GRE

NOVEMBER 2024

PROJECT ID: 1130-66-78

WITH: N/A

COUNTY: OUTAGAMIE

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 = 528



N

DESIGN DESIGNATION

| | | IH 41 | CTH J |
|---|---|---|---|
| A.A.D.T. | (2025) | = 53,360 | 11,850 |
| A.A.D.T. | (2045) | = 67,310 | 15,650 |
| D.H.V. | | = 7,470 | 1,640 |
| D.D. | | = 56/44 | 60/40 |
| T. | | = 10.0% | 11.2% |
| DESIGN SPEED | | = 75 MPH | 40 MPH |
| ESALS | | = 17,000,000 | 5,200,000 |

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

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

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

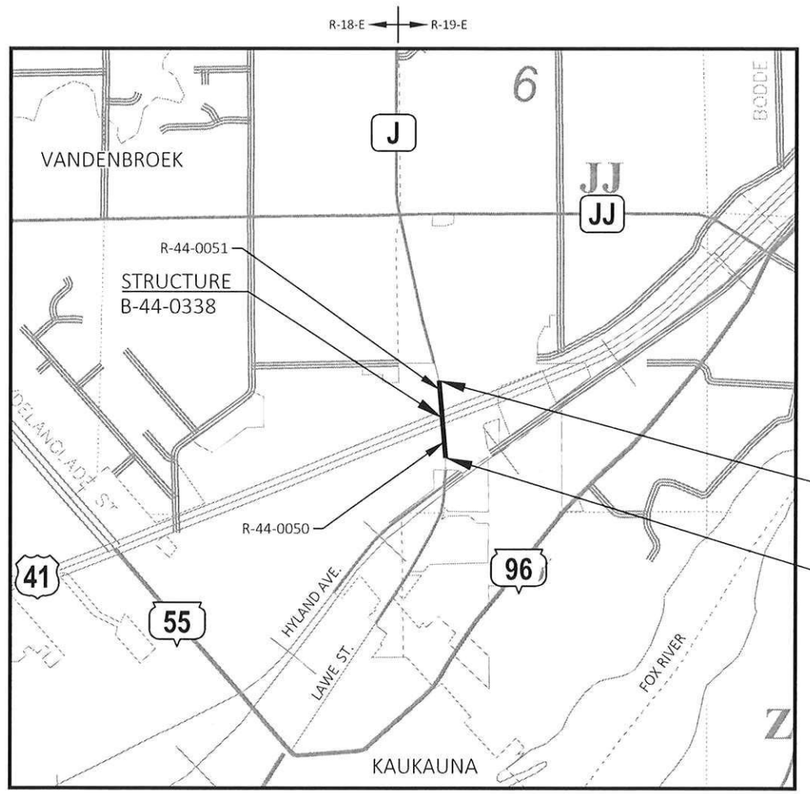
# APPLETON-DE PERE

CTH J INTERCHANGE

## IH 41

## OUTAGAMIE COUNTY

| STATE PROJECT NUMBER |
|---|
| 1130-66-78 |




LAYOUT

SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.279 MI.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), OUTAGAMIE COUNTY, NAD83 ( 2011 ), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 ( 2012 ). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 1130-66-78 | WISC 2025087 | 1 |
| | | |
| | | |
| | | |

ORIGINAL PLANS PREPARED BY:


STRAND ASSOCIATES®
910 WEST WINGRA DRIVE
MADISON, WISCONSIN 53715-1943
(608) 251-4843


WISCONSIN
SARA J. GRIMME
E-36643
VERONA
WI
PROFESSIONAL ENGINEER

Sara Grimme 6-10-24

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---|---|
| Surveyor | NE REGION |
| Designer | STRAND ASSOCIATES, INC. |
| Project Manager | SCOTT EBEL, P.E. |
| Regional Examiner | NE REGION |
| Regional Supervisor | ERIC GWIDT, P.E. |

APPROVED FOR THE DEPARTMENT

DATE: 6-10-24 (Signature)

E

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\010101-TI.DWG

PLOT DATE : 6/10/2024 2:59 PM

PLOT BY : GRIMME, SARA

PLOT NAME :

2

## UTILITY CONTACTS

**AT&T WISCONSIN - COMMUNICATION LINE**
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APPLETON, WI 54911
PHONE: (920) 221-5969
KW715W@att.com

**KAUKAUNA UTILITIES - ELECTRICITY**
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rsorenson@ku-wi.org

**LEVEL 3 COMMUNICATIONS LLC - COMMUNICATION LINE**
RYAN BIRDSALL
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**NET LEC LLC - COMMUNICATION LINE**
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GREEN BAY, WI 54307-9079
PHONE: (920) 617-7316
rick.vincent@nsight.com

**TDS METROCOM LLC - COMMUNICATION LINE**
COLE HOOKER
525 JUNCTION ROAD
MADISON, WI 53717
PHONE: (608) 332-8243
cole.hooker@tdstelecom.com

**WE ENERGIES - GAS/PETROLEUM**
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800 S LYNNDALE DRIVE
APPLETON, WI 54914
PHONE: (920) 380-3422
cody.beckman@we-energies.com

## STANDARD ABBREVIATIONS

| | | | |
|---|---|---|---|
| AEW | APRON END WALL | NC | NORMAL CROWN |
| AGG | AGGREGATE | PAVT | PAVEMENT |
| AH | AHEAD | PC | POINT OF CURVE |
| ASPH | ASPHALTIC | PCC | POINT OF COMPOUND CURVE |
| BK | BACK | PE | PRIVATE ENTRANCE |
| BAD | BASE AGGREGATE DENSE | PGL | PROFILE GRADE LINE |
| BM | BENCH MARK | PI | POINT OF INTERSECTION |
| C&G | CURB AND GUTTER | PLE | PERMANENT LIMITED EASEMENT |
| C/L OR ℄ | CENTER LINE | PNB | PROPOSED NOISE BARRIER |
| CONC | CONCRETE | PRC | POINT OF REVERSE CURVE |
| CP | CULVERT PIPE | PT | POINT OF TANGENT |
| CPCM | CULVERT PIPE CORRUGATED METAL | R | RADIUS OF CURVE |
| CPRC | CULVERT PIPE REINFORCED CONCRETE | R/L OR ~ | REFERENCE LINE |
| CPRCHE | CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL | R/W | RIGHT OF WAY |
| | | RC | REVERSE CROWN |
| CSD | CONCRETE SURFACE DRAIN | RCAEW | APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE |
| CY | CUBIC YARD | | |
| D | DEGREE OF CURVE | REQ'D | REQUIRED |
| DISCH | DISCHARGE | RD | ROAD |
| Δ | DELTA | RHF | RIGHT HAND FORWARD |
| é | INTERSECTION ANGLE | RO | RUN OFF LENGTH |
| EB | EASTBOUND | RT | RIGHT |
| ENB | EXISTING NOISE BARRIER | SALV | SALVAGED |
| EOP | EDGE OF PAVEMENT | SB | SOUTHBOUND |
| FE | FIELD ENTRANCE | SDD | STANDARD DETAIL DRAWING |
| FL | FLOW LINE | SE | SUPERELEVATION |
| FS | FULL SUPERELEVATION | SF | SQUARE FOOT |
| HMA | HOT MIX ASPHALT | SSPRC | STORM SEWER PIPE REINFORCED CONCRETE |
| IE | INVERT ELEVATION | STA | STATION |
| INV | INVERT | SY | SQUARE YARD |
| L | LENGTH OF CURVE | T | TANGENT LENGTH |
| LHF | LEFT HAND FORWARD | TLE | TEMPORARY LIMITED EASEMENT |
| LP | LOW POINT | TYP | TYPICAL |
| LT | LEFT | VCL | VERTICAL CURVE LENGTH |
| MAX | MAXIMUM | VPC | POINT OF VERTICAL CURVE |
| MIN | MINIMUM | VPI | POINT OF VERTICAL INTERSECTION |
| M/L | MATCHLINE | VPT | POINT OF VERTICAL TANGENT |
| NB | NORTHBOUND | WB | WESTBOUND |

## GENERAL NOTES

ANY REINFORCEMENT LOCATED IN EXISTING CONCRETE PAVEMENT SHALL BE CONSIDERED INCLUDED WITH THE REMOVING CONCRETE PAVEMENT ITEM, AND NO ADDITIONAL COMPENSATION WILL BE GRANTED.

CURB AND GUTTER GRADES ARE GIVEN TO THE FLANGE OF CURB AND GUTTER. CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE OF CURB AND GUTTER.

BROKEN CONCRETE CONTAINING RE-BAR SHALL NOT BE USED AS RIPRAP MEDIUM.

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

VERIFY EXISTING PAVEMENT ELEVATIONS AT ALL TIE-INS TO EXISTING PAVEMENT PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER IF A DISCREPANCY IS FOUND BETWEEN PROPOSED PLAN ELEVATIONS AND EXISTING PAVEMENT ELEVATIONS.

THE EXACT LOCATION OF EXCAVATION BELOW SUBGRADE (EBS) WILL BE DETERMINED BY THE ENGINEER.

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

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED.

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

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.

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

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

PROVIDE TEMPORARY POSITIVE DRAINAGE OF THE NEWLY INSTALLED STORM SEWER SYSTEM UNTIL IT IS ABLE TO EFFECTIVELY DRAIN TO ITS INTENDED OR PLANNED OUTFALL.

## STATE AGENCIES

**WISCONSIN DEPARTMENT OF NATURAL RESOURCES**
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**WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE & CONSUMER PROTECTION**
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**NE REGION DESIGN PROJECT MANAGER**
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**WISCONSIN DEPARTMENT OF TRANSPORTATION - COMMUNICATION LINE**
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Jeffrey.Madson@dot.wi.gov

**NE REGION SURVEY COORDINATOR**
COMAC MCINNIS, PLS
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## OTHER AGENCIES

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ST. PAUL, MN 55101-1678
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Jessica.l.kempke@usace.army.mil

**U.S. FISH AND WILDLIFE SERVICE**
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Darin_simpkins@fws.gov

**U.S. ENVIRONMENTAL PROTECTION AGENCY**
KENNETH WESTLAKE
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CHICAGO, IL 60604
PHONE: (312) 886-2910
Westlake.kenneth@epa.gov

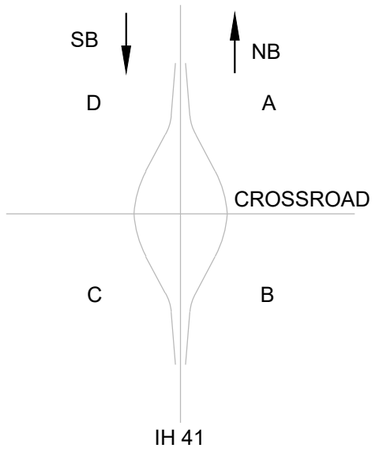
**OUTAGAMIE COUNTY**
JOE ZELLMER
1313 HOLLAND ROAD
APPLETON, WI 54911
PHONE: (920) 832-6034
Joseph.Zellmer@outagamie.org

## 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 STRIPTURF: | .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 SLOPETURF: | | | .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 = 23.838 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 9.722 ACRES

## RAMP QUADRANT IDENTIFICATION




## ORDER OF SECTION 2 DETAIL SHEETS


GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PHRAGMITES
WETLANDS
INTERSECTION DETAILS
PLAN DETAILS
FTMS
EROSION CONTROL
STORM SEWER
PERMANENT SIGNING
LIGHTING
PAVEMENT MARKING
TRAFFIC CONTROL
STAGE CONSTRUCTION
DETOURS
ALIGNMENT DETAILS
BENCHMARKS


## REFERENCE LINE CALLOUTS

NONE - IH 41
NB - IH 41 NB
SB - IH 41 SB
JNB - CTH J /HYLAND AVE NB
JSB - CTH J/HYLAND AVE SB
JA - CTH J/HYLAND AVE NB ENTRANCE RAMP
JB - CTH J/HYLAND AVE NB EXIT RAMP
JC - CTH J/HYLAND AVE SB ENTRANCE RAMP
JD - CTH J/HYLAND AVE SB EXIT RAMP
JE - NB ROUNDABOUT
JK - SB ROUNDABOUT
JDR - CTH J SB EXIT RIGHT TURN BYPASS
JAT - CTH J NB ENTRANCE RAMP TEMPORARY TIE-IN
JBT - CTH J NB EXIT RAMP TEMPORARY TIE-IN
JCT - CTH J SB ENTRANCE RAMP TEMPORARY TIE-IN
JDT - CTH J SB EXIT RAMP TEMPORARY TIE-IN

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

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

2

TOWN OF VANDENBROEK

END PROJECT
STA 26+34.30 'JNB'

CTH J

KELSO RD

R-44-051

END CONSTRUCTION
STA. 1183+00.00 'JCT'
BEGIN CONSTRUCTION
STA. 1183+00.00 'JC'

EXIST R/W

RAMP JC

BEGIN CONSTRUCTION
STA 1180+00.00 'JCT'

B-44-0338

END CONSTRUCTION
STA. 1192+00.00 'JD'
BEGIN CONSTRUCTION
STA. 1192+00.00 'JDT'

END CONSTRUCTION
STA 1195+25.00 'JDT'

END CONSTRUCTION
STA 1194+98.00 'SB'

RAMP JD

1175+00 'JC'
1175+00 'SB'
1175+00 'NB'
1175+00 'JB'
1180+00 'JCT'
1180+00 'SB'
1180+00 'NB'
IH 41 SB
IH 41 NB
1185+00 'SB'
1185+00 'NB'
1190+00 'SB'
1190+00 'NB'
1195+00 'JDT'
1195+00 'SB'
1195+00 'NB'
1200+00 'SB'
1200+00 'NB'
1200+00 'JA'
1195+00 'JA'
1180+00 'JB'
1185+00 'JB'
1190+00 'JA'

TLE

RAMP JB

EXIST R/W

RAMP JA

END CONSTRUCTION
STA 1193+50.00 'JAT'

BEGIN CONSTRUCTION
STA 1178+75.00 'JBT'

END CONSTRUCTION
STA. 1181+50.00 'JBT'
BEGIN CONSTRUCTION
STA. 1181+50.00 'JB'

BEGIN CONSTRUCTION
STA 1179+52.00 'NB'

R-44-050

END CONSTRUCTION
STA. 1190+50.00 'JA'
BEGIN CONSTRUCTION
STA. 1190+50.00 'JAT'

CITY OF KAUKAUNA

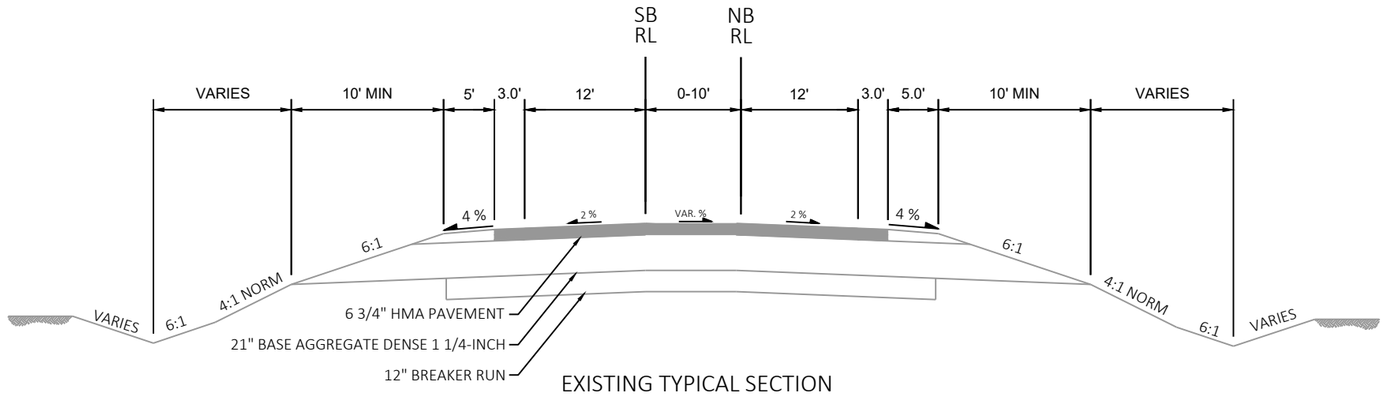
BEGIN PROJECT
STA 11+61.02 'JNB'

E FRONTAGE RD

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PROJECT OVERVIEW | SHEET 3 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\020201-PO.DWG
LAYOUT NAME - 020201-po
PLOT DATE : 8/1/2024 9:44 AM
PLOT BY : KOWALSKI, NICK
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

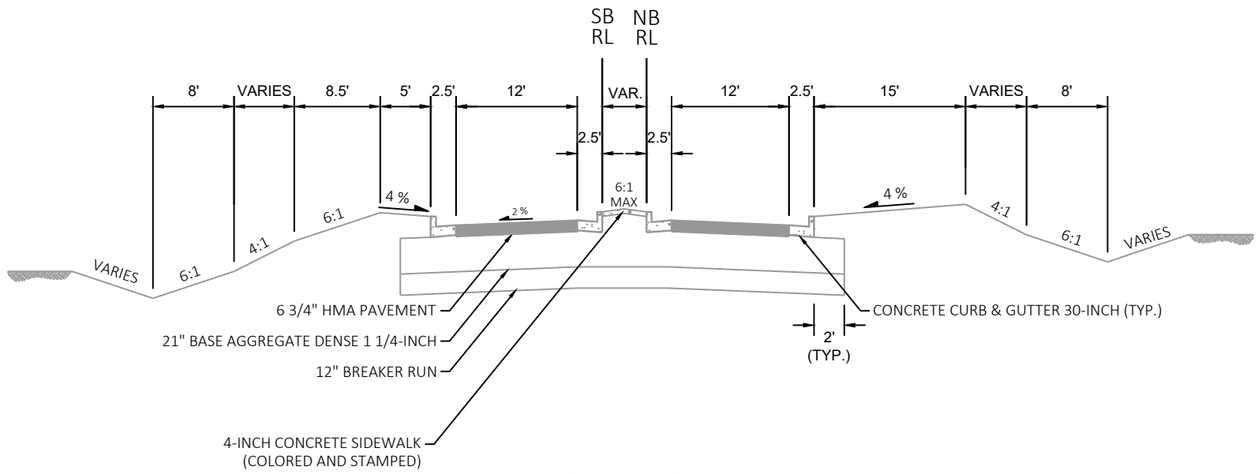
2




EXISTING TYPICAL SECTION

CTH J/HYLAND AVE

STA. 11+61 'JNB' - STA. 13+23 'JNB'




EXISTING TYPICAL SECTION

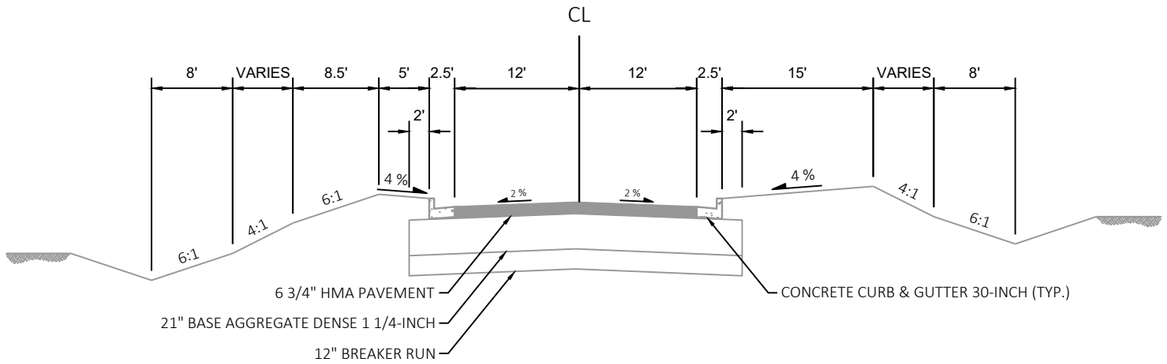
CTH J/HYLAND AVE

STA. 13+23 'JNB' - STA. 15+25 'JNB'
STA. 16+65 'JNB' - STA. 17+59 'JNB'
STA. 21+00 'JNB' - STA. 21+91 'JNB'
STA. 23+36 'JNB' - STA. 26+34 'JNB'

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EXISTING TYPICAL SECTIONS | SHEET 4 | E |
|---|---|---|---|---|---|

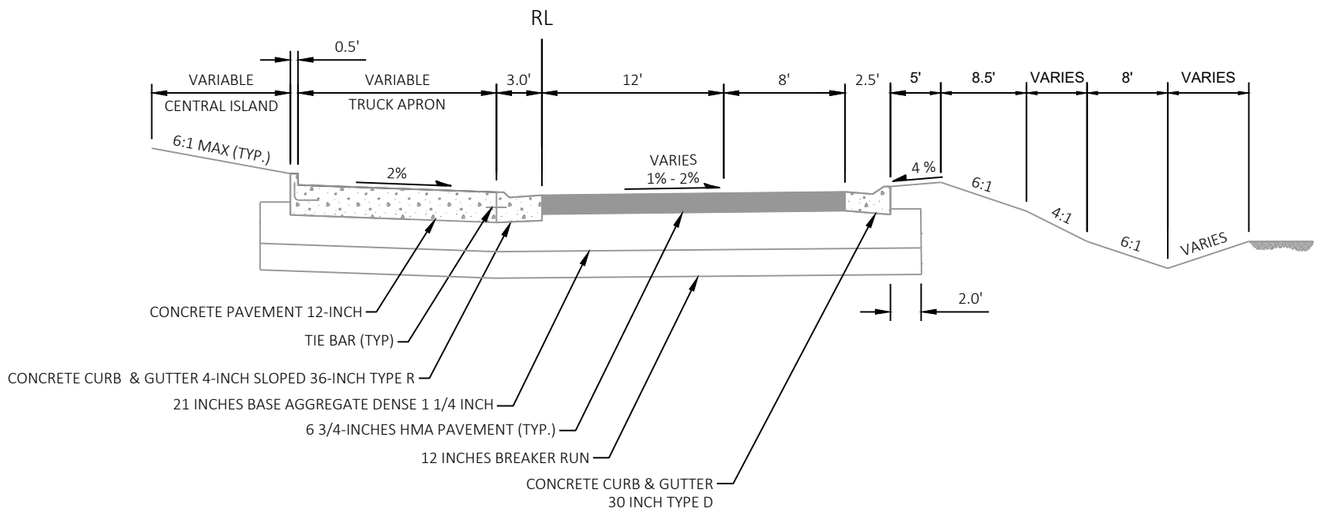
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LAYOUT NAME - 020301-ts
PLOT DATE : 8/1/2024 7:33 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2




EXISTING TYPICAL SECTION
CTH J/HYLAND AVE

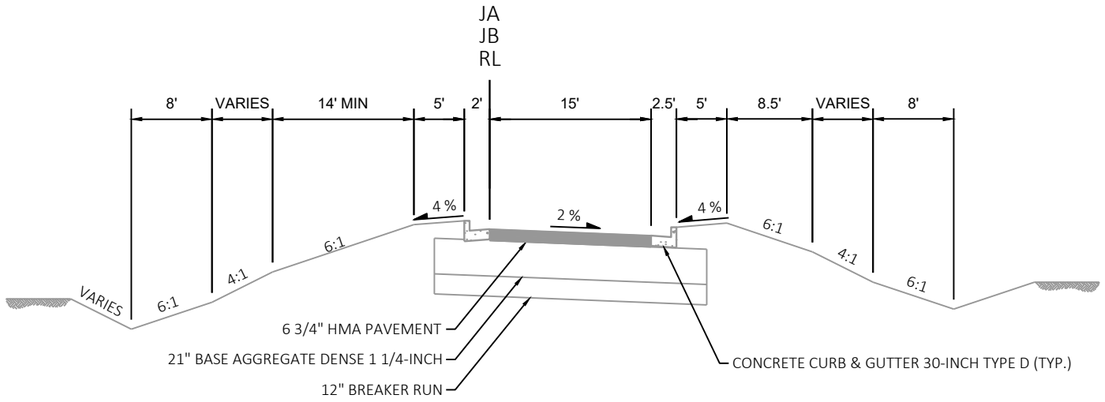
STA. 17+59 'JNB' - STA. 18+00 'JNB'
STA. 20+55 'JNB' - STA. 21+00 'JNB'



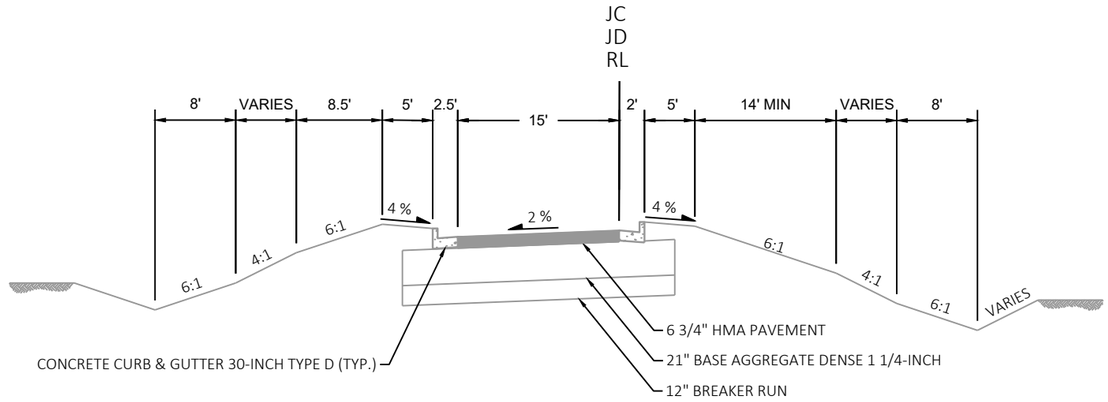

EXISTING TYPICAL HALF SECTION
ROUNDABOUT DETAIL

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EXISTING TYPICAL SECTIONS | SHEET 5 | E |
|---|---|---|---|---|---|

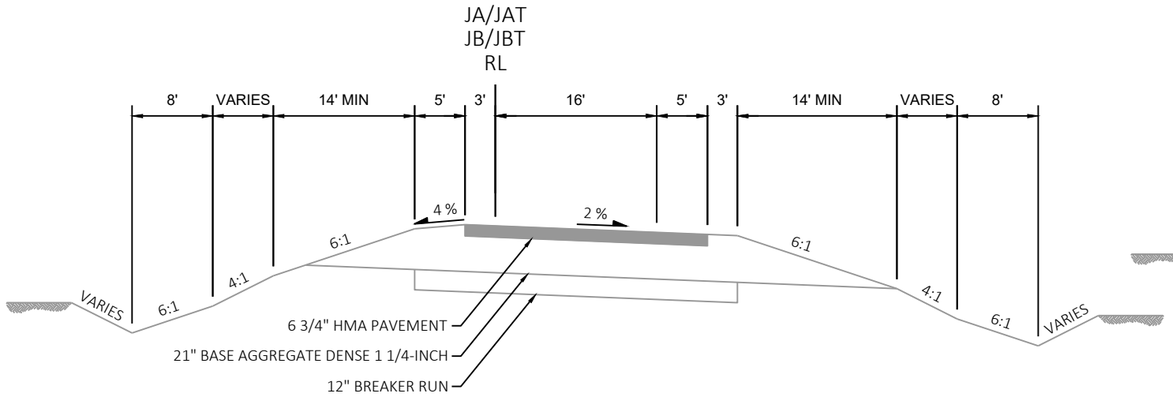
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LAYOUT NAME - 020302-ts
PLOT DATE : 8/1/2024 7:33 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



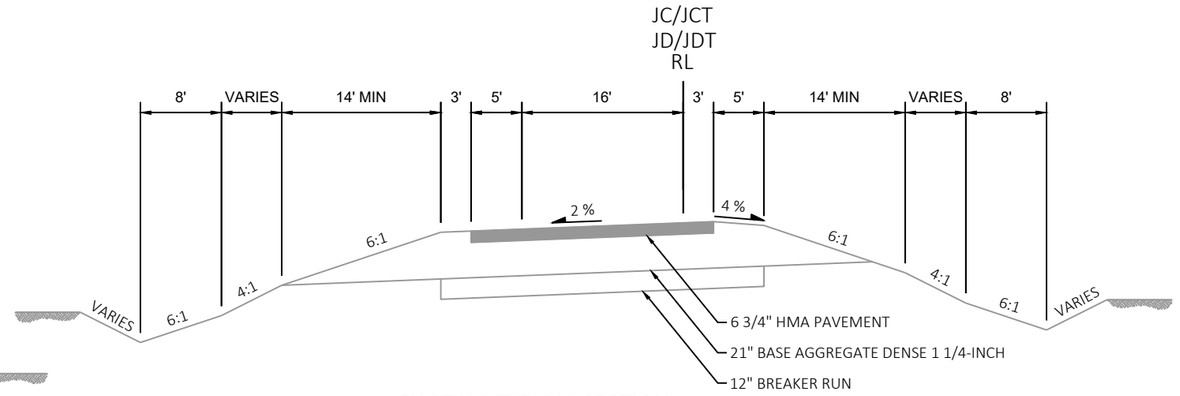

EXISTING TYPICAL SECTION
CTH J/HYLAND AVE RAMPS
STA. 1186+88 'JA' - STA. 1188+15 'JA'
STA. 1183+67 'JB' - STA. 1186+37 'JB'




EXISTING TYPICAL SECTION
CTH J/HYLAND AVE RAMPS
STA. 1187+11 'JC' - STA. 1188+06 'JC'
STA. 1189+02 'JD' - STA. 1191+50 'JD'




EXISTING TYPICAL SECTION
CTH J/HYLAND AVE RAMPS
STA. 1188+15 'JA' - STA. 1193+50 'JAT'
STA. 1178+75 'JBT' - STA. 1183+67 'JB'

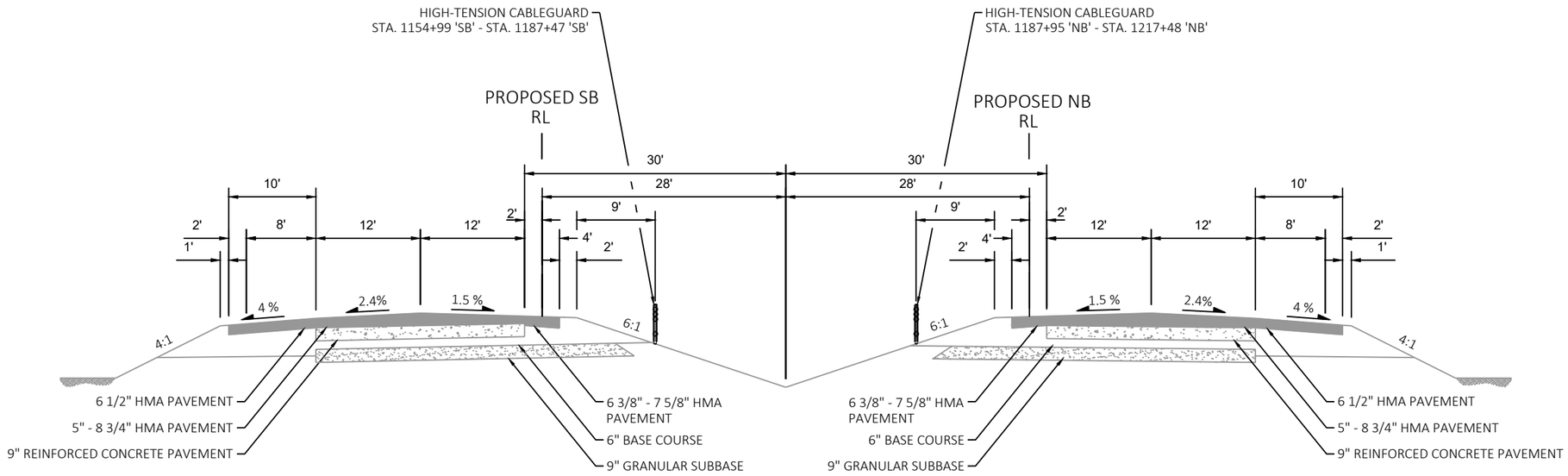



EXISTING TYPICAL SECTION
CTH J/HYLAND AVE RAMPS
STA. 1180+00 'JCT' - STA. 1187+11 'JC'
STA. 1191+50 'JD' - STA. 1195+25 'JDT'

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EXISTING TYPICAL SECTIONS | SHEET 6 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\020301-TS.DWG
LAYOUT NAME - 020303-ts
PLOT DATE : 8/1/2024 7:33 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2




## EXISTING TYPICAL SECTION
### IH 41

STA. 1179+52 'NB' - STA. 1192+00 'NB'
STA. 1183+50 'SB' - STA. 1194+98 'SB'

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EXISTING TYPICAL SECTIONS | SHEET 7 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\020301-TS.DWG
LAYOUT NAME - 020304-ts
PLOT DATE : 8/1/2024 7:33 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

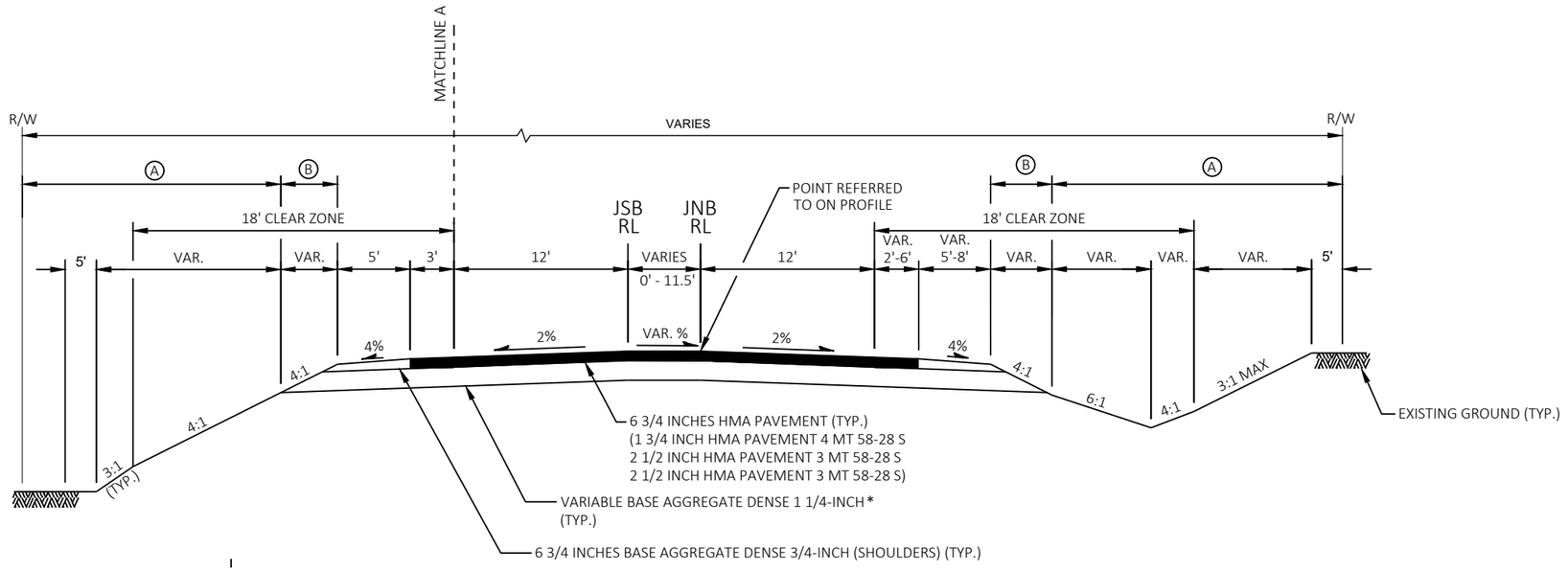
Ⓐ TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B.

Ⓑ SEEDING MIXTURE NO. 30 & FERTILIZER TYPE B.

Ⓒ POINT REFERRED TO ON SUPPLEMENTAL PROFILE. SEE PLAN DETAIL SHEETS FOR ALIGNMENT INFORMATION.

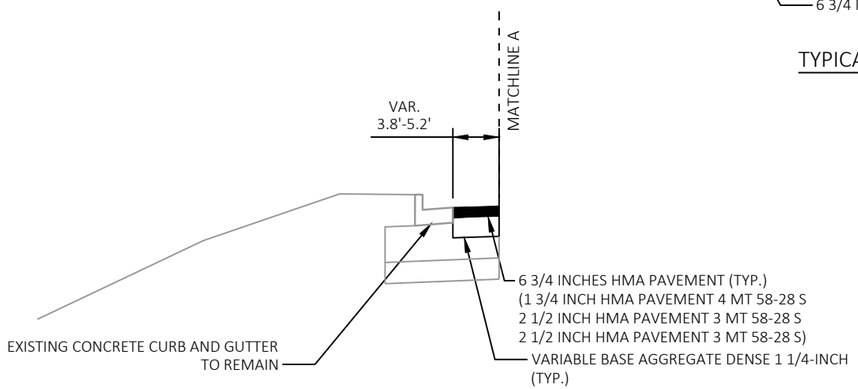
* REMOVE EXISTING HMA PAVEMENT AND BASE AGGREGATE DENSE AS NEEDED. PLACE PROPOSED BASE AGGREGATE DENSE TO MEET PROPOSED BOTTOM OF HMA OR CONCRETE PAVEMENT GRADES. DEPTH VARIES.

** PLACE 6 INCHES BASE AGGREGATE DENSE 1 1/4-INCH AND 16 INCHES SELECT CRUSHED MATERIAL IN AREAS OUTSIDE OF THE EXISTING PAVEMENT STRUCTURE.




TYPICAL FINISHED SECTION CTH J

STA. 11+61 'JNB' - STA. 13+33 'JNB'
STA. 26+24 'JNB' - STA. 26+34 'JNB'




STA. 26+24 'JNB' - STA. 26+34 'JNB'

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PROPOSED TYPICAL SECTIONS | SHEET 8 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\020302-TS.DWG
LAYOUT NAME - 020302-ts
PLOT DATE : 8/1/2024 8:43 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

Ⓐ TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B.

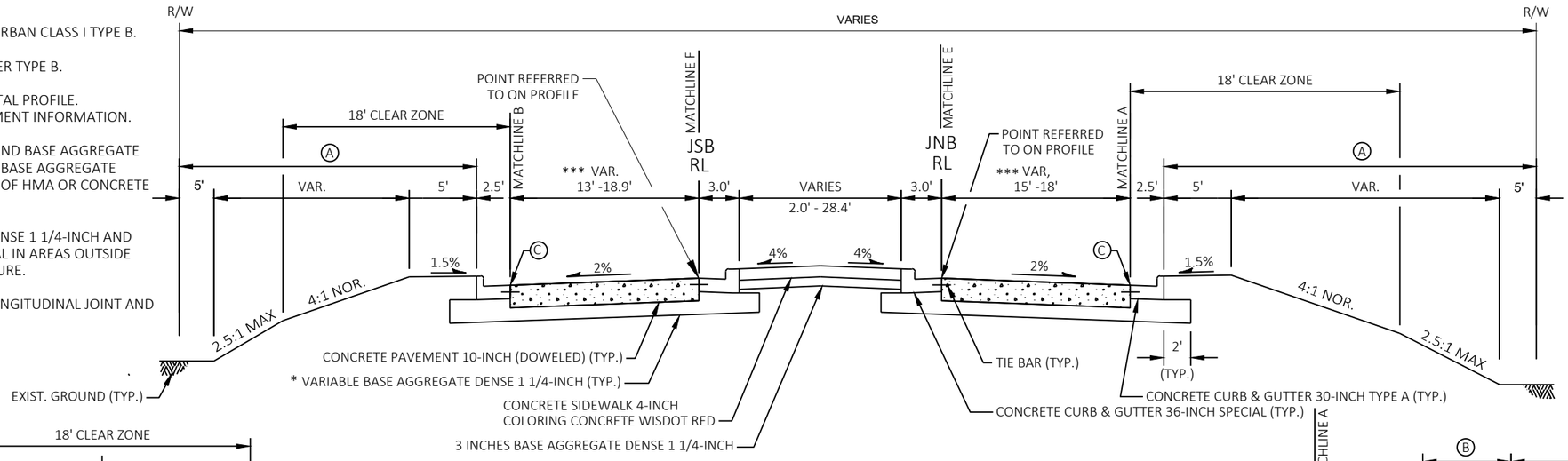
Ⓑ SEEDING MIXTURE NO. 30 & FERTILIZER TYPE B.

Ⓒ POINT REFERRED TO ON SUPPLEMENTAL PROFILE. SEE PLAN DETAIL SHEETS FOR ALIGNMENT INFORMATION.

* REMOVE EXISTING HMA PAVEMENT AND BASE AGGREGATE DENSE AS NEEDED. PLACE PROPOSED BASE AGGREGATE DENSE TO MEET PROPOSED BOTTOM OF HMA OR CONCRETE PAVEMENT GRADES. DEPTH VARIES.

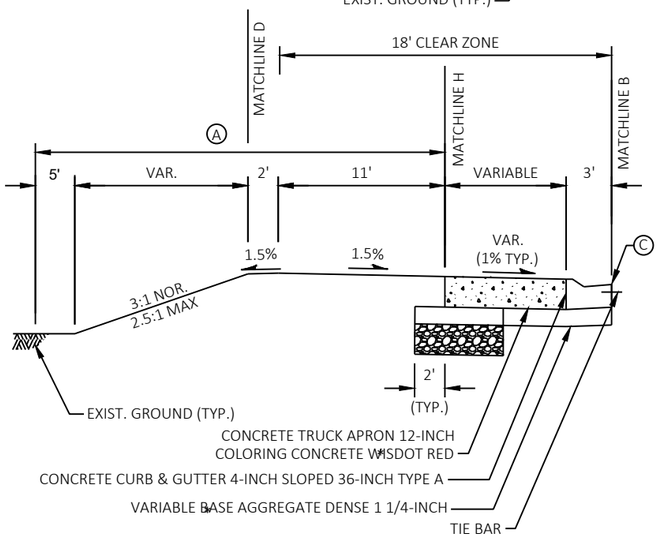
** PLACE 6 INCHES BASE AGGREGATE DENSE 1 1/4-INCH AND 16 INCHES SELECT CRUSHED MATERIAL IN AREAS OUTSIDE OF THE EXISTING PAVEMENT STRUCTURE.

*** WHEN WIDTH EXCEEDS 15', PLACE LONGITUDINAL JOINT AND TIE BAR AS SHOWN IN PLANS

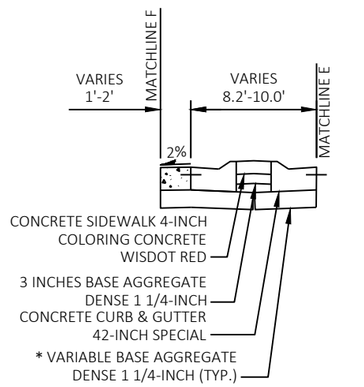



## TYPICAL FINISHED SECTION CTH J

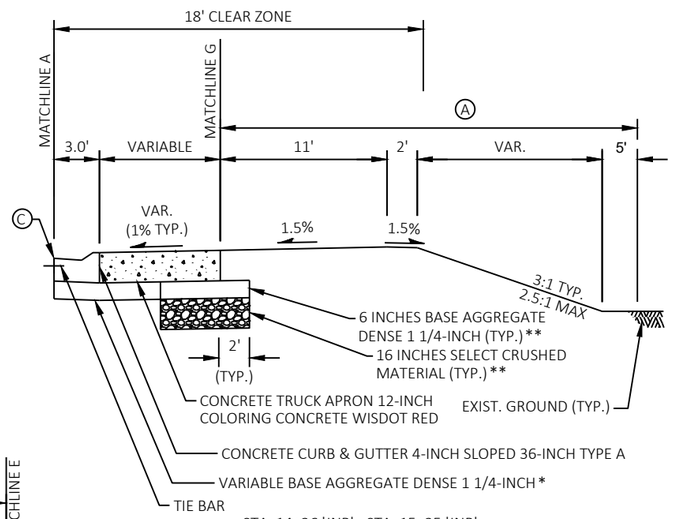
STA. 13+33 'JNB' - STA. 15+25 'JNB'
STA. 23+34 'JNB' - STA. 26+24 'JNB'



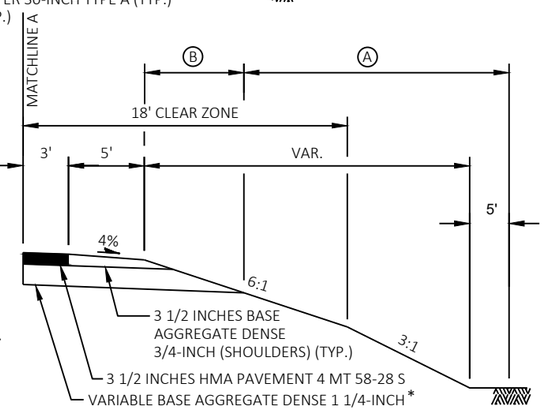

STA. 113+60 'JSB' - STA. 115+26 'JSB'
STA. 123+39 'JSB' - STA. 124+49 'JSB'



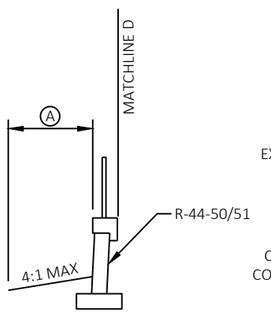

STA. 24+88 'JNB' - STA. 25+93 'JNB'

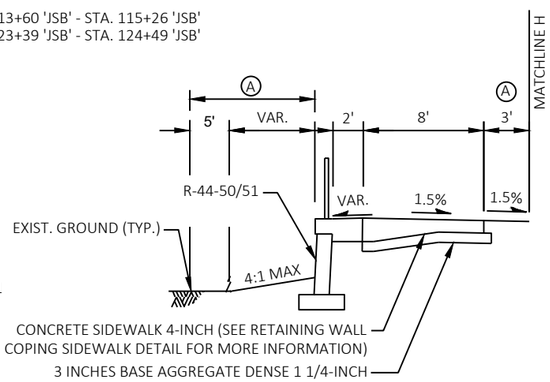



STA. 14+26 'JNB' - STA. 15+25 'JNB'
STA. 23+34 'JNB' - STA. 24+59 'JNB'



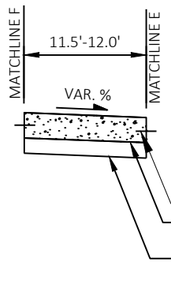

STA. 25+89 'JNB' - STA. 26+24 'JNB'



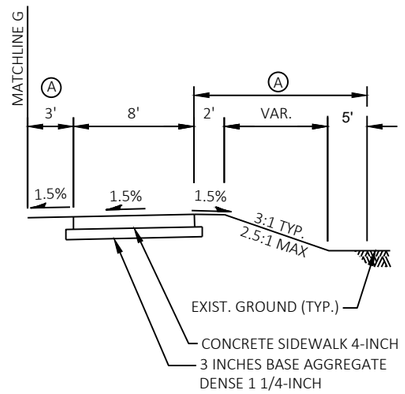




STA. 114+25 'JSB' - STA. 114+90 'JSB'
STA. 123+81 'JSB' - STA. 124+44 'JSB'

STA. 114+90 'JSB' - STA. 115+26 'JSB'
STA. 123+39 'JSB' - STA. 123+81 'JSB'




STA. 25+93 'JNB' - STA. 26+24 'JNB'




STA. 14+82 'JNB' - STA. 15+25 'JNB'
STA. 23+34 'JNB' - STA. 23+70 'JNB'

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PROPOSED TYPICAL SECTIONS | SHEET 9 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\020302-TS.DWG
LAYOUT NAME - 020302b-ts
PLOT DATE : 8/1/2024 8:43 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

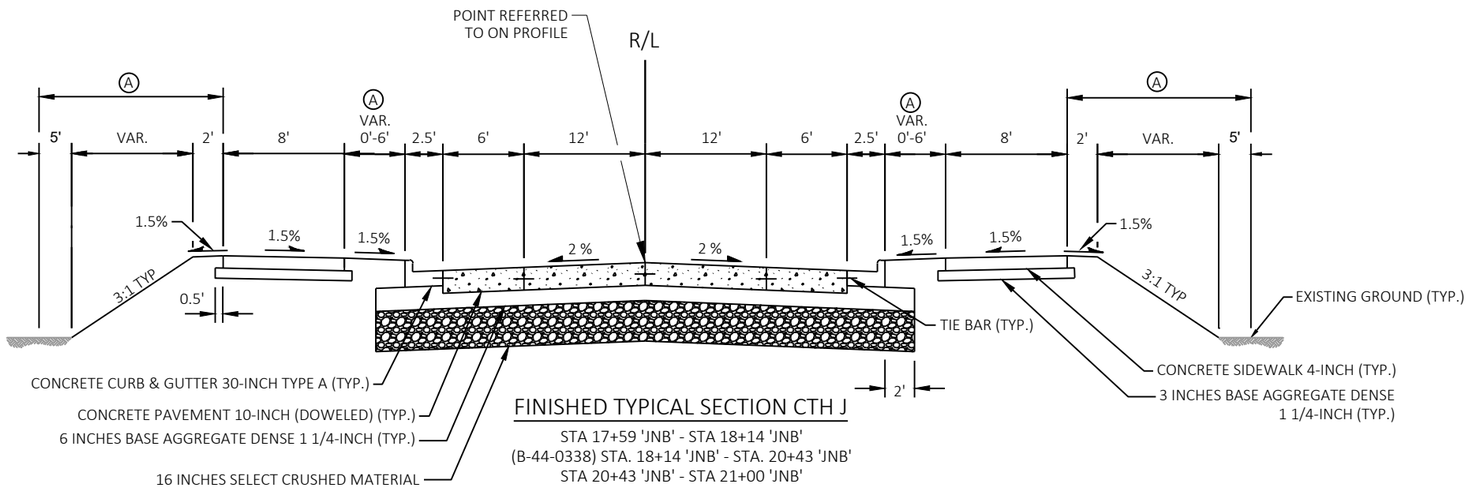
Ⓐ TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B.

Ⓑ SEEDING MIXTURE NO. 30 & FERTILIZER TYPE B.

Ⓒ POINT REFERRED TO ON SUPPLEMENTAL PROFILE. SEE PLAN DETAIL SHEETS FOR ALIGNMENT INFORMATION.

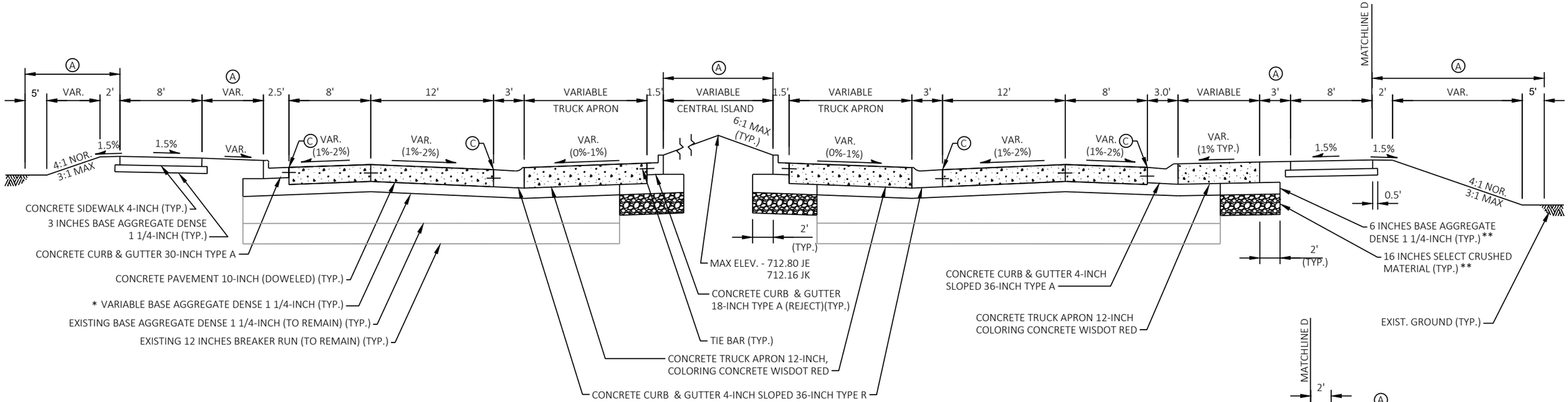
* REMOVE EXISTING HMA PAVEMENT AND BASE AGGREGATE DENSE AS NEEDED. PLACE PROPOSED BASE AGGREGATE DENSE TO MEET PROPOSED BOTTOM OF HMA OR CONCRETE PAVEMENT GRADES. DEPTH VARIES.

** PLACE 6 INCHES BASE AGGREGATE DENSE 1 1/4-INCH AND 16 INCHES SELECT CRUSHED MATERIAL IN AREAS OUTSIDE OF THE EXISTING PAVEMENT STRUCTURE.



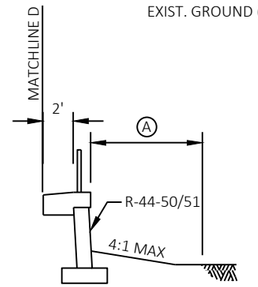

## FINISHED TYPICAL SECTION CTH J

STA 17+59 'JNB' - STA 18+14 'JNB'
(B-44-0338) STA. 18+14 'JNB' - STA. 20+43 'JNB'
STA 20+43 'JNB' - STA 21+00 'JNB'




## TYPICAL FINISHED SECTION THROUGH ROUNDABOUT

STA. 10+00.00 'JE' - STA. 13+39.29 'JE'
STA. 10+00.00 'JK' - STA. 13+39.29 'JK'




STA. 11+88 'JK' - STA. 12+21 'JK'
STA. 10+95 'JE' - STA. 11+23 'JE'

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PROPOSED TYPICAL SECTIONS | SHEET 10 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\020302-TS.DWG
LAYOUT NAME - 020302a-ts
PLOT DATE : 8/1/2024 8:43 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

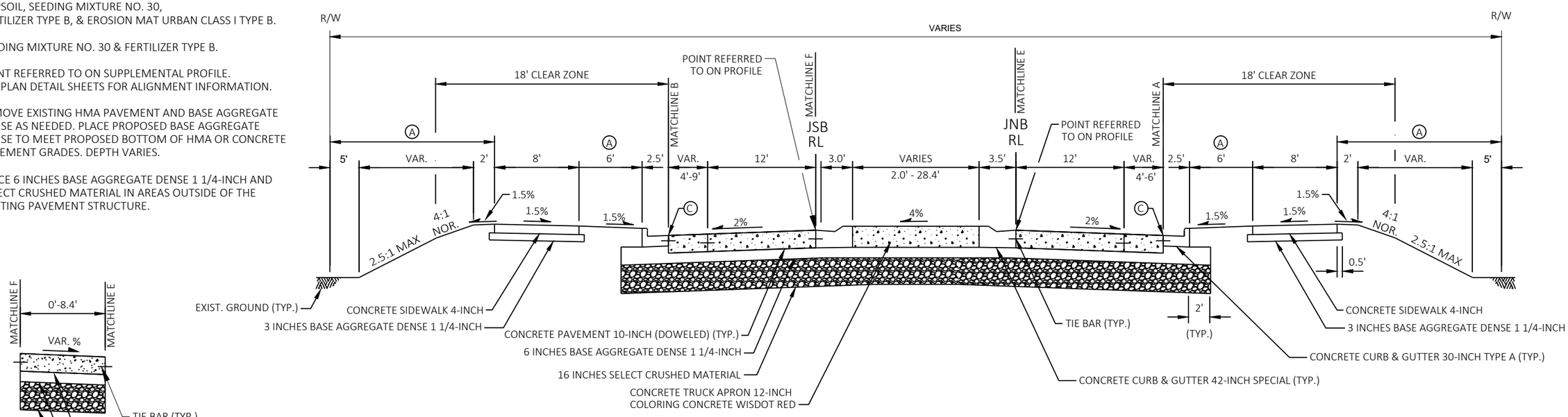
Ⓐ TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B.

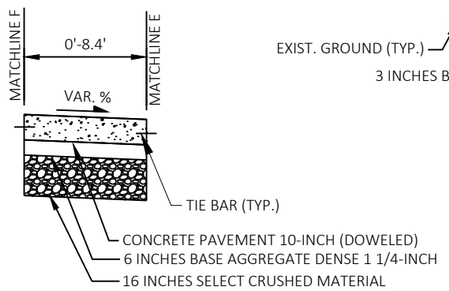
Ⓑ SEEDING MIXTURE NO. 30 & FERTILIZER TYPE B.

Ⓒ POINT REFERRED TO ON SUPPLEMENTAL PROFILE. SEE PLAN DETAIL SHEETS FOR ALIGNMENT INFORMATION.

* REMOVE EXISTING HMA PAVEMENT AND BASE AGGREGATE DENSE AS NEEDED. PLACE PROPOSED BASE AGGREGATE DENSE TO MEET PROPOSED BOTTOM OF HMA OR CONCRETE PAVEMENT GRADES. DEPTH VARIES.

** PLACE 6 INCHES BASE AGGREGATE DENSE 1 1/4-INCH AND SELECT CRUSHED MATERIAL IN AREAS OUTSIDE OF THE EXISTING PAVEMENT STRUCTURE.

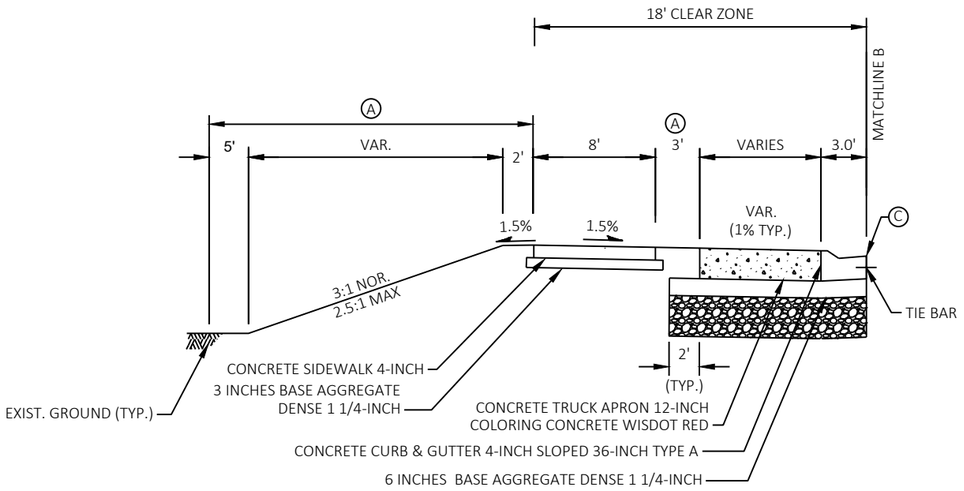


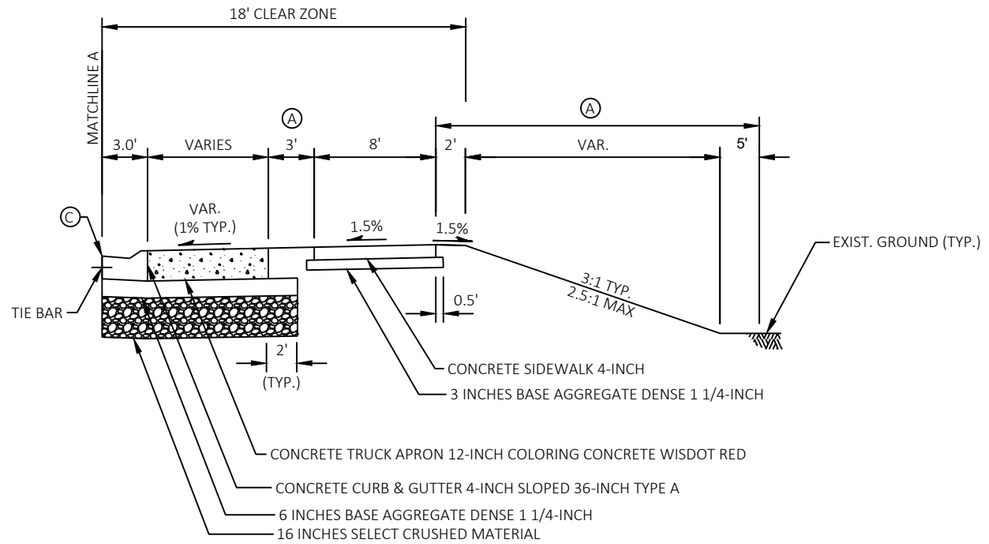

## TYPICAL FINISHED SECTION CTH J

STA. 16+65 'JNB' - STA. 17+59 'JNB'
STA. 21+00 'JNB' - STA. 21+91 'JNB'

STA. 17+15 'JNB' - STA. 17+59 'JNB'
STA. 21+00 'JNB' - STA. 21+49 'JNB'




STA. 116+72 'JSB' - STA. 117+60 'JSB'




STA. 21+14 'JNB' - STA. 21+91 'JNB'

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PROPOSED TYPICAL SECTIONS | SHEET 11 | E |
|---|---|---|---|---|---|

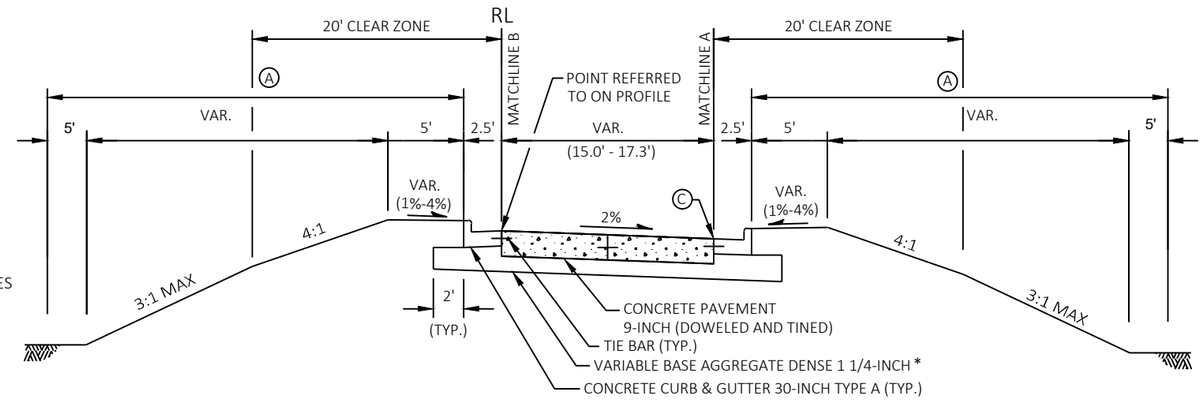
Ⓐ TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B.

Ⓑ SEEDING MIXTURE NO. 30 & FERTILIZER TYPE B.

Ⓒ POINT REFERRED TO ON SUPPLEMENTAL PROFILE. SEE PLAN DETAIL SHEETS FOR ALIGNMENT INFORMATION.

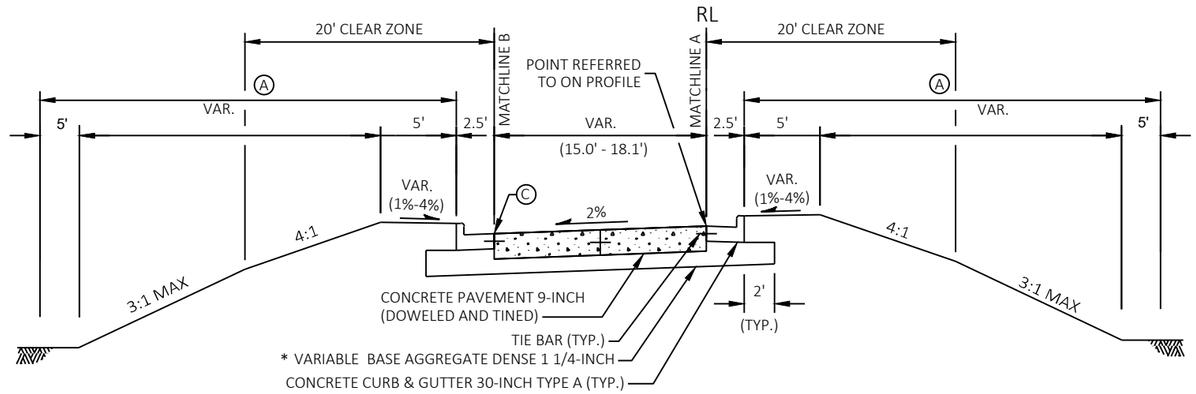
* REMOVE EXISTING HMA PAVEMENT AND BASE AGGREGATE DENSE AS NEEDED. PLACE PROPOSED BASE AGGREGATE DENSE TO MEET PROPOSED BOTTOM OF HMA OR CONCRETE PAVEMENT GRADES. DEPTH VARIES.

** PLACE 6 INCHES BASE AGGREGATE DENSE 1 1/4-INCH AND 16 INCHES SELECT CRUSHED MATERIAL IN AREAS OUTSIDE OF THE EXISTING PAVEMENT STRUCTURE.



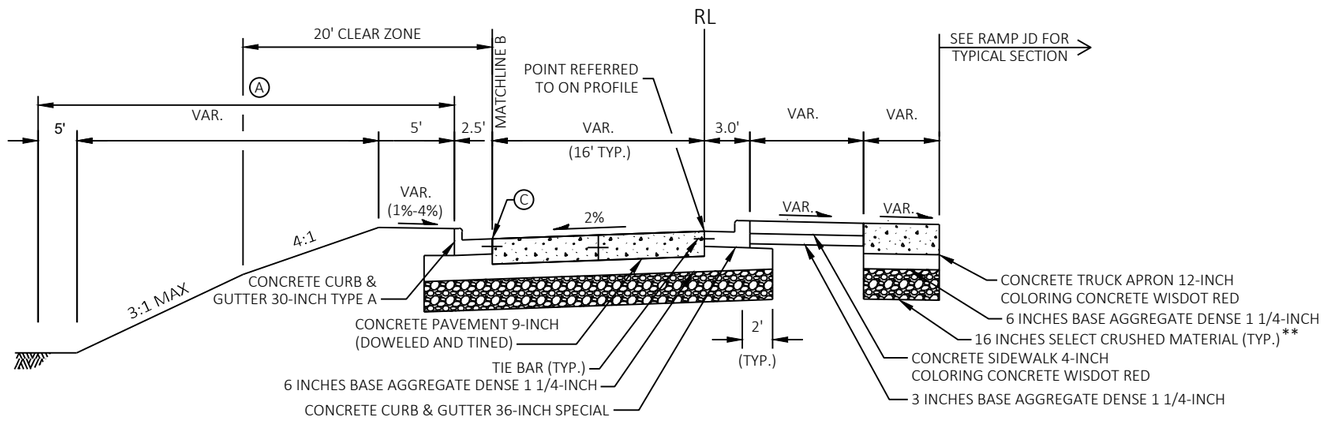

TYPICAL FINISHED SECTION RAMPS JA & JB

STA. 1186+99 'JA' - STA. 1189+17 'JA'
STA. 1183+67 'JB' - STA. 1186+32 'JB'




TYPICAL FINISHED SECTION RAMPS JC & JD

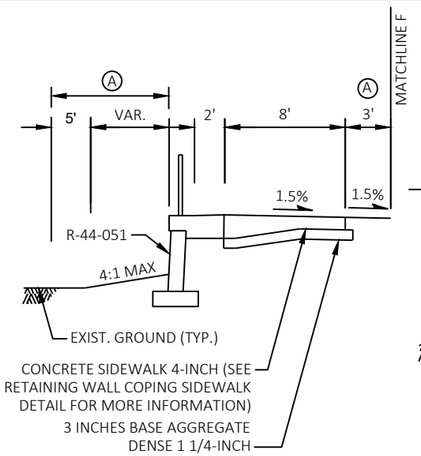
STA. 1185+87 'JC' - STA. 1187+99 'JC'
STA. 1189+09 'JD' - STA. 1191+66 'JD'




TYPICAL FINISHED SECTION RAMP JDR

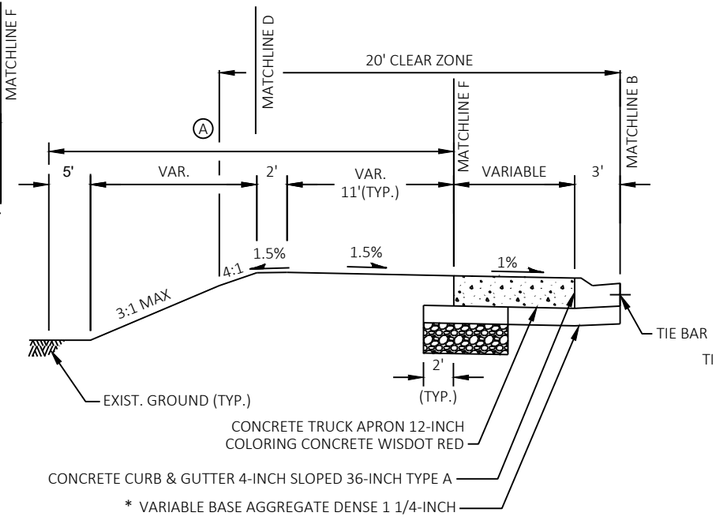
STA. 188+64 'JDR' - STA. 190+10 'JDR'

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PROPOSED TYPICAL SECTIONS | SHEET 12 | E |
|---|---|---|---|---|---|



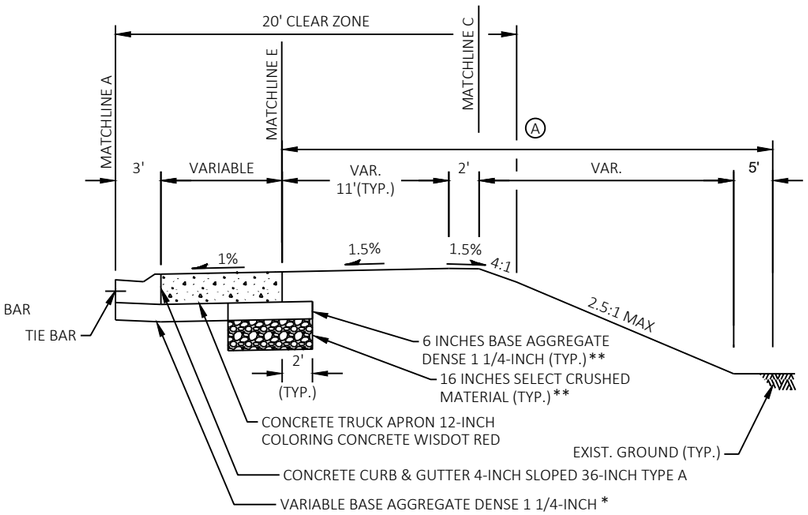

## RAMPS - MATCHLINE F

STA. 1187+72' JC' - STA. 1187+99 'JC'



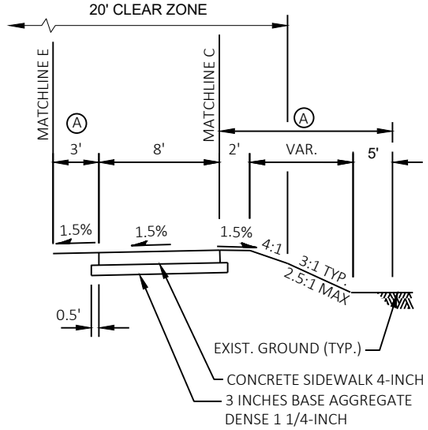

## RAMPS - MATCHLINE B

STA. 1186+99 'JA' - STA. 1189+07 'JA'
STA. 1185+58 'JB' - STA. 1186+32 'JB'
STA. 1187+12 'JC' - STA. 1187+99 'JC'
STA. 188+64 'JDR' - STA. 189+03 'JDR'



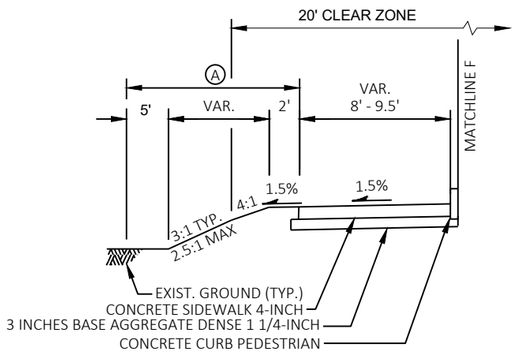

## RAMPS - MATCHLINE A

STA. 1186+99' JA' - STA. 1187+27 'JA'
STA. 1185+28 'JB' - STA. 1186+32 'JB'
STA. 1185+87 'JC' - STA. 1187+99 'JC'
STA. 1189+09 'JD' - STA. 1189+72 'JD'



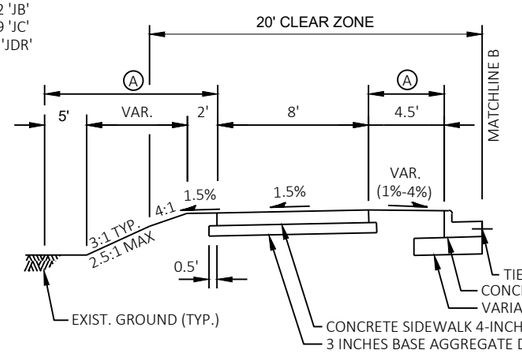

## RAMPS - MATCHLINE E

STA. 1186+99' JA' - STA. 1187+27 'JA'
STA. 1185+96 'JB' - STA. 1186+32 'JB'



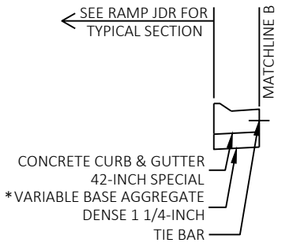

## RAMPS - MATCHLINE F

STA. 188+62 'JDR' - STA. 189+03 'JDR



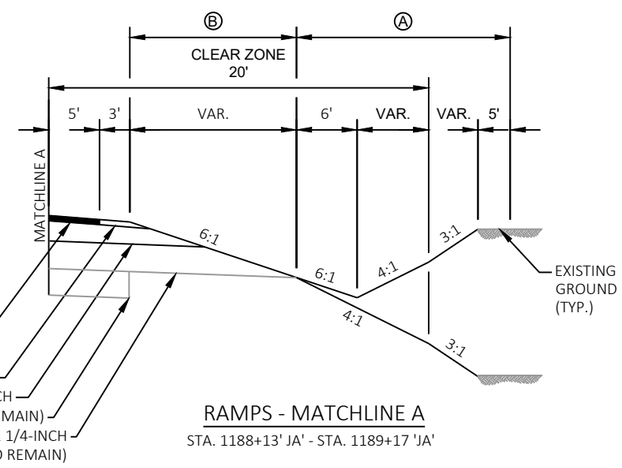

## RAMP JDR - MATCHLINE B

STA. 189+03 'JDR' - STA. 189+47 'JDR



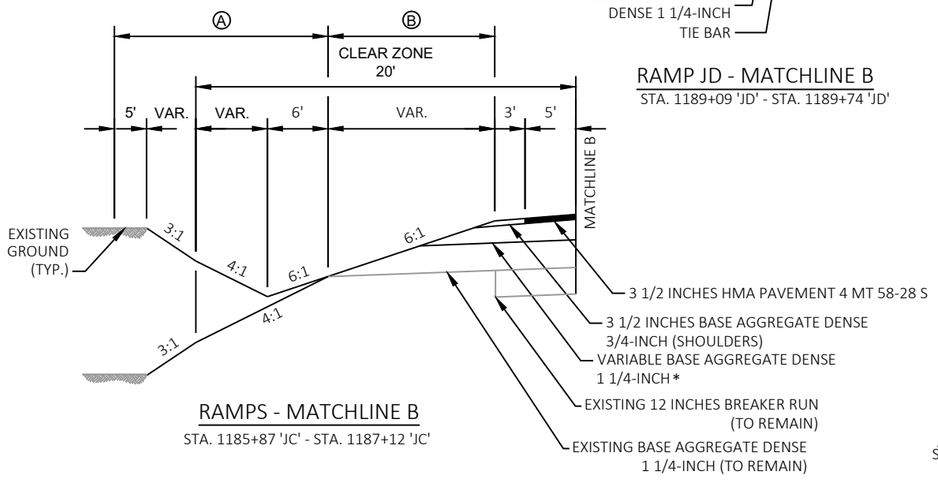

## RAMP JD - MATCHLINE B

STA. 1189+09 'JD' - STA. 1189+74 'JD'



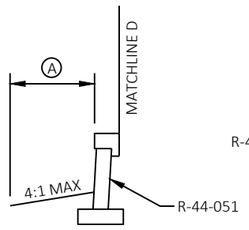

## RAMPS - MATCHLINE A

STA. 1188+13' JA' - STA. 1189+17 'JA'



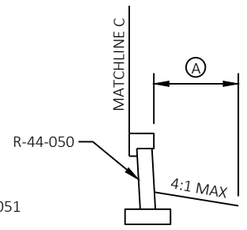

## RAMPS - MATCHLINE B

STA. 1185+87 'JC' - STA. 1187+12 'JC'




## RAMP JC - MATCHLINE D

STA. 1187+30 'JC' - STA. 1187+72 'JC'




## RAMP JB - MATCHLINE C

STA. 1185+77 'JB' - STA. 1186+32 'JB'

Ⓐ TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B.

Ⓑ SEEDING MIXTURE NO. 30 & FERTILIZER TYPE B.

Ⓒ POINT REFERRED TO ON SUPPLEMENTAL PROFILE. SEE PLAN DETAIL SHEETS FOR ALIGNMENT INFORMATION.

* REMOVE EXISTING HMA PAVEMENT AND BASE AGGREGATE DENSE AS NEEDED. PLACE PROPOSED BASE AGGREGATE DENSE TO MEET PROPOSED BOTTOM OF HMA OR CONCRETE PAVEMENT GRADES. DEPTH VARIES.

** PLACE 6 INCHES BASE AGGREGATE DENSE 1 1/4-INCH AND 16 INCHES SELECT CRUSHED MATERIAL IN AREAS OUTSIDE OF THE EXISTING PAVEMENT STRUCTURE.

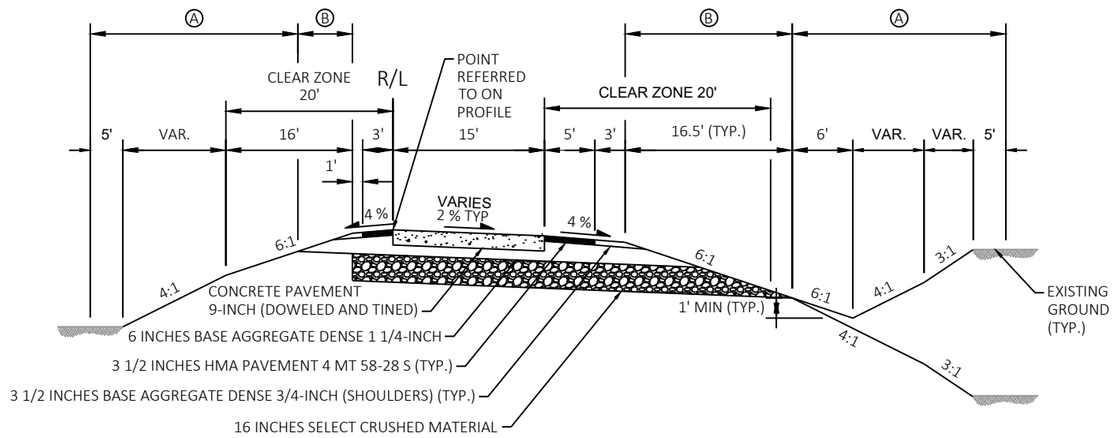
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PROPOSED TYPICAL SECTIONS | SHEET 13 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\020302-TS.DWG
LAYOUT NAME - 020302d-ts
PLOT DATE : 8/1/2024 8:43 AM
PLOT BY : KOWALSKI, NICK
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

Ⓐ TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B.

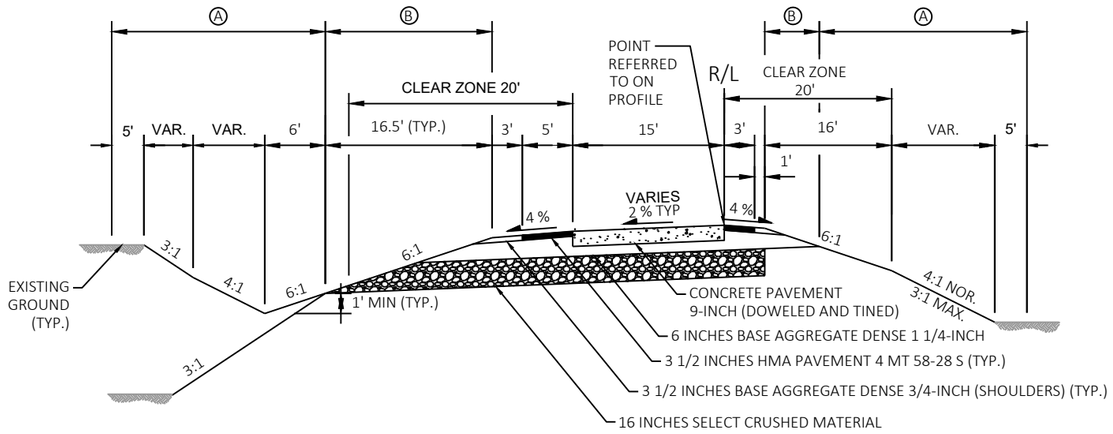
Ⓑ SEEDING MIXTURE NO. 30 & FERTILIZER TYPE B.

Ⓒ POINT REFERRED TO ON SUPPLEMENTAL PROFILE. SEE PLAN DETAIL SHEETS FOR ALIGNMENT INFORMATION.




## TYPICAL FINISHED SECTION RAMPS JA & JB

STA. 1189+17 'JA' - STA. 1190+50 'JA'
STA. 1181+50 'JB' - STA. 1183+67 'JB'




## TYPICAL FINISHED SECTION RAMPS JC & JD

STA. 1183+00 'JC' - STA. 1185+87 'JC'
STA. 1191+66 'JD' - STA. 1192+00 'JD'

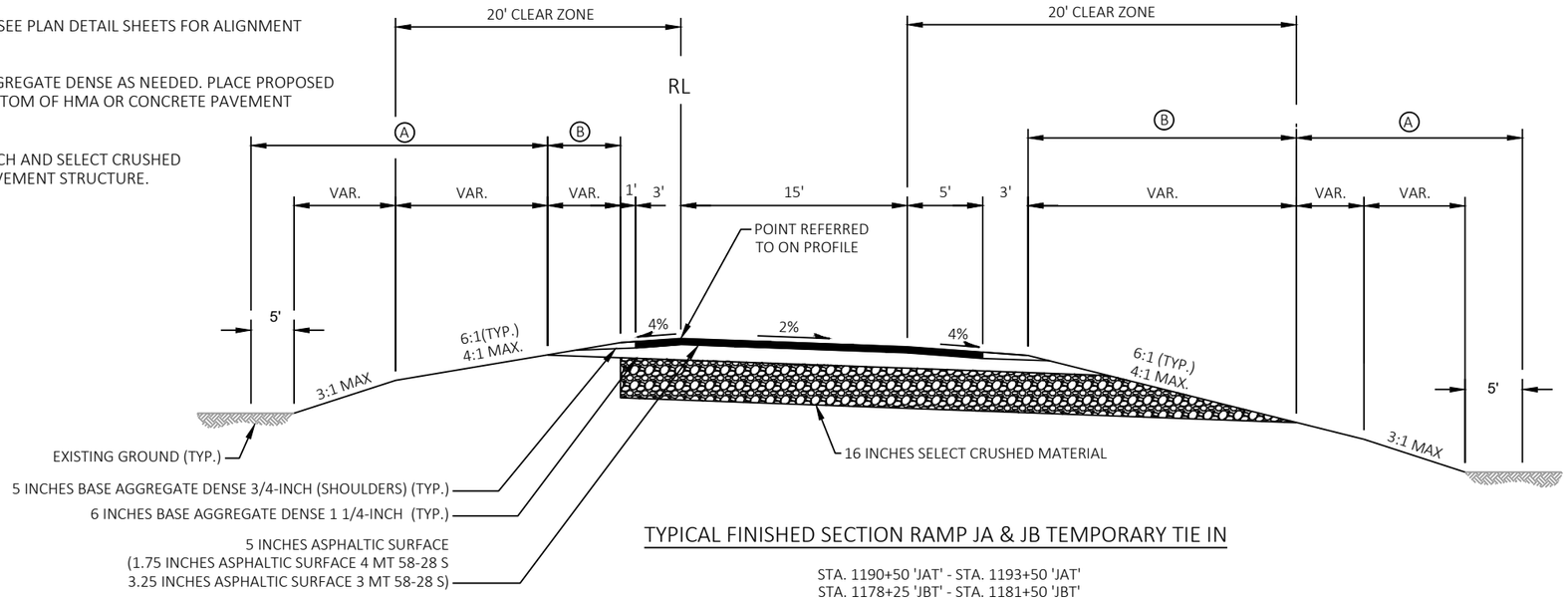
Ⓐ TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B.

Ⓑ SEEDING MIXTURE NO. 30 & FERTILIZER TYPE B.

Ⓒ POINT REFERRED TO ON SUPPLEMENTAL PROFILE. SEE PLAN DETAIL SHEETS FOR ALIGNMENT INFORMATION.

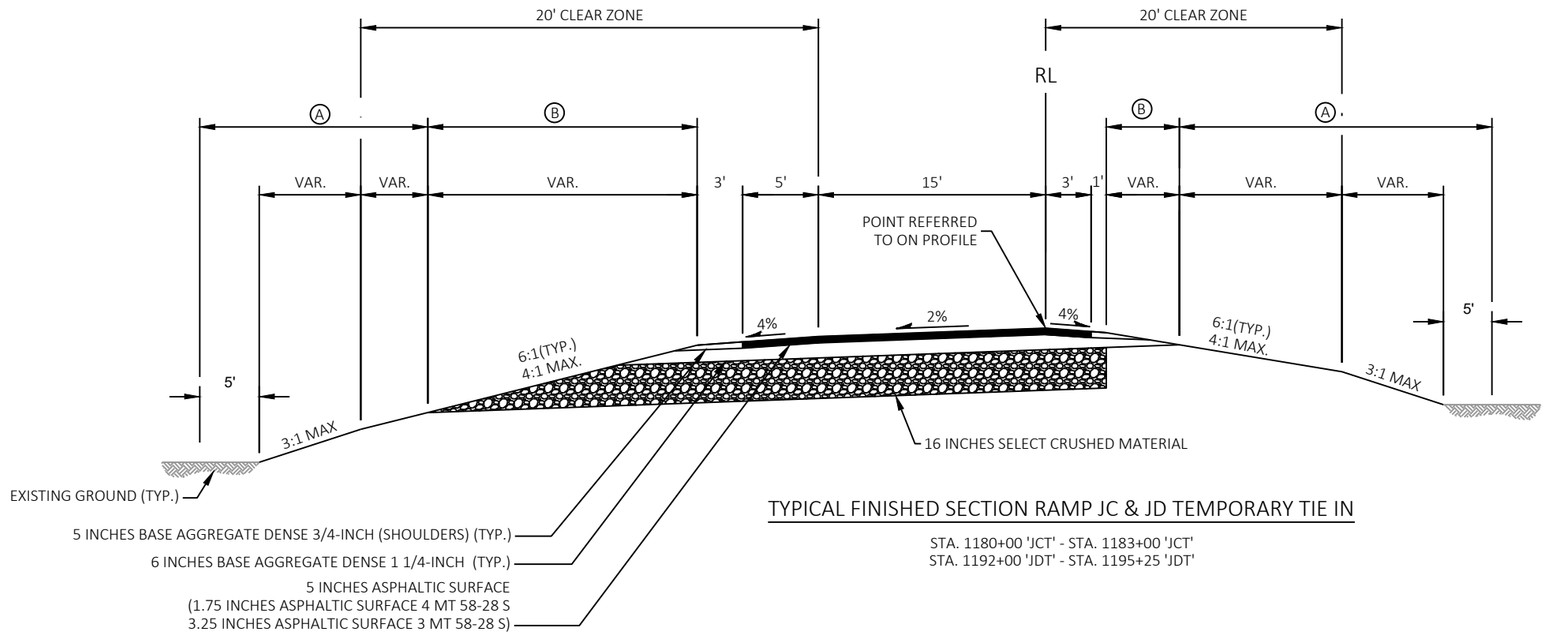
* REMOVE EXISTING HMA PAVEMENT AND BASE AGGREGATE DENSE AS NEEDED. PLACE PROPOSED BASE AGGREGATE DENSE TO MEET PROPOSED BOTTOM OF HMA OR CONCRETE PAVEMENT GRADES. DEPTH VARIES.

** PLACE 6 INCHES BASE AGGREGATE DENSE 1 1/4-INCH AND SELECT CRUSHED MATERIAL IN AREAS OUTSIDE OF THE EXISTING PAVEMENT STRUCTURE.




TYPICAL FINISHED SECTION RAMP JA & JB TEMPORARY TIE IN

STA. 1190+50 'JAT' - STA. 1193+50 'JAT'
STA. 1178+25 'JBT' - STA. 1181+50 'JBT'




TYPICAL FINISHED SECTION RAMP JC & JD TEMPORARY TIE IN

STA. 1180+00 'JCT' - STA. 1183+00 'JCT'
STA. 1192+00 'JDT' - STA. 1195+25 'JDT'

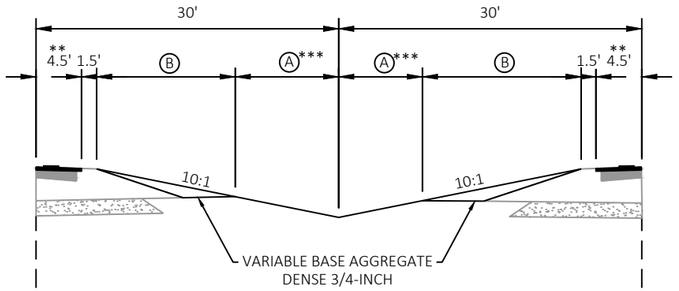
Ⓐ TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B.

Ⓑ SEEDING MIXTURE NO. 30 & FERTILIZER TYPE B.

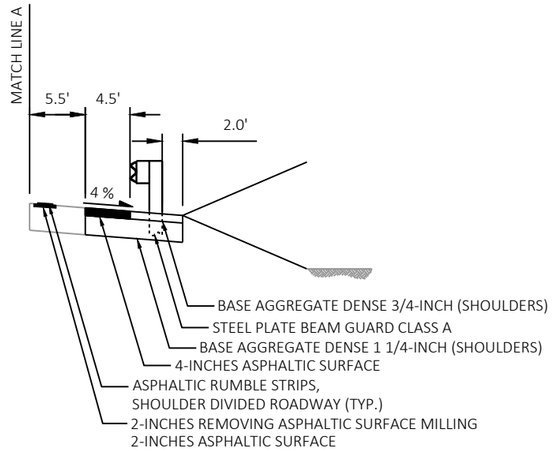
* SEE CONSTRUCTION DETAILS FOR RUMBLE STRIP REMOVAL, CRASHWALL REMOVAL, REMOVING GUARDRAIL, SHOULDER PAVEMENT, AND STEEL PLATE BEAM GUARD CLASS A FOR OUTSIDE SHOULDER LOCATIONS AND DETAILS.

** SEE CONSTRUCTION DETAILS AND TRAFFIC CONTROL TYPICAL SECTIONS FOR REMOVING ASPHALTIC SURFACE MILLING AND PLACEMENT OF ASPHALTIC SURFACE FOR MEDIAN SHOULDER LOCATIONS AND DETAILS.

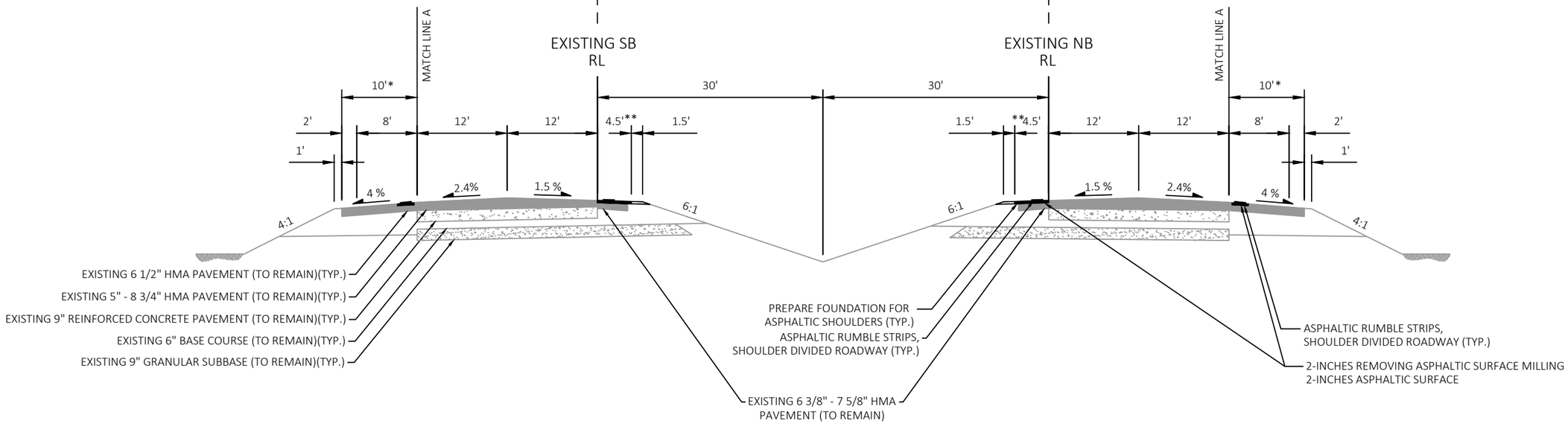
*** FOR ADDITIONAL GRADING INFORMATION, SEE BULLNOSE CROSS SECTIONS.




STA. 1186+20 - STA. 1189+21

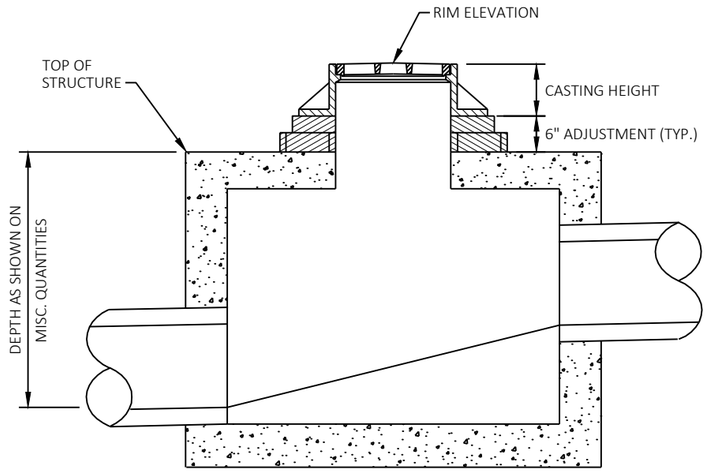



STA. 1186+57 NB - STA. 1188+14 NB RT
STA. 1187+28 SB - STA. 1188+85 SB LT

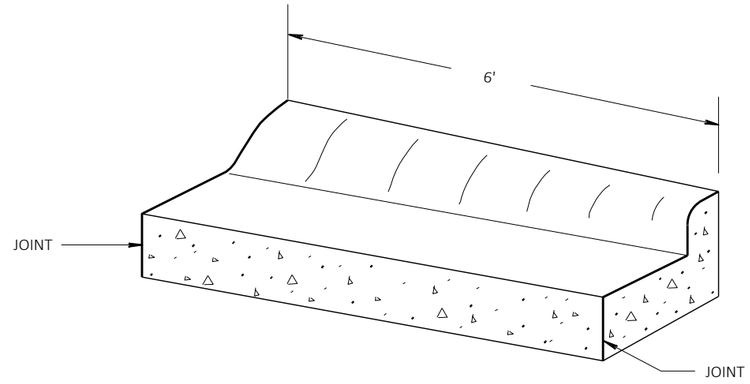



## TYPICAL FINISHED SECTION IH 41

STA. 1180+52 'NB' - STA. 1194+98 'SB'

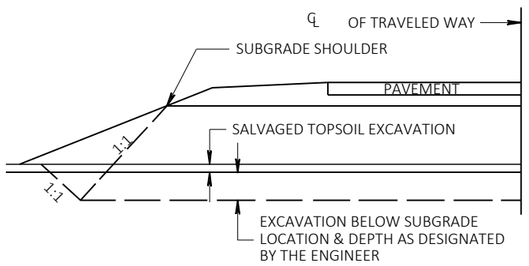



DETAIL FOR COMPUTING MANHOLE STRUCTURE ELEVATIONS

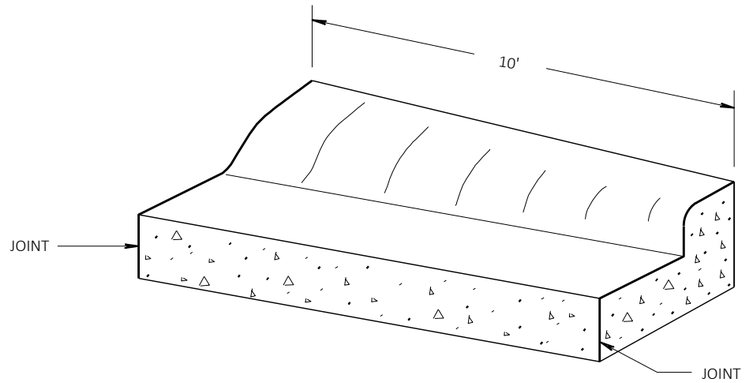



36-INCH TRANSITION DETAIL

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

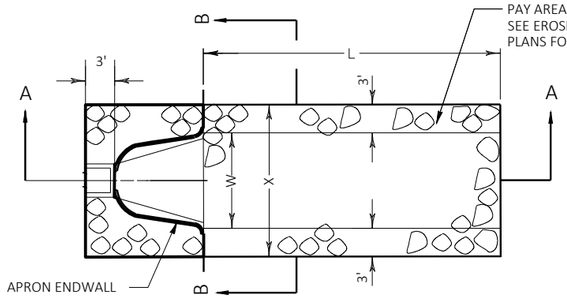



DETAIL FOR EXCAVATION BELOW SUBGRADE




42-INCH TRANSITION DETAIL

CONCRETE CURB & GUTTER 42-INCH SPECIAL TO CONCRETE CURB & GUTTER 36-INCH SPECIAL
(TO BE MEASURED AND PAID FOR AS CONCRETE CURB & GUTTER 42-INCH SPECIAL)




PAY AREA FOR RIPRAP.
SEE EROSION CONTROL
PLANS FOR TYPE OF PROTECTION.

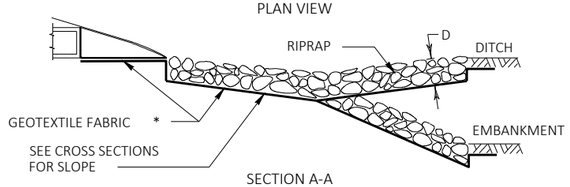
PLAN VIEW

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
24" FOR RIPRAP HEAVY

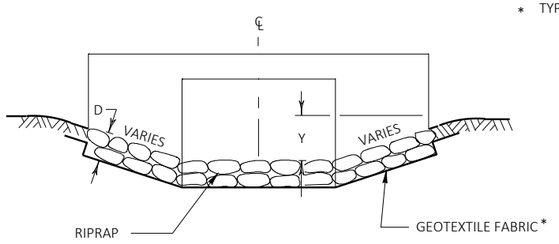
X = W+6'

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




SECTION A-A

* TYPE HR (FOR RIPRAP HEAVY AND MEDIUM ONLY)



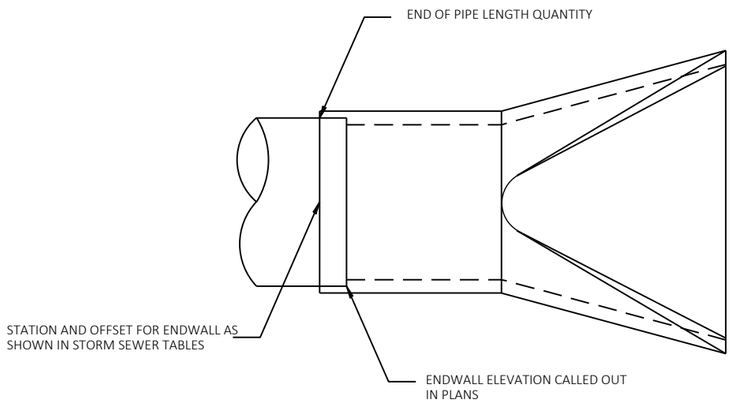

SECTION B-B

CONSTRUCTION NOTES:

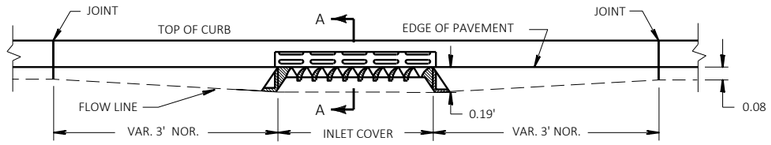
1. GEOTEXTILE FABRIC SHALL EXTEND BENEATH THE ENTIRE LENGTH OF THE APRON ENDWALL SECTION. INSTALL ON PREPAVED FOUNDATION. GRADE PRIOR TO END WALL INSTALLATION.
2. COMPLETE GEOTEXTILE FABRIC AND RIPRAP SECTION INSTALLATION PRIOR TO STORM WATER FLOW.

## RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS

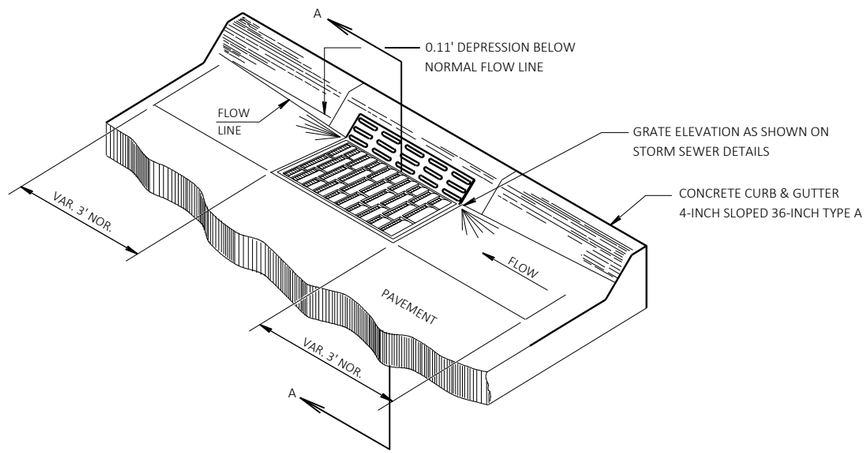
SEE EROSION CONTROL PLAN FOR LOCATIONS




## ENDWALL DETAIL

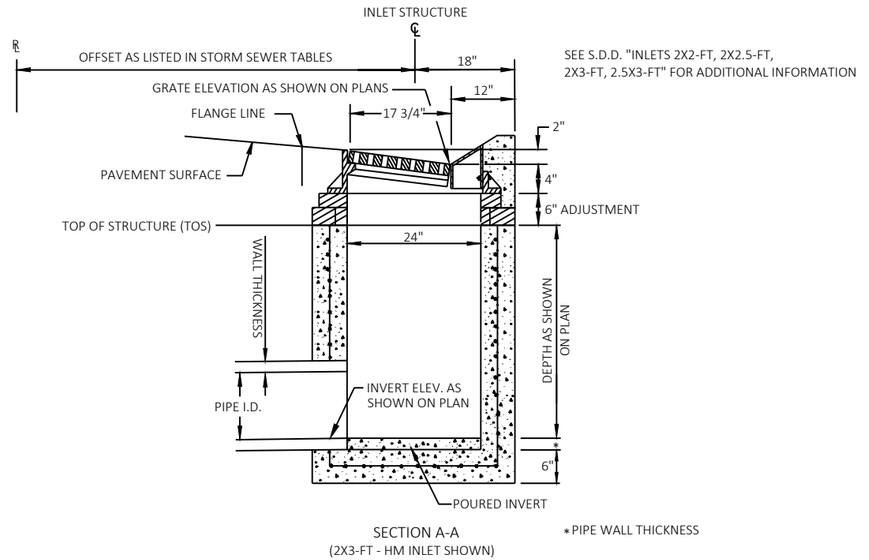



ELEVATION




## DETAIL OF CURB AND GUTTER AT INLETS

(2X3-FT - HM INLET SHOWN)

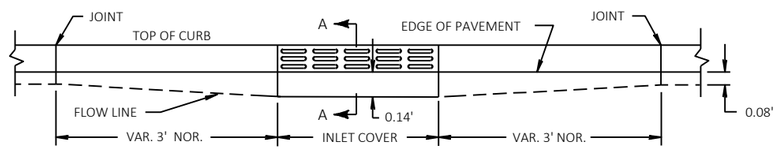



SECTION A-A

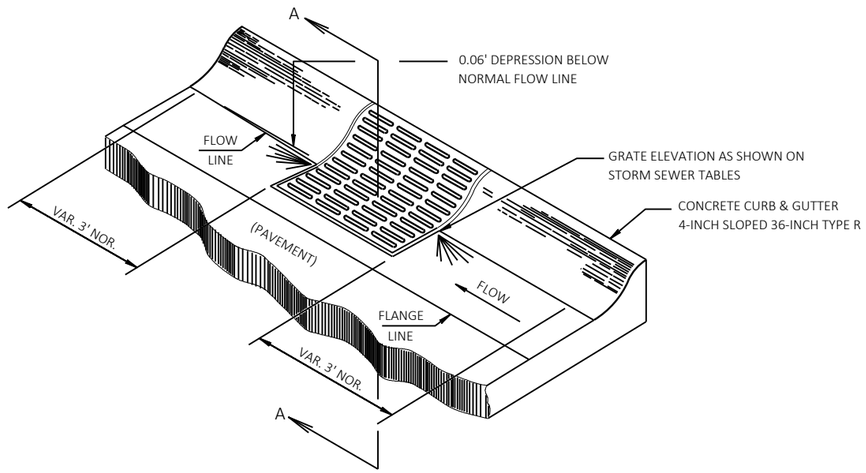
(2X3-FT - HM INLET SHOWN)

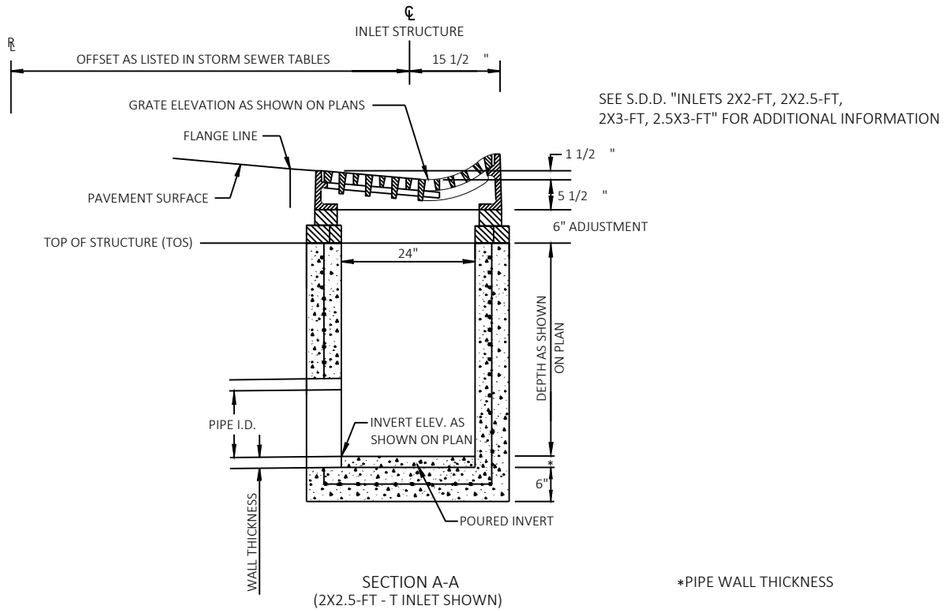
* PIPE WALL THICKNESS

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




ELEVATION



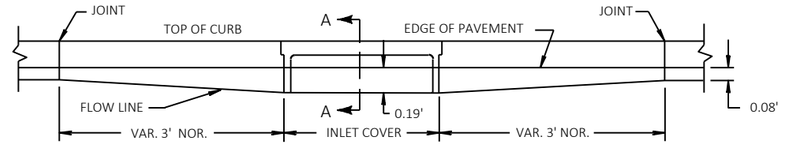




SEE S.D.D. "INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT" FOR ADDITIONAL INFORMATION

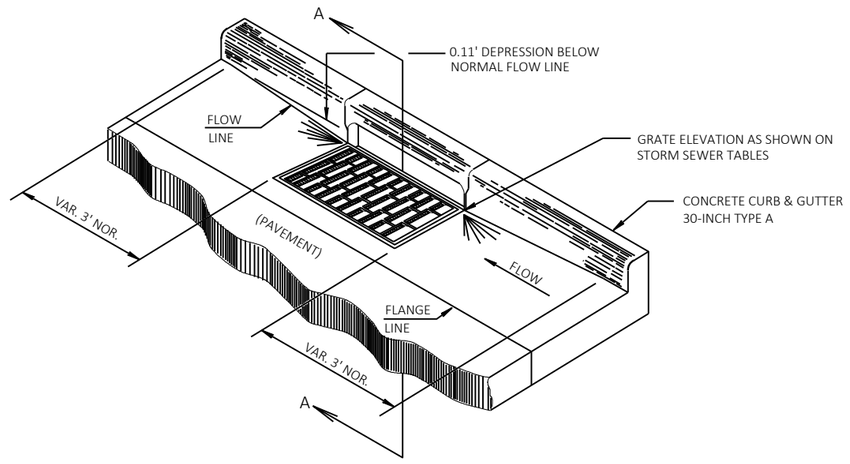
SECTION A-A
(2X2.5-FT - T INLET SHOWN)

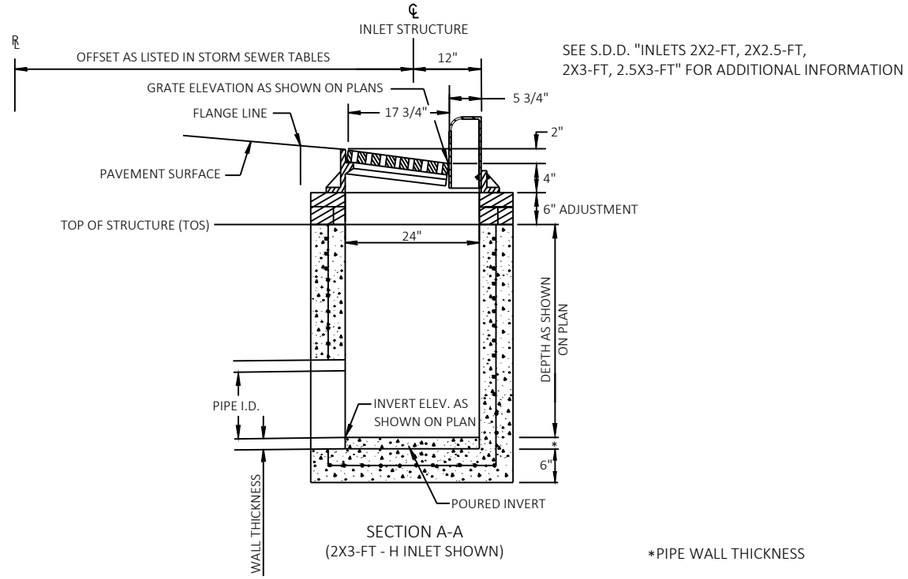
*PIPE WALL THICKNESS

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




ELEVATION



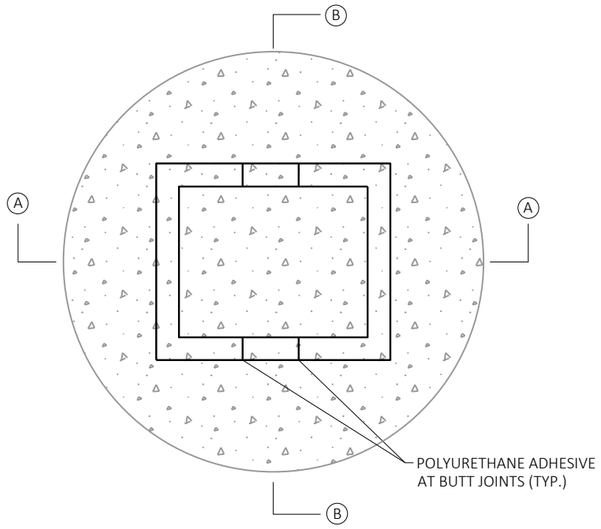




SEE S.D.D. "INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT" FOR ADDITIONAL INFORMATION

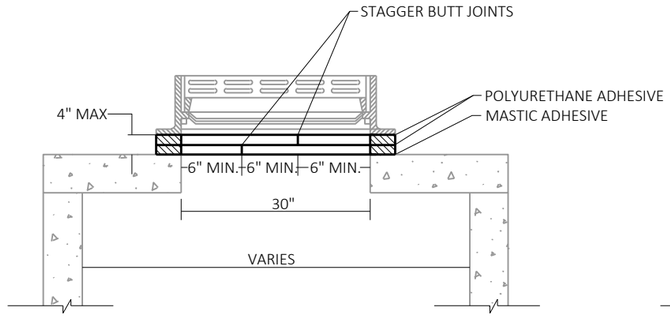
SECTION A-A
(2X3-FT - H INLET SHOWN)

*PIPE WALL THICKNESS

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

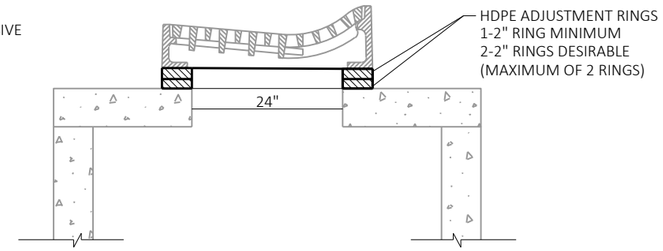



PLAN VIEW



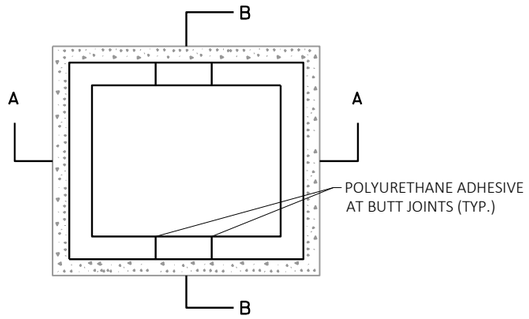

SECTION A-A

NOTE:
ALL CUTS MADE TO HDPE ADJUSTMENT RINGS WILL BE PERPENDICULAR AND PROVIDE A TIGHT JOINT

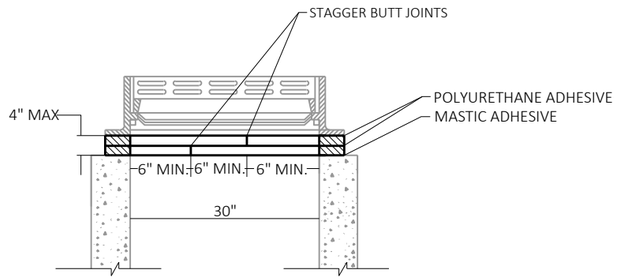



SECTION B-B

HDPE RING CUTTING DETAIL FOR INLETS 4-FT

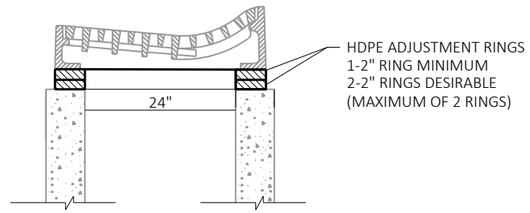



PLAN VIEW




SECTION A-A

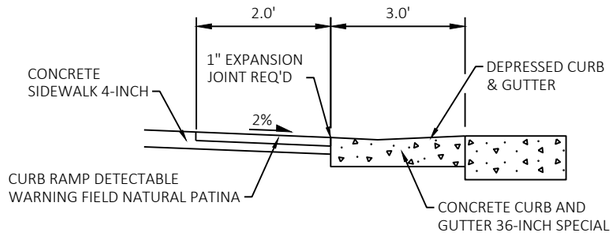
NOTE:
ALL CUTS MADE TO HDPE ADJUSTMENT RINGS WILL BE PERPENDICULAR AND PROVIDE A TIGHT JOINT



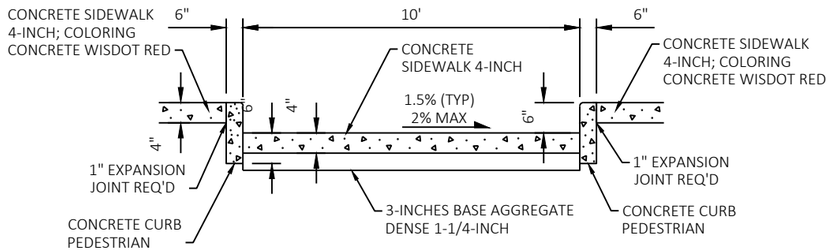

SECTION B-B

HDPE RING CUTTING DETAIL FOR INLETS 2X2.5-FT

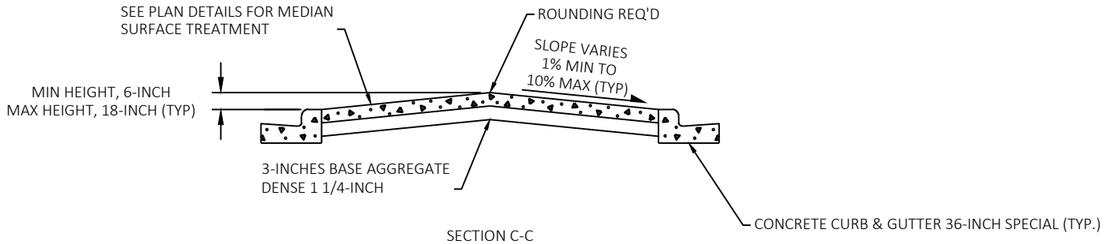
2




SECTION A-A

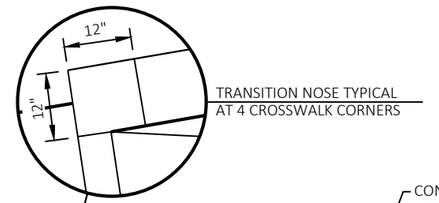



SECTION B-B




SECTION C-C

NOTE:
EXPANSION MATERIAL TO BE 1" TALLER THAN ABUTTING MEDIAN CONCRETE THICKNESS. (I.E. 5" IN HEIGHT WHEN ADJACENT TO CONCRETE SIDEWALK 4-INCH)




TRANSITION NOSE TYPICAL AT 4 CROSSWALK CORNERS

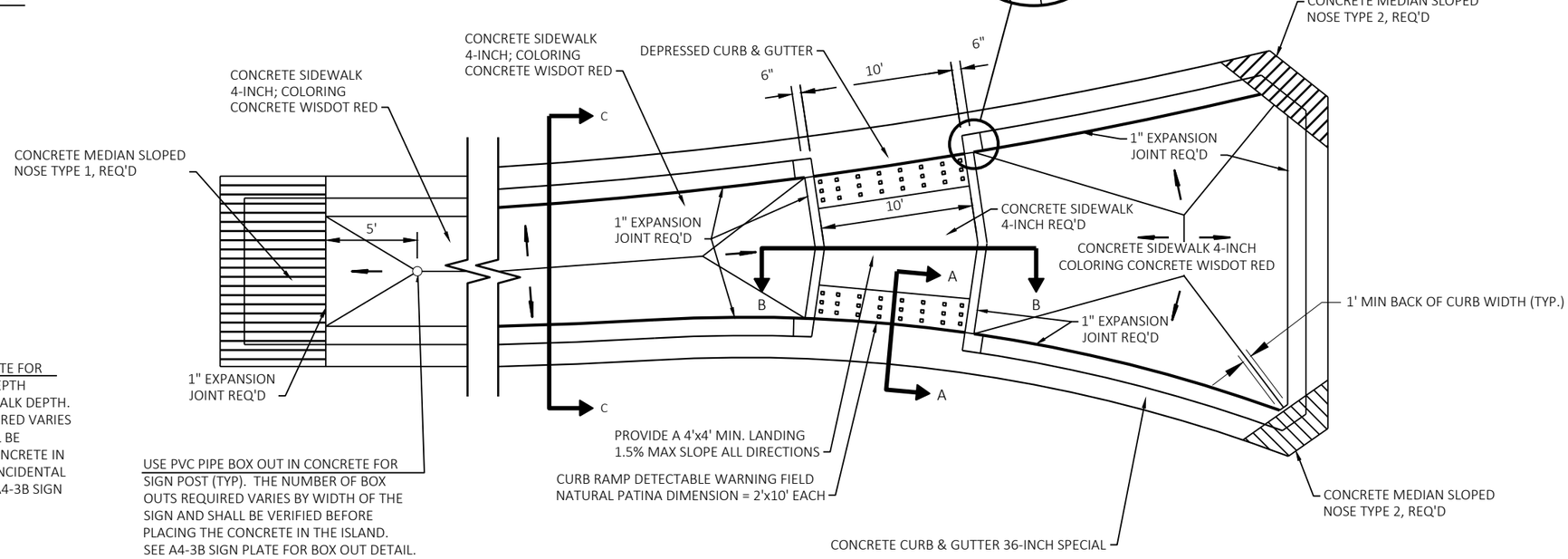



* DISTANCE TO BE LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.

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

USE PVC PIPE BOX OUT IN CONCRETE FOR SIGN POST (TYP). PVC BOX OUT DEPTH SHOULD MATCH ADJACENT SIDEWALK 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 THE SIGN POST BID ITEM. SEE A4-3B SIGN PLATE FOR BOX OUT DETAIL.

CENTER AND SPLITTER ISLAND SIGN LOCATION DETAIL (TYP)



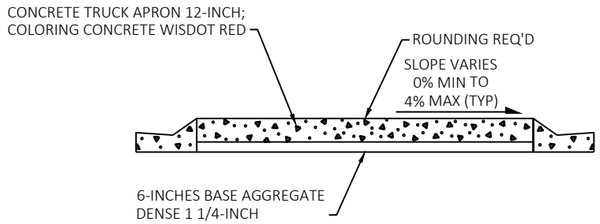

USE PVC PIPE BOX OUT IN CONCRETE FOR SIGN POST (TYP). THE NUMBER OF BOX OUTS REQUIRED VARIES BY WIDTH OF THE SIGN AND SHALL BE VERIFIED BEFORE PLACING THE CONCRETE IN THE ISLAND. SEE A4-3B SIGN PLATE FOR BOX OUT DETAIL.

DRAINAGE BREAK POINT
DIRECTION OF DRAINAGE

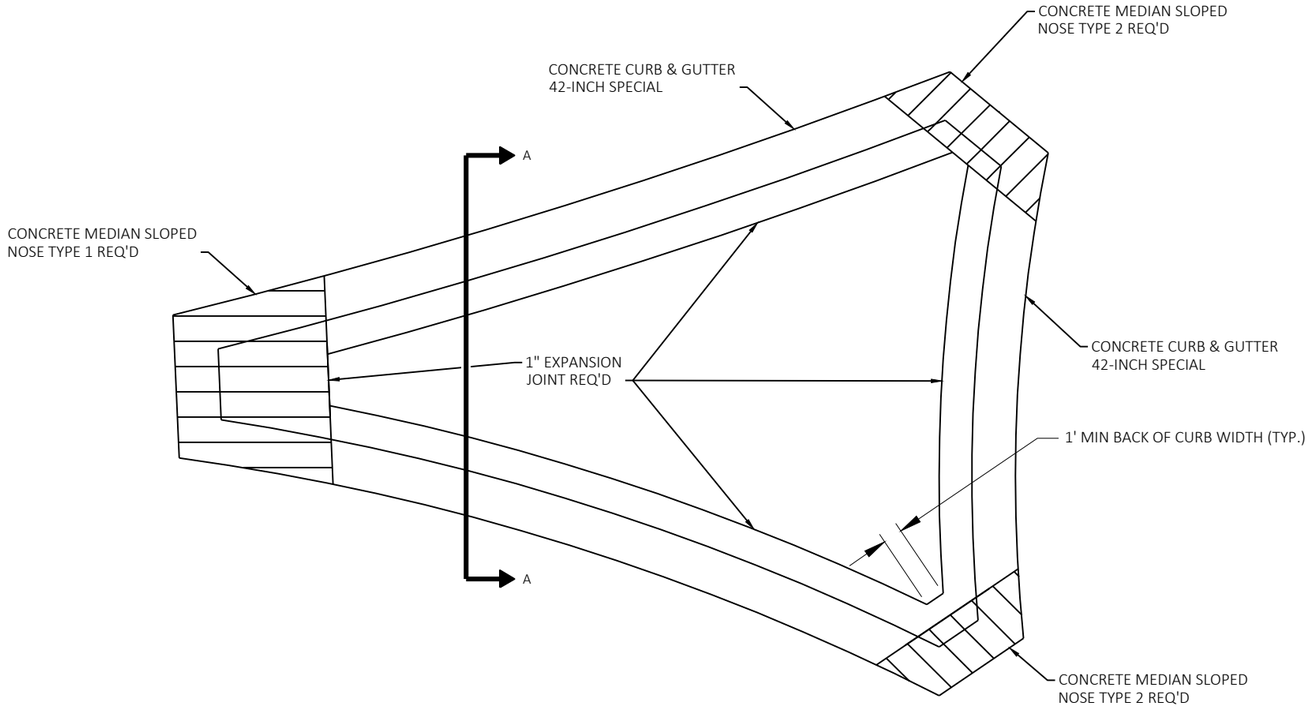
NOTES: INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE. CONTRACTOR TO USE FULL WIDTH DETECTABLE WARNING FIELD PANELS.

## SPLITTER ISLAND DETAIL WITH PEDESTRIAN CROSSING

STA. 13+33 'JNB' - STA. 15+21 'JNB'
STA. 23+39 'JNB' - STA. 25+93 'JNB'



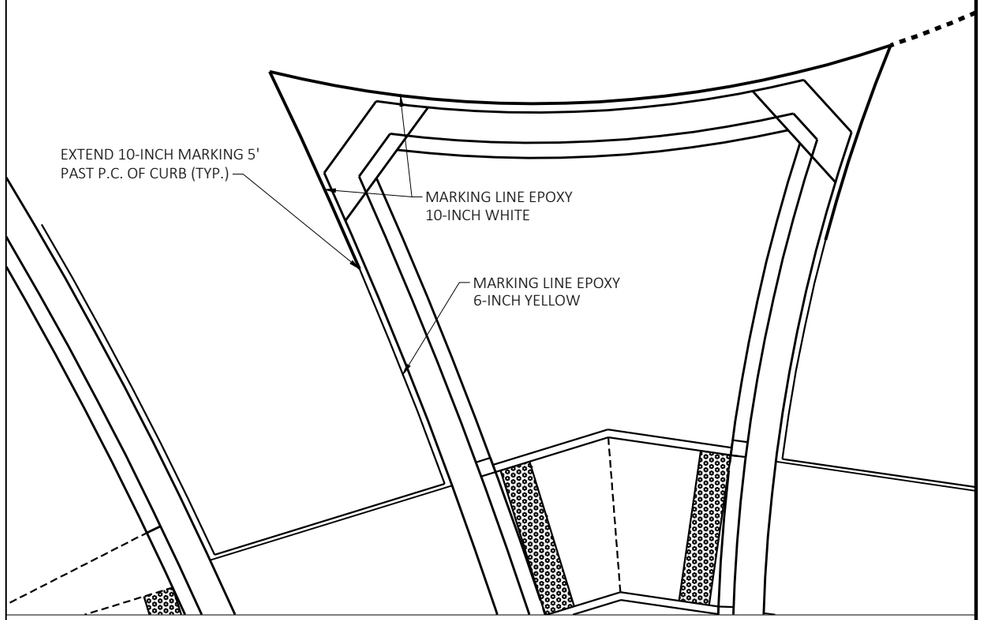

SECTION A-A




SPLITTER ISLAND DETAIL

STA. 16+71 'JNB' - STA. 17+15 'JNB'
STA. 21+49 'JNB' - STA. 21+87 'JNB'

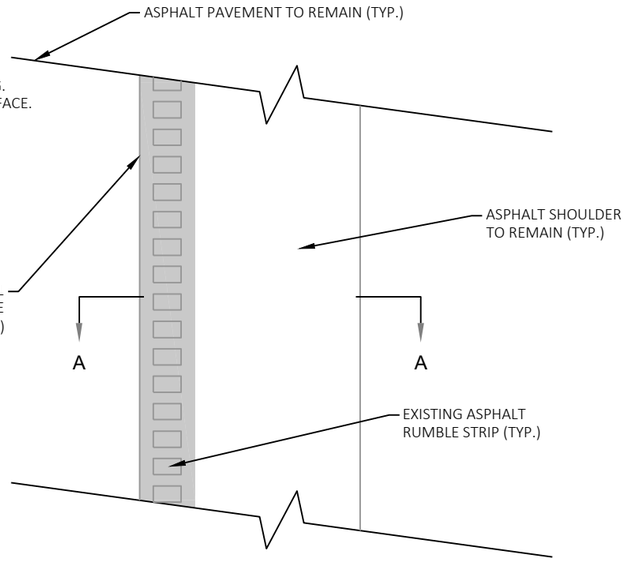
SEE PLAN DETAILS FOR ADDITIONAL INFORMATION



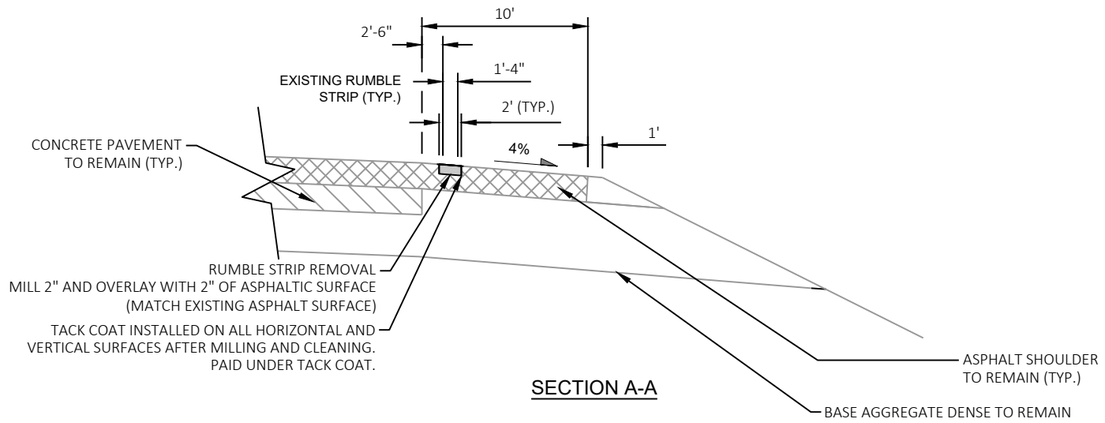

ROUNDABOUT PAVEMENT MARKING DETAIL

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CONSTRUCTION DETAILS | SHEET 22 | E |
|---|---|---|---|---|---|

NOTES:
1. EXISTING RUMBLE STRIP REMOVAL PAID FOR UNDER BID ITEM REMOVING ASPHALTIC SURFACE MILLING.
2. NEW ASPHALT PAID FOR UNDER BID ITEM ASPHALTIC SURFACE.



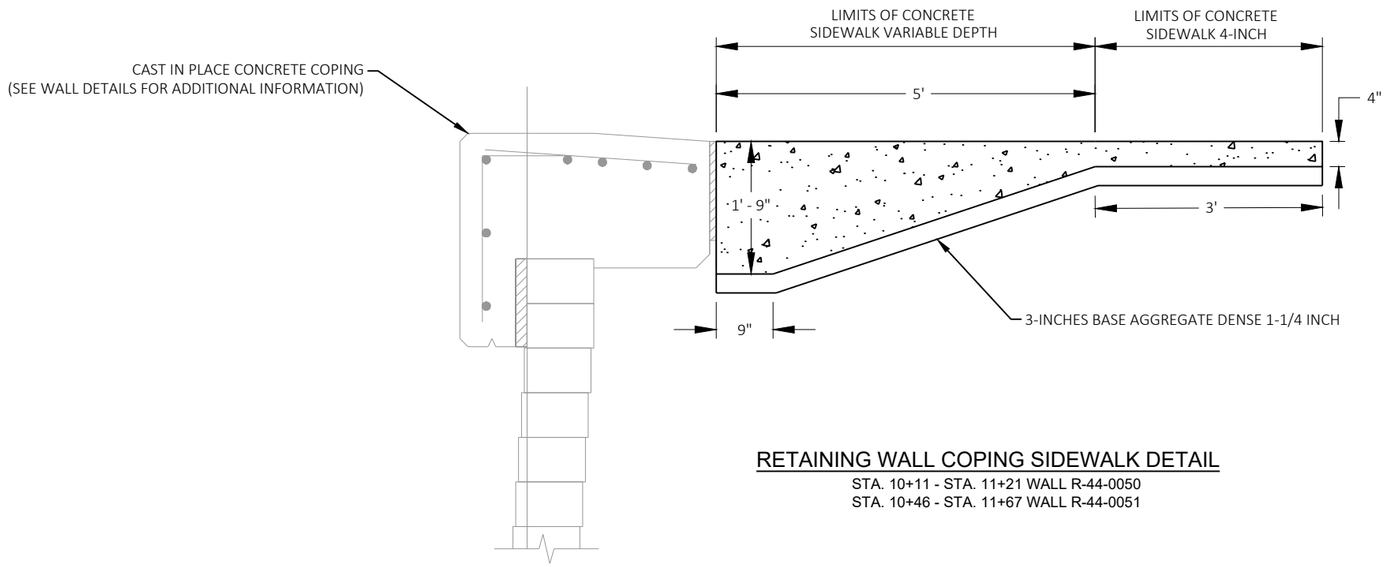

PLAN VIEW




SECTION A-A

## RUMBLE STRIP REMOVAL - ASPHALT SHOULDER W/ CONTINUOUS RUMBLE STRIP

STA. 1180+52 'NB' - STA. 1192+00 'NB'
STA. 1183+50 'SB' - STA. 1194+98 'SB'




## RETAINING WALL COPING SIDEWALK DETAIL

STA. 10+11 - STA. 11+21 WALL R-44-0050
STA. 10+46 - STA. 11+67 WALL R-44-0051

SEE S.D.D. STEEL THRIE BEAM BULLNOSE TERMINAL FOR MORE INFORMATION

SB IH-41

CTH J

POST 5 - STA 1188'41'+45.49
-7.37' LT

POST 1 - STA 1188'41'+57.99
-5.12' LT

POST 12 - STA 1188'41'+07.99
-7.37' LT

POST 1 - STA 1188'41'+57.99
5.12' RT

POST 5 - STA 1188'41'+45.49
7.38' RT

1188+00'41'

POST 12 - STA 1188'41'+07.99
7.38' RT

POST 12 - STA 1187'41'+32.99
-7.38' LT

STEEL THRIE BEAM

POST 5 - STA 1186'41'+95.49
-7.38' LT

POST 1 - STA 1186'41'+82.99
-5.12' LT

1187+00'41'

B-44-338

POST 12 - STA 1187'41'+32.99
7.37' RT

POST 1 - STA 1186'41'+82.99
5.12' RT

POST 5 - STA 1186'41'+95.49
7.37' RT

NB IH-41

N

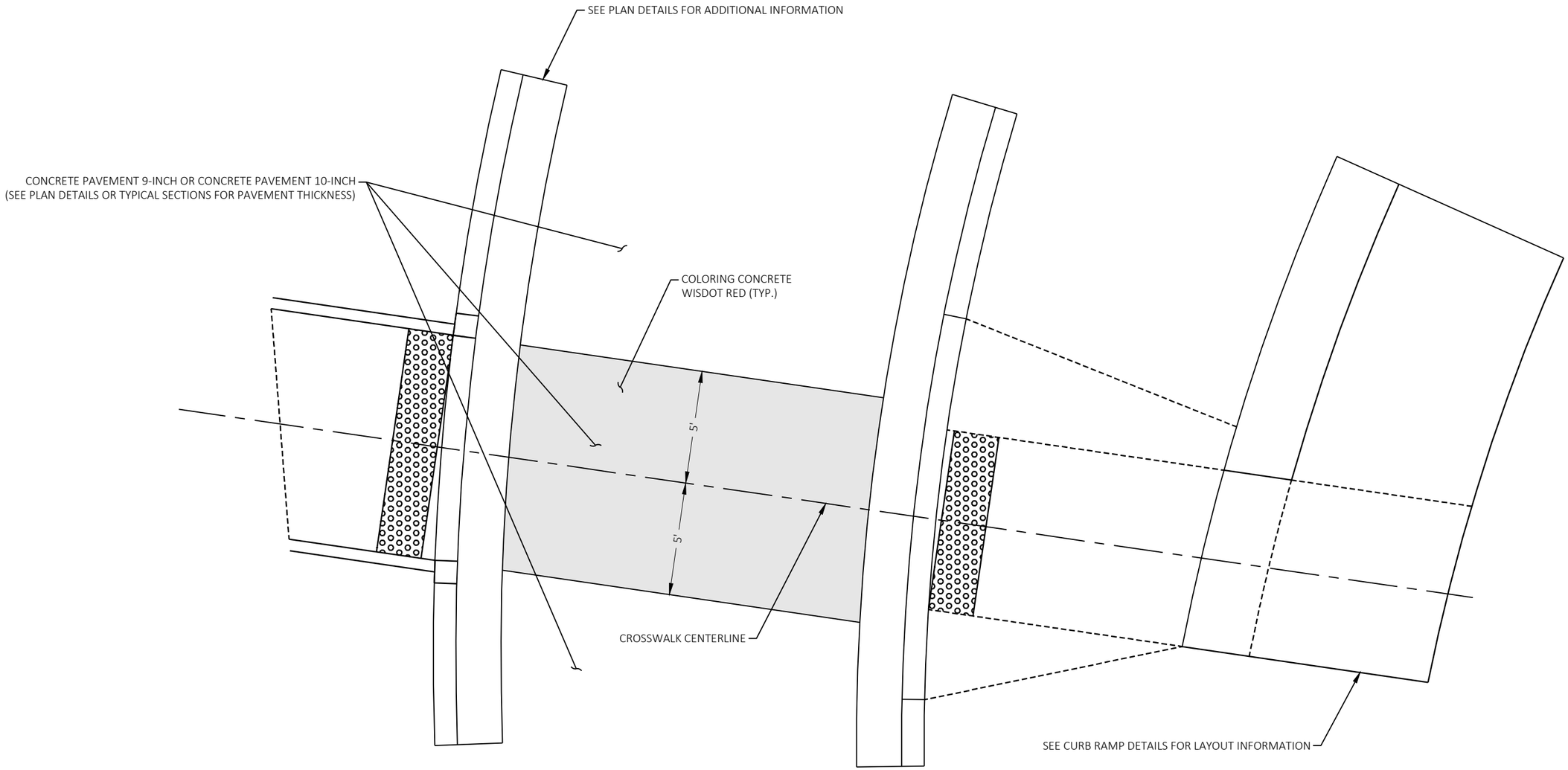
## STEEL THRIE BEAM BULLNOSE DETAIL

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CONSTRUCTION DETAILS | SHEET 24 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021001-CD.DWG
LAYOUT NAME - 021007-cd

PLOT DATE : 7/31/2024 10:57 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : Custom

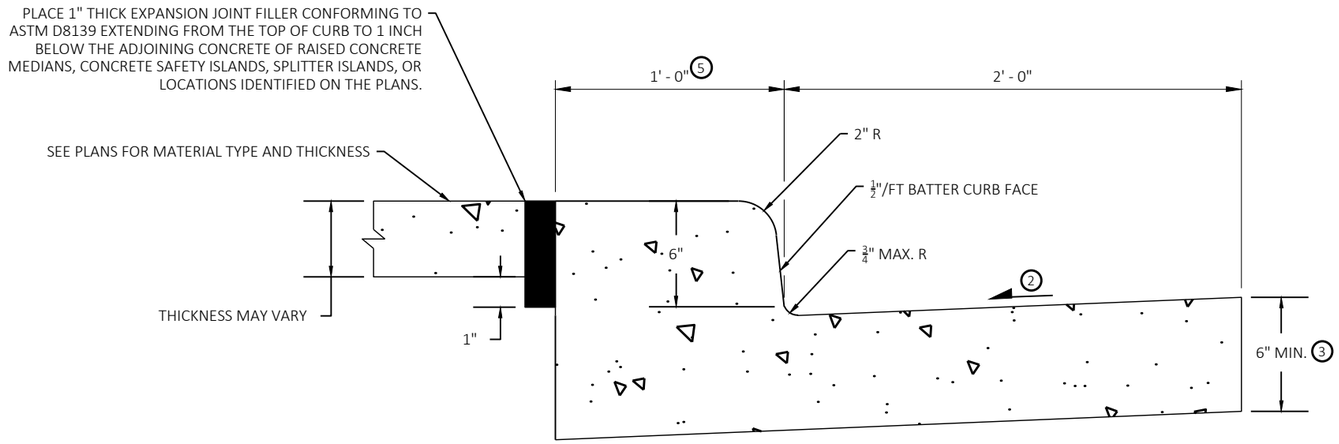
2




## COLORING CONCRETE CROSSWALK DETAIL

STA. 14+85.25 'JNB' - STA. 14+97.35 'JNB'
STA. 23+63.56 'JNB' - STA. 23+73.58 'JNB'
STA. 114+87.47 'JSB' - STA. 114+98.40 'JSB'
STA. 123+66.20 'JSB' - STA. 123+78.11 'JSB'
STA. 1187+13.22 'JA' - STA. 1187+23.40 'JA'
STA. 1185+99.77 'JB' - STA. 1186+11.91 'JB'
STA. 1187+71.20 'JC' - STA. 1187+81.21 'JC'
STA. 1189+26.98 'JD' - STA. 1189+40.61 'JD'
STA. 189+40.31 'JDR' - STA. 1189+50.31 'JDR'

2




CONCRETE CURB & GUTTER 36-INCH SPECIAL ①

## GENERAL NOTES

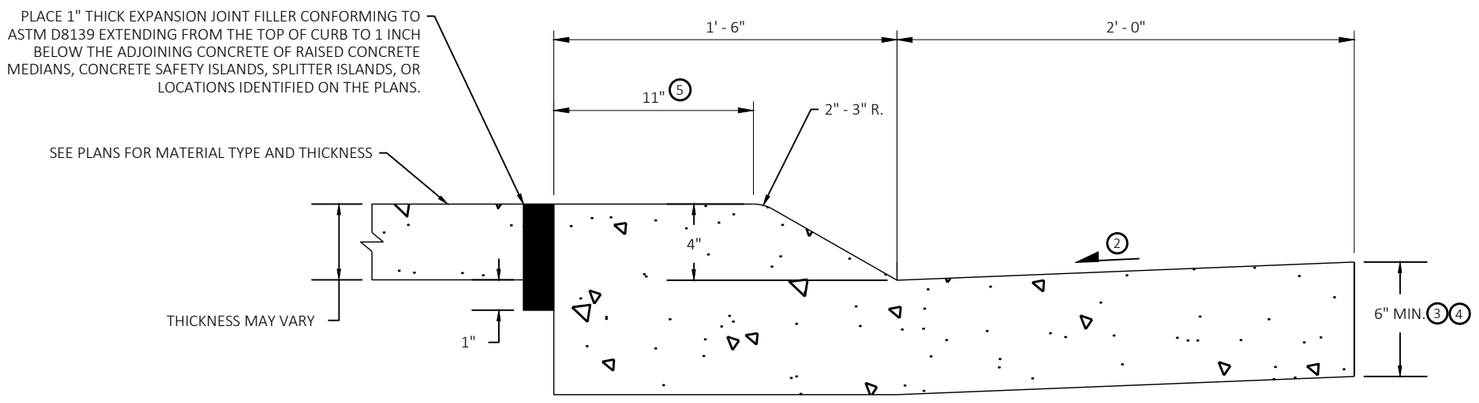
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER WHEN ADJACENT TO CONCRETE PAVEMENT PER SECTION 601 OF THE STANDARD SPECIFICATIONS.

② USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

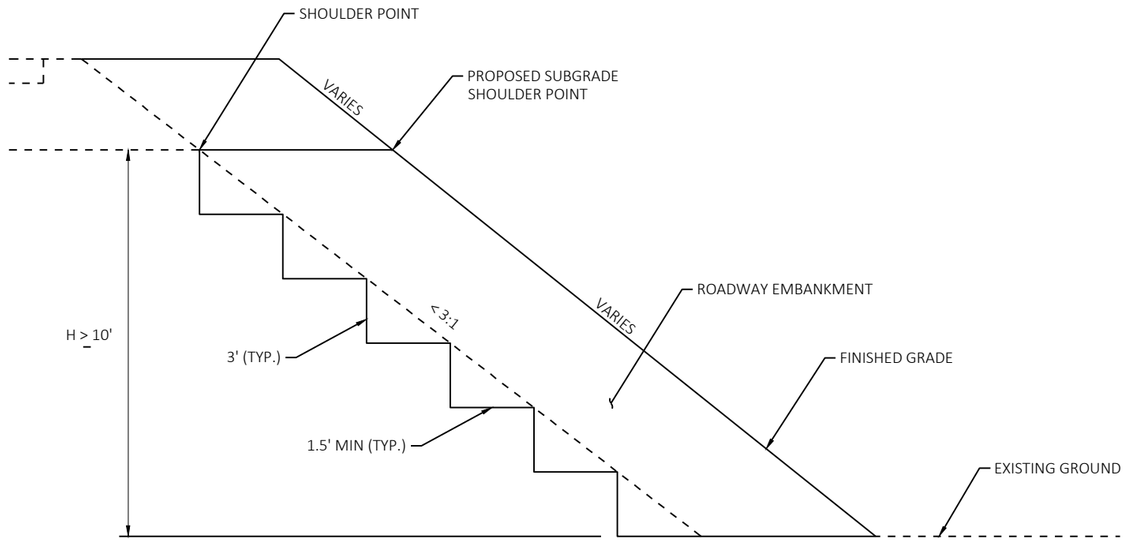
④ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

⑤ TRANSITION LENGTH FROM 11" OR 12" CURB TO 6" CURB IS 10 FEET.




CONCRETE CURB & GUTTER 42-INCH SPECIAL ①

2




EMBANKMENT BENCHING DETAIL

NOTES

1. EMBANKMENT PLACED IN LAYERS AND COMPACTED PER SPECIFICATIONS.
2. BENCHING MAY BE REQUIRED IN AREAS OF FLY ASH. IF BENCH EXTENDS INTO CLAY COVER, CEASE OPERATIONS AND NOTIFY ENGINEER

NOTES:

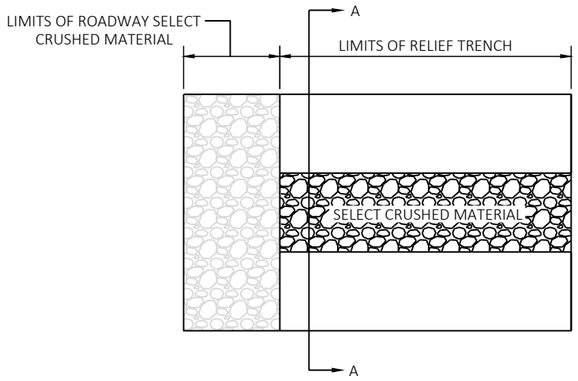
CONSTRUCT RELIEF TRENCH AT STATIONS LISTED.

PROTECT STORM SEWER PIPES AND UTILITIES FROM DAMAGE DURING CONSTRUCTION OF RELIEF TRENCHES.

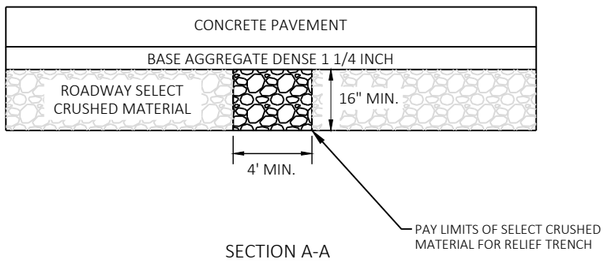
FIELD ADJUST RELIEF TRENCH LOCATION TO AVOID CONFLICTS WITH STRUCTURE FOUNDATIONS, UTILITIES AND STORM SEWER, OR AS DIRECTED BY THE ENGINEER.

REFER TO PROPOSED TYPICAL SECTIONS FOR PAVEMENT STRUCTURE.

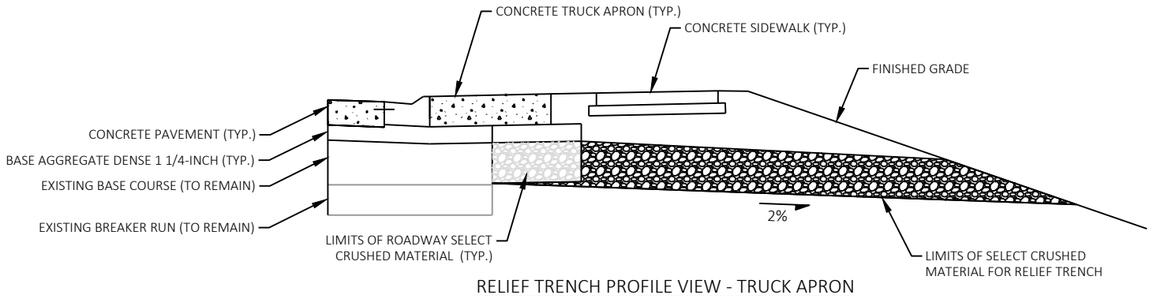
MIRROR DETAIL AS NECESSARY OR DIRECTED BY THE ENGINEER.




RELIEF TRENCH PLAN VIEW

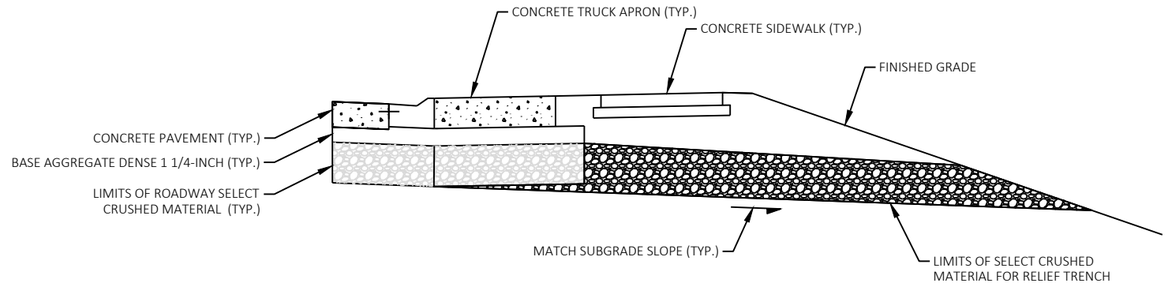



SECTION A-A



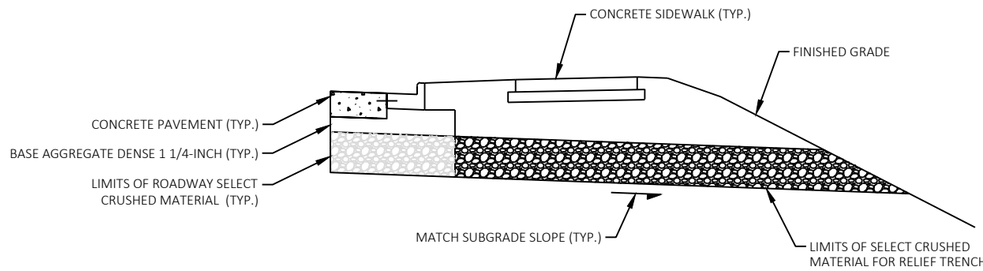

RELIEF TRENCH PROFILE VIEW - TRUCK APRON

STA. 14+26 'JNB'
STA. 24+59 'JNB'
STA. 113+61 'JSB'
STA. 124+50 'JSB'
STA. 1187+27 'JA'
STA. 1189+07 'JA'
STA. 1185+28 'JB'
STA. 1185+58 'JB'
STA. 1185+87 'JC'
STA. 1187+29 'JC'
STA. 1189+72 'JD'




RELIEF TRENCH PROFILE VIEW - RAMP JDR & BRIDGE RECONSTRUCTION WITH TRUCK APRON

STA. 116+72 'JSB'
STA. 21+91 'JNB'
STA. 1189+03 'JDR'




RELIEF TRENCH PROFILE VIEW - RAMP JDR & BRIDGE RECONSTRUCTION WITHOUT TRUCK APRON

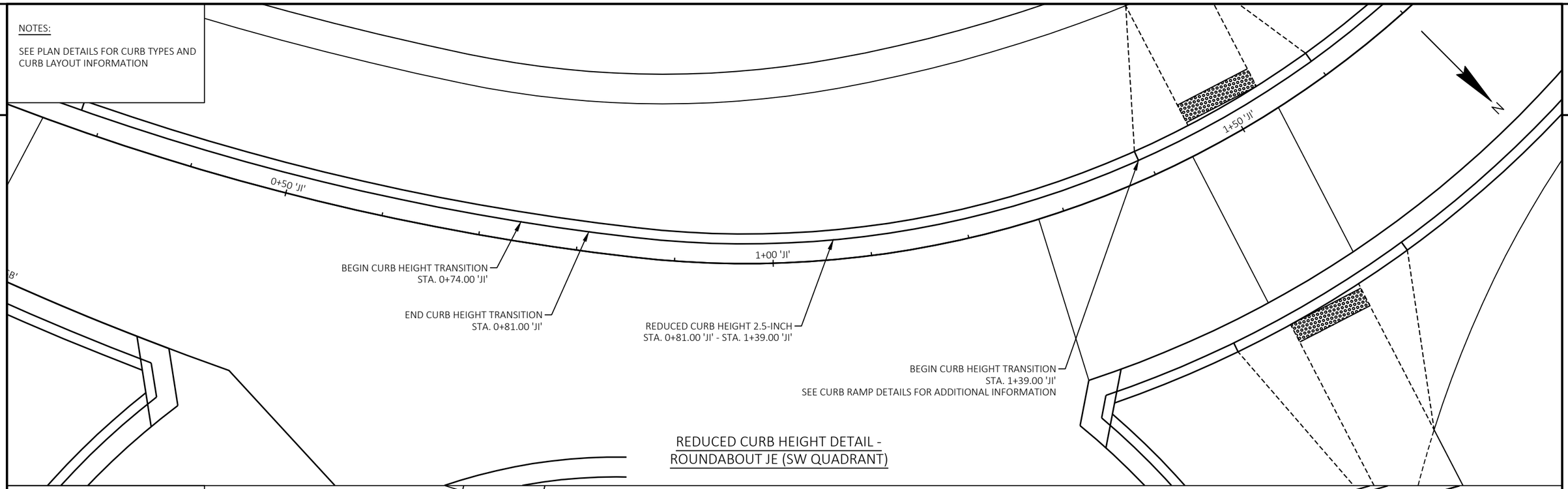
STA. 16+65 'JNB'
STA. 121+95 'JSB'
STA. 1190+94 'JD'

RELIEF TRENCH DETAIL

2

NOTES:

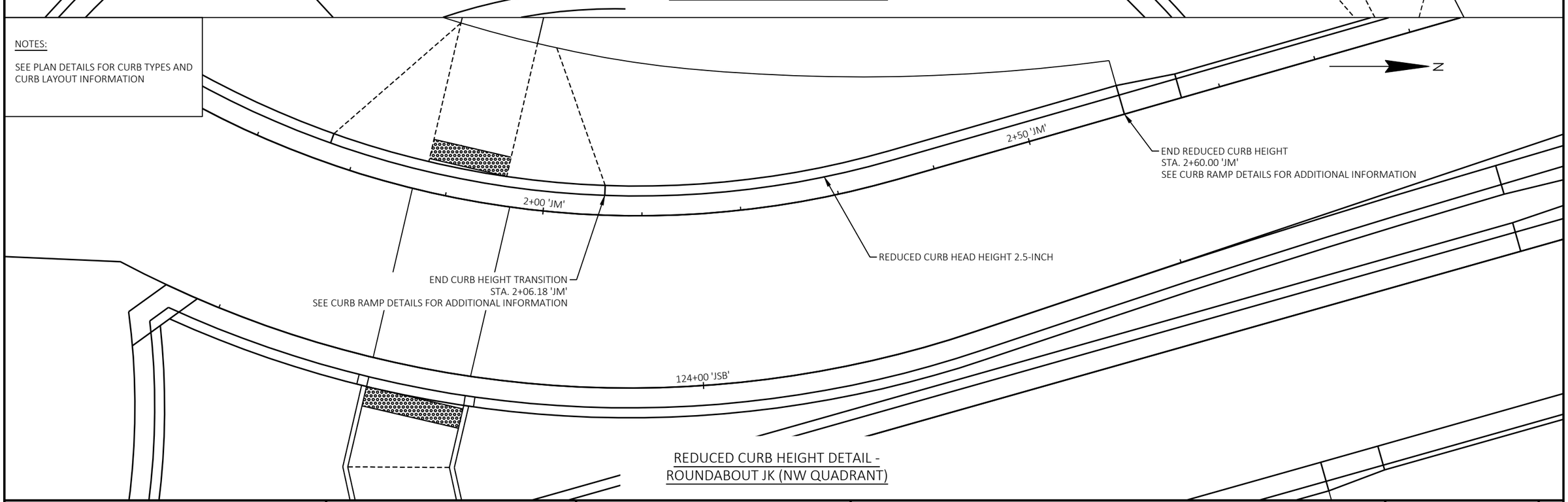
SEE PLAN DETAILS FOR CURB TYPES AND CURB LAYOUT INFORMATION




REDUCED CURB HEIGHT DETAIL -
ROUNDABOUT JE (SW QUADRANT)

NOTES:

SEE PLAN DETAILS FOR CURB TYPES AND CURB LAYOUT INFORMATION




REDUCED CURB HEIGHT DETAIL -
ROUNDABOUT JK (NW QUADRANT)

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CONSTRUCTION DETAILS | SHEET 29 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021007-CD.DWG
LAYOUT NAME - 021007.9-cd
PLOT DATE : 8/27/2024 3:42 PM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

NOTE: CONCRETE BARRIER WALL TEMPORARY PRECAST INSTALLED IN STAGE 1.

2

2

N

CTH J

SIGN

TRAFFIC CAMERA

REMOVING CONCRETE BARRIER
STA. 1187+53.77 'SB' - STA. 1188+42.08 'SB'

STA 1187+53.77 'SB', -36.00' LT
STA 1187+53.77 'SB', -31.50' LT

STA 1188+42.08 'SB', -36.00' LT
STA 1188+42.08 'SB', -31.50' LT

REMOVING GUARDRAIL STA. 1188+40 'SB' - STA. 1188+85 'SB'

EXISTING BEAMGUARD TO REMAIN

2'
12'
12'
2'

IH 41 SB

1185+00 SB | 1186+00 SB | 1187+00 SB | 1188+00 SB | 1189+00 SB | 1190+00 SB

REMOVAL AND SALVAGE
OF HIGH TENSION CABLE
GUARD AND POSTS REQ'D.

REMOVING GUARDRAIL

SIGN

SIGN

1185+00 NB | 1186+00 NB | 1187+00 NB | 1188+00 NB | 1189+00 NB | 1190+00 NB

2'
12'
12'
2'

IH 41 NB

EXISTING BEAMGUARD TO REMAIN

REMOVING GUARDRAIL STA. 1186+67 'NB' - STA. 1187+02 'NB'

STA 1186+99.83 'NB', 31.50' RT
STA 1186+99.83 'NB', 36.00' RT

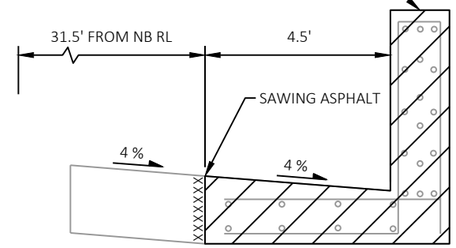
RIPRAP

STA 1187+78.25 'NB' , 31.50' RT
STA 1187+78.25 'NB', 36.00' RT

REMOVING CONCRETE BARRIER
STA. 1186+99.83 'NB' - STA. 1187+78.25 'NB'

SIGN

REMOVE CONCRETE BARRIER/CRASH WALL




CROSS SECTION THRU CRASH WALL

LEGEND

- SAWING ASPHALT
- ASPHALTIC SURFACE
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC

## VEHICLE BARRIER SYSTEM REMOVAL DETAIL

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CONSTRUCTION DETAIL | SHEET 30 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021002-CD.DWG
LAYOUT NAME - 021008-cd

PLOT DATE : 9/16/2024 11:19 AM | PLOT BY : GRIMME, SARA | PLOT NAME : | PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

CTH J

N

STA. 1187+27.66 'SB' - STA. 1187+35.37 'SB' ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
STA. 1187+35.37 'SB' - STA. 1188+85.37 'SB' STEEL PLATE BEAM GUARD CLASS A

STA 1187+53.77 'SB', -36.00' LT
STA 1187+53.77 'SB', -31.50' LT
STA 1187+35.37 'SB', -36.00' LT
ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
STA 1187+27.66 'SB', -36.00' LT

STEEL PLATE BEAM GUARD CLASS A
STA 1188+42.08 'SB', -36.00' LT
STA 1188+42.08 'SB', -31.50' LT
STA 1188+85.37 'SB', -36.00' LT
RECONNECT TO EXISTING GUARDRAIL CLASS A

IH 41 SB

12'
12'

10'

1185+00 SB | 1186+00 SB | 1187+00 SB | 1188+00 SB | 1189+00 SB | 1190+00 SB

SIGN

1185+00 NB | 1186+00 NB | 1187+00 NB | 1188+00 NB | 1189+00 NB | 1190+00 NB

IH 41 NB

10'

12'
12'

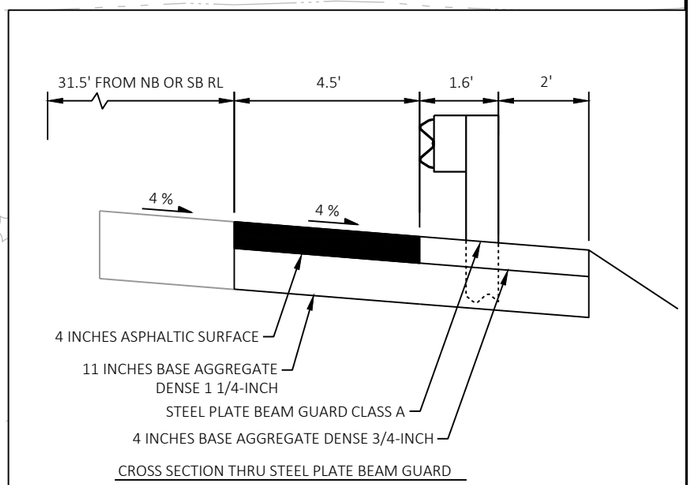
RECONNECT TO EXISTING GUARDRAIL CLASS A
STA 1186+56.65 'NB', 36.00' RT

STA 1186+99.83 'NB', 31.50' RT
STA 1186+99.83 'NB', 36.00' RT
STEEL PLATE BEAM GUARD CLASS A

STA 1188+14.36 'NB', 36.00' RT
ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
STA 1188+06.65 'NB', 36.00' RT

STA 1187+78.25 'NB', 31.50' RT
STA 1187+78.25 'NB', 36.00' RT

STA. 1186+56.65 'NB' - STA. 1188+06.65 'NB' STEEL PLATE BEAM GUARD CLASS A
STA. 1188+06.65 'NB' - STA. 1188+14.36 'NB' ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2




CROSS SECTION THRU STEEL PLATE BEAM GUARD

## STEEL PLATE BEAM GUARD CLASS A DETAIL

LEGEND

- 4 INCHES ASPHALTIC SURFACE
- 2 INCHES ASPHALTIC SURFACE
- DIRECTION OF TRAFFIC

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CONSTRUCTION DETAILS | SHEET 31 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\ELISAB\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021003-CD.DWG
LAYOUT NAME - 021009-cd
PLOT DATE : 8/1/2024 10:45 AM
PLOT BY : BECKER, ELISA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

PHRAGMITES

N

IH 41 SB

IH 41 NB

1166+00 'SB' 1167+00 'SB' 1168+00 'SB' 1169+00 'SB' 1170+00 'SB' 1171+00 'SB' 1172+00 'SB' 1173+00 'SB' 1174+00 'SB' 1175+00 'SB' 1176+00 'SB' 1177+00 'SB' 1178+00 'SB' 1179+00 'SB' 1180+00 'SB'

1166+00 'NB' 1167+00 'NB' 1168+00 'NB' 1169+00 'NB' 1170+00 'NB' 1171+00 'NB' 1172+00 'NB' 1173+00 'NB' 1174+00 'NB' 1175+00 'NB' 1176+00 'NB' 1177+00 'NB' 1178+00 'NB' 1179+00 'NB' 1180+00 'NB'

1174+00 'JC' 1175+00 'JC' 1176+00 'JC' 1177+00 'JC' 1178+00 'JC' 1179+00 'JC' 1180+00 'JC'

1174+00 'JB' 1175+00 'JB' 1176+00 'JB' 1177+00 'JB' 1178+00 'JB' 1179+00 'JB' 1180+00 'JB'

RAMP JC

RAMP JB

EXIST R/W

TLE

SLOPE INTERCEPT (TYP.)

MATCH LINE 1181+00 NB

5_173

5_174

SIGN

POST

RIPRAP

FLAG

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PHRAGMITES | SHEET 32 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021004-CD.DWG
LAYOUT NAME - 021010-cd

PLOT DATE : 8/1/2024 11:12 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

PHRAGMITES

N

MATCH LINE 23+50 JNB

EXIST R/W

RAMP JC

1181+00 'JC'
1182+00 'JC'
1183+00 'JC'
1184+00 'JC'
1185+00 'JC'
1186+00 'JC'
1187+00 'JC'
1188+00 'JC'

IH 41 SB

1184+00 'SB'
1185+00 'SB'
1186+00 'SB'
1187+00 'SB'
1188+00 'SB'
1189+00 'SB'
1190+00 'SB'
1191+00 'SB'
1192+00 'SB'
1193+00 'SB'
1194+00 'SB'
1195+00 'SB'

IH 41 NB

1181+00 'NB'
1182+00 'NB'
1183+00 'NB'
1184+00 'NB'
1185+00 'NB'
1186+00 'NB'
1187+00 'NB'
1188+00 'NB'
1189+00 'NB'
1190+00 'NB'
1191+00 'NB'
1192+00 'NB'
1193+00 'NB'
1194+00 'NB'
1195+00 'NB'

MATCH LINE 1181+00 NB

MATCH LINE 1195+50 NB

RAMP JD

1190+00 'JD'
1191+00 'JD'
1192+00 'JD'
1193+00 'JD'
1194+00 'JD'
1195+00 'JD'

EXIST R/W

RAMP JB

1183+00 'JB'
1184+00 'JB'
1185+00 'JB'
1186+00 'JB'
1187+00 'JB'

EXIST R/W

RAMP JA

1188+00 'JA'
1189+00 'JA'
1190+00 'JA'
1191+00 'JA'
1192+00 'JA'
1193+00 'JA'
1194+00 'JA'
1195+00 'JA'

EXIST R/W

STRUCTURE B-44-0338

SLOPE INTERCEPT (TYP.)

MATCH LINE 14+50 JNB

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PHRAGMITES | SHEET 33 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021004-CD.DWG
LAYOUT NAME - 021011-cd

PLOT DATE : 8/1/2024 11:12 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

PHRAGMITES

N

EXIST R/W

RAMP JD

1196+00 'JD' 1197+00 'JD' 1198+00 'JD' 1199+00 'JD'

IH 41 SB

1196+00 'SB' 1197+00 'SB' 1198+00 'SB' 1199+00 'SB' 1200+00 'SB' 1201+00 'SB' 1202+00 'SB' 1203+00 'SB' 1204+00 'SB' 1205+00 'SB' 1206+00 'SB' 1207+00 'SB' 1208+00 'SB' 1209+00 'SB' 1210+00 'SB'

1196+00 'NB' 1197+00 'NB' 1198+00 'NB' 1199+00 'NB' 1200+00 'NB' 1201+00 'NB' 1202+00 'NB' 1203+00 'NB' 1204+00 'NB' 1205+00 'NB' 1206+00 'NB' 1207+00 'NB' 1208+00 'NB' 1209+00 'NB' 1210+00 'NB'

IH 41 NB

1196+00 'JA' 1197+00 'JA' 1198+00 'JA' 1199+00 'JA' 1200+00 'JA'

RAMP JA

MATCH LINE 1195+50 NB

EXIST R/W

SUBSTATION

RIPRAP

RIPRAP

FRONTAGE ROAD

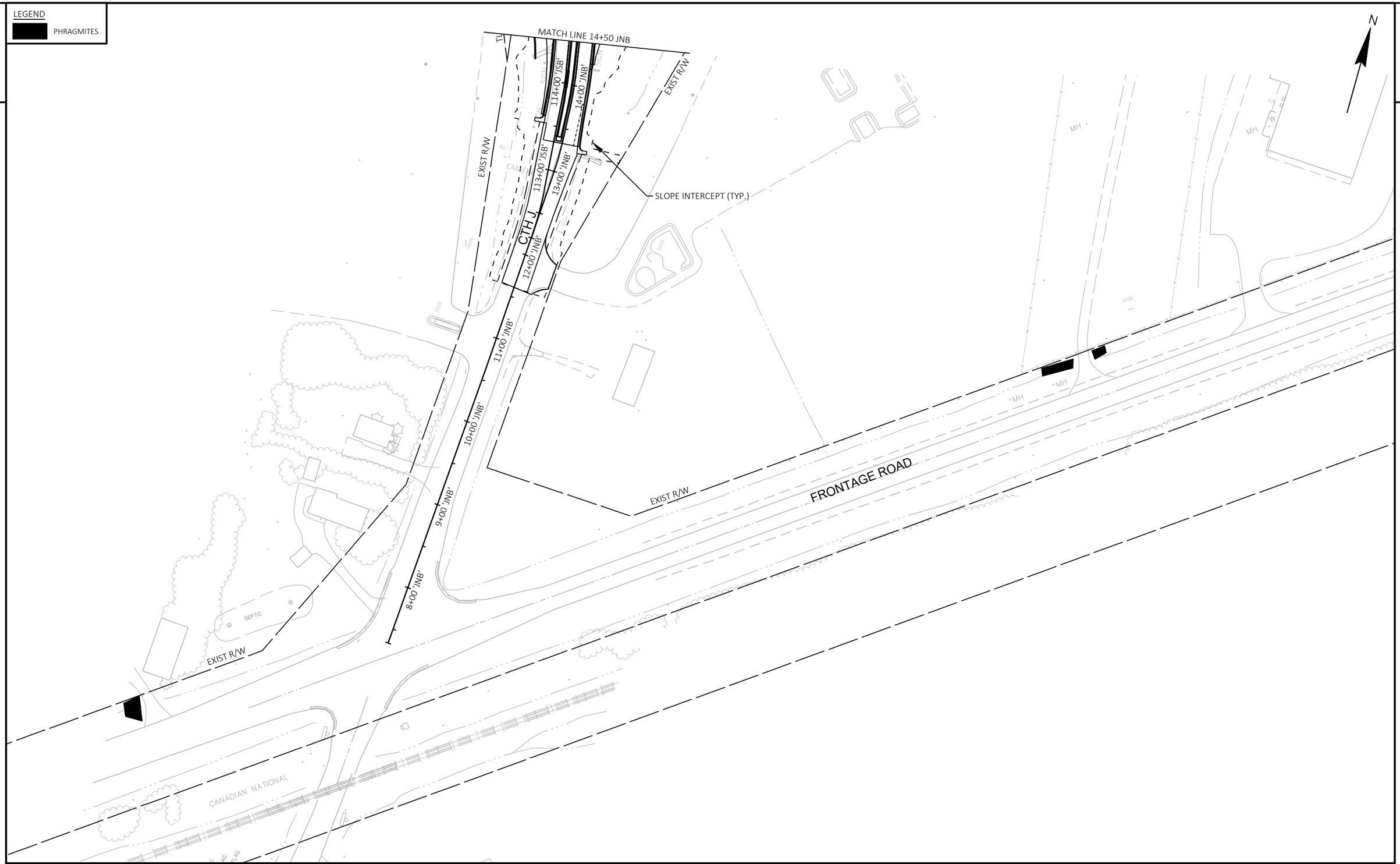
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PHRAGMITES | SHEET 34 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021004-CD.DWG
LAYOUT NAME - 021012-cd

PLOT DATE : 8/1/2024 11:13 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

PHRAGMITES



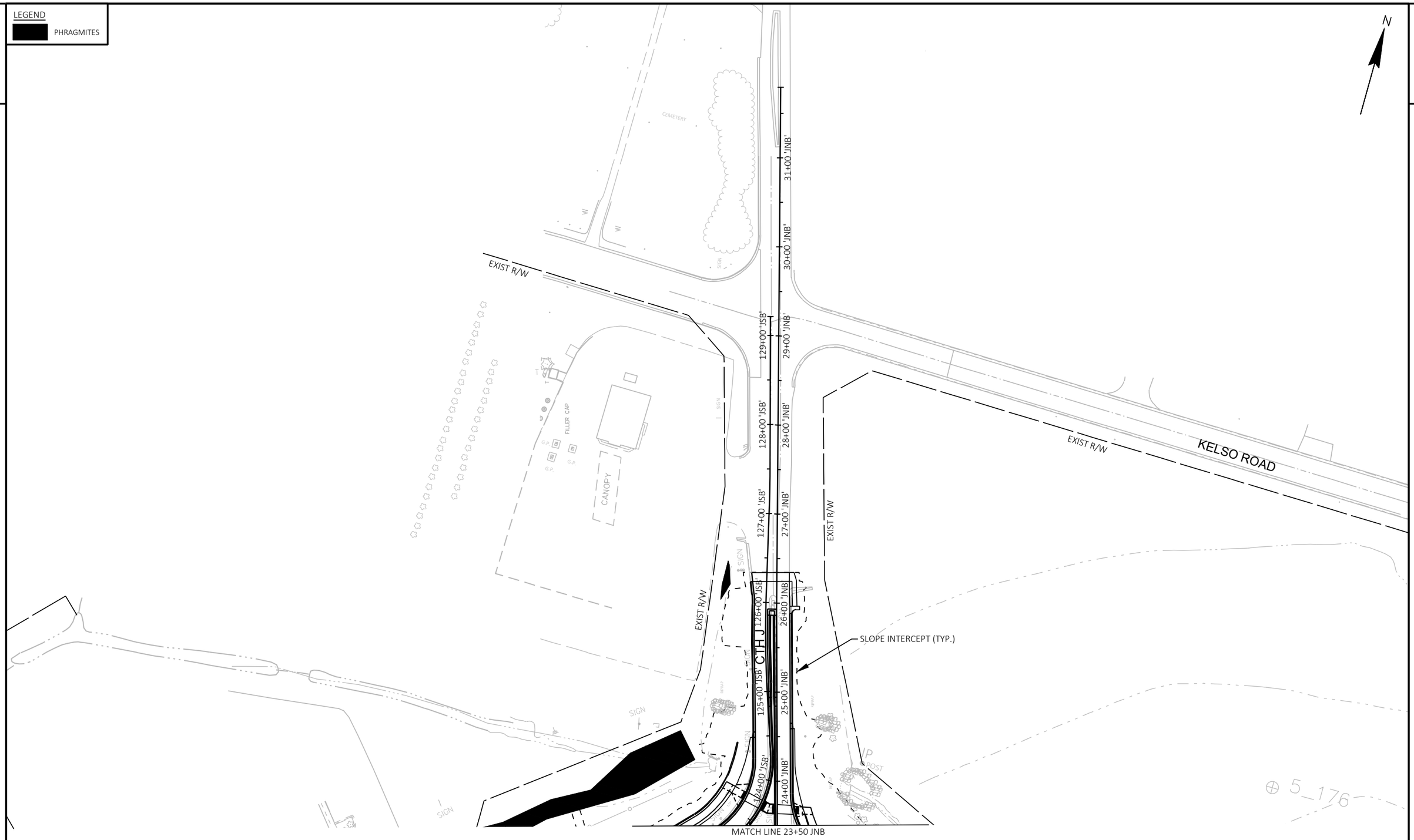

2

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PHRAGMITES | SHEET 35 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021004-CD.DWG
LAYOUT NAME - 021013-cd
PLOT DATE : 8/1/2024 11:13 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LEGEND

PHRAGMITES


N
CEMETERY
W
W
SIGN
EXIST R/W
31+00 'JNB'
30+00 'JNB'
29+00 'JNB'
129+00 'JSB'
128+00 'JSB'
28+00 'JNB'
127+00 'JSB'
27+00 'JNB'
126+00 'JSB'
26+00 'JNB'
125+00 'JSB'
25+00 'JNB'
124+00 'JSB'
24+00 'JNB'
CTH J
KELSO ROAD
EXIST R/W
EXIST R/W
FILLER CAP
G.P.
CANOPY
SIGN
SLOPE INTERCEPT (TYP.)
SIGN
SIGN
SIGN

LEGEND

WETLANDS

PERMITTED WETLANDS

N

IH 41 SB

IH 41 NB

EXIST R/W

RAMP JC

RAMP JB

SLOPE INTERCEPT (TYP.)

MATCH LINE 1181+00 NB

1166+00 'SB' 1167+00 'SB' 1168+00 'SB' 1169+00 'SB' 1170+00 'SB' 1171+00 'SB' 1172+00 'SB' 1173+00 'SB' 1174+00 'SB' 1175+00 'SB' 1176+00 'SB' 1177+00 'SB' 1178+00 'SB' 1179+00 'SB' 1180+00 'SB'

1166+00 'NB' 1167+00 'NB' 1168+00 'NB' 1169+00 'NB' 1170+00 'NB' 1171+00 'NB' 1172+00 'NB' 1173+00 'NB' 1174+00 'NB' 1175+00 'NB' 1176+00 'NB' 1177+00 'NB' 1178+00 'NB' 1179+00 'NB' 1180+00 'NB'

1174+00 'JB' 1175+00 'JB' 1176+00 'JB' 1177+00 'JB' 1178+00 'JB' 1179+00 'JB' 1180+00 'JB'

1174+00 'JC' 1175+00 'JC' 1176+00 'JC' 1177+00 'JC' 1178+00 'JC' 1179+00 'JC' 1180+00 'JC'

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | WETLANDS | SHEET 37 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021006-CD.DWG
LAYOUT NAME - 021016-cd
PLOT DATE : 8/1/2024 11:14 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

WETLANDS

PERMITTED WETLANDS

N

MATCH LINE 23+50 JNB

EXIST R/W

RAMP JC

1181+00 'JC'
1182+00 'JC'
1183+00 'JC'
1184+00 'JC'
1185+00 'JC'
1186+00 'JC'
1187+00 'JC'
1188+00 'JC'

123+00 'JSB'
123+00 'JNB'
122+00 'JSB'
122+00 'JNB'
21+00 'JSB'
21+00 'JNB'
120+00 'JSB'
120+00 'JNB'

RAMP JD

1190+00 'JD'
1191+00 'JD'
1192+00 'JD'
1193+00 'JD'
1194+00 'JD'
1195+00 'JD'

IH 41 SB

1184+00 'SB'
1185+00 'SB'
1186+00 'SB'
1187+00 'SB'
1188+00 'SB'
1189+00 'SB'
1190+00 'SB'
1191+00 'SB'
1192+00 'SB'
1193+00 'SB'
1194+00 'SB'
1195+00 'SB'

IH 41 NB

1181+00 'NB'
1182+00 'NB'
1183+00 'NB'
1184+00 'NB'
1185+00 'NB'
1186+00 'NB'
1187+00 'NB'
1188+00 'NB'
1189+00 'NB'
1190+00 'NB'
1191+00 'NB'
1192+00 'NB'
1193+00 'NB'
1194+00 'NB'
1195+00 'NB'

MATCH LINE 1195+50 NB

MATCH LINE 1181+00 NB

1194+00 'JA'
1195+00 'JA'

RAMP JA

1187+00 'JB'
1183+00 'JB'
1184+00 'JB'
1185+00 'JB'
1186+00 'JB'

RAMP JB

EXIST R/W

17+00 'JSB'
17+00 'JNB'
16+00 'JSB'
16+00 'JNB'
119+00 'JSB'
15+00 'JNB'

STRUCTURE B-44-0338

SLOPE INTERCEPT (TYP.)

MATCH LINE 14+50 JNB

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | WETLANDS | SHEET 38 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021006-CD.DWG
LAYOUT NAME - 021017-cd

PLOT DATE : 8/1/2024 11:15 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

WETLANDS

PERMITTED WETLANDS



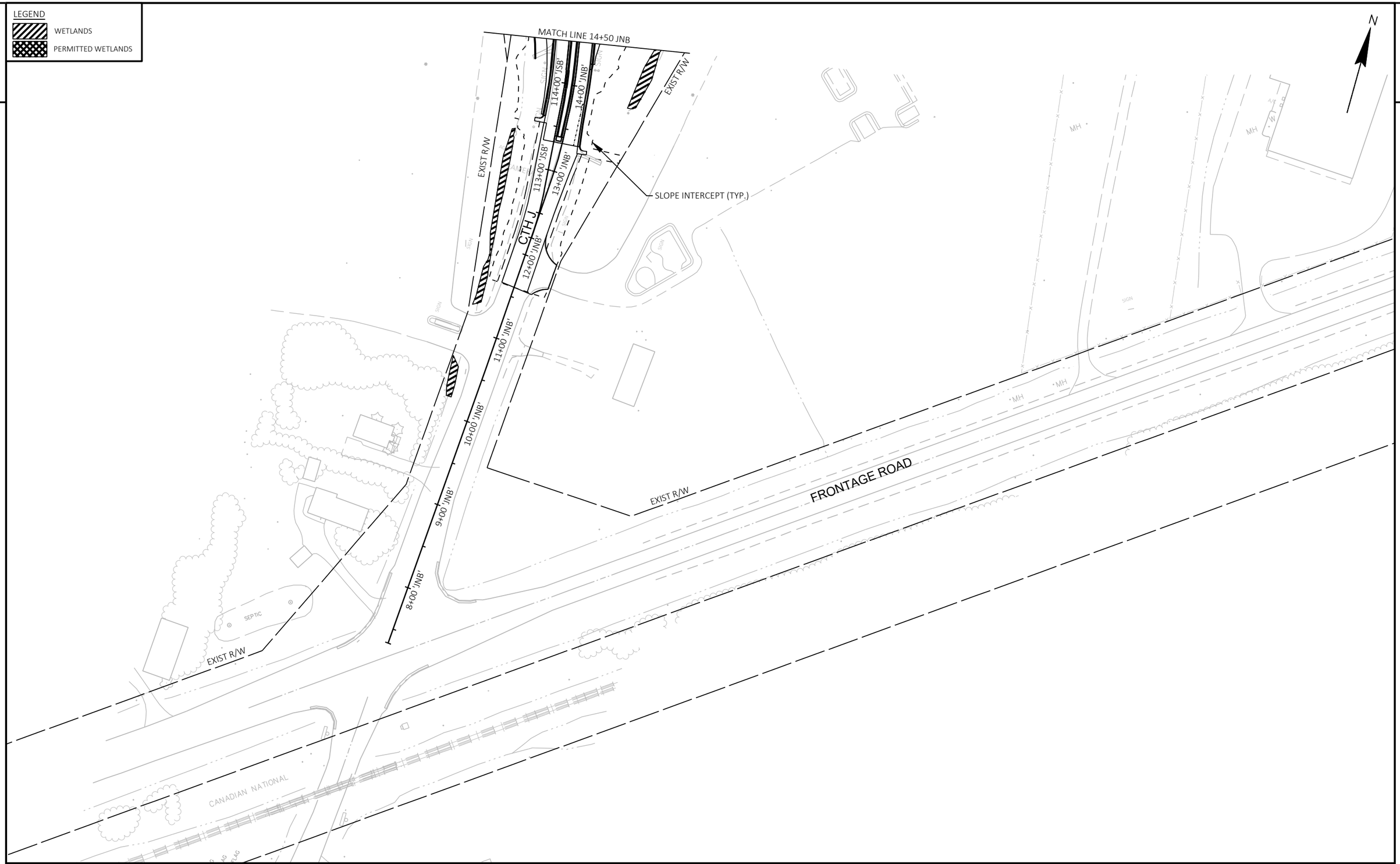

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | WETLANDS | SHEET 39 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021006-CD.DWG
LAYOUT NAME - 021018-cd
PLOT DATE : 8/1/2024 11:15 AM
PLOT BY : KOWALSKI, NICK
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LEGEND

WETLANDS

PERMITTED WETLANDS




2

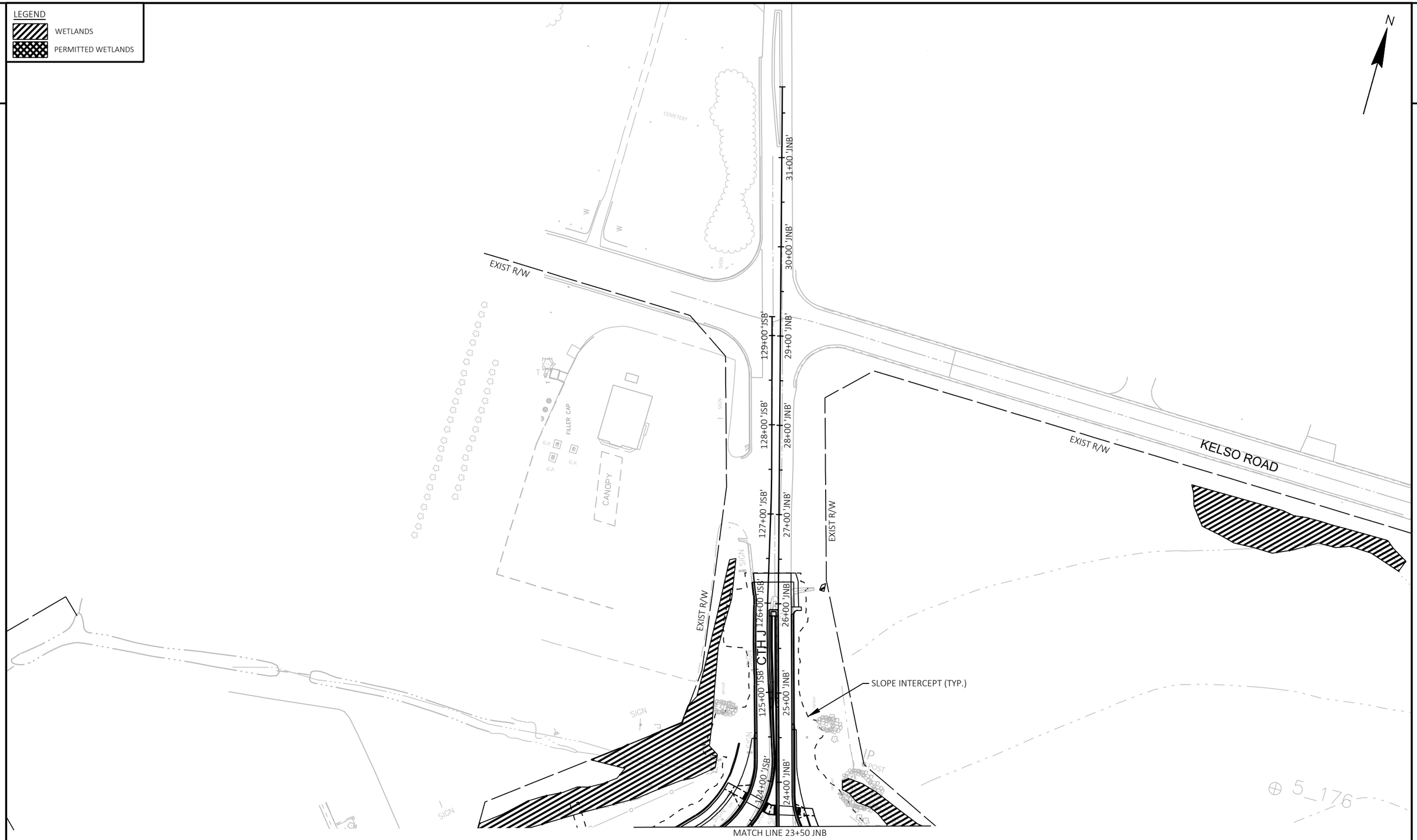
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | WETLANDS | SHEET 40 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021006-CD.DWG
LAYOUT NAME - 021019-cd
PLOT DATE : 8/1/2024 11:16 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LEGEND

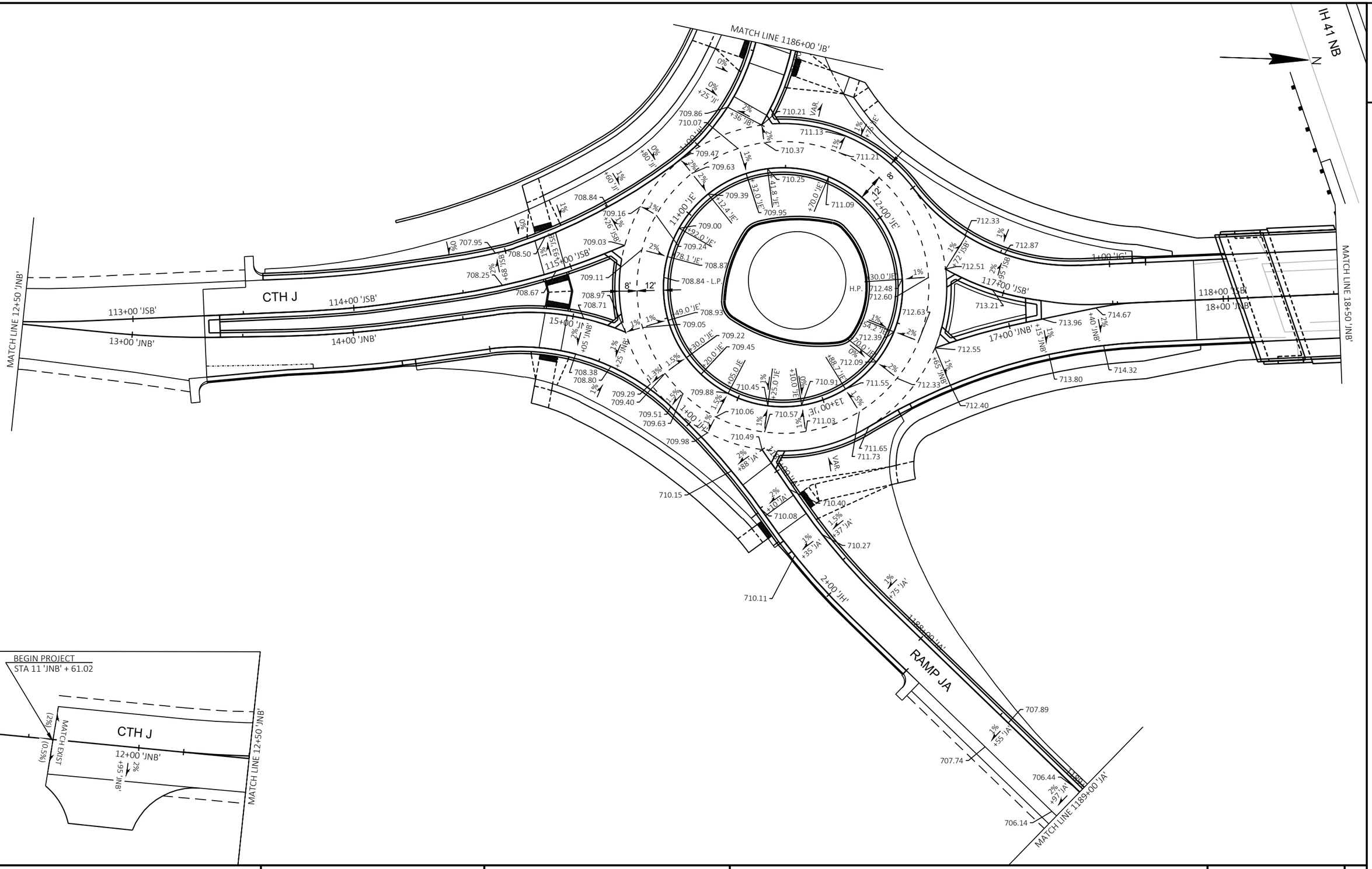
WETLANDS

PERMITTED WETLANDS

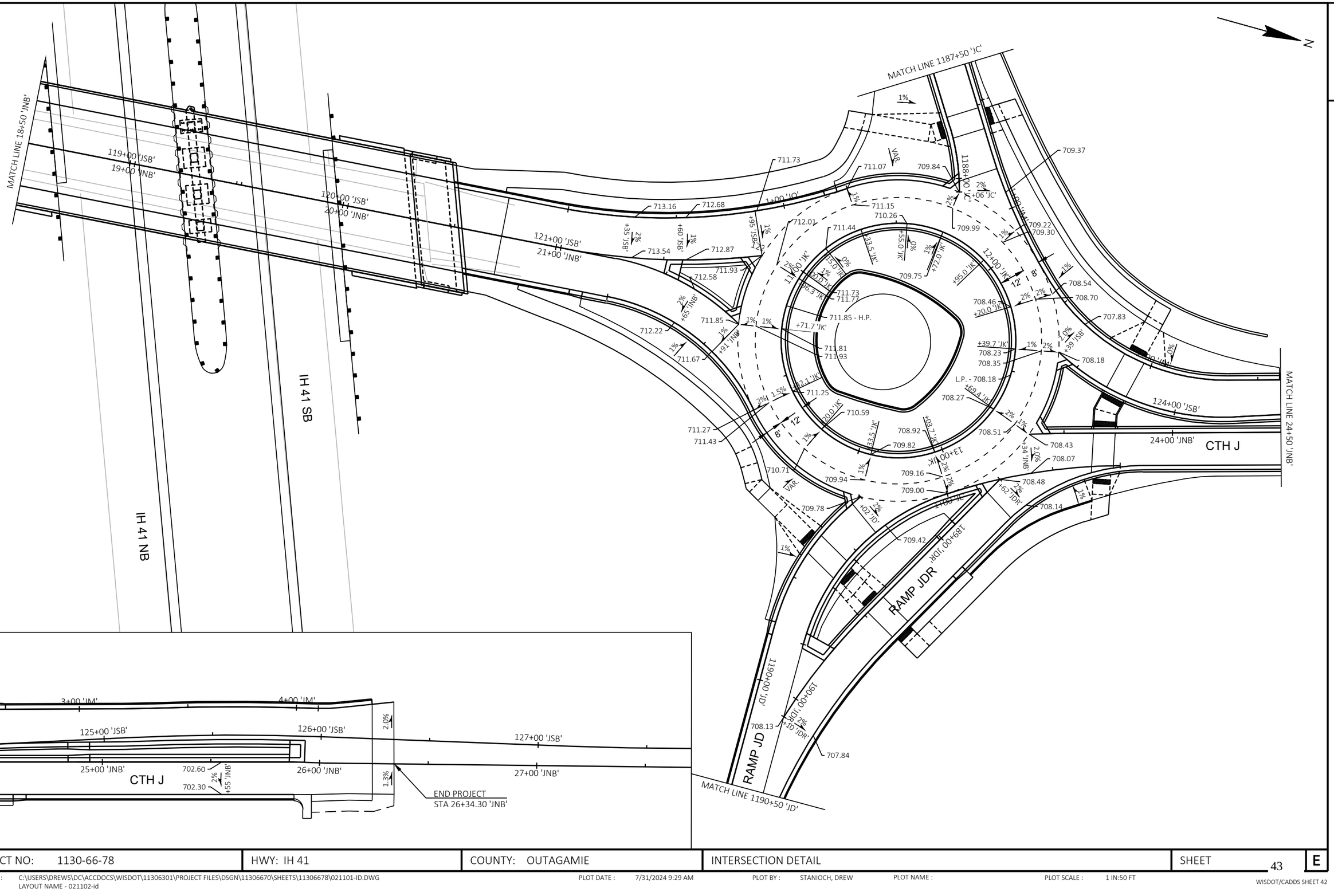



2

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | WETLANDS | SHEET 41 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | INTERSECTION DETAIL | SHEET 42 | E |
|---|---|---|---|---|---|



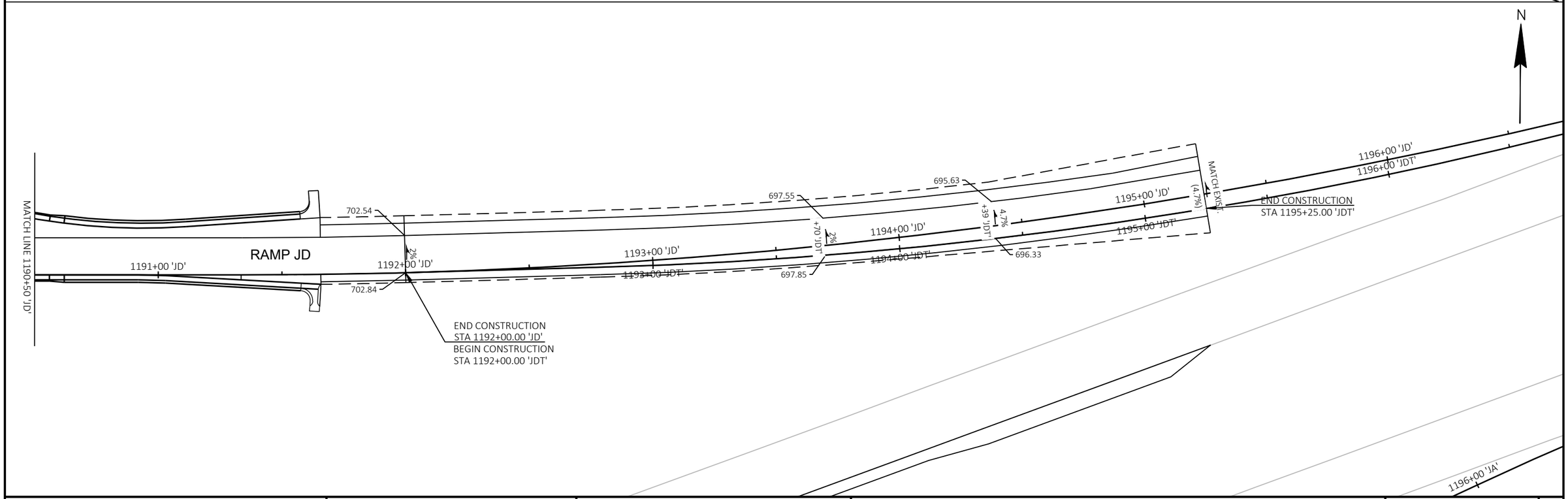

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | INTERSECTION DETAIL | SHEET 43 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\DREWS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021101-ID.DWG
LAYOUT NAME - 021102-id

PLOT DATE : 7/31/2024 9:29 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

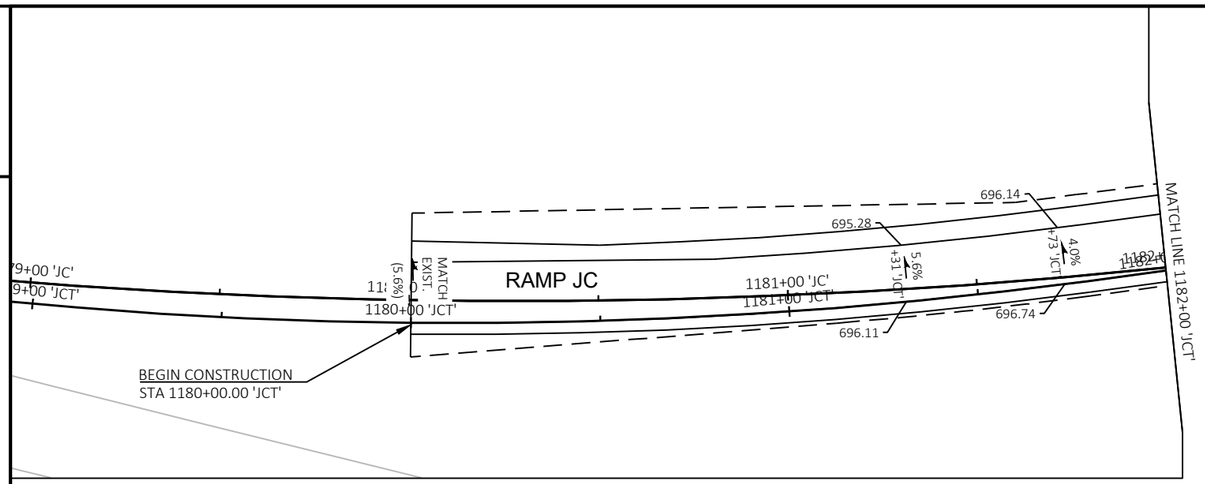


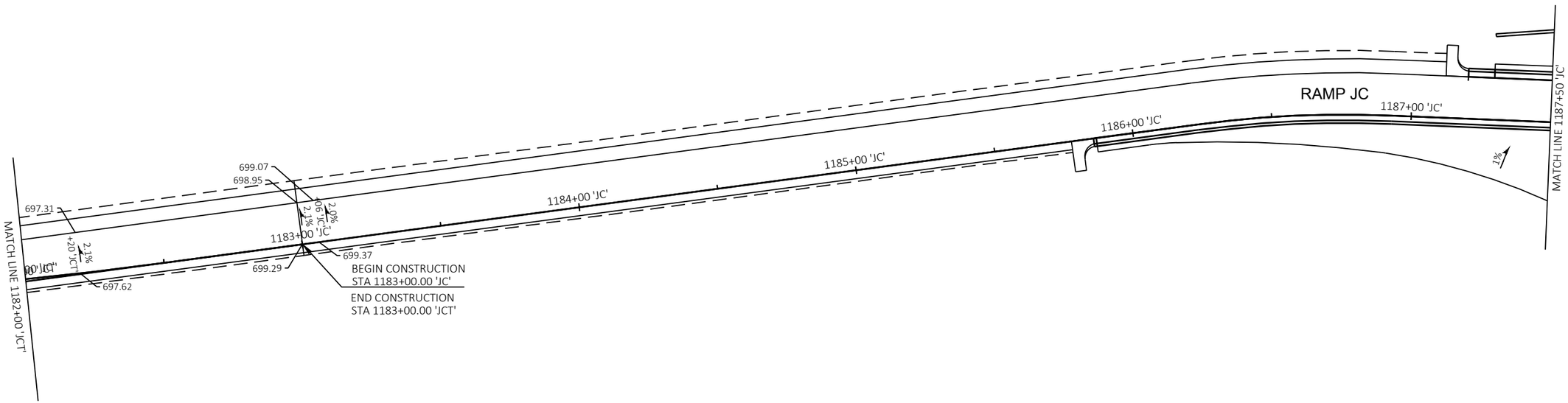




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | INTERSECTION DETAIL | SHEET 44 | E |
|---|---|---|---|---|---|

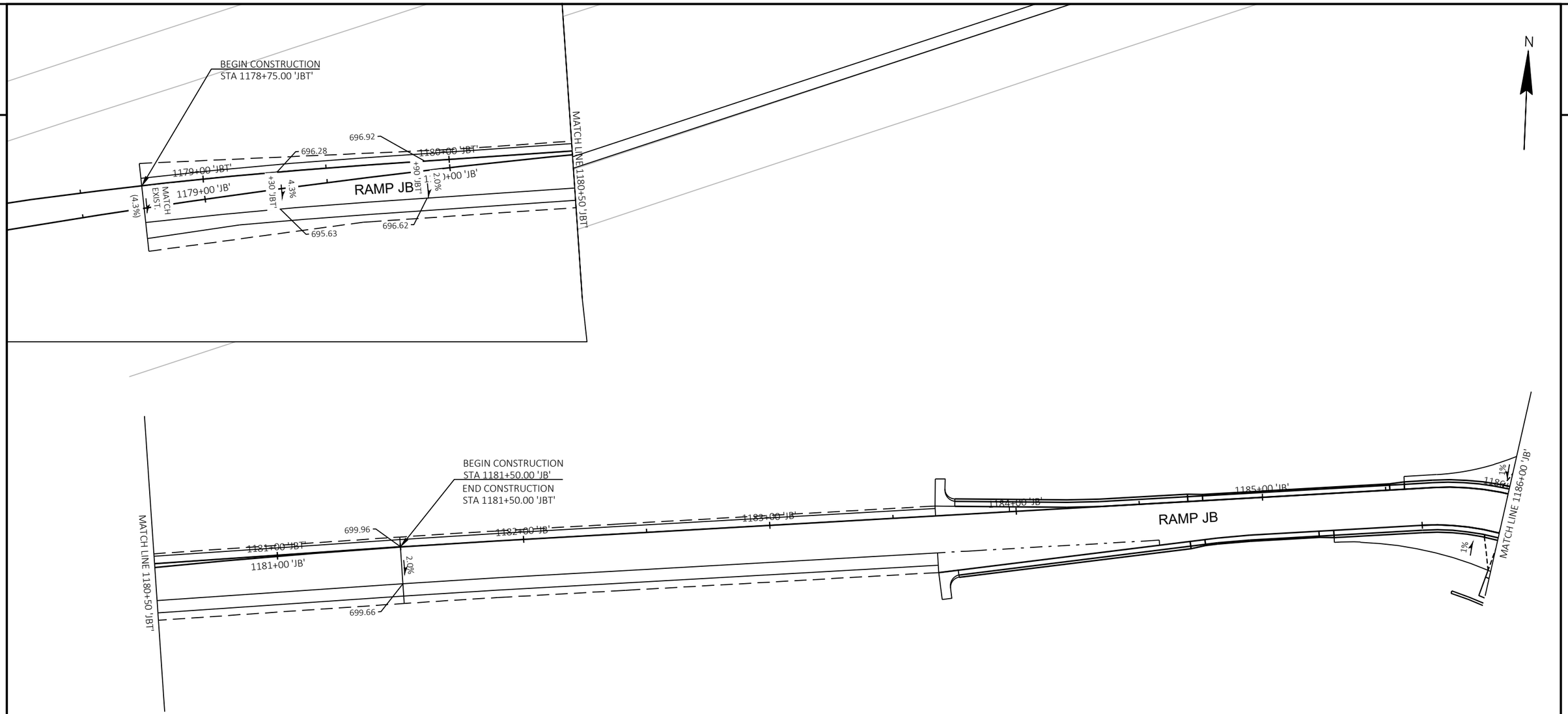
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LAYOUT NAME - 021103-id
PLOT DATE : 7/31/2024 9:33 AM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : ##########

2




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | INTERSECTION DETAIL | SHEET 45 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | INTERSECTION DETAIL | SHEET 46 | E |
|---|---|---|---|---|---|

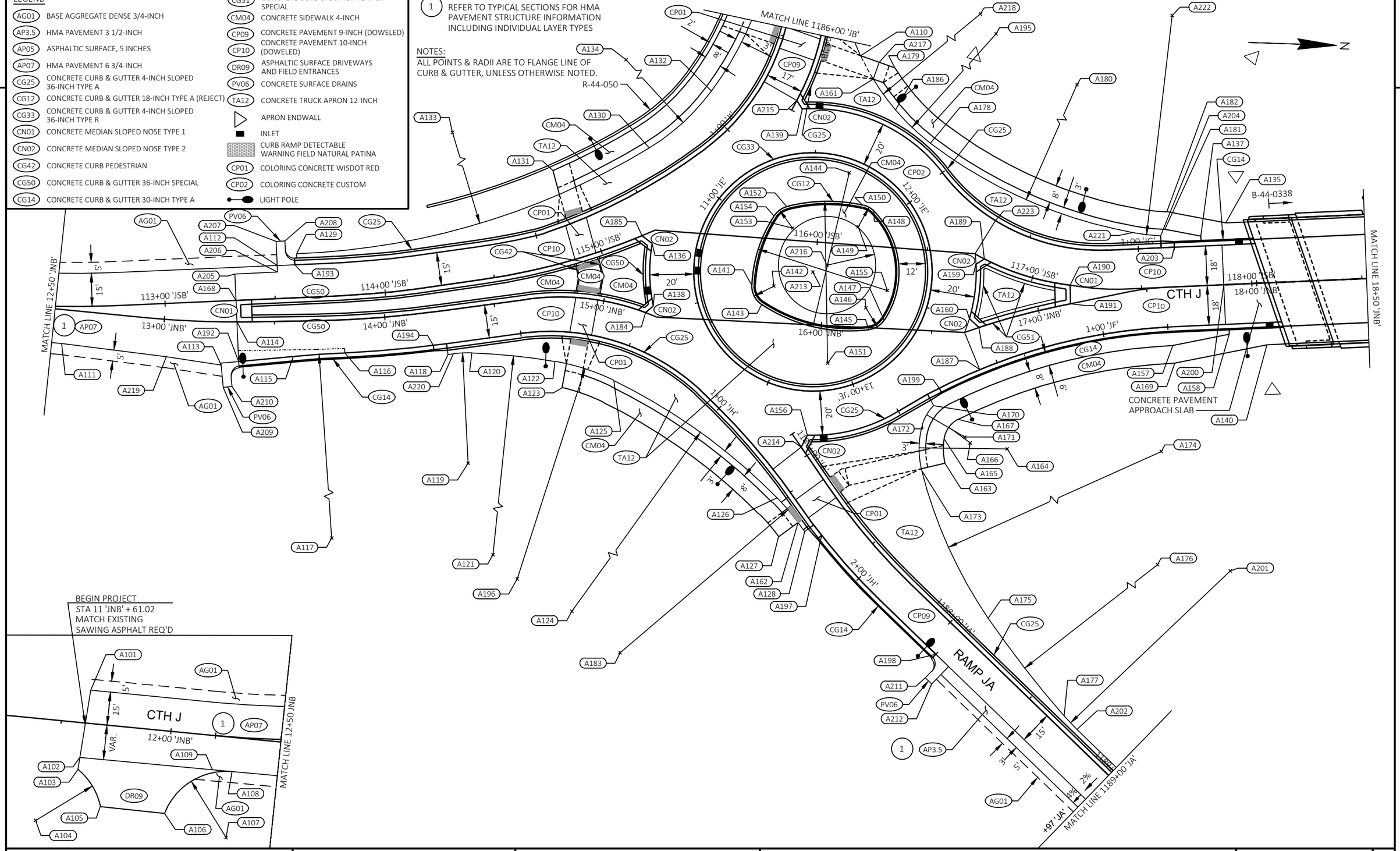
2

LEGEND

| | |
|---|---|
| AG01 | BASE AGGREGATE DENSE 3/4-INCH |
| AP3.5 | HMA PAVEMENT 3 1/2-INCH |
| AP05 | ASPHALTIC SURFACE, 5 INCHES |
| AP07 | HMA PAVEMENT 6 3/4-INCH |
| CG25 | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A |
| CG12 | CONCRETE CURB & GUTTER 18-INCH TYPE A (REJECT) |
| CG33 | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R |
| CN01 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| CN02 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| CG42 | CONCRETE CURB PEDESTRIAN |
| CG50 | CONCRETE CURB & GUTTER 36-INCH SPECIAL |
| CG14 | CONCRETE CURB & GUTTER 30-INCH TYPE A |
| CG51 | CONCRETE CURB & GUTTER 42-INCH SPECIAL |
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP09 | CONCRETE PAVEMENT 9-INCH (DOWELED) |
| CP10 | CONCRETE PAVEMENT 10-INCH (DOWELED) |
| DR09 | ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| PV06 | CONCRETE SURFACE DRAINS |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| | APRON ENDWALL |
| | INLET |
| | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| CP01 | COLORING CONCRETE WISDOT RED |
| CP02 | COLORING CONCRETE CUSTOM |
| | LIGHT POLE |

(1) REFER TO TYPICAL SECTIONS FOR HMA PAVEMENT STRUCTURE INFORMATION INCLUDING INDIVIDUAL LAYER TYPES

NOTES:
ALL POINTS & RADII ARE TO FLANGE LINE OF CURB & GUTTER, UNLESS OTHERWISE NOTED.




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN DETAILS | SHEET 47 | E |
|---|---|---|---|---|---|

2

STATION & OFFSET TABLE

| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
|---|---|---|---|---|---|---|
| A101 | 11+61.98 'JNB' | 15.05 LT | 577502.92 | 868616.42 | | EOP; MATCH EXIST. |
| A102 | 11+60.01 'JNB' | 15.74 RT | 577498.99 | 868647.03 | | EOP; MATCH EXIST. |
| A103 | 11+59.65 'JNB' | 21.27 RT | 577498.28 | 868652.52 | | MATCH EXIST., BEGIN RAD. |
| A104 | 11+42.80 'JNB' | 46.09 RT | 577479.88 | 868676.21 | | R=30' |
| A105 | 11+71.40 'JNB' | 37.02 RT | 577509.00 | 868668.98 | | END RAD., MATCH EXIST. |
| A106 | 12+00.66 'JNB' | 37.28 RT | 577538.18 | 868671.12 | | BEGIN RAD.;MATCH EXIST. |
| A107 | 12+29.51 'JNB' | 45.50 RT | 577566.45 | 868681.16 | | R=30' |
| A108 | 12+29.35 'JNB' | 15.50 RT | 577568.20 | 868651.21 | 700.88 | END RAD., EOP |
| A109 | 12+20.39 'JNB' | 15.55 RT | 577559.25 | 868650.69 | 700.70 | EOP |
| A110 | 116+76.16 'JSB' | 85.70 LT | 577951.41 | 868510.47 | | BACK OF TRUCK APRON; BACK OF SIDEWALK; SEE CURB RAMP DETAILS |
| A111 | 12+54.61 'JNB' | 15.36 RT | 577593.42 | 868652.68 | 701.44 | EOP |
| A112 | 113+51.55 'JSB' | 15.00 LT | 577690.02 | 868614.16 | 704.17 | EOP; END HMA SHOULDER |
| A113 | 13+26.05 'JNB' | 19.59 RT | 577666.13 | 868660.09 | 703.16 | EOP |
| A114 | 13+32.91 'JNB' | 0.00 RT | 577672.60 | 868640.31 | 703.78 | BEGIN CONC PAVT 10-INCH |
| A115 | 13+58.19 'JNB' | 16.03 RT | 577698.64 | 868655.12 | 704.22 | EOP, BEGIN RAD. |
| A116 | 13+81.24 'JNB' | 15.00 RT | 577722.04 | 868652.73 | 704.98 | EOP, END RAD. |
| A117 | 13+81.24 'JNB' | 515.00 RT | 577761.10 | 869151.20 | | R=500' |
| A118 | 14+26.15 'JNB' | 20.00 RT | 577768.77 | 868651.98 | 706.78 | BACK TRUCK APRON |
| A119 | 14+28.58 'JNB' | 70.00 RT | 577779.52 | 868700.87 | | R=50' |
| A120 | 14+37.00 'JNB' | 20.71 RT | 577779.58 | 868650.87 | 707.15 | BACK TRUCK APRON, END RAD.; BEGIN RAD. |
| A121 | 14+03.77 'JNB' | 292.58 RT | 577779.25 | 868925.87 | | R=275' |
| A122 | 14+76.96 'JNB' | 29.18 RT | 577817.37 | 868653.53 | 709.00 | BACK TRUCK APRON, END RAD.; BEGIN RAD. |
| A123 | 14+81.60 'JNB' | 41.09 RT | 577820.99 | 868665.30 | | BACK OF SIDEWALK; SEE CURB RAMP DETAILS |
| A124 | 10+12.82 'JE' | 312.77 LT | 577729.05 | 868914.01 | | R=270' |
| A125 | 15+15.91 'JNB' | 33.81 RT | 577844.30 | 868661.26 | 708.98 | BACK TRUCK APRON, END RAD.; BEGIN RAD. |
| A126 | 1187+08.16 'JA' | 22.07 RT | 577920.09 | 868712.00 | 710.38 | BACK TRUCK APRON, END RAD.; BEGIN RAD. |
| A127 | 1187+22.59 'JA' | 31.61 RT | 577921.33 | 868729.68 | | BACK OF SIDEWALK; SEE CURB RAMP DETAILS |
| A128 | 1187+27.21 'JA' | 20.56 RT | 577933.16 | 868726.88 | 710.39 | BACK TRUCK APRON |
| A129 | 113+60.55 'JSB' | 20.00 LT | 577698.61 | 868608.50 | 704.73 | BACK TRUCK APRON, BEGIN RAD. |
| A130 | 10+99.10 'JE' | 39.15 LT | 577856.98 | 868555.30 | 709.41 | BACK TRUCK APRON, END RAD.; BEGIN RAD. |
| A131 | 114+89.53 'JSB' | 41.41 LT | 577813.66 | 868567.10 | | BACK OF SIDEWALK; SEE CURB RAMP DETAILS |
| A132 | 11+21.27 'JE' | 40.06 LT | 577884.34 | 868528.67 | 709.82 | BACK TRUCK APRON, END RAD.; BEGIN RAD. |
| A133 | 113+63.07 'JSB' | 350.00 LT | 577676.14 | 868279.26 | | R=330' |
| A134 | 11+09.56 'JE' | 135.78 LT | 577802.18 | 868471.65 | | R=100' |
| A135 | 117+89.40 'JSB' | 28.00 LT | 578119.41 | 868580.76 | 716.17 | BACK OF SIDEWALK, END TAPER |
| A136 | 10+73.47 'JE' | 20.00 LT | 577859.73 | 868598.70 | 708.99 | EOP |
| A137 | 117+77.84 'JSB' | 22.50 LT | 578108.30 | 868587.13 | 715.76 | FRONT OF SIDEWALK, END TAPER |
| A138 | 10+52.73 'JE' | 20.00 LT | 577861.14 | 868626.90 | 708.95 | EOP |
| A139 | 11+45.35 'JE' | 20.00 LT | 577925.76 | 868535.52 | 710.32 | EOP |

STATION & OFFSET TABLE

| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
|---|---|---|---|---|---|---|
| A140 | 18+03.38 'JNB' | 28.00 RT | 578139.86 | 868635.36 | 716.63 | BACK OF SIDEWALK, END TAPER |
| A141 | 10+52.58 'JE' | 25.67 RT | 577905.50 | 868616.03 | 709.38 | BEGIN RAD.; END RAD.; EDGE OF TRUCK APRON |
| A142 | 10+45.42 'JE' | 35.19 RT | 577915.50 | 868616.10 | | R=10' |
| A143 | 10+33.61 'JE' | 26.51 RT | 577910.23 | 868624.60 | 709.64 | END RAD.; EDGE OF TRUCK APRON |
| A144 | 11+67.82 'JE' | 6.07 RT | 577947.98 | 868563.64 | | R=71.7' |
| A145 | 12+77.03 'JE' | 17.64 RT | 577959.08 | 868634.48 | 712.16 | BEGIN RAD.; END RAD.; EDGE OF TRUCK APRON |
| A146 | 12+65.75 'JE' | 25.00 RT | 577957.53 | 868624.60 | | R=10' |
| A147 | 12+65.75 'JE' | 15.00 RT | 577966.00 | 868629.92 | 712.48 | END RAD.; EDGE OF TRUCK APRON |
| A148 | 11+91.36 'JE' | 15.00 RT | 577959.69 | 868580.75 | 712.11 | BEGIN RAD.; EDGE OF RADIUS |
| A149 | 11+91.36 'JE' | 25.00 RT | 577952.84 | 868588.03 | | R=10' |
| A150 | 11+83.66 'JE' | 16.18 RT | 577954.70 | 868578.21 | 711.89 | BEGIN RAD.; END RAD.; EDGE OF TRUCK APRON |
| A151 | 13+09.78 'JE' | 12.13 RT | 577941.06 | 868650.25 | | R=73.3' |
| A152 | 11+28.42 'JE' | 22.12 RT | 577920.24 | 868579.95 | 710.29 | BEGIN RAD.; END RAD.; EDGE OF TRUCK APRON |
| A153 | 11+25.41 'JE' | 32.01 RT | 577923.08 | 868589.54 | | R=10' |
| A154 | 11+16.18 'JE' | 23.06 RT | 577914.55 | 868584.31 | 709.94 | BEGIN RAD.; END RAD.; EDGE OF TRUCK APRON |
| A155 | 12+46.82 'JE' | 19.23 RT | 577966.98 | 868616.44 | | R=61.5' |
| A156 | 13+20.30 'JE' | 20.00 LT | 577932.94 | 868683.16 | 710.64 | EOP |
| A157 | 17+60.72 'JNB' | 26.50 RT | 578097.21 | 868637.13 | 715.40 | FRONT OF SIDEWALK, END RAD, BEGIN TAPER |
| A158 | 17+86.59 'JNB' | 22.50 RT | 578122.71 | 868631.16 | 716.07 | FRONT OF SIDEWALK, END TAPER |
| A159 | 12+31.13 'JE' | 20.00 LT | 578006.74 | 868603.26 | 712.53 | EOP |
| A160 | 12+49.25 'JE' | 20.00 LT | 578004.57 | 868627.88 | 712.58 | EOP |
| A161 | 11+65.22 'JE' | 37.71 LT | 577957.47 | 868520.79 | | FRONT OF SIDEWALK; BACK OF TRUCK APRON; SEE CURB RAMP DETAILS |
| A162 | 1187+22.50 'JA' | 20.61 RT | 577930.02 | 868722.93 | | BACK OF TRUCK APRON; BACK OF SIDEWALK; SEE CURB RAMP DETAILS |
| A163 | 1187+42.69 'JA' | 48.61 LT | 577995.66 | 868693.86 | | BACK OF SIDEWALK; SEE CURB RAMP DETAILS |
| A164 | 12+73.54 'JE' | 65.16 LT | 578023.69 | 868686.43 | | R=40' |
| A165 | 12+82.49 'JE' | 42.20 LT | 577994.93 | 868682.77 | 711.87 | BACK OF SIDEWALK, BEGIN RAD |
| A166 | 12+78.32 'JE' | 51.34 LT | 578006.83 | 868684.29 | | R=12' |
| A167 | 12+76.41 'JE' | 39.87 LT | 578001.11 | 868673.73 | 712.75 | BACK OF SIDEWALK, END RAD. |
| A168 | 113+32.20 'JSB' | 0.00 RT | 577671.86 | 868630.59 | 703.84 | BEGIN CONC PAVT 10-INCH |
| A169 | 17+61.34 'JNB' | 34.50 RT | 578098.45 | 868645.06 | 715.53 | BACK OF SIDEWALK, END RAD, BEGIN TAPER |
| A170 | 12+78.81 'JE' | 27.71 LT | 577989.74 | 868667.95 | 712.27 | BACK OF TRUCK APRON, END RAD. |
| A171 | 12+78.33 'JE' | 47.70 LT | 578004.26 | 868681.70 | | R=20' |
| A172 | 12+85.02 'JE' | 31.36 LT | 577984.83 | 868676.97 | 711.93 | BACK OF TRUCK APRON, BEGIN RAD.; END RAD. |
| A173 | 1187+37.87 'JA' | 38.37 LT | 577985.25 | 868697.48 | | BACK OF TRUCK APRON, END RAD.; BEGIN RAD.; SEE CURB RAMP DETAILS |
| A174 | 1188+53.54 'JA' | 218.90 LT | 578187.08 | 868639.47 | | R=210' |
| A175 | 1188+11.10 'JA' | 13.23 LT | 578017.55 | 868763.41 | 709.46 | BACK OF TRUCK APRON, END RAD.; BEGIN RAD. |
| A176 | 1189+08.88 'JA' | 503.57 LT | 578419.21 | 868465.63 | | R=500' |
| A177 | 1188+66.72 'JA' | 5.36 LT | 578053.49 | 868806.58 | 707.78 | BACK OF TRUCK APRON; END RAD.; BEGIN RAD. |
| A178 | 11+88.80 'JE' | 25.11 LT | 577984.36 | 868549.02 | 711.97 | BACK OF TRUCK APRON; END RAD.; BEGIN RAD. |

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| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| A179 | 1186+05.63 'JB' | 36.02 LT | 577967.14 | 868515.47 | | BACK OF SIDEWALK; SEE CURB RAMP DETAILS |
| A180 | 117+94.88 'JSB' | 235.12 LT | 578109.01 | 868373.84 | | R=215' |
| A181 | 117+61.68 'JSB' | 26.30 LT | 578091.90 | 868584.58 | 715.36 | FRONT OF SIDEWALK; END RAD.; BEGIN TAPER |
| A182 | 117+62.91 'JSB' | 34.23 LT | 578092.51 | 868576.58 | 715.51 | BACK OF SIDEWALK; END RAD.; BEGIN TAPER |
| A183 | 1187+23.29 'JA' | 120.61 RT | 577851.23 | 868784.51 | | R=100' |
| A184 | 15+19.69 'JNB' | 0.00 RT | 577857.68 | 868630.05 | 708.90 | EOP |
| A185 | 115+19.77 'JSB' | 0.00 LT | 577855.00 | 868595.25 | 708.96 | EOP |
| A186 | 11+74.31 'JE' | 28.53 LT | 577968.03 | 868534.45 | 711.56 | BACK OF TRUCK APRON, END RAD. |
| A187 | 1187+12.37 'JA' | 86.62 LT | 578010.08 | 868650.88 | 712.40 | EOP |
| A188 | 16+71.86 'JNB' | 0.00 RT | 578009.06 | 868631.83 | 712.75 | EOP |
| A189 | 116+76.54 'JSB' | 0.01 LT | 578010.53 | 868600.69 | 712.65 | EOP |
| A190 | 117+17.46 'JSB' | 0.00 RT | 578049.81 | 868611.31 | 713.89 | EOP |
| A191 | 17+14.88 'JNB' | 0.00 RT | 578050.30 | 868619.69 | 713.96 | EOP |
| A192 | 13+33.57 'JNB' | 17.95 RT | 577673.96 | 868658.23 | 703.44 | EOP, BEGIN C&G, BEGIN CONC PAVT 10-INCH |
| A193 | 113+59.55 'JSB' | 15.00 LT | 577698.00 | 868613.56 | 704.44 | EOP, BEGIN SLOPED C&G |
| A194 | 14+20.33 'JNB' | 15.00 RT | 577762.01 | 868648.02 | 706.33 | EOP, BEGIN SLOPED C&G |
| A195 | 11+86.13 'JE' | 124.94 LT | 578042.34 | 868467.54 | | R=100' |
| A196 | 14+43.58 'JNB' | 124.97 RT | 577803.51 | 868752.56 | | R=100' |
| A197 | 1187+32.84 'JA' | 15.49 RT | 577940.87 | 868728.36 | 710.11 | EOP, END SLOPED C&G |
| A198 | 1188+05.43 'JA' | 15.00 RT | 577994.40 | 868780.53 | 709.08 | EOP, END C&G |
| A199 | 12+73.77 'JE' | 23.77 LT | 577991.98 | 868659.84 | 712.10 | EOP, END SLOPED C&G |
| A200 | 17+85.05 'JNB' | 0.00 RT | 578119.45 | 868608.84 | 715.94 | BEGIN CONC PAVT APPROACH SLAB |
| A201 | 1188+75.15 'JA' | 105.00 LT | 578126.63 | 868738.39 | | R=100' |
| A202 | 1188+75.15 'JA' | 5.00 LT | 578059.50 | 868812.51 | 707.48 | BACK OF TRUCK APRON, END RAD. |
| A203 | 117+65.63 'JSB' | 18.00 LT | 578096.47 | 868592.55 | 714.97 | EOP, END SLOPED C&G |
| A204 | 117+59.63 'JSB' | 23.47 LT | 578090.07 | 868587.56 | 715.08 | BACK OF TRUCK APRON |
| A205 | 113+32.20 'JSB' | 12.00 LT | 577670.95 | 868618.62 | 703.60 | EOP; BEGIN CONC PAVT 10-INCH |
| A206 | 113+51.55 'JSB' | 12.00 LT | 577690.25 | 868617.15 | 704.23 | EOP; BEGIN CONC PAVT 10-INCH |
| A207 | 113+51.54 'JSB' | 26.00 LT | 577689.18 | 868603.20 | | EDGE OF SURFACE DRAIN |
| A208 | 113+55.54 'JSB' | 26.00 LT | 577693.17 | 868602.90 | | EDGE OF SURFACE DRAIN |
| A209 | 13+27.04 'JNB' | 29.66 RT | 577667.40 | 868670.14 | | EDGE OF SURFACE DRAIN |
| A210 | 13+30.75 'JNB' | 29.27 RT | 577671.36 | 868669.64 | | EDGE OF SURFACE DRAIN |
| A211 | 1188+09.43 'JA' | 26.00 RT | 577989.98 | 868791.37 | | EDGE OF SURFACE DRAIN |
| A212 | 1188+13.43 'JA' | 26.00 RT | 577992.95 | 868794.05 | | EDGE OF SURFACE DRAIN |
| A213 | 10+00.00 'JE' | 54.00 RT | 577932.98 | 868609.17 | 712.80 | CENTER OF RAB CENTRAL ISLAND |
| A214 | 1186+95.43 'JA' | 0.00 RT | 577930.30 | 868688.65 | 710.46 | EOP, END CONCRETE PAVEMENT 10-INCH, BEGIN 9-INCH |
| A215 | 1186+31.73 'JB' | 0.00 RT | 577923.13 | 868531.64 | 710.18 | EOP, END CONCRETE PAVT 9-INCH; BEGIN CONCRETE PAVT 10-INCH |
| A216 | 12+09.19 'JE' | 46.86 | 577939.29 | 868605.83 | | CENTER OF LANDSCAPING AREA; R=22' |
| A217 | 11+65.38 'JE' | 45.70 LT | 577959.89 | 868513.16 | | BACK OF SIDEWALK; BACK OF TRUCK APRON; SEE CURB RAMP DETAILS |

| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| A218 | 1185+67.51 'JB' | 119.76 LT | 578053.49 | 868457.50 | | R=115' |
| A219 | 13+02.12 'JNB' | 16.86 RT | 577641.15 | 868657.12 | 702.58 | EOP |
| A220 | 14+28.58 'JNB' | 20.00 RT | 577771.16 | 868651.58 | 706.92 | END RAD.; BACK OF TRUCK APRON |
| A221 | 117+47.03 'JSB' | 25.51 LT | 578077.36 | 868586.49 | 714.71 | END RAD.; BEGIN RAD.; BACK OF TRUCK APRON |
| A222 | 117+69.29 'JSB' | 123.00 LT | 578092.08 | 868487.58 | | R=100' |
| A223 | 116+72.34 'JSB' | 17.64 LT | 578014.99 | 868583.19 | 712.34 | EOP |

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MATCH LINE 18+50 'JNB'

119+00 'JSB'
19+00 'JNB'

120+00 'JSB'
20+00 'JNB'

CTH J

IH 41 NB

IH 41 SB

B-44-0338

CONCRETE PAVEMENT APPROACH SLAB

121+00 'JSB'
21+00 'JNB'

22+00 'JNB'

0+50 'JN'

1+00 'JO'

11+00 'JK'

12+00 'JK'

123+00 'JSB'

23+00 'JNB'

13+00 'JK'

1+00 'JL'

124+00 'JSB'

24+00 'JNB'

MATCH LINE 1187+50 'JC'

1188+00 'JC'

1+00 'JM'

RAMP JDR

RAMP JD

1190+00 'JD'

1+00 'JP'

MATCH LINE 1190+50 'JD'

R-44-51

MATCH LINE 24+50 'JNB'

1 REFER TO TYPICAL SECTIONS FOR HMA PAVEMENT STRUCTURE INFORMATION INCLUDING INDIVIDUAL LAYER TYPES

NOTES:
ALL POINTS & RADII ARE TO FLANGE LINE OF CURB & GUTTER, UNLESS OTHERWISE NOTED.

LEGEND

| | | | |
|---|---|---|---|
| AG01 | BASE AGGREGATE DENSE 3/4-INCH | CG51 | CONCRETE CURB & GUTTER 42-INCH SPECIAL |
| AP3.5 | HMA PAVEMENT 3 1/2-INCH | CM04 | CONCRETE SIDEWALK 4-INCH |
| AP05 | ASPHALTIC SURFACE, 5 INCHES | CP09 | CONCRETE PAVEMENT 9-INCH (DOWELED) |
| AP07 | HMA PAVEMENT 6 3/4-INCH | CP10 | CONCRETE PAVEMENT 10-INCH (DOWELED) |
| CG25 | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A | DR09 | ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| CG12 | CONCRETE CURB & GUTTER 18-INCH TYPE A (REJECT) | PV06 | CONCRETE SURFACE DRAINS |
| CG33 | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R | TA12 | CONCRETE TRUCK APRON 12-INCH |
| CN01 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 | | APRON ENDWALL |
| CN02 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 | | INLET |
| CG42 | CONCRETE CURB PEDESTRIAN | | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| CG50 | CONCRETE CURB & GUTTER 36-INCH SPECIAL | CP01 | COLORING CONCRETE WISDOT RED |
| CG14 | CONCRETE CURB & GUTTER 30-INCH TYPE A | CP02 | COLORING CONCRETE CUSTOM |
| | | | LIGHT POLE |

MATCH LINE 24+50 'JNB'

3+00 'JM'

4+00 'JM'

125+00 'JSB'

126+00 'JSB'

127+00 'JSB'

25+00 'JNB'

26+00 'JNB'

27+00 'JNB'

CTH J

END PROJECT
STA 26+34.30 'JNB'
MATCH EXISTING
SAWING ASPHALT REQ'D

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN DETAILS | SHEET 50 | E |
|---|---|---|---|---|---|

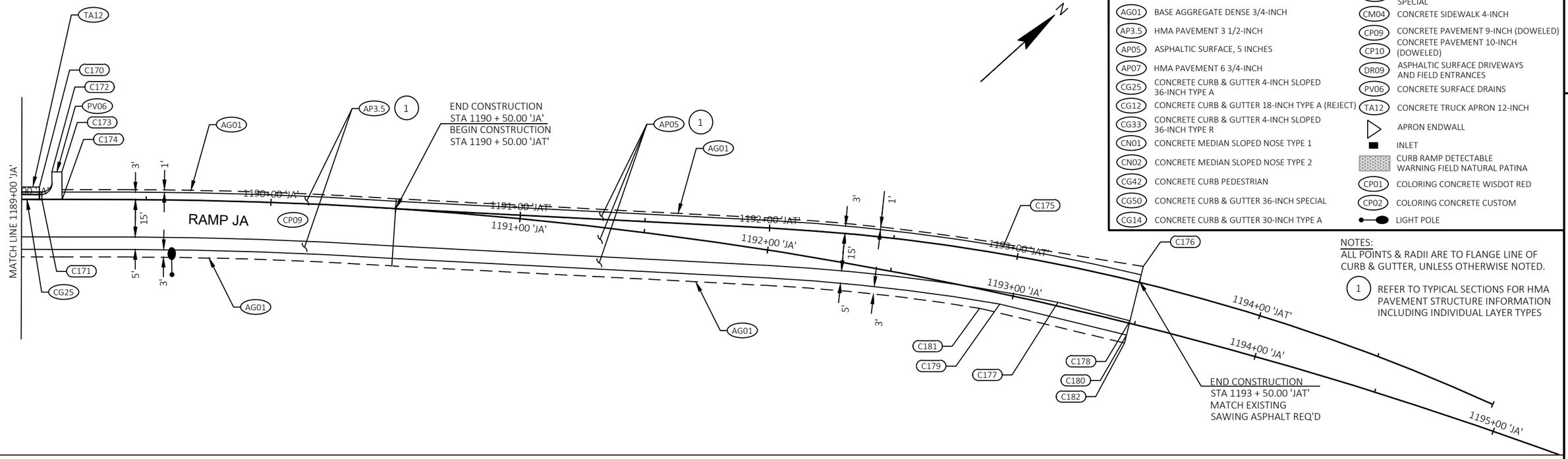
| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| B101 | 120+56.09 'JSB' | 28.00 LT | 578385.31 | 868560.35 | 715.88 | BACK OF SIDEWALK, BEGIN TAPER |
| B102 | 11+28.53 'JK' | 37.02 LT | 578536.99 | 868513.98 | 711.87 | BACK OF SIDEWALK; BEGIN RAD. |
| B103 | 1187+55.07 'JC' | 42.47 RT | 578544.21 | 868488.37 | | BACK OF SIDEWALK; SEE CURB RAMP DETAILS |
| B104 | 11+30.22 'JK' | 25.19 LT | 578546.43 | 868521.58 | 711.43 | BACK OF TRUCK APRON, BEGIN RAD. |
| B105 | 21+49.05 'JNB' | 0.00 RT | 578482.39 | 868583.47 | 713.03 | EOP |
| B106 | 20+70.07 'JNB' | 28.00 RT | 578405.77 | 868614.94 | 715.42 | BACK OF SIDEWALK, BEGIN TAPER |
| B107 | 20+98.12 'JNB' | 33.28 RT | 578434.15 | 868618.05 | 714.71 | BACK OF SIDEWALK, END TAPER, BEGIN RAD |
| B108 | 20+68.67 'JNB' | 240.19 RT | 578420.62 | 868826.62 | | R=220' |
| B109 | 1189+80.52 'JD' | 152.55 RT | 578422.36 | 868733.74 | | R=150' |
| B110 | 10+24.65 'JK' | 43.82 LT | 578545.20 | 868668.70 | | BACK OF SIDEWALK; SEE CURB RAMP DETAILS |
| B111 | 21+13.68 'JNB' | 24.86 RT | 578449.02 | 868608.47 | 714.95 | BACK OF TRUCK APRON, BEGIN RAD. |
| B112 | 10+43.13 'JK' | 27.81 LT | 578532.03 | 868636.91 | 711.60 | BACK OF TRUCK APRON, END RAD.; BEGIN RAD. |
| B113 | 10+36.15 'JK' | 76.00 LT | 578506.71 | 868680.02 | | R=50' |
| B114 | 10+27.72 'JK' | 28.69 LT | 578548.88 | 868653.17 | 710.98 | BACK OF TRUCK APRON, END RAD.; BEGIN RAD. |
| B115 | 1189+72.37 'JD' | 5.07 RT | 578569.79 | 868724.33 | 709.56 | BACK OF TRUCK APRON, END RAD. |
| B116 | 124+83.23 'JSB' | 0.82 RT | 578806.17 | 868559.96 | 704.48 | EOP, BEGIN SLOPED C&G |
| B117 | 120+97.27 'JSB' | 34.50 LT | 578425.88 | 868550.71 | 714.81 | BACK OF SIDEWALK, END TAPER |
| B118 | 10+91.73 'JK' | 20.00 LT | 578522.23 | 868569.49 | 711.95 | EOP |
| B119 | 10+75.41 'JK' | 20.00 LT | 578521.09 | 868591.74 | 711.89 | EOP |
| B120 | 11+68.69 'JK' | 20.00 LT | 578598.89 | 868510.49 | 709.94 | EOP |
| B121 | 120+72.55 'JSB' | 22.50 LT | 578402.15 | 868564.57 | 715.33 | FRONT OF SIDEWALK, BEGIN TAPER |
| B122 | 13+37.01 'JK' | 20.00 LT | 578592.35 | 868658.27 | 709.88 | EOP |
| B123 | 120+97.90 'JSB' | 26.50 LT | 578427.12 | 868558.64 | 714.68 | FRONT OF SIDEWALK, END TAPER |
| B124 | 25+96.75 'JNB' | 14.75 RT | 578920.64 | 868552.58 | 701.68 | EOP; BEGIN HMA SHOULDER |
| B125 | 1189+78.35 'JD' | 0.00 RT | 578574.89 | 868730.35 | 709.20 | EOP; END SLOPED C&G |
| B126 | 189+47.10 'JDR' | 31.00 LT | 578642.18 | 868722.97 | | BACK OF SIDEWALK; SEE CURB RAMP DETAILS |
| B127 | 1189+80.83 'JD' | 15.00 LT | 578589.91 | 868732.70 | 708.86 | EOP |
| B128 | 189+78.03 'JDR' | 0.00 RT | 578601.22 | 868735.44 | 708.45 | EOP |
| B129 | 23+40.39 'JNB' | 0.00 RT | 578670.38 | 868607.82 | 708.36 | EOP |
| B130 | 23+70.35 'JNB' | 37.51 RT | 578709.38 | 868635.65 | | BACK OF SIDEWALK; SEE CURB RAMP DETAILS |
| B131 | 24+58.93 'JNB' | 20.00 RT | 578789.86 | 868594.70 | 705.29 | BACK OF TRUCK APRON |
| B132 | 20+99.43 'JNB' | 25.38 RT | 578434.84 | 868610.08 | 714.56 | FRONT OF SIDEWALK, END TAPER, BEGIN RAD |
| B133 | 1187+72.20 'JC' | 32.56 LT | 578616.74 | 868462.63 | | BACK OF SIDEWALK; SEE CURB RAMP DETAILS |
| B134 | 11+33.48 'JK' | 39.62 LT | 578542.21 | 868506.83 | 711.04 | BACK OF SIDEWALK, END RAD.; BEGIN RAD. |
| B135 | 1187+19.80 'JC' | 478.49 LT | 578965.18 | 868179.45 | | R=460' |
| B136 | 123+80.99 'JSB' | 45.13 LT | 578711.87 | 868536.92 | | BACK OF SIDEWALK; SEE CURB RAMP DETAILS |

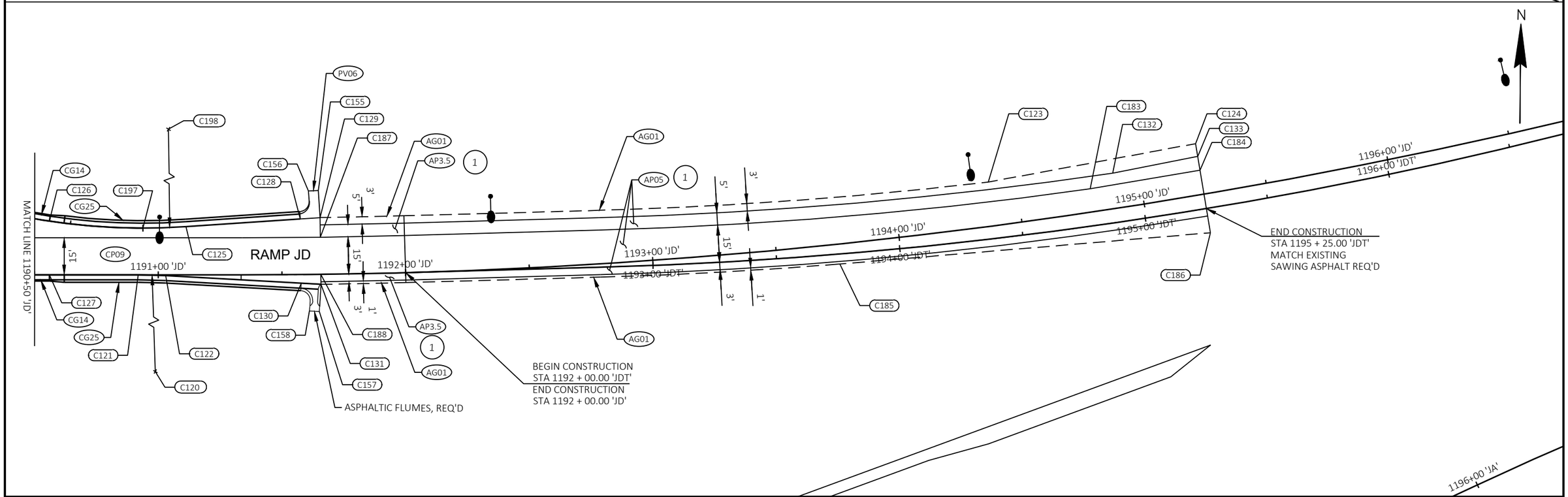
| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| B137 | 124+49.56 'JSB' | 21.63 LT | 578767.11 | 868549.36 | 705.54 | BACK OF TRUCK APRON, END RAD. |
| B138 | 124+85.76 'JSB' | 208.15 LT | 578742.17 | 868361.01 | | R=190' |
| B139 | 124+00.94 'JSB' | 31.98 LT | 578724.63 | 868550.19 | 706.89 | BACK OF TRUCK APRON, END RAD.; BEGIN RAD. |
| B140 | 124+63.81 'JSB' | 152.14 LT | 578739.15 | 868421.09 | | R=130' |
| B141 | 12+21.37 'JK' | 41.75 LT | 578676.91 | 868535.22 | 708.51 | BACK OF TRUCK APRON, END RAD.; BEGIN RAD. |
| B142 | 126+22.90 'JSB' | 15.79 LT | 578936.29 | 868504.99 | | EOP; END CONCRETE PAVT; BEGIN HMA |
| B143 | 26+24.50 'JNB' | 14.04 RT | 578947.59 | 868544.70 | | EOP; END CONCRETE PAVT; BEGIN HMA |
| B144 | 125+92.71 'JSB' | 2.03 RT | 578911.15 | 868529.43 | 701.64 | EOP |
| B145 | 25+93.06 'JNB' | 0.00 RT | 578913.53 | 868539.14 | 701.79 | EOP |
| B146 | 12+43.41 'JK' | 20.00 LT | 578668.08 | 868574.70 | 708.19 | EOP |
| B147 | 1189+25.51 'JD' | 31.99 RT | 578555.97 | 868665.56 | | BACK OF TRUCK APRON, FRONT OF SIDEWALK; SEE CURB RAMP DETAILS |
| B148 | 12+64.84 'JK' | 20.00 LT | 578666.11 | 868603.81 | 708.36 | EOP |
| B149 | 12+92.06 'JK' | 22.26 LT | 578649.44 | 868637.45 | 708.68 | EOP |
| B150 | 11+10.24 'JK' | 15.00 RT | 578561.37 | 868564.12 | 711.85 | BEGIN RAD.; EDGE OF TRUCK APRON |
| B151 | 11+10.24 'JK' | 35.00 RT | 578578.47 | 868574.49 | | R=20' |
| B152 | 11+16.92 'JK' | 15.28 RT | 578564.34 | 868560.34 | 711.65 | END RAD.; BEGIN RAD.; EDGE OF TRUCK APRON |
| B153 | 11+14.72 'JK' | 25.19 RT | 578571.40 | 868567.42 | | R=10' |
| B154 | 11+25.75 'JK' | 17.67 RT | 578570.26 | 868557.48 | 711.39 | END RAD.; BEGIN RAD.; EDGE OF TRUCK APRON |
| B155 | 10+10.72 'JK' | 2.21 LT | 578579.57 | 868638.47 | | R=81.5' |
| B156 | 12+14.95 'JK' | 24.79 RT | 578617.84 | 868566.49 | 709.03 | END RAD.; BEGIN RAD.; EDGE OF TRUCK APRON |
| B157 | 12+25.87 'JK' | 33.48 RT | 578613.15 | 868575.32 | | R=10' |
| B158 | 12+33.47 'JK' | 24.11 RT | 578623.14 | 868575.09 | 708.74 | END RAD.; BEGIN RAD.; EDGE OF TRUCK APRON |
| B159 | 10+95.03 'JK' | 23.44 RT | 578565.21 | 868576.39 | | R=58' |
| B160 | 13+06.56 'JK' | 21.97 RT | 578610.97 | 868611.95 | 709.45 | END RAD.; BEGIN RAD.; EDGE OF TRUCK APRON |
| B161 | 13+15.25 'JK' | 30.96 RT | 578603.07 | 868605.81 | | R=10' |
| B162 | 13+20.30 'JK' | 21.30 RT | 578603.68 | 868615.79 | 709.86 | END RAD.; BEGIN RAD; EDGE OF TRUCK APRON |
| B163 | 10+27.62 'JK' | 16.64 RT | 578574.07 | 868615.47 | 711.21 | END RAD.; BEGIN RAD.; EDGE OF TRUCK APRON |
| B164 | 10+36.64 'JK' | 25.00 RT | 578574.89 | 868605.51 | | R=10' |
| B165 | 10+36.64 'JK' | 15.00 RT | 578568.06 | 868612.80 | 711.47 | END RAD. |
| B166 | 121+51.55 'JSB' | 0.00 RT | 578482.11 | 868576.93 | 713.10 | EOP |
| B167 | 20+84.10 'JNB' | 22.50 RT | 578419.34 | 868608.38 | 714.94 | FRONT OF SIDEWALK, BEGIN TAPER |
| B168 | 21+07.68 'JNB' | 18.00 RT | 578442.51 | 868602.09 | 713.83 | EOP, BEGIN SLOPED C&G |
| B169 | 21+85.71 'JNB' | 0.00 RT | 578517.21 | 868594.37 | 712.00 | EOP |
| B170 | 121+88.89 'JSB' | 0.00 RT | 578517.72 | 868565.77 | 712.10 | EOP |
| B171 | 11+25.62 'JK' | 20.94 LT | 578544.13 | 868529.05 | 711.28 | EOP, BEGIN SLOPED C&G |
| B172 | 11+34.87 'JK' | 27.12 LT | 578550.95 | 868516.04 | 711.15 | BACK OF TRUCK APRON, END RAD.; BEGIN RAD. |

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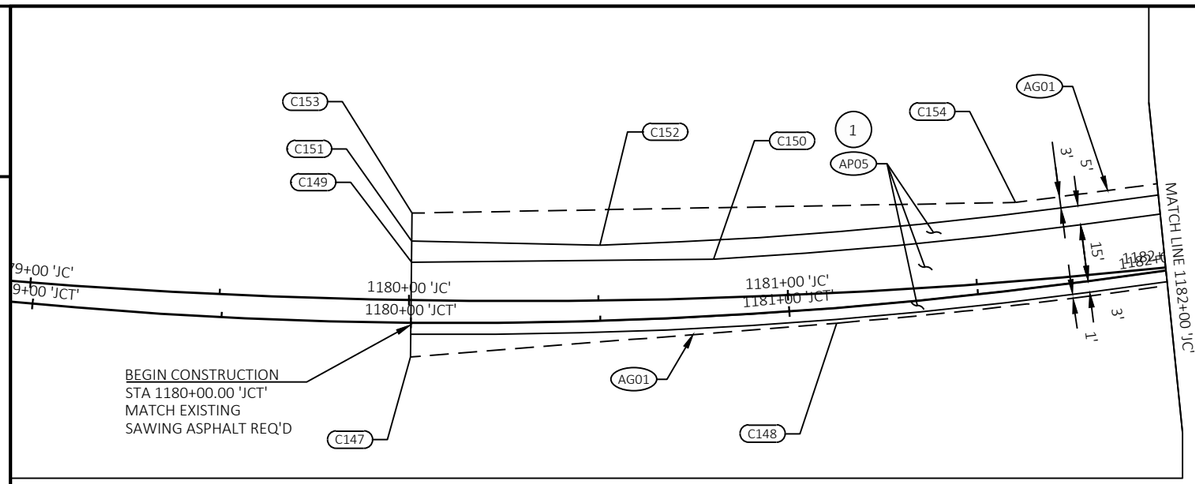
| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| B173 | 1187+70.85 'JC' | 39.95 RT | 578554.79 | 868500.34 | 710.49 | BACK OF TRUCK APRON, END RAD.; BEGIN RAD. |
| B174 | 11+29.32 'JK' | 48.94 LT | 578530.59 | 868503.82 | | R=12' |
| B175 | 1189+31.66 'JD' | 32.83 RT | 578552.06 | 868672.54 | | BACK OF SIDEWALK; BACK OF TRUCK APRON; SEE CURB RAMP DETAILS |
| B176 | 12+08.40 'JK' | 34.94 LT | 578658.02 | 868521.87 | 709.18 | BACK OF TRUCK APRON, END RAD.; BEGIN RAD. |
| B177 | 123+44.18 'JSB' | 0.00 LT | 578671.88 | 868571.96 | 708.12 | EOP |
| B178 | 124+55.31 'JSB' | 15.76 LT | 578774.43 | 868553.11 | 705.09 | EOP, END SLOPED C&G |
| B179 | 24+64.93 'JNB' | 15.00 RT | 578794.27 | 868588.26 | 704.80 | EOP, END SLOPED C&G |
| B180 | 24+84.15 'JNB' | 0.00 RT | 578808.69 | 868568.60 | 704.49 | EOP, BEGIN SLOPED C&G |
| B181 | 124+79.58 'JSB' | 0.69 RT | 578802.66 | 868560.99 | 704.59 | EOP; END RAD.; BEGIN TAPER |
| B182 | 125+09.52 'JSB' | 1.80 RT | 578831.40 | 868552.53 | 703.69 | EOP; END TAPER |
| B183 | 125+97.79 'JSB' | 13.00 LT | 578912.50 | 868513.61 | 701.25 | EOP; BEGIN RAD. |
| B184 | 126+08.70 'JSB' | 13.78 LT | 578922.95 | 868510.28 | 701.02 | EOP; END RAD. |
| B185 | 1189+32.86 'JD' | 22.05 RT | 578561.56 | 868677.85 | | BACK OF SIDEWALK; BACK OF TRUCK APRON; SEE CURB RAMP DETAILS |
| B186 | 20+72.18 'JNB' | 0.00 RT | 578405.73 | 868586.86 | 715.19 | END CONC PAVT APPROACH SLAB |
| B187 | 11+31.05 'JK' | 35.12 LT | 578541.46 | 868512.88 | | R=10' |
| B188 | 1187+04.58 'JC' | 114.84 RT | 578456.05 | 868484.51 | | R=100' |
| B189 | 12+06.67 'JK' | 134.85 LT | 578724.79 | 868447.43 | | R=100' |
| B190 | 1189+69.71 'JD' | 105.00 RT | 578469.96 | 868718.43 | | R=100' |
| B191 | 24+20.05 'JNB' | 19.99 RT | 578752.44 | 868605.28 | 706.59 | BACK OF TRUCK APRON, END RAD. |
| B192 | 24+20.04 'JNB' | 109.99 RT | 578776.92 | 868691.89 | | R=90' |
| B193 | 24+05.66 'JNB' | 21.15 RT | 578738.91 | 868610.31 | 707.05 | BACK OF TRUCK APRON; END RAD.; BEGIN RAD. |
| B194 | 24+63.19 'JNB' | 376.52 RT | 578890.95 | 868936.63 | | R=360' |
| B195 | 23+46.60 'JNB' | 35.86 RT | 578686.26 | 868640.48 | 708.14 | BACK OF TRUCK APRON, END RAD.; BEGIN RAD. |
| B196 | 188+93.20 'JDR' | 110.00 LT | 578737.43 | 868714.52 | | R=90' (BACK OF TRUCK APRON) |
| B197 | 189+02.54 'JDR' | 23.00 LT | 578656.95 | 868680.18 | 708.60 | FRONT OF SIDEWALK |
| B198 | 189+08.54 'JDR' | 16.00 LT | 578647.92 | 868681.99 | 708.37 | EOP, BEGIN SLOPED C&G |
| B199 | 189+01.03 'JDR' | 0.00 LT | 578637.62 | 868667.63 | 708.67 | EOP, BEGIN SLOPED C&G |
| B200 | 188+91.03 'JDR' | 7.28 RT | 578636.15 | 868655.34 | 709.21 | BACK OF TRUCK APRON, END RAD. |
| B201 | 1189+78.95 'JD' | 115.00 LT | 578689.89 | 868730.01 | | R=92' |
| B202 | 1189+09.22 'JD' | 24.90 LT | 578613.72 | 868678.42 | 709.50 | BACK OF TRUCK APRON, END RAD.; BEGIN RAD. |
| B203 | 1189+88.86 'JD' | 125.03 LT | 578700.01 | 868739.84 | | R=106' |
| B204 | 1189+75.01 'JD' | 20.58 LT | 578595.45 | 868726.84 | 709.14 | BACK OF TRUCK APRON |
| B205 | 25+88.69 'JNB' | 14.99 RT | 578912.87 | 868554.74 | 701.78 | EOP, END C&G |
| B206 | 11+64.53 'JK' | 121.37 LT | 578591.12 | 868409.00 | | R=207' |
| B207 | 25+93.10 'JNB' | 25.87 RT | 578919.75 | 868564.25 | | EDGE OF SURFACE DRAIN |
| B208 | 25+97.10 'JNB' | 25.74 RT | 578923.60 | 868563.17 | | EDGE OF SURFACE DRAIN |

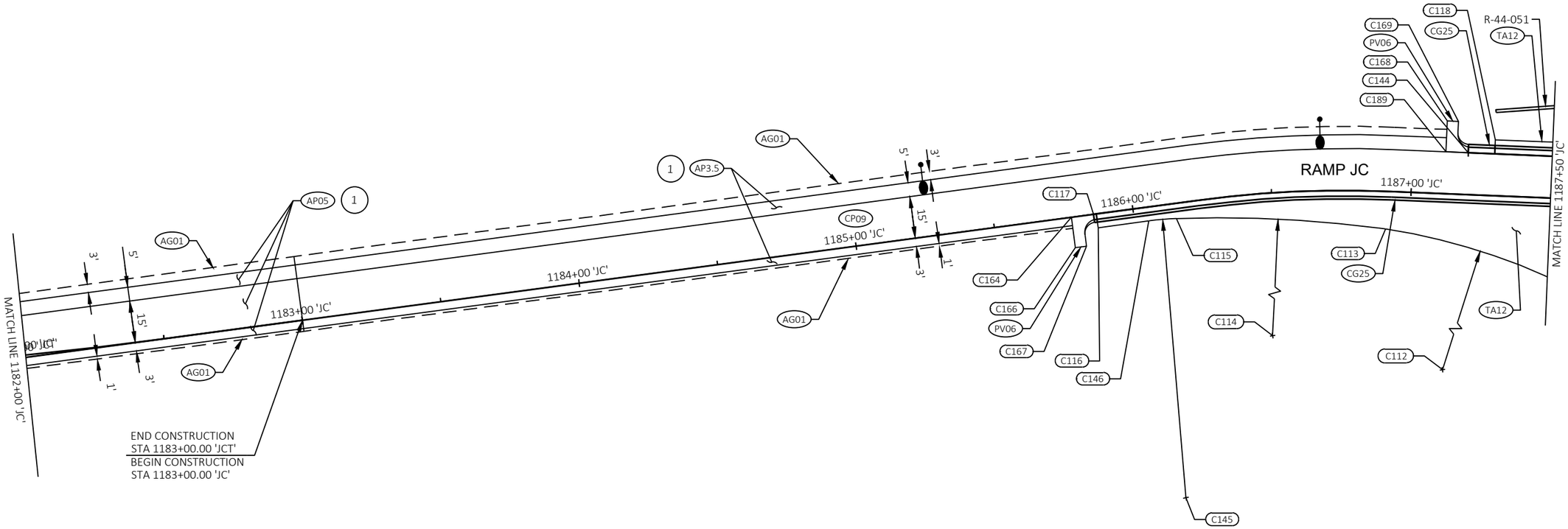
| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| B209 | 12+26.00 'JK' | 54.00 RT | 578594.72 | 868584.34 | 712.16 | CENTER OF RAB CENTRAL ISLAND; R=22' |
| B210 | 1188+01.38 'JC' | 0.00 RT | 578601.99 | 868506.22 | 709.81 | END CONCRETE PAVT 9-INCH; BEGIN CONCRETE PAVT 10-INCH |
| B211 | 1189+06.50 'JD' | 0.00 LT | 578594.43 | 868662.50 | 709.74 | END CONCRETE PAVT 9-INCH; BEGIN CONCRETE PAVT 10-INCH |
| B212 | 188+70.12 'JDR' | 0.00 RT | 578652.71 | 868640.66 | 708.52 | END CONCRETE PAVT 9-INCH; BEGIN CONCRETE PAVT 10-INCH |
| B213 | 10+61.67 'JK' | 46.78 RT | 578587.95 | 868586.85 | | CENTER OF LANDSCAPING AREA; R=22' |
| B214 | 188+90.81 'JDR' | 31.00 LT | 578669.66 | 868673.85 | 708.39 | BACK OF SIDEWALK, BEGIN RAD |
| B215 | 23+59.68 'JNB' | 40.61 RT | 578699.96 | 868641.54 | 707.84 | BACK OF SIDEWALK, END RAD |
| B216 | 10+62.98 'JK' | 32.12 LT | 578513.25 | 868612.27 | 711.67 | EOP |
| B217 | 121+94.47 'JSB' | 20.76 LT | 578515.12 | 868544.48 | 711.75 | EOP |
| B218 | 1187+58.37 'JC' | 31.86 RT | 578554.94 | 868485.46 | | BEGIN RAD.; END RAD.; BACK OF TRUCK APRON |
| B219 | 1187+37.72 'JC' | 77.40 RT | 578505.42 | 868492.42 | | R=50' |
| B220 | 1187+52.76 'JC' | 20.00 LT | 578595.72 | 868452.94 | 709.53 | BEGIN RAD.; BACK OF TRUCK APRON |
| B221 | 1187+61.91 'JC' | 20.42 LT | 578600.98 | 868460.44 | 709.59 | END RAD.; BEGIN RAD.; BACK OF TRUCK APRON |
| B222 | 1187+52.76 'JC' | 120.00 LT | 578680.15 | 868399.36 | | R=100' |
| B223 | 123+89.03 'JSB' | 33.31 LT | 578716.23 | 868549.05 | 707.17 | END RAD.; BEGIN RAD.; BACK OF TRUCK APRON |
| B224 | 189+02.54 'JDR' | 21.50 LT | 578655.65 | 868679.44 | | EDGE OF SIDEWALK; BEGIN CONCRETE CURB PEDESTRIAN |
| B225 | 188+91.18 'JDR' | 21.50 LT | 578661.19 | 868669.54 | | END RAD. |
| B226 | 1189+67.43 'JD' | 20.90 LT | 578595.87 | 868720.51 | 709.23 | END RAD.; BEGIN RAD.; BACK OF TRUCK APRON |
| B227 | 1189+39.89 'JD' | 15.38 RT | 578565.16 | 868687.81 | 709.95 | END RAD.; BEGIN RAD.; BACK OF TRUCK APRON |
| B228 | 26+13.59 'JNB' | 13.99 RT | 578937.04 | 868547.50 | 701.45 | EOP |
| B229 | 26+25.20 'JNB' | 22.04 RT | 578950.35 | 868552.25 | 700.94 | EDGE OF SHOULDER |
| B230 | 26+34.48 'JNB' | 19.30 RT | 578958.59 | 868547.19 | | MATCH EXIST. |
| B231 | 26+34.50 'JNB' | 14.07 RT | 578957.25 | 868542.14 | | EOP; MATCH EXIST. |
| B232 | 124+42.51 'JSB' | 1000.00 RT | 579085.03 | 869520.29 | | R=1000' |
| B233 | 25+98.26 'JNB' | 105.04 LT | 578893.49 | 868435.90 | | R=80' |
| B234 | 126+32.86 'JSB' | 17.18 LT | 578945.64 | 868501.30 | | MATCH EXIST. |
| B235 | 12+89.00 'JK' | 151.35 LT | 578749.95 | 868718.78 | | R=92' |
| B236 | 124+42.51 'JSB' | 0.00 RT | 578767.29 | 868572.12 | 705.86 | END RAD.; EOP |
| B237 | 23+62.73 'JNB' | 30.82 RT | 578700.23 | 868631.30 | | END CONCRETE CURB PEDESTRIAN; SEE CURB RAMP DETAILS |




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN DETAILS | SHEET 53 | E |
|---|---|---|---|---|---|



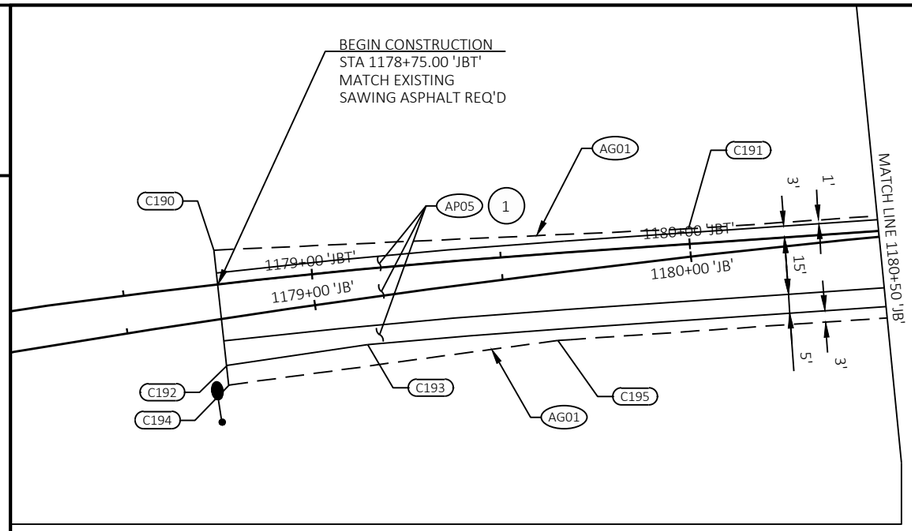



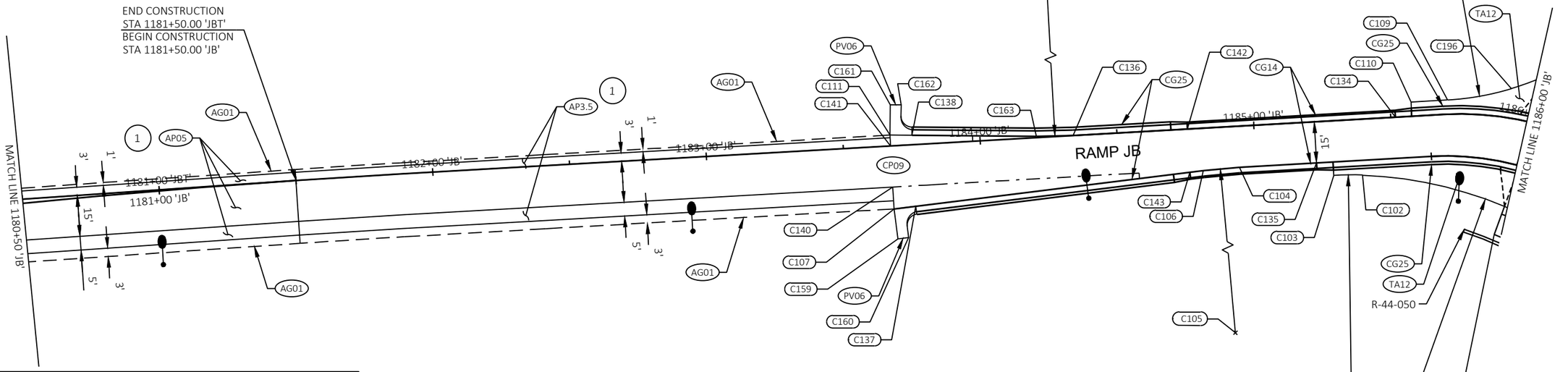

LEGEND

| | |
|---|---|
| AG01 | BASE AGGREGATE DENSE 3/4-INCH |
| AP3.5 | HMA PAVEMENT 3 1/2-INCH |
| AP05 | ASPHALTIC SURFACE, 5 INCHES |
| AP07 | HMA PAVEMENT 6 3/4-INCH |
| CG25 | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A |
| CG12 | CONCRETE CURB & GUTTER 18-INCH TYPE A (REJECT) |
| CG33 | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R |
| CN01 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| CN02 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| CG42 | CONCRETE CURB PEDESTRIAN |
| CG50 | CONCRETE CURB & GUTTER 36-INCH SPECIAL |
| CG14 | CONCRETE CURB & GUTTER 30-INCH TYPE A |
| CG51 | CONCRETE CURB & GUTTER 42-INCH SPECIAL |
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP09 | CONCRETE PAVEMENT 9-INCH (DOWELED) |
| CP10 | CONCRETE PAVEMENT 10-INCH (DOWELED) |
| DR09 | ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| PV06 | CONCRETE SURFACE DRAINS |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| | APRON ENDWALL |
| | INLET |
| | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| CP01 | COLORING CONCRETE WISDOT RED |
| CP02 | COLORING CONCRETE CUSTOM |
| | LIGHT POLE |

NOTES:
ALL POINTS & RADII ARE TO FLANGE LINE OF CURB & GUTTER, UNLESS OTHERWISE NOTED.

1 REFER TO TYPICAL SECTIONS FOR HMA PAVEMENT STRUCTURE INFORMATION INCLUDING INDIVIDUAL LAYER TYPES




LEGEND

| | |
|---|---|
| AG01 | BASE AGGREGATE DENSE 3/4-INCH |
| AP3.5 | HMA PAVEMENT 3 1/2-INCH |
| AP05 | ASPHALTIC SURFACE, 5 INCHES |
| AP07 | HMA PAVEMENT 6 3/4-INCH |
| CG25 | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A |
| CG12 | CONCRETE CURB & GUTTER 18-INCH TYPE A (REJECT) |
| CG33 | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R |
| CN01 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| CN02 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| CG42 | CONCRETE CURB PEDESTRIAN |
| CG50 | CONCRETE CURB & GUTTER 36-INCH SPECIAL |
| CG14 | CONCRETE CURB & GUTTER 30-INCH TYPE A |
| CG51 | CONCRETE CURB & GUTTER 42-INCH SPECIAL |
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP09 | CONCRETE PAVEMENT 9-INCH (DOWELED) |
| CP10 | CONCRETE PAVEMENT 10-INCH (DOWELED) |
| DR09 | ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES |
| PV06 | CONCRETE SURFACE DRAINS |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| | APRON ENDWALL |
| | INLET |
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| CP01 | COLORING CONCRETE WISDOT RED |
| CP02 | COLORING CONCRETE CUSTOM |
| | LIGHT POLE |

NOTES:
ALL POINTS & RADII ARE TO FLANGE LINE OF CURB & GUTTER, UNLESS OTHERWISE NOTED.

(1) REFER TO TYPICAL SECTIONS FOR HMA PAVEMENT STRUCTURE INFORMATION INCLUDING INDIVIDUAL LAYER TYPES

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN DETAILS | SHEET 55 | E |
|---|---|---|---|---|---|

STATION & OFFSET TABLE

| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
|---|---|---|---|---|---|---|
| C101 | 1185+24.36 'JB' | 169.77 RT | 577761.10 | 868443.15 | | R=150' |
| C102 | 1185+38.60 'JB' | 20.45 RT | 577911.10 | 868442.58 | 709.31 | BACK OF TRUCK APRON, END RAD.,BEGIN RAD. |
| C103 | 1185+28.08 'JB' | 20.01 RT | 577910.51 | 868432.06 | 709.09 | BACK OF TRUCK APRON; BEGIN RAD. |
| C104 | 1184+93.93 'JB' | 15.00 RT | 577912.12 | 868397.58 | 707.96 | EOP, END RAD. |
| C105 | 1184+93.93 'JB' | 215.00 RT | 577713.09 | 868417.33 | | R=200' |
| C106 | 1184+80.62 'JB' | 15.44 RT | 577910.36 | 868384.39 | 707.59 | EOP, BEGIN RAD. |
| C107 | 1183+67.27 'JB' | 23.00 RT | 577891.65 | 868272.33 | 704.22 | EOP |
| C108 | 1185+70.17 'JB' | 105.19 LT | 578039.33 | 868462.45 | | R=100' |
| C109 | 1185+70.96 'JB' | 5.20 LT | 577939.81 | 868472.33 | 710.09 | BACK OF TRUCK APRON, BEGIN RAD. |
| C110 | 1185+57.70 'JB' | 5.18 LT | 577938.50 | 868459.05 | 709.92 | BACK OF TRUCK APRON |
| C111 | 1183+67.27 'JB' | 4.00 LT | 577918.52 | 868269.67 | 704.68 | EOP |
| C112 | 1186+32.63 'JC' | 230.28 RT | 578337.08 | 868516.08 | | R=220' |
| C113 | 1186+91.35 'JC' | 13.51 RT | 578534.55 | 868419.10 | 709.07 | BACK OF TRUCK APRON, END RAD.; BEGIN RAD. |
| C114 | 1185+70.61 'JC' | 453.29 RT | 578134.21 | 868624.55 | | R=450' |
| C115 | 1186+15.00 'JC' | 5.49 RT | 578494.89 | 868355.46 | 706.98 | BACK OF TRUCK APRON, END RAD.; BEGIN RAD. |
| C116 | 1185+86.79 'JC' | 5.00 RT | 578476.23 | 868334.29 | 706.18 | BACK OF TRUCK APRON |
| C117 | 1185+85.79 'JC' | 0.00 RT | 578479.25 | 868330.18 | 705.88 | EOP, BEGIN SLOPED C&G |
| C118 | 1187+29.35 'JC' | 20.00 LT | 578583.17 | 868433.17 | 709.31 | BACK OF TRUCK APRON |
| C119 | 1185+95.75 'JB' | 42.90 RT | 577891.45 | 868491.43 | | SEE CURB RAMP DETAILS |
| C120 | 1190+91.96 'JD' | 200.00 RT | 578375.82 | 868845.57 | | R=200' |
| C121 | 1190+91.96 'JD' | 0.00 RT | 578575.81 | 868843.95 | 705.87 | EOP, BEGIN RAD |
| C122 | 1191+03.06 'JD' | 0.31 RT | 578575.59 | 868855.06 | 705.51 | EOP, END RAD |
| C123 | 1194+38.62 'JD' | 17.82 LT | 578616.26 | 869187.08 | 695.27 | EDGE OF UNPAVED SHOULDER, BEGIN TAPER |
| C124 | 1195+24.58 'JD' | 20.70 LT | 578632.53 | 869270.80 | | EDGE OF UNPAVED SHOULDER, END TAPER, MATCH EXIST |
| C125 | 1191+11.21 'JD' | 19.50 LT | 578595.46 | 868863.04 | 704.88 | EOP, END RAD |
| C126 | 1190+56.00 'JD' | 21.71 LT | 578597.23 | 868807.81 | 706.67 | EOP. BEGIN SLOPED C&G |
| C127 | 1190+56.00 'JD' | 0.00 RT | 578575.52 | 868807.99 | 707.04 | EOP, BEGIN SLOPED C&G |
| C128 | 1191+57.66 'JD' | 22.54 LT | 578599.00 | 868909.23 | 703.49 | EOP, END SLOPED C&G |
| C129 | 1191+65.72 'JD' | 22.98 LT | 578599.60 | 868917.21 | 703.10 | EOP |
| C130 | 1191+57.76 'JD' | 3.47 RT | 578572.99 | 868909.81 | 703.86 | EOP, END SLOPED C&G |
| C131 | 1191+65.72 'JD' | 4.02 RT | 578572.60 | 868917.79 | 703.55 | EOP |
| C132 | 1194+89.33 'JD' | 14.27 LT | 578620.30 | 869237.40 | 694.49 | EDGE OF PAVED SHOULDER, BEGIN TAPER |
| C133 | 1195+24.54 'JD' | 15.47 LT | 578627.38 | 869271.68 | | EDGE OF PAVED SHOULDER, END TAPER, MATCH EXIST |
| C134 | 1185+51.70 'JB' | 0.00 RT | 577932.75 | 868453.59 | 709.55 | EOP, BEGIN SLOPED C&G |
| C135 | 1185+22.08 'JB' | 15.00 RT | 577914.90 | 868425.60 | 708.69 | EOP, BEGIN SLOPED C&G |

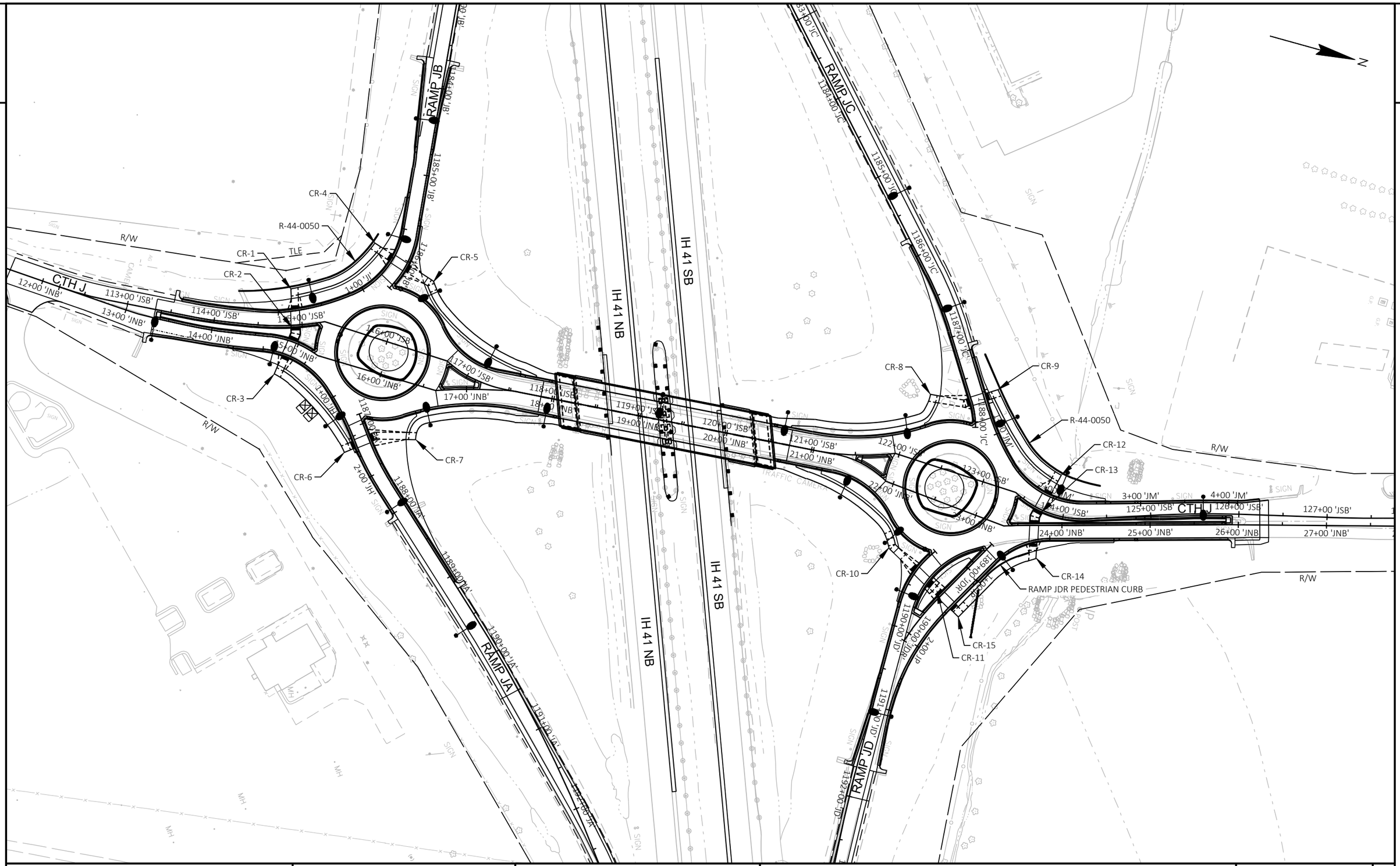
STATION & OFFSET TABLE

| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
|---|---|---|---|---|---|---|
| C136 | 1184+33.94 'JB' | 0.00 RT | 577921.12 | 868336.41 | 706.64 | EOP, END RAD |
| C137 | 1183+75.25 'JB' | 22.47 RT | 577892.97 | 868280.22 | 704.60 | EOP, BEGIN SLOPED C&G |
| C138 | 1183+75.25 'JB' | 3.48 LT | 577918.79 | 868277.66 | 704.98 | EOP, BEGIN SLOPED C&G |
| C139 | 1184+33.94 'JB' | 200.00 LT | 578120.14 | 868316.66 | | R=200' |
| C140 | 1183+67.27 'JB' | 15.00 RT | 577899.61 | 868271.54 | 704.54 | EOP; END ASPHALT HMA SHOULDER |
| C141 | 1183+67.27 'JB' | 0.00 LT | 577914.54 | 868270.06 | 704.84 | EOP; END ASPHALT HMA SHOULDER |
| C142 | 1184+75.74 'JB' | 0.00 RT | 577925.25 | 868378.00 | 707.77 | EOP, END SLOPED C&G |
| C143 | 1184+75.74 'JB' | 15.77 RT | 577909.56 | 868379.56 | 707.45 | EOP, END SLOPED C&G |
| C144 | 1187+19.89 'JC' | 15.00 LT | 578573.88 | 868427.86 | 708.91 | EOP, BEGIN SLOPED C&G |
| C145 | 1186+05.14 'JC' | 105.00 RT | 578414.74 | 868415.26 | | R=100' |
| C146 | 1186+05.14 'JC' | 5.00 RT | 578488.60 | 868347.85 | 706.70 | BACK OF TRUCK APRON, BEGIN RAD. |
| C147 | 1180+00.00 'JCT' | 9.04 RT | 578086.77 | 867894.39 | | EDGE OF UNPAVED SHOULDER, BEGIN TAPER, MATCH EXIST |
| C148 | 1181+12.18 'JCT' | 4.00 RT | 578158.24 | 867981.72 | 695.78 | EDGE OF UNPAVED SHOULDER, END TAPER |
| C149 | 1180+00.00 'JCT' | 15.92 LT | 578107.42 | 867880.38 | | EOP, BEGIN TAPER, MATCH EXIST |
| C150 | 1180+80.72 'JCT' | 15.00 LT | 578153.55 | 867945.38 | 694.71 | EOP, END TAPER |
| C151 | 1180+00.00 'JCT' | 21.52 LT | 578112.06 | 867877.23 | | EDGE OF PAVED SHOULDER, BEGIN TAPER, MATCH EXIST |
| C152 | 1180+50.48 'JCT' | 20.00 LT | 578139.52 | 867918.61 | 694.20 | EDGE OF PAVED SHOULDER, END TAPER |
| C153 | 1180+00.00 'JCT' | 28.92 LT | 578118.18 | 867873.07 | | EDGE OF UNPAVED SHOULDER, BEGIN TAPER, MATCH EXIST |
| C154 | 1181+62.65 'JCT' | 23.00 LT | 578211.28 | 868002.29 | 695.56 | EDGE OF UNPAVED SHOULDER, END TAPER |
| C155 | 1191+65.13 'JD' | 33.96 LT | 578610.57 | 868916.39 | | EDGE OF SURFACE DRAIN |
| C156 | 1191+61.08 'JD' | 33.75 LT | 578610.27 | 868912.40 | | EDGE OF SURFACE DRAIN |
| C157 | 1191+64.96 'JD' | 14.99 RT | 578561.62 | 868917.27 | | EDGE OF SURFACE FLUME |
| C158 | 1191+60.99 'JD' | 14.71 RT | 578561.82 | 868913.27 | | EDGE OF SURFACE FLUME |
| C159 | 1183+68.00 'JB' | 33.98 RT | 577880.80 | 868274.15 | | EDGE OF SURFACE DRAIN |
| C160 | 1183+72.00 'JB' | 33.71 RT | 577881.46 | 868278.09 | | EDGE OF SURFACE DRAIN |
| C161 | 1183+67.99 'JB' | 15.01 LT | 577929.55 | 868269.30 | | EDGE OF SURFACE DRAIN |
| C162 | 1183+71.98 'JB' | 14.67 LT | 577929.60 | 868273.30 | | EDGE OF SURFACE DRAIN |
| C163 | 1184+20.61 'JB' | 0.44 LT | 577920.25 | 868323.10 | 706.29 | EOP, BEGIN RAD |
| C164 | 1185+77.79 'JC' | 0.00 RT | 578473.86 | 868324.28 | 705.66 | EOP, END ASPHALT SHOULDER |
| C165 | 1185+29.11 'JB' | 120.00 RT | 577811.10 | 868442.96 | | R=100' |
| C166 | 1185+77.79 'JC' | 11.00 RT | 578465.73 | 868331.69 | | EDGE OF SURFACE DRAIN |
| C167 | 1185+81.79 'JC' | 11.00 RT | 578468.43 | 868334.65 | | EDGE OF SURFACE DRAIN |
| C168 | 1187+11.89 'JC' | 26.00 LT | 578578.88 | 868415.21 | | EDGE OF SURFACE DRAIN |
| C169 | 1187+15.89 'JC' | 26.00 LT | 578581.03 | 868418.59 | | EDGE OF SURFACE DRAIN |
| C170 | 1189+07.22 'JA' | 5.00 LT | 578083.27 | 868834.04 | 706.36 | BACK OF TRUCK APRON |

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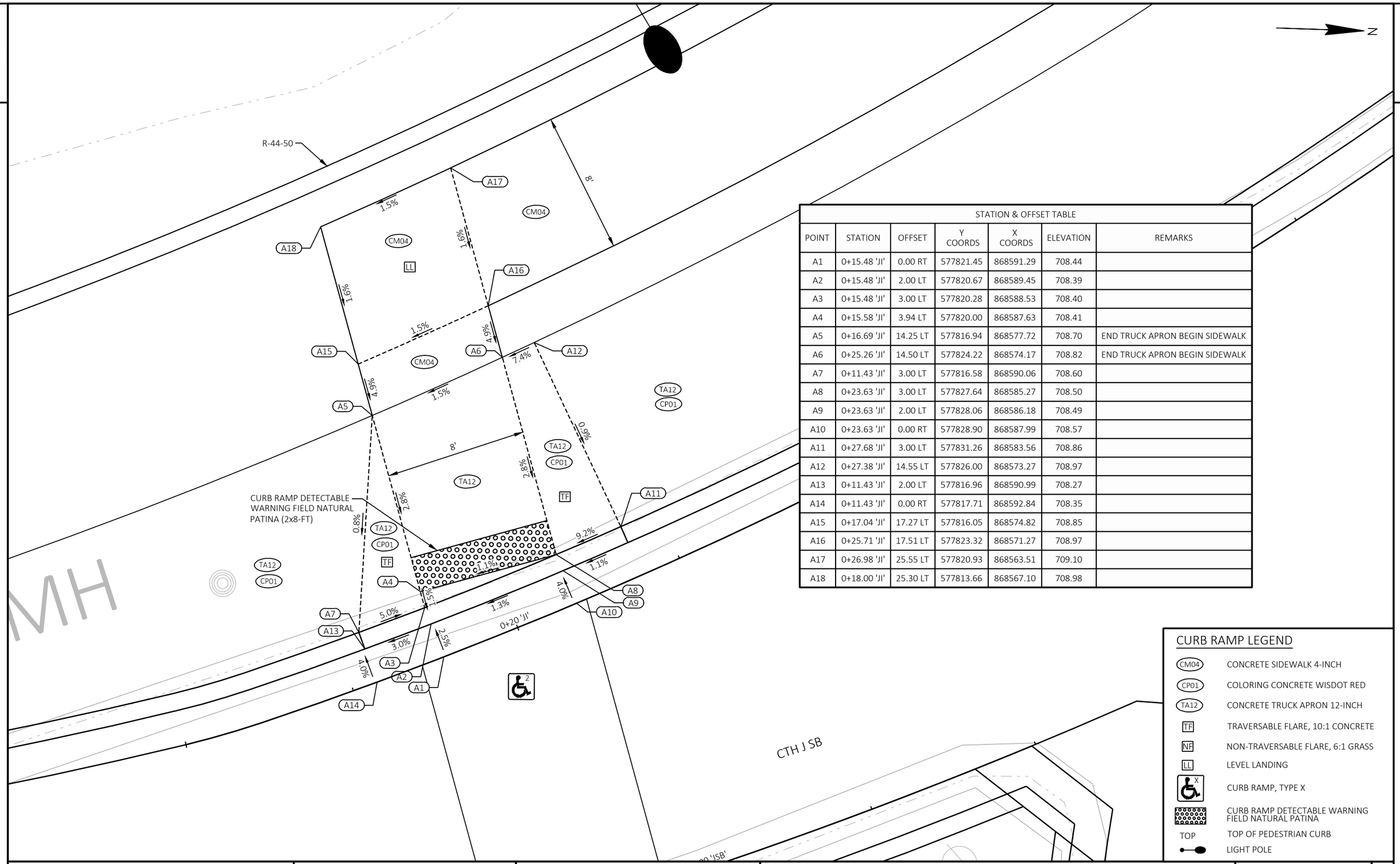
| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| C171 | 1189+08.26 'JA' | 0.00 RT | 578080.68 | 868838.44 | 706.05 | EOP, END SLOPED C&G |
| C172 | 1189+12.18 'JA' | 11.03 LT | 578090.99 | 868832.90 | | EDGE OF SURFACE DRAIN |
| C173 | 1189+16.18 'JA' | 11.06 LT | 578093.98 | 868835.56 | | EDGE OF SURFACE DRAIN |
| C174 | 1189+16.26 'JA' | 0.00 RT | 578086.61 | 868843.81 | 705.79 | EOP, BEGIN ASPHALT SHOULDER |
| C175 | 1192+94.01 'JAT' | 4.00 LT | 578354.94 | 869109.96 | 695.53 | EDGE OF UNPAVED SHOULDER, BEGIN TAPER |
| C176 | 1193+50.00 'JAT' | 6.58 LT | 578390.33 | 869153.88 | | EDGE OF UNPAVED SHOULDER, END TAPER, MATCH EXIST |
| C177 | 1193+19.55 'JAT' | 15.00 RT | 578355.21 | 869141.65 | 693.99 | EOP, BEGIN TAPER |
| C178 | 1193+50.00 'JAT' | 15.89 RT | 578371.75 | 869166.53 | | EOP, END TAPER, MATCH EXIST |
| C179 | 1192+96.32 'JAT' | 20.00 RT | 578337.48 | 869126.59 | 694.09 | EDGE OF PAVED SHOULDER, BEGIN TAPER |
| C180 | 1193+50.00 'JAT' | 21.76 RT | 578366.90 | 869169.83 | | EDGE OF PAVED SHOULDER, END TAPER, MATCH EXIST |
| C181 | 1192+88.41 'JAT' | 23.00 RT | 578330.35 | 869122.42 | 694.05 | EDGE OF UNPAVED SHOULDER, BEGIN TAPER |
| C182 | 1193+50.00 'JAT' | 25.08 RT | 578364.15 | 869171.70 | | EDGE OF UNPAVED SHOULDER, END TAPER, MATCH EXIST |
| C183 | 1194+79.63 'JDT' | 15.00 LT | 578613.87 | 869228.37 | 694.91 | EOP, BEGIN TAPER |
| C184 | 1195+24.99 'JDT' | 15.73 LT | 578621.80 | 869272.65 | | EOP, END TAPER, MATCH EXIST |
| C185 | 1193+75.32 'JDT' | 4.00 RT | 578582.64 | 869127.40 | 697.56 | EDGE OF UNPAVED SHOULDER, BEGIN TAPER |
| C186 | 1195+24.99 'JDT' | 9.90 RT | 578596.55 | 869277.07 | | EDGE OF UNPAVED SHOULDER, END TAPER, MATCH EXIST |
| C187 | 1191+65.73 'JD' | 15.00 LT | 578591.62 | 868917.39 | 703.42 | EOP, BEGIN ASPHALT SHOULDER |
| C188 | 1191+65.73 'JD' | 0.00 LT | 578576.62 | 868917.72 | 703.72 | EOP, BEGIN ASPHALT SHOULDER |
| C189 | 1187+11.89 'JC' | 15.00 LT | 578569.59 | 868421.11 | 708.79 | END ASPHALT SHOULDER |
| C190 | 1178+75.05 'JBT' | 9.06 LT | 577869.46 | 867779.44 | | EDGE OF UNPAVED SHOULDER, BEGIN TAPER, MATCH EXIST |
| C191 | 1179+99.92 'JBT' | 4.00 LT | 577880.33 | 867904.26 | 696.90 | EDGE OF UNPAVED ASPHALT SHOULDER, END TAPER |
| C192 | 1178+75.00 'JBT' | 21.54 RT | 577839.23 | 867784.16 | | EDGE OF PAVED SHOULDER, BEGIN TAPER, MATCH EXIST |
| C193 | 1179+12.88 'JBT' | 20.00 RT | 577846.24 | 867821.02 | 695.28 | EDGE OF PAVED SHOULDER, END TAPER |
| C194 | 1178+75.00 'JBT' | 26.71 RT | 577834.12 | 867784.97 | | EDGE OF UNPAVED SHOULDER, BEGIN TAPER, MATCH EXIST |
| C195 | 1179+63.52 'JBT' | 23.00 RT | 577849.49 | 867871.10 | 695.83 | EDGE OF UNPAVED SHOULDER, END TAPER |
| C196 | 1185+92.47 'JB' | 10.66 LT | 577944.92 | 868495.43 | 710.32 | END RAD.; BEGIN RAD. |
| C197 | 1190+93.78 'JD' | 18.90 LT | 578594.72 | 868845.62 | 705.43 | EOP |
| C198 | 1190+97.09 'JD' | 272.01 LT | 578847.85 | 868846.89 | | R=255' |

2




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CURB RAMP DETAILS | SHEET 58 | E |
|---|---|---|---|---|---|

2




| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| A1 | 0+15.48 'JI' | 0.00 RT | 577821.45 | 868591.29 | 708.44 | |
| A2 | 0+15.48 'JI' | 2.00 LT | 577820.67 | 868589.45 | 708.39 | |
| A3 | 0+15.48 'JI' | 3.00 LT | 577820.28 | 868588.53 | 708.40 | |
| A4 | 0+15.58 'JI' | 3.94 LT | 577820.00 | 868587.63 | 708.41 | |
| A5 | 0+16.69 'JI' | 14.25 LT | 577816.94 | 868577.72 | 708.70 | END TRUCK APRON BEGIN SIDEWALK |
| A6 | 0+25.26 'JI' | 14.50 LT | 577824.22 | 868574.17 | 708.82 | END TRUCK APRON BEGIN SIDEWALK |
| A7 | 0+11.43 'JI' | 3.00 LT | 577816.58 | 868590.06 | 708.60 | |
| A8 | 0+23.63 'JI' | 3.00 LT | 577827.64 | 868585.27 | 708.50 | |
| A9 | 0+23.63 'JI' | 2.00 LT | 577828.06 | 868586.18 | 708.49 | |
| A10 | 0+23.63 'JI' | 0.00 RT | 577828.90 | 868587.99 | 708.57 | |
| A11 | 0+27.68 'JI' | 3.00 LT | 577831.26 | 868583.56 | 708.86 | |
| A12 | 0+27.38 'JI' | 14.55 LT | 577826.00 | 868573.27 | 708.97 | |
| A13 | 0+11.43 'JI' | 2.00 LT | 577816.96 | 868590.99 | 708.27 | |
| A14 | 0+11.43 'JI' | 0.00 RT | 577817.71 | 868592.84 | 708.35 | |
| A15 | 0+17.04 'JI' | 17.27 LT | 577816.05 | 868574.82 | 708.85 | |
| A16 | 0+25.71 'JI' | 17.51 LT | 577823.32 | 868571.27 | 708.97 | |
| A17 | 0+26.98 'JI' | 25.55 LT | 577820.93 | 868563.51 | 709.10 | |
| A18 | 0+18.00 'JI' | 25.30 LT | 577813.66 | 868567.10 | 708.98 | |

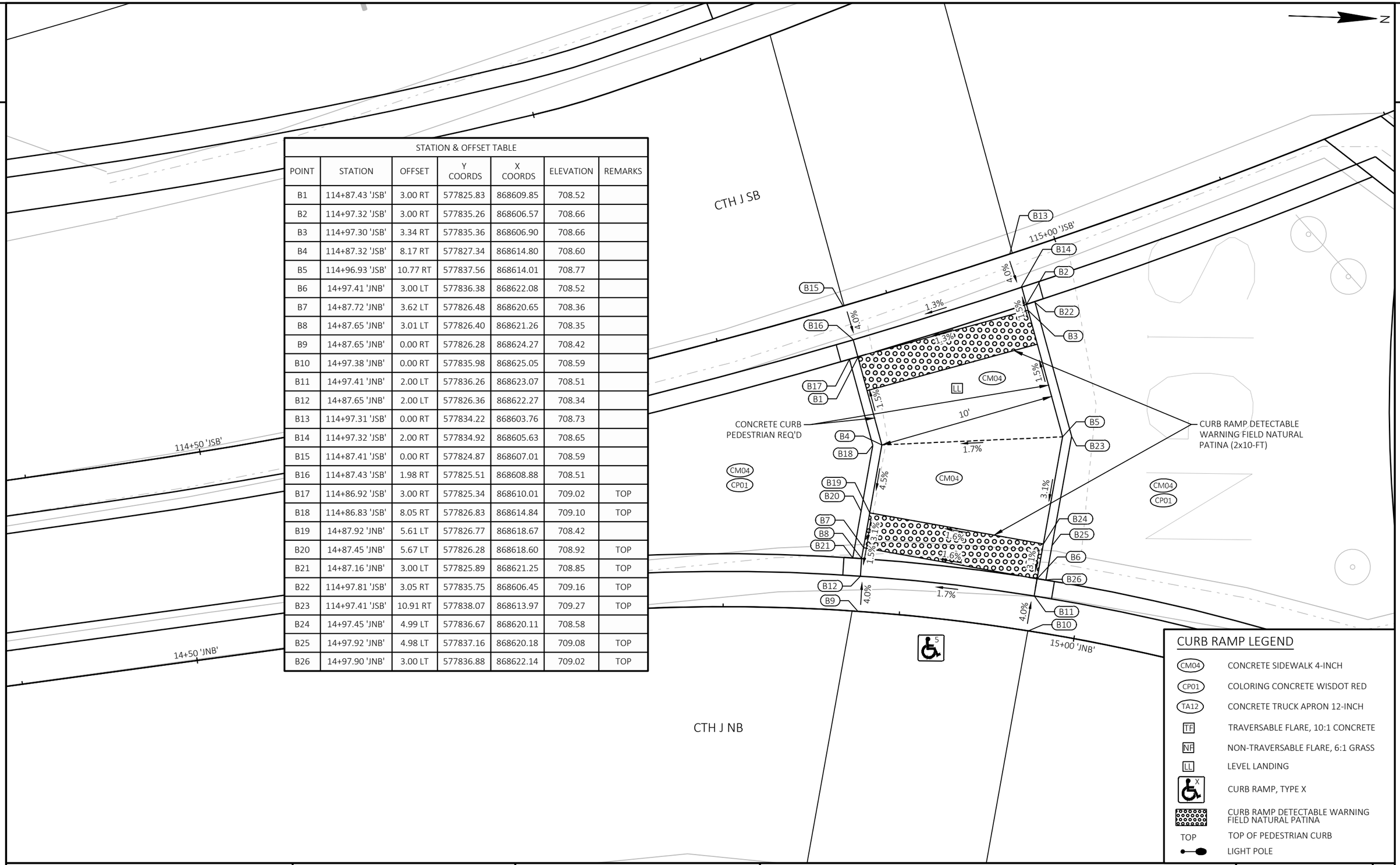
## CURB RAMP LEGEND

- CM04 — CONCRETE SIDEWALK 4-INCH
- CP01 — COLORING CONCRETE WISDOT RED
- TA12 — CONCRETE TRUCK APRON 12-INCH
- TF — TRAVERSABLE FLARE, 10:1 CONCRETE
- NF — NON-TRAVERSABLE FLARE, 6:1 GRASS
- LL — LEVEL LANDING
- X — CURB RAMP, TYPE X
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
- TOP — TOP OF PEDESTRIAN CURB
- LIGHT POLE

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CURB RAMP DETAILS (CR-1) | SHEET 59 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021302-CR.DWG
LAYOUT NAME - 021302-cr
PLOT DATE : 7/31/2024 9:31 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| B1 | 114+87.43 'JSB' | 3.00 RT | 577825.83 | 868609.85 | 708.52 | |
| B2 | 114+97.32 'JSB' | 3.00 RT | 577835.26 | 868606.57 | 708.66 | |
| B3 | 114+97.30 'JSB' | 3.34 RT | 577835.36 | 868606.90 | 708.66 | |
| B4 | 114+87.32 'JSB' | 8.17 RT | 577827.34 | 868614.80 | 708.60 | |
| B5 | 114+96.93 'JSB' | 10.77 RT | 577837.56 | 868614.01 | 708.77 | |
| B6 | 14+97.41 'JNB' | 3.00 LT | 577836.38 | 868622.08 | 708.52 | |
| B7 | 14+87.72 'JNB' | 3.62 LT | 577826.48 | 868620.65 | 708.36 | |
| B8 | 14+87.65 'JNB' | 3.01 LT | 577826.40 | 868621.26 | 708.35 | |
| B9 | 14+87.65 'JNB' | 0.00 RT | 577826.28 | 868624.27 | 708.42 | |
| B10 | 14+97.38 'JNB' | 0.00 RT | 577835.98 | 868625.05 | 708.59 | |
| B11 | 14+97.41 'JNB' | 2.00 LT | 577836.26 | 868623.07 | 708.51 | |
| B12 | 14+87.65 'JNB' | 2.00 LT | 577826.36 | 868622.27 | 708.34 | |
| B13 | 114+97.31 'JSB' | 0.00 RT | 577834.22 | 868603.76 | 708.73 | |
| B14 | 114+97.32 'JSB' | 2.00 RT | 577834.92 | 868605.63 | 708.65 | |
| B15 | 114+87.41 'JSB' | 0.00 RT | 577824.87 | 868607.01 | 708.59 | |
| B16 | 114+87.43 'JSB' | 1.98 RT | 577825.51 | 868608.88 | 708.51 | |
| B17 | 114+86.92 'JSB' | 3.00 RT | 577825.34 | 868610.01 | 709.02 | TOP |
| B18 | 114+86.83 'JSB' | 8.05 RT | 577826.83 | 868614.84 | 709.10 | TOP |
| B19 | 14+87.92 'JNB' | 5.61 LT | 577826.77 | 868618.67 | 708.42 | |
| B20 | 14+87.45 'JNB' | 5.67 LT | 577826.28 | 868618.60 | 708.92 | TOP |
| B21 | 14+87.16 'JNB' | 3.00 LT | 577825.89 | 868621.25 | 708.85 | TOP |
| B22 | 114+97.81 'JSB' | 3.05 RT | 577835.75 | 868606.45 | 709.16 | TOP |
| B23 | 114+97.41 'JSB' | 10.91 RT | 577838.07 | 868613.97 | 709.27 | TOP |
| B24 | 14+97.45 'JNB' | 4.99 LT | 577836.67 | 868620.11 | 708.58 | |
| B25 | 14+97.92 'JNB' | 4.98 LT | 577837.16 | 868620.18 | 709.08 | TOP |
| B26 | 14+97.90 'JNB' | 3.00 LT | 577836.88 | 868622.14 | 709.02 | TOP |

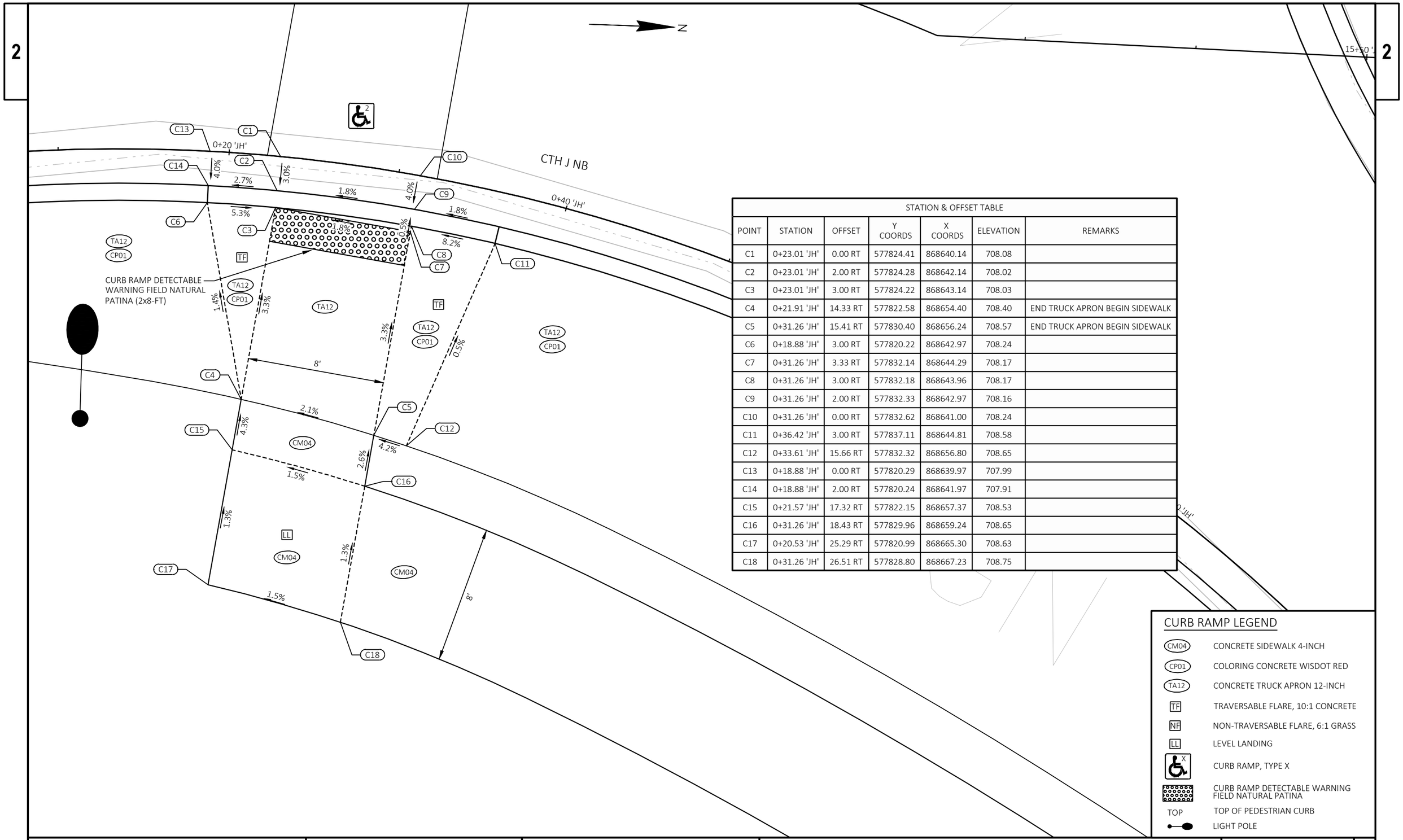



## CURB RAMP LEGEND

| | |
|---|---|
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP01 | COLORING CONCRETE WISDOT RED |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| TF | TRAVERSABLE FLARE, 10:1 CONCRETE |
| NF | NON-TRAVERSABLE FLARE, 6:1 GRASS |
| LL | LEVEL LANDING |
| X | CURB RAMP, TYPE X |
| | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| TOP | TOP OF PEDESTRIAN CURB |
| | LIGHT POLE |

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CURB RAMP DETAILS (CR-2) | SHEET 60 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021302-CR.DWG
LAYOUT NAME - 021303-cr
PLOT DATE : 7/31/2024 9:32 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42




| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| C1 | 0+23.01 'JH' | 0.00 RT | 577824.41 | 868640.14 | 708.08 | |
| C2 | 0+23.01 'JH' | 2.00 RT | 577824.28 | 868642.14 | 708.02 | |
| C3 | 0+23.01 'JH' | 3.00 RT | 577824.22 | 868643.14 | 708.03 | |
| C4 | 0+21.91 'JH' | 14.33 RT | 577822.58 | 868654.40 | 708.40 | END TRUCK APRON BEGIN SIDEWALK |
| C5 | 0+31.26 'JH' | 15.41 RT | 577830.40 | 868656.24 | 708.57 | END TRUCK APRON BEGIN SIDEWALK |
| C6 | 0+18.88 'JH' | 3.00 RT | 577820.22 | 868642.97 | 708.24 | |
| C7 | 0+31.26 'JH' | 3.33 RT | 577832.14 | 868644.29 | 708.17 | |
| C8 | 0+31.26 'JH' | 3.00 RT | 577832.18 | 868643.96 | 708.17 | |
| C9 | 0+31.26 'JH' | 2.00 RT | 577832.33 | 868642.97 | 708.16 | |
| C10 | 0+31.26 'JH' | 0.00 RT | 577832.62 | 868641.00 | 708.24 | |
| C11 | 0+36.42 'JH' | 3.00 RT | 577837.11 | 868644.81 | 708.58 | |
| C12 | 0+33.61 'JH' | 15.66 RT | 577832.32 | 868656.80 | 708.65 | |
| C13 | 0+18.88 'JH' | 0.00 RT | 577820.29 | 868639.97 | 707.99 | |
| C14 | 0+18.88 'JH' | 2.00 RT | 577820.24 | 868641.97 | 707.91 | |
| C15 | 0+21.57 'JH' | 17.32 RT | 577822.15 | 868657.37 | 708.53 | |
| C16 | 0+31.26 'JH' | 18.43 RT | 577829.96 | 868659.24 | 708.65 | |
| C17 | 0+20.53 'JH' | 25.29 RT | 577820.99 | 868665.30 | 708.63 | |
| C18 | 0+31.26 'JH' | 26.51 RT | 577828.80 | 868667.23 | 708.75 | |

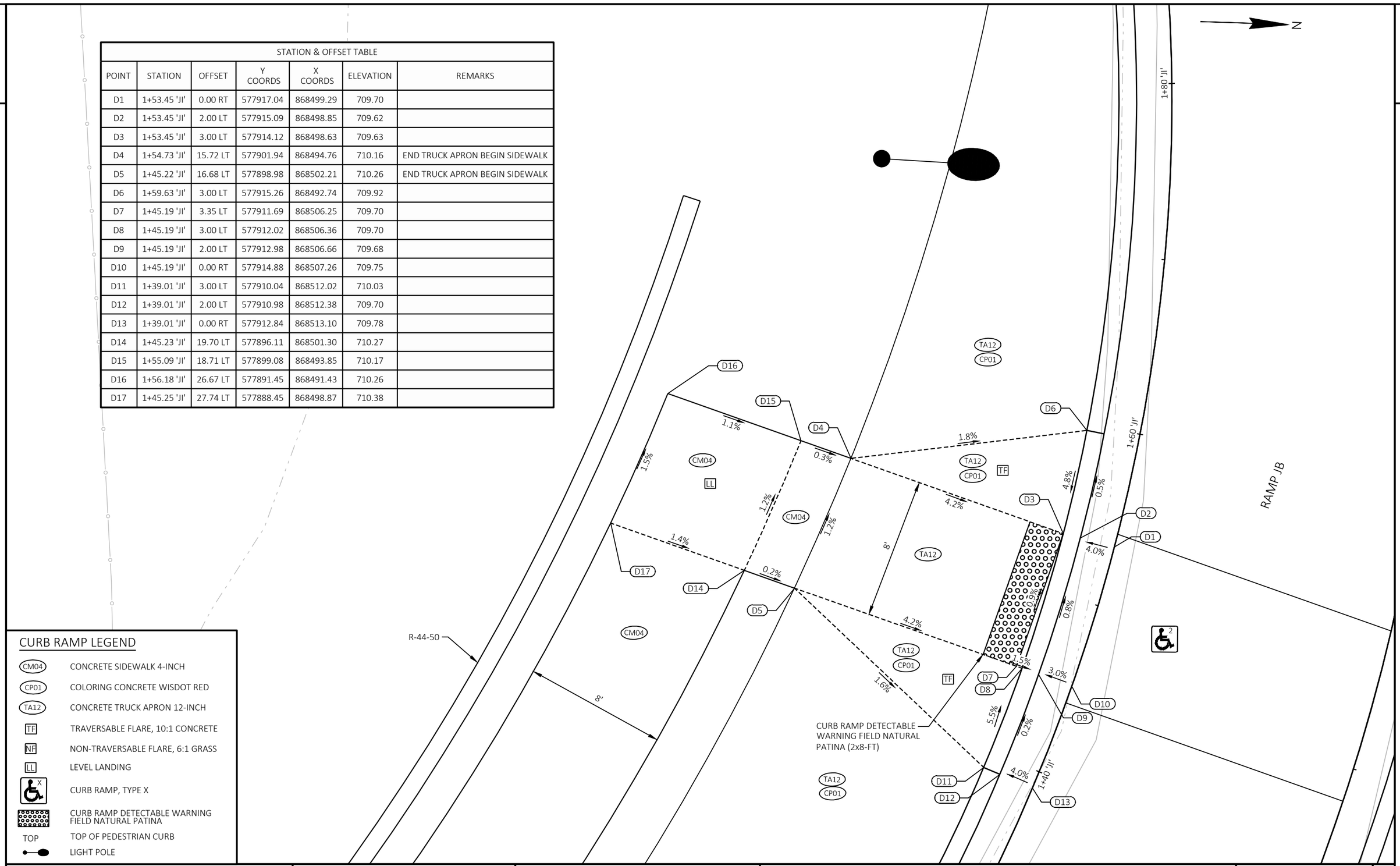
## CURB RAMP LEGEND

- CM04 — CONCRETE SIDEWALK 4-INCH
- CP01 — COLORING CONCRETE WISDOT RED
- TA12 — CONCRETE TRUCK APRON 12-INCH
- TF — TRAVERSABLE FLARE, 10:1 CONCRETE
- NF — NON-TRAVERSABLE FLARE, 6:1 GRASS
- LL — LEVEL LANDING
- X — CURB RAMP, TYPE X
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
- TOP — TOP OF PEDESTRIAN CURB
- LIGHT POLE

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CURB RAMP DETAILS (CR-3) | SHEET 61 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021302-CR.DWG
LAYOUT NAME - 021304-cr
PLOT DATE : 7/31/2024 9:32 PM
PLOT BY : KOWALSKI, NICK
PLOT NAME :
PLOT SCALE : #########
WISDOT/CADDS SHEET 42

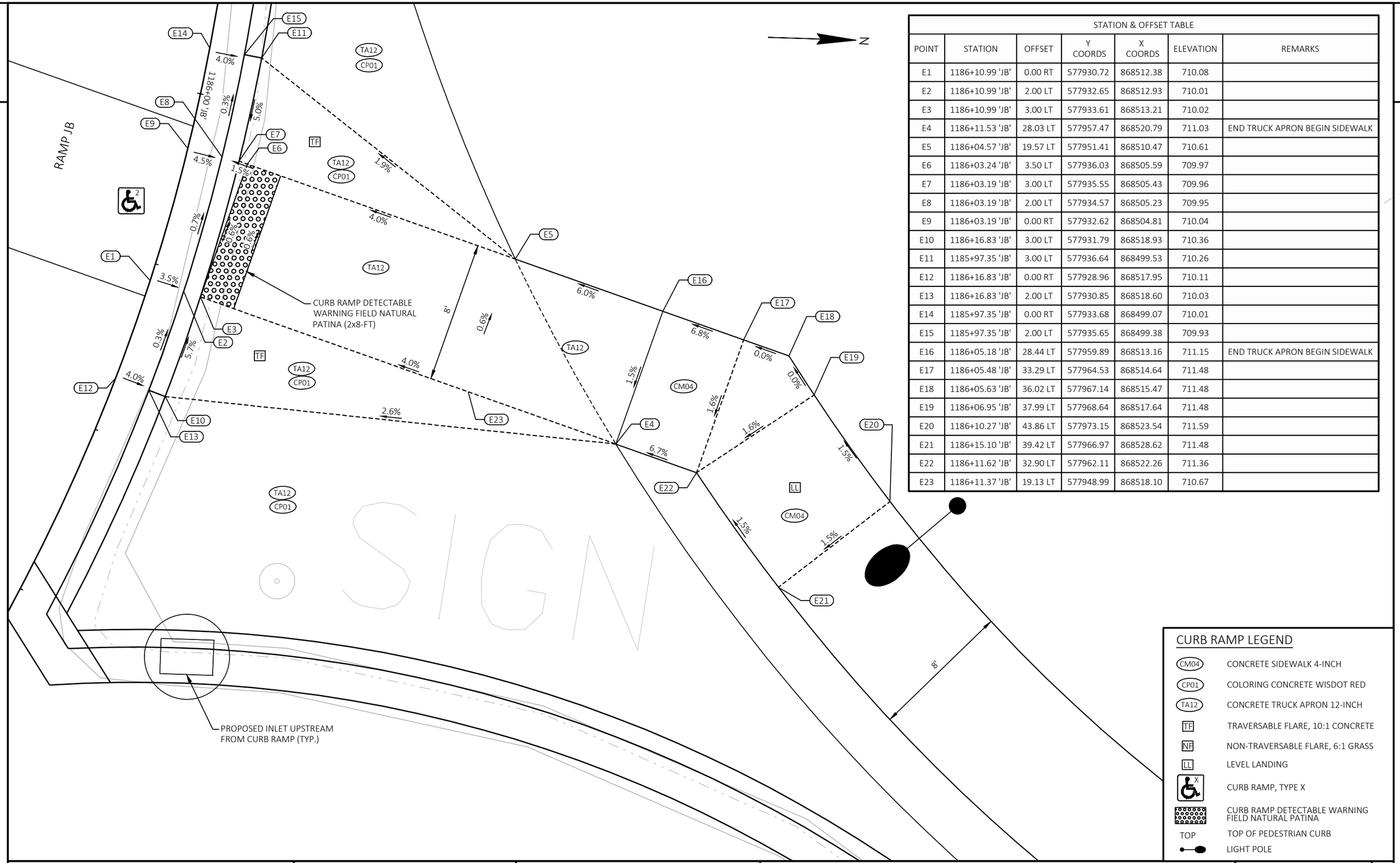
| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| D1 | 1+53.45 'JI' | 0.00 RT | 577917.04 | 868499.29 | 709.70 | |
| D2 | 1+53.45 'JI' | 2.00 LT | 577915.09 | 868498.85 | 709.62 | |
| D3 | 1+53.45 'JI' | 3.00 LT | 577914.12 | 868498.63 | 709.63 | |
| D4 | 1+54.73 'JI' | 15.72 LT | 577901.94 | 868494.76 | 710.16 | END TRUCK APRON BEGIN SIDEWALK |
| D5 | 1+45.22 'JI' | 16.68 LT | 577898.98 | 868502.21 | 710.26 | END TRUCK APRON BEGIN SIDEWALK |
| D6 | 1+59.63 'JI' | 3.00 LT | 577915.26 | 868492.74 | 709.92 | |
| D7 | 1+45.19 'JI' | 3.35 LT | 577911.69 | 868506.25 | 709.70 | |
| D8 | 1+45.19 'JI' | 3.00 LT | 577912.02 | 868506.36 | 709.70 | |
| D9 | 1+45.19 'JI' | 2.00 LT | 577912.98 | 868506.66 | 709.68 | |
| D10 | 1+45.19 'JI' | 0.00 RT | 577914.88 | 868507.26 | 709.75 | |
| D11 | 1+39.01 'JI' | 3.00 LT | 577910.04 | 868512.02 | 710.03 | |
| D12 | 1+39.01 'JI' | 2.00 LT | 577910.98 | 868512.38 | 709.70 | |
| D13 | 1+39.01 'JI' | 0.00 RT | 577912.84 | 868513.10 | 709.78 | |
| D14 | 1+45.23 'JI' | 19.70 LT | 577896.11 | 868501.30 | 710.27 | |
| D15 | 1+55.09 'JI' | 18.71 LT | 577899.08 | 868493.85 | 710.17 | |
| D16 | 1+56.18 'JI' | 26.67 LT | 577891.45 | 868491.43 | 710.26 | |
| D17 | 1+45.25 'JI' | 27.74 LT | 577888.45 | 868498.87 | 710.38 | |




## CURB RAMP LEGEND

| | |
|---|---|
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP01 | COLORING CONCRETE WISDOT RED |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| TF | TRAVERSABLE FLARE, 10:1 CONCRETE |
| NF | NON-TRAVERSABLE FLARE, 6:1 GRASS |
| LL | LEVEL LANDING |
| X | CURB RAMP, TYPE X |
| | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| TOP | TOP OF PEDESTRIAN CURB |
| | LIGHT POLE |

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CURB RAMP DETAILS (CR-4) | SHEET 62 | E |
|---|---|---|---|---|---|




| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| E1 | 1186+10.99 'JB' | 0.00 RT | 577930.72 | 868512.38 | 710.08 | |
| E2 | 1186+10.99 'JB' | 2.00 LT | 577932.65 | 868512.93 | 710.01 | |
| E3 | 1186+10.99 'JB' | 3.00 LT | 577933.61 | 868513.21 | 710.02 | |
| E4 | 1186+11.53 'JB' | 28.03 LT | 577957.47 | 868520.79 | 711.03 | END TRUCK APRON BEGIN SIDEWALK |
| E5 | 1186+04.57 'JB' | 19.57 LT | 577951.41 | 868510.47 | 710.61 | |
| E6 | 1186+03.24 'JB' | 3.50 LT | 577936.03 | 868505.59 | 709.97 | |
| E7 | 1186+03.19 'JB' | 3.00 LT | 577935.55 | 868505.43 | 709.96 | |
| E8 | 1186+03.19 'JB' | 2.00 LT | 577934.57 | 868505.23 | 709.95 | |
| E9 | 1186+03.19 'JB' | 0.00 RT | 577932.62 | 868504.81 | 710.04 | |
| E10 | 1186+16.83 'JB' | 3.00 LT | 577931.79 | 868518.93 | 710.36 | |
| E11 | 1185+97.35 'JB' | 3.00 LT | 577936.64 | 868499.53 | 710.26 | |
| E12 | 1186+16.83 'JB' | 0.00 RT | 577928.96 | 868517.95 | 710.11 | |
| E13 | 1186+16.83 'JB' | 2.00 LT | 577930.85 | 868518.60 | 710.03 | |
| E14 | 1185+97.35 'JB' | 0.00 RT | 577933.68 | 868499.07 | 710.01 | |
| E15 | 1185+97.35 'JB' | 2.00 LT | 577935.65 | 868499.38 | 709.93 | |
| E16 | 1186+05.18 'JB' | 28.44 LT | 577959.89 | 868513.16 | 711.15 | END TRUCK APRON BEGIN SIDEWALK |
| E17 | 1186+05.48 'JB' | 33.29 LT | 577964.53 | 868514.64 | 711.48 | |
| E18 | 1186+05.63 'JB' | 36.02 LT | 577967.14 | 868515.47 | 711.48 | |
| E19 | 1186+06.95 'JB' | 37.99 LT | 577968.64 | 868517.64 | 711.48 | |
| E20 | 1186+10.27 'JB' | 43.86 LT | 577973.15 | 868523.54 | 711.59 | |
| E21 | 1186+15.10 'JB' | 39.42 LT | 577966.97 | 868528.62 | 711.48 | |
| E22 | 1186+11.62 'JB' | 32.90 LT | 577962.11 | 868522.26 | 711.36 | |
| E23 | 1186+11.37 'JB' | 19.13 LT | 577948.99 | 868518.10 | 710.67 | |

## CURB RAMP LEGEND

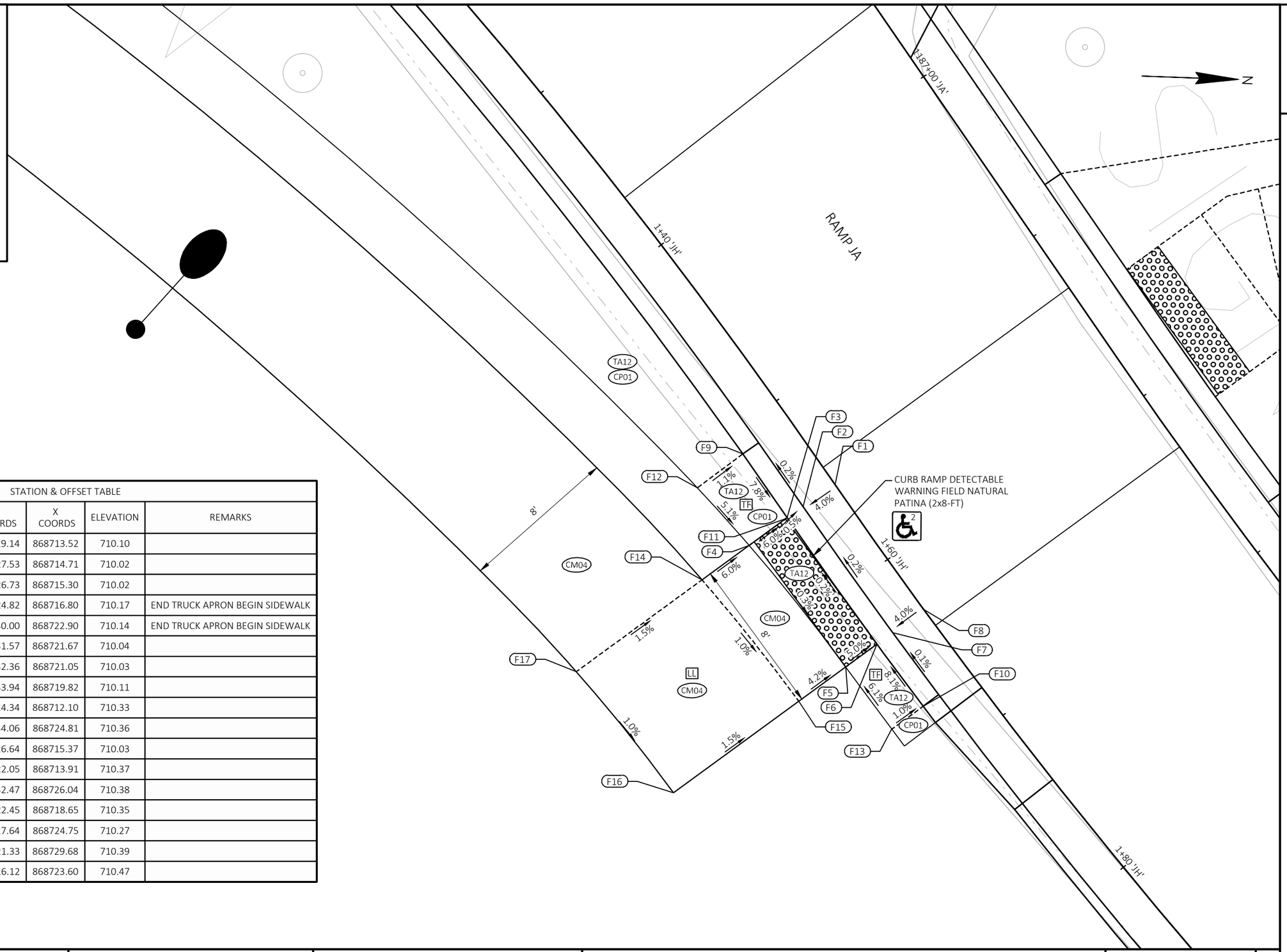
| | |
|---|---|
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP01 | COLORING CONCRETE WISDOT RED |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| TF | TRAVERSABLE FLARE, 10:1 CONCRETE |
| NF | NON-TRAVERSABLE FLARE, 6:1 GRASS |
| LL | LEVEL LANDING |
| X | CURB RAMP, TYPE X |
| | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| TOP | TOP OF PEDESTRIAN CURB |
| | LIGHT POLE |

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CURB RAMP DETAILS (CR-5) | SHEET 63 | E |
|---|---|---|---|---|---|

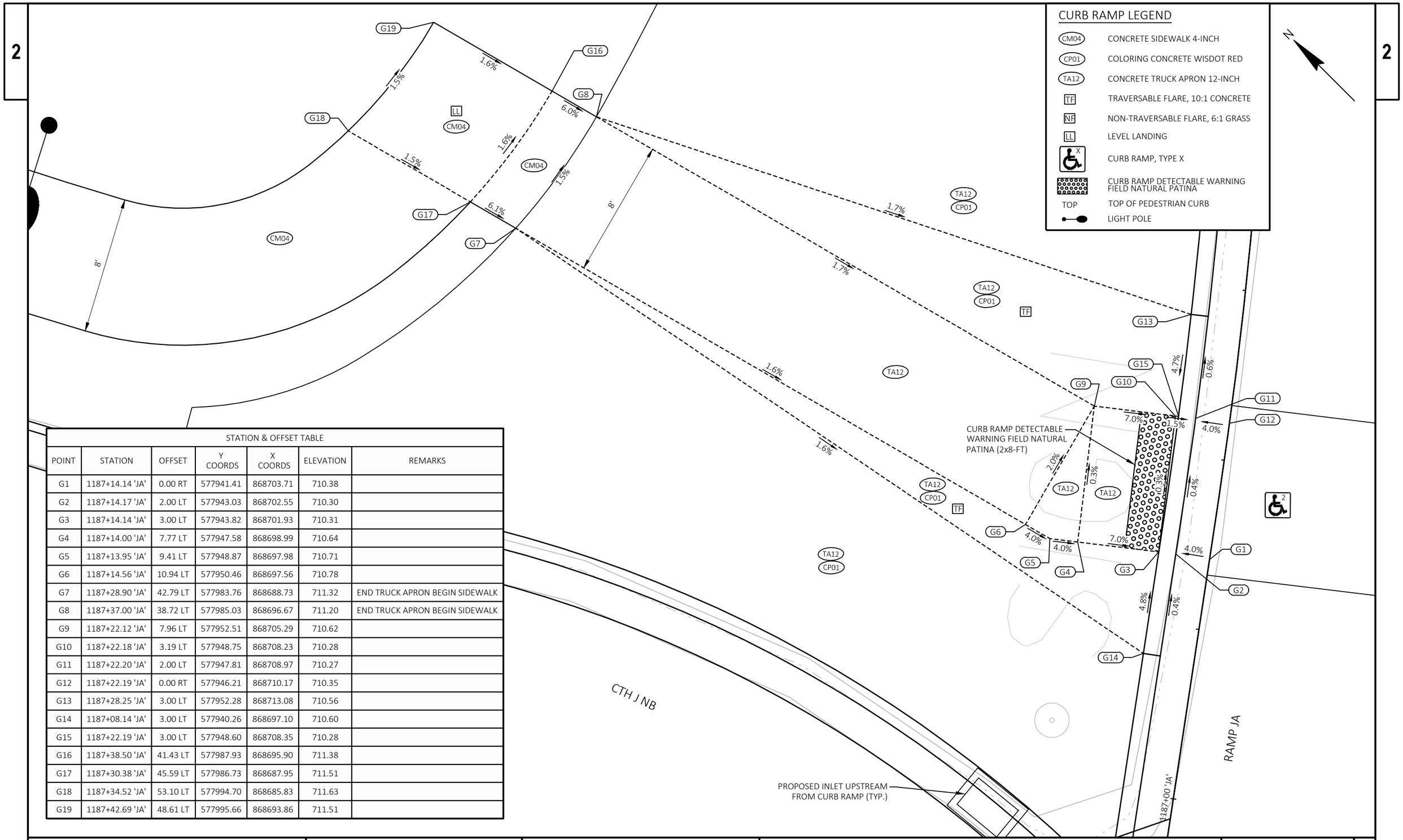
FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021302-CR.DWG
LAYOUT NAME - 021306-cr
PLOT DATE : 7/31/2024 9:33 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : ##########

## CURB RAMP LEGEND

- CM04 — CONCRETE SIDEWALK 4-INCH
- CP01 — COLORING CONCRETE WISDOT RED
- TA12 — CONCRETE TRUCK APRON 12-INCH
- TF — TRAVERSABLE FLARE, 10:1 CONCRETE
- NF — NON-TRAVERSABLE FLARE, 6:1 GRASS
- LL — LEVEL LANDING
- CURB RAMP, TYPE X
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
- TOP — TOP OF PEDESTRIAN CURB
- LIGHT POLE




| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| F1 | 1+55.28 'JH' | 0.00 RT | 577929.14 | 868713.52 | 710.10 | |
| F2 | 1+55.28 'JH' | 2.00 RT | 577927.53 | 868714.71 | 710.02 | |
| F3 | 1+55.28 'JH' | 3.00 RT | 577926.73 | 868715.30 | 710.02 | |
| F4 | 1+55.34 'JH' | 5.43 RT | 577924.82 | 868716.80 | 710.17 | END TRUCK APRON BEGIN SIDEWALK |
| F5 | 1+63.20 'JH' | 5.00 RT | 577930.00 | 868722.90 | 710.14 | END TRUCK APRON BEGIN SIDEWALK |
| F6 | 1+63.20 'JH' | 3.00 RT | 577931.57 | 868721.67 | 710.04 | |
| F7 | 1+63.20 'JH' | 2.00 RT | 577932.36 | 868721.05 | 710.03 | |
| F8 | 1+63.20 'JH' | 0.00 RT | 577933.94 | 868719.82 | 710.11 | |
| F9 | 1+51.24 'JH' | 3.00 RT | 577924.34 | 868712.10 | 710.33 | |
| F10 | 1+67.16 'JH' | 3.00 RT | 577934.06 | 868724.81 | 710.36 | |
| F11 | 1+55.28 'JH' | 3.11 RT | 577926.64 | 868715.37 | 710.03 | |
| F12 | 1+51.31 'JH' | 5.92 RT | 577922.05 | 868713.91 | 710.37 | |
| F13 | 1+67.13 'JH' | 5.01 RT | 577932.47 | 868726.04 | 710.38 | |
| F14 | 1+55.42 'JH' | 8.44 RT | 577922.45 | 868718.65 | 710.35 | |
| F15 | 1+63.20 'JH' | 8.00 RT | 577927.64 | 868724.75 | 710.27 | |
| F16 | 1+63.20 'JH' | 16.00 RT | 577921.33 | 868729.68 | 710.39 | |
| F17 | 1+55.62 'JH' | 16.46 RT | 577916.12 | 868723.60 | 710.47 | |




| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| G1 | 1187+14.14 'JA' | 0.00 RT | 577941.41 | 868703.71 | 710.38 | |
| G2 | 1187+14.17 'JA' | 2.00 LT | 577943.03 | 868702.55 | 710.30 | |
| G3 | 1187+14.14 'JA' | 3.00 LT | 577943.82 | 868701.93 | 710.31 | |
| G4 | 1187+14.00 'JA' | 7.77 LT | 577947.58 | 868698.99 | 710.64 | |
| G5 | 1187+13.95 'JA' | 9.41 LT | 577948.87 | 868697.98 | 710.71 | |
| G6 | 1187+14.56 'JA' | 10.94 LT | 577950.46 | 868697.56 | 710.78 | |
| G7 | 1187+28.90 'JA' | 42.79 LT | 577983.76 | 868688.73 | 711.32 | END TRUCK APRON BEGIN SIDEWALK |
| G8 | 1187+37.00 'JA' | 38.72 LT | 577985.03 | 868696.67 | 711.20 | END TRUCK APRON BEGIN SIDEWALK |
| G9 | 1187+22.12 'JA' | 7.96 LT | 577952.51 | 868705.29 | 710.62 | |
| G10 | 1187+22.18 'JA' | 3.19 LT | 577948.75 | 868708.23 | 710.28 | |
| G11 | 1187+22.20 'JA' | 2.00 LT | 577947.81 | 868708.97 | 710.27 | |
| G12 | 1187+22.19 'JA' | 0.00 RT | 577946.21 | 868710.17 | 710.35 | |
| G13 | 1187+28.25 'JA' | 3.00 LT | 577952.28 | 868713.08 | 710.56 | |
| G14 | 1187+08.14 'JA' | 3.00 LT | 577940.26 | 868697.10 | 710.60 | |
| G15 | 1187+22.19 'JA' | 3.00 LT | 577948.60 | 868708.35 | 710.28 | |
| G16 | 1187+38.50 'JA' | 41.43 LT | 577987.93 | 868695.90 | 711.38 | |
| G17 | 1187+30.38 'JA' | 45.59 LT | 577986.73 | 868687.95 | 711.51 | |
| G18 | 1187+34.52 'JA' | 53.10 LT | 577994.70 | 868685.83 | 711.63 | |
| G19 | 1187+42.69 'JA' | 48.61 LT | 577995.66 | 868693.86 | 711.51 | |

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CURB RAMP DETAILS (CR-7) | SHEET 65 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021302-CR.DWG
LAYOUT NAME - 021308-cr
PLOT DATE : 7/31/2024 9:34 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : #########

## CURB RAMP LEGEND

| | |
|---|---|
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP01 | COLORING CONCRETE WISDOT RED |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| TF | TRAVERSABLE FLARE, 10:1 CONCRETE |
| NF | NON-TRAVERSABLE FLARE, 6:1 GRASS |
| LL | LEVEL LANDING |
| X | CURB RAMP, TYPE X |
| | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| TOP | TOP OF PEDESTRIAN CURB |
| | LIGHT POLE |

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA (2x8-FT)

RAMP JC

0+40 'JM'

1187+60 'JC'

1187+80 'JC'

| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| H1 | 1187+72.20 'JC' | 0.00 RT | 578589.25 | 868480.07 | 709.67 | |
| H2 | 1187+72.20 'JC' | 2.00 RT | 578587.56 | 868481.15 | 709.59 | |
| H3 | 1187+72.20 'JC' | 3.00 RT | 578586.72 | 868481.68 | 709.60 | |
| H4 | 1187+72.20 'JC' | 8.00 RT | 578582.50 | 868484.36 | 709.89 | |
| H5 | 1187+59.97 'JC' | 32.62 RT | 578555.15 | 868487.22 | 710.16 | END TRUCK APRON BEGIN SIDEWALK |
| H6 | 1187+66.85 'JC' | 36.76 RT | 578555.34 | 868495.24 | 710.29 | END TRUCK APRON BEGIN SIDEWALK |
| H7 | 1187+79.83 'JC' | 11.49 RT | 578583.33 | 868492.32 | 710.01 | |
| H8 | 1187+80.68 'JC' | 9.77 RT | 578585.20 | 868492.12 | 709.97 | |
| H9 | 1187+80.58 'JC' | 7.90 RT | 578586.78 | 868491.11 | 709.93 | |
| H10 | 1187+80.34 'JC' | 3.00 RT | 578590.92 | 868488.49 | 709.64 | |
| H11 | 1187+80.34 'JC' | 2.00 RT | 578591.79 | 868487.99 | 709.63 | |
| H12 | 1187+80.34 'JC' | 0.00 RT | 578593.52 | 868487.00 | 709.71 | |
| H13 | 1187+84.47 'JC' | 3.00 RT | 578592.84 | 868492.00 | 709.98 | |
| H14 | 1187+68.20 'JC' | 3.00 RT | 578584.57 | 868478.30 | 709.90 | |
| H15 | 1187+58.63 'JC' | 35.31 RT | 578552.17 | 868487.53 | 710.23 | |
| H16 | 1187+65.49 'JC' | 39.48 RT | 578552.32 | 868495.56 | 710.35 | |
| H17 | 1187+61.87 'JC' | 46.77 RT | 578544.22 | 868496.41 | 710.47 | |
| H18 | 1187+55.07 'JC' | 42.47 RT | 578544.21 | 868488.37 | 710.35 | |

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CURB RAMP DETAILS (CR-8) | SHEET 66 E |

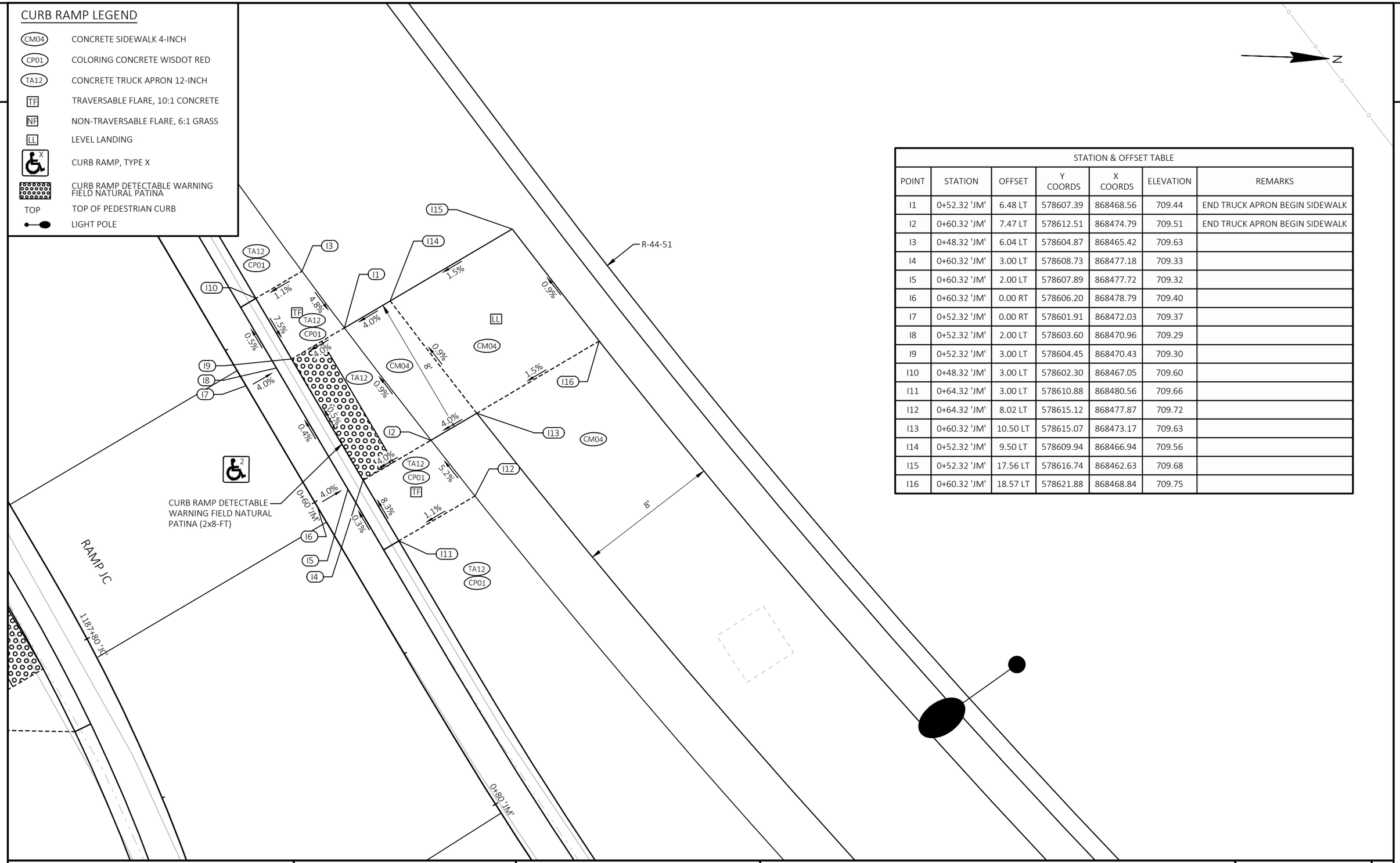
FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021302-CR.DWG
LAYOUT NAME - 021309-cr

PLOT DATE : 7/31/2024 9:35 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:5 FT

WISDOT/CADDS SHEET 42

## CURB RAMP LEGEND

| | |
|---|---|
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP01 | COLORING CONCRETE WISDOT RED |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| TF | TRAVERSABLE FLARE, 10:1 CONCRETE |
| NF | NON-TRAVERSABLE FLARE, 6:1 GRASS |
| LL | LEVEL LANDING |
| X | CURB RAMP, TYPE X |
| | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| TOP | TOP OF PEDESTRIAN CURB |
| | LIGHT POLE |

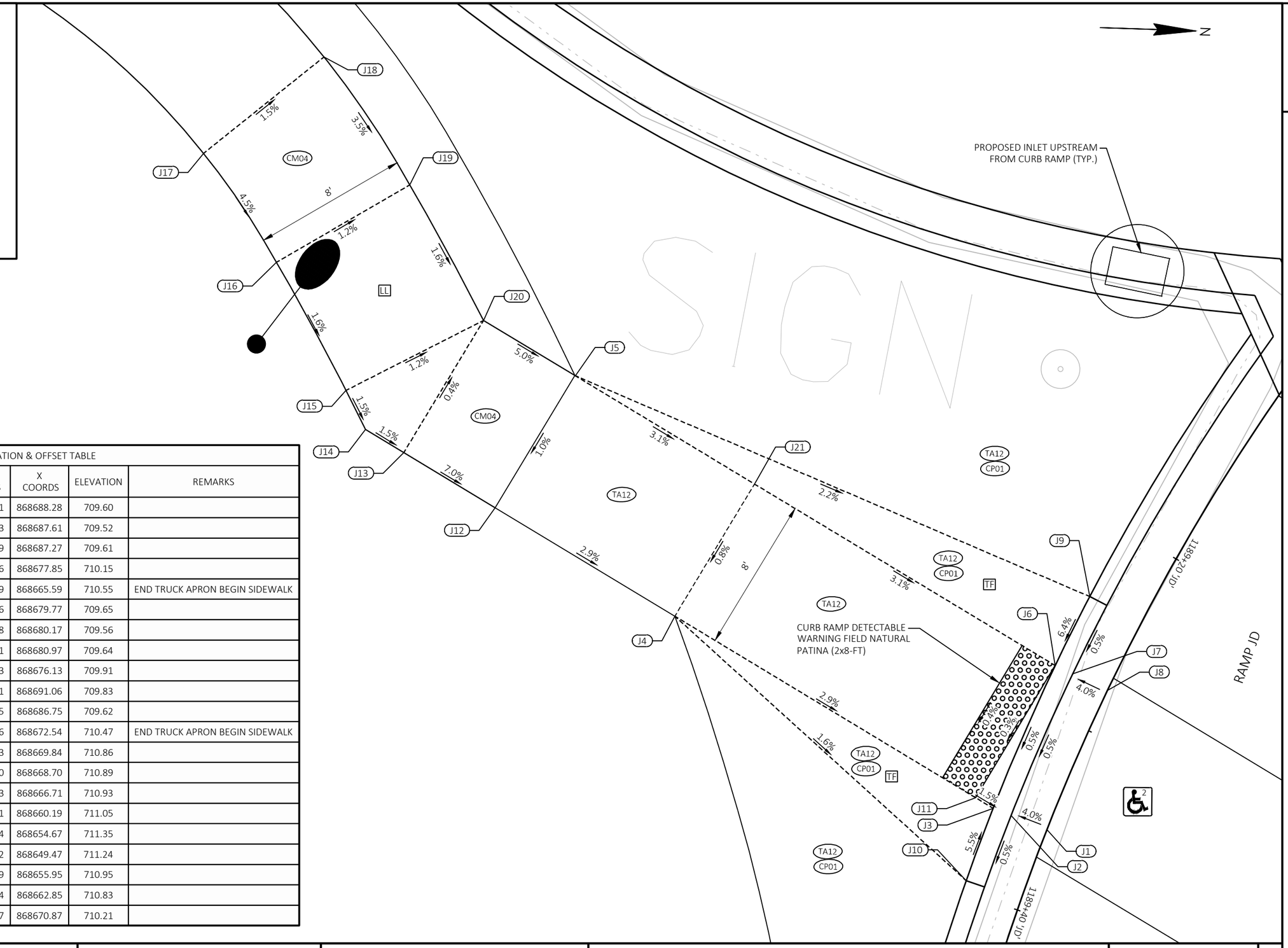



### STATION & OFFSET TABLE

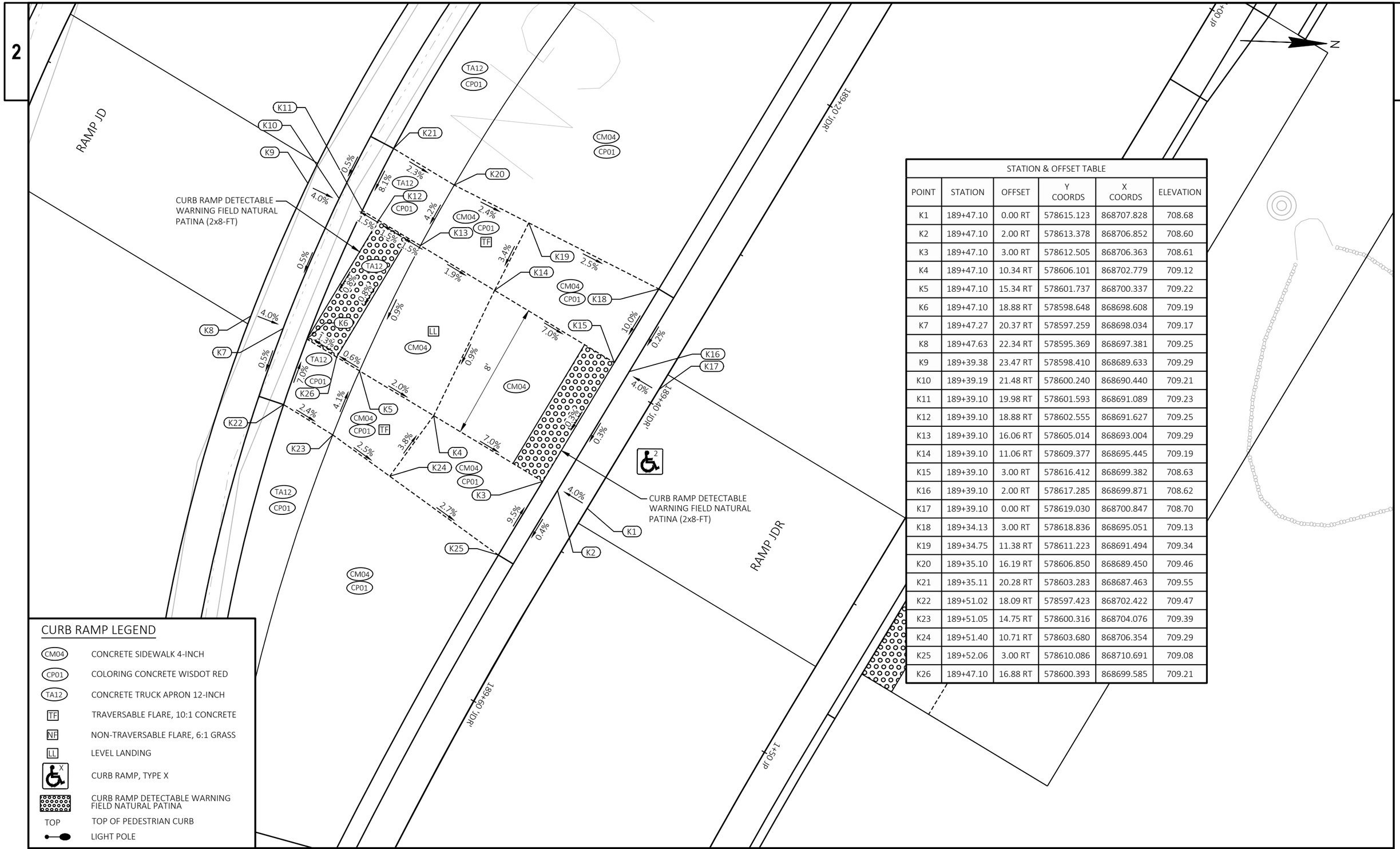
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
|---|---|---|---|---|---|---|
| I1 | 0+52.32 'JM' | 6.48 LT | 578607.39 | 868468.56 | 709.44 | END TRUCK APRON BEGIN SIDEWALK |
| I2 | 0+60.32 'JM' | 7.47 LT | 578612.51 | 868474.79 | 709.51 | END TRUCK APRON BEGIN SIDEWALK |
| I3 | 0+48.32 'JM' | 6.04 LT | 578604.87 | 868465.42 | 709.63 | |
| I4 | 0+60.32 'JM' | 3.00 LT | 578608.73 | 868477.18 | 709.33 | |
| I5 | 0+60.32 'JM' | 2.00 LT | 578607.89 | 868477.72 | 709.32 | |
| I6 | 0+60.32 'JM' | 0.00 RT | 578606.20 | 868478.79 | 709.40 | |
| I7 | 0+52.32 'JM' | 0.00 RT | 578601.91 | 868472.03 | 709.37 | |
| I8 | 0+52.32 'JM' | 2.00 LT | 578603.60 | 868470.96 | 709.29 | |
| I9 | 0+52.32 'JM' | 3.00 LT | 578604.45 | 868470.43 | 709.30 | |
| I10 | 0+48.32 'JM' | 3.00 LT | 578602.30 | 868467.05 | 709.60 | |
| I11 | 0+64.32 'JM' | 3.00 LT | 578610.88 | 868480.56 | 709.66 | |
| I12 | 0+64.32 'JM' | 8.02 LT | 578615.12 | 868477.87 | 709.72 | |
| I13 | 0+60.32 'JM' | 10.50 LT | 578615.07 | 868473.17 | 709.63 | |
| I14 | 0+52.32 'JM' | 9.50 LT | 578609.94 | 868466.94 | 709.56 | |
| I15 | 0+52.32 'JM' | 17.56 LT | 578616.74 | 868462.63 | 709.68 | |
| I16 | 0+60.32 'JM' | 18.57 LT | 578621.88 | 868468.84 | 709.75 | |

## CURB RAMP LEGEND

| | |
|---|---|
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP01 | COLORING CONCRETE WISDOT RED |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| TF | TRAVERSABLE FLARE, 10:1 CONCRETE |
| NF | NON-TRAVERSABLE FLARE, 6:1 GRASS |
| LL | LEVEL LANDING |
| X | CURB RAMP, TYPE X |
| | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| TOP | TOP OF PEDESTRIAN CURB |
| | LIGHT POLE |




| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| J1 | 1189+35.55 'JD' | 0.00 RT | 578581.21 | 868688.28 | 709.60 | |
| J2 | 1189+35.55 'JD' | 2.00 RT | 578579.33 | 868687.61 | 709.52 | |
| J3 | 1189+35.55 'JD' | 3.00 RT | 578578.39 | 868687.27 | 709.61 | |
| J4 | 1189+32.86 'JD' | 22.05 RT | 578561.56 | 868677.85 | 710.15 | |
| J5 | 1189+25.53 'JD' | 31.96 RT | 578555.99 | 868665.59 | 710.55 | END TRUCK APRON BEGIN SIDEWALK |
| J6 | 1189+27.69 'JD' | 3.00 RT | 578581.36 | 868679.77 | 709.65 | |
| J7 | 1189+27.69 'JD' | 2.00 RT | 578582.28 | 868680.17 | 709.56 | |
| J8 | 1189+27.69 'JD' | 0.00 RT | 578584.11 | 868680.97 | 709.64 | |
| J9 | 1189+23.80 'JD' | 3.00 RT | 578583.03 | 868676.13 | 709.91 | |
| J10 | 1189+39.45 'JD' | 3.00 RT | 578577.11 | 868691.06 | 709.83 | |
| J11 | 1189+35.38 'JD' | 4.05 RT | 578577.45 | 868686.75 | 709.62 | |
| J12 | 1189+31.66 'JD' | 32.83 RT | 578552.06 | 868672.54 | 710.47 | END TRUCK APRON BEGIN SIDEWALK |
| J13 | 1189+31.11 'JD' | 38.32 RT | 578547.23 | 868669.84 | 710.86 | |
| J14 | 1189+30.89 'JD' | 40.62 RT | 578545.20 | 868668.70 | 710.89 | |
| J15 | 1189+29.85 'JD' | 42.37 RT | 578544.13 | 868666.71 | 710.93 | |
| J16 | 1189+26.69 'JD' | 48.47 RT | 578540.31 | 868660.19 | 711.05 | |
| J17 | 1189+24.41 'JD' | 54.38 RT | 578536.34 | 868654.67 | 711.35 | |
| J18 | 1189+19.42 'JD' | 51.28 RT | 578542.42 | 868649.47 | 711.24 | |
| J19 | 1189+21.95 'JD' | 44.16 RT | 578547.09 | 868655.95 | 710.95 | |
| J20 | 1189+25.19 'JD' | 37.51 RT | 578551.14 | 868662.85 | 710.83 | |
| J21 | 1189+26.21 'JD' | 21.14 RT | 578565.47 | 868670.87 | 710.21 | |



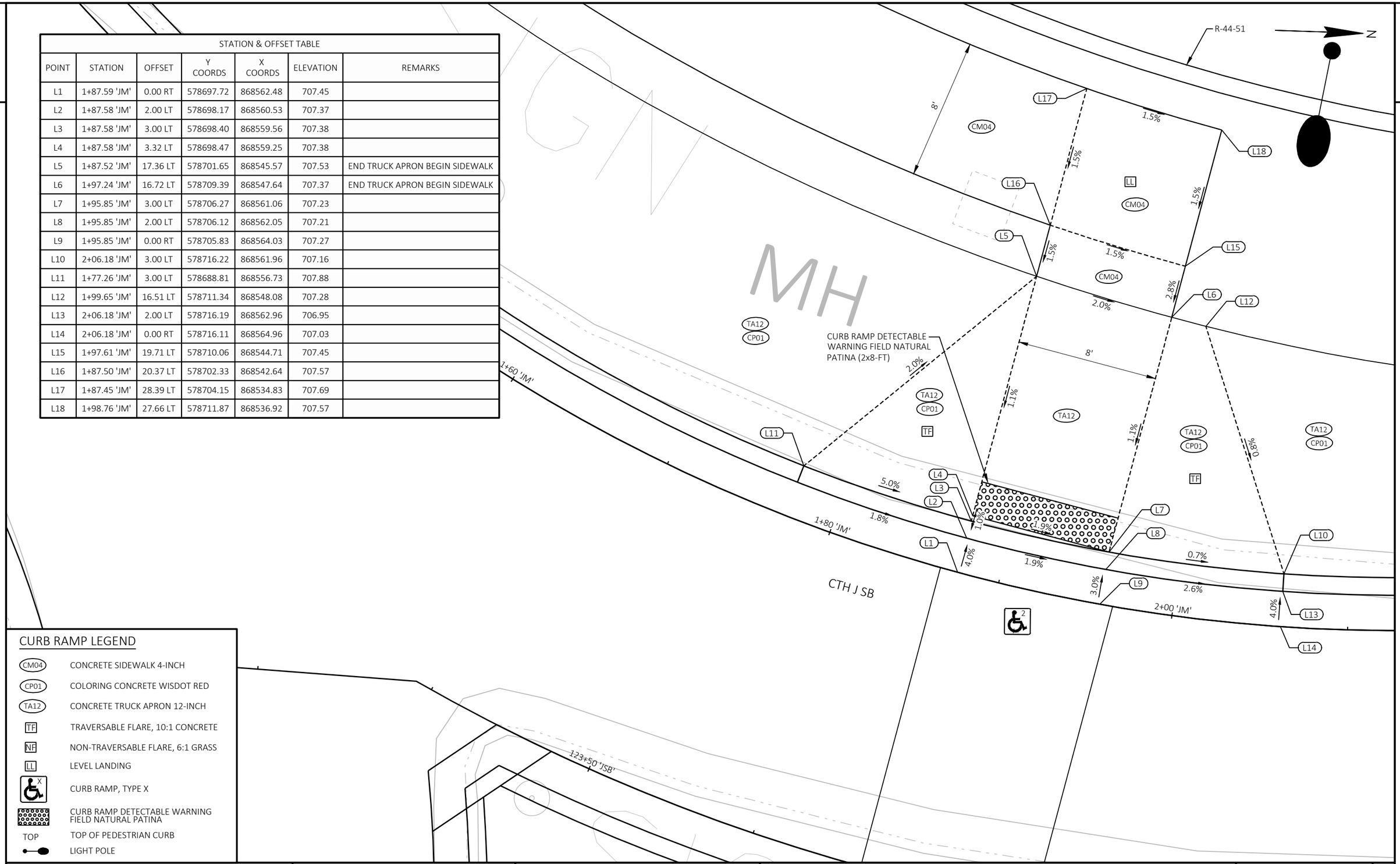

| STATION & OFFSET TABLE | | | | | |
|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION |
| K1 | 189+47.10 | 0.00 RT | 578615.123 | 868707.828 | 708.68 |
| K2 | 189+47.10 | 2.00 RT | 578613.378 | 868706.852 | 708.60 |
| K3 | 189+47.10 | 3.00 RT | 578612.505 | 868706.363 | 708.61 |
| K4 | 189+47.10 | 10.34 RT | 578606.101 | 868702.779 | 709.12 |
| K5 | 189+47.10 | 15.34 RT | 578601.737 | 868700.337 | 709.22 |
| K6 | 189+47.10 | 18.88 RT | 578598.648 | 868698.608 | 709.19 |
| K7 | 189+47.27 | 20.37 RT | 578597.259 | 868698.034 | 709.17 |
| K8 | 189+47.63 | 22.34 RT | 578595.369 | 868697.381 | 709.25 |
| K9 | 189+39.38 | 23.47 RT | 578598.410 | 868689.633 | 709.29 |
| K10 | 189+39.19 | 21.48 RT | 578600.240 | 868690.440 | 709.21 |
| K11 | 189+39.10 | 19.98 RT | 578601.593 | 868691.089 | 709.23 |
| K12 | 189+39.10 | 18.88 RT | 578602.555 | 868691.627 | 709.25 |
| K13 | 189+39.10 | 16.06 RT | 578605.014 | 868693.004 | 709.29 |
| K14 | 189+39.10 | 11.06 RT | 578609.377 | 868695.445 | 709.19 |
| K15 | 189+39.10 | 3.00 RT | 578616.412 | 868699.382 | 708.63 |
| K16 | 189+39.10 | 2.00 RT | 578617.285 | 868699.871 | 708.62 |
| K17 | 189+39.10 | 0.00 RT | 578619.030 | 868700.847 | 708.70 |
| K18 | 189+34.13 | 3.00 RT | 578618.836 | 868695.051 | 709.13 |
| K19 | 189+34.75 | 11.38 RT | 578611.223 | 868691.494 | 709.34 |
| K20 | 189+35.10 | 16.19 RT | 578606.850 | 868689.450 | 709.46 |
| K21 | 189+35.11 | 20.28 RT | 578603.283 | 868687.463 | 709.55 |
| K22 | 189+51.02 | 18.09 RT | 578597.423 | 868702.422 | 709.47 |
| K23 | 189+51.05 | 14.75 RT | 578600.316 | 868704.076 | 709.39 |
| K24 | 189+51.40 | 10.71 RT | 578603.680 | 868706.354 | 709.29 |
| K25 | 189+52.06 | 3.00 RT | 578610.086 | 868710.691 | 709.08 |
| K26 | 189+47.10 | 16.88 RT | 578600.393 | 868699.585 | 709.21 |

## CURB RAMP LEGEND

| | |
|---|---|
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP01 | COLORING CONCRETE WISDOT RED |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| TF | TRAVERSABLE FLARE, 10:1 CONCRETE |
| NF | NON-TRAVERSABLE FLARE, 6:1 GRASS |
| LL | LEVEL LANDING |
| X | CURB RAMP, TYPE X |
| | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| TOP | TOP OF PEDESTRIAN CURB |
| | LIGHT POLE |

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CURB RAMP DETAILS (CR-11) | SHEET 69 | E |
|---|---|---|---|---|---|

| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| L1 | 1+87.59 'JM' | 0.00 RT | 578697.72 | 868562.48 | 707.45 | |
| L2 | 1+87.58 'JM' | 2.00 LT | 578698.17 | 868560.53 | 707.37 | |
| L3 | 1+87.58 'JM' | 3.00 LT | 578698.40 | 868559.56 | 707.38 | |
| L4 | 1+87.58 'JM' | 3.32 LT | 578698.47 | 868559.25 | 707.38 | |
| L5 | 1+87.52 'JM' | 17.36 LT | 578701.65 | 868545.57 | 707.53 | END TRUCK APRON BEGIN SIDEWALK |
| L6 | 1+97.24 'JM' | 16.72 LT | 578709.39 | 868547.64 | 707.37 | END TRUCK APRON BEGIN SIDEWALK |
| L7 | 1+95.85 'JM' | 3.00 LT | 578706.27 | 868561.06 | 707.23 | |
| L8 | 1+95.85 'JM' | 2.00 LT | 578706.12 | 868562.05 | 707.21 | |
| L9 | 1+95.85 'JM' | 0.00 RT | 578705.83 | 868564.03 | 707.27 | |
| L10 | 2+06.18 'JM' | 3.00 LT | 578716.22 | 868561.96 | 707.16 | |
| L11 | 1+77.26 'JM' | 3.00 LT | 578688.81 | 868556.73 | 707.88 | |
| L12 | 1+99.65 'JM' | 16.51 LT | 578711.34 | 868548.08 | 707.28 | |
| L13 | 2+06.18 'JM' | 2.00 LT | 578716.19 | 868562.96 | 706.95 | |
| L14 | 2+06.18 'JM' | 0.00 RT | 578716.11 | 868564.96 | 707.03 | |
| L15 | 1+97.61 'JM' | 19.71 LT | 578710.06 | 868544.71 | 707.45 | |
| L16 | 1+87.50 'JM' | 20.37 LT | 578702.33 | 868542.64 | 707.57 | |
| L17 | 1+87.45 'JM' | 28.39 LT | 578704.15 | 868534.83 | 707.69 | |
| L18 | 1+98.76 'JM' | 27.66 LT | 578711.87 | 868536.92 | 707.57 | |

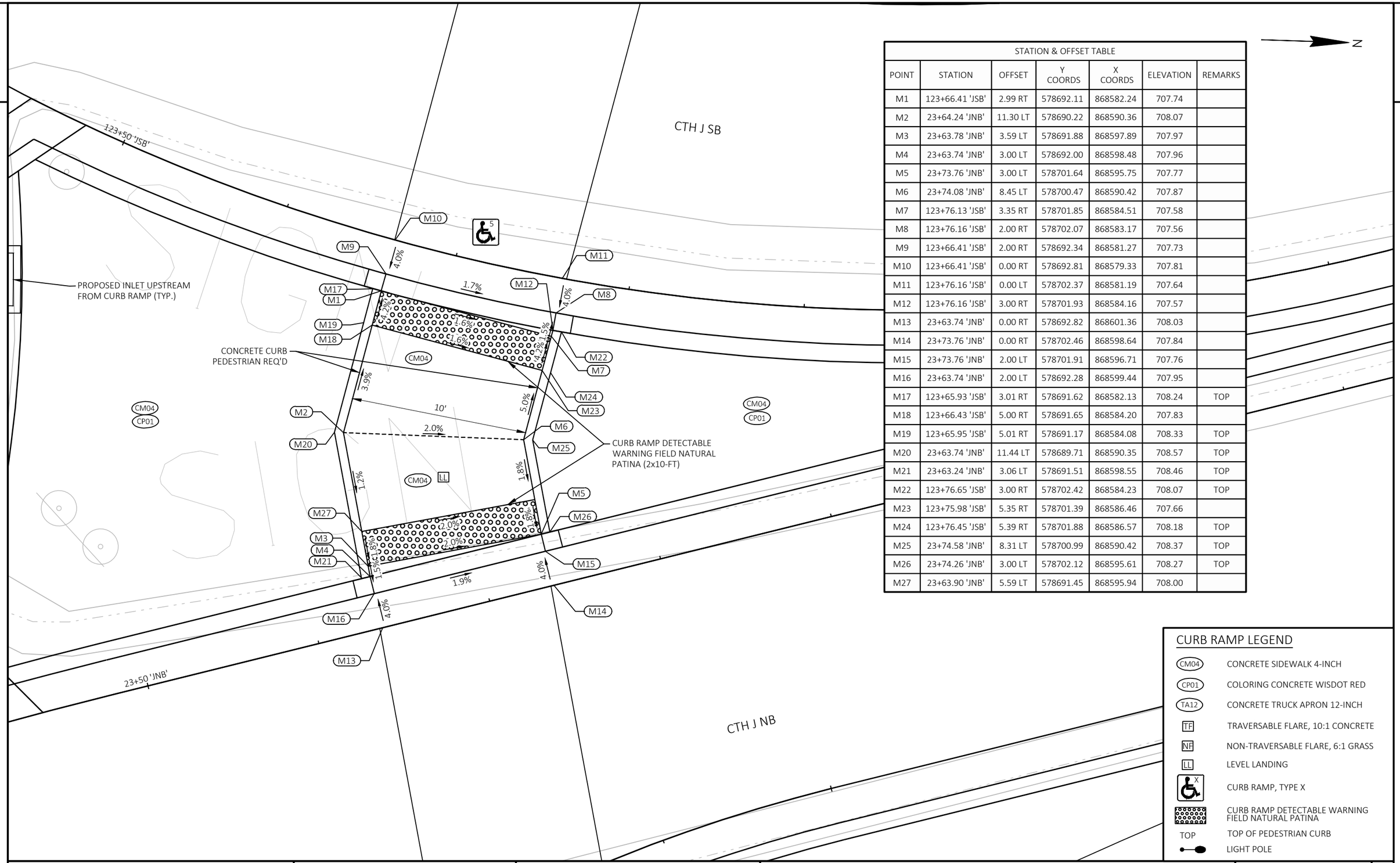



## CURB RAMP LEGEND

- CM04 — CONCRETE SIDEWALK 4-INCH
- CP01 — COLORING CONCRETE WISDOT RED
- TA12 — CONCRETE TRUCK APRON 12-INCH
- TF — TRAVERSABLE FLARE, 10:1 CONCRETE
- NF — NON-TRAVERSABLE FLARE, 6:1 GRASS
- LL — LEVEL LANDING
- CURB RAMP, TYPE X
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
- TOP — TOP OF PEDESTRIAN CURB
- LIGHT POLE

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CURB RAMP DETAILS (CR-12) | SHEET 70 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\021302-CR.DWG
LAYOUT NAME - 021313-cr
PLOT DATE : 7/31/2024 9:37 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42




| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| M1 | 123+66.41 'JSB' | 2.99 RT | 578692.11 | 868582.24 | 707.74 | |
| M2 | 23+64.24 'JNB' | 11.30 LT | 578690.22 | 868590.36 | 708.07 | |
| M3 | 23+63.78 'JNB' | 3.59 LT | 578691.88 | 868597.89 | 707.97 | |
| M4 | 23+63.74 'JNB' | 3.00 LT | 578692.00 | 868598.48 | 707.96 | |
| M5 | 23+73.76 'JNB' | 3.00 LT | 578701.64 | 868595.75 | 707.77 | |
| M6 | 23+74.08 'JNB' | 8.45 LT | 578700.47 | 868590.42 | 707.87 | |
| M7 | 123+76.13 'JSB' | 3.35 RT | 578701.85 | 868584.51 | 707.58 | |
| M8 | 123+76.16 'JSB' | 2.00 RT | 578702.07 | 868583.17 | 707.56 | |
| M9 | 123+66.41 'JSB' | 2.00 RT | 578692.34 | 868581.27 | 707.73 | |
| M10 | 123+66.41 'JSB' | 0.00 RT | 578692.81 | 868579.33 | 707.81 | |
| M11 | 123+76.16 'JSB' | 0.00 LT | 578702.37 | 868581.19 | 707.64 | |
| M12 | 123+76.16 'JSB' | 3.00 RT | 578701.93 | 868584.16 | 707.57 | |
| M13 | 23+63.74 'JNB' | 0.00 RT | 578692.82 | 868601.36 | 708.03 | |
| M14 | 23+73.76 'JNB' | 0.00 RT | 578702.46 | 868598.64 | 707.84 | |
| M15 | 23+73.76 'JNB' | 2.00 LT | 578701.91 | 868596.71 | 707.76 | |
| M16 | 23+63.74 'JNB' | 2.00 LT | 578692.28 | 868599.44 | 707.95 | |
| M17 | 123+65.93 'JSB' | 3.01 RT | 578691.62 | 868582.13 | 708.24 | TOP |
| M18 | 123+66.43 'JSB' | 5.00 RT | 578691.65 | 868584.20 | 707.83 | |
| M19 | 123+65.95 'JSB' | 5.01 RT | 578691.17 | 868584.08 | 708.33 | TOP |
| M20 | 23+63.74 'JNB' | 11.44 LT | 578689.71 | 868590.35 | 708.57 | TOP |
| M21 | 23+63.24 'JNB' | 3.06 LT | 578691.51 | 868598.55 | 708.46 | TOP |
| M22 | 123+76.65 'JSB' | 3.00 RT | 578702.42 | 868584.23 | 708.07 | TOP |
| M23 | 123+75.98 'JSB' | 5.35 RT | 578701.39 | 868586.46 | 707.66 | |
| M24 | 123+76.45 'JSB' | 5.39 RT | 578701.88 | 868586.57 | 708.18 | TOP |
| M25 | 23+74.58 'JNB' | 8.31 LT | 578700.99 | 868590.42 | 708.37 | TOP |
| M26 | 23+74.26 'JNB' | 3.00 LT | 578702.12 | 868595.61 | 708.27 | TOP |
| M27 | 23+63.90 'JNB' | 5.59 LT | 578691.45 | 868595.94 | 708.00 | |

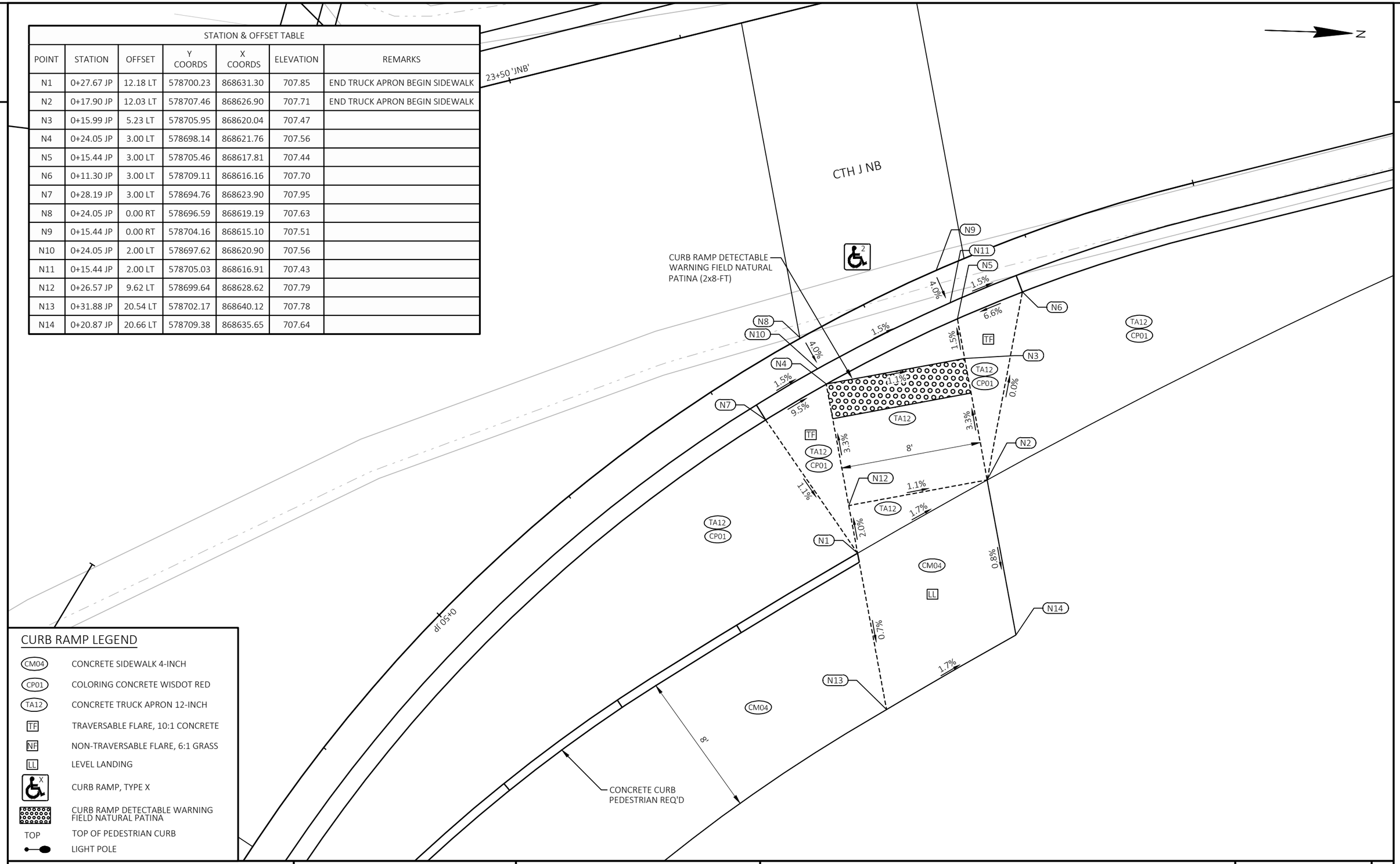
## CURB RAMP LEGEND

| | |
|---|---|
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP01 | COLORING CONCRETE WISDOT RED |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| TF | TRAVERSABLE FLARE, 10:1 CONCRETE |
| NF | NON-TRAVERSABLE FLARE, 6:1 GRASS |
| LL | LEVEL LANDING |
| X | CURB RAMP, TYPE X |
| | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| TOP | TOP OF PEDESTRIAN CURB |
| | LIGHT POLE |

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CURB RAMP DETAILS (CR-13) | SHEET 71 | E |
|---|---|---|---|---|---|

2

| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| N1 | 0+27.67 JP | 12.18 LT | 578700.23 | 868631.30 | 707.85 | END TRUCK APRON BEGIN SIDEWALK |
| N2 | 0+17.90 JP | 12.03 LT | 578707.46 | 868626.90 | 707.71 | END TRUCK APRON BEGIN SIDEWALK |
| N3 | 0+15.99 JP | 5.23 LT | 578705.95 | 868620.04 | 707.47 | |
| N4 | 0+24.05 JP | 3.00 LT | 578698.14 | 868621.76 | 707.56 | |
| N5 | 0+15.44 JP | 3.00 LT | 578705.46 | 868617.81 | 707.44 | |
| N6 | 0+11.30 JP | 3.00 LT | 578709.11 | 868616.16 | 707.70 | |
| N7 | 0+28.19 JP | 3.00 LT | 578694.76 | 868623.90 | 707.95 | |
| N8 | 0+24.05 JP | 0.00 RT | 578696.59 | 868619.19 | 707.63 | |
| N9 | 0+15.44 JP | 0.00 RT | 578704.16 | 868615.10 | 707.51 | |
| N10 | 0+24.05 JP | 2.00 LT | 578697.62 | 868620.90 | 707.56 | |
| N11 | 0+15.44 JP | 2.00 LT | 578705.03 | 868616.91 | 707.43 | |
| N12 | 0+26.57 JP | 9.62 LT | 578699.64 | 868628.62 | 707.79 | |
| N13 | 0+31.88 JP | 20.54 LT | 578702.17 | 868640.12 | 707.78 | |
| N14 | 0+20.87 JP | 20.66 LT | 578709.38 | 868635.65 | 707.64 | |




## CURB RAMP LEGEND

| | |
|---|---|
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP01 | COLORING CONCRETE WISDOT RED |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| TF | TRAVERSABLE FLARE, 10:1 CONCRETE |
| NF | NON-TRAVERSABLE FLARE, 6:1 GRASS |
| LL | LEVEL LANDING |
| X | CURB RAMP, TYPE X |
| | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| TOP | TOP OF PEDESTRIAN CURB |
| | LIGHT POLE |

2

2

CONCRETE CURB
PEDESTRIAN REQ'D

1+00 JP

8'

O13

1.6%

O12

1.5%

CM04

0.3%

O11

O14

2.1%

1.0%

CM04

LL

1.0%

O8

O7

0.3%

NF

16.5%

16.0%

8'

CM04

O10

0.2%

4.0%

O3

O2

O1

5.0%

0.3%

NF

15.9%

O9

4.0%

0.4%

O6

O5

O4

1+50 JP

CURB RAMP DETECTABLE
WARNING FIELD NATURAL
PATINA (2x8-FT)

2

RAMP JDR

189+20 'JDR'

189+40 'JDR'

N

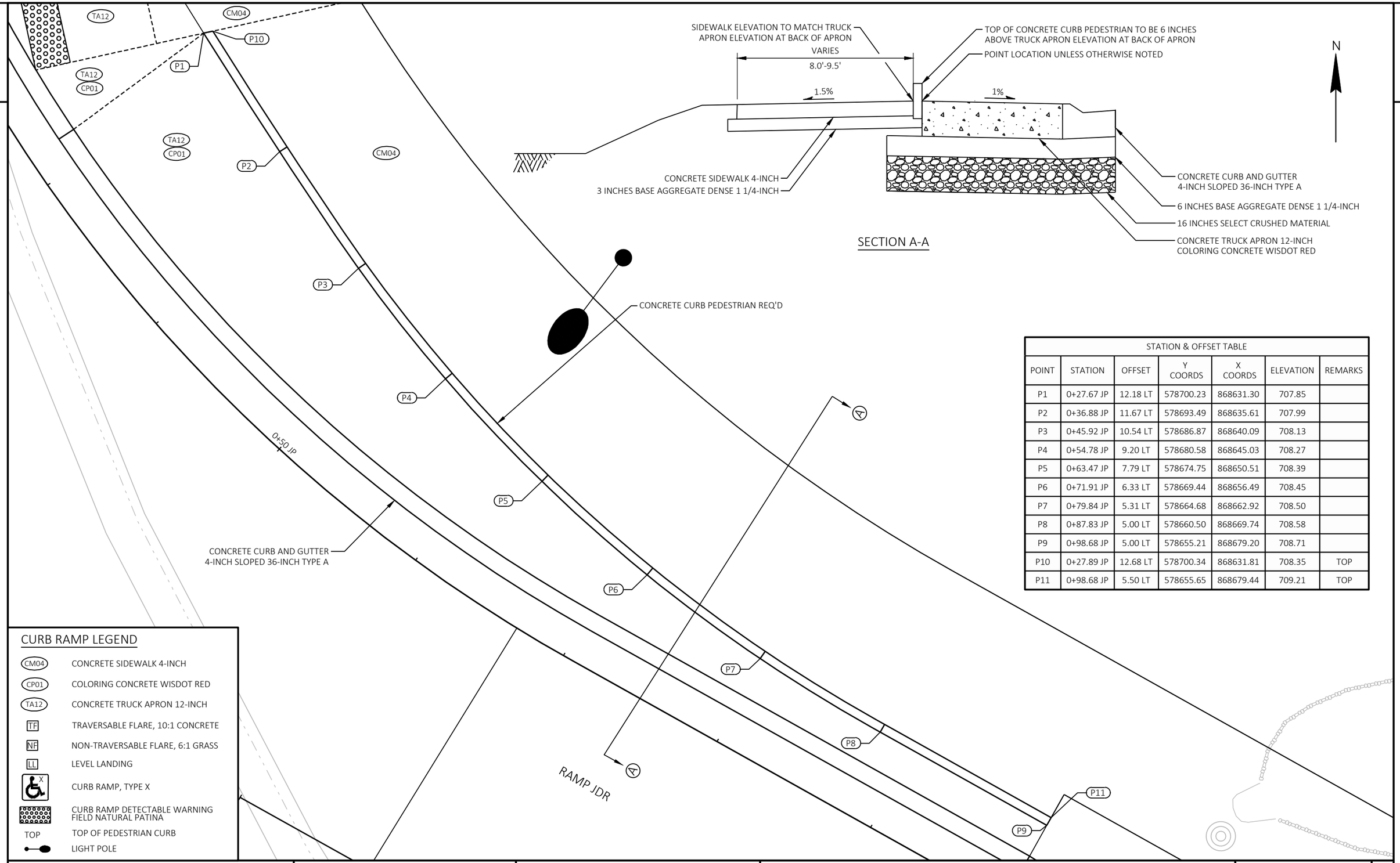
| STATION & OFFSET TABLE | | | | | |
|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION |
| O1 | 1+35.24 | 0.00 RT | 578632.993 | 868708.661 | 708.38 |
| O2 | 1+35.24 | 2.00 LT | 578634.738 | 868709.637 | 708.30 |
| O3 | 1+35.24 | 2.50 LT | 578635.174 | 868709.882 | 708.31 |
| O4 | 1+43.24 | 0.00 RT | 578629.086 | 868715.642 | 708.36 |
| O5 | 1+43.24 | 2.00 LT | 578630.831 | 868716.619 | 708.28 |
| O6 | 1+43.24 | 2.50 LT | 578631.267 | 868716.863 | 708.29 |
| O7 | 1+32.24 | 2.50 LT | 578636.639 | 868707.264 | 708.81 |
| O8 | 1+35.24 | 7.00 LT | 578639.101 | 868712.079 | 708.58 |
| O9 | 1+46.24 | 2.50 LT | 578629.802 | 868719.481 | 708.77 |
| O10 | 1+43.24 | 7.00 LT | 578635.194 | 868719.060 | 708.56 |
| O11 | 1+43.24 | 15.00 LT | 578642.175 | 868722.967 | 708.48 |
| O12 | 1+35.24 | 15.00 LT | 578646.082 | 868715.986 | 708.50 |
| O13 | 1+27.24 | 15.00 LT | 578649.989 | 868709.005 | 708.62 |
| O14 | 1+27.24 | 7.00 LT | 578643.007 | 868705.100 | 708.74 |

## CURB RAMP LEGEND

| | |
|---|---|
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP01 | COLORING CONCRETE WISDOT RED |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| TF | TRAVERSABLE FLARE, 10:1 CONCRETE |
| NF | NON-TRAVERSABLE FLARE, 6:1 GRASS |
| LL | LEVEL LANDING |
| X | CURB RAMP, TYPE X |
| | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| TOP | TOP OF PEDESTRIAN CURB |
| | LIGHT POLE |

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CURB RAMP DETAILS (CR-15) | SHEET 73 | E |
|---|---|---|---|---|---|

SECTION A-A




| STATION & OFFSET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS | ELEVATION | REMARKS |
| P1 | 0+27.67 JP | 12.18 LT | 578700.23 | 868631.30 | 707.85 | |
| P2 | 0+36.88 JP | 11.67 LT | 578693.49 | 868635.61 | 707.99 | |
| P3 | 0+45.92 JP | 10.54 LT | 578686.87 | 868640.09 | 708.13 | |
| P4 | 0+54.78 JP | 9.20 LT | 578680.58 | 868645.03 | 708.27 | |
| P5 | 0+63.47 JP | 7.79 LT | 578674.75 | 868650.51 | 708.39 | |
| P6 | 0+71.91 JP | 6.33 LT | 578669.44 | 868656.49 | 708.45 | |
| P7 | 0+79.84 JP | 5.31 LT | 578664.68 | 868662.92 | 708.50 | |
| P8 | 0+87.83 JP | 5.00 LT | 578660.50 | 868669.74 | 708.58 | |
| P9 | 0+98.68 JP | 5.00 LT | 578655.21 | 868679.20 | 708.71 | |
| P10 | 0+27.89 JP | 12.68 LT | 578700.34 | 868631.81 | 708.35 | TOP |
| P11 | 0+98.68 JP | 5.50 LT | 578655.65 | 868679.44 | 709.21 | TOP |

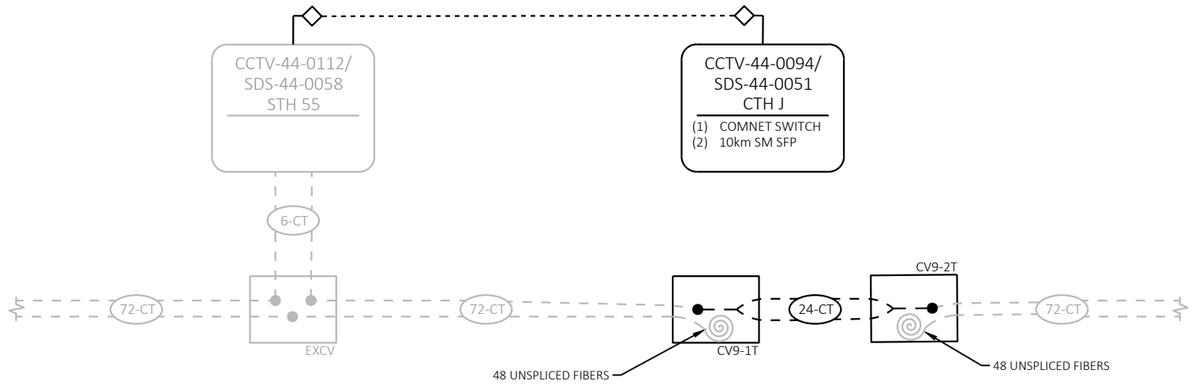
## CURB RAMP LEGEND

| | |
|---|---|
| CM04 | CONCRETE SIDEWALK 4-INCH |
| CP01 | COLORING CONCRETE WISDOT RED |
| TA12 | CONCRETE TRUCK APRON 12-INCH |
| TF | TRAVERSABLE FLARE, 10:1 CONCRETE |
| NF | NON-TRAVERSABLE FLARE, 6:1 GRASS |
| LL | LEVEL LANDING |
| X | CURB RAMP, TYPE X |
| | CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA |
| TOP | TOP OF PEDESTRIAN CURB |
| | LIGHT POLE |

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CURB RAMP DETAILS (RAMP JDR PEDESTRIAN CURB) | SHEET 74 | E |
|---|---|---|---|---|---|

2

# IH-41
# ITS COMMUNICATIONS OVERVIEW
# PROPOSED CONDITIONS




LEGEND

XX-CT — FIBER OPTIC CABLE - SM

FIELD SPLICE LOCATION

CV — COMMUNICATION VAULT

5.8 GHZ WIRELESS COMMUNICATIONS

NOTES

SM = SINGLE MODE FIBER OPTIC CABLE
GRAYSHADE REPRESENT EXISTING

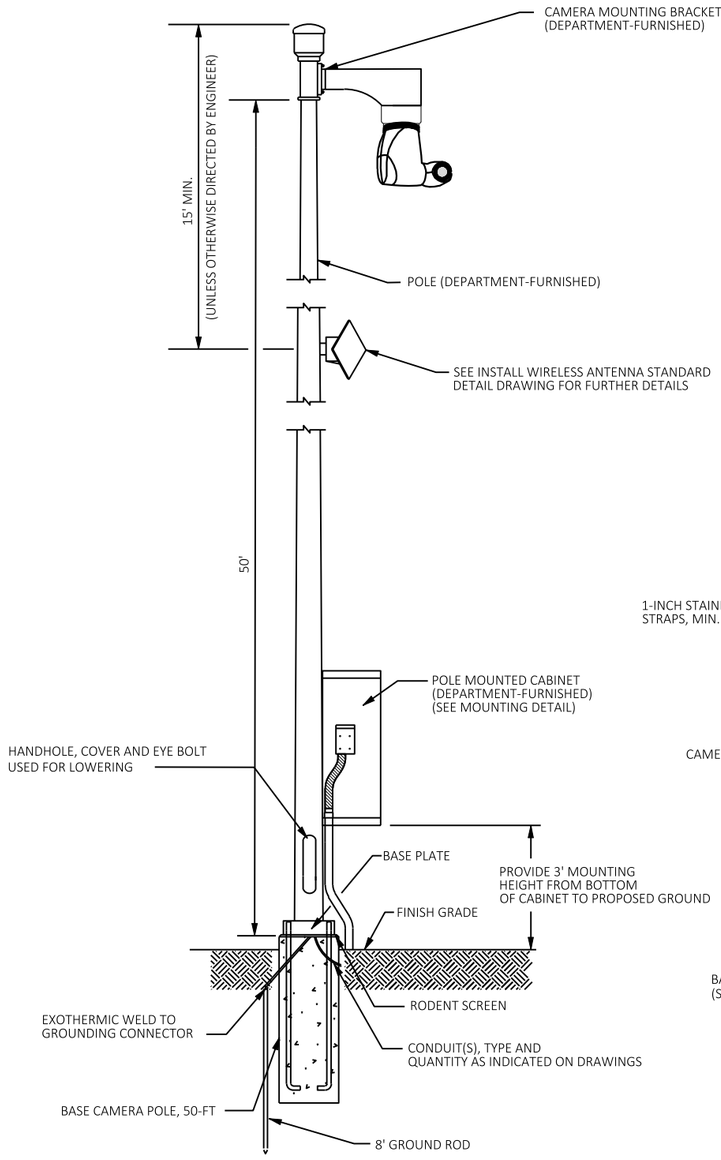
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ITS COMMUNICATION OVERVIEW | SHEET 75 | E |
|---|---|---|---|---|---|

FILE NAME : S:\MAD\2000--2099\2089\018\DRAWINGS\CAD\11300601\SHEETSPLAN\COMMUNICATION OVERVIEW\021501-FM.DWG
LAYOUT NAME - 021501(CTHJ)-fm

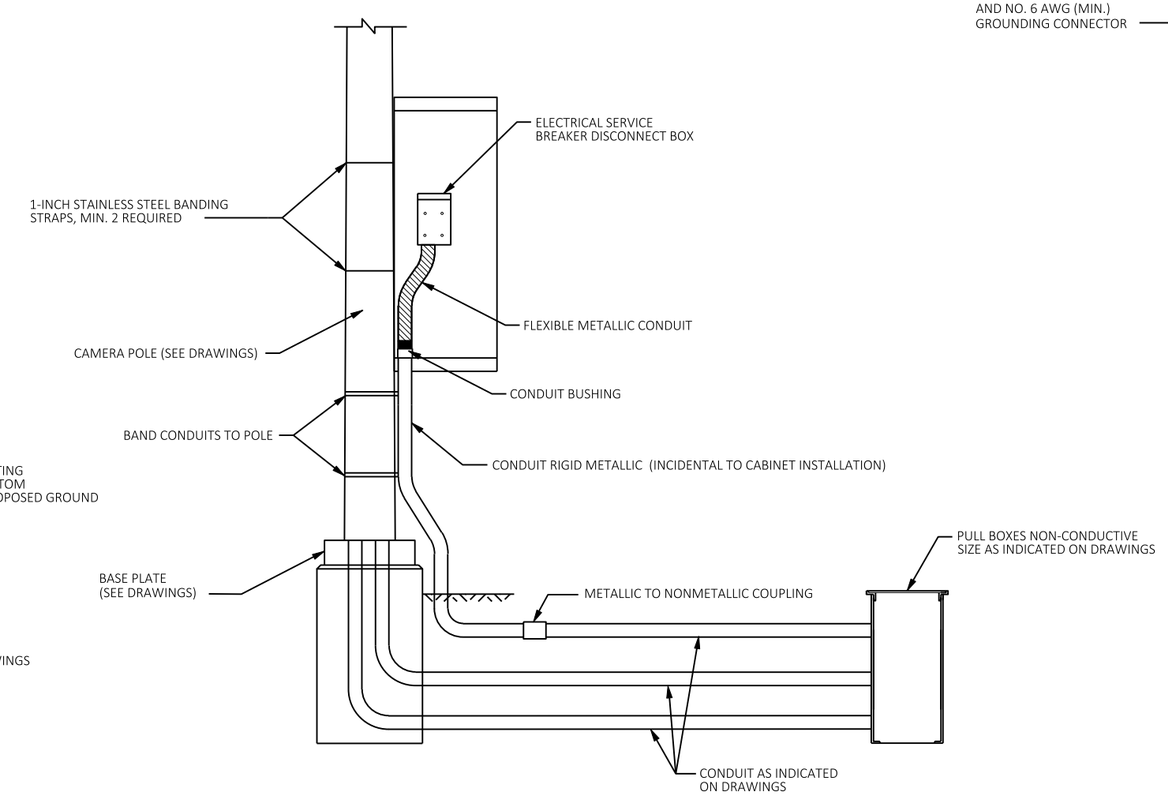
PLOT DATE : 7/3/2024 12:30 PM PLOT BY : WALTER, ADAM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

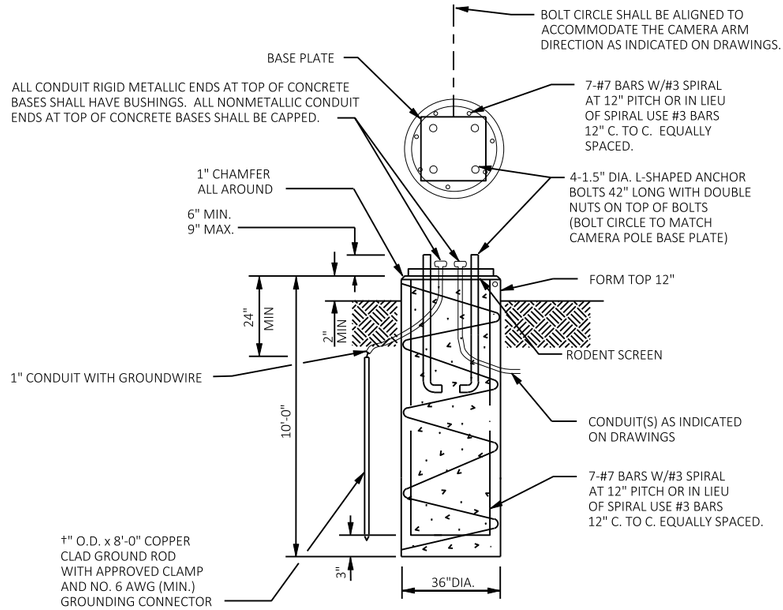
NOT TO SCALE




CAMERA POLE, WITH CAMERA LOWERING HARDWARE




INSTALL MOUNTED CABINET ON CAMERA POLE (POLE MOUNTED CABINET)

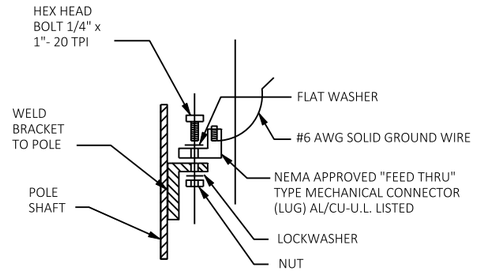



## MATERIALS DATA

| | |
|---|---|
| CONCRETE | f'c=3,500 psi |
| HIGH STRENGTH BAR STEEL REINFORCEMENT | fy = 60,000 psi |

BASE CAMERA POLE, 50-FT

NOT TO SCALE

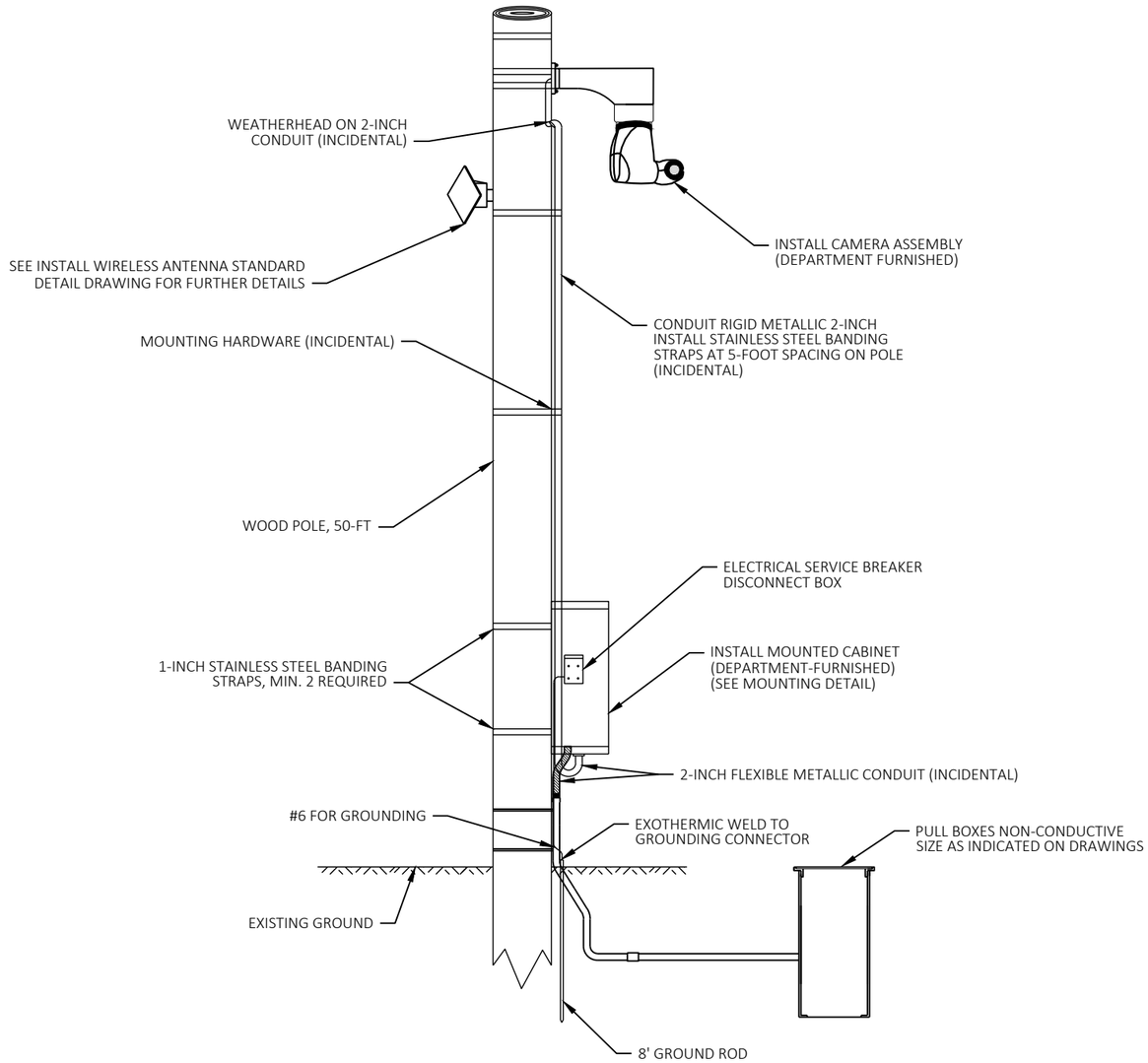



FIELD INSTALLED GROUNDING LUG

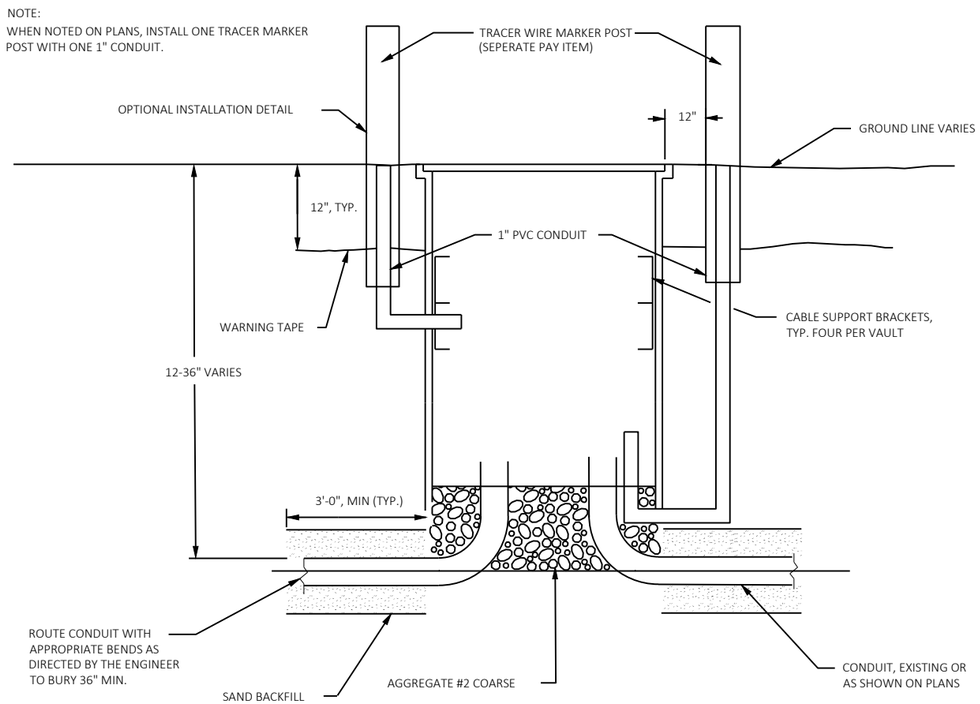
## NOTES

1. ALL HARDWARE AND FASTENERS SHALL BE STAINLESS STEEL
2. POLE DRAWINGS SHOWN FOR BIDDING INFORMATION PURPOSES ONLY. POLES WILL BE DEPARTMENT FURNISHED. FOUNDATION CAMERA POLE 50-FEET TO BE CONSTRUCTED PER SECTION 531 OF THE STANDARD SPECIFICATIONS.
3. CONFIRM BOLT PATTERN OF CAMERA POLE PRIOR TO CONSTRUCTION OF CONCRETE BASE.
4. INSTALL GROUNDING LUG AS SHOWN

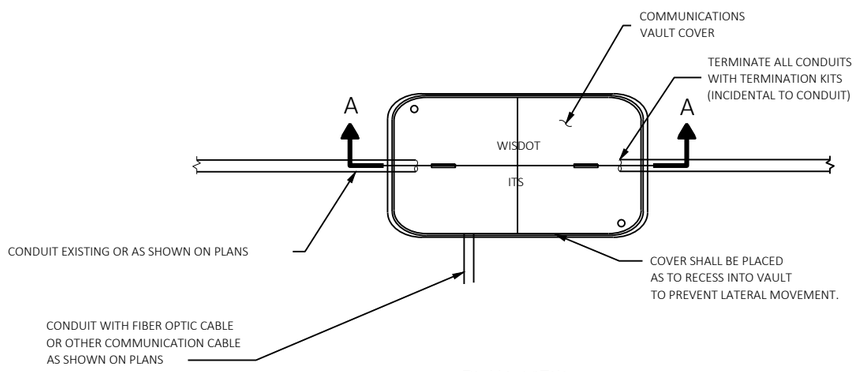
NOT TO SCALE




## WOOD POLE, 50-FT




SECTION A-A




PLAN VIEW

# COMMUNICATIONS VAULT TYPE 1

## GENERAL NOTES

PROVIDE VAULT WITH OPEN BASE.

COVER SHALL HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.

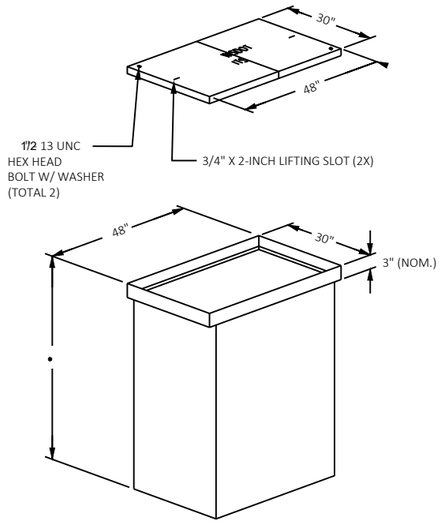
ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.

VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.

FIELD PLACEMENT OF COMMUNICATIONS VAULTS SHALL BE AS DIRECTED BY THE ENGINEER.

FIBER TRACER MARKER POSTS SHALL BE CONSTRUCTED WITH HIGH-IMPACT PLASTIC MATERIAL WHICH IS FADE RESISTANT AND UV STABLE. ALL HARDWARE SHALL BE STAINLESS STEEL AND CONTAIN A MINIMUM OF FIVE STANDARD TERMINALS.

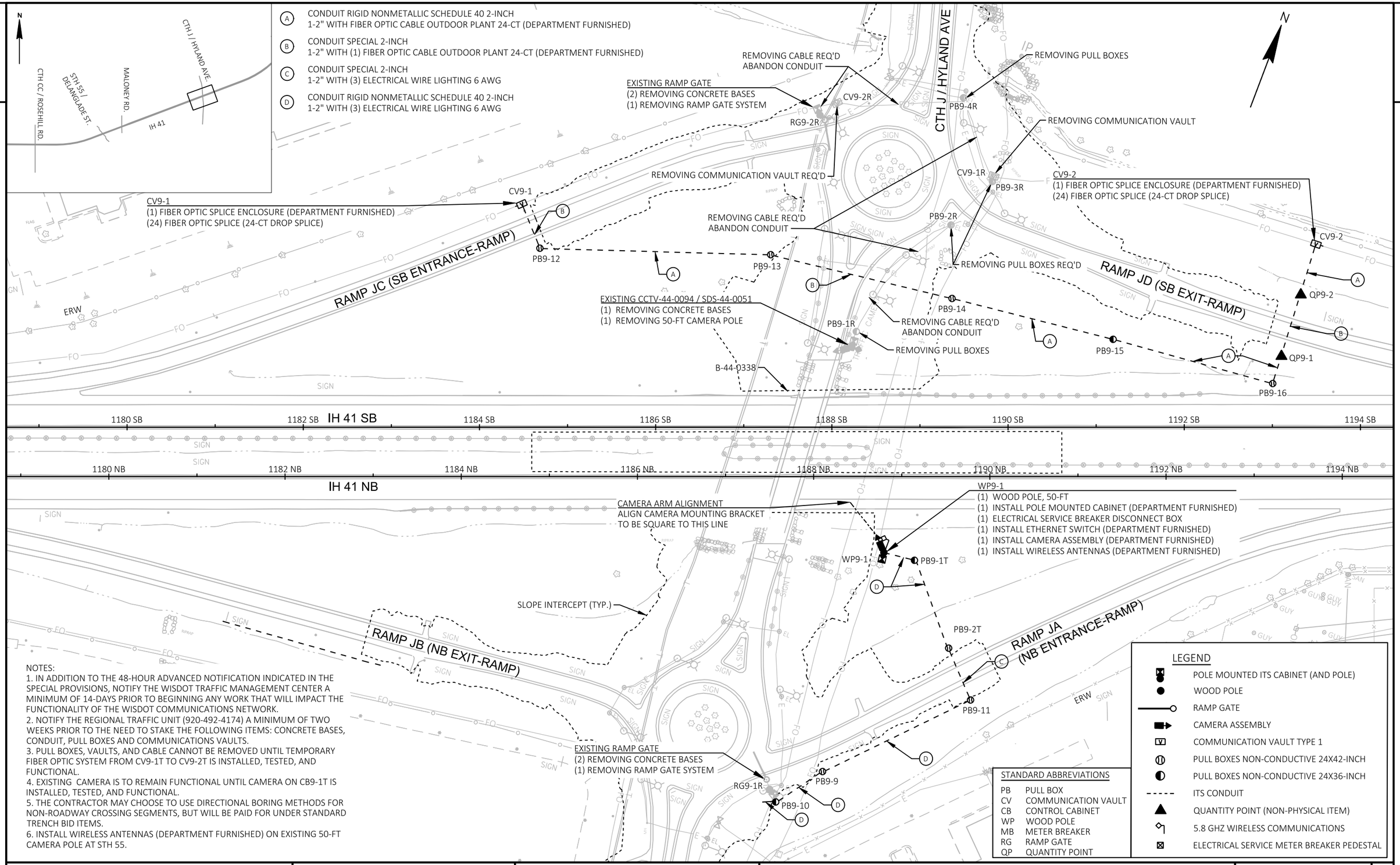
VAULT IS TO BE CUT TO SIZE, EXISTING CONDUIT DEPTH VARIES.
ADJUST DEPTH OF VAULT TO ACCOMODATE PLACEMENT.




- VAULT IS TO BE CUT TO SIZE, EXISTING CONDUIT DEPTH

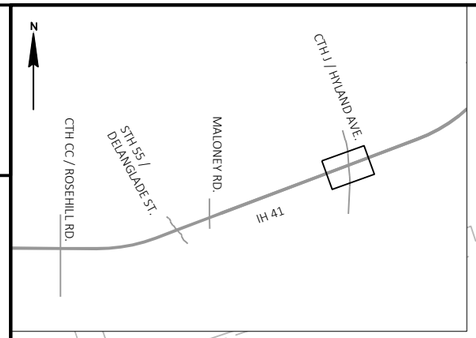
ISOMETRIC VIEW

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ITS COMMUNICATION OVERVIEW | SHEET 78 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | FTMS PLANS | SHEET 79 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\ADAMWA\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\DSGN\ITS\SHEETS\11306678 (CTH J)\021501-FM.DWG
LAYOUT NAME - 0215118-fm
PLOT DATE : 6/27/2024 12:25 PM
PLOT BY : WALTER, ADAM
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42




A CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
1-3" (FOR FUTURE CABLE MICROWAVE DETECTOR)

B (3) ELECTRICAL WIRE LIGHTING 2 AWG

C CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
1-2" WITH (3) ELECTRICAL WIRE LIGHTING 2 AWG
INSTALL CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
1-3" (FOR FUTURE FIBER OPTIC CABLE OUTDOOR PLANT 12-CT AND CABLE MICROWAVE DETECTOR)

CTH J / HYLAND AVE

RG9-2

CV9-1

PROTECT WISDOT FIBER OPTIC CABLE

PB9-12

RAMP JC (SB ENTRANCE-RAMP)

PB9-13

PB9-14

RAMP JD (SB EXIT-RAMP)

CV9-2

PROTECT WISDOT FIBER OPTIC CABLE

PB9-15

B-44-0338

PB9-16

PROTECT WISDOT FIBER OPTIC CABLE

IH 41 SB

IH 41 NB

REMOVE AND REINSTALL ITS EQUIPMENT

CAMERA ARM ALIGNMENT
ALIGN BOLT CIRCLE AND CAMERA MOUNTING BRACKET TO BE SQUARE TO THIS LINE

PROPOSED CCTV-44-0094
(1) FOUNDATION CAMERA POLE 50-FT
(1) INSTALL CAMERA POLE 50-FT (DEPARTMENT FURNISHED)

WP9-1
(1) REMOVING POLES WOOD

CB9-1

PB9-6

PB9-1T

REMOVING CABLE REQ'D ABANDON CONDUIT

REMOVING PULL BOXES REQ'D

SLOPE INTERCEPT (TYP.)

PB9-5

PB9-7

RAMP JB (NB EXIT-RAMP)

PB9-1

PB9-4

PB9-2

PB9-3

REMOVING CABLE REQ'D ABANDON CONDUIT

PB9-2T

RAMP JA (NB ENTRANCE-RAMP)

PB9-17

PB9-8

PB9-11

RG9-1

PB9-10

PB9-9

NOTES:
1. IN ADDITION TO THE 48-HOUR ADVANCED NOTIFICATION INDICATED IN THE SPECIAL PROVISIONS, NOTIFY THE WISDOT TRAFFIC MANAGEMENT CENTER A MINIMUM OF 14-DAYS PRIOR TO BEGINNING ANY WORK THAT WILL IMPACT THE FUNCTIONALITY OF THE WISDOT COMMUNICATIONS NETWORK.
2. NOTIFY THE REGIONAL TRAFFIC UNIT (920-492-4174) A MINIMUM OF TWO WEEKS PRIOR TO THE NEED TO STAKE THE FOLLOWING ITEMS: CONCRETE BASES, CONDUIT, PULL BOXES AND COMMUNICATIONS VAULTS.
3. CAMERA ON CB9-1T IS TO REMAIN ACTIVE UNTIL CAMERA ON CB9-1 IS INSTALLED, TESTED, AND FUNCTIONAL.
4. WP9-1, PB9-1T, AND PB9-2T CANNOT BE REMOVED UNTIL CAMERA ON CB9-1 IS INSTALLED, TESTED, AND FUNCTIONAL.
5. THE CONTRACTOR MAY CHOOSE TO USE DIRECTIONAL BORING METHODS FOR NON-ROADWAY CROSSING SEGMENTS, BUT WILL BE PAID FOR UNDER STANDARD TRENCH BID ITEMS.

LEGEND
- POLE MOUNTED ITS CABINET (AND POLE)
- WOOD POLE
- RAMP GATE
- CAMERA ASSEMBLY
- COMMUNICATION VAULT TYPE 1
- PULL BOXES NON-CONDUCTIVE 24X42-INCH
- PULL BOXES NON-CONDUCTIVE 24X36-INCH
- ITS CONDUIT
- QUANTITY POINT (NON-PHYSICAL ITEM)
- 5.8 GHZ WIRELESS COMMUNICATIONS
- ELECTRICAL SERVICE METER BREAKER PEDESTAL

STANDARD ABBREVIATIONS

| | |
|---|---|
| PB | PULL BOX |
| CV | COMMUNICATION VAULT |
| CB | CONTROL CABINET |
| WP | WOOD POLE |
| MB | METER BREAKER |
| RG | RAMP GATE |
| QP | QUANTITY POINT |

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | FTMS PLANS | SHEET 80 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\ADAMWA\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\DSGN\ITS\SHEETS\11306678 (CTH J)\021502-FM.DWG
LAYOUT NAME - 0215118-fm
PLOT DATE : 7/2/2024 5:04 PM PLOT BY : WALTER, ADAM PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

MATCH LINE 1185+00 JB

RAMP JB

IH 41 NB

N

1185+00

1186+00

1187+00

TLE

EXIST R/W

SIGN

CTH J

12+00 'JNB'

113+00 'JSB'

13+00 'JNB'

114+00 'JSB'

14+00 'JNB'

15+00 'JSB'

15+00 'JNB'

116+00 'JSB'

16+00 'JNB'

17+00 'JSB'

17+00 'JNB'

18+00 'JSB'

18+00 'JNB'

119+00 'JSB'

19+00 'JNB'

A/C

A/D

BEGIN PROJECT
STA 11 'JNB' + 61.02

SLOPE INTERCEPT (TYP.)

1188+00 JA

1189+00 JA

RAMP JA

MATCH LINE 1189+00 JA

## LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK
- 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: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - TEMPORARY | SHEET 81 | E |
|---|---|---|---|---|---|

2

2

MATCH LINE 1187+00 JC

1187+00 'JC'

RAMP JC

1188+00 'JC'

EXISTING RIPRAP TO REMAIN

120+00 'JSB'
20+00 'JNB'

121+00 'JSB'
21+00 'JNB'

CTH J

122+00 'JSB'

123+00 'JSB'
22+00 'JNB'

23+00 'JNB'

A/C

A/D

IH 41 SB

1188+00

1189+00

1190+00

1191+00

EXISTING RIPRAP TO REMAIN

EXIST R/W

END PROJECT
STA 26 'JNB' + 34.30

124+00 'JSB'

125+00 'JSB'

126+00 'JSB'

127+00 'JSB'

24+00 'JNB'

25+00 'JNB'

26+00 'JNB'

27+00 'JNB'

CANO

N

SLOPE INTERCEPT (TYP.)

RAMP JDR

1190+00 'JD'

RAMP JD

1191+00

MATCH LINE 1191+00 JD

EXISTING RIPRAP TO REMAIN

EXISTING BOX CULVERT TO REMAIN

EXISTING RIPRAP TO REMAIN

## LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK
- 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: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - TEMPORARY | SHEET 82 | E |
|---|---|---|---|---|---|

2

2

N

EXIST R/W

1190+00

1191+00

1192+00

1193+00

1194+00

1195+00

1196+00

1193+00 'JD'

1193+00 'JDT'

1194+00 'JD'

1194+00 'JDT'

1195+00 'JD'

1195+00 'JDT'

1196+00 'JD'

1196+00 'JDT'

MATCH LINE 1189+00 'JA'

1189+00 'JA'

1190+00 'JA'

1191+00 'JAT'

1191+00 'JA'

1192+00 'JAT'

1192+00 'JA'

1193+00 'JAT'

1193+00 'JA'

1194+00 'JAT'

1194+00 'JA'

1195+00 'JA'

1196+00 'JA'

RAMP JA

SLOPE INTERCEPT (TYP.)

EXIST R/W

INL

A/C

SUBSTATION

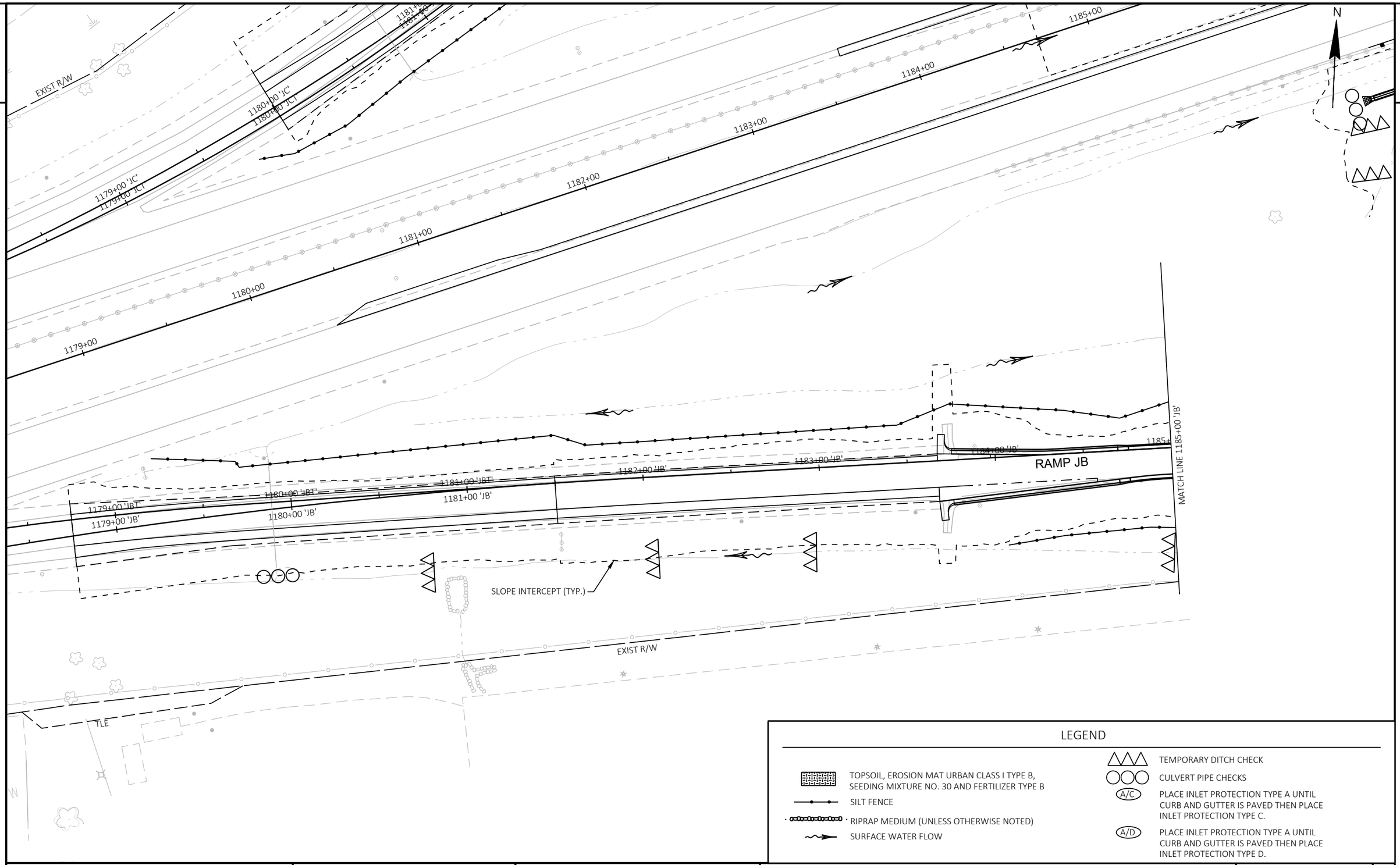
## LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK
- 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: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - TEMPORARY | SHEET 83 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\022001-EC-TEMP.DWG
LAYOUT NAME - 022003-ec
PLOT DATE : 7/31/2024 4:10 PM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2




## LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK
- 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: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - TEMPORARY | SHEET 84 | E |
|---|---|---|---|---|---|

2

2

EXIST R/W

RAMP JC

1187+

MATCH LINE 1187+00 'JC'

1186+00 'JC'

1185+00 'JC'

1184+00 'JC'

1183+00 'JC'

1182+00 'JC'

1181+00 'JC'

1180+00 'JC'

SLOPE INTERCEPT (TYP.)

1181+00

1182+00

1183+00

## LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK
- 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: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - TEMPORARY | SHEET 85 | E |
|---|---|---|---|---|---|

2

N

EXIST R/W

SLOPE INTERCEPT (TYP.)

MATCH LINE 1191+00 'JD'

RAMP JD

1192+00 'JD'

1193+00 'JD'

1193+00 'JDT'

1194+00 'JD'

1194+00 'JDT'

1195+00 'JD'

1195+00 'JDT'

1196+00 'JD'

1196+00 'JDT'

1197+00 'JD'

1197+00 'JDT'

1191+00

1192+00

1193+00

1194+00

1195+00

1196+00

1197+00

1193+00 'JA'

1194+00 'JA'

1194+00 'JAT'

1195+00 'JA'

1196+00 'JA'

EXIST R/W

INL

SUBSTATION

SUBSTATION

A/C

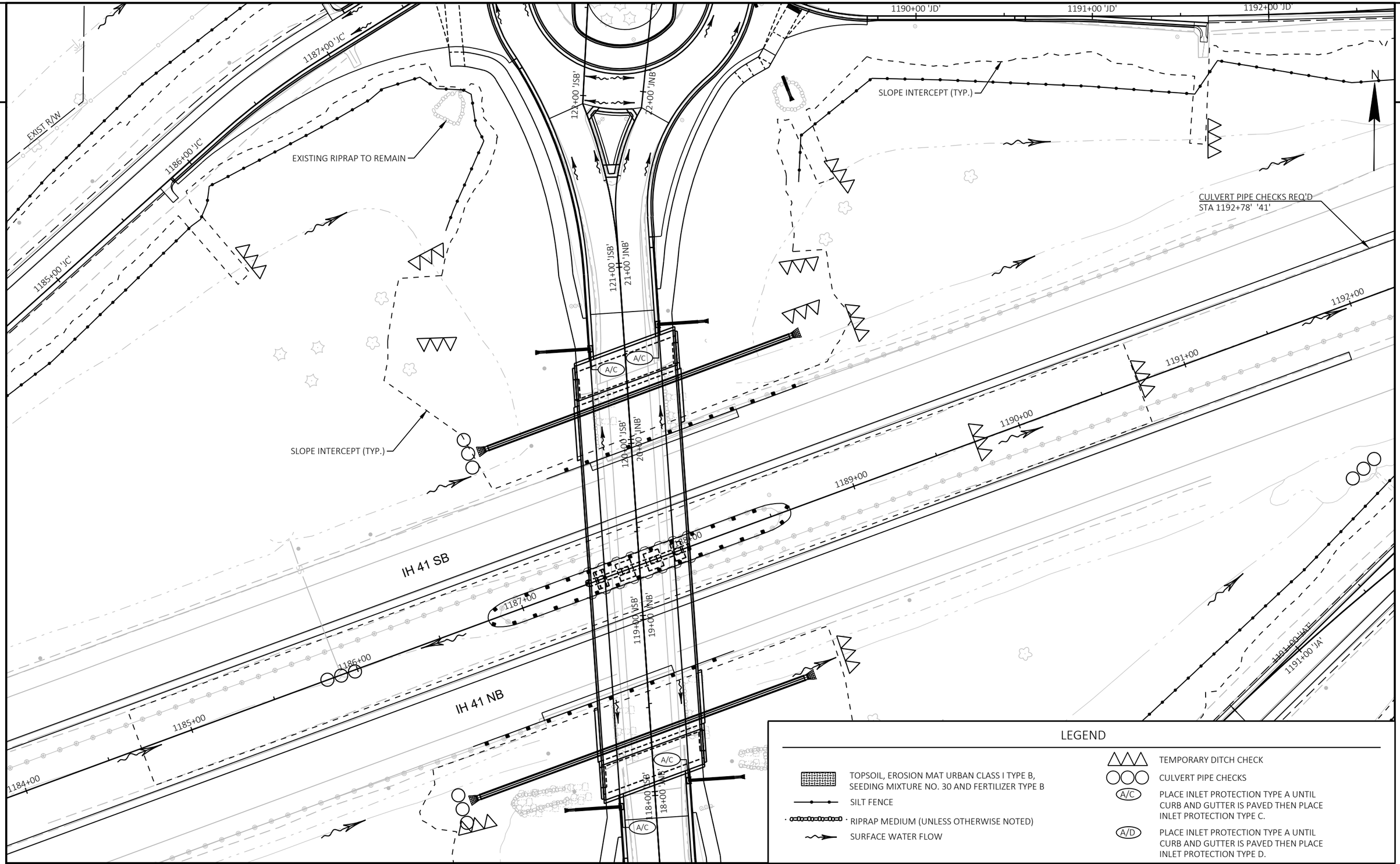
## LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK
- 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: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - TEMPORARY | SHEET 86 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\022001-EC-TEMP.DWG
LAYOUT NAME - 022006-ec
PLOT DATE : 7/31/2024 4:22 PM
PLOT BY : GRIMME, SARA
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2




## LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK
- 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: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - TEMPORARY | SHEET 87 | E |
|---|---|---|---|---|---|

2

MATCH LINE 1185+00 JB

RAMP JB

IH 41 NB

SEE PLANTINGS SHEET FOR ADDITIONAL INFORMATION

TLE

EXIST R/W

SIGN

CTH J

12+00 'JNB'

13+00 'JNB'

113+00 'JSB'

14+00 'JNB'

114+00 'JSB'

15+00 'JNB'

15+00 'JSB'

16+00 'JNB'

116+00 'JSB'

17+00 'JNB'

117+00 'JSB'

CTH J

18+00 'JNB'

118+00 'JSB'

19+00 'JNB'

119+00 'JSB'

BEGIN PROJECT
STA 11 'JNB' + 61.02

EXIST R/W

SIGN

118+00 JA

RAMP JA

MATCH LINE 1189+00 JA

N

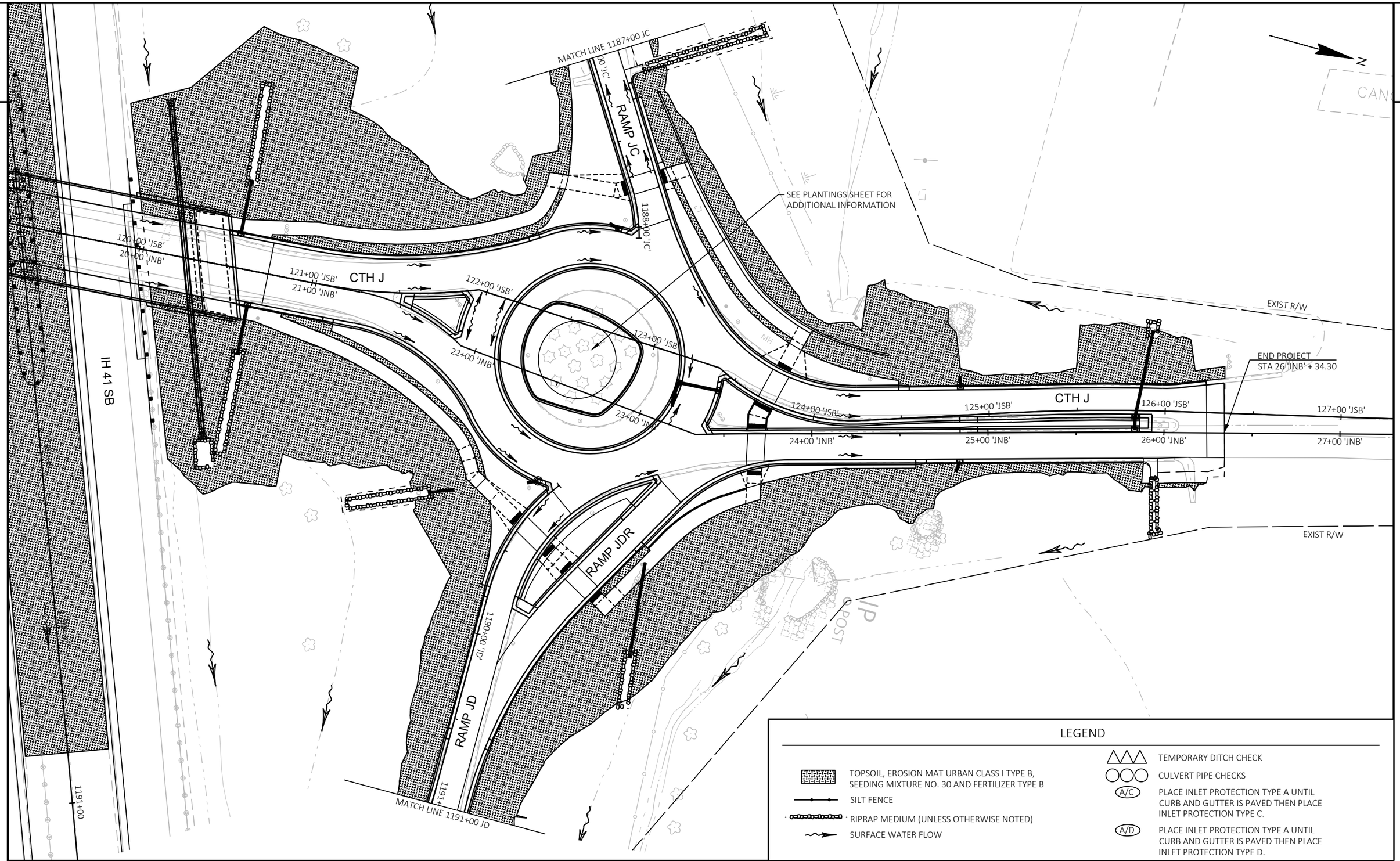
2

## LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK
- 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: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - PERMANENT | SHEET 88 | E |
|---|---|---|---|---|---|

2




## LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK
- 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: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - PERMANENT | SHEET 89 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\022001-EC-PERM.DWG
LAYOUT NAME - 022002-ec-p
PLOT DATE : 7/31/2024 7:07 PM
PLOT BY : KOWALSKI, NICK
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

N

EXIST R/W

1191+00

1192+00

1193+00

1194+00

1195+00

1196+00

1193+00 'JD'

1193+00 'JDT'

1194+00 'JD'

1194+00 'JDT'

1195+00 'JD'

1195+00 'JDT'

1196+00 'JD'

1196+00 'JDT'

MATCH LINE 1189+00 'JA'

RAMP JA

1190+00 'JA'

1191+00 'JA'

1191+00 'JAT'

1192+00 'JA'

1192+00 'JAT'

1193+00 'JA'

1193+00 'JAT'

1194+00 'JA'

1194+00 'JAT'

1195+00 'JA'

1196+00 'JA'

EXIST R/W

INL

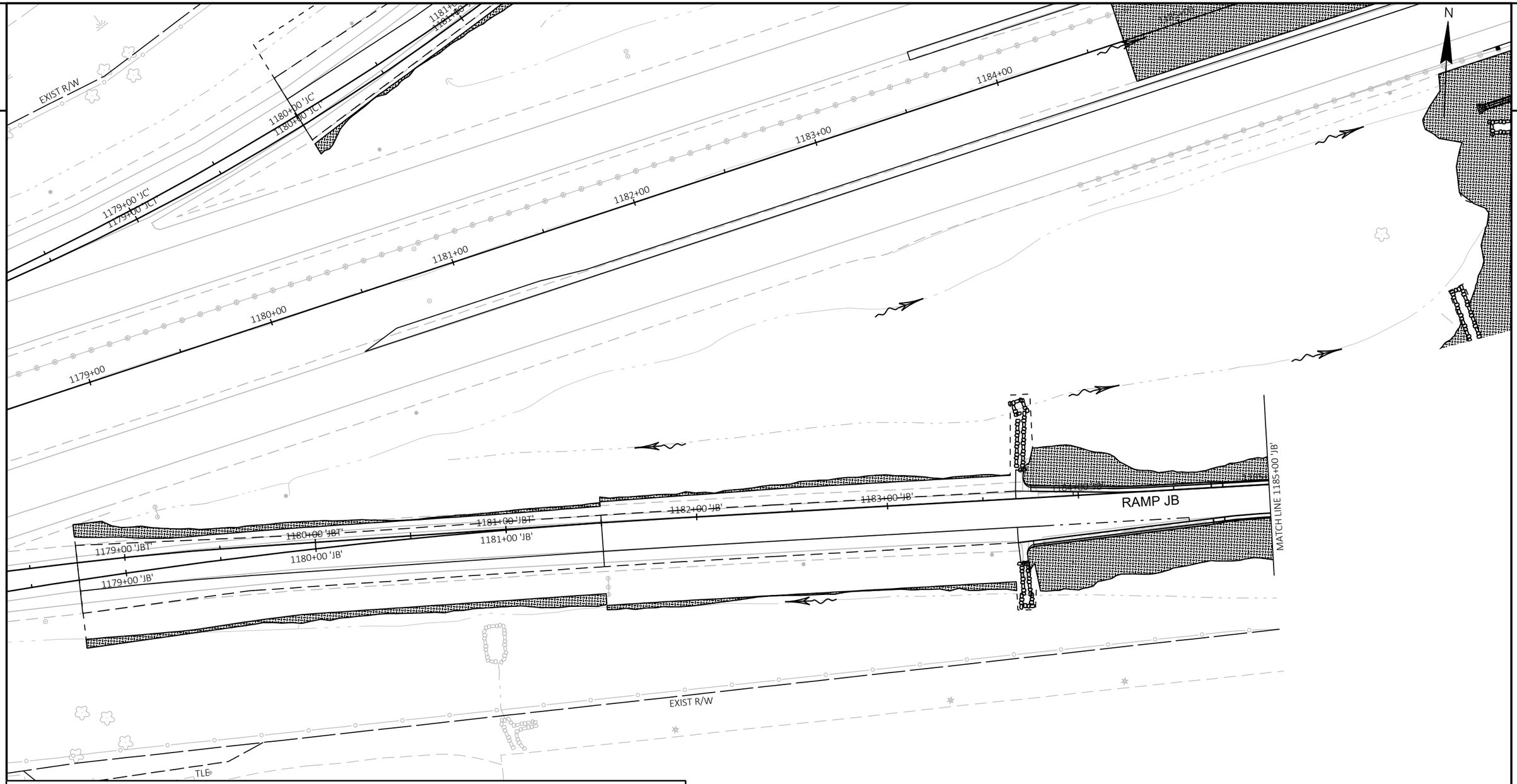
A/C

SUBSTATION

## LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK
- 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: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - PERMANENT | SHEET 90 | E |
|---|---|---|---|---|---|




## LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK
- 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: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - PERMANENT | SHEET 91 | E |
|---|---|---|---|---|---|

2

2

EXIST R/W

RAMP JC

1180+00 'JC'

1181+00 'JC'

1182+00 'JC'

1183+00 'JC'

1184+00 'JC'

1185+00 'JC'

1186+00 'JC'

1187+

MATCH LINE 1187+00 'JC'

## LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK
- 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: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - PERMANENT | SHEET 92 | E |
|---|---|---|---|---|---|

2

N

EXIST R/W

MATCH LINE 1191+00 'JD'

RAMP JD

1192+00 'JD'

1193+00 'JD'

1193+00 'JDT'

1194+00 'JD'

1194+00 'JDT'

1195+00 'JD'

1195+00 'JDT'

1196+00 'JD'

1196+00 'JDT'

1197+00 'JD'

1197+00 'JDT'

1191+00

1192+00

1193+00

1194+00

1195+00

1196+00

1197+00

1192+00 'JA'

1192+00 'JAT'

1193+00 'JA'

1193+00 'JAT'

1194+00 'JA'

1194+00 'JAT'

1195+00 'JA'

1196+00 'JA'

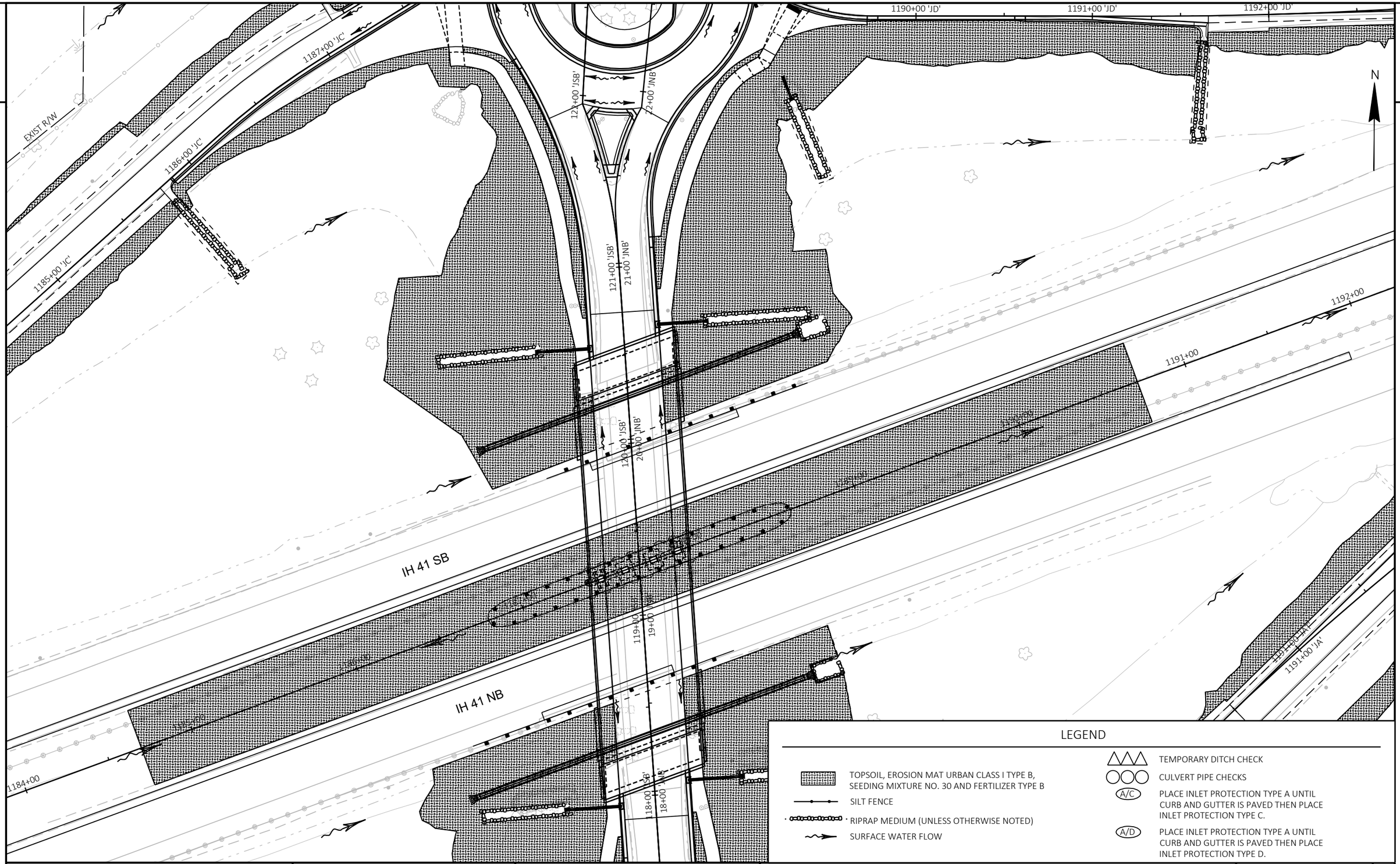
EXIST R/W

## LEGEND

- TOPSOIL, EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- SILT FENCE
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK
- 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: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - PERMANENT | SHEET 93 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\022001-EC-PERM.DWG
LAYOUT NAME - 022006-ec-p
PLOT DATE : 7/31/2024 7:09 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | EROSION CONTROL - PERMANENT | SHEET 94 | E |
|---|---|---|---|---|---|

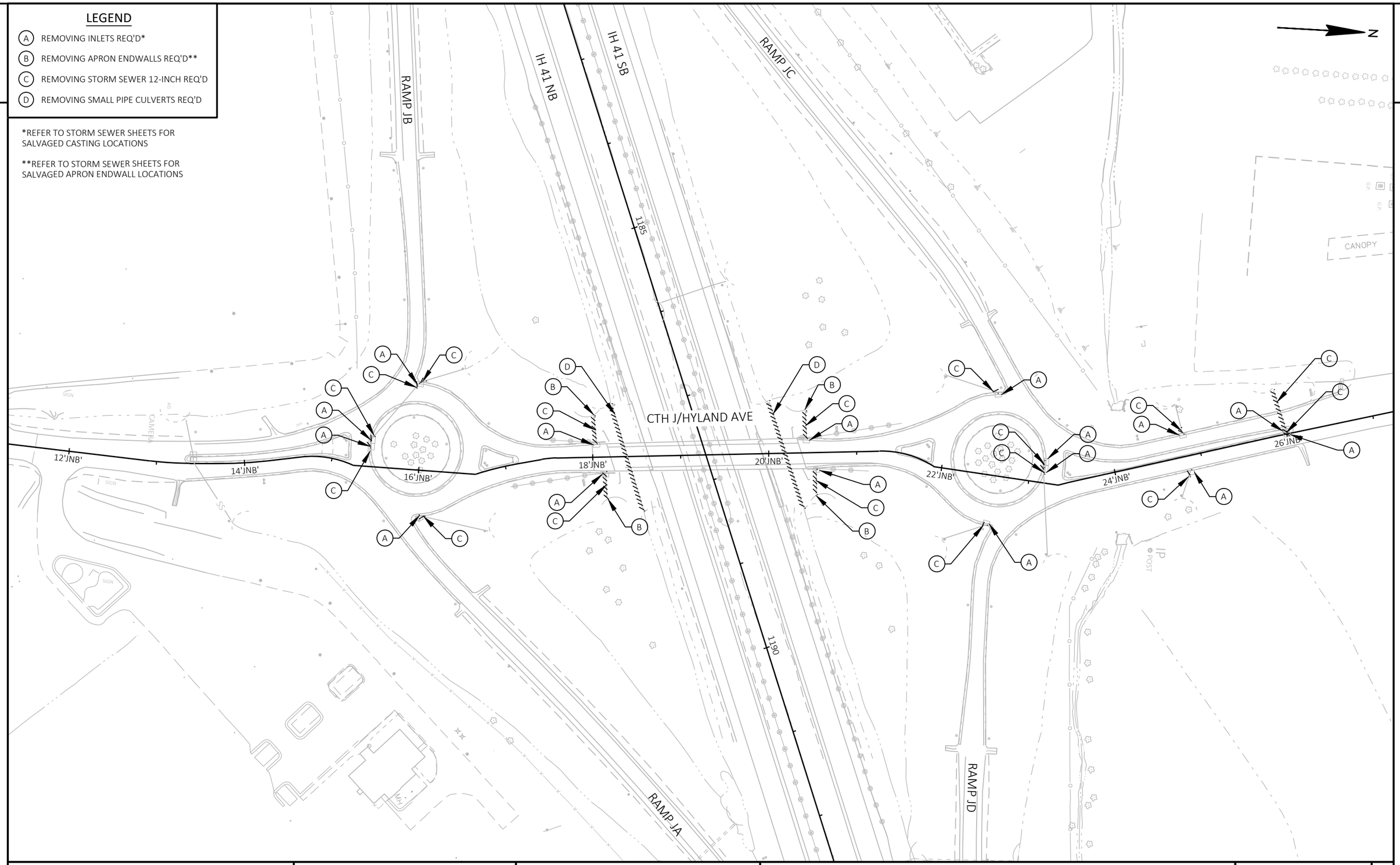
FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\022001-EC-PERM.DWG
LAYOUT NAME - 022007-ec-p
PLOT DATE : 7/31/2024 7:10 PM
PLOT BY : KOWALSKI, NICK
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

## LEGEND

- (A) REMOVING INLETS REQ'D*
- (B) REMOVING APRON ENDWALLS REQ'D**
- (C) REMOVING STORM SEWER 12-INCH REQ'D
- (D) REMOVING SMALL PIPE CULVERTS REQ'D

*REFER TO STORM SEWER SHEETS FOR SALVAGED CASTING LOCATIONS

**REFER TO STORM SEWER SHEETS FOR SALVAGED APRON ENDWALL LOCATIONS




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STORM SEWER REMOVALS | SHEET 95 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\022401-SS.DWG
LAYOUT NAME - 022401-ss
PLOT DATE : 7/22/2024 2:35 PM
PLOT BY : CARPENTER, ZACH
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

STA 11+83 'JE', 65.7' LT
APRON ENDWALLS FOR CP SALVAGED 12-INCH
9749

STA 11+77 'JE', 51.0' LT
CONCRETE COLLARS FOR PIPE REQ'D
9748

STA 11+55 'JE', 23.8' LT
CONCRETE COLLARS FOR PIPE REQ'D
9745

STA 11+51 'JE', 21.5' LT
INLETS 4-HM
9750

STA 11+49 'JE', 16.5' LT
CONCRETE COLLARS FOR PIPE REQ'D
9746

STA 10+79 'JE', 4.5' RT
CONCRETE COLLARS FOR PIPE REQ'D
9755

STA 10+73 'JE', 1.7' RT
INLETS 4-T SALVAGED
9751

STA 113+42 'JSB', 1.5' RT
ADJUSTING INLET COVERS REQ'D
9760

STA 13+43 'JNB', 1.5' LT
ADJUSTING INLET COVERS REQ'D
9761

STA 10+58 'JE', 21.5' LT
INLETS 2x3-H-S
9757

STA 10+65 'JE', 1.7' RT
INLETS 2x2.5-T SALVAGED
9752

STA 13+15 'JE', 21.5' LT
INLETS 2x3-HM
9753

STA 13+11 'JE', 23.7' LT
CONCRETE COLLARS FOR PIPE REQ'D
9754

STA 18+05 'JNB', 19.5' RT
INLETS 2x3-H
9742

STA 18+05 'JNB', 45.2' RT
APRON ENDWALLS FOR CPRC 12-INCH
9743

STA 18+58 'JNB', 88.9' RT
APRON ENDWALLS FOR CPRC 30-INCH
7435

STA 118+06 'JSB', 98.9' LT
APRON ENDWALLS FOR CPRC 30-INCH
7437

STA 117+95 'JSB', 45.6' LT
APRON ENDWALLS FOR CPRC 12-INCH
9740

STA 117+95 'JSB', 19.5' LT
INLETS 2x3-H
9741

STA 120+03 'JSB', 81.1' LT
APRON ENDWALLS FOR CPRC 30-INCH
7432

STA 120+55 'JSB', 19.5' LT
INLETS 2x3-H
9731

STA 120+55 'JSB', 44.5' LT
APRON ENDWALLS FOR CPRC 12-INCH
9730

STA 20+64 'JNB', 19.5' RT
INLETS 2x3-H
9732

STA 20+64 'JNB', 42.2' RT
APRON ENDWALLS FOR CPRC 12-INCH
9733

STA 20+52 'JNB', 93.6' RT
APRON ENDWALLS FOR CPRC 30-INCH
7430

STA 22+09 'JNB', 81.7' RT
APRON ENDWALLS FOR CP SALVAGED 12-INCH
9726

STA 10+25 'JK', 53.3' LT
CONCRETE COLLARS FOR PIPE REQ'D
9725

STA 11+59 'JK', 23.7' LT
CONCRETE COLLARS FOR PIPE REQ'D
9719

STA 11+63 'JK', 21.5' LT
INLETS 2x3-HM
9720

STA 124+85 'JSB', 22.0' LT
CONCRETE COLLARS FOR PIPE REQ'D
9712

STA 124+85 'JSB', 16.0' LT
INLETS 2x3-H SALVAGED
9710

STA 125+83 'JSB', 3.5' RT
INLETS 2x3-HM
9701

STA 125+91 'JSB', 39.5' LT
APRON ENDWALLS FOR CP SALVAGED 12-INCH
9700

STA 25+83 'JNB', 1.5' LT
INLETS 2x3-HM
9702

STA 24+84 'JNB', 16.5' RT
INLETS 2x3-H SALVAGED
9711

STA 24+82 'JNB', 22.0' RT
CONCRETE COLLARS FOR PIPE REQ'D
9713

STA 12+33 'JE', 683.7' LT
INLETS 2x3-H-S
9735

STA 12+50 'JK', 1.7' RT
INLETS 2x2.5-T SALVAGED
9721

STA 12+58 'JK', 1.7' RT
INLETS 2x2.5-T SALVAGED
9722

STA 12+64 'JK', 0.1' LT
CONCRETE COLLARS FOR PIPE REQ'D
9727

STA 13+06 'JK', 66.3' LT
CONCRETE COLLARS FOR PIPE REQ'D
9728

STA 13+13 'JK', 111.6' LT
APRON ENDWALLS FOR CP SALVAGED 12-INCH
9729

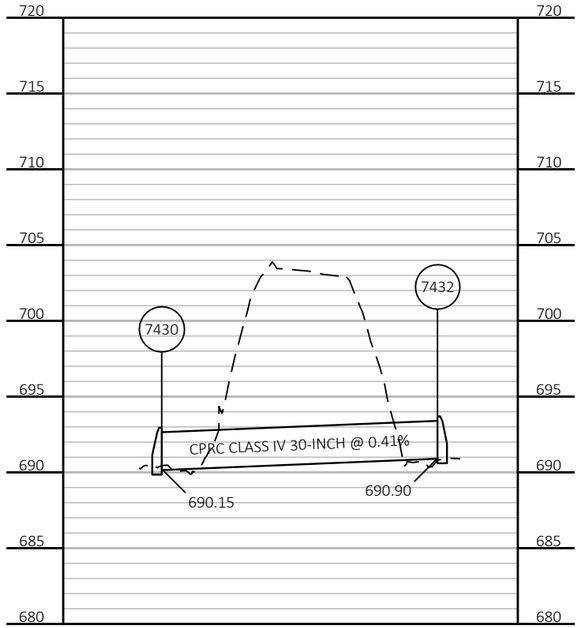
STA 10+03 'JK', 21.5' LT
INLETS 4-HM
9723

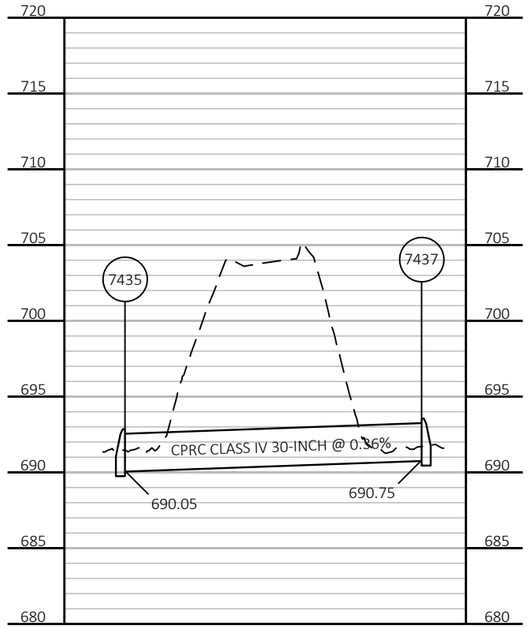
STA 10+07 'JK', 24.8' LT
CONCRETE COLLARS FOR PIPE REQ'D
9724

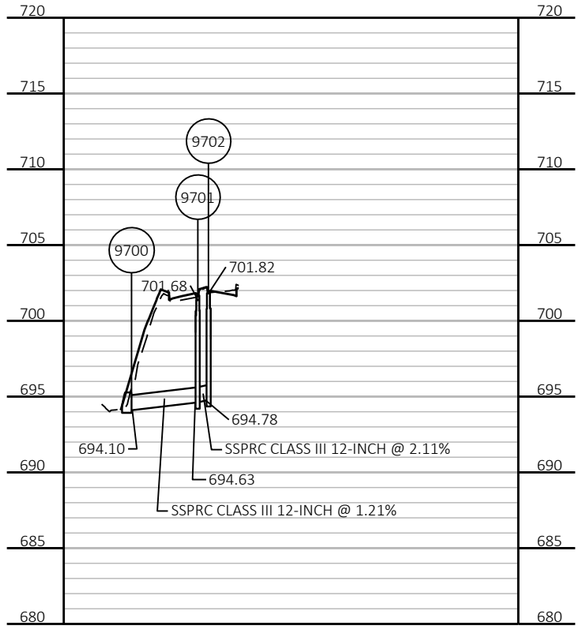
IH 41 NB
IH 41 SB
RAMP JB
RAMP JC
RAMP JD
RAMP JA
RAMP JDR
CTH J/HYLAND AVE
1185
1190
CANOPY
SIGN
12'JE'
11'JE'
13'JE'
16'JSB'
16'JNB'
114'JSB'
14'JNB'
12'JNB'
118'JSB'
18'JNB'
120'JSB'
20'JNB'
122'JSB'
22'JNB'
12'JK'
13'JK'
124'JSB'
24'JNB'
26'JSB'
26'JNB'

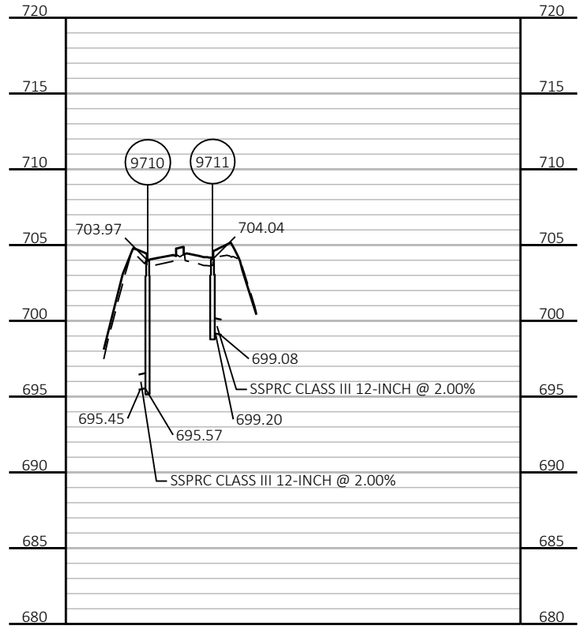
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STORM SEWER | SHEET 96 | E |
|---|---|---|---|---|---|

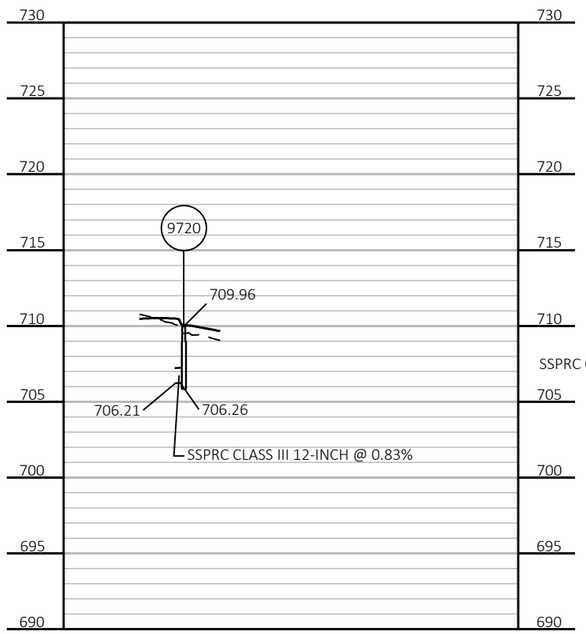
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LAYOUT NAME - 022501-ss
PLOT DATE : 7/22/2024 2:35 PM
PLOT BY : CARPENTER, ZACH
PLOT NAME :
PLOT SCALE : ##########

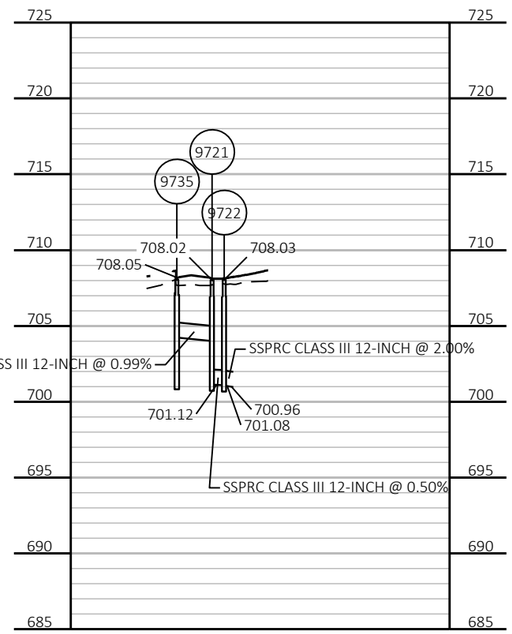


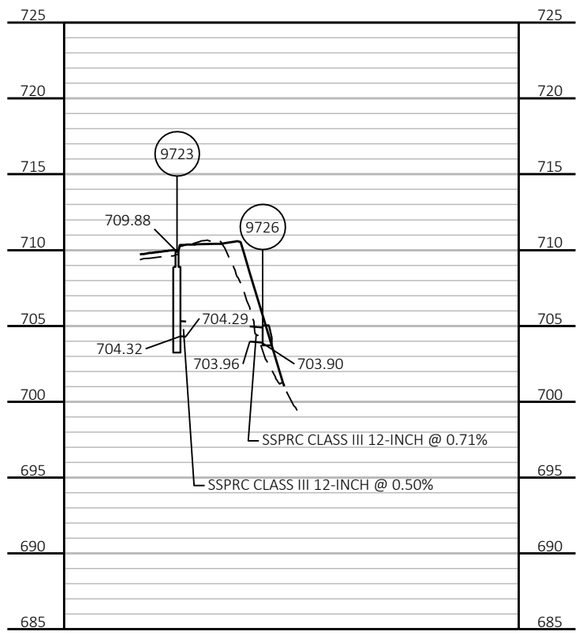



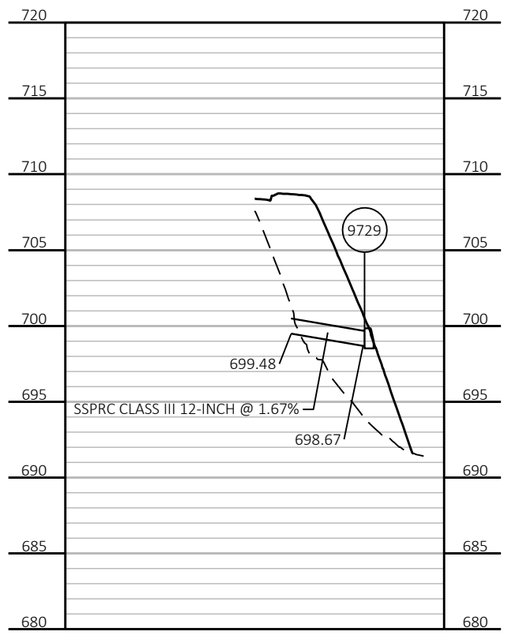



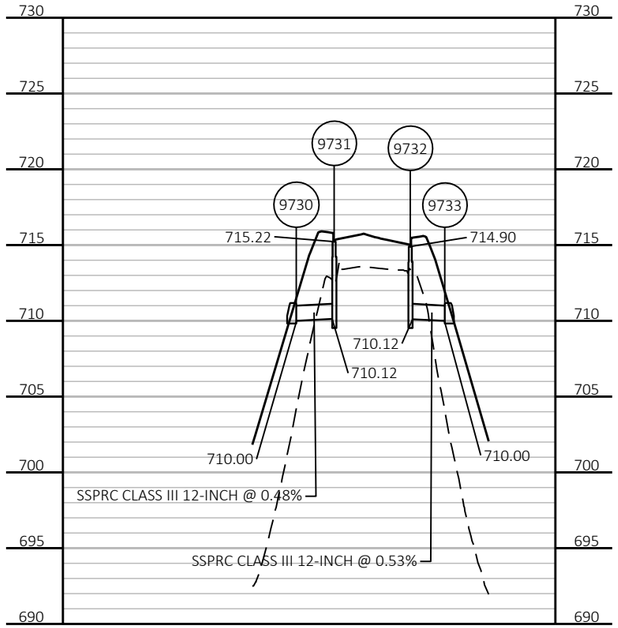



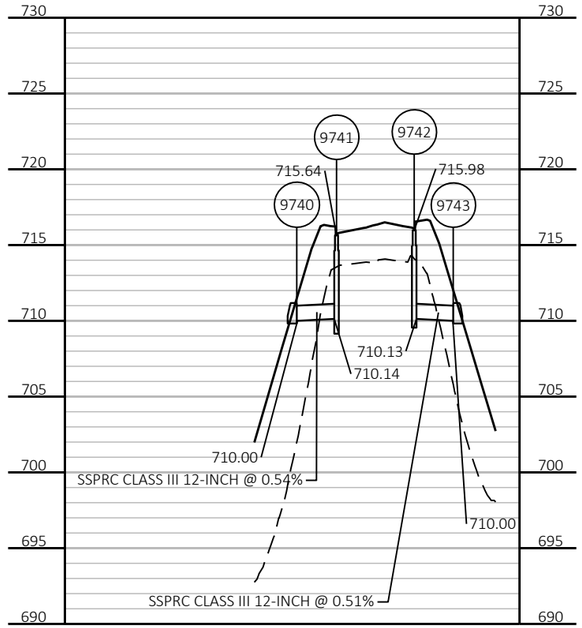



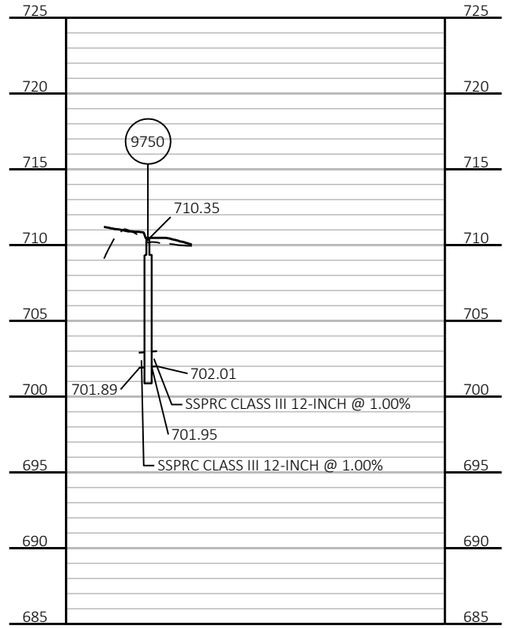



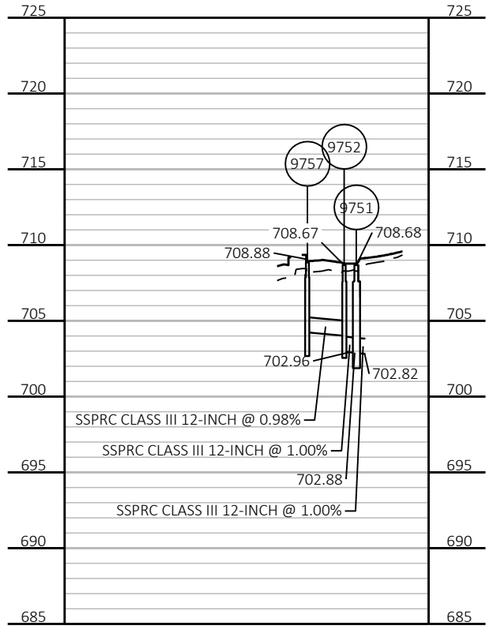



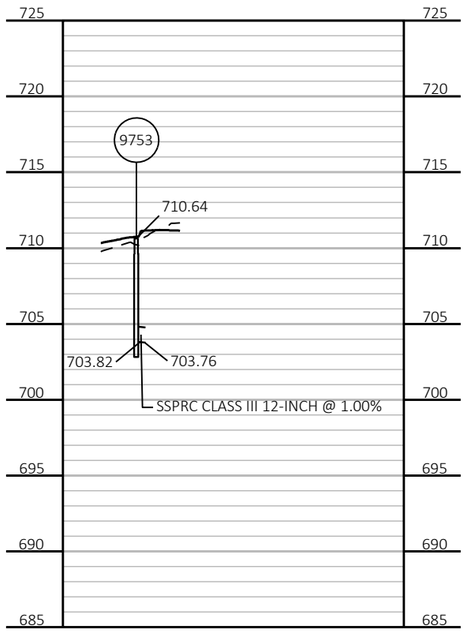

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STORM SEWER | SHEET 97 | E |
|---|---|---|---|---|---|


730
725
720
715
710
705
700
695
690
9731
9732
9730
9733
715.22
714.90
710.12
710.12
710.00
710.00
SSPRC CLASS III 12-INCH @ 0.48%
SSPRC CLASS III 12-INCH @ 0.53%


730
725
720
715
710
705
700
695
690
9741
9742
715.64
715.98
9740
9743
710.13
710.14
710.00
710.00
SSPRC CLASS III 12-INCH @ 0.54%
SSPRC CLASS III 12-INCH @ 0.51%


725
720
715
710
705
700
695
690
685
9750
710.35
702.01
701.89
SSPRC CLASS III 12-INCH @ 1.00%
701.95
SSPRC CLASS III 12-INCH @ 1.00%


725
720
715
710
705
700
695
690
685
9757
9752
9751
708.67
708.68
708.88
702.96
702.82
SSPRC CLASS III 12-INCH @ 0.98%
SSPRC CLASS III 12-INCH @ 1.00%
702.88
SSPRC CLASS III 12-INCH @ 1.00%


725
720
715
710
705
700
695
690
685
9753
710.64
703.82
703.76
SSPRC CLASS III 12-INCH @ 1.00%

| STRUCTURE NO. | STATION | | OFFSET | C-C (ft) | DOWNSTREAM STRUCTURE | INLET TYPE | COVER | MH TYPE | COVER | RIM/ GRATE ELEVATION | T.O.S. ELEVATION | DEPTH (FT) | DISCHARGE PIPE SIZE (IN) | DISCHARGE PIPE INVERT ELEVATIONS | DISCHARGE PIPE DISCHARGE ELEVATION | DISCHARGE PIPE LENGTH (FT) | DISCHARGE PIPE SLOPE (%) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7430 | 20+52.14 | JNB | 93.6 ' RT | - | - | - | - | - | - | - | - | - | - | 690.15 | - | - | - | APRON ENDWALLS FOR CPRC 30-INCH |
| 7432 | 120+02.79 | JSB | 81.1 ' LT | 182.2 | 7430 | - | - | - | - | - | - | - | 30 | 690.90 | 690.15 | 182 | 0.41% | APRON ENDWALLS FOR CPRC 30-INCH |
| 7435 | 18+58.48 | JNB | 88.9 ' RT | - | - | - | - | - | - | - | - | - | - | 690.05 | - | - | - | APRON ENDWALLS FOR CPRC 30-INCH |
| 7437 | 118+05.93 | JSB | 98.9 ' LT | 195.7 | 7435 | - | - | - | - | - | - | - | 30 | 690.75 | 690.05 | 196 | 0.36% | APRON ENDWALLS FOR CPRC 30-INCH |
| 9700 | 125+90.99 | JSB | 39.5 ' LT | - | - | - | - | - | - | - | - | - | - | 694.10 | - | - | - | APRON ENDWALLS FOR CP SALVAGED 12-INCH |
| 9701 | 125+83.00 | JSB | 3.5 ' RT | 43.8 | 9700 | 2X3-FT | HM | - | - | 701.68 | 700.85 | 6.22 | 12 | 694.63 | 694.10 | 44 | 1.21% | |
| 9702 | 25+83.31 | JNB | 1.5 ' LT | 7.1 | 9701 | 2X3-FT | HM | - | - | 701.82 | 700.99 | 6.21 | 12 | 694.78 | 694.63 | 7 | 2.11% | |
| 9710 | 124+84.50 | JSB | 16.0 ' LT | 6.0 | 9712 | 2X3-FT | - | - | - | 703.97 | 703.14 | 7.57 | 12 | 695.57 | 695.45 | 6 | 2.00% | SALVAGED INLET COVERS REQ'D (H COVER) |
| 9711 | 24+84.00 | JNB | 16.5 ' RT | 6.0 | 9713 | 2X3-FT | - | - | - | 704.04 | 703.21 | 4.01 | 12 | 699.20 | 699.08 | 6 | 2.00% | SALVAGED INLET COVERS REQ'D (H COVER) |
| 9712 | 124+84.52 | JSB | 22.0 ' LT | - | - | - | - | - | - | - | - | - | - | - | - | - | - | CONCRETE COLLARS FOR PIPE REQ'D |
| 9713 | 24+81.67 | JNB | 22.0 ' RT | - | - | - | - | - | - | - | - | - | - | - | - | - | - | CONCRETE COLLARS FOR PIPE REQ'D |
| 9719 | 11+59.05 | JK | 23.7 ' LT | - | - | - | - | - | - | - | - | - | - | - | - | - | - | CONCRETE COLLARS FOR PIPE REQ'D |
| 9720 | 11+63.00 | JK | 21.5 ' LT | 6.0 | 9719 | 2X3-FT | HM | - | - | 709.96 | 709.13 | 2.87 | 12 | 706.26 | 706.21 | 6 | 0.83% | |
| 9721 | 12+50.00 | JK | 1.7 ' RT | 8.0 | 9722 | 2X2.5-FT | - | - | - | 708.02 | 707.10 | 5.98 | 12 | 701.12 | 701.08 | 8 | 0.50% | SALVAGED INLET COVERS REQ'D (T COVER) |
| 9722 | 12+58.26 | JK | 1.7 ' RT | 6.0 | 9727 | 2X2.5-FT | - | - | - | 708.03 | 707.11 | 6.03 | 12 | 701.08 | 700.96 | 6 | 2.00% | SALVAGED INLET COVERS REQ'D (T COVER) |
| 9723 | 10+03.00 | JK | 21.5 ' LT | 6.0 | 9724 | 4-FT | HM | - | - | 709.88 | 709.05 | 4.73 | 12 | 704.32 | 704.29 | 6 | 0.50% | |
| 9724 | 10+06.53 | JK | 24.8 ' LT | - | - | - | - | - | - | - | - | - | - | - | - | - | - | CONCRETE COLLARS FOR PIPE REQ'D |
| 9725 | 10+24.80 | JK | 53.3 ' LT | 8.4 | 9726 | - | - | - | - | - | - | - | 12 | 703.96 | 703.90 | 8 | 0.71% | CONCRETE COLLARS FOR PIPE REQ'D |
| 9726 | 10+27.24 | JK | 60.0 ' LT | - | - | - | - | - | - | - | - | - | - | 703.90 | - | - | - | APRON ENDWALLS FOR CP SALVAGED 12-INCH |
| 9727 | 12+64.09 | JK | 0.1 ' LT | - | - | - | - | - | - | - | - | - | - | - | - | - | - | CONCRETE COLLARS FOR PIPE REQ'D |
| 9728 | 13+06.39 | JK | 66.3 ' LT | 48.4 | 9729 | - | - | - | - | - | - | - | 12 | 699.48 | 698.67 | 48 | 1.67% | CONCRETE COLLARS FOR PIPE REQ'D |
| 9729 | 13+12.95 | JK | 111.6 ' LT | - | - | - | - | - | - | - | - | - | - | 698.67 | - | - | - | APRON ENDWALLS FOR CP SALVAGED 12-INCH |
| 9730 | 120+55.00 | JSB | 44.5 ' LT | - | - | - | - | - | - | - | - | - | - | 710.00 | - | - | - | APRON ENDWALLS FOR CPRC 12-INCH |
| 9731 | 120+55.00 | JSB | 19.5 ' LT | 25.0 | 9730 | 2X3-FT | H | - | - | 715.22 | 714.39 | 4.27 | 12 | 710.12 | 710.00 | 25 | 0.48% | |
| 9732 | 20+64.00 | JNB | 19.5 ' RT | 22.7 | 9733 | 2X3-FT | H | - | - | 714.90 | 714.07 | 3.95 | 12 | 710.12 | 710.00 | 23 | 0.53% | |
| 9733 | 20+64.00 | JNB | 42.2 ' RT | - | - | - | - | - | - | - | - | - | - | 710.00 | - | - | - | APRON ENDWALLS FOR CPRC 12-INCH |
| 9735 | 12+49.00 | JK | 21.5 ' LT | 23.2 | 9721 | 2X3-FT | H-S | - | - | 708.05 | 707.22 | 2.99 | 12 | 704.23 | 704.00 | 23 | 0.99% | |
| 9740 | 117+95.00 | JSB | 45.6 ' LT | - | - | - | - | - | - | - | - | - | - | 710.00 | - | - | - | APRON ENDWALLS FOR CPRC 12-INCH |
| 9741 | 117+95.00 | JSB | 19.5 ' LT | 26.1 | 9740 | 2X3-FT | H | - | - | 715.64 | 714.81 | 4.67 | 12 | 710.14 | 710.00 | 26 | 0.54% | |
| 9742 | 18+05.00 | JNB | 19.5 ' RT | 25.7 | 9743 | 2X3-FT | H | - | - | 715.98 | 715.15 | 5.02 | 12 | 710.13 | 710.00 | 26 | 0.51% | |
| 9743 | 18+05.00 | JNB | 45.2 ' RT | - | - | - | - | - | - | - | - | - | - | 710.00 | - | - | - | APRON ENDWALLS FOR CPRC 12-INCH |
| 9745 | 11+54.90 | JE | 23.8 ' LT | - | - | - | - | - | - | - | - | - | - | - | - | - | - | CONCRETE COLLARS FOR PIPE REQ'D |
| 9746 | 11+48.50 | JE | 16.5 ' LT | 6.0 | 9750 | - | - | - | - | - | - | - | 12 | 702.01 | 701.95 | 6 | 1.00% | CONCRETE COLLARS FOR PIPE REQ'D |
| 9748 | 11+76.67 | JE | 51.0 ' LT | 19.1 | 9749 | - | - | - | - | - | - | - | 12 | 701.36 | 701.00 | 19 | 1.89% | CONCRETE COLLARS FOR PIPE REQ'D |
| 9749 | 11+82.51 | JE | 65.7 ' LT | - | - | - | - | - | - | - | - | - | - | 701.00 | - | - | - | APRON ENDWALLS FOR CP SALVAGED 12-INCH |
| 9750 | 11+51.00 | JE | 21.5 ' LT | 6.0 | 9745 | 4-FT | HM | - | - | 710.35 | 709.52 | 7.57 | 12 | 701.95 | 701.89 | 6 | 1.00% | |
| 9751 | 10+73.00 | JE | 1.7 ' RT | 6.0 | 9755 | 4-FT | - | - | - | 708.68 | 707.76 | 4.88 | 12 | 702.88 | 702.82 | 6 | 1.00% | SALVAGED INLET COVERS REQ'D (T COVER) |
| 9752 | 10+64.74 | JE | 1.7 ' RT | 8.0 | 9751 | 2X2.5-FT | - | - | - | 708.67 | 707.75 | 4.79 | 12 | 702.96 | 702.88 | 8 | 1.00% | SALVAGED INLET COVERS REQ'D (T COVER) |
| 9753 | 13+15.00 | JE | 21.5 ' LT | 6.0 | 9754 | 2X3-FT | HM | - | - | 710.64 | 709.81 | 5.99 | 12 | 703.82 | 703.76 | 6 | 1.00% | |
| 9754 | 13+11.05 | JE | 23.7 ' LT | - | - | - | - | - | - | - | - | - | - | - | - | - | - | CONCRETE COLLARS FOR PIPE REQ'D |
| 9755 | 10+78.60 | JE | 4.5 ' RT | - | - | - | - | - | - | - | - | - | - | - | - | - | - | CONCRETE COLLARS FOR PIPE REQ'D |
| 9757 | 10+58.00 | JE | 21.5 ' LT | 24.5 | 9752 | 2X3-FT | H-S | - | - | 708.88 | 708.05 | 3.81 | 12 | 704.24 | 704.00 | 24 | 0.98% | |
| 9760 | 113+42.00 | JSB | 1.5 ' RT | - | - | - | - | - | - | 703.93 | - | - | - | - | - | - | - | ADJUSTING INLET COVERS REQ'D |
| 9761 | 13+43.00 | JNB | 1.5 ' LT | - | - | - | - | - | - | 703.88 | - | - | - | - | - | - | - | ADJUSTING INLET COVERS REQ'D |

SIGNS MOUNTED ON SAME POST WILL BE PAID AS ONE(1) SIGN REMOVAL.
NEW SIGN POST LENGTHS IN MQ ARE ESTIMATES AND CONTRACTOR IS RESPONSIBLE FOR INSTALLING CORRECT LENGTH POST.

N

1 W3-1 36"X36"
2 J1-1 24"X39"
3 R2-1 24"X30"
4 D1-2 66"X36"
5 D1-62 84"X78"
6 W3-2
7 R4-7 24"X30"
8 D1-2 72"X30"
9 R1-2 36"X31"
10 R1-2 36"X31" ***
11 12 13 14 15 16 R6-4B
17 D1-1 42"X30" ***
18 R5-57 36"X36"
19 20 R1-2 36"X31" ***
21 22 R5-1
23 R5-1A 36"X24"
24
25 R5-1A 36"X24"
26 R5-1 30"X30" ***
27 R3-1 24"X24" ***
28 29 R1-2 36"X31" ***
30 R4-7 24"X30" ***
31 D1-2 72"X30"
32 D1-1 60"X30" ***
33 D1-62 72"X66"
34 D1-1 72"X15"
35 D1-62 72"X66"
36 D1-2 60"X30"
37 R4-7 24"X30" ***
38 39 R1-2 36"X31" ***
40 R3-1 24"X24" ***
41 D1-1 42"X30" ***
42 R5-57 36"X36"
43 45 47 R6-4B
44 46 48
49 50 R1-2 36"X31" ***
51 R5-1 30"X30" ***
52 53 R5-1
54 R5-1A 36"X24"
55 R3-8IR 36"X30"
56 W3-2
57 R5-1A 36"X24"
58 R1-2 36"X31" ***
59 D1-2 66"X36"
60 M1-5A 24"X24"
61 R4-7 24"X30"
62 R2-1 24"X30"
63 64 R1-2 36"X31" ***
65 D1-3 72"X36"
66 W3-2
67 D1-62 84"X78"

SIGN - MOVE
SIGN - REMOVE
SIGN - NEW INSTALL
SIGN - REMOVE AND REPLACE
*** SIGN - ON REMOVABLE STEEL POST

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PERMANENT SIGNING | SHEET 100 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\DOTETS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\SHEETS\SIGNING PLANS\11306678_023201-PSCTH J RAB_PRE PSE.DWG
LAYOUT NAME - 023201-ps
PLOT DATE : 5/31/2024 12:45 PM PLOT BY : SIKORSKI, ERIC T PLOT NAME : PLOT SCALE : 1 IN:100 FT

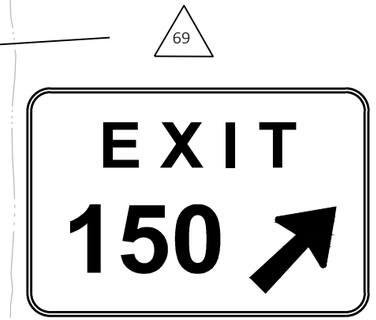
2

N

MOVE AND REINSTALL EXISTING SIGN ON NEW POSTS IF NECESSARY FOR CONSTRUCTION.
PAID AS REMOVING POSTS, INSTALLING POSTS, AND MOVING SIGNS

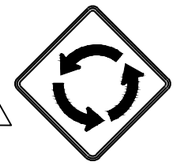
68
D1-62

69




E5-1A

70



W2-6

X SIGN - MOVE

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PERMANENT SIGNING | SHEET 101 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\DOTETS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\SHEETS\SIGNING PLANS\11306678_023201-PSCTH J RAB_PRE PSE.DWG
LAYOUT NAME - 023202-ps
PLOT DATE : 9/12/2024 9:14 AM
PLOT BY : SIKORSKI, ERIC T
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

71

W2-6

72

E5-1A

73

D1-62

SIGN

RIPRAP

△X SIGN - MOVE

MOVE AND REINSTALL EXISTING SIGN ON NEW POSTS IF NECESSARY FOR CONSTRUCTION.
PAID AS REMOVING POSTS, INSTALLING POSTS, AND MOVING SIGNS

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PERMANENT SIGNING | SHEET 102 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\DOTETS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\SHEETS\SIGNING PLANS\11306678_023201-PSCTH J RAB_PRE PSE.DWG
LAYOUT NAME - 023203-ps
PLOT DATE : 9/12/2024 9:09 AM
PLOT BY : SIKORSKI, ERIC T
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

Plant Data Table

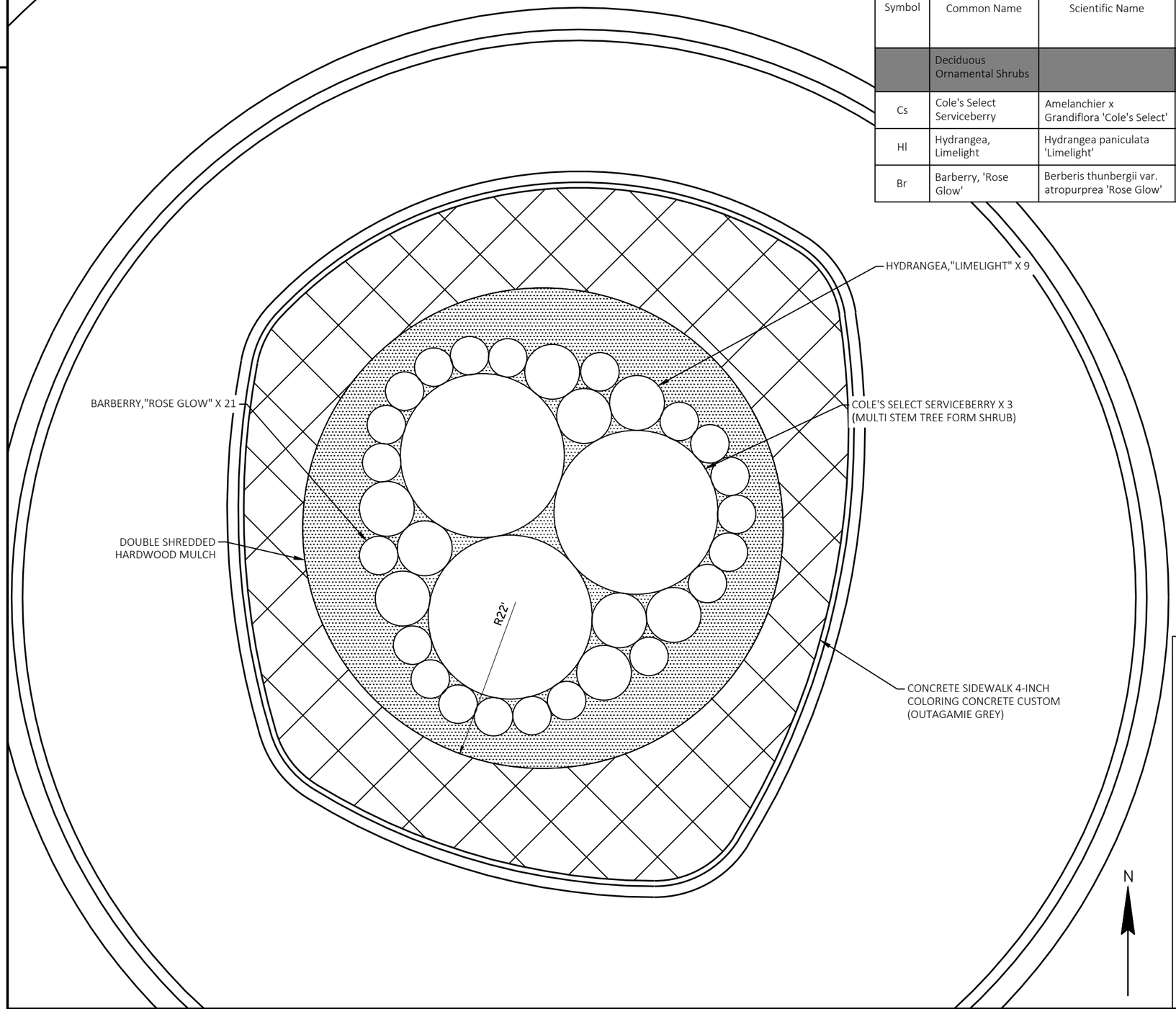
| Symbol | Common Name | Scientific Name | Average Mature Height | Size When Planted | Root Zone Mode | Minimum Size | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Ball/Pot | | Root Spread | Plant Hole | |
| | | | | | | Diameter | Depth | | Diameter | Depth |
| | Deciduous Ornamental Shrubs | | | | | | | | | |
| Cs | Cole's Select Serviceberry | Amelanchier x Grandiflora 'Cole's Select' | 20' Ht. | 5' Ht. | B&B | 24" | 12" | ---- | 36" | 12" |
| Hl | Hydrangea, Limelight | Hydrangea paniculata 'Limelight' | 7' Ht. | 3' Ht./#5 | CONT | 12" | 8" | ---- | 36" | 8" |
| Br | Barberry, 'Rose Glow' | Berberis thunbergii var. atropurprea 'Rose Glow' | 2' Ht. | 12" Ht./#3 | CONT | 9" | 6" | ---- | 33" | 6" |

## LEGEND

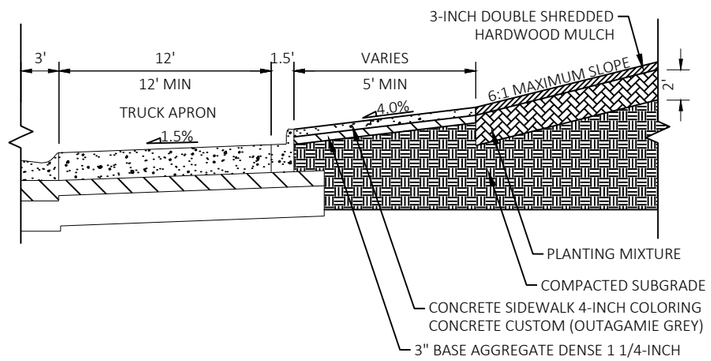
| | |
|---|---|
| CONT | Container Grown |
| B&B | Balled and Burlapped |
| Ht. | Height |

## PLANT SCHEDULE

| QTY | BOTANICAL / COMMON NAME |
|---|---|
| 3 | COLE'S SELECT SERVICEBERRY, B&B, 5-FT |
| 9 | HYDRANGEA,"LIMELIGHT", CONT, 3-FT |
| 21 | BARBERRY,"ROSE GLOW", CONT, 1-FT |
| 170 SY | DOUBLE SHREDDED HARDWOOD MULCH |




NOTES:
1. PLANTING MIXTURE SHALL BE INSTALLED IN 6-8" LAYERS. TAMPING EACH LAYER TO REMOVE AIR POCKETS AND PREVENT SETTLING. PLANTING MIXTURE SHALL BE NO LESS THAN 24" DEPTH AT ANY GIVEN POINT.




## ROUNDABOUT LANDSCAPE SECTION

2

2

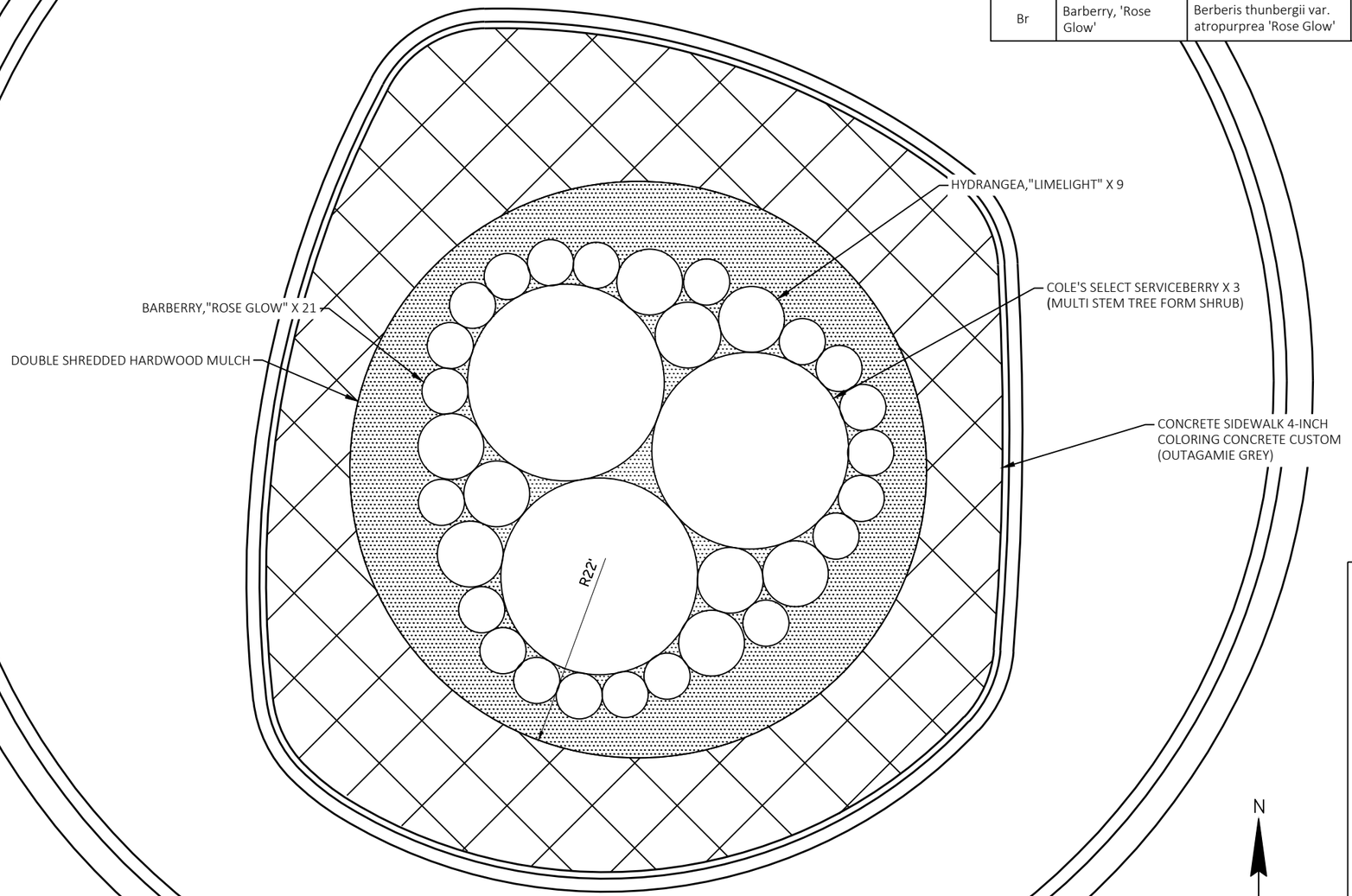
| Plant Data Table | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Symbol | Common Name | Scientific Name | Average Mature Height | Size When Planted | Root Zone Mode | Minimum Size | | | | |
| | | | | | | Ball/Pot | | Root Spread | Plant Hole | |
| | | | | | | Diameter | Depth | | Diameter | Depth |
| | Deciduous Ornamental Shrubs | | | | | | | | | |
| Cs | Cole's Select Serviceberry | Amelanchier x Grandiflora 'Cole's Select' | 20' Ht. | 5' Ht. | B&B | 24" | 12" | ---- | 36" | 12" |
| Hl | Hydrangea, Limelight | Hydrangea paniculata 'Limelight' | 7' Ht. | 3' Ht./#5 | CONT | 12" | 8" | ---- | 36" | 8" |
| Br | Barberry, 'Rose Glow' | Berberis thunbergii var. atropurprea 'Rose Glow' | 2' Ht. | 12" Ht./#3 | CONT | 9" | 6" | ---- | 33" | 6" |

## LEGEND

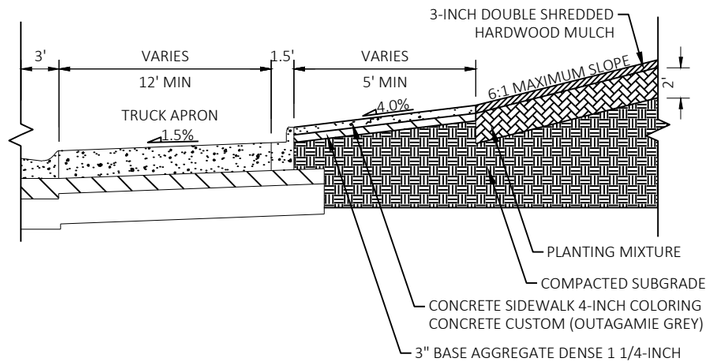
| | |
|---|---|
| CONT | Container Grown |
| B&B | Balled and Burlapped |
| Ht. | Height |

## PLANT SCHEDULE

| QTY | BOTANICAL / COMMON NAME |
|---|---|
| 3 | COLE'S SELECT SERVICEBERRY, B&B, 5-FT |
| 9 | HYDRANGEA,"LIMELIGHT", CONT, 3-FT |
| 21 | BARBERRY,"ROSE GLOW", CONT, 1-FT |
| 170 SY | DOUBLE SHREDDED HARDWOOD MULCH |




NOTES:
1. PLANTING MIXTURE SHALL BE INSTALLED IN 6-8" LAYERS. TAMPING EACH LAYER TO REMOVE AIR POCKETS AND PREVENT SETTLING. PLANTING MIXTURE SHALL BE NO LESS THAN 24" DEPTH AT ANY GIVEN POINT.




## ROUNDABOUT LANDSCAPE SECTION

| PROJECT NO: 1130-66-78 | HWY: CTH J | COUNTY: OUTAGAMIE | PLANTINGS - ROUNDABOUT JK | SHEET 104 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\023101-PL.DWG
LAYOUT NAME - 023102-pl
PLOT DATE : 7/29/2024 4:24 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

STREET LIGHTING PLANS PREPARED BY

KL Engineering
[A] Better Experience

WISCONSIN
JACOB A. JOYAL
46965-6
OREGON, WI
PROFESSIONAL ENGINEER

07/11/2024
(DATE)

(SIGNATURE)

GENERAL STREET LIGHTING NOTES:

1) WISCONSIN DOT NORTHEAST REGION ELECTRICAL UNIT SHALL APPROVE THE FINAL LOCATION FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO INSTALLATION. CONTACT THEM 3 DAYS IN ADVANCE AT (920) 492-5654 OR (920) 492-5628.

2) PITCH ALL CONDUIT TOWARDS PULLBOXES. A 2" DRAIN DUCT TO DITCH OR STORM SEWER REQUIRED FOR ALL PULLBOXES IN LOW POINTS. REFER TO THE MISCELLANEOUS QUANTITIES FOR LOCATIONS OF DRAIN DUCT.

3) THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

4) REFER TO STANDARD DETAIL DRAWING, CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL), WITH EXCEPTION TO CONDUIT ENTRY THROUGH THE CABINET SIDE. DO NOT DRILL OR OTHERWISE PIERCE THE CABINET ENCLOSURE FOR ELECTRICAL SERVICE WIRING ACCESS. SEE CONSTRUCTION DETAILS FOR CABINET BASES SHOWING UNDERGROUND CONDUIT ENTRY TO METER PEDESTAL.

5) REFER TO ITS PLANS FOR LOCATIONS OF SHARED INFRASTRUCTURE.

6) REFER TO STAKING DATA FOR EXACT LOCATIONS, WITH ALL LOCATIONS APPROVED BY THE ENGINEER PRIOR TO INSTALL. GENERAL GUIDLINES FOR OFFSETS ARE AS FOLLOWS:
-BEHIND CURB AND GUTTER: 4.33' FROM FACE OF CURB TO CENTER OF BASE
-BEHIND GUARDRAIL OR BARRIER: 4.83' FROM FACE OF BARRIER TO CENTER OF BASE
-ON SHOULDER: 6' FROM SUBGRADE SLOPE HINGE POINT TO CENTER OF BASE
-IN FRONT OF RETAINING WALLS: 1.5' MINIMUM

7) CONDUIT RIGID METALLIC MAY BE REQUIRED ACROSS STRUCTURE JOINTS AT CERTAIN LOCATIONS. FIVE FEET (MINIMUM) ON EITHER SIDE OF THE JOINT REQUIRED. APPLY ASPHALTIC SEALANT TO ANY EXPOSED METALLIC CONDUIT. EXPANSION FITTING BONDING JUMPER TO ASPHALTIC SEALANT TO BE CONSIDERED INCIDENTAL TO THE CONDUIT. REFER TO LOCATIONS SHOWN IN THE PLANS FOR RIGID METALLIC CONDUIT LOCATIONS.

8) CABINET BASES AND THE PULLBOXES AND CONDUIT WITHIN THE AREA OF CABINET BASES SHALL BE INSTALLED PER FIELD CONDITIONS (WITH ENGINEER APPROVAL). VERIFY THE LOCATION OF ALL ELECTRICAL FACILITIES WITH THE ENGINEER PRIOR TO INSTALLING.

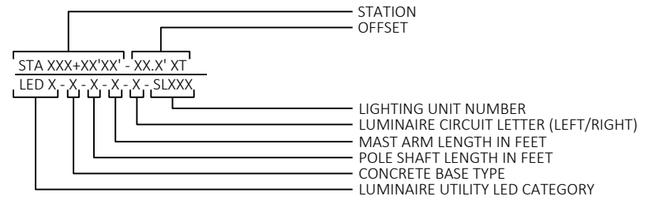
LIGHTING PLAN LEGEND

- PROPOSED CONCRETE CONTROL CABINET BASE/ELEC. SERVICE
- PROPOSED PULL BOX NON-CONDUCTIVE (24"X42")
- PROPOSED LIGHTING CONDUIT (2" SCHEDULE 40 PVC)
- PROPOSED LIGHTING CONDUIT (3" SCHEDULE 80 PVC)

UNLESS SPECIFIED OTHERWISE

- PROPOSED SINGLE ARM LUMINAIRE
- PROPOSED TWIN ARM LUMINAIRE
- B-XX-XXXX — SEE STRUCTURE PLANS FOR ELECTRICAL DETAILS

*STRUCTURE NUMBERS WITHOUT A BOX INDICATE NO ELECTRICAL INFRASTRUCTURE INCLUDED




CB1500
CTH J & IH 41 NB
WISDOT SERVICE

TO BE INSTALLED WITH PROJECT ID 1130-66-72 & 1130-67-71

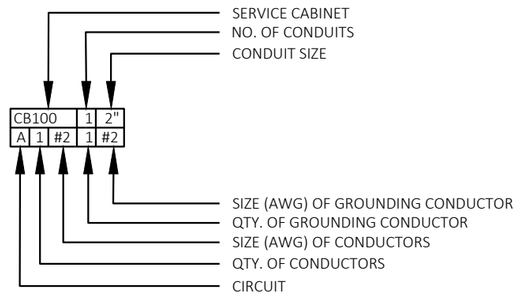
480V PHASE TO PHASE

CB1600
CTH J & IH 41 SB
WISDOT SERVICE

A - BLACK
B - RED
C - BLUE
D - BROWN

240V PHASE TO PHASE

CONDUIT/CONDUCTOR LEGEND




ABBREVIATIONS

STR - STRUCTURE MOUNT (REFER TO STRUCTURE PLANS)
PWO - PULLWIRE ONLY REQ'D

SHEET 1 OF 8

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | LIGHTING PLANS - TITLE SHEET | SHEET 105 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\IADAMS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\DSGN\LIGHTING\SHEETS\SHEETSPLAN\1130-66-78_CTH J INTERCHANGE\023601-LP.DWG
LAYOUT NAME - TITLE
PLOT DATE : 7/25/2024 12:01 PM PLOT BY : ISAIAH ADAMS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

## GENERAL NOTES (APPLIES TO THIS CONSTRUCTION DETAIL)

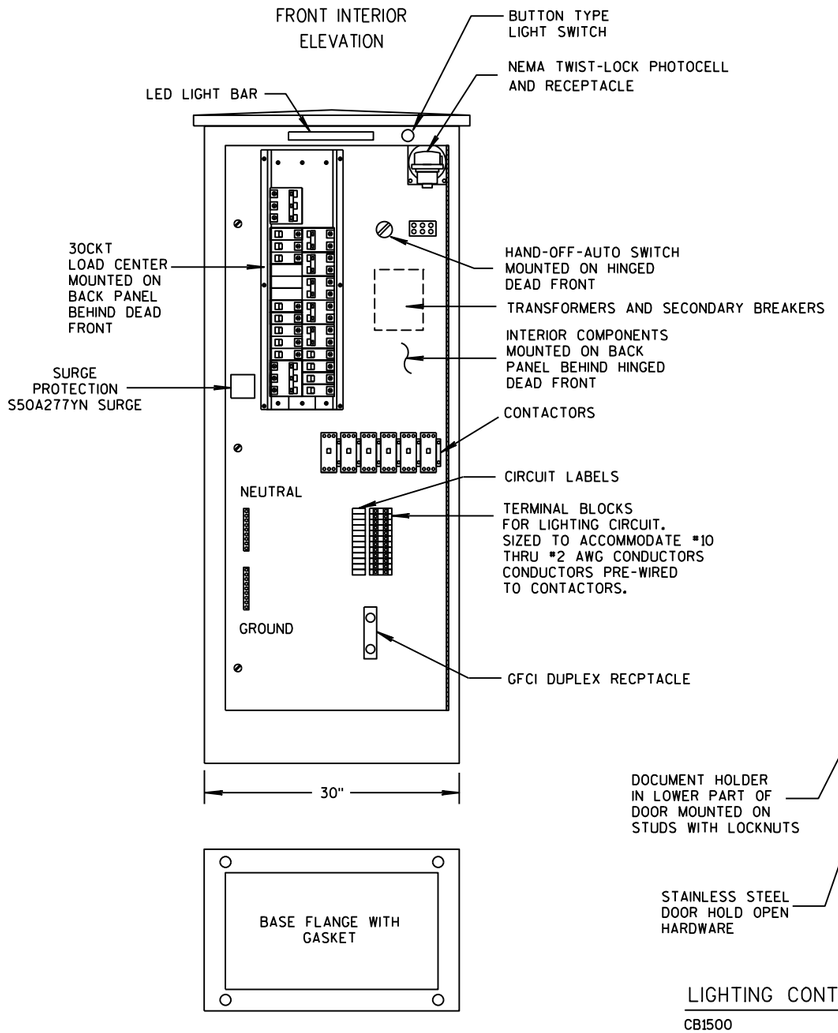
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

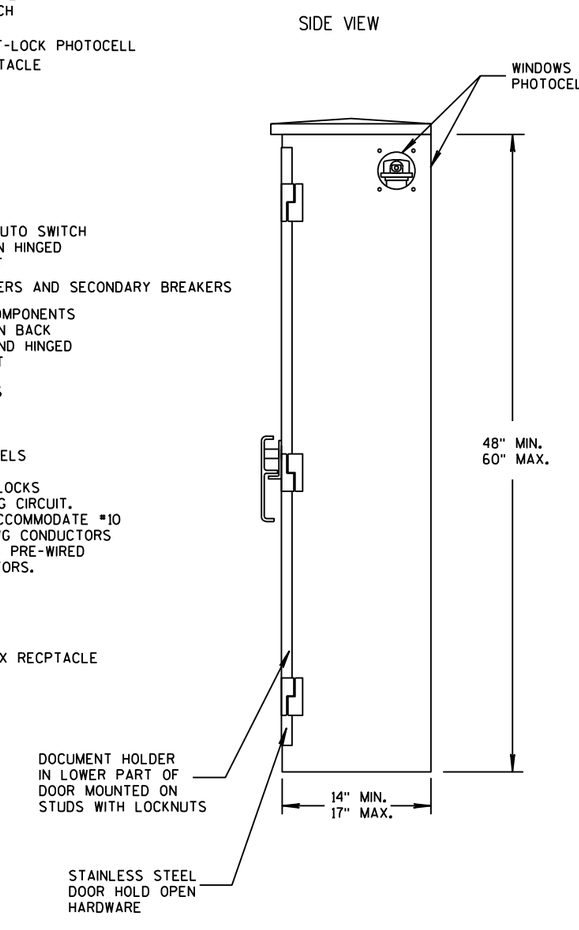
ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

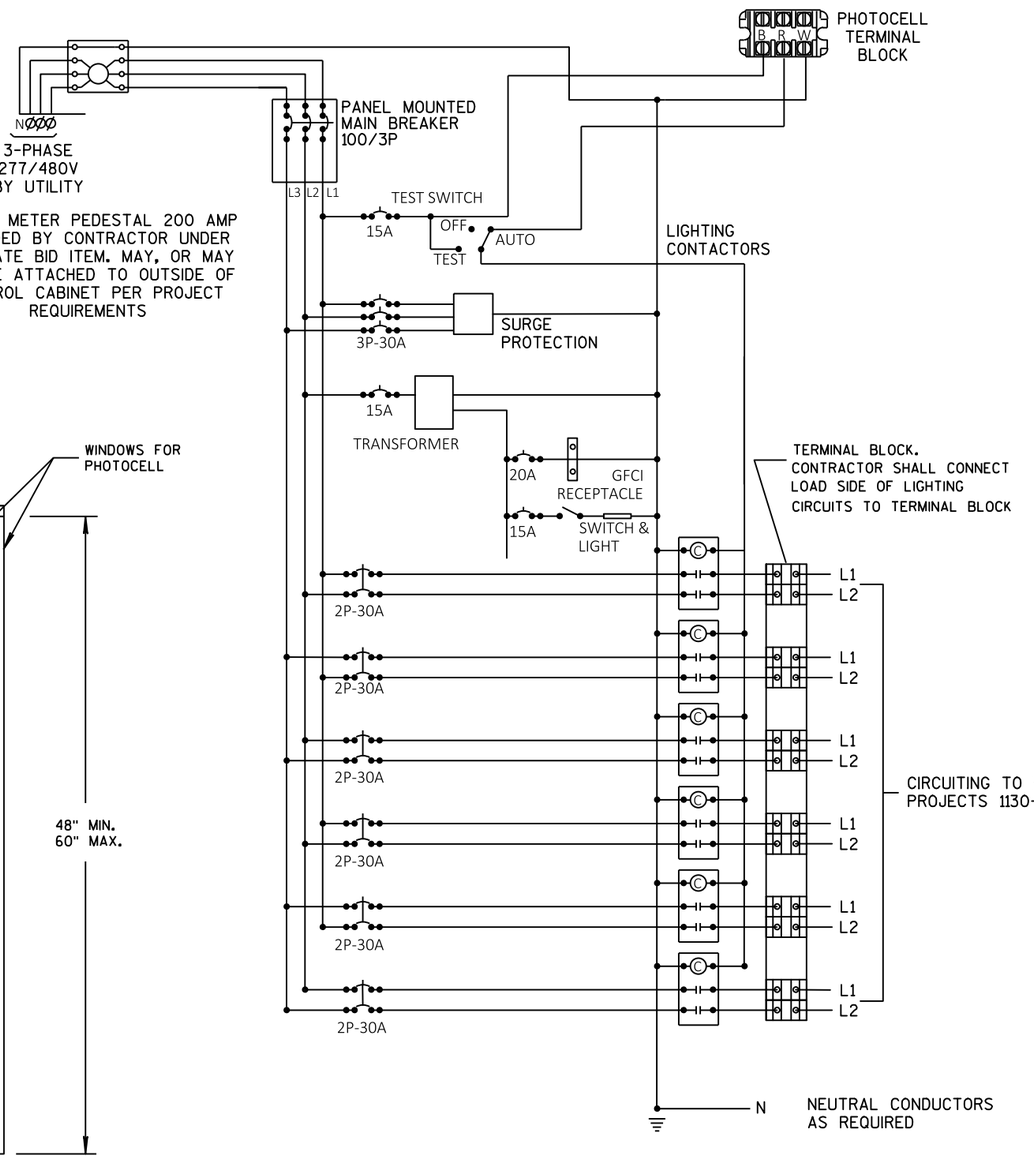
ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.




## LIGHTING CONTROL CABINET - SCHEMATICS

CB1500 SPV.0060.0500

SHEET 2 OF 8

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | LIGHTING PLANS - CONTROL CABINET SCHEMATICS | SHEET 106 | E |
|---|---|---|---|---|---|

## GENERAL NOTES (APPLIES TO THIS CONSTRUCTION DETAIL)

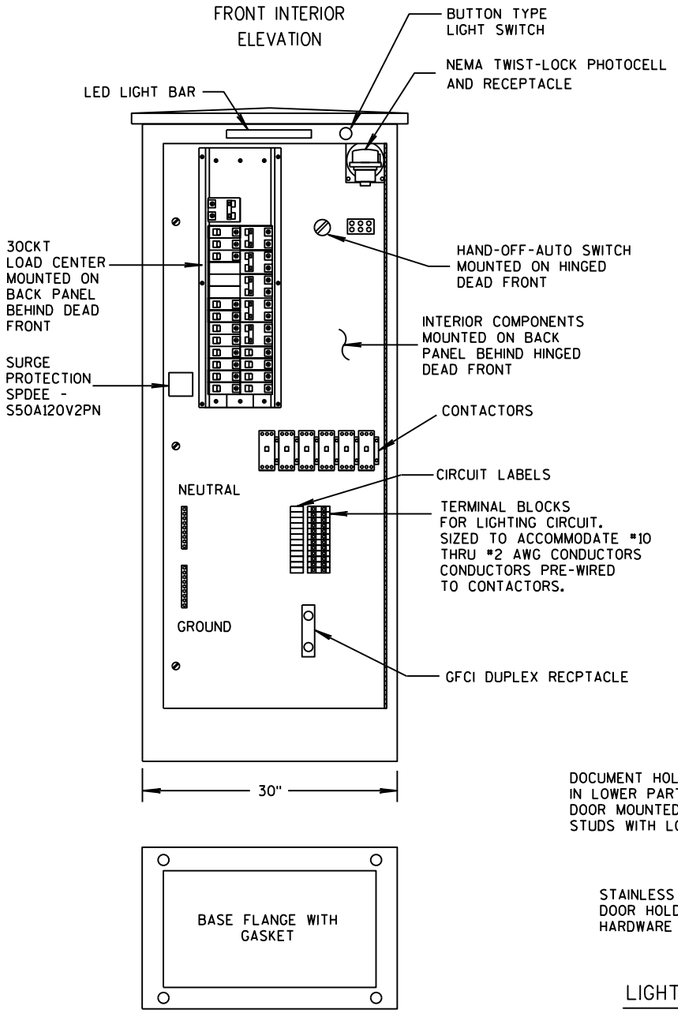
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

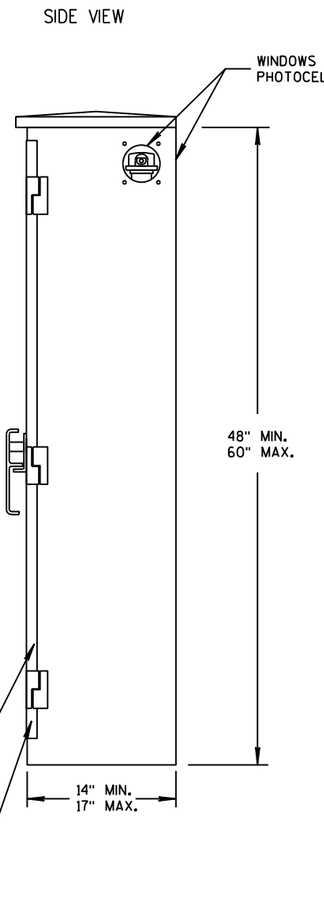
ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

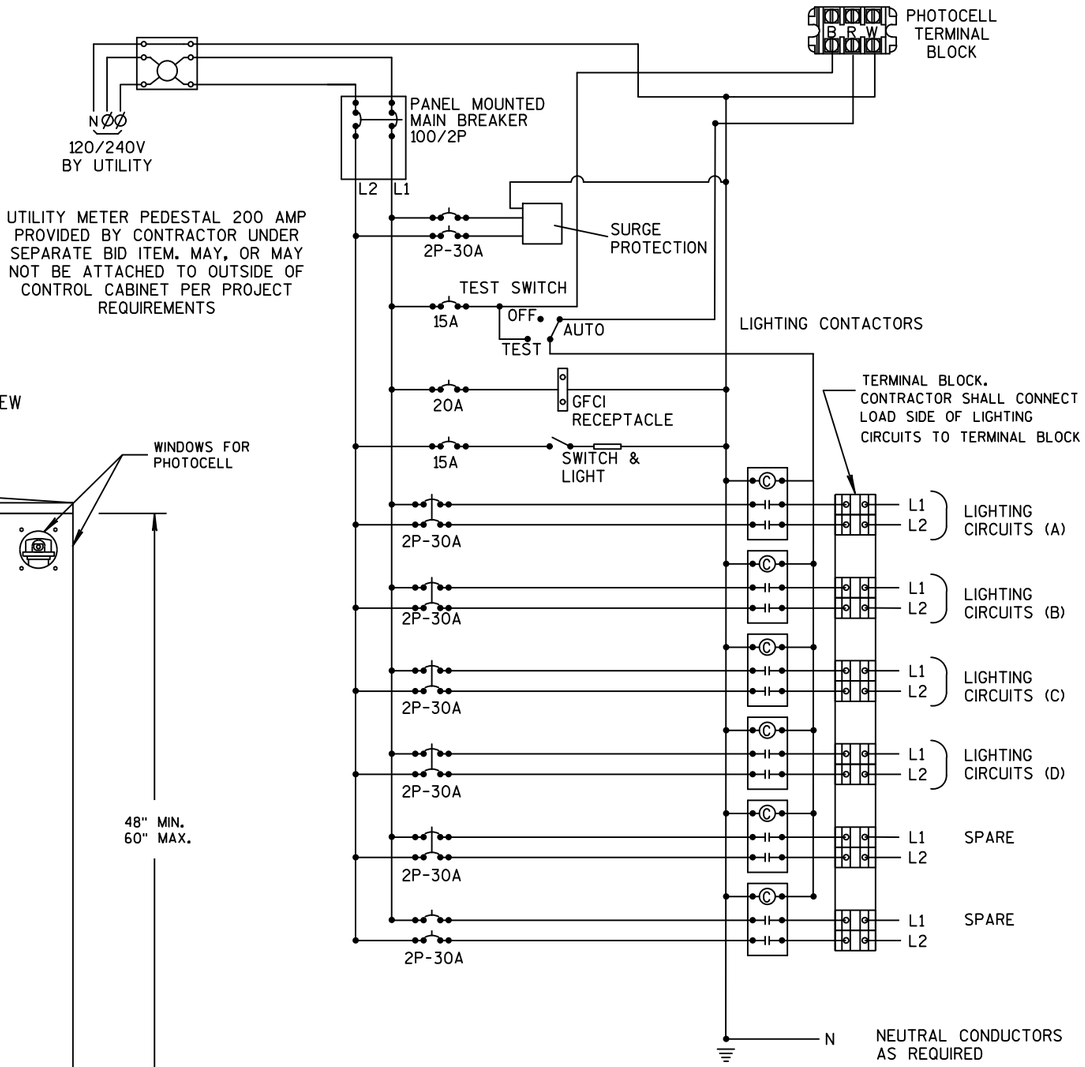
ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.




## LIGHTING CONTROL CABINET - SCHEMATICS

CB1600 659.2130



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | LIGHTING PLANS - CONTROL CABINET SCHEMATICS | SHEET 107 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNE\USH 41 CORRIDOR LIGHTING\CIVIL 3D\SHEETSPLAN\CONSTRUCTION DETAILS\1130-66-78_CTH J INTERCHANGE\CONTROL CABINET SCHEMATICS_CTH J INTERCHANGE 240V.DWG PLOT DATE : 7/25/2024 9:39 AM PLOT BY : ANDREW LOBDELL PLOT NAME : PLOT SCALE : XXXXXX
LAYOUT NAME - CONTROL CABINET
WISDOT/CADDS SHEET 42

2

▲ 1

| TO BE INSTALLED WITH PROJECT ID 1130-66-72 & 1130-67-71 |
|---|
| 480V PHASE TO PHASE |

- L44-2074 / IH 41 CORRIDOR - HYLAND AVE (CTH J) INTERCHANGE / CITY OF KAUKAUNA / OUTAGAMIE COUNTY
- CB1500 / NORTHWEST QUADRANT OF NB IH 41 ON-RAMP
- 240/480 VOLT SINGLE PHASE/200 AMP SERVICE
- MAIN LUGS ONLY METER PEDESTAL
- CIRCUIT DESCRIPTIONS

  -TO BE INSTALLED WITH PROJECT ID 1130-66-72 & 1130-67-71

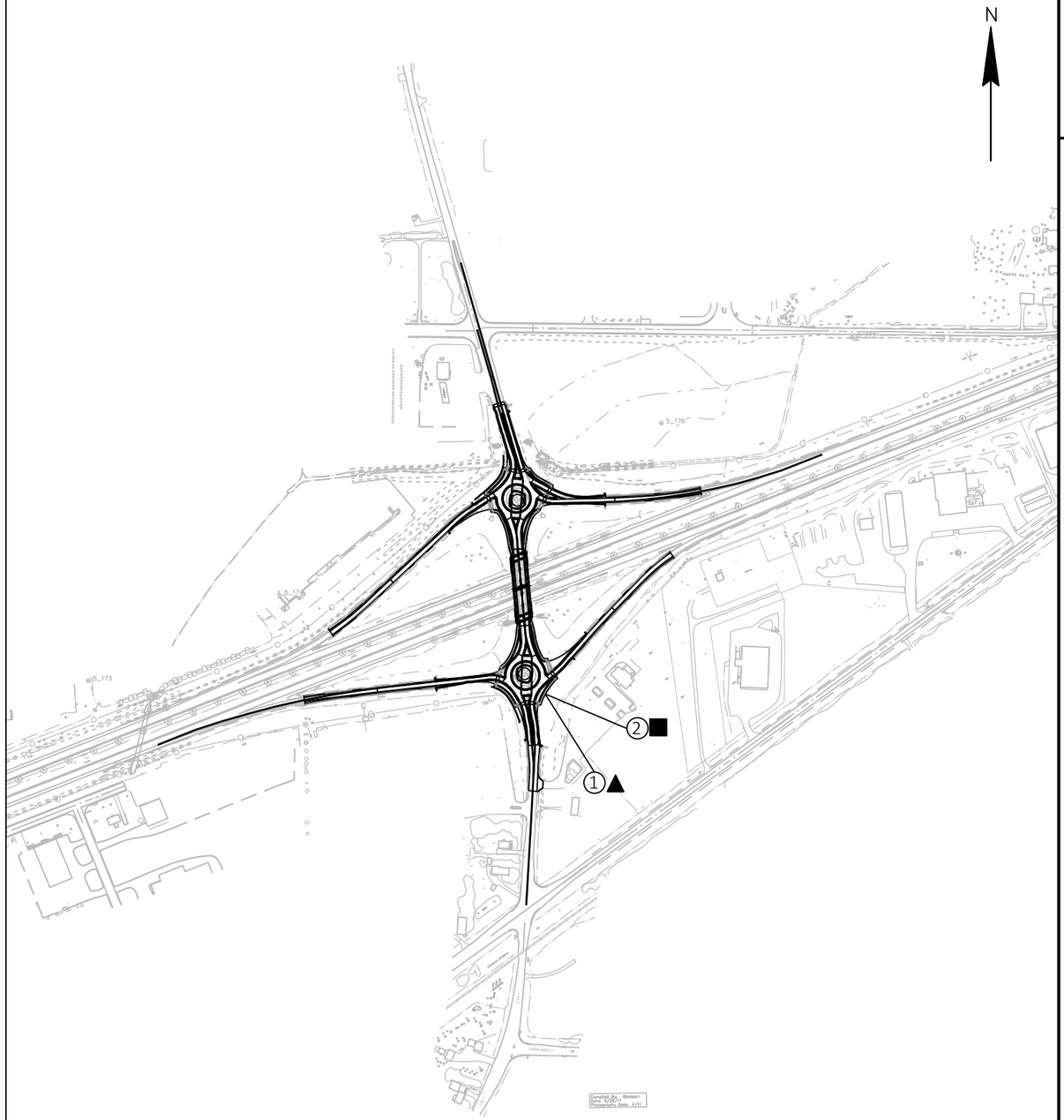
■ 2

| A - BLACK<br>B - RED<br>C - BLUE<br>D - BROWN |
|---|
| 240V PHASE TO PHASE |

- L44-2075 / IH 41 CORRIDOR - HYLAND AVE (CTH J) INTERCHANGE / CITY OF KAUKAUNA / OUTAGAMIE COUNTY
- CB1600 / SOUTHEAST QUADRANT OF NB IH 41 ON-RAMP
- 120/240 VOLT SINGLE PHASE/200 AMP SERVICE
- METER BREAKER PEDESTAL
- CIRCUIT DESCRIPTIONS

  CKT A - IH 41 SB OFF-RAMP TO SOUTHEAST LEG OF HYLAND AVE
  CKT B - IH 41 NB ON-RAMP TO NORTHEAST LEG OF HYLAND AVE
  CKT C - IH 41 NB OFF-RAMP TO NORTHWEST LEG OF HYLAND AVE
  CKT D - IH 41 SB ON-RAMP TO SOUTHWEST LEG OF HYLAND AVE

WISDOT SYSTEMS

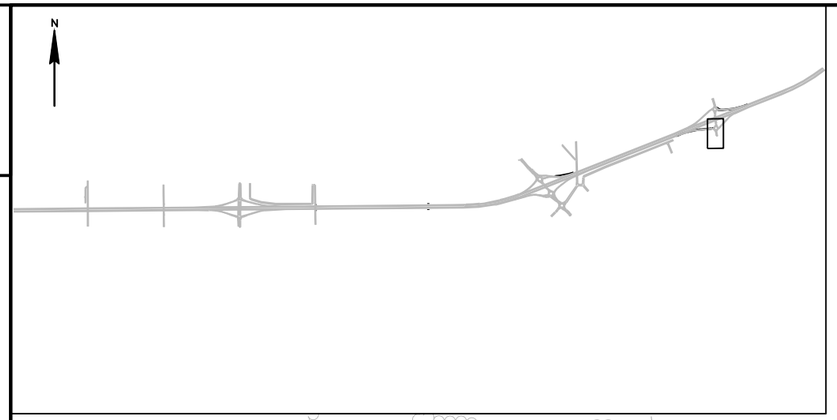



2

SHEET 4 OF 8

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | LIGHTING PLANS - CABINET MAP | SHEET 108 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\IADAMS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\DSGN\LIGHTING\SHEETS\SHEETSPLAN\1130-66-78_CTH J INTERCHANGE\023601-LP.DWG
LAYOUT NAME - Cabinet Map
PLOT DATE : 7/25/2024 12:02 PM PLOT BY : ISAIAH ADAMS PLOT NAME : PLOT SCALE : ############
WISDOT/CADDS SHEET 42



2

N

INSTALLED WITH PROJECT 1130-67-71

INSTALLED WITH PROJECT 1130-66-78

STA 1183+83'JB' - 36.8' RT
PB1505

STA 1184+38'JB' - 22.7' RT
LED B - 5 - 30 - 12 - D - SL1605

STA 1185+55'JB' - 37.8' RT
PB1606

STA 1185+74'JB' - 31.8' RT
LED B - 5 - 30 - 12 - C - SL1604

STA 14+88'JNB' - 72.4' LT
LED B - 7 - 40 - 12 - D - SL1603

STA 13+95'JNB' - 60.7' LT
PB1504

STA 14+83'JNB' - 67.4' LT
PB1605

INSTALLED WITH PROJECT 1130-66-78

STA 1185+68'JB' - 18.4' LT
PB1607

STA 1186+09'JB' - 47.6' LT
LED B - 5 - 30 - 12 - D - SL1606

STA 17+32'JNB' - 49.0' LT
LED B - 5 - 30 - 12 - C - SL1610

STA 17+79'JNB' - 35.9' LT
PB1609

STA 19+20'JNB' - 28.5' LT
LED B - STR - 30 - 12 - D - SL1612

STA 20+63'JNB' - 35.7' LT
PB1611

STA 20+63'JNB' - 36.5' LT
LED B - 5 - 30 - 12 - C - SL1613

MATCH LINE STA. 21+00'JNB'

STA 17+94'JNB' - 32.7' RT
LED B - 5 - 30 - 12 - A - SL1611

STA 17+82'JNB' - 37.0' RT
PB1610

STA 20+78'JNB' - 35.3' RT
PB1612

STA 1187+32'JA' - 70.8' LT
LED B - 5 - 30 - 12 - B - SL1607

STA 1187+49'JA' - 48.8' LT
PB1608

STA 1189+61'JA' - 30.0' RT
LED B - 5 - 30 - 12 - A - SL1609

INSTALLED WITH PROJECT 1130-66-78

STA 1187+33'JA' - 35.9' RT
PB1604

STA 1188+00'JA' - 21.3' RT
LED B - 5 - 30 - 12 - B - SL1608

STA 1190+46'JA' - 31.2' RT
PB1502

INSTALLED WITH PROJECT 1130-67-71

LOCALLY OWNED LIGHTING TO BE DETERMINED

STA 13+18'JNB' - 27.8' RT
PB1600

STA 13+36'JNB' - 24.9' RT
LED B - 5 - 30 - 12 - D - SL1600

STA 13+09'JNB' - 35.1' RT
PB1503

STA 14+08'JNB' - 24.1' RT
PB1601

STA 14+71'JNB' - 31.1' RT
LED B - 5 -30 - 12 - C - SL1601

STA 15+24'JNB' - 52.8' RT
PB1602

STA 0+76'JH' - 56.6' RT
PB1500

STA 15+27'JNB' - 58.0' RT
CB1500

STA 15+35'JNB' - 86.1' RT
PB1501

STA 15+38'JNB' - 64.5' RT
CB1600

STA 15+49'JNB' - 76.7' RT
PB1603

STA 15+57'JNB' - 74.3' RT
LED B - 5 - 30 - 12 - A - SL1602

R/W (TYP.)

8+00 'JNB'

10+00 'JNB'

12+00 'JNB'

14+00 'JNB'

16+00 'JNB'

18+00 'JNB'

20+00 'JNB'

11+00

12+00

1+00

13+00

2+00

1184+00 'JB'

1184+00 'NB'

1184+00 'SB'

1186+00 'JB'

1186+00 'NB'

1186+00 'SB'

1188+00 'JA'

1190+00 'JA'

1190+00 'NB'

1190+00 'SB'

1192+00 'NB'

1192+00 'SB'

1192+00 'JA'

B-44-0338

IH 41 NB OFF RAMP

IH 41 NB ON RAMP

IH 41 FRONTAGE RD

CTH J

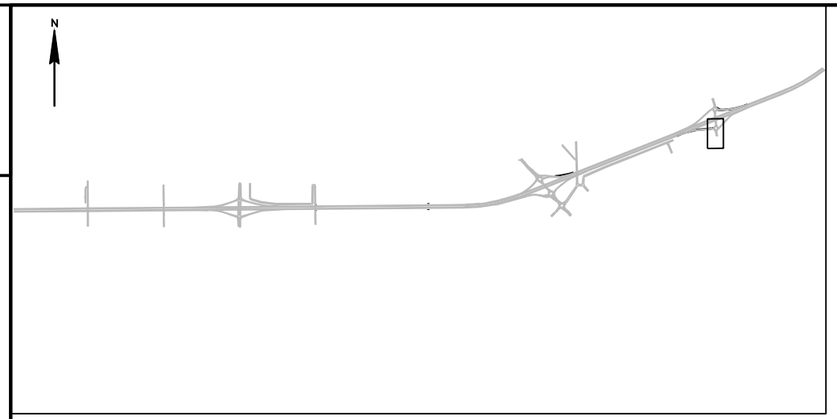
IH 41 NB

IH 41 SB

| USH 41 CORRIDOR - HOLLAND RD TO CTH J<br>HYLAND AVE - 480V<br>CITY OF KAUKAUNA, OUTAGAMIE COUNTY | | USH 41 CORRIDOR - HOLLAND RD TO CTH J<br>HYLAND AVE - 240V<br>CITY OF KAUKAUNA, OUTAGAMIE COUNTY | |
|---|---|---|---|
| LIGHTING NO. L44-2074 | | LIGHTING NO. L44-2075 | |
| DESIGNER: KL ENGINEERING, INC. | | DESIGNER: KL ENGINEERING, INC. | |
| DATE: 07-11-2024 | SHEET 1 OF 2 | DATE: 07-11-2024 | SHEET 1 OF 4 |

SHEET 5 of 8

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | LIGHTING PLANS | SHEET 109 | E |
|---|---|---|---|---|---|



INSTALLED WITH PROJECT 1130-67-71

INSTALLED WITH PROJECT 1130-66-78

INSTALLED WITH PROJECT 1130-66-78

PB1505
PWO 1-2"
SL1605
1184+00 'JB'
IH 41 NB OFF RAMP
1184+00 'NB'
1184+00 'SB'
1186+00 'NB'
1186+00 'SB'
1186+00 'JB'
PB1606
PB1607
SL1604
SL1606
PWO 1-2"
SL1603
1+00
11+00
12+00
SL1610
PB1609
SL1612
SL1613
PB1611
PB1612
MATCH LINE STA. 21+00 'JNB'
PB1504
PB1605
PWO 1-3"
8+00 'JNB'
10+00 'JNB'
12+00 'JNB'
14+00 'JNB'
16+00 'JNB'
18+00 'JNB'
20+00 'JNB'
CTH J
SL1600
PB1600
PB1601
PB1503
PWO 1-2"
SL1601
13+00
SL1602
PB1608
SL1608
SL1611
PB1610
1188+00 'NB'
1188+00 'SB'
2+00
1188+00 'JA'
PB1604
SL1608
PWO 1-2"
SL1609
1190+00 'JA'
IH 41 NB ON RAMP
PB1502
IH 41 NB
1190+00 'NB'
IH 41 SB
1190+00 'SB'
1192+00 'NB'
1192+00 'SB'
1192+00 'JA'
PB1602
CB1500
CB1600
PWO 2-3"
PB1500
PWO 2-3"
PWO 3-3"
PB1501
PB1603

| CB1600 | 1 | 2" |
|---|---|---|
| D | 2 | #8 | 1 | #8 |

| CB1600 | 1 | 3" |
|---|---|---|
| C | 4 | #8 | 3 | #8 |
| D | 6 | #8 | - | - |

| CB1600 | 1 | 2" |
|---|---|---|
| C | 4 | #8 | 2 | #8 |
| D | 4 | #8 | - | - |

| CB1600 | 1 | 2" |
|---|---|---|
| C | 4 | #8 | 2 | #8 |
| D | 4 | #8 | - | - |

| CB1600 | 1 | 2" |
|---|---|---|
| A | 4 | #8 | 2 | #8 |
| B | 4 | #8 | - | - |

| CB1600 | 1 | 2" |
|---|---|---|
| A | 4 | #8 | 2 | #8 |
| B | 4 | #8 | - | - |

| CB1600 | 1 | 3" |
|---|---|---|
| A | 6 | #8 | 3 | #8 |
| B | 6 | #8 | - | - |

| CB1600 | 1 | 2" |
|---|---|---|
| A | 2 | #8 | 1 | #8 |

LOCALLY OWNED LIGHTING TO BE DETERMINED

KEYED NOTES:

① INSTALL 1-2" CONDUIT, SEE STRUCTURE PLANS B-44-0338 FOR ADDITIONAL DETAILS.

1 =

| CB1600 | 1 | 2" |
|---|---|---|
| A | 2 | #8 | 1 | #8 |
| B | 2 | #8 | - | - |

2 =

| CB1600 | 1 | 2" |
|---|---|---|
| C | 2 | #8 | 1 | #8 |
| D | 2 | #8 | - | - |

3 =

| CB1600 | 1 | 3" |
|---|---|---|
| A | 2 | #8 | 1 | #8 |
| B | 2 | #8 | - | - |

4 =

| CB1600 | 1 | 3" |
|---|---|---|
| C | 2 | #8 | 1 | #8 |
| D | 2 | #8 | - | - |

* CONDUIT EMBEDDED IN PARAPET. SEE STRUCTURE PLANS B-44-0338.

| USH 41 CORRIDOR - HOLLAND RD TO CTH J<br>HYLAND AVE - 480V<br>CITY OF KAUKAUNA, OUTAGAMIE COUNTY | | USH 41 CORRIDOR - HOLLAND RD TO CTH J<br>HYLAND AVE - 240V<br>CITY OF KAUKAUNA, OUTAGAMIE COUNTY | |
|---|---|---|---|
| LIGHTING NO. L44-2074 | | LIGHTING NO. L44-2075 | |
| DESIGNER: KL ENGINEERING, INC. | | DESIGNER: KL ENGINEERING, INC. | |
| DATE: 07-11-2024 | SHEET 2 OF 2 | DATE: 07-11-2024 | SHEET 2 OF 4 |

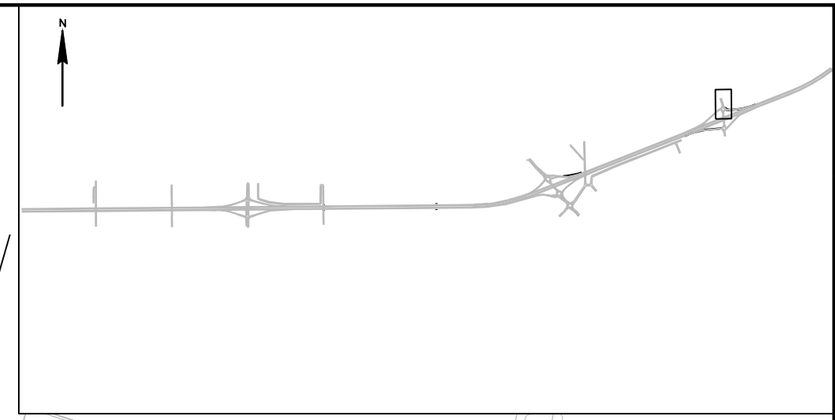
SHEET 6 of 8

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | LIGHTING PLANS - WIRING SHEET | SHEET 110 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\IADAMS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\DSGN\LIGHTING\SHEETS\SHEETSPLAN\1130-66-78_CTH J INTERCHANGE\023601-LP.DWG
LAYOUT NAME - 5A-100 SCALE
PLOT DATE : 7/25/2024 12:05 PM
PLOT BY : ISAIAH ADAMS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2




STA 1185+27'JC' - 25.8' LT
LED B - 5 - 30 - 12 - C - SL1623

STA 1186+68'JC' - 25.6' LT
LED B - 5 - 30 - 12 - D - SL1622

STA 1186+93'JC' - 30.4' RT
PB1620

STA 1186+99'JC' - 30.8' LT
PB1619

STA 21+71'JNB' - 83.4' LT
PB1621

STA 21+69'JNB' - 72.1' LT
LED B - 5 - 30 - 12 - D - SL1624

STA 1187+98'JC' - 48.2' LT
LED B - 7 - 40 - 12 - C - SL1621

STA 24+07'JNB' - 59.6' LT
LED B - 7 - 40 - 12 - D - SL1620

STA 24+57'JNB' - 49.6' LT
PB1618

STA 25+60'JNB' - 31.6' LT
LED B - 5 - 30 - 12 - C - SL1619

STA 25+70'JNB' - 30.2' LT
PB1617

LOCALLY OWNED
LIGHTING TO BE
DETERMINED

R/W (TYP.)

KELSO RD

IH 41 SB ON RAMP

1186+00 'JC'

1188+00 'JC'

MATCH LINE STA. 21+00'JNB'

CTH J

STA 21+50'JNB' - 45.2' RT
LED B - 5 - 30 - 12 - A - SL1614

STA 24+52'JNB' - 42.1' RT
PB1616

INSTALLED WITH
PROJECT
1130-66-78

STA 23+55'JNB' - 48.5' RT
PB1615

STA 23+43'JNB' - 50.4' RT
LED B - 5 - 30 - 12 - B - SL1618

STA 1189+30'JD' - 47.5' RT
LED B - 5 - 30 - 12 - B - SL1615

STA 1189+43'JD' - 29.2' RT
PB1613

STA 1189+72'JD' - 73.9' LT
PB1614

STA 1189+61'JD' - 9.2' RT
LED B - 5 - 30 - 12 - A - SL1616

STA 1191+01'JD' - 23.4' LT
LED B - 5 - 30 - 12 - B - SL1617

INSTALLED WITH
PROJECT
1130-66-78

INSTALLED WITH
PROJECT
1130-67-71

IH 41 SB OFF RAMP

1190+00 'JD'

1192+00 'JD'

SHEET 7 OF 8

USH 41 CORRIDOR - HOLLAND RD TO CTH J
HYLAND AVE - 24OV
CITY OF KAUKAUNA, OUTAGAMIE COUNTY

LIGHTING NO. L44-2075

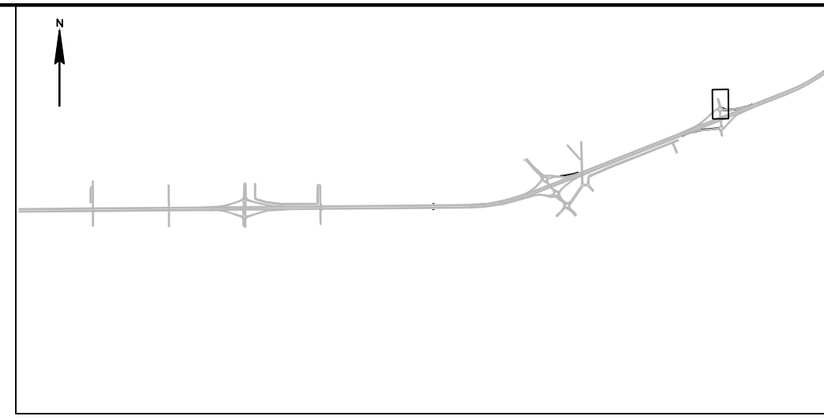
DESIGNER: KL ENGINEERING, INC.

DATE: 07-11-2024 | SHEET 3 OF 4

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | LIGHTING PLANS | SHEET 111 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\IADAMS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\DSGN\LIGHTING\SHEETS\SHEETSPLAN\1130-66-78_CTH J INTERCHANGE\023601-LP.DWG
LAYOUT NAME - 6-100 SCALE
PLOT DATE : 7/25/2024 12:06 PM
PLOT BY : ISAIAH ADAMS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2




N

SL1623

IH 41 SB ON RAMP

1186+00 'JC'

| CB1600 | 1 | 2" |
|---|---|---|
| C | 2 | #8 |
| | 1 | #8 |

SL1622

| CB1600 | 1 | 2" |
|---|---|---|
| C | 4 | #8 |
| | 2 | #8 |
| D | 4 | #8 |
| | - | - |

4

PB1619

| CB1600 | 1 | 2" |
|---|---|---|
| C | 4 | #8 |
| | 2 | #8 |
| D | 4 | #8 |
| | - | - |

PB1620

2

2

SL1624

PB1621

1+00

MATCH LINE STA. 21+00 'JNB'

1188+00 'JC'

SL1621

2

| CB1600 | 1 | 2" |
|---|---|---|
| C | 2 | #8 |
| | 1 | #8 |
| D | 2 | #8 |
| | - | - |

22+00 'JNB'

SL1620

PB1618

PWO 1-2"

PB1617

SL1619

3+00

4+00

24+00 'JNB'

26+00 'JNB'

28+00 'JNB'

30+00 'JNB'

CTH J

LOCALLY OWNED
LIGHTING TO BE
DETERMINED

SL1614

1

SL1615

PWO 1-3"

PWO 1-2"

1+00

SL1618

PB1615

PB1616

| CB1600 | 1 | 2" |
|---|---|---|
| A | 4 | #8 |
| | 2 | #8 |
| B | 4 | #8 |
| | - | - |

PB1613

SL1616

| CB1600 | 1 | 3" |
|---|---|---|
| A | 4 | #8 |
| | 3 | #8 |
| B | 6 | #8 |
| | - | - |

1190+00 'JD'

PB1614

1

INSTALLED WITH
PROJECT
1130-66-78

| CB1600 | 1 | 3" |
|---|---|---|
| A | 2 | #8 |
| | 2 | #8 |
| B | 4 | #8 |
| | - | - |

| CB1600 | 1 | 2" |
|---|---|---|
| B | 2 | #8 |
| | 1 | #8 |

SL1617

INSTALLED WITH
PROJECT
1130-66-78

IH 41 SB OFF RAMP

1192+00 'JD'

INSTALLED WITH
PROJECT
1130-67-71

1 = | CB1600 | 1 | 2" |
|---|---|---|
| A | 2 | #8 |
| | 1 | #8 |
| B | 2 | #8 |
| | - | - |

3 = | CB1600 | 1 | 3" |
|---|---|---|
| A | 2 | #8 |
| | 1 | #8 |
| B | 2 | #8 |
| | - | - |

2 = | CB1600 | 1 | 2" |
|---|---|---|
| C | 2 | #8 |
| | 1 | #8 |
| D | 2 | #8 |
| | - | - |

4 = | CB1600 | 1 | 3" |
|---|---|---|
| C | 2 | #8 |
| | 1 | #8 |
| D | 2 | #8 |
| | - | - |

SHEET 8 of 8

USH 41 CORRIDOR - HOLLAND RD TO CTH J
HYLAND AVE - 240V
CITY OF KAUKAUNA, OUTAGAMIE COUNTY

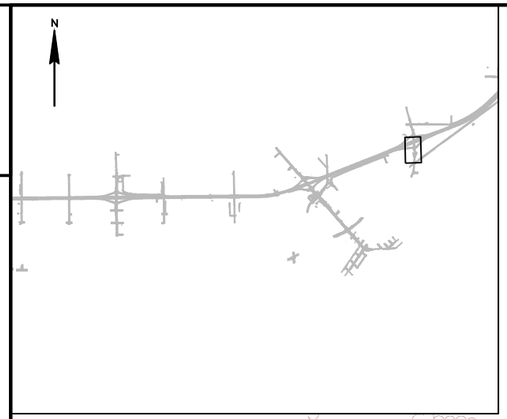
LIGHTING NO. L44-2075

DESIGNER: KL ENGINEERING, INC.

DATE: 07-11-2024 | SHEET 4 OF 4

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | LIGHTING PLANS - WIRING SHEET | SHEET 112 | E |
|---|---|---|---|---|---|

2




LIGHTING REMOVAL LEGEND

- EXISTING LIGHTING UNIT
- EXISTING PULL BOX (24" X 42")
- REMOVE OR ABANDON CONDUIT & CONDUCTORS
- EXISTING CONTROL CABINET
- * BOLD INDICATES ITEMS FOR REMOVAL

N

IH 41 NB OFF RAMP

EXPB102 EXPB103 EXSL103 EXSL104 EXSL102 EXPB101 EXPB104 EXSL105 EXSL206

MATCH LINE STA. 21+00 'JNB'

8+00 'JNB' 10+00 'JNB' 12+00 'JNB' 14+00 'JNB' 16+00 'JNB' 18+00 'JNB' 20+00 'JNB'

CTH J

R/W (TYP.)

EXSL101 EXSL100 EXPB100 EXCB100 EXSL108 EXPB107 EXPB105 EXSL106 EXSL107 EXPB106

1184+00 'NB' 1184+00 'SB' 1186+00 'NB' 1186+00 'SB' 1188+00 'NB' 1188+00 'SB'

IH 41 NB 1190+00 'NB' IH 41 SB 1190+00 'SB' 1192+00 'NB' 1192+00 'SB'

IH 41 NB ON RAMP

E FRONTAGE RD

CONSTRUCTION NOTES:

1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY.

2) ROUNDABOUT LIGHTING TO REMAIN OPERATIONAL THROUGH COMPLETION OF CONSTRUCTION STAGE 4.

SHEET 1 OF 2

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | LIGHTING REMOVAL PLANS | SHEET 113 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\IADAMS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\DSGN\LIGHTING\SHEETS\SHEETSPLAN\1130-66-78_CTH J INTERCHANGE\023401-LR (1130-66-78).DWG PLOT DATE : 7/10/2024 12:40 PM PLOT BY : ISAIAH ADAMS PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 5-100 SCALE

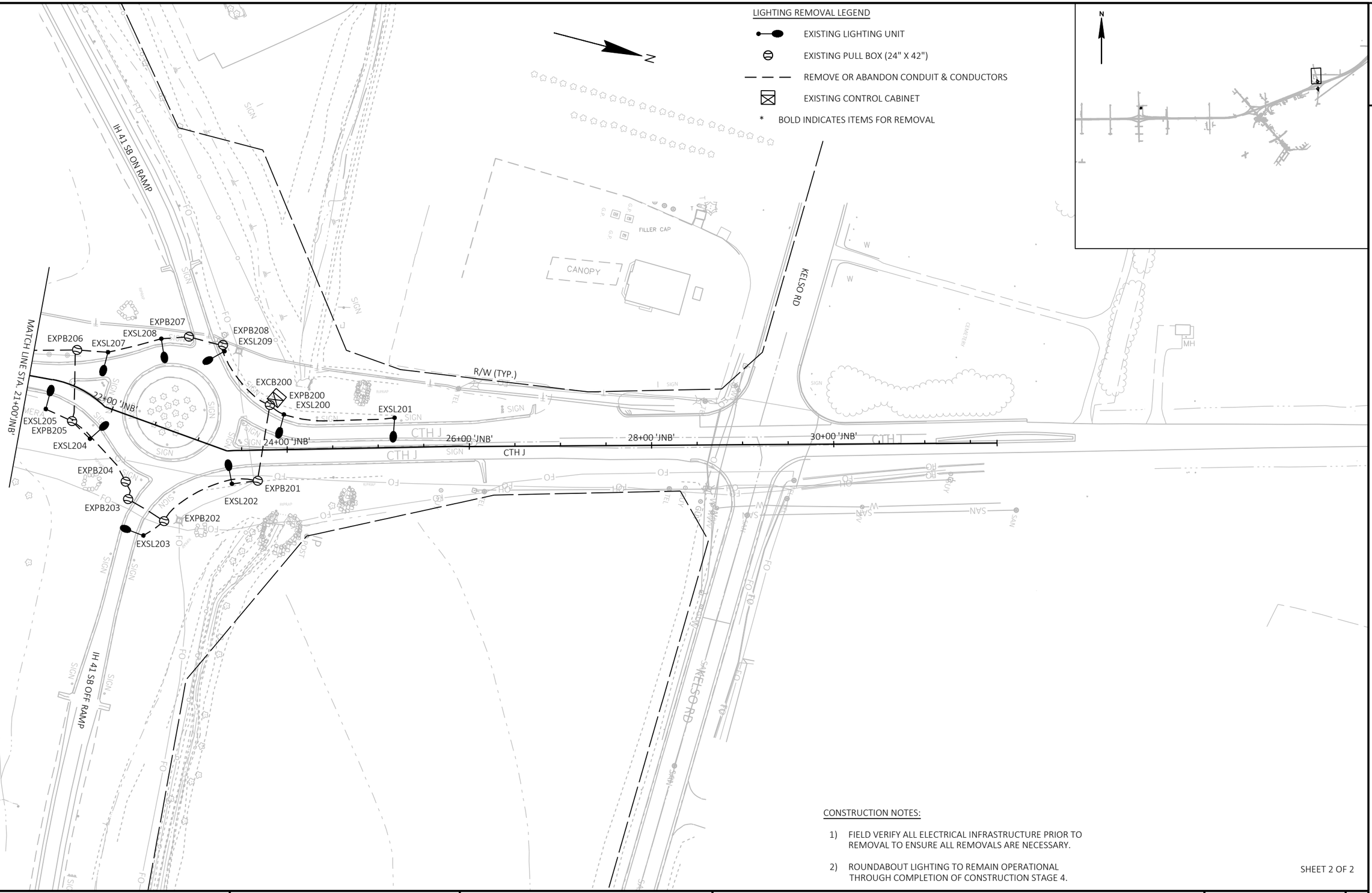
WISDOT/CADDS SHEET 42

2

LIGHTING REMOVAL LEGEND

- EXISTING LIGHTING UNIT
- EXISTING PULL BOX (24" X 42")
- REMOVE OR ABANDON CONDUIT & CONDUCTORS
- EXISTING CONTROL CABINET
- * BOLD INDICATES ITEMS FOR REMOVAL




CONSTRUCTION NOTES:

1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY.

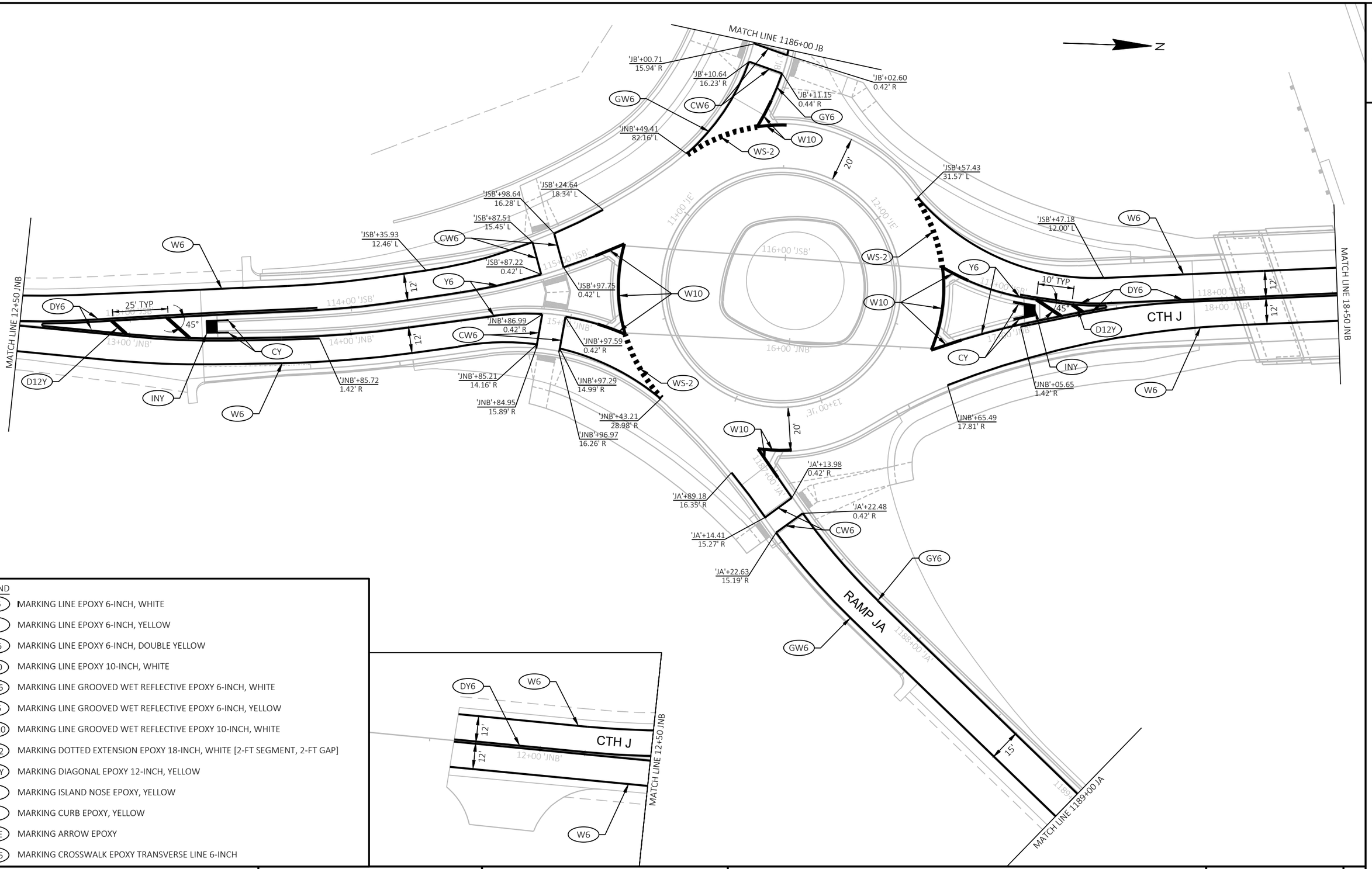
2) ROUNDABOUT LIGHTING TO REMAIN OPERATIONAL THROUGH COMPLETION OF CONSTRUCTION STAGE 4.

SHEET 2 OF 2

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | LIGHTING REMOVAL PLANS | SHEET 114 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\IADAMS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\DSGN\LIGHTING\SHEETS\SHEETSPLAN\1130-66-78_CTH J INTERCHANGE\023401-LR (1130-66-78).DWG PLOT DATE : 7/10/2024 12:41 PM PLOT BY : ISAIAH ADAMS PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 6-100 SCALE
WISDOT/CADDS SHEET 42

2




LEGEND

| | |
|---|---|
| W6 | MARKING LINE EPOXY 6-INCH, WHITE |
| Y6 | MARKING LINE EPOXY 6-INCH, YELLOW |
| DY6 | MARKING LINE EPOXY 6-INCH, DOUBLE YELLOW |
| W10 | MARKING LINE EPOXY 10-INCH, WHITE |
| GW6 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE |
| GY6 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW |
| GW10 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE |
| WS-2 | MARKING DOTTED EXTENSION EPOXY 18-INCH, WHITE [2-FT SEGMENT, 2-FT GAP] |
| D12Y | MARKING DIAGONAL EPOXY 12-INCH, YELLOW |
| INY | MARKING ISLAND NOSE EPOXY, YELLOW |
| CY | MARKING CURB EPOXY, YELLOW |
| MAE | MARKING ARROW EPOXY |
| CW6 | MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH |

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PAVEMENT MARKING | SHEET 115 E |

2

2

MATCH LINE 18+50 JNB

CTH J

MATCH LINE 1187+50 JC

MATCH LINE 24+50 JNB

RAMP JDR

RAMP JD

MATCH LINE 1190+50 JD

W6 DY6 'JSB'+56.72 12.00' L 'JSB'+94.95 20.35' L 'JC'+71.95 14.58' L 'JC'+71.95 0.42' L CW6 'JC'+79.86 14.68' L 'JC'+80.43 0.52' L GY6 GW6 W10 'JC'+04.03 19.91' L 'JSB'+21.70 32.08' L DY6 CY 45° Y6 W10 D12Y INY 'JNB'+57.34 1.30' R WS-2 20' WS-2 'JSB'+65.91 17.11' L W6 CW6 'JSB'+78.35 17.06' L W10 'JSB'+66.13 0.42' L 'JSB'+76.68 0.42' L Y6 'JNB'+63.29 0.42' R CW6 'JNB'+73.81 0.42' R W10 WS-2 'JNB'+04.07 42.00' R WS-2 W10 'JD'+27.78 0.42' L 'JD'+36.39 0.42' L CW6 'JD'+29.59 16.15' L 'JD'+39.62 15.90' L GW6 GY6 15' 'JNB'+72.90 15.57' R W6 GW6 MAE 'JNB'+62.26 15.34' R 'JNB'+62.25 17.82' R 'JDR'+41.06 0.42' L 'JDR'+49.56 0.42' L CW6 'JDR'+41.06 15.58' L 'JDR'+49.56 15.58' L GY6 GW10 'JDR'+65.96 0.25' L MAE 'JD'+13.72 14.74' L

LEGEND

| | |
|---|---|
| W6 | MARKING LINE EPOXY 6-INCH, WHITE |
| Y6 | MARKING LINE EPOXY 6-INCH, YELLOW |
| DY6 | MARKING LINE EPOXY 6-INCH, DOUBLE YELLOW |
| W10 | MARKING LINE EPOXY 10-INCH, WHITE |
| GW6 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE |
| GY6 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW |
| GW10 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE |
| WS-2 | MARKING DOTTED EXTENSION EPOXY 18-INCH, WHITE [2-FT SEGMENT, 2-FT GAP] |
| D12Y | MARKING DIAGONAL EPOXY 12-INCH, YELLOW |
| INY | MARKING ISLAND NOSE EPOXY, YELLOW |
| CY | MARKING CURB EPOXY, YELLOW |
| MAE | MARKING ARROW EPOXY |
| CW6 | MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH |

MATCH LINE 24+50 JNB W6 Y6 CY 125+00 'JSB' 126+00 'JSB' 25' TYP 45° DY6 'JNB'+61.33 9.10' L 15' 25+00 'JNB' 26+00 'JNB' 27+00 'JNB' CTH J INY D12Y W6 'JNB'+43.23 1.42' R

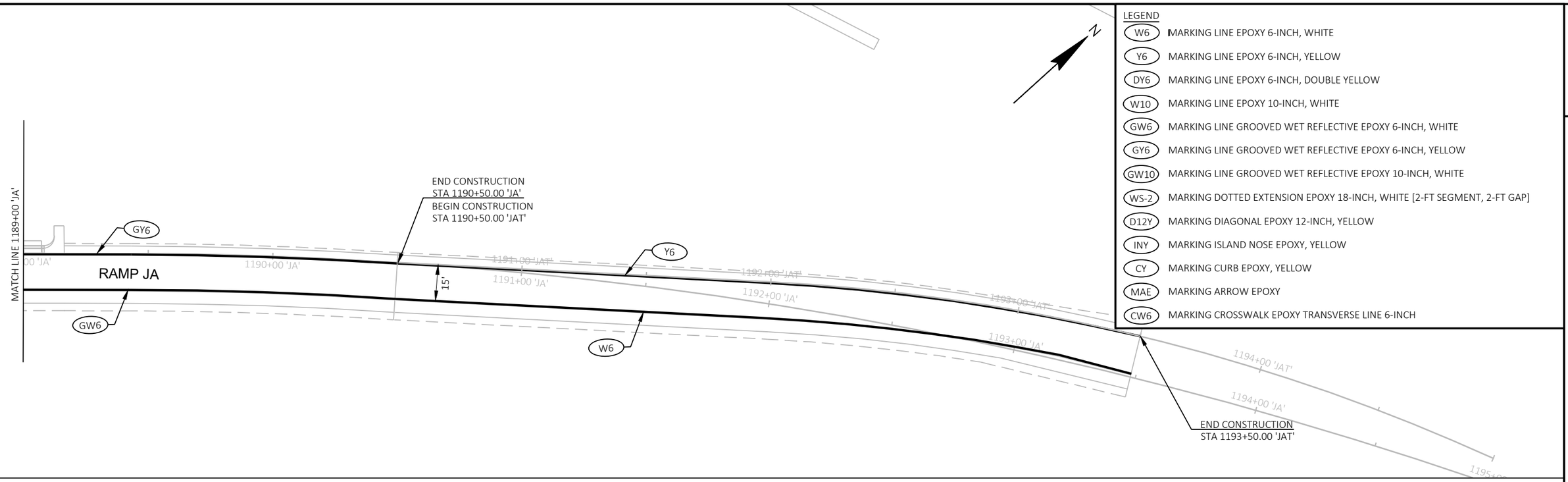
| | | | | |
|---|---|---|---|---|
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PAVEMENT MARKING | SHEET 116 E |

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\024501-PM.DWG
LAYOUT NAME - 024502-pm

PLOT DATE : 8/1/2024 11:39 AM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:40 FT

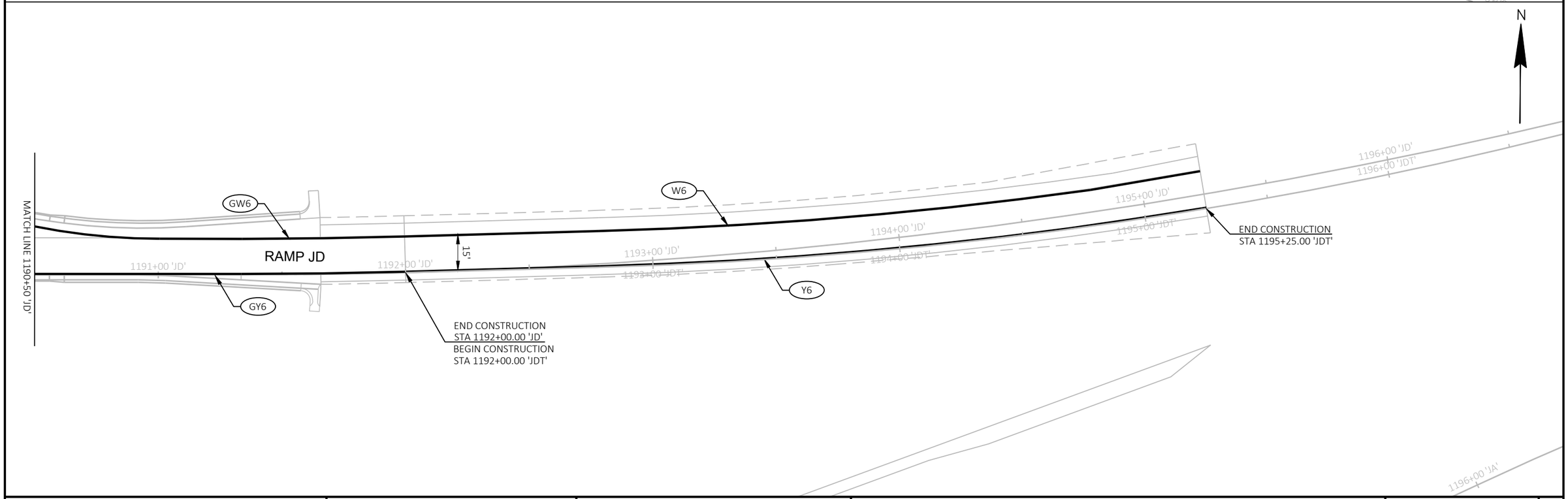
WISDOT/CADDS SHEET 42

2



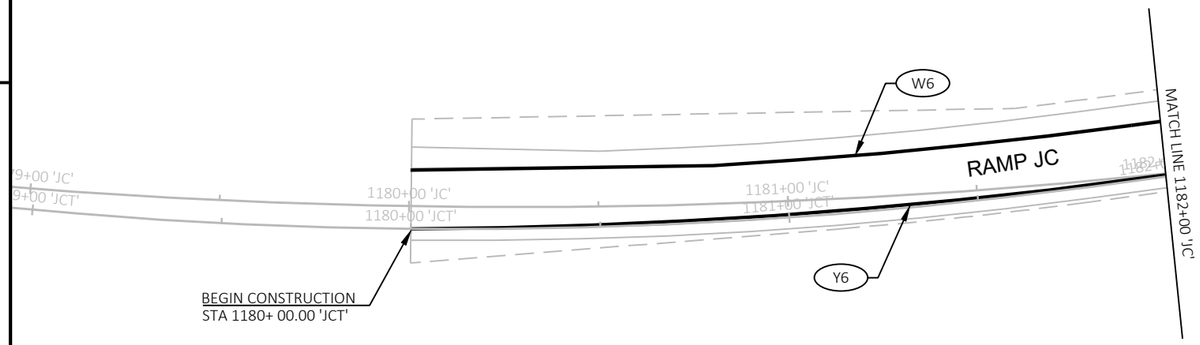

LEGEND

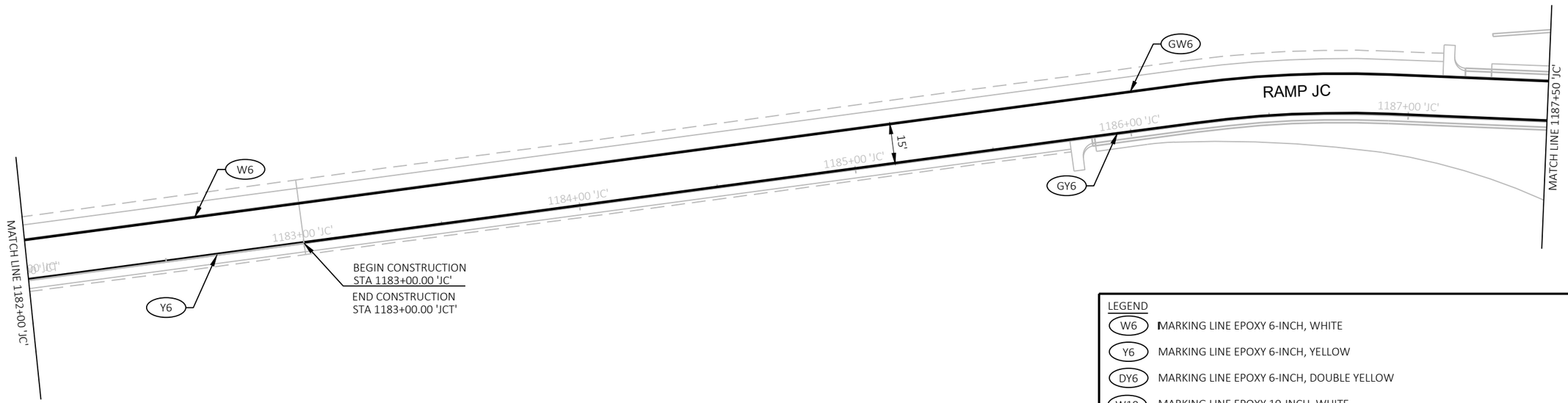
| | |
|---|---|
| W6 | MARKING LINE EPOXY 6-INCH, WHITE |
| Y6 | MARKING LINE EPOXY 6-INCH, YELLOW |
| DY6 | MARKING LINE EPOXY 6-INCH, DOUBLE YELLOW |
| W10 | MARKING LINE EPOXY 10-INCH, WHITE |
| GW6 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE |
| GY6 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW |
| GW10 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE |
| WS-2 | MARKING DOTTED EXTENSION EPOXY 18-INCH, WHITE [2-FT SEGMENT, 2-FT GAP] |
| D12Y | MARKING DIAGONAL EPOXY 12-INCH, YELLOW |
| INY | MARKING ISLAND NOSE EPOXY, YELLOW |
| CY | MARKING CURB EPOXY, YELLOW |
| MAE | MARKING ARROW EPOXY |
| CW6 | MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH |




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PAVEMENT MARKING | SHEET 117 | E |
|---|---|---|---|---|---|

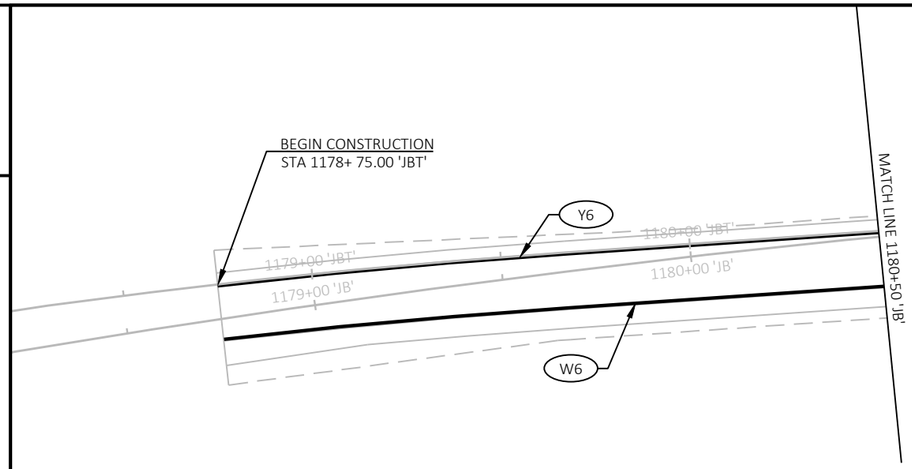
2




LEGEND

| | |
|---|---|
| W6 | MARKING LINE EPOXY 6-INCH, WHITE |
| Y6 | MARKING LINE EPOXY 6-INCH, YELLOW |
| DY6 | MARKING LINE EPOXY 6-INCH, DOUBLE YELLOW |
| W10 | MARKING LINE EPOXY 10-INCH, WHITE |
| GW6 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE |
| GY6 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW |
| GW10 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE |
| WS-2 | MARKING DOTTED EXTENSION EPOXY 18-INCH, WHITE [2-FT SEGMENT, 2-FT GAP] |
| D12Y | MARKING DIAGONAL EPOXY 12-INCH, YELLOW |
| INY | MARKING ISLAND NOSE EPOXY, YELLOW |
| CY | MARKING CURB EPOXY, YELLOW |
| MAE | MARKING ARROW EPOXY |
| CW6 | MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH |

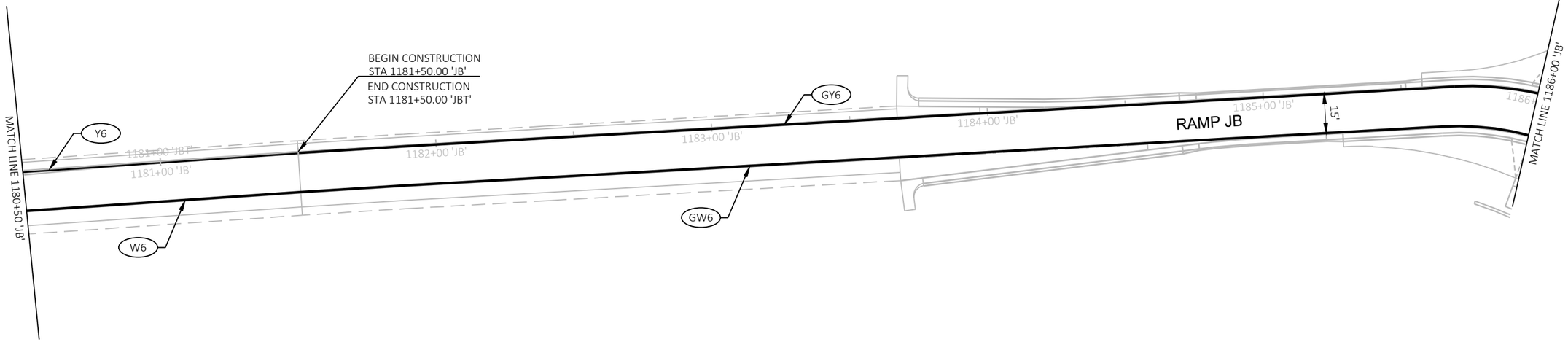






LEGEND

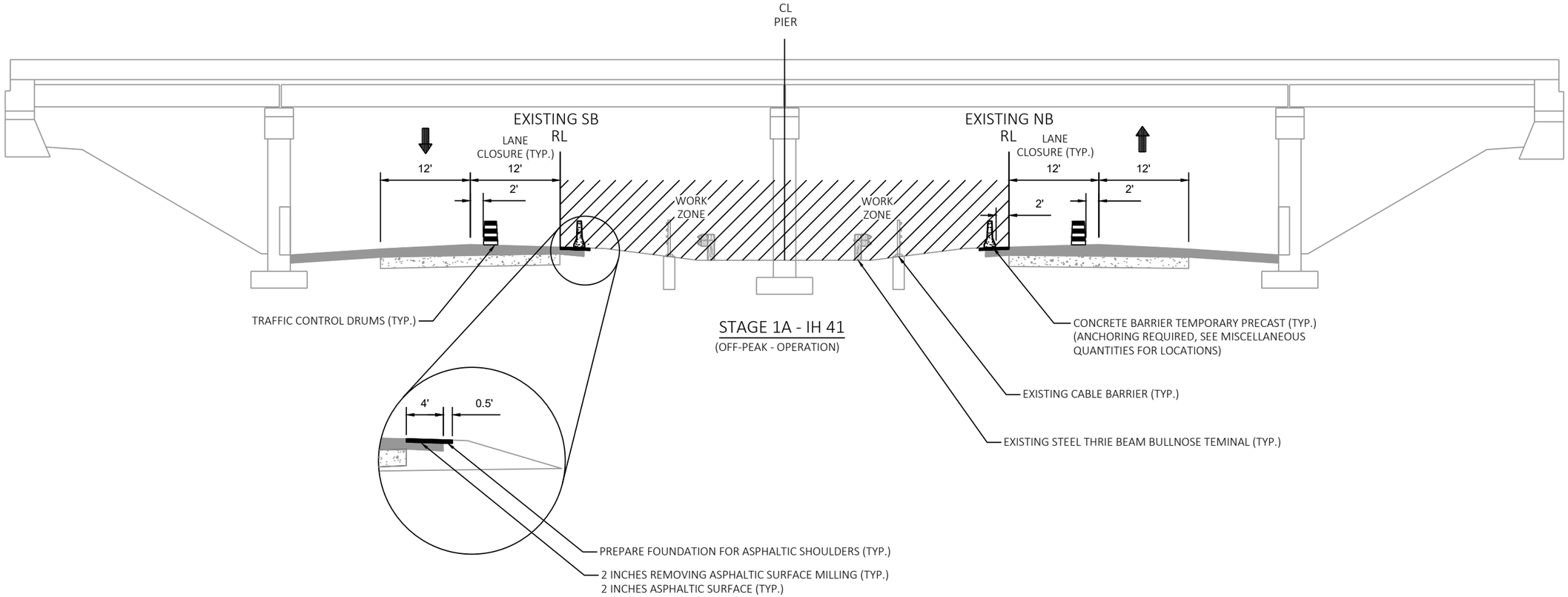
| | |
|---|---|
| W6 | MARKING LINE EPOXY 6-INCH, WHITE |
| Y6 | MARKING LINE EPOXY 6-INCH, YELLOW |
| DY6 | MARKING LINE EPOXY 6-INCH, DOUBLE YELLOW |
| W10 | MARKING LINE EPOXY 10-INCH, WHITE |
| GW6 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE |
| GY6 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW |
| GW10 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE |
| WS-2 | MARKING DOTTED EXTENSION EPOXY 18-INCH, WHITE [2-FT SEGMENT, 2-FT GAP] |
| D12Y | MARKING DIAGONAL EPOXY 12-INCH, YELLOW |
| INY | MARKING ISLAND NOSE EPOXY, YELLOW |
| CY | MARKING CURB EPOXY, YELLOW |
| MAE | MARKING ARROW EPOXY |
| CW6 | MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH |



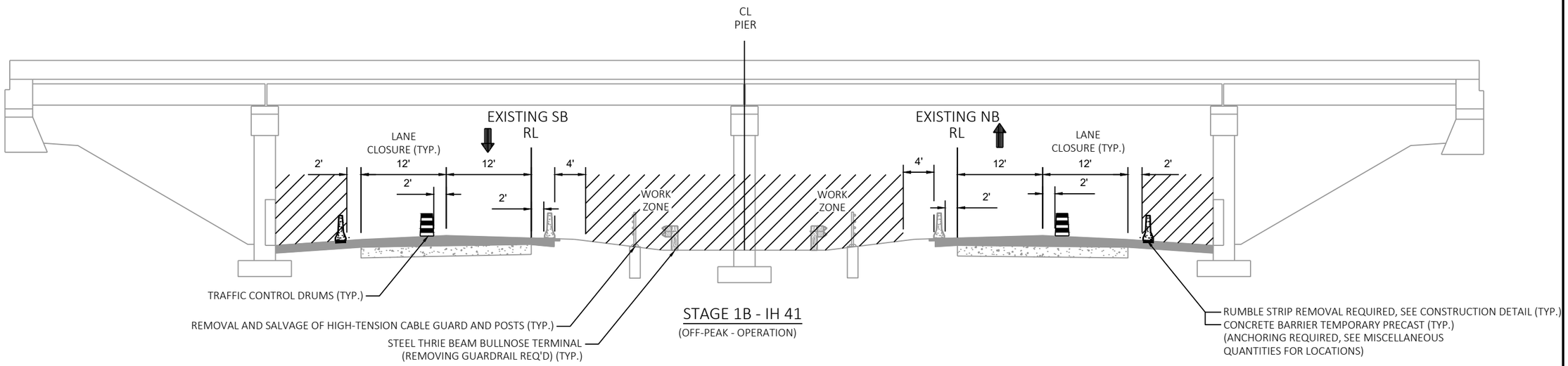

2

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PAVEMENT MARKING | SHEET 119 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\024501-PM.DWG
LAYOUT NAME - 024505-pm
PLOT DATE : 8/1/2024 11:37 AM
PLOT BY : KOWALSKI, NICK
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



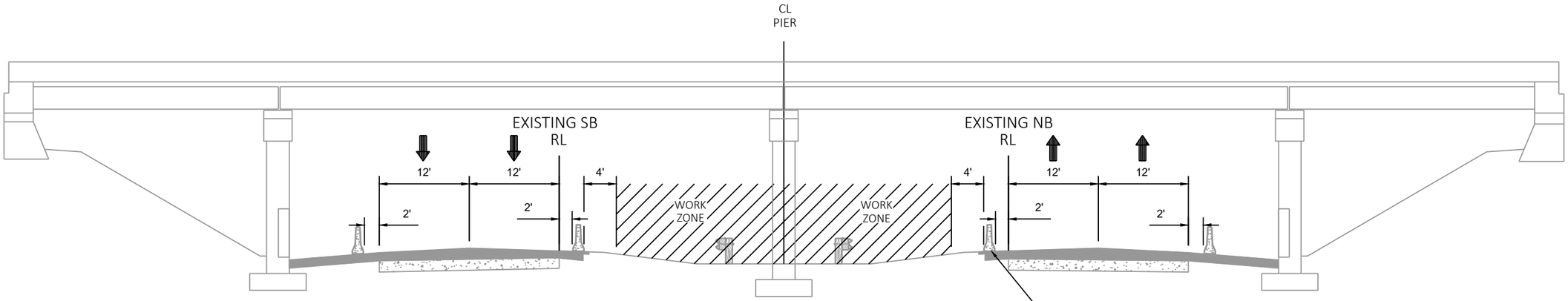

STAGE 1A - IH 41
(OFF-PEAK - OPERATION)




STAGE 1B - IH 41
(OFF-PEAK - OPERATION)

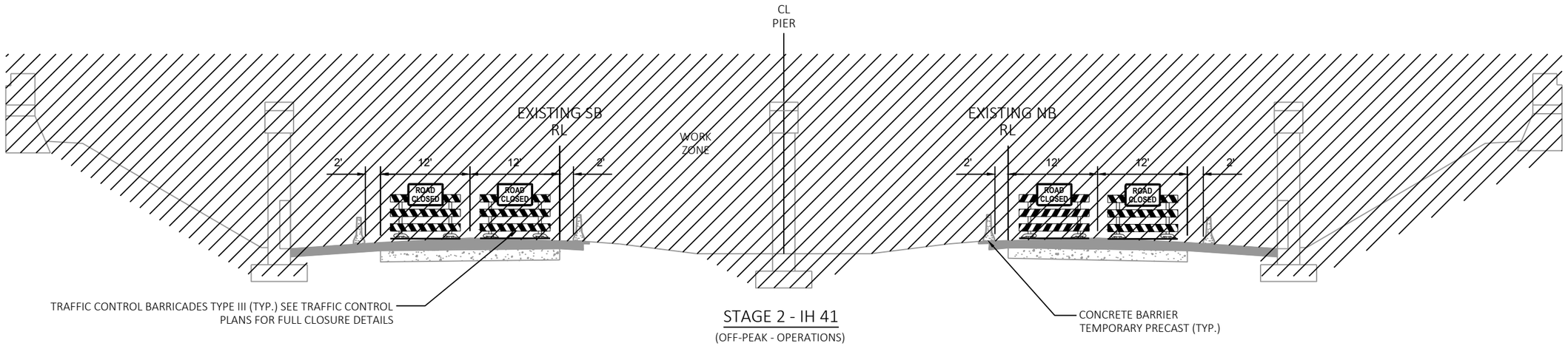
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | TRAFFIC CONTROL TYPICAL SECTIONS | SHEET 120 | E |
|---|---|---|---|---|---|

2



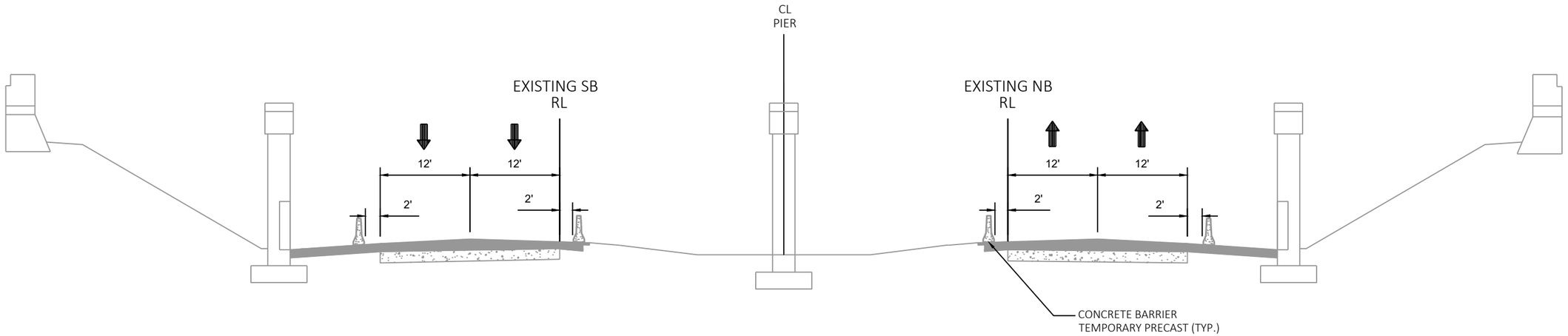

STAGE 1A/1B - IH 41

(ALL TIMES OUTSIDE OF OFF-PEAK OPERATIONS)




STAGE 2 - IH 41

(OFF-PEAK - OPERATIONS)



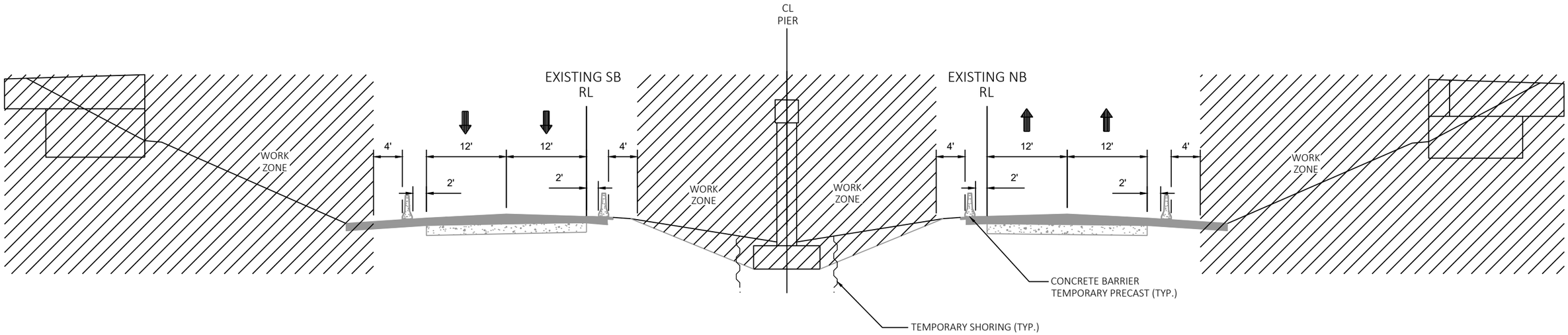

STAGE 2 - IH 41

(ALL TIMES OUTSIDE OF OFF-PEAK OPERATIONS)

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | TRAFFIC CONTROL TYPICAL SECTIONS | SHEET 122 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\025100-TC.DWG
LAYOUT NAME - 025103-tc
PLOT DATE : 7/22/2024 2:46 PM PLOT BY : CARPENTER, ZACH PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



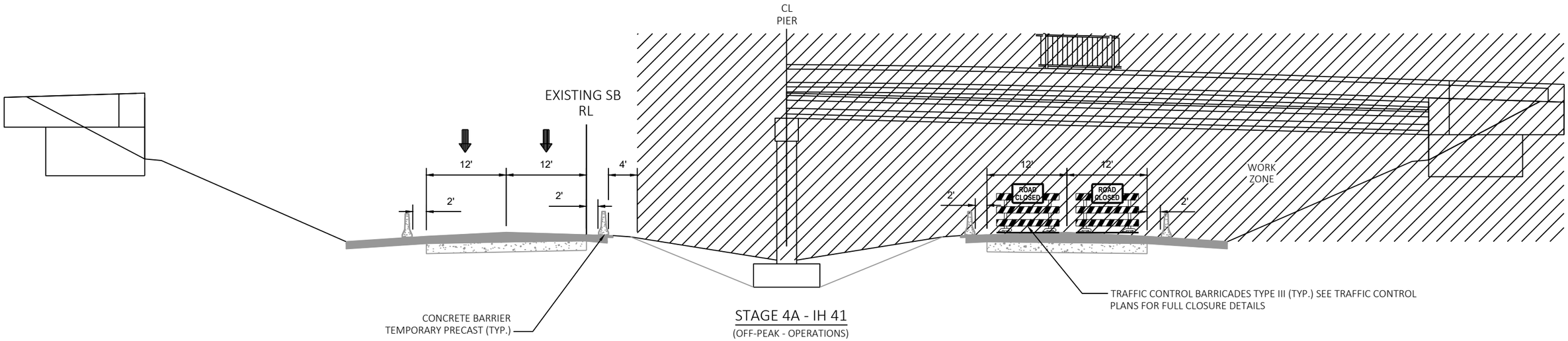

STAGE 3 - IH 41

ALL TIMES

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | TRAFFIC CONTROL TYPICAL SECTIONS | SHEET 123 | E |
|---|---|---|---|---|---|

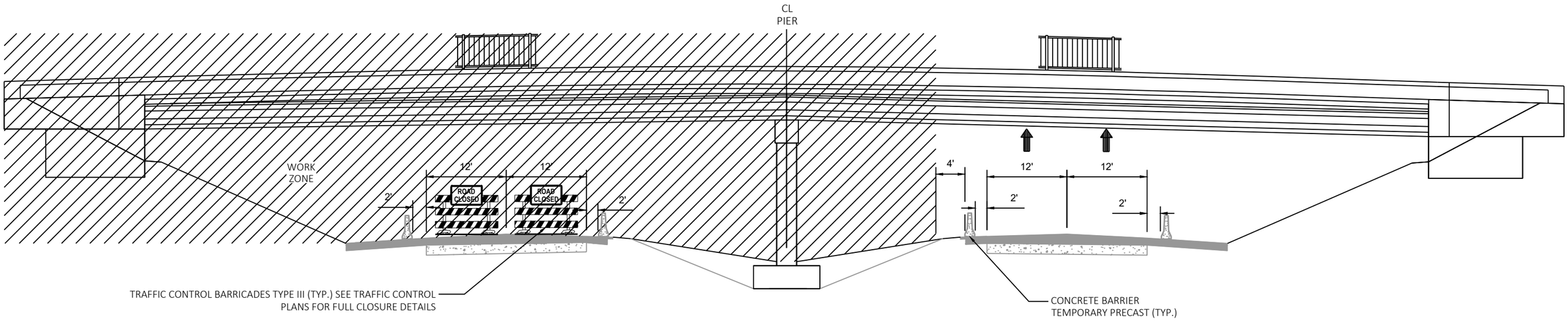
FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\025100-TC.DWG
LAYOUT NAME - 025104-tc
PLOT DATE : 7/22/2024 2:46 PM PLOT BY : CARPENTER, ZACH PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2




STAGE 4A - IH 41

(OFF-PEAK - OPERATIONS)



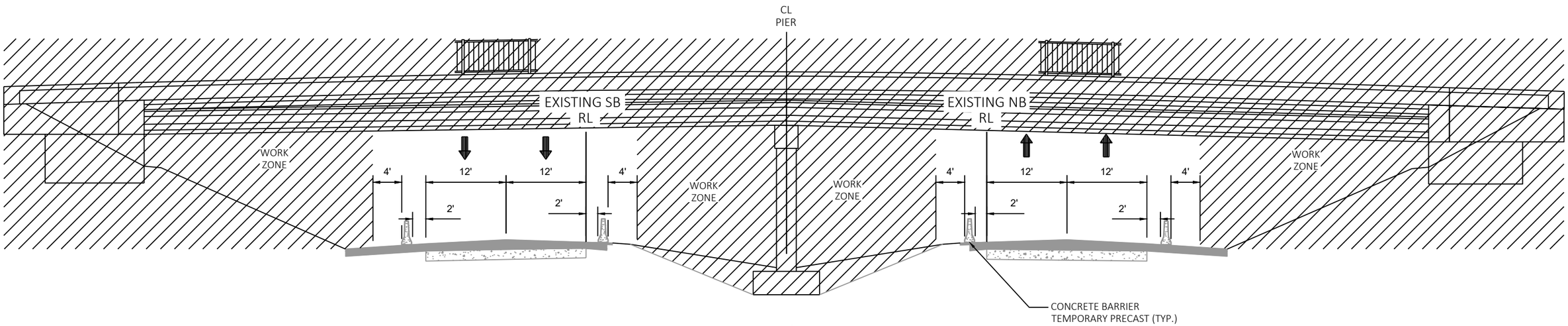

STAGE 4B - IH 41

(OFF-PEAK - OPERATIONS)

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | TRAFFIC CONTROL TYPICAL SECTIONS | SHEET 124 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\025100-TC.DWG
LAYOUT NAME - 025105-tc
PLOT DATE : 7/22/2024 2:46 PM PLOT BY : CARPENTER, ZACH PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2




STAGE 4A/4B - IH 41

(ALL TIMES OUTSIDE OF OFF-PEAK OPERATIONS)

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | TRAFFIC CONTROL TYPICAL SECTIONS | SHEET 125 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\025100-TC.DWG
LAYOUT NAME - 025106-tc
PLOT DATE : 7/22/2024 2:46 PM PLOT BY : CARPENTER, ZACH PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

## GENERAL NOTES FOR TRAFFIC CONTROL

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

2) A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER. FLAGGING IS NOT PERMITTED ON FREEWAY LANES. FOR FREEWAYS REFERENCE SDD-TRAFFIC CONTROL, INGRESS/EGRESS.

3) ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

6) DIMENSIONS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE CENTER OF THE BARRIER. STATION CALL-OUTS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE CENTER OF THE BARRIER.

7) WHEN A SEGMENT OF THE PROJECT IS NOT SHOWN ON THE STAGING PLANS, USE THE SAME TRAFFIC CONTROL AS THE PREVIOUS STAGE FOR THE SEGMENT.

8) TRAFFIC CONTROL DRUM SPACING SHALL BE 100' UNLESS OTHERWISE NOTED.

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

10) CONCRETE BARRIER TEMPORARY PRECAST SHALL BE ANCHORED AS SHOWN IN CONSTRUCTION DETAILS.

11) TRAFFIC CONTROL DRUMS IN TAPERS SHALL BE EQUIPPED WITH TRAFFIC CONTROL WARNING LIGHTS TYPE "C", ONE WAY LIGHTS IN TAPERS ONLY.

12) ALL SIGNS TEMPORARY OR EXISTING WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR AS DIRECTED BY THE ENGINEER. .

13) COORDINATE WITH PROJECT ID 1130-63-72 CORRIDOR QWS CONTACT FOR QWS IMPLEMENTATION. REFER TO OTHER ADVANCE SIGNING NEEDS - CORRIDOR QWS WILL BE IMPLEMENTED ON ALL PROJECTS UNDER CONSTRUCTION.

2

2

N

IH 41 SB

1150+00 SB 1151+00 SB 1152+00 SB 1153+00 SB 1154+00 SB 1155+00 SB 1156+00 SB 1157+00 SB 1158+00 SB 1159+00 SB 1160+00 SB 1161+00 SB 1162+00 SB 1163+00 SB 1164+00 SB 1

1150+00 NB 1151+00 NB 1152+00 NB 1153+00 NB 1154+00 NB 1155+00 NB 1156+00 NB 1157+00 NB 1158+00 NB 1159+00 NB 1160+00 NB 1161+00 NB 1162+00 NB 1163+00 NB 1164+00 NB 1165+

525'

IH 41 NB

MATCH LINE 1165+00

TOWER DR.

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" FOR ADDITIONAL DETAILS ON ADVANCED WARNING (USE 70 MPH)

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 1A OFF-PEAK OPERATIONS | SHEET 127 | E |
|---|---|---|---|---|---|

2

2

MATCH LINE 1165+00

MATCH LINE 1180+00

N

SPEED LIMIT 70
R2-1
48"X60"

END ROAD WORK
G20-2A
48"X24"

IH 41 SB

165+00 SB | 1166+00 SB | 1167+00 SB | 1168+00 SB | 1169+00 SB | 1170+00 SB | 1171+00 SB | 1172+00 SB | 1173+00 SB | 1174+00 SB | 1175+00 SB | 1176+00 SB | 1177+00 SB | 1178+00 SB | 1179+00 SB | 1

50' (TYP.)

100' (TYP.)

00 NB | 1166+00 NB | 1167+00 NB | 1168+00 NB | 1169+00 NB | 1170+00 NB | 1171+00 NB | 1172+00 NB | 1173+00 NB | 1174+00 NB | 1175+00 NB | 1176+00 NB | 1177+00 NB | 1178+00 NB | 1179+00 NB | 1180+

IH 41 NB

840' TAPER

RAMP JC

RAMP JB

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" FOR ADDITIONAL DETAILS (USE 70 MPH)

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL INGRESS/EGRESS WITHOUT BARRIER" FOR ADDITIONAL DETAILS

TOWER DR.

LANE CLOSED
R11-2L
48"X30"

SIGN

POST

FOOTBRIDGE

RIPRAP

FLAG

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 1A OFF-PEAK OPERATIONS | SHEET 128 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S1A.DWG
LAYOUT NAME - 026002-s1a
PLOT DATE : 9/16/2024 11:28 AM
PLOT BY : GRIMME, SARA
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

MATCH LINE 1180+00

MATCH LINE 1193+00

ROAD WORK AHEAD
W20-1A
48"X48"

RAMP JC

END ROAD WORK
G20-2A
48"X24"

RAMP JD

IH 41 SB

IH 41 NB

180+00 SB 1181+00 SB 1182+00 SB 1183+00 SB 1184+00 SB 1185+00 SB 1186+00 SB 1187+00 SB 1188+00 SB 1189+00 SB 1190+00 SB 1191+00 SB 1192+00 SB

00 NB 1181+00 NB 1182+00 NB 1183+00 NB 1184+00 NB 1185+00 NB 1186+00 NB 1187+00 NB 1188+00 NB 1189+00 NB 1190+00 NB 1191+00 NB 1192+00 NB

+50, -2.00' L
+50, 1.00' R
C/L CBT

100' (TYP.)

+75, -2.50' L
+75, -1.00' L
C/L CBT

+00, -2.50' L
C/L CBT

+71.50, -4.50' L

+52, 2.00' R

+50, -4.50' L
+50, -2.50' L
C/L CBT

+00, -1.00' L
+00, 2.00' R
C/L CBT

24+00 J NB
23+00 J NB
23+00 J NB
21+00 J NB
20+00 J NB
19+00 J NB
18+00 J NB
17+00 J NB
16+00 J NB
15+00 J NB

CTH J

TRAFFIC CAMERA

RAMP JB

END ROAD WORK
G20-2A
48"X24"

RAMP JA

ROAD WORK AHEAD
W20-1A
48"X48"

## LEGEND

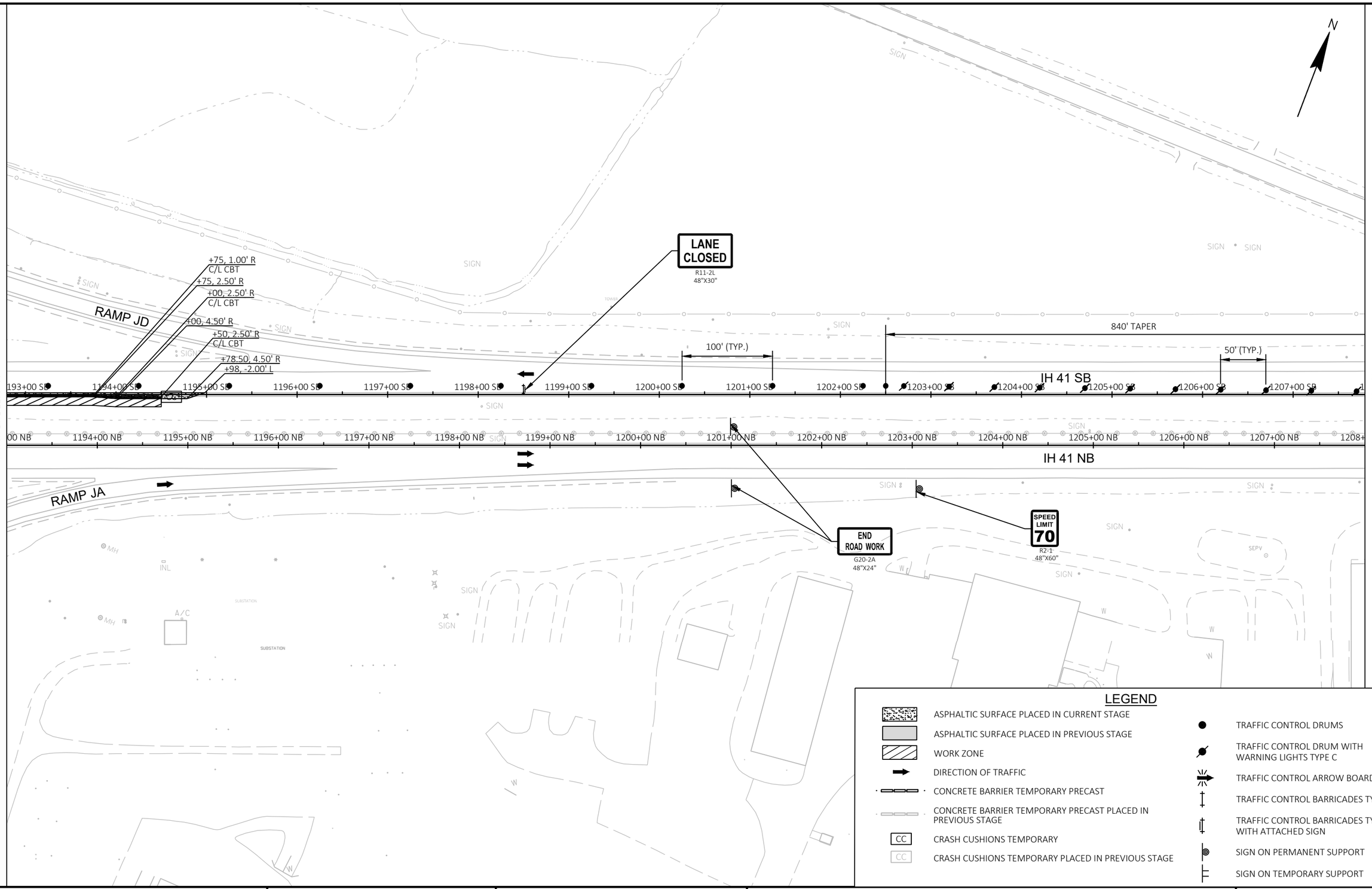
- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 1A OFF-PEAK OPERATIONS | SHEET 129 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S1A.DWG
LAYOUT NAME - 026003-s1a

PLOT DATE : 9/16/2024 11:29 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT

2




## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CRASH CUSHIONS TEMPORARY
- CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 1A OFF-PEAK OPERATIONS | SHEET 130 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S1A.DWG
LAYOUT NAME - 026004-s1a
PLOT DATE : 9/16/2024 11:31 AM
PLOT BY : GRIMME, SARA
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

MATCH LINE 1208+00

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" FOR ADDITIONAL DETAILS (USE 70 MPH)

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" FOR ADDITIONAL DETAILS ON ADVANCED WARNING (USE 70 MPH)

KELSO RD

840' TAPER

IH 41 SB

208+00 SB 1209+00 SB 1210+00 SB 1211+00 SB 1212+00 SB 1213+00 SB 1214+00 SB 1215+00 SB 1216+00 SB 1217+00 SB 1218+00 SB 1219+00 SB 1220+00 SB 1221+00 SB 1222+00 SB 1223+00 SB

00 NB 1209+00 NB 1210+00 NB 1211+00 NB 1212+00 NB 1213+00 NB 1214+00 NB 1215+00 NB 1216+00 NB 1217+00 NB 1218+00 NB 1219+00 NB 1220+00 NB 1221+00 NB 1222+00 NB 1223+00 NB

IH 41 NB

EAST FRONTAGE RD

FLAG

RIPRAP

RIPRAP

RIPRAP

POST

SIGN

W

IP

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 1A OFF-PEAK OPERATIONS | SHEET 131 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S1A.DWG
LAYOUT NAME - 026005-s1a

PLOT DATE : 9/16/2024 11:32 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

MALONEY RD

POST

SUBSTATION

SIGN

A/C

IH 41 SB

1135+00 SB | 1136+00 SB | 1137+00 SB | 1138+00 SB | 1139+00 SB | 1140+00 SB | 1141+00 SB | 1142+00 SB | 1143+00 SB | 1144+00 SB | 1145+00 SB | 1146+00 SB | 1147+00 SB | 1148+00 SB | 1149+00 SB | 1

1135+00 NB | 1136+00 NB | 1137+00 NB | 1138+00 NB | 1139+00 NB | 1140+00 NB | 1141+00 NB | 1142+00 NB | 1143+00 NB | 1144+00 NB | 1145+00 NB | 1146+00 NB | 1147+00 NB | 1148+00 NB | 1149+00 NB | 1150+

IH 41 NB

MATCH LINE 1150+00

TOWER DR

WATER TOWER

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" FOR ADDITIONAL DETAILS ON ADVANCED WARNING (USE 70 MPH)

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 1B OFF-PEAK OPERATIONS | SHEET 132 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S1B.DWG
LAYOUT NAME - 026001-s1b
PLOT DATE : 9/16/2024 11:38 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

IH 41 SB

150+00 SB | 1151+00 SB | 1152+00 SB | 1153+00 SB | 1154+00 SB | 1155+00 SB | 1156+00 SB | 1157+00 SB | 1158+00 SB | 1159+00 SB | 1160+00 SB | 1161+00 SB | 1162+00 SB | 1163+00 SB | 1164+00 SB

MATCH LINE 1150+00

MATCH LINE 1165+00

50' (TYP.)

100' (TYP.)

00 NB | 1151+00 NB | 1152+00 NB | 1153+00 NB | 1154+00 NB | 1155+00 NB | 1156+00 NB | 1157+00 NB | 1158+00 NB | 1159+00 NB | 1160+00 NB | 1161+00 NB | 1162+00 NB | 1163+00 NB | 1164+00 NB | 1165+

IH 41 NB

840' TAPER

1000'

SEE STANDARD DETAIL
DRAWING "TRAFFIC CONTROL,
LANE CLOSURE, SPEED
REDUCTION" FOR ADDITIONAL
DETAILS (USE 70 MPH)

LANE CLOSED
R11-2L
48"X30"

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 1B OFF-PEAK OPERATIONS | SHEET 133 | E |
|---|---|---|---|---|---|

2

2

N

SPEED LIMIT 70
R2-1
48"X60"

END ROAD WORK
G20-2A
48"X24"

RAMP JC

IH 41 SB

1165+00 SB | 1166+00 SB | 1167+00 SB | 1168+00 SB | 1169+00 SB | 1170+00 SB | 1171+00 SB | 1172+00 SB | 1173+00 SB | 1174+00 SB | 1175+00 SB | 1176+00 SB | 1177+00 SB | 1178+00 SB | 1179+00 SB | 1

MATCH LINE 1165+00

100' (TYP.)

25' (TYP.)

00 NB | 1166+00 NB | 1167+00 NB | 1168+00 NB | 1169+00 NB | 1170+00 NB | 1171+00 NB | 1172+00 NB | 1173+00 NB | 1174+00 NB | 1175+00 NB | 1176+00 NB | 1177+00 NB | 1178+00 NB | 1179+00 NB | 1180+

25' (TYP.)

100' (TYP.)

MATCH LINE 1180+00

IH 41 NB

200'

200'

350'

1000'

200'

RAMP JB

TOWER DR

EXIT
E5-1
48"X48"

LANE CLOSED
R11-2L
48"X30"

SEE STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL PARALLEL EXIT RAMP WITHIN LANE CLOSURE" FOR ADDITIONAL DETAILS

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 1B OFF-PEAK OPERATIONS | SHEET 134 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S1B.DWG
LAYOUT NAME - 026003-s1b
PLOT DATE : 9/16/2024 11:41 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

ROAD WORK AHEAD
W20-1A
48"X48"

RAMP JC

END ROAD WORK
G20-2A
48"X24"

RAMP JD

+50, -29.00' L
C/L CBT

100' (TYP.)

IH 41 SB

180+00 SB | 1181+00 SB | 1182+00 SB | 1183+00 SB | 1184+00 SB | 1185+00 SB | 1186+00 SB | 1187+00 SB | 1188+00 SB | 1189+00 SB | 1190+00 SB | 1191+00 SB | 1192+00 SB

MATCH LINE 1180+00

MATCH LINE 1193+00

00 NB | 1181+00 NB | 1182+00 NB | 1183+00 NB | 1184+00 NB | 1185+00 NB | 1186+00 NB | 1187+00 NB | 1188+00 NB | 1189+00 NB | 1190+00 NB | 1191+00 NB | 1192+00 NB | 1193+

IH 41 NB

CC

+75, 29.00' R
C/L CBT

+50, 30.50' R
C/L CBT

+00, 30.50' R
C/L CBT

+00, 29.00' R
C/L CBT

CTH J

RAMP JB

RAMP JA

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A
48"X48"

24+00 J NB
23+00 J NB
22+00 J NB
21+00 J NB
20+00 J NB
19+00 J NB
18+00 J NB
17+00 J NB
16+00 J NB
15+00 J NB
00 J NB

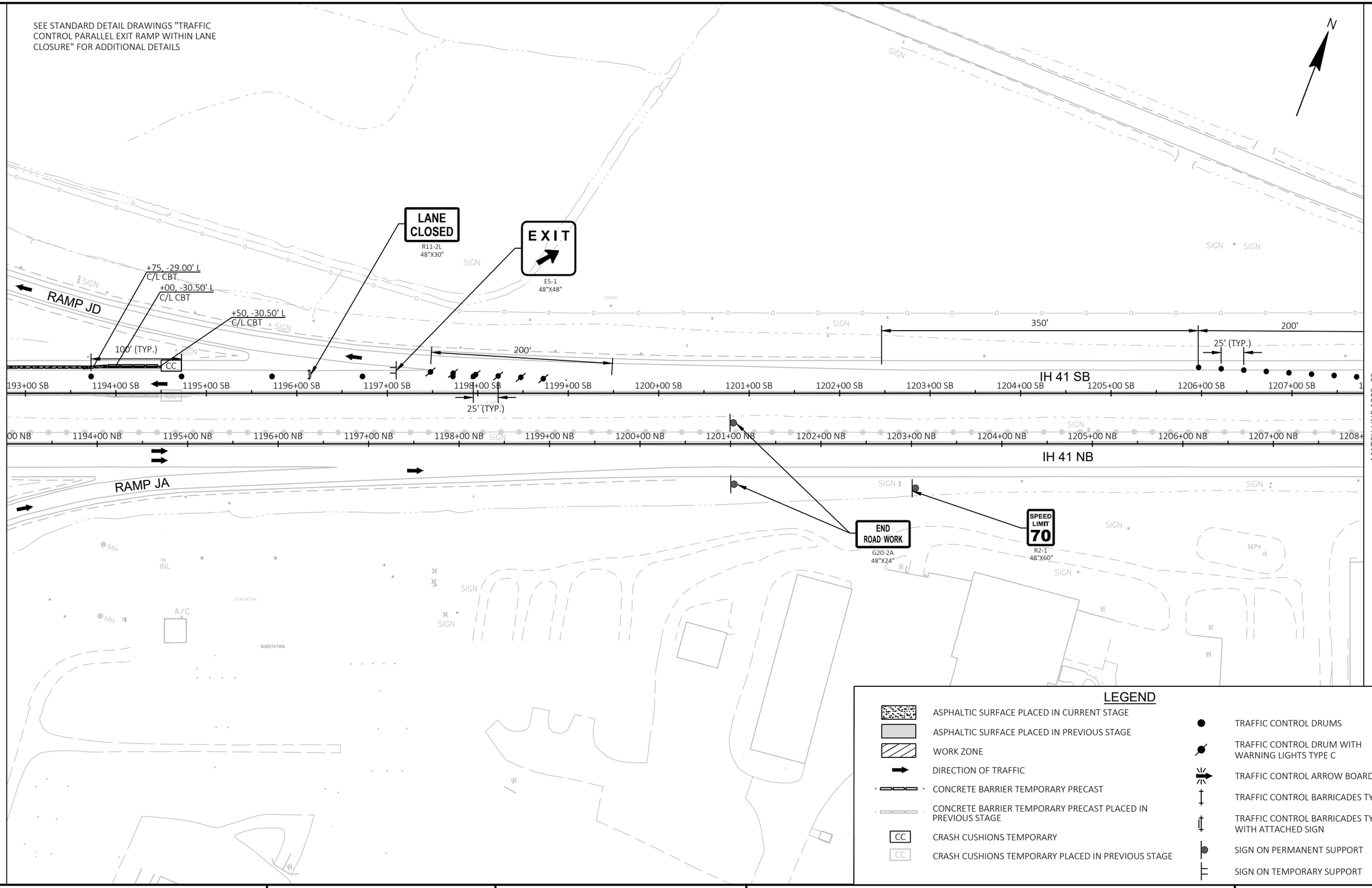
## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 1B OFF-PEAK OPERATIONS | SHEET 135 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S1B.DWG
LAYOUT NAME - 026004-s1b
PLOT DATE : 9/16/2024 11:43 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

SEE STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL PARALLEL EXIT RAMP WITHIN LANE CLOSURE" FOR ADDITIONAL DETAILS




## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CRASH CUSHIONS TEMPORARY
- CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 1B OFF-PEAK OPERATIONS | SHEET 136 E |
|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S1B.DWG
LAYOUT NAME - 026005-s1b
PLOT DATE : 9/16/2024 11:44 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

MATCH LINE 1208+00

MATCH LINE 1223+00

KELSO RD

EAST FRONTAGE RD

LANE CLOSED
R11-2L
48"X30"

840' TAPER

50' (TYP.)

1000'

200'

200'

100' (TYP.)

25' (TYP.)

IH 41 SB

208+00 SB 1209+00 SB 1210+00 SB 1211+00 SB 1212+00 SB 1213+00 SB 1214+00 SB 1215+00 SB 1216+00 SB 1217+00 SB 1218+00 SB 1219+00 SB 1220+00 SB 1221+00 SB 1222+00 SB 1223+

IH 41 NB

00 NB 1209+00 NB 1210+00 NB 1211+00 NB 1212+00 NB 1213+00 NB 1214+00 NB 1215+00 NB 1216+00 NB 1217+00 NB 1218+00 NB 1219+00 NB 1220+00 NB 1221+00 NB 1222+00 NB

POST SIGN W RIPRAP FLAG IP

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CRASH CUSHIONS TEMPORARY
- CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 1B OFF-PEAK OPERATIONS | SHEET 137 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S1B.DWG
LAYOUT NAME - 026006-s1b

PLOT DATE : 9/16/2024 11:46 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

SEE STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" AND "TRAFFIC CONTROL PARALLEL EXIT RAMP WITHIN LANE CLOSURE" FOR ADDITIONAL DETAILS (USE 70 MPH)

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" FOR ADDITIONAL DETAILS ON ADVANCED WARNING (USE 70 MPH)

KELSO RD

840' TAPER

50' (TYP.)

IH 41 SB

1223+00 SB 1224+00 SB 1225+00 SB 1226+00 SB 1227+00 SB 1228+00 SB 1229+00 SB

IH 41 NB

00 NB 1224+00 NB 1225+00 NB 1226+00 NB 1227+00 NB 1228+00 NB 1229+00 NB 1230+00 NB

EAST FRONTAGE RD

MATCH LINE 1223+00

SIGN

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 1B OFF-PEAK OPERATIONS | SHEET 138 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S1B.DWG
LAYOUT NAME - 026007-s1b

PLOT DATE : 9/16/2024 11:48 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

MALONEY RD

N

IH 41 SB

1135+00 SB | 1136+00 SB | 1137+00 SB | 1138+00 SB | 1139+00 SB | 1140+00 SB | 1141+00 SB | 1142+00 SB | 1143+00 SB | 1144+00 SB | 1145+00 SB | 1146+00 SB | 1147+00 SB | 1148+00 SB | 1149+00 SB

1135+00 NB | 1136+00 NB | 1137+00 NB | 1138+00 NB | 1139+00 NB | 1140+00 NB | 1141+00 NB | 1142+00 NB | 1143+00 NB | 1144+00 NB | 1145+00 NB | 1146+00 NB | 1147+00 NB | 1148+00 NB | 1149+00 NB | 1150+

IH 41 NB

50' (TYP.)

840' TAPER

MATCH LINE 1150+00

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" FOR ADDITIONAL DETAILS ON ADVANCED WARNING (USE 70 MPH)

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" FOR ADDITIONAL DETAILS (USE 70 MPH)

TOWER DR

WATER TOWER

NOTE:

WHEN OUTSIDE OF OFF-PEAK OPERATION TIMES, MOVE TRAFFIC CONTROL DEVICES TO OUTSIDE EDGE OF SHOULDERS AND OPEN IH 41 TO TWO TRAVEL LANES.

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 2 OFF-PEAK OPERATIONS (FULL IH 41 CLOSURE) | SHEET 139 | E |
|---|---|---|---|---|---|

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR ADDITIONAL DETAILS.

N

MATCH LINE 1150+00

MATCH LINE 1165+00

IH 41 SB

1150+00 SB | 1151+00 SB | 1152+00 SB | 1153+00 SB | 1154+00 SB | 1155+00 SB | 1156+00 SB | 1157+00 SB | 1158+00 SB | 1159+00 SB | 1160+00 SB | 1161+00 SB | 1162+00 SB | 1163+00 SB | 1164+00 SB

00 NB | 1151+00 NB | 1152+00 NB | 1153+00 NB | 1154+00 NB | 1155+00 NB | 1156+00 NB | 1157+00 NB | 1158+00 NB | 1159+00 NB | 1160+00 NB | 1161+00 NB | 1162+00 NB | 1163+00 NB | 1164+00 NB

IH 41 NB

840' TAPER

50' (TYP.)

1680'

TOWER DR

POST

INL

WALLS

FLAG

FOUNTAIN

ANT

W

RIPRAP

SIGN

691.2

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

NOTE:

WHEN OUTSIDE OF OFF-PEAK OPERATION TIMES, MOVE TRAFFIC CONTROL DEVICES TO OUTSIDE EDGE OF SHOULDERS AND OPEN IH 41 TO TWO TRAVEL LANES.

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 2 OFF-PEAK OPERATIONS (FULL IH 41 CLOSURE) | SHEET 140 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S2.DWG
LAYOUT NAME - 026002-s2
PLOT DATE : 9/16/2024 11:54 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

NOTE: CONCRETE BARRIER WALL TEMPORARY PRECAST INSTALLED IN STAGE 1.

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR ADDITIONAL DETAILS.

N

END ROAD WORK
G20-2A
48"X24"

IH 41 SB

RAMP JC

MATCH LINE 1165+00

1165+00 SB | 1166+00 SB | 1167+00 SB | 1168+00 SB | 1169+00 SB | 1170+00 SB | 1171+00 SB | 1172+00 SB | 1173+00 SB | 1174+00 SB | 1175+00 SB | 1176+00 SB | 1177+00 SB | 1178+00 SB | 1179+00 SB | 1180+00 SB

MATCH LINE 1180+00

1165+00 NB | 1166+00 NB | 1167+00 NB | 1168+00 NB | 1169+00 NB | 1170+00 NB | 1171+00 NB | 1172+00 NB | 1173+00 NB | 1174+00 NB | 1175+00 NB | 1176+00 NB | 1177+00 NB | 1178+00 NB | 1179+00 NB | 1180+00 NB

IH 41 NB

1680'

50' (TYP.)

840' TAPER

25' (TYP.)

PCMS

WO1-R2
48"X48"

TOWER DR

RAMP JB

WO1-6
48"X24"

SEE STANDARD DETAIL DRAWING "BARRICADES AND SIGNS FOR VARIOUS CLOSURES" DETAIL D

TRAFFIC CONTROL SIGNS PCMS

ROAD/TO/CLOSE DAY/11 PM TO/4:30 AM

ALL/TRAFFIC EXIT/RIGHT

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

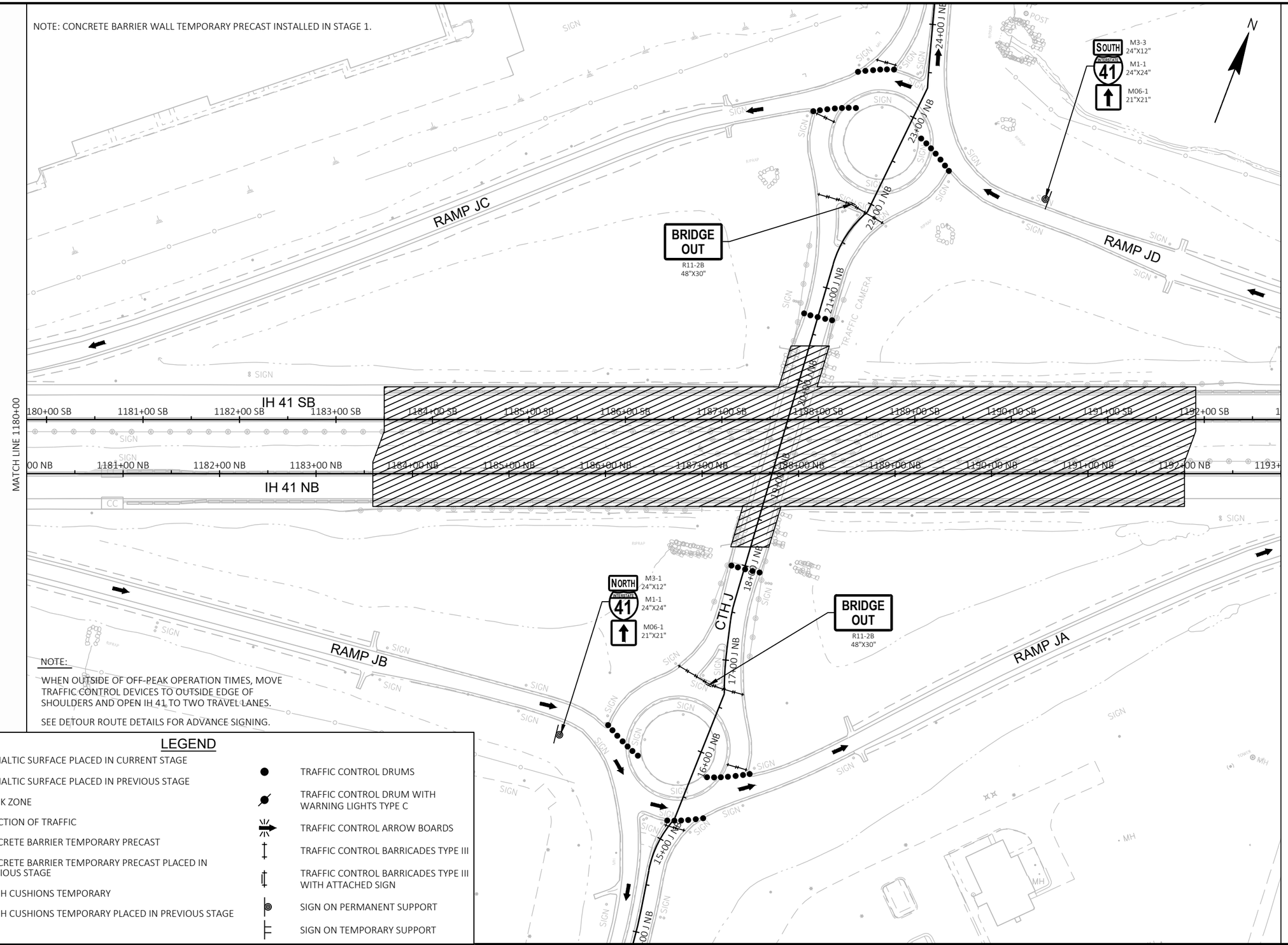
NOTE:

WHEN OUTSIDE OF OFF-PEAK OPERATION TIMES, MOVE TRAFFIC CONTROL DEVICES TO OUTSIDE EDGE OF SHOULDERS AND OPEN IH 41 TO TWO TRAVEL LANES.

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 2 OFF-PEAK OPERATIONS (FULL IH 41 CLOSURE) | SHEET 141 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S2.DWG
LAYOUT NAME - 026003-s2
PLOT DATE : 9/16/2024 11:55 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

NOTE: CONCRETE BARRIER WALL TEMPORARY PRECAST INSTALLED IN STAGE 1.




NOTE:

WHEN OUTSIDE OF OFF-PEAK OPERATION TIMES, MOVE TRAFFIC CONTROL DEVICES TO OUTSIDE EDGE OF SHOULDERS AND OPEN IH 41 TO TWO TRAVEL LANES.

SEE DETOUR ROUTE DETAILS FOR ADVANCE SIGNING.

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 2 OFF-PEAK OPERATIONS (FULL IH 41 CLOSURE) | SHEET 142 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S2.DWG
LAYOUT NAME - 026004-s2
PLOT DATE : 9/16/2024 11:56 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

NOTE: CONCRETE BARRIER WALL TEMPORARY PRECAST INSTALLED IN STAGE 1.

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR ADDITIONAL DETAILS

N

(ADVANCE NOTICE) (DURING CLOSURE)

**ROAD/TO/CLOSE DAY/11 PM TO/4:30 AM** | **ALL/TRAFFIC EXIT/RIGHT**

TRAFFIC CONTROL SIGNS PCMS

WO1-6 48"X24"

WO1-R2 48"X48"

840' TAPER

1680'

25' (TYP.)

50' (TYP.)

PCMS

RAMP JD

RAMP JA

JH 41 SB

IH 41 NB

MATCH LINE 1193+00

MATCH LINE 1208+00

1193+00 SB 1194+00 SB 1195+00 SB 1196+00 SB 1197+00 SB 1198+00 SB 1199+00 SB 1200+00 SB 1201+00 SB 1202+00 SB 1203+00 SB 1204+00 SB 1205+00 SB 1206+00 SB 1207+00 SB

1193+00 NB 1194+00 NB 1195+00 NB 1196+00 NB 1197+00 NB 1198+00 NB 1199+00 NB 1200+00 NB 1201+00 NB 1202+00 NB 1203+00 NB 1204+00 NB 1205+00 NB 1206+00 NB 1207+00 NB 1208+

SEE STANDARD DETAIL DRAWING "BARRICADES AND SIGNS FOR VARIOUS CLOSURES" DETAIL D

END ROAD WORK

G20-2A 48"X24"

NOTE:

WHEN OUTSIDE OF OFF-PEAK OPERATION TIMES, MOVE TRAFFIC CONTROL DEVICES TO OUTSIDE EDGE OF SHOULDERS AND OPEN IH 41 TO TWO TRAVEL LANES.

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 2 OFF-PEAK OPERATIONS (FULL IH 41 CLOSURE) | SHEET 143 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S2.DWG
LAYOUT NAME - 026005-s2
PLOT DATE : 9/16/2024 11:58 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR ADDITIONAL DETAILS

KELSO RD

1680'

50' (TYP.)

IH 41 SB

208+00 SB 1209+00 SB 1210+00 SB 1211+00 SB 1212+00 SB 1213+00 SB 1214+00 SB 1215+00 SB 1216+00 SB 1217+00 SB 1218+00 SB 1219+00 SB 1220+00 SB 1221+00 SB 1222+00 SB 1223+

MATCH LINE 1208+00

MATCH LINE 1223+00

00 NB 1209+00 NB 1210+00 NB 1211+00 NB 1212+00 NB 1213+00 NB 1214+00 NB 1215+00 NB 1216+00 NB 1217+00 NB 1218+00 NB 1219+00 NB 1220+00 NB 1221+00 NB 1222+00 NB

IH 41 NB

EAST FRONTAGE RD

NOTE:

WHEN OUTSIDE OF OFF-PEAK OPERATION TIMES, MOVE TRAFFIC CONTROL DEVICES TO OUTSIDE EDGE OF SHOULDERS AND OPEN IH 41 TO TWO TRAVEL LANES.

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 2 OFF-PEAK OPERATIONS (FULL IH 41 CLOSURE) | SHEET 144 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S2.DWG
LAYOUT NAME - 026006-s2
PLOT DATE : 9/16/2024 11:59 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

MATCH LINE 1223+00

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, TWO LANE FULL FREEWAY CLOSURE" FOR ADDITIONAL DETAILS (USE 70 MPH)

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" FOR ADDITIONAL DETAILS ON ADVANCED WARNING (USE 70 MPH)

KELSO RD

840' TAPER

IH 41 SB

1223+00 SB 1224+00 SB 1225+00 SB 1226+00 SB 1227+00 SB 1228+00 SB 1229+00 SB

50' (TYP.)

00 NB 1224+00 NB 1225+00 NB 1226+00 NB 1227+00 NB 1228+00 NB 1229+00 NB 1230+00 NB

IH 41 NB

EAST FRONTAGE RD

SIGN

NOTE:

WHEN OUTSIDE OF OFF-PEAK OPERATION TIMES, MOVE TRAFFIC CONTROL DEVICES TO OUTSIDE EDGE OF SHOULDERS AND OPEN IH 41 TO TWO TRAVEL LANES.

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 2 OFF-PEAK OPERATIONS (FULL IH 41 CLOSURE) | SHEET 145 | E |
|---|---|---|---|---|---|

2

2

N

LEFT SHOULDER CLOSED
W21-5AL

RIGHT SHOULDER CLOSED
W21-5A

END ROAD WORK
G20-2A
48"X24"

IH 41 SB

1165+00 SB | 1166+00 SB | 1167+00 SB | 1168+00 SB | 1169+00 SB | 1170+00 SB | 1171+00 SB | 1172+00 SB | 1173+00 SB | 1174+00 SB | 1175+00 SB | 1176+00 SB | 1177+00 SB | 1178+00 SB | 1179+00 SB

1165+00 NB | 1166+00 NB | 1167+00 NB | 1168+00 NB | 1169+00 NB | 1170+00 NB | 1171+00 NB | 1172+00 NB | 1173+00 NB | 1174+00 NB | 1175+00 NB | 1176+00 NB | 1177+00 NB | 1178+00 NB | 1179+00 NB | 1180+

IH 41 NB

RAMP JC

RAMP JB

TOWER DR

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH" FOR ADDITIONAL DETAILS

MATCH LINE 1180+00

SIGN

POST

FOOTBRIDGE

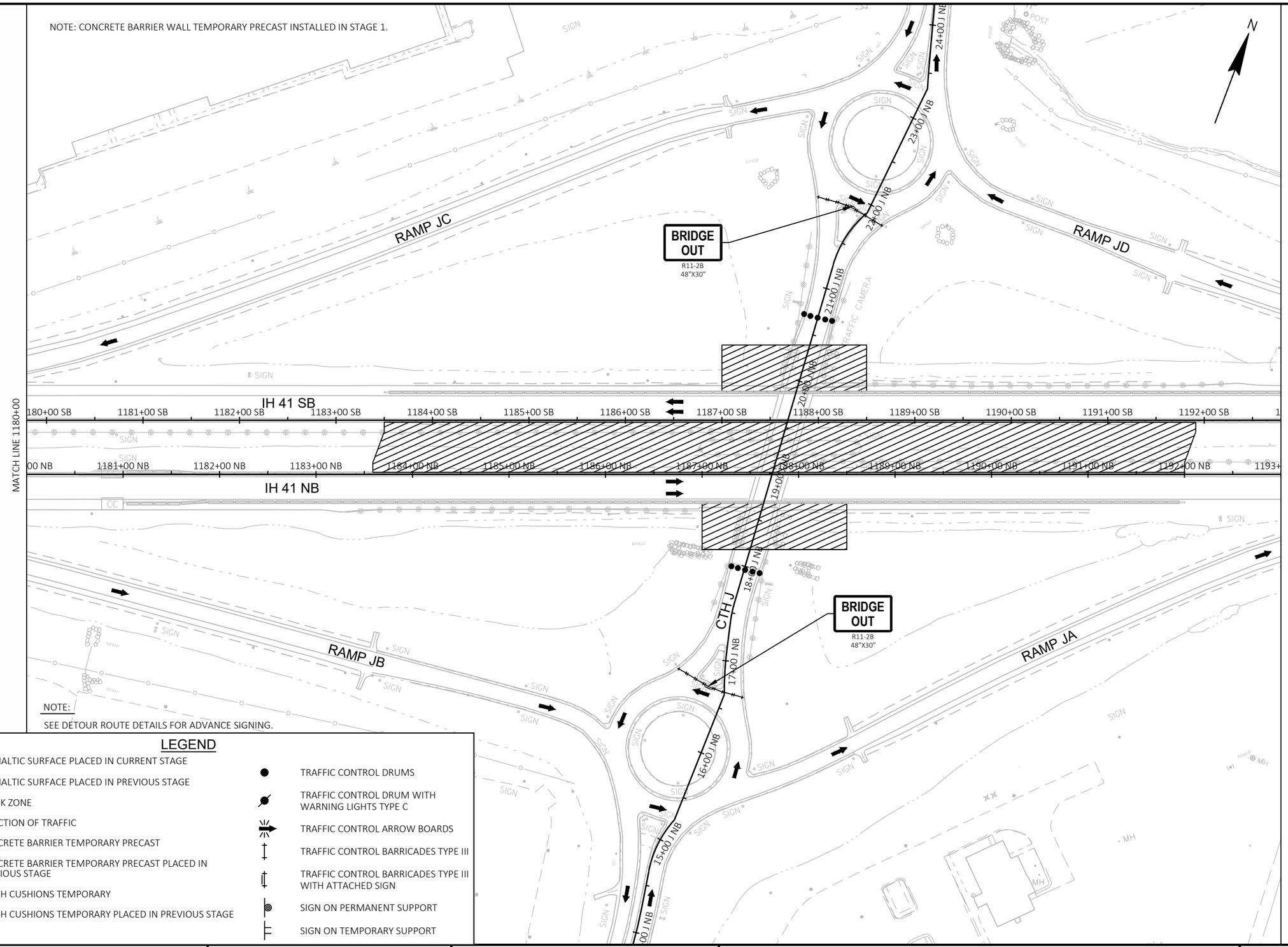
RIPRAP

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 2, STAGE 3, AND STAGE 4 PEAK OPERATIONS | SHEET 146 | E |
|---|---|---|---|---|---|

NOTE: CONCRETE BARRIER WALL TEMPORARY PRECAST INSTALLED IN STAGE 1.




NOTE:

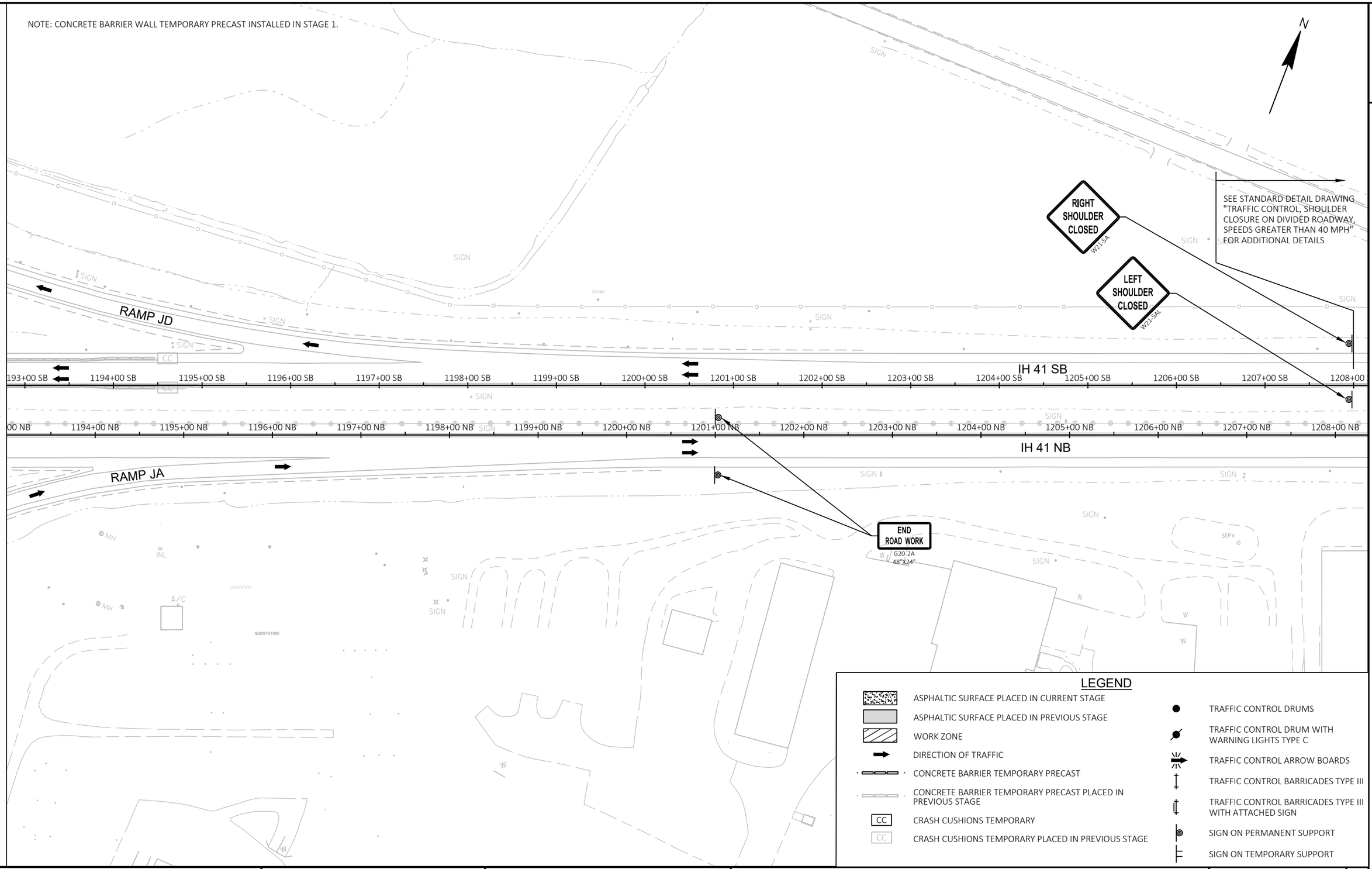
SEE DETOUR ROUTE DETAILS FOR ADVANCE SIGNING.

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CRASH CUSHIONS TEMPORARY
- CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 2, STAGE 3, AND STAGE 4 PEAK OPERATIONS | SHEET 147 | E |
|---|---|---|---|---|---|

NOTE: CONCRETE BARRIER WALL TEMPORARY PRECAST INSTALLED IN STAGE 1.




## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CRASH CUSHIONS TEMPORARY
- CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 2, STAGE 3, AND STAGE 4 PEAK OPERATIONS | SHEET 148 | E |
|---|---|---|---|---|---|

2

2

MALONEY RD

N

IH 41 SB

1135+00 SB | 1136+00 SB | 1137+00 SB | 1138+00 SB | 1139+00 SB | 1140+00 SB | 1141+00 SB | 1142+00 SB | 1143+00 SB | 1144+00 SB | 1145+00 SB | 1146+00 SB | 1147+00 SB | 1148+00 SB | 1149+00 SB | 1

1135+00 NB | 1136+00 NB | 1137+00 NB | 1138+00 NB | 1139+00 NB | 1140+00 NB | 1141+00 NB | 1142+00 NB | 1143+00 NB | 1144+00 NB | 1145+00 NB | 1146+00 NB | 1147+00 NB | 1148+00 NB | 1149+00 NB | 1150+

50' (TYP.)

IH 41 NB

840' TAPER

MATCH LINE 1150+00

TOWER DR

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" FOR ADDITIONAL DETAILS ON ADVANCED WARNING (USE 70 MPH)

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, TWO LANE FULL FREEWAY CLOSURE" FOR ADDITIONAL DETAILS (USE 70 MPH)

WATER TOWER

SIGN

POST

SUBSTATION

FOOT BRIDGE

A/C

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 4A OFF-PEAK OPERATIONS (NB IH 41 CLOSURE) | SHEET 149 | E |
|---|---|---|---|---|---|

2

2

N

MATCH LINE 1150+00

MATCH LINE 1165+00

IH 41 SB

1150+00 SB | 1151+00 SB | 1152+00 SB | 1153+00 SB | 1154+00 SB | 1155+00 SB | 1156+00 SB | 1157+00 SB | 1158+00 SB | 1159+00 SB | 1160+00 SB | 1161+00 SB | 1162+00 SB | 1163+00 SB | 1164+00 SB

50' (TYP.)

00 NB | 1151+00 NB | 1152+00 NB | 1153+00 NB | 1154+00 NB | 1155+00 NB | 1156+00 NB | 1157+00 NB | 1158+00 NB | 1159+00 NB | 1160+00 NB | 1161+00 NB | 1162+00 NB | 1163+00 NB | 1164+00 NB | 1165+

840' TAPER

IH 41 NB

1680'

TOWER DR

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR ADDITIONAL DETAILS

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 4A OFF-PEAK OPERATIONS (NB IH 41 CLOSURE) | SHEET 150 | E |
|---|---|---|---|---|---|

2

2

N

END
ROAD WORK
G20-2A
48"X24"

IH 41 SB

165+00 SB 1166+00 SB 1167+00 SB 1168+00 SB 1169+00 SB 1170+00 SB 1171+00 SB 1172+00 SB 1173+00 SB 1174+00 SB 1175+00 SB 1176+00 SB 1177+00 SB 1178+00 SB 1179+00 SB 1

50' (TYP.)

MATCH LINE 1165+00

00 NB 1166+00 NB 1167+00 NB 1168+00 NB 1169+00 NB 1170+00 NB 1171+00 NB 1172+00 NB 1173+00 NB 1174+00 NB 1175+00 NB 1176+00 NB 1177+00 NB 1178+00 NB 1179+00 NB 1180+

MATCH LINE 1180+00

1680'

IH 41 NB

840' TAPER

25' (TYP.)

RAMP JB

RAMP JC

PCMS

WO1-R2
48"X48"

TOWER DR

(ADVANCE NOTICE)
ROAD/TO/CLOSE
DAY/11 PM TO/4:30 AM

(DURING CLOSURE)
ALL/TRAFFIC
EXIT/RIGHT

TRAFFIC CONTROL SIGNS PCMS

WO1-6
48"X24"

SEE STANDARD DETAIL DRAWING
"BARRICADES AND SIGNS FOR
VARIOUS CLOSURES" DETAIL D

SEE STANDARD DETAIL DRAWING "TRAFFIC
CONTROL TWO LANE FULL FREEWAY
CLOSURE" FOR ADDITIONAL DETAILS

SIGN
POST
RIPRAP
FOOTBRIDGE
FLAG

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

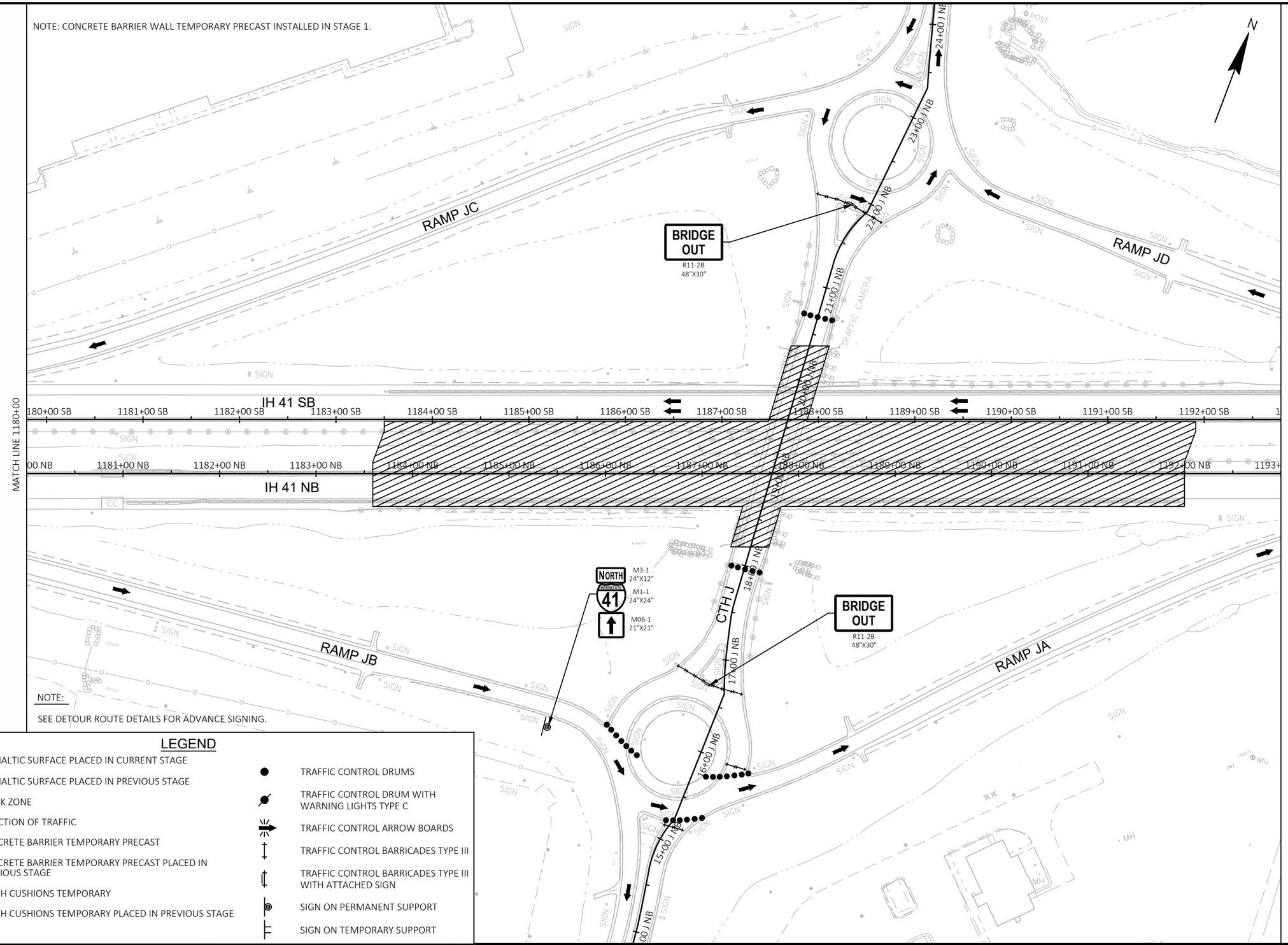
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 4A OFF-PEAK OPERATIONS (NB IH 41 CLOSURE) | SHEET 151 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S4A.DWG
LAYOUT NAME - 026003-s4a

PLOT DATE : 9/16/2024 12:17 PM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

NOTE: CONCRETE BARRIER WALL TEMPORARY PRECAST INSTALLED IN STAGE 1.




NOTE:

SEE DETOUR ROUTE DETAILS FOR ADVANCE SIGNING.

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 4A OFF-PEAK OPERATIONS (NB IH 41 CLOSURE) | SHEET 152 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S4A.DWG
LAYOUT NAME - 026004-s4a
PLOT DATE : 9/16/2024 12:19 PM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

NOTE: CONCRETE BARRIER WALL TEMPORARY PRECAST INSTALLED IN STAGE 1.

N

RIGHT SHOULDER CLOSED
W21-5A

LEFT SHOULDER CLOSED
W21-5AL

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH" FOR ADDITIONAL DETAILS

RAMP JD

IH 41 SB

1193+00 SB | 1194+00 SB | 1195+00 SB | 1196+00 SB | 1197+00 SB | 1198+00 SB | 1199+00 SB | 1200+00 SB | 1201+00 SB | 1202+00 SB | 1203+00 SB | 1204+00 SB | 1205+00 SB | 1206+00 SB | 1207+00 SB | 1208+00

MATCH LINE 1193+00

1194+00 NB | 1195+00 NB | 1196+00 NB | 1197+00 NB | 1198+00 NB | 1199+00 NB | 1200+00 NB | 1201+00 NB | 1202+00 NB | 1203+00 NB | 1204+00 NB | 1205+00 NB | 1206+00 NB | 1207+00 NB | 1208+00 NB

IH 41 NB

RAMP JA

END ROAD WORK
G20-2A
48"X24"

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 4A OFF-PEAK OPERATIONS (NB IH 41 FULL CLOSURE) | SHEET 153 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S4A.DWG
LAYOUT NAME - 026005-s4a
PLOT DATE : 9/16/2024 12:21 PM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

END
ROAD WORK
G20-2A
48"X24"

IH 41 SB

1165+00 SB | 1166+00 SB | 1167+00 SB | 1168+00 SB | 1169+00 SB | 1170+00 SB | 1171+00 SB | 1172+00 SB | 1173+00 SB | 1174+00 SB | 1175+00 SB | 1176+00 SB | 1177+00 SB | 1178+00 SB | 1179+00 SB | 1

1165+00 NB | 1166+00 NB | 1167+00 NB | 1168+00 NB | 1169+00 NB | 1170+00 NB | 1171+00 NB | 1172+00 NB | 1173+00 NB | 1174+00 NB | 1175+00 NB | 1176+00 NB | 1177+00 NB | 1178+00 NB | 1179+00 NB | 1180+

IH 41 NB

RAMP JC

RAMP JB

MATCH LINE 1180+00

LEFT
SHOULDER
CLOSED
W21-5AL

RIGHT
SHOULDER
CLOSED
W21-5A

TOWER DR

SEE STANDARD DETAIL DRAWING
"TRAFFIC CONTROL, SHOULDER
CLOSURE ON DIVIDED ROADWAY,
SPEEDS GREATER THAN 40 MPH"
FOR ADDITIONAL DETAILS

SIGN
POST
RIPRAP
FOOTBRIDGE
FLAG

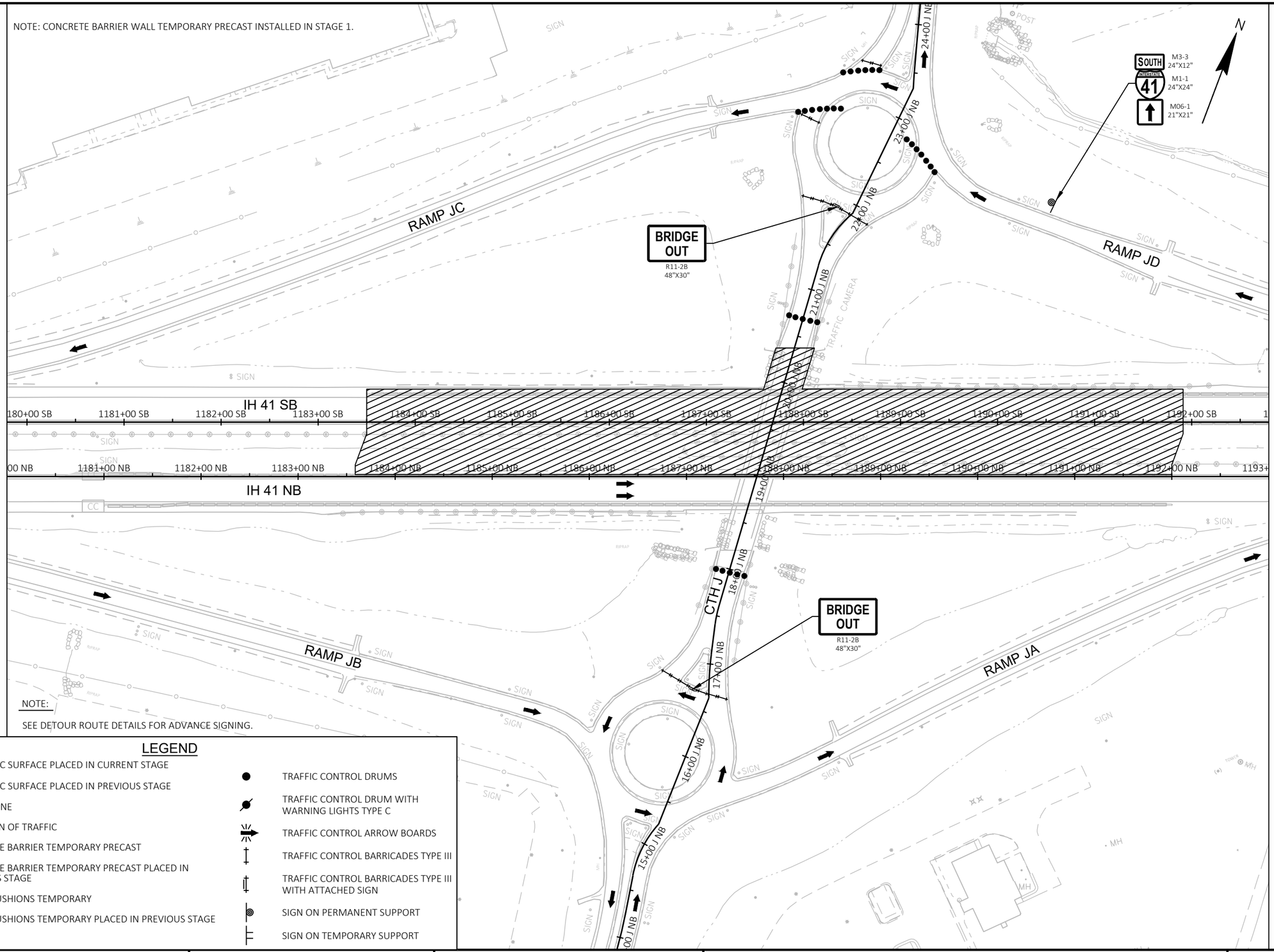
## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 4B OFF-PEAK OPERATIONS (SB IH 41 FULL CLOSURE) | SHEET 154 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S4B.DWG
LAYOUT NAME - 026001-s4b
PLOT DATE : 9/16/2024 12:25 PM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

NOTE: CONCRETE BARRIER WALL TEMPORARY PRECAST INSTALLED IN STAGE 1.




NOTE:

SEE DETOUR ROUTE DETAILS FOR ADVANCE SIGNING.

## LEGEND

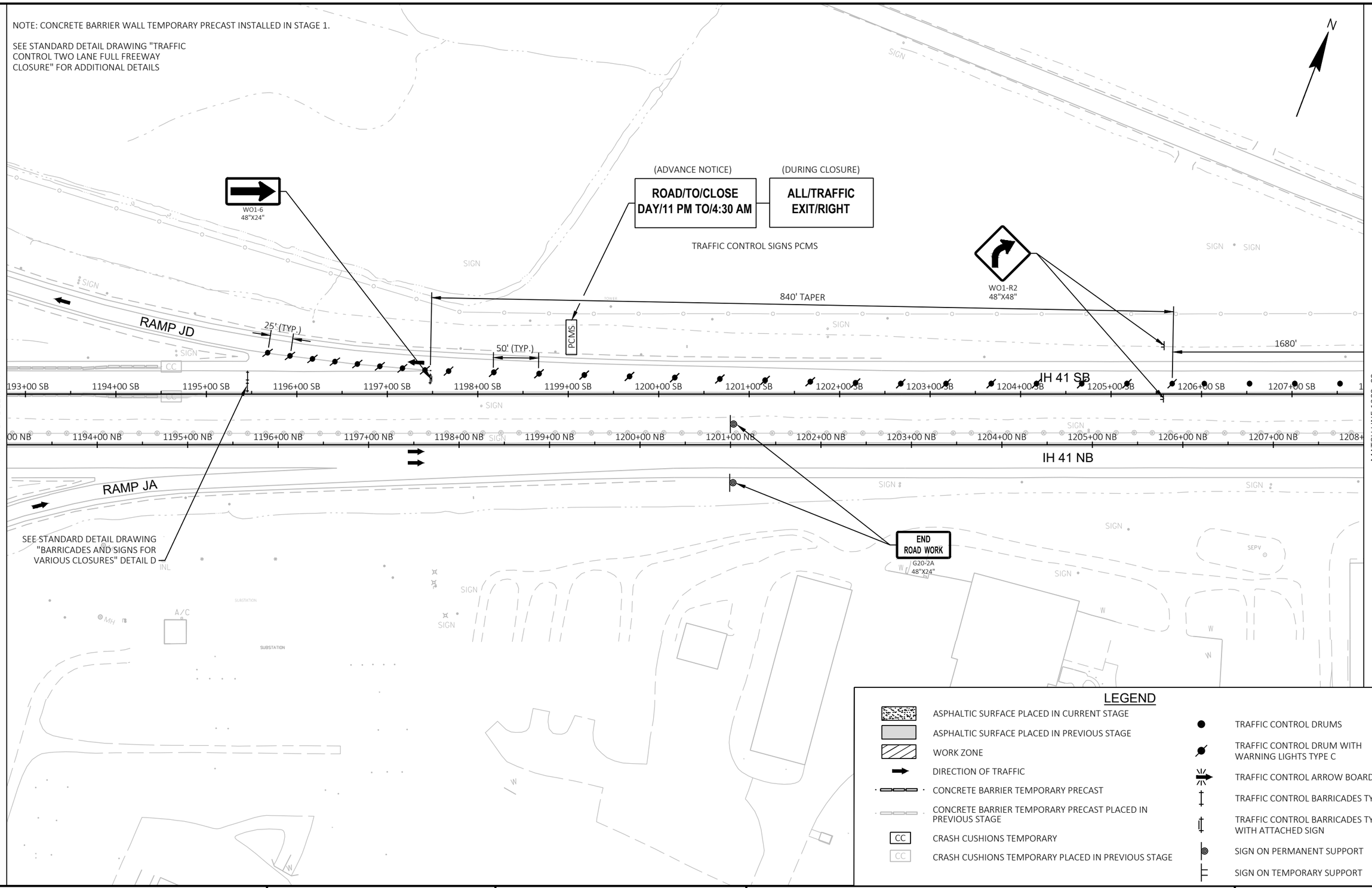
- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 4B OFF-PEAK OPERATIONS (SB IH 41 FULL CLOSURE) | SHEET 155 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S4B.DWG
LAYOUT NAME - 026002-s4b
PLOT DATE : 9/16/2024 12:27 PM
PLOT BY : GRIMME, SARA
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

NOTE: CONCRETE BARRIER WALL TEMPORARY PRECAST INSTALLED IN STAGE 1.

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR ADDITIONAL DETAILS




## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CRASH CUSHIONS TEMPORARY
- CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 4B OFF-PEAK OPERATIONS (SB IH 41 FULL CLOSURE) | SHEET 156 | E |
|---|---|---|---|---|---|

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE" FOR ADDITIONAL DETAILS

KELSO RD

IH 41 SB

IH 41 NB

EAST FRONTAGE RD

1680'

50' (TYP.)

MATCH LINE 1208+00

MATCH LINE 1223+00

1208+00 SB 1209+00 SB 1210+00 SB 1211+00 SB 1212+00 SB 1213+00 SB 1214+00 SB 1215+00 SB 1216+00 SB 1217+00 SB 1218+00 SB 1219+00 SB 1220+00 SB 1221+00 SB 1222+00 SB 1223+

00 NB 1209+00 NB 1210+00 NB 1211+00 NB 1212+00 NB 1213+00 NB 1214+00 NB 1215+00 NB 1216+00 NB 1217+00 NB 1218+00 NB 1219+00 NB 1220+00 NB 1221+00 NB 1222+00 NB

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 4B OFF-PEAK OPERATIONS (SB IH 41 FULL CLOSURE) | SHEET 157 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S4B.DWG
LAYOUT NAME - 026004-s4b

PLOT DATE : 9/16/2024 12:31 PM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

MATCH LINE 1223+00

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, TWO LANE FULL FREEWAY CLOSURE" FOR ADDITIONAL DETAILS (USE 70 MPH)

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" FOR ADDITIONAL DETAILS ON ADVANCED WARNING (USE 70 MPH)

KELSO RD

840' TAPER

IH 41 SB

1223+00 SB 1224+00 SB 1225+00 SB 1226+00 SB 1227+00 SB 1228+00 SB 1229+00 SB

50' (TYP.)

00 NB 1224+00 NB 1225+00 NB 1226+00 NB 1227+00 NB 1228+00 NB 1229+00 NB 1230+00 NB

IH 41 NB

EAST FRONTAGE RD

SIGN

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 4B OFF-PEAK OPERATIONS (SB IH 41 FULL CLOSURE) | SHEET 158 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S4B.DWG
LAYOUT NAME - 026005-s4b
PLOT DATE : 9/16/2024 12:33 PM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

END
ROAD WORK
G20-2A
48"X24"

IH 41 SB

1165+00 SB | 1166+00 SB | 1167+00 SB | 1168+00 SB | 1169+00 SB | 1170+00 SB | 1171+00 SB | 1172+00 SB | 1173+00 SB | 1174+00 SB | 1175+00 SB | 1176+00 SB | 1177+00 SB | 1178+00 SB | 1179+00 SB

1165+00 NB | 1166+00 NB | 1167+00 NB | 1168+00 NB | 1169+00 NB | 1170+00 NB | 1171+00 NB | 1172+00 NB | 1173+00 NB | 1174+00 NB | 1175+00 NB | 1176+00 NB | 1177+00 NB | 1178+00 NB | 1179+00 NB | 1180+

IH 41 NB

RAMP JC

RAMP JB

TOWER DR

25' (TYP.)

200'

+66.6, 26' R

+52.3, 26' R

LEFT
SHOULDER
CLOSED
W21-5AL

RIGHT
SHOULDER
CLOSED
W21-5A

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH" FOR ADDITIONAL DETAILS

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL DETAILS ON ADVANCED WARNING (USE 70 MPH)

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL DETAILS

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

RAMP
CLOSED
R11-2R
48"X30"

MATCH LINE 1180+00

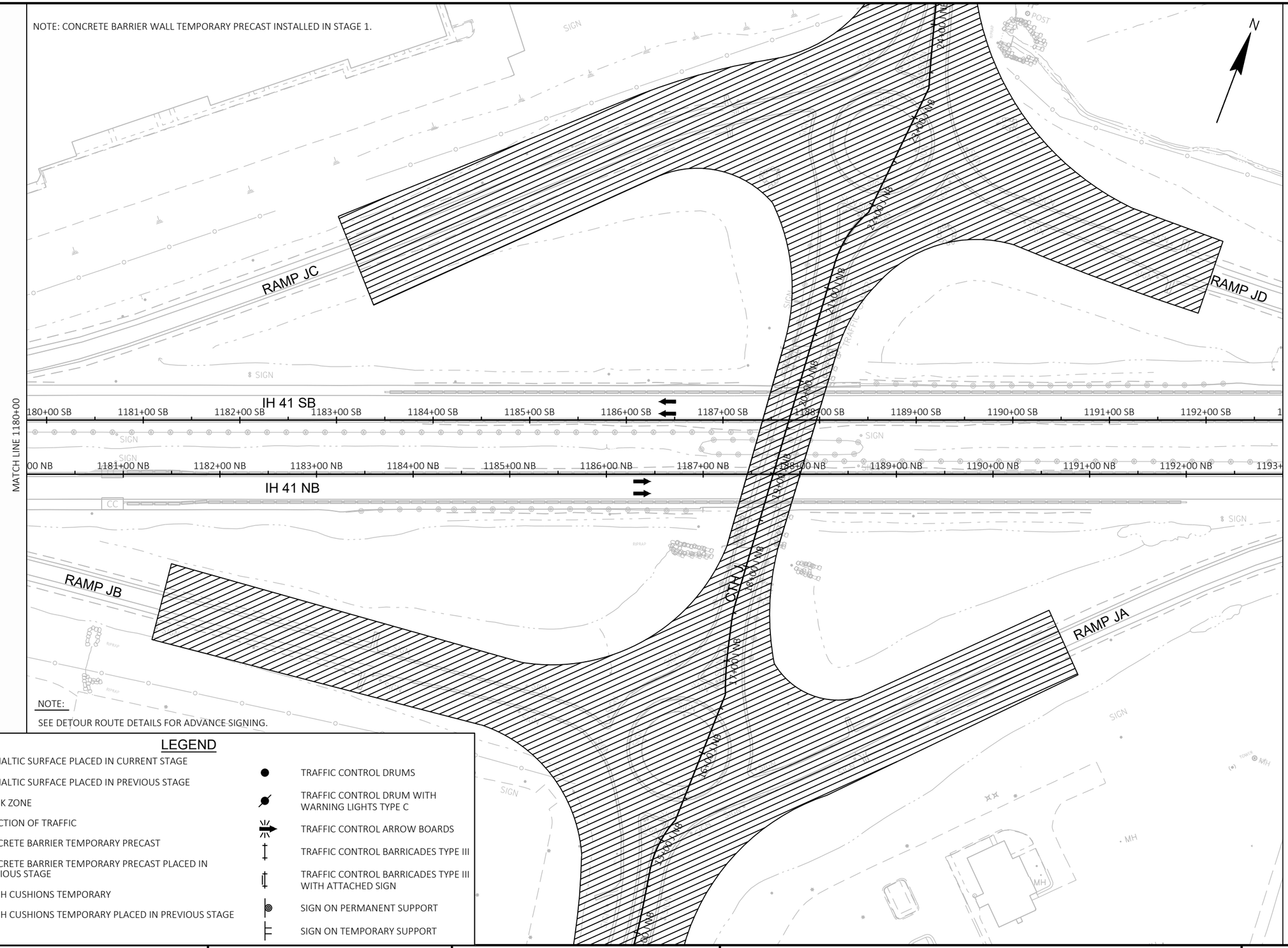
SIGN | POST | RIPRAP | FOOTBRIDGE | FLAG | HEADWALL

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 5 | SHEET 159 | E |
|---|---|---|---|---|---|

NOTE: CONCRETE BARRIER WALL TEMPORARY PRECAST INSTALLED IN STAGE 1.




NOTE:

SEE DETOUR ROUTE DETAILS FOR ADVANCE SIGNING.

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC — CRASH CUSHIONS TEMPORARY
- CC — CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 5 | SHEET 160 | E |
|---|---|---|---|---|---|

NOTE: CONCRETE BARRIER WALL TEMPORARY PRECAST INSTALLED IN STAGE 1.

SEE STANDARD DETAIL "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL DETAILS

SEE STANDARD DETAIL "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL DETAILS ON ADVANCED WARNING

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH" FOR ADDITIONAL DETAILS

RIGHT SHOULDER CLOSED W21.5A

LEFT SHOULDER CLOSED W21.5AL

RAMP CLOSED R11-2R 48"X30"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

+47.7, 26' L

25' (TYP.)

+43.4, 26' L

200'

RAMP JD

RAMP JA

IH 41 SB

IH 41 NB

1193+00 SB 1194+00 SB 1195+00 SB 1196+00 SB 1197+00 SB 1198+00 SB 1199+00 SB 1200+00 SB 1201+00 SB 1202+00 SB 1203+00 SB 1204+00 SB 1205+00 SB 1206+00 SB 1207+00 SB 1208+00

00 NB 1194+00 NB 1195+00 NB 1196+00 NB 1197+00 NB 1198+00 NB 1199+00 NB 1200+00 NB 1201+00 NB 1202+00 NB 1203+00 NB 1204+00 NB 1205+00 NB 1206+00 NB 1207+00 NB 1208+00 NB

MATCH LINE 1193+00

END ROAD WORK G20-2A 48"X24"

## LEGEND

- ASPHALTIC SURFACE PLACED IN CURRENT STAGE
- ASPHALTIC SURFACE PLACED IN PREVIOUS STAGE
- WORK ZONE
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PREVIOUS STAGE
- CC CRASH CUSHIONS TEMPORARY
- CC CRASH CUSHIONS TEMPORARY PLACED IN PREVIOUS STAGE
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUM WITH WARNING LIGHTS TYPE C
- TRAFFIC CONTROL ARROW BOARDS
- TRAFFIC CONTROL BARRICADES TYPE III
- TRAFFIC CONTROL BARRICADES TYPE III WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | STAGE 5 | SHEET 161 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\026001-S5.DWG
LAYOUT NAME - 026003-s5
PLOT DATE : 9/16/2024 12:40 PM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

## SIGN LEGEND



G20-60
108"X24"



M3-3
24"X12"

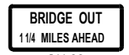


M4-9R
30"X24"


MO6-2
21"X21"



R11-3
60"X30"



R11-3C
60"X24"



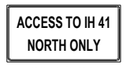



M1-1
24"X24"



MO4-5
24"X12"


MO5-1L
21"X21"



R10-61 (MOD.)
60"X30"



R11-3
60"X30"



R11-4
60"X30"



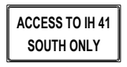



M1-5A
24"X24"



M4-8
24"X12"


MO5-1R
21"X21"



R10-61 (MOD.)
60"X30"



R11-3C
60"X24"









M2-1
21"X15"



M4-8A
24"X18"


MO5-2R
21"X21"



R11-2
48"X30"



R11-3C
60"X24"









M3-1
24"X12"



M4-9L
30"X24"


MO6-1
21"X21"



R11-2R
48"X30"



R11-3C
60"X24"




## GENERAL NOTES

USE SIZE 5 SIGNS FOR ANY SIGNS PLACED ALONG IH 41 AS SHOWN ON SIGN LAYOUT DETAILS. ALL OTHER SIGNS SIZED AS NOTED ON THIS DRAWING.

MO SIGNS ARE THE SAME AS M, BUT WITH ORANGE SHEETING.

WO SIGNS ARE THE SAME AS W, BUT WITH ORANGE SHEETING.

## General Notes

DETOUR ROUTE MARKER SIGNING TO BE INSTALLED AND MAINTAINED BY CONTRACTOR.

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

REMOVE OR COVER ANY SIGN, TEMPORARY OR EXISTING, WHICH CONFLICTS WITH TRAFFIC CONTROL "IN USE", OR AS APPROVED BY THE ENGINEER.

"WO" AND "W" SIGNS SHALL BE 48"x48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL SIGNS PORTABLE CHANGEABLE MESSAGE TO BE INSTALLED ONE WEEK PRIOR TO IMPLEMENTATION OF DETOUR ROUTE.

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.

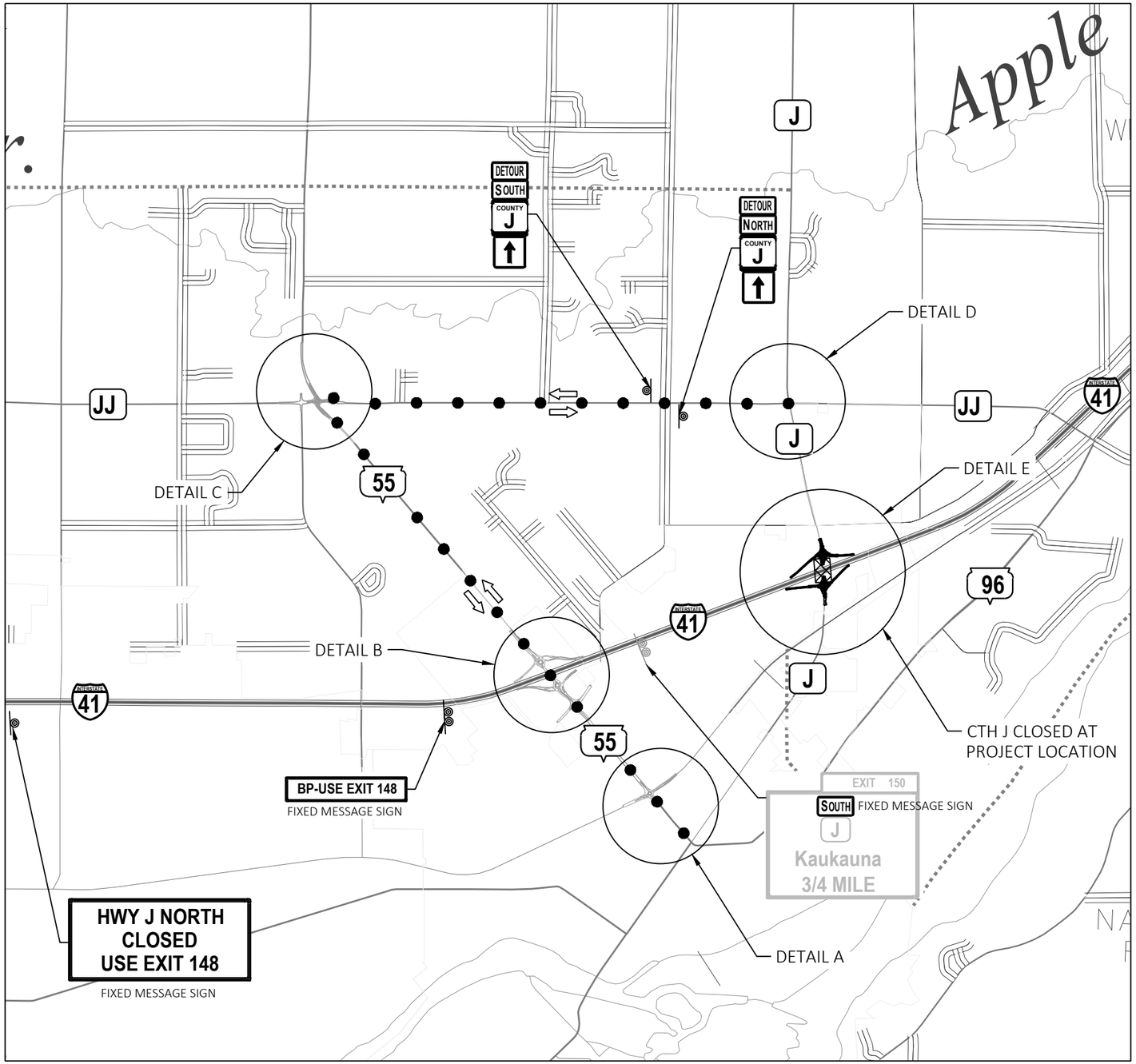
ALL M05 AND M06 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

### LEGEND

- WORK ZONE
- TRAFFIC CONTROL COVERING SIGNS TYPE I/TYPE II
- DETOUR
- TRAFFIC CONTROL SIGNS
- EXISTING SIGN
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN WITH TRAFFIC CONTROL WARNING LIGHTS TYPE A
- PCMS — TRAFFIC CONTROL SIGNS PCMS

### SEE THE FOLLOWING STANDARD DETAILS:

SDD 15C02: BARRICADES AND SIGNS FOR MAINLINE CLOSURES
SDD 15C02: BARRICADES AND SIGNS FOR VARIOUS CLOSURES
SDD 15C02: DETOUR SIGNING FOR MAINLINE CLOSURES

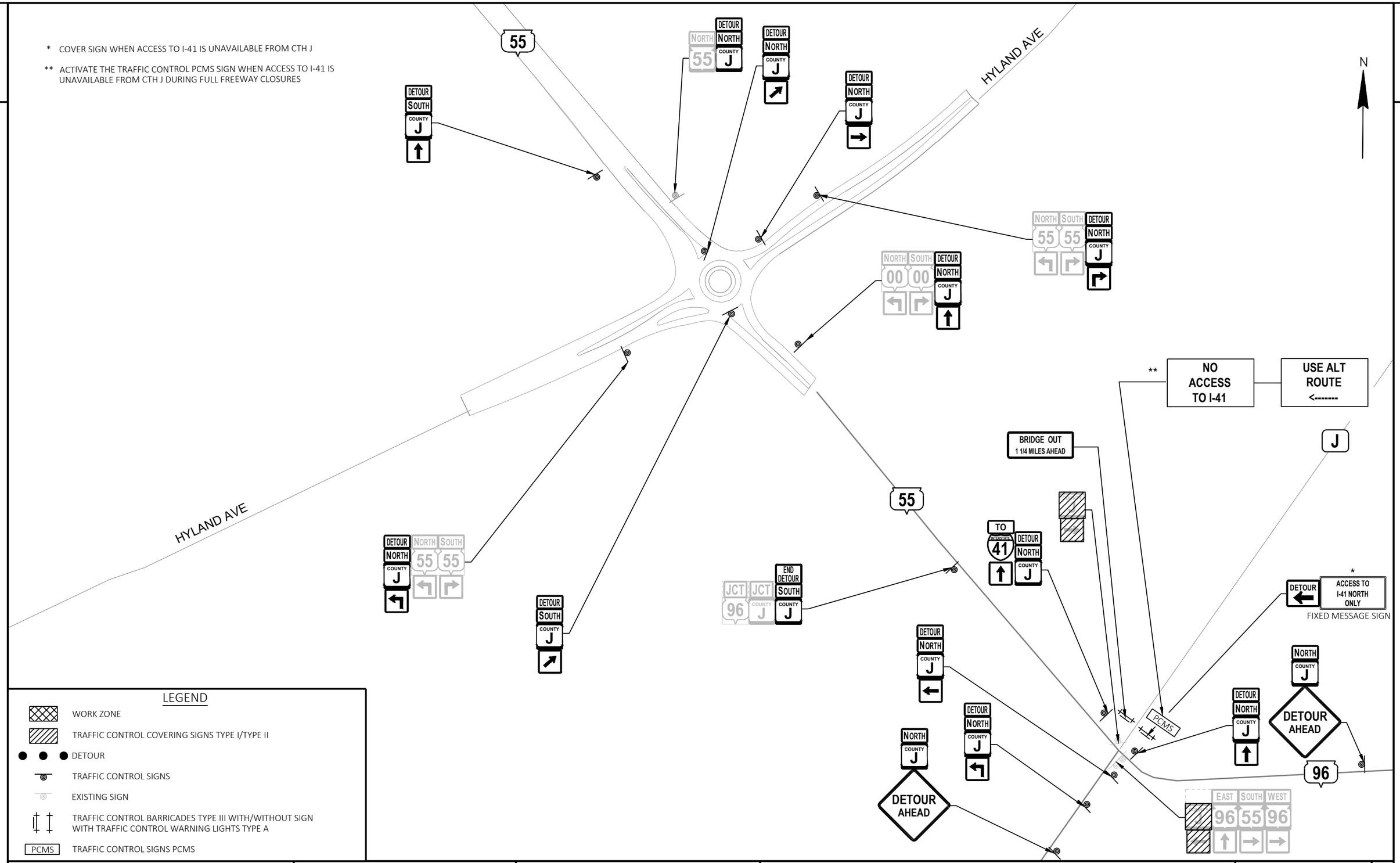



DETOUR OVERVIEW FOR CTH J CLOSURE

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | DETOUR ROUTE OVERVIEW - CTH J, STAGES 2, 3, AND 4 | SHEET 163 | E |
|---|---|---|---|---|---|

* COVER SIGN WHEN ACCESS TO I-41 IS UNAVAILABLE FROM CTH J

** ACTIVATE THE TRAFFIC CONTROL PCMS SIGN WHEN ACCESS TO I-41 IS UNAVAILABLE FROM CTH J DURING FULL FREEWAY CLOSURES




LEGEND

- WORK ZONE
- TRAFFIC CONTROL COVERING SIGNS TYPE I/TYPE II
- DETOUR
- TRAFFIC CONTROL SIGNS
- EXISTING SIGN
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN WITH TRAFFIC CONTROL WARNING LIGHTS TYPE A
- PCMS — TRAFFIC CONTROL SIGNS PCMS

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | DETOUR ROUTE OVERVIEW - DETAIL A, STAGES 2, 3, AND 4 | SHEET 164 E |
|---|---|---|---|---|

FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027002-DT.DWG
LAYOUT NAME - 027003-dt-Detail A

PLOT DATE : 7/22/2024 2:51 PM PLOT BY : CARPENTER, ZACH PLOT NAME : PLOT SCALE : ##########

2

DETOUR SOUTH COUNTY J

DETOUR NORTH COUNTY J

TO SOUTH COUNTY J

TO NORTH COUNTY J

55

INTERSTATE 41

MALONEY ROAD

GERTRUDE ST

BP-FOLLOW HWY J NORTH DETOUR
FIXED MESSAGE SIGN

SIZE 5

N

LEGEND

- WORK ZONE
- TRAFFIC CONTROL COVERING SIGNS TYPE I/TYPE II
- DETOUR
- TRAFFIC CONTROL SIGNS
- EXISTING SIGN
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN WITH TRAFFIC CONTROL WARNING LIGHTS TYPE A
- PCMS — TRAFFIC CONTROL SIGNS PCMS

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | DETOUR ROUTE OVERVIEW - DETAIL B, STAGES 2, 3, AND 4 | SHEET 165 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027002-DT.DWG
LAYOUT NAME - 027004-dt-Detail B
PLOT DATE : 7/22/2024 2:51 PM PLOT BY : CARPENTER, ZACH PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

SOUTH COUNTY J DETOUR AHEAD

55

DETOUR SOUTH COUNTY J

DETOUR SOUTH COUNTY J

DETOUR SOUTH COUNTY J

DETOUR SOUTH COUNTY J 55

JJ

JJ

SOUTH COUNTY J DETOUR AHEAD

DETOUR SOUTH COUNTY J

DETOUR SOUTH COUNTY J

DETOUR SOUTH COUNTY J

DETOUR NORTH COUNTY J

DETOUR NORTH COUNTY J

DETOUR NORTH COUNTY J

DETOUR NORTH COUNTY J

CC

SOUTH 55 DETOUR SOUTH COUNTY J

55

LEGEND

- WORK ZONE
- TRAFFIC CONTROL COVERING SIGNS TYPE I/TYPE II
- DETOUR
- TRAFFIC CONTROL SIGNS
- EXISTING SIGN
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN WITH TRAFFIC CONTROL WARNING LIGHTS TYPE A
- PCMS TRAFFIC CONTROL SIGNS PCMS

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | DETOUR ROUTE OVERVIEW - DETAIL C, STAGES 2, 3. AND 4 | SHEET 166 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027002-DT.DWG
LAYOUT NAME - 027005-dt-Detail C

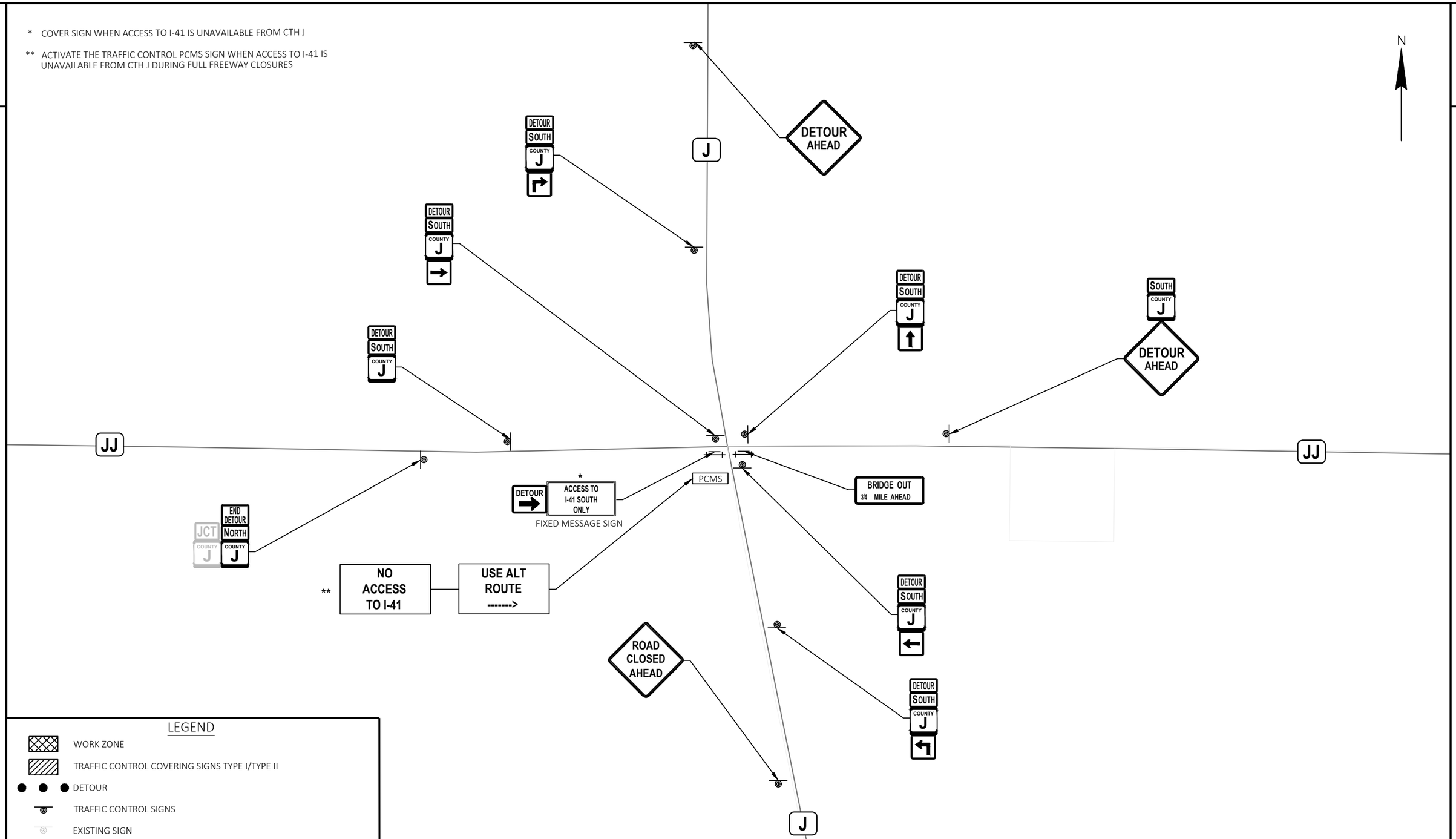
PLOT DATE : 7/22/2024 2:51 PM PLOT BY : CARPENTER, ZACH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

* COVER SIGN WHEN ACCESS TO I-41 IS UNAVAILABLE FROM CTH J

** ACTIVATE THE TRAFFIC CONTROL PCMS SIGN WHEN ACCESS TO I-41 IS UNAVAILABLE FROM CTH J DURING FULL FREEWAY CLOSURES




LEGEND

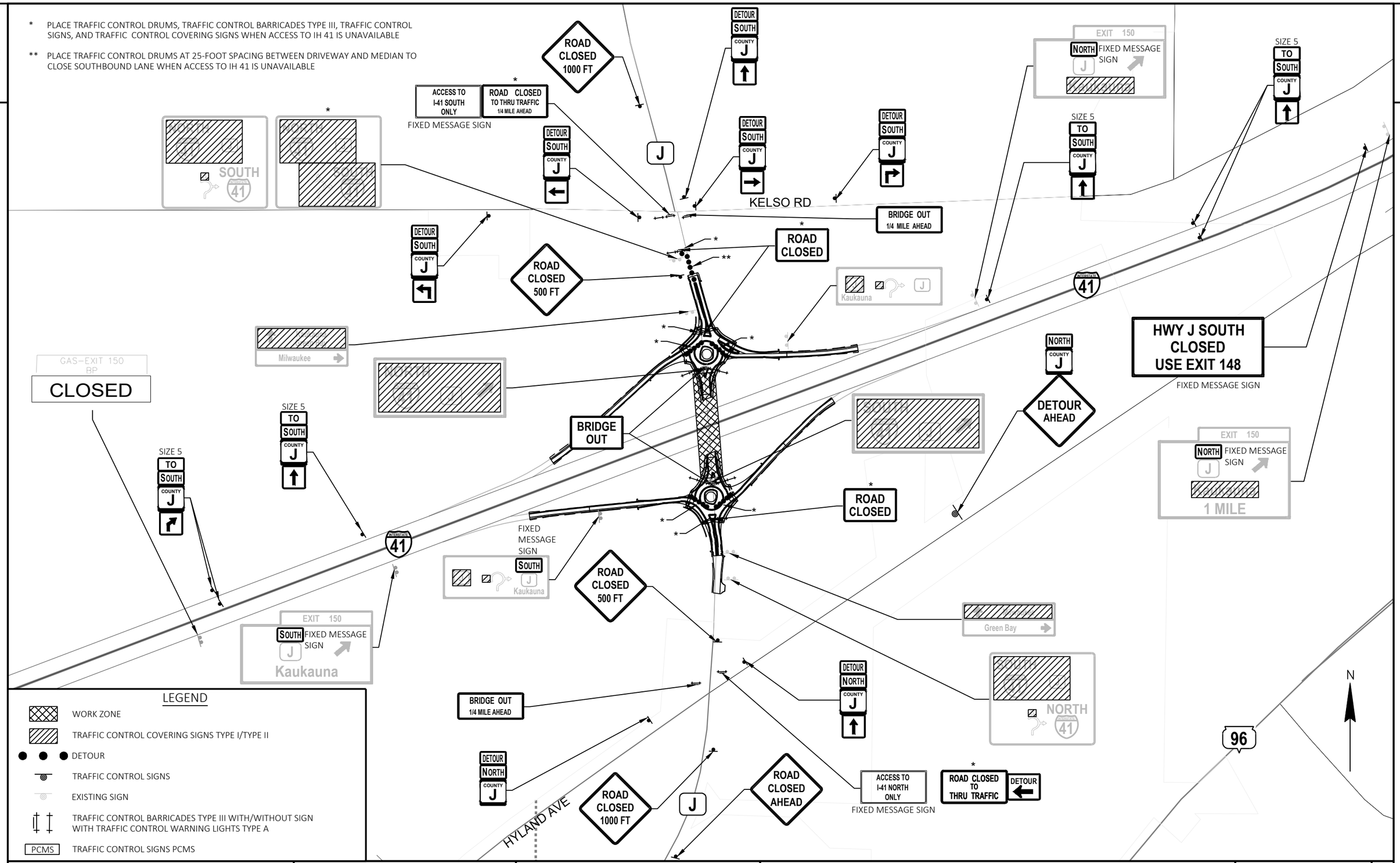
- WORK ZONE
- TRAFFIC CONTROL COVERING SIGNS TYPE I/TYPE II
- DETOUR
- TRAFFIC CONTROL SIGNS
- EXISTING SIGN
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN WITH TRAFFIC CONTROL WARNING LIGHTS TYPE A
- PCMS — TRAFFIC CONTROL SIGNS PCMS

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | DETOUR ROUTE OVERVIEW - DETAIL D, STAGES 2, 3, AND 4 | SHEET 167 | E |
|---|---|---|---|---|---|

2

* PLACE TRAFFIC CONTROL DRUMS, TRAFFIC CONTROL BARRICADES TYPE III, TRAFFIC CONTROL SIGNS, AND TRAFFIC CONTROL COVERING SIGNS WHEN ACCESS TO IH 41 IS UNAVAILABLE

** PLACE TRAFFIC CONTROL DRUMS AT 25-FOOT SPACING BETWEEN DRIVEWAY AND MEDIAN TO CLOSE SOUTHBOUND LANE WHEN ACCESS TO IH 41 IS UNAVAILABLE




LEGEND

- WORK ZONE
- TRAFFIC CONTROL COVERING SIGNS TYPE I/TYPE II
- DETOUR
- TRAFFIC CONTROL SIGNS
- EXISTING SIGN
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN WITH TRAFFIC CONTROL WARNING LIGHTS TYPE A
- PCMS TRAFFIC CONTROL SIGNS PCMS

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | DETOUR ROUTE OVERVIEW - DETAIL E, STAGES 2, 3, AND 4 | SHEET 168 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027002-DT.DWG
LAYOUT NAME - 027007-dt-Detail E
PLOT DATE : 7/22/2024 2:51 PM PLOT BY : CARPENTER, ZACH PLOT NAME : PLOT SCALE : ########### WISDOT/CADDS SHEET 42

## General Notes

DETOUR ROUTE MARKER SIGNING TO BE INSTALLED AND MAINTAINED BY CONTRACTOR.

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

REMOVE OR COVER ANY SIGN, TEMPORARY OR EXISTING, WHICH CONFLICTS WITH TRAFFIC CONTROL "IN USE", OR AS APPROVED BY THE ENGINEER.

"WO" AND "W" SIGNS SHALL BE 48"x48" UNLESS OTHERWISE NOTED.

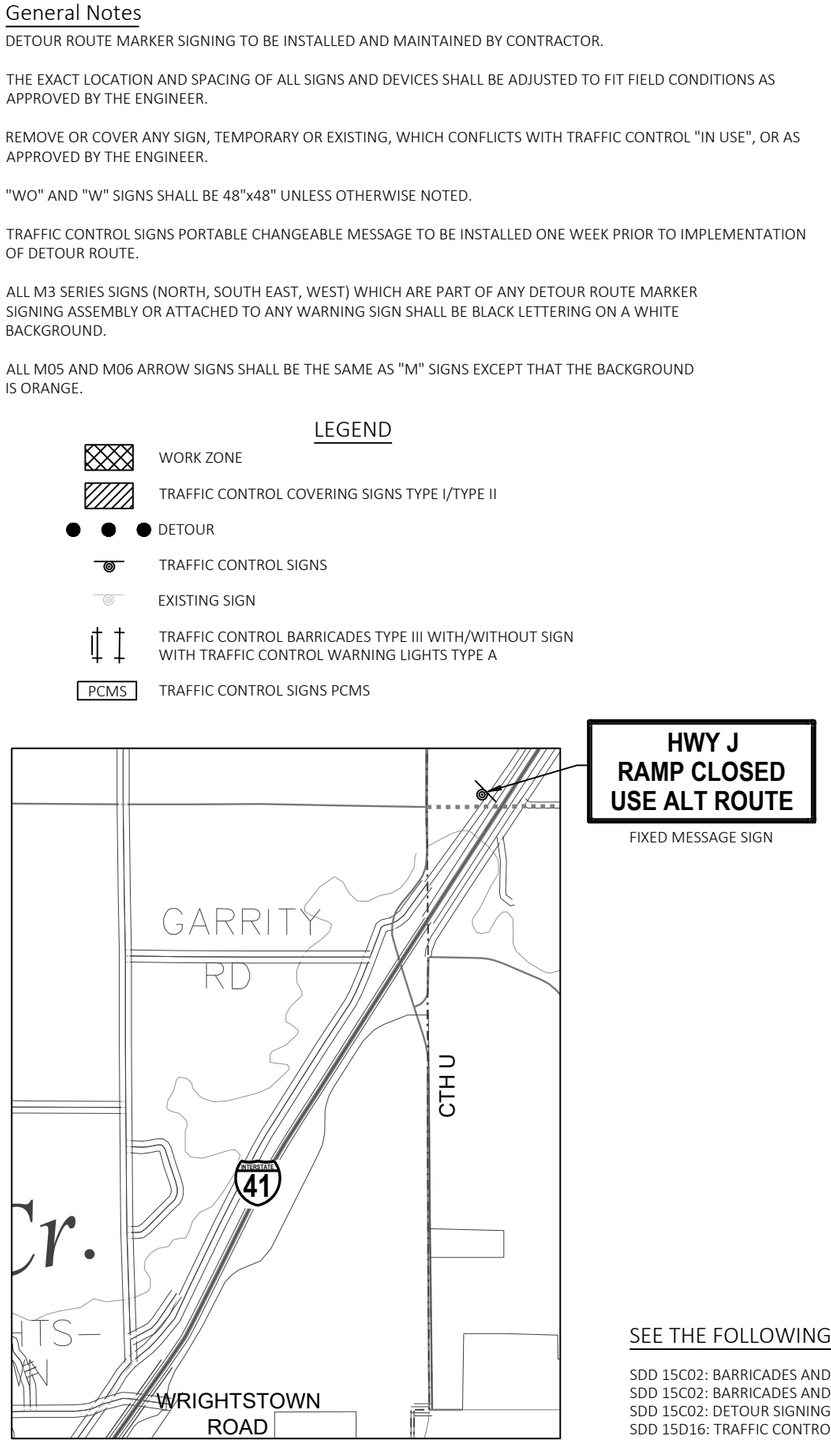
TRAFFIC CONTROL SIGNS PORTABLE CHANGEABLE MESSAGE TO BE INSTALLED ONE WEEK PRIOR TO IMPLEMENTATION OF DETOUR ROUTE.

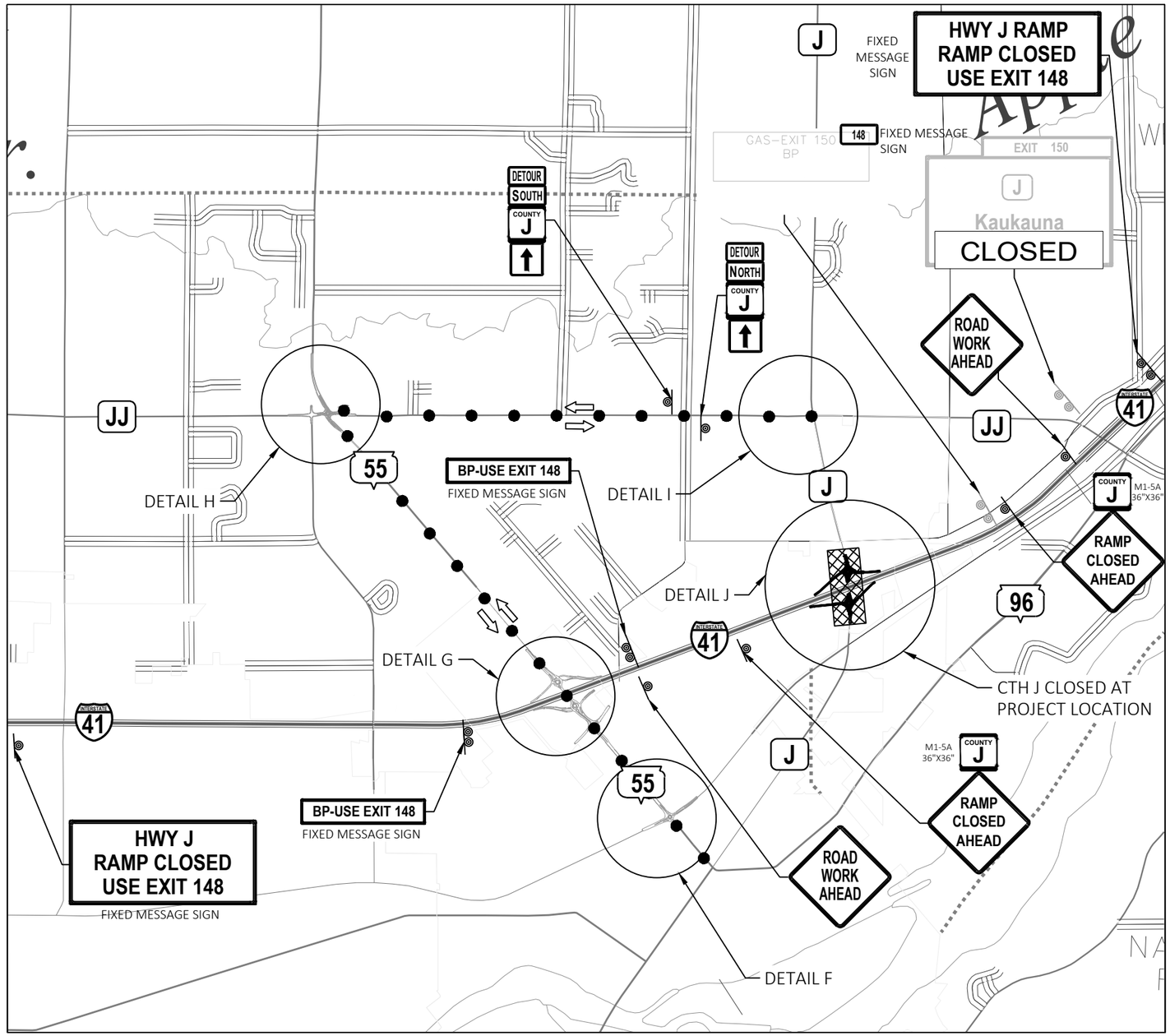
ALL M3 SERIES SIGNS (NORTH, SOUTH EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

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

### LEGEND

- WORK ZONE
- TRAFFIC CONTROL COVERING SIGNS TYPE I/TYPE II
- DETOUR
- TRAFFIC CONTROL SIGNS
- EXISTING SIGN
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN WITH TRAFFIC CONTROL WARNING LIGHTS TYPE A
- PCMS — TRAFFIC CONTROL SIGNS PCMS



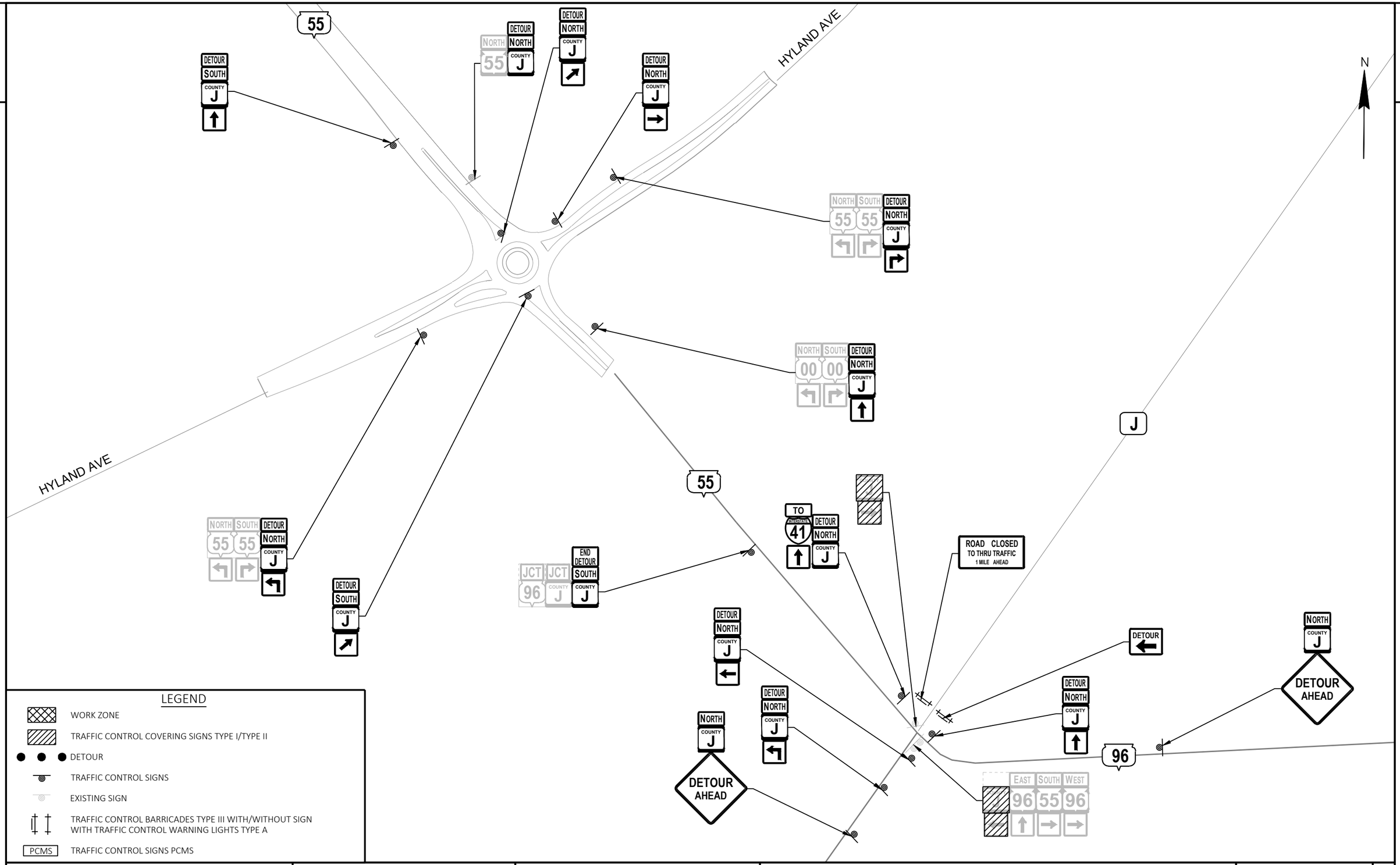




DETOUR OVERVIEW FOR CTH J CLOSURE AND CONTINUOUS RAMP CLOSURE

### SEE THE FOLLOWING STANDARD DETAILS:

SDD 15C02: BARRICADES AND SIGNS FOR MAINLINE CLOSURES
SDD 15C02: BARRICADES AND SIGNS FOR VARIOUS CLOSURES
SDD 15C02: DETOUR SIGNING FOR MAINLINE CLOSURES
SDD 15D16: TRAFFIC CONTROL, EXIT RAMP CLOSURE

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | DETOUR ROUTE OVERVIEW - RAMP CLOSURES, STAGE 5 | SHEET 169 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | DETOUR ROUTE OVERVIEW - DETAIL F - CTH J RAMP CLOSURES, STAGE 5 | SHEET 170 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027004-DT.DWG
LAYOUT NAME - 027009-dt-Detail F
PLOT DATE : 7/22/2024 2:51 PM
PLOT BY : CARPENTER, ZACH
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

DETOUR SOUTH COUNTY J

DETOUR NORTH COUNTY J

DETOUR NORTH COUNTY J

DETOUR NORTH COUNTY J

TO SOUTH COUNTY J

TO NORTH COUNTY J

TO SOUTH COUNTY J

BP-FOLLOW HWY J NORTH DETOUR
FIXED MESSAGE SIGN

TO COUNTY J

TO COUNTY J

55

41

DETOUR SOUTH COUNTY J

DETOUR NORTH COUNTY J

DETOUR NORTH COUNTY J

55

DETOUR SOUTH COUNTY J

MALONEY ROAD

EXIT 150
J
Kaukauna
CLOSED

N

BP-FOLLOW HWY J NORTH DETOUR
FIXED MESSAGE SIGN

TO NORTH COUNTY J

TO NORTH COUNTY J

TO NORTH COUNTY J

TO COUNTY J

DETOUR SOUTH COUNTY J

DETOUR SOUTH COUNTY J

DETOUR SOUTH COUNTY J

DETOUR SOUTH 55 COUNTY J

DETOUR NORTH COUNTY J

DETOUR NORTH COUNTY J

DETOUR NORTH NORTH 55 TO INTERSTATE 41 COUNTY J

DETOUR SOUTH COUNTY J

GERTRUDE ST

55

## LEGEND

- WORK ZONE
- TRAFFIC CONTROL COVERING SIGNS TYPE I/TYPE II
- DETOUR
- TRAFFIC CONTROL SIGNS
- EXISTING SIGN
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN WITH TRAFFIC CONTROL WARNING LIGHTS TYPE A
- PCMS — TRAFFIC CONTROL SIGNS PCMS

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | DETOUR ROUTE OVERVIEW - DETAIL G - CTH J RAMP CLOSURES, STAGE 5 | SHEET 171 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027004-DT.DWG
LAYOUT NAME - 027010-dt-Detail G
PLOT DATE : 7/22/2024 2:51 PM
PLOT BY : CARPENTER, ZACH
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

SOUTH COUNTY J DETOUR AHEAD

55

DETOUR SOUTH COUNTY J

DETOUR SOUTH COUNTY J

TO INTERSTATE 41 DETOUR SOUTH COUNTY J

DETOUR SOUTH TO INTERSTATE 41 COUNTY J 55

JJ

JJ

SOUTH COUNTY J DETOUR AHEAD

DETOUR SOUTH COUNTY J

DETOUR SOUTH COUNTY J

DETOUR SOUTH TO INTERSTATE 41 COUNTY J

DETOUR NORTH COUNTY J

DETOUR NORTH COUNTY J

DETOUR NORTH COUNTY J

CC

SOUTH 55 DETOUR SOUTH TO INTERSTATE 41 COUNTY J

55

LEGEND

- WORK ZONE
- TRAFFIC CONTROL COVERING SIGNS TYPE I/TYPE II
- DETOUR
- TRAFFIC CONTROL SIGNS
- EXISTING SIGN
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN WITH TRAFFIC CONTROL WARNING LIGHTS TYPE A
- PCMS — TRAFFIC CONTROL SIGNS PCMS

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | DETOUR ROUTE OVERVIEW - DETAIL H - CTH J RAMP CLOSURES, STAGE 5 | SHEET 172 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027004-DT.DWG
LAYOUT NAME - 027011-dt-Detail H

PLOT DATE : 7/22/2024 2:51 PM PLOT BY : CARPENTER, ZACH PLOT NAME : PLOT SCALE : ##########

2

2

N

J

SOUTH
COUNTY
J
DETOUR
AHEAD

DETOUR
TO
SOUTH
INTERSTATE
41
COUNTY
J

DETOUR
TO
SOUTH
INTERSTATE
41
COUNTY
J

DETOUR
TO
SOUTH
INTERSTATE
41
COUNTY
J

DETOUR
SOUTH
COUNTY
J

SOUTH
COUNTY
J
DETOUR
AHEAD

JJ

JJ

END
DETOUR
JCT
COUNTY
J
SOUTH
COUNTY
J

DETOUR

ROAD CLOSED
TO THRU TRAFFIC
1/2 MILE AHEAD

DETOUR
SOUTH
COUNTY
J

ROAD
CLOSED
AHEAD

DETOUR
SOUTH
COUNTY
J

J

LEGEND

- WORK ZONE
- TRAFFIC CONTROL COVERING SIGNS TYPE I/TYPE II
- DETOUR
- TRAFFIC CONTROL SIGNS
- EXISTING SIGN
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN WITH TRAFFIC CONTROL WARNING LIGHTS TYPE A
- PCMS — TRAFFIC CONTROL SIGNS PCMS

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | DETOUR ROUTE OVERVIEW - DETAIL I - CTH J RAMP CLOSURES, STAGE 5 | SHEET 173 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027004-DT.DWG
LAYOUT NAME - 027012-dt-Detail I

PLOT DATE : 7/22/2024 2:51 PM PLOT BY : CARPENTER, ZACH PLOT NAME : PLOT SCALE : ##########

2

N

ROAD CLOSED 500 FT

J

ROAD CLOSED 1000 FT

DETOUR SOUTH COUNTY J

RAMP CLOSED 1000 FT

TO COUNTY J

BRIDGE OUT

KELSO RD

EXIT 150 J CLOSED

ROAD CLOSED TO THRU TRAFFIC 1/4 MILE AHEAD

RAMP CLOSED

INTERSTATE 41

PLACE PCMS 7 DAYS PRIOR TO CLOSURE

RAMP TO CLOSE LONGTERM

XXX DAY XX/XX

ROAD CLOSED

PCMS

GAS–EXIT 150 BP CLOSED

TO COUNTY J

EXIT 150

PLACE PCMS 7 DAYS PRIOR TO CLOSURE

RAMP TO CLOSE LONGTERM

XXX DAY XX/XX

PCMS

TO COUNTY J

EXIT 150

PLACE PCMS 7 DAYS PRIOR TO CLOSURE

RAMP TO CLOSE LONGTERM

XXX DAY XX/XX

NORTH COUNTY J

DETOUR AHEAD

TO COUNTY J

INTERSTATE 41

RAMP CLOSED 1000 FT

RAMP CLOSED

ROAD CLOSED

ROAD CLOSED 500 FT

EXIT 150 J CLOSED

BRIDGE OUT 1/4 MILE AHEAD

DETOUR NORTH COUNTY J

ROAD CLOSED TO THRU TRAFFIC

DETOUR NORTH COUNTY J

HYLAND AVE

ROAD CLOSED 1000 FT

J

ROAD CLOSED AHEAD

96

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL DETAILS (USE 55 MPH)

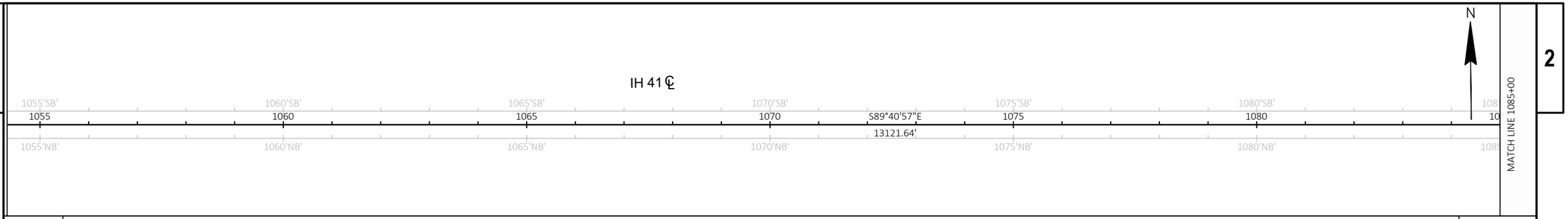
LEGEND

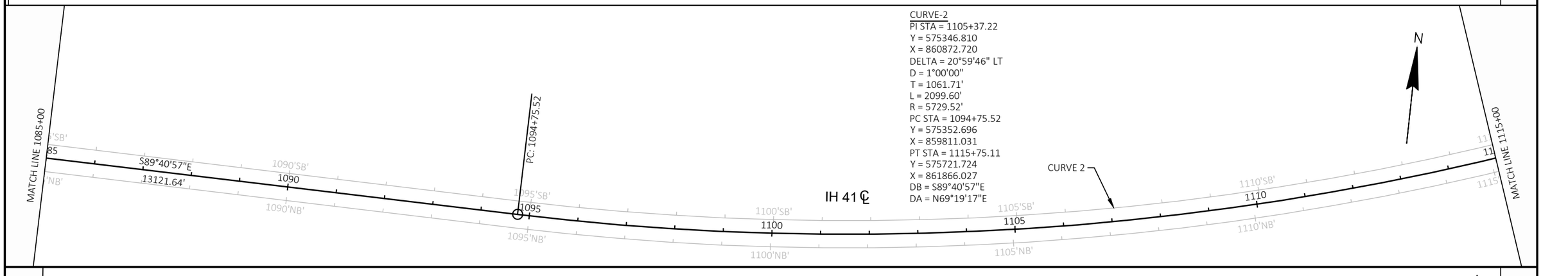
- WORK ZONE
- TRAFFIC CONTROL COVERING SIGNS TYPE I/TYPE II
- DETOUR
- TRAFFIC CONTROL SIGNS
- EXISTING SIGN
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN WITH TRAFFIC CONTROL WARNING LIGHTS TYPE A
- PCMS — TRAFFIC CONTROL SIGNS PCMS

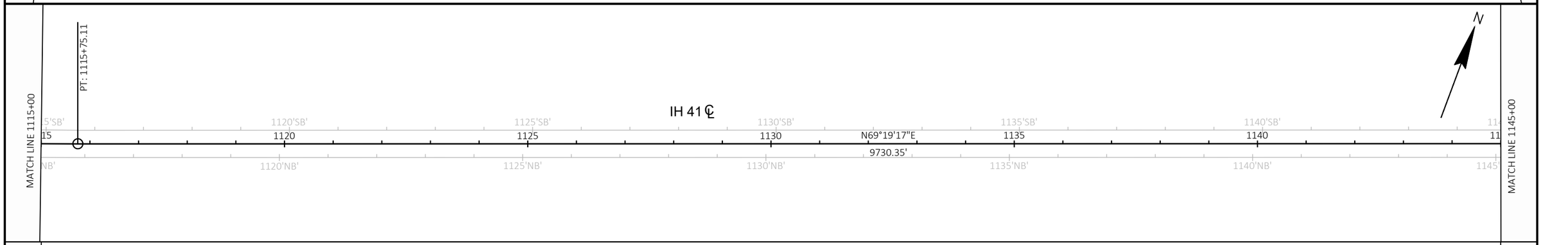
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | DETOUR ROUTE OVERVIEW - DETAIL J - CTH J RAMP CLOSURES, STAGE 5 | SHEET 174 | E |
|---|---|---|---|---|---|

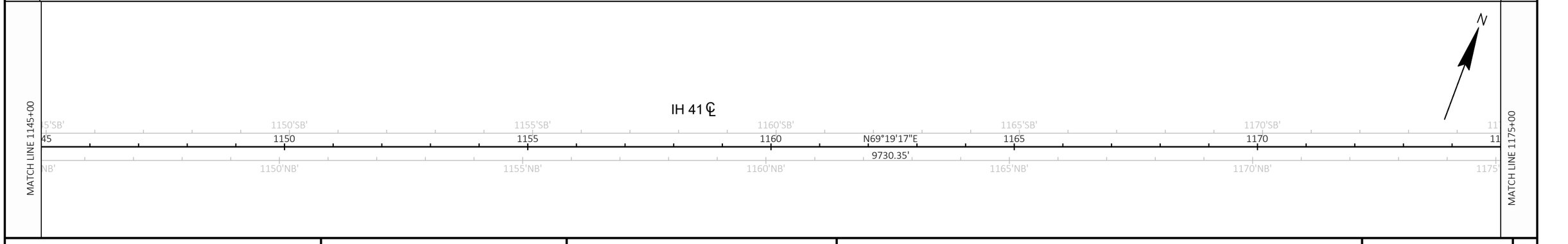
FILE NAME : C:\USERS\ZACHC\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027004-DT.DWG
LAYOUT NAME - 027013-dt-Detail J

PLOT DATE : 7/22/2024 2:51 PM PLOT BY : CARPENTER, ZACH PLOT NAME : PLOT SCALE : ##########




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ALIGNMENT DETAILS - IH 41 | SHEET 175 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027205-AD.DWG
LAYOUT NAME - 027201-ad
PLOT DATE : 7/29/2024 4:31 PM
PLOT BY : KOWALSKI, NICK
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

2

MATCH LINE 1175+00

MATCH LINE 1205+00

IH 41 ℄

'5'SB' 1180'SB' 1185'SB' 1190'SB' 1195'SB' 1200'SB' 12

75 1180 1185 1190 N69°19'17"E 1195 1200 12

9730.35'

NB' 1180'NB' 1185'NB' 1190'NB' 1195'NB' 1200'NB' 1205

CURVE-3
PI STA = 1224+71.51
Y = 579569.510
X = 872060.440
DELTA = 23°00'24" LT
D = 1°00'00"
T = 1166.05'
L = 2300.68'
R = 5729.58'
PC STA = 1213+05.46
Y = 579157.750
X = 870969.512
PT STA = 1236+06.14
Y = 580374.897
X = 872903.661
DB = N69°19'17"E
DA = N46°18'53"E

MATCH LINE 1205+00

05'SB'

05

NB'

N69°19'17"E
9730.35'

PC: 1213+05.46

1210'SB' 1215'SB' 1220'SB' 1225'SB' 1230

1210 1215 1220 1225 1230 1235

1210'NB' 1215'NB' 1220'NB' 1225'NB' 1230'NB'

CURVE 3

IH 41 ℄

PT: 1236+06.14

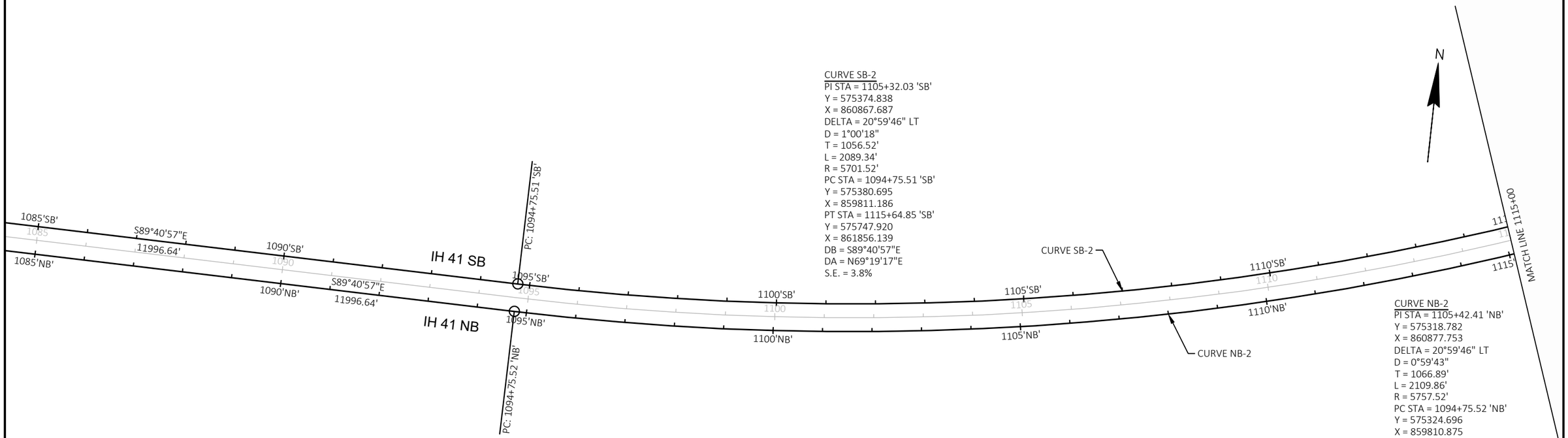
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ALIGNMENT DETAILS - IH 41 | SHEET 176 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027205-AD.DWG
LAYOUT NAME - 027202-ad

PLOT DATE : 7/29/2024 4:31 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

2



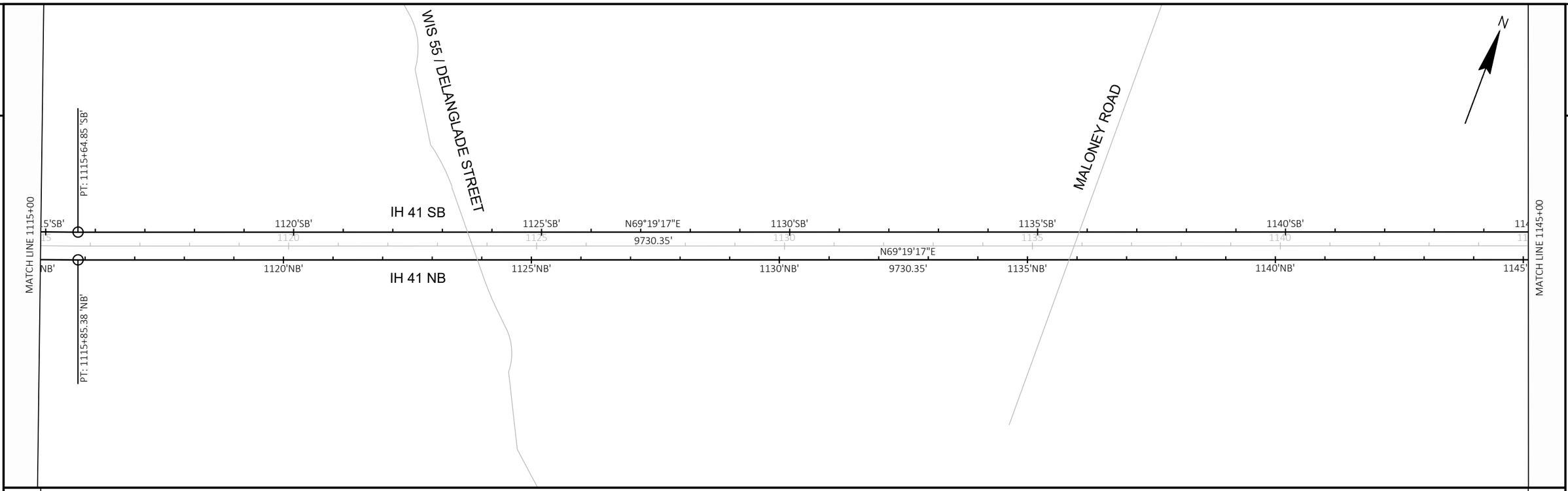

CURVE SB-2
PI STA = 1105+32.03 'SB'
Y = 575374.838
X = 860867.687
DELTA = 20°59'46" LT
D = 1°00'18"
T = 1056.52'
L = 2089.34'
R = 5701.52'
PC STA = 1094+75.51 'SB'
Y = 575380.695
X = 859811.186
PT STA = 1115+64.85 'SB'
Y = 575747.920
X = 861856.139
DB = S89°40'57"E
DA = N69°19'17"E
S.E. = 3.8%

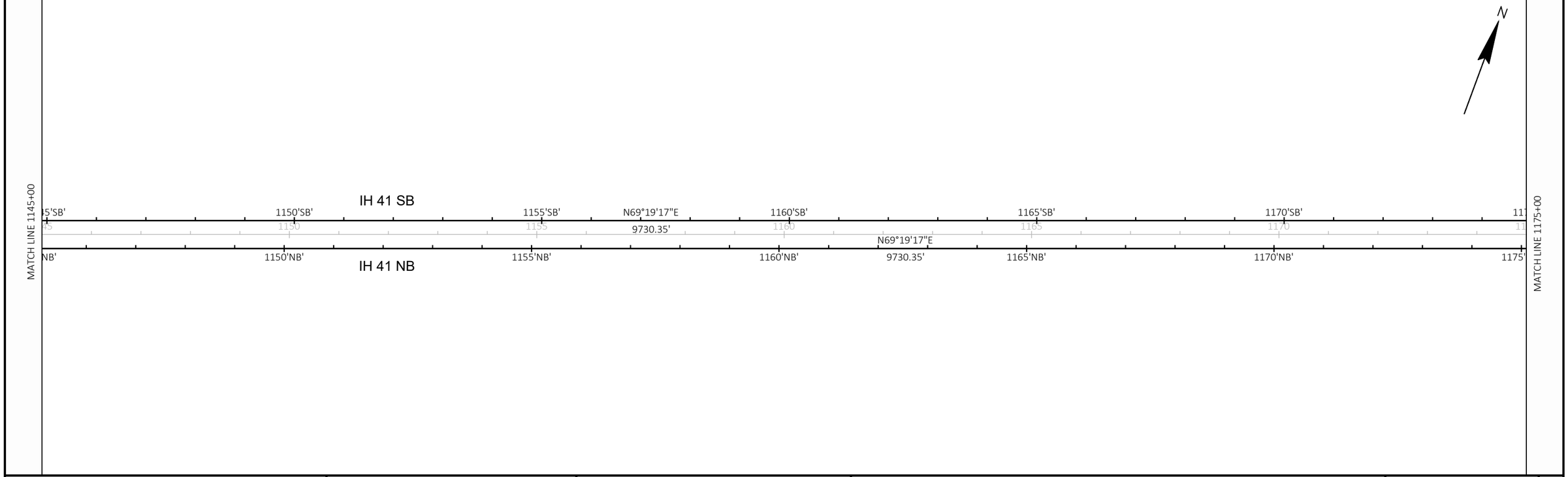
CURVE NB-2
PI STA = 1105+42.41 'NB'
Y = 575318.782
X = 860877.753
DELTA = 20°59'46" LT
D = 0°59'43"
T = 1066.89'
L = 2109.86'
R = 5757.52'
PC STA = 1094+75.52 'NB'
Y = 575324.696
X = 859810.875
PT STA = 1115+85.38 'NB'
Y = 575695.528
X = 861875.914
DB = S89°40'57"E
DA = N69°19'17"E
S.E. = 3.8%

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ALIGNMENT DETAILS - IH 41 NB AND IH 41 SB | SHEET 177 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027204-AD.DWG
LAYOUT NAME - 027203-ad
PLOT DATE : 7/29/2024 4:31 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ALIGNMENT DETAILS | SHEET 178 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027204-AD.DWG
LAYOUT NAME - 027204-ad

PLOT DATE : 7/29/2024 4:32 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

MATCH LINE 1175+00

CTH J / HYLAND AVE

IH 41 SB

'5'SB' 1180'SB' 1185'SB' N69°19'17"E 1190'SB' 1195'SB' 1200'SB' 120

9730.35'

N69°19'17"E

NB' 1180'NB' 1185'NB' 1190'NB' 9730.35' 1195'NB' 1200'NB' 1205'

IH 41 NB

MATCH LINE 1205+00

2

MATCH LINE 1205+00

'5'SB' N69°19'17"E 9730.35' 1210'SB' IH 41 SB

NB' N69°19'17"E 9730.35' 1210'NB' IH 41 NB

PC: 1212+95.20 'SB'

PC: 1213+15.73 'NB'

CURVE SB-3

1215'SB' 1220'SB' 1225'SB'

1215'NB' 1220'NB' 1225'NB'

CURVE NB-3

EP: 1229+81.46 'SB'
Y: 580002.358
X: 872426.933

EP: 1230+18.54 'NB'
Y: 579958.004
X: 872461.120

CURVE SB-3
PI STA = 1221'SB'+44.53
Y = 579483.864
X = 871754.236
DELTA = 16°56'43" LT
D = 1°00'18"
T = 849.33'
L = 1686.26'
R = 5701.58'
PC STA = 1212'SB'+95.20
Y = 579183.946
X = 870959.625
PT STA = 1229'SB'+81.46
Y = 580002.358
X = 872426.933
DB = N69°19'17"E
DA = N52°22'34"E
SE. = 3.8%

CURVE NB-3
PI STA = 1221'NB'+73.40
Y = 579434.418
X = 871781.815
DELTA = 16°56'43" LT
D = 0°59'42"
T = 857.67'
L = 1702.82'
R = 5757.58'
PC STA = 1213'NB'+15.73
Y = 579131.553
X = 870979.400
PT STA = 1230'NB'+18.54
Y = 579958.004
X = 872461.120
DB = N69°19'17"E
DA = N52°22'34"E
S.E. = 3.8%

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ALIGNMENT DETAILS | SHEET 179 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027204-AD.DWG
LAYOUT NAME - 027205-ad

PLOT DATE : 7/29/2024 4:32 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

2

N

IH 41

1180

1185

1190

1195

R/L RAMP JB

R/L RAMP JC

R/L RAMP JA

R/L RAMP JD

CTH J / HYLAND AVE

BEGIN PROJECT
STA. 11+61.02 'JNB'
Y: 577501.00
X: 868631.38

END PROJECT
STA. 26+34.30 'JNB'
Y: 578953.40
X: 868528.60

BP: 7+33.38 'JNB'
Y: 577074.409
X: 868601.546

PI: 10+65.37 'JNB'
Y: 577405.545
X: 868625.278

10'JNB'

N1°00'21"E, 140.07'

PC: 12+92.57 'JNB'
PT: 13+37.58 'JNB'
PC: 13+68.72 'JNB'
PT: 14+26.15 'JNB'
PC: 14+65.15 'JNB'

15'JNB'

PC: 16+64.93 'JNB'
PT: 17+09.84 'JNB'
PC: 17+41.54 'JNB'
PT: 17+58.82 'JNB'

N4°23'27"W
366.79'
20'JNB'

PC: 21+25.61 'JNB'

CURVE J NB-6

PC: 23+33.90 'JNB'
PT: 23+48.07 'JNB'

N5°12'50"E
143.01'

25'JNB'

PI: 25+88.18 'JNB'
Y: 578908.788
X: 868540.303

N13°49'12"W, 14.09'

N15°04'44"W
30'JNB'
577.05'

EP: 31+79.31 'JNB'
Y: 579479.644
X: 868386.819

CURVE J NB-1

N2°47'21"W, 31.14'

CURVE J NB-2

N9°37'40"W, 38.99'

CURVE J NB-3

PT: 15+24.86 'JNB'

CURVE J NB-4

N13°23'26"W, 31.70'

CURVE J NB-5

PC: 21+90.88 'JNB'

N15°47'11"W, 240.11'

CURVE J NB-7

PI: 26+02.26 'JNB'
Y: 578922.465
X: 868536.938

CURVE J NB-1
PI STA = 13+15.10 'JNB'
Y = 577654.767
X = 868641.211
DELTA = 6°26'50" LT
D = 14°19'26"
T = 22.53'
L = 45.01'
R = 400.00'
PC STA = 12+92.57 'JNB'
Y = 577632.285
X = 868639.774
PT STA = 13+37.58 'JNB'
Y = 577677.269
X = 868640.115
DB = N03°39'29"E
DA = N02°47'21"W

CURVE J NB-2
PI STA = 13+97.47 'JNB'
Y = 577737.081
X = 868637.071
DELTA = 6°34'53" LT
D = 11°27'33"
T = 28.75'
L = 57.43'
R = 500.00'
PC STA = 13+68.72 'JNB'
Y = 577708.374
X = 868638.599
PT STA = 14+26.15 'JNB'
Y = 577765.424
X = 868632.264
DB = N02°47'21"W
DA = N09°37'40"W

CURVE J NB-3
PI STA = 14+95.76 'JNB'
Y = 577834.049
X = 868620.622
DELTA = 31°06'07" RT
D = 52°05'13"
T = 30.61'
L = 59.71'
R = 110.00'
PC STA = 14+65.15 'JNB'
Y = 577803.869
X = 868625.742
PT STA = 15+24.86 'JNB'
Y = 577862.535
X = 868631.829
DB = N09°37'40"W
DA = N21°28'28"E

CURVE J NB-4
PI STA = 16+87.42 'JNB'
Y = 578023.523
X = 868626.069
DELTA = 8°02'30" RT
D = 17°54'18"
T = 22.49'
L = 44.91'
R = 320.00'
PC STA = 16+64.93 'JNB'
Y = 578002.585
X = 868634.288
PT STA = 17+09.84 'JNB'
Y = 578045.404
X = 868620.860
DB = N21°25'55"W
DA = N13°23'26"W

CURVE J NB-5
PI STA = 17+50.20 'JNB'
Y = 578084.663
X = 868611.514
DELTA = 8°59'58" RT
D = 52°05'13"
T = 8.66'
L = 17.28'
R = 110.00'
PC STA = 17+41.54 'JNB'
Y = 578076.242
X = 868613.519
PT STA = 17+58.82 'JNB'
Y = 578093.295
X = 868610.851
DB = N13°23'26"W
DA = N04°23'27"W

CURVE J NB-6
PI STA = 21+59.24 'JNB'
Y = 578492.538
X = 868580.194
DELTA = 33°59'55" RT
D = 52°05'13"
T = 33.63'
L = 65.27'
R = 110.00'
PC STA = 21+25.61 'JNB'
Y = 578459.008
X = 868582.769
PT STA = 21+90.88 'JNB'
Y = 578521.776
X = 868596.809
DB = N04°23'27"W
DA = N29°36'28"E

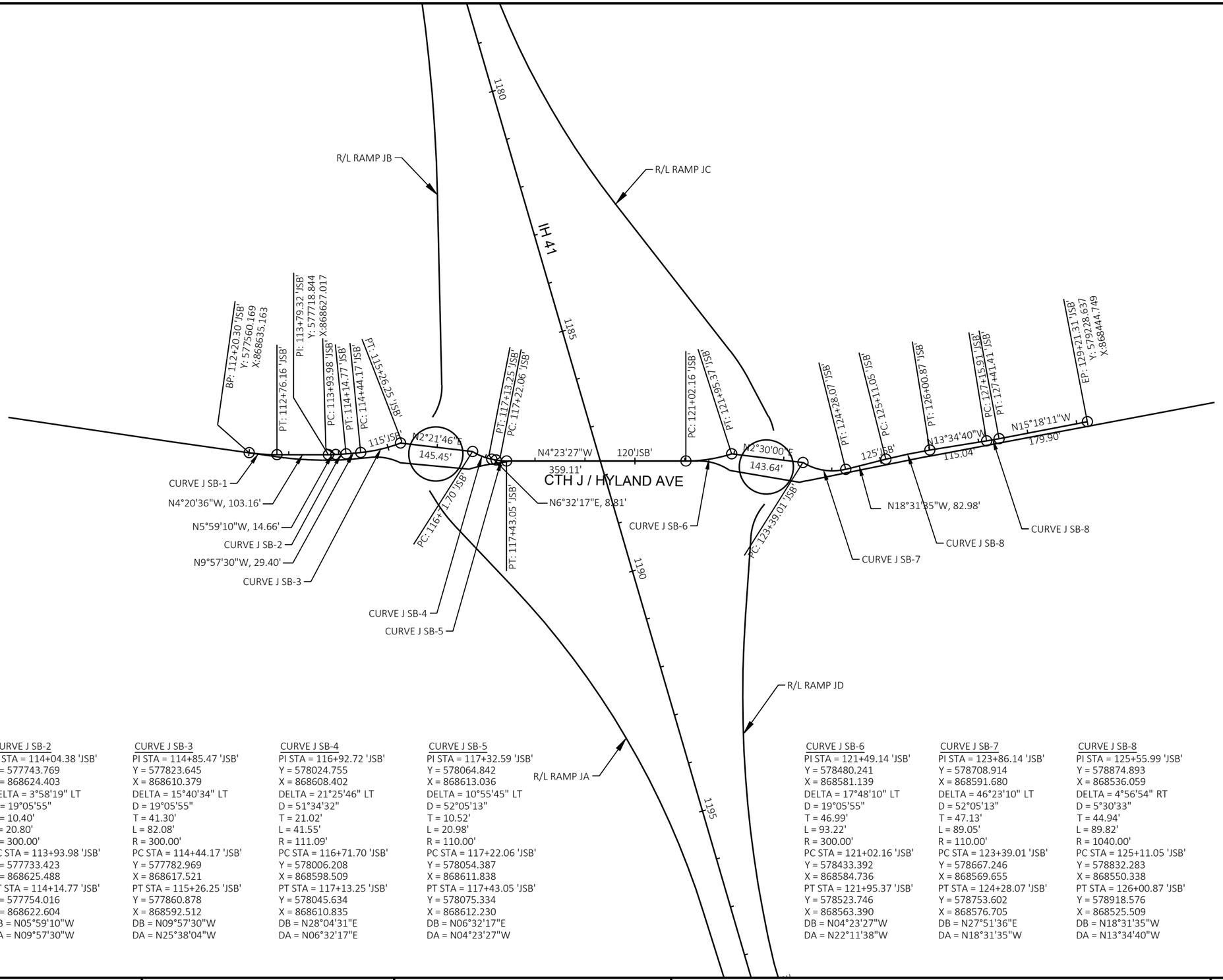
CURVE J NB-7
PI STA = 23+40.98 'JNB'
Y = 578670.917
X = 868607.555
DELTA = 2°42'21" RT
D = 19°05'55"
T = 7.08'
L = 14.17'
R = 300.00'
PC STA = 23+33.90 'JNB'
Y = 578664.199
X = 868609.805
PT STA = 23+48.07 'JNB'
Y = 578677.734
X = 868605.625
DB = N18°30'50"W
DA = N15°47'11"W

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ALIGNMENT DETAILS - J NB | SHEET 180 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027201-AD.DWG
LAYOUT NAME - 027206-ad
PLOT DATE : 7/31/2024 7:11 PM
PLOT BY : GRIMME, SARA
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

N




**CURVE J SB-1**
PI STA = 112+48.27 'JSB'
Y = 577588.087
X = 868636.948
DELTA = 8°00'05" LT
D = 14°19'26"
T = 27.98'
L = 55.86'
R = 400.00'
PC STA = 112+20.30 'JSB'
Y = 577560.169
X = 868635.163
PT STA = 112+76.16 'JSB'
Y = 577615.982
X = 868634.829
DB = N03°39'29"E
DA = N04°20'36"W

**CURVE J SB-2**
PI STA = 114+04.38 'JSB'
Y = 577743.769
X = 868624.403
DELTA = 3°58'19" LT
D = 19°05'55"
T = 10.40'
L = 20.80'
R = 300.00'
PC STA = 113+93.98 'JSB'
Y = 577733.423
X = 868625.488
PT STA = 114+14.77 'JSB'
Y = 577754.016
X = 868622.604
DB = N05°59'10"W
DA = N09°57'30"W

**CURVE J SB-3**
PI STA = 114+85.47 'JSB'
Y = 577823.645
X = 868610.379
DELTA = 15°40'34" LT
D = 19°05'55"
T = 41.30'
L = 82.08'
R = 300.00'
PC STA = 114+44.17 'JSB'
Y = 577782.969
X = 868617.521
PT STA = 115+26.25 'JSB'
Y = 577860.878
X = 868592.512
DB = N09°57'30"W
DA = N25°38'04"W

**CURVE J SB-4**
PI STA = 116+92.72 'JSB'
Y = 578024.755
X = 868608.402
DELTA = 21°25'46" LT
D = 51°34'32"
T = 21.02'
L = 41.55'
R = 111.09'
PC STA = 116+71.70 'JSB'
Y = 578006.208
X = 868598.509
PT STA = 117+13.25 'JSB'
Y = 578045.634
X = 868610.835
DB = N28°04'31"E
DA = N06°32'17"E

**CURVE J SB-5**
PI STA = 117+32.59 'JSB'
Y = 578064.842
X = 868613.036
DELTA = 10°55'45" LT
D = 52°05'13"
T = 10.52'
L = 20.98'
R = 110.00'
PC STA = 117+22.06 'JSB'
Y = 578054.387
X = 868611.838
PT STA = 117+43.05 'JSB'
Y = 578075.334
X = 868612.230
DB = N06°32'17"E
DA = N04°23'27"W

**CURVE J SB-6**
PI STA = 121+49.14 'JSB'
Y = 578480.241
X = 868581.139
DELTA = 17°48'10" LT
D = 19°05'55"
T = 46.99'
L = 93.22'
R = 300.00'
PC STA = 121+02.16 'JSB'
Y = 578433.392
X = 868584.736
PT STA = 121+95.37 'JSB'
Y = 578523.746
X = 868563.390
DB = N04°23'27"W
DA = N22°11'38"W

**CURVE J SB-7**
PI STA = 123+86.14 'JSB'
Y = 578708.914
X = 868591.680
DELTA = 46°23'10" LT
D = 52°05'13"
T = 47.13'
L = 89.05'
R = 110.00'
PC STA = 123+39.01 'JSB'
Y = 578667.246
X = 868569.655
PT STA = 124+28.07 'JSB'
Y = 578753.602
X = 868576.705
DB = N27°51'36"E
DA = N18°31'35"W

**CURVE J SB-8**
PI STA = 125+55.99 'JSB'
Y = 578874.893
X = 868536.059
DELTA = 4°56'54" RT
D = 5°30'33"
T = 44.94'
L = 89.82'
R = 1040.00'
PC STA = 125+11.05 'JSB'
Y = 578832.283
X = 868550.338
PT STA = 126+00.87 'JSB'
Y = 578918.576
X = 868525.509
DB = N18°31'35"W
DA = N13°34'40"W

**CURVE J SB-9**
PI STA = 127+28.66 'JSB'
Y = 579042.793
X = 868495.509
DELTA = 1°19'41" LT
D = 5°12'31"
T = 12.75'
L = 25.50'
R = 1100.00'
PC STA = 127+15.91 'JSB'
Y = 579030.400
X = 868498.502
PT STA = 127+41.41 'JSB'
Y = 579055.113
X = 868492.229
DB = N13°34'40"W
DA = N15°18'11"W

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ALIGNMENT DETAILS - J SB | SHEET 181 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027201-AD.DWG
LAYOUT NAME - 027207-ad
PLOT DATE : 7/31/2024 7:09 PM
PLOT BY : GRIMME, SARA
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

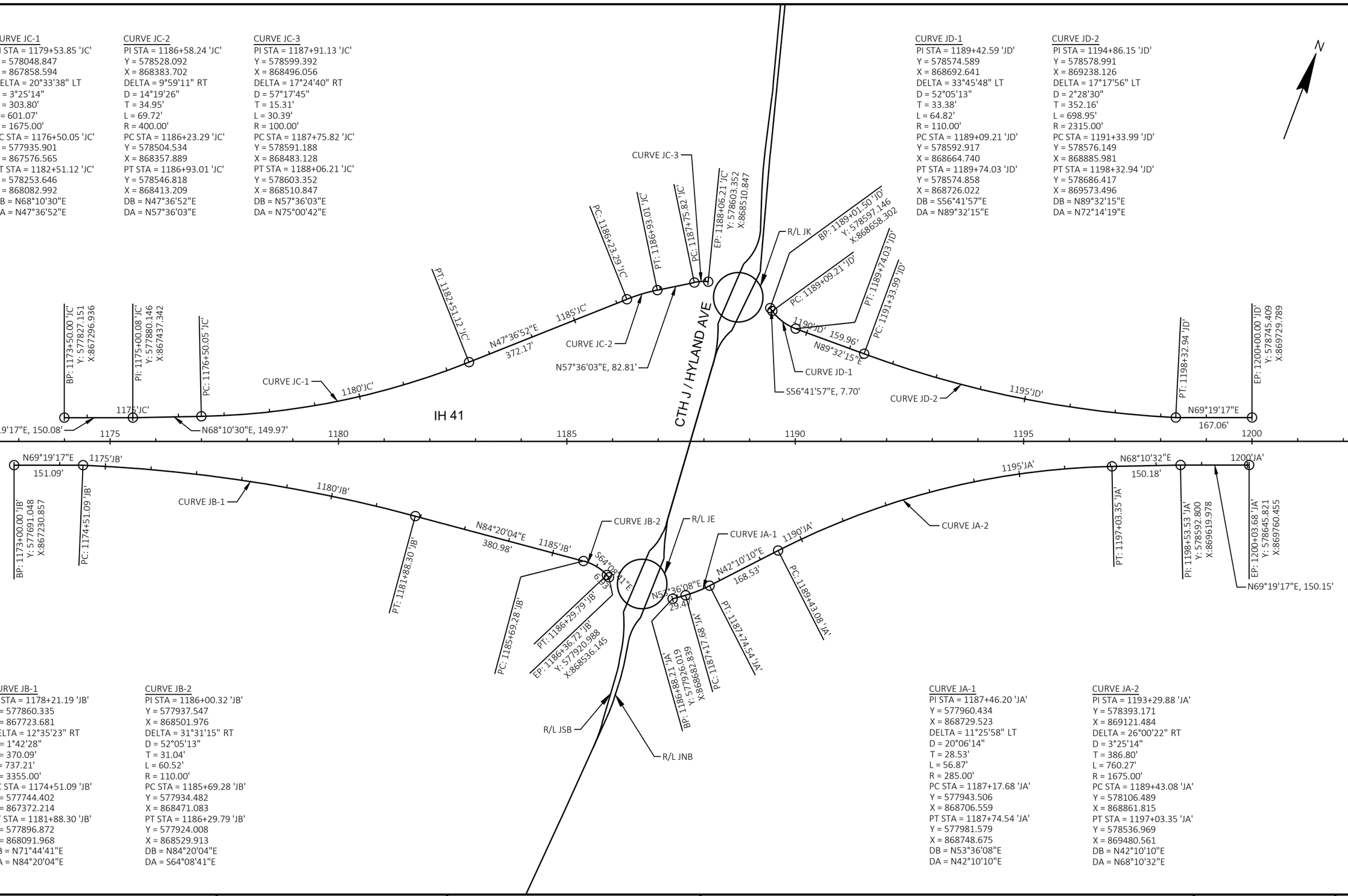
**CURVE JC-1**
PI STA = 1179+53.85 'JC'
Y = 578048.847
X = 867858.594
DELTA = 20°33'38" LT
D = 3°25'14"
T = 303.80'
L = 601.07'
R = 1675.00'
PC STA = 1176+50.05 'JC'
Y = 577935.901
X = 867576.565
PT STA = 1182+51.12 'JC'
Y = 578253.646
X = 868082.992
DB = N68°10'30"E
DA = N47°36'52"E

**CURVE JC-2**
PI STA = 1186+58.24 'JC'
Y = 578528.092
X = 868383.702
DELTA = 9°59'11" RT
D = 14°19'26"
T = 34.95'
L = 69.72'
R = 400.00'
PC STA = 1186+23.29 'JC'
Y = 578504.534
X = 868357.889
PT STA = 1186+93.01 'JC'
Y = 578546.818
X = 868413.209
DB = N47°36'52"E
DA = N57°36'03"E

**CURVE JC-3**
PI STA = 1187+91.13 'JC'
Y = 578599.392
X = 868496.056
DELTA = 17°24'40" RT
D = 57°17'45"
T = 15.31'
L = 30.39'
R = 100.00'
PC STA = 1187+75.82 'JC'
Y = 578591.188
X = 868483.128
PT STA = 1188+06.21 'JC'
Y = 578603.352
X = 868510.847
DB = N57°36'03"E
DA = N75°00'42"E

**CURVE JD-1**
PI STA = 1189+42.59 'JD'
Y = 578574.589
X = 868692.641
DELTA = 33°45'48" LT
D = 52°05'13"
T = 33.38'
L = 64.82'
R = 110.00'
PC STA = 1189+09.21 'JD'
Y = 578592.917
X = 868664.740
PT STA = 1189+74.03 'JD'
Y = 578574.858
X = 868726.022
DB = S56°41'57"E
DA = N89°32'15"E

**CURVE JD-2**
PI STA = 1194+86.15 'JD'
Y = 578578.991
X = 869238.126
DELTA = 17°17'56" LT
D = 2°28'30"
T = 352.16'
L = 698.95'
R = 2315.00'
PC STA = 1191+33.99 'JD'
Y = 578576.149
X = 868885.981
PT STA = 1198+32.94 'JD'
Y = 578686.417
X = 869573.496
DB = N89°32'15"E
DA = N72°14'19"E




**CURVE JB-1**
PI STA = 1178+21.19 'JB'
Y = 577860.335
X = 867723.681
DELTA = 12°35'23" RT
D = 1°42'28"
T = 370.09'
L = 737.21'
R = 3355.00'
PC STA = 1174+51.09 'JB'
Y = 577744.402
X = 867372.214
PT STA = 1181+88.30 'JB'
Y = 577896.872
X = 868091.968
DB = N71°44'41"E
DA = N84°20'04"E

**CURVE JB-2**
PI STA = 1186+00.32 'JB'
Y = 577937.547
X = 868501.976
DELTA = 31°31'15" RT
D = 52°05'13"
T = 31.04'
L = 60.52'
R = 110.00'
PC STA = 1185+69.28 'JB'
Y = 577934.482
X = 868471.083
PT STA = 1186+29.79 'JB'
Y = 577924.008
X = 868529.913
DB = N84°20'04"E
DA = S64°08'41"E

**CURVE JA-1**
PI STA = 1187+46.20 'JA'
Y = 577960.434
X = 868729.523
DELTA = 11°25'58" LT
D = 20°06'14"
T = 28.53'
L = 56.87'
R = 285.00'
PC STA = 1187+17.68 'JA'
Y = 577943.506
X = 868706.559
PT STA = 1187+74.54 'JA'
Y = 577981.579
X = 868748.675
DB = N53°36'08"E
DA = N42°10'10"E

**CURVE JA-2**
PI STA = 1193+29.88 'JA'
Y = 578393.171
X = 869121.484
DELTA = 26°00'22" RT
D = 3°25'14"
T = 386.80'
L = 760.27'
R = 1675.00'
PC STA = 1189+43.08 'JA'
Y = 578106.489
X = 868861.815
PT STA = 1197+03.35 'JA'
Y = 578536.969
X = 869480.561
DB = N42°10'10"E
DA = N68°10'32"E

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ALIGNMENT DETAILS - RAMPS | SHEET 182 | E |
|---|---|---|---|---|---|

2

N

CTH J / HYLAND AVE

R/L CTH J NB

R/L IH 41

IH 41

BP: 188+61.77 'JDR'
Y: 578656.794
X:868633.365

CURVE JP-1

BP: 0+00.00 'JP'
Y: 578718.586
X:868609.653

PT: 0+70.66 'JP'

93.03'
S60°46'04"E

189+00 'JDR'

1+00 'JP'

76.46'
S60°46'04"E

PC: 189+54.79 'JDR'

CURVE JDR-1

PC: 1+47.12 'JP'

190+00 'JDR'

2+00 'JP'

EP: 190+10.00 'JDR'
Y: 578590.219
X:868765.439

CURVE JP-2

EP: 2+79.28 'JP'
Y: 578594.724
X:868845.616

CURVE JDR-1
PI STA = 189'JDR'+82.49
Y = 578598.217
X = 868738.922
DELTA = 11°33'20" LT
D = 20°55'54"
T = 27.70'
L = 55.21'
R = 273.73'
PC STA = 189'JDR'+54.79
Y = 578611.365
X = 868714.545
PT STA = 190'JDR'+10.00
Y = 578590.219
X = 868765.439
DB = S61°39'37"E
DA = S73°12'57"E

CURVE JP-1
PI STA = 0'JP'+37.26
Y = 578682.727
X = 868619.790
DELTA = 44°59'03" LT
D = 63°39'43"
T = 37.26'
L = 70.66'
R = 90.00'
PC STA = 0'JP'+00.00
Y = 578718.586
X = 868609.653
PT STA = 0'JP'+70.66
Y = 578664.528
X = 868652.309
DB = S15°47'01"E
DA = S60°46'04"E

CURVE JP-2
PI STA = 2'JP'+14.72
Y = 578594.178
X = 868778.019
DELTA = 29°41'40" LT
D = 22°28'08"
T = 67.60'
L = 132.16'
R = 255.00'
PC STA = 1'JP'+47.12
Y = 578627.190
X = 868719.029
PT STA = 2'JP'+79.28
Y = 578594.724
X = 868845.616
DB = S60°46'04"E
DA = N89°32'15"E

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ALIGNMENT DETAILS - JD RIGHT TURN BYPASS ( JDR LINE AND JP LINE) | SHEET 183 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\SARAG\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027203-AD.DWG
LAYOUT NAME - 027209-ad
PLOT DATE : 7/30/2024 9:51 AM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

CURVE JCT-1
PI STA = 1179'JCT'+91.08
Y = 578076.374
X = 867888.755
DELTA = 17°22'58" LT
D = 4°35'01"
T = 191.08'
L = 379.23'
R = 1250.00'
PC STA = 1178'JCT'+00.00
Y = 577995.610
X = 867715.578
PT STA = 1181'JCT'+79.23
Y = 578205.187
X = 868029.895
DB = N64°59'50"E
DA = N47°36'52"E

EP: 1183+00.00 'JCT'
Y:578286.595
X:868119.094

PT: 1181+79.23 'JCT'

1182+00 'JCT'

120.76'
N47°36'52"E

R/L JC

1181+00 'JCT'

1180+00 'JCT'

1179+00 'JCT'

BP: 1178+00.00 'JCT'
Y:577995.610
X:867715.578

CURVE JCT-1

CURVE JDT-1
PI STA = 1195'JDT'+02.98
Y = 578588.704
X = 869254.745
DELTA = 14°12'28" LT
D = 3°10'59"
T = 224.33'
L = 446.35'
R = 1800.00'
PC STA = 1192'JDT'+78.65
Y = 578580.499
X = 869030.570
PT STA = 1197'JDT'+25.00
Y = 578651.679
X = 869470.049
DB = N87°54'14"E
DA = N73°41'46"E

EP: 1197+25.00 'JDT'
Y:578651.679
X:869470.049

CURVE JDT-1

1197+00 'JDT'

1196+00 'JDT'

1195+00 'JDT'

1194+00 'JDT'

1193+00 'JDT'

PC: 1192+78.65 'JDT'

BP: 1192+00.00 'JDT'
Y:578577.623
X:868951.971

78.65'
N87°54'14"E

R/L JD

EP: 1195+00.00 'JAT'
Y:578467.192
X:869238.766

1194'JAT'

CURVE JAT-1

PC: 1192+00.07 'JAT'

1193'JAT'

1192'JAT'

BP: 1190+50.00 'JAT'
Y:578183.393
X:868936.075

1191'JAT'
150.07'
N45°01'41"E

R/L JA

BP: 1177+75.00 'JBT'
Y:577842.482
X:867682.458

PT: 1179+66.92 'JBT'

EP: 1181+50.00 'JBT'
Y:577892.873
X:868053.878

1180+00 'JBT' 183.09' 1181+00 'JBT'
N83°40'49"E

1179+00 'JBT'

1178+00 'JBT'

R/L JB

CURVE JBT-1

CURVE JBT-1
PI STA = 1178'JBT'+71.03
Y = 577862.149
X = 867776.454
DELTA = 5°29'53" RT
D = 2°51'53"
T = 96.03'
L = 191.92'
R = 2000.00'
PC STA = 1177'JBT'+75.00
Y = 577842.482
X = 867682.458
PT STA = 1179'JBT'+66.92
Y = 577872.720
X = 867871.902
DB = N78°10'57"E
DA = N83°40'49"E

CURVE JAT-1
PI STA = 1193'JAT'+51.82
Y = 578396.705
X = 869149.597
DELTA = 21°28'51" RT
D = 7°09'43"
T = 151.75'
L = 299.93'
R = 800.00'
PC STA = 1192'JAT'+00.07
Y = 578289.457
X = 869042.244
PT STA = 1195'JAT'+00.00
Y = 578457.192
X = 869288.766
DB = N45°01'41"E
DA = N66°30'32"E

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ALIGNMENT DETAILS | SHEET 184 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027207-AD.DWG
LAYOUT NAME - 027210-ad
PLOT DATE : 7/29/2024 4:32 PM
PLOT BY : KOWALSKI, NICK
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

CURVE JI-1
PI STA = 0+02.23 'JI'
Y = 577809.123
X = 868596.159
DELTA = 5°06'15" LT
D = 114°35'30"
T = 2.23'
L = 4.45'
R = 50.00'
PC STA = 0+00.00 'JI'
Y = 577806.974
X = 868596.752
PCC STA = 0+04.45 'JI'
Y = 577811.210
X = 868595.377
DB = N15°26'31"W
DA = N20°32'47"W

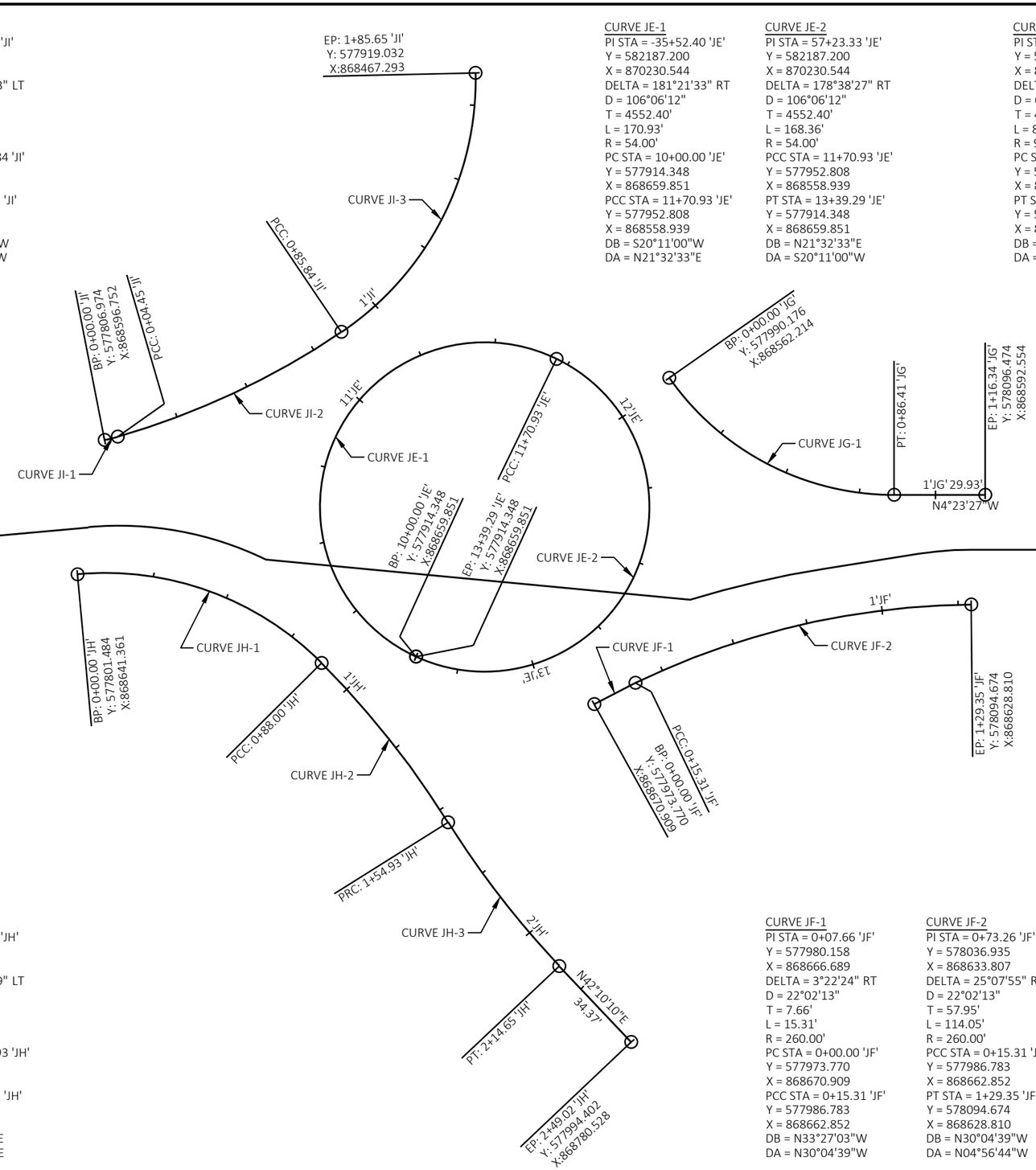
CURVE JI-2
PI STA = 0+45.48 'JI'
Y = 577849.629
X = 868580.977
DELTA = 17°56'07" LT
D = 22°02'13"
T = 41.03'
L = 81.39'
R = 260.00'
PCC STA = 0+04.45 'JI'
Y = 577811.210
X = 868595.377
PCC STA = 0+85.84 'JI'
Y = 577881.747
X = 868555.446
DB = N20°32'47"W
DA = N38°28'53"W

CURVE JI-3
PI STA = 1+40.35 'JI'
Y = 577924.413
X = 868521.530
DELTA = 57°11'03" LT
D = 57°17'45"
T = 54.50'
L = 99.81'
R = 100.00'
PCC STA = 0+85.84 'JI'
Y = 577881.747
X = 868555.446
PT STA = 1+85.65 'JI'
Y = 577919.032
X = 868467.293
DB = N38°28'53"W
DA = S84°20'04"W

CURVE JE-1
PI STA = -35+52.40 'JE'
Y = 582187.200
X = 870230.544
DELTA = 181°21'33" RT
D = 106°06'12"
T = 4552.40'
L = 170.93'
R = 54.00'
PC STA = 10+00.00 'JE'
Y = 577914.348
X = 868659.851
PCC STA = 11+70.93 'JE'
Y = 577952.808
X = 868558.939
DB = S20°11'00"W
DA = N21°32'33"E

CURVE JE-2
PI STA = 57+23.33 'JE'
Y = 582187.200
X = 870230.544
DELTA = 178°38'27" RT
D = 106°06'12"
T = 4552.40'
L = 168.36'
R = 54.00'
PCC STA = 11+70.93 'JE'
Y = 577952.808
X = 868558.939
PT STA = 13+39.29 'JE'
Y = 577914.348
X = 868659.851
DB = N21°32'33"E
DA = S20°11'00"W

CURVE JG-1
PI STA = 0+46.86 'JG'
Y = 578019.908
X = 868598.433
DELTA = 55°00'30" LT
D = 63°39'43"
T = 46.86'
L = 86.41'
R = 90.00'
PC STA = 0+00.00 'JG'
Y = 577990.176
X = 868562.214
PT STA = 0+86.41 'JG'
Y = 578066.630
X = 868594.846
DB = N50°37'03"E
DA = N04°23'27"W




CURVE JH-1
PI STA = 0+47.08 'JH'
Y = 577847.897
X = 868633.487
DELTA = 50°25'07" RT
D = 57°17'45"
T = 47.08'
L = 88.00'
R = 100.00'
PC STA = 0+00.00 'JH'
Y = 577801.484
X = 868641.361
PCC STA = 0+88.00 'JH'
Y = 577883.539
X = 868664.243
DB = N09°37'40"W
DA = N40°47'28"E

CURVE JH-2
PI STA = 1+21.60 'JH'
Y = 577908.983
X = 868686.198
DELTA = 12°47'01" RT
D = 19°05'55"
T = 33.61'
L = 66.93'
R = 300.00'
PCC STA = 0+88.00 'JH'
Y = 577883.539
X = 868664.243
PRC STA = 1+54.93 'JH'
Y = 577928.938
X = 868713.239
DB = N40°47'28"E
DA = N53°34'29"E

CURVE JH-3
PI STA = 1+84.89 'JH'
Y = 577946.726
X = 868737.344
DELTA = 11°24'19" LT
D = 19°05'55"
T = 29.96'
L = 59.72'
R = 300.00'
PRC STA = 1+54.93 'JH'
Y = 577928.938
X = 868713.239
PT STA = 2+14.65 'JH'
Y = 577968.929
X = 868757.455
DB = N53°34'29"E
DA = N42°10'10"E

CURVE JF-1
PI STA = 0+07.66 'JF'
Y = 577980.158
X = 868666.689
DELTA = 3°22'24" RT
D = 22°02'13"
T = 7.66'
L = 15.31'
R = 260.00'
PC STA = 0+00.00 'JF'
Y = 577973.770
X = 868670.909
PCC STA = 0+15.31 'JF'
Y = 577986.783
X = 868662.852
DB = N33°27'03"W
DA = N30°04'39"W

CURVE JF-2
PI STA = 0+73.26 'JF'
Y = 578036.935
X = 868633.807
DELTA = 25°07'55" RT
D = 22°02'13"
T = 57.95'
L = 114.05'
R = 260.00'
PCC STA = 0+15.31 'JF'
Y = 577986.783
X = 868662.852
PT STA = 1+29.35 'JF'
Y = 578094.674
X = 868628.810
DB = N30°04'39"W
DA = N04°56'44"W

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ALIGNMENT DETAILS - J | SHEET 185 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027202-AD.DWG
LAYOUT NAME - 027211-ad
PLOT DATE : 7/29/2024 4:32 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

CURVE JO-1
PI STA = 0'JO'+63.90
Y = 578495.620
X = 868560.654
DELTA = 27°36'56" LT
D = 22°02'13"
T = 63.90'
L = 125.32'
R = 260.00'
PC STA = -0'JO'+-00.00
Y = 578432.011
X = 868566.743
PCC STA = 1'JO'+25.32
Y = 578549.159
X = 868525.773
DB = N05°28'07"W
DA = N33°05'02"W

CURVE JO-1
PI STA = 1'JO'+27.73
Y = 578551.182
X = 868524.455
DELTA = 1°03'50" LT
D = 22°02'13"
T = 2.41'
L = 4.83'
R = 260.00'
PCC STA = 1'JO'+25.32
Y = 578549.159
X = 868525.773
PT STA = 1'JO'+30.14
Y = 578553.180
X = 868523.100
DB = N33°05'02"W
DA = N34°08'53"W

CURVE JM-1
PI STA = 1'JM'+05.31
Y = 578630.311
X = 868516.782
DELTA = 14°42'26" LT
D = 22°02'13"
T = 33.55'
L = 66.74'
R = 260.00'
PC STA = 0'JM'+71.76
Y = 578612.332
X = 868488.451
PCC STA = 1'JM'+38.50
Y = 578654.893
X = 868539.621
DB = N57°36'03"E
DA = N42°53'36"E

CURVE JM-2
PI STA = 1'JM'+92.15
Y = 578694.195
X = 868576.134
DELTA = 58°54'22" LT
D = 60°18'41"
T = 53.65'
L = 97.67'
R = 95.00'
PCC STA = 1'JM'+38.50
Y = 578654.893
X = 868539.621
PT STA = 2'JM'+36.17
Y = 578745.760
X = 868561.336
DB = N42°53'36"E
DA = N16°00'46"W

CURVE JM-3
PI STA = 3'JM'+25.87
Y = 578831.975
X = 868536.593
DELTA = 1°42'08" LT
D = 14°19'26"
T = 5.94'
L = 11.88'
R = 400.00'
PC STA = 3'JM'+19.92
Y = 578826.263
X = 868538.232
PRC STA = 3'JM'+31.81
Y = 578837.636
X = 868534.785
DB = N16°00'46"W
DA = N17°42'54"W

CURVE JM-4
PI STA = 3'JM'+70.92
Y = 578874.894
X = 868522.884
DELTA = 3°49'22" RT
D = 4°53'19"
T = 39.11'
L = 78.20'
R = 1172.01'
PRC STA = 3'JM'+31.81
Y = 578837.636
X = 868534.785
PT STA = 4'JM'+10.01
Y = 578912.864
X = 868513.493
DB = N17°42'54"W
DA = N13°53'31"W

N

BP: 0+00.00 'JM'
Y: 578573.881
X:868427.861

71.76'
N57°36'03"E

PC: 0+71.76 'JM'

1'JM'

CURVE JM-1

PCC: 1+38.50 'JM'

2'JM'

CURVE JM-2

PT: 2+36.17 'JM'

29.83'
N16°00'46"W

PI: 2+66.00 'JM'

53.93' 3'JM'
N16°00'46"W

PC: 3+19.92 'JM'

PRC: 3+31.81 'JM'

4'JM'

EP: 4+10.01 'JM'
Y: 578912.864
X:868513.493

CURVE JM-3

CURVE JM-4

EP: 1+30.14 'JO'
Y: 578553.180
X:868523.100
PCC: 1+25.32 'JO'

BP: -0+00.00 'JO'
Y: 578432.011
X:868566.743

1'JO'

CURVE JO-2

CURVE JO-1

CURVE JK-2

12'JK'

11'JK'

PCC: 11+13.00 'JK'

PCC: 12+26.00 'JK'

CURVE JK-1

CTH J / HYLAND AVE

R/L CTH J NB

CURVE JN-1

BP: 0+00.00 'JN'
Y: 578460.110
X:868600.737

EP: 0+88.34 'JN'
Y: 578538.962
X:868632.996

CURVE JK-3

13'JK'

BP: 10+00.00 'JK'
Y: 578590.713
X:868638.193

EP: 13+39.29 'JK'
Y: 578590.713
X:868638.193

1'JL'

CURVE JL-2

PCC: 0+98.55 'JL'

EP: 1+81.10 'JL'
Y: 578708.537
X:868612.494

CURVE JL-1

BP: 0+00.00 'JL'
Y: 578589.897
X:868730.822

CURVE JN-1
PI STA = 0'JN'+47.66
Y = 578507.628
X = 868597.089
DELTA = 53°16'54" RT
D = 60°18'41"
T = 47.66'
L = 88.34'
R = 95.00'
PC STA = 0'JN'+00.00
Y = 578460.110
X = 868600.737
PT STA = 0'JN'+88.34
Y = 578538.962
X = 868632.996
DB = N04°23'27"W
DA = N48°53'27"E

CURVE JL-1
PI STA = 0'JL'+53.69
Y = 578589.464
X = 868677.134
DELTA = 56°27'44" RT
D = 57°17'45"
T = 53.69'
L = 98.55'
R = 100.00'
PC STA = 0'JL'+00.00
Y = 578589.897
X = 868730.822
PCC STA = 0'JL'+98.55
Y = 578633.975
X = 868647.111
DB = S89°32'15"W
DA = N34°00'01"W

CURVE JL-2
PI STA = 1'JL'+40.17
Y = 578668.484
X = 868623.834
DELTA = 18°11'31" RT
D = 22°02'13"
T = 41.63'
L = 82.55'
R = 260.00'
PCC STA = 0'JL'+98.55
Y = 578633.975
X = 868647.111
PT STA = 1'JL'+81.10
Y = 578708.537
X = 868612.494
DB = N34°00'01"W
DA = N15°48'30"W

CURVE JK-1
PI STA = 10'JK'+93.34
Y = 578497.634
X = 868631.270
DELTA = 119°53'48" RT
D = 106°06'12"
T = 93.34'
L = 113.00'
R = 54.00'
PC STA = 10'JK'+00.00
Y = 578590.713
X = 868638.193
PCC STA = 11'JK'+13.00
Y = 578550.029
X = 868554.028
DB = S04°15'12"W
DA = N55°51'00"W

CURVE JK-2
PI STA = 12'JK'+06.34
Y = 578602.425
X = 868476.786
DELTA = 119°53'48" RT
D = 106°06'12"
T = 93.34'
L = 113.00'
R = 54.00'
PCC STA = 11'JK'+13.00
Y = 578550.029
X = 868554.028
PCC STA = 12'JK'+26.00
Y = 578643.272
X = 868560.709
DB = N55°51'00"W
DA = N64°02'49"E

CURVE JK-3
PI STA = 13'JK'+19.92
Y = 578684.376
X = 868645.159
DELTA = 120°12'24" RT
D = 106°06'12"
T = 93.92'
L = 113.29'
R = 54.00'
PCC STA = 12'JK'+26.00
Y = 578643.272
X = 868560.709
PT STA = 13'JK'+39.29
Y = 578590.713
X = 868638.193
DB = N64°02'49"E
DA = S04°15'12"W

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | ALIGNMENT DETAILS - J | SHEET 186 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\027202-AD.DWG
LAYOUT NAME - 027212-ad
PLOT DATE : 7/29/2024 4:32 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

TOWN OF VANDENBROEK

2

END PROJECT
STA 26+34.30 'JNB'

CTH J

KELSO RD

END CONSTRUCTION
STA. 1183 + 00.00 'JCT'
BEGIN CONSTRUCTION
STA. 1183+ 00.00 'JC'

BEGIN CONSTRUCTION
STA 1180+ 00.00 'JCT'

RAMP JC

B-44-0338

BM 179

END CONSTRUCTION
STA. 1192+00.00 'JD'
BEGIN CONSTRUCTION
STA. 1192+00.00 'JDT'

END CONSTRUCTION
STA 1195+25.00 'JDT'

END CONSTRUCTION
STA 1194+98.00 'SB'

RAMP JD

1175+00 'JC'
1175+00 'SB'
1180+00 'SB'
IH 41 SB
1185+00 'SB'
1190+00 'SB'
1195+00 'SB'
1200+00 'SB'

1175+00 'NB'
1175+00 'JB'
1180+00 'NB'
IH 41 NB
1185+00 'NB'
1190+00 'NB'
1195+00 'NB'
1200+00 'NB'
1200+00 'JA'

1195+00 'JA'

BM 177

BM 178

1180+00 'JB'

RAMP JB

1185+00 'JB'

1190+00 'JA'

RAMP JA

END CONSTRUCTION
STA 1193+50.00 'JAT'

BEGIN CONSTRUCTION
STA 1178+75.00 'JBT'

END CONSTRUCTION
STA. 1181+50.00 'JBT'
BEGIN CONSTRUCTION
STA. 1181+50.00 'JB'

BEGIN CONSTRUCTION
STA 1179+52.00 'NB'

END CONSTRUCTION
STA. 1190+50.00 'JA'
BEGIN CONSTRUCTION
STA. 1190+50.00 'JAT'

BENCH MARKS

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| BM177 | STA. 1172+16.47 'NB' OFFSET 40.37' RT | CHISELED SQUARE, NE WING WALL | 697.430 |
| BM178 | STA. 18+25.51 'JNB' OFFSET 18.05' RT | CHISELED SQUARE | 716.767 |
| BM179 | STA. 20+32.35 'JNB' OFFSET 16.98' LT | CHISELED SQUARE | 716.460 |
| BM180 | STA. 13+30.33 'JNB' OFFSET 28.11' RT | CHISELED SQUARE, LIGHT POLE | 703.908 |
| BM182 | STA. 1201+73.17 NB OFFSET 594.55' RT | NE WING WALL | 689.024 |

BM 180

BM 182

CITY OF KAUKAUNA

BEGIN PROJECT
STA 11+61.02 'JNB'

10+00 'JNB'

E FRONTAGE RD

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | BENCHMARKS | SHEET 187 | E |
|---|---|---|---|---|---|

## Estimate Of Quantities

1130-66-78

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0002 | 201.0105 | Clearing | STA | 2.000 | 2.000 |
| 0004 | 201.0120 | Clearing | ID | 42.000 | 42.000 |
| 0006 | 201.0205 | Grubbing | STA | 2.000 | 2.000 |
| 0008 | 201.0220 | Grubbing | ID | 42.000 | 42.000 |
| 0010 | 203.0100 | Removing Small Pipe Culverts | EACH | 2.000 | 2.000 |
| 0012 | 203.0220 | Removing Structure (structure) 0001. B-44-44 | EACH | 1.000 | 1.000 |
| 0014 | 204.0100 | Removing Concrete Pavement | SY | 1,124.000 | 1,124.000 |
| 0016 | 204.0120 | Removing Asphaltic Surface Milling | SY | 1,560.000 | 1,560.000 |
| 0018 | 204.0150 | Removing Curb & Gutter | LF | 4,631.000 | 4,631.000 |
| 0020 | 204.0155 | Removing Concrete Sidewalk | SY | 521.000 | 521.000 |
| 0022 | 204.0157 | Removing Concrete Barrier | LF | 156.000 | 156.000 |
| 0024 | 204.0165 | Removing Guardrail | LF | 831.000 | 831.000 |
| 0026 | 204.0170 | Removing Fence | LF | 75.000 | 75.000 |
| 0028 | 204.0195 | Removing Concrete Bases | EACH | 23.000 | 23.000 |
| 0030 | 204.0220 | Removing Inlets | EACH | 16.000 | 16.000 |
| 0032 | 204.0245 | Removing Storm Sewer (size) 0001. 12-Inch | LF | 244.000 | 244.000 |
| 0034 | 204.9060.S | Removing (item description) 0002. Removing Street Light Assembly | EACH | 18.000 | 18.000 |
| 0036 | 204.9060.S | Removing (item description) 0003. Removing Lighting Control | EACH | 2.000 | 2.000 |
| 0038 | 204.9060.S | Removing (item description) 0701. Communications Vault | EACH | 2.000 | 2.000 |
| 0040 | 204.9060.S | Removing (item description) 0702. Ramp Gate System | EACH | 2.000 | 2.000 |
| 0042 | 204.9090.S | Removing (item description) 0001. Removing Electrical Conductors from Existing Conduit | LF | 2,295.000 | 2,295.000 |
| 0044 | 204.9090.S | Removing (item description) 0002. Removing or Abandoning Existing Conduit | LF | 2,295.000 | 2,295.000 |
| 0046 | 205.0100 | Excavation Common | CY | 11,018.000 | 11,018.000 |
| 0048 | 206.1001 | Excavation for Structures Bridges (structure) 0001. B-44-338 | EACH | 1.000 | 1.000 |
| 0050 | 208.0100 | Borrow | CY | 47.000 | 47.000 |
| 0052 | 209.1100 | Backfill Granular Grade 1 | CY | 50.000 | 50.000 |
| 0054 | 210.1500 | Backfill Structure Type A | TON | 674.000 | 674.000 |
| 0056 | 211.0400 | Prepare Foundation for Asphaltic Shoulders | STA | 24.000 | 24.000 |
| 0058 | 213.0100 | Finishing Roadway (project) 0001. 1130-66-78 | EACH | 1.000 | 1.000 |
| 0060 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 799.000 | 799.000 |
| 0062 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 8,735.000 | 8,735.000 |
| 0064 | 312.0110 | Select Crushed Material | TON | 11,624.000 | 11,624.000 |
| 0066 | 405.0100 | Coloring Concrete WisDOT Red | CY | 1,081.000 | 1,081.000 |
| 0068 | 405.0200 | Coloring Concrete Custom | CY | 36.000 | 36.000 |
| 0070 | 415.0090 | Concrete Pavement 9-Inch | SY | 3,244.000 | 3,244.000 |
| 0072 | 415.0100 | Concrete Pavement 10-Inch | SY | 4,732.000 | 4,732.000 |
| 0074 | 415.0410 | Concrete Pavement Approach Slab | SY | 162.000 | 162.000 |
| 0076 | 415.2010 | Concrete Truck Apron 12-inch | SY | 3,179.000 | 3,179.000 |
| 0078 | 415.4100 | Concrete Pavement Joint Filling | SY | 13,224.000 | 13,224.000 |
| 0080 | 455.0605 | Tack Coat | GAL | 343.000 | 343.000 |
| 0082 | 460.2000 | Incentive Density HMA Pavement | DOL | 262.000 | 262.000 |
| 0084 | 460.6223 | HMA Pavement 3 MT 58-28 S | TON | 197.000 | 197.000 |
| 0086 | 460.6224 | HMA Pavement 4 MT 58-28 S | TON | 213.000 | 213.000 |
| 0088 | 465.0105 | Asphaltic Surface | TON | 1,081.000 | 1,081.000 |
| 0090 | 465.0120 | Asphaltic Surface Driveways and Field Entrances | TON | 17.000 | 17.000 |
| 0092 | 465.0315 | Asphaltic Flumes | SY | 7.000 | 7.000 |
| 0094 | 465.0510 | Asphaltic Rumble Strips, Shoulder Divided Roadway | LF | 4,592.000 | 4,592.000 |
| 0096 | 501.1000.S | Ice Hot Weather Concreting | LB | 5,240.000 | 5,240.000 |

1130-66-78

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0098 | 502.0100 | Concrete Masonry Bridges | CY | 309.000 | 309.000 |
| 0100 | 502.3200 | Protective Surface Treatment | SY | 1,593.000 | 1,593.000 |
| 0102 | 502.3210 | Pigmented Surface Sealer | SY | 202.000 | 202.000 |
| 0104 | 503.0146 | Prestressed Girder Type I 45W-Inch | LF | 1,638.000 | 1,638.000 |
| 0106 | 505.0400 | Bar Steel Reinforcement HS Structures | LB | 14,640.000 | 14,640.000 |
| 0108 | 505.0600 | Bar Steel Reinforcement HS Coated Structures | LB | 167,870.000 | 167,870.000 |
| 0110 | 505.0800.S | Bar Steel Reinforcement HS Stainless Structures | LB | 2,010.000 | 2,010.000 |
| 0112 | 506.2605 | Bearing Pads Elastomeric Non-Laminated | EACH | 32.000 | 32.000 |
| 0114 | 506.4000 | Steel Diaphragms (structure) 0001. B-44-338 | EACH | 28.000 | 28.000 |
| 0116 | 511.1200 | Temporary Shoring (structure) 0001. B-44-338 | SF | 636.000 | 636.000 |
| 0118 | 513.4091 | Railing Tubular Screening | LF | 879.000 | 879.000 |
| 0120 | 516.0500 | Rubberized Membrane Waterproofing | SY | 34.000 | 34.000 |
| 0122 | 520.8000 | Concrete Collars for Pipe | EACH | 12.000 | 12.000 |
| 0124 | 522.0430 | Culvert Pipe Reinforced Concrete Class IV 30-Inch | LF | 378.000 | 378.000 |
| 0126 | 522.1012 | Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch | EACH | 4.000 | 4.000 |
| 0128 | 522.1030 | Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch | EACH | 4.000 | 4.000 |
| 0130 | 524.0612 | Apron Endwalls for Culvert Pipe Salvaged 12-Inch | EACH | 4.000 | 4.000 |
| 0132 | 531.2036 | Drilling Shaft 36-Inch | LF | 10.000 | 10.000 |
| 0134 | 531.4050 | Foundation Camera Pole 50-FT | EACH | 1.000 | 1.000 |
| 0136 | 531.8990 | Anchor Assemblies Poles on Structures | EACH | 1.000 | 1.000 |
| 0138 | 550.0500 | Pile Points | EACH | 54.000 | 54.000 |
| 0140 | 550.1120 | Piling Steel HP 12-Inch X 53 Lb | LF | 4,880.000 | 4,880.000 |
| 0142 | 601.0405 | Concrete Curb & Gutter 18-Inch Type A | LF | 400.000 | 400.000 |
| 0144 | 601.0409 | Concrete Curb & Gutter 30-Inch Type A | LF | 1,209.000 | 1,209.000 |
| 0146 | 601.0551 | Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A | LF | 2,462.000 | 2,462.000 |
| 0148 | 601.0580 | Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R | LF | 654.000 | 654.000 |
| 0150 | 601.0600 | Concrete Curb Pedestrian | LF | 131.000 | 131.000 |
| 0152 | 602.0405 | Concrete Sidewalk 4-Inch | SF | 15,480.000 | 15,480.000 |
| 0154 | 602.0515 | Curb Ramp Detectable Warning Field Natural Patina | SF | 376.000 | 376.000 |
| 0156 | 602.3010 | Concrete Surface Drains | CY | 7.000 | 7.000 |
| 0158 | 603.8000 | Concrete Barrier Temporary Precast Delivered | LF | 4,400.000 | 4,400.000 |
| 0160 | 603.8125 | Concrete Barrier Temporary Precast Installed | LF | 4,400.000 | 4,400.000 |
| 0162 | 603.8500 | Anchoring Concrete Barrier Temporary Precast | LF | 500.000 | 500.000 |
| 0164 | 604.0400 | Slope Paving Concrete | SY | 314.000 | 314.000 |
| 0166 | 604.0600 | Slope Paving Select Crushed Material | SY | 86.000 | 86.000 |
| 0168 | 606.0200 | Riprap Medium | CY | 213.000 | 213.000 |
| 0170 | 606.0300 | Riprap Heavy | CY | 12.000 | 12.000 |
| 0172 | 608.0312 | Storm Sewer Pipe Reinforced Concrete Class III 12-Inch | LF | 343.000 | 343.000 |
| 0174 | 611.0624 | Inlet Covers Type H | EACH | 4.000 | 4.000 |
| 0176 | 611.0627 | Inlet Covers Type HM | EACH | 6.000 | 6.000 |
| 0178 | 611.0639 | Inlet Covers Type H-S | EACH | 2.000 | 2.000 |
| 0180 | 611.3004 | Inlets 4-FT Diameter | EACH | 3.000 | 3.000 |
| 0182 | 611.3225 | Inlets 2x2.5-FT | EACH | 3.000 | 3.000 |
| 0184 | 611.3230 | Inlets 2x3-FT | EACH | 12.000 | 12.000 |
| 0186 | 611.8115 | Adjusting Inlet Covers | EACH | 2.000 | 2.000 |
| 0188 | 611.9710 | Salvaged Inlet Covers | EACH | 6.000 | 6.000 |
| 0190 | 612.0406 | Pipe Underdrain Wrapped 6-Inch | LF | 1,066.000 | 1,066.000 |
| 0192 | 614.0115 | Anchorages for Steel Plate Beam Guard Type 2 | EACH | 2.000 | 2.000 |
| 0194 | 614.0220 | Steel Thrie Beam Bullnose Terminal | EACH | 2.000 | 2.000 |

## Estimate Of Quantities

1130-66-78

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0196 | 614.0230 | Steel Thrie Beam | LF | 150.000 | 150.000 |
| 0198 | 614.0305 | Steel Plate Beam Guard Class A | LF | 300.000 | 300.000 |
| 0200 | 614.0905 | Crash Cushions Temporary | EACH | 4.000 | 4.000 |
| 0202 | 616.0700.S | Fence Safety | LF | 75.000 | 75.000 |
| 0204 | 618.0100 | Maintenance and Repair of Haul Roads (project) 0001. 1130-66-78 | EACH | 1.000 | 1.000 |
| 0206 | 619.1000 | Mobilization | EACH | 1.000 | 1.000 |
| 0208 | 620.0300 | Concrete Median Sloped Nose | SF | 620.000 | 620.000 |
| 0210 | 624.0100 | Water | MGAL | 163.000 | 163.000 |
| 0212 | 625.0100 | Topsoil | SY | 23,680.000 | 23,680.000 |
| 0214 | 627.0200 | Mulching | SY | 590.000 | 590.000 |
| 0216 | 628.1504 | Silt Fence | LF | 6,333.000 | 6,333.000 |
| 0218 | 628.1520 | Silt Fence Maintenance | LF | 31,665.000 | 31,665.000 |
| 0220 | 628.1905 | Mobilizations Erosion Control | EACH | 11.000 | 11.000 |
| 0222 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 11.000 | 11.000 |
| 0224 | 628.2008 | Erosion Mat Urban Class I Type B | SY | 23,680.000 | 23,680.000 |
| 0226 | 628.7005 | Inlet Protection Type A | EACH | 20.000 | 20.000 |
| 0228 | 628.7015 | Inlet Protection Type C | EACH | 10.000 | 10.000 |
| 0230 | 628.7020 | Inlet Protection Type D | EACH | 10.000 | 10.000 |
| 0232 | 628.7504 | Temporary Ditch Checks | LF | 525.000 | 525.000 |
| 0234 | 628.7555 | Culvert Pipe Checks | EACH | 45.000 | 45.000 |
| 0236 | 628.7560 | Tracking Pads | EACH | 5.000 | 5.000 |
| 0238 | 629.0210 | Fertilizer Type B | CWT | 19.100 | 19.100 |
| 0240 | 630.0130 | Seeding Mixture No. 30 | LB | 1,336.000 | 1,336.000 |
| 0242 | 630.0300 | Seeding Borrow Pit | LB | 13.000 | 13.000 |
| 0244 | 630.0500 | Seed Water | MGAL | 668.700 | 668.700 |
| 0246 | 632.0101 | Trees (species, root, size) 0001. Cole's Select Serviceberry, B&B, 5-FT | EACH | 6.000 | 6.000 |
| 0248 | 632.0201 | Shrubs (species, root, size) 0001. Hydranga "Limelight", Cont., 3-FT | EACH | 18.000 | 18.000 |
| 0250 | 632.0201 | Shrubs (species, root, size) 0002. Barberry "Rose Glow", Cont., 1-FT | EACH | 42.000 | 42.000 |
| 0252 | 632.9101 | Landscape Planting Surveillance and Care Cycles | EACH | 10.000 | 10.000 |
| 0254 | 633.5200 | Markers Culvert End | EACH | 12.000 | 12.000 |
| 0256 | 634.0614 | Posts Wood 4x6-Inch X 14-FT | EACH | 30.000 | 30.000 |
| 0258 | 634.0616 | Posts Wood 4x6-Inch X 16-FT | EACH | 20.000 | 20.000 |
| 0260 | 634.0618 | Posts Wood 4x6-Inch X 18-FT | EACH | 8.000 | 8.000 |
| 0262 | 634.0812 | Posts Tubular Steel 2x2-Inch X 12-FT | EACH | 25.000 | 25.000 |
| 0264 | 637.2210 | Signs Type II Reflective H | SF | 489.440 | 489.440 |
| 0266 | 637.2230 | Signs Type II Reflective F | SF | 9.000 | 9.000 |
| 0268 | 638.2102 | Moving Signs Type II | EACH | 6.000 | 6.000 |
| 0270 | 638.2602 | Removing Signs Type II | EACH | 50.000 | 50.000 |
| 0272 | 638.3000 | Removing Small Sign Supports | EACH | 86.000 | 86.000 |
| 0274 | 643.0300 | Traffic Control Drums | DAY | 9,527.000 | 9,527.000 |
| 0276 | 643.0420 | Traffic Control Barricades Type III | DAY | 5,552.000 | 5,552.000 |
| 0278 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 7,817.000 | 7,817.000 |
| 0280 | 643.0715 | Traffic Control Warning Lights Type C | DAY | 700.000 | 700.000 |
| 0282 | 643.0800 | Traffic Control Arrow Boards | DAY | 22.000 | 22.000 |
| 0284 | 643.0900 | Traffic Control Signs | DAY | 57,481.000 | 57,481.000 |
| 0286 | 643.0910 | Traffic Control Covering Signs Type I | EACH | 24.000 | 24.000 |
| 0288 | 643.0920 | Traffic Control Covering Signs Type II | EACH | 4.000 | 4.000 |
| 0290 | 643.1000 | Traffic Control Signs Fixed Message | SF | 458.000 | 458.000 |
| 0292 | 643.1050 | Traffic Control Signs PCMS | DAY | 132.000 | 132.000 |

1130-66-78

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0294 | 643.3180 | Temporary Marking Line Removable Tape 6-Inch | LF | 760.000 | 760.000 |
| 0296 | 643.5000 | Traffic Control | EACH | 1.000 | 1.000 |
| 0298 | 645.0111 | Geotextile Type DF Schedule A | SY | 120.000 | 120.000 |
| 0300 | 645.0120 | Geotextile Type HR | SY | 878.000 | 878.000 |
| 0302 | 646.2020 | Marking Line Epoxy 6-Inch | LF | 8,025.000 | 8,025.000 |
| 0304 | 646.2040 | Marking Line Grooved Wet Ref Epoxy 6-Inch | LF | 3,545.000 | 3,545.000 |
| 0306 | 646.4020 | Marking Line Epoxy 10-Inch | LF | 270.000 | 270.000 |
| 0308 | 646.4040 | Marking Line Grooved Wet Ref Epoxy 10-Inch | LF | 89.000 | 89.000 |
| 0310 | 646.5020 | Marking Arrow Epoxy | EACH | 2.000 | 2.000 |
| 0312 | 646.6320 | Marking Dotted Extension Epoxy 18-Inch | LF | 130.000 | 130.000 |
| 0314 | 646.7120 | Marking Diagonal Epoxy 12-Inch | LF | 92.000 | 92.000 |
| 0316 | 646.7420 | Marking Crosswalk Epoxy Transverse Line 6-Inch | LF | 279.000 | 279.000 |
| 0318 | 646.8120 | Marking Curb Epoxy | LF | 40.000 | 40.000 |
| 0320 | 646.8220 | Marking Island Nose Epoxy | EACH | 4.000 | 4.000 |
| 0322 | 652.0125 | Conduit Rigid Metallic 2-Inch | LF | 24.000 | 24.000 |
| 0324 | 652.0225 | Conduit Rigid Nonmetallic Schedule 40 2-Inch | LF | 5,192.000 | 5,192.000 |
| 0326 | 652.0235 | Conduit Rigid Nonmetallic Schedule 40 3-Inch | LF | 1,573.000 | 1,573.000 |
| 0328 | 652.0335 | Conduit Rigid Nonmetallic Schedule 80 3-Inch | LF | 695.000 | 695.000 |
| 0330 | 652.0605 | Conduit Special 2-Inch | LF | 438.000 | 438.000 |
| 0332 | 653.0154 | Pull Boxes Non-Conductive 24x36-Inch | EACH | 7.000 | 7.000 |
| 0334 | 653.0164 | Pull Boxes Non-Conductive 24x42-Inch | EACH | 40.000 | 40.000 |
| 0336 | 653.0222 | Junction Boxes 18x12x6-Inch | EACH | 1.000 | 1.000 |
| 0338 | 653.0905 | Removing Pull Boxes | EACH | 23.000 | 23.000 |
| 0340 | 654.0105 | Concrete Bases Type 5 | EACH | 22.000 | 22.000 |
| 0342 | 654.0107 | Concrete Bases Type 7 | EACH | 3.000 | 3.000 |
| 0344 | 654.0230 | Concrete Control Cabinet Bases Type L30 | EACH | 2.000 | 2.000 |
| 0346 | 655.0610 | Electrical Wire Lighting 12 AWG | LF | 6,684.000 | 6,684.000 |
| 0348 | 655.0620 | Electrical Wire Lighting 8 AWG | LF | 21,614.000 | 21,614.000 |
| 0350 | 655.0625 | Electrical Wire Lighting 6 AWG | LF | 1,752.000 | 1,752.000 |
| 0352 | 655.0635 | Electrical Wire Lighting 2 AWG | LF | 1,320.000 | 1,320.000 |
| 0354 | 656.0201 | Electrical Service Meter Breaker Pedestal (location) 0001. CB1600 | EACH | 1.000 | 1.000 |
| 0356 | 656.0501 | Electrical Service Breaker Disconnect Box (location) 0001. CB9-1 | EACH | 1.000 | 1.000 |
| 0358 | 657.0210 | Transformer Bases Breakaway 15-17 Inch Bolt Circle | EACH | 3.000 | 3.000 |
| 0360 | 657.0255 | Transformer Bases Breakaway 11 1/2-Inch Bolt Circle | EACH | 22.000 | 22.000 |
| 0362 | 657.0322 | Poles Type 5-Aluminum | EACH | 21.000 | 21.000 |
| 0364 | 657.0337 | Poles Type 17-Aluminum | EACH | 3.000 | 3.000 |
| 0366 | 657.0710 | Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT | EACH | 21.000 | 21.000 |
| 0368 | 657.0730 | Luminaire Arms Truss Type 6-Inch Clamp 12-FT | EACH | 3.000 | 3.000 |
| 0370 | 659.1120 | Luminaires Utility LED B | EACH | 24.000 | 24.000 |
| 0372 | 659.2130 | Lighting Control Cabinets 120/240 30-Inch | EACH | 1.000 | 1.000 |
| 0374 | 659.5000.S | Lamp, Ballast, LED, Switch Disposal by Contractor | EACH | 18.000 | 18.000 |
| 0376 | 662.1026.S | Ramp Closure Gates 26-FT | EACH | 2.000 | 2.000 |
| 0378 | 670.0101 | Field System Integrator | EACH | 1.000 | 1.000 |
| 0380 | 670.0201 | ITS Documentation | EACH | 1.000 | 1.000 |
| 0382 | 673.0105 | Communication Vault Type 1 | EACH | 2.000 | 2.000 |
| 0384 | 673.0200 | Tracer Wire Marker Posts | EACH | 4.000 | 4.000 |
| 0386 | 673.1225.S | Install Pole Mounted Cabinet | EACH | 1.000 | 1.000 |
| 0388 | 674.0300 | Remove Cable | LF | 1,408.000 | 1,408.000 |
| 0390 | 677.0150 | Install Camera Pole 50-FT | EACH | 1.000 | 1.000 |

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0392 | 677.0200 | Install Camera Assembly | EACH | 1.000 | 1.000 |
| 0394 | 677.9051.S | Removing 50-FT Camera Pole | EACH | 1.000 | 1.000 |
| 0396 | 678.0024 | Install Fiber Optic Cable Outdoor Plant 24-CT | LF | 1,339.000 | 1,339.000 |
| 0398 | 678.0200 | Fiber Optic Splice Enclosure | EACH | 2.000 | 2.000 |
| 0400 | 678.0300 | Fiber Optic Splice | EACH | 48.000 | 48.000 |
| 0402 | 678.0501 | Communication System Testing | EACH | 1.000 | 1.000 |
| 0404 | 678.0600 | Install Ethernet Switches | EACH | 1.000 | 1.000 |
| 0406 | 678.0700 | Install Wireless Antennas | EACH | 2.000 | 2.000 |
| 0408 | 690.0150 | Sawing Asphalt | LF | 405.000 | 405.000 |
| 0410 | 690.0250 | Sawing Concrete | LF | 13.000 | 13.000 |
| 0412 | 715.0502 | Incentive Strength Concrete Structures | DOL | 6,060.000 | 6,060.000 |
| 0414 | 715.0720 | Incentive Compressive Strength Concrete Pavement | DOL | 3,395.000 | 3,395.000 |
| 0416 | ASP.1T0A | On-the-Job Training Apprentice at $5.00/HR | HRS | 2,400.000 | 2,400.000 |
| 0418 | ASP.1T0G | On-the-Job Training Graduate at $5.00/HR | HRS | 2,100.000 | 2,100.000 |
| 0420 | SPV.0035 | Special 0001. High Performance Concrete (HPC) Masonry Structures | CY | 701.000 | 701.000 |
| 0422 | SPV.0035 | Special 0002. Planting Mixture | CY | 230.000 | 230.000 |
| 0424 | SPV.0035 | Special 0003. Concrete Sidewalk Variable Depth | CY | 46.000 | 46.000 |
| 0426 | SPV.0060 | Special 0001. Construction Staking Survey Project 1130-66-78 | EACH | 1.000 | 1.000 |
| 0428 | SPV.0060 | Special 0002. Emergency Response to Traffic Involving Concrete Barrier Temporary | EACH | 8.000 | 8.000 |
| 0430 | SPV.0060 | Special 0003. Emergency Response to Traffic Involving Crash Cushion Temporary | EACH | 8.000 | 8.000 |
| 0432 | SPV.0060 | Special 0500. Lighting Control Cabinets 277/480 30-Inch 3-Phase | EACH | 1.000 | 1.000 |
| 0434 | SPV.0060 | Special 0501. Electrical Service Main Lugs Only Meter Pedestal 3-Phase 600V (CB1500) | EACH | 1.000 | 1.000 |
| 0436 | SPV.0060 | Special 0502. Concrete Transformer Pad | EACH | 1.000 | 1.000 |
| 0438 | SPV.0060 | Special 0702. Wood Pole, 50-FT | EACH | 1.000 | 1.000 |
| 0440 | SPV.0060 | Special 0703. Remove Poles Wood | EACH | 1.000 | 1.000 |
| 0442 | SPV.0060 | Special 0704. Remove and Reinstall ITS Equipment | EACH | 1.000 | 1.000 |
| 0444 | SPV.0075 | Special 0001. Street Sweeping | HRS | 99.000 | 99.000 |
| 0446 | SPV.0090 | Special 0001. Removal and Salvage of High-Tension Cable Guard and Posts | LF | 6,200.000 | 6,200.000 |
| 0448 | SPV.0090 | Special 0002. Concrete Curb and Gutter 36-Inch Special | LF | 777.000 | 777.000 |
| 0450 | SPV.0090 | Special 0003. Concrete Curb and Gutter 42-Inch Special | LF | 526.000 | 526.000 |
| 0452 | SPV.0165 | Special 0001. Wall Modular Block Mechanically Stabilized Earth R-44-50 | SF | 1,282.000 | 1,282.000 |
| 0454 | SPV.0165 | Special 0002. Wall Modular Block Mechanically Stabilized Earth R-44-51 | SF | 1,693.000 | 1,693.000 |
| 0456 | SPV.0180 | Special 0001. Double Shredded Hardwood Mulch | SY | 340.000 | 340.000 |

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## REMOVING CURB & GUTTER

| CATEGORY | STATION | | - | STATION | | LOCATION | 204.0150 LF |
|---|---|---|---|---|---|---|---|
| 1000 | 13+34 | 'JNB' | - | 15+18 | 'JNB' | LT | 190 |
| | 13+34 | 'JNB' | - | 1188+05 | 'JA' | RT | 380 |
| | 15+12 | 'JNB' | - | 15+18 | 'JNB' | LT | 22 |
| | 16+72 | 'JNB' | - | 17+14 | 'JNB' | LT | 44 |
| | 16+72 | 'JNB' | - | 16+81 | 'JNB' | LT | 23 |
| | 16+81 | 'JNB' | - | 16+82 | 'JNB' | LT | 2 |
| | 20+43 | 'JNB' | - | 1191+63 | 'JD' | RT | 490 |
| | 21+46 | 'JNB' | - | 21+85 | 'JNB' | LT | 41 |
| | 21+79 | 'JNB' | - | 21+86 | 'JNB' | LT | 22 |
| | 23+43 | 'JNB' | - | 23+52 | 'JNB' | LT | 30 |
| | 23+43 | 'JNB' | - | 26+06 | 'JNB' | LT | 270 |
| | 26+06 | 'JNB' | - | 1191+64 | 'JD' | LT | 590 |
| | 113+34 | 'JNB' | - | 115+20 | 'JNB' | RT | 190 |
| | 116+78 | 'JNB' | - | 117+17 | 'JNB' | RT | 41 |
| | 121+48 | 'JNB' | - | 121+90 | 'JNB' | RT | 46 |
| | 123+44 | 'JNB' | - | 126+06 | 'JNB' | LT | 260 |
| | 1188+06 | 'JA' | - | 18+25 | JNB' | LT | 350 |
| | 1183+79 | 'JB' | - | 118+17 | 'JSB' | LT | 490 |
| | 1183+80 | 'JB' | - | 114+47 | 'JSB' | RT | 390 |
| | 1187+18 | 'JC' | - | 120+35 | 'JSB' | RT | 330 |
| | 1187+20 | 'JC' | - | 126+23 | 'JSB' | LT | 430 |
| | | | | TOTAL | | | 4,631 |

## CLEARING AND GRUBBING SUMMARY

| CATEGORY | STATION | | - | STATION | | LOCATION | 201.0105 CLEARING STA | 201.0205 GRUBBING STA | 201.0120 CLEARING ID | 201.0220 GRUBBING ID |
|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | 15+90 | 'JNB' | - | 15+95 | 'JNB' | LT | --- | --- | 7 | 7 |
| | 15+93 | 'JNB' | - | 15+98 | 'JNB' | LT | --- | --- | 7 | 7 |
| | 16+01 | 'JNB' | - | 16+05 | 'JNB' | LT | --- | --- | 7 | 7 |
| | 22+53 | 'JNB' | - | 22+58 | 'JNB' | LT | --- | --- | 7 | 7 |
| | 22+54 | 'JNB' | - | 22+58 | 'JNB' | LT | --- | --- | 7 | 7 |
| | 22+64 | 'JNB' | - | 22+69 | 'JNB' | LT | --- | --- | 7 | 7 |
| | | | | CATEGORY 1000 SUBTOTALS | | | 0 | 0 | 42 | 42 |
| 1200 | 1188+00 | 'NB' | - | 1190+00 | 'NB' | RT | 2 | 2 | --- | --- |
| | | | | CATEGORY 1200 SUBTOTALS | | | 2 | 2 | 0 | 0 |
| | | | | | | TOTALS | 2 | 2 | 42 | 42 |

## REMOVING SMALL PIPE CULVERTS

| CATEGORY | STATION | | - | STATION | | LOCATION | 203.0100 EACH | SIZE |
|---|---|---|---|---|---|---|---|---|
| 1000 | 18+15 | 'JNB' | - | 18+60 | 'JNB' | LT/RT | 1 | 30"x127' CMCP |
| | 20+00 | 'JNB' | - | 20+40 | 'JNB' | LT/RT | 1 | 24"x129' CMCP |
| | | | | | | TOTAL | 2 | |

## REMOVING CONCRETE PAVEMENT

| CATEGORY | STATION | | - | STATION | | LOCATION | 204.0100 SY |
|---|---|---|---|---|---|---|---|
| 1000 | 15+44 | JNB' | - | 16+46 | JNB' | LT/RT | 490 |
| | 22+11 | JNB' | - | 23+13 | JNB' | LT/RT | 500 |
| | 18+00 | JNB' | - | 18+20 | JNB' | LT/RT | 67 |
| | 20+37 | JNB' | - | 20+57 | JNB' | LT/RT | 67 |
| | | | | TOTAL | | | 1,124 |

## REMOVING CONCRETE SIDEWALK

| CATEGORY | STATION | | - | STATION | | LOCATION | 204.0155 SY |
|---|---|---|---|---|---|---|---|
| 1000 | 13+39 | 'JNB' | - | 15+17 | 'JNB' | LT | 170 |
| | 16+74 | 'JNB' | - | 17+10 | 'JNB' | LT | 56 |
| | 21+50 | 'JNB' | - | 21+85 | 'JNB' | LT | 55 |
| | 23+43 | 'JNB' | - | 26+03 | 'JNB' | LT | 240 |
| | | | | | | TOTAL | 521 |

## REMOVING GUARDRAIL

| CATEGORY | STATION | | - | STATION | | LOCATION | 204.0165 LF |
|---|---|---|---|---|---|---|---|
| 1000 | 17+01 | 'JNB' | - | 18+25 | 'JNB' | LT | 120 |
| | 20+42 | 'JNB' | - | 21+13 | 'JNB' | LT | 71 |
| | 117+47 | 'JSB' | - | 118+17 | 'JSB' | LT | 70 |
| | 120+35 | 'JSB' | - | 121+60 | 'JSB' | LT | 120 |
| | 1186+90 | 'NB' | - | 1188+70 | 'NB' | MEDIAN | 360 |
| | 1186+57 | 'NB' | - | 1187+02 | NB' | RT | 45 |
| | 1188+40 | 'SB' | - | 1188+85 | 'SB' | LT | 45 |
| | | | | | | TOTAL | 831 |

## REMOVING CONCRETE BARRIER

| CATEGORY | STATION | | - | STATION | | LOCATION | 204.0157 LF |
|---|---|---|---|---|---|---|---|
| 1000 | 1187+00 | 'NB' | - | 1187+78 | 'NB' | RT | 78 |
| | 1187+54 | 'SB' | - | 1188+42 | 'SB' | LT | 78 |
| | | | | | | TOTAL | 156 |

## REMOVING ASPHALTIC SURFACE MILLING

| CATEGORY | STAGE | STATION | | - | STATION | | LOCATION | 204.0120 SY |
|---|---|---|---|---|---|---|---|---|
| 1000 | 1A | 1180+52 | 'NB' | - | 1192+00 | 'NB' | MEDIAN | 520 |
| | 1A | 1183+50 | 'SB' | - | 1194+98 | 'SB' | MEDIAN | 520 |
| | 1B | 1180+52 | 'NB' | - | 1192+00 | 'NB' | RT | 260 |
| | 1B | 1183+50 | 'SB' | - | 1194+98 | 'SB' | LT | 260 |
| | | | | | | | TOTAL | 1,560 |

REMOVING FENCE

| CATEGORY | STATION - STATION | LOCATION | 204.0170 LF |
|---|---|---|---|
| 1000 | 23+34 'JNB' - 23+62 'JNB' | RT | 75 |

REMOVING INLETS

| CATEGORY | STATION | OFFSET | 204.0220 EACH |
|---|---|---|---|
| 1000 | 15+42 'JNB' | 22.0 'LT | 1 |
| | 15+42 'JNB' | 29.0 'LT | 1 |
| | 15+94 'JNB' | 100.0 'LT | 1 |
| | 16+03 'JNB' | 51.0 'RT | 1 |
| | 18+04 'JNB' | 14.0 'LT | 1 |
| | 18+14 'JNB' | 20.0 'RT | 1 |
| | 20+43 'JNB' | 14.0 'LT | 1 |
| | 20+53 'JNB' | 20.0 'RT | 1 |
| | 22+52 'JNB' | 93.0 'LT | 1 |
| | 22+59 'JNB' | 56.0 'RT | 1 |
| | 23+17 'JNB' | 16.0 'LT | 1 |
| | 23+17 'JNB' | 24.0 'LT | 1 |
| | 24+84 'JNB' | 16.0 'RT | 1 |
| | 24+84 'JNB' | 26.0 'LT | 1 |
| | 26+00 'JNB' | 1.0 'LT | 1 |
| | 26+00 'JNB' | 7.0 'LT | 1 |
| | | TOTAL | 16 |

REMOVING STORM SEWER

| CATEGORY | STATION | - | STATION | LOCATION | 204.0245.0001 12-INCH LF | REMARKS |
|---|---|---|---|---|---|---|
| 1000 | 15+42 | | 'JNB' | LT | 8 | |
| | 15+42 | - | 15+47 'JNB' | LT | 6 | |
| | 15+90 | - | 15+94 'JNB' | LT | 6 | |
| | 15+94 | - | 16+00 'JNB' | LT | 6 | |
| | 16+04 | - | 16+09 'JNB' | RT | 6 | |
| | 18+04 | | 'JNB' | LT | 30 | REMOVE APRON ENDWALL |
| | 18+15 | | 'JNB' | RT | 30 | REMOVE APRON ENDWALL |
| | 20+42 | | 'JNB' | LT | 30 | REMOVE APRON ENDWALL |
| | 20+53 | | 'JNB' | RT | 30 | REMOVE APRON ENDWALL |
| | 22+46 | - | 22+52 'JNB' | LT | 6 | |
| | 22+54 | - | 22+59 'JNB' | RT | 6 | |
| | 23+14 | | 'JNB' | LT | 8 | |
| | 23+14 | - | 23+16 'JNB' | LT | 6 | |
| | 24+84 | | 'JNB' | LT | 6 | |
| | 24+84 | | 'JNB' | RT | 6 | |
| | 25+94 | - | 26+00 'JNB' | LT | 50 | |
| | 26+00 | | 'JNB' | LT | 4 | |
| | | | | TOTAL | 244 | |

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

| CATEGORY | STAGE | STATION-STATION | OFFSET | LOCATION | 211.0400 STA |
|---|---|---|---|---|---|
| 1000 | 1A | 1180+50'NB'- 1192+50'NB' | LT | NB MEDIAN SHOULDER | 12 |
| | 1A | 1183+00'SB' - 1195+00'SB' | RT | SB MEDIAN SHOULDER | 12 |
| | | | | TOTAL | 24 |

FINISHING ROADWAY

| CATEGORY | PROJECT | 213.0100 EACH |
|---|---|---|
| 1000 | 1130-66-78 | 1 |

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| DIVISION | FROM/TO STATION | LOCATION | 205.0100 COMMON EXCAVATION (1) CUT (2) | 205.0100 COMMON EXCAVATION (1) EBS EXCAVATION | SALVAGED/UNUSABLE PAVEMENT MATERIAL | AVAILABLE STRUCTURE EXCAVATION (4) | AVAILABLE MATERIAL (5) | EXPANDED EBS BACKFILL (6) FACTOR 1.25 | UNEXPANDED FILL | EXPANDED FILL (7) FACTOR 1.25 | MASS ORDINATE +/- (8) | WASTE (9)(10) | 208.0100 BORROW | *312.0110 SELECT CRUSHED MATERIAL | *624.0100 WATER (FOR DUST |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DIVISION 1 | | | CY | CY | CY | CY | CY | CY | CY | CY | CY | CY | CY | TON | MGAL |
| I41 | 1184+69.66/1190+71.32 | LT/RT | 266 | 14 | 0 | 0 | 266 | 18 | 63 | 79 | 187 | 201 | --- | 25 | 0.6 |
| DIVISION 1 SUBTOTAL | | | 266 | 14 | 0 | 0 | 266 | 18 | 63 | 79 | 187 | 201 | 0 | 25 | 0.6 |
| DIVISION 2 - SOUTH OF B-44-338 | | | CY | CY | CY | CY | CY | CY | CY | CY | CY | CY | CY | TON | MGAL |
| JA | 1186+88.26/1190+50.00 | LT/RT | 682 | 33 | 0 | 0 | 682 | 41 | 265 | 331 | 351 | 384 | --- | 58 | 1.4 |
| JB | 1181+50.00/1186+36.72 | LT/RT | 1,022 | 51 | 0 | 30 | 1,052 | 64 | 448 | 560 | 492 | 543 | --- | 89 | 2.1 |
| JAT | 1190+50.00/1193+50.00 | LT/RT | 616 | 31 | 0 | 0 | 616 | 39 | 165 | 206 | 410 | 441 | --- | 54 | 1.3 |
| JBT | 1178+75.00/1181+50.00 | LT/RT | 568 | 28 | 0 | 0 | 568 | 35 | 25 | 31 | 537 | 565 | --- | 49 | 1.2 |
| JE | 10+00.00/13+39.39 | LT/RT | 1,033 | 52 | 126 | 30 | 937 | 65 | 567 | 709 | 228 | 280 | --- | 91 | 2.2 |
| JNB | 11+62.06/15+24.85 | LT/RT | 458 | 23 | 0 | 0 | 458 | 29 | 105 | 131 | 327 | 350 | --- | 40 | 1.0 |
| JNB | 16+64.93/17+98.15 | LT/RT | 199 | 10 | 0 | 121 | 320 | 12 | 1,081 | 1,351 | -1,031 | 10 | --- | 17 | 0.4 |
| JSB | 112+20.30/115+26.25 | LT/RT | 204 | 10 | 0 | 46 | 250 | 13 | 400 | 500 | -250 | 10 | --- | 18 | 0.4 |
| JSB | 117+13.25/117+50.00 | LT/RT | 171 | 9 | 0 | 0 | 171 | 11 | 625 | 781 | -610 | 9 | --- | 15 | 0.4 |
| RELIEF TRENCH | 11+62.06/18+14.00 | LT/RT | 30 | 0 | 0 | 0 | 30 | 0 | 10 | 12 | 18 | 18 | --- | 0 | 0.1 |
| DIVISION 2 SUBTOTAL | | | 4,953 | 247 | 126 | 227 | 5,054 | 308 | 3,691 | 4,613 | 471 | 779 | 0 | 432 | 10.5 |
| DIVISION 3 - NORTH OF B-44-338 | | | CY | CY | CY | CY | CY | CY | CY | CY | CY | CY | CY | TON | MGAL |
| JC | 1183+00.00/1188+06.21 | LT/RT | 1,243 | 62 | 0 | 100 | 1,343 | 78 | 114 | 143 | 1,201 | 1,263 | --- | 109 | 2.6 |
| JD | 1189+01.50/1192+00.00 | LT/RT | 369 | 18 | 0 | 0 | 369 | 23 | 420 | 525 | -156 | 18 | --- | 32 | 0.8 |
| JDR | 188+63.98/190+10.00 | LT/RT | 154 | 7 | 0 | 0 | 154 | 9 | 1,370 | 1,713 | -1,559 | 7 | --- | 12 | 0.3 |
| JCT | 1183+00.00/1183+00.00 | LT/RT | 789 | 39 | 0 | 0 | 789 | 49 | 41 | 51 | 738 | 777 | --- | 68 | 1.7 |
| JDT | 1192+00.00/1195+24.00 | LT/RT | 366 | 18 | 0 | 0 | 366 | 23 | 547 | 684 | -318 | 18 | --- | 32 | 0.8 |
| JK | 10+00.00/13+39.39 | LT/RT | 1,095 | 56 | 126 | 44 | 1,013 | 70 | 98 | 123 | 891 | 947 | --- | 98 | 2.3 |
| JNB | 20+60.00/21+90.89 | LT/RT | 427 | 21 | 0 | 121 | 548 | 27 | 1,404 | 1,755 | -1,207 | 21 | --- | 37 | 0.9 |
| JNB | 23+33.90/26+34.00 | LT/RT | 425 | 21 | 0 | 0 | 425 | 27 | 127 | 159 | 266 | 288 | --- | 37 | 0.9 |
| JSB | 121+50.00/121+95.38 | LT/RT | 55 | 3 | 0 | 0 | 55 | 3 | 61 | 76 | -21 | 3 | --- | 5 | 0.1 |
| JSB | 123+39.01/125+87.42 | LT/RT | 268 | 13 | 0 | 145 | 413 | 17 | 253 | 316 | 97 | 110 | --- | 23 | 0.6 |
| RELIEF TRENCH | 20+43.00/26+34.00 | LT/RT | 38 | 0 | 0 | 0 | 38 | 0 | 13 | 16 | 22 | 22 | --- | 0 | 0.1 |
| DIVISION 3 SUBTOTAL | | | 5,229 | 259 | 126 | 410 | 5,513 | 323 | 4,448 | 5,560 | -47 | 323 | 47 | 453 | 11.0 |
| GRAND TOTAL | | | 10,448 | 519 | 252 | 637 | 10,833 | 649 | 8,202 | 10,252 | 611 | 1,304 | 47 | 909 | 22.0 |
| TOTAL COMMON EXC | | | 10,968 | | | | | | | | | | | | |

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 STRUCTURE EXCAVATION IS FOR INFORMATION ONLY AND IS INCLUDED IN BID ITEM "EXCAVATION FOR STRUCTURES B-44-338"
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL+AVAILABLE STRUCTURE EXCAVATION
(6) EXPANDED EBS BACKFILL - THIS IS TO BE FILLED WITH SELECT CRUSHED MATERIAL. EBS BACKFILL FACTOR = 1.25. ITEM NUMBER 312.0110
(7) EXPANDED FILL = (UNEXPANDED FILL)* EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.25.
(8) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL+AVAILABLE STRUCTURE EXCAVATION
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.
(9) WASTE = MASS ORDINATE + EXPANDED EBS BACKFILL
(10) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR INFORMATION ONLY.

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

BASE AGGREGATE SUMMARY

| CATEGORY | STATION | - | STATION | LOCATION | 305.0110 BASE AGGREGATE DENSE 3/4-INCH TON | 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON | 312.0110* SELECT CRUSHED MATERIAL TON | 624.0100* WATER MGAL |
|---|---|---|---|---|---|---|---|---|
| 1000 | 1186+88 JA | - | 1190+50 JA | LT/RT | 24 | 690 | 800 | 12.0 |
| | 1190+50 JAT | - | 1193+50 JAT | LT/RT | 67 | 410 | 1,120 | 7.0 |
| | 1181+50 JB | - | 1186+37 JB | LT/RT | 30 | 770 | 1,000 | 13.0 |
| | 1178+75 JBT | - | 1181+50 JBT | LT/RT | 58 | 350 | 970 | 6.0 |
| | 1183+00 JC | - | 1188+06 JC | LT/RT | 45 | 950 | 1,310 | 16.0 |
| | 1180+00 JCT | - | 1183+00 JCT | LT/RT | 93 | 430 | 1,190 | 7.3 |
| | 1189+01 JD | - | 1192+00 JD | LT/RT | 3 | 870 | 200 | 15.0 |
| | 1192+00 JDT | - | 1195+25 JDT | LT/RT | 76 | 430 | 1,190 | 7.3 |
| | 188+81 JDR | - | 189+81 JDR | LT/RT | 0 | 240 | 510 | 4.1 |
| | 10+00 JE | - | 13+39 JE | LT/RT | 0 | 440 | 320 | 7.5 |
| | 10+00 JK | - | 13+39 JK | LT/RT | 0 | 470 | 280 | 8.0 |
| | 11+62 JNB | - | 15+25 JNB | LT/RT | 64 | 380 | 85 | 6.5 |
| | 16+65 JNB | - | 21+91 JNB | LT/RT | 0 | 420 | 985 | 7.2 |
| | 23+34 JNB | - | 26+24 JNB | LT/RT | 22 | 340 | 65 | 5.8 |
| | 112+20 JSB | - | 115+26 JSB | LT | 57 | 550 | 115 | 9.3 |
| | 116+72 JSB | - | 117+61 JSB | LT | 0 | 130 | 240 | 2.1 |
| | 121+02 JSB | - | 121+95 JSB | LT | 0 | 120 | 240 | 2.0 |
| | 123+40 JSB | - | 125+87 JSB | LT | 0 | 230 | 95 | 4.0 |
| | 1181+00 NB | - | 1194+70 NB | LT/RT | 260 | 53 | 0 | 0.9 |
| | | | CATEGORY 1000 TOTALS | | 799 | 8,273 | 10,715 | 141.0 |
| 1600 | | | UNDISTRIBUTED | | 0 | 1 | 0 | 0.0 |
| | | | CATEGORY 1600 TOTALS | | 0 | 1 | 0 | 0.0 |
| 1610 | | | UNDISTRIBUTED | | 0 | 1 | 0 | 0.0 |
| | | | CATEGORY 1610 TOTALS | | 0 | 1 | 0 | 0.0 |
| | | | TOTALS | | 799 | 8,275 | 10,715 | 141.0 |

*ADDITIONAL QUANTITY LISTED ELSEWHERE

3

ASPHALTIC ITEMS

| CATEGORY | STAGE | STATION | - | STATION | LOCATION | 455.0605 TACK COAT GAL | 460.6223 HMA PAVEMENT 3 MT 58-28 S TON | 460.6224 HMA PAVEMENT 4 MT 58-28 S TON | 465.0120 ASPHALTIC SURFACE DRIVEWAYS AND AND FIELD ENTRANCES TON | 465.0105 ASPHALTIC SURFACE TON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | 1A | 1180+52 'NB' | - | 1192+00 'NB' | NB MEDIAN SHOULDER | 41 | --- | --- | --- | 70 |
| | 1A | 1183+50 'SB' | - | 1194+98 'SB' | SB MEDIAN SHOULDER | 41 | --- | --- | --- | 70 |
| | 1B | 1180+52 'NB' | - | 1192+00 'NB' | NB OUTSIDE SHOULDER | 18 | --- | --- | --- | 30 |
| | 1B | 1183+50 'SB' | - | 1194+98 'SB' | SB OUTSIDE SHOULDER | 18 | --- | --- | --- | 30 |
| | | | | | SUBTOTALS (STAGE 1) | 119 | 0 | 0 | 0 | 200 |
| | 5 | 11+60 'JNB' | - | 13+34 'JNB' | LT/RT | 43 | 121 | 42 | 17 | --- |
| | 5 | 25+97 'JNB' | - | 26+24 'JNB' | RT | 1 | --- | 2 | --- | --- |
| | 5 | 26+24 'JNB' | - | 26+34 'JNB' | LT/RT | 5 | 13 | 5 | --- | --- |
| | 5 | 112+20 'JSB' | - | 113+52 'JSB' | LT/RT | 22 | 63 | 22 | --- | --- |
| | 5 | 1190+50 'JAT' | - | 1193+50 'JAT' | LT/RT | 39 | --- | --- | --- | 216 |
| | 5 | 1188+13 'JA' | - | 1190+50 'JA' | RT | --- | --- | 26 | --- | --- |
| | 5 | 1189+16 'JA' | - | 1190+50 'JA' | LT | --- | --- | 9 | --- | --- |
| | 5 | 1178+75 'JBT' | - | 1181+50 'JBT' | LT/RT | 35 | --- | --- | --- | 197 |
| | 5 | 1181+50 'JB' | - | 1183+67 'JB' | LT | --- | --- | 14 | --- | --- |
| | 5 | 1181+50 'JB' | - | 1183+67 'JB' | RT | --- | --- | 24 | --- | --- |
| | 5 | 1180+00 'JCT' | - | 1183+00 'JCT' | LT/RT | 38 | --- | --- | --- | 215 |
| | 5 | 1183+00 'JC' | - | 1187+12 'JC' | LT | --- | --- | 45 | --- | --- |
| | 5 | 1183+00 'JC' | - | 1185+78 'JC' | RT | --- | --- | 18 | --- | --- |
| | 5 | 1192+00 'JDT' | - | 1195+25 'JDT' | LT/RT | 42 | --- | --- | --- | 233 |
| | 5 | 1191+66 'JD' | - | 1192+00 'JD' | LT | --- | --- | 4 | --- | --- |
| | 5 | 1191+66 'JD' | - | 1192+00 'JD' | RT | --- | --- | 2 | --- | --- |
| | 5 | 1187+00 'NB' | - | 1187+78 'NB' | RT | --- | --- | --- | --- | 10 |
| | 5 | 1187+54 'SB' | - | 1188+42 'SB' | LT | --- | --- | --- | --- | 10 |
| | | | | | SUBTOTALS (STAGE 5) | 224 | 197 | 213 | 17 | 881 |
| | | | | | TOTALS | 343 | 197 | 213 | 17 | 1,081 |

## CONCRETE PAVEMENT SUMMARY

| CATEGORY | STATION | - | STATION | LOCATION | 405.0100* COLORING CONCRETE WISDOT RED CY | 415.0090 9-INCH SY | 415.0100 10-INCH SY | 415.0410 APPROACH SLAB SY | 415.2010 CONCRETE TRUCK APRON 12-INCH SY | 415.4100* CONCRETE PAVEMENT JOINT FILLING SY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | 13+33 'JNB' | - | 15+25 'JNB' | RT | 5 | --- | 328 | --- | --- | 328 |
| | 14+26 'JNB' | - | 1187+27 'JA' | RT | 58 | --- | --- | --- | 186 | 186 |
| | 15+04 'JNB' | - | 16+92 'JNB' | LT/RT | --- | --- | 1,060 | --- | --- | 1,060 |
| | 15+44 'JNB' | - | 16+46 'JNB' | LT/RT | 183 | --- | --- | --- | 550 | 550 |
| | 1186+96 'JA' | - | 1189+07 'JA' | LT | 111 | --- | --- | --- | 370 | 370 |
| | 16+65 'JNB' | - | 17+85 'JNB' | LT/RT | --- | --- | 458 | --- | --- | 458 |
| | 16+73 'JNB' | - | 17+09 'JNB' | LT | 15 | --- | --- | --- | 46 | 46 |
| | 17+85 'JNB' | - | 18+11 'JNB' | LT/RT | --- | --- | --- | 81 | --- | 81 |
| | 20+47 'JNB' | - | 20+72 'JNB' | LT/RT | --- | --- | --- | 81 | --- | 81 |
| | 20+72 'JNB' | - | 21+91 'JNB' | LT/RT | --- | --- | 487 | --- | --- | 487 |
| | 21+14 'JNB' | - | 1189+72 'JD' | RT | 64 | --- | --- | --- | 219 | 219 |
| | 21+55 'JNB' | - | 21+84 'JNB' | LT | 11 | --- | --- | --- | 34 | 34 |
| | 21+68 'JNB' | - | 23+60 'JNB' | LT/RT | --- | --- | 1,060 | --- | --- | 1,060 |
| | 22+11 'JNB' | - | 23+13 'JNB' | LT/RT | 179 | --- | --- | --- | 537 | 537 |
| | 188+74 'JDR' | - | 189+73 'JDR' | RT | 14 | --- | --- | --- | 44 | 44 |
| | 23+35 'JNB' | - | 26+24 'JNB' | LT/RT | 5 | --- | 507 | --- | --- | 507 |
| | 23+29 'JNB' | - | 24+59 'JNB' | RT | 25 | --- | --- | --- | 85 | 85 |
| | 113+32 'JSB' | - | 115+26 'JSB' | LT | 5 | --- | 323 | --- | --- | 323 |
| | 123+39 'JSB' | - | 126+24 'JSB' | LT/RT | 5 | --- | 509 | --- | --- | 509 |
| | 1186+95 'JA' | - | 1190+50 'JA' | RT | 4 | 596 | --- | --- | --- | 596 |
| | 1181+50 'JB' | - | 1186+32 'JB' | LT/RT | 5 | 870 | --- | --- | --- | 870 |
| | 113+61 'JSB' | - | 115+77 'JSB' | LT | 96 | --- | --- | --- | 309 | 309 |
| | 1185+58 'JB' | - | 117+60 'JSB' | LT | 68 | --- | --- | --- | 227 | 227 |
| | 1183+00 'JC' | - | 1188+01 'JC' | LT | 4 | 840 | --- | --- | --- | 840 |
| | 1185+86 'JC' | - | 1188+01 'JC' | RT | 103 | --- | --- | --- | 340 | 340 |
| | 1187+29 'JC' | - | 124+50 'JSB' | LT | 72 | --- | --- | --- | 232 | 232 |
| | 1189+06 'JD' | - | 1192+00 'JD' | LT/RT | 5 | 542 | --- | --- | --- | 542 |
| | 188+64 'JDR' | - | 190+10 'JDR' | LT/RT | 5 | 396 | --- | --- | --- | 396 |
| | | | | TOTALS | 1,042 | 3,244 | 4,732 | 162 | 3,179 | 11,317 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

## ASPHALTIC RUMBLE STRIPS, SHOULDER DIVIDED ROADWAY

| CATEGORY | STATION | - | STATION | LOCATION | 465.0510 ASPHALTIC RUMBLE STRIPS, SHOULDER DIVIDED ROADWAY LF |
|---|---|---|---|---|---|
| 1000 | 1180+52 'NB' | - | 1192+00 'NB' | MEDIAN | 1,148 |
| | 1180+52 'NB' | - | 1192+00 'NB' | RT | 1,148 |
| | 1183+50 'SB' | - | 1194+98 'SB' | MEDIAN | 1,148 |
| | 1183+50 'SB' | - | 1194+98 'SB' | LT | 1,148 |
| | | | | TOTAL | 4,592 |

## CULVERT PIPE REINFORCED CONCRETE CLASS IV

| CATEGORY | FROM STRUCTURE | TO | 522.0430 30-INCH LF |
|---|---|---|---|
| 1000 | 7432 | 7430 | 182 |
| | 7437 | 7435 | 196 |
| | | TOTALS | 378 |

## APRON ENDWALLS AND RIP RAP 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 | 524.0612 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 12-INCH EACH | 633.5200 MARKERS CULVERT END EACH | 606.0200* RIPRAP MEDIUM CY | 606.0300 RIPRAP HEAVY CY | 645.0120* GEOTEXTILE TYPE HR SY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | 7430 | 20+53.98 | 'JNB' | 93.1 'RT | - | 1 | - | 1 | - | 6 | 17 |
| | 7432 | 120+04.05 | 'JSB' | 81.4 'LT | - | 1 | - | 1 | - | - | - |
| | 7435 | 18+56.27 | 'JNB' | 89.6 'RT | - | 1 | - | 1 | - | 6 | 17 |
| | 7437 | 118+03.82 | 'JSB' | 98.3 'LT | - | 1 | - | 1 | - | - | - |
| | 9700 | 125+90.99 | 'JSB' | 39.5 'LT | - | - | 1 | 1 | 3 | - | 9 |
| | 9726 | 10+27.24 | 'JK' | 60.0 'LT | - | - | 1 | 1 | 18 | - | 53 |
| | 9729 | 13+12.95 | 'JK' | 111.6 'LT | - | - | 1 | 1 | 12 | - | 36 |
| | 9730 | 120+55.00 | 'JSB' | 44.5 'LT | 1 | - | - | 1 | 22 | - | 64 |
| | 9733 | 20+64.00 | 'JNB' | 42.2 'RT | 1 | - | - | 1 | 24 | - | 69 |
| | 9740 | 117+95.00 | 'JSB' | 45.6 'LT | 1 | - | - | 1 | 20 | - | 58 |
| | 9743 | 18+05.00 | 'JSB' | 45.2 'RT | 1 | - | - | 1 | 20 | - | 58 |
| | 9749 | 11+82.51 | 'JE' | 65.7 'LT | - | - | 1 | 1 | 12 | - | 36 |
| | | | | TOTALS | 4 | 4 | 4 | 12 | 131 | 12 | 417 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

## CONCRETE SIDEWALK SUMMARY

| CATEGORY | STATION | - | STATION | LOCATION | 602.0405 CONCRETE SIDEWALK 4-INCH SF | 602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF | 405.0100* COLORING CONCRETE WISDOT RED CY | 405.0200 COLORING CONCRETE CUSTOM (OUTAGAMIE GREY) CY | SPV.0035.0003 CONCRETE SIDEWALK VARIABLE DEPTH CY |
|---|---|---|---|---|---|---|---|---|---|
| 1000 | 13+40 'JNB' | - | 15+19 'JNB' | LT/RT | 1,410 | --- | 16 | --- | --- |
| | 14+82 'JNB' | - | 15+94 'JNB' | RT | 1,040 | 44 | --- | --- | --- |
| | 15+69 'JNB' | - | 16+32 'JNB' | LT/RT | 1,400 | 40 | --- | 17 | --- |
| | 16+47 'JNB' | - | 18+13 'JNB' | RT | 1,500 | --- | --- | --- | --- |
| | 20+58 'JNB' | - | 22+31 'JNB' | RT | 1,420 | --- | --- | --- | --- |
| | 22+25 'JNB' | - | 22+89 'JNB' | LT/RT | 1,510 | 20 | --- | 19 | --- |
| | 23+11 'JNB' | - | 23+71 'JNB' | RT | 1,060 | 40 | --- | --- | --- |
| | 23+41 'JNB' | - | 25+86 'JNB' | LT/RT | 1,250 | 24 | 14 | --- | --- |
| | 114+89 'JSB' | - | 115+63 'JSB' | LT | 400 | 44 | --- | --- | 22 |
| | 115+72 'JSB' | - | 116+00 'JSB' | LT | --- | 40 | --- | --- | --- |
| | 116+20 'JSB' | - | 118+02 'JSB' | LT | 1530 | --- | --- | --- | --- |
| | 120+46 'JSB' | - | 122+24 'JSB' | LT | 1660 | --- | --- | --- | --- |
| | 122+53 'JSB' | - | 123+81 'JSB' | LT | 430 | 84 | --- | --- | 24 |
| | 188+93 'JDR' | - | 189+75 'JDR' | RT | 870 | 40 | 9 | --- | --- |
| | | | | TOTALS | 15,480 | 376 | 39 | 36 | 46 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

## CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

| CATEGORY | STATION | - | STATION | LOCATION | 465.0315 ASPHALTIC FLUMES SY | 602.3010 CONCRETE SURFACE DRAINS CY | 606.0200* RIPRAP MEDIUM CY | 645.0120* GEOTEXTILE TYPE HR SY |
|---|---|---|---|---|---|---|---|---|
| 1000 | 13+26 'JNB' | - | 13+34 'JNB' | RT | --- | 0.7 | 6 | 35 |
| | 25+89 'JNB' | - | 25+97 'JNB' | RT | --- | 0.7 | 6 | 35 |
| | 113+52 'JSB' | - | 113+60 'JSB' | LT | --- | 0.7 | 4 | 25 |
| | 1188+05 'JA' | - | 1188+13 'JA' | RT | --- | 0.7 | 10 | 55 |
| | 1189+08 'JA' | - | 1189+16 'JA' | LT | --- | 0.7 | 9 | 49 |
| | 1183+67 'JB' | - | 1183+75 'JB' | LT | --- | 0.7 | 4 | 35 |
| | 1183+67 'JB' | - | 1183+75 'JB' | RT | --- | 0.7 | 6 | 26 |
| | 1185+78 'JC' | - | 1185+86 'JC' | RT | --- | 0.7 | 9 | 48 |
| | 1187+12 'JC' | - | 1187+20 'JC' | LT | --- | 0.7 | 11 | 59 |
| | 1191+58 'JD' | - | 1191+66 'JD' | LT | --- | 0.7 | 8 | 46 |
| | 1191+58 'JD' | - | 1191+66 'JD' | RT | 7 | --- | 9 | 48 |
| | | | | TOTALS | 7 | 7.0 | 82 | 461 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

CONCRETE CURB AND CONCRETE CURB & GUTTER SUMMARY

| CATEGORY | STATION | - | STATION | LOCATION | 601.0405 18-INCH TYPE A LF | 601.0409 30-INCH TYPE A LF | 601.0551 4-INCH SLOPED 36-INCH TYPE A LF | 601.0580 4-INCH SLOPED 36-INCH TYPE R LF | 601.0600 CONCRETE CURB PEDESTRIAN LF | 415.4100* CONCRETE PAVEMENT JOINT FILLING SY | SPV.0090.0002 36-INCH SPECIAL LF | SPV.0090.0003 42-INCH SPECIAL LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | 13+34 'JNB' | - | 14+20 'JNB' | RT | --- | 89 | --- | --- | --- | 25 | --- | --- |
| | 13+40 'JNB' | - | 14+88 'JNB' | LT | --- | --- | --- | --- | --- | 49 | 148 | --- |
| | 14+20 'JNB' | - | 1187+33 'JA' | RT | --- | --- | 212 | --- | --- | 71 | --- | --- |
| | 14+88 'JNB' | - | 15+20 'JNB' | LT | --- | --- | --- | --- | --- | 32 | 95 | --- |
| | 15+43 'JNB' | - | 16+47 'JNB' | | --- | --- | --- | 327 | --- | 109 | --- | --- |
| | 15+69 'JNB' | - | 16+33 'JNB' | | 200 | --- | --- | --- | --- | 33 | --- | --- |
| | 16+56 'JNB' | - | 18+11 'JNB' | RT | --- | 159 | --- | --- | --- | 44 | --- | --- |
| | 16+56 'JNB' | - | 1189+08 'JA' | LT | --- | --- | 279 | --- | --- | 93 | --- | --- |
| | 16+71 'JNB' | - | 16+82 'JNB' | LT | --- | --- | --- | --- | --- | 11 | --- | 29 |
| | 16+73 'JNB' | - | 17+08 'JNB' | LT | --- | --- | --- | --- | --- | 14 | --- | 35 |
| | 20+58 'JNB' | - | 21+08 'JNB' | RT | --- | 50 | --- | --- | --- | 14 | --- | --- |
| | 21+08 'JNB' | - | 1189+74 'JD' | LT | --- | --- | --- | --- | --- | 54 | --- | 139 |
| | 21+56 'JNB' | - | 21+83 'JNB' | LT | --- | --- | --- | --- | --- | 11 | --- | 28 |
| | 21+75 'JNB' | - | 21+85 'JNB' | LT | --- | --- | --- | --- | --- | 11 | --- | 29 |
| | 22+10 'JNB' | - | 23+14 'JNB' | | --- | --- | --- | 327 | --- | 109 | --- | --- |
| | 22+24 'JNB' | - | 22+89 'JNB' | | 200 | --- | --- | --- | --- | 33 | --- | --- |
| | 23+40 'JNB' | - | 23+64 'JNB' | LT | --- | --- | --- | --- | --- | 26 | 77 | --- |
| | 23+64 'JNB' | - | 24+88 'JNB' | LT | --- | --- | --- | --- | --- | 40 | 120 | --- |
| | 24+65 'JNB' | - | 25+89 'JNB' | RT | --- | 123 | --- | --- | --- | 34 | --- | --- |
| | 24+65 'JNB' | - | 189+11 'JDR' | LT | --- | --- | 182 | --- | --- | 61 | --- | --- |
| | 24+84 'JNB' | - | 25+86 'JNB' | LT | --- | --- | --- | --- | --- | 40 | --- | 102 |
| | 113+39 'JSB' | - | 114+88 'JSB' | RT | --- | --- | --- | --- | --- | 50 | 149 | --- |
| | 116+78 'JSB' | - | 117+11 'JSB' | RT | --- | --- | --- | --- | --- | 13 | --- | 34 |
| | 117+66 'JSB' | - | 118+02 'JSB' | LT | --- | 36 | --- | --- | --- | 10 | --- | --- |
| | 120+48 'JSB' | - | 122+13 'JSB' | LT | --- | 172 | --- | --- | --- | 48 | --- | --- |
| | 121+58 'JSB' | - | 121+86 'JSB' | RT | --- | --- | --- | --- | --- | 11 | --- | 28 |
| | 123+66 'JSB' | - | 124+87 'JSB' | RT | --- | --- | --- | --- | --- | 39 | 118 | --- |
| | 124+55 'JSB' | - | 126+23 'JSB' | LT | --- | 169 | --- | --- | --- | 47 | --- | --- |
| | 124+83 'JSB' | - | 125+86 'JSB' | RT | --- | --- | --- | --- | --- | 40 | --- | 102 |
| | 1187+33 'JA' | - | 1188+05 'JA' | RT | --- | 75 | --- | --- | --- | 21 | --- | --- |
| | 1183+75 'JB' | - | 1184+76 'JB' | LT/RT | --- | --- | 202 | --- | --- | 67 | --- | --- |
| | 1185+22 'JB' | - | 113+60 'JSB' | RT | --- | --- | 335 | --- | --- | 112 | --- | --- |
| | 1183+75 'JB' | - | 1185+52 'JB' | LT | --- | 76 | --- | --- | --- | 21 | --- | --- |
| | 1184+76 'JB' | - | 1185+22 'JB' | RT | --- | 46 | --- | --- | --- | 13 | --- | --- |
| | 1185+52 'JB' | - | 117+66 'JSB' | LT | --- | --- | 270 | --- | --- | 90 | --- | --- |
| | 1185+86 'JC' | - | 122+13 'JSB' | RT | --- | --- | 276 | --- | --- | 92 | --- | --- |
| | 1187+20 'JC' | - | 124+55 'JSB' | LT | --- | --- | 263 | --- | --- | 88 | --- | --- |
| | 1189+02 'JD' | - | 1190+56 'JD' | LT | --- | 136 | --- | --- | --- | 38 | --- | --- |
| | 1189+78 'JD' | - | 1190+56 'JD' | RT | --- | 78 | --- | --- | --- | 22 | --- | --- |
| | 1190+56 'JD' | - | 1191+58 'JD' | LT | --- | --- | 101 | --- | --- | 34 | --- | --- |
| | 1190+56 'JD' | - | 1191+58 'JD' | RT | --- | --- | 102 | --- | --- | 34 | --- | --- |
| | 21+08 'JNB' | - | 1189+78 'JD' | RT | --- | --- | 240 | --- | --- | 80 | --- | --- |
| | 188+93 'JDR' | - | 189+74 'JDR' | RT | --- | --- | --- | --- | --- | 23 | 70 | --- |
| | 14+88 'JNB' | - | 114+88 'JSB' | LT/RT | --- | --- | --- | --- | 14 | --- | --- | --- |
| | 14+94 'JNB' | - | 114+96 'JSB' | LT/RT | --- | --- | --- | --- | 18 | --- | --- | --- |
| | 23+32 'JNB' | - | 23+63 'JNB' | RT | --- | --- | --- | --- | 66 | --- | --- | --- |
| | 23+64 'JNB' | - | 123+67 'JSB' | LT/RT | --- | --- | --- | --- | 19 | --- | --- | --- |
| | 23+73 'JNB' | - | 123+75 'JSB' | LT/RT | --- | --- | --- | --- | 14 | --- | --- | --- |
| | | | | TOTALS | 400 | 1,209 | 2,462 | 654 | 131 | 1,907 | 777 | 526 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

## CONCRETE BARRIER TEMPORARY PRECAST

| CATEGORY | STAGE | STATION-STATION | OFFSET | LOCATION | 603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF | 603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF | 603.8500 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST LF | ANCHORING LIMITS |
|---|---|---|---|---|---|---|---|---|
| 1000 | 1A | 1181+00'NB'- 1192+00'NB' | LT | NB MEDIAN SHOULDER | 1,100 | 1,100 | 125 | STA. 1187+00'NB' - STA. 1188+25'NB' |
| | 1A | 1183+50'SB' - 1194+50'SB' | RT | SB MEDIAN SHOULDER | 1,100 | 1,100 | 125 | STA. 1187+13'SB' - STA. 1188+38'SB' |
| | | | | SUB TOTALS (STAGE 1A) | 2,200 | 2,200 | 250 | |
| | 1B | 1181+00'NB'- 1192+00'NB' | RT | NB OUTSIDE SHOULDER | 1,100 | 1,100 | 125 | STA. 1187+00'NB' - STA. 1188+25'NB' |
| | 1B | 1183+50'SB' - 1194+50'SB' | LT | SB OUTSIDE SHOULDER | 1,100 | 1,100 | 125 | STA. 1187+13'SB' - STA. 1188+38'SB' |
| | | | | SUB TOTALS (STAGE 1B) | 2,200 | 2,200 | 250 | |
| | | | | TOTALS | 4,400 | 4,400 | 500 | |

## MANHOLES AND INLETS SUMMARY

| CATEGORY | STRUCTURE NUMBER | STATION | OFFSET | 611.3230 INLETS 2X3-FT EACH | 611.3004 INLETS 4-FT DIAMETER EACH | 611.3225 INLETS 2X2.5-FT EACH | 611.0627 INLET COVERS TYPE HM EACH | 611.0639 INLET COVERS TYPE H-S EACH | 611.0624 INLET COVERS TYPE H EACH | 611.9710 SALVAGED INLET COVERS EACH | 611.8115 ADJUSTING INLET COVERS EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | 9701 | 125+83.00 'JSB' | 3.5 'RT | 1 | - | - | 1 | - | - | - | - |
| | 9702 | 25+83.31 'JNB' | 1.5 'LT | 1 | - | - | 1 | - | - | - | - |
| | 9710 | 124+84.50 'JSB' | 16.0 'LT | 1 | - | - | - | - | - | 1 | - |
| | 9711 | 24+84.00 'JNB' | 16.5 'RT | 1 | - | - | - | - | - | 1 | - |
| | 9720 | 11+63.00 'JK' | 21.5 'LT | 1 | - | - | 1 | - | - | - | - |
| | 9721 | 12+50.00 'JK' | 1.7 'RT | - | - | 1 | - | - | - | 1 | - |
| | 9722 | 12+58.26 'JK' | 1.7 'RT | - | - | 1 | - | - | - | 1 | - |
| | 9723 | 10+03.00 'JK' | 21.5 'LT | - | 1 | - | 1 | - | - | - | - |
| | 9731 | 120+55.00 'JSB' | 19.5 'LT | 1 | - | - | - | - | 1 | - | - |
| | 9732 | 20+64.00 'JNB' | 19.5 'RT | 1 | - | - | - | - | 1 | - | - |
| | 9735 | 12+49.00 'JK' | 21.5 'LT | 1 | - | - | - | 1 | - | - | - |
| | 9741 | 117+95.00 'JSB' | 19.5 'LT | 1 | - | - | - | - | 1 | - | - |
| | 9742 | 18+05.00 'JNB' | 19.5 'RT | 1 | - | - | - | - | 1 | - | - |
| | 9750 | 11+51.00 'JE' | 21.5 'LT | - | 1 | - | 1 | - | - | - | - |
| | 9751 | 10+73.00 'JE' | 1.7 'RT | - | 1 | - | - | - | - | 1 | - |
| | 9752 | 10+64.74 'JE' | 1.7 'RT | - | - | 1 | - | - | - | 1 | - |
| | 9753 | 13+15.00 'JE' | 21.5 'LT | 1 | - | - | 1 | - | - | - | - |
| | 9757 | 10+58.00 'JE' | 21.5 'LT | 1 | - | - | - | 1 | - | - | - |
| | 9760 | 113+42.00 'JSB' | 1.5 'RT | - | - | - | - | - | - | - | 1 |
| | 9761 | 13+43.00 'JNB' | 1.5 'LT | - | - | - | - | - | - | - | 1 |
| | | | TOTALS | 12 | 3 | 3 | 6 | 2 | 4 | 6 | 2 |

## STORM SEWER PIPE REINFORCED CONCRETE

| CATEGORY | FROM STRUCTURE | TO STRUCTURE | 608.0312 CLASS III 12-INCH LF | 520.8000 CONCRETE COLLARS FOR PIPE EACH |
|---|---|---|---|---|
| 1000 | 7432 | 7430 | - | - |
| | 7437 | 7435 | - | - |
| | 9701 | 9700 | 44 | - |
| | 9702 | 9701 | 7 | - |
| | 9710 | 9712 | 6 | - |
| | 9711 | 9713 | 6 | - |
| | 9712 | - | - | 1 |
| | 9713 | - | - | 1 |
| | 9719 | - | - | 1 |
| | 9720 | 9719 | 6 | - |
| | 9721 | 9722 | 8 | - |
| | 9722 | 9727 | 6 | - |
| | 9723 | 9724 | 6 | - |
| | 9724 | - | - | 1 |
| | 9725 | 9726 | 8 | 1 |
| | 9727 | - | - | 1 |
| | 9728 | 9729 | 48 | 1 |
| | 9731 | 9730 | 25 | - |
| | 9732 | 9733 | 23 | - |
| | 9735 | 9721 | 23 | - |
| | 9741 | 9740 | 26 | - |
| | 9742 | 9743 | 26 | - |
| | 9745 | - | - | 1 |
| | 9746 | 9750 | 6 | 1 |
| | 9748 | 9749 | 19 | 1 |
| | 9750 | 9745 | 6 | - |
| | 9751 | 9755 | 6 | - |
| | 9752 | 9751 | 8 | - |
| | 9753 | 9754 | 6 | - |
| | 9754 | - | - | 1 |
| | 9755 | - | - | 1 |
| | 9757 | 9752 | 24 | - |
| | | TOTALS | 343 | 12 |

## MOBILIZATION

| CATEGORY | PROJECT | 619.1000 EACH |
|---|---|---|
| 1000 | 1130-66-78 | 1 |

## MAINTENANCE AND REPAIR OF HAUL ROADS

| CATEGORY | PROJECT | 618.0100 EACH |
|---|---|---|
| 1800 | 1130-66-78 | 1 |

3

## CRASH CUSHIONS TEMPORARY

| CATEGORY | STAGE | STATION | OFFSET FT | 614.0905 CRASH CUSHIONS TEMPORARY EACH | BACK WIDTH FT | OBJECT MARKING PATTERN | CRASH TEST LEVEL | TRAFFIC DIRECTION | TRAFFIC LOCATION |
|---|---|---|---|---|---|---|---|---|---|
| 1000 | 1A | 1181+00'NB' | 1LT | 1 | 2 | 1OM-3L (W5-58L) | TL-2 | UNIDIRECTIONAL | R |
| | 1A | 1194+50'SB' | 1RT | 1 | 2 | 1OM-3L (W5-58L) | TL-2 | UNIDIRECTIONAL | R |
| | | SUBTOTAL (STAGE 1A) | | 2 | | | | | |
| | 1B | 1181+00'NB' | 29RT | 1 | 2 | 1OM-3R (W5-58R) | TL-2 | UNIDIRECTIONAL | L |
| | 1B | 1194+50'SB' | 29LT | 1 | 2 | 1OM-3R (W5-58R) | TL-2 | UNIDIRECTIONAL | L |
| | | SUBTOTAL (STAGE 1B) | | 2 | | | | | |
| | | TOTAL | | 4 | | | | | |

## BEAM GUARD SUMMARY

| CATEGORY | STATION | - | STATION | LOCATION | 614.0115 ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2 EACH | 614.0220 STEEL THRIE BEAM BULLNOSE TERMINAL EACH | 614.0230 STEEL THRIE BEAM LF | 614.0305 STEEL PLATE BEAM GUARD CLASS A LF |
|---|---|---|---|---|---|---|---|---|
| 1000 | 1186+29 | - | 1188+62 | MEDIAN | --- | 2 | 150 | --- |
| | 1186+57 NB | - | 1188+14 NB | RT | 1 | --- | --- | 150 |
| | 1187+28 SB | - | 1188+85 SB | LT | 1 | --- | --- | 150 |
| | | | | TOTALS | 2 | 2 | 150 | 300 |

## SILT FENCE

| CATEGORY | STATION | - | STATION | LOCATION | 628.1504 SILT FENCE LF | 628.1520 SILT FENCE MAINTENANCE LF |
|---|---|---|---|---|---|---|
| 1000 | 11+45 'JNB' | - | 13+22 'JA' | LT | 177 | 885 |
| | 12+00 'JNB' | - | 1189+00 'JA' | RT | 580 | 2,900 |
| | 24+49 'JNB' | - | 25+55 'JNB' | LT | 154 | 770 |
| | 1188+68 'JA' | - | 1192+15 'JA' | LT | 592 | 2,960 |
| | 1190+57 'JA' | - | 1193+06 'JA' | RT | 246 | 1,230 |
| | 1179+24 'JB' | - | 1185+92 'JB' | LT | 744 | 3,720 |
| | 1184+05 'JB' | - | 1185+60 'JB' | RT | 157 | 785 |
| | 1179+78 'JC' | - | 121+39 'JSB' | LT/RT | 878 | 4,390 |
| | 1184+51 'JC' | - | 124+30 'JSB' | LT | 462 | 2,310 |
| | 1190+01 'JD' | - | 26+42 'JNB' | RT | 394 | 1,970 |
| | 1189+52 'JD' | - | 1194+86 'JD' | RT | 609 | 3,045 |
| | 1190+13 'JD' | - | 1191+86 | LT | 187 | 935 |
| | 1193+89 'JD' | - | 1195+42 'JD' | LT | 153 | 765 |
| | UNDISTRIBUTED | | | | 1,000 | 5,000 |
| | | | | TOTALS | 6,333 | 31,665 |

## EROSION MAT

| CATEGORY | STATION - STATION | LOCATION | 628.2008 URBAN CLASS I TYPE B SY |
|---|---|---|---|
| 1000 | 11+58 'JNB' - 13+28 'JNB' | RT | 110 |
| | 13+30 'JNB' - 1188+09 'JA' | RT | 740 |
| | 18+87 'JNB' - 1189+12 'JA' | LT/RT | 2,090 |
| | 20+08 'JNB' - 1191+61 'JD' | RT | 2,080 |
| | 26+35 'JNB' - 1191+61 'JD' | LT/RT | 1,770 |
| | 112+20 'JSB' - 113+51 'JSB' | LT | 130 |
| | 113+56 'JSB' - 1183+72 'JB' | LT/RT | 1,040 |
| | 118+53 'JSB' - 1183+72 'JB' | LT | 2,060 |
| | 119+79 'JSB' - 1185+82 'JC' | LT/RT | 1,930 |
| | 126+67 'JSB' - 1187+16 'JCB' | LT | 950 |
| | 1188+13 'JA' - 1193+48 'JA' | LT/RT | 970 |
| | 1178+74 'JB' - 1183+68 'JB' | LT/RT | 270 |
| | 1180+01 'JC' - 1187+12 'JC' | LT/RT | 710 |
| | 1191+64 'JD' - 1195+25 'JD' | LT/RT | 1,010 |
| | 1184+80 '41NB' - 1190+82 '41NB' | LT/RT | 3,080 |
| | UNDISTRIBUTED | --- | 4,740 |
| | | TOTAL | 23,680 |

## FENCE SAFETY

| CATEGORY | STATION | - | STATION | LOCATION | 616.0700.S LF |
|---|---|---|---|---|---|
| 1000 | 23+34 'JNB' | - | 23+62 'JNB' | RT | 75 |

## CONCRETE MEDIAN SLOPED NOSE

| CATEGORY | STATION | LOCATION | 620.0300 SF | REMARKS |
|---|---|---|---|---|
| 1000 | 13+35 'JNB' | LT | 69 | TYPE 1 |
| | 15+10 'JNB' | LT | 23 | TYPE 2 |
| | 15+19 'JNB' | LT | 19 | TYPE 2 |
| | 15+88 'JNB' | LT | 19 | TYPE 2 |
| | 15+98 'JNB' | RT | 23 | TYPE 2 |
| | 16+72 'JNB' | LT | 23 | TYPE 2 |
| | 16+81 'JNB' | LT | 19 | TYPE 2 |
| | 17+10 'JNB' | LT | 68 | TYPE 1 |
| | 21+50 'JNB' | LT | 56 | TYPE 1 |
| | 21+77 'JNB' | LT | 23 | TYPE 2 |
| | 21+83 'JNB' | LT | 19 | TYPE 2 |
| | 22+60 'JNB' | LT | 22 | TYPE 2 |
| | 22+65 'JNB' | RT | 19 | TYPE 2 |
| | 23+22 'JNB' | RT | 16 | TYPE 2 |
| | 23+43 'JNB' | LT | 23 | TYPE 2 |
| | 23+51 'JNB' | LT | 19 | TYPE 2 |
| | 25+90 'JNB' | LT | 70 | TYPE 1 |
| | 1189+80 'JD' | LT | 90 | TYPE 1 |
| | | TOTAL | 620 | |

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## MOBILIZATIONS EROSION CONTROL

| CATEGORY | STAGE | 628.1905 MOBILIZATIONS EROSION CONTROL EACH | 628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH |
|---|---|---|---|
| 1000 | 1A | 1 | 1 |
| | 1B | 1 | 1 |
| | 2 | 2 | 2 |
| | 3 | 2 | 2 |
| | 4 | 2 | 2 |
| | 5 | 3 | 3 |
| | TOTALS | 11 | 11 |

## TRACKING PADS

| CATEGORY | LOCATION | 628.7560 EACH |
|---|---|---|
| 1000 | IH 41 SB WORK ZONE EXIT | 1 |
| | IH 41 NB WORK ZONE EXIT | 1 |
| | CTH J SOUTH WORK ZONE EXIT | 1 |
| | CTH J NORTH WORK ZONE EXIT | 1 |
| | WASTE SITE | 1 |
| | TOTAL | 5 |

## INLET PROTECTION

| CATEGORY | STATION | LOCATION | 628.7005 TYPE A EACH | 628.7015 TYPE C EACH | 628.7020 TYPE D EACH |
|---|---|---|---|---|---|
| 1000 | 13+42 'JNB' | LT | 1 | --- | 1 |
| | 113+42 'JSB' | RT | 1 | --- | 1 |
| | 15+17 'JNB' | LT | 1 | --- | 1 |
| | 15+46 'JNB' | LT | 1 | --- | 1 |
| | 15+47 'JNB' | LT | 1 | --- | 1 |
| | 15+94 'JNB' | LT | 1 | 1 | --- |
| | 16+04 'JNB' | RT | 1 | 1 | --- |
| | 117+95 'JSB' | LT | 1 | 1 | --- |
| | 18+05 'JNB' | RT | 1 | 1 | --- |
| | 120+55 'JSB' | LT | 1 | 1 | --- |
| | 20+65 'JNB' | RT | 1 | 1 | --- |
| | 122+60 'JSB' | LT | 1 | 1 | --- |
| | 22+59 'JNB' | RT | 1 | 1 | --- |
| | 23+14 'JNB' | LT | 1 | --- | 1 |
| | 23+15 'JNB' | LT | 1 | --- | 1 |
| | 123+47 'JSB' | RT | 1 | --- | 1 |
| | 24+84 'JNB' | RT | 1 | 1 | --- |
| | 124+85 'JSB' | LT | 1 | 1 | --- |
| | 25+83 'JNB' | LT | 1 | --- | 1 |
| | 125+83 'JSB' | RT | 1 | --- | 1 |
| | TOTALS | | 20 | 10 | 10 |

## FINISHING SUMMARY

| CATEGORY | STATION | - | STATION | LOCATION | 625.0100 TOPSOIL SY | 627.0200 MULCHING SY | 629.0210 FERTILIZER TYPE B CWT | 630.0130 SEEDING MIXTURE NO. 30 LB | 630.0300 SEEDING BORROW PIT LB | 630.0500 SEED WATER MGAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | 11+58 'JNB' | - | 13+28 'JNB' | RT | 110 | --- | 0.1 | 9 | --- | 4.4 |
| | 13+30 'JNB' | - | 1188+09 'JA' | RT | 745 | --- | 0.5 | 30 | --- | 16.7 |
| | 18+87 'JNB' | - | 1189+12 'JA' | LT/RT | 2,090 | --- | 1.3 | 90 | --- | 47.0 |
| | 20+08 'JNB' | - | 1191+61 'JD' | RT | 2,080 | --- | 1.3 | 93 | --- | 46.6 |
| | 26+35 'JNB' | - | 1191+61 'JD' | LT/RT | 1,770 | --- | 1.1 | 81 | --- | 40.4 |
| | 112+20 'JSB' | - | 113+51 'JSB' | LT | 130 | --- | 0.2 | 11 | --- | 5.7 |
| | 113+56 'JSB' | - | 1183+72 'JB' | LT/RT | 1,040 | --- | 0.7 | 47 | --- | 23.3 |
| | 118+53 'JSB' | - | 1183+72 'JB' | LT | 2,060 | --- | 1.3 | 90 | --- | 46.2 |
| | 119+79 'JSB' | - | 1185+82 'JC' | LT/RT | 1,930 | --- | 1.2 | 90 | --- | 43.3 |
| | 126+67 'JSB' | - | 1187+16 'JCB' | LT | 945 | --- | 0.6 | 43 | --- | 21.2 |
| | 1188+13 'JA' | - | 1193+48 'JA' | LT/RT | 975 | --- | 1.3 | 95 | --- | 47.5 |
| | 1178+74 'JB' | - | 1183+68 'JB' | LT/RT | 270 | --- | 1.0 | 68 | --- | 33.9 |
| | 1180+01 'JC' | - | 1187+12 'JC' | LT/RT | 705 | --- | 1.4 | 99 | --- | 49.5 |
| | 1191+64 'JD' | - | 1195+25 'JD' | LT/RT | 1,010 | --- | 1.1 | 80 | --- | 39.8 |
| | 1184+80 '41NB' | - | 1190+82 '41NB' | LT/RT | 3,080 | --- | 1.9 | 140 | --- | 69.2 |
| | BORROW SITE | | | | --- | 470 | 0.3 | --- | 13 | --- |
| | UNDISTRIBUTED | | | | 4,740 | 120 | 3.8 | 270 | --- | 134.0 |
| | | | | TOTALS | 23,680 | 590 | 19.1 | 1,336 | 13 | 668.7 |

## CULVERT PIPE CHECKS

| CATEGORY | STATION | LOCATION | 628.7555 EACH |
|---|---|---|---|
| 1000 | 113+31 'JSB' | LT | 3 |
| | 118+00 'JSB' | LT | 8 |
| | 120+00 'JSB' | LT | 7 |
| | 1192+87 'JD' | RT | 3 |
| | 1191+92 'JA' | LT | 3 |
| | 1195+40 'JA' | RT | 5 |
| | 1179+88 'JB' | RT | 5 |
| | 1180+75 'JC' | RT | 5 |
| | 1186+05 | LT | 3 |
| | 1192+88 | LT | 3 |
| | | TOTAL | 45 |

## TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH

| CATEGORY | STAGE | STATION-STATION | LOCATION | 643.3180 (WHITE) LF |
|---|---|---|---|---|
| 1000 | 5 | 1173+60'NB'- 1176+20'NB' | RT | 260 |
| | 5 | 1197+50'SB' - 1202+50'SB' | LT | 500 |
| | | | TOTAL | 760 |

## PLANTING ITEMS

| CATEGORY | STATION | - | STATION | 632.0101.0001 TREES (COLE'S SELECT SERVICEBERRY, B&B, 5-FT) EACH | 632.0201.0001 SHRUBS (HYDRANGA LIMELIGHT, CONT, 3-FT) EACH | 632.0201.0002 SHRUBS (BARBERRY ROSE GLOW, CONT, 1-FT) EACH | SPV.0035.0002 PLANTING MIXTURE CY | SPV.0180.0001 DOUBLE SHREDDED HARDWOOD MULCH SY |
|---|---|---|---|---|---|---|---|---|
| 1000 | 10+00 'JE' | - | 13+39 'JE' | 3 | 9 | 21 | 115 | 170 |
| | 10+00 'JK' | - | 13+39 'JK' | 3 | 9 | 21 | 115 | 170 |
| | | | TOTALS | 6 | 18 | 42 | 230 | 340 |

## TEMPORARY DITCH CHECKS

| CATEGORY | STATION | LOCATION | 628.7504 LF |
|---|---|---|---|
| 1000 | 1188+19 'JA' | RT | 8 |
| | 1188+40 'JA' | LT | 14 |
| | 1189+22 'JA' | LT | 14 |
| | 1189+71 'JA' | RT | 8 |
| | 1190+95 'JA' | RT | 14 |
| | 1193+50 'JA' | RT | 7 |
| | 1180+75 'JB' | RT | 10 |
| | 1182+05 'JB' | RT | 10 |
| | 1182+94 'JB' | RT | 12 |
| | 1184+97 'JB' | RT | 16 |
| | 1180+95 'JC' | LT | 8 |
| | 1182+09 'JC' | LT | 7 |
| | 1183+08 'JC' | LT | 8 |
| | 1183+90 'JC' | LT | 10 |
| | 1185+86 'JC' | RT | 8 |
| | 1187+20 'JC' | LT | 12 |
| | 1189+64 'JD' | RT | 8 |
| | 1190+36 'JD' | LT | 8 |
| | 1191+64 'JD' | RT | 8 |
| | 1192+28 'JD' | LT | 14 |
| | 1194+31 'JD' | LT | 14 |
| | 1195+25 'JD' | LT | 16 |
| | 17+60 'JNB' | RT | 6 |
| | 17+90 'JNB' | RT | 6 |
| | 18+15 'JNB' | RT | 6 |
| | 20+55 'JNB' | RT | 6 |
| | 20+93 'JNB' | RT | 6 |
| | 113+43 'JSB' | LT | 9 |
| | 114+00 'JSB' | LT | 10 |
| | 114+36 'JSB' | LT | 10 |
| | 117+59 'JSB' | LT | 10 |
| | 117+86 'JSB' | LT | 10 |
| | 120+66 'JSB' | LT | 6 |
| | 121+22 'JSB' | LT | 6 |
| | 124+44 'JSB' | LT | 12 |
| | 125+09 'JSB' | LT | 12 |
| | 125+79 'JSB' | LT | 14 |
| | 1188+75 | RT | 12 |
| | 1189+86 | LT | 12 |
| | 1190+71 | LT | 14 |
| | 1191+78 | LT | 14 |
| | UNDISTRIBUTED | | 110 |
| | | TOTAL | 525 |

## SIGNS FIXED MESSAGE

| CATEGORY | SIGN | INCH | X | INCH | 643.1000 SF |
|---|---|---|---|---|---|
| 1000 | BP-USE EXIT 148 | 18 | X | 138 | 17.25 |
| | HWY J NORTH CLOSED USE EXIT 148 | 54 | X | 114 | 42.75 |
| | SOUTH | 24 | X | 90 | 15.00 |
| | ACCESS TO I-41 NORTH ONLY | 30 | X | 60 | 12.50 |
| | BP-FOLLOW HWY J NORTH DETOUR | 36 | X | 72 | 18.00 |
| | ACCESS TO I-41 SOUTH ONLY | 30 | X | 60 | 12.50 |
| | NORTH | 24 | X | 90 | 15.00 |
| | NORTH | 24 | X | 90 | 15.00 |
| | SOUTH | 24 | X | 90 | 15.00 |
| | SOUTH | 24 | X | 90 | 15.00 |
| | 148 | 24 | X | 54 | 9.00 |
| | ACCESS TO I-41 NORTH ONLY | 30 | X | 60 | 12.50 |
| | ACCESS TO I-41 SOUTH ONLY | 30 | X | 60 | 12.50 |
| | HWY J SOUTH CLOSED USE EXIT 148 | 54 | X | 114 | 42.75 |
| | BP-USE EXIT 148 | 18 | X | 138 | 17.25 |
| | BP-USE EXIT 148 | 18 | X | 138 | 17.25 |
| | HWY J RAMP CLOSED USE EXIT 148 | 54 | X | 114 | 42.75 |
| | HWY J RAMP CLOSED USE EXIT 148 | 54 | X | 114 | 42.75 |
| | HWY J RAMP CLOSED USE ALT ROUTE | 54 | X | 126 | 47.25 |
| | BP-FOLLOW HWY J NORTH DETOUR | 36 | X | 72 | 18.00 |
| | BP-FOLLOW HWY J NORTH DETOUR | 36 | X | 72 | 18.00 |
| | | | | TOTAL | 458.00 |

## LANDSCAPING PLANTING SURVEILLANCE AND CARE CYCLES

| CATEGORY | LOCATION | 632.9101 EACH | REMARKS |
|---|---|---|---|
| 1000 | CTH J | 10 | MAY 1 2026 - OCTOBER 1 2026 |

## TRAFFIC CONTROL

| CATEGORY | PROJECT | 643.5000 EACH |
|---|---|---|
| 1000 | 1130-66-78 | 1 |

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TRAFFIC CONTROL SUMMARY

| CATEGORY | STAGE | DURATION DAYS | LOCATION | 643.0300 DRUMS EACH | 643.0300 DRUMS DAY | 643.0420 BARRICADES TYPE III EACH | 643.0420 BARRICADES TYPE III DAY | 643.0705 WARNING LIGHTS TYPE A EACH | 643.0705 WARNING LIGHTS TYPE A DAY | 643.0715 WARNING LIGHTS TYPE C EACH | 643.0715 WARNING LIGHTS TYPE C DAY | 643.0800 ARROW BOARDS EACH | 643.0800 ARROW BOARDS DAY | 643.0900 SIGNS EACH | 643.0900 SIGNS DAY | 643.0910 COVERING SIGNS TYPE I SIGNS | 643.0910 COVERING SIGNS TYPE I CYCLES | 643.0910 COVERING SIGNS TYPE I EACH | 643.0920 COVERING SIGNS TYPE II SIGNS | 643.0920 COVERING SIGNS TYPE II CYCLES | 643.0920 COVERING SIGNS TYPE II EACH | 643.1050 SIGNS PCMS EACH | 643.1050 SIGNS PCMS DAYS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | PRE-WARN | 7 | IH 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 14 |
| | 1A | 4 | IH 41 | 83 | 332 | 2 | 8 | 4 | 16 | 33 | 132 | 2 | 8 | 24 | 96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1B | 3 | IH 41 | 138 | 414 | 4 | 12 | 8 | 24 | 47 | 141 | 2 | 6 | 28 | 84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 2 | IH 41 | 178 | 356 | 12 | 24 | 16 | 32 | 86 | 172 | 1 | 2 | 24 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 18 |
| | 2 | 2 | CTH J | 50 | 100 | 20 | 40 | 32 | 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 37 | IH 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 592 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 37 | CTH J | 10 | 370 | 14 | 518 | 16 | 592 | 0 | 0 | 0 | 0 | 2 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4A (OFF-PEAK) | 3 | IH 41 | 84 | 252 | 6 | 18 | 8 | 24 | 43 | 129 | 1 | 3 | 20 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| | 4A/4B | 5 | CTH J | 30 | 150 | 22 | 110 | 24 | 120 | 0 | 0 | 0 | 0 | 5 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4B (OFF-PEAK) | 3 | IH 41 | 88 | 264 | 6 | 18 | 8 | 24 | 42 | 126 | 1 | 3 | 20 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| | 5 | 65 | IH 41 | 67 | 4,355 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 1,300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | CTH J DETOUR | 109 | CTH J | 26 | 2,834 | 20 | 2,180 | 29 | 3,161 | 0 | 0 | 0 | 0 | 318 | 34,662 | 216 | 1 | 16 | 0 | 0 | 0 | 2 | 34 |
| | CTH J RAMP DETOURS | 62 | CTH J RAMPS | 0 | 0 | 42 | 2,604 | 60 | 3,720 | 0 | 0 | 0 | 0 | 330 | 20,460 | 8 | 1 | 8 | 4 | 1 | 4 | 4 | 48 |
| | LANDSCAPE PLANTINGS | 5 | CTH J | 20 | 100 | 4 | 20 | 8 | 40 | 0 | 0 | 0 | 0 | 4 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTALS | | | | 9,527 | | 5,552 | | 7,817 | | 700 | | 22 | | 57,481 | | | 24 | | | 4 | | 132 |

3

## ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

| SIGN NO. | LOCATION | SIGN CODE | W X H | 637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F. | 637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F. | 634.0614 POSTS WOOD 4x6x14 EACH | 634.0616 POSTS WOOD 4x6x16 EACH | 634.0618 POSTS WOOD 4x6x18 EACH | 634.0812 POSTS TUBULAR STEEL 2X2X12 EACH | 638.2102 MOVING SIGNS TYPE II EACH | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CTH J, S. OF IH 41 | W3-1 | 36" X 36" | --- | 9.00 | --- | 1 | --- | --- | --- | 1 | 1 | |
| 2 | " | J1-1 | 24" X 39" | 6.50 | --- | --- | 1 | --- | --- | --- | 1 | 1 | SEE PLAN SHEET |
| 3 | " | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 35 MPH |
| 4 | " | D1-2 | 66" X 36" | 16.50 | --- | 2 | --- | --- | --- | --- | 1 | 2 | SEE SIGN DETAILS |
| 5 | " | D1-62 | 84" X 78" | 45.50 | --- | --- | --- | 2 | --- | --- | 1 | 3 | SEE SIGN DETAILS |
| 6 | " | W3-2 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 1 | |
| 7 | " | R4-7 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 8 | " | D1-2 | 72" X 30" | 15.00 | --- | 2 | --- | --- | --- | --- | 1 | 2 | SEE SIGN DETAILS |
| 9 | " | R1-2 | 36" X 31" | 3.88 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 10 | " | R1-2 | 36" X 31" | 3.88 | --- | --- | --- | --- | 1 | --- | 1 | 1 | |
| 11 | IH 41 NB AND CTH J RAB | R6-1R | 54" X 18" | 6.75 | --- | 2 | --- | --- | --- | --- | 1 | 2 | |
| 12 | " | R6-4B | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | INCLUDED IN REMOVAL OF SIGN 11 |
| 13 | " | R6-1R | 54" X 18" | 6.75 | --- | 2 | --- | --- | --- | --- | 1 | 2 | |
| 14 | " | R6-4B | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | INCLUDED IN REMOVAL OF SIGN 13 |
| 15 | " | R6-1R | 54" X 18" | 6.75 | --- | 2 | --- | --- | --- | --- | 1 | 2 | |
| 16 | " | R6-4B | --- 24" | --- | --- | --- | --- | --- | --- | --- | --- | --- | INCLUDED IN REMOVAL OF SIGN 15 |
| 17 | IH 41 NB ON RAMP FROM CTH J | D1-1 | 42" X 30" | 8.75 | --- | --- | --- | --- | 2 | --- | 1 | 2 | SEE SIGN DETAILS |
| 18 | " | R5-57 | 36" X 36" | 9.00 | --- | --- | 1 | --- | --- | --- | 1 | 1 | |
| 19 | IH 41 NB OFF RAMP TO CTH J | R1-2 | 36" X 31" | 3.88 | --- | --- | --- | --- | 1 | --- | 1 | 1 | |
| 20 | " | R1-2 | 36" X 31" | 3.88 | --- | --- | --- | --- | 1 | --- | 1 | 1 | |
| 21 | " | R5-1 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 1 | |
| 22 | " | R5-1 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 1 | |
| 23 | " | R5-1A | 36" X 24" | 6.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 24 | " | W3-2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | INCLUDED IN REMOVAL OF SIGN 23 |
| 25 | " | R5-1A | 36" X 24" | 6.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 26 | CTH J, BETWEEN RAB TERMINALS | R5-1 | 30" X 30" | 6.25 | --- | --- | --- | --- | 1 | --- | --- | --- | |
| 27 | " | R3-1 | 24" X 24" | 4.00 | --- | --- | --- | --- | 1 | --- | --- | --- | |
| 28 | " | R1-2 | 36" X 31" | 3.88 | --- | --- | --- | --- | 1 | --- | 1 | 1 | |
| 29 | " | R1-2 | 36" X 31" | 3.88 | --- | --- | --- | --- | 1 | --- | 1 | 1 | |
| 30 | " | R4-7 | 24" X 30" | 5.00 | --- | --- | --- | --- | 1 | --- | --- | --- | |
| 31 | " | D1-2 | 72" X 30" | 15.00 | --- | 2 | --- | --- | --- | --- | 1 | 2 | SEE SIGN DETAILS |
| 32 | " | D1-1 | 60" X 30" | 12.50 | --- | --- | --- | --- | 2 | --- | 1 | 2 | SEE SIGN DETAILS |
| 33 | " | D1-62 | 72" X 66" | 33.00 | --- | --- | --- | 2 | --- | --- | 1 | 3 | SEE SIGN DETAILS |
| 34 | " | D1-2 | 72" X 15" | 7.50 | --- | 2 | --- | --- | --- | --- | 1 | 2 | SEE SIGN DETAILS |
| 35 | " | D1-62 | 72" X 66" | 33.00 | --- | --- | --- | 2 | --- | --- | 1 | 3 | SEE SIGN DETAILS |
| | PAGE SUBTOTALS | | | 283.03 | 9.00 | 19 | 3 | 6 | 12 | 0 | 28 | 43 | |

## ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

| SIGN NO. | LOCATION | SIGN CODE | W X H | 637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F. | 637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F. | 634.0614 POSTS WOOD 4x6x14 EACH | 634.0616 POSTS WOOD 4x6x16 EACH | 634.0618 POSTS WOOD 4x6x18 EACH | 634.0812 POSTS TUBULAR STEEL 2X2X12 EACH | 638.2102 MOVING SIGNS TYPE II EACH | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 | CTH J, BETWEEN RAB TERMINALS | D1-2 | 60" X 30" | 12.50 | --- | --- | --- | --- | 2 | --- | 1 | 2 | SEE SIGN DETAILS |
| 37 | " | R4-7 | 24" X 30" | 5.00 | --- | --- | --- | --- | 1 | --- | --- | --- | |
| 38 | " | R1-2 | 36" X 31" | 3.88 | --- | --- | --- | --- | 1 | --- | 1 | 1 | |
| 39 | " | R1-2 | 36" X 31" | 3.88 | --- | --- | --- | --- | 1 | --- | 1 | 1 | |
| 40 | " | R3-1 | 24" X 24" | 4.00 | --- | --- | --- | --- | 1 | --- | --- | --- | |
| 41 | IH 41 SB ON RAMP FROM CTH J | D1-1 | 42" X 30" | 8.75 | --- | --- | --- | --- | 2 | --- | 1 | 2 | SEE SIGN DETAILS |
| 42 | " | R5-57 | 36" X 36" | 9.00 | --- | --- | 1 | --- | --- | --- | 1 | 1 | |
| 43 | IH 41 SB AND CTH J RAB | R6-1R | 54" X 18" | 6.75 | --- | --- | 2 | --- | --- | --- | 1 | 2 | |
| 44 | " | R6-4B | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | INCLUDED IN REMOVAL OF SIGN 43 |
| 45 | " | R6-1R | 54" X 18" | 6.75 | --- | 2 | --- | --- | --- | --- | 1 | 2 | |
| 46 | " | R6-4B | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | INCLUDED IN REMOVAL OF SIGN 45 |
| 47 | " | R6-1R | 54" X 18" | 6.75 | --- | 2 | --- | --- | --- | --- | 1 | 2 | |
| 48 | " | R6-4B | --- 24" | --- | --- | --- | --- | --- | --- | --- | --- | --- | INCLUDED IN REMOVAL OF SIGN 47 |
| 49 | IH 41 SB OFF RAMP TO CTH J | R1-2 | 36" X 31" | 3.88 | --- | --- | --- | --- | 1 | --- | 1 | 1 | |
| 50 | " | R1-2 | 36" X 31" | 3.88 | --- | --- | --- | --- | 1 | --- | 1 | 1 | |
| 51 | " | R5-1 | 30" X 30" | 6.25 | --- | --- | --- | --- | 1 | --- | --- | --- | |
| 52 | " | R5-1 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 1 | |
| 53 | " | R5-1 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 1 | |
| 54 | " | R5-1A | 36" X 24" | 6.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 55 | " | R3-8IR | 36" X 30" | 7.50 | --- | --- | --- | --- | --- | --- | --- | --- | MOUNT TO BACK OF SIGN 54, SEE PLAN SHEET |
| 56 | " | W3-2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | INCLUDED IN REMOVAL OF SIGN 54 |
| 57 | " | R5-1A | 36" X 24" | 6.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 58 | " | R1-2 | 36" X 31" | 3.88 | --- | --- | --- | --- | --- | --- | 1 | 1 | |
| 59 | CTH J, N. OF IH 41 | D1-2 | 66" X 36" | 16.50 | --- | 2 | --- | --- | --- | --- | 1 | 2 | SEE SIGN DETAILS |
| 60 | " | M1-5A | 24" X 24" | 4.00 | --- | 1 | --- | --- | --- | --- | --- | --- | SEE PLAN SHEET |
| 61 | " | R4-7 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 62 | " | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | --- | --- | 45 MPH |
| 63 | " | R1-2 | 36" X 31" | 3.88 | --- | --- | --- | --- | 1 | --- | 1 | 1 | |
| 64 | " | R1-2 | 36" X 31" | 3.88 | --- | --- | --- | --- | 1 | --- | 1 | 1 | |
| 65 | " | D1-3 | 72" X 36" | 18.00 | --- | --- | 2 | --- | --- | --- | 1 | 2 | SEE SIGN DETAILS |
| 66 | " | W3-2 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 1 | |
| 67 | " | D1-62 | 84" X 78" | 45.50 | --- | --- | --- | 2 | --- | --- | 1 | 3 | SEE SIGN DETAILS |
| 68 | IH 41 NB OFF RAMP TO CTH J | D1-62 | --- | --- | --- | --- | 3 | --- | --- | 1 | --- | 3 | |
| 69 | | E5-1A | --- | --- | --- | --- | 2 | --- | --- | 1 | --- | 2 | |
| 70 | | W2-6 | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 1 | |
| 71 | IH 41 SB OFF RAMP TO CTH J | W2-6 | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 1 | |
| 72 | " | E5-1A | --- | --- | --- | --- | 2 | --- | --- | 1 | --- | 2 | |
| 73 | " | D1-62 | --- | --- | --- | --- | 3 | --- | --- | 1 | --- | 3 | |
| | PAGE SUBTOTALS | | | 206.41 | 0.00 | 11 | 17 | 2 | 13 | 6 | 22 | 43 | |
| | **PROJECT TOTALS** | | | **489.44** | **9.00** | **30** | **20** | **8** | **25** | **6** | **50** | **86** | |

PAVEMENT MARKING ITEMS

| CATEGORY | STATION | - | STATION | LOCATION | 646.2020 MARKING LINE EPOXY 6-INCH (WHITE) LF | 646.2020 MARKING LINE EPOXY 6-INCH (YELLOW) LF | 646.2020 MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW) LF | 646.2040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (WHITE) LF | 646.2040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) LF | 646.4020 MARKING LINE EPOXY 10-INCH (WHITE) LF | 646.4040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE) LF | 646.5020 MARKING ARROW EPOXY (WHITE) EACH | 646.6320 MARKING DOTTED EXTENSION EPOXY 18-INCH (2-FT SEGMENT, 2-FT GAP) (WHITE) LF | 646.7120 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) LF | 646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) LF | 646.8120 MARKING CURB EPOXY (YELLOW) LF | 646.8220 MARKING ISLAND NOSE EPOXY (YELLOW) EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | 11+60 'JNB' | - | 15+43 'JNB' | RT | 380 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 31 | --- | --- |
| | 11+61 'JNB' | - | 12+60 'JNB' | RT | --- | --- | 200 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 16+65 'JNB' | - | 22+08 'JNB' | RT | 540 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 12+60 'JNB' | - | 13+86 'JNB' | LT | --- | --- | 250 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 12+91 'JNB' | - | 12+98 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9 | --- | --- | --- |
| | 13+17 'JNB' | - | 13+27 'JNB' | | --- | --- | --- | --- | --- | --- | --- | --- | --- | 14 | --- | --- | --- |
| | 13+35 'JNB' | - | 13+40 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 |
| | 13+40 'JNB' | - | 13+45 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 | --- |
| | 13+40 'JNB' | - | 13+45 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 | --- |
| | 13+86 'JNB' | - | 15+26 'JNB' | RT | --- | 130 | --- | --- | --- | 68 | --- | --- | --- | --- | --- | --- | --- |
| | 15+26 'JNB' | - | 15+44 'JNB' | RT | --- | --- | --- | --- | --- | --- | --- | --- | 17 | --- | --- | --- | --- |
| | 16+65 'JNB' | - | 17+06 'JNB' | RT | --- | 41 | --- | --- | --- | 68 | --- | --- | --- | --- | --- | --- | --- |
| | 17+03 'JNB' | - | 17+08 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 | --- |
| | 17+05 'JNB' | - | 17+09 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 | --- |
| | 17+06 'JNB' | - | 17+45 'JNB' | RT | --- | --- | 80 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 17+08 'JNB' | - | 17+14 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 |
| | 17+15 'JNB' | - | 17+25 'JNB' | | --- | --- | --- | --- | --- | --- | --- | --- | --- | 13 | --- | --- | --- |
| | 17+30 'JNB' | - | 17+35 'JNB' | | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6 | --- | --- | --- |
| | 17+45 'JNB' | - | 21+28 'JNB' | RT | --- | --- | 760 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 21+28 'JNB' | - | 21+57 'JNB' | | --- | --- | 58 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 21+50 'JNB' | - | 21+56 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 |
| | 21+55 'JNB' | - | 21+59 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 | --- |
| | 21+55 'JNB' | - | 21+60 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 | --- |
| | 21+39 'JNB' | - | 21+47 'JNB' | | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9 | --- | --- | --- |
| | 21+57 'JNB' | - | 21+92 'JNB' | RT | --- | 35 | --- | --- | --- | 67 | --- | --- | --- | --- | --- | --- | --- |
| | 21+92 'JNB' | - | 22+08 'JNB' | RT | --- | --- | --- | --- | --- | --- | --- | --- | 17 | --- | --- | --- | --- |
| | 22+73 'JNB' | - | 23+04 'JNB' | RT | --- | --- | --- | --- | --- | --- | --- | --- | 17 | --- | --- | --- | --- |
| | 23+29 'JNB' | - | 23+76 'JNB' | RT | --- | --- | --- | --- | --- | 67 | --- | --- | 28 | --- | --- | --- | --- |
| | 23+34 'JNB' | - | 25+43 'JNB' | RT | --- | 200 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 23+86 'JNB' | - | 26+25 'JNB' | RT | 230 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 32 | --- | --- |
| | 25+43 'JNB' | - | 27+06 'JNB' | | --- | --- | 330 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 25+81 'JNB' | - | 25+86 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 | --- |
| | 25+81 'JNB' | - | 25+86 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 | --- |
| | 25+86 'JNB' | - | 25+91 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 |
| | 25+97 'JNB' | - | 26+10 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | 16 | --- | --- | --- |
| | 26+25 'JNB' | - | 26+35 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12 | --- | --- | --- |
| | 26+53 'JNB' | - | 26+59 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8 | --- | --- | --- |
| | 26+81 'JNB' | - | 26+84 'JNB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 | --- | --- | --- |
| | 27+05 'JNB' | - | 27+61 'JNB' | LT | --- | --- | 110 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

CON'T. ON NEXT PAGE

PAVEMENT MARKING ITEMS (CON'T.)

| CATEGORY | STATION | - | STATION | LOCATION | 646.2020 MARKING LINE EPOXY 6-INCH (WHITE) LF | 646.2020 MARKING LINE EPOXY 6-INCH (YELLOW) LF | 646.2020 MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW) LF | 646.2040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (WHITE) LF | 646.2040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) LF | 646.4020 MARKING LINE EPOXY 10-INCH (WHITE) LF | 646.4040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE) LF | 646.5020 MARKING ARROW EPOXY (WHITE) EACH | 646.6320 MARKING DOTTED EXTENSION EPOXY 18-INCH (2-FT SEGMENT, 2-FT GAP) (WHITE) LF | 646.7120 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) LF | 646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) LF | 646.8120 MARKING CURB EPOXY (YELLOW) LF | 646.8220 MARKING ISLAND NOSE EPOXY (YELLOW) EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | 112+20 'JSB' | - | 115+25 'JSB' | LT | 350 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 31 | --- | --- |
| | 112+60 'JSB' | - | 113+85 'JSB' | | --- | --- | 250 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 113+85 'JSB' | - | 115+26 'JSB' | LT | --- | 130 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 116+57 'JSB' | - | 121+95 'JSB' | LT | 540 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 116+71 'JSB' | - | 117+08 'JSB' | LT | --- | 37 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 117+08 'JSB' | - | 117+45 'JSB' | | --- | --- | 78 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 121+60 'JSB' | - | 121+95 'JSB' | LT | --- | 36 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 123+22 'JSB' | - | 126+23 'JSB' | LT | 290 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 34 | --- | --- |
| | 123+38 'JSB' | - | 125+43 'JSB' | LT | --- | 190 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 115+52 'JSB' | - | 115+83 'JSB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | 17 | --- | --- | --- | --- |
| | 116+57 'JSB' | - | 116+71 'JSB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | 17 | --- | --- | --- | --- |
| | 121+30 'JSB' | - | 121+60 'JSB' | LT | --- | --- | 60 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 123+21 'JSB' | - | 123+38 'JSB' | LT | --- | --- | --- | --- | --- | --- | --- | --- | 17 | --- | --- | --- | --- |
| | 125+43 'JSB' | - | 127+50 'JSB' | LT | --- | --- | 320 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1186+89 'JA' | - | 1190+50 'JA' | RT | --- | --- | --- | 350 | --- | --- | --- | --- | --- | --- | 30 | --- | --- |
| | 1186+88 'JA' | - | 1190+50 'JA' | LT | --- | --- | --- | --- | 350 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1190+50 'JAT' | - | 1193+50 'JAT' | RT | 300 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1190+50 'JAT' | - | 1193+50 'JAT' | LT | --- | 300 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1181+50 'JB' | - | 1186+37 'JB' | RT | --- | --- | --- | 500 | --- | --- | --- | --- | --- | --- | 31 | --- | --- |
| | 1181+50 'JB' | - | 1186+37 'JB' | LT | --- | --- | --- | --- | 500 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1178+75 'JBT' | - | 1181+50 'JBT' | RT | 275 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1178+75 'JBT' | - | 1181+50 'JBT' | LT | --- | 275 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1183+00 'JC' | - | 1188+04 'JC' | LT | --- | --- | --- | 500 | --- | --- | --- | --- | --- | --- | 28 | --- | --- |
| | 1183+00 'JC' | - | 1188+06 'JC' | RT | --- | --- | --- | --- | 500 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1180+00 'JCT' | - | 1183+00 'JCT' | LT | 300 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1180+00 'JCT' | - | 1183+00 'JCT' | RT | --- | 300 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1189+02 'JD' | - | 1189+68 'JD' | RT | --- | --- | --- | 75 | --- | --- | --- | --- | --- | --- | 32 | --- | --- |
| | 1191+01 'JD' | - | 1192+00 'JD' | LT | --- | --- | --- | 100 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1189+02 'JD' | - | 1192+00 'JD' | RT | --- | --- | --- | --- | 290 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1189+68 'JD' | - | 1190+14 'JD' | LT | --- | --- | --- | --- | --- | --- | 45 | --- | --- | --- | --- | --- | --- |
| | 1192+00 'JDT' | - | 1195+25 'JDT' | LT | 325 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1192+00 'JDT' | - | 1195+25 'JDT' | RT | --- | 325 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 188+64 'JDR' | - | 190+10 'JDR' | RT | --- | --- | --- | 280 | --- | --- | --- | --- | --- | --- | 30 | --- | --- |
| | 188+64 'JDR' | - | 189+68 'JDR' | LT | --- | --- | --- | --- | 100 | --- | --- | --- | --- | --- | --- | --- | --- |
| | | | 189+08 'JDR' | LT | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- |
| | 189+68 'JDR' | - | 190+10 'JDR' | LT | --- | --- | --- | --- | --- | --- | 44 | --- | --- | --- | --- | --- | --- |
| | | | 189+93 'JDR' | LT | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- |
| | SUBTOTALS | | | | 3,530 | 1,999 | 2,496 | 1,805 | 1,740 | | | | | | | | |
| | TOTALS | | | | | 8,025 | | | 3,545 | 270 | 89 | 2 | 130 | 92 | 279 | 40 | 4 |

3

## SAWING SUMMARY

| CATEGORY | STATION | | STATION | LOCATION | 690.0150 ASPHALT LF | 690.0250 CONCRETE LF |
|---|---|---|---|---|---|---|
| 1000 | 11+60 'JNB' | - | 11+61 'JNB' | LT/RT | 35 | --- |
| | 11+71 'JNB' | - | 12+01 'JNB' | RT | 29 | --- |
| | 26+24 'JNB' | - | 26+34 'JNB' | LT/RT | 52 | 3 |
| | 1193+48 'JA' | - | 1193+48 'JA' | | 22 | --- |
| | 1178+75 'JB' | - | 1178+75 'JB' | | 18 | --- |
| | 1180+00 'JC' | - | 1180+00 'JC' | | 24 | --- |
| | 1195+25 'JD' | - | 1195+25 'JD' | | 25 | --- |
| | 1187+00 NB' | - | 1187+78 NB' | RT | 90 | --- |
| | 1187+35 SB' | - | 1188+42 SB' | LT | 90 | --- |
| | UNDISTRIBUTED | | | | 20 | 10 |
| | | | | TOTALS | 405 | 13 |

## CONSTRUCTION STAKING SURVEY PROJECT 1130-66-78

| CATEGORY | SPV.0060.0001 EACH |
|---|---|
| 1000 | 1 |

## STREET SWEEPING

| CATEGORY | PROJECT | SPV.0075.0001 HRS |
|---|---|---|
| 1000 | 1130-66-78 | 99 |

## REMOVAL AND SALVAGE OF HIGH-TENSION CABLE GUARD AND POSTS

| CATEGORY | STAGE | STATION-STATION | OFFSET | SPV.0090.0001 LF |
|---|---|---|---|---|
| 1000 | 1B | 1188+00'NB'- 1217+50'NB' | NB MEDIAN SHOULDER | 2,950 |
| | 1B | 1155+00'SB' - 1187+50'SB' | SB MEDIAN SHOULDER | 3,250 |
| | | | TOTAL | 6,200 |

## EMERGENCY RESPONSE TO TRAFFIC INVOLVING CONCRETE BARRIER TEMPORARY

| CATEGORY | PROJECT | SPV.0060.0002 EACH |
|---|---|---|
| 1000 | 1130-66-78 | 8 |

## EMERGENCY RESPONSE TO TRAFFIC INVOLVING CRASH CUSHION TEMPORARY

| CATEGORY | PROJECT | SPV.0060.0003 EACH |
|---|---|---|
| 1000 | 1130-66-78 | 8 |

LIGHTING REMOVALS

| Item | | 204.0195 * REMOVING CONCRETE BASE EACH | 204.9060.S.0002 REMOVING STREET LIGHT ASSEMBLY EACH | 204.9060.S.0003 REMOVING LIGHTING CONTROL EACH | 653.0905 * REMOVING PULL BOXES EACH | 659.5100.S LAMP, BALLAST, LED SWITCH DISPOSAL EACH |
|---|---|---|---|---|---|---|
| CATEGORY 1100 | | | | | | |
| EXCB | 100 | -- | -- | 1 | -- | -- |
| EXCB | 200 | -- | -- | 1 | -- | -- |
| EXSL | 100 | 1 | 1 | -- | -- | 1 |
| EXSL | 101 | 1 | 1 | -- | -- | 1 |
| EXSL | 102 | 1 | 1 | -- | -- | 1 |
| EXSL | 103 | 1 | 1 | -- | -- | 1 |
| EXSL | 104 | 1 | 1 | -- | -- | 1 |
| EXSL | 105 | 1 | 1 | -- | -- | 1 |
| EXSL | 106 | 1 | 1 | -- | -- | 1 |
| EXSL | 107 | 1 | 1 | -- | -- | 1 |
| EXSL | 200 | 1 | 1 | -- | -- | 1 |
| EXSL | 201 | 1 | 1 | -- | -- | 1 |
| EXSL | 202 | 1 | 1 | -- | -- | 1 |
| EXSL | 203 | 1 | 1 | -- | -- | 1 |
| EXSL | 204 | 1 | 1 | -- | -- | 1 |
| EXSL | 205 | 1 | 1 | -- | -- | 1 |
| EXSL | 206 | 1 | 1 | -- | -- | 1 |
| EXSL | 207 | 1 | 1 | -- | -- | 1 |
| EXSL | 208 | 1 | 1 | -- | -- | 1 |
| EXSL | 209 | 1 | 1 | -- | -- | 1 |
| EXPB | 100 | -- | -- | -- | 1 | -- |
| EXPB | 101 | -- | -- | -- | 1 | -- |
| EXPB | 102 | -- | -- | -- | 1 | -- |
| EXPB | 103 | -- | -- | -- | 1 | -- |
| EXPB | 104 | -- | -- | -- | 1 | -- |
| EXPB | 105 | -- | -- | -- | 1 | -- |
| EXPB | 106 | -- | -- | -- | 1 | -- |
| EXPB | 107 | -- | -- | -- | 1 | -- |
| EXPB | 200 | -- | -- | -- | 1 | -- |
| EXPB | 201 | -- | -- | -- | 1 | -- |
| EXPB | 202 | -- | -- | -- | 1 | -- |
| EXPB | 203 | -- | -- | -- | 1 | -- |
| EXPB | 204 | -- | -- | -- | 1 | -- |
| EXPB | 205 | -- | -- | -- | 1 | -- |
| EXPB | 206 | -- | -- | -- | 1 | -- |
| EXPB | 207 | -- | -- | -- | 1 | -- |
| EXPB | 208 | -- | -- | -- | 1 | -- |
| **PROJECT TOTAL** | | **18** | **18** | **2** | **17** | **18** |

LIGHTING LINEAR REMOVALS

| FROM | - | TO | 204.9090.S.0001 REMOVING ELECTRICAL CONDUCTORS FROM EXISTING CONDUIT LF | 204.9090.S.0002 REMOVING OR ABANDONING EXISTING CONDUIT LF |
|---|---|---|---|---|
| CATEGORY 1100 | | | | |
| EXCB 100 | - | EXPB 100 | 25 | 25 |
| EXPB 100 | - | EXSL 100 | 5 | 5 |
| EXSL 100 | - | EXSL 101 | 140 | 140 |
| EXPB 100 | - | EXPB 101 | 75 | 75 |
| EXPB 101 | - | EXSL 102 | 50 | 50 |
| EXPB 101 | - | EXPB 102 | 140 | 140 |
| EXPB 102 | - | EXSL 103 | 30 | 30 |
| EXPB 102 | - | EXPB 103 | 40 | 40 |
| EXPB 103 | - | EXSL 104 | 75 | 75 |
| EXPB 103 | - | EXPB 104 | 145 | 145 |
| EXPB 104 | - | EXSL 105 | 5 | 5 |
| EXPB 104 | - | EXPB 105 | 65 | 65 |
| EXPB 105 | - | EXSL 106 | 85 | 85 |
| EXPB 105 | - | EXPB 106 | 75 | 75 |
| EXPB 106 | - | EXSL 107 | 5 | 5 |
| EXPB 106 | - | EXPB 107 | 105 | 105 |
| EXPB 107 | - | EXSL 108 | 15 | 15 |
| EXPB 107 | - | EXPB 100 | 120 | 120 |
| EXCB 200 | - | EXPB 200 | 5 | 5 |
| EXPB 200 | - | EXSL 200 | 20 | 20 |
| EXSL 200 | - | EXSL 201 | 130 | 130 |
| EXPB 200 | - | EXPB 201 | 85 | 85 |
| EXPB 201 | - | EXSL 202 | 30 | 30 |
| EXPB 201 | - | EXPB 202 | 125 | 125 |
| EXPB 202 | - | EXSL 203 | 30 | 30 |
| EXPB 202 | - | EXPB 203 | 50 | 50 |
| EXPB 203 | - | EXPB 204 | 20 | 20 |
| EXPB 204 | - | EXPB 205 | 90 | 90 |
| EXPB 205 | - | EXSL 204 | 30 | 30 |
| EXPB 205 | - | EXSL 205 | 35 | 35 |
| EXPB 205 | - | EXPB 206 | 80 | 80 |
| EXPB 206 | - | EXSL 206 | 100 | 100 |
| EXPB 206 | - | EXSL 207 | 35 | 35 |
| EXSL 207 | - | EXSL 208 | 65 | 65 |
| EXSL 208 | - | EXPB 207 | 35 | 35 |
| EXPB 207 | - | EXPB 208 | 40 | 40 |
| EXPB 208 | - | EXSL 209 | 5 | 5 |
| EXPB 208 | - | EXPB 200 | 85 | 85 |
| **PROJECT TOTAL** | | | **2295** | **2295** |

3

LIGHTING CONDUIT AND WIRE

| FROM | - | TO | 652.0225 * CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF | 652.0235 * CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF | 652.0335 CONDUIT RIGID NONMETALLIC SCHEDULE 80 3-INCH LF | 655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF | REMARKS |
|---|---|---|---|---|---|---|---|
| ALL ITEMS ARE CATEGORY 1100 | | | | | | | |
| CB 1500 | - | PB 1500 | -- | 15 | -- | -- | PULL WIRE ONLY |
| CB 1500 | - | PB 1500 | -- | 15 | -- | -- | PULL WIRE ONLY |
| CB 1500 | - | PB 1500 | -- | 15 | -- | -- | PULL WIRE ONLY |
| PB 1500 | - | PB 1503 | 100 | -- | -- | -- | PULL WIRE ONLY |
| PB 1503 | - | PB 1504 | -- | -- | 100 | -- | PULL WIRE ONLY |
| PB 1504 | - | PB 1505 | 395 | -- | -- | -- | PULL WIRE ONLY |
| CB 1500 | - | PB 1501 | -- | 15 | -- | -- | PULL WIRE ONLY |
| CB 1500 | - | PB 1501 | -- | 15 | -- | -- | PULL WIRE ONLY |
| CB 1500 | - | PB 1501 | -- | 15 | -- | -- | PULL WIRE ONLY |
| PB 1501 | - | PB 1502 | 375 | -- | -- | -- | PULL WIRE ONLY |
| CB 1600 | - | PB 1602 | -- | 40 | -- | 290 | -- |
| CB 1600 | - | PB 1602 | -- | 40 | -- | -- | PULL WIRE ONLY |
| CB 1600 | - | PB 1602 | -- | 40 | -- | -- | PULL WIRE ONLY |
| PB 1602 | - | SL 1601 | 45 | -- | -- | 290 | -- |
| SL 1601 | - | PB 1601 | 50 | -- | -- | 630 | -- |
| PB 1601 | - | SL 1600 | 70 | -- | -- | 415 | -- |
| SL 1600 | - | PB 1600 | 10 | -- | -- | -- | PULL WIRE ONLY |
| PB 1601 | - | PB 1605 | -- | -- | 70 | 430 | -- |
| PB 1605 | - | SL 1603 | 100 | -- | -- | 565 | -- |
| SL 1603 | - | PB 1606 | 105 | -- | -- | 590 | -- |
| PB 1606 | - | SL 1604 | -- | 15 | -- | 364 | -- |
| PB 1606 | - | SL 1605 | 115 | -- | -- | 384 | -- |
| PB 1606 | - | PB 1607 | -- | -- | 50 | 330 | -- |
| PB 1607 | - | SL 1606 | 35 | -- | -- | 240 | -- |
| SL 1606 | - | SL 1610 | 90 | -- | -- | 500 | -- |
| SL 1610 | - | PB 1609 | 50 | -- | -- | 315 | -- |
| PB 1609 | - | PB 1610 | -- | -- | 75 | 455 | -- |
| PB 1609 | - | SL 1612 | 20 | -- | -- | 765 | CONDUIT IN STRUCTURE B-44-0338 |
| SL 1612 | - | PB 1611 | 20 | -- | -- | 865 | CONDUIT IN STRUCTURE B-44-0338 |
| PB 1609 | - | PB 1611 | 40 | -- | -- | 1,580 | CONDUIT IN STRUCTURE B-44-0338 |
| PB 1611 | - | SL 1613 | 10 | -- | -- | 230 | -- |
| PB 1611 | - | PB 1612 | -- | -- | 60 | 380 | -- |
| PB 1611 | - | PB 1621 | 110 | -- | -- | 630 | -- |
| PB 1621 | - | SL 1624 | 10 | -- | -- | 230 | -- |
| PB 1621 | - | PB 1620 | 85 | -- | -- | 505 | -- |
| PB 1620 | - | PB 1619 | -- | -- | 50 | 330 | -- |
| PB 1619 | - | SL 1622 | 25 | -- | -- | 380 | -- |
| SL 1622 | - | SL 1623 | 150 | -- | -- | 480 | -- |
| PB 1619 | - | SL 1621 | 100 | -- | -- | 565 | -- |
| SL 1621 | - | SL 1620 | 85 | -- | -- | 475 | -- |
| SL 1620 | - | PB 1618 | 35 | -- | -- | 240 | |
| PB 1618 | - | SL 1619 | 75 | -- | -- | 440 | -- |
| SL 1619 | - | PB 1617 | 10 | -- | -- | -- | PULL WIRE ONLY |
| PB 1618 | - | PB 1616 | -- | -- | 80 | -- | PULL WIRE ONLY |
| PB 1616 | - | PB 1615 | 90 | -- | -- | -- | PULL WIRE ONLY |
| **SUBTOTAL** | | | **2405** | **225** | **485** | **13893** | |

## LIGHTING CONDUIT AND WIRE (CONTINUED)

| FROM | - | TO | 652.0225 * CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF | 652.0235 * CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF | 652.0335 CONDUIT RIGID NONMETALLIC SCHEDULE 80 3-INCH LF | 655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF | REMARKS |
|---|---|---|---|---|---|---|---|
| ALL ITEMS ARE CATEGORY 1100 | | | | | | | |
| PB 1615 | - | SL 1618 | 10 | -- | -- | 115 | -- |
| PB 1615 | - | PB 1614 | 80 | -- | -- | 480 | -- |
| PB 1614 | - | SL 1617 | 140 | -- | -- | 459 | -- |
| PB 1614 | - | PB 1613 | -- | -- | 110 | 1,008 | -- |
| PB 1613 | - | SL 1616 | -- | 30 | -- | 559 | -- |
| PB 1613 | - | SL 1615 | 30 | -- | -- | 430 | -- |
| PB 1613 | - | SL 1614 | 90 | -- | -- | 515 | -- |
| SL 1614 | - | PB 1612 | 90 | -- | -- | 515 | -- |
| PB 1610 | - | SL 1611 | 10 | -- | -- | 230 | -- |
| PB 1610 | - | PB 1608 | 135 | -- | -- | 755 | -- |
| PB 1608 | - | SL 1608 | 20 | -- | -- | 330 | -- |
| PB 1608 | - | PB 1604 | -- | -- | 100 | 580 | -- |
| PB 1604 | - | SL 1608 | 50 | -- | -- | 315 | -- |
| SL 1608 | - | SL 1609 | 160 | -- | -- | 510 | -- |
| PB 1604 | - | PB 1603 | 35 | -- | -- | 510 | -- |
| PB 1603 | - | SL 1602 | -- | 5 | -- | 270 | -- |
| PB 1603 | - | CB 1600 | -- | 10 | -- | 140 | -- |
| PB 1603 | - | CB 1600 | -- | 10 | -- | -- | PULL WIRE ONLY |
| PB 1603 | - | CB 1600 | -- | 10 | -- | -- | PULL WIRE ONLY |
| **SUBTOTAL** | | | **850** | **65** | **210** | **7721** | |
| **PROJECT TOTAL** | | | **3255** | **290** | **695** | **21614** | |

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

## LIGHTING PULLBOXES

| PULLBOX NUMBER | STATION | OFFSET | R/L | 653.0164 * PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH |
|---|---|---|---|---|
| ALL ITEMS ARE CATEGORY 1100 | | | | |
| PB 1500 | 00+76'JH' | 56.6' | RT | 1 |
| PB 1501 | 15+35'JNB' | 86.1' | RT | 1 |
| PB 1502 | 1190+46'JA' | 31.2' | RT | 1 |
| PB 1503 | 13+09'JNB' | 35.1' | RT | 1 |
| PB 1504 | 13+95'JNB' | 60.7' | LT | 1 |
| PB 1505 | 1183+83'JB' | 36.8' | RT | 1 |
| PB 1600 | 13+18'JNB' | 27.8' | RT | 1 |
| PB 1601 | 14+08'JNB' | 24.1' | RT | 1 |
| PB 1602 | 15+24'JNB' | 52.8' | RT | 1 |
| PB 1603 | 15+49'JNB' | 76.7' | RT | 1 |
| PB 1604 | 1187+33'JA' | 35.9' | RT | 1 |
| PB 1605 | 14+83'JNB' | 67.4' | LT | 1 |
| PB 1606 | 1185+55'JB' | 37.8' | RT | 1 |
| PB 1607 | 1185+68'JB' | 18.4' | LT | 1 |
| PB 1608 | 1187+49'JA' | 48.8' | LT | 1 |
| PB 1609 | 17+79'JNB' | 35.9' | LT | 1 |
| PB 1610 | 17+82'JNB' | 37.0' | RT | 1 |
| PB 1611 | 20+63'JNB' | 35.7' | LT | 1 |
| PB 1612 | 20+78'JNB' | 35.3' | RT | 1 |
| PB 1613 | 1189+43'JD' | 29.2' | RT | 1 |
| PB 1614 | 1189+72'JD' | 73.9' | LT | 1 |
| PB 1615 | 23+55'JNB' | 48.5' | RT | 1 |
| PB 1616 | 24+52'JNB' | 42.1' | RT | 1 |
| PB 1617 | 25+70'JNB' | 30.2' | LT | 1 |
| PB 1618 | 24+57'JNB' | 49.6' | LT | 1 |
| PB 1619 | 1186+99'JC' | 30.8' | LT | 1 |
| PB 1620 | 1186+93'JC' | 30.4' | RT | 1 |
| PB 1621 | 21+71'JNB' | 83.4' | LT | 1 |
| **PROJECT TOTAL** | | | | **28** |

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

3

STREET LIGHTS

| | LIGHT NUMBER | STATION | OFFSET | R/L | 654.0105 * CONCRETE BASES TYPE 5 EACH | 654.0107 CONCRETE BASES TYPE 7 EACH | 657.0210 TRANSFORMER BASES BREAKAWAY 15-17 INCH BOLT CIRCLE EACH | 657.0255 * TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH | 657.0322 POLES TYPE 5 ALUMINUM EACH | 657.0337 POLES TYPE 17 ALUMINUM EACH | 657.0710 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT EACH | 657.0730 LUMINAIRE ARMS TRUSS TYPE 6-INCH CLAMP 12-FT EACH | 659.1120 LUMINAIRES UTILITY LED B EACH | 655.0610 * ELECTRICAL WIRE LIGHTING 12AWG LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALL ITEMS ARE CATEGORY 1100 | | | | | | | | | | | | | | |
| SL | 1600 | 13+36'JNB' | 24.9' | RT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1601 | 14+71'JNB' | 31.1' | RT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1602 | 15+57'JNB' | 74.3' | RT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1603 | 14+88'JNB' | 72.4' | LT | -- | 1 | 1 | -- | -- | 1 | -- | 1 | 1 | 180 |
| SL | 1604 | 1185+74'JB' | 31.8' | RT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1605 | 1184+38'JB' | 22.7' | RT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1606 | 1186+09'JB' | 47.6' | LT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1607 | 1187+32'JA' | 70.8' | LT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1608 | 1188+00'JA' | 21.3' | RT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1609 | 1189+61'JA' | 30.0' | RT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1610 | 17+32'JNB' | 49.0' | LT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1611 | 17+94'JNB' | 32.7' | RT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1612 | 19+20'JNB' | 28.5' | LT | -- | -- | -- | -- | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1613 | 20+63'JNB' | 36.5' | RT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1614 | 21+50'JNB' | 45.2' | RT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1615 | 1189+30'JD' | 47.5' | RT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1616 | 1189+61'JD' | 9.2' | RT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1617 | 1191+01'JD' | 23.4' | LT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1618 | 23+43'JNB' | 50.4' | RT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1619 | 25+60'JNB' | 31.6' | LT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1620 | 24+07'JNB' | 59.6' | LT | -- | 1 | 1 | -- | -- | 1 | -- | 1 | 1 | 180 |
| SL | 1621 | 1187+98'JC' | 48.2' | LT | -- | 1 | 1 | -- | -- | 1 | -- | 1 | 1 | 180 |
| SL | 1622 | 1186+68'JC' | 25.6' | LT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| SL | 1623 | 1185+27'JC' | 25.8' | LT | 1 | -- | -- | 1 | 1 | -- | 1 | -- | 1 | 150 |
| **PROJECT TOTAL** | | | | | **20** | **3** | **3** | **20** | **21** | **3** | **21** | **3** | **24** | **3690** |

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

LIGHTING CONTROL

| CABINET NUMBER | STATION | OFFSET | R/L | 654.0230 CONCRETE CONTROL CABINET BASES TYPE L30 EACH | 656.0201.0001 ELECTRICAL SERVICE METER BREAKER PEDESTAL (CB1600) EACH | 659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH EACH | SPV.0060.0500 LIGHTING CONTROL CABINETS 277/480 30-INCH 3-PHASE EACH | SPV.0060.0501 ELECTRICAL SERVICE MAIN LUGS ONLY METER PEDESTAL 3-PHASE 600V (CB1500) EACH | SPV.0060.0502 CONCRETE TRANSFORMER PAD EACH |
|---|---|---|---|---|---|---|---|---|---|
| ALL ITEMS ARE CATEGORY 1100 | | | | | | | | | |
| CB1500 | 15+27'JNB' | 58.0' | RT | 1 | -- | -- | 1 | 1 | 1 |
| CB1600 | 15+38'JNB' | 64.5' | RT | 1 | 1 | 1 | -- | -- | -- |
| PROJECT TOTALS | | | | 2 | 1 | 1 | 1 | 1 | 1 |

## REMOVING AND SALVAGING FTMS ITEMS

| CATEGORY | LOCATION | STATION | OFFSET | 204.0195* REMOVING CONCRETE BASES EACH | 204.9060.S.0701 REMOVING COMMUNICATIONS VAULT EACH | 204.9060.S.0702 REMOVING RAMP GATE SYSTEM EACH | 677.9051.S REMOVING 50-FT CAMERA POLE EACH | SPV.0060.0703 REMOVE POLES WOOD EACH | SPV.0060.0704 REMOVE AND REINSTALL ITS EQUIPMENT EACH |
|---|---|---|---|---|---|---|---|---|---|
| 1200 | EXISTING CCTV 44-0094 | 1188SB+23.0 | 90.4' LT | 1 | --- | --- | 1 | --- | --- |
| | CV9-1R | 1189SB+83.9 | 285.0' LT | --- | 1 | --- | --- | --- | --- |
| | CV9-2R | 1188SB+05.9 | 367.7' LT | --- | 1 | --- | --- | --- | --- |
| | RG9-1R | 1187NB+46.5 | 343.6' RT | 2 | --- | 1 | --- | --- | --- |
| | RG9-2R | 1187SB+91.9 | 348.2' LT | 2 | --- | 1 | --- | --- | --- |
| | WP9-1 | 1188NB+79.5 | 86.1' RT | --- | --- | --- | --- | 1 | --- |
| | WP9-1 TO CB9-1 | --- | --- | --- | --- | --- | --- | --- | 1 |
| | | | TOTALS | 5 | 2 | 2 | 1 | 1 | 1 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

## ITS BASE SUMMARY

| CATEGORY | LOCATION | STATION | OFFSET | 531.2036 DRILLING SHAFT 36-INCH LF | 531.4050 FOUNDATION CAMERA POLE 50-FT EACH | 654.0105* CONCRETE BASES TYPE 5 EACH | 657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH |
|---|---|---|---|---|---|---|---|
| 1200 | CB9-1 | 1187NB+86.5 | 91.7' RT | 10 | 1 | --- | --- |
| | RG9-1 | 1187NB+55.5 | 303.7' RT | --- | --- | 1 | 1 |
| | RG9-2 | 1187SB+86.1 | 313.1 LT | --- | --- | 1 | 1 |
| | | | TOTALS | 10 | 1 | 2 | 2 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

## ITS CONDUIT SUMMARY

| CATEGORY | FROM | TO | 652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF | 652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF | 652.0605 CONDUIT SPECIAL 2-INCH LF | 655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF |
|---|---|---|---|---|---|---|
| 1200 | CV9-1 | PB9-12 | --- | --- | 58 | 73 |
| | PB9-12 | PB9-13 | 262 | --- | --- | 277 |
| | PB9-13 | PB9-14 | --- | --- | 212 | 227 |
| | PB9-14 | PB9-15 | 189 | --- | --- | 204 |
| | PB9-15 | PB9-16 | 188 | --- | --- | 203 |
| | PB9-16 | QP9-1 | 26 | --- | --- | 41 |
| | QP9-1 | QP9-2 | --- | --- | 80 | 95 |
| | QP9-2 | CV9-2 | 56 | --- | --- | 71 |
| | PB9-1 | PB9-2 | --- | 179 | --- | 194 |
| | PB9-2 | PB9-3 | --- | 227 | --- | 242 |
| | PB9-3 | PB9-4 | --- | 65 | --- | 80 |
| | PB9-4 | PB9-5 | --- | 153 | --- | 168 |
| | PB9-5 | PB9-7 | --- | 93 | --- | 108 |
| | PB9-7 | PB9-6 | 62 | 62 | --- | 77 |
| | PB9-6 | CB9-1 | 19 | 19 | --- | 34 |
| | PB9-7 | PB9-8 | 94 | 94 | --- | 109 |
| | PB9-8 | PB9-9 | 77 | 77 | --- | 92 |
| | PB9-9 | PB9-10 | 63 | --- | --- | 78 |
| | PB9-10 | LIGHTING MB | 14 | --- | --- | 29 |
| | PB9-9 | PB9-11 | 187 | 187 | --- | 202 |
| | PB9-11 | PB9-17 | --- | 123 | --- | 138 |
| | WP9-1 | PB9-1T | 36 | --- | --- | 51 |
| | PB9-1T | PB9-2T | 107 | --- | --- | 122 |
| | PB9-2T | PB9-11 | 64 | --- | 64 | 79 |
| | | TOTALS | 1,455 | 1283 | 438 | 2,994 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

## ITS PULL BOX SUMMARY

| CATEGORY | LOCATION | STATION | OFFSET | 653.0154 PULL BOXES NON-CONDUCTIVE 24X36-INCH EACH | 653.0164* PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH |
|---|---|---|---|---|---|
| 1200 | PB9-1 | 1181NB+25.7 | 162.9' RT | 1 | --- |
| | PB9-2 | 1182NB+98.6 | 211.4' RT | 1 | --- |
| | PB9-3 | 1185NB+17.6 | 269.5' RT | --- | 1 |
| | PB9-4 | 1185NB+34.1 | 207.1' RT | --- | 1 |
| | PB9-5 | 1186NB+75.8 | 149.0' RT | --- | 1 |
| | PB9-6 | 1187NB+83.0 | 109.9' RT | 1 | --- |
| | PB9-7 | 1187NB+66.2 | 169.5' RT | --- | 1 |
| | PB9-8 | 1187NB+92.4 | 259.6' RT | --- | 1 |
| | PB9-9 | 1188NB+09.9 | 334.6' RT | --- | 1 |
| | PB9-10 | 1187NB+56.8 | 369.0' RT | 1 | --- |
| | PB9-11 | 1189SB+77.9 | 253.5' RT | --- | 1 |
| | PB9-12 | 1184SB+68.6 | 203.0' LT | --- | 1 |
| | PB9-13 | 1187SB+30.5 | 195.6' LT | --- | 1 |
| | PB9-14 | 1189SB+36.4 | 146.0' LT | --- | 1 |
| | PB9-15 | 1191SB+19.3 | 99.7' LT | 1 | --- |
| | PB9-16 | 1193SB+00.4 | 49.5' LT | --- | 1 |
| | PB9-17 | 1190SB+89.1 | 200.1' RT | 1 | --- |
| | PB9-1T | 1189NB+14.3 | 95.0' RT | 1 | --- |
| | PB9-2T | 1189NB+53.1 | 194.6' RT | --- | 1 |
| | | | TOTALS | 7 | 12 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

## REMOVING PULL BOXES

| CATEGORY | LOCATION | STATION | OFFSET | 653.0905* EACH |
|---|---|---|---|---|
| 1200 | PB9-1R | 188SB+27.7 | 108.5' LT | 1 |
| | PB9-2R | 1189SB+35.2 | 229.4' LT | 1 |
| | PB9-3R | 1189SB+82.2 | 278.6' LT | 1 |
| | PB9-4R | 1189SB+49.3 | 373.6' LT | 1 |
| | PB9-1T | 1189NB+14.3 | 95.0' RT | 1 |
| | PB9-2T | 1189NB+53.1 | 194.6' RT | 1 |
| | | | TOTAL | 6 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

## ITS ELECTRICAL WIRE

| CATEGORY | LOCATION FROM | LOCATION TO | 655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF | 655.0635 ELECTRICAL WIRE LIGHTING 2 AWG LF |
|---|---|---|---|---|
| 1200 | LIGHTING MB | WP9-1 | 1,752 | --- |
| | LIGHTING MB | CB9-1 | --- | 1,320 |
| | | TOTALS | 1,752 | 1,320 |

## ELECTRICAL SERVICE BREAKER DISCONNECT BOX

| CATEGORY | LOCATION | 656.0501.01 EACH |
|---|---|---|
| 1200 | CB9-1 | 1 |

## ITS POLES AND EQUIPMENT

| CATEGORY | LOCATION | 662.1026.S RAMP CLOSURE GATES 26-FT EACH | 677.0150 INSTALL CAMERA POLE 50-FT EACH | 677.0200 INSTALL CAMERA ASSEMBLY EACH | 678.0700 INSTALL WIRELESS ANTENNAS EACH | SPV.0060.0702 WOOD POLE, 50-FT EACH |
|---|---|---|---|---|---|---|
| 1200 | CB9-1 | --- | 1 | --- | --- | --- |
| | RG9-1 | 1 | --- | --- | --- | --- |
| | RG9-2 | 1 | --- | --- | --- | --- |
| | STH 55 EXISTING CAMERA POLE | --- | --- | --- | 1 | --- |
| | WP9-1 | --- | --- | 1 | 1 | 1 |
| | TOTALS | 2 | 1 | 1 | 2 | 1 |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

## FREEWAY TRAFFIC MANAGEMENT SYSTEM

| CATEGORY | PROJECT | 670.0101 FIELD SYSTEM INTEGRATOR EACH | 670.0201 ITS DOCUMENTATION EACH | 678.0501 COMMUNICATION SYSTEM TESTING EACH |
|---|---|---|---|---|
| 1200 | 1130-66-78 | 1 | 1 | 1 |

## COMMUNICATION VAULTS

| CATEGORY | LOCATION | STATION | OFFSET | 673.0105 COMMUNICATION VAULT TYPE 1 EACH | 673.0200 TRACER WIRE MARKER POST EACH |
|---|---|---|---|---|---|
| 1200 | CV9-1 | 1184SB+46.1 | 256.5' LT | 1 | 2 |
| | CV9-2 | 1193SB+48.5 | 204.4' LT | 1 | 2 |
| | | | TOTALS | 2 | 4 |

## ITS CABINET SUMMARY

| CATEGORY | LOCATION | 673.1225.S INSTALL POLE MOUNTED CABINET EACH | 678.0600 INSTALL ETHERNET SWITCHES EACH |
|---|---|---|---|
| 1200 | WP9-1 | 1 | 1 |

## REMOVE CABLE

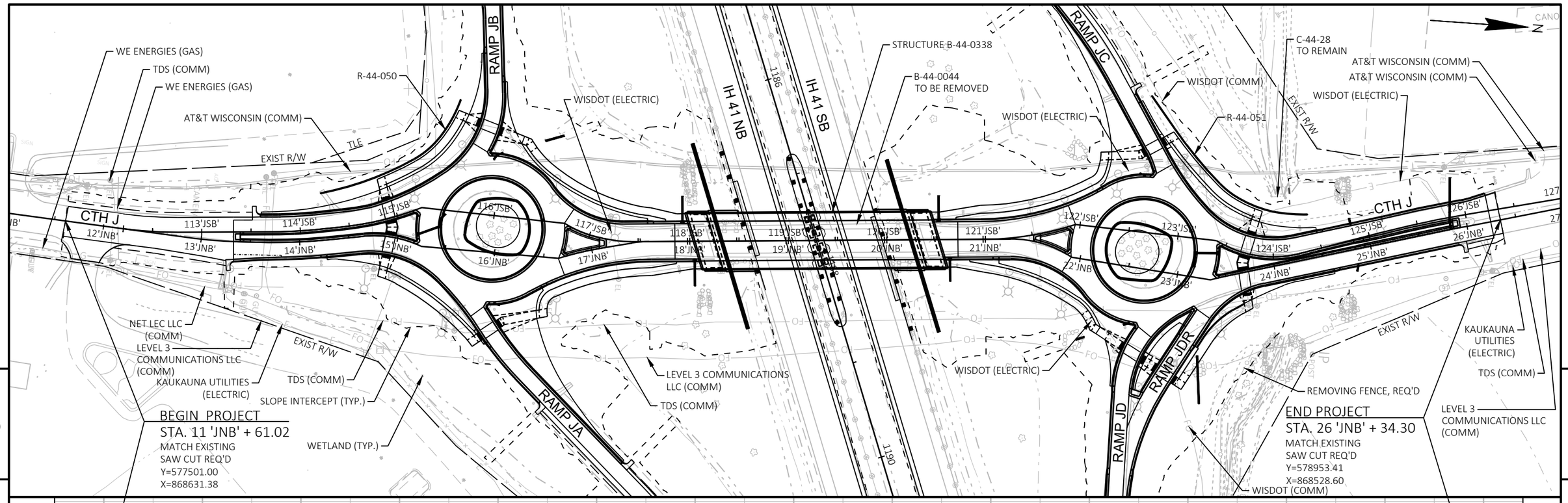
| CATEGORY | FROM | TO | 674.0300 LF |
|---|---|---|---|
| 1200 | CV9-1 | CV9-2 | 706 |
| | LIGHTING MB | WP9-1 | 479 |
| | CV9-1R | EXISTING CCTV 44-0094 | 223 |
| | | TOTAL | 1,408 |

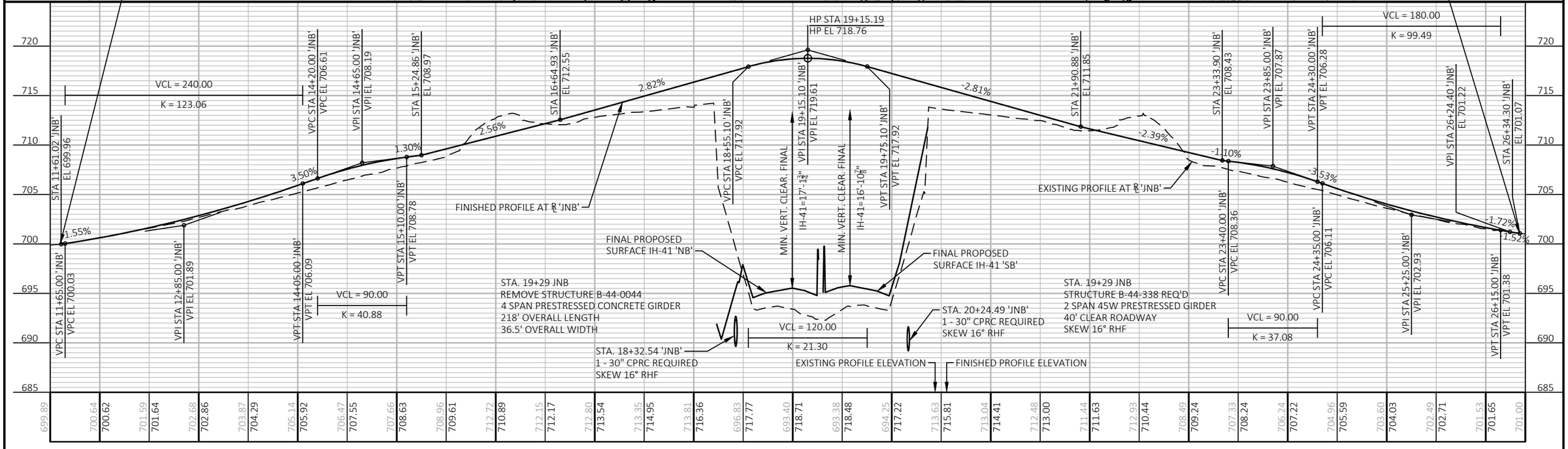
## INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 24-CT

| CATEGORY | LOCATION FROM | LOCATION TO | 678.0024 LF |
|---|---|---|---|
| 1200 | CV9-1 | CV9-2 | 1,339 |

## FIBER OPTIC SPLICE SUMMARY

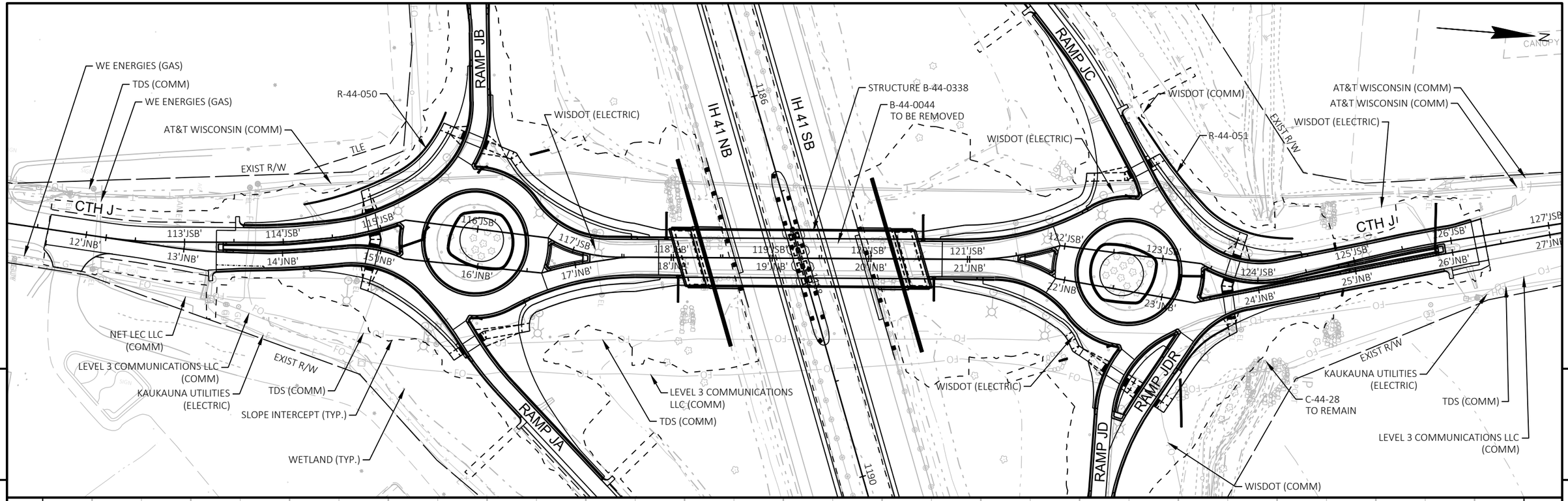
| CATEGORY | EQUIP. LOCATION | 678.0200 FIBER OPTIC SPLICE ENCLOSURE EACH | 678.0300 FIBER OPTIC SPLICE EACH |
|---|---|---|---|
| 1200 | CV9-1 | 1 | 24 |
| | CV9-2 | 1 | 24 |
| | TOTALS | 2 | 48 |

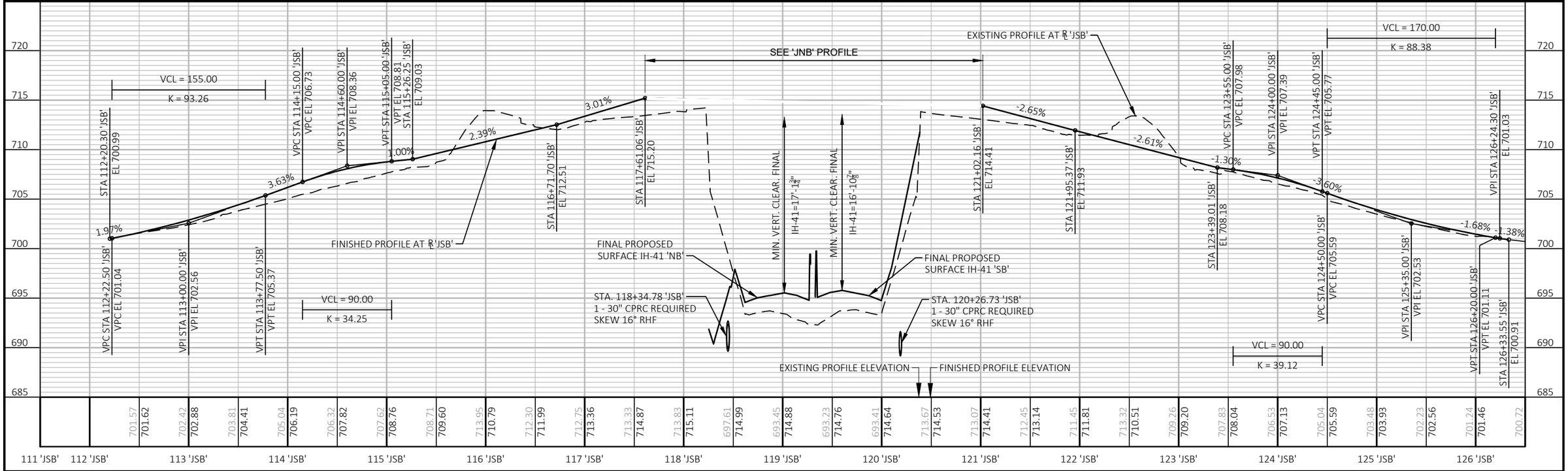


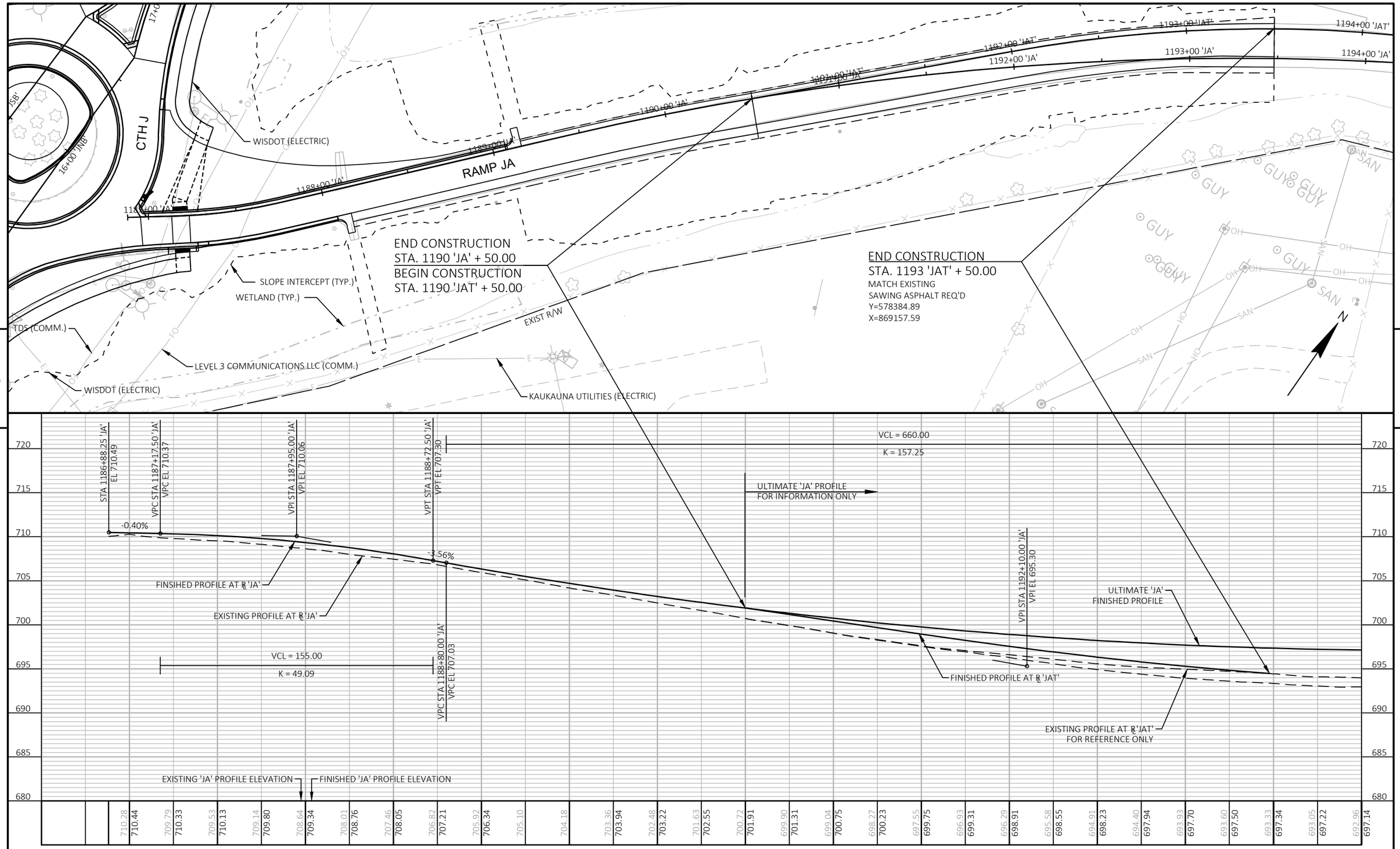

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN AND PROFILE: CTH J NORTHBOUND (JNB) | SHEET 217 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\DREWS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\050101-PP-J.DWG
LAYOUT NAME - 050101-pp-jnb
PLOT DATE : 7/31/2024 5:01 PM
PLOT BY : STANIOCH, DREW
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44




| | | | | |
|---|---|---|---|---|
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN AND PROFILE: CTH J SOUTHBOUND (JSB) | SHEET 218 E |

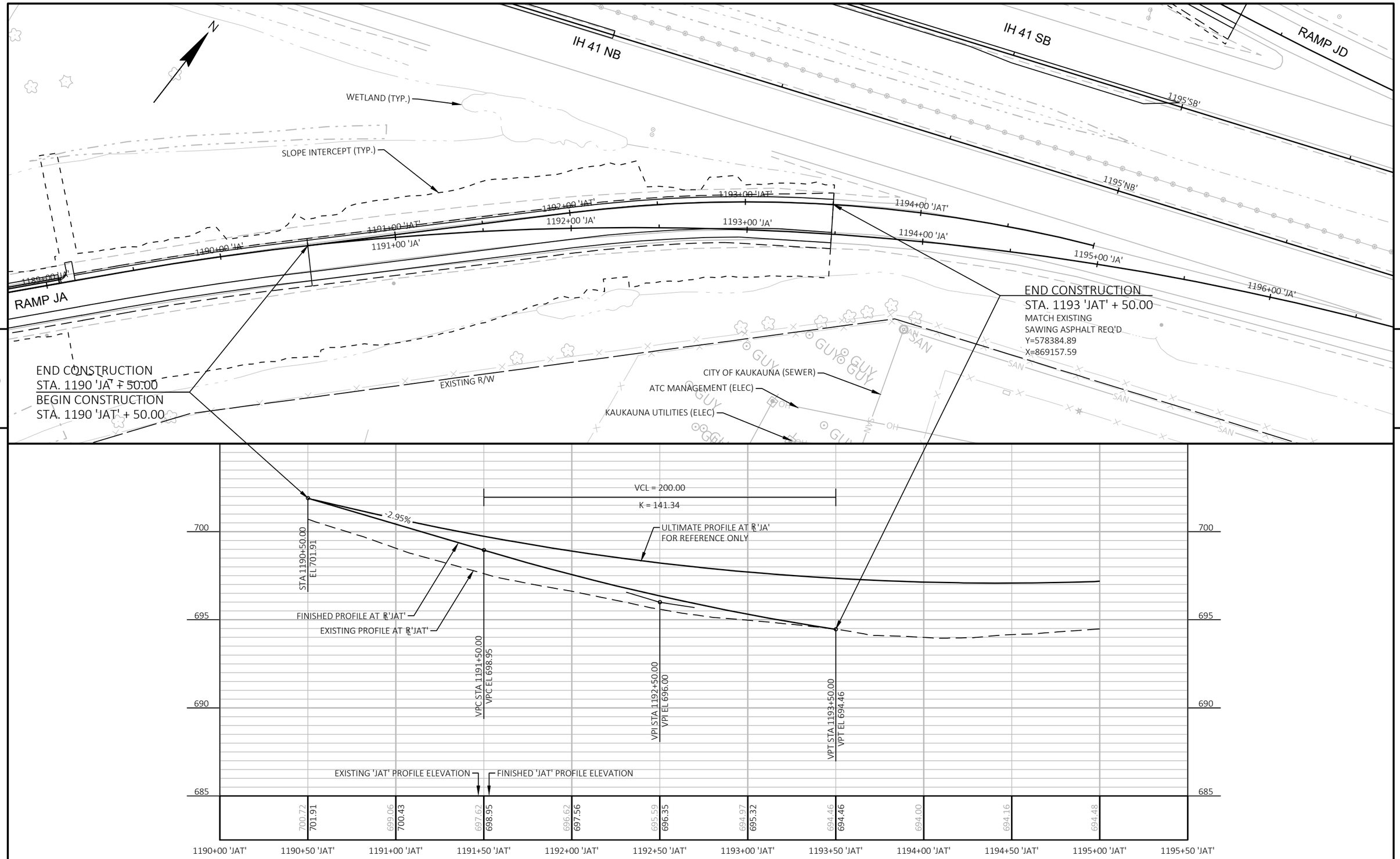



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN AND PROFILE: RAMP JA | SHEET 219 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\DREWS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\050103-PP-JA.DWG
LAYOUT NAME - 050101-pp-ja

PLOT DATE : 7/31/2024 4:07 PM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:50 FT

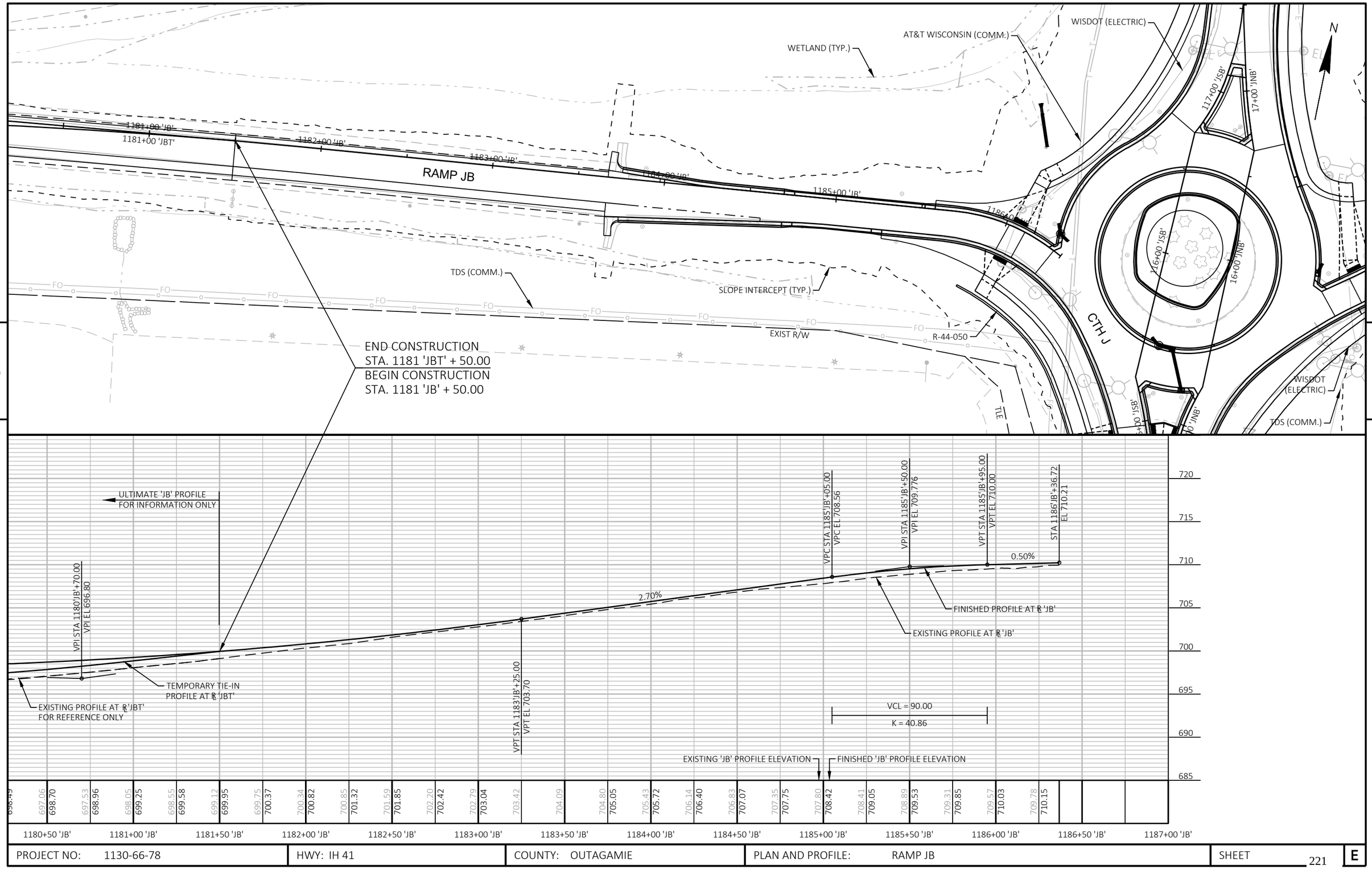
WISDOT/CADDS SHEET 44




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN AND PROFILE: RAMP JAT | SHEET 220 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\DREWS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\050103-PP-JAT.DWG
LAYOUT NAME - 050101-pp-jat

PLOT DATE : 7/31/2024 4:09 PM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:50 FT



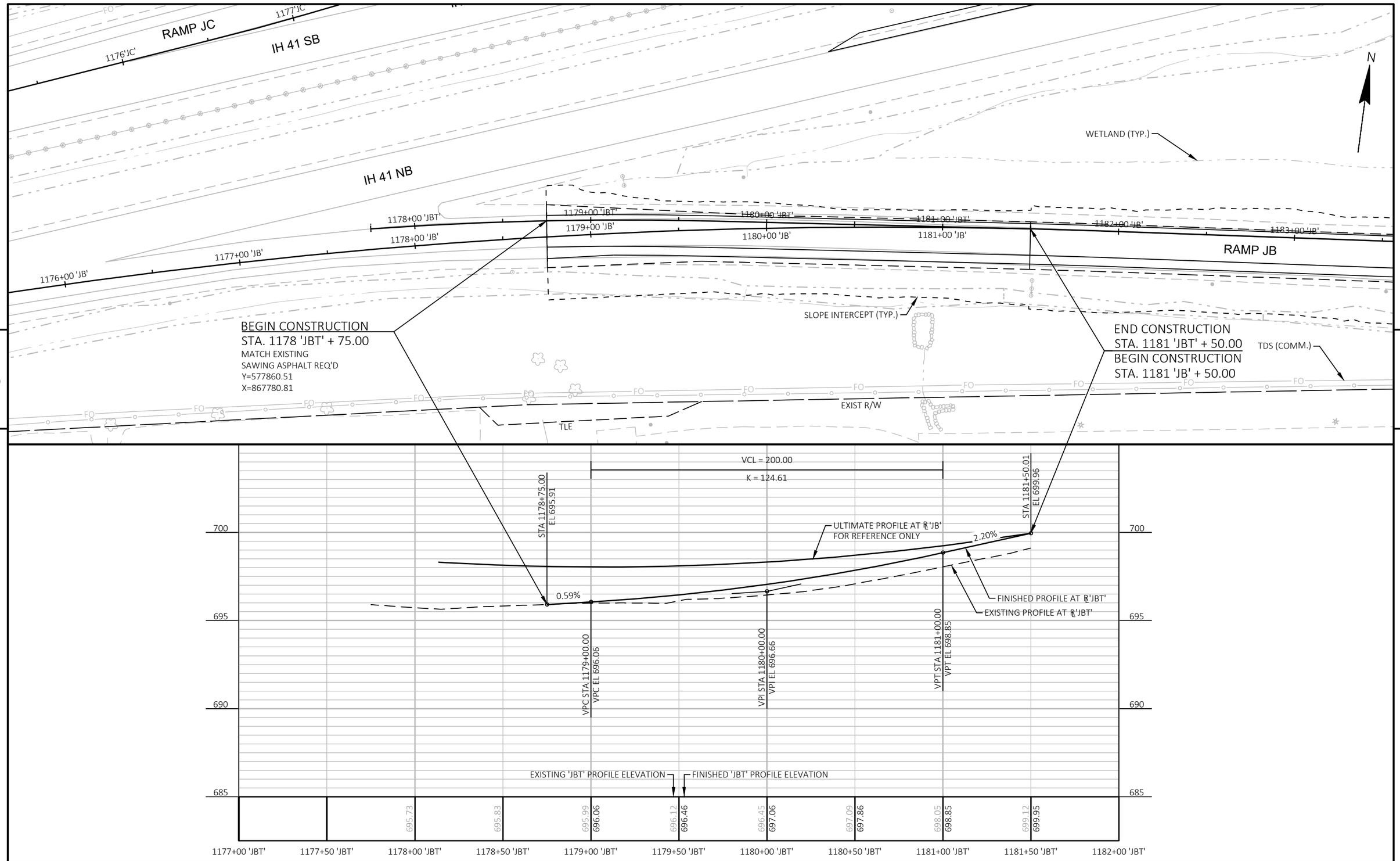

5

5

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN AND PROFILE: RAMP JB | SHEET 221 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\DREWS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\050104-PP-JB.DWG
LAYOUT NAME - 050101-pp-jb

PLOT DATE : 7/31/2024 4:12 PM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:50 FT

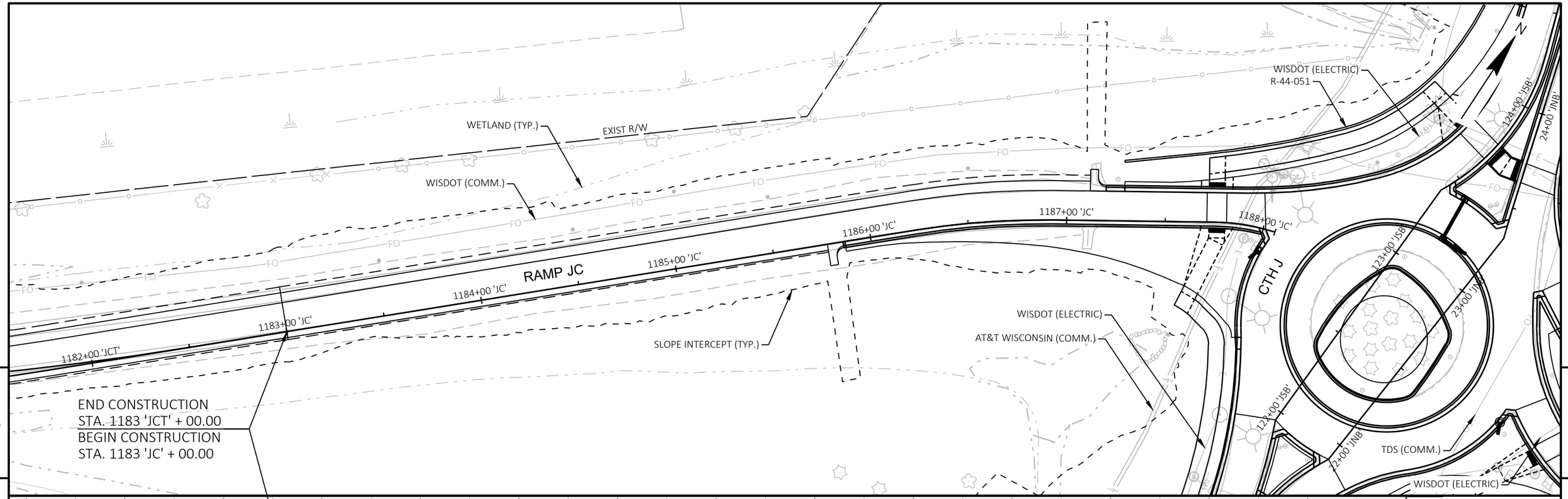



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN AND PROFILE: RAMP JBT | SHEET 222 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\DREWS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\050104-PP-JBT.DWG
LAYOUT NAME - 050101-pp-jbt

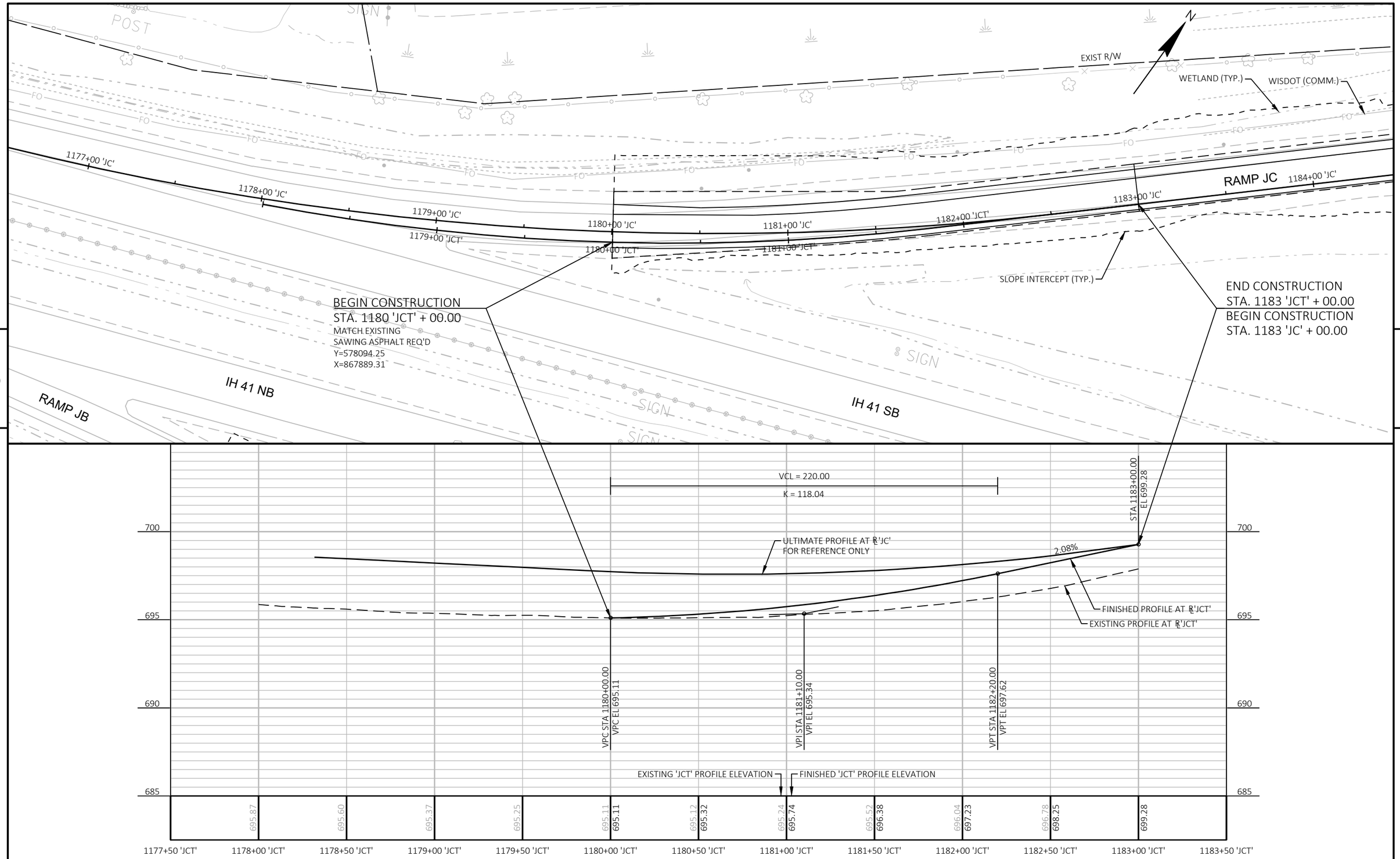
PLOT DATE : 7/31/2024 4:14 PM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN AND PROFILE: RAMP JC | SHEET 223 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\DREWS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\050105-PP-JC.DWG
LAYOUT NAME - 050101-pp-jc
PLOT DATE : 7/31/2024 4:16 PM
PLOT BY : STANIOCH, DREW
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

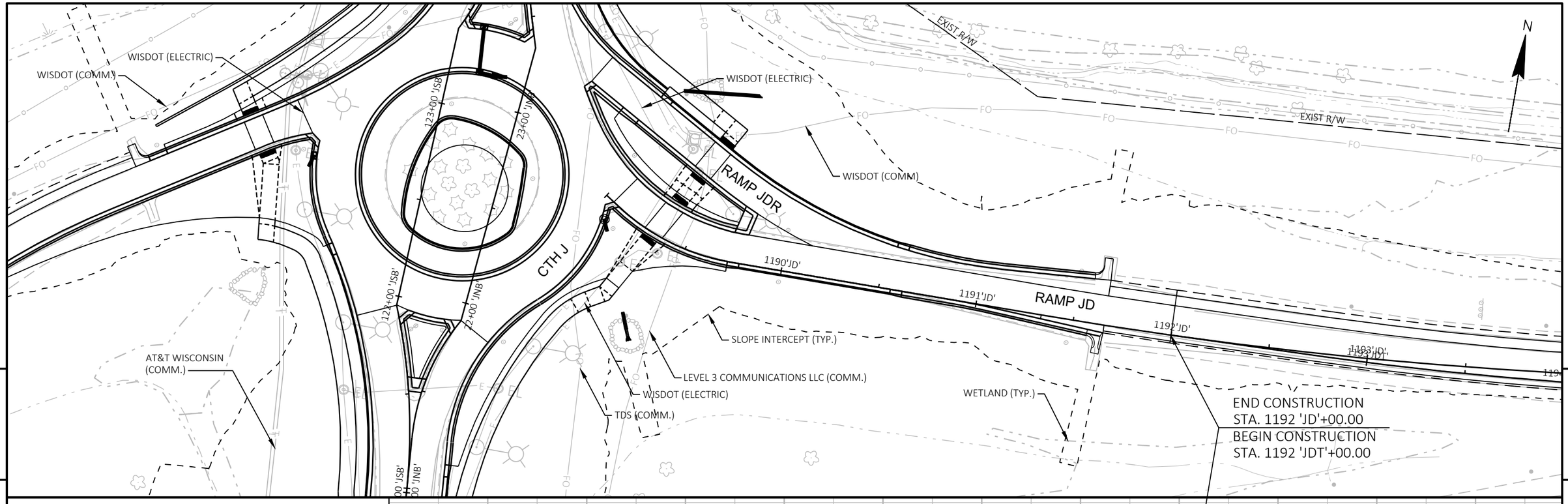



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN AND PROFILE: RAMP JCT | SHEET 224 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\DREWS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\050105-PP-JCT.DWG
LAYOUT NAME - 050101-pp-jct

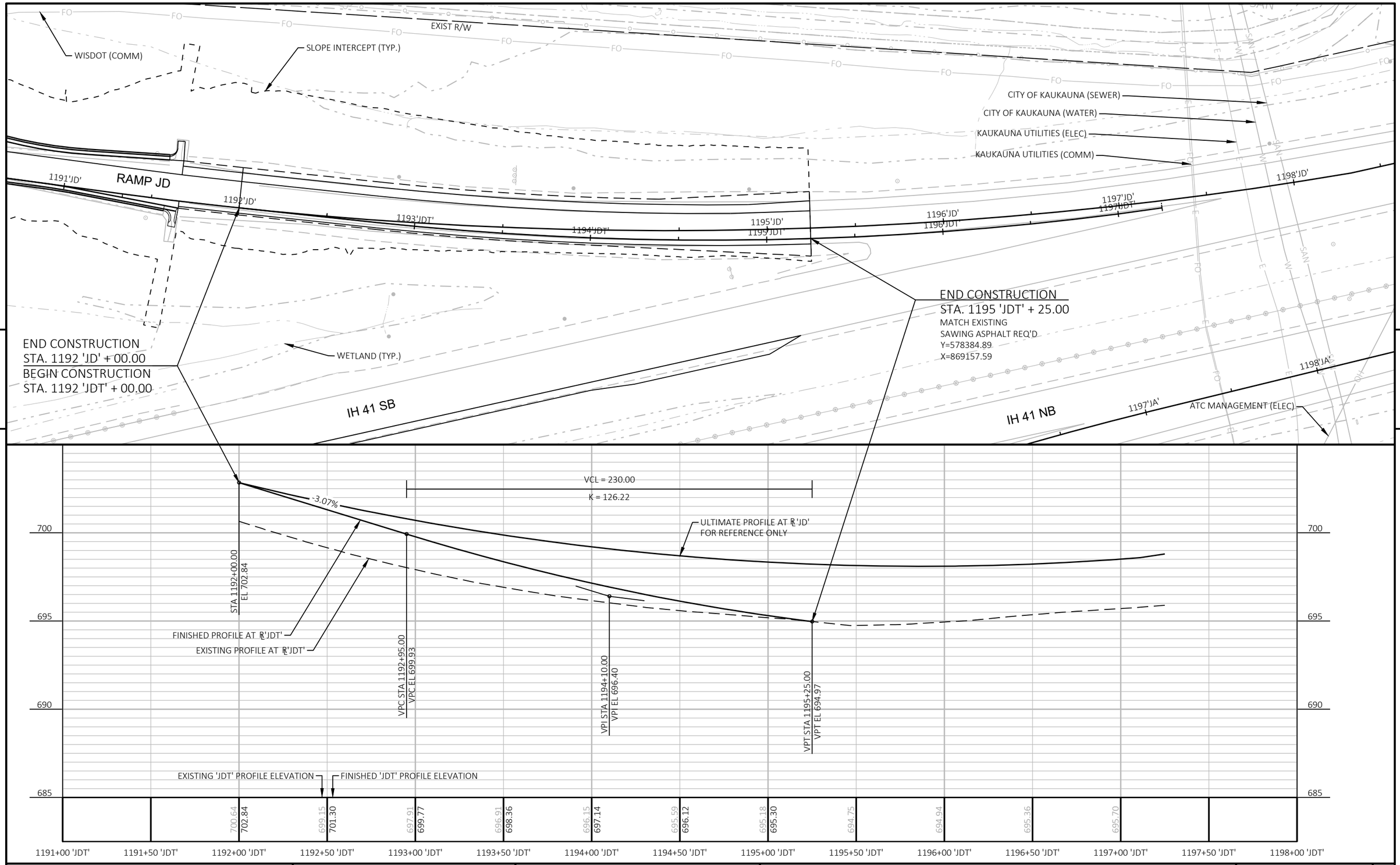
PLOT DATE : 7/31/2024 4:18 PM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



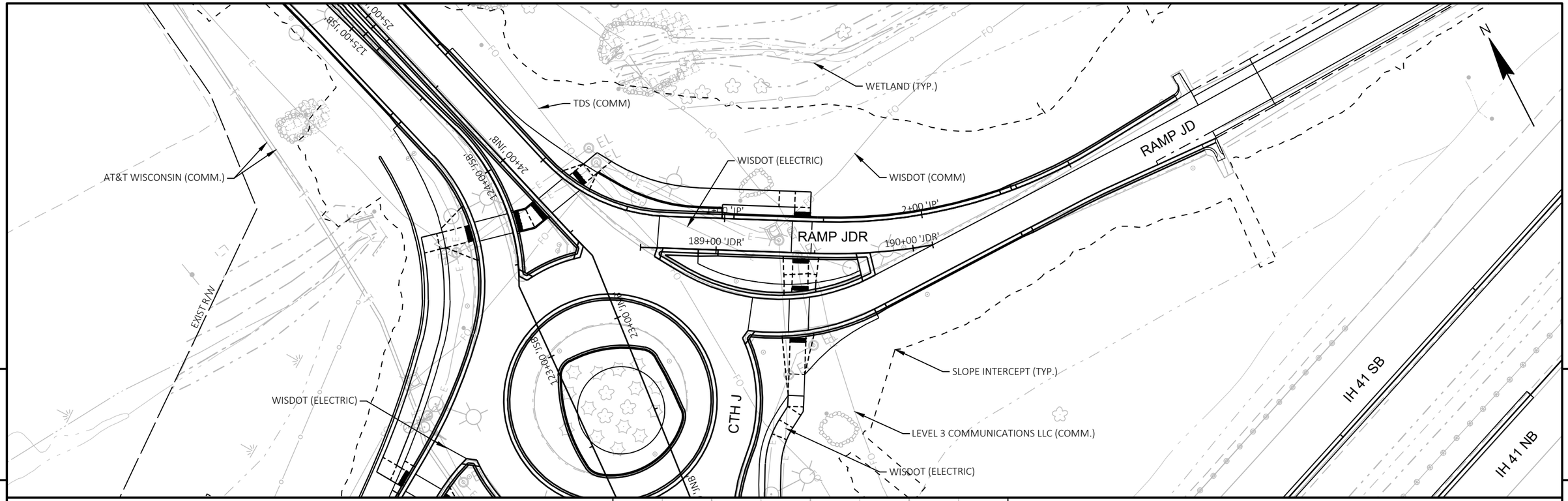

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN AND PROFILE: RAMP JD | SHEET 225 | E |
|---|---|---|---|---|---|

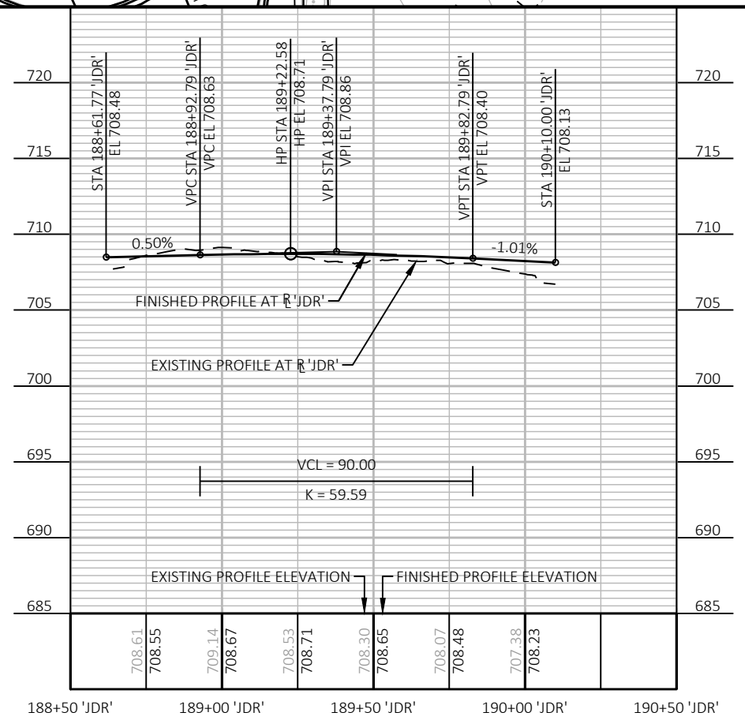

FILE NAME : C:\USERS\DREWS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\050106-PP-JD.DWG
LAYOUT NAME - 050101-pp-jd
PLOT DATE : 7/31/2024 4:20 PM
PLOT BY : STANIOCH, DREW
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN AND PROFILE: RAMP JDT | SHEET 226 E |
|---|---|---|---|---|

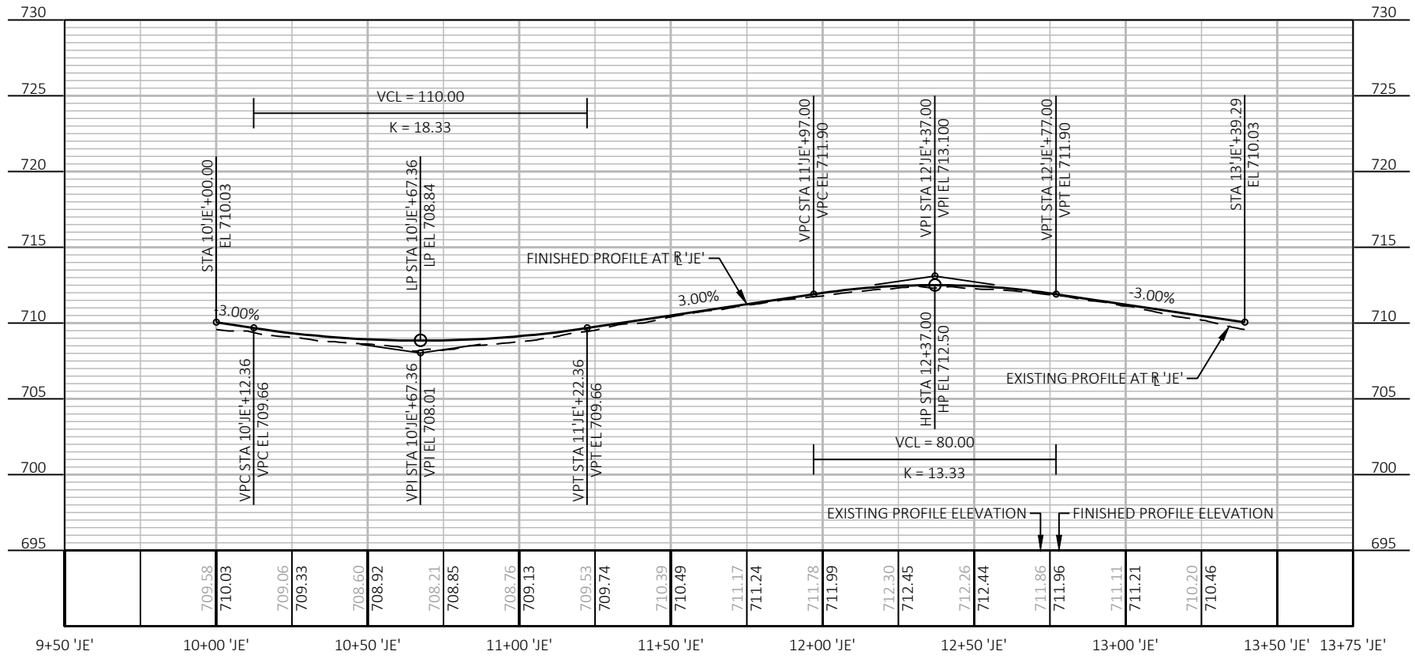
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LAYOUT NAME - 050101-pp-jdt
PLOT DATE : 7/31/2024 7:24 PM PLOT BY : GRIMME, SARA PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

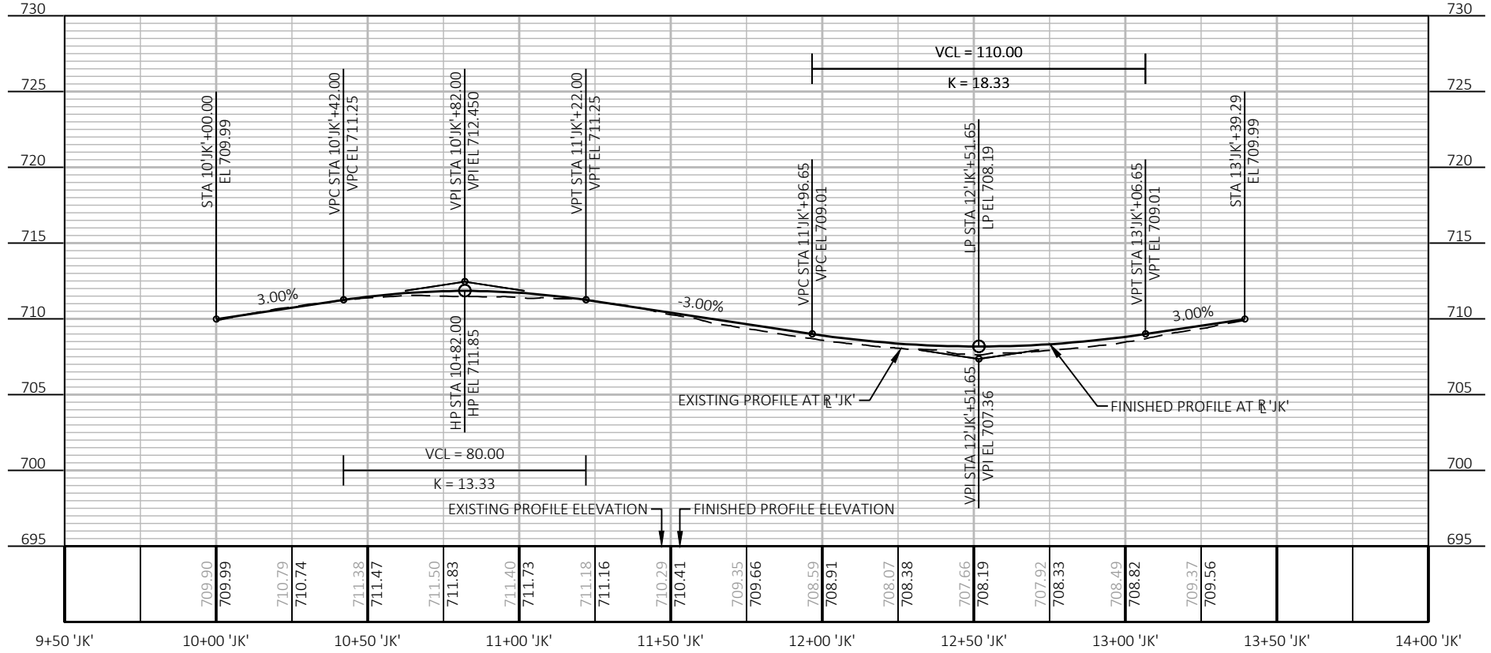



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PLAN AND PROFILE: RAMP JDR | SHEET 227 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\DREWS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\050108-PP-JDR.DWG
LAYOUT NAME - 050101-pp-jdr
PLOT DATE : 7/31/2024 4:24 PM
PLOT BY : STANIOCH, DREW
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44




| | | | | |
|---|---|---|---|---|
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CTH J ROUNDABOUT PROFILES | SHEET 228 E |

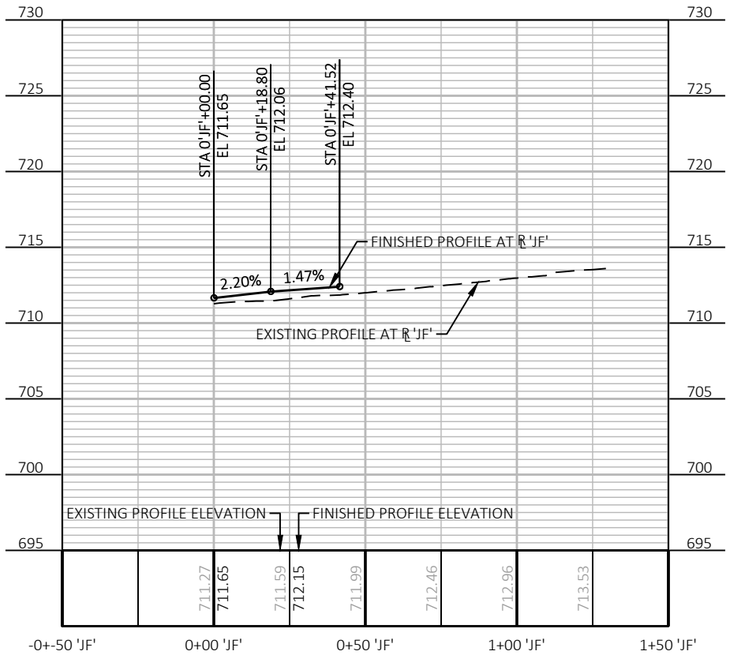
FILE NAME : C:\USERS\DREWS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\050107-PP-J.DWG
LAYOUT NAME - 050101-pp-j

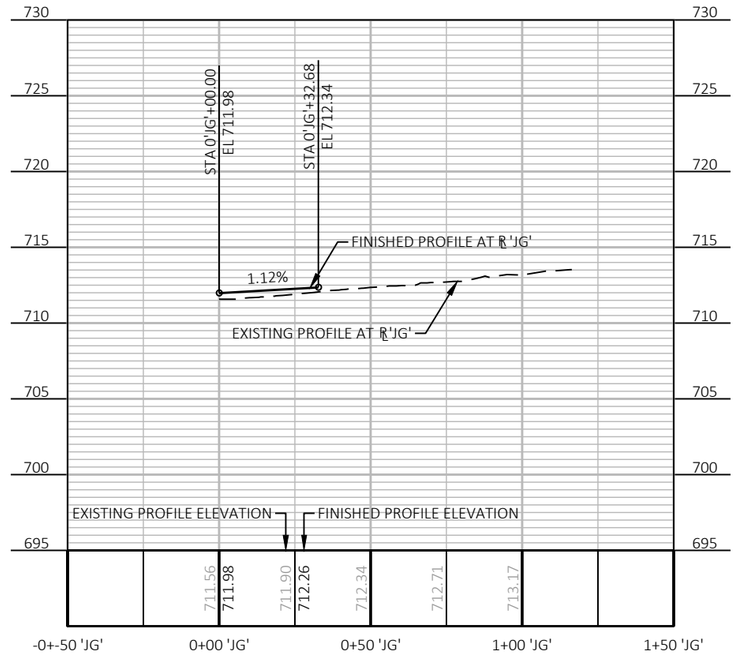
PLOT DATE : 7/31/2024 4:26 PM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : ##########

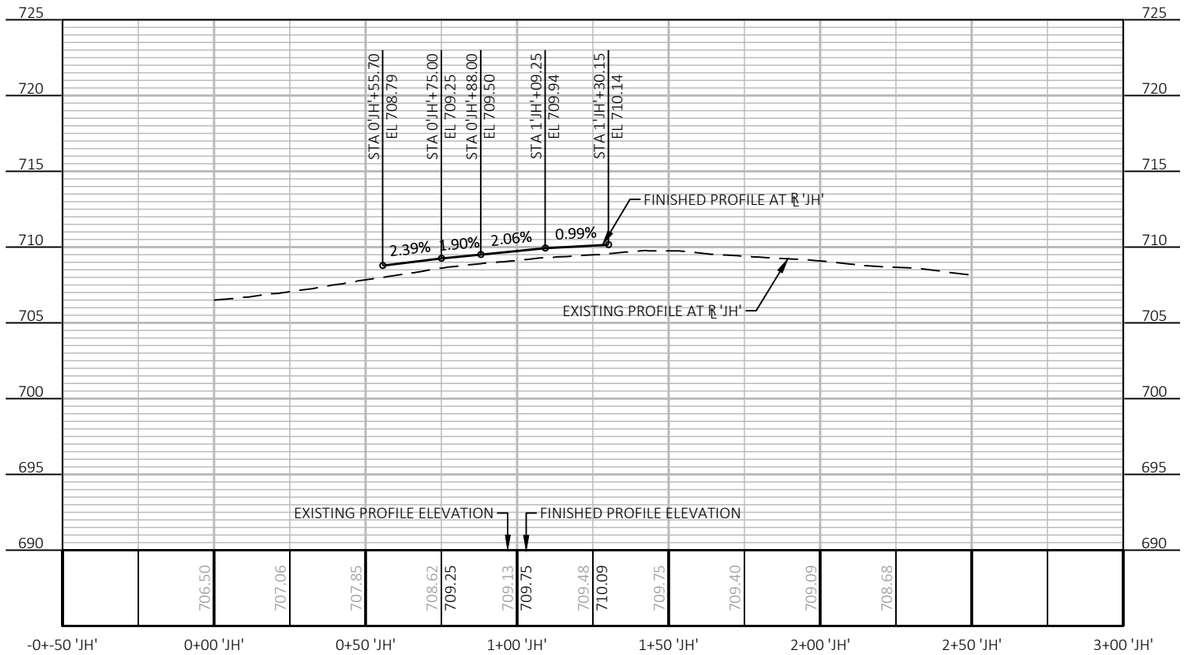
WISDOT/CADDS SHEET 44

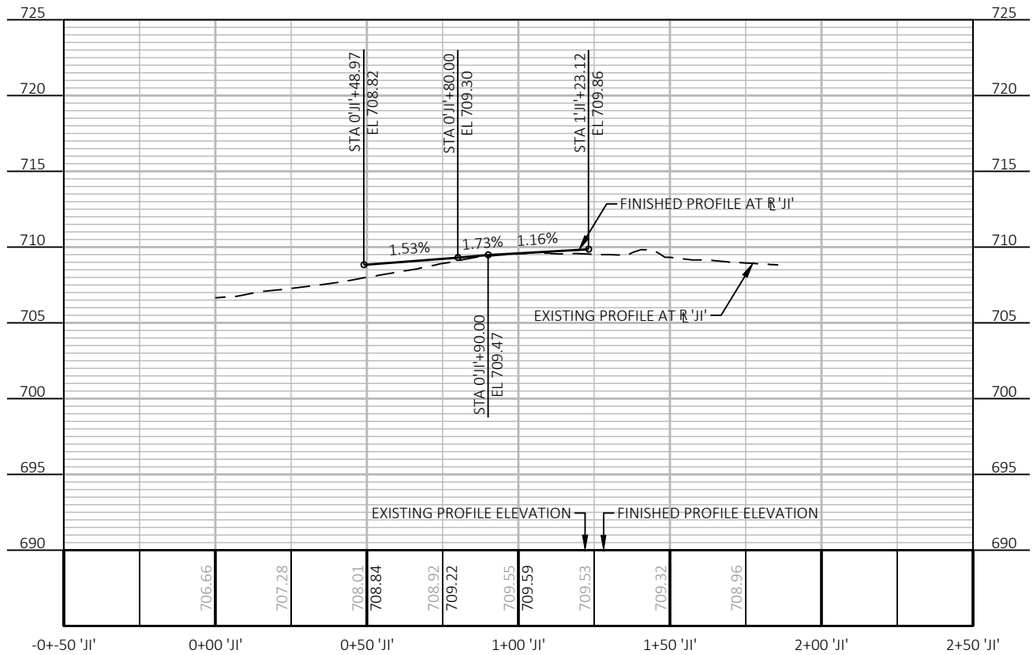
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5



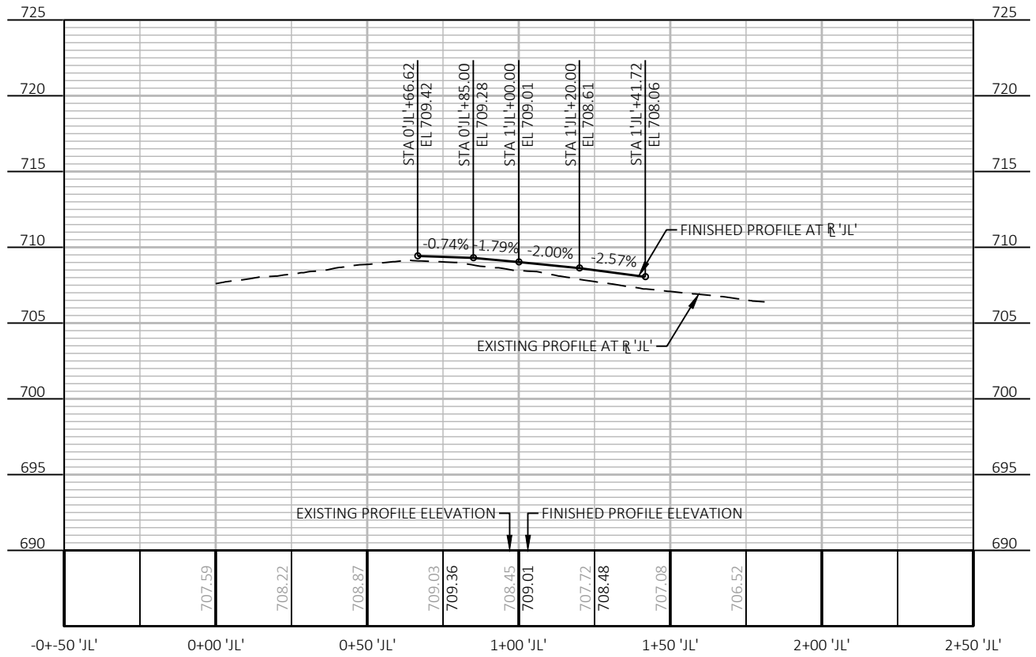



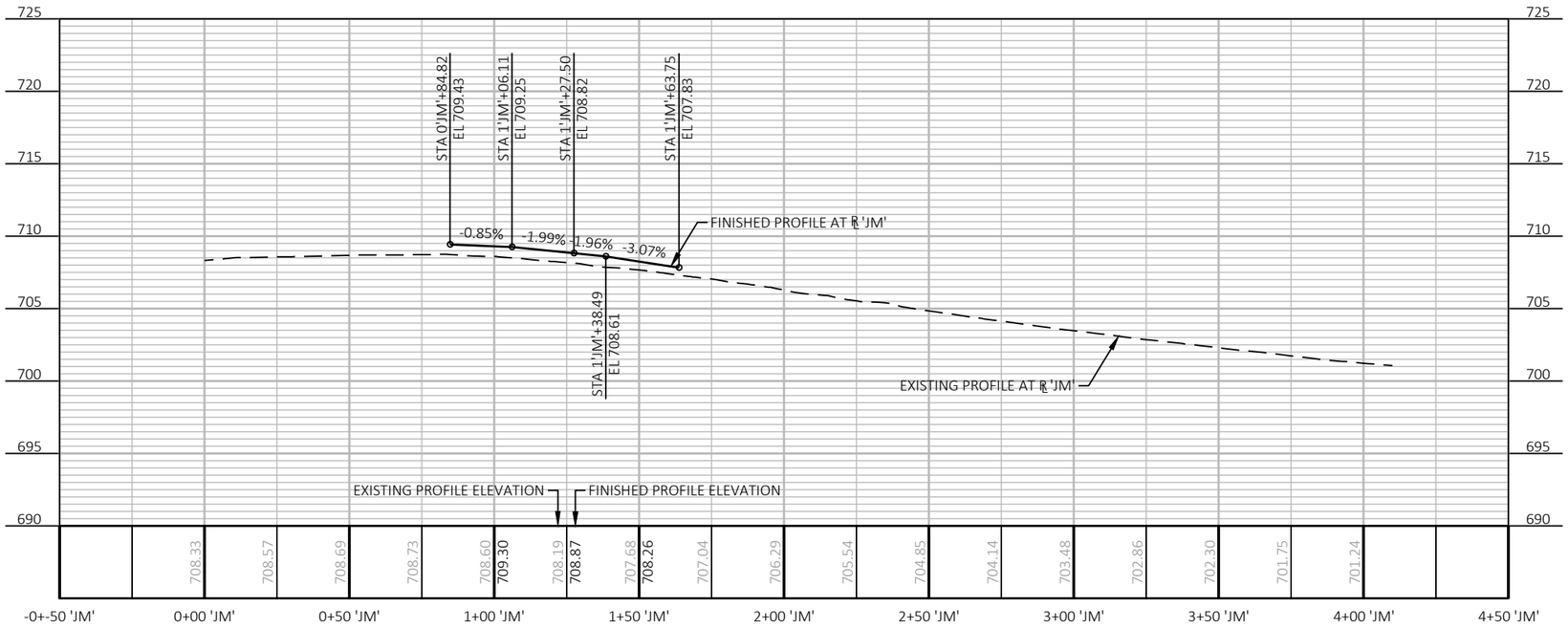

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5

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CTH J ROUNDABOUT PROFILES | SHEET 229 | E |
|---|---|---|---|---|---|

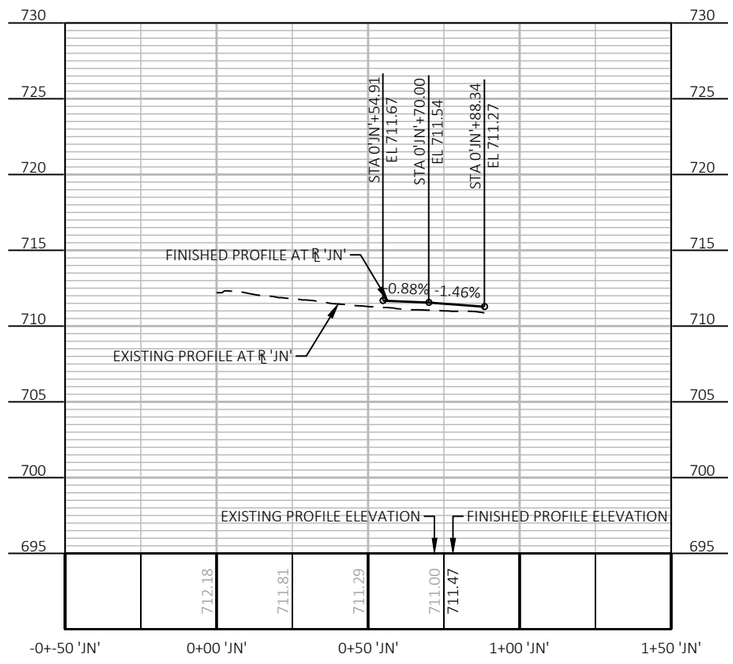

FILE NAME : C:\USERS\DREWS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\050107-PP-J.DWG
LAYOUT NAME - 050102-pp-j
PLOT DATE : 7/31/2024 4:27 PM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

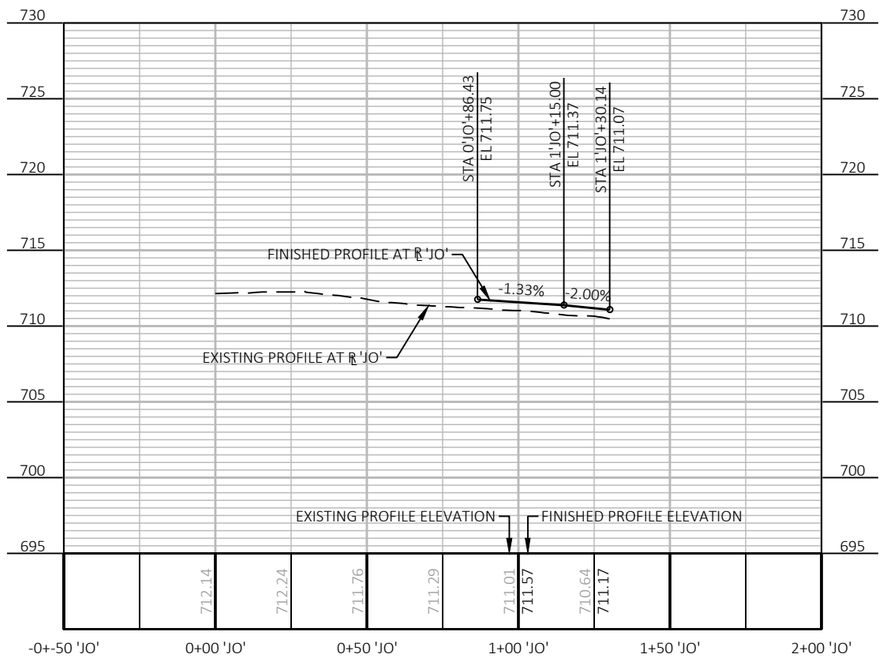


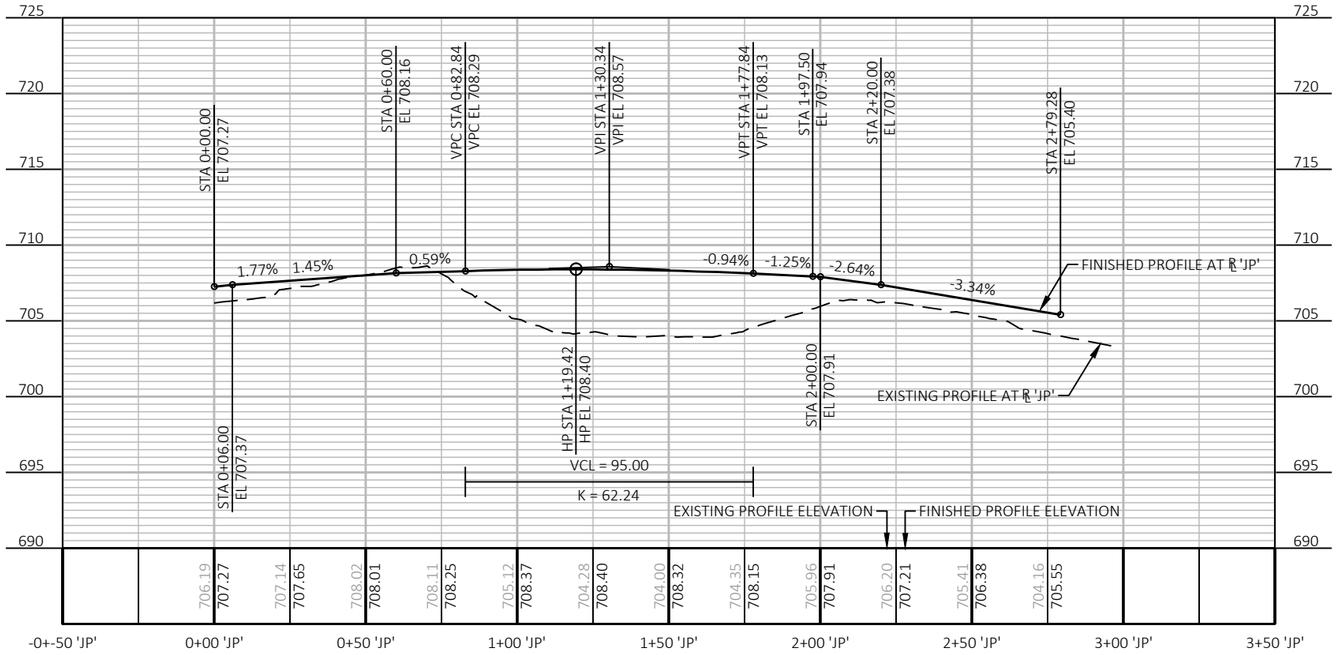




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CTH J ROUNDABOUT PROFILES | SHEET 230 | E |
|---|---|---|---|---|---|


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LAYOUT NAME - 050103-pp-j
PLOT DATE : 7/31/2024 4:27 PM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CTH J ROUNDABOUT PROFILES | SHEET 231 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\DREWS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\050107-PP-J.DWG
LAYOUT NAME - 050104-pp-j

PLOT DATE : 7/31/2024 4:28 PM PLOT BY : STANIOCH, DREW PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

# Standard Detail Drawing List

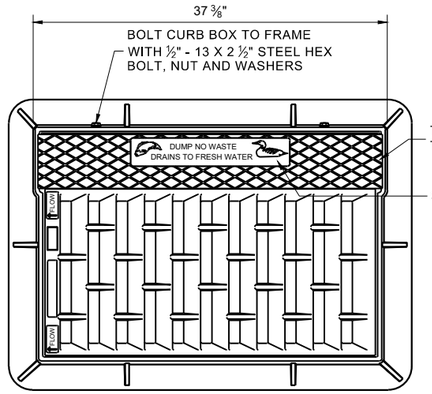
| | |
|---|---|
| 08A05-21A | INLET COVERS TYPE A, H, A-S, H-S & Z |
| 08A05-21C | INLET COVERS TYPE F, HM, HM-S, S, T, HM-GJ & HM-GJ-S |
| 08C06-03 | INLETS 3-FT AND 4-FT DIAMETER |
| 08C07-03 | INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT |
| 08D01-23A | CONCRETE CURB & GUTTER |
| 08D01-23B | CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS |
| 08D04-07 | CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES |
| 08D05-21A | CURB RAMPS TYPES 1 AND 1-A |
| 08D05-21B | CURB RAMPS TYPES 2 AND 3 |
| 08D05-21C | CURB RAMPS TYPES 4A AND 4A1 |
| 08D05-21D | CURB RAMPS TYPE 4B AND 4B1 |
| 08D05-21E | CURB RAMPS TYPES 5, 6, 7A, 7B & 8 |
| 08D05-21F | CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS |
| 08D05-21G | CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES |
| 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 |
| 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 |
| 09C08-06 | CONCRETE BASE, TYPE 7 |
| 09C10-03 | TRANSFORMER BASE FOR 15" BOLT CIRCLE |
| 09C14-03 | CONCRETE CONTROL CABINET BASE, TYPE L |
| 09D03-03 | POST MOUNTED CONTROLLER SERVICE INSTALLATION |
| 09D04-03 | LIGHTING CONTROL CABINET 120/240 VOLT |
| 09D05-02 | L30 LIGHTING CONTROL CABINET 240/480 VOLT |
| 09E01-15D | POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET) |
| 09E01-15F | POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 17 (40 FEET) |
| 09E01-15G | HARDWARE DETAILS FOR POLE MOUNTINGS |
| 09E03-06 | NON-FREEWAY LIGHTING UNIT POLE WIRING |
| 09H03-01 | 2 CIRCUIT METER BREAKER PEDESTAL |
| 09H04-01 | 2 CIRCUIT ELECTRICAL SERVICE METER BREAKER PEDESTAL AND BREAKER DISCONNECT BOX |
| 09H05-01 | CABINET BREAKER DISCONNECT BOX INSTALLATION |
| 09H09-02 | COMMUNICATION VAULT TYPE 1 |
| 09H11-01 | IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS |
| 09H16-01 | INSTALL WIRELESS ANTENNA |
| 10A18-05B | LUMINAIRE ARMS, TRUSS TYPE 6-INCH CLAMP |
| 11B02-02 | CONCRETE MEDIAN NOSE |
| 12A03-10 | NAME PLATE (STRUCTURES) |
| 12A04-03 | STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD  SIGN SUPPORTS & TRAFFIC SIGNALS |
| 13A05-06A | SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY |
| 13A05-06B | SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY |
| 13B02-09A | CONCRETE PAVEMENT APPROACH SLAB |
| 13B02-09B | STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB |
| 13C01-19 | CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES |
| 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 |
| 14A02-01 | TREE PLANTING DETAIL |
| 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" |

6

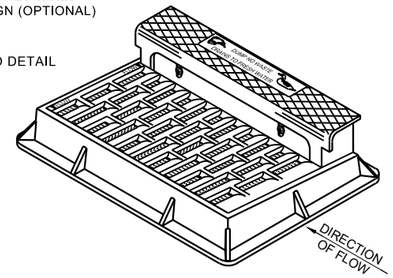
# Standard Detail Drawing List

| | |
|---|---|
| 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 |
| 14B15-11A | STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS |
| 14B15-11B | STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS |
| 14B15-11C | STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS |
| 14B16-04A | ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2 |
| 14B16-04B | ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2 |
| 14B26-05A | STEEL THRIE BEAM BULLNOSE TERMINAL |
| 14B26-05B | STEEL THRIE BEAM BULLNOSE TERMINAL |
| 14B26-05C | STEEL THRIE BEAM BULLNOSE TERMINAL |
| 14B26-05D | STEEL THRIE BEAM BULLNOSE TERMINAL |
| 14B26-05E | STEEL THRIE BEAM BULLNOSE TERMINAL |
| 14B26-05F | STEEL THRIE BEAM BULLNOSE TERMINAL |
| 14B26-05G | STEEL THRIE BEAM BULLNOSE TERMINAL |
| 14B26-05H | STEEL THRIE BEAM BULLNOSE TERMINAL |
| 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 |
| 15C02-09D | ON RAMP LANE CLOSURE |
| 15C02-09E | OFF RAMP LANE CLOSURE |
| 15C02-09H | MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING |
| 15C07-15C | PAVEMENT MARKING ARROWS |
| 15C08-23A | PERMANENT LONGITUDINAL PAVEMENT MARKINGS |
| 15C11-10B | CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS |
| 15C12-09A | TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION |
| 15C18-08B | MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE |
| 15D12-12D | TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE |
| 15D12-13A | TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE |
| 15D12-13B | TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE |
| 15D15-07B | TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE |
| 15D15-07E | TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE |
| 15D16-06 | TRAFFIC CONTROL, EXIT RAMP CLOSURE |
| 15D27-03 | TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY,  SPEEDS GREATER THAN 40 MPH |
| 15D29-06 | TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD |
| 15D35-03A | RAMP GATE HARD WIRED |
| 15D35-03B | RAMP GATE HARD WIRED |
| 15D35-03C | RAMP GATE HARD WIRED |
| 15D42-02 | TRAFFIC CONTROL, TWO LANE FULL FREEWAY CLOSURE |
| 15D47-03A | TRAFFIC CONTROL, INGRESS/EGRESS WITH BARRIER |
| 15D47-03B | TRAFFIC CONTROL, INGRESS/EGRESS WITHOUT BARRIER |

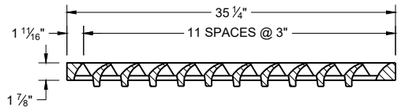
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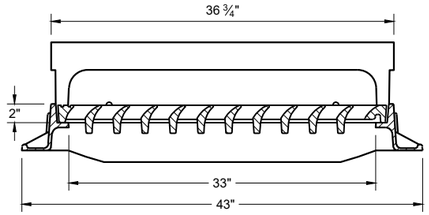


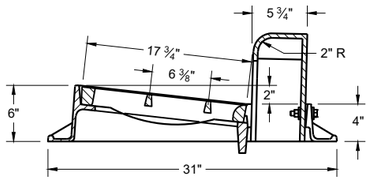

NOTE: EITHER CASTING IS ACCEPTABLE

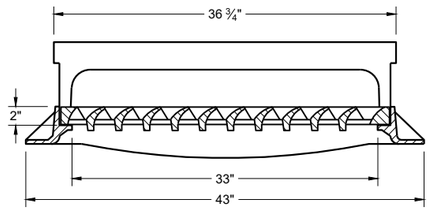


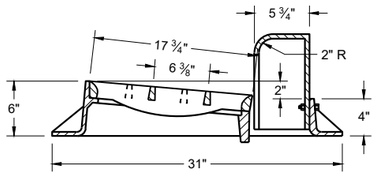

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"



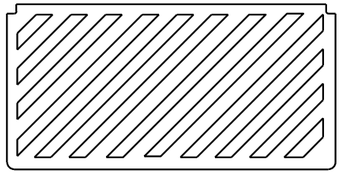




**TYPE "H"**

NOTE: EITHER CASTING IS ACCEPTABLE

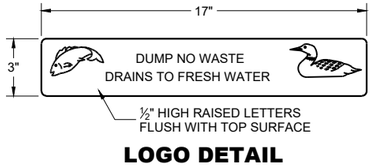
1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



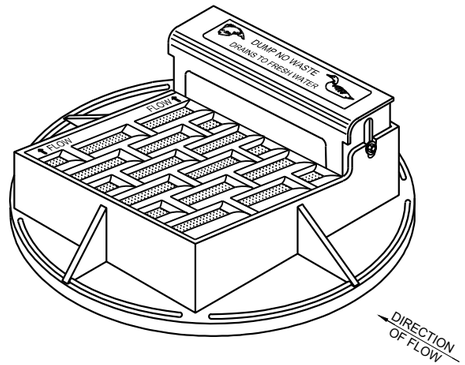
**SPECIAL GRATE FOR TYPE "H" COVER**

(MEASURES 35" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

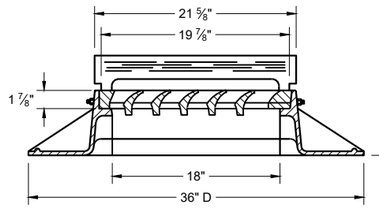


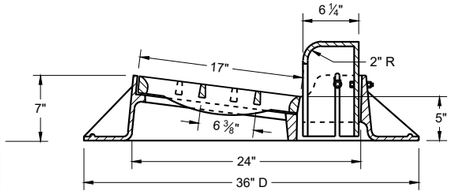

**LOGO DETAIL**




NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE



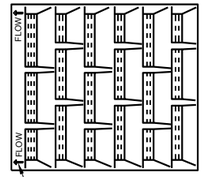

**TYPE "A"**

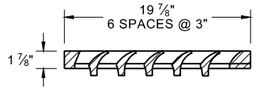
## GENERAL NOTES

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.

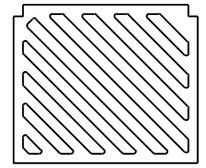
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



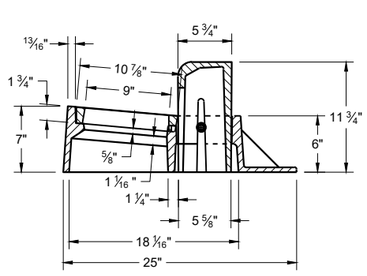

1" DIAGONAL BARS WITH 1 1/2" OPENINGS



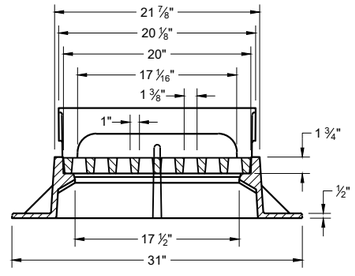
**SPECIAL GRATE FOR TYPE "A" COVER**

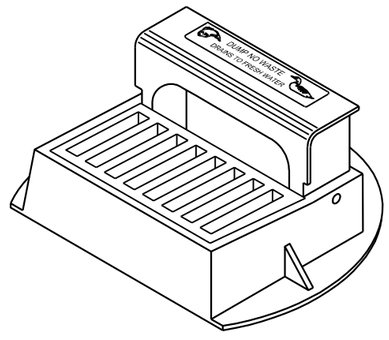
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)




**TYPE "Z"**




**INLET COVERS**
**TYPES A, H, A-S, H-S AND Z**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

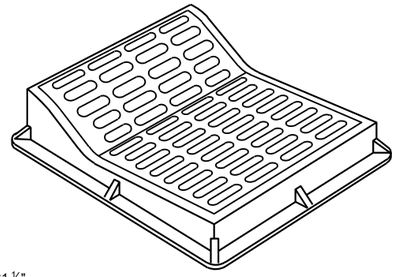
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

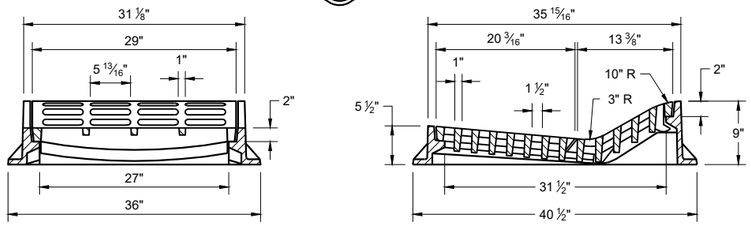
FHWA

## 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.

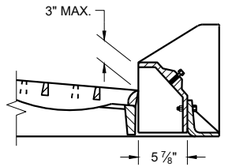
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.






### TYPE "F"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

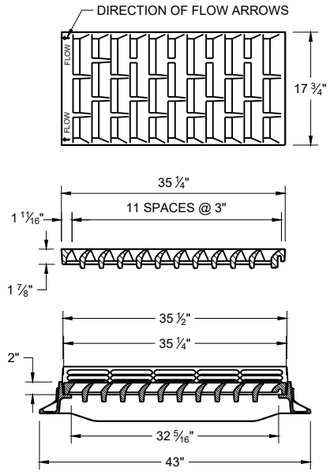



### ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

USE WITH TYPES "G" AND "J" CONCRETE CURB AND GUTTER, 30 INCH
**NOTED AS TYP "HM-GJ" ON DRAINAGE TABLE**

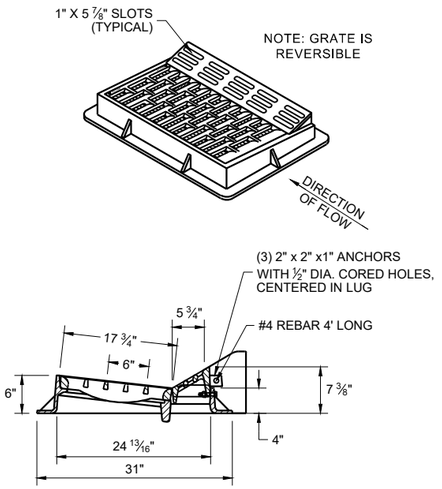
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

**NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.**



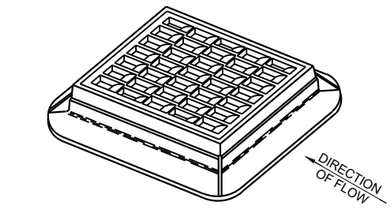

### TYPE "HM"

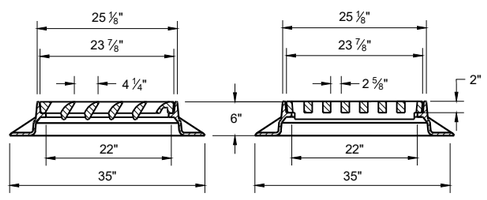
USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"



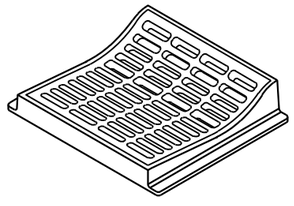

NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

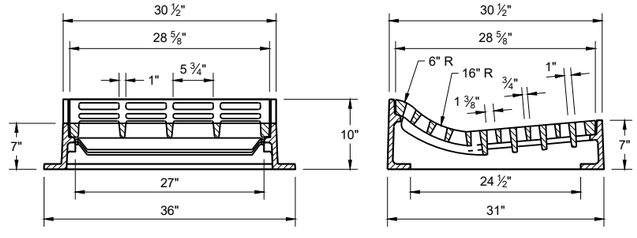
**NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.**




### TYPE "S"






### TYPE "T"

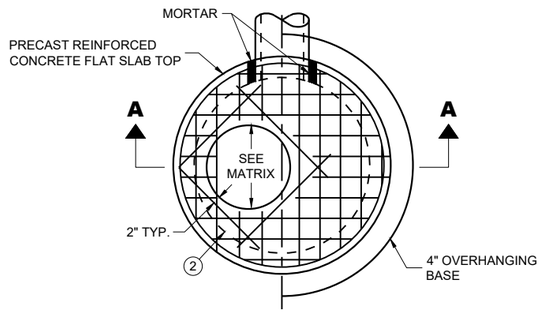
USE WITH TYPES "R" AND "T" CONCRETE CURB AND GUTTER, 36"

**INLET COVERS**
**TYPES F, HM, HM-S, S, T, HM-GJ AND HM-GJ-S**

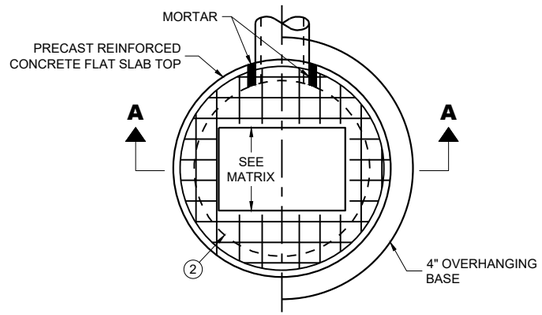
STATE OF WISCONSIN
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APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

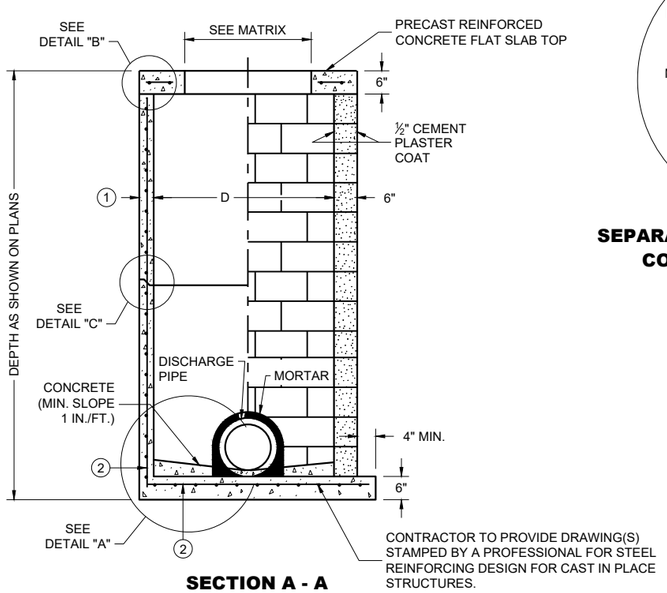
FHWA




**PLAN VIEW CIRCULAR OPENING**




**PLAN VIEW RECTANGULAR OPENING**




**SECTION A - A**

**PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE**

**CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE** (2)

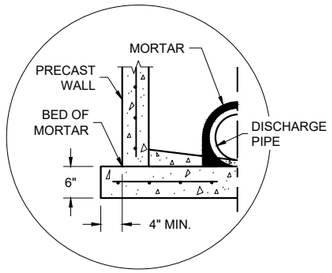
**CIRCULAR INLETS WITH FLAT TOP**

## CATCH BASIN COVER OPENING MATRIX

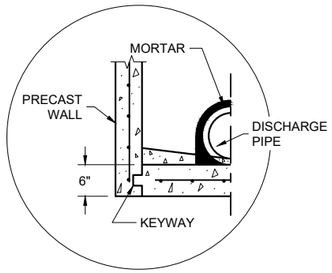
| INLET SIZE | INLET COVER TYPE | ALL A'S | ALL B'S | BW | C | F | ALL H'S | S | T | V | WM | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OPENING SIZE (FT.) | | | | | | | | | | | |
| 3-FT | 2 DIA. | | | | X | | | | | | | X |
| | 2 X 2 | X | X | | | | | X | | X | | |
| 4-FT | 2 DIA. | | | | X | | | | | | | X |
| | 2 X 2 | X | X | | | | | X | | X | | |
| | 2 X 2.5 | | | X | | | | X | X | X | X | |
| | 2 X 3 | | | | | | X | | | | | |
| | 2.5 X 3 | | | | | X | | | | | | |

## 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 |

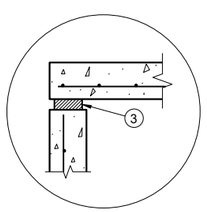



**SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION**

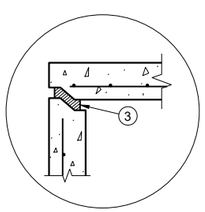



**PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION**

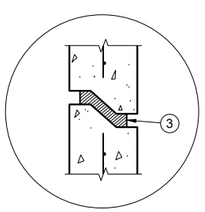
**DETAIL "A"**




**TOP WITH PLAIN END JOINT**




**TOP WITH TONGUE AND GROOVE JOINT**




**RISER WITH TONGUE AND GROOVE JOINT**

**DETAIL "B"** **DETAIL "C"**

## GENERAL NOTES

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 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.

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

ALL PRECAST INLET 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.

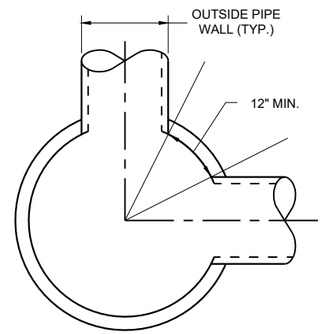
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT DIAMETER AND 5 INCHES FOR 4-FT DIAMTER PRECAST INLETS.

(2) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(3) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.




**MINIMUM HORIZONTAL PIPE SEPARATION**

**DETAIL "D"**

**INLETS 3-FT AND 4-FT DIAMETER**

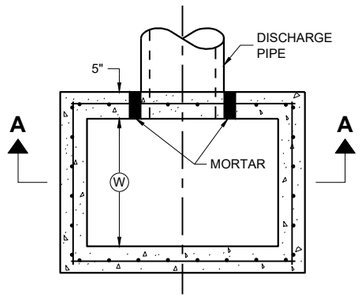
STATE OF WISCONSIN
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December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

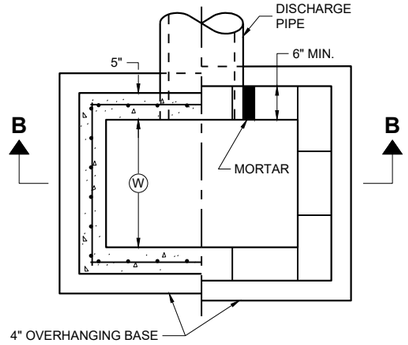
FHWA



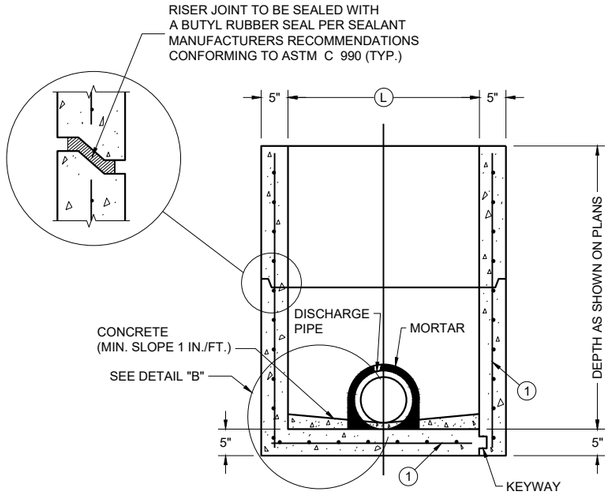
6
SDD 08C06-03




**PLAN VIEW**



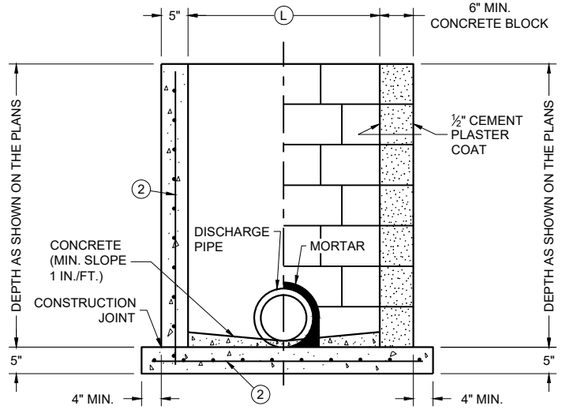

**PLAN VIEW**




**PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE**

**PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE**

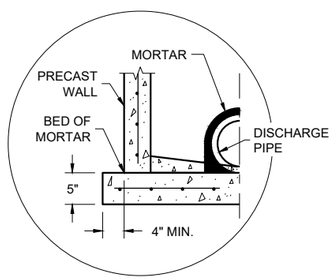
**SECTION A - A**




**CAST IN PLACE REINFORCED CONCRETE**

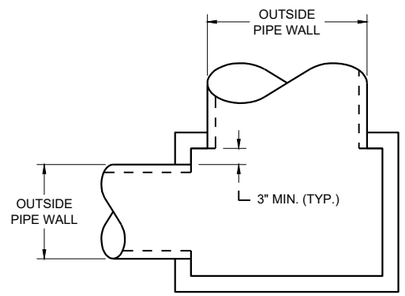
**CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE** (1)

**SECTION B - B**




**SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION**

**DETAIL "B"**




**DETAIL "A"**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T 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" 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 AND REINFORCED CONCRETE BASES 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.

## CATCH BASIN COVER MATRIX

| INLET SIZE | WIDTH (W) (FT.) | LENGTH (L) (FT.) | INLET COVER TYPE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ALL A'S | ALL B'S | BW | F | ALL H'S | S | T | V | WM | V V-B |
| 2 X 2-FT | 2 | 2 | X | X | | | | X | | | | |
| 2 X 2.5-FT | 2 | 2.5 | | | X | | | X | X | X | X | |
| 2 X 3-FT | 2 | 3 | | | | | X | | | | | |
| 2.5 X 3-FT | 2.5 | 3 | | | | X | | | | | | |
| 2 X 3.5-FT | 2 | 3.5 | | | | | | | | | | X |

## PIPE MATRIX

| CATCH BASIN SIZE | MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES | |
|---|---|---|
| | WIDTH (IN) | LENGTH (IN) |
| 2 X 2-FT | 12 | 12 |
| 2 X 2.5-FT | 12 | 18 |
| 2 X 3-FT | 12 | 24 |
| 2.5 X 3-FT | 18 | 24 |
| 2 X 3.5-FT | 12 | 30 |

**INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT**

**INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT**

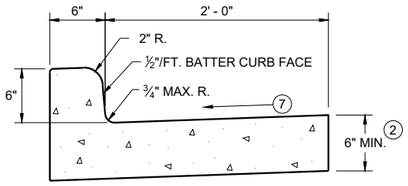
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

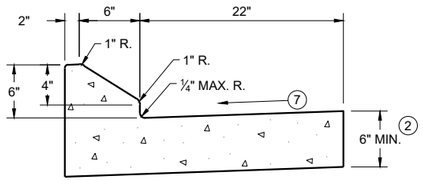
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

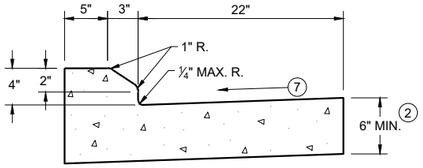

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SDD 08C07-03



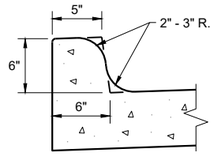

**TYPES A (1) & D**



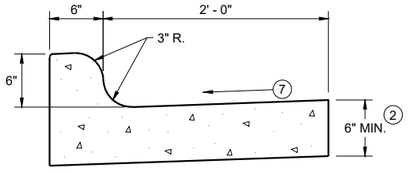

**6" SLOPED CURB TYPES G (1) & J**




**4" SLOPED CURB TYPES G (1) & J**

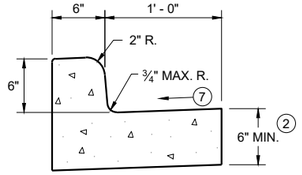



**TYPES K (1) & L**
(OPTIONAL CURB SHAPE)



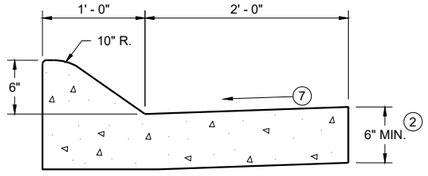

**TYPES K (1) & L**

**CONCRETE CURB AND GUTTER 30"**

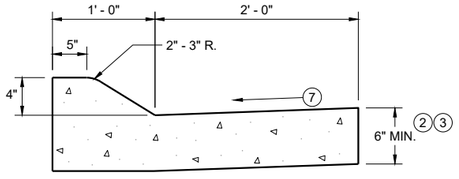



**TYPES A (1) & D**

**CONCRETE CURB AND GUTTER 18"**

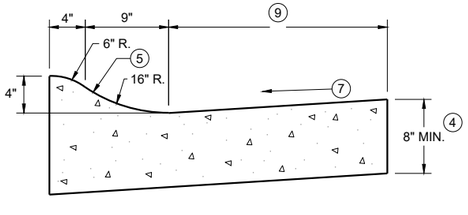



**6" SLOPED CURB TYPES A (1) & D**



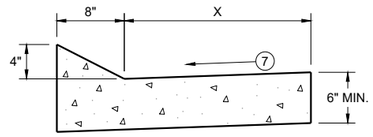

**4" SLOPED CURB TYPES A (1) & D**

**CONCRETE CURB AND GUTTER 36"**




**4" SLOPED CURB TYPES R (1) & T**

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

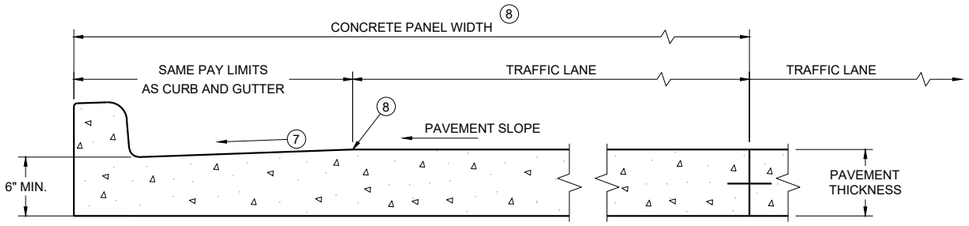



**TYPES TBT & TBTT (1)**

**CONCRETE CURB AND GUTTER**

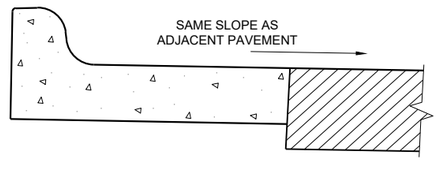
**PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE**

| 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.

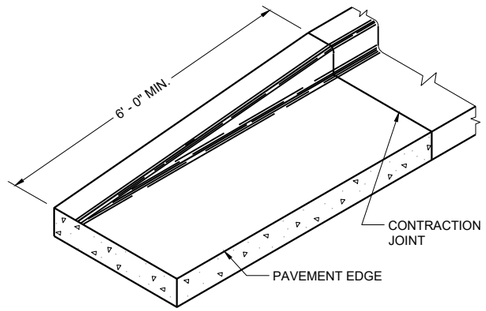
(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(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.

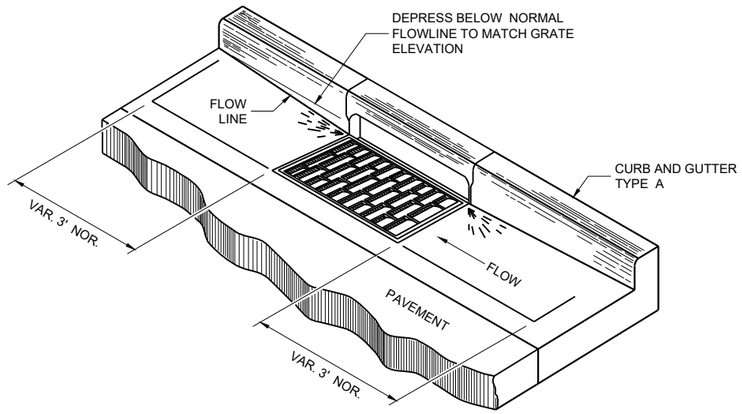
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

**CONCRETE CURB AND GUTTER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




## END SECTION CURB 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.

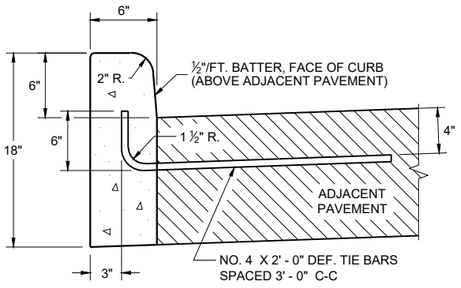
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

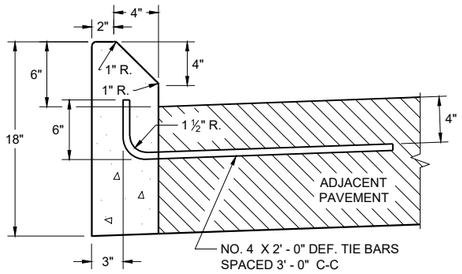
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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.

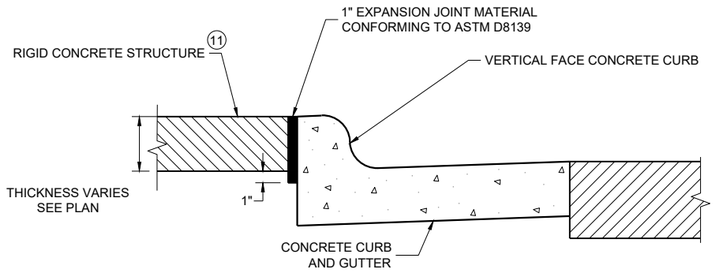



TYPES A (1) & D

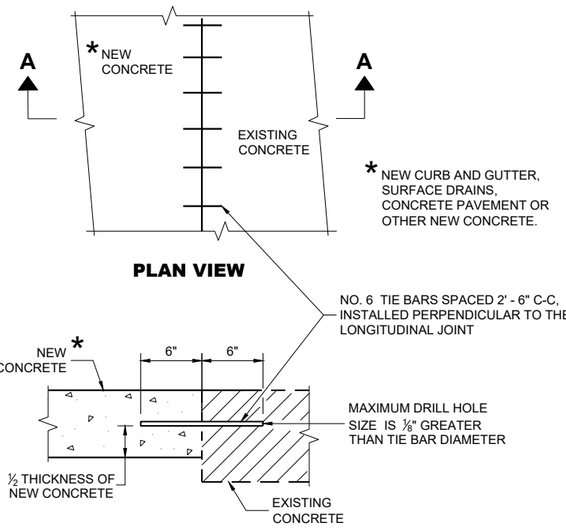



TYPES G (1) & J

## CONCRETE CURB



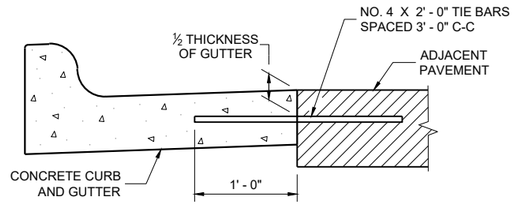

## EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



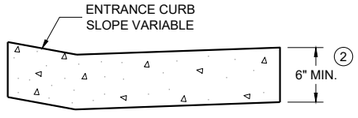

PLAN VIEW

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 DEVELOPMENT UNIT SUPERVISOR

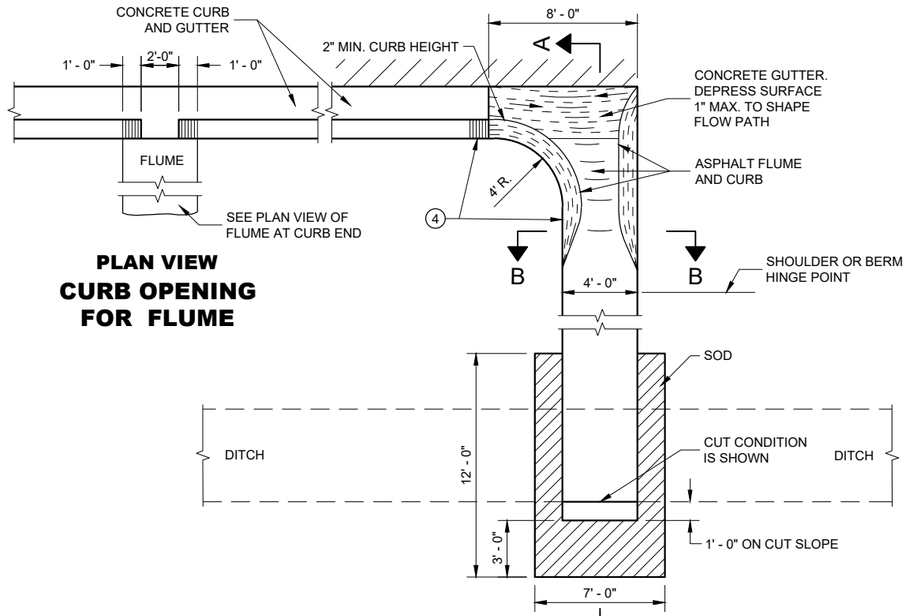
FHWA

6

SDD 08D01-23b

NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

## ASPHALTIC FLUME

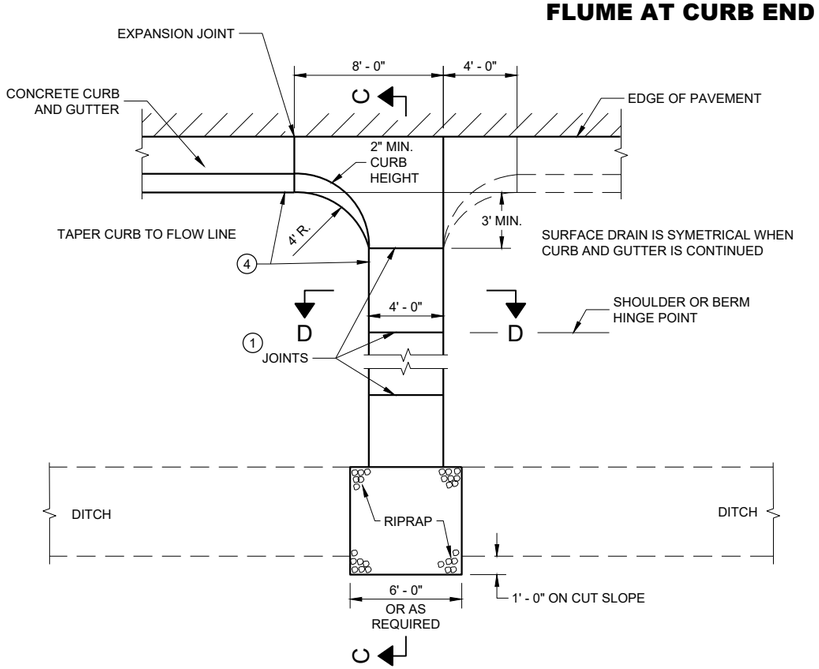



**PLAN VIEW**

**CURB OPENING FOR FLUME**

**PLAN VIEW**

**FLUME AT CURB END**




**PLAN VIEW**

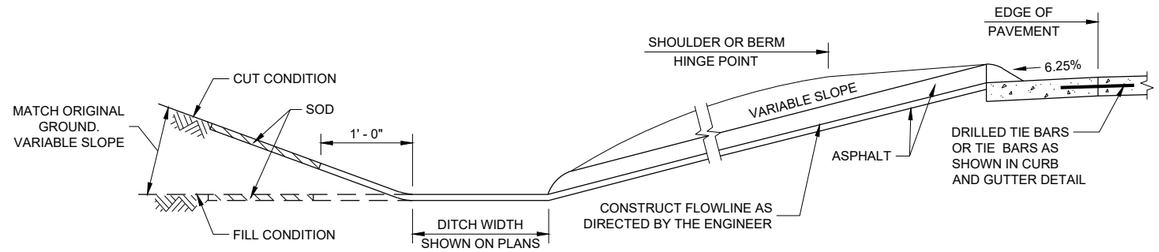
**CONCRETE SURFACE DRAIN**

## 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.

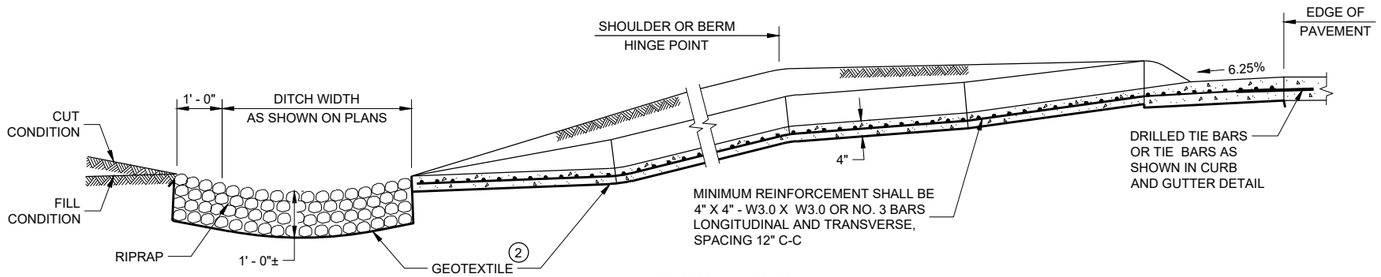
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. 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.



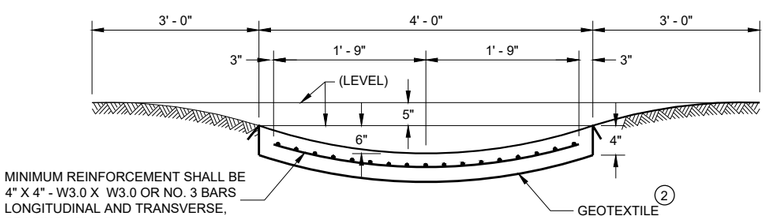

**SECTION A - A**




**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

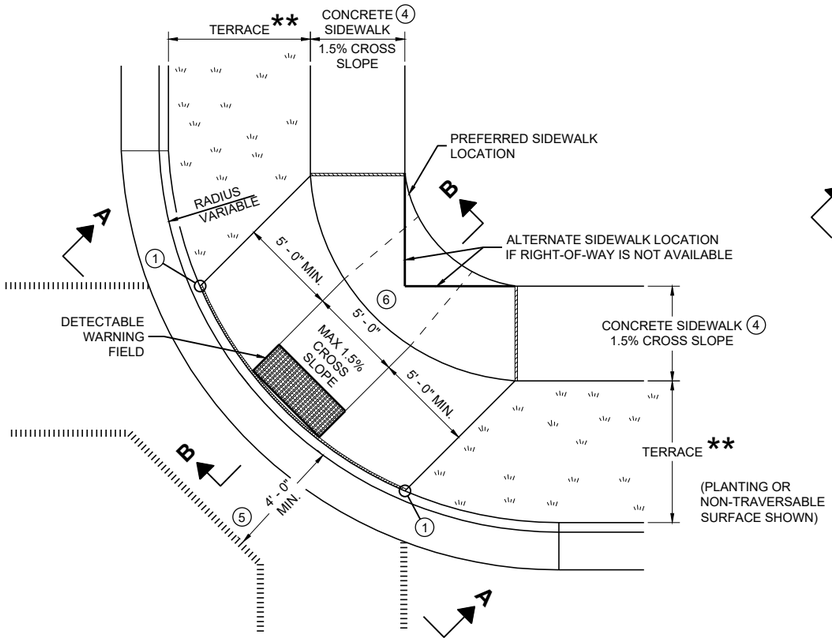




6



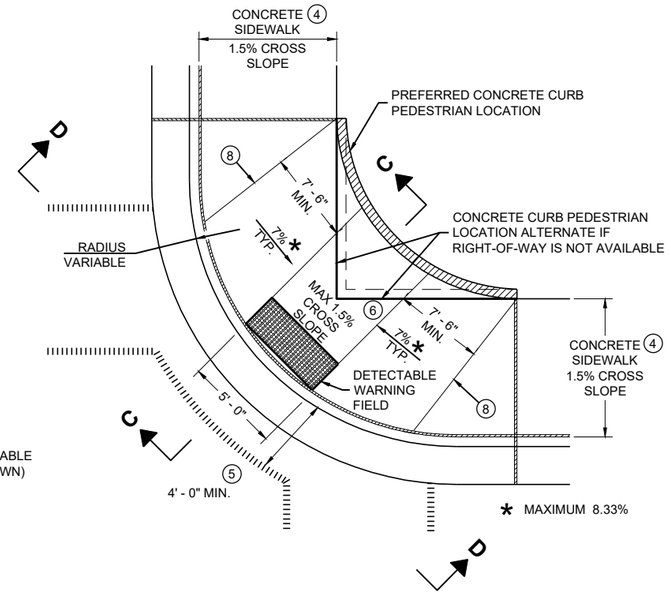
SDD 08D04 - 07




**PLAN VIEW**

## CURB RAMP TYPE 1

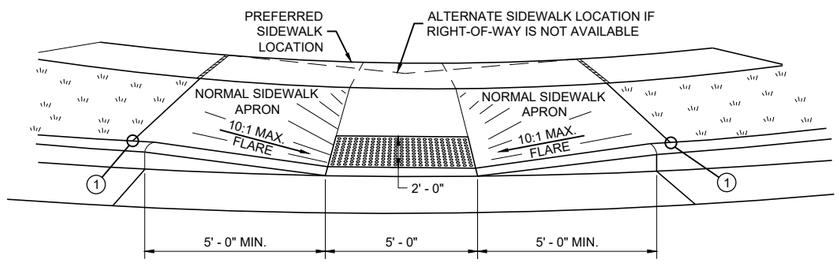
**(CENTER OF CORNER RADIUS)**



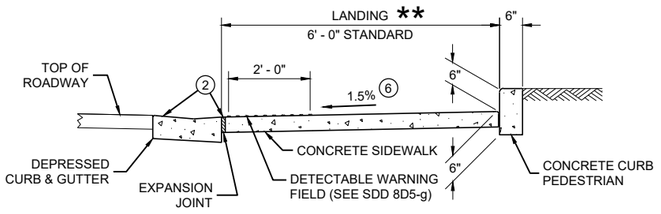

**PLAN VIEW**

## CURB RAMP TYPE 1 - A

**(NO TERRACE)**

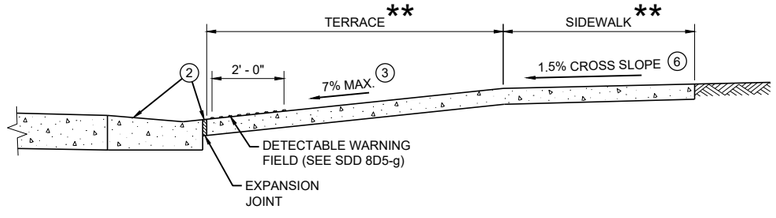



**VIEW A - A FOR TYPE 1**

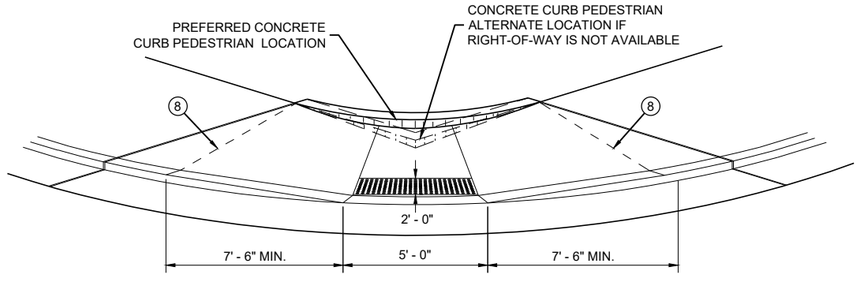



**SECTION C - C FOR TYPE 1 - A**

** WIDTH SHOWN ELSEWHERE IN THE PLANS




**SECTION B - B FOR TYPE 1**




**VIEW D - D FOR TYPE 1 - A**

## GENERAL NOTES

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

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

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

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

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

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

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

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

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

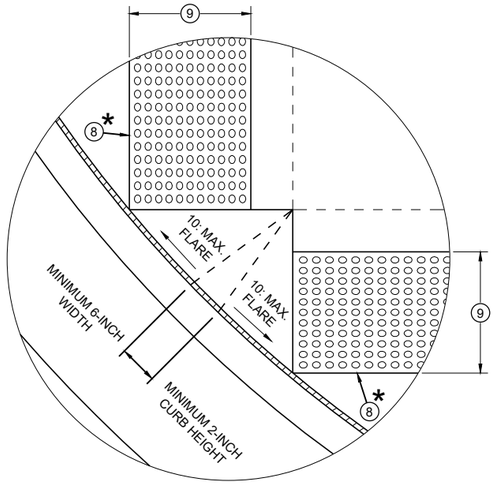
(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

## LEGEND

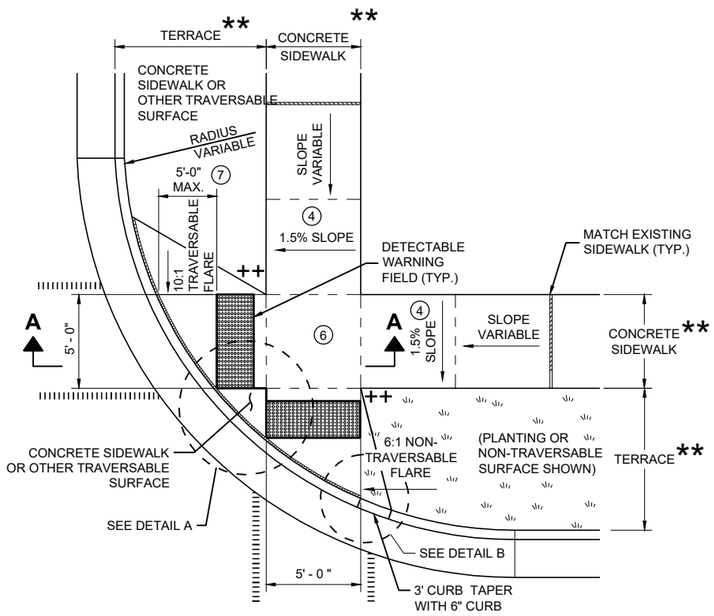
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS TYPE 1 AND 1-A**

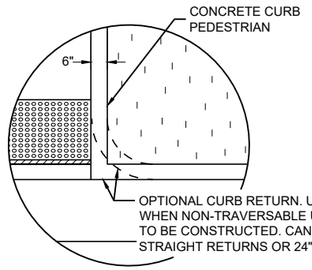
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



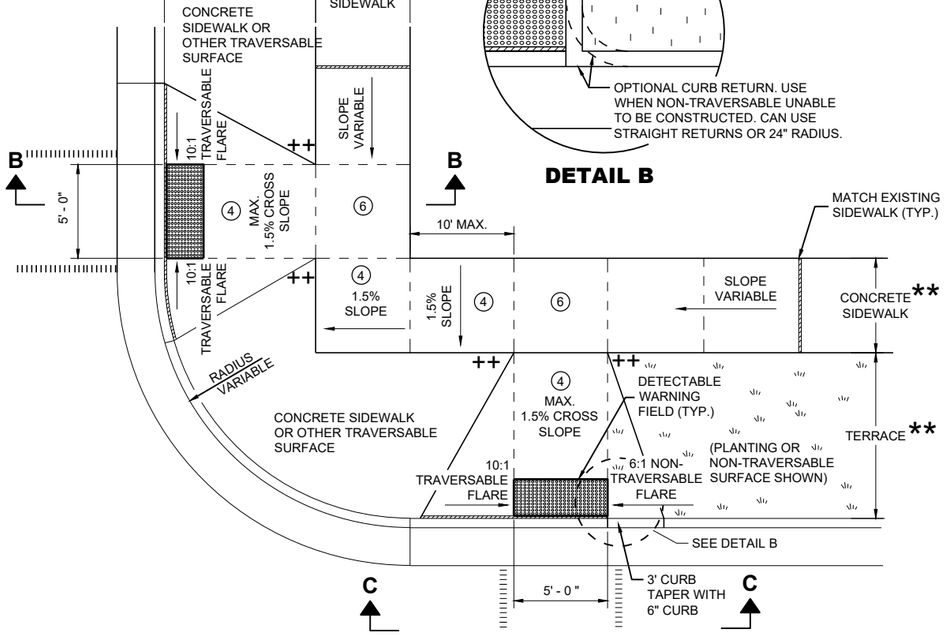

**DETAIL A**




**PLAN VIEW**
**CURB RAMP TYPE 2**
**(CENTER OF CORNER RADIUS)**




**DETAIL B**




**PLAN VIEW**
**CURB RAMP TYPE 3**
**(OUTSIDE OF CROSSWALK AREA)**

## GENERAL NOTES

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

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.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

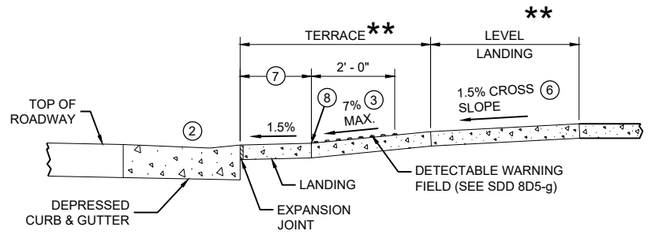
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

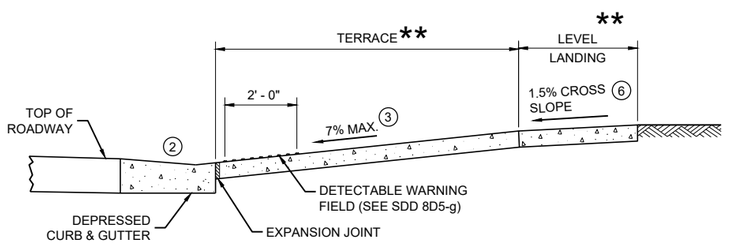



**SECTION A - A FOR TYPE 2**

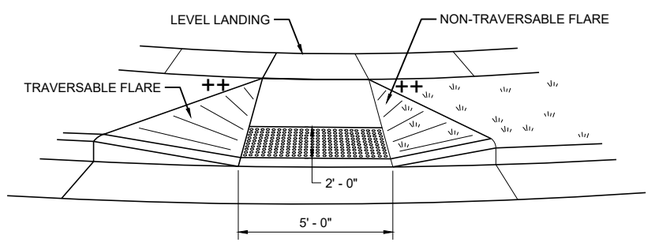
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE




**SECTION B - B FOR TYPE 3**



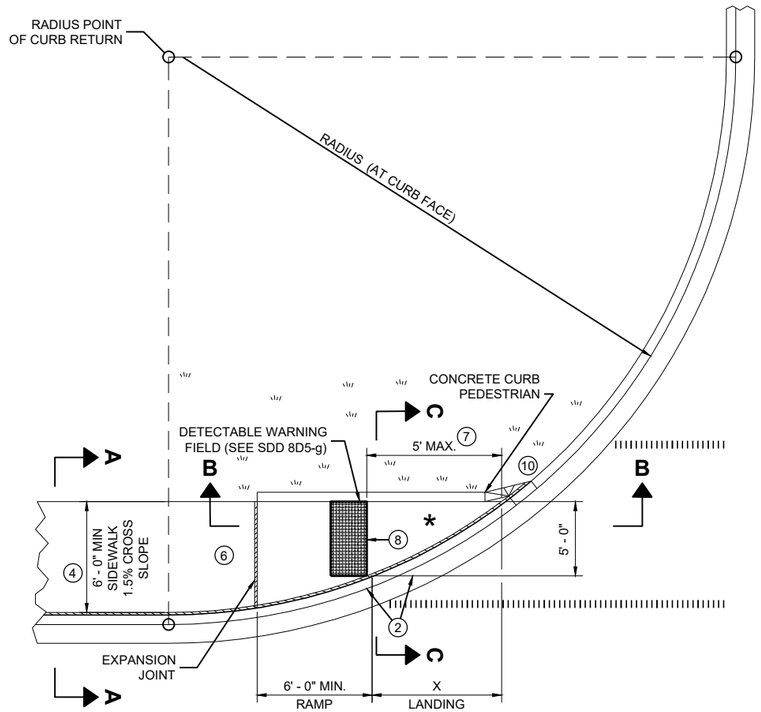

**VIEW C - C FOR TYPE 3**

## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS TYPE 2 AND 3**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

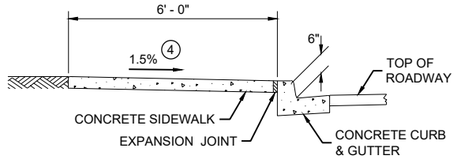



**PLAN VIEW**

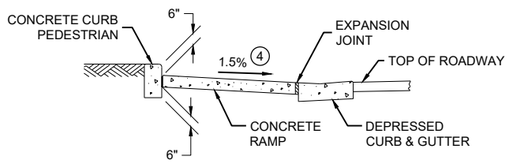
**CURB RAMP TYPE 4A**

| RADIUS (AT CURB FACE) | X |
|---|---|
| 10 FEET | 4' - 7" |

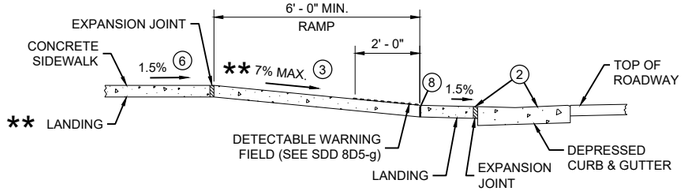
INTERMEDIATE RADII CAN BE INTERPOLATED




**SECTION A - A FOR TYPE 4A**

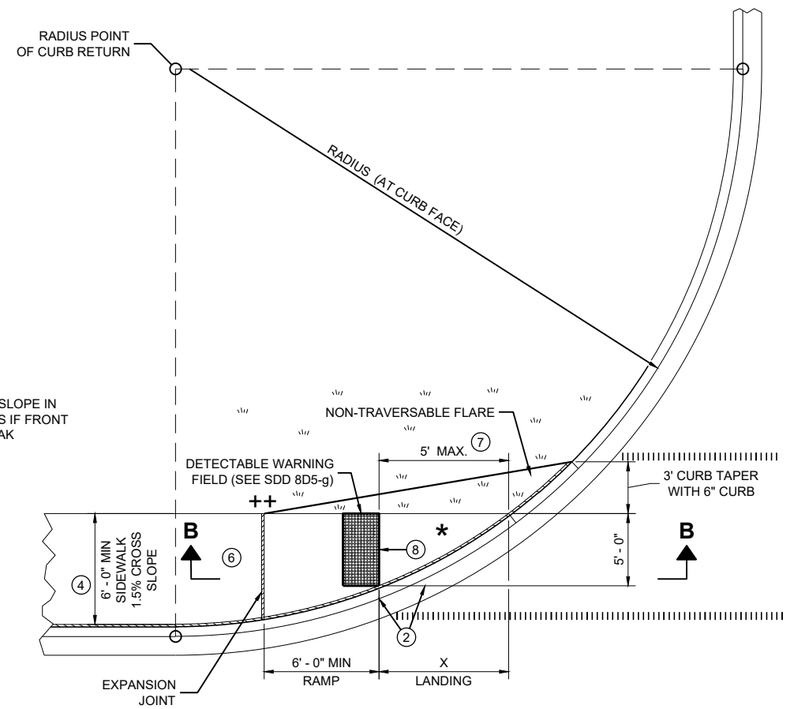



**SECTION C - C FOR TYPE 4A**




**SECTION B - B FOR TYPE 4A AND TYPE 4A1**

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




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

**PLAN VIEW**

**CURB RAMP TYPE 4A1**

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

## GENERAL NOTES

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

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.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

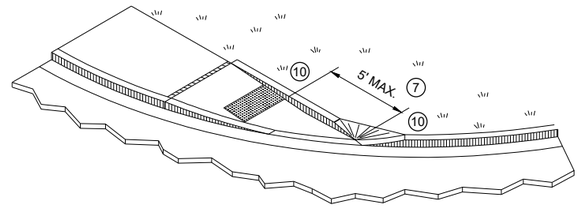
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

## LEGEND

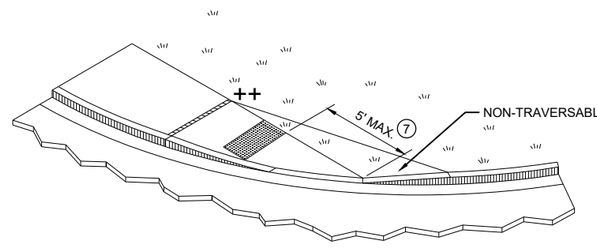
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



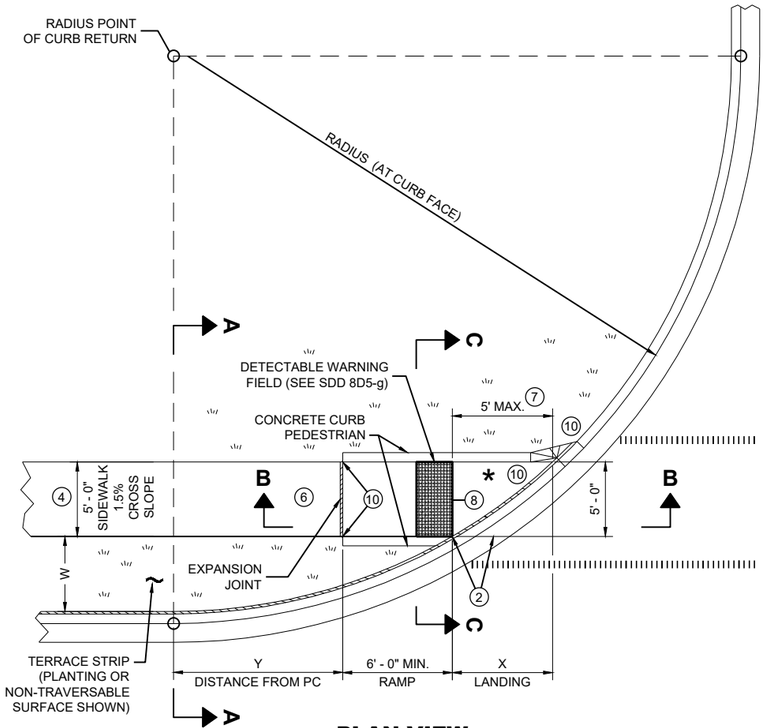

**ISOMETRIC VIEW FOR TYPE 4A**




**ISOMETRIC VIEW FOR TYPE 4A1**

**CURB RAMPS**
**TYPE 4A AND 4A1**

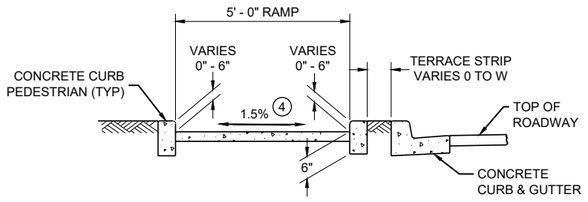
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




**PLAN VIEW**
**CURB RAMP TYPE 4B**

| RADIUS (AT CURB FACE) | W = 3' - 0" | | W = 4' - 0" | | W = 5' - 0" | | W = 6' - 0" | | W = 7' - 0" | | W = 8' - 0" | | W = 9' - 0" | | W = 10' - 0" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y |
| 10 FEET | 2' - 10 1/4" | 0' - 5" | 2' - 1" | 1' - 4 1/2" | 1' - 5" | 2' - 1" | 0' - 10" | 2' - 7 1/2" | 0' - 3 1/4" | 3' - 0 1/4" | | | | | | |
| 15 FEET | 4' - 6 3/4" | 2' - 1 3/4" | 3' - 9" | 3' - 5 3/4" | 3' - 1 1/4" | 4' - 6" | 2' - 6 3/4" | 5' - 4 1/2" | 2' - 1" | 6' - 1" | 1' - 8" | 6' - 8 1/2" | 1' - 3 1/4" | 7' - 2 1/2" | 0' - 10 3/4" | 7' - 7 1/4" |
| 20 FEET | | | 4' - 11 1/2" | 5' - 1 3/4" | 4' - 3 1/4" | 6' - 5 1/2" | 3' - 8 3/4" | 7' - 7" | 3' - 3" | 8' - 6 1/2" | 2' - 10" | 9' - 4 1/2" | 2' - 5 1/2" | 10' - 1 1/4" | 2' - 1 1/4" | 10' - 9" |
| 30 FEET | | | | | | | | | 4' - 10 3/4" | 12' - 5 3/4" | 4' - 5 1/2" | 13' - 7 3/4" | 4' - 0 3/4" | 14' - 8 1/2" | 3' - 8 1/2" | 15' - 8 1/4" |
| 40 FEET | | | | | | | | | | | | | | | 4' - 10 3/4" | 19' - 8 1/4" |

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH




**SECTION C - C FOR TYPE 4B**

## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

## GENERAL NOTES

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

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.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

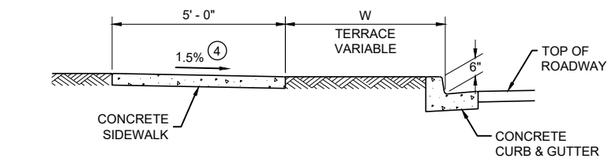
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

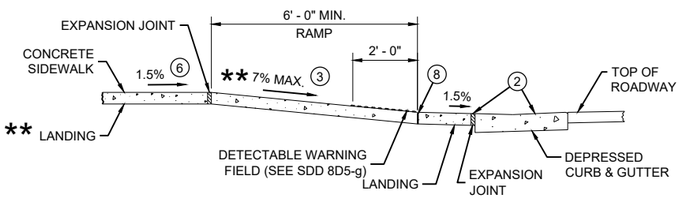
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

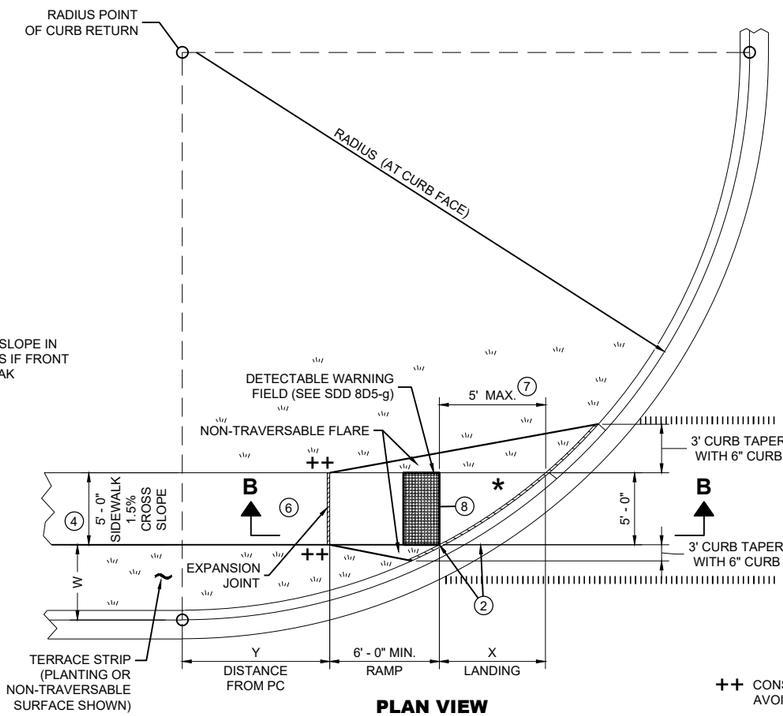



**SECTION A - A FOR TYPE 4B**




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

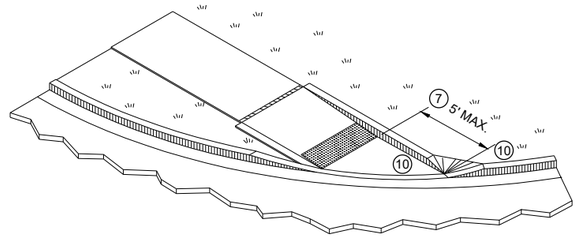
**SECTION B - B FOR TYPE 4B AND TYPE 4B1**



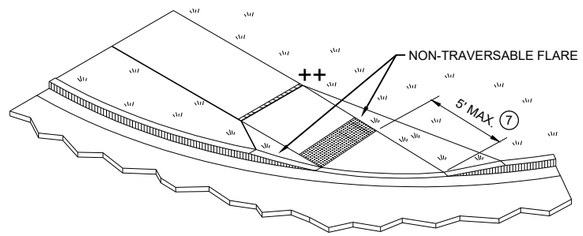

**PLAN VIEW**
**CURB RAMP TYPE 4B1**

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

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



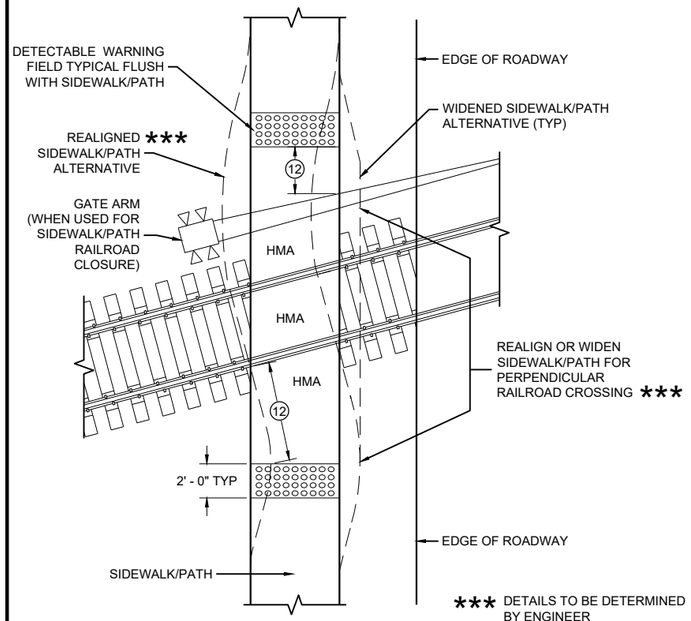

**ISOMETRIC VIEW FOR TYPE 4B**




**ISOMETRIC VIEW FOR TYPE 4B1**

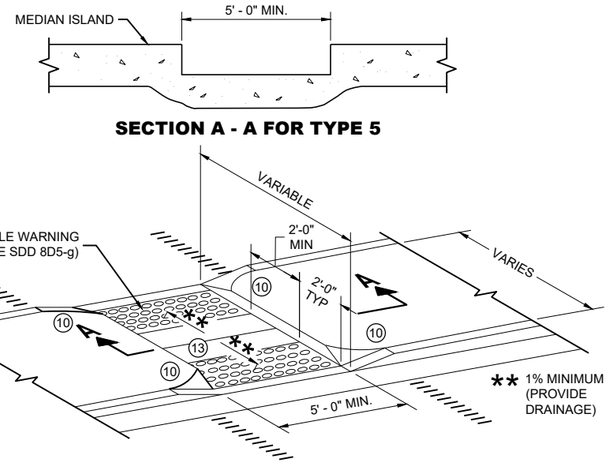
**CURB RAMPS**
**TYPE 4B AND 4B1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




## CURB RAMP TYPE 8

### DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS




SECTION A - A FOR TYPE 5

## CURB RAMP TYPE 5

### MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

## GENERAL NOTES

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

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.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

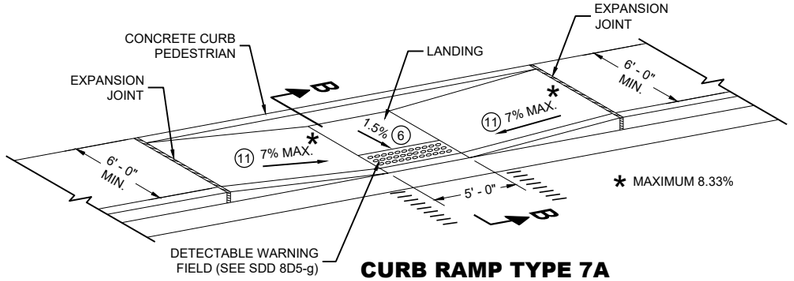
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

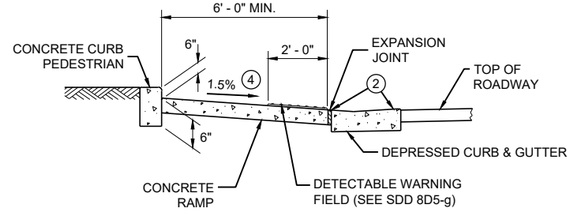
## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

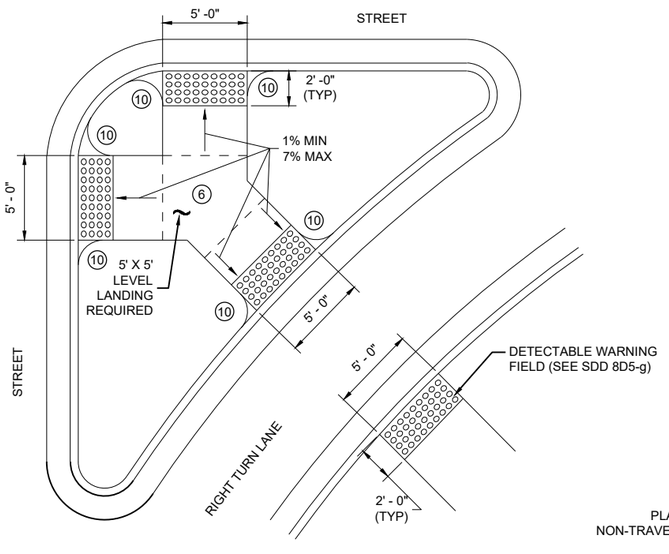



## CURB RAMP TYPE 7A

### FOR INTERSECTIONS AND MID BLOCK CROSSINGS



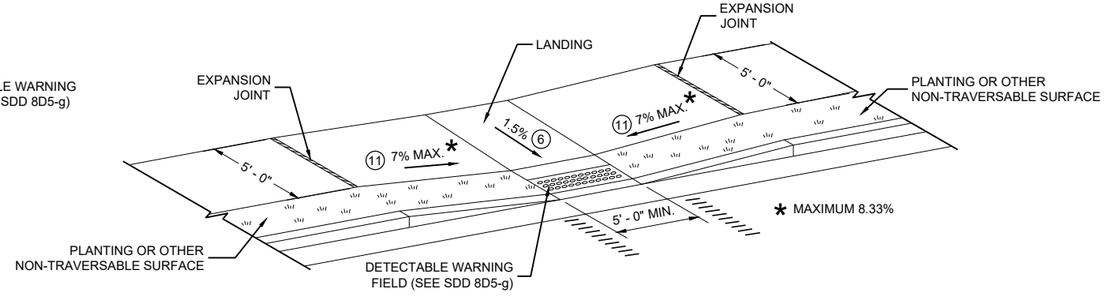

SECTION B - B FOR TYPE 7A




## CURB RAMP TYPE 6

### DETECTABLE WARNING AT ISLANDS

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




## CURB RAMP TYPE 7B

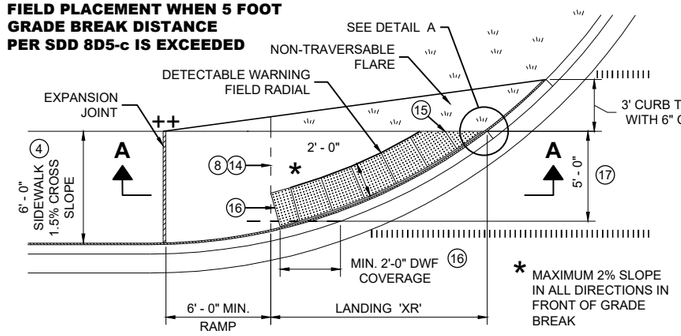
### FOR INTERSECTIONS AND MID BLOCK CROSSINGS

**CURB RAMPS TYPE 5, 6, 7A, 7B & 8**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

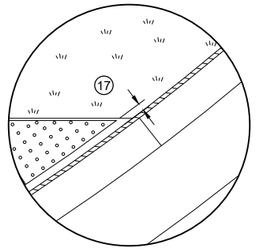
SDD 08D05-21e

**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED**

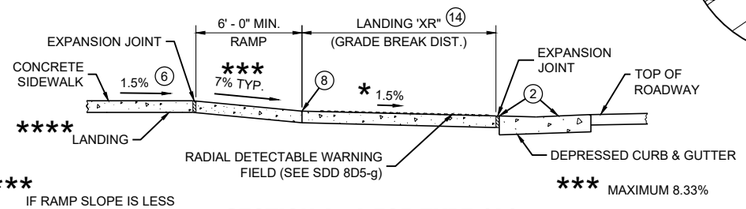



**PLAN VIEW**

## CURB RAMP TYPE 4A1
## (GRADE BREAK DISTANCE GREATER THAN 5 FEET)




**DETAIL A**




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

*** MAXIMUM 8.33%

**SECTION A - A FOR TYPE 4A1**

## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

## GENERAL NOTES

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

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.

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

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

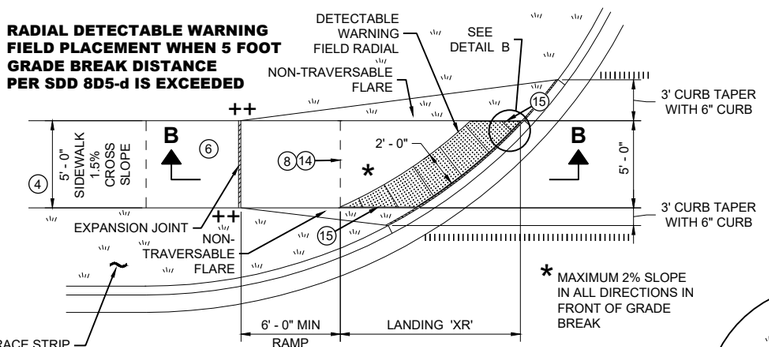
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

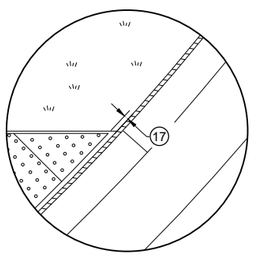
(17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED**

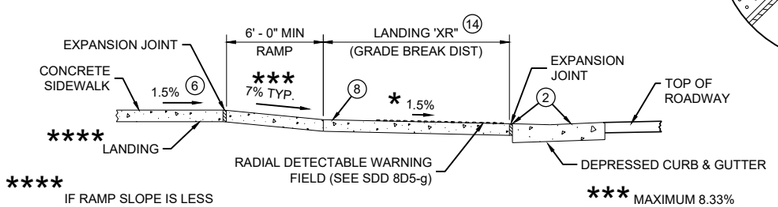



**PLAN VIEW**

## CURB RAMP TYPE 4B1
## (GRADE BREAK DISTANCE GREATER THAN 5 FEET)




**DETAIL B**

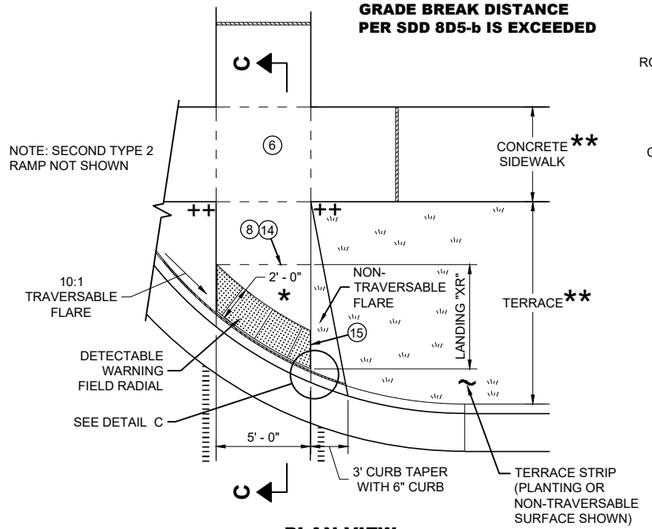



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

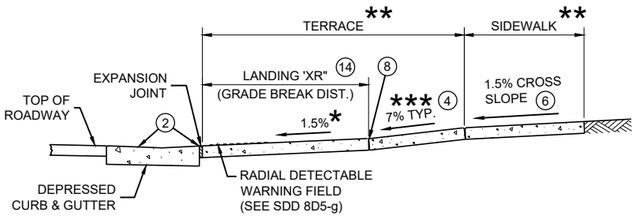
**SECTION B - B FOR TYPE 4B1**

**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED**

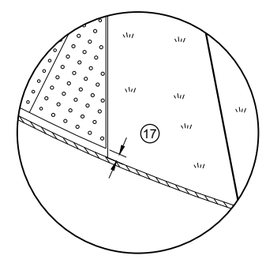



**PLAN VIEW**

## CURB RAMP TYPE 2
## (GRADE BREAK DISTANCE GREATER THAN 5 FEET)
## (ON LINE WITH SIDEWALK)




**SECTION C - C FOR TYPE 2**




**DETAIL C**

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

**CURB RAMPS**
**RADIAL DETECTABLE WARNING**

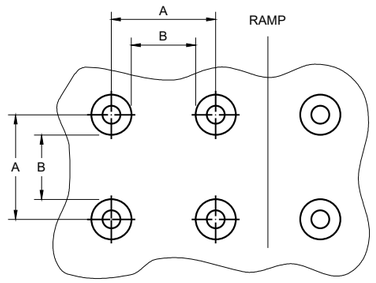
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

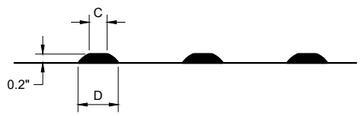
SDD 08D05-21f

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

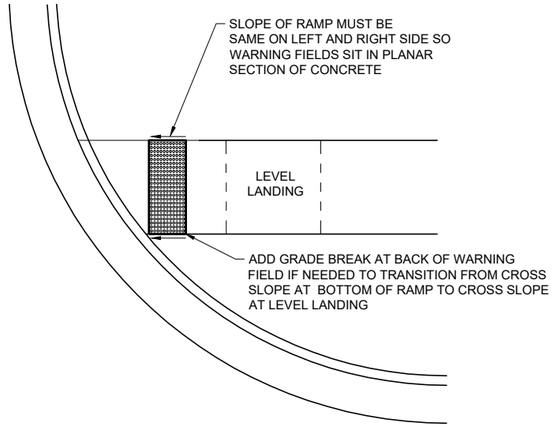
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.




**PLAN VIEW**




**ELEVATION VIEW**




**DETECTABLE WARNING FIELD**
**PLANAR INSTALLATION**

## GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

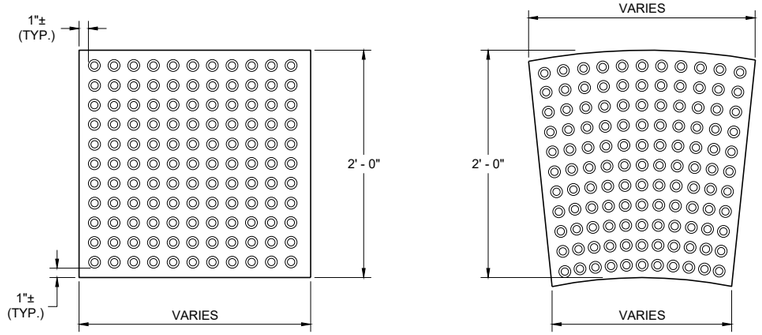
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

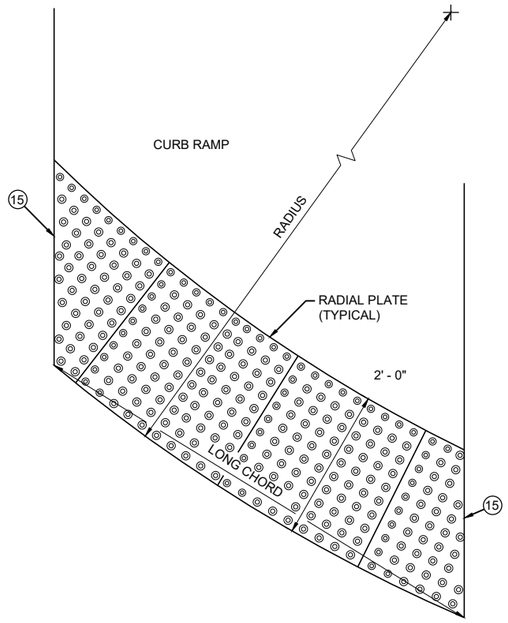
## TRUNCATED DOMES
### DETECTABLE WARNING PATTERN DETAIL



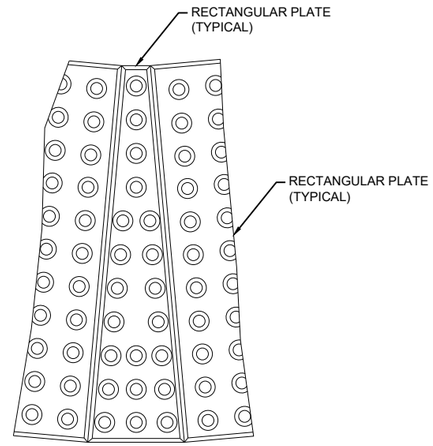

**RECTANGULAR PLATES**

**RADIAL PLATES**

**PLAN VIEW**
**DETECTABLE WARNING FIELDS (TYPICAL)**




**PLAN VIEW**
**RADIAL DETECTABLE WARNING FIELD ATTRIBUTES**




**PLAN VIEW**
**RADIAL WEDGE PLATE CONNECTION DETAIL**

**CURB RAMPS**
**RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES**

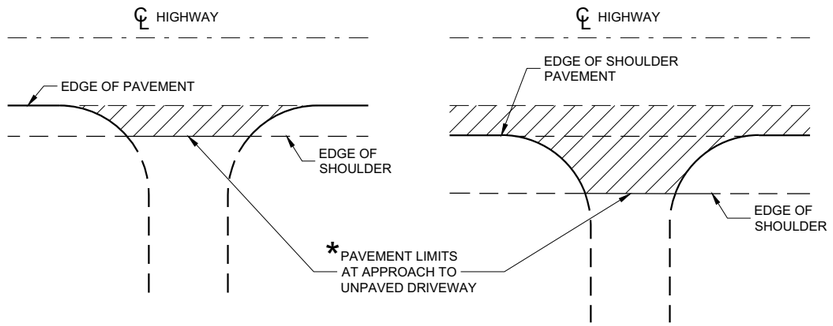
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA



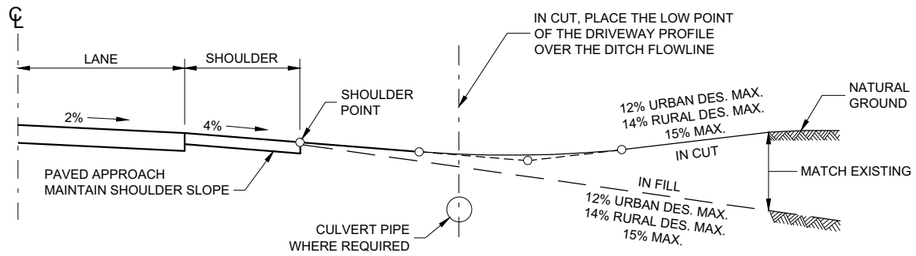
6
SDD 08D05-21g



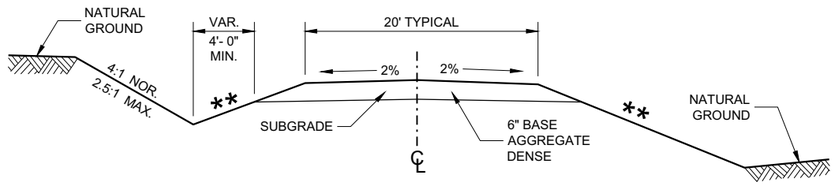

**PLAN VIEW**
(UNPAVED SHOULDER ON HIGHWAY)

**PLAN VIEW**
(PAVED SHOULDER ON HIGHWAY)

## RURAL DRIVEWAY INTERSECTION DETAIL
## (NO CURB AND GUTTER OR SIDEWALK)




## TYPICAL DRIVEWAY PROFILES

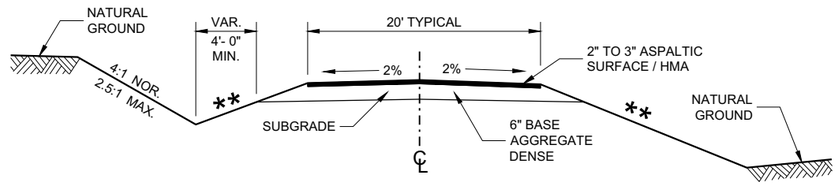



**IN CUT** **IN FILL**

## 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

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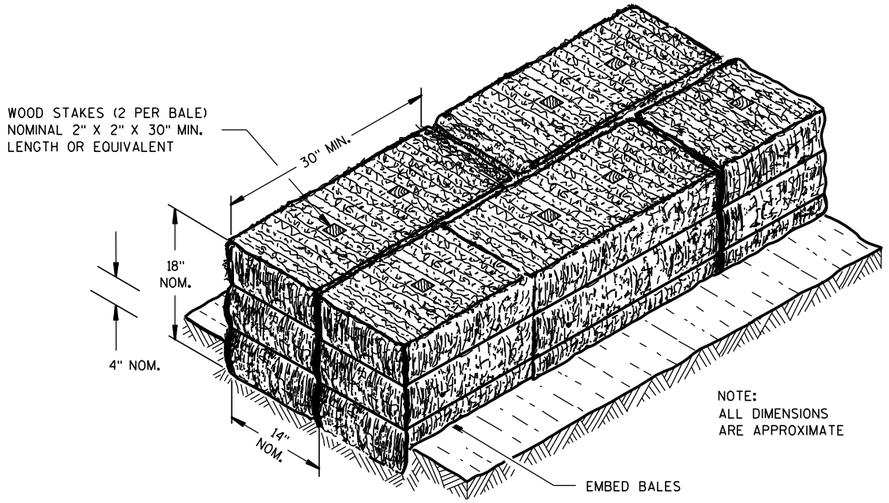
## DRIVEWAYS WITHOUT CURB AND GUTTER

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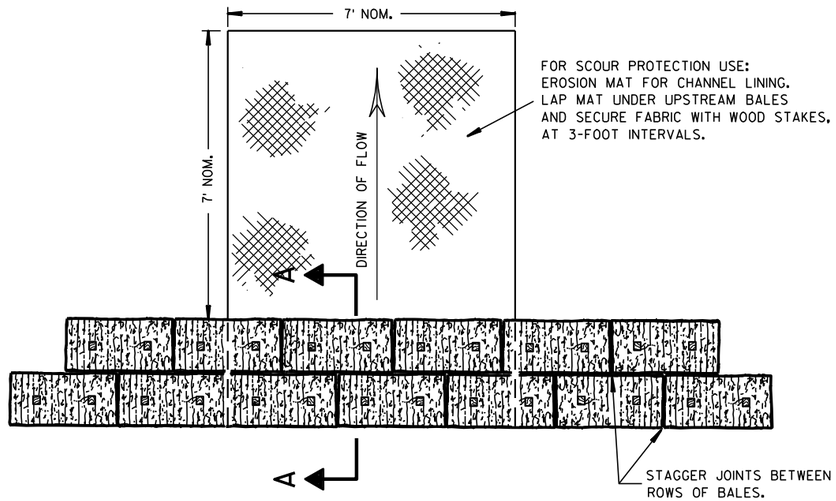
APPROVED
December 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

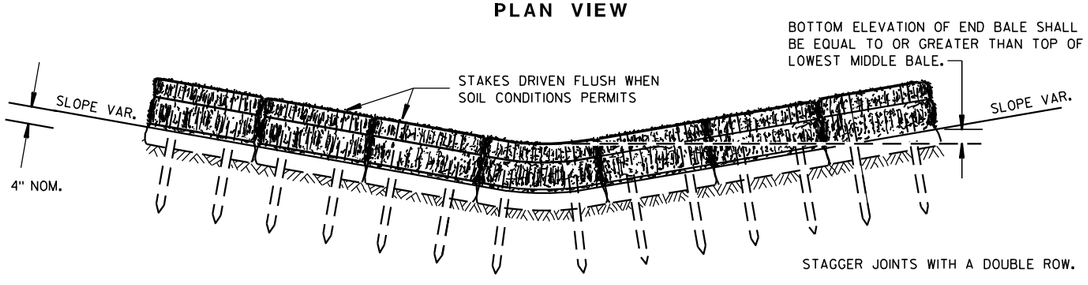
FHWA




SECTION A-A




PLAN VIEW



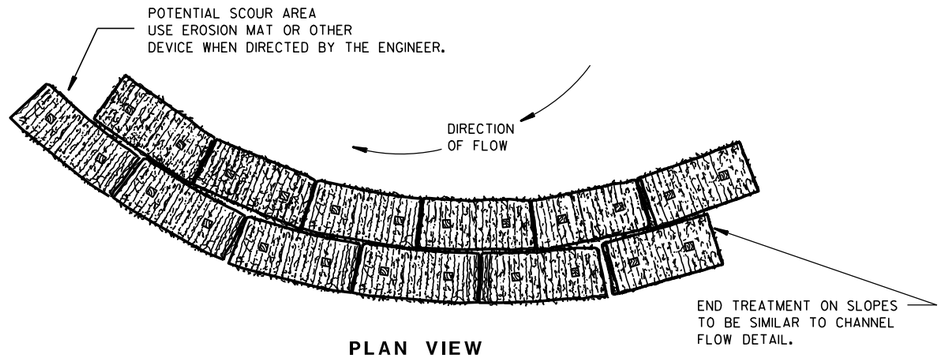

FRONT ELEVATION

## TEMPORARY DITCH CHECK USING EROSION BALES (1)

## GENERAL NOTES

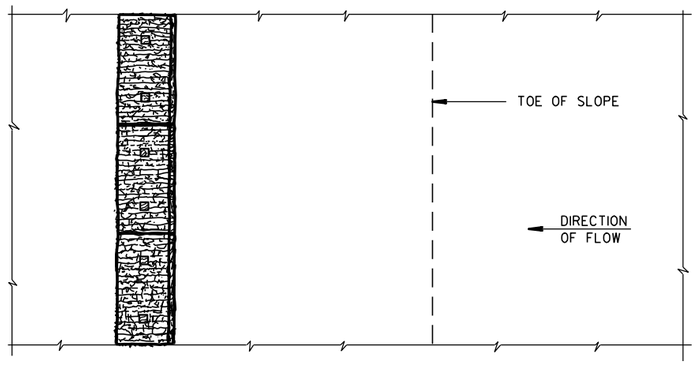
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

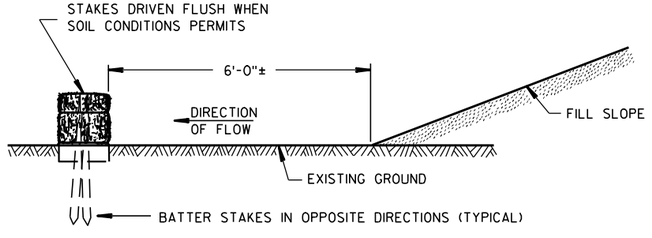



PLAN VIEW

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

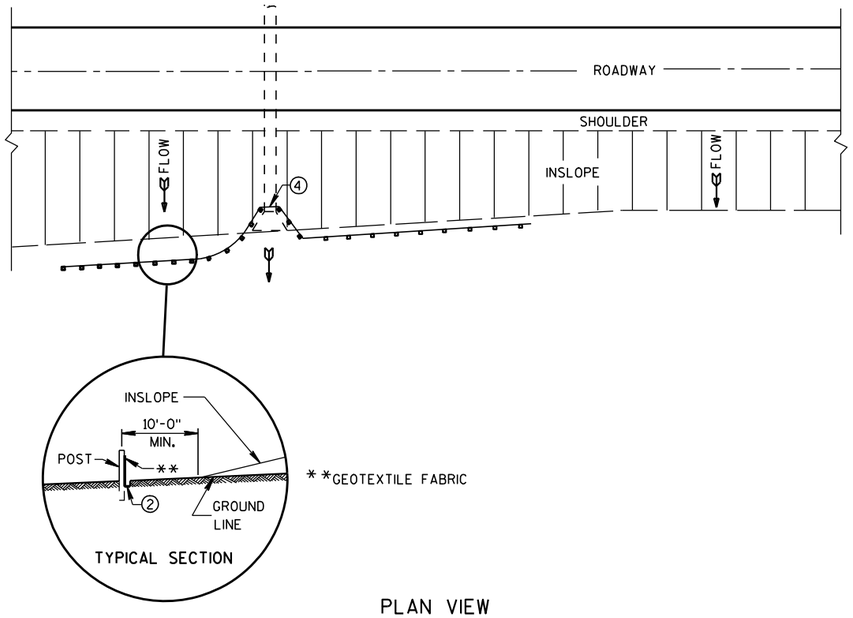
6/04/02 DATE — /S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



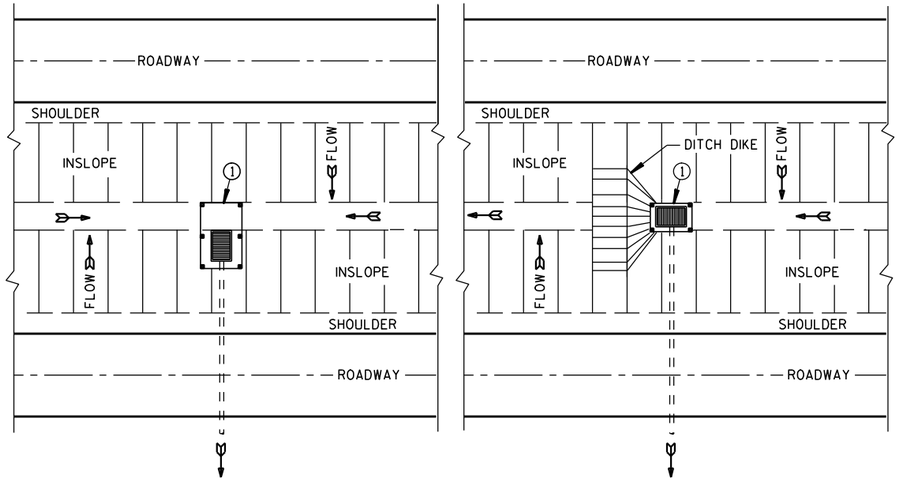


6
S.D.D. 8 E 8-3




PLAN VIEW

## TYPICAL APPLICATION OF SILT FENCE



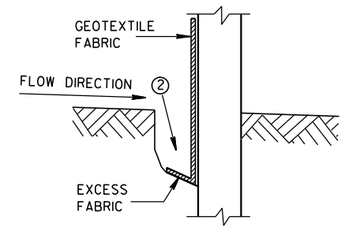

PLAN VIEW

## SILT FENCE AT MEDIAN SURFACE DRAINS

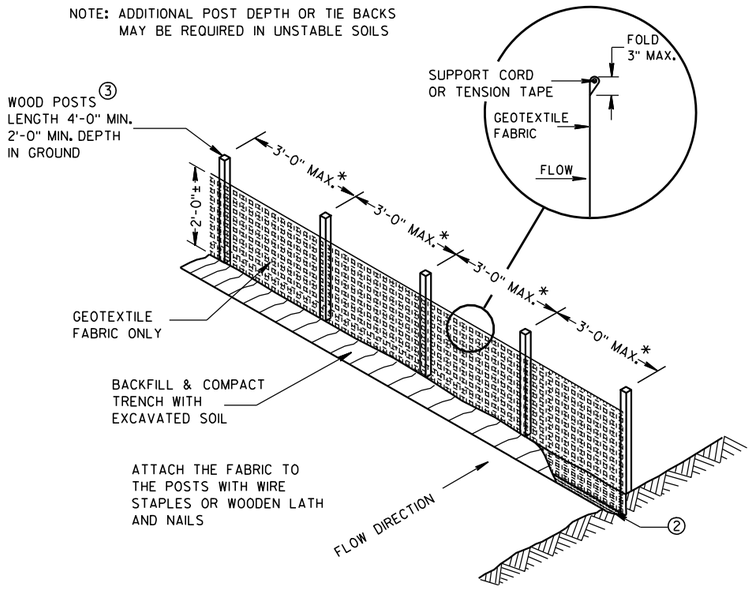
## GENERAL NOTES

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.

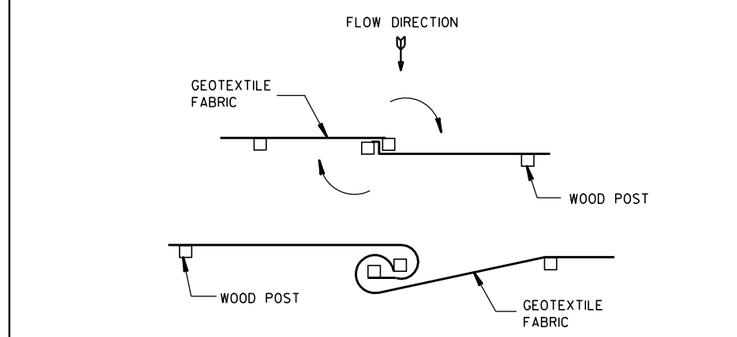



## TRENCH DETAIL

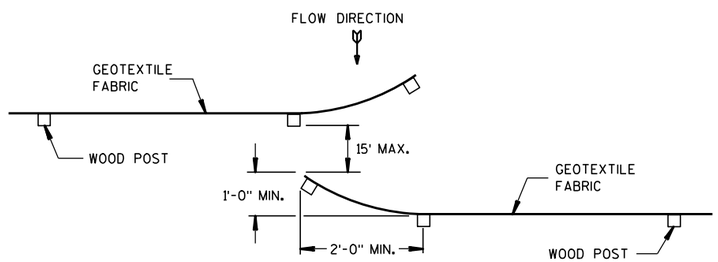



*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

## SILT FENCE

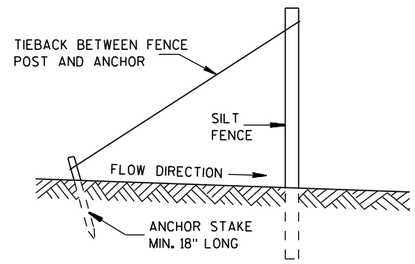



TWIST METHOD




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

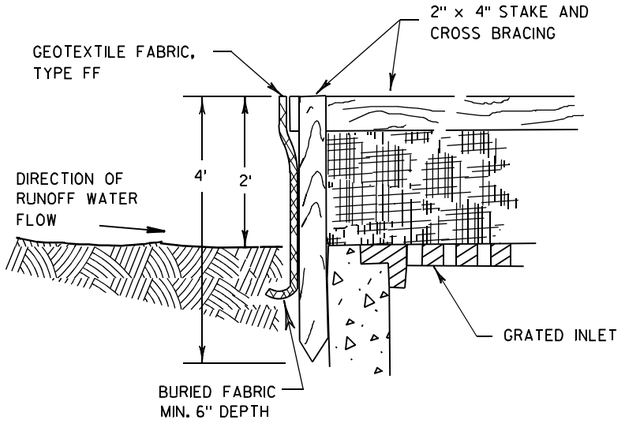


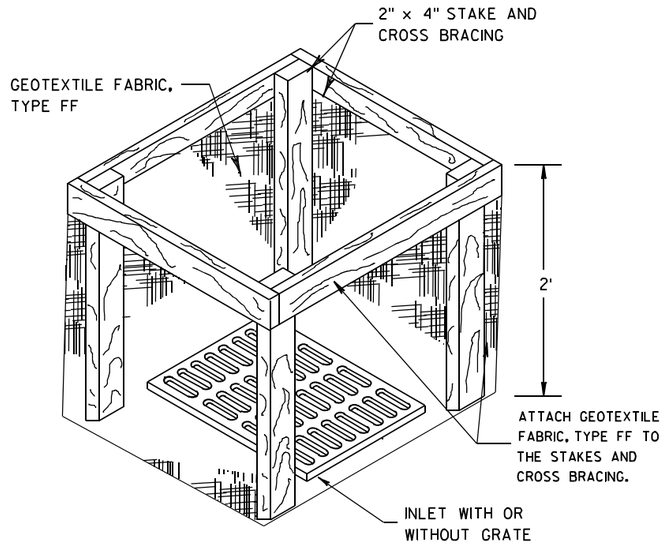
6

S.D.D. 8 E 9-6

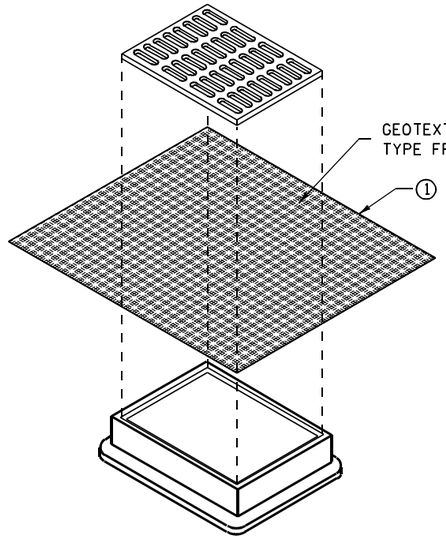
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S.D.D. 8 E 9-6



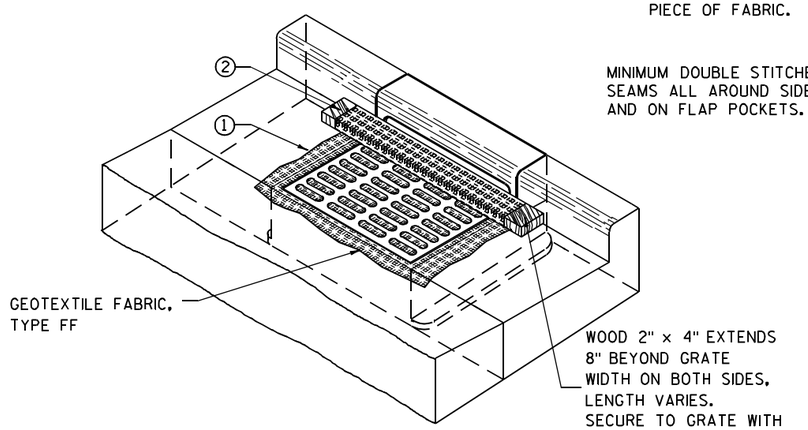




## INLET PROTECTION, TYPE A

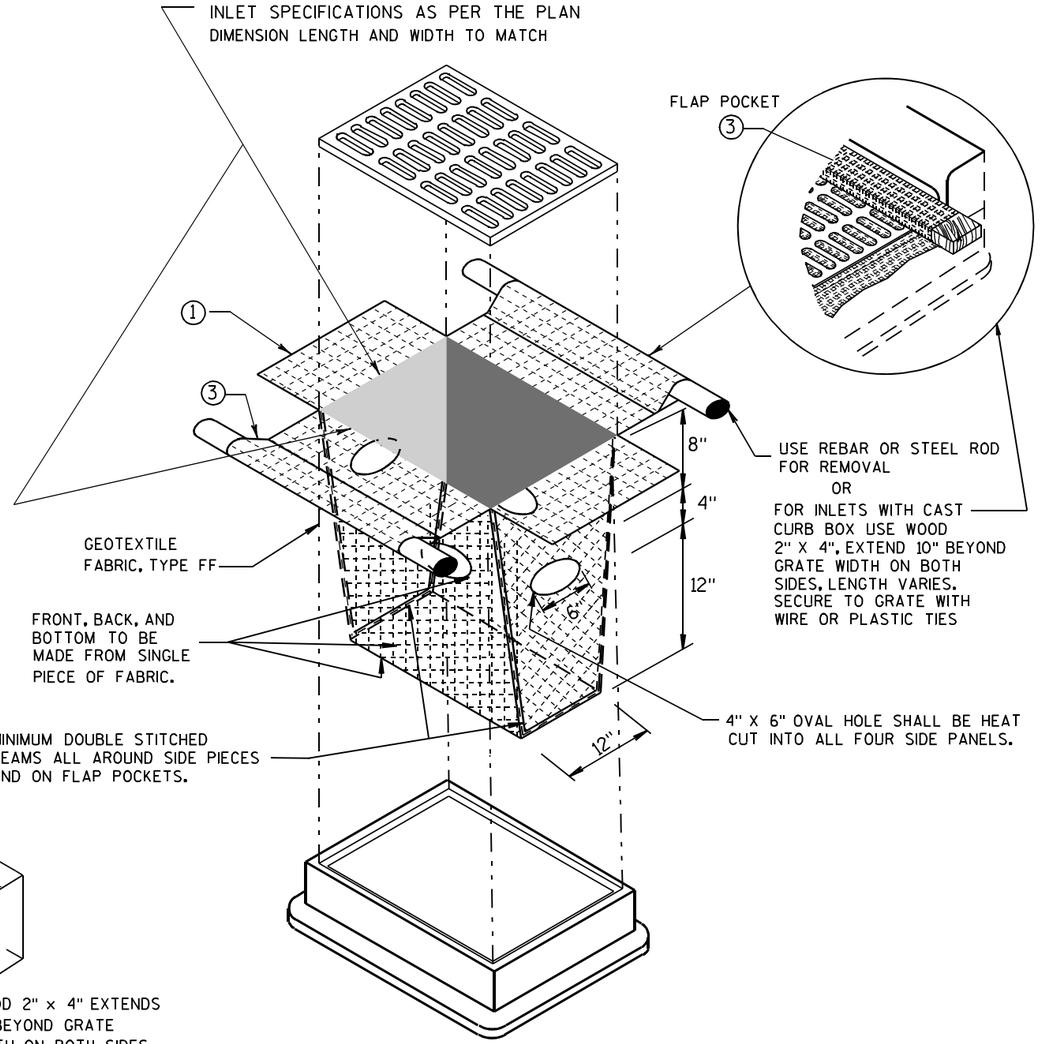



## INLET PROTECTION, TYPE B
## (WITHOUT CURB BOX)

(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.

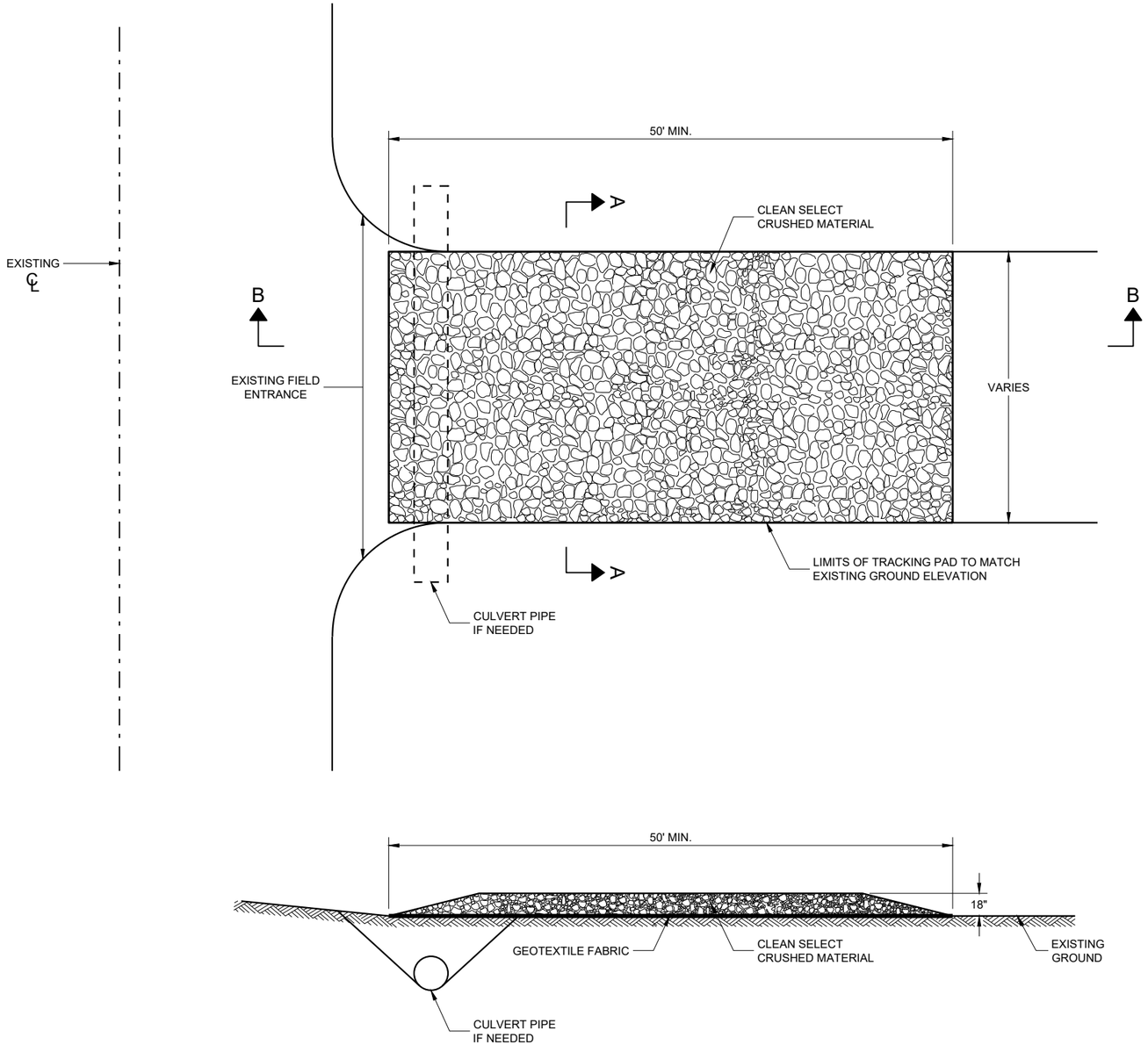
**INLET PROTECTION**
**TYPE A, B, C, AND D**

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.

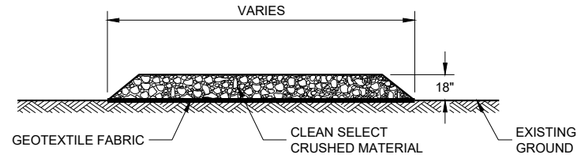
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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**

# TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVE ENGINEER

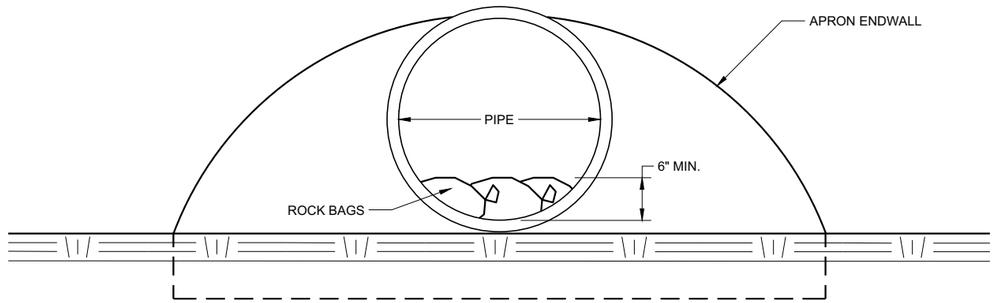
FHWA



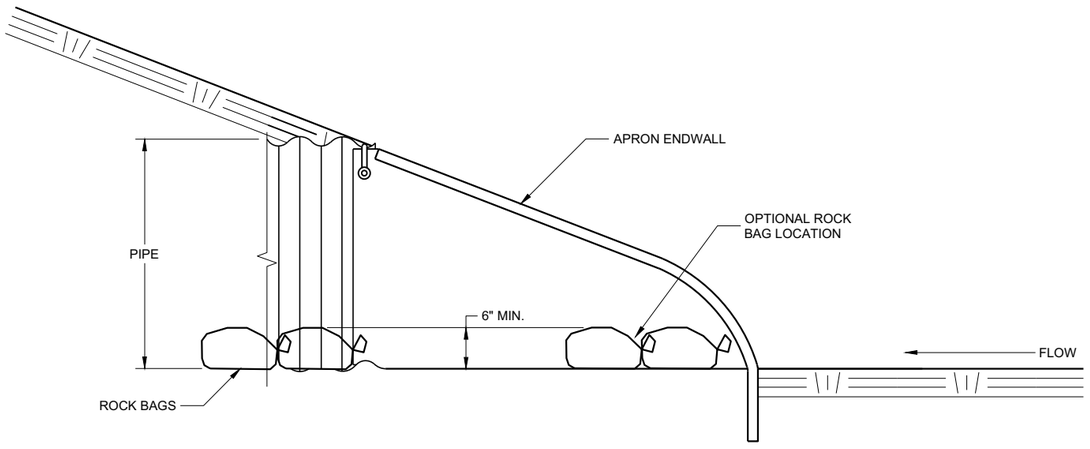


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SDD 08E14 - 01




**END VIEW**




**SIDE VIEW**

## CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

| CULVERT PIPE CHECK | |
|---|---|
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION | |
| APPROVED<br>May 2019<br>DATE | /S/ Daniel Schave<br>EROSION CONTROL ENGI |
| FHWA | |





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SDD 08E15 - 01

## METAL APRON ENDWALLS

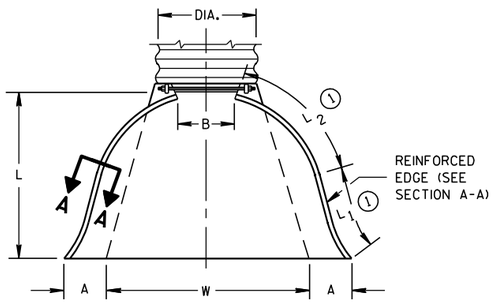
| PIPE DIA. (IN.) | MIN. THICK. (Inches) STEEL | MIN. THICK. (Inches) ALUM. | DIMENSIONS (Inches) A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | APPROX. SLOPE | BODY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | .064 | .060 | 6 | 6 | 6 | 21 | 12 | 17 1/2 | 24 | 2 1/2 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

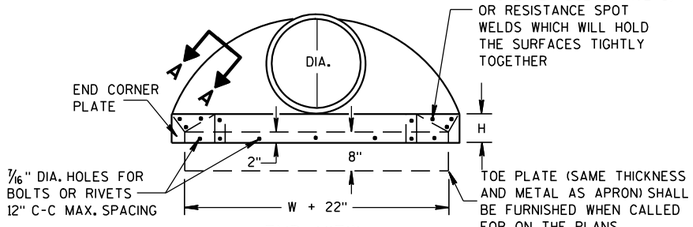
## REINFORCED CONCRETE APRON ENDWALLS

| 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 |

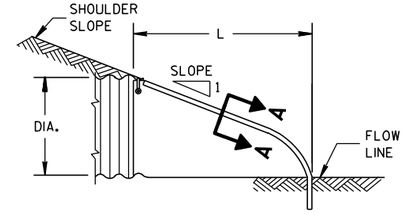
*MINIMUM
**MAXIMUM




PLAN VIEW

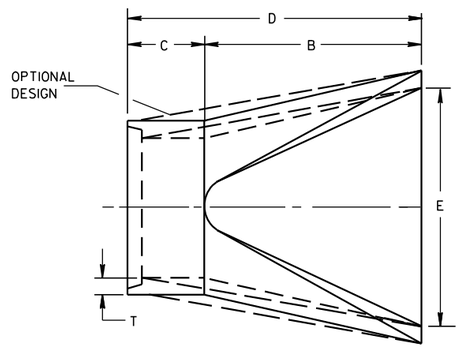



END VIEW

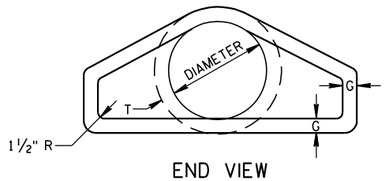



SIDE ELEVATION

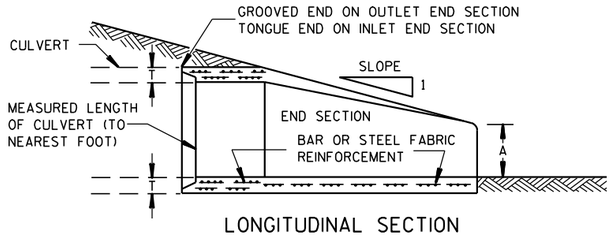
## METAL ENDWALLS




PLAN

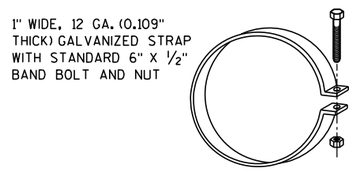



END VIEW



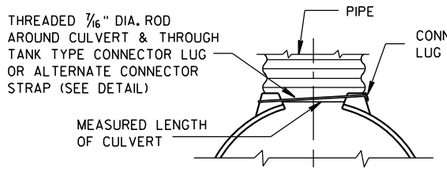

LONGITUDINAL SECTION

## CONCRETE ENDWALLS

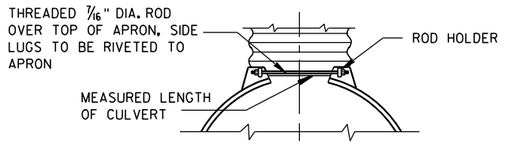



ALTERNATE FOR TYPE 1 CONNECTION

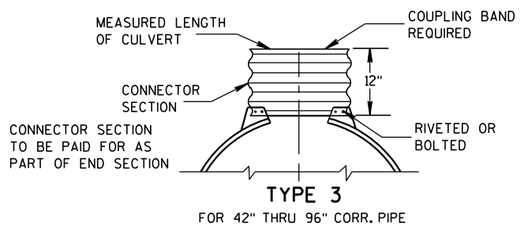
## END SECTION CONNECTOR STRAP



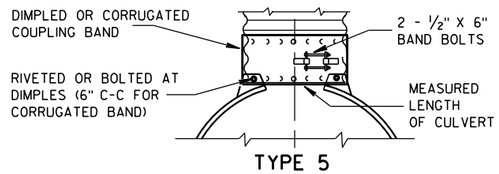

TYPE 1
FOR 12" THRU 24" CORR. PIPE




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

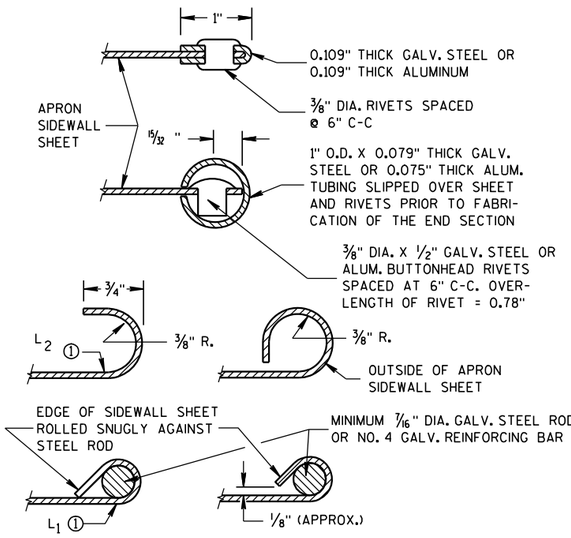
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

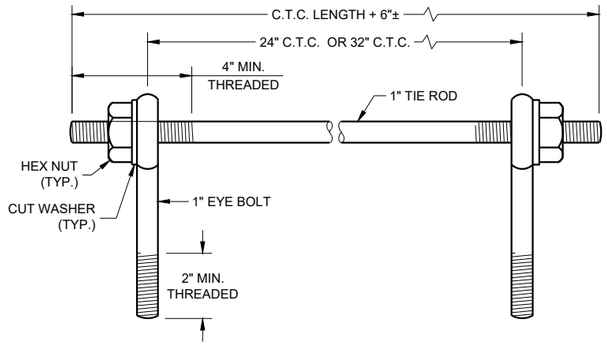
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

# APRON ENDWALLS FOR CULVERT PIPE

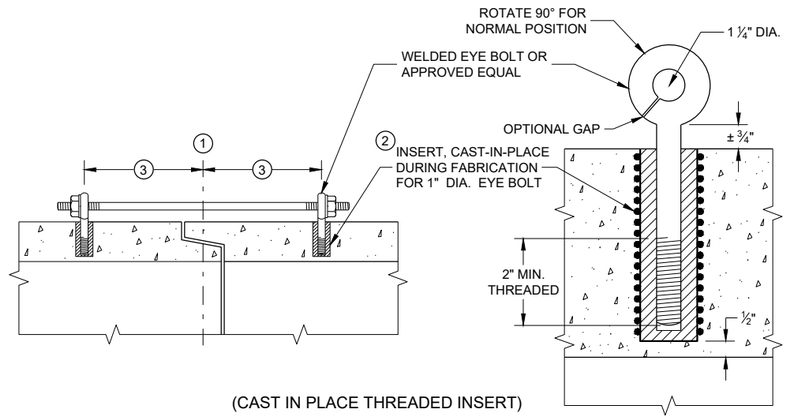
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA


6
S.D.D. 8 F 1-11




**EYE BOLTS AND TIE ROD**




(CAST IN PLACE THREADED INSERT)

**LONGITUDINAL SECTIONS**

# EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

## GENERAL NOTES

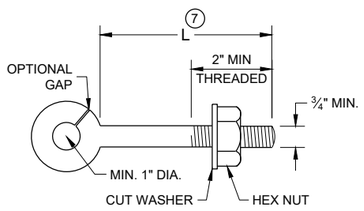
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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.

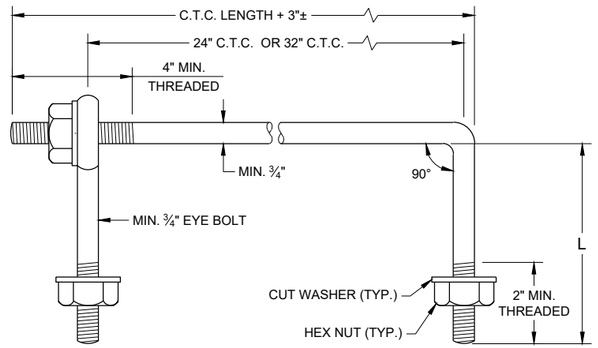
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

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.

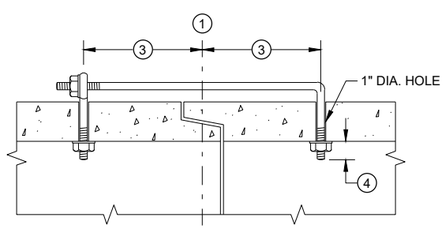



**EYE BOLT** 7

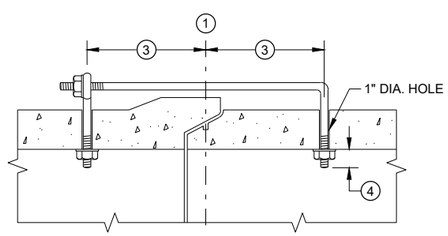
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.




**EYE BOLT AND TIE ROD**




(TONGUE AND GROOVE PIPE)




(MODIFIED BELL PIPE)

**LONGITUDINAL SECTION**

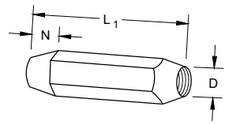
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

# EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

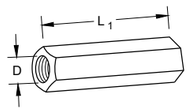
ADJUSTABLE TIE ROD TABLE

| 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



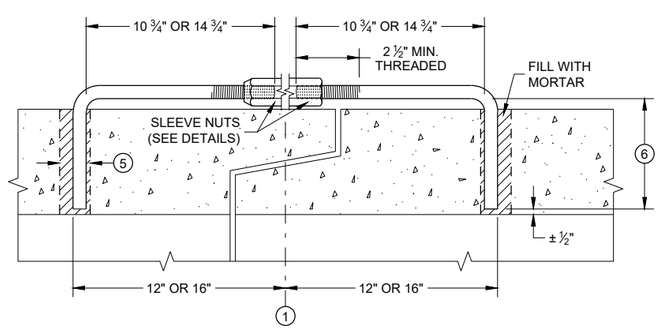

TAPERED




PLAIN

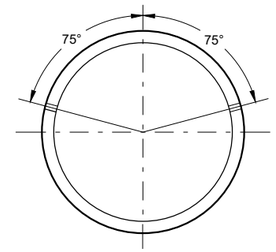
RIGHT AND LEFT THREADS

**SLEEVE NUTS**



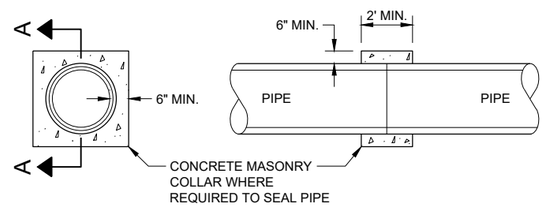

**LONGITUDINAL SECTION**

# 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**

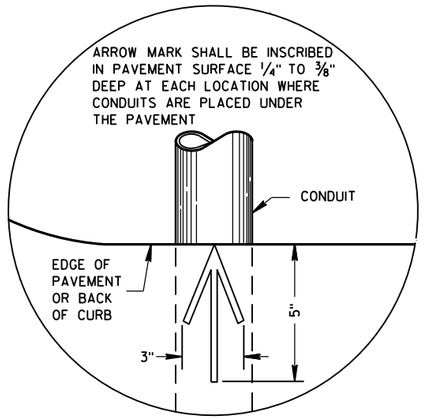
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA



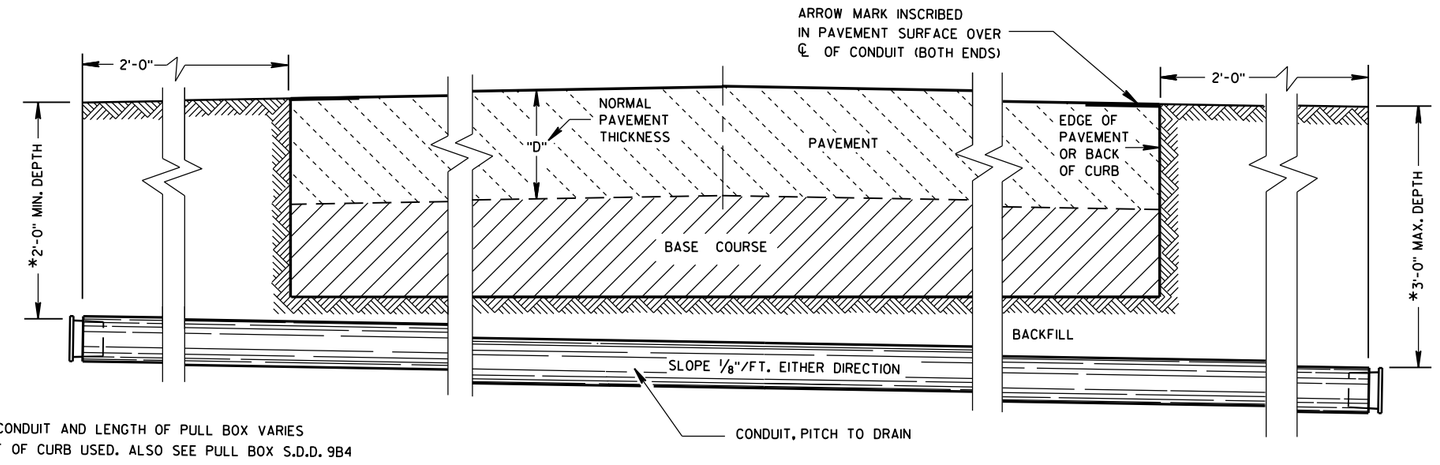
SDD 08F04 - 08

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

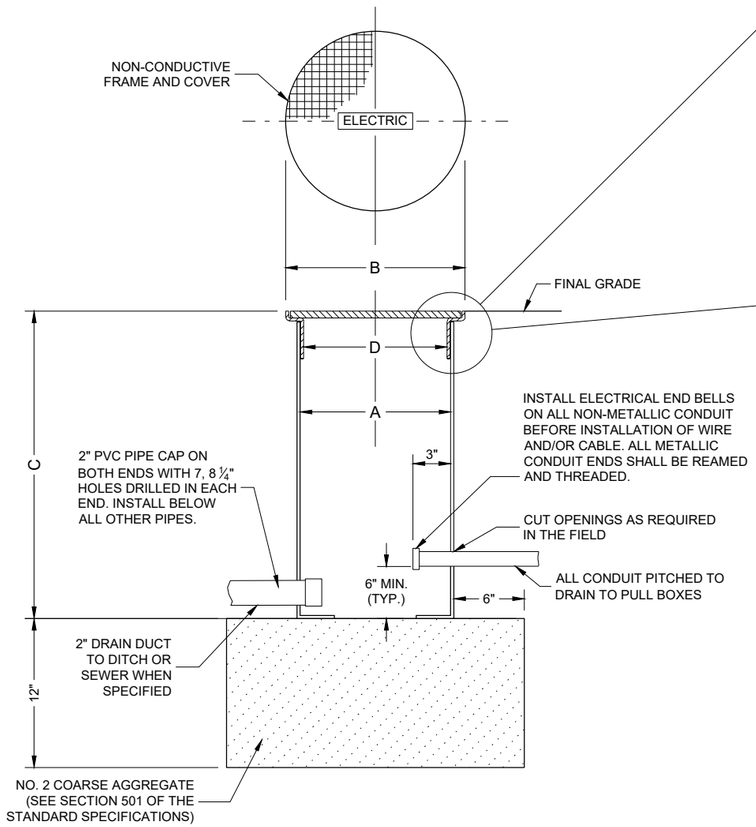
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

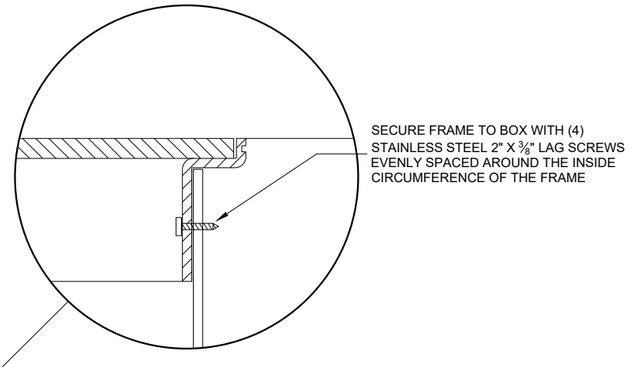
| DIMENSION IN INCHES | | NON- CONDUCTIVE PULL BOX | |
|---|---|---|---|
| BOX DIAMETER ** (INSIDE) | A | 24 | 24 |
| BOX OVERALL OUTSIDE DIAMETER | B | 27 | 27 |
| BOX LENGTH | C | 36 | 42 |
| FRAME OPENING | D | 22 ½ | 22 ½ |
| WEIGHT IN POUNDS * | | | |
| COVER | | 50 | 50 |
| BOX ONLY | | 75 | 85 |

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

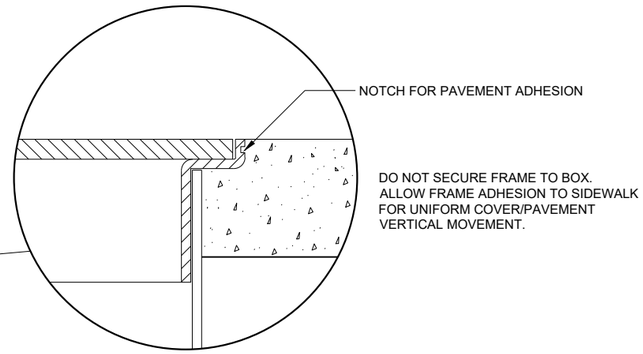
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



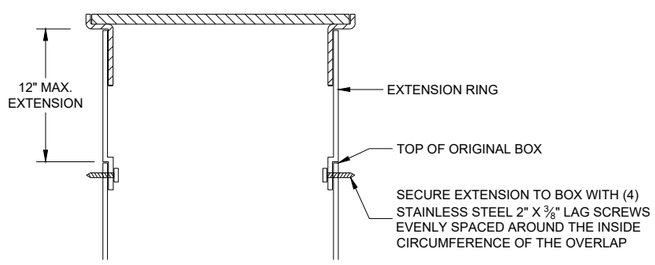

**NON-CONDUCTIVE PULL BOX**




**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".

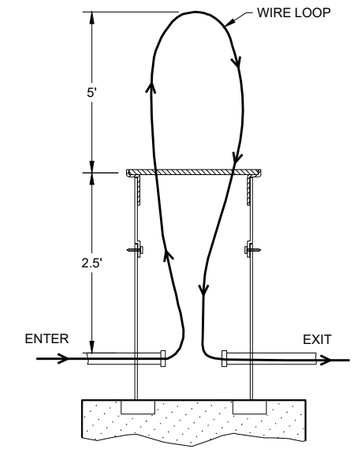
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

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

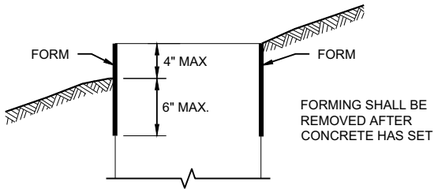
APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 257

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.

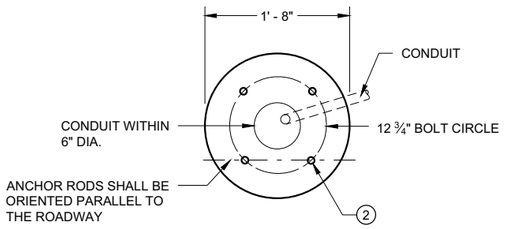
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

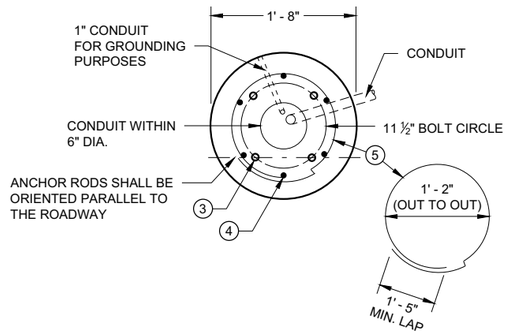
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

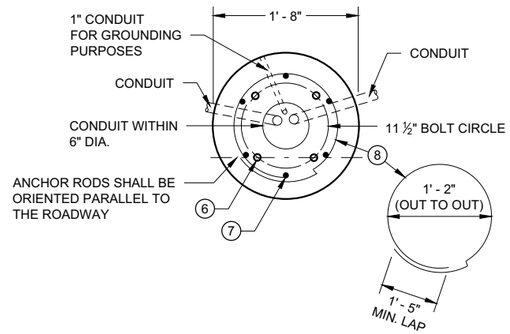
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

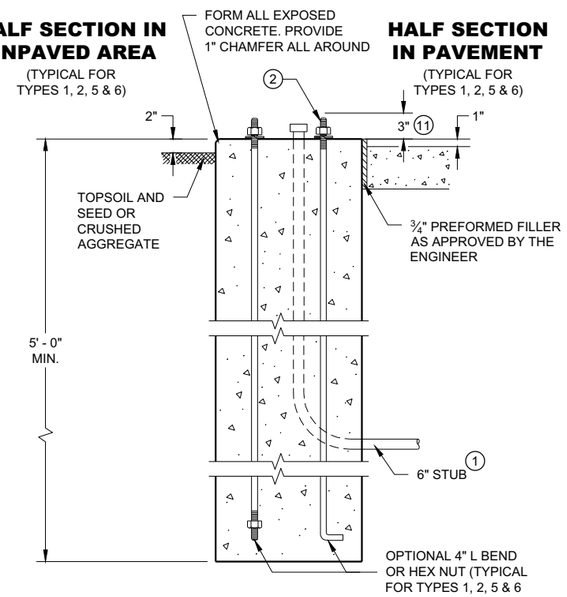
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

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.

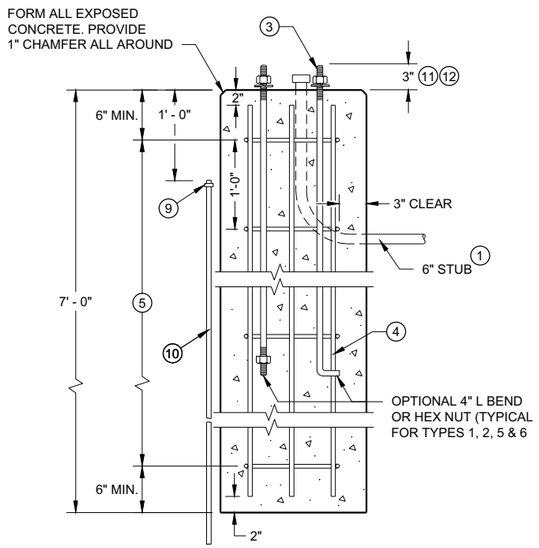
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

**HALF SECTION IN UNPAVED AREA**
(TYPICAL FOR TYPES 1, 2, 5 & 6)

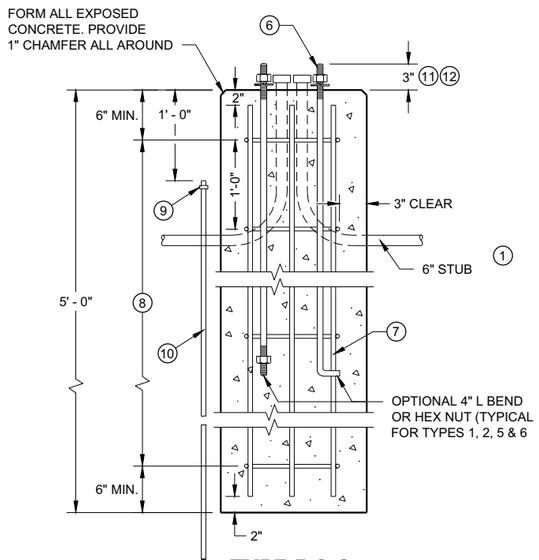
**HALF SECTION IN PAVEMENT**
(TYPICAL FOR TYPES 1, 2, 5 & 6)




**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 258

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.

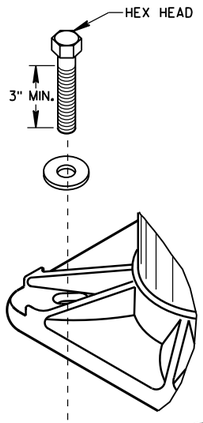
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

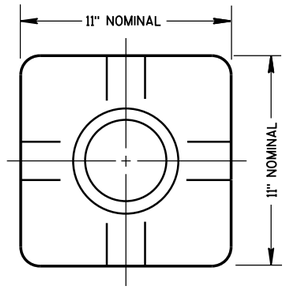
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

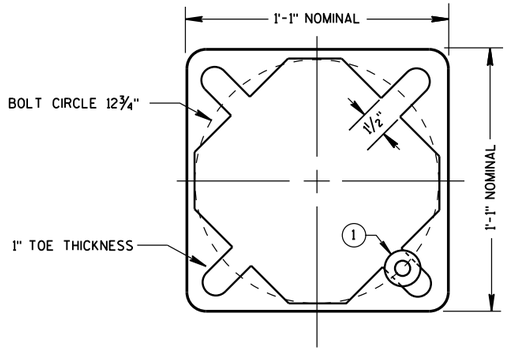
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

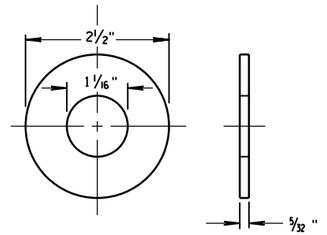



TOP VIEW
(PEDESTAL BASE)

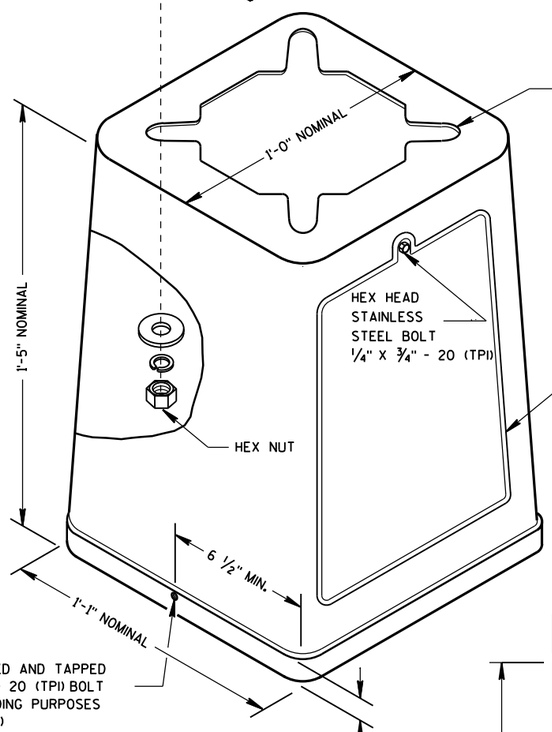



BOTTOM VIEW
(PEDESTAL BASE)

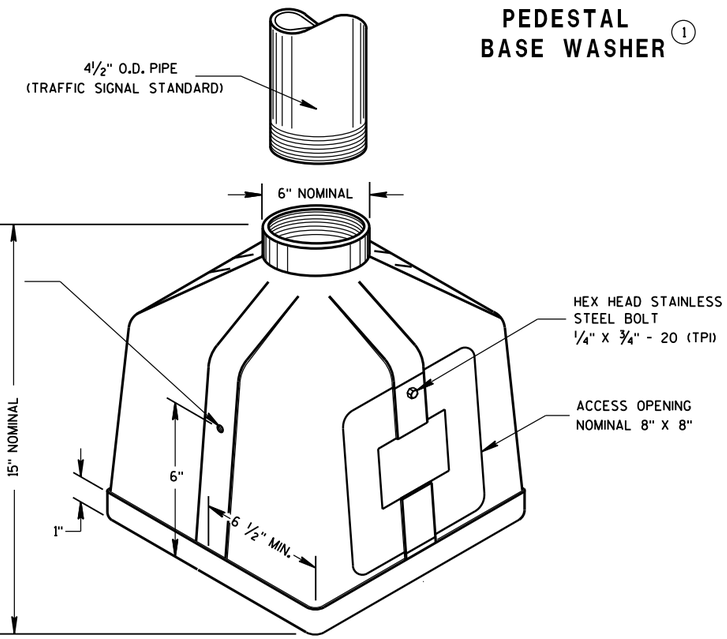



ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

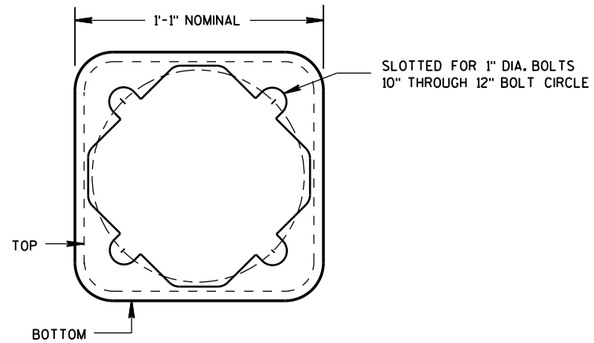
**PEDESTAL BASE WASHER** (1)



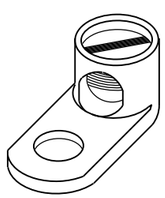

ISOMETRIC VIEW




ISOMETRIC VIEW
**PEDESTAL BASE**




BOTTOM VIEW
(TRANSFORMER BASE)

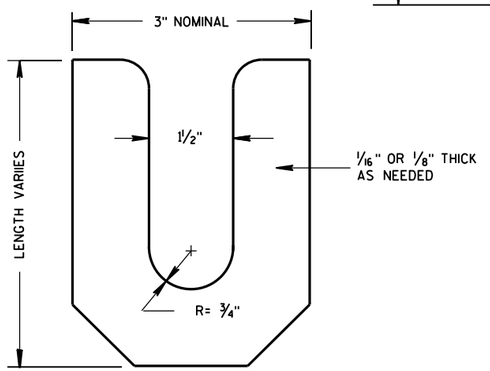


**TYPICAL MECHANICAL CONNECTOR LUG**

TO BE FURNISHED WITH EACH BASE

**TRANSFORMER BASE**

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




**LEVELING SHIM**

**TRANSFORMER/PEDESTAL BASES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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




6


S.D.D. 9 C 3-4

## GENERAL NOTES

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER.

IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

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

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

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 OF THE STANDARD SPECIFICATIONS.

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

ANCHOR RODS SHALL BE 1" X 60".

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

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES 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 OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

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

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE 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.

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.

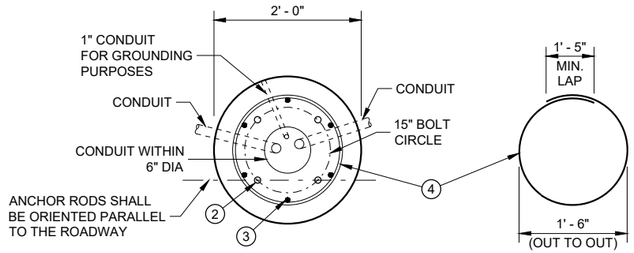
FOR USE WITH TYPE 7 AND TYPE 17 POLES.

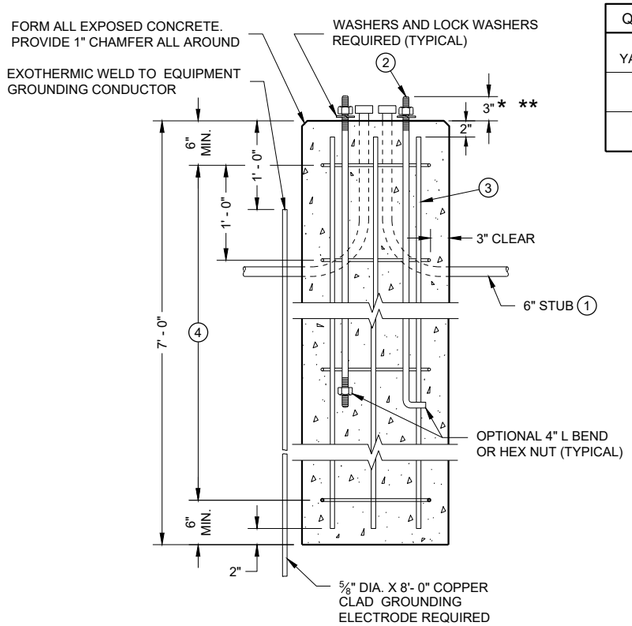
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN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

(2) (4) 1" DIA. X 5'-0" ANCHOR RODS.

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

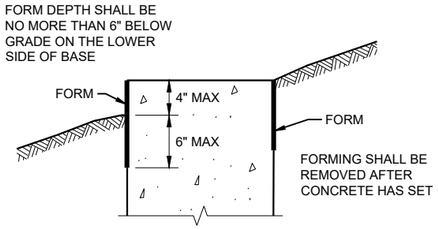
(4) (7) NO. 4 X 6'-2" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



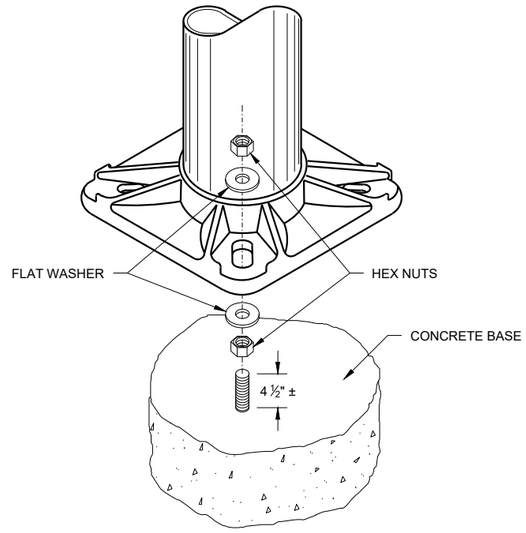




### CONCRETE BASE, TYPE 7

| QUANTITY REQUIREMENTS | |
|---|---|
| APPROX. CUBIC YARDS OF CONCRETE | 0.8 |
| LBS. OF HOOP BAR STEEL | 29 |
| LBS. OF VERTICAL BAR STEEL | 60 |




### FORMING DETAIL




### NON-BREAKAWAY INSTALLATION
### (LEVELING NUT)

* 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.

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

**CONCRETE BASE TYPE 17**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

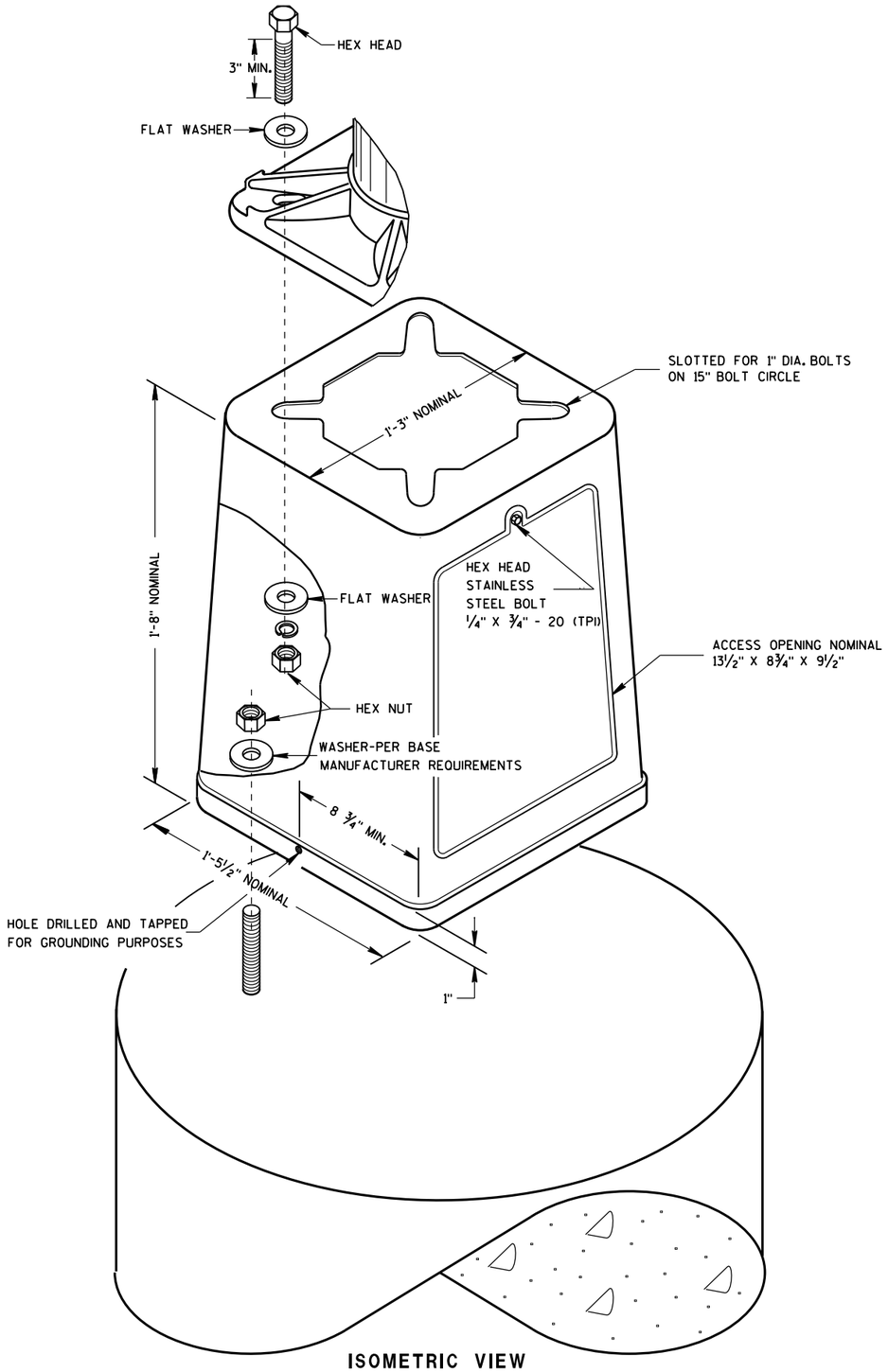
APPROVED
May 2022 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTU PROGRAM LEADER

FHWA



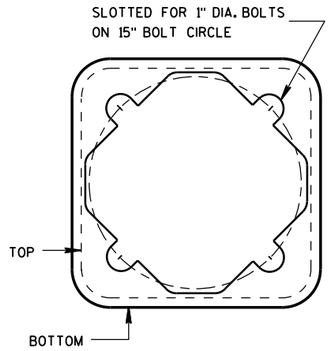

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SDD 09C08 - 05




ISOMETRIC VIEW

## TRANSFORMER BASE




BOTTOM VIEW

## GENERAL NOTES

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

BREAKAWAY BASES (WHERE REQUIRED) WILL BE MEASURED AND PAID AS SEPARATE ITEMS OF WORK IN ADDITION TO THE LIGHT POLE.

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 DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIMS SHALL BE SIZED TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

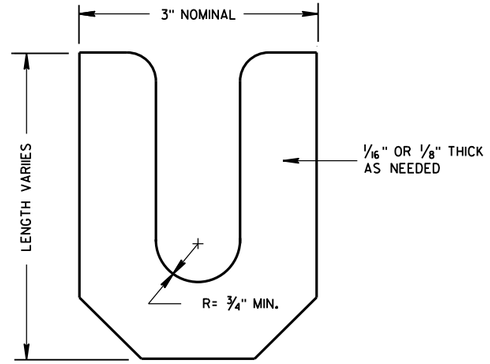
A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE TRANSFORMER BASE.

THE MECHANICAL CONNECTOR (GROUNDING LUG) SHALL BE INSTALLED USING THE TAPPED HOLE PROVIDED BY THE MANUFACTURER. THE MOUNTING BOLT HEXHEAD), NUT, WASHER AND LOCK WASHER SHALL BE STAINLESS STEEL, SIZED TO FIT THE THREADING AND HOLE SIZE, AND BE OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

SHOULD A GROUNDING LUG MOUNTING HOLE NOT BE PROVIDED, THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" X 3/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE. IT SHALL BE MOUNTED IN THE SAME LOCATION AS IS SHOWN ON THE DRAWING.

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

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




## LEVELING SHIM



## TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

**TRANSFORMER BASE FOR 15" BOLT CIRCLE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

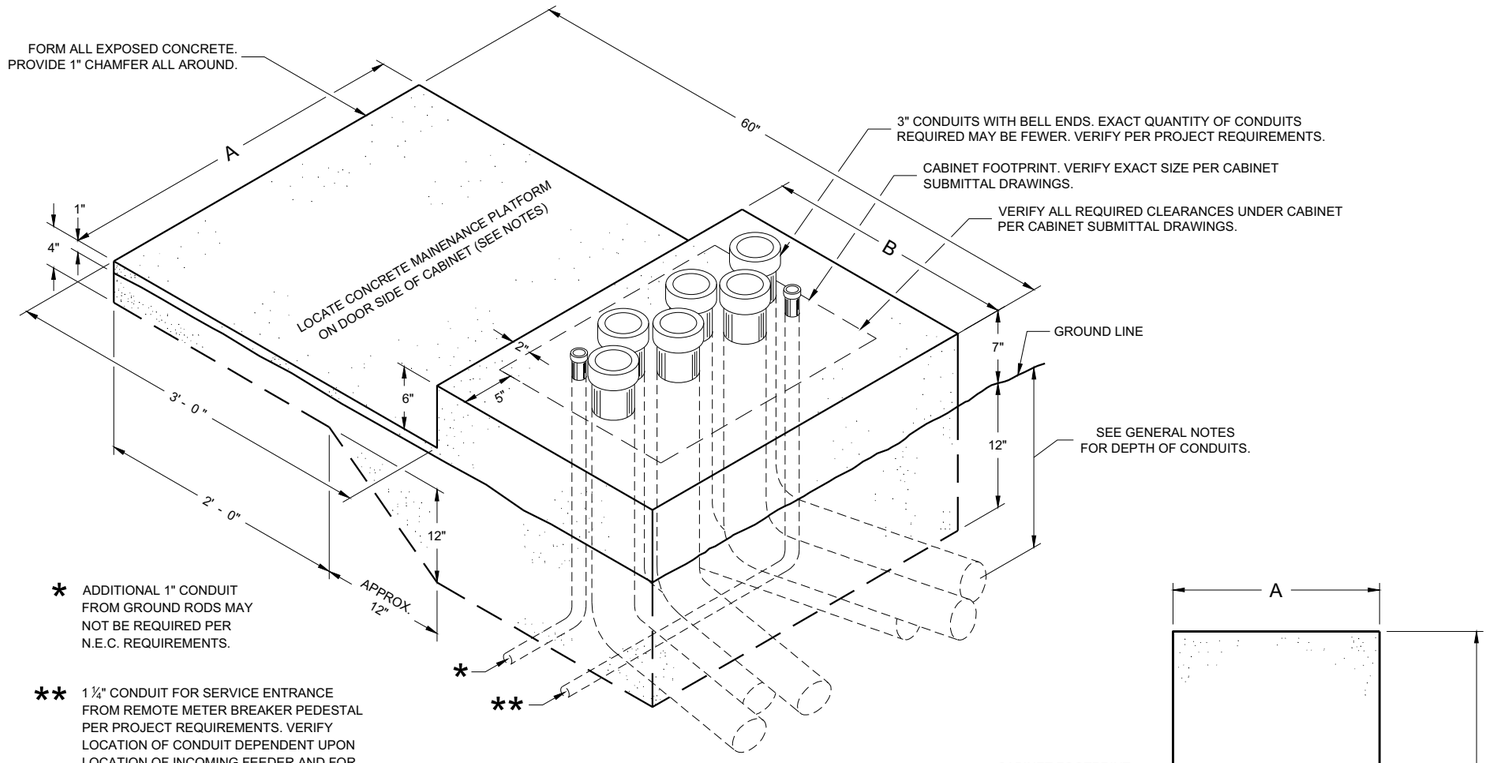


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S.D.D. 9 C 10-3




* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

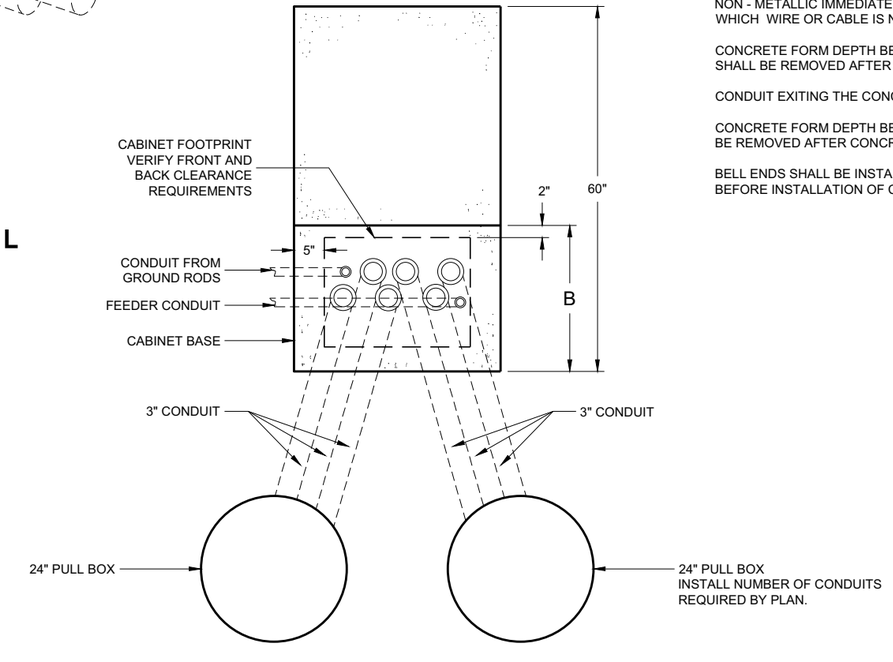
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

**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**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

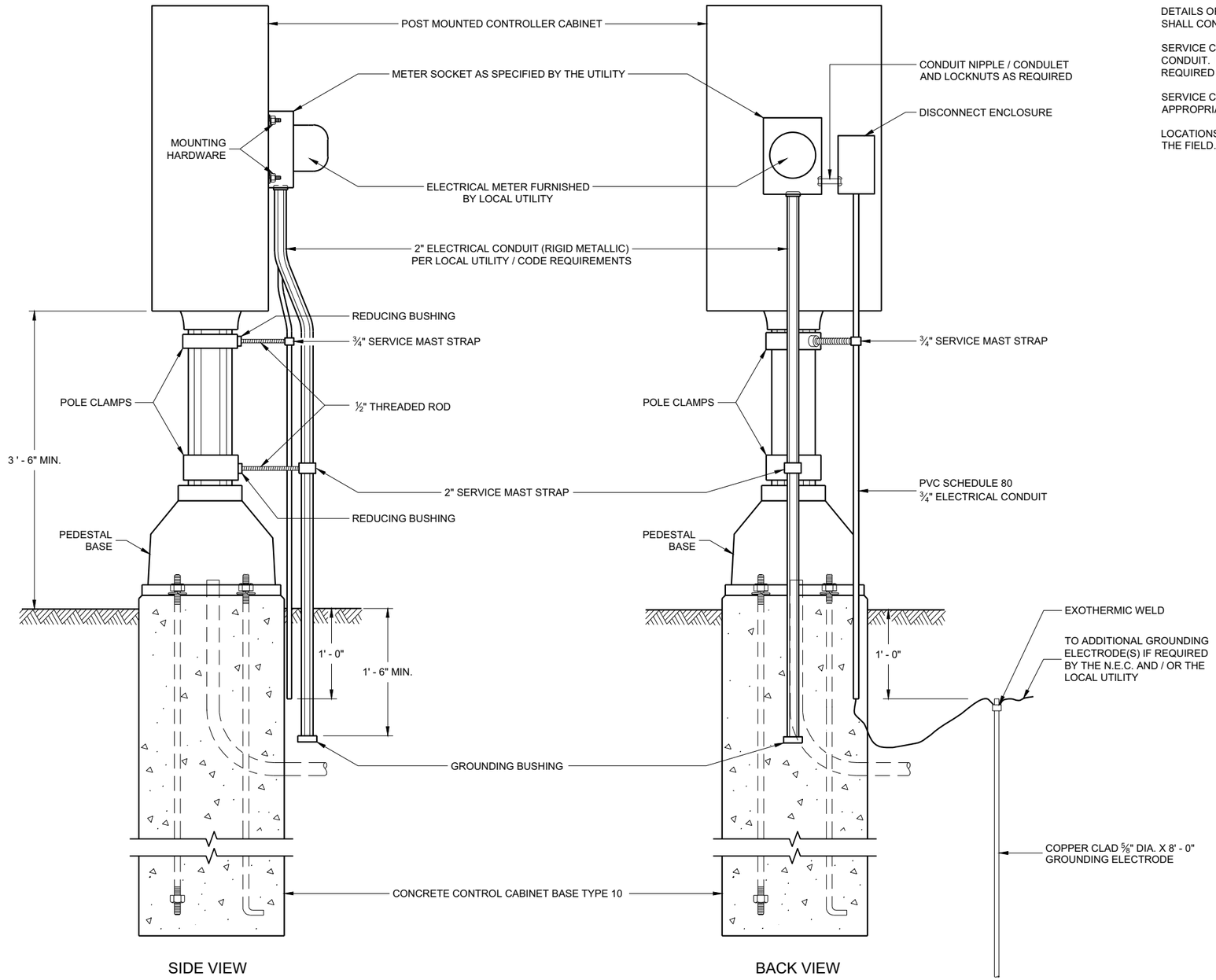
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA



SDD 09C14 - 03

SDD 09C14 - 03




**POST MOUNTED CONTROLLER SERVICE INSTALLATION**

## GENERAL NOTES

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

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID STEEL OR SCHEDULE 80 PVC ELECTRICAL CONDUIT. NIPPLES AND/OR CONDULETS, WITH LOCK NUTS AND GROUNDING BUSHINGS AS REQUIRED BY THE N.E.C. OR THE LOCAL UTILITY.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AS REQUIRED AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED ELECTRICAL CODE.

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

**POST MOUNTED CONTROLLER SERVICE INSTALLATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI



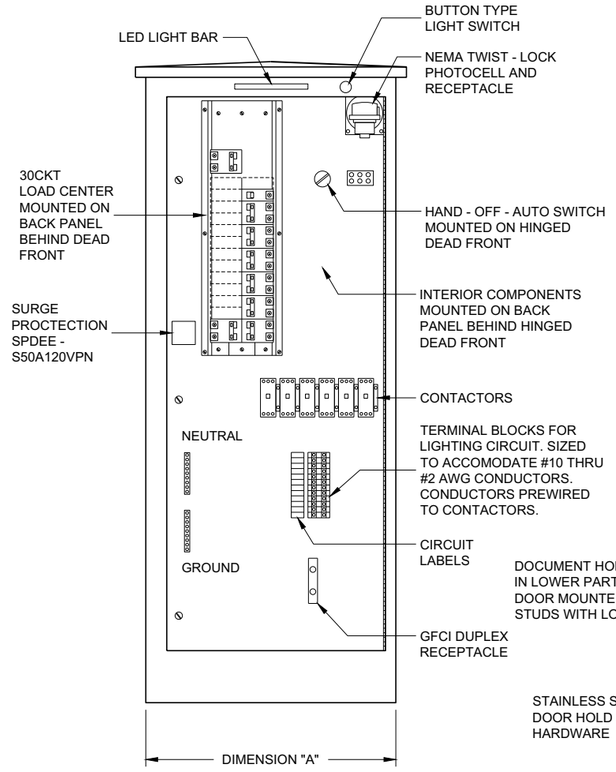
FHWA



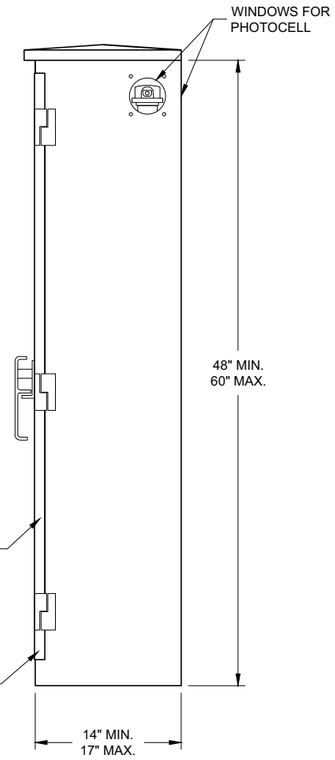
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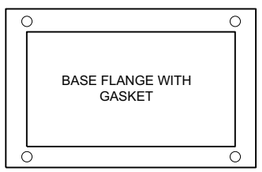
SDD 09D03 - 03

## FRONT INTERIOR ELEVATION



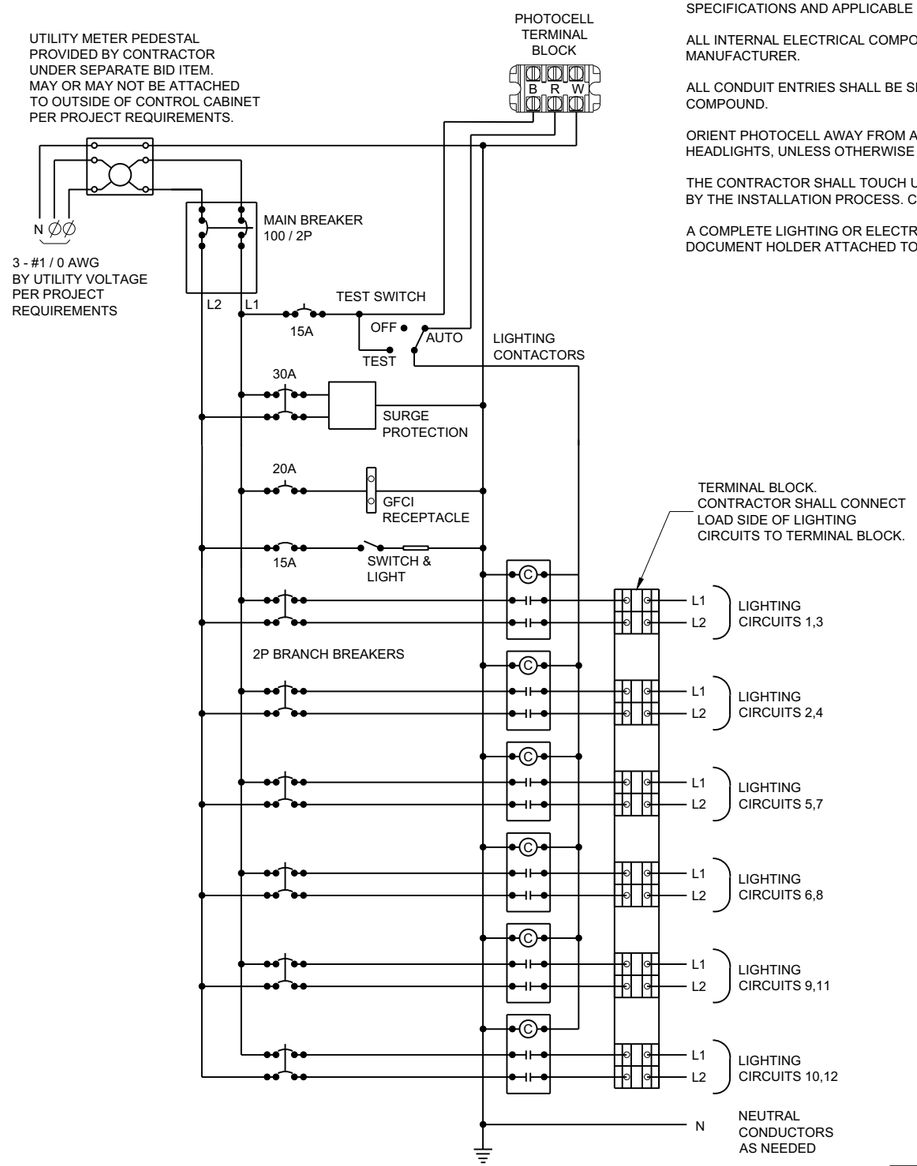

## SIDE VIEW




| 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**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

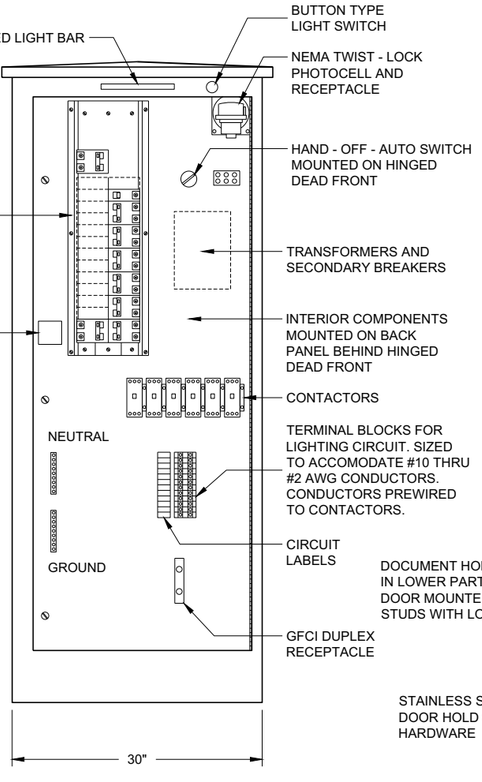
APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 264

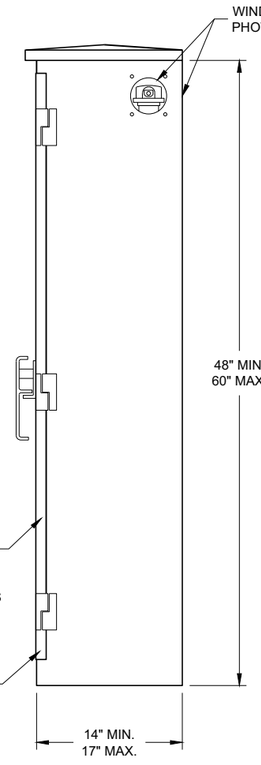
FHWA


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SDD 09D04 - 03

## FRONT INTERIOR ELEVATION



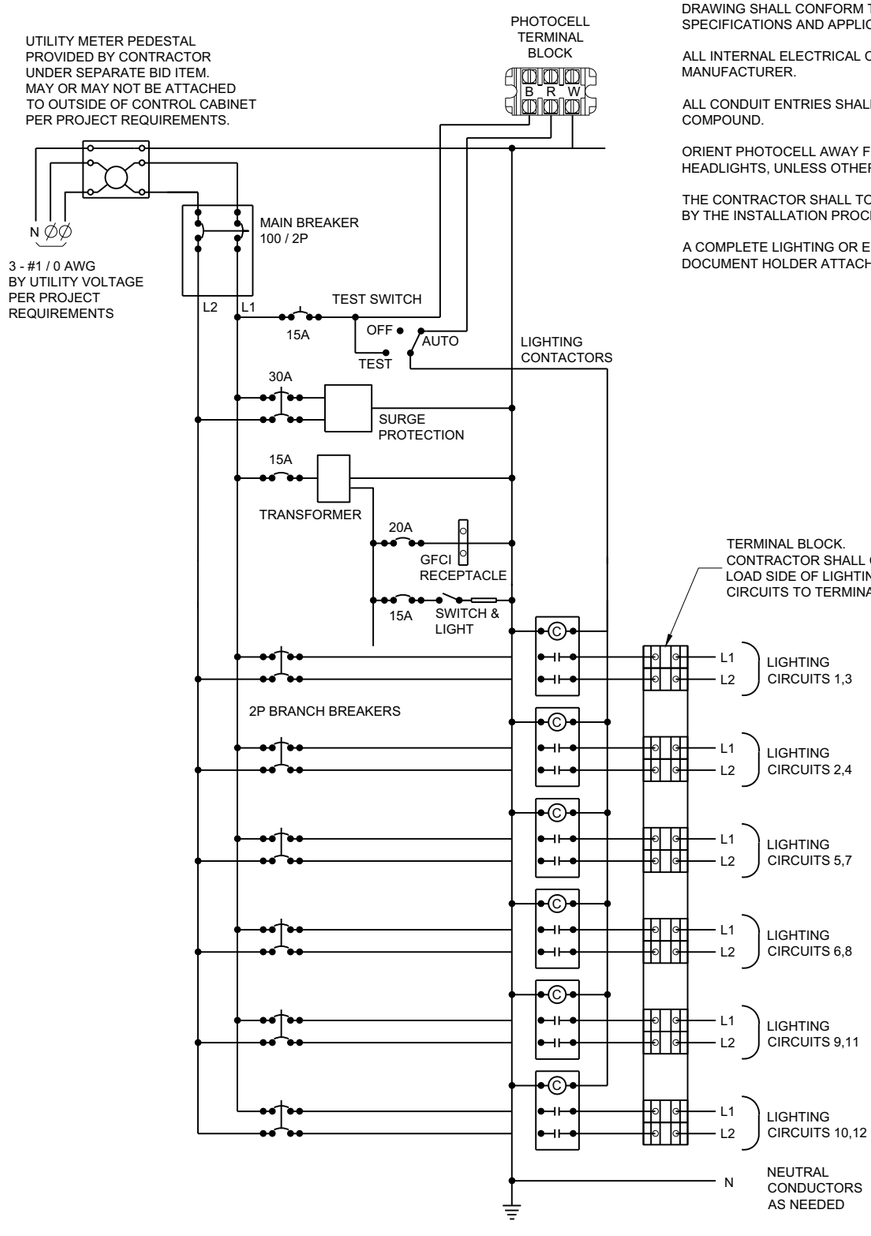

## SIDE VIEW







## 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.

# L30
# LIGHTING CONTROL CABINET 240 / 480 VOLT

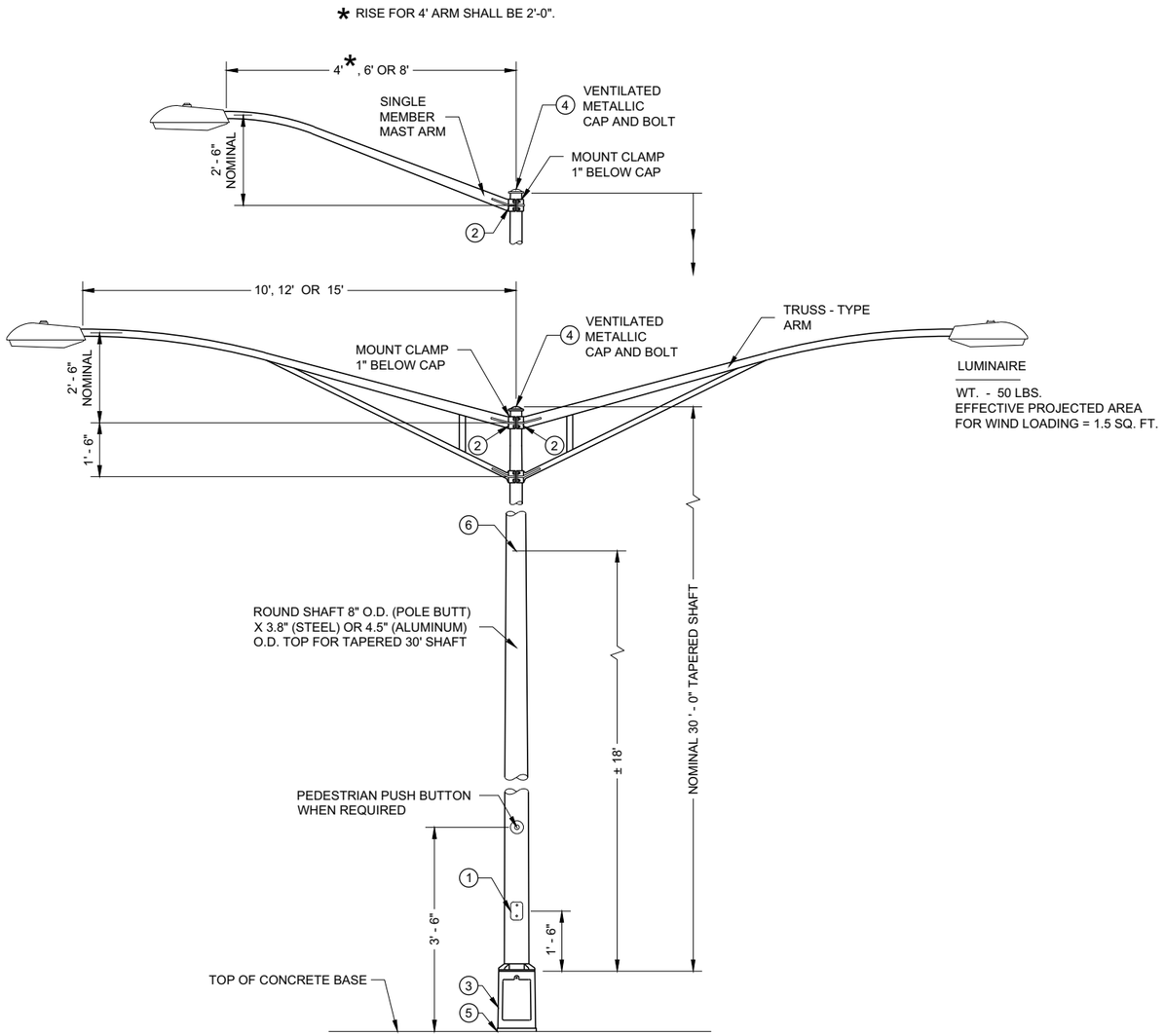
STATE OF WISCONSIN
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APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 265

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SDD 09D05 - 02




**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.

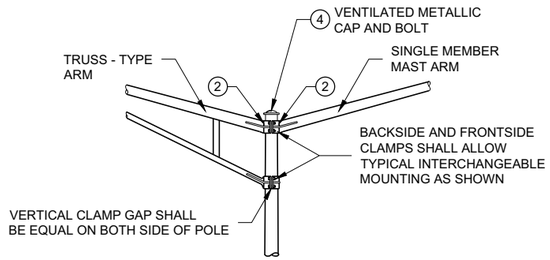
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(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.



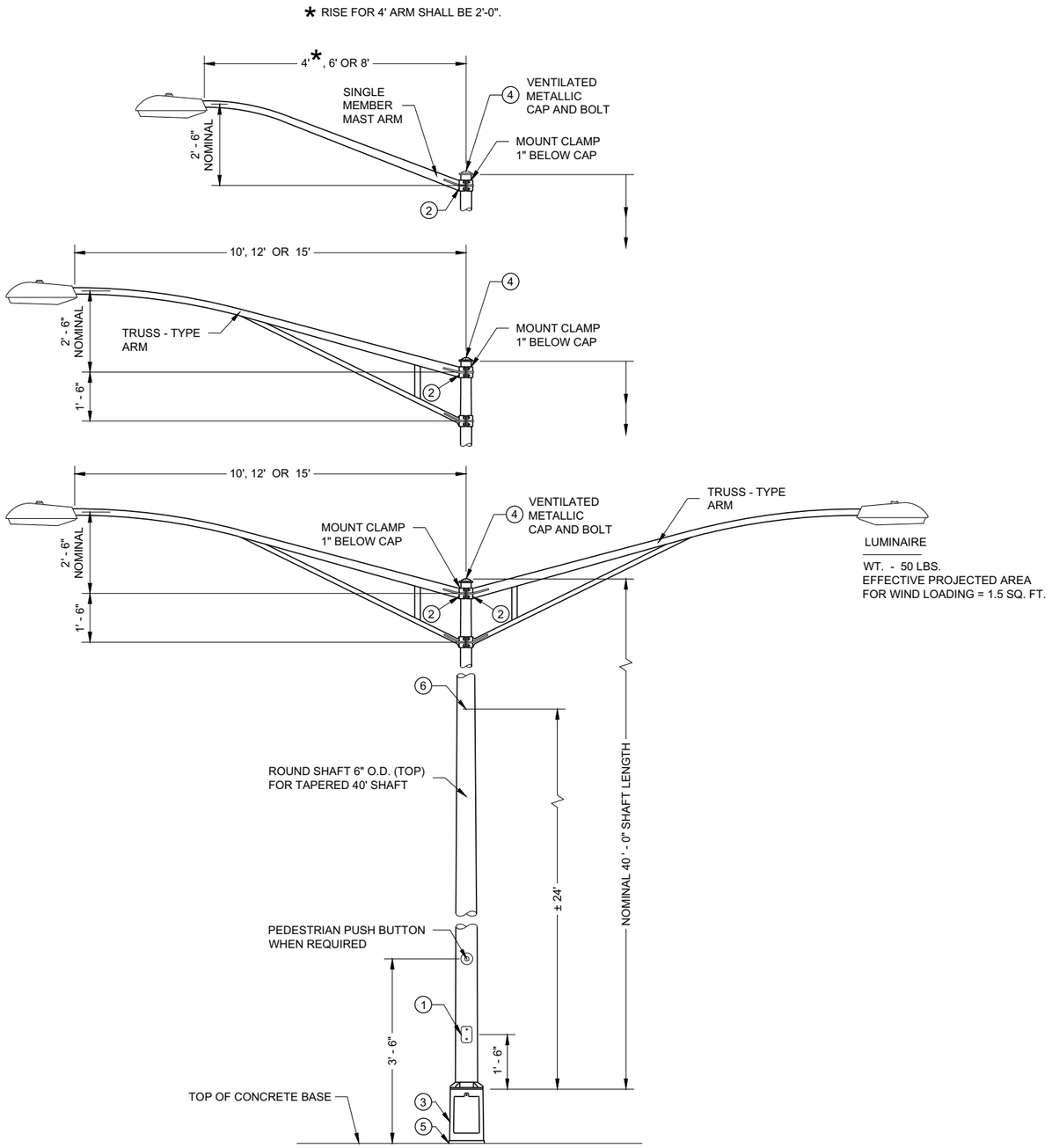

**INTERCHANGEABLE MOUNTING DETAIL**

**POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 ( 30 FEET )**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




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SDD 09E01 - 15d




**TYPE 17 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 LUMINAIRE 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 17 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 17 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SHOE BASE SHALL BE SLOTTED TO ACCEPT A 15" BOLT CIRCLE (14" X 16" SLOT) USING 1" ANCHOR RODS.

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.

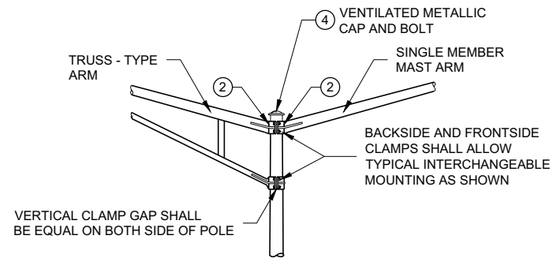
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM FHWA APPROVED TRANSFORMER BASE WHEN REQUIRED, SHALL HAVE AN ULTIMATE STATIC LOAD STRENGTH OF AT LEAST 40,000 FT. - LBS.

(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 DUMBELL - TYPE VIBRATION DAMPER.

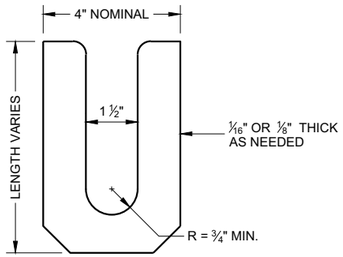



**INTERCHANGEABLE MOUNTING DETAIL**

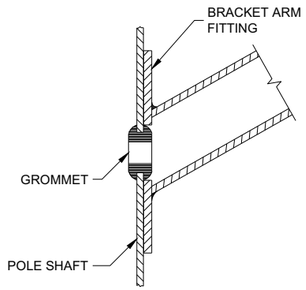
**POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 17 ( 40 FEET )**



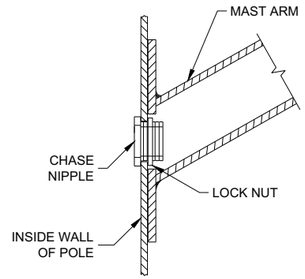
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SDD 09E01 - 15f




**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.

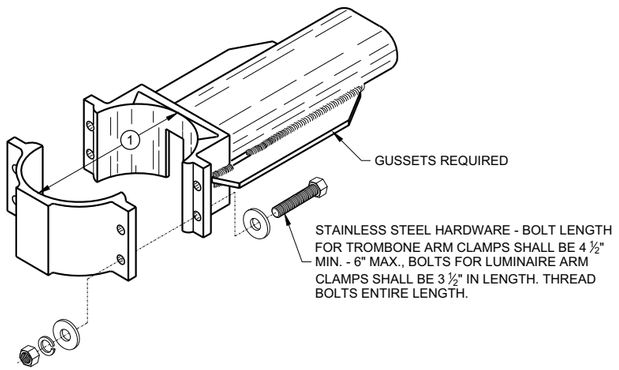
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

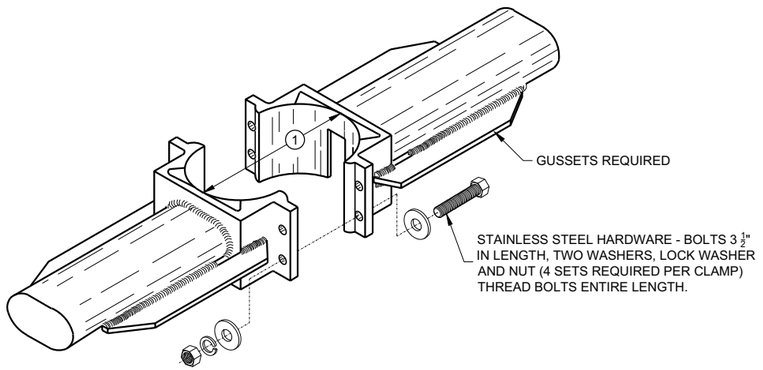
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

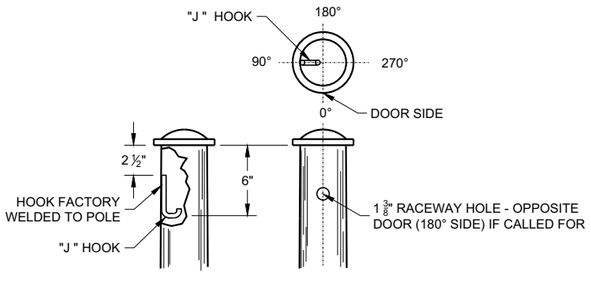
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



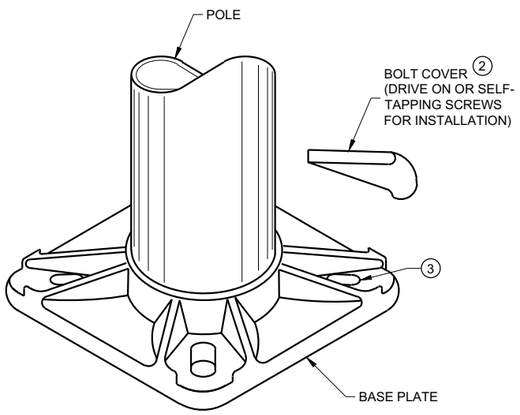

**TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP**



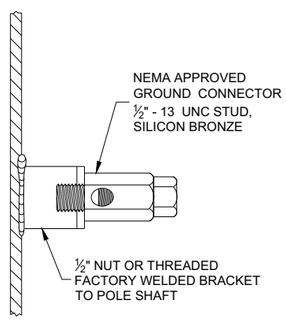

**TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS**

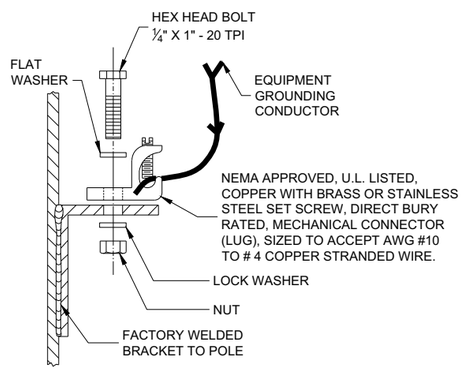


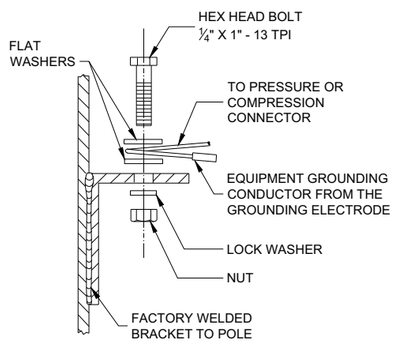

**TYPICAL "J" HOOK LOCATION**




**BASE PLATE**




**TYPICAL GROUNDING CONNECTIONS**
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

**HARDWARE DETAILS FOR POLE MOUNTING**

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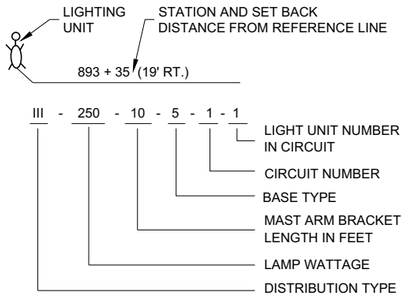

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## GENERAL NOTES

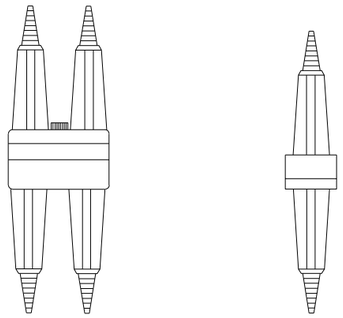
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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.



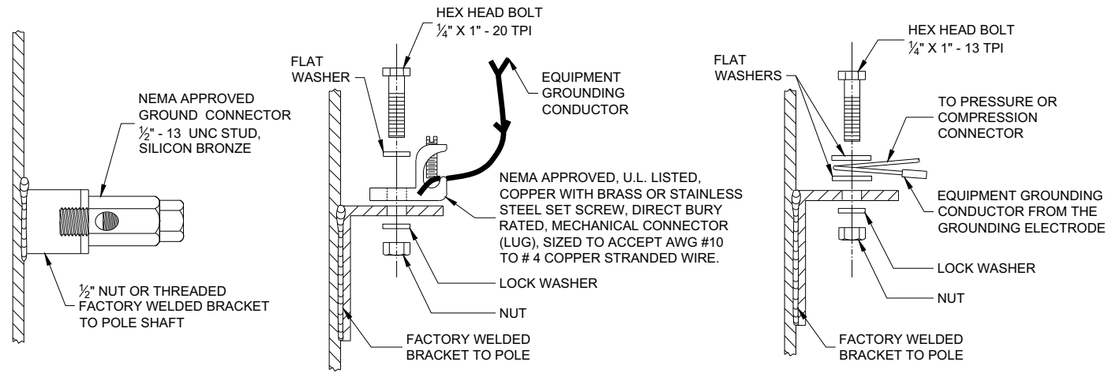

**LIGHTING UNIT CODE**
**(TYPICAL)**



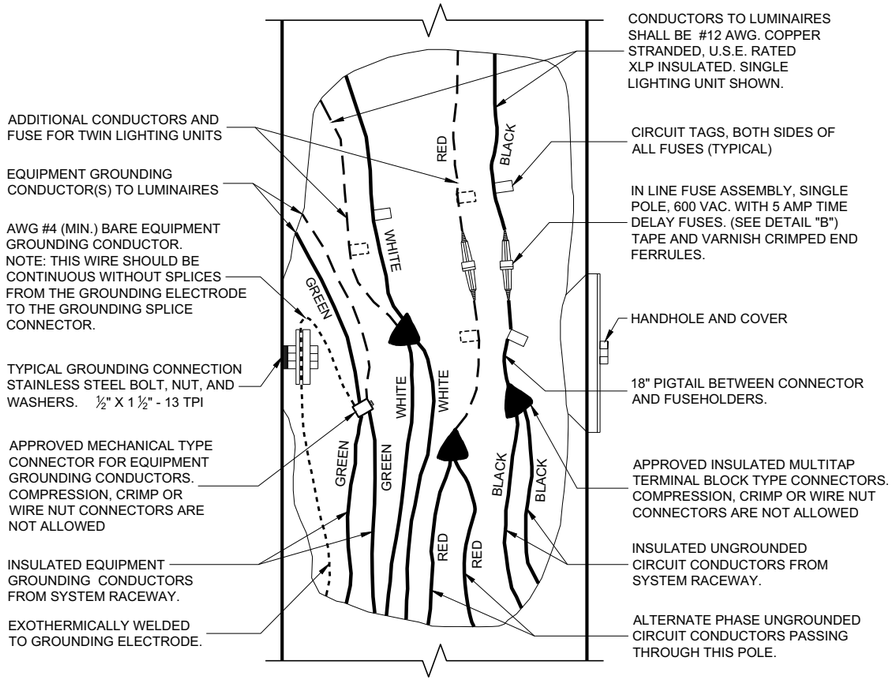
**DETAIL "A"**
**BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT**



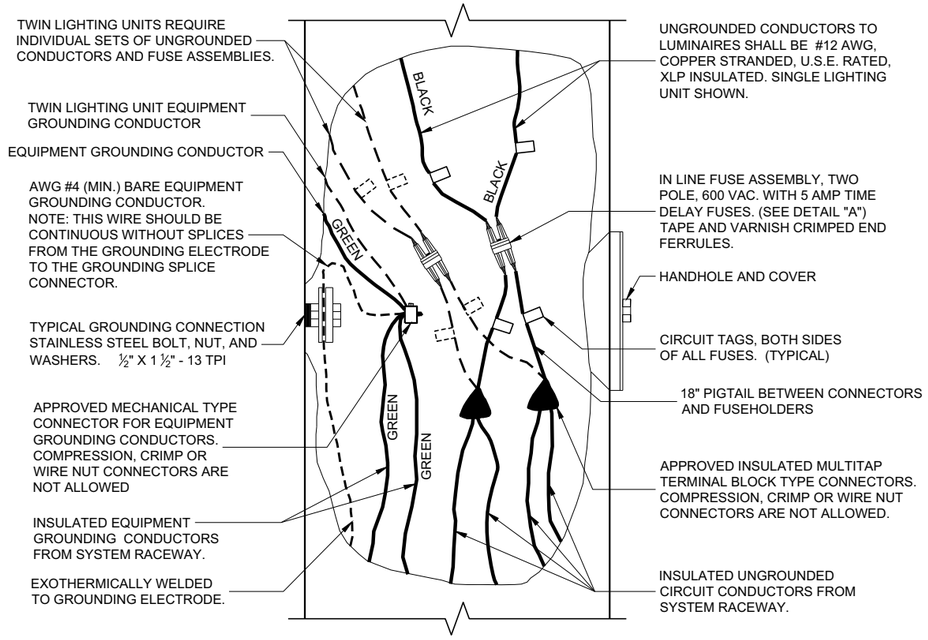
**DETAIL "B"**
**BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT**




**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**

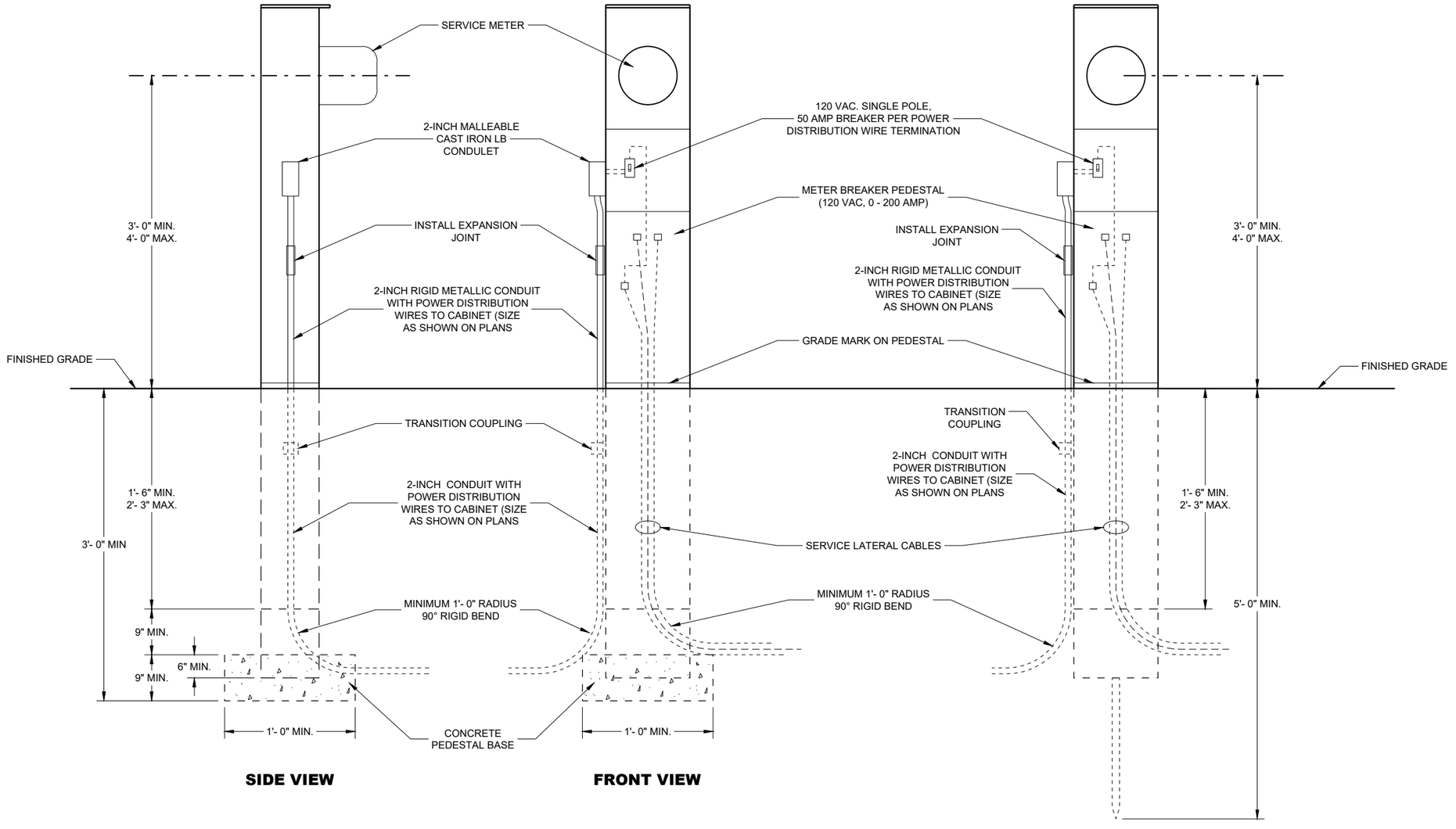
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## 2 CIRCUIT METER BREAKER PEDESTAL

## ALTERNATE SUPPORTING STAKE
**(IF APPROVED BY UTILITY)**

**2 CIRCUIT METER BREAKER PEDESTAL**

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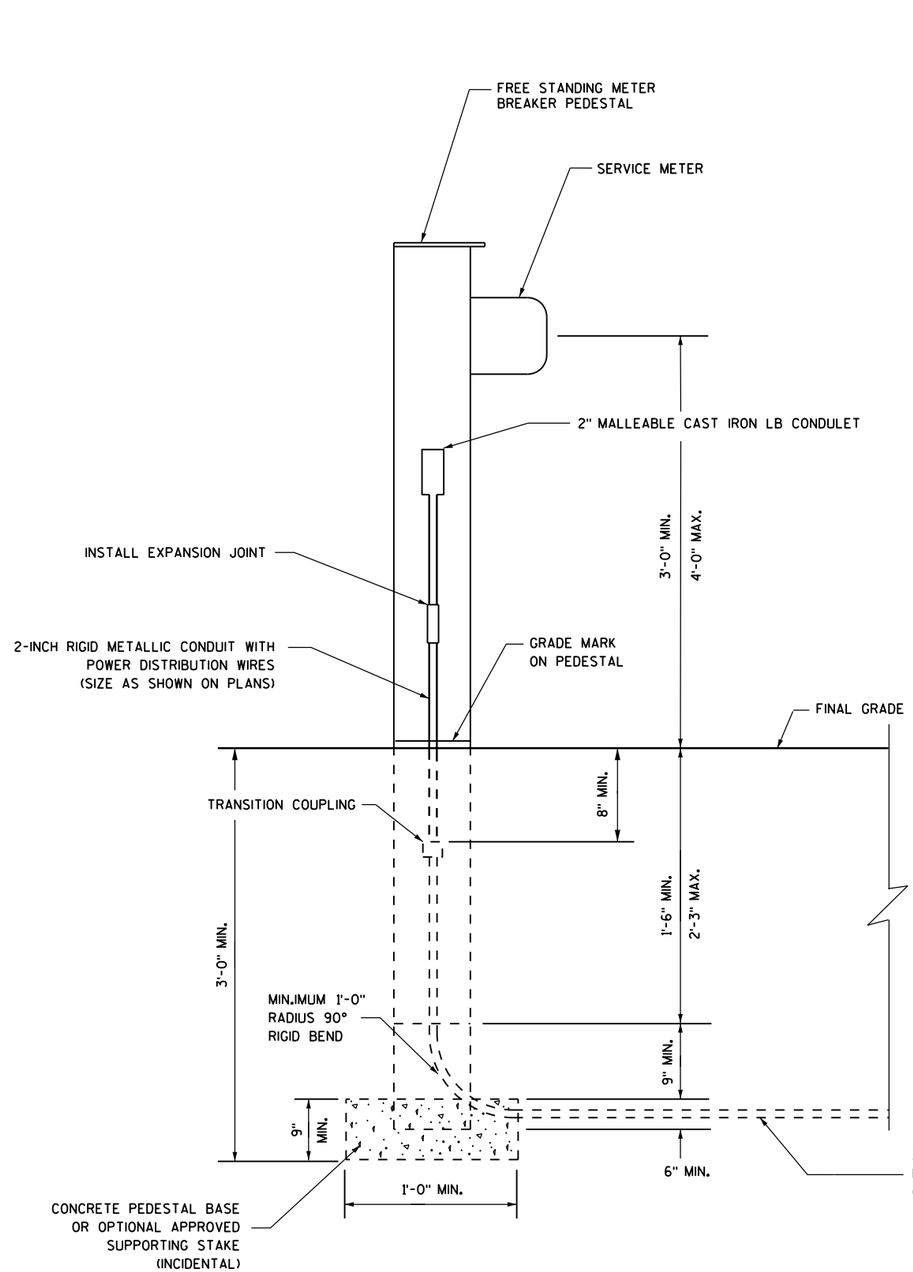
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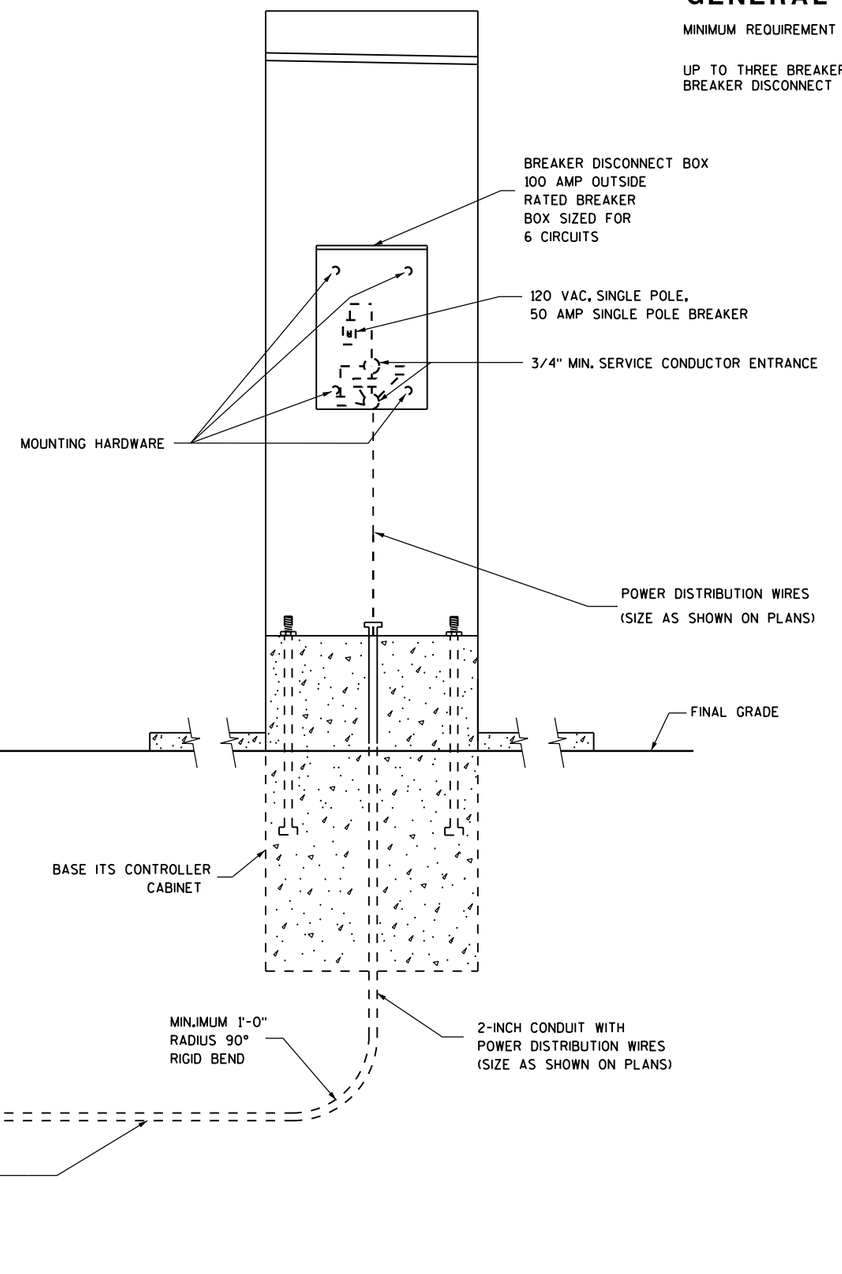
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## GENERAL NOTES

MINIMUM REQUIREMENT SHOWN. ADDITIONAL BREAKERS MAY BE REQUIRED.

UP TO THREE BREAKERS WILL BE CONSIDERED INCIDENTAL TO THE ITEM BREAKER DISCONNECT BOX.

# 2 CIRCUIT ELECTRICAL SERVICE METER BREAKER PEDESTAL AND BREAKER DISCONNECT BOX

| 2 CIRCUIT ELECTRICAL SERVICE METER BREAKER PEDESTAL AND BREAKER DISCONNECT BOX | |
|---|---|
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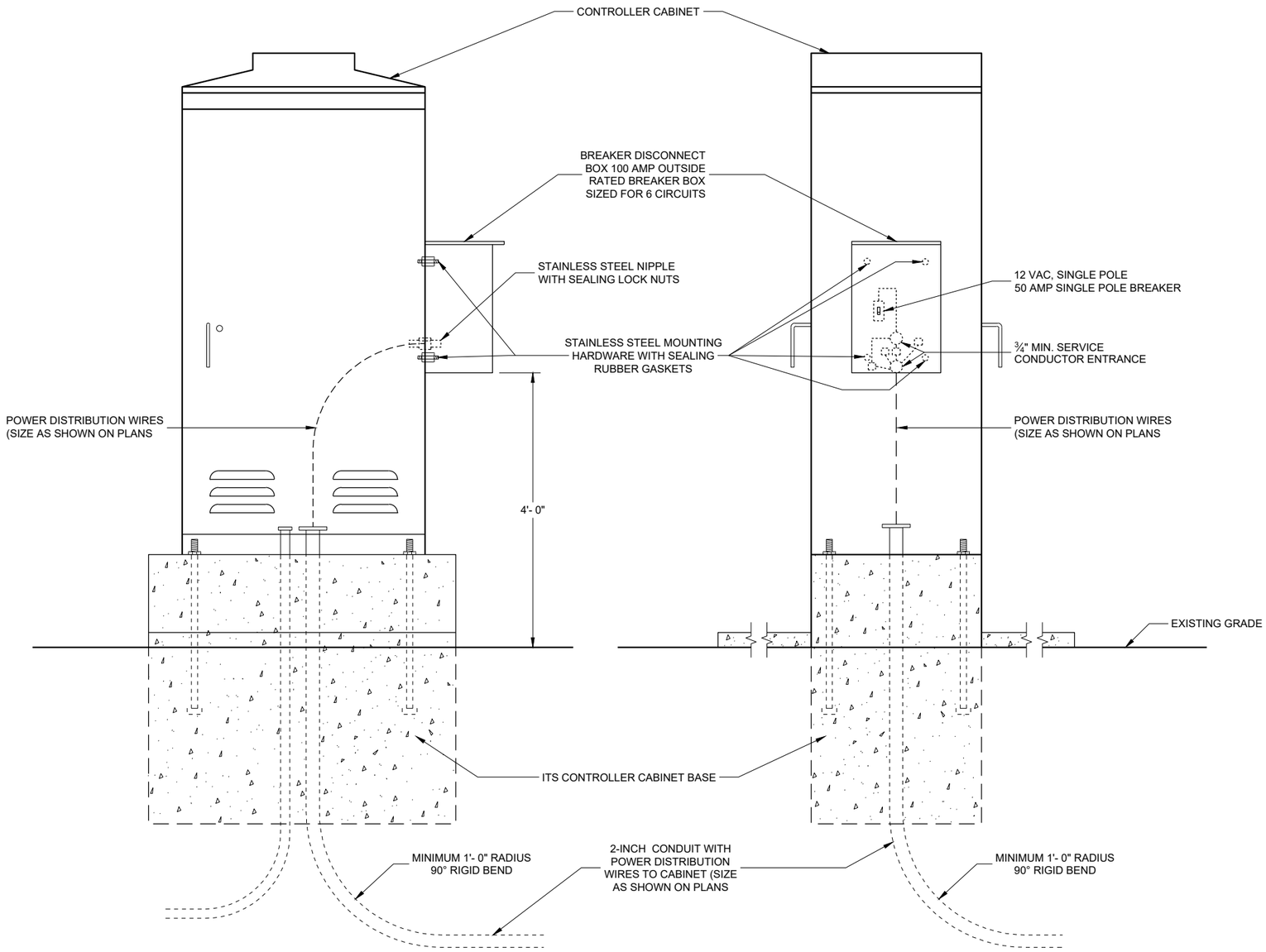



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## GENERAL NOTES

MINIMUM REQUIREMENT SHOWN. ADDITIONAL BREAKERS MAY BE REQUIRED.

UP TO THREE BREAKERS WILL BE CONSIDERED INCIDENTAL TO THE ITEM BREAKER DISCONNECT BOX.




**FRONT VIEW** **SIDE VIEW**

## CIRCUIT BREAKER DISCONNECT BOX INSTALLATION

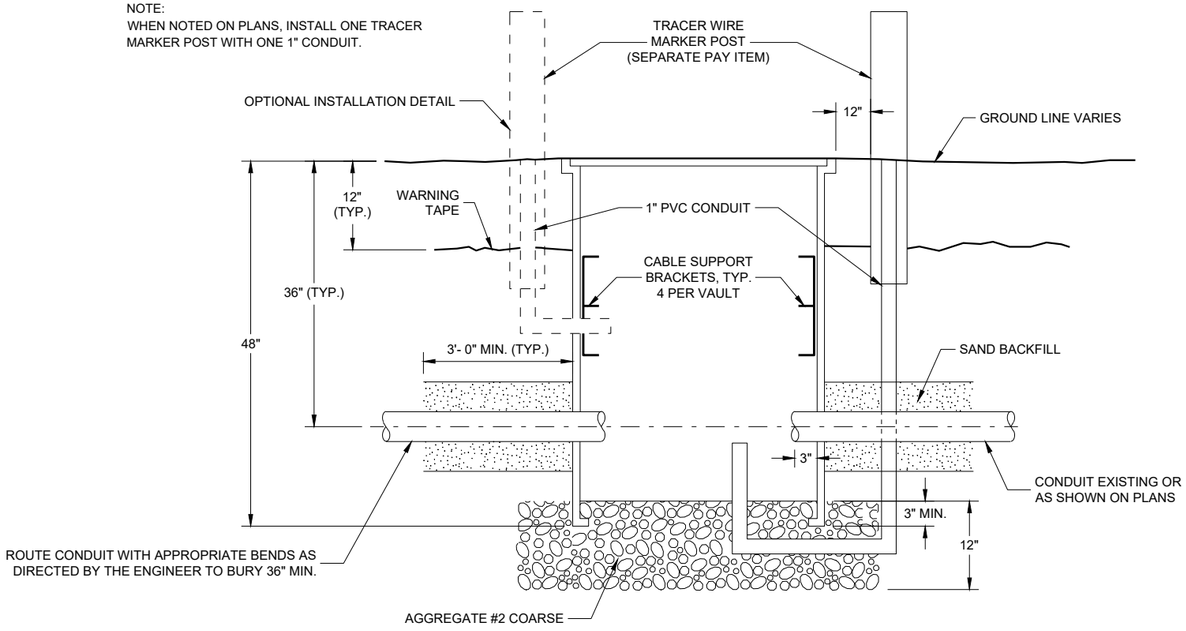
**CABLE BREAKER DISCONNECT BOX INSTALLATION**

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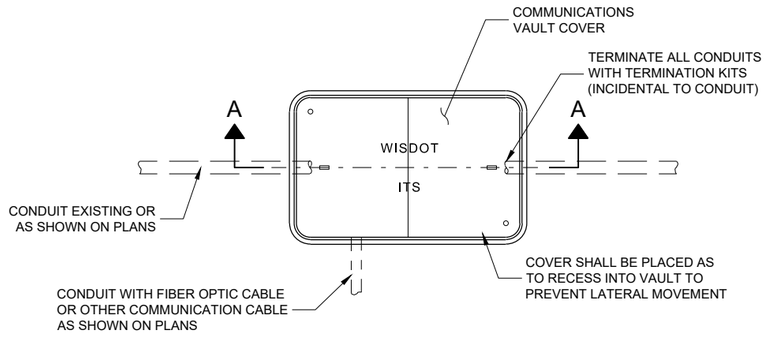
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NOTE:
WHEN NOTED ON PLANS, INSTALL ONE TRACER MARKER POST WITH ONE 1" CONDUIT.




**SECTION A - A**




**PLAN VIEW**

## COMMUNICATIONS VAULT TYPE 1

## GENERAL NOTES

PROVIDE VAULT WITH OPEN BASE.

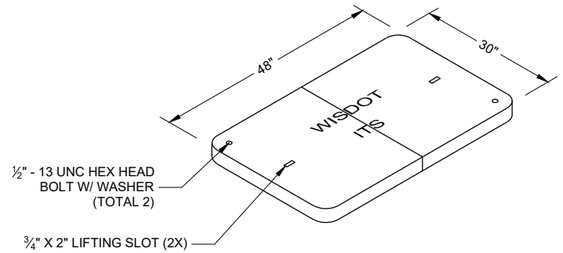
COVER SHALL HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.

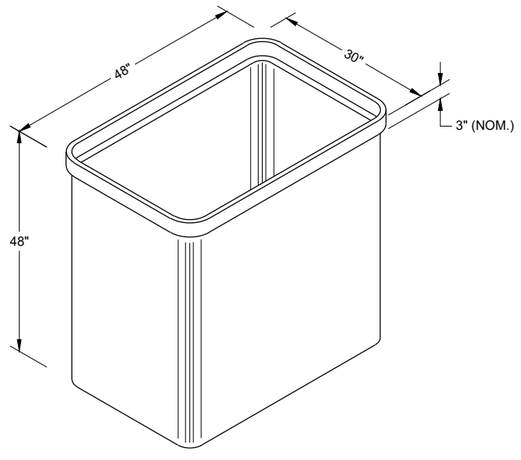
ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.

VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.

FIELD PLACEMENT OF COMMUNICATIONS VAULTS SHALL BE AS DIRECTED BY THE ENGINEER.

FIBER TRACER MARKER POSTS SHALL BE CONSTRUCTED WITH HIGH-IMPACT PLASTIC MATERIAL WHICH IS FADE RESISTANT AND UV STABLE. ALL HARDWARE SHALL BE STAINLESS STEEL AND CONTAIN A MINIMUM OF FIVE STANDARD TERMINALS.




**ISOMETRIC VIEW**

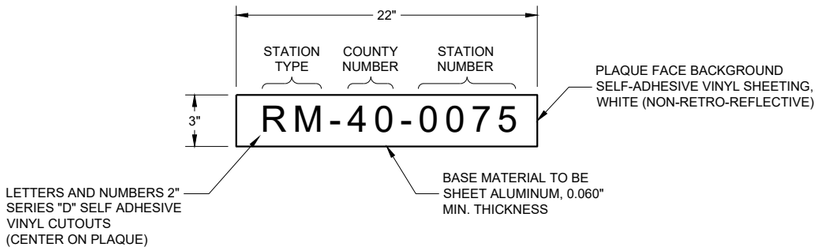
**COMMUNICATION VAULT TYPE 1**

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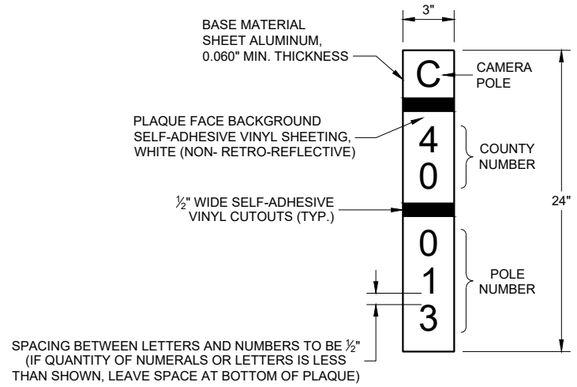
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## CONTROL CABINET IDENTIFICATION PLAQUE DETAIL



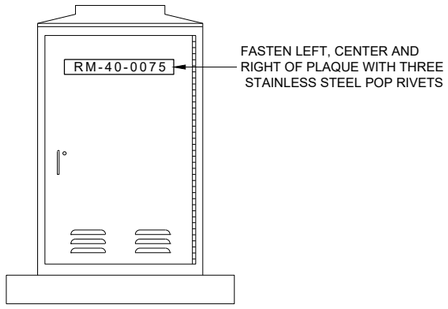

## POLE IDENTIFICATION PLAQUE DETAIL

## GENERAL NOTES

1. TWO PLAQUES PER CABINET REQUIRED ON CONTROL CABINET.
2. FASTEN ONE PLAQUE ON FRONT DOOR, UPPER HALF.
3. FASTEN ONE PLAQUE ON SIDE FACING LOCAL STREET. IF NO LOCAL STREET NEARBY, OR IF SUCH LOCATION COINCIDES WITH LOCATION OF PLAQUE IN NOTE 2 , FASTEN PLAQUE ON REAR OF CABINET, UPPER HALF.
4. COUNTY NUMBER NOT REQUIRED ON RAMP METER CABINETS.

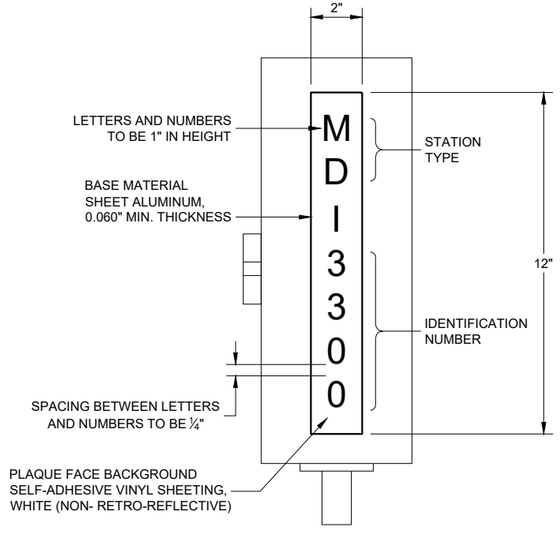
## LEGEND STATION TYPE

RM - RAMP METER
CCTV - CLOSED CIRCUIT TELEVISION
ATR - AUTOMATIC TRAFFIC RECORDER
SDS - SYSTEM DETECTOR STATION
MD - MICROWAVE DETECTOR




## CONTROL CABINET IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

(TYPICAL ALL CONTROL CABINETS)




## MICROWAVE DETECTOR FIELD CABINET IDENTIFICATION PLAQUE DETAIL

## IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

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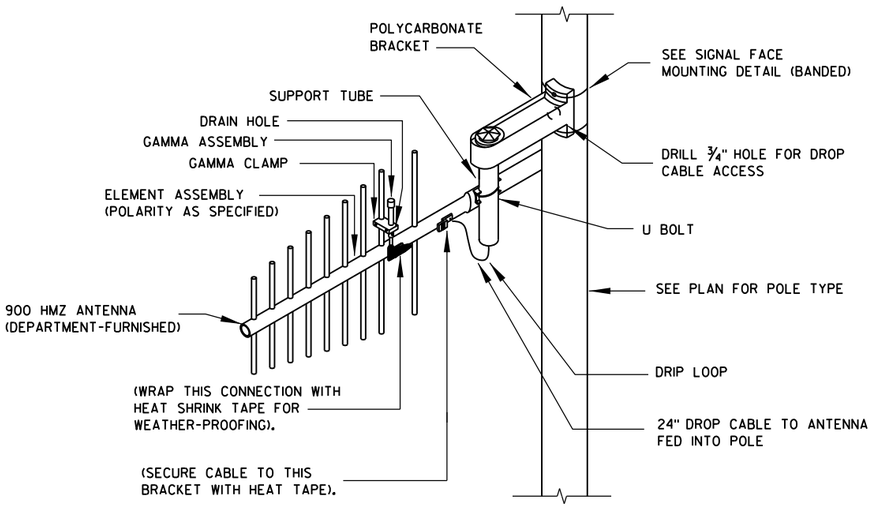
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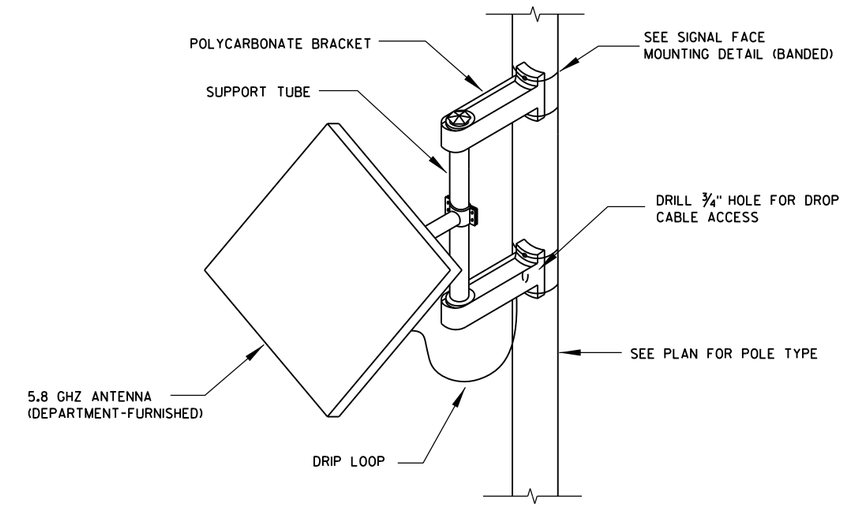
## GENERAL NOTES

INSTALL DRIP LOOPS ON LOOSE CABLES TO PREVENT WATER FROM FLOWING ON CABLE AND ENTERING POLES/ENCLOSURES.

ALL MOUNTING EQUIPMENT REQUIRED IS INCIDENTIAL TO BID ITEM "INSTALL WIRELESS ANTENNA".




### 900 MHZ ANTENNA




### 5.8 GHZ ANTENNA

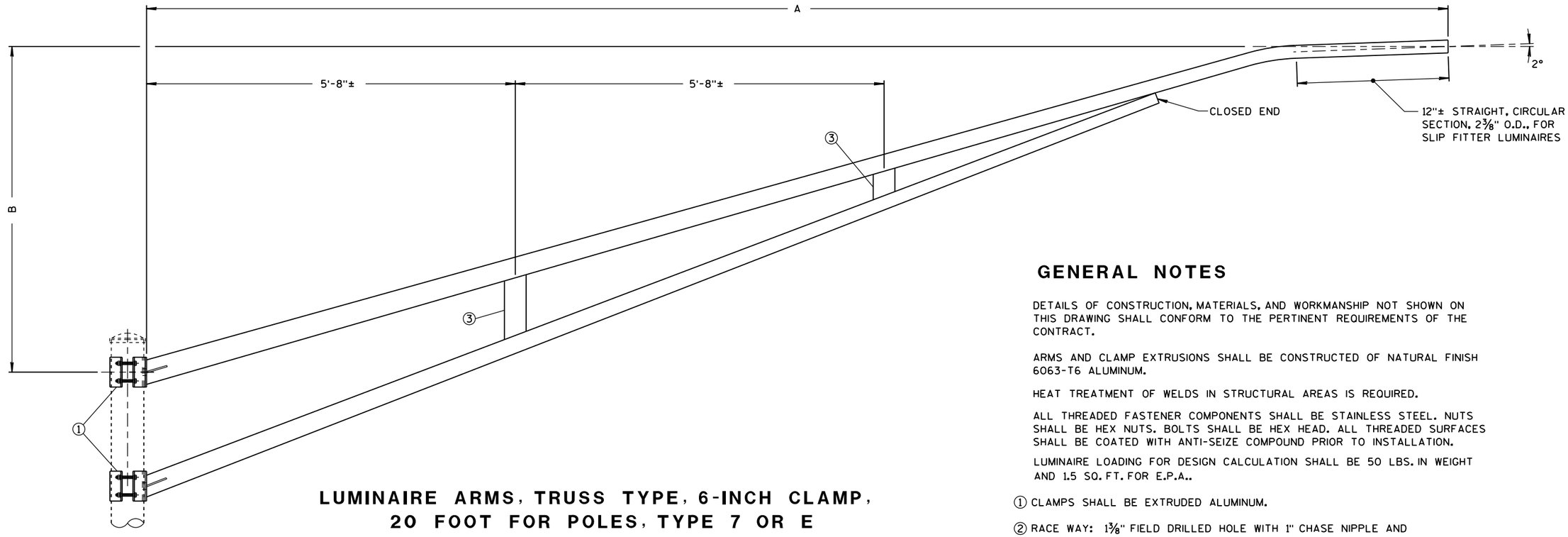
# INSTALL WIRELESS ANTENNA

| | |
|---|---|
| INSTALL WIRELESS ANTENNA | |
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## LUMINAIRE ARMS, TRUSS TYPE, 6-INCH CLAMP, 20 FOOT FOR POLES, TYPE 7 OR E

UPPER AND LOWER TRUSS CHORD CLAMPS SIMILIAR

| TYPE | DIM. A<br>NOMINAL ARM LENGTH (FT) | DIM. B<br>APPROX. RISE (FT) |
|---|---|---|
| TRUSS TYPE | 20.0 | 5.0 |

## GENERAL NOTES

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

ARMS AND CLAMP EXTRUSIONS SHALL BE CONSTRUCTED OF NATURAL FINISH 6063-T6 ALUMINUM.

HEAT TREATMENT OF WELDS IN STRUCTURAL AREAS IS REQUIRED.

ALL THREADED FASTENER COMPONENTS SHALL BE STAINLESS STEEL. NUTS SHALL BE HEX NUTS. BOLTS SHALL BE HEX HEAD. ALL THREADED SURFACES SHALL BE COATED WITH ANTI-SEIZE COMPOUND PRIOR TO INSTALLATION.

LUMINAIRE LOADING FOR DESIGN CALCULATION SHALL BE 50 LBS. IN WEIGHT AND 1.5 SQ. FT. FOR E.P.A..

① CLAMPS SHALL BE EXTRUDED ALUMINUM.

② RACE WAY: 1⅜" FIELD DRILLED HOLE WITH 1" CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET) PER EACH REQUIRED LUMINAIRE ARM. PROVIDE 1½" HOLE IN CLAMP EXTRUSION TO CONTINUE RACEWAY. NOTE: NO RACEWAY ON LOWER TRUSS CORD CLAMP. FOR INFORMATION ONLY.

③ STIFFENER.

④ GUSSETS REQUIRED.

⑤ CLAMP BOLT ASSEMBLY (BOLT - ½"-13 UNC, 2 EACH - FLAT WASHER, LOCK WASHER, NUT) - 4 EACH PER CLAMP.

**LUMINAIRE ARMS, TRUSS TYPE 6-INCH CLAMP**

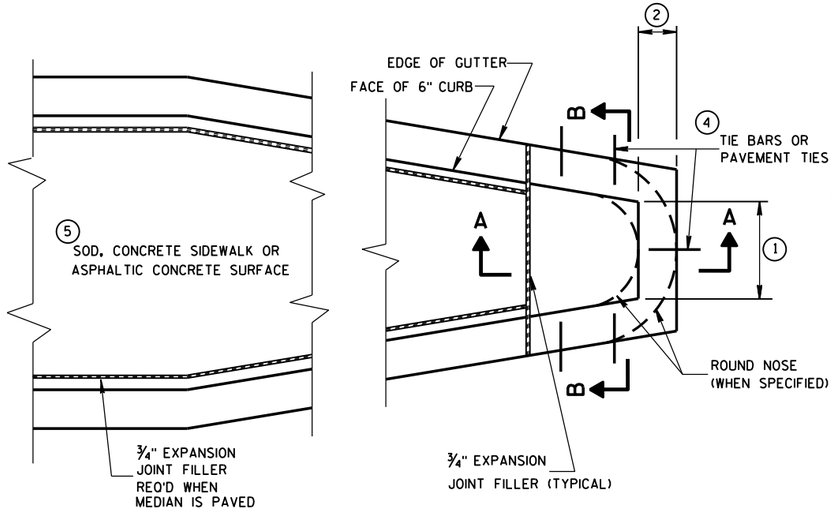
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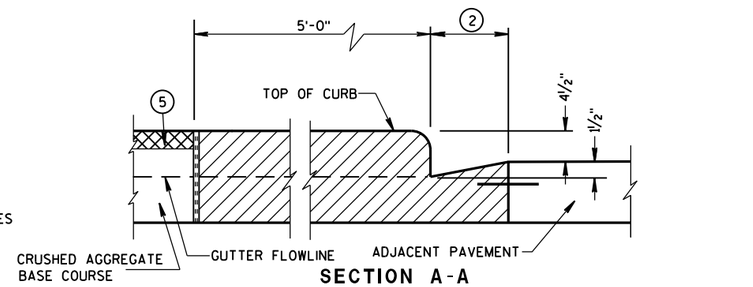
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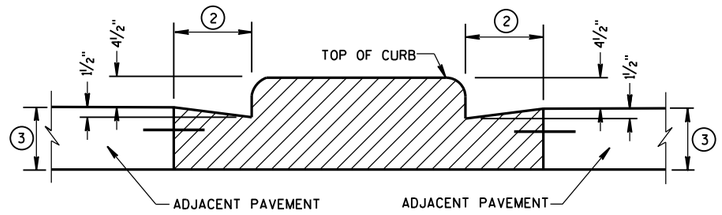

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SECTION A-A




SECTION B-B

## 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.

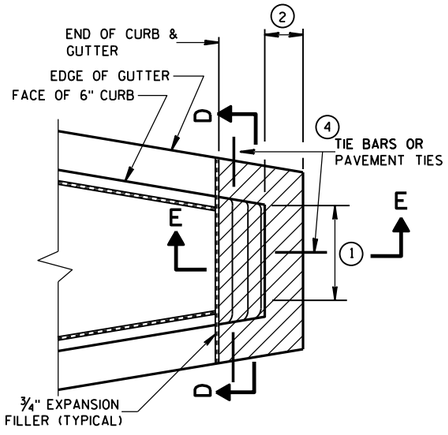
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

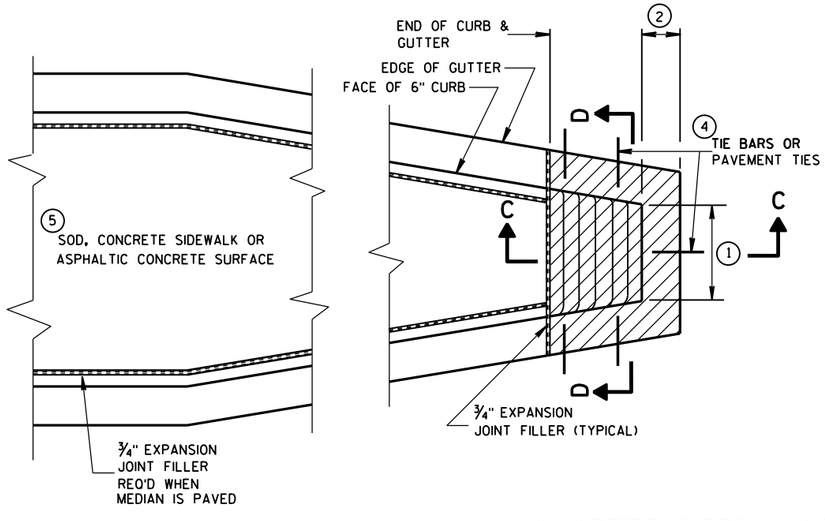
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(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.

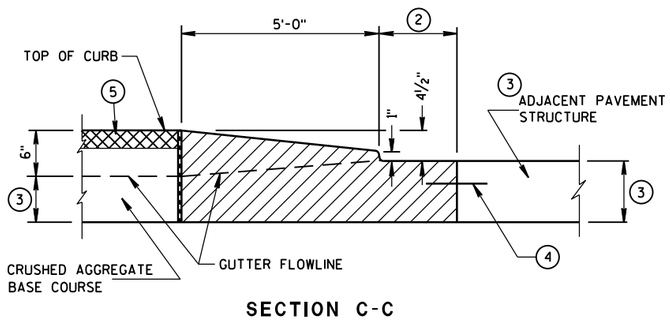
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

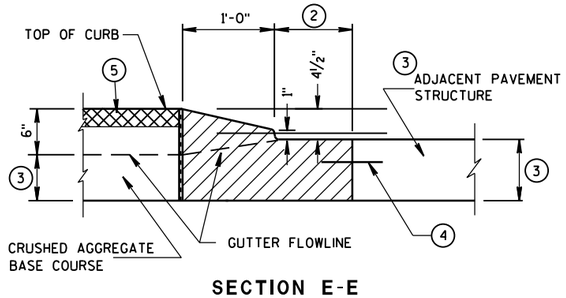



## CONCRETE MEDIAN SLOPED NOSE TYPE 1

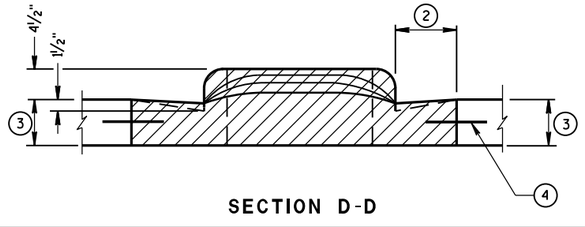



SECTION C-C




SECTION E-E

## CONCRETE MEDIAN SLOPED NOSE TYPE 2




SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

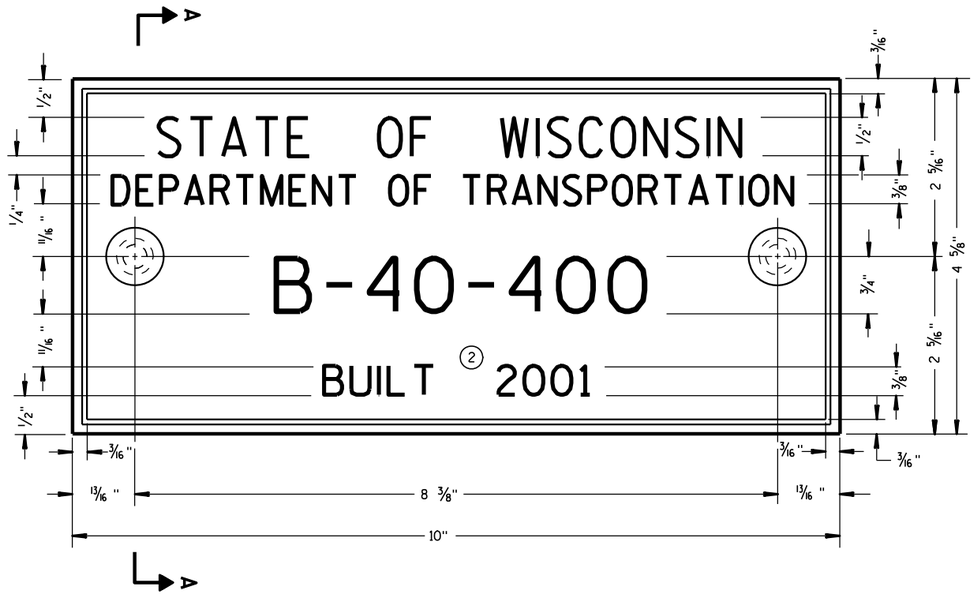
277

6

S.D.D. 11 B 2-2

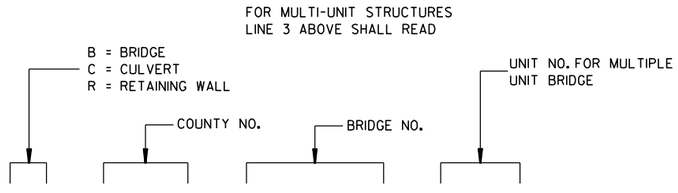
6

S.D.D. 11 B 2-2




## TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)




## NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

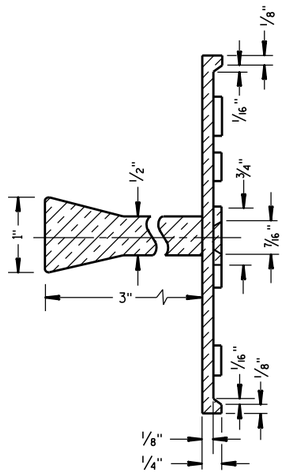
## GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

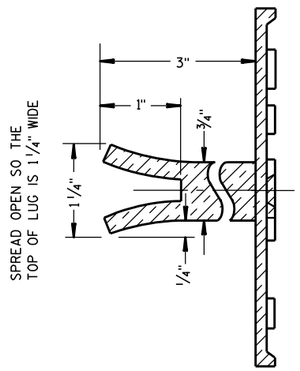
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

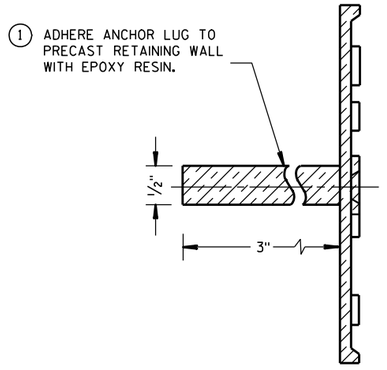
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.




SECTION A-A




ALTERNATE LUG




## ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

**NAME PLATE (STRUCTURES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE

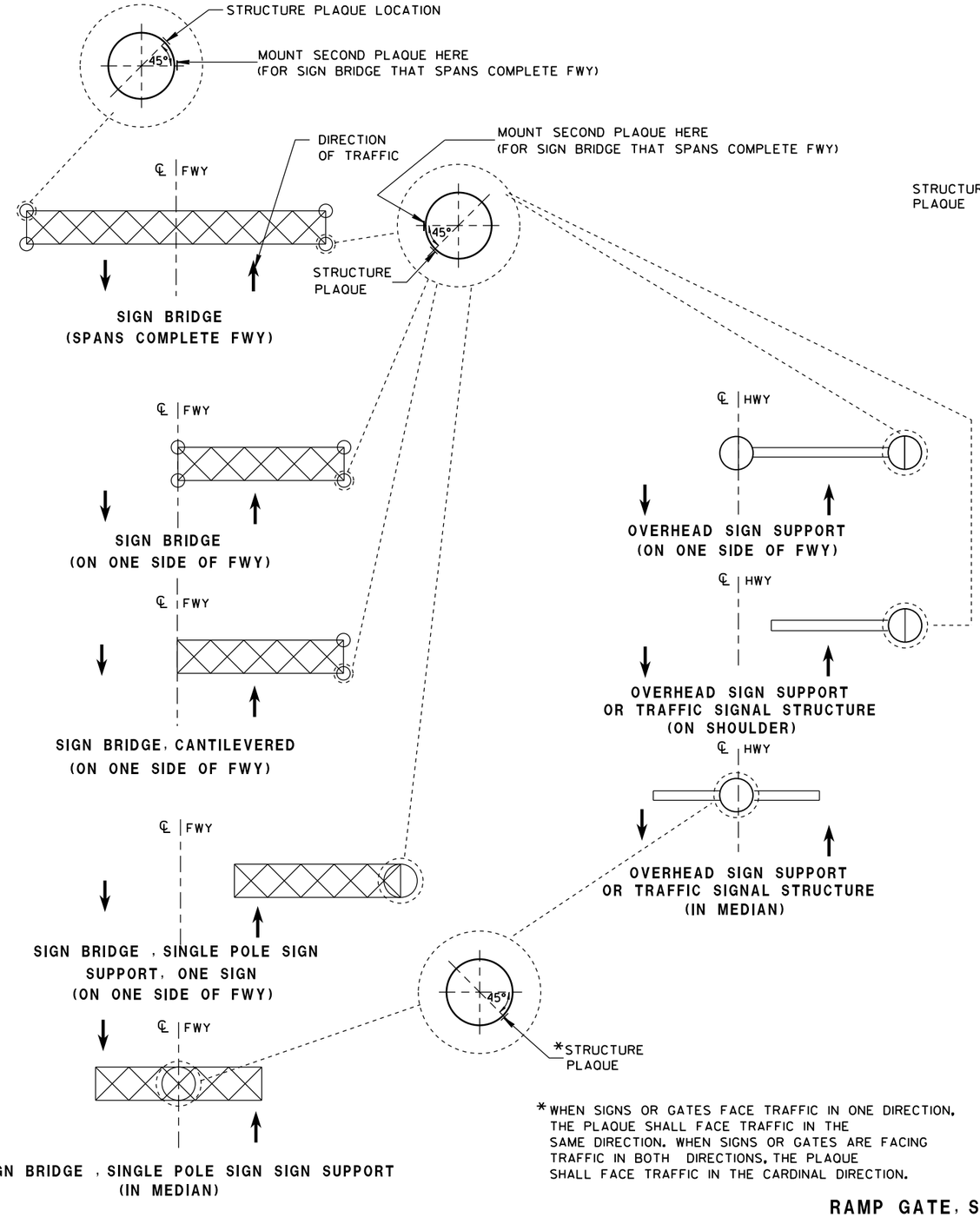
/S/ Scot Beck-- CHIEF STRUCTURAL DEVELOP ENGINEER

FHWA



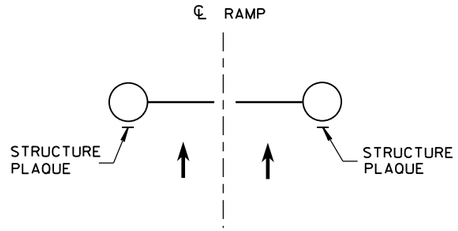
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S.D.D. 12 A 3-10

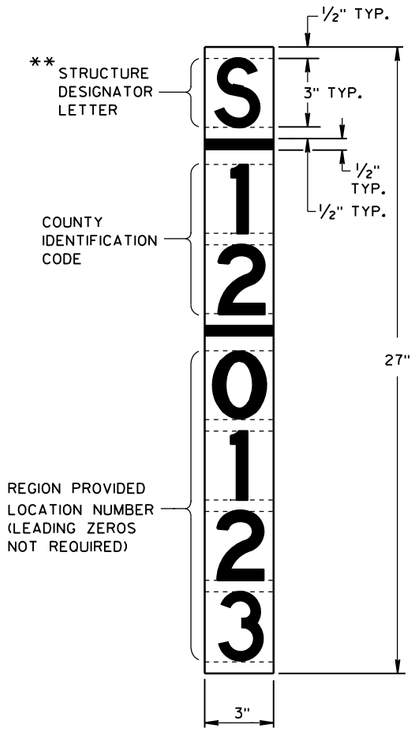



* WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

**LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES**




**RAMP GATE
(ACROSS FWY ON-RAMP)**




** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

**RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED**

## 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.

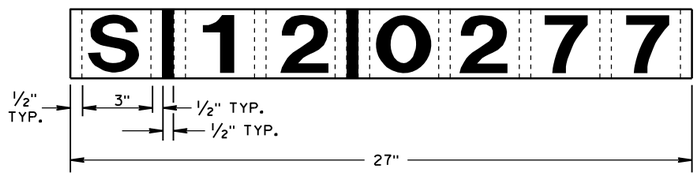
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

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



6

S.D.D. 12 A 4-3

6

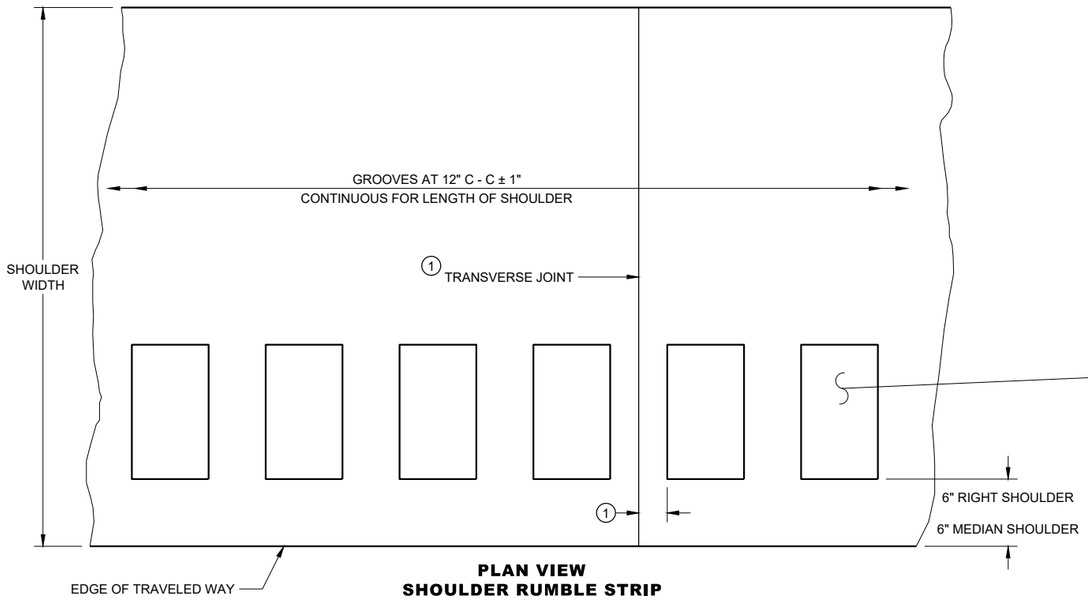
S.D.D. 12 A 4-3

## GENERAL NOTES

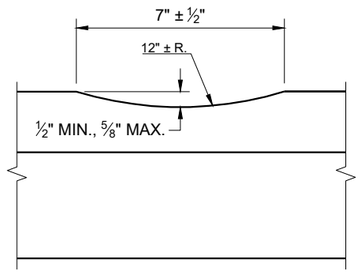
SDD 13A5, SHEET "b" SHOWS THE LOCATION OF THE RUMBLE STRIPS AT RAMP AND GORE LOCATIONS.

RUMBLE STRIPS ON EXPRESSWAYS:
DO NOT INSTALL SHOULDER RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL AND PRIVATE DRIVEWAYS, ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, 25' IN ADVANCE OF BRIDGE DECKS, 25' IN ADVANCE OF BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSINGS.

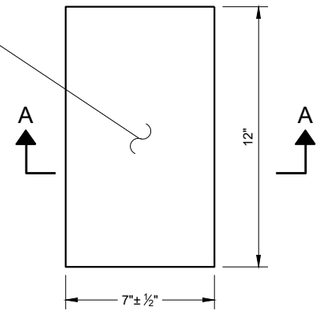
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6 INCHES AWAY FROM TRANSVERSE JOINTS.



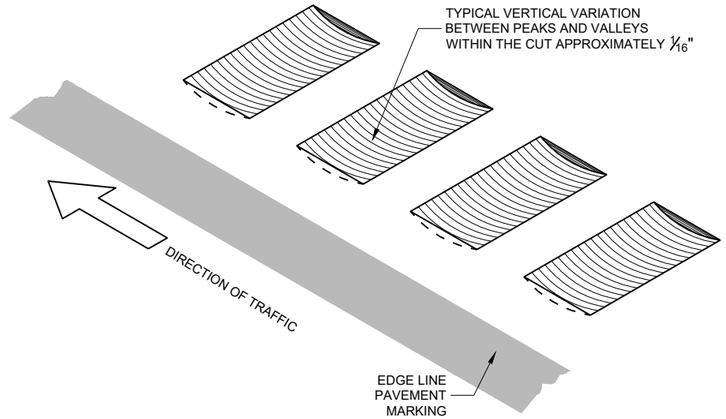

**PLAN VIEW**
**SHOULDER RUMBLE STRIP**




**SECTION A - A**

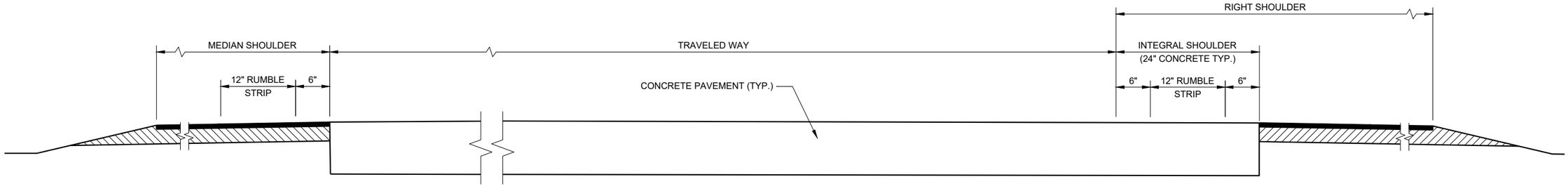



**PLAN VIEW**
**(SINGLE GROOVE)**




**ISOMETRIC**

**PLACEMENT DETAIL FOR RUMBLE STRIP**




**SECTION VIEW**

## TYPICAL SHOULDER RUMBLE STRIPS
**(ONE ROADWAY IS SHOWN)**

**SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY**

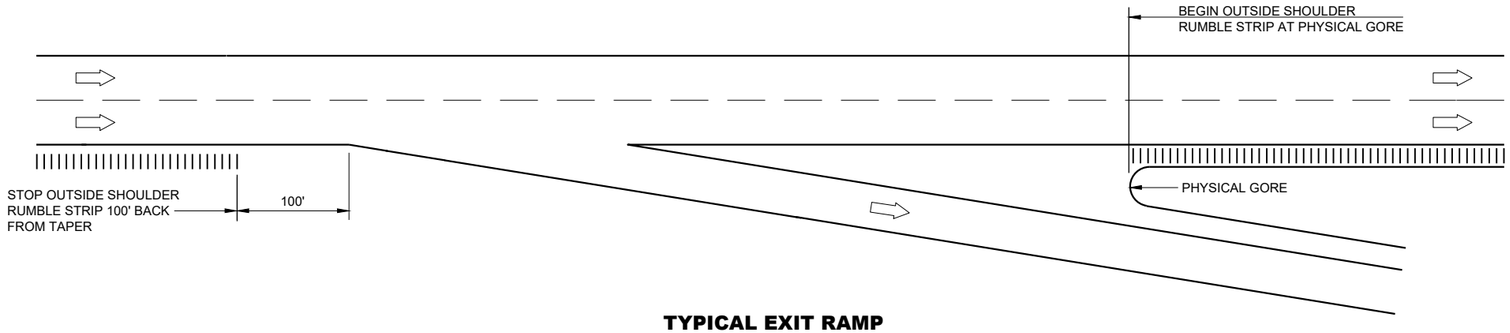
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



6

SDD 13A05-06a

SDD 13A05-06a




**TYPICAL EXIT RAMP**

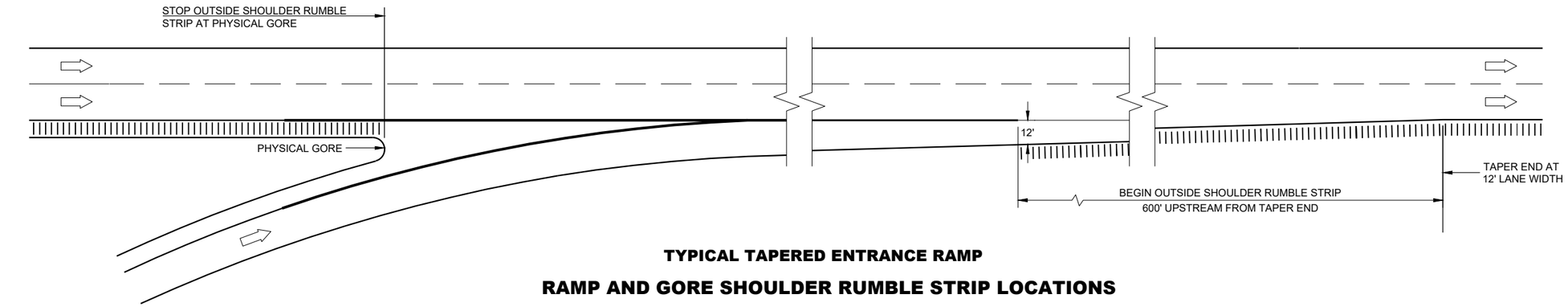
## GENERAL NOTES

NO RUMBLE STRIP ON EXIT, DIRECTIONAL OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

RUMBLE STRIPS ON EXPRESSWAYS:
DO NOT INSTALL SHOULDER RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIALAND PRIVATE DRIVEWAYS, ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, 25' IN ADVANCE OF BRIDGE DECKS, 25' IN ADVANCE OF BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSINGS.

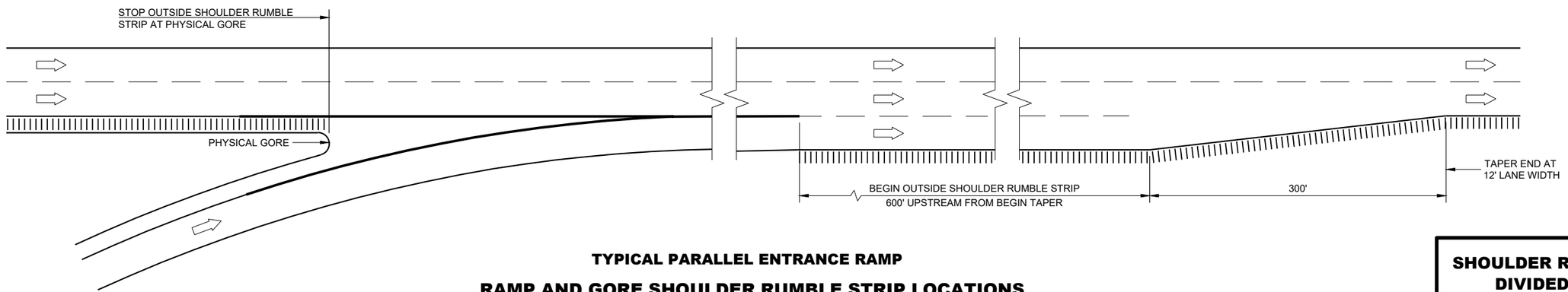
## LEGEND

DIRECTION OF TRAFFIC




**TYPICAL TAPERED ENTRANCE RAMP**

**RAMP AND GORE SHOULDER RUMBLE STRIP LOCATIONS**




**TYPICAL PARALLEL ENTRANCE RAMP**

**RAMP AND GORE SHOULDER RUMBLE STRIP LOCATIONS**

**SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

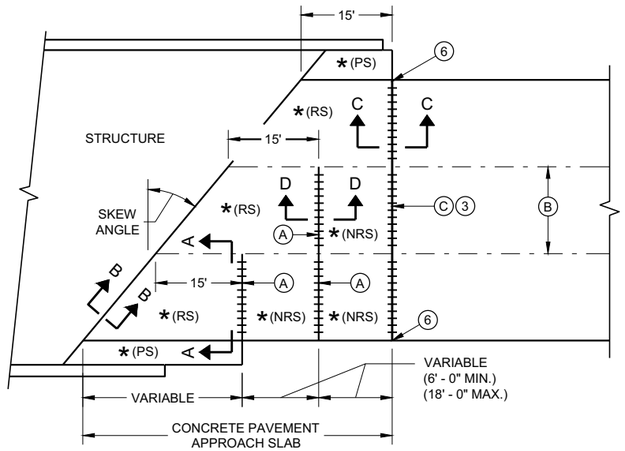
/S/ Rodney Taylor
ROADWAY DESIGN STANDARDS
UNIT SUPERVISOR

FHWA

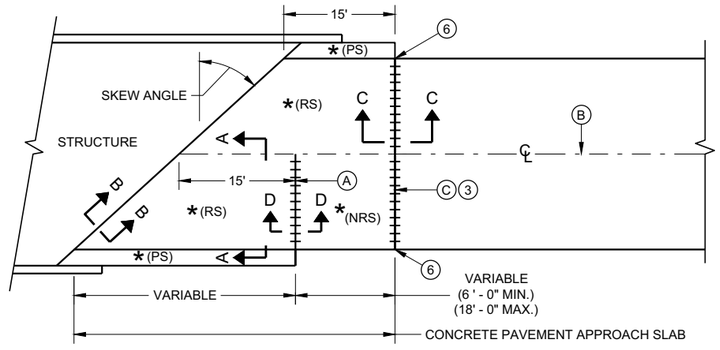



6

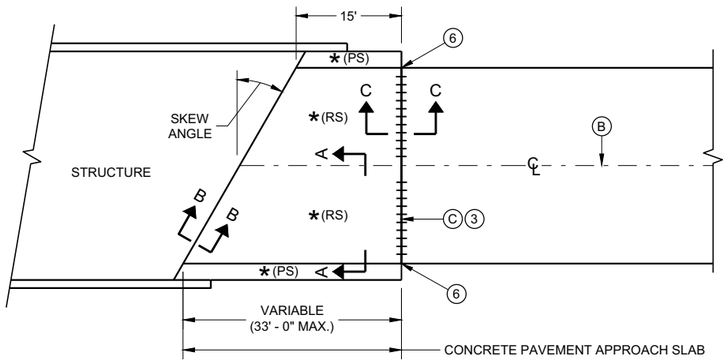

SDD 13A05-06b




**SKEWED APPROACH**
**(PAVEMENT MORE THAN TWO LANES)**




**SKEWS > 20°**
**(PAVEMENT WIDTH ≤ 30')**




**SKEWS ≤ 20°**
**(PAVEMENT WIDTH ≤ 30')**

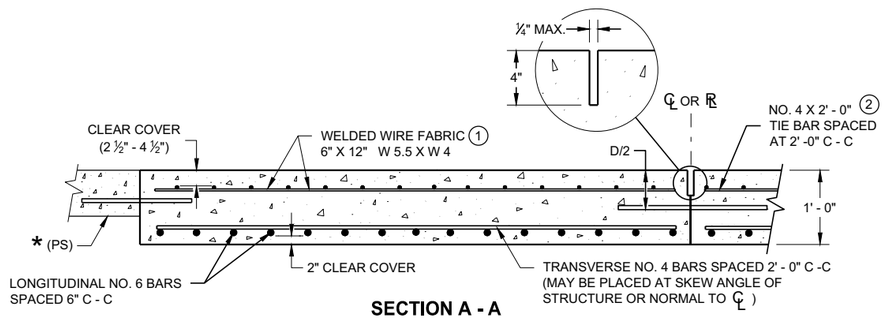
**APPROACH SLAB AND ADJACENT PAVEMENT**

* (RS) = REINFORCED CONCRETE SLAB

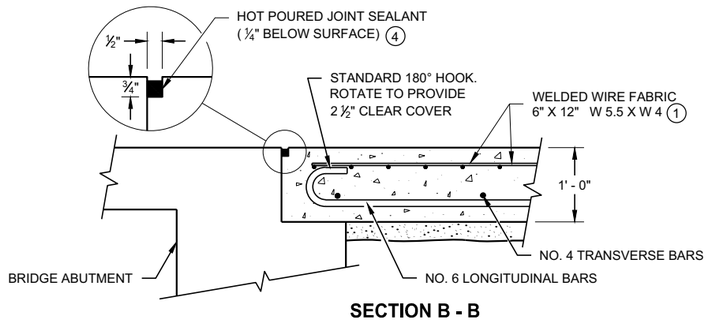
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

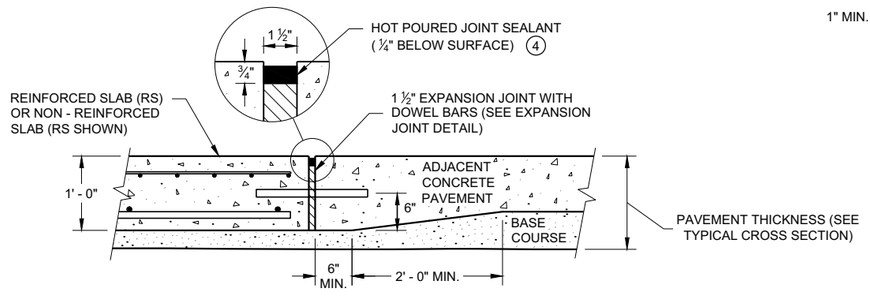
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)




**SECTION A - A**
**REINFORCEMENT POSITIONING DETAIL**




**SECTION B - B**
**BEND DETAIL**
**BOTTOM REINFORCEMENT**




**SECTION C - C**
**TRANSITION DETAIL**
**APPROACH SLAB TO ADJACENT PAVEMENT**

## GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

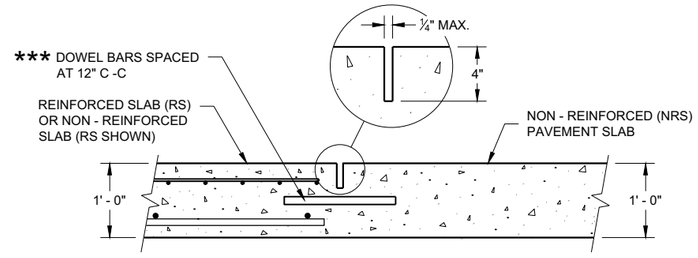
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

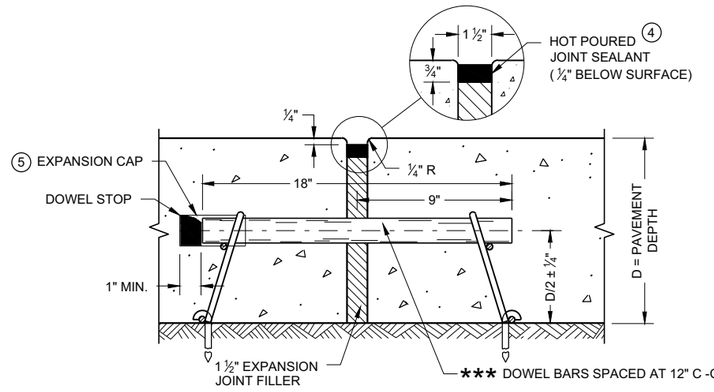
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .




**SECTION D - D**
**CONTRACTION JOINT**




**EXPANSION JOINT DETAIL**

**CONCRETE PAVEMENT APPROACH SLAB**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVISO

FHWA

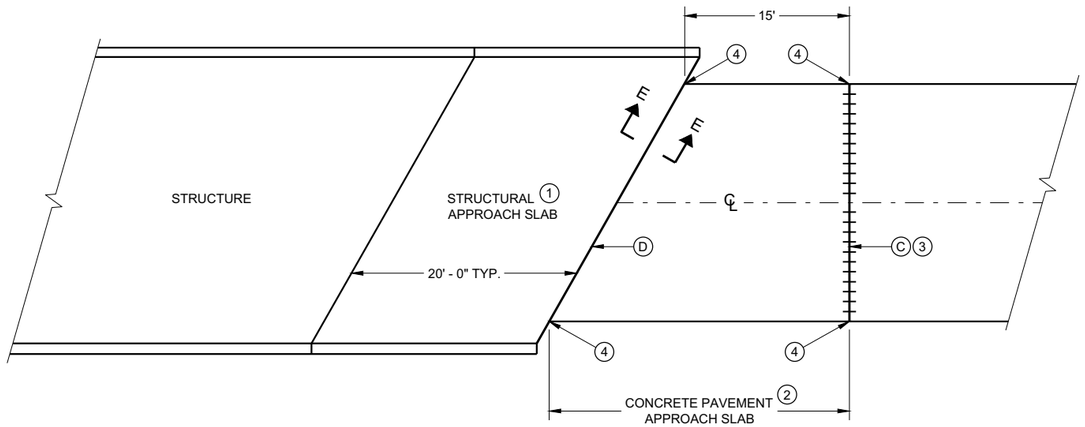




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SDD 13B02 - 09a

SDD 13B02 - 09a




## BRIDGE APPROACHES

## GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

(1) SEE BRIDGE PLAN.

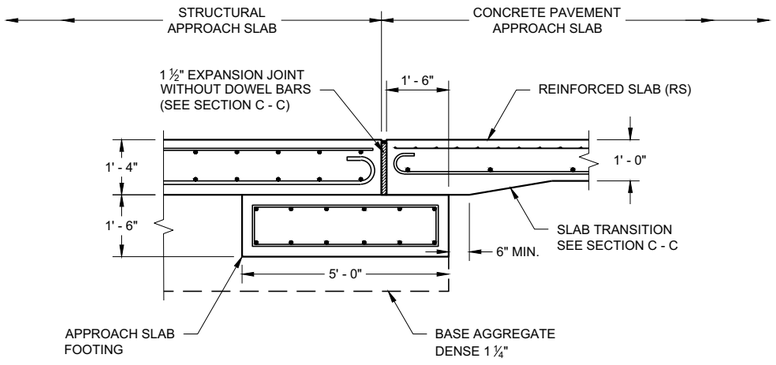
(2) CONFORM TO SDD 13B02 SHEET A FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞.

(D) 1 ½" EXPANSION JOINT (NO DOWELS)




**SECTION E - E**
**FOOTING DETAIL**
**STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH**

**STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

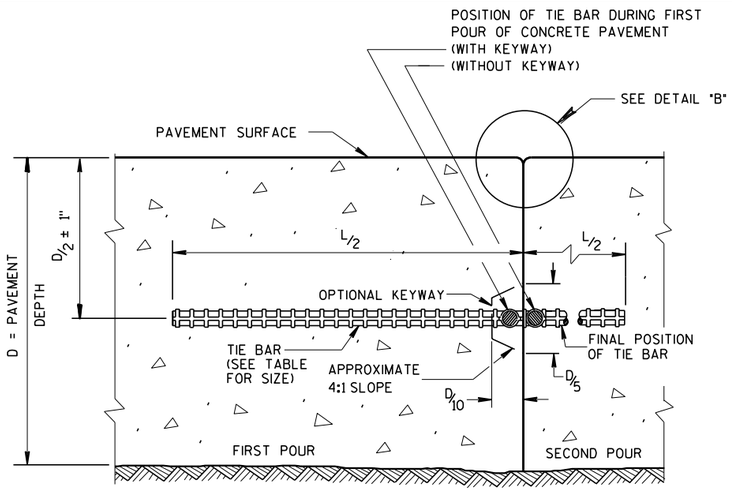
APPROVED
November 2018
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

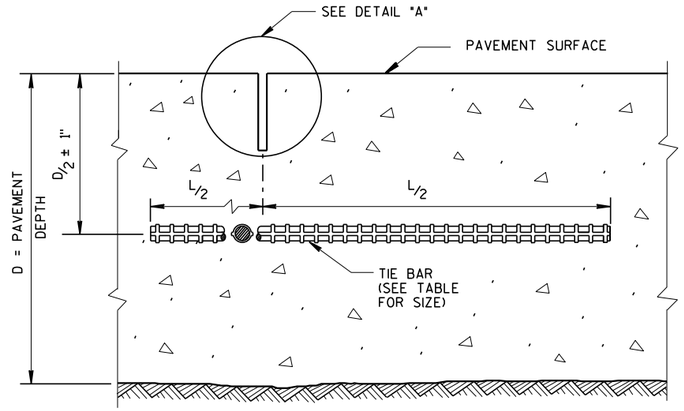



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SDD 13B02 - 09b




## 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

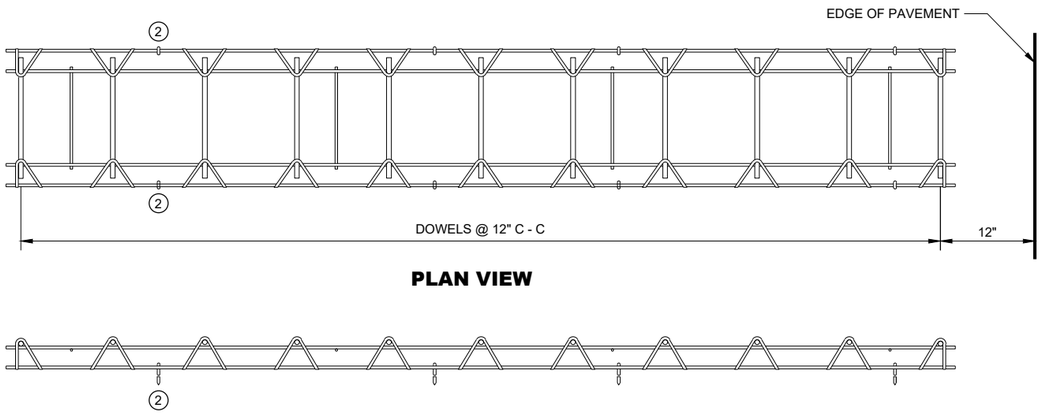


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S.D.D. 13 C 1-19

6

S.D.D. 13 C 1-19

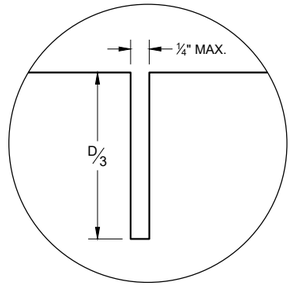



**PLAN VIEW**




**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.

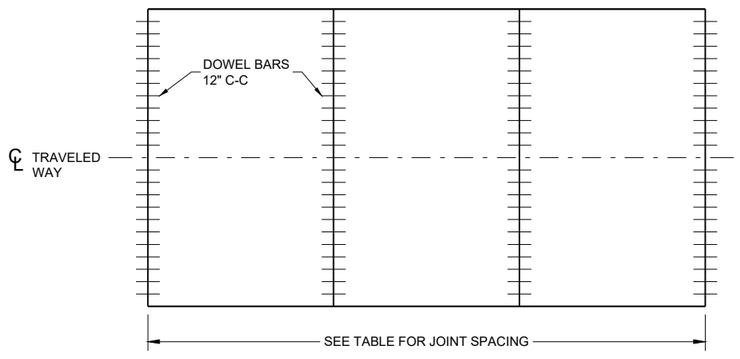
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

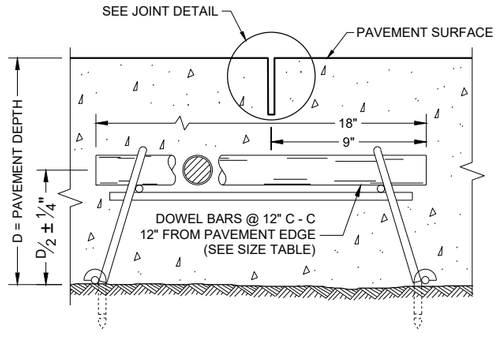
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED 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.



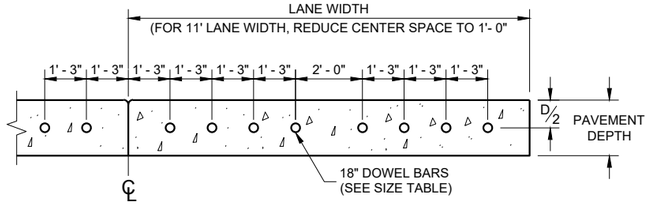

**CONTRACTION JOINT LOCATIONS**



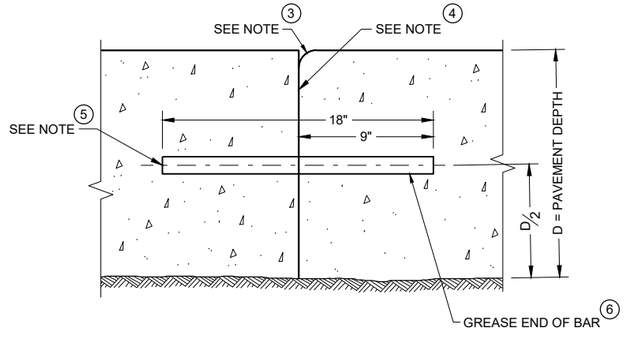

**DOWELED CONTRACTION JOINT**

## 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

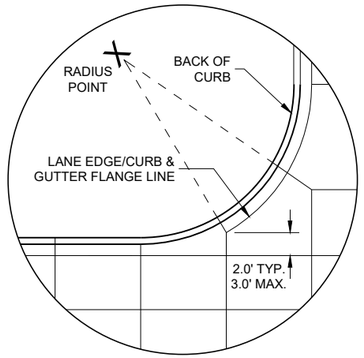




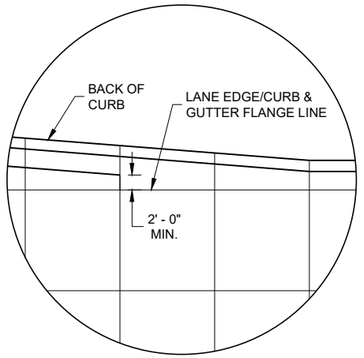
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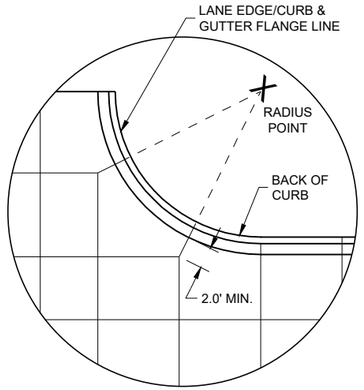
SDD 13C13 - 11



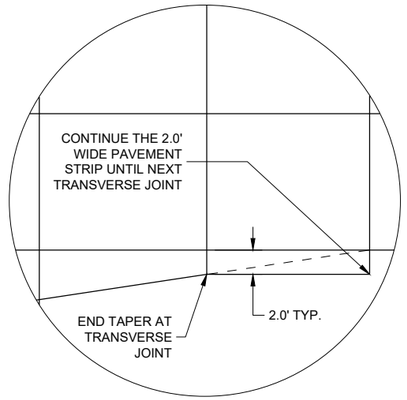

**DETAIL "A"**




**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.

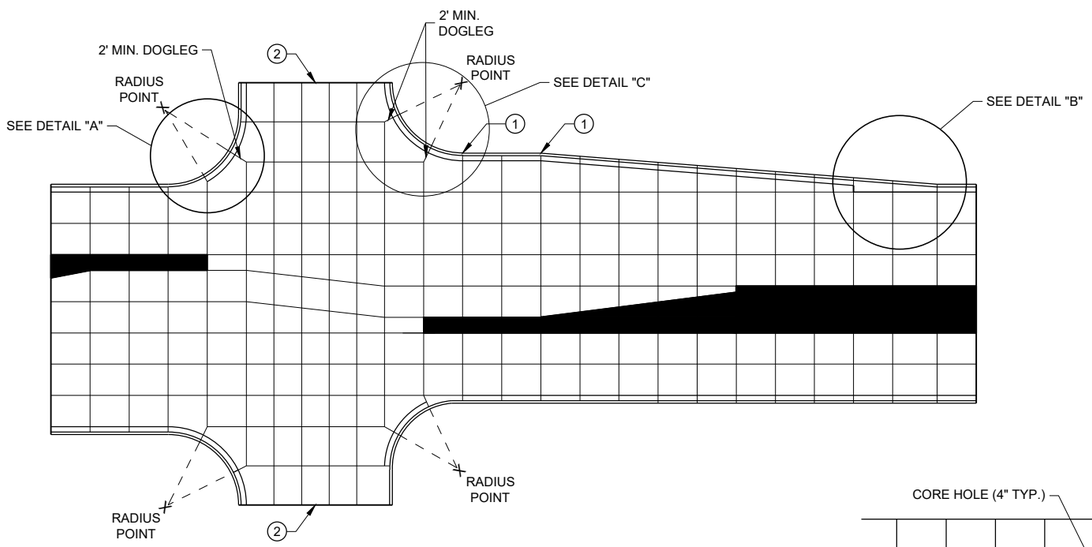
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

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.

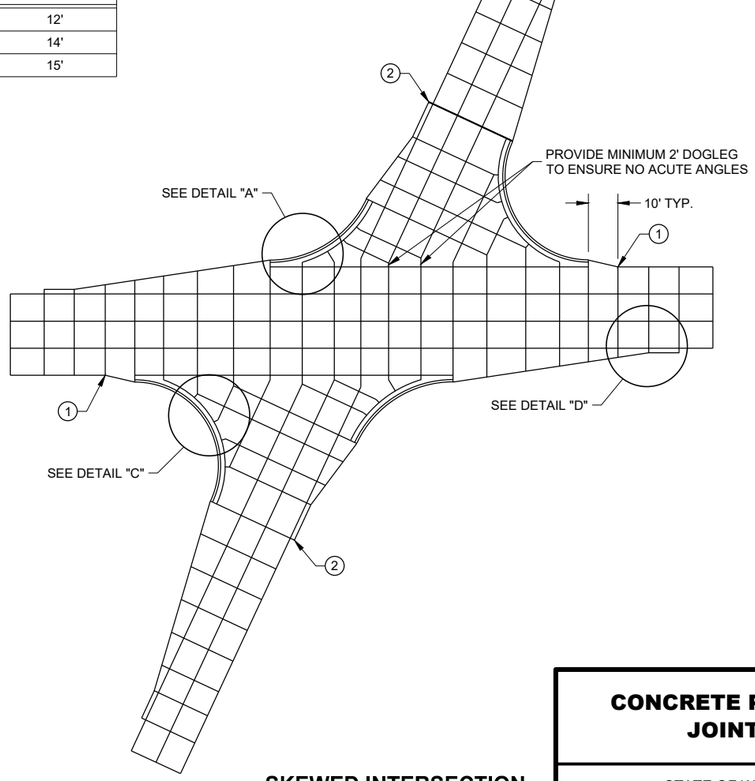
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



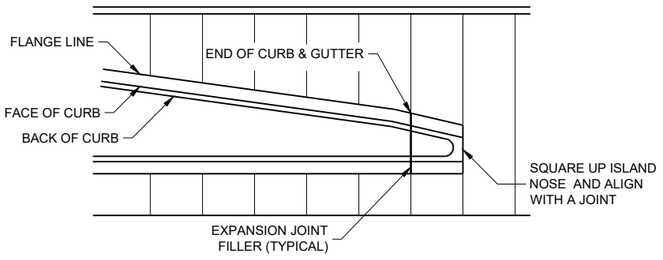

**STANDARD INTERSECTION**

PAVEMENT DEPTH AND JOINT SPACING TABLE

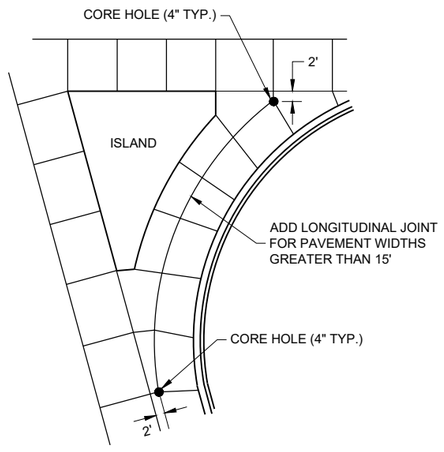
| PAVEMENT DEPTH (D) | CONTRACTION JOINT SPACING |
|---|---|
| 6", 6 ½" | 12' |
| 7", 7 ½" | 14' |
| 8" & ABOVE | 15' |




**SKEWED INTERSECTION**




**APPROACH TO MEDIAN**




**LARGE RIGHT TURN**

**CONCRETE PAVEMENT JOINTING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



6

SDD 13C18 - 08a

6

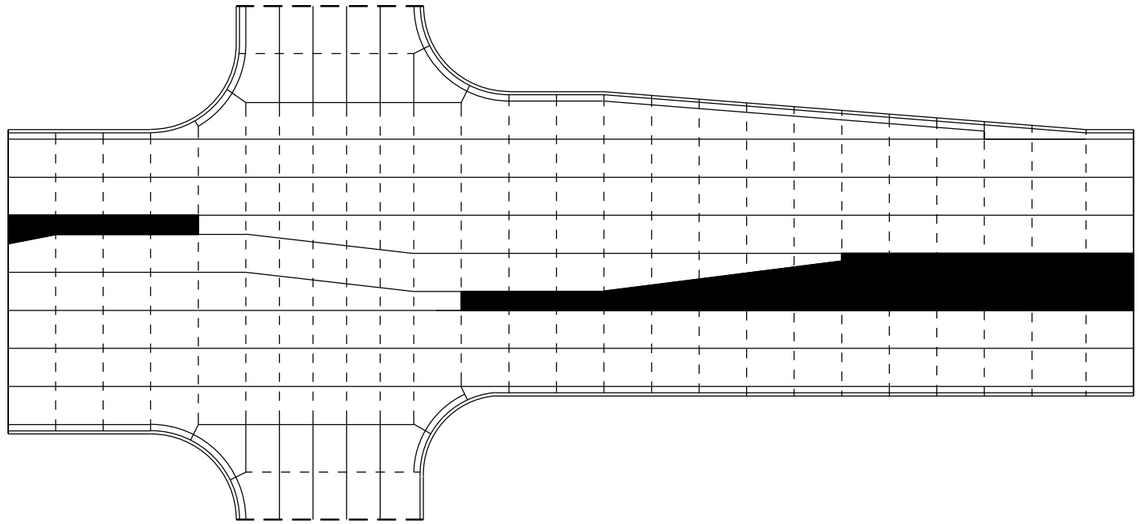
SDD 13C18 - 08a

## LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

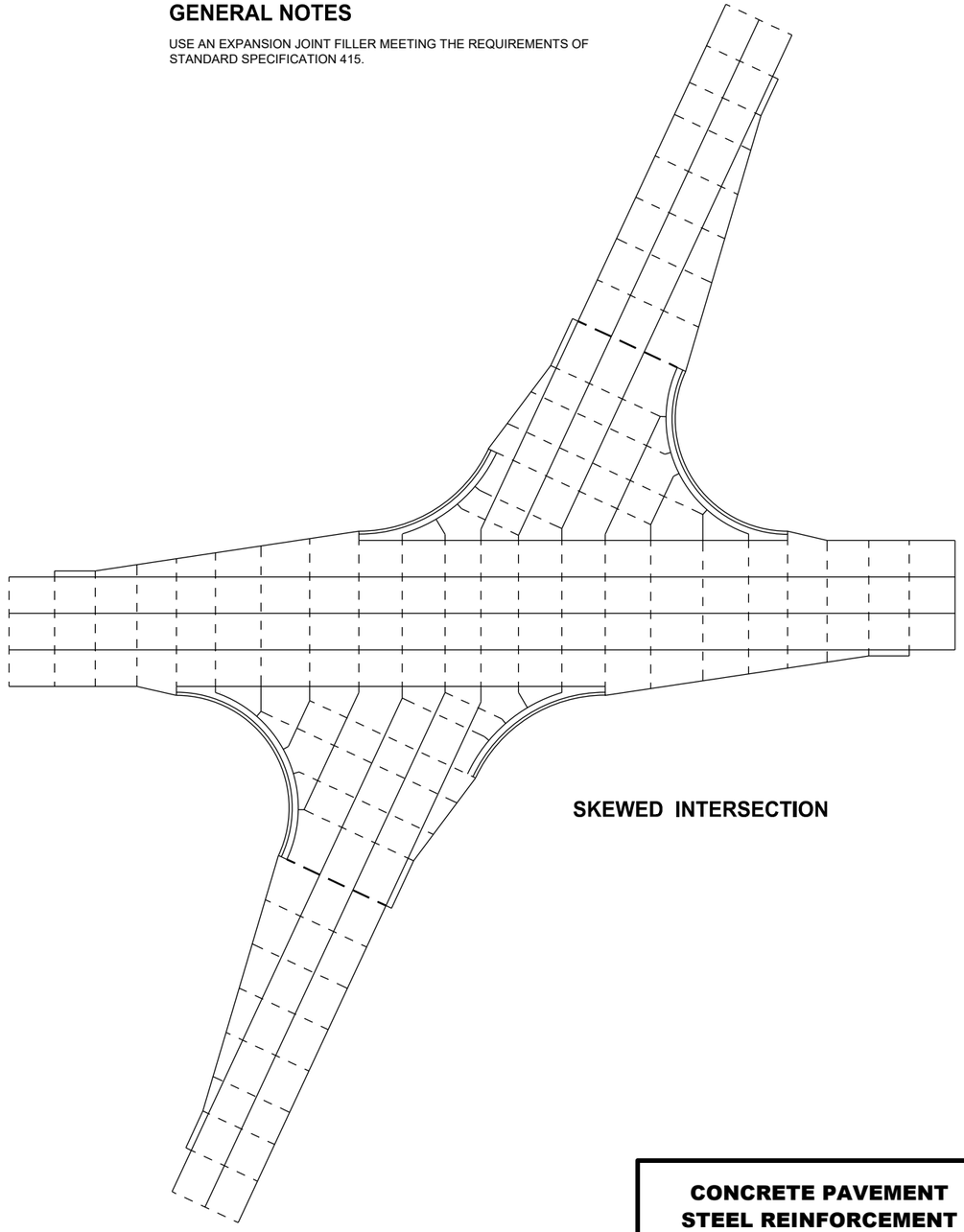
TIED JOINT



STANDARD INTERSECTION

## GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

SDD 13C18 - 08b

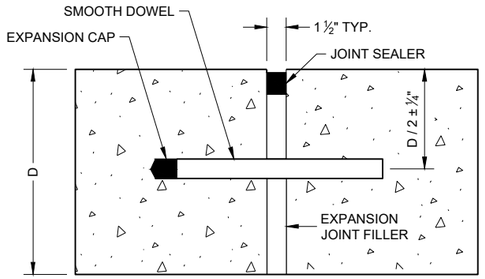
**CONCRETE PAVEMENT STEEL REINFORCEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

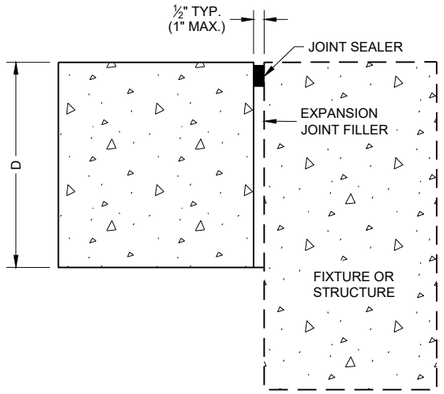


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SDD 13C18 - 08b




**DOWELED TRANSVERSE** (1)




**UNTIED - LONGITUDINAL**

## EXPANSION JOINTS

### TIE BAR TABLE

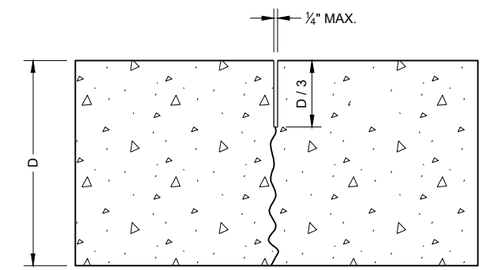
| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|---|---|---|---|
| < 10 ½" | NO. 4 | 30" | 36" |
| ≥ 10 ½" | NO. 5 | 36" | 36" |
| | NO. 4 * | 30" | 24" ** |

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

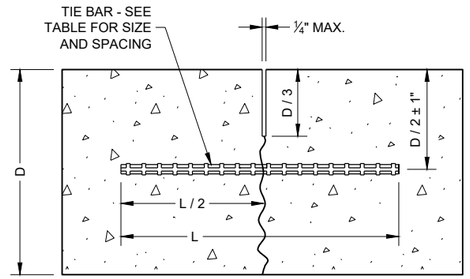
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

### GENERAL NOTES

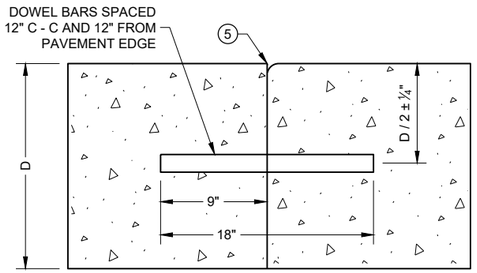
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM 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.



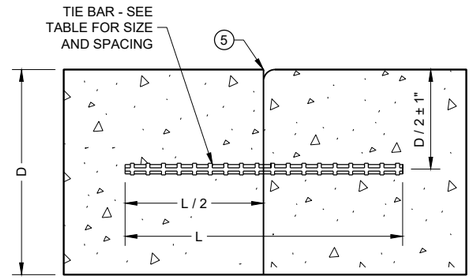

**UNDOWELED TRANSVERSE**



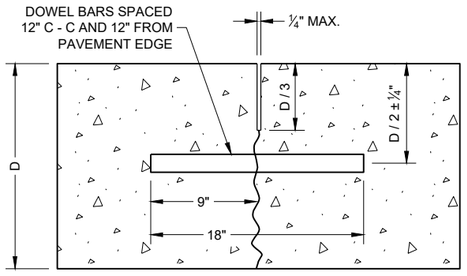

**TIED LONGITUDINAL**



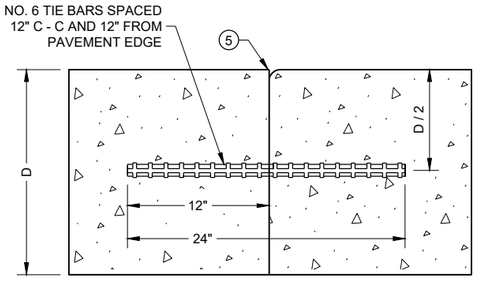

**DOWELED TRANSVERSE** (3)



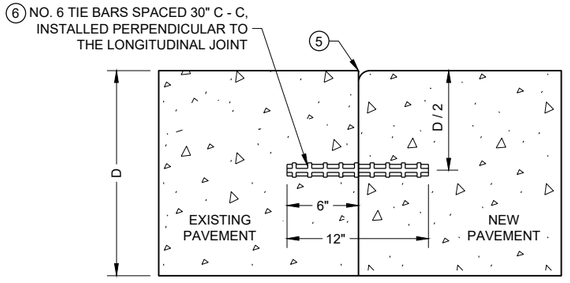

**TIED LONGITUDINAL**




**DOWELED TRANSVERSE**




**TIED TRANSVERSE** (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)

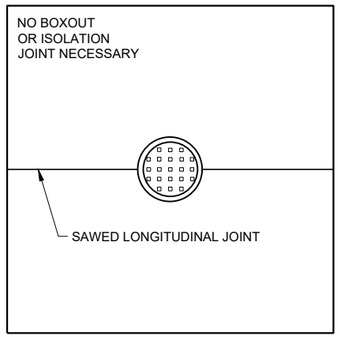



**TIED LONGITUDINAL TO EXISTING**

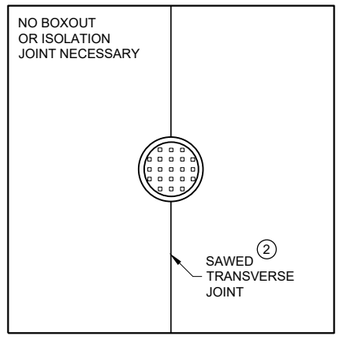
## CONTRACTION JOINTS (2)

## CONSTRUCTION JOINTS (4)

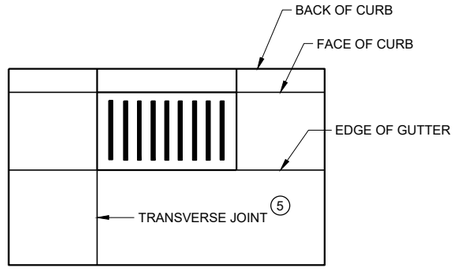
**CONCRETE PAVEMENT JOINT TYPES**




**MANHOLE WITH LONGITUDINAL JOINT**



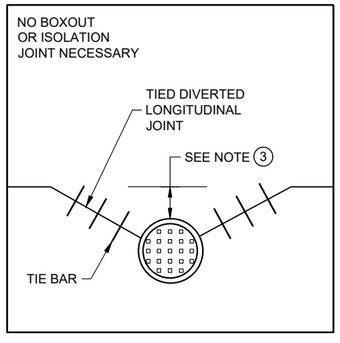

**MANHOLE WITH TRANSVERSE JOINT**



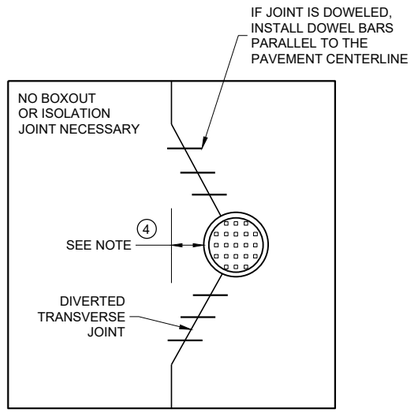

**INLET WITH TRANSVERSE JOINT**

## GENERAL NOTES

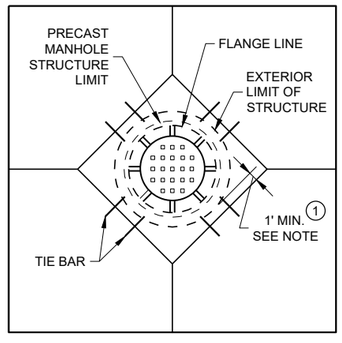
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF 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

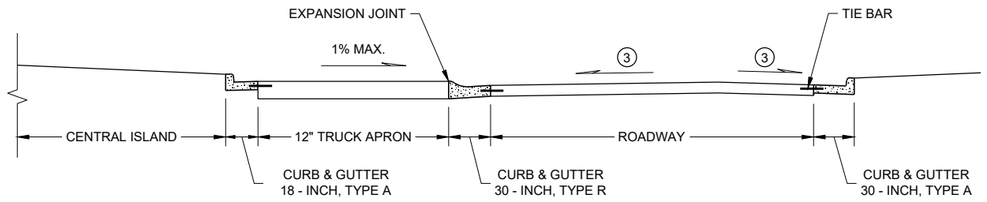
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

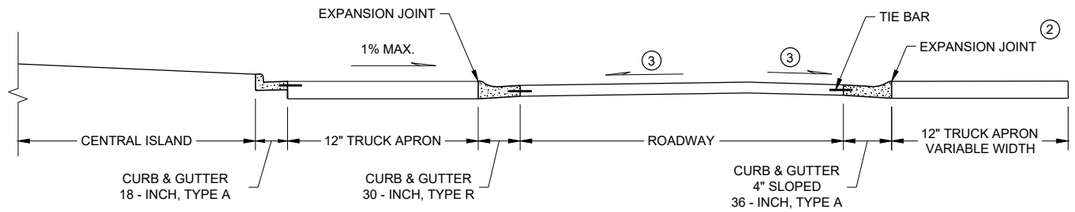



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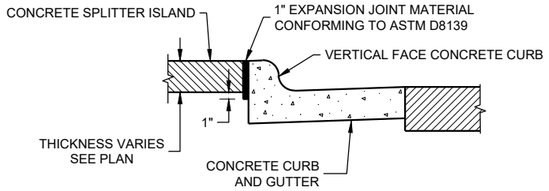
SDD13C18 - 08d
SDD13C18 - 08d



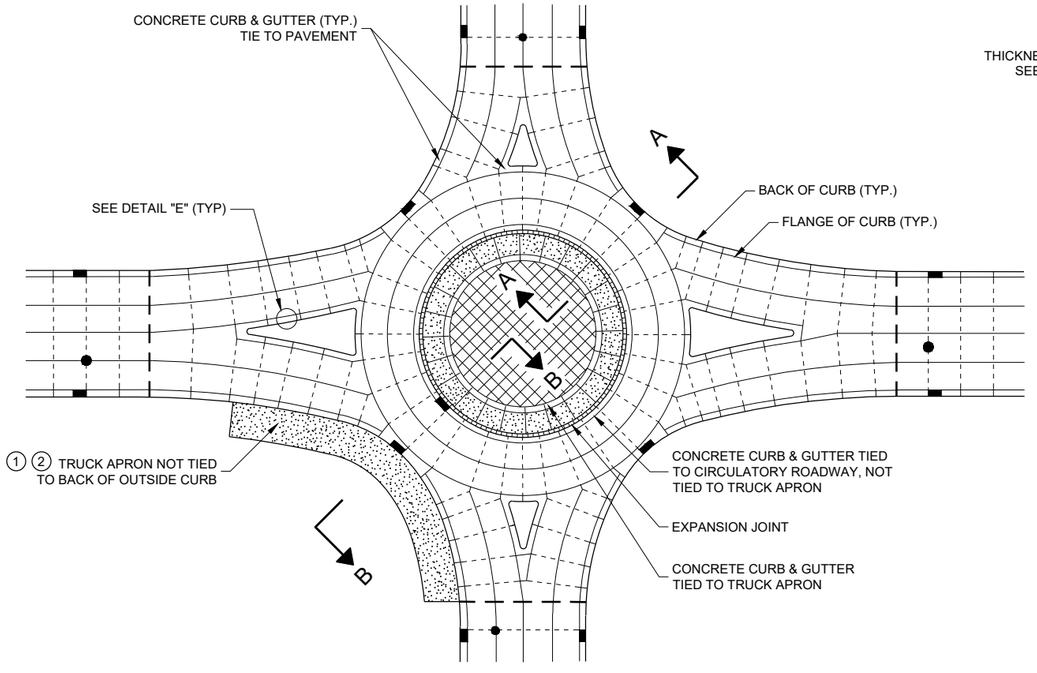

**SECTION A - A**



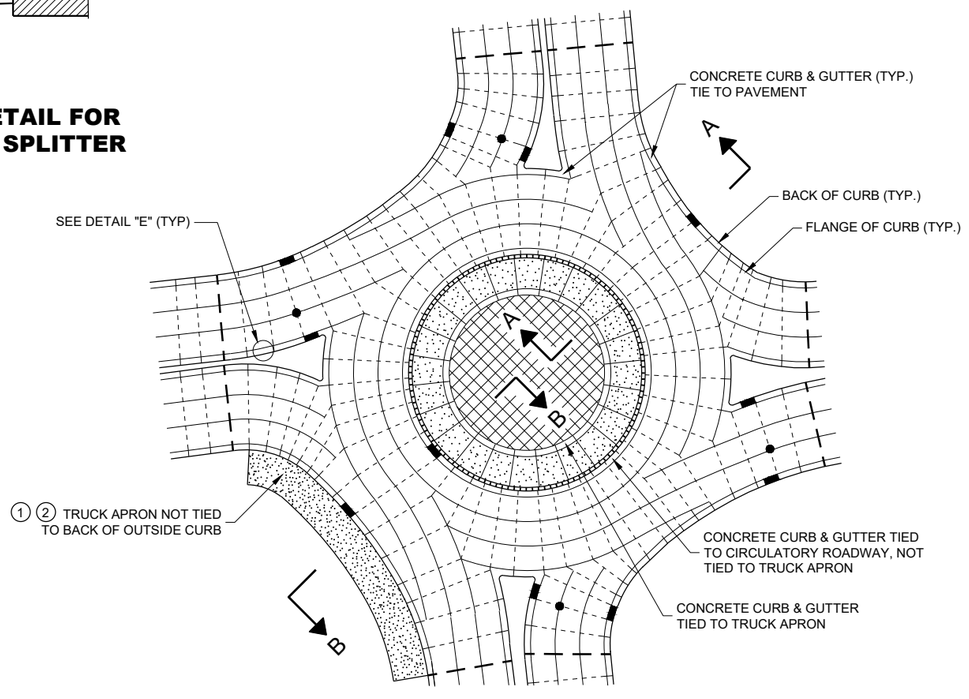

**SECTION B - B**




**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**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

290

6

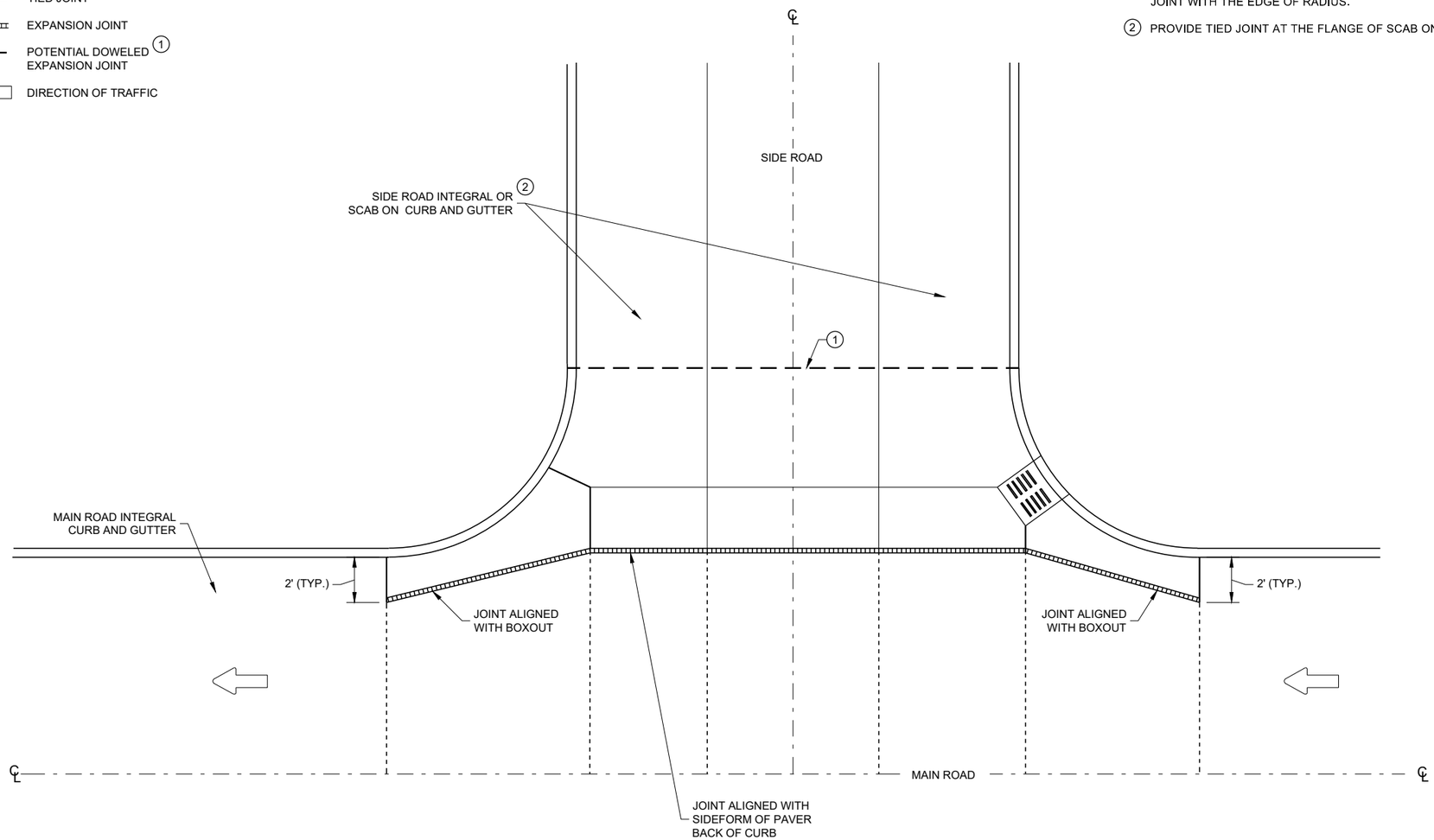
SDD 13C18 - 08e

6

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

APPROVED
May 2023
DATE

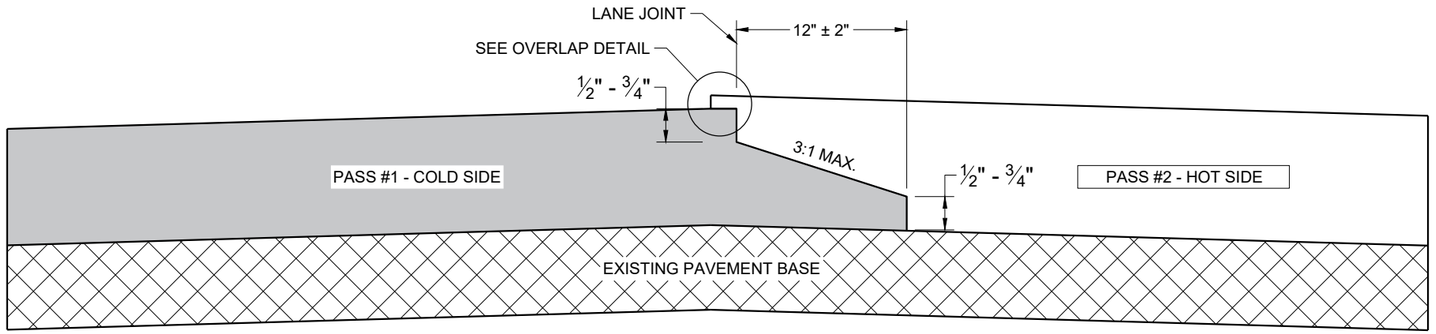
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

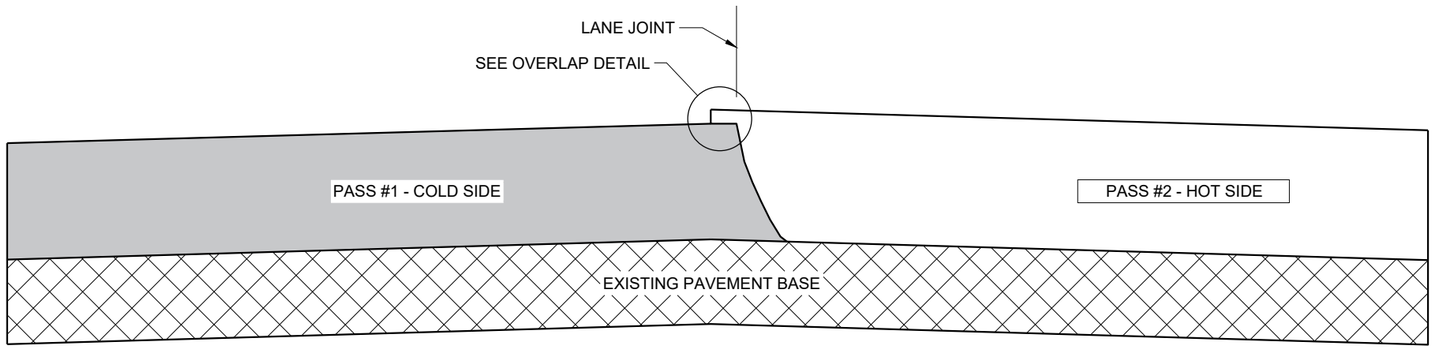




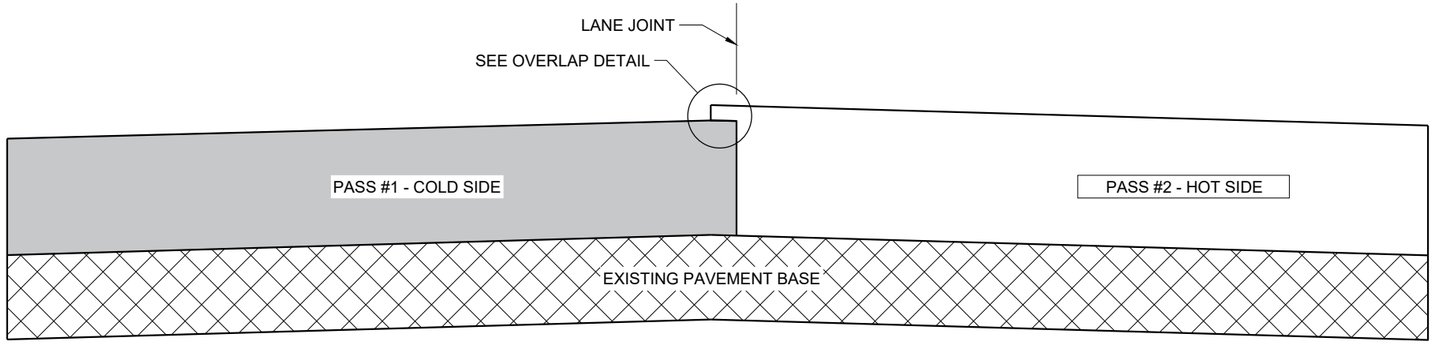
6
SDD 13C18 - 08f




**TYPICAL PAVEMENT CROSS SECTION**
**NOTCHED WEDGE JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT (MILLED)**

## GENERAL NOTES

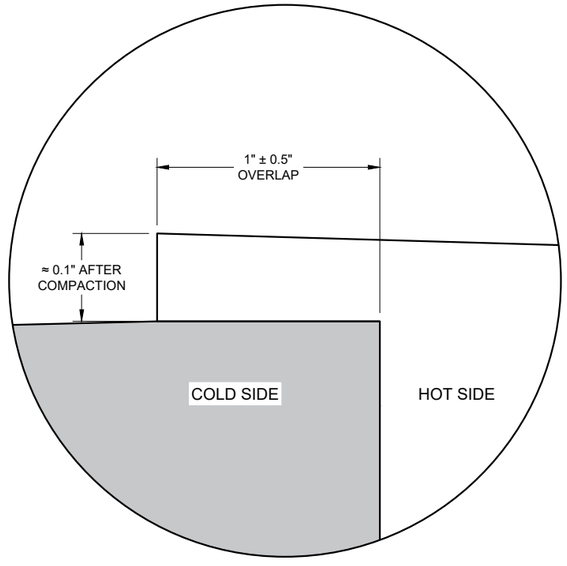
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

6

SDD 13C19 - 03

SDD 13C19 - 03

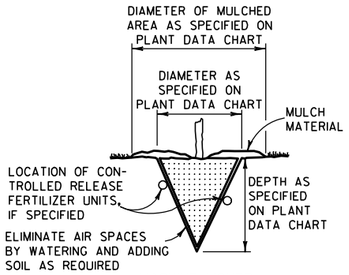
**HMA LONGITUDINAL JOINTS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

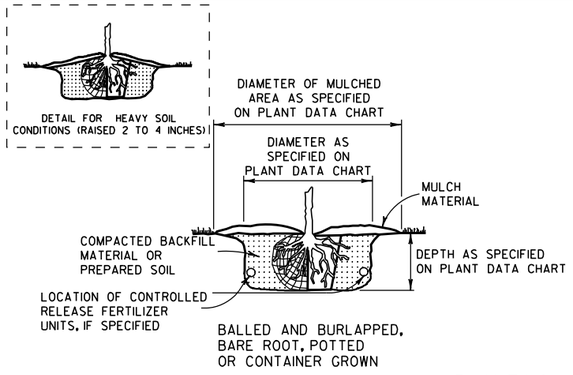
APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

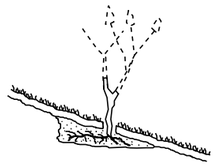
FHWA




MACHINE MOVED

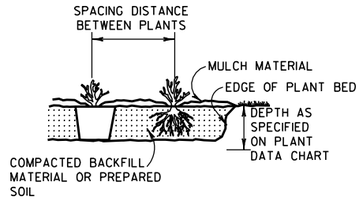



BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



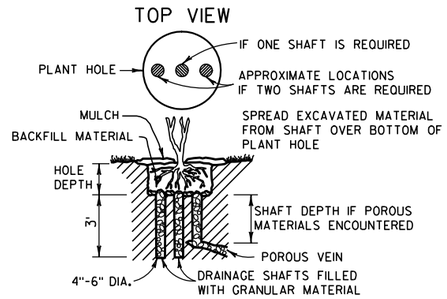
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



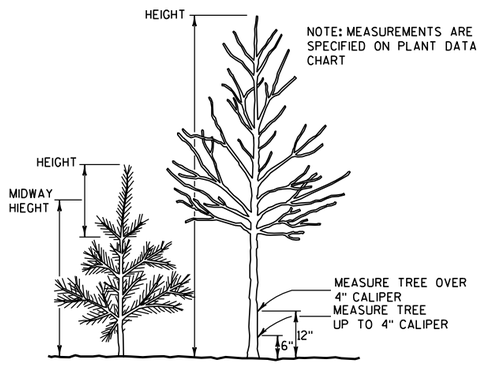

PREPARED BED (BARE ROOT AND POTTED)

## PLANTING

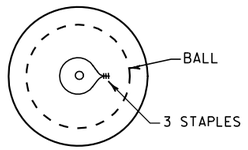



NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

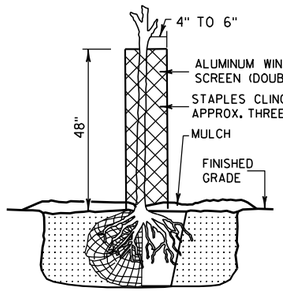
## DRAINING



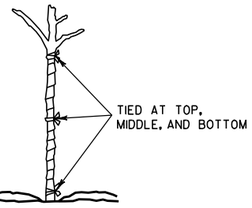

## MEASURING



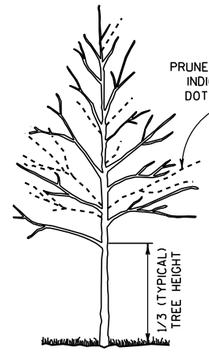

TOP VIEW




## RODENT PROTECTION




## WRAPPING

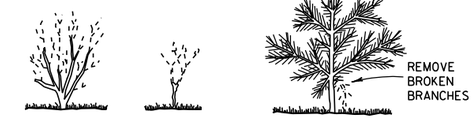



TALL DECIDUOUS TREES (ASH, MAPLE, LINDEN, OAK)

SINGLE STEMMED LOW DECIDUOUS TREES (CRABS AND OTHER SINGLE STEM TYPE)

MULTI-STEMMED LOW DECIDUOUS TREES OR LARGE SHRUBS (HAWTHORN, SERVICEBERRY)

NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES

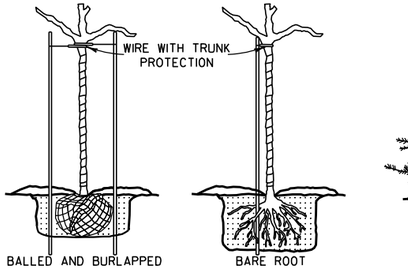


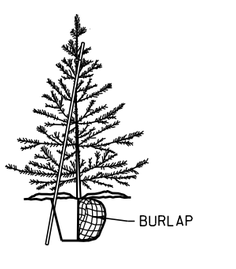

SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

SUMAC

TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

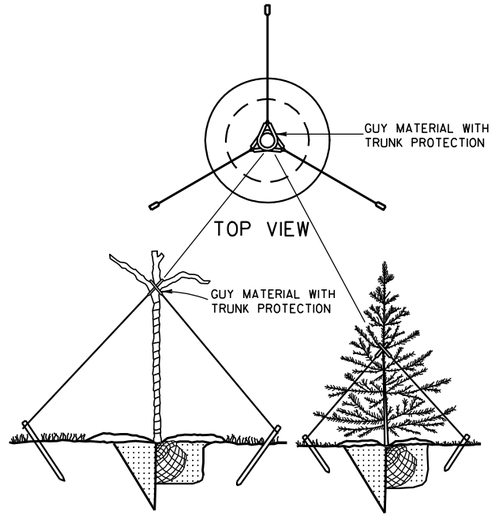
## PRUNING



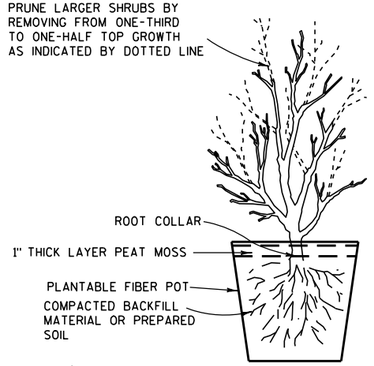




NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

## BRACING




## GUYING




## POTTING

## NOTES

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

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

# TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

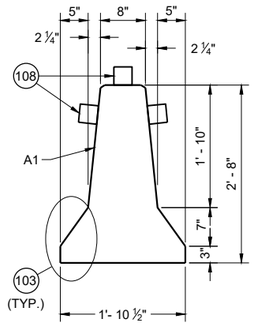
APPROVED
4/11/94
DATE
/S/ Rory L. Rhinesmith
CHIEF METHODS DEVELOPMENT ENGINEER
FHWA



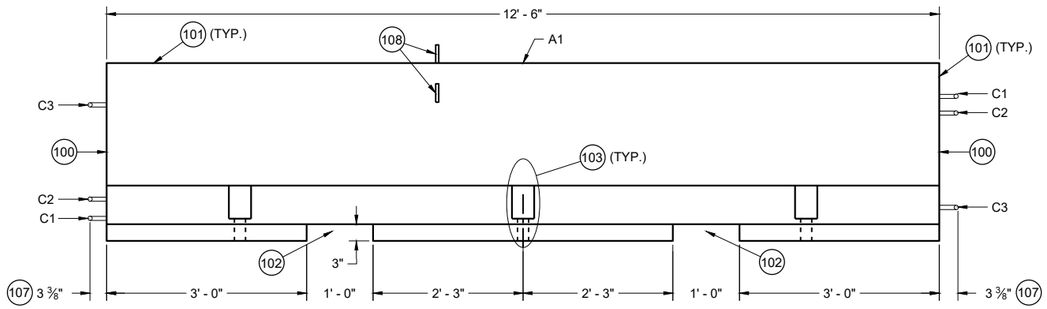


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S.D.D. 14 A 2-1




**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

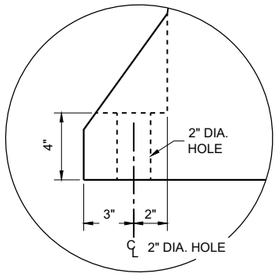
(104) 1 ¾" MIN. CLEAR COVER

(105) 2" MIN. CLEAR COVER

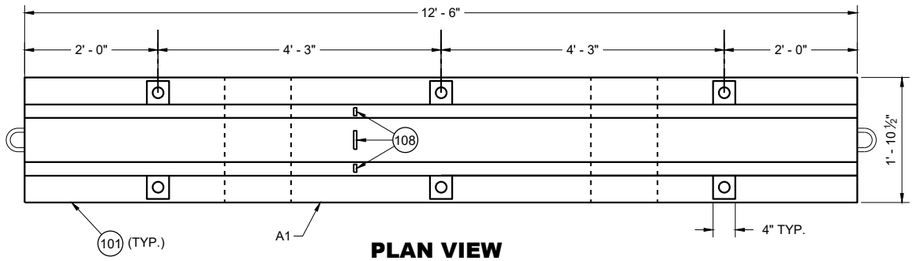
(106) 1" MIN. CLEAR COVER

(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 TOP 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.

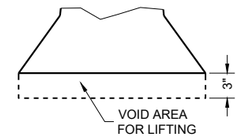



**ANCHOR BLOCK DETAIL**

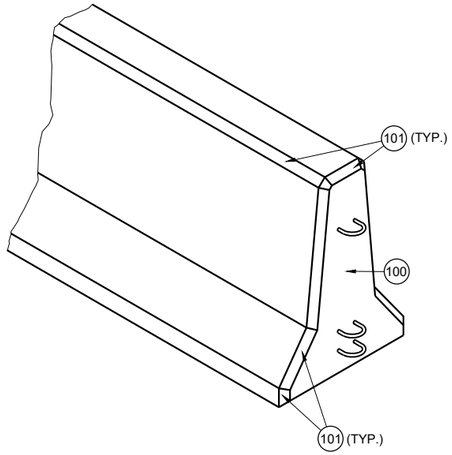


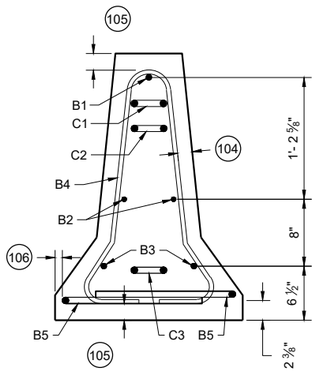

**PLAN VIEW**

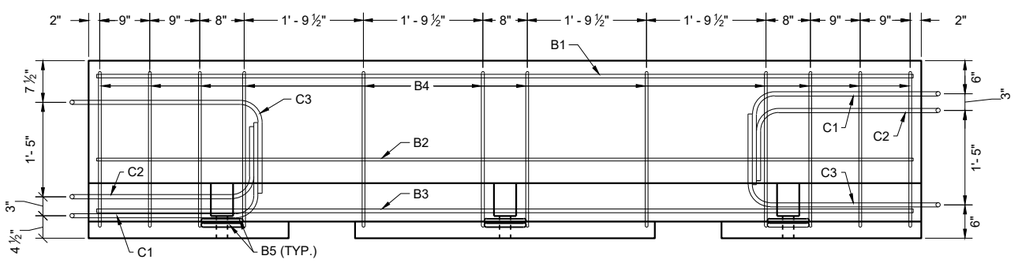
**TEMPORARY BARRIER**




**LIFTING SLOT DETAIL (TYP.)**



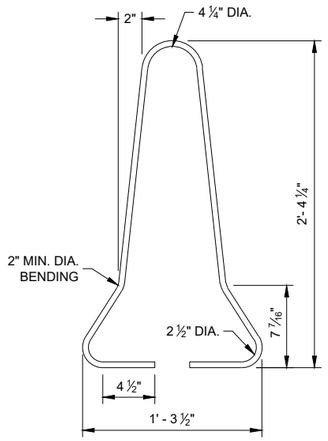




**PROFILE VIEW**

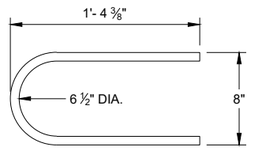
**TEMPORARY BARRIER REINFORCEMENT**

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

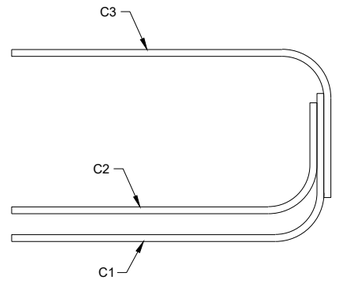
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




**B4 BAR DETAIL**

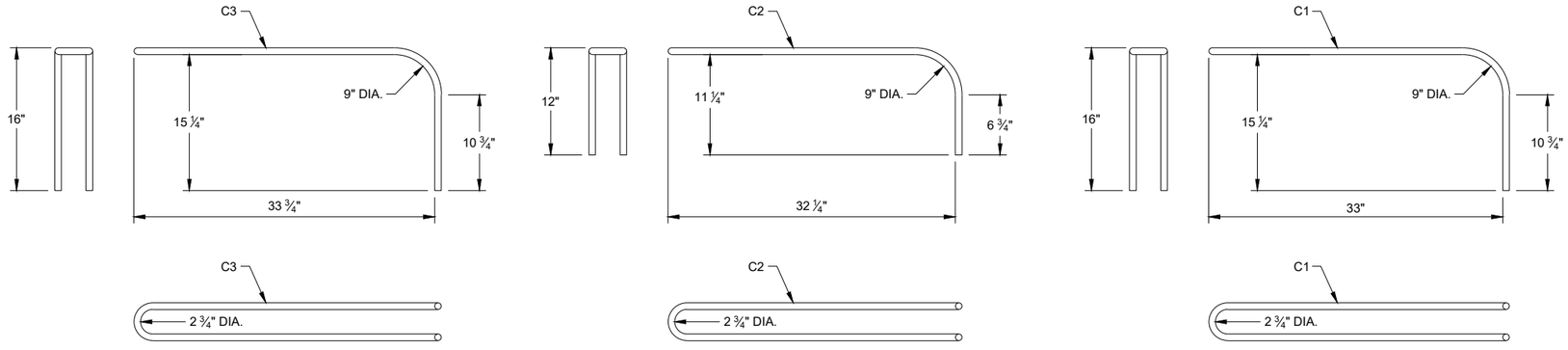



**B5 BAR DETAIL**




**PROFILE VIEW**

**LOOP BAR ASSEMBLY**




**C BAR DETAILS**

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

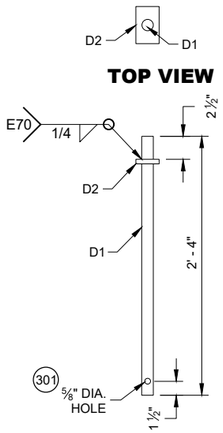






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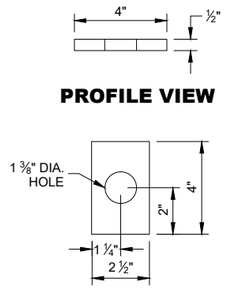
SDD 14B07-16b




**TOP VIEW**

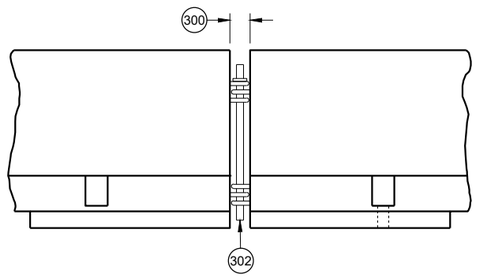
**PROFILE VIEW**

**CONNECTOR PIN ASSEMBLY**




**PROFILE VIEW**

**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.

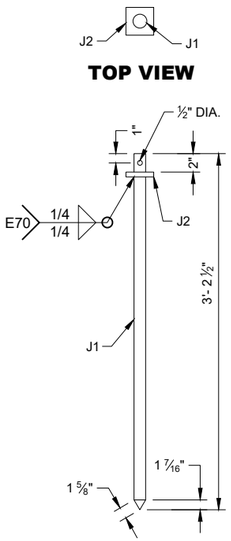
305 DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY OR CONCRETE PAVEMENT WITH ASPHALT OVERLAY.

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"

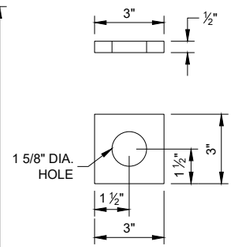
309 WHEN THERE IS ASPHALT OVERLAYING CONCRETE PAVEMENT, A 1 5/8" DIA. PILOT HOLE CAN BE DRILLED INTO THE OVERLAY AND CONCRETE. IF NEEDED DRILL A 3/4" PILOT HOLE IN BASE COURSE.



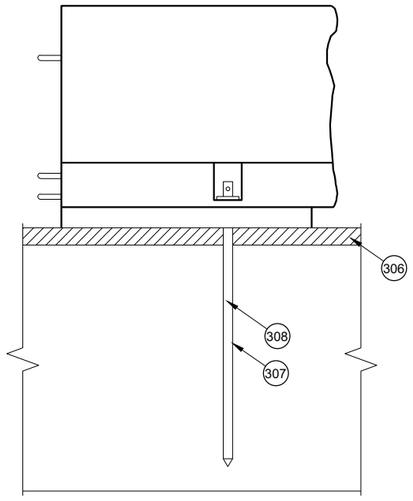

**TOP VIEW**

**PROFILE VIEW**

**ASPHALT ANCHOR PIN ASSEMBLY**

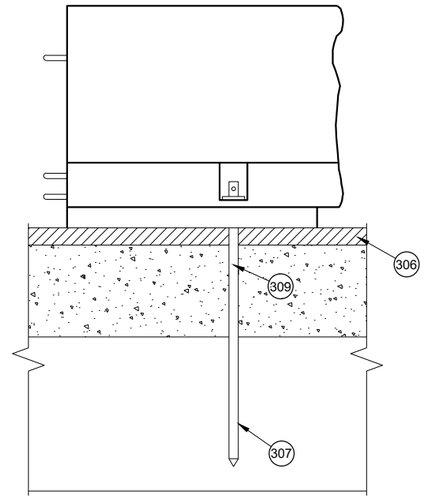



**TOP VIEW J2**



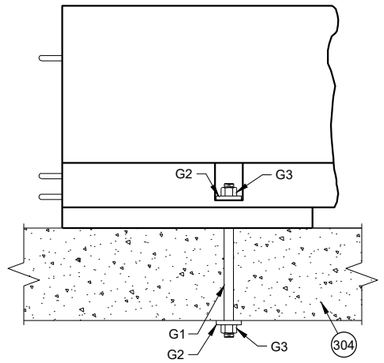

**SIDE VIEW**

**ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT PAVEMENT**



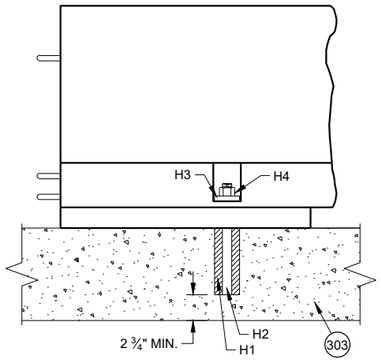

**SIDE VIEW**

**ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT OVERLAY ON TOP OF CONCRETE PAVEMENT**




**SIDE VIEW**

**THROUGH BOLT ANCHOR INSTALLATION** (305)




**SIDE VIEW**

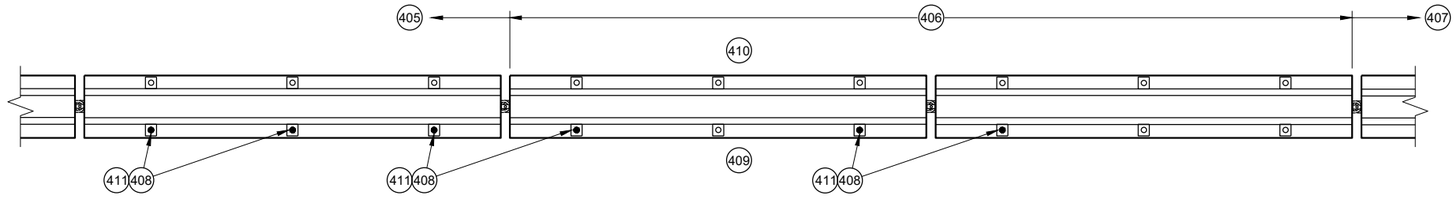
**ADHESIVE ANCHOR INSTALLATION** (305)

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



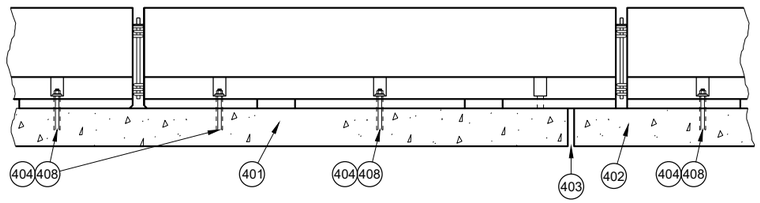

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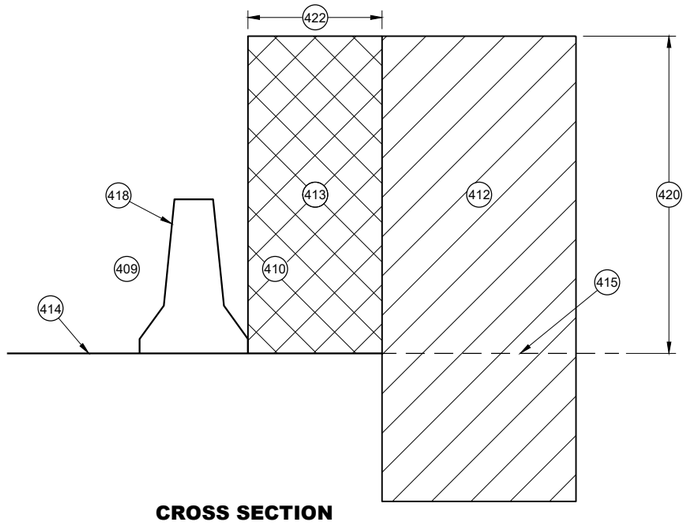

PLAN VIEW

## TRANSITION FROM FREE STANDING TO ANCHORED BARRIER



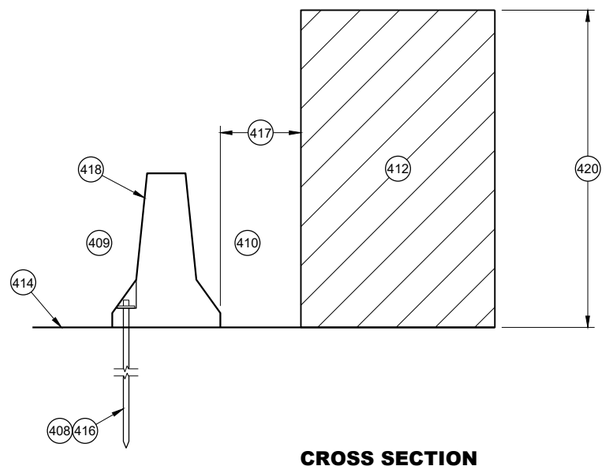

PROFILE VIEW

## ANCHORED BARRIER NEAR EXPANSION JOINT (400)



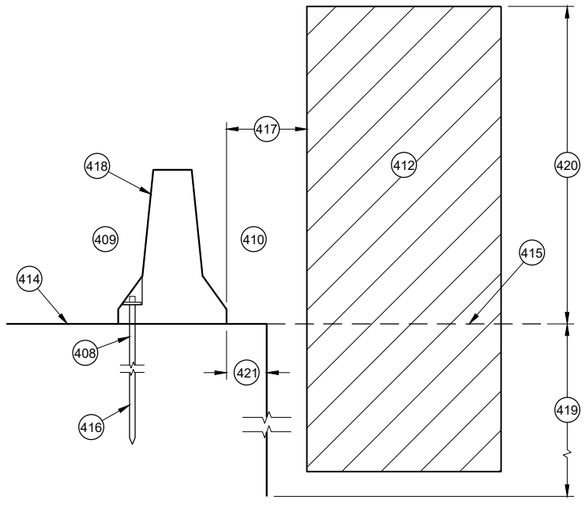

CROSS SECTION

## FREE STANDING BARRIER



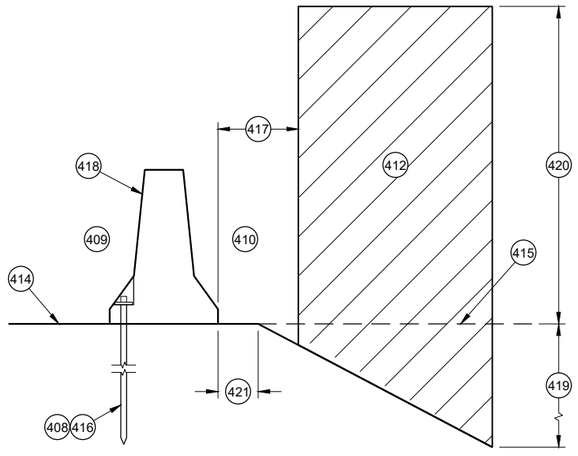

CROSS SECTION

## 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"**




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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

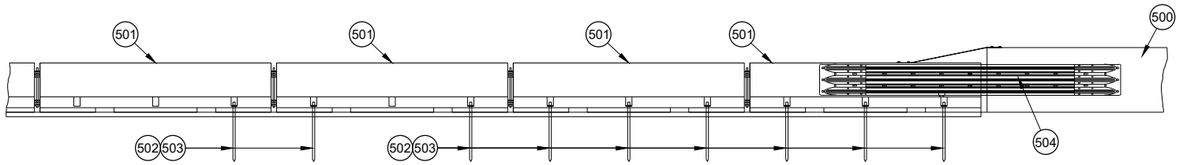
(516) CUT WOOD BLOCK TO FIT.

(517) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL ASSEMBLY.

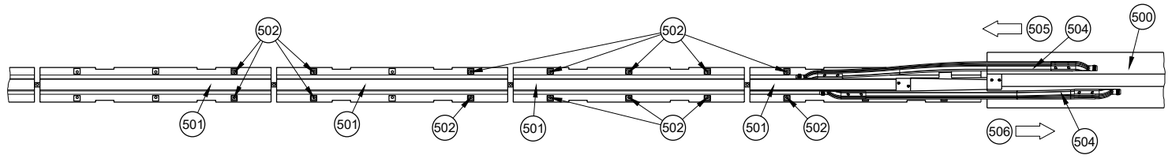
(518) CAP ASSEMBLY

(519) 4" MAX. GAP BETWEEN TEMPORARY BARRIER AND RIGID BARRIER.

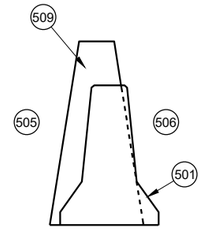
(520) ALL TWELVE SPLICE HOLES REQUIRE M1 AND M2



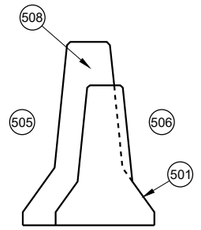

**PROFILE VIEW**



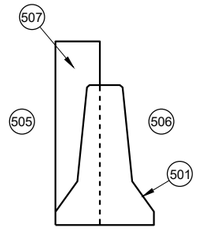

**PLAN VIEW**
**TRANSITION TO RIGID BARRIER**



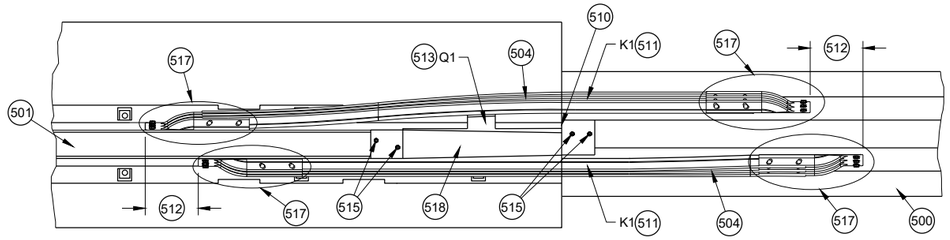

**CROSS SECTION TEMPORARY BARRIER PLACEMENT SINGLE SLOPE**



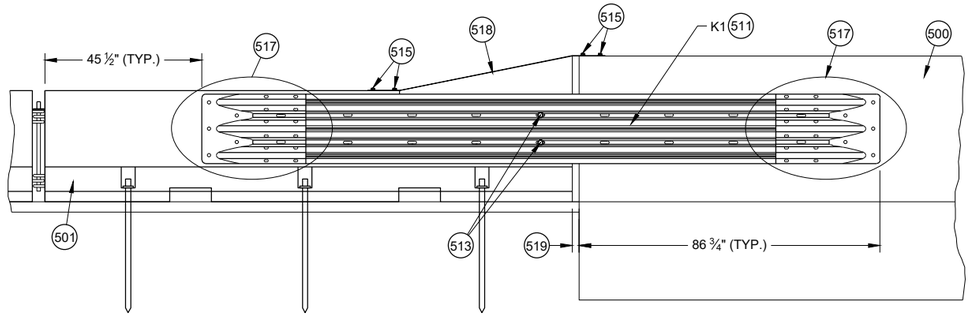

**CROSS SECTION TEMPORARY BARRIER PLACEMENT SAFETY SHAPE**



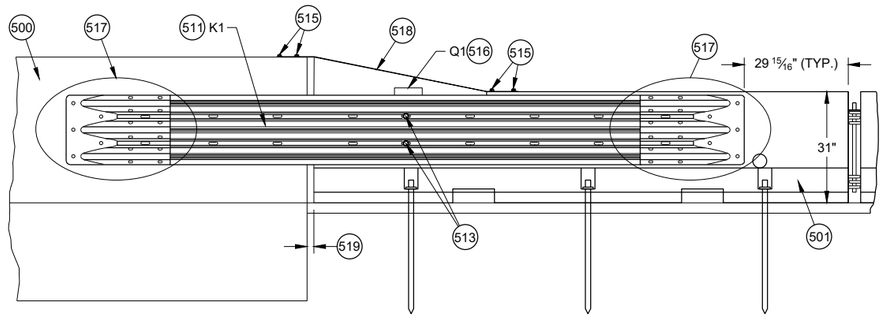

**CROSS SECTION TEMPORARY BARRIER PLACEMENT VERTICAL**



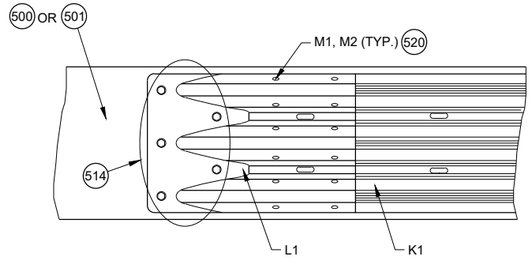

**PLAN DETAIL VIEW**
**TRANSITION TO RIGID BARRIER**




**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"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

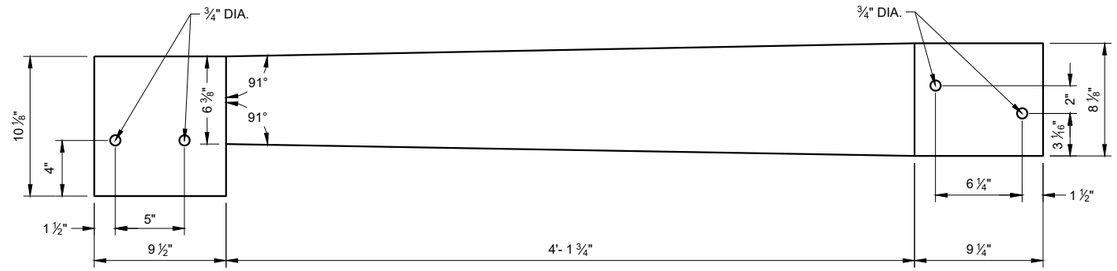


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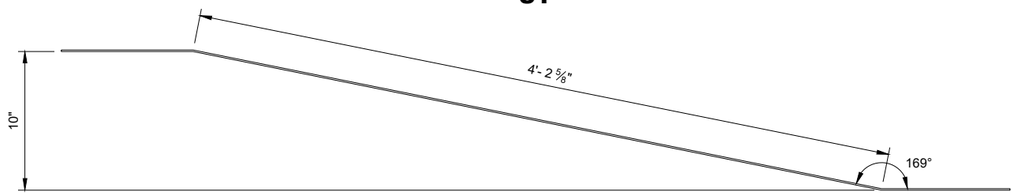
6

SDD 14B07-16e



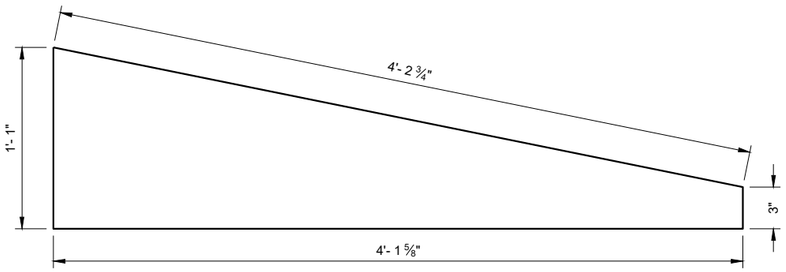

**TOP VIEW**

**S1**



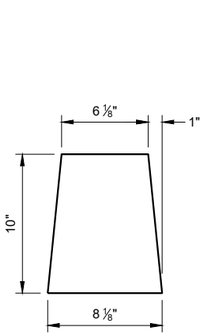

**ELEVATION VIEW**

**S1**

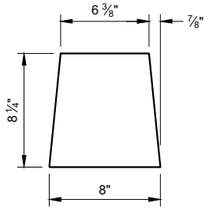



**SIDE VIEW**

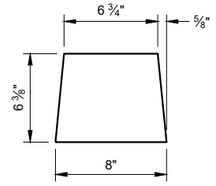
**S3**



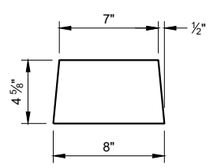

**S2**



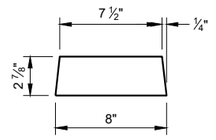

**S4**



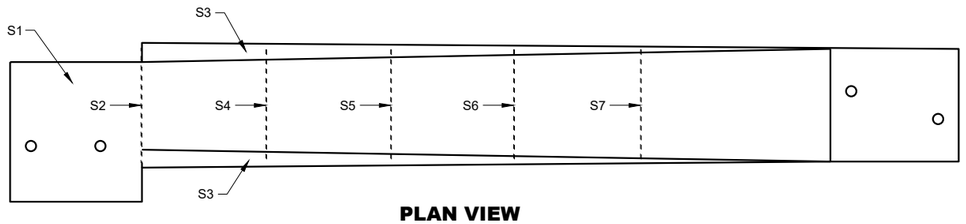

**S5**



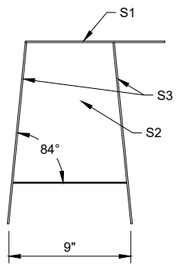

**S6**



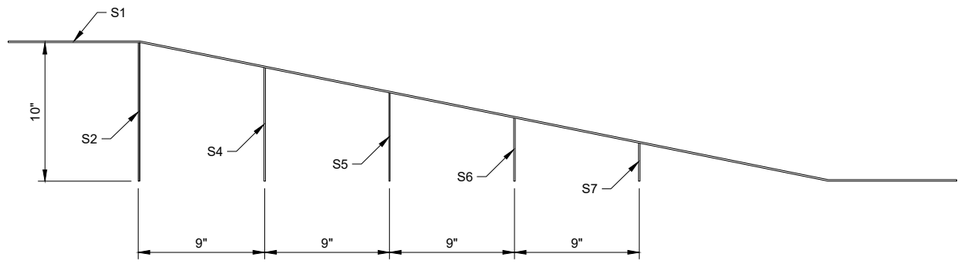

**S7**




**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"**

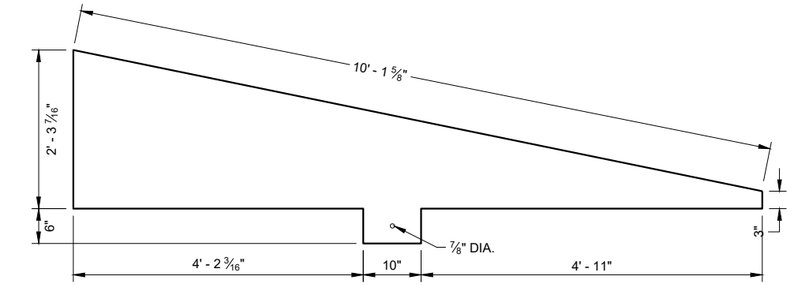
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION





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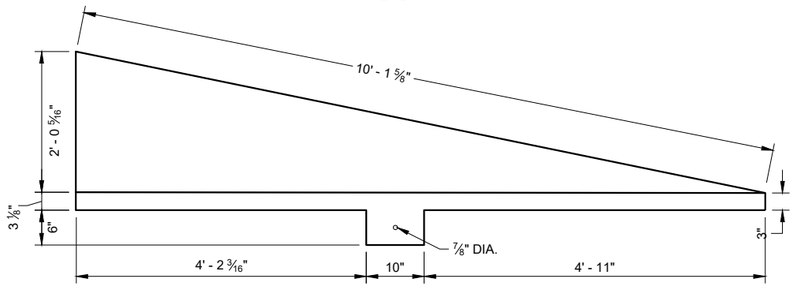
SDD 14B07-16f




**SIDE VIEW**
**T4**




**END VIEW**




**SIDE VIEW**
**T3**

**END VIEW**

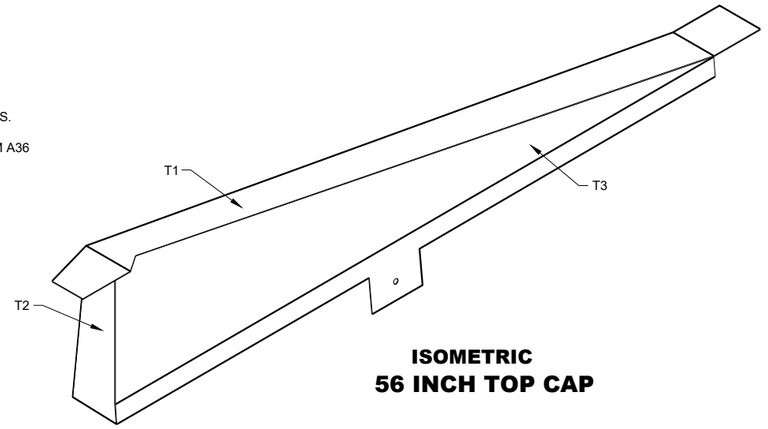
**GENERAL NOTES**

STITCH WELD GUSSET PLATES AND END PLATES ON THRIE SIDES

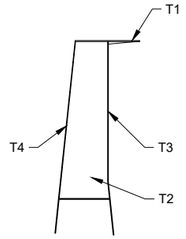
STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

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

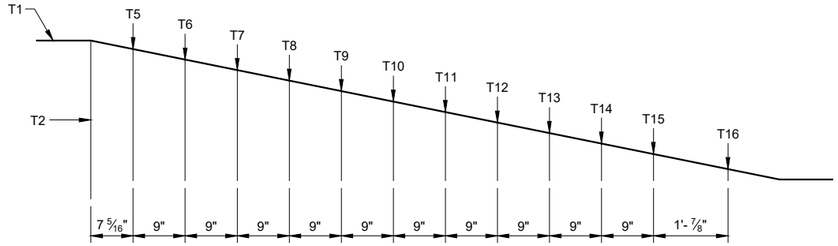
(700) SIDE PLATES (T3 AND T4) NOT SHOWN FOR CLARITY.



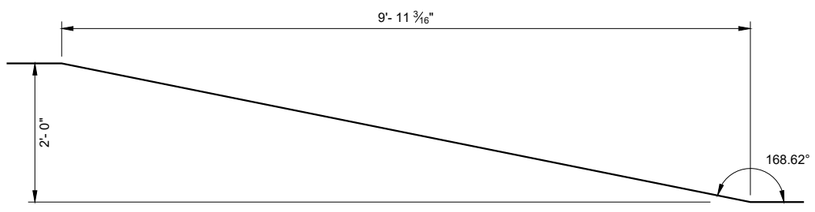

**ISOMETRIC**
**56 INCH TOP CAP**



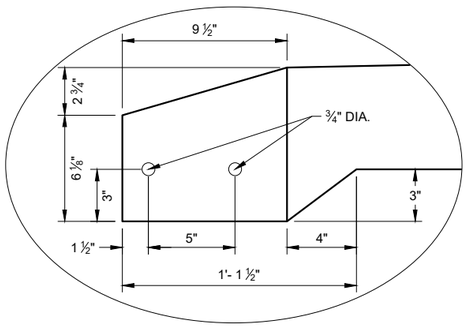

**END VIEW**
**56 INCH TOP CAP**



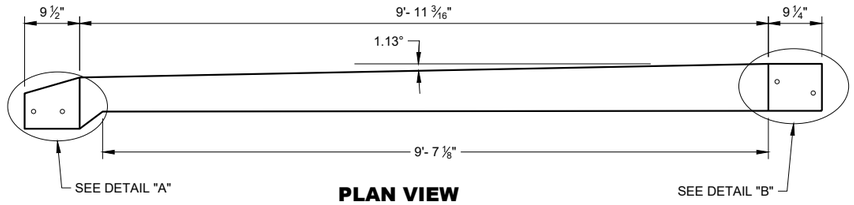

**SIDE VIEW** (700)
**56 INCH TOP CAP**



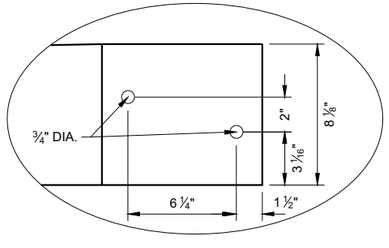

**SIDE VIEW**
**TOP PLATE T1**



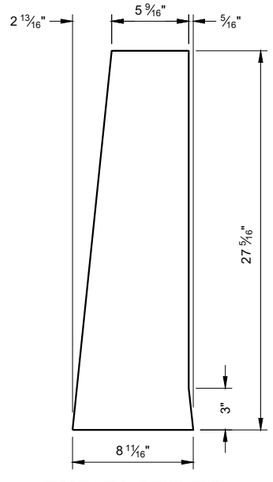

**DETAIL "A"**



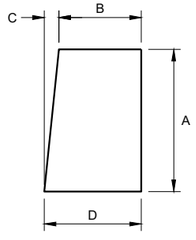

**PLAN VIEW**
**TOP PLATE T1**




**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 1/16" | 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

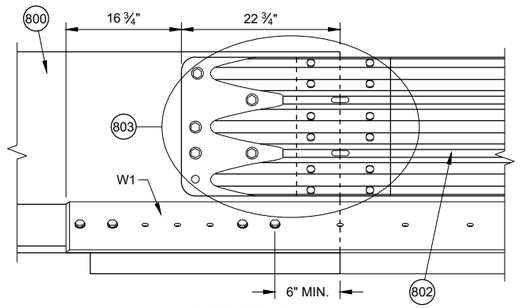




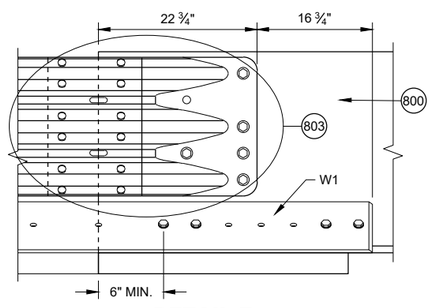
6



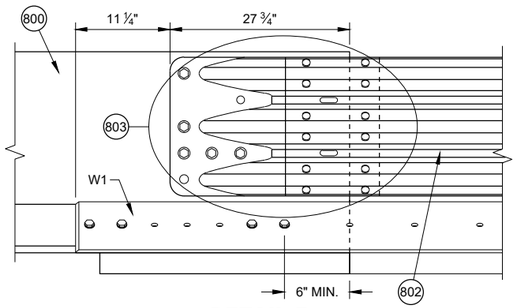
SDD 14B07-16g



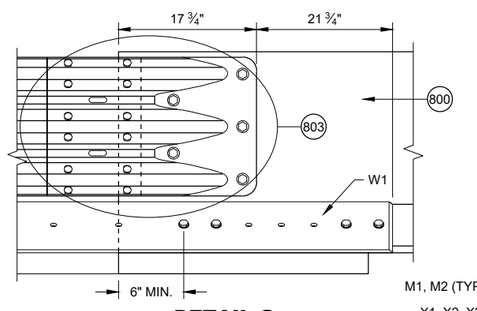

**DETAIL D**



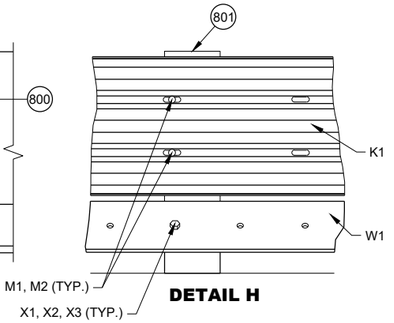

**DETAIL E**



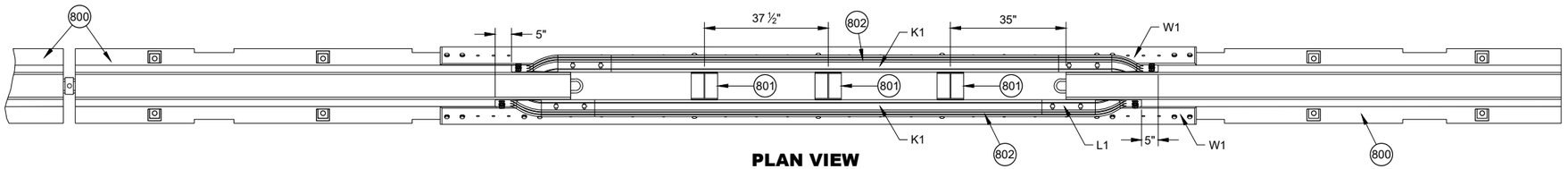

**DETAIL F**




**DETAIL G**




**DETAIL H**




**PLAN VIEW**

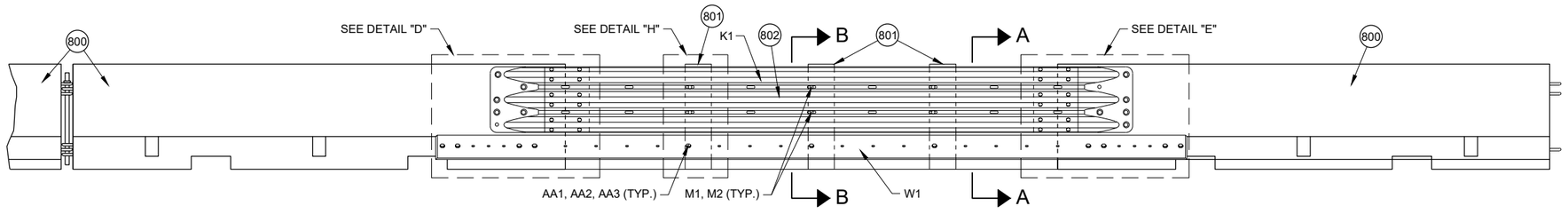
## GENERAL NOTES

(800) FREE STANDING TEMPORARY BARRIER

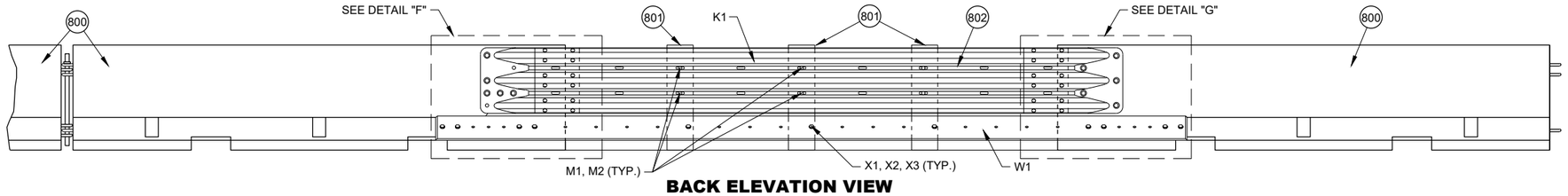
(801) GAP STIFFENER ASSEMBLY

(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

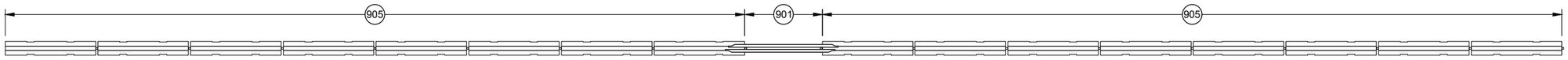
**CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

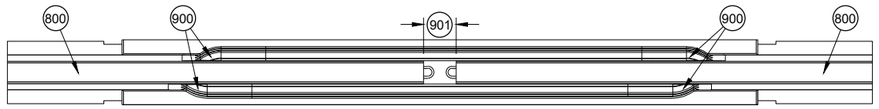




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SDD 14B07-16h



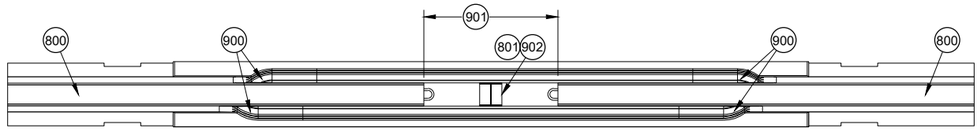

**PLAN VIEW**
**GAP WITHIN SPACING**



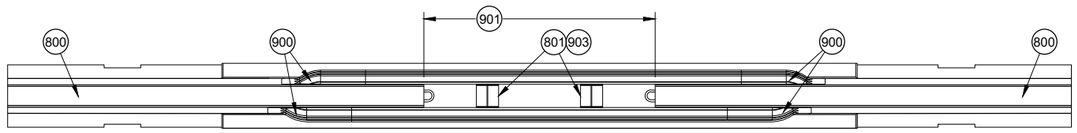

**PLAN VIEW**
**TEMPORARY BARRIER GAP OVER 4" TO 1' MAX.** (904)

## GENERAL NOTES

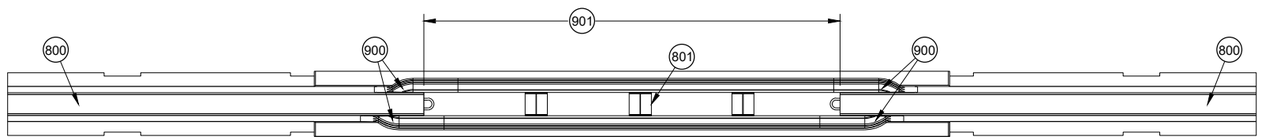
(900) SEE OTHER DETAILS FOR TEMPORARY GAP HARDWARE (TYP.)
(901) TEMPORARY BARRIER GAP
(902) GAP STIFFENER ASSEMBLY CENTERED IN THE GAP.
(903) GAP STIFFENER ASSEMBLY IS OFFSET 18 ¾" FROM CENTER
(904) MINIMUM NUMBER OF GAP STIFFENERS SHOWN FOR THE GAP RANGE SHOWN.
(905) MINIMUM OF 8 CONTINUOUS FREE STANDING TEMPORARY BARRIERS




**PLAN VIEW**
**TEMPORARY BARRIER GAP OVER 1' TO 4' MAX.** (904)




**PLAN VIEW**
**TEMPORARY BARRIER GAP OVER 4' TO 7' MAX.** (904)



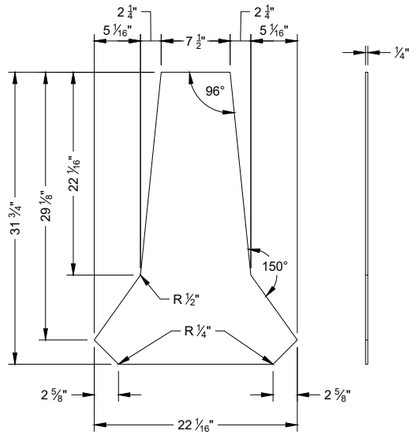

**PLAN VIEW**
**TEMPORARY BARRIER GAP OVER 7' TO 12.5' MAX.** (904)

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

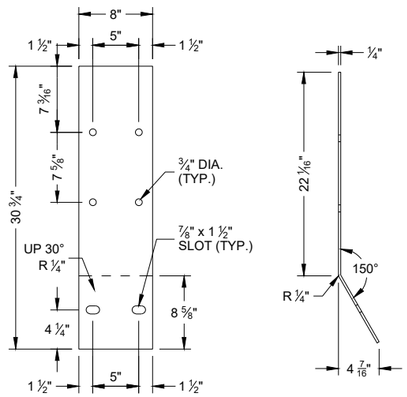



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PROFILE VIEW SIDE VIEW

**STIFFENER ASSEMBLY CENTER PANEL U1**

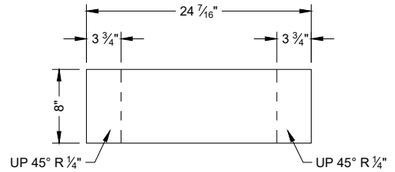



FLAT PATTERN

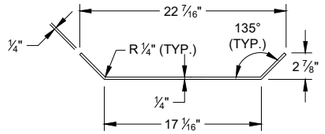



SIDE VIEW

**STIFFENER ASSEMBLY SIDE PANEL U2**

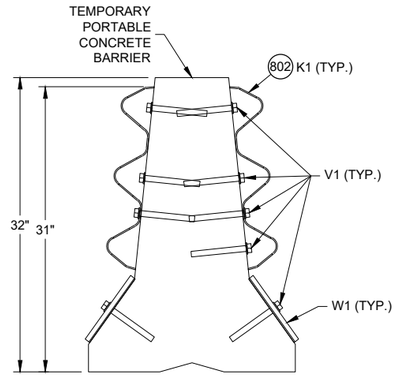



**FLAT PATTERN**

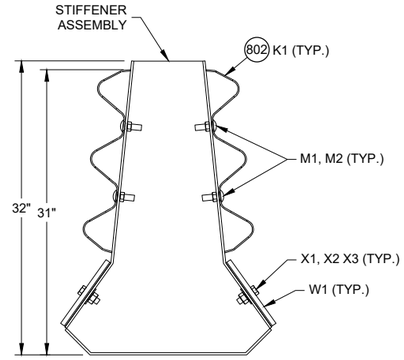



PROFILE VIEW

**STIFFENER ASSEMBLY BOTTOM PANEL U3**



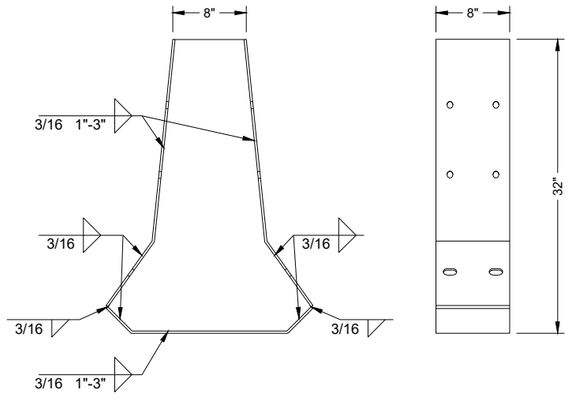

**SECTION A - A**




**SECTION B - B**



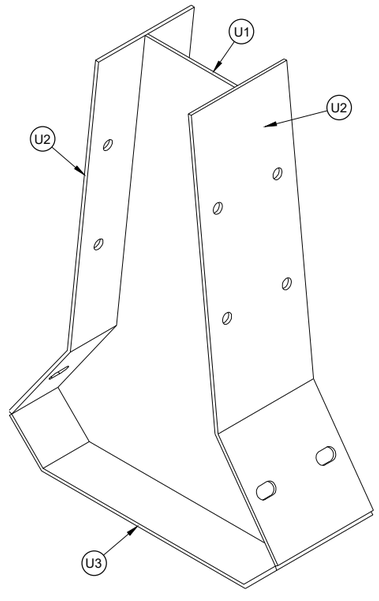

PLAN VIEW




PROFILE VIEW

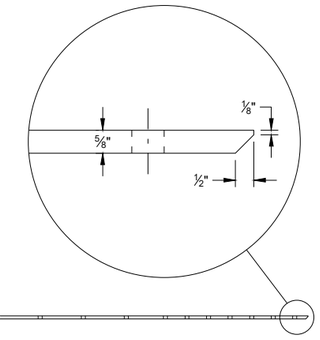



SIDE VIEW

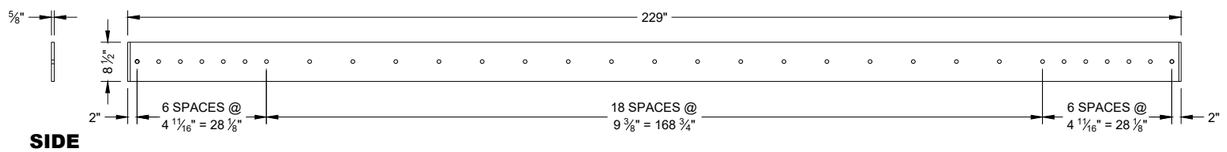



ISOMETRIC

**GAP STIFFENER ASSEMBLY**




PLAN VIEW




SIDE VIEW

ELEVATION VIEW

**W1 TOE PLATE**

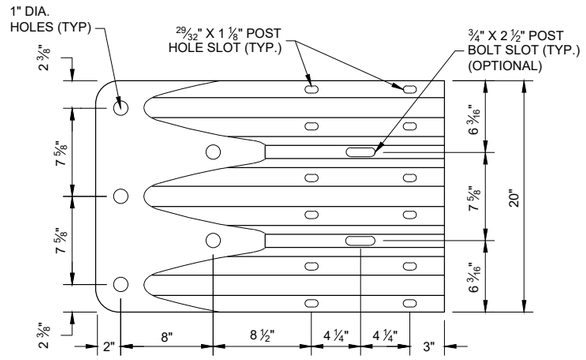
**CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



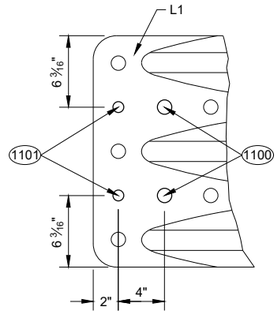


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**ELEVATION VIEW**

**THRIE BEAM TERMINAL CONNECTOR**




**ELEVATION VIEW**

**ADDITIONAL THRIE BEAM (1102) TERMINAL CONNECTOR HOLE DETAIL**

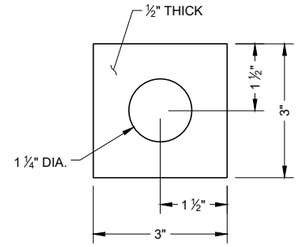


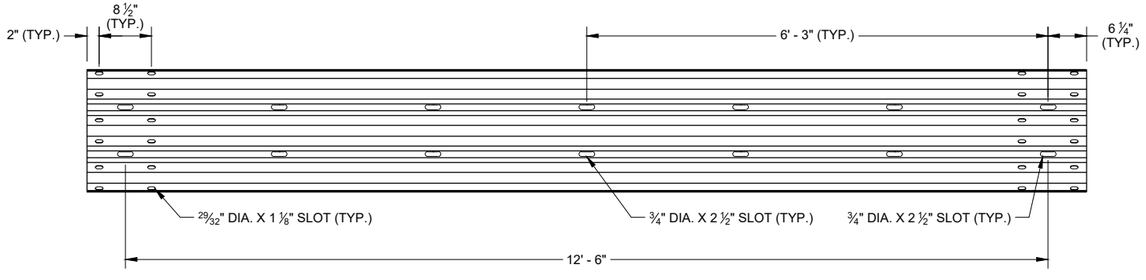

**PLATE WASHER DETAIL G2, H3**

## GENERAL NOTES

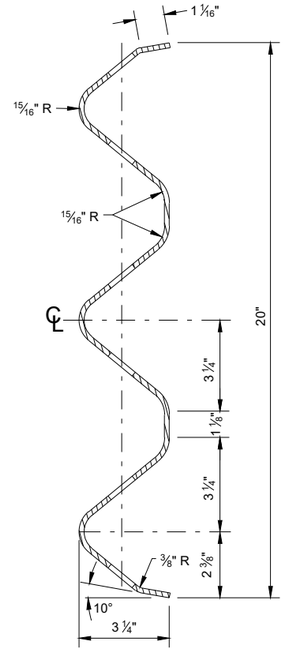
(1100) 1" DIA. HOLE

(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"**

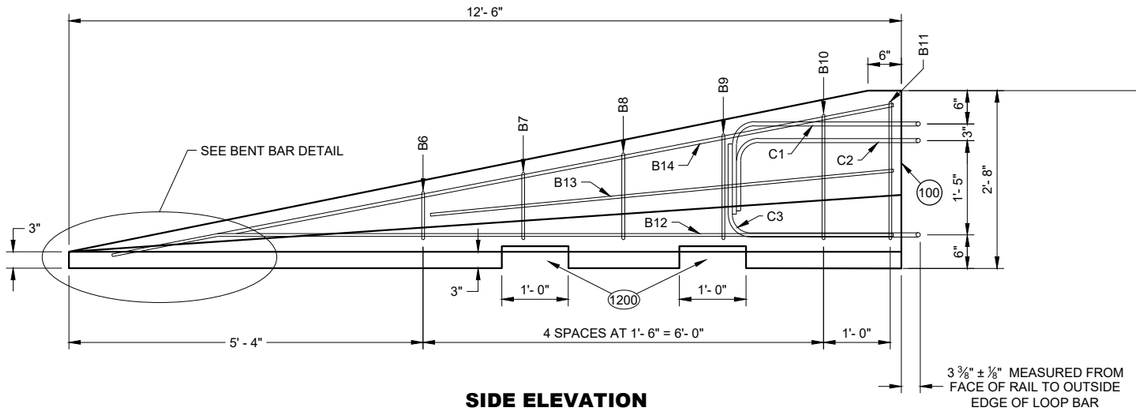
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



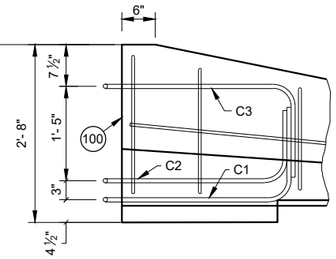


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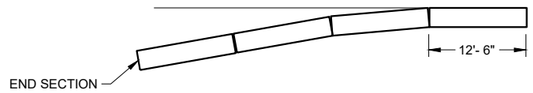

**SIDE ELEVATION**
(FOR CONNECTION TO LEFT END OF BARRIER)




**SIDE ELEVATION**
LOOP BAR ASSEMBLY INVERTED FOR OPPOSITE END
(FOR CONNECTION TO RIGHT END OF BARRIER)

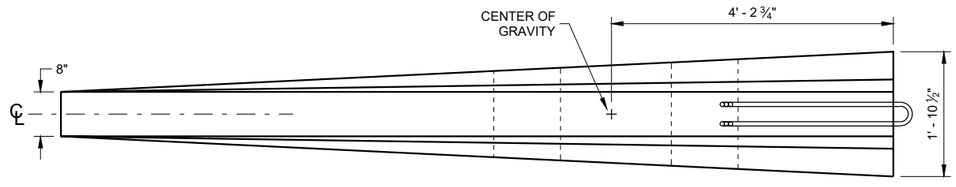
## GENERAL NOTES

(1200) SEE LIFTING SLOT DETAIL. LOCATION OF LIFTING SLOTS DETERMINED BY CONTRACTOR.

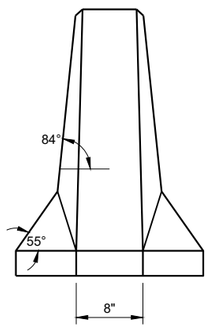



**FLARE AT BARRIER END**

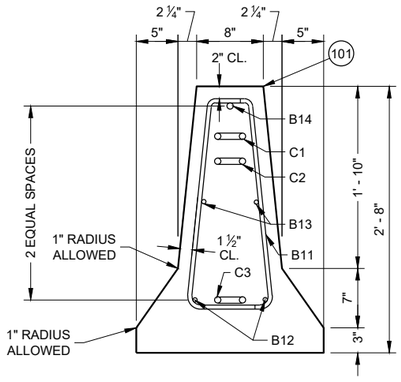
| POSTED SPEED, (MPH) | FLARE RATE |
|---|---|
| 40 OR LESS | 6:1 |
| 45 OR GREATER | 8:1 |




**PLAN VIEW**

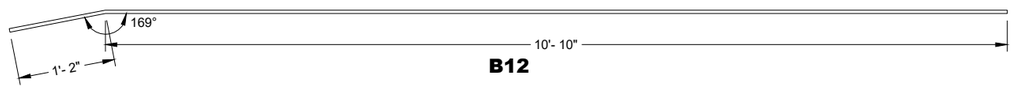



**FRONT ELEVATION**

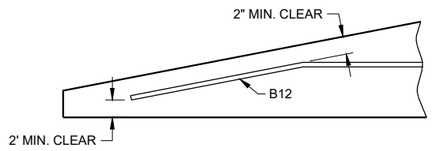



**END SECTION**

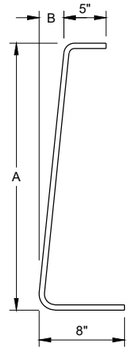
**DETAILS OF BARRIER TAPER SECTION**




**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 |

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SDD 14B07-16m

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SDD 14B07-16m

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

## 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 | |

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SDD 14B07-16n

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

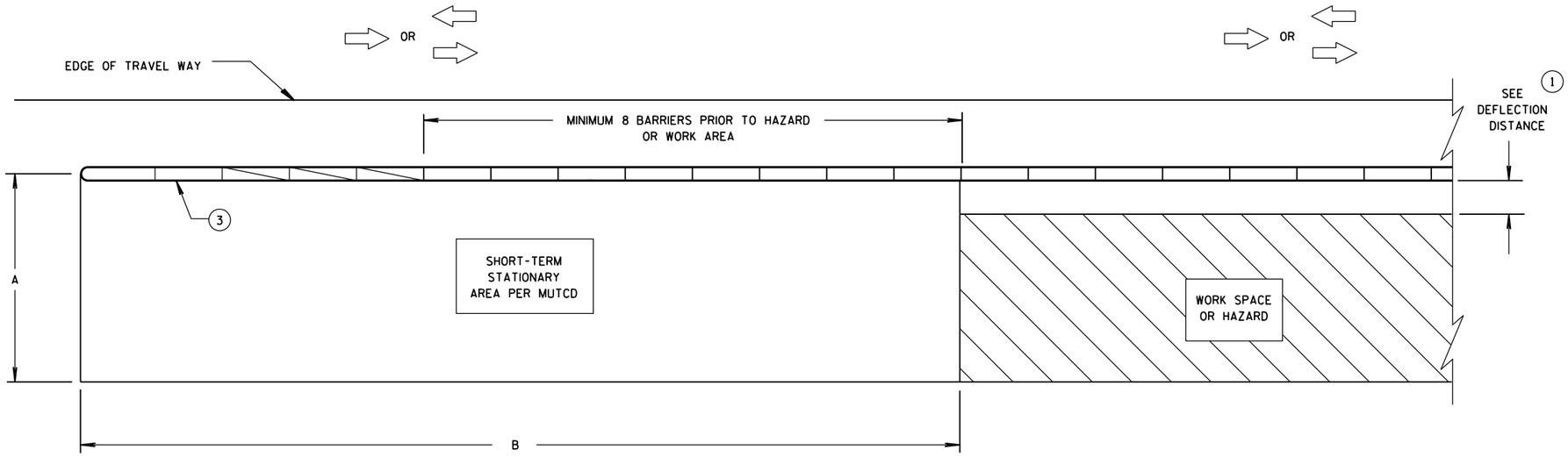
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA



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SDD 14B07-16n



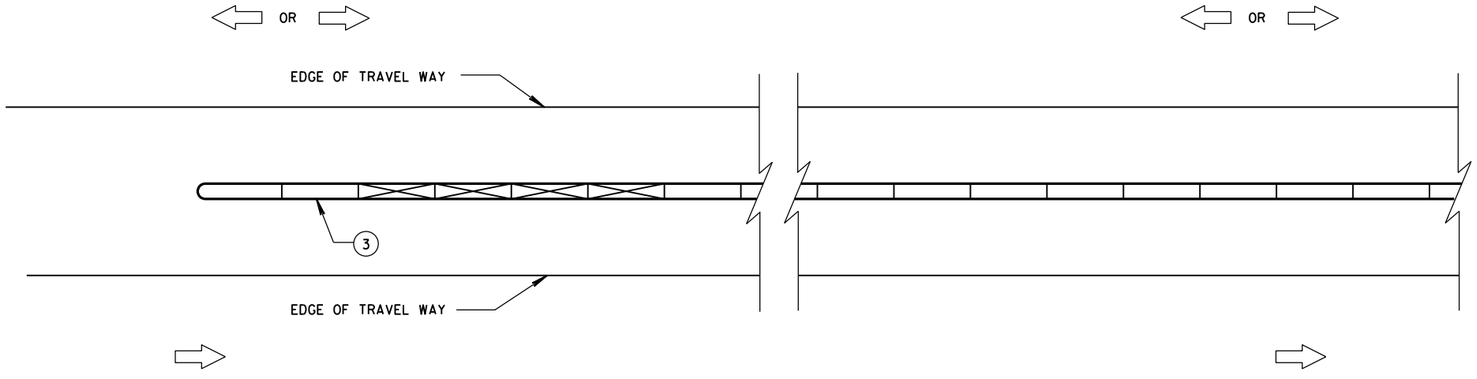

## CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

### 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.

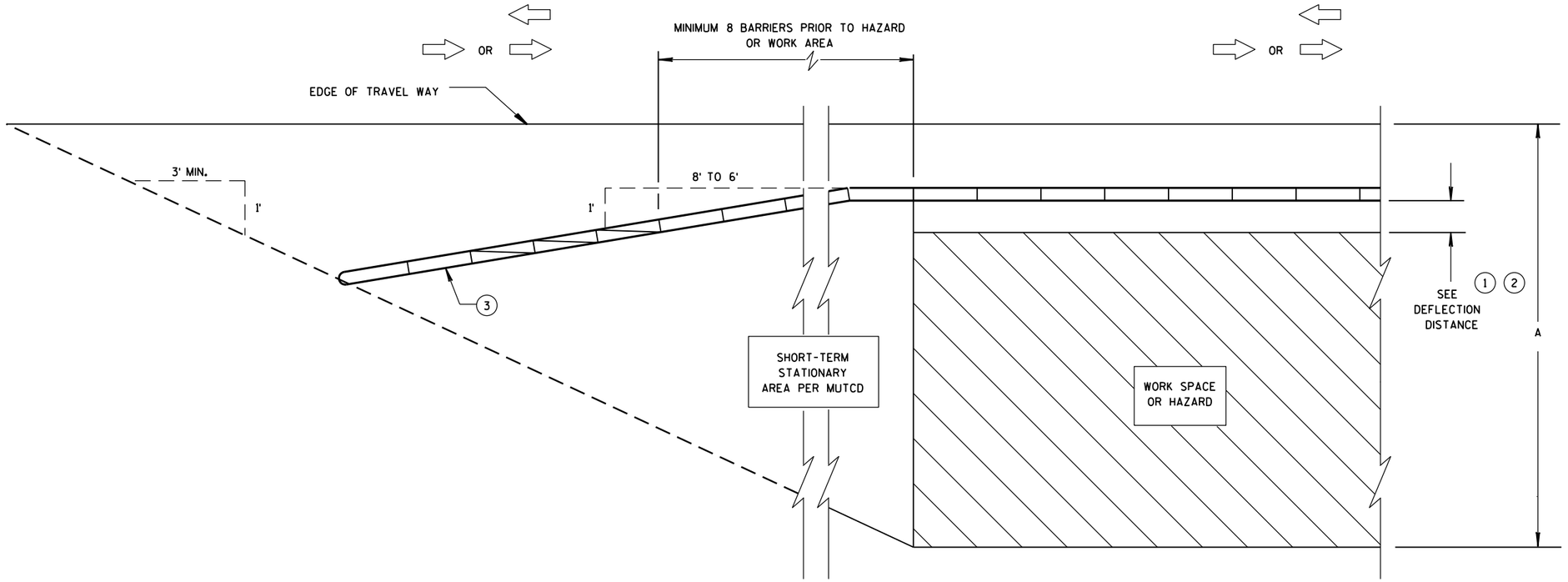
**CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

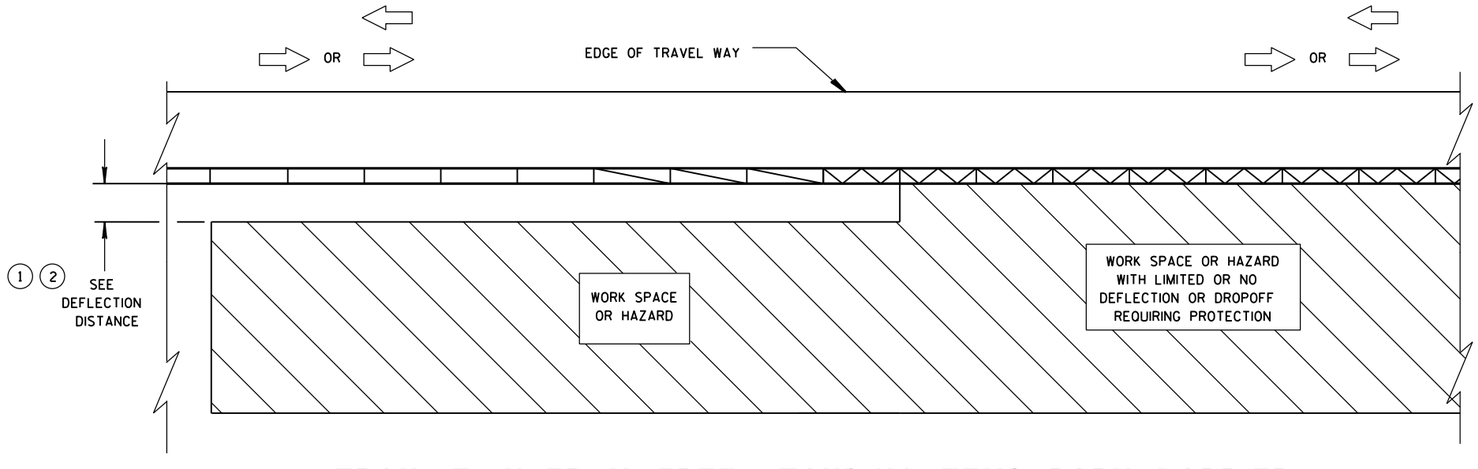



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S.D.D. 14 B 8-2a




## 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

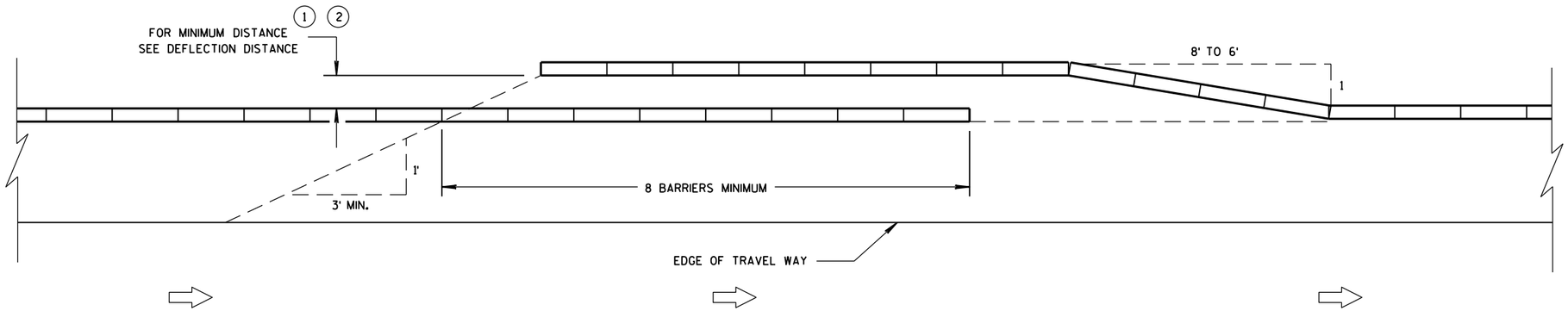
**CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

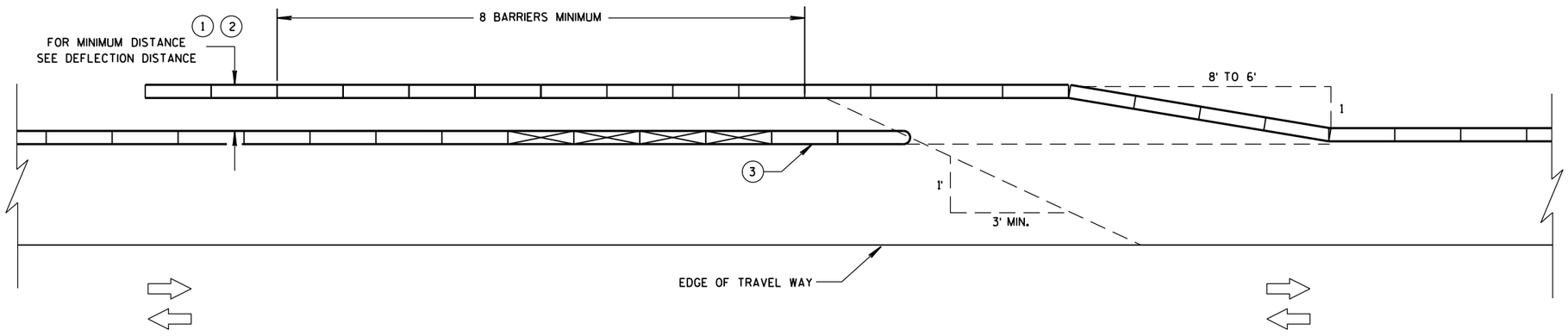



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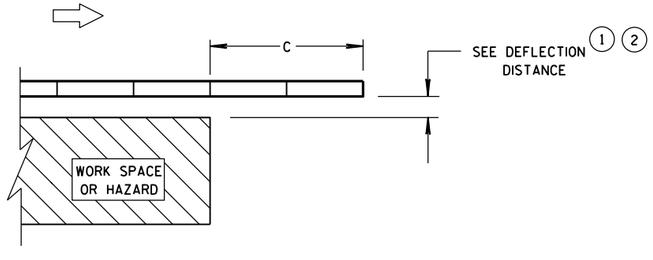

S.D.D. 14 B 8-2b



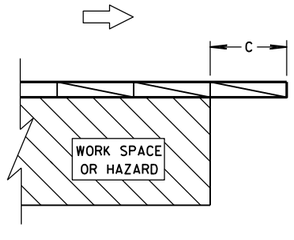

## TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC




## 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

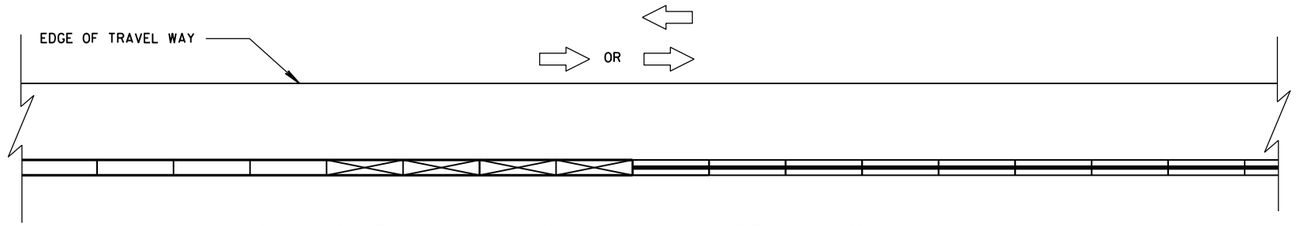
**CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

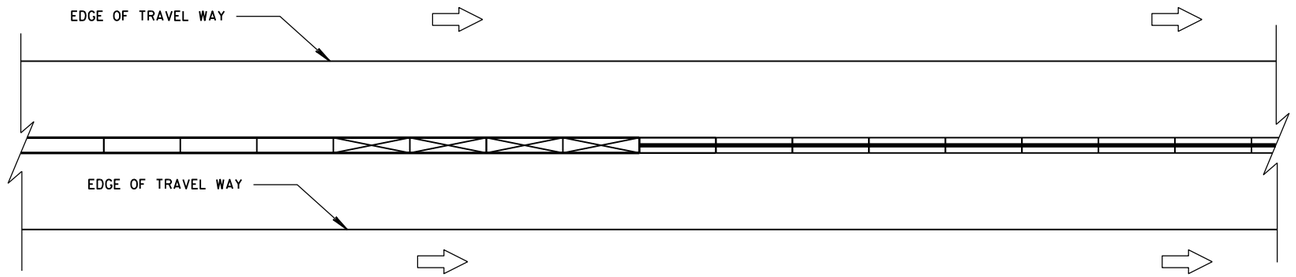



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S.D.D. 14 B 8-2c




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

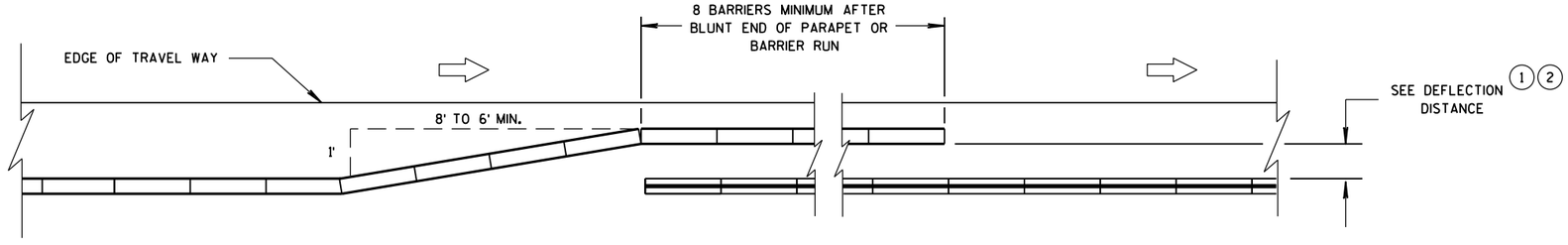
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

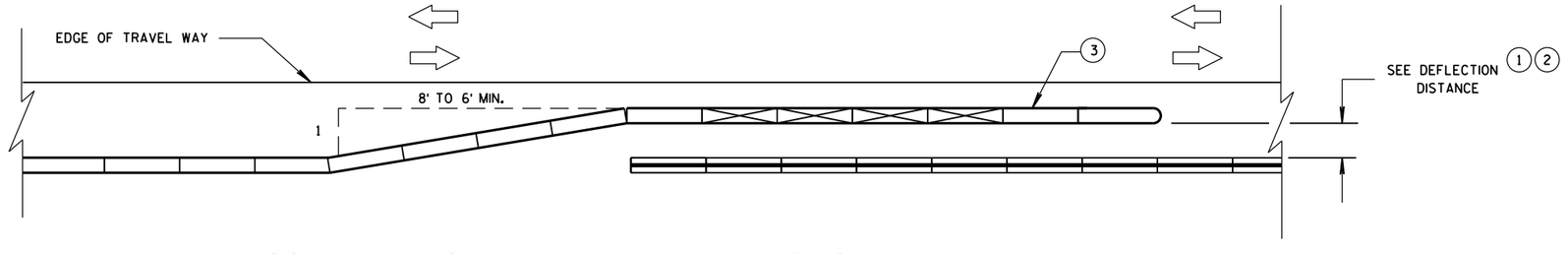
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

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
DEPARTMENT OF TRANSPOI




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

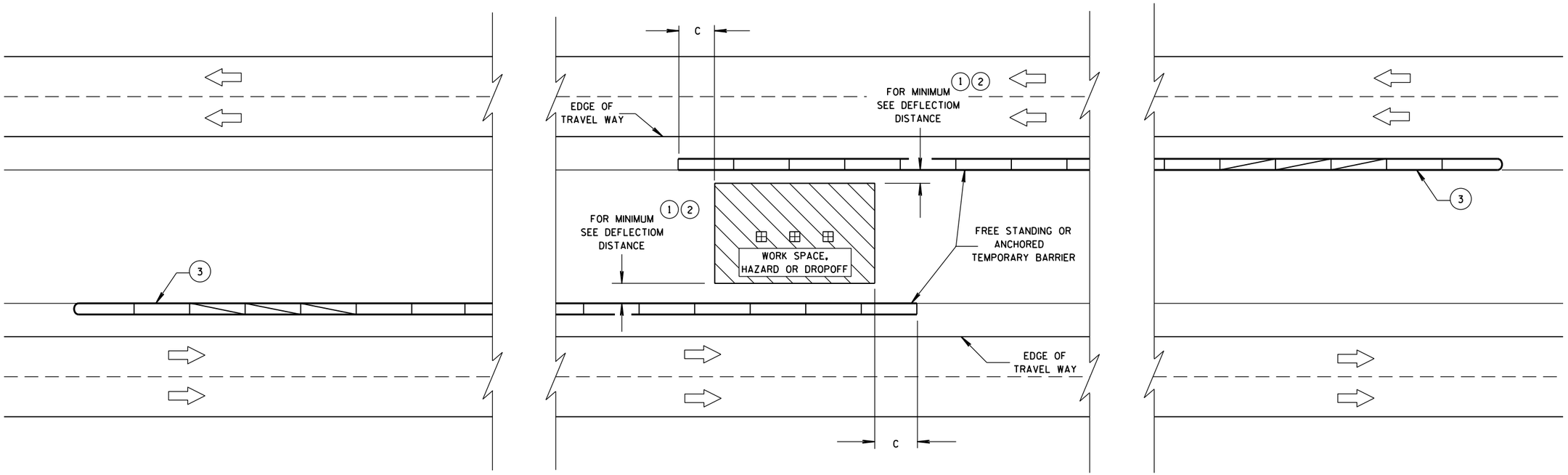
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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




6


S.D.D. 14 B 8-2e

## GENERAL NOTES

(1) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

(2) USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.

(3) INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(4) USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

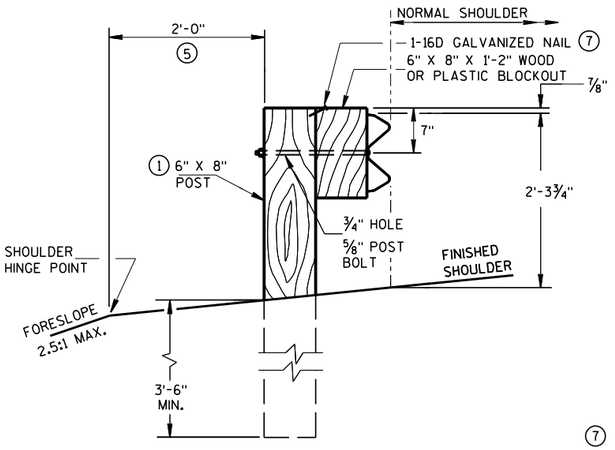
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

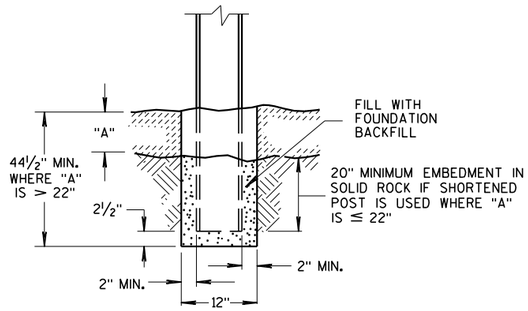
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

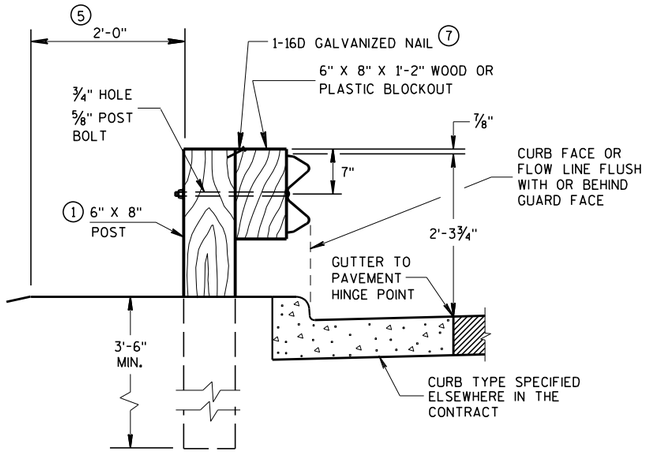
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



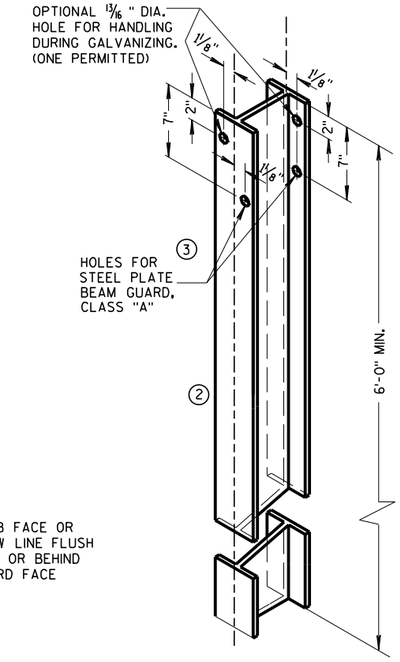

END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION




END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)

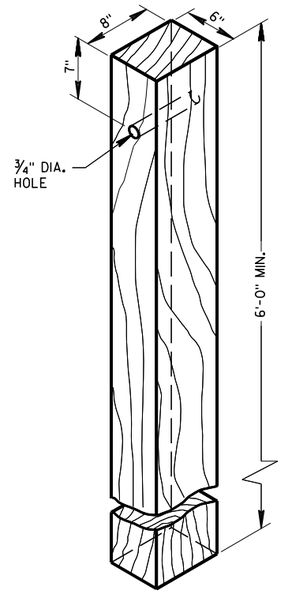



END VIEW
LOCATED ALONG A CURBED ROADWAY

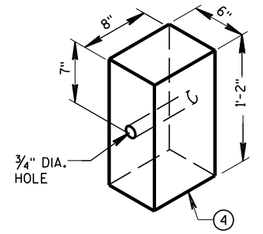



STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

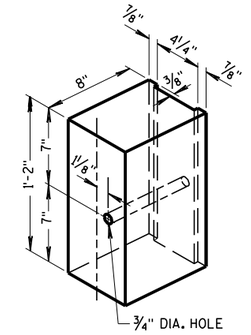
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



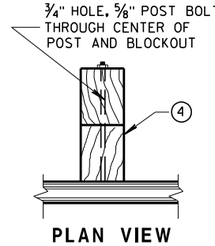

WOOD POST
(6"X8") NOMINAL



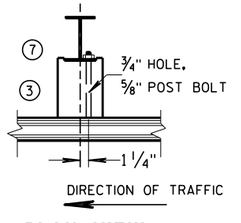

WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



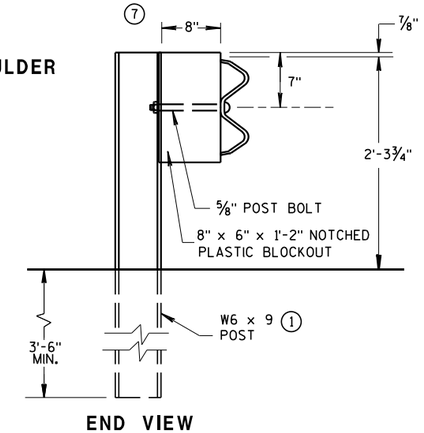

TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS (1)



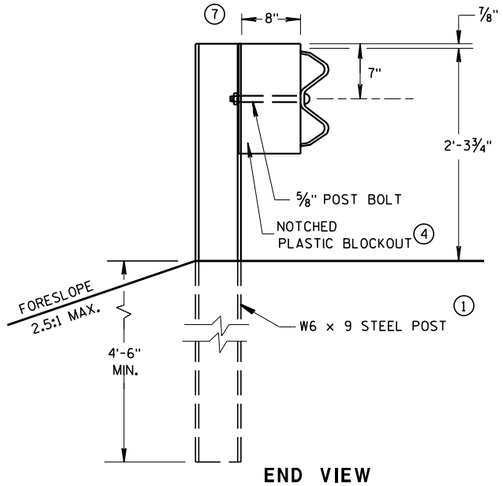

PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



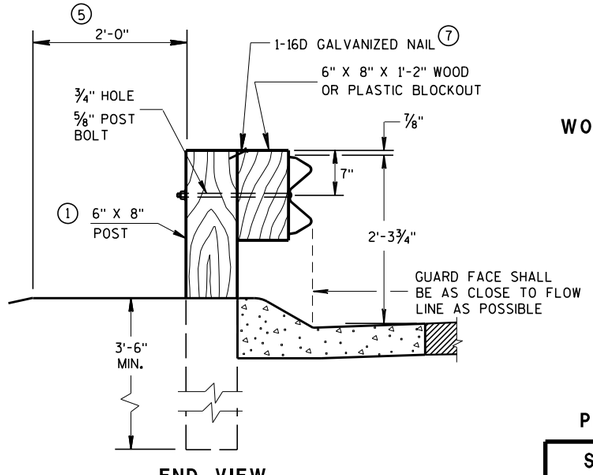

PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM




END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION




END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)




END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

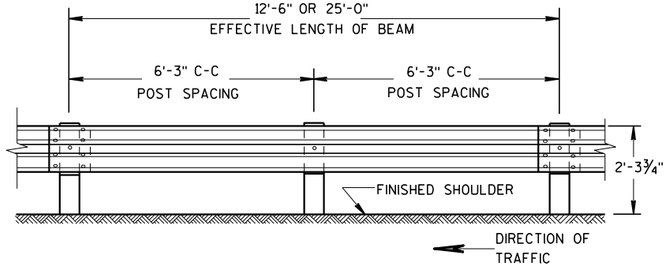
## TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

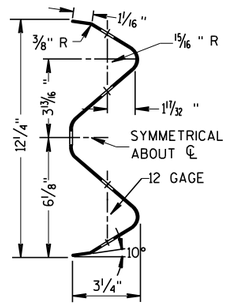



6
S.D.D. 14 B 15-11a

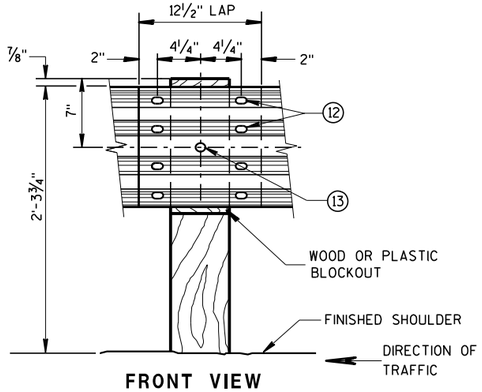



FRONT VIEW

## POST SPACING STANDARD INSTALLATION




## SECTION THRU W BEAM




FRONT VIEW

## BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

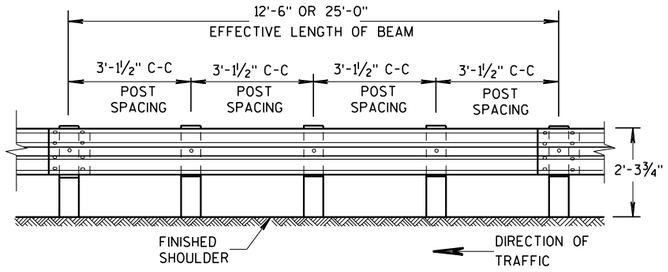
## GENERAL NOTES

FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.

(9) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINA. START REFLECTORS AT POST #9 AND SPACE EVENLY EVERY 100 FEET (MAX.) TO THE END OF GUARDRAIL RUN, USING A MINIMUM OF 3 REFLECTORS.

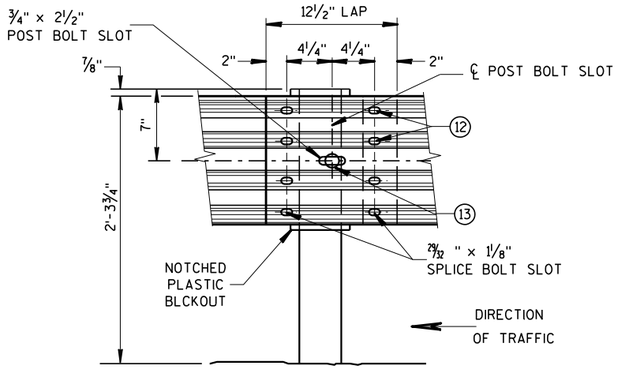
(12) 8 -5/8" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

(13) 5/8" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH 5/8" DIA. F844 FLAT WASHER UNDER NUT.




FRONT VIEW

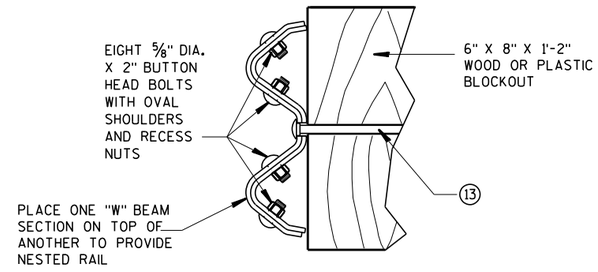
## POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)




FRONT VIEW

BEAM SPLICE AT STEEL POST

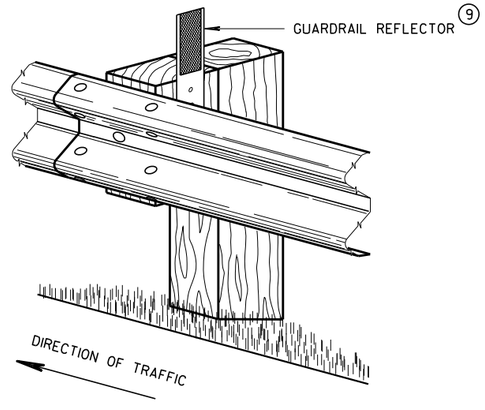
## TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD



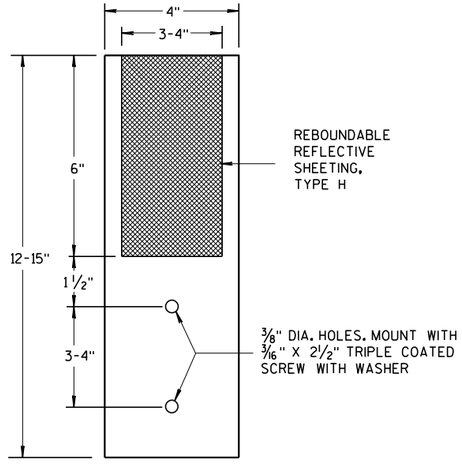

## NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

* USE DOUBLE SIDED WHITE GUADRAIL REFLECTORS ON ROADWAYS WITH BI-DIRECTIONAL TRAFFIC (NO MEDIAN). USE SINGLE SIDED WHITE (RIGHT SIDE) AND SINGLE SIDED YELLOW (LEFT SIDE) ON ROADWAYS WITH MEDIAN SEPARATION.




## 4" X 12" GUARDRAIL REFLECTOR DETAIL AND TYPICAL INSTALLATION *




4"x 12" GUARDRAIL REFLECTOR

**STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS**

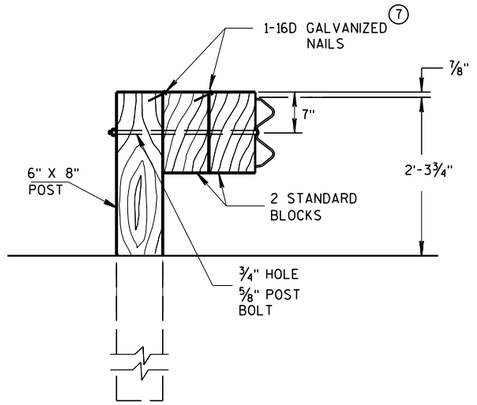
STATE OF WISCO 314
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 15-11b

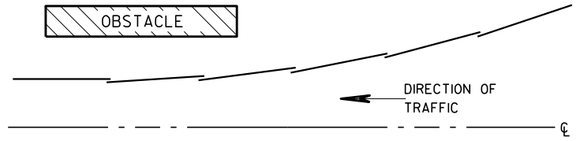
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S.D.D. 14 B 15-11b

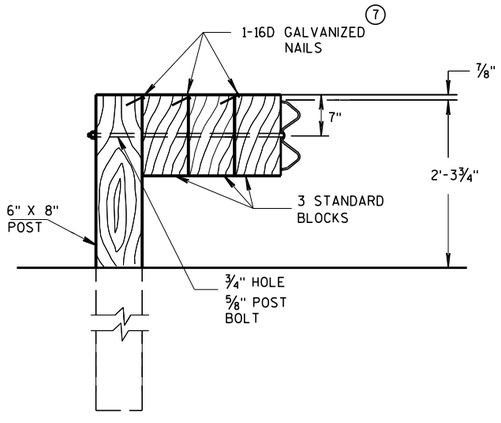



**DETAIL FOR DOUBLE BLOCKS**

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

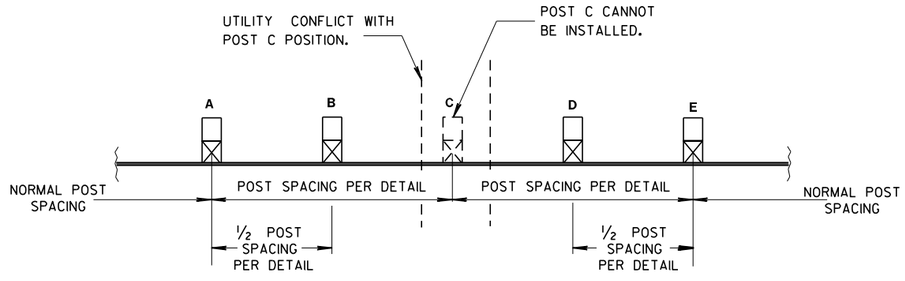



**PLAN VIEW**
**BEAM LAPPING DETAIL**




**DETAIL FOR TRIPLE BLOCKS**

TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.




**POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION**

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA 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.

**STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

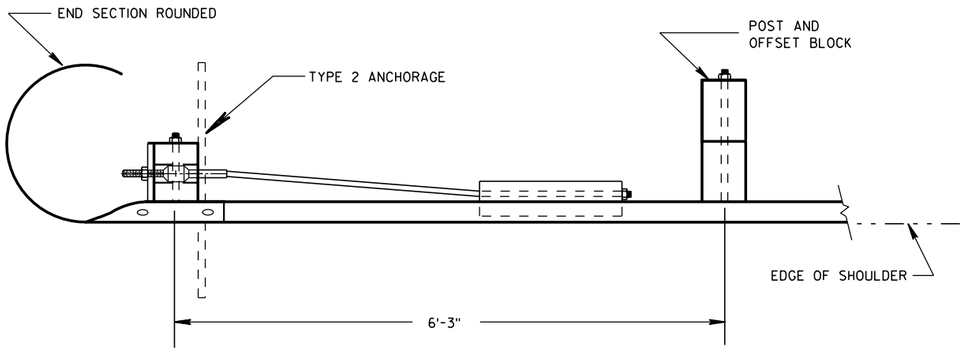
APPROVED
June 2017
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR
315
FHWA

6

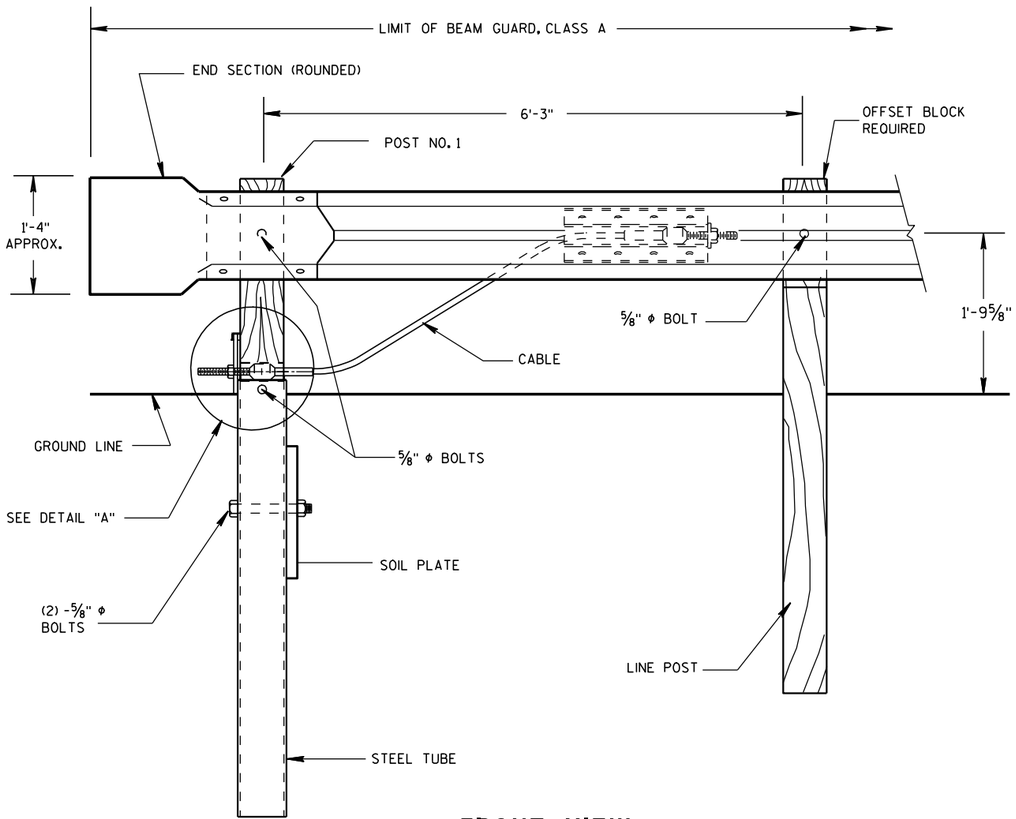
S.D.D. 14 B 15-11c

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S.D.D. 14 B 15-11c



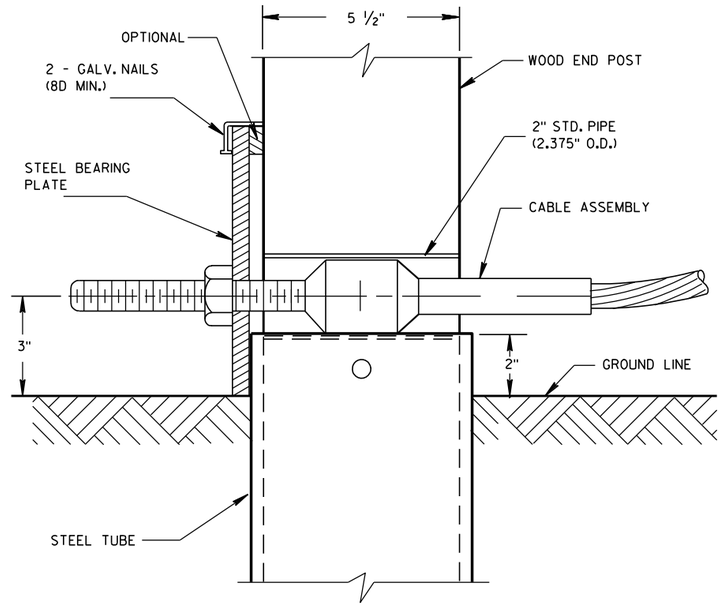

**PLAN VIEW**




**FRONT VIEW**

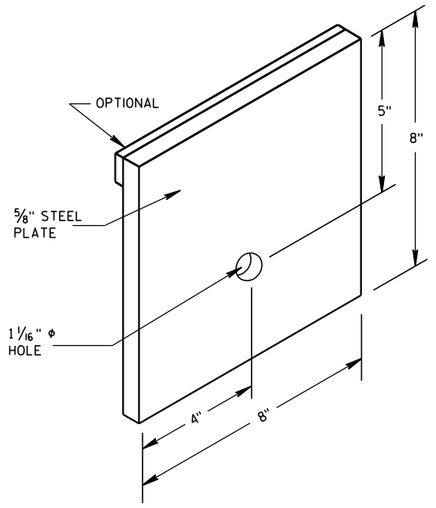
## END TREATMENT WITH TYPE 2 ANCHORAGE

(USE ON ONE-WAY ROADWAYS ONLY - DEPARTING END)




## DETAIL "A"

POST NO. 1




## STEEL BEARING PLATE

ANCHORAGE FOR STEEL
PLATE BEAM GUARD
TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....T

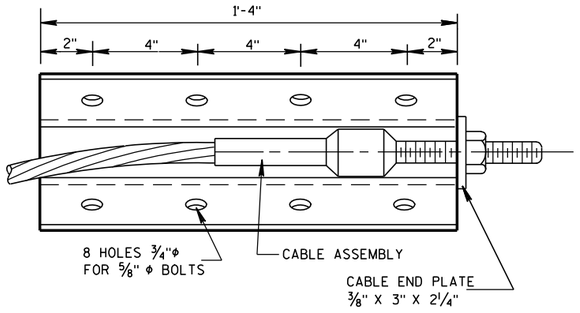


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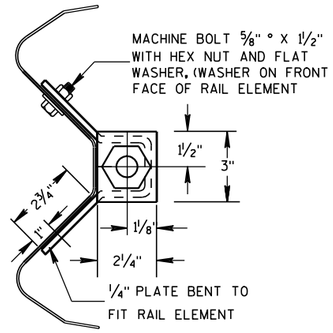
S.D.D. 14 B 16-4a

6

S.D.D. 14 B 16-4a

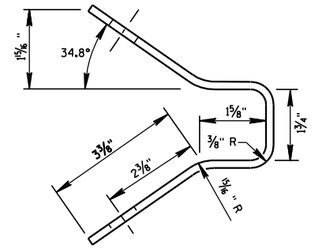



FRONT VIEW

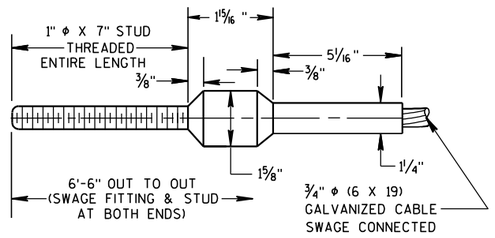



END VIEW

## ANCHOR PLATE DETAIL




END VIEW OF BRACKET




### CABLE ASSEMBLY

CABLE, SWAGE FITTING, STUD AND NUT SHALL DEVELOP
A MINIMUM BREAKING STRENGTH OF 40,000 LB
(TIGHTEN UNTIL TAUT)

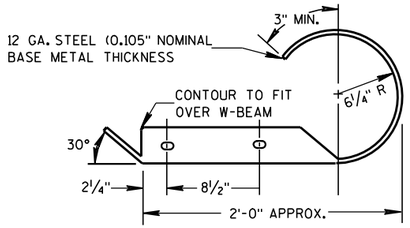
## GENERAL NOTES

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

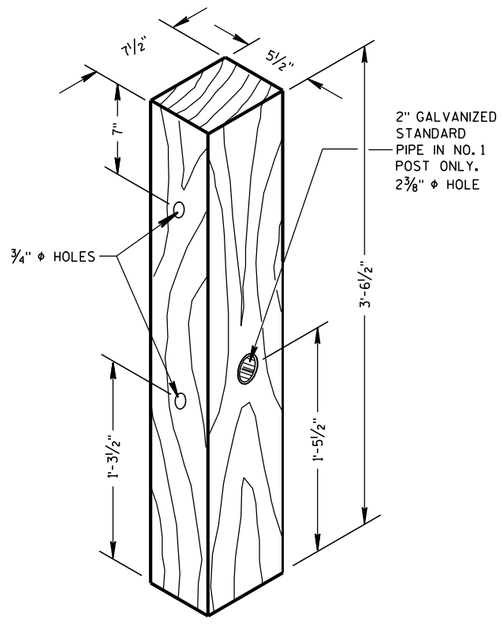
STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-500 GRADE B OR ASTM A-501.

POST NO. 1 SHALL BE WOOD BREAKAWAY POST INSERTED AND BOLTED INTO STEEL TUBE.

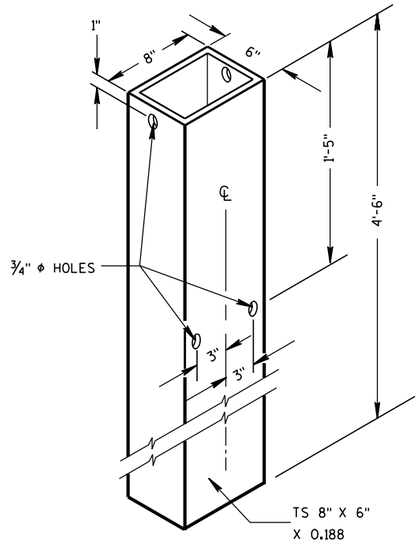
TYPE 2 ANCHORAGE SHALL CONSIST OF A STEEL TUBE, SOIL PLATE WOOD BREAKAWAY POST, BEARING PLATE, ANCHOR PLATE, CABLE ASSEMBLY AND ALL ASSOCIATED HARDWARE, ALL STEEL PARTS SHALL BE GALVANIZED.




PLAN VIEW

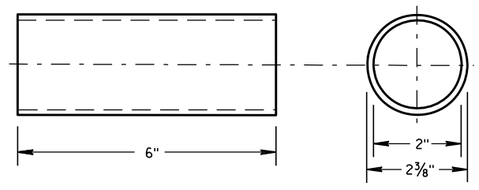



WOOD BREAKAWAY POST



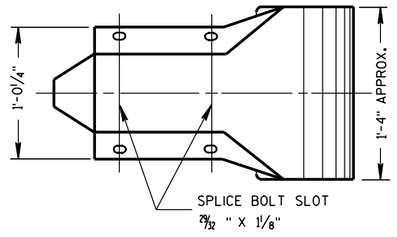

### STEEL TUBE

STEEL TUBE SHALL CONFORM TO
REQUIREMENTS OF ASTM A500

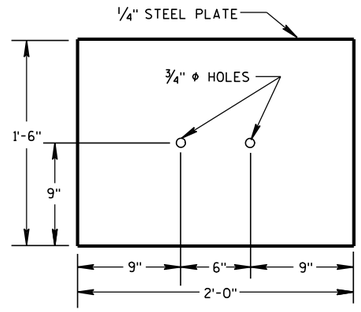



### BREAKAWAY TERMINAL POST SLEEVE

GALVANIZED STANDARD STRENGTH STEEL PIPE, ASTM 53 GRADE "B"




FRONT VIEW
W BEAM END SECTION ROUNDED




SOIL PLATE

ANCHORAGE FOR STEEL
PLATE BEAM GUARD
TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

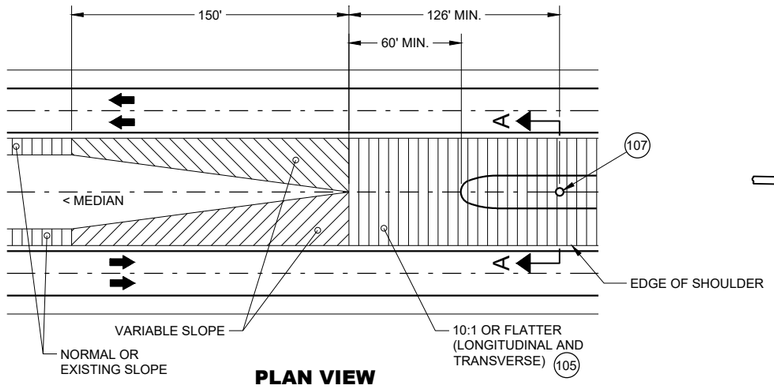
APPROVED
8/21/2007
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
317
ENT
FHWA

6

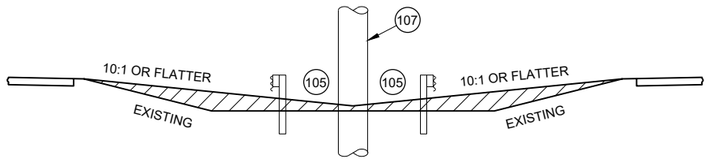
S.D.D. 14 B 16-4b

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S.D.D. 14 B 16-4b




**PLAN VIEW**
**GRADING AT BULLNOSE**
(ALL INSTALLATIONS)




**SECTION A -A**
**MEDIAN GRADING**
(ALL INSTALLATIONS)

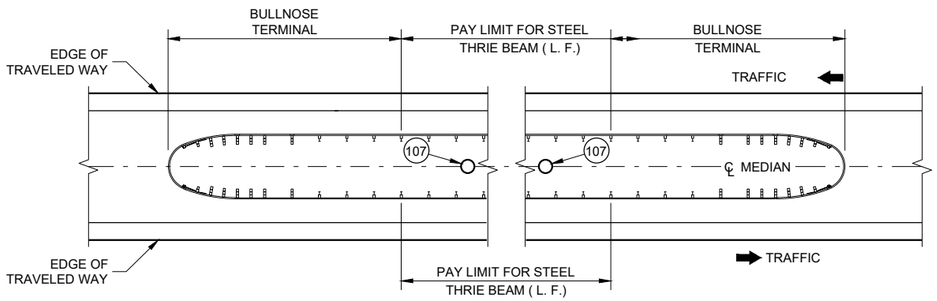
## GENERAL NOTES

THRIE BEAM RAILS MAY NEED TO BE FIELD BENT TO FIT THE LOCATION.

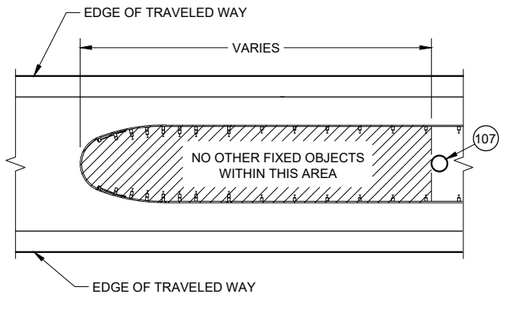
SEE STANDARD DETAIL DRAWINGS 14B26 SHEETS a-h.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 ½". MINIMUM DIAMETER OF THE ROCK REMOVAL IS 12" DIAMETER

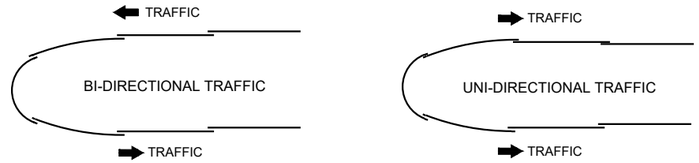
- E1 UNBENT STANDARD THRIE BEAM RAIL B1 (POST 8 TO POST 10 AND POST 10 TO POST 12)
- E2 SLOTTED THRIE BEAM RAIL E1 (POST 1 TO POST 1)
- E3 SLOTTED THRIE BEAM RAIL B3 (POST 5 TO POST 8)
- E4 SLOTTED THRIE BEAM RAIL E4 (POST 1 TO POST 5)
- 5 BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.
- (100) DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.
- (101) U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.
- (102) NOSE CABLE WITH SWAGGED END BUTTONS.
- (103) NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).
- (104) THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.
- (105) MINIMUM WORKING WIDTH 4' - 2".
- (106) MAX. WIDTH OF SYSTEM IS 14' - 2 ½" MEASURED FROM THE BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.
- (107) FIXED OBJECT OR OTHER HAZARD.
- (108) PLAN IS TO PROVIDE STATION OFFSET TO CENTER OF POST 5 IN PLANS.



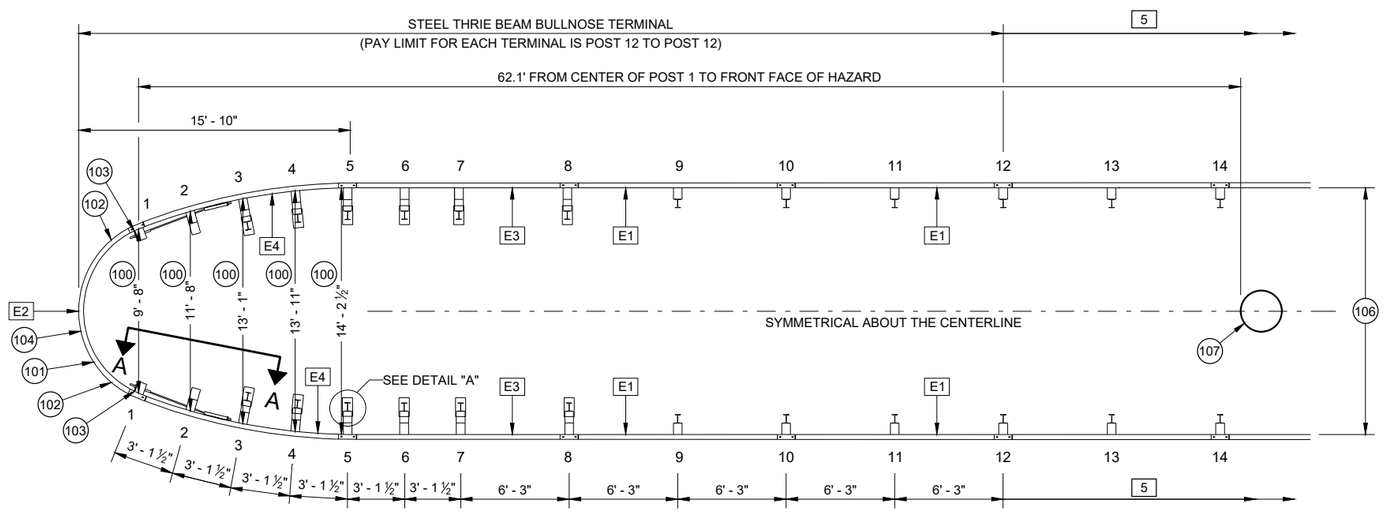

**MEDIAN HAZARD PROTECTION PAY LIMITS**



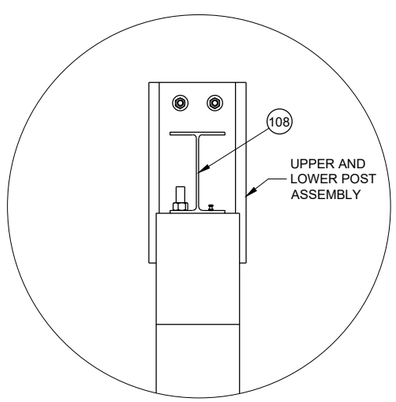

**HAZARD FREE AREA**
**INSIDE BULLNOSE**




**LAPPING DETAIL**




**PLAN VIEW**
**TYPICAL BULLNOSE LAYOUT**




**DETAIL "A"**

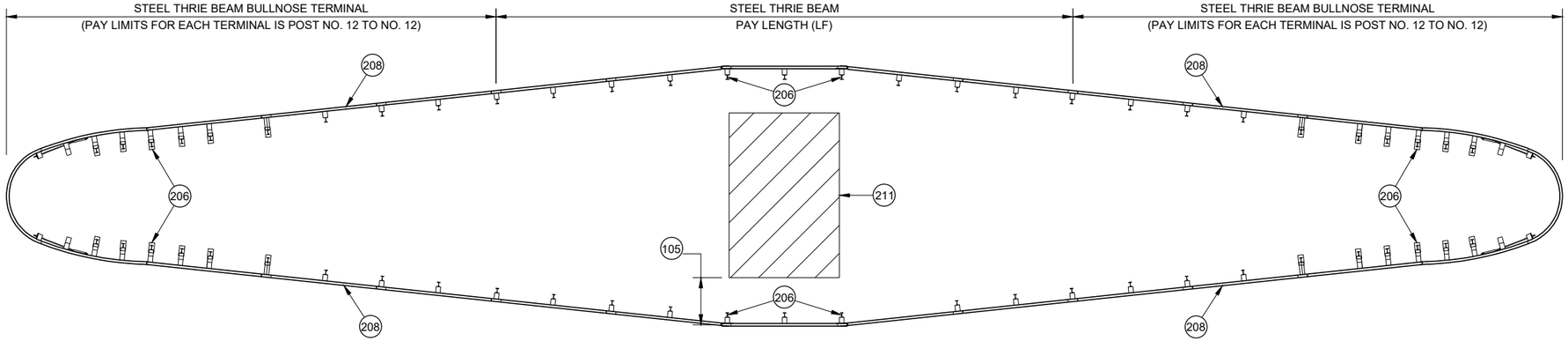
**STEEL THRIE BEAM**
**BULLNOSE TERMINAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SDD 14B26 - 05a

SDD 14B26 - 05a




**VARIABLE WIDTH BULLNOSE**

## GENERAL NOTES

200 6' - 3" ASYMMETRICAL 10-GAUGE W-BEAM TO THRIE BEAM GUARD TRANSITION. SEE SDD 14B45 FOR MORE INFORMATION.

201 W-BEAM RAIL. SEE SDD 14B42 FOR MORE INFORMATION.

202 SEE POST NO. 9 AND ALL STEEL THRIE BEAM POST BEYOND DETAIL.

203 SEE SDD 14B42 FOR INSTALLATION INFORMATION.

204 SEE SDD 14B45 FOR INSTALLATION DETAILS. REPLACE ASYMMETRICAL W-BEAM TO THRIE BEAM TRANSITION AND W-BEAM RAIL WITH E1. PAY FOR MODIFIED THRIE BEAM TRANSITION.

205 CONCRETE BARRIER OR BRIDGE RAIL.

206 SEE PLAN FOR STATION AND OFFSET TO CENTER OF POST.

207 SEE PLAN FOR STATION AND OFFSET TO CENTER OF SPLICE.

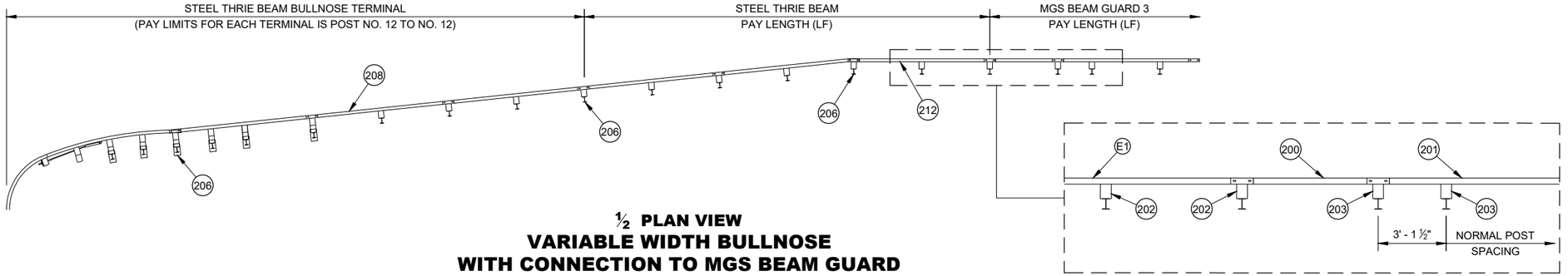
208 SEE PLAN FOR FLARE RATE.

209 A MINIMUM OF 25 FT OF THRIE BEAM TANGENT BEFORE TRANSITIONING TO BEAM GUARD OR THRIE BEAM TRANSITION.

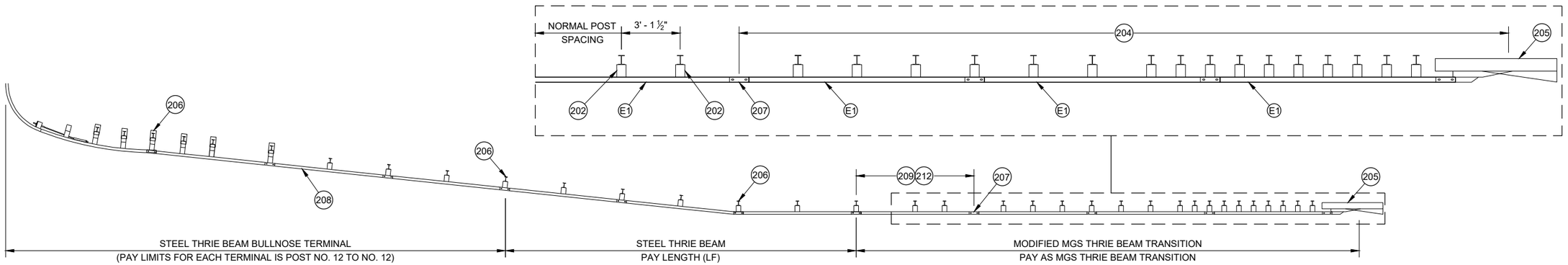
210 NOT ALL BULLNOSE HARDWARE SHOWN. SEE OTHER SHEETS IN 14B26.

211 WIDER HAZARD TO BE SHIELDED.

212 TRANSITION RAIL HEIGHT TO 31" OVER THE LENGTH OF A 12' - 6" BEAM SECTION.




**½ PLAN VIEW**
**VARIABLE WIDTH BULLNOSE**
**WITH CONNECTION TO MGS BEAM GUARD**




**½ PLAN VIEW**
**VARIABLE WIDTH BULLNOSE**
**WITH CONNECTION TO RIGID BARRIER**

**STEEL THRIE BEAM BULLNOSE TERMINAL**

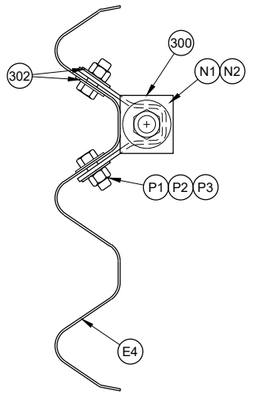
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION





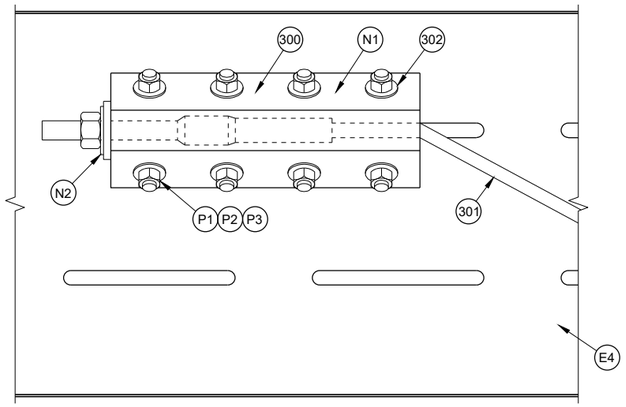
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SDD 14B26 - 05b

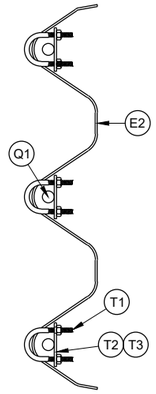



**PROFILE VIEW**

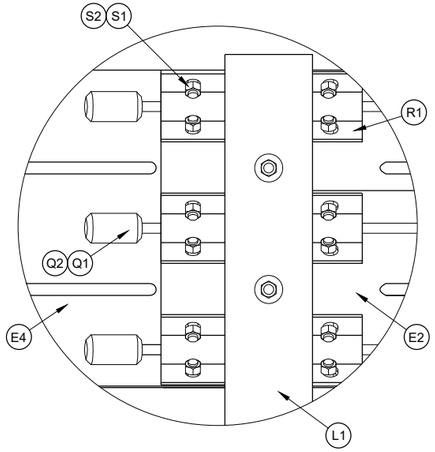
## CABLE ANCHOR ASSEMBLY CONNECTION



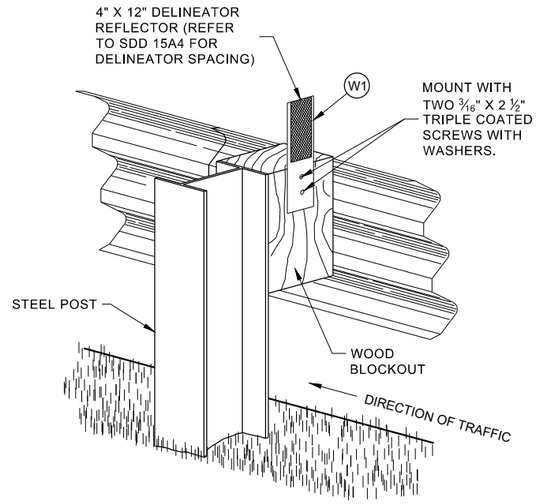

## CABLE ANCHOR ASSEMBLY




## NOSE CABLE RETAINING CLIP




## DETAIL "A"




## ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION



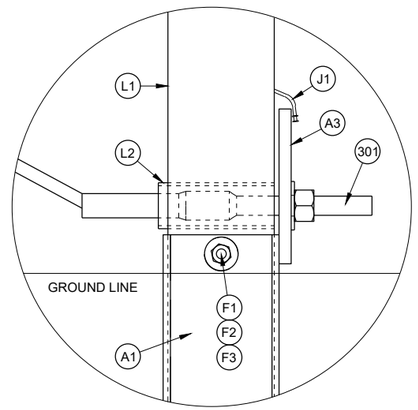

**POST 8**

**POST 3**

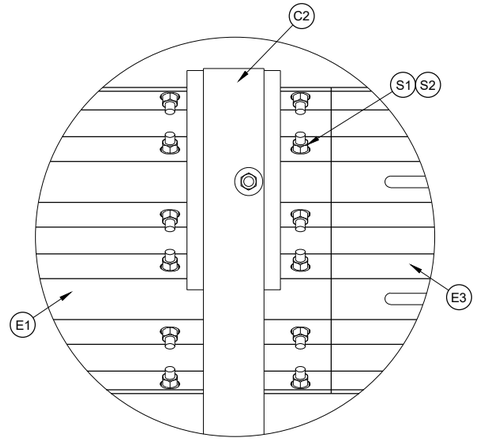
**POST 2**

**POST 1**

## CROSS SECTION A - A




## DETAIL "B"




## DETAIL "C" THRIE BEAM SPLICE

## GENERAL NOTES

(300) SEE ANCHOR BRACKET ASSEMBLY DETAIL.

(301) SEE ANCHOR CABLE ASSEMBLY DETAIL

(302) ONE WASHER BETWEEN BOLT HEAD AND RAIL AND BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

(303) ONE WASHER BETWEEN BOLD HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

**STEEL THRIE BEAM BULLNOSE TERMINAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

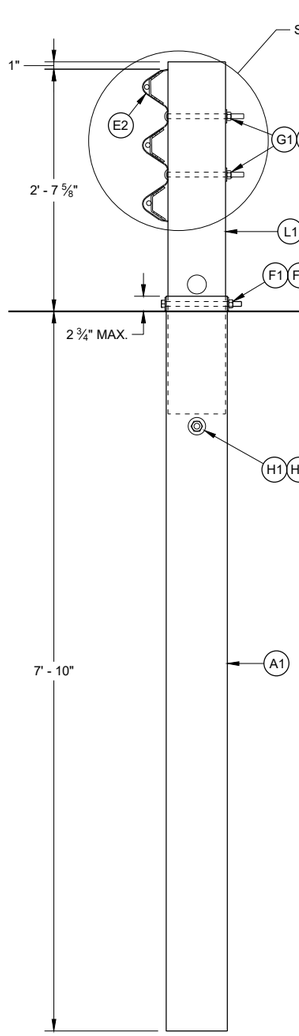




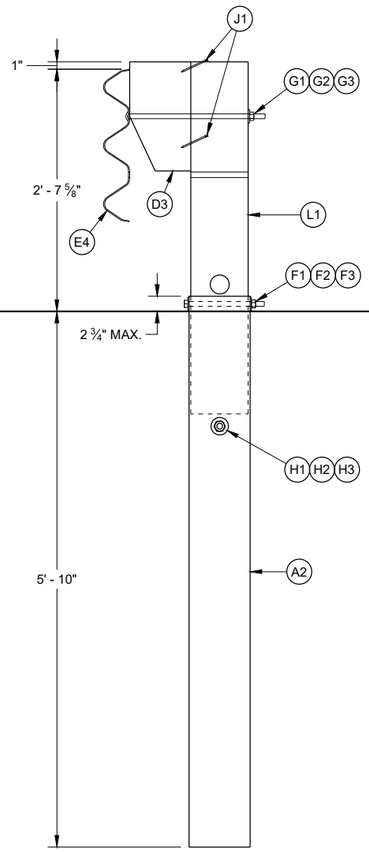
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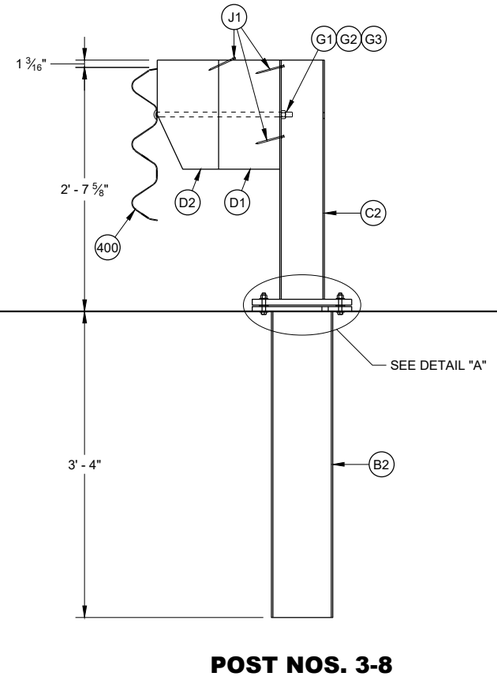
SDD 14B26 - 05c



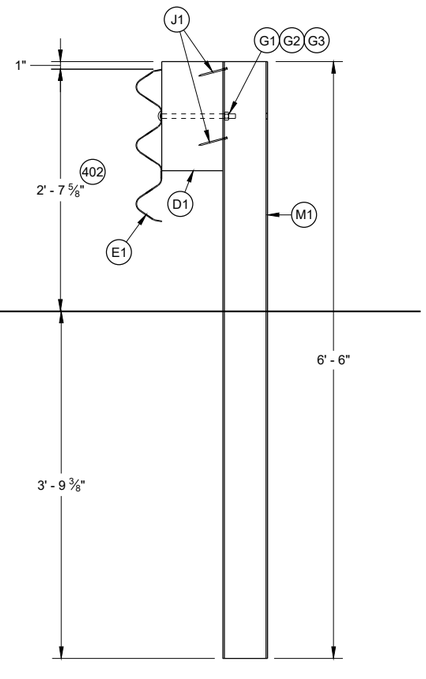

**POST NO. 1**




**POST NO. 2**




**POST NOS. 3-8**



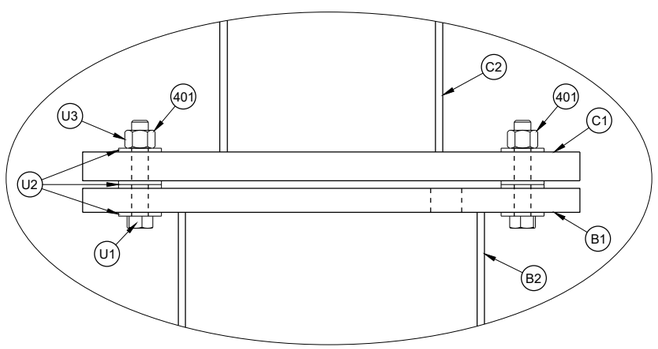

**POST NOS. 9 AND ALL STEEL THRIE BEAM POSTS BEYOND**

## GENERAL NOTES

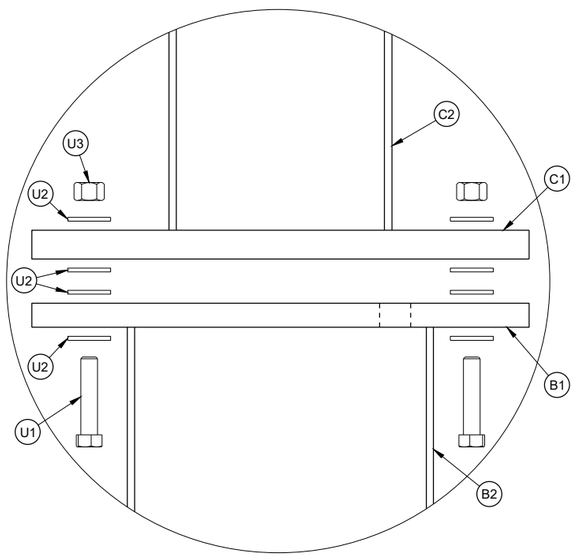
(400) RAIL CAN BE E3 OR E4 DEPENDING ON POST LOCATION.

(401) TORQUE BOLD BETWEEN 60-75 FT-LB

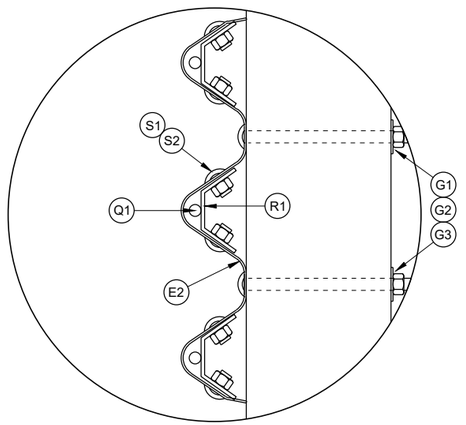
(402) HEIGHT WILL VARY WITHIN HEIGHT TRANSITION TO OTHER HARDWARE. SEE NOTE 213, SHEET "b".




**DETAIL "A"**




**EXPLODED VIEW**
**DETAIL "A"**




**DETAIL "B"**

**STEEL THRIE BEAM BULLNOSE TERMINAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

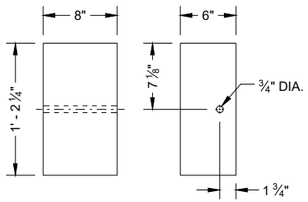


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SDD 14B26 - 05d

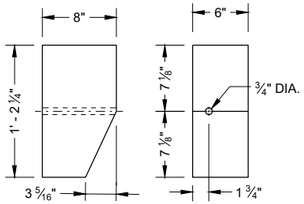
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SDD 14B26 - 05d



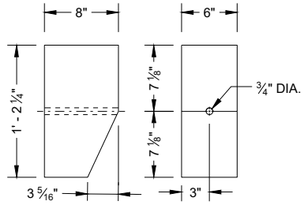

ELEVATION PROFILE

**BLOCKOUT (D1)**



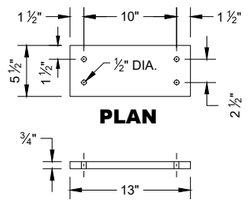

ELEVATION PROFILE

**BLOCKOUT (D2)**




ELEVATION PROFILE

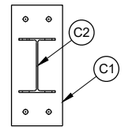
**BLOCKOUT (D3)**



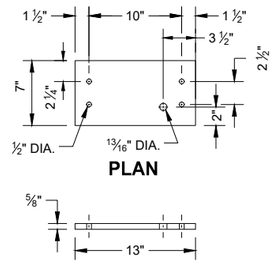

PLAN

PROFILE

**UPPER SHEAR PLATE (C1)**



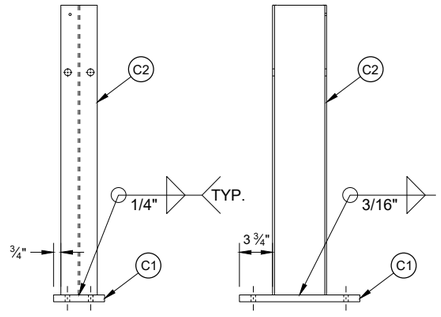

PLAN




PLAN

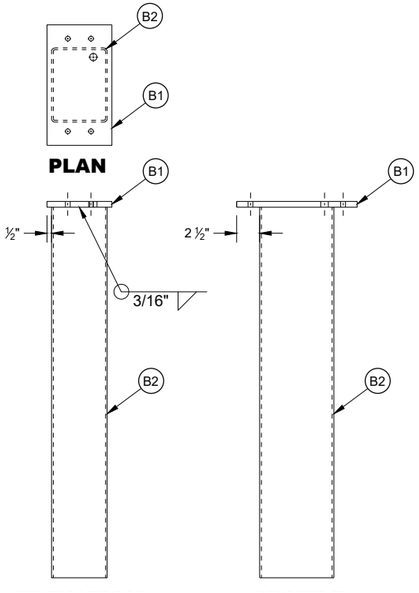
PROFILE

**LOWER SHEAR PLATE (B1)**




ELEVATION PROFILE

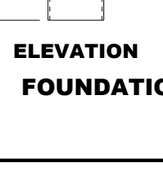
**UPPER POST ASSEMBLY**




PLAN

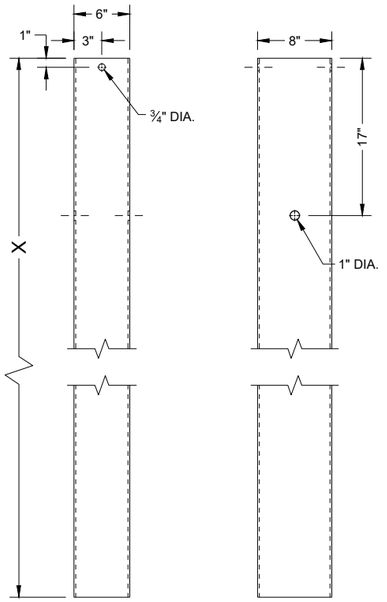
ELEVATION PROFILE

**LOWER POST ASSEMBLY**



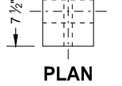

PLAN

| PART | LENGTH "X" |
|---|---|
| A1 | 8' - 0" |
| A2 | 6' - 0" |
| B2 | 3' - 4" |

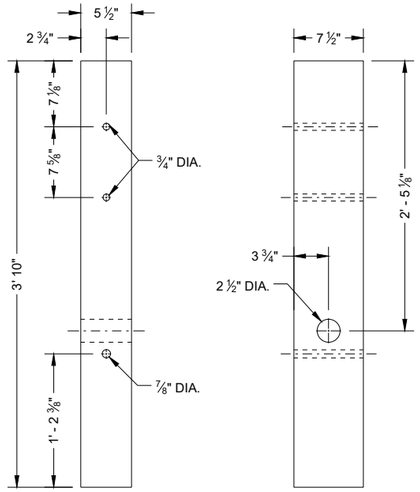



ELEVATION PROFILE

**FOUNDATION TUBE**

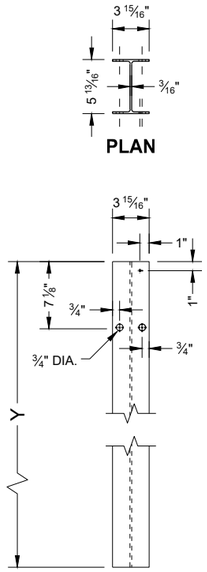



PLAN




ELEVATION PROFILE

**BCT POST (L1)**




PLAN

ELEVATION

**POST**

| PART | LENGTH "Y" |
|---|---|
| M1 | 6' - 6" |
| M2 | 5' - 8 5/8" |
| C2 | 2' - 7 5/8" |

6

SDD 14B26 - 05e

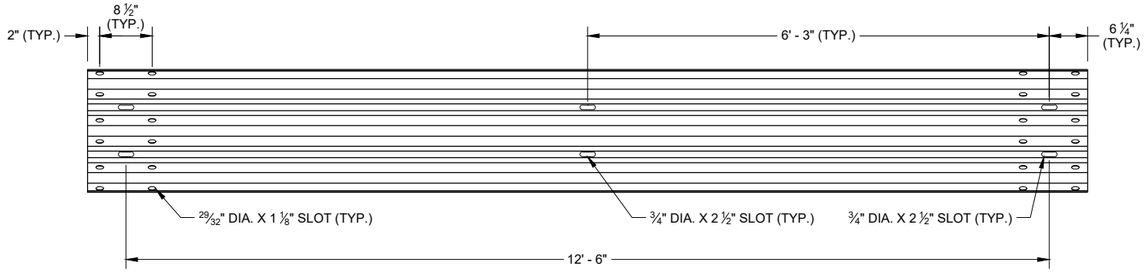
**STEEL THRIE BEAM BULLNOSE TERMINAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

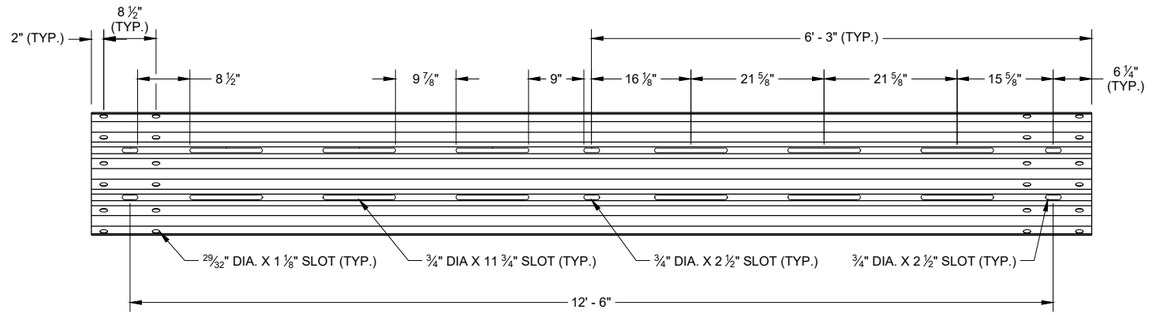


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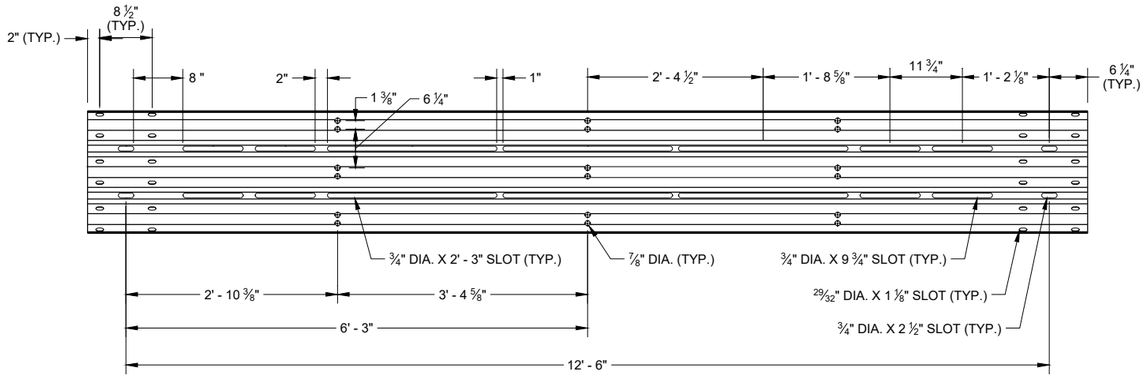
SDD 14B26 - 05e



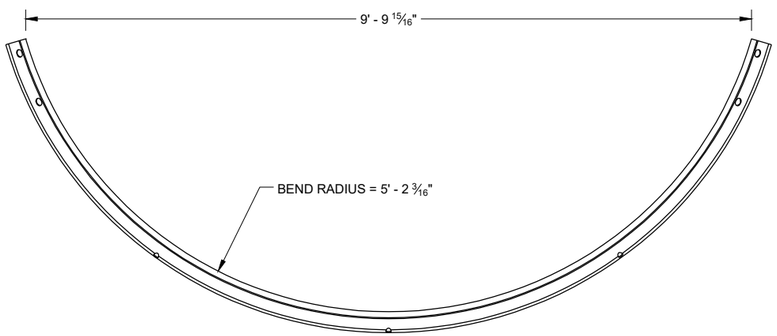

**SLOTTED THRIE BEAM RAIL E1**



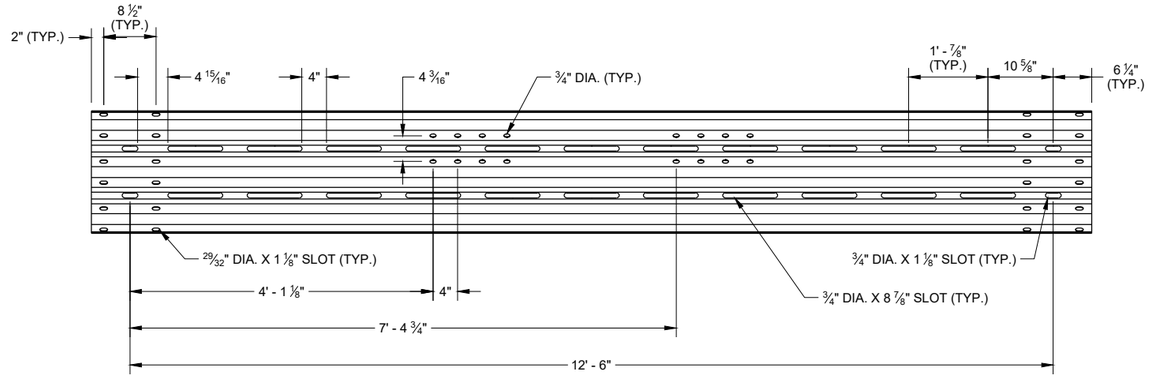

**SLOTTED THRIE BEAM RAIL E3**



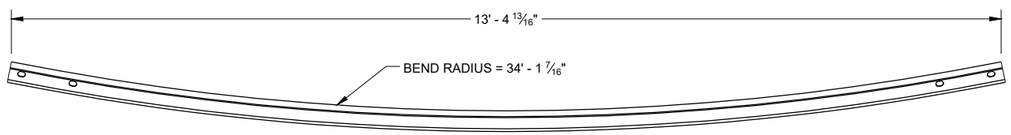

**ELEVATION VIEW NON - RADIUSED**
**SLOTTED THRIE BEAM RAIL E2**




**PLAN VIEW**
**SLOTTED THRIE BEAM RAIL E2**




**ELEVATION VIEW NON - RADIUSED**
**SLOTTED THRIE BEAM RAIL E4**




**PLAN VIEW**
**SLOTTED THRIE BEAM RAIL E4**

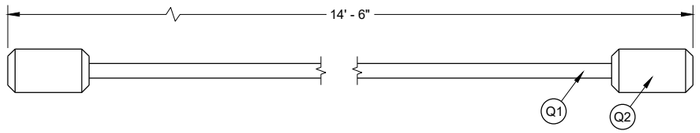
**STEEL THRIE BEAM BULLNOSE TERMINAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

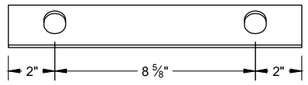




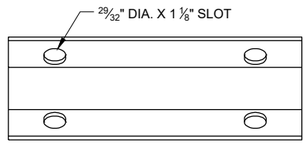
6
SDD 14B26 - 05f



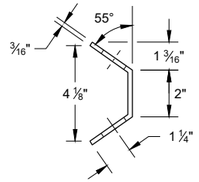

**NOSE CABLE AND SWAGE BUTTON**




**PLAN VIEW**

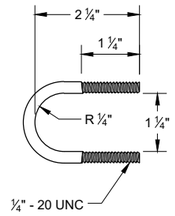



**ELEVATION VIEW**

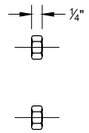



**PROFILE VIEW**

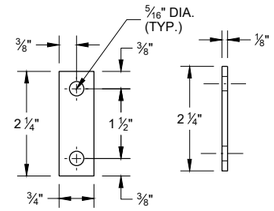
**NOSE CABLE ANCHOR (R1)**




**U - BOLT (T1)**

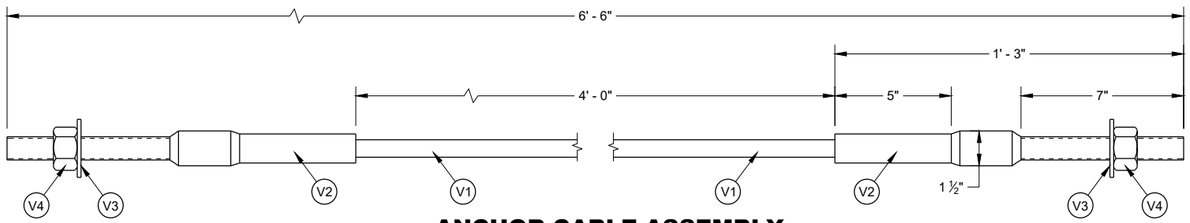



**U - BOLT NUT (T3)**

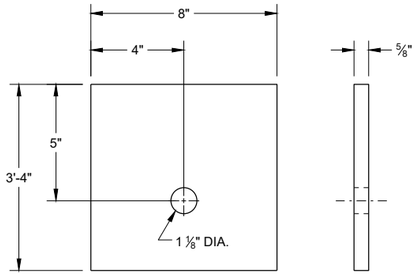



**ELEVATION VIEW** **PROFILE VIEW**

**U - BOLT PLATE WASHER (T2)**

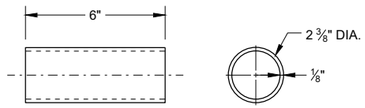



**ANCHOR CABLE ASSEMBLY**



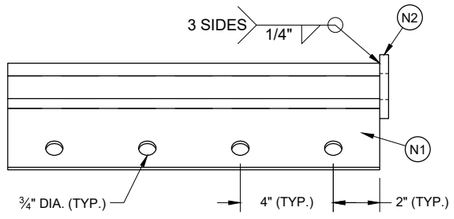

**ELEVATION VIEW** **PROFILE VIEW**

**BCT BEARING PLATE (A3)**

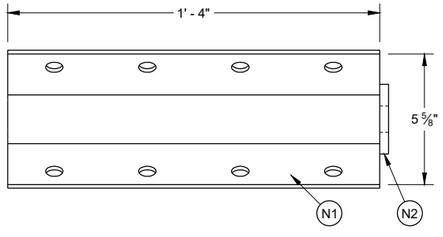



**ELEVATION VIEW** **PROFILE VIEW**

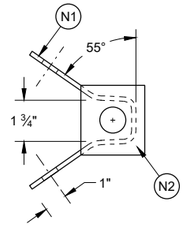
**BCT POST SLEEVE (L2)**




**PLAN VIEW**

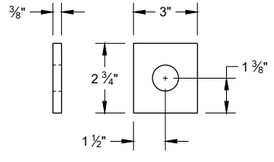



**ELEVATION VIEW**




**PROFILE VIEW**

**ANCHOR BRACKET ASSEMBLY (N1)**




**ANCHOR BRACKET END PLATE (N2)**

**STEEL THRIE BEAM BULLNOSE TERMINAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SDD 14B26 - 05g

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SDD 14B26 - 05g

# BILL OF MATERIALS LIST

| PART NUMBER | DESCRIPTION | MATERIAL SPECIFICATION |
|---|---|---|
| A1 | LONG FOUNDATION TUBE | AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501 |
| A2 | FOUNDATION TUBE | AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501 |
| A3 | BEARING PLATE AT POST | 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 |
| B1 | LOWER SLIP POST ASSEMBLY - 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 |
| B2 | LOWER SLIP POST ASSEMBLY - TUBE | AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501 |
| C1 | UPPER SLIP POST ASSEMBLY - 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 |
| C2 | UPPER SLIP POST ASSEMBLY - POST | AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 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 |
| D1 | BLOCK FOR STEEL POST - WOOD | WISDOT SPEC. 614 |
| D2 | TAPERED BLOCK FOR STEEL POST - WOOD | WISDOT SPEC. 614 |
| D3 | TAPERED BLOCK FOR BCT POST - WOOD | WISDOT SPEC. 614 |
| E1 | THRIE BEAM RAIL | AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER |
| E2 | THRIE BEAM RAIL - SHOP BENT AND PUNCHED | AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS. |
| E3 | THRIE BEAM RAIL - PUNCHED | AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER |
| E4 | THRIE BEAM RAIL - SHOP BENT AND PUNCHED | AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS. |
| F1 | 5/8" DIA. HEX HEAD GROUND STRUT AND YOKE BOLT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36 |
| F2 | 5/8" DIA. GROUND STRUT AND YOKE BOLT - WASHER | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY) |
| F3 | GROUND STRUT AND YOKE BOLT - NUT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 |
| G1 | 5/8 " DIA. POST BOLT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD) |
| G2 | POST BOLT - WASHER | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD) |
| G3 | POST BOLT - NUT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5 |
| H1 | 7/8" DIA. SOIL TUBE BOLT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 7/8" ASTM A563DH OR SAE J995 GRADE 5 |
| H2 | SOIL TUBE BOLT - WASHER | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 7/8" ASTM F844 TYPE 1 (HARDEN WASHER ONLY) |
| H3 | SOIL TUBE BOLT - NUT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 7/8" ASTM A563DH OR SAE J995 GRADE 5 |
| J1 | 16D DOUBLE HEAD NAIL | ASTM A153 HOT DIPPED CLASS D DOUBLE HEAD ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED) |
| L1 | BCT TIMBER POST | WISDOT SPEC. 614 S4S FINISH ON 4 SIDE |
| L2 | BCT POST SLEEVE | AASHTO M111/ASTM A123 2 3/8" OD ASTM 53 GRADE B |
| M1 | W6X8.5 OR W6X9 STEEL POST | AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 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 |
| M2 | W6X8.5 OR W6X9 STEEL POST | AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 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 |
| N1 | ANCHOR BRACKET | 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 |
| N2 | ANCHOR BRACKET - BEARING 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 |

| PART NUMBER | DESCRIPTION | MATERIAL SPECIFICATION |
|---|---|---|
| P1 | 5/8" DIA. ANCHOR BRACKET BOLT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36 |
| P2 | ANCHOR BRACKET BOLT - WASHER | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY) |
| P3 | SOIL TUBE BOLT - NUT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 |
| Q1 | 5/8" DIA. NOSE CABLE | 6X19 AASTHO M30 / ASTM A741 XIPS INDEPENDENT WIRE CORE (IWRC) PR 6X25 XIPS, IWRC NOMINAL BREAKING STRENGTH OF 41.2 KIPS. |
| Q2 | NOSE CABLE-SWAGE BUTTON | COLD TUFF BUTTON, S-409 SIZE NO. 12 STOCK NUMBER 1040395 OR ANY OTHER SIMILAR SIZED WAGED-GRIP-BUTTON FERRULES. ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FIELD SWAGED PER MANUFACTURERS RECOMMENDATION. NOMINAL BREAKING STRENGTH OF 41.2 KIPS. |
| R1 | NOSE CABLE ANCHOR BRACKET | 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 |
| S1 | 5/8" DIA. SPLICE BOLT - BOLT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36 |
| S2 | SPLICE - BOLT NUT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 AASHTO M180 RECESSED HEAVY HEX HEAD 5/8" ASTM A563DH OR SAE J995 GRADE 5 |
| T1 | 1/4" DIA. NOSE CABLE - U BOLT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36 |
| T2 | U-BOLT - PLATE WASHER | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY) |
| T3 | U-BOLT NUT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 |
| U1 | 7/16" DIA. SLIP POST ASSEMBLY - BREAKAWAY BOLT | ASTM A153 OR B695 CLASS 55 OR F2329 UNC FULLY THREADED HEX HEAD TAP BOLT ASTM A449 OR SAE J429 GRADE 5 |
| U2 | 7/16" DIA. SLIP POST ASSEBLY - BREAKAWAY BOLT - WASHER | ASTM F436 TYPE I (HARDEN TYPICALLY USED WITH STEEL) GALV. AASHTO M111/ASTM A 123 OR GALV. HOT DIP. TO POST BOLT CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 55, F2329 |
| U3 | SLIP POST ASSEBLY - BREAKAWAY BOLT - NUT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / STM 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 |
| V1 | ¾" DIA. BCT CABLE | AASHTO M30 / ASTM A741 6X19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6X19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN BREAKING STRENGTH OF 42.7 KIPS |
| V2 | ANCHOR CABLE-SWAGE FITTING | UNC ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FACTORY SWAGED. MIN. BREAKING STRENGTH OF 42.7 KIPS. ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS." |
| V3 | 1" DIA. ANCHOR CABLE-WASHER | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY) |
| V4 | 1" DIA. ANCHOR CABLE-NUT | HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 | REFLECTOR | SEE SDD 15A4 |

6

SDD 14B26 - 05h

6

SDD 14B26 - 05h

**STEEL THRIE BEAM BULLNOSE TERMINAL**

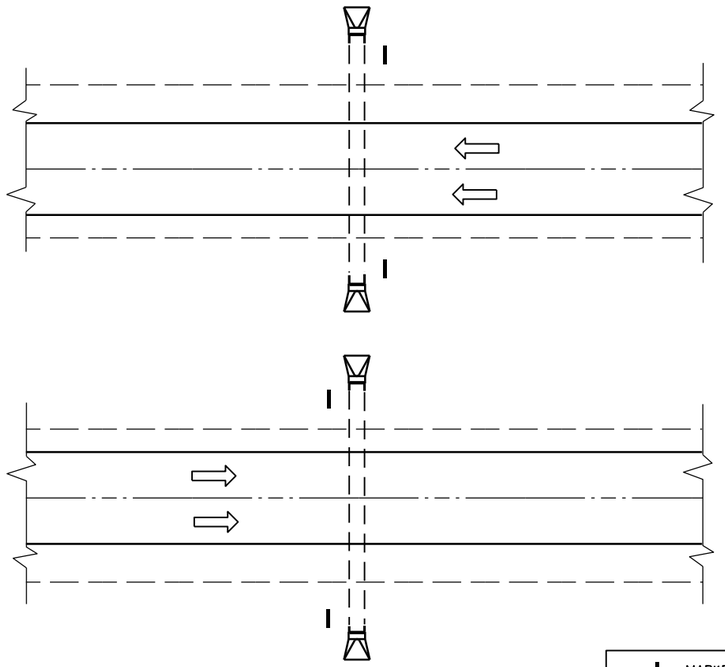
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2022
DATE

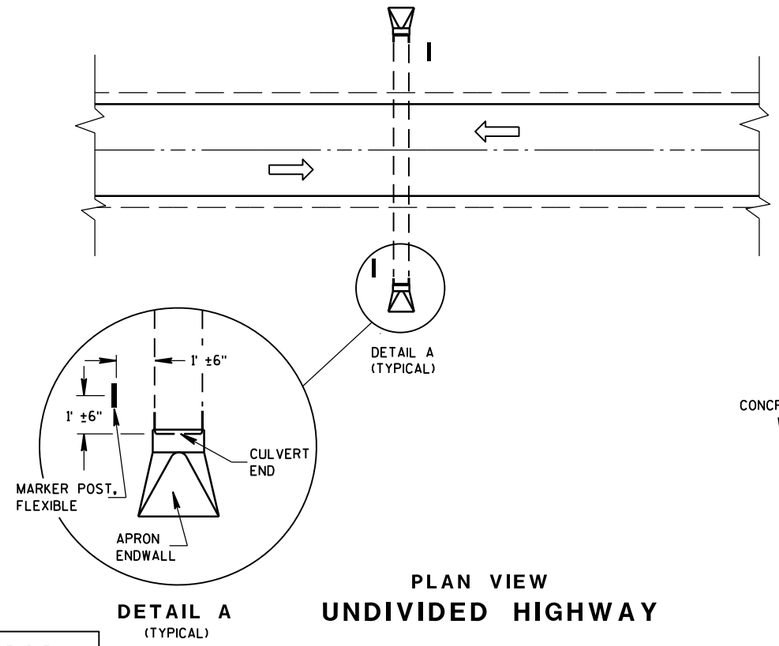
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW

## DIVIDED HIGHWAY




DETAIL A
(TYPICAL)

PLAN VIEW

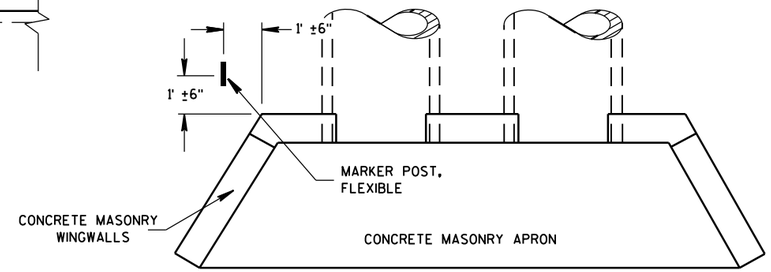
## UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

## GENERAL NOTES

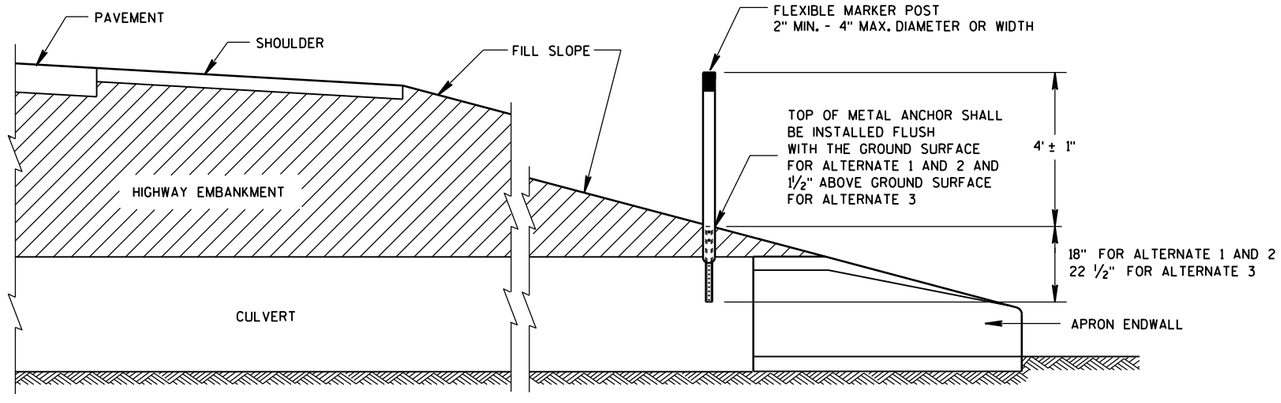
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.




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

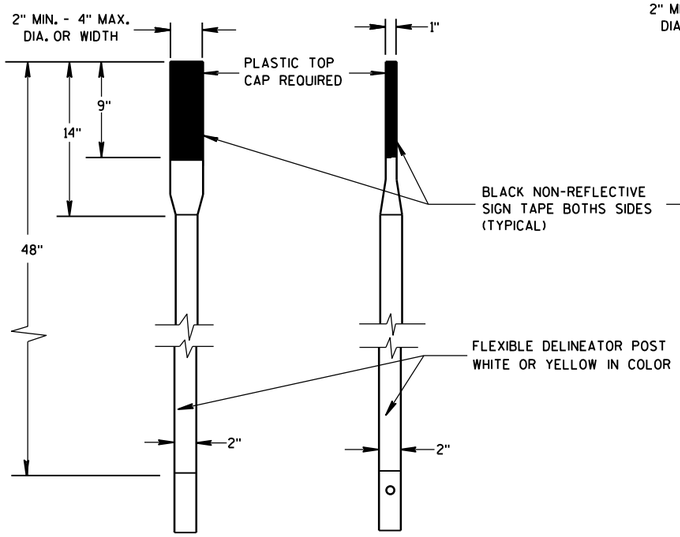


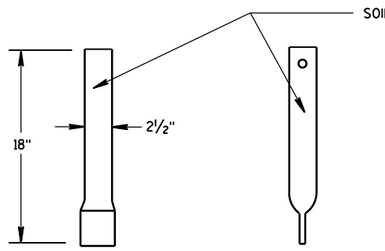
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S.D.D. 15 A 3-2a

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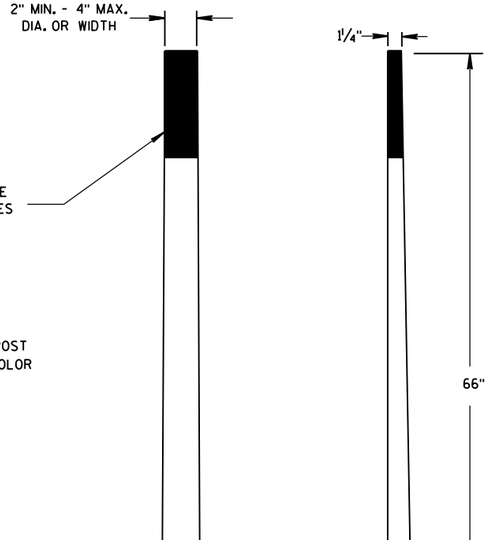
S.D.D. 15 A 3-2a



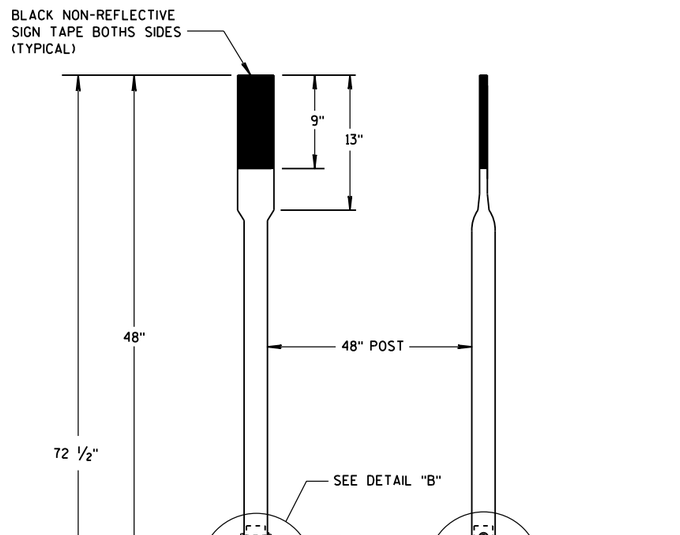

FRONT VIEW SIDE VIEW

ALTERNATE 1




FRONT VIEW SIDE VIEW

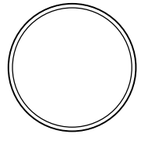
ALTERNATE 2



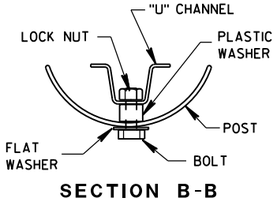

FRONT VIEW SIDE VIEW

ALTERNATE 3

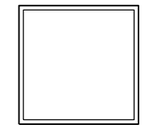
## FLEXIBLE MARKER POSTS



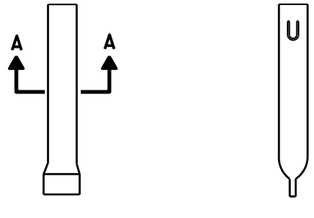
SECTION A-A




SECTION B-B

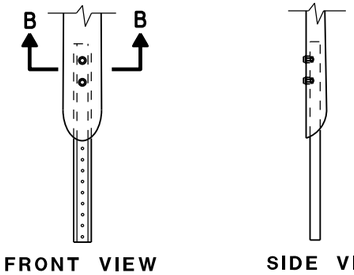


SECTION C-C



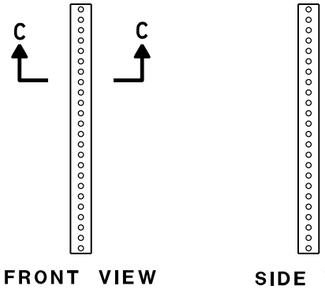

FRONT VIEW SIDE VIEW

ALTERNATE 1




FRONT VIEW SIDE VIEW

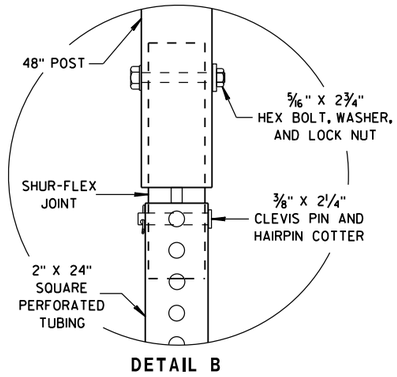
ALTERNATE 2



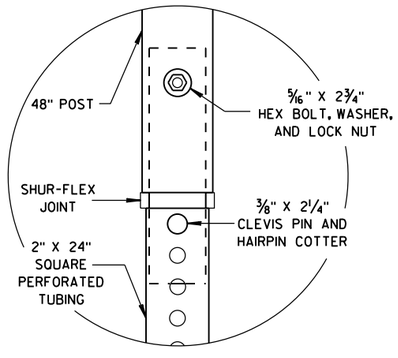

FRONT VIEW SIDE VIEW

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

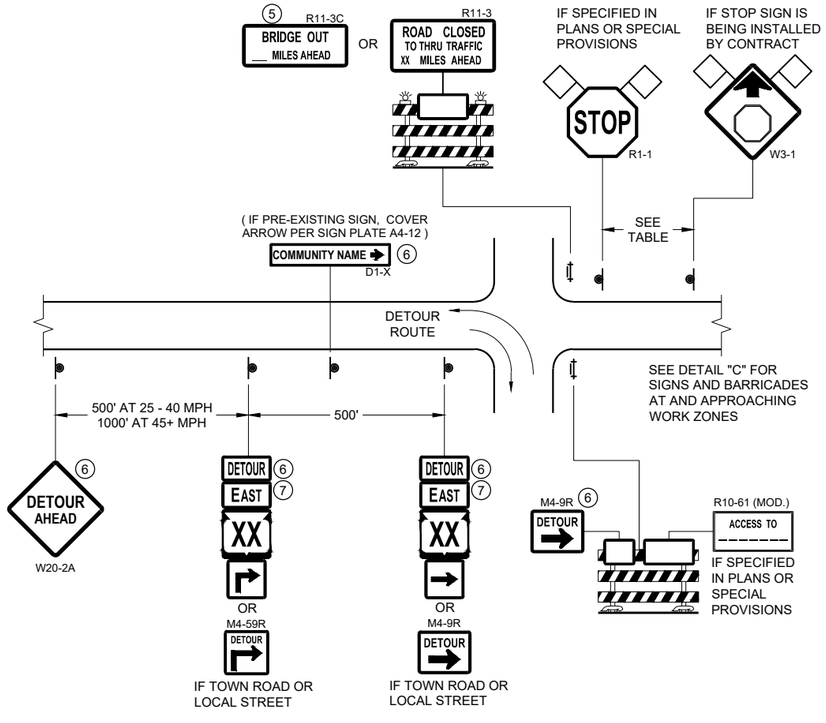


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S.D.D. 15 A 3-2b

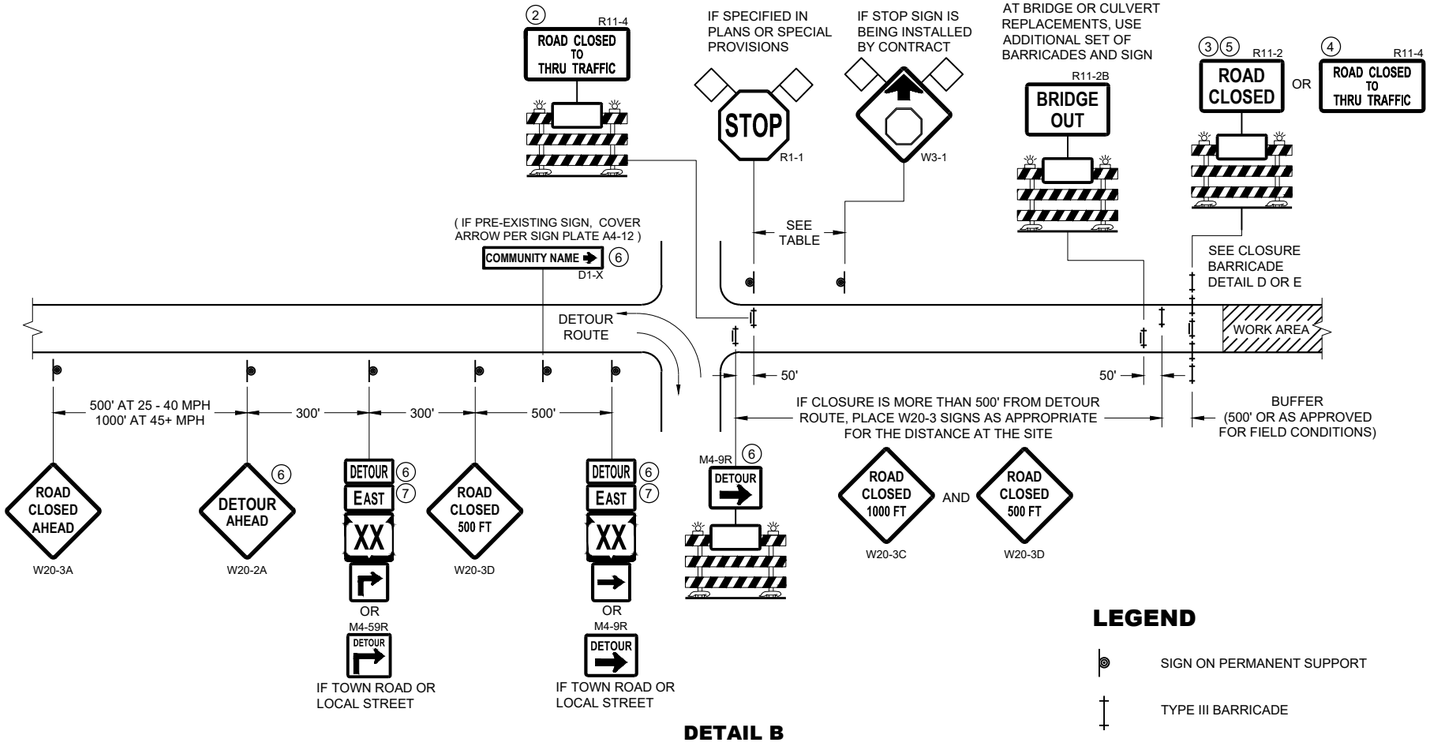
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S.D.D. 15 A 3-2b




## DETAIL A
## MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )

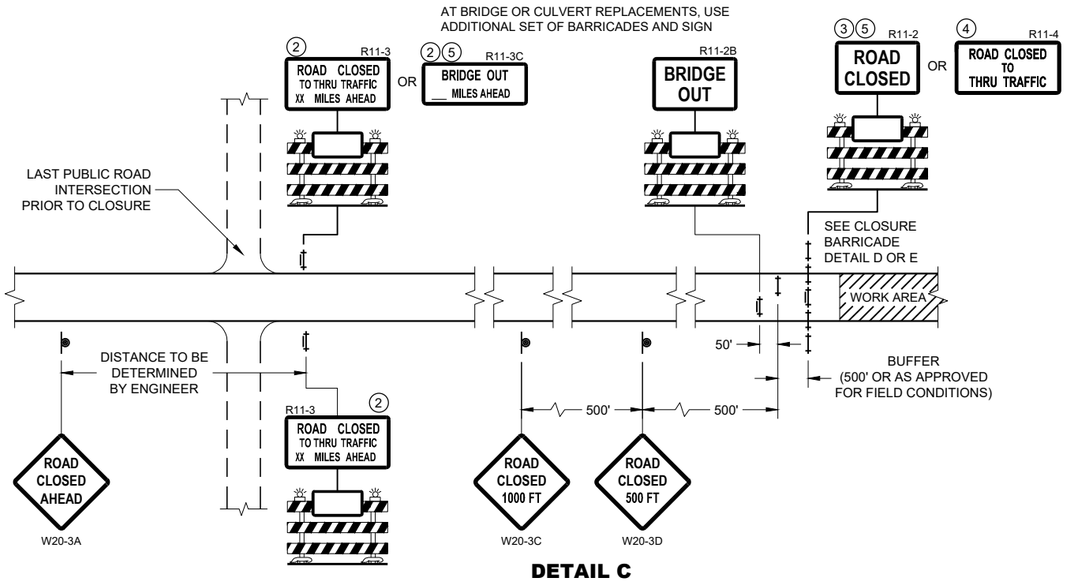



## DETAIL B
## MAINLINE CLOSURE WITH POSTED DETOUR

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

## 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




## 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

**BARRICADES AND SIGNS FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

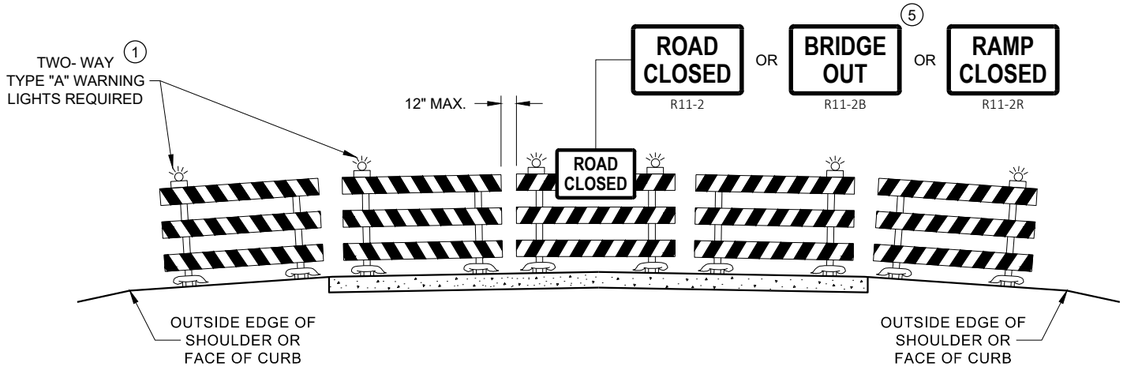


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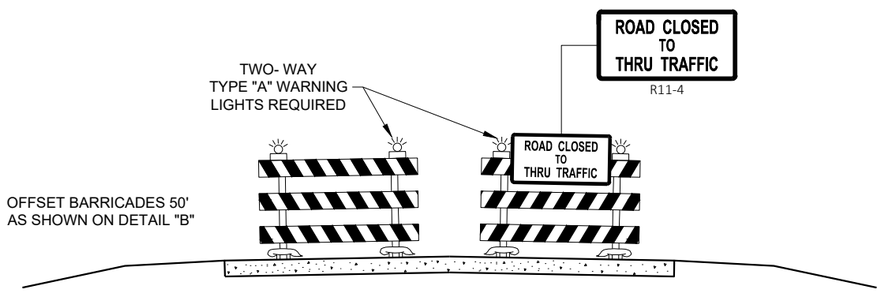
SDD 15C02 - 09a

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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.

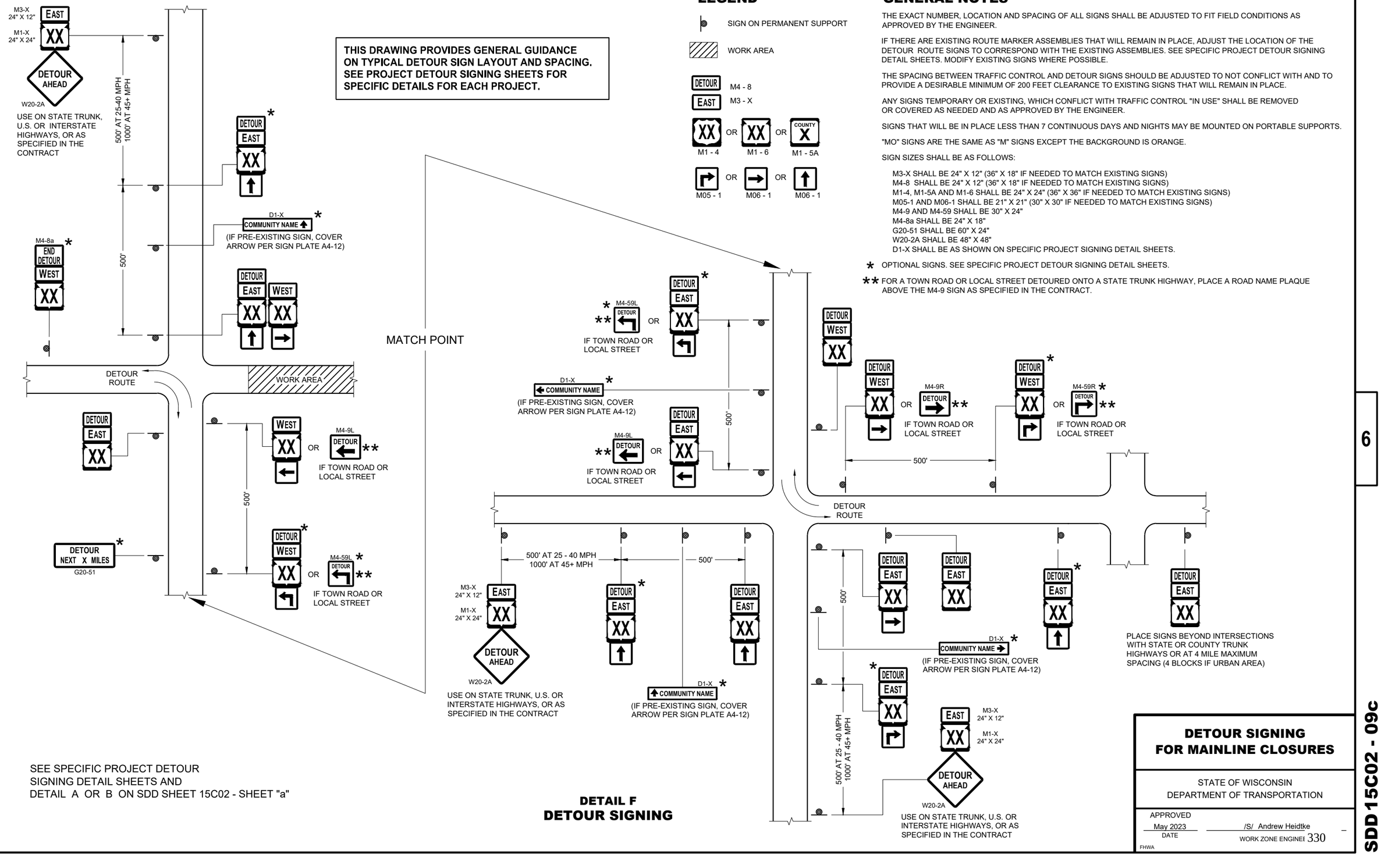
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.




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

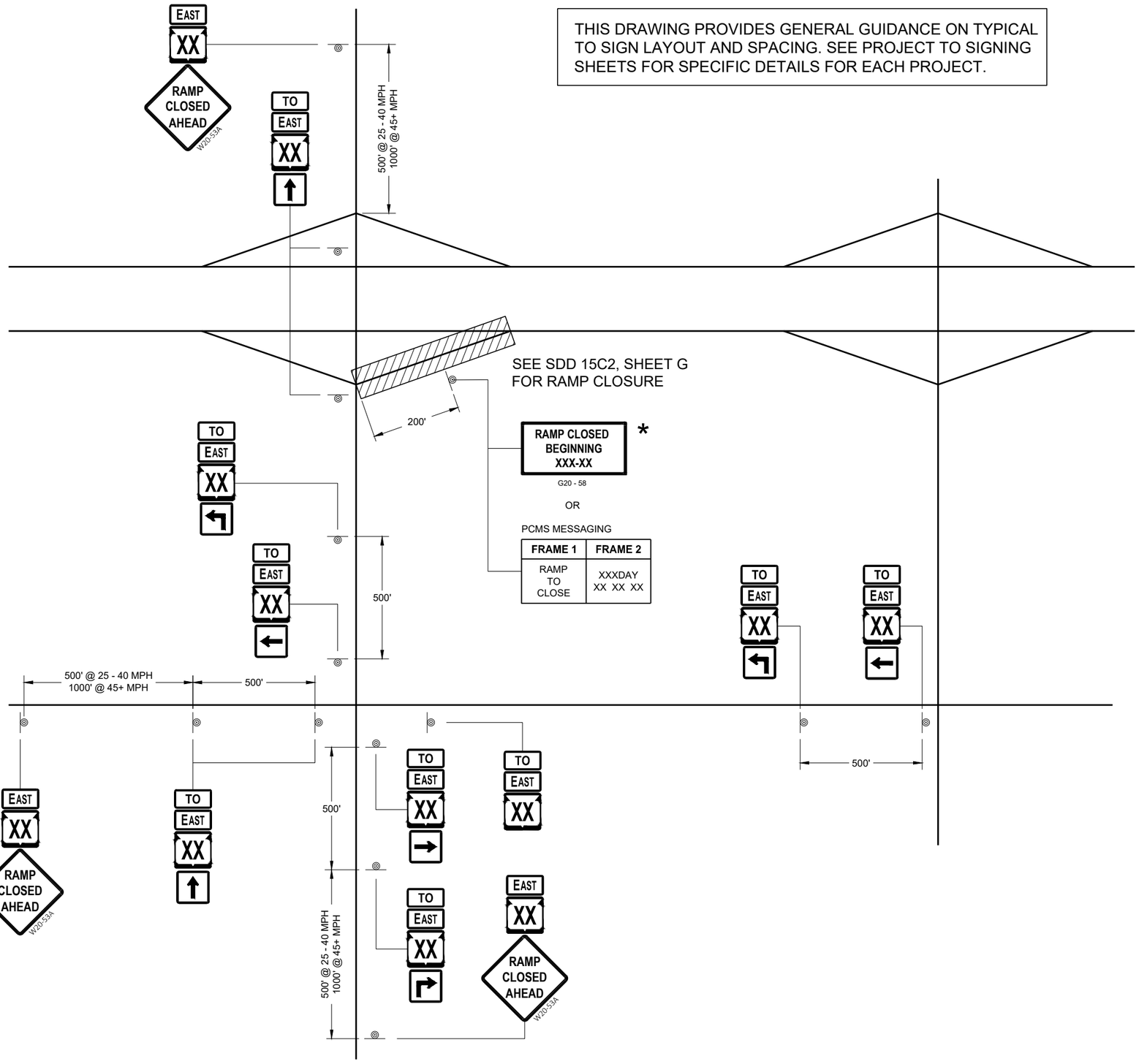
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

330

FHWA


6
SDD 15C02 - 09c




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

## LEGEND

SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

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 ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND TO 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 SHALL 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 FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

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

# ON RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

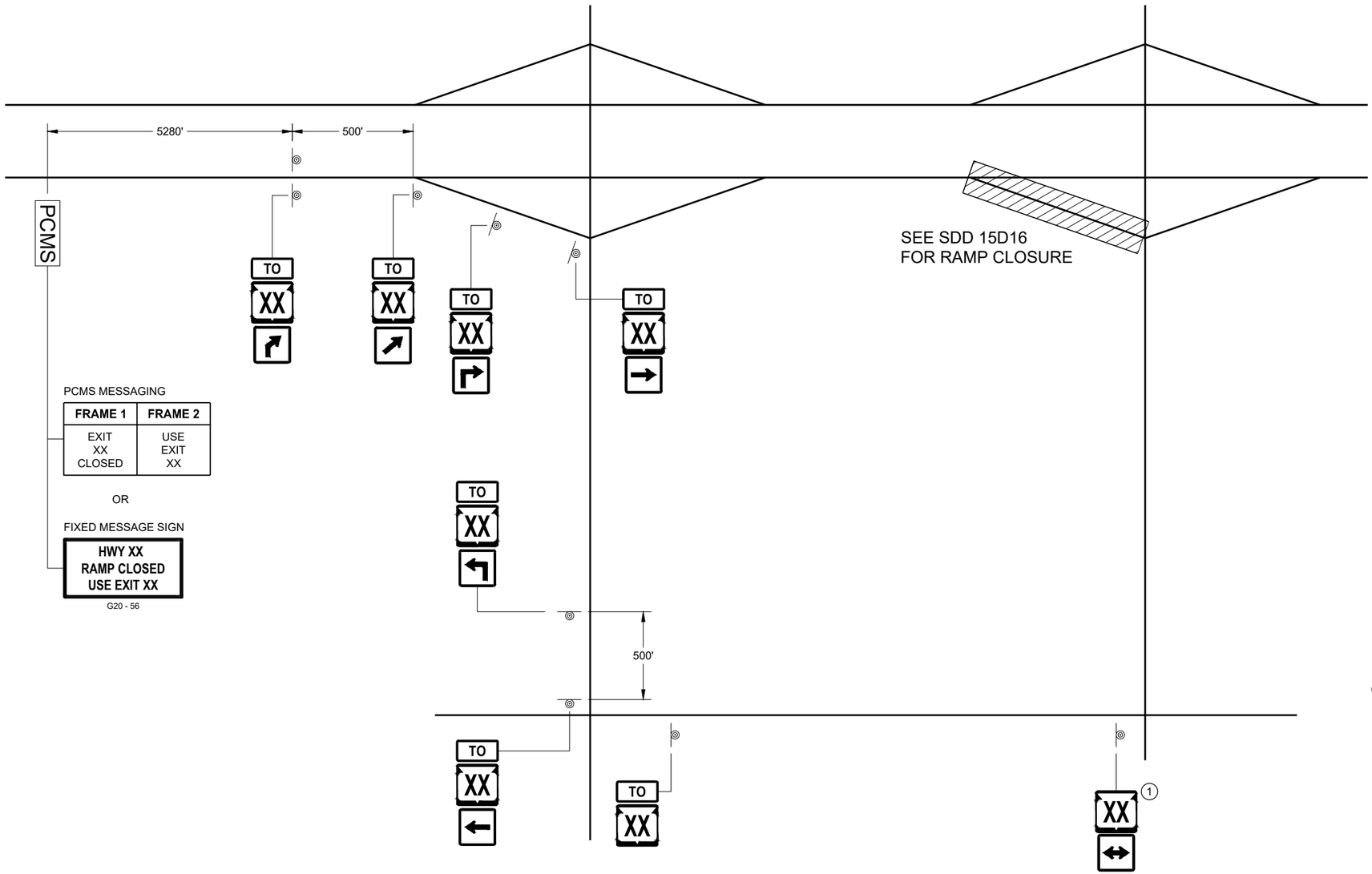


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SDD 15C02 - 09d

SDD 15C02 - 09d

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.




PCMS MESSAGING

| FRAME 1 | FRAME 2 |
|---|---|
| EXIT XX CLOSED | USE EXIT XX |

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

## LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M05 - 2 OR M06 - 1 OR M06 - 2 OR M06 - 4

## GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE "TO" MO-4 ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 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 SHALL 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 FOLLOW:
- MO4 - 5 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, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

(1) ONLY ADD IF THERE ARE NO EXISTING ROUTE MARKERS FOR THE INTERSECTING ROADWAY.

**OFF RAMP LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

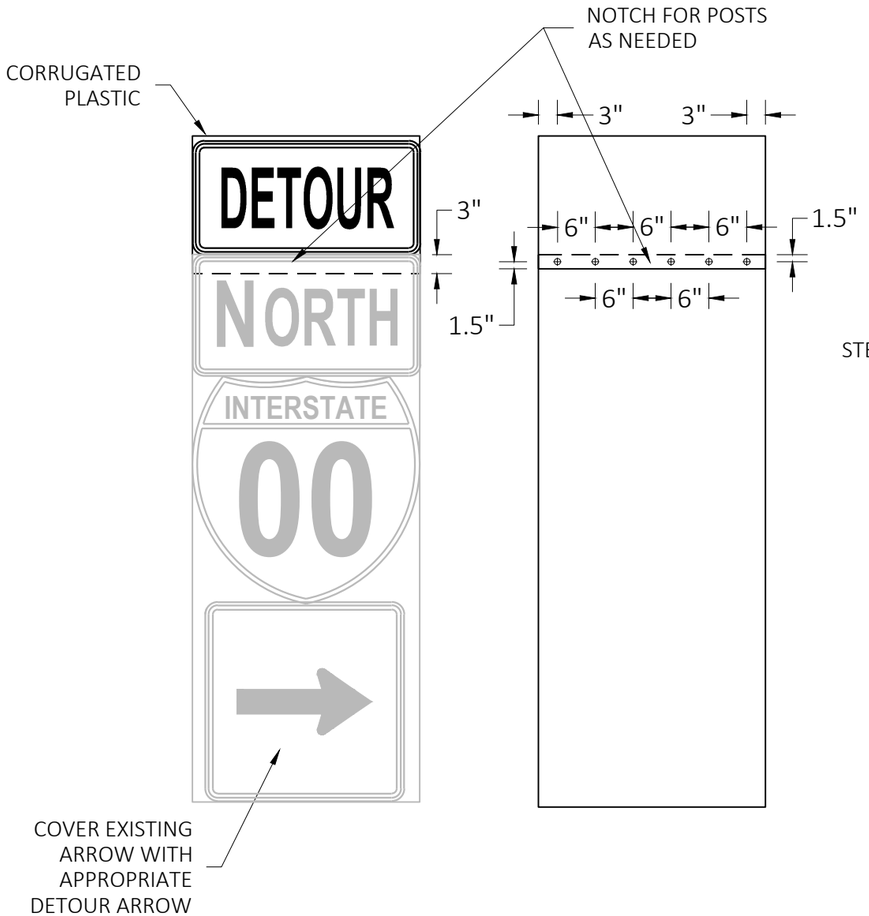
APPROVED
May 2023 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA

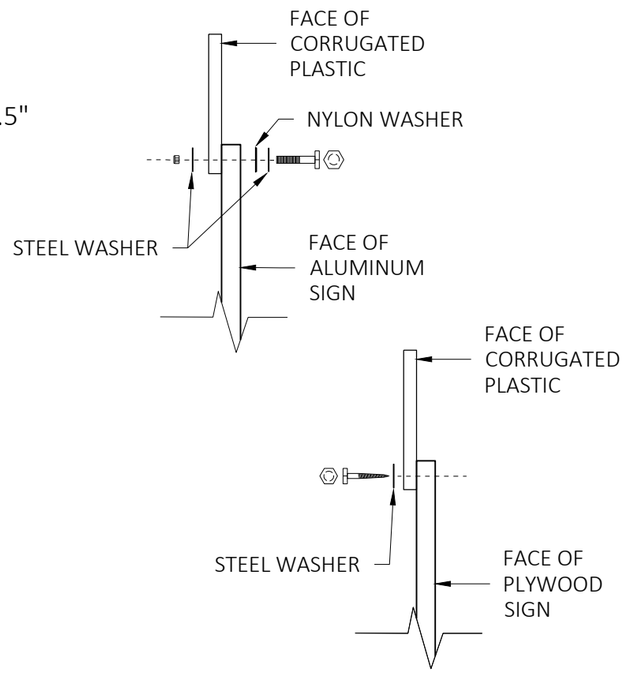

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SDD 15C02 - 09e

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

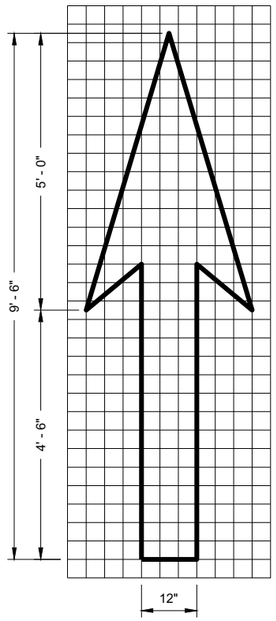
**MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

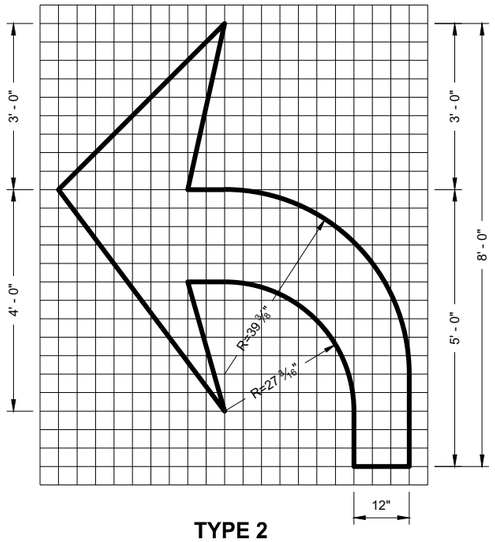
APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVEL ENGINEER
FHWA



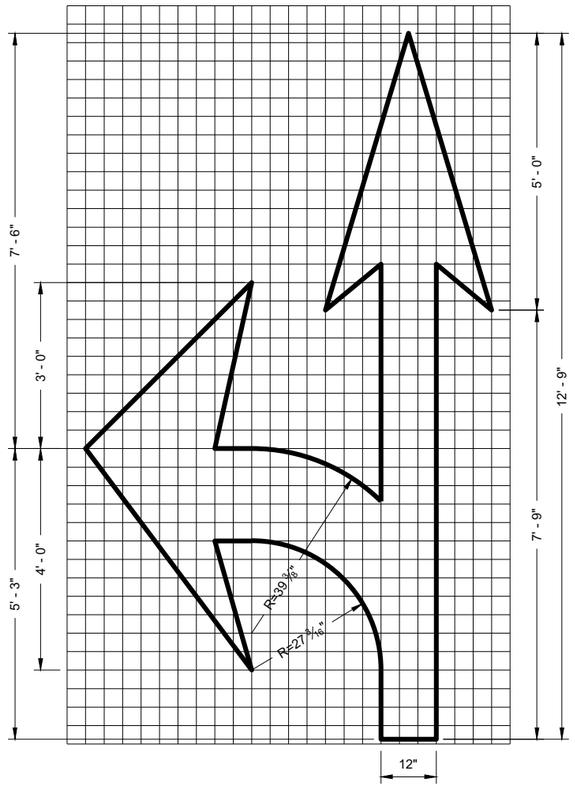

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SDD 15C02-09h




TYPE 1



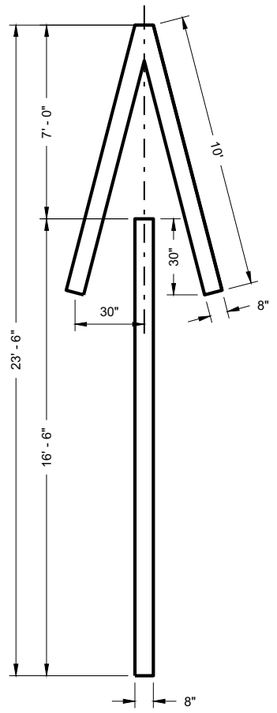

TYPE 2



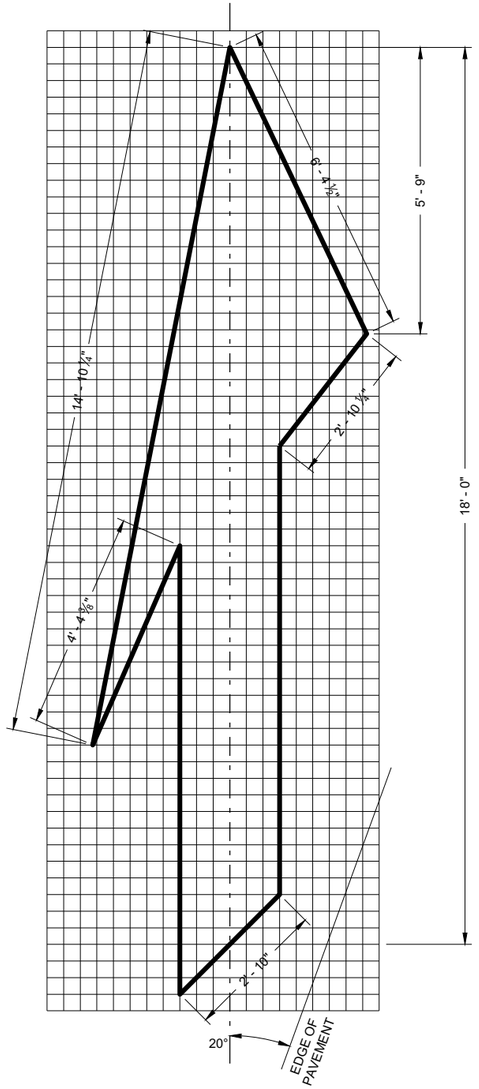

TYPE 3

## GENERAL NOTES

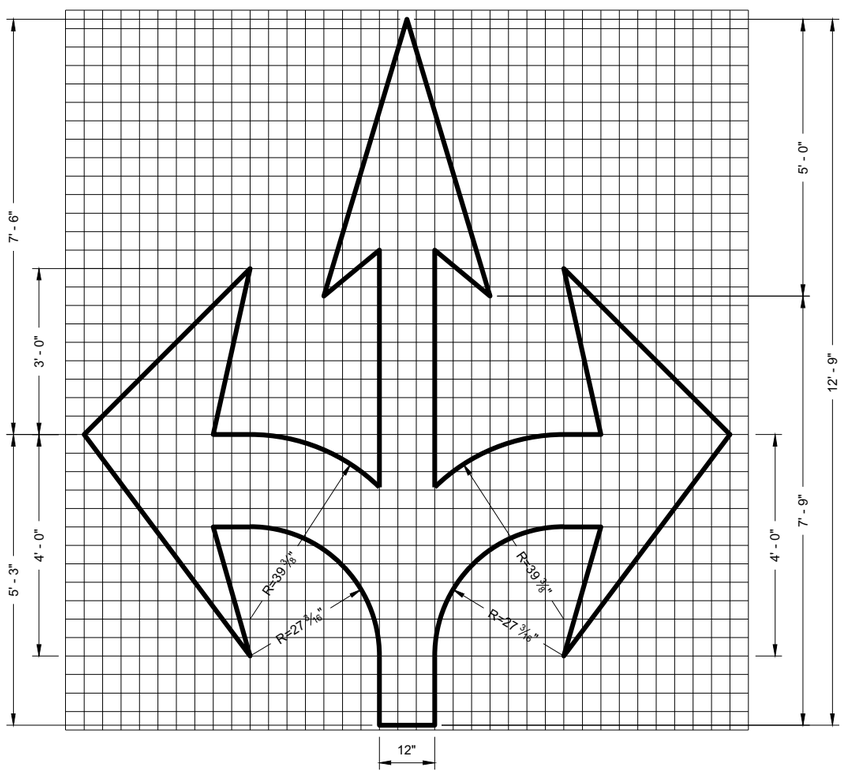
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



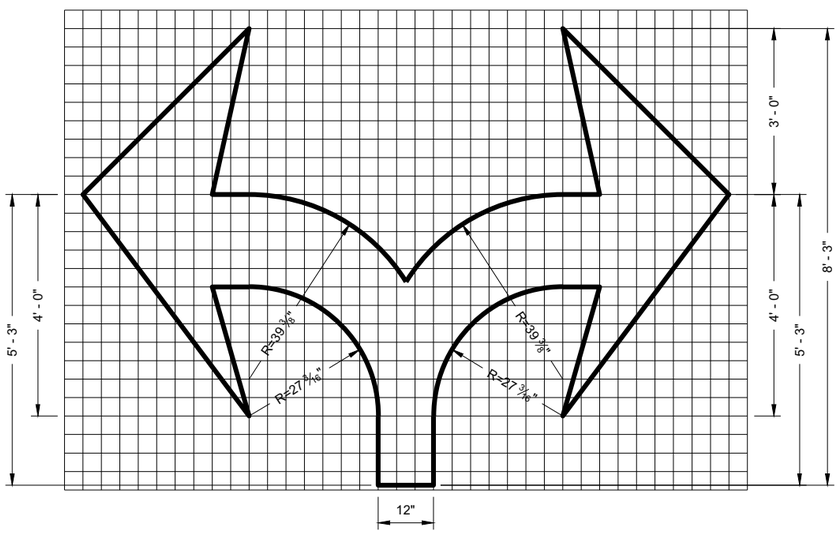

TYPE 4




TYPE 5 LANE DROP ARROW




TYPE 6




TYPE 7

**PAVEMENT MARKING ARROWS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA



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SDD 15C07 - 15c

6

SDD 15C07 - 15c

## 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.

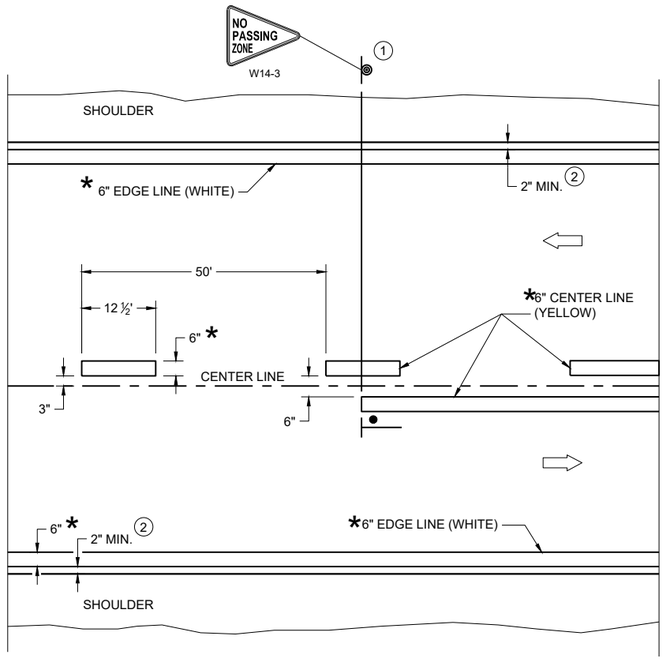
## LEGEND

"T" MARKING

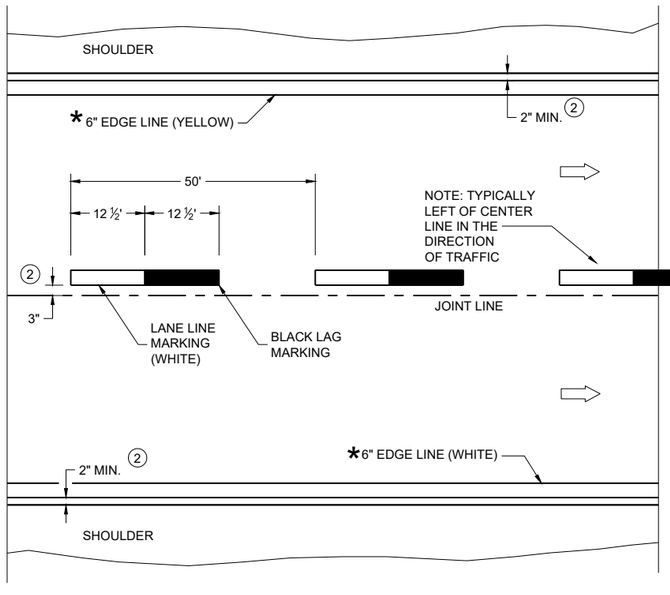
SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES




TWO WAY TRAFFIC




ONE WAY TRAFFIC

**PERMANENT PAVEMENT MARKING**

6

SDD 15C08-23a

**PERMANENT LONGITUDINAL PAVEMENT MARKINGS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

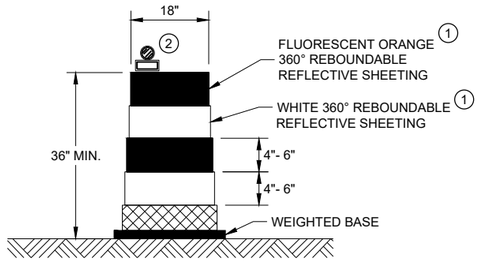


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SDD 15C08-23a

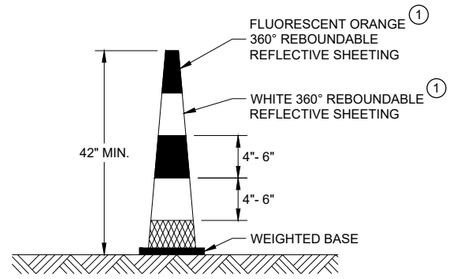
## GENERAL NOTES

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

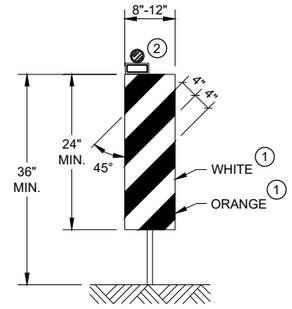
BALLAST WIDTHS
RANGE FROM 24"-36"




### 42" CONE

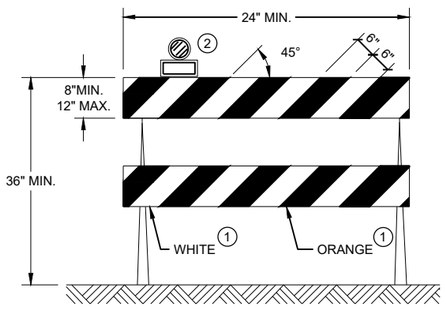
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



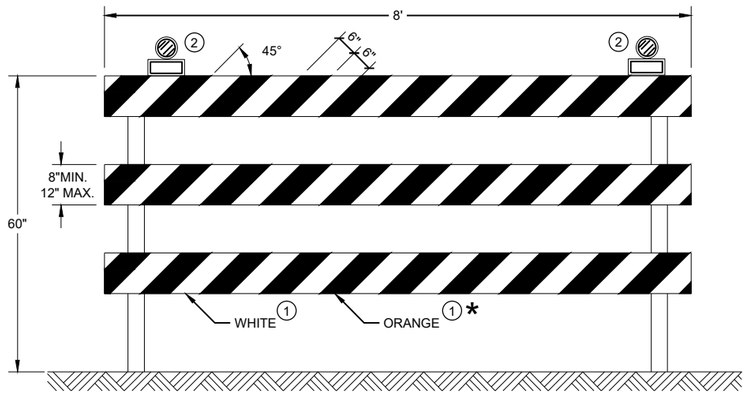

### VERTICAL PANEL

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

6

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.

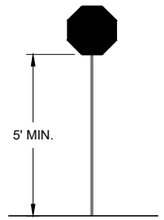
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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**

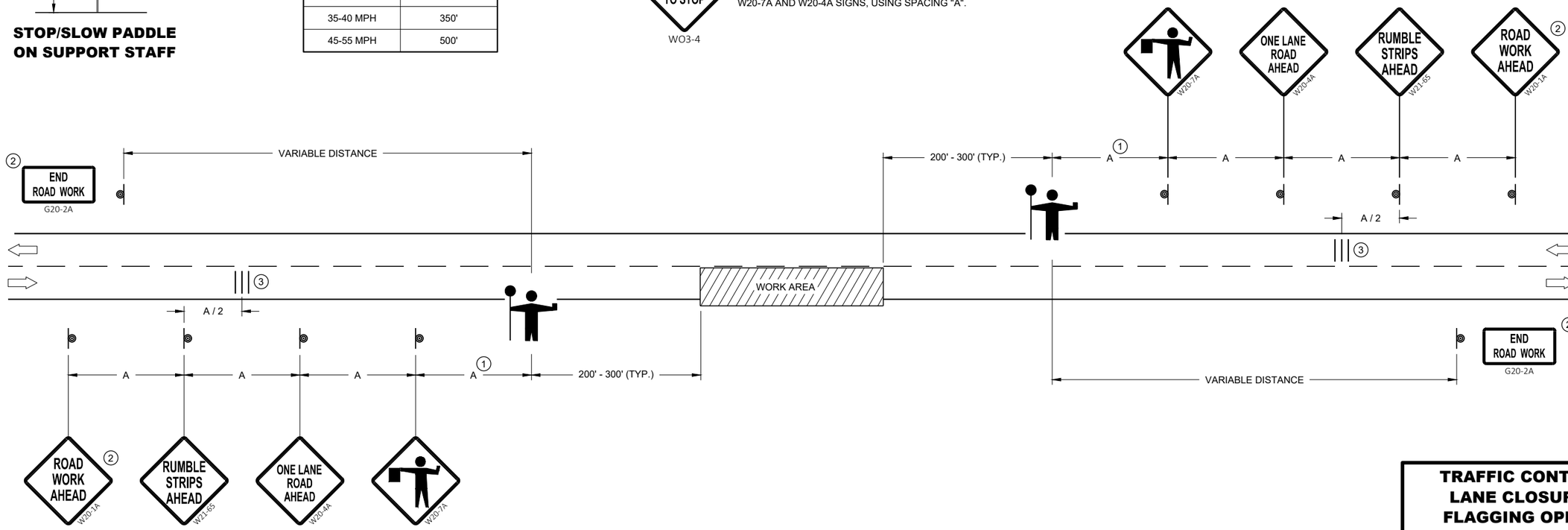
## SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

| 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

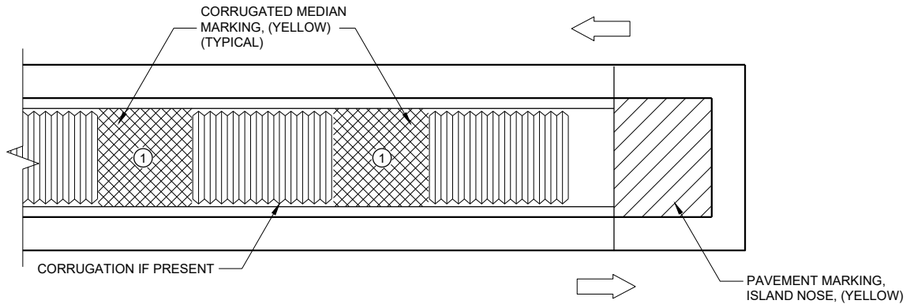
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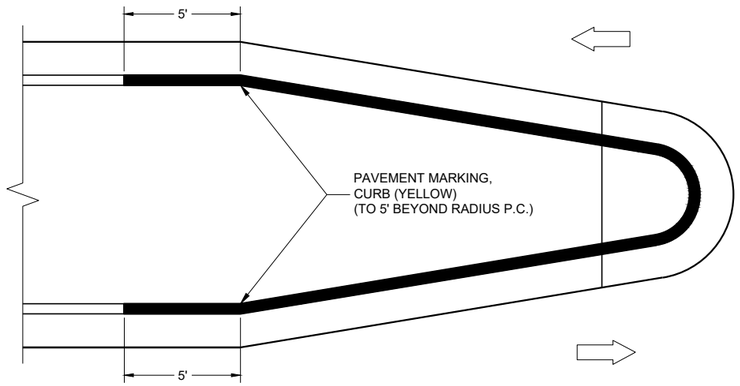
SDD 15C12 - 09a

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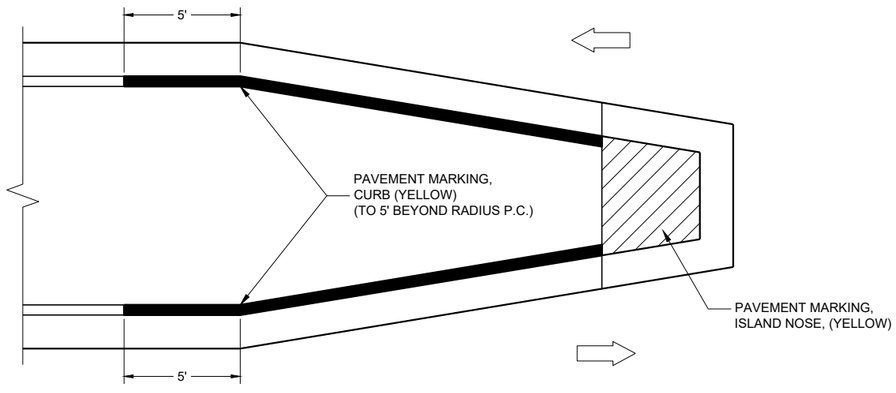
SDD 15C12 - 09a




**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 — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA





6
SDD 15C18-08b

## LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD
- S — PORTABLE TRAFFIC SENSOR (PTS)
- FBS — FLASHING BEACON SIGN

## GENERAL NOTES

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

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

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

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

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

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

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 LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS. WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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

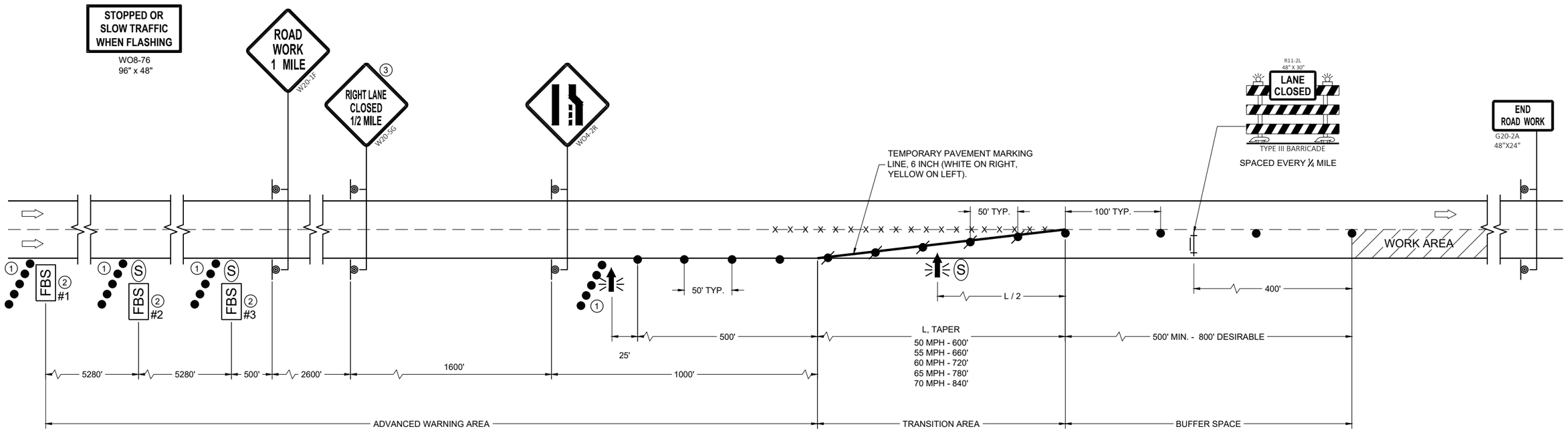
CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

PORTABLE TRAFFIC SENSOR (PTS) MAY BE MOUNTED ON THE FBS, ARROW BOARD OR OTHER TRAILER DEVICES.

(1) 5 DRUMS SPACED AT 10 FOOT INTERVALS AS NEEDED.

(2) IF THERE ARE MORE THAN TWO LANES OR IF SPECIFIED IN THE PLANS, PLACE FBS ON BOTH SIDES OF THE ROADWAY.

(3) IF THERE IS AN APPROVED TEMPORARY SPEED DECLARATION, ADD WO-3-5 SIGNS 400 FEET AFTER THE W20-5G SIGNS AND ADD R2-1 SIGNS (48"x60") 700 FEET AFTER THE WO3-5 SIGNS. A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A "RESUME SPEED LIMIT" SIGN 200 FEET MINIMUM (800 FEET DESIRABLE) BEYOND THE G30-3A "END ROAD WORK" SIGN.




# TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2023 — DATE
/S/ Erin Schwark — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA



6 SDD 15D12-12d

6 SDD 15D12-12d

## GENERAL NOTES

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

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

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

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

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

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

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

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

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

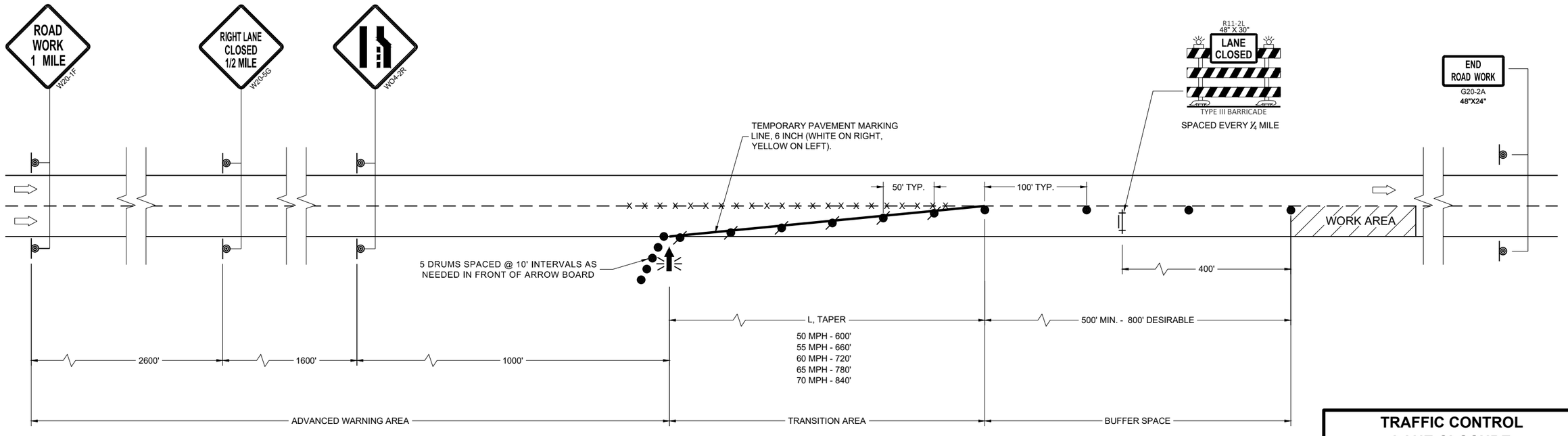
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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

## LEGEND

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




# TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

/S/ Andrew Heidtke
Work Zone Engineer

FHWA



6

SDD 15D12-13a

6

SDD 15D12-13a

## GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

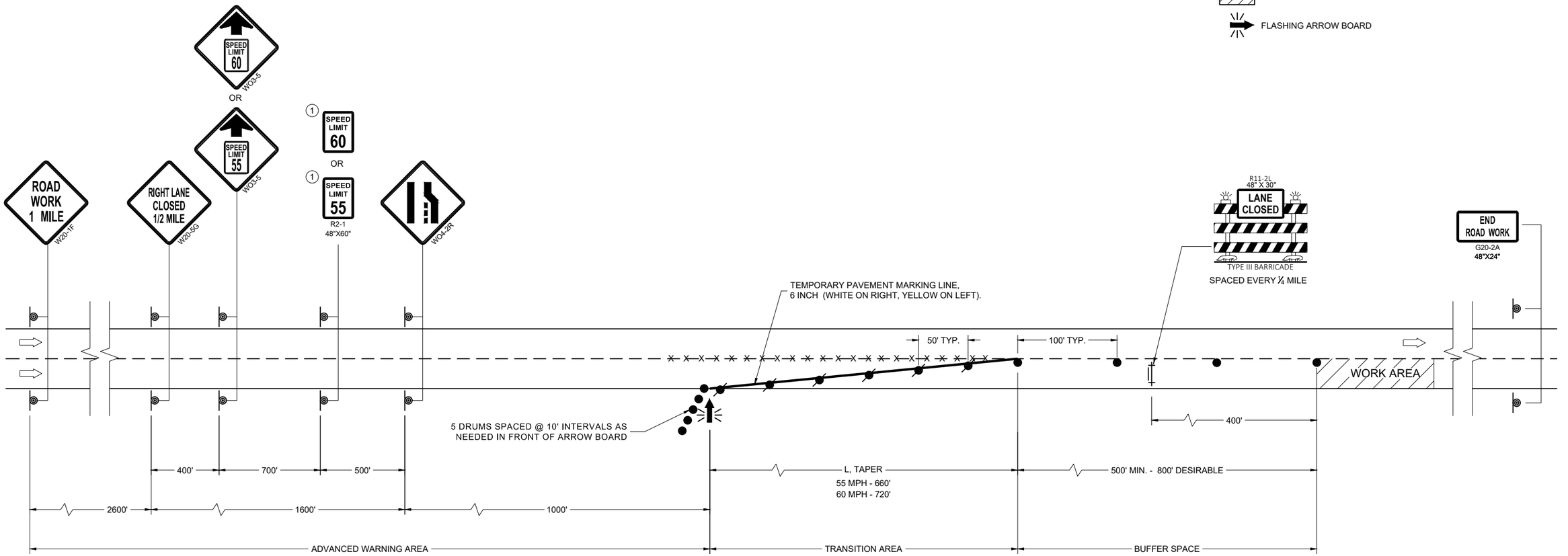
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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

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

## LEGEND

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




# TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024 — DATE
/S/ Andrew Heidtke — Work Zone Engineer

FHWA



6

SDD 15D12-13b

SDD 15D12-13b

## LEGEND

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

## GENERAL NOTES

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

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

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

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

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

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

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

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS /OR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

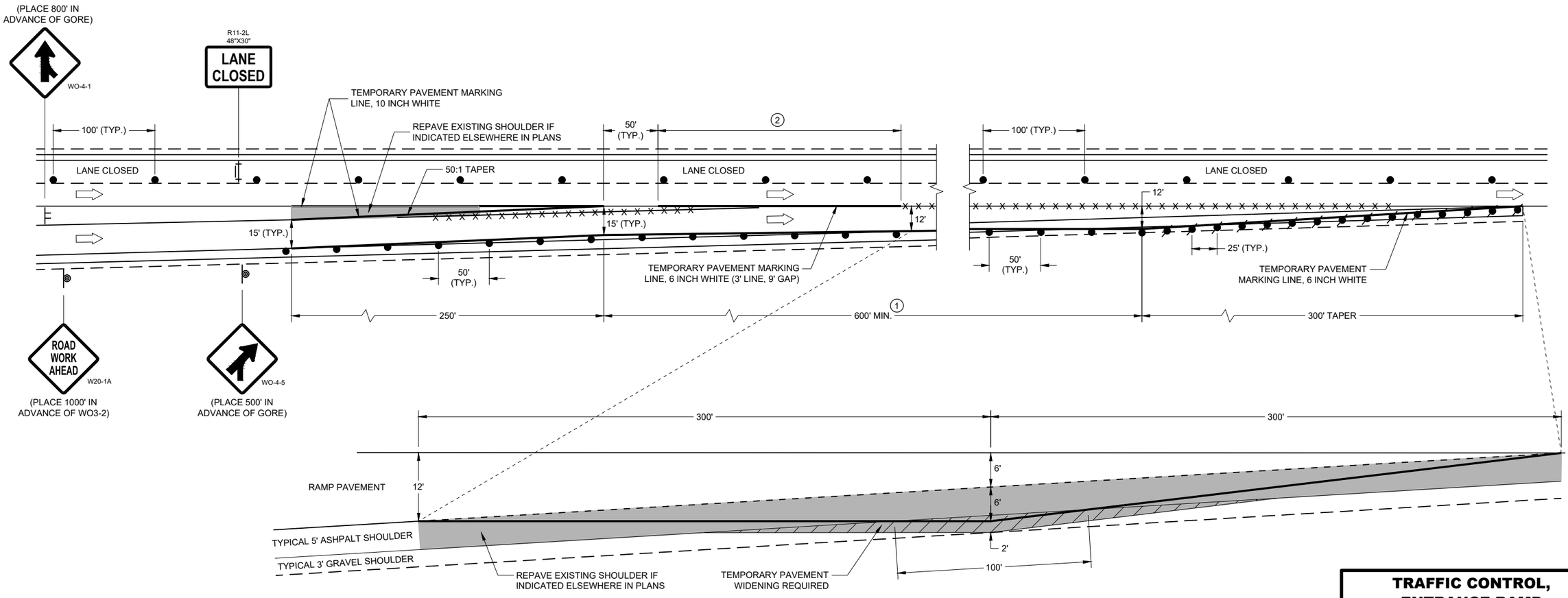
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING 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.

(1) EXTEND THE LENGTH OF THE MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY PAVEMENT MARKING LINE AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.




## TEMPORARY PAVEMENT DETAIL

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

# TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA



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SDD 15D15-07b

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SDD 15D15-07b

## LEGEND

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

## GENERAL NOTES

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

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

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

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

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

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

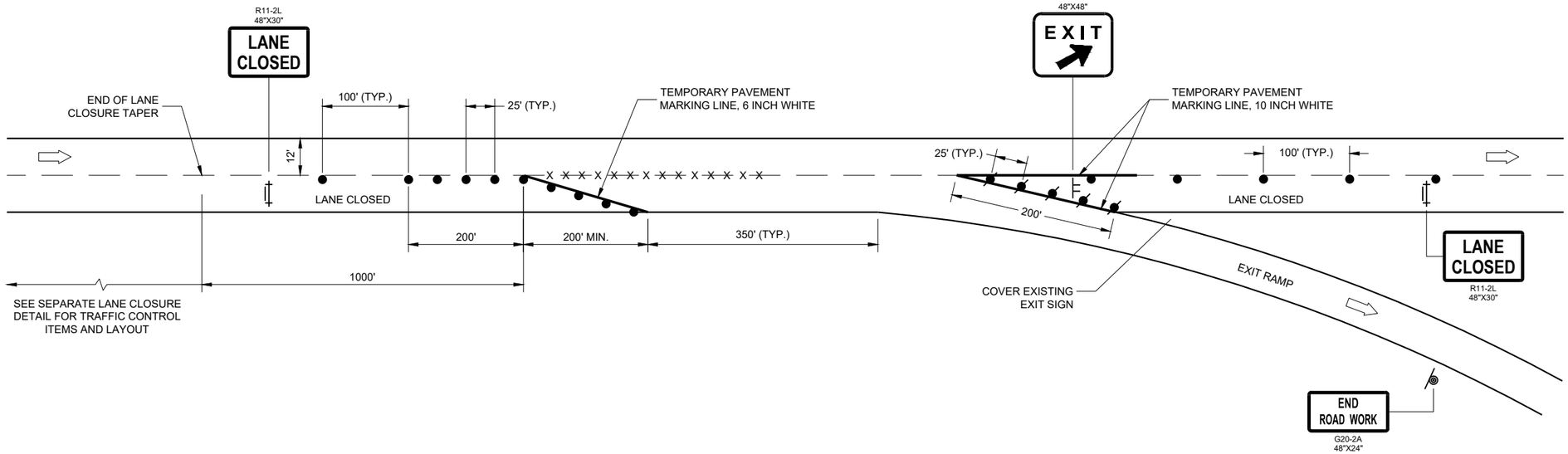
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING 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.




# TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA




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SDD 15D15-07e

## LEGEND

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

## GENERAL NOTES

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

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

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

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

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

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

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

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

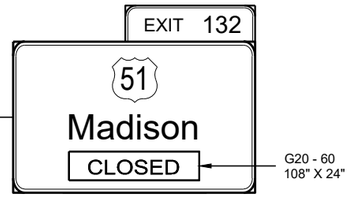
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

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

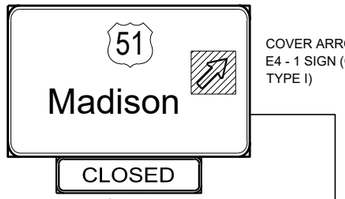
(2) PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.




OR

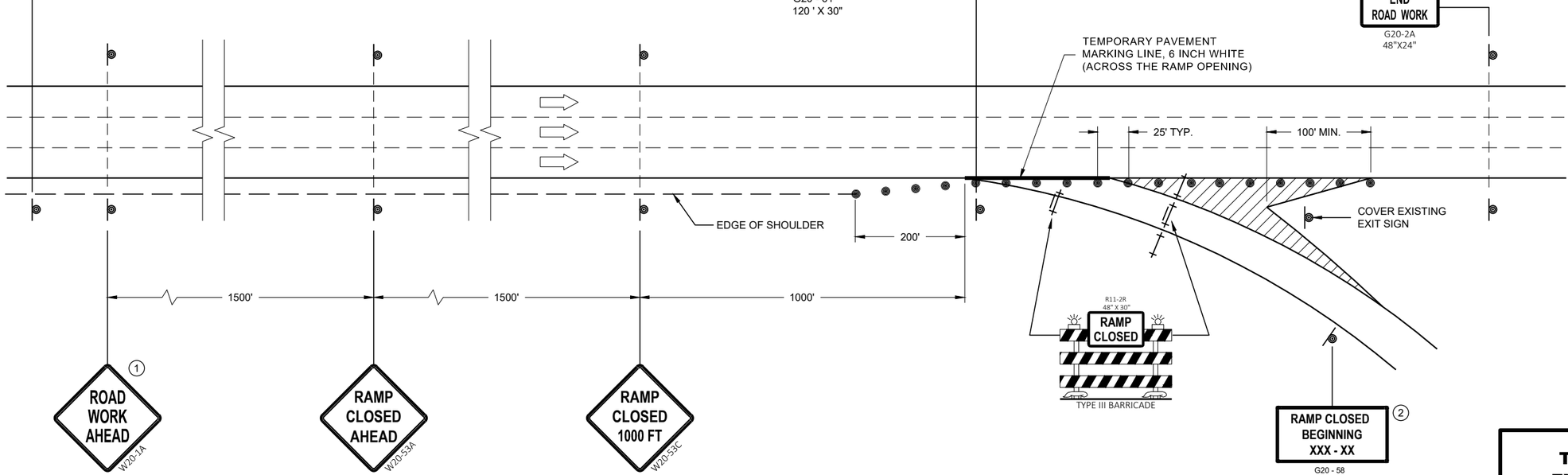



PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN




G20 - 61
120 ' X 30"

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




OR

PCMS MESSAGING

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

## TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA





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SDD 15D16-06

## LEGEND

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

## GENERAL NOTES

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

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

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

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

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

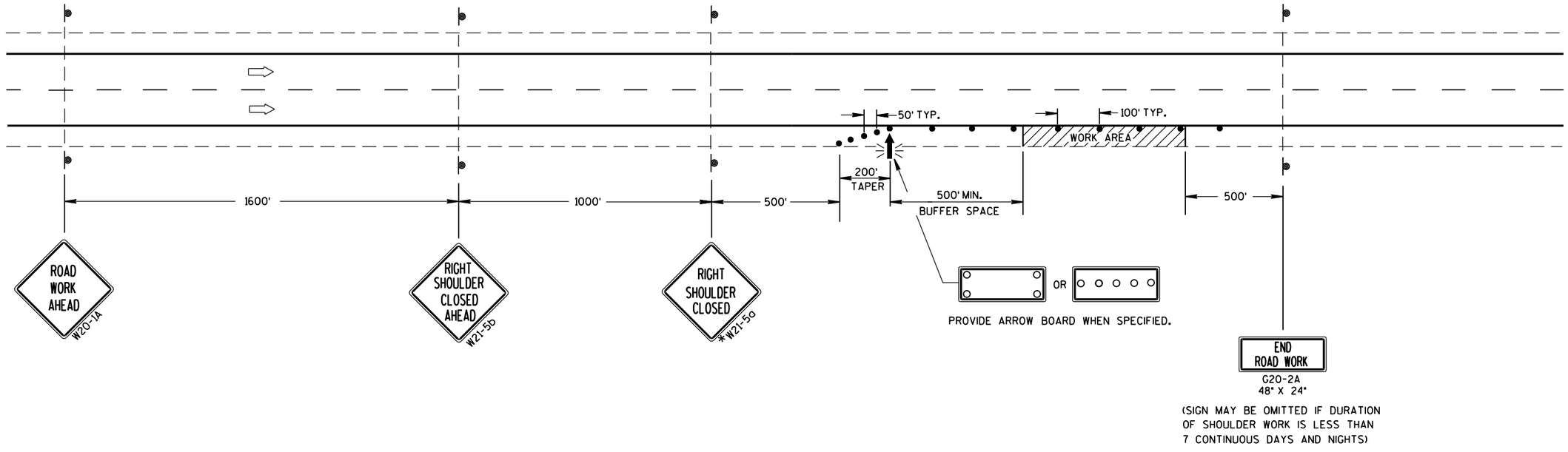
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

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




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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

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

FHWA




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S.D.D. 15 D 27-3

## LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

| POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH) | ADVANCE WARNING SIGN SPACING (A) FEET |
|---|---|
| 0-30 | 200' |
| 35-40 | 350' |
| 45-55 | 500' |

## GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

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

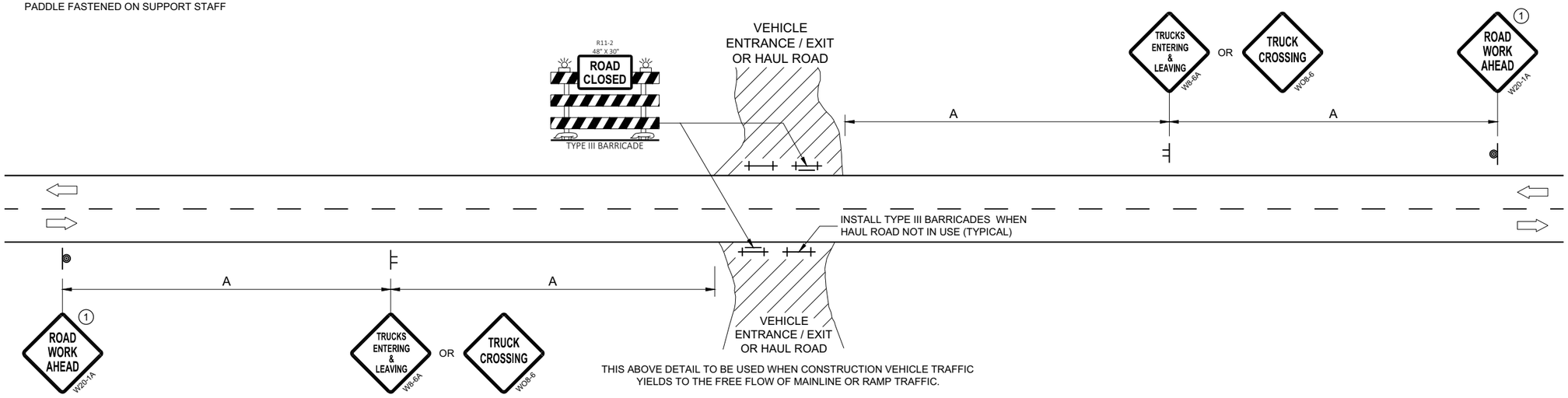
WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

WHEN ACTIVITY REFLECTED BY THE SIGN IS NOT CURRENTLY TAKING PLACE, THE HIGHWAY SHALL BE RESTORED TO NORMAL CONDITION AND THE SIGNS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC.

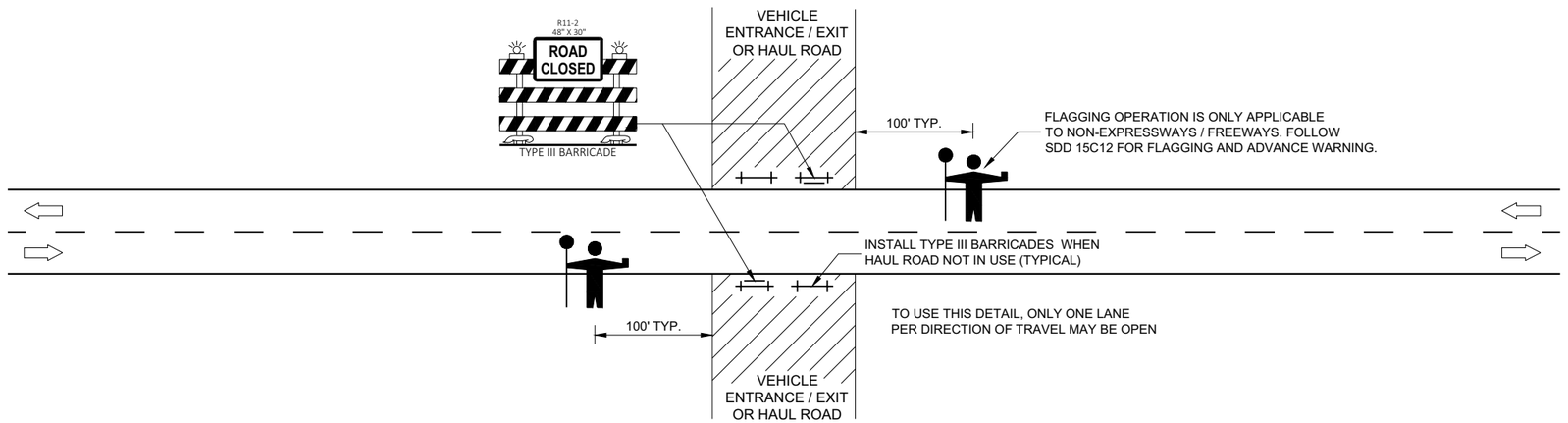
WHEN A SIDE ROAD OR RAMP INTERSECTS WITHIN THE ADVANCE SIGNING AREA, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND / OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

PLACE SIGNS ON BOTH SIDES IF USED ON DIVIDED HIGHWAY.

(1) THESE SIGNS ARE TO BE USED ONLY WHEN VEHICLE ENTRANCE / EXIT CONDITIONS ARE SEPARATED BY MORE THAN TWO MILES FROM PREVIOUS WORK AREA OR SIGNING OR AS DIRECTED BY THE ENGINEER.




THIS ABOVE DETAIL TO BE USED WHEN CONSTRUCTION VEHICLE TRAFFIC YIELDS TO THE FREE FLOW OF MAINLINE OR RAMP TRAFFIC.




TO USE THIS DETAIL, ONLY ONE LANE PER DIRECTION OF TRAVEL MAY BE OPEN

THIS DETAIL TO BE USED WHEN CONSTRUCTION WORK INCLUDING TRUCKING ACTIVITY REQUIRES MAINLINE TRAFFIC TO BE TEMPORARILY STOPPED IN ONE OR BOTH DIRECTIONS. DELAY TO HIGHWAY TRAFFIC SHALL BE MINIMIZED.

**TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

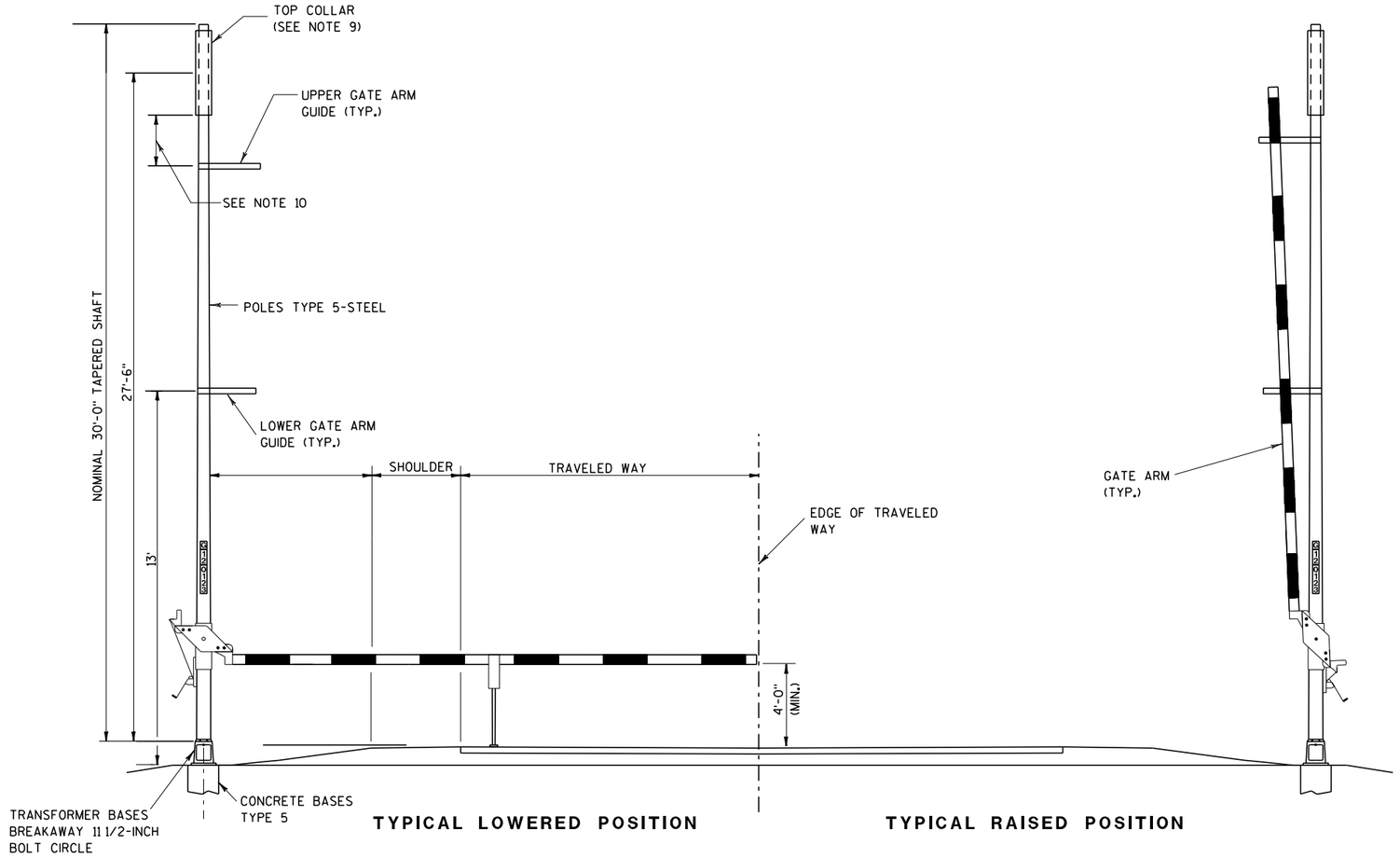
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA




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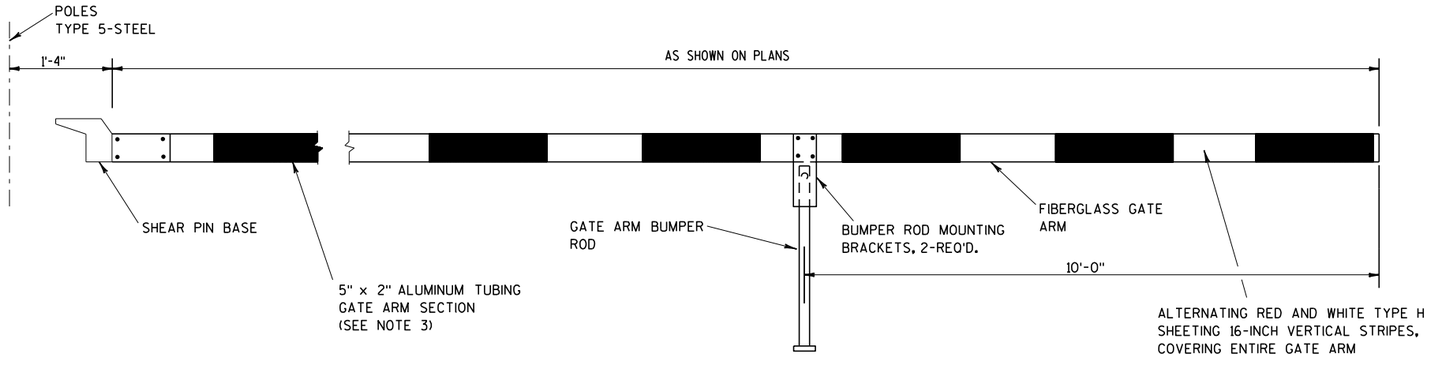

SDD 15D29 - 06




TYPICAL LOWERED POSITION



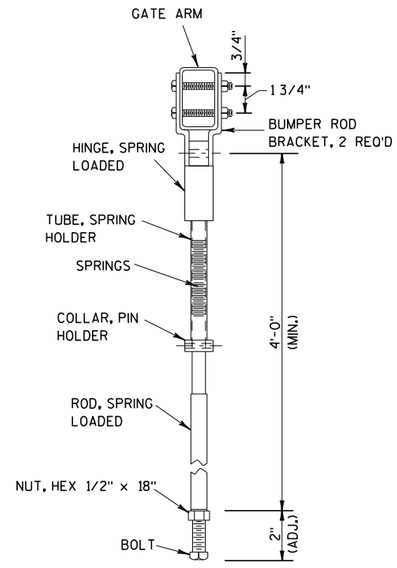

TYPICAL RAISED POSITION



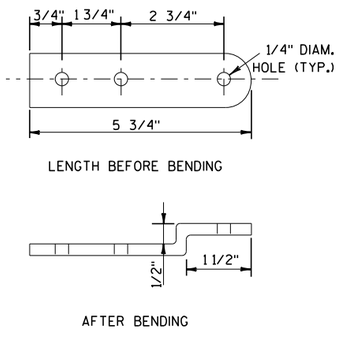

GATE DETAIL

## GENERAL NOTES

1. THE LOCATION OF RAMP CLOSURE GATES AND MOUNTING HEIGHT OF GATE ARM PIVOT SHALL BE VERIFIED BY THE ENGINEER.
2. HEIGHT OF GATE ARM GUIDES MAY BE VARIED AS REQUIRED FOR WARNING LIGHT CLEARANCE.
3. FIBERGLASS/ALUMINUM GATE ARM AND SHEAR PIN BASE SHALL BE SUPPLIED BY THE SAME VENDOR.
4. GATE ARM TO BE MOUNTED ON PROPOSED POLE AS INDICATED ON THE PLANS. PROPOSED POLE SHALL BE TYPE 5 POLE.
5. LOCATION OF THE CONCRETE BASE AND LENGTH OF THE GATE ARM WILL BE VERIFIED BY THE ENGINEER TO ENSURE ADEQUATE COVERAGE OF THE TRAVELED LANE.
6. GATE PIVOTS, SUPPORTS AND GUIDES, AND ALL ASSOCIATED HARDWARE SHALL BE GALVANIZED. ALL ROUGH EDGES AND BURRS SHALL BE GROUND SMOOTH PRIOR TO GALVANIZING.
7. ALL EXPOSED BOLT THREADS SHALL BE PAINTED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
8. ANY FIELD DAMAGE TO THE GALVANIZING SHALL BE REPAIRED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
9. A STANDARD LIGHTING LUMINAIRE ARM MAY BE MOUNTED TO THE TYPE 5 POLE IN LIEU OF THE TOP COLLAR.
10. UPPER GATE ARM GUIDE IS TO BE INSTALLED 6 TO 12-INCHES BELOW THE BOTTOM OF THE TOP COLLAR.




GATE ARM BUMPER ROD DETAIL



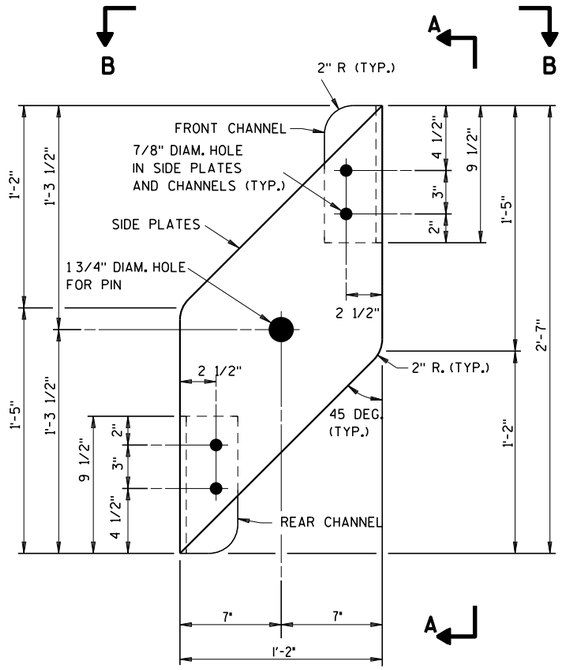

BUMPER ROD MOUNTING
BRACKET DETAIL

RAMP GATE

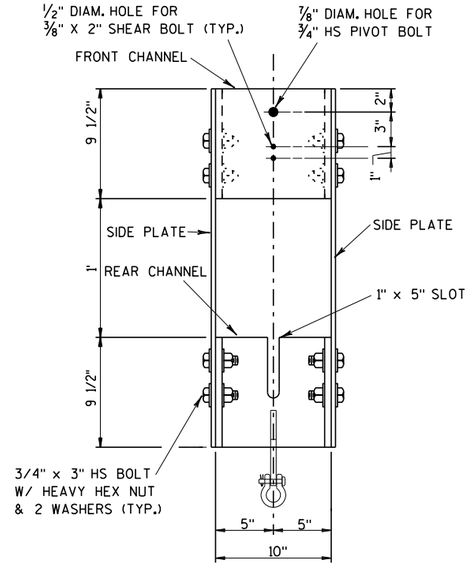
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



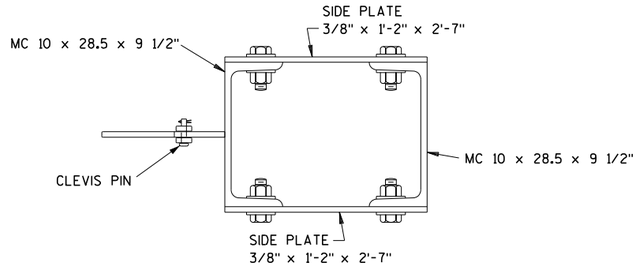

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S.D.D. 15 D 35-3a



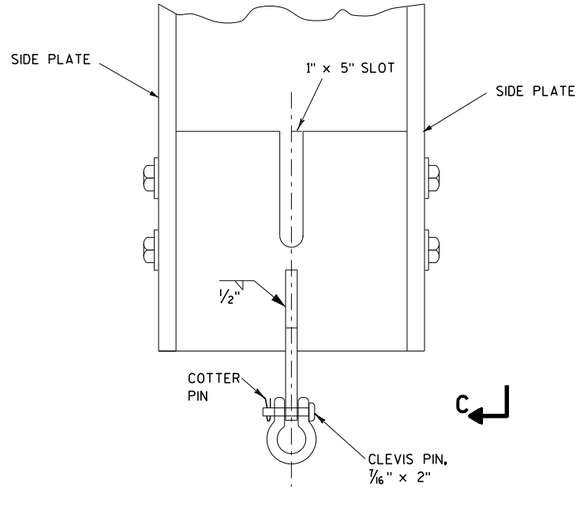

SIDE PLATE DETAIL



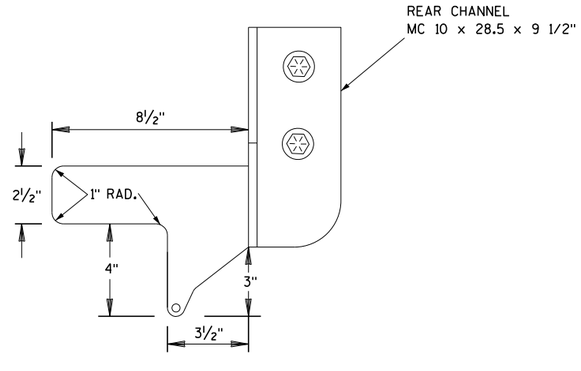

SECTION A-A




SECTION B-B




YOKE ASSEMBLY DETAIL




SECTION C-C

RAMP GATE

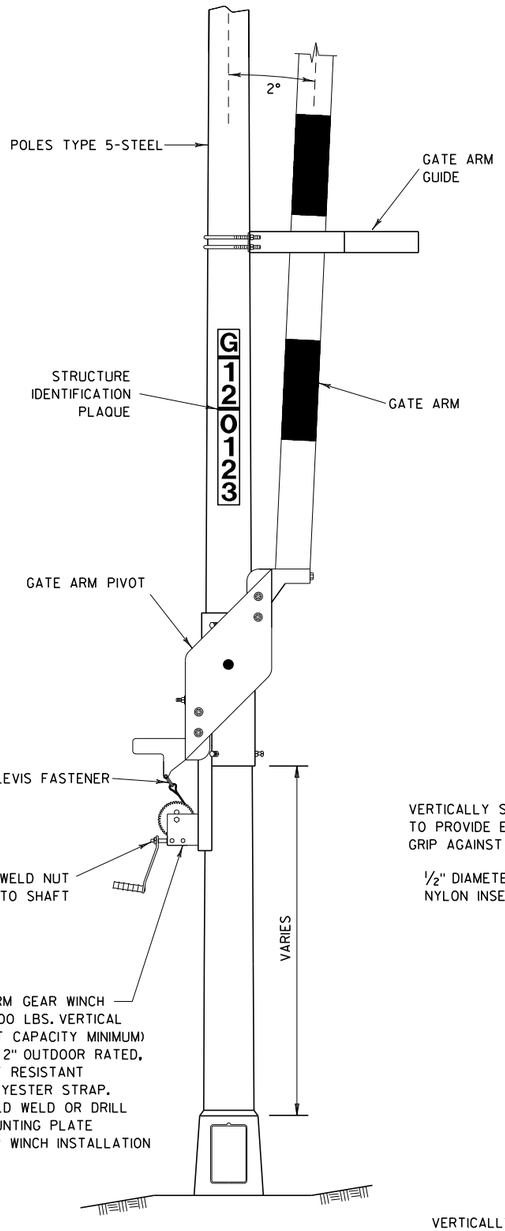
# GENERAL NOTES

1. WHEN THE GATE IS FULLY RAISED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL.

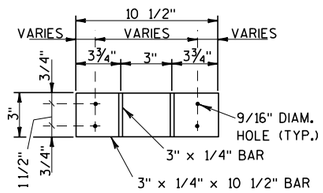
2. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL.

3. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.

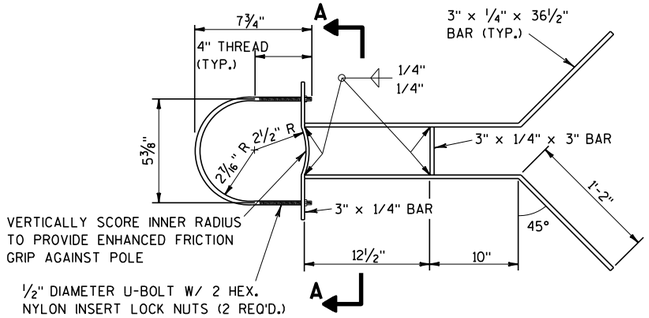
4. ALL BOLTS SHALL BE GALVANIZED AND CONFORM TO ASTM A307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A325. BOLTS OF ½" NOMINAL DIAMTER OR LESS MAY BE STAINLESS STEEL.



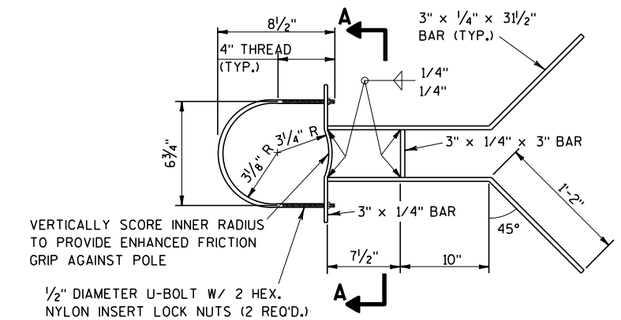

GATE PIVOT ASSEMBLY



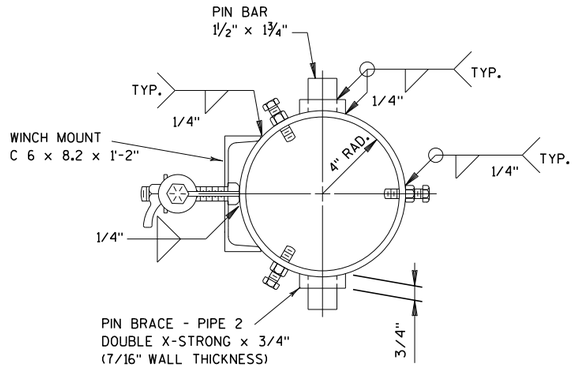

SECTION A-A
U-BOLTS NOT SHOWN



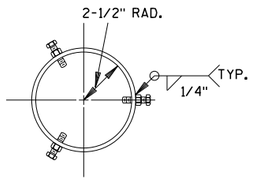

UPPER GATE ARM GUIDE DETAIL



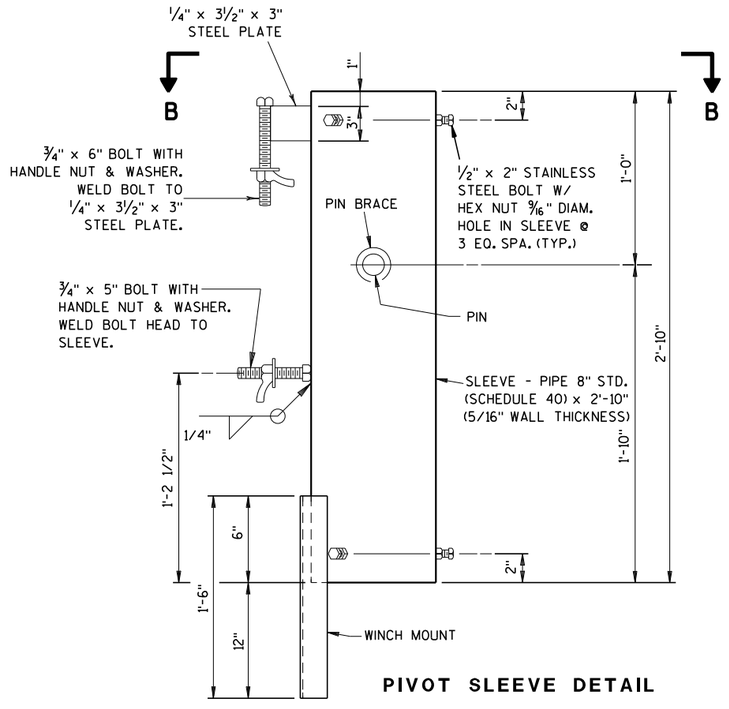

LOWER GATE ARM GUIDE DETAIL



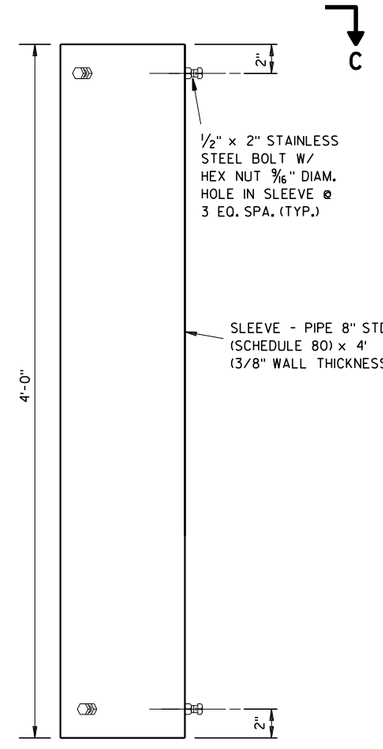

SECTION B-B




SECTION C-C




PIVOT SLEEVE DETAIL




TOP COLLAR

RAMP GATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER
FHWA




6
S.D.D. 15 D 35-3c

## LEGEND

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

## GENERAL NOTES

RIGHT CLOSURE SHOWN (LEFT LANE CLOSURE SIMILAR)

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

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

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

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

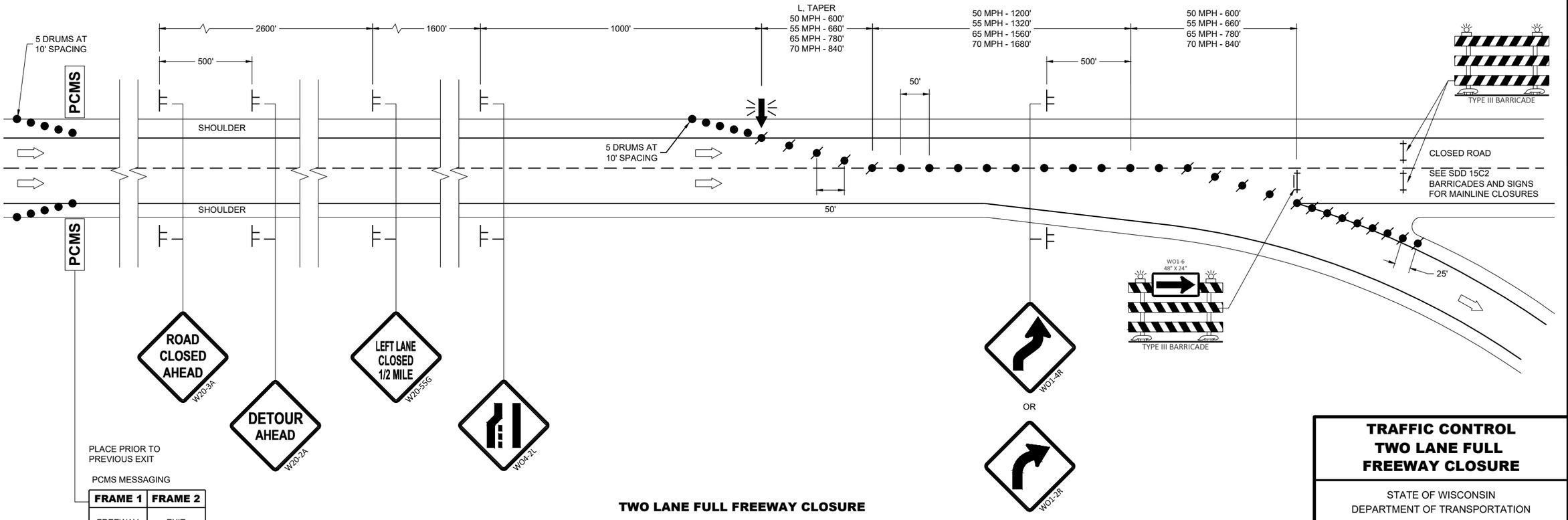
WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROL SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND / OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1000' ACROSS EACH CLOSED LANE TO HELP REINFORCE THE DRUM LINE.

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

REFER TO DETOUR ROUTES FOR TRAFFIC GUIDANCE SIGNING.

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




PLACE PRIOR TO PREVIOUS EXIT

PCMS MESSAGING

| FRAME 1 | FRAME 2 |
|---|---|
| FREEWAY CLOSED | EXIT AHEAD |

**TWO LANE FULL FREEWAY CLOSURE**

# TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA



6

SDD 15D42-02

6

SDD 15D42-02

## LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- DELINEATOR, FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- CONSTRUCTION TRAFFIC
- WORK AREA
- CC — CRASH CUSHION TEMPORARY
- EXISTING CONCRETE BARRIER TEMPORARY PRECAST

## 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.

WORK ZONE INGRESS/EGRESS LOCATIONS SHALL BE APPROVED BY THE ENGINEER. LOCATIONS FOR WORK ZONE ACCESS TO/FROM THE FREEWAY SHALL NOT BE USED FOR INGRESS AND EGRESS AT THE SAME TIME.

THIS ACCESS DETAIL IS TYPICAL FOR LEFT LANE ACCESS, FOR RIGHT LANE ACCESS, REVERSE THE TRAFFIC CONTROL

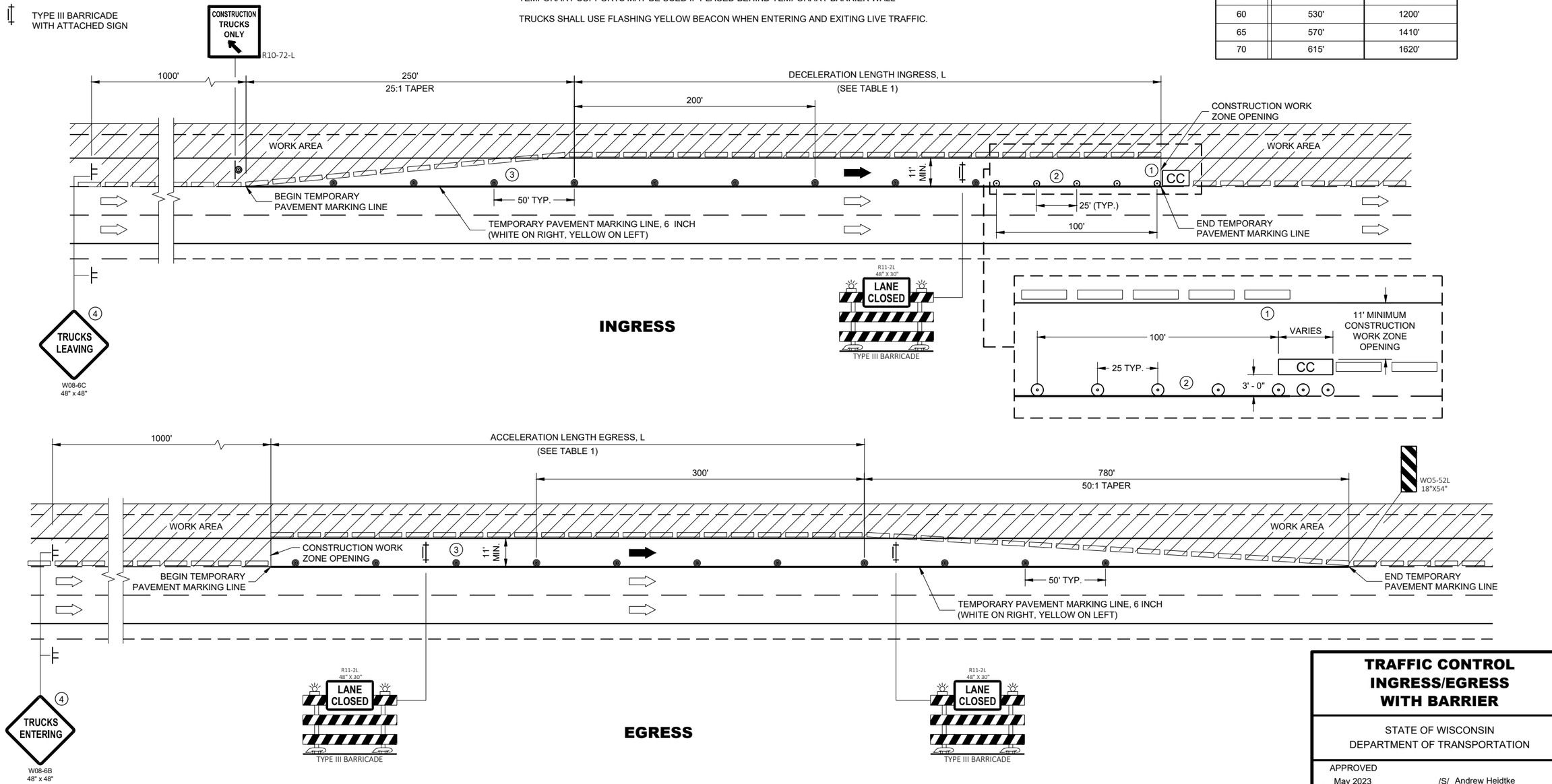
TEMPORARY SUPPORTS MAY BE USED IF PLACED BEHIND TEMPORARY BARRIER WALL

TRUCKS SHALL USE FLASHING YELLOW BEACON WHEN ENTERING AND EXITING LIVE TRAFFIC.

1. WIDEN BARRIER AS NECESSARY TO ACCOMMODATE CRASH CUSHION WIDTH.
2. USE TUBULAR MARKERS TO HELP DELINEATE TEMPORARY CRASH CUSHION.
3. REMOVE DRUMS / BARRICADES WHEN INGRESS / EGRESS ARE IN USE.
4. REMOVE OR COVER WHEN ACCESS IS NOT NEEDED.

### TABLE 1

| S (MPH) | INGRESS, L | EGRESS, L |
|---|---|---|
| 50 | 435' | 720' |
| 55 | 480' | 960' |
| 60 | 530' | 1200' |
| 65 | 570' | 1410' |
| 70 | 615' | 1620' |




**TRAFFIC CONTROL INGRESS/EGRESS WITH BARRIER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA




6

SDD 15D47-03a

## LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- CONSTRUCTION TRAFFIC
- WORK AREA

## TABLE 1

| S (MPH) | INGRESS, L | EGRESS, L |
|---|---|---|
| 50 | 435' | 720' |
| 55 | 480' | 960' |
| 60 | 530' | 1200' |
| 65 | 570' | 1410' |
| 70 | 615' | 1620' |

## LEGEND

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.

WORK ZONE INGRESS/EGRESS LOCATIONS SHALL BE APPROVED BY THE ENGINEER. LOCATIONS FOR WORK ZONE ACCESS TO/FROM THE FREEWAY SHALL NOT BE USED FOR INGRESS AND EGRESS AT THE SAME TIME.

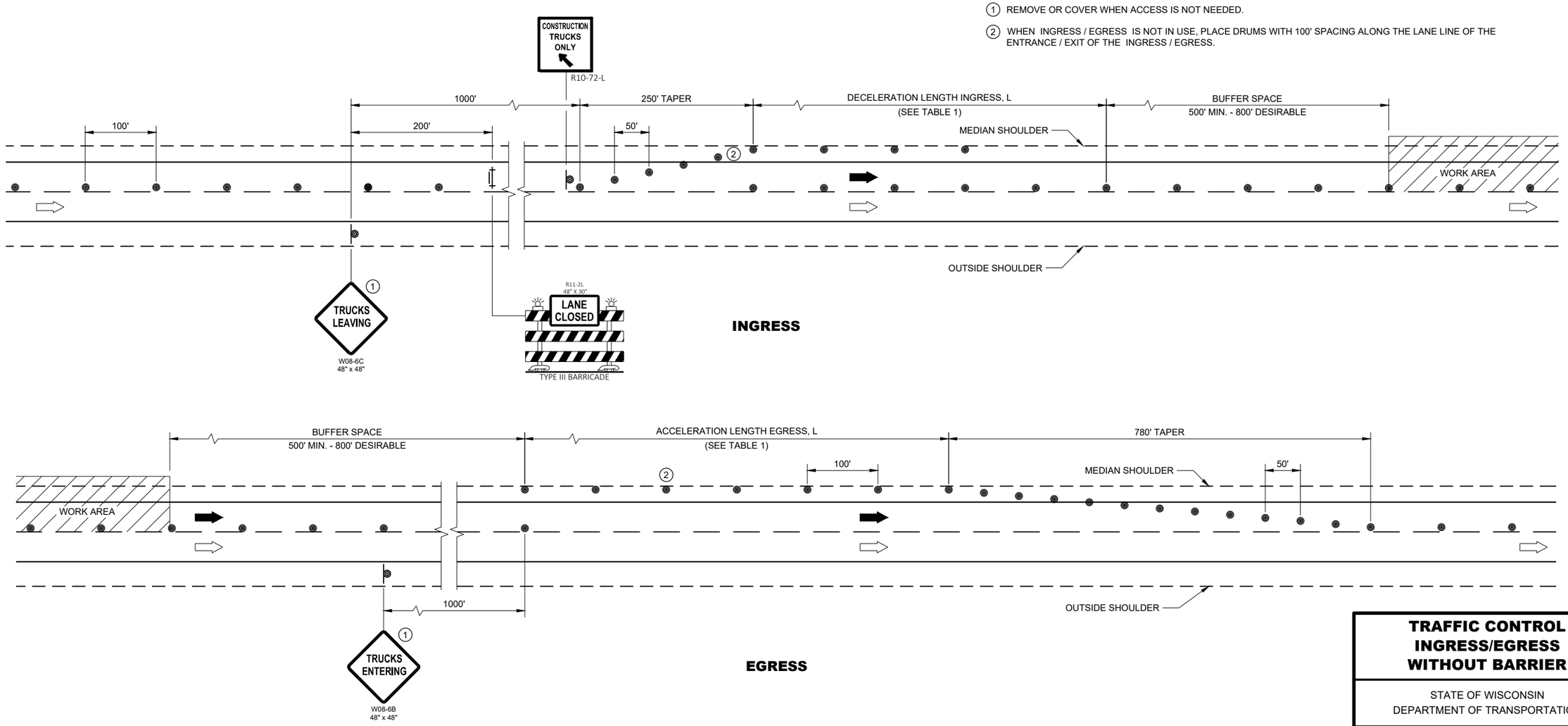
THIS ACCESS DETAIL IS TYPICAL FOR LEFT LANE ACCESS, FOR RIGHT LANE ACCESS, REVERSE THE TRAFFIC CONTROL

TEMPORARY SUPPORTS MAY BE USED IF PLACED BEHIND TEMPORARY BARRIER WALL

TRUCKS SHALL USE FLASHING YELLOW BEACON WHEN ENTERING AND EXITING LIVE TRAFFIC.

(1) REMOVE OR COVER WHEN ACCESS IS NOT NEEDED.

(2) WHEN INGRESS / EGRESS IS NOT IN USE, PLACE DRUMS WITH 100' SPACING ALONG THE LANE LINE OF THE ENTRANCE / EXIT OF THE INGRESS / EGRESS.




# TRAFFIC CONTROL INGRESS/EGRESS WITHOUT BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



6

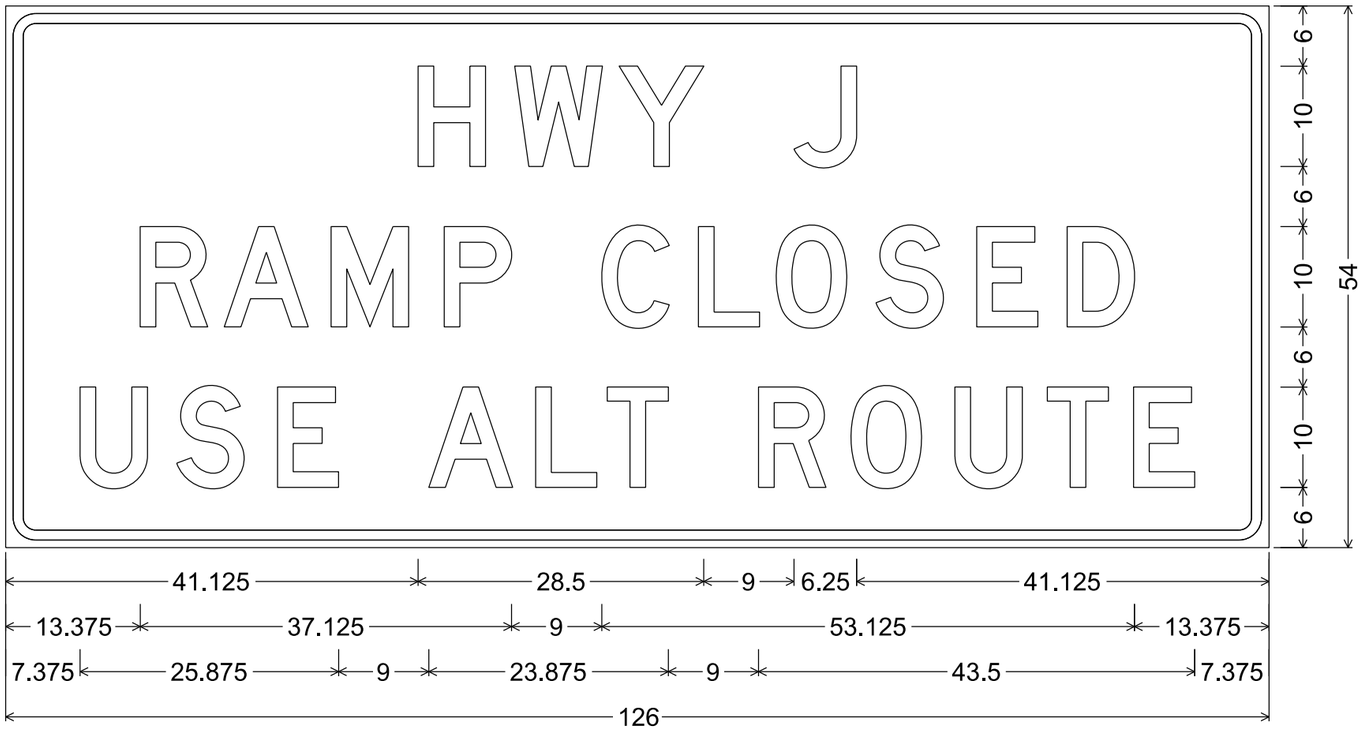
SDD 15D47-03b

6

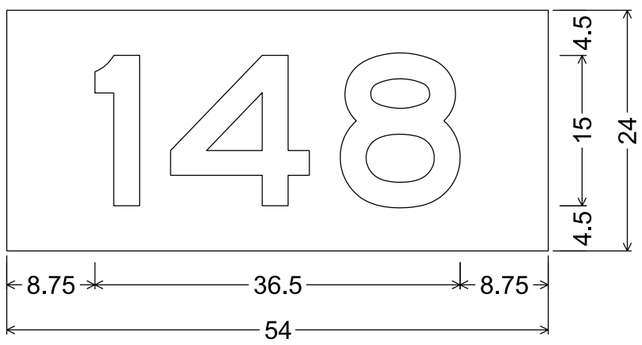
SDD 15D47-03b

NOTES

1. Fixed Message Sign Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D or as noted



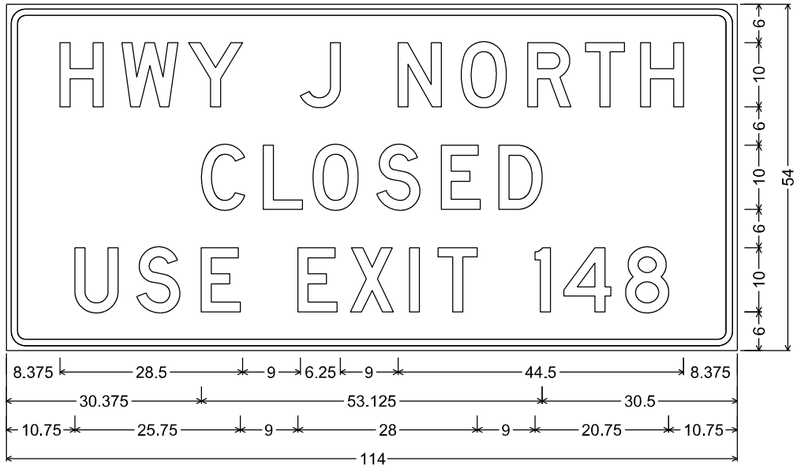

3.000" Radius, 1.000" Border, 0.750" Indent



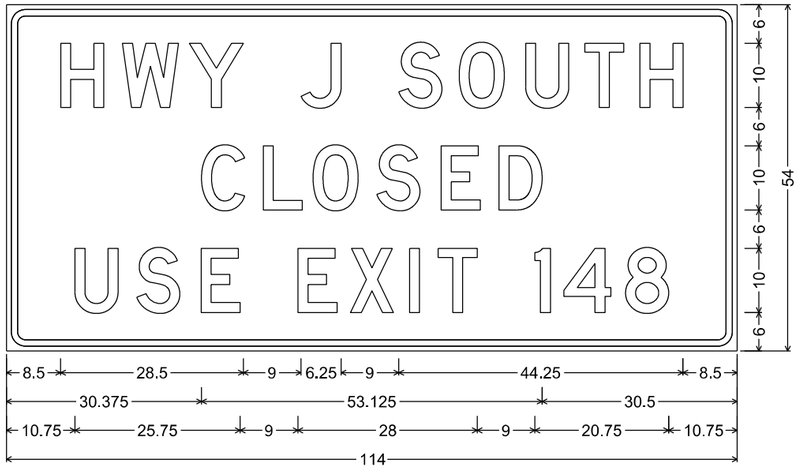

No border, Black on Fluorescent orange;
"148", E;

NOTES

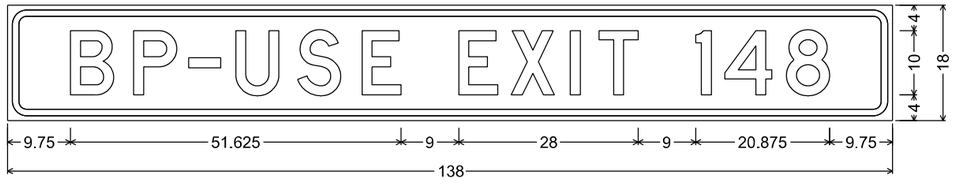
1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D or as noted



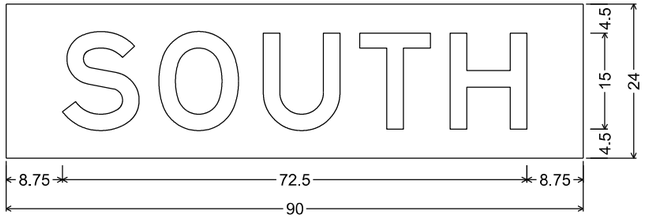

3.000" Radius, 1.000" Border, 0.750" Indent



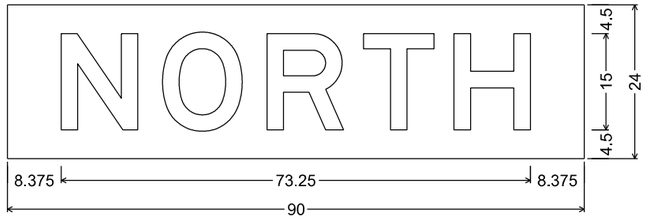

3.000" Radius, 1.000" Border, 0.750" Indent



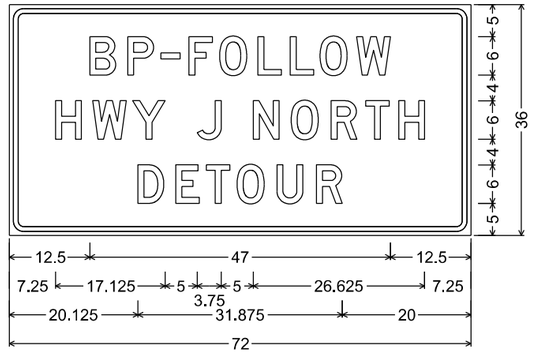

3.000" Radius, 1.000" Border, 0.750" Indent



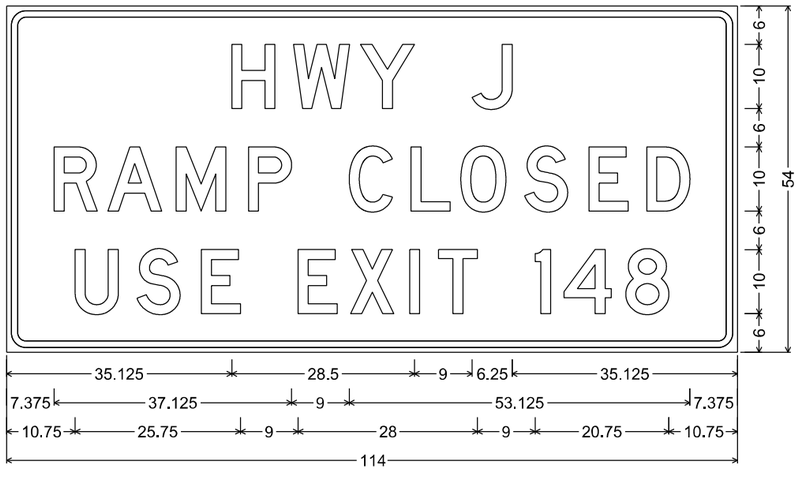

No border, Black on Fluorescent orange;
"SOUTH", E;




No border, Black on Fluorescent orange;
"NORTH", E;



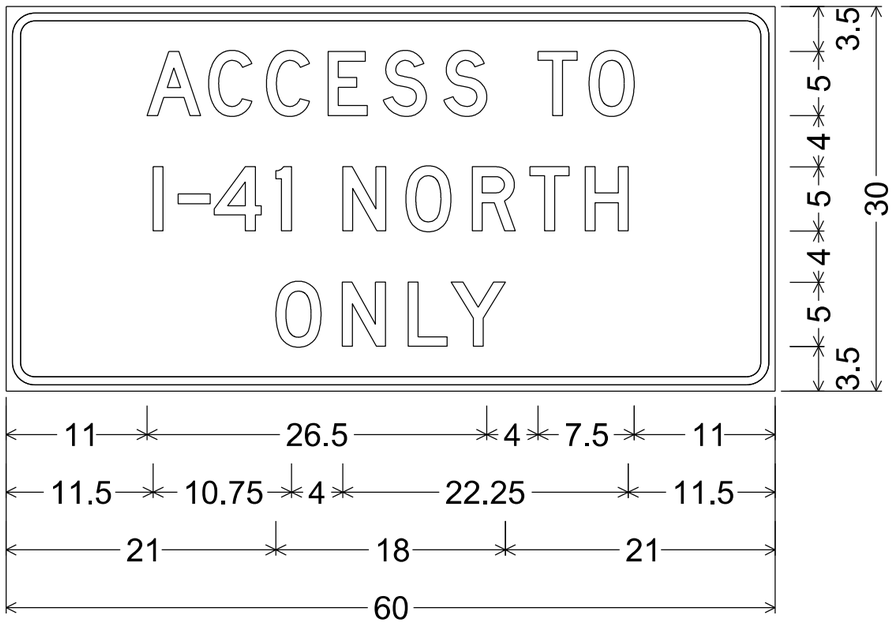

2.250" Radius, 0.750" Border, 0.625" Indent



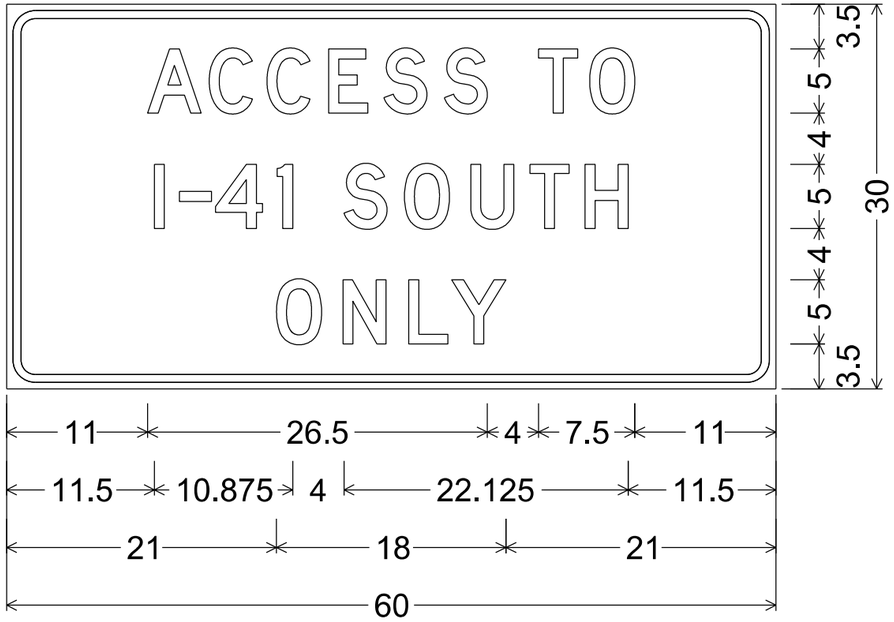

3.000" Radius, 1.000" Border, 0.750" Indent

NOTES

1. Fixed Message Signs Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D




2.250" Radius, 0.625" Border, 0.500" Indent




2.250" Radius, 0.625" Border, 0.500" Indent

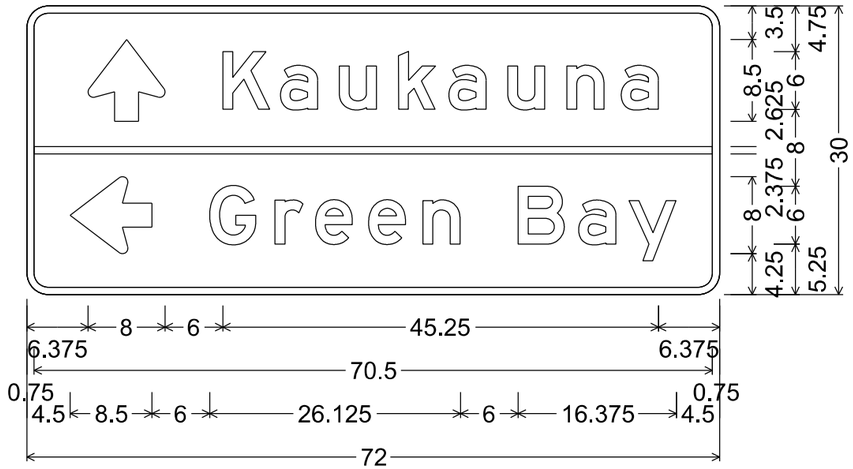
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7

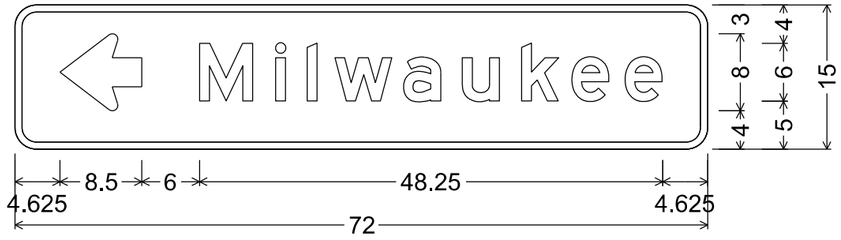
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | TEMPORARY SIGNING | SHEET NO: 355 | E |
|---|---|---|---|---|---|

NOTES

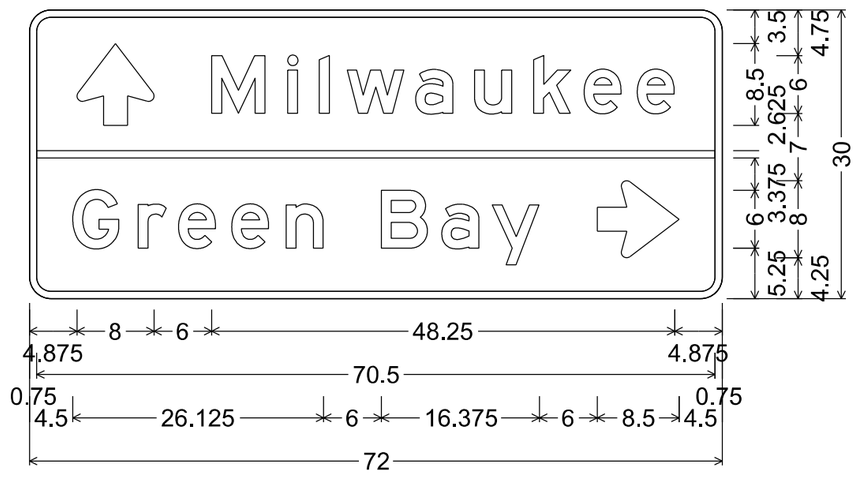
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



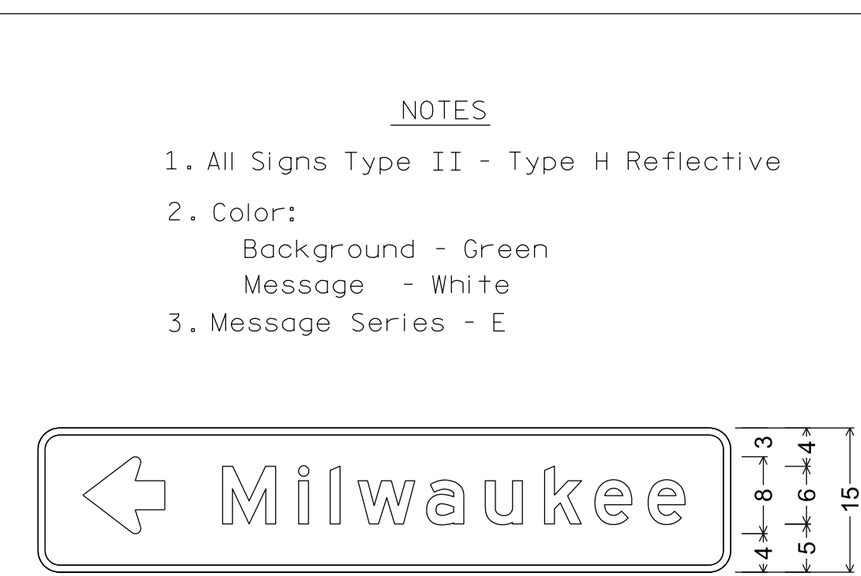

D1-2; 2.250" Radius, 0.750" Border




D1-1; 2.250" Radius, 0.750" Border




D1-2; 2.250" Radius, 0.750" Border




D1-3; 2.250" Radius, 0.750" Border

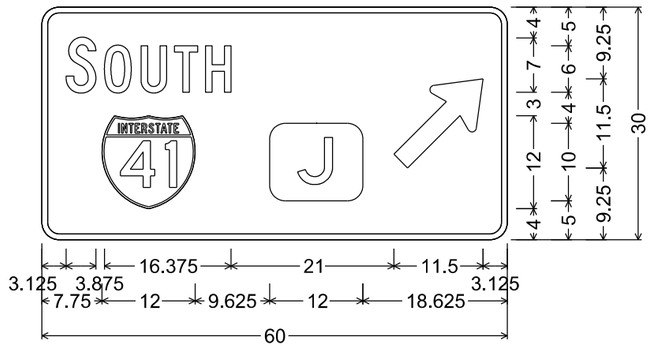


| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PERMANENT SIGNING | SHEET NO: 356 | E |
|---|---|---|---|---|---|

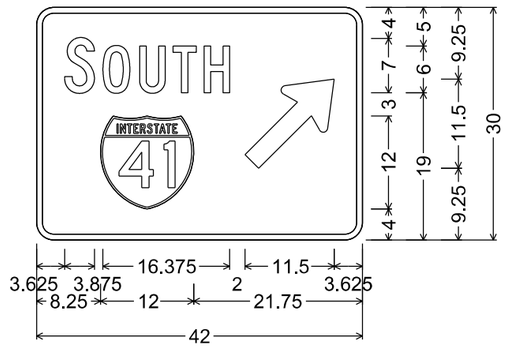

FILE NAME : C:\CAEfiles\Projects\tr_d3\3449a923.dgn PLOT DATE : 21-SEPT 2023 1:50 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES

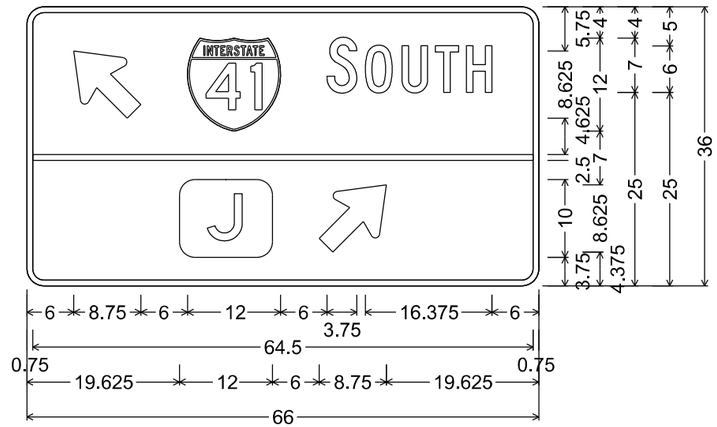
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C



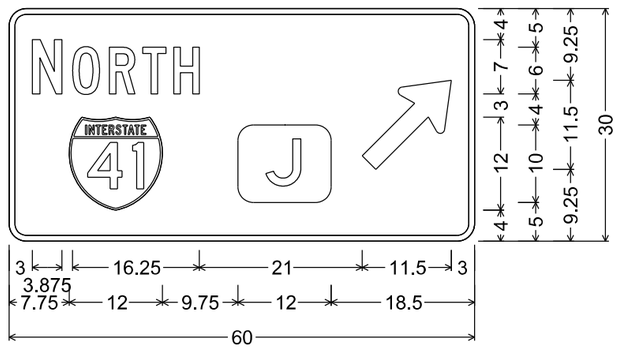

D1-1; 2.250" Radius, 0.750" Border



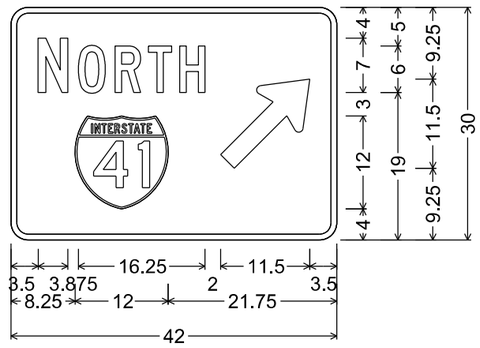

D1-1; 2.250" Radius, 0.750" Border



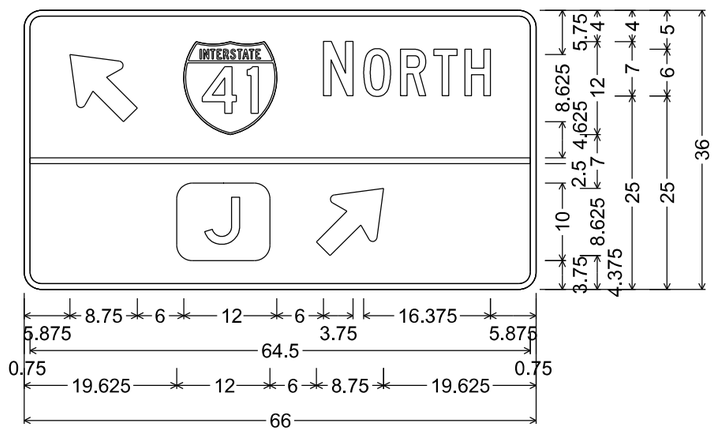

D1-2; 2.250" Radius, 0.750" Border



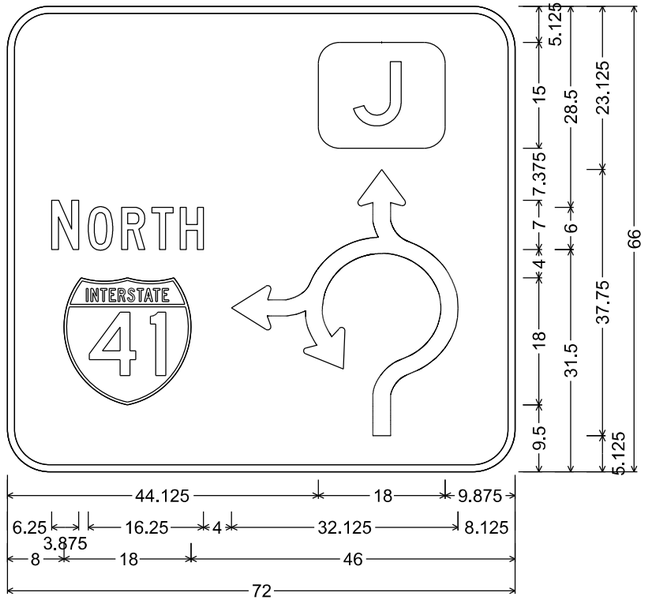

D1-2; 2.250" Radius, 0.750" Border




D1-1; 2.250" Radius, 0.750" Border



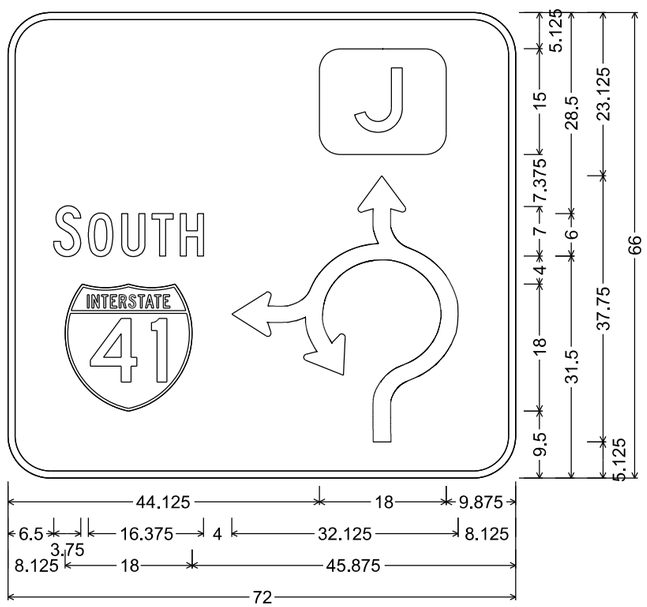

D1-2; 2.250" Radius, 0.750" Border



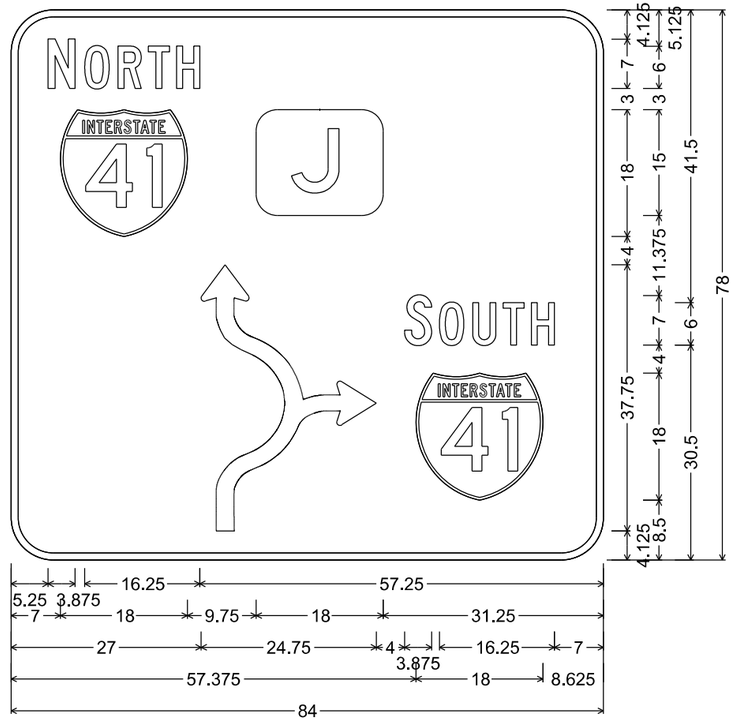

D1-62; 6.000" Radius, 1.000" Border

NOTES

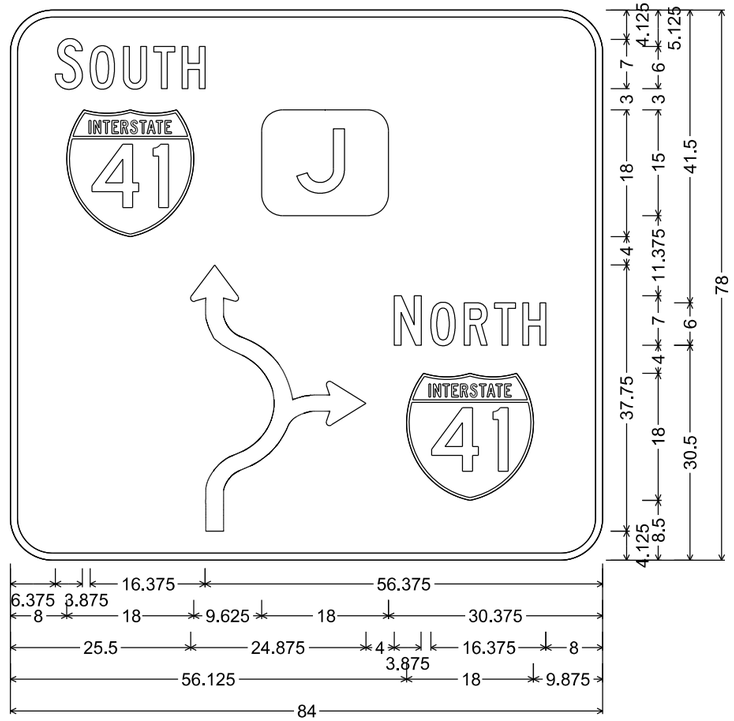
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C




D1-62; 6.000" Radius, 1.000" Border




D1-62; 6.000" Radius, 1.000" Border




D1-62; 6.000" Radius, 1.000" Border

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | PERMANENT SIGNING | SHEET NO: 358 | E |
|---|---|---|---|---|---|

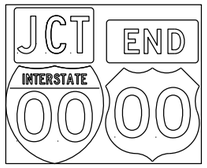
FILE NAME : C:\CAEfiles\Projects\tr_d3\3449d923.dgn PLOT DATE : 21-SEPT 2023 1:50 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42


7

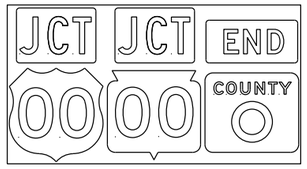
# TYPICAL ASSEMBLIES



J1-1



J1-2



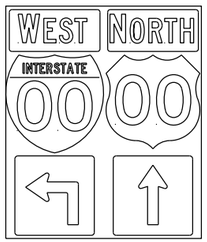
J1-3



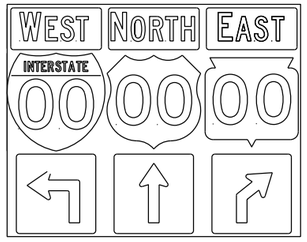
JR1-1



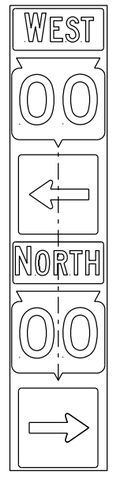
J2-1



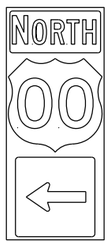
J2-2



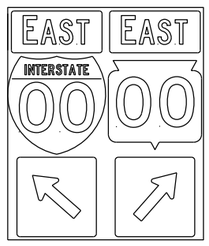
J2-3



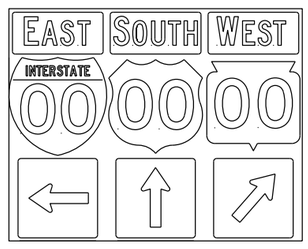
JV
( Typical Vertical J-Assembly
See Note 10 and 11 )



J3-1



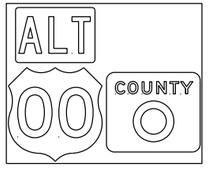
J3-2



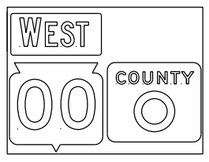
J3-3



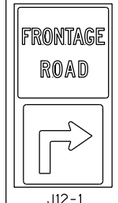
J4-1



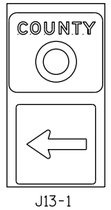
J4-2



J4-2



J12-1



J13-1



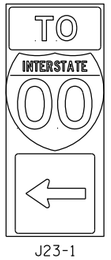
J32-1



J33-1



J22-1



J23-1



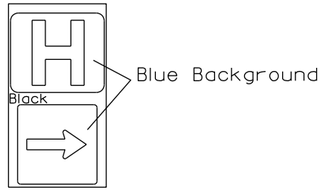
JR13-1



JR23-1



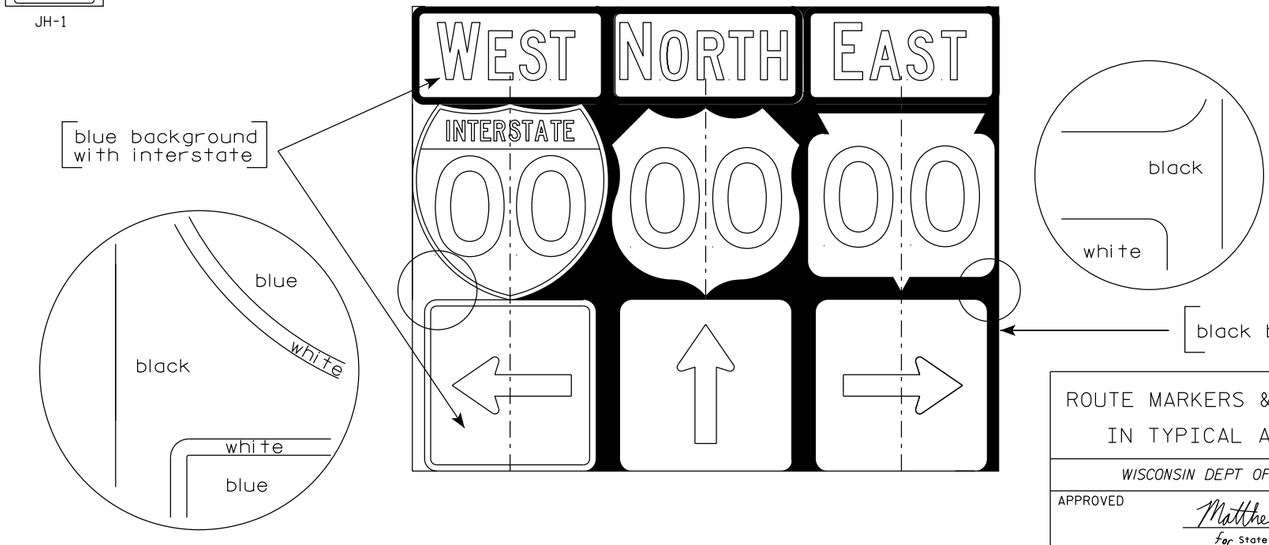
JR99-1



JH-1

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 4
3. Message Series - See Note 4
4. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
5. 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.
6. 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.
7. 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.
8. 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.
9. All Vertical J Assemblies are given a Sign Code of JV
10. For JV Assemblies that have a mixture of Interstate and Non-Interstate shields, arrows and cardinals shall be white on blue.
11. For JV Assemblies that have a mixture of Non-Interstate and Auto-Tour shields, arrows and cardinals shall be black on white.




ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

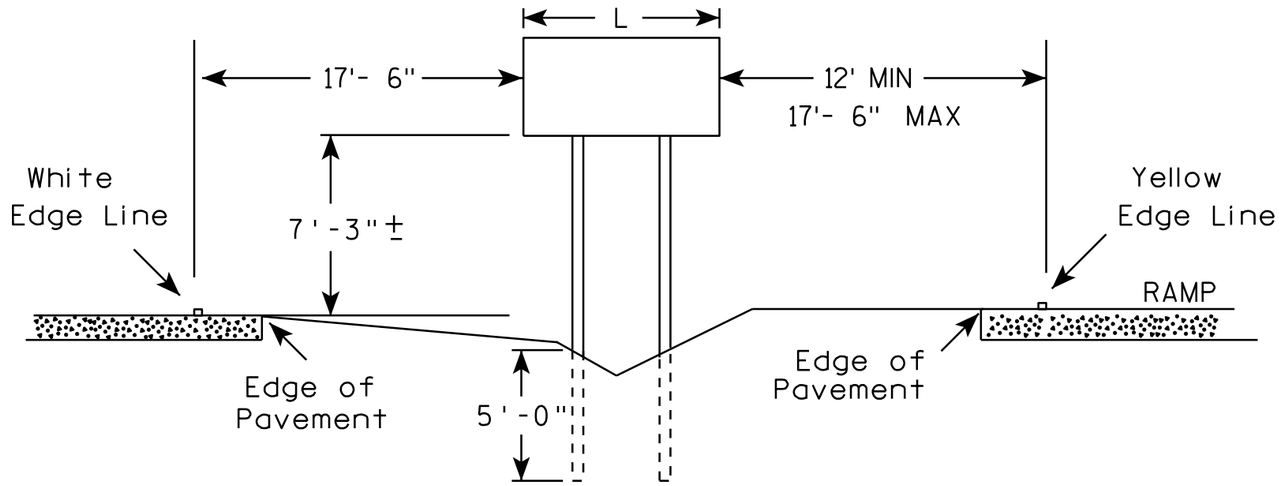
*WISCONSIN DEPT OF TRANSPORTATION*

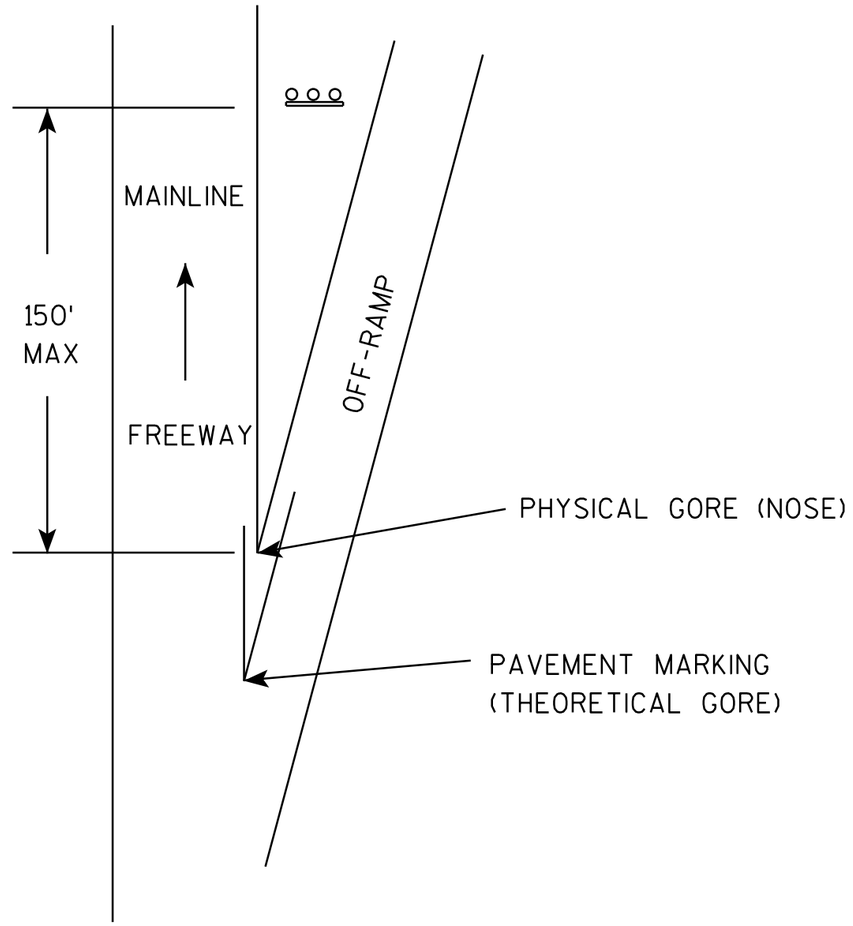
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/23 PLATE NO. A2-1S.10

PROJECT NO:

SHEET NO: 359 E




GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 10 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

7

7

TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

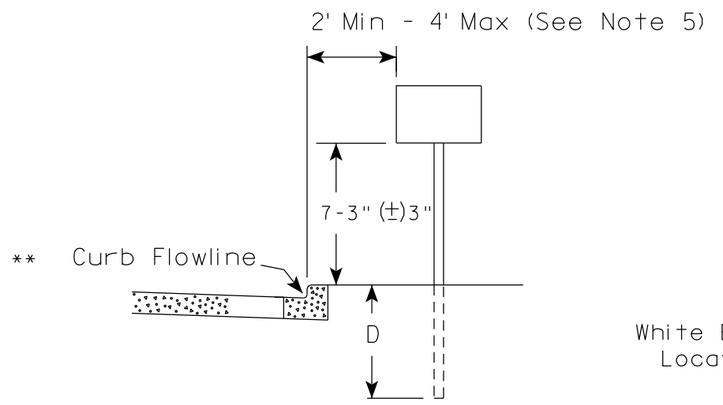
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

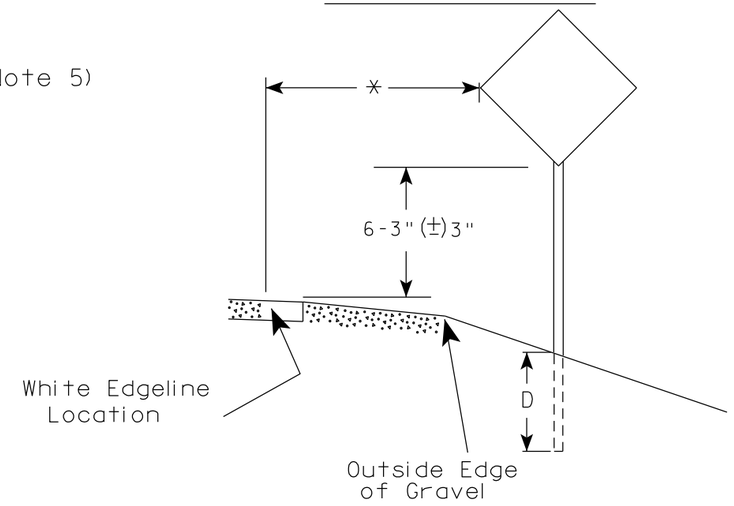
DATE 2/06/14 PLA 360 A4-2.3

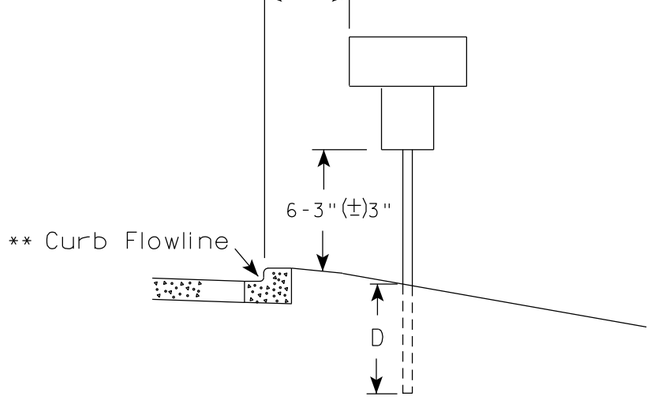
PROJECT NO: | SHEET NO: E

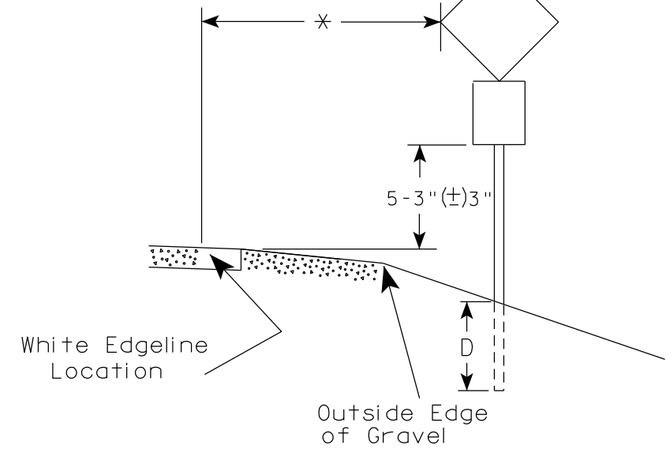
## URBAN AREA




## RURAL AREA (See Note 2)




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

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

### 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" (±) 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".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

### POST EMBEDMENT DEPTH

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

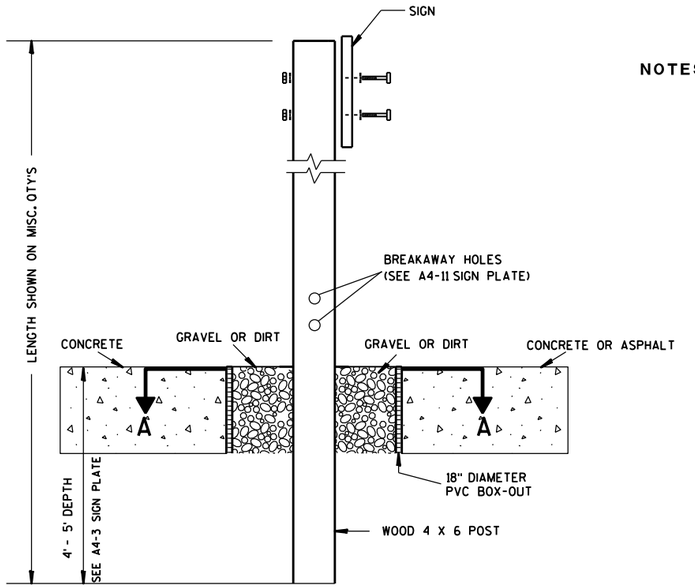
# TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

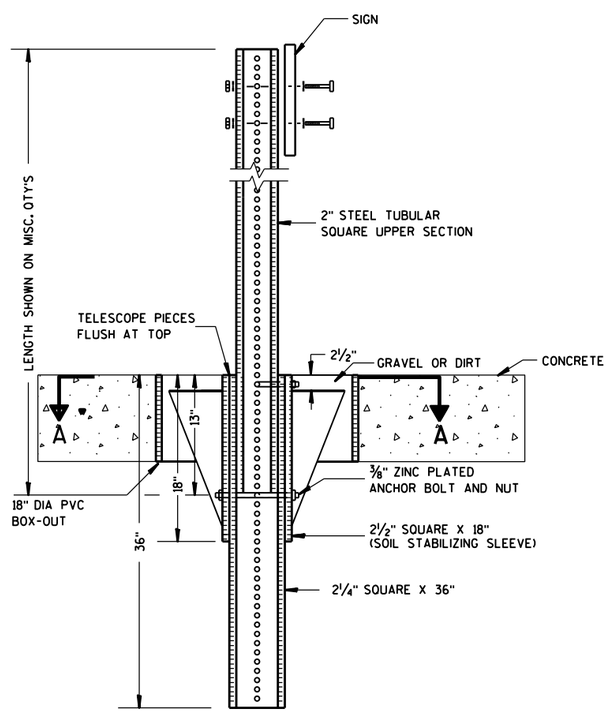
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 361 | E |
|---|---|---|---|---|---|




**ELEVATION VIEW**

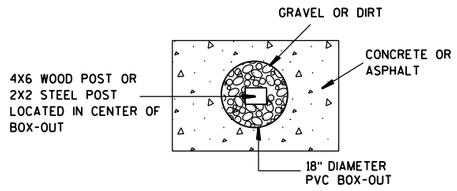
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

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

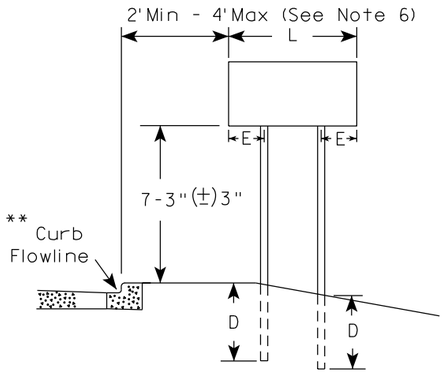
DATE 1/27/14 PLATE NO. A4-3B.1



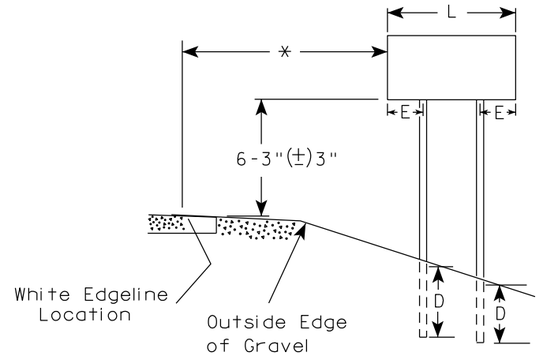
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

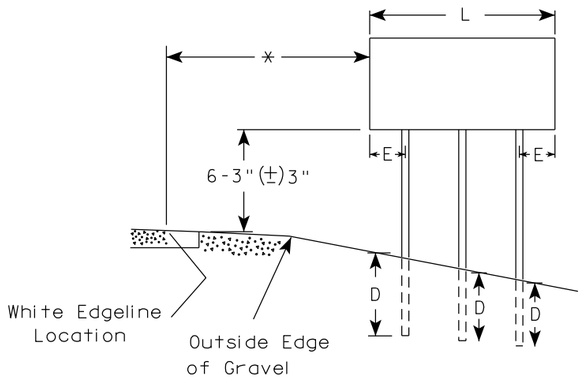
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

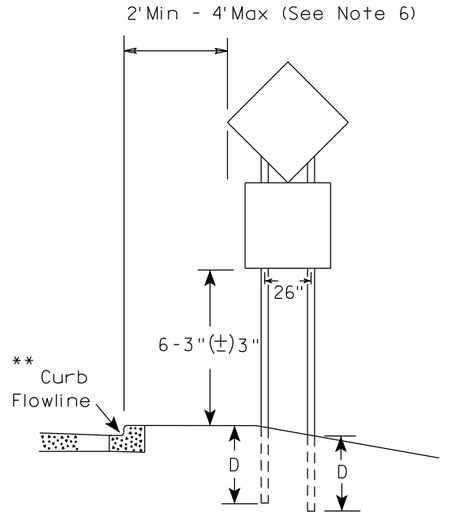
## URBAN AREA



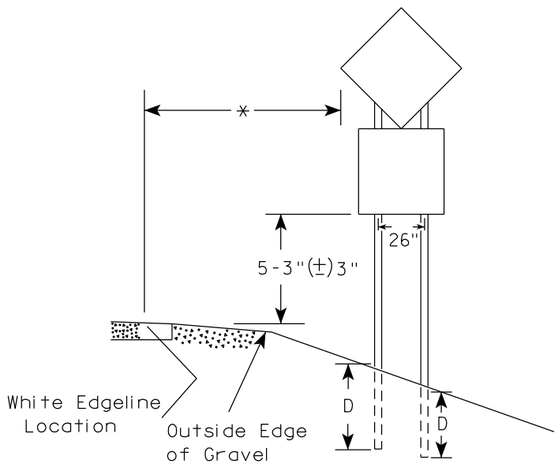

## RURAL AREA (See Note 3)




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" (±) 3" or 6'-3" (±) 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" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 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" (±) 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' |

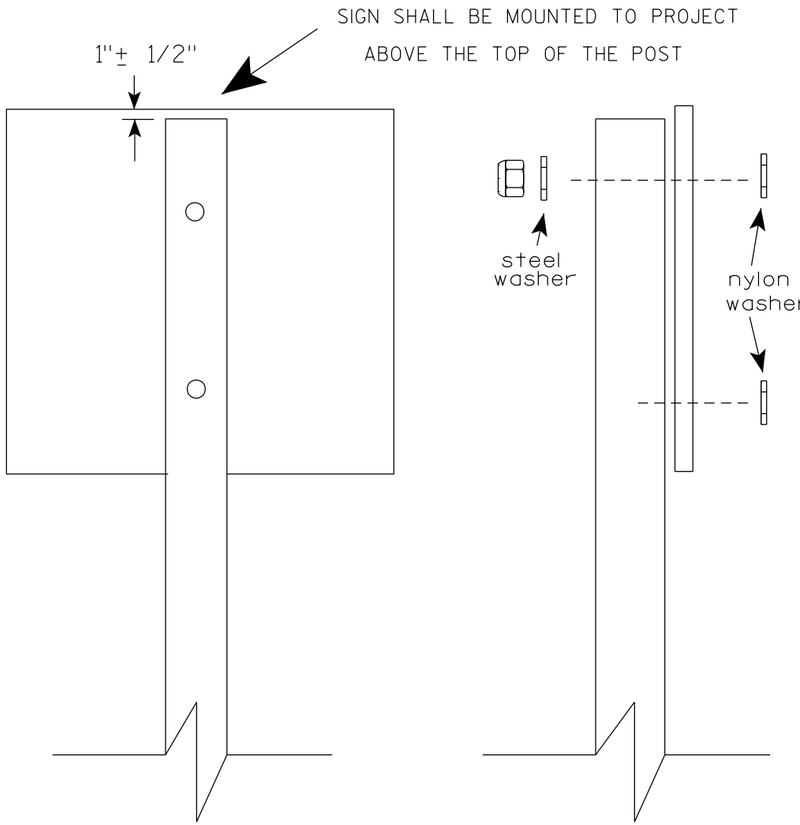
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

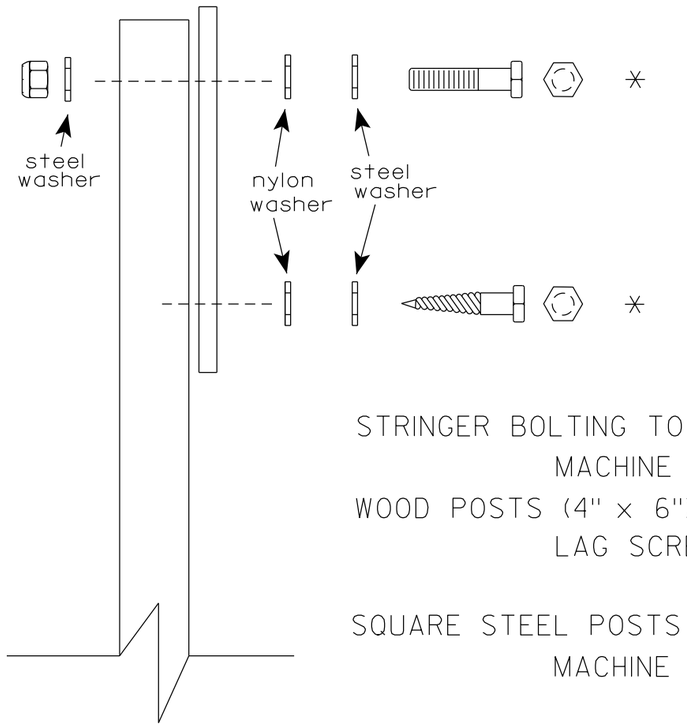
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 363 | 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

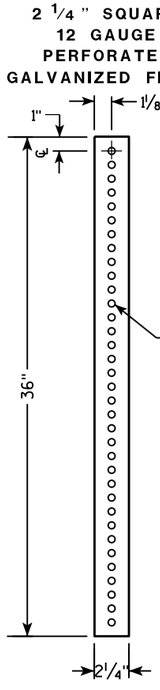
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

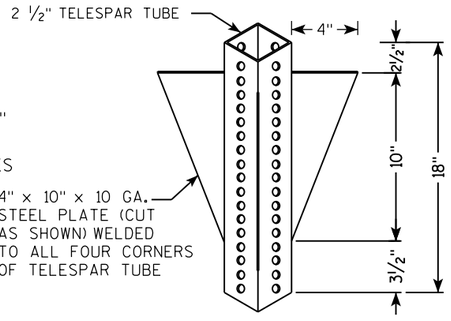
DATE 4/1/2020 PLATE NO. A4-8.9

## TELESCOPIC TUBING ANCHORS
## TWO PIECE SYSTEM

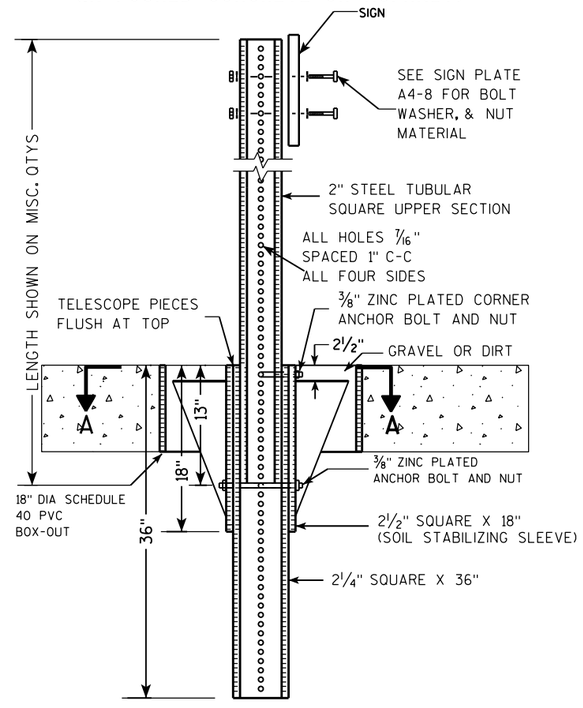
**2 1/4 " SQUARE**
**12 GAUGE**
**PERFORATED**
**GALVANIZED FINISH**



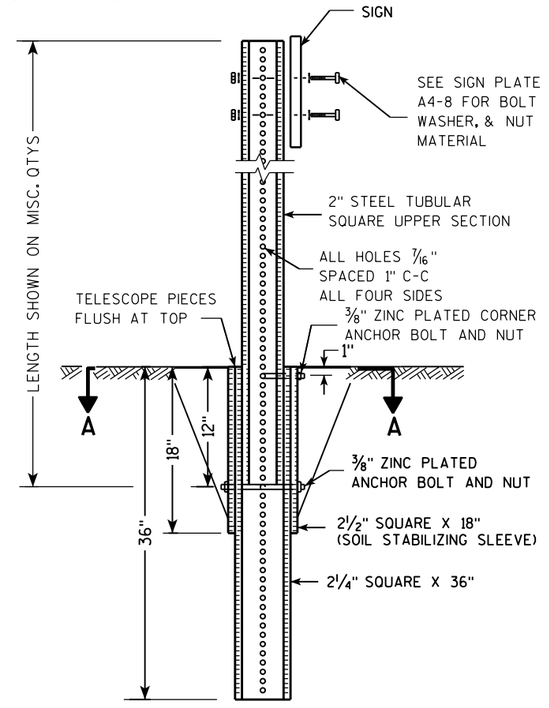

**2 1/2 " SQUARE**
**12 GAUGE**
**OMNI-DIRECTIONAL**
**PERFORATED**
**SOIL STABILIZING SLEEVE**
**GALVANIZED FINISH**

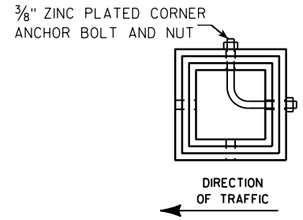



## DETAIL OF TUBULAR STEEL SIGN POST
**(IN POURED CONCRETE OR ASPHALT)**




## 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*

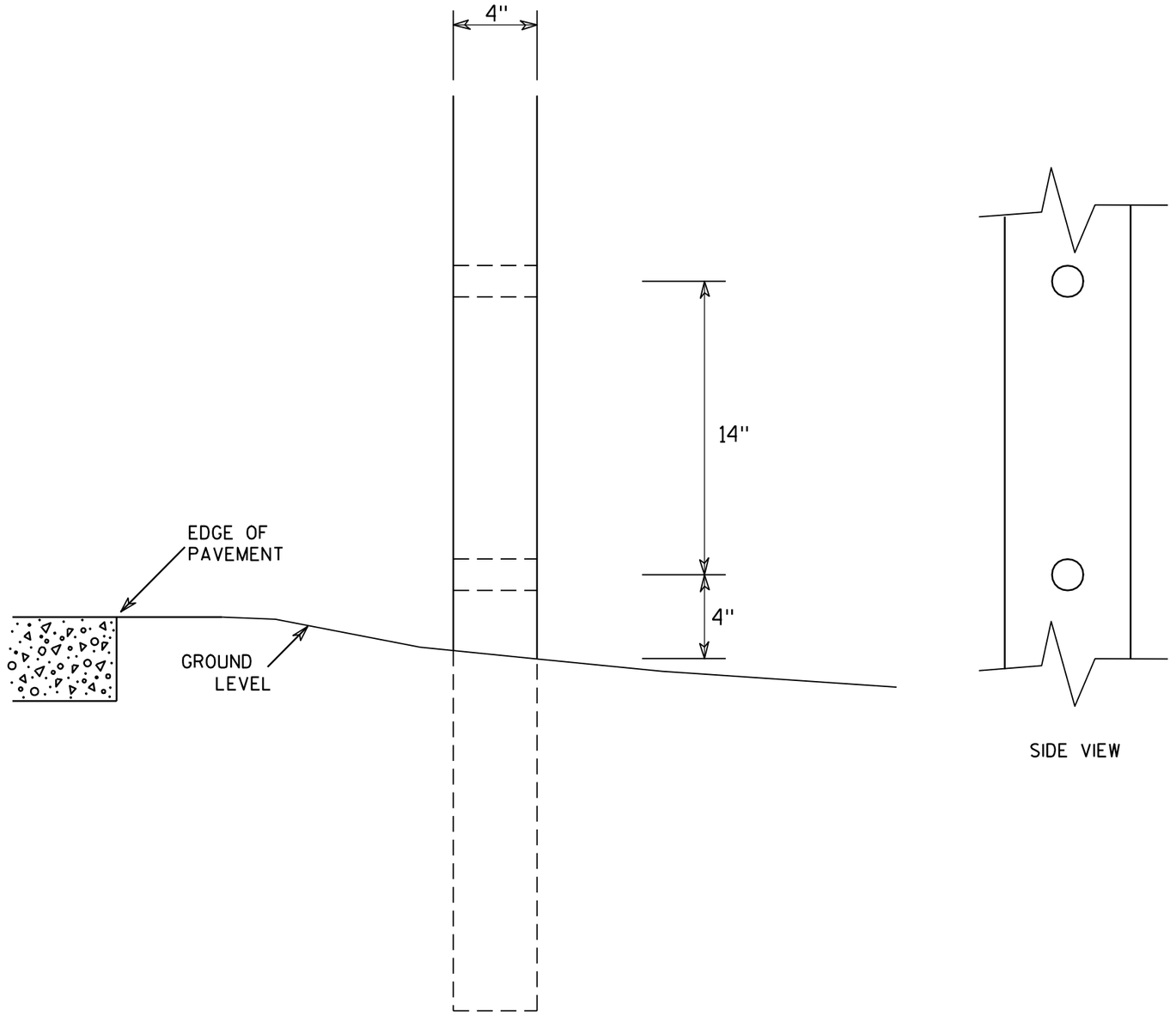
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/05/15 PLATE 365 A4-9.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42






SIDE VIEW

GENERAL NOTES

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

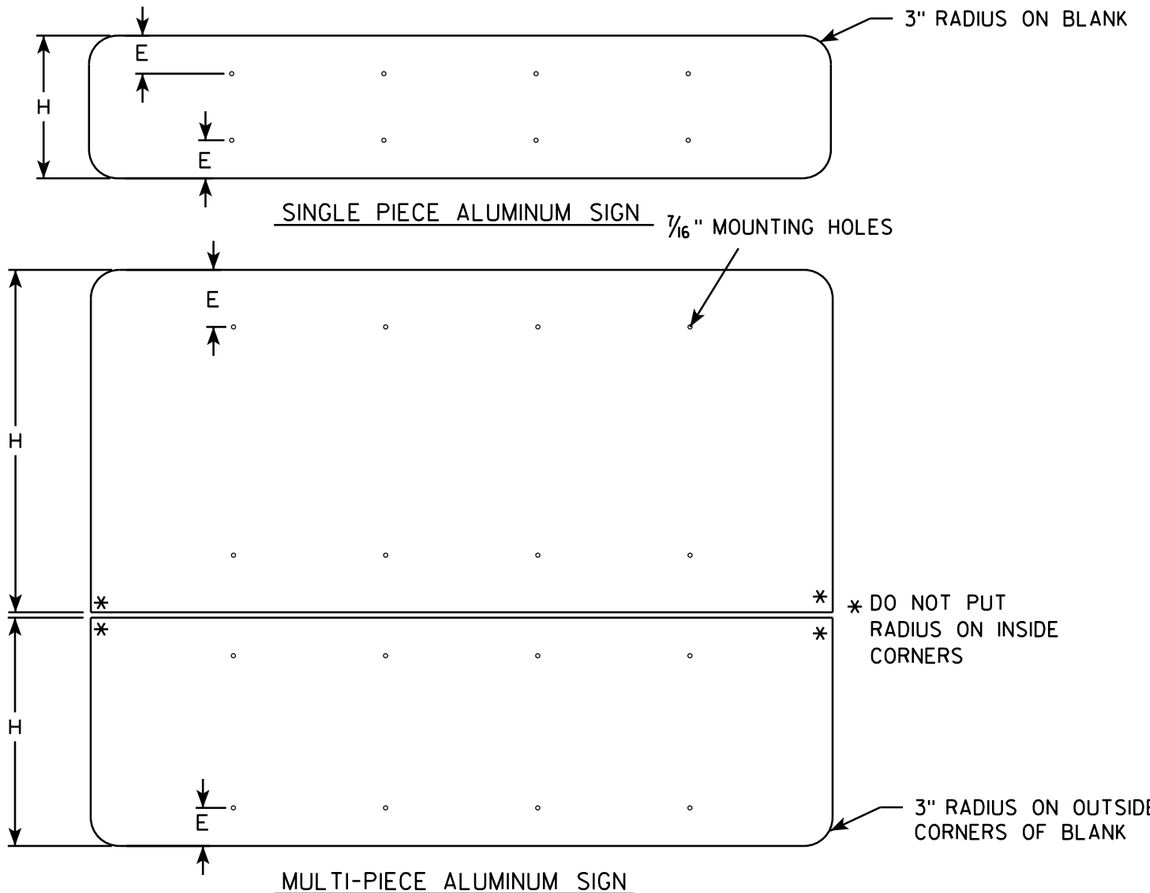
# 4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

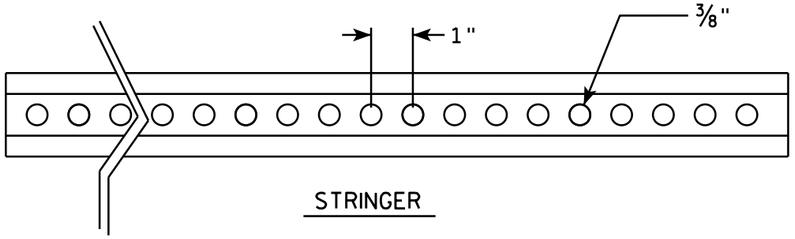
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 366 | E |
|---|---|---|---|---|---|




# GENERAL NOTES

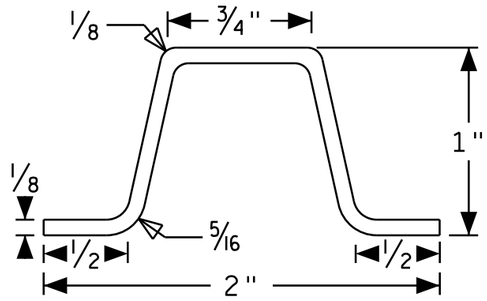
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 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" |

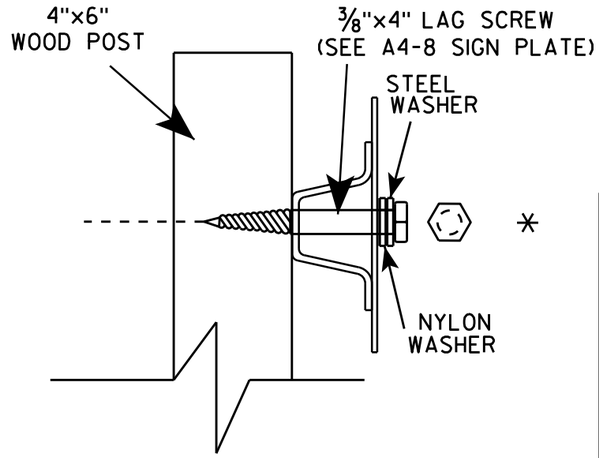



STRINGER

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

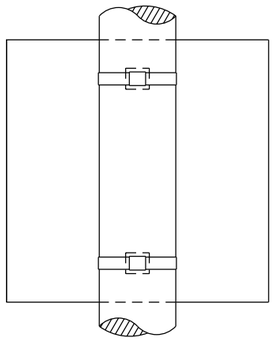
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

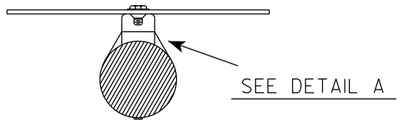


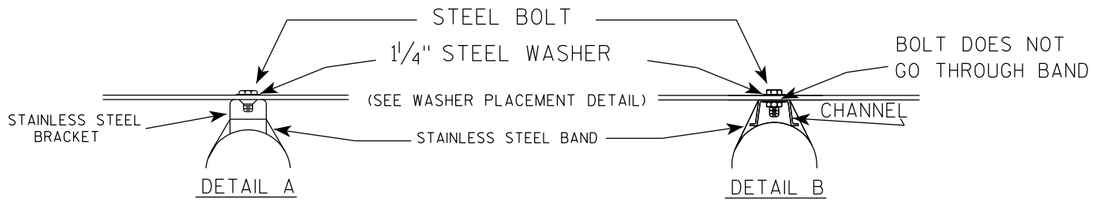
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

# BANDING

SINGLE SIGN



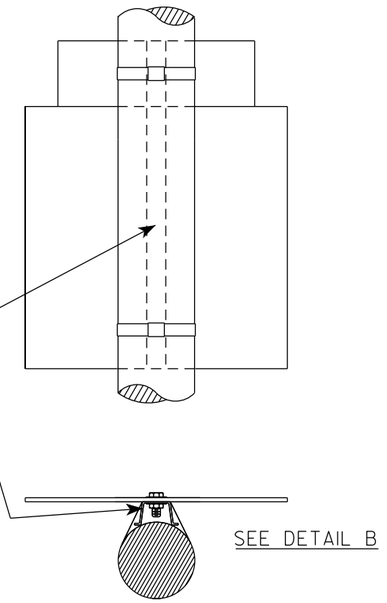


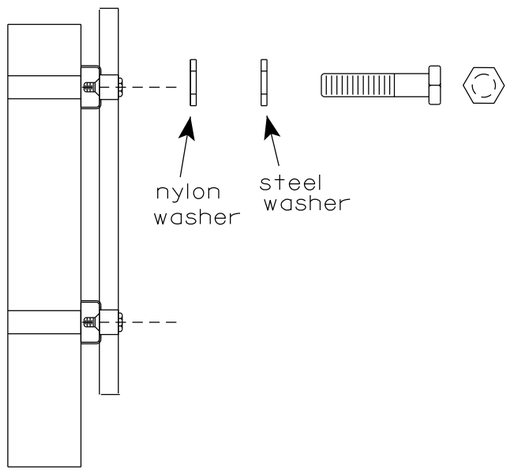

## GENERAL NOTES

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

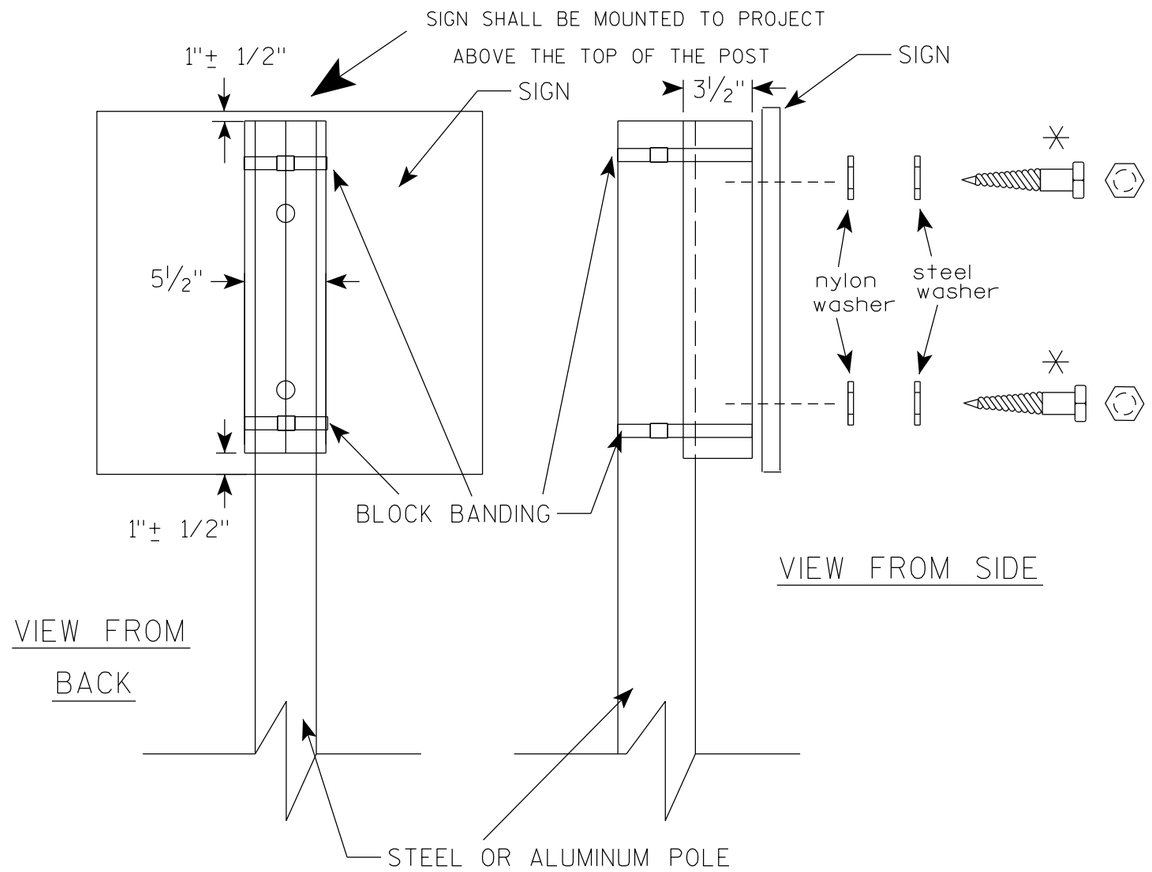
DATE 6/10/19 PLATE NO. A5-9.4

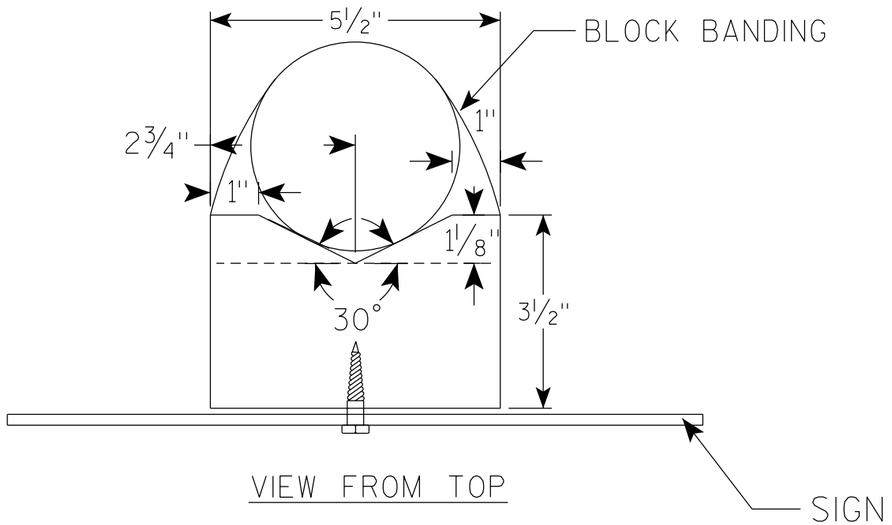
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 368 | E |
|---|---|---|---|---|---|

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7




## 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 )

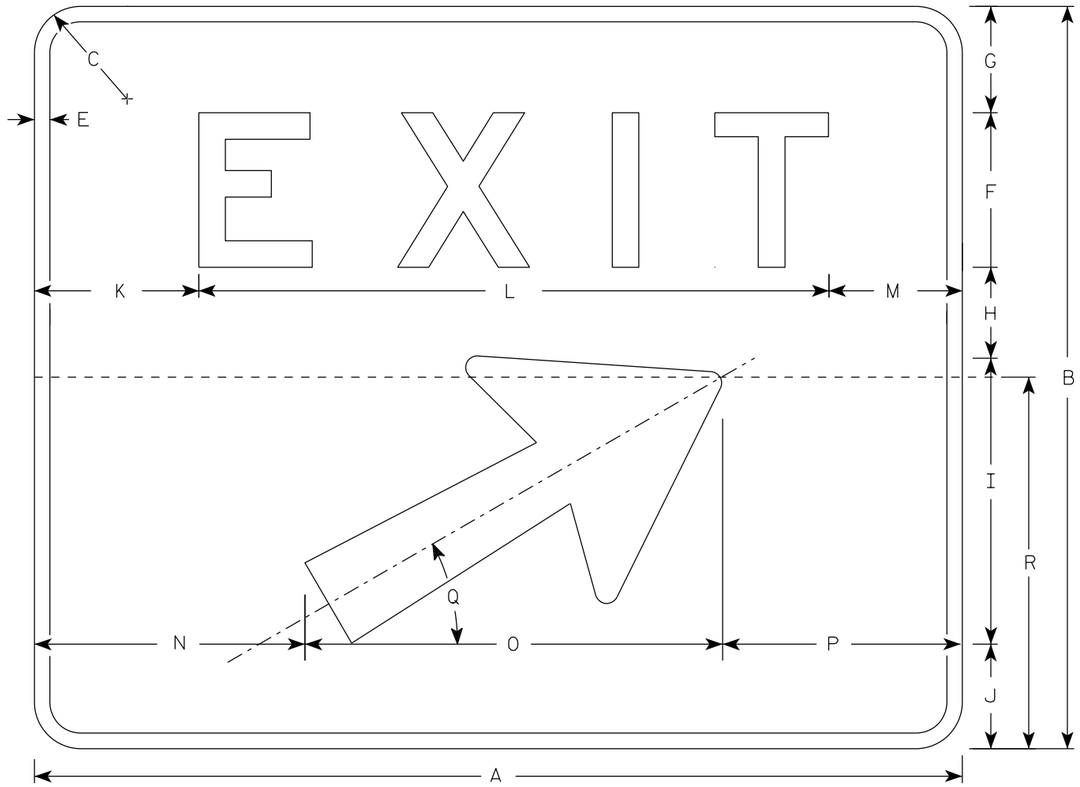
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 369 E




E5-1

NOTES

1. Sign is Type II - Type H reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E
4. Sign shall be split into two seperate pieces as shown on the detail by the dashed line (----------) for sizes 4 & 5.
5. Arrow is Type "A" from sign plate A1-1.
6. As per the Standard Spec's, this sign shall not have a vertical joint.
7. Size 3 E5-1 shall only be used in a Work Zone application with a Temporary Sign Support

| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2M | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 48 | 48 | 3 | | 1 | 10 | 6 7/8 | 5 7/8 | 18 1/2 | 6 3/4 | 8 1/2 | 31 1/8 | 8 3/8 | 11 1/2 | 27 | 9 1/2 | 30° | 30 | | | | | | | | | 16.0 |
| 4 | 60 | 48 | 3 | | 1 | 10 | 6 7/8 | 5 7/8 | 18 1/2 | 6 3/4 | 10 5/8 | 40 3/4 | 8 5/8 | 17 1/2 | 27 | 15 1/2 | 30° | 30 | | | | | | | | | 20.0 |
| 5 | 72 | 60 | 3 | | 1 | 12 | 9 3/4 | 10 | 18 1/2 | 9 3/4 | 13 1/4 | 48 1/2 | 10 1/4 | 23 1/2 | 27 | 21 1/2 | 30° | 30 | | | | | | | | | 30.0 |

STANDARD SIGN

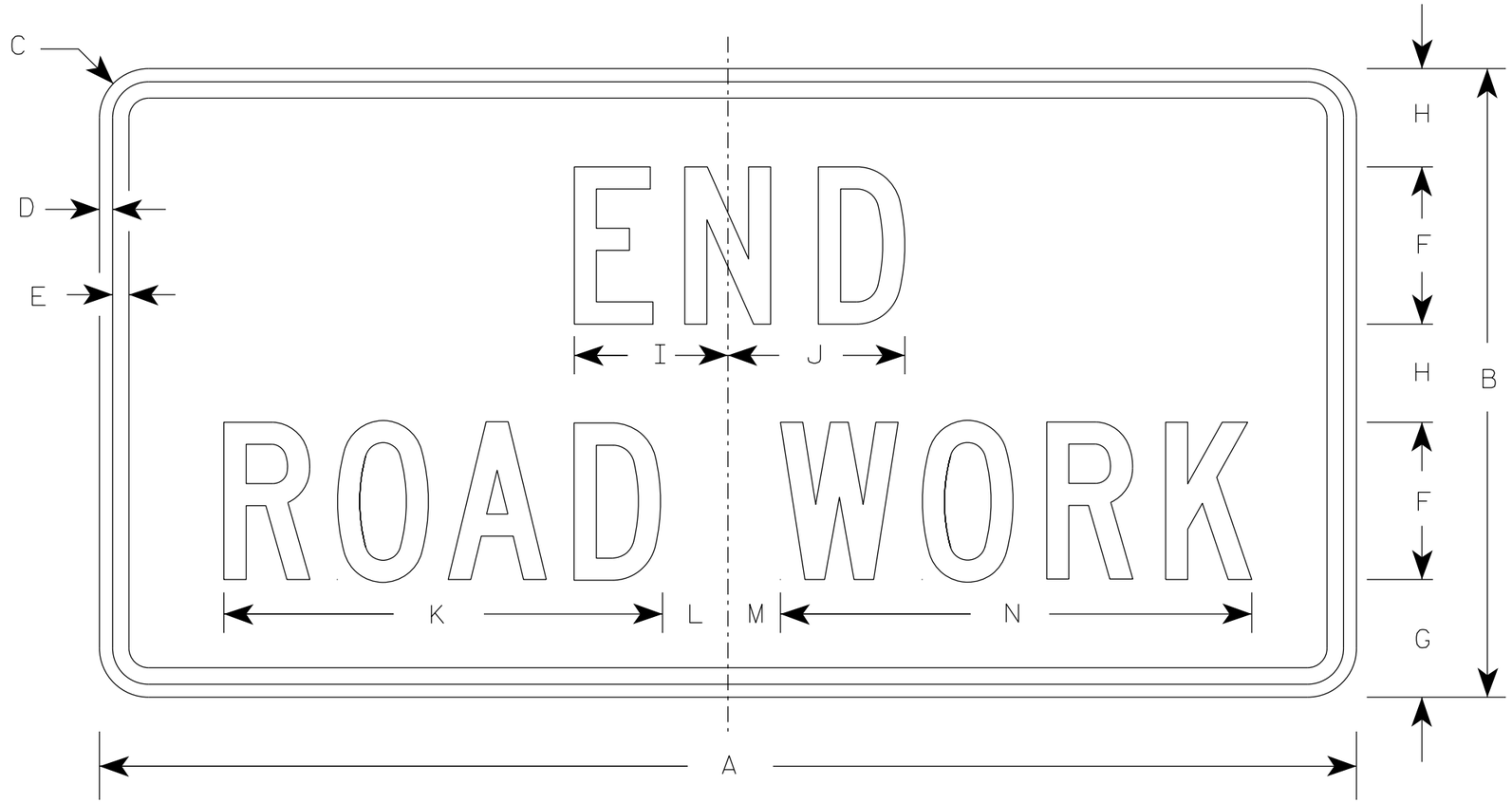
E5-1

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. E5-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 370 | E




G20-2A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 4 | 3 3/4 | 2 1/2 | 4 1/8 | 4 1/8 | 11 1/8 | 2 | 1 | 12 1/8 | | | | | | | | | | | | | 4.5 |
| 2 | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 |
| 3 | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 |
| 4 | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 |
| 5 | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 |

STANDARD SIGN

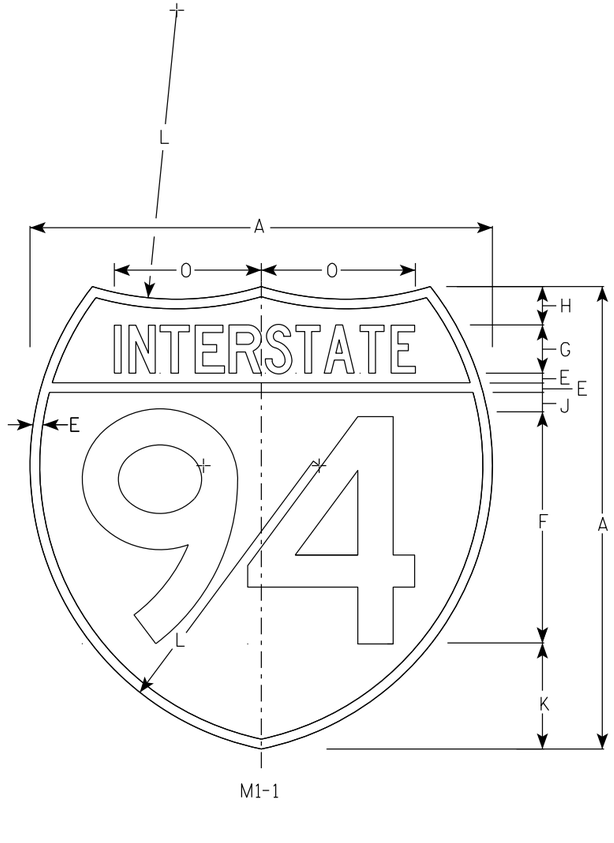
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

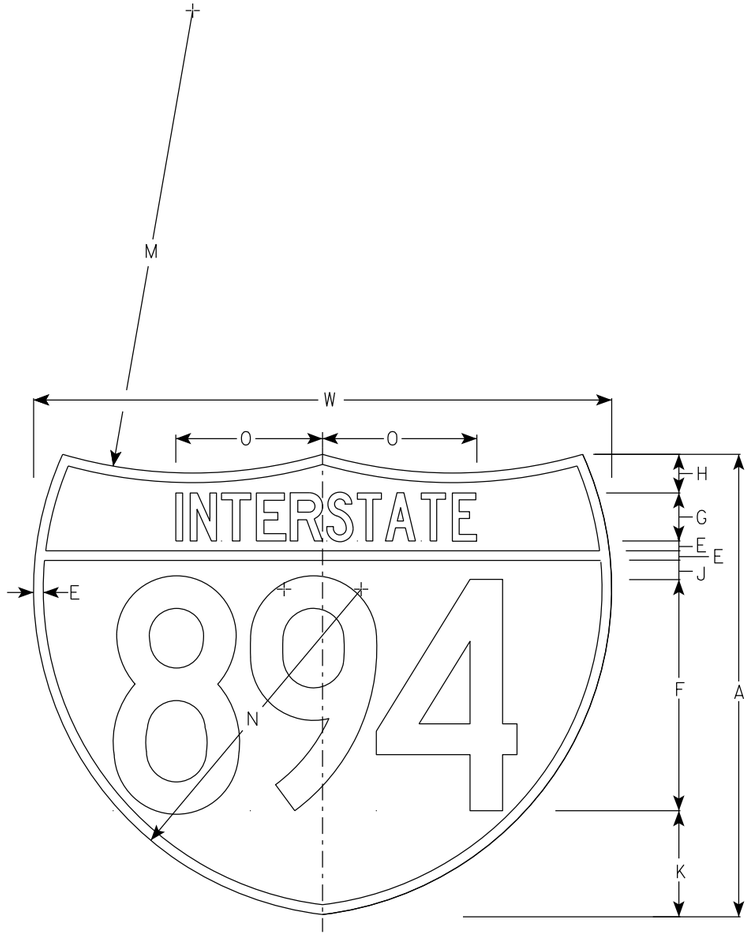
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 371 E




M1-1




M1-1A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Top Red - Bottom Blue
   Message - White
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | M1-1 Area sq. ft. | M1-1A Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | | | | 1/2 | 12 | 2 1/2 | 2 | | 1 | 5 1/2 | 15 | 24 | 17 | 7 7/8 | | | | | | | | 30 | | | 3.13 | 3.91 |
| 2M | 24 | | | | 1/2 | 12 | 2 1/2 | 2 | | 1 | 5 1/2 | 15 | 24 | 17 | 7 7/8 | | | | | | | | 30 | | | 3.13 | 3.91 |
| 3 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 |
| 4 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 |
| 5 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 |

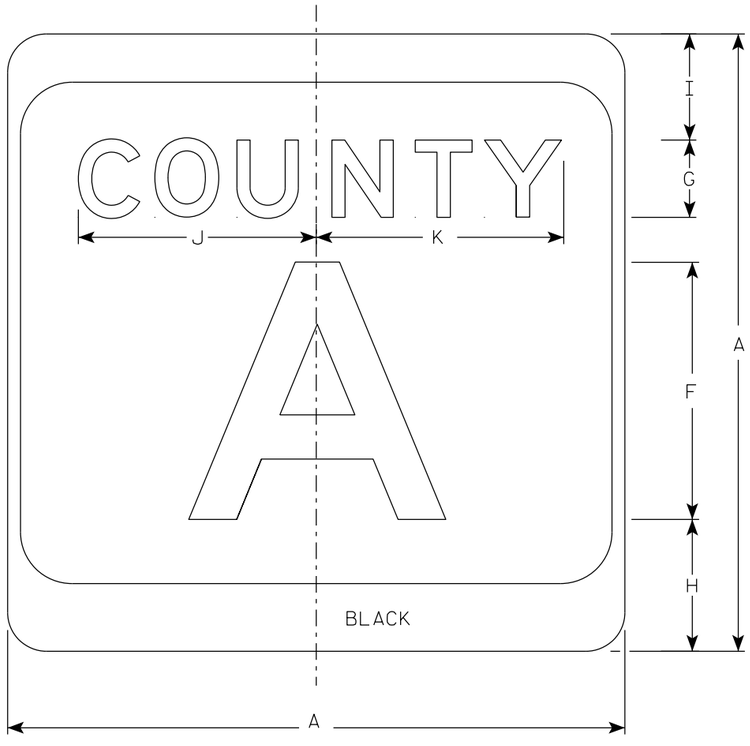
# INTERSTATE ROUTE MARKER M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

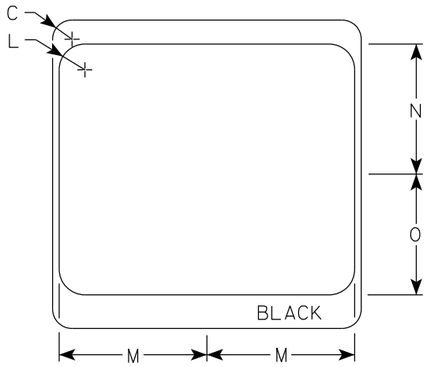
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 11/7/2022 PLATE NO. M1-1.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 372 | E

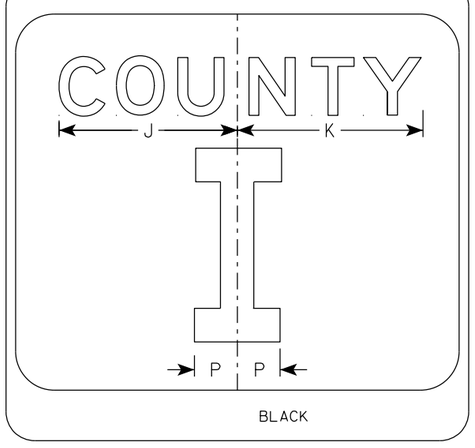


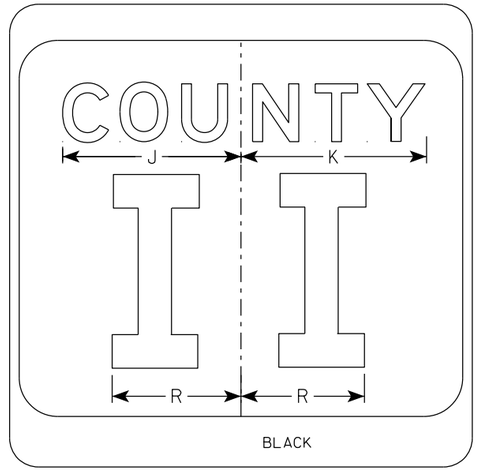

M1-5A




NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White & Black
   Message - Black
3. Message Series - see Note 4
4. 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.
5. Substitute appropriate letters & optically center 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 | 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 |
| 2M | 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

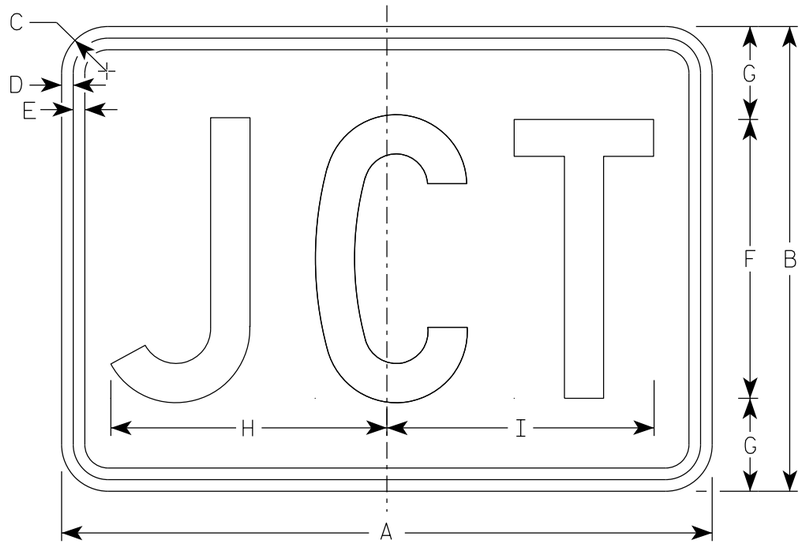
DATE 11/8/2022 PLATE NO. M1-5A.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

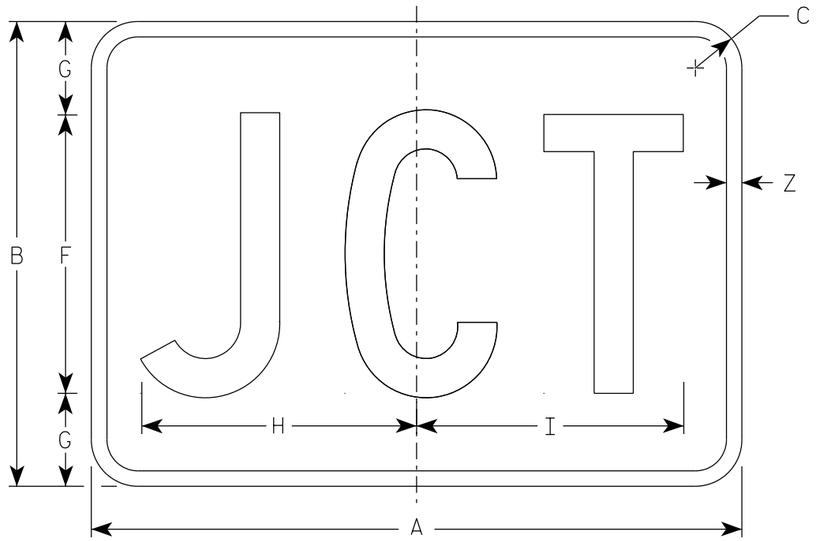


FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M15A.dgn PLOT DATE : 8-NOV 2022 8:26 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42


7




M2-1
MM2-1
MP2-1




MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 21 | 15 | 1 1/2 | 3/8 | 3/8 | 9 | 3 | 8 7/8 | 8 5/8 | | | | | | | | | | | | | | | | | 1/2 | 2.20 |
| 2M | 21 | 15 | 1 1/2 | 3/8 | 3/8 | 9 | 3 | 8 7/8 | 8 5/8 | | | | | | | | | | | | | | | | | 1/2 | 2.20 |
| 3 | 30 | 21 | 1 1/2 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | | 1/2 | 4.40 |
| 4 | 30 | 21 | 1 1/2 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | | 1/2 | 4.40 |
| 5 | 30 | 21 | 1 1/2 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | | 1/2 | 4.40 |

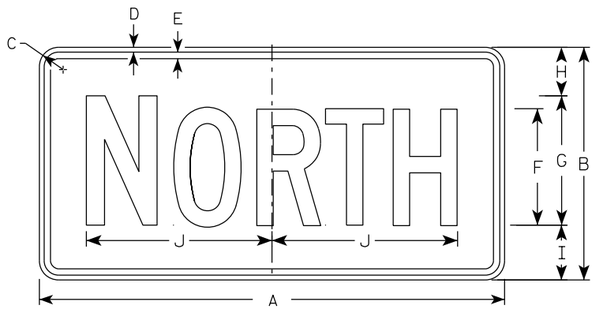
STANDARD SIGN
M2-1

*WISCONSIN DEPT OF TRANSPORTATION*

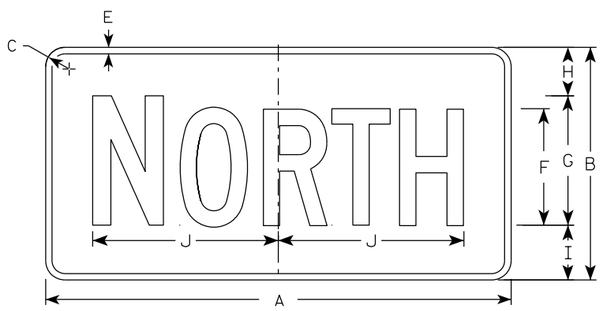
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M2-1.14

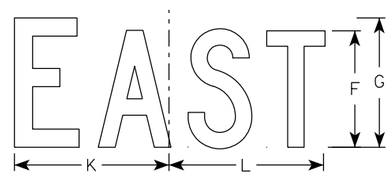
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 374 | E




M3-1
MM3-1
MP3-1



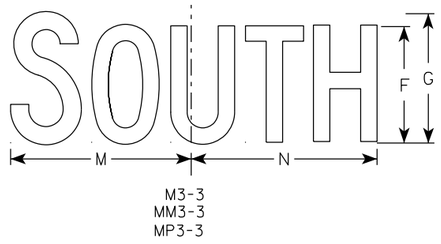

MB3-1
MK3-1
MN3-1



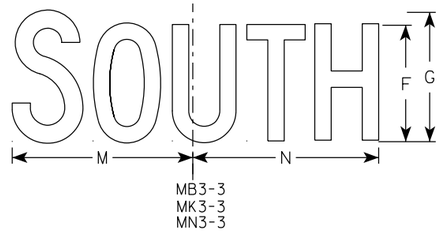

M3-2
MM3-2
MP3-2



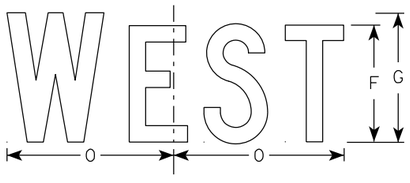

MB3-2
MK3-2
MN3-2



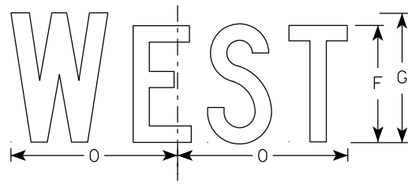

M3-3
MM3-3
MP3-3




MB3-3
MK3-3
MN3-3




M3-4
MM3-4
MP3-4




MB3-4
MK3-4
MN3-4

## NOTES

1. All Signs Type II - Type H Reflective
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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 12 | 1 1/2 | 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 | | | | | | | | | | | | 2.00 |
| 2M | 24 | 12 | 1 1/2 | 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 | | | | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | | | | | | | | | | 4.5 |

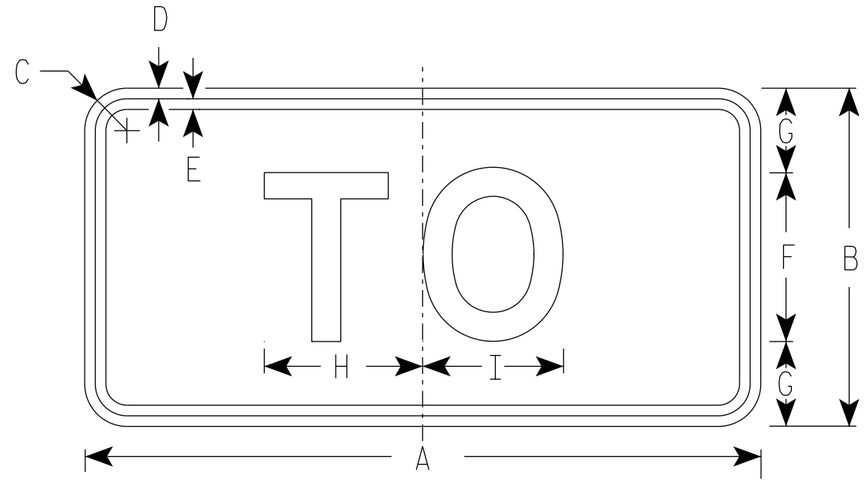
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

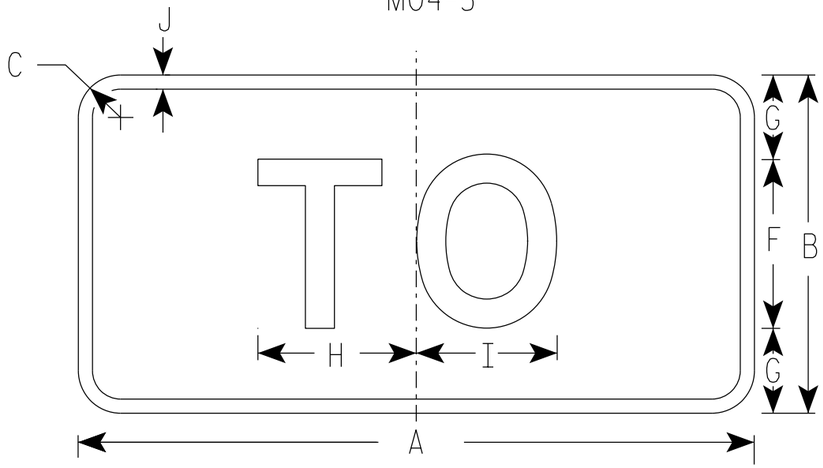
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 375 | E




M4-5
MM4-5
MP4-5
M04-5




MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
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. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   M04-5 Background - Orange Type F Reflective
   Message - Black

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 12 | 1 ½ | ⅜ | ⅜ | 6 | 3 | 5 ⅜ | 5 ¼ | ½ | | | | | | | | | | | | | | | | | 2.00 |
| 2M | 24 | 12 | 1 ½ | ⅜ | ⅜ | 6 | 3 | 5 ⅜ | 5 ¼ | ½ | | | | | | | | | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 ½ | ⅜ | ½ | 9 | 4 ½ | 8 ¼ | 8 ⅜ | ½ | | | | | | | | | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 ½ | ⅜ | ½ | 9 | 4 ½ | 8 ¼ | 8 ⅜ | ½ | | | | | | | | | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 ½ | ⅜ | ½ | 9 | 4 ½ | 8 ¼ | 8 ⅜ | ½ | | | | | | | | | | | | | | | | | 4.5 |

STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M4-5.11

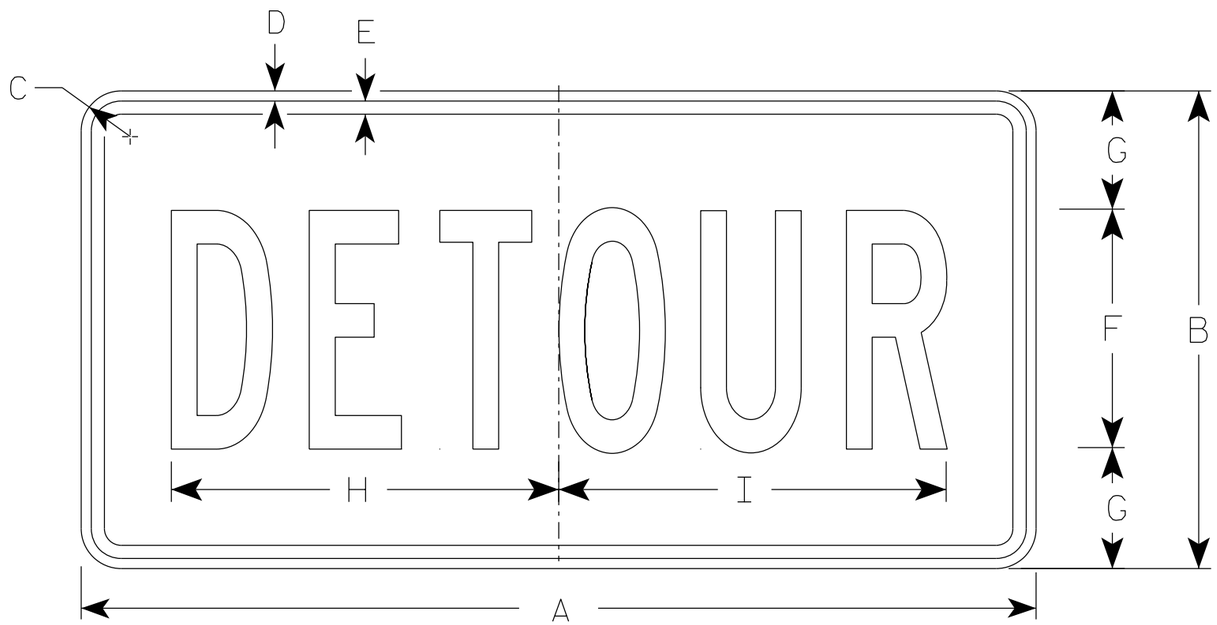
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 376 E




7

NOTES

1. Sign is Type II - Type F Reflective
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.




M4-8

| 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 1/2 | 3/8 | 3/8 | 6 | 3 | 10 | 10 1/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 2M | 24 | 12 | 1 1/2 | 3/8 | 3/8 | 6 | 3 | 10 | 10 1/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 9 | 4 1/2 | 14 5/8 | 14 1/2 | | | | | | | | | | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 9 | 4 1/2 | 14 5/8 | 14 1/2 | | | | | | | | | | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 9 | 4 1/2 | 14 5/8 | 14 1/2 | | | | | | | | | | | | | | | | | | 4.5 |

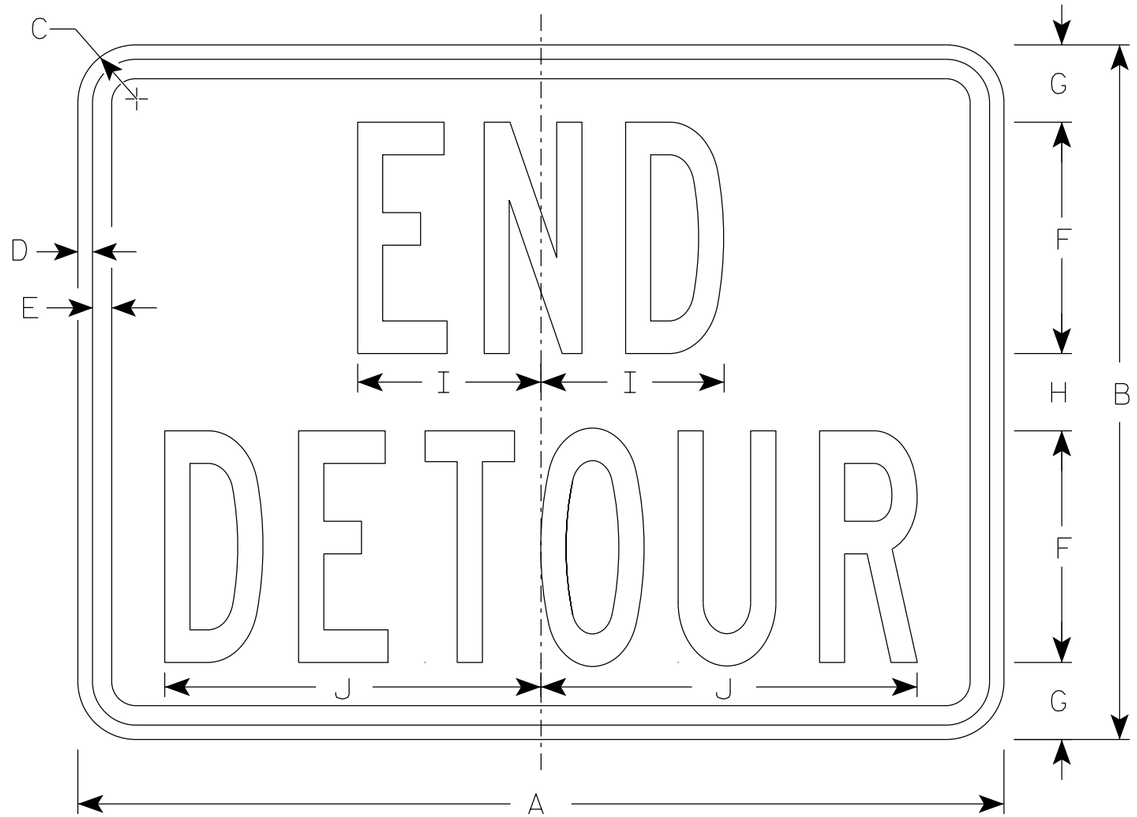
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 377 | E |
|---|---|---|---|---|---|




M4-8A

NOTES

1. Sign is Type II - Type F Reflective
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 ½ | ⅜ | ½ | 6 | 2 | 2 | 4 ¾ | 9 ¾ | | | | | | | | | | | | | | | | | 3.0 |
| 2M | 24 | 18 | 1 ½ | ⅜ | ½ | 6 | 2 | 2 | 4 ¾ | 9 ¾ | | | | | | | | | | | | | | | | | 3.0 |
| 3 | 30 | 24 | 1 ½ | ⅜ | ½ | 8 | 2 ½ | 3 | 6 ¾ | 13 | | | | | | | | | | | | | | | | | 5.0 |
| 4 | 30 | 24 | 1 ½ | ⅜ | ½ | 8 | 2 ½ | 3 | 6 ¾ | 13 | | | | | | | | | | | | | | | | | 5.0 |
| 5 | 30 | 24 | 1 ½ | ⅜ | ½ | 8 | 2 ½ | 3 | 6 ¾ | 13 | | | | | | | | | | | | | | | | | 5.0 |

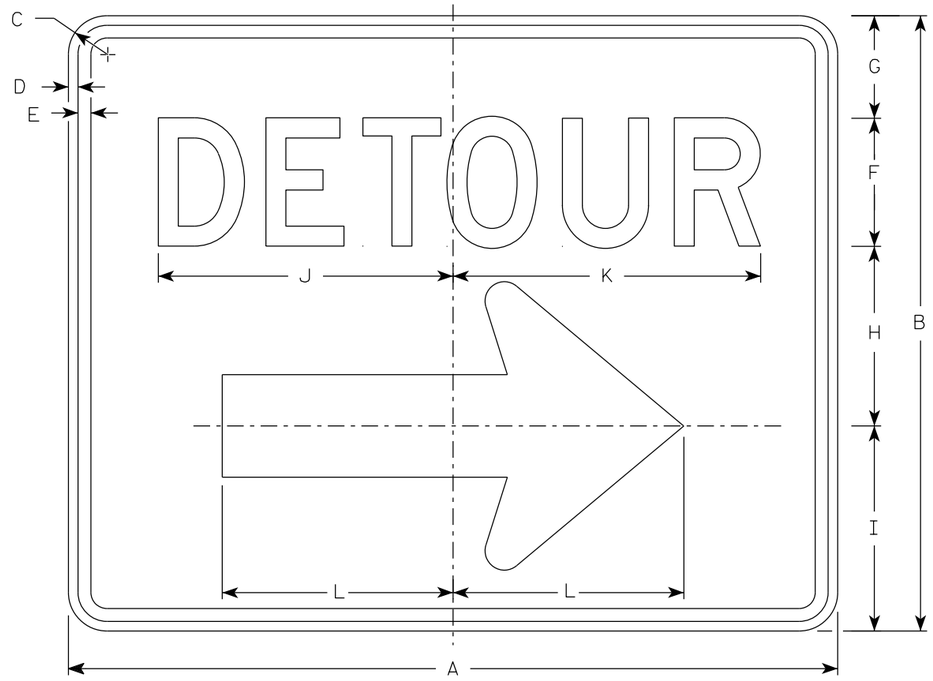
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

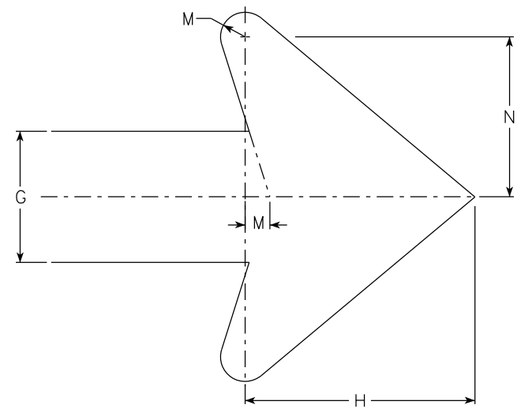
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 378 | E




M4-9R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   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.
4. M4-9L is the same as M4-9R except the arrow 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 30 | 24 | 1 1/2 | 3/8 | 1/2 | 5 | 4 | 7 | 8 | 11 1/2 | 12 | 9 | 3/4 | 4 7/8 | | | | | | | | | | | | | 5.00 |
| 2M | 30 | 24 | 1 1/2 | 3/8 | 1/2 | 5 | 4 | 7 | 8 | 11 1/2 | 12 | 9 | 3/4 | 4 7/8 | | | | | | | | | | | | | 5.00 |
| 3 | 30 | 24 | 1 1/2 | 3/8 | 1/2 | 5 | 4 | 7 | 8 | 11 1/2 | 12 | 9 | 3/4 | 4 7/8 | | | | | | | | | | | | | 5.00 |
| 4 | 48 | 36 | 1 7/8 | 1/2 | 5/8 | 8 | 6 | 10 1/2 | 11 5/8 | 20 5/8 | 20 1/2 | 13 1/4 | 1 1/8 | 6 7/8 | | | | | | | | | | | | | 12.0 |
| 5 | 48 | 36 | 1 7/8 | 1/2 | 5/8 | 8 | 6 | 10 1/2 | 11 5/8 | 20 5/8 | 20 1/2 | 13 1/4 | 1 1/8 | 6 7/8 | | | | | | | | | | | | | 12.0 |

# STANDARD SIGN
# M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

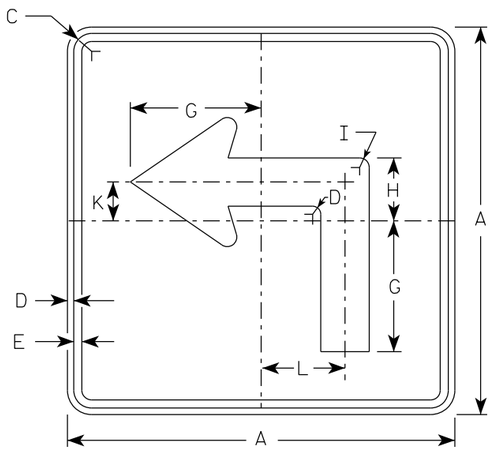
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9R.6

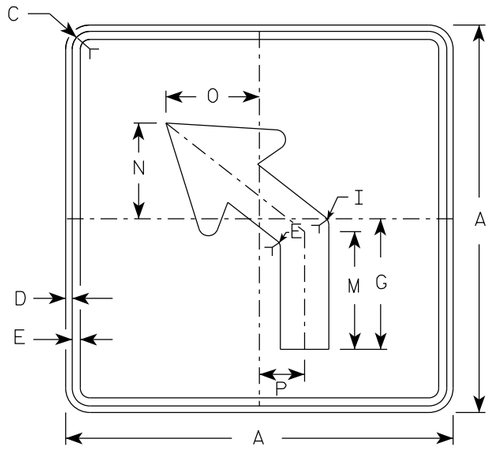
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



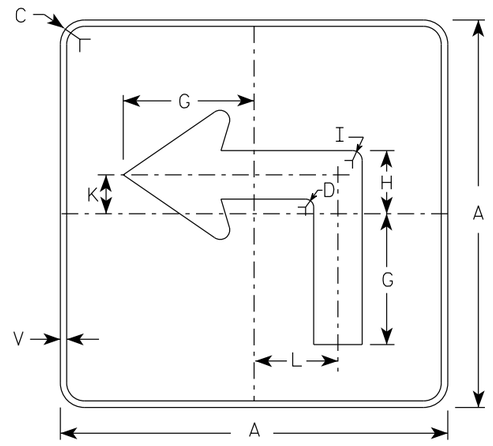
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M49R.dgn PLOT DATE : 21-MARCH 2023 1:40 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



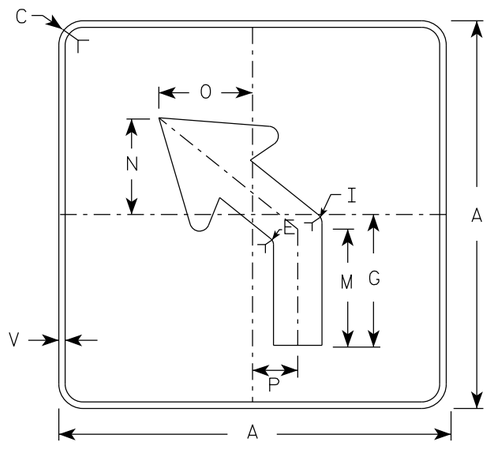

M5-1L
MM5-1L
MO5-1L
MP5-1L




M5-2L
MM5-2L
MO5-2L
MP5-2L




MB5-1L
MK5-1L
MN5-1L
MR5-1L

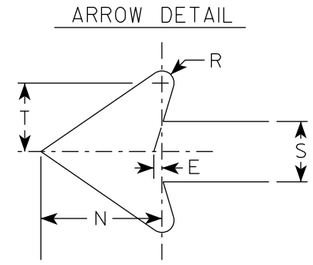



MB5-2L
MK5-2L
MN5-2L
MR5-2L

## 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
   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.

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 | 21 | | 1 1/2 | 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 | | 1/2 | | | | | 3.06 |
| 2M | 21 | | 1 1/2 | 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 | | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 7/8 | 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 | | 1/2 | | | | | 6.25 |
| 4 | 30 | | 1 7/8 | 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 | | 1/2 | | | | | 6.25 |
| 5 | 30 | | 1 7/8 | 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 | | 1/2 | | | | | 6.25 |

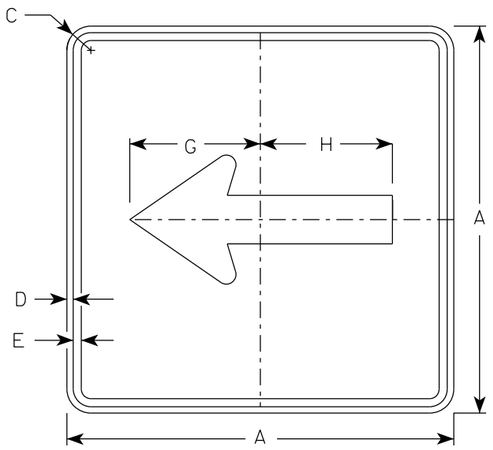
# STANDARD SIGN
# M5-1 & M5-2

*WISCONSIN DEPT OF TRANSPORTATION*

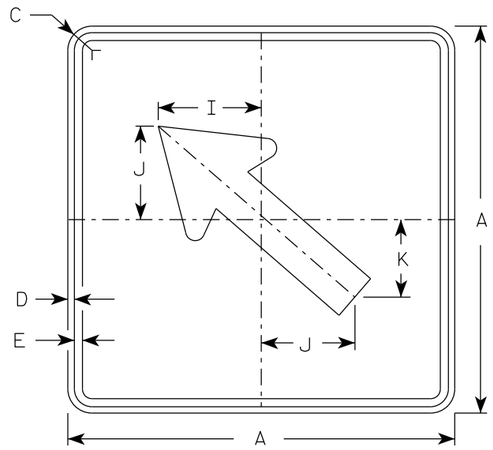
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

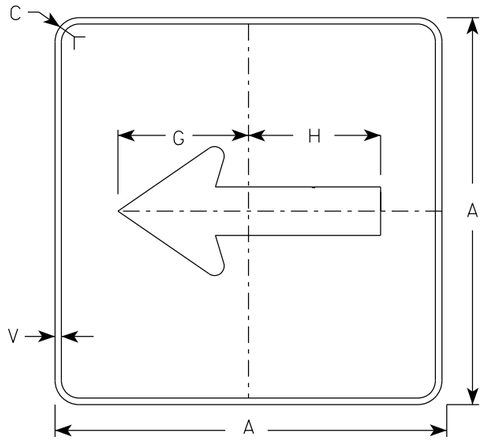
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 380 | E



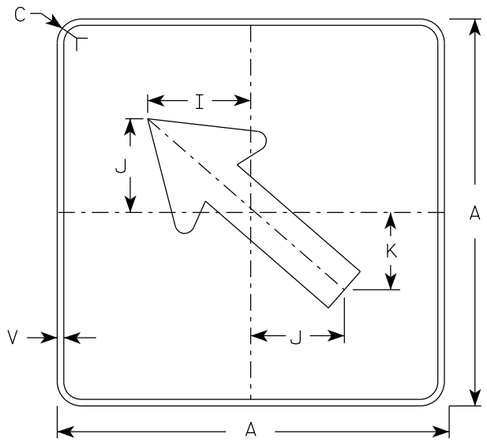

M6-1
MM6-1
MO6-1
MP6-1




M6-2
MM6-2
MO6-2
MP6-2




MB6-1
MK6-1
MN6-1
MR6-1

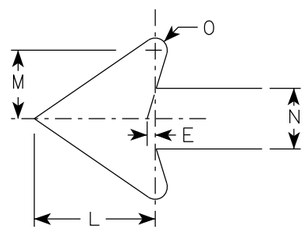



MB6-2
MK6-2
MN6-2
MR6-2

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. 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

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 | 21 | | 1 1/2 | 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 | | | | | | | 1/2 | | | | | 3.06 |
| 2M | 21 | | 1 1/2 | 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 | | | | | | | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 7/8 | 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 | | | | | | | 1/2 | | | | | 6.25 |
| 4 | 30 | | 1 7/8 | 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 | | | | | | | 1/2 | | | | | 6.25 |
| 5 | 30 | | 1 7/8 | 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 | | | | | | | 1/2 | | | | | 6.25 |

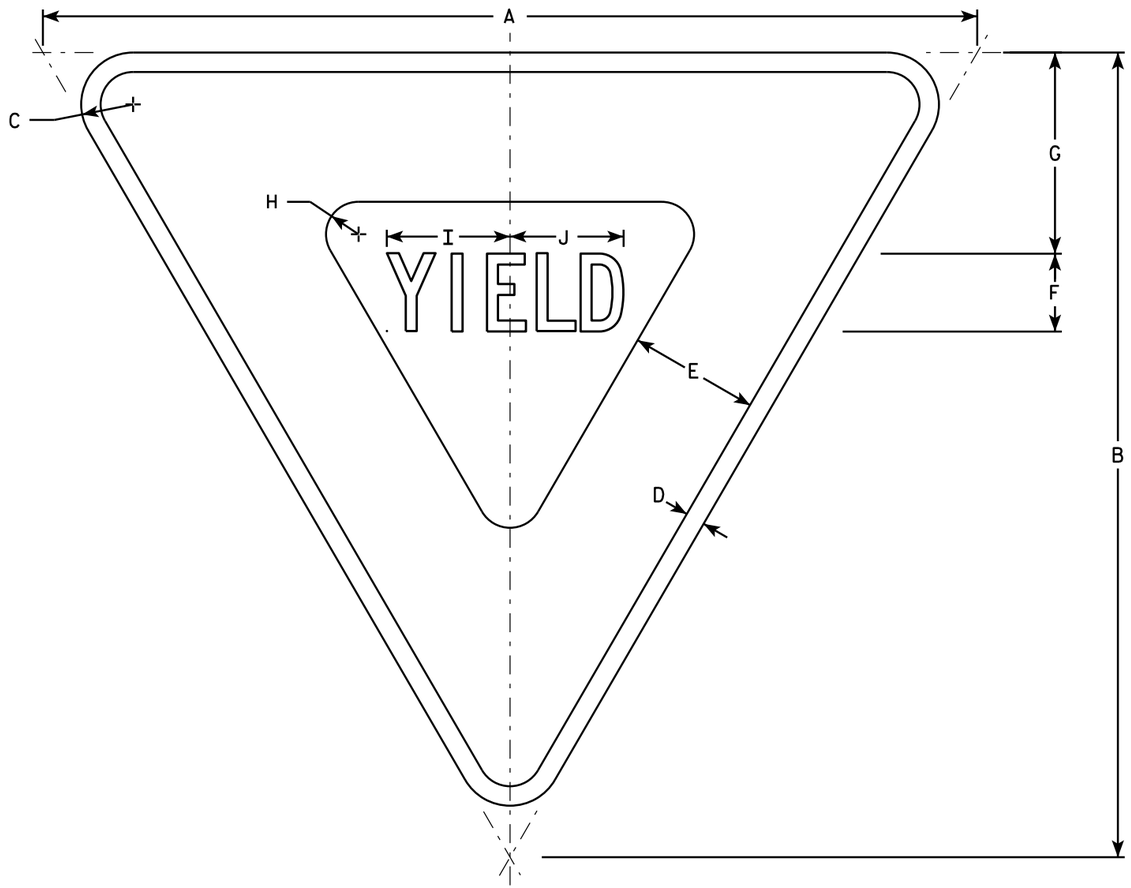
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 381 | 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

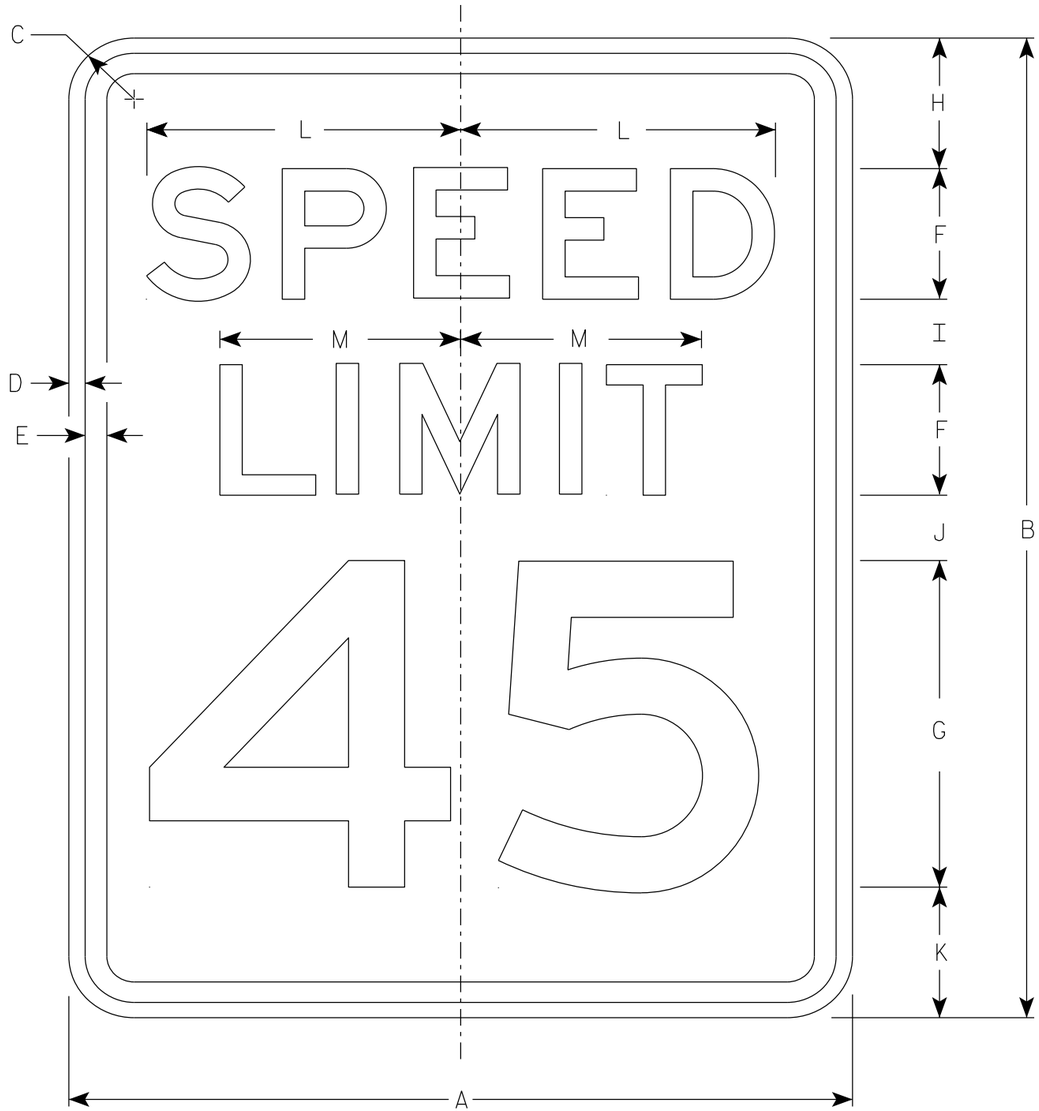
APPROVED Matthew R Rauch
for State Traffic Engineer

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
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. 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 1/2 | 3/8 | 1/2 | 3 | 8 | 3 | 2 | 2 | 3 | 7 1/4 | 5 1/2 | | | | | | | | | | | | | | 3.0 |
| 2S | 24 | 30 | 1 1/2 | 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 7/8 | 1/2 | 5/8 | 5 | 12 | 5 | 2 1/2 | 2 1/2 | 4 | 12 | 9 1/4 | | | | | | | | | | | | | | 7.5 |
| 3 | 36 | 48 | 1 7/8 | 1/2 | 5/8 | 6 | 14 | 6 | 5 | 5 | 6 | 14 3/8 | 11 | | | | | | | | | | | | | | 12.0 |
| 4 | 36 | 48 | 1 7/8 | 1/2 | 5/8 | 6 | 14 | 6 | 5 | 5 | 6 | 14 3/8 | 11 | | | | | | | | | | | | | | 12.0 |
| 5 | 48 | 60 | 3 | 3/4 | 1 | 8 | 20 | 6 | 4 1/2 | 6 3/4 | 6 3/4 | 19 1/4 | 14 5/8 | | | | | | | | | | | | | | 20.0 |

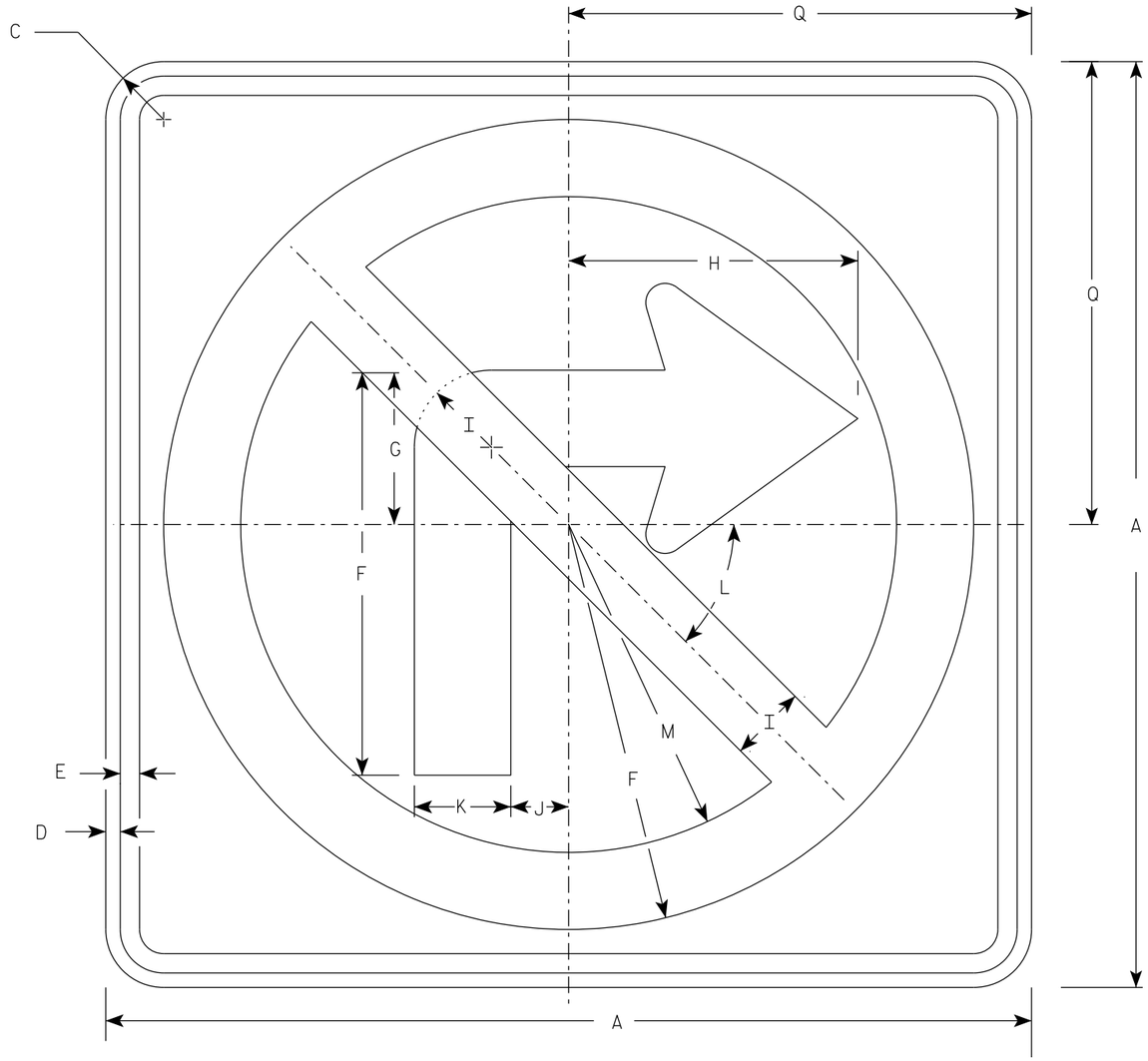
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/23 PLATE NO. R2-1.14

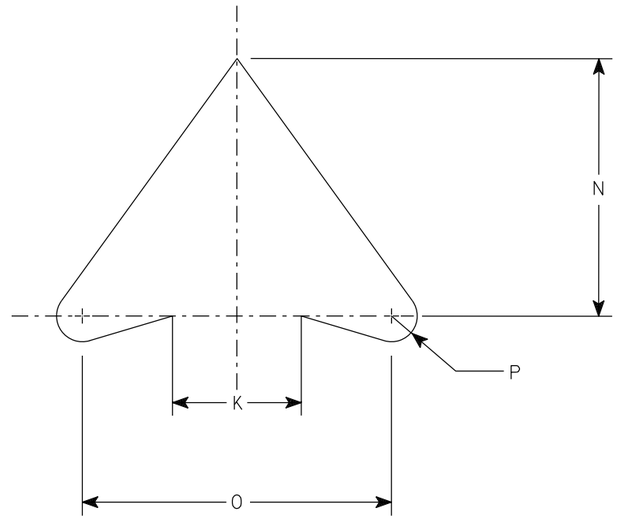
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 383 | E




R3-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. 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 1/2 | 3/8 | 1/2 | 10 1/2 | 4 | 7 1/2 | 2 | 1 1/2 | 2 1/2 | 45 | 8 1/2 | 5 | 6 | 1/2 | 12 | | | | | | | | | | 4.0 |
| 2S | 24 | | 1 1/2 | 3/8 | 1/2 | 10 1/2 | 4 | 7 1/2 | 2 | 1 1/2 | 2 1/2 | 45° | 8 1/2 | 5 | 6 | 1/2 | 12 | | | | | | | | | | 4.0 |
| 2M | 36 | | 2 1/4 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45 | 12 3/4 | 7 1/2 | 9 | 3/4 | 18 | | | | | | | | | | 9.0 |
| 3 | 36 | | 2 1/4 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45 | 12 3/4 | 7 1/2 | 9 | 3/4 | 18 | | | | | | | | | | 9.0 |
| 4 | 36 | | 2 1/4 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45° | 12 3/4 | 7 1/2 | 9 | 3/4 | 18 | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 21 | 8 | 15 | 4 | 3 | 5 | 45° | 17 | 10 | 12 | 1 | 24 | | | | | | | | | | 16.0 |

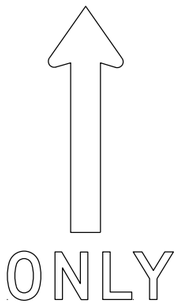
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-1.6

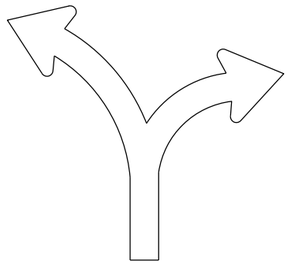
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 384 | E

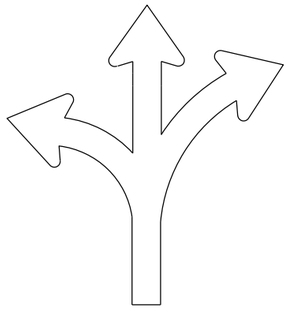


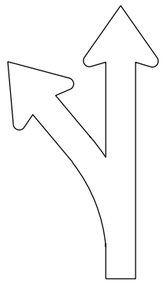
(A)

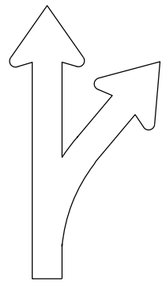


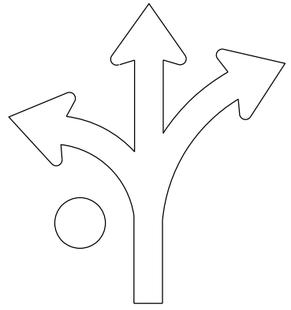
(B)

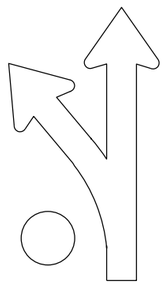

(C)

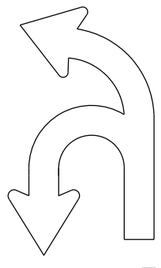

(D)

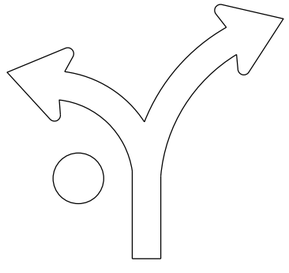

(E)

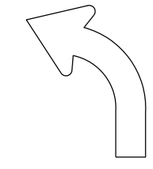

(F)


(G)

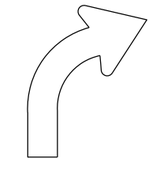

(H)


(I)


(J)



(L)



(R)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

| | | |
|---|---|---|
| 1 Letter = | 3.75 sq ft | for Size 2 |
| | 6.0 sq ft | for Size 3 |
| | 10.0 sq ft | for Size 4 or 5 |
| 2 Letters = | 7.5 sq ft | for Size 2 |
| | 12.0 sq ft | for Size 3 |
| | 20.0 sq ft | for Size 4 or 5 |
| 3 Letters = | 11.25 sq ft | for Size 2 |
| | 18.0 sq ft | for Size 3 |
| | 30.0 sq ft | for Size 4 or 5 |
| 4 Letters = | 15.0 sq ft | for Size 2 |
| | 24.0 sq ft | for Size 3 |
| | 40.0 sq ft | for Size 4 or 5 |
| 5 Letters = | 18.75 sq ft | for Size 2 |
| | 30.0 sq ft | for Size 3 |
| | 50.0 sq ft | for Size 4 or 5 |
| 6 Letters = | 22.5 sq ft | for Size 2 |
| | 36.0 sq ft | for Size 3 |
| | 60.0 sq ft | for Size 4 or 5 |

6. When letters C,D,G,J are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

7

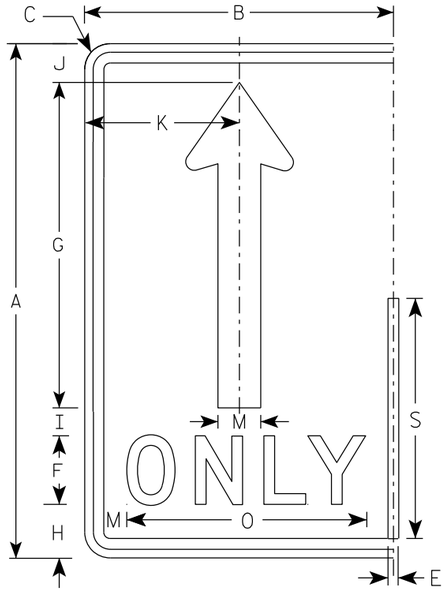
7

PROJECT NO:

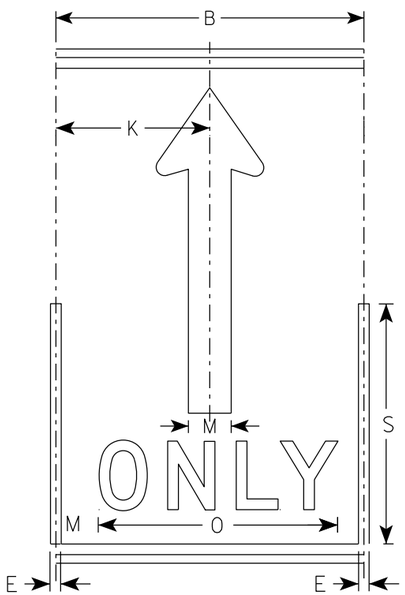
SHEET NO: 385 E

NOTES

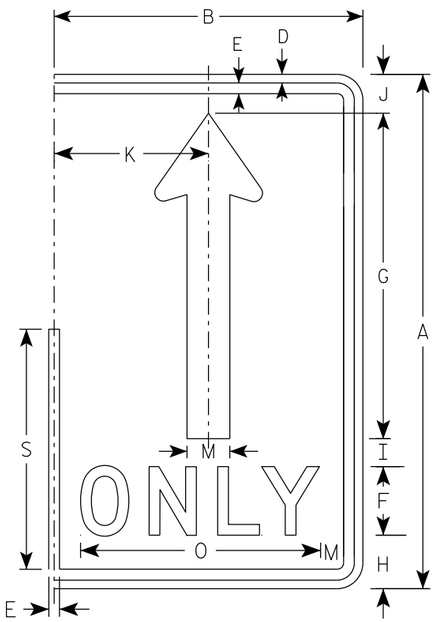
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



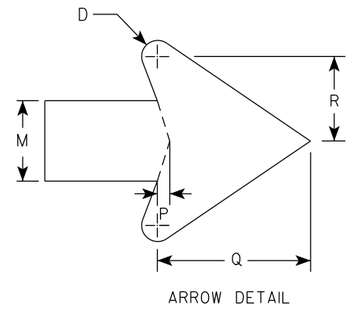

(A)




(A)




(A)




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 | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 19 | 3 1/8 | 1 5/8 | 2 1/4 | 9 | | 2 1/2 | | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 19 | 3 1/8 | 1 5/8 | 2 1/4 | 9 | | 2 1/2 | | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | 5 | 22 3/4 | 3 3/4 | 1 3/4 | 2 3/4 | 12 | | 3 | | 17 5/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 30 3/8 | 5 1/8 | 2 7/8 | 3 5/8 | 15 | | 4 | | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 30 3/8 | 5 1/8 | 2 7/8 | 3 5/8 | 15 | | 4 | | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |

# STANDARD SIGN
# R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 386 | E

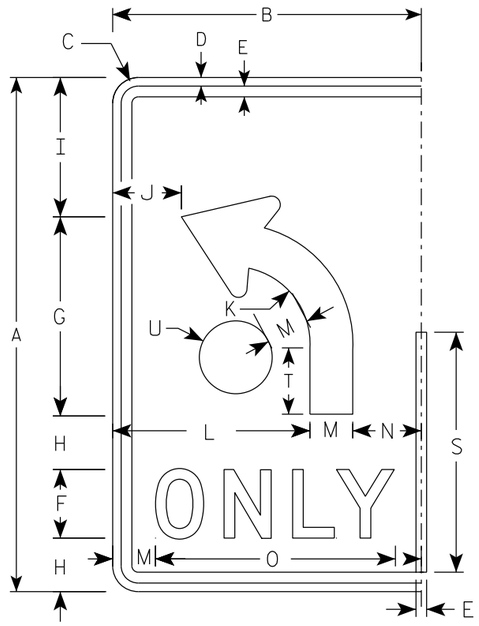


7

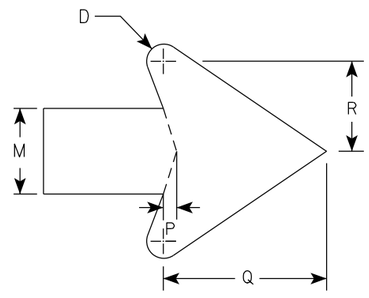
7

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
   Message Series - D




(B)




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 | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | 2 1/8 | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | 2 1/8 | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | 5 | 14 | 3 1/2 | 9 3/4 | 6 | 5 3/8 | 15 | 3 | 6 | 17 5/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | 4 5/8 | 2 1/2 | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | 3 3/8 | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | 3 3/8 | | | | | | 10.0 |

STANDARD SIGN

R3-8 (B) Arrow

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

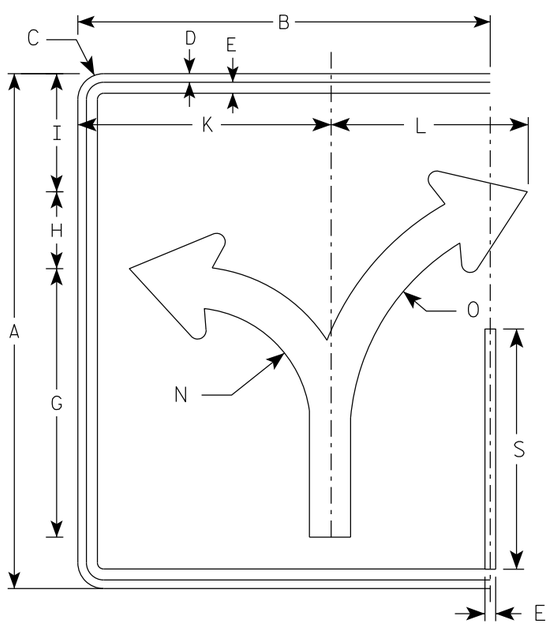
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

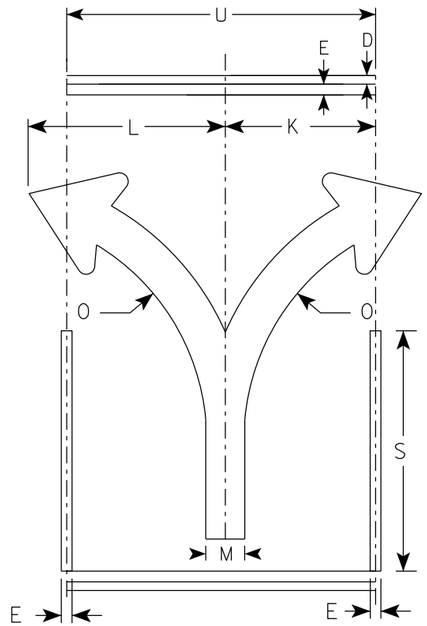
SHEET NO: 387 E

NOTES

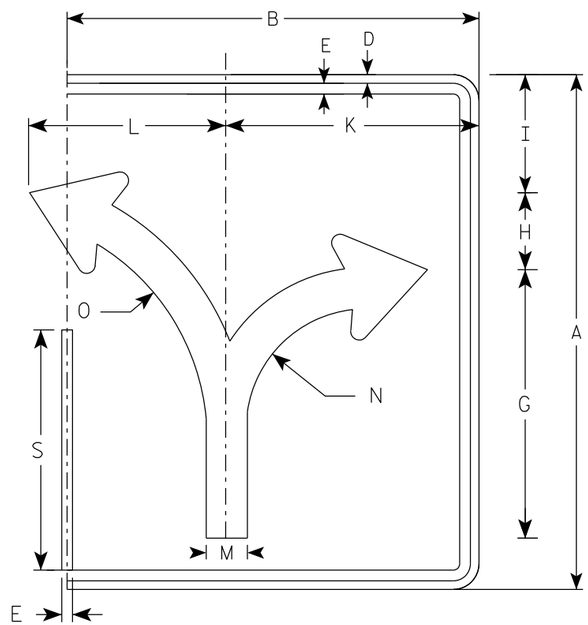
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



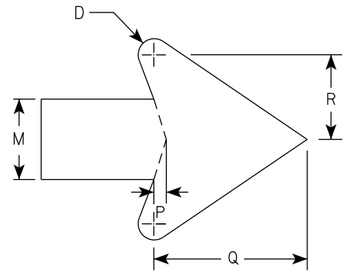

(C)




(C)




(C)




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 | ENDS Area sq. ft. | MIDDLE Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 6 7/8 | | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 18 | | | | | | 5.0 | 3.75 |
| 2M | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 6 7/8 | | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 18 | | | | | | 5.0 | 3.75 |
| 3 | 36 | 30 | 1 1/2 | 1/2 | 5/8 | | 18 3/4 | 5 1/2 | 8 1/4 | | 17 1/4 | 17 1/4 | 2 7/8 | 8 3/8 | 16 | 1/2 | 5 1/2 | 3 | 16 3/4 | | 24 | | | | | | 7.5 | 6.0 |
| 4 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 11 | | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 30 | | | | | | 12.0 | 10.0 |
| 5 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 11 | | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 30 | | | | | | 12.0 | 10.0 |

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

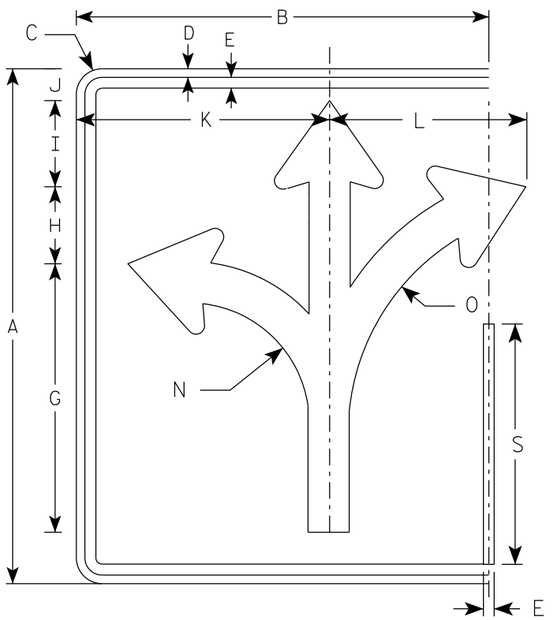
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

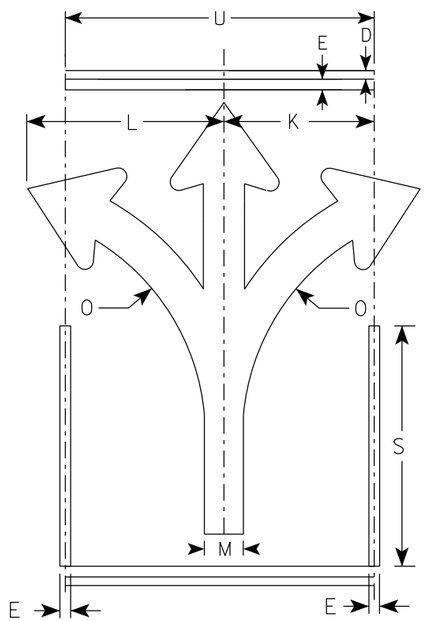
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 388 E

NOTES

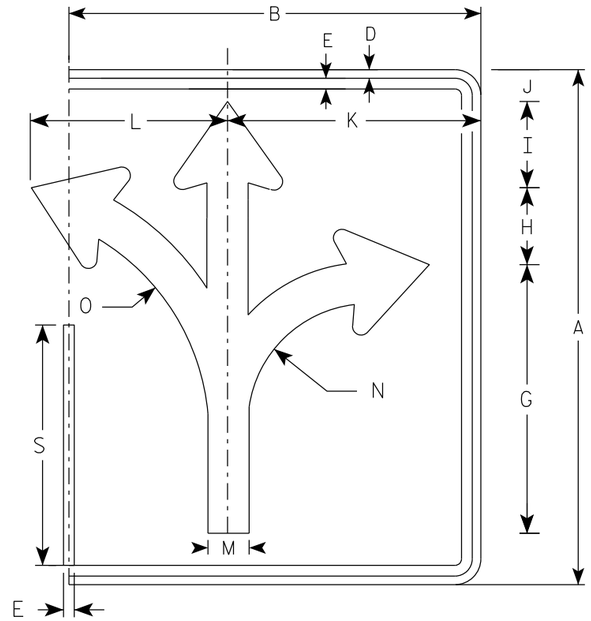
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



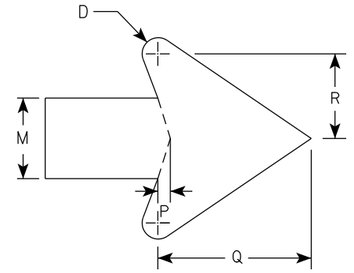

(D)




(D)




(D)




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 | ENDS Area sq. ft. | MIDDLE Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 5 | 1 7/8 | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 18 | | | | | | 5.0 | 3.75 |
| 2M | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 5 | 1 7/8 | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 18 | | | | | | 5.0 | 3.75 |
| 3 | 36 | 30 | 1 1/2 | 1/2 | 5/8 | | 18 3/4 | 5 1/2 | 6 | 2 1/4 | 17 1/4 | 17 1/4 | 2 7/8 | 8 3/8 | 16 | 1/2 | 5 1/2 | 3 | 16 3/4 | | 24 | | | | | | 7.5 | 6.0 |
| 4 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 7 7/8 | 3 1/8 | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 30 | | | | | | 12.0 | 10.0 |
| 5 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 7 7/8 | 3 1/8 | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 30 | | | | | | 12.0 | 10.0 |

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

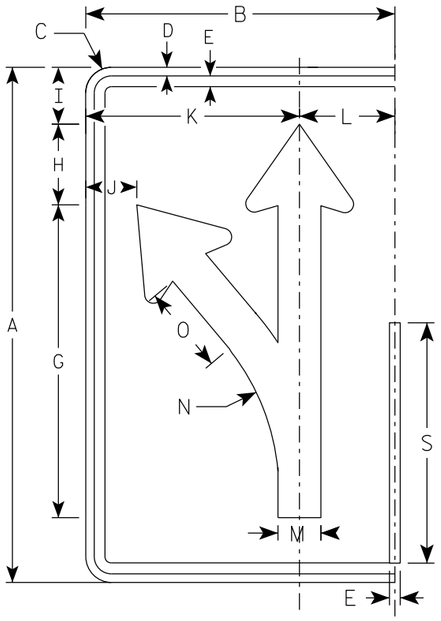
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

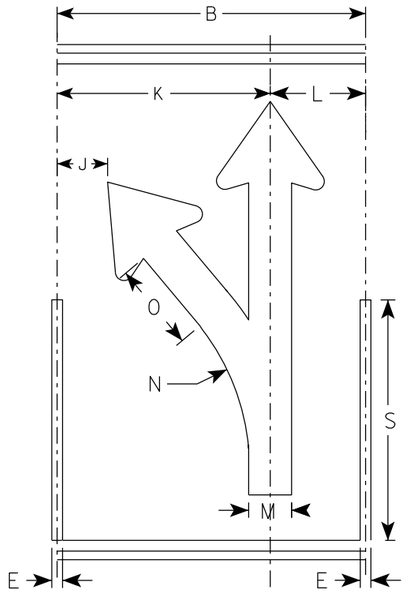
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 389 | E

NOTES

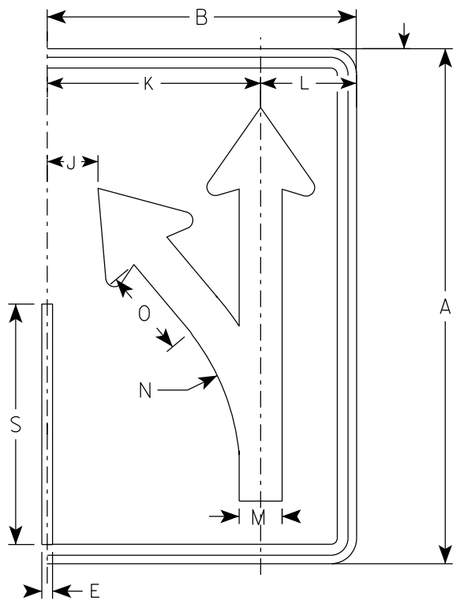
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



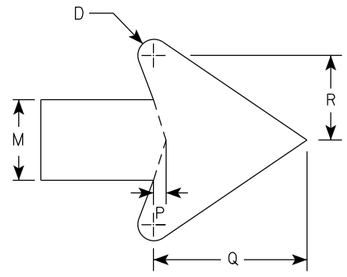

(E)




(E)




(E)




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 | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | | 21 7/8 | 5 5/8 | 4 | 4 7/8 | 16 1/8 | 7 3/4 | 3 | 15 7/8 | 6 1/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

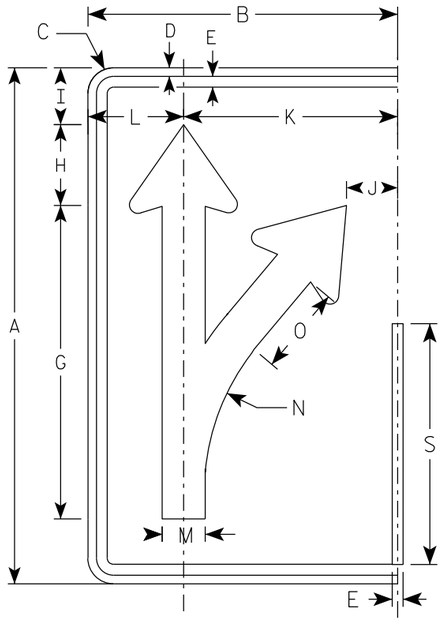
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

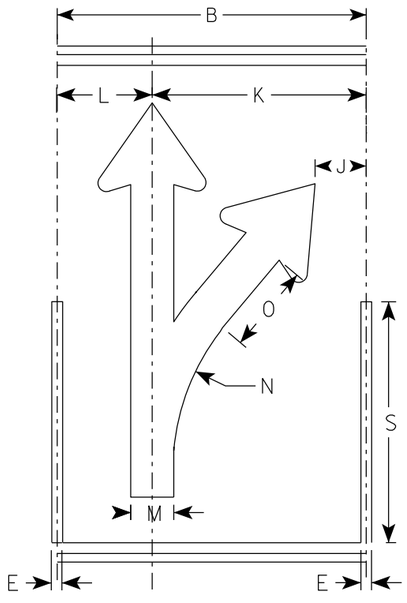
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 390 | E

NOTES

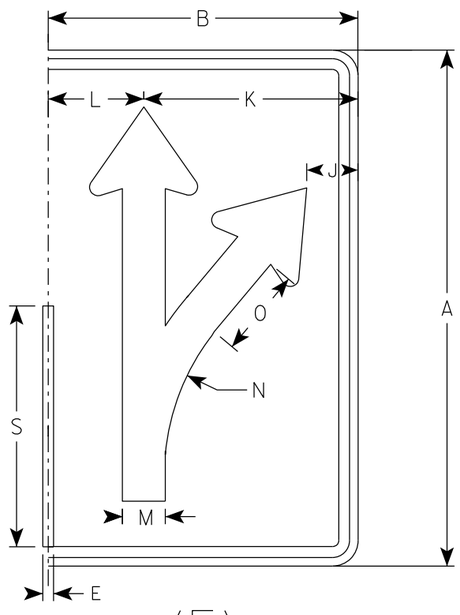
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



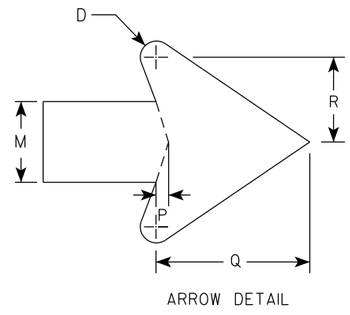

(F)




(F)




(F)




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 | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | | 21 7/8 | 5 5/8 | 4 | 4 7/8 | 16 1/8 | 7 3/4 | 3 | 15 7/8 | 6 1/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

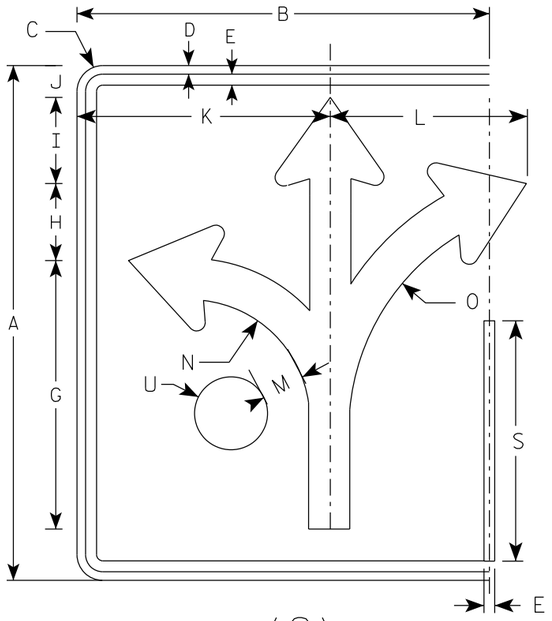
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

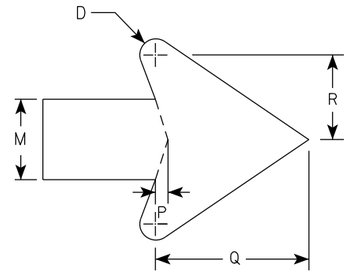
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 391 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None




(G)




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 | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 5 | 1 7/8 | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 2 1/8 | | | | | | 5.0 |
| 2M | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 5 | 1 7/8 | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 2 1/8 | | | | | | 5.0 |
| 3 | 36 | 30 | 1 1/2 | 1/2 | 5/8 | | 18 3/4 | 5 1/2 | 6 | 3 1/8 | 17 1/4 | 17 1/4 | 2 7/8 | 8 3/8 | 16 | 1/2 | 5 1/2 | 3 | 16 3/4 | | 2 1/2 | | | | | | 7.5 |
| 4 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 7 7/8 | 3 1/8 | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 3 3/8 | | | | | | 12.0 |
| 5 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 7 7/8 | 3 1/8 | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 3 3/8 | | | | | | 12.0 |

STANDARD SIGN
R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

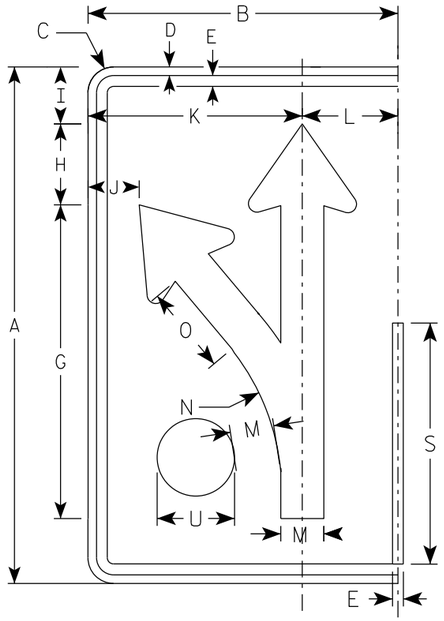
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

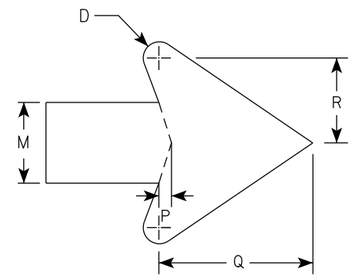
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 392 | E |
|---|---|---|---|---|---|

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None




(H)




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 | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | 2 1/8 | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | 2 1/8 | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | | 21 7/8 | 5 5/8 | 4 | 4 7/8 | 16 1/8 | 7 3/4 | 3 | 15 7/8 | 6 1/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | | 2 1/2 | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | 3 3/8 | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | 3 3/8 | | | | | | 10.0 |

STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

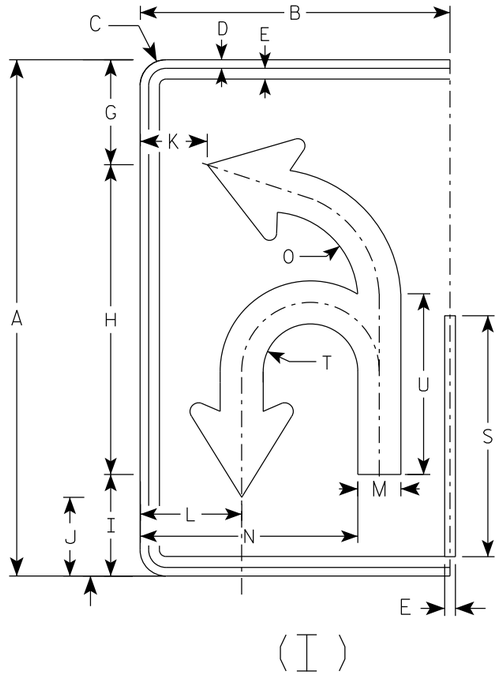
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

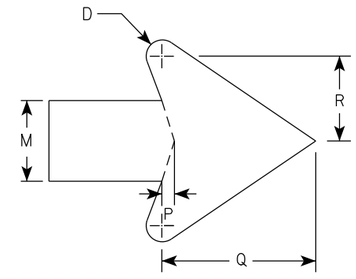
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 393 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None




(I)




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 | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 6 1/8 | 18 | 5 7/8 | 4 5/8 | 3 7/8 | 5 7/8 | 2 1/2 | 12 5/8 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | 2 3/4 | 10 1/2 | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | | 6 1/8 | 18 | 5 7/8 | 4 5/8 | 3 7/8 | 5 7/8 | 2 1/2 | 12 5/8 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | 2 3/4 | 10 1/2 | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | | 21 7/8 | 21 5/8 | 7 1/8 | 5 1/2 | 5 7/8 | 8 1/4 | 3 | 16 3/8 | 6 1/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | 3 1/4 | 12 5/8 | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 28 3/4 | 9 3/8 | 7 1/4 | 6 7/8 | 10 | 4 | 20 7/8 | 8 1/8 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 4 3/8 | 16 3/4 | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 28 3/4 | 9 3/8 | 7 1/4 | 6 7/8 | 10 | 4 | 20 7/8 | 8 1/8 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 4 3/8 | 16 3/4 | | | | | | 10.0 |

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

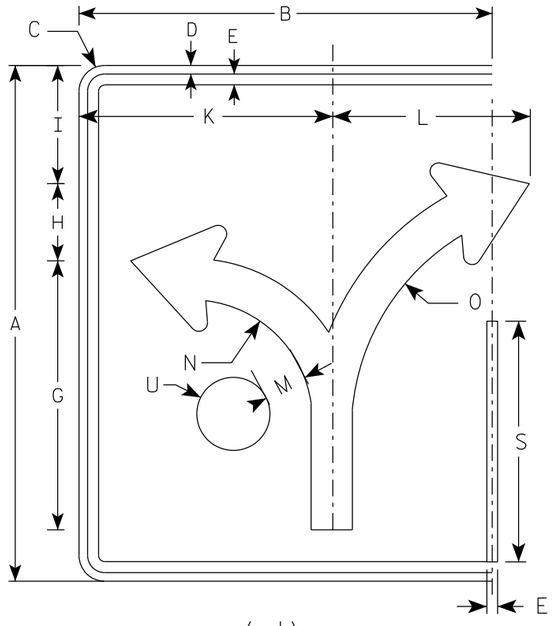
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

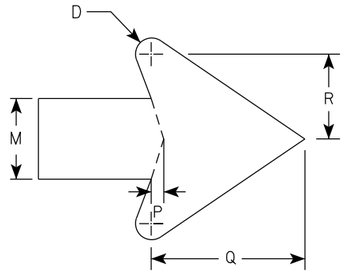
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 394 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None




(J)




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 | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 6 7/8 | | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 2 1/8 | | | | | | 5.0 |
| 2M | 30 | 24 | 1 1/2 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 6 7/8 | | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 2 1/8 | | | | | | 5.0 |
| 3 | 36 | 30 | 1 1/2 | 1/2 | 5/8 | | 18 3/4 | 5 1/2 | 8 1/4 | | 17 1/4 | 17 1/4 | 2 7/8 | 8 3/8 | 16 | 1/2 | 5 1/2 | 3 | 16 3/4 | | 2 1/2 | | | | | | 7.5 |
| 4 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 11 | | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 3 3/8 | | | | | | 12.0 |
| 5 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 11 | | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 3 3/8 | | | | | | 12.0 |

STANDARD SIGN
R3-8 (J) Arrow

WISCONSIN DEPT OF TRANSPORTATION

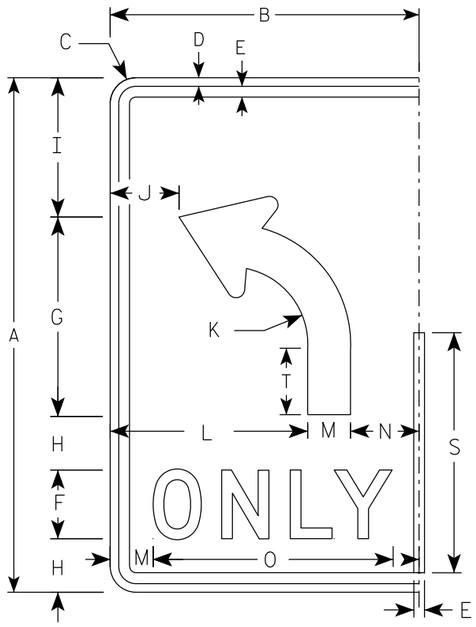
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

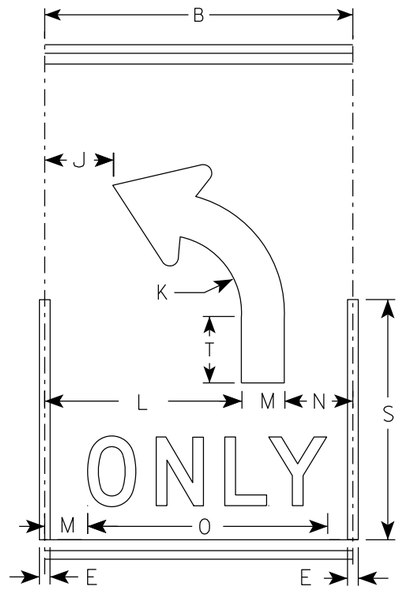
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 395 | E

NOTES

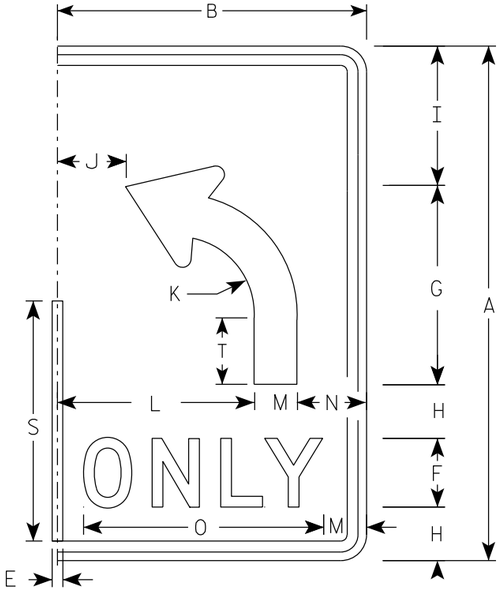
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



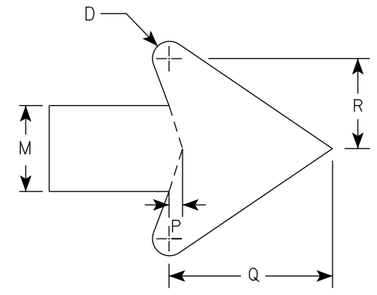

(L)




(L)




(L)




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 | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | 5 | 14 | 3 1/2 | 9 3/4 | 6 | 5 3/8 | 15 | 3 | 6 | 17 5/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | 4 5/8 | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | | | | | | | 10.0 |

STANDARD SIGN

R3-8 (L) Arrow

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

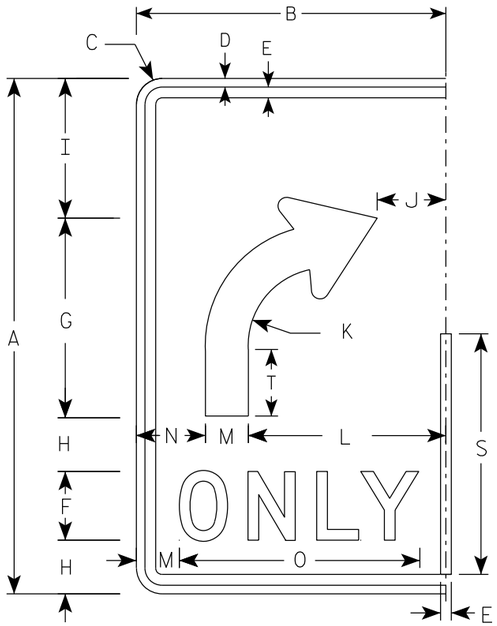
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

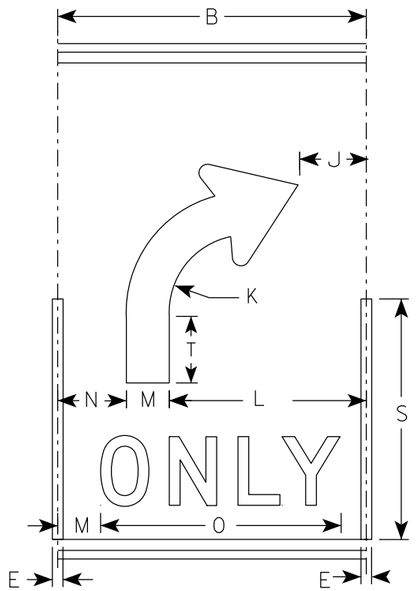
SHEET NO: 396 E

## NOTES

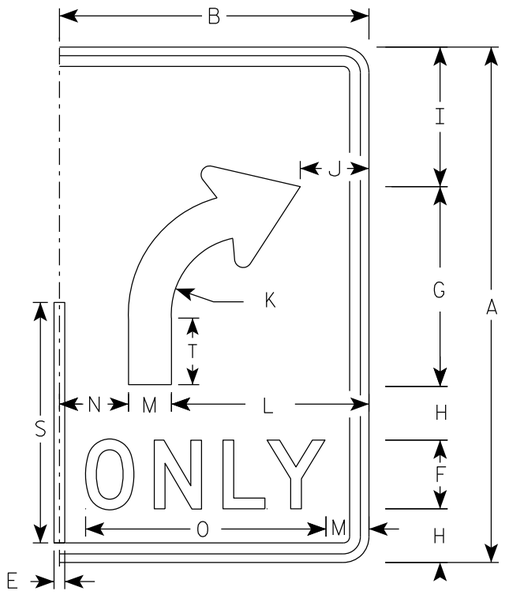
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



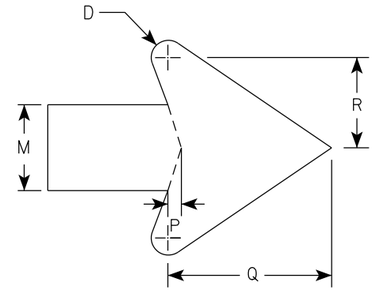

(R)




(R)




(R)




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 | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/2 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | 5 | 14 | 3 1/2 | 9 3/4 | 6 | 5 3/8 | 15 | 3 | 6 | 17 5/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | 4 5/8 | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | | | | | | | 10.0 |

STANDARD SIGN

R3-8 (R) Arrow

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

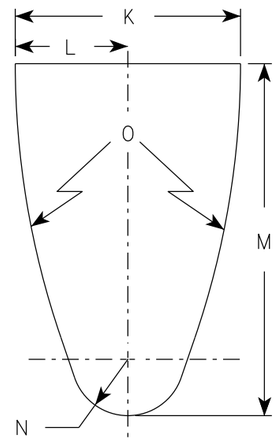
PROJECT NO:

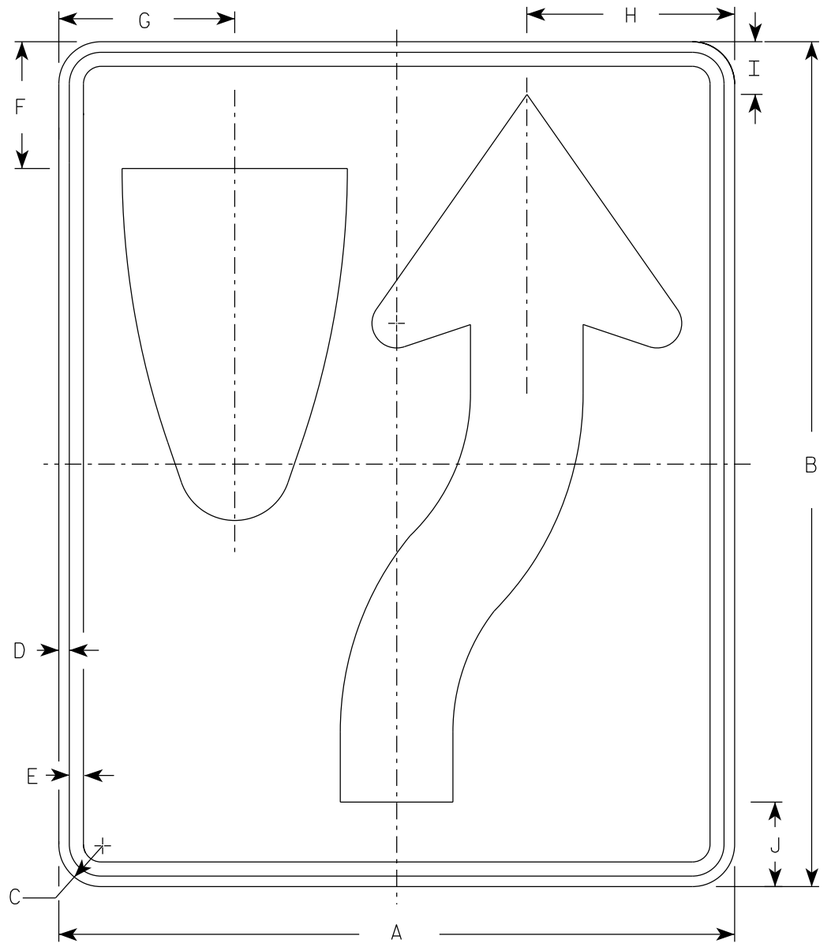
SHEET NO: 397 **E**

## NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. R4-8 is the same as R4-7 except Legend is reversed.

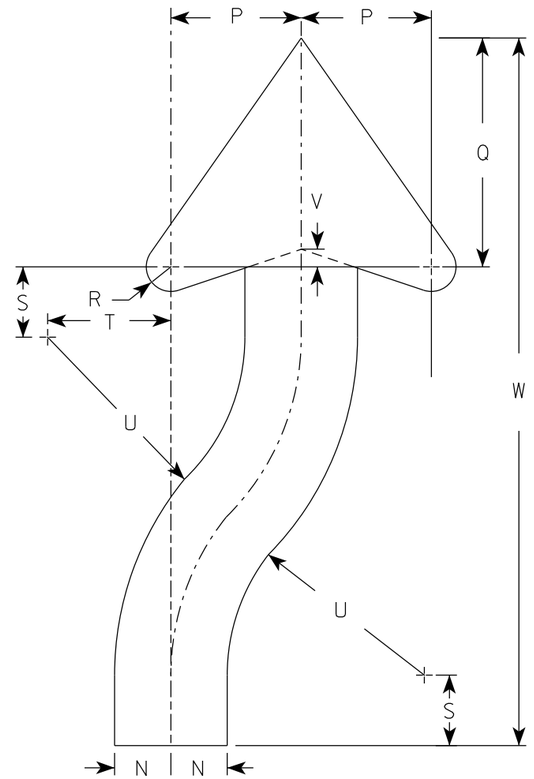
## DIVIDER DETAIL




R4-7

## 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 1/2 | 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 1/2 | 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 1/2 | 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 7/8 | 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 7/8 | 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 | 3 | 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 |

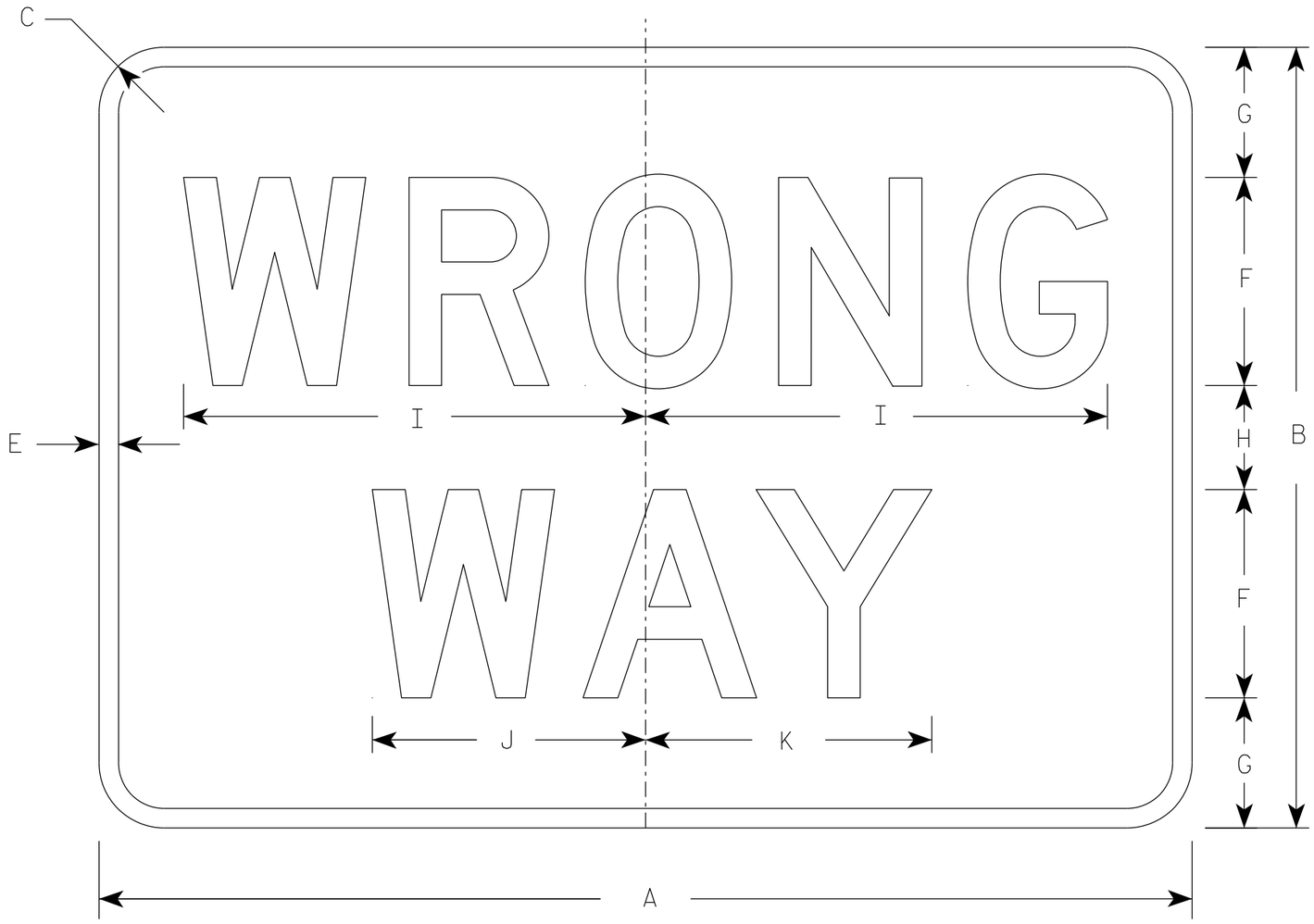
# STANDARD SIGN
# R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/17/23 PLATE NO. R4-7.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 398 | E |
|---|---|---|---|---|---|




R5-1A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Red
   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 | 30 | 18 | 1 1/2 | | 1/2 | 5 | 3 | 2 | 11 | 6 1/2 | 6 7/8 | | | | | | | | | | | | | | | | 3.75 |
| 2S | 36 | 24 | 1 1/2 | | 5/8 | 6 | 4 1/2 | 3 | 13 1/4 | 7 7/8 | 8 1/4 | | | | | | | | | | | | | | | | 6.00 |
| 2M | 42 | 30 | 1 7/8 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 3 | 42 | 30 | 1 7/8 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 4 | 42 | 30 | 1 7/8 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 5 | 42 | 30 | 1 7/8 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |

STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/17/23 PLATE NO. R5-1A.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 399 | E




R5-57

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Lines 1, 2, and 5 are Series C.
   Lines 3 and 4 are Series B.

| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2M | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 36 | | 2 1/4 | 5/8 | 3/4 | 4 | 3 | 2 | 3 1/2 | 14 1/4 | 14 7/8 | 11 | 11 1/2 | 4 3/4 | 1 3/4 | 9 | | 1 3/8 | 10 | 11 | 2 1/2 | 1 3/4 | 15 1/2 | 13 | 13 5/8 | | 9.0 |
| 5 | 36 | | 2 1/4 | 5/8 | 3/4 | 4 | 3 | 2 | 3 1/2 | 14 1/4 | 14 7/8 | 11 | 11 1/2 | 4 3/4 | 1 3/4 | 9 | | 1 3/8 | 10 | 11 | 2 1/2 | 1 3/4 | 15 1/2 | 13 | 13 5/8 | | 9.0 |

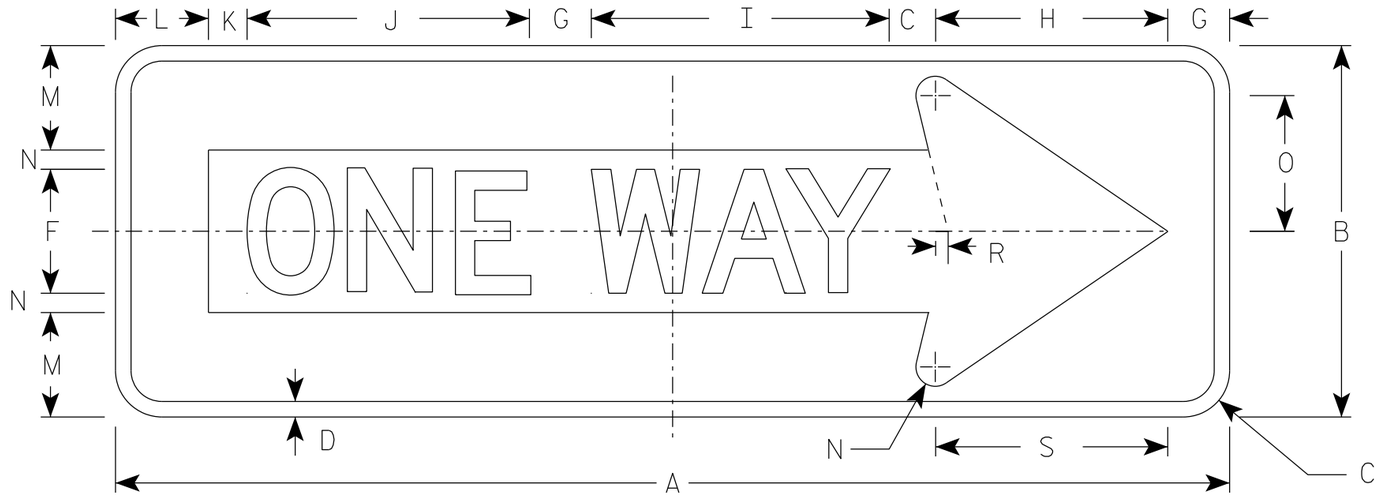
STANDARD SIGN
R5-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/30/23 PLATE NO. R5-57.11

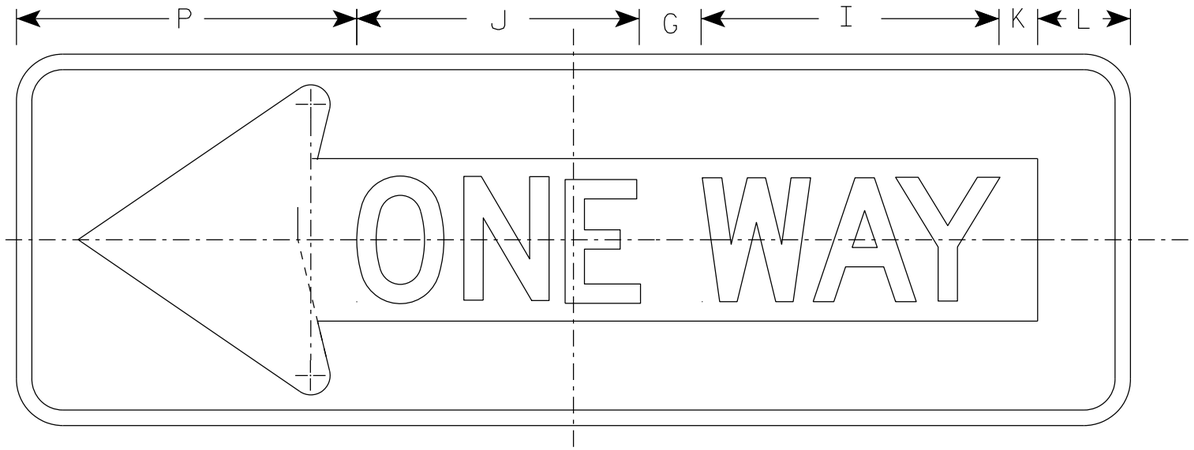
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 400 | E




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 ½ | ½ | | 4 | 2 | 7 ½ | 9 ⅝ | 9 ⅛ | 1 ¼ | 3 | 3 ⅜ | ⅝ | 4 ⅜ | 11 | | ⅜ | 7 ½ | | | | | | | | 3.0 |
| 2M | 54 | 18 | 1 ½ | ¾ | | 6 | 3 | 11 ¼ | 13 ⅝ | 14 ½ | 1 ⅞ | 4 ½ | 5 | 1 | 6 ½ | 16 ½ | | ⅝ | 11 ¼ | | | | | | | | 6.75 |
| 3 | 54 | 18 | 1 ½ | ¾ | | 6 | 3 | 11 ¼ | 13 ⅝ | 14 ½ | 1 ⅞ | 4 ½ | 5 | 1 | 6 ½ | 16 ½ | | ⅝ | 11 ¼ | | | | | | | | 6.75 |
| 4 | 54 | 18 | 1 ½ | ¾ | | 6 | 3 | 11 ¼ | 13 ⅝ | 14 ½ | 1 ⅞ | 4 ½ | 5 | 1 | 6 ½ | 16 ½ | | ⅝ | 11 ¼ | | | | | | | | 6.75 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R6-1 L&R

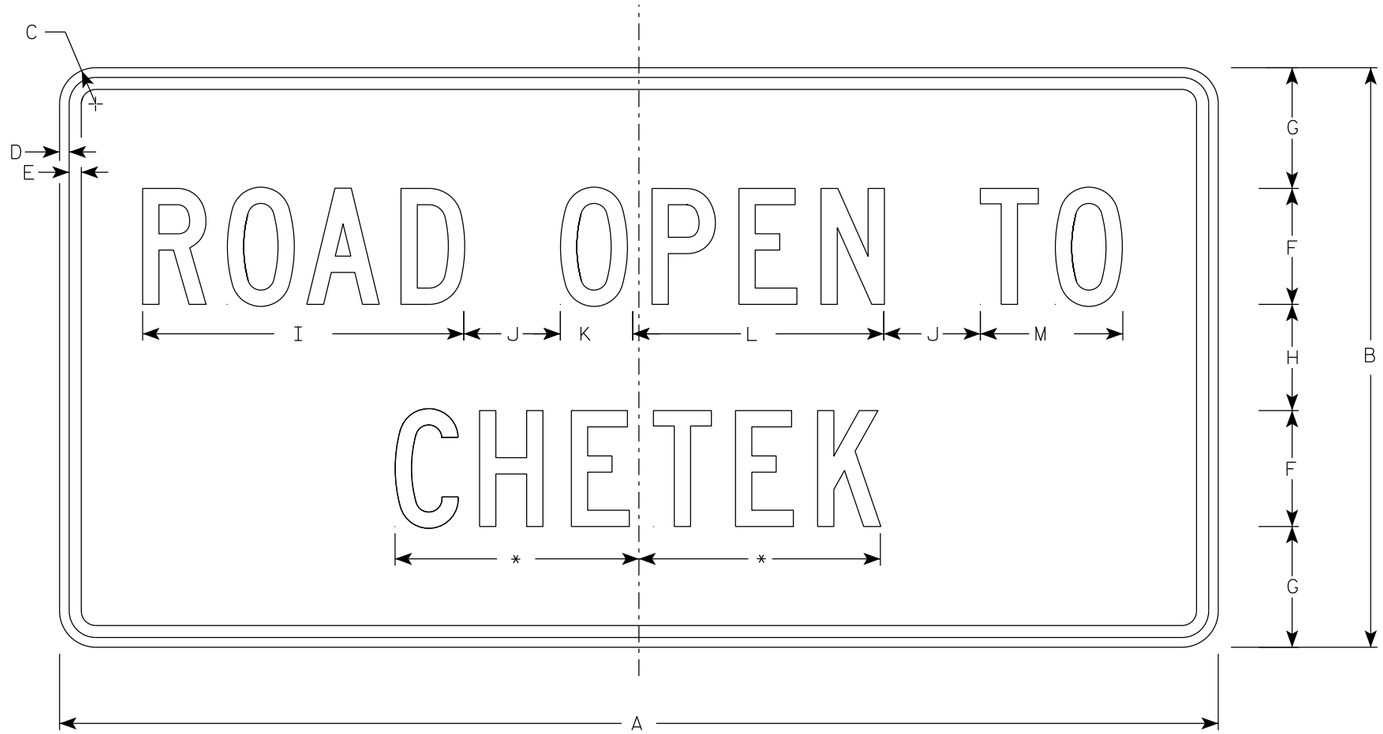
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/30/23 PLATE NO. R6-1.4

PROJECT NO:

SHEET NO: 401 E




R10-61

*See note 5

## 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 message and optically 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 | 36 | 24 | 1 1/2 | 1/2 | 5/8 | 4 | 5 1/2 | 5 | 10 3/4 | 2 | 2 1/8 | 8 3/8 | 4 5/8 | | | | | | | | | | | | | | 6.0 |
| 2S | 60 | 30 | 1 7/8 | 1/2 | 5/8 | 6 | 6 1/4 | 5 1/2 | 16 5/8 | 5 | 3 3/4 | 13 | 7 3/8 | | | | | | | | | | | | | | 12.5 |
| 2M | 60 | 30 | 1 7/8 | 1/2 | 5/8 | 6 | 6 1/4 | 5 1/2 | 16 5/8 | 5 | 3 3/4 | 13 | 7 3/8 | | | | | | | | | | | | | | 12.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R10-61

WISCONSIN DEPT OF TRANSPORTATION

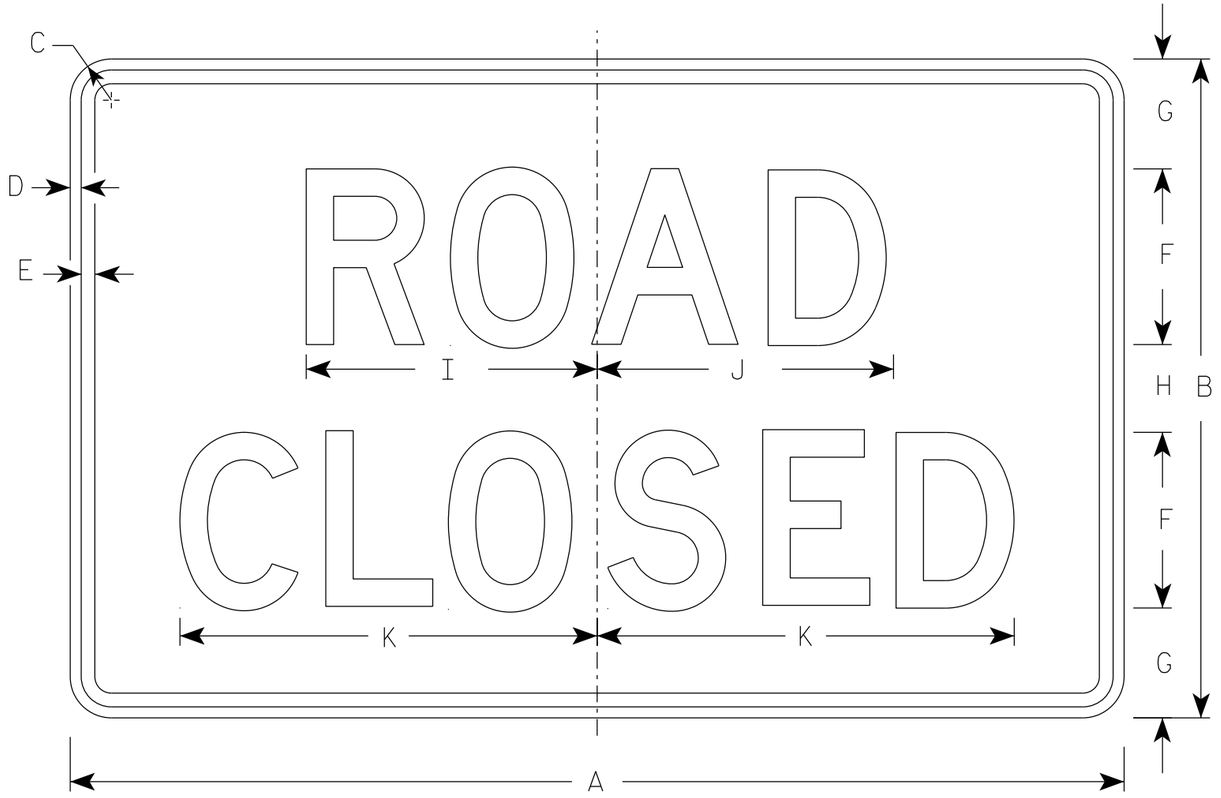
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R10-61.6

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 402 | E |
|---|---|---|---|---|---|



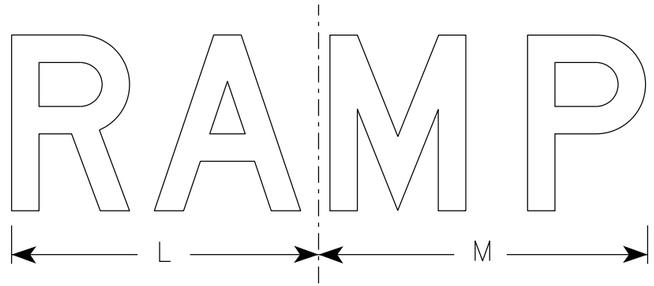

7



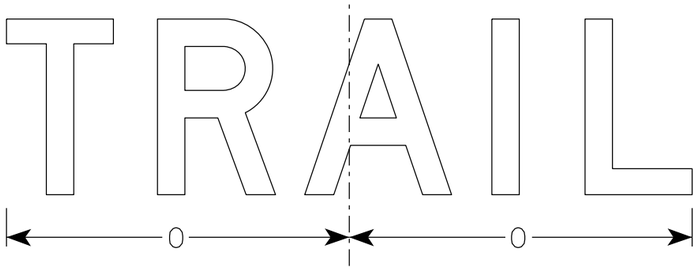

R11-2

NOTES

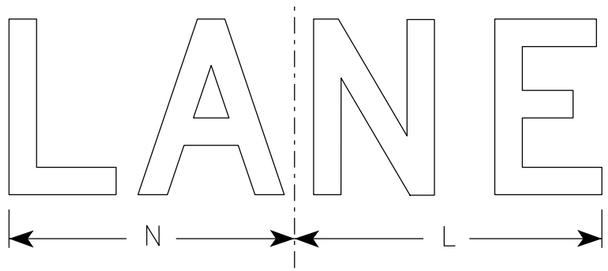
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the 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 7/8 | 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 7/8 | 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 7/8 | 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 7/8 | 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 7/8 | 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

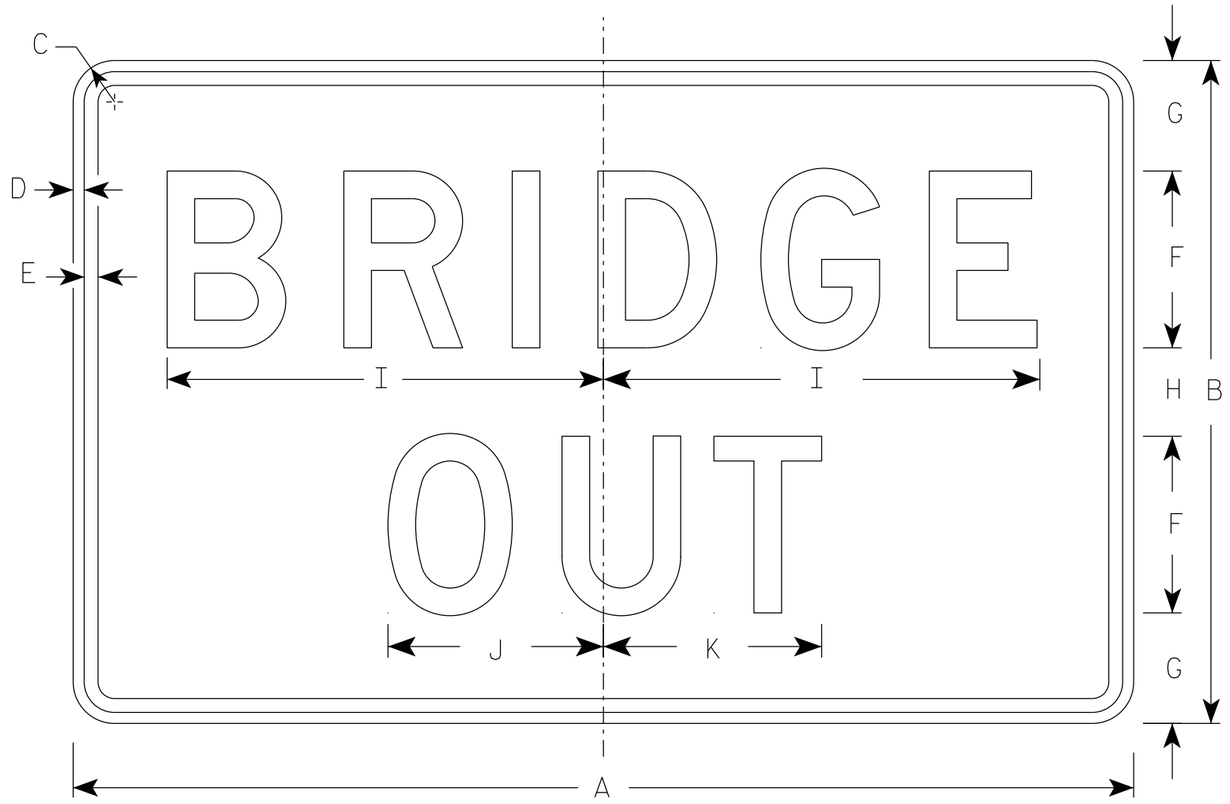
DATE 2/5/24 PLATE NO. R11-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 5-FEB 2024 2:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42


7




R11-2B

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.

| 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 7/8 | 1/2 | 5/8 | 8 | 5 | 4 | 19 3/4 | 9 3/4 | 9 7/8 | | | | | | | | | | | | | | | | 10.0 |
| 2M | 48 | 30 | 1 7/8 | 1/2 | 5/8 | 8 | 5 | 4 | 19 3/4 | 9 3/4 | 9 7/8 | | | | | | | | | | | | | | | | 10.0 |
| 3 | 48 | 30 | 1 7/8 | 1/2 | 5/8 | 8 | 5 | 4 | 19 3/4 | 9 3/4 | 9 7/8 | | | | | | | | | | | | | | | | 10.0 |
| 4 | 48 | 30 | 1 7/8 | 1/2 | 5/8 | 8 | 5 | 4 | 19 3/4 | 9 3/4 | 9 7/8 | | | | | | | | | | | | | | | | 10.0 |
| 5 | 48 | 30 | 1 7/8 | 1/2 | 5/8 | 8 | 5 | 4 | 19 3/4 | 9 3/4 | 9 7/8 | | | | | | | | | | | | | | | | 10.0 |

STANDARD SIGN
R11-2B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

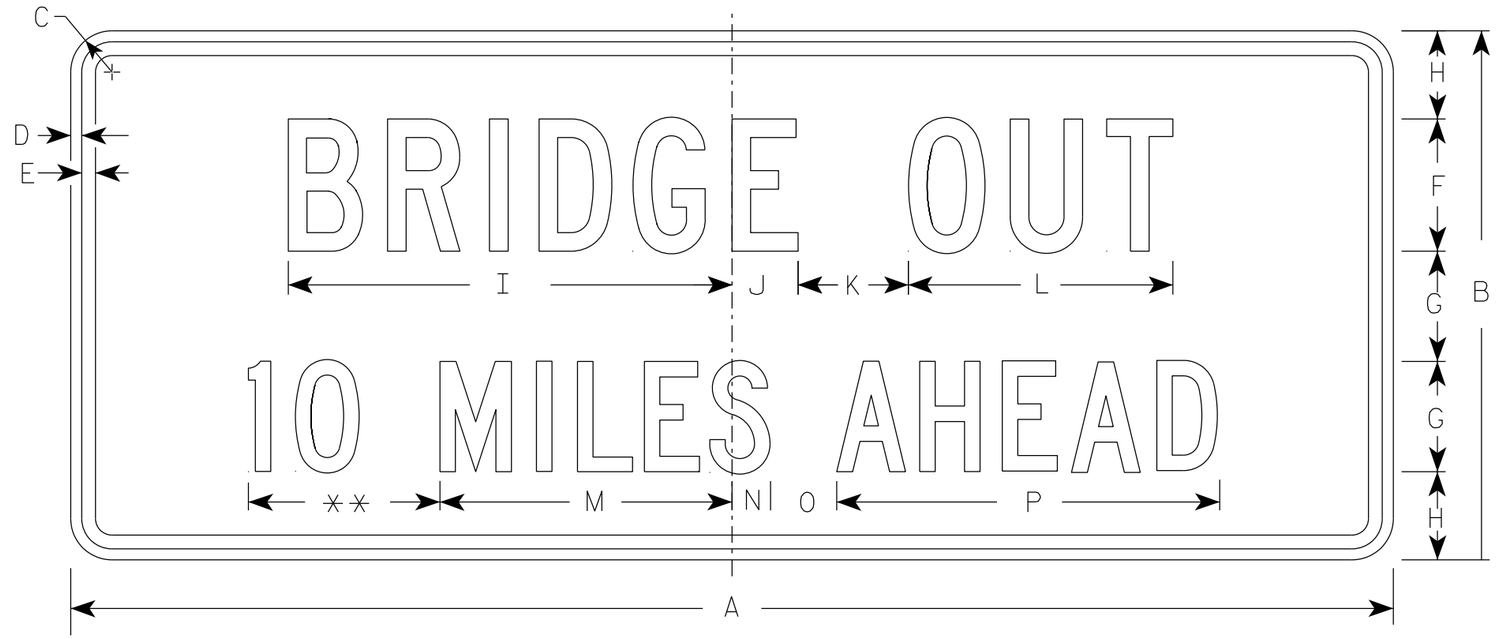
DATE 2/5/24 PLATE NO. R11-2B.3

PROJECT NO:

SHEET NO: 404 E

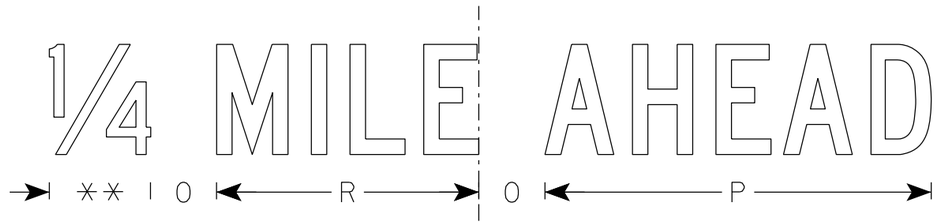
NOTES

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.




R11-3C

** 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 | 15 | 1 1/2 | 1/2 | 5/8 | 4 | 3 | 2 1/2 | 13 1/4 | 2 1/4 | 3 | 8 | 8 | 1 1/2 | 2 | 10 3/4 | | 7 1/8 | | | | | | | | | 3.75 |
| 2S | 60 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 5 | 4 | 20 1/8 | 3 | 5 | 12 | 13 1/4 | 1 3/4 | 3 | 17 3/8 | | 11 7/8 | | | | | | | | | 10.0 |
| 2M | 60 | 24 | 1 7/8 | 1/2 | 5/8 | 6 | 5 | 4 | 20 1/8 | 3 | 5 | 12 | 13 1/4 | 1 3/4 | 3 | 17 3/8 | | 11 7/8 | | | | | | | | | 10.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R11-3C

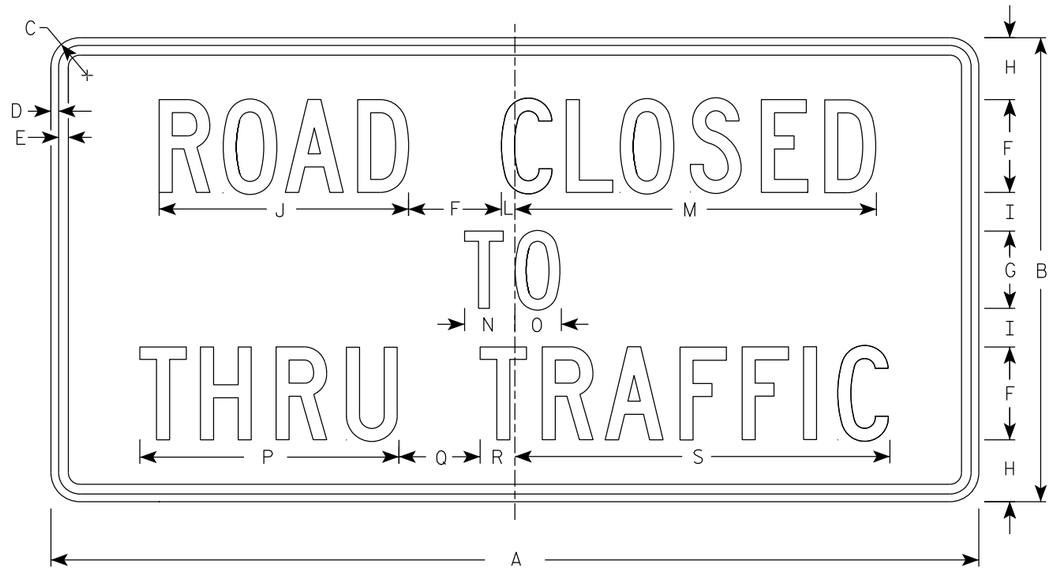
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-3C.4

PROJECT NO:

SHEET NO: 405 E




R11-4

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.

| 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 7/8 | 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 7/8 | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

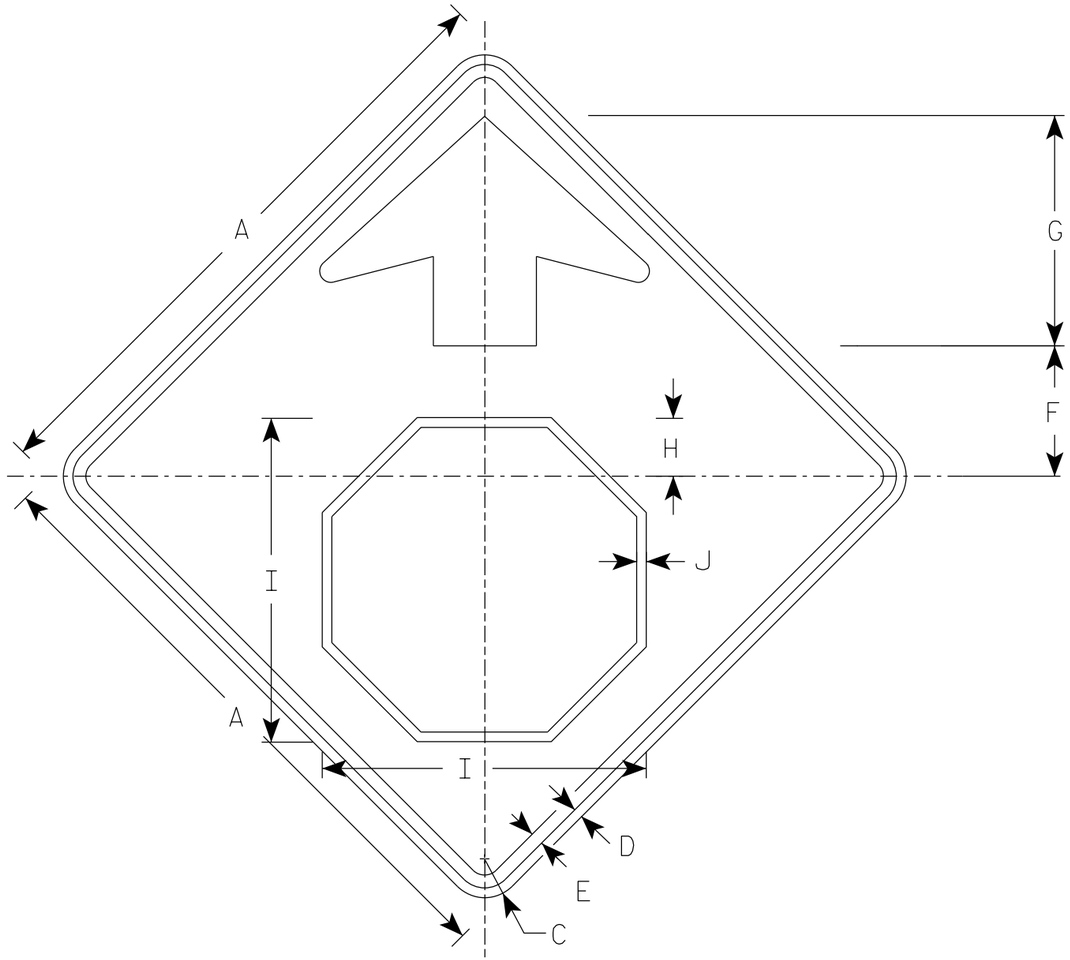
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-4.4

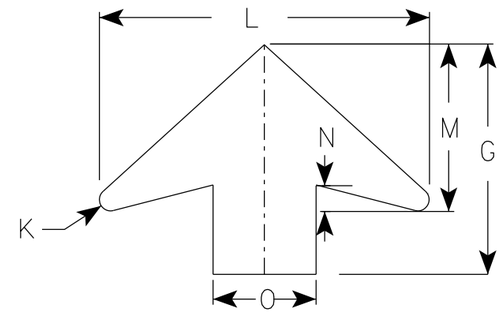
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 406 | E




W3-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Arrow & Border - Black
   Stop Symbol - White Border on Red Background




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 7/8 | 1/2 | 5/8 | 6 1/4 | 11 1/4 | 2 7/8 | 15 3/4 | 1/2 | 1/2 | 16 | 8 | 1 1/4 | 5 | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 2 1/4 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 3 1/2 | 19 | 5/8 | 5/8 | 19 1/4 | 9 3/4 | 1 5/8 | 6 | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 2 1/4 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 3 1/2 | 19 | 5/8 | 5/8 | 19 1/4 | 9 3/4 | 1 5/8 | 6 | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 2 1/4 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 3 1/2 | 19 | 5/8 | 5/8 | 19 1/4 | 9 3/4 | 1 5/8 | 6 | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 10 | 17 7/8 | 4 1/2 | 25 1/8 | 3/4 | 7/8 | 25 5/8 | 13 | 2 | 8 | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 10 | 17 7/8 | 4 1/2 | 25 1/8 | 3/4 | 7/8 | 25 5/8 | 13 | 2 | 8 | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W3-1

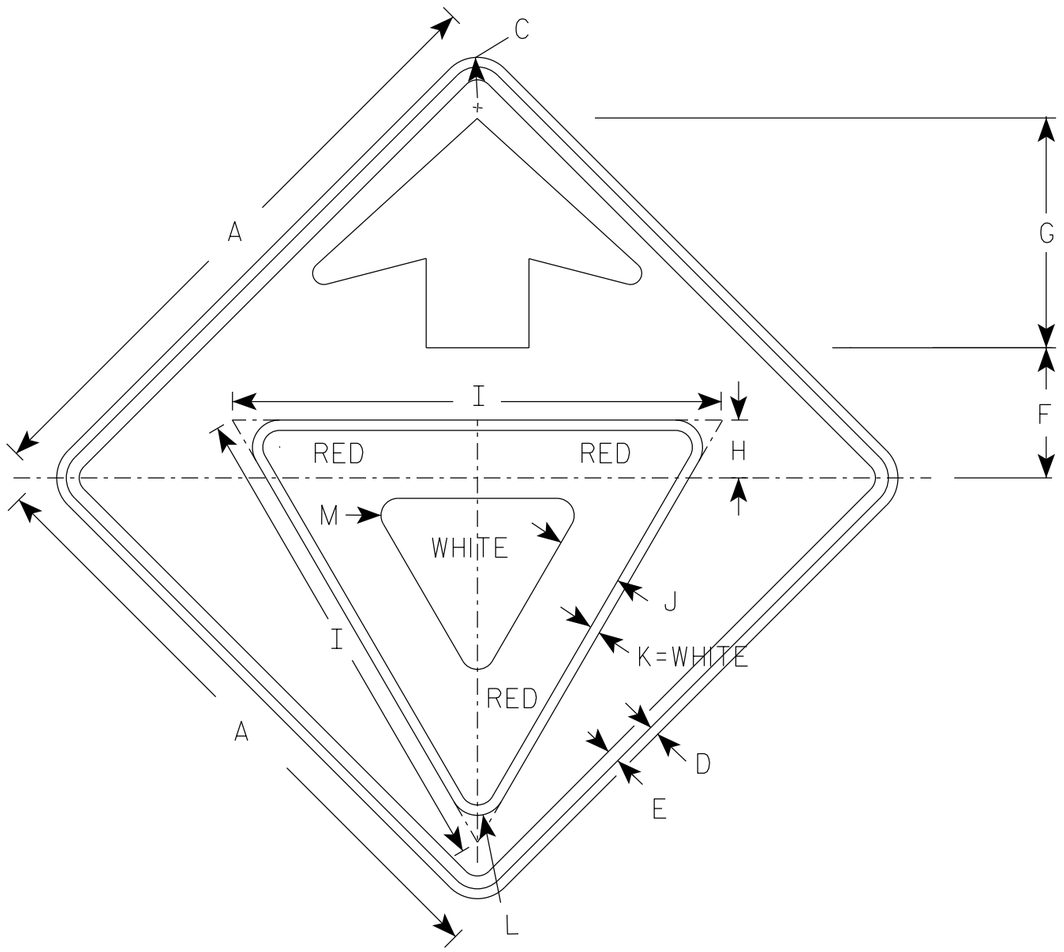
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/17/2023 PLATE NO. W3-1.13

PROJECT NO:

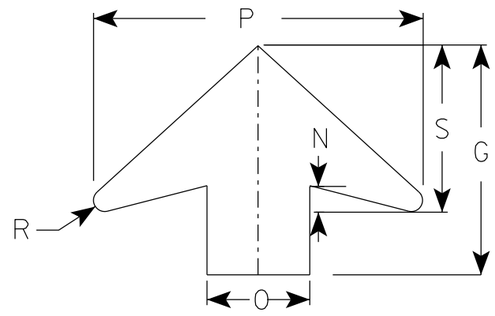
SHEET NO: 407 E




W3-2

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Arrow & Border - Black
   Yield Symbol - White Border on Red Background




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 7/8 | 1/2 | 5/8 | 6 1/4 | 11 1/4 | 3 | 25 | 3 3/8 | 1/2 | 1 3/8 | 7/8 | 1 1/4 | 5 | 16 | | 1/2 | 8 | | | | | | | | 6.25 |
| 2S | 36 | | 2 1/4 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 3 3/8 | 28 | 3 3/4 | 5/8 | 1 1/2 | 1 | 1 5/8 | 6 | 19 1/4 | | 5/8 | 9 3/4 | | | | | | | | 9.0 |
| 2M | 36 | | 2 1/4 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 3 3/8 | 28 | 3 3/4 | 5/8 | 1 1/2 | 1 | 1 5/8 | 6 | 19 1/4 | | 5/8 | 9 3/4 | | | | | | | | 9.0 |
| 3 | 36 | | 2 1/4 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 3 3/8 | 28 | 3 3/4 | 5/8 | 1 1/2 | 1 | 1 5/8 | 6 | 19 1/4 | | 5/8 | 9 3/4 | | | | | | | | 9.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 10 | 17 7/8 | 4 1/2 | 38 | 5 | 3/4 | 2 1/8 | 1 3/8 | 2 | 8 | 25 5/8 | | 7/8 | 13 | | | | | | | | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 10 | 17 7/8 | 4 1/2 | 38 | 5 | 3/4 | 2 1/8 | 1 3/8 | 2 | 8 | 25 5/8 | | 7/8 | 13 | | | | | | | | 16.0 |

STANDARD SIGN
W3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

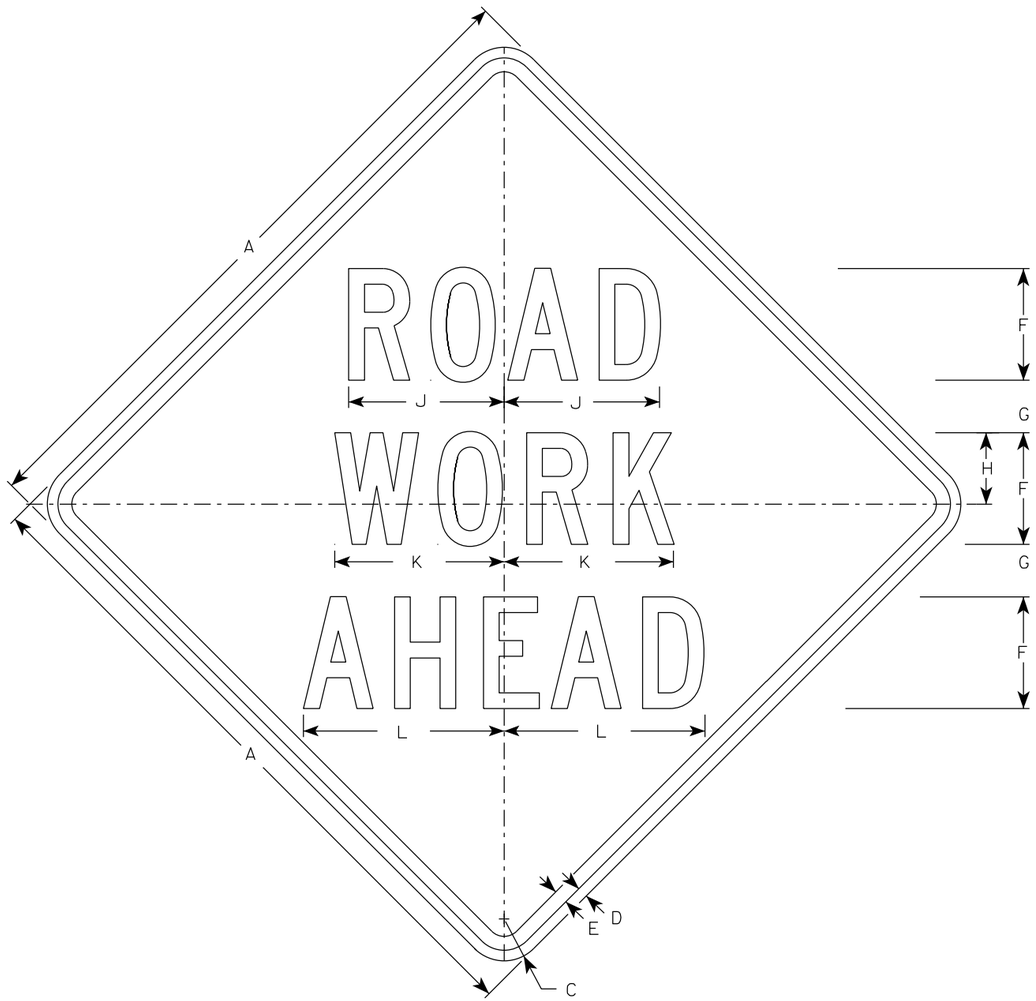
DATE 8/17/2023 PLATE NO. W3-2.10

PROJECT NO:

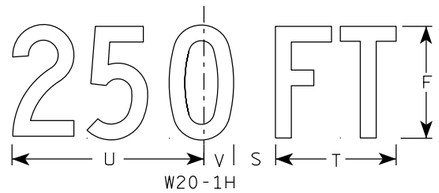
SHEET NO: 408 E

NOTES

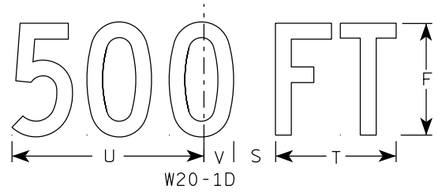
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.




W20-1A



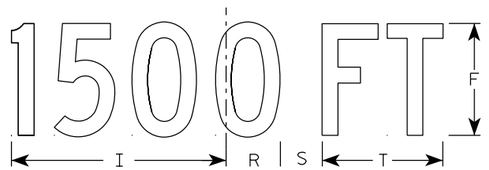

W20-1H



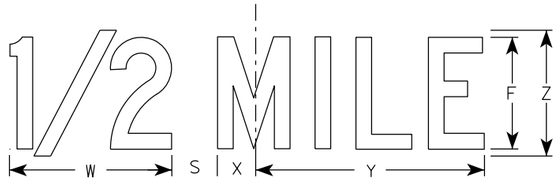

W20-1D



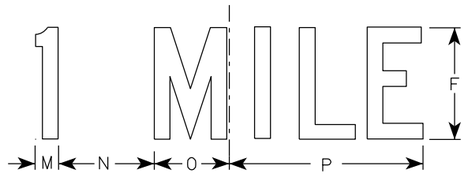

W20-1C



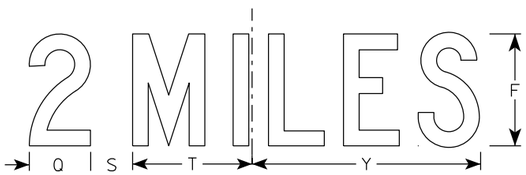

W20-1B




W20-1G




W20-1F




W20-1E

| 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 | | 2 1/4 | 5/8 | 3/4 | 5 | 2 5/8 | 3 1/4 | 10 1/8 | 7 | 7 5/8 | 8 7/8 | 1 1/8 | 4 1/2 | 3 1/2 | 9 | 3 1/4 | 2 1/2 | 2 1/4 | 5 5/8 | 9 | 1 3/8 | 8 | 1 3/4 | 10 3/4 | 6 | 9.0 |
| 2S | 48 | | 3 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

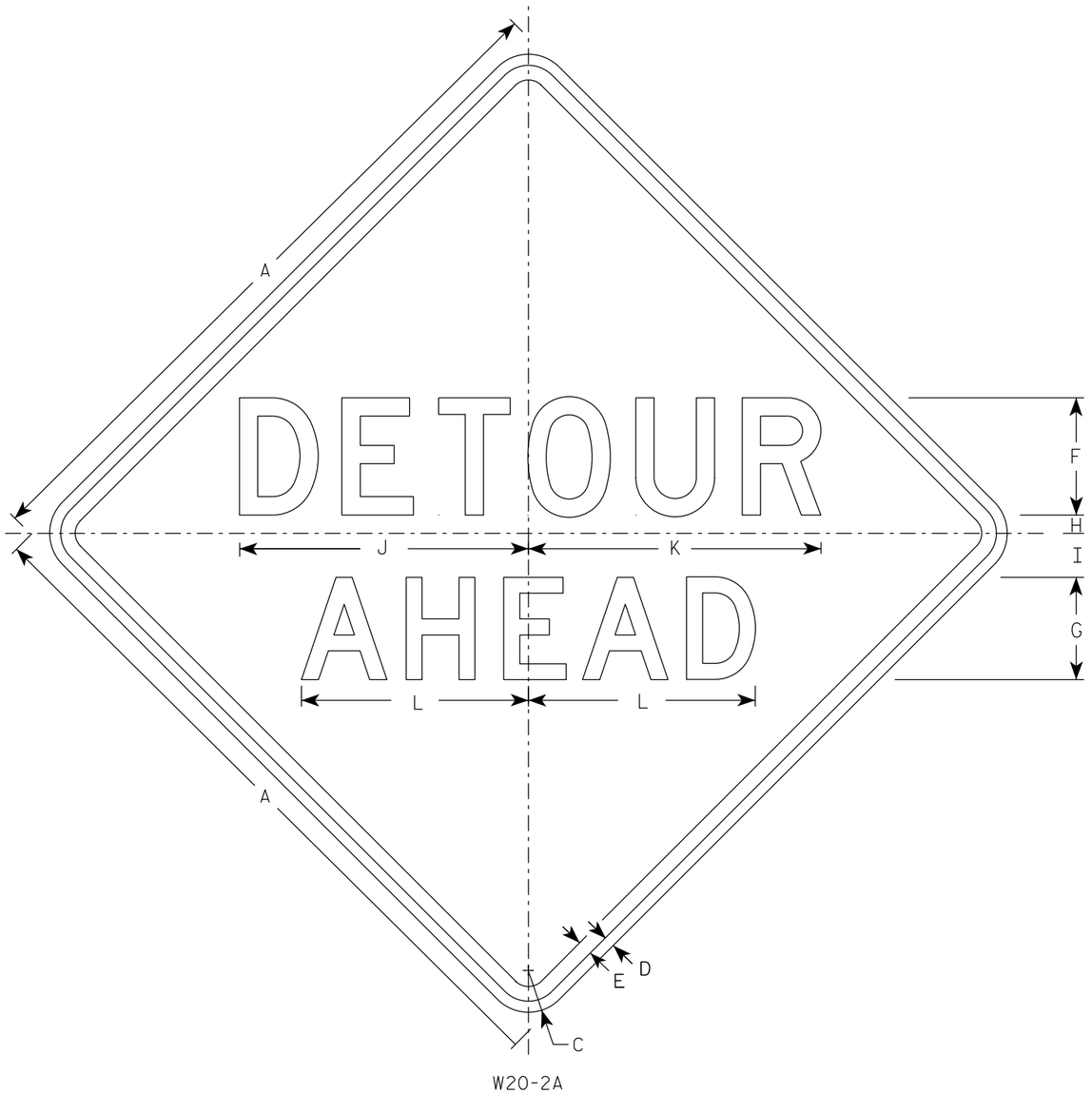
SHEET NO: 409 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 10-JAN 2024 11:16 PLOT BY : dotc4c

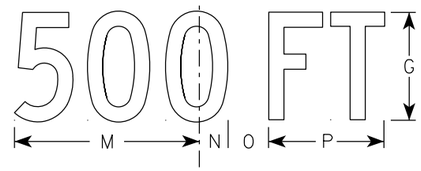
WISDOT/CADDS SHEET 42

7

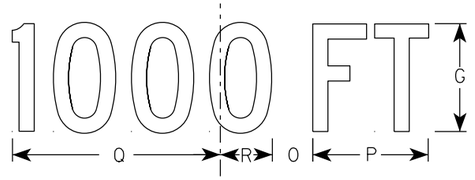
7



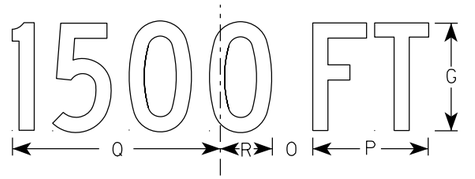

W20-2A



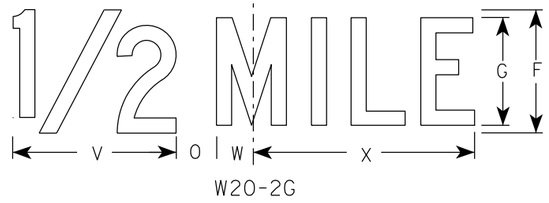

W20-2D



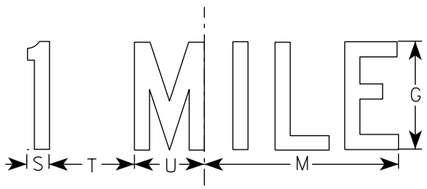

W20-2C




W20-2B




W20-2G




W20-2F

NOTES

1. Sign is Type II - Type F Reflective
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 | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 2 1/4 | 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 | | 3 | 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 | | 3 | 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 | | 3 | 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 | | 3 | 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 | | 3 | 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

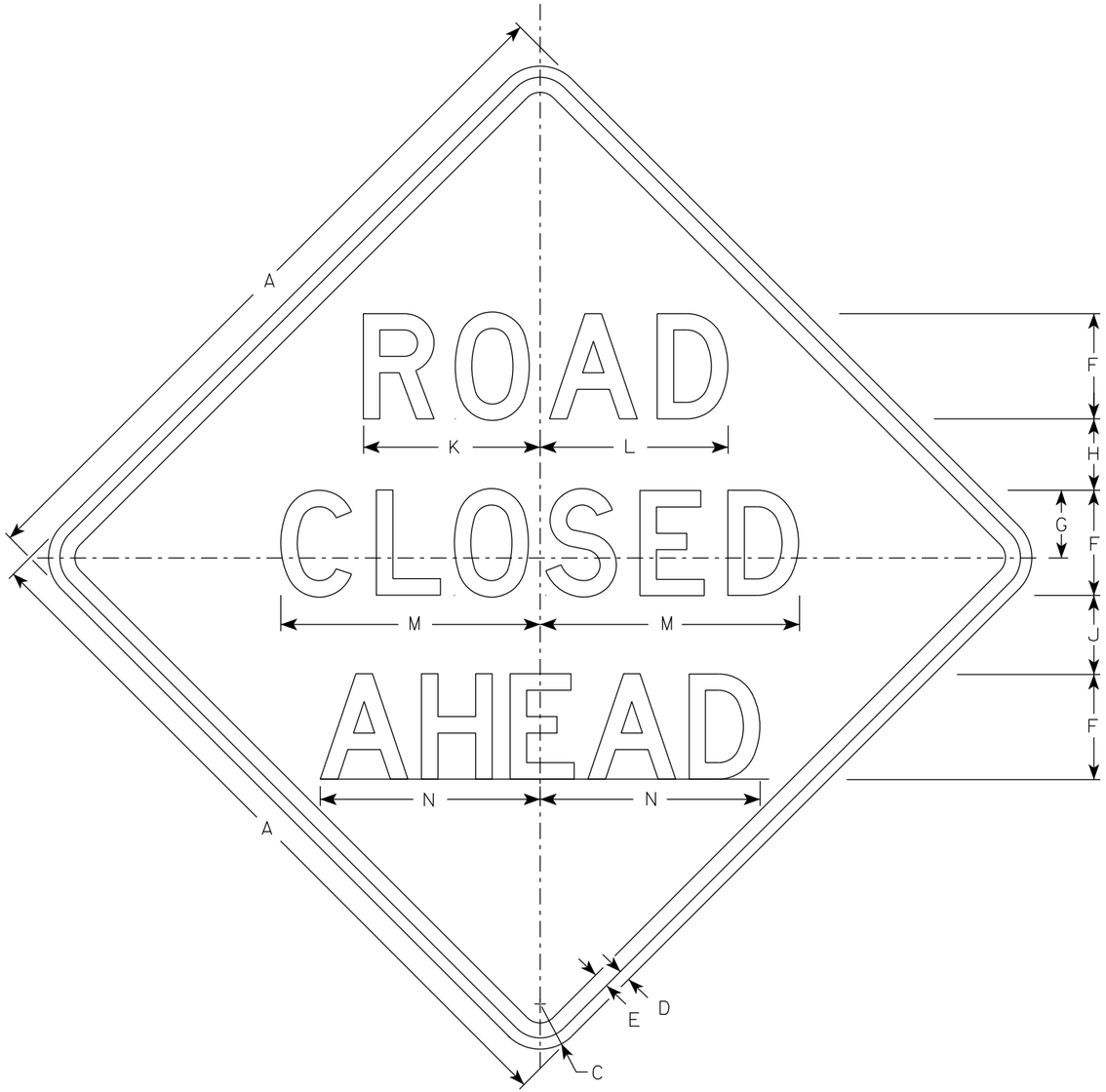
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-2.7

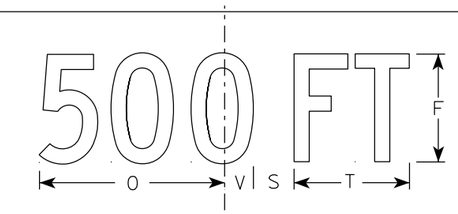
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



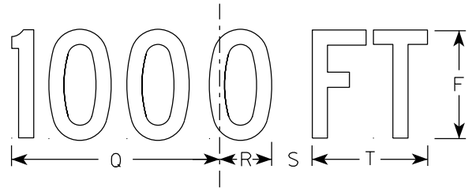
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



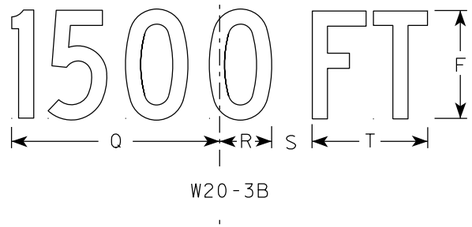

W20-3A



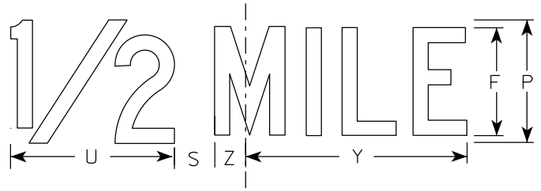

W20-3D



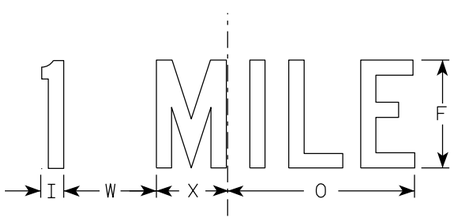

W20-3C




W20-3B




W20-3G




W20-3F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 2 1/4 | 5/8 | 3/4 | 5 | 3 3/8 | 3 1/2 | 1 1/8 | 4 | 8 3/8 | 8 7/8 | 12 1/2 | 11 | 9 | 6 | 10 1/8 | 2 1/2 | 1 7/8 | 5 5/8 | 8 | 1 3/8 | 4 1/2 | 3 1/2 | 10 3/4 | 1 3/4 | 9.0 |
| 2S | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

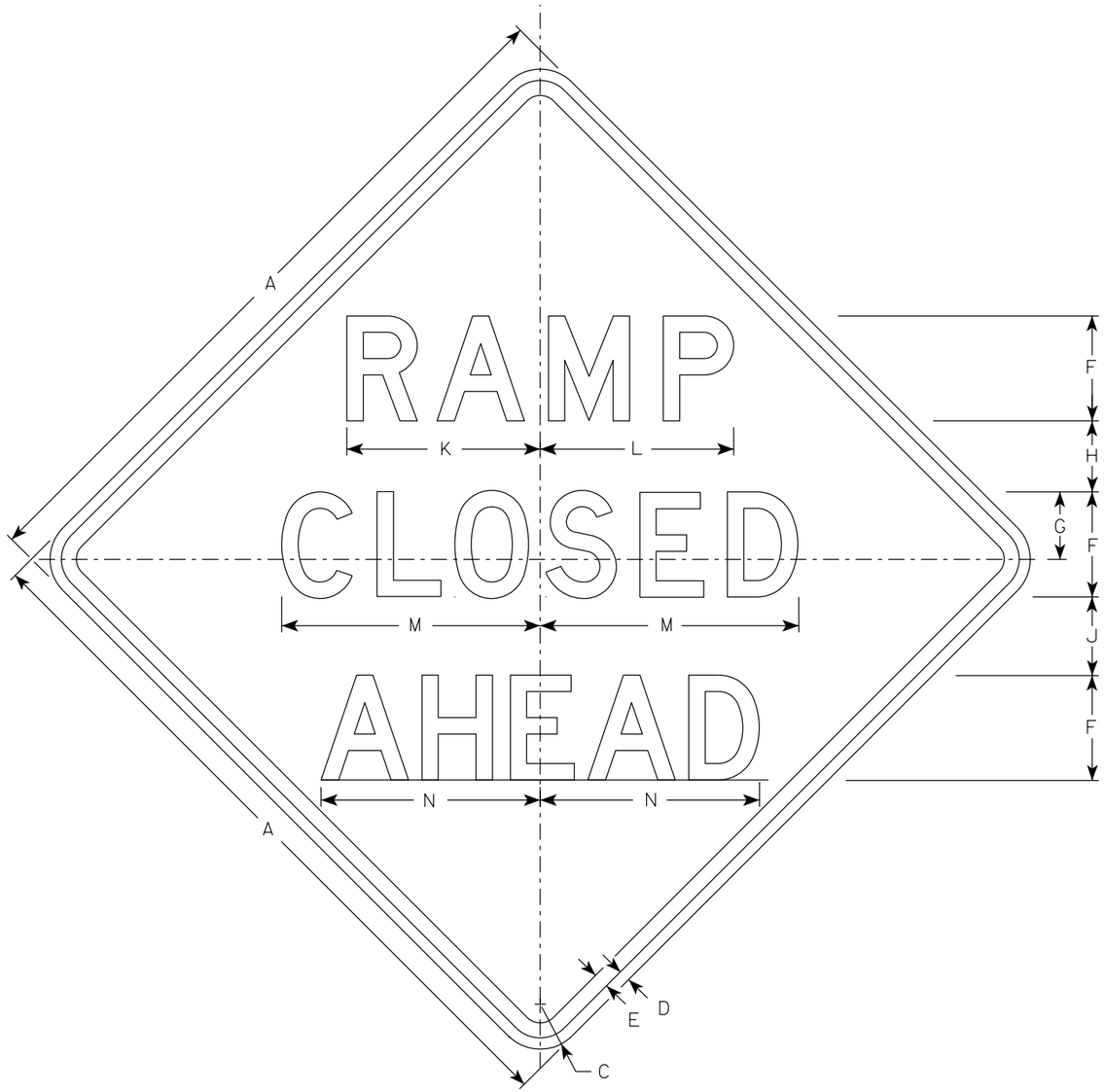
DATE 1/10/2024 PLATE NO. W20-3.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

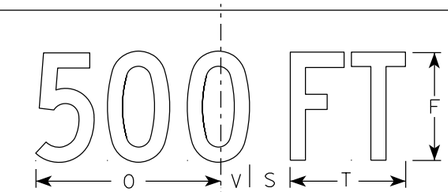


FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W203.DGN PLOT DATE : 10-JAN 2024 12:02 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

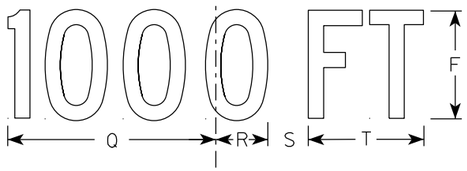

7



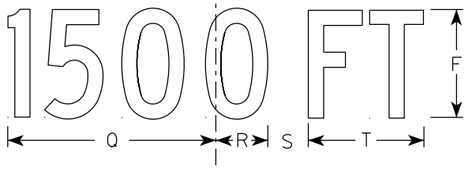

W20-53A



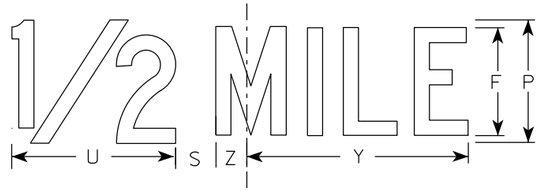

W20-53D



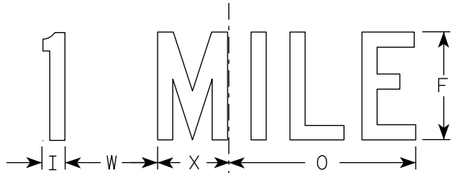

W20-53C




W20-53B




W20-53G




W20-53F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 2 1/4 | 5/8 | 3/4 | 5 | 3 3/8 | 3 1/2 | 1 1/8 | 4 | 9 1/4 | 9 1/4 | 12 1/2 | 11 | 9 | 6 | 10 1/8 | 2 1/2 | 1 7/8 | 5 5/8 | 8 | 1 3/8 | 4 1/2 | 3 1/2 | 10 3/4 | 1 3/4 | 9.0 |
| 2S | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 12 7/8 | 12 7/8 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 12 7/8 | 12 7/8 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 12 7/8 | 12 7/8 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 12 7/8 | 12 7/8 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 12 7/8 | 12 7/8 | 17 1/4 | 14 5/8 | 12 | 8 | 13 1/2 | 3 3/8 | 2 5/8 | 7 1/2 | 10 5/8 | 1 7/8 | 6 | 4 5/8 | 14 3/8 | 2 3/8 | 16.0 |

STANDARD SIGN
W20-53A,B,C,D,F,G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-53.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

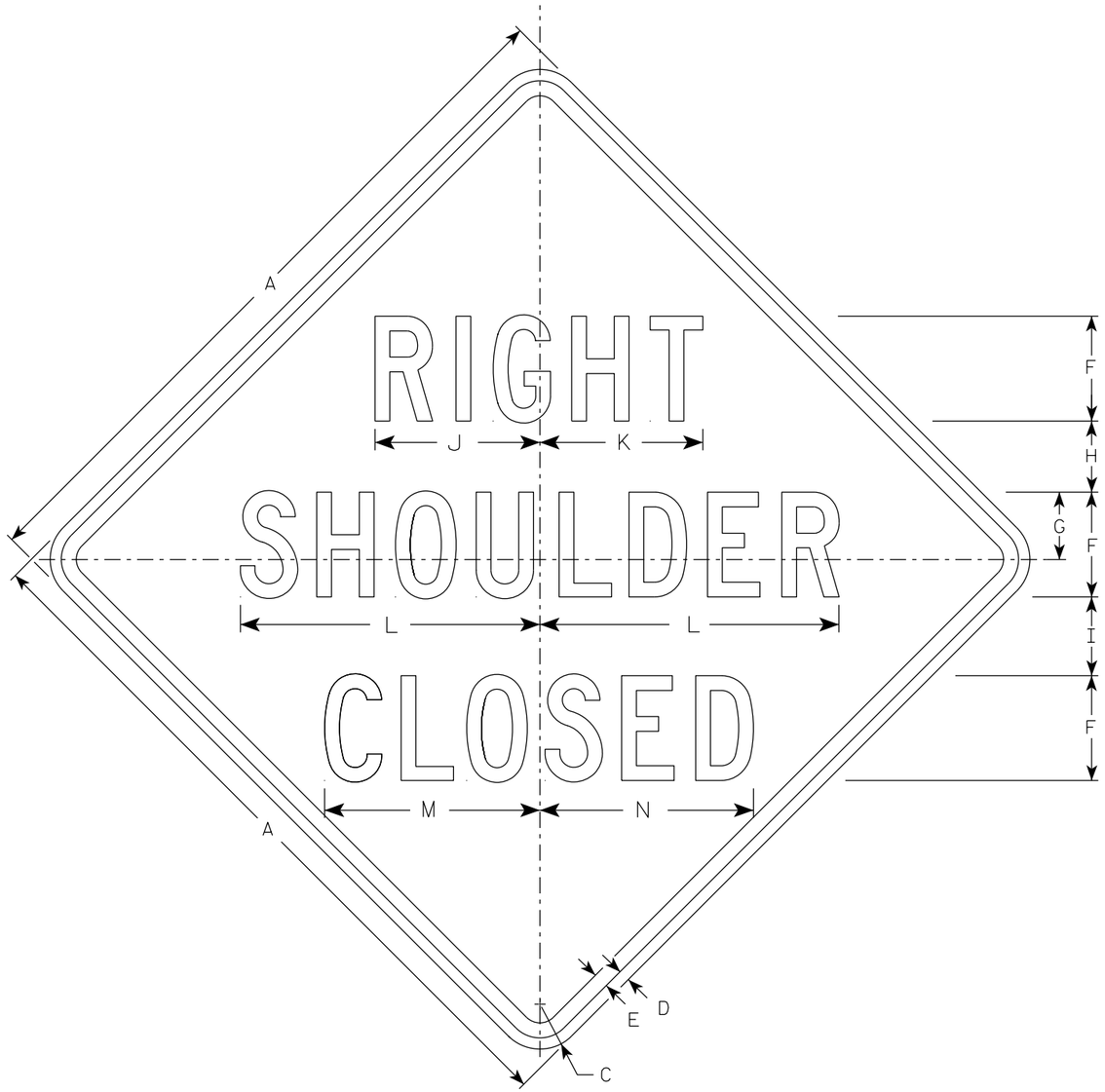


FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 10-JAN 2024 2:38 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





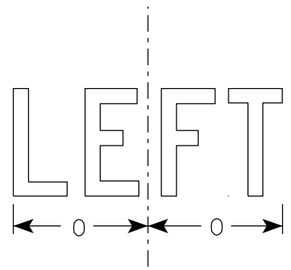
7




W21-5A

## NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D




W21-5AL

| 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 | | 2 1/4 | 5/8 | 3/4 | 5 | 3 3/8 | 3 1/2 | 4 | 7 7/8 | 7 3/4 | 14 1/4 | 10 1/4 | 10 1/8 | 6 1/4 | | | | | | | | | | | | 9.0 |
| 2S | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 5 1/4 | 11 | 10 7/8 | 20 | 14 3/8 | 14 1/4 | 8 3/4 | | | | | | | | | | | | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 5 1/4 | 11 | 10 7/8 | 20 | 14 3/8 | 14 1/4 | 8 3/4 | | | | | | | | | | | | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 5 1/4 | 11 | 10 7/8 | 20 | 14 3/8 | 14 1/4 | 8 3/4 | | | | | | | | | | | | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 5 1/4 | 11 | 10 7/8 | 20 | 14 3/8 | 14 1/4 | 8 3/4 | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | 7 | 4 1/2 | 4 3/4 | 5 1/4 | 11 | 10 7/8 | 20 | 14 3/8 | 14 1/4 | 8 3/4 | | | | | | | | | | | | 16.0 |

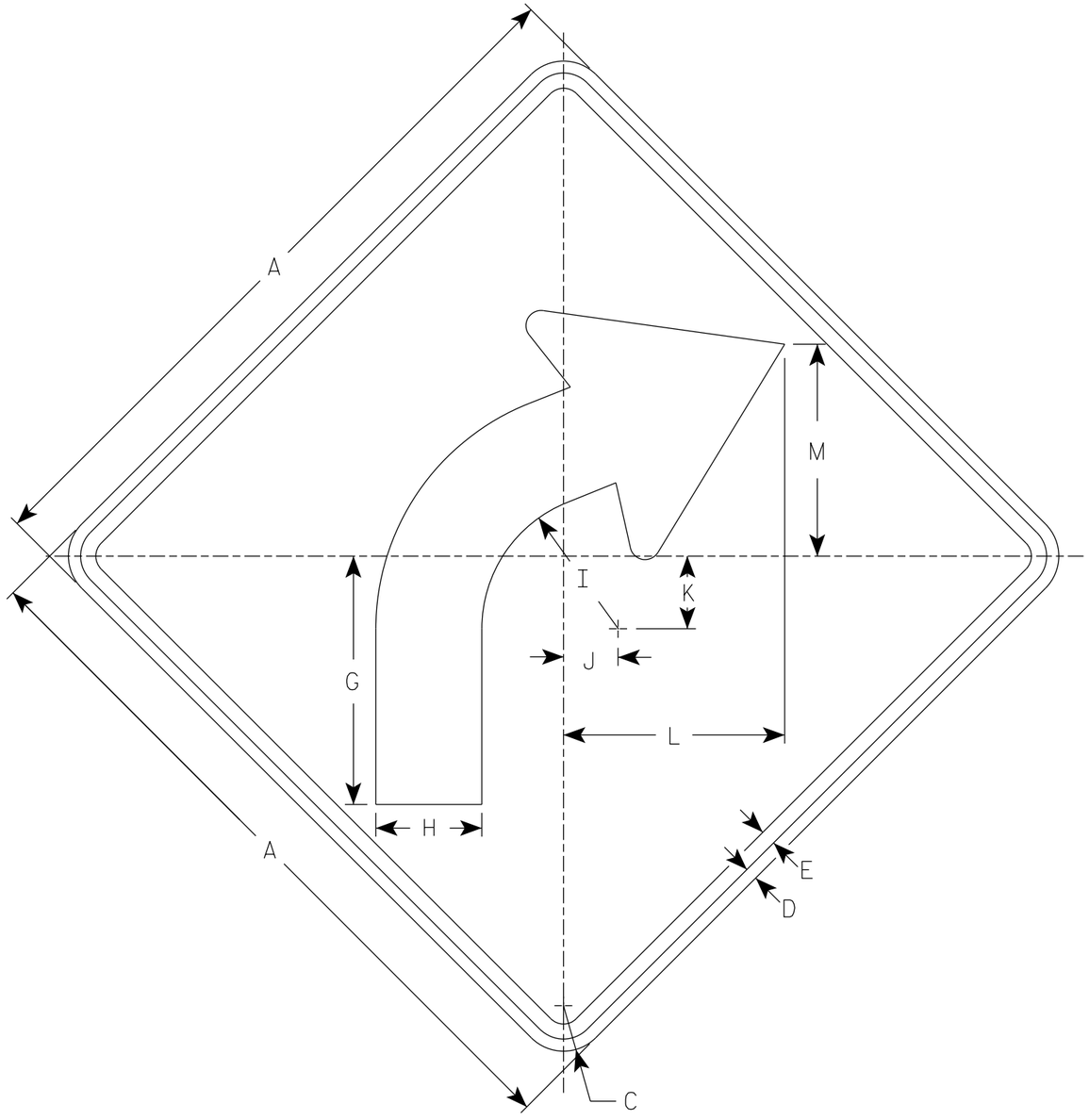
STANDARD SIGN
W21-5A

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/11/2024 PLATE NO. W21-5A.4

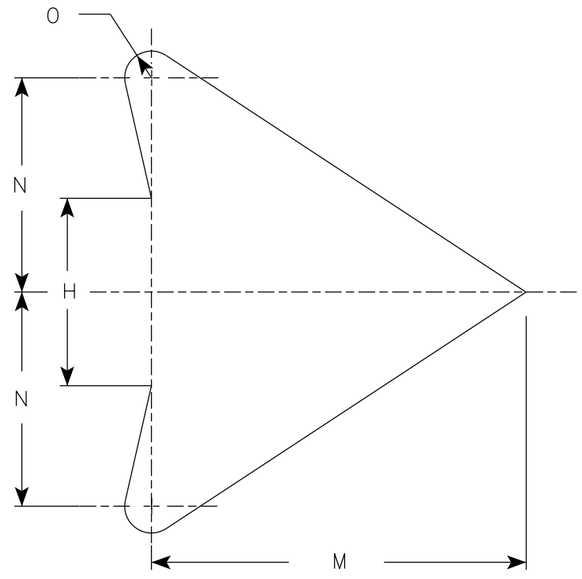
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 413 | E




W01-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
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 | | 2 1/4 | 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 | | 3 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | | | | | | | | | | | | 16.0 |
| 2M | 48 | | 3 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | | | | | | | | | | | | 16.0 |
| 3 | 48 | | 3 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | | | | | | | | | | | | 16.0 |
| 4 | 48 | | 3 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 3 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | | | | | | | | | | | | 16.0 |

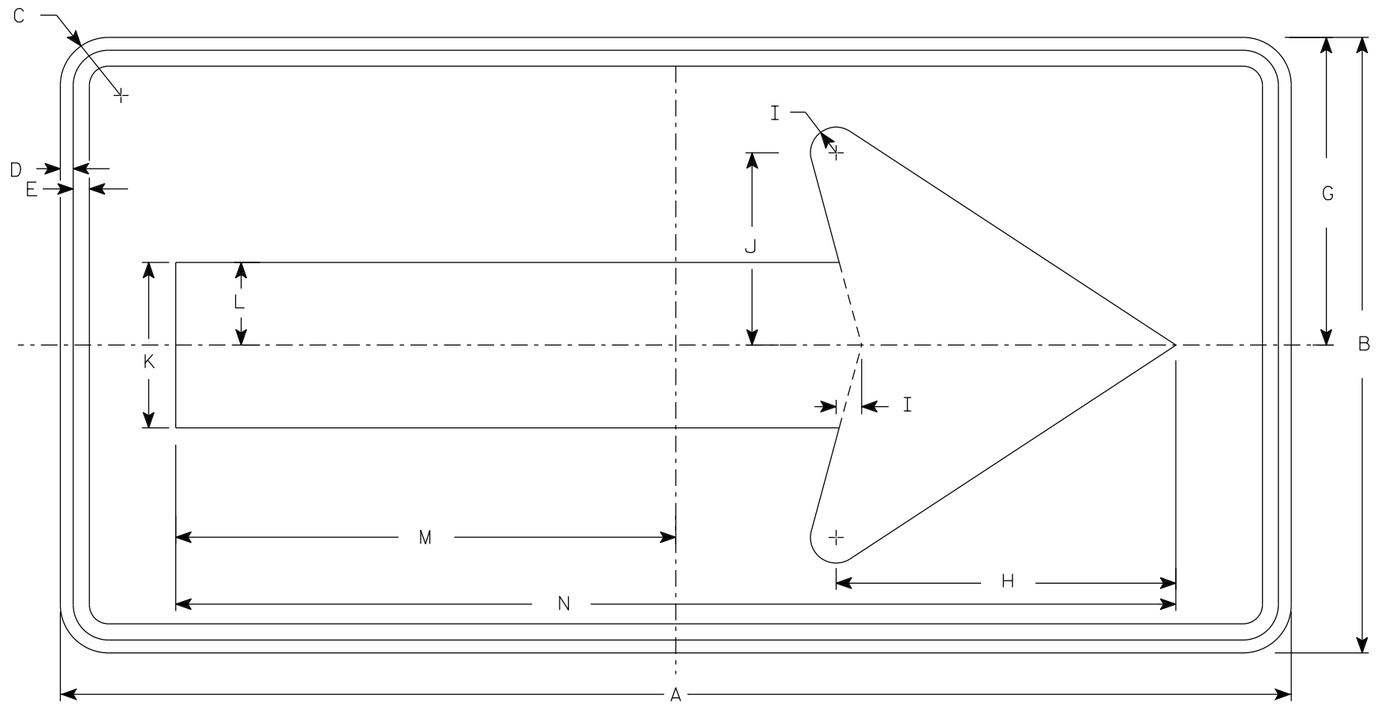
STANDARD SIGN
W01-2

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-2.2

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 414 | E |
|---|---|---|---|---|---|




WO1-6

## NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| 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 7/8 | 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 7/8 | 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 7/8 | 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 7/8 | 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 7/8 | 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
WO1-6

*WISCONSIN DEPT OF TRANSPORTATION*

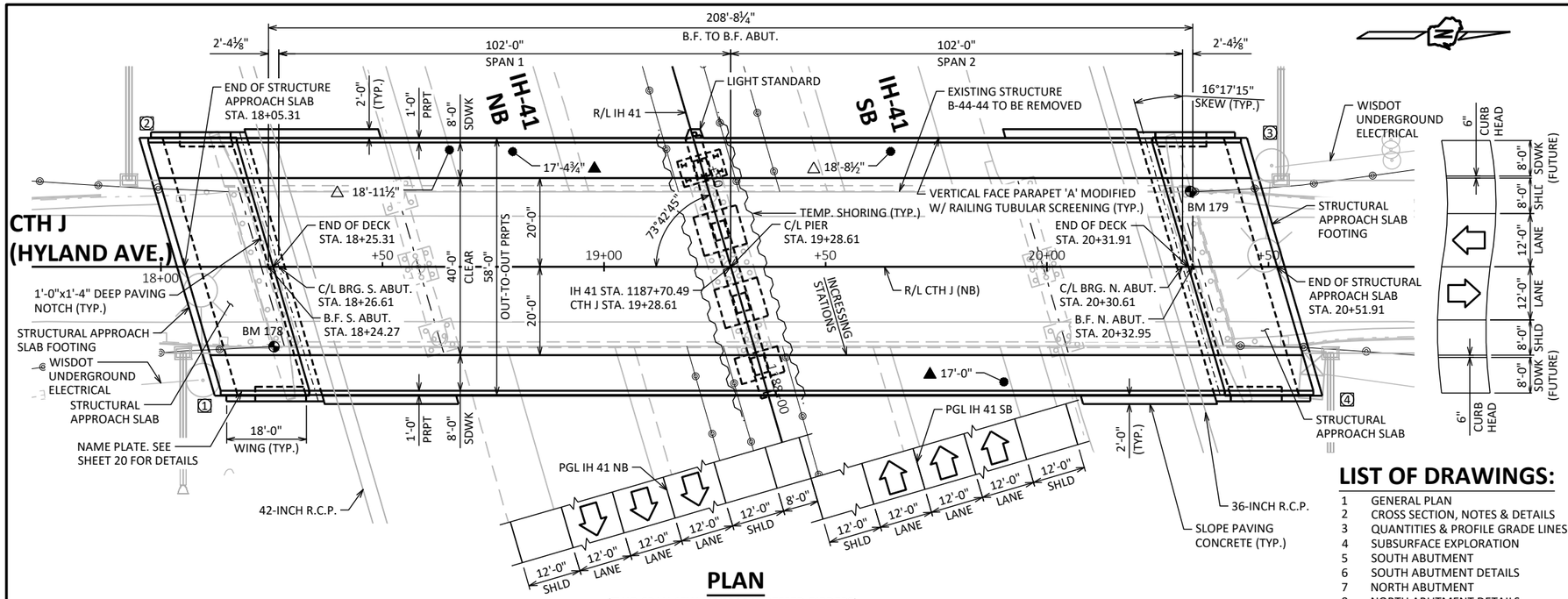
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-6.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

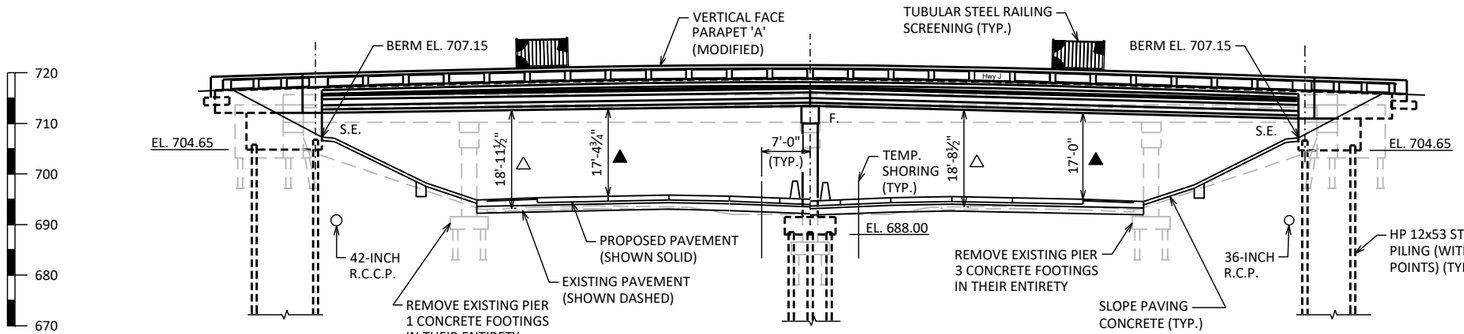
STATE PROJECT NUMBER

**1130-66-78**



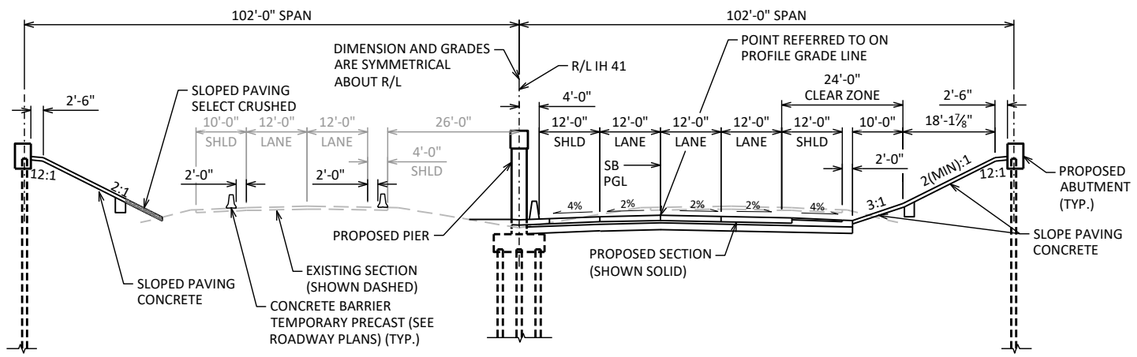

## PLAN

(TWO-SPAN 45W-INCH PRESTRESSED GIRDERS)




## ELEVATION

(NORMAL TO SUBSTRUCTURE, LOOKING WEST)




**INTERIM CONDITION**
(SHOWING EXISTING NB IH 41 DIMENSIONS AND GRADES)
(SB SIMILAR)

## TYPICAL SECTION

(LOOKING WEST, NORMAL TO IH41)

**ULTIMATE CONDITION**
(SHOWING PROPOSED SB IH 41 DIMENSIONS AND GRADES)
(NB SIMILAR)

## DESIGN DATA

**LIVE LOAD:**

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.21
OPERATING RATING: RF = 1.90
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

**MATERIAL PROPERTIES:**

CONCRETE MASONRY:
SUPERSTRUCTURE — $f'_c$ = 4,000 PSI
ALL OTHER — $f'_c$ = 3,500 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — $f_y$ = 60,000 PSI

45-W" PRESTRESSED GIRDERS:
CONCRETE MASONRY — $f'_c$ = 8,000 PSI
STRANDS: 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

## FOUNDATION DATA

ABUTMENTS AND PIER TO BE SUPPORTED ON PILING STEEL HP 12-INCH X 53 LB (WITH PILE POINTS) DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE PILE CAPACITY.

ESTIMATED PILE LENGTHS:
SOUTH ABUTMENT — 100 FEET EACH
PIER — 80 FEET EACH
NORTH ABUTMENT — 100 FEET EACH

## TRAFFIC DATA

| | ADT (2025) | ADT (2045) | DESIGN SPEED (MPH) |
|---|---|---|---|
| IH 41 = | 49,870 | 67,310 | 75 |
| CTH J = | 11,850 | 15,650 | 30 |

## LIST OF DRAWINGS:


1 GENERAL PLAN
2 CROSS SECTION, NOTES & DETAILS
3 QUANTITIES & PROFILE GRADE LINES
4 SUBSURFACE EXPLORATION
5 SOUTH ABUTMENT
6 SOUTH ABUTMENT DETAILS
7 NORTH ABUTMENT
8 NORTH ABUTMENT DETAILS
9 ABUTMENT DETAILS
10 PIER
11 PIER DETAILS
12 45W" PRESTRESSED GIRDER DETAILS - 1
13 45W" PRESTRESSED GIRDER DETAILS - 2
14 STEEL DIAPHRAGMS
15 SUPERSTRUCTURE PLAN
16 SUPERSTRUCTURE SECTION
17 SUPERSTRUCTURE DETAILS - 1
18 SUPERSTRUCTURE DETAILS - 2
19 STRUCTURAL APPROACH SLAB
20 VERTICAL FACE PARAPET 'A' MODIFIED
21 LIGHT STANDARD AND JUNCTION BOX
22 CONDUIT DETAILS AND NOTES
23 TUBULAR STEEL RAILING SCREENING
24 AESTHETIC DETAILS - 1
25 AESTHETIC DETAILS - 2
26 LIGHT ACCESS GATE DETAILS


## LEGEND

[#] INDICATES WING NUMBER

▲ POINT OF MINIMUM VERTICAL CLEARANCE FOR PROPOSED PAVEMENT (FINAL CONDITION)

△ POINT OF MINIMUM VERTICAL CLEARANCE FOR EXISTING PAVEMENT (INTERIM CONDITION)

## BENCH MARK

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| BM 178 | 18+25.44, 18.04' LT | CHISELED SQUARE | 716.77 |
| BM 179 | 20+32.39, 17.15' RT | CHISELED SQUARE | 716.46 |

NOTE: SEE ROADWAY PLANS FOR ADDITIONAL BENCHMARK AND CONTROL POINT INFORMATION.

WISCONSIN
KEITH R. BEHREND E-42073 MADISON WI
PROFESSIONAL ENGINEER
Keith Behrend
8/15/2024

**STRUCTURE DESIGN CONTACTS:**
DESIGN CONSULTANT CONTACT:
KEITH BEHREND (608) 251-4843

BUREAU OF STRUCTURES CONTACTS:
AARON BONK (608) 261-0261

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |


STRAND ASSOCIATES®
MADISON, WISCONSIN 53715
(608)–251–4843
(608) 251–8655 FAX
WWW.STRAND.COM


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED SDR 08/16/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

**STRUCTURE B-44-338**

CTH J (HYLAND AVE.) OVER IH 41

COUNTY: OUTAGAMIE
~~TOWN~~/CITY/~~VILLAGE~~: KAUKAUNA

DESIGN SPEC.: AASHTO LRFD BRIDGE DESIGN SPECIFICATION

| DESIGNED BY | DESIGNED CK'D | DRAWN BY | PLANS CK'D |
|---|---|---|---|
| JFG | KRB | ZHC | KRB |

**GENERAL PLAN**

SHEET 1 OF 26
416

SCALE =

I.D.

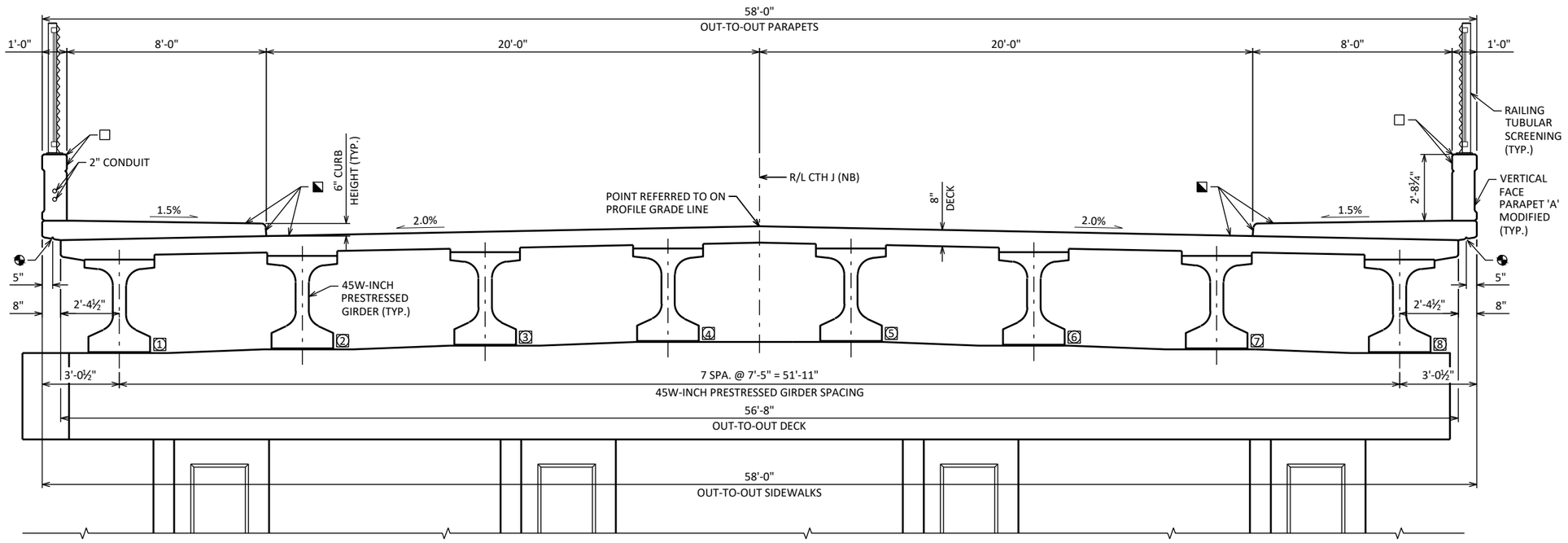
DATE:

8

8

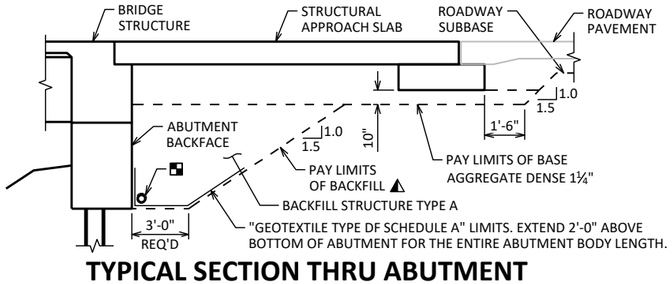
STATE PROJECT NUMBER

**1130-66-78**

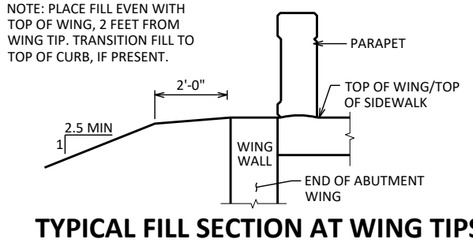



## CROSS SECTION THRU SUPERSTRUCTURE

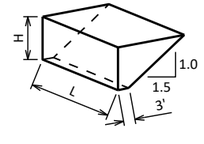
(LOOKING NORTH)




## TYPICAL SECTION THRU ABUTMENT




## TYPICAL FILL SECTION AT WING TIPS




## ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
$V_{CF}$ = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)
$V_{CY}$ = $V_{CF}$(EF)/27
$V_{TON}$ = $V_{CY}$(2.0)

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR DIMENSIONS FOR BENDING ARE OUT-TO-OUT OF BARS.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-44-338" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A. ALSO EXCLUDED IS THE "BASE AGGREGATE DENSE 1 1/4-INCH" AS DETAILED ON THE STRUCTURAL APPROACH SLAB SHEETS.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDERS DETAIL SHEET.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

THE EXISTING STRUCTURE B-44-44, A 4-SPAN PRESTRESSED GIRDER BRIDGE 218' LONG BY 36.5' WIDE, IS TO BE REMOVED.

ALL CAST-IN-PLACE SUPERSTRUCTURE CONCRETE SHALL BE HIGH PERFORMANCE CONCRETE. THIS INCLUDES THE DECK, SIDEWALK PARAPETS, PIER DIAPHRAGM, ABUTMENT DIAPHRAGMS, AND APPROACH SLAB. ALL OTHER CONCRETE, INCLUDING THE APPROACH SLAB FOOTING, SHALL BE PAID FOR UNDER BID ITEM CONCRETE MASONRY BRIDGES.

## LEGEND

- ¾" V-GROOVE REQ'D. EXTEND TO 6" FROM F.F. OF ABUTMENT DIAPHRAGMS.
- PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF DECK AND SIDEWALK, FACE OF SIDEWALK AND VERTICAL AND HORIZONTAL SURFACES OF PAVING NOTCHES.
- BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.
- PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE DETAIL ON "SOUTH ABUTMENT" SHEET.
- PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE INSIDE FACE, TOP AND ENDS OF THE CONCRETE PARAPETS.
- (#) INDICATES GIRDER NUMBER.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**CROSS SECTION, NOTES & DETAILS**

SHEET 2
417

SCALE =

8

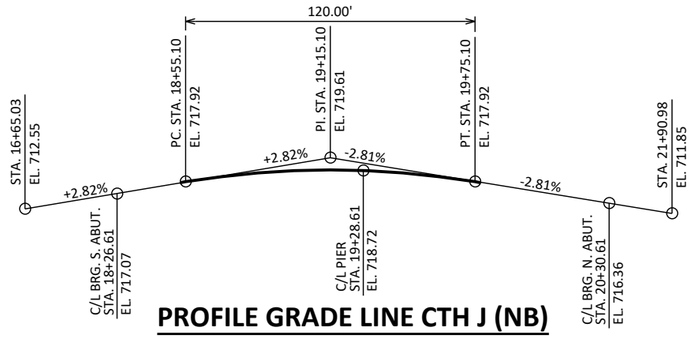
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STATE PROJECT NUMBER

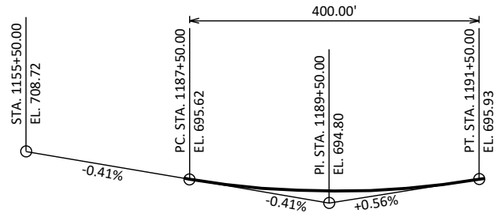
**1130-66-78**

## TOTAL ESTIMATED QUANTITIES

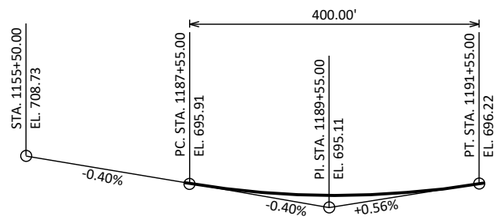
| BID NUMBER | BID ITEM | UNIT | S. ABUT. | PIER | N. ABUT. | SUPER. | APPROACH SLABS | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 203.0220 | REMOVING STRUCTURE B-44-44 | EACH | --- | --- | --- | --- | --- | 1 |
| 206.1001 | EXCAVATION FOR STRUCTURES BRIDGES B-44-338 | EACH | --- | --- | --- | --- | --- | 1 |
| 210.1500 | BACKFILL STRUCTURE TYPE A | TON | 358 | --- | 316 | --- | --- | 674 |
| 305.0120 | BASE AGGREGATE DENSE 1-1/4 INCH | TON | --- | --- | --- | --- | 460 | 460 |
| 501.1000.S | ICE HOT WEATHER CONCRETING | LB | --- | --- | --- | 4,200 | 1,040 | 5,240 |
| 502.0100 | CONCRETE MASONRY BRIDGES | CY | 90.3 | 102.7 | 82.1 | --- | 33.5 | 309 |
| 502.3200 | PROTECTIVE SURFACE TREATMENT | SY | --- | --- | --- | 1,340 | 253 | 1,593 |
| 502.3210 | PIGMENTED SURFACE SEALER | SY | --- | --- | --- | 168 | 34 | 202 |
| 503.0146 | PRESTRESSED GIRDER TYPE I 45W-INCH | LF | --- | --- | --- | 1,638 | --- | 1,638 |
| 505.0400 | BAR STEEL REINFORCEMENT HS STRUCTURES | LB | 6,080 | 2,600 | 5,960 | --- | --- | 14,640 |
| 505.0600 | BAR STEEL REINFORCEMENT HS COATED STRUCTURES | LB | 2,990 | 18,510 | 2,950 | 116,150 | 27,270 | 167,870 |
| 505.0800.S | BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES | LB | --- | --- | --- | --- | 2,010 | 2,010 |
| 506.2605 | BEARING PADS ELASTOMERIC NON-LAMINATED | EACH | 8 | 16 | 8 | --- | --- | 32 |
| 506.4000 | STEEL DIAPHRAGMS B-44-338 | EACH | --- | --- | --- | 28 | --- | 28 |
| 511.1200 | TEMPORARY SHORING B-44-338 | SF | --- | 636 | --- | --- | --- | 636 |
| 513.4091 | RAILING TUBULAR SCREENING | LF | --- | --- | --- | 413 | 78 | 491 |
| 516.0500 | RUBBERIZED MEMBRANE WATERPROOFING | SY | 17 | --- | 17 | --- | --- | 34 |
| 531.8990 | ANCHOR ASSEMBLIES POLES ON STRUCTURES | EACH | --- | --- | --- | 1 | --- | 1 |
| 550.0500 | PILE POINTS | EACH | 14 | 26 | 14 | --- | --- | 54 |
| 550.1120 | PILING STEEL HP 12-INCH X 53 LB | LF | 1,400 | 2,080 | 1,400 | --- | --- | 4,880 |
| 604.0400 | SLOPE PAVING CONCRETE | SY | 157 | --- | 157 | --- | --- | 314 |
| 604.0600 | SLOPE PAVING SELECT CRUSHED MATERIAL | SY | 43 | --- | 43 | --- | --- | 86 |
| 612.0406 | PIPE UNDERDRAIN WRAPPED 6-INCH | LF | 328 | --- | 328 | --- | --- | 656 |
| 645.0111 | GEOTEXTILE TYPE DF SCHEDULE A | SY | 60 | --- | 60 | --- | --- | 120 |
| 652.0125 | CONDUIT RIGID METALLIC 2-INCH | LF | 6 | --- | 6 | 12 | --- | 24 |
| 652.0225 | CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH | LF | 38 | --- | 38 | 406 | --- | 482 |
| 653.0222 | JUNCTION BOXES 18X12X6 -INCH | EACH | --- | --- | --- | 1 | --- | 1 |
| SPV.0035.0001 | HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES | CY | --- | --- | --- | 561.2 | 139.5 | 701 |
| | NON-BID ITEMS | | | | | | | |
| | NAME PLATE | EACH | | | | | | 1 |
| | FILLER | SIZE | | | | | | 1/2" & 3/4" |




## PROFILE GRADE LINE CTH J (NB)




## PROFILE GRADE LINE IH 41 NB




## PROFILE GRADE LINE IH 41 SB

8

8

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**QUANTITIES & PROFILE GRADE LINES**

SHEET 3

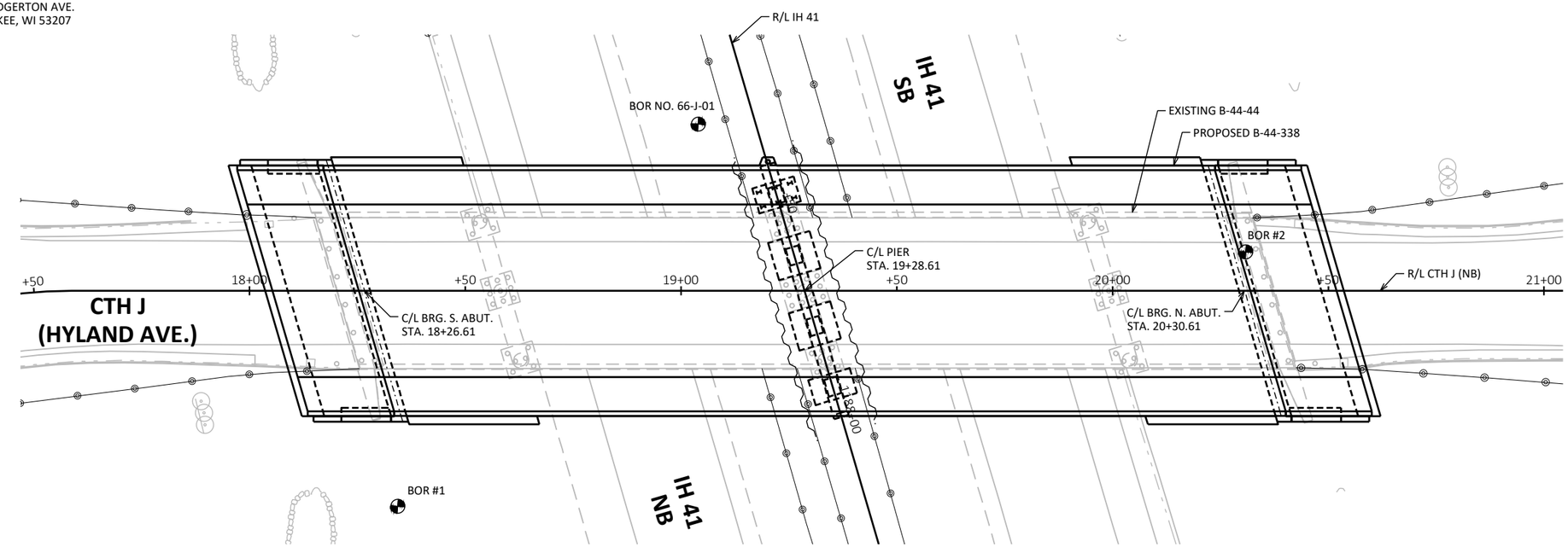
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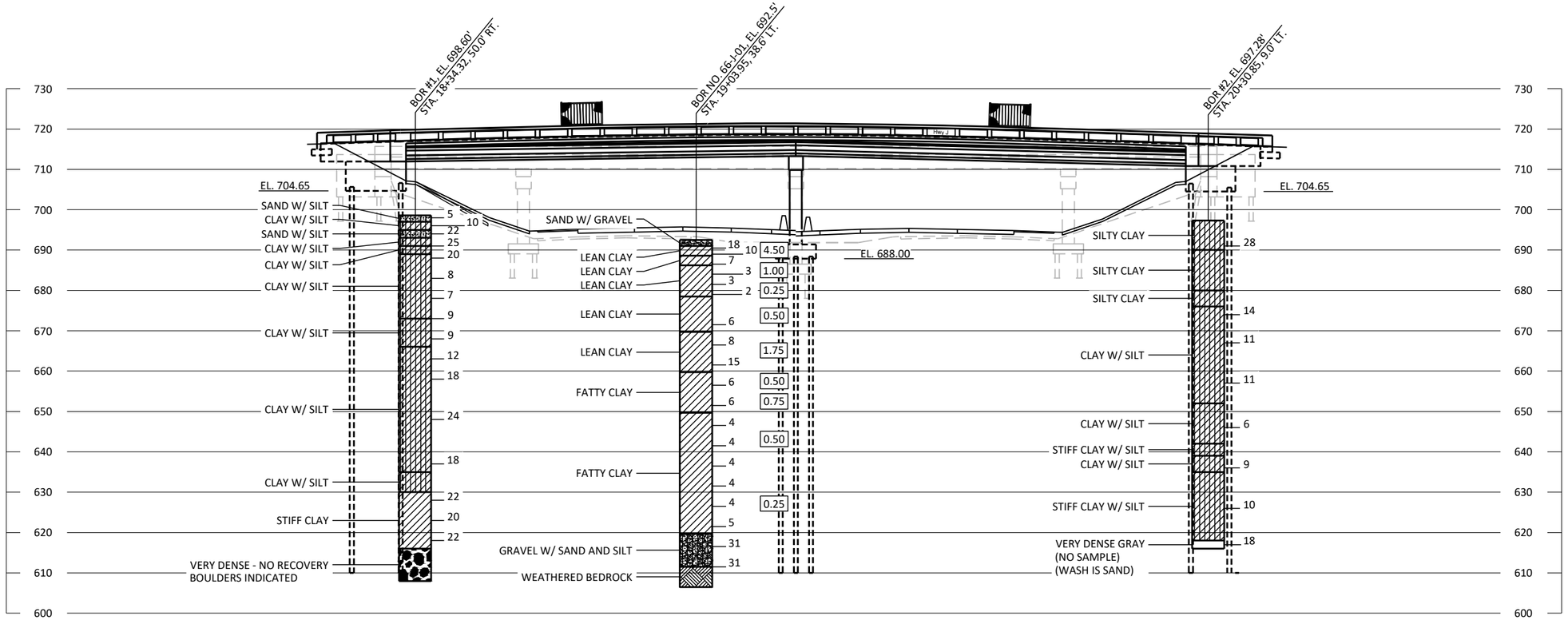
SCALE =

| BORING # | DATE COMPLETED | NORTHING (Y) | EASTING (X) |
|---|---|---|---|
| 66-J-01 | 5/18/2022 | 578236 | 868565 |
| BORINGS COMPLETED BY: GESTRA ENGINEERING, INC. | | | |
| REPORT COMPLETED BY: GESTRA ENGINEERING, INC. | | | |
| ALL COORDINATES REFERENCED TO WCCS NAD 83(91) OUTAGAMIE COUNTY | | | |

BORINGS PERFORMED AND REPORT COMPLETED BY:
GESTRA ENGINEERING, INC.
191 W. EDGERTON AVE.
MILWAUKEE, WI 53207

NOTE:
B-44-44 BORING #1 AND #2 ARE HISTORICAL BORINGS COMPLETED AROUND 1960 PRIOR TO CONSTRUCTION OF THE EXISTING B-44-44 BRIDGE. BORING INFORMATION SHOWN ON THIS DRAWING FOR THESE BORINGS IS REPRODUCED FROM THE ORIGINAL B-44-44 STRUCTURE PLANS.



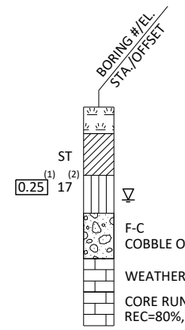

STATE PROJECT NUMBER

**1130-66-78**

**MATERIAL SYMBOLS**

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/ META

**LEGEND OF BORING**




(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

**GROUND WATER ELEVATION**

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

**ABBREVIATIONS**

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

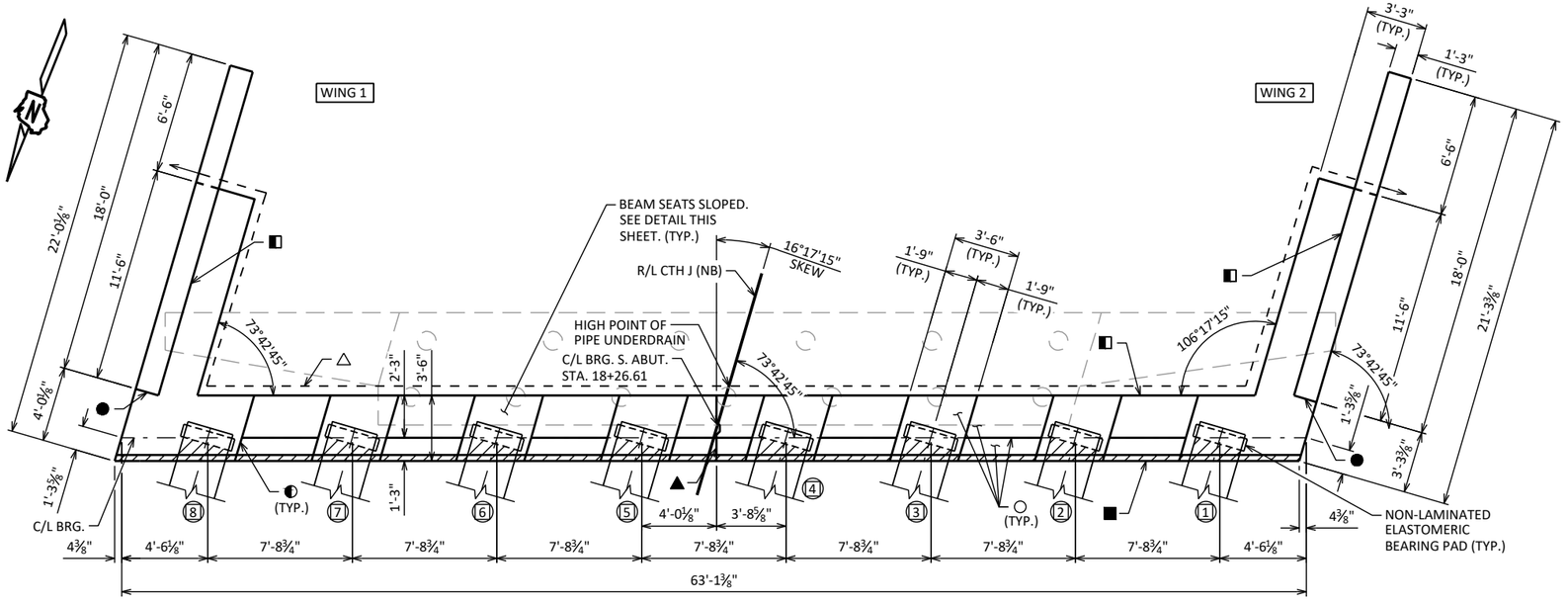
**SUBSURFACE EXPLORATION**

SHEET 4
419

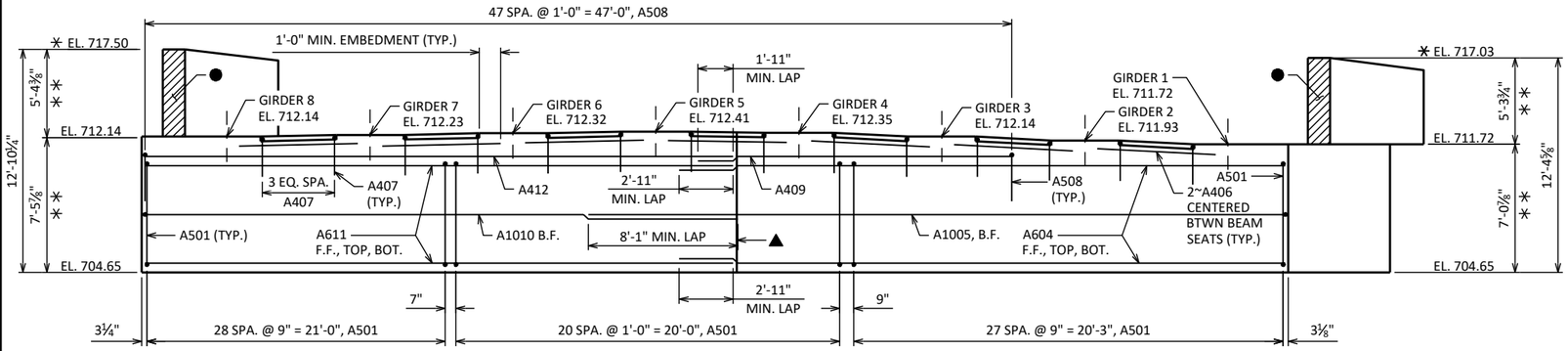
SCALE =

8

8

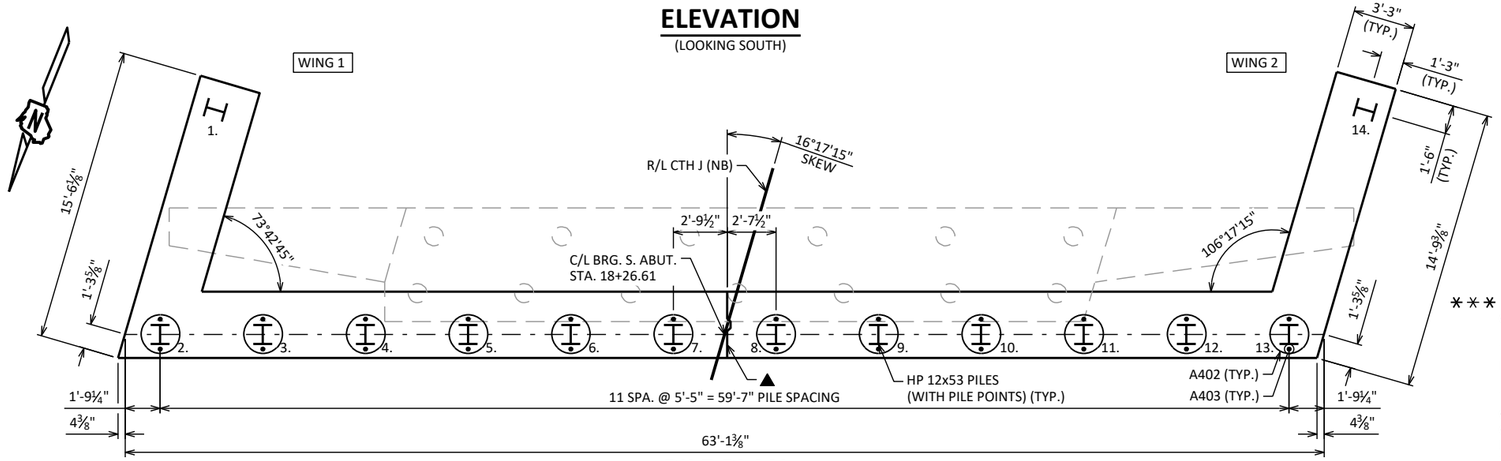



## PLAN




## ELEVATION

(LOOKING SOUTH)




## PILE PLAN

## NOTES

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW FINISHED ROADWAY SURFACE AT INSIDE FACE.

ADJUST A501 BARS INTERFERING WITH PILES.

SEE SHEET 9 FOR PILE SPLICE DETAILS.

SEE SHEET 6 FOR REINFORCING DETAILS.

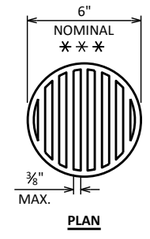
SOUTH ABUTMENT TO BE SUPPORTED ON PILING STEEL 12-INCH X 53 LB WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE. ESTIMATED 100 FEET LONG EACH.

EXISTING PILE LOCATIONS ARE BASED ON THE ORIGINAL DRAWINGS FOR B-44-44. IF NEW PILE LOCATIONS CONFLICT WITH EXISTING PILES, SHIFT NEW PILES ALONG THE CENTERLINE BEARING LINE OF THE ABUTMENT TO MISS EXISTING PILES, SO LONG AS THE FOLLOWING REQUIREMENTS ARE MET:

- MINIMUM PILE SPACING FOR NEW PILES (CENTER TO CENTER) = 3'-0"
- MAXIMUM PILE SPACING FOR NEW PILES (CENTER TO CENTER) = 8'-0"
- MAXIMUM DISTANCE FROM CENTERLINE OF NEW END PILE (NO. 2 OR 13) TO END OF ABUTMENT = 2'-6"

## LEGEND

- ● ½" FILLER. EXTEND FROM ABUT. SEAT TO TOP OF PARAPET. FILLER INCLUDED IN WING LENGTH.
- ◧ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.
- (#) INDICATES GIRDER NUMBER.
- ✳ ELEVATION GIVEN AT B.F. ABUTMENT AND ABUTMENT WING.
- △ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE. SEE DETAIL THIS SHEET.
- ○ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ■ 4"x ½" PREFORMED JOINT FILLER, LENGTH OF ABUTMENT, AND UNDER GIRDER IN FRONT OF BRG. PAD.
- ◐ ¾" CORK FILLER ON VERTICAL BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDERS.
- ▲ VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2"x8". PROVIDE ¾" V-GROOVE AT F.F. RUN BAR STEEL THRU JOINT. SEAL JOINT WITH 18" RUBBERIZED MEMBRANE WATERPROOFING (B.F.). SEE ABUTMENT DETAILS SHEET FOR ALTERNATE CONSTRUCTION JOINT DETAIL. ORIENT CONSTRUCTION JOINT NORMAL TO ABUTMENT AND LOCATE AT C/L BRG.
- ✳✳ DIMENSION MEASURED TO BEAM SEAT ELEVATION @ C/L BRG.

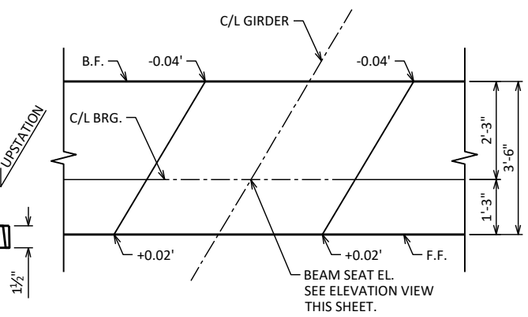



## RODENT SHIELD DETAIL

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

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE 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.




## SLOPED BEAM SEAT DETAIL

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE PROJECT NUMBER

**1130-66-78**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**SOUTH ABUTMENT**

SHEET 5
420

SCALE =

8

8

STATE PROJECT NUMBER

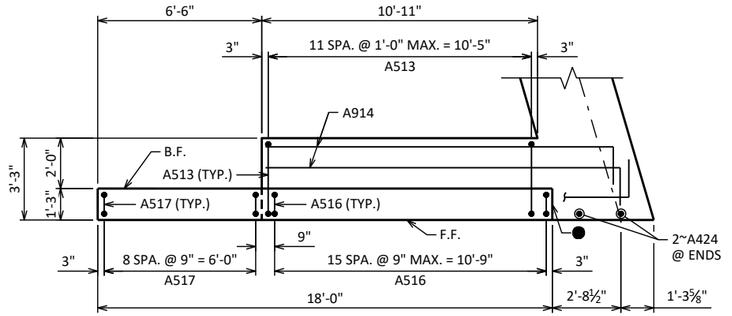
**1130-66-78**

# SOUTH ABUTMENT BILL OF BARS

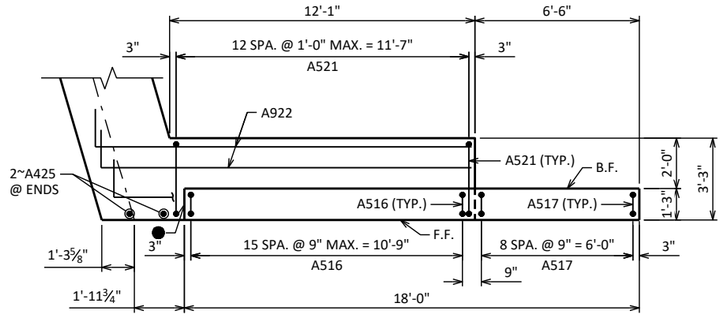
**UNCOATED: 6,080 LBS**
**COATED: 2,990 LBS**

| BAR MARK | NO. REQ'D | LENGTH | BENT | COAT | LOCATION |
|---|---|---|---|---|---|
| A501 | 78 | 19'-6" | X | | LOWER BODY - VERT. STIRRUPS |
| A402 | 12 | 28'-0" | X | | LOWER BODY - PILES - SPIRAL |
| A403 | 24 | 2'-3" | | | LOWER BODY - PILES - VERT. |
| A604 | 11 | 35'-0" | | | BODY - F.F., TOP, BTM. - HORIZ. |
| A1005 | 8 | 41'-6" | X | | BODY - B.F. - HORIZ. |
| A406 | 14 | 6'-2" | | | BODY - TOP - HORIZ. |
| A407 | 28 | 4'-9" | X | | BODY - TOP - VERT. |
| A508 | 48 | 6'-11" | X | | BODY - TOP - VERT. |
| A409 | 3 | 17'-5" | | | BODY - TOP - HORIZ. |
| A1010 | 8 | 32'-3" | X | | BODY - B.F. - HORIZ. |
| A611 | 11 | 30'-9" | | | BODY - F.F., TOP, BTM. - HORIZ. |
| A412 | 3 | 30'-8" | | | BODY - TOP - HORIZ. |
| A513 | 12 | 20'-6" | X | X | WING 1 - LOWER STIRRUPS |
| A914 | 10 | 15'-7" | X | X | WING 1 - LOWER - B.F. - HORIZ |
| A515 | 8 | 15'-0" | | X | WING 1 - LOWER - F.F. - HORIZ. |
| A516 | 32 | 15'-0" | X | X | WINGS 1 & 2 - UPPER - VERT. |
| A517 | 18 | 11'-8" | X | X | WINGS 1 & 2 - UPPER - VERT. |
| A618 | 4 | 17'-7" | | X | WINGS 1 & 2 - UPPER - TOP - HORIZ. |
| A419 | 26 | 17'-7" | | X | WINGS 1 & 2 - UPPER - F.F., B.F. - HORIZ. |
| A420 | 4 | 7'-9" | | X | WINGS 1 & 2 - UPPER - F.F., B.F. - HORIZ. |
| A521 | 13 | 19'-8" | X | X | WING 2 - LOWER STIRRUPS |
| A922 | 10 | 16'-0" | X | X | WING 2 - LOWER - B.F. - HORIZ |
| A523 | 8 | 14'-5" | | X | WING 2 - LOWER - F.F. - HORIZ. |
| A424 | 2 | 7'-0" | | | BODY ENDS - VERT. |
| A425 | 2 | 6'-7" | | | BODY ENDS - VERT. |

## WING 1 PLAN

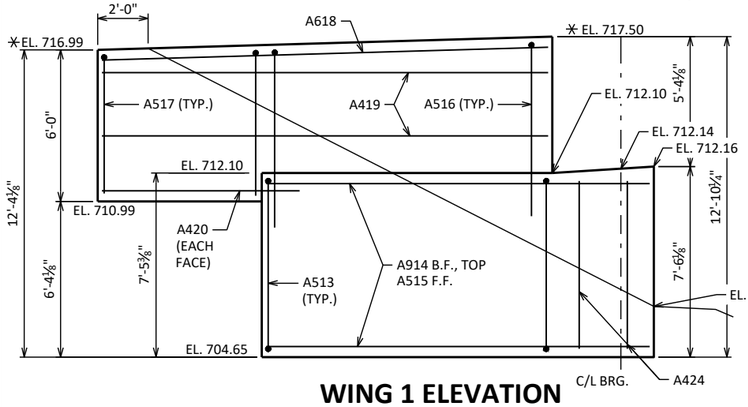



## WING 2 PLAN



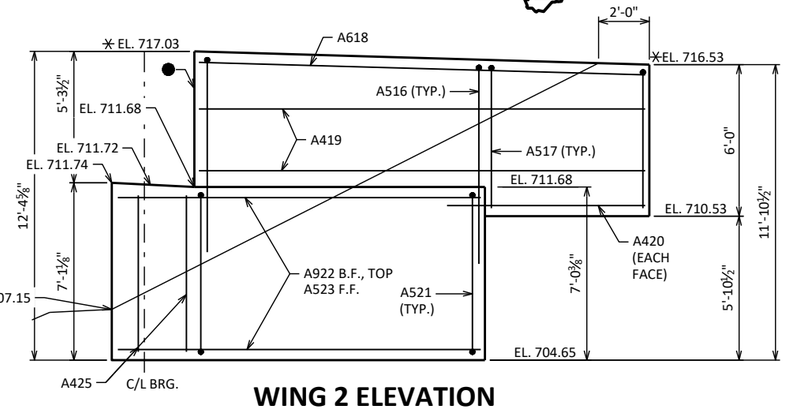

## WING 1 ELEVATION

(LOOKING AT FRONT FACE)

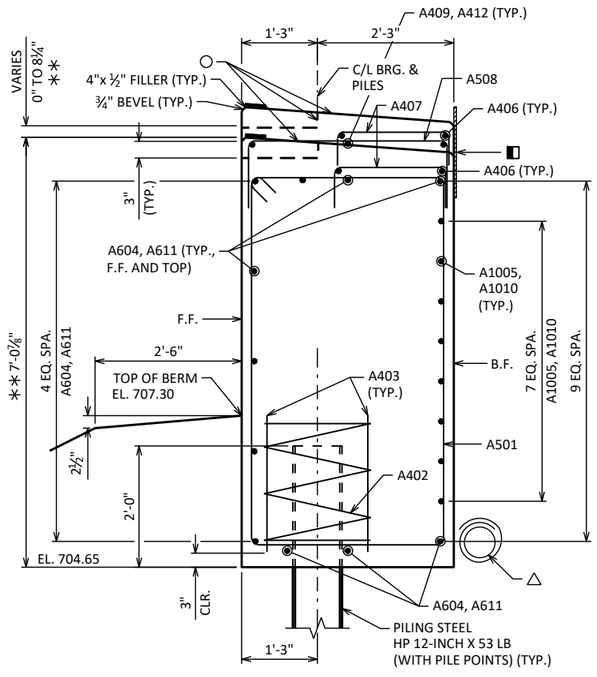



## WING 2 ELEVATION

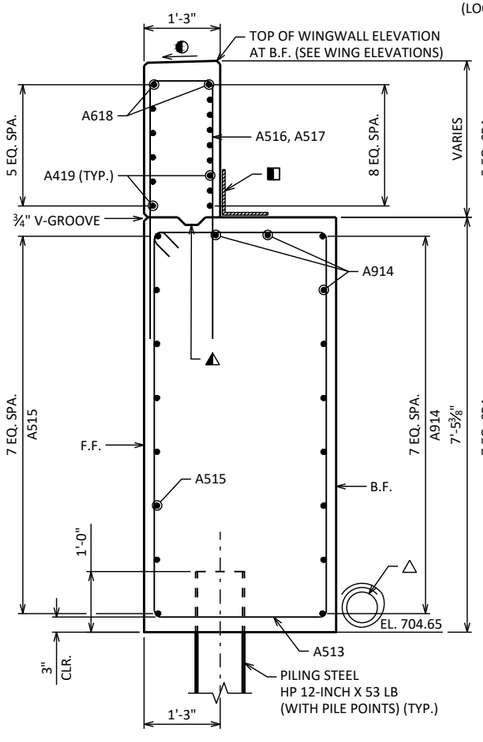
(LOOKING AT FRONT FACE)



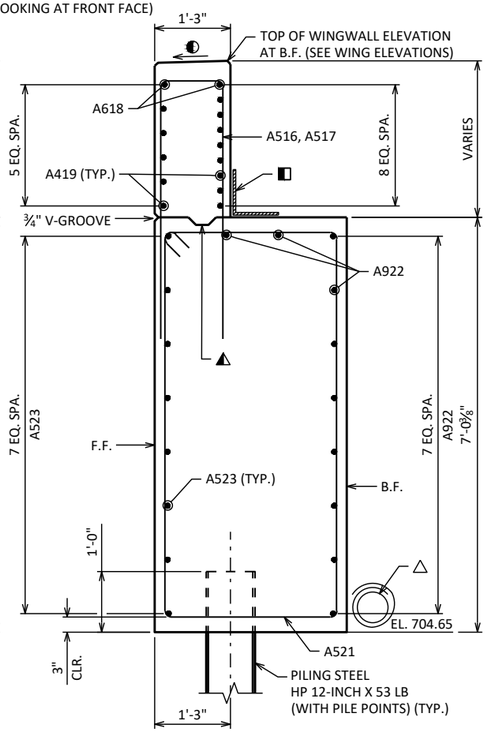

## BODY SECTION

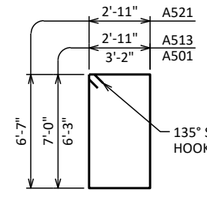



## WING 1 SECTION

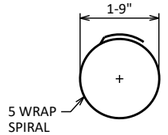



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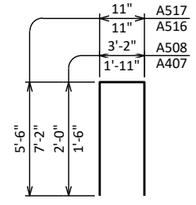


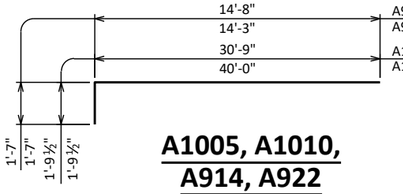

**A501, A513, A521**




**A402**




**A407, A508, A516, A517**




**A1005, A1010, A914, A922**

## LEGEND

- ◧ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.
- △ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 5.
- ◭ OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"x6".
- ○ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ◐ SLOPE TOP OF WALL ½"
- ● ½" FILLER, INCLUDED IN WING LENGTH.
- ✳ ELEVATION GIVEN AT B.F. WINGWALL.
- ✳✳ DIMENSION MEASURED TO BEAM SEAT ELEVATION AT C/L BRG.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**SOUTH ABUTMENT DETAILS**

SHEET 6
421

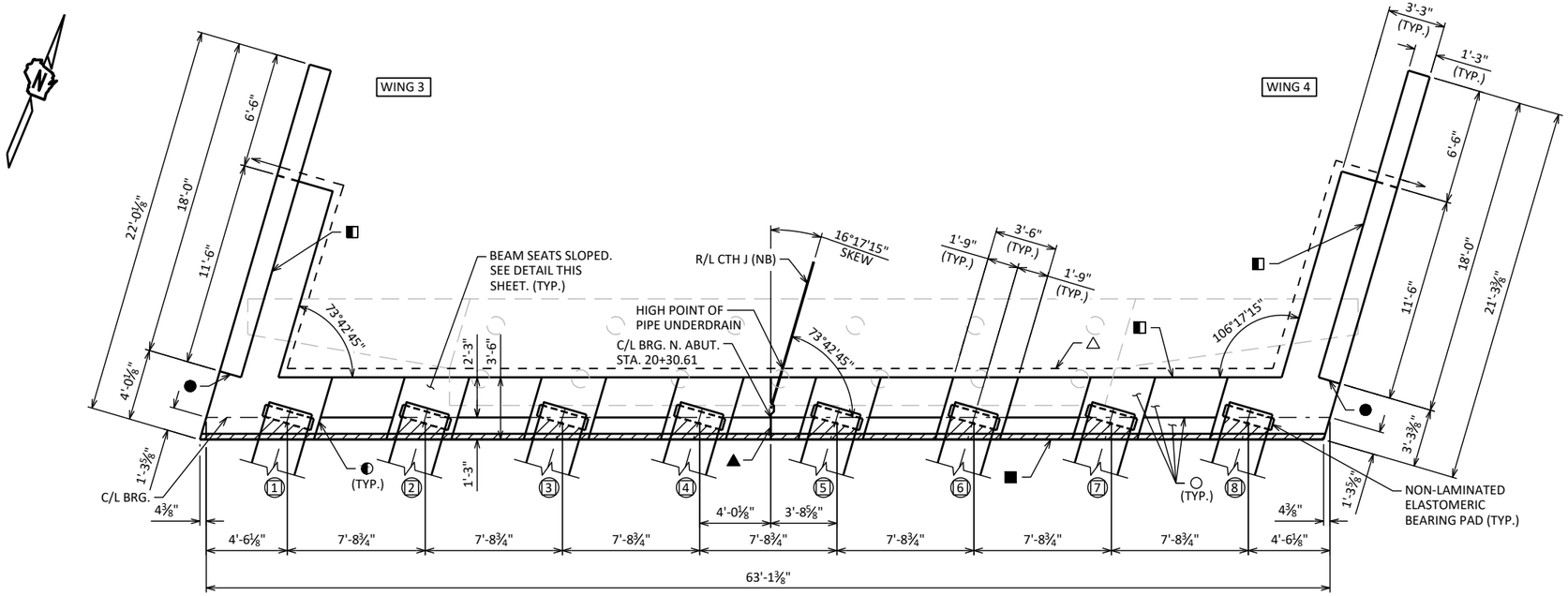
SCALE =

8

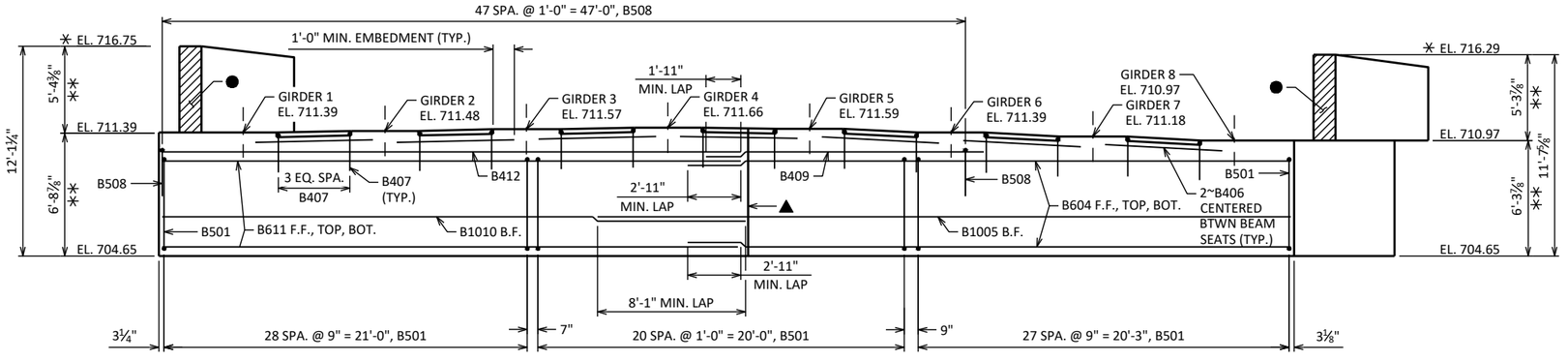
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STATE PROJECT NUMBER

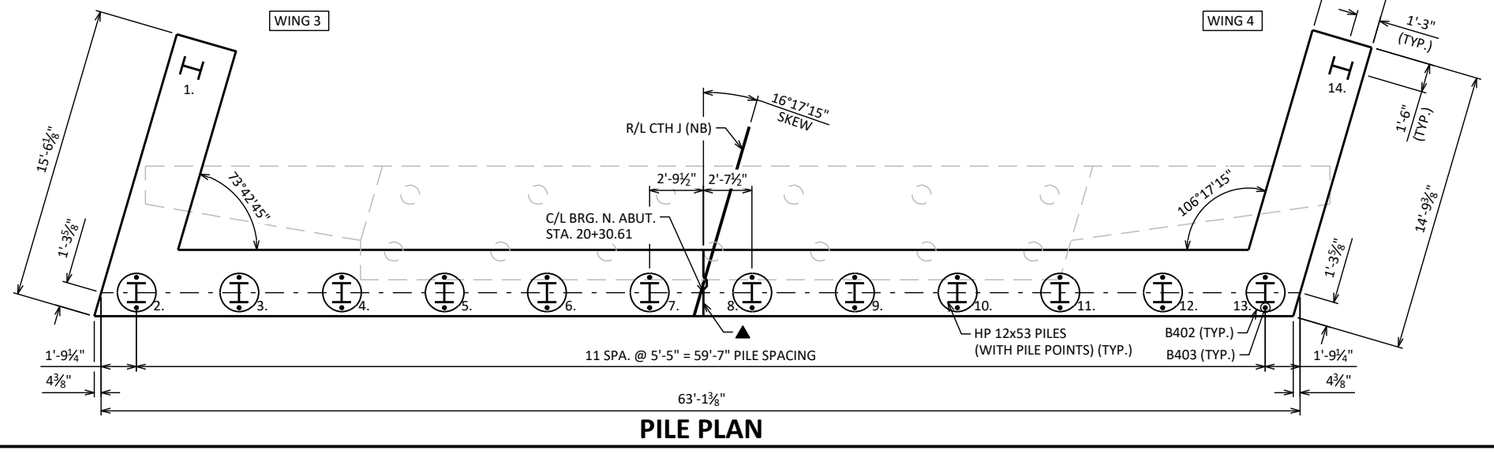
**1130-66-78**




## PLAN




## ELEVATION




## PILE PLAN

## NOTES

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW FINISHED ROADWAY SURFACE AT INSIDE FACE.

ADJUST B501 BARS INTERFERING WITH PILES.

SEE SHEET 9 FOR PILE SPLICE DETAILS.

SEE SHEET 8 FOR REINFORCING DETAILS.

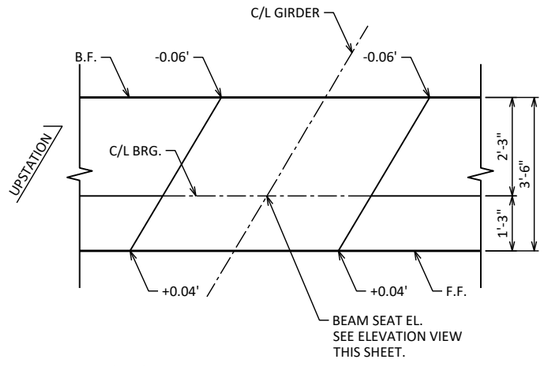
SOUTH ABUTMENT TO BE SUPPORTED ON PILING STEEL 12-INCH X 53 LB WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE. ESTIMATED 100 FEET LONG EACH.

EXISTING PILE LOCATIONS ARE BASED ON THE ORIGINAL DRAWINGS FOR B-44-44. IF NEW PILE LOCATIONS CONFLICT WITH EXISTING PILES, SHIFT NEW PILES ALONG THE CENTERLINE BEARING LINE OF THE ABUTMENT TO MISS EXISTING PILES, SO LONG AS THE FOLLOWING REQUIREMENTS ARE MET:

- MINIMUM PILE SPACING FOR NEW PILES (CENTER TO CENTER) = 3'-0"
- MAXIMUM PILE SPACING FOR NEW PILES (CENTER TO CENTER) = 8'-0"
- MAXIMUM DISTANCE FROM CENTERLINE OF NEW END PILE (NO. 2 OR 13) TO END OF ABUTMENT = 2'-6"

## LEGEND

- ● ½" FILLER. EXTEND FROM ABUT. SEAT TO TOP OF PARAPET. FILLER INCLUDED IN WING LENGTH.
- ◧ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.
- (#) INDICATES GIRDER NUMBER.
- ✳ ELEVATION GIVEN AT B.F. ABUTMENT AND ABUTMENT WING.
- △ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE. SEE DETAIL ON SHEET 5.
- ○ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ■ 4"x ½" PREFORMED JOINT FILLER, LENGTH OF ABUTMENT, AND UNDER GIRDER IN FRONT OF BRG. PAD.
- ◐ ¾" CORK FILLER ON VERTICAL BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDERS.
- ▲ VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2"x8". PROVIDE ¾" V-GROOVE AT F.F. RUN BAR STEEL THRU JOINT. SEAL JOINT WITH 18" RUBBERIZED MEMBRANE WATERPROOFING (B.F.). SEE ABUTMENT DETAILS SHEET FOR ALTERNATE CONSTRUCTION JOINT DETAIL. ORIENT CONSTRUCTION JOINT NORMAL TO ABUTMENT AND LOCATE AT C/L BRG.
- ✳✳ DIMENSION MEASURED TO BEAM SEAT ELEVATION @ C/L BRG.




## SLOPED BEAM SEAT DETAIL

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**NORTH ABUTMENT**

SHEET 7
422

SCALE =

8

8

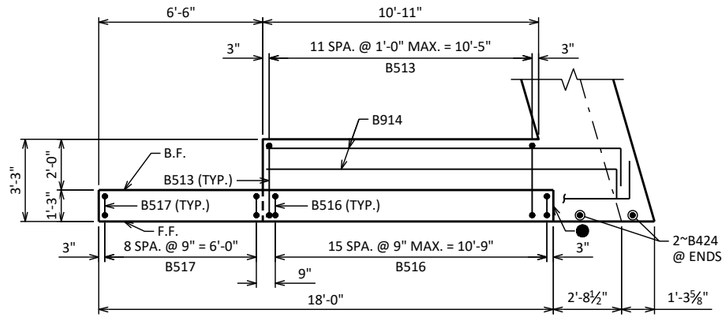
STATE PROJECT NUMBER

**1130-66-78**

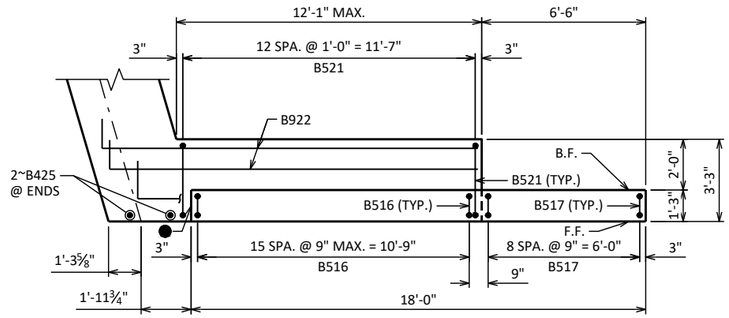
# NORTH ABUTMENT BILL OF BARS

**UNCOATED: 5,960 LBS**
**COATED: 2,950 LBS**

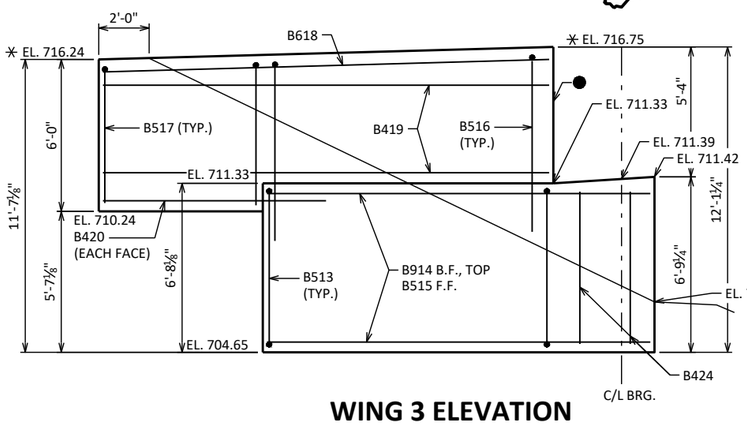
| BAR MARK | NO. REQ'D | LENGTH | BENT | COAT | LOCATION |
|---|---|---|---|---|---|
| B501 | 78 | 18'-0" | X | | LOWER BODY - VERT. STIRRUPS |
| B402 | 12 | 28'-0" | X | | LOWER BODY - PILES - SPIRAL |
| B403 | 24 | 2'-3" | | | LOWER BODY - PILES - VERT. |
| B604 | 11 | 35'-0" | | | BODY - F.F., TOP, BTM. - HORIZ. |
| B1005 | 8 | 41'-6" | X | | BODY - B.F. - HORIZ. |
| B406 | 14 | 6'-2" | | | BODY - TOP - HORIZ. |
| B407 | 28 | 4'-9" | X | | BODY - TOP - VERT. |
| B508 | 48 | 6'-11" | X | | BODY - TOP - VERT. |
| B409 | 3 | 17'-5" | | | BODY - TOP - HORIZ. |
| B1010 | 8 | 32'-3" | X | | BODY - B.F. - HORIZ. |
| B611 | 11 | 30'-9" | | | BODY - F.F., TOP, BTM. - HORIZ. |
| B412 | 3 | 30'-8" | | | BODY - TOP - HORIZ. |
| B513 | 12 | 19'-0" | X | X | WING 3 - LOWER STIRRUPS |
| B914 | 10 | 15'-7" | X | X | WING 3 - LOWER - B.F. - HORIZ. |
| B515 | 8 | 15'-0" | | X | WING 3 - LOWER - F.F. - HORIZ. |
| B516 | 32 | 15'-0" | X | X | WINGS 3 & 4 - UPPER - VERT. |
| B517 | 18 | 11'-8" | X | X | WINGS 3 & 4 - UPPER - VERT. |
| B618 | 4 | 17'-7" | | X | WINGS 3 & 4 - UPPER - TOP - HORIZ. |
| B419 | 26 | 17'-7" | | X | WINGS 3 & 4 - UPPER - F.F., B.F. - HORIZ. |
| B420 | 4 | 7'-9" | | X | WINGS 3 & 4 - UPPER - F.F., B.F. - HORIZ. |
| B521 | 13 | 18'-2" | X | X | WING 4 - LOWER STIRRUPS |
| B922 | 10 | 16'-0" | X | X | WING 4 - LOWER - B.F. - HORIZ. |
| B523 | 8 | 14'-5" | | X | WING 4 - LOWER - F.F. - HORIZ. |
| B424 | 2 | 6'-3" | | | BODY ENDS - VERT. |
| B425 | 2 | 5'-10" | | | BODY ENDS - VERT. |




## WING 3 PLAN

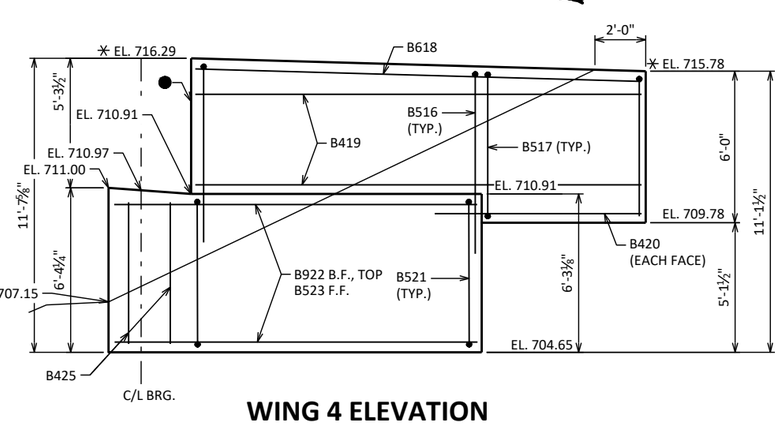



## WING 4 PLAN



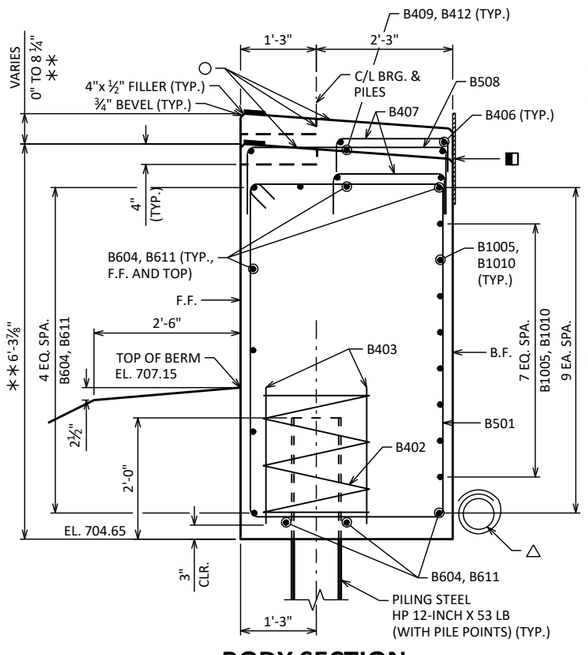

## WING 3 ELEVATION

(LOOKING AT FRONT FACE)

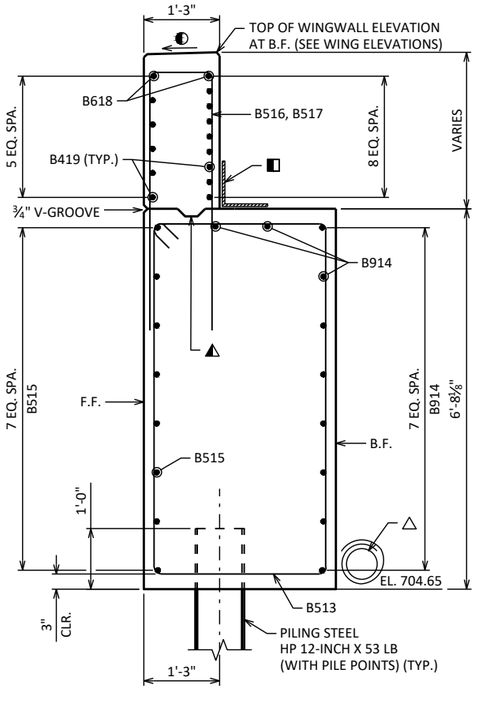



## WING 4 ELEVATION

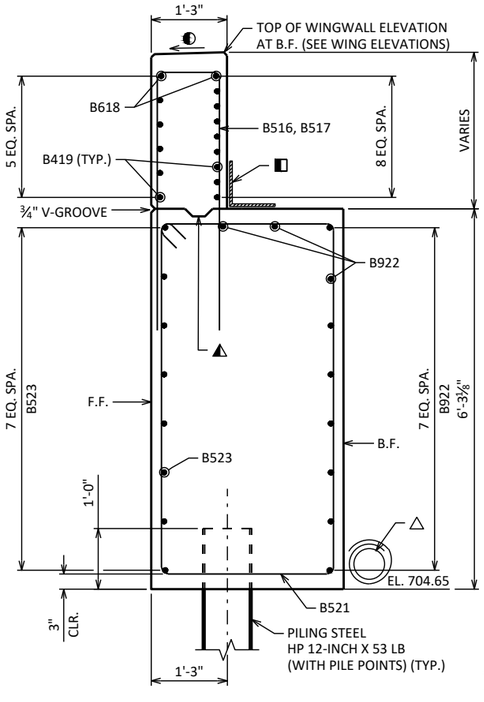
(LOOKING AT FRONT FACE)



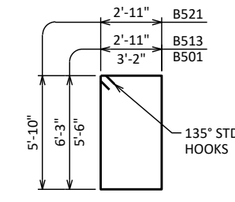

## BODY SECTION



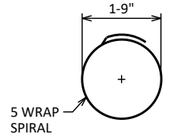

## WING 3 SECTION



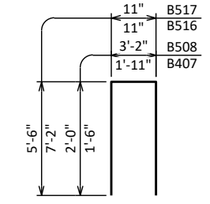

## WING 4 SECTION



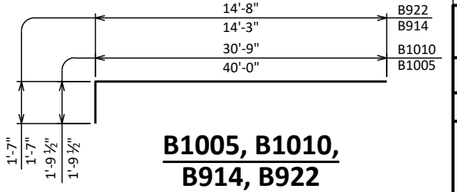

## B501, B513, B521




## B402




## B407, B508, B516, B517




## B1005, B1010, B914, B922

## LEGEND

- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 5.
- OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"x6".
- STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- SLOPE TOP OF WALL ½"
- ½" FILLER, INCLUDED IN WING LENGTH.
- ✶ ELEVATION GIVEN AT B.F. WINGWALL.
- ✶✶ DIMENSION MEASURED TO BEAM SEAT ELEVATION AT C/L BRG.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**NORTH ABUTMENT DETAILS**

SHEET 8
423

SCALE =

8

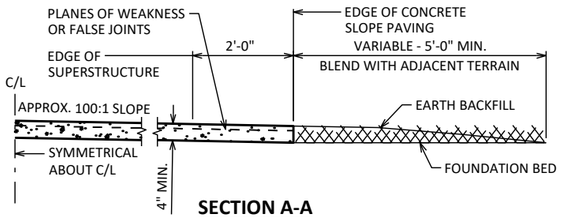
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STATE PROJECT NUMBER

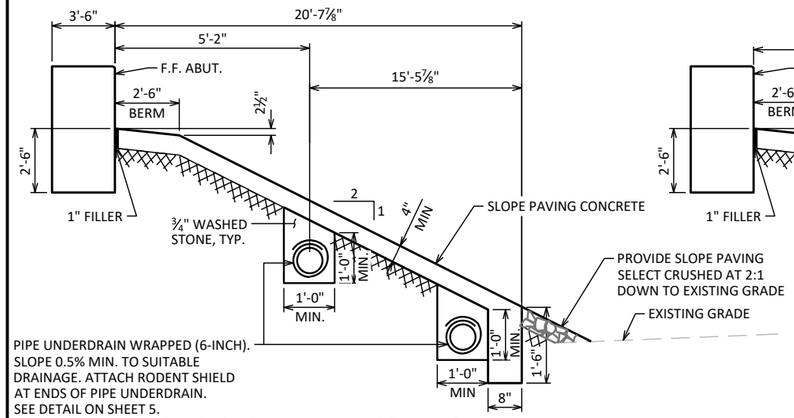
**1130-66-78**

## SLOPE PAVING NOTES

BID ITEMS SHALL BE "SLOPE PAVING CONCRETE", "SLOPE PAVING SELECT CRUSHED", AND "PIPE UNDERDRAIN WRAPPED 6-INCH".

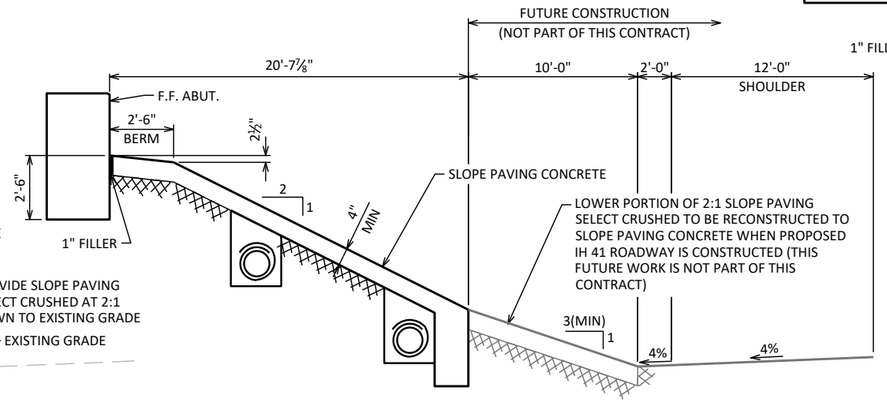



**SECTION A-A**



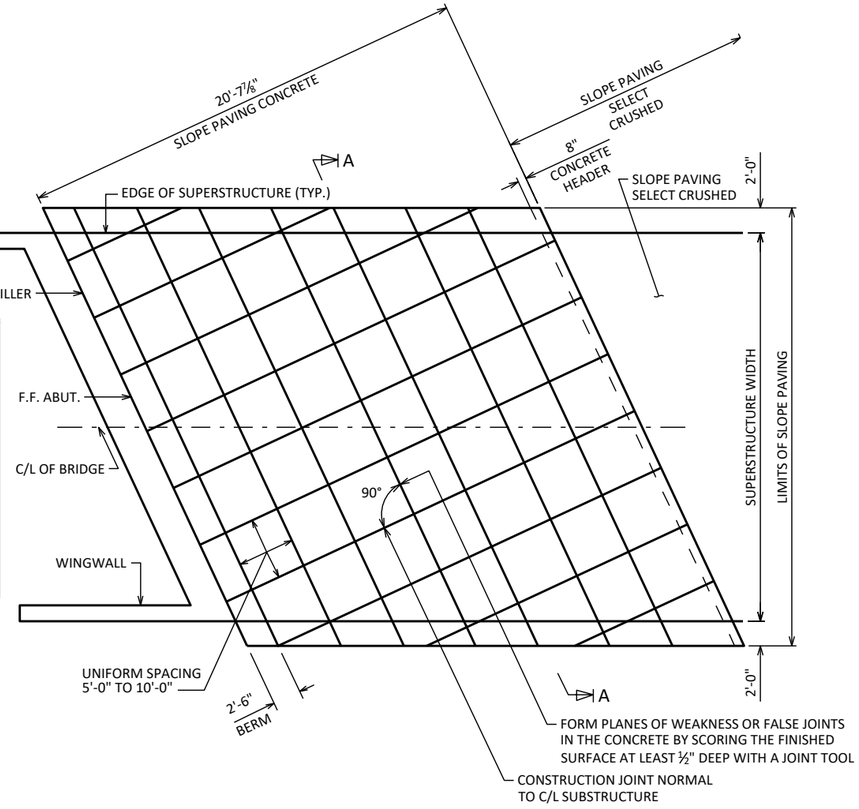

**TYPICAL SECTION - INTERIM CONDITION**

(LOOKING NORMAL TO ABUTMENT)



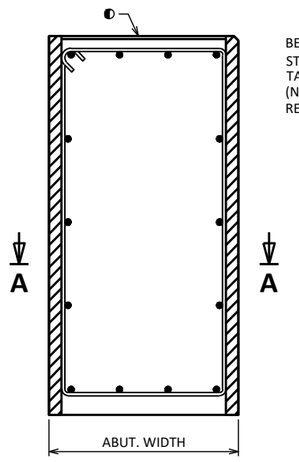

**TYPICAL SECTION - ULTIMATE CONDITION**

(LOOKING NORMAL TO ABUTMENT)

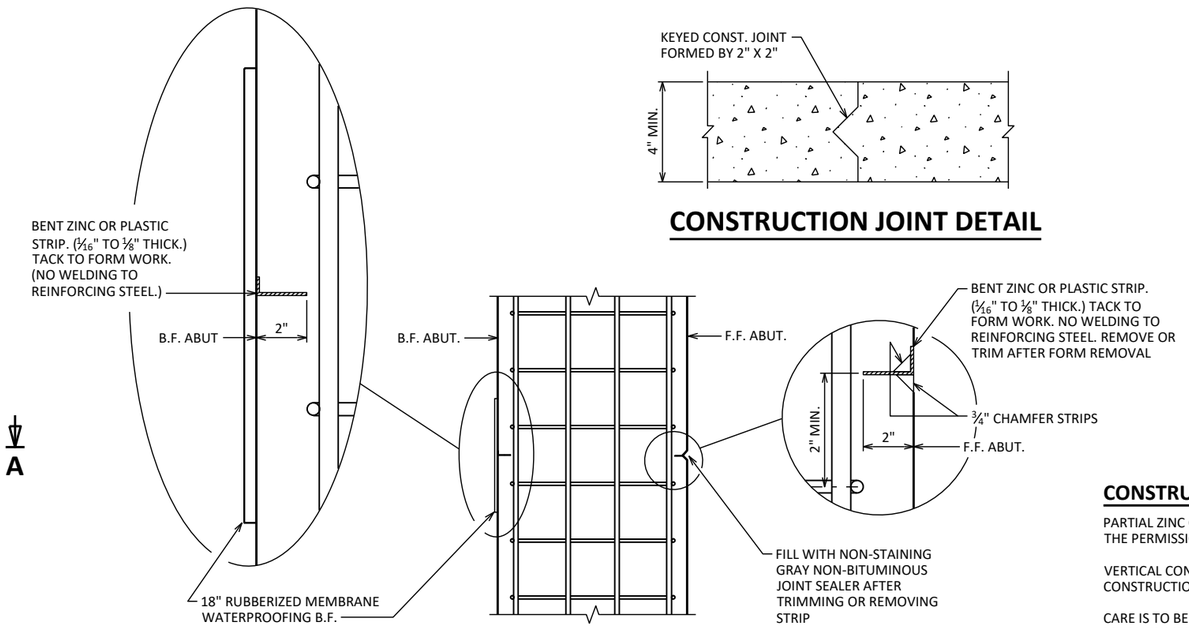



**PLAN**

# SLOPE PAVING




**SECTION THRU ABUTMENT BODY**

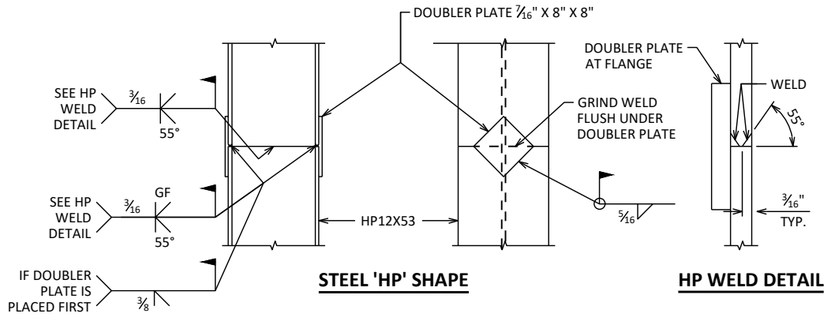



**SECTION A-A**

# ALTERNATE CONSTRUCTION JOINT AT ABUTMENT




**CONSTRUCTION JOINT DETAIL**




**STEEL 'HP' SHAPE** **HP WELD DETAIL**

# 'HP' PILE DETAILS

## CONSTRUCTION JOINT NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SAW CUTTING JOINT IS NOT ALLOWED.

◐ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY ½" DEEP.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**ABUTMENT DETAILS**

SHEET 9
424

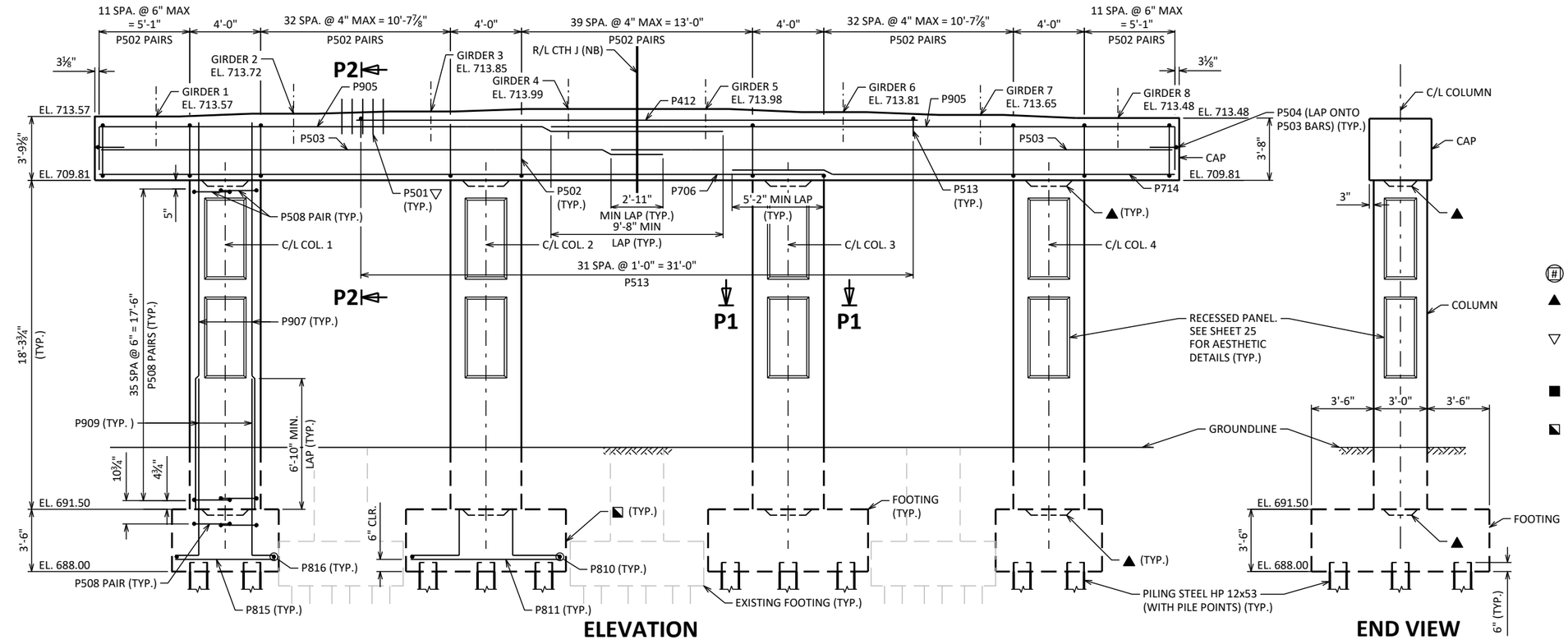
SCALE =

8

8

STATE PROJECT NUMBER

**1130-66-78**




## ELEVATION
(LOOKING NORTH)

## END VIEW

## NOTES

PIER TO BE SUPPORTED ON HP 12-INCH X 53 LB. STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH 80 FT EACH.

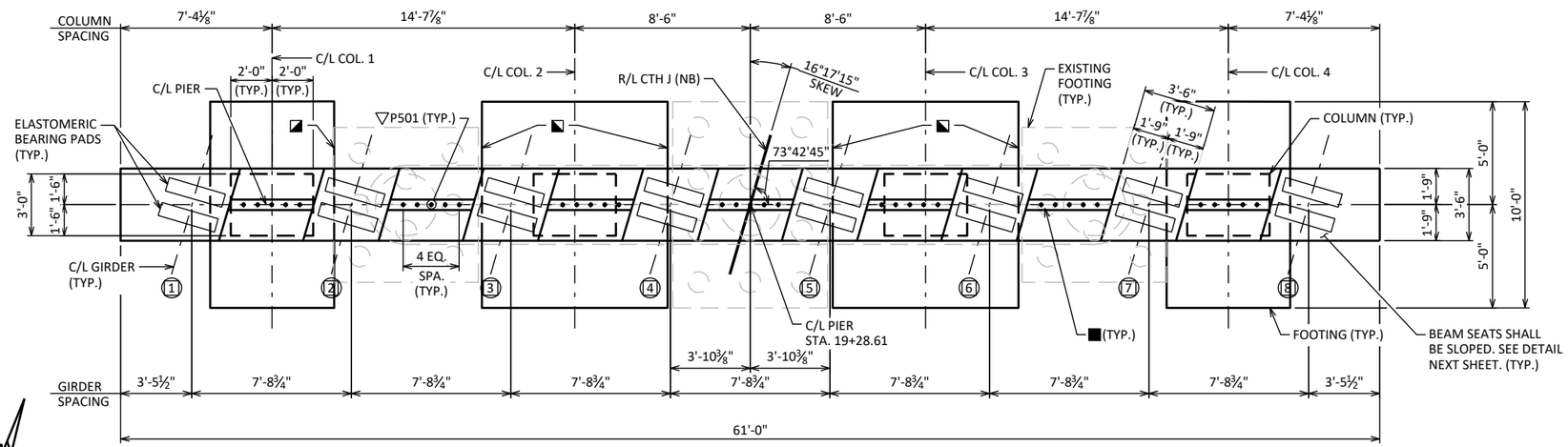
SEE SHEET 9 FOR PILE SPLICE DETAILS.

SEE SHEET 11 FOR PIER DETAILS.

SEE SHEET 25 FOR AESTHETIC DETAILS.

## LEGEND

- (#) INDICATES GIRDER NUMBER.
- ▲ 1'-3" x 2'-0" x 4" DEEP CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY. (TYP.)
- ▽ P501 BARS @ 1'-0" MAX. BETWEEN BEAM SEATS, EMBED 1'-0". BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.
- ■ KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" x 6" BETWEEN BEAM SEATS. (TYP.)
- ◪ IF PLACING NEW CONCRETE ADJACENT TO EXISTING, SEPARATE WITH ½" PREFORMED JOINT FILLER.




## PLAN

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

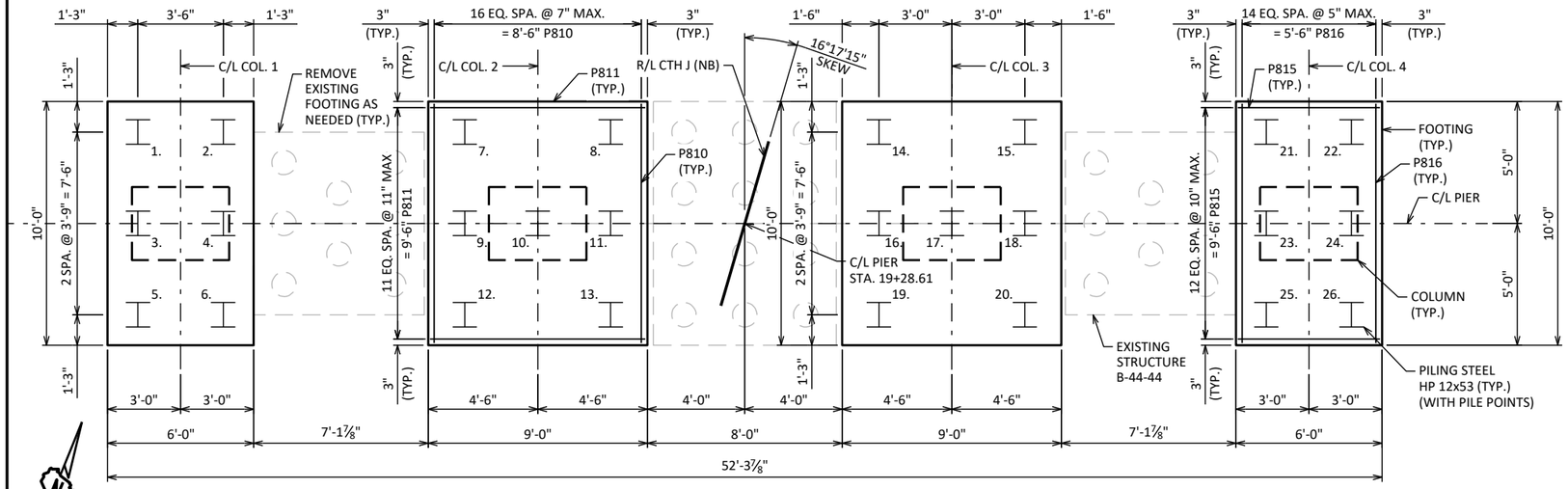
**PIER**

SHEET 10
425

SCALE =

STATE PROJECT NUMBER

**1130-66-78**




## FOUNDATION PLAN

## PIER BILL OF BARS

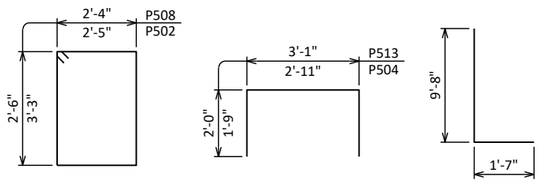
**UNCOATED: 2,600 LBS**
**COATED: 18,510 LBS**

| BAR MARK | NO. REQ'D | LENGTH | BENT | COAT | LOCATION |
|---|---|---|---|---|---|
| P501 | 35 | 2'-0" | | X | CAP - DOWEL - VERT. |
| P502 | 260 | 12'-0" | X | X | CAP - STIRRUPS - VERT. |
| P503 | 16 | 31'-9" | | X | CAP - SIDES - HORIZ. |
| P504 | 8 | 6'-2" | X | X | CAP - ENDS - HORIZ. |
| P905 | 16 | 38'-0" | X | X | CAP - TOP - HORIZ. |
| P706 | 8 | 41'-0" | | X | CAP - BOT. - HORIZ. |
| P907 | 72 | 21'-7" | | X | COLUMN - VERT. |
| P508 | 296 | 10'-4" | X | X | COLUMN - STIRRUPS |
| P909 | 72 | 11'-0" | X | X | FOOTING/COLUMN - VERT. |
| P810 | 34 | 9'-8" | | | INT. FOOTING - HORIZ. |
| P811 | 24 | 8'-8" | | | INT. FOOTING - HORIZ. |
| P412 | 3 | 31'-0" | | X | CAP - TOP - HORIZ. |
| P513 | 32 | 6'-10" | X | X | CAP - STIRRUPS - VERT. |
| P714 | 8 | 24'-11" | | X | CAP - BOT. - HORIZ. |
| P815 | 26 | 5'-8" | | | EXT. FOOTING - HORIZ. |
| P816 | 30 | 9'-8" | | | EXT. FOOTING - HORIZ. |

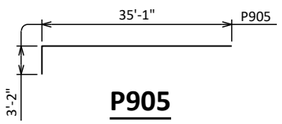
## LEGEND

▽ P501 BARS @ 1'-0" MAX. BETWEEN BEAM SEATS, EMBED 1'-0". BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.

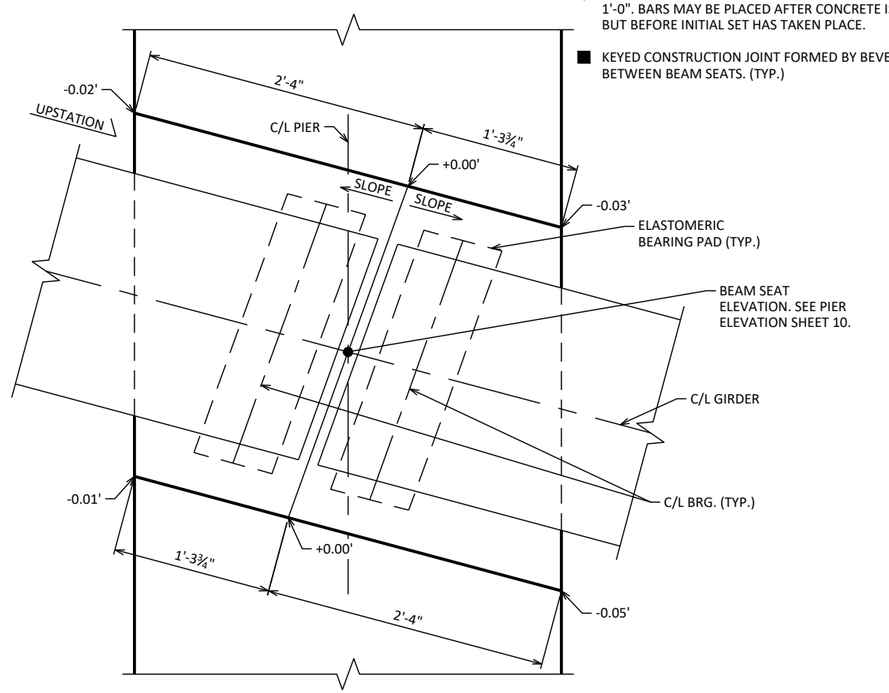
■ KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" BETWEEN BEAM SEATS. (TYP.)



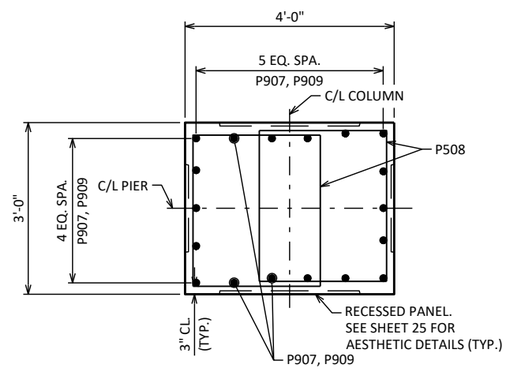

**P502, P508** **P504, P513** **P909**



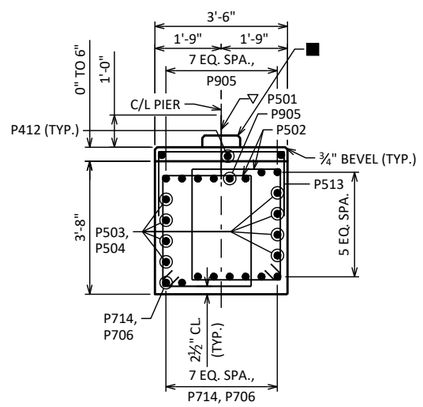

**P905**



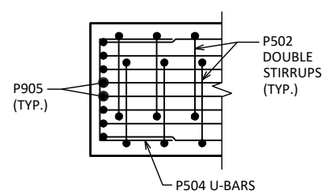

## SLOPED BEAM SEAT DETAIL




## SECTION P1
(THRU COLUMN)




## SECTION P2
(THRU CAP)




## PLAN VIEW SHOWING END OF CAP REINF.

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**PIER DETAILS**

SHEET 11
426

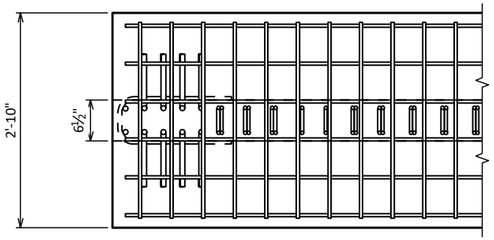
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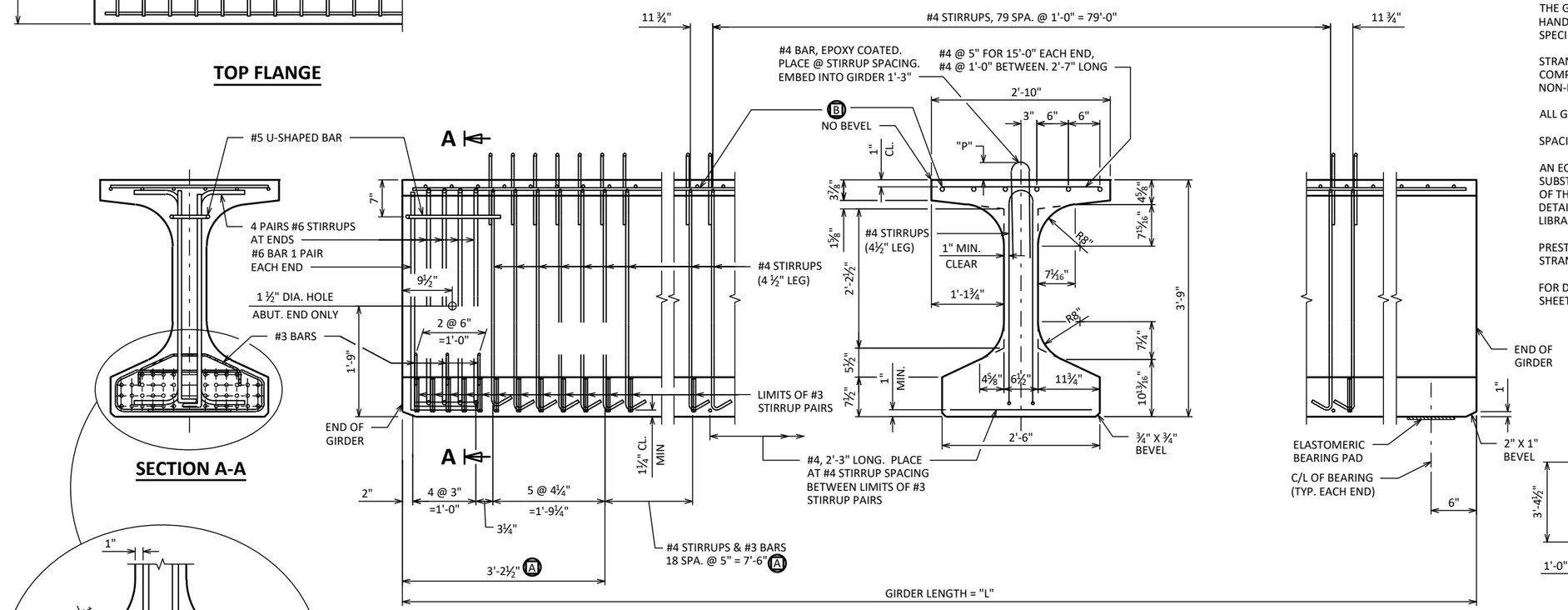
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STATE PROJECT NUMBER

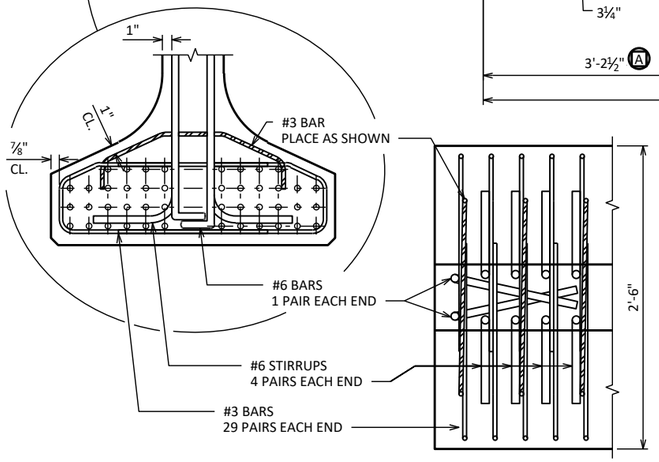
**1130-66-78**




## TOP FLANGE




## SECTION A-A

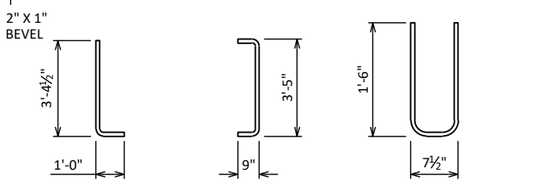


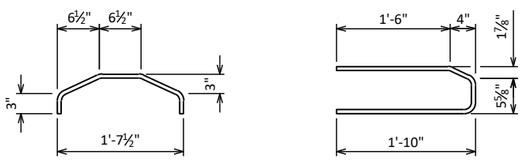

## BOTTOM FLANGE

## SIDE VIEW & TYPICAL SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 6 - #5 BARS, FULL LENGTH, MIN. LAP = 2'-5"




## NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.4 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON ACCEPTANCE OF THE STRUCTURES MAINTENANCE SECTION. IF USED, WWF SUBSTITUTION DETAILS SHALL BE SUBMITTED ELECTRONICALLY TO THE WISDOT FABRICATION LIBRARY AND ACCEPTED PRIOR TO SHOP DRAWING SUBMITTAL.

PRESTRESSING STRANDS SHALL BE ( 0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

⚹ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

## GIRDER DATA

| SPAN | GIRDER | GIRDER LENGTH "L" (FEET) | DEAD LOAD DEFL. (IN.) | | | | | | | | | CONC. STRGTH. $f'_c$ (P.S.I.) | "P" (IN.) | | | DIA. OF STRAND (IN.) | DRAPED PATTERN | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | 6/10 | 7/10 | 8/10 | 9/10 | | 1ST ⅓ OF GIRDER | MID ⅓ OF GIRDER | END ⅓ OF GIRDER | | TOTAL NO. OF STRANDS | $f'_{ci}$ (P.S.I.) ⚹ | ( IN.) "A" | "B" MIN. | "B" MAX. | "C" |
| 1 | 1,8 | 102'-4 1/2" | 0.63 | 1.22 | 1.68 | 1.97 | 2.06 | 1.94 | 1.64 | 1.17 | 0.60 | 8,000 | 7.25 | 7.25 | 7.25 | 0.6 | 34 | 6800 | 39 | 13.50 | 16.50 | 5 |
| 1 | 2-7 | 102'-4 1/2" | 0.65 | 1.26 | 1.73 | 2.03 | 2.12 | 2.00 | 1.69 | 1.21 | 0.61 | 8,000 | 7.25 | 7.25 | 7.25 | 0.6 | 34 | 6800 | 39 | 13.50 | 16.50 | 5 |
| 2 | 1,8 | 102'-4 1/2" | 0.60 | 1.17 | 1.64 | 1.94 | 2.06 | 1.97 | 1.68 | 1.22 | 0.63 | 8,000 | 7.25 | 7.25 | 7.25 | 0.6 | 34 | 6800 | 39 | 13.50 | 16.50 | 5 |
| 2 | 2-7 | 102'-4 1/2" | 0.61 | 1.21 | 1.69 | 2.00 | 2.12 | 2.03 | 1.73 | 1.26 | 0.65 | 8,000 | 7.25 | 7.25 | 7.25 | 0.6 | 34 | 6800 | 39 | 13.50 | 16.50 | 5 |

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**45W" PRESTRESSED GIRDER DETAILS - 1**

SHEET 12
427

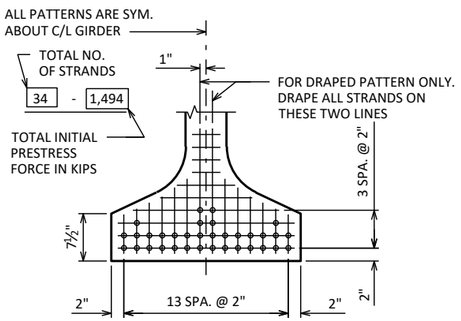
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8

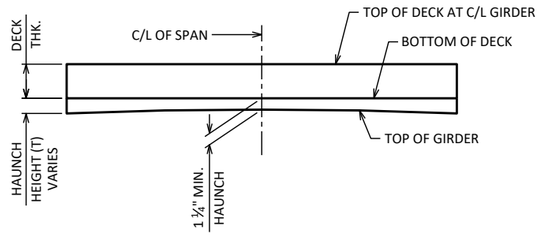
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STATE PROJECT NUMBER

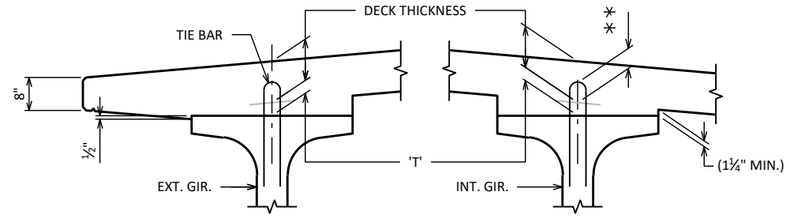
**1130-66-78**




## TYP. STRAND PATTERN




## ELEVATION




## DECK HAUNCH DETAIL

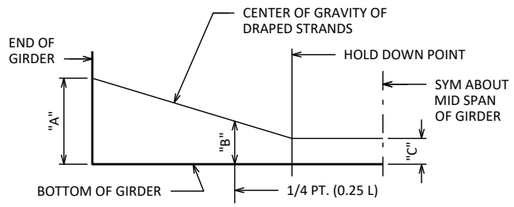
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

⁑⁑ IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED, AND NO HAT BAR (S431, S434) IS PROVIDED AT THAT LOCATION.

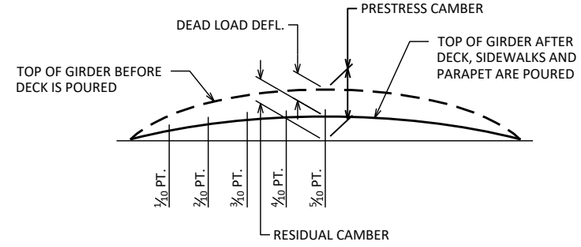
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT C/L OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

| | |
|---|---|
| | TOP OF DECK ELEV. AT FINAL GRADE |
| - | TOP OF GIRDER ELEVATION |
| + | DEAD LOAD DEFLECTION |
| - | DECK THICKNESS |
| = | HAUNCH HEIGHT 'T' |

NOTE: AN AVERAGE HAUNCH ('T') OF 4½" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".




## DRAPED STRAND PROFILE



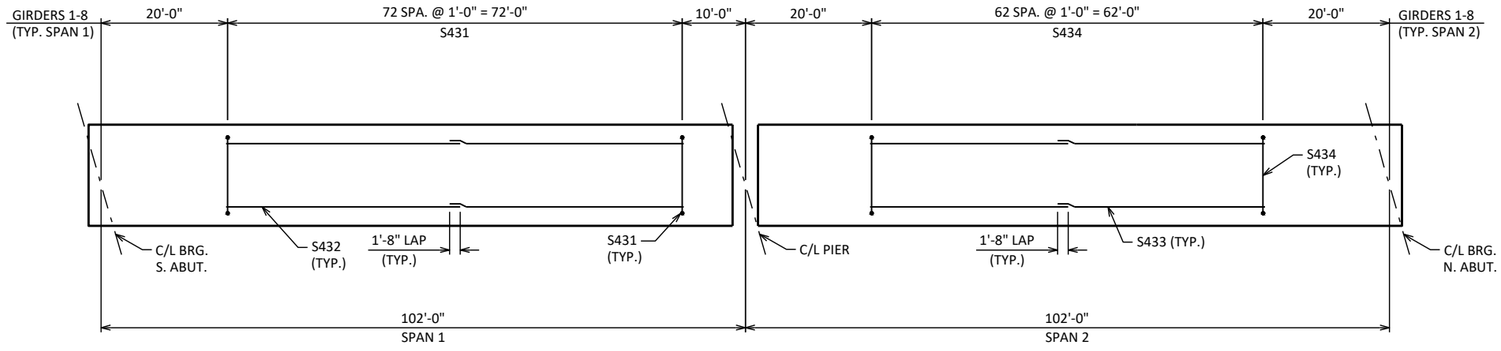

## DEAD LOAD DEFLECTION DIAGRAM

⁎ THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

| SPAN | CAMBER (IN.) ⁎ |
|---|---|
| 1 | 3.54 |
| 2 | 3.54 |

**THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.**

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.




## HAUNCH REINFORCEMENT PLAN

NOTE: TILT S431 AND S434 BARS AS REQUIRED TO FIT BETWEEN REBAR MATS.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**45W" PRESTRESSED GIRDER DETAILS - 2**

SHEET 13
428

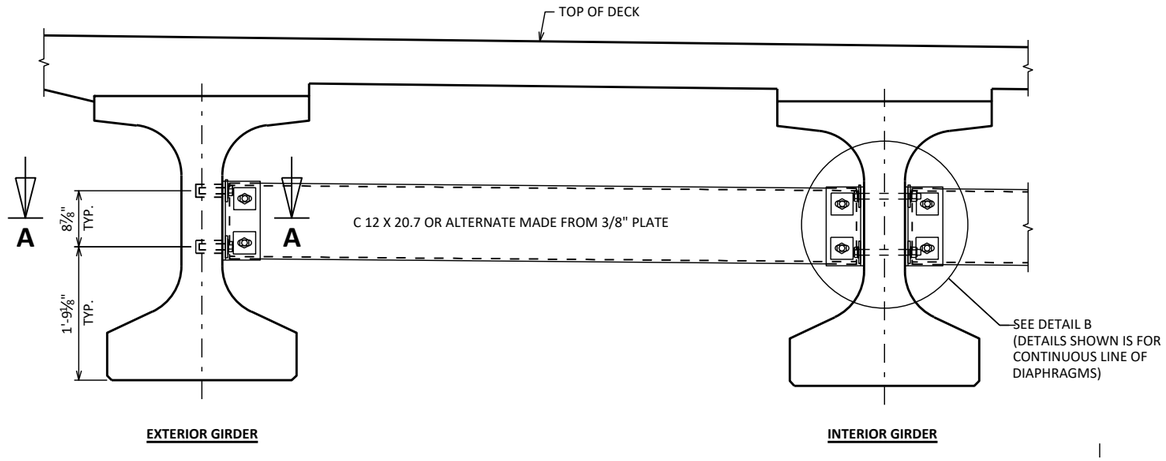
SCALE =

8

8

STATE PROJECT NUMBER

**1130-66-78**




**EXTERIOR GIRDER** **INTERIOR GIRDER**

## PART TRANSVERSE SECTION AT DIAPHRAGM

## NOTES

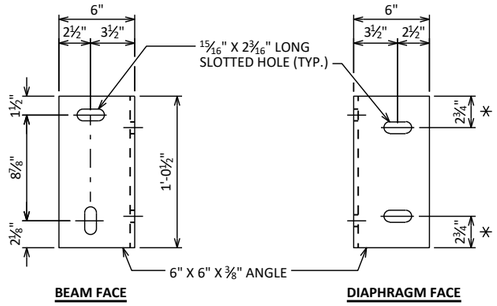
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-44-338", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.



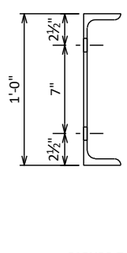

**BEAM FACE**



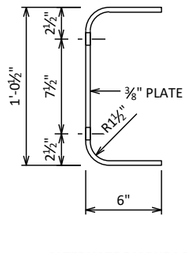

**DIAPHRAGM FACE**

## DIAPHRAGM SUPPORT

* 2½" FOR ALTERNATE PLATE DIAPHRAGM

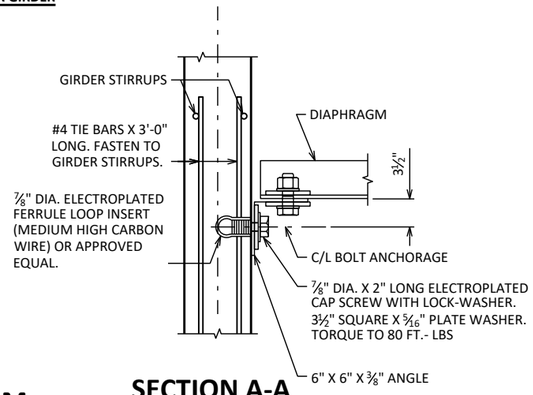



**C12X20.7**



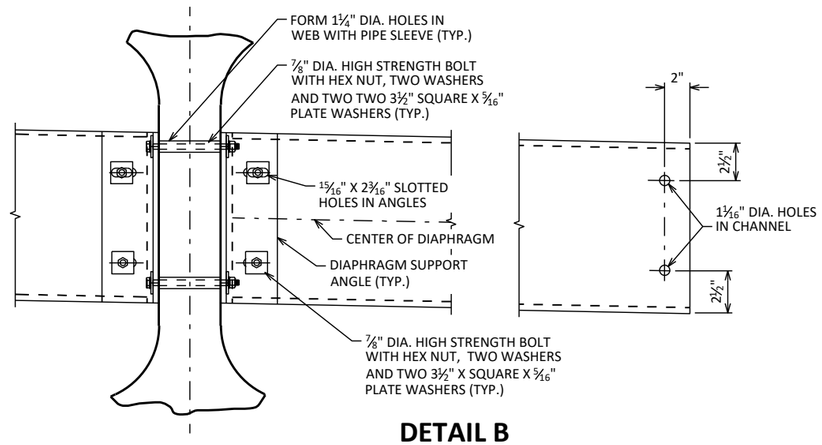

**ALTERNATE DIAPHRAGM**

## SECTION THRU DIAPHRAGM

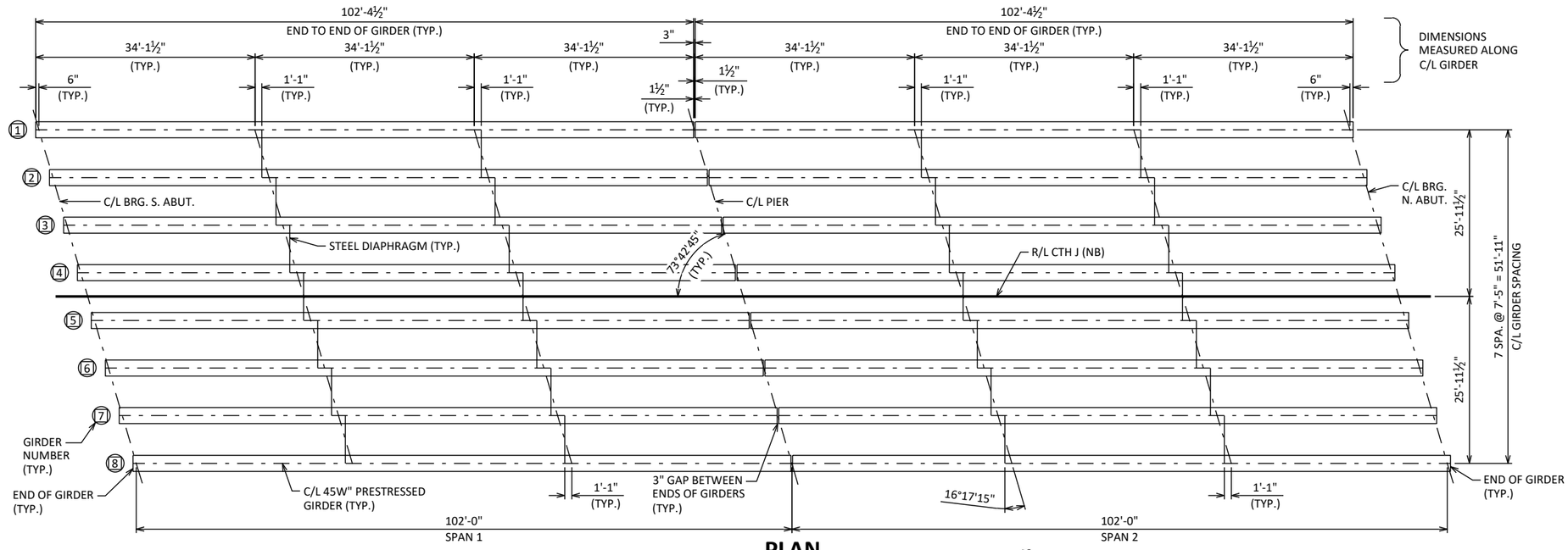



## SECTION A-A

(FOR EXTERIOR ATTACHMENT)




## DETAIL B




## PLAN

(SHOWING STEEL DIAPHRAGM LAYOUT)

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**STEEL DIAPHRAGMS**

SHEET 14
429

SCALE =

8

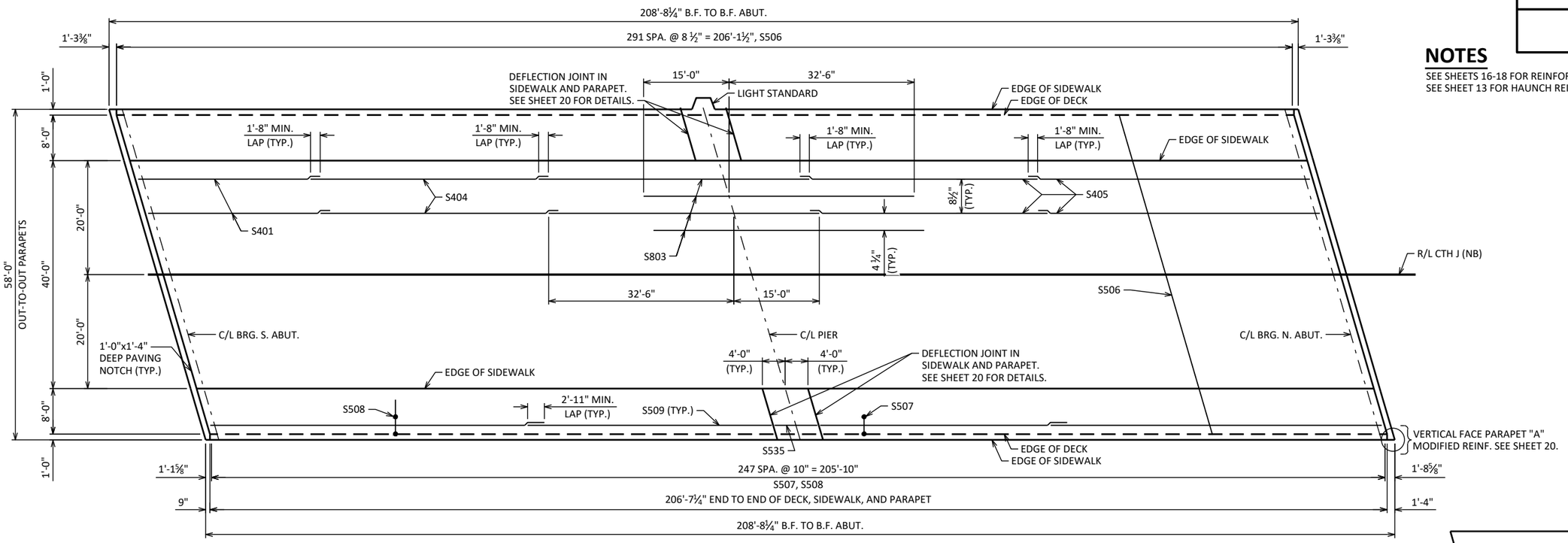
8

STATE PROJECT NUMBER

**1130-66-78**

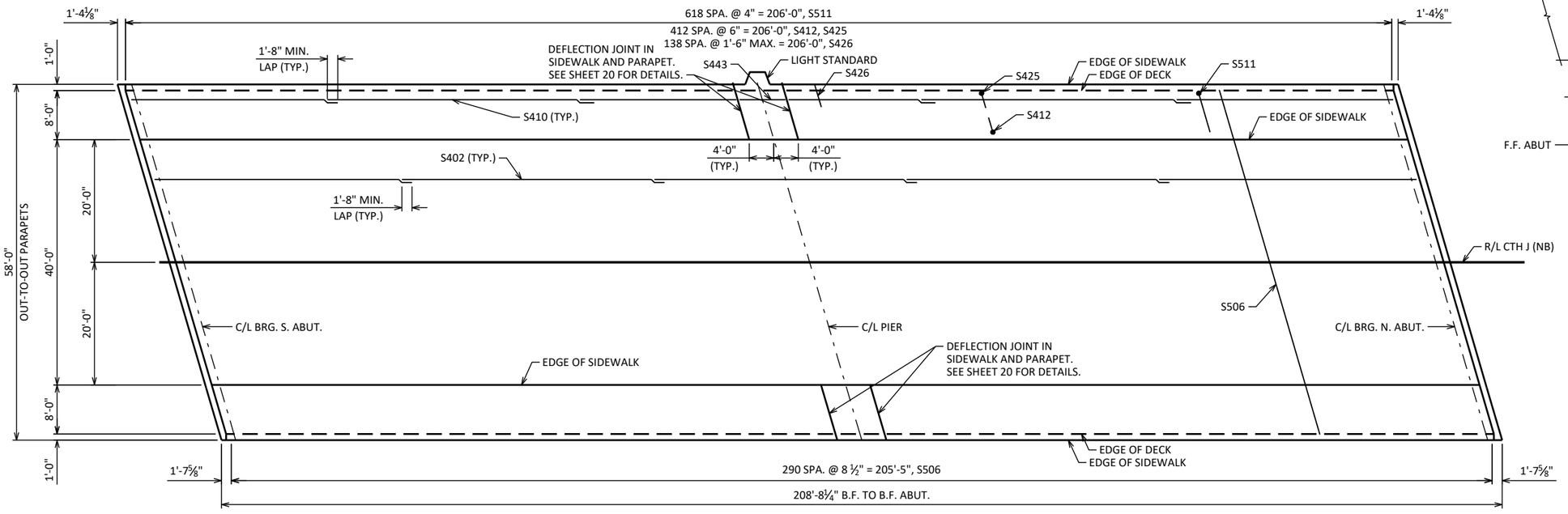
## NOTES

SEE SHEETS 16-18 FOR REINFORCING DETAILS.
SEE SHEET 13 FOR HAUNCH REINFORCEMENT PLAN.



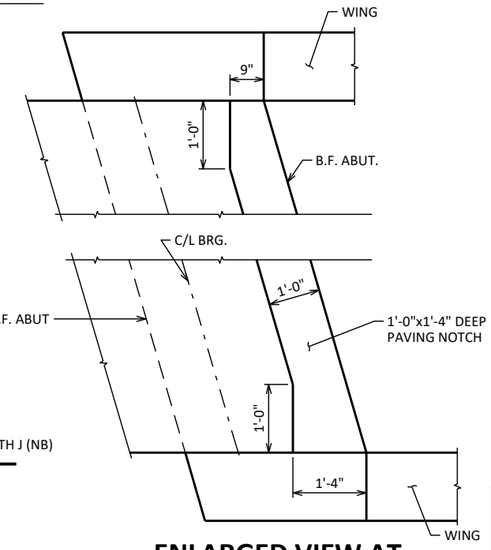

## PLAN

(SHOWING TOP MAT SLAB REINFORCING)
AND PARAPET REINFORCING




## PLAN

(SHOWING BOTTOM MAT SLAB REINFORCING)
AND SIDEWALK SLAB REINFORCING




## ENLARGED VIEW AT NW & NE CORNERS

(OTHER CORNERS SIMILAR)

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

| DRAWN BY | ZHC | PLANS CK'D | KRB |
|---|---|---|---|

**SUPERSTRUCTURE PLAN**

SHEET 15
430

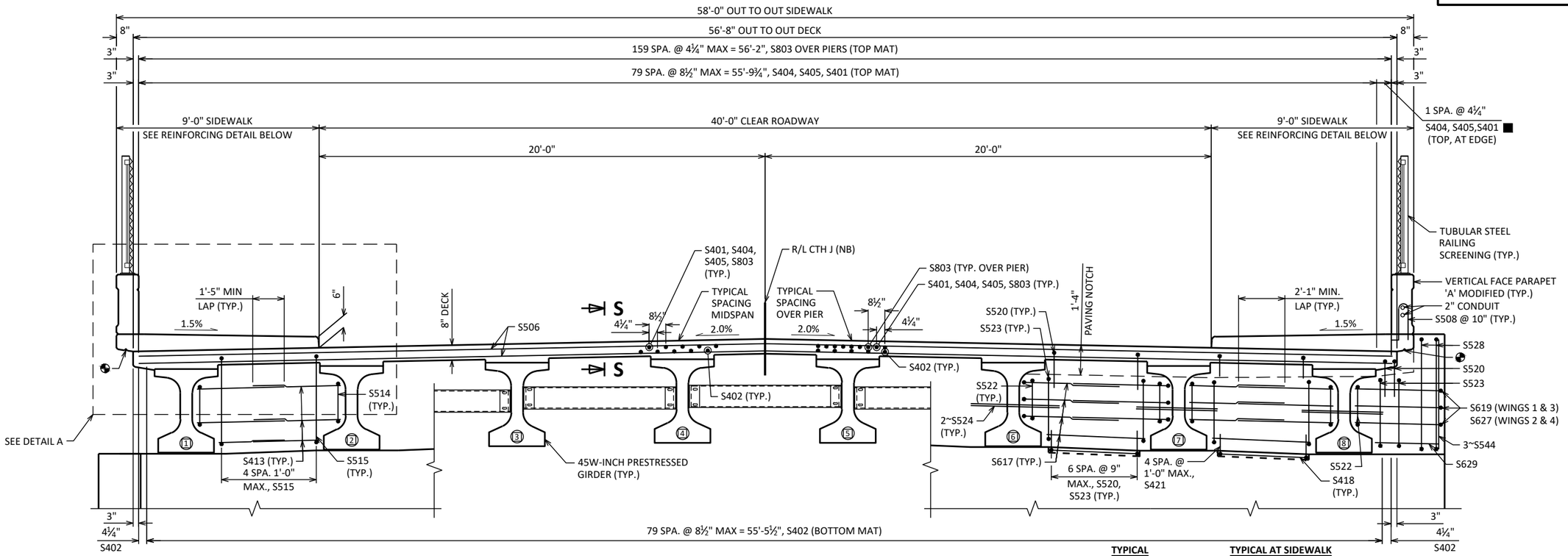
SCALE =

8

8

STATE PROJECT NUMBER

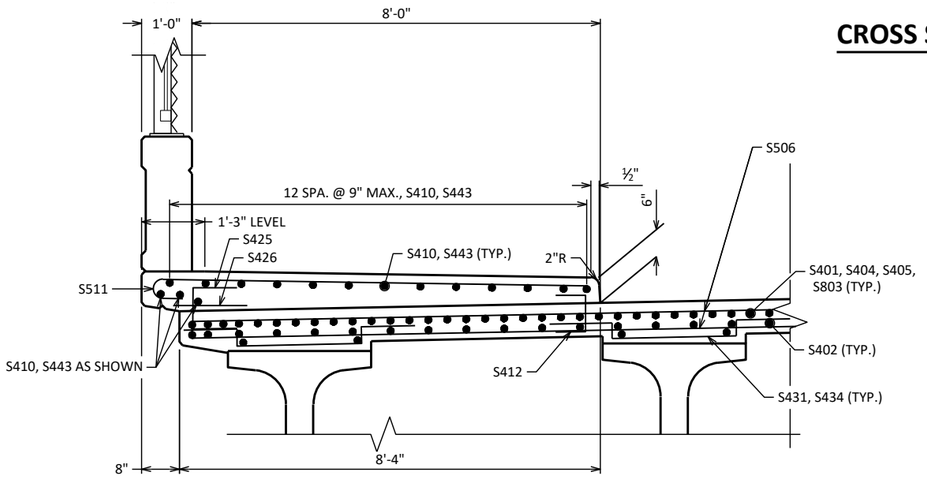
**1130-66-78**



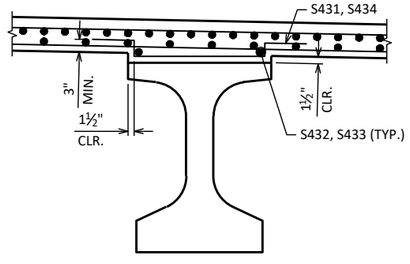

**CONCRETE DIAPHRAGM AT PIER** | **IN-SPAN DIAPHRAGM** | **TYPICAL** | **TYPICAL AT SIDEWALK** | **CONCRETE DIAPHRAGM AT ABUTMENTS**

## CROSS SECTION THROUGH DECK

(LOOKING NORTH)

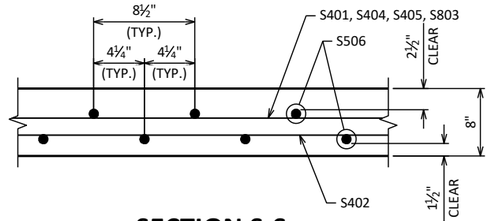



## DETAIL A




## HAUNCH DETAIL

NOTE: TILT S431 BARS AS REQUIRED TO FIT BETWEEN REBAR MATS. SEE SHEET 13 FOR HAUNCH REINFORCEMENT PLAN.




## SECTION S-S

## LEGEND

(#) INDICATES GIRDER NUMBER.

¾" V-GROOVE REQ'D. EXTEND TO 6" FROM F.F. OF ABUTMENT DIAPHRAGMS.

■ LOCATE S401 AND S404 AT EDGE OF DECK THIS SIDE IN SPAN 2. LOCATE S405 AT EDGE OF DECK THIS SIDE IN SPAN 1.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**SUPERSTRUCTURE SECTION**

SHEET 16
431

SCALE =

8

8

STATE PROJECT NUMBER

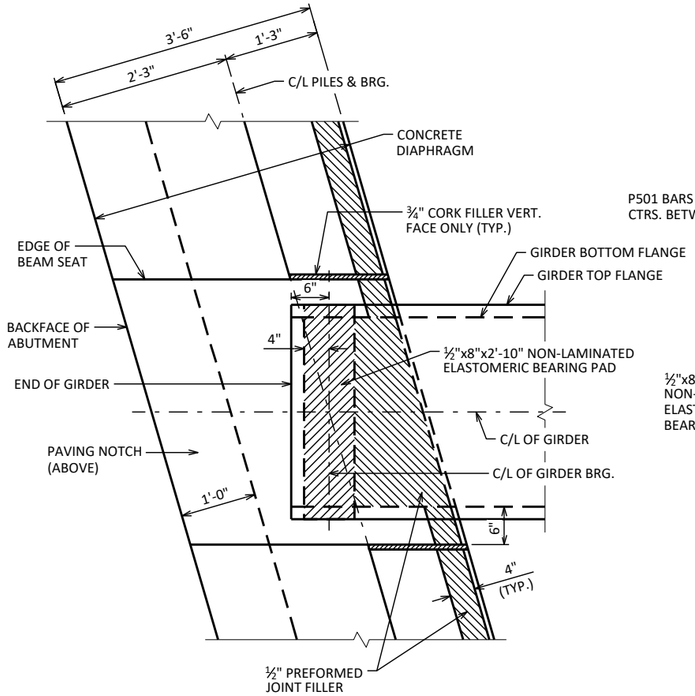
**1130-66-78**

## NOTES

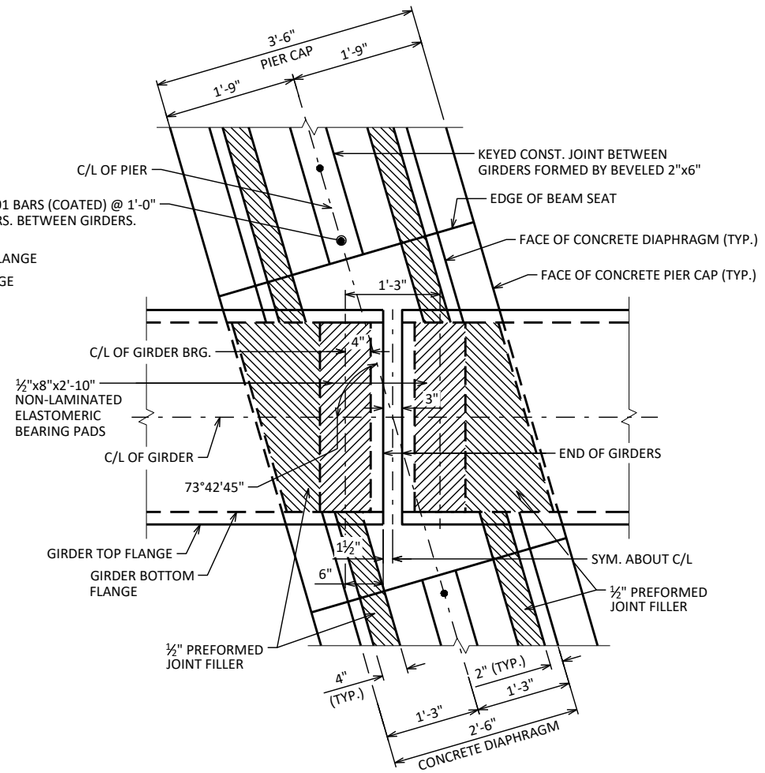
SEE SHEET 18 FOR REINFORCING DETAILS.

## LEGEND

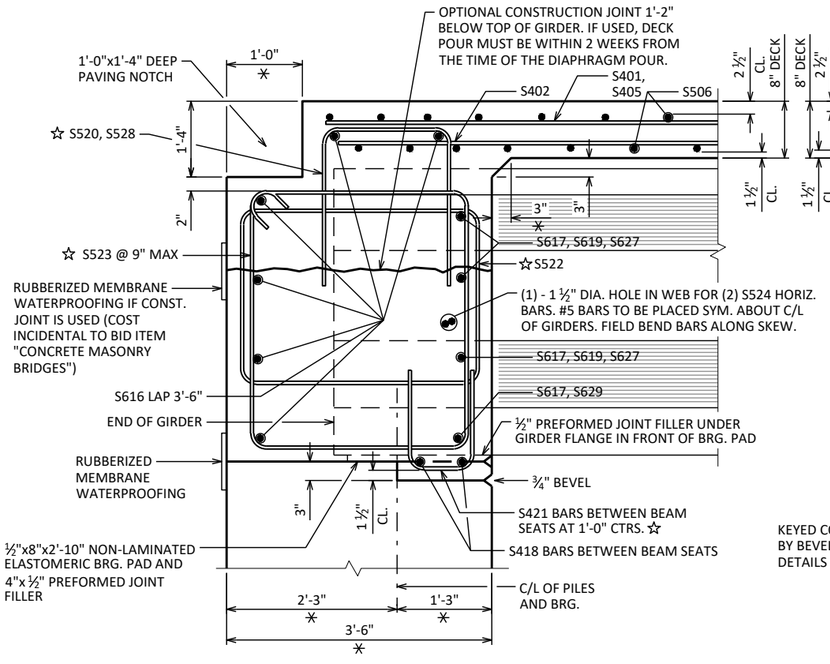
- ✳ DIMENSION IS TAKEN NORMAL TO C/L SUBSTRUCTURE UNIT.
- ◪ DIMENSION IS TAKEN PARALLEL TO C/L GIRDER.
- ☆ BARS PLACED PARALLEL TO GIRDERS. SPACING PERPENDICULAR TO GIRDERS.



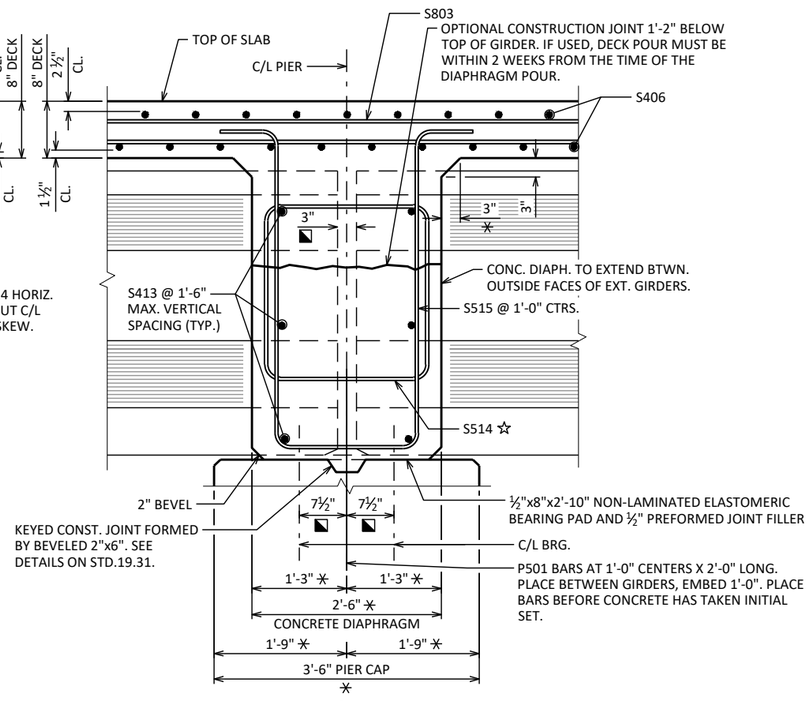

## BEARING PAD AT ABUTMENT




## BEARING PAD AT PIER




## PRESTRESSED GIRDER WITH SEMI-EXPANSION SEAT




## DIAPHRAGM AT PIER

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**SUPERSTRUCTURE DETAILS - 1**

SHEET 17
432

SCALE =

8

8

# TOP OF DECK ELEVATIONS

| LOCATION | WEST EDGE OF DECK | | GIRDER 1 | | GIRDER 2 | | GIRDER 3 | | GIRDER 4 | | R/L | | GIRDER 5 | | GIRDER 6 | | GIRDER 7 | | GIRDER 8 | | EAST EDGE OF DECK | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 28.33' LT | | 25.96' LT | | 18.54' LT | | 11.13' LT | | 3.71' LT | | 0.00' | | 3.71' RT | | 11.13' RT | | 18.54' RT | | 25.96' RT | | 28.33' RT | |
| | STATION | ELEVATION | STATION | ELEVATION | STATION | ELEVATION | STATION | ELEVATION | STATION | ELEVATION | STATION | ELEVATION | STATION | ELEVATION | STATION | ELEVATION | STATION | ELEVATION | STATION | ELEVATION | STATION | ELEVATION |
| C/L BRG. S. ABUT. | 18+18.34 | 716.32 | 18+19.03 | 716.38 | 18+21.20 | 716.59 | 18+23.36 | 716.80 | 18+25.53 | 717.01 | 18+26.61 | 717.12 | 18+27.70 | 717.07 | 18+29.86 | 716.99 | 18+32.03 | 716.90 | 18+34.20 | 716.81 | 18+34.89 | 716.78 |
| 0.1 SPAN | 18+28.54 | 716.60 | 18+29.23 | 716.67 | 18+31.40 | 716.88 | 18+33.56 | 717.09 | 18+35.73 | 717.30 | 18+36.81 | 717.40 | 18+37.90 | 717.36 | 18+40.06 | 717.27 | 18+42.23 | 717.19 | 18+44.40 | 717.10 | 18+45.09 | 717.07 |
| 0.2 SPAN | 18+38.74 | 716.89 | 18+39.43 | 716.96 | 18+41.60 | 717.17 | 18+43.76 | 717.38 | 18+45.93 | 717.59 | 18+47.01 | 717.69 | 18+48.10 | 717.65 | 18+50.26 | 717.56 | 18+52.43 | 717.47 | 18+54.60 | 717.39 | 18+55.29 | 717.36 |
| 0.3 SPAN | 18+48.94 | 717.18 | 18+49.63 | 717.25 | 18+51.80 | 717.46 | 18+53.96 | 717.67 | 18+56.13 | 717.87 | 18+57.21 | 717.98 | 18+58.30 | 717.93 | 18+60.46 | 717.84 | 18+62.63 | 717.75 | 18+64.80 | 717.65 | 18+65.49 | 717.62 |
| 0.4 SPAN | 18+59.14 | 717.46 | 18+59.83 | 717.53 | 18+62.00 | 717.73 | 18+64.16 | 717.93 | 18+66.33 | 718.13 | 18+67.41 | 718.23 | 18+68.50 | 718.18 | 18+70.66 | 718.08 | 18+72.83 | 717.98 | 18+75.00 | 717.87 | 18+75.69 | 717.83 |
| 0.5 SPAN | 18+69.34 | 717.71 | 18+70.03 | 717.77 | 18+72.20 | 717.96 | 18+74.36 | 718.15 | 18+76.53 | 718.34 | 18+77.61 | 718.44 | 18+78.70 | 718.38 | 18+80.86 | 718.27 | 18+83.03 | 718.15 | 18+85.20 | 718.04 | 18+85.89 | 718.00 |
| 0.6 SPAN | 18+79.54 | 717.90 | 18+80.23 | 717.96 | 18+82.40 | 718.14 | 18+84.56 | 718.32 | 18+86.73 | 718.50 | 18+87.81 | 718.59 | 18+88.90 | 718.53 | 18+91.06 | 718.41 | 18+93.23 | 718.28 | 18+95.40 | 718.16 | 18+96.09 | 718.12 |
| 0.7 SPAN | 18+89.74 | 718.05 | 18+90.43 | 718.10 | 18+92.60 | 718.28 | 18+94.76 | 718.45 | 18+96.93 | 718.61 | 18+98.01 | 718.70 | 18+99.10 | 718.63 | 19+01.26 | 718.50 | 19+03.43 | 718.36 | 19+05.60 | 718.23 | 19+06.29 | 718.18 |
| 0.8 SPAN | 18+99.94 | 718.15 | 19+00.63 | 718.20 | 19+02.80 | 718.36 | 19+04.96 | 718.52 | 19+07.13 | 718.68 | 19+08.21 | 718.76 | 19+09.30 | 718.69 | 19+11.46 | 718.54 | 19+13.63 | 718.40 | 19+15.80 | 718.25 | 19+16.49 | 718.20 |
| 0.9 SPAN | 19+10.14 | 718.19 | 19+10.83 | 718.24 | 19+13.00 | 718.40 | 19+15.16 | 718.55 | 19+17.33 | 718.69 | 19+18.41 | 718.77 | 19+19.50 | 718.69 | 19+21.66 | 718.54 | 19+23.83 | 718.38 | 19+26.00 | 718.22 | 19+26.69 | 718.17 |
| C/L BRG. PIER | 19+20.34 | 718.19 | 19+21.03 | 718.24 | 19+23.20 | 718.38 | 19+25.36 | 718.52 | 19+27.53 | 718.66 | 19+28.61 | 718.73 | 19+29.70 | 718.64 | 19+31.86 | 718.48 | 19+34.03 | 718.31 | 19+36.20 | 718.14 | 19+36.89 | 718.09 |
| 0.1 SPAN | 19+30.54 | 718.15 | 19+31.23 | 718.19 | 19+33.40 | 718.32 | 19+35.56 | 718.45 | 19+37.73 | 718.57 | 19+38.81 | 718.64 | 19+39.90 | 718.55 | 19+42.06 | 718.38 | 19+44.23 | 718.20 | 19+46.40 | 718.02 | 19+47.09 | 717.96 |
| 0.2 SPAN | 19+40.74 | 718.05 | 19+41.43 | 718.09 | 19+43.60 | 718.21 | 19+45.76 | 718.33 | 19+47.93 | 718.44 | 19+49.01 | 718.50 | 19+50.10 | 718.41 | 19+52.26 | 718.22 | 19+54.43 | 718.04 | 19+56.60 | 717.85 | 19+57.29 | 717.79 |
| 0.3 SPAN | 19+50.94 | 717.90 | 19+51.63 | 717.94 | 19+53.80 | 718.05 | 19+55.96 | 718.16 | 19+58.13 | 718.26 | 19+59.21 | 718.31 | 19+60.30 | 718.22 | 19+62.46 | 718.02 | 19+64.63 | 717.82 | 19+66.80 | 717.62 | 19+67.49 | 717.56 |
| 0.4 SPAN | 19+61.14 | 717.71 | 19+61.83 | 717.74 | 19+64.00 | 717.84 | 19+66.16 | 717.94 | 19+68.33 | 718.03 | 19+69.41 | 718.08 | 19+70.50 | 717.98 | 19+72.66 | 717.77 | 19+74.83 | 717.56 | 19+77.00 | 717.35 | 19+77.69 | 717.29 |
| 0.5 SPAN | 19+71.34 | 717.46 | 19+72.03 | 717.49 | 19+74.20 | 717.58 | 19+76.36 | 717.67 | 19+78.53 | 717.76 | 19+79.61 | 717.80 | 19+80.70 | 717.69 | 19+82.86 | 717.49 | 19+85.03 | 717.28 | 19+87.20 | 717.07 | 19+87.89 | 717.00 |
| 0.6 SPAN | 19+81.54 | 717.18 | 19+82.23 | 717.21 | 19+84.40 | 717.29 | 19+86.56 | 717.38 | 19+88.73 | 717.47 | 19+89.81 | 717.51 | 19+90.90 | 717.41 | 19+93.06 | 717.20 | 19+95.23 | 716.99 | 19+97.40 | 716.78 | 19+98.09 | 716.71 |
| 0.7 SPAN | 19+91.74 | 716.89 | 19+92.43 | 716.92 | 19+94.60 | 717.01 | 19+96.76 | 717.09 | 19+98.93 | 717.18 | 20+00.01 | 717.23 | 20+01.10 | 717.12 | 20+03.26 | 716.91 | 20+05.43 | 716.70 | 20+07.60 | 716.49 | 20+08.29 | 716.43 |
| 0.8 SPAN | 20+01.94 | 716.61 | 20+02.63 | 716.63 | 20+04.80 | 716.72 | 20+06.96 | 716.81 | 20+09.13 | 716.90 | 20+10.21 | 716.94 | 20+11.30 | 716.83 | 20+13.46 | 716.63 | 20+15.63 | 716.42 | 20+17.80 | 716.21 | 20+18.49 | 716.14 |
| 0.9 SPAN | 20+12.14 | 716.32 | 20+12.83 | 716.35 | 20+15.00 | 716.43 | 20+17.16 | 716.52 | 20+19.33 | 716.61 | 20+20.41 | 716.65 | 20+21.50 | 716.55 | 20+23.66 | 716.34 | 20+25.83 | 716.13 | 20+28.00 | 715.92 | 20+28.69 | 715.85 |
| C/L BRG. N. ABUT. | 20+22.34 | 716.03 | 20+23.03 | 716.06 | 20+25.20 | 716.15 | 20+27.36 | 716.23 | 20+29.53 | 716.32 | 20+30.61 | 716.37 | 20+31.70 | 716.26 | 20+33.86 | 716.05 | 20+36.03 | 715.84 | 20+38.20 | 715.63 | 20+38.89 | 715.57 |

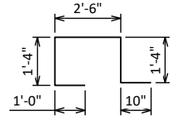
# SUPERSTRUCTURE BILL OF BARS

## COATED: 116,150 LBS

| BAR MARK | NO. REQ'D | LENGTH | BENT | COAT | LOCATION |
|---|---|---|---|---|---|
| S401 | 81 | 37'-9" | | X | SLAB - LONG. - TOP - SPANS 1 |
| S402 | 410 | 42'-7" | | X | SLAB - LONG. - BOTTOM - SPANS 1&2 |
| S803 | 160 | 47'-6" | | X | SLAB - LONG. - TOP AT PIER |
| S404 | 81 | 36'-4" | | X | SLAB - LONG. - TOP - SPAN 1 |
| S405 | 162 | 45'-10" | | X | SLAB - LONG. - TOP - SPAN 2 |
| S506 | 583 | 58'-8" | | X | SLAB - TRANS. - TOP & BOTTOM - SPANS 1 & 2 |
| S507 | 496 | 4'-9" | X | X | PARAPET - VERT. |
| S508 | 498 | 4'-4" | X | X | PARAPET - VERT. |
| S509 | 64 | 51'-0" | | X | PARAPET - LONG. |
| S410 | 192 | 34'-2" | | X | SDWLK - LONG. - TOP & BOTTOM |
| S511 | 1238 | 9'-5" | X | X | SDWLK - TRANS. - TOP |
| S412 | 826 | 2'-6" | X | X | SDWLK - TRANS. |
| S413 | 84 | 4'-2" | | X | PIER DIAPHRAGM - HORIZ |
| S514 | 14 | 9'-6" | X | X | PIER DIAPHRAGM - VERT. |
| S515 | 35 | 11'-9" | X | X | PIER DIAPHRAGM - VERT. |
| S616 | 24 | 31'-8" | | X | ABUT. DIAPHRAGM - HORIZ. - B.F., TOP |
| S617 | 98 | 4'-7" | | X | ABUT. DIAPHRAGM - HORIZ. |
| S418 | 28 | 3'-8" | | X | ABUT. DIAPHRAGM - HORIZ. |
| S619 | 6 | 7'-2" | X | X | ABUT. DIAPHRAGM - HORIZ. - ENDS - WINGS 1 & 3 |
| S520 | 106 | 7'-0" | X | X | ABUT. DIAPHRAGM - VERT. |
| S421 | 70 | 3'-5" | X | X | ABUT. DIAPHRAGM - VERT. |
| S522 | 32 | 11'-6" | X | X | ABUT. DIAPHRAGM - VERT. |
| S523 | 106 | 13'-0" | X | X | ABUT. DIAPHRAGM - VERT. |
| S524 | 32 | 6'-0" | | X | ABUT. DIAPHRAGM - GIRDER ENDS |
| S425 | 826 | 2'-9" | X | X | SDWLK - TRANS. |
| S426 | 278 | 1'-7" | | X | SDWLK - TRANS. - BOT. |
| S627 | 6 | 6'-7" | X | X | ABUT. DIAPHRAGM - HORIZ. - ENDS - WINGS 2 & 4 |
| S528 | 8 | 16'-10" | X | X | ABUT. DIAPHRAGM - VERT. - ENDS |
| S629 | 4 | 2'-7" | | X | ABUT. DIAPHRAGM - HORIZ. - ENDS |
| S530 | 2 | 2'-2" | | X | PARAPET - VERT. - JUNCTION BOX |
| S431 | 584 | 5'-1" | X | X | HAUNCH - TRANS. - SPAN 1 |
| S432 | 32 | 36'-10" | | X | HAUNCH - LONG. - SPAN 1 |
| S433 | 32 | 31'-10" | | X | HAUNCH - LONG. - SPAN 2 |
| S434 | 504 | 4'-9" | X | X | HAUNCH - TRANS. - SPAN 2 |
| S535 | 16 | 7'-8" | | X | PARAPET - LONG. - BETWEEN DEFLECTION JOINTS |
| S536 | 12 | 8'-6" | X | X | LIGHT STANDARD/SIDEWALK - TOP - TRANS. - VERT. |
| S537 | 4 | 6'-2" | X | X | LIGHT STANDARD - TRANS. - VERT. |
| S538 | 4 | 6'-6" | X | X | LIGHT STANDARD - BOT. - TRANS. - VERT. |
| S639 | 7 | 10'-0" | X | X | LIGHT STANDARD - HORIZ. |
| S540 | 2 | 3'-1" | X | X | LIGHT STANDARD - TRANS. - VERT. - ON EACH SIDE |
| S541 | 2 | 3'-4" | X | X | LIGHT STANDARD - BOT. - TRANS. - VERT. - ON EACH SIDE |
| S542 | 12 | 7'-10" | | X | LIGHT STANDARD/SIDEWALK - BOT. - TRANS. - HORIZ. |
| S443 | 32 | 7'-8" | | X | SDWLK - LONG. - BETWEEN DEFLECTION JOINTS |
| S544 | 12 | 4'-11" | | X | ABUT. DIAPHRAGM - VERT. - ENDS |

STATE PROJECT NUMBER

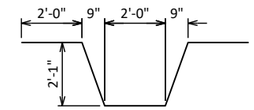
**1130-66-78**



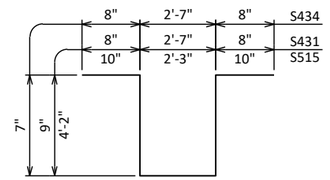

**S538**



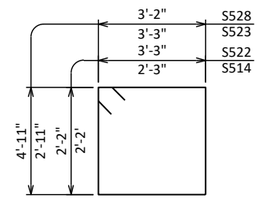

**S540**



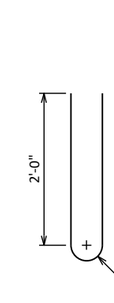

**S639**



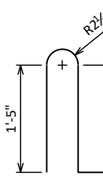

**S431, S515, S434**



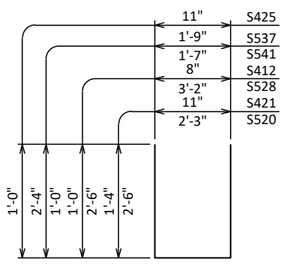

**S514, S522, S523, S528**



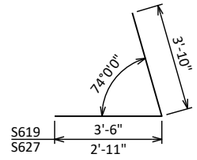

**S507**



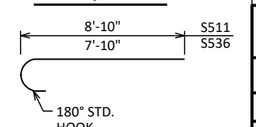

**S508**




**S520, S421, S528, S412, S537, S541, S425**




**S619, S627**




**S511, S536**

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

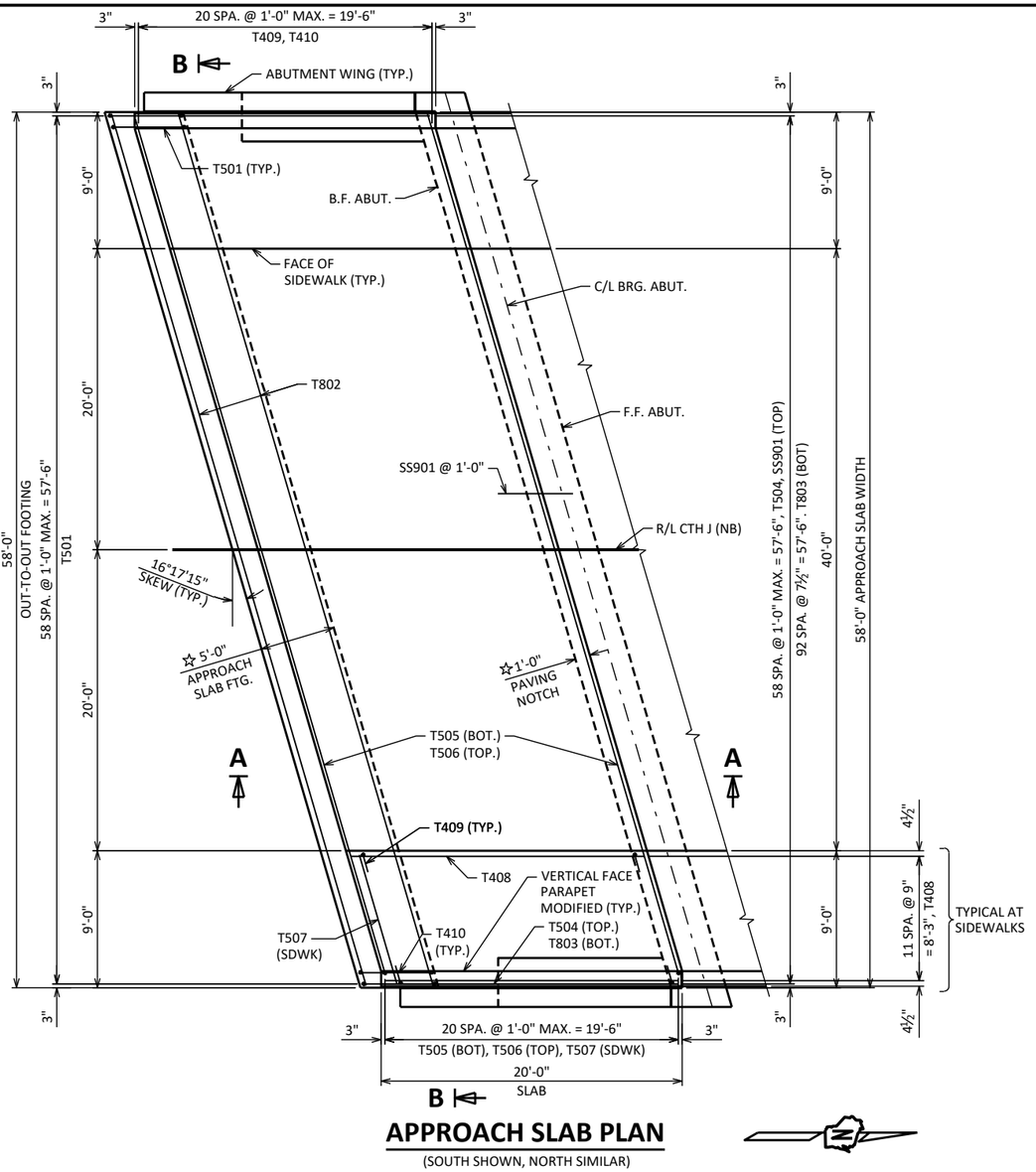
**SUPERSTRUCTURE DETAILS - 2**

SHEET 18
433

SCALE =

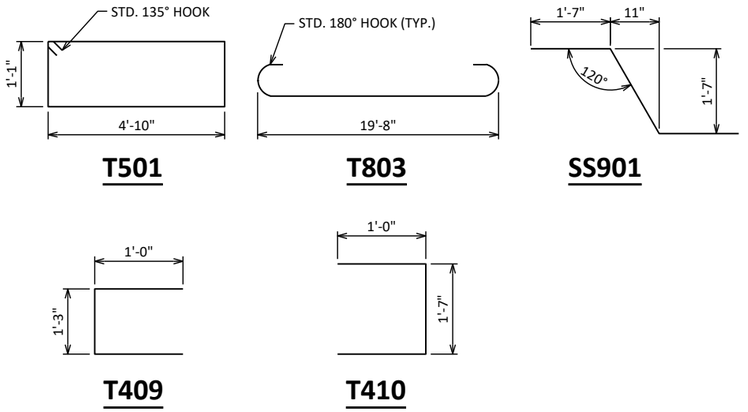
8

8




## APPROACH SLAB PLAN

(SOUTH SHOWN, NORTH SIMILAR)




## LEGEND

- SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).
- STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.
- PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.
- COAT WITH "PROTECTIVE SURFACE TREATMENT."
- ADJUST SS901 SPACING AS NECESSARY TO AVOID CONFLICTS WITH PRESTRESSED GIRDERS.
- COST. JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH. MATCH BRIDGE CROSS SLOPE.
- SEE VERTICAL FACE PARAPET 'A' MODIFIED SHEET FOR REINFORCEMENT.
- ☆ MEASURED NORMAL TO ABUTMENT

## DESIGN DATA

CONCRETE STRENGTH, f'c: 4,000 P.S.I.
BAR STEEL REINFORCEMENT,
GRADE = 60, fy: 60,000 P.S.I.
ALLOWABLE SOIL BEARING PRESSURE: 2,000 P.S.F.

## STRUCTURAL APPROACH SLABS BILL OF BARS

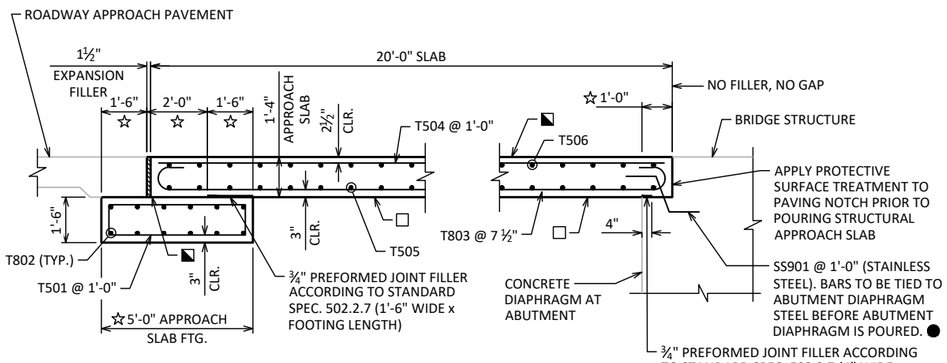
**COATED: 25,520 LBS**

| BAR MARK | NO. REQ'D | LENGTH | BENT | COAT | LOCATION |
|---|---|---|---|---|---|
| T501 | 118 | 12'-6" | X | X | FOOTING - STIRRUP |
| T802 | 24 | 60'-0" | | X | FOOTING - TRANS. |
| T803 | 186 | 21'-6" | X | X | SLAB - LONG. - BOT. |
| T504 | 118 | 19'-8" | | X | SLAB - LONG. - TOP |
| T505 | 42 | 60'-0" | | X | SLAB - TRANS. - BOT. |
| T506 | 42 | 60'-0" | | X | SLAB - TRANS. - TOP |
| T507 | 84 | 9'-0" | | X | SIDEWALK - TRANS. - TOP |
| T408 | 48 | 19'-8" | | X | SIDEWALK - LONG. - TOP |
| T409 | 84 | 3'-1" | X | X | SIDEWALK - VERT. |
| T410 | 84 | 3'-5" | X | X | SIDEWALK - VERT. |

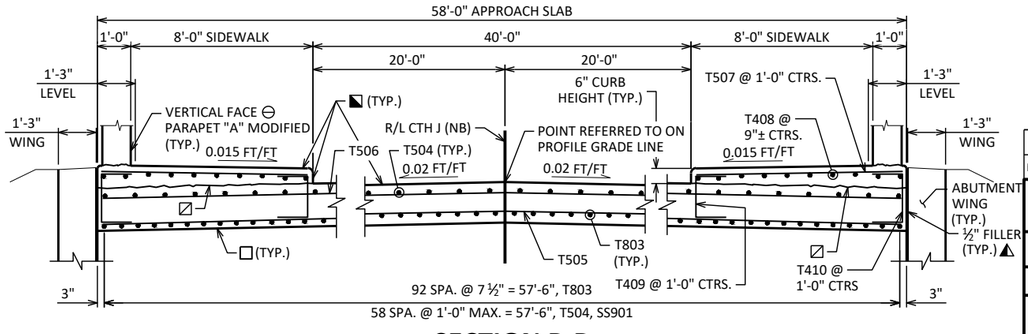
## STAINLESS STEEL BILL OF BARS

**STAINLESS: 2,010 LBS**

| BAR MARK | NO. REQ'D | LENGTH | BENT | COAT | LOCATION |
|---|---|---|---|---|---|
| SS901 | 118 | 5'-0" | X | | CONC. ABUT. DIAPH. TO APPROACH SLAB |




## SECTION A-A




## SECTION B-B

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**STRUCTURAL APPROACH SLAB**

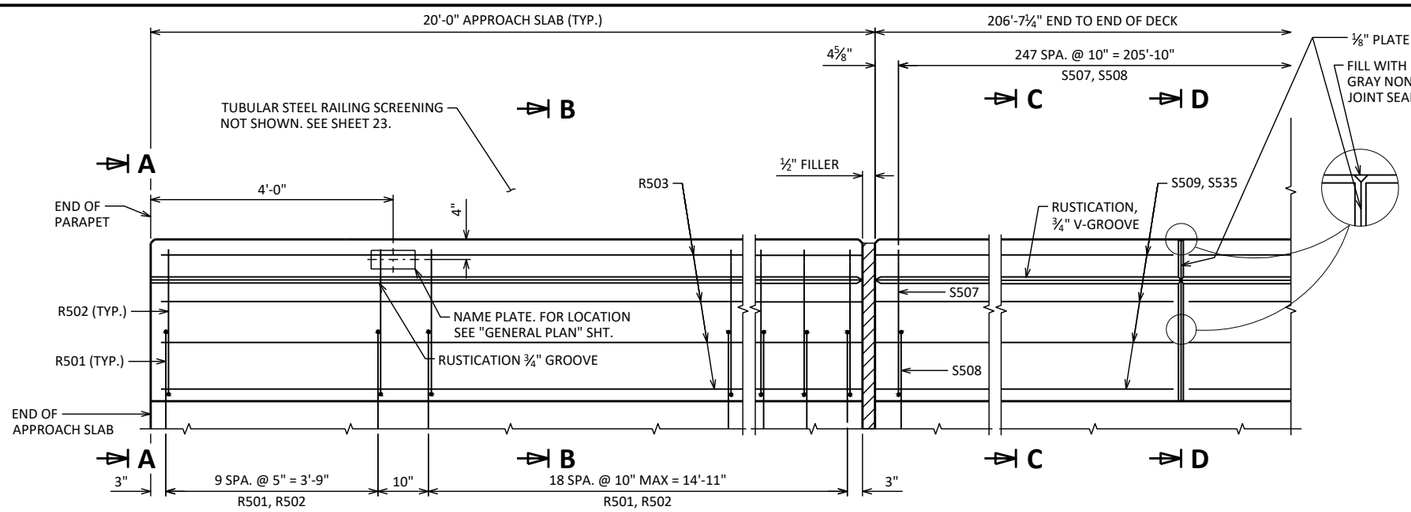
SHEET 19
434

SCALE =

STATE PROJECT NUMBER
**1130-66-78**

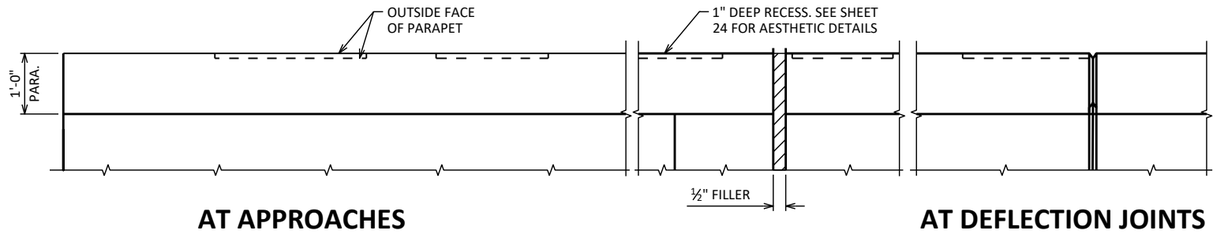
8

8




**AT APPROACHES** **AT DEFLECTION JOINTS**

## INSIDE ELEVATION OF PARAPET




**AT APPROACHES** **AT DEFLECTION JOINTS**

## PLAN OF PARAPET

(RAILING NOT SHOWN FOR CLARITY)

# VERTICAL FACE PARAPET 'A'

## BILL OF BARS

**COATED: 1,750 LBS**

| BAR MARK | NO. REQ'D | | LENGTH | BENT | COAT | LOCATION |
|---|---|---|---|---|---|---|
| | S. ABUT. | N. ABUT. | | | | |
| R501 | 58 | 58 | 4'-4" | X | X | PARAPET - VERT. |
| R502 | 58 | 58 | 4'-9" | X | X | PARAPET - VERT. |
| R503 | 16 | 16 | 19'-7" | | X | PARAPET - HORIZ. |

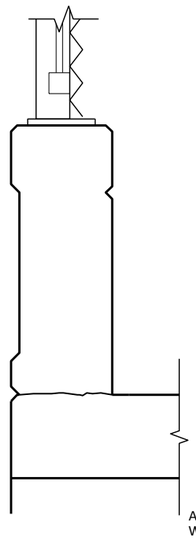
## NOTES

SEE SHEET 15 FOR DEFLECTION JOINT LOCATIONS.

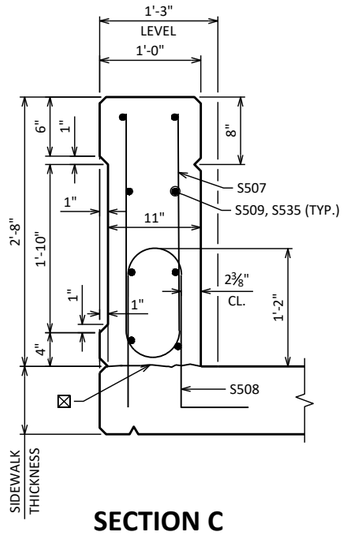
## LEGEND

☒ HORIZ. CONST. JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH.

◧ CONST. JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH. MATCH BRIDGE CROSS-SLOPE.

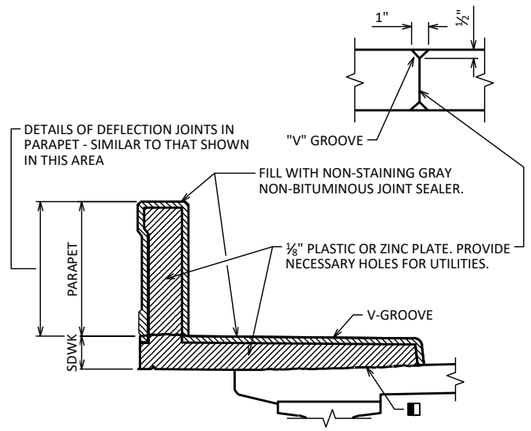



**VIEW A** **SECTION B**



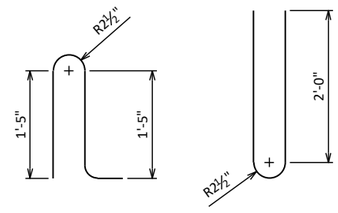

## SECTION C

(PARAPET ON BRIDGE)
(RAILING NOT SHOWN FOR CLARITY)




## SECTION D

WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF ⅛" ZINC OR PLASTIC PLATE CUT AS SHOWN IN SECTION "D" BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS. ONE SIDE OF JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.




**R501** **R502**

STATE PROJECT NUMBER

**1130-66-78**

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**VERTICAL FACE PARAPET 'A' MODIFIED**

SHEET 20
435

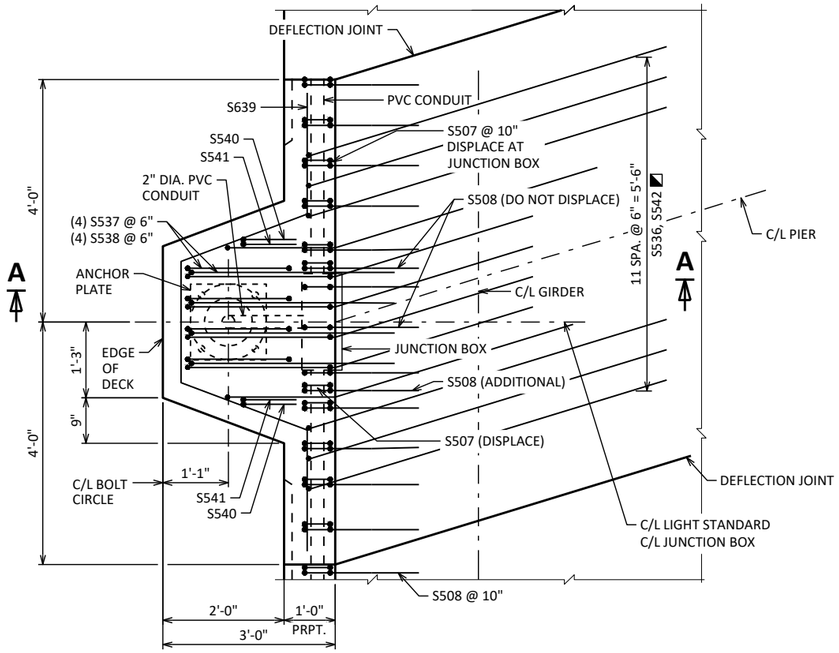
SCALE =

8

8

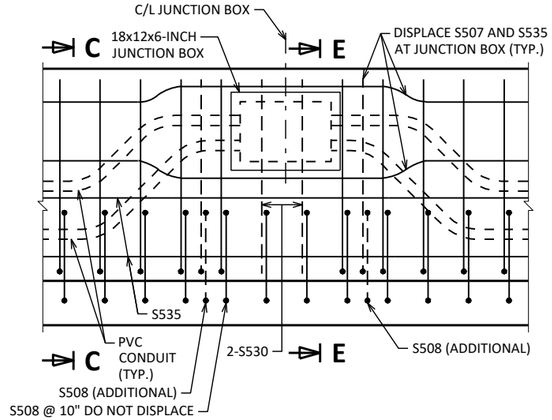
STATE PROJECT NUMBER

**1130-66-78**



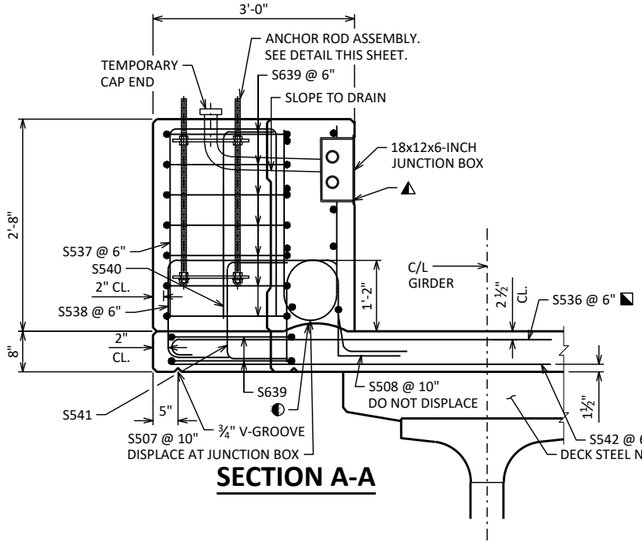

## PLAN AT LIGHT STANDARD

(SIDEWALK STEEL NOT SHOWN FOR CLARITY)

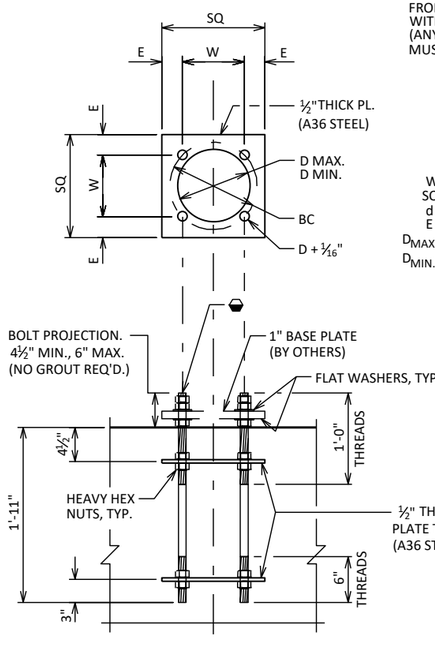



## INSIDE ELEVATION AT JUNCTION BOX

(DECK STEEL NOT SHOWN FOR CLARITY)




## SECTION A-A



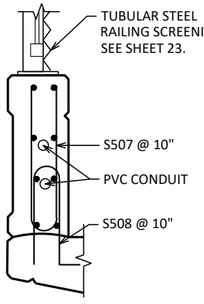

## ANCHOR ROD ASSEMBLY DETAILS

SINGLE ASSEMBLY SHOWN
(4) - RODS REQUIRED PER ASSEMBLY

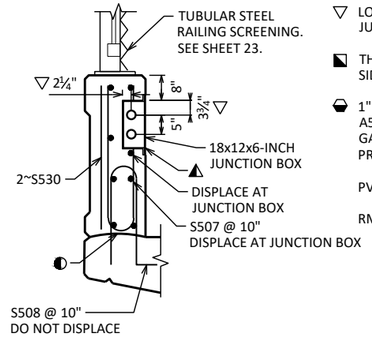
TABLE FOR "TYPE 5 LIGHT POLE" FROM FACILITIES DEV. MANUAL WITH 1" DIA. ANCHOR BOLTS. (ANY OTHER LIGHT POLE TYPE MUST BE DESIGNED FOR.)

| | |
|---|---|
| SQ | 1'-1½" |
| E | 2 11/16" |
| W | 8⅛" |
| BC | 11½" |
| D | 9½" |

W = 0.707 X BC
SQ = BC + 2d
d = ANCHOR BOLT DIA.
E = (SQ-W)/2
$D_{MAX.}$ = BC - 2d
$D_{MIN.}$ = 2 X CONDUIT DIA. + 1"




## SECTION C-C




## SECTION E-E

## NOTES

SEE SHEET 22 FOR CONDUIT DETAILS.

PROVIDE JUNCTION BOXES FROM THE APPROVED PRODUCTS LAST.

BID ITEM SHALL BE "ANCHOR ASSEMBLIES POLES ON STRUCTURES", EACH

## LEGEND

- CONSTRUCTION JOINT, STRIKE OFF AS SHOWN.
- CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.
- LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.
- THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN SIDEWALK.
- 1" DIA. ANCHOR RODS ASTM F1554 GR 55, HEAVY HEX NUTS ASTM A563, AND WASHERS ASTM F436. ANCHOR ASSEMBLIES SHALL BE GALVANIZED PER SECTION 531 OF THE STANDARD SPECIFICATION. PROVIDE (2) WASHERS AND (7) NUTS PER ANCHOR ROD.

PVC = POLYVINYL CHLORIDE (RIGID NONMETALLIC) CONDUIT.

RMC = RIGID METALLIC CONDUIT.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**LIGHT STANDARD AND JUNCTION BOX**

SHEET 21
436

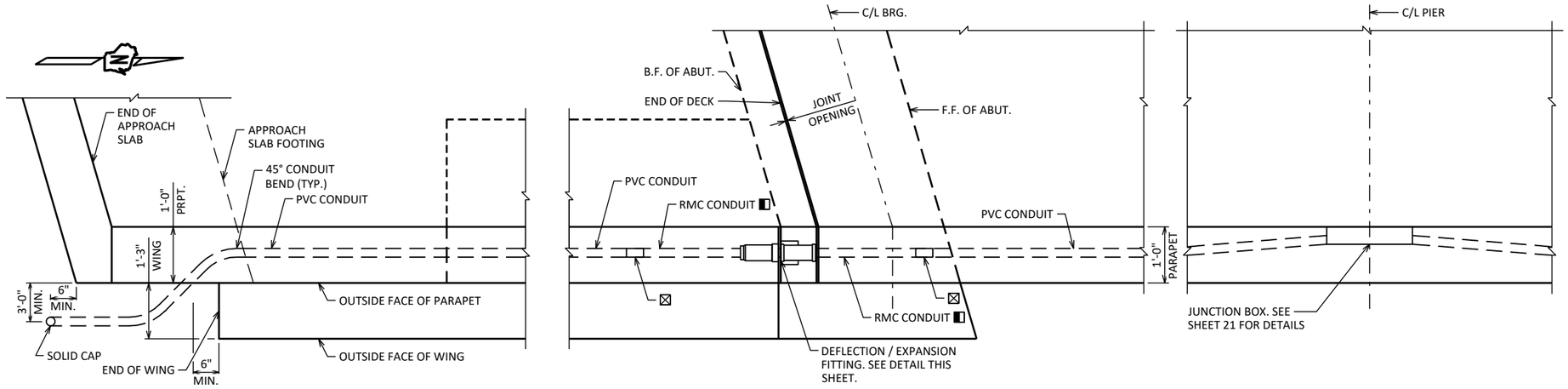
SCALE =

8

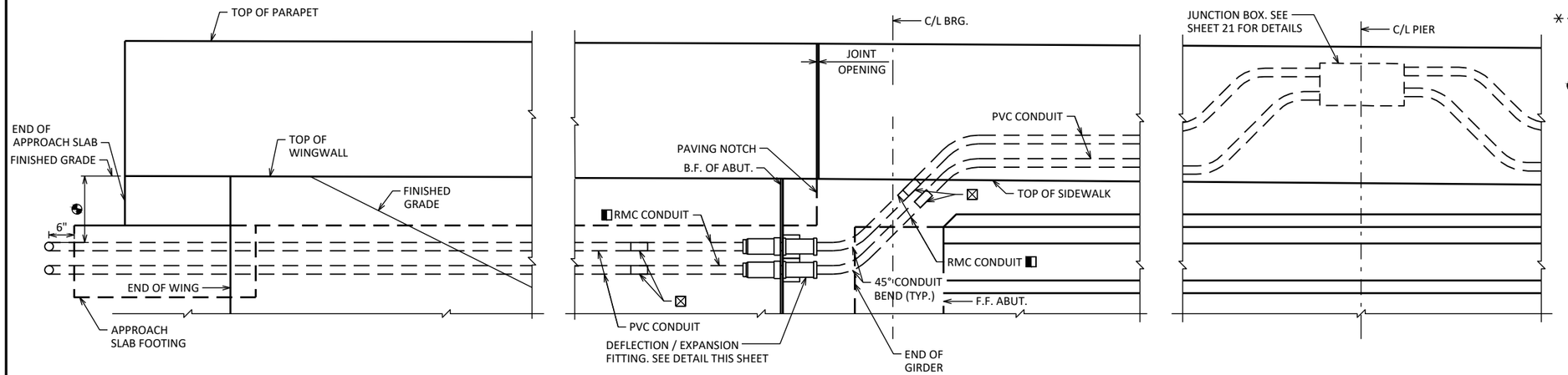
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STATE PROJECT NUMBER

**1130-66-78**

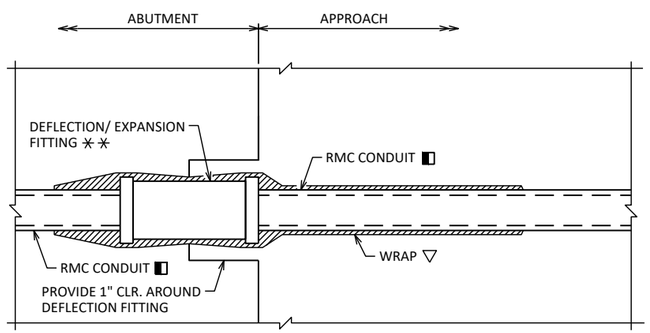



## PLAN OF WING 3 PARAPET AT APPROACH SLAB




## OUTSIDE ELEVATION OF WING 3 PARAPET AT APPROACH SLAB

(AESTHETIC RECESSES NOT SHOWN)




## DEFLECTION/EXPANSION FITTING

THIS DETAIL ACCOMMODATES A MAXIMUM OF ¾" TOTAL MOVEMENT AND UP TO 30 DEGREES OF ANGULAR MISALIGNMENT IN ANY DIRECTION. BOND JUMPER NOT SHOWN FOR CLARITY. (CONCRETE TO CONCRETE FITTING)

## NOTES

CONDUIT SHALL BE EMBEDDED 2" CLEAR, MIN.

USE 2" DIA. RIGID NONMETALLIC CONDUIT (PVC) UNLESS NOTED OTHERWISE.

CONDUIT FITTINGS, CONDUIT BENDS, AND ADAPTER FITTINGS INCIDENTAL TO CONDUIT WORK.

CONDUIT BENDS SHALL CONFORM TO THE NATIONAL ELECTRIC CODE.

PVC = POLYVINYL CHLORIDE (RIGID NONMETALLIC) CONDUIT

RMC = RIGID METALLIC CONDUIT

## LEGEND

◧ USE 2" DIA. RIGID METALLIC (RMC) CONDUIT AT FITTINGS. PROVIDE RMC FOR 3'-0" MIN. ON EACH SIDE OF JOINT OPENINGS UNLESS NOTED OTHERWISE.

⊠ NONMETALLIC CONDUIT TO METALLIC CONDUIT ADAPTER FITTING (UL OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED).

▽ SPONGE RUBBER WRAP TO BE AASHTO M153, TYPE 1 OR EQUIVALENT - ¼" MINIMUM THICKNESS. PROVIDE WRAP FOR THE ENTIRE LENGTH OF THE FITTING OR AS SHOWN. SPONGE RUBBER WRAP INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

✳✳ DEFLECTION/EXPANSION FITTING REQUIREMENTS (IF USED):

- UP TO ¾" CONDUIT CONTRACTION OR EXPANSION AND UP TO 30 DEGREES OF ANGULAR MISALIGNMENT IN ANY DIRECTION WITH BONDING JUMPER.

◔ 1'-6" MIN. CONDUIT COVER. CONDUIT COVER SHOULD NOT EXCEED 3'-0".

| NO. | DATE | REVISION | BY |
|---|---|---|---|
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

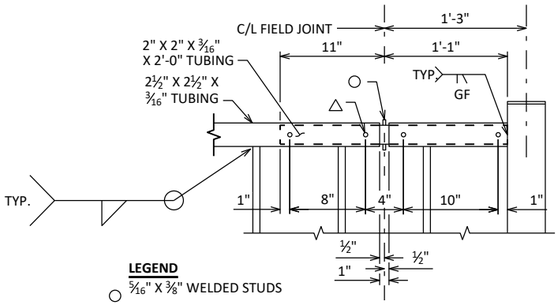
**CONDUIT DETAILS AND NOTES**

SHEET 22
437

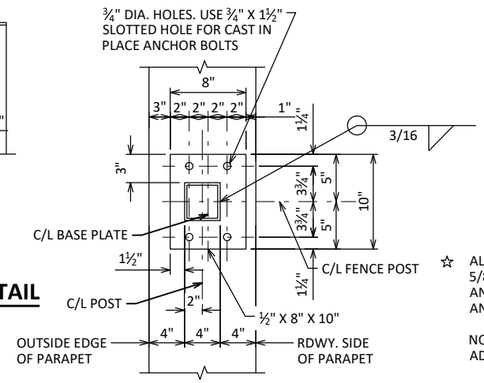
SCALE =

STATE PROJECT NUMBER

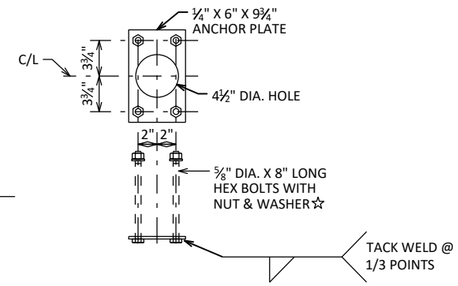
**1130-66-78**




## RAILING EXPANSION JOINT DETAIL



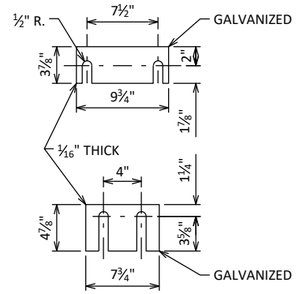

## BASE PLATE




## ANCHORAGE DETAIL

☆ ALTERNATIVE ANCHORAGE: ADHESIVE ANCHORS 5/8-INCH. EMBED 7" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.




## SHIM PLATE DETAILS

TWO SHIMS OF EACH SIZE REQUIRED PER POST

## NOTES

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B. PLATES, ANGLES, BARS AND SHIMS SHALL CONFORM TO ASTM A709, GRADE 36. FENCE FABRIC SHALL CONFORM TO F668, CLASS 2B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPACINGS ARE TAKEN HORIZONTAL ALONG CENTERLINE OF RAILING AT BASE OF POST.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED. ☆

THE BID ITEM SHALL BE "RAILING TUBULAR SCREENING B-44-338" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

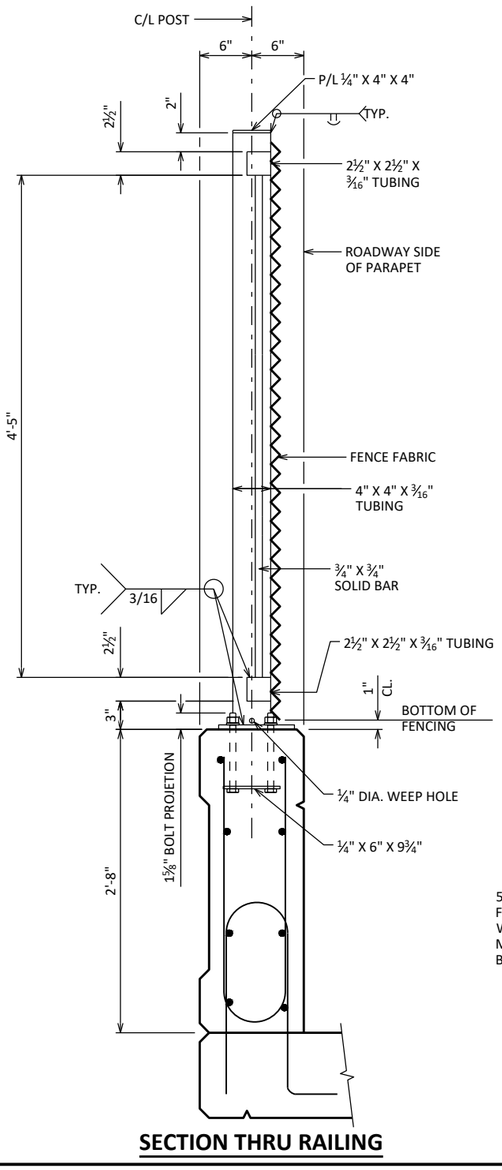
RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

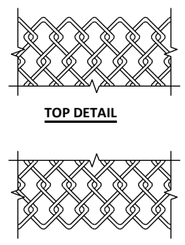
ALL RAILING MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED AMS STD. COLOR NO. 27038. FENCE FABRIC AND TIES TO BE VINYL-COATED. COLOR SHALL BE BLACK IN ACCORDANCE WITH ASTM F934.

THE END OF THE FABRIC SHALL BE ATTACHED TO THE POST BY MEANS OF A TENSION BAR THREADED THROUGH THE END LOOPS OF THE FABRIC AND SECURED TO THE POST WITH CLAMPS & BOLT. THE FABRIC SHALL BE STRETCHED TO REMOVE ALL SLACK.

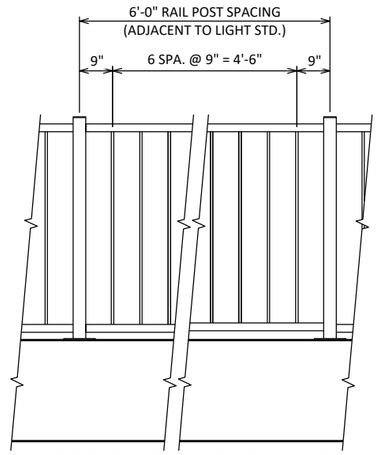
SEE SHEET 24 FOR RAIL POST LAYOUT.




## SECTION THRU RAILING

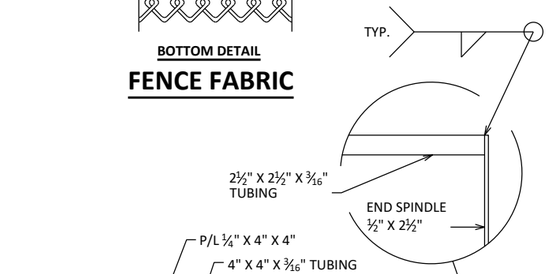


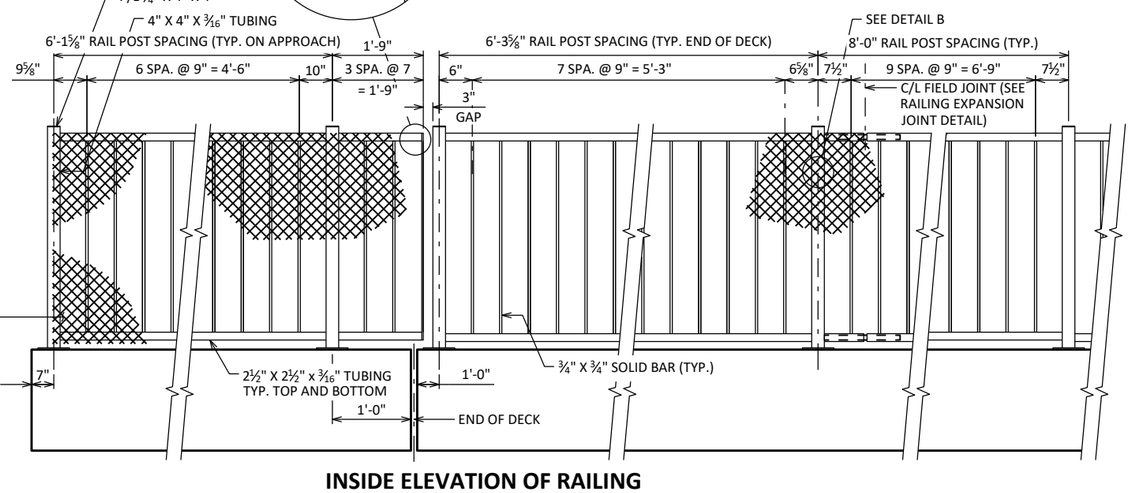

## FENCE FABRIC



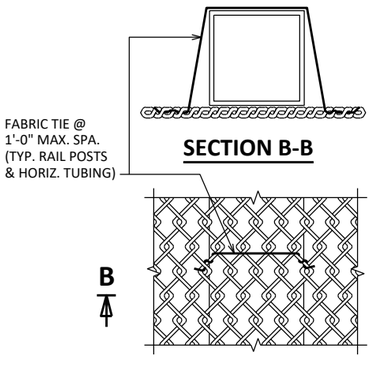

## INSIDE ELEVATION OF RAILING ADJACENT TO LIGHT STANDARD

NOTE: SEE SHEET 26 FOR RAIL POST SPACING AT LIGHT STANDARD.




## INSIDE ELEVATION OF RAILING




## SECTION B-B

## DETAIL B

| NO. | DATE | REVISION | BY |
|---|---|---|---|
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**TUBULAR STEEL RAILING SCREENING**

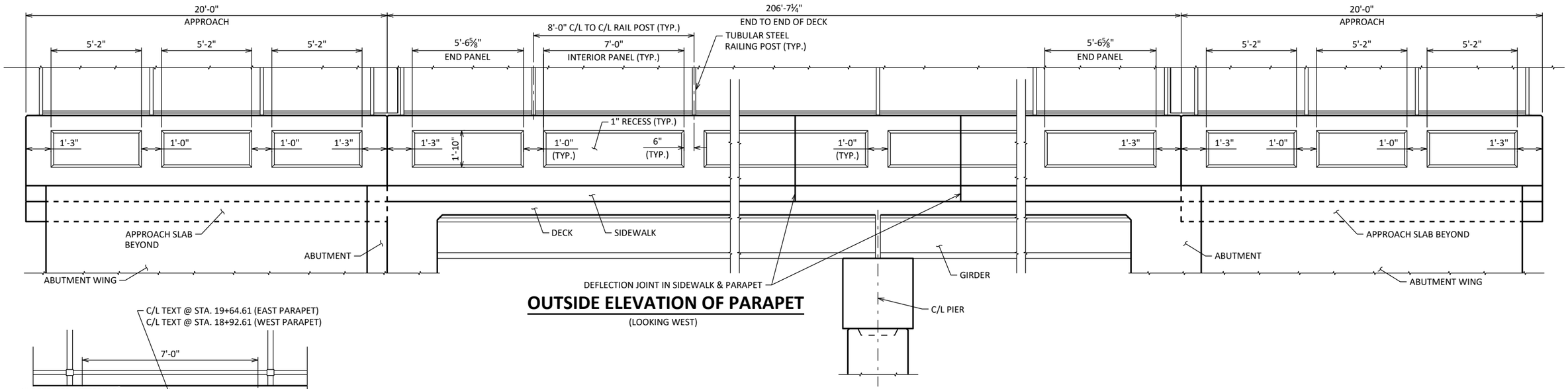
SHEET 23
438

SCALE = 2.00

8

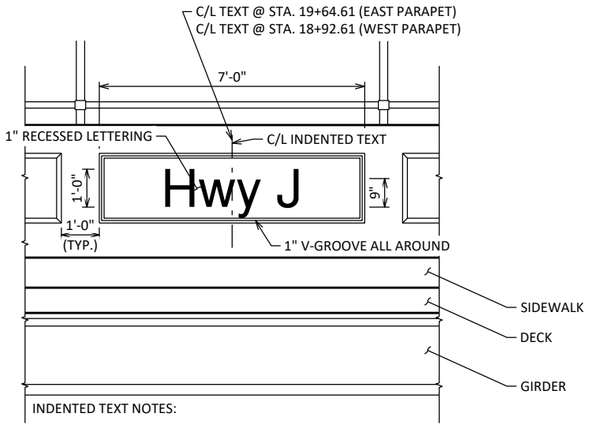
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| STATE PROJECT NUMBER |
|---|
| **1130-66-78** |



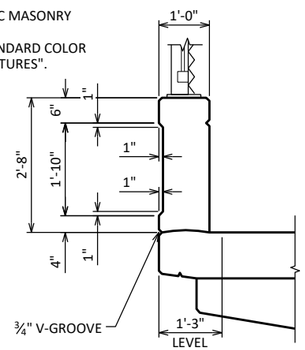

## OUTSIDE ELEVATION OF PARAPET

(LOOKING WEST)



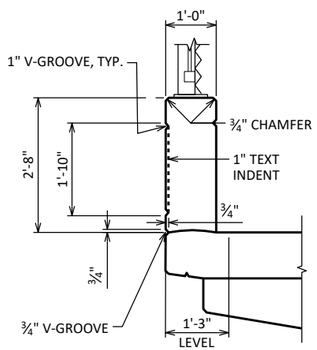

INDENTED TEXT NOTES:

1. LETTERING SHALL BE HELVETICA . 12" UPPERCASE AND 9" LOWERCASE HEIGHT.
2. LETTERING SHALL BE CENTERED HORIZONTALLY AND VERTICALLY WITHIN PANELS.
3. LETTERING IS ONLY ON EXTERIOR FACE OF PARAPET IN LOCATIONS AS INDICATED ON THIS SHEET.
4. FORMING OF LETTERING INCIDENTAL TO "HPC MASONRY STRUCTURES".
5. STAIN RECESSED LETTERING BLACK, AMS STANDARD COLOR #27038. INCIDENTAL TO "HPC MASONRY STRUCTURES".
6. PANEL RAISED AT ROAD NAME ONLY.

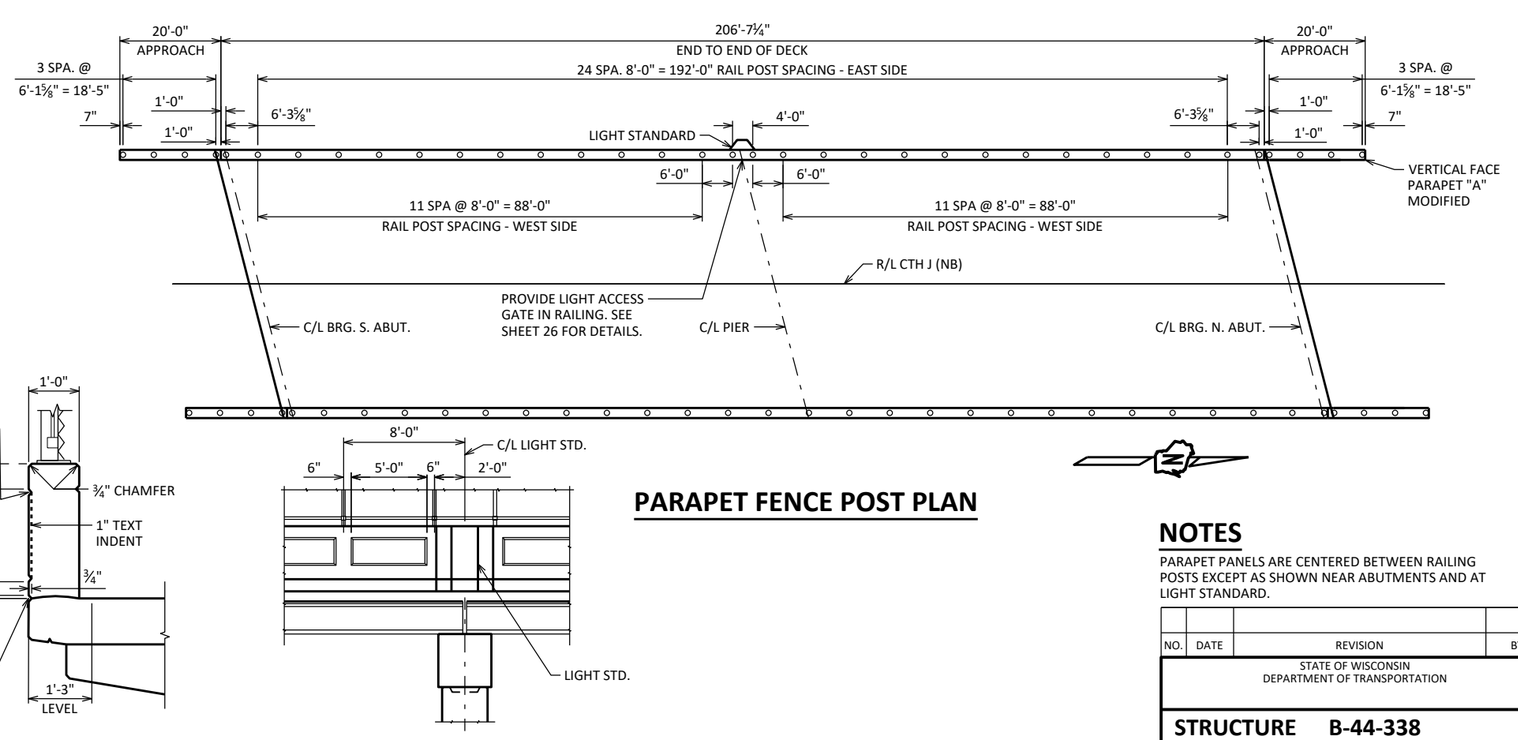



## SECTION THRU PARAPET ON BRIDGE

VERTICAL FACE PARAPET 'A' - MODIFIED




## SECTION THRU PARAPET AT ROAD NAME PANEL




## PARAPET FENCE POST PLAN




## OUTSIDE ELEVATION OF PARAPET AT LIGHT STANDARD

## NOTES

PARAPET PANELS ARE CENTERED BETWEEN RAILING POSTS EXCEPT AS SHOWN NEAR ABUTMENTS AND AT LIGHT STANDARD.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

| DRAWN BY | ZHC | PLANS CK'D | KRB |
|---|---|---|---|

**AESTHETIC DETAILS - 1**

SHEET 24
439

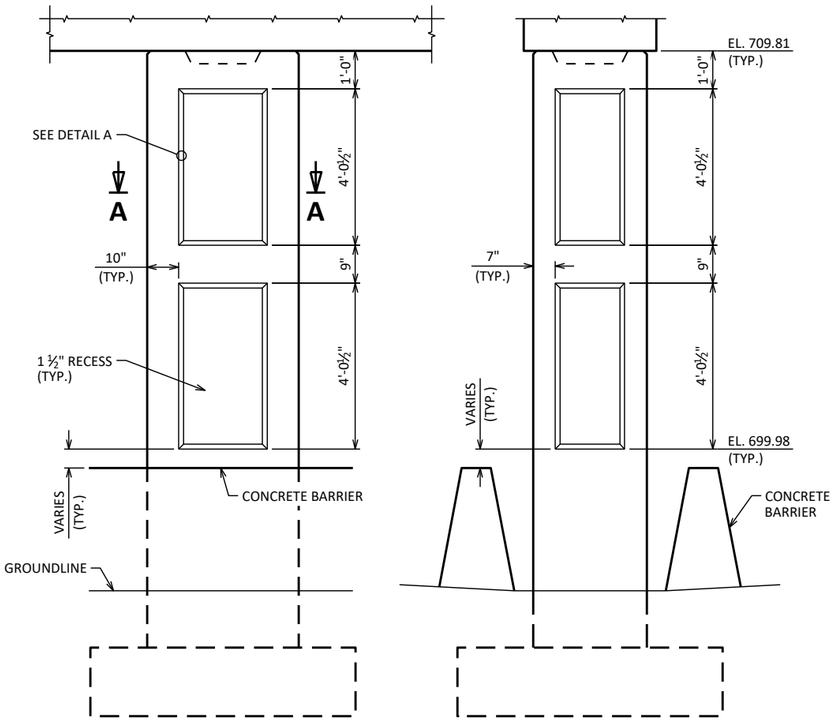
SCALE =

8

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STATE PROJECT NUMBER

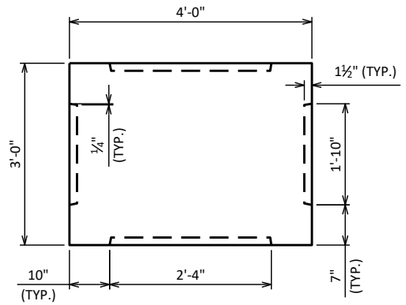
**1130-66-78**



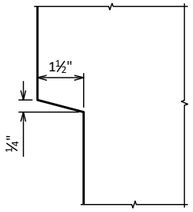

**FRONT VIEW**
(TYPICAL AT ALL COLUMNS)




**END VIEW**
(TYPICAL AT ALL COLUMNS)




**SECTION A-A**
(THRU TYPICAL PIER COLUMN)




**DETAIL A**

## PIER ELEVATIONS WITH FINAL ROADWAY CONDITIONS

8

8

## NOTES

PARAPET PANELS ARE CENTERED BETWEEN RAILING POSTS EXCEPT AS SHOWN NEAR ABUTMENTS.

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

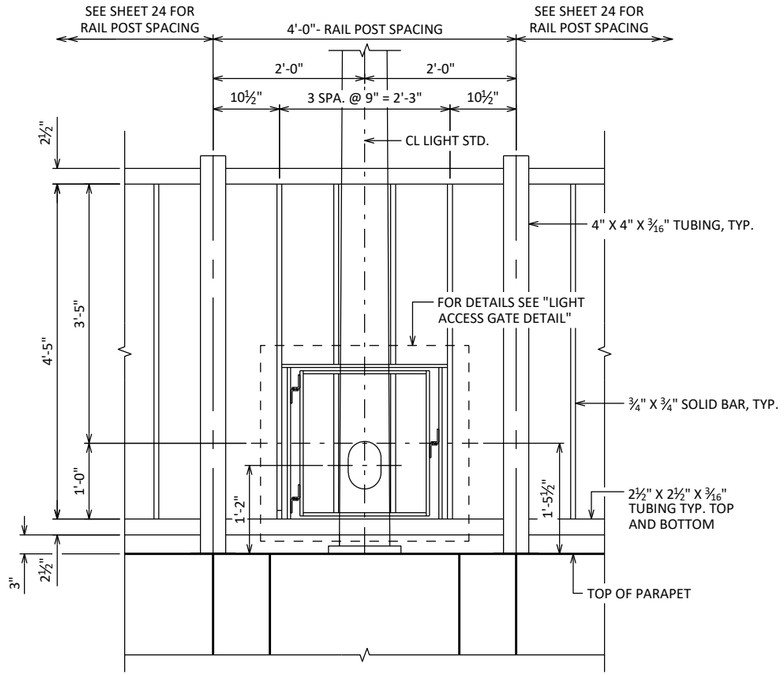
**AESTHETIC DETAILS - 2**

SHEET 25
440

SCALE =

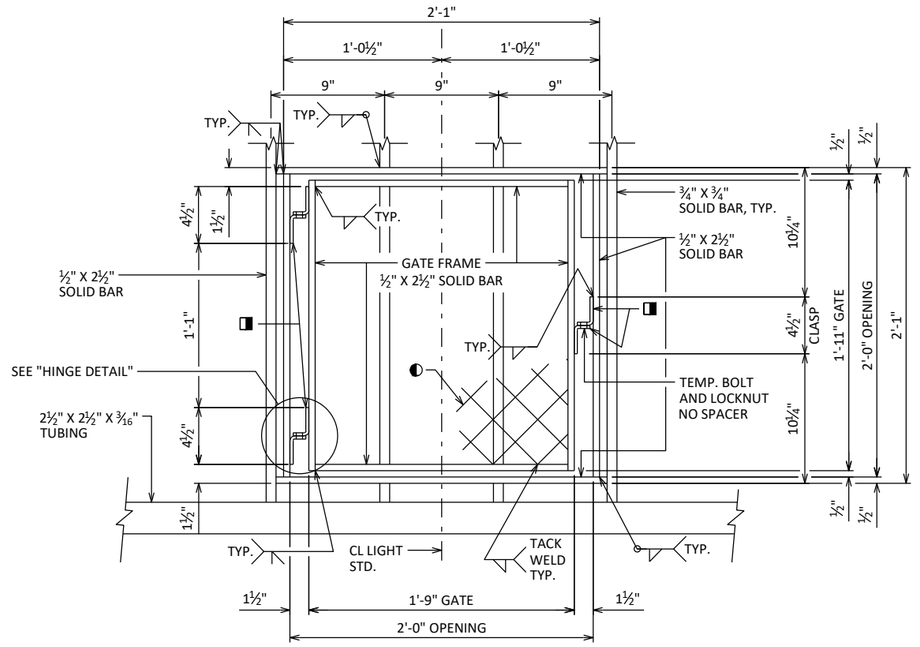
STATE PROJECT NUMBER

**1130-66-78**




## OUTSIDE ELEVATION VIEW

SCREENING NOT SHOWN FOR CLARITY

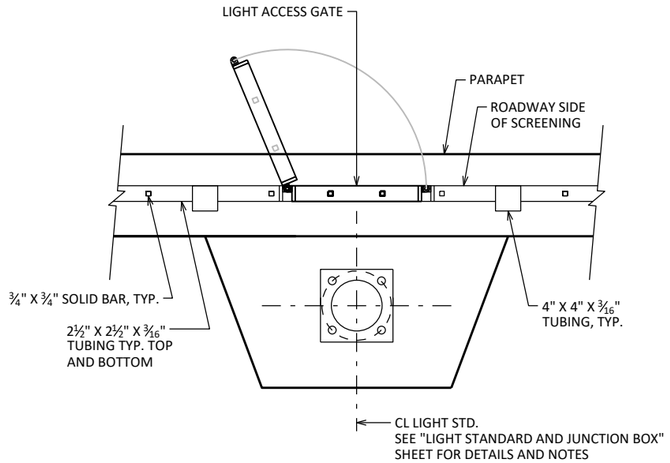



## LIGHT ACCESS GATE DETAIL

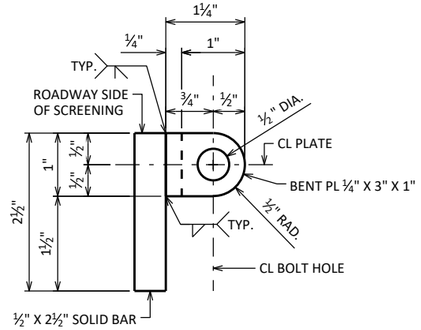
## LEGEND

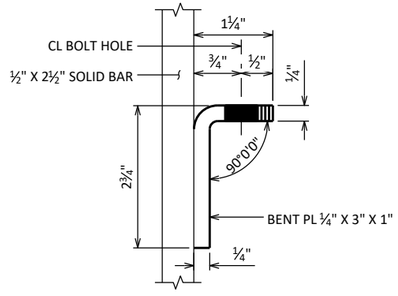
- MESH WITH OPENING SIZE 2" X 2" SQUARE, ¼" DIA. WIRE.
- BENT STEEL PL ¼" X 3" X 1", SEE "STEEL PLATE DETAIL"

SEE "TUBULAR STEEL RAILING SCREENING" SHEET FOR MATERIAL, GALVANIZING, AND BID ITEM INFORMATION

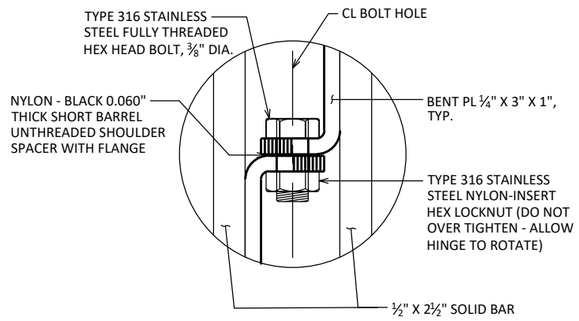



## PLAN




## STEEL PLATE DETAIL




## HINGE DETAIL

PROVIDE ADDITIONAL STAINLESS STEEL FULLY THREADED HEX HEAD BOLT, ⅜" DIA. AND STAINLESS STEEL NYLON-INSERT HEX LOCKNUT, HAND TIGHTENED, TO ACT AS TEMPORARY LOCK

## NOTES

THE STEEL WIRE MESH SHALL BE ATTACHED TO THE LIGHT ACCESS GATE BY MEANS OF TACK WELDING AT ALL LOCATIONS WHERE THE STEEL WIRE MESH MEETS THE LIGHT ACCESS GATE, ½" X 2½" SOLID BAR GATE FRAME AND ¾" X ¾" SOLID BARS. THE STEEL WIRE MESH SHALL BE WELDED TO THE ROADWAY SIDE OF THE ¾" X ¾" SOLID BARS.

GATE, HARDWARE, AND ACCESSORIES ARE INCIDENTAL TO BID ITEM "TUBULAR STEEL RAILING SCREENING".

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-44-338**

DRAWN BY ZHC | PLANS CK'D KRB

**LIGHT ACCESS GATE DETAILS**

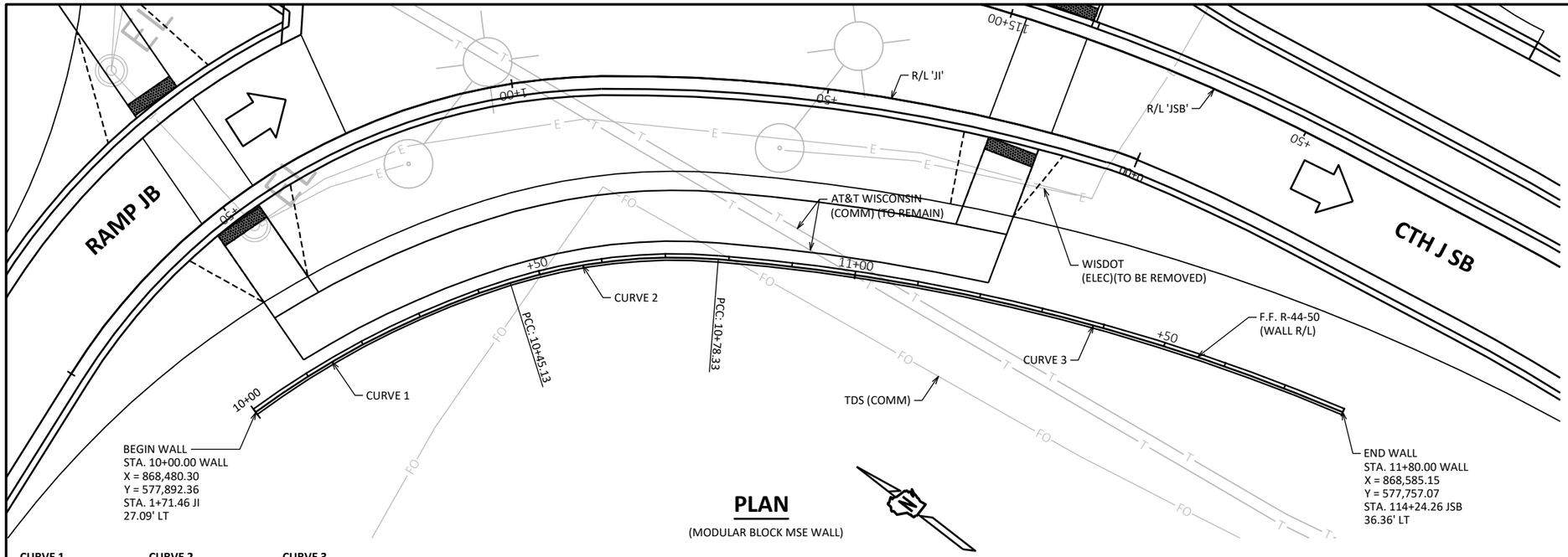
SHEET 26
441

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8

STATE PROJECT NUMBER

**1130-66-78**




## PLAN

(MODULAR BLOCK MSE WALL)

**CURVE 1**
PI STA = 10+22.77
Y = 577886.16
X = 868502.21
DELTA = 18°57'17" RT
D = 42°00'02"
T = 22.77'
L = 45.13'
R = 136.42'
PC STA = 10+00.00
Y = 577892.36
X = 868480.30
PT STA = 10+45.13
Y = 577873.18
X = 868520.92
DB = S74°11'44" E
DA = S55°14'27" E

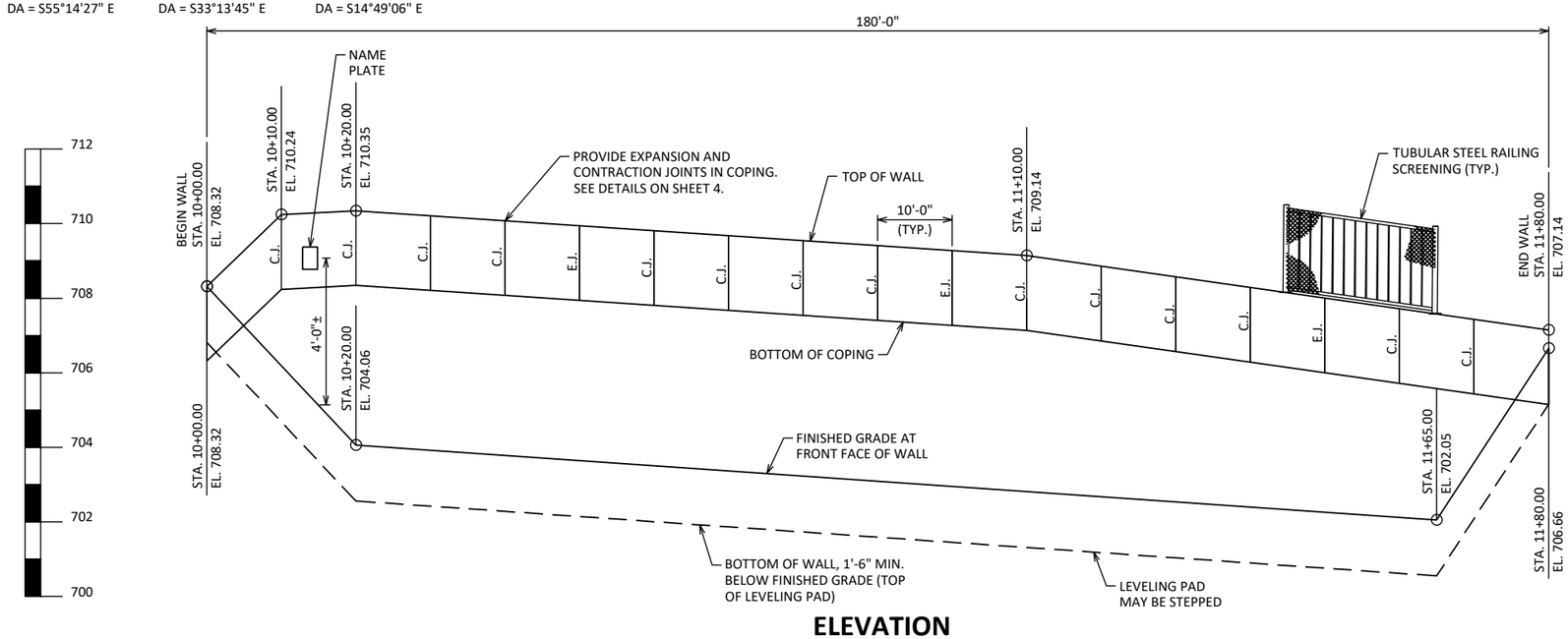
**CURVE 2**
PI STA = 10+61.94
Y = 577863.60
X = 868534.73
DELTA = 22°00'42" RT
D = 66°18'06"
T = 16.81'
L = 33.20'
R = 86.42'
PC STA = 10+45.13
Y = 577873.18
X = 868520.92
PT STA = 10+78.33
Y = 577849.54
X = 868543.94
DB = S55°14'27" E
DA = S33°13'45" E

**CURVE 3**
PI STA = 11+29.61
Y = 577806.64
X = 868572.04
DELTA = 18°24'39" RT
D = 18°06'28"
T = 51.28'
L = 101.67'
R = 316.42'
PC STA = 10+78.33
Y = 577849.54
X = 868543.94
PT STA = 11+80.00
Y = 577757.07
X = 868585.16
DB = S33°13'45" E
DA = S14°49'06" E

## BENCH MARK

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| BM 178 | 18+25.44 JNB, 18.04' LT | CHISELED SQUARE | 716.77 |
| BM 179 | 20+32.39 JNB, 17.15' RT | CHISELED SQUARE | 716.46 |

NOTE: SEE ROADWAY PLANS FOR ADDITIONAL BENCHMARK AND CONTROL POINT INFORMATION.




## ELEVATION

(LOOKING AT F.F. OF WALL)

## DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-44-50".

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS,LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN IN THIS PLAN.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED IN FRONT OF AND BEHIND WALL AS SHOWN ON THE WALL PLAN AND ROADWAY CROSS SECTIONS.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30 DEGREES WITHOUT CERTIFIED TEST VALUES.

## LIST OF DRAWINGS:


1. GENERAL PLAN
2. TYPICAL SECTION, QUANTITIES, AND NOTES
3. SUBSURFACE EXPLORATION
4. WALL DETAILS
5. TUBULAR STEEL RAILING SCREENING


## LEGEND

R/L = REFERENCE LINE
F.F. = FRONT FACE
B.F. = BACK FACE
R/W = RIGHT OF WAY
E.J. = EXPANSION JOINT
C.J. = CONTRACTION JOINT

**TRAFFIC DATA:**
A.A.D.T. (2025) = 11,850
A.A.D.T. (2045) = 15,650
DESIGN SPEED = 65 MPH

**MATERIAL PROPERTIES:**
CONCRETE MASONRY (COPING) — $f'_c$ = 3,500 PSI
COATED HIGH-STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 PSI

**STRUCTURE DESIGN CONTACTS:**
DESIGN CONSULTANT CONTACT:
KEITH BEHREND (608) 251-4843

BUREAU OF STRUCTURES CONTACT:
AARON BONK (608) 261-0261

| 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 08/06/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

WISCONSIN
KEITH R. BEHREND
E-42073
MADISON
WI
PROFESSIONAL ENGINEER
Keith Behrend
5/31/2024

**STRUCTURE R-44-50**

WALL WEST SIDE OF CTH J

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| OUTAGAMIE | KAUKAUNA |

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

| DESIGNED BY | JFG | DESIGNED CK'D | KRB | DRAWN BY | ZHC | PLANS CK'D | KRB |
|---|---|---|---|---|---|---|---|

**GENERAL PLAN**

SHEET 1 OF 5
442

I.D.
DATE:
SCALE =

8

8

STATE PROJECT NUMBER

**1130-66-78**

## TOTAL ESTIMATED QUANTITIES

| BID ITEM NUMBER | BID ITEMS | UNIT | TOTAL |
|---|---|---|---|
| 205.0100 | EXCAVATION COMMON | CY | 25 |
| 209.1100 | BACKFILL GRANULAR GRADE 1 | CY | 25 |
| 513.4091 | RAILING TUBULAR SCREENING | LF | 179 |
| 612.0406 | PIPE UNDERDRAIN WRAPPED 6-INCH | LF | 190 |
| SPV.0165.0001 | WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-44-50 | SF | 1,282 |
| | NON-BID ITEMS | | |
| | PREFORMED JOINT FILLER | SIZE | 3/4" |
| | NAME PLATE | EACH | 1 |
| | EXPANDED POLYSTYRENE | SIZE | 1" |

## SOIL PARAMETERS

| STRATUM LOCATIONS & SOIL DESCRIPTIONS | TOTAL UNIT WEIGHT (PCF) | DRAINED | | UNDRAINED | |
|---|---|---|---|---|---|
| | | EFFECTIVE COHESION (PSF) | EFFECTIVE FRICTION ANGLE (DEGREES) | EFFECTIVE COHESION (PSF) | EFFECTIVE FRICTION ANGLE (DEGREES) |
| GRANULAR BACKFILL (REINFORCING ZONE OR BACKFILL) | 120 | 0 | 32 | 0 | 32 |
| (EMBANKMENT FILL) RETAINED SOIL * | 130 | 0 | 28 | 0 | 28 |
| BORING 66-JSB-101 | | | | | |
| EMBANKMENT FILL<br>EL. 708 — EL. 694 | 130 | 0 | 28 | 0 | 28 |
| LEAN CLAY<br>EL. 694 — EL. 685 | 125 | 0 | 28 | 1,500 | 0 |
| FAT CLAY<br>EL. 685 — EL. 677 | 135 | 0 | 28 | 3,000 | 0 |
| BORING 66-JSB-102 | | | | | |
| EMBANKMENT FILL<br>EL. 710 — EL. 696 | 130 | 0 | 28 | 0 | 28 |
| LEAN CLAY<br>EL. 696 — EL. 692 | 125 | 0 | 28 | 1,500 | 0 |
| POORLY GRADED SAND<br>EL. 692 — EL. 681 | 120 | 0 | 30 | 0 | 30 |
| SILT<br>EL. 681 — EL. 679 | 125 | 0 | 32 | 0 | 32 |
| BORING 66-JSB-103 | | | | | |
| EMBANKMENT FILL<br>EL. 710 — EL. 695 | 130 | 0 | 28 | 0 | 28 |
| BURIED TOPSOIL<br>EL. 695 — EL. 694 | 130 | 0 | 28 | 1,000 | 0 |
| FAT CLAY<br>EL. 694 — EL. 689 | 135 | 0 | 28 | 3,000 | 0 |
| LEAN CLAY<br>EL. 689 — EL. 684 | 125 | 0 | 26 | 250 | 0 |
| SILT<br>EL. 684 — EL. 680 | 125 | 0 | 32 | 0 | 32 |

* DESIGN WALL FOR THESE VALUES

## GEOMETRY TABLE

| WALL STA. | ROADWAY STA. | OFFSET TO F.F. WALL | TOP OF WALL EL. | FINISHED GRADE EL. |
|---|---|---|---|---|
| 10+00.00 | 1+71.46 'JI' | 27.09' LT | 708.32 | 708.32 |
| 10+10.00 | 1+57.82 'JI' | 29.09' LT | 710.24 | 706.03 |
| 10+20.00 | 1+43.71 'JI' | 30.45' LT | 710.35 | 704.06 |
| 10+25.00 | 1+36.52 'JI' | 30.87' LT | 710.28 | 703.99 |
| 10+50.00 | 1+00.36 'JI' | 30.35' LT | 709.94 | 703.64 |
| 10+75.00 | 0+69.29 'JI' | 28.34' LT | 709.61 | 703.30 |
| 11+00.00 | 0+41.23 'JI' | 28.37' LT | 709.27 | 702.95 |
| 11+10.00 | 0+30.01 'JI' | 28.20' LT | 709.14 | 702.81 |
| 11+25.00 | 0+13.21 'JI' | 27.72' LT | 708.71 | 702.60 |
| 11+50.00 | 114+55.50 'JSB' | 40.13' LT | 708.00 | 702.26 |
| 11+65.00 | 114+39.17 'JSB' | 37.98' LT | 707.57 | 702.05 |
| 11+75.00 | 114+29.24 'JSB' | 36.82' LT | 707.29 | 705.12 |
| 11+80.00 | 114+24.26 'JSB' | 36.36' LT | 707.14 | 706.66 |

## WALL EXTERNAL & OVERALL STABILITY EVALUATION

| DIMENSIONS | EVALUATED LOCATION |
|---|---|
| WALL HEIGHT (FEET) | 8.0 |
| EXPOSED WALL HEIGHT (FEET) | 6.5 |
| MINIMUM LENGTH OF REINFORCEMENT (FEET) | 8.0 |
| WALL STATION | 10+25 |
| BORING USED | 66-JSB-103 |
| CAPACITY TO DEMAND RATIO (CDR) AND FACTORED BEARING RESISTANCE | |
| SLIDING (CDR>1.0) | 1.27 |
| ECCENTRICITY (CDR>1.0) | 2.21 |
| OVERALL STABILITY (CDR>1.0) | 1.27 |
| BEARING RESISTANCE (CDR>1.0) | 2.13 |
| FACTORED BEARING RESISTANCE (PSF) | 5,930 |

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE PLAN QUANTITY FOR THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-44-50" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF WALL TO A CONSTANT DEPTH OF 1'-6" BELOW FINISHED GRADE.

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

AT THE BACK FACE OF THE WALL, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE OR THE REINFORCED SOIL ZONE SHALL BE BACKFILLED WITH EMBANKMENT. BACKFILLING THE RETAINED SOIL ZONE IS INCLUDED IN THE BID ITEM FOR "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-44-50".

ALL DIMENSIONS, STATIONS, AND OFFSETS ARE GIVEN AT THE WALL R/L UNLESS OTHERWISE SHOWN.

BAR STEEL REINFORCEMENT FOR CAST-IN-PLACE CONCRETE COPING SHALL BE EPOXY COATED.

BEVEL EXPOSED EDGES OF CONCRETE 3/4-INCH UNLESS NOTED OTHERWISE.

THE TOTAL ESTIMATED MAXIMUM SETTLEMENT OF THE WALL IS 2 INCHES.

## LEGEND

▲ MINIMUM LENGTH OF MSE WALL REINFORCING MUST BE 70% THE TOTAL WALL HEIGHT (EXPOSED HEIGHT PLUS EMBEDMENT DEPTH) OR 8.0 FEET, WHICHEVER IS GREATER. SOIL REINFORCING MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.

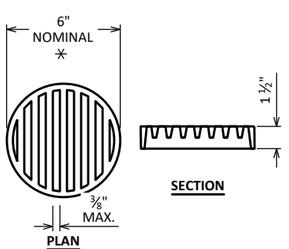
◭ MINIMUM EMBEDMENT BASED ON SITE SPECIFIC PARAMETERS (1'-6" MINIMUM FOR ALL WALLS ON LEVEL GROUND). FIELD EMBEDMENTS SHALL MEET OR EXCEED THE MINIMUM EMBEDMENT. FIELD EMBEDMENTS BELOW MINIMUM EMBEDMENT SHALL NOT BE INCLUDED IN THE PAY LIMITS.

◆ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE WEST OF WALL. PROVIDE SOLID END CAP ON UNDERDRAIN AT NORTH END OF WALL. DAYLIGHT UNDERDRAIN AT SOUTH END OF WALL. PROVIDE RODENT PROTECTION AT DISCHARGE END OF PIPE. SEE DETAIL ON THIS SHEET.

● EXCAVATION BELOW SUBGRADE (EBS) MAY BE REQUIRED BELOW THE FOOTING WHERE SOFT, LOOSE, OR OTHERWISE UNSUITABLE MATERIALS ARE PRESENT AT THE PLANNED SUBGRADE. WHERE EBS IS REQUIRED, EXTEND EXCAVATION OUT ONE FOOT LATERALLY FOR EACH FOOT REMOVED BELOW THE STRUCTURE, ON EITHER SIDE OF THE FOOTING. SUITABILITY OF THE EXISTING SOILS AT THE PLANNED SUBGRADE SHALL BE APPROVED BY THE REGION GEOTECHNICAL ENGINEER. UNDERCUT VOLUME SHALL BE REPLACED WITH BACKFILL GRANULAR GRADE 1. EXCAVATION FOR UNDERCUT VOLUME SHALL BE PAID FOR UNDER EXCAVATION COMMON.

◐ SLOPE TOP OF COPING IN FRONT OF RAILING TO MATCH TOP OF SIDEWALK ELEVATION . SLOPE ½" WHERE THERE'S NO SIDEWALK. SEE SHEET 4 FOR MORE INFORMATION.

☆ WHERE CAST-IN-PLACE CONCRETE COPING IS ADJACENT TO CONCRETE SIDEWALK, THE CONCRETE COPING SHALL BE PLACED AFTER THE SIDEWALK IS IN PLACE. SEE ROADWAY PLANS FOR SIDEWALK INFORMATION.

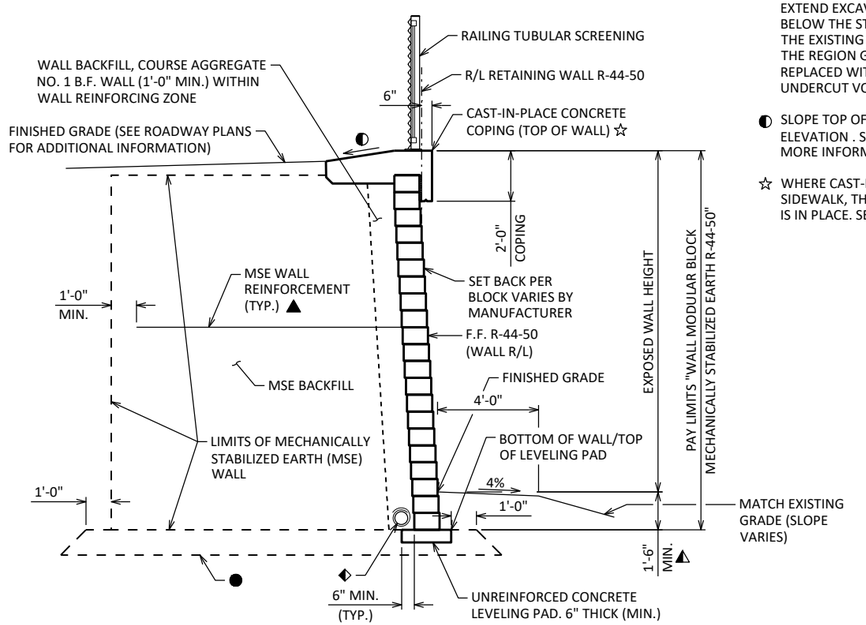



✳ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAING 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




## TYPICAL SECTION

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE R-44-50**

DRAWN BY ZHC | PLANS CK'D KRB

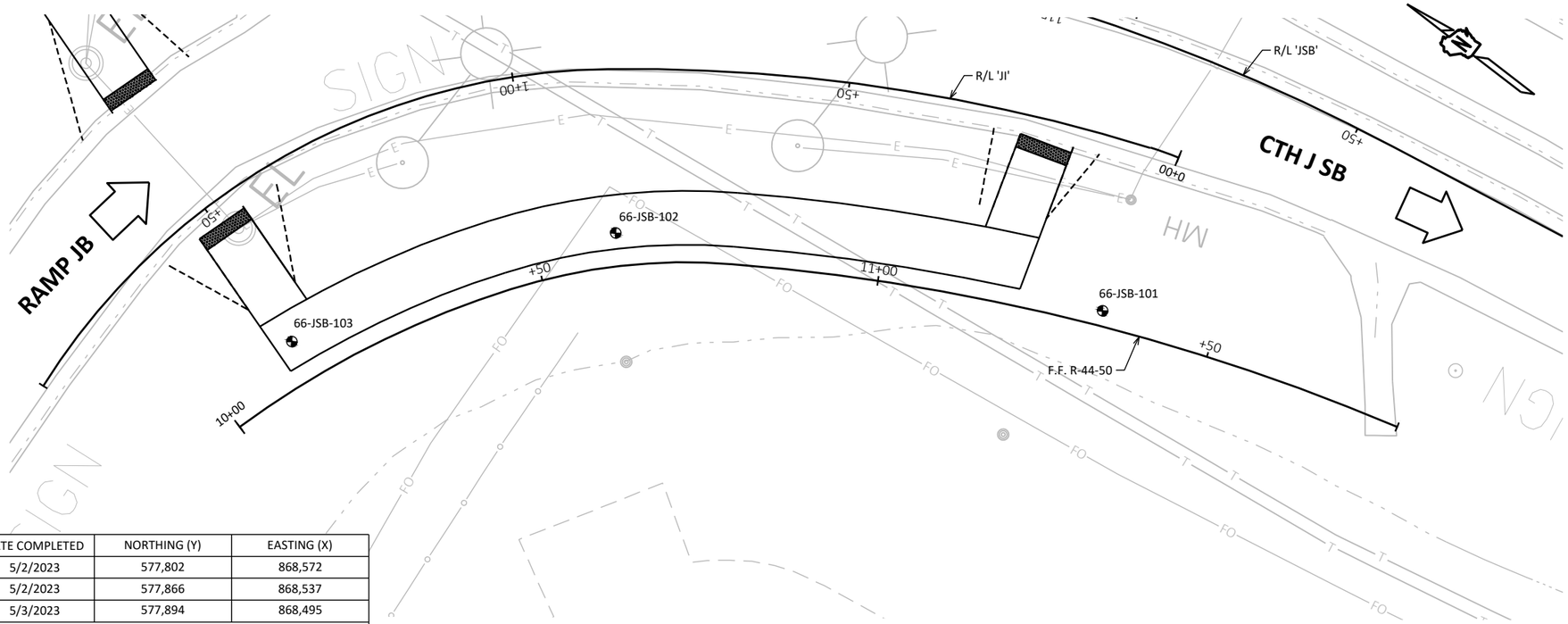
**TYPICAL SECTION, QUANTITIES, AND NOTES**

SHEET 2
443

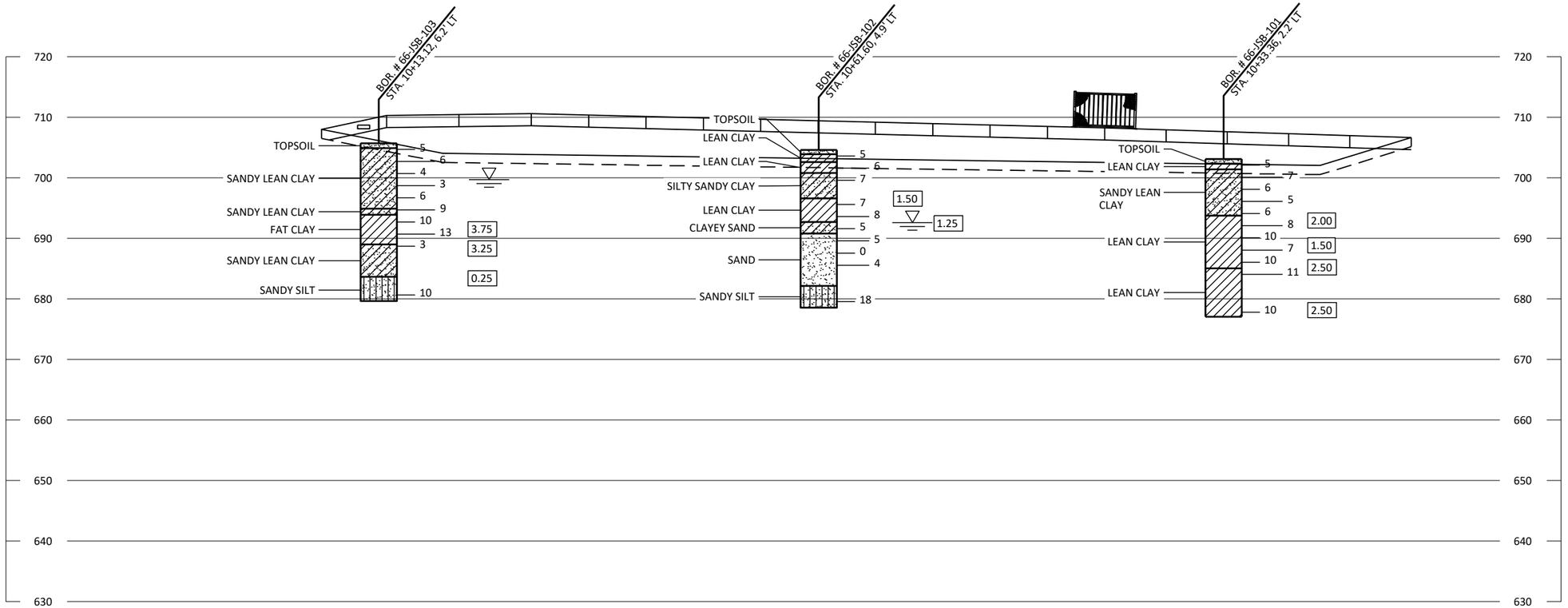
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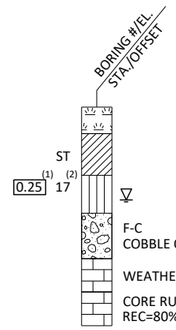

| BORING # | DATE COMPLETED | NORTHING (Y) | EASTING (X) |
|---|---|---|---|
| 66-JSB-101 | 5/2/2023 | 577,802 | 868,572 |
| 66-JSB-102 | 5/2/2023 | 577,866 | 868,537 |
| 66-JSB-103 | 5/3/2023 | 577,894 | 868,495 |
| BORINGS COMPLETED BY: GESTRA | | | |
| REPORT COMPLETED BY: GESTRA | | | |
| ALL COORDINATES REFERENCED TO WCCS NAD 83 OUTAGAMIE COUNTY | | | |




## MATERIAL SYMBOLS

ASPHALT · TOPSOIL · PEAT
CONCRETE · FILL · GRAVEL
SAND · CLAY · SILT
BOULDERS OR COBBLES · LIMESTONE · BEDROCK (UNKNOWN)
SHALE · SANDSTONE · IGNEOUS/ META

## LEGEND OF BORING




(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

## GROUND WATER ELEVATION

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

## ABBREVIATIONS

F-FINE · M-MEDIUM · C-COARSE · ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STATE PROJECT NUMBER

**1130-66-78**

**STRUCTURE R-44-50**

DRAWN BY ZHC · PLANS CK'D KRB

**SUBSURFACE EXPLORATION**

SHEET 3
444

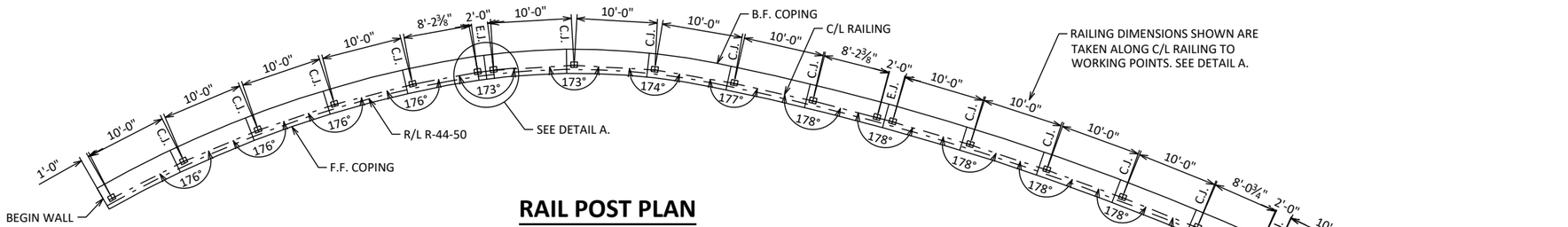
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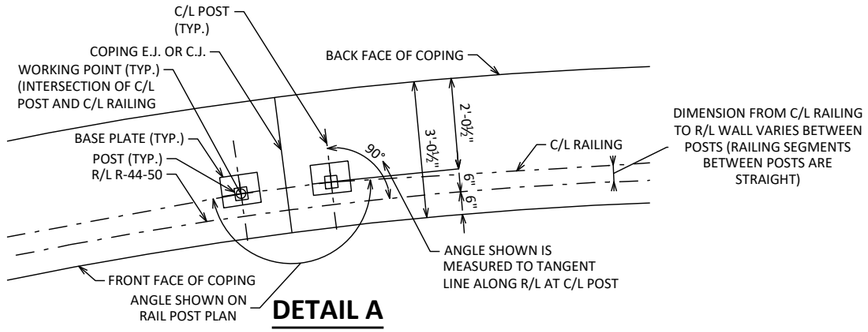
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STATE PROJECT NUMBER

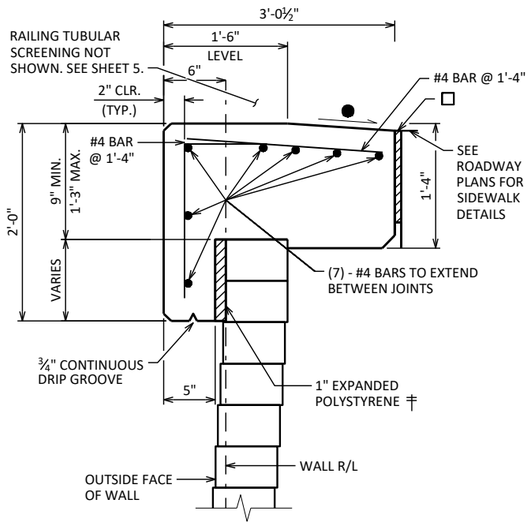
**1130-66-78**



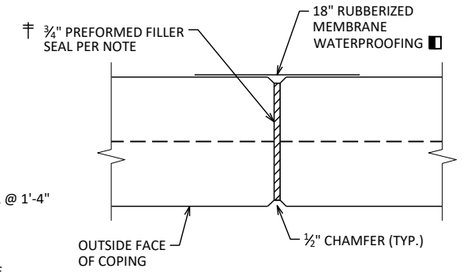

## RAIL POST PLAN




## DETAIL A

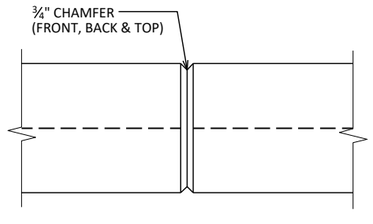



## CAST-IN-PLACE CONCRETE COPING DETAIL



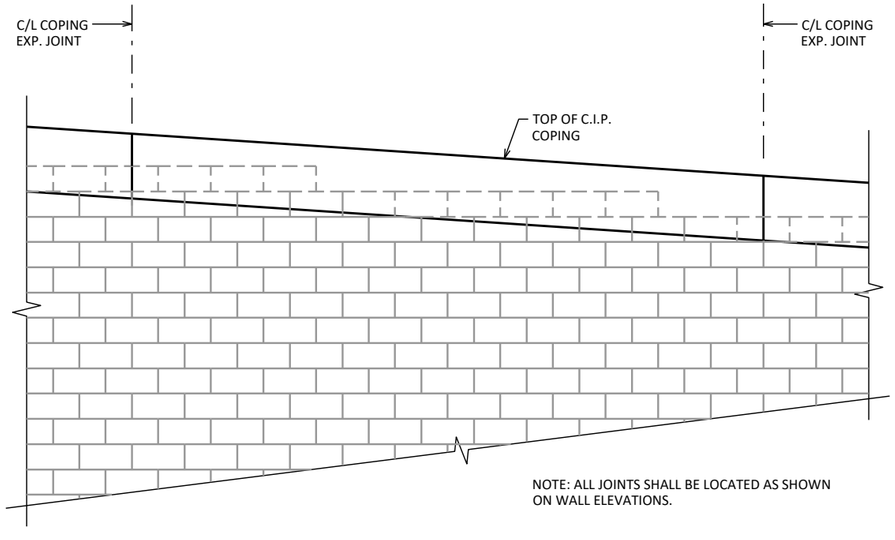

## COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 50'




## COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT. MAX. SPACING OF JOINT = 10'.




NOTE: ALL JOINTS SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS.

## C.I.P. COPING PARTIAL ELEVATION

## LEGEND

◧ MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF MODULAR BLOCK. MEMBRANE WATERPROOFING INCLUDED IN BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH".

‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

● SLOPE TOP OF COPING TO MATCH TOP OF SIDEWALK ELEVATION. SLOPE ½" WHERE THERE'S NO SIDEWALK.

□ ½" PREFORMED JOINT FILLER WHERE COPING ABUTS SIDEWALK.

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE R-44-50**

DRAWN BY ZHC | PLANS CK'D KRB

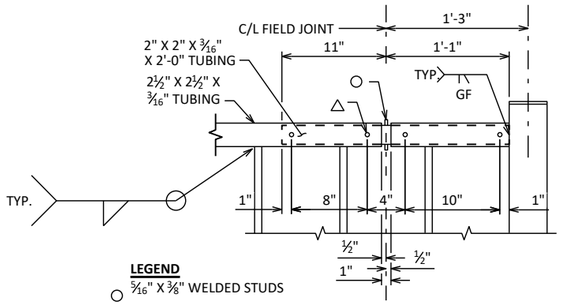
**WALL DETAILS**

SHEET 4
445

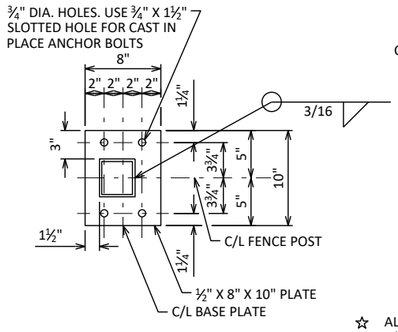
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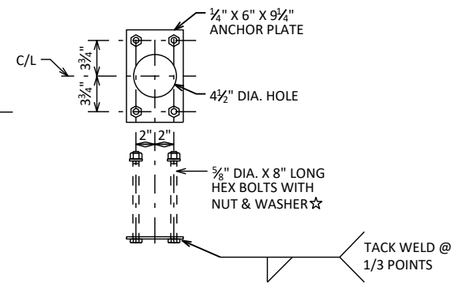
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## RAILING EXPANSION JOINT DETAIL



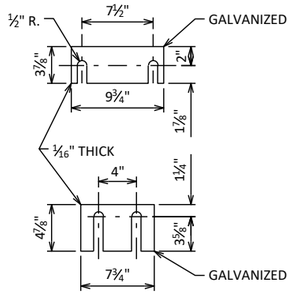

## BASE PLATE




## ANCHORAGE DETAIL

☆ ALTERNATIVE ANCHORAGE: ADHESIVE ANCHORS 5/8-INCH. EMBED 7" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.




## SHIM PLATE DETAILS

TWO SHIMS OF EACH SIZE REQUIRED PER POST

## LEGEND

△ SEE RAIL POST PLAN ON SHEET 4 FOR LOCATIONS WHERE RAIL POST SPACINGS APPLY.

## NOTES

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B. PLATES, ANGLES, BARS AND SHIMS SHALL CONFORM TO ASTM A709, GRADE 36. FENCE FABRIC SHALL CONFORM TO F668, CLASS 2B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPACINGS ARE TAKEN HORIZONTAL ALONG CENTERLINE OF RAILING AT BASE OF POST.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED. ☆

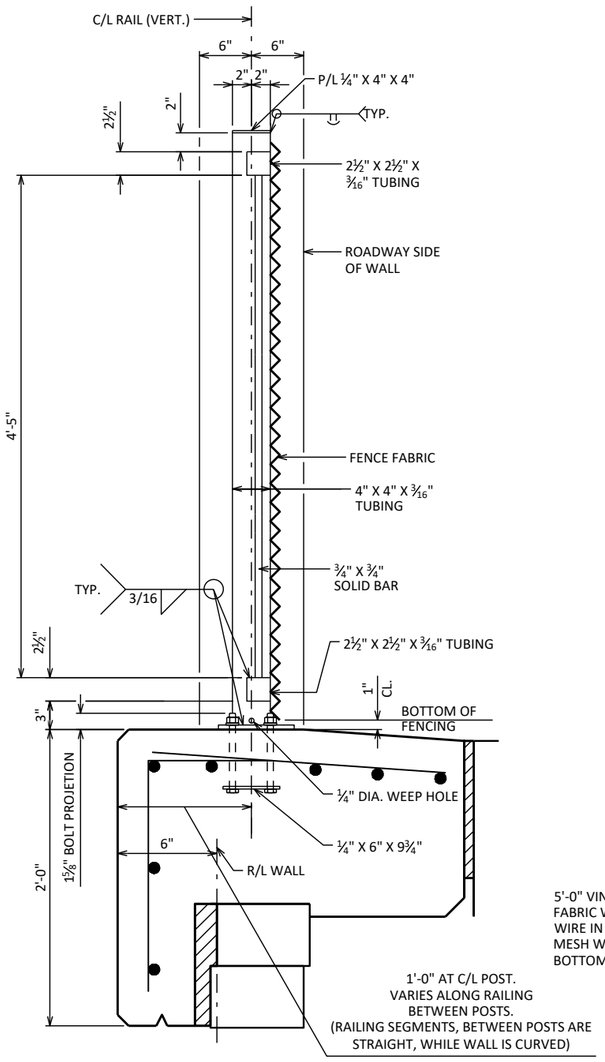
THE BID ITEM SHALL BE "RAILING TUBULAR SCREENING R-44-50" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

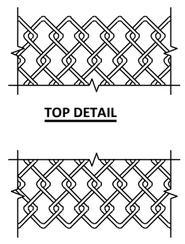
VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

ALL RAILING MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED AMS STD. COLOR NO. 27038. FENCE FABRIC AND TIES TO BE VINYL-COATED. COLOR SHALL BE BLACK IN ACCORDANCE WITH ASTM F934.

THE END OF THE FABRIC SHALL BE ATTACHED TO THE POST BY MEANS OF A TENSION BAR THREADED THROUGH THE END LOOPS OF THE FABRIC AND SECURED TO THE POST WITH CLAMPS & BOLT. THE FABRIC SHALL BE STRETCHED TO REMOVE ALL SLACK.




## SECTION THRU RAILING

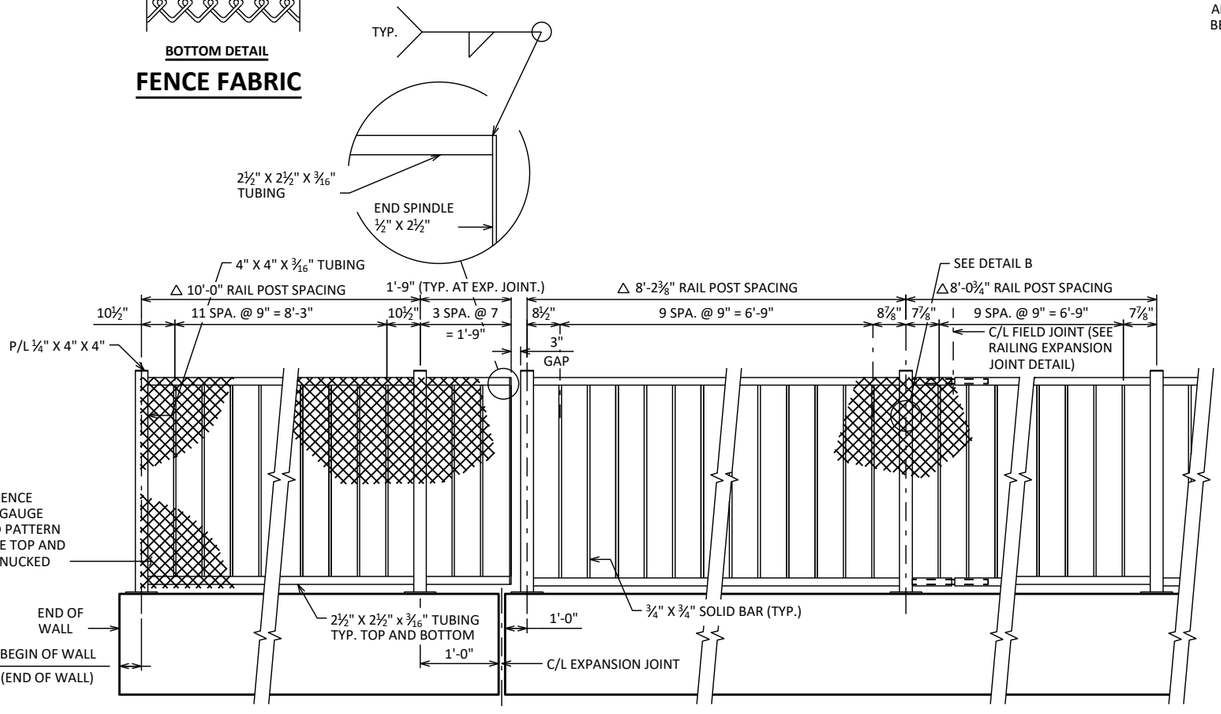


TOP DETAIL

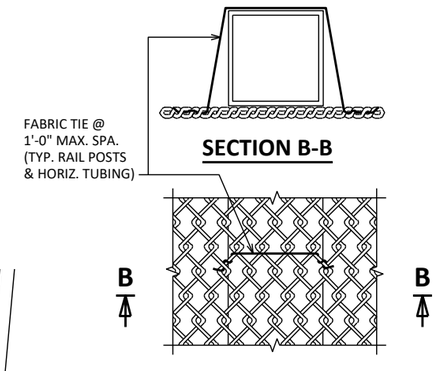


BOTTOM DETAIL

## FENCE FABRIC




## INSIDE ELEVATION OF RAILING




## SECTION B-B

## DETAIL B

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE R-44-50**

DRAWN BY ZHC | PLANS CK'D KRB

**TUBULAR STEEL RAILING SCREENING**

SHEET 5
446

SCALE = 2.00

STATE PROJECT NUMBER

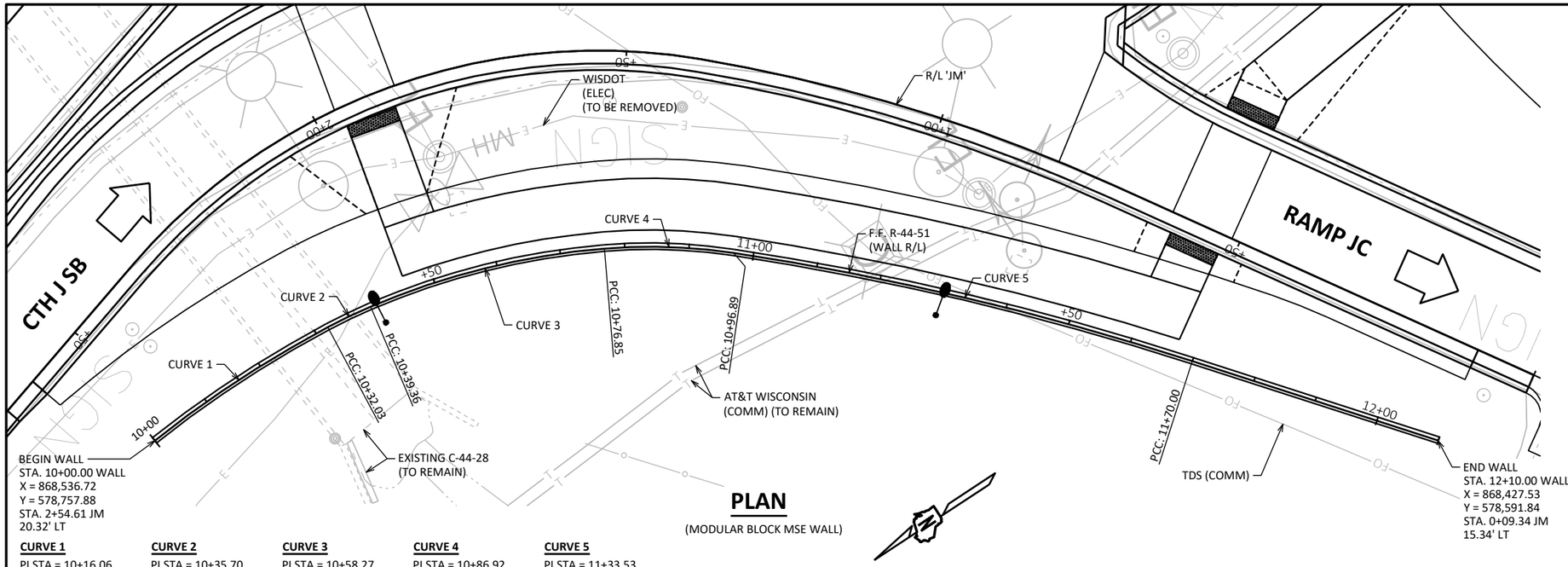
**1130-66-78**

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8

STATE PROJECT NUMBER

**1130-66-78**




## PLAN

(MODULAR BLOCK MSE WALL)

**CURVE 1**
PI STA = 10+16.06
Y = 578741.88
X = 868538.15
DELTA = 10°24'12" RT
D = 32°28'39"
T = 16.06'
L = 32.03'
R = 176.42'
PC STA = 10+00.00
Y = 578757.88
X = 868536.72
PT STA = 10+32.03
Y = 578725.89
X = 868536.67
DB = S05°06'27" E
DA = S05°17'45" W

**CURVE 2**
PI STA = 10+35.70
Y = 578722.24
X = 868536.33
DELTA = 4°51'33" RT
D = 66°18'06"
T = 3.67'
L = 7.33'
R = 86.42'
PC STA = 10+32.03
Y = 578725.89
X = 868536.67
PT STA = 10+39.36
Y = 578718.63
X = 868535.68
DB = S05°17'45" W
DA = S10°09'18" W

**CURVE 3**
PI STA = 10+58.27
Y = 578700.02
X = 868532.35
DELTA = 18°26'58" RT
D = 49°12'58"
T = 18.91'
L = 37.49'
R = 116.42'
PC STA = 10+39.36
Y = 578718.63
X = 868535.68
PT STA = 10+76.85
Y = 578683.42
X = 868523.30
DB = S10°09'18" W
DA = S28°36'17" W

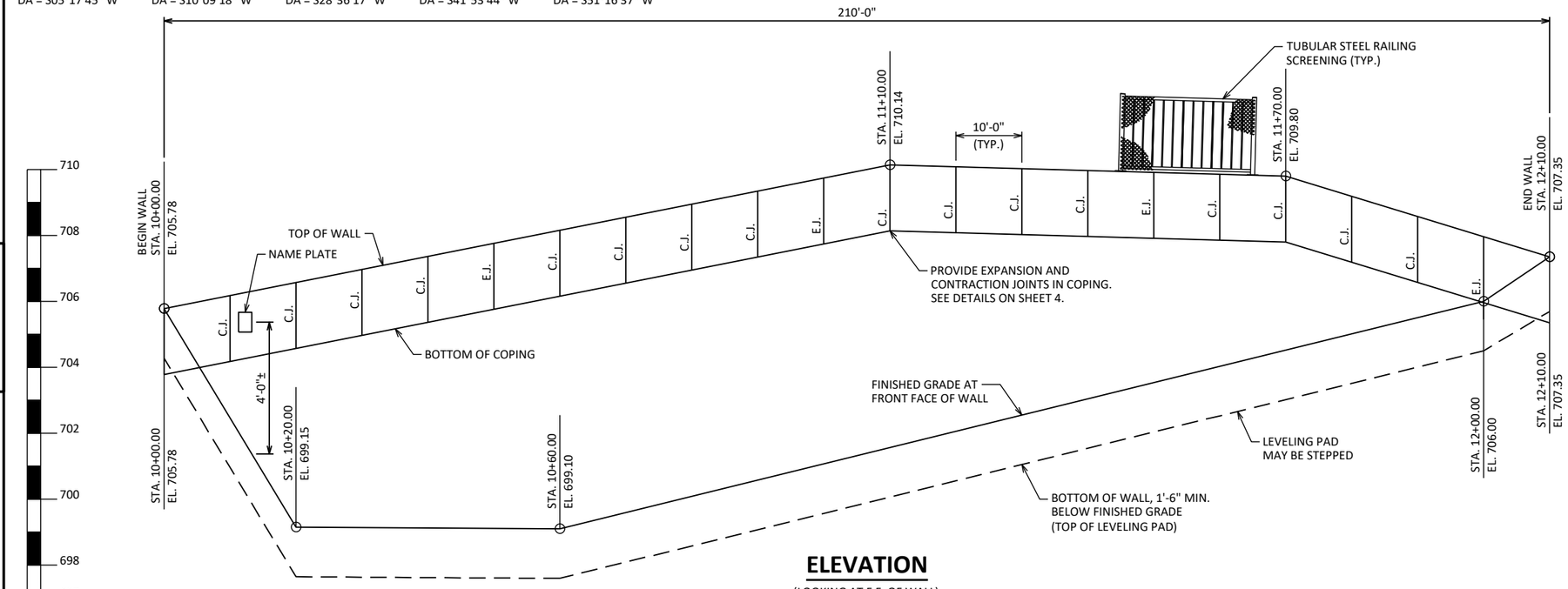
**CURVE 4**
PI STA = 10+86.92
Y = 578674.58
X = 868518.48
DELTA = 13°17'27" RT
D = 66°18'06"
T = 10.07'
L = 20.05'
R = 86.42'
PC STA = 10+76.85
Y = 578683.42
X = 868523.30
PT STA = 10+96.89
Y = 578667.08
X = 868511.76
DB = S28°36'17" W
DA = S41°53'44" W

**CURVE 5**
PI STA = 11+33.53
Y = 578639.81
X = 868487.29
DELTA = 9°23'00" RT
D = 12°50'05"
T = 36.64'
L = 73.11'
R = 446.42'
PC STA = 10+96.89
Y = 578667.08
X = 868511.76
PT STA = 11+70.00
Y = 578616.89
X = 868458.71
DB = S41°53'37" W
DA = S51°16'37" W

## BENCH MARK

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| BM 178 | 18+25.44 JNB, 18.04' LT | CHISELED SQUARE | 716.77 |
| BM 179 | 20+32.39 JNB, 17.15' RT | CHISELED SQUARE | 716.46 |

NOTE: SEE ROADWAY PLANS FOR ADDITIONAL BENCHMARK AND CONTROL POINT INFORMATION.




## ELEVATION

(LOOKING AT F.F. OF WALL)

## DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-44-51".

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS,LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN IN THIS PLAN.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED IN FRONT OF AND BEHIND WALL AS SHOWN ON THE WALL PLAN AND ROADWAY CROSS SECTIONS.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30 DEGREES WITHOUT CERTIFIED TEST VALUES.

## LIST OF DRAWINGS:


1. GENERAL PLAN
2. TYPICAL SECTION, QUANTITIES, AND NOTES
3. SUBSURFACE EXPLORATION
4. WALL DETAILS
5. TUBULAR STEEL RAILING SCREENING


## LEGEND

R/L = REFERENCE LINE
F.F. = FRONT FACE
B.F. = BACK FACE
R/W = RIGHT OF WAY
E.J. = EXPANSION JOINT
C.J. = CONTRACTION JOINT

**TRAFFIC DATA:**
A.A.D.T. (2025) = 11,850
A.A.D.T. (2045) = 15,650
DESIGN SPEED = 65 MPH

**MATERIAL PROPERTIES:**
CONCRETE MASONRY (COPING) — $f'_c$ = 3,500 PSI
COATED HIGH-STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 PSI

WISCONSIN
KEITH R. BEHREND E-42073 MADISON WI
PROFESSIONAL ENGINEER
Keith Behrend
5/31/2024

**STRUCTURE DESIGN CONTACTS:**
DESIGN CONSULTANT CONTACT:
KEITH BEHREND (608) 251-4843

BUREAU OF STRUCTURES CONTACT:
AARON BONK (608) 261-0261

| 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 08/06/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

**STRUCTURE R-44-51**

WALL WEST SIDE OF CTH J

| COUNTY | ~~TOWN~~/CITY/~~VILLAGE~~ |
|---|---|
| OUTAGAMIE | KAUKAUNA |

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

| DESIGNED BY | DESIGNED CK'D | DRAWN BY | PLANS CK'D |
|---|---|---|---|
| JFG | KRB | ZHC | KRB |

**GENERAL PLAN**

SHEET 1 OF 5
447

I.D.
DATE:
SCALE =

8
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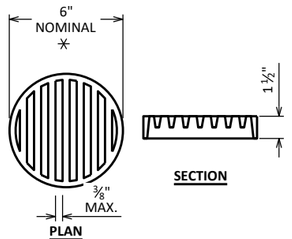
## TOTAL ESTIMATED QUANTITIES

| BID ITEM NUMBER | BID ITEMS | UNIT | TOTAL |
|---|---|---|---|
| 205.0100 | EXCAVATION COMMON | CY | 25 |
| 209.1100 | BACKFILL GRANULAR GRADE 1 | CY | 25 |
| 513.4091 | RAILING TUBULAR SCREENING | LF | 209 |
| 612.0406 | PIPE UNDERDRAIN WRAPPED 6-INCH | LF | 220 |
| SPV.0165.0002 | WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-44-51 | SF | 1,693 |
| | NON-BID ITEMS | | |
| | PREFORMED JOINT FILLER | SIZE | 3/4" |
| | NAME PLATE | EACH | 1 |
| | EXPANDED POLYSTYRENE | SIZE | 1" |

## SOIL PARAMETERS

| STRATUM LOCATIONS & SOIL DESCRIPTIONS | TOTAL UNIT WEIGHT (PCF) | DRAINED | | UNDRAINED | |
|---|---|---|---|---|---|
| | | EFFECTIVE COHESION (PSF) | EFFECTIVE FRICTION ANGLE (DEGREES) | EFFECTIVE COHESION (PSF) | EFFECTIVE FRICTION ANGLE (DEGREES) |
| GRANULAR BACKFILL (REINFORCING ZONE OR BACKFILL) | 120 | 0 | 32 | 0 | 32 |
| (EMBANKMENT FILL) RETAINED SOIL * | 130 | 0 | 30 | 0 | 30 |
| BORING 66-JSB-104 | | | | | |
| EMBANKMENT FILL<br>EL. 710 — EL. 701 | 130 | 0 | 30 | 0 | 30 |
| ORGANICS<br>EL. 701 — EL. 699 | 80 | 0 | 26 | 250 | 0 |
| EMBANKMENT FILL<br>EL. 699 — EL. 691 | 130 | 0 | 30 | 0 | 30 |
| BURIED TOPSOIL<br>EL. 691 — EL. 686 | 130 | 0 | 26 | 1,000 | 0 |
| LEAN CLAY<br>EL. 686 — EL. 678 | 130 | 0 | 28 | 1,500 | 0 |
| BORING 66-JSB-105 | | | | | |
| EMBANKMENT FILL<br>EL. 709 — EL. 691 | 130 | 0 | 30 | 0 | 30 |
| BURIED TOPSOIL<br>EL. 691 — EL. 689 | 130 | 0 | 26 | 1,000 | 0 |
| LEAN CLAY<br>EL. 689 — EL. 685 | 135 | 0 | 28 | 3,500 | 0 |
| LEAN CLAY<br>EL. 685 — EL. 681 | 130 | 0 | 28 | 1,500 | 0 |
| BORING 66-JSB-106 | | | | | |
| EMBANKMENT FILL<br>EL. 707 — EL. 691 | 130 | 0 | 30 | 0 | 30 |
| BURIED TOPSOIL<br>EL. 691 — EL. 690 | 130 | 0 | 26 | 1,000 | 0 |
| LEAN CLAY<br>EL. 690 — EL. 680 | 135 | 0 | 28 | 3,500 | 0 |

* DESIGN WALL FOR THESE VALUES




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

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAING 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.

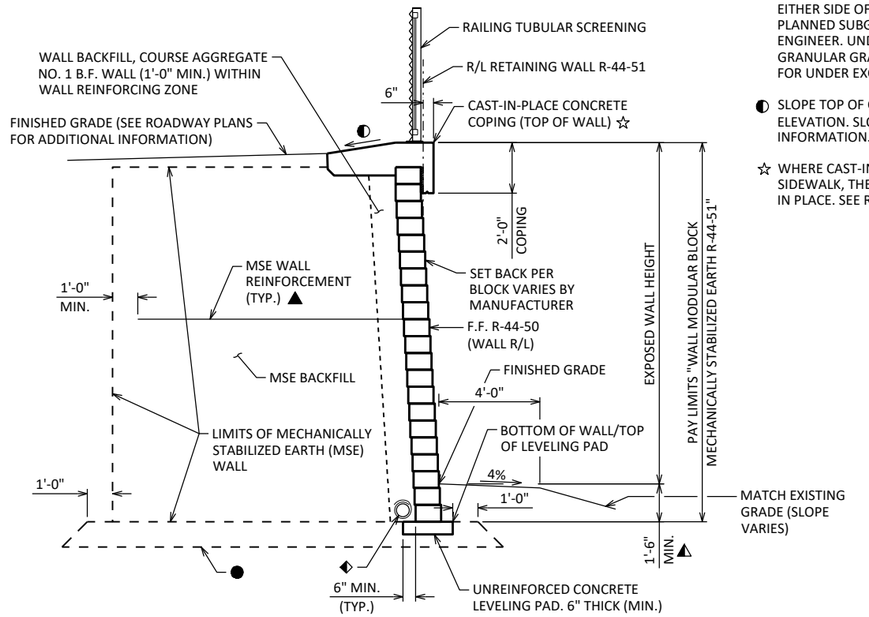
## RODENT SHIELD DETAIL

## GEOMETRY TABLE

| WALL STA. | ROADWAY STA. | OFFSET TO F.F. WALL | TOP OF WALL EL. | FINISHED GRADE EL. |
|---|---|---|---|---|
| 10+00.00 | 2+54.61 'JM' | 20.32' LT | 705.78 | 705.78 |
| 10+20.00 | 2+34.89 'JM' | 25.20' LT | 706.57 | 699.15 |
| 10+25.00 | 2+28.26 'JM' | 26.53' LT | 706.77 | 699.14 |
| 10+50.00 | 1+92.84 'JM' | 30.68' LT | 707.76 | 699.11 |
| 10+60.00 | 1+78.02 'JM' | 31.26' LT | 708.16 | 699.10 |
| 10+75.00 | 1+55.72 'JM' | 30.78' LT | 708.75 | 699.84 |
| 11+00.00 | 1+23.75 'JM' | 28.30' LT | 709.74 | 701.07 |
| 11+10.00 | 1+12.58 'JM' | 27.52' LT | 710.14 | 701.56 |
| 11+25.00 | 0+95.94 'JM' | 25.98' LT | 710.05 | 702.30 |
| 11+50.00 | 0+68.92 'JM' | 22.44' LT | 709.91 | 703.54 |
| 11+70.00 | 0+49.09 'JM' | 19.79' LT | 709.80 | 704.52 |
| 11+75.00 | 0+44.12 'JM' | 19.23' LT | 709.49 | 704.77 |
| 12+00.00 | 0+19.28 'JM' | 16.45' LT | 707.96 | 706.00 |
| 12+10.00 | 0+09.34 'JM' | 15.34' LT | 707.35 | 707.35 |

## WALL EXTERNAL & OVERALL STABILITY EVALUATION

| DIMENSIONS | EVALUATED LOCATION |
|---|---|
| WALL HEIGHT (FEET) | 10.3 |
| EXPOSED WALL HEIGHT (FEET) | 8.8 |
| MINIMUM LENGTH OF REINFORCEMENT (FEET) | 12.0 |
| WALL STATION | 10+50 |
| BORING USED | 66-JSB-105 |
| CAPACITY TO DEMAND RATIO (CDR) AND FACTORED BEARING RESISTANCE | |
| SLIDING (CDR>1.0) | 1.90 |
| ECCENTRICITY (CDR>1.0) | 3.34 |
| OVERALL STABILITY (CDR>1.0) | 1.15 |
| BEARING RESISTANCE (CDR>1.0) | 1.04 |
| FACTORED BEARING RESISTANCE (PSF) | 3,400 |




## TYPICAL SECTION

STATE PROJECT NUMBER

**1130-66-78**

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE PLAN QUANTITY FOR THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-44-51" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF WALL TO A CONSTANT DEPTH OF 1'-6" BELOW FINISHED GRADE.

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

AT THE BACK FACE OF THE WALL, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE OR THE REINFORCED SOIL ZONE SHALL BE BACKFILLED WITH EMBANKMENT. BACKFILLING THE RETAINED SOIL ZONE IS INCLUDED IN THE BID ITEM FOR "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-44-51".

ALL DIMENSIONS, STATIONS, AND OFFSETS ARE GIVEN AT THE WALL R/L UNLESS OTHERWISE SHOWN.

BAR STEEL REINFORCEMENT FOR CAST-IN-PLACE CONCRETE COPING SHALL BE EPOXY COATED.

BEVEL EXPOSED EDGES OF CONCRETE 3/4-INCH UNLESS NOTED OTHERWISE.

THE TOTAL ESTIMATED MAXIMUM SETTLEMENT OF THE WALL IS 4 INCHES.

## LEGEND

▲ MINIMUM LENGTH OF MSE WALL REINFORCING MUST BE 70% THE TOTAL WALL HEIGHT (EXPOSED HEIGHT PLUS EMBEDMENT DEPTH) OR 12.0 FEET, WHICHEVER IS GREATER. SOIL REINFORCING MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.

⚠ MINIMUM EMBEDMENT BASED ON SITE SPECIFIC PARAMETERS (1'-6" MINIMUM FOR ALL WALLS ON LEVEL GROUND). FIELD EMBEDMENTS SHALL MEET OR EXCEED THE MINIMUM EMBEDMENT. FIELD EMBEDMENTS BELOW MINIMUM EMBEDMENT SHALL NOT BE INCLUDED IN THE PAY LIMITS.

⬖ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE NORTHWEST OF WALL. PROVIDE SOLID END CAP ON UNDERDRAIN AT SOUTH END OF WALL. DAYLIGHT UNDERDRAIN AT NORTH END OF WALL. PROVIDE RODENT PROTECTION AT DISCHARGE END OF PIPE. SEE DETAIL ON THIS SHEET.

● EXCAVATION BELOW SUBGRADE (EBS) MAY BE REQUIRED BELOW THE FOOTING WHERE SOFT, LOOSE, OR OTHERWISE UNSUITABLE MATERIALS ARE PRESENT AT THE PLANNED SUBGRADE. WHERE EBS IS REQUIRED, EXTEND EXCAVATION OUT ONE FOOT LATERALLY FOR EACH FOOT REMOVED BELOW THE STRUCTURE, ON EITHER SIDE OF THE FOOTING. SUITABILITY OF THE EXISTING SOILS AT THE PLANNED SUBGRADE SHALL BE APPROVED BY THE REGION GEOTECHNICAL ENGINEER. UNDERCUT VOLUME SHALL BE REPLACED WITH BACKFILL GRANULAR GRADE 1. EXCAVATION FOR UNDERCUT VOLUME SHALL BE PAID FOR UNDER EXCAVATION COMMON.

◐ SLOPE TOP OF COPING IN FRONT OF RAILING TO MATCH TOP OF SIDEWALK ELEVATION. SLOPE ½" WHERE THERE'S NO SIDEWALK. SEE SHEET 4 FOR MORE INFORMATION.

☆ WHERE CAST-IN-PLACE CONCRETE COPING IS ADJACENT TO THE CONCRETE SIDEWALK, THE CONCRETE COPING SHALL BE PLACED AFTER THE SIDEWALK IS IN PLACE. SEE ROADWAY PLANS FOR SIDEWALK INFORMATION.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE R-44-51**

DRAWN BY ZHC | PLANS CK'D KRB

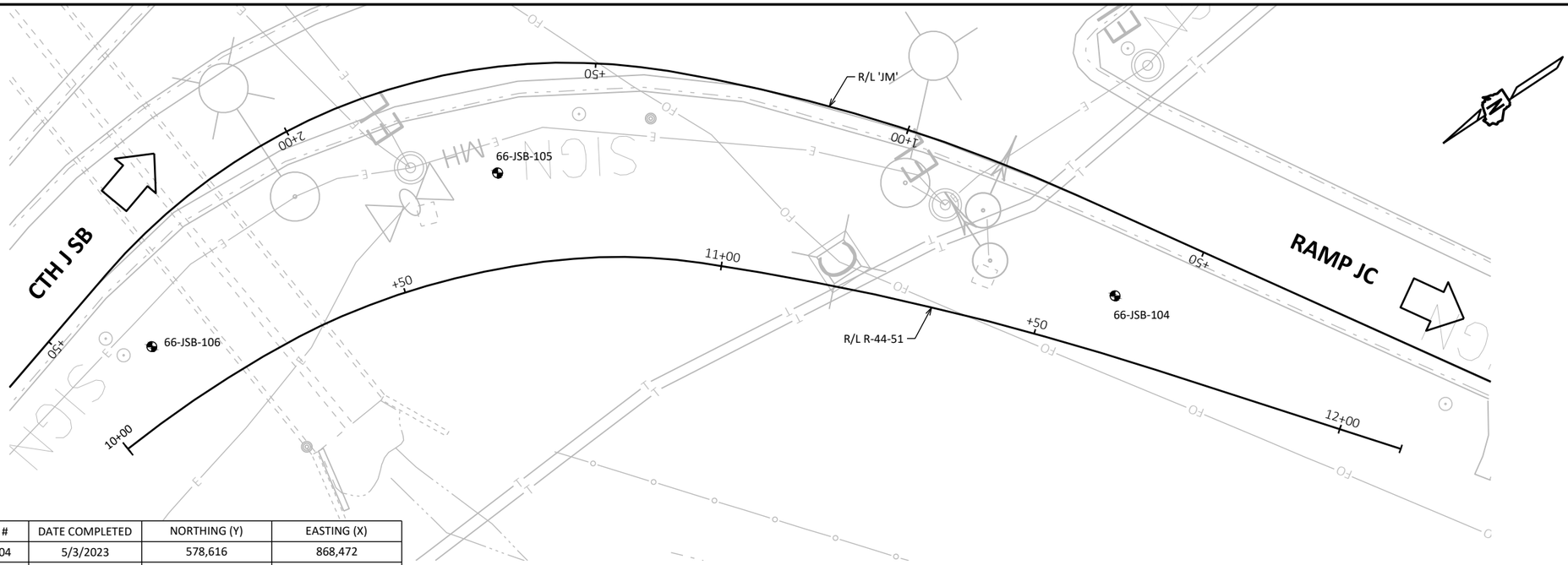
**TYPICAL SECTION, QUANTITIES, AND NOTES**

SHEET 2
448

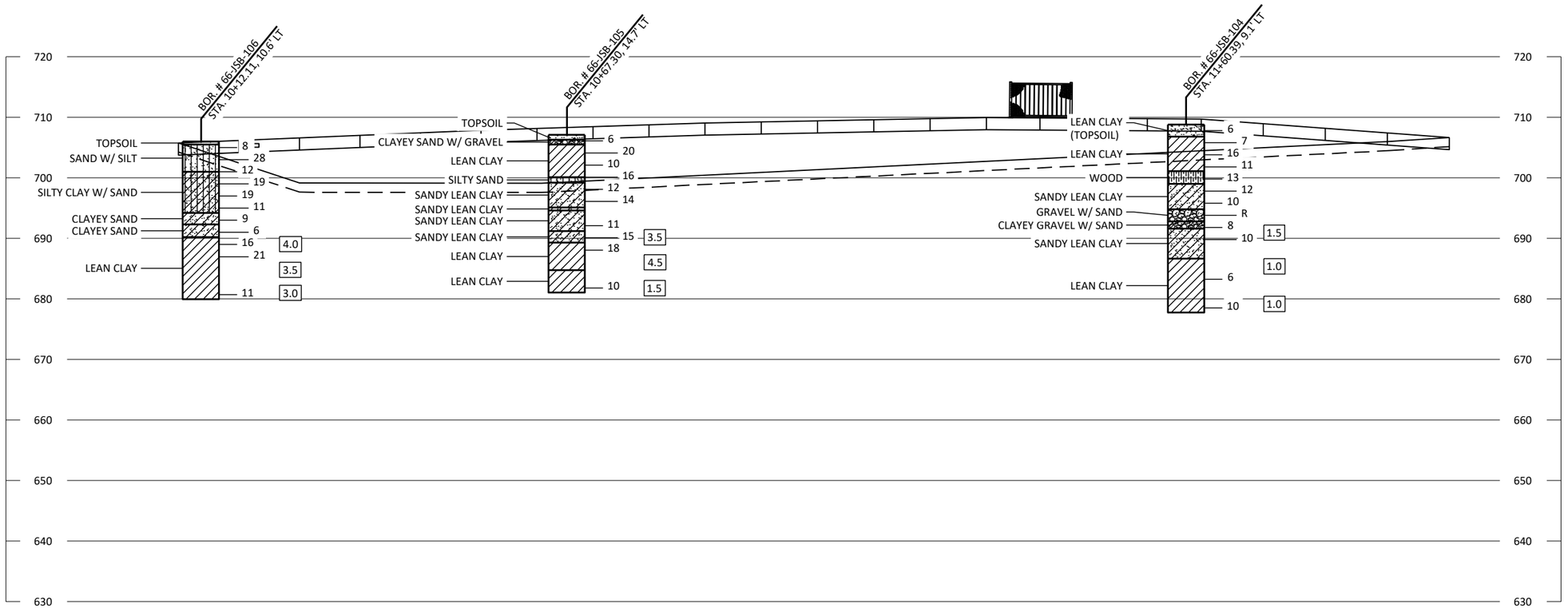
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| BORING # | DATE COMPLETED | NORTHING (Y) | EASTING (X) |
|---|---|---|---|
| 66-JSB-104 | 5/3/2023 | 578,616 | 868,472 |
| 66-JSB-105 | 5/3/2023 | 578,686 | 868,541 |
| 66-JSB-106 | 5/3/2023 | 578,746 | 868,548 |
| BORINGS COMPLETED BY: GESTRA | | | |
| REPORT COMPLETED BY: GESTRA | | | |
| ALL COORDINATES REFERENCED TO WCCS NAD 83 OUTAGAMIE COUNTY | | | |




8

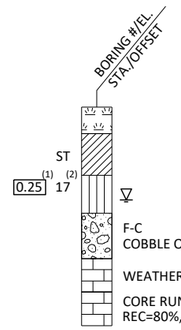
STATE PROJECT NUMBER

**1130-66-78**

**MATERIAL SYMBOLS**

| | | |
|---|---|---|
| ASPHALT | TOPSOIL | PEAT |
| CONCRETE | FILL | GRAVEL |
| SAND | CLAY | SILT |
| BOULDERS OR COBBLES | LIMESTONE | BEDROCK (UNKNOWN) |
| SHALE | SANDSTONE | IGNEOUS/ META |

**LEGEND OF BORING**




(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

**GROUND WATER ELEVATION**

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

**ABBREVIATIONS**

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE R-44-51**

DRAWN BY ZHC | PLANS CK'D KRB

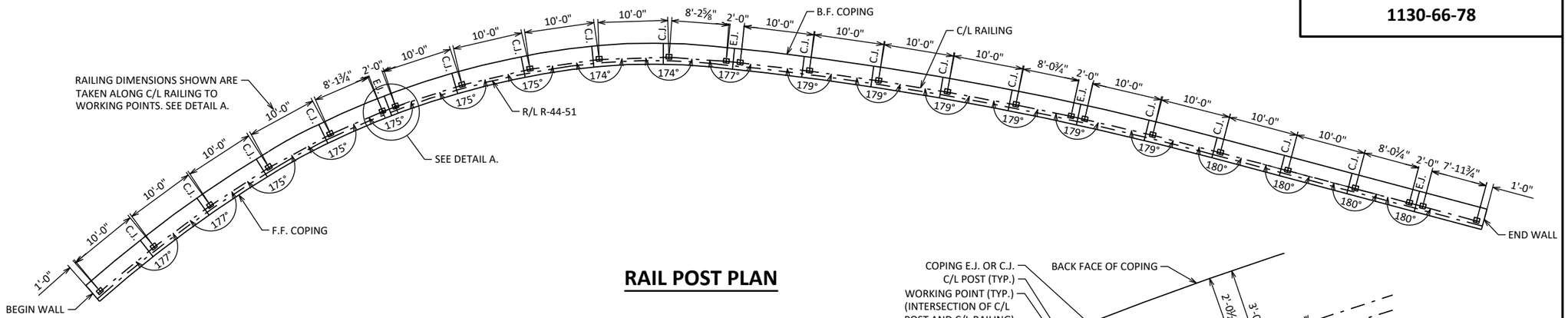
**SUBSURFACE EXPLORATION**

SHEET 3
449

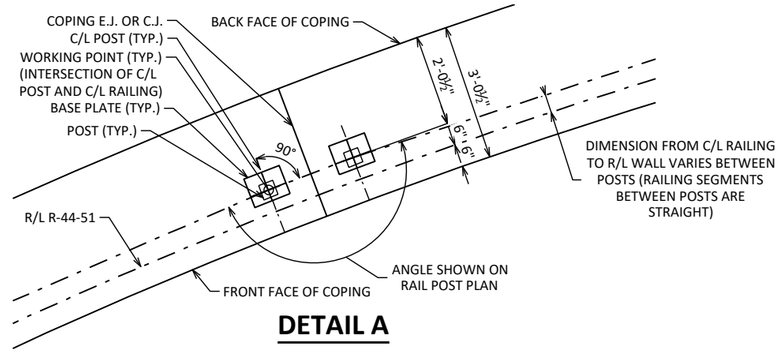
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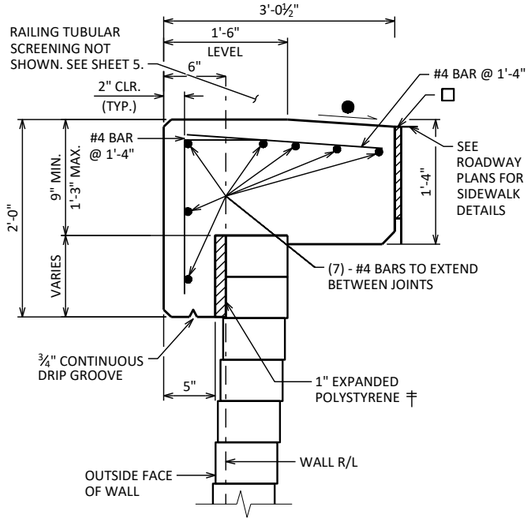
| STATE PROJECT NUMBER |
|---|
| **1130-66-78** |



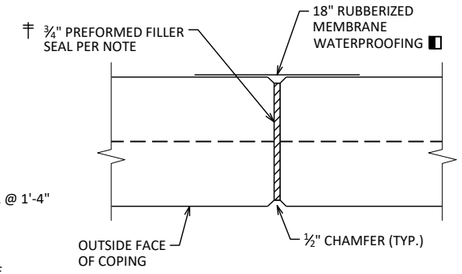

## RAIL POST PLAN




## DETAIL A

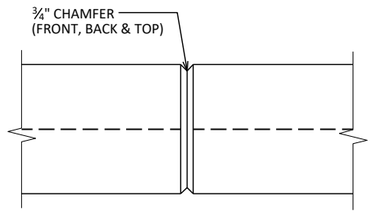



## CAST-IN-PLACE CONCRETE COPING DETAIL



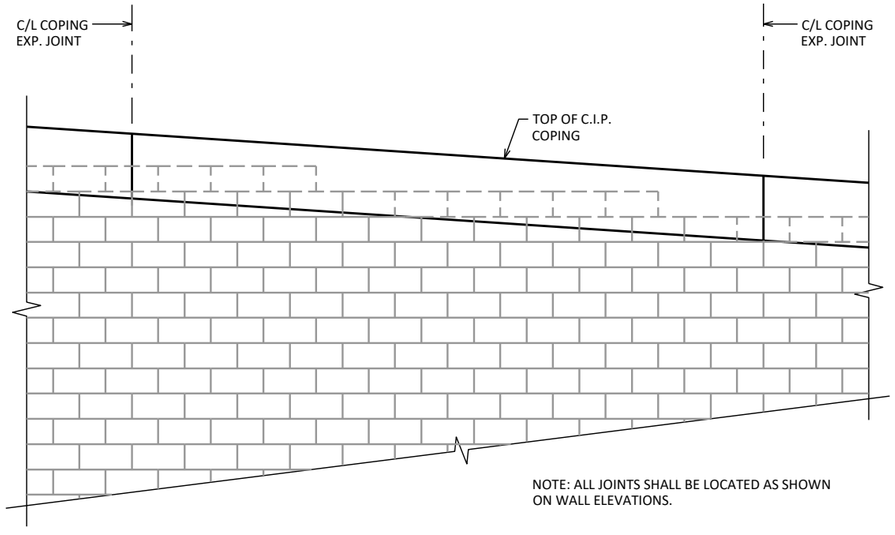

## COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 50'




## COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT. MAX. SPACING OF JOINT = 10'.




NOTE: ALL JOINTS SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS.

## C.I.P. COPING PARTIAL ELEVATION

## LEGEND

◧ MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF MODULAR BLOCK. MEMBRANE WATERPROOFING INCLUDED IN BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH".

‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

● SLOPE TOP OF COPING TO MATCH TOP OF SIDEWALK ELEVATION. SLOPE ½" WHERE THERE'S NO SIDEWALK.

□ ½" PREFORMED JOINT FILLER WHERE COPING ABUTS SIDEWALK.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE R-44-51**

| DRAWN BY | ZHC | PLANS CK'D | KRB |
|---|---|---|---|

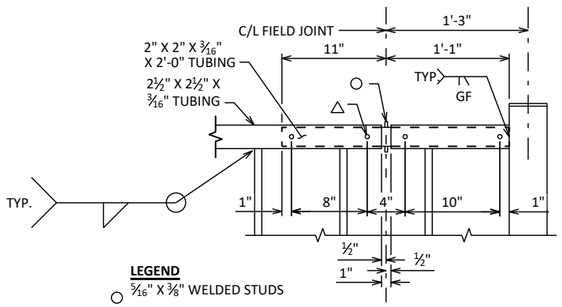
**WALL DETAILS**

SHEET 4
450

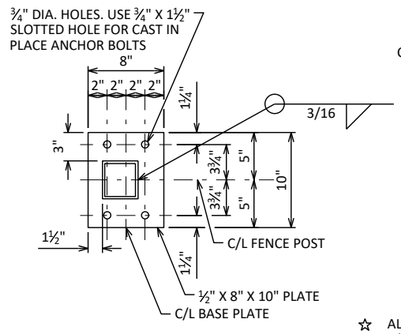
SCALE =

8

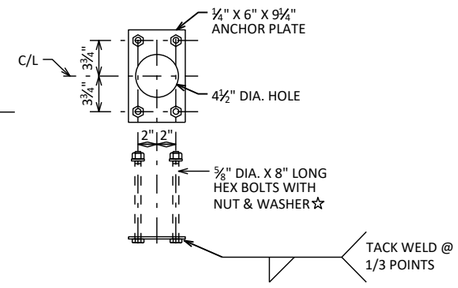
8




## RAILING EXPANSION JOINT DETAIL



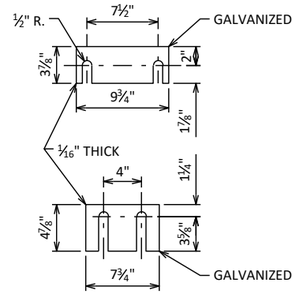

## BASE PLATE




## ANCHORAGE DETAIL

☆ ALTERNATIVE ANCHORAGE: ADHESIVE ANCHORS 5/8-INCH. EMBED 7" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.




## SHIM PLATE DETAILS

TWO SHIMS OF EACH SIZE REQUIRED PER POST

## LEGEND

△ SEE RAIL POST PLAN ON SHEET 4 FOR LOCATIONS WHERE RAIL POST SPACINGS APPLY.

## NOTES

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B. PLATES, ANGLES, BARS AND SHIMS SHALL CONFORM TO ASTM A709, GRADE 36. FENCE FABRIC SHALL CONFORM TO F668, CLASS 2B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPACINGS ARE TAKEN HORIZONTAL ALONG CENTERLINE OF RAILING AT BASE OF POST.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED. ☆

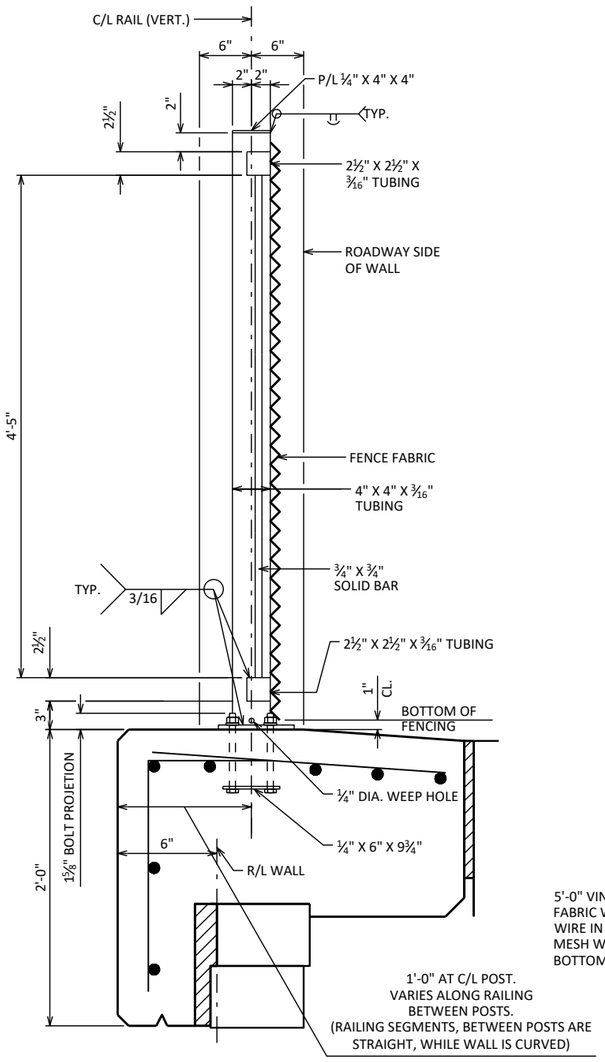
THE BID ITEM SHALL BE "RAILING TUBULAR SCREENING R-44-51" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

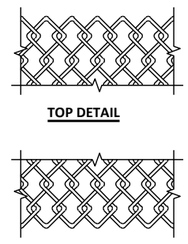
VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

ALL RAILING MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED AMS STD. COLOR NO. 27038. FENCE FABRIC AND TIES TO BE VINYL-COATED. COLOR SHALL BE BLACK IN ACCORDANCE WITH ASTM F934.

THE END OF THE FABRIC SHALL BE ATTACHED TO THE POST BY MEANS OF A TENSION BAR THREADED THROUGH THE END LOOPS OF THE FABRIC AND SECURED TO THE POST WITH CLAMPS & BOLT. THE FABRIC SHALL BE STRETCHED TO REMOVE ALL SLACK.




## SECTION THRU RAILING

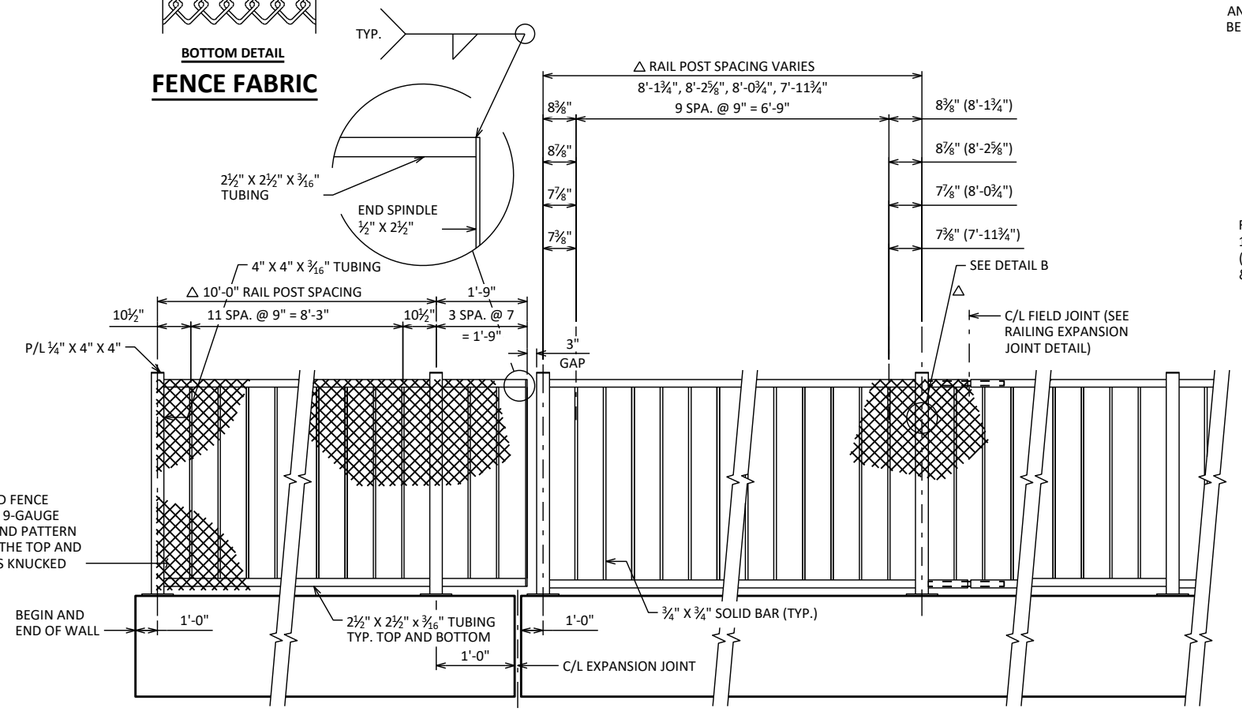


TOP DETAIL

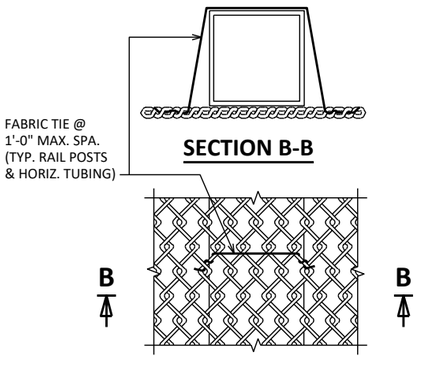


BOTTOM DETAIL

## FENCE FABRIC




## INSIDE ELEVATION OF RAILING




## SECTION B-B

## DETAIL B

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE R-44-51**

DRAWN BY ZHC | PLANS CK'D KRB

**TUBULAR STEEL RAILING SCREENING**

SHEET 5
451

SCALE = 2.00

STATE PROJECT NUMBER

**1130-66-78**

8

8

DIVISION 2 - JA-OCO-6678

| 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 8 |
| 1186+88.26 | 0.00 | 28.88 | 4.40 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1187+00.00 | 11.74 | 26.08 | 4.47 | 1 | 12 | 2 | 1 | 12 | 3 | 1 | 10 |
| 1187+50.00 | 50.00 | 92.28 | 7.59 | 5 | 110 | 11 | 5 | 122 | 16 | 8 | 106 |
| 1188+00.00 | 50.00 | 43.10 | 33.46 | 2 | 125 | 38 | 6 | 247 | 64 | 15 | 183 |
| 1188+50.00 | 50.00 | 28.44 | 23.69 | 1 | 66 | 53 | 3 | 313 | 130 | 19 | 183 |
| 1189+00.00 | 50.00 | 26.14 | 1.00 | 1 | 51 | 23 | 3 | 364 | 159 | 23 | 205 |
| 1189+50.00 | 50.00 | 67.79 | 26.49 | 3 | 87 | 25 | 4 | 451 | 190 | 28 | 261 |
| 1190+00.00 | 50.00 | 62.99 | 32.69 | 3 | 121 | 55 | 6 | 572 | 259 | 35 | 313 |
| 1190+50.00 | 50.00 | 55.36 | 29.69 | 3 | 110 | 58 | 5 | 682 | 331 | 41 | 351 |
| | | COLUMN TOTALS | | | 682 | 265 | 33 | | | | |

DIVISION 2 - JAT-OCO-6678

| 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 8 |
| 1190+50.00 | 0.00 | 47.57 | 32.87 | 2.38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1191+00.00 | 50.00 | 44.52 | 38.94 | 2.23 | 85 | 66 | 4 | 85 | 83 | 5 | 3 |
| 1191+50.00 | 50.00 | 48.00 | 19.88 | 2.40 | 86 | 54 | 4 | 171 | 150 | 10 | 21 |
| 1192+00.00 | 50.00 | 53.20 | 7.80 | 2.66 | 94 | 26 | 5 | 265 | 183 | 16 | 83 |
| 1192+50.00 | 50.00 | 54.81 | 4.04 | 2.74 | 100 | 11 | 5 | 365 | 196 | 23 | 169 |
| 1193+00.00 | 50.00 | 66.64 | 2.43 | 3.33 | 112 | 6 | 6 | 477 | 204 | 30 | 273 |
| 1193+50.00 | 50.00 | 83.63 | 0.00 | 4.18 | 139 | 2 | 7 | 616 | 206 | 39 | 410 |
| | | COLUMN TOTALS | | | 616 | 165 | 31 | | | | |

DIVISION 2 - JB-OCO-6678

| 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 2 | NOTE 2 | NOTE 1 | | NOTE 4 | NOTE 5 |
| 1181+50.00 | 0.00 | 58.32 | 14.84 | 2.92 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1182+00.00 | 50.00 | 75.89 | 1.49 | 3.79 | 124 | 15 | 6 | 124 | 19 | 8 | 105 |
| 1182+50.00 | 50.00 | 93.31 | 0.07 | 4.67 | 157 | 1 | 8 | 281 | 20 | 18 | 261 |
| 1183+00.00 | 50.00 | 96.29 | 0.00 | 4.81 | 176 | 0 | 9 | 457 | 20 | 29 | 437 |
| 1183+50.00 | 50.00 | 93.82 | 2.41 | 4.69 | 176 | 2 | 9 | 633 | 23 | 40 | 611 |
| 1184+00.00 | 50.00 | 25.01 | 23.75 | 1.25 | 110 | 24 | 6 | 743 | 53 | 48 | 691 |
| 1184+50.00 | 50.00 | 21.45 | 7.10 | 1.07 | 43 | 29 | 2 | 786 | 89 | 50 | 697 |
| 1185+00.00 | 50.00 | 18.25 | 13.41 | 0.91 | 37 | 19 | 2 | 823 | 113 | 53 | 711 |
| 1185+50.00 | 50.00 | 27.70 | 25.30 | 1.38 | 43 | 36 | 2 | 866 | 158 | 55 | 709 |
| 1186+00.00 | 50.00 | 65.00 | 163.85 | 3.25 | 86 | 175 | 4 | 952 | 376 | 60 | 576 |
| 1186+36.72 | 36.72 | 37.41 | 52.23 | 1.87 | 70 | 147 | 3 | 1022 | 560 | 64 | 462 |
| | | COLUMN TOTALS | | | 1,022 | 448 | 51 | | | | |

NOTES:

1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.
2) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.
3) EBS CALCULATED AT 5 PERCENT OF CUT.
4) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
5) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

DIVISION 2 - JBT-OCO-6678

| 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 2 | NOTE 2 | NOTE 1 | | NOTE 4 | NOTE 5 |
| 1178+75.00 | 0.00 | 92.03 | 0.00 | 4.60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1179+00.00 | 25.00 | 84.33 | 0.00 | 4.22 | 82 | 0 | 4 | 82 | 0 | 5 | 82 |
| 1179+50.00 | 50.00 | 63.41 | 0.56 | 3.17 | 137 | 1 | 7 | 219 | 1 | 14 | 218 |
| 1180+00.00 | 50.00 | 48.33 | 2.01 | 2.42 | 103 | 2 | 5 | 322 | 4 | 20 | 318 |
| 1180+50.00 | 50.00 | 45.38 | 2.59 | 2.27 | 87 | 4 | 4 | 409 | 9 | 25 | 400 |
| 1181+00.00 | 50.00 | 43.17 | 3.30 | 2.16 | 82 | 5 | 4 | 491 | 15 | 30 | 476 |
| 1181+50.00 | 50.00 | 39.62 | 10.73 | 1.98 | 77 | 13 | 4 | 568 | 31 | 35 | 537 |
| | | COLUMN TOTALS | | | 568 | 25 | 28 | | | | |

DIVISION 3 - JC-OCO-6678

| 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 3 | NOTE 1 | | NOTE 4 | NOTE 5 |
| 1183+00.00 | 0.00 | 36.49 | 7.54 | 1.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1183+50.00 | 50.00 | 50.24 | 4.28 | 2.51 | 80 | 11 | 4 | 80 | 14 | 5 | 66 |
| 1184+00.00 | 50.00 | 73.61 | 0.53 | 3.68 | 115 | 4 | 6 | 195 | 19 | 13 | 176 |
| 1184+50.00 | 50.00 | 95.25 | 0.00 | 4.76 | 156 | 0 | 8 | 351 | 19 | 23 | 332 |
| 1185+00.00 | 50.00 | 104.90 | 0.00 | 5.25 | 185 | 0 | 9 | 536 | 19 | 34 | 517 |
| 1185+50.00 | 50.00 | 110.50 | 0.00 | 5.52 | 199 | 0 | 10 | 735 | 19 | 46 | 716 |
| 1186+00.00 | 50.00 | 29.44 | 2.12 | 1.47 | 130 | 2 | 6 | 865 | 21 | 54 | 844 |
| 1186+50.00 | 50.00 | 34.74 | 9.33 | 1.74 | 59 | 11 | 3 | 924 | 35 | 58 | 889 |
| 1187+00.00 | 50.00 | 40.34 | 8.06 | 2.02 | 70 | 16 | 3 | 994 | 55 | 61 | 939 |
| 1187+50.00 | 50.00 | 82.55 | 13.17 | 4.13 | 114 | 20 | 6 | 1,108 | 80 | 69 | 1,028 |
| 1188+00.00 | 50.00 | 49.92 | 31.82 | 2.50 | 123 | 42 | 6 | 1,231 | 133 | 76 | 1,099 |
| 1188+06.21 | 6.21 | 52.14 | 38.67 | 2.61 | 12 | 8 | 1 | 1,243 | 143 | 78 | 1,101 |
| | | COLUMN TOTALS | | | 1,243 | 114 | 62 | | | | |

DIVISION 3 - JCT-OCO-6678

| 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 3 | NOTE 1 | | NOTE 4 | NOTE 5 |
| 1180+00.00 | 0.00 | 122.47 | 1.08 | 6.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1180+50.00 | 50.00 | 103.82 | 0.00 | 5.19 | 210 | 1 | 10 | 210 | 1 | 13 | 209 |
| 1181+00.00 | 50.00 | 97.10 | 0.34 | 4.85 | 186 | 0 | 9 | 396 | 1 | 24 | 395 |
| 1181+50.00 | 50.00 | 76.81 | 2.27 | 3.84 | 161 | 2 | 8 | 557 | 4 | 34 | 553 |
| 1182+00.00 | 50.00 | 47.31 | 3.93 | 2.37 | 115 | 6 | 6 | 672 | 11 | 41 | 661 |
| 1182+50.00 | 50.00 | 28.91 | 8.56 | 1.45 | 71 | 12 | 4 | 743 | 26 | 46 | 717 |
| 1183+00.00 | 50.00 | 21.09 | 13.20 | 1.05 | 46 | 20 | 2 | 789 | 51 | 49 | 738 |
| | | COLUMN TOTALS | | | 789 | 41 | 39 | | | | |

NOTES:

1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.
2) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.
3) EBS CALCULATED AT 5 PERCENT OF CUT.
4) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
5) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

DIVISION 3 - JD-OCO-6678

| 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 | NOTE2 | NOTE 3 | NOTE 1 | | NOTE 4 | NOTE 5 |
| 1189+01.50 | 0.00 | 60.34 | 0.00 | 3.02 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1189+50.00 | 48.50 | 72.60 | 1.09 | 3.63 | 119 | 1 | 6 | 119 | 1 | 8 | 118 |
| 1190+00.00 | 50.00 | 17.60 | 18.81 | 0.88 | 84 | 18 | 4 | 203 | 24 | 13 | 179 |
| 1190+50.00 | 50.00 | 30.00 | 75.34 | 1.50 | 44 | 87 | 2 | 247 | 133 | 15 | 115 |
| 1191+00.00 | 50.00 | 21.39 | 27.50 | 1.07 | 48 | 95 | 2 | 295 | 251 | 18 | 44 |
| 1191+50.00 | 50.00 | 24.90 | 72.99 | 1.24 | 43 | 93 | 2 | 338 | 368 | 20 | -30 |
| 1192+00.00 | 50.00 | 8.88 | 63.43 | 0.44 | 31 | 126 | 2 | 369 | 525 | 23 | -156 |
| | | COLUMN TOTALS | | | 369 | 420 | 18 | | | | |

DIVISION 3 - JDT-OCO-6678

| 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 | NOTE2 | NOTE 3 | NOTE 1 | | NOTE 4 | NOTE 5 |
| 1192+00.00 | 0.00 | 4.92 | 68.97 | 0.25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1192+50.00 | 50.00 | 0.72 | 90.39 | 0.04 | 5 | 148 | 0 | 5 | 185 | 0 | -180 |
| 1193+00.00 | 50.00 | 4.28 | 72.92 | 0.21 | 5 | 151 | 0 | 10 | 374 | 0 | -364 |
| 1193+50.00 | 50.00 | 14.04 | 47.87 | 0.70 | 17 | 112 | 1 | 27 | 514 | 1 | -487 |
| 1194+00.00 | 50.00 | 32.86 | 27.31 | 1.64 | 43 | 70 | 2 | 70 | 601 | 4 | -531 |
| 1194+50.00 | 50.00 | 61.38 | 12.62 | 3.07 | 87 | 37 | 4 | 157 | 648 | 9 | -491 |
| 1195+00.00 | 50.00 | 80.78 | 10.07 | 4.04 | 132 | 21 | 7 | 289 | 674 | 18 | -385 |
| 1195+24.00 | 24.00 | 92.41 | 8.68 | 4.62 | 77 | 8 | 4 | 366 | 684 | 23 | -318 |
| | | COLUMN TOTALS | | | 366 | 547 | 18 | | | | |

DIVISION 3 - JDR-OCO-6678

| 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 2 | NOTE 3 | NOTE 1 | | NOTE 4 | NOTE 5 |
| 188+63.98 | 0.00 | 65.75 | 136.56 | 3.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 189+00.00 | 36.02 | 33.50 | 276.17 | 1.68 | 66 | 275 | 3 | 66 | 344 | 4 | -278 |
| 189+50.00 | 50.00 | 16.61 | 354.76 | 0.83 | 46 | 584 | 2 | 112 | 1,074 | 6 | -962 |
| 190+00.00 | 50.00 | 20.22 | 144.16 | 1.01 | 34 | 462 | 2 | 146 | 1,651 | 9 | -1,505 |
| 190+10.00 | 10.00 | 21.05 | 120.05 | 1.05 | 8 | 49 | 0 | 154 | 1,713 | 9 | -1,559 |
| | | COLUMN TOTALS | | | 154 | 1,370 | 7 | | | | |

NOTES:

1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.
2) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.
3) EBS CALCULATED AT 5 PERCENT OF CUT.
4) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
5) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

DIVISION 2- JE-OCO-6678

| 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 1 | | NOTE 5 | NOTE 8 |
| 10+00.00 | 0.00 | 109.18 | 0.00 | 5.46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10+25.00 | 25.00 | 133.60 | 53.76 | 6.68 | 112 | 25 | 6 | 112 | 31 | 8 | 81 |
| 10+50.00 | 25.00 | 73.94 | 0.00 | 3.70 | 96 | 25 | 5 | 208 | 63 | 14 | 146 |
| 10+75.00 | 25.00 | 77.91 | 0.00 | 3.90 | 70 | 0 | 4 | 278 | 63 | 19 | 216 |
| 11+00.00 | 25.00 | 102.26 | 69.95 | 5.11 | 83 | 32 | 4 | 361 | 103 | 24 | 259 |
| 11+25.00 | 25.00 | 104.82 | 3.01 | 5.24 | 96 | 34 | 5 | 457 | 145 | 30 | 312 |
| 11+50.00 | 25.00 | 61.35 | 0.00 | 3.07 | 77 | 1 | 4 | 534 | 146 | 35 | 388 |
| 11+75.00 | 25.00 | 77.42 | 238.20 | 3.87 | 64 | 110 | 3 | 598 | 284 | 39 | 314 |
| 12+00.00 | 25.00 | 69.72 | 242.26 | 3.49 | 68 | 222 | 3 | 666 | 561 | 43 | 105 |
| 12+25.00 | 25.00 | 45.50 | 0.04 | 2.28 | 53 | 112 | 3 | 719 | 701 | 46 | 18 |
| 12+50.00 | 25.00 | 44.11 | 0.00 | 2.21 | 41 | 0 | 2 | 760 | 701 | 49 | 59 |
| 12+75.00 | 25.00 | 64.03 | 5.54 | 3.20 | 50 | 3 | 3 | 810 | 705 | 53 | 105 |
| 13+00.00 | 25.00 | 121.79 | 0.00 | 6.09 | 86 | 3 | 4 | 896 | 709 | 58 | 187 |
| 13+25.00 | 25.00 | 71.40 | 0.00 | 3.57 | 89 | 0 | 4 | 985 | 709 | 63 | 276 |
| 13+39.29 | 14.29 | 109.18 | 0.00 | 5.46 | 48 | 0 | 2 | 1,033 | 709 | 65 | 324 |
| | | COLUMN TOTALS | | | 1,033 | 567 | 52 | | | | |

DIVISION 3- JK-OCO-6678

| 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 2 | NOTE 3 | NOTE 1 | | NOTE 4 | NOTE 5 |
| 10+00.00 | 0.00 | 66.56 | 0.00 | 3.33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10+25.00 | 25.00 | 100.62 | 19.94 | 5.03 | 77 | 9 | 4 | 77 | 11 | 5 | 66 |
| 10+50.00 | 25.00 | 94.68 | 22.83 | 4.73 | 90 | 20 | 5 | 167 | 36 | 11 | 131 |
| 10+75.00 | 25.00 | 46.46 | 0.00 | 2.32 | 65 | 11 | 3 | 232 | 50 | 15 | 182 |
| 11+00.00 | 25.00 | 52.32 | 0.00 | 2.62 | 46 | 0 | 2 | 278 | 50 | 18 | 228 |
| 11+25.00 | 25.00 | 66.76 | 15.26 | 3.34 | 55 | 7 | 3 | 333 | 59 | 21 | 274 |
| 11+50.00 | 25.00 | 142.28 | 0.00 | 7.11 | 97 | 7 | 5 | 430 | 68 | 28 | 363 |
| 11+75.00 | 25.00 | 81.80 | 0.00 | 4.09 | 104 | 0 | 5 | 534 | 68 | 34 | 467 |
| 12+00.00 | 25.00 | 128.20 | 47.68 | 6.41 | 97 | 22 | 5 | 631 | 95 | 40 | 536 |
| 12+25.00 | 25.00 | 119.13 | 0.00 | 5.96 | 115 | 22 | 6 | 746 | 123 | 48 | 624 |
| 12+50.00 | 25.00 | 84.38 | 0.00 | 4.22 | 94 | 0 | 5 | 840 | 123 | 54 | 718 |
| 12+75.00 | 25.00 | 80.72 | 0.00 | 4.04 | 76 | 0 | 4 | 916 | 123 | 59 | 794 |
| 13+00.00 | 25.00 | 77.88 | 0.00 | 3.89 | 73 | 0 | 4 | 989 | 123 | 64 | 867 |
| 13+25.00 | 25.00 | 71.27 | 0.00 | 3.56 | 69 | 0 | 3 | 1,058 | 123 | 68 | 936 |
| 13+39.39 | 14.39 | 66.56 | 0.00 | 3.33 | 37 | 0 | 2 | 1,095 | 123 | 70 | 973 |
| | | COLUMN TOTALS | | | 1,095 | 98 | 56 | | | | |

NOTES:

1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.

2) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.

3) EBS CALCULATED AT 5 PERCENT OF CUT.

4) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.

5) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

DIVISION 2/3 - JNB-OCO-6678

| 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 2 | NOTE 3 | NOTE 1 | | NOTE 4 | NOTE 5 |
| 11+62.06 | 0.00 | 33.18 | 0.41 | 1.66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12+00.00 | 37.94 | 37.56 | 0.47 | 1.88 | 50 | 1 | 2 | 50 | 1 | 3 | 49 |
| 12+50.00 | 50.00 | 23.82 | 0.00 | 1.19 | 57 | 0 | 3 | 107 | 1 | 6 | 106 |
| 13+00.00 | 50.00 | 25.30 | 0.00 | 1.27 | 45 | 0 | 2 | 152 | 1 | 9 | 151 |
| 13+50.00 | 50.00 | 26.97 | 0.00 | 1.35 | 48 | 0 | 2 | 200 | 1 | 11 | 199 |
| 14+00.00 | 50.00 | 23.19 | 3.37 | 1.16 | 46 | 3 | 2 | 246 | 5 | 14 | 241 |
| 14+50.00 | 50.00 | 35.89 | 21.32 | 1.79 | 55 | 23 | 3 | 301 | 34 | 18 | 267 |
| 15+00.00 | 50.00 | 70.59 | 28.60 | 3.53 | 99 | 46 | 5 | 400 | 91 | 24 | 309 |
| 15+24.85 | 24.85 | 56.44 | 40.20 | 2.82 | 58 | 32 | 3 | 458 | 131 | 28 | 327 |
| 16+65.00 | 0.00 | 19.88 | 9.26 | 0.99 | 0 | 0 | 0 | 458 | 131 | 28 | 327 |
| 17+00.00 | 35.00 | 47.58 | 27.43 | 2.38 | 44 | 24 | 2 | 502 | 161 | 30 | 341 |
| 17+50.00 | 50.00 | 31.30 | 114.07 | 1.56 | 73 | 131 | 4 | 575 | 325 | 35 | 250 |
| 17+98.15 | 48.15 | 60.49 | 924.86 | 3.02 | 82 | 926 | 4 | 657 | 1,483 | 40 | -826 |
| 20+60.00 | 0.00 | 207.34 | 1027.00 | 10.37 | 0 | 0 | 0 | 657 | 1,483 | 40 | -826 |
| 20+99.92 | 39.92 | 26.94 | 249.73 | 1.35 | 173 | 944 | 9 | 830 | 2,663 | 51 | -1,833 |
| 21+50.00 | 50.08 | 96.53 | 111.53 | 4.83 | 115 | 335 | 6 | 945 | 3,081 | 59 | -2,136 |
| 21+90.00 | 40.00 | 91.41 | 57.45 | 4.57 | 139 | 125 | 7 | 1,084 | 3,238 | 68 | -2,154 |
| 23+33.91 | 0.00 | 51.58 | 0.00 | 2.58 | 0 | 0 | 0 | 1,084 | 3,238 | 68 | -2,154 |
| 23+50.00 | 16.09 | 90.39 | 28.54 | 4.52 | 42 | 9 | 2 | 1,126 | 3,249 | 70 | -2,123 |
| 24+00.00 | 50.00 | 29.51 | 27.76 | 1.48 | 111 | 52 | 6 | 1,237 | 3,314 | 78 | -2,077 |
| 24+50.00 | 50.00 | 25.29 | 10.53 | 1.26 | 51 | 35 | 3 | 1,288 | 3,358 | 81 | -2,070 |
| 25+00.00 | 50.00 | 19.91 | 1.30 | 1.00 | 42 | 11 | 2 | 1,330 | 3,371 | 84 | -2,041 |
| 25+50.00 | 50.00 | 23.70 | 0.03 | 1.19 | 40 | 1 | 2 | 1,370 | 3,373 | 86 | -2,003 |
| 26+00.00 | 50.00 | 59.19 | 14.42 | 2.96 | 77 | 13 | 4 | 1,447 | 3,389 | 91 | -1,942 |
| 26+24.29 | 24.29 | 45.02 | 0.00 | 2.25 | 47 | 6 | 2 | 1,494 | 3,396 | 94 | -1,902 |
| 26+34.00 | 9.71 | 37.36 | 0.00 | 1.87 | 15 | 0 | 1 | 1,509 | 3,396 | 95 | -1,887 |
| | | COLUMN TOTALS | | | 1,509 | 2,717 | 76 | | | | |

NOTES:

1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.
2) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.
3) EBS CALCULATED AT 5 PERCENT OF CUT.
4) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
5) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

DIVISION 2/3 - JSB-OCO-6678

| 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 2 | NOTE 3 | NOTE 1 | | NOTE 4 | NOTE 5 |
| 112+20.30 | 0.00 | 13.93 | 1.21 | 0.70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 112+50.00 | 29.70 | 14.27 | 1.43 | 0.71 | 16 | 1 | 1 | 16 | 1 | 1 | 15 |
| 113+00.00 | 50.00 | 13.21 | 2.46 | 0.66 | 25 | 4 | 1 | 41 | 6 | 3 | 35 |
| 113+50.00 | 50.00 | 14.37 | 12.13 | 0.72 | 26 | 14 | 1 | 67 | 24 | 4 | 43 |
| 114+00.00 | 50.00 | 14.94 | 96.98 | 0.75 | 27 | 101 | 1 | 94 | 150 | 5 | -56 |
| 114+50.00 | 50.00 | 24.13 | 48.50 | 1.21 | 36 | 135 | 2 | 130 | 319 | 8 | -189 |
| 115+00.00 | 50.00 | 26.60 | 53.03 | 1.33 | 47 | 94 | 2 | 177 | 436 | 10 | -259 |
| 115+26.25 | 26.25 | 28.53 | 51.05 | 1.43 | 27 | 51 | 1 | 204 | 500 | 11 | -296 |
| 116+71.71 | 0.00 | 42.69 | 29.23 | 2.13 | 0 | 0 | 0 | 204 | 500 | 11 | -296 |
| 117+00.00 | 28.29 | 78.87 | 225.91 | 3.94 | 64 | 134 | 3 | 268 | 668 | 15 | -400 |
| 117+50.00 | 50.00 | 36.42 | 304.15 | 1.82 | 107 | 491 | 5 | 375 | 1,281 | 21 | -906 |
| 121+50.00 | 0.00 | 45.57 | 60.76 | 2.28 | 0 | 0 | 0 | 375 | 1,281 | 21 | -906 |
| 121+95.37 | 45.37 | 19.33 | 11.68 | 0.97 | 55 | 61 | 3 | 430 | 1,358 | 25 | -928 |
| 123+39.02 | 0.00 | 39.49 | 0.00 | 1.97 | 0 | 0 | 0 | 430 | 1,358 | 25 | -928 |
| 123+50.00 | 10.98 | 56.31 | 40.66 | 2.82 | 19 | 8 | 1 | 449 | 1,368 | 26 | -919 |
| 124+00.00 | 50.00 | 50.34 | 39.93 | 2.52 | 99 | 75 | 5 | 548 | 1,461 | 33 | -913 |
| 124+50.00 | 50.00 | 17.21 | 63.25 | 0.86 | 63 | 96 | 3 | 611 | 1,581 | 36 | -970 |
| 125+00.00 | 50.00 | 17.31 | 0.33 | 0.87 | 32 | 59 | 2 | 643 | 1,655 | 39 | -1,012 |
| 125+50.00 | 50.00 | 16.79 | 1.17 | 0.84 | 32 | 1 | 2 | 675 | 1,656 | 41 | -981 |
| 125+87.42 | 37.42 | 16.24 | 19.66 | 0.81 | 23 | 14 | 1 | 698 | 1,674 | 43 | -976 |
| | | COLUMN TOTALS | | | 698 | 1,339 | 34 | | | | |

DIVISION 1 - I41

| 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 8 |
| 1184+70 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1186+20 | 150.00 | 0.00 | 15.85 | 0.00 | 0 | 44 | 0 | 0 | 55 | 0 | -55 |
| 1186+83 | 63.33 | 10.37 | 0.00 | 0.52 | 12 | 19 | 1 | 12 | 79 | 1 | -67 |
| 1186+95 | 12.50 | 11.95 | 0.00 | 0.60 | 5 | 0 | 0 | 17 | 79 | 1 | -62 |
| 1187+33 | 37.50 | 17.72 | 0.00 | 0.89 | 21 | 0 | 1 | 38 | 79 | 3 | -41 |
| 1187+70 | 37.50 | 20.77 | 0.00 | 1.04 | 27 | 0 | 1 | 65 | 79 | 4 | -14 |
| 1188+08 | 37.50 | 27.15 | 0.00 | 1.36 | 33 | 0 | 2 | 98 | 79 | 6 | 19 |
| 1188+45 | 37.50 | 23.30 | 0.00 | 1.17 | 35 | 0 | 2 | 133 | 79 | 9 | 54 |
| 1188+58 | 12.50 | 20.22 | 0.00 | 1.01 | 10 | 0 | 1 | 143 | 79 | 10 | 64 |
| 1189+21 | 63.33 | 21.02 | 0.00 | 1.05 | 48 | 0 | 2 | 191 | 79 | 13 | 112 |
| 1190+71 | 150.00 | 0.00 | 0.00 | 0.00 | 75 | 0 | 4 | 266 | 79 | 18 | 94 |
| | | COLUMN TOTALS | | | 266 | 63 | 14 | | | | |

NOTES:

1) CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL.
2) FILL: FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL.
3) EBS CALCULATED AT 5 PERCENT OF CUT.
4) EXPANDED EBS: EXPANDED EBS WILL BE BACKFILLED WITH SELECT CRUSHED MATERIAL.
5) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

BEGIN PROJECT
STA. 11 'JNB' + 61.02

EX RW
FO
FO
TEL
TEL
-30.22, 697.45
-26.55, 698.39
-20.00, 699.48
-15.00, 699.68
-12.00, 699.74
0.00, 699.98
12.00, 699.91
15.74, 699.89
20.74, 699.69
28.18, 698.76
28.53, 698.72
GAS
EX FO
OH
4.0%
2.0%
0.5%
0.5%
4.0%
4.0:1
2.5:1
TOP OF BASE (TYP.)
APPROX. DATUM SURFACE IN PAVEMENT REPLACEMENT AREAS (TYP.)
11+62 'JNB'

C.E. RT

EX RW
FO
TEL
TEL
-29.26, 698.35
-26.55, 699.03
-20.00, 700.12
-15.00, 700.32
-12.00, 700.38
0.00, 700.62
12.00, 700.38
15.62, 700.31
20.62, 700.21
37.28, 699.64
GAS
EX FO
OH
4.0%
2.0%
2.0%
2.0%
2.0%
2.0%
2.0%
3.1%
4.0:1
6.0:1
12+00 'JNB'

10 FT
20 FT

9

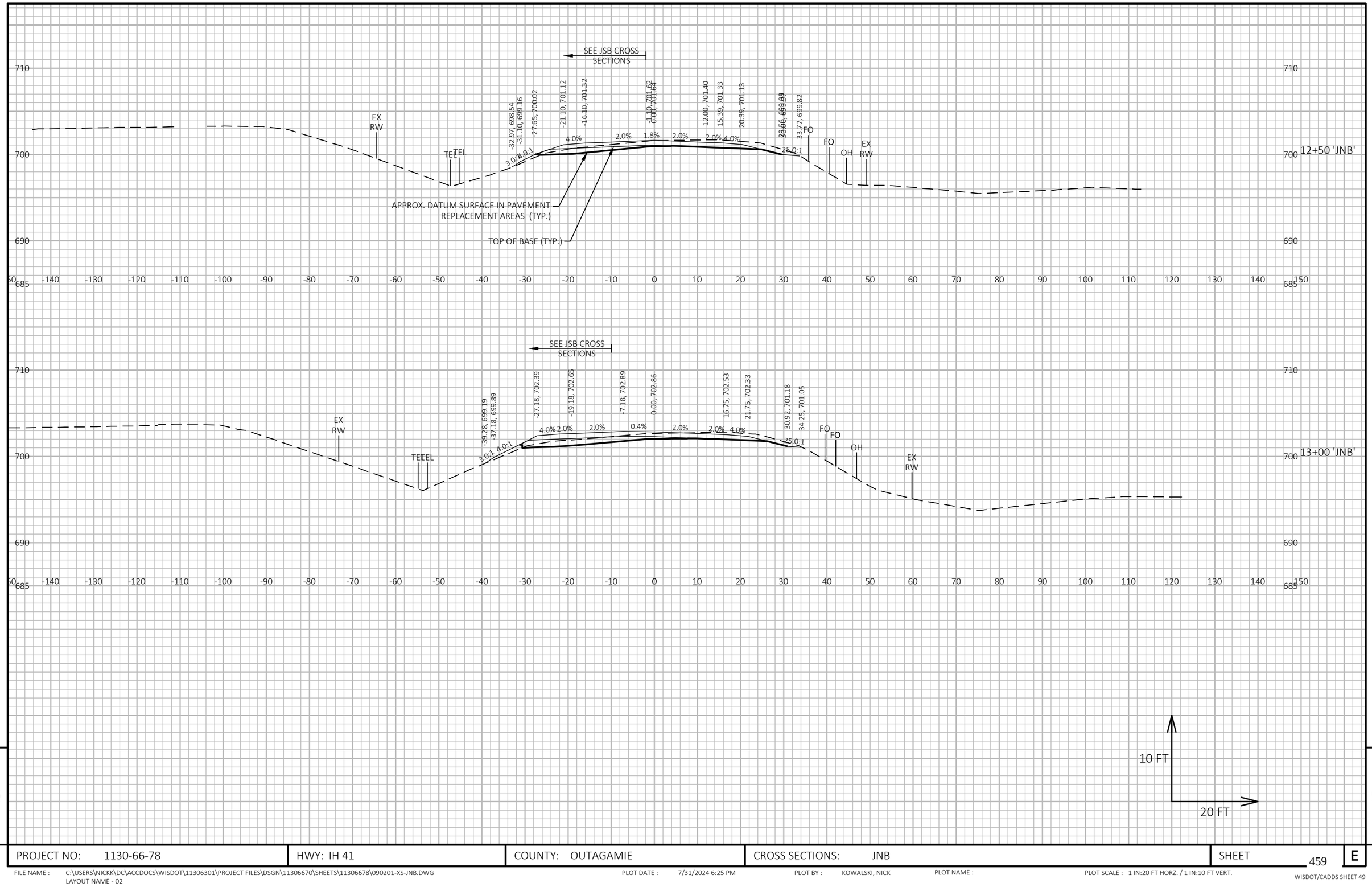
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JNB | SHEET 458 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090201-XS-JNB.DWG
LAYOUT NAME - 01

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

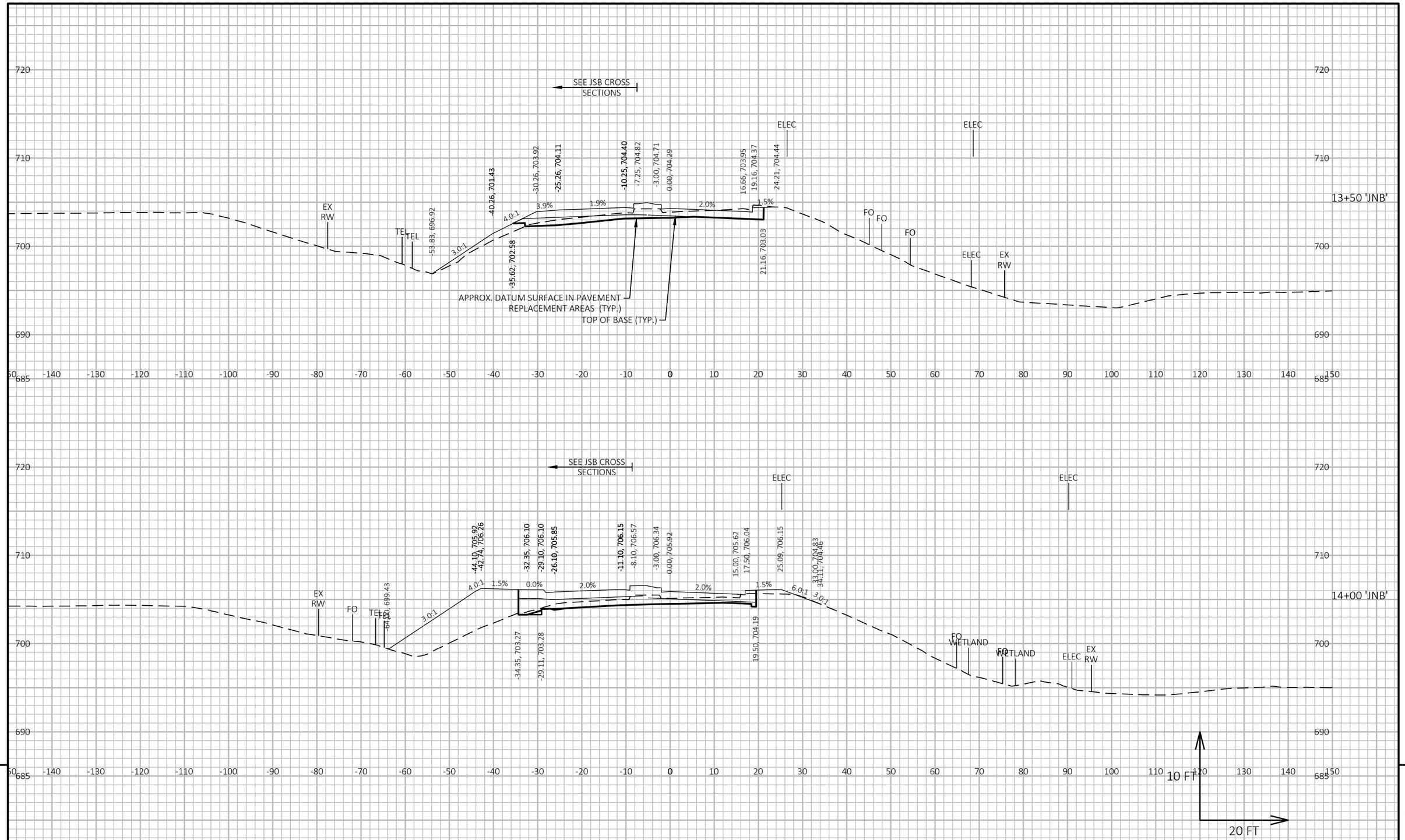
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JNB | SHEET 459 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090201-XS-JNB.DWG
LAYOUT NAME - 02

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JNB | SHEET 460 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090201-XS-JNB.DWG
LAYOUT NAME - 03

PLOT DATE : 7/31/2024 6:25 PM

PLOT BY : KOWALSKI, NICK

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

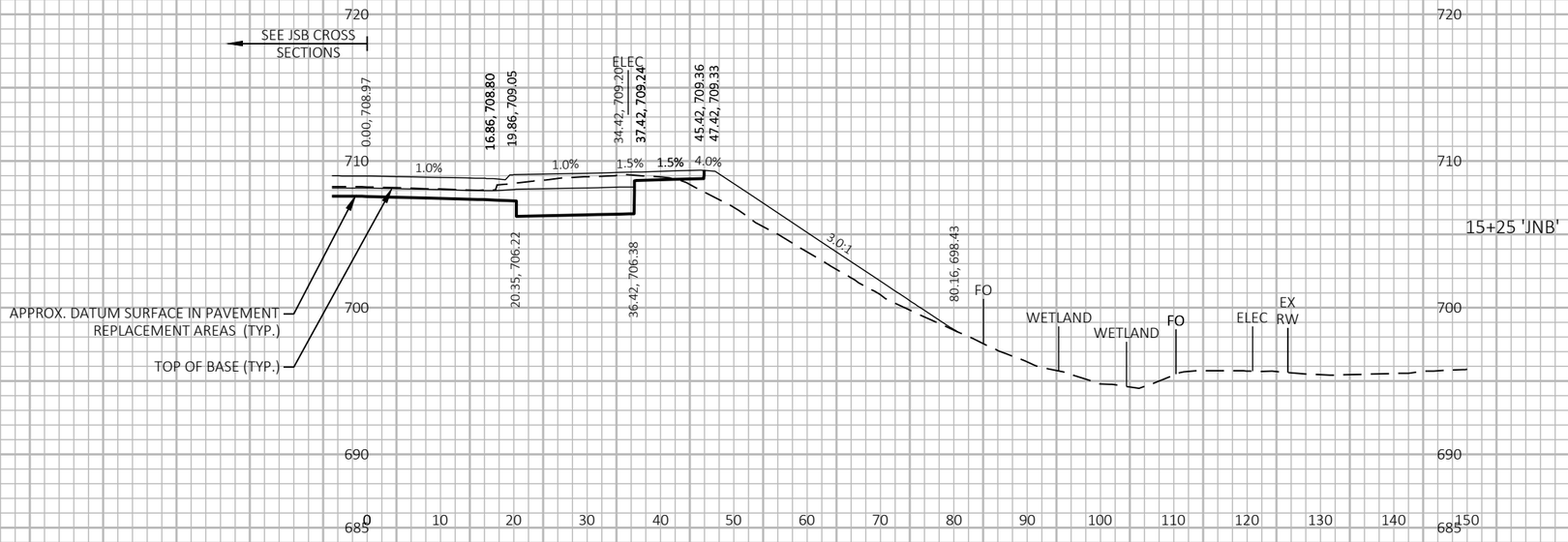


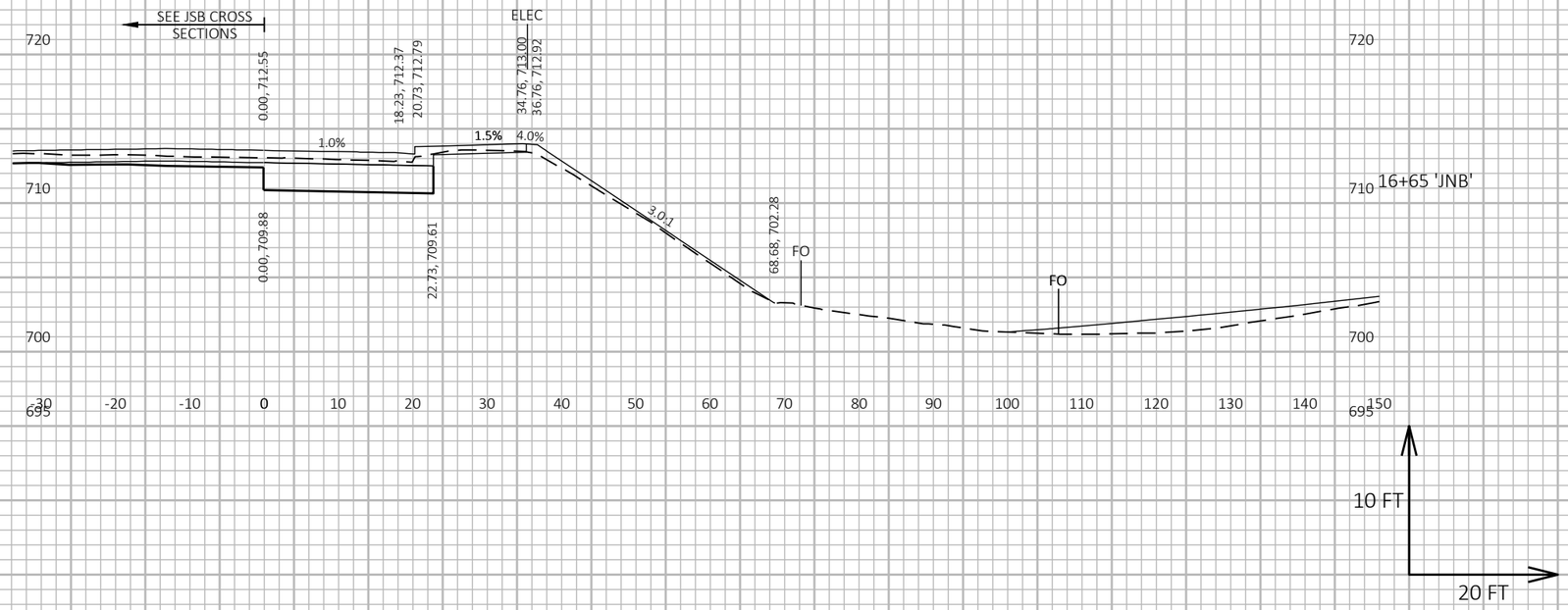

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JNB | SHEET 461 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090201-XS-JNB.DWG
LAYOUT NAME - 04

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

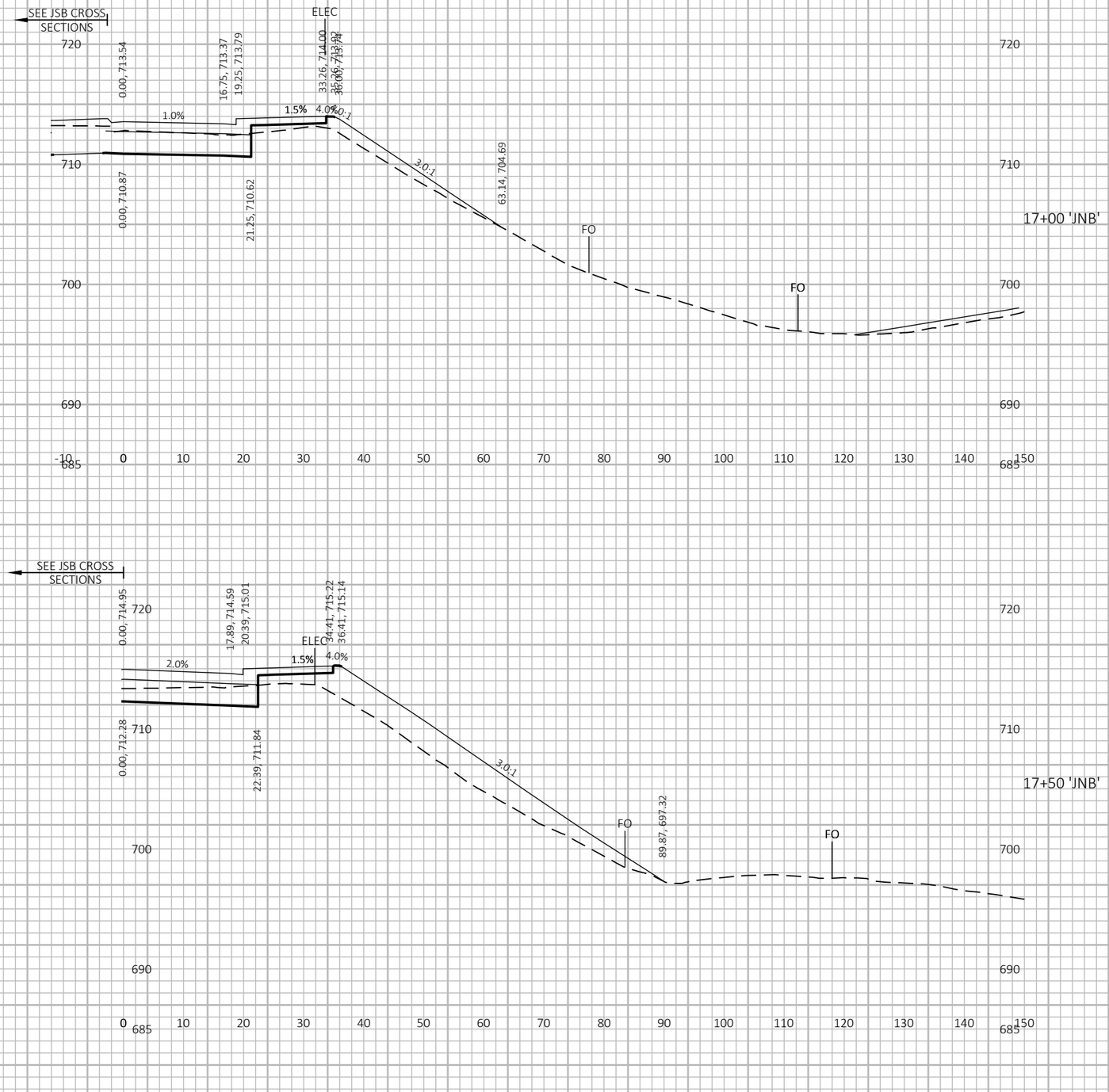
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JNB | SHEET 462 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090201-XS-JNB.DWG
LAYOUT NAME - 05

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

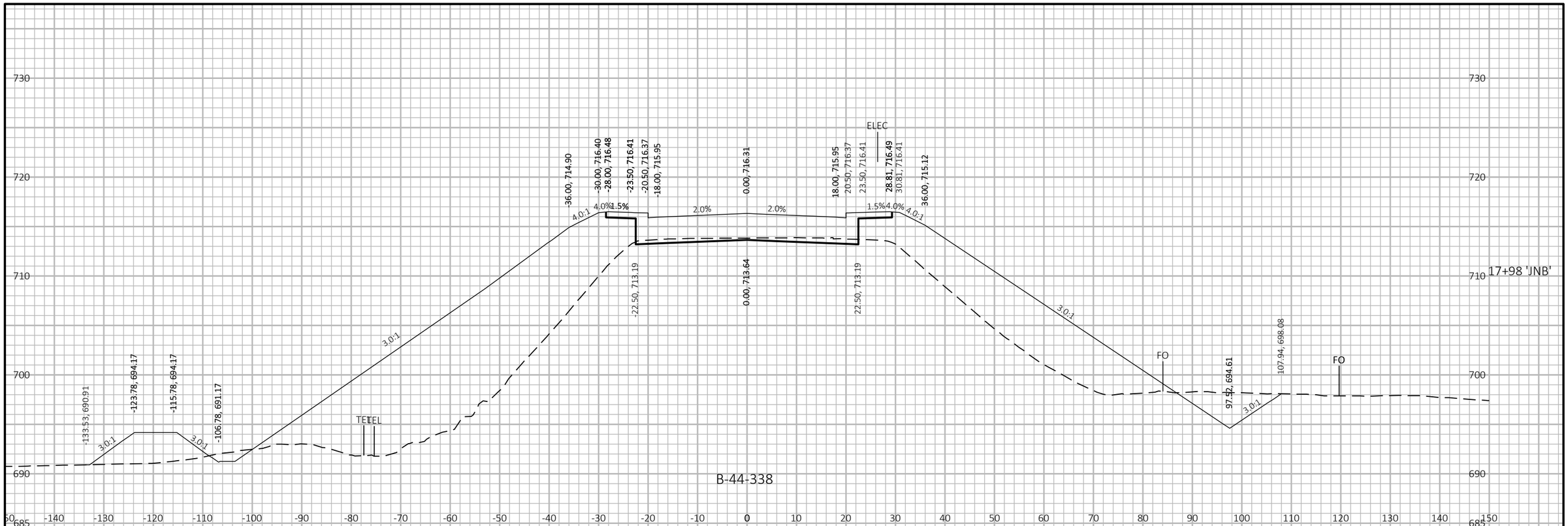



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JNB | SHEET 463 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090201-XS-JNB.DWG
LAYOUT NAME - 06

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

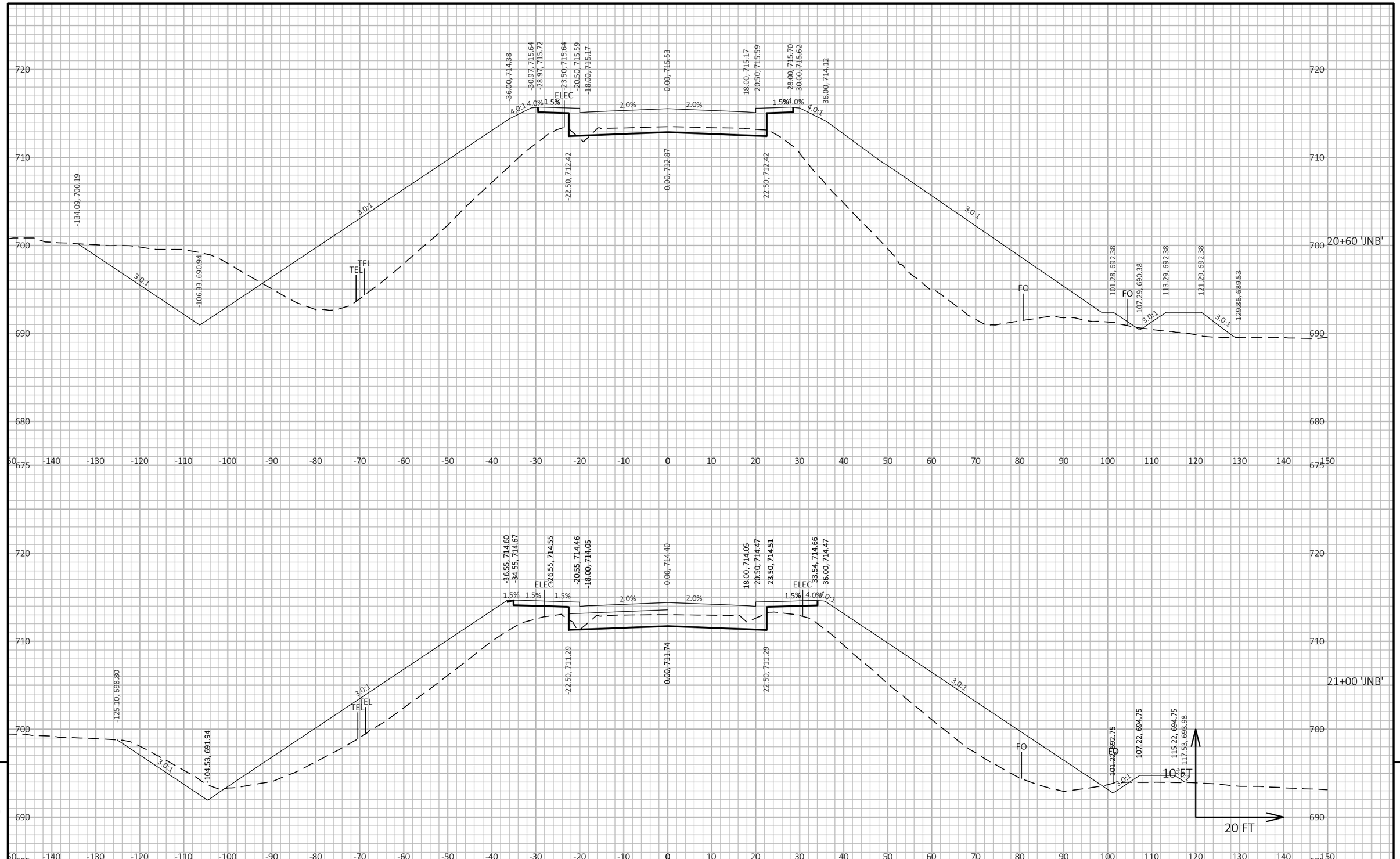
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JNB | SHEET 464 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090201-XS-JNB.DWG
LAYOUT NAME - 07

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

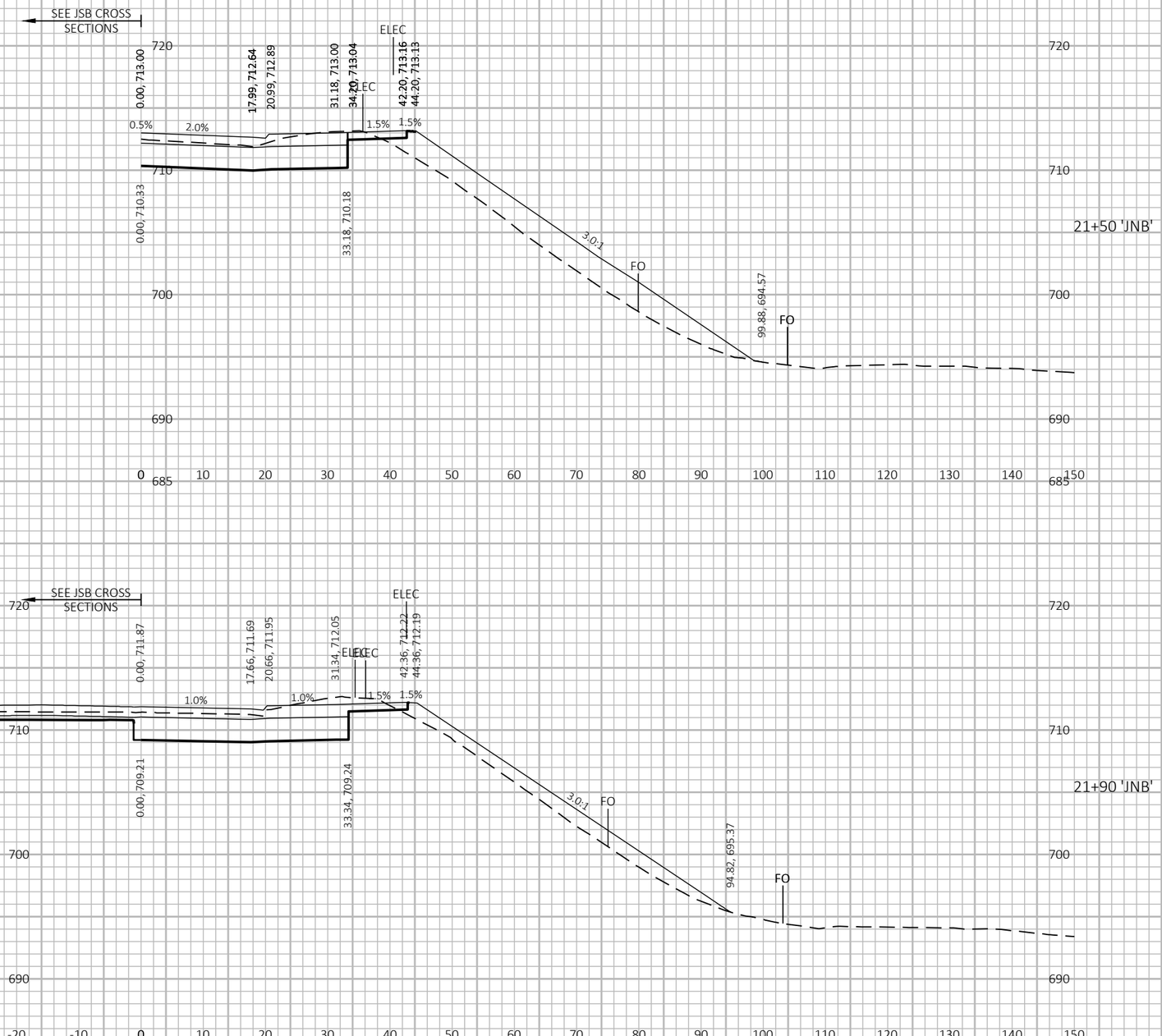



| | | | | |
|---|---|---|---|---|
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JNB | SHEET 465 E |

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090201-XS-JNB.DWG
LAYOUT NAME - 08

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

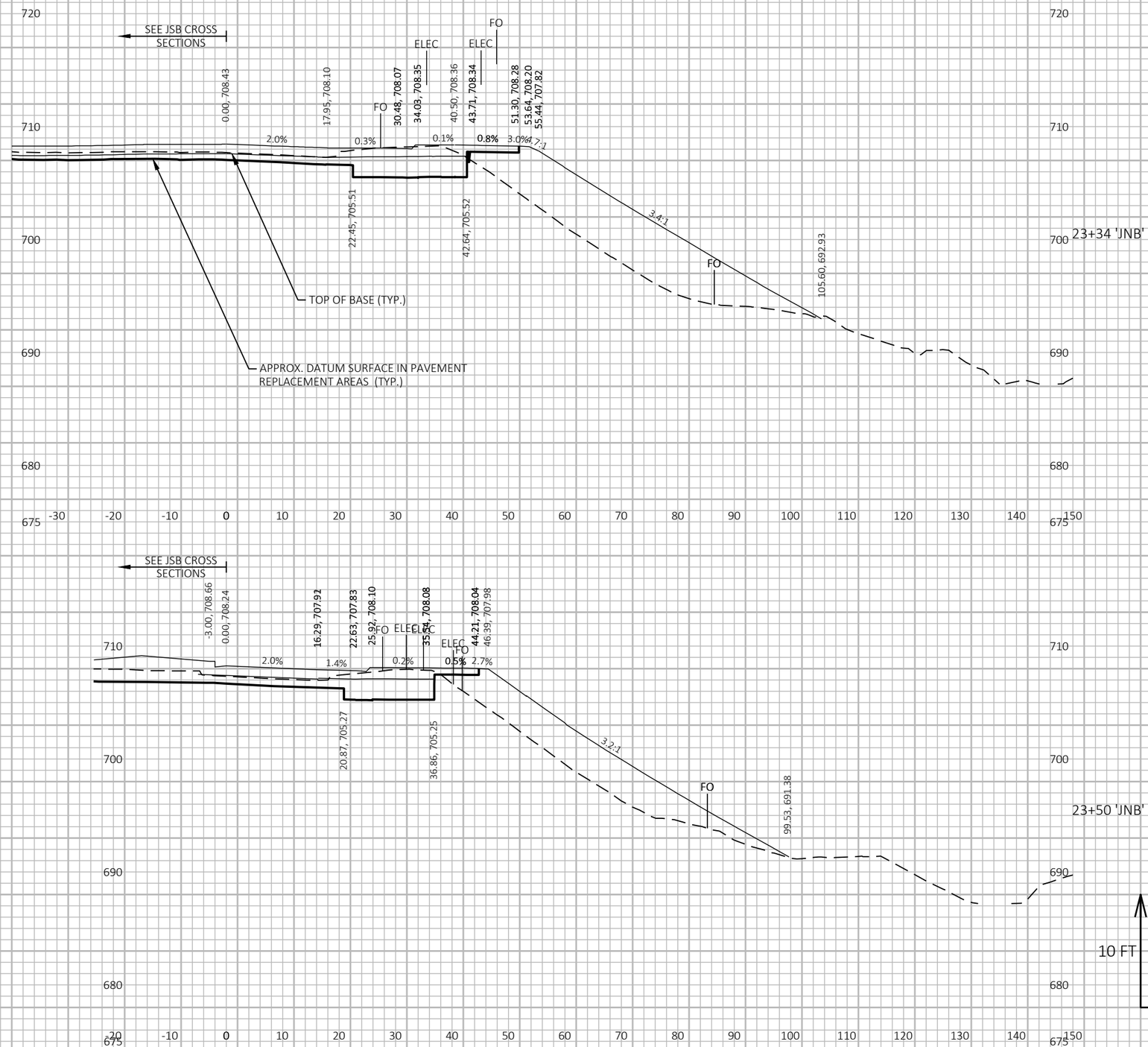



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JNB | SHEET 466 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090201-XS-JNB.DWG
LAYOUT NAME - 09

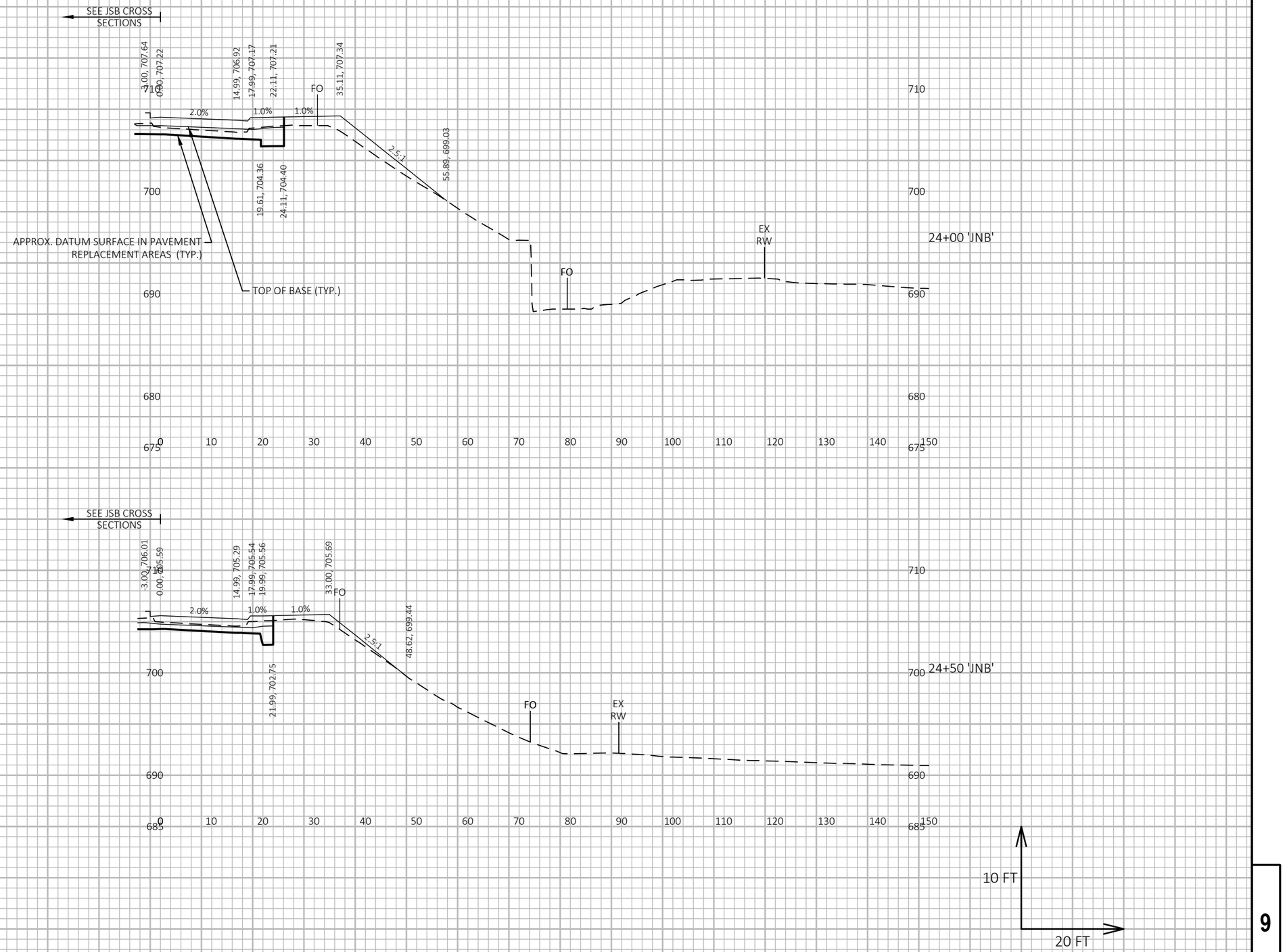
PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JNB | SHEET 467 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090201-XS-JNB.DWG
LAYOUT NAME - 10
PLOT DATE : 7/31/2024 6:25 PM
PLOT BY : KOWALSKI, NICK
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49




9

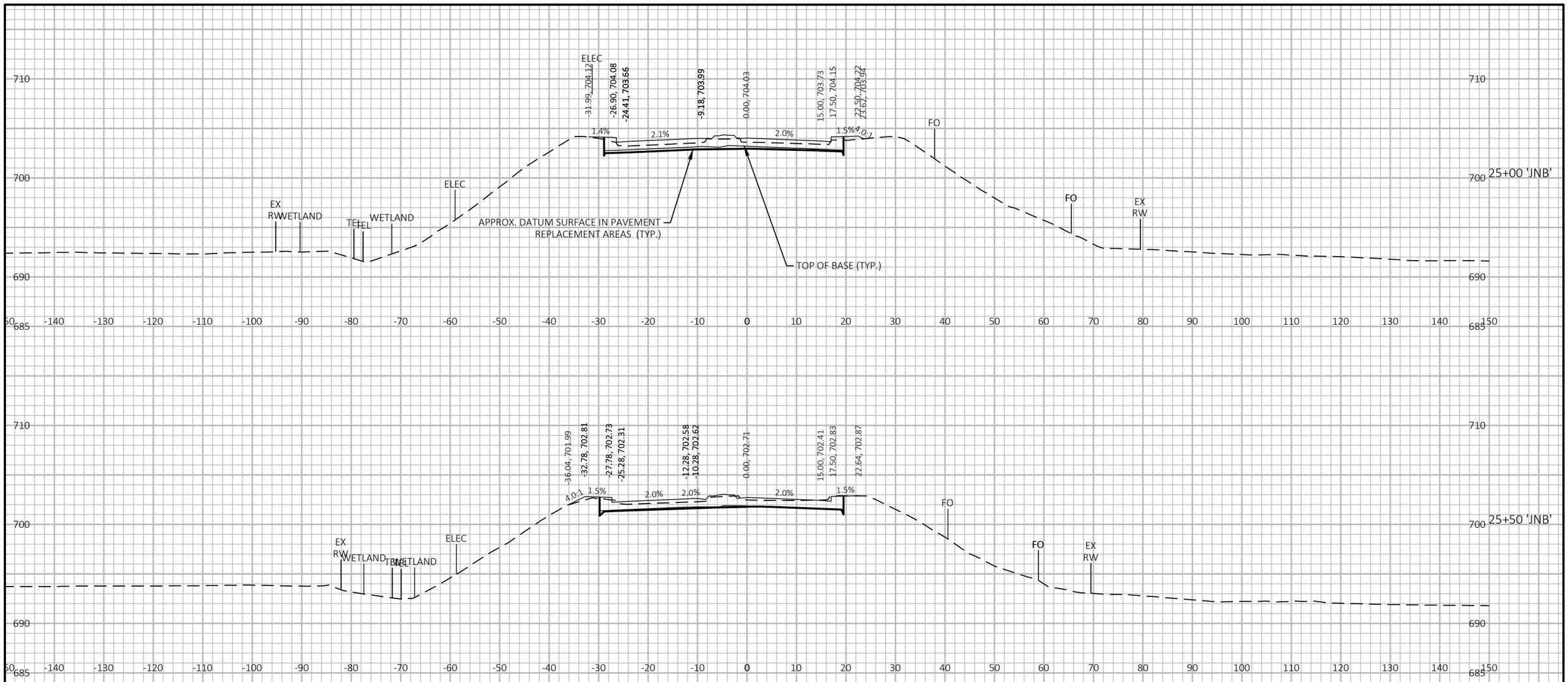
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JNB | SHEET 468 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090201-XS-JNB.DWG
LAYOUT NAME - 11

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49










9

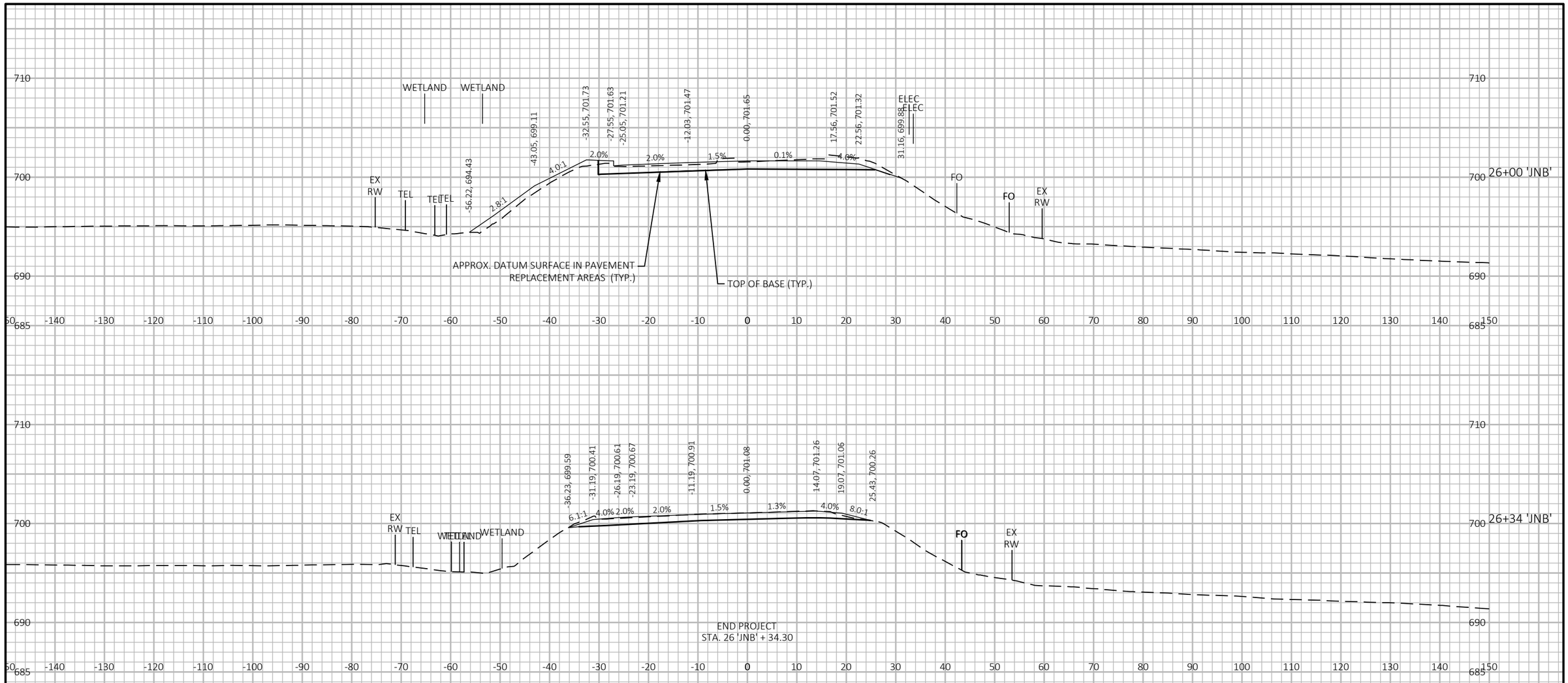
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JNB | SHEET 469 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090201-XS-JNB.DWG
LAYOUT NAME - 12

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

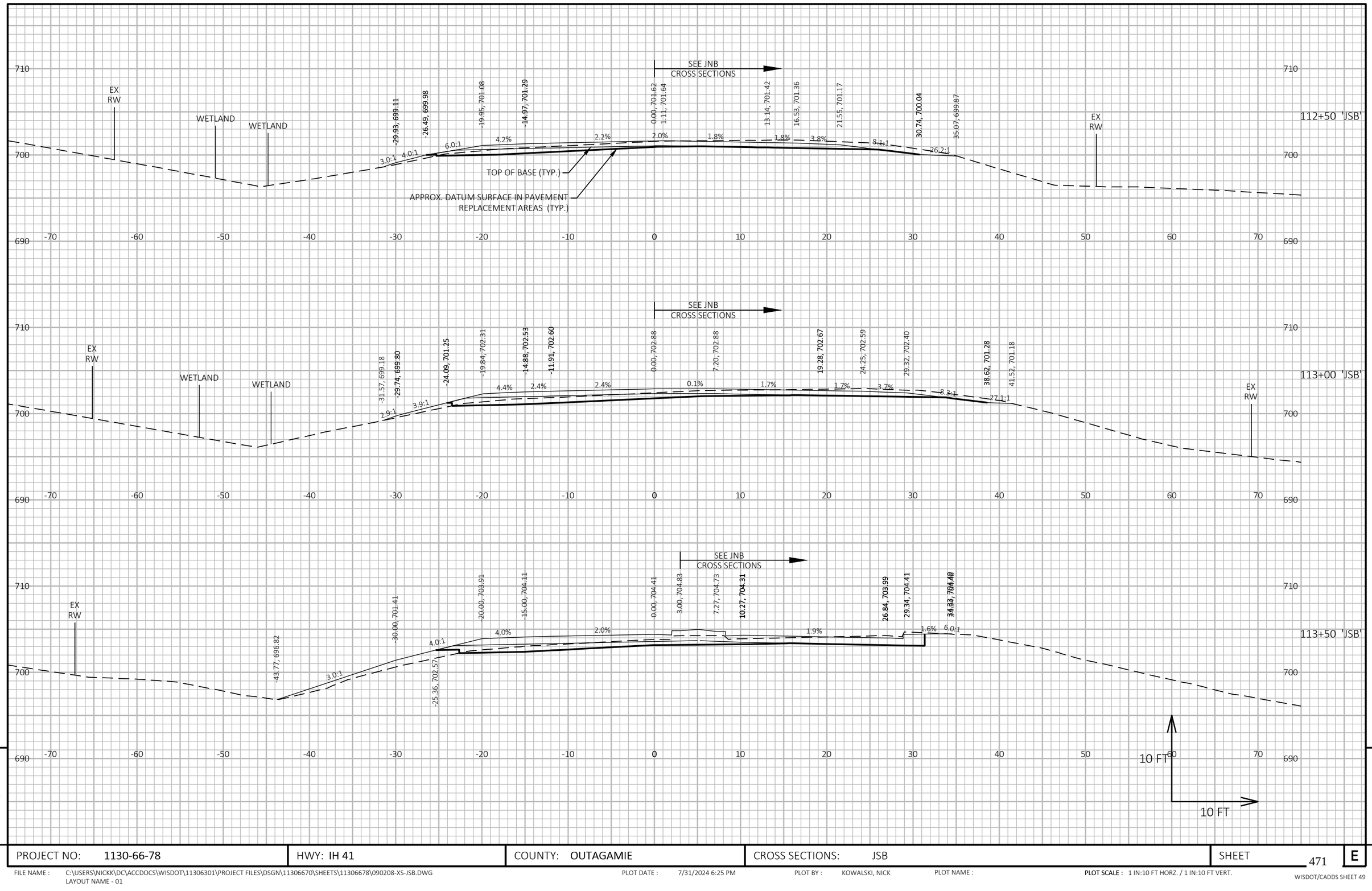
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JNB | SHEET 470 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090201-XS-JNB.DWG
LAYOUT NAME - 13

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



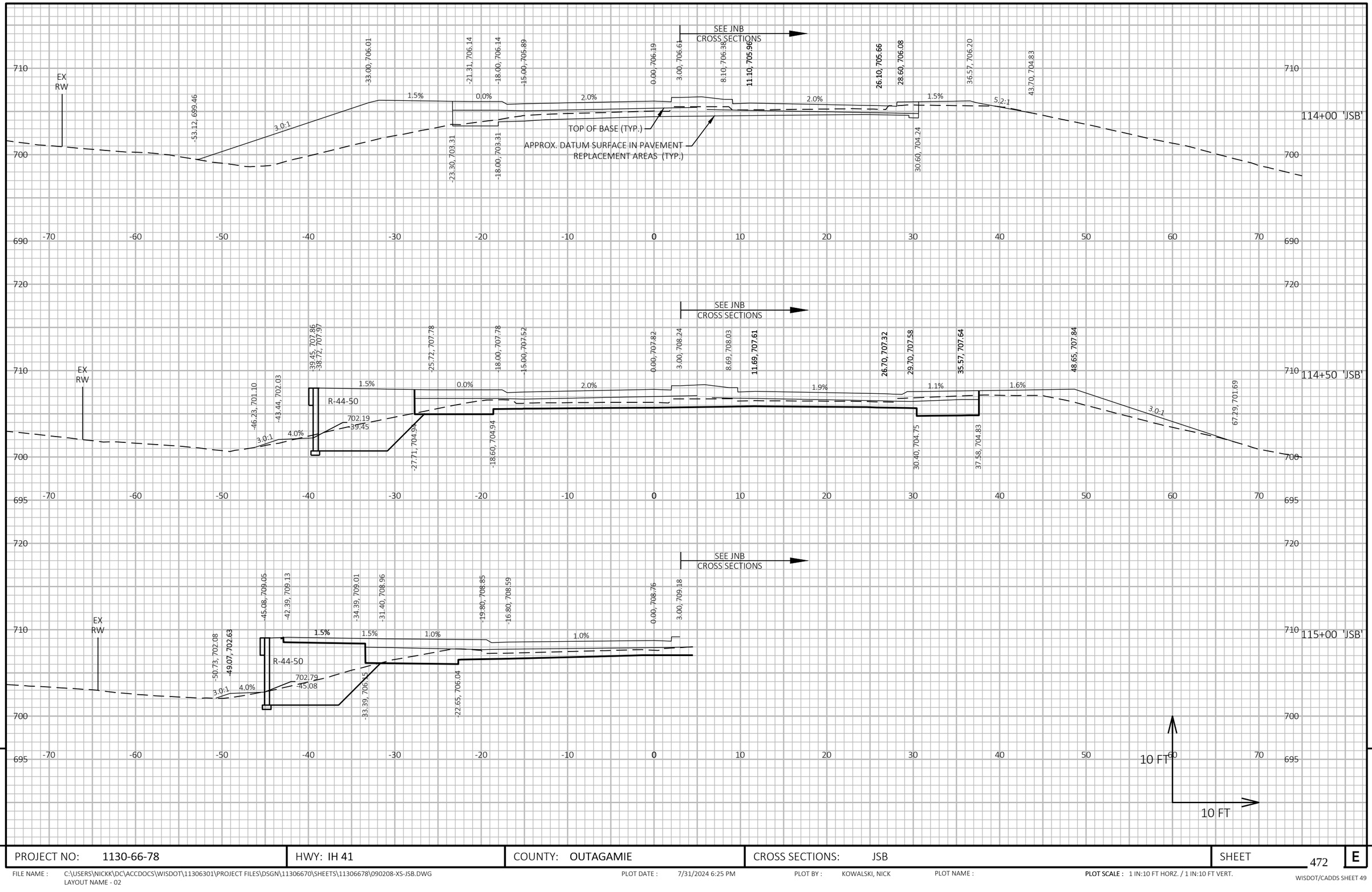

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9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JSB | SHEET 471 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090208-XS-JSB.DWG
LAYOUT NAME - 01

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

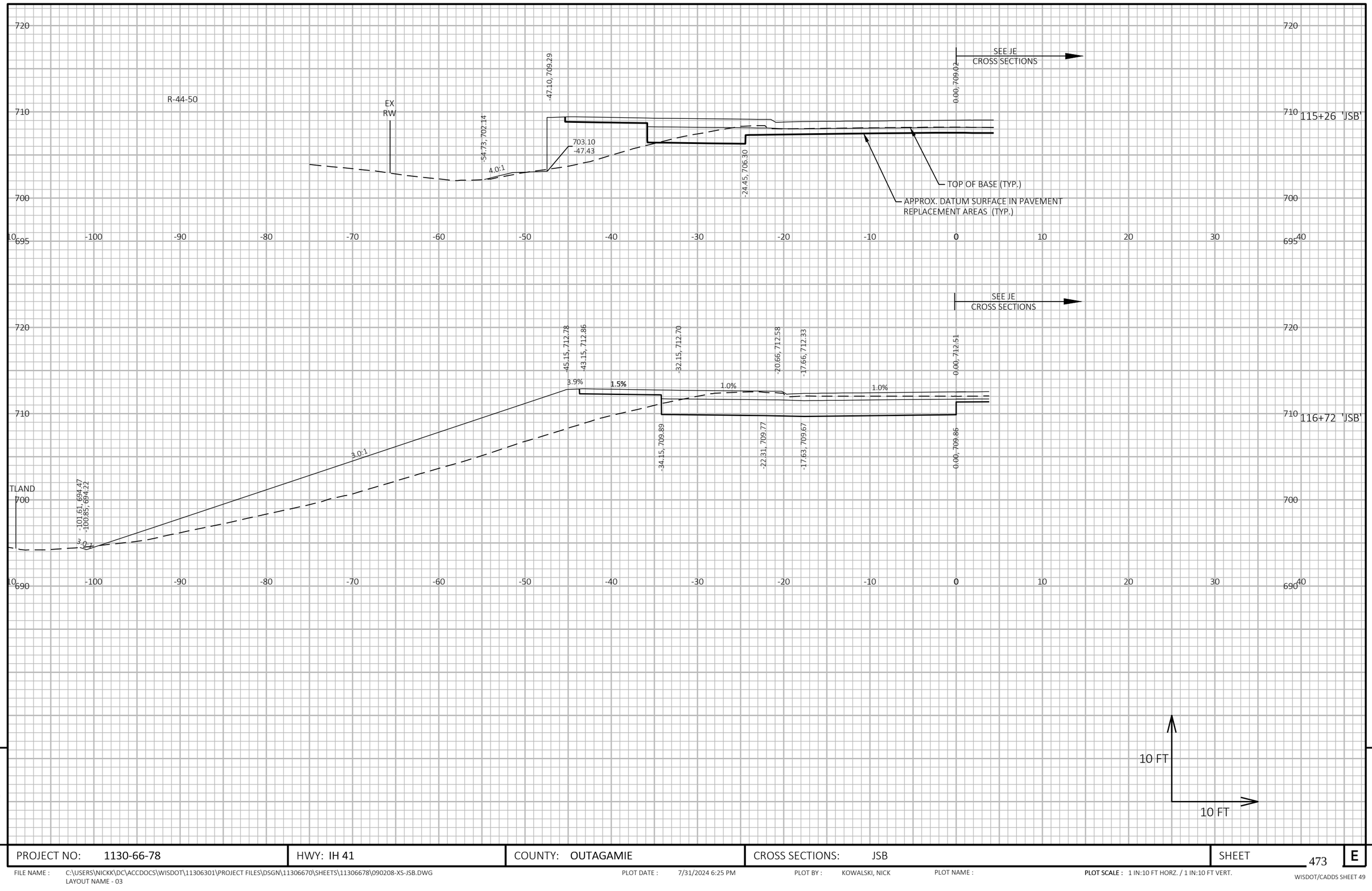



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JSB | SHEET 472 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090208-XS-JSB.DWG
LAYOUT NAME - 02

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

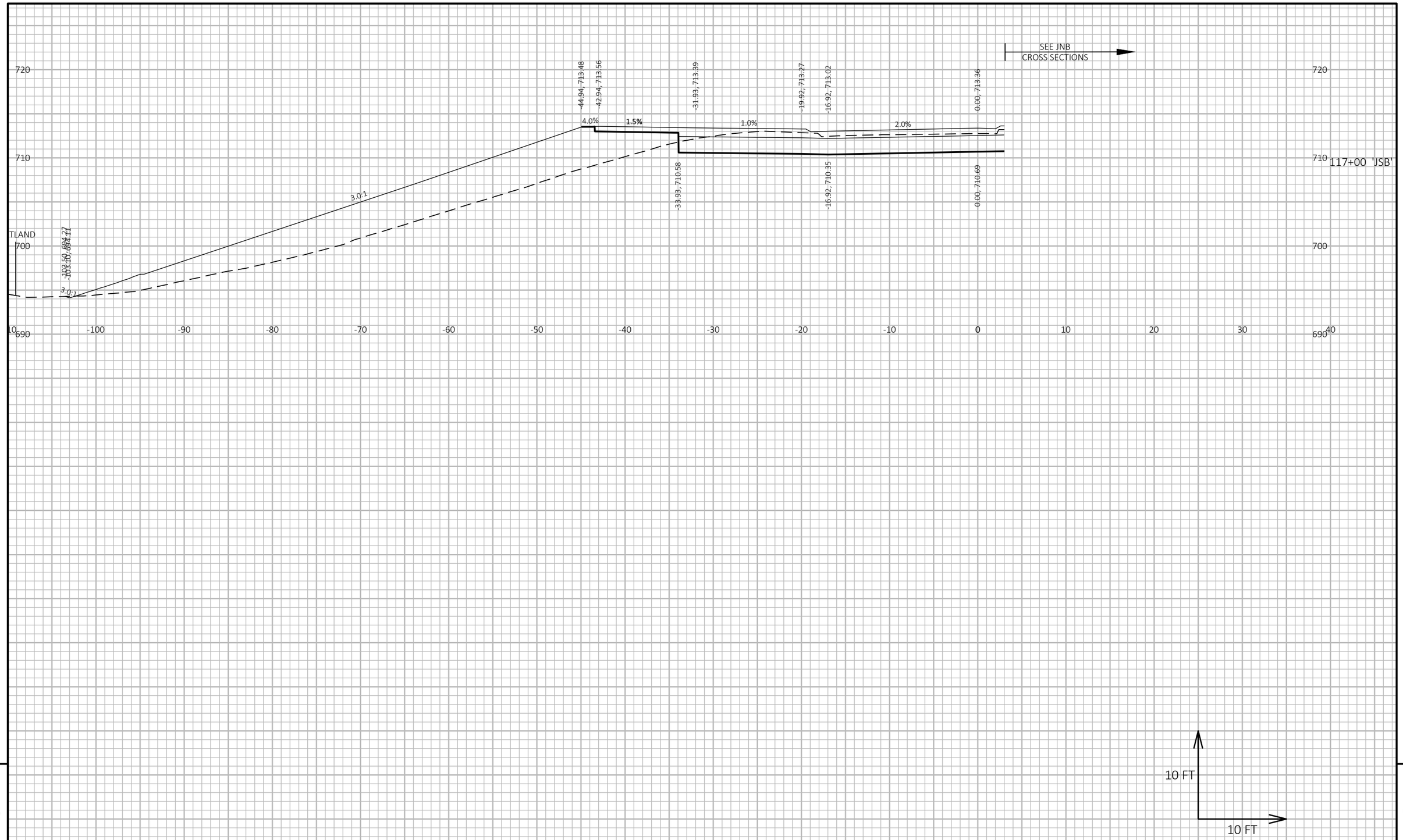
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JSB | SHEET 473 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090208-XS-JSB.DWG
LAYOUT NAME - 03

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9




9

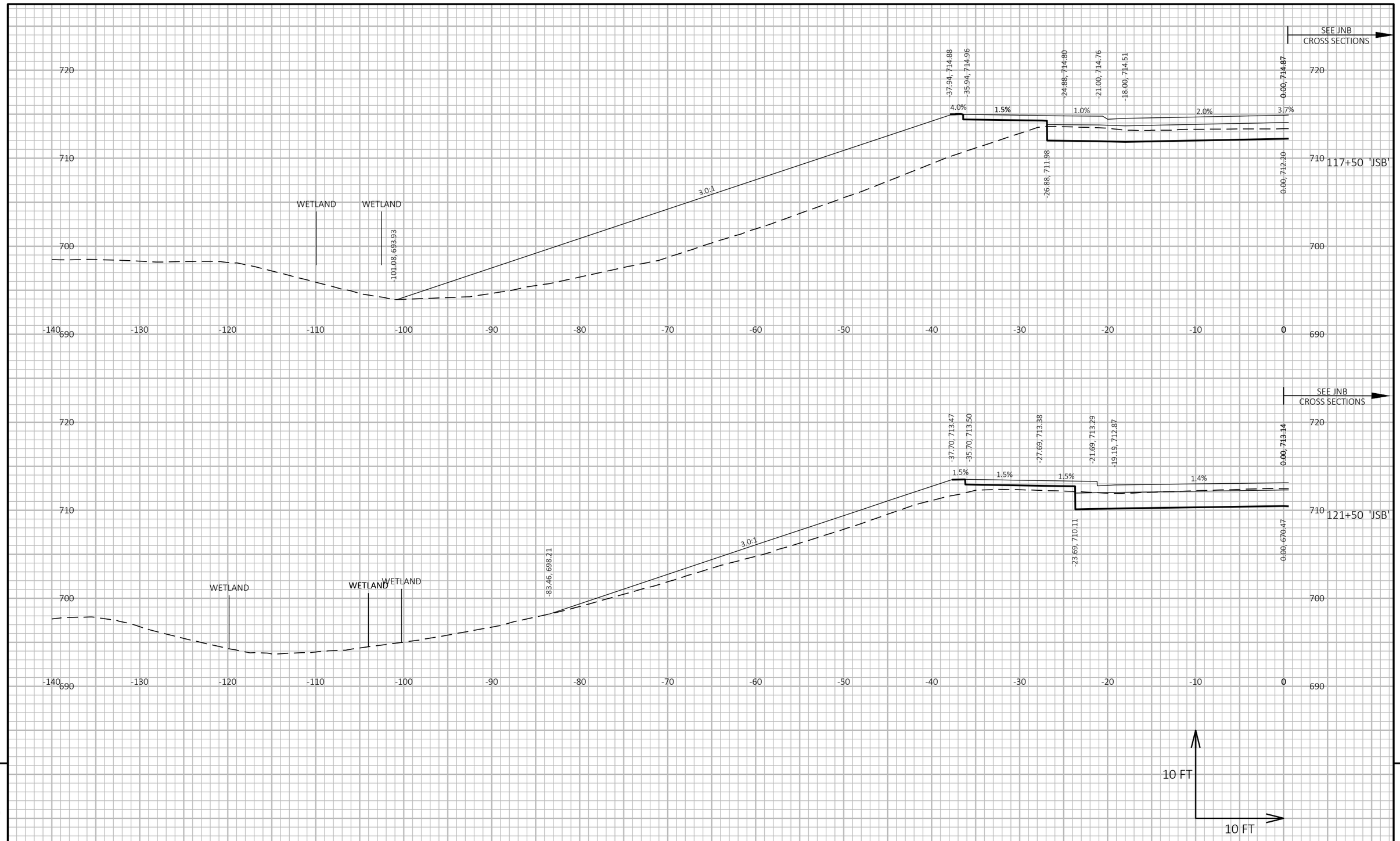
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JSB | SHEET 474 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090208-XS-JSB.DWG
LAYOUT NAME - 04

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

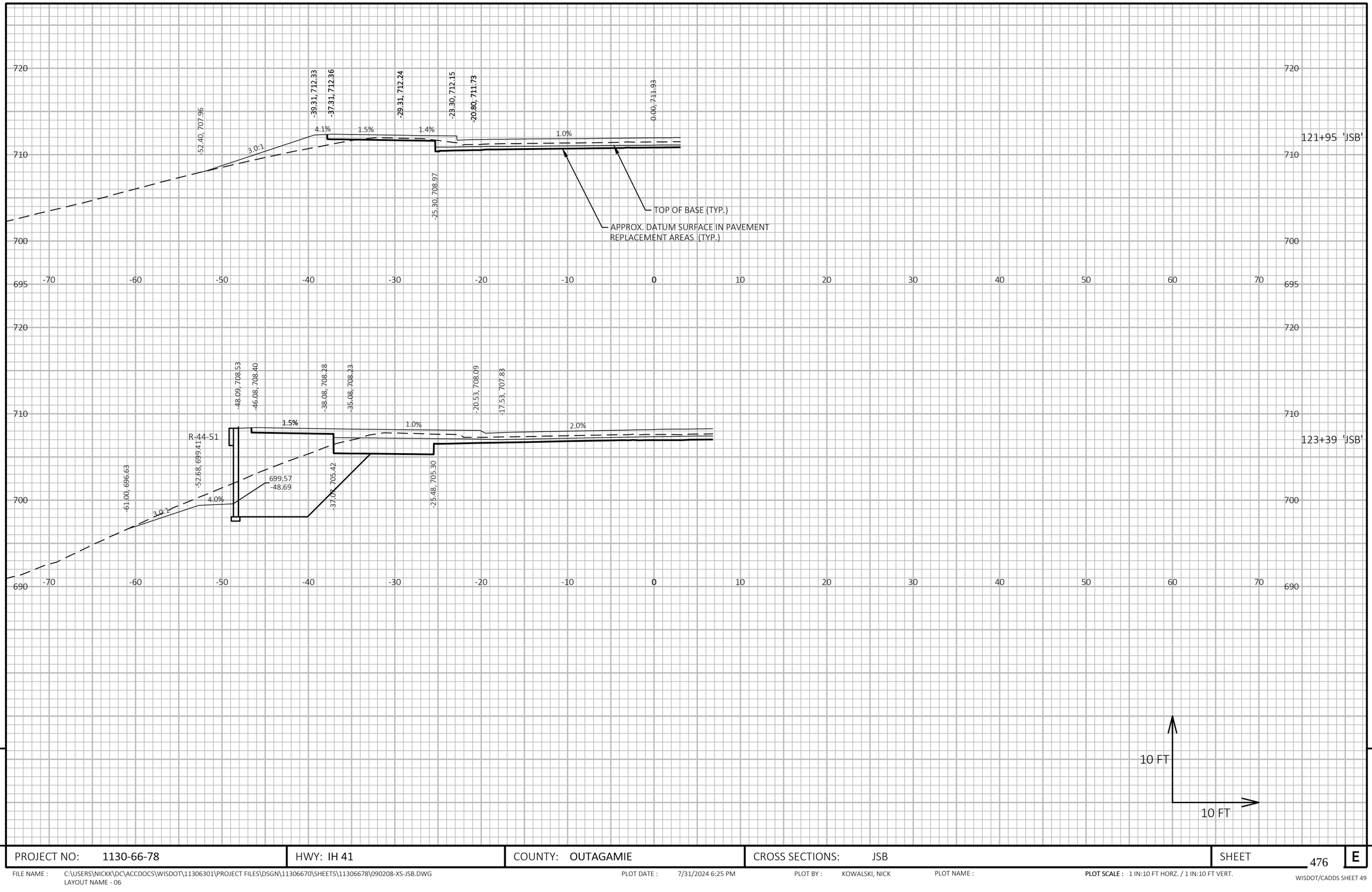
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JSB | SHEET 475 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090208-XS-JSB.DWG
LAYOUT NAME - 05

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

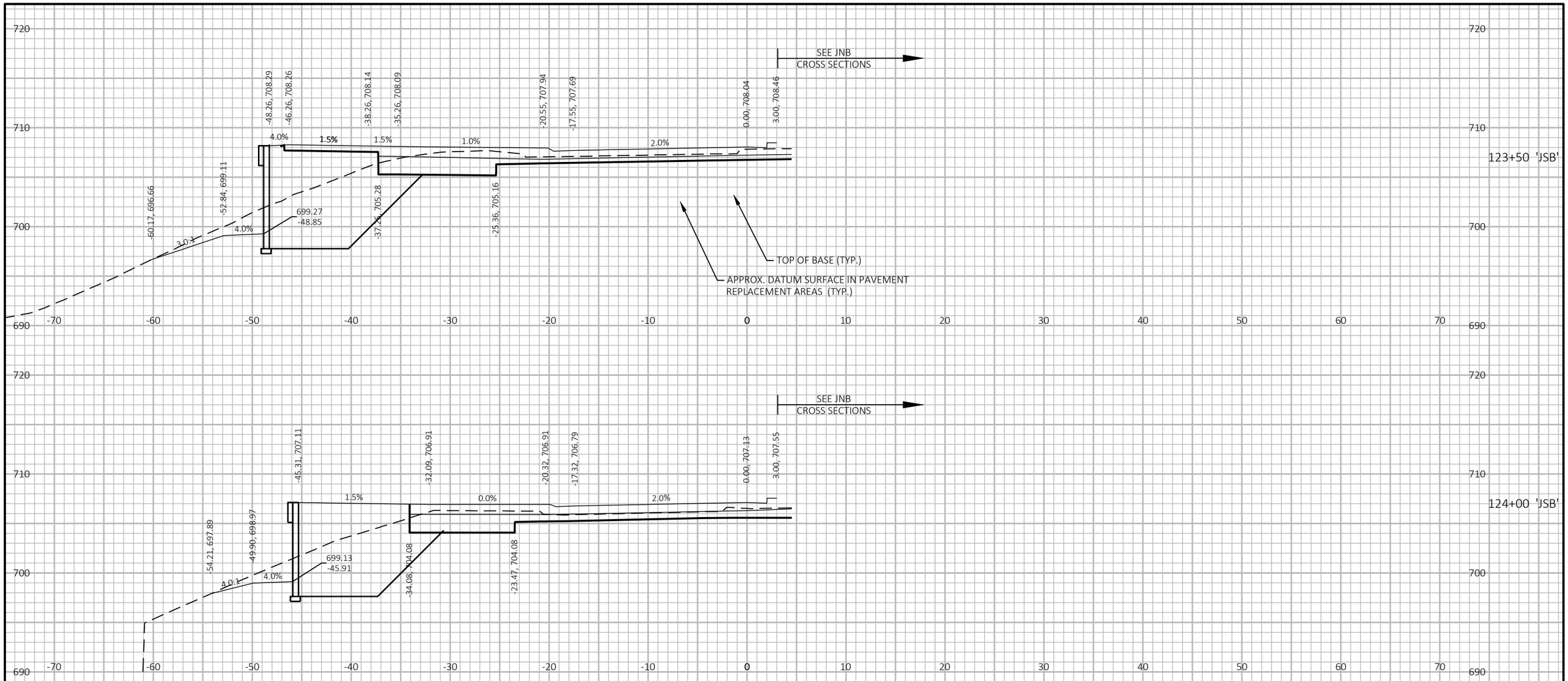
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JSB | SHEET 476 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090208-XS-JSB.DWG
LAYOUT NAME - 06

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9

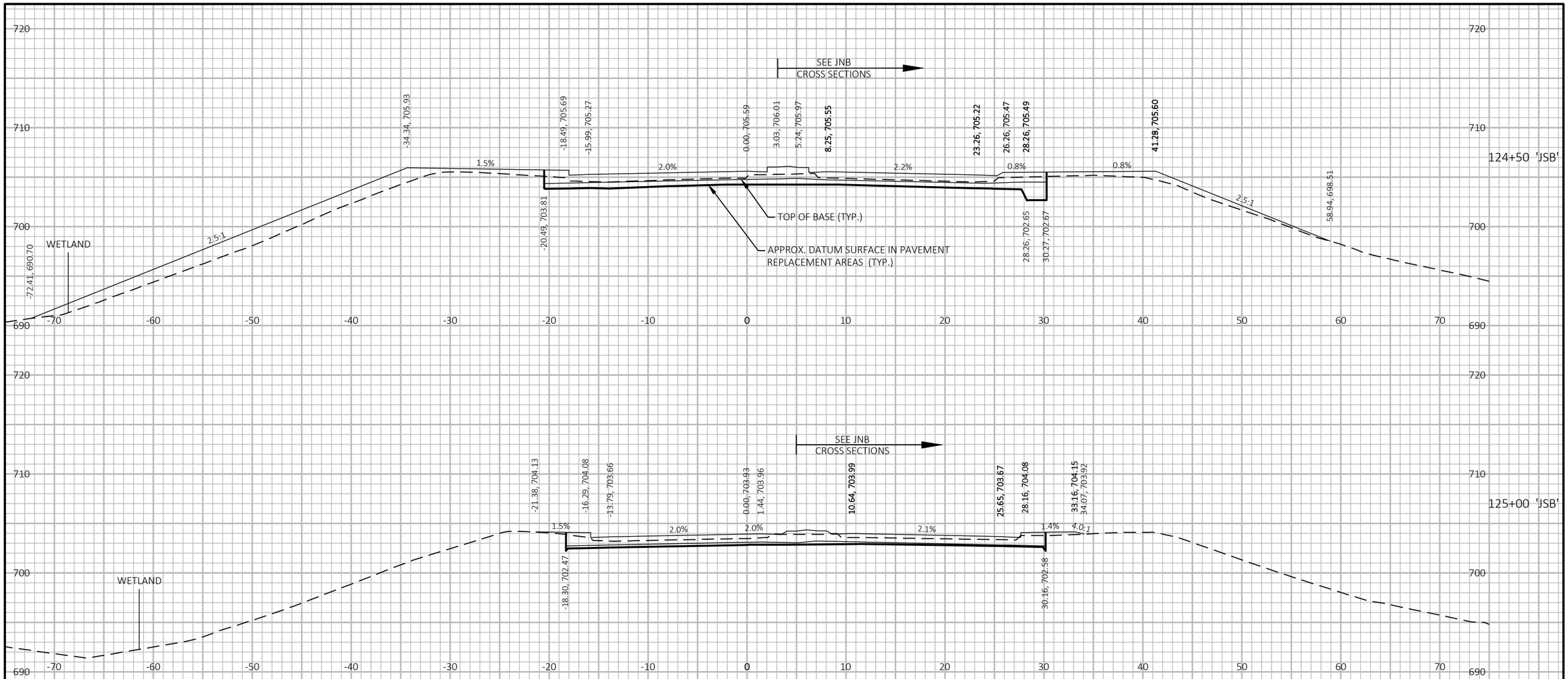



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JSB | SHEET 477 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090208-XS-JSB.DWG
LAYOUT NAME - 07

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

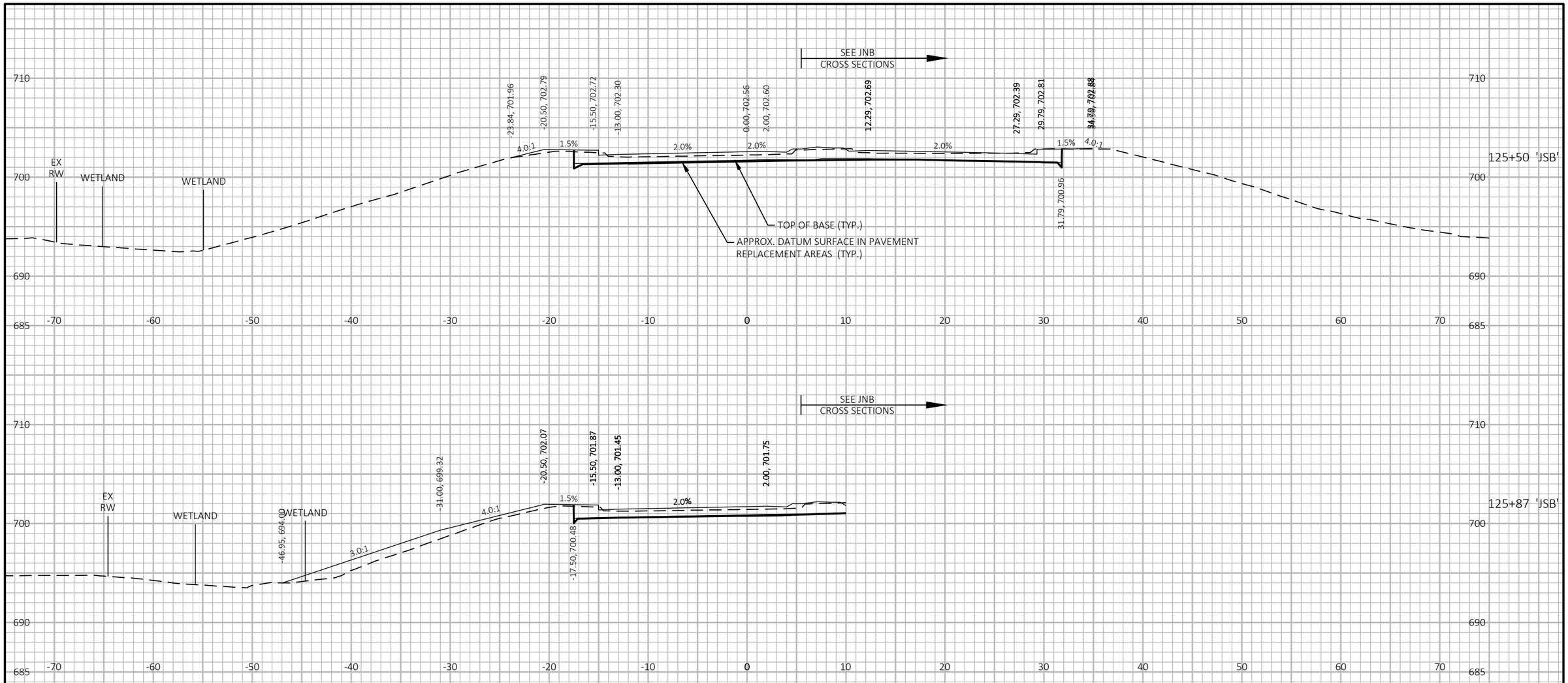
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JSB | SHEET 478 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090208-XS-JSB.DWG
LAYOUT NAME - 08

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

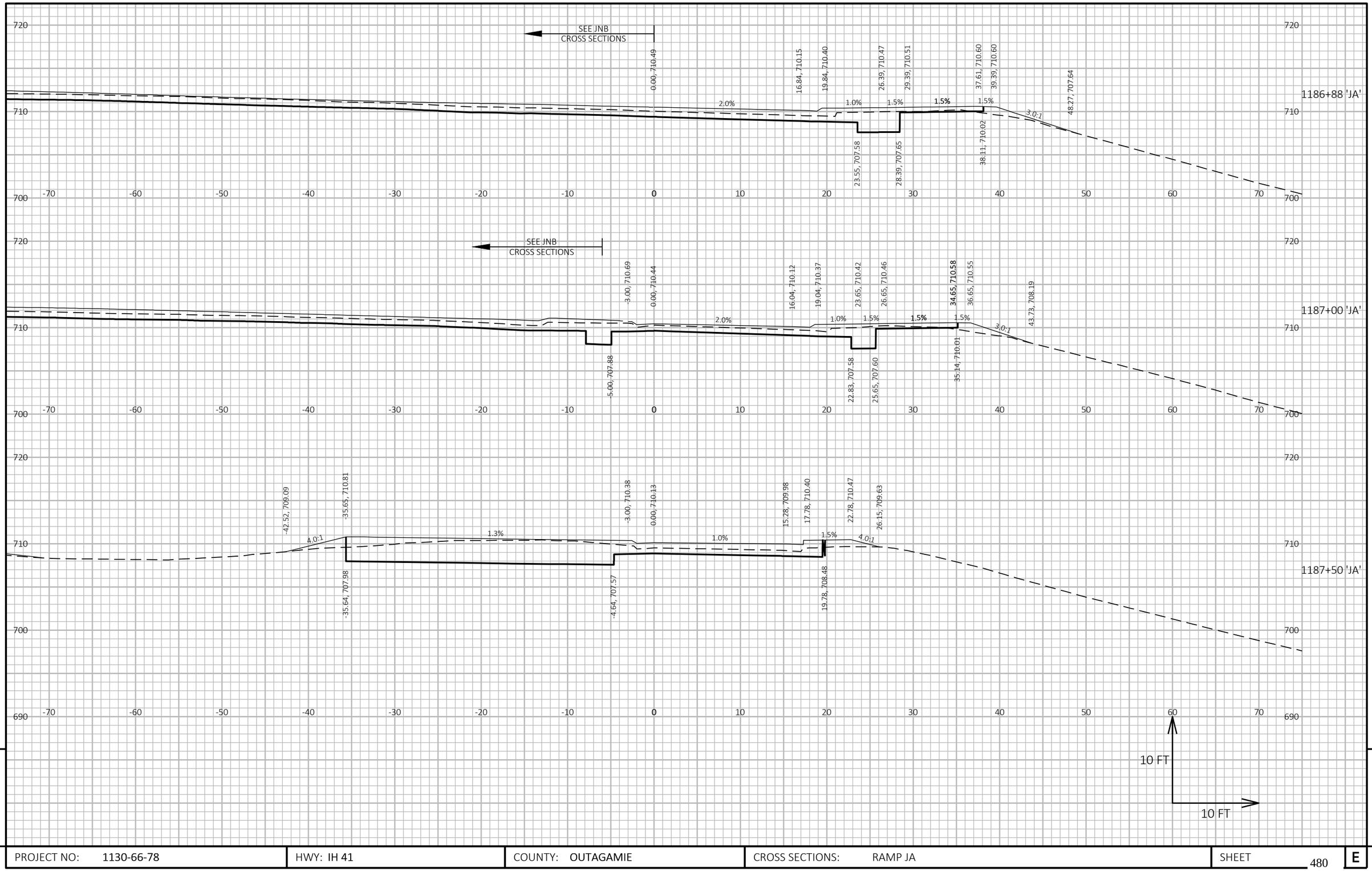
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: JSB | SHEET 479 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090208-XS-JSB.DWG
LAYOUT NAME - 09

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JA | SHEET 480 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090202-XS-JA.DWG
LAYOUT NAME - 01

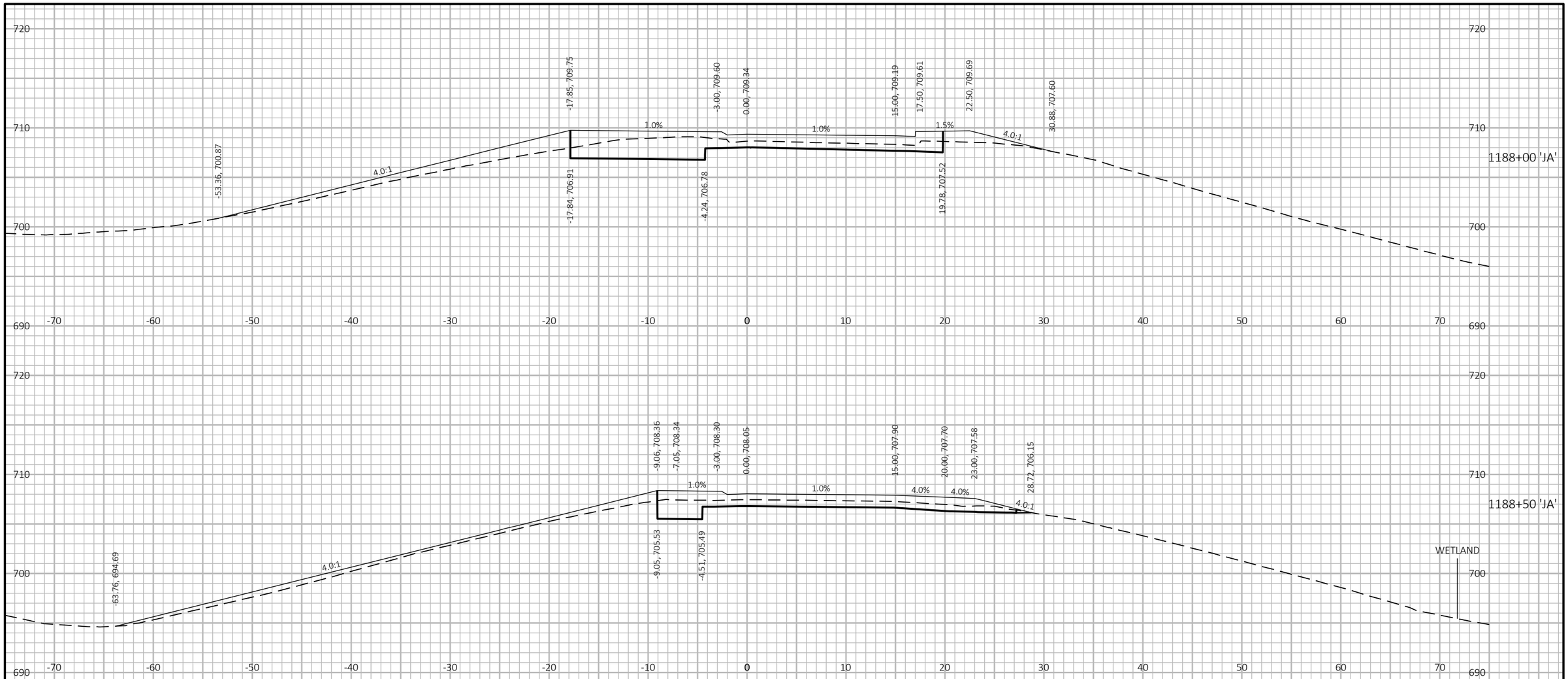
PLOT DATE : 7/31/2024 6:25 PM

PLOT BY : KOWALSKI, NICK

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

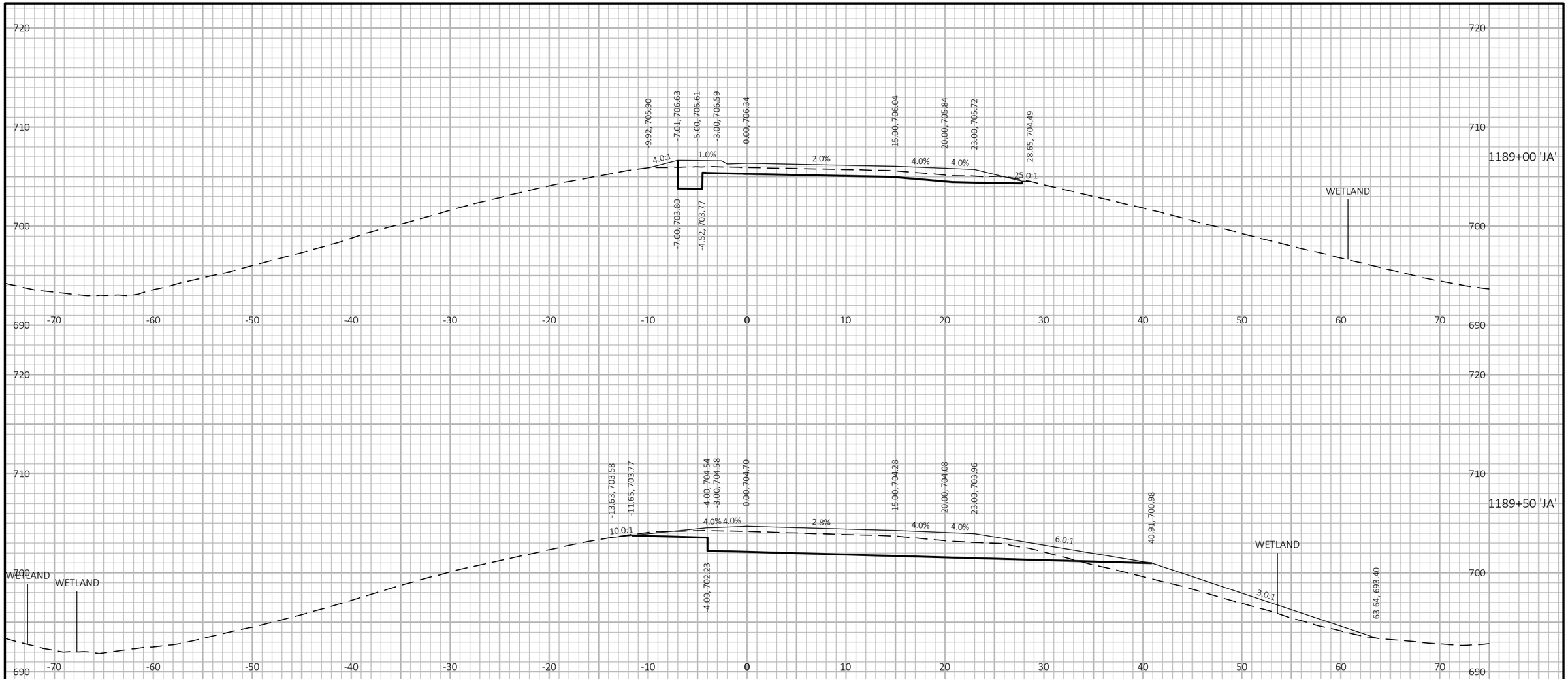



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JA | SHEET 481 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090202-XS-JA.DWG
LAYOUT NAME - 02

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

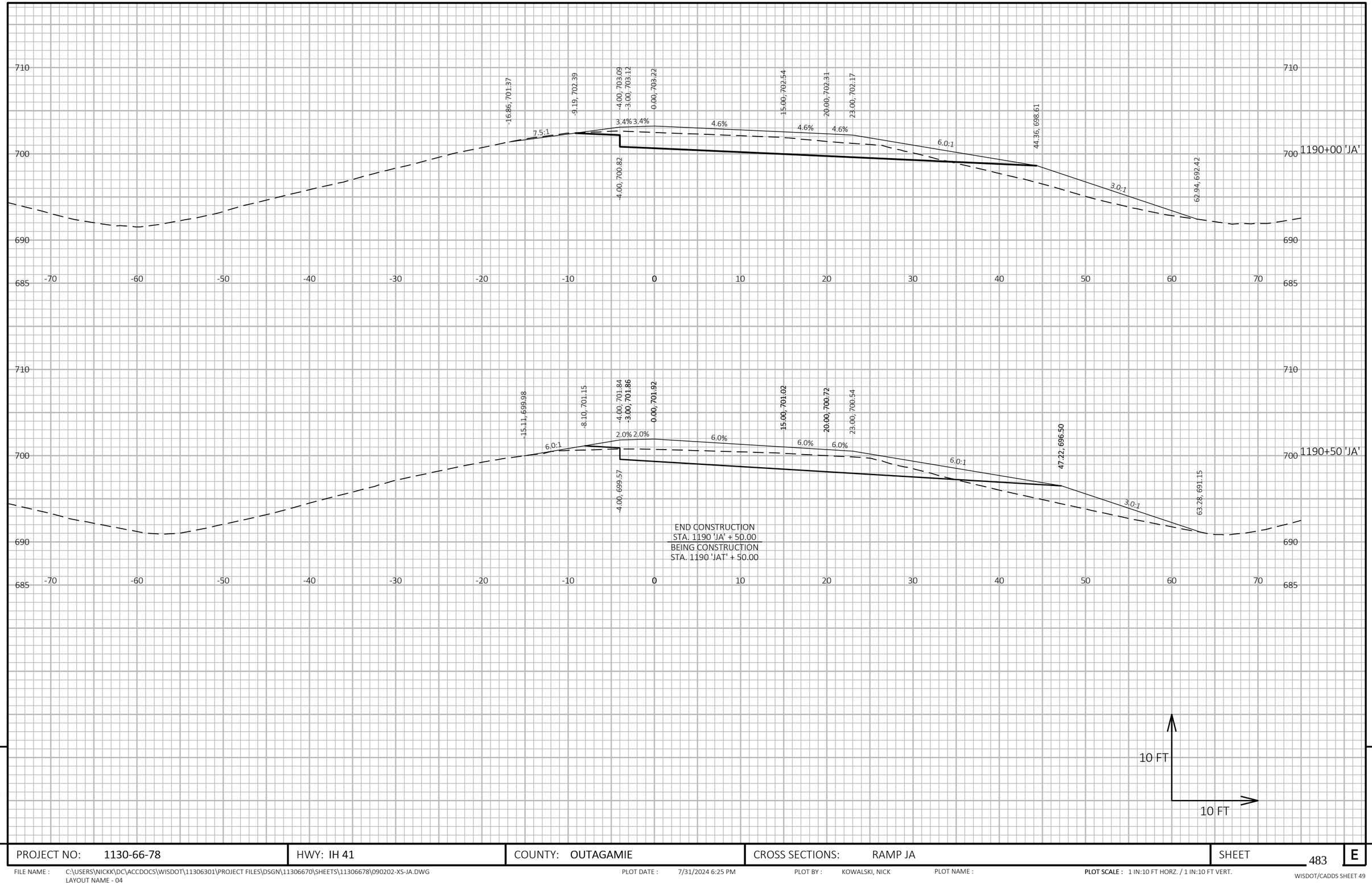
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JA | SHEET 482 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090202-XS-JA.DWG
LAYOUT NAME - 03

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

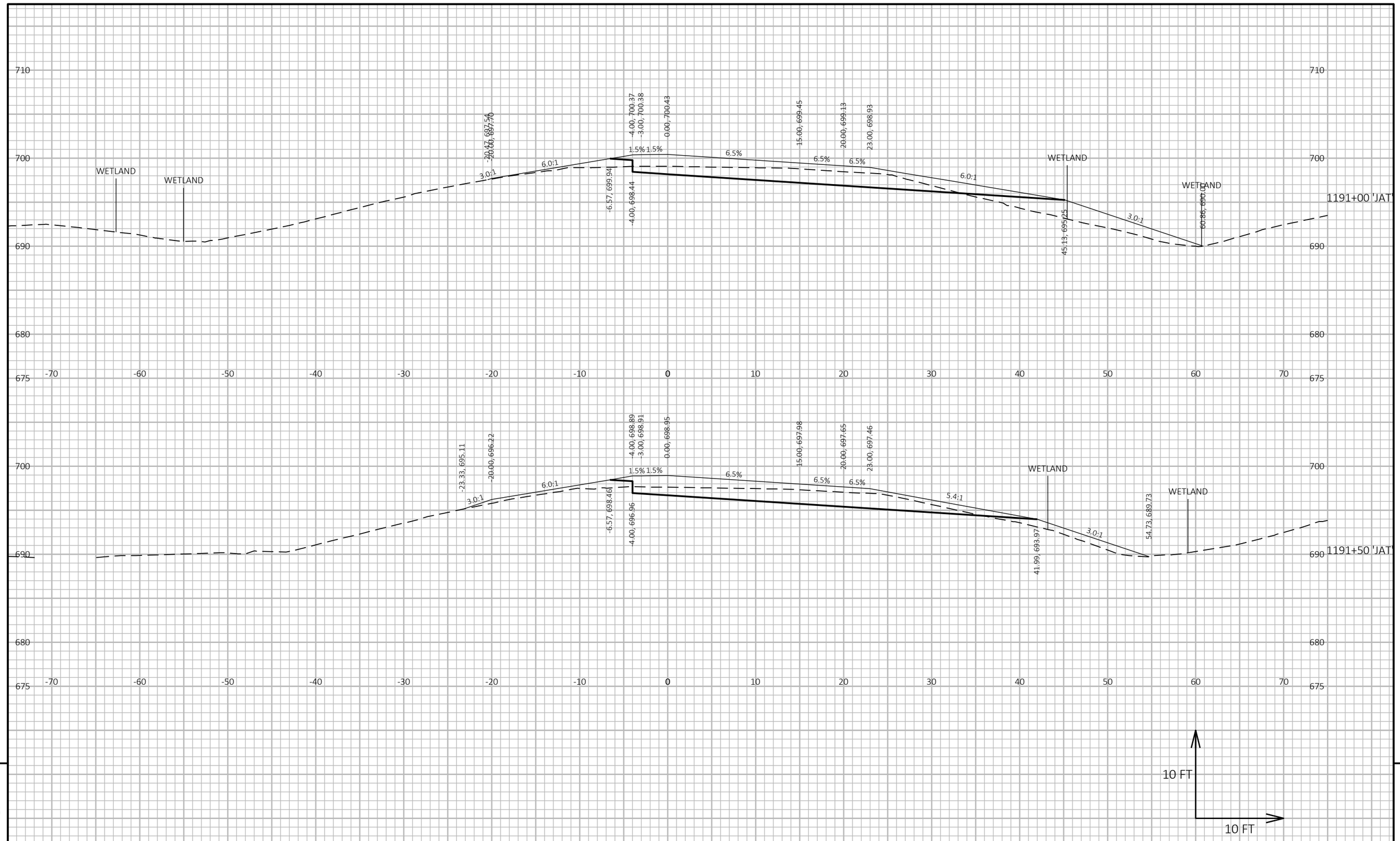



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JA | SHEET 483 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090202-XS-JA.DWG
LAYOUT NAME - 04

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

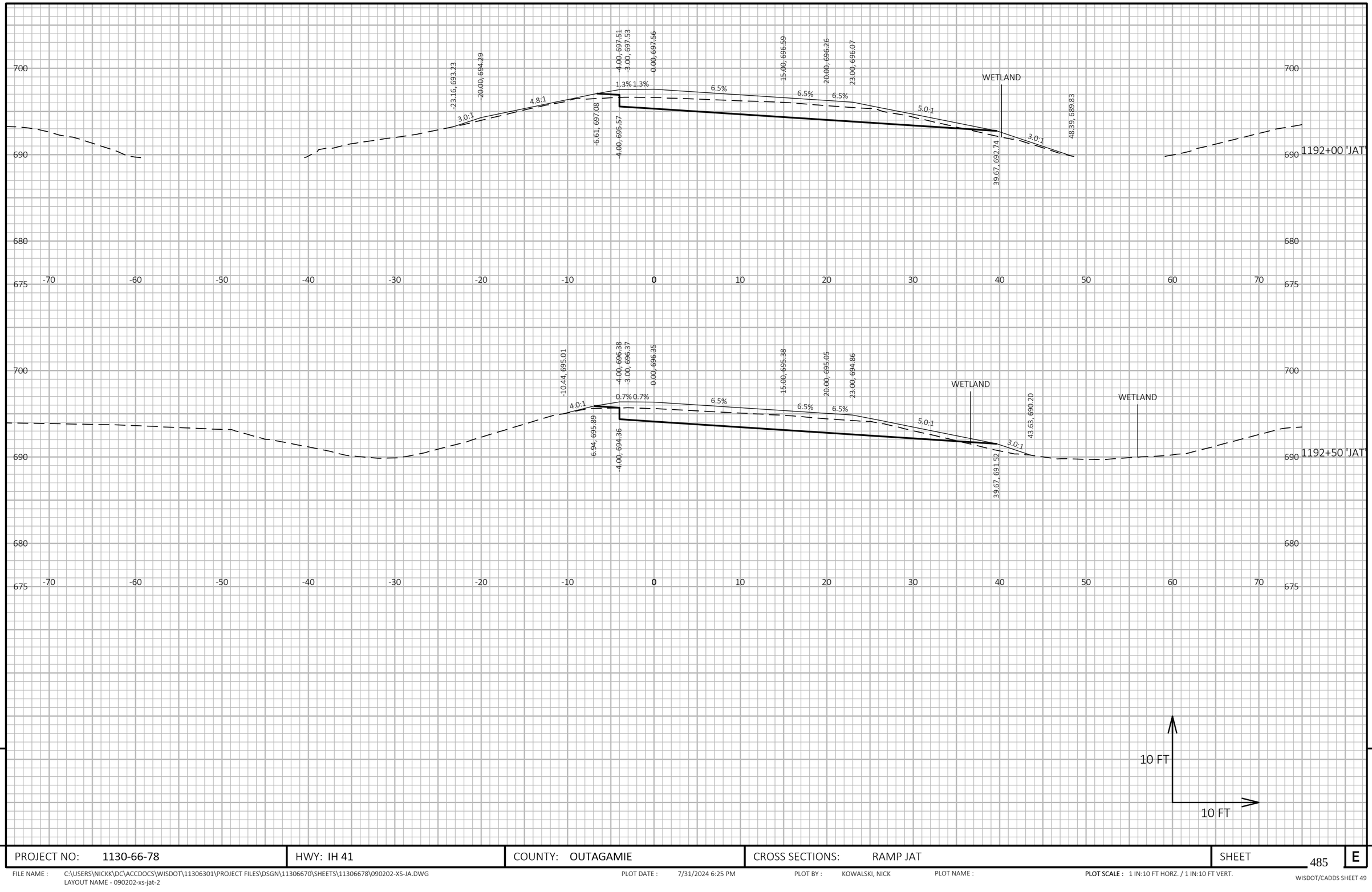
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JAT | SHEET 484 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090202-XS-JA.DWG
LAYOUT NAME - 090202-xs-jat-1

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



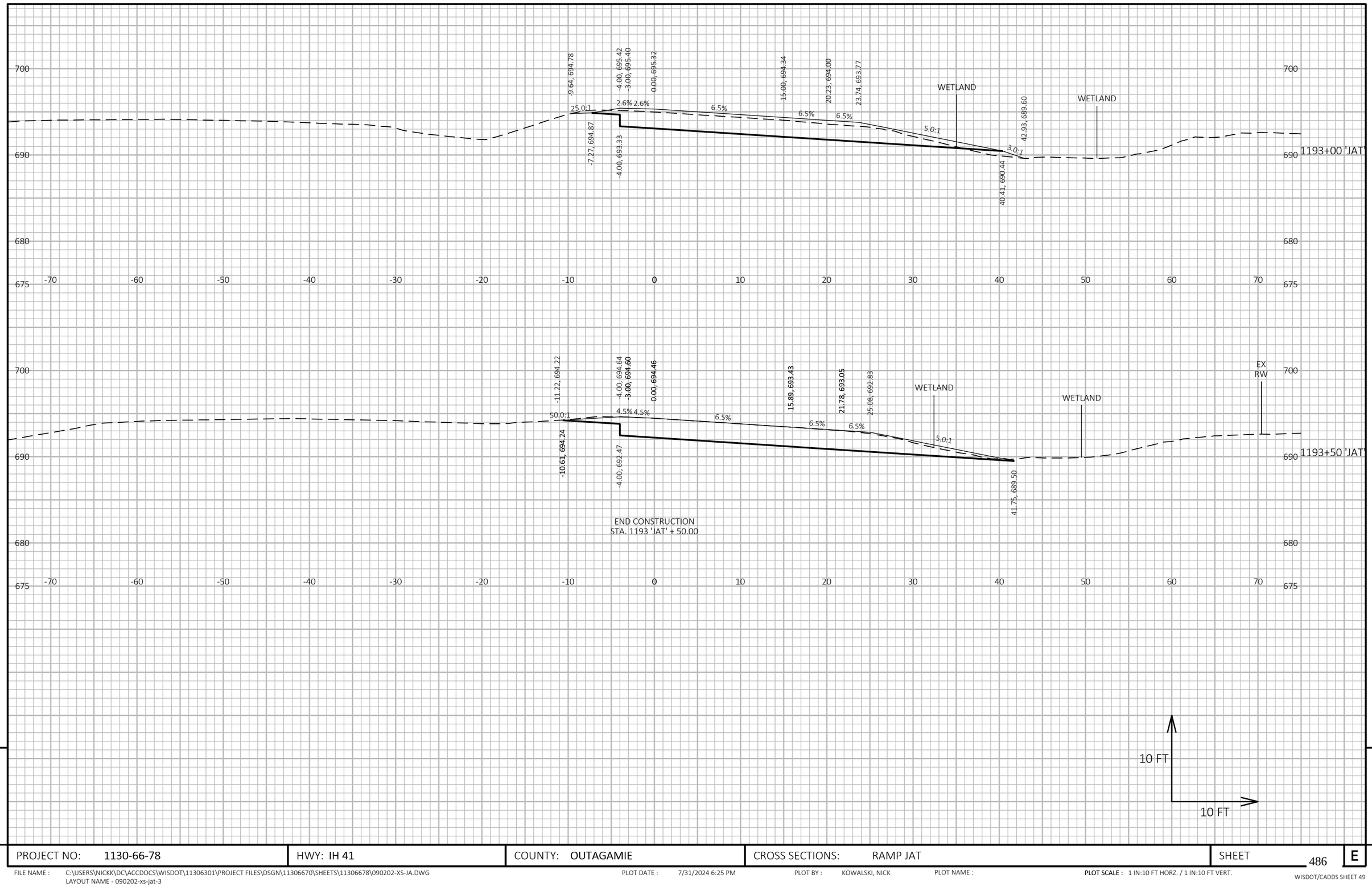

9

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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JAT | SHEET 485 | E |
|---|---|---|---|---|---|

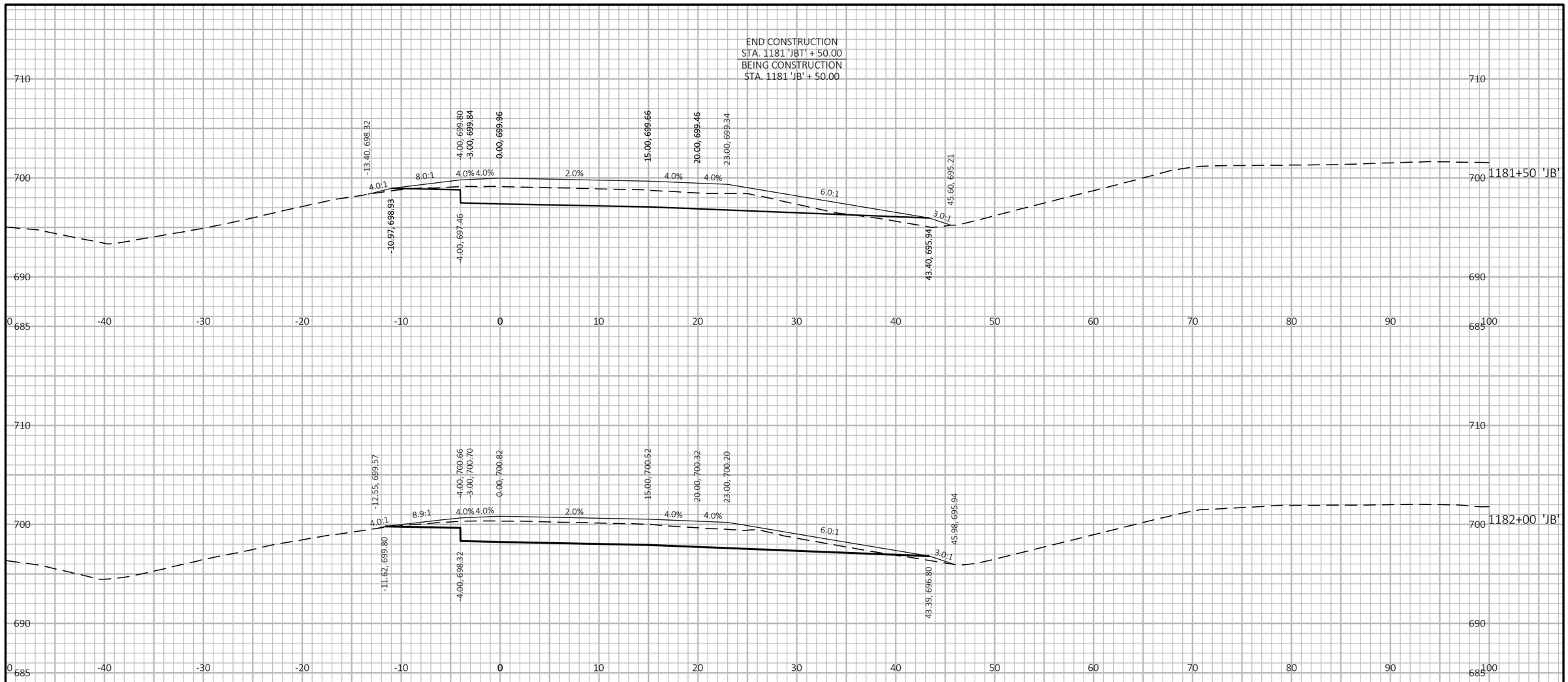
FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090202-XS-JA.DWG
LAYOUT NAME - 090202-xs-jat-2

PLOT DATE : 7/31/2024 6:25 PM PLOT BY : KOWALSKI, NICK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JAT | SHEET 486 | E |
|---|---|---|---|---|---|

END CONSTRUCTION
STA. 1181 'JBT' + 50.00
BEING CONSTRUCTION
STA. 1181 'JB' + 50.00




9

9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JB | SHEET 487 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090203-XS-JB.DWG
LAYOUT NAME - 01

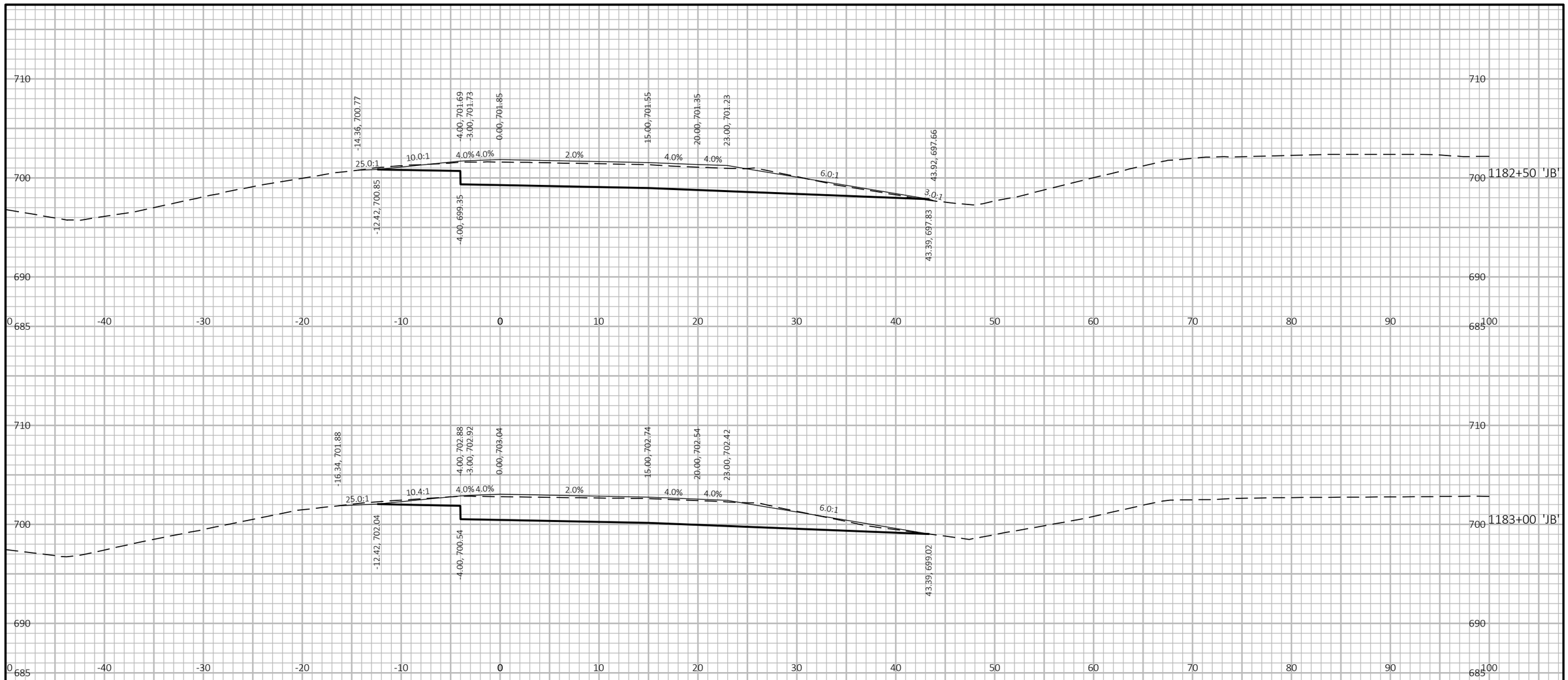
PLOT DATE : 7/31/2024 6:26 PM

PLOT BY : KOWALSKI, NICK

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

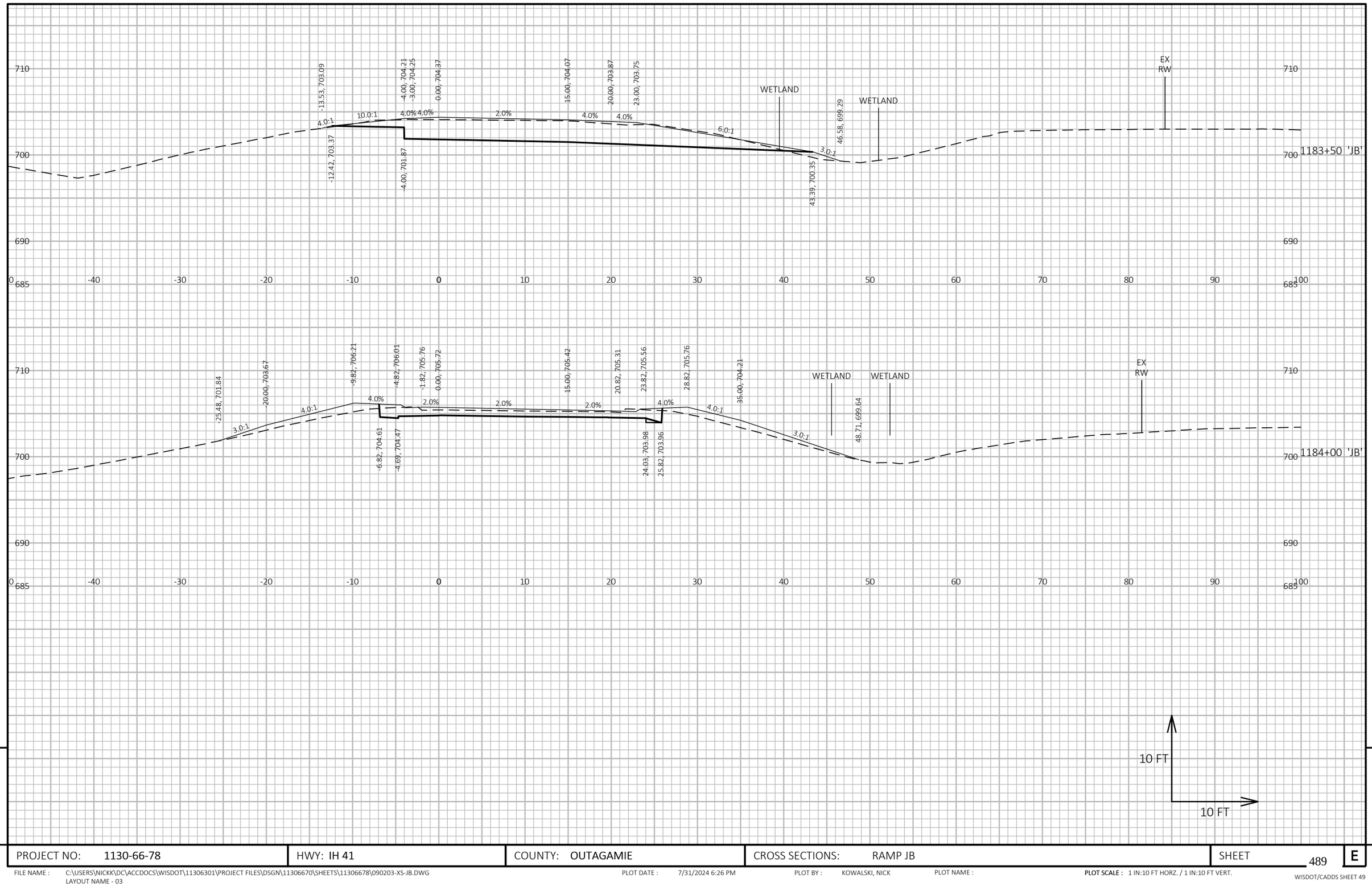
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JB | SHEET 488 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090203-XS-JB.DWG
LAYOUT NAME - 02

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JB | SHEET 489 | E |
|---|---|---|---|---|---|

9

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090203-XS-JB.DWG
LAYOUT NAME - 03

PLOT DATE : 7/31/2024 6:26 PM

PLOT BY : KOWALSKI, NICK

PLOT NAME :

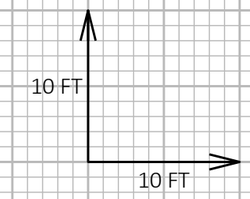
**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49










9

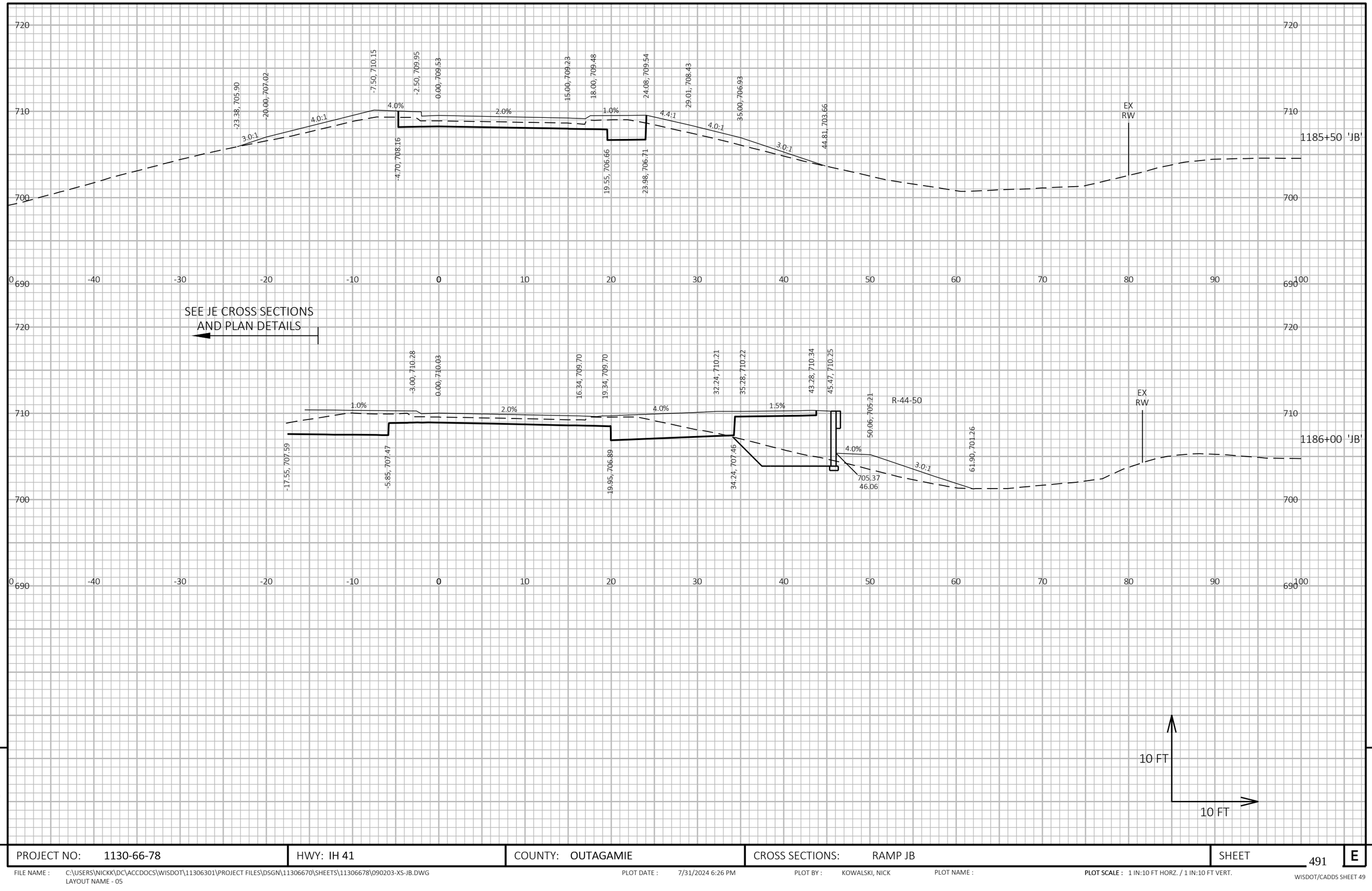
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JB | SHEET 490 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090203-XS-JB.DWG
LAYOUT NAME - 04

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



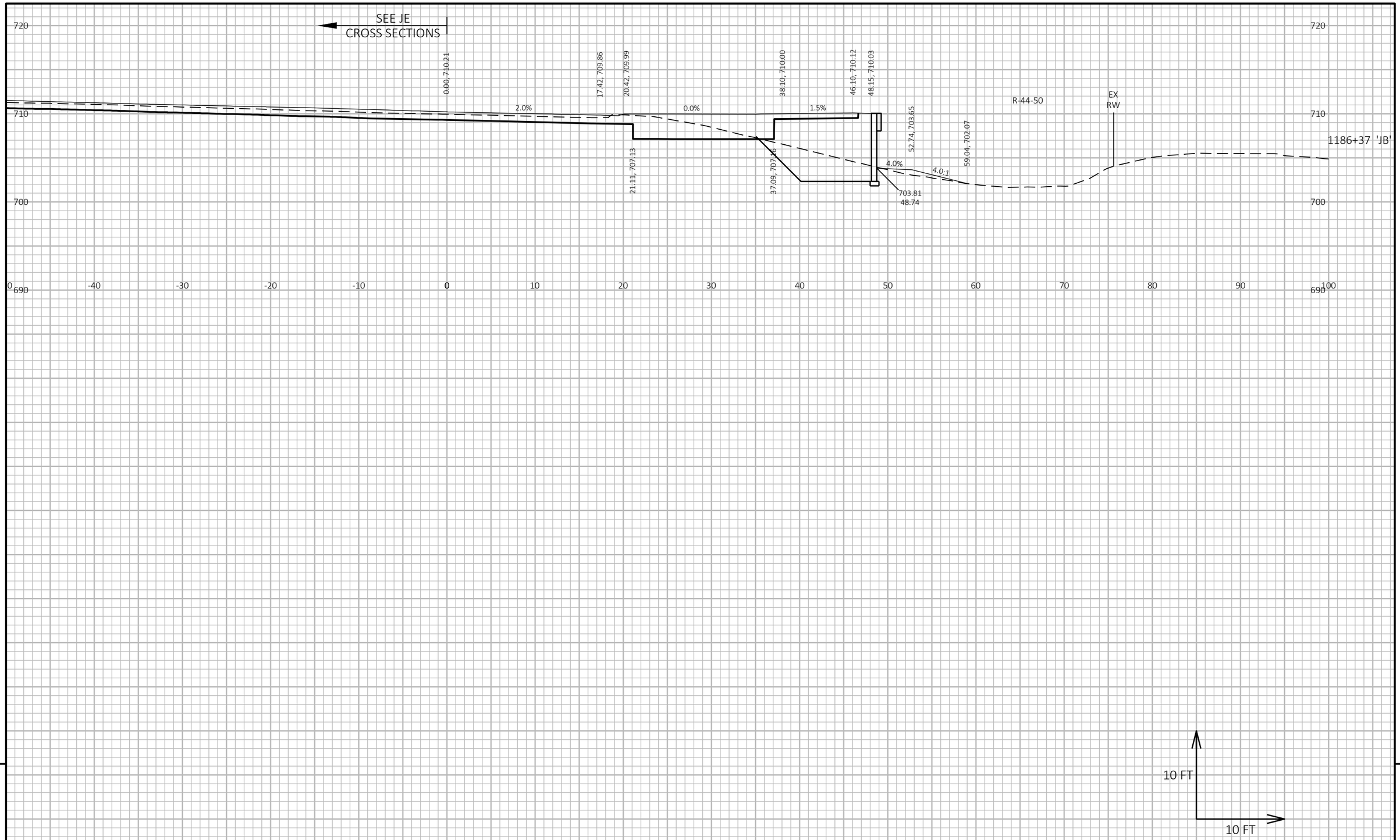

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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JB | SHEET 491 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090203-XS-JB.DWG
LAYOUT NAME - 05

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JB | SHEET 492 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090203-XS-JB.DWG
LAYOUT NAME - 06

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

BEGIN CONSTRUCTION
STA. 1178 'JBT' + 75.00

1178+75 'JBT

-20.00, 695.86
-13.44, 695.57
-4.00, 695.95
-3.00, 695.94
0.00, 695.91
15.00, 695.27
20.00, 694.99
23.00, 694.83
WETLAND
WETLAND
-4.00, 693.83
40.42, 691.92
44.98, 692.59

23.3:1
1.0% 1.0%
4.3%
5.5%
5.5%
6.0:1
6.7:1

720
710
700
690
685
0 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100

1179+00 'JBT

-15.79, 695.40
-10.74, 695.61
-4.00, 696.06
-3.00, 696.06
0.00, 696.06
15.00, 695.42
20.00, 695.19
23.00, 695.06
WETLAND
WETLAND
-4.00, 693.98
41.06, 692.04
43.00, 692.00
44.26, 692.39

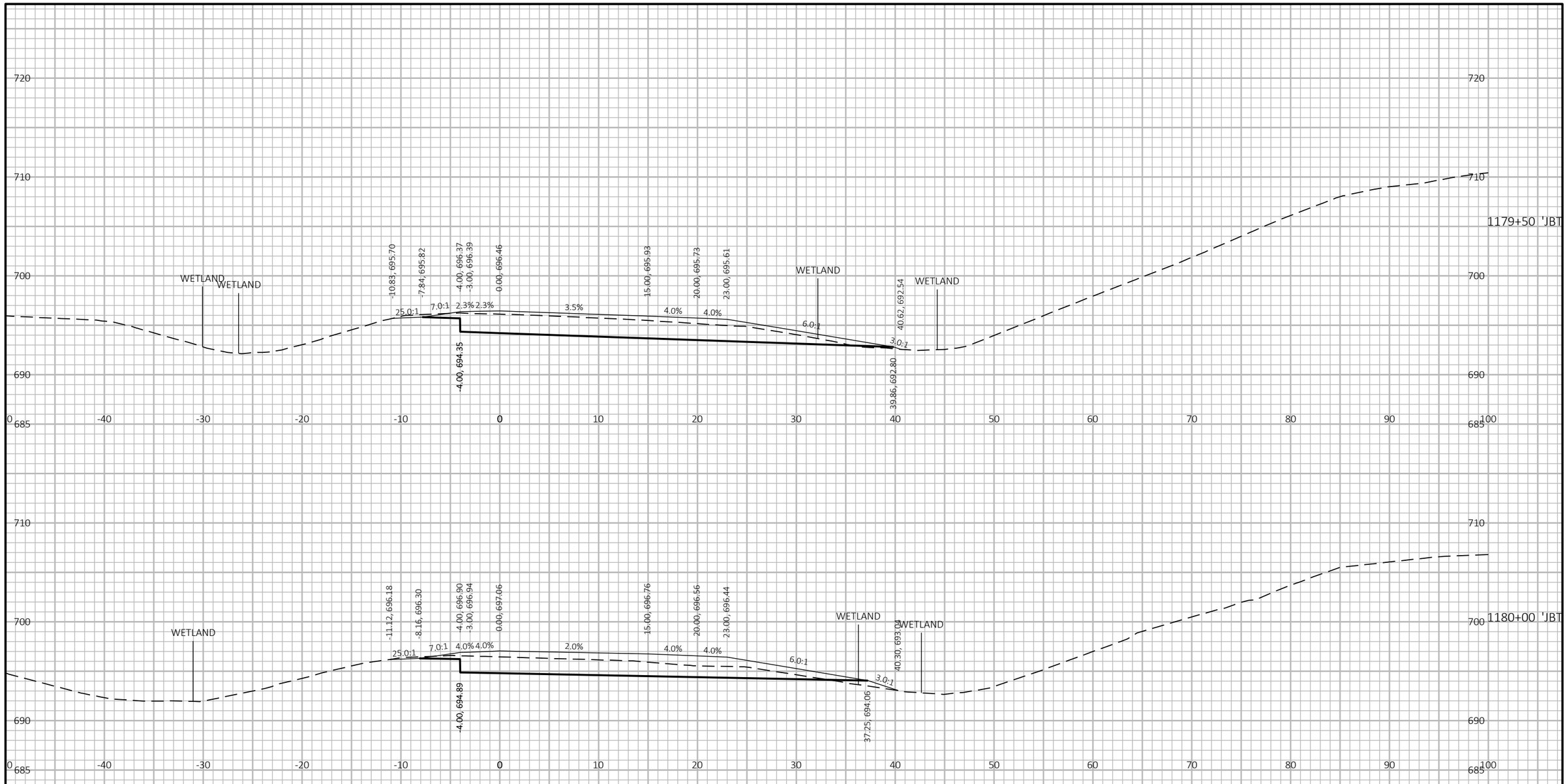
25.0:1
14.6:1
0.1% 0.1%
4.3%
4.5%
4.5%
6.0:1

10 FT
10 FT

9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JBT | SHEET 493 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090203-XS-JB.DWG
LAYOUT NAME - 090203-xs-jbt1
PLOT DATE : 7/31/2024 6:26 PM
PLOT BY : KOWALSKI, NICK
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.




9

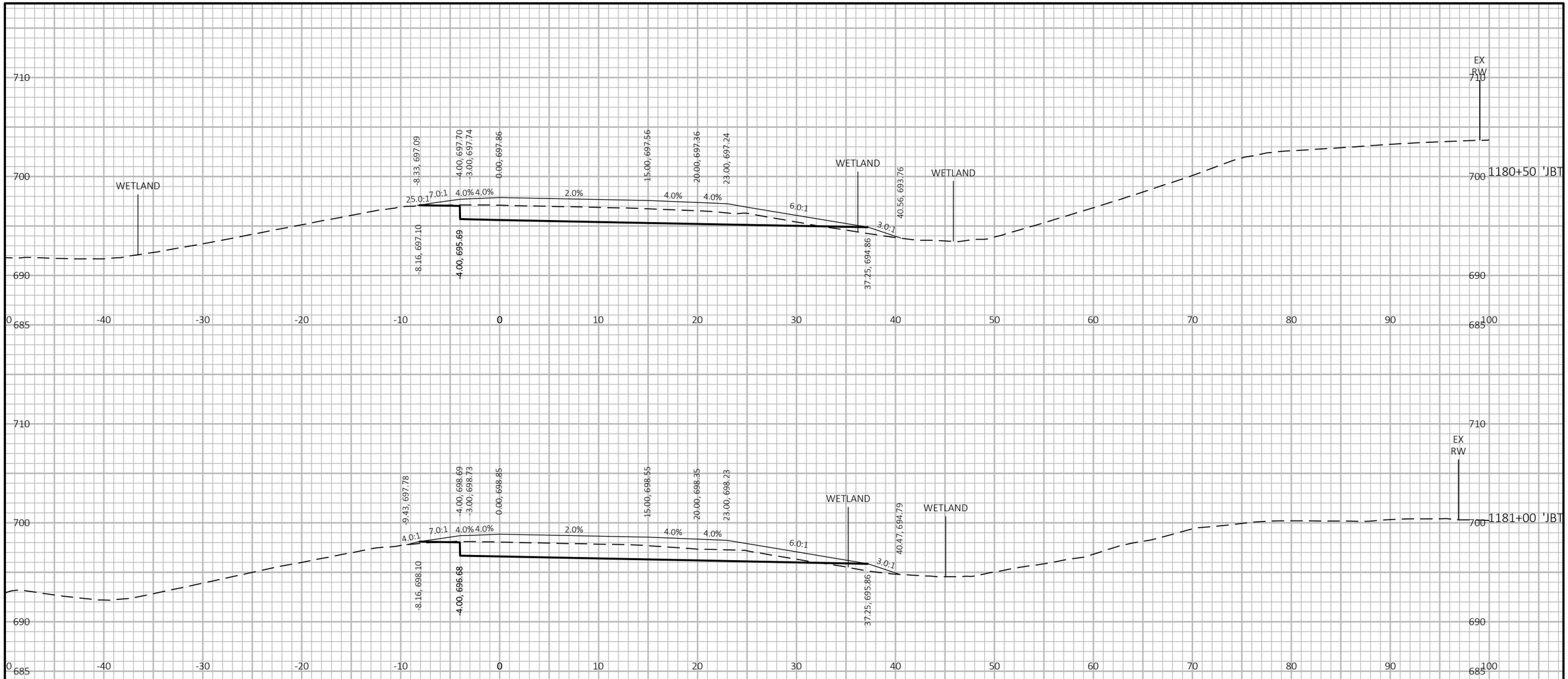
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JBT | SHEET 494 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090203-XS-JB.DWG
LAYOUT NAME - 090203-xs-jbt2

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JBT | SHEET 495 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090203-XS-JB.DWG
LAYOUT NAME - 090203-xs-jbt3

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END CONSTRUCTION
STA. 1183 'JCT' + 00.00
BEING CONSTRUCTION
STA. 1183 'JC' + 00.00




9

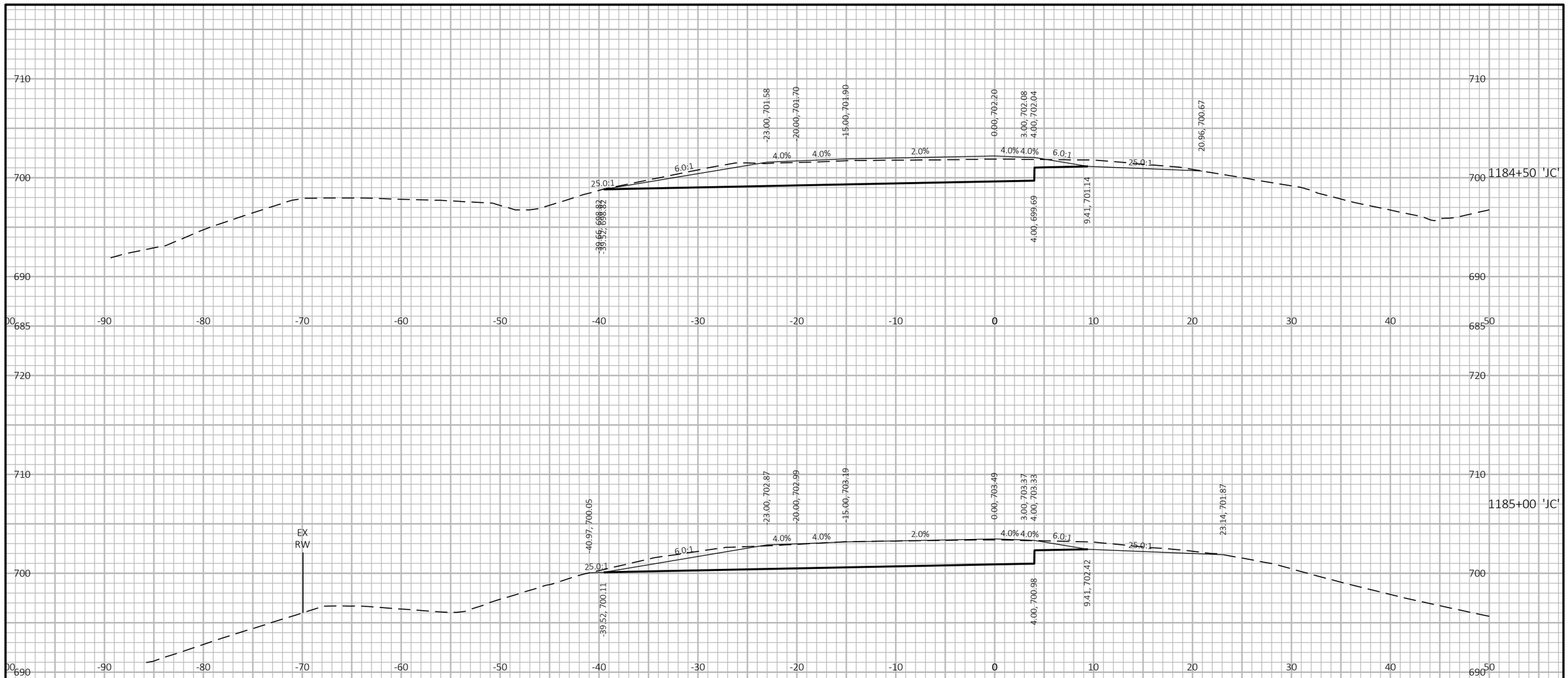
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JC | SHEET 496 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090204-XS-JC.DWG
LAYOUT NAME - 090204-xs-jc-1

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

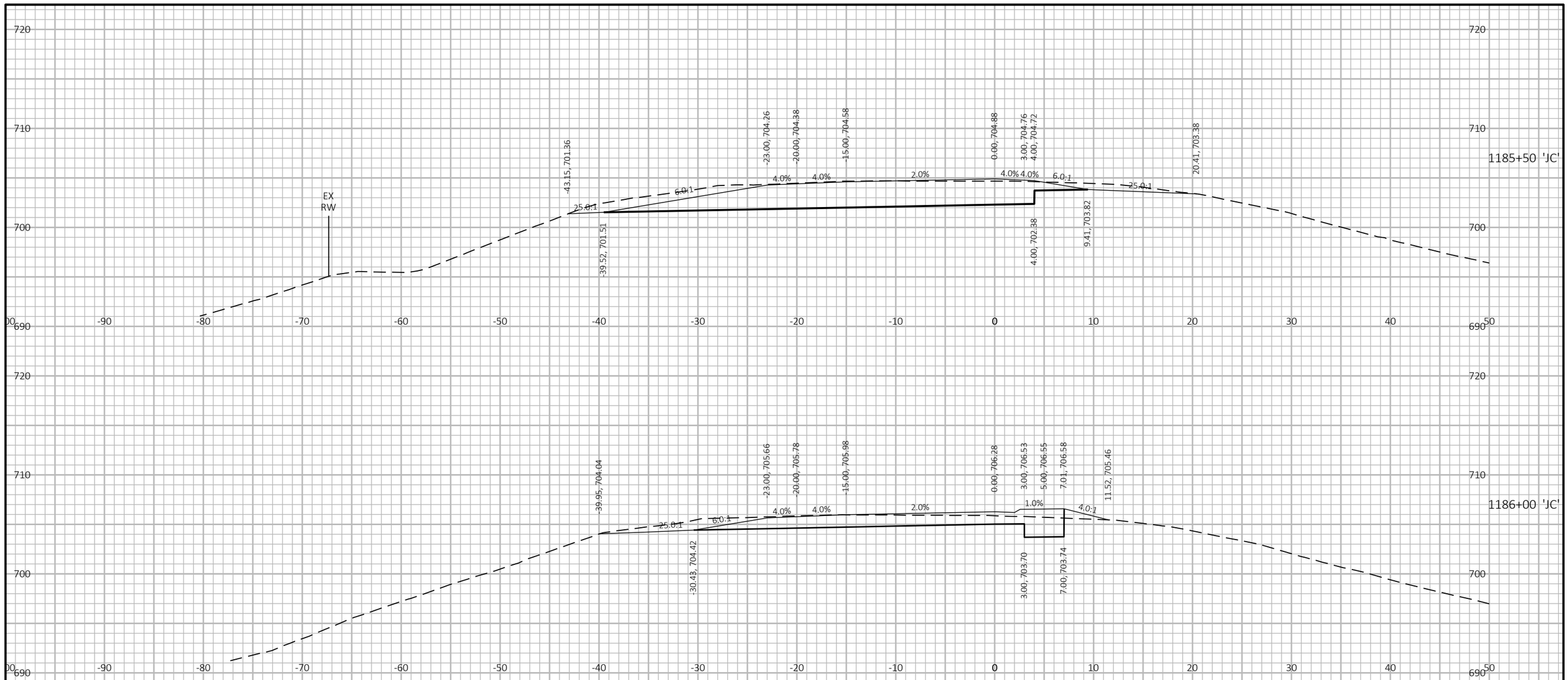



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JC | SHEET 497 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090204-XS-JC.DWG
LAYOUT NAME - 090204-xs-jc-2

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

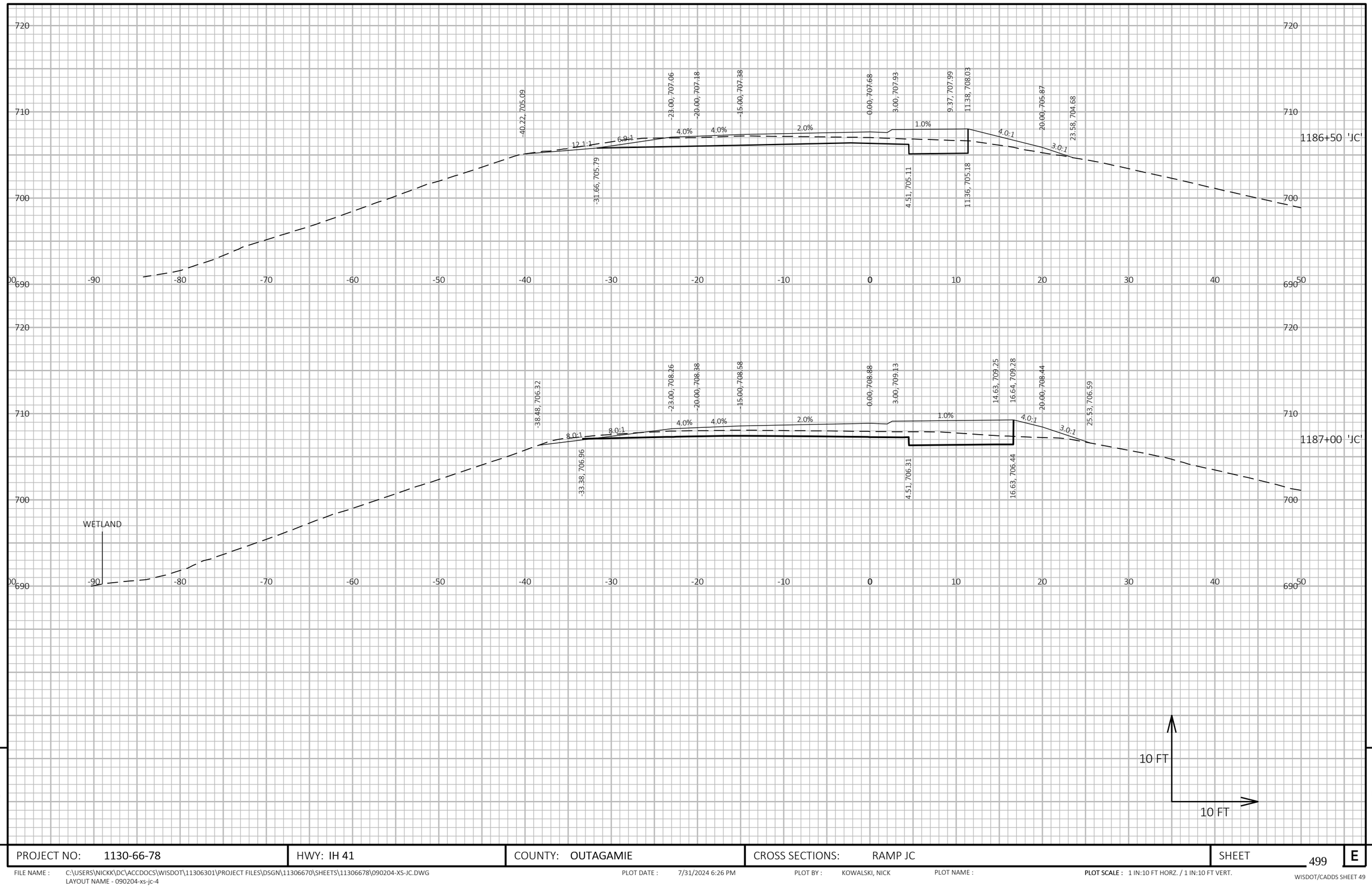



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JC | SHEET 498 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090204-XS-JC.DWG
LAYOUT NAME - 090204-xs-jc-3

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

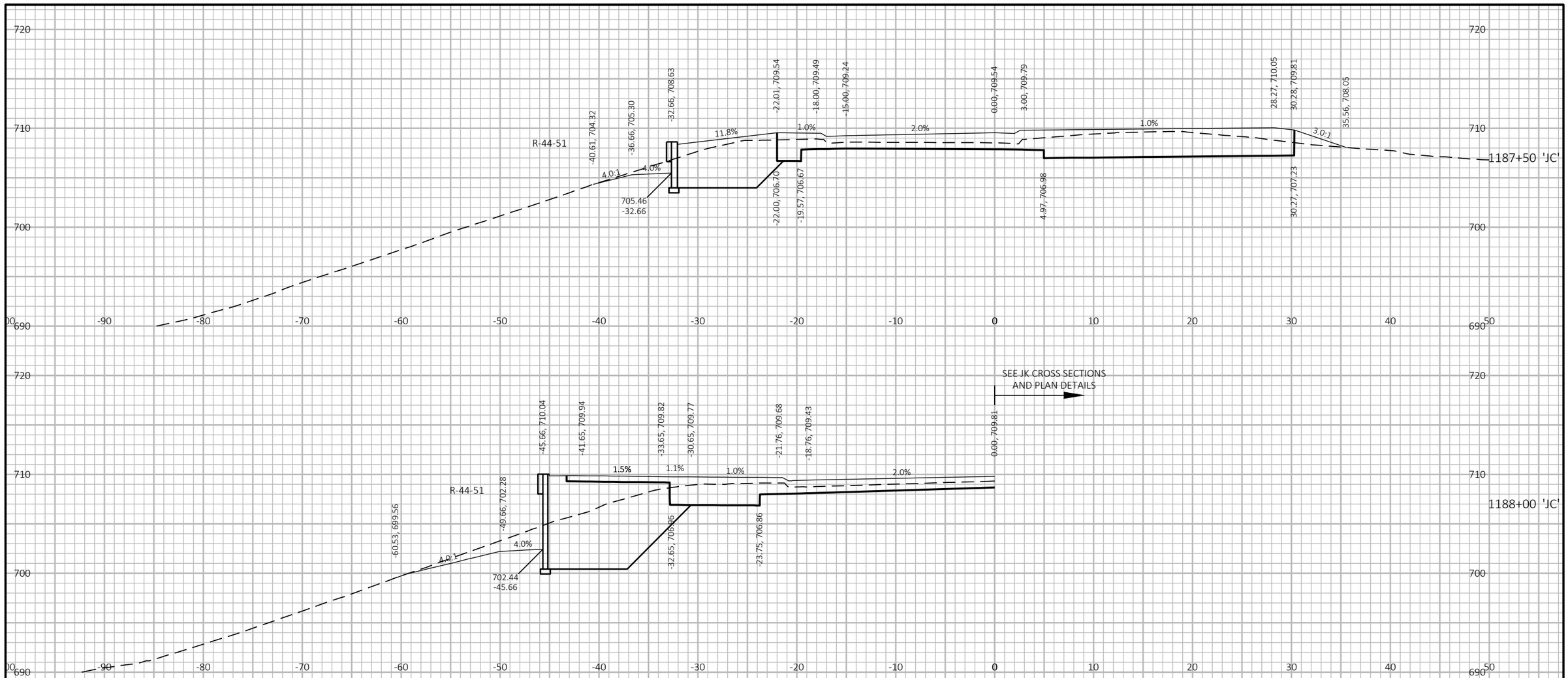
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JC | SHEET 499 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090204-XS-JC.DWG
LAYOUT NAME - 090204-xs-jc-4

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



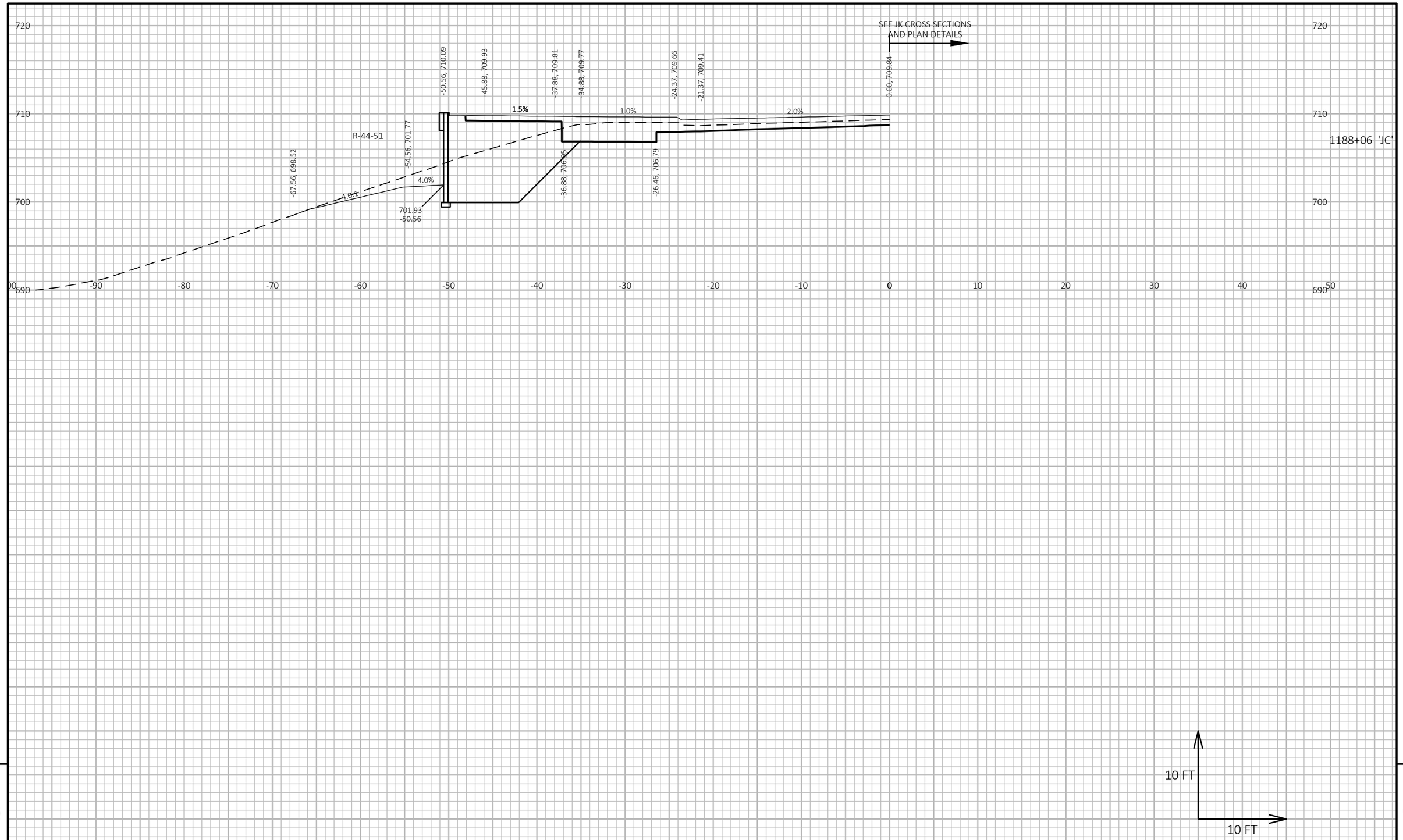

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JC | SHEET 500 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090204-XS-JC.DWG
LAYOUT NAME - 090204-xs-jc-5

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

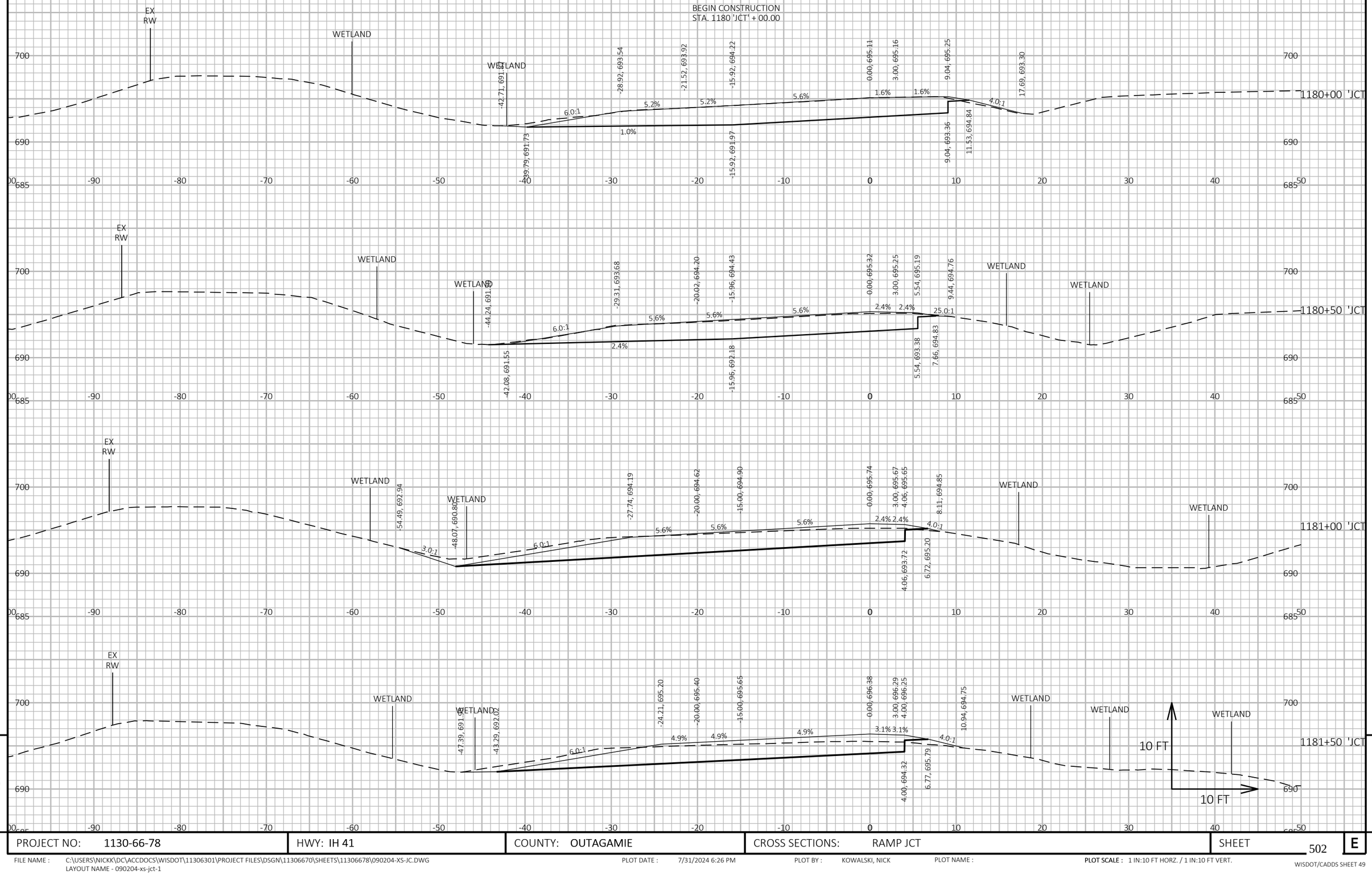
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JC | SHEET 501 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090204-XS-JC.DWG
LAYOUT NAME - 090204-xs-jc-6

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

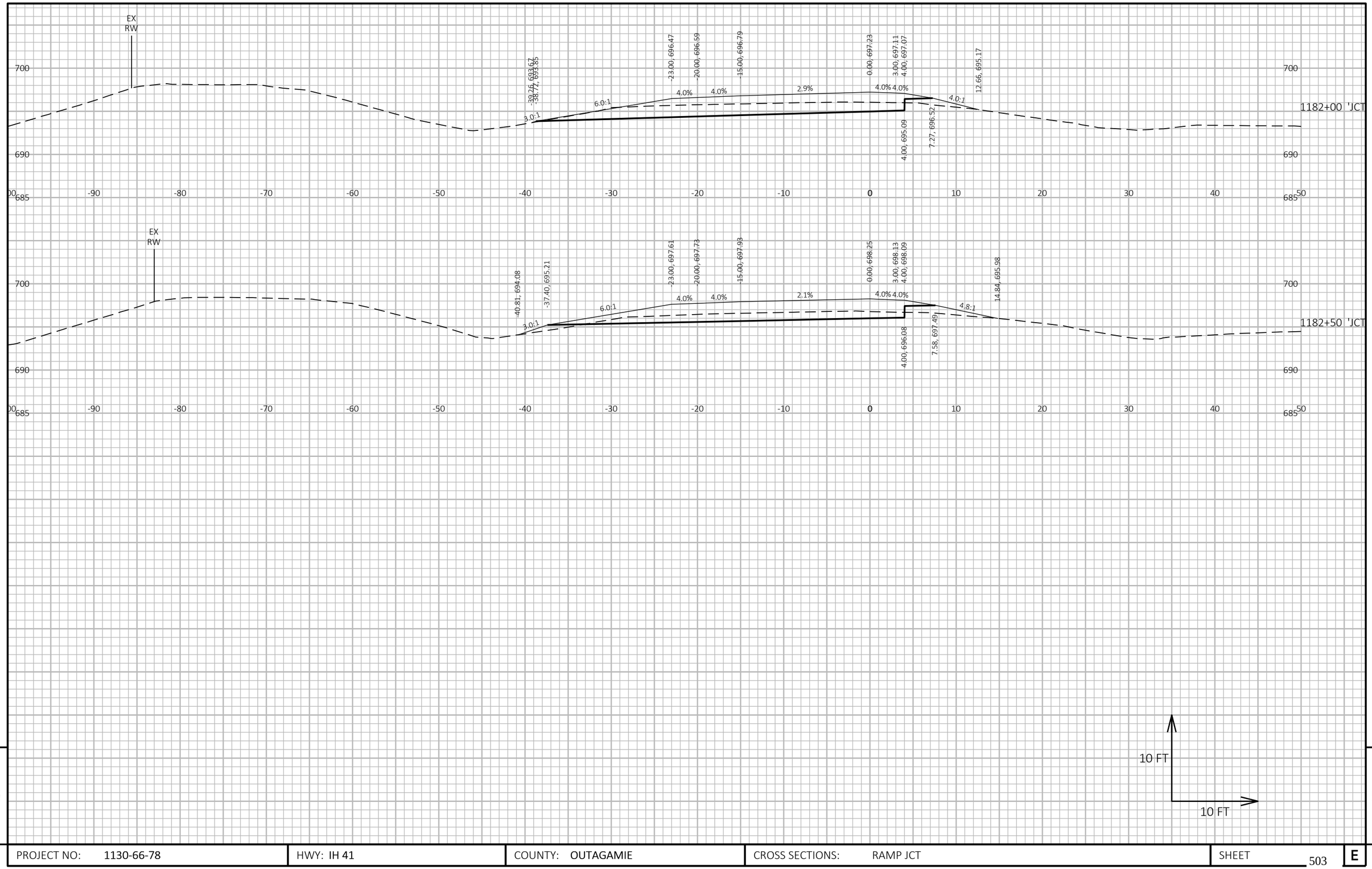



| | | | | |
|---|---|---|---|---|
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JCT | SHEET 502 E |

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090204-XS-JC.DWG
LAYOUT NAME - 090204-xs-jct-1

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

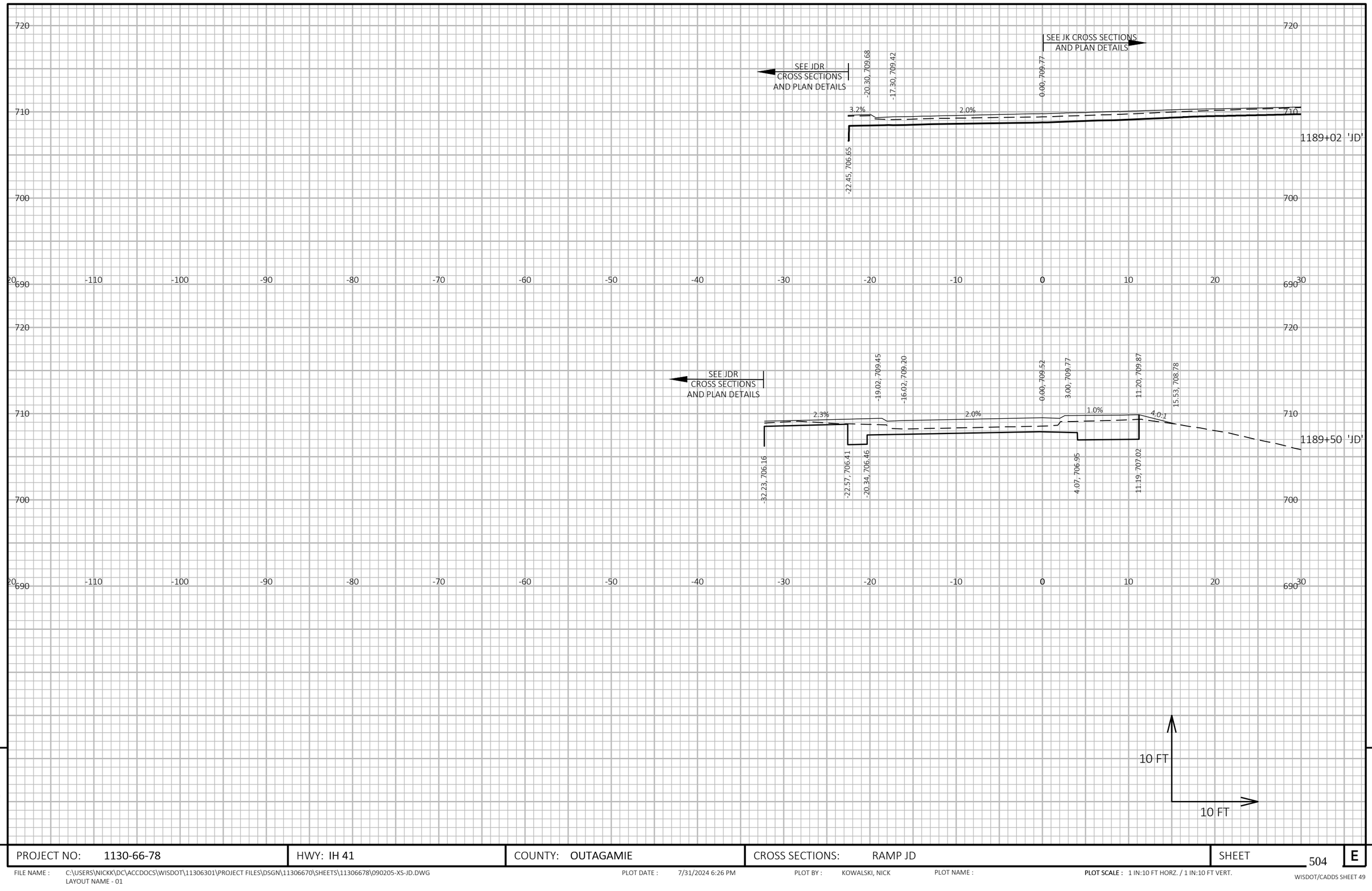
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JCT | SHEET 503 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090204-XS-JC.DWG
LAYOUT NAME - 090204-xs-jct-2

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JD | SHEET 504 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090205-XS-JD.DWG
LAYOUT NAME - 01

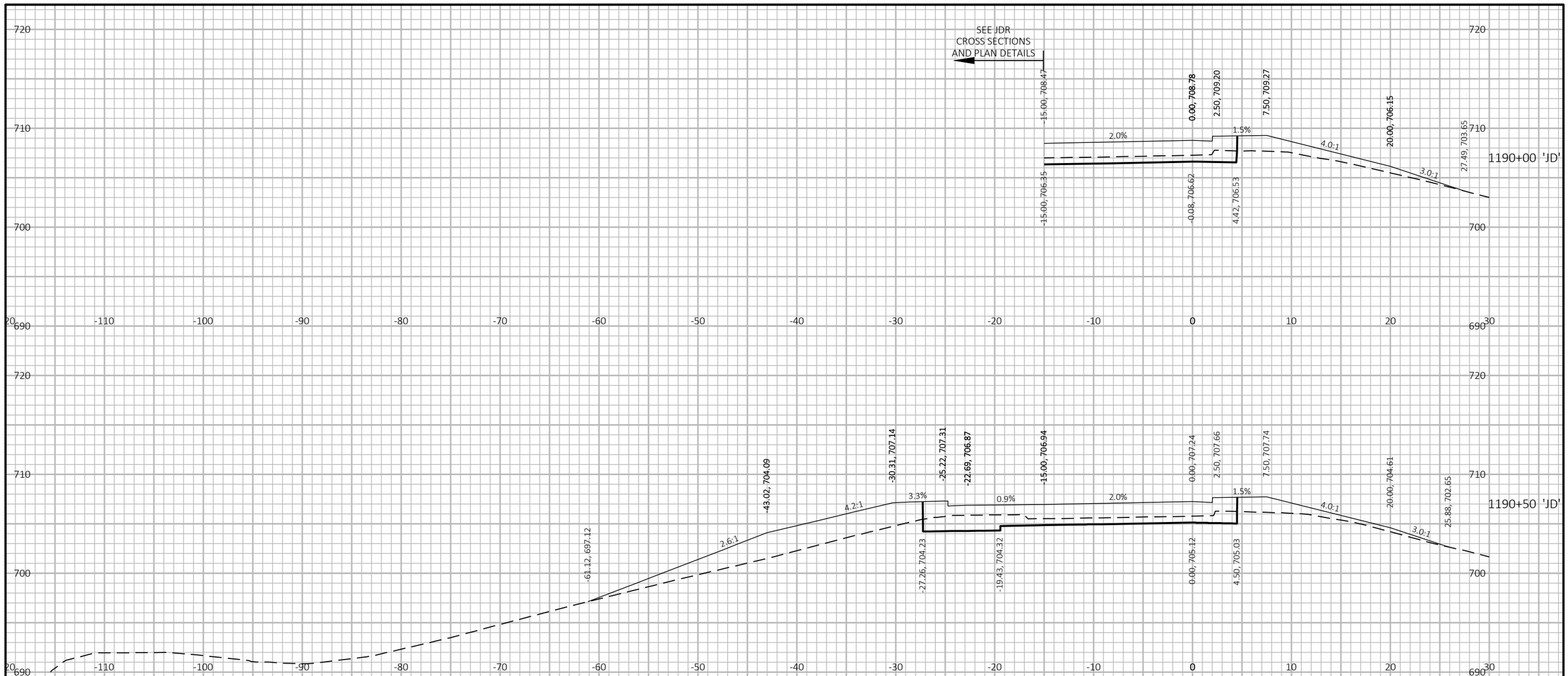
PLOT DATE : 7/31/2024 6:26 PM

PLOT BY : KOWALSKI, NICK

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

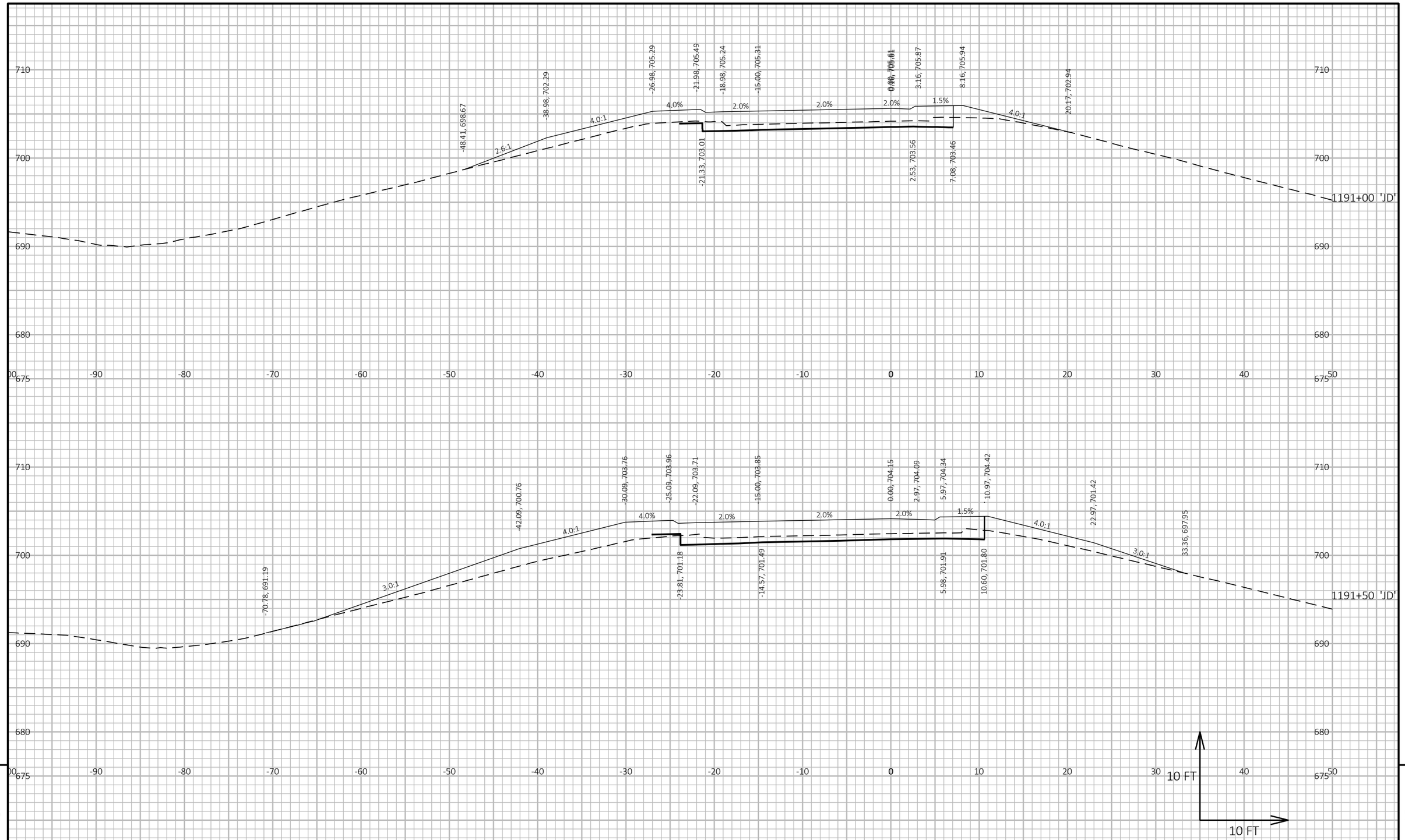
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JD | SHEET 505 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090205-XS-JD.DWG
LAYOUT NAME - 02

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

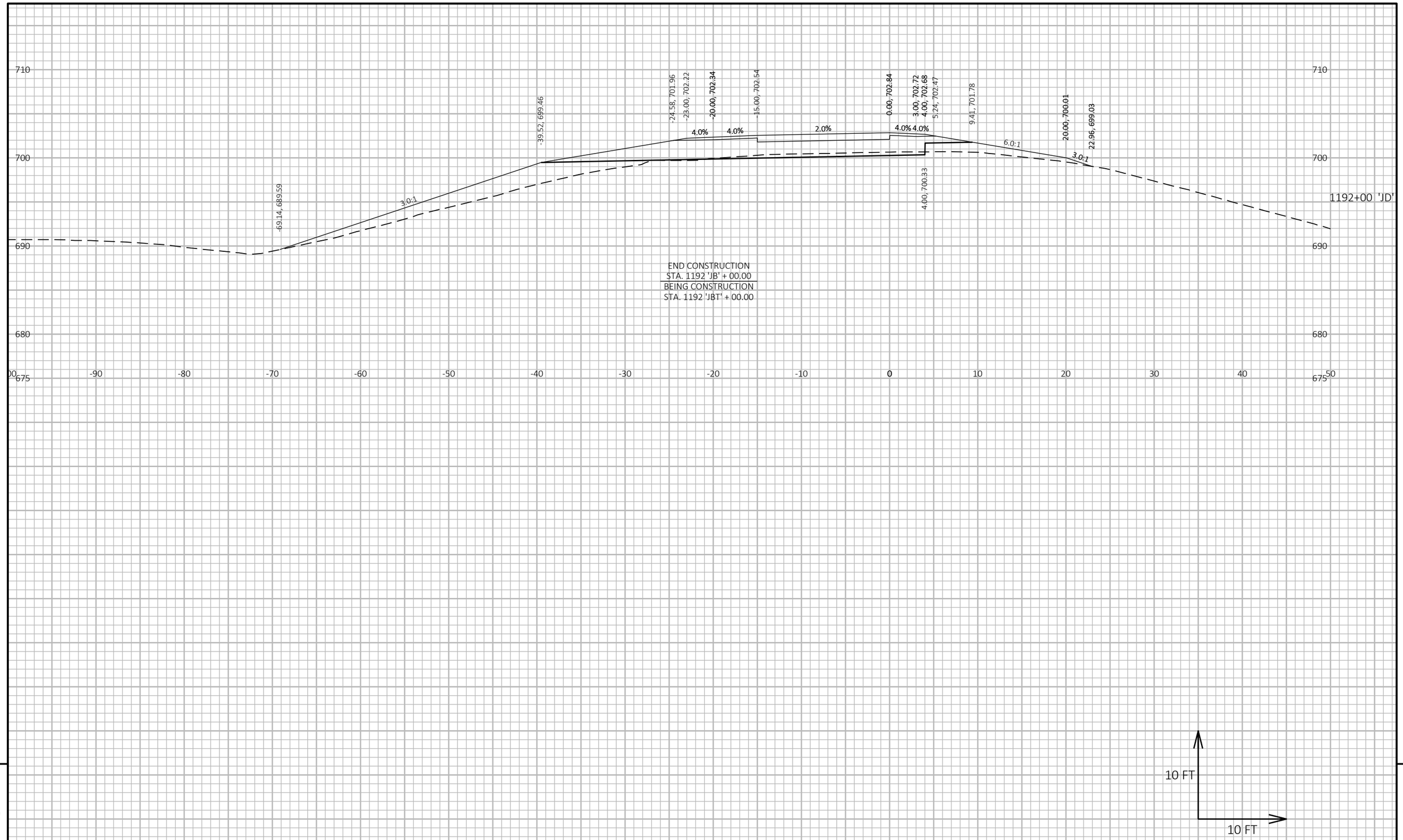



| | | | | | |
|---|---|---|---|---|---|
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JD | SHEET 506 | E |

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090205-XS-JD.DWG
LAYOUT NAME - 03

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

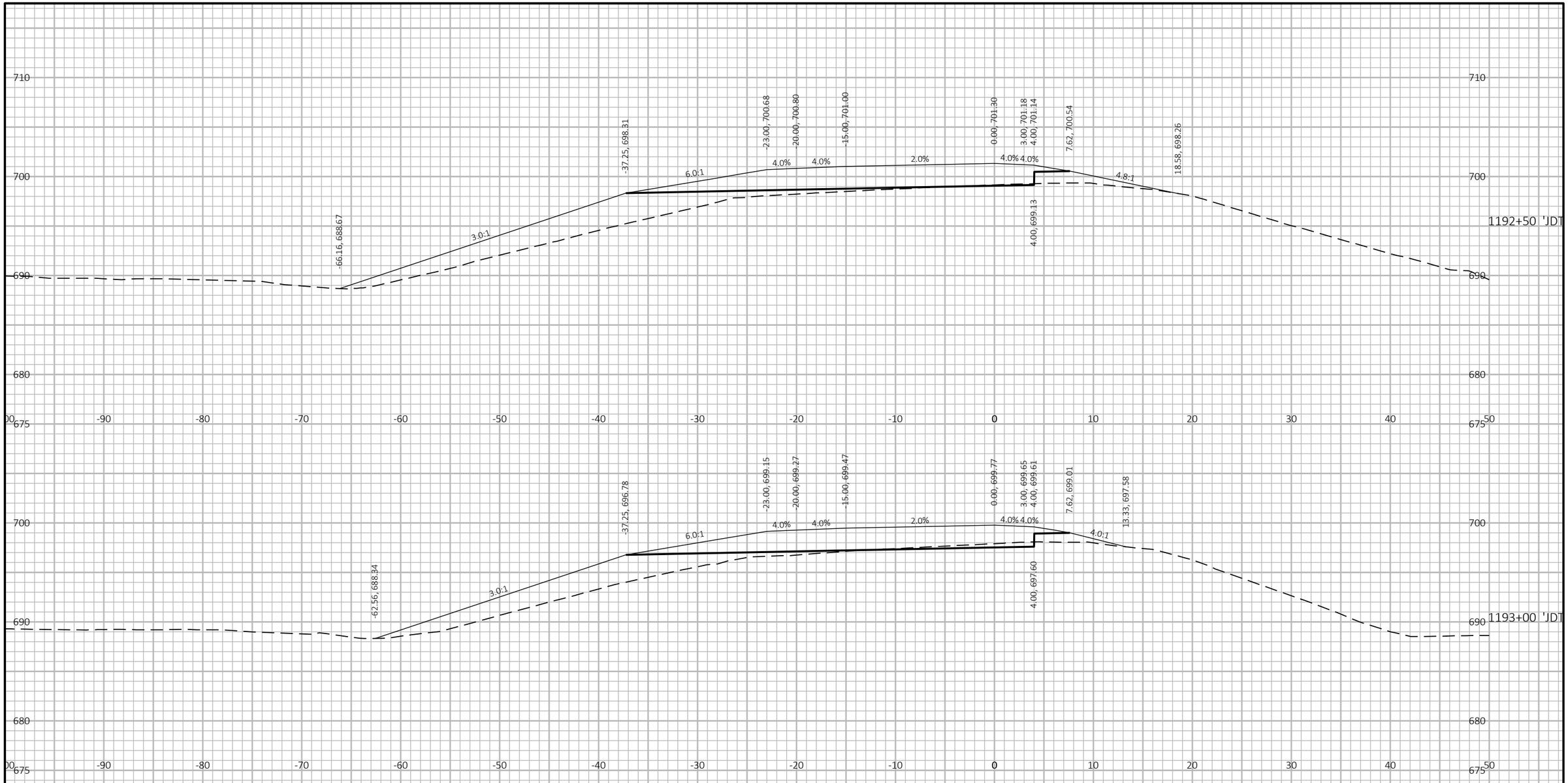



| | | | | | |
|---|---|---|---|---|---|
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JD | SHEET 507 | E |

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090205-XS-JD.DWG
LAYOUT NAME - 04

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

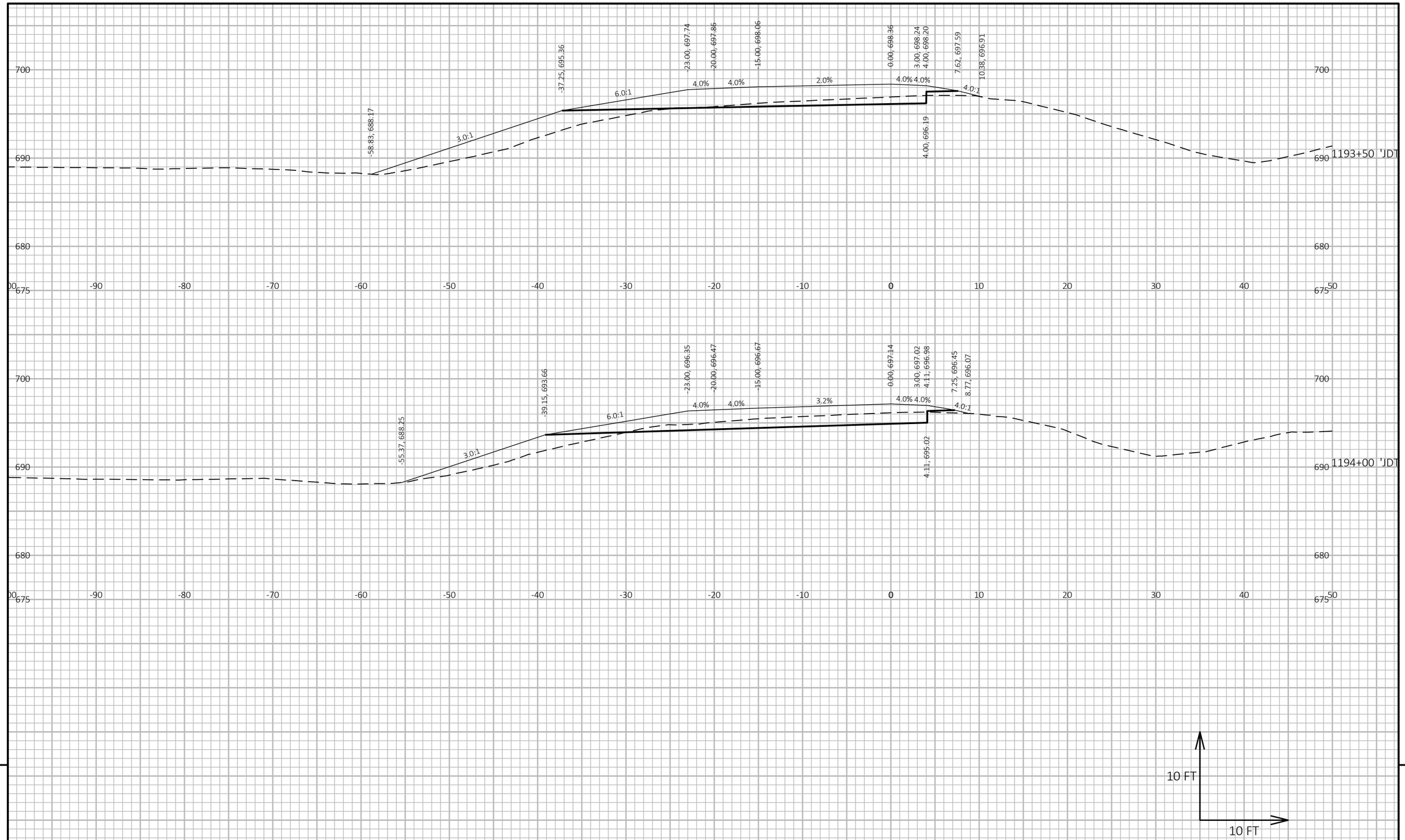
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JDT | SHEET 508 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090205-XS-JD.DWG
LAYOUT NAME - 090205-xs-jdt-1

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

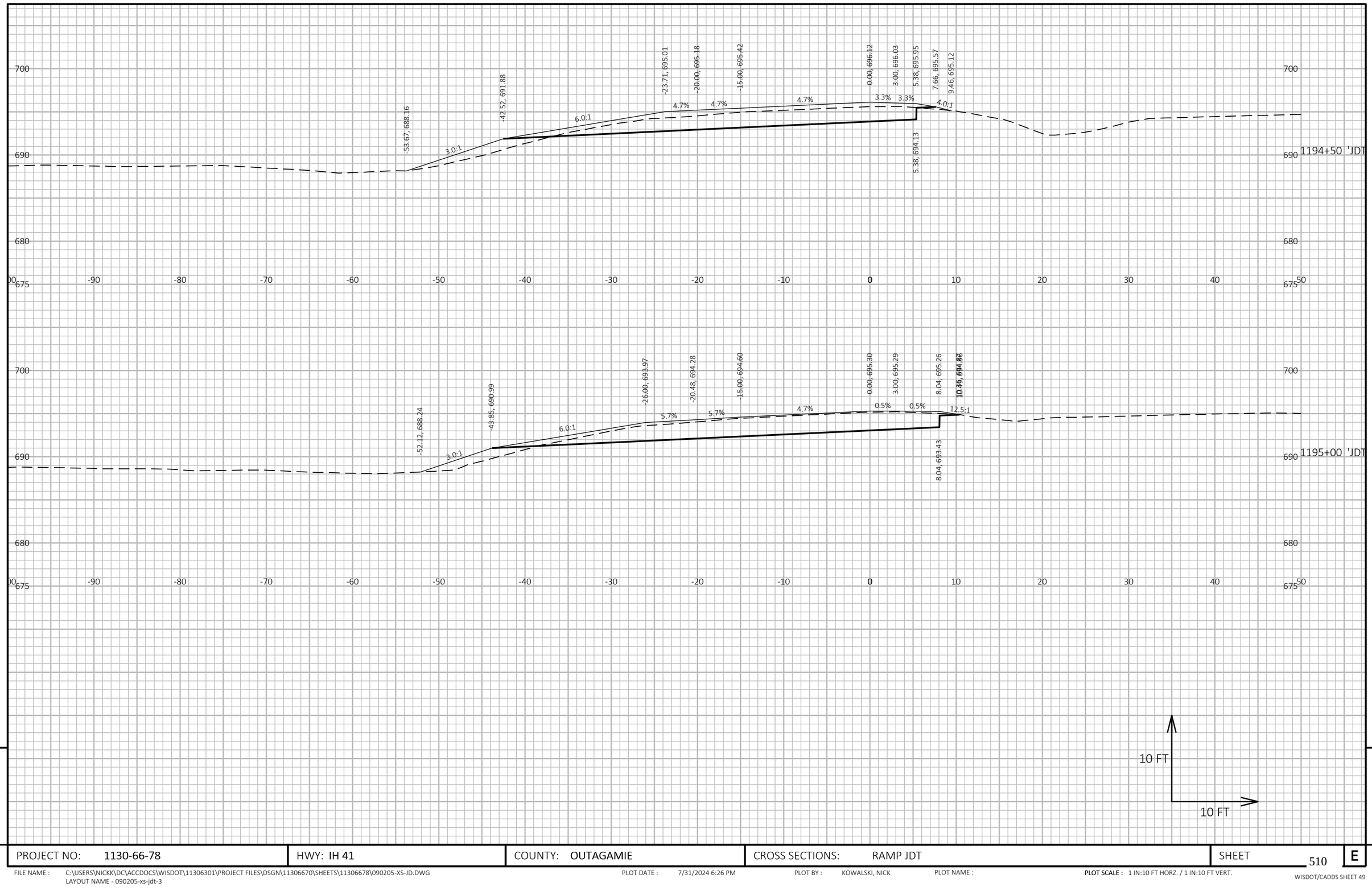
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JDT | SHEET 509 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090205-XS-JD.DWG
LAYOUT NAME - 090205-xs-jdt-2

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

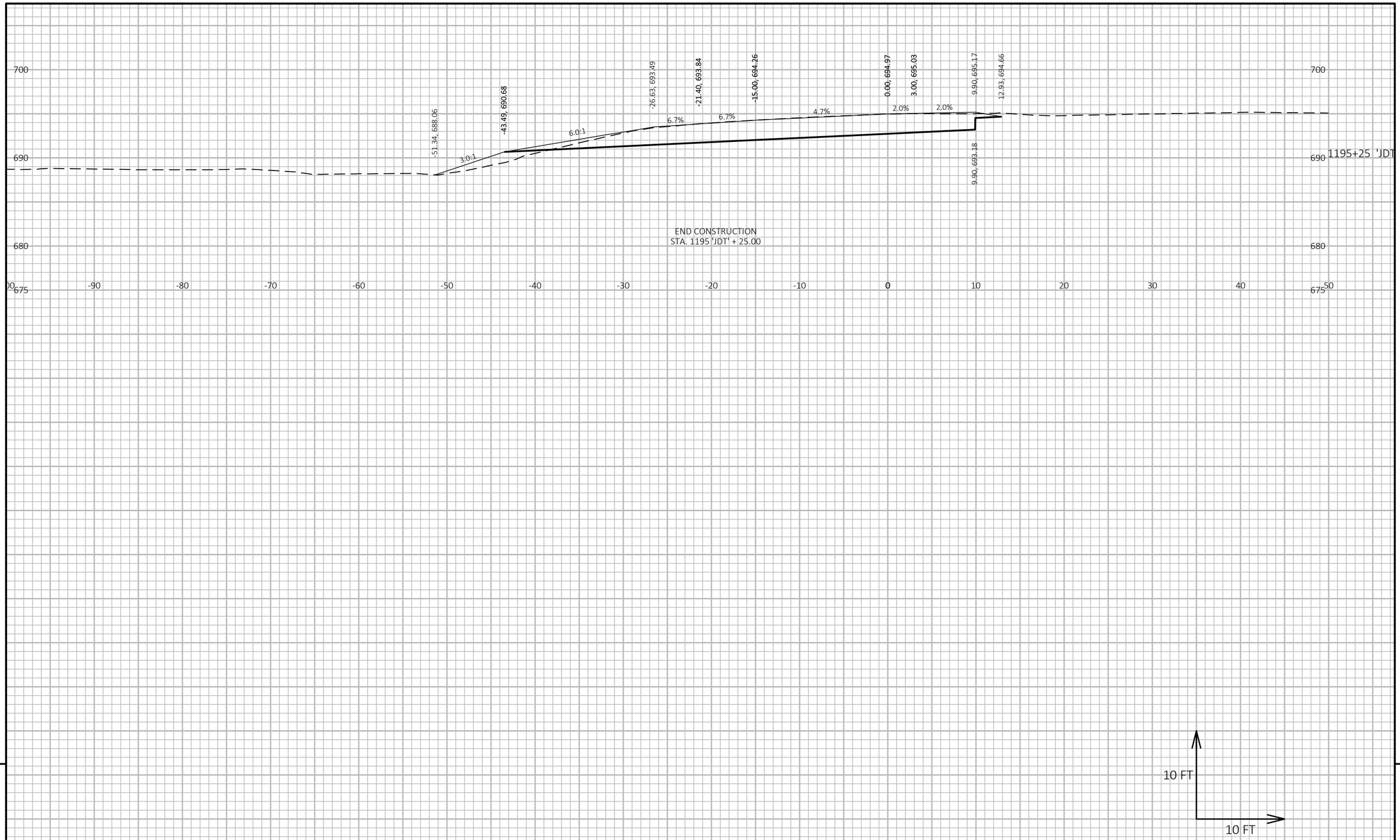
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JDT | SHEET 510 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090205-XS-JD.DWG
LAYOUT NAME - 090205-xs-jdt-3

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

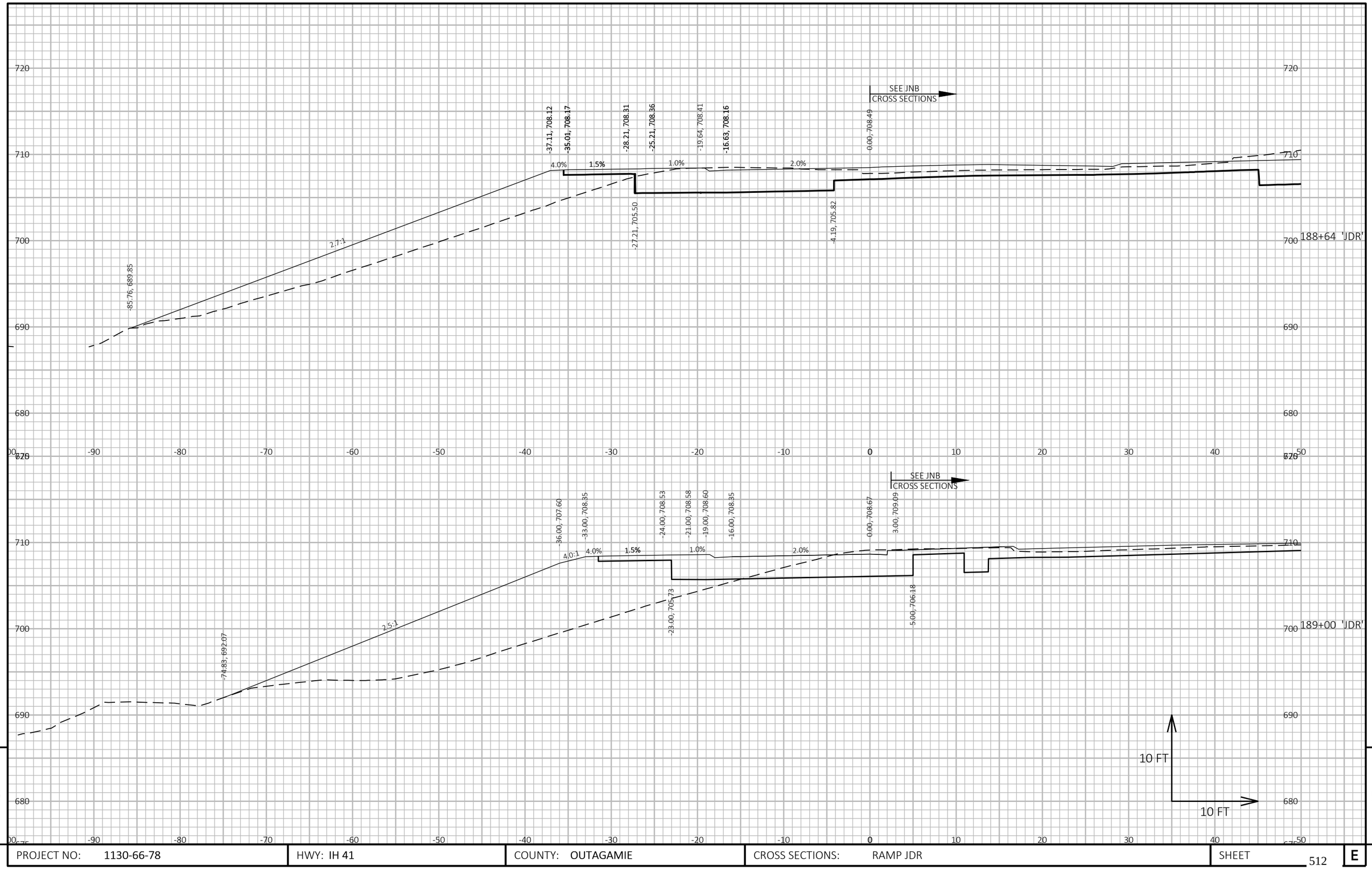
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JDT | SHEET 511 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090205-XS-JD.DWG
LAYOUT NAME - 090205-xs-jdt-4

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| | | | | |
|---|---|---|---|---|
| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JDR | SHEET 512 E |

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090205-XS-JD.DWG
LAYOUT NAME - 06

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SEE JD CROSS SECTIONS AND CURB RAMP DETAILS

-75.12, 692.08
2.5:1
-36.00, 707.73
4.0:1
-33.00, 708.48
4.0%
-31.00, 708.56
1.5%
-23.00, 708.68
-21.50, 708.70
-18.50, 708.75
-16.00, 708.83
2.0%
0.00, 708.65
-20.50, 705.65
0.00, 706.06

189+50 'JDR'

SEE JD CROSS SECTIONS

-65.81, 693.15
2.5:1
-36.00, 705.08
4.0:1
-23.50, 708.21
4.0%
-18.50, 708.33
-16.00, 707.91
2.0%
0.00, 708.23
5.2%
-20.50, 705.24

190+00 'JDR'

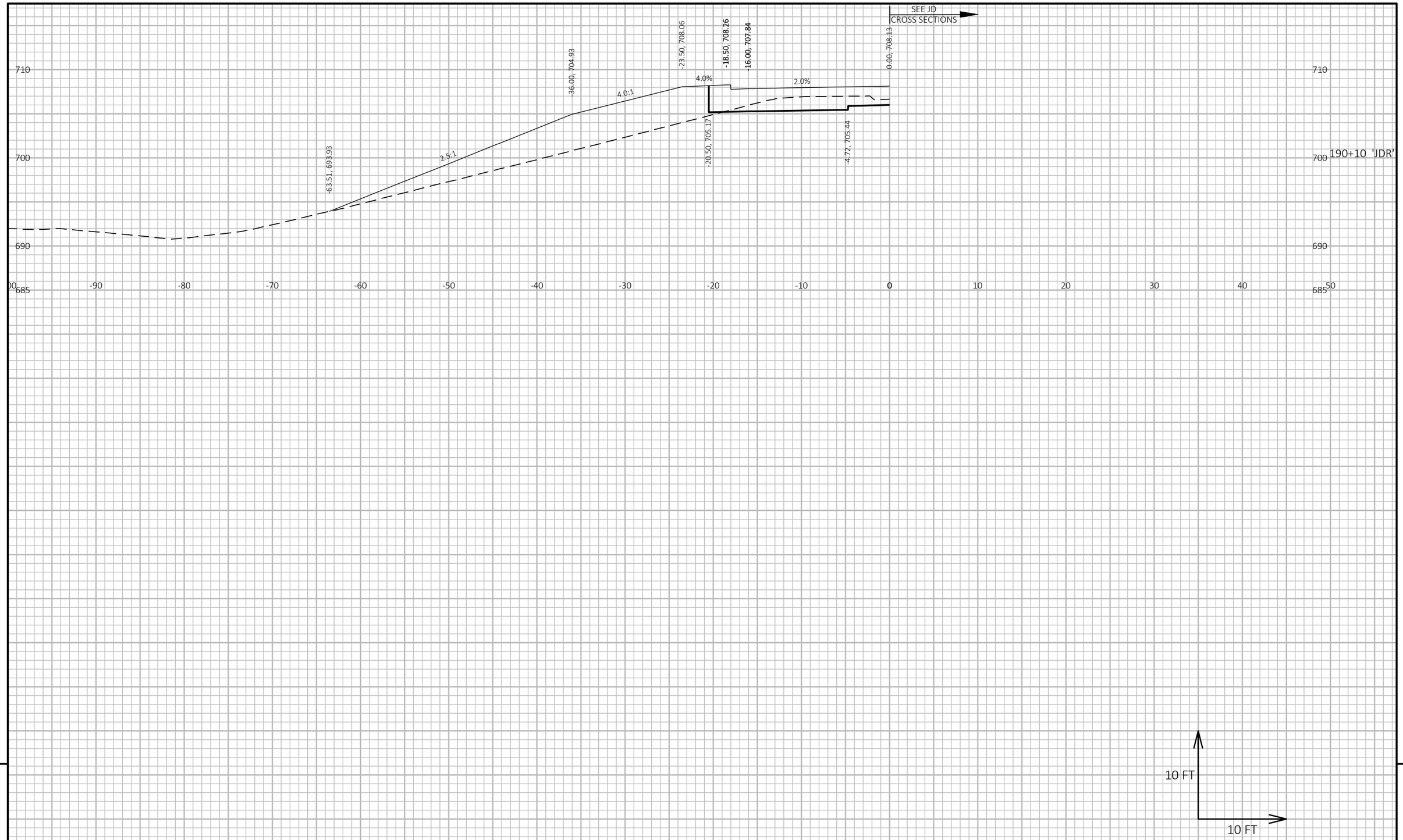
10 FT
10 FT

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JDR | SHEET 513 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090205-XS-JD.DWG
LAYOUT NAME - 07

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

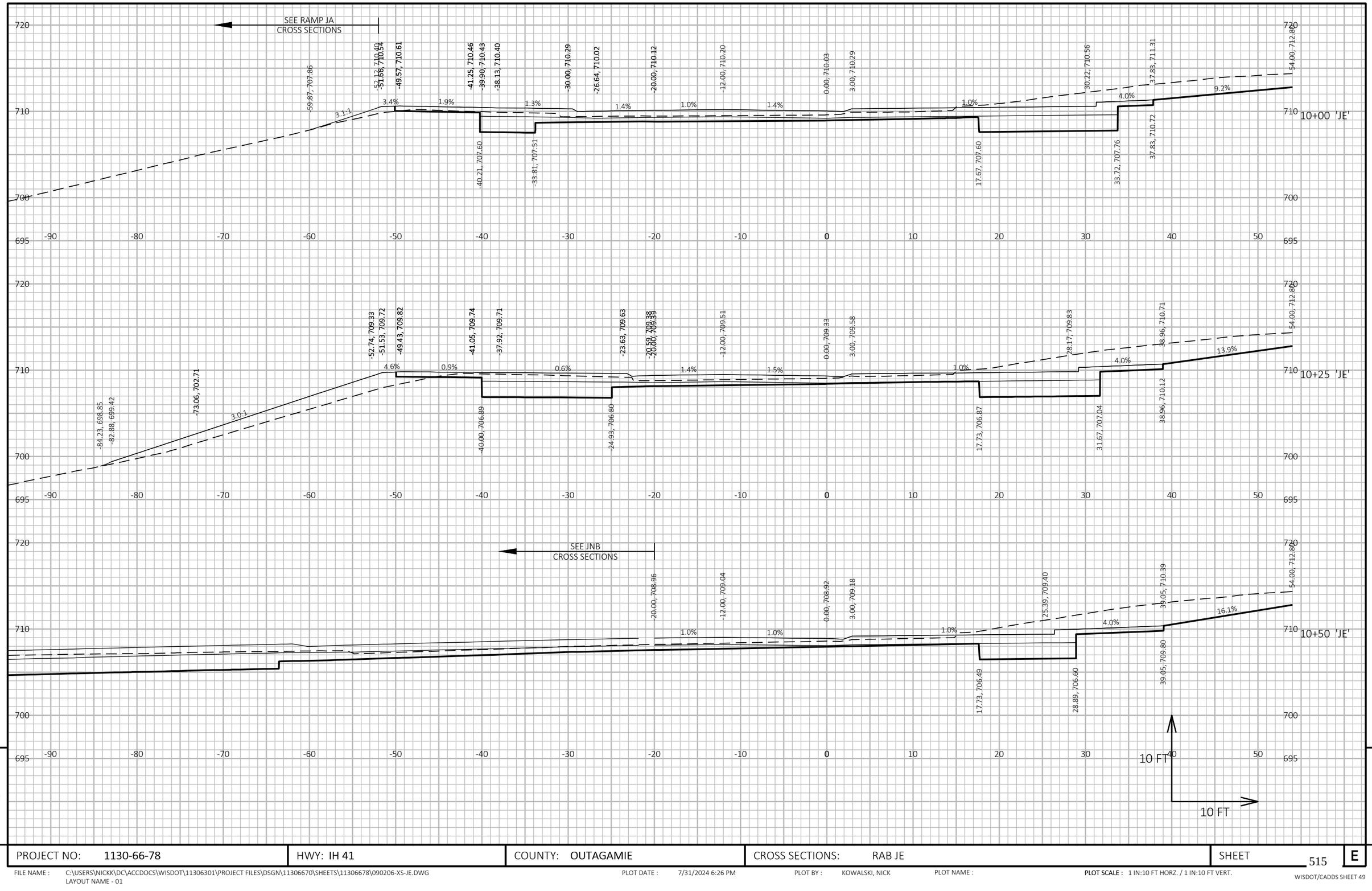
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAMP JDR | SHEET 514 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090205-XS-JD.DWG
LAYOUT NAME - 08

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

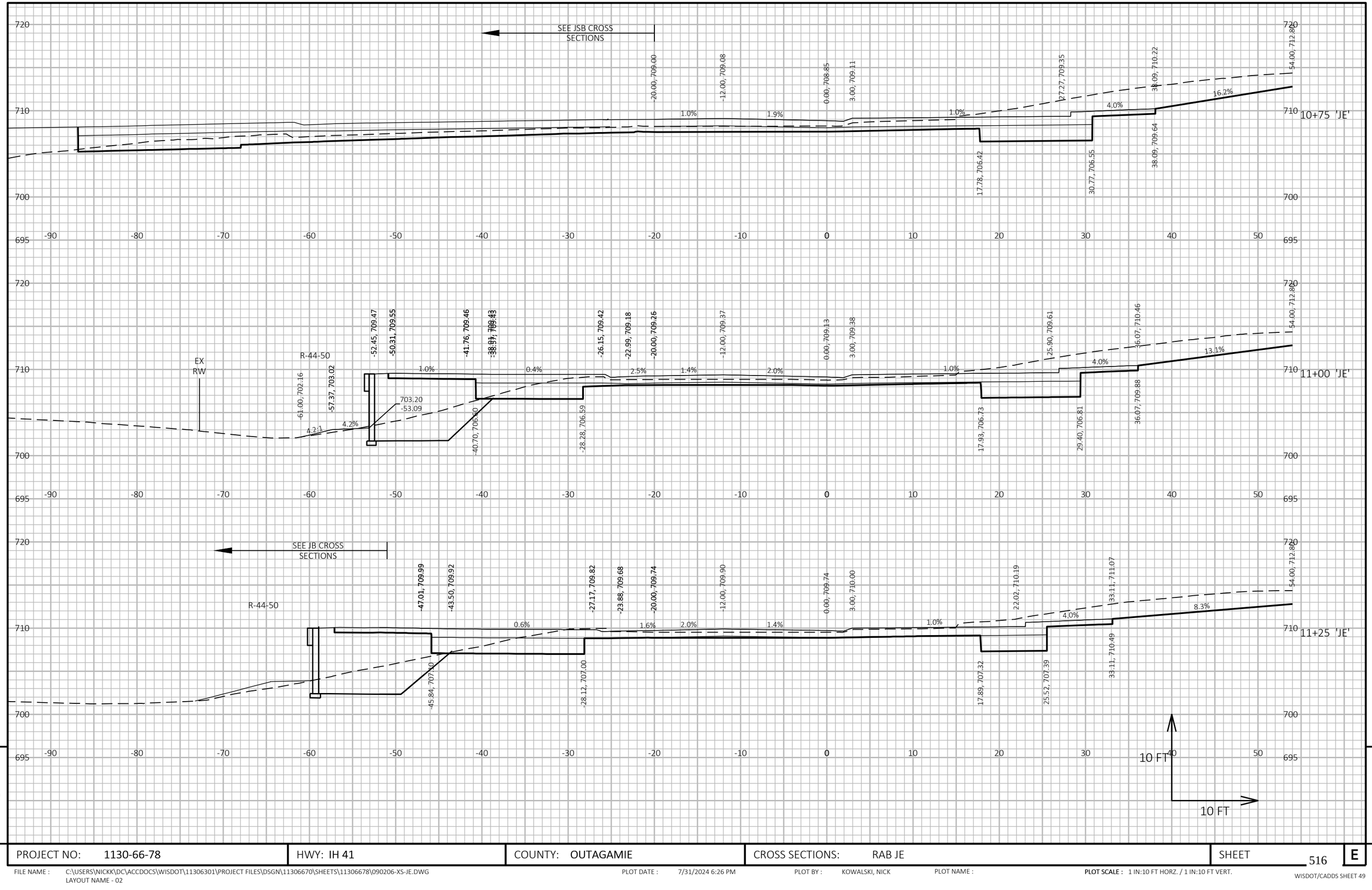



| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAB JE | SHEET 515 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090206-XS-JE.DWG
LAYOUT NAME - 01

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



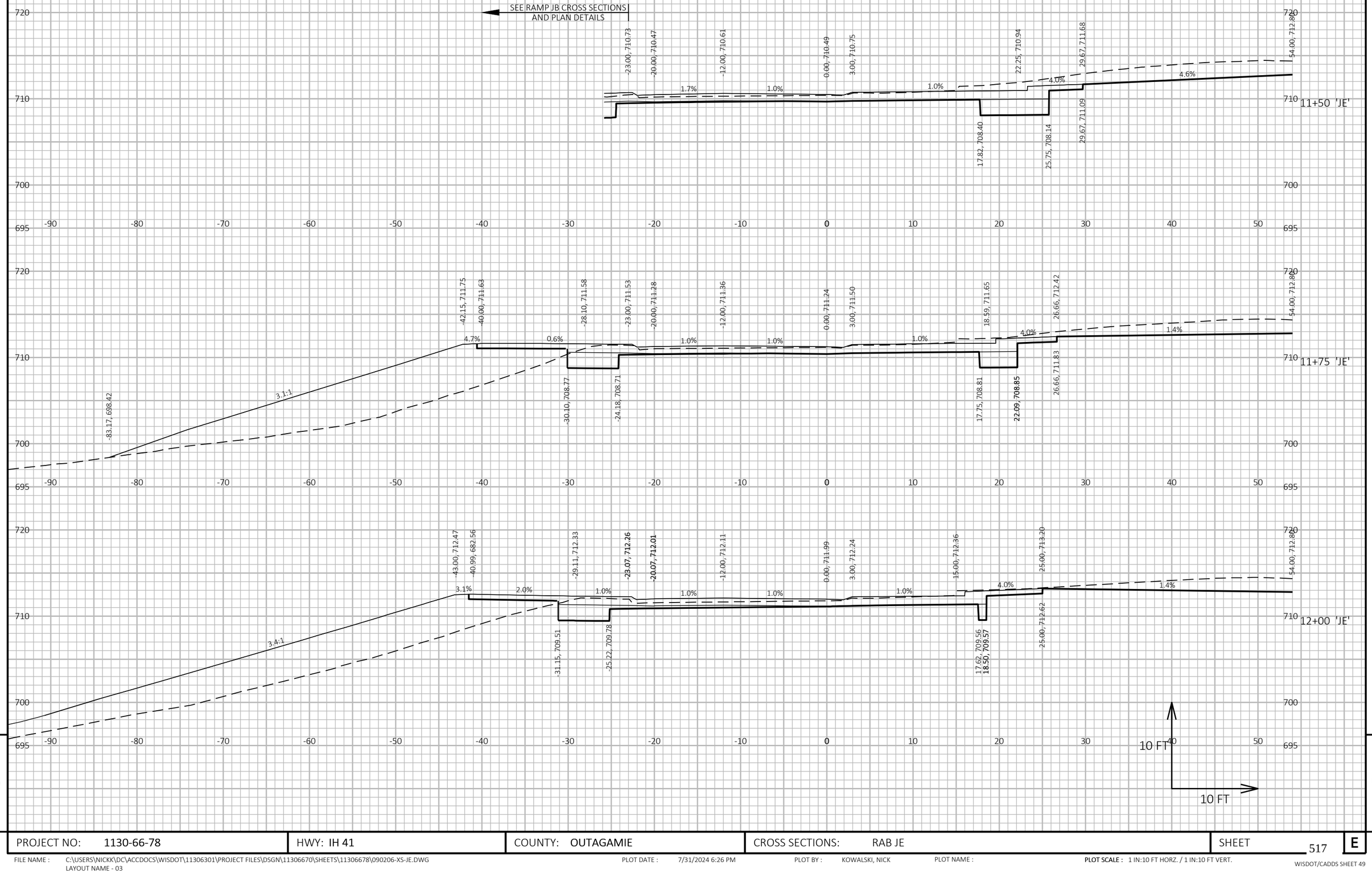

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAB JE | SHEET 516 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090206-XS-JE.DWG
LAYOUT NAME - 02

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SEE RAMP JB CROSS SECTIONS AND PLAN DETAILS




9

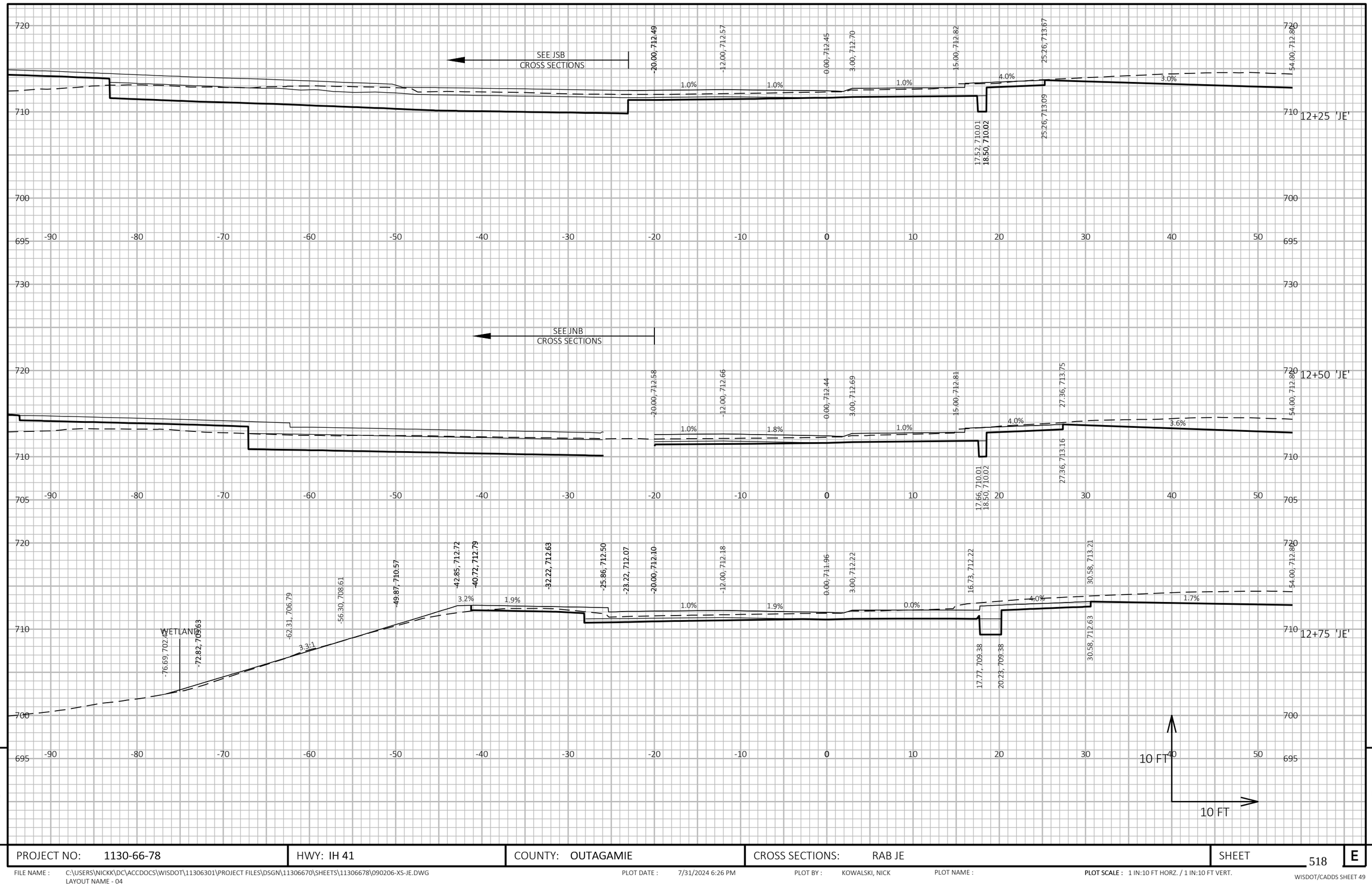
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAB JE | SHEET 517 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090206-XS-JE.DWG
LAYOUT NAME - 03

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAB JE | SHEET 518 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090206-XS-JE.DWG
LAYOUT NAME - 04

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SEE RAMP JA
CROSS SECTIONS

-23.00, 711.53
-20.00, 711.28
-12.00, 711.36
0.00, 711.21
3.00, 711.47
26.03, 711.47
33.96, 712.22
54.00, 712.80

1.0%
1.2%
0.0%
4.0%
2.9%

17.54, 708.67
29.53, 708.63
33.96, 711.64

13+00 'JE'

720
710
700
695
-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50

SEE RAMP JA
CROSS SECTIONS

-20.00, 710.50
-12.00, 710.58
0.00, 710.46
3.00, 710.72
29.80, 710.99
36.71, 711.70
54.00, 712.80

1.0%
1.0%
1.0%
4.0%
6.4%

17.42, 708.03
33.30, 708.19
36.71, 711.12

13+25 'JE'

720
710
700
695
-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50

10 FT
10 FT

9

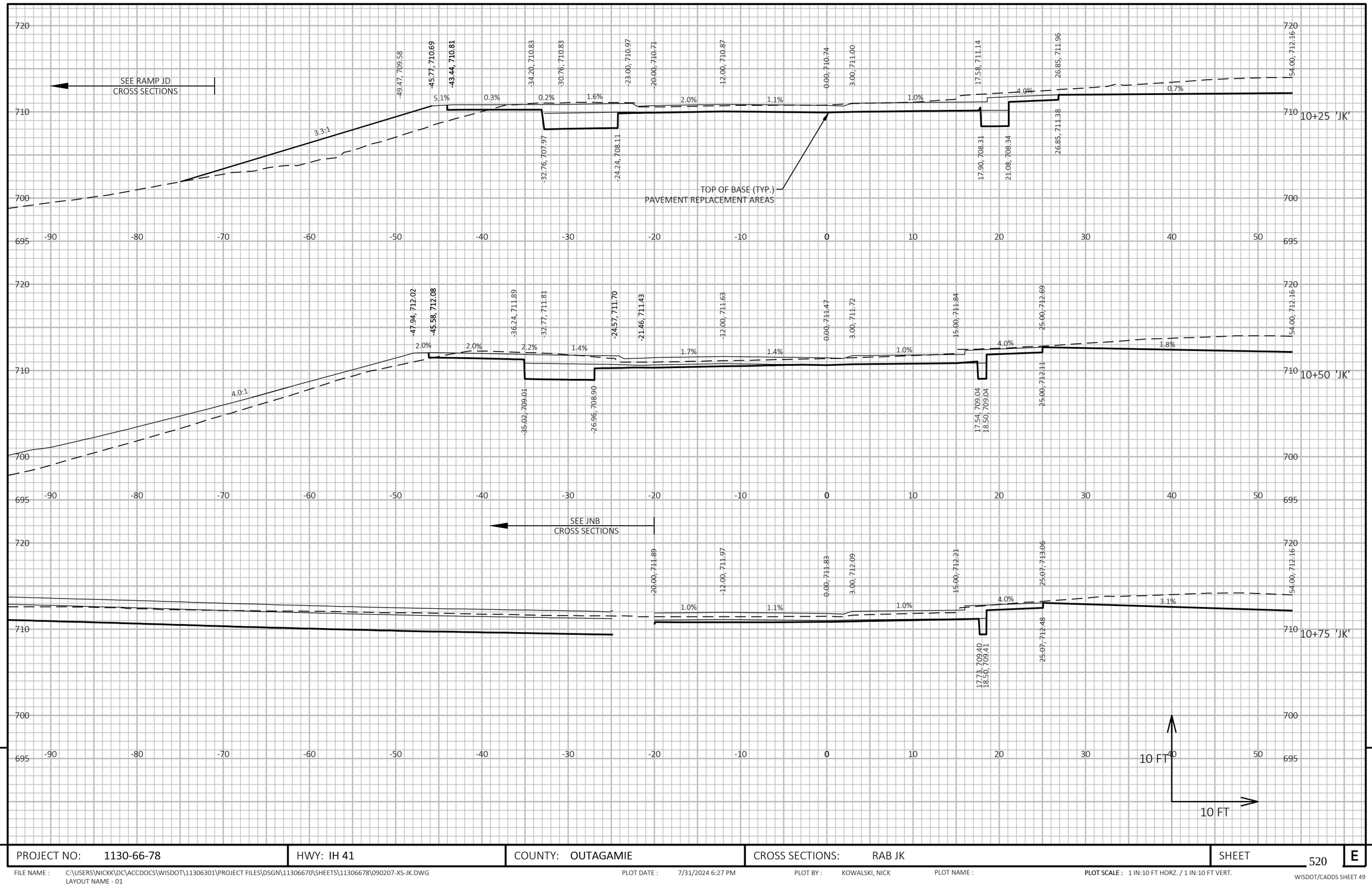
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAB JE | SHEET 519 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090206-XS-JE.DWG
LAYOUT NAME - 05

PLOT DATE : 7/31/2024 6:26 PM PLOT BY : KOWALSKI, NICK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAB JK | SHEET 520 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090207-XS-JK.DWG
LAYOUT NAME - 01

PLOT DATE : 7/31/2024 6:27 PM PLOT BY : KOWALSKI, NICK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SEE JSB
CROSS SECTIONS

-24.85, 711.876
-20.00, 711.89
-12.00, 711.97
0.00, 711.73
3.00, 711.99
15.00, 712.11
27.03, 713.04
54.00, 712.16

0.4%
1.0%
2.0%
1.0%
4.0%
3.3%

-24.85, 709.21
17.77, 709.30
18.50, 709.31
27.03, 712.45

11+00 'JK'

720
710
700
695
-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50

-53.46, 707.63
-40.10, 711.93
-38.05, 712.00
-23.74, 711.73
-21.18, 711.30
-12.00, 711.40
0.00, 711.16
3.00, 711.42
17.33, 711.42
30.23, 712.37
54.00, 712.16

3.1:1
3.5%
1.9%
1.0%
2.0%
0.0%
4.0%
0.9%

WETLAND

TOP OF BASE (TYP.)
PAVEMENT REPLACEMENT AREAS

18.04, 708.58
20.83, 708.58
30.23, 711.79

11+25 'JK'

SEE RAMP JC
CROSS SECTIONS

-40.33, 710.17
-23.00, 710.79
-20.00, 710.54
-12.00, 710.65
0.00, 710.41
3.00, 710.67
25.74, 710.67
33.68, 711.42
54.00, 712.16

2.3%
1.4%
2.0%
0.0%
4.0%
3.6%

-42.33, 707.26
-24.36, 707.91
18.21, 707.86
29.24, 707.83
33.68, 710.84

11+50 'JK'

10 FT
10 FT

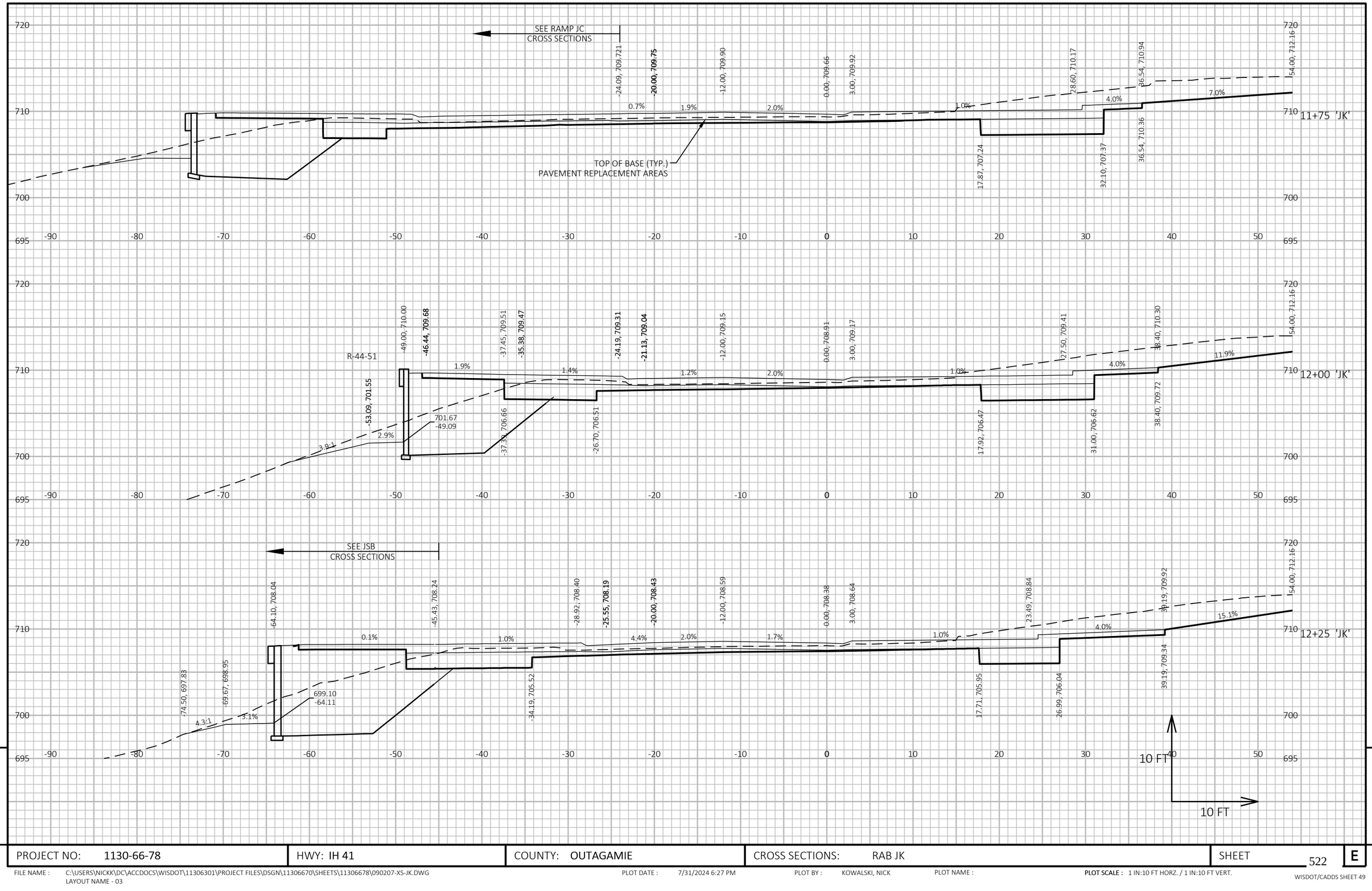
9
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAB JK | SHEET 521 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090207-XS-JK.DWG
LAYOUT NAME - 02

PLOT DATE : 7/31/2024 6:27 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAB JK | SHEET 522 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090207-XS-JK.DWG
LAYOUT NAME - 03

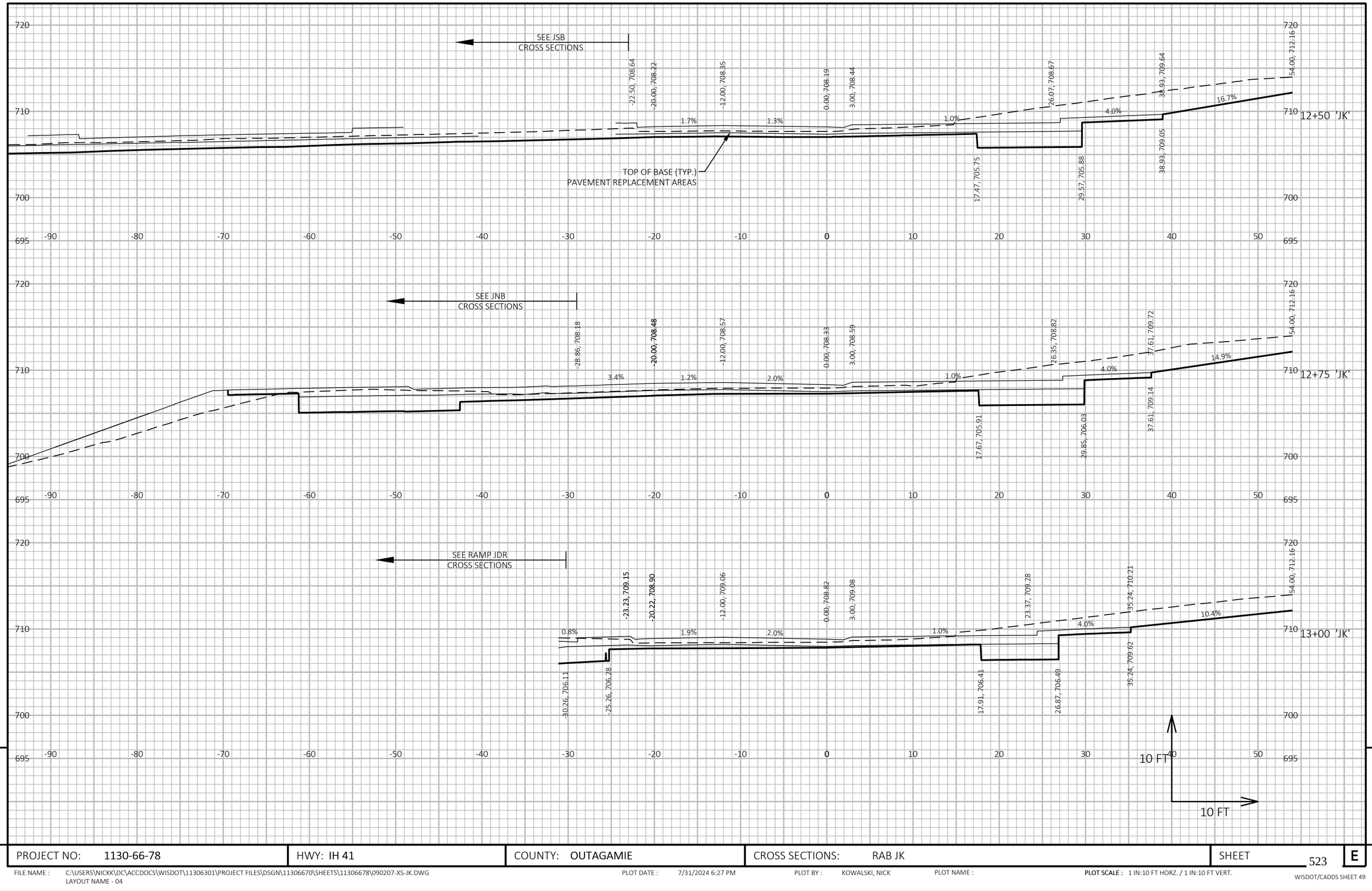
PLOT DATE : 7/31/2024 6:27 PM

PLOT BY : KOWALSKI, NICK

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

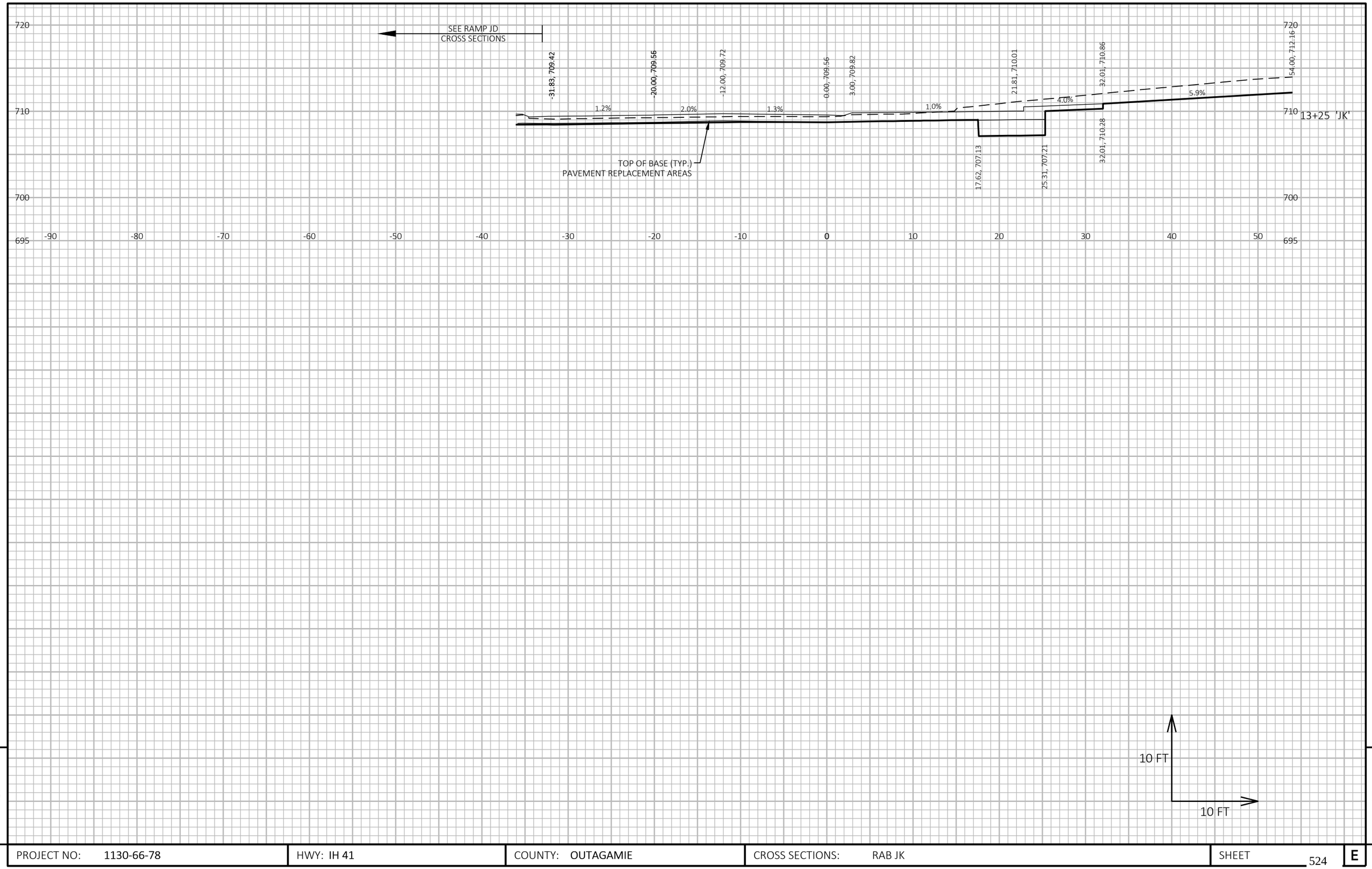
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAB JK | SHEET 523 | E |
|---|---|---|---|---|---|


FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090207-XS-JK.DWG
LAYOUT NAME - 04

PLOT DATE : 7/31/2024 6:27 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

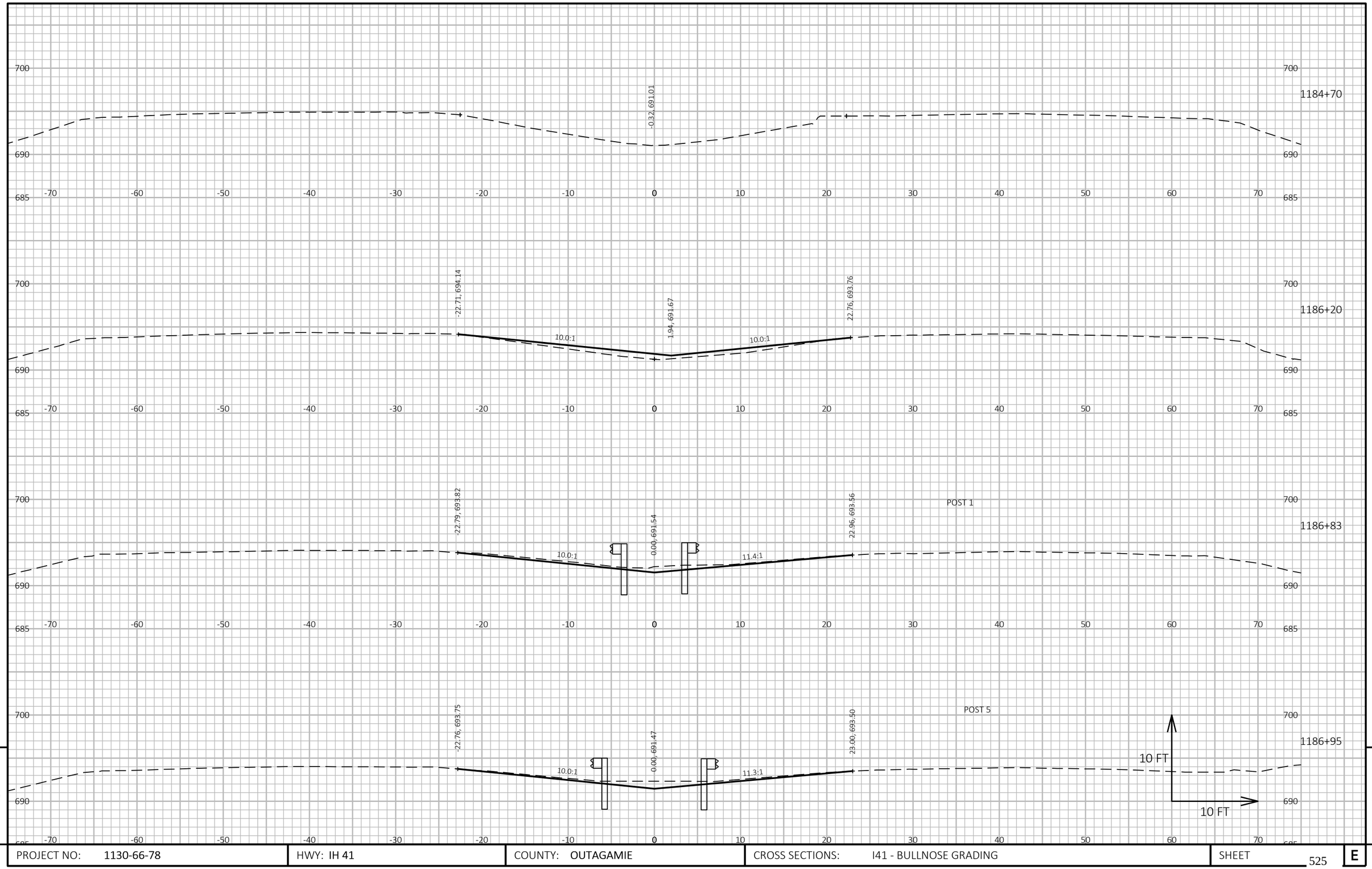
9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: RAB JK | SHEET 524 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090207-XS-JK.DWG
LAYOUT NAME - 05

PLOT DATE : 7/31/2024 6:27 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

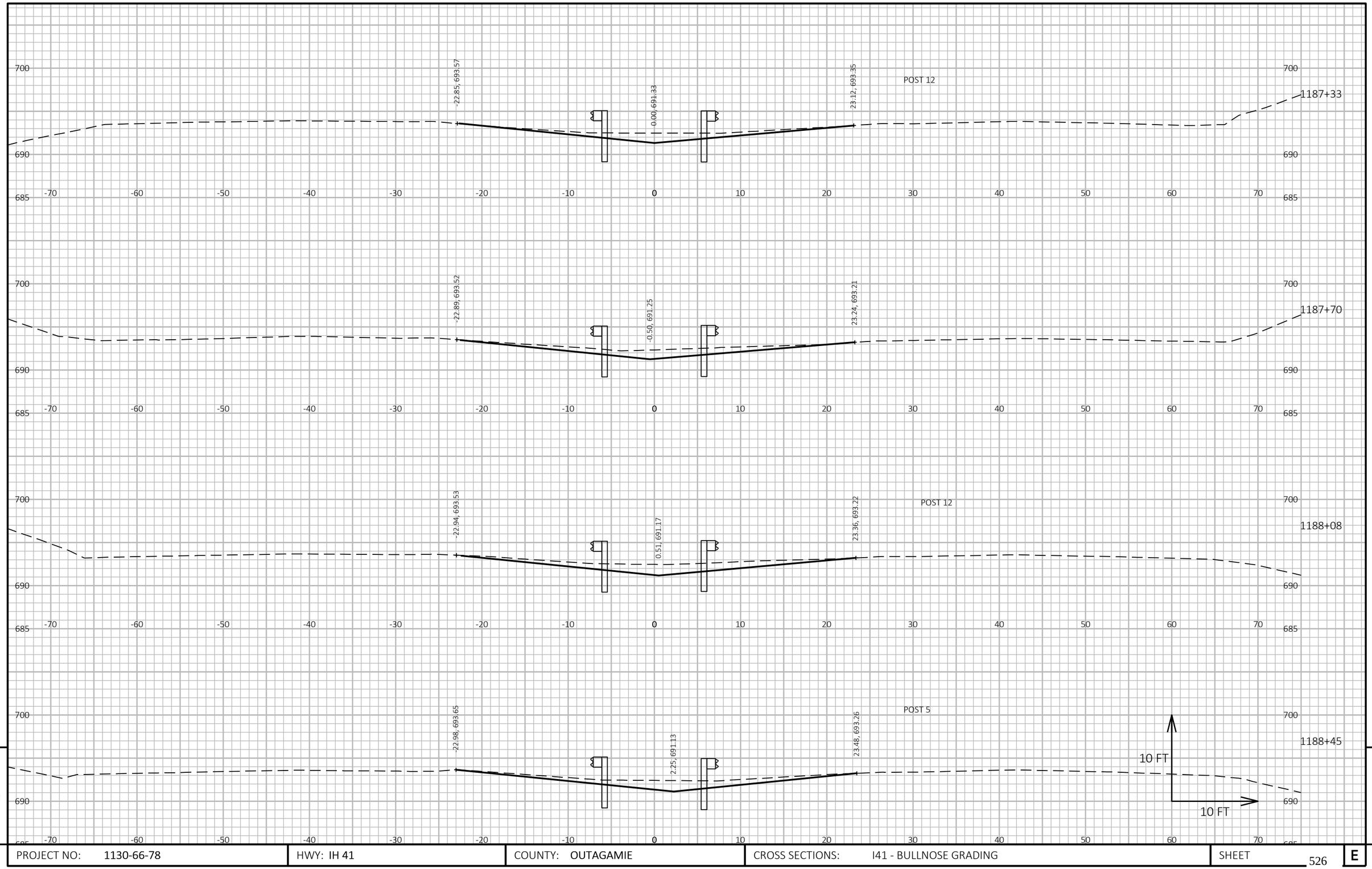
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: I41 - BULLNOSE GRADING | SHEET 525 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090209-XS-BN.DWG
LAYOUT NAME - 090209-xs-41-01

PLOT DATE : 7/31/2024 6:27 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

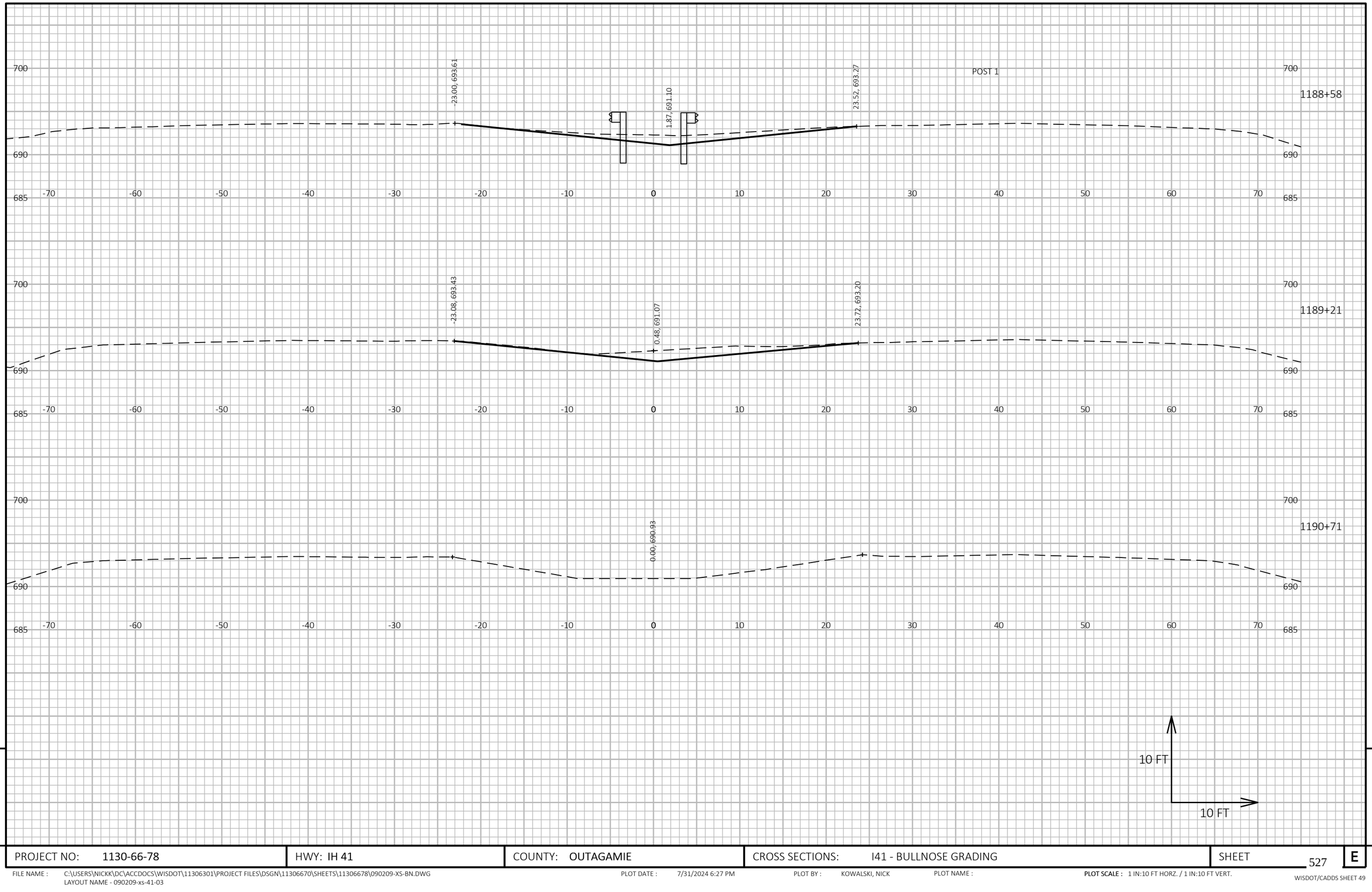
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| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: I41 - BULLNOSE GRADING | SHEET 526 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090209-XS-BN.DWG
LAYOUT NAME - 090209-xs-41-02

PLOT DATE : 7/31/2024 6:27 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 1130-66-78 | HWY: IH 41 | COUNTY: OUTAGAMIE | CROSS SECTIONS: I41 - BULLNOSE GRADING | SHEET 527 | E |
|---|---|---|---|---|---|

FILE NAME : C:\USERS\NICKK\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306678\090209-XS-BN.DWG
LAYOUT NAME - 090209-xs-41-03

PLOT DATE : 7/31/2024 6:27 PM PLOT BY : KOWALSKI, NICK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

**Wisconsin Department of Transportation**

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov