GRE MAY 2024

PROJECT ID: 1130-66-76
WITH: N/A

COUNTY: OUTAGAMIE

ORDER OF SHEETS

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

TOTAL SHEETS = 442

15

N

DESIGN DESIGNATION

A.A.D.T.	(2020)	=	11,350
A.A.D.T.	(2045)	=	16,150
D.H.V.		=	1,700
D.D.		=	59/41
T.		=	17.6%
DESIGN SPEED		=	40 MPH
ESALS		=	9,700,000

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 (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

APPLETON - DE PERE

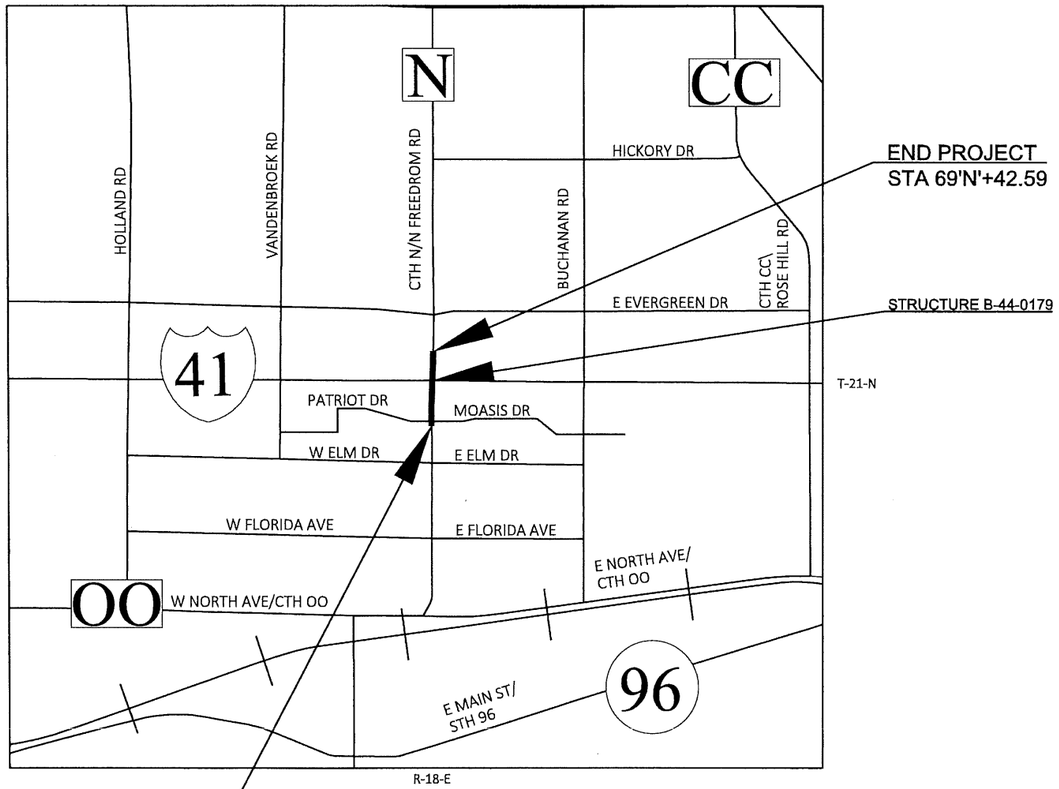
CTH N INTCHG

CTH N

OUTAGAMIE COUNTY

STATE PROJECT NUMBER
1130-66-76

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1130-66-76	———	———



BEGIN PROJECT
STA 56'N'+10.55
Y = 574,592.76
X = 851,975.97

LAYOUT
SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.252 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.

emcs
1300 W. Canal Street, Suite 200
Milwaukee, WI 53233
414.347.1607 Fax 414.347.1347

WISCONSIN
AARON K. SCHRAMM
E-44021
WAUKESHA
WI
PROFESSIONAL ENGINEER

1/25/24 (Date) Aaron Schramm (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NE REGION
Designer	EMCS, INC.
Project Manager	SCOTT EBEL, P.E.
Regional Examiner	NE REGION
Regional Supervisor	ERIC GWIDT, P.E.

APPROVED FOR THE DEPARTMENT
DATE: 1/26/24 (Signature)

E

UTILITY CONTACTS

AT&T WISCONSIN - COMMUNICATION LINE
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APPLETON, WI 54911
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NET LEC LLC - COMMUNICATION LINE
RICK VINCENT
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KURT LITTLE
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PHONE: (920) 831-9227
EMAIL: KURT.LITTLE@CHARTER.COM

TDS METROCOM LLC - COMMUNICATION LINE
COLE HOOKER
525 JUNCTION ROAD
MADISON, WI 53717
PHONE: (608) 332-8243
EMAIL: COLE.HOOKER@TDSTELECOM.COM

WE ENERGIES - GAS/PETROLEUM
DAN SANDE
333 WEST EVERETT STREET
A299
MILWAUKEE, WI 53202
PHONE: (414) 221-4578
EMAIL: DAN.SANDE@WE-ENERGIES.COM

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

STATE AGENCIES

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NE REGION
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WISCONSIN DEPARTMENT OF TRANSPORTATION

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ITS: ADAM WALTER
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U.S. ARMY CORPS OF ENGINEERS

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U.S. ARMY CORPS OF ENGINEERS
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EMAIL: JESSICA.L.KEMPKE@USACE.ARMY.MIL

U.S. ENVIRONMENTAL PROTECTION AGENCY

KENNETH WESTLAKE
U.S. ENVIRONMENTAL PROTECTION AGENCY
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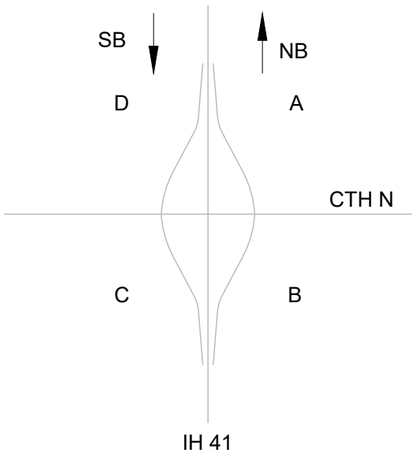
EMAIL: WESTLAKE.KENNETH@EPA.GOV

2

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	GENERAL NOTES	SHEET 2	E

RAMP QUADRANT IDENTIFICATION



REFERENCE LINE CALLOUTS

NB - IH 41 NORTHBOUND
SB - IH 41 SOUTHBOUND
NA - CTH N/FREEDOM RD NB ON RAMP
NB - CTH N/FREEDOM RD NB OFF RAMP
NC - CTH N/FREEDOM RD SB ON RAMP
ND - CTH N/FREEDOM RD SB OFF RAMP
N - CTH N/FREEDOM RD NORTHBOUND OVER IH 41
NSB - CTH N/FREEDOM RD SOUTHBOUND OVER IH 41

LOCATION	BID ITEM	HMA PAVEMENT TYPE	TOTAL PAVEMENT THICKNESS	LAYERS
CTH N RAMP SHOULDER	HMA PAVEMENT	4 LT 58-28 S	3.5"	3.5" LAYER
CTH N	HMA PAVEMENT	4 MT 58-28 S	2"	2.0" LAYER
CTH N RAMP TEMPORARY TIE-IN	ASPHALTIC SURFACE	4 MT 58-28 S 3 MT 58-28 S	5"	1.75" UPPER LAYER 3.25" LOWER LAYER

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 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIPTURF:	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPETURF:			.25 .32			.27 .34			.28 .36			.30 .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 = 22.78 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 9.26 ACRES

GENERAL NOTES

THE LOCATIONS OF EXISTING 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.

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

DO NOT DRIVE OR STORE EQUIPMENT, OR STORE CONSTRUCTION MATERIALS IN ENVIRONMENTALLY SENSITIVE AREAS, WETLANDS OR WATERWAYS.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, AND COVERED WITH EROSION MAT.

TOPSOIL SHALL BE PLACED 1-INCH BELOW THE TOP OF ADJACENT CONCRETE CURBS OR SIDEWALKS.

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT APPROXIMATE LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S EROSION CONTROL IMPLEMENTATION PLAN (ECIP) AND APPROVED BY THE ENGINEER. MAINTAIN EROSION CONTROL MEASURES UNTIL SUCH A TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

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.

CURB AND GUTTER PLAN GRADES ARE AT THE FLANGE LINE UNLESS OTHERWISE NOTED. CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE OF CURB AND GUTTER.

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

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTION
CONSTRUCTION DETAILS
PLAN DETAILS
PAVING GRADES
CURB RAMP DETAILS
ITS
EROSION CONTROL - TEMPORARY
EROSION CONTROL - PERMANENT
STORM SEWER
PERMANENT SIGNING
TRAFFIC SIGNALS AND LIGHTING
PAVEMENT MARKING
TRAFFIC CONTROL
DETOUR
FENCING
ALIGNMENT

STANDARD ABBREVIATIONS

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

2

2

BEGIN CONSTRUCTION
1009+00NB

BEGIN CONSTRUCTION
1009+00NC

N

VILLAGE OF LITTLE CHUTE

VILLAGE OF LITTLE CHUTE

PATRIOT DR

RAMP NB

IH 41 NB

IH 41 SB

RAMP NC

1010NB

1010SB

1015SB

1015NC

1015NB

S-44-383

BEGIN PROJECT 1130-66-76
STA 56+10.55N

END CONSTRUCTION
70+34.47N

50N

55N

60N

65N

70N

75N

CTH N

B-44-0179

END PROJECT 1130-66-76
STA 69+42.59N

S-44-384

ELM DR

MOASIS DR

1020NA

RAMP NA

1020NB

1020SB

RAMP ND

RANDOLPH DR

VILLAGE OF LITTLE CHUTE

VILLAGE OF LITTLE CHUTE

EVERGREEN DR

1025NA

1025NB

1025SB

1025ND

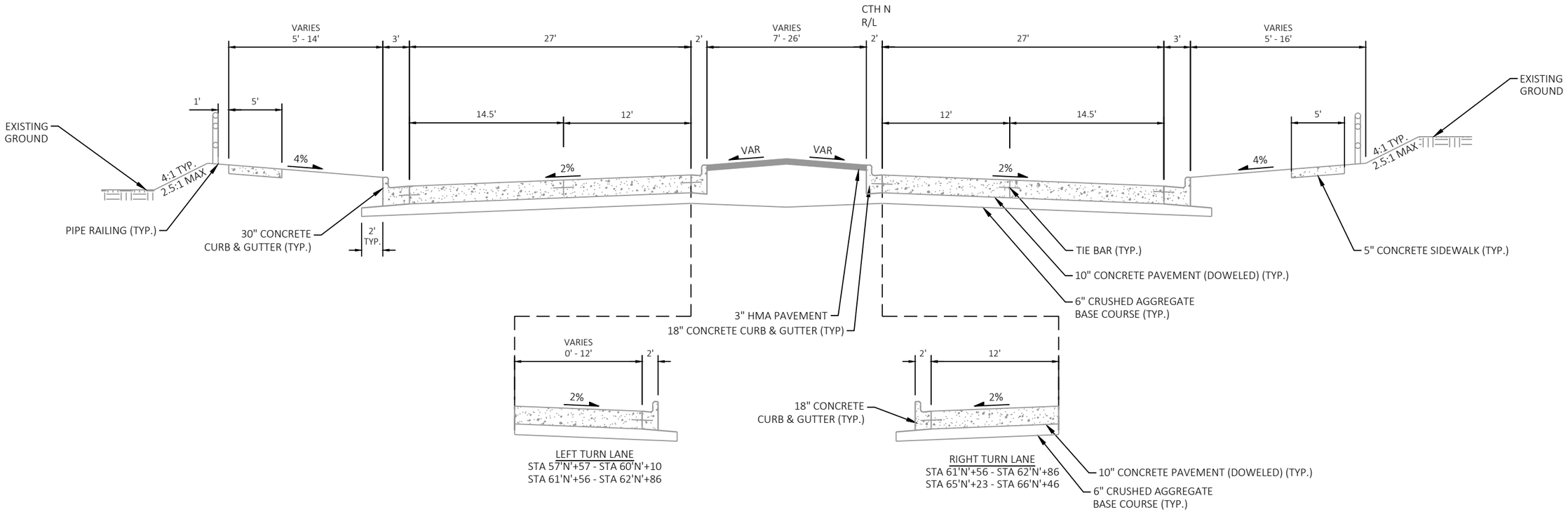
END CONSTRUCTION
STA 1024+75NA

END CONSTRUCTION
STA 1024+50ND

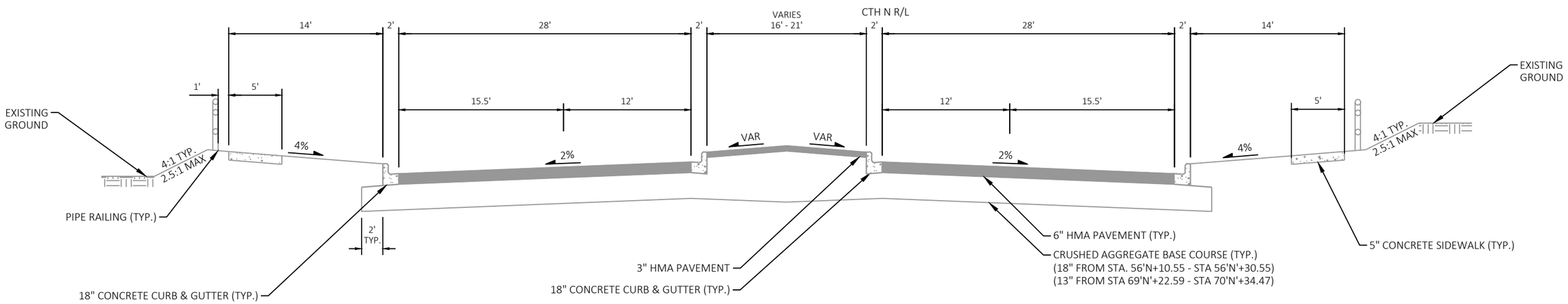
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\020201-PO-N.DWG
LAYOUT NAME - 020201

PLOT DATE : 2/1/2024 9:42 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:200 FT



EXISTING TYPICAL SECTION
CTH N
STA. 56'N+30.55 - STA 63'N'+04.65
STA. 65'N'+23.75 - STA 69'N'+22.59

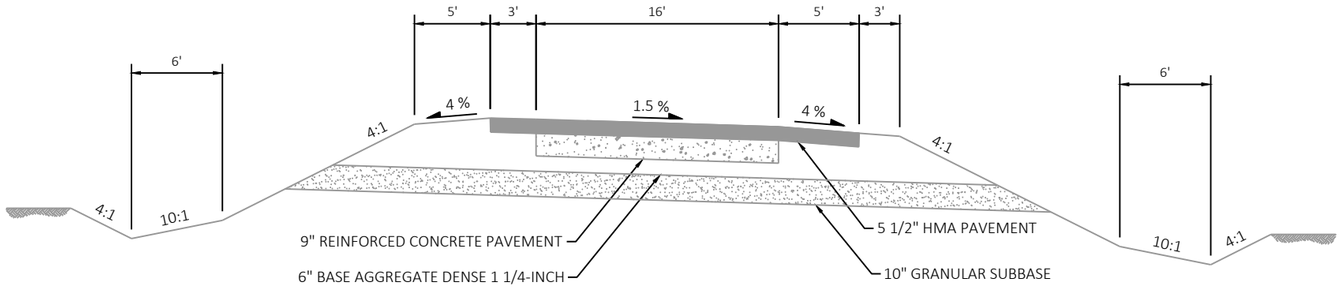


EXISTING TYPICAL SECTION
CTH N
STA. 56'N+10.55 - STA 56'N'+30.55
STA. 69'N+22.59 - STA 70'N'+34.47

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EXISTING TYPICAL SECTIONS - CTH N	SHEET 5	E

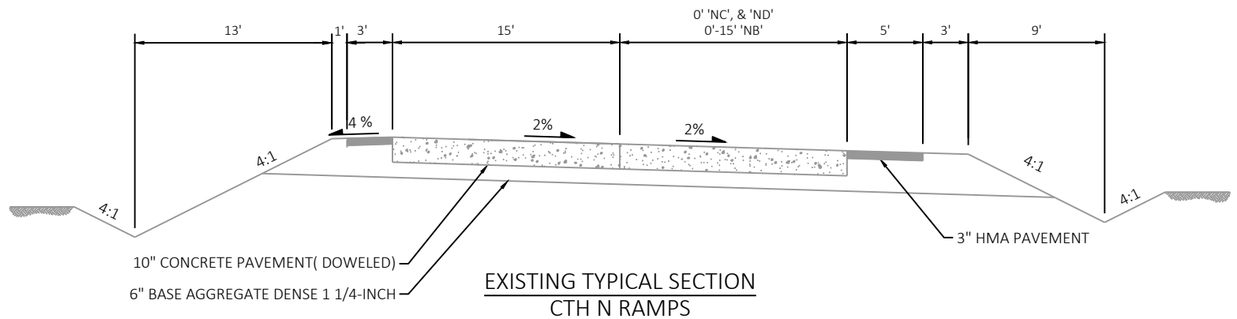
FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\020301-TS-CTH N.DWG
LAYOUT NAME - 01-10ft
PLOT DATE : 1/30/2024 3:52 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION
CTH N RAMPS

STA 1018'NA'+86 - STA 1024'NA'+75
STA 1009'NB'+00 - STA 1011'NB'+50
STA 1009'NC'+00 - STA 1011'NC'+65
STA 1022'ND'+43 - STA 1024'ND'+50

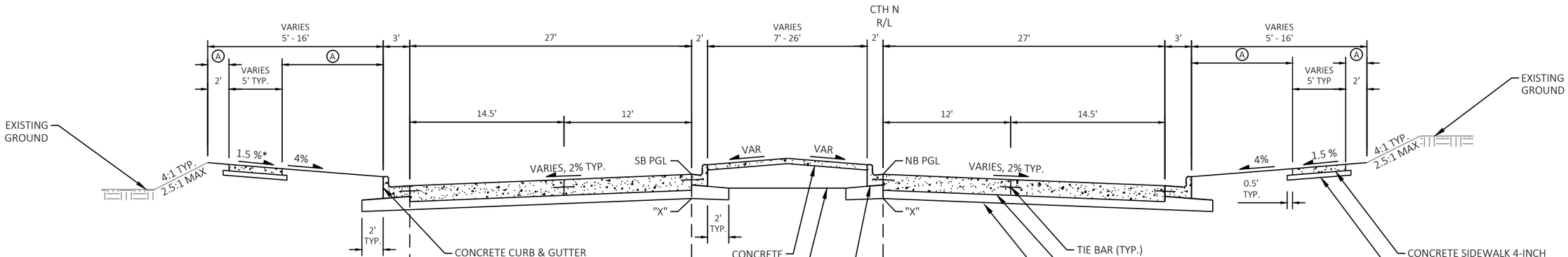


EXISTING TYPICAL SECTION
CTH N RAMPS

STA. 1017'NA'+13 - STA. 1018'NA'+86
STA. 1011'NB'+50 - STA. 1016'NB'+69
STA. 1011'NC'+65 - STA. 1015'NC'+67
STA. 1017'ND'+09 - STA. 1022'ND'+43

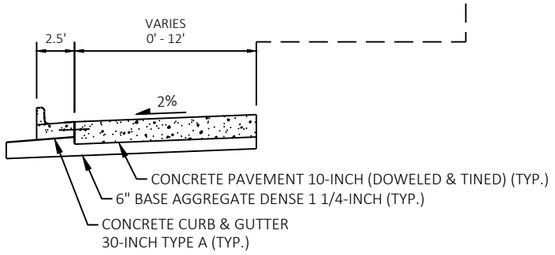
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EXISTING TYPICAL SECTIONS - CTH N RAMPS	SHEET 6	E

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

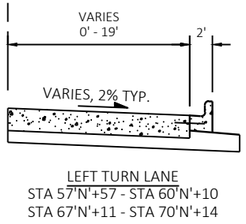


SIDEWALK REPLACEMENT LOCATIONS
STA 56'N'+31 - STA 56'N'+73
STA 57'N'+52 - STA 57'N'+89
STA 60'N'+62 - STA 60'N'+89
STA 61'N'+52 - STA 61'N'+79
STA 66'N'+62 - STA 66'N'+86
STA 67'N'+53 - STA 70'N'+24*

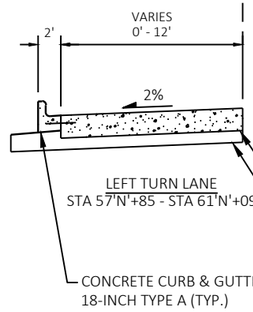
SIDEWALK REPLACEMENT LOCATIONS
STA 56'N'+31 - STA 56'N'+66
STA 57'N'+32 - STA 57'N'+67
STA 60'N'+48 - STA 60'N'+73
STA 61'N'+30 - STA 61'N'+64
STA 66'N'+66 - STA 66'N'+84
STA 67'N'+47 - STA 67'N'+64



RIGHT TURN LANE
STA 68'N'+27.84 - 70'N'+14.45



LEFT TURN LANE
STA 57'N'+57 - STA 60'N'+10
STA 67'N'+11 - STA 70'N'+14



LEFT TURN LANE
STA 57'N'+85 - STA 61'N'+09

FINISHED TYPICAL SECTION
CTH N

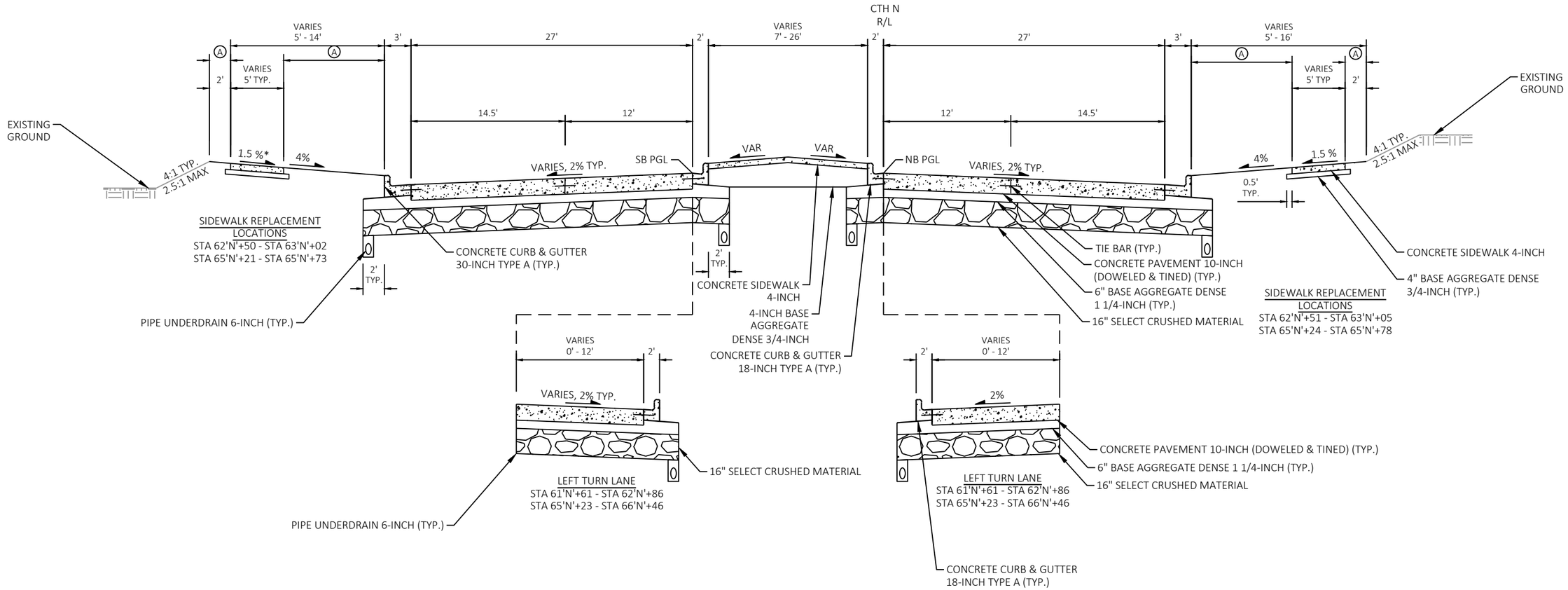
STA. 56'N+30.55 - STA 61'N'+91.40
STA. 66'N'+20.31 - STA 70'N'+14.45

NB PGL = POINT REFERRED TO ON NORTHBOUND PROFILE
SB PGL = POINT REFERRED TO ON SOUTHBOUND PROFILE
"X" = POINT REFERRED TO ON CROSS SECTIONS

* SIDEWALK SLOPES AWAY FROM CTH N WITHIN THIS STATION RANGE

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FINISHED TYPICAL SECTIONS - CTH N	SHEET 7	E

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



FINISHED TYPICAL SECTION
CTH N
STA. 61'N+61.40 - STA 63'N'+04.34
STA. 65'N'+23.59 - STA 66'N'+20.31

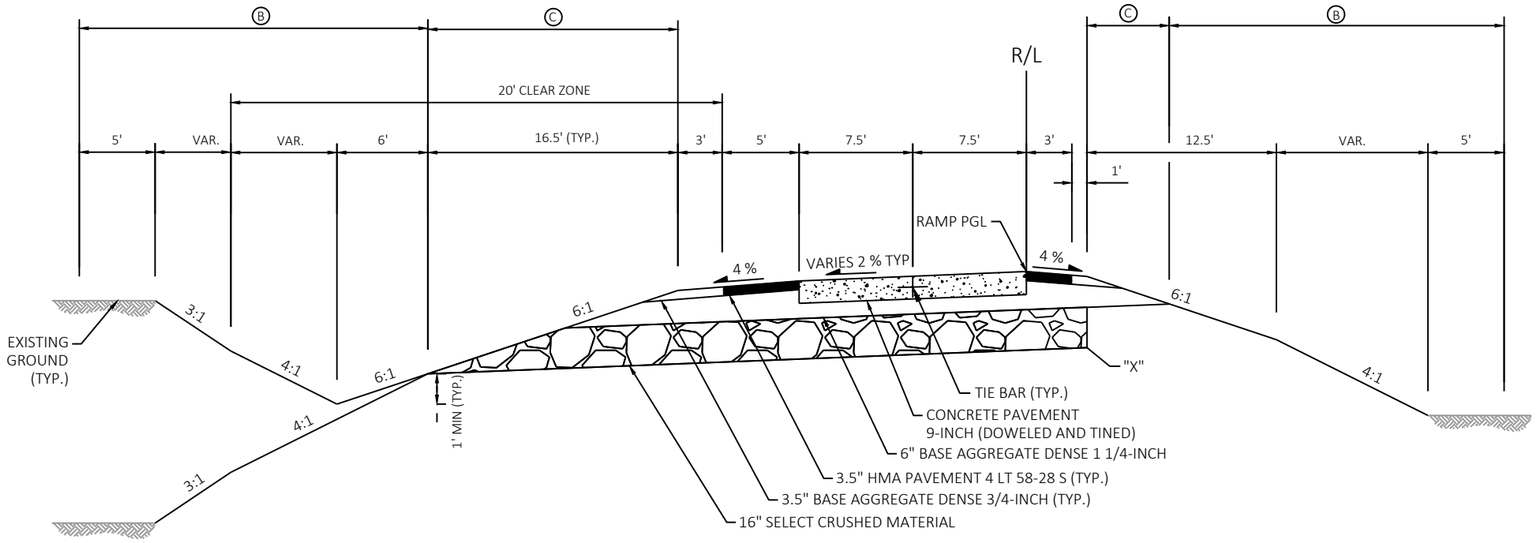
NB PGL = POINT REFERRED TO ON NORTHBOUND PROFILE
SB PGL = POINT REFERRED TO ON SOUTHBOUND PROFILE
"X" = POINT REFERRED TO ON CROSS SECTIONS

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FINISHED TYPICAL SECTIONS - CTH N	SHEET 8	E

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

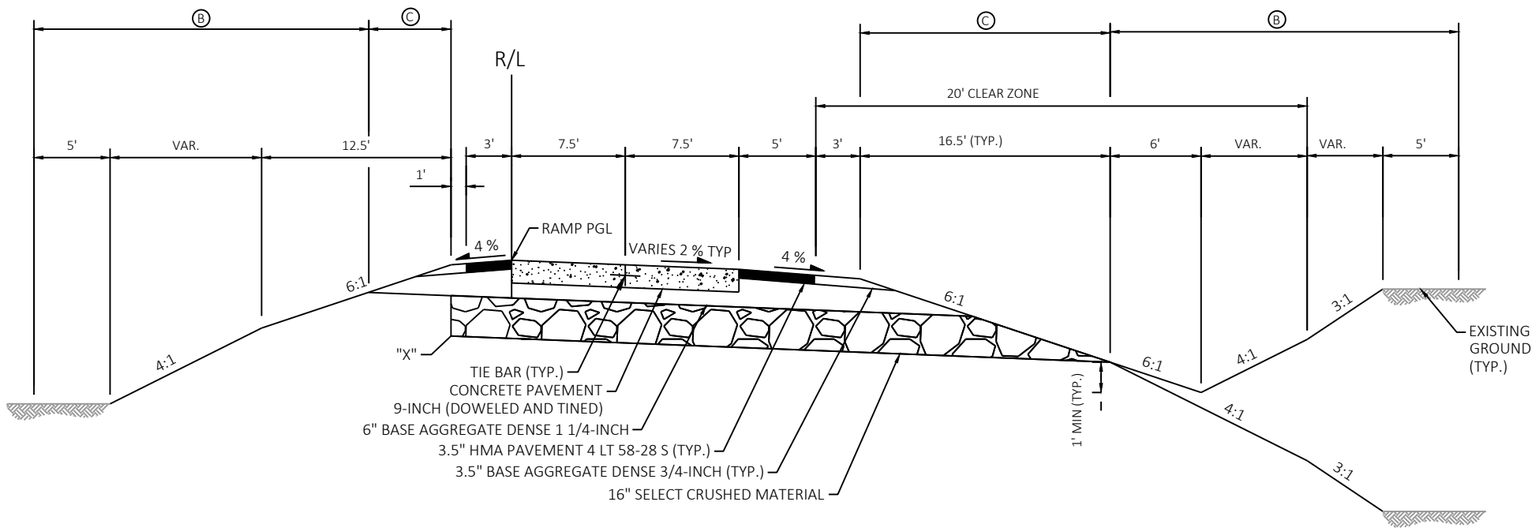
Ⓒ SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B.

2



FINISHED TYPICAL SECTION
CTH N SB RAMPS

STA. 1011'NC'+90 - STA. 1015'NC'+67
STA. 1017'ND'+09 - STA. 1022'ND'+25



FINISHED TYPICAL SECTION
CTH N NB RAMPS

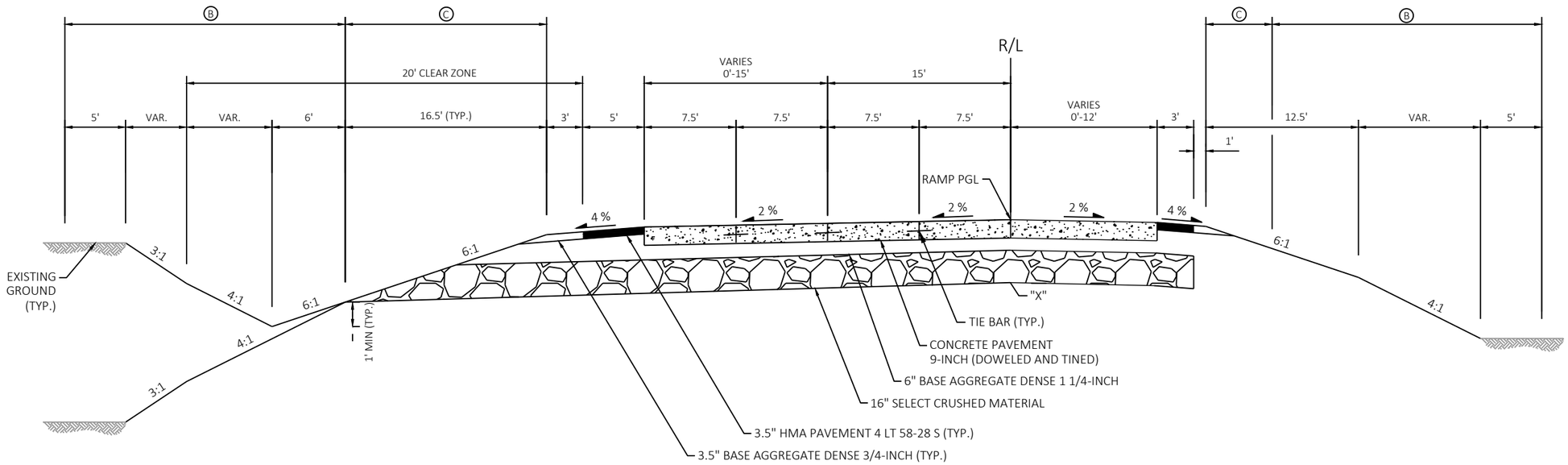
STA. 1017'NA'+13 - STA. 1022'NA'+00
STA. 1011'NB'+50 - STA. 1016'NB'+69

RAMP PGL = POINT REFERRED TO ON RAMP PROFILE
"X" = POINT REFERRED TO ON CROSS SECTIONS

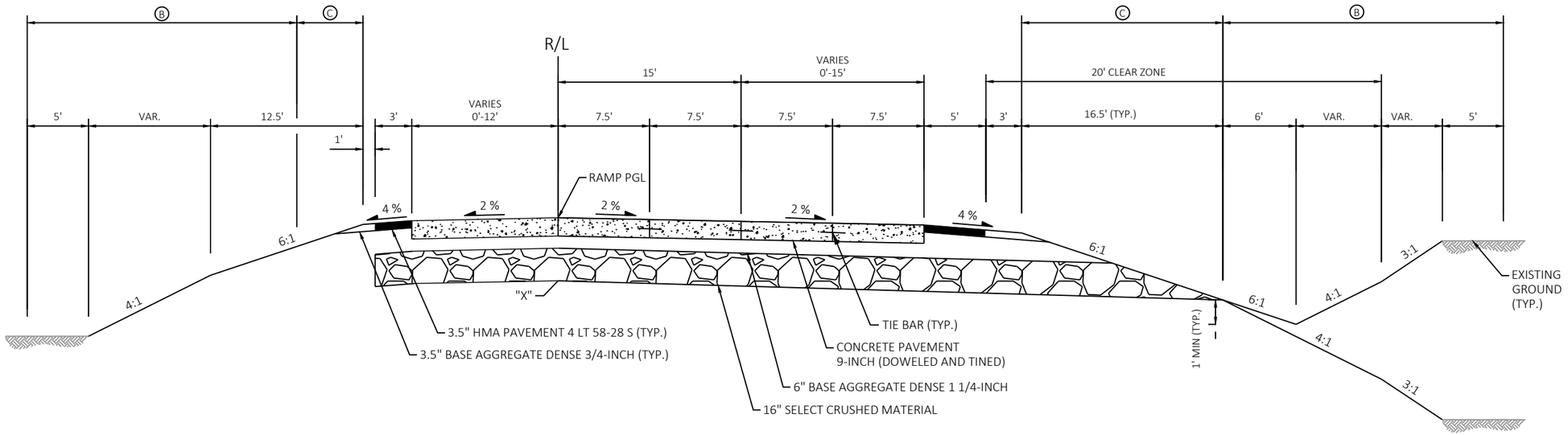
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FINISHED TYPICAL SECTIONS - CTH N RAMPS	SHEET 9	E

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

Ⓒ SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B.



FINISHED TYPICAL SECTION
CTH N SB RAMPS
STA. 1017'ND'+09 - STA. 1022'ND'+25



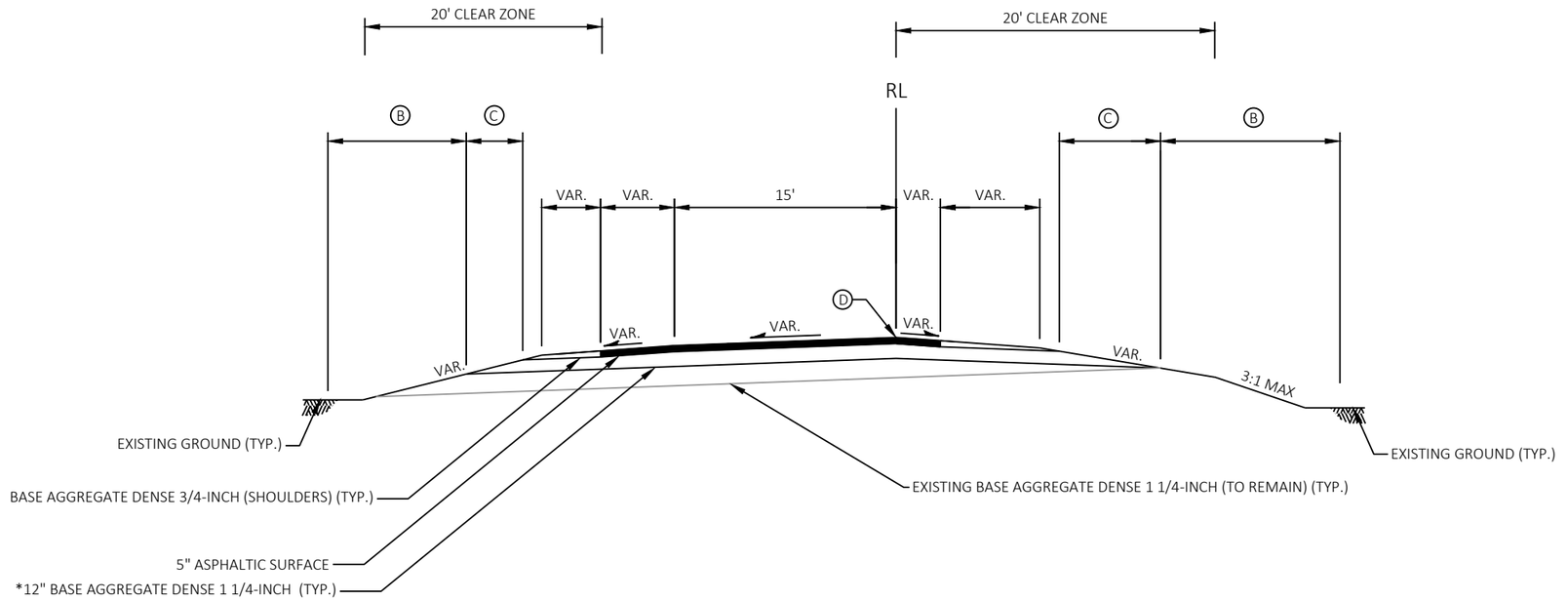
FINISHED TYPICAL SECTION
CTH N NB RAMPS
STA. 1011'NB'+50 - STA. 1016'NB'+69

RAMP PGL = POINT REFERRED TO ON RAMP PROFILE
"X" = POINT REFERRED TO ON CROSS SECTIONS

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FINISHED TYPICAL SECTIONS - CTH N RAMPS	SHEET 10	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\020301-TS-CTH N.DWG
LAYOUT NAME - 06-10ft
PLOT DATE : 1/30/2024 3:52 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



FINISHED TYPICAL SECTION
CTH N RAMPS TEMPORARY TIE IN

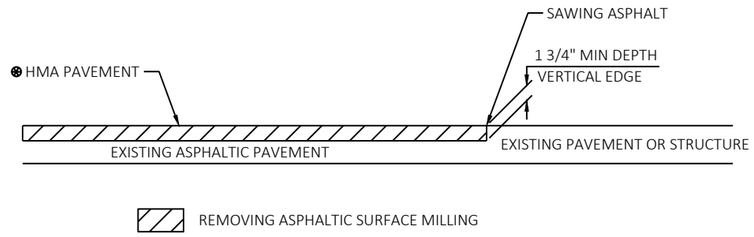
STA. 1022'NA'+50 - STA. 1024'NA'+75
STA. 1009'NB'+00 - STA. 1011'NB'+50
STA. 1009'NC'+00 - STA. 1011'NC'+90
STA. 1022'ND'+25 - STA. 1024'ND'+50

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

Ⓒ SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B.

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

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

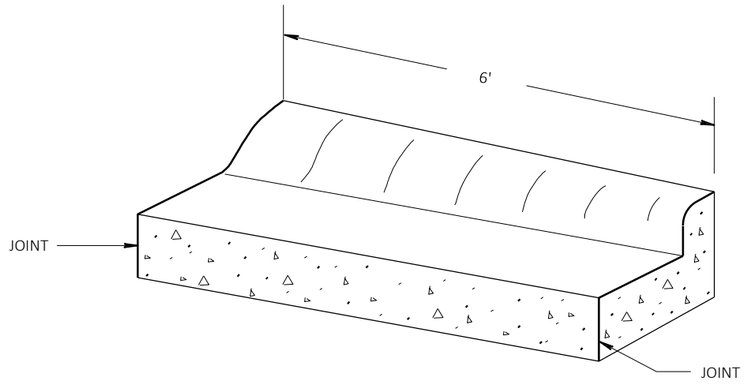


SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)

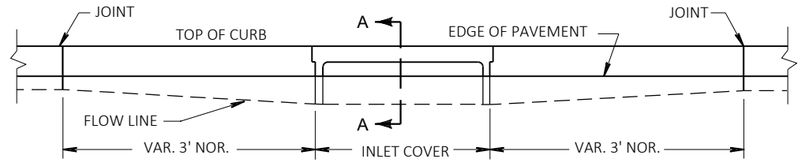
JOINT DETAIL

STA 56'N'+10.55 LT,RT
STA 69'N'+42.59 RT
STA 70'N'+34.30 LT

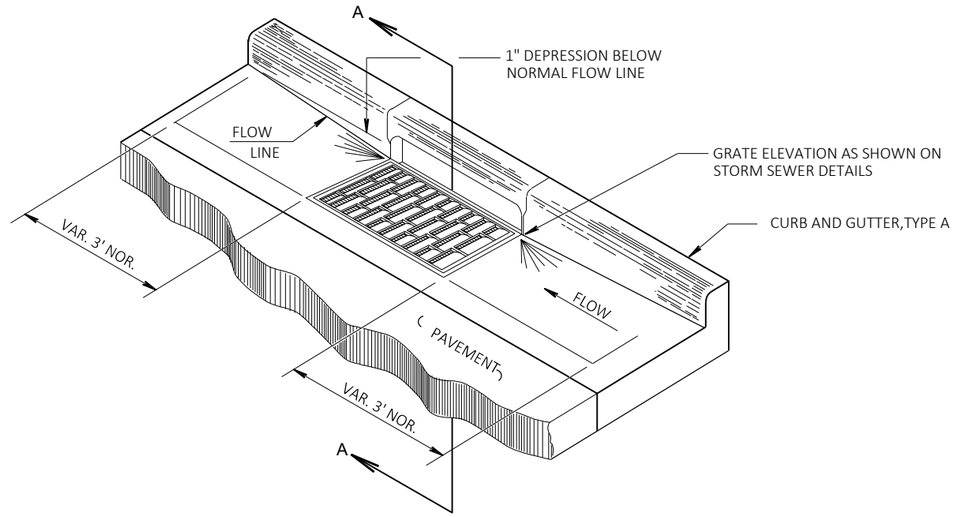


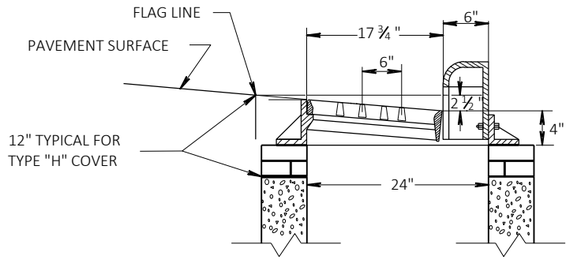
TRANSITION DETAIL

30" TYPE "A" CURB & GUTTER TO 18" TYPE "A" CURB & GUTTER
(TO BE MEASURED & PAID FOR AS 30" CONC. C&G TYPE A)



ELEVATION

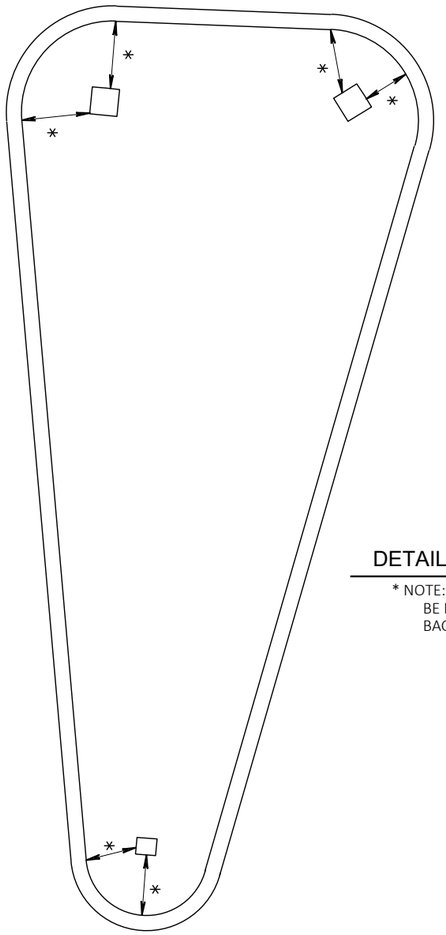


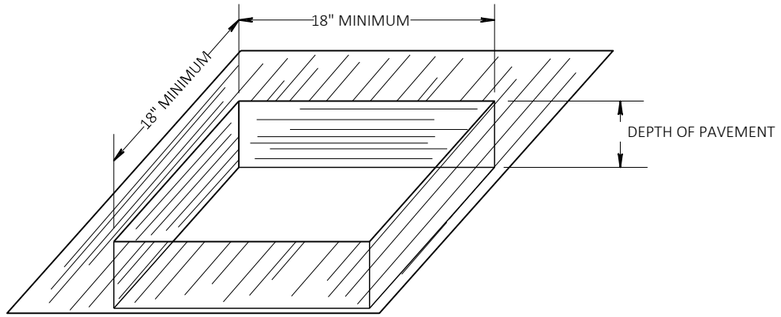


SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS

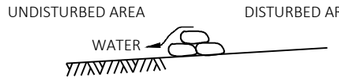
(TYPE 3-H INLET SHOWN)



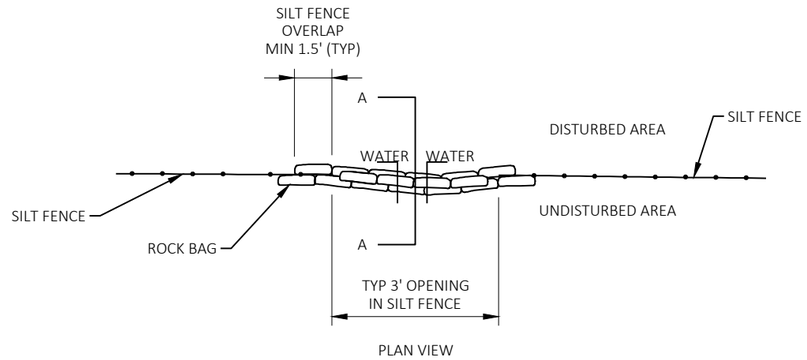


DETAIL OF OPENINGS IN ISLAND FOR SIGN PLACEMENT

* NOTE: ALL SQUARED OPENINGS IN ISLAND FOR SIGN PLACEMENTS SHALL BE DETERMINED BY SIGN SIZE AND NUMBER. A 2" MINIMUM FROM BACK OF CURB IS REQUIRED.

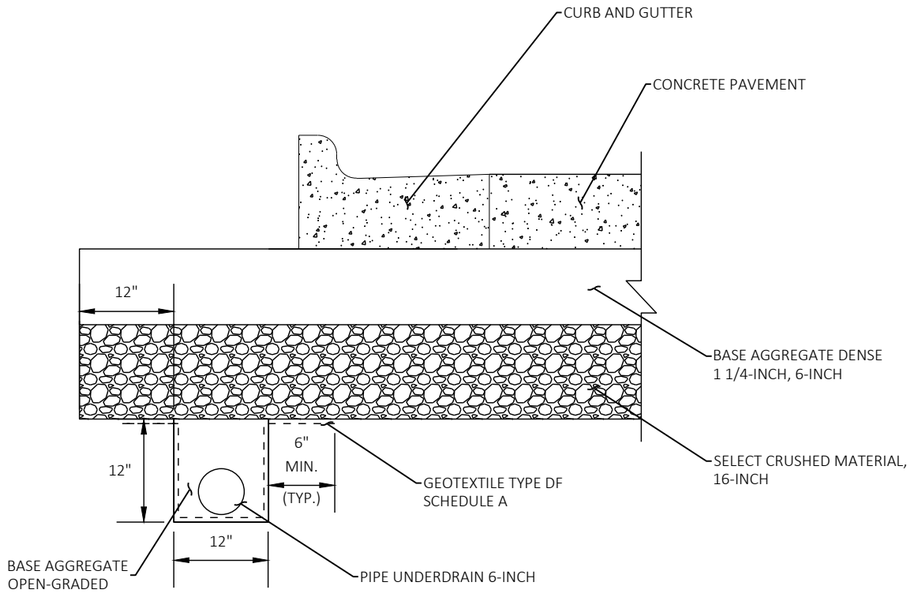


SECTION A-A



PLAN VIEW

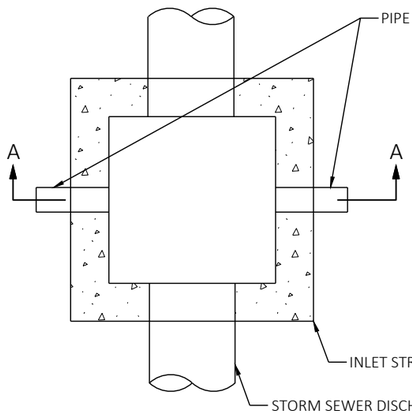
ROCK BAGS USED FOR SILT FENCE RELIEF POINT



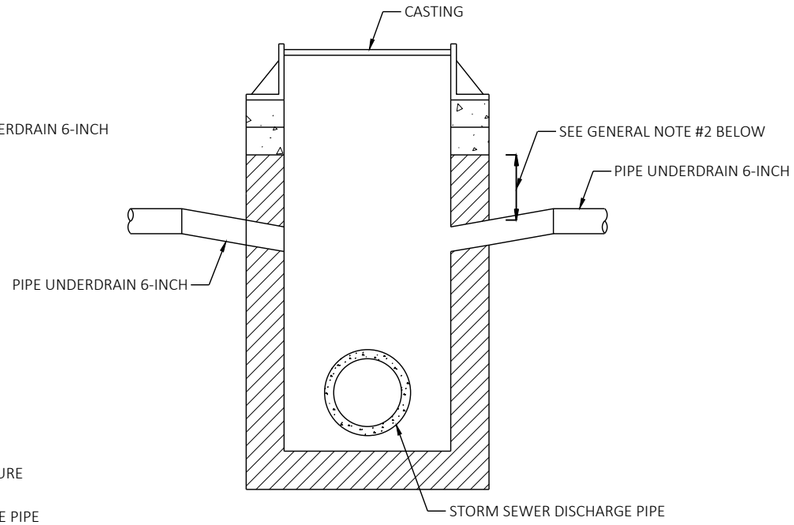
UNDERDRAIN BEHIND CURB AND GUTTER

NOTES:

1. PLACE UNDERDRAIN BENEATH CURB AND GUTTER AT MGS GUARDRAIL LOCATIONS TO AVOID IMPACT BY POSTS.



PLAN VIEW



SECTION A-A

UNDERDRAIN OUTFALL AT STORM SEWER STRUCTURE

NOTES:

1. CONNECTIONS TO INLETS OR MANHOLES IN MEDIAN SHALL USE PIPE UNDERDRAIN, 6-INCH.

2. PROVIDE UNDERDRAIN OPENINGS TO ACCOMMODATE 6" UNDERDRAIN PIPE. SEE TYPICAL SECTIONS FOR PIPE UNDERDRAIN DEPTH AND LOCATIONS.

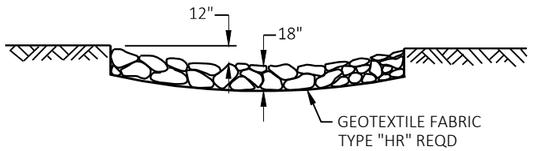
3. DRAIN TILES SHALL NOT BE ALLOWED IN THE ADJUSTMENT RING OF THE STRUCTURE OF INLETS OR SEWER ACCESS STRUCTURES

4. CORE HOLES SHALL PROVIDE FOR A MINIMUM OF 2" OF CONCRETE BETWEEN THE CUTOUT FOR A CONCRETE PIPE AND THE EDGE OF THE CORE HOLE.

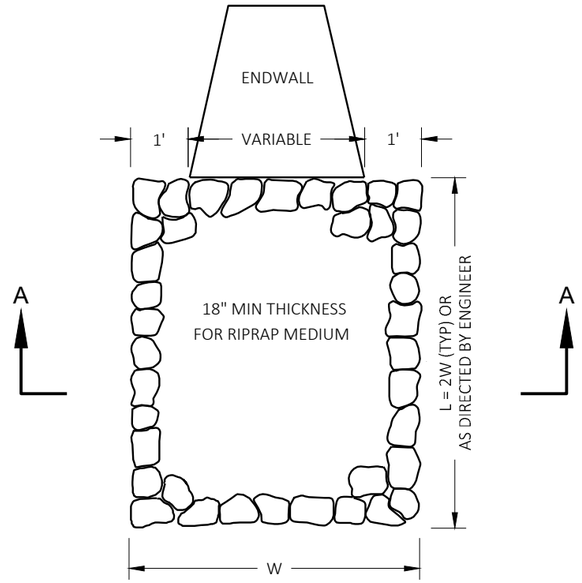
5. CORE HOLES MAY HAVE 1" CLEARANCE FROM THE INSIDE WALLS OF A STRUCTURE.

6. UNDERDRAIN OUTFALL AT STORM STRUCTURE CONNECTIONS ARE INCIDENTAL TO THE STORM STRUCTURE.

2

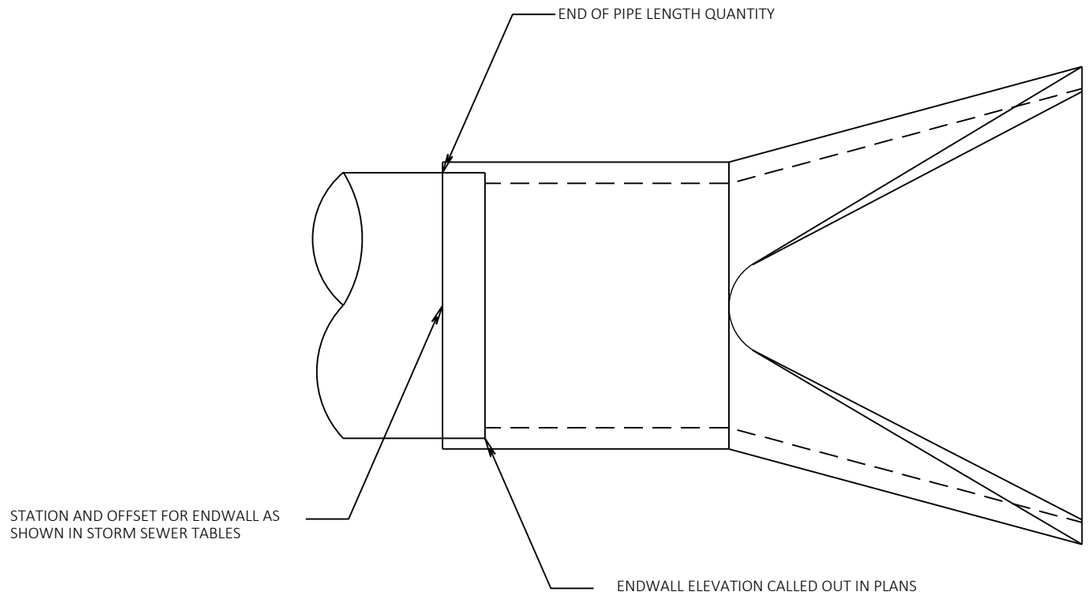


SECTION A-A



RIPRAP MEDIUM TREATMENT AT CULVERTS

RIPRAP SHOULD BE PLACED FROM OUTLET TO THE BOTTOM OF SLOPE WHEN APPLICABLE. SEE STORM SEWER PLANS FOR APPROXIMATE RIPRAP LIMITS.



ENDWALL DETAIL

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CONSTRUCTION DETAILS	SHEET 15	E

2

2

N

VILLAGE OF LITTLE CHUTE

VILLAGE OF LITTLE CHUTE

PATRIOT DR

RAMP NB

1010NB

IH 41 NB

IH 41 SB

1010SB

RAMP NC

1015NC

1015NB

1015SB

S-44-383

50N

55N

60N

65N

70N

CTH N

75N

B-44-0179

S-44-384

ELM DR

MOASIS DR

1020NA

RAMP NA

1020NB

1020SB

RAMP ND

1020ND

RANDOLPH DR

EVERGREEN DR

VILLAGE OF LITTLE CHUTE

VILLAGE OF LITTLE CHUTE

1025NA

1025NB

1025SB

1025ND

EXISTING PHRAGMITES LIMITS

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CONSTRUCTION DETAILS - PHRAGMITES LIMITS OVERVIEW	SHEET 16	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021002-CD.DWG
LAYOUT NAME - 020201

PLOT DATE : 3/26/2024 4:18 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

IH 41 SB

IH 41 NB

N

STA. 1012'NB'+71.35 LT - STA. 1013'NB'+24.48 LT, MGS GUARDRAIL TERMINAL EAT
STA. 1013'NB'+24.48 LT - STA. 1014'NB'+25.01 LT, MGS GUARDRAIL 3

SLOPE INTERCEPT

STA 1012+71.35'NB'
-9.133' LT
POST #1

+70.87
-15.05' LT

+95.98
-14.45' LT

STA 1012+96.32'NB'
-10.187' LT
POST #5

+20.99
-15.17' LT

STA 1013+21.30'NB'
-11.241' LT
POST #9

+24.11
-15.30' LT

+69.61
-18.94' LT

+25.01
-18.94' LT

3'
1'
12'

1010NB+00
1011NB+00
1012NB+00
1013NB+00
1014NB+00
1015NB+00

IH 41 RAMP NB

15'
15'
5'
3'

STA 1011+87.50'NB'
21.99' RT
POST #1

+86.91
27.90' RT

+12.03
27.79' RT

STA 1012+12.50'NB'
23.54' RT
POST #5

+40.13
29.20' RT

STA 1012+37.40'NB'
25.09' RT
POST #9

+37.32
38.92' RT

+24.75
38.94' RT

+34.75
38.00' RT

SLOPE INTERCEPT

EXIST R/W

PROP R/W

STA. 1011'NB'+87.50 RT - STA. 1012'NB'+40.63 RT, MGS GUARDRAIL TERMINAL EAT
STA. 1012'NB'+40.63 RT - STA. 1014'NB'+25.01 RT, MGS GUARDRAIL 3

RIPRAP

BYLS

MATCH LINE 1015'NB'+50

2

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	GUARDRAIL PLAN	SHEET 17	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021201-GR.DWG
LAYOUT NAME - 021206-gr

PLOT DATE : 2/26/2024 1:49 PM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

EXIST R/W

PROP R/W

STA. 1019'ND'+40.45 RT - STA. 1018'ND'+87.33 RT, MGS GUARDRAIL TERMINAL EAT
STA. 1018'ND'+87.33 RT - STA. 1018'ND'+25.00 RT, MGS GUARDRAIL 3

+25
-38.94' LT

+41.31
-38.94' LT

+15
-38.00' LT

STA 1018+90.50'ND'
-31.17' LT
POST #9

+87.69
-35.22' LT

+15.82
-34.37' LT

STA 1019+15.48'ND'
-30.109' LT
POST #5

+40.93
-34.97' LT

STA 1019+40.45'ND'
-29.053' LT
POST #1

SLOPE INTERCEPT

3'

5'

15'

IH 41 RAMP ND

1018ND+00 1019ND+00 1020ND+00 1021ND+00 1022ND+00 1023ND+00

12'

1' 3'

STA 1019+28.12'ND'
8.147' RT
POST #9

STA 1019+53.09'ND'
7.09'RT
POST #5

STA 1019+78.07'ND'
6.03' RT
POST #1

SLOPE INTERCEPT

STA. 1019'ND'+78.07 RT - STA. 1019'ND'+24.95 RT, MGS GUARDRAIL TERMINAL EAT
STA. 1019'ND'+24.95 RT - STA. 1018'ND'+25.00 RT, MGS GUARDRAIL 3

IH 41

IH 41 SB

IH 41 NB

MATCH LINE 1017'ND'+75

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	GUARDRAIL PLAN	SHEET 18	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021201-GR.DWG
LAYOUT NAME - 021208-gr

PLOT DATE : 2/26/2024 1:53 PM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE: SEE PAVING GRADES AND CURB RAMP DETAILS FOR STATION AND OFFSET LAYOUT INFORMATION.

LEGEND

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	ASPHALTIC SURFACE
AP02	HMA PAVEMENT 2" REMOVING ASPHALTIC SURFACE MILLING
AP3.5	HMA PAVEMENT 3.5"
AP05	HMA PAVEMENT 5"
BG32	MGS GUARDRAIL 3
BG40	MGS GUARDRAIL TERMINAL EAT
CG12	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG14	CONCRETE CURB & GUTTER 30-INCH TYPE A
CM04	CONCRETE SIDEWALK 4-INCH
CM10	CONCRETE CORRUGATED MEDIAN
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CP09	CONCRETE PAVEMENT 9-INCH (DOWELED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED)
CP20	CONCRETE PAVEMENT HES 10-INCH (DOWELED)
DR07	CONCRETE DRIVEWAY 7-INCH
DR20	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV06	CONCRETE SURFACE DRAINS
PV08	DRILLED TIE BARS
PV09	DRILLED DOWEL BARS
LS02	TOPSOIL, FERTILIZER, SEEDING
SW01	SAWING ASPHALT
SW02	SAWING CONCRETE

BEGIN PROJECT
STA 56'N'+10.55

CTH N

PATRIOT DR

MOASIS DR

IH 41 RAMP NB

IH 41 RAMP NA

MATCH LINE 1015'NB'+50

MATCH LINE 1017'NA'+50

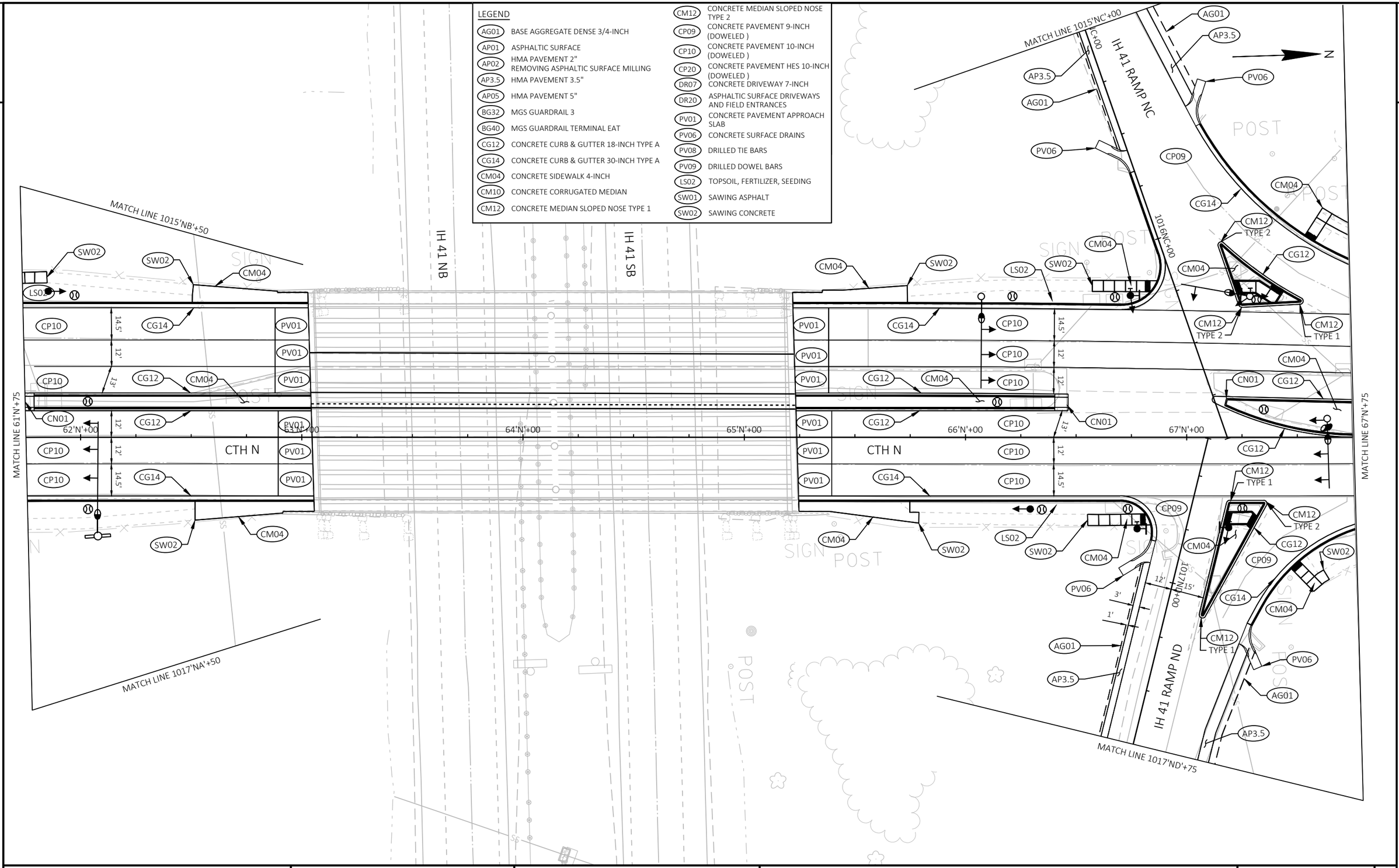
MATCH LINE 61'N'+75

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN DETAILS	SHEET 19 E

2

LEGEND

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	ASPHALTIC SURFACE
AP02	HMA PAVEMENT 2" REMOVING ASPHALTIC SURFACE MILLING
AP3.5	HMA PAVEMENT 3.5"
AP05	HMA PAVEMENT 5"
BG32	MGS GUARDRAIL 3
BG40	MGS GUARDRAIL TERMINAL EAT
CG12	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG14	CONCRETE CURB & GUTTER 30-INCH TYPE A
CM04	CONCRETE SIDEWALK 4-INCH
CM10	CONCRETE CORRUGATED MEDIAN
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CP09	CONCRETE PAVEMENT 9-INCH (DOWELED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED)
CP20	CONCRETE PAVEMENT HES 10-INCH (DOWELED)
DR07	CONCRETE DRIVEWAY 7-INCH
DR20	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV06	CONCRETE SURFACE DRAINS
PV08	DRILLED TIE BARS
PV09	DRILLED DOWEL BARS
LS02	TOPSOIL, FERTILIZER, SEEDING
SW01	SAWING ASPHALT
SW02	SAWING CONCRETE



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN DETAILS	SHEET 20 E

2

LEGEND

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	ASPHALTIC SURFACE
AP02	HMA PAVEMENT 2" REMOVING ASPHALTIC SURFACE MILLING
AP3.5	HMA PAVEMENT 3.5"
AP05	HMA PAVEMENT 5"
BG32	MGS GUARDRAIL 3
BG40	MGS GUARDRAIL TERMINAL EAT
CG12	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG14	CONCRETE CURB & GUTTER 30-INCH TYPE A
CM04	CONCRETE SIDEWALK 4-INCH
CM10	CONCRETE CORRUGATED MEDIAN
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CP09	CONCRETE PAVEMENT 9-INCH (DOWELED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED)
CP20	CONCRETE PAVEMENT HES 10-INCH (DOWELED)
DR07	CONCRETE DRIVEWAY 7-INCH
DR20	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV06	CONCRETE SURFACE DRAINS
PV08	DRILLED TIE BARS
PV09	DRILLED DOWEL BARS
LS02	TOPSOIL, FERTILIZER, SEEDING
SW01	SAWING ASPHALT
SW02	SAWING CONCRETE

N

MATCH LINE 67'N +75

CM04
SW02
LS02
CG14
SW01
AP02
CP10
12'
14.5'
12'
12'
CG12
CG12
END CONSTRUCTION
STA 70'N'+34.30
SW01
68'N'+00
69'N'+00
70'N'+00
71'N'+00
72'N'+00
CM04
CP10
CG12
12'
14.5'
CTH N
CP10
CG14
CP10
LS02
AP02
END PROJECT
STA 69'N'+42.59
SW01
SIGN
POST

2

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN DETAILS	SHEET 21	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021201-PD-N.DWG
LAYOUT NAME - 021203-pd

PLOT DATE : 1/12/2024 6:03 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	ASPHALTIC SURFACE
AP02	HMA PAVEMENT 2" REMOVING ASPHALTIC SURFACE MILLING
AP3.5	HMA PAVEMENT 3.5"
AP05	HMA PAVEMENT 5"
BG32	MGS GUARDRAIL 3
BG40	MGS GUARDRAIL TERMINAL EAT
CG12	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG14	CONCRETE CURB & GUTTER 30-INCH TYPE A
CM04	CONCRETE SIDEWALK 4-INCH
CM10	CONCRETE CORRUGATED MEDIAN
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CP09	CONCRETE PAVEMENT 9-INCH (DOWELED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED)
CP20	CONCRETE PAVEMENT HES 10-INCH (DOWELED)
DR07	CONCRETE DRIVEWAY 7-INCH
DR20	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV06	CONCRETE SURFACE DRAINS
PV08	DRILLED TIE BARS
PV09	DRILLED DOWEL BARS
LS02	TOPSOIL, FERTILIZER, SEEDING
SW01	SAWING ASPHALT
SW02	SAWING CONCRETE

N

IH 41 SB

IH 41 NB

SIGN

AG01

AP3.5

1018NA+00

1019NA+00

1020NA+00

1021NA+00

1022NA+00

1023N

CP09

IH 41 RAMP NA

AP05

1'

3'

15'

5'

3'

MATCH LINE 1017'NA'+50

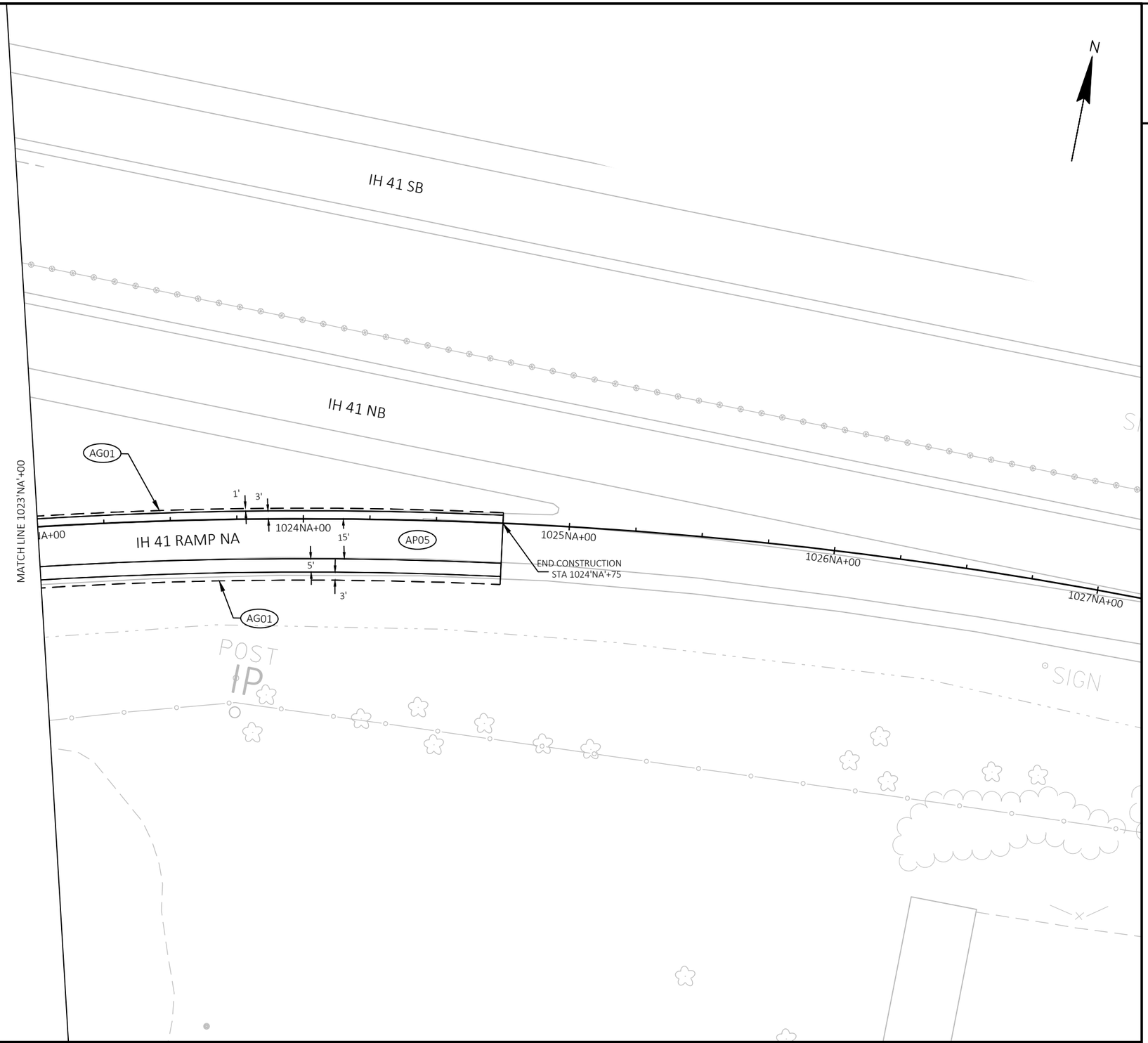
MATCH LINE 1023'NA'+00

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN DETAILS	SHEET 22 E

2

LEGEND

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	ASPHALTIC SURFACE
AP02	HMA PAVEMENT 2" REMOVING ASPHALTIC SURFACE MILLING
AP3.5	HMA PAVEMENT 3.5"
AP05	HMA PAVEMENT 5"
BG32	MGS GUARDRAIL 3
BG40	MGS GUARDRAIL TERMINAL EAT
CG12	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG14	CONCRETE CURB & GUTTER 30-INCH TYPE A
CM04	CONCRETE SIDEWALK 4-INCH
CM10	CONCRETE CORRUGATED MEDIAN
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CP09	CONCRETE PAVEMENT 9-INCH (DOWELED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED)
CP20	CONCRETE PAVEMENT HES 10-INCH (DOWELED)
DR07	CONCRETE DRIVEWAY 7-INCH
DR20	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV06	CONCRETE SURFACE DRAINS
PV08	DRILLED TIE BARS
PV09	DRILLED DOWEL BARS
LS02	TOPSOIL, FERTILIZER, SEEDING
SW01	SAWING ASPHALT
SW02	SAWING CONCRETE



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PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN DETAILS	SHEET 23 E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021201-PD-N.DWG
LAYOUT NAME - 021205-pd

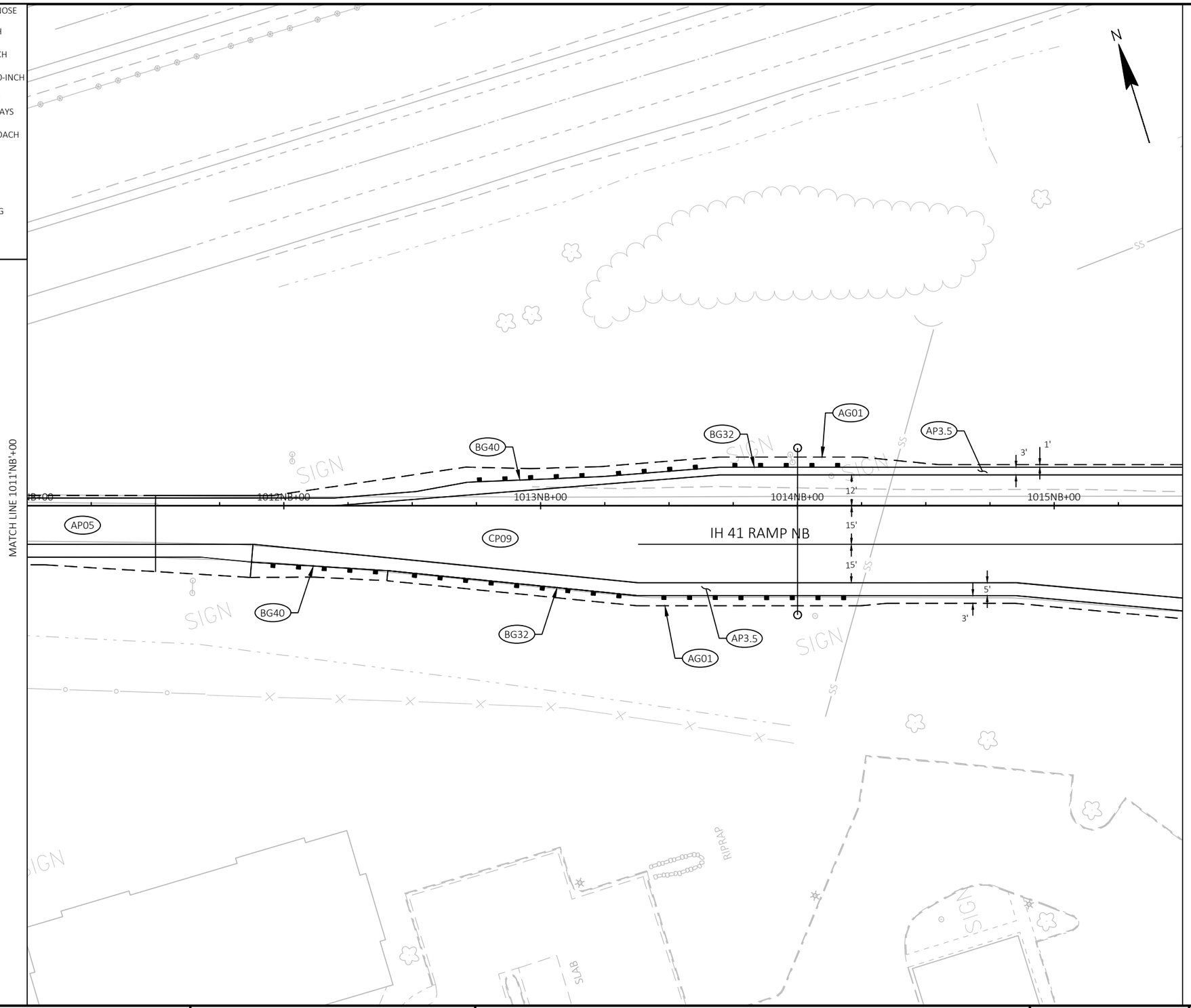
PLOT DATE : 1/12/2024 6:11 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	ASPHALTIC SURFACE
AP02	HMA PAVEMENT 2" REMOVING ASPHALTIC SURFACE MILLING
AP3.5	HMA PAVEMENT 3.5"
AP05	HMA PAVEMENT 5"
BG32	MGS GUARDRAIL 3
BG40	MGS GUARDRAIL TERMINAL EAT
CG12	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG14	CONCRETE CURB & GUTTER 30-INCH TYPE A
CM04	CONCRETE SIDEWALK 4-INCH
CM10	CONCRETE CORRUGATED MEDIAN
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CP09	CONCRETE PAVEMENT 9-INCH (DOWELED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED)
CP20	CONCRETE PAVEMENT HES 10-INCH (DOWELED)
DR07	CONCRETE DRIVEWAY 7-INCH
DR20	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV06	CONCRETE SURFACE DRAINS
PV08	DRILLED TIE BARS
PV09	DRILLED DOWEL BARS
LS02	TOPSOIL, FERTILIZER, SEEDING
SW01	SAWING ASPHALT
SW02	SAWING CONCRETE



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN DETAILS	SHEET 24	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021201-PD-N.DWG
LAYOUT NAME - 021206-pd

PLOT DATE : 1/12/2024 6:14 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	ASPHALTIC SURFACE
AP02	HMA PAVEMENT 2" REMOVING ASPHALTIC SURFACE MILLING
AP3.5	HMA PAVEMENT 3.5"
AP05	HMA PAVEMENT 5"
BG32	MGS GUARDRAIL 3
BG40	MGS GUARDRAIL TERMINAL EAT
CG12	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG14	CONCRETE CURB & GUTTER 30-INCH TYPE A
CM04	CONCRETE SIDEWALK 4-INCH
CM10	CONCRETE CORRUGATED MEDIAN
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CP09	CONCRETE PAVEMENT 9-INCH (DOWELED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED)
CP20	CONCRETE PAVEMENT HES 10-INCH (DOWELED)
DR07	CONCRETE DRIVEWAY 7-INCH
DR20	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV06	CONCRETE SURFACE DRAINS
PV08	DRILLED TIE BARS
PV09	DRILLED DOWEL BARS
LS02	TOPSOIL, FERTILIZER, SEEDING
SW01	SAWING ASPHALT
SW02	SAWING CONCRETE

N

IH 41 SB

IH 41 NB

SIGN

SIGN

SIGN

SIGN

AG01

1010NB+00

1011NB+00

1009NB+00

AP05

1008NB+00

BEGIN CONSTRUCTION
STA 1009'NB'+00

1007NB+00

AG01

MATCH LINE 1011'NB'+00

2

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN DETAILS	SHEET 25	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021201-PD-N.DWG
LAYOUT NAME - 021207-pd

PLOT DATE : 1/12/2024 6:18 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	ASPHALTIC SURFACE
AP02	HMA PAVEMENT 2" REMOVING ASPHALTIC SURFACE MILLING
AP3.5	HMA PAVEMENT 3.5"
AP05	HMA PAVEMENT 5"
BG32	MGS GUARDRAIL 3
BG40	MGS GUARDRAIL TERMINAL EAT
CG12	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG14	CONCRETE CURB & GUTTER 30-INCH TYPE A
CM04	CONCRETE SIDEWALK 4-INCH
CM10	CONCRETE CORRUGATED MEDIAN
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CP09	CONCRETE PAVEMENT 9-INCH (DOWELED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED)
CP20	CONCRETE PAVEMENT HES 10-INCH (DOWELED)
DR07	CONCRETE DRIVEWAY 7-INCH
DR20	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV06	CONCRETE SURFACE DRAINS
PV08	DRILLED TIE BARS
PV09	DRILLED DOWEL BARS
LS02	TOPSOIL, FERTILIZER, SEEDING
SW01	SAWING ASPHALT
SW02	SAWING CONCRETE

N

POST

POST

SIGN

SIGN

POST

AG01

AP3.5

3'

5'

15'

1'

3'

1009NC+00

1010NC+00

AP05

1011NC+00

1012NC+00

IH 41 RAMP NC

1013NC+00

CP09

1014NC+00

1015NC+00

BEGIN CONSTRUCTION
STA 1009'NC'+00

AG01

AP3.5

MATCH LINE 1015'NC'+00

IH 41 SB

IH 41 NB

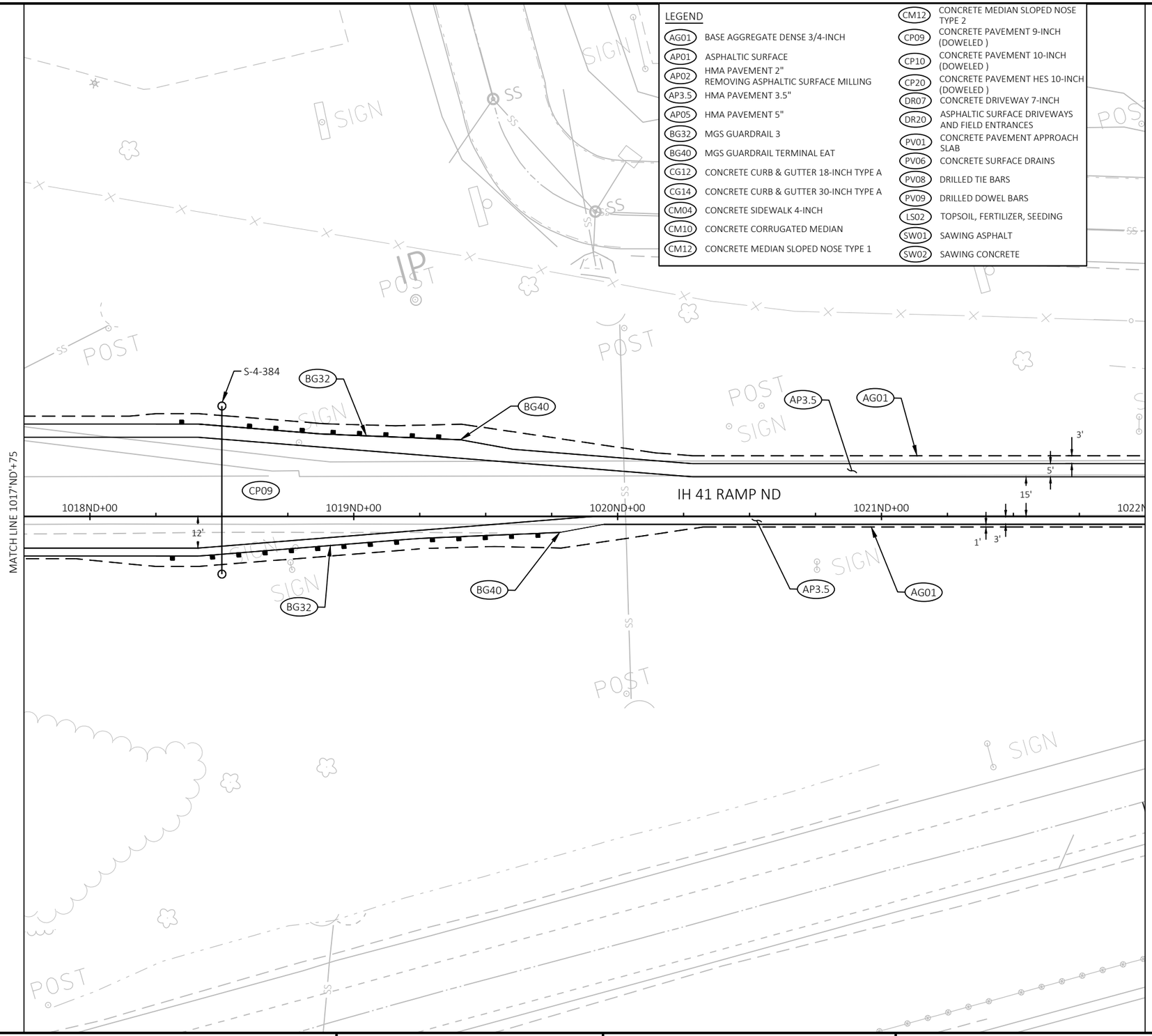
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN DETAILS	SHEET 26	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021201-PD-N.DWG
LAYOUT NAME - 021208-pd
PLOT DATE : 1/12/2024 6:22 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	ASPHALTIC SURFACE
AP02	HMA PAVEMENT 2" REMOVING ASPHALTIC SURFACE MILLING
AP3.5	HMA PAVEMENT 3.5"
AP05	HMA PAVEMENT 5"
BG32	MGS GUARDRAIL 3
BG40	MGS GUARDRAIL TERMINAL EAT
CG12	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG14	CONCRETE CURB & GUTTER 30-INCH TYPE A
CM04	CONCRETE SIDEWALK 4-INCH
CM10	CONCRETE CORRUGATED MEDIAN
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CP09	CONCRETE PAVEMENT 9-INCH (DOWELED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED)
CP20	CONCRETE PAVEMENT HES 10-INCH (DOWELED)
DR07	CONCRETE DRIVEWAY 7-INCH
DR20	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV06	CONCRETE SURFACE DRAINS
PV08	DRILLED TIE BARS
PV09	DRILLED DOWEL BARS
LS02	TOPSOIL, FERTILIZER, SEEDING
SW01	SAWING ASPHALT
SW02	SAWING CONCRETE



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN DETAILS	SHEET 27	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021201-PD-N.DWG
LAYOUT NAME - 021209-pd

PLOT DATE : 1/12/2024 6:26 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	ASPHALTIC SURFACE
AP02	HMA PAVEMENT 2"
	REMOVING ASPHALTIC SURFACE MILLING
AP3.5	HMA PAVEMENT 3.5"
AP05	HMA PAVEMENT 5"
BG32	MGS GUARDRAIL 3
BG40	MGS GUARDRAIL TERMINAL EAT
CG12	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG14	CONCRETE CURB & GUTTER 30-INCH TYPE A
CM04	CONCRETE SIDEWALK 4-INCH
CM10	CONCRETE CORRUGATED MEDIAN
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM12	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CP09	CONCRETE PAVEMENT 9-INCH (DOWELED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED)
CP20	CONCRETE PAVEMENT HES 10-INCH (DOWELED)
DR07	CONCRETE DRIVEWAY 7-INCH
DR20	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
PV01	CONCRETE PAVEMENT APPROACH SLAB
PV06	CONCRETE SURFACE DRAINS
PV08	DRILLED TIE BARS
PV09	DRILLED DOWEL BARS
LS02	TOPSOIL, FERTILIZER, SEEDING
SW01	SAWING ASPHALT
SW02	SAWING CONCRETE

N

AG01

AP05

MATCH LINE 1022'ND+00

1023ND+00

1024ND+00

END CONSTRUCTION
STA 1024'ND'+50

1025ND+00

1026ND+00

1027ND+00

POST

SS

SIGN

IH 41 SB

IH 41 NB

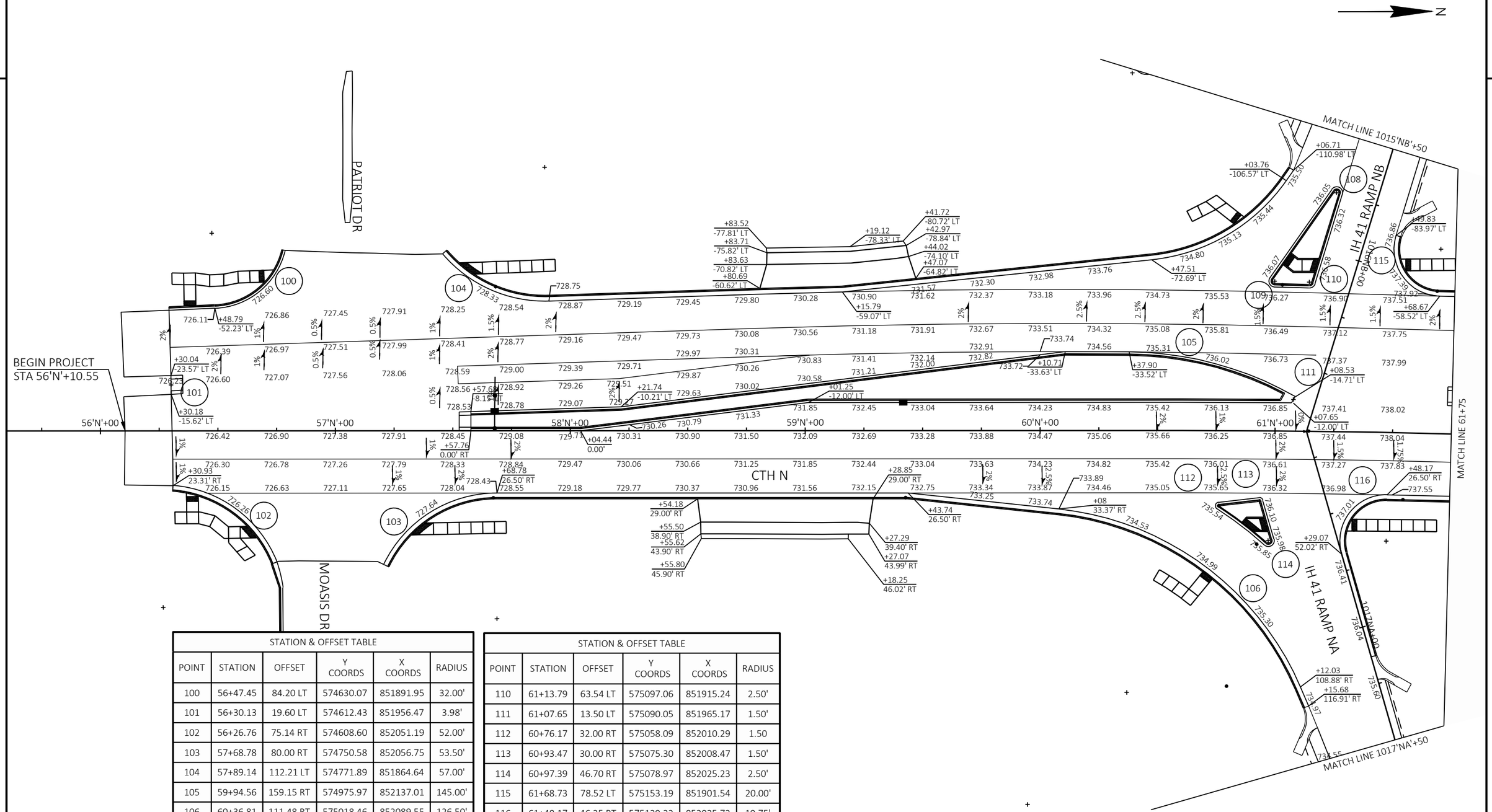
2

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN DETAILS	SHEET 28	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021201-PD-N.DWG
LAYOUT NAME - 021210-pd

PLOT DATE : 1/12/2024 6:29 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

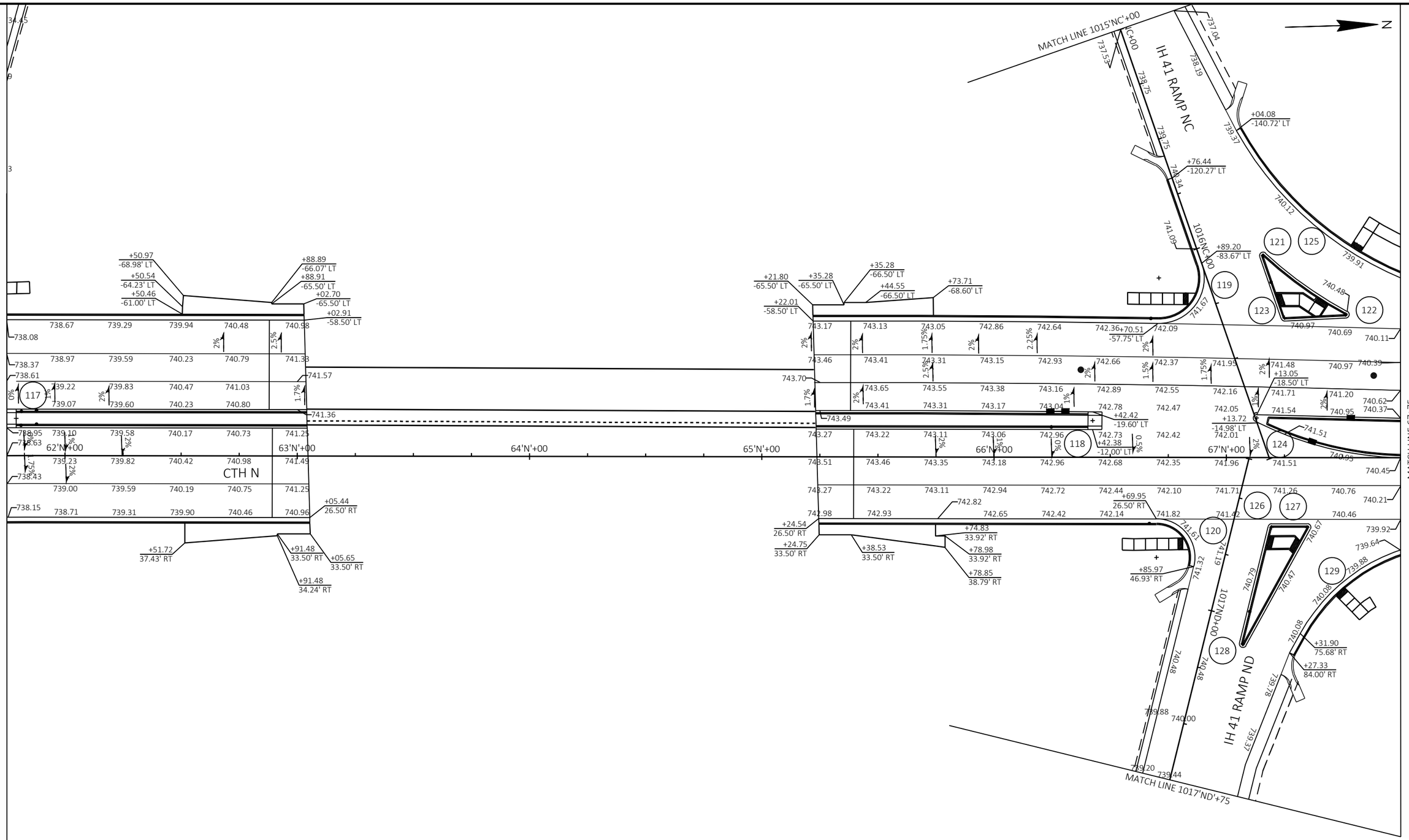
2



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
100	56+47.45	84.20 LT	574630.07	851891.95	32.00'
101	56+30.13	19.60 LT	574612.43	851956.47	3.98'
102	56+26.76	75.14 RT	574608.60	852051.19	52.00'
103	57+68.78	80.00 RT	574750.58	852056.75	53.50'
104	57+89.14	112.21 LT	574771.89	851864.64	57.00'
105	59+94.56	159.15 RT	574975.97	852137.01	145.00'
106	60+36.81	111.48 RT	575018.46	852089.55	126.50'
107	60+39.28	152.27 LT	575022.23	851825.82	80.00'
108	61+24.74	101.66 LT	575108.90	851877.33	2.50'
109	60+99.29	63.75 LT	575082.36	851914.80	2.50'

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
110	61+13.79	63.54 LT	575097.06	851915.24	2.50'
111	61+07.65	13.50 LT	575090.05	851965.17	1.50'
112	60+76.17	32.00 RT	575058.09	852010.29	1.50
113	60+93.47	30.00 RT	575075.30	852008.47	1.50'
114	60+97.39	46.70 RT	575078.97	852025.23	2.50'
115	61+68.73	78.52 LT	575153.19	851901.54	20.00'
116	61+48.17	46.25 RT	575129.22	852025.72	19.75'

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVING GRADES	SHEET 29	E



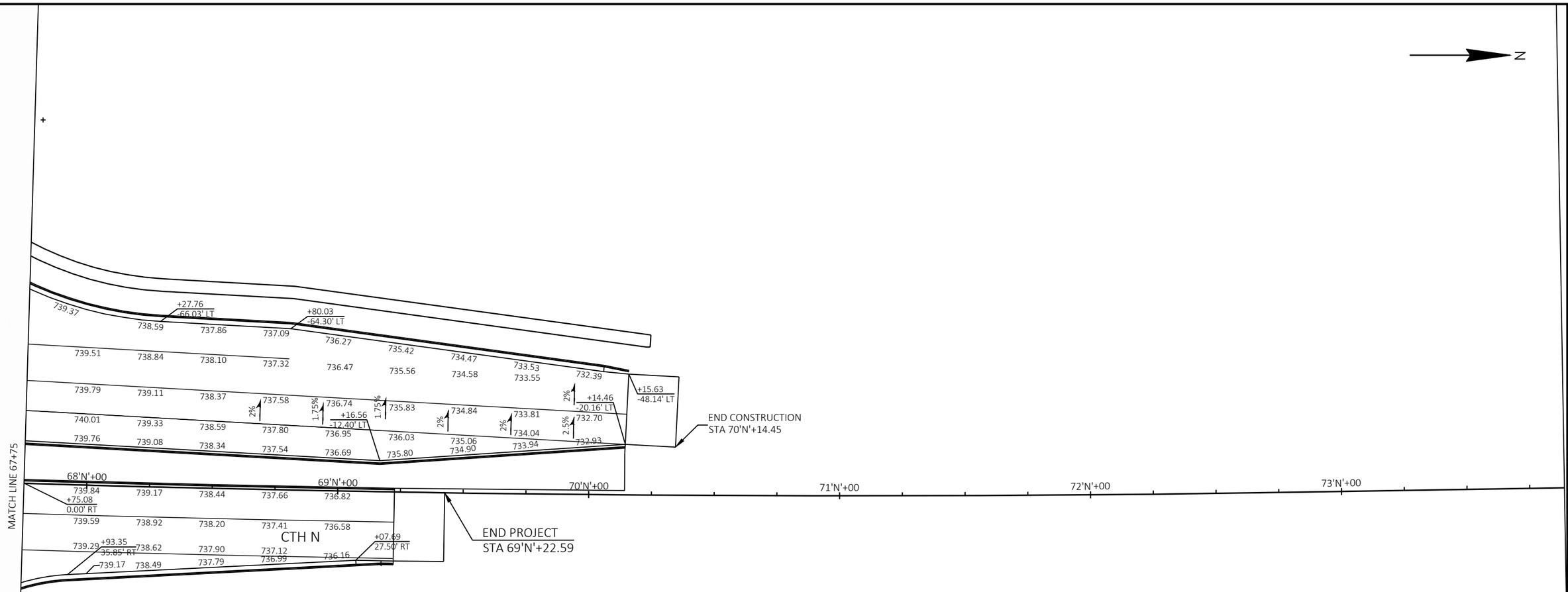
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVING GRADES	SHEET 30	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021202-PD-N.DWG
LAYOUT NAME - 021209-pd

PLOT DATE : 1/31/2024 12:15 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
117	61+79.03	16.00 LT	575161.71	851964.35	4.00'
118	66+42.38	15.80 LT	575624.82	851979.53	3.80'
119	66+70.79	77.24 LT	575655.21	851919.04	19.50'
120	66+69.95	43.00 RT	575650.48	852039.19	16.50'
121	67+15.63	86.87 LT	575700.33	851910.87	1.50'
122	67+51.15	61.62 LT	575735.01	851937.25	1.50'
123	67+24.91	60.24 LT	575708.75	851937.78	1.50'
124	67+13.02	17.00 LT	575695.46	851980.61	1.50'
125	67+78.28	144.96 LT	575764.46	851854.78	145.00'
126	67+19.47	30.00 RT	575700.39	852027.80	1.50'

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
127	67+34.76	30.00 RT	575715.67	852028.29	1.50'
128	67+07.16	80.22 RT	575686.46	852077.59	1.50'
129	67+99.32	113.12 RT	575778.02	852113.36	77.50'
130	68+32.33	210.96 LT	575819.42	851790.26	145.00'

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021202-PD-N.DWG
LAYOUT NAME - 021210-pd
PLOT DATE : 1/31/2024 12:15 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE 1017'NA'+50

MATCH LINE 1023'NA'+00

1018NA+00 1019NA+00 1020NA+00 1021NA+00 1022NA+00 1023N

734.60 734.03 733.40 732.73 732.00 731.23 730.41 729.59 728.81 728.06 727.36 726.69 726.07 725.48 724.93 724.42 723.96 723.54 723.07 722.58 722.11 721

+85.98
15.00' RT
731.68

IH 41 RAMP NA

730.93 730.11 729.29 728.51 727.76 727.06 726.39 725.77 725.18 724.63 724.12 723.66 723.24 722.74 722.20 721.69 721

734.08 733.55 732.98 732.36

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVING GRADES	SHEET 32	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021202-PD-N.DWG
LAYOUT NAME - 021211-pd

PLOT DATE : 1/31/2024 12:15 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

END CONSTRUCTION
STA 1024'ND'+50

1026ND+00

MATCH LINE 1023'NA'+00

1024NA+00

721.23 720.88 720.59 720.38 720.25 720.18 720.19

IH 41 RAMP NA

720.73 720.34 720.02 719.77 719.59 719.49 719.45

END CONSTRUCTION
STA 1024'NA'+75

1025NA+00

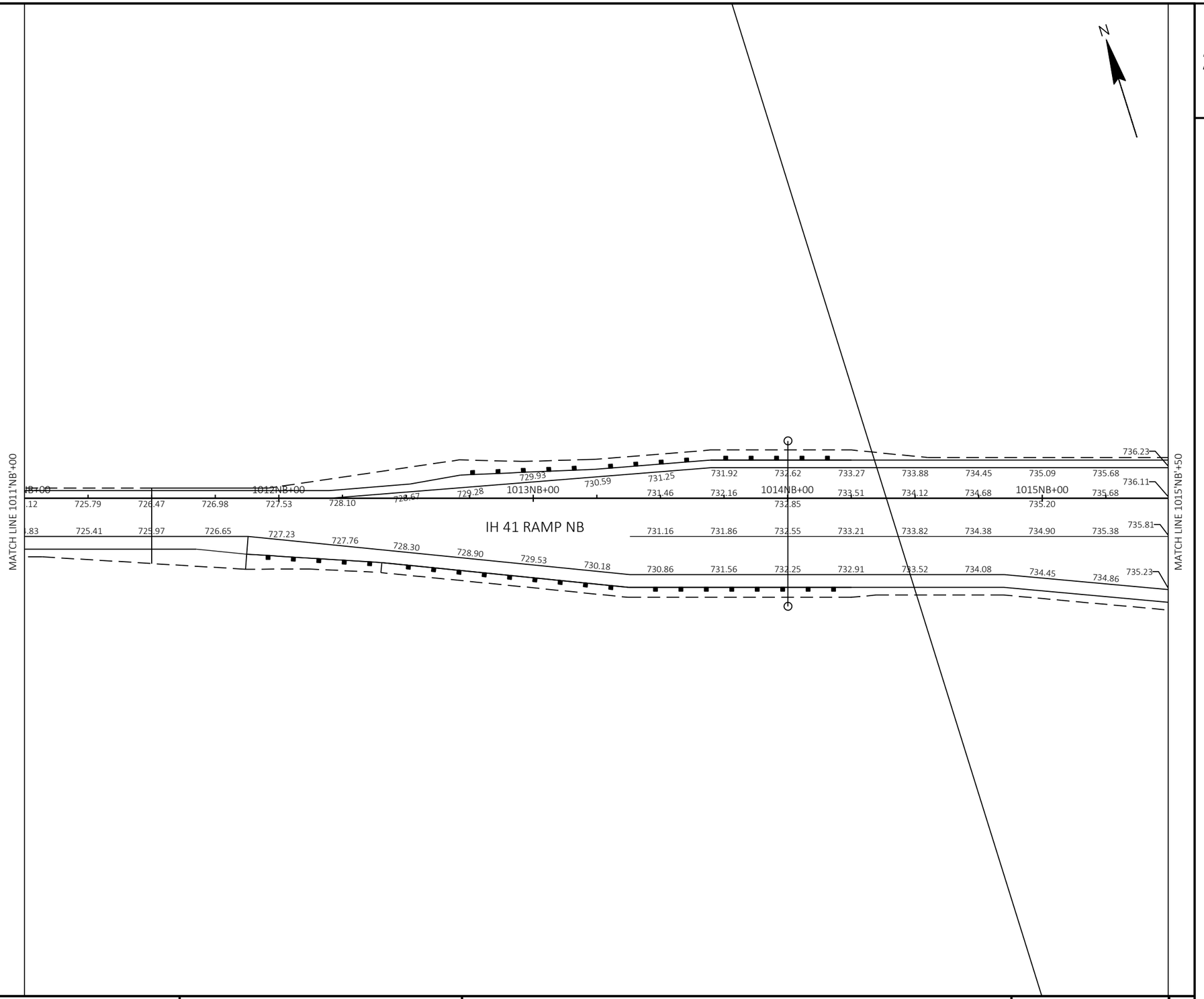
1026NA+00

1027NA+00

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVING GRADES	SHEET 33	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021202-PD-N.DWG
LAYOUT NAME - 021212-pd
PLOT DATE : 1/31/2024 12:15 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVING GRADES	SHEET 34	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021202-PD-N.DWG
LAYOUT NAME - 021213-pd

PLOT DATE : 1/31/2024 12:15 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

1007NB+00

1008NB+00

1009NB+00

1010NB+00

1011NB+00

BEGIN CONSTRUCTION
STA 1009'NB'+00

IH 41 RAMP NB

721.18 721.50 721.90 722.34 722.71 723.14 723.64 724.21

721.93 722.10 722.33 722.63 723.00 723.43 723.93 724.49

MATCH LINE 1011'NB'+00

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVING GRADES	SHEET 35	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021202-PD-N.DWG
LAYOUT NAME - 021214-pd

PLOT DATE : 1/31/2024 12:16 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

721.13 721.20 721.32 721.50 721.75 722.07 722.46 722.90 723.43 723.99 724.60 725.20 725.73 726.27 726.89 727.59 728.36 729.22 730.15 731.16 732.26 733.43 734.64 735.84

009NC+00 721.88 721.91 722.00 722.14 1010NC+00 722.35 722.63 722.97 723.38 1011NC+00 723.86 724.40 724.96 725.52 1012NC+00 726.03 726.57 727.19 727.88 1013NC+00 728.66 729.52 730.45 731.46 1014NC+00 732.56 733.73 734.98 736.25 1015N

+35.83
-15.00' LT

IH 41 RAMP NC

BEGIN CONSTRUCTION
STA 1009'NC'+00

MATCH LINE 1015'NC'+00

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVING GRADES	SHEET 36	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021202-PD-N.DWG
LAYOUT NAME - 021215-pd
PLOT DATE : 1/31/2024 12:16 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

MATCH LINE 1017ND+75

.87 738.22 737.48 736.70 735.85 734.90 733.92 732.87 731.82 730.84 729.91 729.00 728.16 727.38 726.66 726.00 725.40 724

1018ND+00

.44 738.80 738.08 737.28 736.40

1019ND+00

735.44 734.39 733.30 732.21

1020ND+00

735.29 734.29 733.23 731.18 730.21

IH 41 RAMP ND

729.30 728.46

1021ND+00

727.68 726.96 726.30 725.70

1022N

729

.20 738.56 737.84 737.06 736.21

MATCH LINE 1022ND+00

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVING GRADES	SHEET 37	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021202-PD-N.DWG
LAYOUT NAME - 021216-pd
PLOT DATE : 1/31/2024 12:16 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE 1022'ND'+00

.87 724.34 723.70 723.05 722.42 721.85 721.36 720.93 720.43 720.01 719.66

ND+00 724.68 724.03 723.38 1023ND+00 722.18 721.69 721.26 1024ND+00 720.62 720.41

.17 722.75 720.91

IH 41 RAMP ND

1025ND+00

1026ND+00

END CONSTRUCTION
STA 1024'ND'+50

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVING GRADES	SHEET 38	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021202-PD-N.DWG
LAYOUT NAME - 021217-pd

PLOT DATE : 1/31/2024 12:16 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

INTERSECTION 1
(PATRIOT DR & MOASIS DR)

LEGEND

LL	LEVEL LANDING
MEF	MAXIMUM EXTENT FEASIBLE (NON-ADA COMPLIANT FEATURES PRESENT)
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	SLOPE INTERCEPT
	FLOW ARROWS

NOTES

CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.

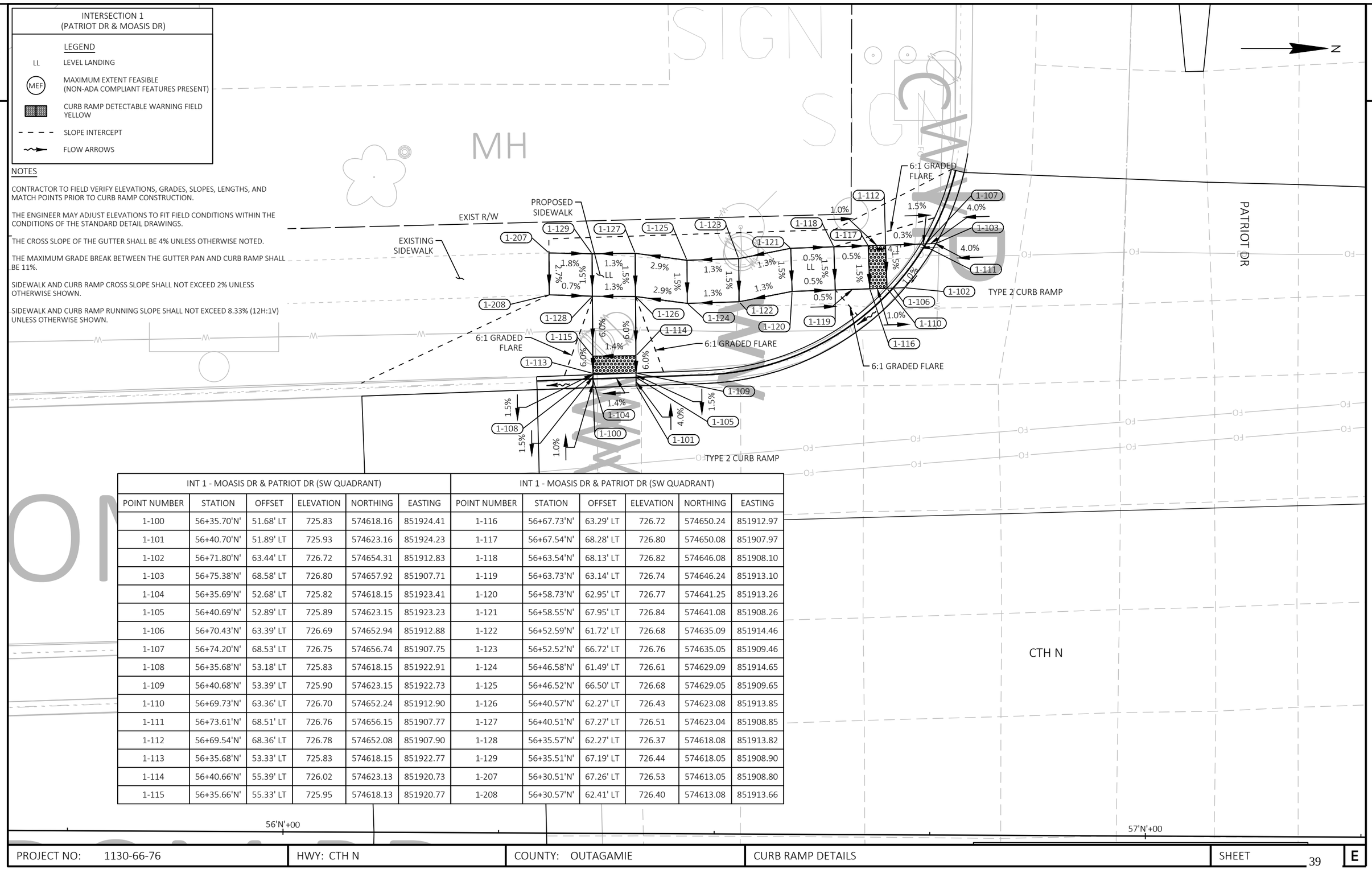
THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.

THE CROSS SLOPE OF THE GUTTER SHALL BE 4% UNLESS OTHERWISE NOTED.

THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.

SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2% UNLESS OTHERWISE SHOWN.

SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V) UNLESS OTHERWISE SHOWN.



INT 1 - MOASIS DR & PATRIOT DR (SW QUADRANT)						INT 1 - MOASIS DR & PATRIOT DR (SW QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1-100	56+35.70'N'	51.68' LT	725.83	574618.16	851924.41	1-116	56+67.73'N'	63.29' LT	726.72	574650.24	851912.97
1-101	56+40.70'N'	51.89' LT	725.93	574623.16	851924.23	1-117	56+67.54'N'	68.28' LT	726.80	574650.08	851907.97
1-102	56+71.80'N'	63.44' LT	726.72	574654.31	851912.83	1-118	56+63.54'N'	68.13' LT	726.82	574646.08	851908.10
1-103	56+75.38'N'	68.58' LT	726.80	574657.92	851907.71	1-119	56+63.73'N'	63.14' LT	726.74	574646.24	851913.10
1-104	56+35.69'N'	52.68' LT	725.82	574618.15	851923.41	1-120	56+58.73'N'	62.95' LT	726.77	574641.25	851913.26
1-105	56+40.69'N'	52.89' LT	725.89	574623.15	851923.23	1-121	56+58.55'N'	67.95' LT	726.84	574641.08	851908.26
1-106	56+70.43'N'	63.39' LT	726.69	574652.94	851912.88	1-122	56+52.59'N'	61.72' LT	726.68	574635.09	851914.46
1-107	56+74.20'N'	68.53' LT	726.75	574656.74	851907.75	1-123	56+52.52'N'	66.72' LT	726.76	574635.05	851909.46
1-108	56+35.68'N'	53.18' LT	725.83	574618.15	851922.91	1-124	56+46.58'N'	61.49' LT	726.61	574629.09	851914.65
1-109	56+40.68'N'	53.39' LT	725.90	574623.15	851922.73	1-125	56+46.52'N'	66.50' LT	726.68	574629.05	851909.65
1-110	56+69.73'N'	63.36' LT	726.70	574652.24	851912.90	1-126	56+40.57'N'	62.27' LT	726.43	574623.08	851913.85
1-111	56+73.61'N'	68.51' LT	726.76	574656.15	851907.77	1-127	56+40.51'N'	67.27' LT	726.51	574623.04	851908.85
1-112	56+69.54'N'	68.36' LT	726.78	574652.08	851907.90	1-128	56+35.57'N'	62.27' LT	726.37	574618.08	851913.82
1-113	56+35.68'N'	53.33' LT	725.83	574618.15	851922.77	1-129	56+35.51'N'	67.19' LT	726.44	574618.05	851908.90
1-114	56+40.66'N'	55.39' LT	726.02	574623.13	851920.73	1-207	56+30.51'N'	67.26' LT	726.53	574613.05	851908.80
1-115	56+35.66'N'	55.33' LT	725.95	574618.13	851920.77	1-208	56+30.57'N'	62.41' LT	726.40	574613.08	851913.66

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CURB RAMP DETAILS	SHEET 39	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021301-CR.DWG
LAYOUT NAME - PATRIOT DR
PLOT DATE : 1/23/2024 9:04 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

INTERSECTION 1
(PATRIOT DR & MOASIS DR)

LEGEND

LL	LEVEL LANDING
MEF	MAXIMUM EXTENT FEASIBLE (NON-ADA COMPLIANT FEATURES PRESENT)
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
- - -	SLOPE INTERCEPT
~→	FLOW ARROWS

NOTES

CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.

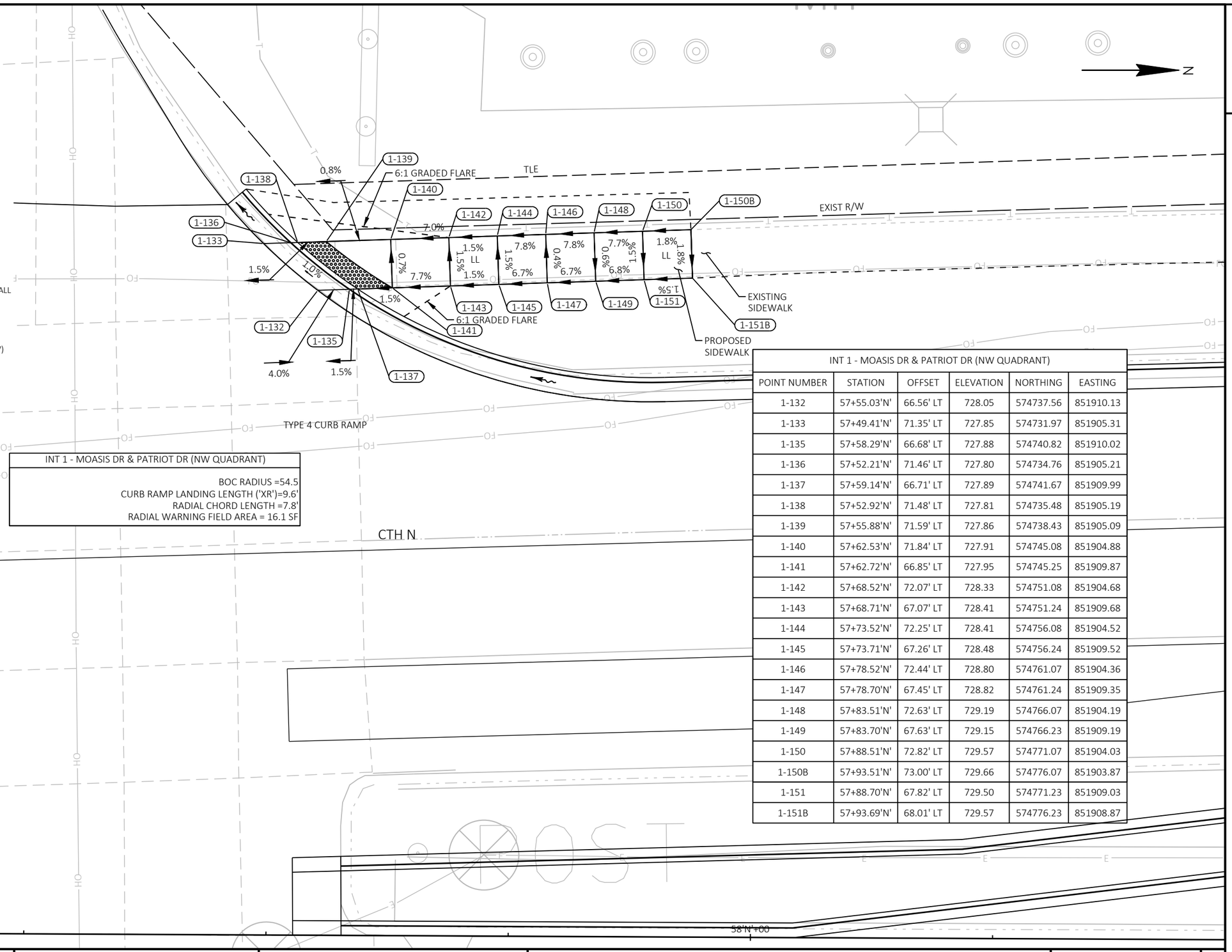
THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.

THE CROSS SLOPE OF THE GUTTER SHALL BE 4% UNLESS OTHERWISE NOTED.

THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.

SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2% UNLESS OTHERWISE SHOWN.

SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V) UNLESS OTHERWISE SHOWN.



INT 1 - MOASIS DR & PATRIOT DR (NW QUADRANT)

BOC RADIUS =54.5
CURB RAMP LANDING LENGTH ('XR')=9.6'
RADIAL CHORD LENGTH =7.8'
RADIAL WARNING FIELD AREA = 16.1 SF

INT 1 - MOASIS DR & PATRIOT DR (NW QUADRANT)

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1-132	57+55.03'N'	66.56' LT	728.05	574737.56	851910.13
1-133	57+49.41'N'	71.35' LT	727.85	574731.97	851905.31
1-135	57+58.29'N'	66.68' LT	727.88	574740.82	851910.02
1-136	57+52.21'N'	71.46' LT	727.80	574734.76	851905.21
1-137	57+59.14'N'	66.71' LT	727.89	574741.67	851909.99
1-138	57+52.92'N'	71.48' LT	727.81	574735.48	851905.19
1-139	57+55.88'N'	71.59' LT	727.86	574738.43	851905.09
1-140	57+62.53'N'	71.84' LT	727.91	574745.08	851904.88
1-141	57+62.72'N'	66.85' LT	727.95	574745.25	851909.87
1-142	57+68.52'N'	72.07' LT	728.33	574751.08	851904.68
1-143	57+68.71'N'	67.07' LT	728.41	574751.24	851909.68
1-144	57+73.52'N'	72.25' LT	728.41	574756.08	851904.52
1-145	57+73.71'N'	67.26' LT	728.48	574756.24	851909.52
1-146	57+78.52'N'	72.44' LT	728.80	574761.07	851904.36
1-147	57+78.70'N'	67.45' LT	728.82	574761.24	851909.35
1-148	57+83.51'N'	72.63' LT	729.19	574766.07	851904.19
1-149	57+83.70'N'	67.63' LT	729.15	574766.23	851909.19
1-150	57+88.51'N'	72.82' LT	729.57	574771.07	851904.03
1-150B	57+93.51'N'	73.00' LT	729.66	574776.07	851903.87
1-151	57+88.70'N'	67.82' LT	729.50	574771.23	851909.03
1-151B	57+93.69'N'	68.01' LT	729.57	574776.23	851908.87

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CURB RAMP DETAILS	SHEET 40	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021301-CR.DWG
LAYOUT NAME - PATRIOT DR (2)
PLOT DATE : 1/23/2024 9:06 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

CTH N

57'N'+00

INT 1 - MOASIS DR & PATRIOT DR (SE QUADRANT)
BOC RADIUS =49.5 CURB RAMP LANDING LENGTH ('XR')=6.9' RADIAL CHORD LENGTH =6.5' RADIAL WARNING FIELD AREA = 13.1 SF

INT 1 - MOASIS DR & PATRIOT DR (NE QUADRANT)
BOC RADIUS =51.0 CURB RAMP LANDING LENGTH ('XR')=7.7' RADIAL CHORD LENGTH =9.5' RADIAL WARNING FIELD AREA = 16.0 SF

INT 1 - MOASIS DR & PATRIOT DR (NE QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1-187	57+28.85'N'	44.40' RT	727.12	574710.83	852020.95
1-188	57+34.05'N'	39.30' RT	727.35	574716.06	852015.88
1-189	57+31.61'N'	44.35' RT	727.09	574713.59	852020.92
1-190	57+37.29'N'	39.25' RT	727.22	574719.30	852015.84
1-191	57+32.32'N'	44.34' RT	727.10	574714.30	852020.91
1-192	57+38.14'N'	39.23' RT	727.23	574720.15	852015.83
1-193	57+35.23'N'	44.28' RT	727.15	574717.21	852020.87
1-194	57+41.70'N'	39.16' RT	727.29	574723.70	852015.78
1-195	57+41.79'N'	44.16' RT	727.25	574723.77	852020.78
1-196	57+47.70'N'	39.05' RT	727.71	574729.70	852015.70
1-197	57+47.79'N'	44.05' RT	727.67	574729.77	852020.70
1-198	57+52.69'N'	38.96' RT	727.78	574734.70	852015.63
1-199	57+52.79'N'	43.96' RT	727.74	574734.77	852020.63
1-200	57+57.69'N'	38.87' RT	728.19	574739.70	852015.56
1-201	57+57.79'N'	43.86' RT	728.19	574739.77	852020.56
1-202	57+62.69'N'	38.77' RT	728.60	574744.70	852015.49
1-203	57+62.79'N'	43.77' RT	728.65	574744.77	852020.49
1-204	57+67.68'N'	38.68' RT	729.04	574749.69	852015.42
1-204B	57+72.68'N'	38.59' RT	729.10	574754.69	852015.35
1-205	57+67.77'N'	43.68' RT	729.12	574749.76	852020.42
1-205B	57+72.75'N'	43.59' RT	729.19	574754.74	852020.36

INT 1 - MOASIS DR & PATRIOT DR (SE QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1-152	56+36.63'N'	24.10' RT	725.86	574618.71	852000.20
1-153	56+41.65'N'	25.33' RT	725.92	574623.72	852001.46
1-154	56+64.23'N'	39.08' RT	726.26	574646.24	852015.32
1-155	56+65.62'N'	40.58' RT	726.28	574647.62	852016.82
1-156	56+69.49'N'	45.51' RT	726.24	574651.47	852021.77
1-157	56+36.65'N'	26.13' RT	725.86	574618.73	852002.23
1-158	56+41.67'N'	27.42' RT	725.91	574623.74	852003.54
1-159	56+62.94'N'	40.63' RT	726.17	574644.95	852016.86
1-160	56+67.07'N'	45.56' RT	726.14	574649.05	852021.80
1-161	56+36.66'N'	26.64' RT	725.86	574618.73	852002.74
1-162	56+41.68'N'	27.94' RT	725.91	574623.74	852004.06
1-163	56+62.26'N'	40.64' RT	726.18	574644.26	852016.87

INT 1 - MOASIS DR & PATRIOT DR (SE QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1-164	56+66.45'N'	45.56' RT	726.15	574648.43	852021.80
1-165	56+36.68'N'	28.00' RT	725.86	574618.74	852004.10
1-166	56+63.97'N'	45.61' RT	726.19	574645.94	852021.84
1-167	56+31.76'N'	34.54' RT	726.48	574613.79	852010.61
1-168	56+36.76'N'	34.51' RT	726.31	574618.79	852010.61
1-169	56+41.75'N'	34.49' RT	726.24	574623.79	852010.61
1-169A	56+42.43'N'	34.48' RT	726.24	574624.47	852010.61
1-170	56+36.70'N'	30.00' RT	726.00	574618.75	852006.10
1-171	56+41.70'N'	29.94' RT	726.05	574623.75	852006.06
1-172	56+48.81'N'	36.08' RT	726.27	574630.83	852012.24
1-173	56+54.47'N'	40.79' RT	726.30	574636.47	852016.98
1-174	56+59.47'N'	40.70' RT	726.22	574641.47	852016.91

INT 1 - MOASIS DR & PATRIOT DR (SE QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1-175	56+59.56'N'	45.70' RT	726.26	574641.54	852021.91
1-176	56+62.55'N'	49.10' RT	726.47	574644.51	852025.32
1-177	56+65.95'N'	52.97' RT	726.70	574647.89	852029.21
1-178	56+31.82'N'	39.54' RT	726.61	574613.82	852015.61
1-179	56+36.82'N'	39.54' RT	726.39	574618.82	852015.64
1-180	56+41.82'N'	39.49' RT	726.31	574623.82	852015.61
1-181	56+52.71'N'	45.82' RT	726.32	574634.68	852022.00
1-183	56+46.53'N'	40.69' RT	726.32	574628.53	852016.84
1-184	56+54.56'N'	45.79' RT	726.33	574636.54	852021.97
1-184A	56+54.60'N'	47.62' RT	726.40	574636.57	852023.81
1-185	56+57.99'N'	51.48' RT	726.54	574639.93	852027.68
1-186	56+61.46'N'	55.30' RT	726.80	574643.39	852031.52

INTERSECTION 1
(PATRIOT DR & MOASIS DR)

LEGEND

- LL — LEVEL LANDING
- MEF — MAXIMUM EXTENT FEASIBLE (NON-ADA COMPLIANT FEATURES PRESENT)
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- SLOPE INTERCEPT
- FLOW ARROWS

NOTES

CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.

THE CROSS SLOPE OF THE GUTTER SHALL BE 4% UNLESS OTHERWISE NOTED.

THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.

SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2% UNLESS OTHERWISE SHOWN.

SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V) UNLESS OTHERWISE SHOWN.

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CURB RAMP DETAILS	SHEET 41	E

2

INTERSECTION 2
(RAMP NA & RAMP NB)

LEGEND

- LL — LEVEL LANDING
- MEF — MAXIMUM EXTENT FEASIBLE (NON-ADA COMPLIANT FEATURES PRESENT)
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- SLOPE INTERCEPT
- FLOW ARROWS

NOTES

CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.

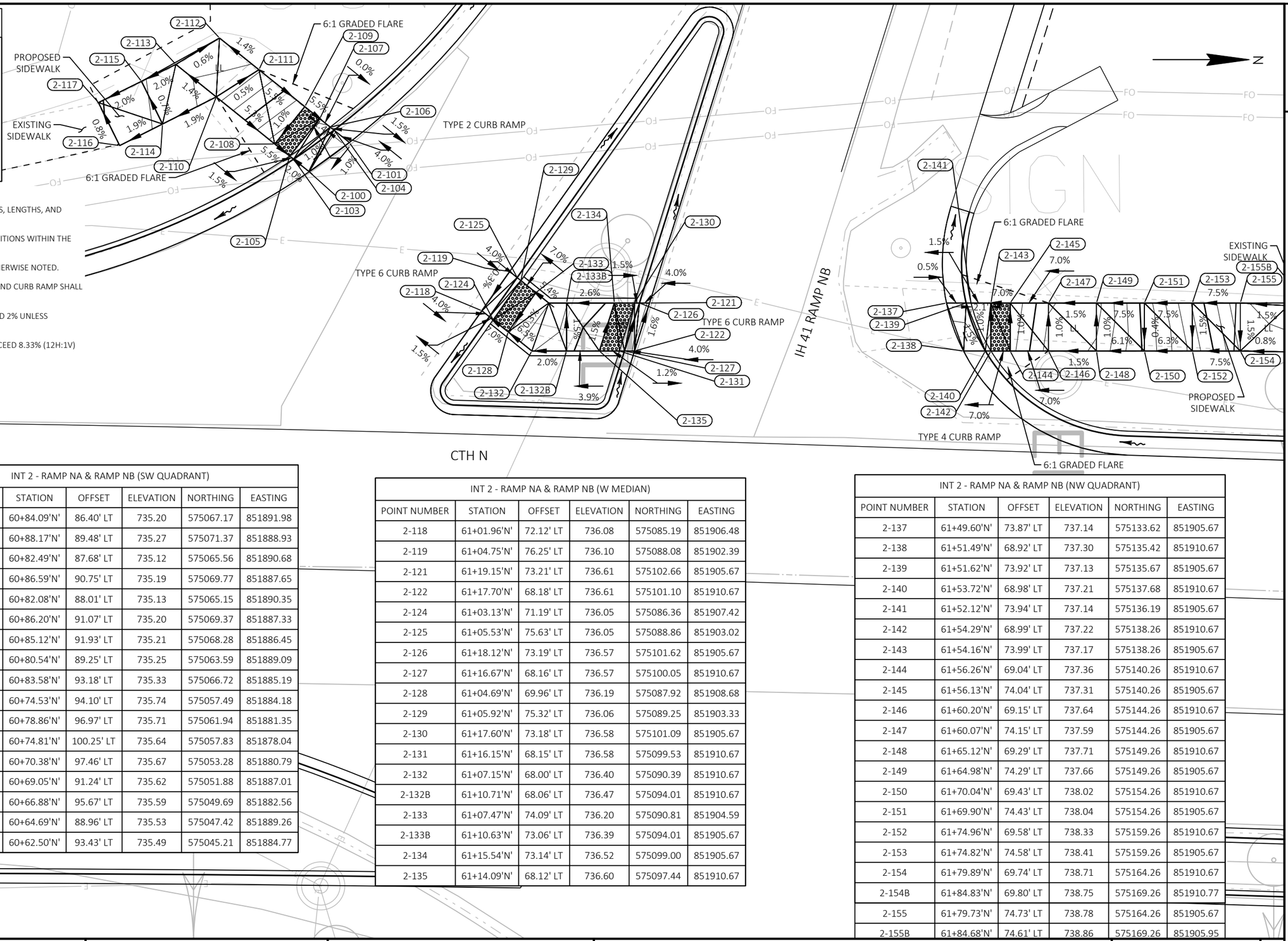
THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.

THE CROSS SLOPE OF THE GUTTER SHALL BE 4% UNLESS OTHERWISE NOTED.

THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.

SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2% UNLESS OTHERWISE SHOWN.

SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V) UNLESS OTHERWISE SHOWN.



INT 2 - RAMP NA & RAMP NB (SW QUADRANT)

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2-100	60+84.09'N'	86.40' LT	735.20	575067.17	851891.98
2-101	60+88.17'N'	89.48' LT	735.27	575071.37	851888.93
2-103	60+82.49'N'	87.68' LT	735.12	575065.56	851890.68
2-104	60+86.59'N'	90.75' LT	735.19	575069.77	851887.65
2-105	60+82.08'N'	88.01' LT	735.13	575065.15	851890.35
2-106	60+86.20'N'	91.07' LT	735.20	575069.37	851887.33
2-107	60+85.12'N'	91.93' LT	735.21	575068.28	851886.45
2-108	60+80.54'N'	89.25' LT	735.25	575063.59	851889.09
2-109	60+83.58'N'	93.18' LT	735.33	575066.72	851885.19
2-110	60+74.53'N'	94.10' LT	735.74	575057.49	851884.18
2-111	60+78.86'N'	96.97' LT	735.71	575061.94	851881.35
2-112	60+74.81'N'	100.25' LT	735.64	575057.83	851878.04
2-113	60+70.38'N'	97.46' LT	735.67	575053.28	851880.79
2-114	60+69.05'N'	91.24' LT	735.62	575051.88	851887.01
2-115	60+66.88'N'	95.67' LT	735.59	575049.69	851882.56
2-116	60+64.69'N'	88.96' LT	735.53	575047.42	851889.26
2-117	60+62.50'N'	93.43' LT	735.49	575045.21	851884.77

INT 2 - RAMP NA & RAMP NB (W MEDIAN)

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2-118	61+01.96'N'	72.12' LT	736.08	575085.19	851906.48
2-119	61+04.75'N'	76.25' LT	736.10	575088.08	851902.39
2-121	61+19.15'N'	73.21' LT	736.61	575102.66	851905.67
2-122	61+17.70'N'	68.18' LT	736.61	575101.10	851910.67
2-124	61+03.13'N'	71.19' LT	736.05	575086.36	851907.42
2-125	61+05.53'N'	75.63' LT	736.05	575088.86	851903.02
2-126	61+18.12'N'	73.19' LT	736.57	575101.62	851905.67
2-127	61+16.67'N'	68.16' LT	736.57	575100.05	851910.67
2-128	61+04.69'N'	69.96' LT	736.19	575087.92	851908.68
2-129	61+05.92'N'	75.32' LT	736.06	575089.25	851903.33
2-130	61+17.60'N'	73.18' LT	736.58	575101.09	851905.67
2-131	61+16.15'N'	68.15' LT	736.58	575099.53	851910.67
2-132	61+07.15'N'	68.00' LT	736.40	575090.39	851910.67
2-132B	61+10.71'N'	68.06' LT	736.47	575094.01	851910.67
2-133	61+07.47'N'	74.09' LT	736.20	575090.81	851904.59
2-133B	61+10.63'N'	73.06' LT	736.39	575094.01	851905.67
2-134	61+15.54'N'	73.14' LT	736.52	575099.00	851905.67
2-135	61+14.09'N'	68.12' LT	736.60	575097.44	851910.67

INT 2 - RAMP NA & RAMP NB (NW QUADRANT)

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2-137	61+49.60'N'	73.87' LT	737.14	575133.62	851905.67
2-138	61+51.49'N'	68.92' LT	737.30	575135.42	851910.67
2-139	61+51.62'N'	73.92' LT	737.13	575135.67	851905.67
2-140	61+53.72'N'	68.98' LT	737.21	575137.68	851910.67
2-141	61+52.12'N'	73.94' LT	737.14	575136.19	851905.67
2-142	61+54.29'N'	68.99' LT	737.22	575138.26	851910.67
2-143	61+54.16'N'	73.99' LT	737.17	575138.26	851905.67
2-144	61+56.26'N'	69.04' LT	737.36	575140.26	851910.67
2-145	61+56.13'N'	74.04' LT	737.31	575140.26	851905.67
2-146	61+60.20'N'	69.15' LT	737.64	575144.26	851910.67
2-147	61+60.07'N'	74.15' LT	737.59	575144.26	851905.67
2-148	61+65.12'N'	69.29' LT	737.71	575149.26	851910.67
2-149	61+64.98'N'	74.29' LT	737.66	575149.26	851905.67
2-150	61+70.04'N'	69.43' LT	738.02	575154.26	851910.67
2-151	61+69.90'N'	74.43' LT	738.04	575154.26	851905.67
2-152	61+74.96'N'	69.58' LT	738.33	575159.26	851910.67
2-153	61+74.82'N'	74.58' LT	738.41	575159.26	851905.67
2-154	61+79.89'N'	69.74' LT	738.71	575164.26	851910.67
2-154B	61+84.83'N'	69.80' LT	738.75	575169.26	851910.77
2-155	61+79.73'N'	74.73' LT	738.78	575164.26	851905.67
2-155B	61+84.68'N'	74.61' LT	738.86	575169.26	851905.95

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CURB RAMP DETAILS	SHEET 42	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021301-CR.DWG
LAYOUT NAME - RAMP NB
PLOT DATE : 1/23/2024 9:10 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

2

INTERSECTION 2
(RAMP NA & RAMP NB)

LEGEND

- LL — LEVEL LANDING
- (MEF) — MAXIMUM EXTENT FEASIBLE (NON-ADA COMPLIANT FEATURES PRESENT)
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- SLOPE INTERCEPT
- FLOW ARROWS

NOTES

CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.

THE CROSS SLOPE OF THE GUTTER SHALL BE 4% UNLESS OTHERWISE NOTED.

THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.

SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2% UNLESS OTHERWISE SHOWN.

SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V) UNLESS OTHERWISE SHOWN.

61'N'+00

CTH N

N

INT 2 - RAMP NA & RAMP NB (E MEDIAN)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2-175	60+85.66'N'	40.37' RT	735.68	575067.43	852018.75
2-178	60+97.21'N'	37.29' RT	736.07	575078.92	852015.81
2-179	60+98.70'N'	42.29' RT	736.02	575080.33	852020.83
2-180	60+89.64'N'	43.45' RT	735.75	575071.33	852021.87
2-181	60+86.30'N'	39.59' RT	735.64	575068.07	852017.98
2-182	60+96.16'N'	37.29' RT	736.03	575077.87	852015.80
2-183	60+97.65'N'	42.29' RT	735.98	575079.29	852020.82
2-184	60+90.27'N'	42.67' RT	735.71	575071.97	852021.10
2-185	60+86.61'N'	39.20' RT	735.64	575068.38	852017.59

INT 2 - RAMP NA & RAMP NB (E MEDIAN)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2-186	60+95.64'N'	37.29' RT	736.06	575077.35	852015.79
2-187	60+97.13'N'	42.29' RT	735.98	575078.76	852020.81
2-188	60+90.59'N'	42.28' RT	735.71	575072.29	852020.72
2-189	60+88.18'N'	37.28' RT	735.71	575069.96	852015.69
2-189B	60+87.88'N'	37.64' RT	735.73	575069.66	852016.05
2-190	60+93.53'N'	37.29' RT	735.97	575075.27	852015.76
2-191	60+95.02'N'	42.29' RT	735.90	575076.68	852020.78
2-192	60+93.78'N'	42.29' RT	735.85	575075.45	852020.76

TYPE 6 CURB RAMP

TYPE 4 CURB RAMP

IH 41 RAMP NA

TYPE 2 CURB RAMP

6:1 GRADED FLARE

EXISTING SIDEWALK

PROPOSED SIDEWALK

INT 2 - RAMP NA & RAMP NB (NE QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2-193	61+30.46'N'	37.19' RT	736.92	575111.88	852016.27
2-194	61+28.65'N'	42.20' RT	736.78	575109.99	852021.24
2-197	61+32.77'N'	37.18' RT	736.78	575114.18	852016.30
2-198	61+30.72'N'	42.19' RT	736.74	575112.04	852021.27
2-199	61+33.36'N'	37.17' RT	736.79	575114.77	852016.31
2-200	61+31.24'N'	42.19' RT	736.75	575112.55	852021.28
2-201	61+33.40'N'	42.17' RT	736.78	575114.70	852021.31
2-202	61+35.38'N'	37.16' RT	736.93	575116.77	852016.34
2-203	61+35.42'N'	42.16' RT	736.92	575116.70	852021.34
2-204	61+39.41'N'	37.13' RT	737.21	575120.77	852016.39
2-205	61+39.46'N'	42.12' RT	737.20	575120.70	852021.39
2-206	61+44.46'N'	37.08' RT	737.29	575125.76	852016.46

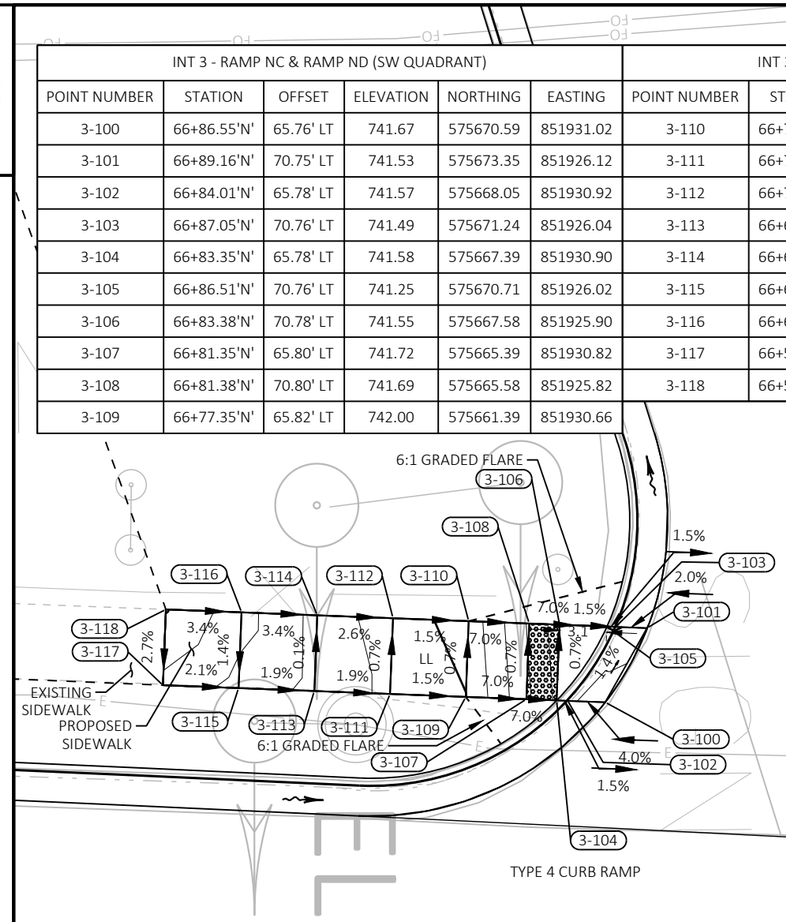
INT 2 - RAMP NA & RAMP NB (SE QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2-156	60+70.98'N'	58.23' RT	735.01	575052.74	852036.48
2-157	60+74.97'N'	61.31' RT	735.07	575056.66	852039.59
2-159	60+69.70'N'	59.77' RT	734.93	575051.47	852038.02
2-160	60+73.69'N'	62.86' RT	735.00	575055.39	852041.13
2-161	60+69.38'N'	60.16' RT	734.93	575051.15	852038.40
2-162	60+73.37'N'	63.24' RT	735.01	575055.07	852041.51
2-163	60+68.09'N'	61.71' RT	734.98	575049.88	852039.94

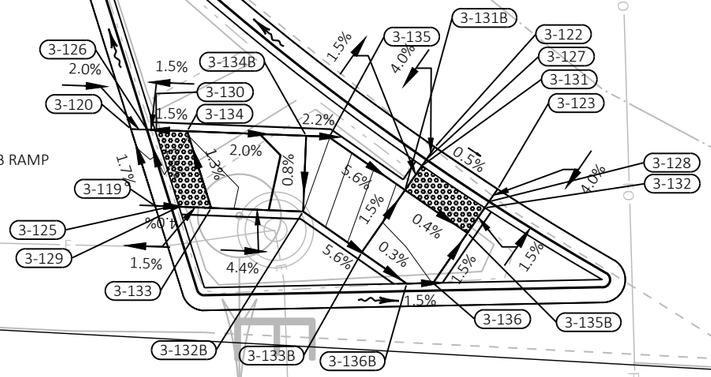
INT 2 - RAMP NA & RAMP NB (SE QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2-164	60+72.09'N'	64.79' RT	735.06	575053.79	852043.05
2-165	60+63.27'N'	67.52' RT	735.17	575045.09	852045.72
2-166	60+67.27'N'	70.60' RT	735.25	575049.01	852048.83
2-167	60+64.05'N'	74.47' RT	735.32	575045.82	852052.68
2-168	60+60.05'N'	71.39' RT	735.25	575041.89	852049.58
2-169	60+55.96'N'	68.49' RT	735.35	575037.82	852046.65
2-170	60+59.15'N'	64.61' RT	735.29	575041.03	852042.79

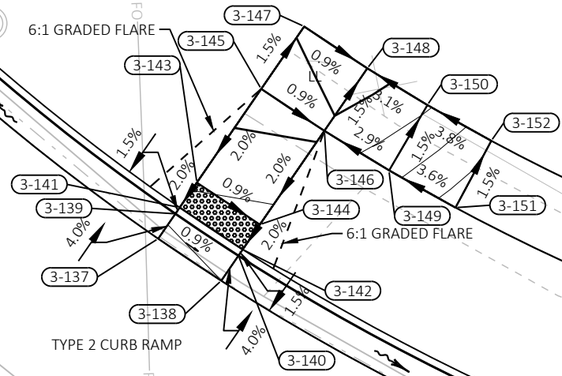
INT 2 - RAMP NA & RAMP NB (SE QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2-171	60+51.73'N'	65.76' RT	735.41	575033.61	852043.91
2-172	60+54.93'N'	61.86' RT	735.35	575036.82	852040.02
2-173	60+48.18'N'	63.68' RT	735.45	575030.06	852041.80
2-174	60+50.62'N'	59.32' RT	735.41	575032.53	852037.46

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CURB RAMP DETAILS	SHEET 43 E

INT 3 - RAMP NC & RAMP ND (SW QUADRANT)						INT 3 - RAMP NC & RAMP ND (SW QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-100	66+86.55'N'	65.76' LT	741.67	575670.59	851931.02	3-110	66+77.38'N'	70.82' LT	741.97	575661.58	851925.67
3-101	66+89.16'N'	70.75' LT	741.53	575673.35	851926.12	3-111	66+72.35'N'	65.85' LT	742.08	575656.39	851930.47
3-102	66+84.01'N'	65.78' LT	741.57	575668.05	851930.92	3-112	66+72.38'N'	70.85' LT	742.04	575656.59	851925.47
3-103	66+87.05'N'	70.76' LT	741.49	575671.24	851926.04	3-113	66+67.35'N'	65.89' LT	742.17	575651.40	851930.28
3-104	66+83.35'N'	65.78' LT	741.58	575667.39	851930.90	3-114	66+67.38'N'	70.88' LT	742.17	575651.59	851925.28
3-105	66+86.51'N'	70.76' LT	741.25	575670.71	851926.02	3-115	66+62.35'N'	65.92' LT	742.27	575646.40	851930.09
3-106	66+83.38'N'	70.78' LT	741.55	575667.58	851925.90	3-116	66+62.38'N'	70.92' LT	742.34	575646.60	851925.09
3-107	66+81.35'N'	65.80' LT	741.72	575665.39	851930.82	3-117	66+57.35'N'	65.95' LT	742.37	575641.41	851929.89
3-108	66+81.38'N'	70.80' LT	741.69	575665.58	851925.82	3-118	66+57.38'N'	70.95' LT	742.51	575641.60	851924.89
3-109	66+77.35'N'	65.82' LT	742.00	575661.39	851930.66						







INT 3 - RAMP NC & RAMP ND (NW QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-147	67+61.50'N'	103.68' LT	739.99	575746.61	851895.53
3-148	67+65.79'N'	101.05' LT	739.94	575750.78	851898.30
3-149	67+67.44'N'	94.36' LT	740.16	575752.21	851905.03
3-150	67+69.86'N'	98.75' LT	740.09	575754.74	851900.72
3-151	67+71.94'N'	92.04' LT	740.35	575756.60	851907.49
3-152	67+74.18'N'	96.52' LT	740.27	575758.96	851903.08

CTH N

INT 3 - RAMP NC & RAMP ND (W MEDIAN)						INT 3 - RAMP NC & RAMP ND (W MEDIAN)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-119	67+21.48'N'	65.54' LT	741.17	575705.49	851932.37	3-131B	67+37.94'N'	67.11' LT	740.56	575721.99	851931.34
3-120	67+19.73'N'	70.55' LT	741.08	575703.90	851927.31	3-132	67+43.23'N'	66.11' LT	740.51	575727.25	851932.51
3-122	67+39.82'N'	70.01' LT	740.56	575723.96	851928.50	3-132B	67+31.26'N'	65.48' LT	740.90	575715.27	851932.75
3-123	67+44.04'N'	67.37' LT	740.54	575728.10	851931.27	3-133	67+25.19'N'	65.52' LT	741.17	575709.20	851932.52
3-125	67+22.54'N'	65.53' LT	741.13	575706.55	851932.41	3-133B	67+35.21'N'	62.92' LT	740.64	575719.13	851935.44
3-126	67+20.79'N'	70.54' LT	741.06	575704.96	851927.35	3-134	67+23.44'N'	70.53' LT	741.10	575707.61	851927.45
3-127	67+39.27'N'	69.17' LT	740.52	575723.39	851929.32	3-134B	67+31.30'N'	70.48' LT	740.94	575715.46	851927.76
3-128	67+43.50'N'	66.53' LT	740.50	575727.53	851932.10	3-135	67+32.84'N'	70.47' LT	740.51	575717.00	851927.82
3-129	67+23.07'N'	65.53' LT	741.13	575707.08	851932.43	3-135B	67+42.15'N'	64.41' LT	740.54	575726.11	851934.17
3-130	67+21.32'N'	70.54' LT	741.06	575705.49	851927.37	3-136	67+39.98'N'	61.04' LT	740.60	575723.84	851937.47
3-131	67+39.00'N'	68.75' LT	740.53	575723.10	851929.73	3-136B	67+38.25'N'	60.95' LT	740.63	575722.10	851937.51

INT 3 - RAMP NC & RAMP ND (NW QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-137	67+52.23'N'	89.38' LT	739.94	575736.98	851909.54
3-138	67+56.51'N'	86.74' LT	739.72	575741.14	851912.31
3-139	67+53.32'N'	91.06' LT	739.86	575738.11	851907.89
3-140	67+57.60'N'	88.42' LT	739.82	575742.27	851910.66
3-141	67+53.59'N'	91.48' LT	739.87	575738.39	851907.48
3-142	67+57.87'N'	88.85' LT	739.83	575742.56	851910.25
3-143	67+54.68'N'	93.17' LT	739.91	575739.53	851905.83
3-144	67+58.96'N'	90.53' LT	739.87	575743.69	851908.60
3-145	67+58.77'N'	99.48' LT	740.06	575743.78	851899.65
3-146	67+63.06'N'	96.84' LT	740.02	575747.94	851902.42

INTERSECTION 3
(RAMP NC & RAMP ND)

LEGEND

- LL — LEVEL LANDING
- MEF — MAXIMUM EXTENT FEASIBLE (NON-ADA COMPLIANT FEATURES PRESENT)
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- SLOPE INTERCEPT
- FLOW ARROWS

NOTES

CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.

THE CROSS SLOPE OF THE GUTTER SHALL BE 4% UNLESS OTHERWISE NOTED.

THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.

SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2% UNLESS OTHERWISE SHOWN.

SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V) UNLESS OTHERWISE SHOWN.

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CURB RAMP DETAILS	SHEET 44	E

INT 3 - RAMP NC & RAMP ND (SE QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-155	66+84.15'N'	34.60' RT	741.57	575664.94	852031.25
3-156	66+86.09'N'	39.57' RT	741.46	575666.72	852036.29
3-157	66+81.79'N'	34.63' RT	741.48	575662.58	852031.21
3-158	66+84.04'N'	39.60' RT	741.42	575664.67	852036.25
3-159	66+81.18'N'	34.64' RT	741.48	575661.97	852031.20
3-160	66+83.53'N'	39.61' RT	741.43	575664.16	852036.24
3-161	66+81.25'N'	39.64' RT	741.46	575661.88	852036.20
3-162	66+79.25'N'	39.67' RT	741.58	575659.88	852036.16
3-163	66+79.18'N'	34.67' RT	741.60	575659.97	852031.16
3-164	66+75.25'N'	39.73' RT	741.82	575655.88	852036.09

INT 3 - RAMP NC & RAMP ND (SE QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-165	66+75.18'N'	34.73' RT	741.84	575655.97	852031.09
3-166	66+70.25'N'	39.80' RT	741.90	575650.88	852036.00
3-167	66+70.18'N'	34.80' RT	741.92	575650.97	852031.00
3-168	66+65.25'N'	39.87' RT	742.25	575645.88	852035.91
3-169	66+65.18'N'	34.87' RT	742.27	575645.97	852030.91
3-170	66+60.25'N'	39.94' RT	742.60	575640.89	852035.82
3-170A	66+55.25'N'	39.92' RT	742.68	575635.89	852035.64
3-171	66+60.18'N'	34.94' RT	742.59	575640.98	852030.82
3-171A	66+55.18'N'	34.80' RT	742.67	575635.98	852030.52

INT 3 - RAMP NC & RAMP ND (NE QUADRANT)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-193	67+49.27'N'	54.28' RT	740.01	575729.40	852053.03
3-194	67+45.59'N'	57.66' RT	740.06	575725.60	852056.29
3-195	67+44.57'N'	58.66' RT	740.05	575724.55	852057.26
3-196	67+50.67'N'	55.70' RT	739.93	575730.75	852054.49
3-197	67+46.99'N'	59.09' RT	739.98	575726.96	852057.76
3-198	67+51.02'N'	56.06' RT	739.94	575731.09	852054.86
3-199	67+47.33'N'	59.44' RT	739.98	575727.29	852058.12
3-200	67+52.41'N'	57.49' RT	740.02	575732.44	852056.34
3-201	67+48.74'N'	60.87' RT	740.06	575728.64	852059.59
3-202	67+55.20'N'	60.34' RT	740.17	575735.15	852059.28
3-203	67+51.53'N'	63.72' RT	740.22	575731.36	852062.54
3-204	67+57.67'N'	62.87' RT	740.31	575737.55	852061.89
3-205	67+54.12'N'	66.38' RT	740.36	575733.87	852065.28
3-206	67+57.36'N'	69.69' RT	740.39	575737.02	852068.69
3-207	67+61.16'N'	66.45' RT	740.37	575740.95	852065.58
3-209	67+64.41'N'	64.24' RT	740.59	575744.28	852063.46
3-210	67+61.81'N'	59.97' RT	740.41	575741.80	852059.12

67'N'+00

CTH N

IH 41 RAMP ND

6:1 GRADED FLARE

PROPOSED SIDEWALK

EXISTING SIDEWALK

TYPE 4 CURB RAMP

TYPE 6 CURB RAMP

TYPE 2 CURB RAMP

INTERSECTION 3
(RAMP NC & RAMP ND)

LEGEND

- LL — LEVEL LANDING
- MEF — MAXIMUM EXTENT FEASIBLE (NON-ADA COMPLIANT FEATURES PRESENT)
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- SLOPE INTERCEPT
- FLOW ARROWS

INT 3 - RAMP NC & RAMP ND (E MEDIAN)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
72	67+15.68'N'	39.15' RT	740.97	575696.31	852036.82
73	67+16.91'N'	34.13' RT	741.02	575697.70	852031.84
76	67+32.51'N'	37.21' RT	740.54	575713.19	852035.42
78	67+30.00'N'	41.78' RT	740.49	575710.53	852039.91
80	67+16.71'N'	39.13' RT	740.92	575697.34	852036.84
81	67+17.94'N'	34.11' RT	740.98	575698.73	852031.86
82	67+31.78'N'	36.46' RT	740.50	575712.48	852034.65
83	67+29.26'N'	41.04' RT	740.45	575709.82	852039.15

INT 3 - RAMP NC & RAMP ND (E MEDIAN)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-184	67+17.23'N'	39.12' RT	740.93	575697.86	852036.85
3-185	67+18.46'N'	34.11' RT	740.99	575699.25	852031.87
3-186	67+31.41'N'	36.09' RT	740.51	575712.13	852034.27
3-187	67+28.90'N'	40.66' RT	740.46	575709.47	852038.76
3-188	67+29.95'N'	34.60' RT	740.54	575710.72	852032.73
3-189	67+19.30'N'	39.09' RT	740.90	575699.92	852036.88
3-190	67+20.53'N'	34.08' RT	740.95	575701.32	852031.91
3-191	67+29.31'N'	33.95' RT	740.58	575710.10	852032.06

INT 3 - RAMP NC & RAMP ND (E MEDIAN)					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-192	67+27.43'N'	39.17' RT	740.49	575708.06	852037.23
3-192B	67+27.24'N'	38.98' RT	740.63	575707.87	852037.03

NOTES

CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.

THE CROSS SLOPE OF THE GUTTER SHALL BE 4% UNLESS OTHERWISE NOTED.

THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.

SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2% UNLESS OTHERWISE SHOWN.

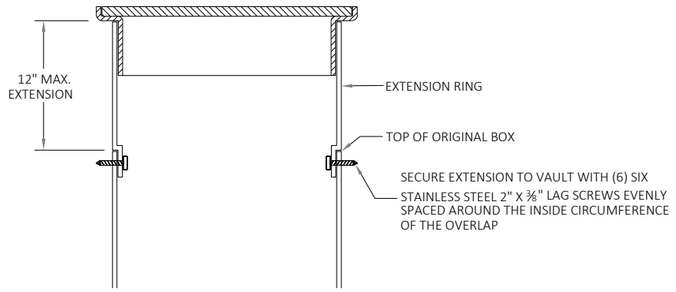
SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V) UNLESS OTHERWISE SHOWN.

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CURB RAMP DETAILS	SHEET 45	E

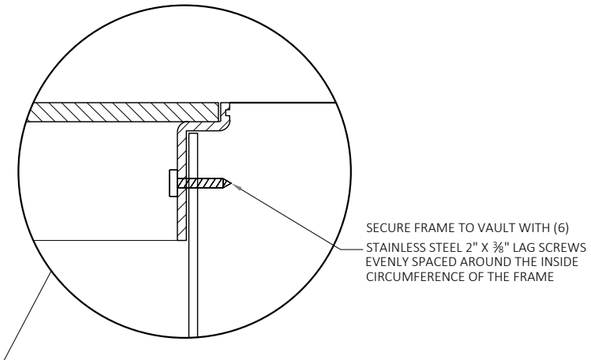
FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\021301-CR.DWG
LAYOUT NAME - RAMP ND

PLOT DATE : 1/23/2024 9:16 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:10 FT

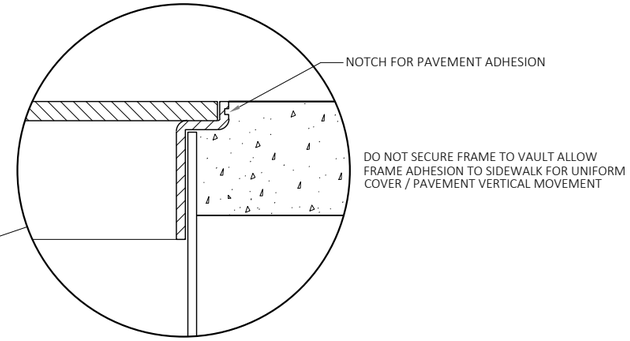
WISDOT/CADDS SHEET 42



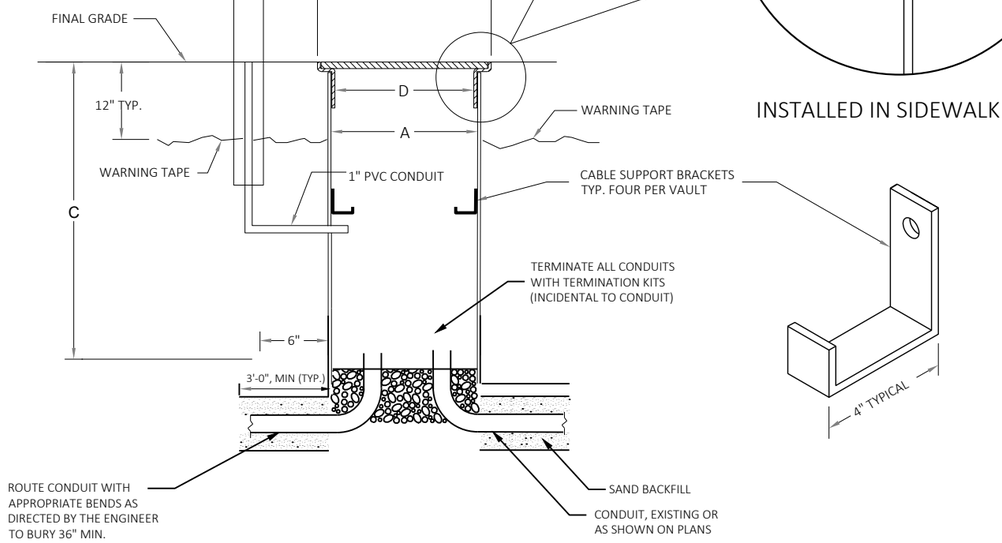
VAULT EXTENSION



INSTALLED IN SOD OR
CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



ROUND COMMUNICATIONS VAULT

GENERAL NOTES

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

ALL VAULTS, 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 1/2" DIAMETER.

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DISCONTINUITIES LESS THAN ¼"

COVER SHALL BE MAGNETICALLY LOCATABLE.

VAULTS AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO VAULT SHALL BE FIELD CUT AT TIME OF PLACEMENT 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 CABLE IN ANY VAULT UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

VAULT EXTENSION MAY ONLY BE USED IF DIRECTED BY THE ENGINEER.

CABLE SUPPORT BRACKETS SHALL BE STAINLESS STEEL AND FASTENED TO THE SIDE WALL WITH ⅜" STAINLESS STEEL BOLT AND NUT. BRACKETS SHALL BE LOCATED 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.

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		COMMUNICATIONS VAULT
VAULT DIAMETER (INSIDE) **	A	36
VAULT OVERALL OUTSIDE DIAMETER	B	39
VAULT LENGTH	C	42
FRAME OPENING	D	34 ½
WEIGHT IN POUNDS*		
COVER		95
VAULT ONLY		85

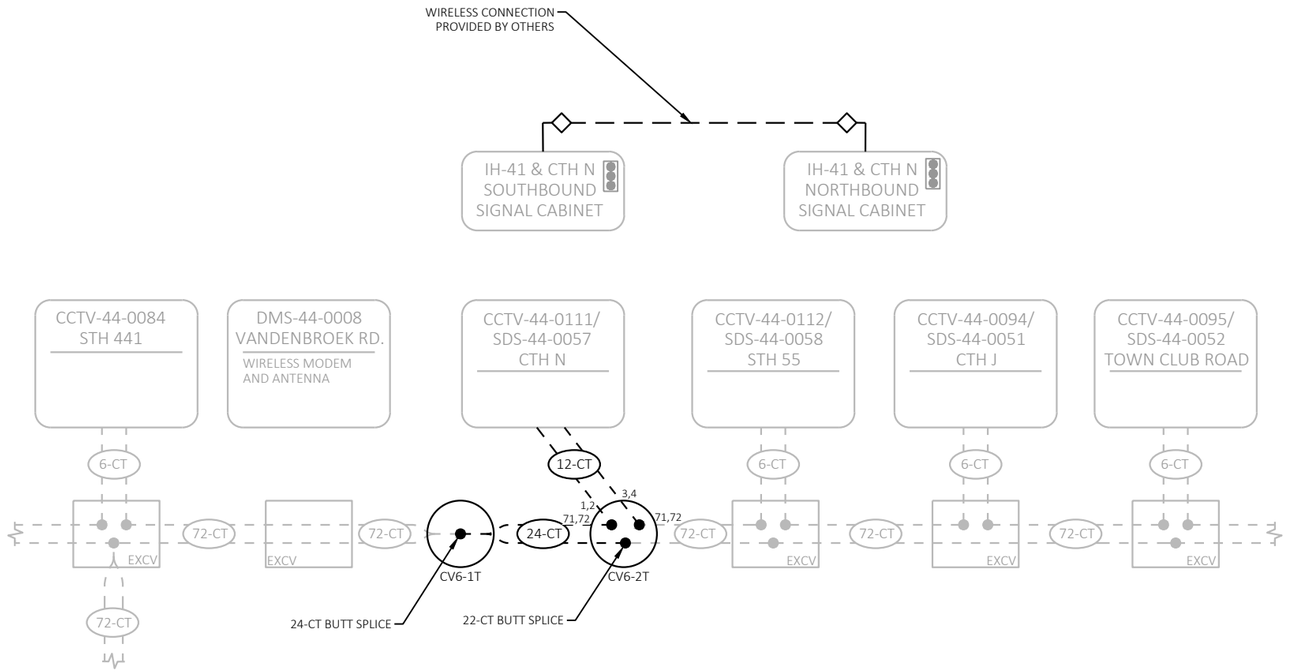
* THE ACTUAL WEIGHT OF THE COVER AND VAULT MAY VARY NOT TO EXCEED 100 LBS FOR THE COVER AND 100 LBS FOR THE VAULT ONLY.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.

2

N

IH-41
ITS COMMUNICATIONS OVERVIEW
PROPOSED CONDITIONS



LEGEND

- XX-CT — FIBER OPTIC CABLE - SM
- FIELD SPLICE LOCATION
- EXCV — COMMUNICATION VAULT TYPE 1
- CV — COMMUNICATION VAULT TYPE ROUND

NOTES

SM = SINGLE MODE FIBER OPTIC
GRAYSHADE REPRESENT EXISTING

PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	ITS COMMUNICATION OVERVIEW	SHEET 47	E

FILE NAME : S:\MAD\2000--2099\2089\018\DRAWINGS\CAD\11300601\SHEETSPLAN\COMMUNICATION OVERVIEW\021501-FM.DWG
LAYOUT NAME - 021501(CTHN)-fm (2)
PLOT DATE : 1/17/2024 10:31 AM PLOT BY : WALTER, ADAM PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

(A) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
1-3" (FOR FUTURE FIBER OPTIC CABLE OUTDOOR PLANT 12-CT AND MICROWAVE CABLE DETECTOR)

(B) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
1-3" (FOR (1) FIBER OPTIC CABLE OUTDOOR PLANT 12-CT AND FUTURE MICROWAVE CABLE DETECTOR)

(C) CONDUIT HDPE 3-DUCT 2-INCH
(FOR FUTURE FIBER OPTIC CABLE OUTDOOR PLANT 72-CT)

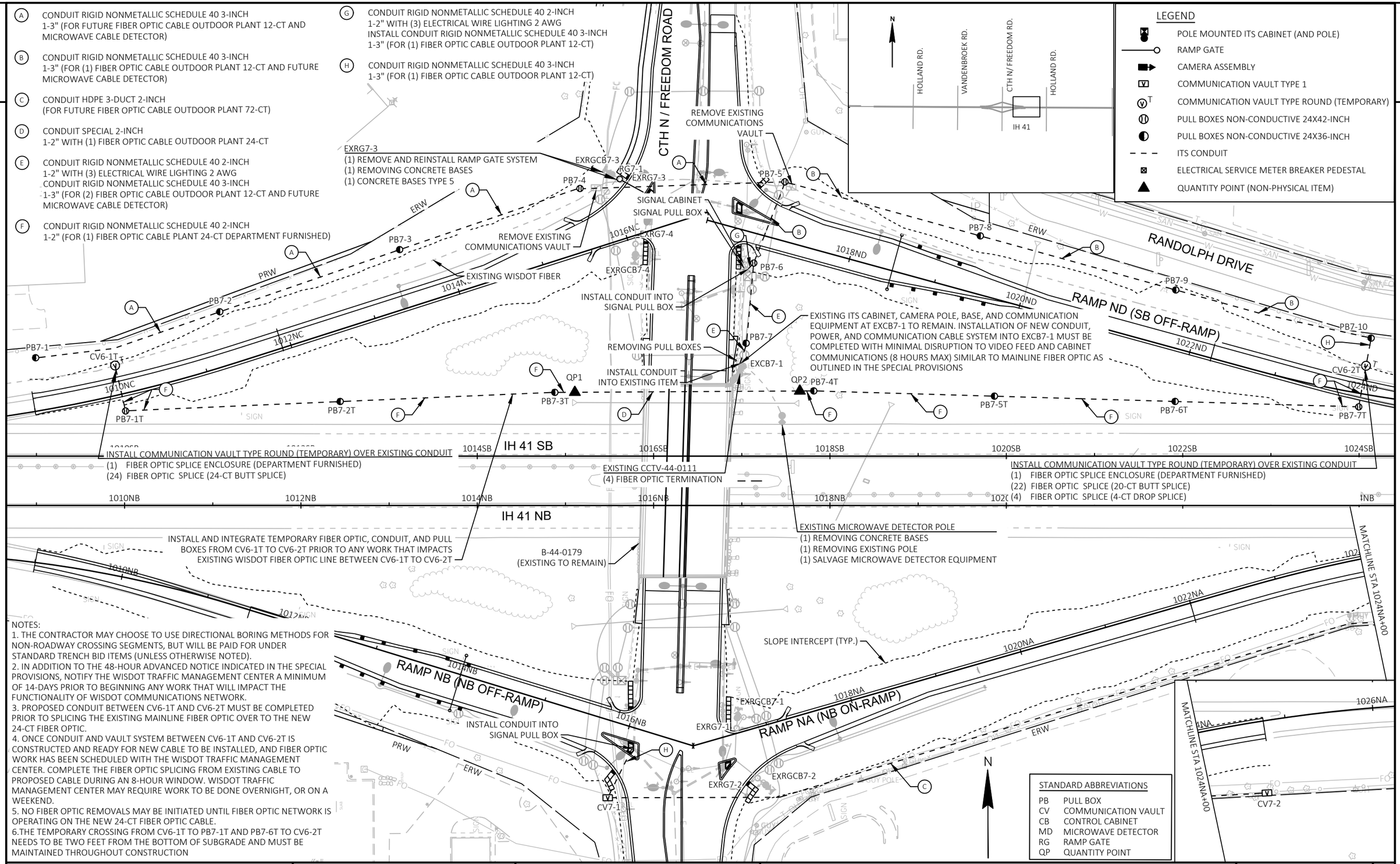
(D) CONDUIT SPECIAL 2-INCH
1-2" WITH (1) FIBER OPTIC CABLE OUTDOOR PLANT 24-CT

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

(F) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
1-2" (FOR (1) FIBER OPTIC CABLE PLANT 24-CT DEPARTMENT FURNISHED)

(G) 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 (1) FIBER OPTIC CABLE OUTDOOR PLANT 12-CT)

(H) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
1-3" (FOR (1) FIBER OPTIC CABLE OUTDOOR PLANT 12-CT)



NOTES:
1. THE CONTRACTOR MAY CHOOSE TO USE DIRECTIONAL BORING METHODS FOR NON-ROADWAY CROSSING SEGMENTS, BUT WILL BE PAID FOR UNDER STANDARD TRENCH BID ITEMS (UNLESS OTHERWISE NOTED).
2. IN ADDITION TO THE 48-HOUR ADVANCED NOTICE 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 WISDOT COMMUNICATIONS NETWORK.
3. PROPOSED CONDUIT BETWEEN CV6-1T AND CV6-2T MUST BE COMPLETED PRIOR TO SPLICING THE EXISTING MAINLINE FIBER OPTIC OVER TO THE NEW 24-CT FIBER OPTIC.
4. ONCE CONDUIT AND VAULT SYSTEM BETWEEN CV6-1T AND CV6-2T IS CONSTRUCTED AND READY FOR NEW CABLE TO BE INSTALLED, AND FIBER OPTIC WORK HAS BEEN SCHEDULED WITH THE WISDOT TRAFFIC MANAGEMENT CENTER. COMPLETE THE FIBER OPTIC SPLICING FROM EXISTING CABLE TO PROPOSED CABLE DURING AN 8-HOUR WINDOW. WISDOT TRAFFIC MANAGEMENT CENTER MAY REQUIRE WORK TO BE DONE OVERNIGHT, OR ON A WEEKEND.
5. NO FIBER OPTIC REMOVALS MAY BE INITIATED UNTIL FIBER OPTIC NETWORK IS OPERATING ON THE NEW 24-CT FIBER OPTIC CABLE.
6.THE TEMPORARY CROSSING FROM CV6-1T TO PB7-1T AND PB7-6T TO CV6-2T NEEDS TO BE TWO FEET FROM THE BOTTOM OF SUBGRADE AND MUST BE MAINTAINED THROUGHOUT CONSTRUCTION

STANDARD ABBREVIATIONS

PB	PULL BOX
CV	COMMUNICATION VAULT
CB	CONTROL CABINET
MD	MICROWAVE DETECTOR
RG	RAMP GATE
QP	QUANTITY POINT

PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	FTMS	SHEET 48	E

FILE NAME : C:\USERS\ADAMWA\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\DSGN\ITS\SHEETS\11306676 (CTH N)\021502-FM.DWG
LAYOUT NAME - 021516-fm
PLOT DATE : 1/17/2024 10:16 AM PLOT BY : WALTER, ADAM PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

EROSION MAT CLASS I TYPE A

EROSION MAT URBAN CLASS I TYPE B

RIPRAP MEDIUM

SLOPE INTERCEPT

SURFACE WATER FLOW

N

BEGIN PROJECT
STA 56'N'+10.55

PATRIOT DR

MOASIS DR

CTH N

SLOPE INTERCEPT (TYP.)

EXISTING R/W

PROPOSED R/W

MATCH LINE 1015'NB'+50

MATCH LINE 1017'NA'+50

MATCH LINE 61+75

56'N'+00

57'N'+00

58'N'+00

59'N'+00

60'N'+00

61'N'+00

SLAB

SIGN

POST

MH

SS

INL

FILLER CAP

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - PERMANENT	SHEET 49	E

2

LEGEND

- EROSION MAT CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- RIPRAP MEDIUM
- SLOPE INTERCEPT
- SURFACE WATER FLOW

MATCH LINE 1015'NB'+50

SLOPE INTERCEPT (TYP.)

MATCH LINE 61+75

62'N'+00

63'N'+00

64'N'+00

65'N'+00

66'N'+00

67'N'+00

CTH N

IH 41 NB

IH 41 SB

MATCH LINE 1015'NC'+00

1016'NC+00

SLOPE INTERCEPT (TYP.)

1017'ND+00

SLOPE INTERCEPT (TYP.)

MATCH LINE 67+75

SLOPE INTERCEPT (TYP.)

MATCH LINE 1017'NA'+50

MATCH LINE 1017'ND'+75

N

SIGN

POST

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - PERMANENT	SHEET 50	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-PERMANENT.DWG
LAYOUT NAME - 022002-ec

PLOT DATE : 1/31/2024 8:45 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

EROSION MAT CLASS I TYPE A

EROSION MAT URBAN CLASS I TYPE B

RIPRAP MEDIUM

SLOPE INTERCEPT

SURFACE WATER FLOW

N

EXISTING R/W

SLOPE INTERCEPT (TYP.)

END CONSTRUCTION
STA 70'N'+34.30

MATCH LINE 67+75

68'N'+00

69'N'+00

70'N'+00

71'N'+00

72'N'+00

73'N'+00

CTH N

END PROJECT
STA 69'N'+42.59

SLOPE INTERCEPT (TYP.)

EXISTING R/W

MATCH LINE 1017'ND'+75

IP

SIGN

POST

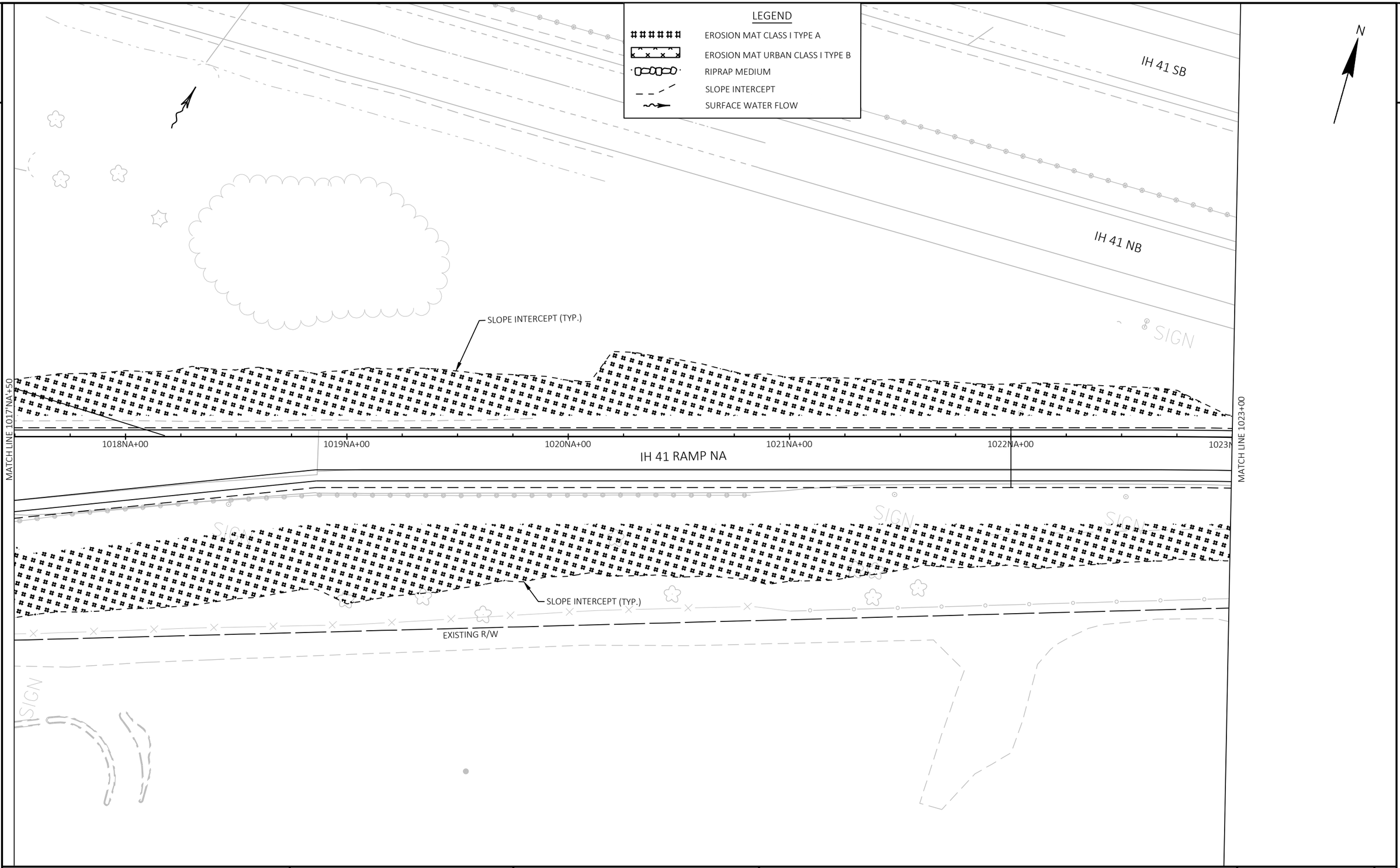
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - PERMANENT	SHEET 51	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-PERMANENT.DWG
LAYOUT NAME - 022003-ec

PLOT DATE : 1/31/2024 8:48 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



2

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - PERMANENT	SHEET 52	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-PERMANENT.DWG
LAYOUT NAME - 022004-ec
PLOT DATE : 1/31/2024 8:51 AM
PLOT BY : AARON SCHRAMM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- EROSION MAT CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- RIPRAP MEDIUM
- SLOPE INTERCEPT
- SURFACE WATER FLOW

N

IH 41 SB

IH 41 NB

SLOPE INTERCEPT (TYP.)

MATCH LINE 1023'NA'+00

1024NA+00

1025NA+00

1026NA+00

1027NA+00

END CONSTRUCTION
STA 1024'NA'+75

SLOPE INTERCEPT (TYP.)

EXISTING R/W

SIGN

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - PERMANENT	SHEET 53	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-PERMANENT.DWG
LAYOUT NAME - 022005-ec

PLOT DATE : 1/31/2024 8:54 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

EROSION MAT CLASS I TYPE A

EROSION MAT URBAN CLASS I TYPE B

RIPRAP MEDIUM

SLOPE INTERCEPT

SURFACE WATER FLOW

N

IH 41 NB

SLOPE INTERCEPT (TYP.)

MATCH LINE 1011'NB+00

1012NB+00

1013NB+00

1014NB+00

1015NB+00

MATCH LINE 1015'NB+50

IH 41 RAMP NB

SLOPE INTERCEPT (TYP.)

PROPOSED R/W

EXISTING R/W

RIPRAP

SLAB

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - PERMANENT	SHEET 54	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-PERMANENT.DWG
LAYOUT NAME - 022006-ec

PLOT DATE : 1/31/2024 8:57 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

EROSION MAT CLASS I TYPE A

EROSION MAT URBAN CLASS I TYPE B

RIPRAP MEDIUM

SLOPE INTERCEPT

SURFACE WATER FLOW

N

IH 41 SB

IH 41 NB

SIGN

SLOPE INTERCEPT (TYP.)

1007NB+00

1008NB+00

1009NB+00

1010NB+00

1011NB+00

BEGIN CONSTRUCTION
STA 1009'NB'+00

SLOPE INTERCEPT (TYP.)

EXISTING R/W

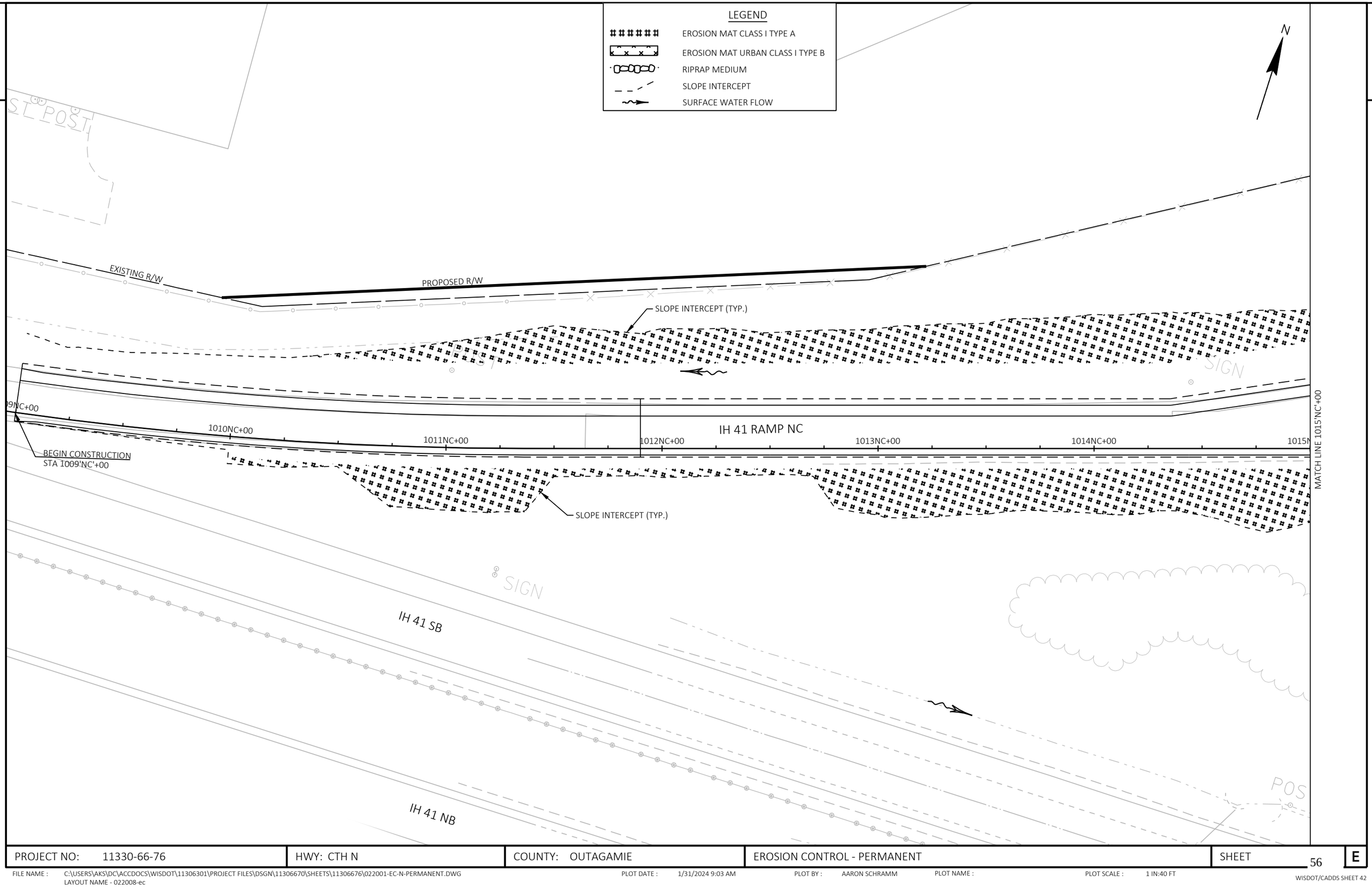
PROPOSED R/W

MATCH LINE 1011'NB'+00

2

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - PERMANENT	SHEET 55	E

2



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PROJECT NO: 11330-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - PERMANENT	SHEET 56	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-PERMANENT.DWG
LAYOUT NAME - 022008-ec

PLOT DATE : 1/31/2024 9:03 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- RIPRAP MEDIUM
- SLOPE INTERCEPT
- SURFACE WATER FLOW

RANDOLPH RD

PROPOSED R/W

EXISTING R/W

SLOPE INTERCEPT (TYP.)

IH 41 RAMP ND

1018ND+00 1019ND+00 1020ND+00 1021ND+00 1022ND+00

SLOPE INTERCEPT (TYP.)

MATCH LINE 1017'ND'+75

MATCH LINE 1022'ND'+00

N

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - PERMANENT	SHEET 57	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-PERMANENT.DWG
LAYOUT NAME - 022009-ec

PLOT DATE : 1/31/2024 9:06 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- RIPRAP MEDIUM
- SLOPE INTERCEPT
- SURFACE WATER FLOW

N

RANDOLPH RD

EXISTING R/W

SLOPE INTERCEPT (TYP.)

MATCH LINE 1022'ND'+00

1022ND+00

1023ND+00

1024ND+00

1025ND+00

1026ND+00

1027ND+00

END CONSTRUCTION
STA 1024'ND'+50

SLOPE INTERCEPT (TYP.)

IH 41 SB

IH 41 SB

IH 41 NB

IH 41 NB

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - PERMANENT	SHEET 58	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-PERMANENT.DWG
LAYOUT NAME - 022010-ec

PLOT DATE : 1/31/2024 9:09 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- A B C — INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

INLET PROTECTION TYPE C SHALL BE PLACED AT NEXT DOWNSTREAM INLET

PATRIOT DR

SLOPE INTERCEPT (TYP.)

EXISTING R/W

PROPOSED R/W

INLET PROTECTION TYPE C SHALL BE PLACED AT NEXT DOWNSTREAM INLET

BEGIN PROJECT
STA 56'N'+10.55

56'N'+00 57'N'+00 58'N'+00 59'N'+00 60'N'+00 61'N'+00

SLOPE INTERCEPT (TYP.)

SILT FENCE

MATCH LINE 1015'NB'+50

1015NB+00

MATCH LINE 61+75

CTH N

INLET PROTECTION TYPE C SHALL BE PLACED AT NEXT DOWNSTREAM INLET

EXISTING R/W

SLOPE INTERCEPT (TYP.)

INLET PROTECTION TYPE C SHALL BE PLACED AT NEXT DOWNSTREAM INLET

MOASIS DR

PROPOSED R/W

INLET PROTECTION TYPE C SHALL BE PLACED AT NEXT DOWNSTREAM INLET

FILLER CAP

EXISTING R/W

SLOPE INTERCEPT (TYP.)

SILT FENCE

1017NA+00

MATCH LINE 1017'NA'+50

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - TEMPORARY	SHEET 59	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-TEMPORARY.DWG
LAYOUT NAME - 022011-ec
PLOT DATE : 1/31/2024 9:21 AM
PLOT BY : AARON SCHRAMM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- A B C — INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

MATCH LINE 1015'NB'+50

SILT FENCE

SLOPE INTERCEPT (TYP.)

SILT FENCE

MATCH LINE 1017'NA'+50

MATCH LINE 61+75

62'N'+00

63'N'+00

64'N'+00

65'N'+00

CTH N

IH 41 NB

IH 41 SB

MATCH LINE 1015'NC'+00

IH 41 RAMP NC

1016NC+00

SILT FENCE

SLOPE INTERCEPT (TYP.)

66'N'+00

67'N'+00

SLOPE INTERCEPT (TYP.)

SILT FENCE

1017ND+00

MATCH LINE 1017'ND'+75

MATCH LINE 67+75

N

POST

SIGN

SS

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - TEMPORARY	SHEET 60	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-TEMPORARY.DWG
LAYOUT NAME - 022012-ec

PLOT DATE : 1/31/2024 9:24 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- A B C — INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

EXISTING R/W

SILT FENCE

POST

SLOPE INTERCEPT (TYP.)

SIGN

SIGN

SIGN

C

END CONSTRUCTION
STA 70'N'+34.30

SIGN

MATCH LINE 67+75

68'N'+00

69'N'+00

70'N'+00

71'N'+00

72'N'+00

73'N'+00

CTH N

END PROJECT
STA 69'N'+42.59

SIGN

SIGN

SIGN

SIGN

POST

SLOPE INTERCEPT (TYP.)

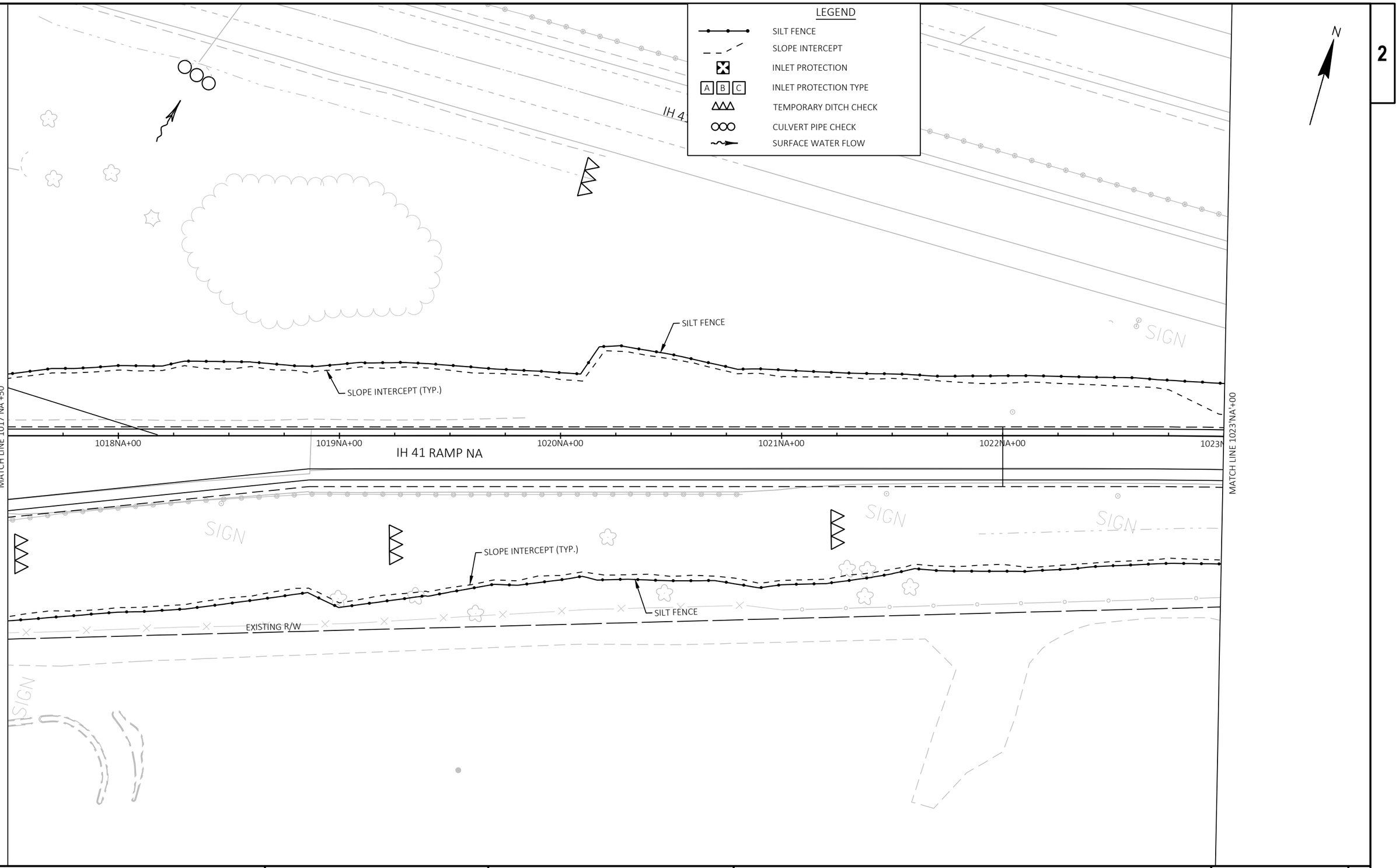
IP

EXISTING R/W

MATCH LINE 1017'ND'+75

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - TEMPORARY	SHEET 61	E

2



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PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - TEMPORARY	SHEET 62	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-TEMPORARY.DWG
LAYOUT NAME - 022014-ec

PLOT DATE : 1/31/2024 9:33 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- A B C INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

IH 41 SB

IH 41 NB

SILT FENCE

MATCH LINE 1023'NA'+00

1024NA+00

IH 41 RAMP NA

1025NA+00

END CONSTRUCTION
STA 1024'NA'+75

1026NA+00

1027NA+00

SLOPE INTERCEPT (TYP.)

POST
TP

SIGN

EXISTING R/W

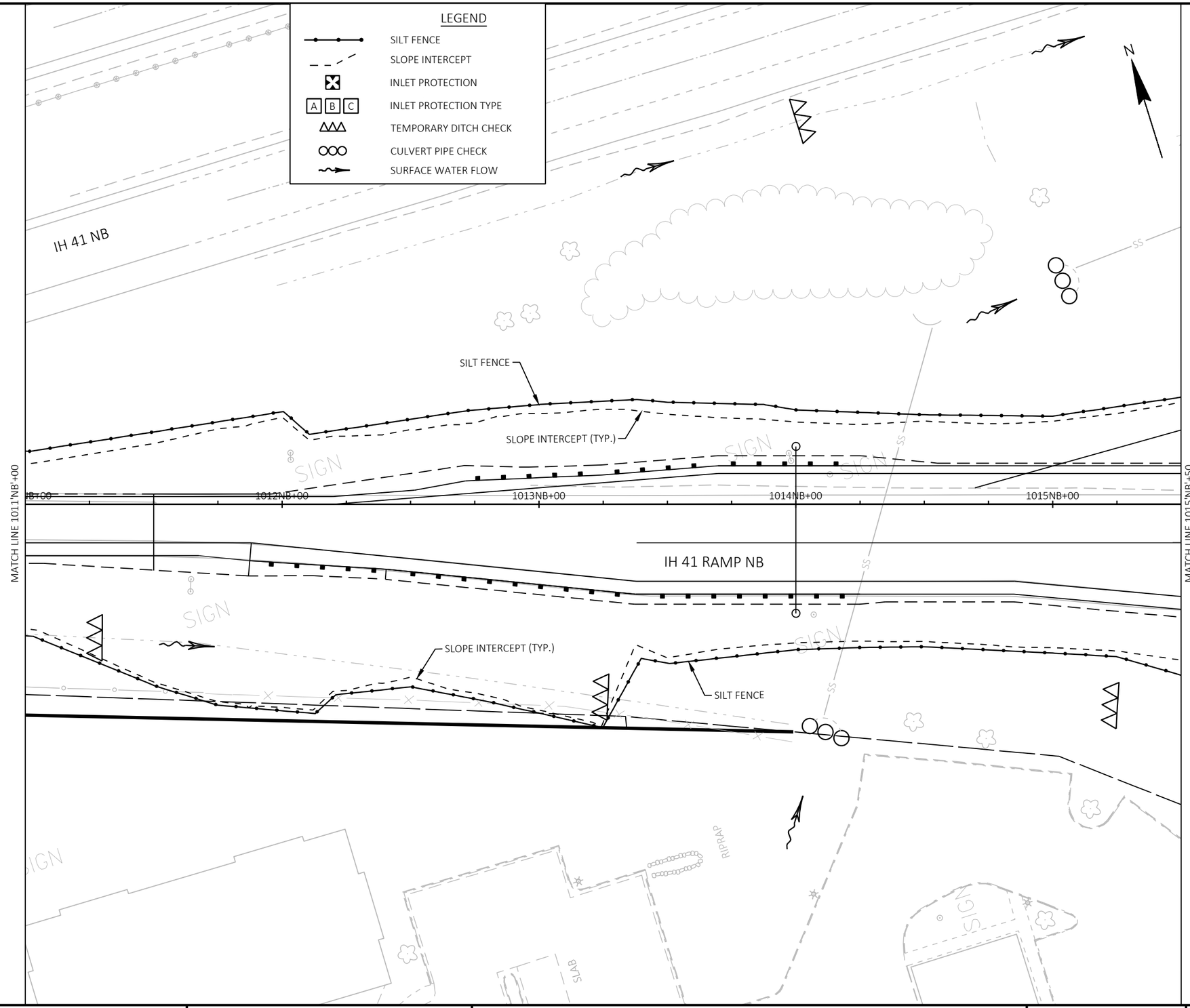
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - TEMPORARY	SHEET 63	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-TEMPORARY.DWG
LAYOUT NAME - 022015-ec

PLOT DATE : 1/31/2024 9:37 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



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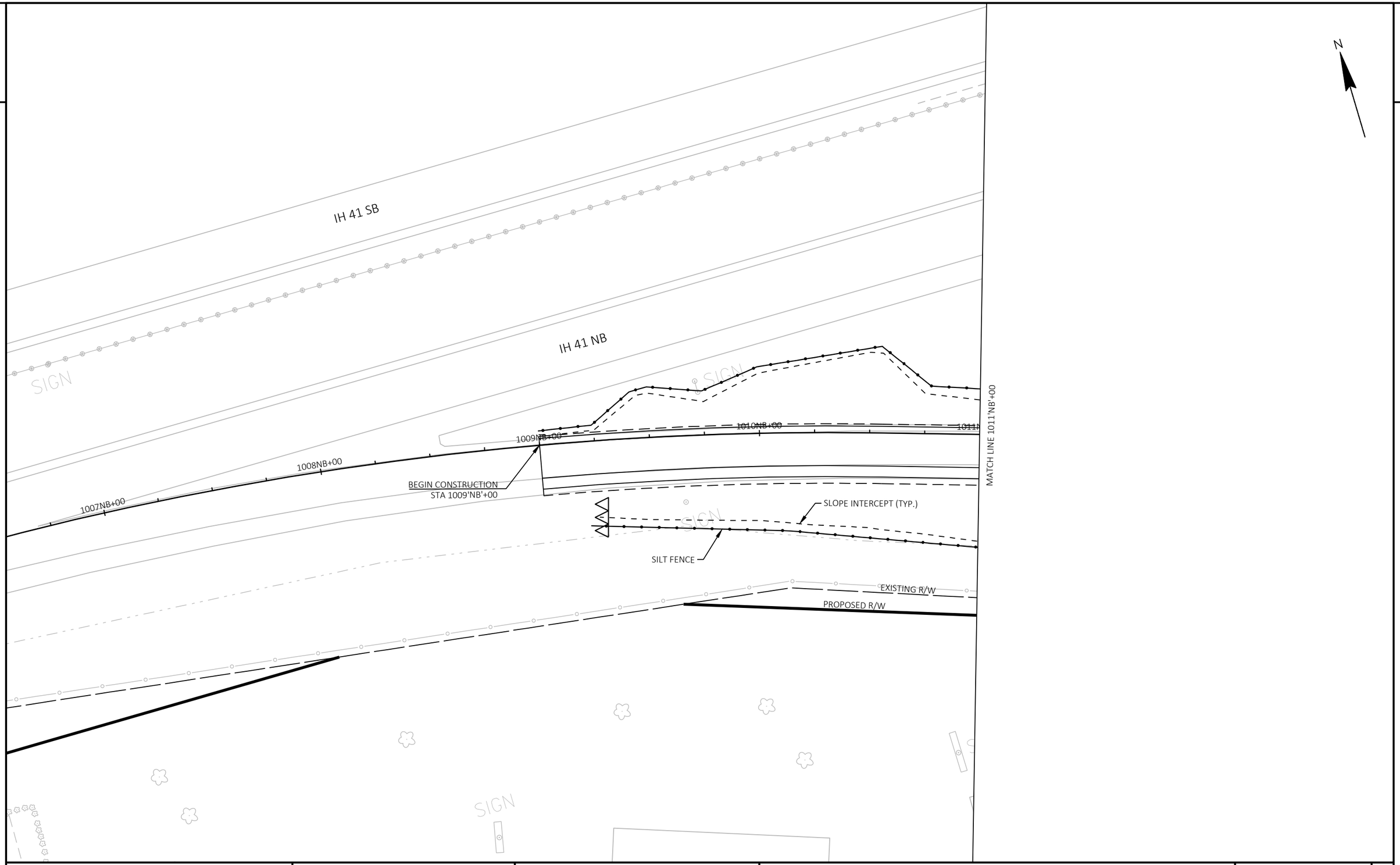
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - TEMPORARY	SHEET 64	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-TEMPORARY.DWG
LAYOUT NAME - 022016-ec
PLOT DATE : 1/31/2024 9:42 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

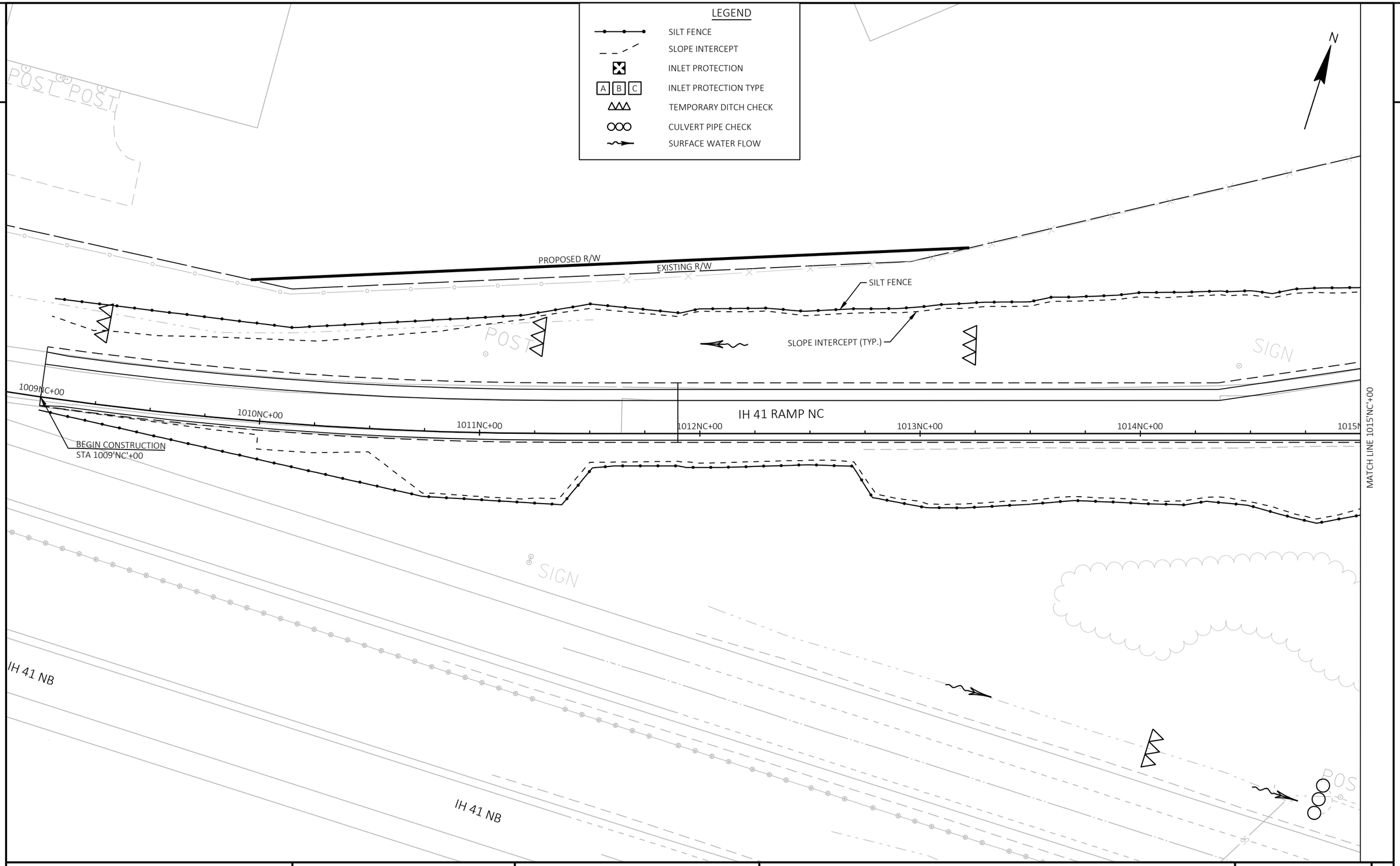


PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - TEMPORARY	SHEET 65	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-TEMPORARY.DWG
LAYOUT NAME - 021217-ec

PLOT DATE : 1/31/2024 9:47 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



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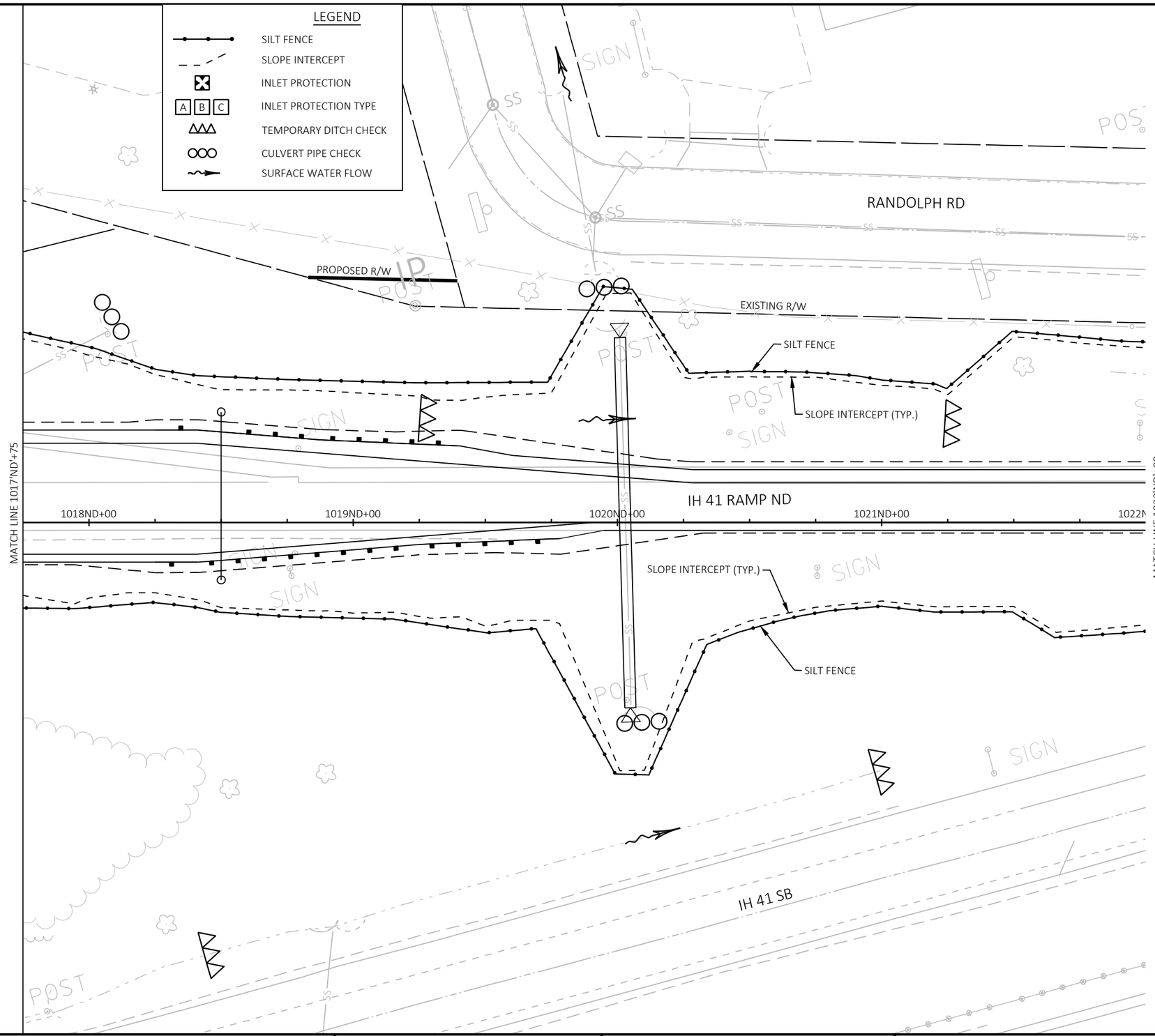
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - TEMPORARY	SHEET 66	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-TEMPORARY.DWG
LAYOUT NAME - 022018-ec
PLOT DATE : 1/31/2024 9:51 AM
PLOT BY : AARON SCHRAMM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



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PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - TEMPORARY	SHEET 67	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-TEMPORARY.DWG
LAYOUT NAME - 022019-ec

PLOT DATE : 1/31/2024 9:55 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

SILT FENCE

SLOPE INTERCEPT (TYP.)

END CONSTRUCTION
STA 1024'ND'+50

MATCH LINE 1022'ND'+00

1023ND+00

1024ND+00

1025ND+00

1026ND+00

1027ND+00

IH 41 SB

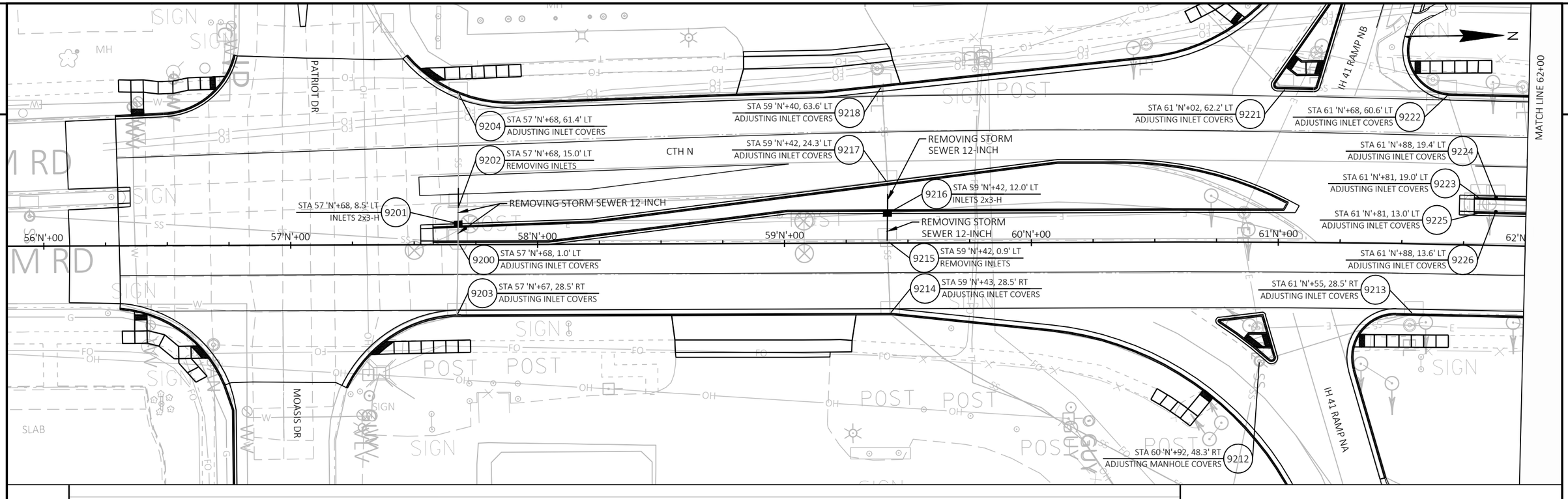
IH 41 NB

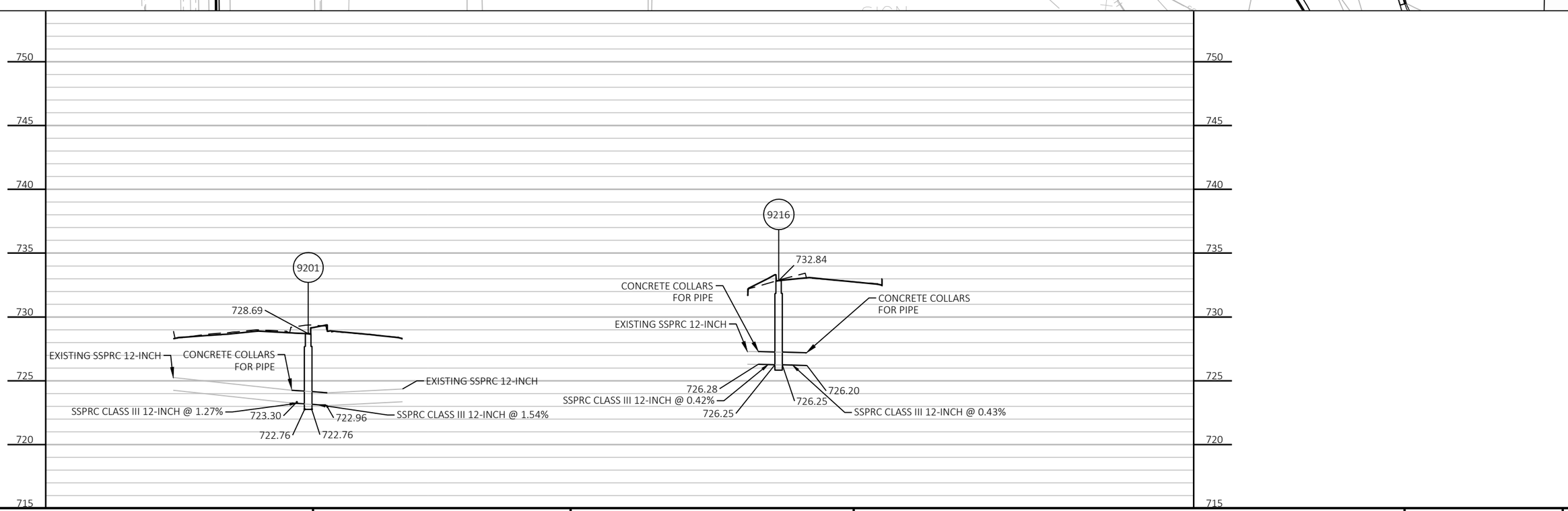
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	EROSION CONTROL - TEMPORARY	SHEET 68	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\022001-EC-N-TEMPORARY.DWG
LAYOUT NAME - 021220-ec

PLOT DATE : 1/31/2024 10:00 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42





PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	STORM SEWER	SHEET 69	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\022501-SS-N.DWG
LAYOUT NAME - 022501
PLOT DATE : 1/31/2024 3:13 PM
PLOT BY : AARON SCHRAMM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

EXISTING 36" RCCP UNDER CTH N TO REMAIN

CTH N / FREEDOM RD

CTH N / FREEDOM RD

CTH N

63'N'+00

64'N'+00

65'N'+00

66'N'+00

67'N'+00

68'N

MATCH LINE 62+00

IH 41 NB

IH 41 SB

IH 41 RAMP NC

IH 41 RAMP ND

REMOVING STORM SEWER 12-INCH

REMOVING STORM SEWER 12-INCH

REMOVING STORM SEWER 12-INCH

STA 66 'N'+67, 59.8' LT
ADJUSTING INLET COVERS
9242

STA 66 'N'+37, 37.7' LT
MANHOLES 3-J
9244

STA 66 'N'+31, 30.3' LT
REMOVING INLETS
9245

STA 66 'N'+31, 19.8' LT
INLETS 2x3-H
9246

STA 66 'N'+24, 19.8' LT
INLETS 2x3-H
9246A

STA 66 'N'+25, 13.0' LT
ADJUSTING INLET COVERS
9248

STA 66 'N'+31, 13.0' LT
ADJUSTING INLET COVERS
9247

STA 66 'N'+67, 28.5' RT
ADJUSTING INLET COVERS
9232

STA 67 'N'+10, 66.3' RT
ADJUSTING INLET COVERS
9231

STA 67 'N'+19, 75.5' LT
ADJUSTING INLET COVERS
9241

STA 67 'N'+63, 35.3' LT
MANHOLES 3-J
9249

STA 67 'N'+71, 28.2' LT
REMOVING INLETS
9250

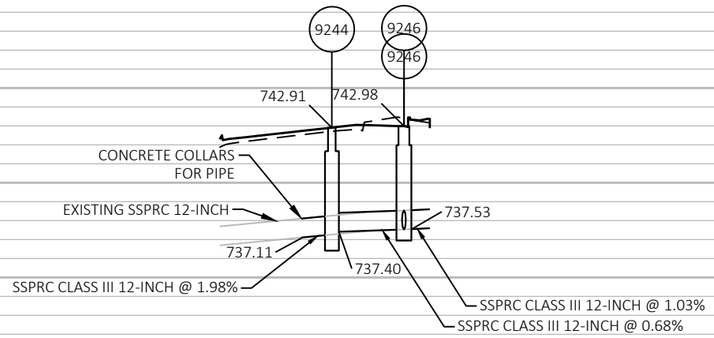
STA 67 'N'+53, 17.2' LT
INLETS 2x3-H
9251

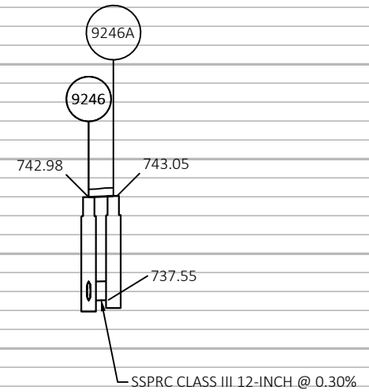
STA 67 'N'+39, 8.4' LT
REMOVING INLETS
9252

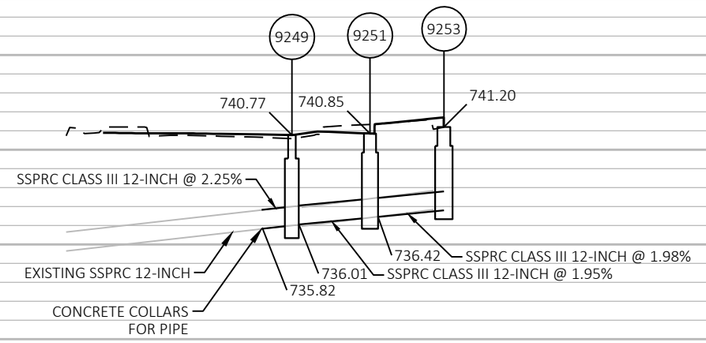
STA 67 'N'+37, 7.0' LT
INLETS 2x3-H
9253

N

2



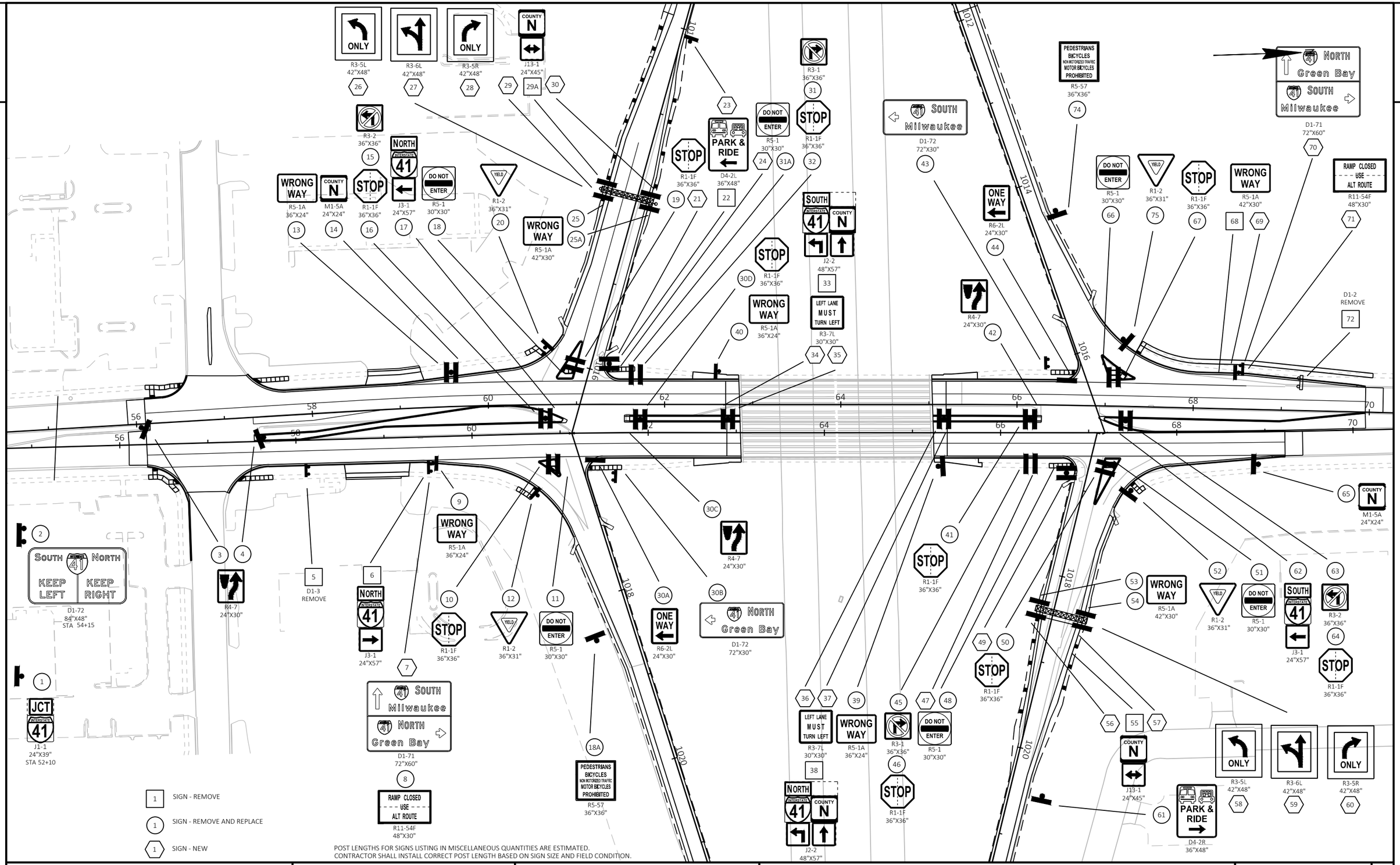




755 750 745 740 735 730 725 720

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	STORM SEWER	SHEET 70	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\022501-SS-N.DWG
LAYOUT NAME - 022502
PLOT DATE : 1/31/2024 3:26 PM
PLOT BY : AARON SCHRAMM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41



PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	PERMANENT SIGNING	SHEET 71	E

FILE NAME : C:\USERS\DOTETS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\SHEETS\SIGNING PLANS\11306676_023201-PS.DWG
LAYOUT NAME - 023201-ps
PLOT DATE : 1/5/2024 2:51 PM
PLOT BY : SIKORSKI, ERIC T
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

N

D1-72
84"X48"

77

R2-1
24"X30"

78

J1-1
24"X39"

79

J2-2
REMOVE

80

J1-1
REMOVE

82

72 72 74 74

81

R4-7
24"X30"

1 SIGN - REMOVE

1 SIGN - REMOVE AND REPLACE

1 SIGN - NEW

POST LENGTHS FOR SIGNS LISTING IN MISCELLANEOUS QUANTITIES ARE ESTIMATED.
CONTRACTOR SHALL INSTALL CORRECT POST LENGTH BASED ON SIGN SIZE AND FIELD CONDITION.

PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	PERMANENT SIGNING	SHEET 72	E

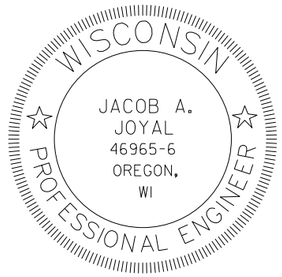
FILE NAME : C:\USERS\DOTETS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\SHEETS\SIGNING PLANS\11306676_023201-PS.DWG
LAYOUT NAME - 023202-ps

PLOT DATE : 1/5/2024 2:55 PM PLOT BY : SIKORSKI, ERIC T PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

STREET LIGHTING PLANS PREPARED BY

KL Engineering
[A] Better Experience



01/11/24
(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.

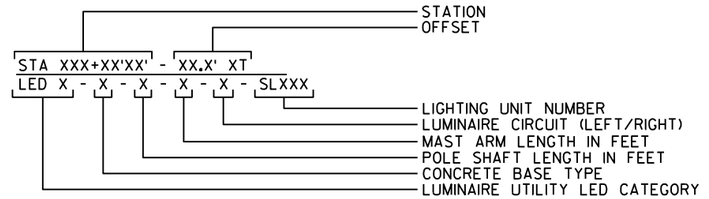
5) REFER TO ITS PLANS FOR LOCATIONS OF SHARED INFRASTRUCTURE.

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
-CRASH INVESTIGATION SITES: 6' FROM EDGE OF PAVEMENT TO CENTER OF BASE

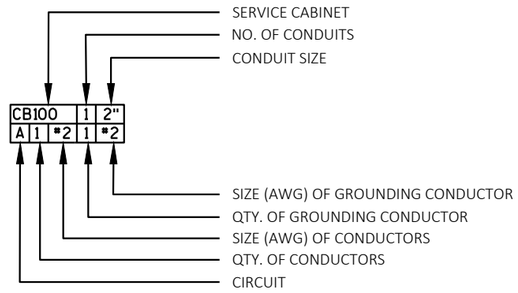
7) CABINET BASES AND THE PULLBOXES AND CONDUIT WITHIN THE AREA OF CABINET BASES SHALL BE INSTALLED PER FIELD CONDITIONS (WITH ENGINEER APPROVAL). VERIFY THE LOCATION OF ALL ELECTRICAL FACILITIES WITH THE ENGINEER PRIOR TO INSTALLING.

LIGHTING PLAN LEGEND

- PROPOSED CONCRETE CONTROL CABINET BASE/ELEC. SERVICE
- PROPOSED PULL BOX NON-CONDUCTIVE (24"X42")
- PROPOSED LIGHTING CONDUIT SCHEDULE 40 PVC (2" UNLESS SPECIFIED OTHERWISE)
- PROPOSED LIGHTING CONDUIT SCHEDULE 80 PVC (2" UNLESS SPECIFIED OTHERWISE)
- PROPOSED SINGLE ARM LUMINAIRE
- PROPOSED TWIN ARM LUMINAIRE



CONDUIT/CONDUCTOR LEGEND



ABBREVIATIONS

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

SHEET 1 OF 6

PROJECT NO: 1130-66-76	HWY: FREEDOM RD/CTH N	COUNTY: OUTAGAMIE	LIGHTING PLANS - TITLE SHEET	SHEET 73	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.

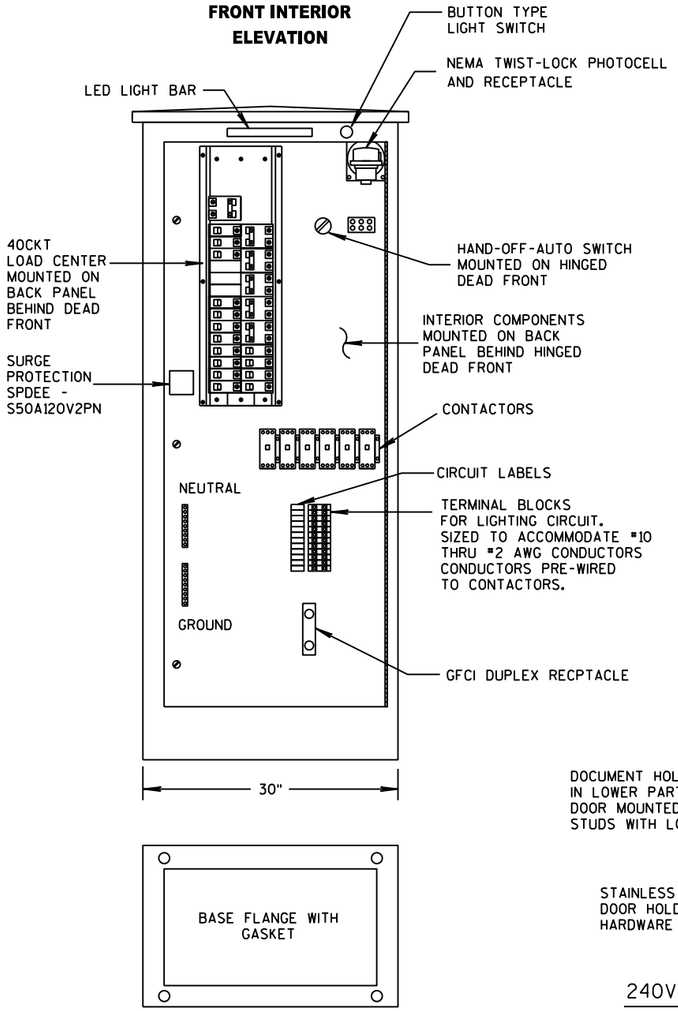
ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

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

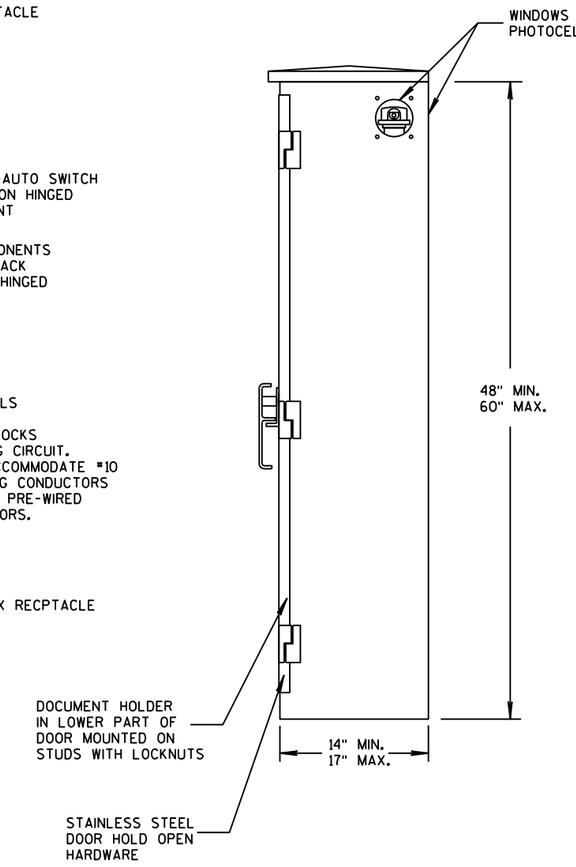
ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

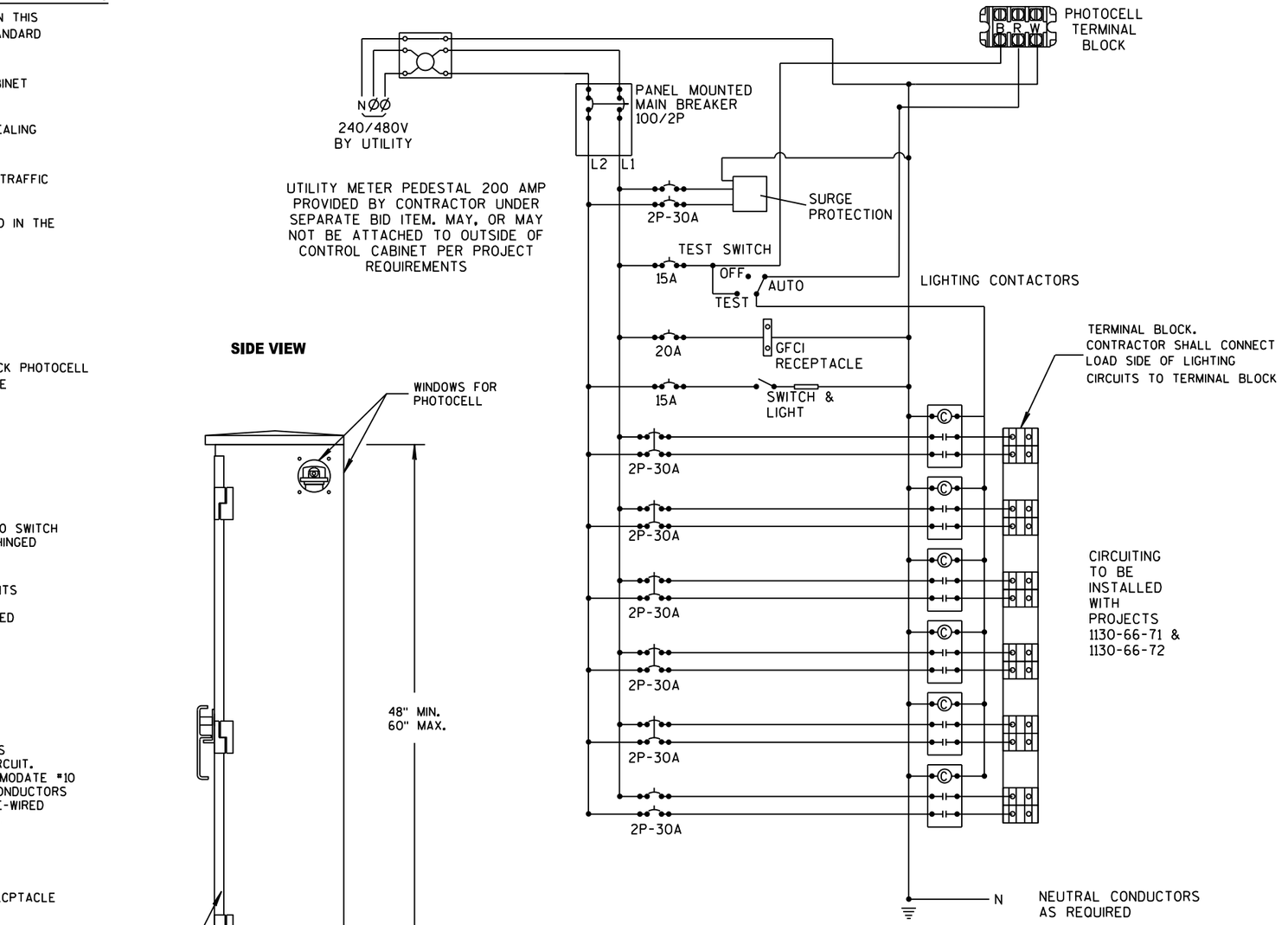
A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

FRONT INTERIOR ELEVATION



SIDE VIEW





240V/480V LIGHTING CONTROL CABINET - SCHEMATICS

CB1000 659.2130

PROJECT NO: 1130-66-76	HWY: FREEDOM RD/CTH N	COUNTY: OUTAGAMIE	LIGHTING PLANS - CONTROL CABINET SCHEMATICS	SHEET 74	E

FILE NAME : C:\USERS\ALOBDELL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\DSGN\LIGHTING\SHEETS\SHEETSPLAN\1130-66-76_FREEDOM RD-CTH N INTERCHANGE\023601_LPPL1130-66-76.DWG 1/16/2024 11:15 AM
LAYOUT NAME - 480V CAB
PLOT BY : ANDREW LOBDELL 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.

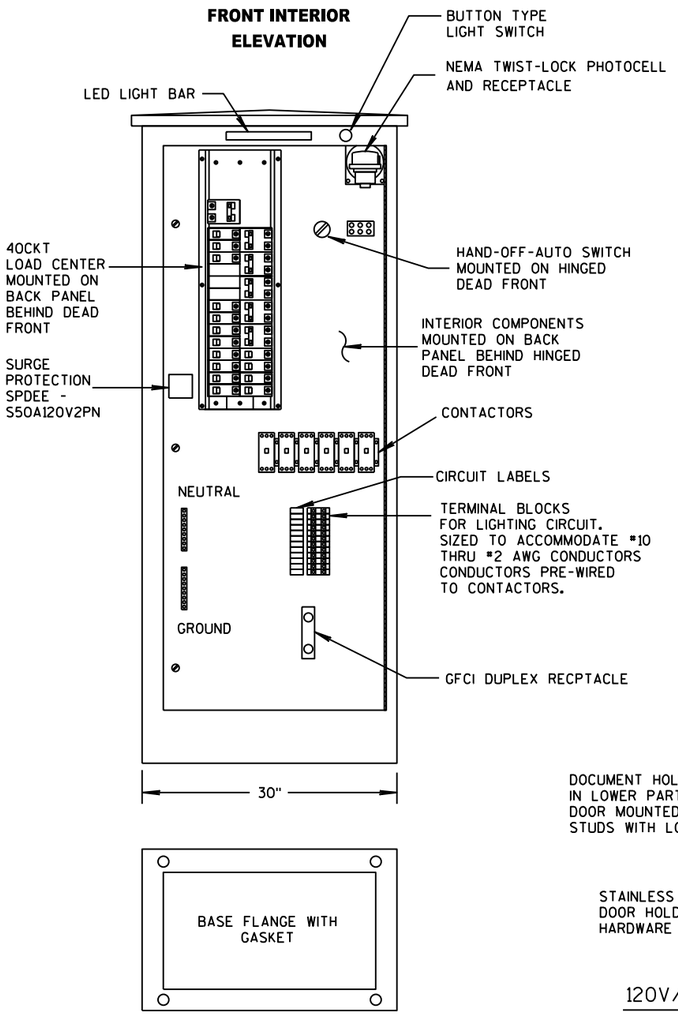
ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

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

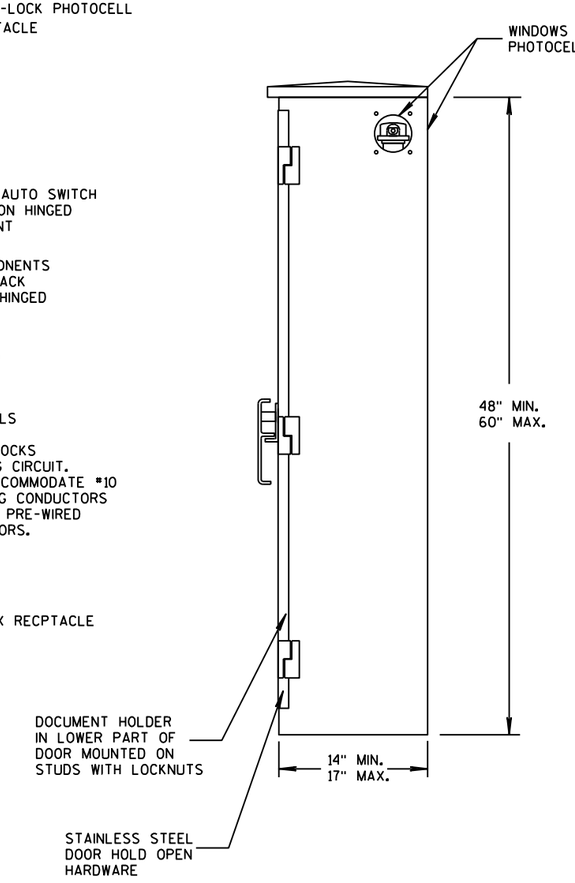
ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

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

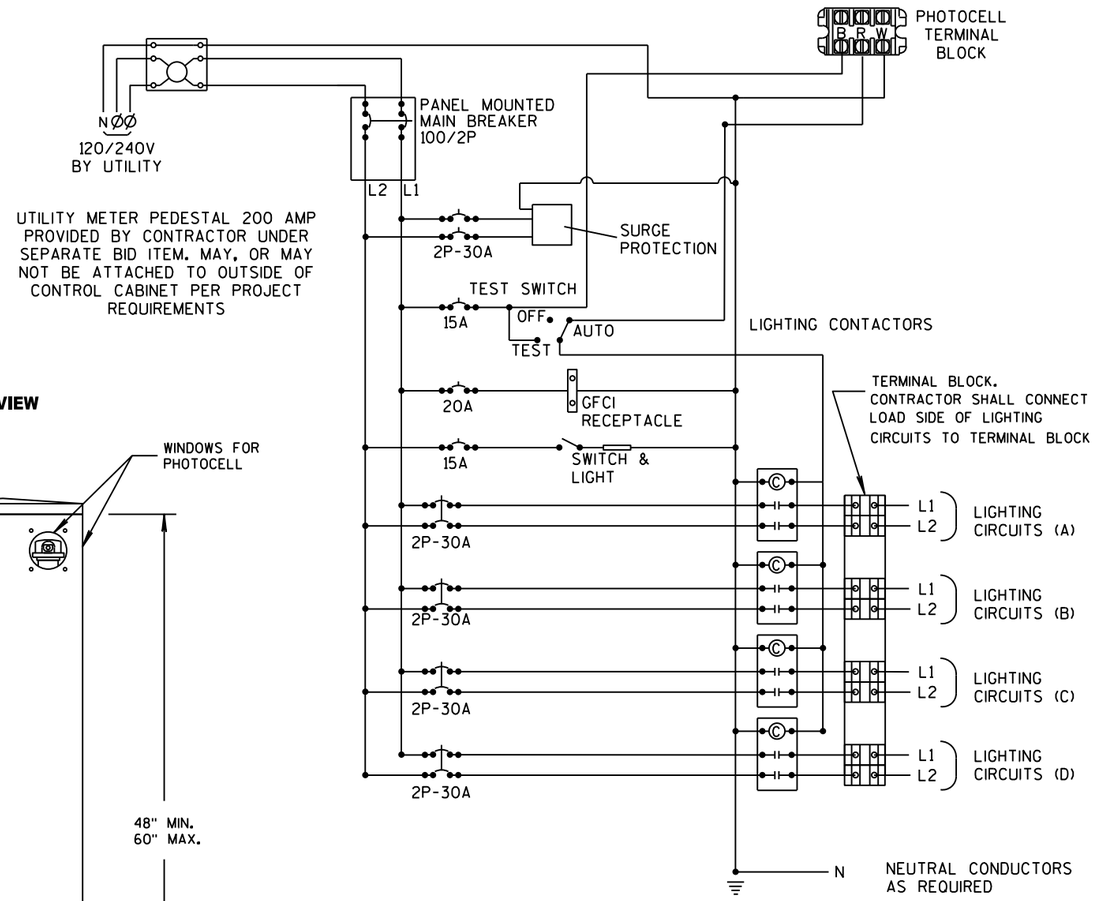
FRONT INTERIOR ELEVATION



SIDE VIEW



UTILITY METER PEDESTAL 200 AMP PROVIDED BY CONTRACTOR UNDER SEPARATE BID ITEM. MAY, OR MAY NOT BE ATTACHED TO OUTSIDE OF CONTROL CABINET PER PROJECT REQUIREMENTS



120V/240V LIGHTING CONTROL CABINET - SCHEMATICS

CB1100 659.2130

SHEET 3 OF 6

PROJECT NO: 1130-66-76	HWY: FREEDOM RD/CTH N	COUNTY: OUTAGAMIE	LIGHTING PLANS - CONTROL CABINET SCHEMATICS	SHEET 75	E

▲ 1

CIRCUITING TO BE INSTALLED WITH PROJECTS 1130-66-71 & 1130-66-72
480V PHASE TO PHASE

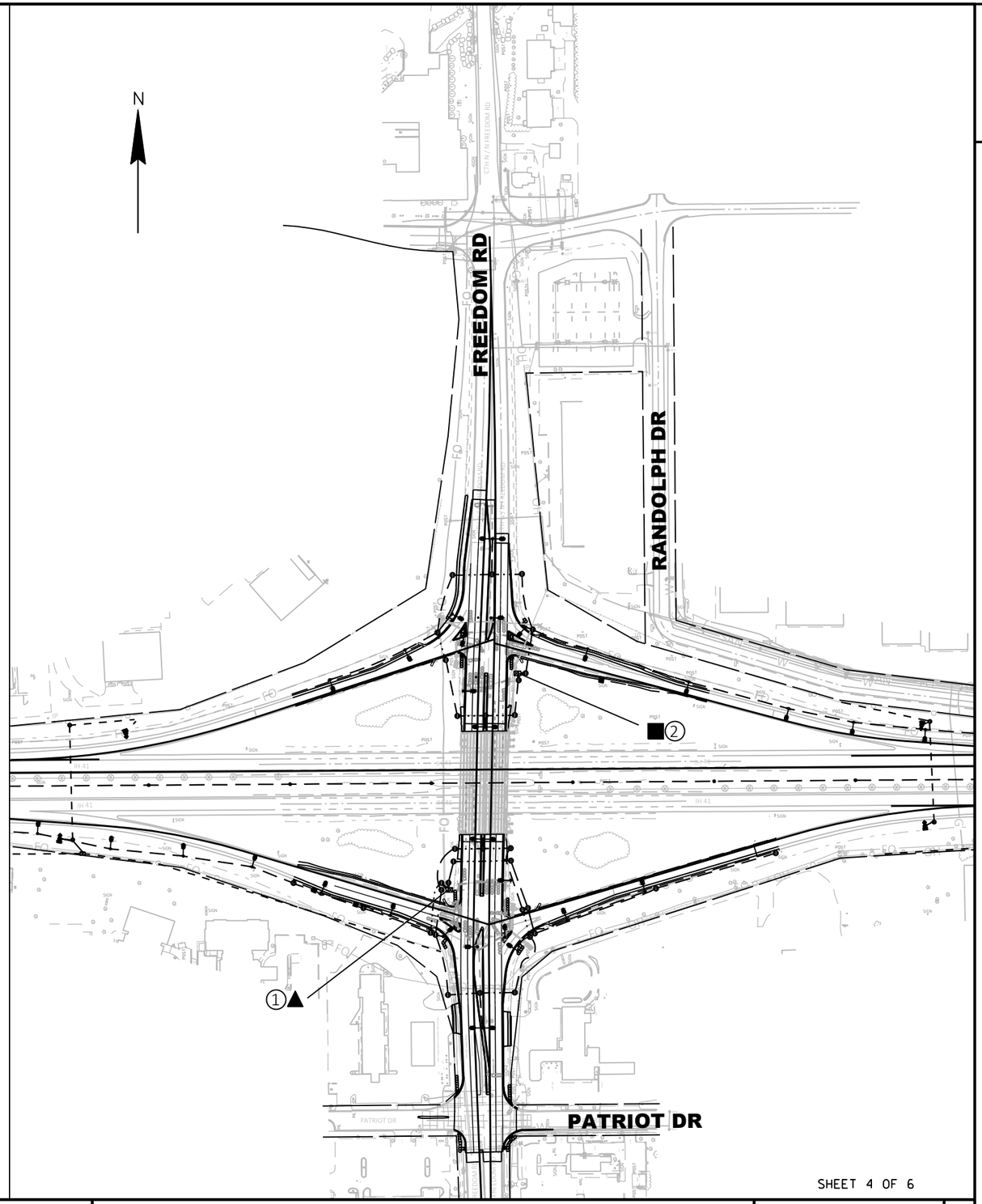
- L44-2071 / IH 41 CORRIDOR - FREEDOM RD./CTH N INTERCHANGE / VILLAGE OF LITTLE CHUTE / OUTAGAMIE COUNTY
- CB1000 / NORTHWEST QUADRANT OF NB IH 41 OFF-RAMP
- 240/480 VOLT SINGLE PHASE / 200 AMP SERVICE
- METER BREAKER PEDESTAL /
- CIRCUIT DESCRIPTIONS
  CIRCUITING TO BE INSTALLED WITH PROJECTS 1130-66-71 & 1130-66-72

■ 2

A - BLACK B - RED C - BLUE D - BROWN
240V PHASE TO PHASE

- L44-2072 / IH 41 CORRIDOR - FREEDOM RD./CTH N INTERCHANGE / VILLAGE OF LITTLE CHUTE / OUTAGAMIE COUNTY
- CB1100 / SOUTHEAST QUADRANT OF SB IH 41 OFF-RAMP
- 120/240 VOLT SINGLE PHASE / 200 AMP SERVICE
- METER BREAKER PEDESTAL
- CIRCUIT DESCRIPTIONS
  CKT A - NORTH SIDE OF INTERCHANGE
  CKT B - NORTH SIDE OF INTERCHANGE
  CKT C - SOUTH SIDE OF INTERCHANGE
  CKT D - SOUTH SIDE OF INTERCHANGE

WISDOT SYSTEMS



SHEET 4 OF 6

2

PROJECT NO: 1130-66-76	HWY: FREEDOM RD/CTH N	COUNTY: OUTAGAMIE	LIGHTING PLANS - CABINET MAP	SHEET 76	E

FILE NAME : C:\USERS\ALOBDELL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\DSGN\LIGHTING\SHEETS\SHEETSPLAN\1130-66-76_FREEDOM RD-CTH N INTERCHANGE\023601_LPPL1130-66-76.DWG 1/16/2024 11:17 AM
LAYOUT NAME - CAB MAP
PLOT BY : ANDREW LOBDELL PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

INSTALLED WITH PROJECT 1130-66-71

INSTALLED WITH PROJECT 1130-66-71

INSTALLED WITH PROJECT 1130-66-76

INSTALLED WITH PROJECT 1130-66-76

STA 1012+53'NB' - 34.6' RT
PB1003

STA 1013+16'NB' - 38.5' RT
LED B - 5 - 30 - 12 - D - SL1104

STA 1014+10'NB' - 42.9' RT
PB1002

STA 1014+70'NB' - 41.8' RT
LED B - 5 - 30 - 12 - C - SL1103

STA 1015+62'NB' - 53.0' RT
PB1001

STA 1015+74'NB' - 54.0' RT
PB1101

STA 60+68'NSB' - 64.6' LT
LED B - 5 - 30 - 12 - D - SL1102

STA 61+66'NSB' - 69.8' LT
PB1102

STA 61+81'NSB' - 70.3' LT
PB1000

STA 61+81'NSB' - 55.3' LT
PB1004

STA 61+66'NSB' - 55.1' LT
CB1000 - SEE NOTE 3

STA 59+46'NSB' - 55.7' LT
PB1100

STA 59+68'NNB' - 20.3' LT
PB1120

STA 62+26'NSB' - 45.2' LT
PB1005

STA 62+53'NSB' - 43.1' LT
PB1103

STA 62+55'NSB' - 15.9' RT
PB1104

STA 65+37'NSB' - 16.0' RT
PB1105

STA 65+36'NSB' - 43.1' LT
PB1106

STA 65+32'NNB' - 15.9' LT
LED B - 5 - 30 - 12 - B/A - SL1106

STA 1015+84'NC' - 9.6' RT
PB1107

STA 1013+37'NC' - 26.8' LT
LED B - 5 - 30 - 12 - A - SL1107

STA 1015+08'NC' - 37.5' LT
LED B - 5 - 30 - 12 - B - SL1108

STA 1015+83'NC' - 53.6' LT
PB1108

STA 67+50'NSB' - 61.6' LT
LED B - 5 - 30 - 12 - A - SL1109

STA 68+33'NSB' - 64.3' LT
PB1109

STA 68+38'NSB' - 19.1' RT
PB1110

STA 69+32'NNB' - 6.7' LT
LED B - 5 - 30 - 12 - A/B - SL1110

STA 68+57'NNB' - 56.0' RT
PB1111

STA 1016+88'ND' - 50.5' LT
LED B - 5 - 30 - 12 - A - SL1111

STA 67+45'NNB' - 85.0' RT
PB1112

STA 66+47'NNB' - 52.7' RT
CB1100 - SEE NOTE 3

STA 66+47'NNB' - 67.6' RT
PB1113

STA 66+32'NNB' - 53.2' RT
PB1114

STA 58+94'NNB' - 15.1' LT
LED B - 5 - 30 - 12 - D/C - SL1100

STA 59+68'NNB' - 39.5' RT
PB1119

STA 1016+56'NA' - 70.9' RT
LED B - 5 - 30 - 12 - D - SL1116

STA 1016+89'NA' - 50.1' RT
PB1118

STA 1017+01'NA' - 45.7' RT
PB1008

STA 1017+75'NA' - 38.2' RT
LED B - 5 - 30 - 12 - C - SL1115

STA 1019+51'NA' - 26.8' RT
LED B - 5 - 30 - 12 - D - SL1114

STA 1019+75'NA' - 27.0' RT
PB1009

STA 1016+91'NA' - 9.8' LT
PB1117

STA 1017+02'NA' - 9.8' LT
PB1007

STA 62+94'NNB' - 16.1' LT
LED B - 5 - 30 - 12 - C/D - SL1105

STA 65+58'NNB' - 46.6' RT
PB1115 - SEE NOTE 2

STA 62+76'NNB' - 43.4' RT
PB1116 - SEE NOTE 2

STA 62+49'NNB' - 44.4' RT
PB1006

STA 1018+27'ND' - 39.8' LT
LED B - 5 - 30 - 12 - B - SL1112

STA 1020+52'ND' - 26.8' LT
LED B - 5 - 30 - 12 - A - SL1113

STA 1022+40'NA' - 27.0 RT
PB1010

INSTALLED WITH PROJECT 1130-66-76

INSTALLED WITH PROJECT 1130-66-72

INSTALLED WITH PROJECT 1130-66-72

INSTALLED WITH PROJECT 1130-66-76

MATCHLINE 1020+00'NA'

IH 41 NB

IH 41 SB

IH 41 NB OFF RAMP

IH 41 NB ON RAMP

IH 41 SB OFF RAMP

IH 41 SB ON RAMP

FREEDOM RD/CTH N

B-44-0179

R/W (TYP.)

USH 41 CORRIDOR - CTH N/FREEDOM RD
IH 41/FREEDOM RD. - 240V
LITTLE CHUTE, OUTAGAMIE COUNTY

LIGHTING NO. L44-2072

DESIGNER: KL ENGINEERING, INC.

DATE: 01-11-2024 | SHEET 1 OF 2

USH 41 CORRIDOR - CTH N/FREEDOM RD
IH 41/FREEDOM RD. - 480V
LITTLE CHUTE, OUTAGAMIE COUNTY

LIGHTING NO. L44-2071

DESIGNER: KL ENGINEERING, INC.

DATE: 01-11-2024 | SHEET 1 OF 2

CONSTRUCTION NOTES:

1) FUTURE LIGHTING INFRASTRUCTURE ALONG MAINLINE TO BE INSTALLED WITH PROJECT #1130-66-71 & 1130-66-72

2) FIELD LOCATE PB1116 AND PB1115 TO INTERCEPT EXISTING CONDUIT THROUGH STRUCTURE B-44-0179

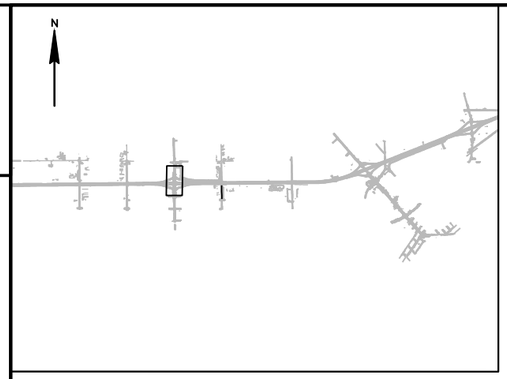
3) FIELD LOCATE LIGHTING CONTROL CABINETS NEXT TO EXISTING SIGNAL CABINETS

4) SEE SIGNAL PLANS FOR LIGHTS THAT SHARE INFRASTRUCTURE WITH SIGNALS

5) STREET LIGHT NUMBER SL1101 IS NOT USED

SHEET 5 OF 6

PROJECT NO: 1130-66-76	HWY: FREEDOM RD/CTH N	COUNTY: OUTAGAMIE	LIGHTING PLANS	SHEET 77	E



1 =	CB1100	1	2"
	A	2	#10
	B	2	#10

3 =	CB1100	1	3"
	A	2	#10
	B	2	#10

2 =	CB1100	1	2"
	C	2	#10
	D	2	#10

4 =	CB1100	1	3"
	C	2	#10
	D	2	#10

INSTALLED WITH PROJECT 1130-66-71

INSTALLED WITH PROJECT 1130-66-76

1012+00 'NB'

1014+00 'NB'

1016+00 'NB'

1018+00 'NA'

1020+00 'NA'

IH 41 NB OFF RAMP

IH 41 NB ON RAMP

PB1003 PWO 1-2" SL1104

PB1002 PWO 1-2" SL1103

PB1102 PB1000 PWO 3-3" CB1000 PB1004 PWO 3-3"

PB1001 PB1101 SL1102 PWO 1-3"

PB1100 PB1120 SL1100

PB1105 PWO 1-3" PB1103 PWO 1-2"

PWO 1-3" PB1104 SL1105

PB1119 SL1116 PB1118 PB1008 PWO 1-3"

PB1117 PB1007 PB1006 PWO 1-2" PB1116

SL1115 PWO 1-2" SL1114 PB1009 PWO 1-2"

CB1100	1	2"
D	2	#10

CB1100	1	2"
C	4	#10
D	4	#10

CB1100	1	2"
C	4	#10
D	4	#10

CB1100	1	3"
C	4	#10
D	4	#10

CB1100	1	2"
C	4	#10
D	4	#10

CB1100	1	3"
C	6	#10
D	6	#10

CB1100	1	2"
D	2	#10

58+00 'NSB' 60+00 'NSB' 62+00 'NSB' 64+00 'NSB'

58+00 'NNB' 60+00 'NNB' 62+00 'NNB' 64+00 'NNB'

FREEDOM RD/CTH N

B-44-0179

MATCHLINE 1020+00'NA'

CONSTRUCTION NOTES:

1) STREET LIGHT NUMBER SL1101 IS NOT USED

1012+00 'SB'

1014+00 'SB'

1016+00 'SB'

1018+00 'SB'

1020+00 'SB'

1012+00 'NC'

1014+00 'NC'

1016+00 'NC'

1018+00 'NC'

1020+00 'NC'

IH 41 SB ON RAMP

IH 41 SB OFF RAMP

INSTALLED WITH PROJECT 1130-66-71

INSTALLED WITH PROJECT 1130-66-76

SL1107

CB1100	1	2"
A	2	#10
B	2	#10

SL1108 PB1108 PB1107 PB1106 PB1109 SL1109

CB1100	1	2"
A	6	#10
B	6	#10

SL1106 PB1105 PB1110 SL1110

66+00 'NSB' 68+00 'NSB' 70+00 'NSB'

66+00 'NNB' 68+00 'NNB' 70+00 'NNB'

PB1115 PWO 1-3" PB1112 SL1111 PB1111

CB1100	EX	
C	2	#10
D	2	#10

CB1100	1	2"
A	4	#10
B	4	#10

CB1100	1	3"
A	6	#10
B	6	#10

SL1112

CB1100	1	2"
A	2	#10
B	2	#10

PB1114 CB1100 PB1113 PWO 2-3"

SL1113

INSTALLED WITH PROJECT 1130-66-72

MATCHLINE 1020+00'NA' 'NA'

PWO 1-2" PB1010 1022+00 'NA'

INSTALLED WITH PROJECT 1130-66-76

INSTALLED WITH PROJECT 1130-66-72

USH 41 CORRIDOR - CTH N/FREEDOM RD IH 41/FREEDOM RD. - 240V LITTLE CHUTE, OUTAGAMIE COUNTY	
LIGHTING NO. L44-2072	
DESIGNER: KL ENGINEERING, INC.	
DATE: 01-11-2024	SHEET 2 OF 2

USH 41 CORRIDOR - CTH N/FREEDOM RD IH 41/FREEDOM RD. - 480V LITTLE CHUTE, OUTAGAMIE COUNTY	
LIGHTING NO. L44-2071	
DESIGNER: KL ENGINEERING, INC.	
DATE: 01-11-2024	SHEET 2 OF 2

SHEET 6 OF 6

PROJECT NO: 1130-66-76	HWY: FREEDOM RD/CTH N	COUNTY: OUTAGAMIE	LIGHTING PLANS - WIRING SHEET	SHEET 78	E

FILE NAME : C:\USERS\ALOBDELL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306301\DSGN\LIGHTING\SHEETS\SHEETSPLAN\1130-66-76_FREEDOM RD-CTH N INTERCHANGE\023601_LPP1130-66-76.DWG1/16/2024 11:32 AM
LAYOUT NAME - 01 (A)

PLOT BY : ANDREW LOBDELL PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

UTILITY NOTE

THE LOCATION 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 VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

N

SB IH 41 ON RAMP

CTH N (Freedom Road)

35 MPH Posted Speed Limit

REMOVE PULL BOX

REMOVE SIGNAL
REMOVE CONCRETE BASE

SALVAGE TO RELOCATE
REMOVE CONCRETE BASE

PB3 SB3 PB4 SB4 PB5 SB5 PB2 SB2 SBX PB6 SB6 PB9 SB1 PB1 PB8 SB8 PB7 SB7

20' 30' 25' 2" TYP 1" TYP 3" TYP

Overlap "A"

Asphalt Concrete

REPLACE PULL BOX

190' TO NEAR RIGHT SIGNAL

350' TO NEAR RIGHT SIGNAL

CB1

Camera CCTV-44-0111

Traffic Signal Communication

ITS Electric Lateral/FOC

3" (in parallel)

GATE

G-44-21

G-44-22

SB IH 41 OFF RAMP

LEGEND

- PULL BOX 12" X 24"
- PULL BOX 24" X 36"
- PULL BOX 24" X 42"
- SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE — XX'
- CONTROL CABINET BASE
- 2" CONDUIT (unless otherwise specified)
- SIGNAL HEAD NUMBER MOUNTING CONFIGURATION — X, XX, R, Y, G
- MICROWAVE DETECTOR
- LOOP DETECTOR IN 1" PVC CONDUIT — XX', XT, XX
- LUMINAIRE

REVISION

Rev. No.	Reconstruct Interchange			
	APPROVAL RECOMMENDED		APPROVED	
3	REGION		CENTRAL OFFICE	
	Date	By	Date	By
	8-23-23	KLB	9-8-2023	JRI
5-9-08	Upgrade Signal Control			
5-17-02	Modifications to Interchange			

TRAFFIC CONTROL SIGNAL

IH 41 SB & CTH N
VILLAGE OF LITTLE CHUTE
OUTAGAMIE COUNTY

SIGNAL NO. 44-0579 CONTROLLER TYPE: Cobalt

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 6-29-1995 — David L. Harp, REGION TRAFFIC ENGINEER

APPROVED
Date 7-13-1995 — R. I. Moe, STATE TRAFFIC ENGINEER

REGION CONTACT: KLB
DESIGNED BY: KLB
REVISED BY: KLB

PAGE 1 OF 2

PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	TRAFFIC CONTRO SIGNAL - S44-0579 - PHASE 1	SHEET 79	E

FILE NAME : F:\D3_TRAFFI\S44-0579 (41 SB & N)\S44-0579 PHASE 1.DWG
LAYOUT NAME - S44-0579-tcs Phase1

PLOT DATE : 1/11/2024 6:28 AM PLOT BY : MARTENS, JOHN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

CONFIGURATION WITH HEAD NUMBERS		
3-V R Y G	2, 3, 4 7, 8, 9 10, 11, 12	4-VLFY R Y FY G	5, 6	1-P	13, 14 15, 16

N

NOTE: SIGNAL HEAD # 5 REQUIRES TUNNEL VISORS

UTILITY NOTE

THE LOCATION 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 VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

NOTE

WISCONSIN DOT NE REGION ELECTRICAL UNIT SHALL APPROVE FINAL LOCATIONS FOR ALL LOOP DETECTORS, PED PUSH BUTTONS, AND CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION, AND MAKE WIRING TERMINATIONS IN THE SIGNAL CABINET.

SB IH 41 ON RAMP

SB IH 41 OFF RAMP

CTH N (Freedom Road)

35 MPH Posted Speed Limit

Overlap "A"

MICROWAVE ZONE (approximate location)

Camera CCTV-44-0111

Traffic Signal Communication

ITS Electric Lateral/FOC

GATE

SCREW IN BASE

270' TO NEAR RIGHT SIGNAL

350' TO NEAR RIGHT SIGNAL

Asphalt

3" (in parapet)

SB2 SB1 SB3 SB4 SB5 SB6 SB7

PB1 PB2 PB3 PB4 PB5 PB6 PB7 PB8 PB9 PB10

TB1

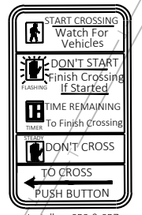
CB1

2-3" TYP

2T 3T 4T 6T

LEGEND

- PULL BOX 12" X 24"
- PULL BOX 24" X 42"
- SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- CONTROL CABINET BASE
- 2" CONDUIT (unless otherwise specified)
- SIGNAL HEAD NUMBER MOUNTING CONFIGURATION
- MICROWAVE DETECTOR
- LOOP DETECTOR (Microwave)
- LOOP DETECTOR IN 1" PVC CONDUIT
- LUMINAIRE



Install on SB3 & SB7

Install on SB4 & SB6

REVISION				
Rev. No.	Reconstruct Interchange			
	APPROVAL RECOMMENDED		APPROVED	
3	REGION		CENTRAL OFFICE	
	Date	By	Date	By
	8-23-23	KLB	9-8-2023	JRI
5-9-08	Upgrade Signal Control			
5-17-02	Modifications to Interchange			

TRAFFIC CONTROL SIGNAL

IH 41 SB & CTH N
VILLAGE OF LITTLE CHUTE
OUTAGAMIE COUNTY

SIGNAL NO. 44-0579 CONTROLLER TYPE: Cobalt

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 6-29-1995 David L. Harp
REGION TRAFFIC ENGINEER

APPROVED
Date 7-13-1995 R. I. Moe
STATE TRAFFIC ENGINEER

REGION CONTACT: KLB
DESIGNED BY: KLB
REVISED BY: KLB

PAGE 1 OF 2

PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	TRAFFIS CONTROL SIGNAL - S44-0579 - PHASE 3	SHEET 80 E

FILE NAME : F:\D3_TRAFFI\S44-0579 (41 SB & N)\S44-0579 PHASE 3.DWG
LAYOUT NAME - S44-0579-tcs Phase 3

PLOT DATE : 1/11/2024 6:40 AM PLOT BY : MARTENS, JOHN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

CONFIGURATION WITH HEAD NUMBERS		
3-V	4-VLFY	1-P
R, Y, G — 1, 2, 3, 4 / 7, 8, 9 / 10, 11, 12	5, 6	13, 14 / 15, 16

MONOTUBE STRUCTURE NUMBERS	
SB2	S-44-0579-001
SB4	S-44-0579-002
SB5	S-44-0579-003

UTILITY NOTE

THE LOCATION 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 VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

NOTE

WISCONSIN DOT NE REGION ELECTRICAL UNIT SHALL APPROVE FINAL LOCATIONS FOR ALL LOOP DETECTORS, PED PUSH BUTTONS, AND CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION, AND MAKE WIRING TERMINATIONS IN THE SIGNAL CABINET.

NOTE: SIGNAL HEAD # 5 REQUIRES TUNNEL VISORS

N

SB IH 41 ON RAMP

SB IH 41 OFF RAMP

REMOVE SIGNAL

SB2

SB4

SB5

REMOVE SIGNAL & SCREW IN BASE

CTH N (Freedom Road)

35 MPH Posted Speed Limit

Overlap "A"

Concrete

MICROWAVE ZONE (approximate location)

3" (in parapet)

Camera CCTV-44-0111

Traffic Signal Communication

ITS Electric Lateral/FOC

270' TO NEAR RIGHT SIGNAL

GATE

G-44-21

G-44-23

40'

30'

30'

LEGEND

- PULL BOX 12" X 24"
- PULL BOX 24" X 42"
- SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL POLE, MONOTUBE ARM BASE-TYPE 10 Special, TYPE 10 — XX'
- CONTROL CABINET BASE
- 2" CONDUIT (unless otherwise specified)
- SIGNAL HEAD NUMBER MOUNTING CONFIGURATION — X, XX, R, Y, G
- MICROWAVE DETECTOR
- LOOP DETECTOR (Microwave) — XX MICROWAVE
- LOOP DETECTOR IN 1" PVC CONDUIT — XX', XT, XX
- LUMINAIRE

Install on SB3 & SB7

Install on SB4 & SB6

REVISION				
Rev. No.	Reconstruct Interchange			
	APPROVAL RECOMMENDED		APPROVED	
3	REGION		CENTRAL OFFICE	
	Date	By	Date	By
	8-23-23	KLB	9-8-2023	JRI
5-9-08	Upgrade Signal Control			
5-17-02	Modifications to Interchange			

TRAFFIC CONTROL SIGNAL

IH 41 SB & CTH N
VILLAGE OF LITTLE CHUTE
OUTAGAMIE COUNTY

SIGNAL NO. 44-0579 CONTROLLER TYPE: Cobalt

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 6-29-1995 — David L. Harp, REGION TRAFFIC ENGINEER

APPROVED
Date 7-13-1995 — R. I. Moe, STATE TRAFFIC ENGINEER

REGION CONTACT: KLB
DESIGNED BY: KLB
REVISED BY: KLB

PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	TRAFFIC CONTROL SIGNAL - S44-0579 - PHASE 4	SHEET 81 E

FILE NAME : F:\D3_TRAFFI\S44-0579 (41 SB & N)\S44-0579 PHASE 4.DWG
LAYOUT NAME - S44-0579-tcs Phase 4

PLOT DATE : 1/11/2024 6:49 AM PLOT BY : MARTENS, JOHN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

GENERAL NOTE

THE LOCATION 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 VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

N

CTH N (Freedom Road)

35 MPH Posted Speed Limit

IH 41 NB OFF RAMP

IH 41 NB ON RAMP

REMOVE SIGNAL
REMOVE CONCRETE BASE

REMOVE PULL BOX

SALVAGE TO RELOCATE
REMOVE CONCRETE BASE

1" TYP

350' TO NEAR
RIGHT SIGNAL

190' TO NEAR
RIGHT SIGNAL

Concrete Sidewalk

Concrete

Asphalt

Grass

SIGN

FO

OH

GUY

MH

GATE

G-44-20

G-44-22

LEGEND

- PULL BOX 12" X 24"
- PULL BOX 24" X 36"
- PULL BOX 24" X 42"
- SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- CONTROL CABINET BASE
- 2" CONDUIT (unless otherwise specified)
- SIGNAL HEAD NUMBER MOUNTING CONFIGURATION
- MICROWAVE DETECTOR
- LOOP DETECTOR IN 1" PVC CONDUIT
- LUMINAIRE

REVISION				
Rev. No.	Reconstruct Interchange			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
	Date	By	Date	By
1	8-23-23	KLB	9-8-2023	JRI

TRAFFIC CONTROL SIGNAL

IH 41 NB & CTH N
VILLAGE OF LITTLE CHUTE
OUTAGAMIE COUNTY

SIGNAL NO. 44-2019 CONTROLLER TYPE: COBALT

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 7-1-2019 Randy P. Asman
REGION TRAFFIC ENGINEER

APPROVED
Date 7-15-2019 Jeremy R. Iwen
STATE TRAFFIC ENGINEER

REGION CONTACT: KLB
DESIGNED BY: KLB
REVISED BY: KLB

PAGE 1 OF 2

PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	TRAFFIC CONTROL SIGNAL - S44-2019 - PHASE 1	SHEET 82	E

FILE NAME : F:\D3_TRAFFI\S44-2019 (41 NB & N)\S44-2019 PHASE 1.DWG
LAYOUT NAME - S44-2019-tcs Phase 1

PLOT DATE : 1/11/2024 7:17 AM PLOT BY : MARTENS, JOHN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

CONFIGURATION WITH HEAD NUMBERS		
3-V R 3, 4, 5 Y 6, 8, 9 G 10, 11, 12	4-VLFY 1, 2	1-P 13, 14 15, 16

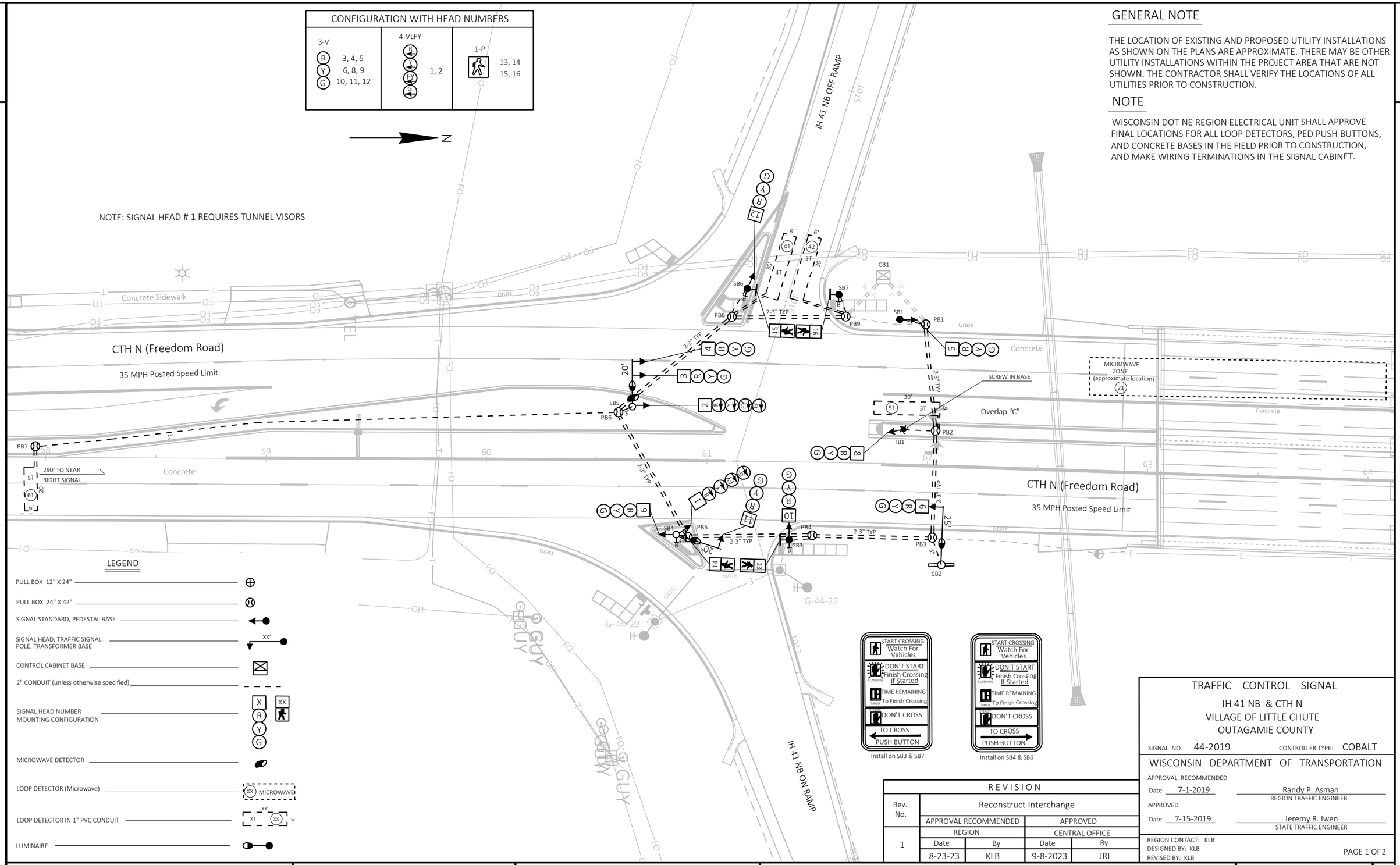
GENERAL NOTE

THE LOCATION 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 VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

NOTE

WISCONSIN DOT NE REGION ELECTRICAL UNIT SHALL APPROVE FINAL LOCATIONS FOR ALL LOOP DETECTORS, PED PUSH BUTTONS, AND CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION, AND MAKE WIRING TERMINATIONS IN THE SIGNAL CABINET.

NOTE: SIGNAL HEAD # 1 REQUIRES TUNNEL VISORS



LEGEND

- PULL BOX 12" X 24"
- PULL BOX 24" X 42"
- SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE — XX'
- CONTROL CABINET BASE
- 2" CONDUIT (unless otherwise specified)
- SIGNAL HEAD NUMBER MOUNTING CONFIGURATION — X, XX, R, Y, G
- MICROWAVE DETECTOR
- LOOP DETECTOR (Microwave) — XX MICROWAVE
- LOOP DETECTOR IN 1" PVC CONDUIT — XX', XT, XX
- LUMINAIRE

Install on SB3 & SB7

Install on SB4 & SB6

REVISION				
Rev. No.	Reconstruct Interchange			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
	Date	By	Date	By
1	8-23-23	KLB	9-8-2023	JRI

TRAFFIC CONTROL SIGNAL

IH 41 NB & CTH N
VILLAGE OF LITTLE CHUTE
OUTAGAMIE COUNTY

SIGNAL NO. 44-2019 CONTROLLER TYPE: COBALT

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 7-1-2019 Randy P. Asman, REGION TRAFFIC ENGINEER

APPROVED
Date 7-15-2019 Jeremy R. Iwen, STATE TRAFFIC ENGINEER

REGION CONTACT: KLB
DESIGNED BY: KLB
REVISED BY: KLB

PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	TRAFFIC CONTROL SIGNAL - S44-2019 - PHASE 3	SHEET 83	E

FILE NAME : F:\D3_TRAFFI\S44-2019 (41 NB & N)\S44-2019 PHASE 3.DWG
LAYOUT NAME - S44-2019-tcs Phase 3

PLOT DATE : 1/11/2024 7:21 AM PLOT BY : MARTENS, JOHN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

MONOTUBE STRUCTURE NUMBERS	
SB2	S-44-2019-001
SB4	S-44-2019-002
SB5	S-44-2019-003

CONFIGURATION WITH HEAD NUMBERS		
3-V R 3, 4, 5 Y 6, 7, 8, 9 G 10, 11, 12	4-VLFY 1, 2	1-P 13, 14 15, 16

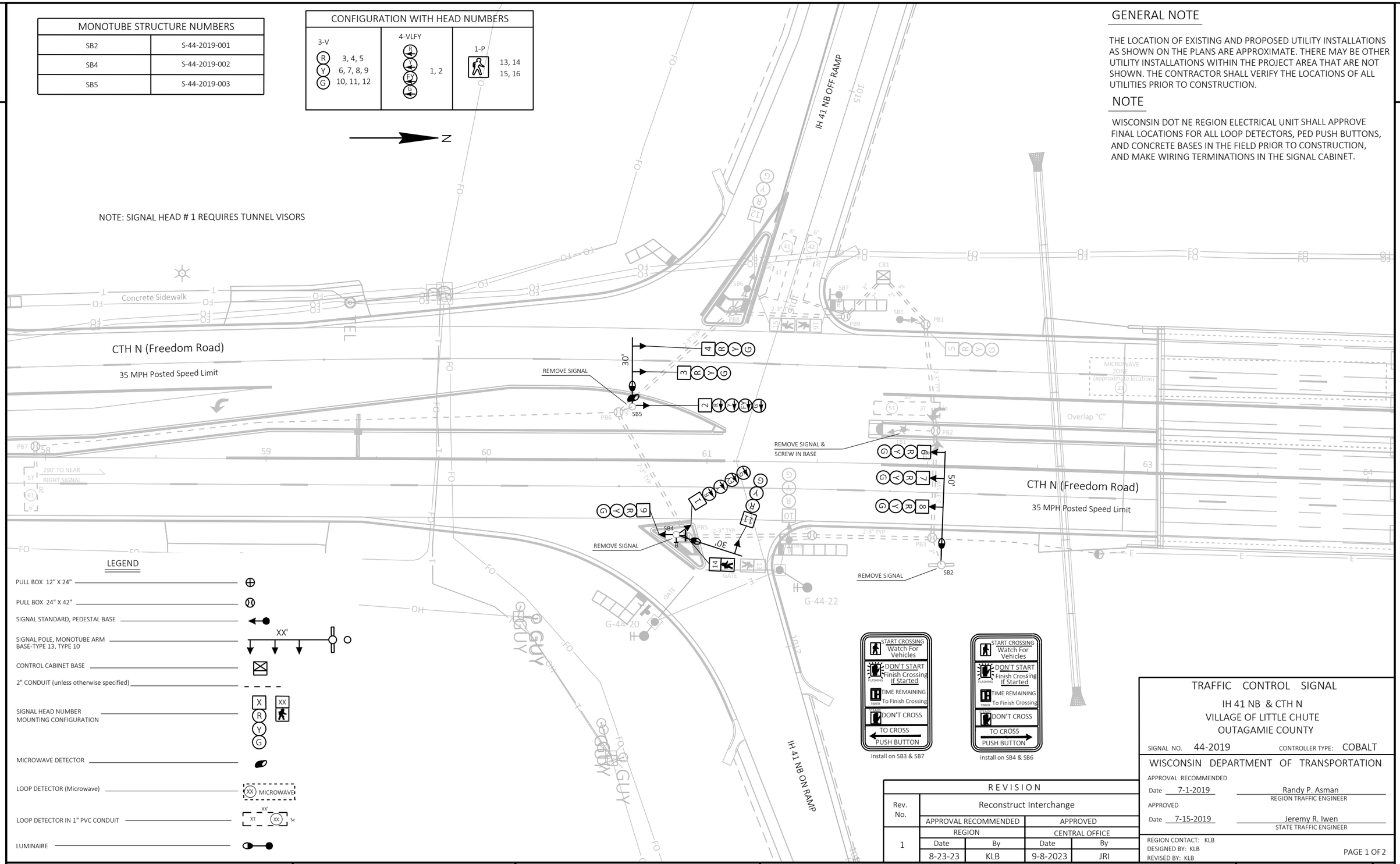
GENERAL NOTE

THE LOCATION 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 VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

NOTE

WISCONSIN DOT NE REGION ELECTRICAL UNIT SHALL APPROVE FINAL LOCATIONS FOR ALL LOOP DETECTORS, PED PUSH BUTTONS, AND CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION, AND MAKE WIRING TERMINATIONS IN THE SIGNAL CABINET.

NOTE: SIGNAL HEAD # 1 REQUIRES TUNNEL VISORS



LEGEND

- PULL BOX 12" X 24"
- PULL BOX 24" X 42"
- SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL POLE, MONOTUBE ARM BASE-TYPE 13, TYPE 10 — XX'
- CONTROL CABINET BASE
- 2" CONDUIT (unless otherwise specified)
- SIGNAL HEAD NUMBER MOUNTING CONFIGURATION — X, XX, R, Y, G
- MICROWAVE DETECTOR
- LOOP DETECTOR (Microwave) — XX MICROWAVE
- LOOP DETECTOR IN 1" PVC CONDUIT — XX', XT, XX
- LUMINAIRE

Install on SB3 & SB7

Install on SB4 & SB6

REVISION				
Rev. No.	Reconstruct Interchange			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
	Date	By	Date	By
1	8-23-23	KLB	9-8-2023	JRI

TRAFFIC CONTROL SIGNAL

IH 41 NB & CTH N
VILLAGE OF LITTLE CHUTE
OUTAGAMIE COUNTY

SIGNAL NO. 44-2019 CONTROLLER TYPE: COBALT

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 7-1-2019 Randy P. Asman
REGION TRAFFIC ENGINEER

APPROVED
Date 7-15-2019 Jeremy R. Iwen
STATE TRAFFIC ENGINEER

REGION CONTACT: KLB
DESIGNED BY: KLB
REVISED BY: KLB

PAGE 1 OF 2

PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	TRAFFIC CONTROL SIGNAL - S44-2019 - PHASE 4	SHEET 84	E

FILE NAME : F:\D3_TRAFFI\S44-2019 (41 NB & N)\S44-2019 PHASE 4.DWG
LAYOUT NAME - S44-2019-tcs Phase 4

PLOT DATE : 1/11/2024 7:25 AM PLOT BY : MARTENS, JOHN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

CY	MARKING CURB EPOXY, YELLOW	W4	MARKING LINE EPOXY 4-INCH, WHITE
GW6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE	W6	MARKING LINE EPOXY 6-INCH, WHITE
GY6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW	W8	MARKING LINE EPOXY 8-INCH, WHITE
GW10	MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE	W6S	MARKING LINE EPOXY 6-INCH, WHITE, 12.5' LINE, 37.5' SKIP
INY	MARKING ISLAND NOSE EPOXY, YELLOW	W6S3	MARKING LINE EPOXY 6-INCH, WHITE, 3' LINE, 9' SKIP
MAE	MARKING ARROW EPOXY	W10	MARKING LINE EPOXY 10-INCH, WHITE
MCWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH	Y4	MARKING LINE EPOXY 4-INCH, YELLOW
MSE	MARKING STOP LINE EPOXY 12-INCH	Y6	MARKING LINE EPOXY 6-INCH, YELLOW
MWE	MARKING WORD EPOXY		

N

BEGIN PROJECT
STA 56'N'+10.55

PATRIOT DR

ONLY

+03.23
-143.44' LT

+91.23
-143.45' LT

+07.24
-143.56' LT

+03.20
-75.97' LT

+07.30
-75.83' LT

+52.51
-27.50' LT

+01.80
-32.22' LT

+81.88
0.00' RT

+07.65
0.00' RT

+07.97
26.50' RT

14.5'

12'

CTH N

MOASIS DR

IH 41 RAMP NA

MATCH LINE 1015'NB'+50

MATCH LINE 1017'NB+00

MATCH LINE 1017'NA+00

MATCH LINE 1017'NA'+50

MATCH LINE 61+75

56'N'+00 57'N'+00 58'N'+00 59'N'+00 60'N'+00 61'N'+00

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVEMENT MARKING	SHEET 85	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\024501-PM-N.DWG
LAYOUT NAME - 024501-pm

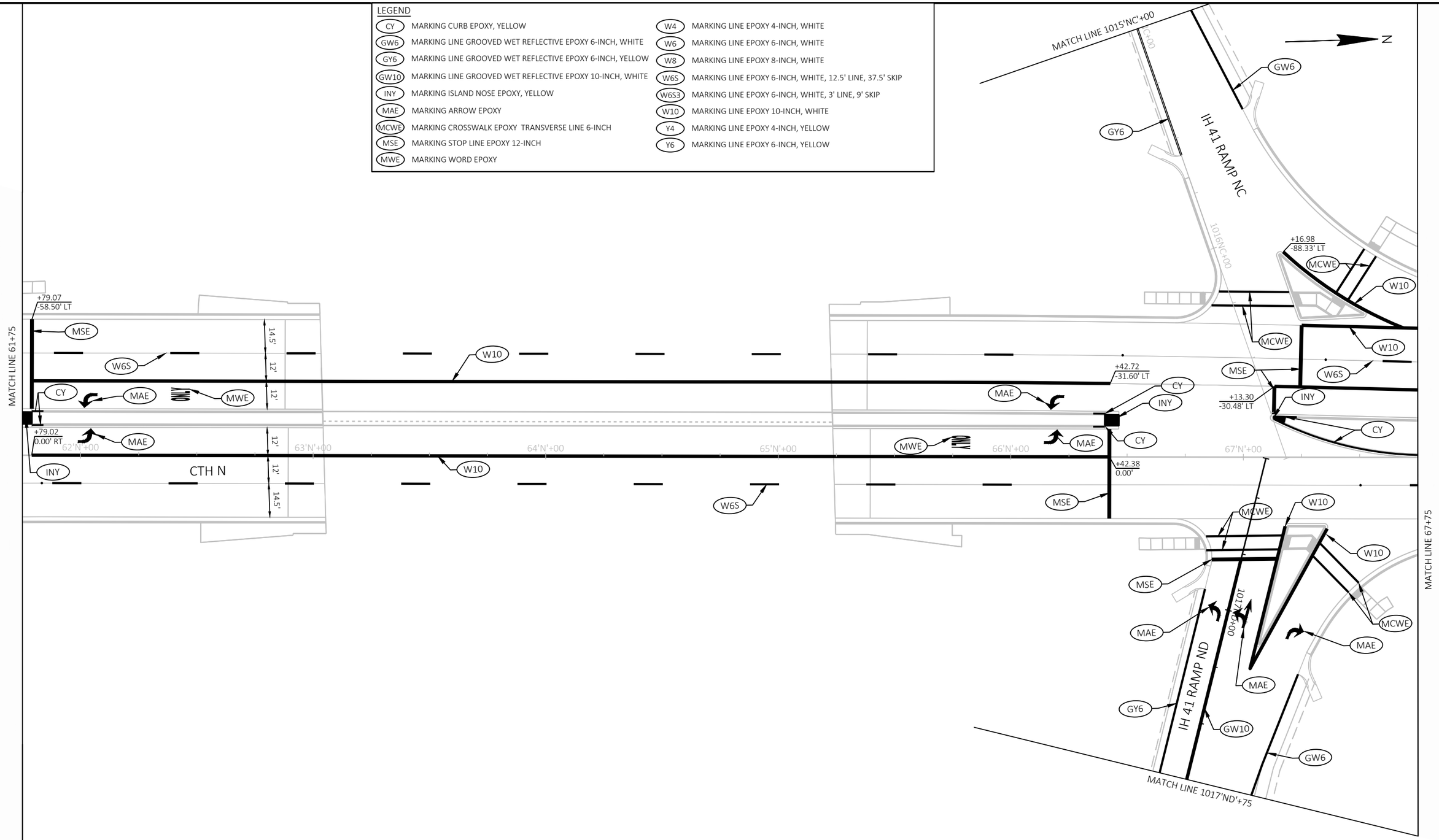
PLOT DATE : 1/31/2024 9:33 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

CY	MARKING CURB EPOXY, YELLOW	W4	MARKING LINE EPOXY 4-INCH, WHITE
GW6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE	W6	MARKING LINE EPOXY 6-INCH, WHITE
GY6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW	W8	MARKING LINE EPOXY 8-INCH, WHITE
GW10	MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE	W6S	MARKING LINE EPOXY 6-INCH, WHITE, 12.5' LINE, 37.5' SKIP
INY	MARKING ISLAND NOSE EPOXY, YELLOW	W6S3	MARKING LINE EPOXY 6-INCH, WHITE, 3' LINE, 9' SKIP
MAE	MARKING ARROW EPOXY	W10	MARKING LINE EPOXY 10-INCH, WHITE
MCWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH	Y4	MARKING LINE EPOXY 4-INCH, YELLOW
MSE	MARKING STOP LINE EPOXY 12-INCH	Y6	MARKING LINE EPOXY 6-INCH, YELLOW
MWE	MARKING WORD EPOXY		



2

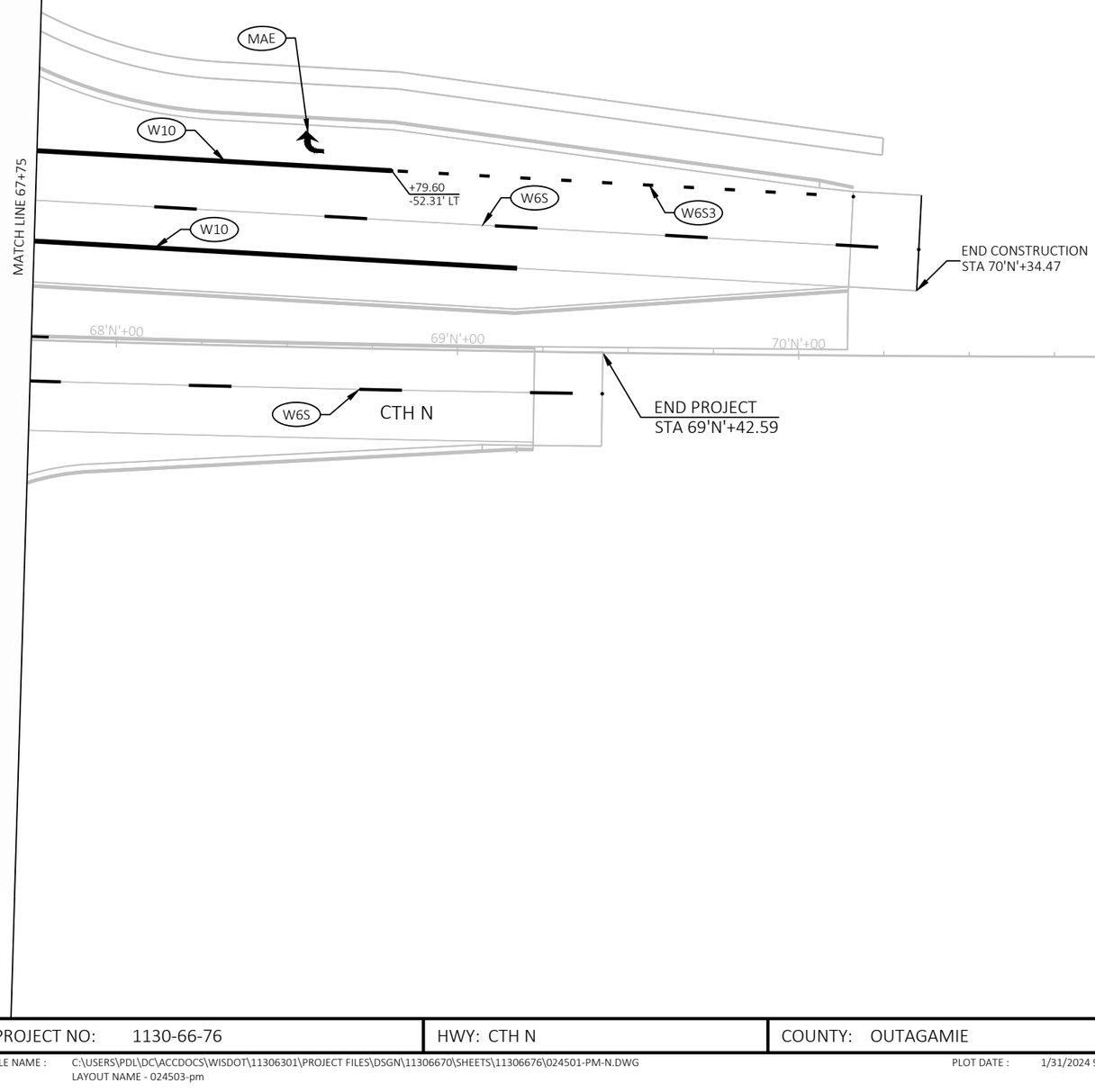
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVEMENT MARKING	SHEET 86	E

2

LEGEND

CY	MARKING CURB EPOXY, YELLOW
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
INY	MARKING ISLAND NOSE EPOXY, YELLOW
MAE	MARKING ARROW EPOXY
MCWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
MSE	MARKING STOP LINE EPOXY 12-INCH
MWE	MARKING WORD EPOXY
W4	MARKING LINE EPOXY 4-INCH, WHITE
W6	MARKING LINE EPOXY 6-INCH, WHITE
W8	MARKING LINE EPOXY 8-INCH, WHITE
W6S	MARKING LINE EPOXY 6-INCH, WHITE, 12.5' LINE, 37.5' SKIP
W6S3	MARKING LINE EPOXY 6-INCH, WHITE, 3' LINE, 9' SKIP
W10	MARKING LINE EPOXY 10-INCH, WHITE
Y4	MARKING LINE EPOXY 4-INCH, YELLOW
Y6	MARKING LINE EPOXY 6-INCH, YELLOW

N



2

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVEMENT MARKING	SHEET 87	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\024501-PM-N.DWG
LAYOUT NAME - 024503-pm

PLOT DATE : 1/31/2024 9:34 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

CY	MARKING CURB EPOXY, YELLOW	W4	MARKING LINE EPOXY 4-INCH, WHITE
GW6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE	W6	MARKING LINE EPOXY 6-INCH, WHITE
GY6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW	W8	MARKING LINE EPOXY 8-INCH, WHITE
GW10	MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE	W6S	MARKING LINE EPOXY 6-INCH, WHITE, 12.5' LINE, 37.5' SKIP
INY	MARKING ISLAND NOSE EPOXY, YELLOW	W6S3	MARKING LINE EPOXY 6-INCH, WHITE, 3' LINE, 9' SKIP
MAE	MARKING ARROW EPOXY	W10	MARKING LINE EPOXY 10-INCH, WHITE
MCWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH	Y4	MARKING LINE EPOXY 4-INCH, YELLOW
MSE	MARKING STOP LINE EPOXY 12-INCH	Y6	MARKING LINE EPOXY 6-INCH, YELLOW
MWE	MARKING WORD EPOXY		

N

2

MATCH LINE 1017'NA'+50

GY6 Y6

1018NA+00 1019NA+00 1020NA+00 1021NA+00 1022NA+00 1023

IH 41 RAMP NA

GW6 +86 W6

MATCH LINE 1023'NA'+00

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVEMENT MARKING	SHEET 88	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\024501-PM-N.DWG
LAYOUT NAME - 024504-pm

PLOT DATE : 1/31/2024 9:34 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

CY	MARKING CURB EPOXY, YELLOW	W4	MARKING LINE EPOXY 4-INCH, WHITE
GW6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE	W6	MARKING LINE EPOXY 6-INCH, WHITE
GY6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW	W8	MARKING LINE EPOXY 8-INCH, WHITE
GW10	MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE	W6S	MARKING LINE EPOXY 6-INCH, WHITE, 12.5' LINE, 37.5' SKIP
INY	MARKING ISLAND NOSE EPOXY, YELLOW	W6S3	MARKING LINE EPOXY 6-INCH, WHITE, 3' LINE, 9' SKIP
MAE	MARKING ARROW EPOXY	W10	MARKING LINE EPOXY 10-INCH, WHITE
MCWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH	Y4	MARKING LINE EPOXY 4-INCH, YELLOW
MSE	MARKING STOP LINE EPOXY 12-INCH	Y6	MARKING LINE EPOXY 6-INCH, YELLOW
MWE	MARKING WORD EPOXY		

N

Y6

MATCH LINE 1023'NA'+00

1024NA+00

1025NA+00

1026NA+00

1027NA+00

IH 41 RAMP NA

END CONSTRUCTION
STA 1024'NA'+75

W6

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVEMENT MARKING	SHEET 89	E

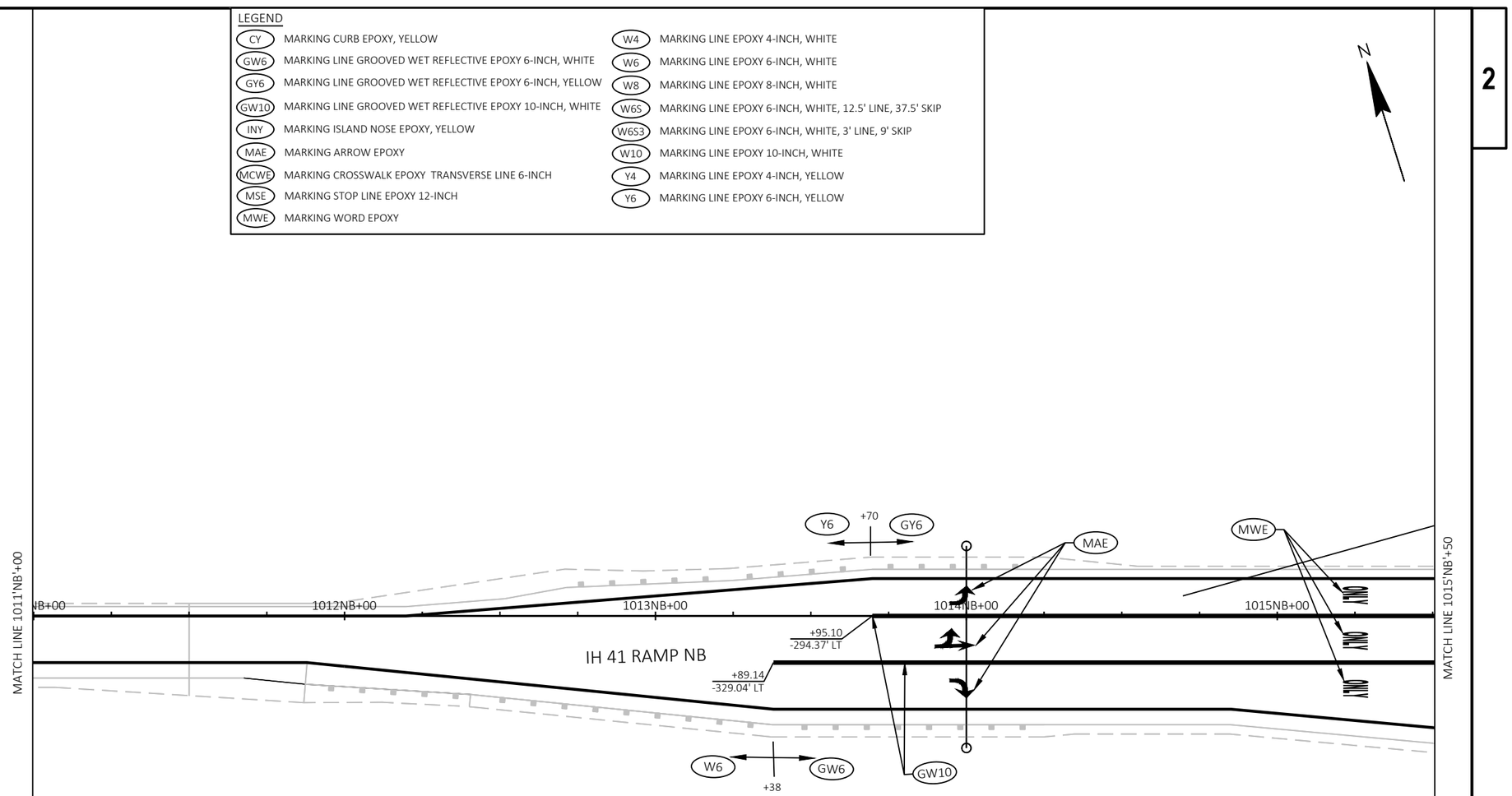
FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\024501-PM-N.DWG
LAYOUT NAME - 024505-pm

PLOT DATE : 1/31/2024 9:34 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

CY	MARKING CURB EPOXY, YELLOW	W4	MARKING LINE EPOXY 4-INCH, WHITE
GW6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE	W6	MARKING LINE EPOXY 6-INCH, WHITE
GY6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW	W8	MARKING LINE EPOXY 8-INCH, WHITE
GW10	MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE	W6S	MARKING LINE EPOXY 6-INCH, WHITE, 12.5' LINE, 37.5' SKIP
INY	MARKING ISLAND NOSE EPOXY, YELLOW	W6S3	MARKING LINE EPOXY 6-INCH, WHITE, 3' LINE, 9' SKIP
MAE	MARKING ARROW EPOXY	W10	MARKING LINE EPOXY 10-INCH, WHITE
MCWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH	Y4	MARKING LINE EPOXY 4-INCH, YELLOW
MSE	MARKING STOP LINE EPOXY 12-INCH	Y6	MARKING LINE EPOXY 6-INCH, YELLOW
MWE	MARKING WORD EPOXY		



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVEMENT MARKING	SHEET 90	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\024501-PM-N.DWG
LAYOUT NAME - 024506-pm
PLOT DATE : 1/31/2024 9:34 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : Custom

2

LEGEND

CY	MARKING CURB EPOXY, YELLOW	W4	MARKING LINE EPOXY 4-INCH, WHITE
GW6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE	W6	MARKING LINE EPOXY 6-INCH, WHITE
GY6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW	W8	MARKING LINE EPOXY 8-INCH, WHITE
GW10	MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE	W6S	MARKING LINE EPOXY 6-INCH, WHITE, 12.5' LINE, 37.5' SKIP
INY	MARKING ISLAND NOSE EPOXY, YELLOW	W6S3	MARKING LINE EPOXY 6-INCH, WHITE, 3' LINE, 9' SKIP
MAE	MARKING ARROW EPOXY	W10	MARKING LINE EPOXY 10-INCH, WHITE
MCWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH	Y4	MARKING LINE EPOXY 4-INCH, YELLOW
MSE	MARKING STOP LINE EPOXY 12-INCH	Y6	MARKING LINE EPOXY 6-INCH, YELLOW
MWE	MARKING WORD EPOXY		

N

2

Y6

+55.74
0.00

1010NB+00

1011NB+00

MATCH LINE 1011'NB'+00

1009NB+00

1008NB+00

1007NB+00

BEGIN CONSTRUCTION
STA 1009'NB'+00

W6

+55.74
15.00' RT

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVEMENT MARKING	SHEET 91	E

2

LEGEND

CY	MARKING CURB EPOXY, YELLOW	W4	MARKING LINE EPOXY 4-INCH, WHITE
GW6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE	W6	MARKING LINE EPOXY 6-INCH, WHITE
GY6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW	W8	MARKING LINE EPOXY 8-INCH, WHITE
GW10	MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE	W6S	MARKING LINE EPOXY 6-INCH, WHITE, 12.5' LINE, 37.5' SKIP
INY	MARKING ISLAND NOSE EPOXY, YELLOW	W6S3	MARKING LINE EPOXY 6-INCH, WHITE, 3' LINE, 9' SKIP
MAE	MARKING ARROW EPOXY	W10	MARKING LINE EPOXY 10-INCH, WHITE
MCWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH	Y4	MARKING LINE EPOXY 4-INCH, YELLOW
MSE	MARKING STOP LINE EPOXY 12-INCH	Y6	MARKING LINE EPOXY 6-INCH, YELLOW
MWE	MARKING WORD EPOXY		

N

W6 +36 GW6

09NC+00 1010NC+00 1011NC+00 IH 41 RAMP NC 1012NC+00 1013NC+00 1014NC+00 1015

MATCH LINE 1015'NC'+00

BEGIN CONSTRUCTION
STA 1009'NC'+00

Y6 GY6

2

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVEMENT MARKING	SHEET 92	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\024501-PM-N.DWG
LAYOUT NAME - 024508-pm

PLOT DATE : 1/31/2024 9:34 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

CY	MARKING CURB EPOXY, YELLOW	W4	MARKING LINE EPOXY 4-INCH, WHITE
GW6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE	W6	MARKING LINE EPOXY 6-INCH, WHITE
GY6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW	W8	MARKING LINE EPOXY 8-INCH, WHITE
GW10	MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE	W6S	MARKING LINE EPOXY 6-INCH, WHITE, 12.5' LINE, 37.5' SKIP
INY	MARKING ISLAND NOSE EPOXY, YELLOW	W6S3	MARKING LINE EPOXY 6-INCH, WHITE, 3' LINE, 9' SKIP
MAE	MARKING ARROW EPOXY	W10	MARKING LINE EPOXY 10-INCH, WHITE
MCWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH	Y4	MARKING LINE EPOXY 4-INCH, YELLOW
MSE	MARKING STOP LINE EPOXY 12-INCH	Y6	MARKING LINE EPOXY 6-INCH, YELLOW
MWE	MARKING WORD EPOXY		

N

2

MATCH LINE 1017'ND'+75

GW6 +91 W6

IH 41 RAMP ND

1018ND+00 +60.12 202.85' RT 1019ND+00 1020ND+00 1021ND+00 1022N

GY6 Y6

MAE GW10

MATCH LINE 1022'ND'+00

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVEMENT MARKING	SHEET 93	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\024501-PM-N.DWG
LAYOUT NAME - 024509-pm

PLOT DATE : 1/31/2024 9:35 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

CY	MARKING CURB EPOXY, YELLOW	W4	MARKING LINE EPOXY 4-INCH, WHITE
GW6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE	W6	MARKING LINE EPOXY 6-INCH, WHITE
GY6	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, YELLOW	W8	MARKING LINE EPOXY 8-INCH, WHITE
GW10	MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE	W6S	MARKING LINE EPOXY 6-INCH, WHITE, 12.5' LINE, 37.5' SKIP
INY	MARKING ISLAND NOSE EPOXY, YELLOW	W6S3	MARKING LINE EPOXY 6-INCH, WHITE, 3' LINE, 9' SKIP
MAE	MARKING ARROW EPOXY	W10	MARKING LINE EPOXY 10-INCH, WHITE
MCWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH	Y4	MARKING LINE EPOXY 4-INCH, YELLOW
MSE	MARKING STOP LINE EPOXY 12-INCH	Y6	MARKING LINE EPOXY 6-INCH, YELLOW
MWE	MARKING WORD EPOXY		

N

2

W6

+34.10
797.76' RT

END CONSTRUCTION
STA 1024'ND'+50

1027ND+00

1026ND+00

1025ND+00

1024ND+00

1023ND+00

ND+00

MATCH LINE 1022'ND'+00

Y6

+19.30
795.30' RT

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PAVEMENT MARKING	SHEET 94	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\024501-PM-N.DWG
LAYOUT NAME - 024510-pm

PLOT DATE : 1/31/2024 9:35 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

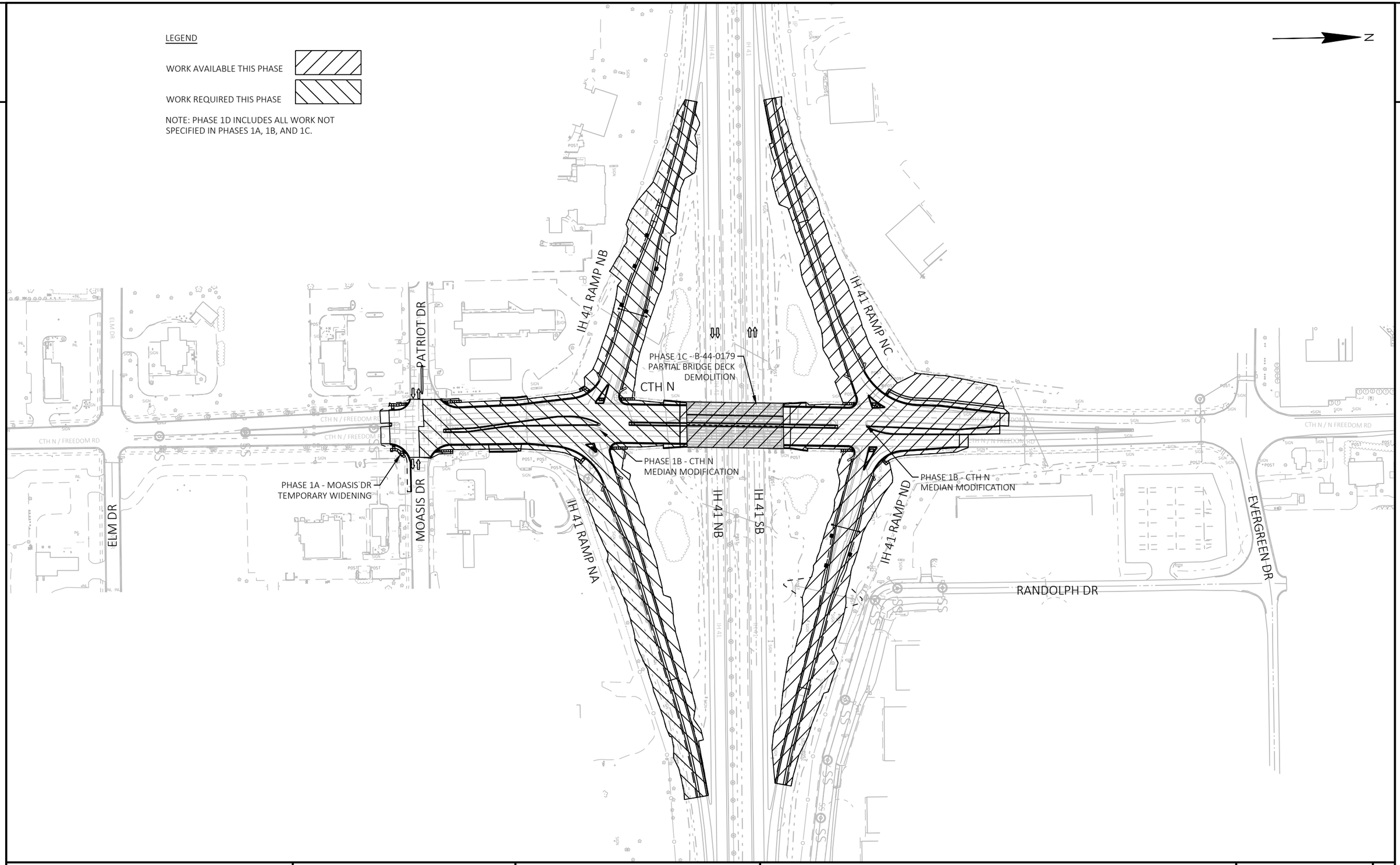
LEGEND

WORK AVAILABLE THIS PHASE

WORK REQUIRED THIS PHASE

NOTE: PHASE 1D INCLUDES ALL WORK NOT SPECIFIED IN PHASES 1A, 1B, AND 1C.

N



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CTH N CONSTRUCTION OVERVIEW - PHASE 1	SHEET 95	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\025101-TC-N - CONSTRUCTION OVERVIEW.DWG
LAYOUT NAME - 025101

PLOT DATE : 2/20/2024 12:01 PM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

2

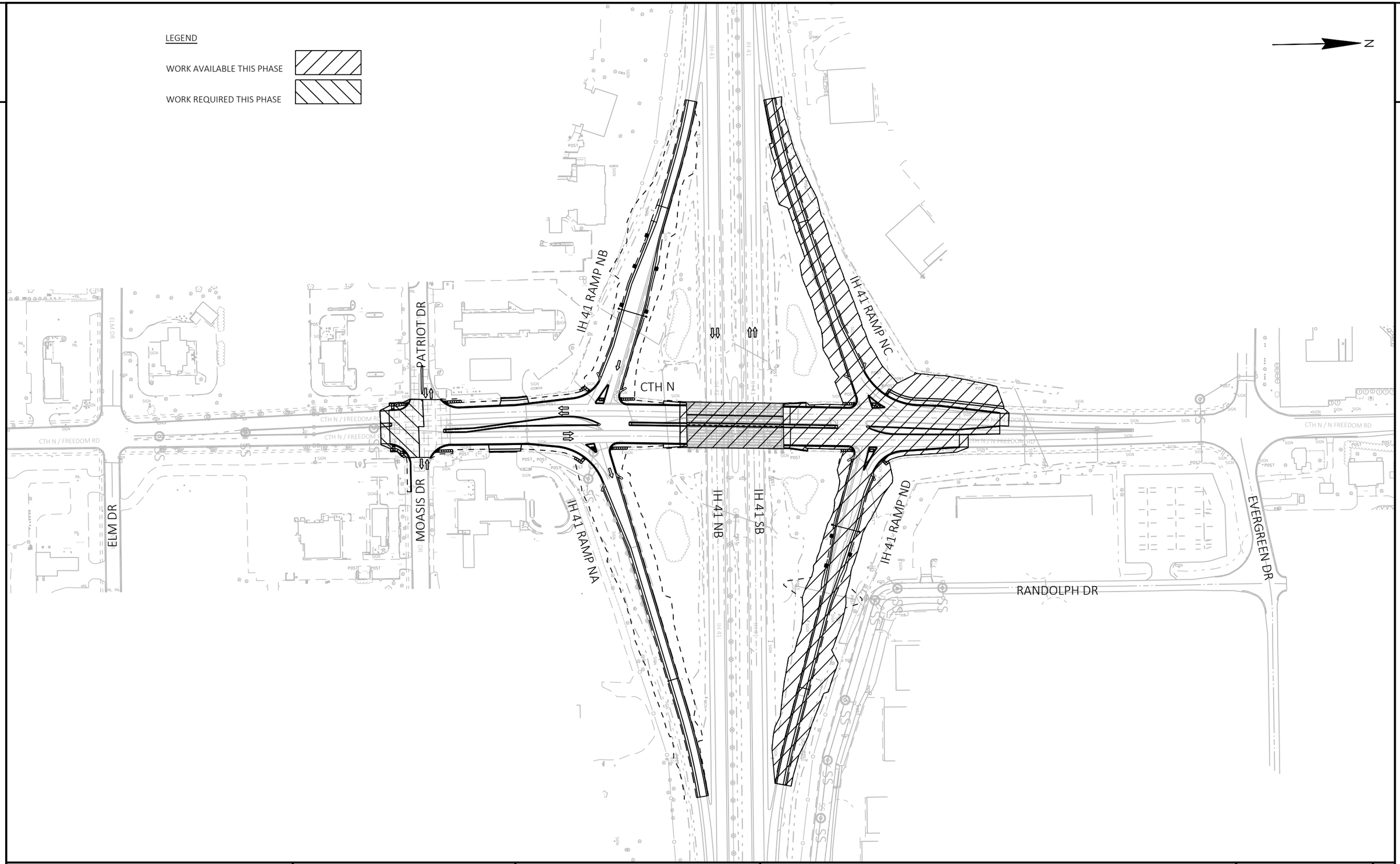
LEGEND

WORK AVAILABLE THIS PHASE

WORK REQUIRED THIS PHASE

N

2



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CTH N CONSTRUCTION OVERVIEW - PHASE 2	SHEET 96	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\025101-TC-N - CONSTRUCTION OVERVIEW.DWG
LAYOUT NAME - 025102

PLOT DATE : 2/20/2024 12:02 PM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

2

LEGEND

WORK REQUIRED THIS PHASE

N

2

CTH N

PATRIOT DR

MOASIS DR

ELM DR

IH 41 RAMP NB

IH 41 RAMP NC

IH 41 RAMP NA

IH 41 RAMP ND

IH 41 NB

IH 41 SB

EVERGREEN DR

RANDOLPH DR

CTH N / FREEDOM RD

CTH N / N FREEDOM RD

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CTH N CONSTRUCTION OVERVIEW - PHASE 3	SHEET 97	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\025101-TC-N - CONSTRUCTION OVERVIEW.DWG
LAYOUT NAME - 025103

PLOT DATE : 2/20/2024 12:04 PM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

2

2

VANDENBROEK RD

N

NORTH AVE

MOVE BARRICADES TO NORTH OF IH 41 RAMPS NA AND NB AND MAINTAIN LOCAL ACCESS TO PATRIOT DRIVE AND MOASIS DRIVE DURING PHASE 3

W ELM DR

PATRIOT DR

IH 41 RAMP NB

IH 41 RAMP NC

ROAD CLOSED TO THRU TRAFFIC 1/2 MILES AHEAD
R11-3

ROAD CLOSED
R11-2

ROAD WORK AHEAD
W20-1A

ROAD CLOSED
R11-2

ROAD CLOSED 500 FT
W20-3D

ROAD CLOSED AHEAD
W20-3A

ROAD CLOSED TO THRU TRAFFIC 1 MILES AHEAD
R11-3

COUNTY N

CTH N

CTH N

COUNTY N

W FLORIDA DR

E FLORIDA DR

ROAD CLOSED AHEAD
W20-3A

ROAD CLOSED 500 FT
W20-3D

ROAD CLOSED
R11-2

ROAD CLOSED
R11-2

IH 41 RAMP NA

IH 41 RAMP ND

1130-66-76
PROJECT LIMITS

E EVERGREEN DR

E ELM DR

MOASIS DR

ROAD WORK AHEAD
W20-1A

COUNTY OO

BUCHANAN ST

BUCHANAN ST

COUNTY JJ

INTERSTATE 41

LEGEND

TYPE III BARRICADE

TYPE III BARRICADE WITH SIGN

TRAFFIC CONTROL SIGNS

TRAFFIC CONTROL GENERAL NOTES

- SEE STANDARD DETAIL DRAWINGS FOR SIGN SIZES
- "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- ALL TYPE III BARRICADES SHALL BE EQUIPPED WITH TWO TYPE "A" (LOW INTENSITY FLASHING LIGHTS) PER SDD'S.
- SEE THE FOLLOWING STANDARD DETAILS:
  - BARRICADES AND SIGNS FOR MAINLINE CLOSURES
  - BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
  - TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
  - TRAFFIC CONTROL, TWO LANE FULL FREEWAY CLOSURE
  - TRAFFIC CONTROL, EXIT RAMP CLOSURE
  - TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H.
  - TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	TRAFFIC CONTROL - CTH N	SHEET 98	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\025100-TC-N.DWG
LAYOUT NAME - 027001

PLOT DATE : 2/22/2024 8:44 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:750 FT

2

N

SIDEWALK CLOSED AHEAD R9-9A
DETOUR M4-9BR

SIDEWALK CLOSED R9-9

TEMPORARY PEDESTRIAN BARRICADE

PATRIOT DR

IH 41 RAMP NB

SIDEWALK CLOSED R9-9

TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED AHEAD R9-9A
DETOUR M4-9BL

CTH N

ELM DR

DETOUR M4-9BL

MOASIS DR

IH 41 RAMP NA

IH 41 NB

IH 41 SB

IH 41 RAMP ND

DETOUR M4-9BR

EVERGREEN DR

RANDOLPH DR

LEGEND

TC SIGN ON TEMPORARY SUPPORT

TC SIGN ON PERMANENT SUPPORT

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PEDESTRIAN DETOUR - WEST SIDEWALK CLOSURE	SHEET 99	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\025101-TC-N.DWG
LAYOUT NAME - 025101

PLOT DATE : 1/19/2024 2:22 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

2

N

PATRIOT DR

IH 41 RAMP NB

IH 41 RAMP NC

DETOUR M4-9BR

TEMPORARY PEDESTRIAN BARRICADE

CTH N

SIDEWALK CLOSED R9-9

IH 41 RAMP NA

IH 41 NB

IH 41 SB

IH 41 RAMP ND

DETOUR M4-9BL

TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED R9-9

SIDEWALK CLOSED AHEAD R9-9A

DETOUR M4-9BL

ELM DR

MOASIS DR

SIDEWALK CLOSED AHEAD R9-9A

DETOUR M4-9BR

EVERGREEN DR

RANDOLPH DR

LEGEND

TC SIGN ON TEMPORARY SUPPORT

TC SIGN ON PERMANENT SUPPORT

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PEDESTRIAN DETOUR - EAST SIDEWALK CLOSURE	SHEET 100	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\025101-TC-N.DWG
LAYOUT NAME - 025102

PLOT DATE : 1/19/2024 2:25 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

SECTION A-A

5" ASPHALTIC SURFACE TEMPORARY
12' BASE AGGREGATE DENSE 1-1/4 INCH

REMOVING CURB & GUTTER

REMOVING CONCRETE PAVEMENT

LEGEND

TYPE III BARRICADE

TYPE III BARRICADE WITH ATTACHED SIGN

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

FLASHING ARROW BOARD

PCMS TRAFFIC CONTROL SIGNS PCMS

DIRECTION OF TRAFFIC

MARKING REMOVAL SPECIAL
MARKING WATER BLASTING

MARKING REMOVAL LINE
WATER BLASTING 4-INCH

MARKING REMOVAL LINE
WATER BLASTING 8-INCH

MARKING REMOVAL SPECIAL
MARKING WATER BLASTING

PATRIOT DR

STA 57+04.76, -153.05' LT

MARKING REMOVAL LINE
WATER BLASTING 4-INCH

REMOVING CONCRETE PAVEMENT

SAWING CONCRETE

25'(TYP.)

A A

STA 57+04.22, -88.65' LT

W01-6
48"X24"

W01-6
48"X24"

54'N'+00

55'N'+00

56'N'+00

57'N'+00

58'N'+00

59'N'+00

25'(TYP.)

125'

CTH N

STA 56+70.12, 46.56' RT

SAWING CONCRETE

A A

REMOVING CURB AND GUTTER

MOASIS DR

MOVING SIGNS TYPE II*

STA 56+78.18, 133.10' RT

STA 56+70.88, 133.15' RT

*SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" FOR ADVANCED SIGNING LAYOUT ON CTH N

*SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADVANCED SIGNING LAYOUT ON PATRIOT DR/MOASIS DR

*REMOVE SIGN AND SUPPORT ON MOASIS DR PRIOR TO TEMPORARY WIDENING, AND INSTALL AT SAME LOCATION AFTER PHASE 1.

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	TRAFFIC CONTROL-MOASIS DR TEMPORARY WIDENING	SHEET 101	E

FILE NAME : Y:\54XX\5441.DS22.IH41.OTG\CADDS\11306670\SHEETSPLAN\025101-TC-N.DWG
LAYOUT NAME - 025101

PLOT DATE : 1/19/2024 1:08 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

SECTION A-A

5" ASPHALTIC SURFACE TEMPORARY
12' BASE AGGREGATE DENSE 1-1/4 INCH

REMOVING CURB & GUTTER

REMOVING CONCRETE PAVEMENT

LEGEND

TYPE III BARRICADE

TYPE III BARRICADE WITH ATTACHED SIGN

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

FLASHING ARROW BOARD

PCMS TRAFFIC CONTROL SIGNS PCMS

DIRECTION OF TRAFFIC

N

PCMS

1014NB+00

1015NB+00

25'(TYP.)

IH 41 RAMP NB

1016NB+00

ROAD CLOSED
R11-2
48"X30"

STA 60+99.54, -11.57' LT

SAWING ASPHALT

STA 60+99.45, 0.00' LT

SAWING CONCRETE

REMOVING CURB AND GUTTER

59'N'+00

60'N'+00

61'N'+00

62'N'+00

63'N'+00

64'N'+00

CTH N

CTH N

IH 41 RAMP NA

1017NA+00

IH 41 NB

SIGN POST

MH

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	TRAFFIC CONTROL-CTH N MEDIAN MODIFICATION	SHEET 102	E

FILE NAME : Y:\54XX\5441.DS22.IH41.OTG\CADDS\11306670\SHEETSPLAN\025101-TC-N.DWG
LAYOUT NAME - 025102

PLOT DATE : 1/19/2024 1:15 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

SECTION A-A

5" ASPHALTIC SURFACE TEMPORARY
12' BASE AGGREGATE DENSE 1-1/4 INCH

REMOVING CURB & GUTTER

REMOVING CONCRETE PAVEMENT

LEGEND

TYPE III BARRICADE

TYPE III BARRICADE WITH ATTACHED SIGN

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

FLASHING ARROW BOARD

PCMS TRAFFIC CONTROL SIGNS PCMS

DIRECTION OF TRAFFIC

IH 41 NB

IH 41 SB

IH 41 RAMP NC

1016NC+00

IH 41 RAMP ND

1017ND+00

1018ND+00

25'(TYP.)

SAWING CONCRETE

REMOVING CURB AND GUTTER

STA 67+26.94, -30.23' LT

SAWING ASHPALT

STA 67+26.94, -13.20' LT

64'N'+00

65'N'+00

66'N'+00

67'N'+00

68'N'+00

69'N'+00

CTH N

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED
R11-2
48"X30"

PCMS

N

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	TRAFFIC CONTROL-CTH N MEDIAN MODIFICATION	SHEET 103	E

FILE NAME : Y:\54XX\5441.DS22.IH41.OTG\CADDS\11306670\SHEETSPLAN\025101-TC-N.DWG
LAYOUT NAME - 025103

PLOT DATE : 1/19/2024 1:22 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FMS — TRAFFIC CONTROL SIGNS FIXED MESSAGE
- DIRECTION OF TRAFFIC
- WORK AREA

*SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER" FOR ADVANCED SIGNING LAYOUT

*SEE OTHER SHEETS FOR BARRICADE AND SIGN LAYOUTS FOR CTH N

N

PATRIOT DR

W6-4
12"X18"

WO1-4R

NO TURNS
R3-3
24"X24"

25'(TYP.)

12.5'
(TYP.)

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

STOP
R1-1
30"X30"

IH 41 RAMP NB

101SNB+00

101SNA+00

CTH N

56'N'+00

57'N'+00

58'N'+00

59'N'+00

60'N'+00

61'N'+00

STOP
R1-1
30"X30"

WO1-6
48"X24"

NO TURNS
R3-3
24"X24"

STA 56+96.39, 167.88' RT

W6-4
12"X18"

WO1-4L

MOASIS DR

101NA+00

IH 41 RAMP NA

101NAB+00

SLAB
SIGN
MH
SS
INL
POST
FILLER CAP

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	TRAFFIC CONTROL - PHASE 1	SHEET 104	E

FILE NAME : Y:\54XX\5441.DS22.IH41.OTG\CADDS\11306670\SHEETSPLAN\025102-TC-N.DWG
LAYOUT NAME - 025101

PLOT DATE : 2/26/2024 11:56 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FMS — TRAFFIC CONTROL SIGNS FIXED MESSAGE
- DIRECTION OF TRAFFIC
- WORK AREA

*SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER" FOR ADVANCED SIGNING LAYOUT

*SEE OTHER SHEETS FOR BARRICADE AND SIGN LAYOUTS FOR CTH N

*PLACE STOP SIGN (R1-1) AT IH 41 RAMP NB TERMINAL DURING PHASE 2.

PATRIOT DR

STA 57+04.45, -168.06' LT

W01-4L

FMS 36

W01-6 48"X24"

R3-1 24"X24"

12.5' (TYP.)

W6-4 12"X18"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

STOP R1-1 30"X30"

LANE CLOSED R11-2L 48"X30"

IH 41 RAMP NB

10ISNB+00

10ISNB+00

R3-2 24"X24"

CTH N

ROAD CLOSED R11-2 48"X30"

LANE CLOSED R11-2L 48"X30"

LANE CLOSED R11-2L 48"X30"

56'N'+00 57'N'+00 58'N'+00 59'N'+00 60'N'+00 61'N'+00

25' (TYP.)

RIGHT TURN ONLY R3-53R 24"X30"

10I7NA+00

IH 41 RAMP NA

10I8NA+00

36 FMS

R3-2 24"X24"

FILLER CAP

STA 56+96.25, 140.01' RT

W01-4R

MOASIS DR

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	TRAFFIC CONTROL - PHASE 2	SHEET 105 E

FILE NAME : Y:\54XX\5441.DS22.IH41.OTG\CADDS\11306670\SHEETSPLAN\025103-TC-N.DWG
LAYOUT NAME - 025103

PLOT DATE : 2/26/2024 1:30 PM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS/BASES
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FMS — TRAFFIC CONTROL SIGNS FIXED MESSAGE
- DIRECTION OF TRAFFIC
- WORK AREA

*SEE "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" FOR ADVANCED SIGNING LAYOUT ON CTH N

*SEE OTHER SHEETS FOR BARRICADE AND SIGN LAYOUTS FOR CTH N

N

PATRIOT DR

IH 41 RAMP NB

101SNB+00

101SNB+00

CTH N

R3-2
24"X24"

STOP
R1-1
30"X30"

ROAD CLOSED
R11-2
48"X30"

LANE CLOSED
R11-2L
48"X30"

56'N'+00 57'N'+00 58'N'+00 59'N'+00 60'N'+00 61'N'+00

25' (TYP.)

125'

25' (TYP.)

36
FMS

RIGHT TURN ONLY
R3-53R
24"X30"

101NA+00

IH 41 RAMP NA

101BNA+

MOASIS DR

SLAB

FILLER CAP

SIGN

SIGN POST

MH

INL

SS

2

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	TRAFFIC CONTROL - PHASE 3	SHEET 106	E

FILE NAME : Y:\54XX\5441.DS22.IH41.OTG\CADDS\11306670\SHEETSPLAN\025104-TC-N.DWG
LAYOUT NAME - 025104

PLOT DATE : 2/26/2024 12:36 PM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:40 FT

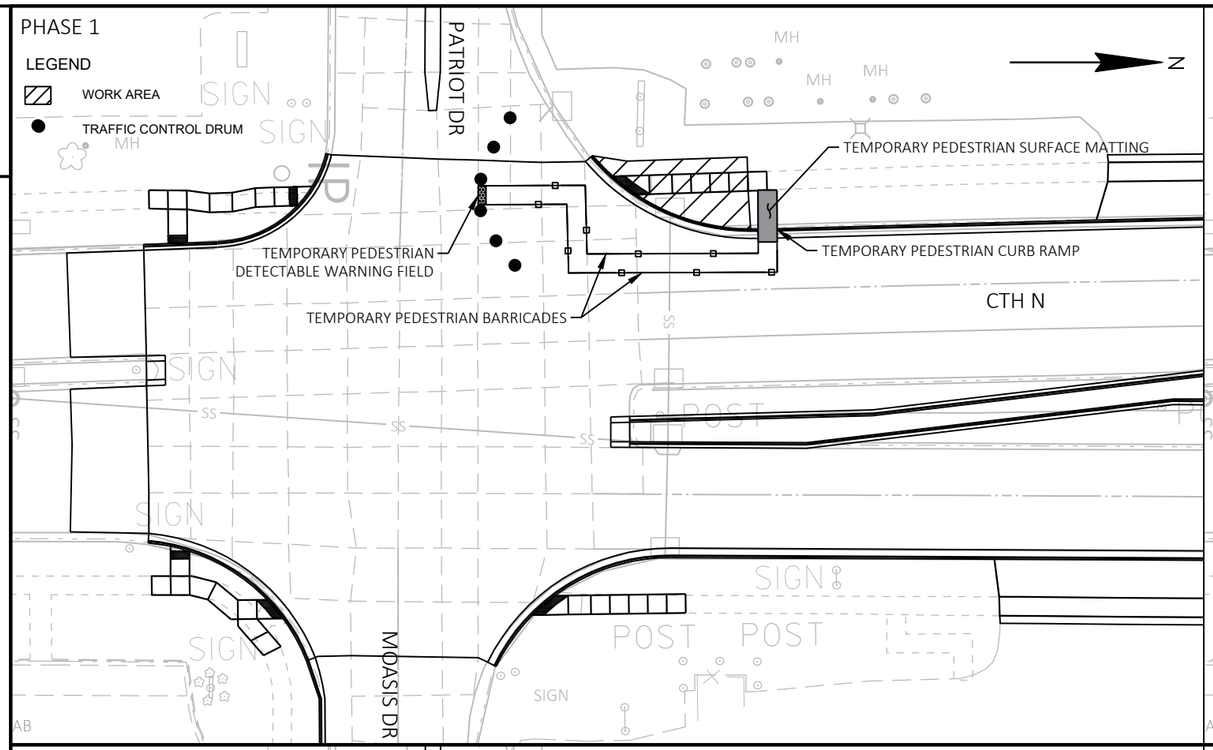
2

PHASE 1

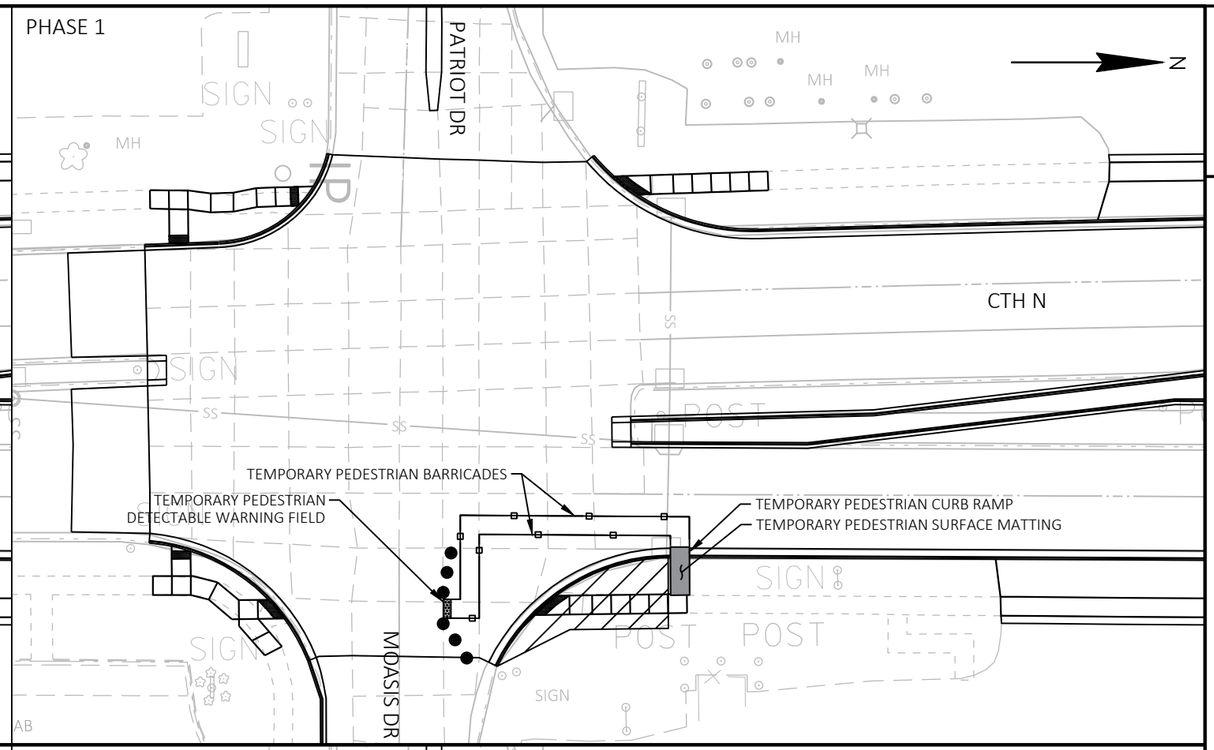
LEGEND

WORK AREA

TRAFFIC CONTROL DRUM

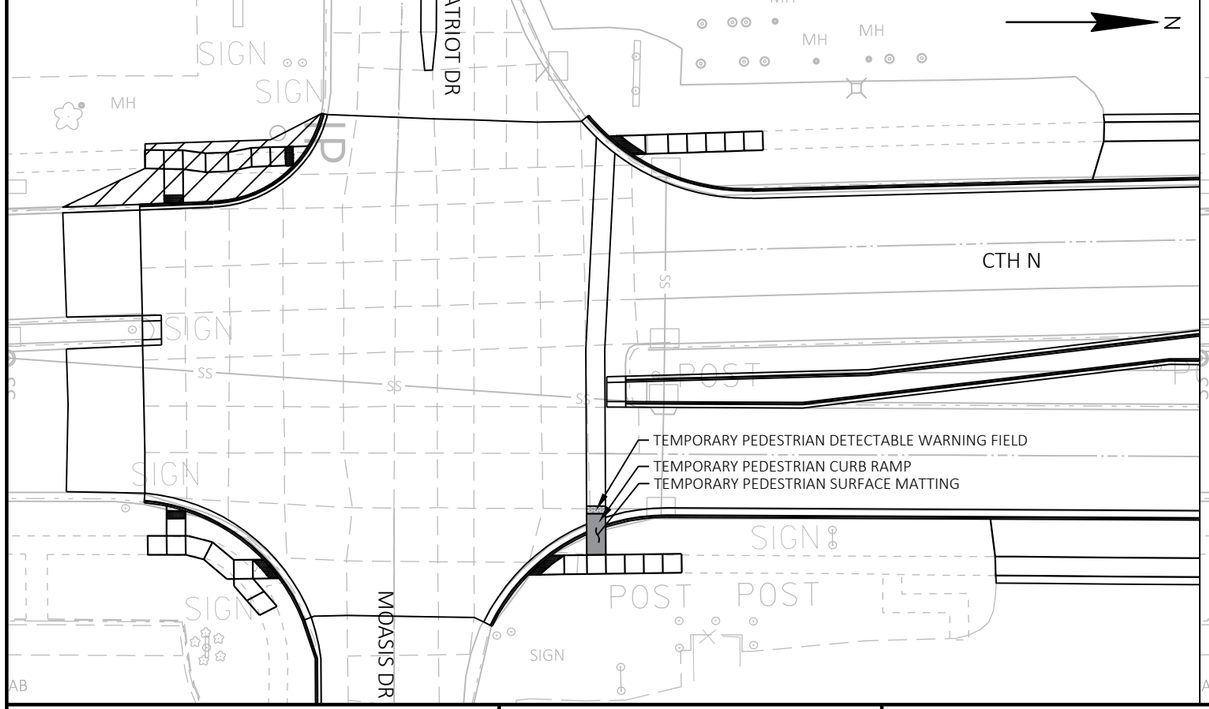


PHASE 1

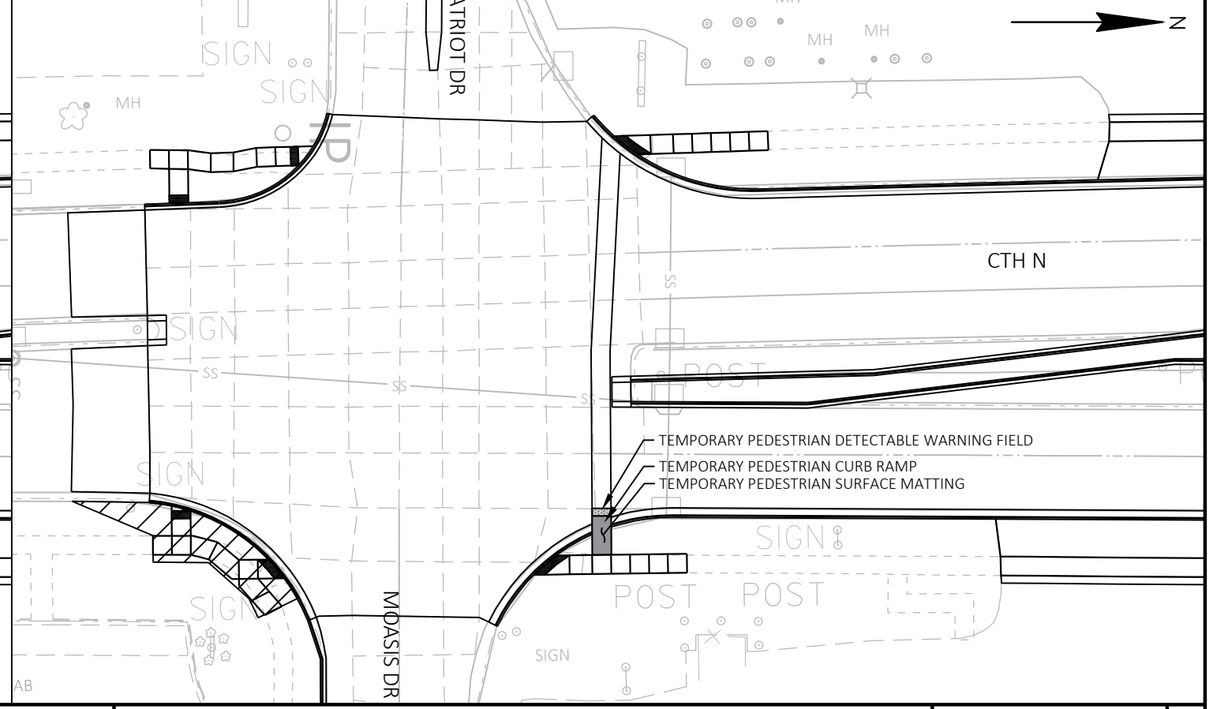


2

PHASE 2



PHASE 2



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	TEMPORARY PEDESTRIAN ACCOMMODATIONS	SHEET 107	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\025102-TC-N.DWG
LAYOUT NAME - 025101a

PLOT DATE : 1/19/2024 3:08 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

2

LEGEND

DETOUR ROUTE

PROJECT LIMITS

SIGN ON EXISTING SUPPORT

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL COVERING SIGNS TYPE I

TRAFFIC CONTROL COVERING SIGNS TYPE II

TRAFFIC CONTROL SIGNS PCMS PCMS

TRAFFIC CONTROL SIGNS FIXED MESSAGE FMS

TRAFFIC CONTROL GENERAL NOTES

- SEE STANDARD DETAIL "DETOUR SIGNING FOR MAINLINE CLOSURES" FOR SIGN SIZES.
- "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- M6-1 SIGNS ARE PAID FOR AS TRAFFIC CONTROL SIGNS
- G20-61 SIGNS ARE PAID FOR AS TRAFFIC CONTROL SIGNS FIXED MESSAGE
- SEE THE FOLLOWING STANDARD DETAILS:
  - "TRAFFIC CONTROL, BARRICADES AND SIGNS FOR MAINLINE CLOSURE", DETAILS A, C, E, & F
  - "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION:
  - "TRAFFIC CONTROL, EXIT RAMP CLOSURE"

N

DETAIL A

DETAIL B

DETAIL C

29 31 32 FMS

VANDENBROEK RD

BUCHANAN ST

COUNTY JJ

COUNTY N

COUNTY CC

55

E EVERGREEN DR

CLOSED G20-61 120"X30"

1130-66-76 PROJECT LIMITS

EXIT 146

Kimberly Combined Locks

Little Chute

31 FMS

32 FMS

FMS 8

29

MOASIS DR

ELM DR

FLORIDA AVE

INTERSTATE 41

TO INTERSTATE 41

M6-1 21"X21"

N FRENCH RD

HOLLAND RD

NORTH AVE

COUNTY OO

TRAFFIC CONTROL COVERING SIGNS TYPE II

13

2

17 18

1 3 3 7 2

26 6

20 1

COUNTY N FMS 30

W MAIN ST

96

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	DETOUR - CTH N	SHEET 108	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027001-DT.DWG
LAYOUT NAME - 027001

PLOT DATE : 1/31/2024 8:59 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:2000 FT

WISDOT/CADDS SHEET 42

2

1 — NORTH / COUNTY N (M3-1, M1-5A) DETOUR AHEAD (W20-2A)

2 — DETOUR / NORTH / COUNTY N (M4-8, M3-1, M1-5A)

3 — DETOUR / NORTH / COUNTY N (M4-8, M3-1, M1-5A) ↑ (MO6-1)

4 — DETOUR / NORTH / COUNTY N (M4-8, M3-1, M1-5A) ↰ (MO5-1L)

5 — DETOUR / NORTH / COUNTY N (M4-8, M3-1, M1-5A) ← (MO6-1)

6 — DETOUR / NORTH / COUNTY N (M4-8, M3-1, M1-5A) ↱ (MO5-1R)

7 — DETOUR / NORTH / COUNTY N (M4-8, M3-1, M1-5A) → (MO6-1)

8 — TO / COUNTY N (M4-5, M1-5A) ↑ (MO6-1)

9 — TO / COUNTY N (M4-5, M1-5A) ↗ (MO5-2R)

10 — TO / COUNTY N (M4-5, M1-5A) ↗ (MO6-2)

11 — END DETOUR / NORTH / COUNTY N (M4-8A, M3-1, M1-5A)

12 — SOUTH / COUNTY N (M3-3, M1-5A) DETOUR AHEAD (W20-2A)

13 — DETOUR / SOUTH / COUNTY N (M4-8, M3-3, M1-5A)

14 — DETOUR / SOUTH / COUNTY N (M4-8, M3-3, M1-5A) ↑ (MO6-1)

15 — DETOUR / SOUTH / COUNTY N (M4-8, M3-3, M1-5A) ↱ (MO5-1R)

16 — DETOUR / SOUTH / COUNTY N (M4-8, M3-3, M1-5A) → (MO6-1)

17 — DETOUR / SOUTH / COUNTY N (M4-8, M3-3, M1-5A) ← (MO6-1)

18 — DETOUR / SOUTH / COUNTY N (M4-8, M3-3, M1-5A) ↰ (M5-1L)

19 — DETOUR / NORTH / COUNTY N (M4-8, M3-1, M1-5A) ↗ (MO5-2R)

20 — DETOUR / SOUTH / COUNTY N (M4-8, M3-3, M1-5A) ↗ (MO5-2R)

21 — END DETOUR / SOUTH / COUNTY N (M4-8A, M3-3, M1-5A)

22 — DETOUR / NORTH / COUNTY N (M4-8, M3-1, M1-5A) ↗ (MO6-2)

23 — DETOUR / SOUTH / COUNTY N (M4-8, M3-3, M1-5A) ↗ (MO6-2)

24 — TO / NORTH / COUNTY N (M4-5, M3-1, M1-5A) ← (MO6-1)

25 — TO / SOUTH / COUNTY N (M4-5, M3-3, M1-5A) → (MO6-1)

26 — TO / INTERSTATE 41 (M4-5, M1-1) ↰ (M5-1L)

27 — TO / INTERSTATE 41 (M4-5, M1-1) ↱ (MO5-1R)

28 — END DETOUR / NORTH / INTERSTATE 41 (M4-8A, M3-1, M1-1)

29 — HWY N
RAMP CLOSED
USE EXIT 148

30 — HWY N CLOSED
NO ACCESS TO
HWY 41
FOLLOW DETOUR

31 — FOOD–EXIT 148
STARBUCKS
MCDONALDS–CULVERS
SUBWAY–TACO BELL
TOMS DRIVE–IN

32 — GAS–LODGING EXIT 148

SHELL–BP–KWIK TRIP
COUNTRY INN & SUITES
COBBLESTONE LODGING

33 — KWIK TRIP
COUNTRY INN & SUITES
COBBLESTONE LODGING
FOLLOW DETOUR

34 — SHELL–BP
KWIK TRIP
COBBLESTONE LODGING
FOLLOW DETOUR

35 — STARBUCKS–MCDONALDS
CULVERS–TACO BELL
TOMS DRIVE–IN
SUBWAY
FOLLOW DETOUR

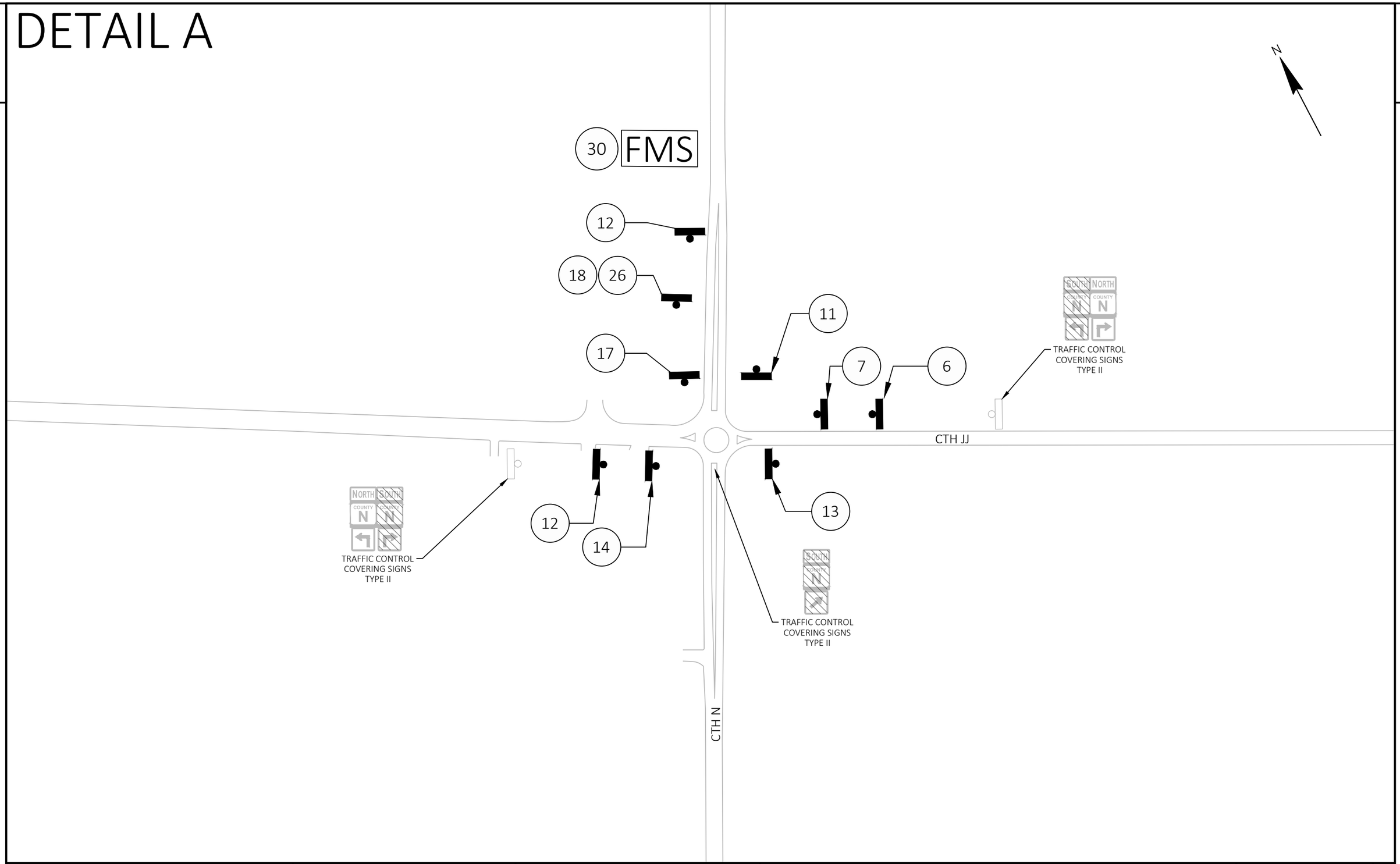
36 — ACCESS TO NORTH
I–41 ONLY
NO THRU TRAFFIC

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	DETOUR - CTH N	SHEET 109	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027001-DT.DWG
LAYOUT NAME - 027002
PLOT DATE : 2/26/2024 11:01 AM
PLOT BY : PETER LUCHT
PLOT NAME :
PLOT SCALE : 1 IN:2000 FT
WISDOT/CADDS SHEET 42

DETAIL A

2



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	DETOUR - DETAIL A	SHEET 110	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027001-DT.DWG
LAYOUT NAME - DETAIL A

PLOT DATE : 1/31/2024 8:59 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

DETAIL B

2

2

N

55

12

14

22

2

18

12

COUNTY JJ

COUNTY JJ

23

15

27

13

4

COUNTY CC

55

LEGEND

SIGN ON PERMANENT SUPPORT

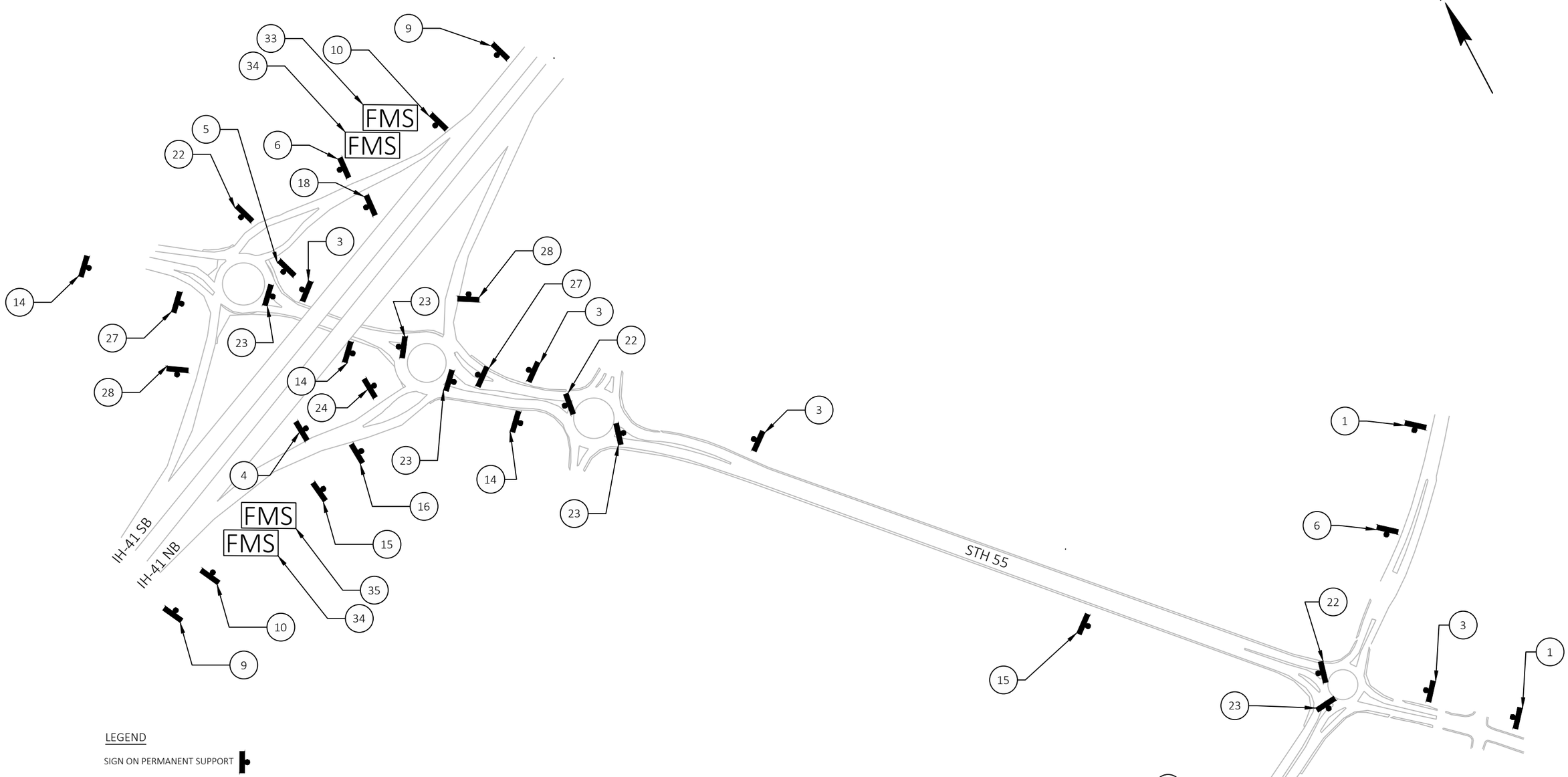
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	DETOUR - DETAIL B	SHEET 111	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027001-DT.DWG
LAYOUT NAME - DETAIL B

PLOT DATE : 1/31/2024 8:59 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

DETAIL C



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	DETOUR - DETAIL C	SHEET 112	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027001-DT.DWG
LAYOUT NAME - DETAIL C

PLOT DATE : 1/31/2024 8:59 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : Custom

WISDOT/CADDS SHEET 42

2

2

N

PATRIOT DR

MOASIS DR

IH 41 RAMP NB

IH 41 RAMP NA

CTH N

EXIST R/W

PROP R/W

TLE

SI

REMOVING PEDESTRIAN RAILING

REMOVING FENCE

FENCE CHAIN LINK 6-FT

+56.97
61.05' RT

+02.55
66.60' RT

+57.97
132.64' RT

BEGIN PROJECT
STA 56'N'+10.55

56'N'+00

57'N'+00

58'N'+00

59'N'+00

60'N'+00

61'N'+00

R/L CTH N

R/L RAMP NA

1015NB+00

1017NA+00

MATCH LINE 1015'NB'+50

MATCH LINE 61'N'+75

MATCH LINE 1017'NA'+50

SLAB

MH

SIGN

POST

FILLER CAP

INL

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FENCE DETAILS - CTH N	SHEET 113	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027101-FN.DWG
LAYOUT NAME - 027101-fn
PLOT DATE : 1/31/2024 9:36 AM
PLOT BY : AARON SCHRAMM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

MATCH LINE 1015'NC'+00

IH 41 RAMP NC

C+00

N

MATCH LINE 1015'NB'+50

SLOPE INTERCEPT

REMOVING PEDESTRIAN RAILING

IH 41 NB

IH 41 SB

SLOPE INTERCEPT

REMOVING PEDESTRIAN RAILING

1016NC+00

MATCH LINE 61'N'+75

62'N'+00

63'N'+00

64'N'+00

65'N'+00

66'N'+00

67'N'+00

CTH N

CTH N

MATCH LINE 67'N'+75

SLOPE INTERCEPT

REMOVING PEDESTRIAN RAILING

SLOPE INTERCEPT

REMOVING PEDESTRIAN RAILING

1017NC+00

IH 41 RAMP ND

MATCH LINE 1017'NA'+50

MATCH LINE 1017'ND'+75

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FENCE DETAILS - CTH N	SHEET 114	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027101-FN.DWG
LAYOUT NAME - 027102-fn

PLOT DATE : 1/31/2024 9:41 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

MATCH LINE 67'N'+75

+21.87
-144.74' LT

EXIST R/W

+16.96
-117.42' LT

FENCE CHAIN LINK 6-FT

SLOPE INTERCEPT

REMOVING PEDESTRIAN RAILING

END CONSTRUCTION
STA 70'N'+34.30

68'N'+00

69'N'+00

70'N'+00

71'N'+00

72'N'+00

73'N'+00

R/L CTH N

CTH N

END PROJECT
STA 69'N'+42.59

SLOPE INTERCEPT

REMOVING PEDESTRIAN RAILING

REMOVING PEDESTRIAN RAILING

FENCE CHAIN LINK 6-FT

+38.44
86.21' RT

EXIST R/W

+22.75
108.84' RT

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FENCE DETAILS - CTH N	SHEET 115	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027101-FN.DWG
LAYOUT NAME - 027103-fn

PLOT DATE : 1/31/2024 9:46 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

IH 41 SB

IH 41 NB

SIGN

SLOPE INTERCEPT

R/L RAMP NA

MATCH LINE 1017'NA'+50

1018NA+00

1019NA+00

1020NA+00

1021NA+00

1022NA+00

1023N

MATCH LINE 1023'NA'+00

IH 41 RAMP NA

SIGN

SIGN

SIGN

SLOPE INTERCEPT

FENCE CHAIN LINK 6-FT

+00
77.08' RT

+10
75.71' RT

EXIST R/W

GUY POLE

SIGN

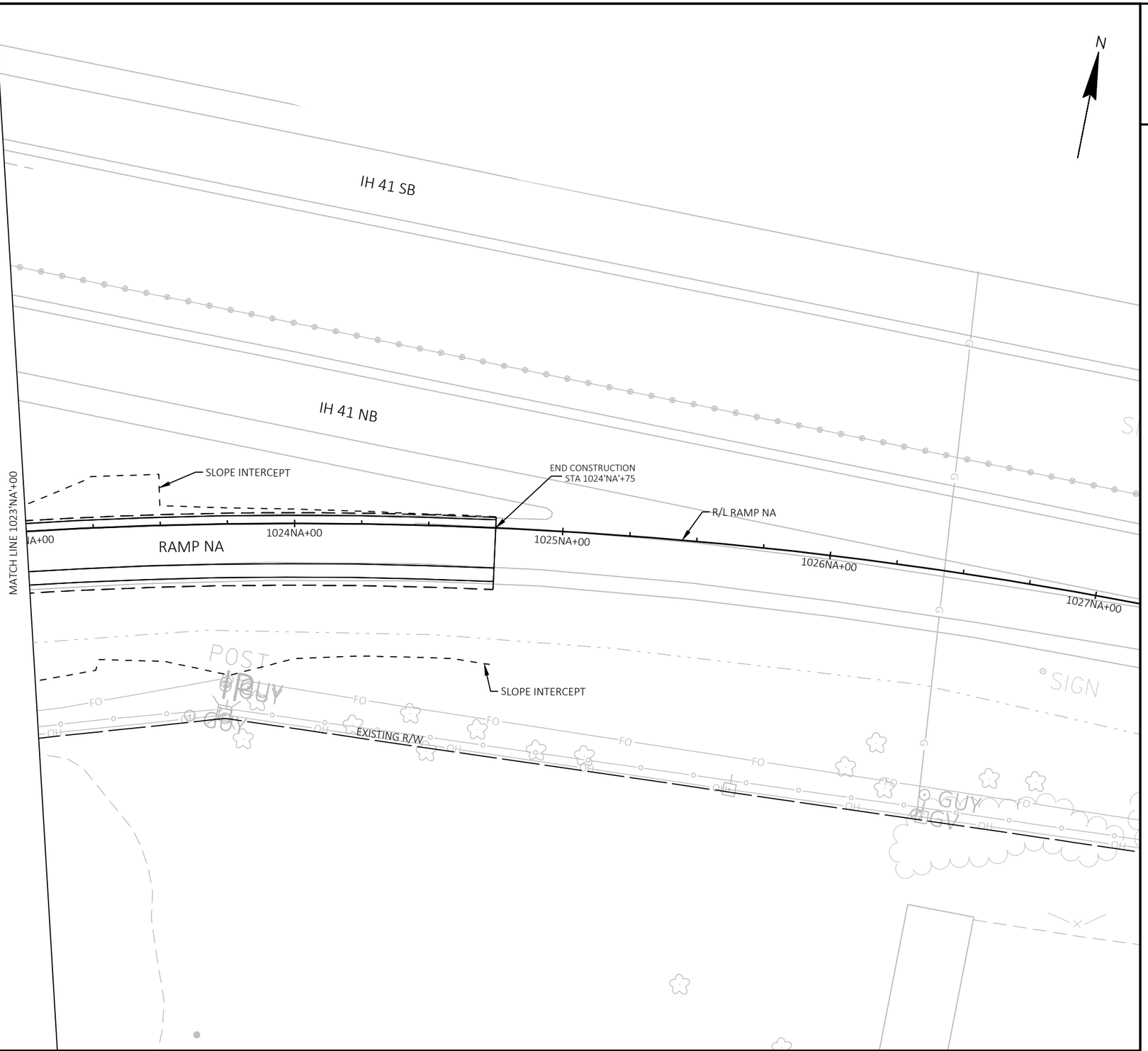
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FENCE DETAILS - RAMP NA	SHEET 116	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027101-FN.DWG
LAYOUT NAME - 027104-fn

PLOT DATE : 1/31/2024 9:51 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

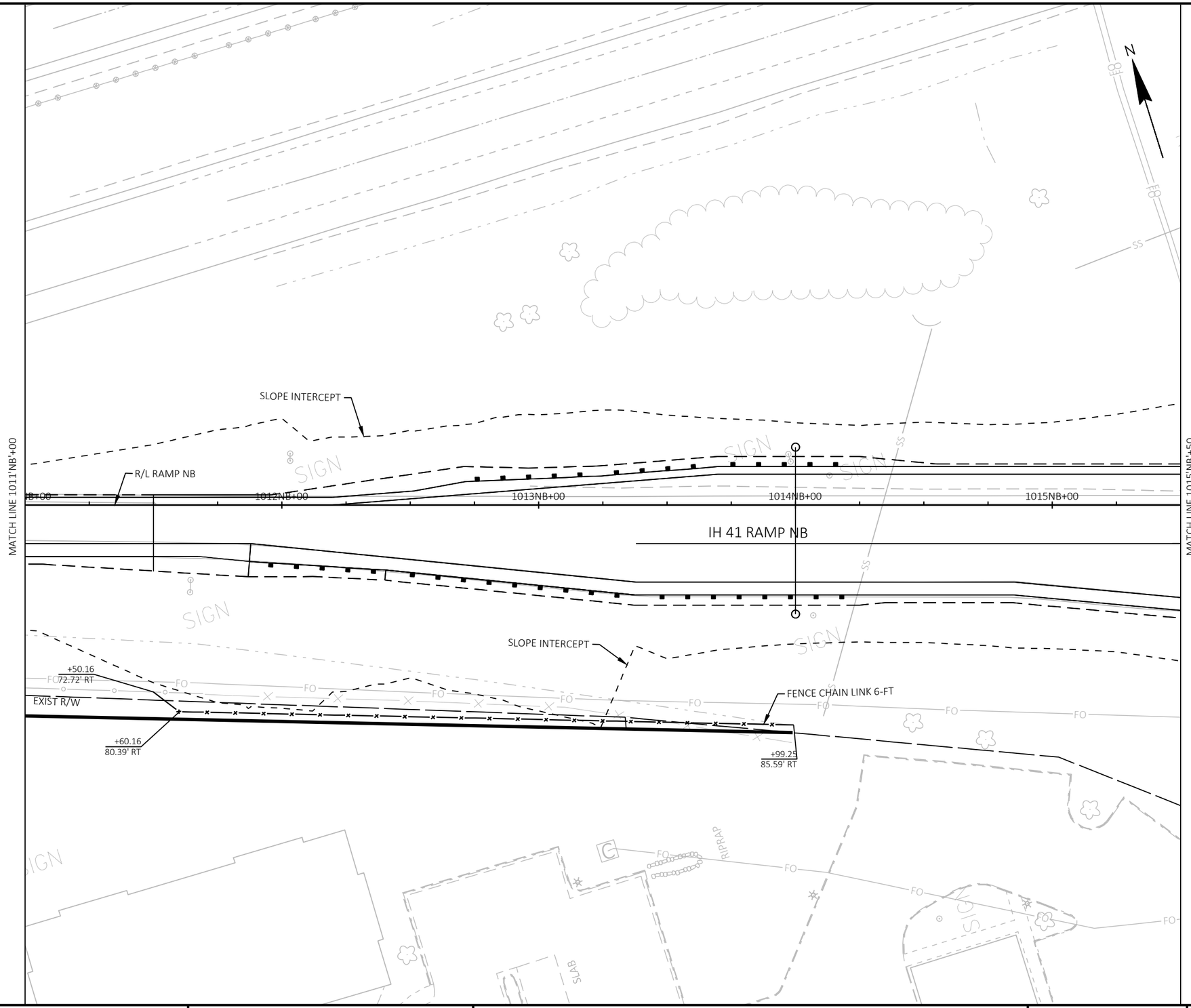
2



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FENCE DETAILS - RAMP NA	SHEET 117	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027101-FN.DWG
LAYOUT NAME - 021205-fn
PLOT DATE : 1/31/2024 9:56 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FENCE DETAILS - RAMP NB	SHEET 118	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027101-FN.DWG
LAYOUT NAME - 027106-fn

PLOT DATE : 1/31/2024 10:01 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

IH 41 SB

IH 41 NB

SIGN

SIGN

SLOPE INTERCEPT

1010NB+00

1009NB+00

1008NB+00

1007NB+00

RAMP NB

BEGIN CONSTRUCTION
STA 1009'NB'+00

SIGN

SLOPE INTERCEPT

FO

PROP R/W

SIGN

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FENCE DETAILS - RAMP NB	SHEET 119	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027101-FN.DWG
LAYOUT NAME - 021207-fn

PLOT DATE : 1/31/2024 10:05 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

EXIST R/W

PROP R/W

+80
-70.28' LT

+90
-75.37' LT

+22.66
-81.24' LT

FENCE CHAIN LINK 6-FT

SLOPE INTERCEPT

FO

POST

SIGN

1009NC+00

1010NC+00

1011NC+00

1012NC+00

IH 41 RAMP NC

1013NC+00

1014NC+00

R/L NAMP NC

1015N

MATCH LINE 1015'NC'+00

BEGIN CONSTRUCTION
STA 1009'NC'+00

SLOPE INTERCEPT

IH 41 SB

IH 41 NB

SIGN

POS

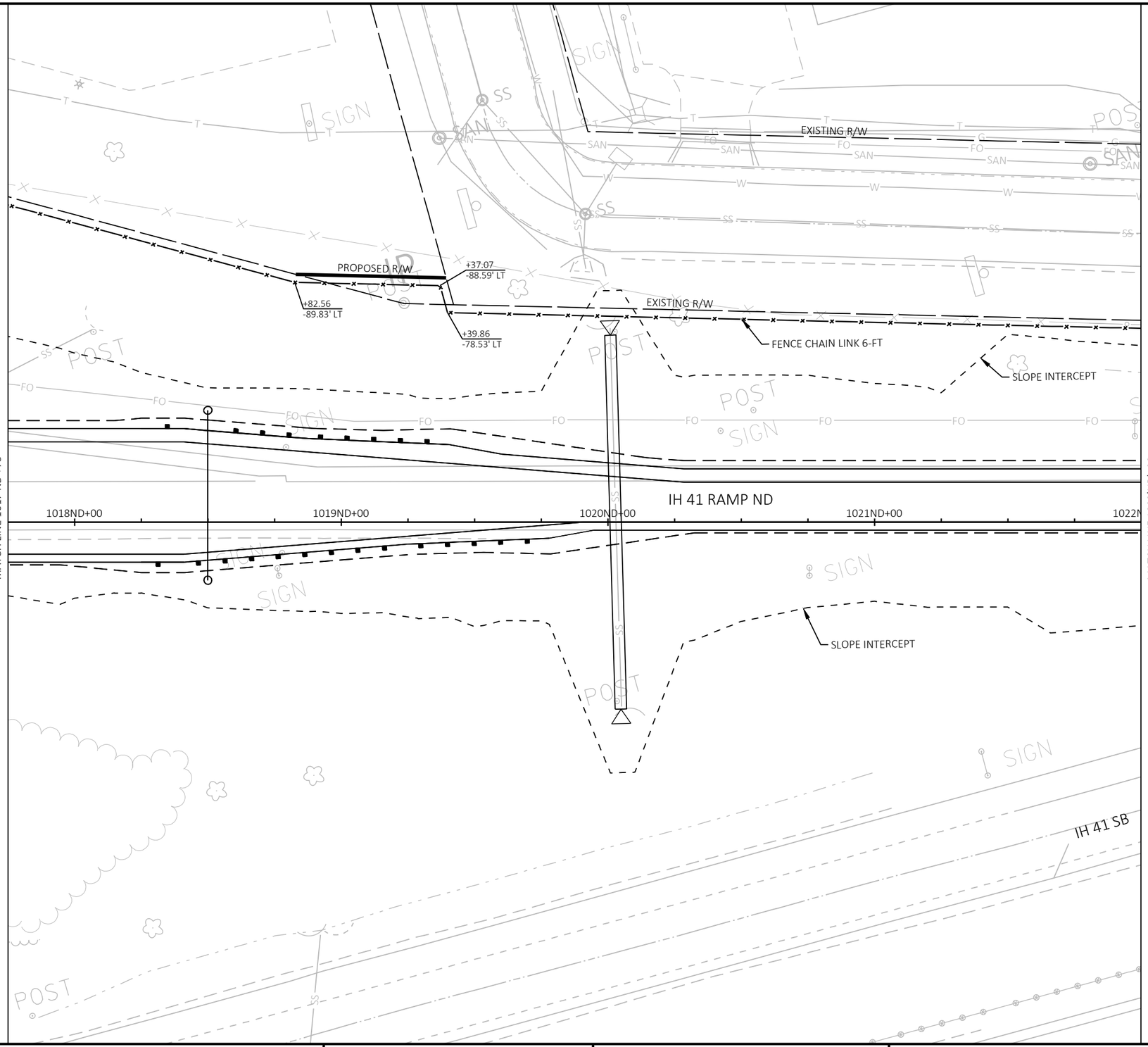
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FENCE DETAILS - RAMP NC	SHEET 120	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027101-FN.DWG
LAYOUT NAME - 027108-fn

PLOT DATE : 1/31/2024 10:10 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



MATCH LINE 1022'ND'+00

N

2

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FENCE DETAILS - RAMP ND	SHEET 121	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027101-FN.DWG
LAYOUT NAME - 027109-fn

PLOT DATE : 1/31/2024 10:15 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

+25
-72.06' LT

+35
-72.81' LT

SLOPE INTERCEPT

MATCH LINE 1022'ND'+00

R/L RAMP ND

1023ND+00

RAMP ND

1024ND+00

1025ND+00

1026ND+00

1027ND+00

END CONSTRUCTION
STA 1024'ND'+50

SLOPE INTERCEPT

IH 41 SB

IH 41 NB

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	FENCE DETAILS - RAMP ND	SHEET 122	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\027101-FN.DWG
LAYOUT NAME - 021210-fn

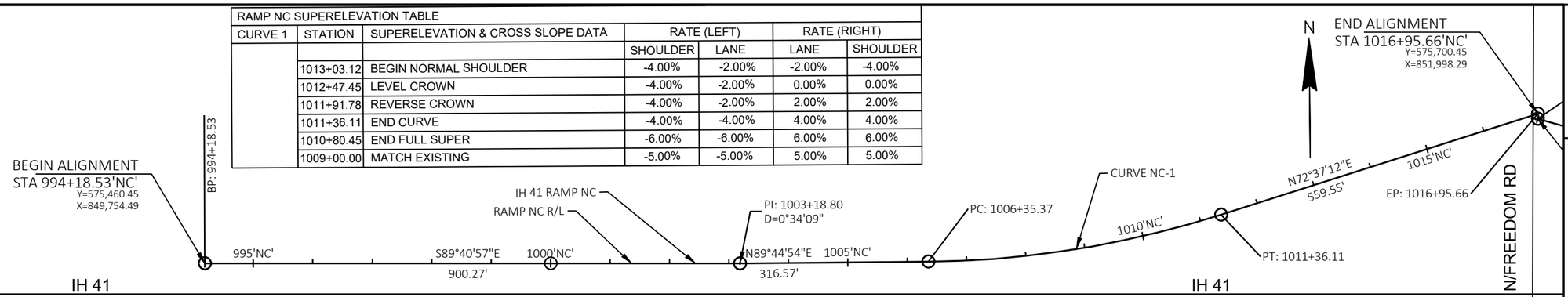
PLOT DATE : 1/31/2024 10:19 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:40 FT

CURVE NC-1
PI STA = 1008+87.62 'NC'
Y = 575457.955
X = 851223.557
DELTA = 17°07'42" LT
D = 3°25'14"
T = 252.25'
L = 500.74'
R = 1675.00'
PC STA = 1006+35.37 'NC'
Y = 575456.847
X = 850971.309
PT STA = 1011+36.11 'NC'
Y = 575533.304
X = 851464.290
DB = N89°44'54"E
DA = N72°37'12"E
S.E. = 6.0%

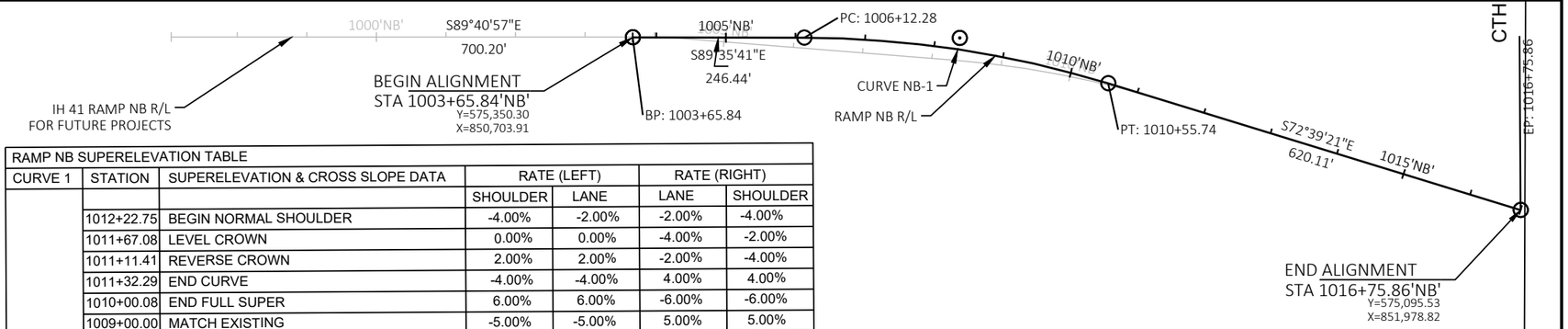
VANDENBROEK RD

RAMP NC SUPERELEVATION TABLE

CURVE 1	STATION	SUPERELEVATION & CROSS SLOPE DATA	RATE (LEFT)		RATE (RIGHT)	
			SHOULDER	LANE	LANE	SHOULDER
	1013+03.12	BEGIN NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
	1012+47.45	LEVEL CROWN	-4.00%	-2.00%	0.00%	0.00%
	1011+91.78	REVERSE CROWN	-4.00%	-2.00%	2.00%	2.00%
	1011+36.11	END CURVE	-4.00%	-4.00%	4.00%	4.00%
	1010+80.45	END FULL SUPER	-6.00%	-6.00%	6.00%	6.00%
	1009+00.00	MATCH EXISTING	-5.00%	-5.00%	5.00%	5.00%



CURVE NB-1
PI STA = 1008+35.64 'NB'
Y = 575346.98
X = 851173.70
DELTA = 16°56'20" RT
D = 3°49'11"
T = 223.36'
L = 443.46'
R = 1500.00'
PC STA = 1006+12.28 'NB'
Y = 575348.56
X = 850950.34
PT STA = 1010+55.74 'NB'
Y = 575280.40
X = 851386.90
DB = S89°35'41"E
DA = S72°39'21"E

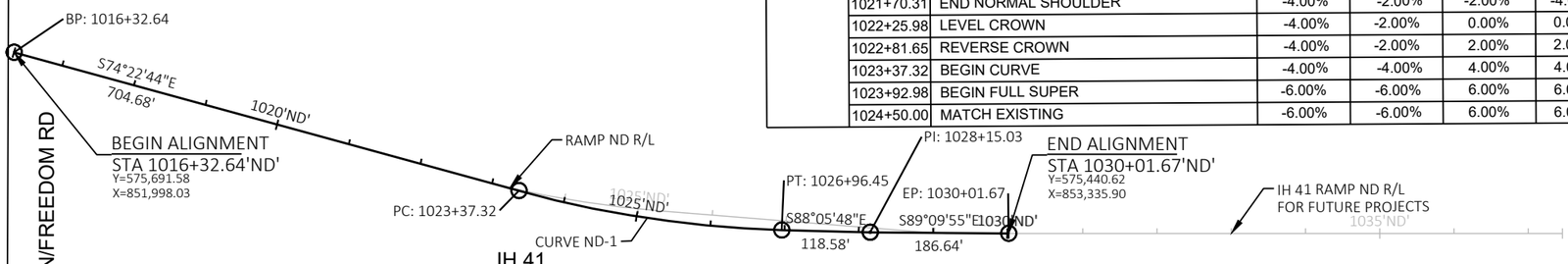


RAMP NB SUPERELEVATION TABLE

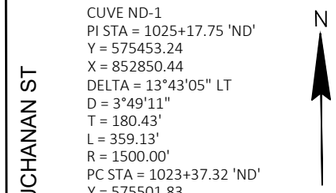
CURVE 1	STATION	SUPERELEVATION & CROSS SLOPE DATA	RATE (LEFT)		RATE (RIGHT)	
			SHOULDER	LANE	LANE	SHOULDER
	1012+22.75	BEGIN NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
	1011+67.08	LEVEL CROWN	0.00%	0.00%	-4.00%	-2.00%
	1011+11.41	REVERSE CROWN	2.00%	2.00%	-2.00%	-4.00%
	1011+32.29	END CURVE	-4.00%	-4.00%	4.00%	4.00%
	1010+00.08	END FULL SUPER	6.00%	6.00%	-6.00%	-6.00%
	1009+00.00	MATCH EXISTING	-5.00%	-5.00%	5.00%	5.00%

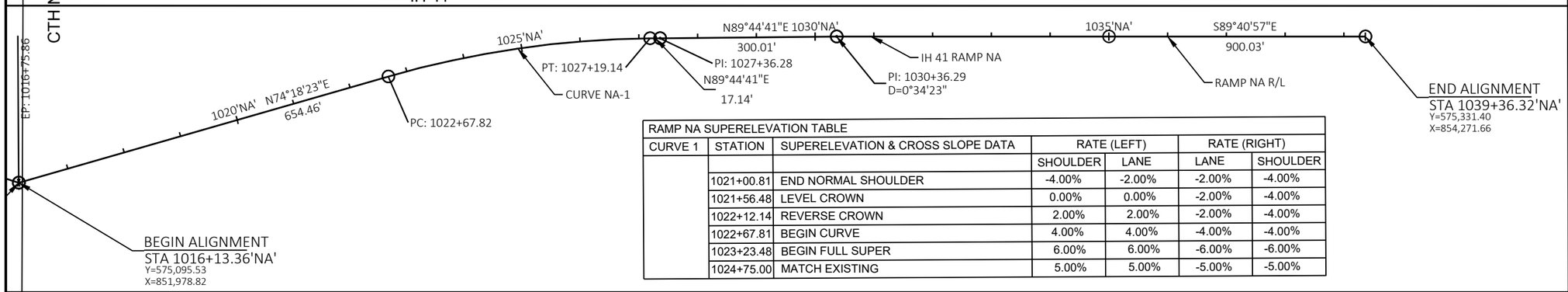
RAMP ND SUPERELEVATION TABLE

CURVE 1	STATION	SUPERELEVATION & CROSS SLOPE DATA	RATE (LEFT)		RATE (RIGHT)	
			SHOULDER	LANE	LANE	SHOULDER
	1021+70.31	END NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
	1022+25.98	LEVEL CROWN	-4.00%	-2.00%	0.00%	0.00%
	1022+81.65	REVERSE CROWN	-4.00%	-2.00%	2.00%	2.00%
	1023+37.32	BEGIN CURVE	-4.00%	-4.00%	4.00%	4.00%
	1023+92.98	BEGIN FULL SUPER	-6.00%	-6.00%	6.00%	6.00%
	1024+50.00	MATCH EXISTING	-6.00%	-6.00%	6.00%	6.00%



CUVE ND-1
PI STA = 1025+17.75 'ND'
Y = 575453.24
X = 852850.44
DELTA = 13°43'05" LT
D = 3°49'11"
T = 180.43'
L = 359.13'
R = 1500.00'
PC STA = 1023+37.32 'ND'
Y = 575501.83
X = 852676.67
PT STA = 1026+96.45 'ND'
Y = 575447.25
X = 853030.77
DB = S74°22'44"E
DA = S88°05'48"E





RAMP NA SUPERELEVATION TABLE

CURVE 1	STATION	SUPERELEVATION & CROSS SLOPE DATA	RATE (LEFT)		RATE (RIGHT)	
			SHOULDER	LANE	LANE	SHOULDER
	1021+00.81	END NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
	1021+56.48	LEVEL CROWN	0.00%	0.00%	-2.00%	-4.00%
	1022+12.14	REVERSE CROWN	2.00%	2.00%	-2.00%	-4.00%
	1022+67.81	BEGIN CURVE	4.00%	4.00%	-4.00%	-4.00%
	1023+23.48	BEGIN FULL SUPER	6.00%	6.00%	-6.00%	-6.00%
	1024+75.00	MATCH EXISTING	5.00%	5.00%	-5.00%	-5.00%

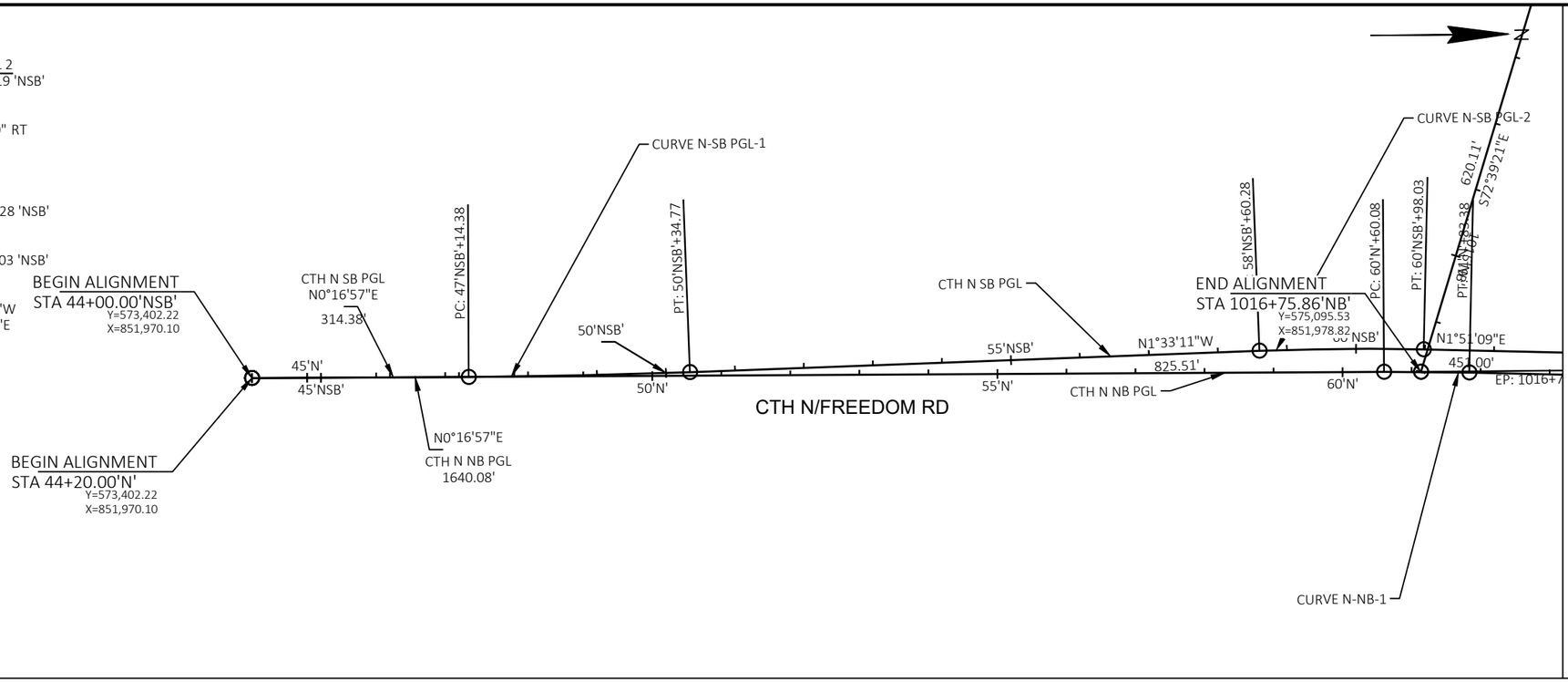
CURVE NA-1
PI STA = 1024+94.85 'NA'
Y = 575333.968
X = 852827.455
DELTA = 15°26'18" RT
D = 3°25'14"
T = 227.04'
L = 451.32'
R = 1675.00'
PC STA = 1022+67.82 'NA'
Y = 575272.556
X = 852608.881
PT STA = 1027+19.14 'NA'
Y = 575334.980
X = 853054.490
DB = N74°18'23"E
DA = N89°44'41"E
S.E.= 6.0%

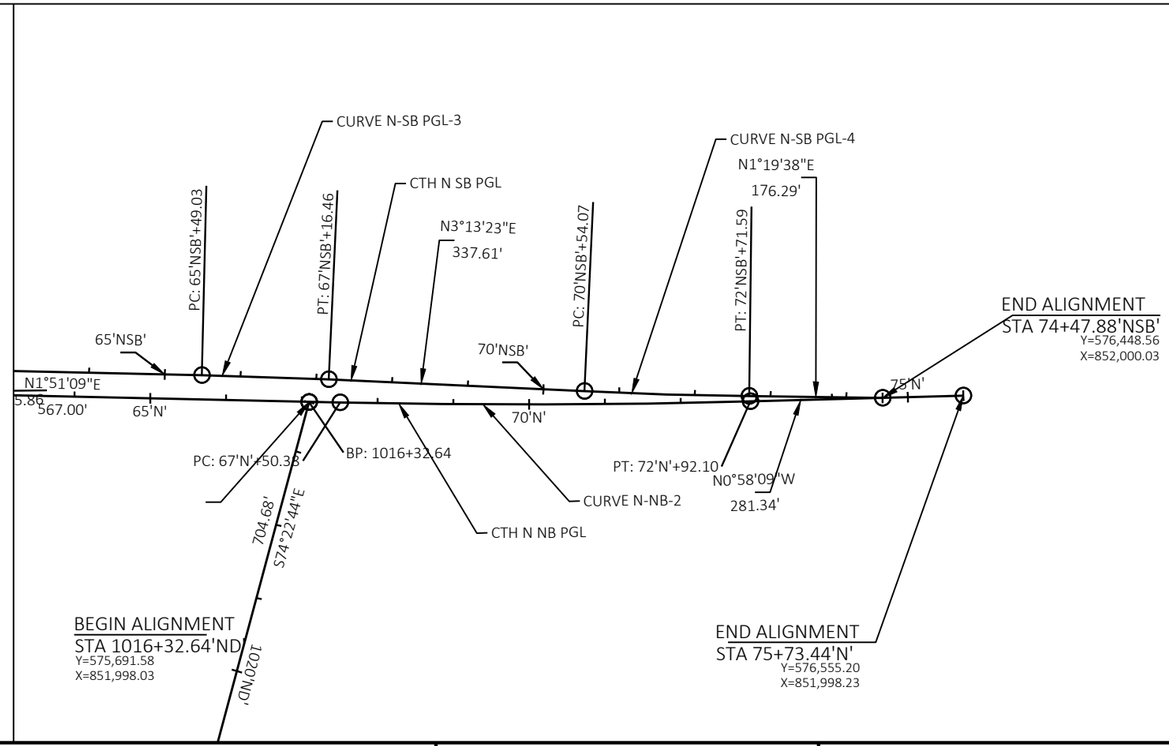
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	ALIGNMENT DETAILS - CTH N INTERCHANGE RAMPS	SHEET 123	E

CURVE N SB PGL 1
PI STA = 48+74.59 'NSB'
Y = 573876.799
X = 851972.438
DELTA = 1°50'09" LT
D = 0°34'23"
T = 160.21'
L = 320.39'
R = 10000.00'
PC STA = 47+14.38 'NSB'
Y = 573716.59
X = 851971.65
PT STA = 50+34.77 'NSB'
Y = 574036.95
X = 851968.10
DB = N00°16'57"E
DA = N01°33'11"W

CURVE N SB PGL 2
PI STA = 59+79.19 'NSB'
Y = 574981.022
X = 851942.499
DELTA = 3°24'20" RT
D = 1°25'57"
T = 118.91'
L = 237.76'
R = 4000.00'
PC STA = 58+60.28 'NSB'
Y = 574862.15
X = 851945.72
PT STA = 60+98.03 'NSB'
Y = 575099.87
X = 851946.34
DB = N01°33'11"W
DA = N01°51'09"E

CURVE N-1
PI STA = 61+21.73 'N'
Y = 575103.931
X = 851978.491
DELTA = 1°34'12" RT
D = 1°16'24"
T = 61.65'
L = 123.30'
R = 4500.00'
PC STA = 60+60.08 'N'
Y = 575042.28
X = 851978.19
PT STA = 61+83.38 'N'
Y = 575165.55
X = 851980.48
DB = N00°16'57"E
DA = N01°51'09"E





CURVE N SB PGL 3
PI STA = 66+32.75 'NSB'
Y = 575634.310
X = 851963.629
DELTA = 1°22'13" RT
D = 0°49'07"
T = 83.72'
L = 167.43'
R = 7000.00'
PC STA = 65+49.03 'NSB'
Y = 575550.64
X = 851960.92
PT STA = 67+16.46 'NSB'
Y = 575717.90
X = 851968.34
DB = N01°51'09"E
DA = N03°13'23"E

CURVE N SB PGL 4
PI STA = 71+62.84 'NSB'
Y = 576163.571
X = 851993.431
DELTA = 1°53'44" LT
D = 0°52'17"
T = 108.77'
L = 217.53'
R = 6575.00'
PC STA = 70+54.07 'NSB'
Y = 576054.97
X = 851987.32
PT STA = 72+71.59 'NSB'
Y = 576272.32
X = 851995.95
DB = N03°13'23"E
DA = N01°19'38"E

CURVE N-2
PI STA = 70+21.29 'N'
Y = 576003.029
X = 852007.571
DELTA = 2°49'18" LT
D = 0°31'15"
T = 270.91'
L = 541.71'
R = 11000.00'
PC STA = 67+50.38 'N'
Y = 575732.26
X = 851998.81
PT STA = 72+92.10 'N'
Y = 576273.90
X = 852002.99
DB = N01°51'09"E
DA = N00°58'09"W

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	ALIGNMENT DETAILS - CTH N	SHEET 124	E

Estimate Of Quantities

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Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	5.000	5.000
0004	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0006	203.0220	Removing Structure (structure) 0001. B-44-0179	EACH	1.000	1.000
0008	204.0100	Removing Concrete Pavement	SY	17,470.000	17,470.000
0010	204.0120	Removing Asphaltic Surface Milling	SY	270.000	270.000
0012	204.0150	Removing Curb & Gutter	LF	331.000	331.000
0014	204.0155	Removing Concrete Sidewalk	SY	530.000	530.000
0016	204.0165	Removing Guardrail	LF	354.000	354.000
0018	204.0170	Removing Fence	LF	2,155.000	2,155.000
0020	204.0180	Removing Delineators and Markers	EACH	10.000	10.000
0022	204.0195	Removing Concrete Bases	EACH	20.000	20.000
0024	204.0220	Removing Inlets	EACH	5.000	5.000
0026	204.0245	Removing Storm Sewer (size) 0001. 12-Inch	LF	91.000	91.000
0028	204.9060.S	Removing (item description) 0301. Communications Vault	EACH	2.000	2.000
0030	204.9060.S	Removing (item description) 0302. Removing Existing Pole	EACH	1.000	1.000
0032	204.9090.S	Removing (item description) 0001. Removing Pedestrian Railing	LF	1,815.000	1,815.000
0034	205.0100	Excavation Common	CY	19,191.000	19,191.000
0036	211.0500	Prepare Foundation for Base Aggregate	STA	23.000	23.000
0038	213.0100	Finishing Roadway (project) 0001. 1130-66-76	EACH	1.000	1.000
0040	305.0110	Base Aggregate Dense 3/4-Inch	TON	620.000	620.000
0042	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	11,553.000	11,553.000
0044	310.0110	Base Aggregate Open-Graded	TON	43.000	43.000
0046	312.0110	Select Crushed Material	TON	16,700.000	16,700.000
0048	415.0090	Concrete Pavement 9-Inch	SY	6,905.000	6,905.000
0050	415.0100	Concrete Pavement 10-Inch	SY	8,609.000	8,609.000
0052	415.0410	Concrete Pavement Approach Slab	SY	266.000	266.000
0054	415.1100	Concrete Pavement HES 10-Inch	SY	822.000	822.000
0056	416.0610	Drilled Tie Bars	EACH	64.000	64.000
0058	416.0620	Drilled Dowel Bars	EACH	110.000	110.000
0060	455.0605	Tack Coat	GAL	459.000	459.000
0062	460.2000	Incentive Density HMA Pavement	DOL	320.000	320.000
0064	460.5224	HMA Pavement 4 LT 58-28 S	TON	497.000	497.000
0066	460.6224	HMA Pavement 4 MT 58-28 S	TON	31.000	31.000
0068	465.0105	Asphaltic Surface	TON	541.000	541.000
0070	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	10.000	10.000
0072	465.0125	Asphaltic Surface Temporary	TON	21.000	21.000
0074	502.0100	Concrete Masonry Bridges	CY	163.000	163.000
0076	502.3205	Pigmented Surface Sealer Reseal	SY	179.000	179.000
0078	502.4205	Adhesive Anchors No. 5 Bar	EACH	36.000	36.000
0080	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	44,700.000	44,700.000
0082	509.1500	Concrete Surface Repair	SF	6.000	6.000
0084	520.8000	Concrete Collars for Pipe	EACH	5.000	5.000
0086	522.0142	Culvert Pipe Reinforced Concrete Class III 42-Inch	LF	140.000	140.000
0088	522.1042	Apron Endwalls for Culvert Pipe Reinforced Concrete 42-Inch	EACH	2.000	2.000
0090	531.2030	Drilling Shaft 30-Inch	LF	52.000	52.000
0092	531.5220	Foundation Single-Shaft Type MF-II (structure) 0501. S-44-0383	EACH	2.000	2.000
0094	531.5220	Foundation Single-Shaft Type MF-II (structure) 0601. S-44-0384	EACH	2.000	2.000
0096	532.5220	Monotube Full Span Type II (structure) 0502. S-44-0383	EACH	1.000	1.000
0098	532.5220	Monotube Full Span Type II (structure) 0602. S-44-0384	EACH	1.000	1.000
0100	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	2,256.000	2,256.000

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Line	Item	Item Description	Unit	Total	Qty
0102	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	2,227.000	2,227.000
0104	602.0405	Concrete Sidewalk 4-Inch	SF	13,966.000	13,966.000
0106	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	194.000	194.000
0108	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	45.000	45.000
0110	602.0815	Concrete Driveway 7-Inch	SY	222.000	222.000
0112	602.3010	Concrete Surface Drains	CY	16.000	16.000
0114	606.0200	Riprap Medium	CY	15.000	15.000
0116	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	108.000	108.000
0118	611.0530	Manhole Covers Type J	EACH	2.000	2.000
0120	611.0624	Inlet Covers Type H	EACH	6.000	6.000
0122	611.2003	Manholes 3-FT Diameter	EACH	2.000	2.000
0124	611.3230	Inlets 2x3-FT	EACH	6.000	6.000
0126	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
0128	611.8115	Adjusting Inlet Covers	EACH	19.000	19.000
0130	612.0106	Pipe Underdrain 6-Inch	LF	980.000	980.000
0132	614.2300	MGS Guardrail 3	LF	548.000	548.000
0134	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0136	614.2620	MGS Guardrail Terminal Type 2	EACH	4.000	4.000
0138	616.0206	Fence Chain Link 6-FT	LF	2,241.000	2,241.000
0140	616.0700.S	Fence Safety	LF	270.000	270.000
0142	618.0100	Maintenance and Repair of Haul Roads (project) 0001. 1130-66-76	EACH	1.000	1.000
0144	619.1000	Mobilization	EACH	1.000	1.000
0146	620.0100	Concrete Corrugated Median	SF	246.000	246.000
0148	620.0300	Concrete Median Sloped Nose	SF	270.000	270.000
0150	624.0100	Water	MGAL	263.000	263.000
0152	625.0100	Topsoil	SY	13,700.000	13,700.000
0154	628.1504	Silt Fence	LF	5,890.000	5,890.000
0156	628.1520	Silt Fence Maintenance	LF	5,890.000	5,890.000
0158	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0160	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0162	628.2002	Erosion Mat Class I Type A	SY	12,130.000	12,130.000
0164	628.2008	Erosion Mat Urban Class I Type B	SY	1,530.000	1,530.000
0166	628.7005	Inlet Protection Type A	EACH	30.000	30.000
0168	628.7015	Inlet Protection Type C	EACH	40.000	40.000
0170	628.7504	Temporary Ditch Checks	LF	450.000	450.000
0172	628.7555	Culvert Pipe Checks	EACH	52.000	52.000
0174	628.7560	Tracking Pads	EACH	8.000	8.000
0176	628.7570	Rock Bags	EACH	20.000	20.000
0178	629.0210	Fertilizer Type B	CWT	10.300	10.300
0180	630.0130	Seeding Mixture No. 30	LB	615.000	615.000
0182	630.0200	Seeding Temporary	LB	440.000	440.000
0184	630.0500	Seed Water	MGAL	310.000	310.000
0186	633.5200	Markers Culvert End	EACH	2.000	2.000
0188	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	12.000	12.000
0190	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	19.000	19.000
0192	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	13.000	13.000
0194	637.2210	Signs Type II Reflective H	SF	597.750	597.750
0196	637.2215	Signs Type II Reflective H Folding	SF	125.040	125.040
0198	638.2602	Removing Signs Type II	EACH	46.000	46.000
0200	638.3000	Removing Small Sign Supports	EACH	54.000	54.000

Estimate Of Quantities

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Line	Item	Item Description	Unit	Total	Qty
0202	643.0300	Traffic Control Drums	DAY	11,318.000	11,318.000
0204	643.0420	Traffic Control Barricades Type III	DAY	1,853.000	1,853.000
0206	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	21.000	21.000
0208	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	21.000	21.000
0210	643.0705	Traffic Control Warning Lights Type A	DAY	3,830.000	3,830.000
0212	643.0715	Traffic Control Warning Lights Type C	DAY	460.000	460.000
0214	643.0800	Traffic Control Arrow Boards	DAY	59.000	59.000
0216	643.0900	Traffic Control Signs	DAY	23,401.000	23,401.000
0218	643.0910	Traffic Control Covering Signs Type I	EACH	4.000	4.000
0220	643.0920	Traffic Control Covering Signs Type II	EACH	22.000	22.000
0222	643.1000	Traffic Control Signs Fixed Message	SF	822.000	822.000
0224	643.1050	Traffic Control Signs PCMS	DAY	307.000	307.000
0226	643.1070	Traffic Control Cones 42-Inch	DAY	1,781.000	1,781.000
0228	643.1205.S	Basic Traffic Queue Warning System	DAY	8.000	8.000
0230	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	1,350.000	1,350.000
0232	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	1,640.000	1,640.000
0234	643.5000	Traffic Control	EACH	1.000	1.000
0236	644.1440	Temporary Pedestrian Surface Matting	SF	238.000	238.000
0238	644.1601	Temporary Pedestrian Curb Ramp	DAY	66.000	66.000
0240	644.1605	Temporary Pedestrian Detectable Warning Field	SF	40.000	40.000
0242	644.1810	Temporary Pedestrian Barricade	LF	471.000	471.000
0244	645.0111	Geotextile Type DF Schedule A	SY	436.000	436.000
0246	645.0120	Geotextile Type HR	SY	45.000	45.000
0248	646.1020	Marking Line Epoxy 4-Inch	LF	186.000	186.000
0250	646.2020	Marking Line Epoxy 6-Inch	LF	4,297.000	4,297.000
0252	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	1,584.000	1,584.000
0254	646.3020	Marking Line Epoxy 8-Inch	LF	115.000	115.000
0256	646.4020	Marking Line Epoxy 10-Inch	LF	2,059.000	2,059.000
0258	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	614.000	614.000
0260	646.5020	Marking Arrow Epoxy	EACH	20.000	20.000
0262	646.5120	Marking Word Epoxy	EACH	8.000	8.000
0264	646.6020	Marking Stop Line Epoxy 12-Inch	LF	213.000	213.000
0266	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	874.000	874.000
0268	646.8120	Marking Curb Epoxy	LF	396.000	396.000
0270	646.8220	Marking Island Nose Epoxy	EACH	6.000	6.000
0272	646.9010	Marking Removal Line Water Blasting 4-Inch	LF	134.000	134.000
0274	646.9110	Marking Removal Line Water Blasting 8-Inch	LF	65.000	65.000
0276	646.9310	Marking Removal Special Marking Water Blasting	EACH	3.000	3.000
0278	652.0210	Conduit Rigid Nonmetallic Schedule 40 1-Inch	LF	265.000	265.000
0280	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	4,903.000	4,903.000
0282	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	3,682.000	3,682.000
0284	652.0335	Conduit Rigid Nonmetallic Schedule 80 3-Inch	LF	1,015.000	1,015.000
0286	652.0605	Conduit Special 2-Inch	LF	355.000	355.000
0288	652.0700.S	Install Conduit into Existing Item	EACH	2.000	2.000
0290	652.0800	Conduit Loop Detector	LF	801.000	801.000
0292	653.0154	Pull Boxes Non-Conductive 24x36-Inch	EACH	12.000	12.000
0294	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	55.000	55.000
0296	653.0905	Removing Pull Boxes	EACH	31.000	31.000
0298	654.0101	Concrete Bases Type 1	EACH	8.000	8.000
0300	654.0105	Concrete Bases Type 5	EACH	17.000	17.000

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Line	Item	Item Description	Unit	Total	Qty
0302	654.0110	Concrete Bases Type 10	EACH	4.000	4.000
0304	654.0113	Concrete Bases Type 13	EACH	1.000	1.000
0306	654.0120	Concrete Bases Type 10-Special	EACH	1.000	1.000
0308	654.0230	Concrete Control Cabinet Bases Type L30	EACH	2.000	2.000
0310	655.0230	Cable Traffic Signal 5-14 AWG	LF	5,809.000	5,809.000
0312	655.0240	Cable Traffic Signal 7-14 AWG	LF	234.000	234.000
0314	655.0260	Cable Traffic Signal 12-14 AWG	LF	1,027.000	1,027.000
0316	655.0305	Cable Type UF 2-12 AWG Grounded	LF	1,458.000	1,458.000
0318	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	2,179.000	2,179.000
0320	655.0610	Electrical Wire Lighting 12 AWG	LF	9,644.000	9,644.000
0322	655.0615	Electrical Wire Lighting 10 AWG	LF	18,494.000	18,494.000
0324	655.0635	Electrical Wire Lighting 2 AWG	LF	624.000	624.000
0326	655.0700	Loop Detector Lead In Cable	LF	1,937.000	1,937.000
0328	655.0800	Loop Detector Wire	LF	2,853.000	2,853.000
0330	656.0201	Electrical Service Meter Breaker Pedestal (location) 0001. CB1100	EACH	1.000	1.000
0332	656.0401	Electrical Service Main Lugs Only Meter Pedestal (location) 0001. CB1000	EACH	1.000	1.000
0334	657.0100	Pedestal Bases	EACH	8.000	8.000
0336	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	17.000	17.000
0338	657.0322	Poles Type 5-Aluminum	EACH	16.000	16.000
0340	657.0350	Poles Type 10	EACH	4.000	4.000
0342	657.0352	Poles Type 10-Special	EACH	1.000	1.000
0344	657.0360	Poles Type 13	EACH	1.000	1.000
0346	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	6.000	6.000
0348	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	2.000	2.000
0350	657.0530	Monotube Arms 30-FT	EACH	4.000	4.000
0352	657.0541	Monotube Arms 40-FT-Special	EACH	1.000	1.000
0354	657.0550	Monotube Arms 50-FT	EACH	1.000	1.000
0356	657.0710	Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT	EACH	20.000	20.000
0358	657.0812	Luminaire Arms Steel 12-FT	EACH	6.000	6.000
0360	658.0173	Traffic Signal Face 3S 12-Inch	EACH	20.000	20.000
0362	658.0174	Traffic Signal Face 4S 12-Inch	EACH	4.000	4.000
0364	658.0416	Pedestrian Signal Face 16-Inch	EACH	8.000	8.000
0366	658.0500	Pedestrian Push Buttons	EACH	8.000	8.000
0368	658.5070	Signal Mounting Hardware (location) 0201. IH 41 NB & CTH N (S44-2019)	EACH	1.000	1.000
0370	658.5070	Signal Mounting Hardware (location) 0202. IH 41 SB & CTH N (S44-0579)	EACH	1.000	1.000
0372	659.1120	Luminaires Utility LED B	EACH	26.000	26.000
0374	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0376	659.2230	Lighting Control Cabinets 240/480 30-Inch	EACH	1.000	1.000
0378	659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH	70.000	70.000
0380	670.0101	Field System Integrator	EACH	1.000	1.000
0382	670.0201	ITS Documentation	EACH	1.000	1.000
0384	671.0132	Conduit HDPE 3-Duct 2-Inch	LF	962.000	962.000
0386	671.0300	Fiber Optic Cable Marker	EACH	4.000	4.000
0388	673.0105	Communication Vault Type 1	EACH	2.000	2.000
0390	673.0110	Communication Vault Type Round	EACH	2.000	2.000
0392	673.0200	Tracer Wire Marker Posts	EACH	3.000	3.000
0394	678.0012	Install Fiber Optic Cable Outdoor Plant 12-CT	LF	1,513.000	1,513.000
0396	678.0024	Install Fiber Optic Cable Outdoor Plant 24-CT	LF	2,078.000	2,078.000
0398	678.0200	Fiber Optic Splice Enclosure	EACH	2.000	2.000
0400	678.0300	Fiber Optic Splice	EACH	50.000	50.000

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Line	Item	Item Description	Unit	Total	Qty
0402	678.0400	Fiber Optic Termination	EACH	4.000	4.000
0404	678.0501	Communication System Testing	EACH	1.000	1.000
0406	690.0150	Sawing Asphalt	LF	241.000	241.000
0408	690.0250	Sawing Concrete	LF	633.000	633.000
0410	715.0502	Incentive Strength Concrete Structures	DOL	978.000	978.000
0412	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	4,900.800	4,900.800
0414	SPV.0060	Special 0001. Construction Staking Survey Project 1130-66-76	EACH	1.000	1.000
0416	SPV.0060	Special 0201. Remove Traffic Signal IH 41 NB & CTH N (S44-2019)	EACH	1.000	1.000
0418	SPV.0060	Special 0202. Remove Traffic Signal IH 41 SB & CTH N (S44-0579)	EACH	1.000	1.000
0420	SPV.0060	Special 0203. Temporary Traffic Signals IH 41 NB & CTH N (S44-2019)	EACH	1.000	1.000
0422	SPV.0060	Special 0204. Temporary Traffic Signals IH 41 SB & CTH N (S44-0579)	EACH	1.000	1.000
0424	SPV.0060	Special 0301. Salvage Microwave Detector Equipment	EACH	1.000	1.000
0426	SPV.0060	Special 0302. Remove and Reinstall Ramp Gate System	EACH	1.000	1.000
0428	SPV.0060	Special 0401. Temporary Support B-44-0179	EACH	1.000	1.000
0430	SPV.0075	Special 0100. Street Sweeping	HRS	34.000	34.000
0432	SPV.0180	Special 0401. Methacrylate Flood Seal	SY	2,459.000	2,459.000

REMOVAL ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	204.0100* REMOVING CONCRETE PAVEMENT SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	204.0150* REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	204.0165 REMOVING GUARDRAIL LF	204.0170 REMOVING FENCE LF	204.0180 REMOVING DELINEATORS AND MARKERS EACH	204.9090.S.0001 REMOVING PEDESTRIAN RAILING LF
1000													
	CTH N	56+10.55	-	63+04.65	CTH N	6,100	150	--	250	--	--	--	545
	CTH N	65+23.75	-	73+10.18	CTH N	3,000	120	183	280	--	--	--	1,270
	RAMP NA	1016+40.97	-	1022+50	NA	1,700	--	--	--	354	550	2	--
	RAMP NB	1012+50	-	1016+14.52	NB	1,700	--	--	--	--	250	3	--
	RAMP NC	1010+60	-	1016+34.47	NC	1,700	--	--	--	--	610	2	--
	RAMP ND	1016+59.39	-	1022+25	ND	1,600	--	--	--	--	745	2	--
	RAMP NA TIE IN	1022+50	-	1024+84	NA	400	--	--	--	--	--	--	--
	RAMP NB TIE IN	1012+00	-	1012+50	NB	500	--	--	--	--	--	--	--
	RAMP NC TIE IN	1009+00	-	1010+60	NC	300	--	--	--	--	--	1	--
	RAMP ND TIE IN	1022+25	-	1023+85	ND	400	--	--	--	--	--	--	--
	PROJECT TOTAL					17,400	270	183	530	354	2,155	10	1,815

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

GRUBBING ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	201.0205 GRUBBING STA
1000						
	RAMP NA	1018+00	-	1022+00	NA	4
	RAMP ND	1021+00	-	1022+00	ND	1
	PROJECT TOTAL					5

REMOVING DRAINAGE ITEMS

CATEGORY	LOCATION	STATION	OFFSET	ALIGNMENT	204.0220 REMOVING INLETS EACH	204.0245 REMOVING STORM SEWER 12-INCH LF
1000						
	CTH N	57+68	LT	CTH N	1	22
	CTH N	59+41	LT	CTH N	1	17
	CTH N	66+31	LT	CTH N	1	20
	CTH N	67+39	LT	CTH N	2	32
	PROJECT TOTAL				5	91

REMOVING SMALL PIPE CULVERTS

CATEGORY	STAGE	LOCATION	STATION	ALIGNMENT	203.0100 REMOVING SMALL PIPE CULVERTS EACH	COMMENTS
1000	1					
		RAMP ND	1020+03	ND	1	30" PLASTIC PIPE
		PROJECT TOTAL			1	

REMOVING PAVEMENT MARKING ITEMS

CATEGORY	LOCATION	STATION	646.9010 MARKING REMOVAL LINE WATER BLASTING 4-INCH LF	646.9110 MARKING REMOVAL LINE WATER BLASTING 8-INCH LF	646.9310 REMOVAL SPECIAL MARKING WATER BLASTING EACH
1000					
	CTH N	57+04.22	134	65	3
	PROJECT TOTAL		134	65	3

3

DIVISION	FROM/TO STATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3) (10)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	EXPANDED EBS BACKFILL (6) FACTOR 1.33	UNEXPANDED FILL	EXPANDED FILL (7) FACTOR 1.33	MASS ORDINATE +/- (8)	WASTE (9)
DIVISION 1										
CTH N	56+30.863/70+14.29	7,173	404	939	6,234	537	931	1,238	4,996	4,996
CTH N RAMP NA	1017+25.962/1024+75	2,122	0	643	1,479	0	478	636	843	843
CTH N RAMP NB	1009+00/1015+71.249	2,767	0	574	2,193	0	349	464	1,729	1,729
CTH N RAMP NC	1009+00/1015+57.539	2,992	0	565	2,427	0	180	239	2,188	2,188
CTH N RAMP ND	1017+22.659/1024+49.995	3,733	0	625	3,108	0	247	329	2,779	2,779
DIVISION 1 SUBTOTAL		18,787	404	3,346	15,441	537	2,185	2,906	12,535	12,535
GRAND TOTAL		18,787	404	3,346	15,441	537	2,185	2,906	12,535	12,535
	TOTAL COMMON EXC	19,191								

NOTES:

(1) COMMON EXCAVATION 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) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(6) EXPANDED EBS BACKFILL - THIS IS TO BE FILLED WITH SELECT CRUSHED MATERIAL. EBS BACKFILL FACTOR = 1.25

(7) EXPANDED FILL FACTOR = 1.25 *(UNEXPANDED FILL)

(8) 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) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

(10) EBS AND BACKFILL ARE AN ESTIMATED QUANTITY OF 10% OF THE TOTAL PAVEMENT AREA AT 12 INCH DEPTH ON CTH N. TO BE FILLED WITH SELECT CRUSHED MATERIAL

PREPARE FOUNDATION FOR BASE AGGREGATE

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	211.0500 STA
1000						
	CTH N	56+10.55	-	63+04.65	CTH N	14
	CTH N	65+23.75	-	70+34.30	CTH N	9
	PROJECT TOTAL					23

CONCRETE PAVEMENT APPROACH SLAB

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	415.0410 SY
1000						
	CTH N	62+89.29	-	63+04.65	CTH N	133
	CTH N	65+23.75	-	65+39.54	CTH N	133
	PROJECT TOTAL					266

UNDERDRAIN ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	310.0110 BASE AGGREGATE OPEN-GRADED TON	612.0106 PIPE UNDERDRAIN 6-INCH LF	645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY
1000	CTH N	56+10.55	-	63+04.65	43	580	258
	CTH N	65+23.75	-	70+34.30	30	400	178
	PROJECT TOTAL				73	980	436

DRILLED BAR ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
1000							
	CTH N	56+10.55	-	57+52	CTH N	64	110
	PROJECT TOTAL					64	110

CONCRETE SURFACE DRAINS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	602.3010 CONCRETE SURFACE DRAINS CY
1000						
	RAMP NA	1016+40.97	-	1022+50	NA	4
	RAMP NB	1012+50	-	1016+14.52	NB	4
	RAMP NC	1010+60	-	1016+34.47	NC	4
	RAMP ND	1016+59.39	-	1022+25	ND	4
	PROJECT TOTAL					16

BASE AGGREGATE ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	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
1000								
	CTH N	56+10.55	-	63+04.65	CTH N	--	2,800	1,200
	CTH N	65+23.75	-	70+34.30	CTH N	--	1,900	800
	RAMP NA	1016+40.97	-	1022+00	NA	70	900	2,600
	RAMP NB	1012+50	-	1016+14.52	NB	60	1,100	2,700
	RAMP NC	1010+60	-	1016+34.47	NC	50	700	2,500
	RAMP ND	1016+59.39	-	1022+25	ND	70	1,200	2,900
	RAMP NA TIE IN	1022+00	-	1024+75	NA	70	600	900
	RAMP NB TIE IN	1009+00	-	1011+50	NB	160	1,000	1,400
	RAMP NC TIE IN	1009+00	-	1011+90	NC	80	700	900
	RAMP ND TIE IN	1022+25	-	1024+50	ND	60	500	800
	SUBTOTAL					620	11,400	16,700
	CATEGORY TOTAL					620	11,400	16,700
1600								
	UNDISTRIBUTED					--	1	--
	CATEGORY TOTAL					--	1	--
1610								
	UNDISTRIBUTED					--	1	--
	CATEGORY TOTAL					--	1	--
	PROJECT TOTAL					620	11,402	16,700

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE PAVEMENT ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	415.0090 CONCRETE PAVEMENT 9-INCH SY	415.0100 CONCRETE PAVEMENT 10-INCH SY SY	415.1100 CONCRETE PAVEMENT HES 10-INCH SY	620.0100 CONCRETE CORRUGATED MEDIAN SF
1000									
	CTH N	56+10.55	-	63+04.65	CTH N	--	5,090	822	246
	CTH N	65+23.75	-	70+34.30	CTH N	--	3,519	--	--
	RAMP NA	1016+40.97	-	1022+50	NA	1,508	--	--	--
	RAMP NB	1012+50	-	1016+14.52	NB	2,052	--	--	--
	RAMP NC	1010+60	-	1016+34.47	NC	1,382	--	--	--
	RAMP ND	1016+59.39	-	1022+25	ND	1,963	--	--	--
	PROJECT TOTAL					6,905	8,609	822	246

ASPHALTIC ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0105 ASPHALTIC SURFACE TON
1000									
	CTH N	56+10.55	-	63+04.65	CTH N	10	--	17	--
	CTH N	65+23.75	-	70+34.30	CTH N	9	--	14	--
	RAMP NA	1016+40.97	-	1022+50	NA	47	131	--	2
	RAMP NB	1012+50	-	1016+14.52	NB	43	119	--	6
	RAMP NC	1010+60	-	1016+34.47	NC	41	116	--	3
	RAMP ND	1016+59.39	-	1022+25	ND	47	131	--	6
	RAMP NA TIE IN	1022+50	-	1024+75	NA	73	--	--	145
	RAMP NB TIE IN	1012+00	-	1012+50	NB	70	--	--	140
	RAMP NC TIE IN	1009+00	-	1010+60	NC	67	--	--	135
	RAMP ND TIE IN	1022+25	-	1023+85	ND	52	--	--	105
	PROJECT TOTAL					459	497	31	541

CURB RAMP DETECTABLE WARNING FIELDS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF
1000							
	CTH N	56+10.55	-	63+04.65	CTH N	113	45
	CTH N	65+23.75	-	70+34.30	CTH N	81	--
	PROJECT TOTAL					194	45

CONCRETE MEDIAN NOSE

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	620.0300 CONCRETE MEDIAN SLOPED NOSE TYPE 1 SF	620.0300 CONCRETE MEDIAN SLOPED NOSE TYPE 2 SF
1000							
	CTH N	56+10.55	-	63+04.65	CTH N	180	5
	CTH N	65+23.75	-	70+34.30	CTH N	80	5
	PROJECT TOTAL					270	

TEMPORARY PAVEMENT

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	204.0100* REMOVING CONCRETE PAVEMENT SY	204.0150* REMOVING CURB & GUTTER LF	305.0120* BASE AGGREGATE DENSE 1 1/4-INCH TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	690.0250* SAWING CONCRETE LF
1000										
	CTH N	56+10.55	-	63+04.65	CTH N	27	105	52	14	134
	CTH N	65+23.75	-	70+34.30	CTH N	43	43	25	7	--
	PROJECT TOTAL					70	148	77	21	134

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE SIDEWALK

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	602.0405 CONCRETE SIDEWALK 4-INCH SF
1000						
	CTH N	56+10.55	-	63+04.65	CTH N	6,766
	CTH N	65+23.75	-	70+34.30	CTH N	7,200
	PROJECT TOTAL					13,966

CONCRETE CURB & GUTTER

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	601.0405 CONCRETE CURB & GUTTER 18-INCH TYPE A LF	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF
1000							
	CTH N	56+10.55	-	63+04.65	CTH N	1,091	766
	CTH N	65+23.75	-	70+34.30	CTH N	762	482
	RAMP NA	1016+40.97	-	1022+50	NA	65	284
	RAMP NB	1012+50	-	1016+14.52	NB	110	238
	RAMP NC	1010+60	-	1016+34.47	NC	101	222
	RAMP ND	1016+59.39	-	1022+25	ND	127	235
	PROJECT TOTAL					2,256	2,227

DRIVEWAYS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	305.0120* BASE AGGREGATE DENSE 1 1/4-INCH TON	602.0815 CONCRETE DRIVEWAY 7-INCH SY	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
1000								
	CTH N	56+10.55	-	63+04.65	CTH N	74	222	10
	PROJECT TOTAL					74	222	10

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

STORM SEWER STRUCTURES

CATEGORY	LOCATION	STATION	OFFSET	ALIGNMENT	STRUCTURE NUMBER	RIM ELEVATIO	BOTTOM OF STRUCTURE ELEVATION	DEPTH	FROM STRUCTURE	TO STRUCTURE	INLET ELEVATIO N	DISCHARGE ELEVATION	SLOPE	520.8000 CONCRETE COLLARS FOR PIPE EACH	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	611.2003 MANHOLES 3-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0624 INLET COVERS TYPE H EACH
1000																			
	CTH N	57+68.00	8.50' LT	CTH N	9201	728.69	722.76	5.80	--	--	--	--	--	--	--	--	1	--	1
	CTH N	59+41.73	12.00' LT	CTH N	9216	732.84	726.25	5.76	--	--	--	--	--	--	--	--	1	--	1
	CTH N	66+37.26	37.65' LT	CTH N	9244	742.90	736.92	4.54	--	--	--	--	--	--	--	1	--	1	--
	CTH N	66+30.65	19.81' LT	CTH N	9246	742.98	737.36	4.39	--	--	--	--	--	--	--	--	1	--	1
	CTH N	66+24.15	19.77' LT	CTH N	9246A	743.06	737.55	4.43	--	--	--	--	--	--	--	--	1	--	1
	CTH N	67+63.37	35.32' LT	CTH N	9249	740.77	736.00	3.57	--	--	--	--	--	--	--	1	--	1	--
	CTH N	67+53.49	17.23' LT	CTH N	9251	740.85	736.42	3.56	--	--	--	--	--	--	--	--	1	--	1
	CTH N	67+36.90	6.96' LT	CTH N	9253	741.20	736.75	3.45	--	--	--	--	--	--	--	--	1	--	1
	CTH N	--	--	CTH N	--	--	--	--	9202	--	723.26	723.43	-2.16%	1	8	--	--	--	--
	CTH N	--	--	CTH N	--	--	--	--	9216	--	726.25	726.20	0.43%	1	11	--	--	--	--
	CTH N	--	--	CTH N	--	--	--	--	--	9244	737.26	737.11	-1.98%	1	8	--	--	--	--
	CTH N	--	--	CTH N	--	--	--	--	9244	9246	737.53	737.40	-0.68%	--	19	--	--	--	--
	CTH N	--	--	CTH N	--	--	--	--	9246A	9246	737.55	737.53	0.30%	--	6	--	--	--	--
	CTH N	--	--	CTH N	--	--	--	--	9246	9247	737.53	737.60	-1.03%	--	7	--	--	--	--
	CTH N	--	--	CTH N	--	--	--	--	--	9249	736.00	735.82	-2.25%	1	8	--	--	--	--
	CTH N	--	--	CTH N	--	--	--	--	9249	9251	736.42	736.01	-1.95%	--	21	--	--	--	--
	CTH N	--	--	CTH N	--	--	--	--	9251	--	736.80	736.42	-1.98%	1	20	--	--	--	--
	PROJECT TOTAL													5	108	2	6	2	6

CULVERT PIPE

CATEGORY	LOCATION	STATION	OFFSET	TO	STATION	OFFSET	ALIGNMENT	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE	522.1042 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 42-INCH EACH	522.0142 CULVERT PIPE REINFORCED CONCRETE CLASS III 42-INCH LF	633.5200 MARKERS CULVERT END EACH
1000													
	RAMP ND	1020+05	70' RT	102001	1020+01	70' LT	RAMP ND	714.14	713.43	0.51%	2.0	140	2
	PROJECT TOTAL										2.0	140	2

NOTE
1) STATION OFFSETS SHOWN ARE TO THE CENTER OF INLET STRUCTURES OR END OF PIPE AT APRON ENDWALLS (NOT INCLUDING LENGTH OF ENDWALL).

RIPRAP ITEMS

CATEGORY	LOCATION	STATION	OFFSET	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
1000					
	RAMP ND	1020+03	LT	6	18
	RAMP ND	1020+03	RT	9	27
	PROJECT TOTAL			15	45

ADJUSTING MANHOLE & INLET COVERS

CATEGORY	LOCATION	STATION	TO	STATION	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH
1000						
	CTH N	56+10.55	-	63+04.65	1	13
	CTH N	65+23.75	-	70+34.30	--	6
	PROJECT TOTAL				1	19

3

TRACKING PADS

CATEGORY	LOCATION	628.7560 EACH
1000	UNDISTRIBUTED	8
	PROJECT TOTAL	8

STREET SWEEPING

CATEGORY	LOCATION	SPV.0075.0100 HR
1000	CTH N	34
	PROJECT TOTAL	34

INLET PROTECTION

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH
1000							
	CTH N	56+10.55	-	63+04.65	CTH N	17	23
	CTH N	65+23.75	-	70+34.30	CTH N	13	17
	PROJECT TOTAL					30	40

3

EROSION CONTROL ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2002 EROSION MAT CLASS I TYPE A SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH
1000												
	CTH N	56+10.55	-	63+04.65	CTH N	110	110	--	900	--	14	--
	CTH N	65+23.75	-	70+34.30	CTH N	390	390	1,550	630	36	8	--
	RAMP NA	1016+40.97	-	1022+50	NA	1,670	1,670	3,530	--	108	--	--
	RAMP NB	1012+50	-	1016+14.52	NB	800	800	1,870	--	90	8	20
	RAMP NC	1010+60	-	1016+34.47	NC	1,480	1,480	2,450	--	90	7	--
	RAMP ND	1016+59.39	-	1022+25	ND	1,440	1,440	2,730	--	126	15	--
	UNDISTRIBUTED					1,180	1,180	2,480	310	--	--	--
	PROJECT TOTAL					5,890	5,890	12,130	1,530	450	52	20

EROSION CONTROL MOBILIZATION

CATEGORY	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
1000	UNDISTRIBUTED	3	3
	PROJECT TOTAL	3	3

RESTORATION ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	625.0100 TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
1000										
	CTH N	56+10.55	-	63+04.65	CTH N	900	0.6	41	20	20
	CTH N	65+23.75	-	70+34.30	CTH N	2,200	1.4	98	60	50
	RAMP NA	1016+40.97	-	1022+50	NA	3,500	2.2	159	100	80
	RAMP NB	1012+50	-	1016+14.52	NB	1,900	1.2	84	50	40
	RAMP NC	1010+60	-	1016+34.47	NC	2,500	1.5	110	70	60
	RAMP ND	1016+59.39	-	1022+25	ND	2,700	1.7	123	70	60
	UNDISTRIBUTED					2,500	1.7	123	70	60
	PROJECT TOTAL					13,700	10.3	615	440	310

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.	637.2215 SIGNS TYPE II REF. TYPE H FOLDING S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1	CTH N, S. OF IH 41	J1-1	24" X 39"	6.50	---	1	---	---	1	1	SEE PLAN SHEET
2	"	D1-72	84" X 48"	28.00	---	---	---	2	1	4	SEE SIGN DETAILS
3	"	R4-7	24" X 30"	5.00	---	1	---	---	1	1	
4	"	R4-7	24" X 30"	5.00	---	1	---	---	1	1	
5	"	D1-3	---	---	---	---	---	---	1	2	SEE SIGN DETAILS
6	"	J13-1	---	---	---	---	---	---	1	1	INCLUDES SIGNS 8,9 REMOVAL
7	"	D1-71	72" X 60"	30.00	---	---	---	3	---	---	SEE SIGN DETAILS
8	"	R11-54F	48" X 30"	---	10.00	---	---	---	---	---	MOUNT BELOW SIGN 7
9	"	R5-1A	36" X 24"	6.00	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 7
10	"	R1-1F	36" X 36"	---	7.46	---	---	---	1	---	MOUNT TO SIGNAL, INCLUDES SIGN 11 REMOVAL
11	"	R5-1	30" X 30"	6.25	---	---	---	---	---	---	MOUNT TO SIGNAL, BACK OF SIGN 10
12	"	R1-2	36" X 31"	---	3.88	---	1	---	1	1	
13	"	R5-1A	36" X 24"	6.00	---	1	---	---	1	1	INCLUDES SIGN 14 REMOVAL
14	"	M1-5A	24" X 24"	4.00	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 13
15	"	R3-2	36" X 36"	9.00	---	---	1	---	1	1	INCLUDES SIGNS 16, 17 REMOVAL
16	"	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	MOUNT BELOW SIGN 15
17	"	J3-1	24" X 57"	9.50	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 15
18A	IH 41 NB ON RAMP FROM CTH N	R5-57	36" X 36"	9.00	---	1	---	---	1	1	
18	IH 41 NB OFF RAMP TO CTH N	R5-1	30" X 30"	6.25	---	---	---	---	1	---	MOUNT TO SIGNAL
19	"	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	MOUNT TO BACK OF SIGN 18
20	"	R1-2	36" X 31"	---	3.88	---	1	---	1	1	
21	"	R1-1F	36" X 36"	---	7.46	---	1	---	---	---	
22	"	D4-2L	---	---	---	---	---	---	1	1	
23	"	D4-2L	36" X 48"	12.00	---	---	1	---	---	---	
24	"	R5-1	30" X 30"	6.25	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 21
25	"	R5-1A	42" X 30"	8.75	---	---	---	---	1	1	MOUNT TO OVERHEAD SIGN STRUCTURE
25A	"	R5-1A	42" X 30"	8.75	---	---	---	---	1	1	MOUNT TO OVERHEAD SIGN STRUCTURE
26	"	R3-5L	42" X 48"	14.00	---	---	---	---	---	---	MOUNT OVER LEFT LANE
27	"	R3-6L	42" X 48"	14.00	---	---	---	---	---	---	MOUNT OVER CENTER LANE
28	"	R3-5R	42" X 48"	14.00	---	---	---	---	---	---	MOUNT OVER RIGHT LANE
29A	"	J13-1	---	---	---	---	---	---	1	1	
29	"	J13-1	24" X 45"	7.50	---	---	---	---	---	---	MOUNT TO OVERHEAD SIGN STRUCTURE
30	"	J13-1	24" X 45"	7.50	---	---	---	---	---	---	MOUNT TO OVERHEAD SIGN STRUCTURE
30A	CTH N, S. OF IH 41	R6-2L	24" 30"	5.00	---	---	---	---	1	---	MOUNT TO SIGNAL
30B	"	D1-72	72" X 30"	15.00	---	---	2	---	1	4	SEE SIGN DETAILS
30C	"	R4-7	24" X 30"	5.00	---	---	1	---	1	1	INCLUDES SIGN 30D REMOVAL
30D	"	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	MOUNT TO BACK OF SIGN 30C
31A	"	R5-1	30" X 30"	6.25	---	---	---	---	1	---	MOUNT TO SIGNAL,INCLUDES SIGNS 31,32 REMOVAL
31	"	R3-1	36" X 36"	9.00	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 31A
32	"	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	MOUNT BELOW SIGN 31
33	"	J2-2	---	---	---	---	---	---	1	1	
34	"	R3-7L	30" X 30"	6.25	---	---	1	---	---	---	
35	"	R3-7L	30" X 30"	6.25	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 34
	PAGE SUBTOTALS			276.00	62.52	5	9	5	22	25	

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.	637.2215 SIGNS TYPE II REF. TYPE H FOLDING S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
36	CTH N, N. OF IH 41	R3-7L	30" X 30"	6.25	---	---	1	---	---	---	
37	"	R3-7L	30" X 30"	6.25	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 36
38	"	J2-2	---	---	---	---	---	---	1	1	
39	"	R5-1A	36" X 24"	6.00	---	1	---	---	1	1	
40	CTH N, S. OF IH 41	R5-1A	36" X 24"	6.00	---	1	---	---	1	1	
41	CTH N, N. OF IH 41	R1-1F	36" X 36"	---	7.46	1	---	---	1	1	INCLUDES SIGN 42 REMOVAL
42	"	R4-7	24" X 30"	5.00	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 41
43	"	D1-72	72" X 30"	15.00	---	---	2	---	1	4	SEE SIGN DETAILS
44	"	R6-2L	24" X 30"	5.00	---	---	---	---	1	---	MOUNT TO SIGNAL
45	"	R3-1	36" X 36"	9.00	---	---	1	---	1	1	INCLUDES SIGN 46,47 REMOVAL
46	"	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	MOUNT BELOW SIGN 45
47	"	R5-1	30" X 30"	6.25	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 45
48	"	R5-1	30" X 30"	6.25	---	1	---	---	1	1	
49	"	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	MOUNT TO BACK OF SIGN 48
50	"	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	MOUNT TO SIGNAL
51	"	R5-1	30" X 30"	6.25	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 50
52	IH 41 SB OFF RAMP TO CTH N	R1-2	36" X 31"	---	3.88	---	1	---	1	1	
53	"	R5-1A	42" X 30"	8.75	---	---	---	---	1	1	MOUNT TO OVERHEAD SIGN STRUCTURE
54	"	R5-1A	42" X 30"	8.75	---	---	---	---	1	1	MOUNT TO OVERHEAD SIGN STRUCTURE
55	"	J13-1	---	---	---	---	---	---	1	1	
56	"	J13-1	24" X 45"	7.50	---	---	---	---	---	---	MOUNT TO OVERHEAD SIGN STRUCTURE
57	"	J13-1	24" X 45"	7.50	---	---	---	---	---	---	MOUNT TO OVERHEAD SIGN STRUCTURE
58	"	R3-5L	42" X 48"	14.00	---	---	---	---	---	---	MOUNT OVER LEFT LANE
59	"	R3-6L	42" X 48"	14.00	---	---	---	---	---	---	MOUNT OVER CENTER LANE
60	"	R3-5R	42" X 48"	14.00	---	---	---	---	---	---	MOUNT OVER RIGHT LANE
61	"	D4-2R	36" X 48"	12.00	---	---	1	---	1	1	
62	CTH N, N. OF IH 41	J13-1	24" X 57"	9.50	---	---	---	1	1	1	INCLUDES SINGS 63,64 REMOVAL
63	"	R3-2	36" X 36"	9.00	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 62
64	"	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	MOUNT BELOW SIGN 63
65	"	M1-5A	24" 24"	4.00	---	1	---	---	1	1	SEE PLAN SHEET
66	"	R5-1	30" X 30"	6.25	---	---	---	---	1	---	MOUNT TO SIGNAL, INCLUDES SIGN 67 REMOVAL
67	"	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	MOUNT TO BACK OF SIGN 66
68	"	R5-1A	---	---	---	---	---	---	1	1	
69	"	R5-1A	42" X 30"	8.75	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 70
70	"	D1-71	72" X 60"	30.00	---	---	---	3	---	---	SEE SIGN DETAILS
	PAGE SUBTOTALS			231.25	48.64	5	6	4	17	18	

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.	637.2215 SIGNS TYPE II REF. TYPE H FOLDING S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
71	CTH N, N. OF IH 41	R11-54F	48" X 30"	---	10.00	---	---	---	---	---	MOUNT BELOW SIGN 70
72	"	D1-2	---	---	---	---	---	---	1	2	
73	VACANT	---	---	---	---	---	---	---	---	---	
74	IH 41 SB ON RAMP FROM CTH N	R5-57	36" X 36"	9.00	---	1	---	---	1	1	
75	"	R1-2	36" X 31"	---	3.88	---	1	---	1	1	
76		D1-2	96" X 30"	20.00	---	---	2	---	---	---	SEE SIGN DETAILS
77		D1-72	120" X 60"	50.00	---	---	---	4	1	4	SEE SIGN DETAILS
78		R2-1	24" X 30"	5.00	---	1	---	---	1	1	35 MPH
79		J1-1	24" X 39"	6.50	---	---	1	---	---	---	SEE PLAN SHEET
80		J2-2	---	---	---	---	---	---	1	1	
81		J1-1	---	---	---	---	---	---	1	1	
	PAGE SUBTOTALS			90.50	13.88	2	4	4	7	11	
	PROJECT TOTALS			**597.75**	**125.04**	**12**	**19**	**13**	**46**	**54**	

3

TRAFFIC CONTROL (1130-66-76)

CATEGORY	LOCATION	643.5000 TRAFFIC CONTROL (1130-66-76) EACH
1000	PROJECT	1
	PROJECT TOTAL	1

TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS

CATEGORY	LOCATION	STATION OFFSET	TO STATION OFFSET	ALIGNMENT	644.1440 TEMPORARY PEDESTRIAN SURFACE MATTING SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1605 TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD SF	644.1810* TEMPORARY PEDESTRIAN BARRICADE LF
1000	CORNER CLOSURE							
	NW				68	26	10	194
	NE				63	26	10	177
	SUBTOTAL				131	52	20	371
	CORNER CLOSURE							
	SW				55	7	10	--
	SE				52	7	10	--
	PROJECT TOTAL				238	66	40	371

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

CTH N PEDESTRIAN DETOUR

CATEGORY	LOCATION	STAGE DURATION DAYS	643.0900* TRAFFIC CONTROL SIGNS NO.	643.0900* TRAFFIC CONTROL SIGNS DAY	644.1810* TEMPORARY PEDESTRIAN BARRICADE LF
1000					
	CTH N - WEST SIDEWALK CLOSURE	37	8	296	50
	CTH N - EAST SIDEWALK CLOSURE	37	8	296	50
	PROJECT TOTAL			592	100

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL SIGNS FIXED MESSAGE

CATEGORY	SIGN NUMBER	NUMBER REQUIRED	SIZE W X H FT X	643.1000 SF
1000				
	29	2	11.5'x8'	184.00
	30	2	11'x6.5'	143.00
	31	2	11.5'x8'	184.00
	32	2	11'x6.5'	143.00
	33	1	7.5'x4'	30.00
	34	2	4.5'x8'	72.00
	35	1	7.5'x4'	30.00
	36	2	6'x3'	36.00
	PROJECT TOTAL			822.00

TRAFFIC CONTROL ITEMS

CATEGORY	LOCATION	STAGE DURATION DAYS	643.0300* TRAFFIC CONTROL DRUMS NO.	643.0300* TRAFFIC CONTROL DRUMS DAY	643.0420* TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR EACH	643.0705* TRAFFIC CONTROL WARNING LIGHTS TYPE A NO.	643.0705* TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715* TRAFFIC CONTROL WARNING LIGHTS TYPE C NO.	643.0715* TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800* TRAFFIC CONTROL ARROW BOARDS NO.	643.0800* TRAFFIC CONTROL ARROW BOARDS DAY	643.0900* TRAFFIC CONTROL SIGNS NO.	643.0900* TRAFFIC CONTROL SIGNS DAY	643.0920* TRAFFIC CONTROL COVERING SIGNS TYPE II NUMBER OF CYCLES	643.0920* TRAFFIC CONTROL COVERING SIGNS TYPE II NUMBER OF SIGNS	643.0920* TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.1070 TRAFFIC CONTROL CONES 42-INCH NO.	643.1070 TRAFFIC CONTROL CONES 42-INCH DAY	643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH LF
1000																					
	CTH N - PHASE 1	53	14	742	--	13	13	--	--	--	--	--	--	9	477	--	--	--	27	1,431	800
	CTH N - PHASE 2	14	21	294	11	8	8	10	140	--	--	--	--	17	238	1	5	5	25	350	550
	CTH N - PHASE 3	21	5	70	1	--	--	2	42	6	126	1	21	4	84	--	--	--	--	--	--
	PROJECT TOTAL			1,106	11	21	21		182		126		21		799		5			1,781	1,350

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

TEMPORARY PAVEMENT MARKING ITEMS

CATEGORY	LOCATION	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH SOLID WHITE LF
1000		
	IH 41 RAMP CLOSURE	1,640
	PROJECT TOTAL	1,640

BASIC TRAFFIC QUEUE WARNING SYSTEM

CATEGORY	LOCATION	643.1205.S DAY
1000		
	IH 41	8
	PROJECT TOTAL	8

3

TRAFFIC CONTROL - MOASIS DR TEMPORARY WIDENING

CATEGORY	LOCATION	NUMBER OF DAYS	643.0300* TRAFFIC CONTROL DRUMS NO.	643.0300* TRAFFIC CONTROL DRUMS DAY	643.0420* TRAFFIC CONTROL BARRICADES TYPE III NO.	643.0420* TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0900* TRAFFIC CONTROL SIGNS NO.	643.0900* TRAFFIC CONTROL SIGNS DAY	643.0715* TRAFFIC CONTROL WARNING LIGHTS TYPE C NO.	643.0715* TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800* TRAFFIC CONTROL ARROW BOARDS NO.	643.0800* TRAFFIC CONTROL ARROW BOARDS DAY
1000												
		4	19	76	3	12	3	12	5	20	1	4
	PROJECT TOTAL			76		12		12		20		4

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL - PHASE 4 SIGNAL INSTALLATION

CATEGORY	LOCATION	NUMBER OF DAYS	643.0300* TRAFFIC CONTROL DRUMS NO.	643.0300* TRAFFIC CONTROL DRUMS DAY	643.0420* TRAFFIC CONTROL BARRICADES TYPE III NO.	643.0420* TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0900* TRAFFIC CONTROL SIGNS NO.	643.0900* TRAFFIC CONTROL SIGNS DAY	643.0715* TRAFFIC CONTROL WARNING LIGHTS TYPE C NO.	643.0715* TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800* TRAFFIC CONTROL ARROW BOARDS NO.	643.0800* TRAFFIC CONTROL ARROW BOARDS DAY
1000												
		2	19	38	3	6	3	6	5	10	1	2
	PROJECT TOTAL			38		6		6		10		2

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL ITEMS-DETOUR

CATEGORY	LOCATION	NUMBER OF DAYS	643.0300* TRAFFIC CONTROL DRUMS NO.	643.0300* TRAFFIC CONTROL DRUMS DAY	643.0420* TRAFFIC CONTROL BARRICADES TYPE III NO.	643.0420* TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO.	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715* TRAFFIC CONTROL WARNING LIGHTS TYPE C NO.	643.0715* TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800* TRAFFIC CONTROL ARROW BOARDS NO.	643.0800* TRAFFIC CONTROL ARROW BOARDS DAY	643.0900* TRAFFIC CONTROL SIGNS NO.	643.0900* TRAFFIC CONTROL SIGNS DAY	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I NUMBER OF CYCLES	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I NUMBER OF SIGNS	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	643.0920* TRAFFIC CONTROL COVERING SIGNS TYPE II NUMBER OF CYCLES	643.0920* TRAFFIC CONTROL COVERING SIGNS TYPE II NUMBER OF SIGNS	643.0920* TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS NO.	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY
1000																						
	CTH N ADVANCED WARNING	74	--	--	14	1,036	28	2,072	--	--	--	--	12	888	--	--	--	--	--	--	--	--
	CTH N DETOUR	74	--	--	--	--	--	--	--	--	--	--	265	19,610	1	2	2	1	17	17	2	148
	IH 41 FREEWAY CLOSURE	8	151	1,208	35	280	70	560	38	304	4	32	28	224	1	--	--	--	--	--	4	32
	IH 41 RAMP NA & NB CLOSURE	53	70	3,710	4	212	8	424	--	--	--	--	10	530	1	1	1	--	--	--	1	53
	IH 41 RAMP NC & ND CLOSURE	74	70	5,180	4	296	8	592	--	--	--	--	10	740	1	1	1	--	--	--	1	74
	PROJECT TOTAL			10,098		1,824		3,648		304		32		21,992		4			17			307

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LONG LINE PAVEMENT MARKING ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	646.1020 MARKING LINE EPOXY 4-INCH SOLID WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH SOLID YELLOW LF	646.2020* MARKING LINE EPOXY 6-INCH SOLID WHITE LF	646.2020* MARKING LINE EPOXY 6-INCH SOLID YELLOW LF	646.2020* MARKING LINE EPOXY 6-INCH 12.5' LINE 37.5' SKIP WHITE LF	646.2020* MARKING LINE EPOXY 6-INCH 3' LINE 9' SKIP LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH SOLID YELLOW LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH SOLID WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH SOLID WHITE LF	646.4020 MARKING LINE EPOXY 10-INCH SOLID WHITE LF	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH SOLID WHITE LF
1000																
	CTH N	56+10.55	-	63+04.65	CTH N	51	135	--	--	280	16	--	--	115	1,508	--
	CTH N	65+23.75	-	70+34.30	CTH N	--	--	--	--	234	34	--	--	--	551	--
	RAMP NA	1016+40.97	-	1022+50	NA	--	--	587	590	--	--	162	151	--	--	--
	RAMP NB	1012+50	-	1016+14.52	NB	--	--	287	320	--	--	205	223	--	--	450
	RAMP NC	1010+60	-	1016+34.47	NC	--	--	534	536	--	--	122	113	--	--	--
	RAMP ND	1016+59.39	-	1022+25	ND	--	--	420	459	--	--	298	310	--	--	164
	SUBTOTAL					51	135	1,828	1,905	514	50	787	797	115	2,059	614
	PROJECT TOTAL					186		3,733		564		1,584		115	2,059	614

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

MISCELLANEOUS PAVEMENT MARKING ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.6020 MARKING STOP LINE EPOXY 12-INCH LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH LF	646.8120 MARKING CURB EPOXY LF	646.8220 MARKING ISLAND NOSE EPOXY EACH
1000											
	CTH N	56+10.55	-	63+04.65	CTH N	8	3	91	440	311	4
	CTH N	65+23.75	-	70+34.30	CTH N	3	1	65	--	85	2
	RAMP NA	1016+40.97	-	1022+50	NA	--	--	--	106	--	--
	RAMP NB	1012+50	-	1016+14.52	NB	6	4	29	108	--	--
	RAMP NC	1010+60	-	1016+34.47	NC	--	--	--	110	--	--
	RAMP ND	1016+59.39	-	1022+25	ND	3	--	28	110	--	--
	PROJECT TOTAL					20	8	213	874	396	6

FENCING ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	616.0206 FENCE CHAIN LINK (6-FT) LF	616.0700.S FENCE SAFETY LF
1000							
	RAMP NA	1016+40.97	-	1022+10	NA	617	60
	RAMP NB	1011+50	-	1014+99	NB	252	70
	RAMP NC	1011+80	-	1016+34.47	NC	615	60
	RAMP ND	1016+59.39	-	1022+25	ND	757	80
	PROJECT TOTAL					2,241	270

MAINTENANCE AND REPAIR OF HAUL ROADS

CATEGORY	LOCATION	618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS 1130-66-76 EACH
1000	PROJECT	1
	PROJECT TOTAL	1

STAKING

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	SPV.0060.0001 CONSTRUCTION STAKING SURVEY PROJECT 1130-66-76 EACH
1000						
	1130-66-76	56+10.55	-	70+34.30	CTH N	1
	PROJECT TOTAL					1

GUARDRAIL ITEMS

CATEGORY	LOCATION	OFFSET	614.2300 MGS GUARDRAIL 3 LF	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
1000					
	RAMP NB	LT	100	1	1
	RAMP NB	RT	184	1	1
	RAMP ND	LT	101	1	1
	RAMP ND	RT	163	1	1
	PROJECT TOTAL		548	4	4

SAWING

CATEGORY	LOCATION	STATION	TO	STATION	ALIGNMENT	690.0150 SAWING ASPHALT LF	690.0250* SAWING CONCRETE LF
1000							
	CTH N	56+10.55	-	63+04.65	CTH N	186	375
	CTH N	65+23.75	-	70+34.30	CTH N	55	30
	RAMP NA	1016+40.97	-	1022+50	NA	--	23
	RAMP NB	1012+50	-	1016+14.52	NB	--	23
	RAMP NC	1010+60	-	1016+34.47	NC	--	25
	RAMP ND	1016+59.39	-	1022+25	ND	--	23
	PROJECT TOTAL					241	499

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

WATER

CATEGORY	LOCATION	624.0100 MGAL
1000	PROJECT-BASE COMPACTION	189
	PROJECT-COMMON EXCAVATION	74
	PROJECT TOTAL	263

FINISHING ROADWAY

CATEGORY	LOCATION	213.0100 FINISHING ROADWAY 1130-66-76 EACH
1000	PROJECT	1
	PROJECT TOTAL	1

MOBILIZATION

CATEGORY	LOCATION	619.1000 MOBILIZATION EACH
1000	PROJECT	1
	PROJECT TOTAL	1

TRAFFIC SIGNALS S-44-0579 PHASE 1

ALL ITEMS ARE CATEGORY 1300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

Removing Pull Box*	
	653.0905
LOCATION	EACH
IH 41 SB & CTH N PHASE 1 (S44-0579)	14
TOTAL	14

Removing Concrete Bases*	
	204.0195
LOCATION	EACH
IH 41 SB & CTH N PHASE 1 (S44-0579)	9
TOTAL	9

TRAFFIC SIGNALS				
		SPV.0060.0202		659.5000.S*
		Remove		Lamp, Ballast, LED
		Traffic		Switch disposal by
		Signal		Contractor
		IH 41 SB & CTH N PHASE 1 (S44-0579)		IH 41 SB & CTH N PHASE 1 (S44-0579)
LOCATION		EACH		EACH
IH 41 SB & CTH N PHASE 1 (S44-0579)		1		35
TOTALS		1		35

TRAFFIC SIGNALS S-44-0579 PHASE 3

ALL ITEMS ARE CATEGORY 1300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

Conduit Rigid Nonmetallic Schedule 40

Location			
IH 41 SB & CTH N PHASE 3 (S44-0579)		652.0225 *	652.0235 *
		2-Inch	3-Inch
FROM	TO	LF	LF
PB1	SB1	5	
PB1	PB2		55
PB1	PB2		55
PB2	PB3		50
PB2	PB3		50
PB3	SB2		15
PB3	PB4		50
PB3	PB4		50
PB4	SB3	10	
PB4	PB5		70
PB4	PB5		70
PB5	SB4		10
PB5	PB6		50
PB5	PB6		50
PB6	SB5		30
PB6	TB1	10	
PB6	PB7	270	
PB6	PB9		50
PB6	PB9		50
PB9	SB6	10	
PB9	PB10		55
PB9	PB10		55
PB10	SB7	10	
	TOTALS	315	815

Electrical Wire Traffic Signals 10 AWG

LOCATION		655.0515 *
IH 41 SB & CTH N PHASE 3 (S44-0579)		
		(Equipment Grounding Conductor)
		(Green)
		LF
FROM	TO	
CB1	SB1	73
SB1	SB2	186
SB2	SB3	121
SB3	SB4	136
SB4	SB5	136
SB5	TB1	79
SB5	SB6	136
SB6	SB7	121
SB7	CB1	68
	TOTAL	1,056

Concrete Bases

LOCATION		Station	Offset	654.0101 * Type 1 EACH	654.0110 * Type 10 EACH	654.0120 Type 10 Special EACH
IH 41 SB & CTH N PHASE 3 (S44-0579)						
	SB1	66+30	32' RT	1		
	SB2	66+70	64' RT			1
	SB3	66+75	64' RT	1		
	SB4	67+29	64' RT		1	
	SB5	67+64	9' LT		1	
	SB6	67+19	40' LT	1		
	SB7	66+78	40' LT	1		
TOTALS				4	2	1

Loop Detectors

LOCATION	LOOP NO.	# OF TURNS	652.0800 * Conduit LF	655.0700 * Lead In Cable LF	655.0800 * Wire LF
IH 41 SB & CTH N PHASE 3 (S44-0579)					
	11	2	92	108	192
	21	4		498	344
	22	3	92	418	284
	41	3	112	98	344
	42	2	112	43	232
		TOTALS	408	1,165	1,396

Pull Boxes

LOCATION	Non-Conductive 653.0164 * 24x42-Inch EACH
IH 41 SB & CTH N PHASE 3 (S44-0579)	9
TOTALS	9

TRAFFIC SIGNALS S-44-0579 PHASE 3

ALL ITEMS ARE CATEGORY 1300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

TRAFFIC SIGNAL CABLE

IH 41 SB & CTH N PHASE 3 (S44-0579)	655.0230*	655.0230* Base to Head	655.0240*	655.0240 * Base to Head	655.0260 *		655.0700* Lead-In Cable For Button
	5-14 AWG	5-14 AWG	7-14 AWG	7-14 AWG	12-14 AWG	HEAD NO.	
From CB1 to	LF	LF	LF	LF	LF		
SB1	73	29				9	
SB2	218	61				2	
		51				3	
SB3	278	29				10	
	278	29				15	5
SB4		29			268	4	
				29		5	
	268	56				11	
	268	29				16	5
TB1	193			31		6	
SB5		56			223	7	
		36				8	
SB6	138	29				12	
	138	29				13	5
SB7	68	26				14	5
Sub Total	1,920	489	0	60	491		20
TOTALS	2,409		60		491		20

Signal Indication		**Conductor Color**
Red	=	Red
Yellow	=	Orange
Green	=	Green
Red Arrow	=	Red w/Black Tracer
Yellow Arrow	=	Black w/White
Yellow Flashing Arrow	=	White w/Black
Green Arrow	=	Blue w/Black

PEDS

Walk	=	Green
Don't Walk	=	Red
Button	=	Black & Orange

TRAFFIC SIGNALS S-44-0579 PHASE 3

ALL ITEMS ARE CATEGORY 1300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

TRAFFIC SIGNALS

		657.0420 *	657.0430 *	
	657.0100 *	Traffic Signal Standard Aluminum 13-FT	Traffic Signal Standard Aluminum 10-FT	
	Pedestal Bases			
LOCATION	EACH	EACH	EACH	
IH 41 SB & CTH N PHASE 3 (S44-0579)	4	3	1	
TOTALS	4	3	1	

TRAFFIC SIGNALS

	658.0173 *	658.0174 *	658.0416 *	658.0500 *
	Traffic Signal Face 3S 12-Inch	Traffic Signal Face 4S 12-Inch	Pedestrain Signal Face 16-Inch	Pedestrian Push Buttons
LOCATION	EACH	EACH	EACH	EACH
IH 41 SB & CTH N PHASE 3 (S44-0579)	9	2	4	4
TOTALS	9	2	4	4

TRAFFIC SIGNALS

	SPV.0060.0204
	Temporary Traffic Signal
	IH 41 SB & CTH N (S44-0579)
LOCATION	EACH
IH 41 SB & CTH N PHASE 3 (S44-0579)	1
TOTALS	1

TRAFFIC SIGNALS S-44-0579 PHASE 3

ALL ITEMS ARE CATEGORY 1300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

Signal Lighting Cable		
		655.0305 *
LOCATION		Type UF
IH 41 SB & CTH N PHASE 3 (S44-0579)		2-12 AWG
		Grounded
FROM	TO	LF
CB1	SB2	218
CB1	SB4	268
CB1	SB5	223
	TOTAL	709

Electrical Wire Lighting 12 AWG		
LOCATION		
IH 41 SB & CTH N PHASE 3 (S44-0579)		655.0610 *
120 Volt System		
FROM	TO	LF
SB2	LUMINAIRES	150
SB4	LUMINAIRES	150
SB5	LUMINAIRES	150
	TOTAL	450

TRAFFIC SIGNALS S-44-0579 PHASE 4

ALL ITEMS ARE CATEGORY 1300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

TRAFFIC SIGNAL CABLE

IH 41 SB & CTH N PHASE 4 (S44-0579)	655.0230*	655.0230*	655.0240	655.0240		655.0700*
		Base to Head		Base to Head		Lead-In
	5-14	5-14	7-14	7-14	HEAD	Cable
	AWG	AWG	AWG	AWG	NO.	For Button
From CB1 to	LF	LF	LF	LF		
SB2		76			1	
		66			2	
		56			3	
SB4		29			4	
				29	5	
		66			11	
		29			16	5
SB5				29	6	
		56			7	
		66			8	
Sub Total	0	444	0	58		20
TOTALS		444		58		20

Signal Indication		Conductor Color
Red	=	Red
Yellow	=	Orange
Green	=	Green
Red Arrow	=	Red w/Black Tracer
Yellow Arrow	=	Black w/White
Yellow Flashing Arrow	=	White w/Black
Green Arrow	=	Blue w/Black

PEDS

Walk	=	Green
Don't Walk	=	Red
Button	=	Black & Orange

TRAFFIC SIGNALS S-44-0579 PHASE 4

ALL ITEMS ARE CATEGORY 1300

TRAFFIC SIGNALS

	657.0350 *	657.0352	657.0530 *	657.0541	658.0173 *
					Traffic
					Signal
	Poles	Poles	Monotube Arms	Monotube Arms	Face
	Type 10	Type 10 Special	30-FT	40-FT Special	3S 12-Inch
LOCATION	Each	EACH	EACH	EACH	EACH
IH 41 SB & CTH N PHASE 4 (S44-0579)	2	1	2	1	1
TOTALS	2	1	2	1	1

TRAFFIC SIGNALS

	658.5070
	Signal
	Mounting
	Hardware
	0202. IH 41 SB & CTH N
	(S44-0579)
LOCATION	EACH
IH 41 SB & CTH N PHASE 4 (S44-0579)	1
TOTALS	1

Lighting Summary

	657.0812 *	659.1120 *
	Luminaire	Luminaires
	Arms	Utility
	Steel 12-FT	LED-B
LOCATION	EACH	EACH
IH 41 SB & CTH N PHASE 4 (S44-0579)	3	3
TOTALS	3	3

Electrical Wire Lighting 12 AWG

LOCATION		
IH 41 SB & CTH N PHASE 4 (S44-0579)		655.0610 *
120 Volt System		
FROM	TO	LF
SB2	LUMINAIRES	150
SB4	LUMINAIRES	150
SB5	LUMINAIRES	150
	TOTAL	450

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

TRAFFIC SIGNALS S-44-2019 PHASE 1

ALL ITEMS ARE CATEGORY 1300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

Removing Pull Box	
	653.0905*
LOCATION	EACH
IH 41 NB & CTH N PHASE 1 (S44-2019)	16
TOTAL	16

Removing Concrete Bases	
	204.0195*
LOCATION	EACH
IH 41 NB & CTH N PHASE 1 (S44-2019)	9
TOTAL	9

TRAFFIC SIGNALS				
		SPV.0060.0201		659.5000.S *
		Remove		Lamp, Ballast, LED
		Traffic		Switch disposal by
		Signal		Contractor
		IH 41 NB & CTH N (S44-2019)		
LOCATION		EACH		EACH
IH 41 NB & CTH N PHASE 1 (S44-2019)		1		35
TOTALS		1		35

TRAFFIC SIGNALS S-44-2019 PHASE 3

ALL ITEMS ARE CATEGORY 1300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

Conduit Rigid Nonmetallic Schedule 40

Location				
IH 41 NB & CTH N PHASE 3 (S44-2019)		652.0210	652.0225*	652.0235 *
		1-Inch	2-Inch	3-Inch
FROM	TO	LF	LF	LF
PB1	SB1		15	
PB1	PB2			50
PB1	PB2			50
PB2	TB1		15	
PB2	PB3			50
PB2	PB3			50
PB3	SB2			15
PB3	PB4			55
PB3	PB4			55
PB4	SB3		10	
PB4	PB5			60
PB4	PB5			60
PB5	SB4			10
PB5	PB6			65
PB5	PB6			65
PB6	PB7	265		
PB6	SB5			10
PB6	PB8			70
PB6	PB8			70
PB8	SB6		15	
PB8	PB9			55
PB8	PB9			55
PB9	SB7		10	
	TOTALS	265	65	845

Concrete Bases

LOCATION		Station	Offset	654.0101 * Type 1 EACH	654.0110 * Type 10 EACH	654.0113 Type 13 EACH
IH 41 NB & CTH N PHASE 3 (S44-2019)						
	SB1	61+86	65' LT	1		
	SB2	62+07	46' RT			1
	SB3	61+38	35' RT	1		
	SB4	60+86	34' RT		1	
	SB5	60+66	24' LT		1	
	SB6	61+17	78' LT	1		
	SB7	61+59	76' LT	1		
TOTALS				4	2	1

Loop Detectors

LOCATION	LOOP NO.	# OF TURNS	652.0800 * Conduit LF	655.0700 * Lead In Cable LF	655.0800 * Wire LF
IH 41 NB & CTH N PHASE 3 (S44-2019)					
	41	4	112	103	456
	42	3	122	48	374
	51	3	92	103	284
	61	5	67	438	343
		TOTALS	393	692	1,457

Electrical Wire Traffic Signals 10 AWG

LOCATION		655.0515 * (Equipment Grounding Conductor) (Green) LF
IH 41 NB & CTH N PHASE 3 (S44-2019)		
FROM	TO	
CB1	SB1	83
SB1	TB1	126
SB1	SB2	191
SB2	SB3	126
SB3	SB4	126
SB4	SB5	131
SB5	SB6	141
SB6	SB7	126
SB7	CB1	73
	TOTAL	1,123

Pull Boxes

LOCATION	Non-Conductive 653.0164 * 24x42-Inch EACH
IH 41 NB & CTH N PHASE 3 (S44-2019)	9
TOTALS	9

TRAFFIC SIGNALS S-44-2019 PHASE 3

ALL ITEMS ARE CATEGORY 1300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

TRAFFIC SIGNAL CABLE

IH 41 NB & CTH N PHASE 3 (S44-2019)	655.0230*	655.0230*	655.0240*	655.0240	655.0260 *		655.0700
		Base to Head		Base to Head			Lead-In
	5-14	5-14	7-14	7-14	12-14	HEAD	Cable
	AWG	AWG	AWG	AWG	AWG	NO.	For Button
From CB1 to	LF	LF	LF	LF	LF		
SB1	83	29				5	
SB2	213	81				6	
TB1	148	29				8	
SB3	278	29				10	
	278	29				13	5
SB4				29	308	1	
		29				9	
	308	56				11	
	308	29				14	5
SB5				29	228	2	
		46				3	
		56				4	
SB6	148	29				12	
	148	29				15	5
SB7	73	26				16	5
Sub Total	1,985	497	0	58	536		20
TOTALS	2,482		58		536		20

Signal Indication		Conductor Color
Red	=	Red
Yellow	=	Orange
Green	=	Green
Red Arrow	=	Red w/Black Tracer
Yellow Arrow	=	Black w/White
Yellow Flashing Arrow	=	White w/Black
Green Arrow	=	Blue w/Black

PEDS

Walk	=	Green
Don't Walk	=	Red
Button	=	Black & Orange

TRAFFIC SIGNALS S-44-2019 PHASE 3

ALL ITEMS ARE CATEGORY 1300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

TRAFFIC SIGNALS				
		657.0420*	657.0430*	
	657.0100*	Traffic	Traffic	
		Signal	Signal	
	Pedestal	Standard	Standard	
	Bases	Aluminum	Aluminum	
		13-FT	10-FT	
LOCATION	EACH	EACH	EACH	
IH 41 NB & CTH N PHASE 3 (S44-2019)	4	3	1	
TOTALS	4	3	1	

TRAFFIC SIGNALS				
	658.0173*	658.0174*	658.0416*	
				658.0500*
	Traffic	Traffic	Pedestrain	
	Signal	Signal	Signal	Pedestrian
	Face	Face	Face	Push
	3S 12-Inch	4S 12-Inch	16-Inch	Buttons
LOCATION	EACH	EACH	EACH	EACH
IH 41 NB & CTH N PHASE 3 (S44-2019)	9	2	4	4
TOTALS	9	2	4	4

TRAFFIC SIGNALS				
		SPV.0060.0203		
		Temporary Traffic Signal		
		IH 41 NB & CTH N (S44-2019)		
LOCATION		EACH		
IH 41 NB & CTH N PHASE 3 (S44-2019)		1		
TOTALS		1		

TRAFFIC SIGNALS S-44-2019 PHASE 3

ALL ITEMS ARE CATEGORY 1300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

3

Signal Lighting Cable

		655.0305 *
LOCATION		Type UF
IH 41 NB & CTH N PHASE 3 (S44-2019)		2-12 AWG
		Grounded
FROM	TO	LF
CB1	SB2	213
CB1	SB4	308
CB1	SB5	228
	TOTAL	749

Electrical Wire Lighting 12 AWG

LOCATION		
IH 41 NB & CTH N PHASE 3 (S44-2019)		655.0610 *
120 Volt System		
FROM	TO	LF
SB2	LUMINAIRES	150
SB4	LUMINAIRES	150
SB5	LUMINAIRES	150
	TOTAL	450

TRAFFIC SIGNALS S-44-2019 PHASE 4

ALL ITEMS ARE CATEGORY 1300

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

TRAFFIC SIGNAL CABLE

IH 41 NB & CTH N PHASE 4 (S44-2019)	655.0230*	655.0230*	655.0240	655.0240	655.0260 *		655.0700
		Base to Head		Base to Head			Lead-In
	5-14	5-14	7-14	7-14	12-14	HEAD	Cable
	AWG	AWG	AWG	AWG	AWG	NO.	For Button
From CB1 to	LF	LF	LF	LF	LF		
SB2		86				6	
		76				7	
		66				8	
SB4				29		1	
		29				9	
		66				11	
		29				14	5
SB5				29		2	
		56				3	
		66				4	
Sub Total	0	474	0	58	0		20
TOTALS	474		58		0		20

Signal Indication		Conductor Color
Red	=	Red
Yellow	=	Orange
Green	=	Green
Red Arrow	=	Red w/Black Tracer
Yellow Arrow	=	Black w/White
Yellow Flashing Arrow	=	White w/Black
Green Arrow	=	Blue w/Black

PEDS

Walk	=	Green
Don't Walk	=	Red
Button	=	Black & Orange

TRAFFIC SIGNALS S-44-2019 PHASE 4

ALL ITEMS ARE CATEGORY 1300

TRAFFIC SIGNALS

	657.0350 *	657.0360	657.0530 *	657.0550	658.0173 *
					Traffic Signal
	Poles	Poles	Monotube Arms	Monotube Arms	Face
	Type 10	Type 13	30-FT	50-FT	3S 12-Inch
LOCATION	EACH	EACH			EACH
IH 41 NB & CTH N PHASE 4 (S44-2019)	2	1	2	1	1
TOTALS	2	1	2	1	1

TRAFFIC SIGNALS

	658.5070 Signal Mounting Hardware 0201. IH 41 NB & CTH N (S44-2019)
LOCATION	EACH
IH 41 NB & CTH N PHASE 4 (S44-2019)	1
TOTALS	1

Lighting Summary

	* 657.0812 Luminaire Arms Steel 12-FT	* 659.1120 Luminaires Utility LED-B
LOCATION	EACH	EACH
IH 41 SB & CTH N PHASE 4 (S44-2019)	3	3
TOTALS	3	3

Electrical Wire Lighting 12 AWG

LOCATION		655.0610 *
IH 41 NB & CTH N PHASE 4 (S44-2019)		120 Volt System
FROM	TO	LF
SB2	LUMINAIRES	150
SB4	LUMINAIRES	150
SB5	LUMINAIRES	150
	TOTAL	450

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

REMOVING FTMS ITEMS

CATEGORY	STATION	OFFSET	204.0195 * REMOVING CONCRETE BASES EACH	204.9060.S.0301 REMOVING COMMUNICATIONS VAULT EACH	204.9060.S.0302 REMOVING EXISTING POLE EACH	SPV.0060.0301 SALVAGE MICROWAVE DETECTOR EQUIPMENT EACH
1200	1015SB+32	304 LT	---	1	---	---
	1017SB+57	305 LT	---	1	---	---
	1017SB+46	46 LT	1	---	1	1
	1015SB+61	313 LT	1	---	---	---
		TOTALS	2	2	1	1

INSTALL CONDUIT INTO EXISTING ITEM

CATEGORY	LOCATION	STATION	OFFSET	652.0700.S EACH
1200	EXCB7-1	1016SB+97.7	101 LT	1
	SIGNAL PB	1017SB+03.1	214 LT	1
			TOTAL	2

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	671.0132 CONDUIT HDPE 3-DUCT 2-INCH LF
1200	CV6-1T	PB7-1T	---	---	53	83	---
	PB7-1T	PB7-2T	244	---	---	259	---
	PB7-2T	PB7-3T	244	---	---	259	---
	PB7-3T	QP1	23	---	---	23	---
	QP1	QP2	---	---	255	255	---
	QP2	PB7-4T	16	---	---	31	---
	PB7-4T	PB7-5T	205	---	---	220	---
	PB7-5T	PB7-6T	205	---	---	220	---
	PB7-6T	PB7-7T	208	---	---	223	---
	PB7-7T	CV6-2T	---	---	47	62	---
	PB7-1	PB7-2	---	216	---	246	---
	PB7-2	PB7-3	---	216	---	231	---
	PB7-3	PB7-4	---	216	---	231	---
	PB7-4	PB7-5	---	232	---	247	---
	PB7-5	PB7-6	---	99	---	114	---
	PB7-6	SIGNAL PE	12	12	---	27	---
	PB7-6	PB7-7	91	91	---	106	---
	PB7-7	CB7-1	25	25	---	40	---
	PB7-5	PB7-8	---	230	---	260	---
	PB7-8	PB7-9	---	230	---	245	---
	PB7-9	PB7-10	---	228	---	243	---
	PB7-10	CV6-2T	---	32	---	47	---
	CV7-1	CV7-2	---	---	---	992	962
		TOTALS	1,273	1,827	355	4,664	962

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	PB7-1T	1010SB+01.1	51.2 LT	---	1
	PB7-2T	1012SB+44.5	61.8 LT	1	---
	PB7-3T	1014SB+87.9	72.2 LT	1	---
	PB7-4T	1017SB+81.5	73.9 LT	1	---
	PB7-5T	1019SB+86.5	68.0 LT	1	---
	PB7-6T	1021SB+91.4	62.0 LT	1	---
	PB7-7T	1023SB+99.6	55.8 LT	---	1
	PB7-1	1008SB+99.1	111.5 LT	1	---
	PB7-2	1011SB+07.9	163.6 LT	1	---
	PB7-3	1013SB+12.0	234.1 LT	1	---
	PB7-4	1015SB+16.4	303.5 LT	---	1
	PB7-5	1017SB+48.8	311.0 LT	---	1
	PB7-6	1017SB+13.5	218.9 LT	---	1
	PB7-7	1017SB+04.9	128.0 LT	1	---
	PB7-8	1019SB+70.5	249.7 LT	1	---
	PB7-9	1021SB+92.1	188.4 LT	1	---
	PB7-10	1024SB+13.7	138.6 LT	1	---
			TOTALS	12	5

REMOVING PULL BOXES

CATEGORY	LOCATION	STATION	OFFSET	653.0905 EACH
1200	EXISTING PB	1017SB+01.4	102.0 LT	1

ITS BASE SUMMARY

CATEGORY	LOCATION	STATION	OFFSET	* 654.0105 CONCRETE BASES TYPE 5 EACH	* 657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH
1200	RG7-1	1015SB+61.4	314.3 LT	1	1

3

ITS ELECTRICAL WIRE

CATEGORY	LOCATION FROM	LOCATION TO	655.0635 ELECTRICAL WIRE LIGHTING 2 AWG LF
1200	SIGNAL BREAKER	SIGNAL PB	72
	SIGNAL PB	PB7-6	81
	PB7-6	PB7-7	318
	PB7-7	CB7-1	153
		TOTAL	624

FREEWAY TRAFFIC MANAGEMENT SYSTEM

CATEGORY	PROJECT	670.0101 FIELD SYSTEM INTEGRATOR EACH	670.0201 ITS DOCUMENTATION EACH	678.0501 COMMUNICATION SYSTEM TESTING EACH
1200	1130-66-76	1	1	1

COMMUNICATION VAULTS

CATEGORY	LOCATION	STATION	OFFSET	673.0105 COMMUNICATIONS VAULT TYPE 1 EACH	673.0110 COMMUNICATIONS VAULT TYPE ROUND EACH	673.0200 TRACER WIRE MARKER POSTS EACH	671.0300 FIBER OPTIC CABLE MARKER EACH
1200	CV6-1T	1009SB+89.2	102.7 LT	---	1	1	---
	EQUALLY SPACED BETWEEN VAULTS			---	---	---	2
	CV6-2T	1024SB+07.8	102.3 LT	---	1	1	---
	CV7-1	1015NB+48.0	331.5 RT	1	---	1	---
	EQUALLY SPACED BETWEEN VAULTS			---	---	---	1
	CV7-2	1024NB+80.5	129.0 RT	1	---	---	1
			TOTALS	2	2	3	4

INSTALL FIBER OPTIC CABLE OUTDOOR PLANT

CATEGORY	LOCATION FROM	LOCATION TO	678.0012 INSTALL FIBER OPTIC OUTDOOR PLANT 12-CT LF	678.0024 INSTALL FIBER OPTIC OUTDOOR PLANT 24-CT LF
1200	CV6-1T	PB7-1T	---	133
	PB7-1T	PB7-2T	---	274
	PB7-2T	PB7-3T	---	274
	PB7-3T	PB7-4T	---	324
	PB7-4T	PB7-5T	---	235
	PB7-5T	PB7-6T	---	235
	PB7-6T	PB7-7T	---	476
	PB7-7T	CV6-2T	---	127
	CB7-1	PB7-7	210	---
	PB7-7	PB7-6	242	---
	PB7-6	SIGNAL PB	42	---
	PB7-6	PB7-5	159	---
	PB7-5	PB7-8	260	---
	PB7-8	PB7-9	260	---
	PB7-9	PB7-10	258	---
	PB7-10	CV6-2T	82	---
		TOTALS	1,513	2,078

FIBER OPTIC SPLICE SUMMARY

CATEGORY	EQUIP. LOCATION	STATION	OFFSET	678.0200 FIBER OPTIC SPLICE ENCLOSURE EACH	678.0300 FIBER OPTIC SPLICE EACH	678.0400 FIBER OPTIC TERMINATION EACH
1200	CV6-1T	1009SB+89.2	102.7 LT	1	24	---
	CV6-2T	1024SB+07.8	102.3 LT	1	26	---
	EXCB7-1	1016SB+97.7	108.4 LT	---	---	4
			TOTALS	2	50	4

REMOVE AND REINSTALL RAMP GATE SYSTEM

CATEGORY	LOCATION	STATION	OFFSET	SPV.0060.0302 EACH
1200	RG7-1	1015SB+61.4	314.3 LT	1

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	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	REMARKS
ALL ITEMS ARE CATEGORY 1100							
CB 1000	-	PB 1000	--	15	--	--	PULL WIRE ONLY
CB 1000	-	PB 1000	--	15	--	--	PULL WIRE ONLY
CB 1000	-	PB 1000	--	15	--	--	PULL WIRE ONLY
PB 1000	-	PB 1001	--	--	105	--	PULL WIRE ONLY
PB 1001	-	PB 1002	150	--	--	--	PULL WIRE ONLY
PB 1002	-	PB 1003	150	--	--	--	PULL WIRE ONLY
CB 1000	-	PB 1004	--	15	--	--	PULL WIRE ONLY
CB 1000	-	PB 1004	--	15	--	--	PULL WIRE ONLY
CB 1000	-	PB 1004	--	15	--	--	PULL WIRE ONLY
PB 1004	-	PB 1005	40	--	--	--	PULL WIRE ONLY
PB 1005	-	PB 1006	--	--	115	--	PULL WIRE ONLY
PB 1006	-	PB 1007	100	--	--	--	PULL WIRE ONLY
PB 1007	-	PB 1008	--	--	50	--	PULL WIRE ONLY
PB 1008	-	PB 1009	275	--	--	--	PULL WIRE ONLY
PB 1009	-	PB 1010	275	--	--	--	PULL WIRE ONLY
PB 1100	-	PB 1101	125	--	--	705	--
PB 1101	-	SL 1102	15	--	--	168	--
PB 1101	-	SL 1103	105	--	--	590	--
SL 1103	-	SL 1104	155	--	--	495	--
PB 1101	-	PB 1102	--	--	90	--	PULL WIRE ONLY
PB 1102	-	PB 1103	95	--	--	--	PULL WIRE ONLY
PB 1103	-	PB 1104	--	--	50	--	PULL WIRE ONLY
PB 1104	-	SL 1105	20	--	--	330	--
PB 1104	-	PB 1116	--	--	50	660	--
PB 1116	-	PB 1117	130	--	--	730	--
PB 1117	-	PB 1118	--	--	50	330	--
PB 1118	-	SL 1115	90	--	--	515	--
SL 1115	-	SL 1114	180	--	--	570	--
PB 1118	-	SL 1116	40	--	--	318	--
PB 1118	-	PB 1119	130	--	--	730	--
PB 1119	-	PB 1120	--	--	65	405	--
PB 1120	-	SL 1100	70	--	--	830	--
PB 1120	-	PB 1100	--	--	60	380	--
PB 1116	-	PB 1115	--	--	--	1,480	EXISTING CONDUIT IN STRUCTURE
PB 1115	-	PB 1105	--	--	55	--	PULL WIRE ONLY
PB 1105	-	SL 1106	20	--	--	165	--
PB 1105	-	PB 1106	--	--	50	330	--
PB 1106	-	PB 1107	115	--	--	655	--
PB 1107	-	PB 1108	--	--	55	355	--
PB 1108	-	SL 1108	75	--	--	880	--
SL 1108	-	SL 1107	175	--	--	555	--
PB 1108	-	SL 1109	50	--	--	378	--
PB 1108	-	PB 1109	120	--	--	680	--
PB 1109	-	PB 1110	--	--	75	455	--
PB 1110	-	SL 1110	75	--	--	880	--
PB 1110	-	PB 1111	--	--	55	355	--
PB 1111	-	PB 1112	110	--	--	630	--
PB 1112	-	SL 1111	15	--	--	420	--
PB 1112	-	SL 1112	140	--	--	765	--
SL 1112	-	SL 1113	145	--	--	465	--
PB 1112	-	PB 1113	--	--	90	530	--
PB 1113	-	CB 1100	--	20	--	190	--
PB 1113	-	CB 1100	--	20	--	--	PULL WIRE ONLY
PB 1113	-	CB 1100	--	20	--	--	PULL WIRE ONLY
CB 1100	-	PB 1114	--	15	--	--	PULL WIRE ONLY
CB 1100	-	PB 1114	--	15	--	--	PULL WIRE ONLY
CB 1100	-	PB 1114	--	15	--	165	--
PB 1114	-	PB 1115	65	--	--	405	--
PROJECT TOTALS			3250	195	1015	18494	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

STREET LIGHTING

LIGHT NUMBER	STATION	OFFSET	R/L	* 654.0105 CONCRETE BASES TYPE 5 EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/12-INCH BOLT CIRCLE EACH	657.0322 POLES TYPE 5 ALUMINUM EACH	657.0710 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT EACH	* 659.1120 LUMINAIRES UTILITY LED B EACH	* 655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF
ALL ITEMS ARE CATEGORY 1100									
SL 1100	58+94'NNB'	15.1'	LT	1	1	1	2	2	318
SL 1101	NOT USED			--	--	--	--	--	--
SL 1102	60+68'NSB'	64.6'	LT	1	1	1	1	1	159
SL 1103	1014+70'NB'	41.8'	RT	1	1	1	1	1	159
SL 1104	1013+16'NB'	38.5'	RT	1	1	1	1	1	159
SL 1105	62+94'NNB'	16.1'	LT	1	1	1	2	2	318
SL 1106	65+32'NNB'	15.9'	LT	1	1	1	2	2	318
SL 1107	1013+37'NC'	26.8'	LT	1	1	1	1	1	159
SL 1108	1015+08'NC'	37.5'	LT	1	1	1	1	1	159
SL 1109	67+50'NSB'	61.6'	LT	1	1	1	1	1	159
SL 1110	69+32'NNB'	6.7'	LT	1	1	1	2	2	318
SL 1111	1016+88'ND'	50.5'	LT	1	1	1	1	1	159
SL 1112	1018+27'ND'	39.8'	LT	1	1	1	1	1	159
SL 1113	1020+52'ND'	26.8'	LT	1	1	1	1	1	159
SL 1114	1019+51'NA'	26.8'	RT	1	1	1	1	1	159
SL 1115	1017+75'NA'	38.2'	RT	1	1	1	1	1	159
SL 1116	1016+56'NA'	70.9'	RT	1	1	1	1	1	159
PROJECT TOTALS				16	16	16	20	20	3180

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 (CB1100) EACH	656.0401.0001 ELECTRICAL SERVICE MAIN LUGS ONLY METER PEDESTAL (CB1000) EACH	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH EACH	659.2230 LIGHTING CONTROL CABINETS 240/480 30-INCH EACH
ALL ITEMS ARE CATEGORY 1100								
CB1000	61+66'NSB'	55.1'	LT	1	1	--	--	1
CB1100	66+47'NNB'	52.7'	RT	1	--	1	1	--
PROJECT TOTALS				2	1	1	1	1

LIGHTING PULLBOXES

PULLBOX NUMBER	STATION	OFFSET	R/L	* 653.0164 PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH
ALL ITEMS ARE CATEGORY 1100				
PB 1000	61+81'NSB'	LT	70.3'	1
PB 1001	1015+62'NB'	RT	53.0'	1
PB 1002	1014+10'NB'	RT	42.9'	1
PB 1003	1012+53'NB'	RT	34.6'	1
PB 1004	61+81'NSB'	LT	55.3'	1
PB 1005	62+26'NSB'	LT	45.2'	1
PB 1006	62+49'NNB'	RT	44.4'	1
PB 1007	1017+02'NA'	LT	9.8'	1
PB 1008	1017+01'NA'	RT	45.7'	1
PB 1009	1019+75'NA'	RT	27.0'	1
PB 1010	1022+40'NA'	RT	27.0'	1
PB 1100	59+46'NSB'	LT	55.7'	1
PB 1101	1015+74'NB'	RT	54.0'	1
PB 1102	61+66'NSB'	LT	69.8'	1
PB 1103	62+53'NSB'	LT	43.1'	1
PB 1104	62+55'NSB'	RT	15.9'	1
PB 1105	65+37'NSB'	RT	16.0'	1
PB 1106	65+36'NSB'	LT	43.1'	1
PB 1107	1015+84'NC'	RT	9.6'	1
PB 1108	1015+83'NC'	LT	53.6'	1
PB 1109	68+33'NSB'	LT	64.3'	1
PB 1110	68+38'NSB'	RT	19.1'	1
PB 1111	68+57'NNB'	RT	56.0'	1
PB 1112	67+45'NNB'	RT	85.0'	1
PB 1113	66+47'NNB'	RT	67.6'	1
PB 1114	66+32'NNB'	RT	53.2'	1
PB 1115	65+58'NNB'	RT	46.6'	1
PB 1116	62+76'NNB'	RT	43.4'	1
PB 1117	1016+91'NA'	LT	9.8'	1
PB 1118	1016+89'NA'	RT	50.1'	1
PB 1119	59+68'NNB'	RT	39.5'	1
PB 1120	59+68'NNB'	LT	20.3'	1
PROJECT TOTALS				32

TRANSPORTATION PROJECT PLAT NO: 1130-63-21 - 4.26

THAT PART OF LOT 4, LOT 5, AND LOT 8 OF HJT BUSINESS PARK - NORTH, AND THAT PART OF LOT 1 OF CERTIFIED SURVEY MAP 5338, BEING IN PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4, AND THAT PART OF LOT 2 AND LOT 3 OF HJT BUSINESS PARK, AND THAT PART OF LOT 1 AND LOT 2 OF CERTIFIED SURVEY MAP 4616, BEING IN AND INCLUDING PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4, SECTION 16, AND THAT PART OF LOT 1 OF CERTIFIED SURVEY MAP 4011, BEING IN PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4, AND THAT PART OF LOT 1 OF CERTIFIED SURVEY MAP 5842, BEING IN AND INCLUDING PART OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4, SECTION 15, ALL IN TOWNSHIP 21 NORTH, RANGE 18 EAST, VILLAGE OF LITTLE CHUTE, OUTAGAMIE COUNTY, WISCONSIN.

RELOCATION ORDER IH-41 APPLETON-DE PERE STH 96 - CTH F OUTAGAMIE & BROWN COUNTIES

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

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

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

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOUND IRON PINS ARE 1" IRON PIPE WITH PLASTIC CAP, UNLESS OTHERWISE NOTED.

EXISTING ACCESS CONTROL FOR IH-41 ESTABLISHED FROM PREVIOUS PROJECTS TO3-2(28), 1123-01-22, HJT BUSINESS PARK-NORTH, AND DOC 933501.

EXISTING ACCESS CONTROL FOR CTH N/FREEDOM RD ESTABLISHED FROM PREVIOUS PROJECTS TO3-2(28) AND 1123-01-21.

EXISTING RIGHT-OF-WAY FOR IH-41 ESTABLISHED FROM PREVIOUS PROJECTS TO3-2(28), 1130-42-00, CSM 4616, CSM 4011, CSM 5338, AND HJT BUSINESS PARK-NORTH.

EXISTING RIGHT-OF-WAY FOR CTH N/FREEDOM RD ESTABLISHED FROM PREVIOUS PROJECTS TO3-2(28), 1130-42-00, HJT BUSINESS PARK-NORTH, AND CSM 4011.

EXISTING RIGHT-OF-WAY FOR RANDOLPH DR ESTABLISHED FROM CSM 4011, CSM 1819, CSM 4819, CSM 3577, AND CSM 3581.

EXISTING RIGHT-OF-WAY FOR MOASIS DR ESTABLISHED FROM CSM 5842.

EXISTING RIGHT-OF-WAY FOR PATRIOT DR ESTABLISHED FROM HJT BUSINESS PARK.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

USH 41 IN OUTAGAMIE/BROWN COUNTIES WAS DESIGNATED AS A FREEWAY UNDER SECTION 84.295 OF WISCONSIN STATUTES BY THE HIGHWAY COMMISSION ON 6/8/1972.

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

ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED. THE PURPOSE FOR ALL TLE'S IS GRADING UNLESS OTHERWISE NOTED.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST(S) REQUIRED	FEE R/W S.F., REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
252	GC ENTERPRISES, LLC BLKKK ENTERPRISES, LLC NLB ENTERPRISES, LLC	FEE	1332	0	1332	0
253	BCK INVESTMENTS, LLC	FEE	2499	0	2499	0
254	SC4 LLC	FEE	682	0	682	0
255	MOASIS TRUCK STOP LLC	FEE, TLE	13	0	13	217
256	MARINIC, LLC	FEE	837	0	837	0
257	WONG-CHIN FAMILY TRUST, DATED SEPTEMBER 19, 1989 U/A OF TRUST DATED MARCH 30, 1994	FEE, TLE	162	0	162	90
261	TJ UTSCHIG, SR., LLC	FEE	6540	0	6540	0
262	TLR ENTERPRISES LLC	FEE	4448	0	4448	0
263	NETWORK HEALTH SYSTEM INC	FEE	1717	0	1717	0
264	APPLETON HOSPITALITY LLC	FEE	1899	0	1899	0
266	YASH LITTLE CHUTE PROPERTY LLC	FEE, TLE	173	0	173	701
267	K.A.K. ENTERPRISES, LLC LC PROPERTY MANAGEMENT, LLC	FEE	375	0	375	0

GN

SCALE, FEET

0 100 200

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SARAH R VAN CAMP, REGISTER OF DEEDS
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER: 1130-63-21 - 4.26
SHEET 1 OF 2

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN OUTAGAMIE COUNTY AS SHEET 2 OF 2 OF DOCUMENT #2288266.

COURSE TABLE		
COURSE	BEARING	DISTANCE
2602-2603	S59° 17' 17"E	176.27'
2603-2604	S73° 04' 44"E	56.40'
2604-2605	S00° 07' 56"W	10.45'
2605-2606	S73° 04' 44"E	428.56'
2606-2607	S82° 16' 32"E	504.21'
2607-2608	S89° 40' 57"E	70.24'
2610-2611	S87° 08' 16"W	571.69'
2611-2612	S72° 47' 27"W	642.70'
2612-2613	S50° 16' 50"W	84.42'
2613-2614	S07° 13' 30"W	203.54'
2614-2615	S00° 10' 11"W	64.65'
2615-2616	S54° 39' 23"E	7.43'
2616-2617	S08° 15' 21"E	66.74'
2617-2618	S47° 57' 01"W	26.31'
2618-2619	N89° 49' 49"W	41.37'
2621-2622	N51° 02' 36"W	106.28'
2622-2623	N67° 24' 32"W	103.88'
2623-2624	N71° 24' 36"W	432.21'
2624-2625	N82° 17' 13"W	158.13'
2625-2508	N89° 40' 57"W	465.93'
2506-2627	S81° 56' 05"E	74.18'
2627-2628	S89° 40' 57"E	252.38'
2628-2629	N85° 10' 59"E	327.76'
2629-2630	N70° 05' 06"E	326.39'
2630-2631	N59° 23' 21"E	275.01'

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTERESTS REQUIRED
501	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
502	AT&T WISCONSIN	RELEASE OF RIGHTS
503	SPECTRUM	RELEASE OF RIGHTS
523	KAUKAUNA UTILITIES - ELECTRIC	RELEASE OF RIGHTS

501 WE ENERGIES - ELECTRIC
DOC 1623142 - PARCELS 252, 253, 254, & 256

502 AT&T WISCONSIN
DOC 1623142 - PARCELS 252, 253, 254, & 256
DOC 1155129 - PARCEL 255
NO RECORDED EASEMENT - PARCEL 266

503 SPECTRUM
DOC 1623142 - PARCELS 252, 253, 254, & 256
NO RECORDED EASEMENT - PARCEL 257

523 KAUKAUNA UTILITIES - ELECTRIC
NO RECORDED EASEMENT - PARCEL 255

UTILITY AGREEMENT WISCONSIN STATUTES

UTILITY NUMBER	UTILITY OWNER(S)	STATUTES NUMBER
625	VILLAGE OF LITTLE CHUTE - SANITARY	84.295(4m)
626	VILLAGE OF LITTLE CHUTE - WATER	84.295(4m)

JE ENGINEERING, INC Consultant Services

I, JAMES R. CAPPEART, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 1130-63-21 - 4.26 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN James R. Cappeart S-3044 Green Bay Wis. LAND SURVEYOR

SIGNATURE: DATE: 7/21/2023
PRINT NAME: JAMES R. CAPPEART
REGISTRATION NUMBER: S-3044

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SIGNATURE: DATE: 8/1/2023
PRINT NAME: Alan Rommel

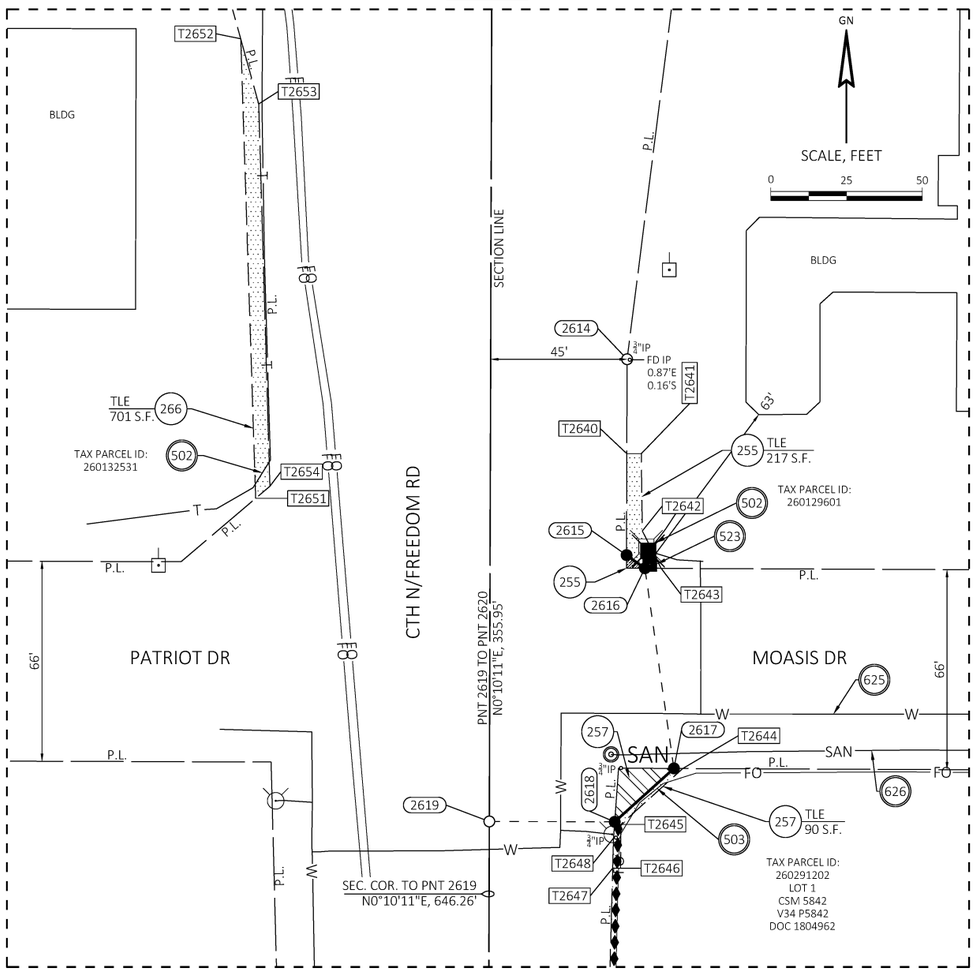
TRANSPORTATION PROJECT PLAT NO: 1130-63-21 - 4.26 EXTENSION SHEET

RELOCATION ORDER IH-41 APPLETON-DE PERE STH 96 - CTH F OUTAGAMIE & BROWN COUNTIES

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

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN OUTAGAMIE COUNTY AS SHEET 2 OF 2 OF DOCUMENT #2288266.

DETAIL 1



R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
2506	1003+28.38	138.95' LT
2507	1003+28.33	0.00' RT
2508	1003+28.28	148.31' RT
2600	1016+49.19	410.41' LT
2602	1017+82.00	408.21' LT
2603	1019+34.05	319.02' LT
2604	1019+88.09	302.91' LT
2605	1019+88.12	292.46' LT
2606	1023+98.82	170.00' LT
2607	1028+98.82	105.00' LT
2608	1029+69.05	105.00' LT
2609	1029+69.31	0.00' RT
2610	1029+69.63	133.29' RT
2611	1023+98.82	165.00' RT
2612	1017+85.95	358.55' RT
2613	1017+21.32	412.86' RT
2614	1016+96.84	614.92' RT

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
2615	1016+97.00	679.57' RT
2616	1017+03.09	683.83' RT
2617	1017+13.04	749.82' RT
2618	1016+93.60	767.55' RT
2619	1016+52.23	767.66' RT
2620	1016+51.31	411.72' RT
2621	1015+40.59	409.91' RT
2622	1014+57.58	343.55' RT
2623	1013+61.45	304.18' RT
2624	1009+51.03	168.67' RT
2625	1007+94.21	148.31' RT
2626	1016+50.25	0.00' RT
2627	1004+01.88	128.95' LT
2628	1006+54.26	128.95' LT
2629	1009+80.71	158.28' LT
2630	1012+86.96	271.16' LT
2631	1015+22.86	412.50' LT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T2640	1016+96.92	646.03' RT
T2641	1017+01.70	646.00' RT
T2642	1017+02.19	671.52' RT
T2643	1017+08.46	683.83' RT
T2644	1017+16.01	749.82' RT
T2645	1016+95.67	768.37' RT
T2646	1016+95.63	782.84' RT
T2647	1016+93.04	782.83' RT
T2648	1016+93.25	772.93' RT
T2651	1015+74.56	661.47' RT
T2652	1015+68.79	509.88' RT
T2653	1015+74.84	531.36' RT
T2654	1015+79.24	657.44' RT

PROJECT NUMBER 1130-63-21 - 4.26
SHEET 2 OF 2

FILE NAME : C:\USERS\RYANMA\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\BASESHARED\RW\DWG\PLAT SHEETS\040126-RP.DWG
APPRAISAL PLAT DATE : 7/21/2023
PLOT DATE : 7/21/2023 12:25 PM
PLOT BY : RYAN MALUEG
PLOT NAME :
PLOT SCALE : 1IN:25 FT
PRE_145
1130-66-70
1130-63-21 - 4.26

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
7160	62+94, 34' RT	BM DISK ON PARAPET	744.33
7161	65+32, 66' LT	BM DISK ON PARAPET	746.41

5

5

N

WETLAND (TYP.)

PATRIOT DR

WE ENERGIES (GAS)

EXIST R/W

LITTLE CHUTE (WAT)

KAUKAUNA OH (ELEC)

TLE

AT&T (COMM)

TDS (COMM)

SI

NETLEC LLC (COMM)

CTH N

IH 41 RAMP NB

1012NC

1014NC

1016NC

WISDOT (COMM)

END CONSTRUCTION
STA 70'NSB'+15.45
MATCH EXISTING
SAW CUT REQ'D

WISDOT (ELEC)

B-44-0179

BM #7160

CTH N SB PGL

CTH N NB PGL

WE ENERGIES (GAS)

LITTLE CHUTE (SAN)

CAUTION

BEGIN PROJECT
STA 56'N'+10.55
MATCH EXISTING
SAW CUT REQ'D

PROP R/W

MOASIS DR

KAUKAUNA OH (ELEC)
SPECTRUM OH (COMM)

IH 41 RAMP NA

1018NA

1020NA

IH 41 NB

IH 41 SB

1018ND

1020ND

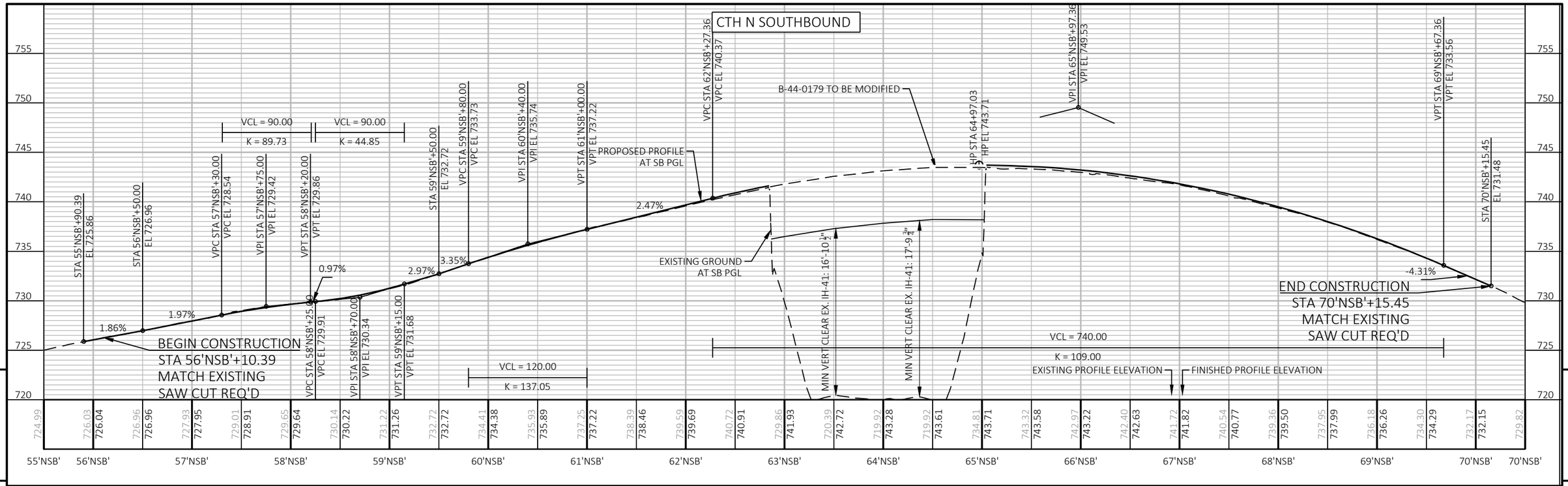
END PROJECT
STA 69'N'+42.59
MATCH EXISTING
SAW CUT REQ'D

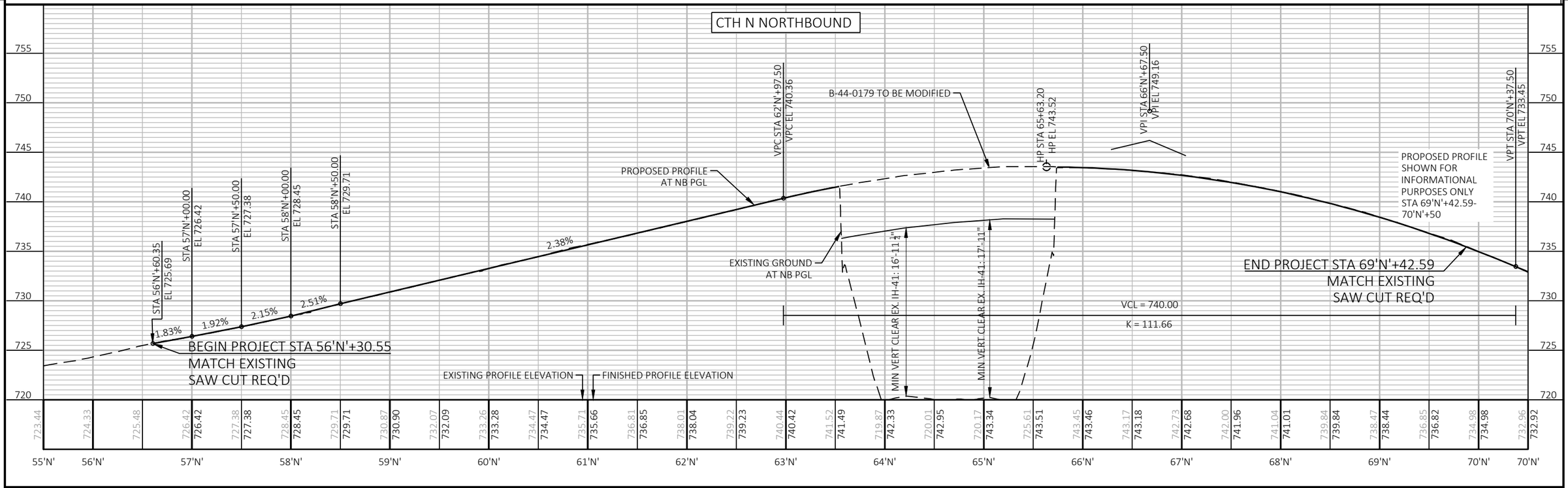
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN & PROFILE - CTH N	SHEET 164	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\050101-PP-N.DWG
LAYOUT NAME - 050101-pp-n-100

PLOT DATE : 1/31/2024 2:46 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

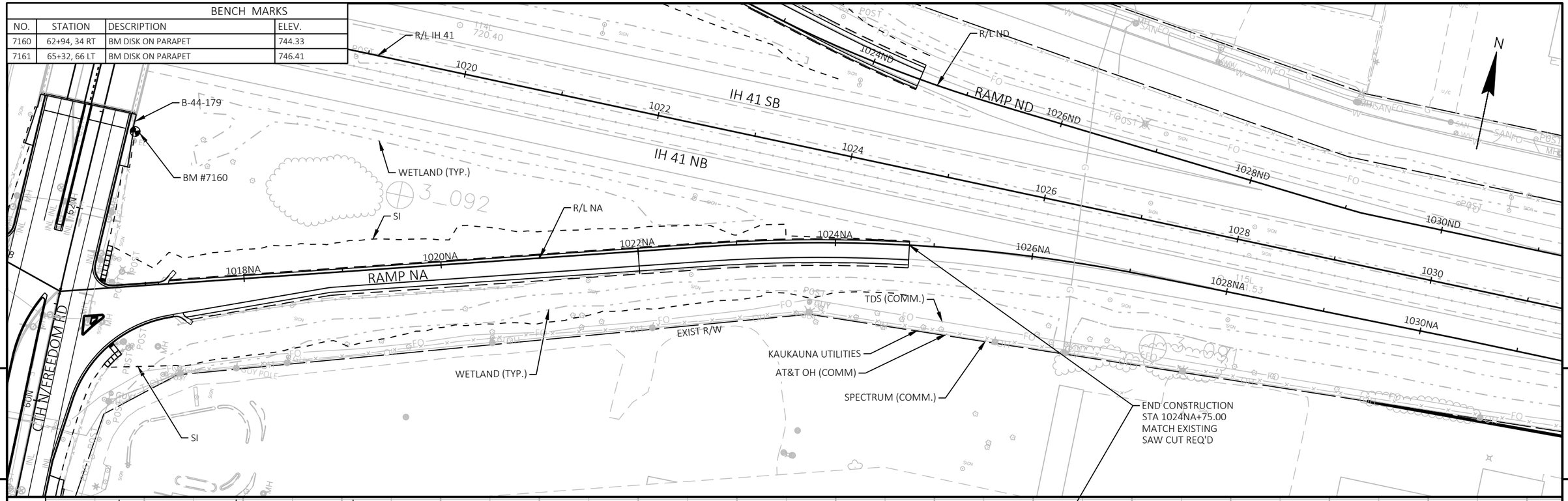


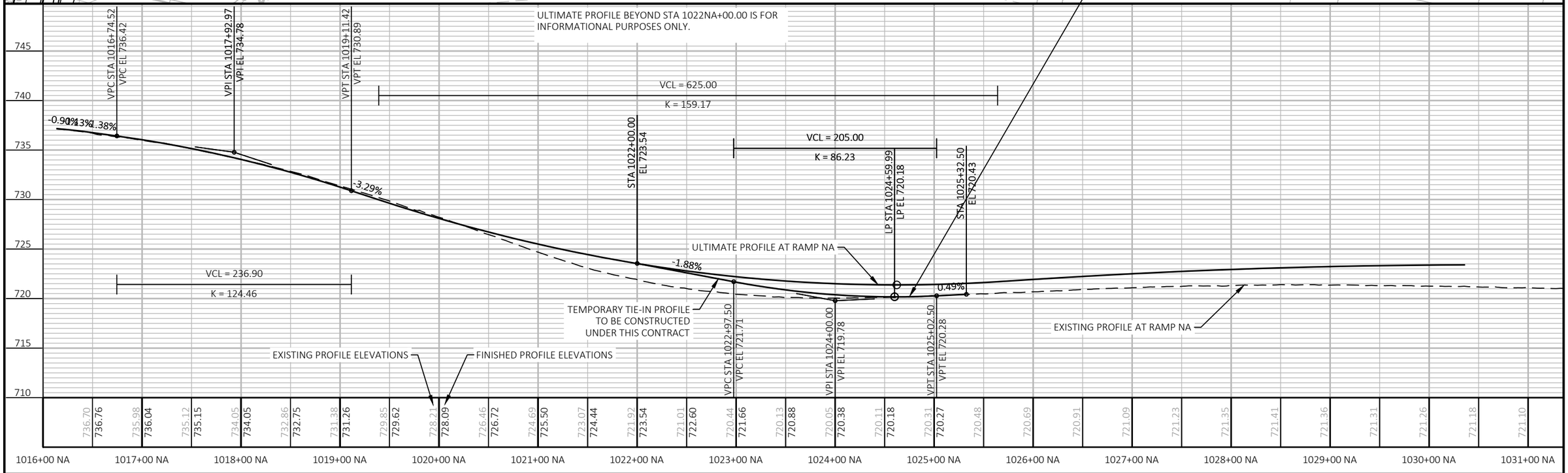


PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN & PROFILE - CTH N	SHEET 165	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\050101-PP-N.DWG
LAYOUT NAME - 050102-pp-n
PLOT DATE : 1/31/2024 11:15 AM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
7160	62+94, 34 RT	BM DISK ON PARAPET	744.33
7161	65+32, 66 LT	BM DISK ON PARAPET	746.41

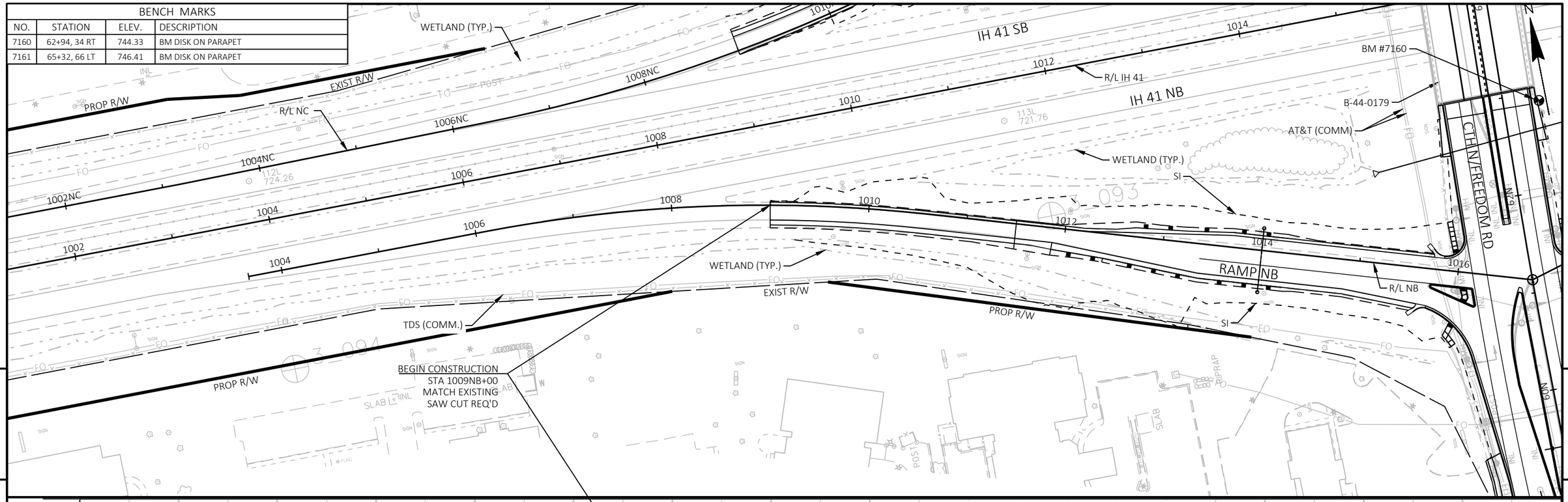


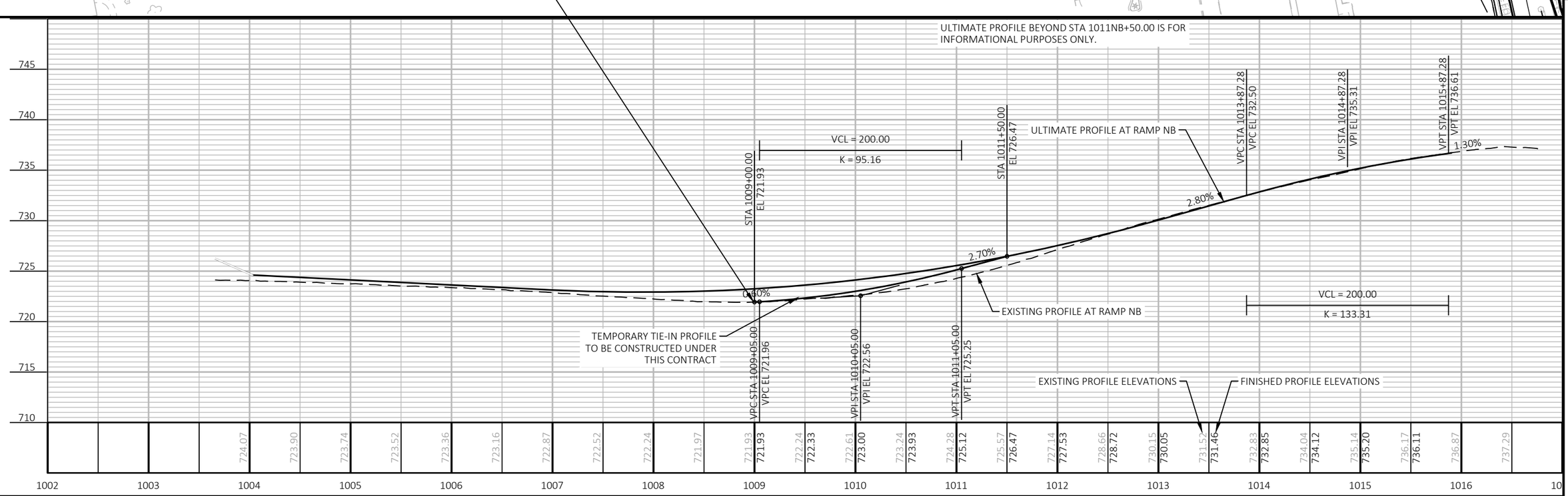


PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: CTH N - RAMP NA	SHEET 166	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\050105-PP-NA.DWG
LAYOUT NAME - 05011-pp-na
PLOT DATE : 1/31/2024 10:08 AM
PLOT BY : PETER LUCHT
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
7160	62+94, 34 RT	744.33	BM DISK ON PARAPET
7161	65+32, 66 LT	746.41	BM DISK ON PARAPET





PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN AND PROFILE: CTH N - RAMP NB	SHEET 167	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\050106-PP-NB.DWG
LAYOUT NAME - 05012-pp-nb
PLOT DATE : 1/31/2024 10:38 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
7160	62+94, 34 RT	744.33	BM DISK ON PARAPET
7161	65+32, 66 LT	746.41	BM DISK ON PARAPET

PROP R/W
WETLAND (TYP.)
1002NC
1004NC
1006NC
1008NC
1002
1004
1006
1008
1010
1012
1014
1016
WISDOT (COMM.)
R/L NC
R/L NB
R/L IH 41
RAMP NC
1010NC
1012NC
1014NC
1016NC
EXIST R/W
SI
WETLAND (TYP.)
BM #7161
CTH N/FREEDOM RD
IH 41 SB
IH 41 NB
RAMP NB
SLAB
INL
POST
FO
SIGN
FLAG

BEGIN CONSTRUCTION
STA 1009+00NC
MATCH EXISTING
SAW CUT REQ'D

ULTIMATE PROFILE BEYOND STA 1011NC+90.00 IS FOR INFORMATIONAL PURPOSES ONLY.

VCL = 390.00
K = 157.86
VCL = 250.00
K = 78.89
VCL = 200.00
K = 95.12
VCL = 90.00
K = 26.40

STA 1009+00.00
EL 721.88
STA 1011+90.00
EL 725.85
VPC STA 1015+10.00
VPC EL 738.04
VPI STA 1015+55.00
VPI EL 740.33
STA 1016+34.45
EL 741.68
VPT STA 1016+00.00
VPT EL 741.09
STA 1016+62.74
EL 742.01

EXISTING PROFILE AT RAMP NC
ULTIMATE PROFILE AT RAMP NC
TEMPORARY TIE-IN PROFILE TO BE CONSTRUCTED UNDER THIS CONTRACT

.14%
2.24%
1.93%
5.10%
1.69%
1.20%

VPC STA 1009+20.00
VPC EL 721.91
VPI STA 1010+20.00
VPI EL 722.05
VPT STA 1011+20.00
VPT EL 724.29
VPC STA 1011+95.00
VPC EL 725.93
VPI STA 1013+20.00
VPI EL 728.35
VPT STA 1014+45.00
VPT EL 734.72

EXISTING PROFILE ELEVATIONS
FINISHED PROFILE ELEVATIONS

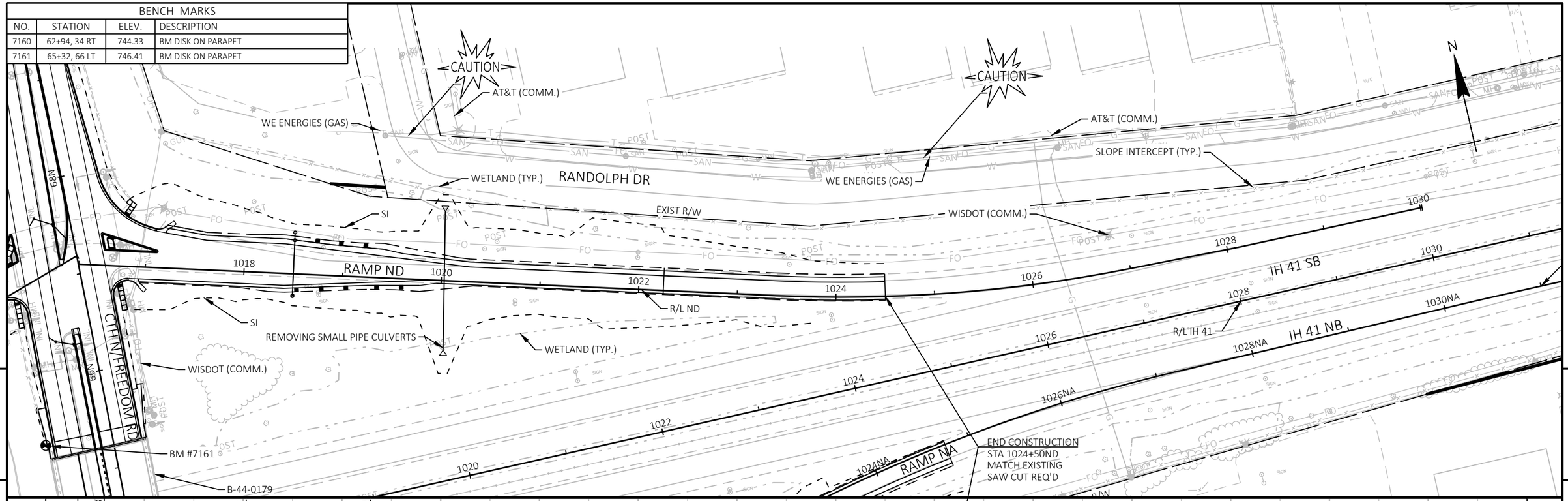
745
740
735
730
725
720
715
710

1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017
724.67	724.50	724.34	724.17	724.05	723.91	723.74	723.54	723.38	723.15	722.90	722.63	722.31	722.06	721.88	721.88
															721.73
															722.00
															721.62
															722.35
															722.00
															722.97
															722.66
															723.86
															723.47
															724.96
															724.78
															726.03
															726.68
															727.19
															729.09
															728.66
															731.78
															730.45
															734.35
															732.56
															736.57
															734.98
															738.49
															737.53
															740.02
															739.77
															741.08
															741.09
															741.73
															741.86

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN AND PROFILE: CTH N - RAMP NC	SHEET 168 E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\050107-PP-NC.DWG
LAYOUT NAME - 05011-pp-nc
PLOT DATE : 1/31/2024 10:49 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
7160	62+94, 34 RT	744.33	BM DISK ON PARAPET
7161	65+32, 66 LT	746.41	BM DISK ON PARAPET



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	PLAN AND PROFILE: CTH N - RAMP ND	SHEET 169	E

FILE NAME : C:\USERS\PDL\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\050108-PP-ND.DWG
LAYOUT NAME - 05011-pp-nd

PLOT DATE : 1/31/2024 10:25 AM PLOT BY : PETER LUCHT PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

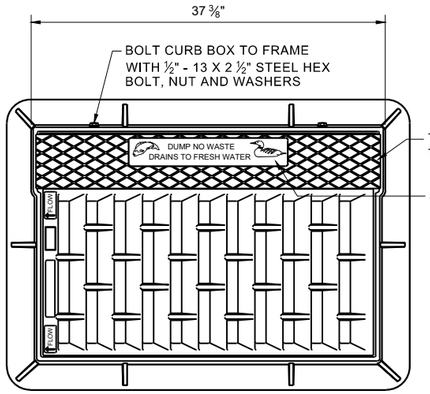
08A05-20A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-20D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-03	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
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
08D19-04	DRIVEWAY AND SIDEWALK RAMPS TYPE Z
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
09C11-10	CONCRETE BASE TYPE 10
09C12-09A	CONCRETE BASE TYPE 13
09C12-09B	CONCRETE BASE TYPE 13
09C13-03	CONCRETE BASE TYPE 10 & TYPE 13 EXTENSION
09C14-03	CONCRETE CONTROL CABINET BASE, TYPE L
09C15-01	CONCRETE BASE TYPE 10 SPECIAL
09C16-01	CONCRETE BASE TYPE 10 SPECIAL EXTENSION
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
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)
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-09E	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-09G	TYPE 10 SPECIAL POLE 40' MONOTUBE ARM
09E08-09J	TYPE 13 POLE 35'-55' MONOTBE ARM
09E08-09K	GENERAL NOTES,HARDWARE DETAILS FOR TYPE 9/10,9/10 SPECIAL,12 & 13 POLES W/MONOTUBE ARMS
09F15-04A	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
09H05-01	CABINET BREAKER DISCONNECT BOX INSTALLATION
09H09-02	COMMUNICATION VAULT TYPE 1
10A01-04	ELECTRICAL HANDHOLE WIRING
11B01-05	CONCRETE CORRUGATED MEDIAN
11B02-02	CONCRETE MEDIAN NOSE
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13B02-09A	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
13C18-08F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
13C19-03	HMA LONGITUDINAL JOINTS
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

6

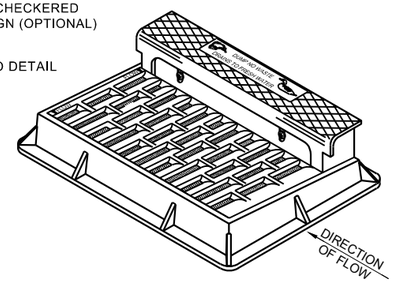
Standard Detail Drawing List

14B47-05A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05D	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05E	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05F	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05G	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
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
15C02-09G	TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-08B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C18-08C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D12-11B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D12-11D	TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
15D16-06	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-07A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D35-03A	RAMP GATE HARD WIRED
15D35-03B	RAMP GATE HARD WIRED
15D35-03C	RAMP GATE HARD WIRED
15D40-05A	TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D42-01	TRAFFIC CONTROL, TWO LANE FULL FREEWAY CLOSURE

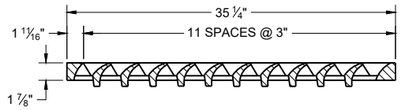
6

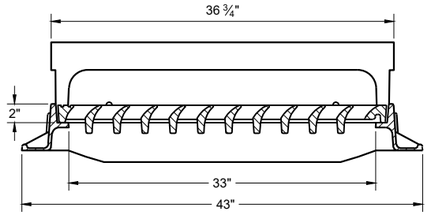


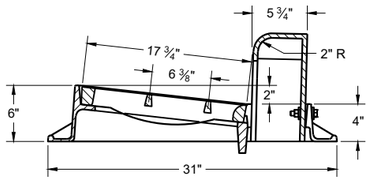
NOTE: EITHER CASTING IS ACCEPTABLE

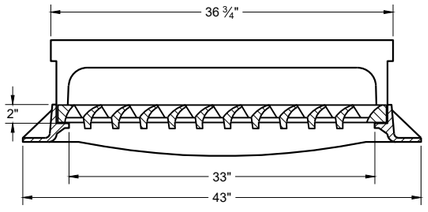


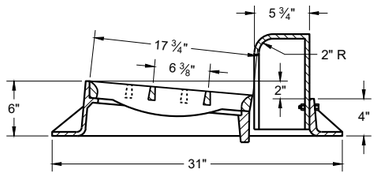
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







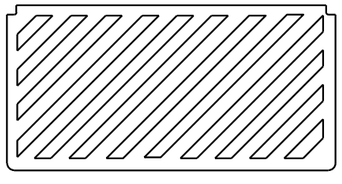




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

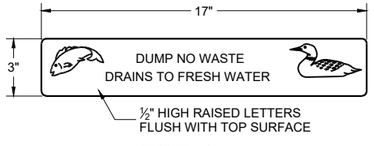
1 ⅛" DIAGONAL BARS WITH 1 ⅝" OPENINGS



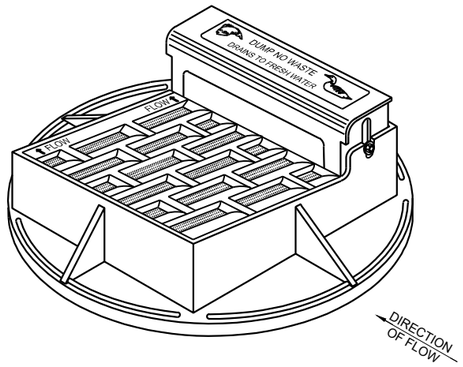
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 ¾" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

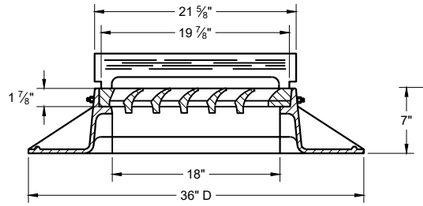


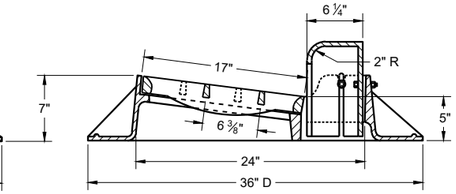
LOGO DETAIL



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE





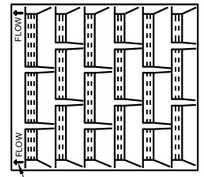
TYPE "A"

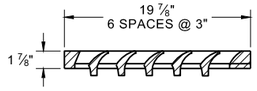
GENERAL NOTES

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.

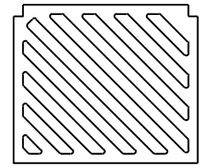
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.





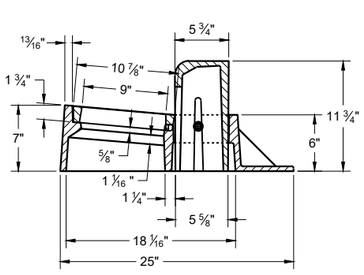
1" DIAGONAL BARS WITH 1 ½" OPENINGS



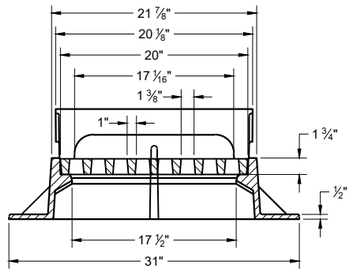
SPECIAL GRATE FOR TYPE "A" COVER

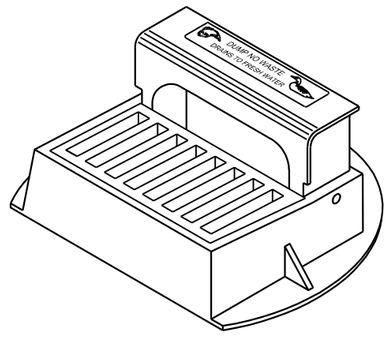
(MEASURES 19 ¾" X 17" X 1 ⅞")

(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
July 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

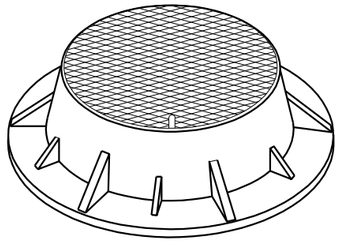
FHWA

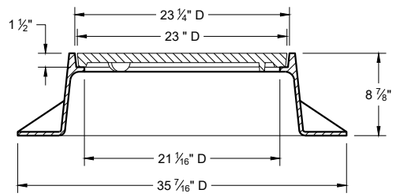
GENERAL NOTES

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 MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

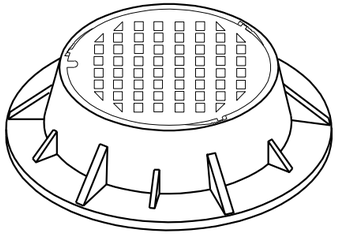
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

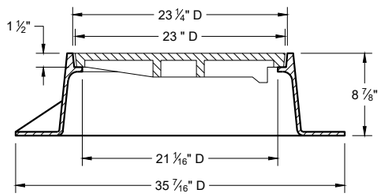




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

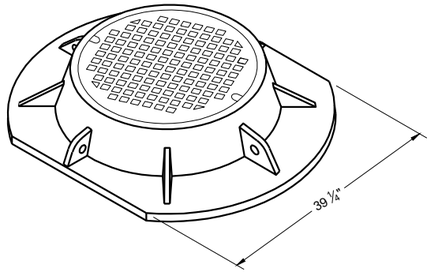


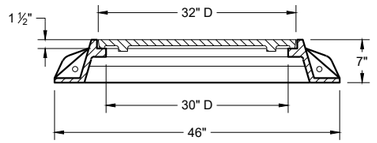


TYPE "J" SPECIAL

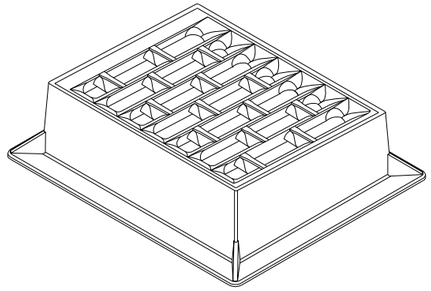
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

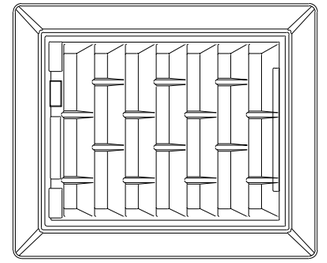
NOTE: EITHER CASTING IS ACCEPTABLE

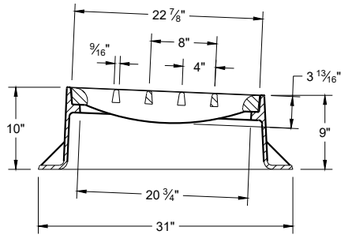


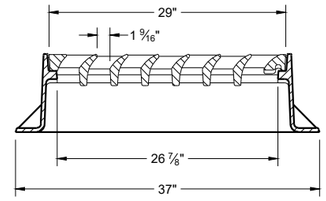


TYPE "K"

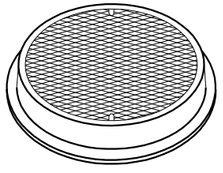


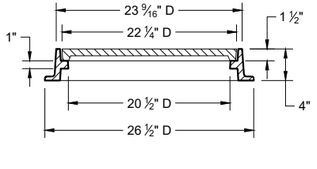




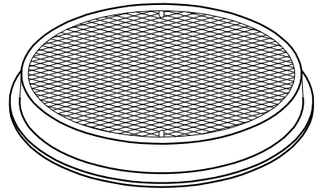


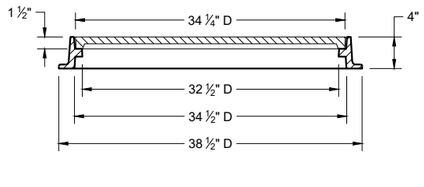
INLET COVER TYPE "BW"





TYPE "L"





TYPE "M"

INLET COVERS TYPES BW
MANHOLE COVERS TYPES K, J, J-S, L, AND M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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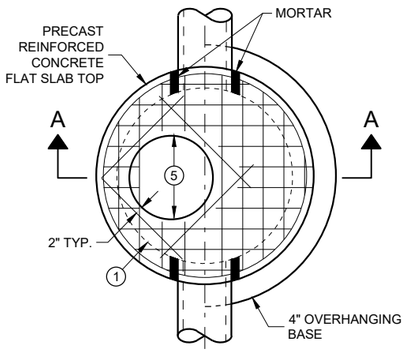
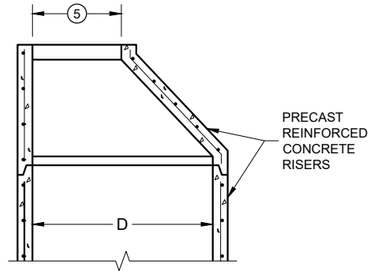
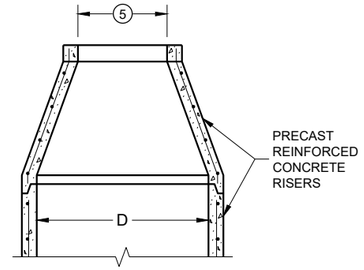
SDD 08A05-20d



PLAN VIEW
CIRCULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42*	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

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 MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

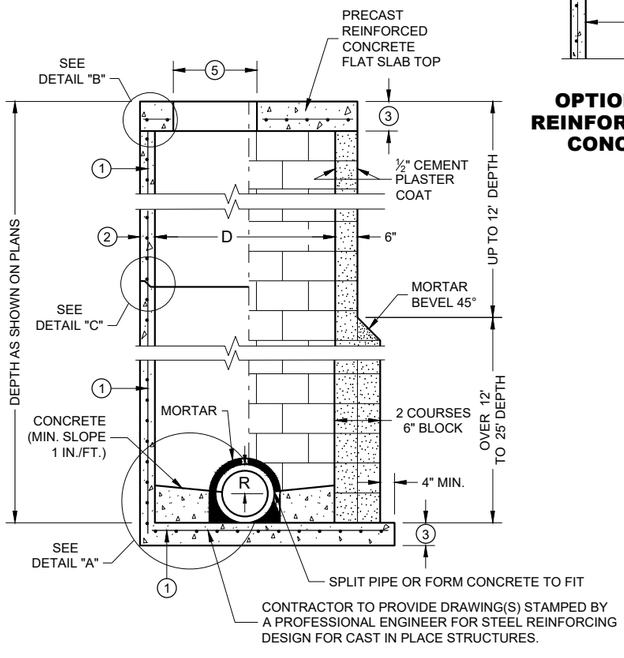
(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP.).

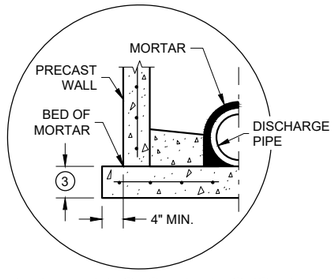
(5) SEE MANHOLE COVER OPENING MATRIX.



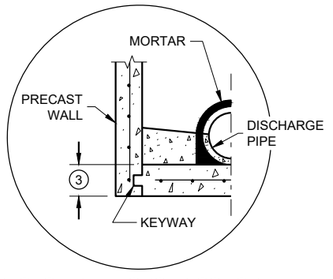
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

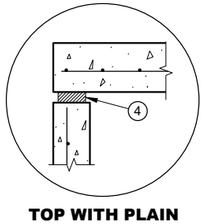


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

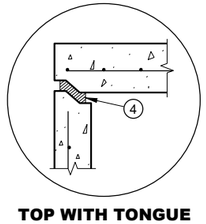


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

DETAIL "A"

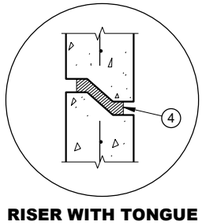


TOP WITH PLAIN END JOINT



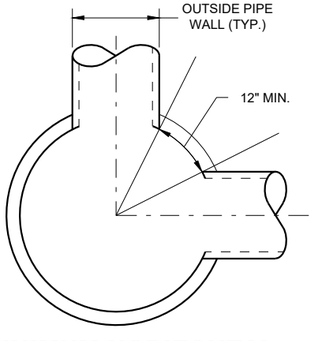
TOP WITH TONGUE AND GROOVE JOINT

DETAIL "B"



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "C"



MINIMUM HORIZONTAL PIPE SEPARATION

MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

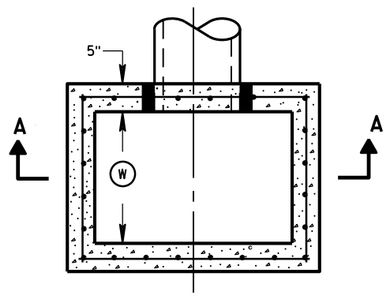
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

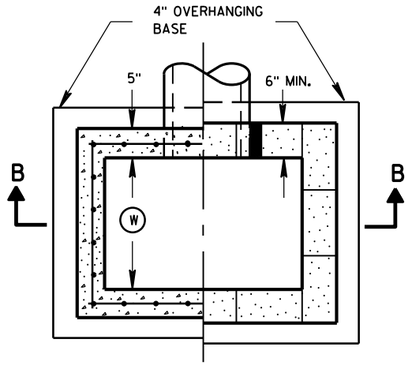
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

6

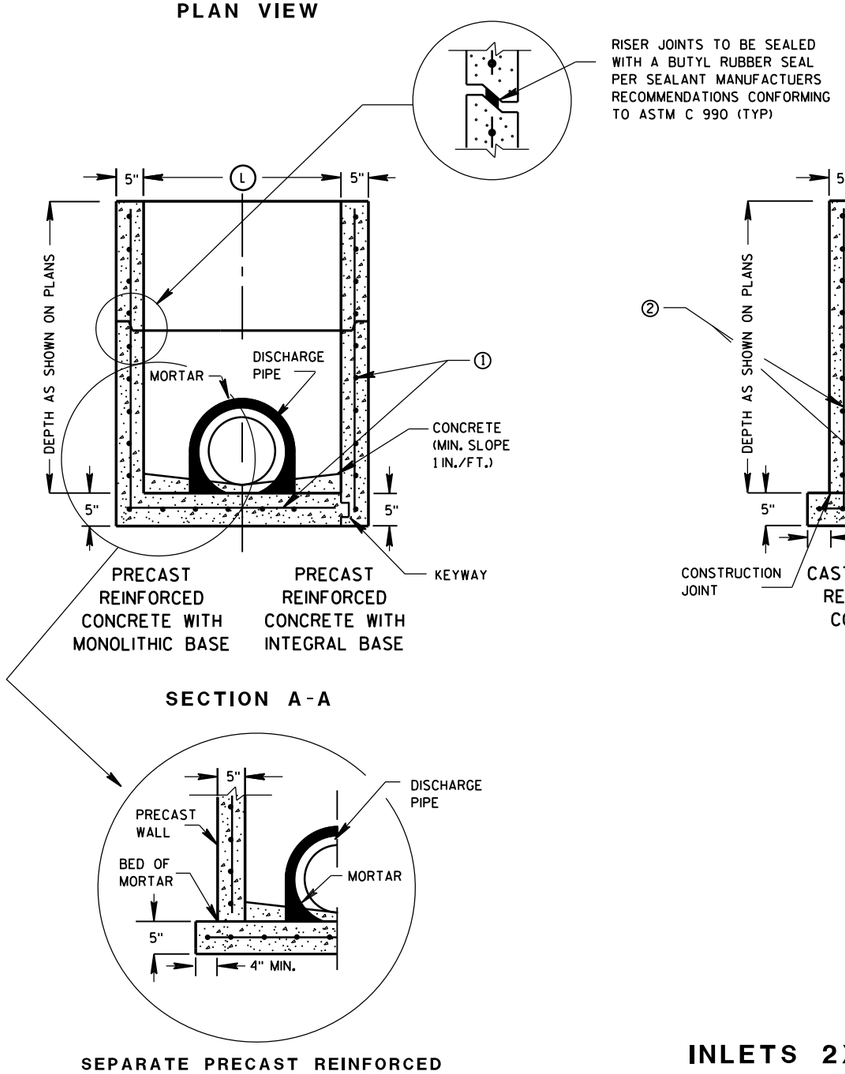
SDD 08B09 - 03



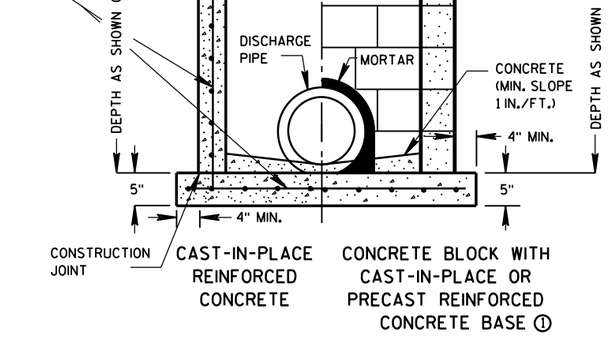
PLAN VIEW



PLAN VIEW



SECTION A-A



SECTION B-B

SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

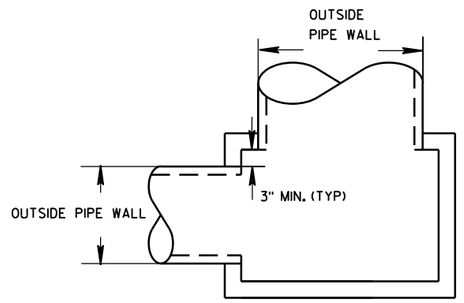
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



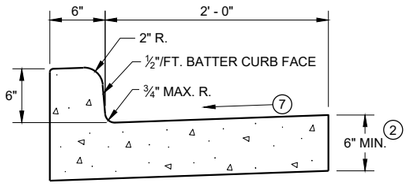
DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

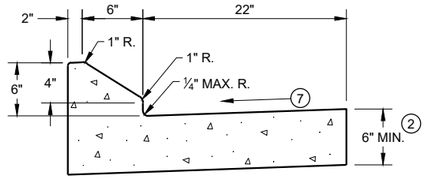
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT
UNIT SUPERVIS
FHWA

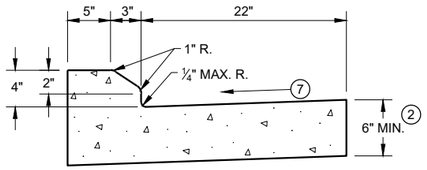
6
S.D.D. 8 C 7-2



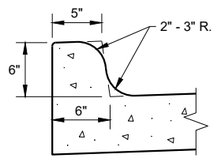
TYPES A (1) & D



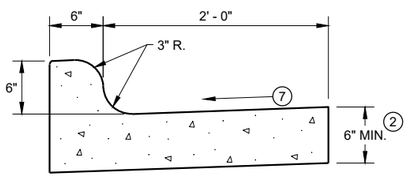
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

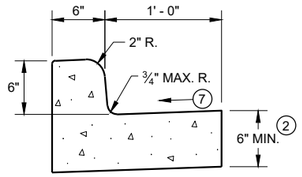


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



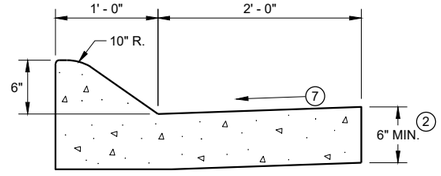
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

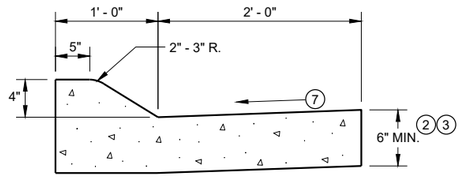


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

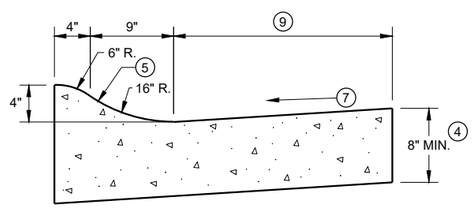


6" SLOPED CURB TYPES A (1) & D



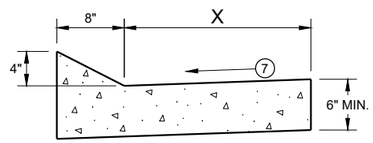
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"

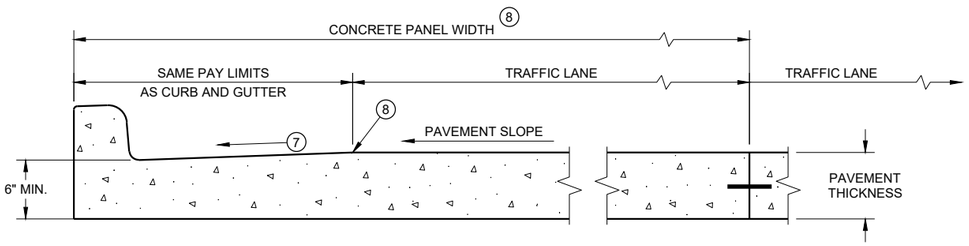


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

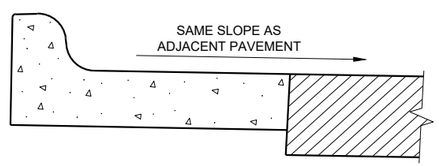
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

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

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

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

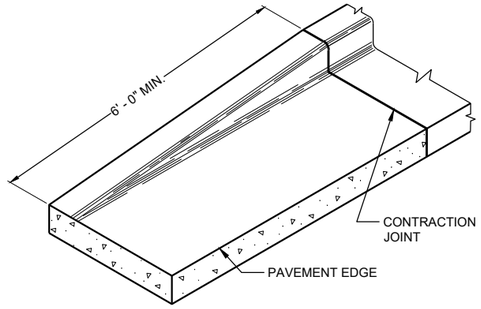
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

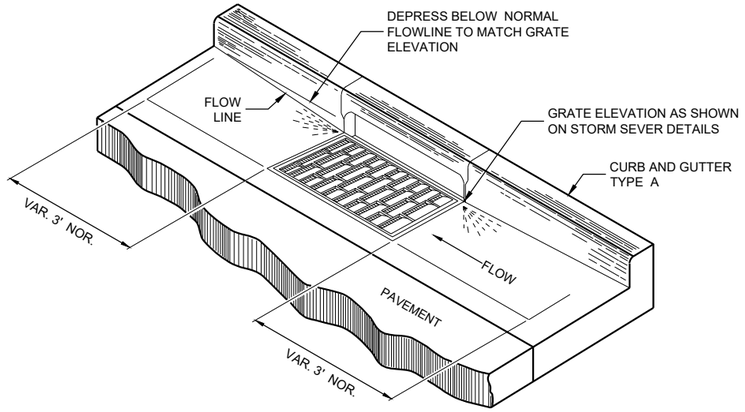
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D01 - 23a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

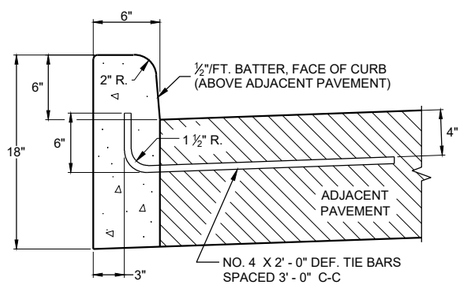
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

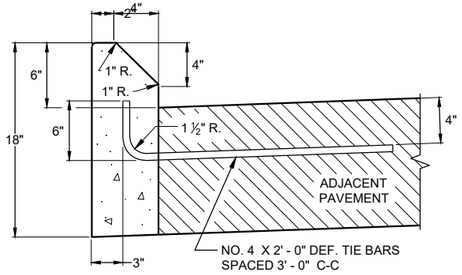
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

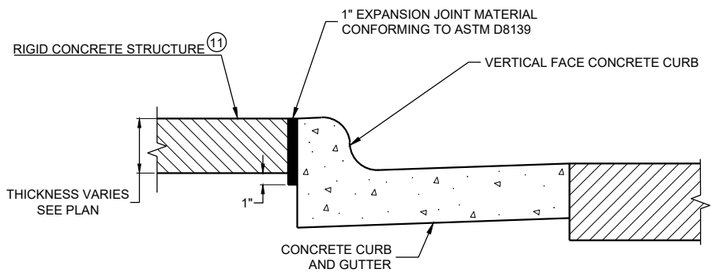


TYPES A (1) & D

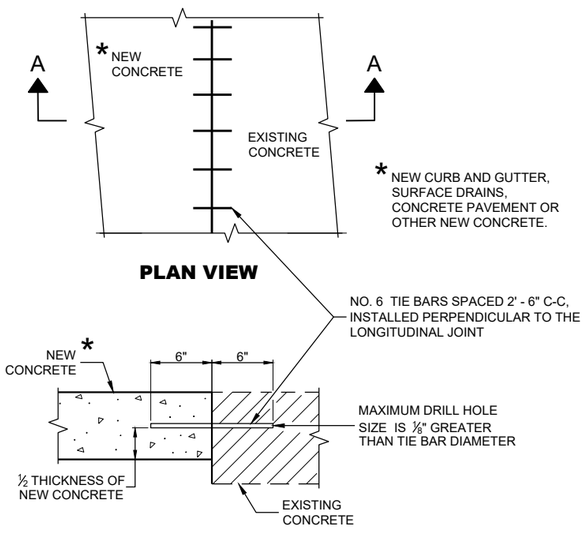


TYPES G (1) & J

CONCRETE CURB



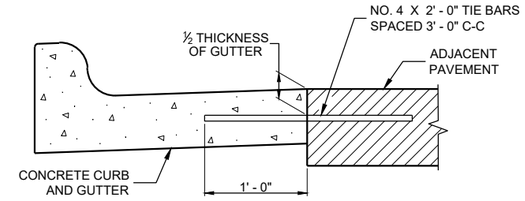
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



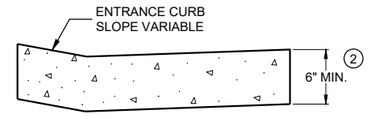
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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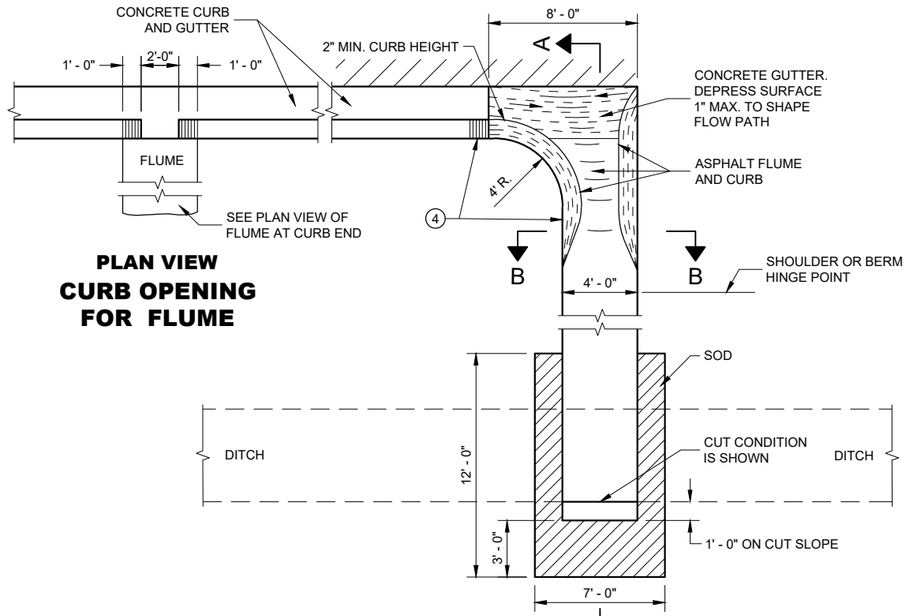
SDD08D01 - 23b

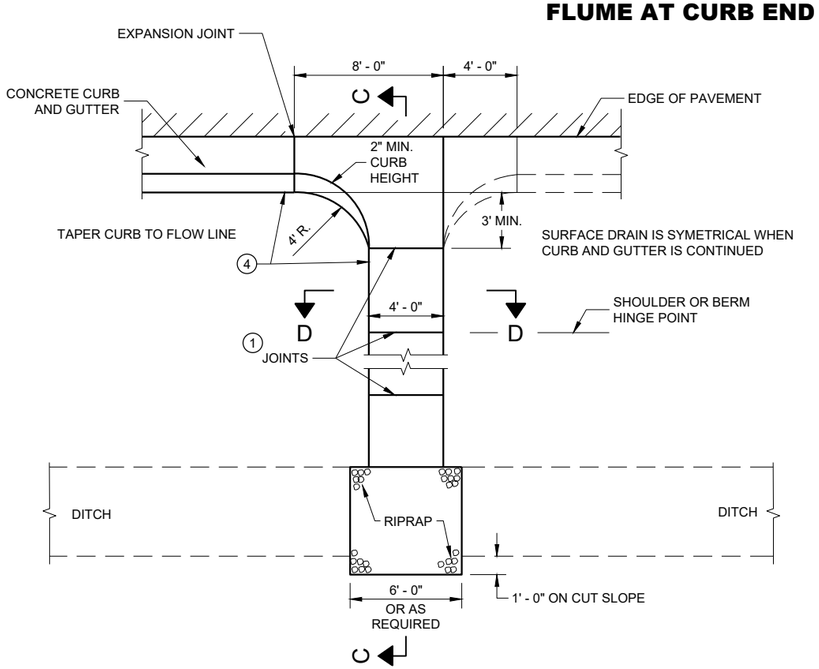
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



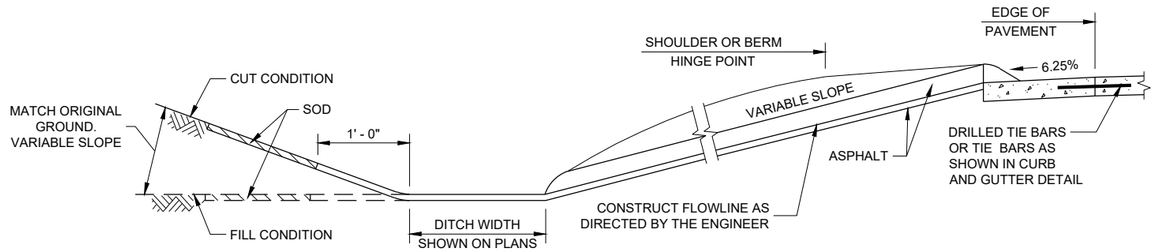
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

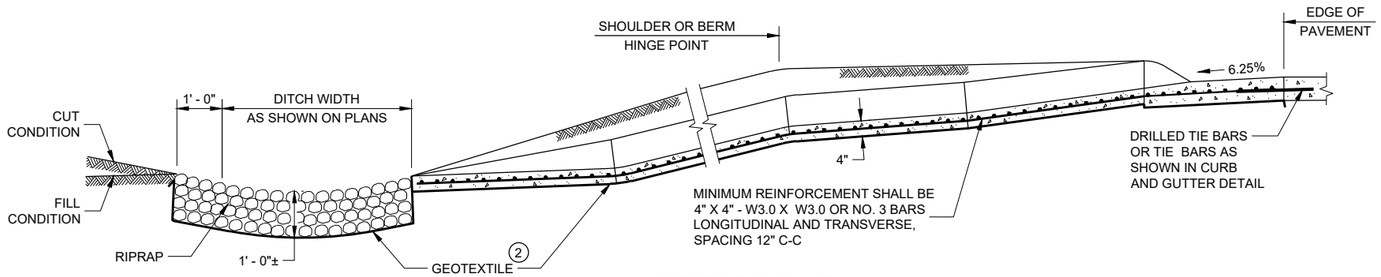
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

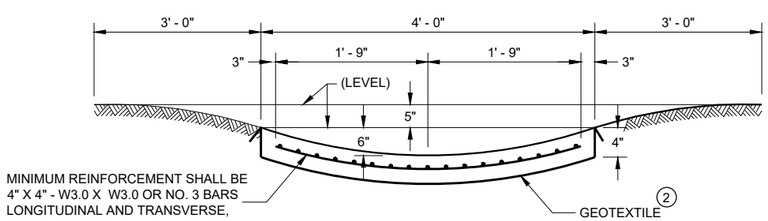


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD 08D04 - 07

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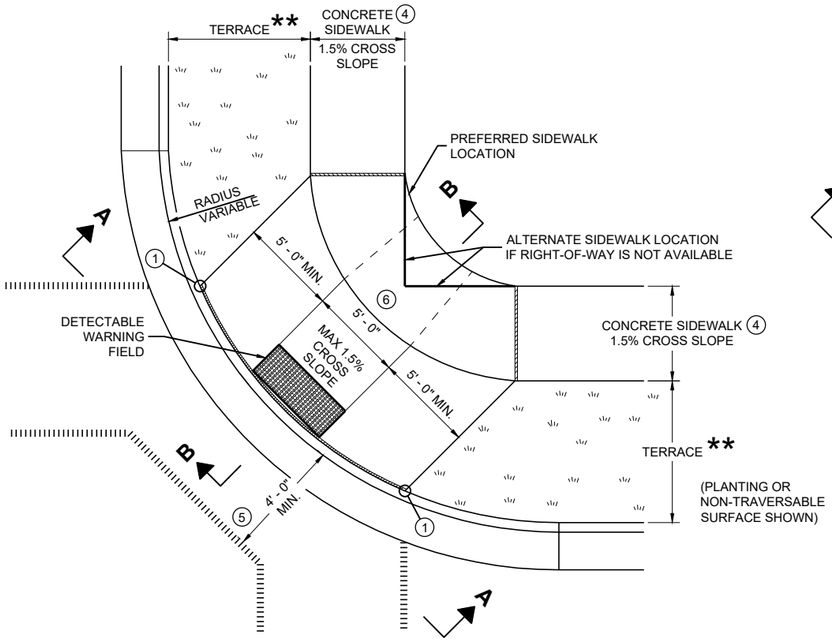
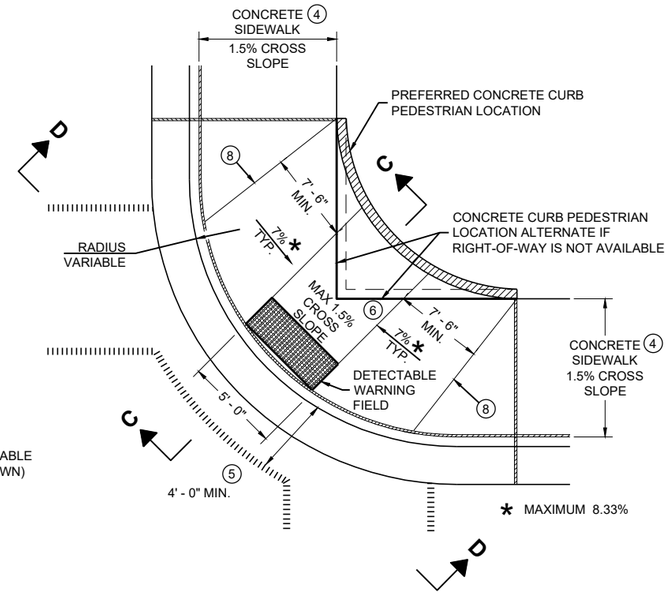
SDD 08D04 - 07



PLAN VIEW

CURB RAMP TYPE 1

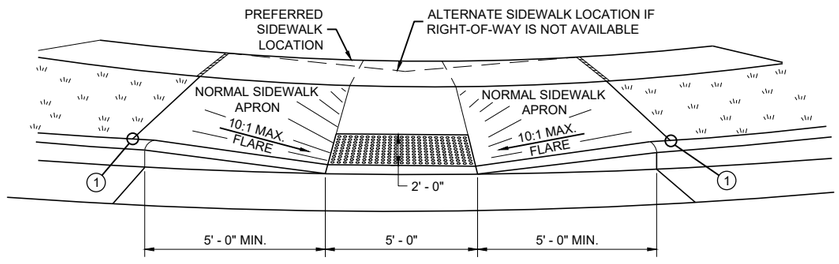
(CENTER OF CORNER RADIUS)



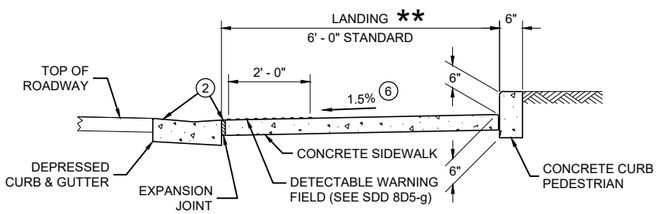
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

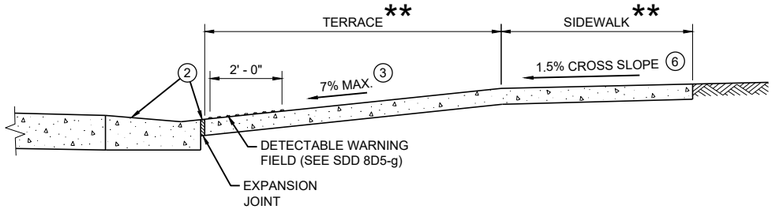


VIEW A - A FOR TYPE 1

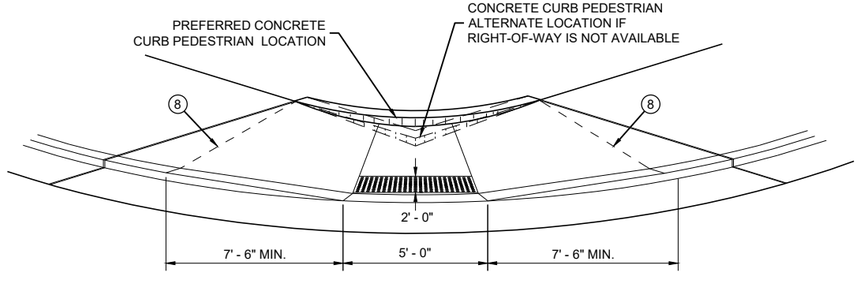


SECTION C - C FOR TYPE 1 - A

** 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.

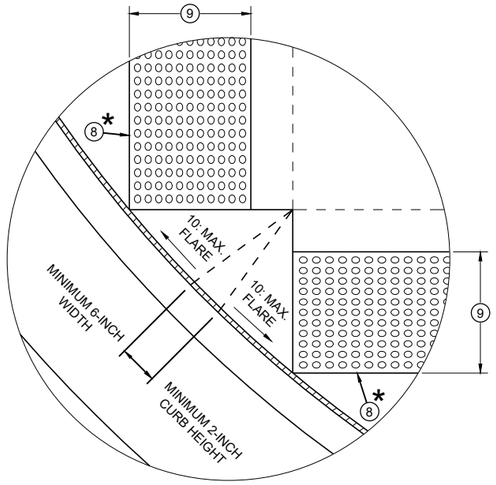
LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

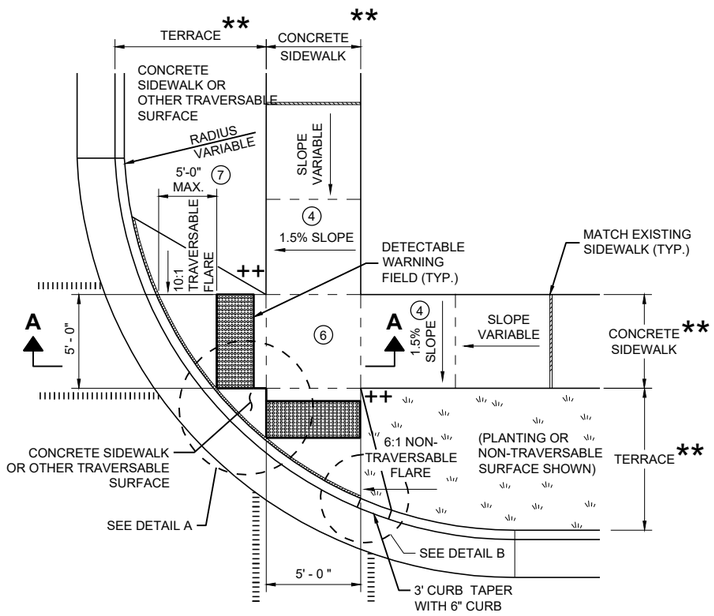
CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

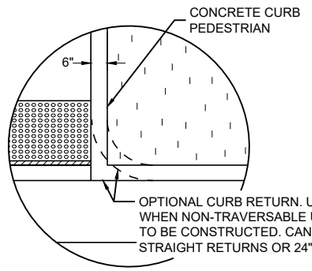
6
SDD 08D05-21a



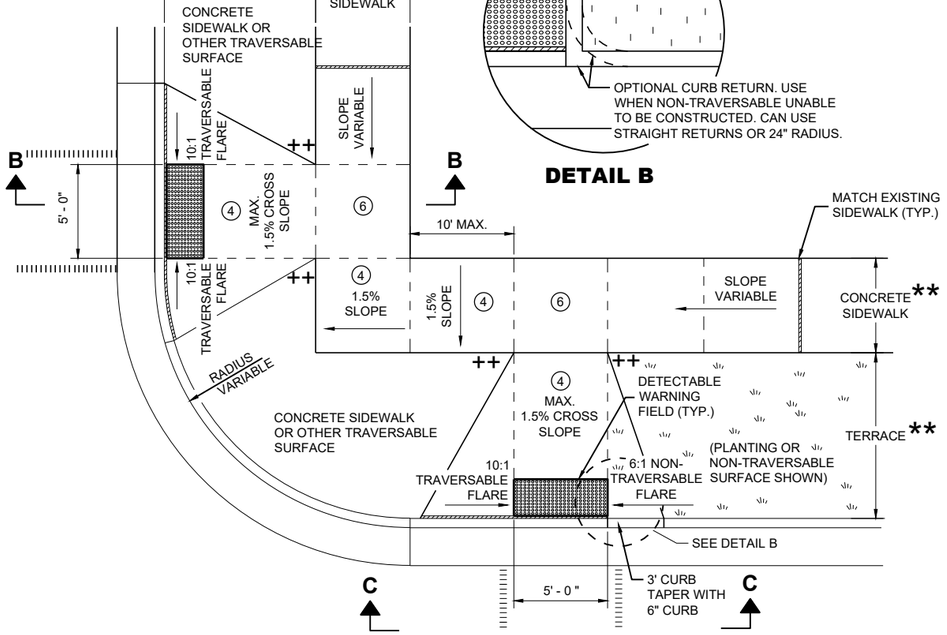
DETAIL A



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.

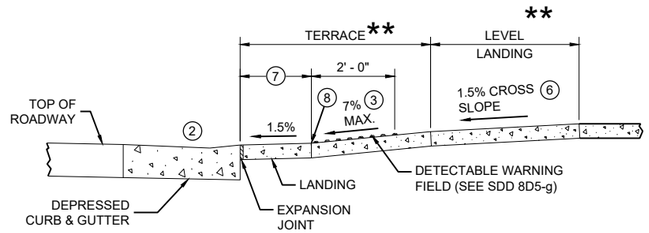
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(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.

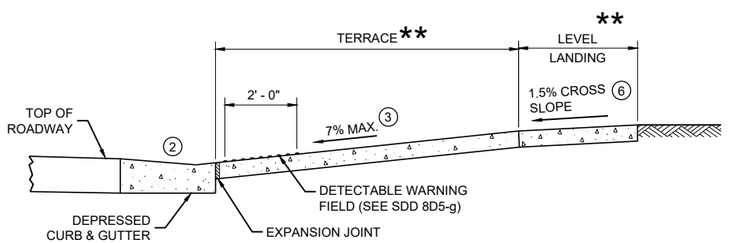


SECTION A - A FOR TYPE 2

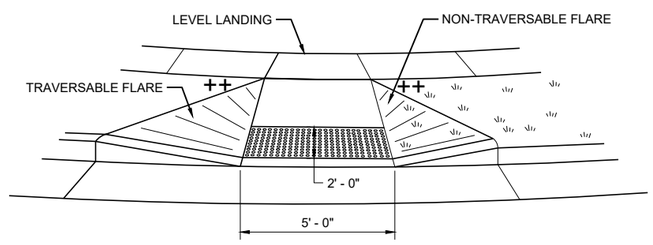
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



SECTION B - B FOR TYPE 3



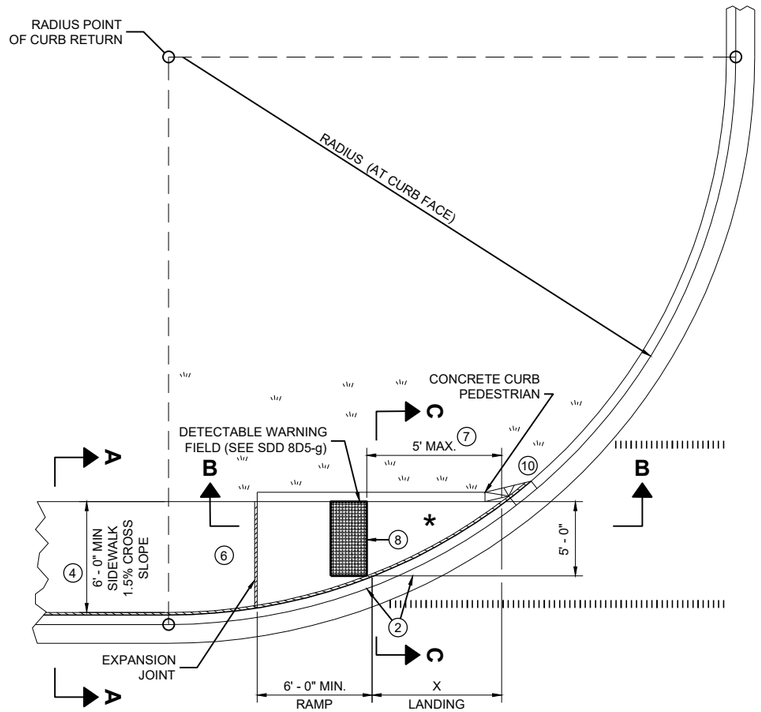
VIEW C - C FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

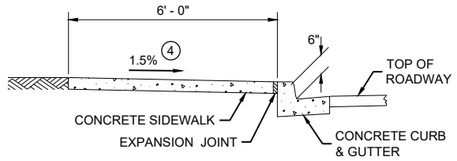


PLAN VIEW

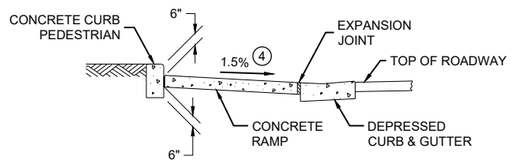
CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

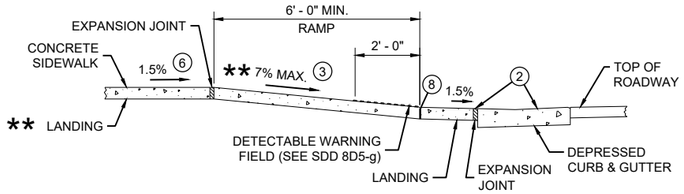
INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A



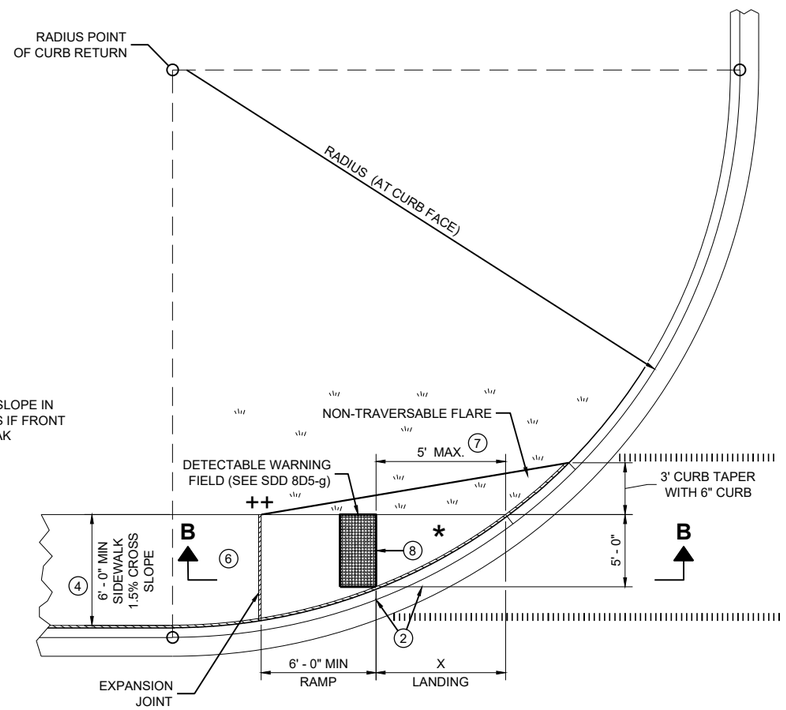
SECTION C - C FOR TYPE 4A



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.

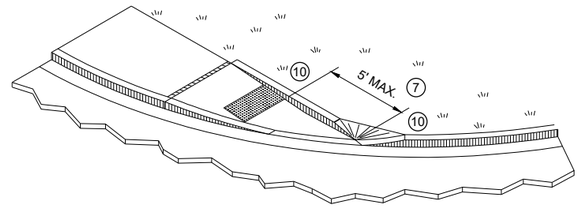
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

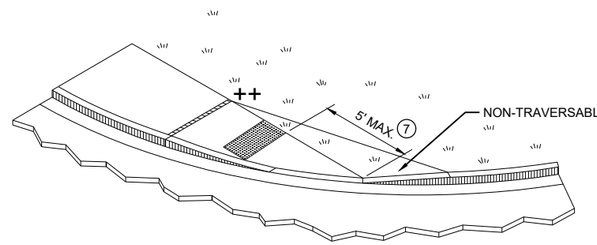
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



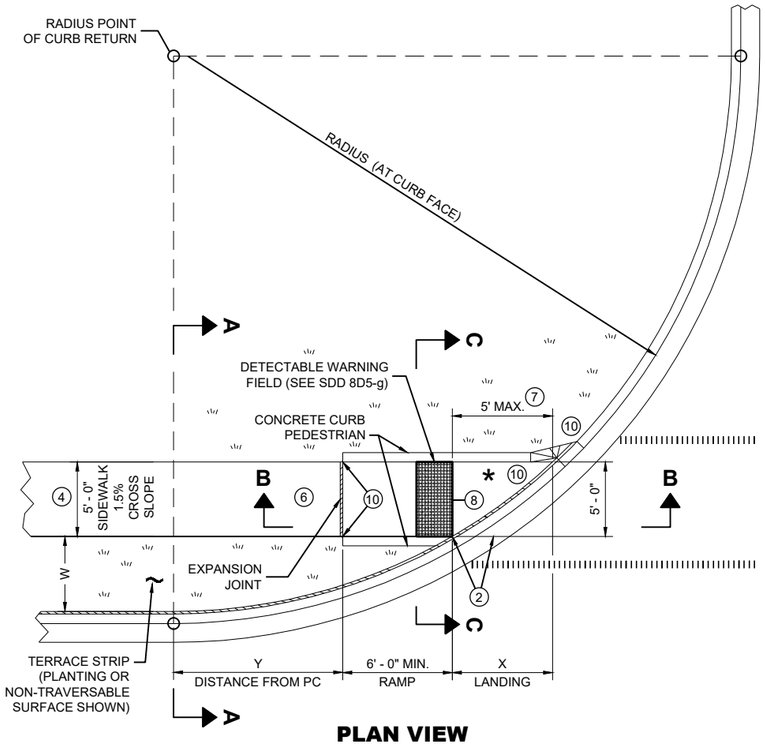
ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

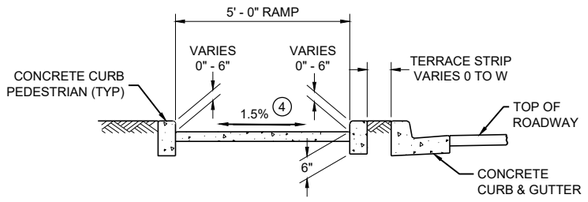
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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.

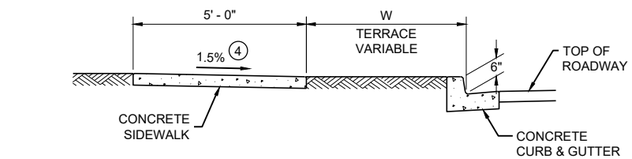
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

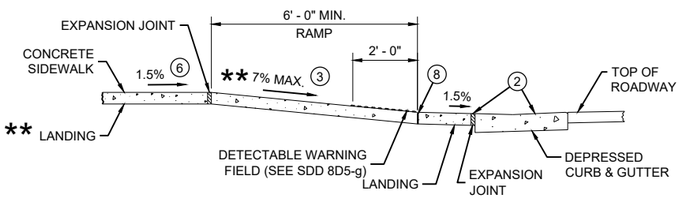
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

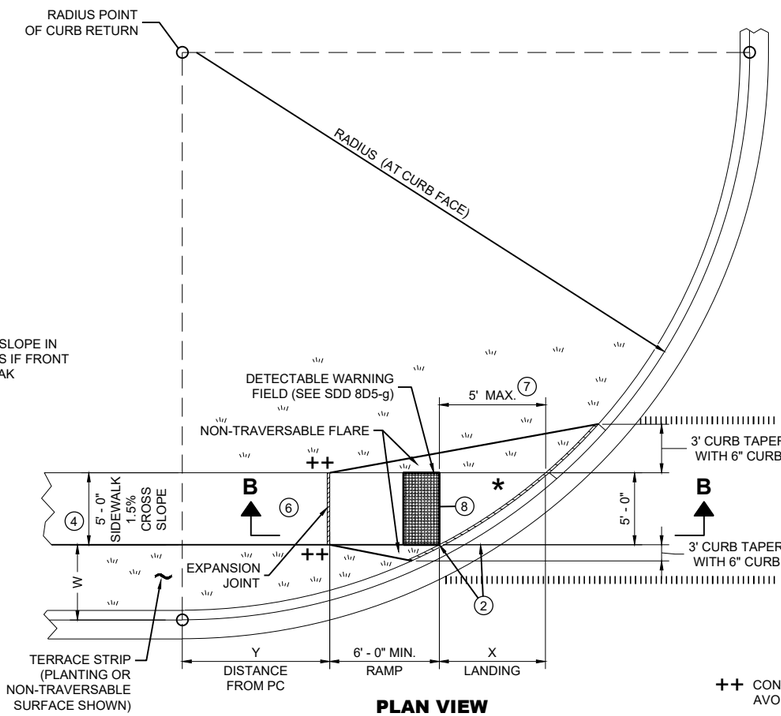


SECTION A - A FOR TYPE 4B



SECTION B - B FOR TYPE 4B AND TYPE 4B1

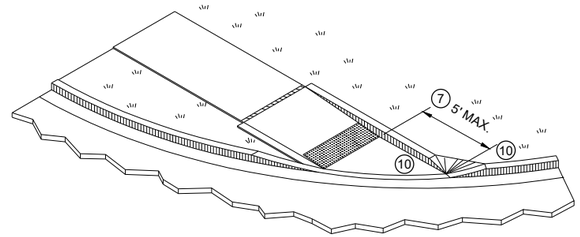
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED



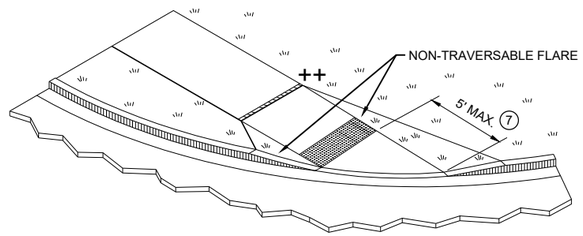
PLAN VIEW
CURB RAMP TYPE 4B1

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



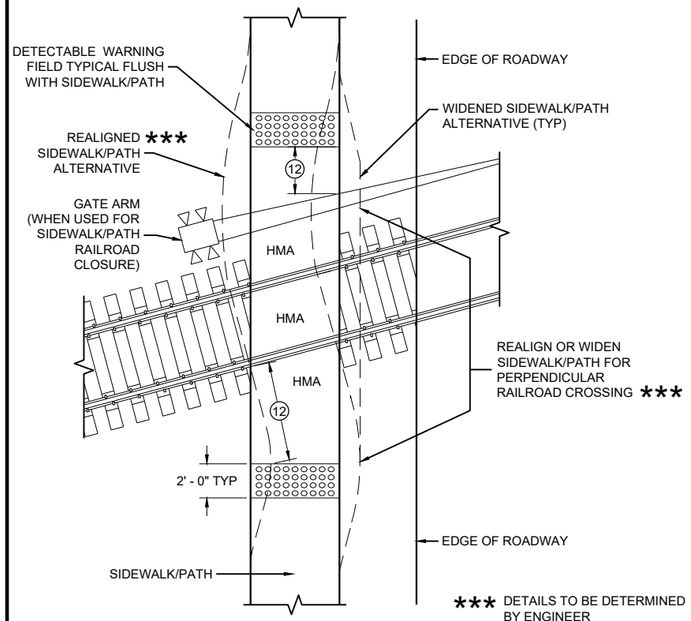
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

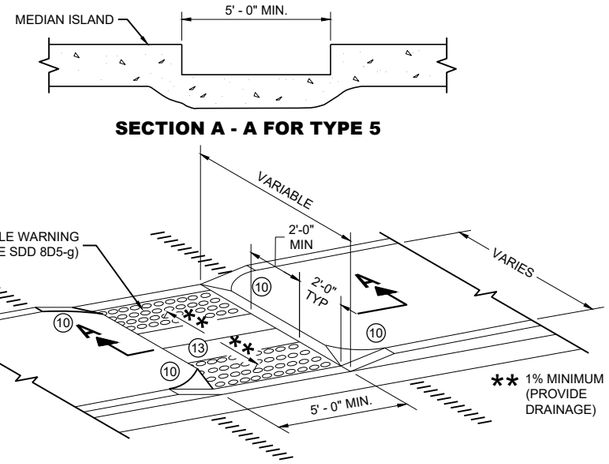
CURB RAMPS
TYPE 4B AND 4B1

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.

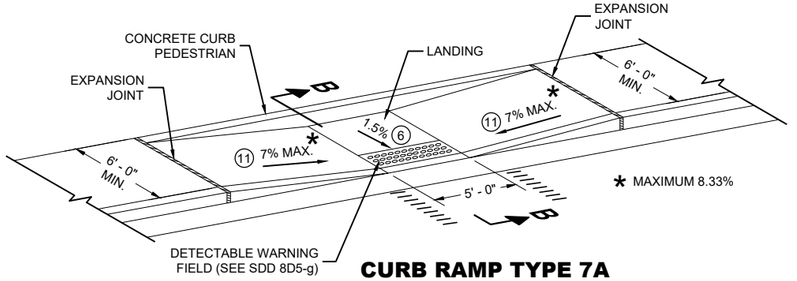
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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.

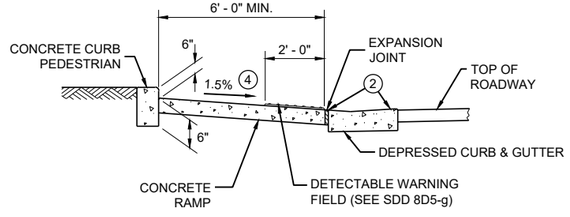
LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

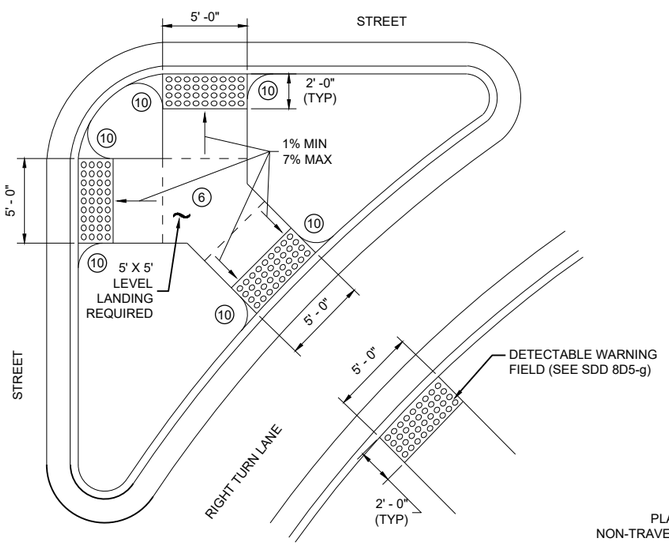


CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



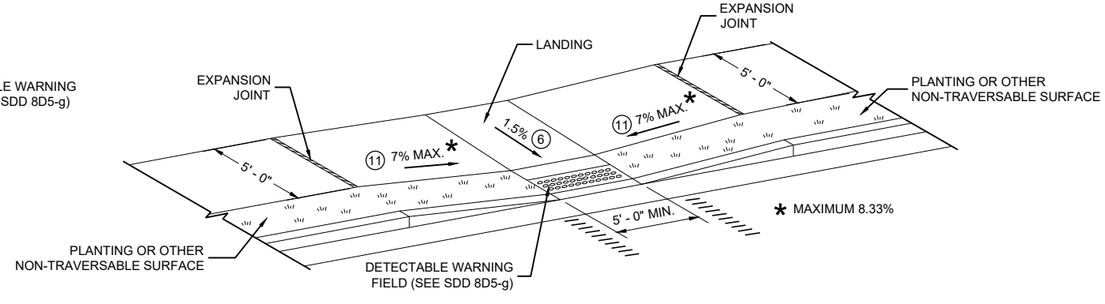
SECTION B - B FOR TYPE 7A



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

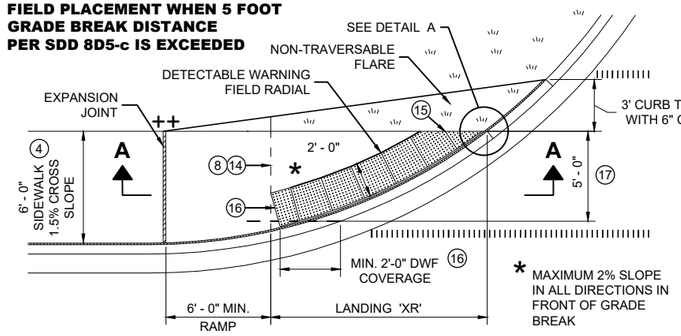
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

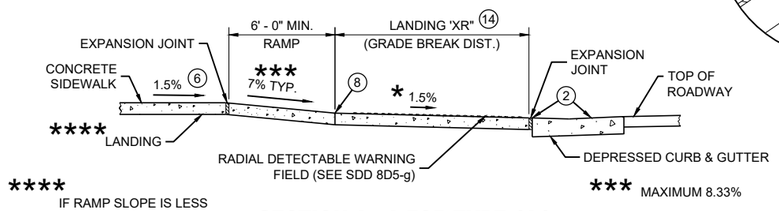
SDD 08D05-21e

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED

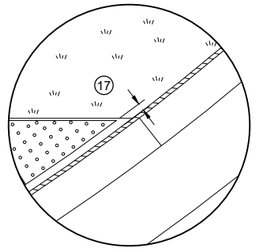


PLAN VIEW

CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



SECTION A - A FOR TYPE 4A1



DETAIL A

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.

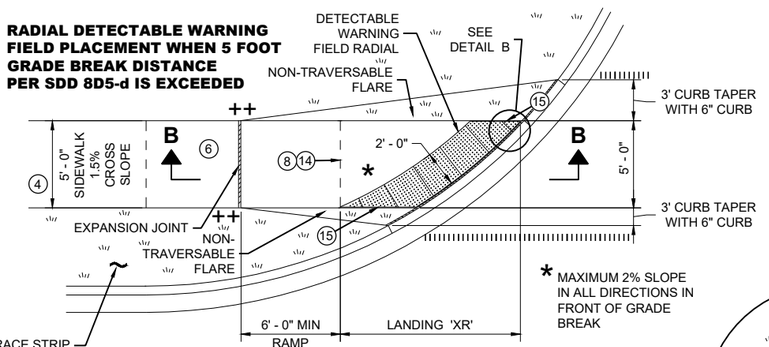
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(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.

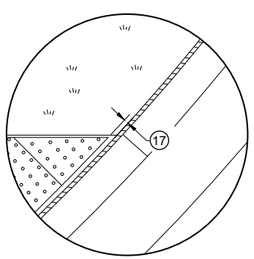
(17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED

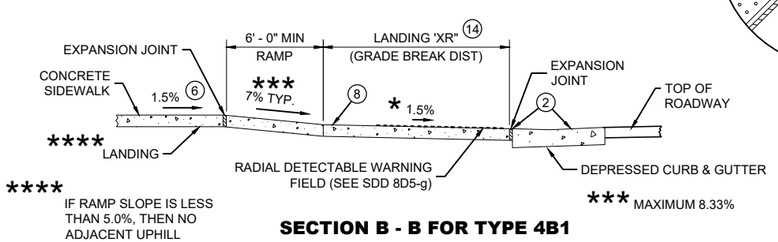


PLAN VIEW

CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

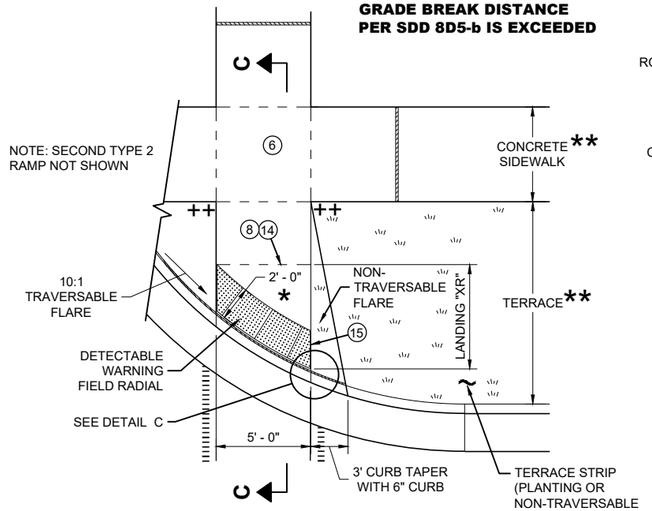


DETAIL B



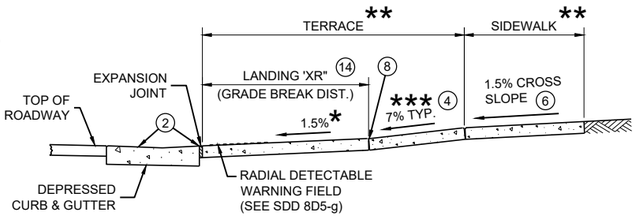
SECTION B - B FOR TYPE 4B1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

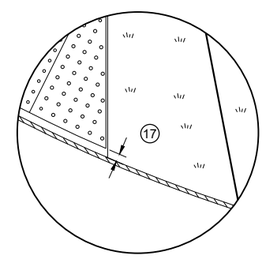


PLAN VIEW

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

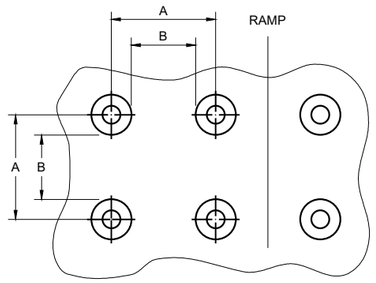
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

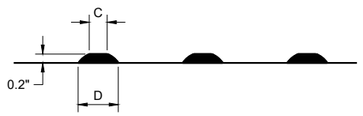
SDD 08D05-21f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

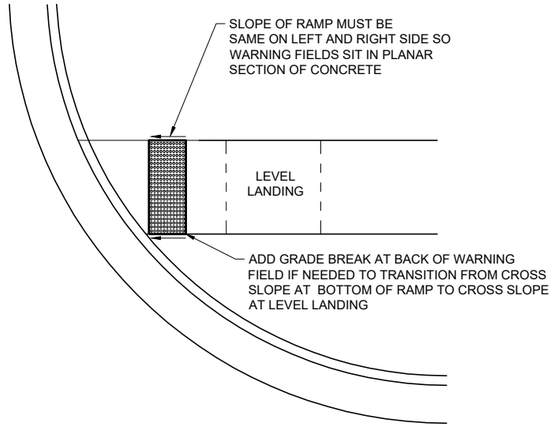
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



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.

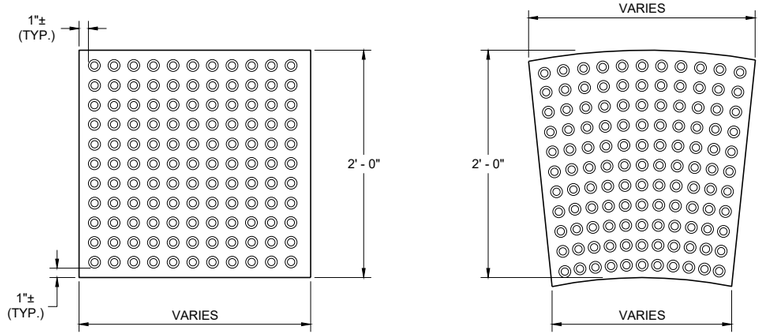
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. 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.

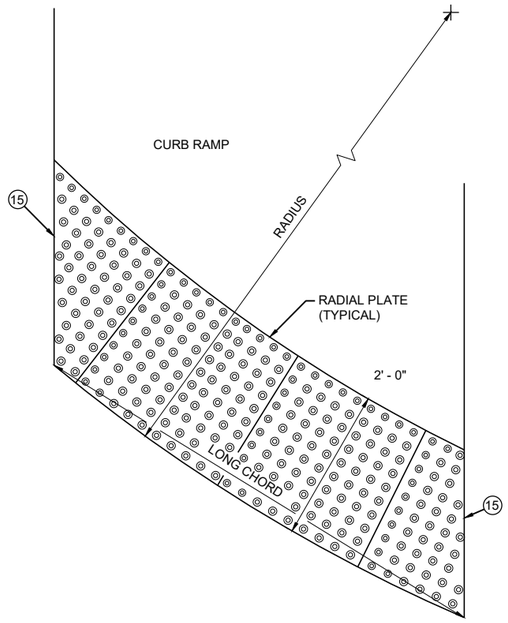
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



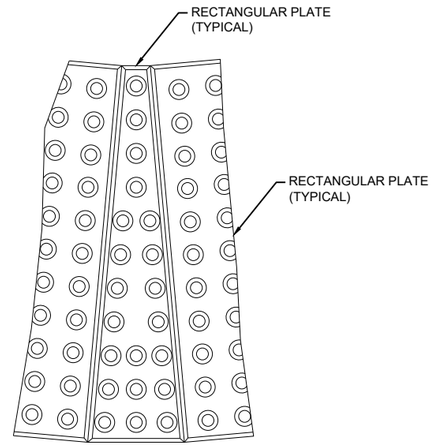
RECTANGULAR PLATES

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

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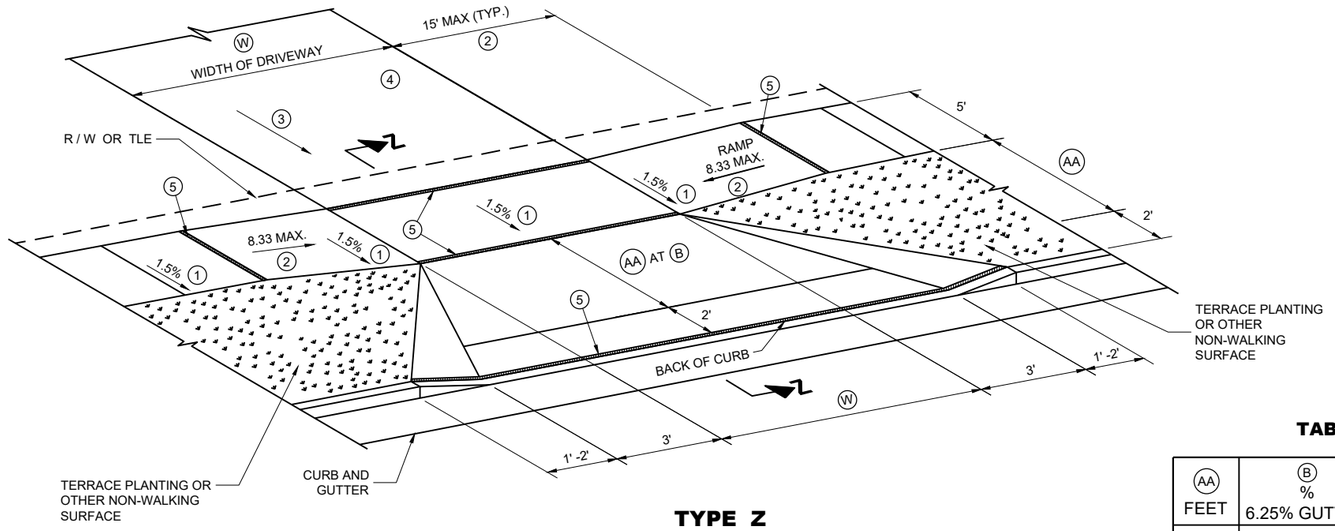


TYPE Z

SIDEWALK WITH WIDER TERRACE
TERRACE VARIES 7 TO 12 FEET

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.

(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

(4) DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

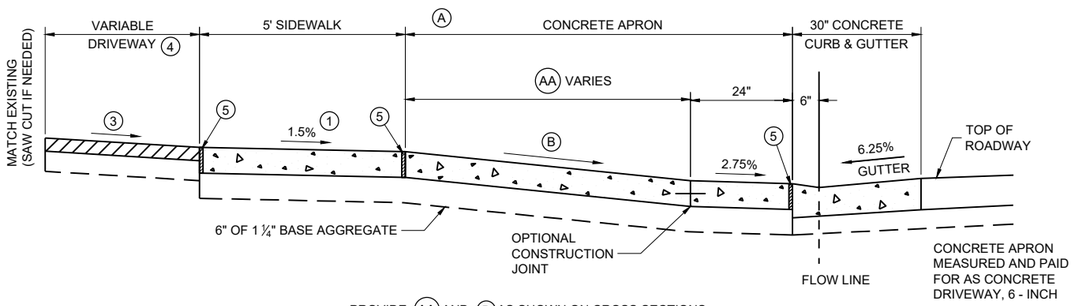
(5) ½" EXPANSION JOINT FILLER.

TABLE Z

(AA) FEET	(B) % 6.25% GUTTER	(B) % 4% GUTTER
4.5'	11.5%	9% TO 11.5%
5.5'	9% TO 11.5%	8% TO 11.5%
6.5'	8% TO 11.5%	6% TO 11.5%
7.5'	7% TO 11.5%	6% TO 11.5%
8.5'	6% TO 11.5%	5% TO 11.5%
9.5'	5% TO 11.5%	4% TO 11.5%

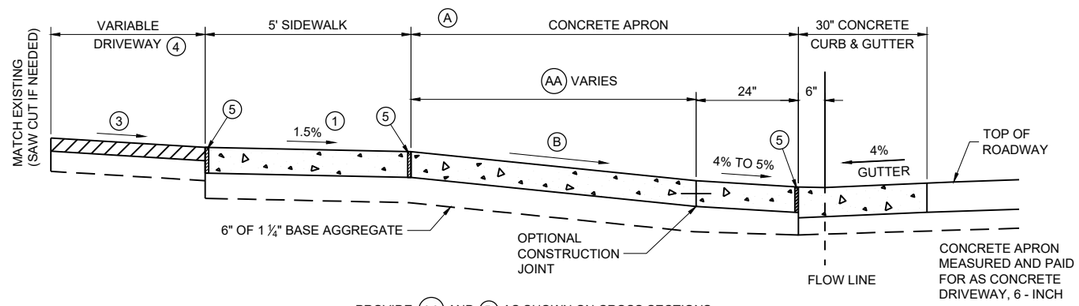
(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)



PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

6.25% GUTTER SLOPE



PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

4% GUTTER SLOPE

NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS FOR (B) VALUES NOT SHOWN IN TABLE Z.

SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY 6-INCH.

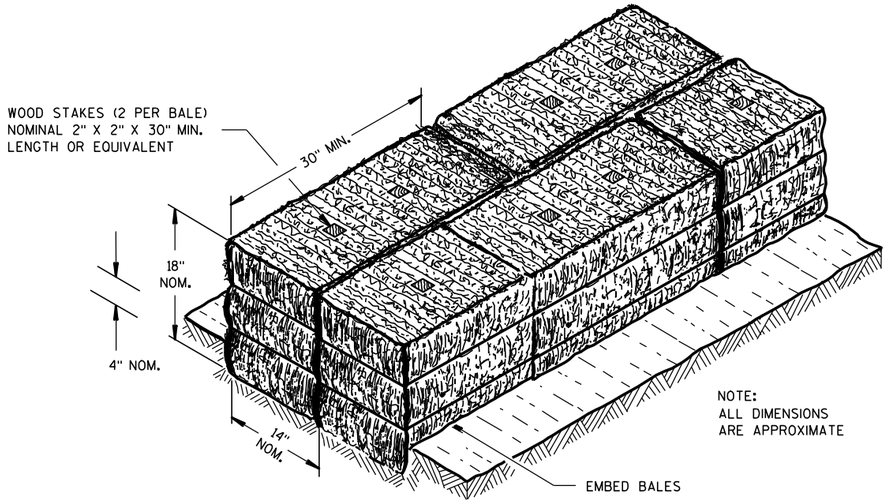
SECTION Z - Z
DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER
(URBAN AND SUBURBAN)

DRIVEWAY AND SIDEWALK RAMPS TYPE Z

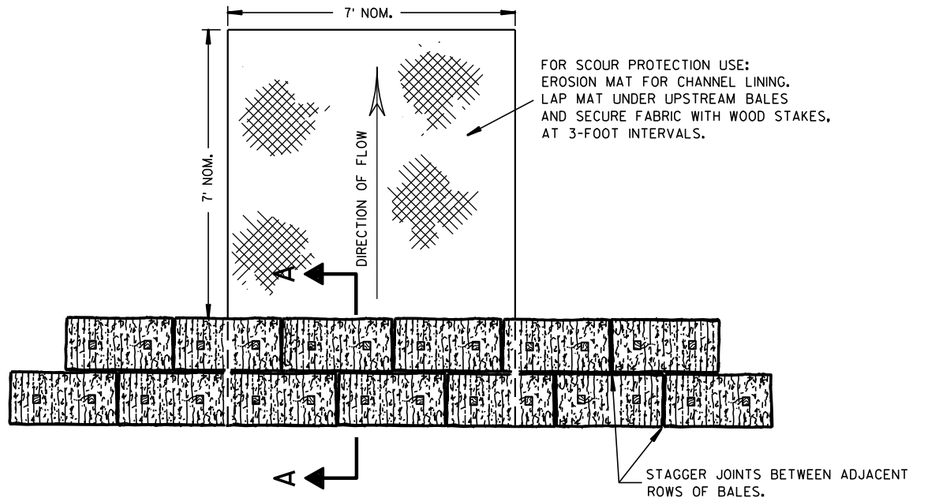
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

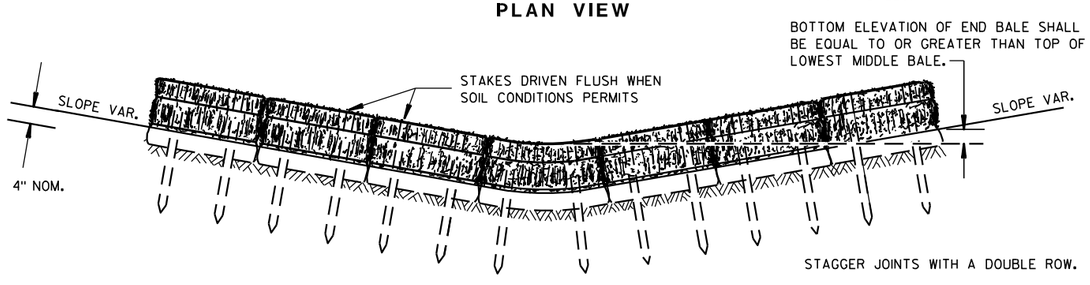
FHWA



SECTION A-A



PLAN VIEW



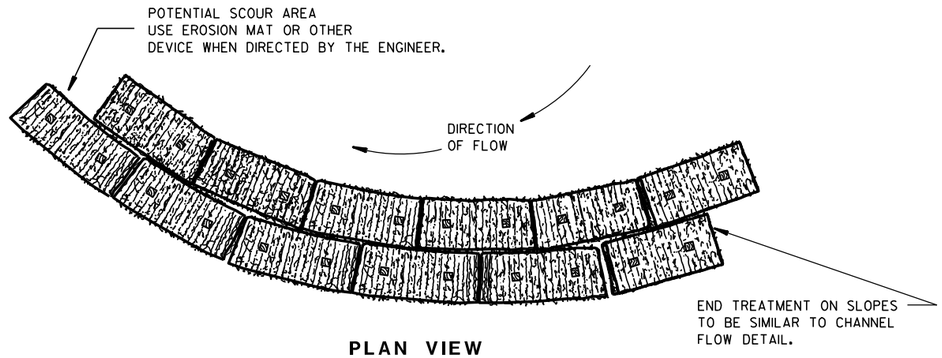
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

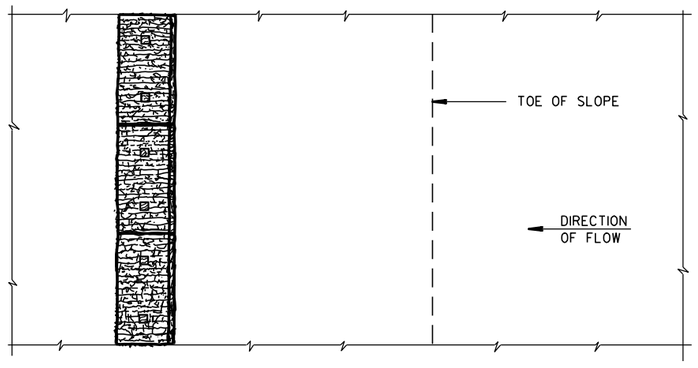
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

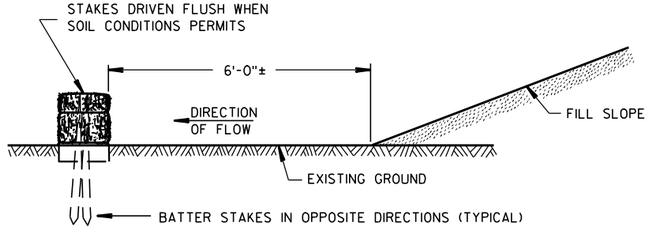


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

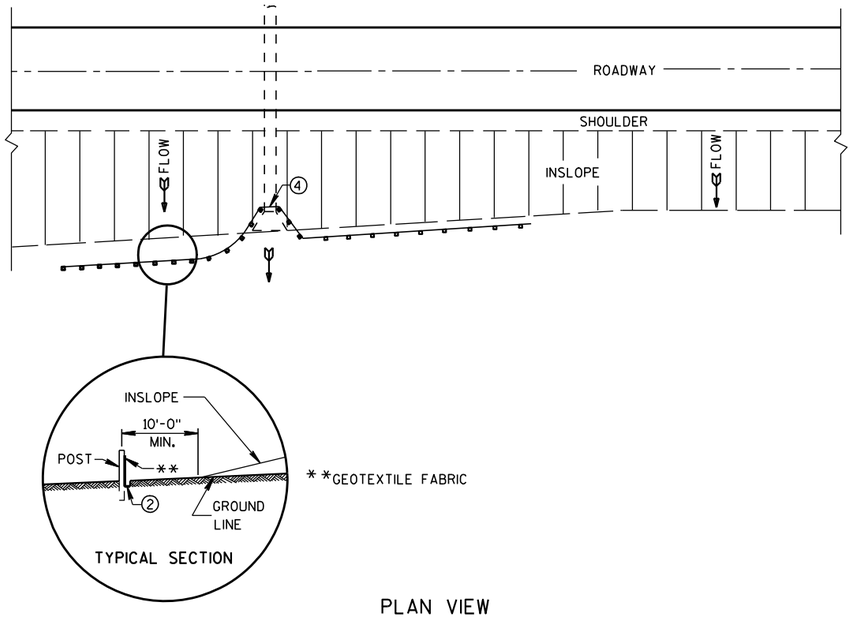
FHWA

6

S.D.D. 8 E 8-3

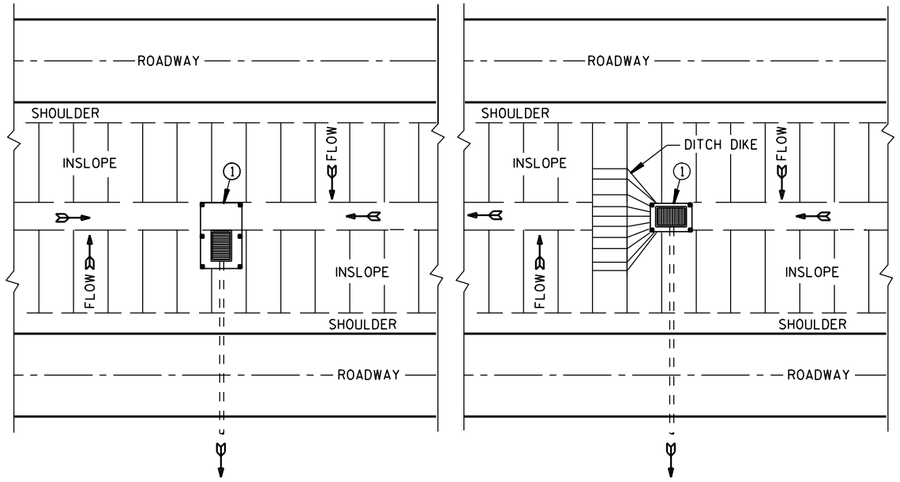
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



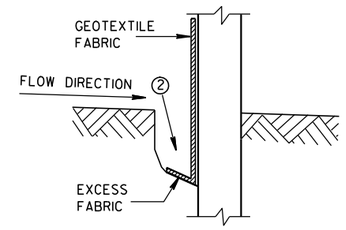
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

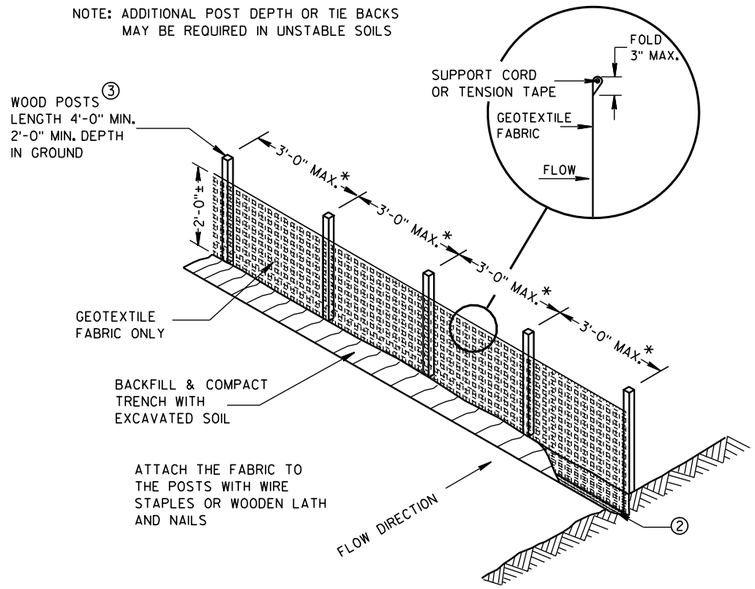
GENERAL NOTES

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

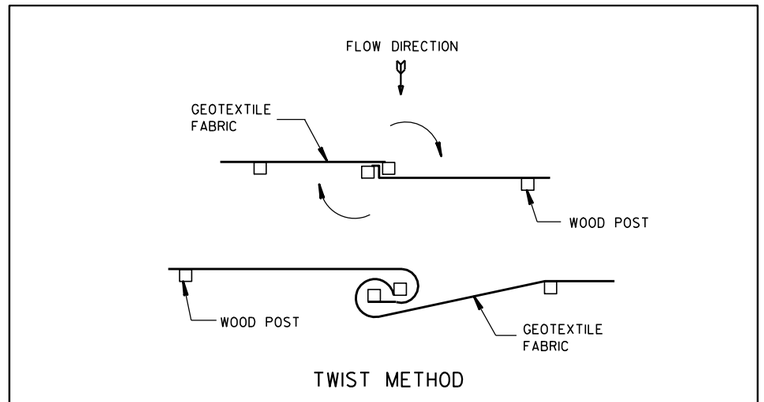
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



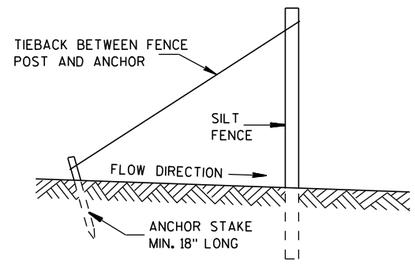
TRENCH DETAIL



SILT FENCE



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

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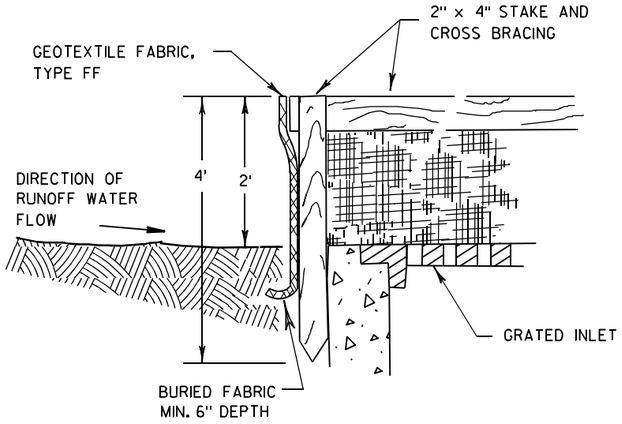
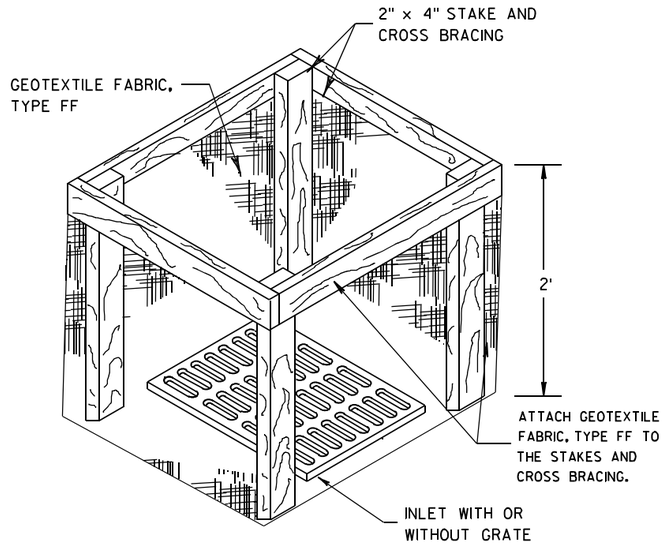
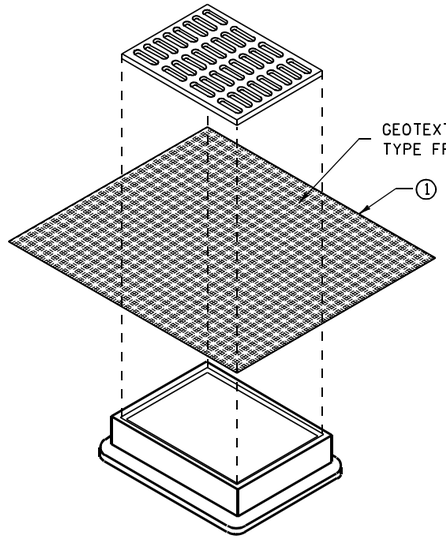
S.D.D. 8 E 9-6



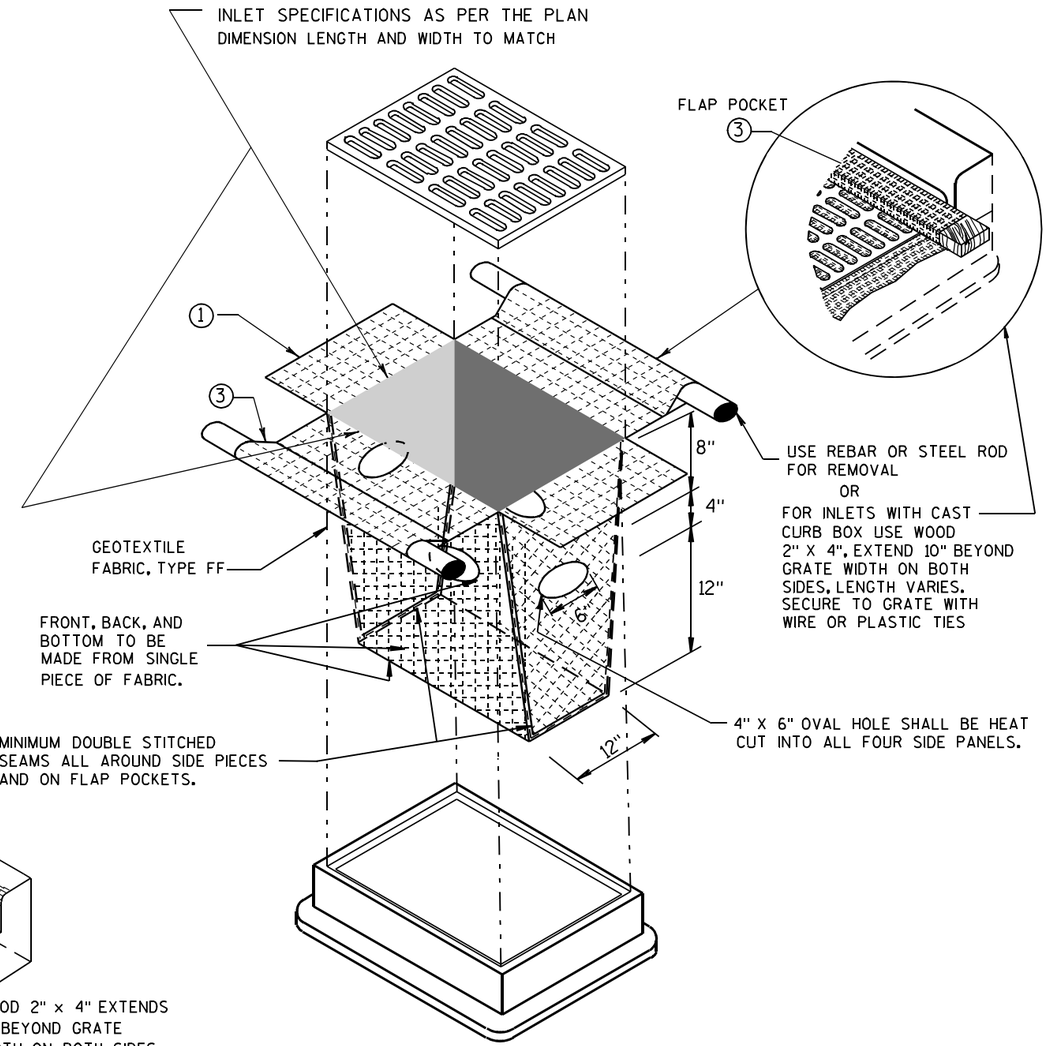


INLET PROTECTION, TYPE A



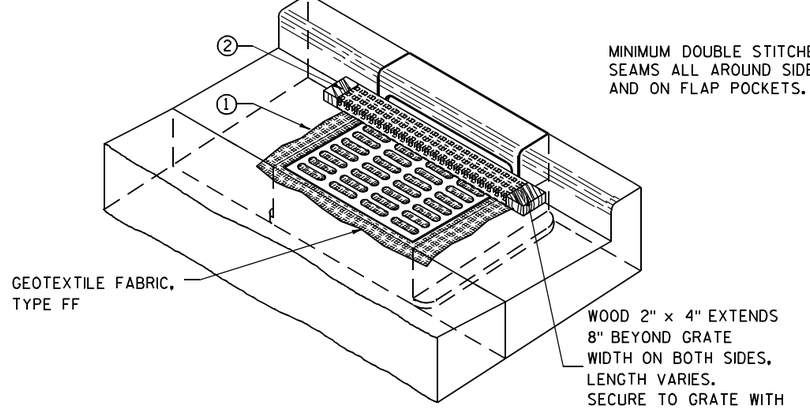
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

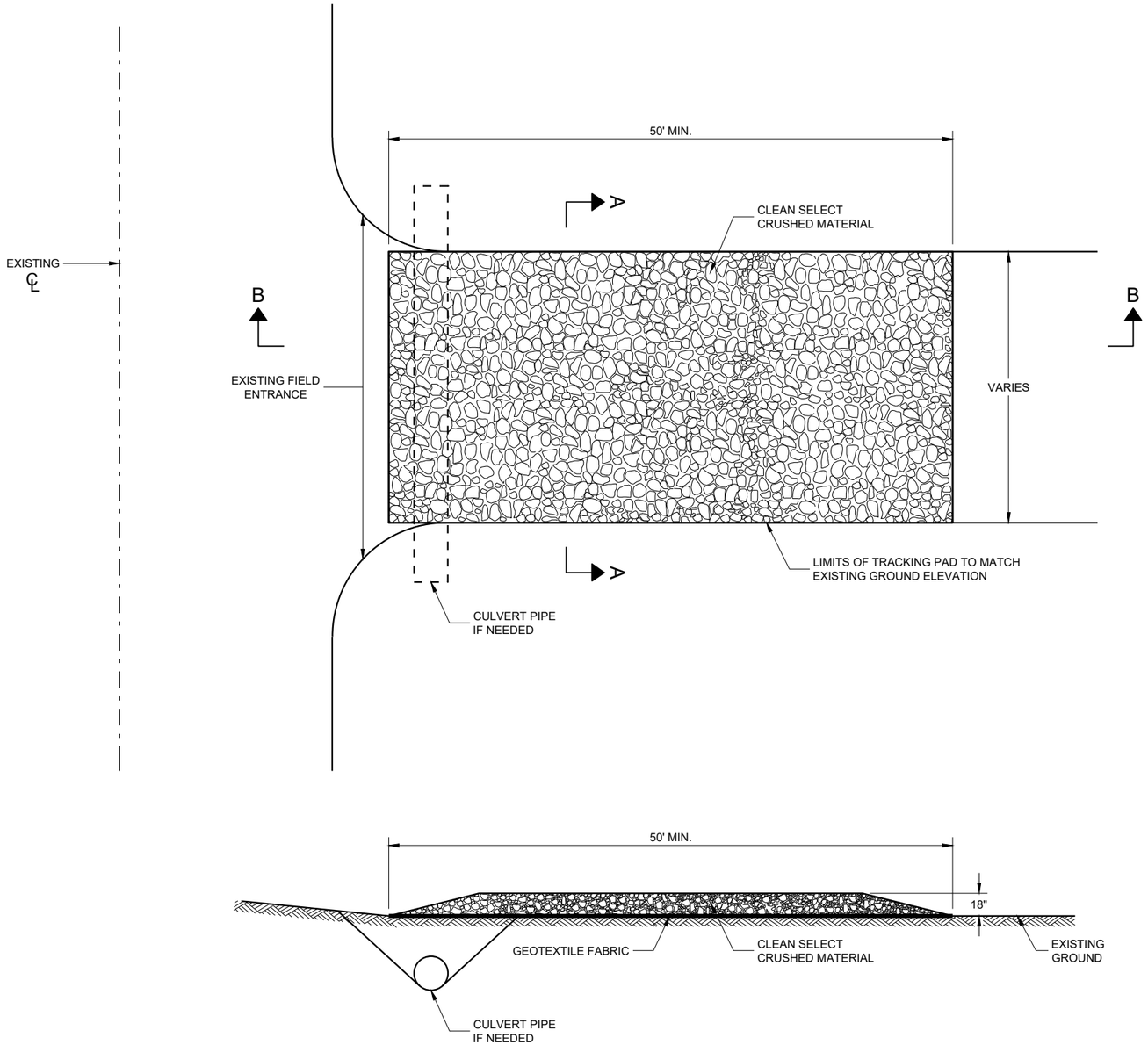
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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.

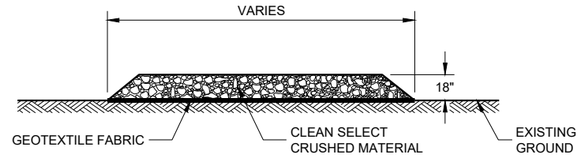
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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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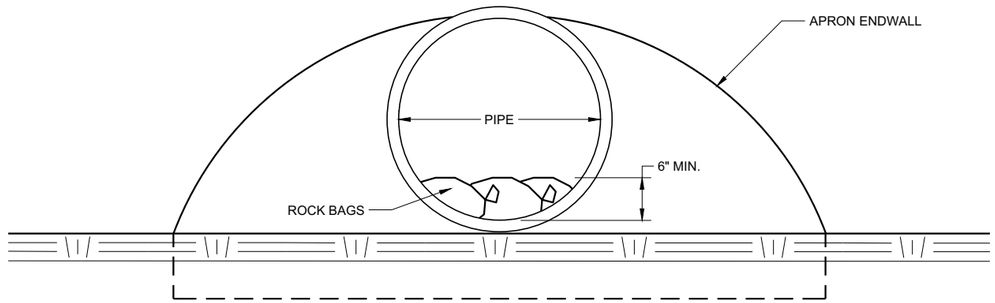
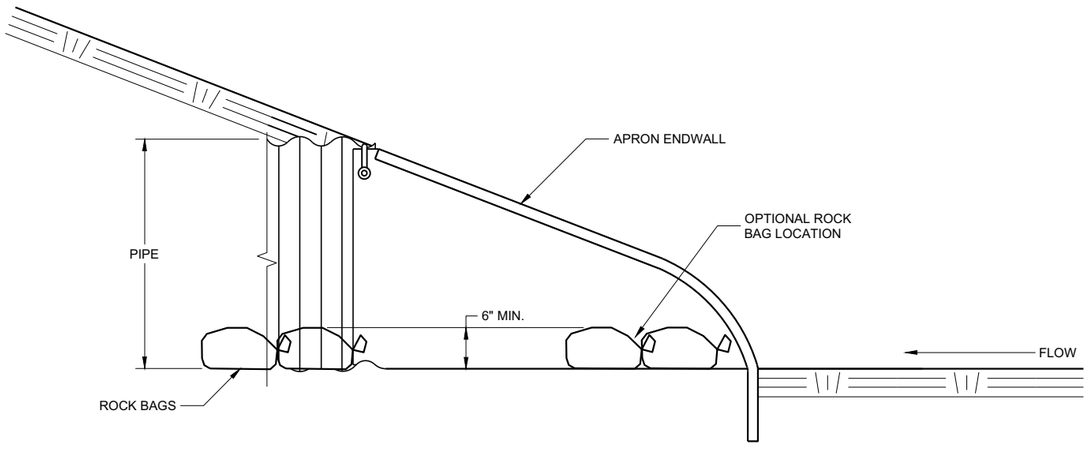
SDD 08E14 - 01



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI
FHWA	

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SDD 08E15 - 01

METAL APRON ENDWALLS

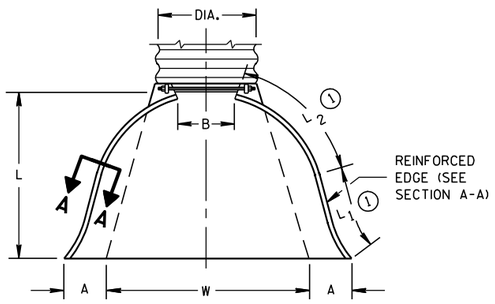
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

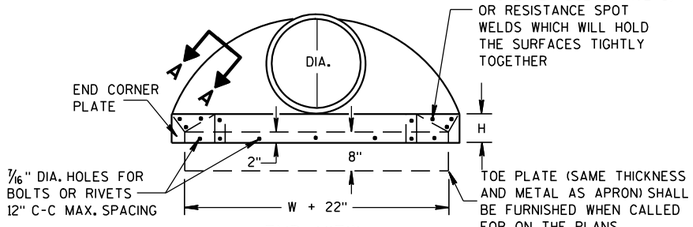
REINFORCED CONCRETE APRON ENDWALLS

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



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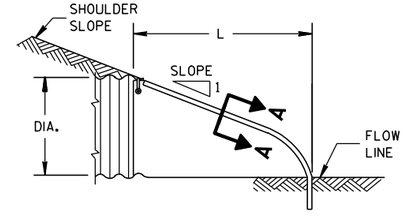
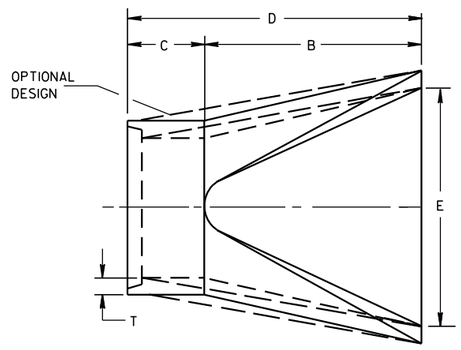
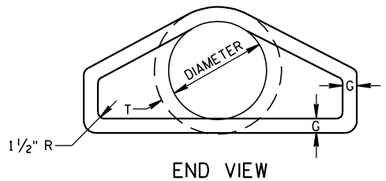


SIDE ELEVATION

METAL ENDWALLS



PLAN



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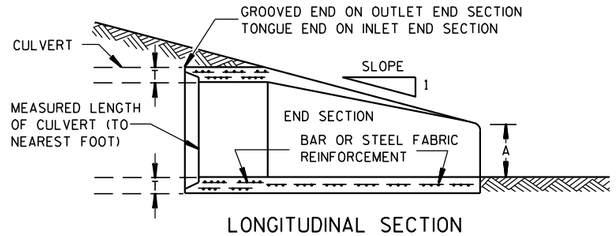
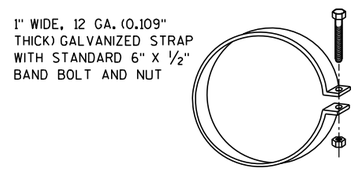


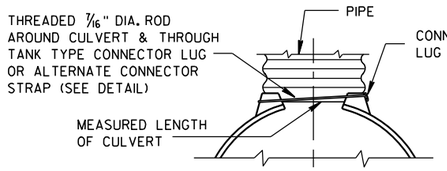
LONGITUDINAL SECTION

CONCRETE ENDWALLS

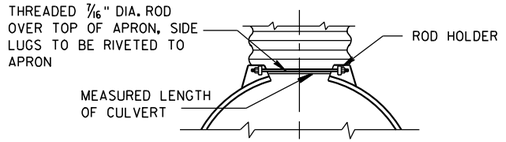


ALTERNATE FOR TYPE 1 CONNECTION

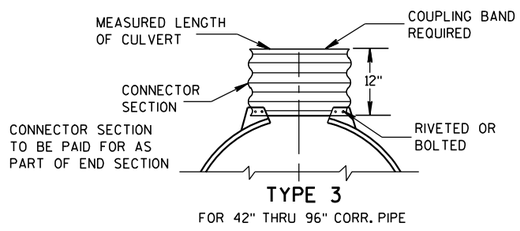
END SECTION CONNECTOR STRAP



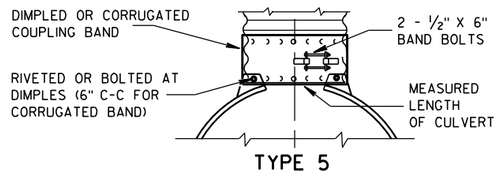
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

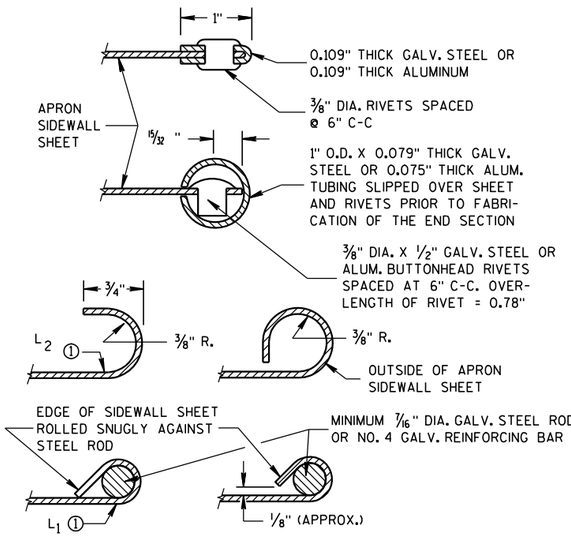
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

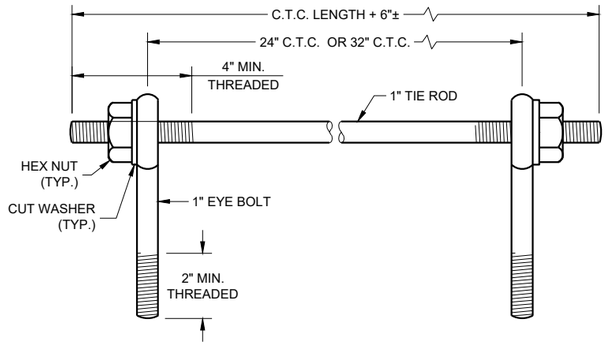
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

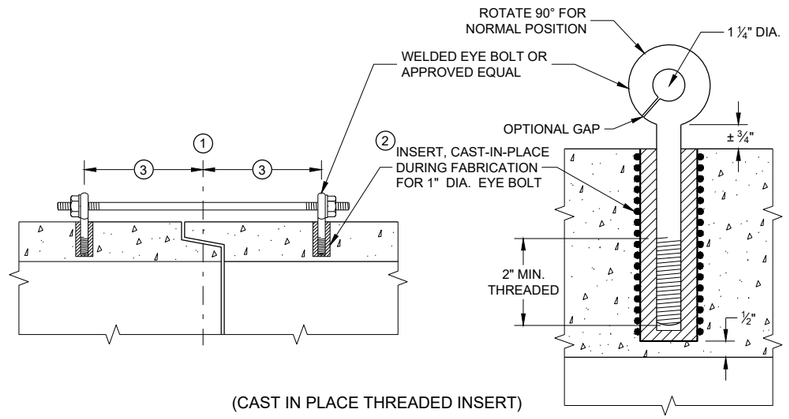
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

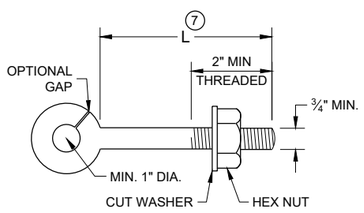
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

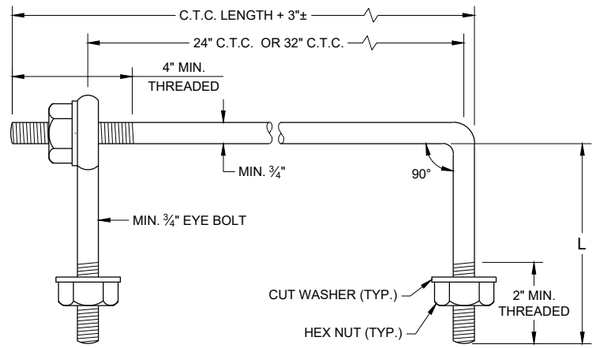
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

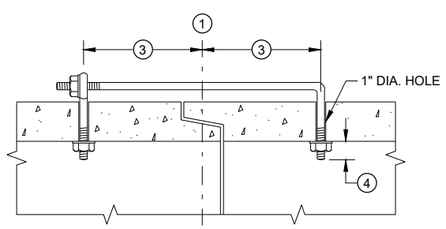


EYE BOLT (7)

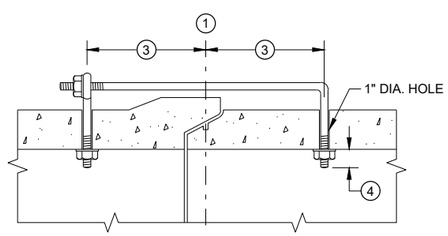
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

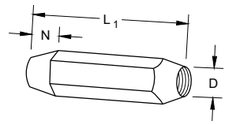
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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



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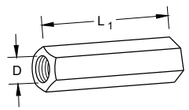
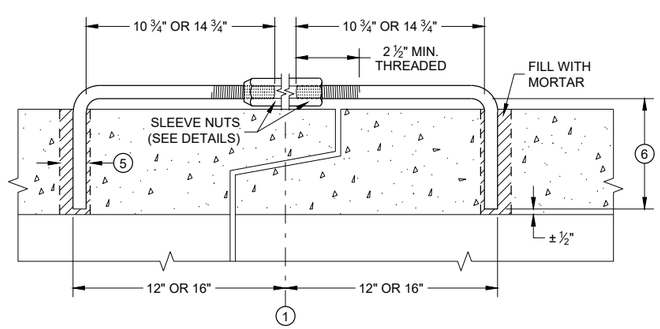


PLAIN

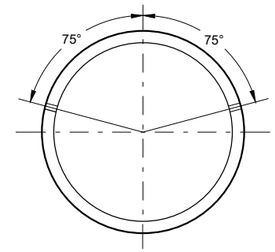
RIGHT AND LEFT THREADS

SLEEVE NUTS



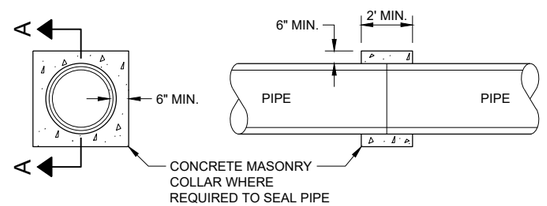
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

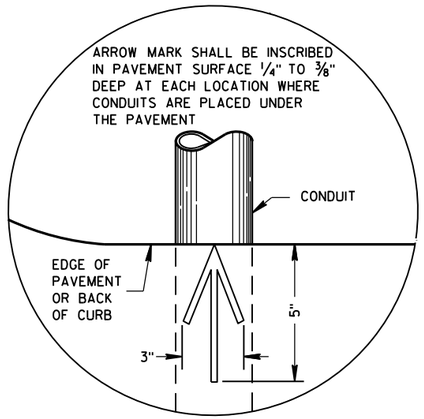
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

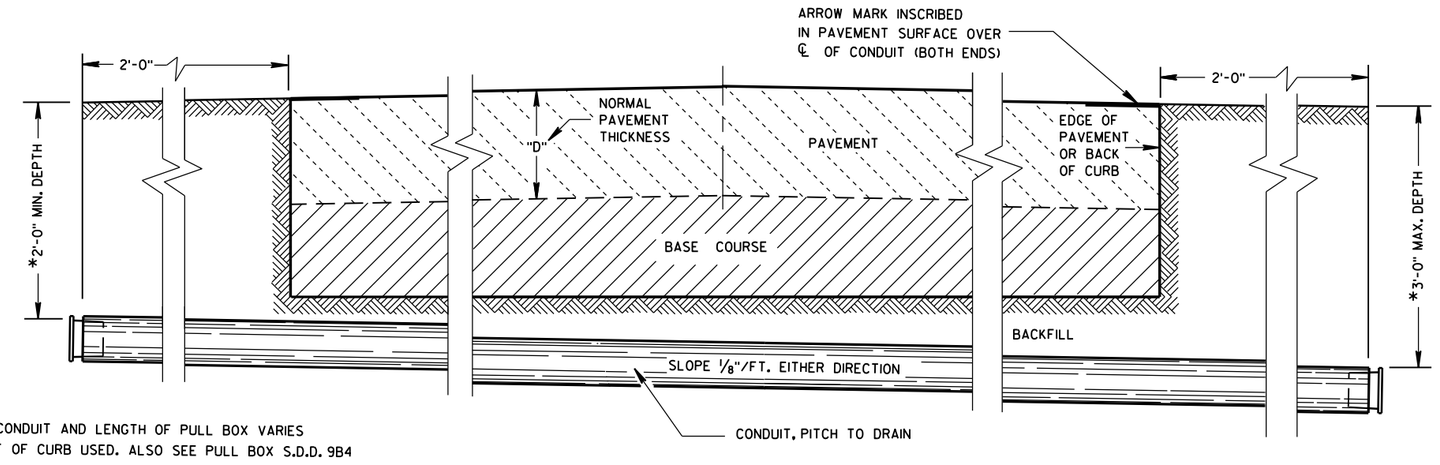
SDD 08F04 - 08

SDD 08F04 - 08



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

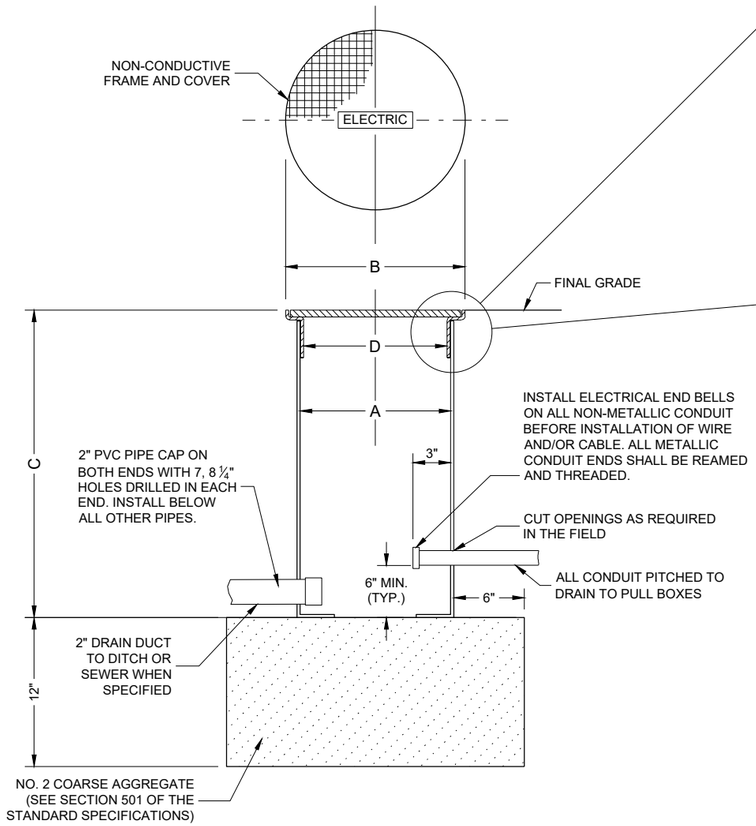
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

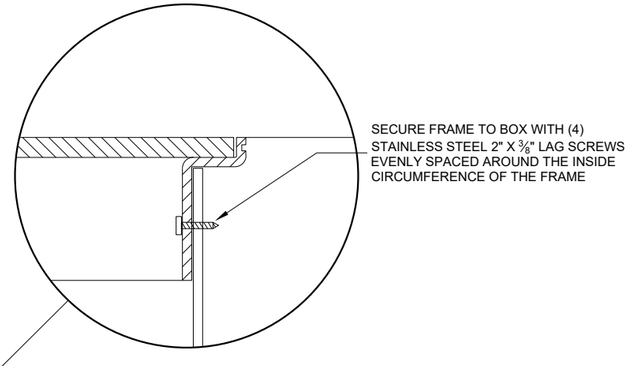
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

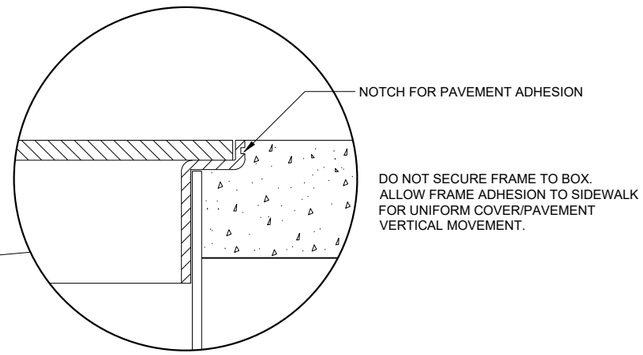
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



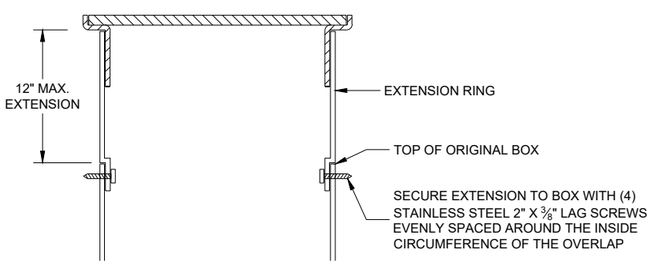
NON-CONDUCTIVE PULL BOX



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



BOX EXTENSION

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

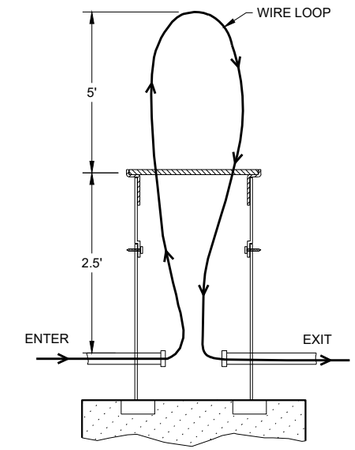
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE.

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

PULL BOXES NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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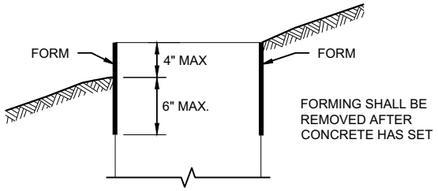
SDD 09B16 - 02

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.

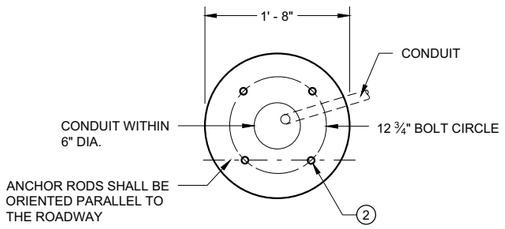
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

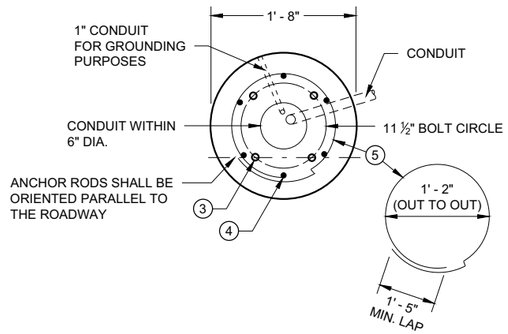
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

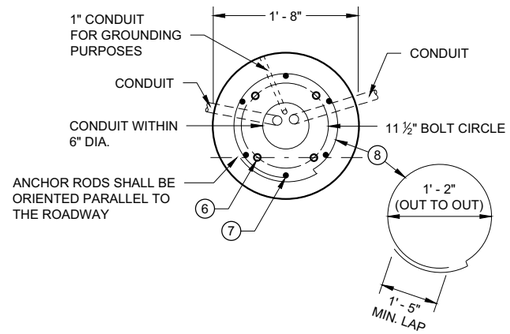
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

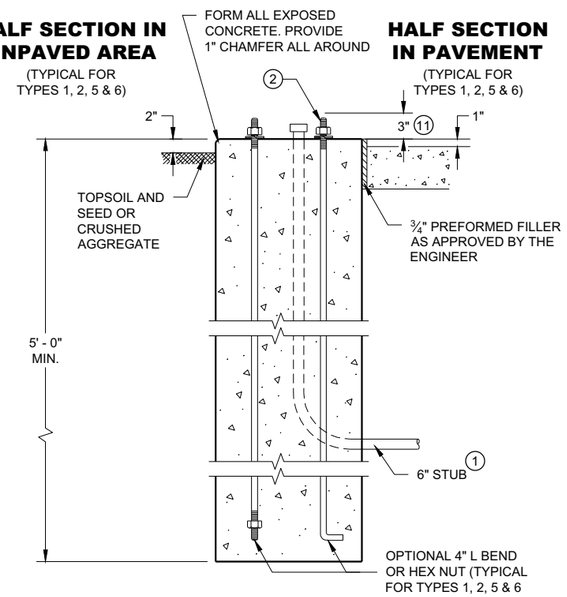
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

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.

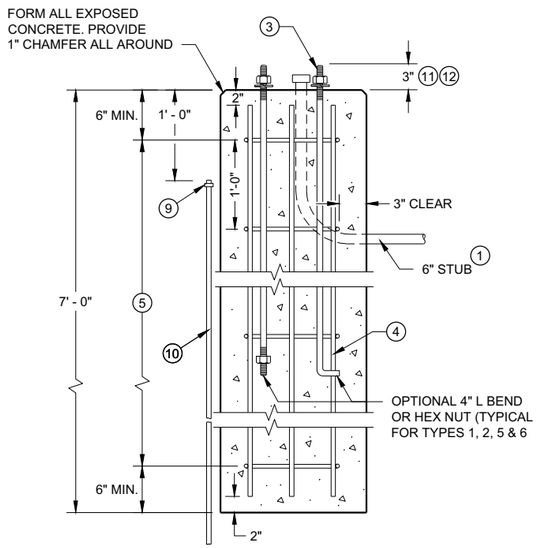
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

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



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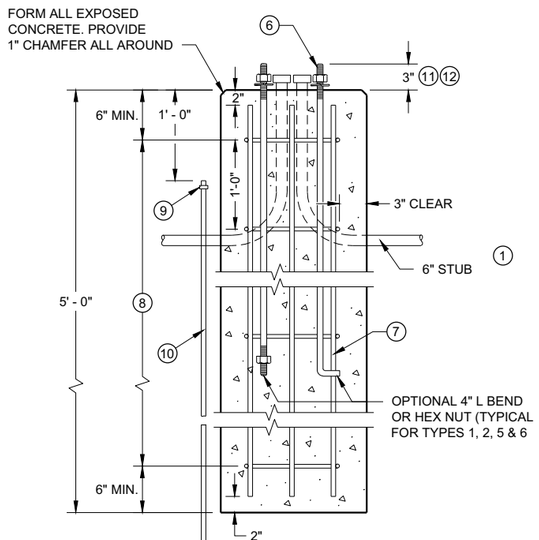


TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

196

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.

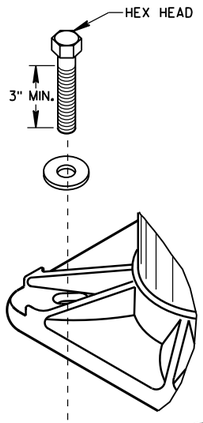
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

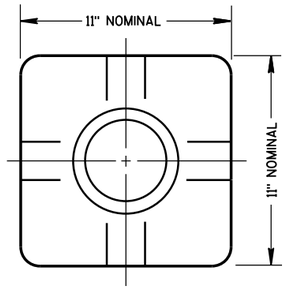
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

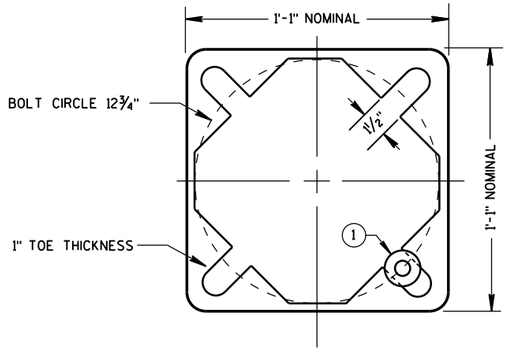
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

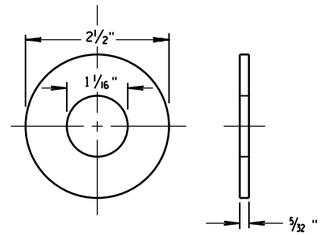




TOP VIEW
(PEDESTAL BASE)

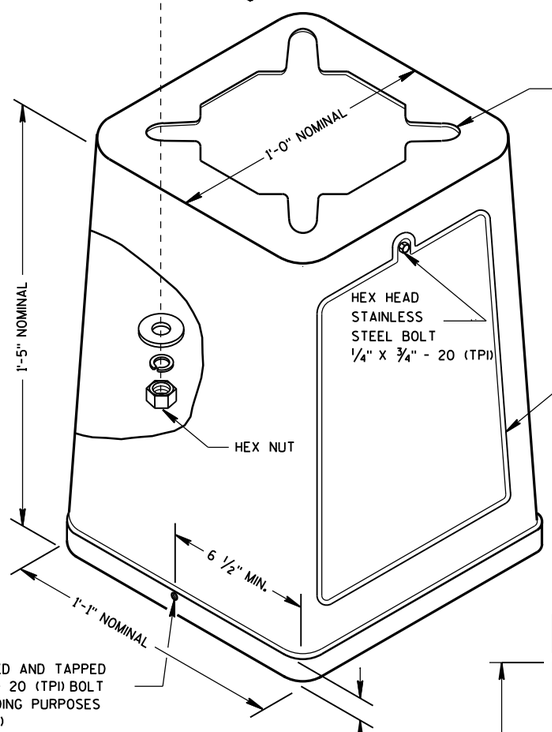


BOTTOM VIEW
(PEDESTAL BASE)

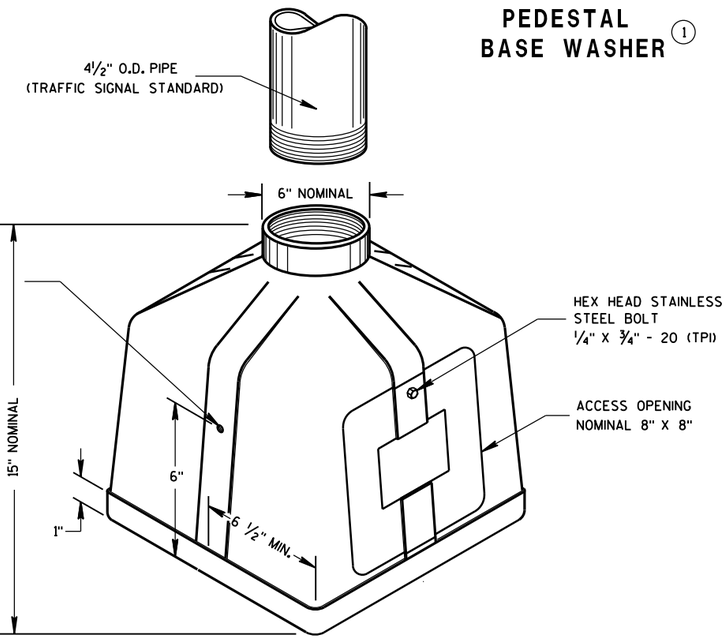


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

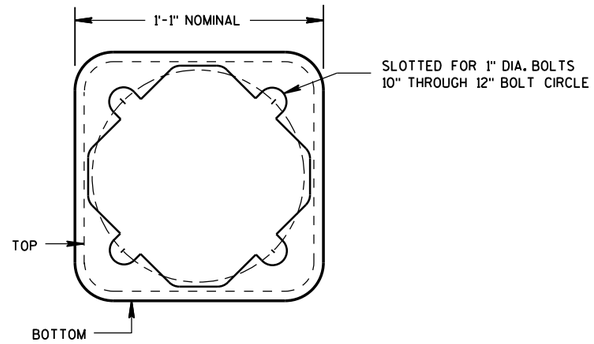


ISOMETRIC VIEW

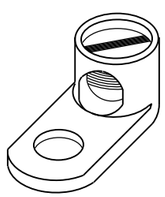


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

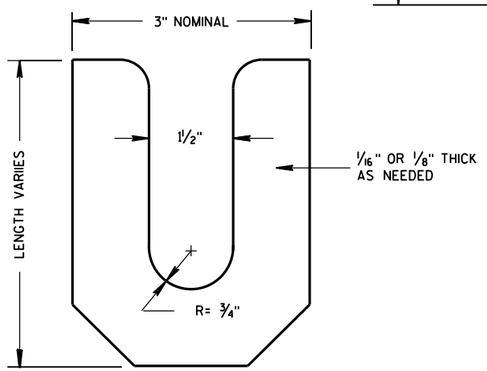


TYPICAL MECHANICAL CONNECTOR LUG

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. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. 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 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).

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

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 4" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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.

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

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

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.

(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 (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

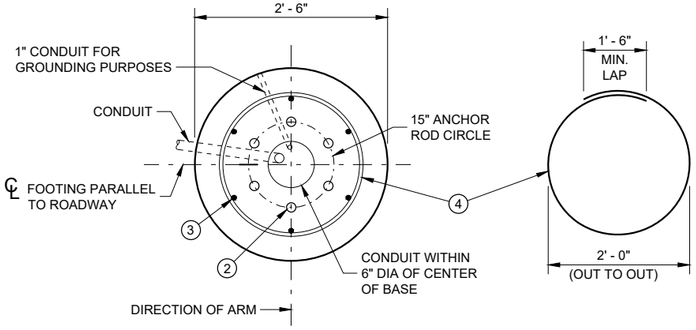
(2) (6) 1 ½ DIA. X 4' - 4" ANCHOR RODS

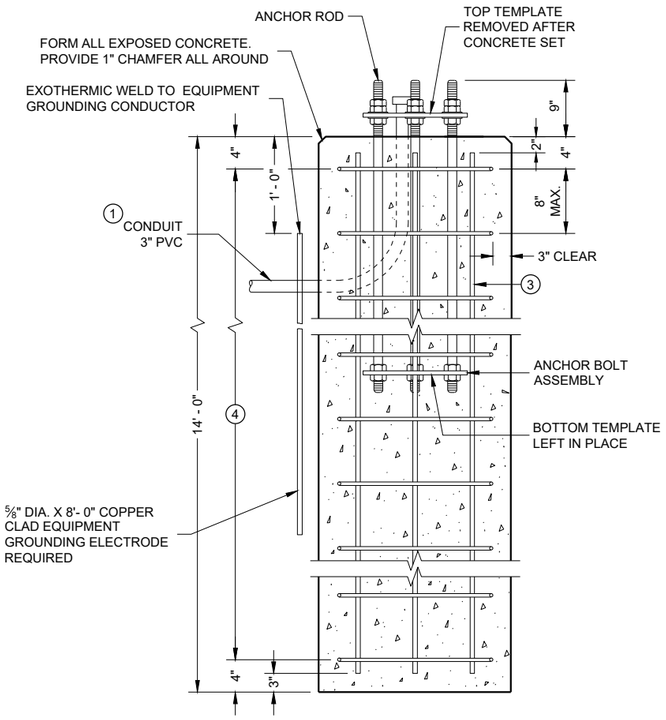
(3) (6) NO. 6 X 13' - 7" BAR STEEL REINFORCEMENT.

(4) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.

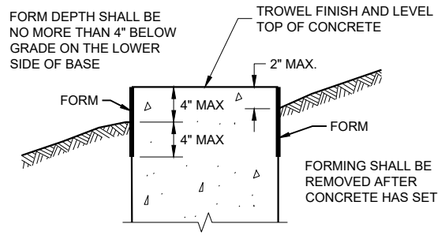
QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122



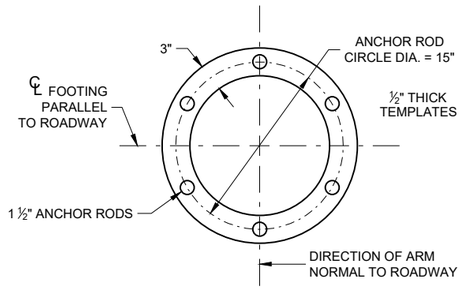


CONCRETE BASE, TYPE 10
(FOR TYPE 9, TYPE 10 AND OVER HEIGHT (OH) POLES)

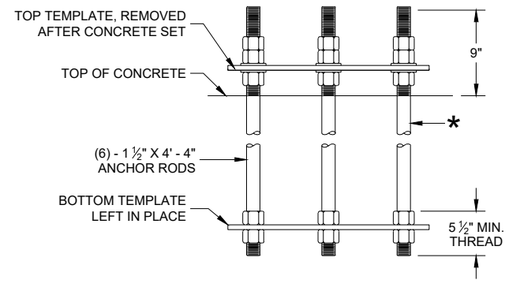
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE SDD 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demerbilek — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

6

SDD 09C11 - 10

6

SDD 09C11 - 10

GENERAL NOTES

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

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, 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.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

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

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

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

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

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

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4 ½ INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC 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.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR 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 CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL 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, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

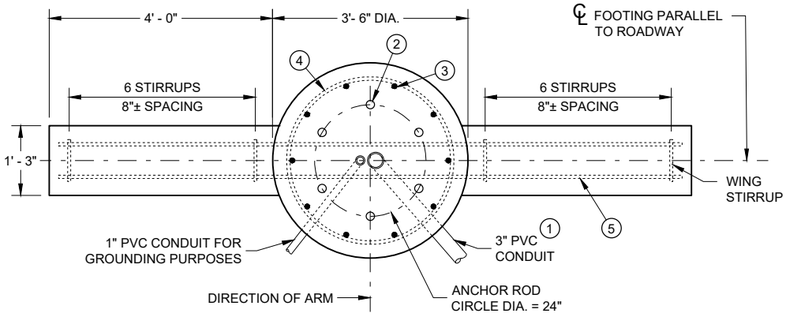
(2) (6) 1 ¾" DIA. X 7' - 2" ANCHOR RODS

(3) (10) NO. 6 X 14' - 1" BAR STEEL VERTICAL REINFORCEMENT.

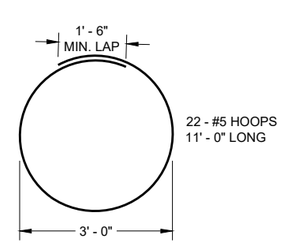
(4) (22) NO. 5 X 11'- 0" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

(5) (10) NO. 5 X 11' - 0" BAR STEEL HORIZONTAL REINFORCEMENT

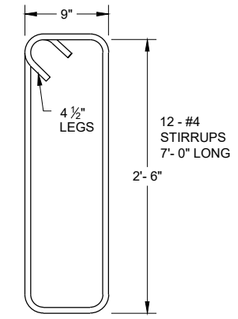
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



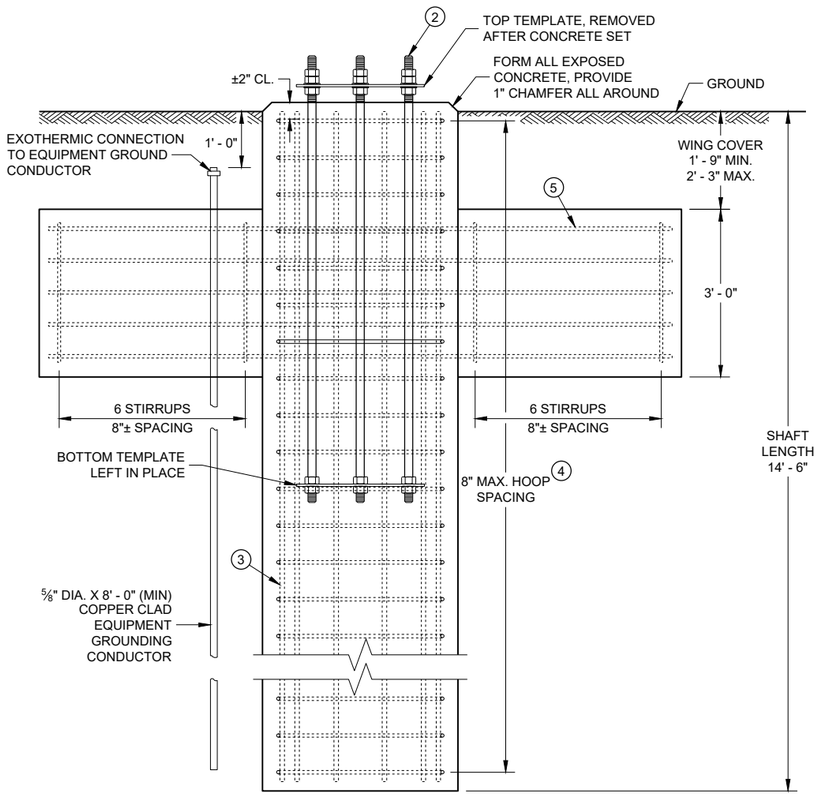
PLAN VIEW



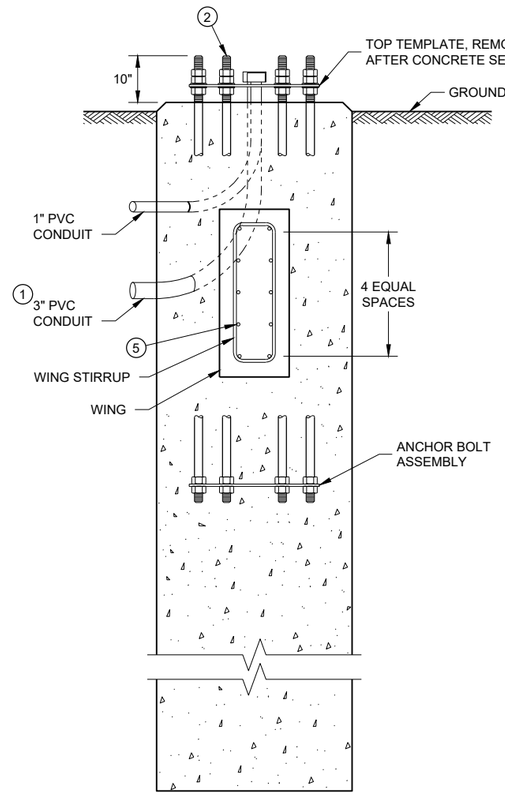
HOOP DETAIL



WING STIRRUP DETAIL



ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)



(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)

CONCRETE BASE, TYPE 13
(FOR TYPE 12, TYPE 13 AND OVER HEIGHT (OH) POLES)

CONCRETE = 6.3 CUBIC YARD
H.S. REINFORCEMENT = 635 LBS.

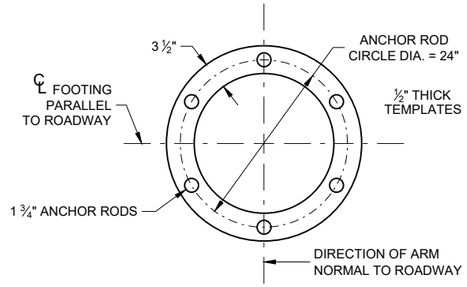
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION

CONCRETE BASE TYPE 13

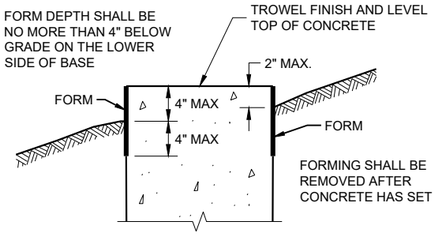
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

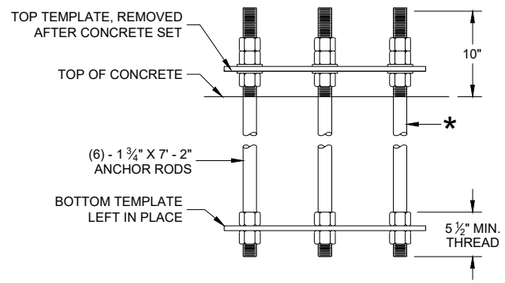
SDD 09C12 - 09a



TOP AND BOTTOM TEMPLATE



FORMING DETAIL



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 11" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2017
DATE

/S/ Ahmet Demirbilek
WIND LOADED STRUCTU
PROGRAM LEADER

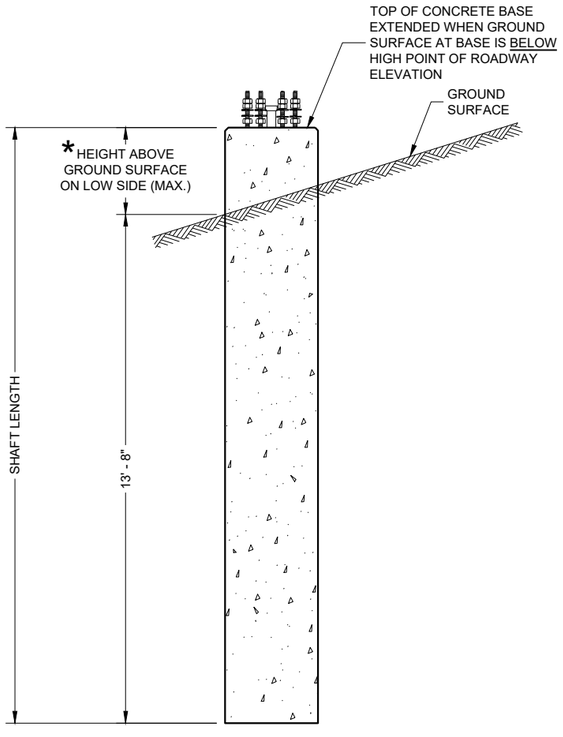
FHWA

6

SDD 09C12 - 09b

REINFORCEMENT AND CONCRETE QUANTITIES ADJUSTED FOR EXTENDED TYPE 10 CONCRETE BASE

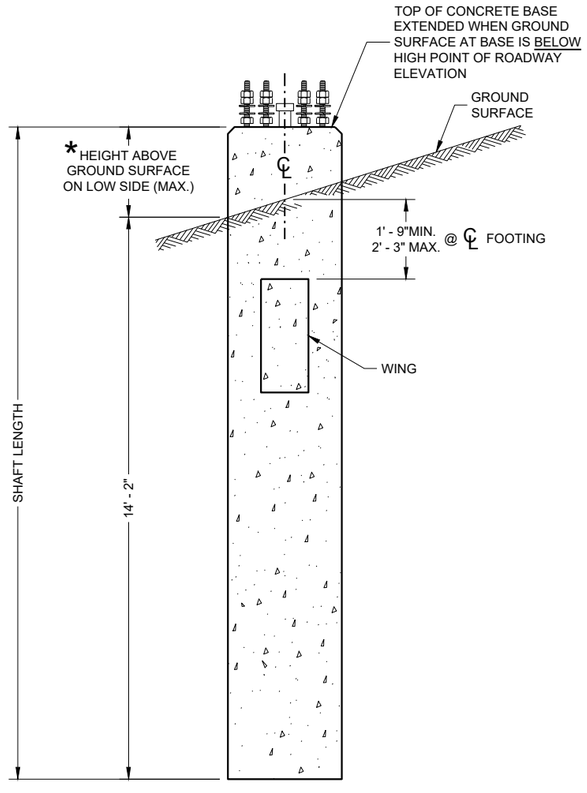
HEIGHT INCREASE REQUIRED	*HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAX.)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #5 HOOPS	CU. YD. OF CONCRETE	LBS. OF HOOP BAR STEEL	LBS. OF VERTICAL STEEL
>0" TO 6"	10"	14' - 6"	14' - 1"	22	2.6	180	127
>6" TO 1' - 0"	1' - 4"	15' - 0"	14' - 7"	23	2.7	188	131
>1' - 0" TO 1' - 6"	1' - 10"	15' - 6"	15' - 1"	24	2.8	196	136
>1' - 6" TO 2 - 0"	2' - 4"	16' - 0"	15' - 7"	24	2.9	196	141



CONCRETE BASE TYPE 10 (EXTENDED)

REINFORCEMENT AND CONCRETE QUANTITIES ADJUSTED FOR EXTENDED TYPE 13 CONCRETE BASE

HEIGHT INCREASE REQUIRED	*HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAX.)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #5 HOOPS	CU. YD. OF CONCRETE	LBS. OF H.S. BAR STEEL
>0" TO 6"	10"	15' - 0"	14' - 7"	23	6.5	654
>6" TO 1' - 0"	1' - 4"	15' - 6"	15' - 1"	24	6.6	673
>1' - 0" TO 1' - 6"	1' - 10"	16' - 0"	15' - 7"	24	6.8	680
>1' - 6" TO 2 - 0"	2' - 4"	16' - 6"	16' - 1"	25	7.0	699



CONCRETE BASE TYPE 13 (EXTENDED)

CONCRETE BASE TYPE 10 AND TYPE13 EXTENSION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 201

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SDD 09C13 - 03

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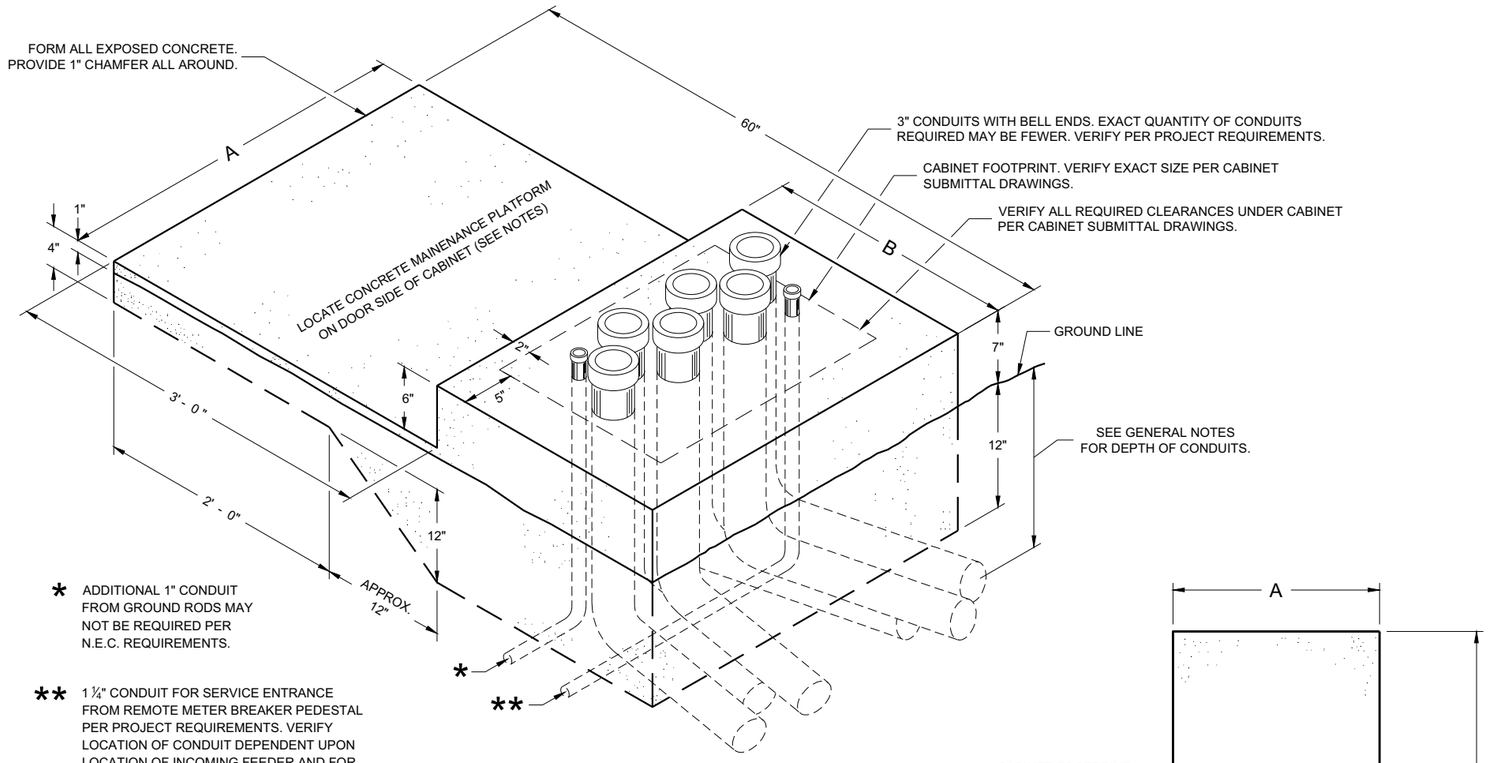
SDD 09C13 - 03



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

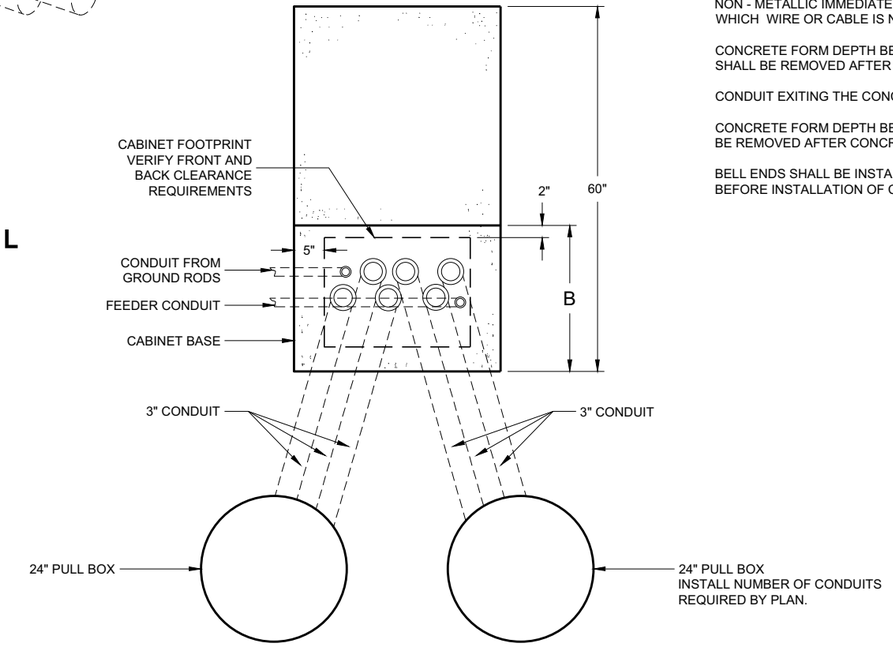
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

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 202

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SDD 09C14 - 03

GENERAL NOTES

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

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

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. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. 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 AND LEVEL.

ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR RODS STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

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).

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

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

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

FORM ALL EXPOSED CONCRETE CORNERS WITH 1" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

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 4 ½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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.

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

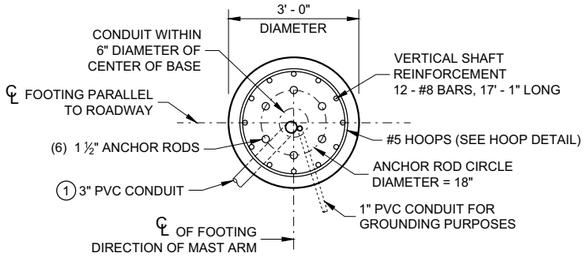
A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

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.

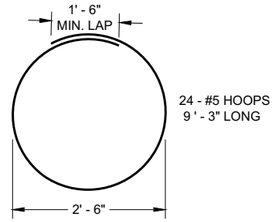
THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(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 (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

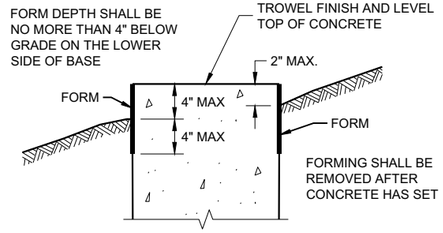
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION).....fy = 55,000 p.s.i.
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



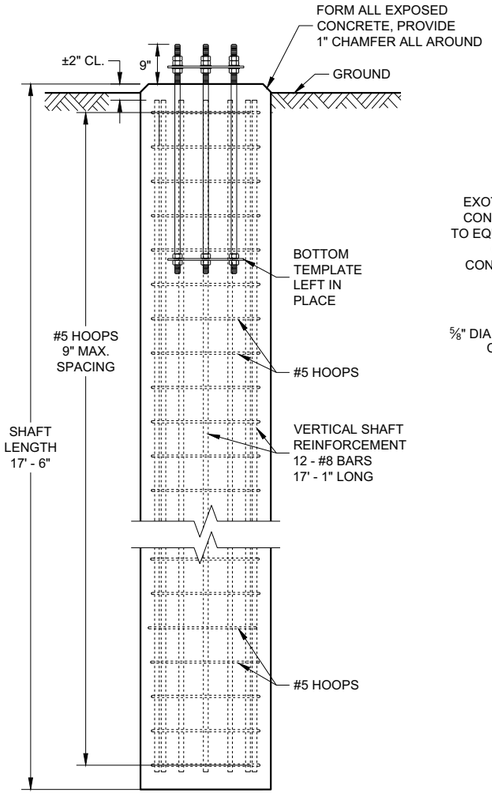
PLAN VIEW



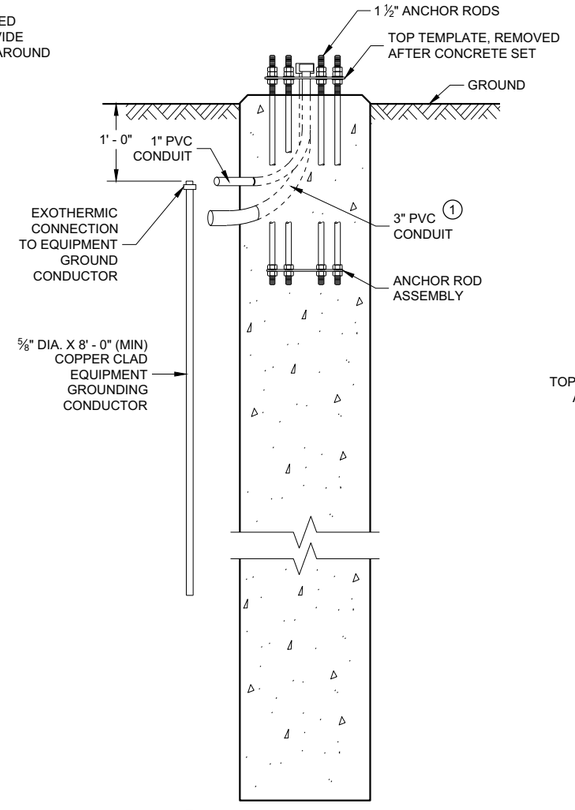
HOOP DETAIL



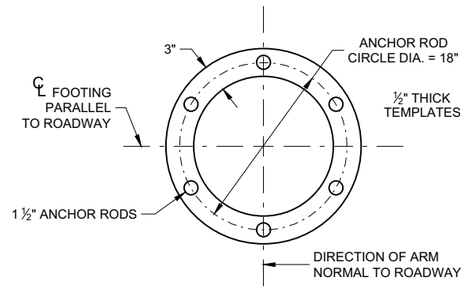
FORMING DETAIL



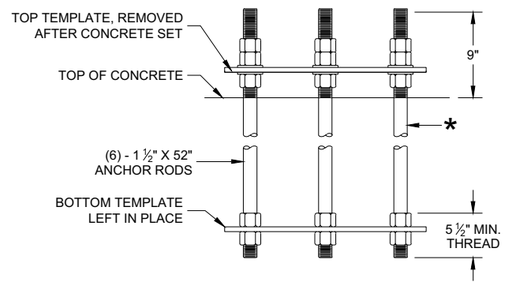
ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)



SIDE VIEW
(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE, TYPE 10 SPECIAL
(FOR TYPE 9 SPECIAL AND TYPE 10 SPECIAL POLES)

CONCRETE = 4.6 CUBIC YARD
H.S. REINFORCEMENT = 779 LBS.

FOR USE WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 10 SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

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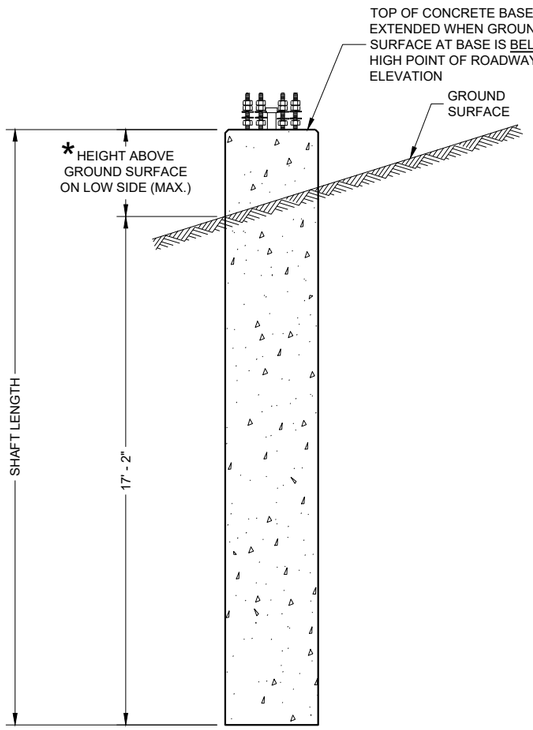
REINFORCEMENT AND CONCRETE QUANTITIES
ADJUSTED FOR EXTENDED TYPE 10 SPECIAL CONCRETE BASE

HEIGHT INCREASE REQUIRED	*HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAX.)	SHAFT LENGTH	LENGTH OF #8 VERTICAL REINF.	NO. OF #5 HOOPS	CU. YD. OF CONCRETE	LBS. OF HOOP BAR STEEL	LBS. OF VERTICAL STEEL
>0" TO 6"	10"	18' - 0"	17' - 7"	25	4.7	241	563
>6" TO 1' - 0"	1' - 4"	18' - 6"	18' - 1"	25	4.8	241	579
>1' - 0" TO 1' - 6"	1' - 10"	19' - 0"	18' - 7"	26	5.0	251	595
>1' - 6" TO 2 - 0"	2' - 4"	19' - 6"	19' - 1"	27	5.1	260	611



CONCRETE BASE TYPE 10 SPECIAL (EXTENDED)

CONCRETE BASE TYPE 10 SPECIAL EXTENSION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 204

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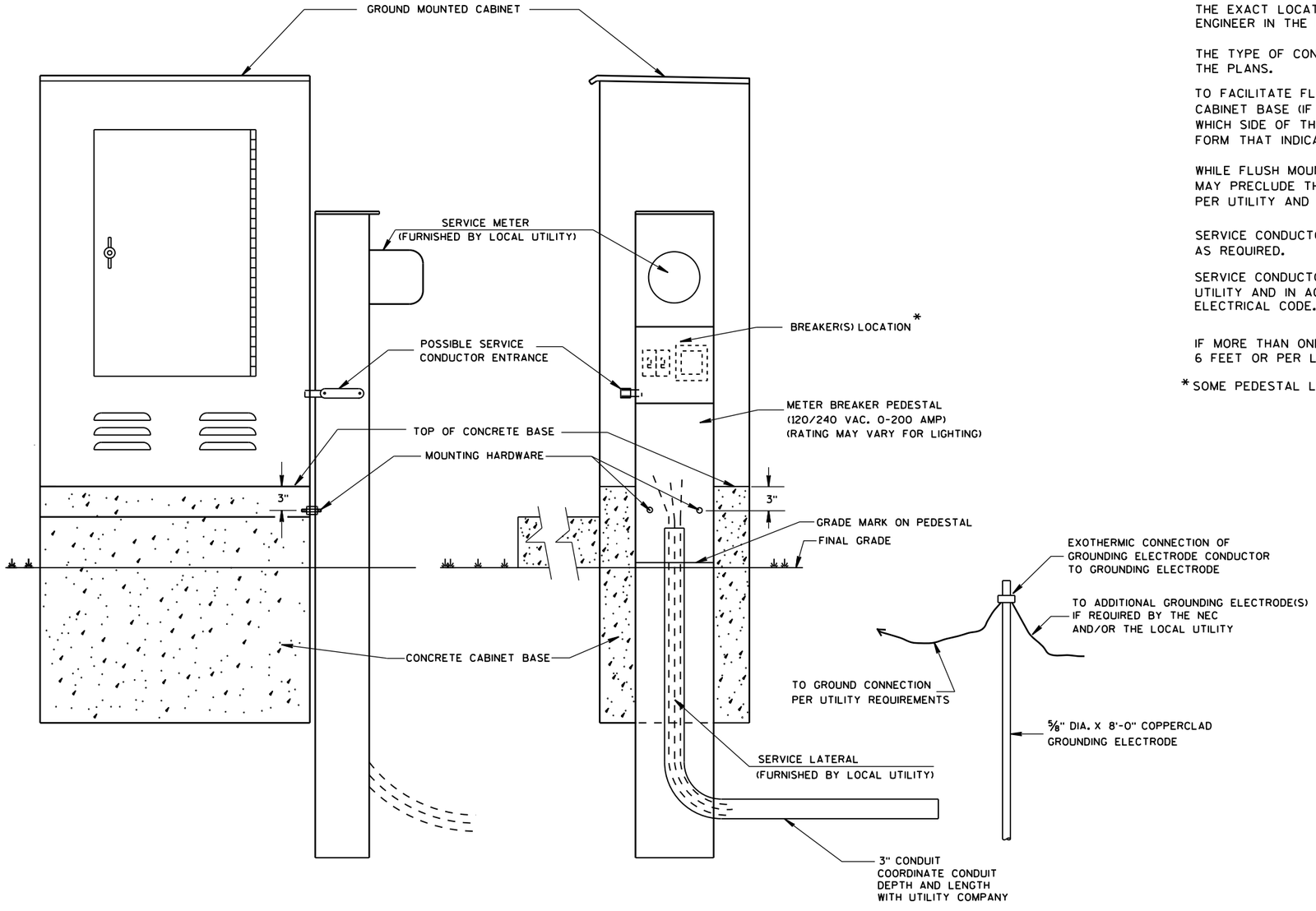

TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

*SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

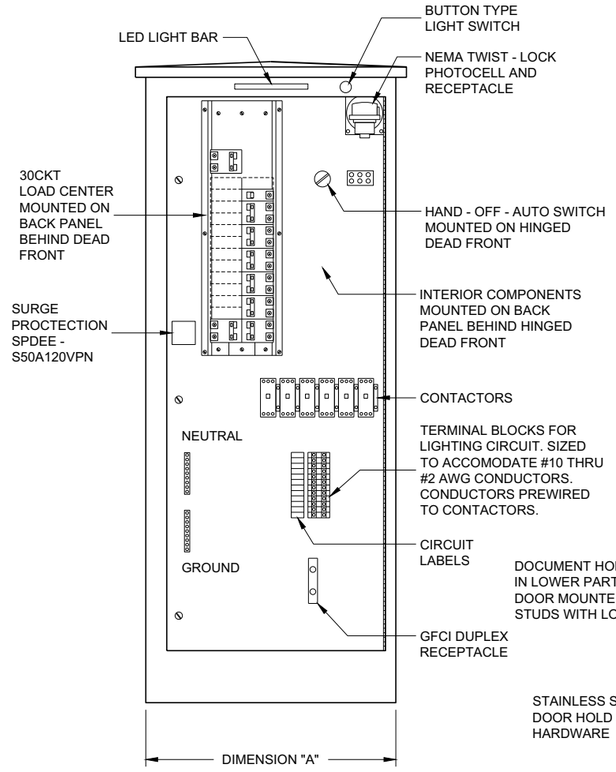
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

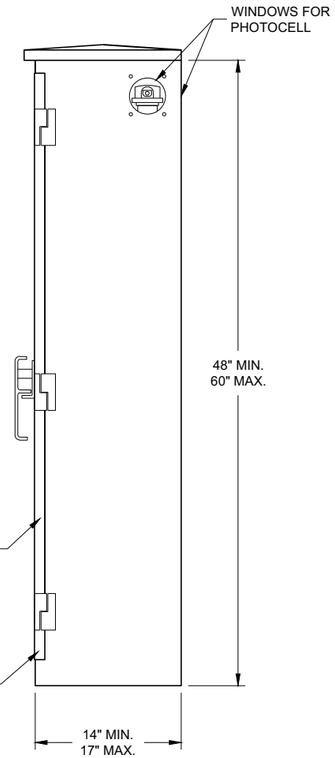
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

FRONT INTERIOR ELEVATION



SIDE VIEW



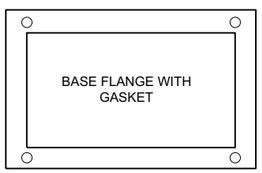
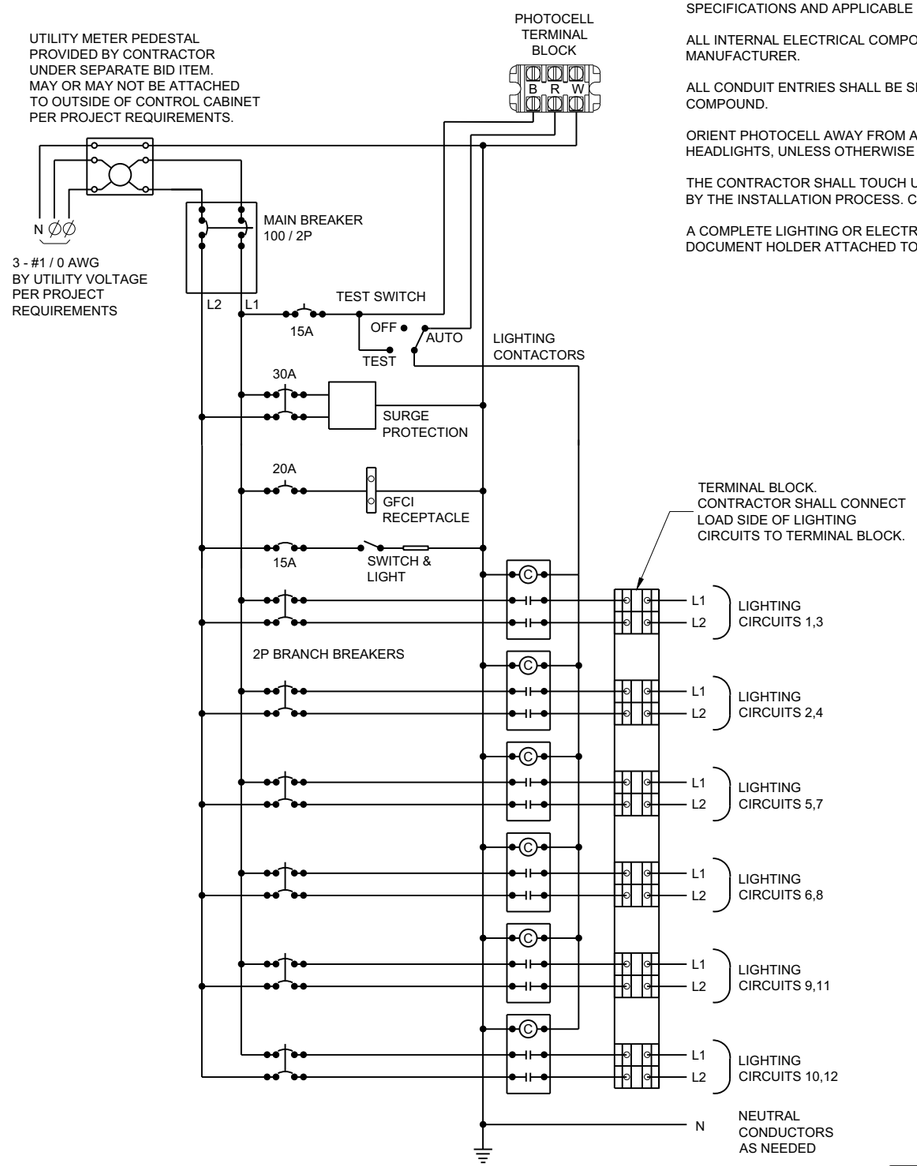


TABLE OF DIMENSIONS (INCHES)		
CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

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

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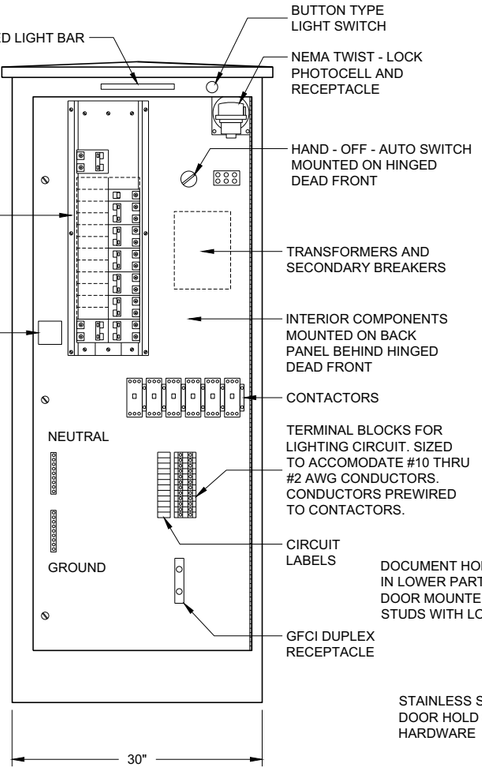
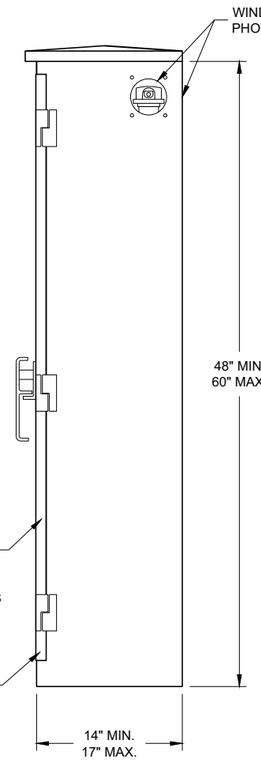
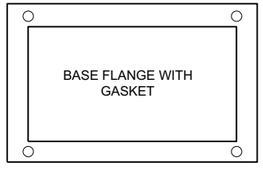
FRONT INTERIOR ELEVATION

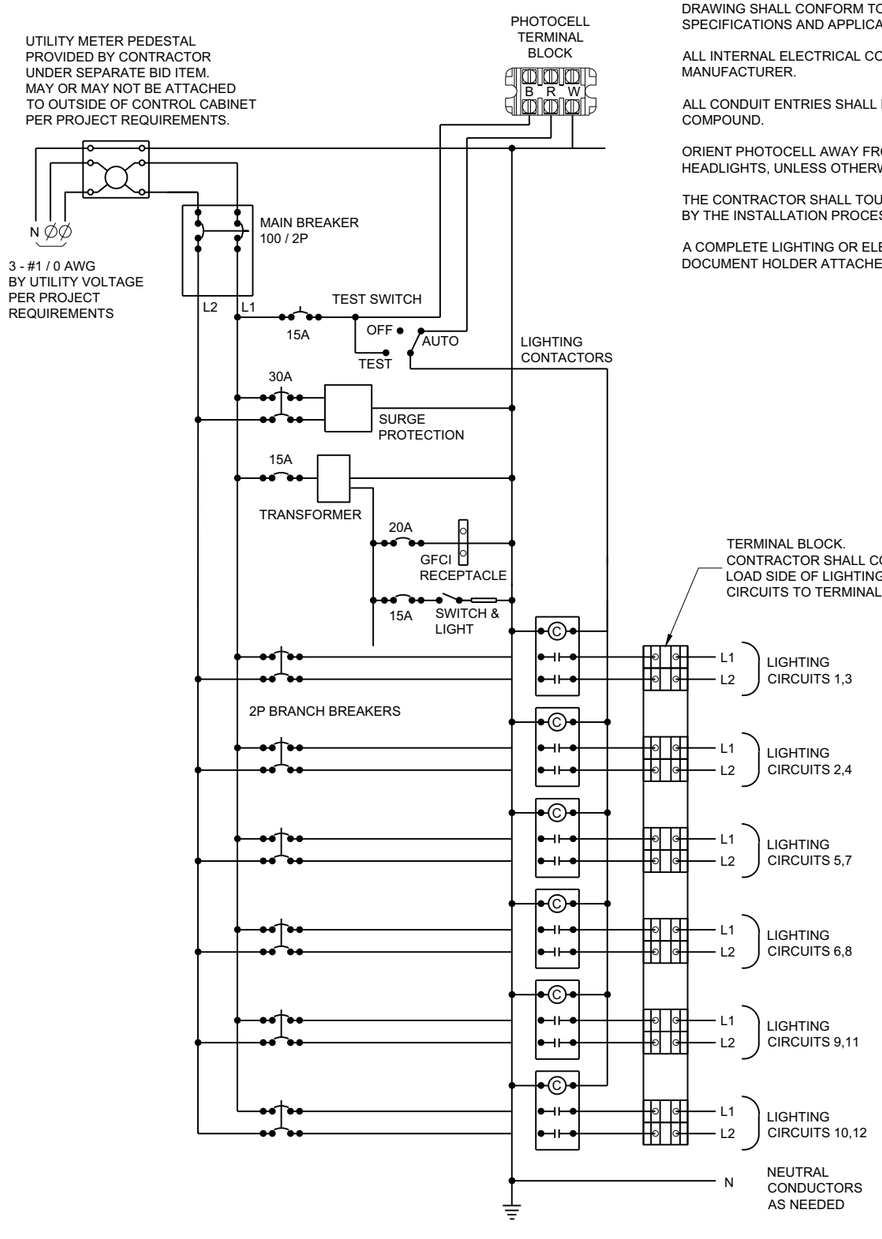


SIDE VIEW





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
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 207

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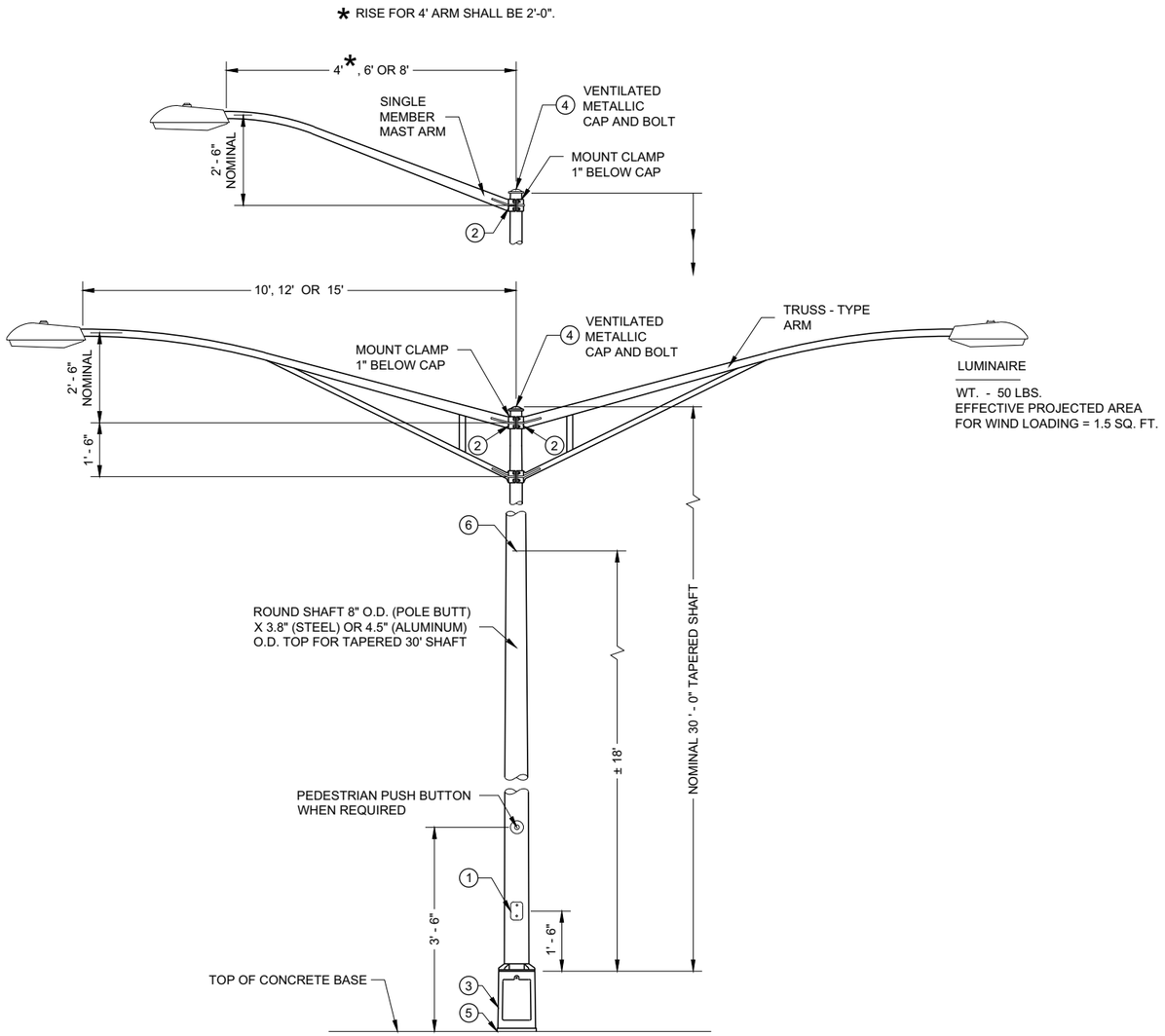
SDD 09D05 - 02



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.

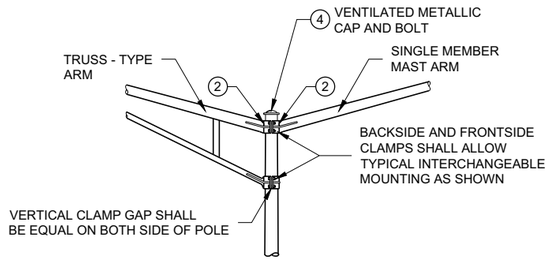
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(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)

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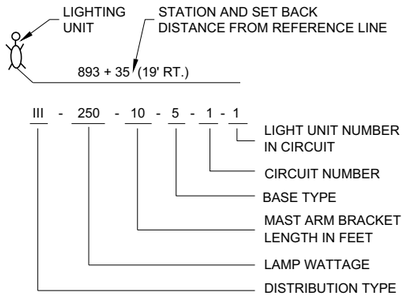
GENERAL NOTES

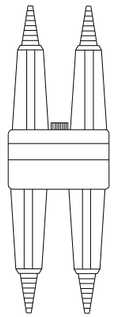
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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.

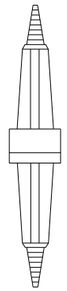
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



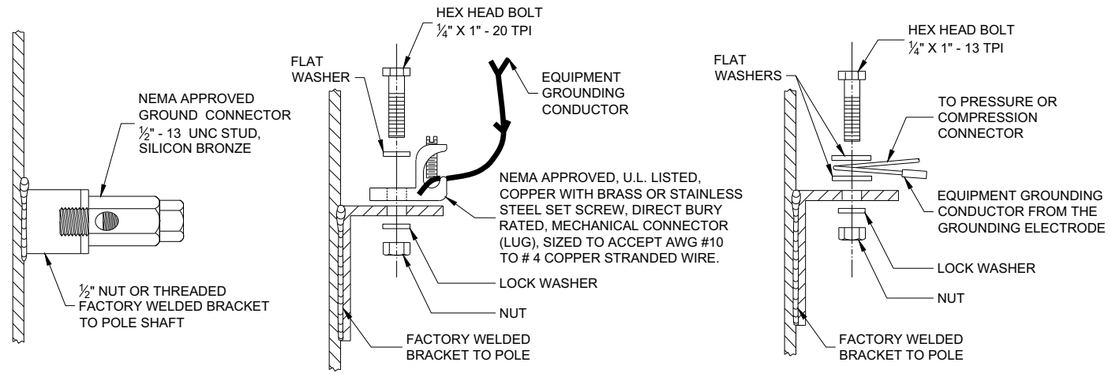
LIGHTING UNIT CODE
(TYPICAL)



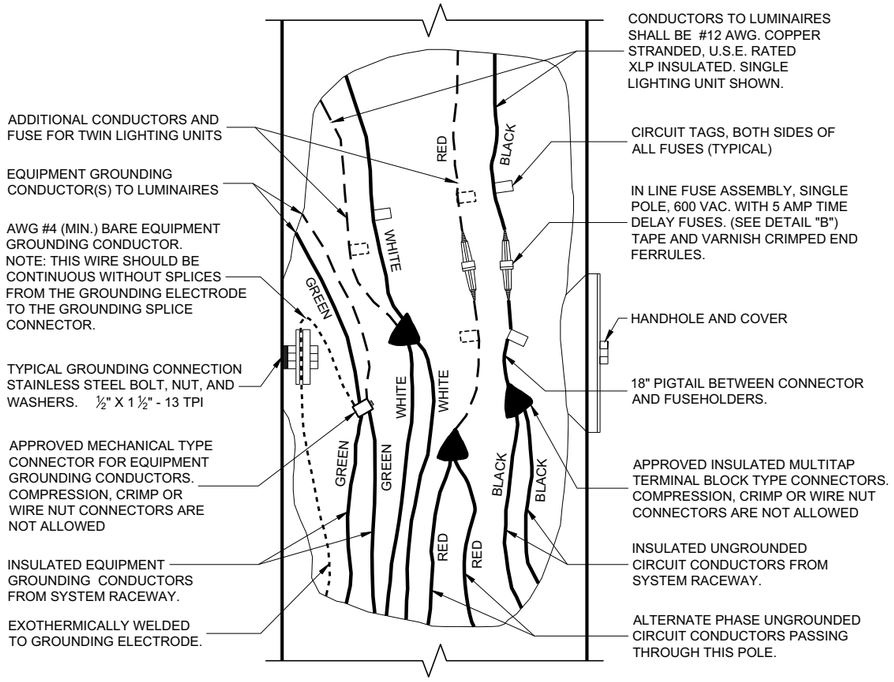
DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



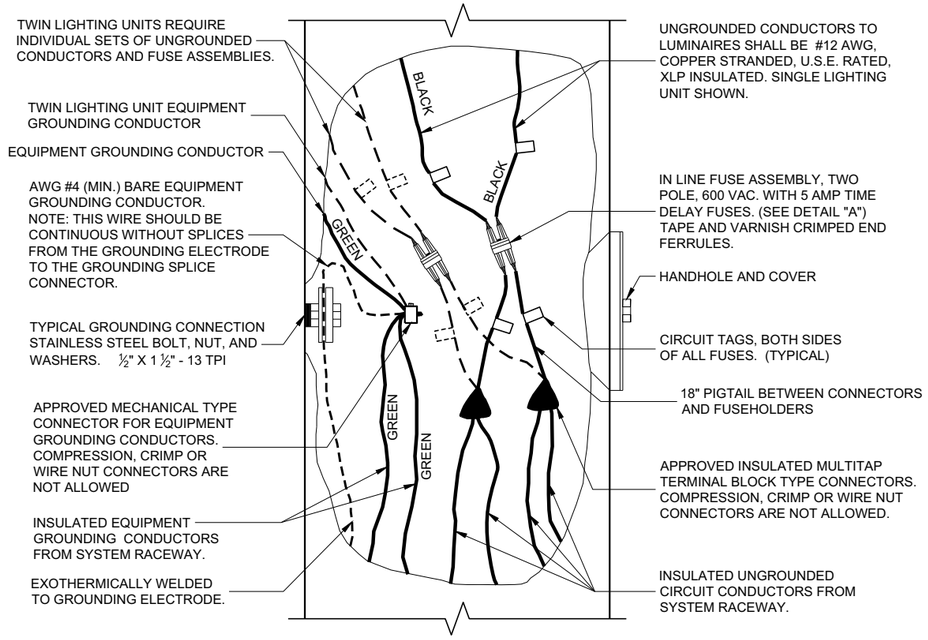
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



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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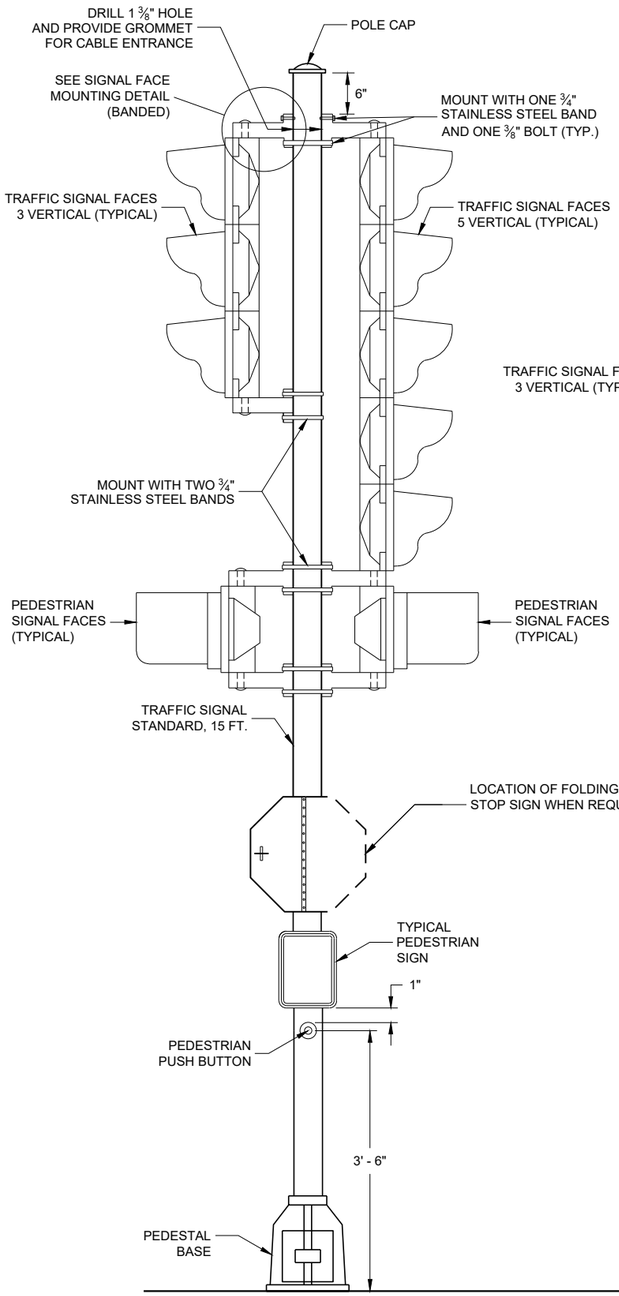
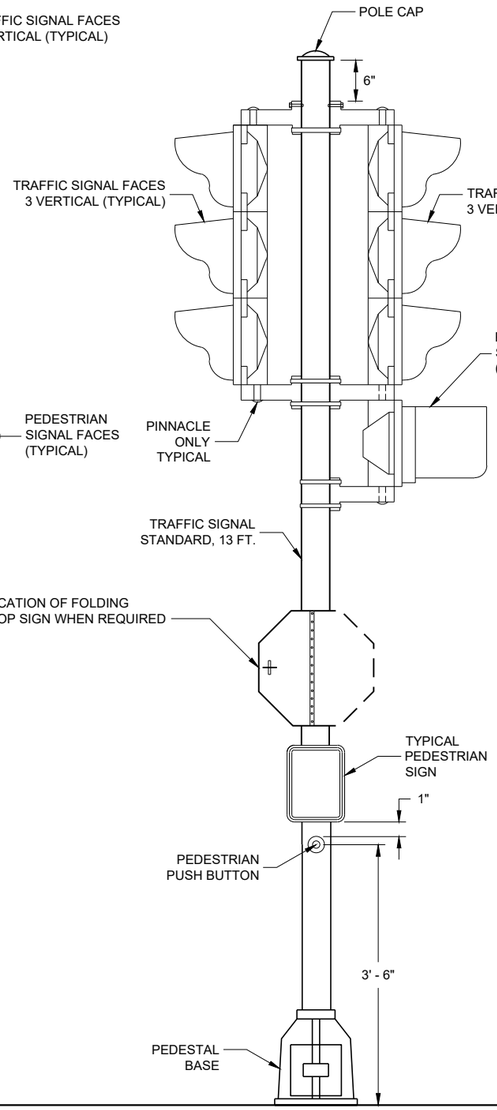
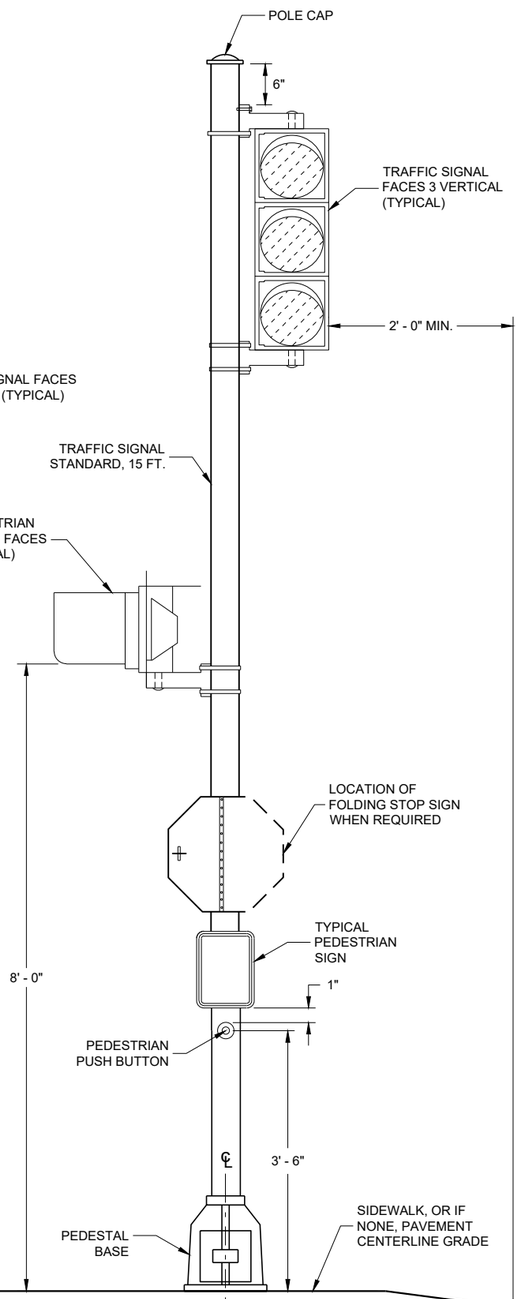


TRAFFIC SIGNAL STANDARD - 15 FT.



TRAFFIC SIGNAL STANDARD - 13 FT.



TRAFFIC SIGNAL TANDARD - 15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

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

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

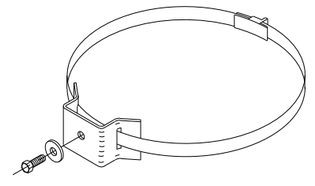
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

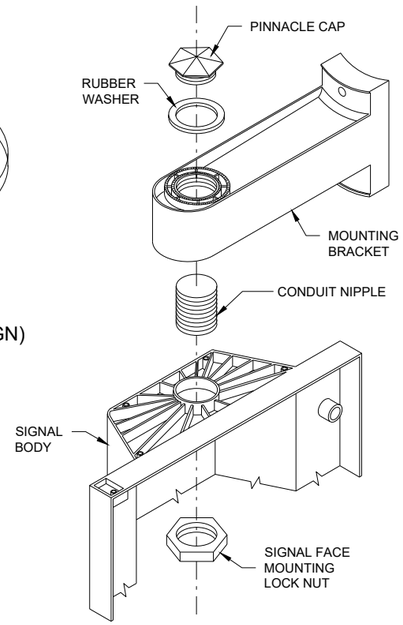
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL (BANDED)

TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

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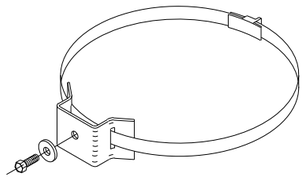
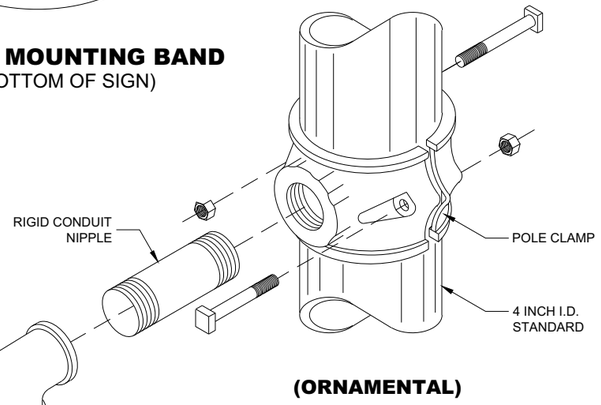


TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



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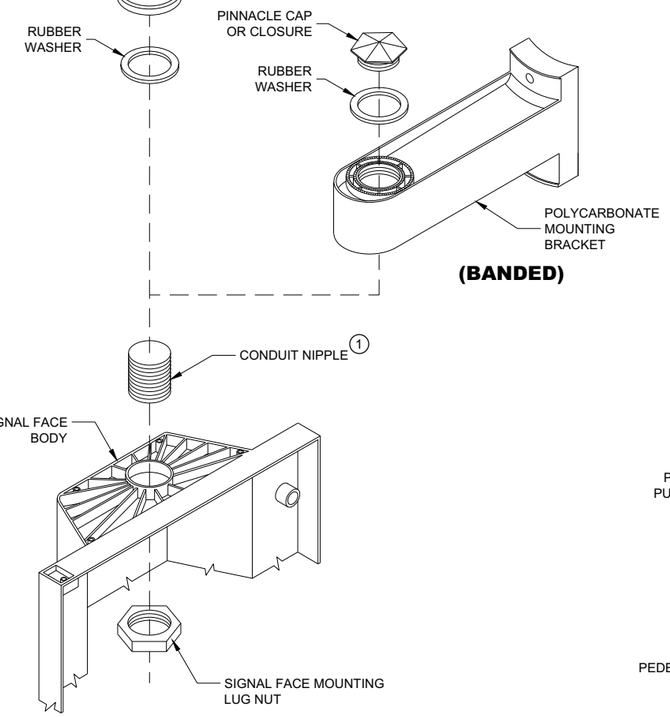
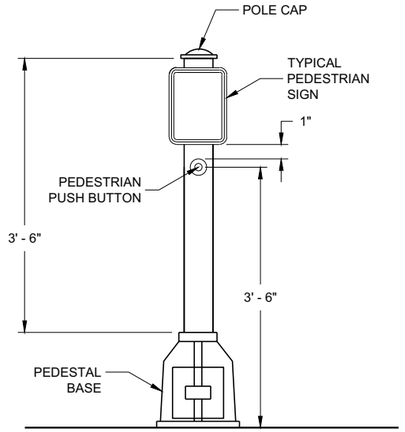


(BANDED)

SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

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

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

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

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

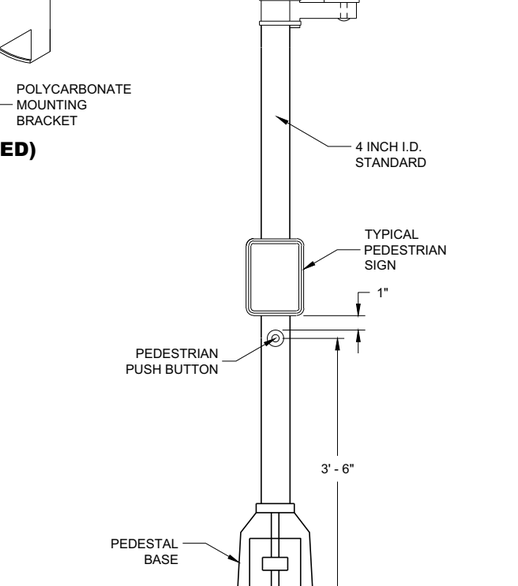
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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

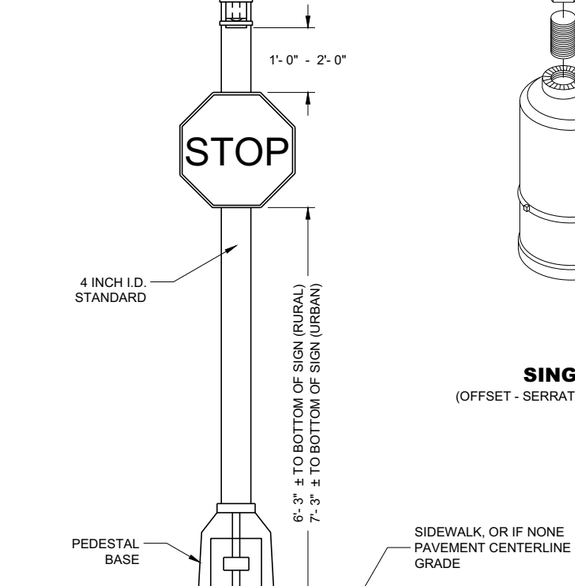
PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

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

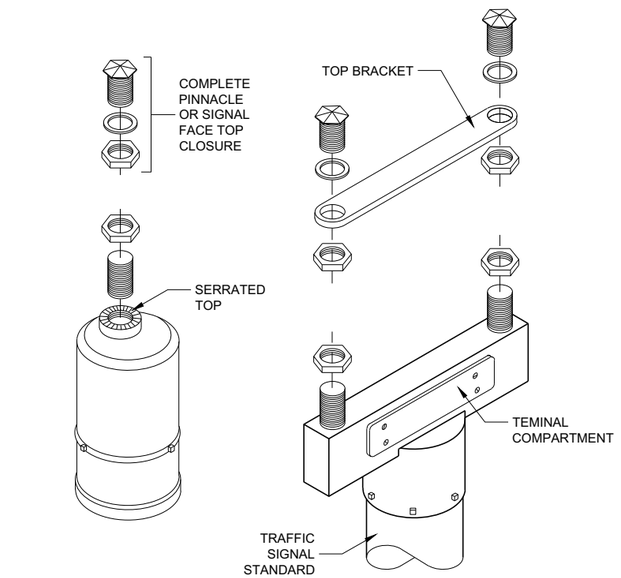
(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE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



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



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



SINGLE
(OFFSET - SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD
PEDESTRIAN AND FLASHER
TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
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November 2018
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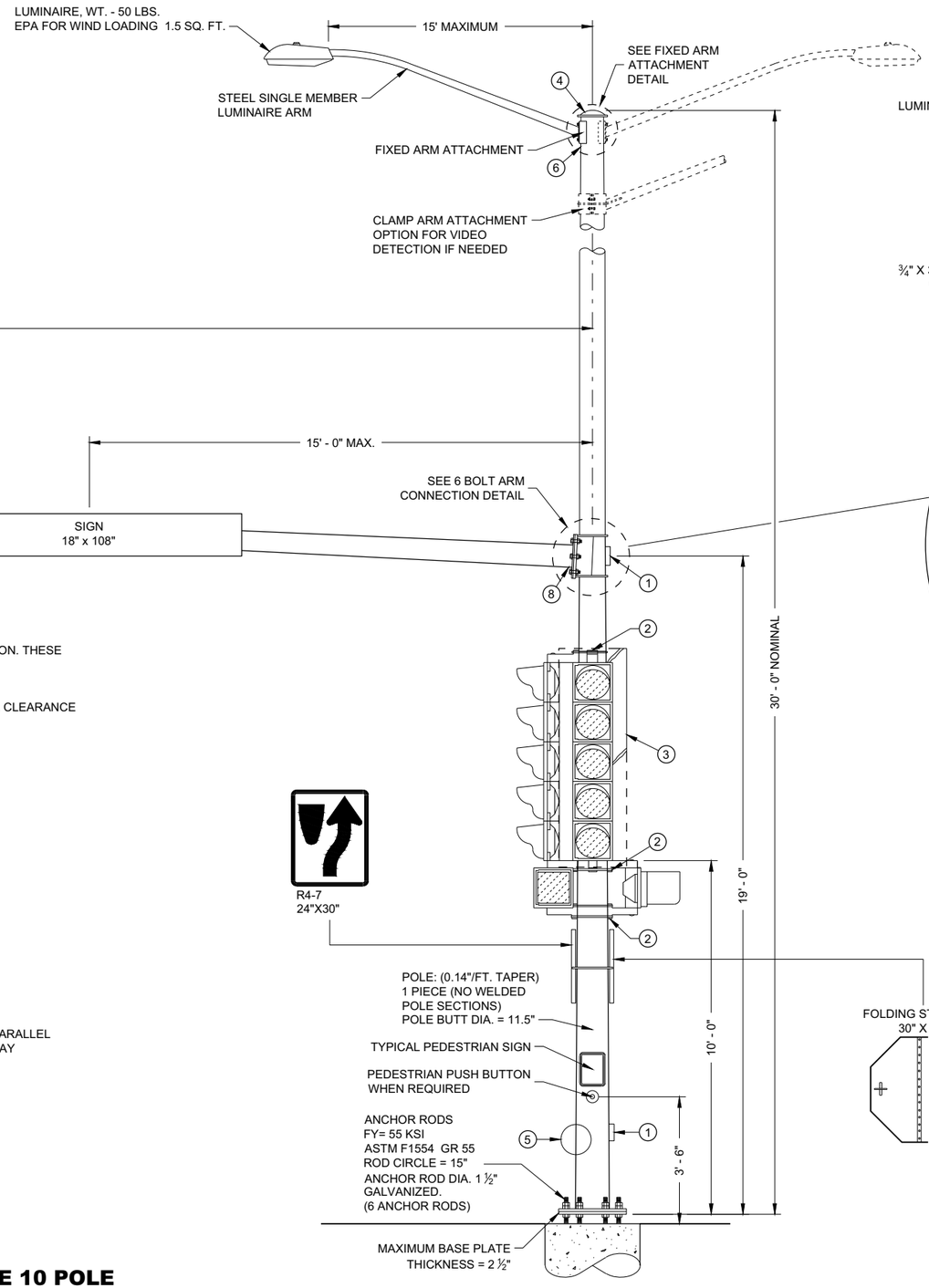
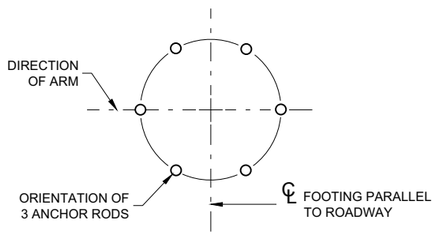
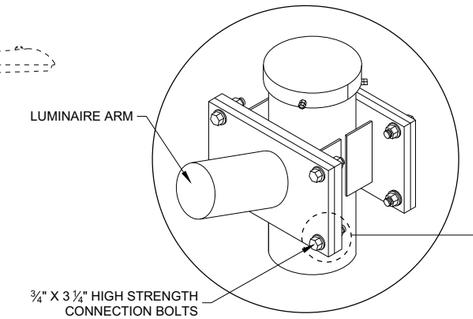


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

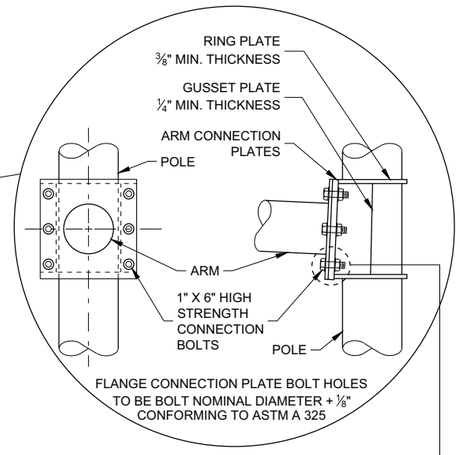
** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE



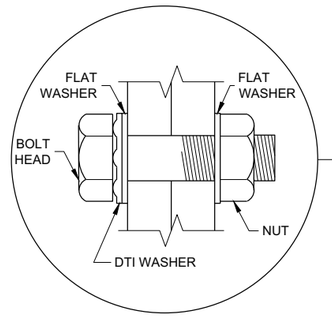
ANCHOR ROD LOCATION



FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
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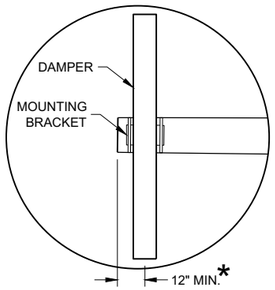
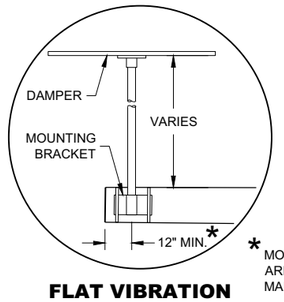
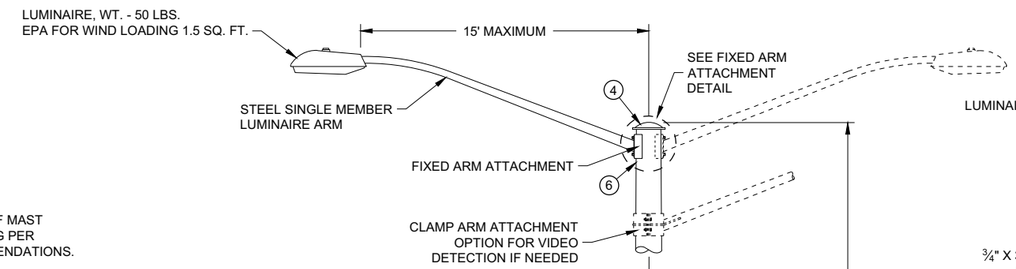


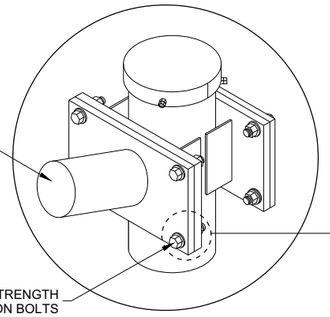
DUMBBELL VIBRATION DAMPER



FLAT VIBRATION DAMPER

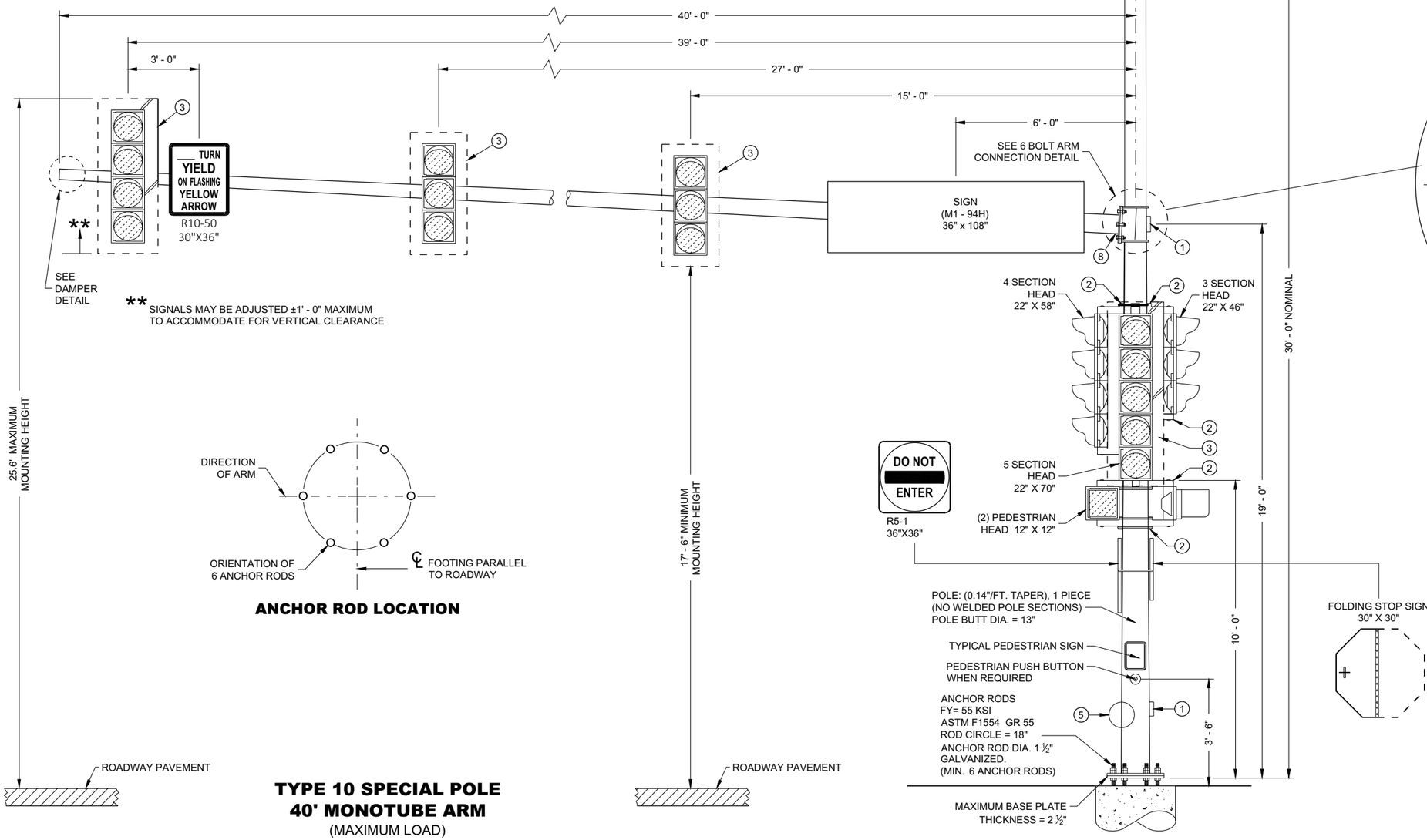
* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.

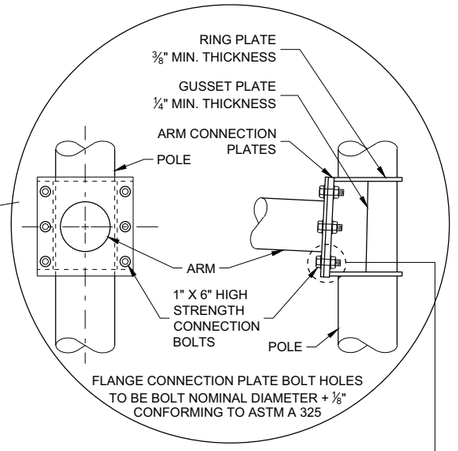




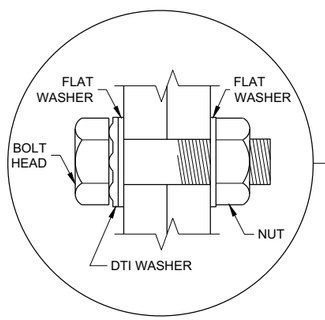
FIXED ARM ATTACHMENT DETAIL

** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE





6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

ANCHOR ROD LOCATION

TYPE 10 SPECIAL POLE
40' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 SPECIAL POLE
40' MONOTUBE ARM

STATE OF WISCONSIN
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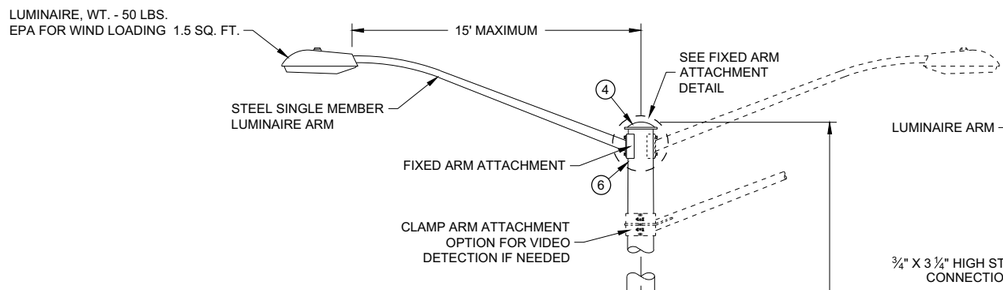
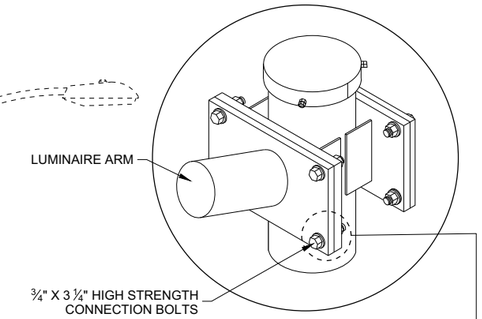
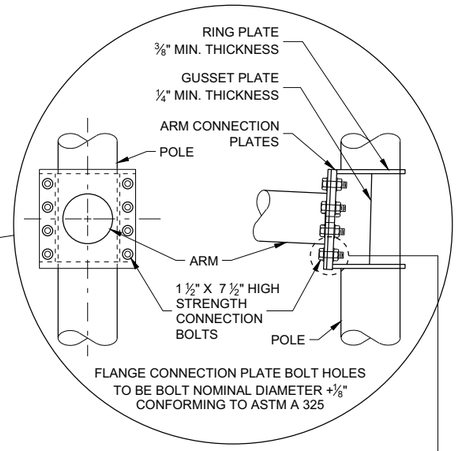
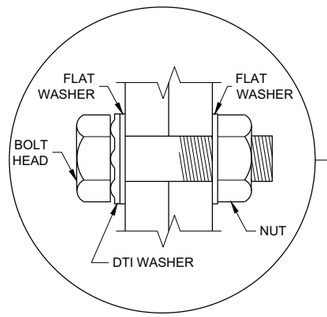




FIXED ARM ATTACHMENT DETAIL



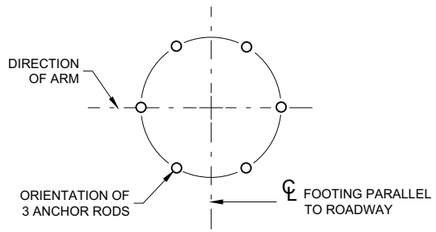
8 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE



ANCHOR ROD LOCATION

TYPE 13 POLE
35' - 55' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 13 POLE
35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 214

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GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).

(3) SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

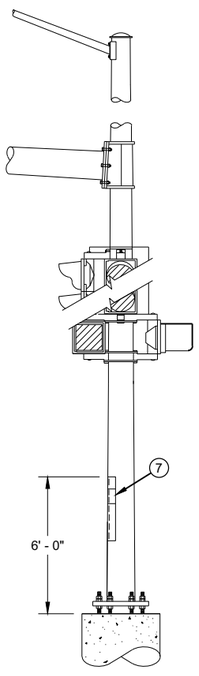
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

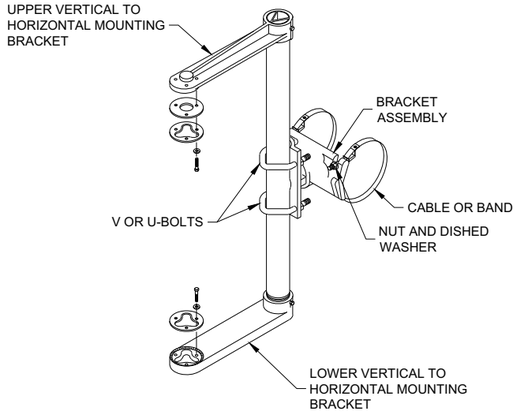
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6' - 0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

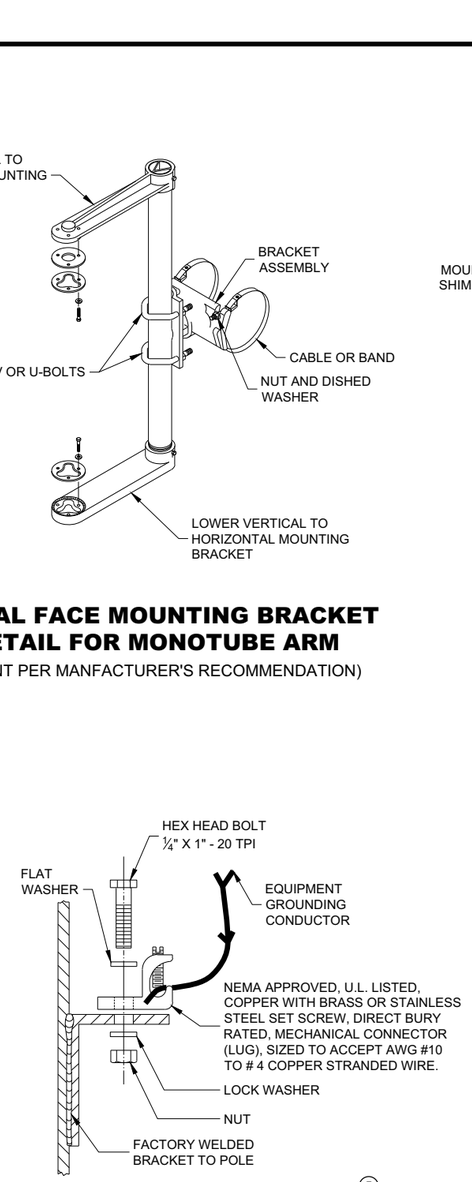


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



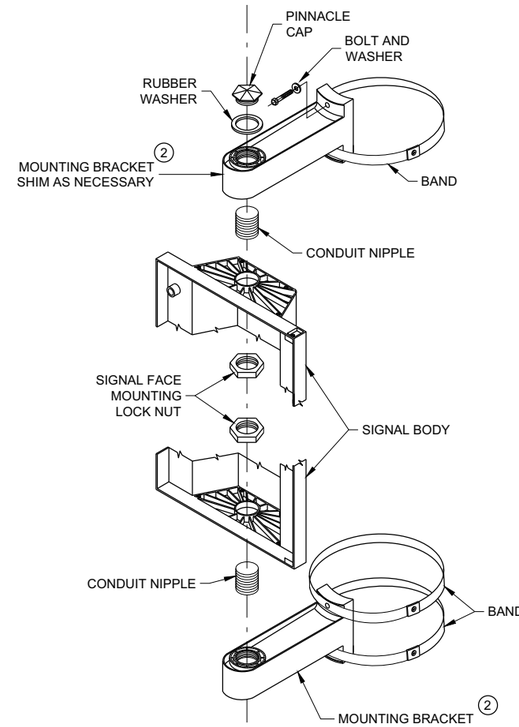
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANFACTURER'S RECOMMENDATION)

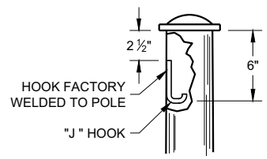


TYPICAL GROUNDING (5) CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



TYPICAL "J" HOOK (6) WIRE SUPPORT

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

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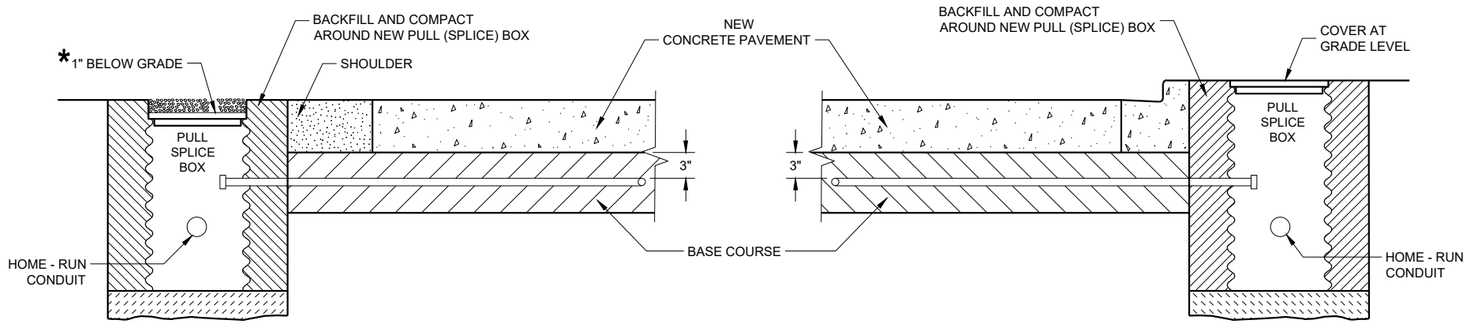


SECTION A - A
NO CURB AND GUTTER

SECTION B - B
CURB AND GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

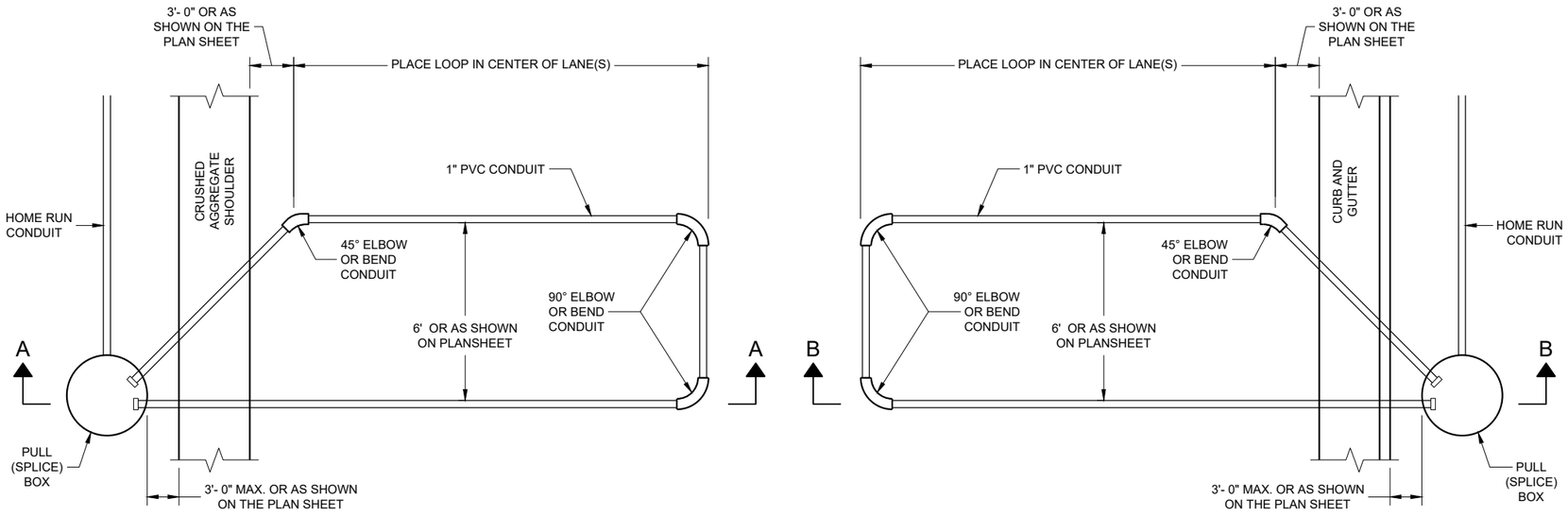
THE #12 AWG LOOP WIRE IN THE ROADSIDE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN LOOP DETECTOR WITH 18" OR 24" PULL (SPLICE) BOX

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)

STATE OF WISCONSIN
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DATE
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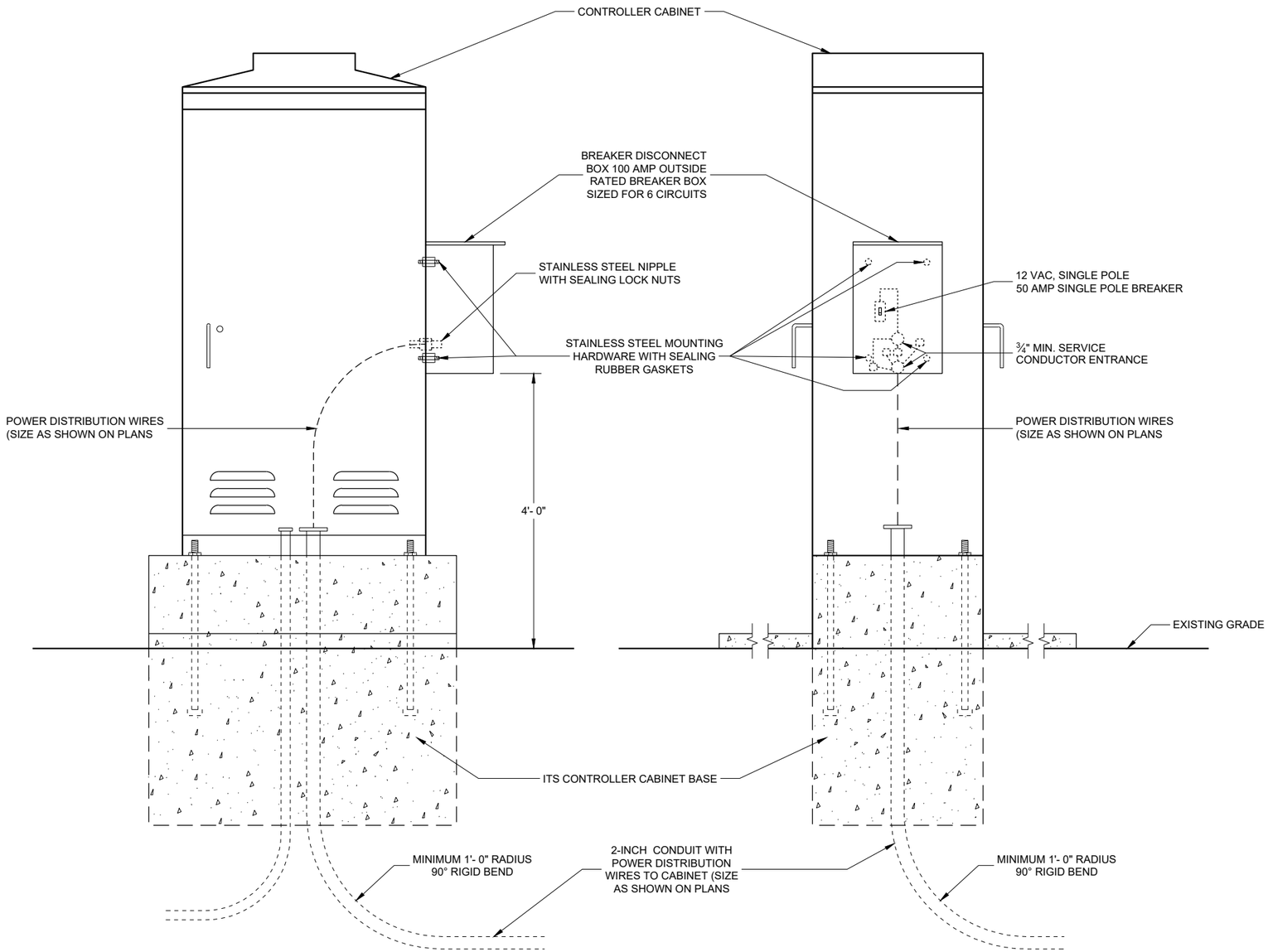
GENERAL NOTES

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

STATE OF WISCONSIN
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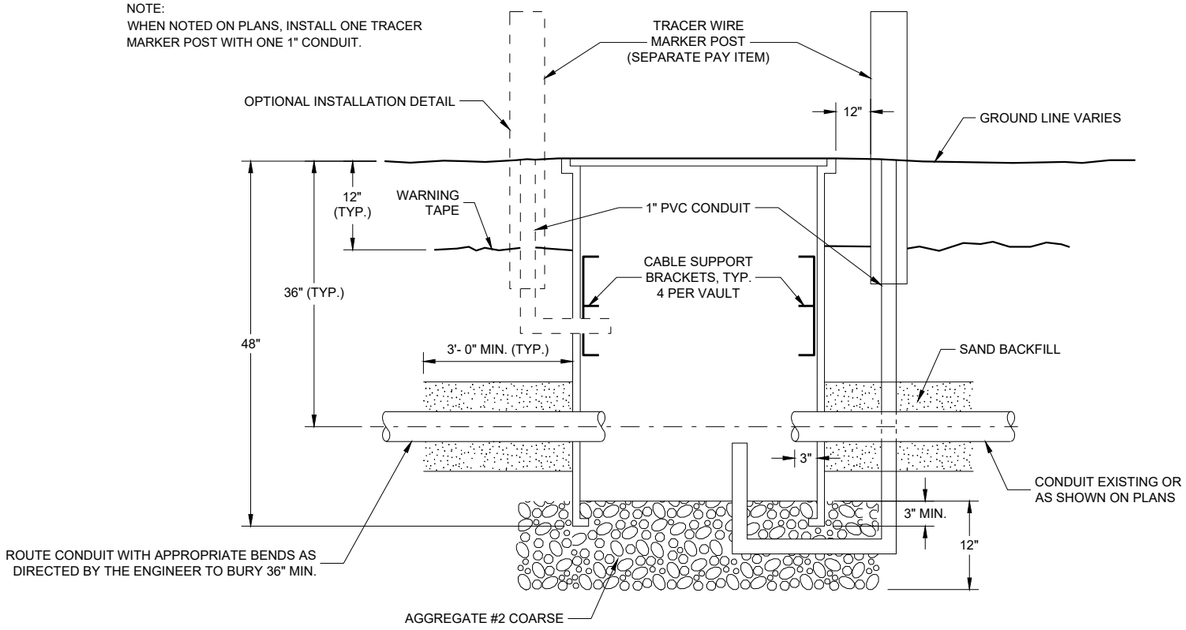
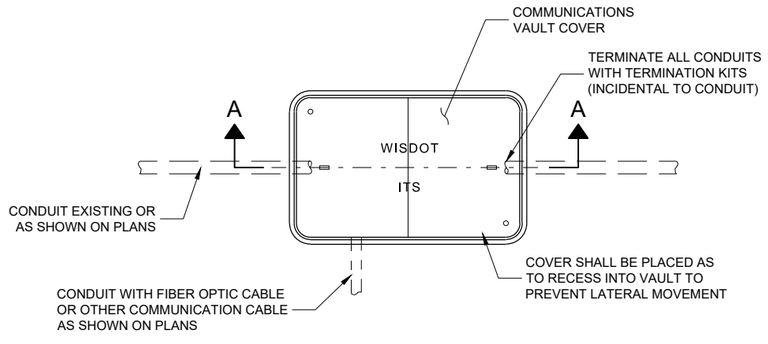
NOTE:
WHEN NOTED ON PLANS, INSTALL ONE TRACER MARKER POST WITH ONE 1" CONDUIT.



SECTION A - A



PLAN VIEW

COMMUNICATIONS VAULT TYPE 1

GENERAL NOTES

PROVIDE VAULT WITH OPEN BASE.

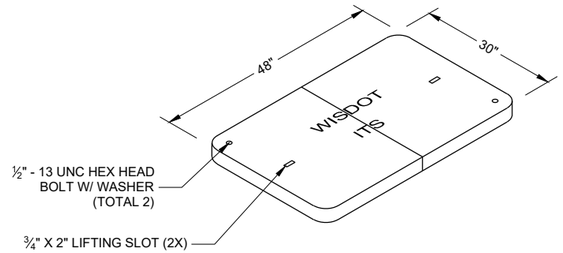
COVER SHALL HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.

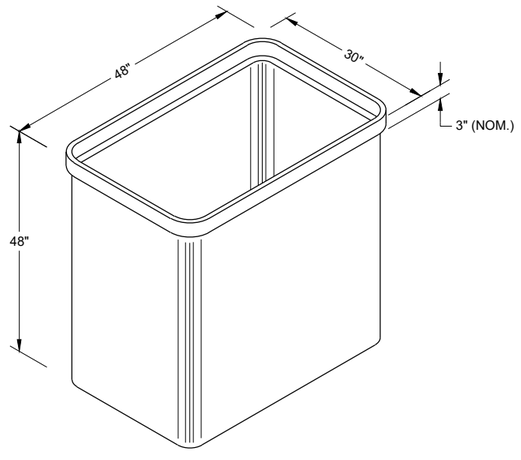
ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.

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	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
May 2017 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL ENGI 218
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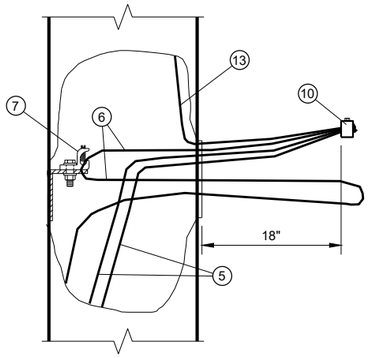
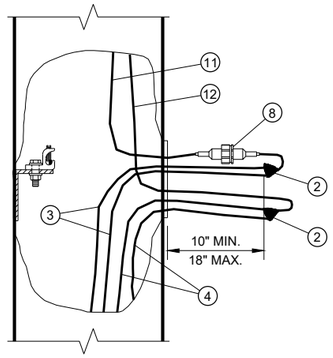
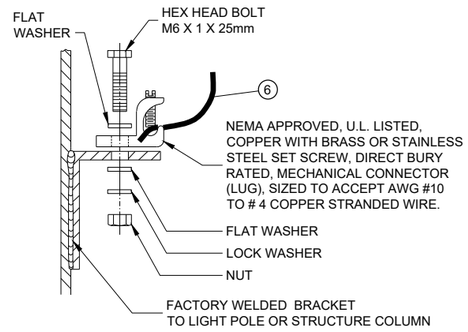


EQUIPMENT GROUNDING CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK (AND GROUNDED NEUTRAL SLACK IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES



HANDHOLE GROUNDING LUG

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

GENERAL NOTES

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

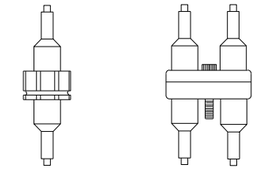
USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

THREE POLE WIRES ARE SHOWN FOR A SINGLE LUMINAIRE LIGHT POLE. THREE ADDITIONAL POLE WIRES REQUIRED FOR TWIN LUMINAIRE LIGHT POLES ARE OMITTED FROM THE DRAWING FOR CLARITY. IN THE TWIN POLE CASE, BUNDLE EACH SET OF THREE WIRES WITH A NYLON CABLE TIE.

IN 3-PHASE SYSTEMS, THERE WILL BE ONE MORE UNGROUNDED LINE WIRE, WHICH IS OMITTED FROM THE DRAWING FOR CLARITY.

CIRCUIT TAGS SHALL BE INSTALLED ONLY WHERE REQUIRED IN THE SPECIAL PROVISIONS.



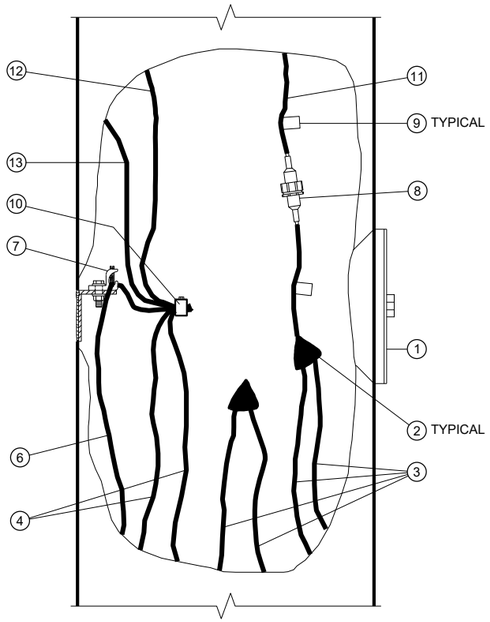
1 POLE (1P) 2 POLE (2P)

FUSE ASSEMBLIES

CONDUCTOR COLOR CODES

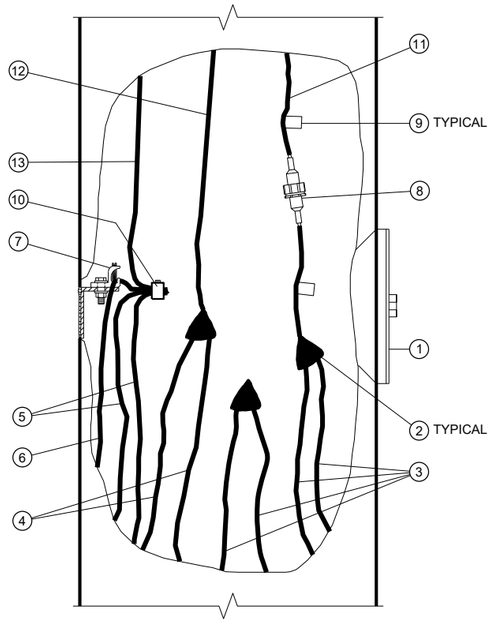
KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	*
4	GROUNDED LINE WIRE	WHITE
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	BARE
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING, USE BLACK FOR SINGLE LUMINAIRE POLES; BLACK AND RED FOR TWIN LUMINAIRE POLES.



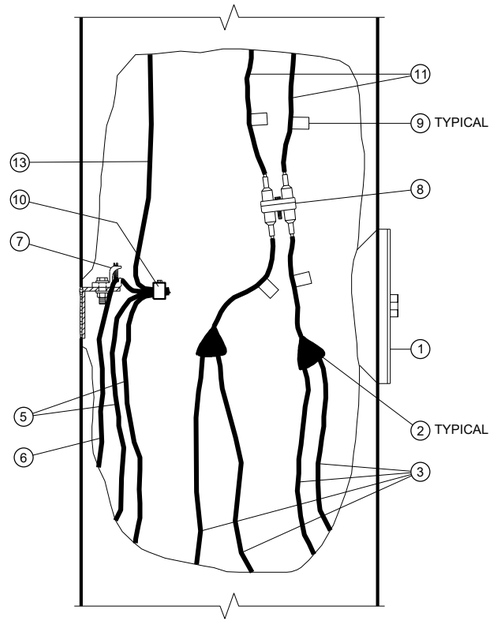
CUTAWAY HANDHOLE DETAIL

GROUNDED NEUTRAL SYSTEMS
1-ϕ



CUTAWAY HANDHOLE DETAIL

ISOLATED NEUTRAL SYSTEMS
1-ϕ SHOWN; 3-ϕ WYE SIMILAR
(SEE GENERAL NOTE)



CUTAWAY HANDHOLE DETAIL

PHASE TO PHASE SYSTEMS
1-ϕ SHOWN; 3-ϕ DELTA SIMILAR
(SEE GENERAL NOTE)

NOTE: REQUIRED CONDUCTOR SLACK NOT SHOWN ON "CUTAWAY HAND HOLE" DETAILS FOR DRAWING CLARITY, SEE "TYPICAL CONDUCTOR SLACK AT HANDHOLES" ON THIS SHEET.

1. HANDHOLE AND COVER
2. INSULATED SPLICE
3. UNGROUNDED LINE WIRE
4. GROUNDED LINE WIRE
5. SYSTEM GROUNDING LINE WIRE
6. GROUNDING ELECTRODE CONDUCTOR
7. HANDHOLE GROUNDING LUG
8. FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
9. CIRCUIT TAG (SEE GENERAL NOTE)
10. REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
11. UNGROUNDED POLE WIRE
12. GROUNDED POLE WIRE
13. EQUIPMENT GROUNDING POLE WIRE

ELECTRICAL HANDHOLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 219

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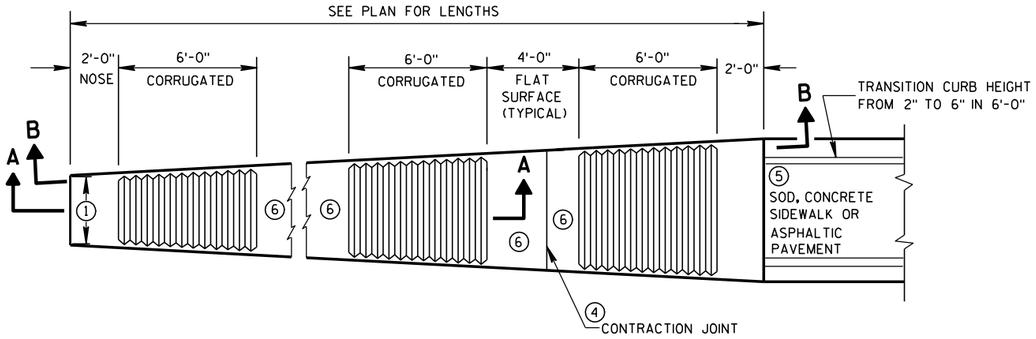
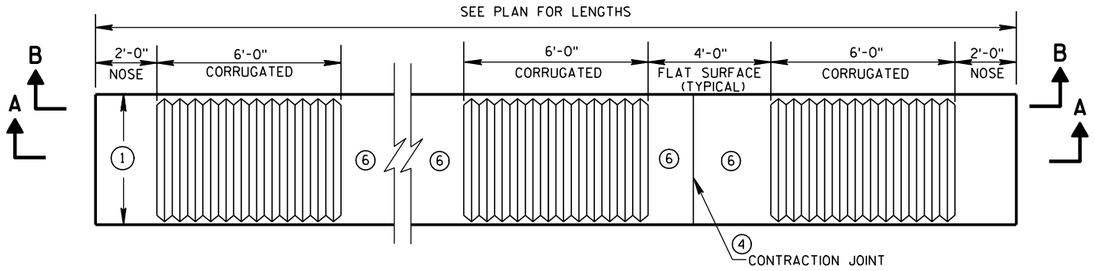


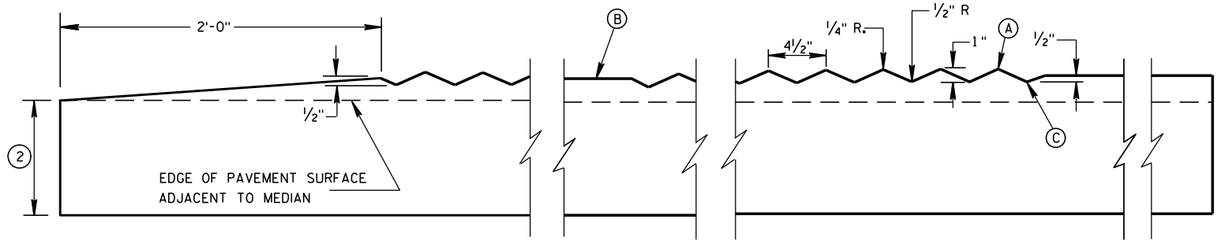
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

GENERAL NOTES

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.

ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.

(3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.

(3) 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.

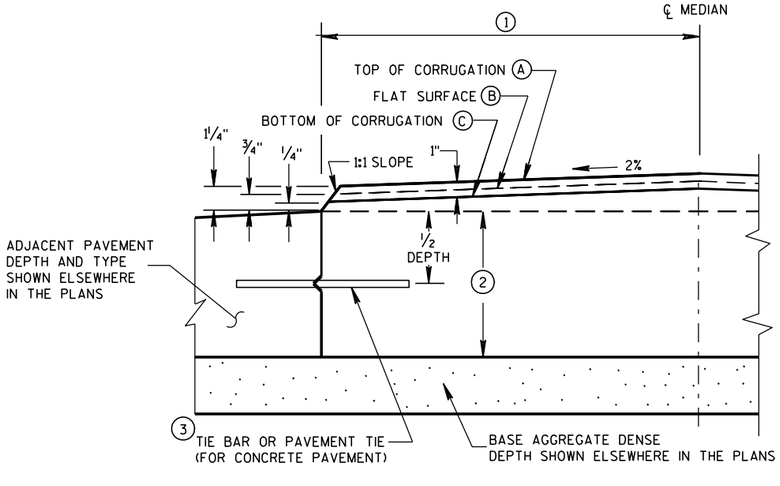
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR 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.

(4) CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

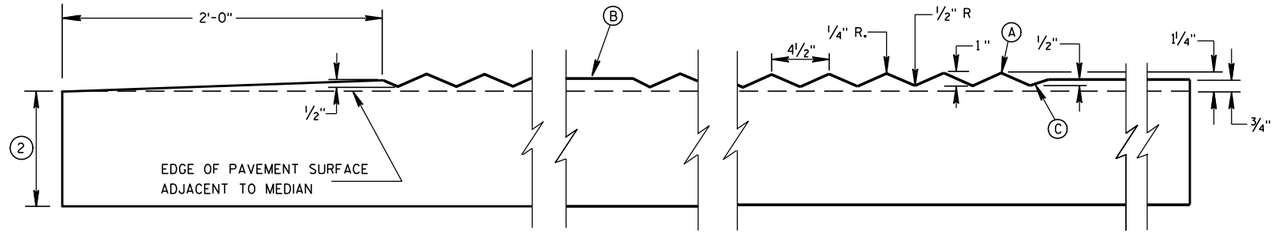
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(6) YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



SECTION B-B

LONGITUDINAL SECTION

CONCRETE CORRUGATED MEDIAN	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
12/17/07 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER
FHWA	220

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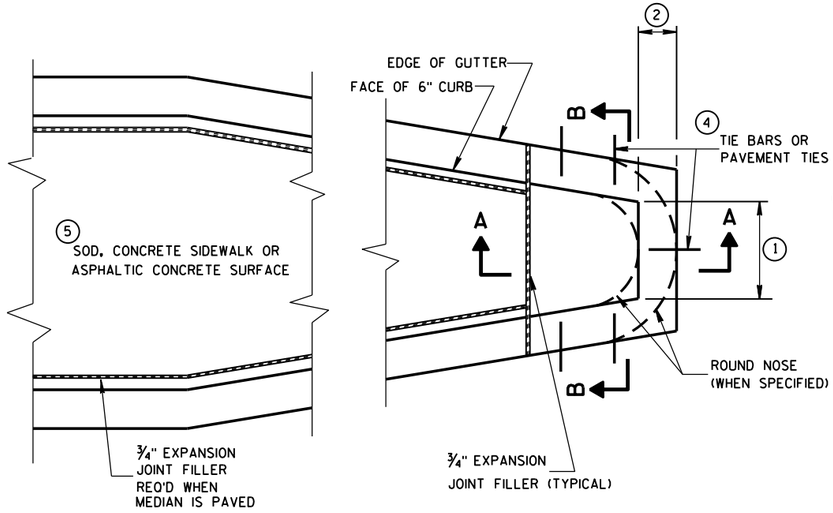
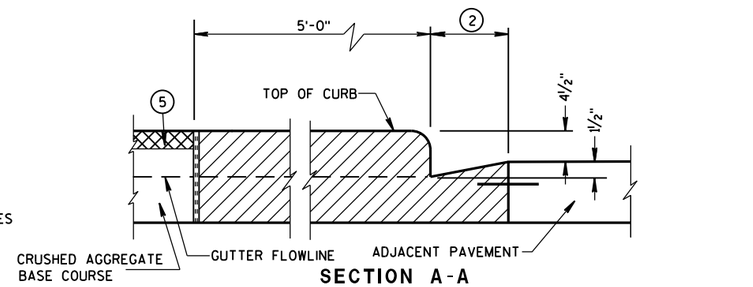
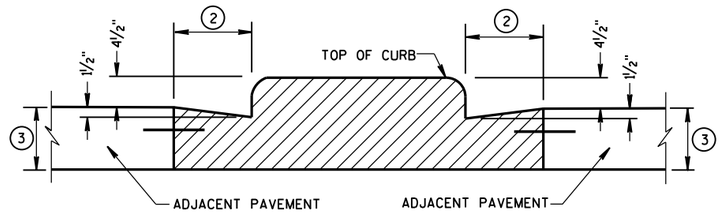




SECTION A-A



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.

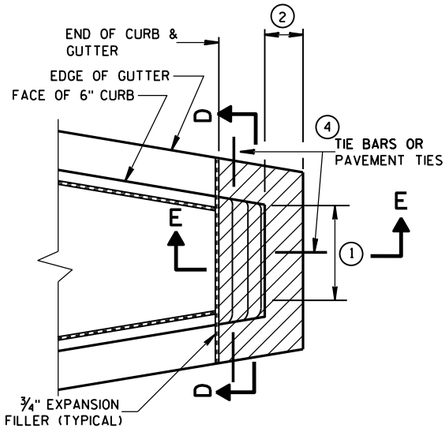
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

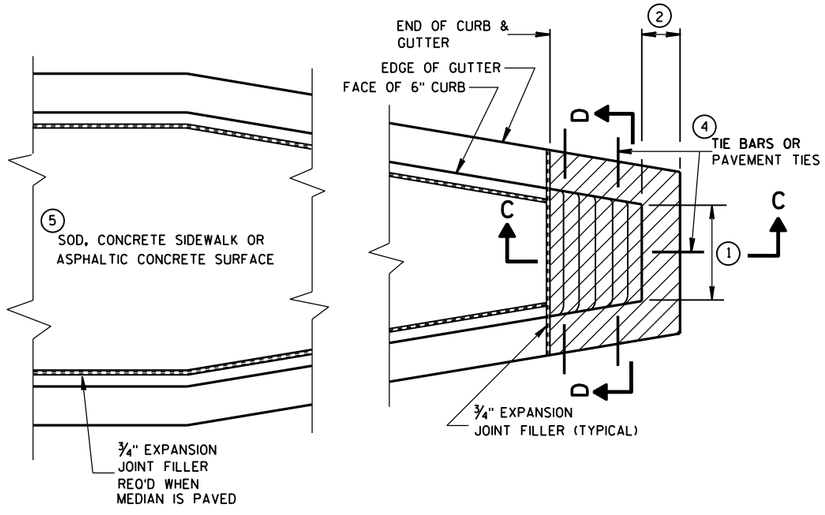
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(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.

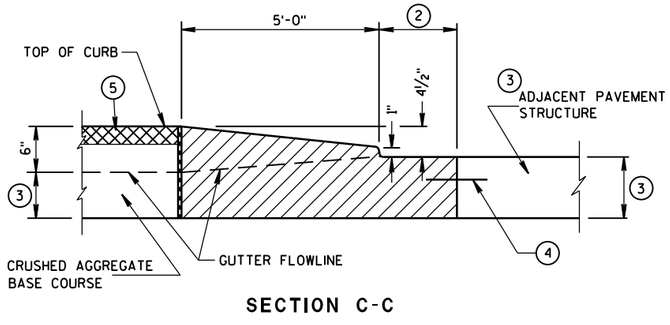
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

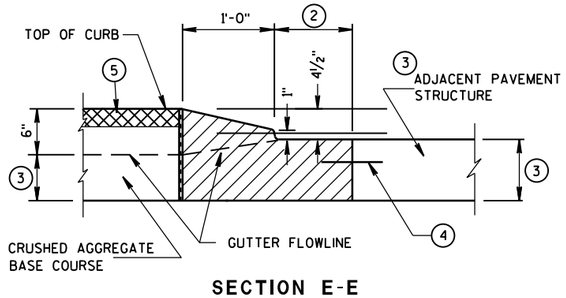




CONCRETE MEDIAN SLOPED NOSE TYPE 1

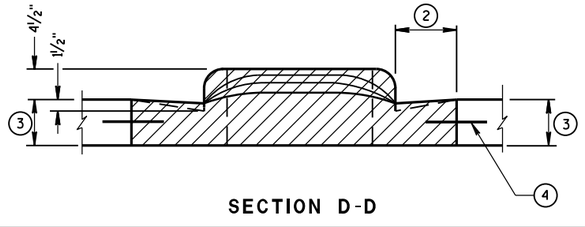


SECTION C-C



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

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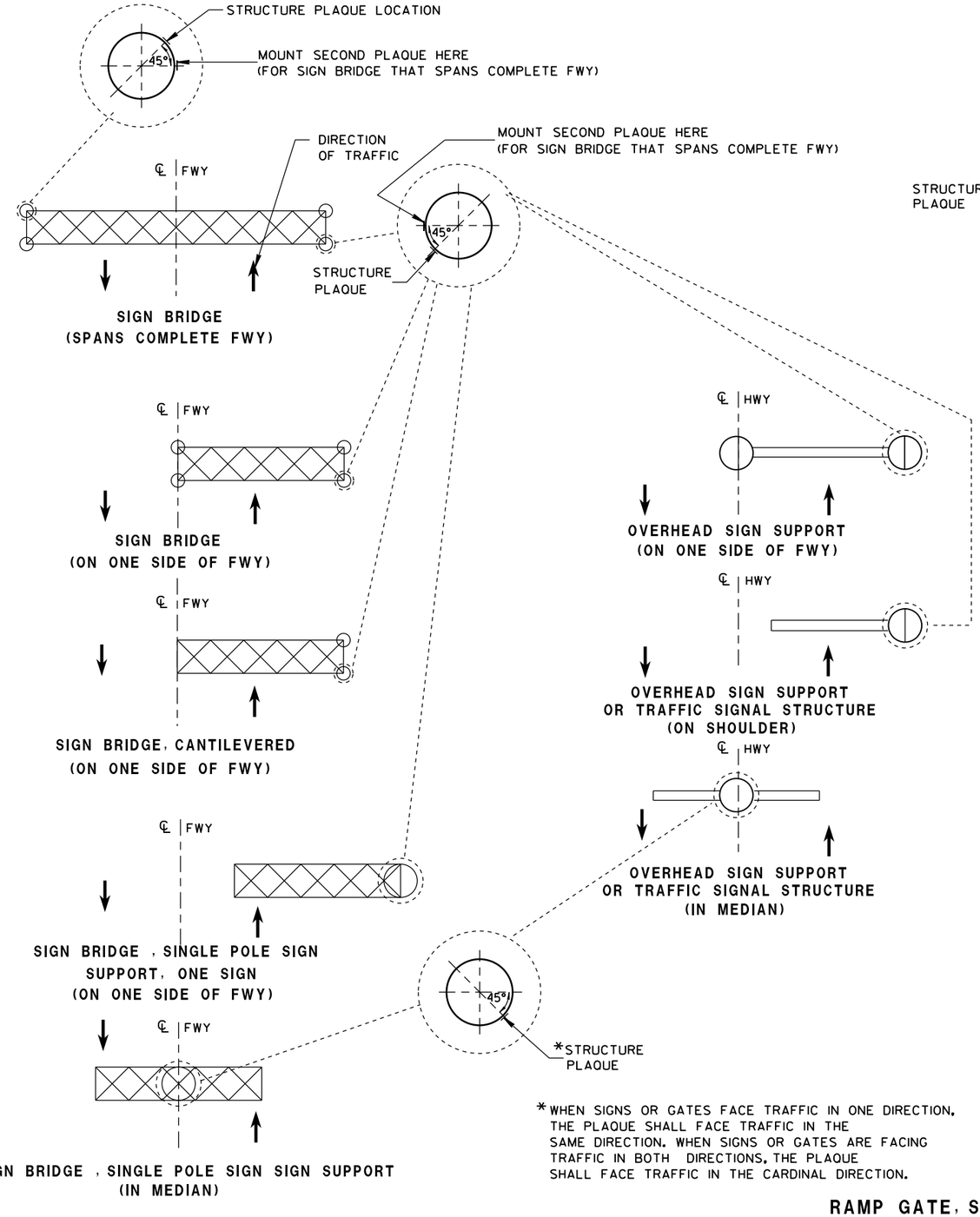
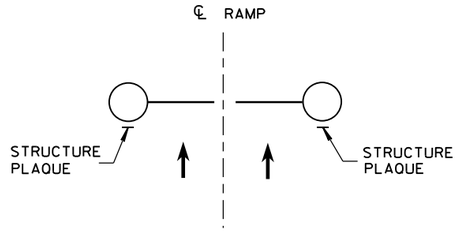
S.D.D. 11 B 2-2

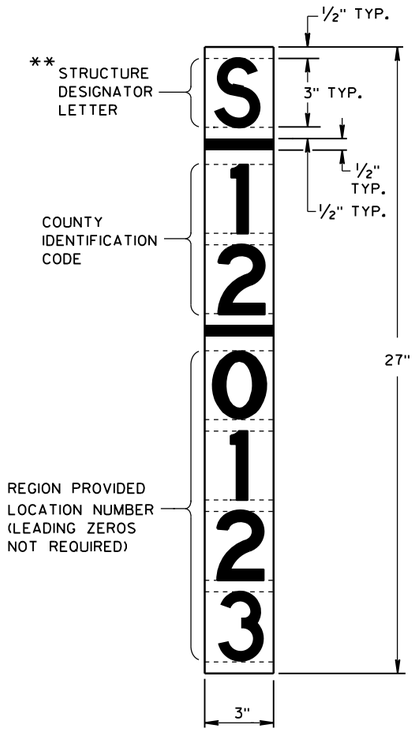


* WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



**RAMP GATE
(ACROSS FWY ON-RAMP)**



** 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.

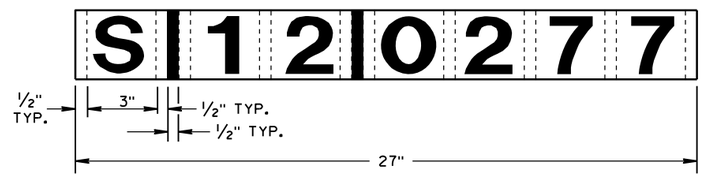
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

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

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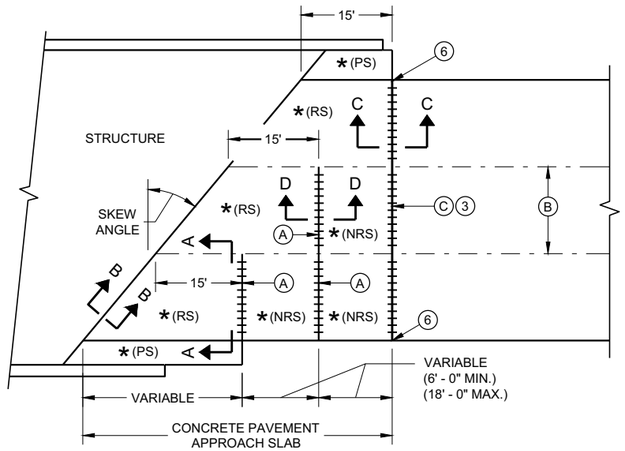
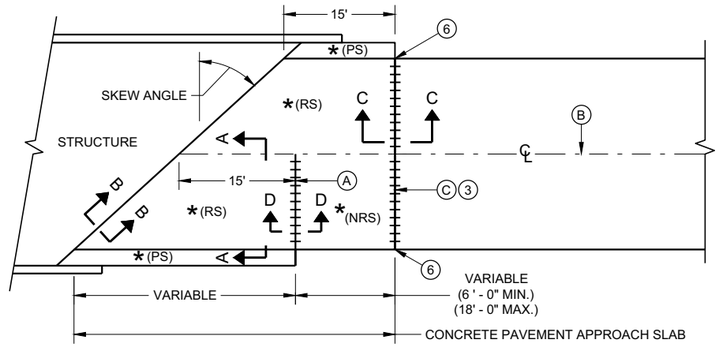
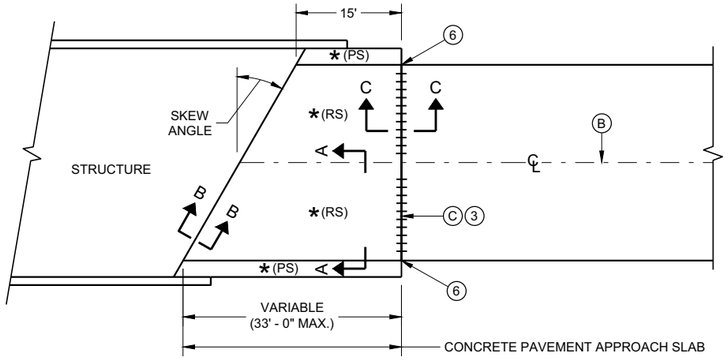


SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

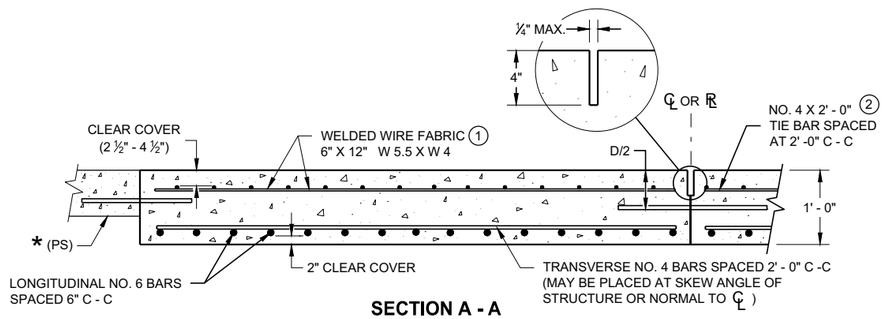
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

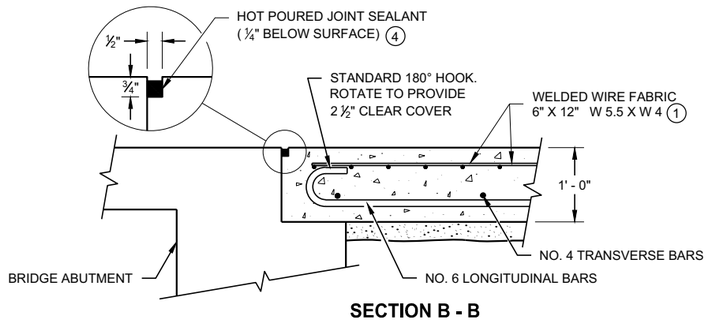
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

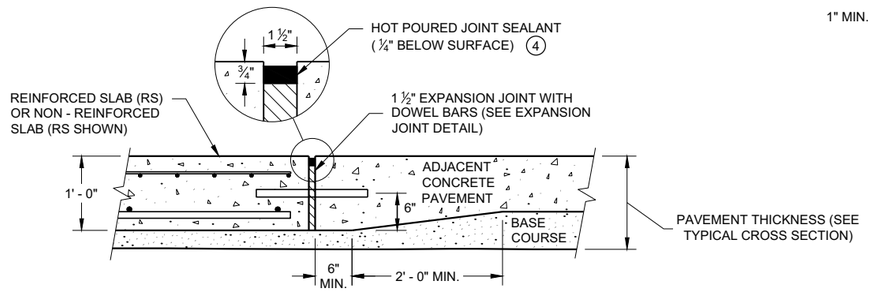
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



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.

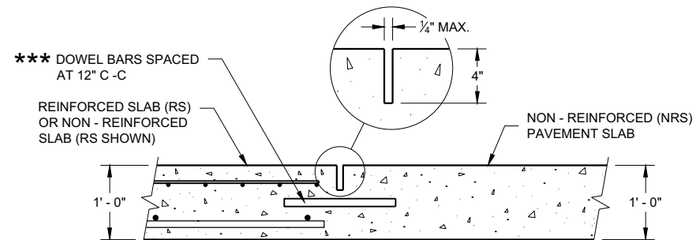
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

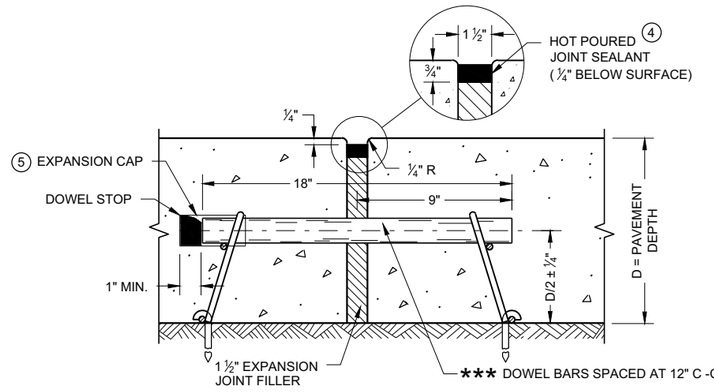
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(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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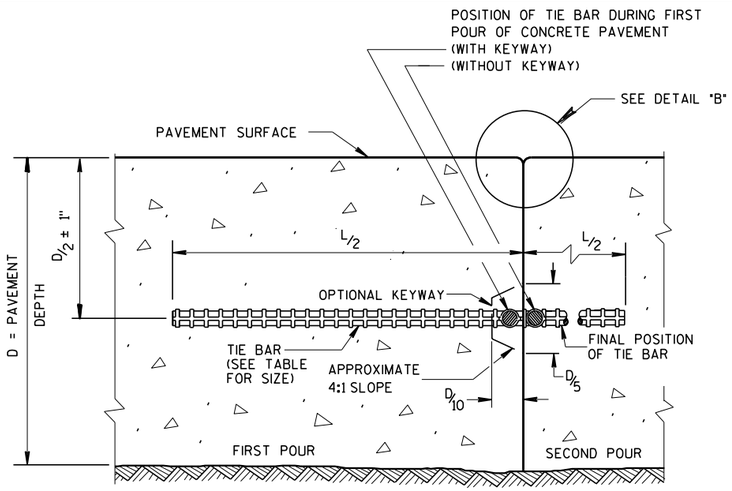
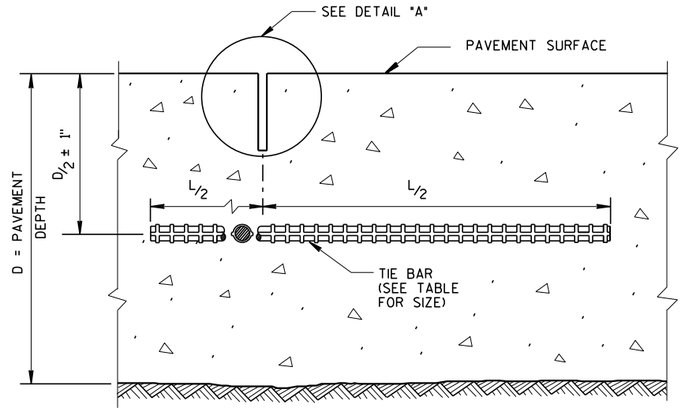
SDD 13B02 - 09a



CONSTRUCTION JOINT



SAWED JOINT

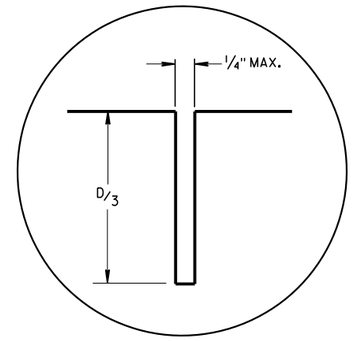
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

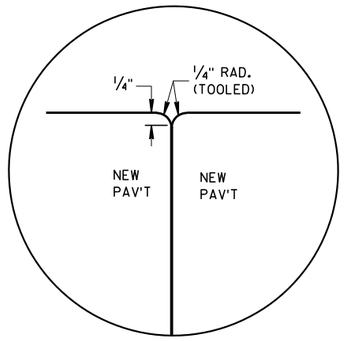
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

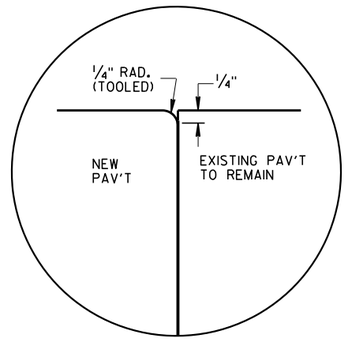
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



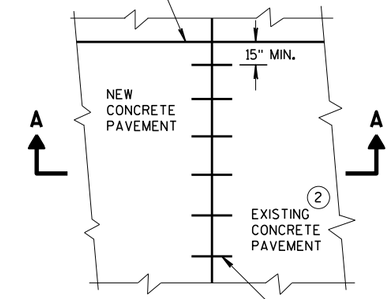
DETAIL "A"



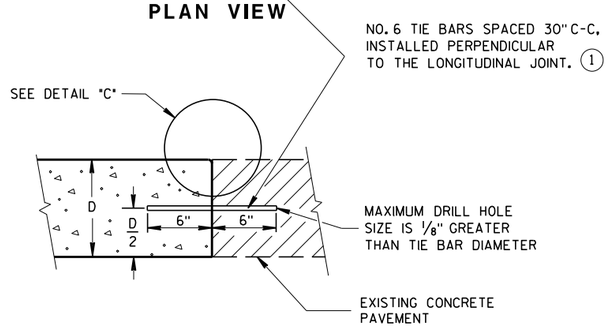
DETAIL "B"



DETAIL "C"



PLAN VIEW



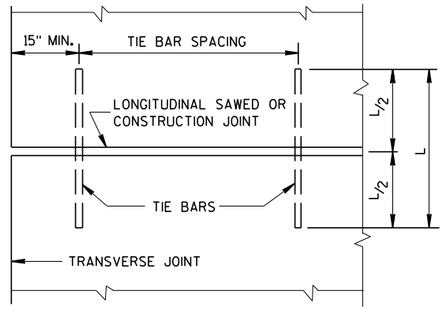
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

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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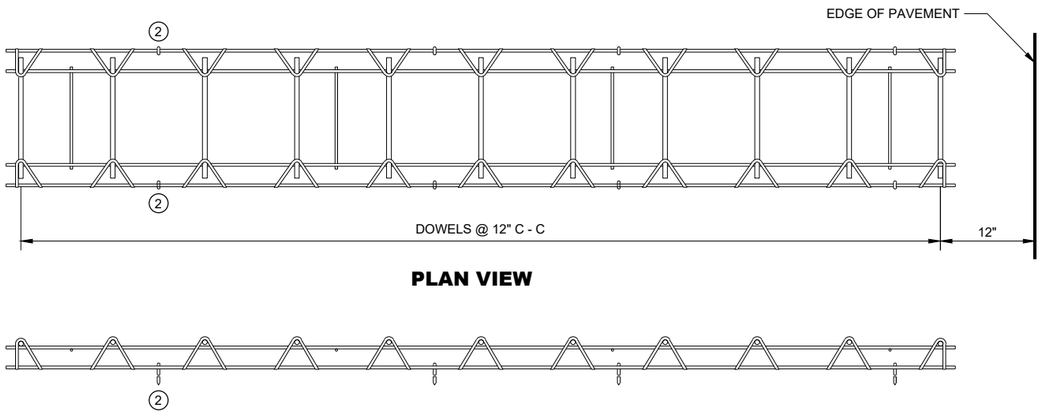
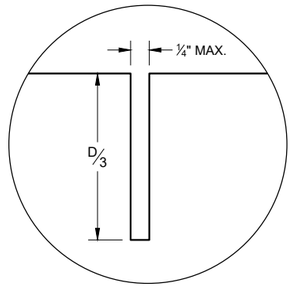
S.D.D. 13 C 1-19



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.

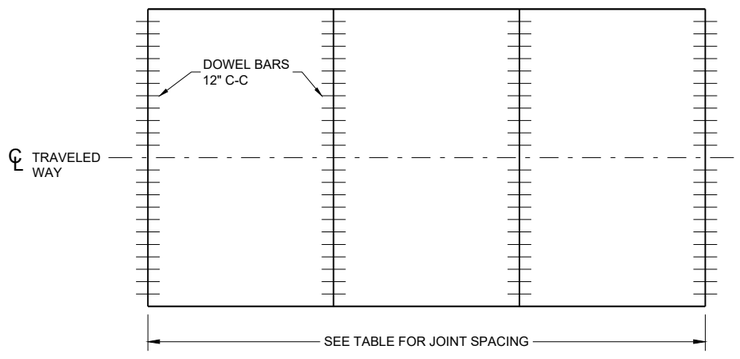
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

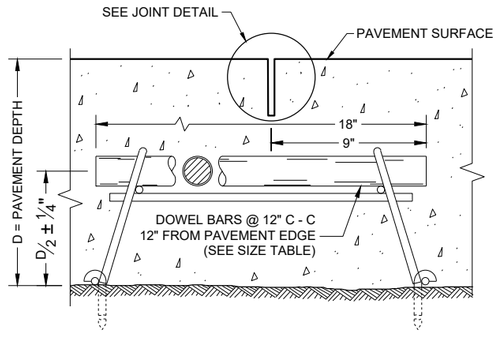
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED 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.



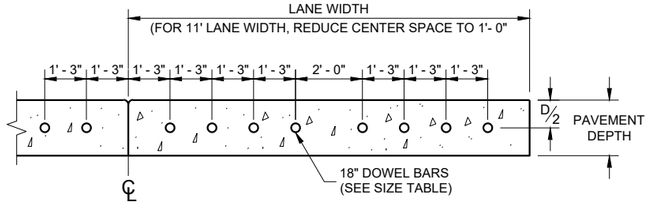
CONTRACTION JOINT LOCATIONS



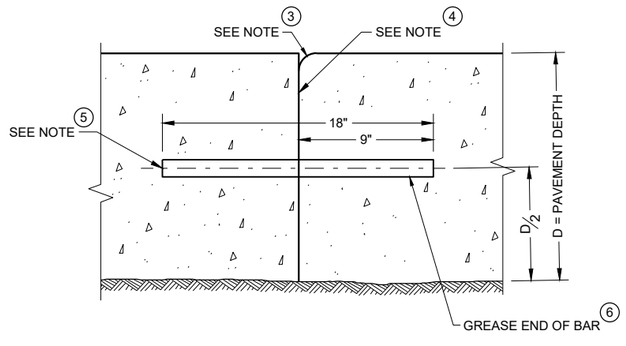
DOWELED CONTRACTION JOINT

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

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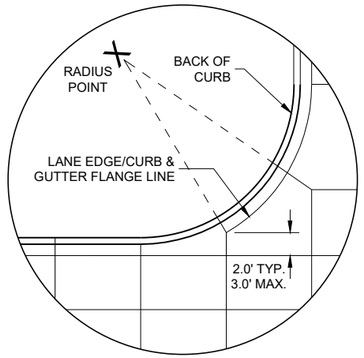
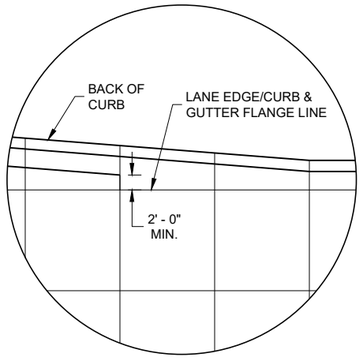
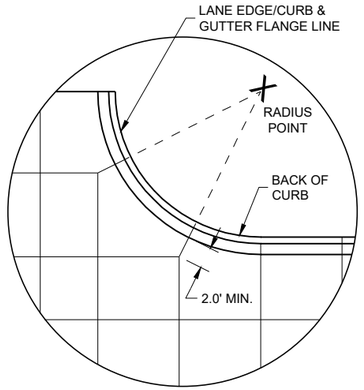
SDD 13C13 - 11



DETAIL "A"



DETAIL "B"



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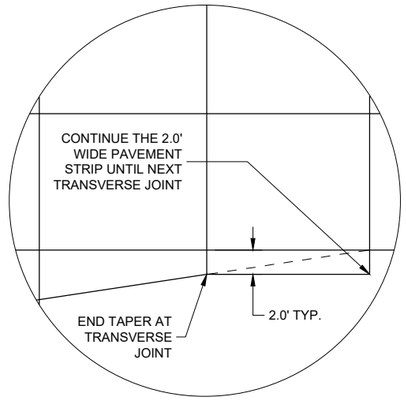


DETAIL "D"

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.

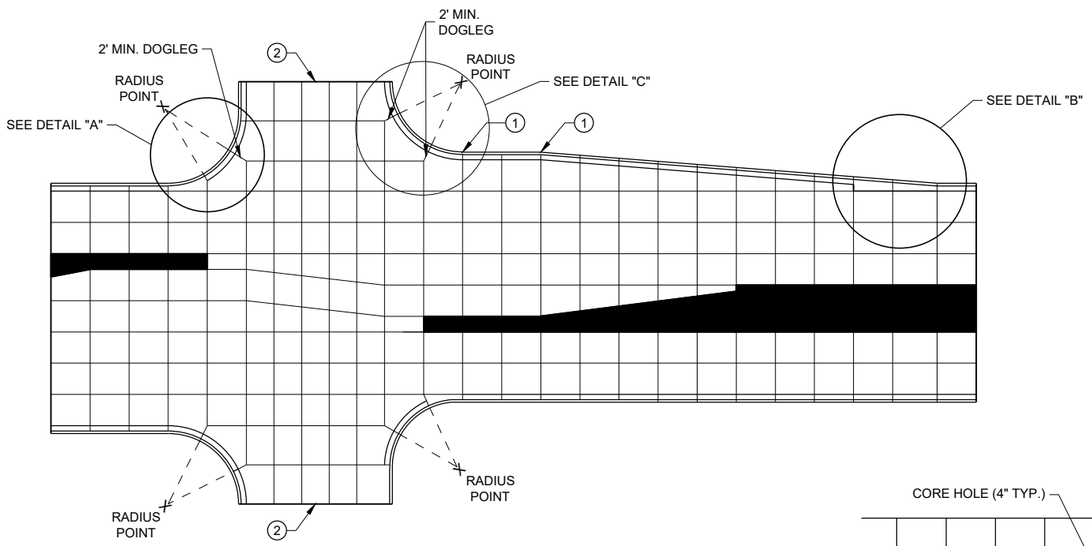
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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.

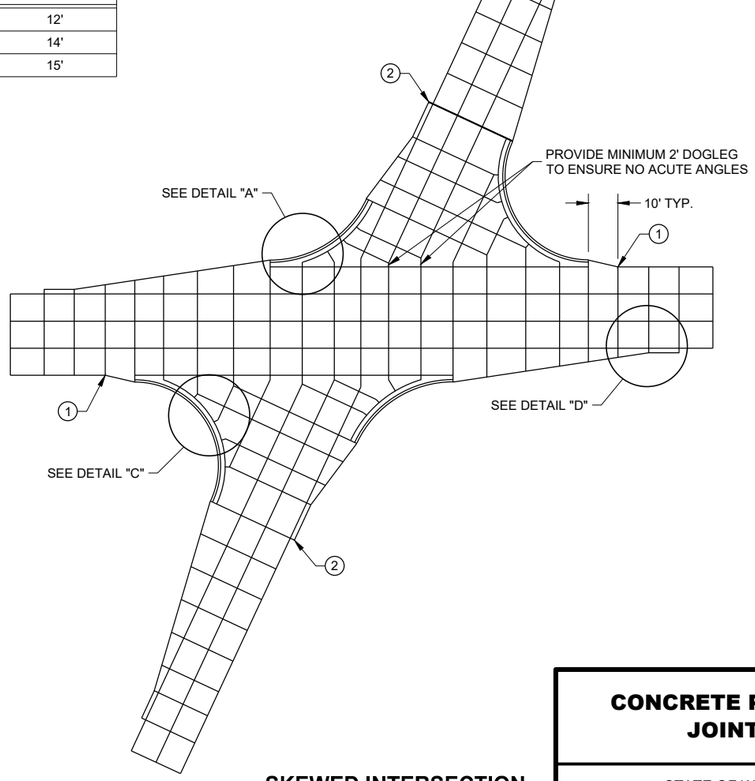
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



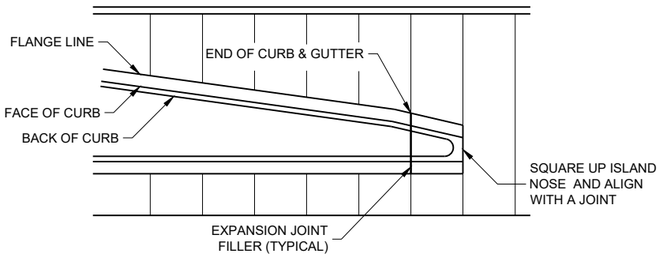
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

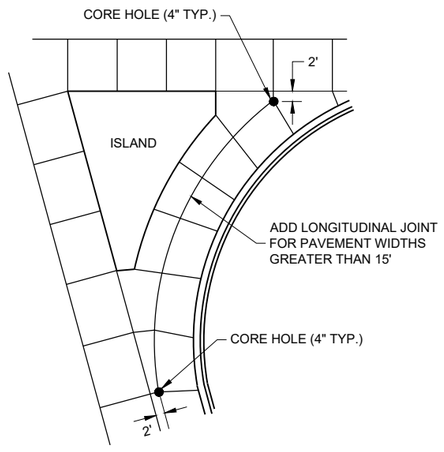
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 08a

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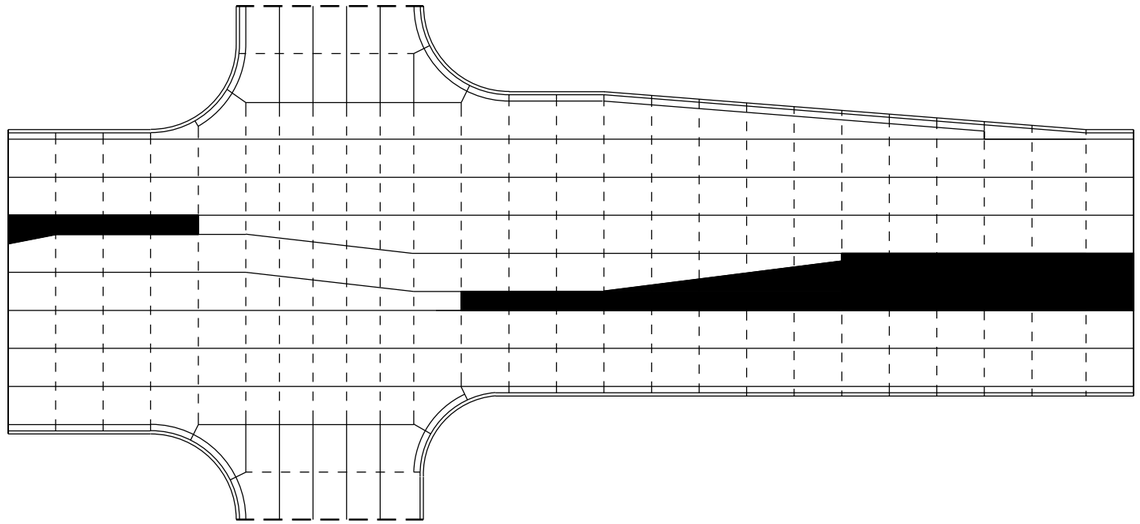
SDD 13C18 - 08a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

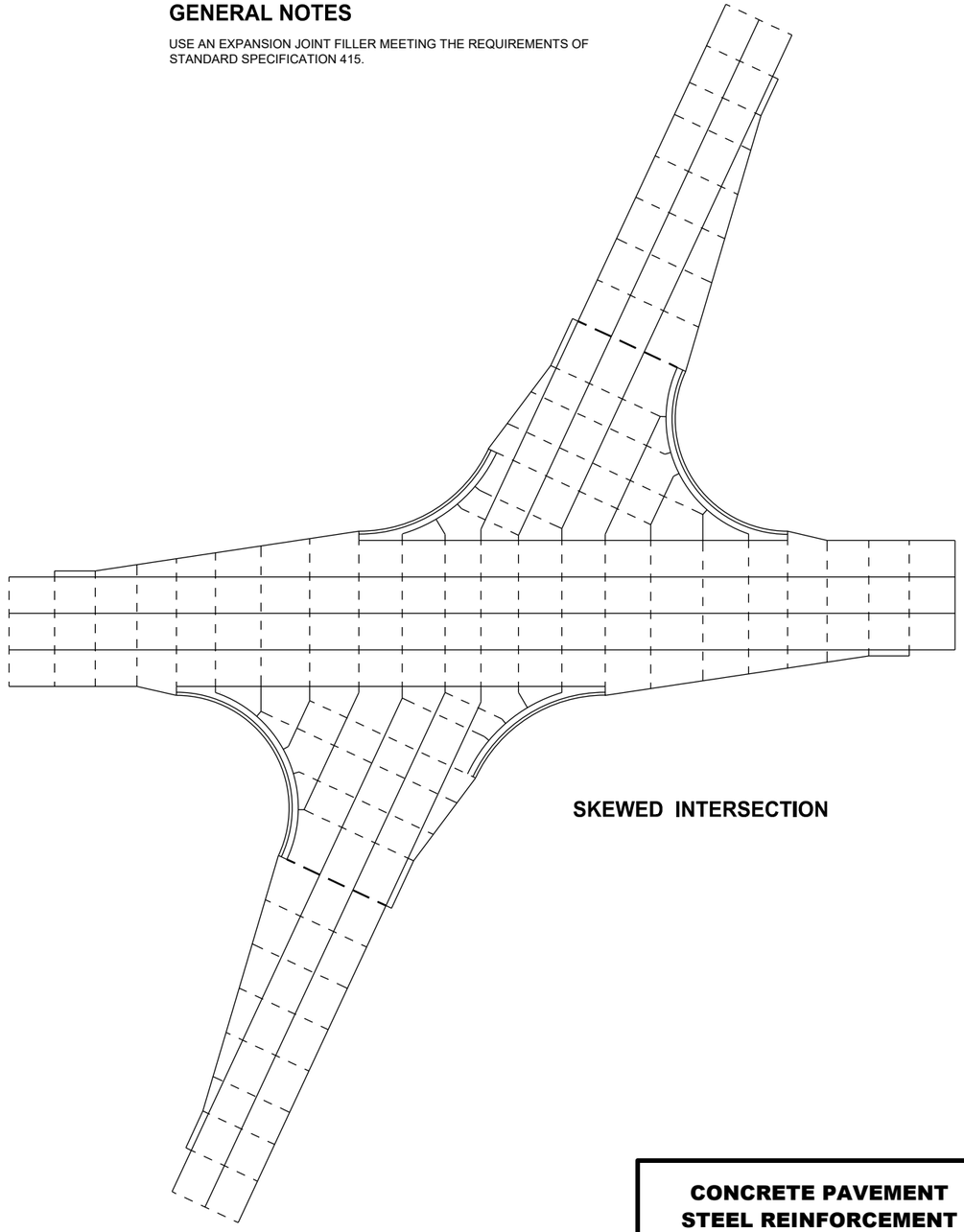
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

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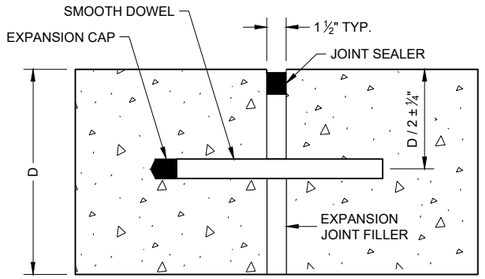
SDD 13C18 - 08b

CONCRETE PAVEMENT STEEL REINFORCEMENT

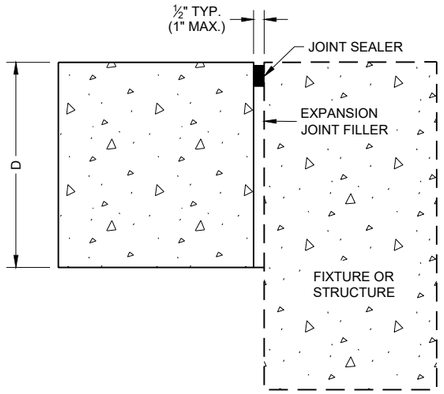
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 08b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

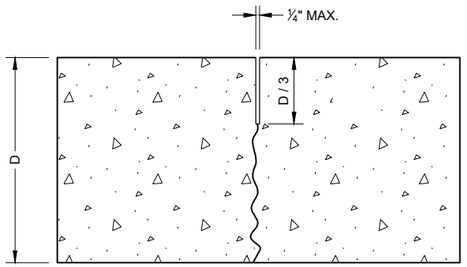
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

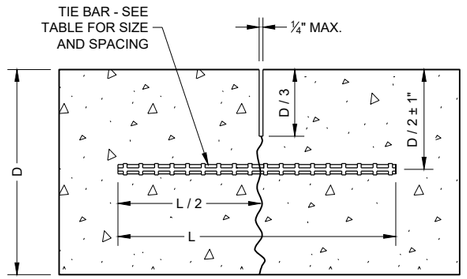
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

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.



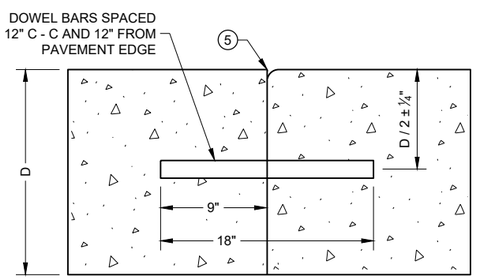
UNDOWELED TRANSVERSE



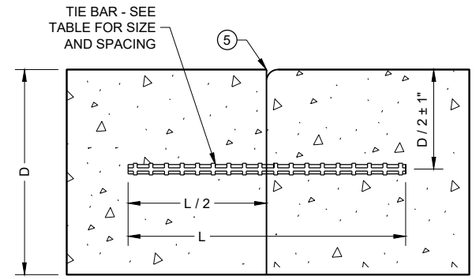
TIED LONGITUDINAL

DOWELED TRANSVERSE

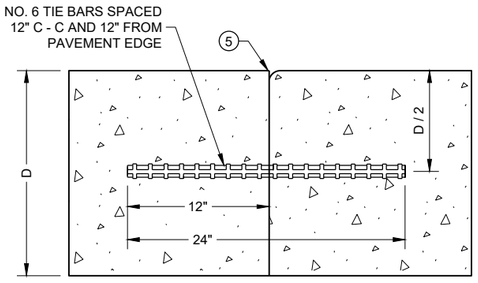
CONTRACTION JOINTS (2)



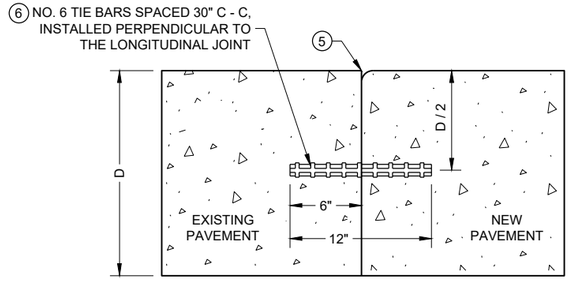
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

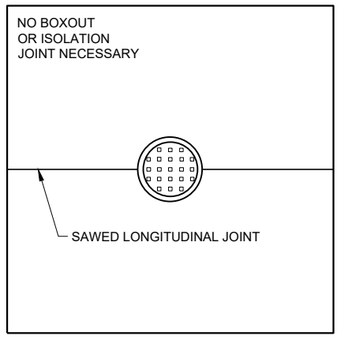
CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

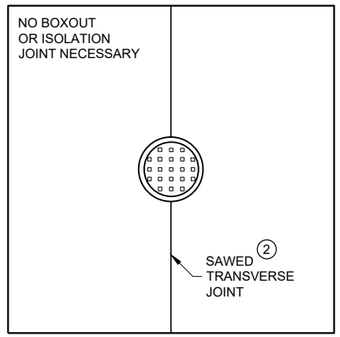
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

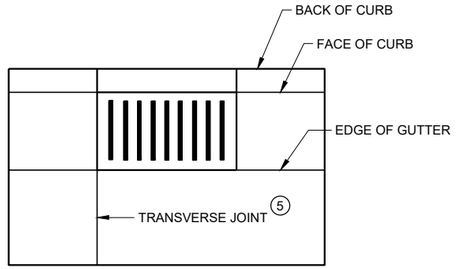
SDD 13C18 - 08c



MANHOLE WITH LONGITUDINAL JOINT



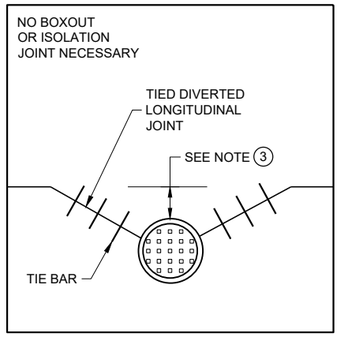
MANHOLE WITH TRANSVERSE JOINT



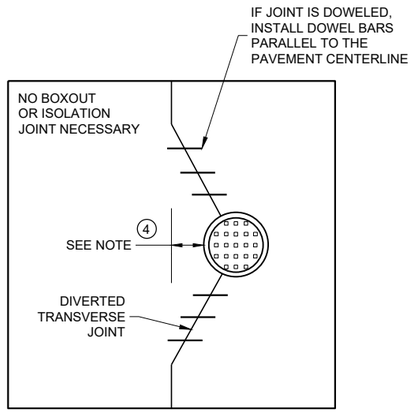
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

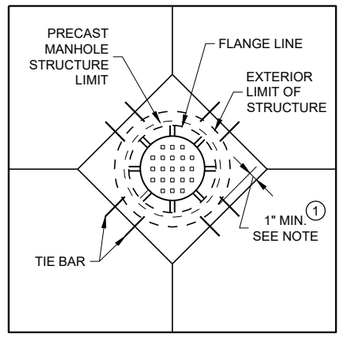
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF 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 SUPERVISO

FHWA

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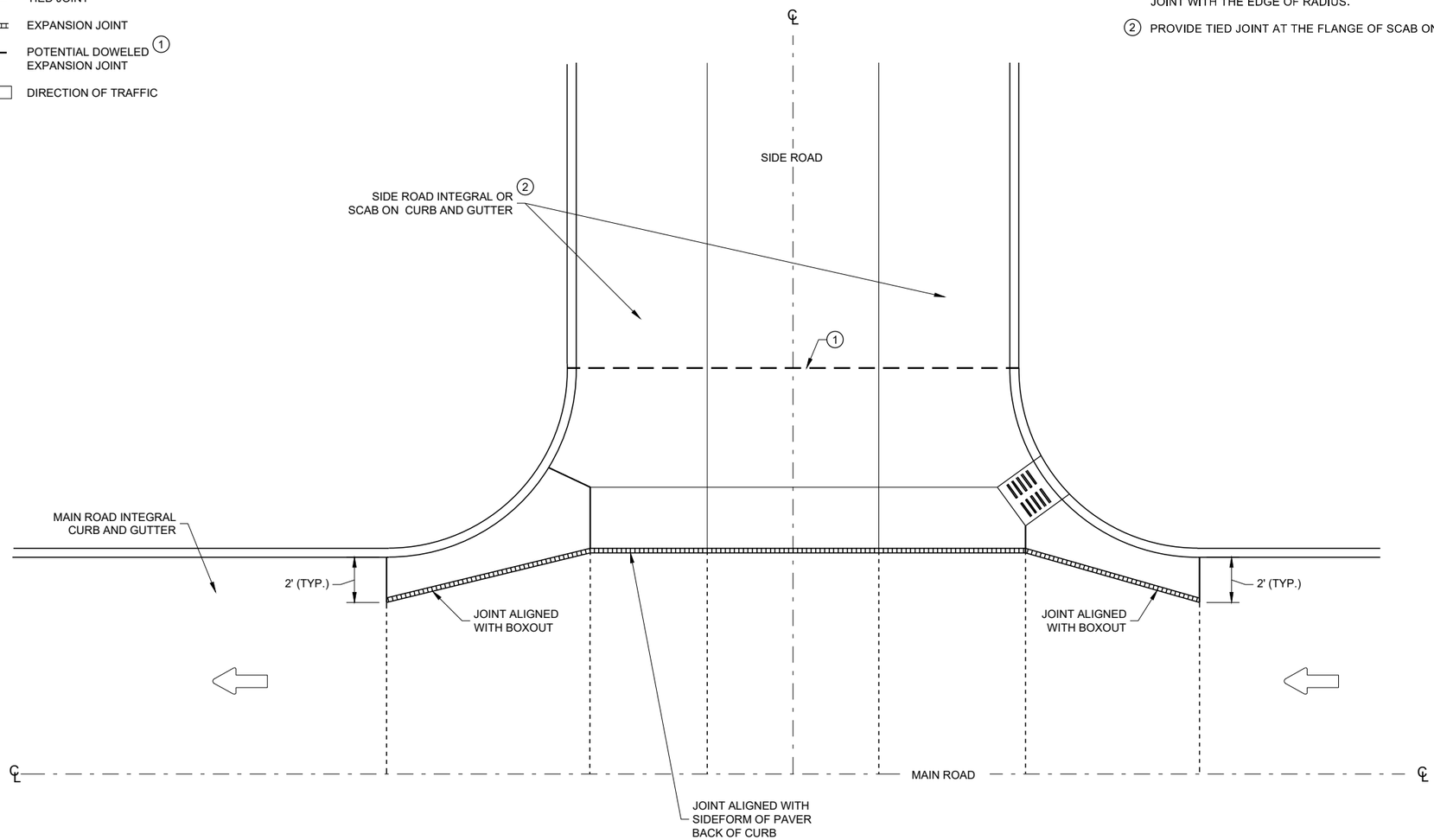
SDD13C18 - 08d

SDD13C18 - 08d

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	230

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SDD 13C18 - 08f

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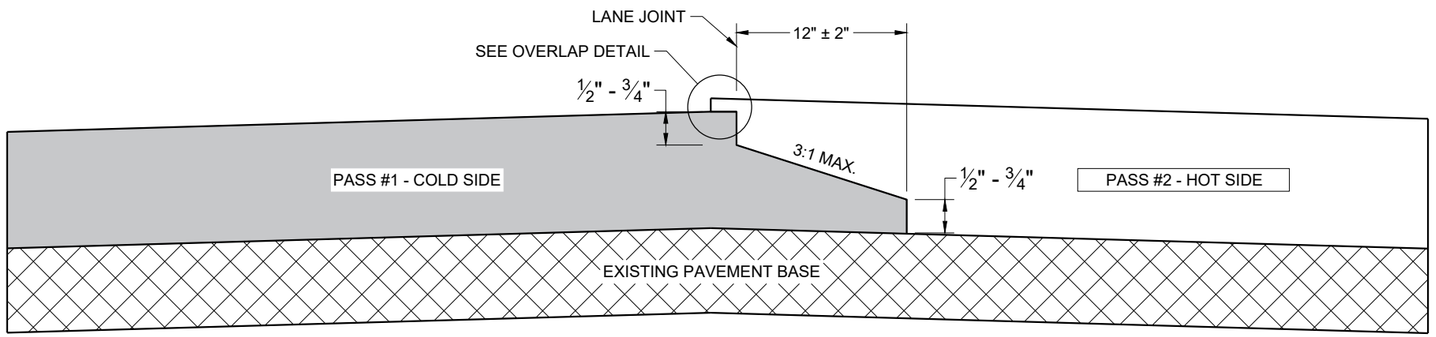
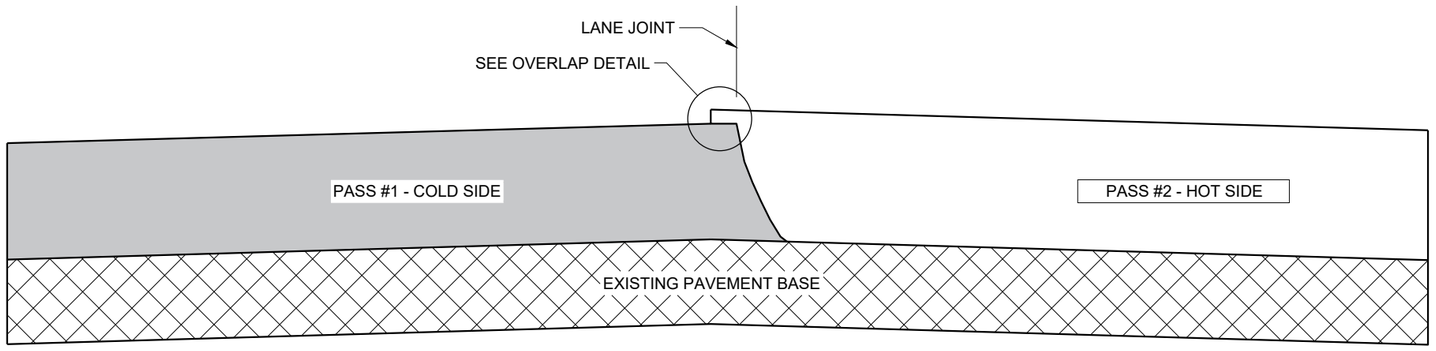
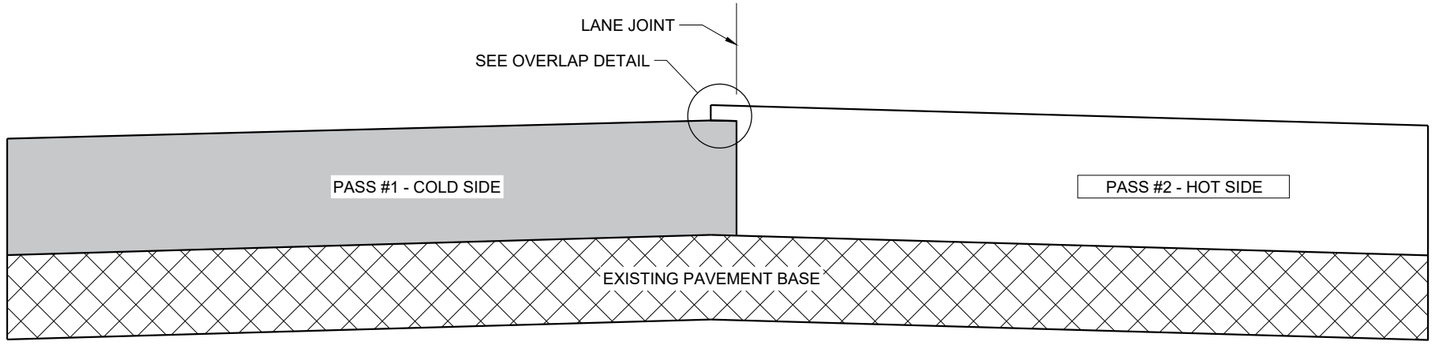
SDD 13C18 - 08f



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

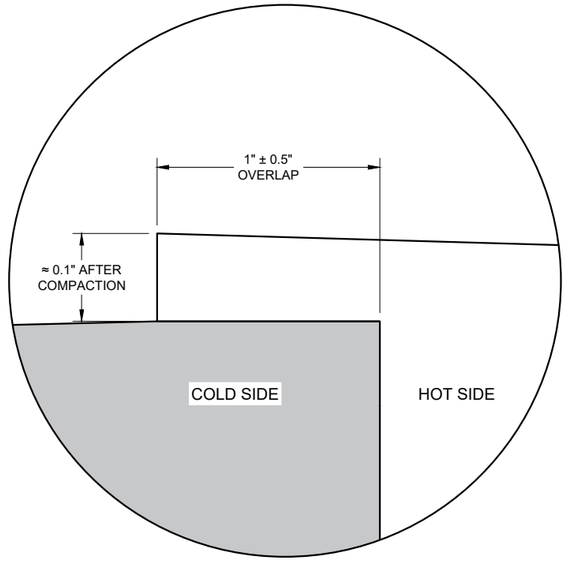
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

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SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

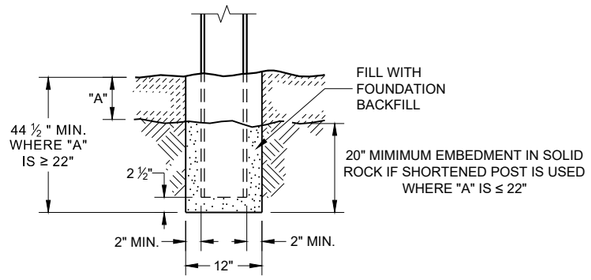
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

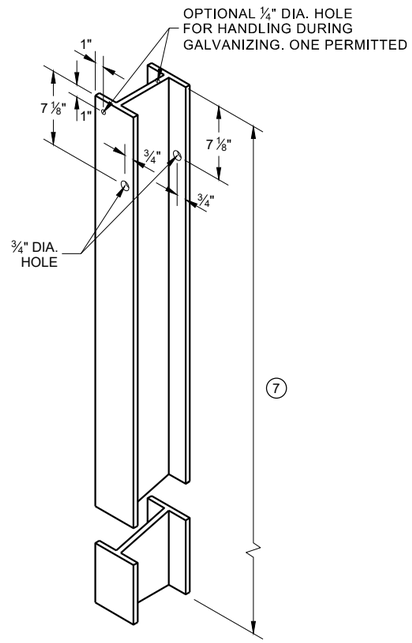
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

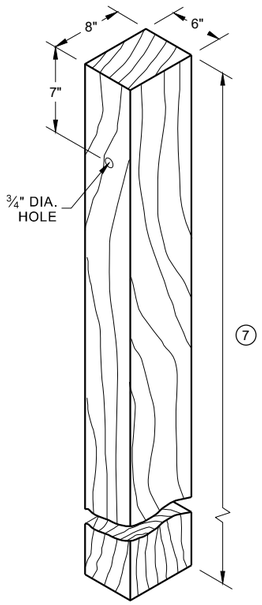
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



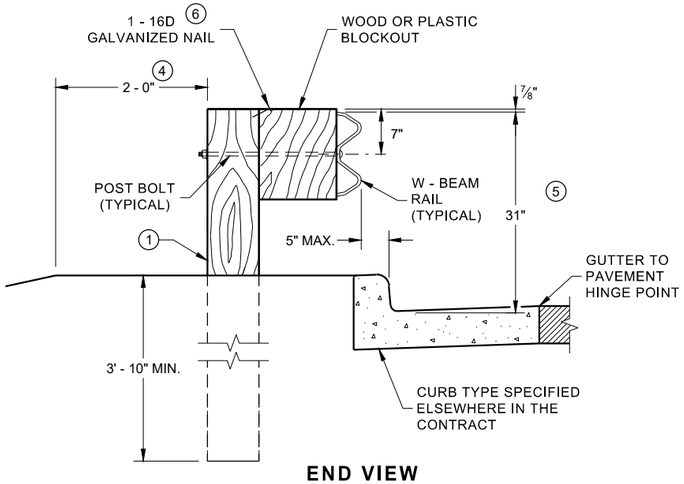
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



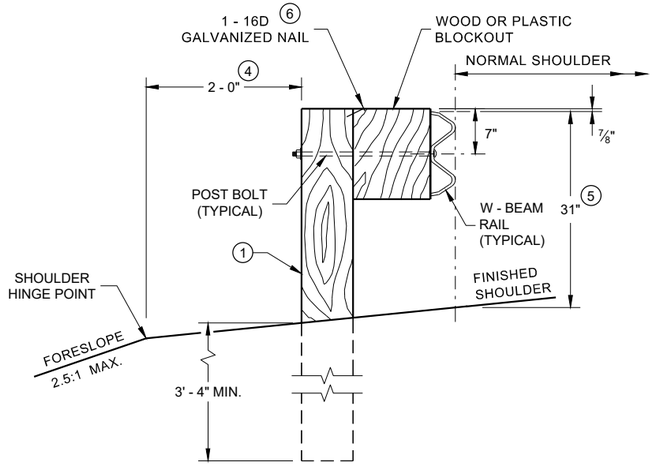
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



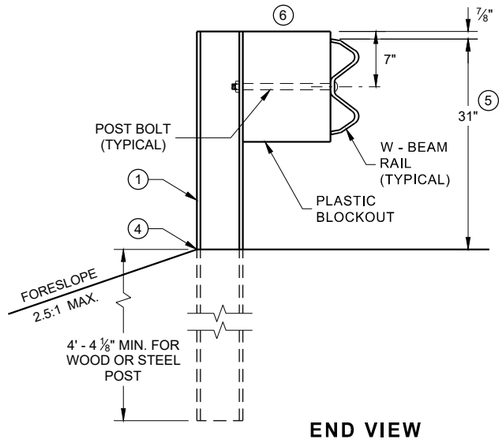
WOOD POST (6" X 8") NOMINAL (1)



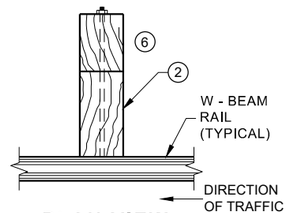
END VIEW
LOCATED ALONG A CURBED ROADWAY



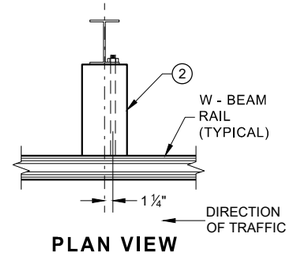
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



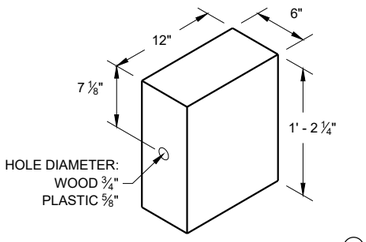
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07a

6

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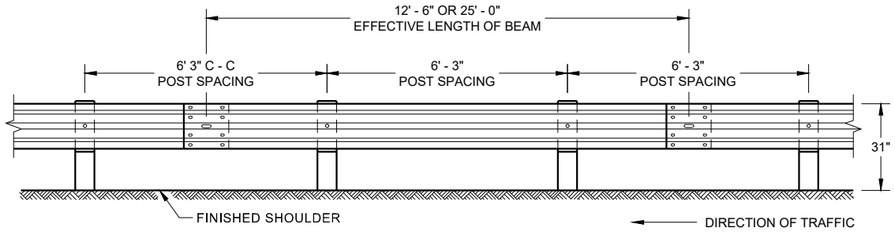
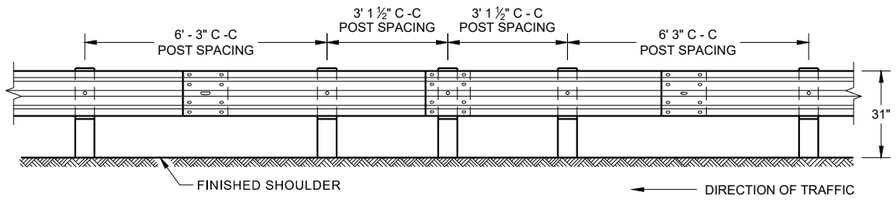
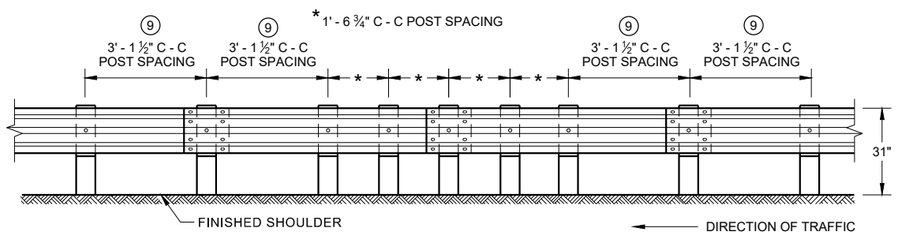


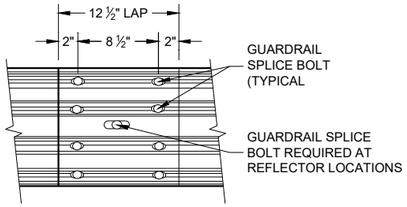
FRONT VIEW
POST SPACING STANDARD INSTALLATION



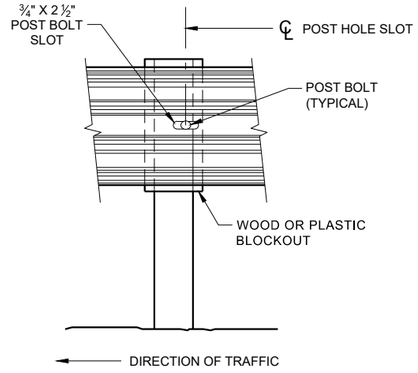
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



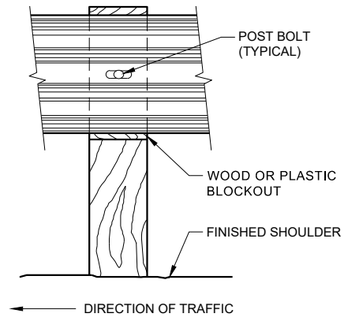
FRONT VIEW
QUARTER POST SPACING (QS)



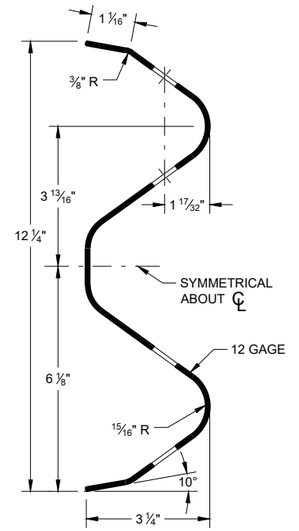
FRONT VIEW
MID-SPAN BEAM SPLICE



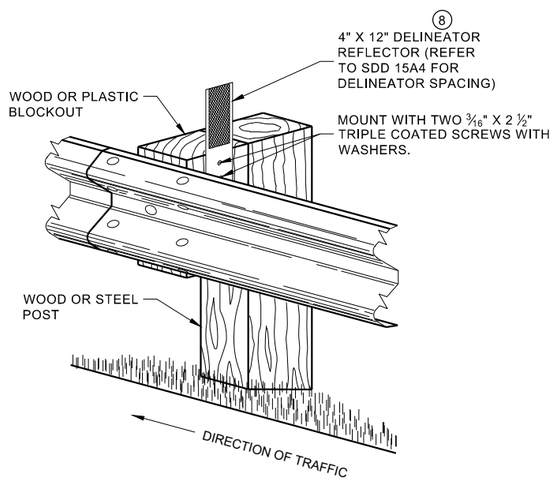
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

(8) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

(9) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

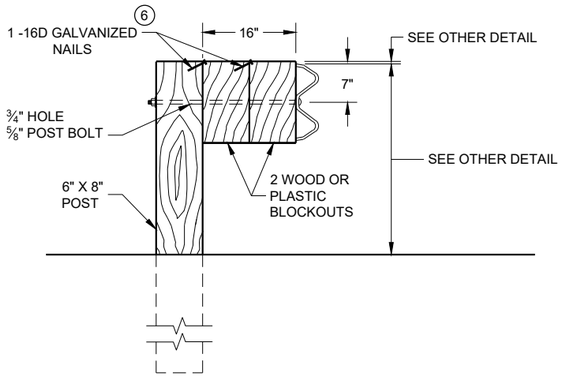
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

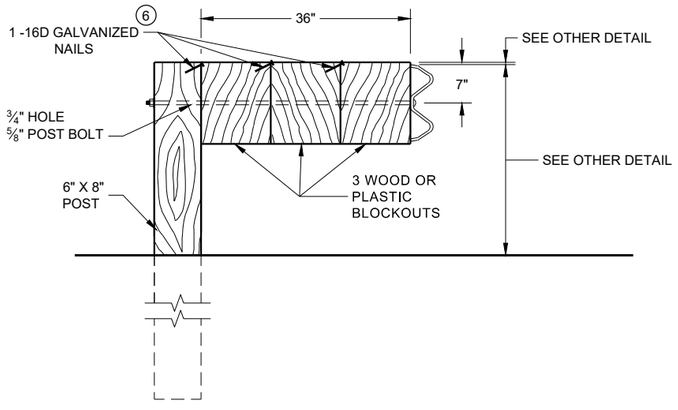
6

SDD 14B42 - 07b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



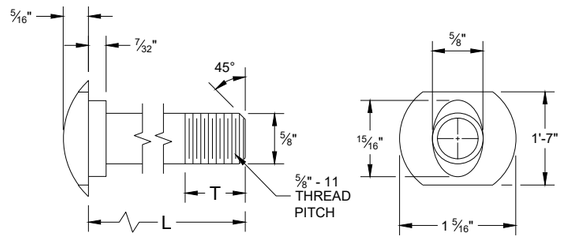
DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

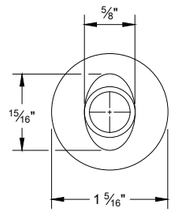
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

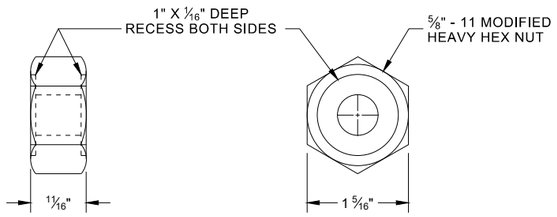


POST BOLT TABLE

L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"

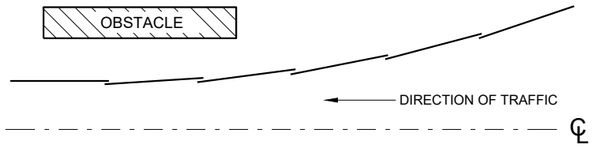


ALTERNATE BOLT HEAD

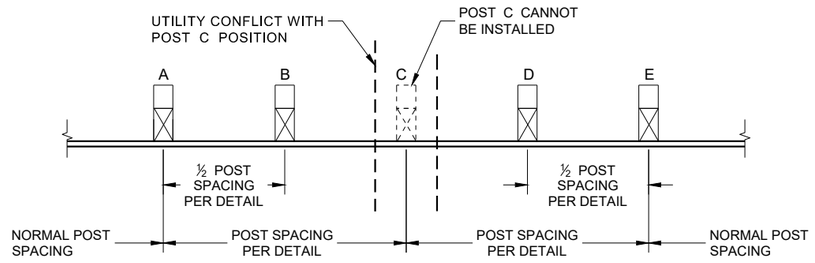


POST BOLT, SPLICE BOLT AND RECESS NUT

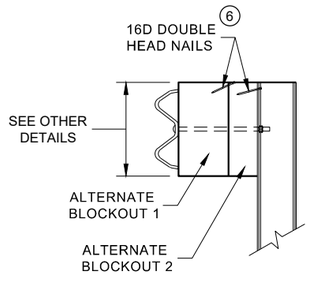
6 WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



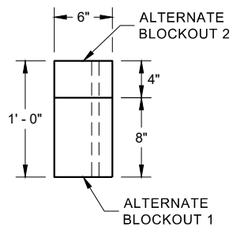
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

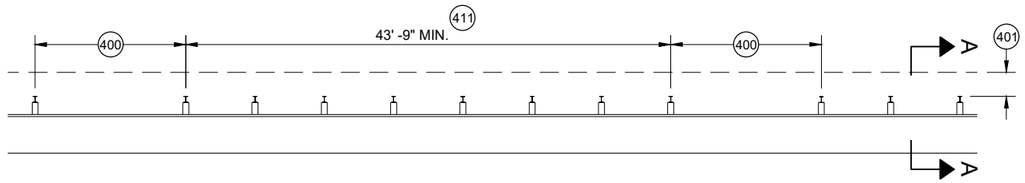
6

SDD 14B42 - 07c

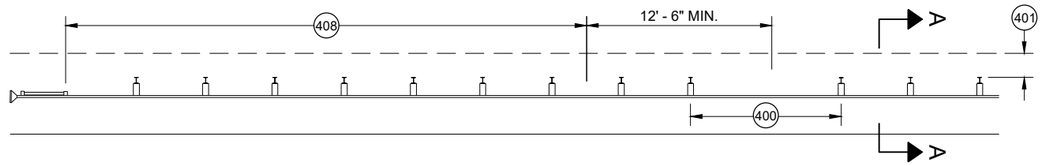
6

SDD 14B42 - 07c

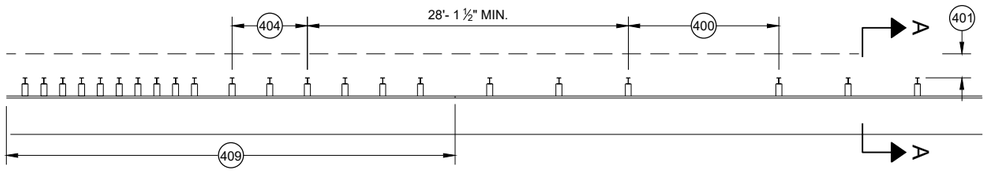
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



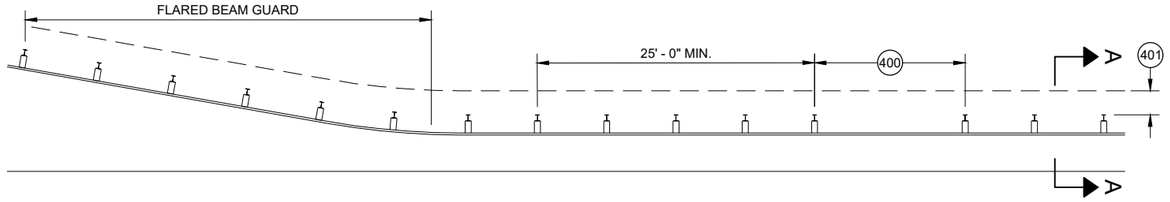
MISSING POST IN MGS GUARDRAIL



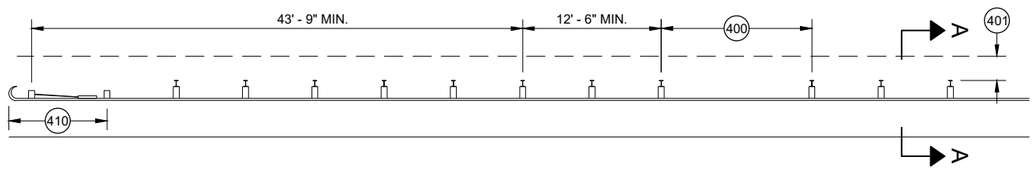
MISSING POST IN MGS GUARDRAIL NEAR EAT



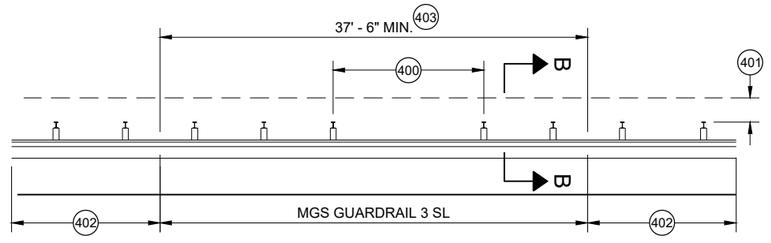
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

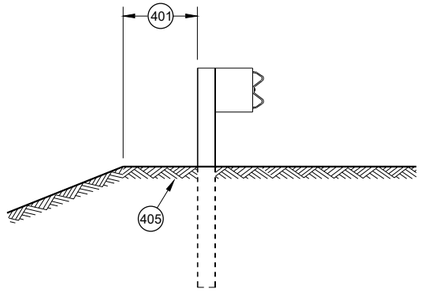


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

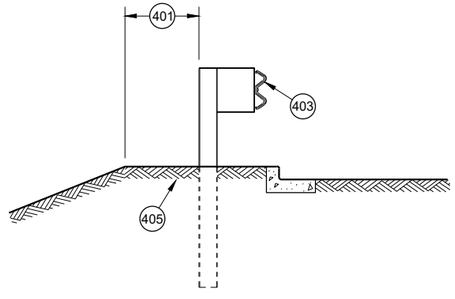


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

6

SDD 14B42 - 07d

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

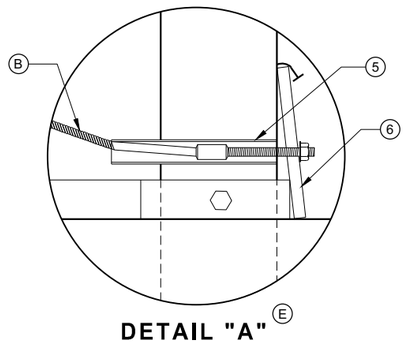
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

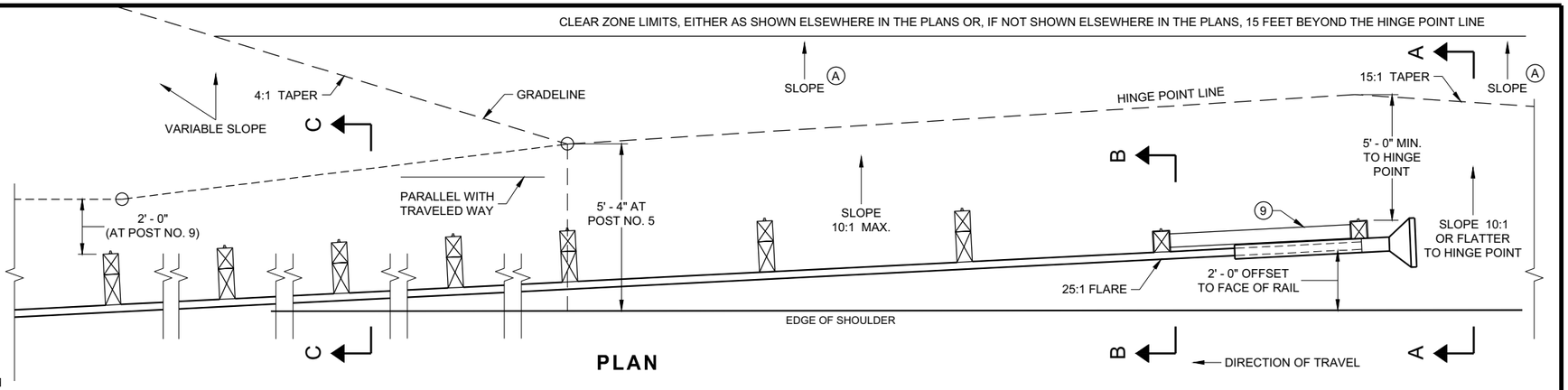
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

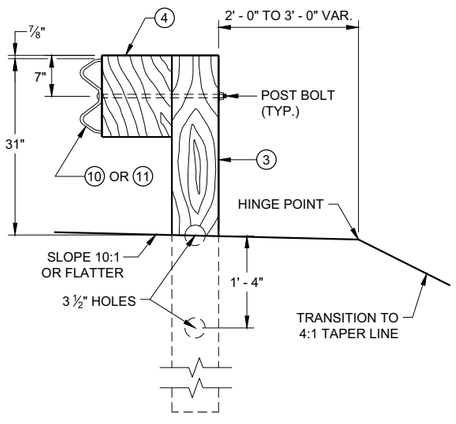
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.

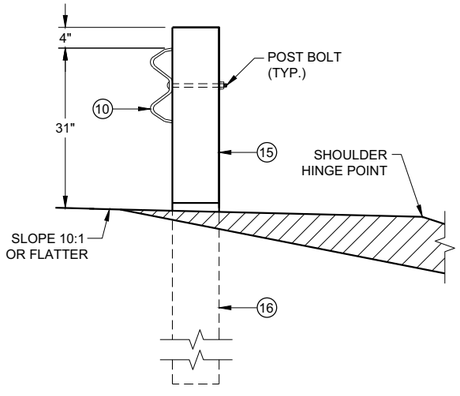


DETAIL "A" (E)

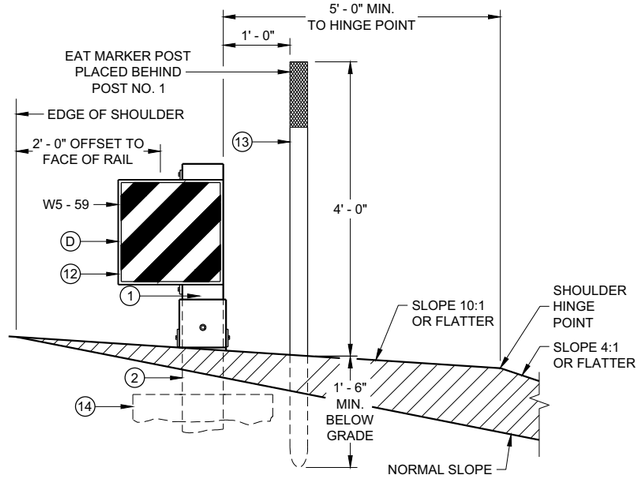




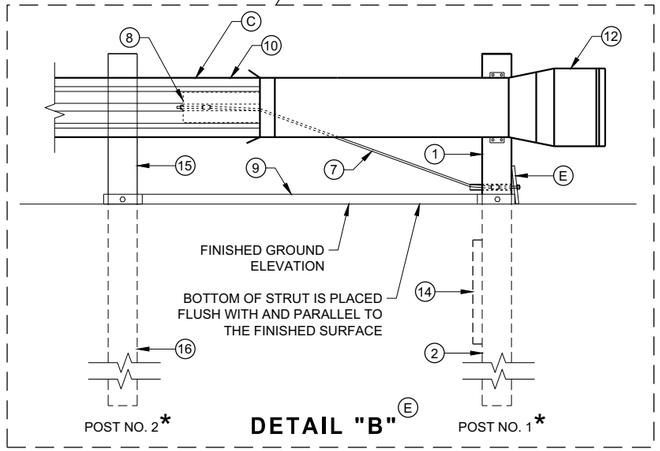
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



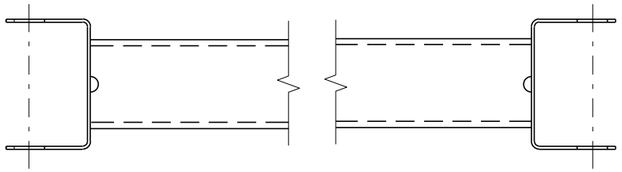
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

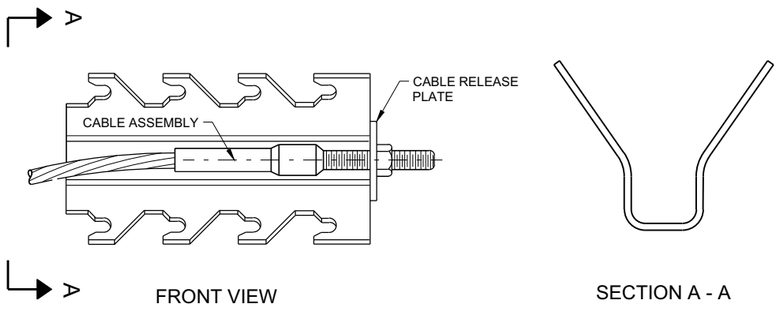
SDD 14B44 - 04a



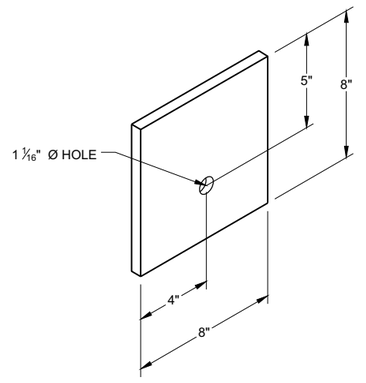
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX ⑧ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

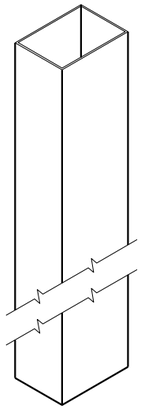
6

SDD 14B44 - 04b

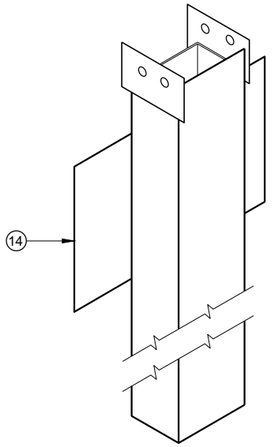
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

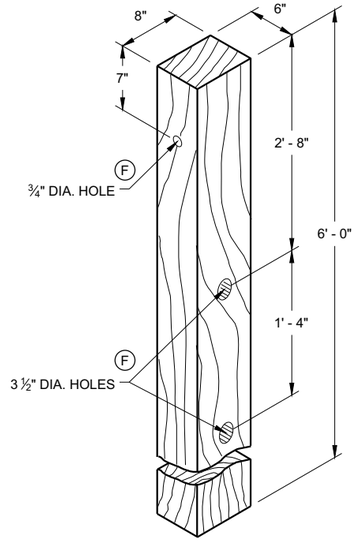
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



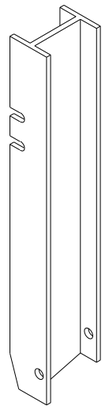
UPPER POST NO. 1 (1) (E)



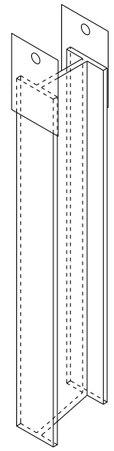
LOWER POST NO. 1 (2) (E)



WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



UPPER POST NO. 2 (15) (E)



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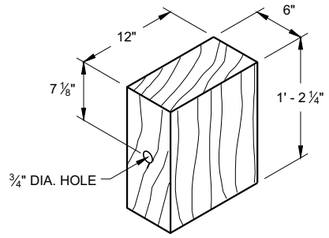
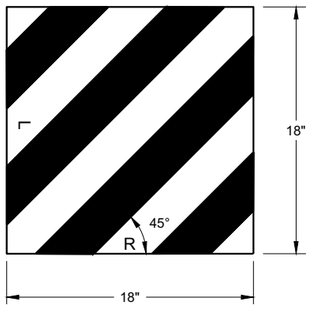
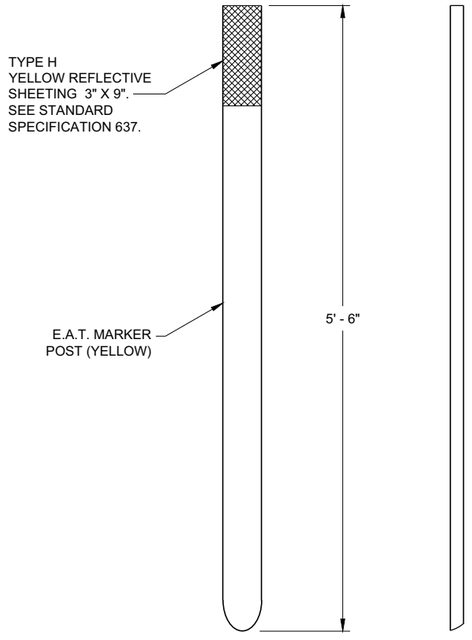


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



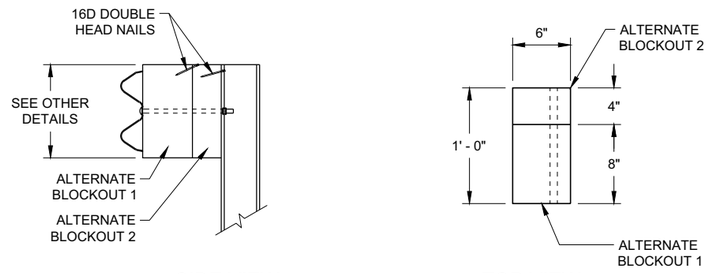
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

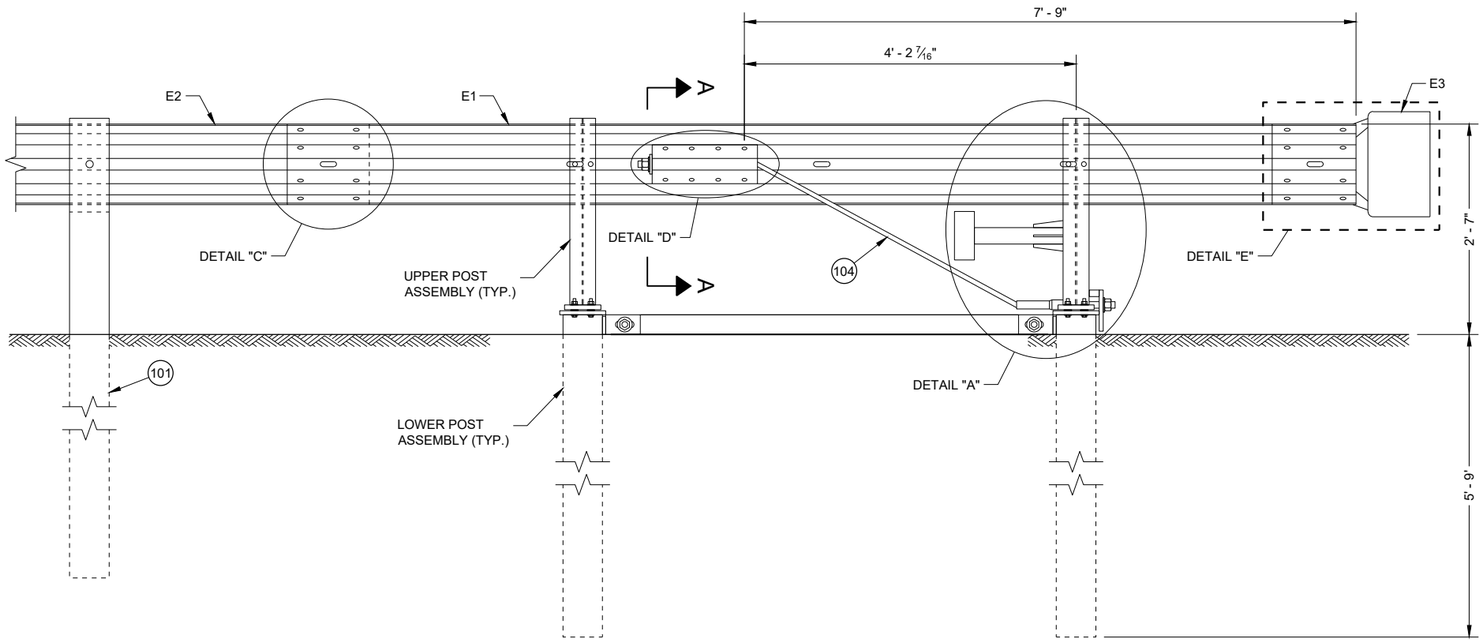
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

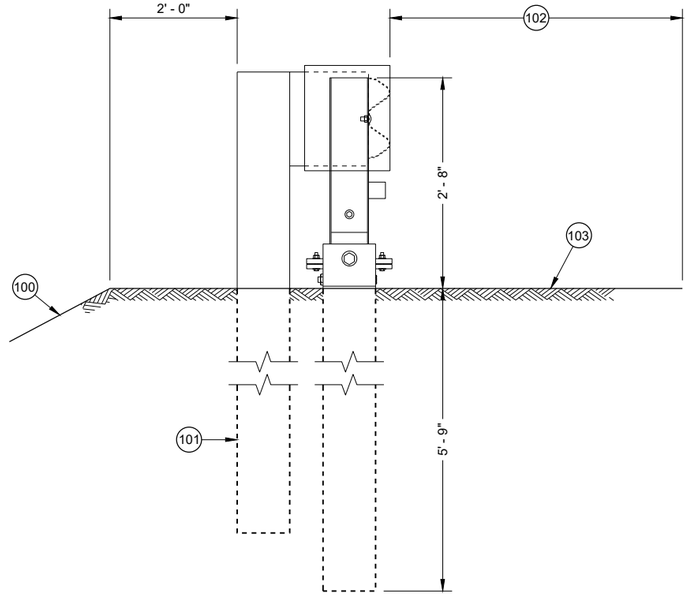
APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

6

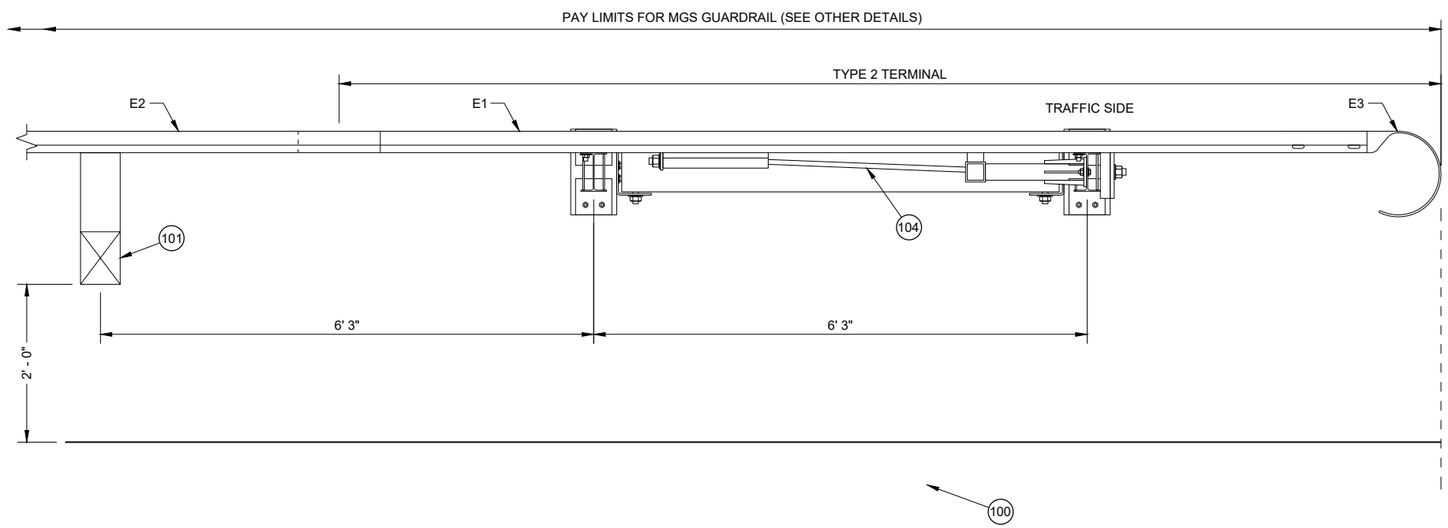
SDD 14B44 - 04c



BACK VIEW
TYPE 2 TERMINAL



SIDE VIEW
TYPE 2 TERMINAL



TOP VIEW
TYPE 2 TERMINAL

GENERAL NOTES

(100) MAXIMUM SLOPE IS 2.5:1.

(101) SEE SDD 14B42 FOR MORE INFORMATION.

(102) SHOULDER

(103) MAXIMUM SLOPE IS 10:1.

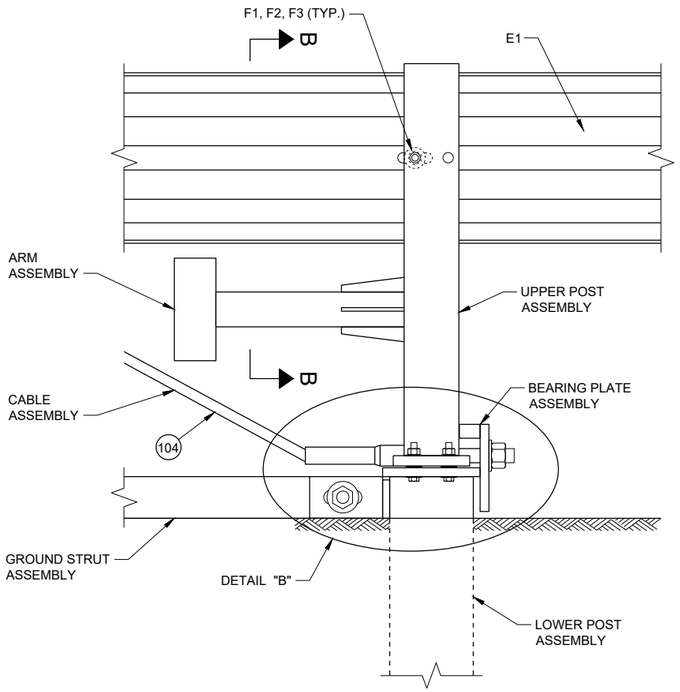
(104) AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

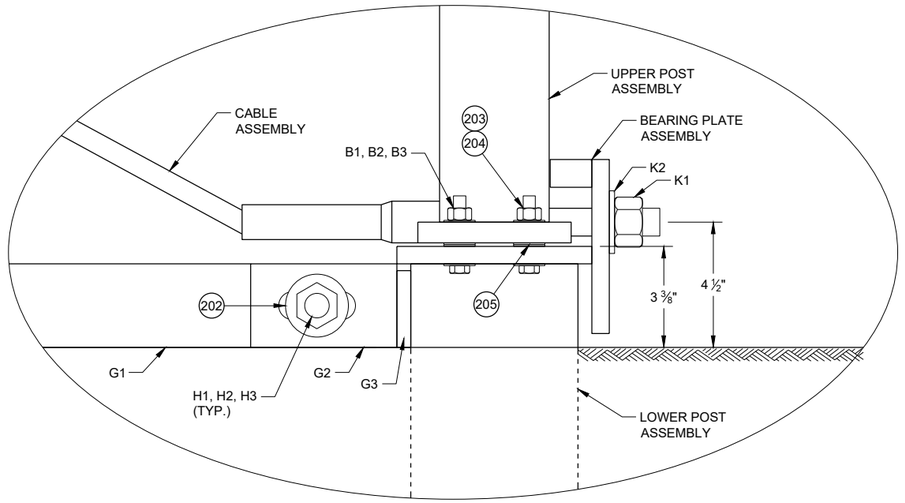
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

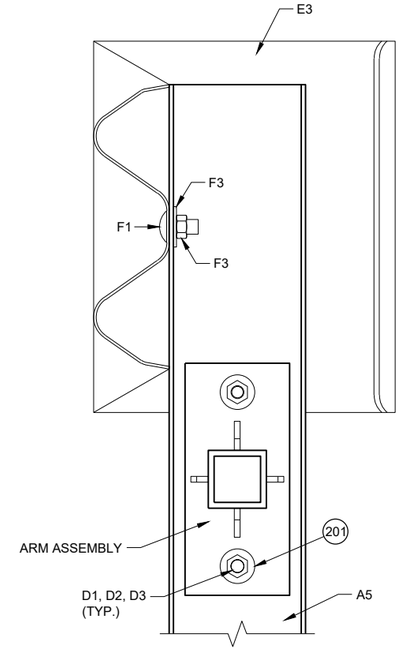
SDD 14B47 - 05a



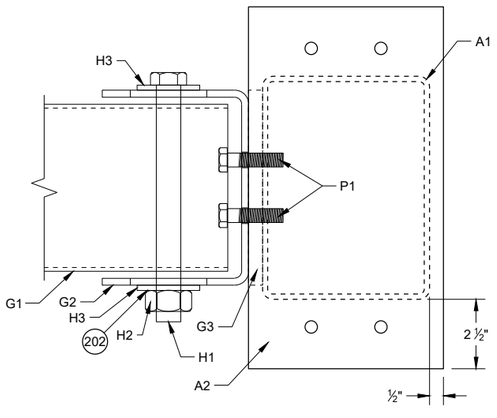
DETAIL "A"



DETAIL "B"

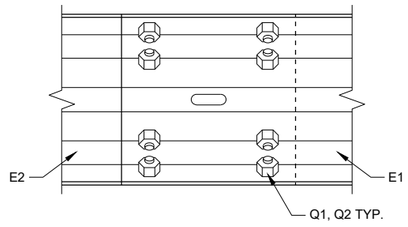


SECTION B - B



TOP VIEW

GROUND STRUT CONNECTION DETAIL



DETAIL "C"

GENERAL NOTES

200 INSTALL ONE WASHER UNDER BOLT HEAD AND RAIL AND ON WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

201 INSTALL ONE WASHER UNDER BOLT HEAD AND UPPER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND ARM PLATE.

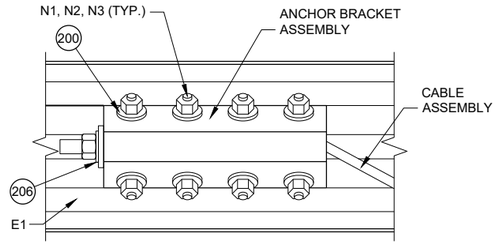
202 INSTALL ONE WASHER UNDER BOLT HEAD AND GROUND STRUT CONNECTOR AND ONE WASHER BETWEEN NUT AND GROUND STRUT CONNECTOR.

203 INSTALL ONE WASHER UNDER BOLT HEAD AND LOWER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND UPPER POST ASSEMBLY.

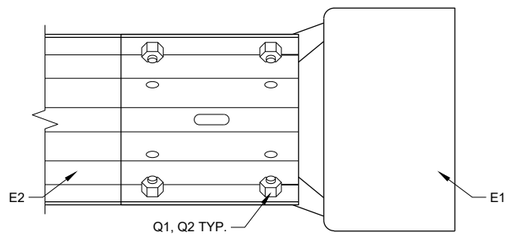
204 TORQUE VALUE IS BETWEEN 60 - 75 FT-LB.

205 TWO WASHERS BETWEEN UPPER AND LOWER POST ASSEMBLY.

206 INSTALL ONE WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.



DETAIL "D"



DETAIL "E"

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

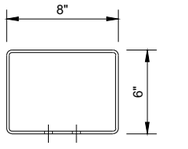
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

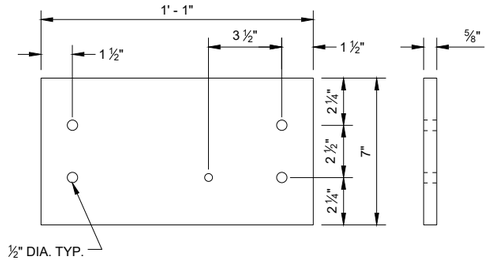
SDD 14B47 - 05b

GENERAL NOTES

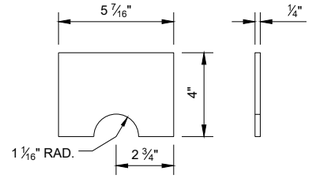
(300) TAP FOR 1/2" AFTER GALVANIZATION



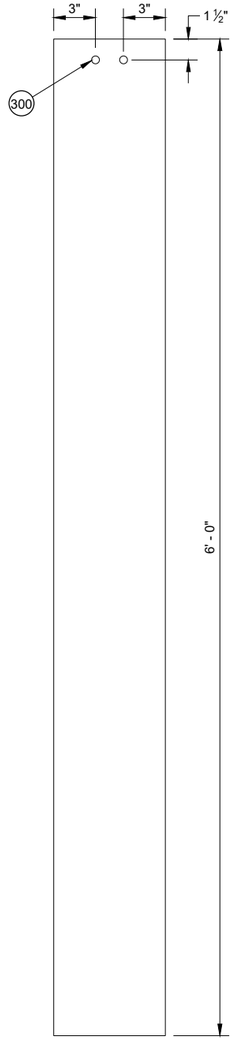
TOP VIEW



LOWER PLATE (A2)

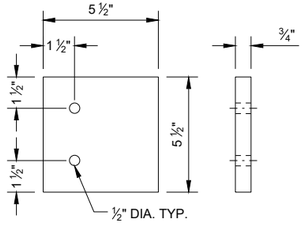


POST GUSSET (A3)

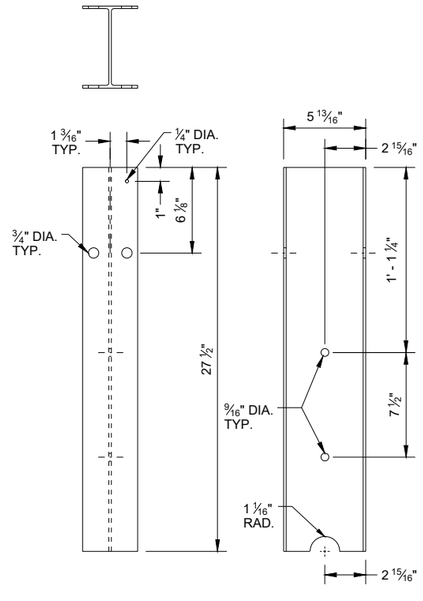


SIDE VIEW

FOUNDATION TUBE (A1)

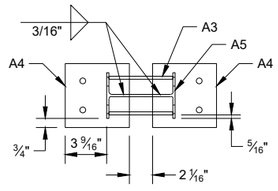


UPPER PLATE (A4)

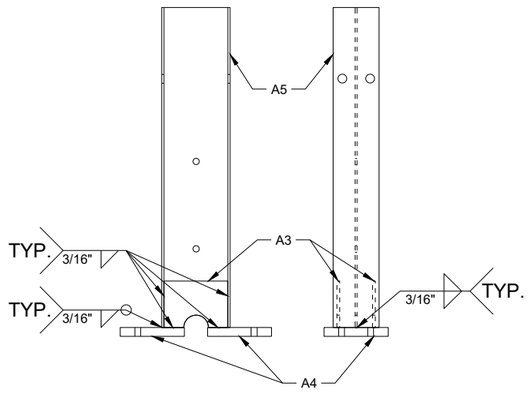


FRONT VIEW SIDE VIEW

TYPE 2 POST (A5)

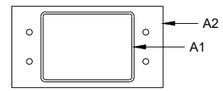


PLAN VIEW

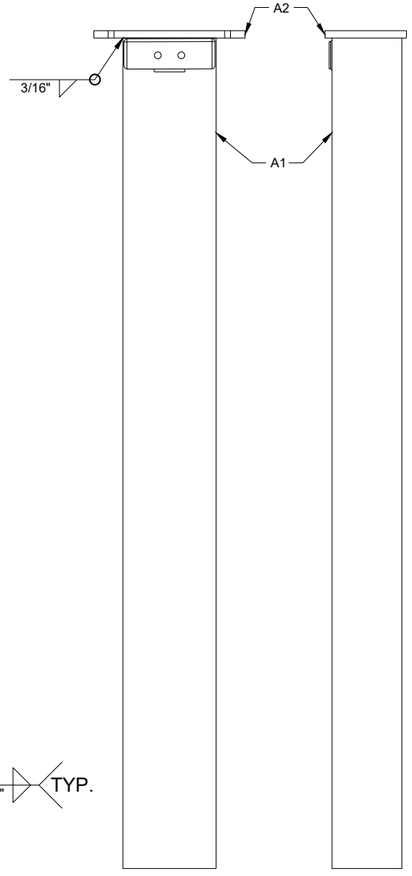


SIDE VIEW FRONT VIEW

UPPER POST ASSEMBLY

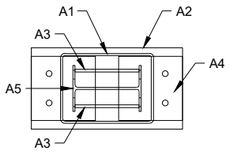


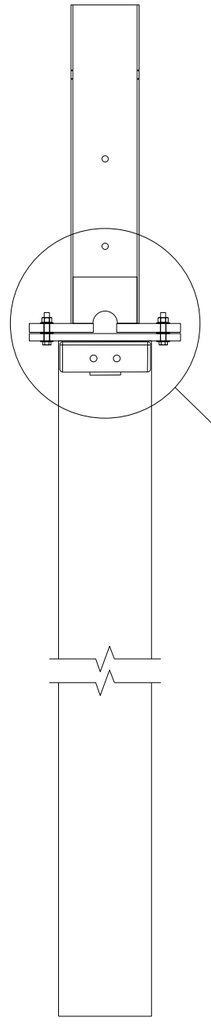
PLAN VIEW

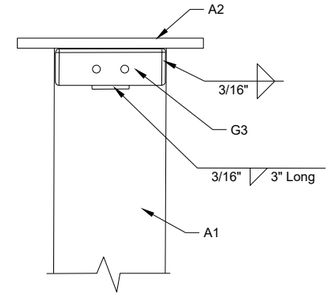


FRONT VIEW SIDE VIEW

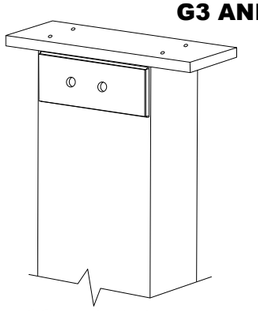
LOWER POST ASSEMBLY



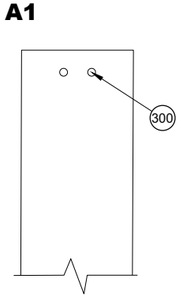




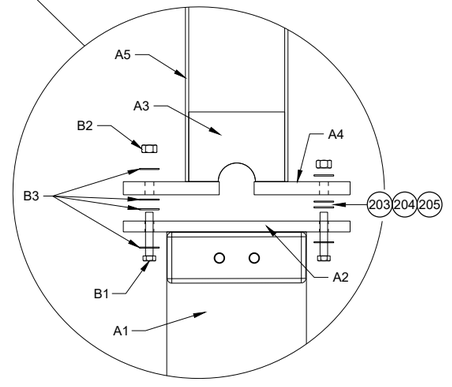
WELDING DETAIL G3 AND A1



ASSEMBLY DETAIL ISOMETRIC



A1



POST CONNECTION DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

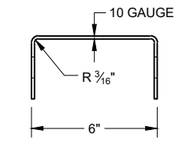
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

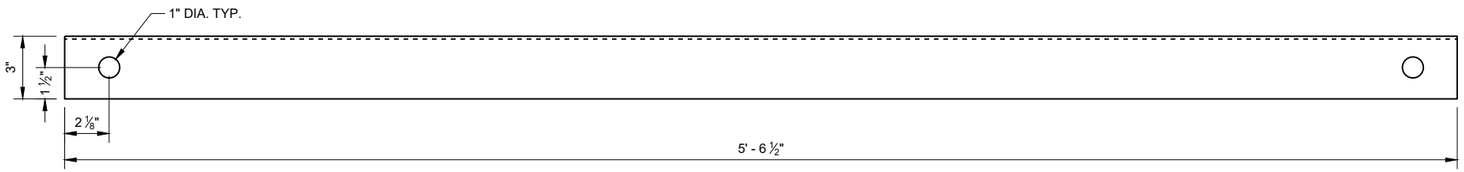
SDD14B47 - 05c

6

SDD14B47 - 05c

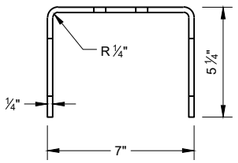


SIDE VIEW

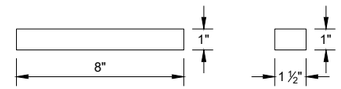


FRONT VIEW

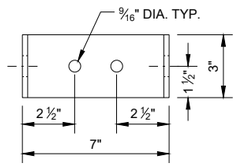
GROUND STRUT CHANNEL (G1)



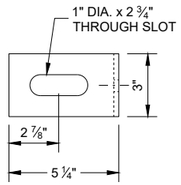
TOP VIEW



BEARING PLATE FLANGE (L2)

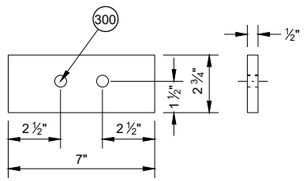


FRONT VIEW

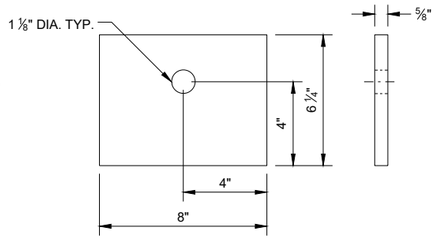


SIDE VIEW

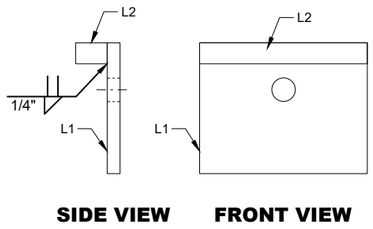
GROUND STRUT CONNECTOR (G2)



GROUND STRUT PLATE (G3)

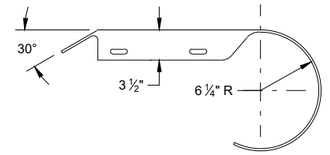


BEARING PLATE (L1)

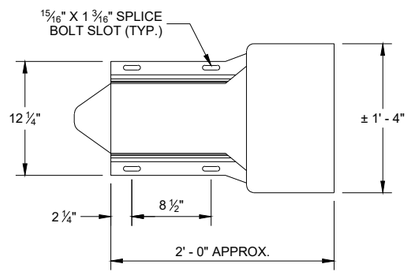


SIDE VIEW FRONT VIEW

BEARING PLATE ASSEMBLY

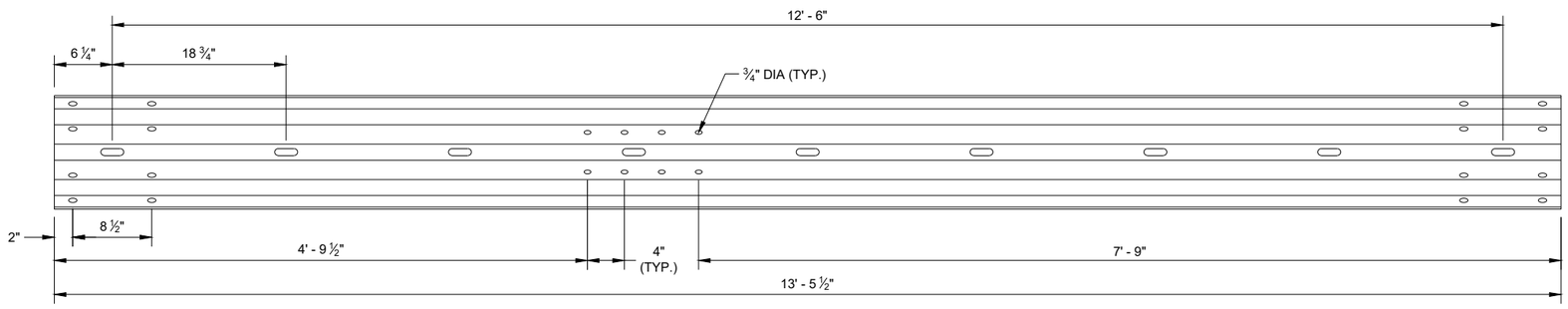


PLAN VIEW

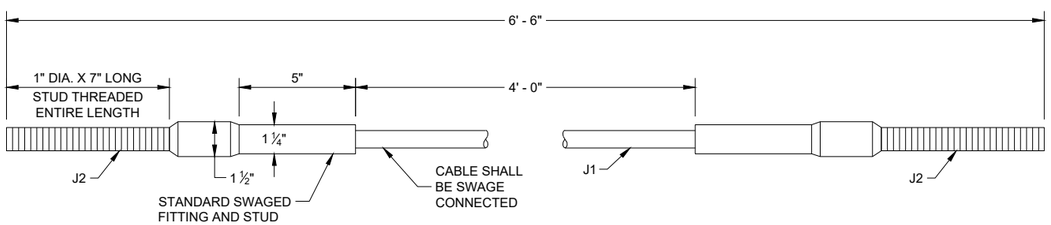


ELEVATION VIEW

ROUNDED BUFFER END (E3)



TYPE 2 GUARDRAIL (E1)



CABLE ASSEMBLY

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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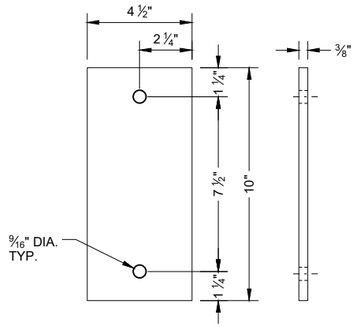
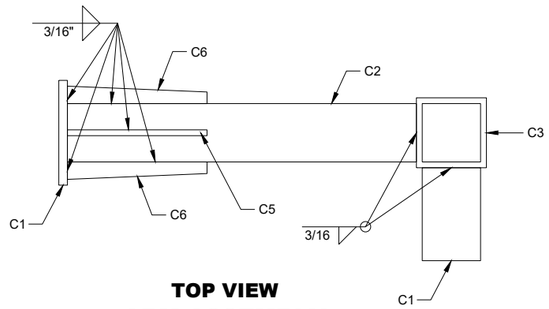
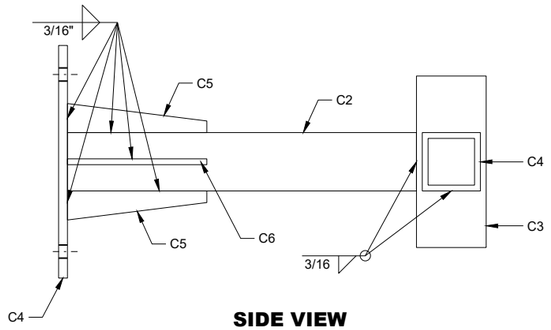


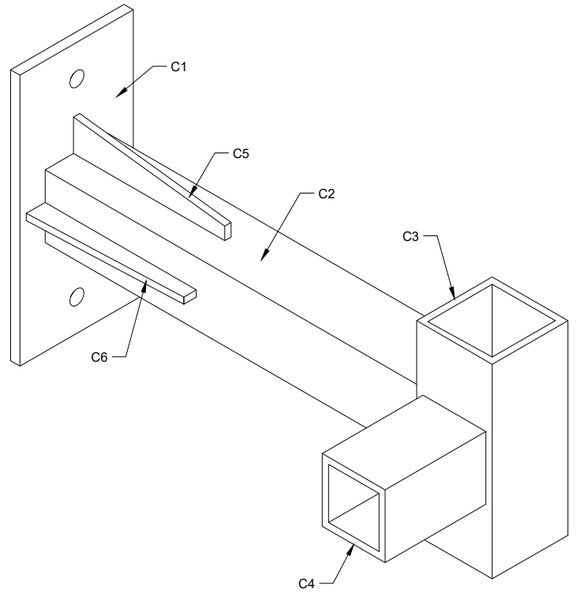
ARM PLATE (C1)



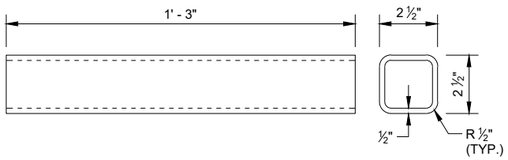
TOP VIEW
ARM ASSEMBLY



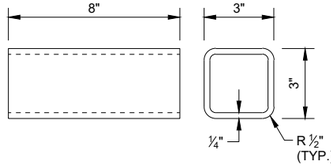
SIDE VIEW
ARM ASSEMBLY



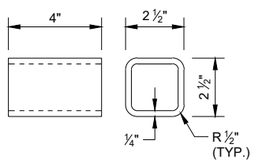
ISOMETRIC VIEW
ARM ASSEMBLY



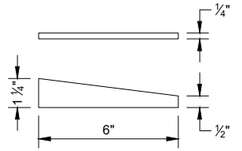
ARM TUBE 1 (C2)



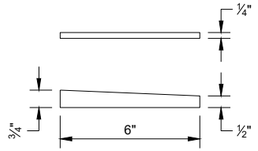
ARM TUBE 2 (C3)



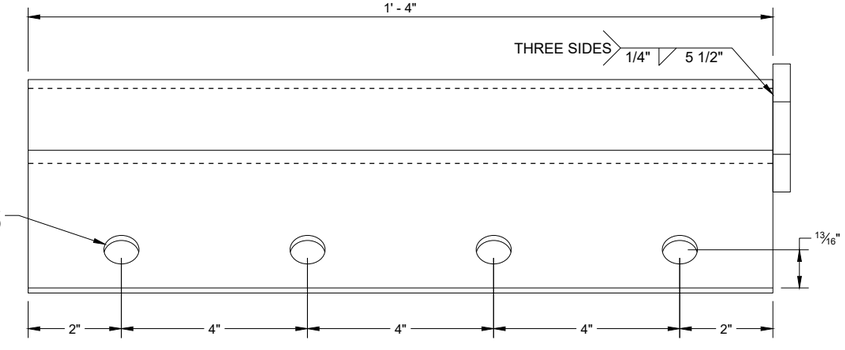
ARM TUBE 3 (C4)

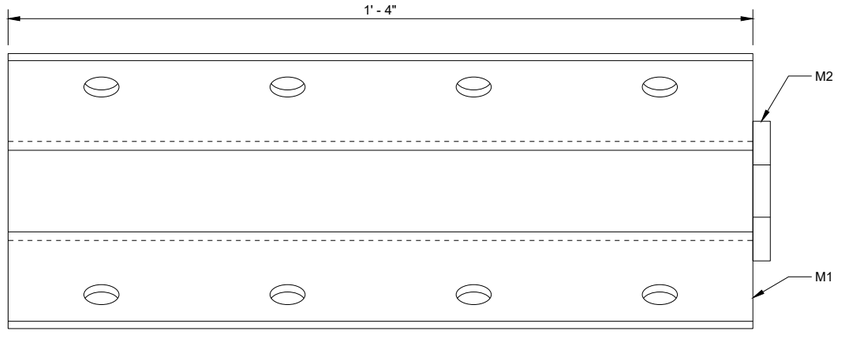


ARM GUSSET PLATE 1 (C5)

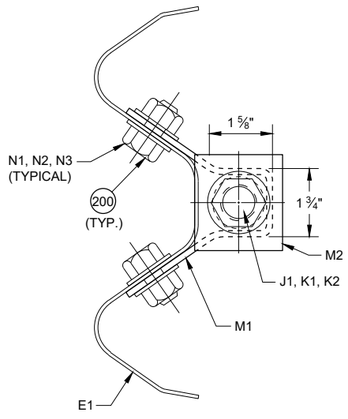


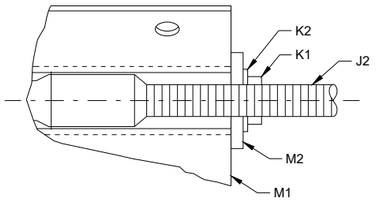
ARM GUSSET PLATE 2 (C6)



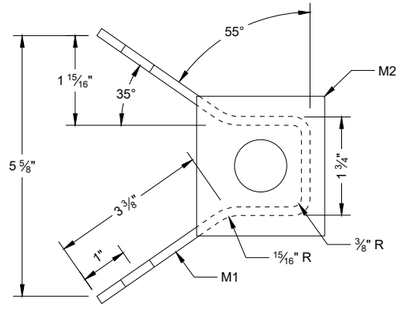


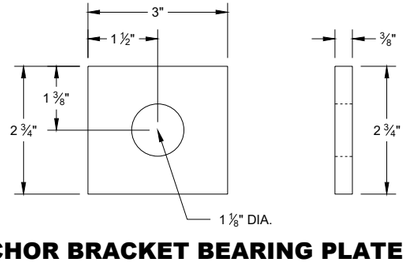
ANCHOR BRACKET (M1, M2)





SECTION A - A





ANCHOR BRACKET BEARING PLATE (M2)

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B47 - 05e

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	TYPE 2 FOUNDATION TUBE	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
A2	LOWER 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	5/8" THICKNESS
A3	POST GUSSET	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	1/4" THICKNESS
A4	UPPER 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	3/4" THICKNESS
A5	TYPE 2 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, w6x9 or w6x8.5	
B1	BREAKAWAY 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 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.	7/16" DIA.
B2	BREAKAWAY 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)	7/16" DIA.
B3	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 / 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	
C1	ARM 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	3/8" THICKNESS
C2	ARM ASSEMBLY TUBE 1	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
C3	ARM ASSEMBLY TUBE 2	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 3" x 3" x 1/4"
C4	ARM ASSEMBLY TUBE 3	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 2 1/2" x 2 1/2" X 1/4"
C5	ARM ASSEMBLY GUSSET 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	1/4" THICKNESS
C6	ARM ASSEMBLY GUSSET 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	1/4" THICKNESS
D1	ARM ASSEMBLY 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	1/2" DIA.
D2	ARM ASSEMBLY 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)	1/2" DIA.
D3	ARM ASSEMBLY 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	1/2" DIA.
E1	TYPE 2 GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E2	BEAM GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E3	BEAM GUARD ROUNDED BUFFER END	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
F1	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 UNC UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
F2	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 ONLY)	5/8" DIA.
F3	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	
G1	GROUND STRUT CHANNEL	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	1/2" x 11 3/4" x 10 GAUGE
G2	GROUND STRUT CONNECTOR	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	1/4" THICKNESS
G3	GROUND STRUT 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	1/2" THICKNESS

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B47 - 05f

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
H1	GROUND STRUT 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	7/8" DIA.
H2	GROUND STRUT 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)	7/8" DIA.
H3	GROUND STRUT 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 HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
J1	BCT CABLE	AASHTO M30 / ASTM A741 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN. BREAKING STRENGTH OF 42.7 KIPS	**3/4" DIA.**
J2	BCT CABLE	UNC 1" ASTM A576 GRADE 1035 SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. 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."	
K1	CABLE ASSEMBLY 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	1" DIA.
K2	CABLE ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1	1" DIA.
L1	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	5/8" THICKNESS
L2	BEARING PLATE FLANGE	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	1" THICKNESS
M1	BEAM GUARD 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	
M2	BEAM GUARD ANCHOR 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	3/8" THICKNESS
N1	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 AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
N2	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)	5/8" DIA.
N3	ANCHOR BRACKET 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	
P1	FOUNDATION 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 ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
Q1	SPLICE 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	
Q2	SPLICE 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	5/8" DIA.

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MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

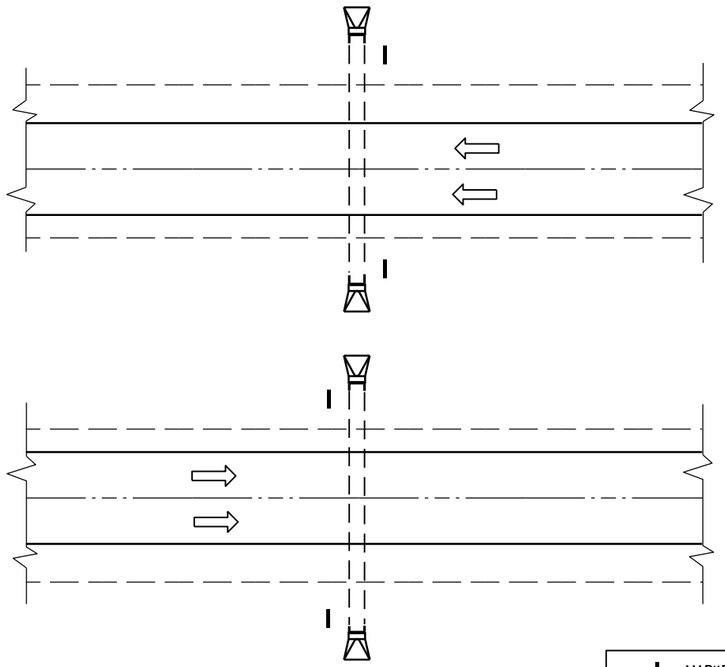
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

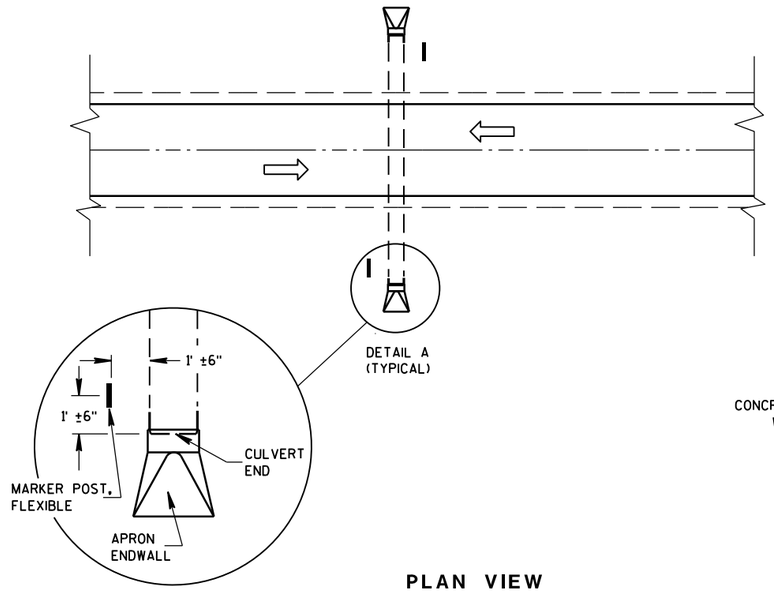
FHWA

SDD 14B47 - 05g



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

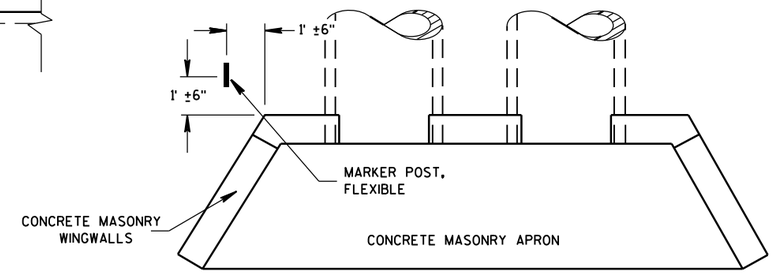
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

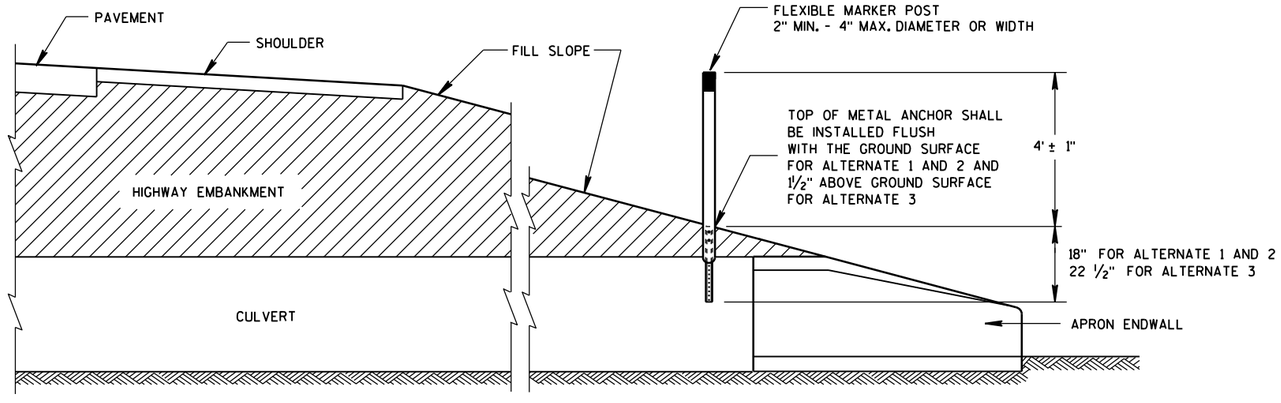
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 15 A 3-2a

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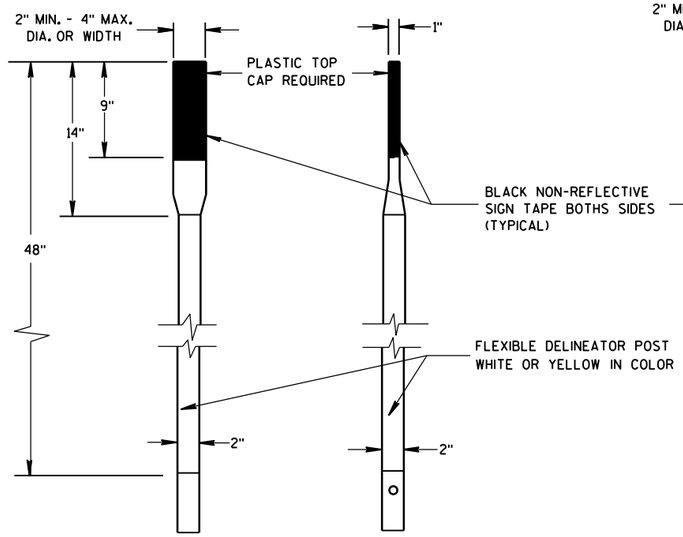
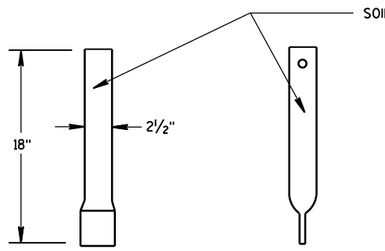
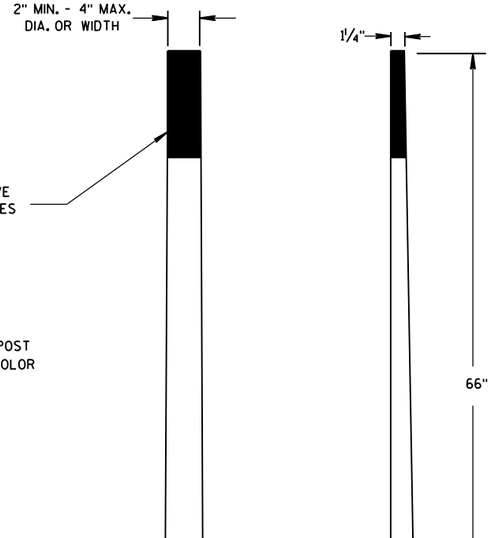
S.D.D. 15 A 3-2a





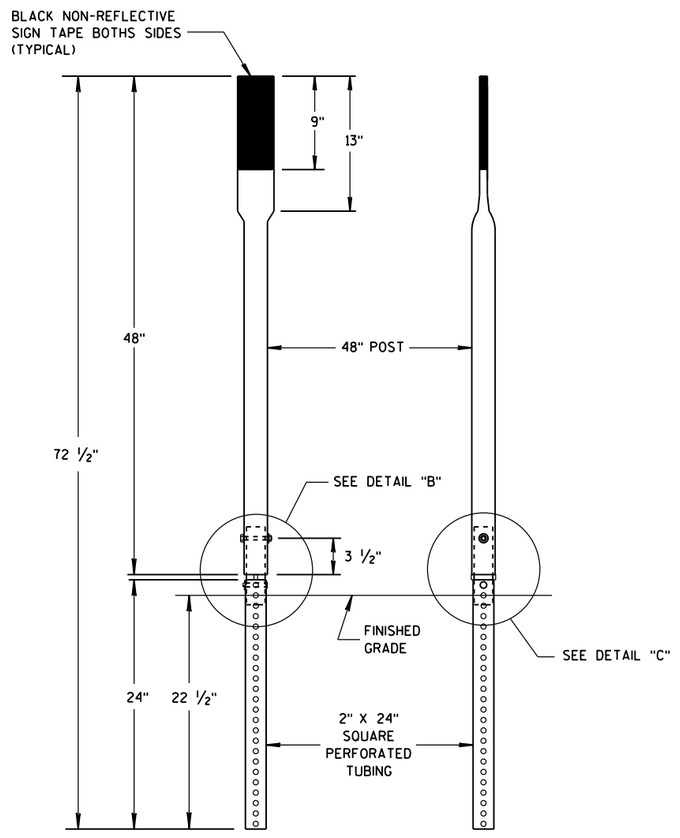
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

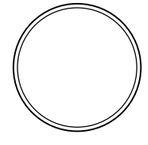
ALTERNATE 2



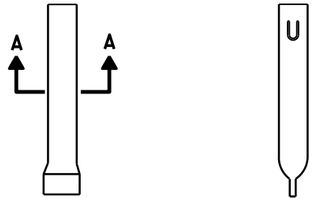
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

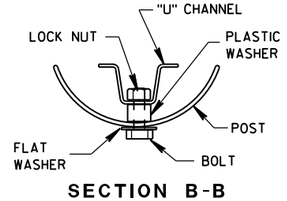


SECTION A-A

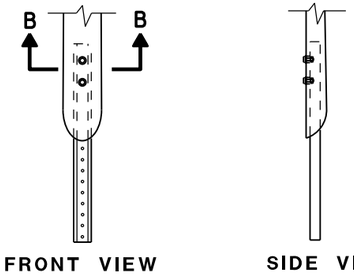


FRONT VIEW SIDE VIEW

ALTERNATE 1

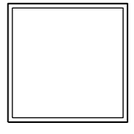


SECTION B-B

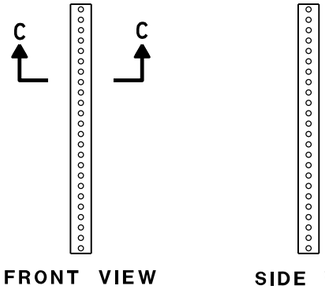


FRONT VIEW SIDE VIEW

ALTERNATE 2



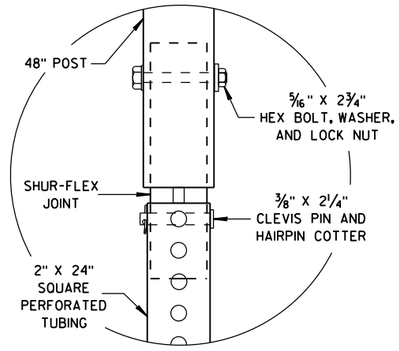
SECTION C-C



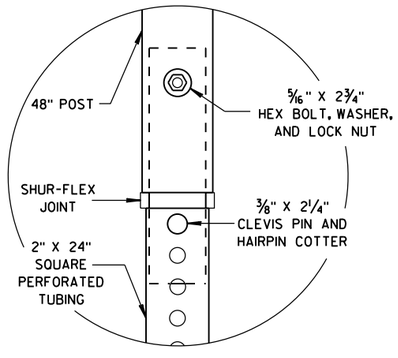
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

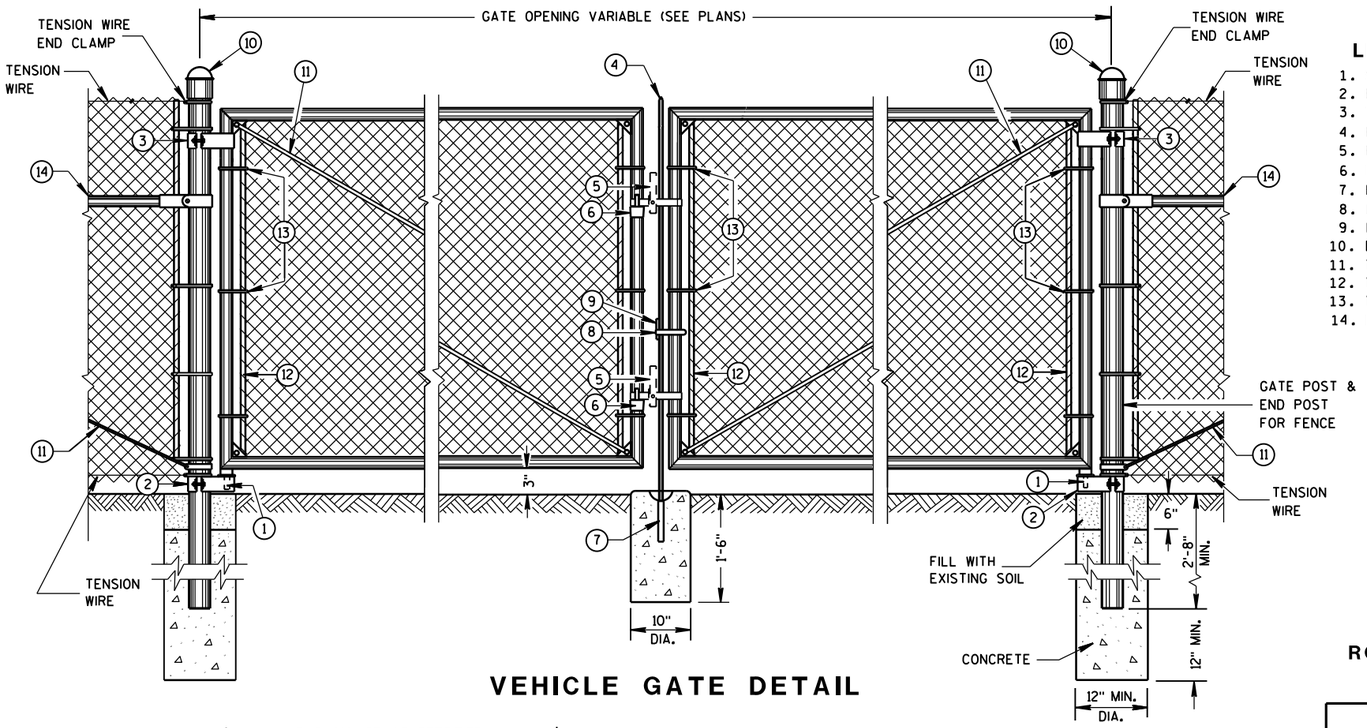
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

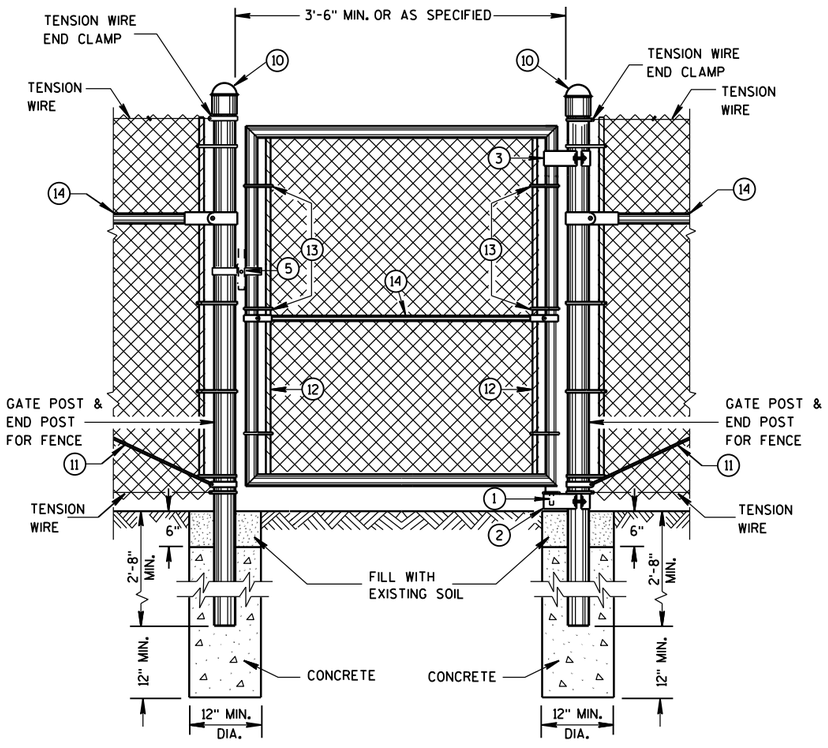
S.D.D. 15 A 3-2b

6

S.D.D. 15 A 3-2b



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

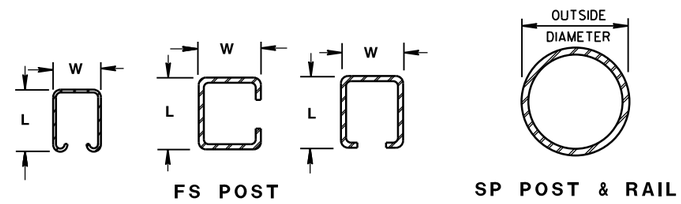
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



CROSS SECTIONS OF POSTS AND RAILS

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

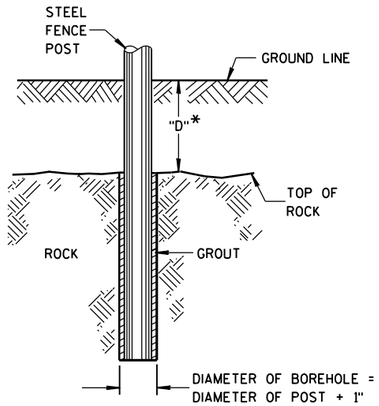
POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

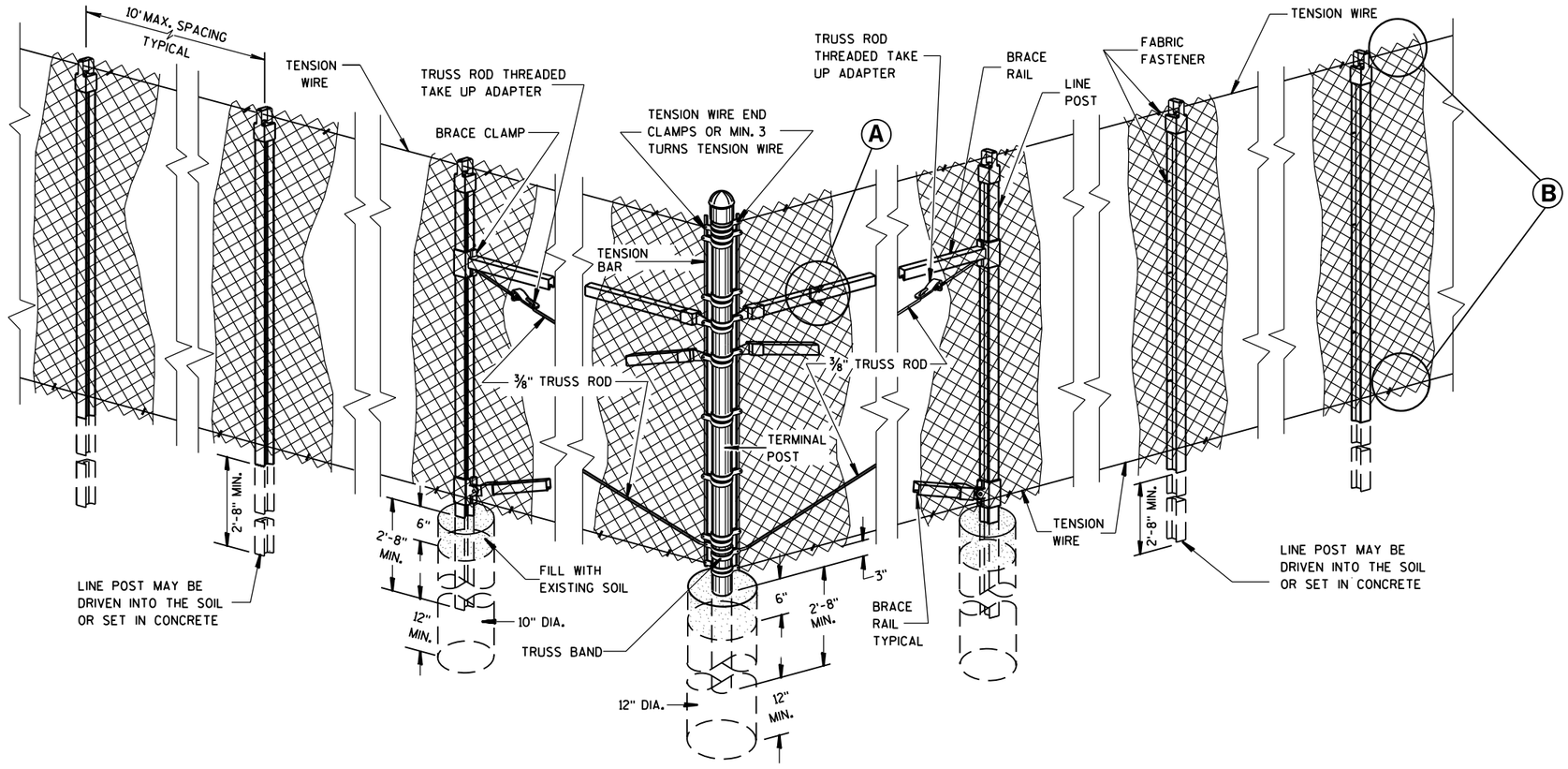
6

S.D.D. 15 B 3-15a

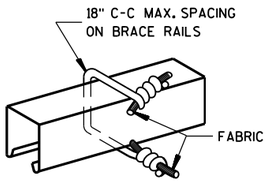


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



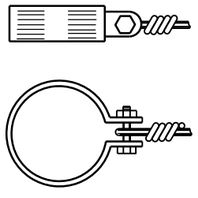
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



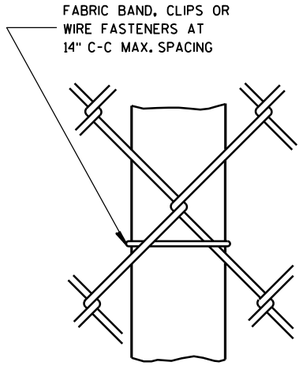
BRACE RAIL

FABRIC FASTENER

Ⓐ



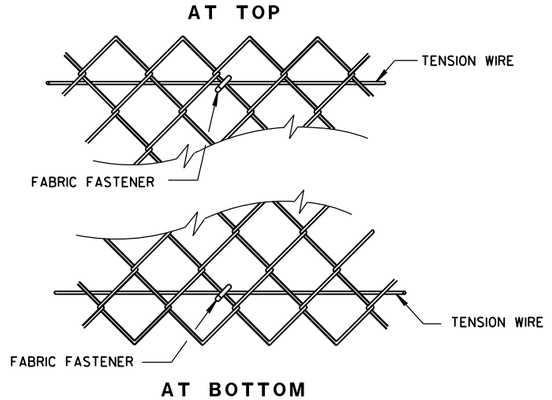
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

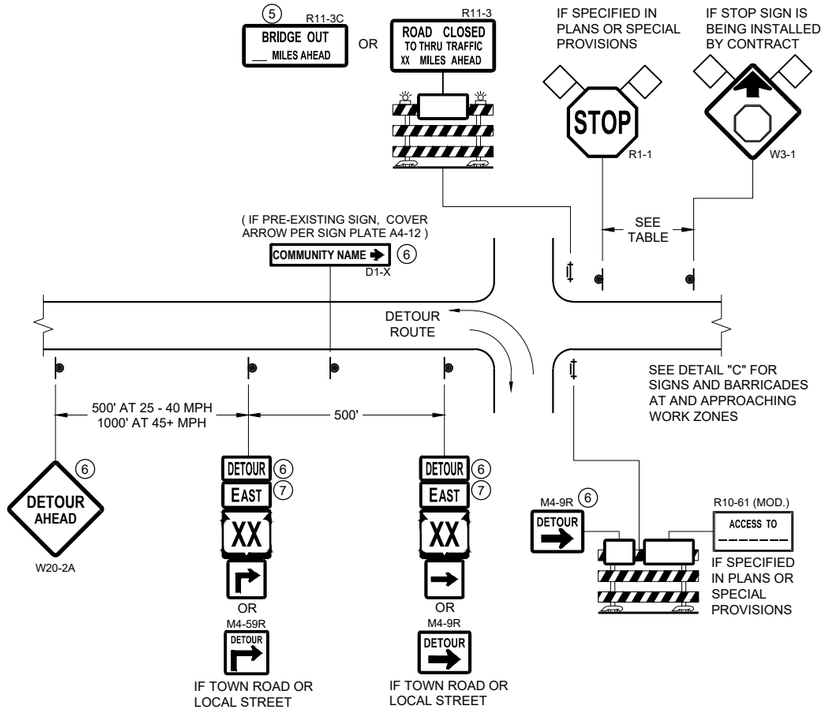
APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 15 B 3-15b

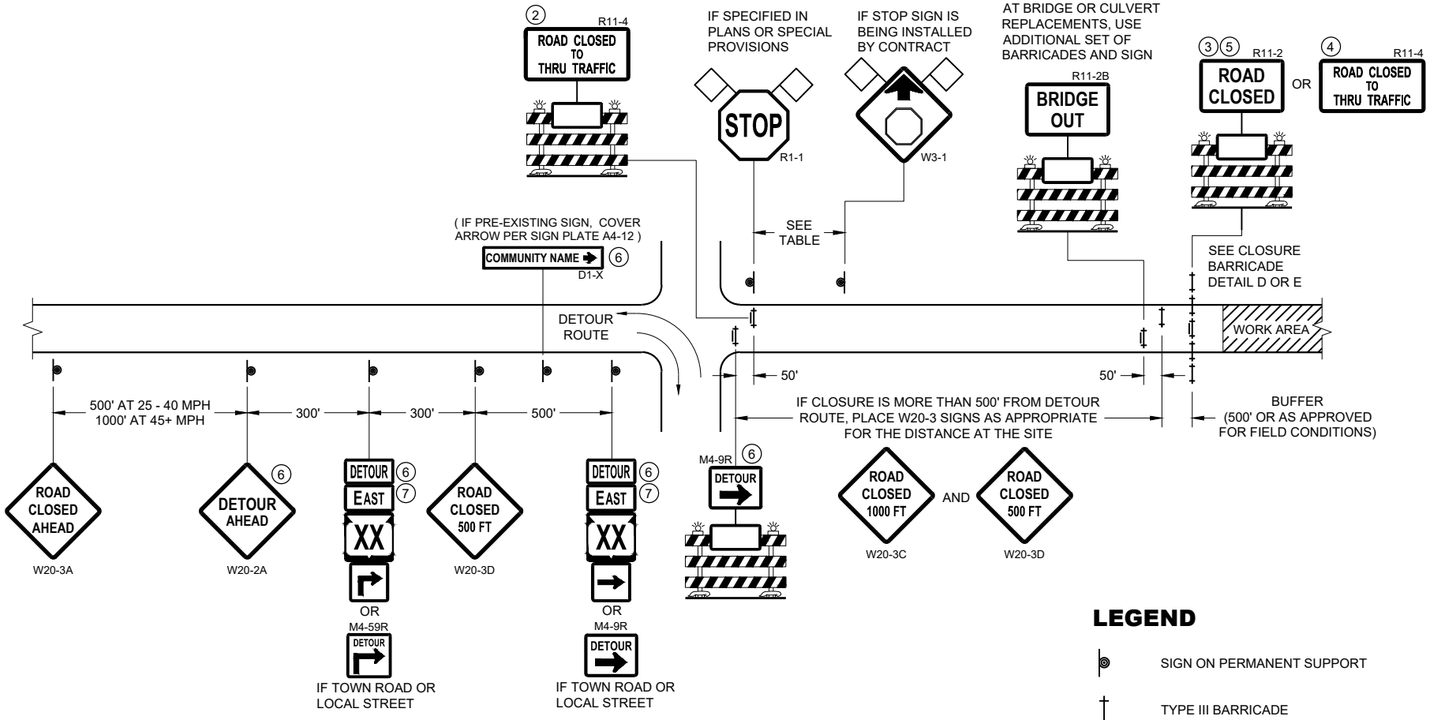
6

S.D.D. 15 B 3-15b



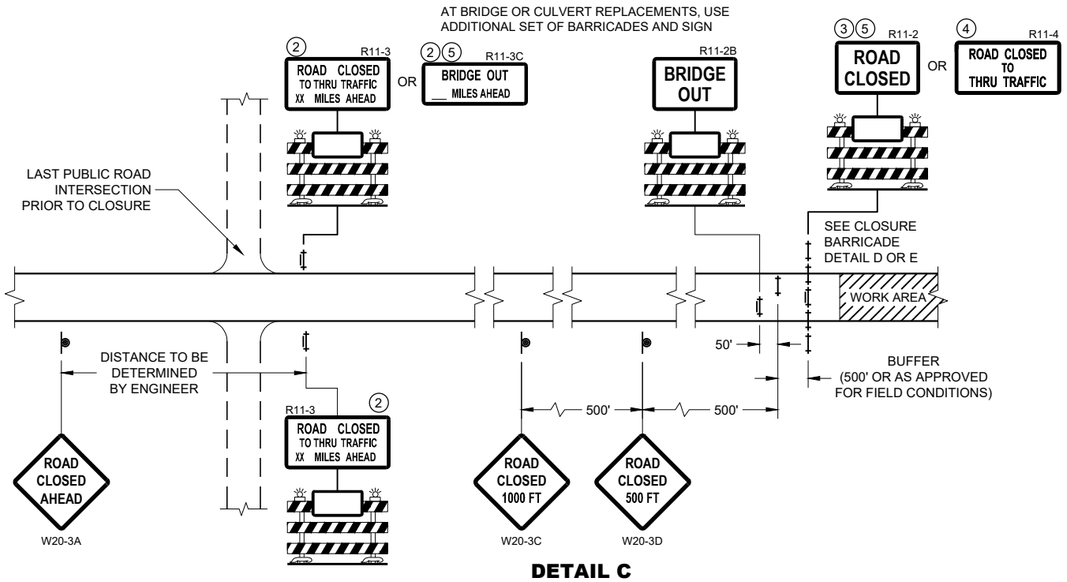
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

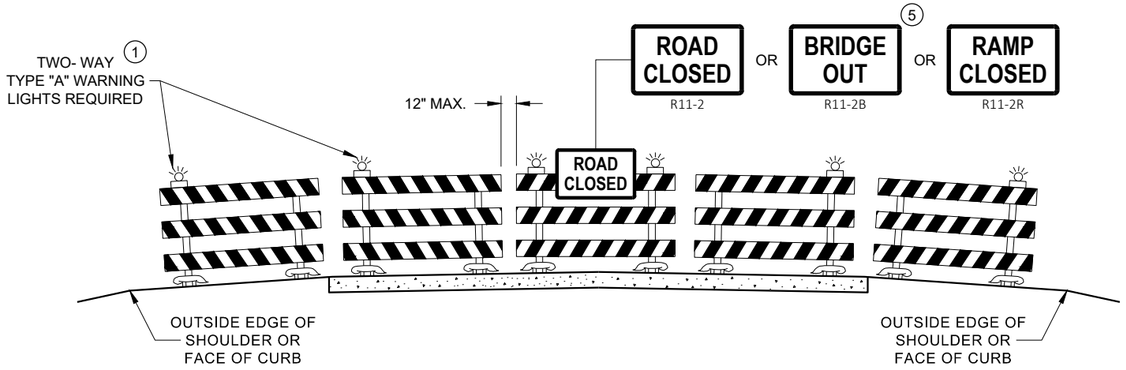
APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

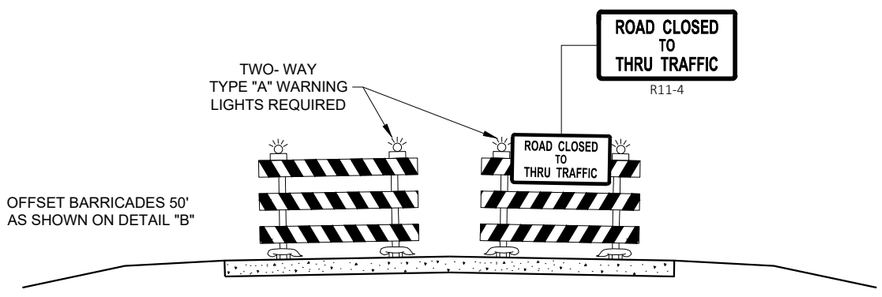
6

SDD 15C02 - 09a

SDD 15C02 - 09a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 09b

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 — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

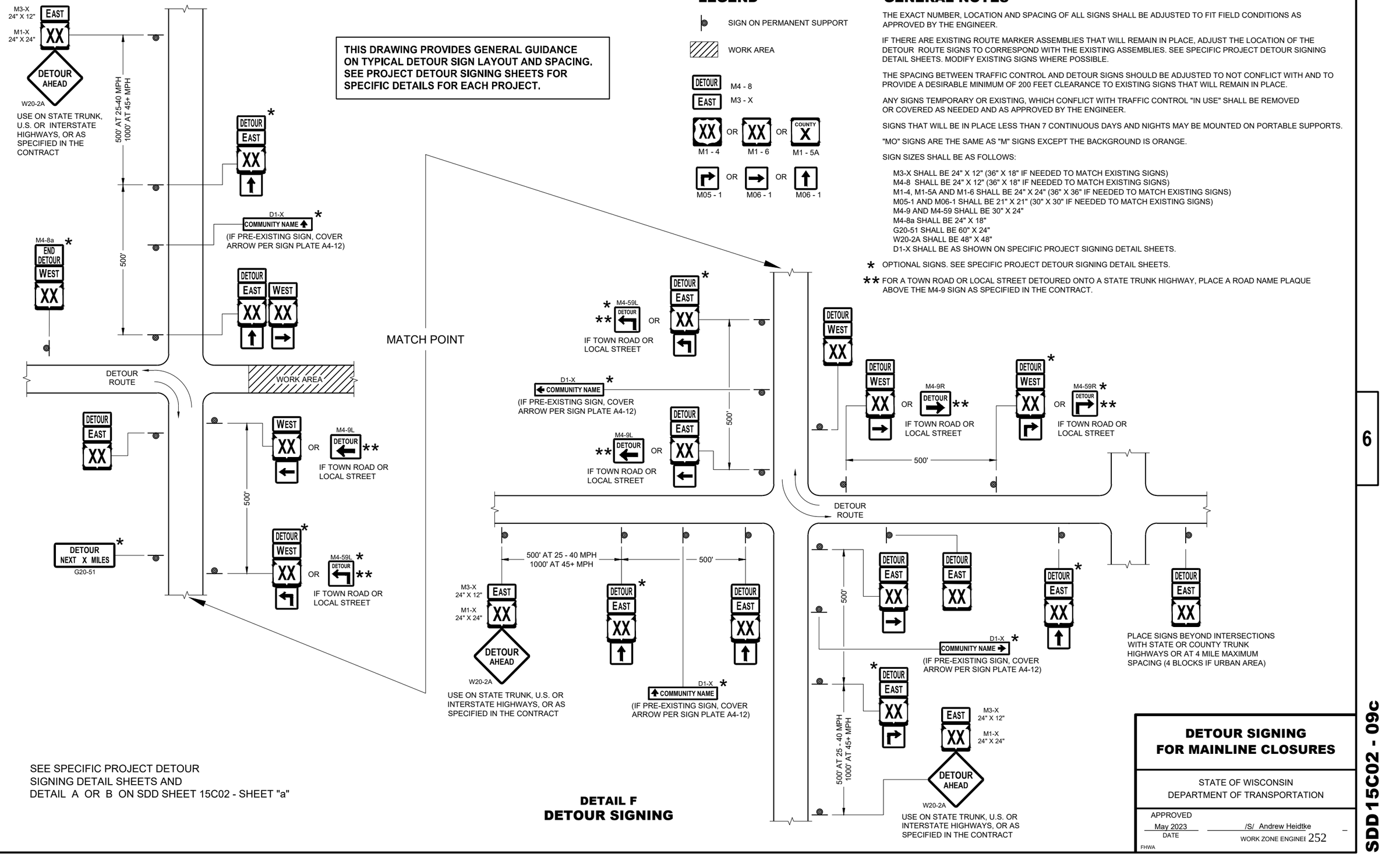
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (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

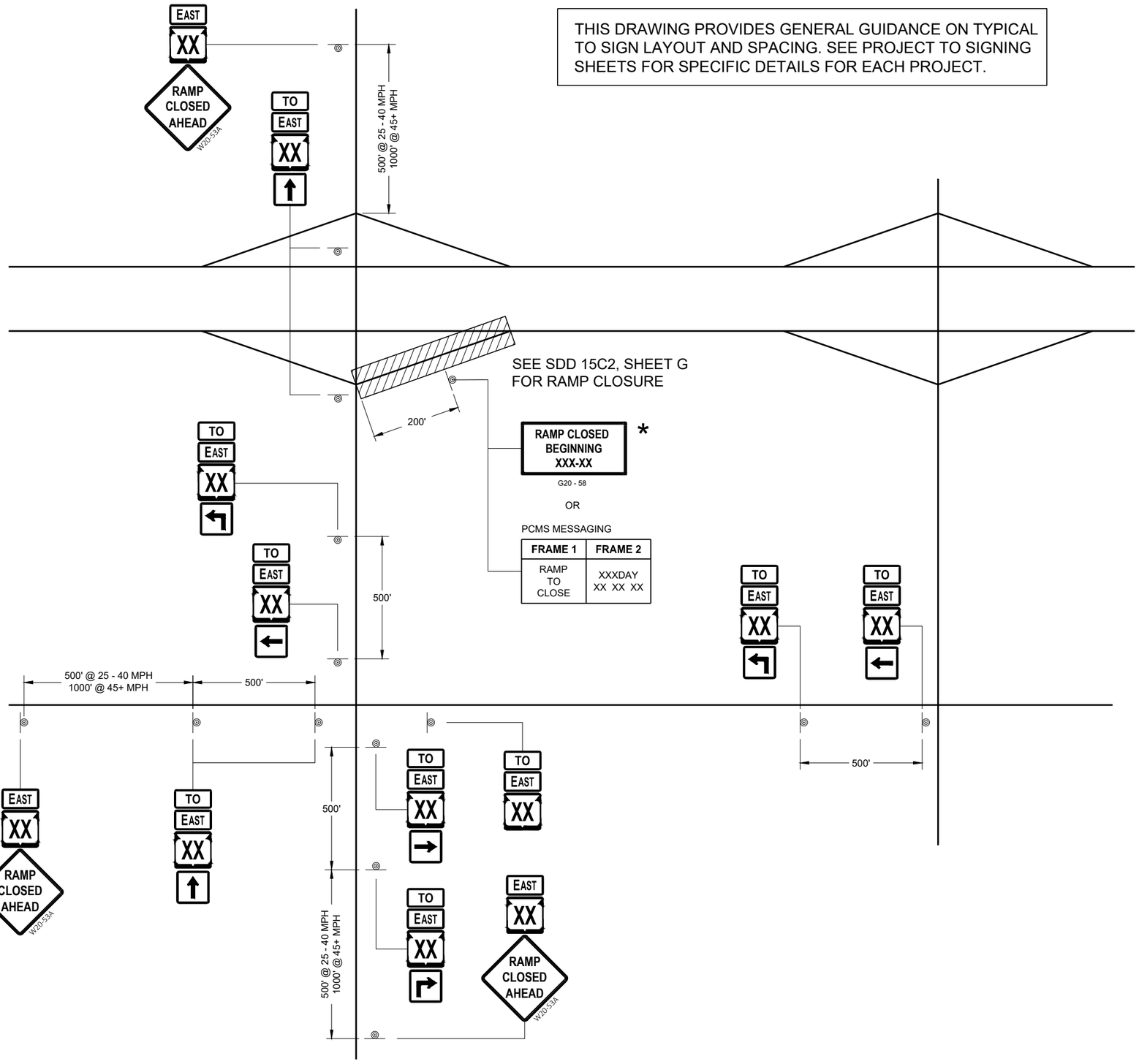
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

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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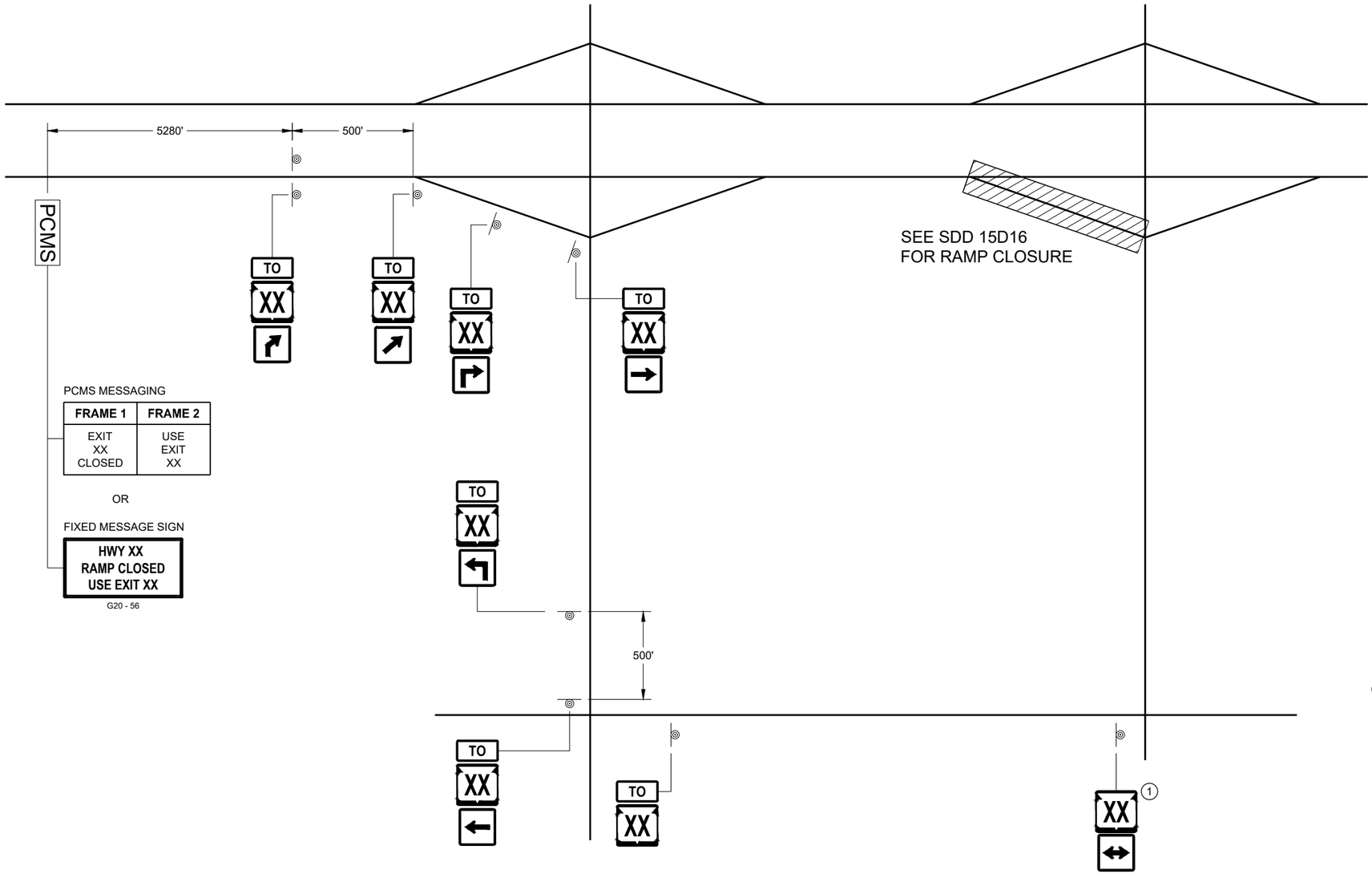
SDD 15C02 - 09d

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 ENGINEE
FHWA

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SDD 15C02 - 09e
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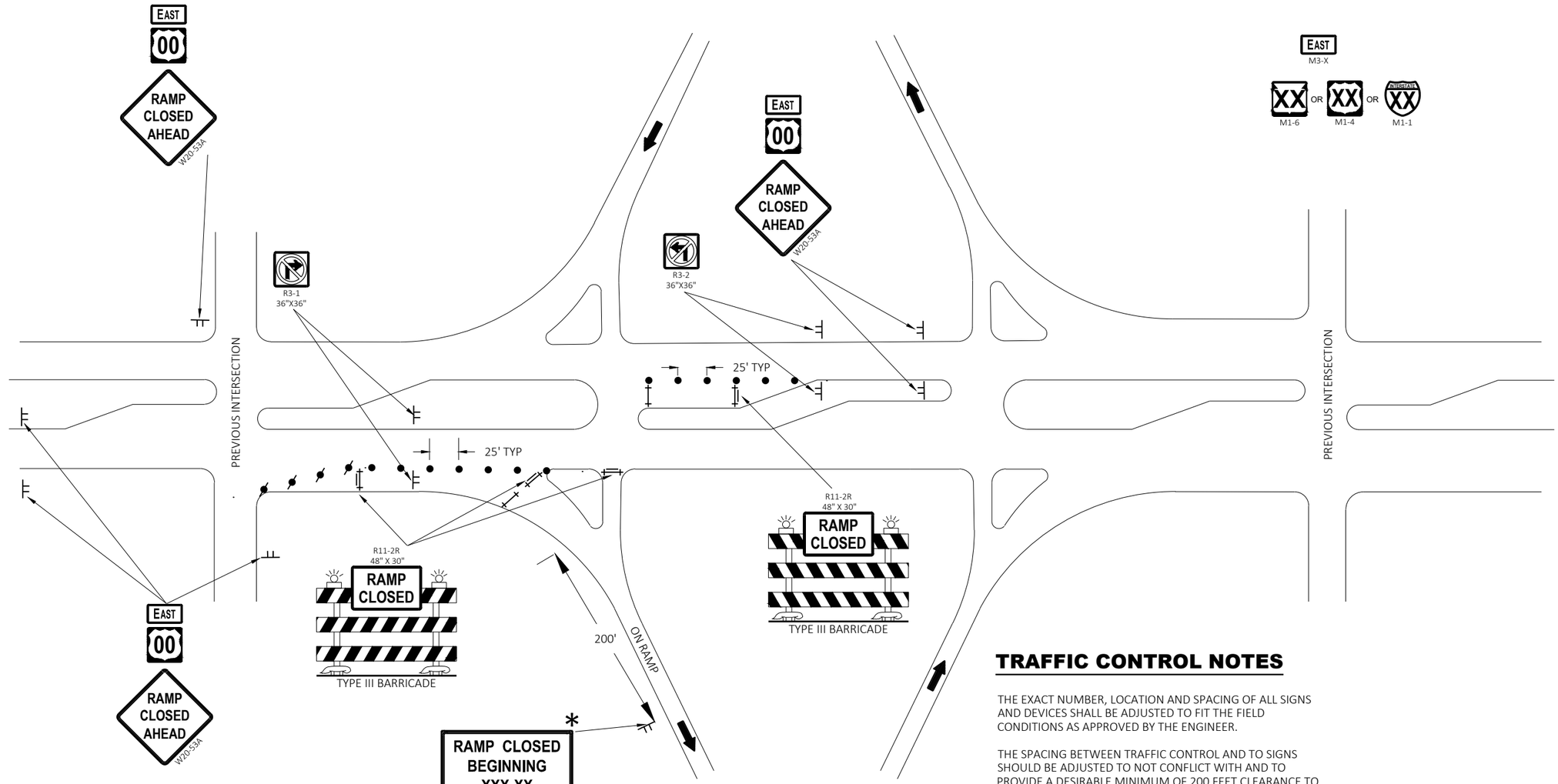

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL NOTES

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

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 THE 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.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24"x24" (36" x18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-1, M1-4, AND M1-6 SHALL BE 24"x24" (36"x36" IF NEEDED TO MATCH EXISTING SIGNS)
- W20-53A SHALL BE 48"X48"

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

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEE

FHWA

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SDD 15C02-09g

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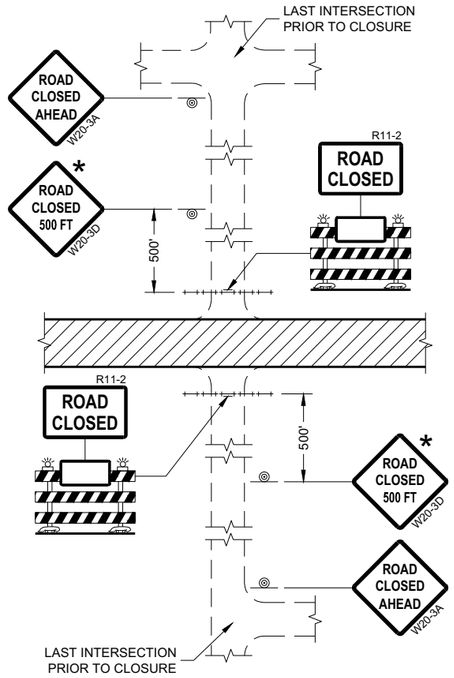
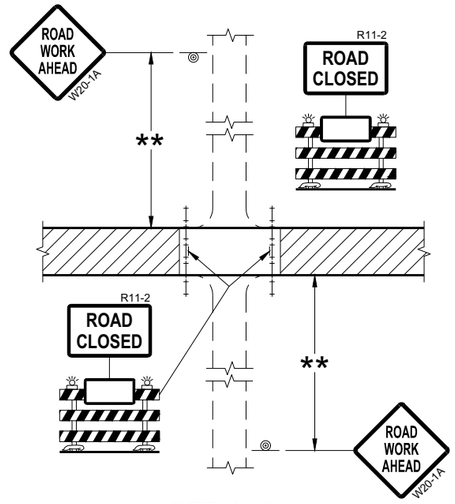
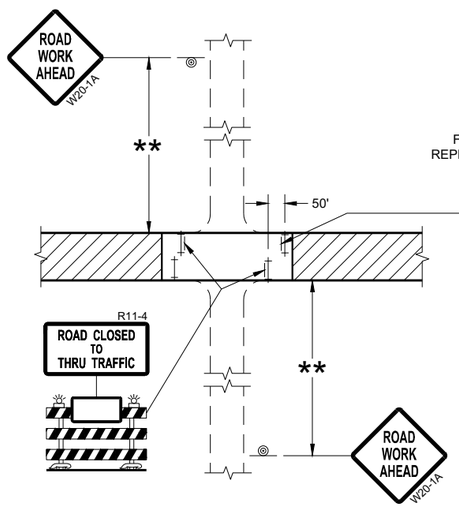
SDD 15C02-09g



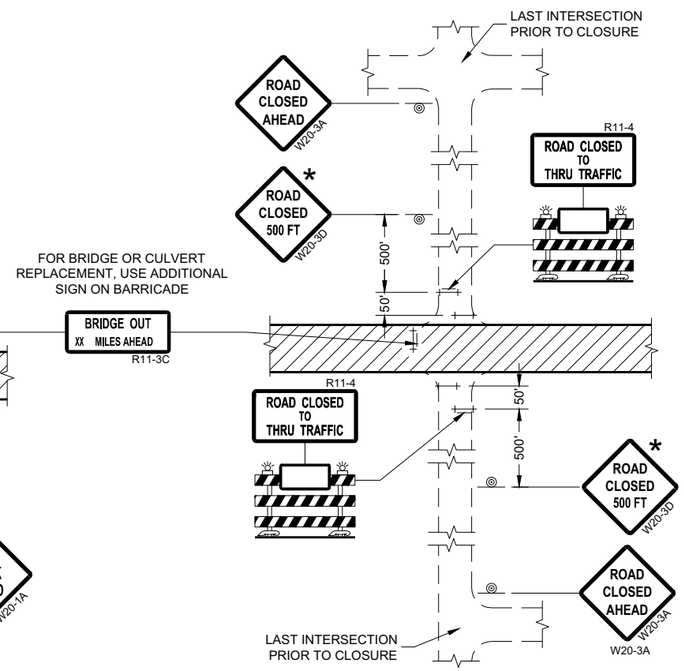
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

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 (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C03 - 05

GENERAL NOTES

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

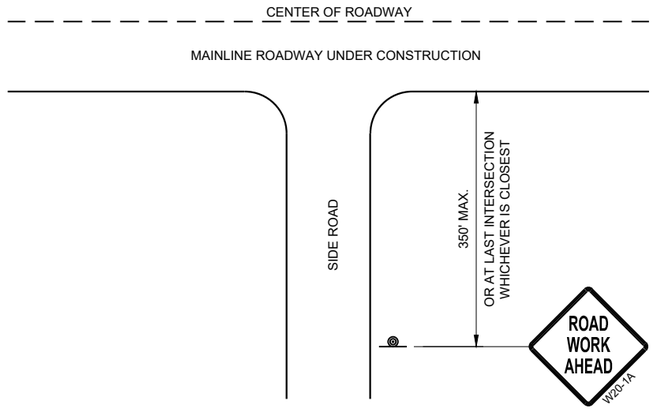
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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

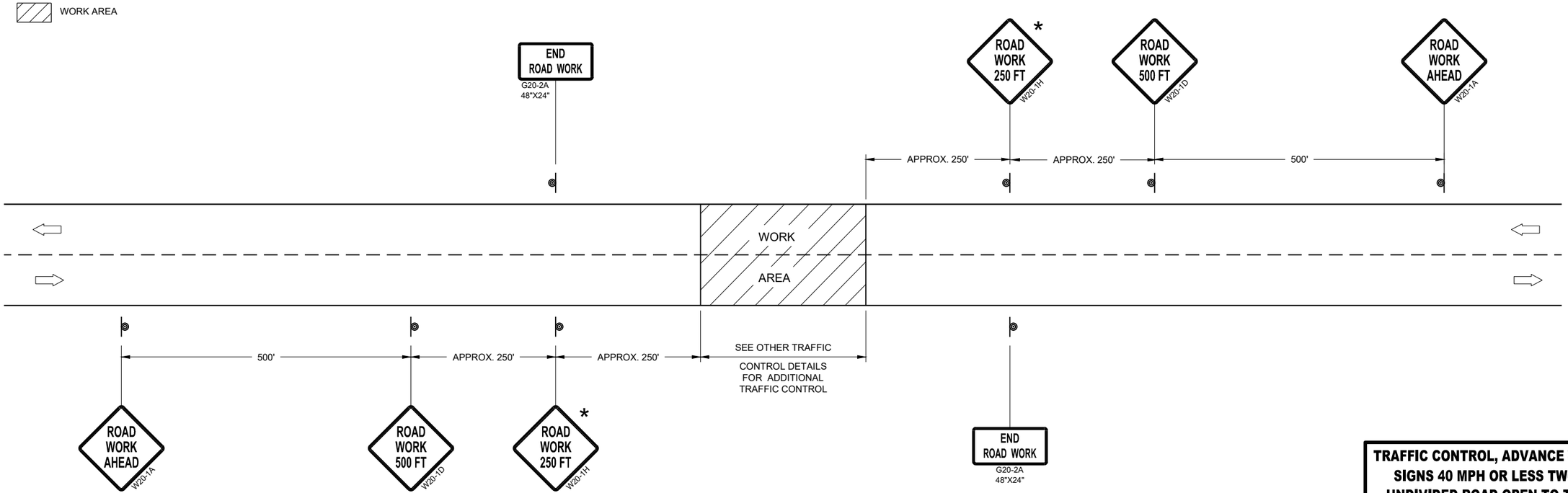
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

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



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

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WORK ZONE ENGINEE

FHWA

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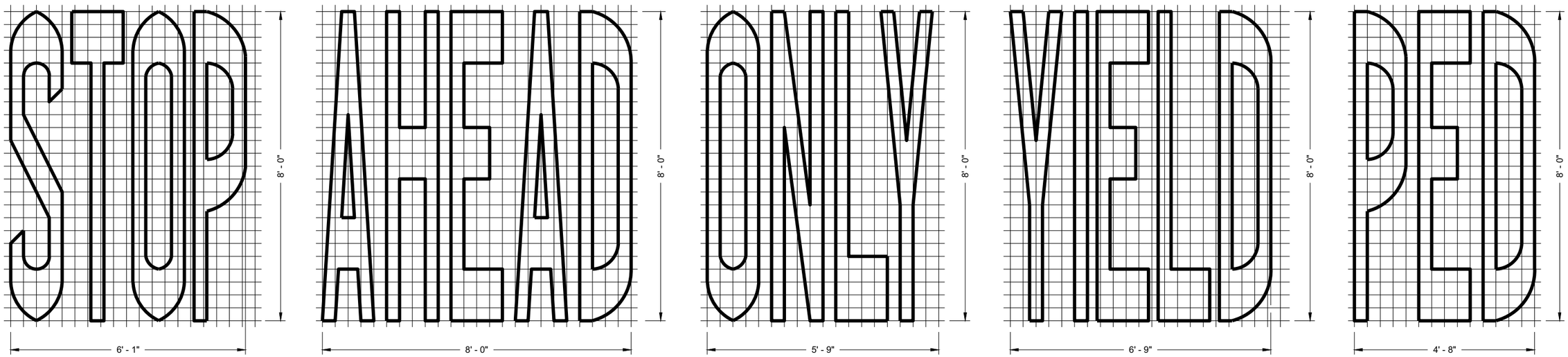
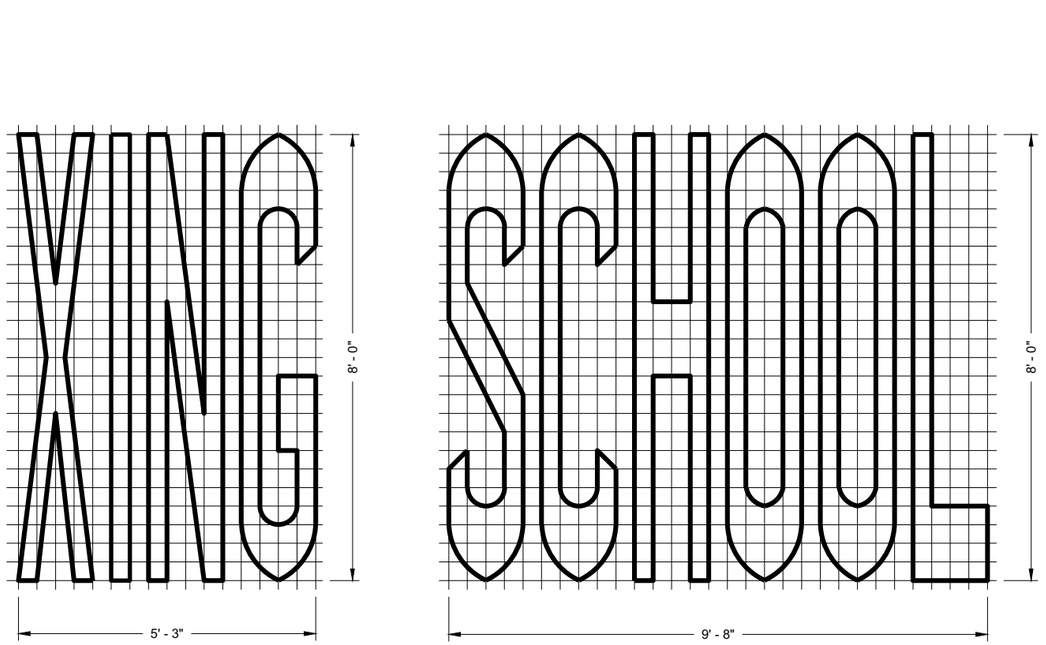
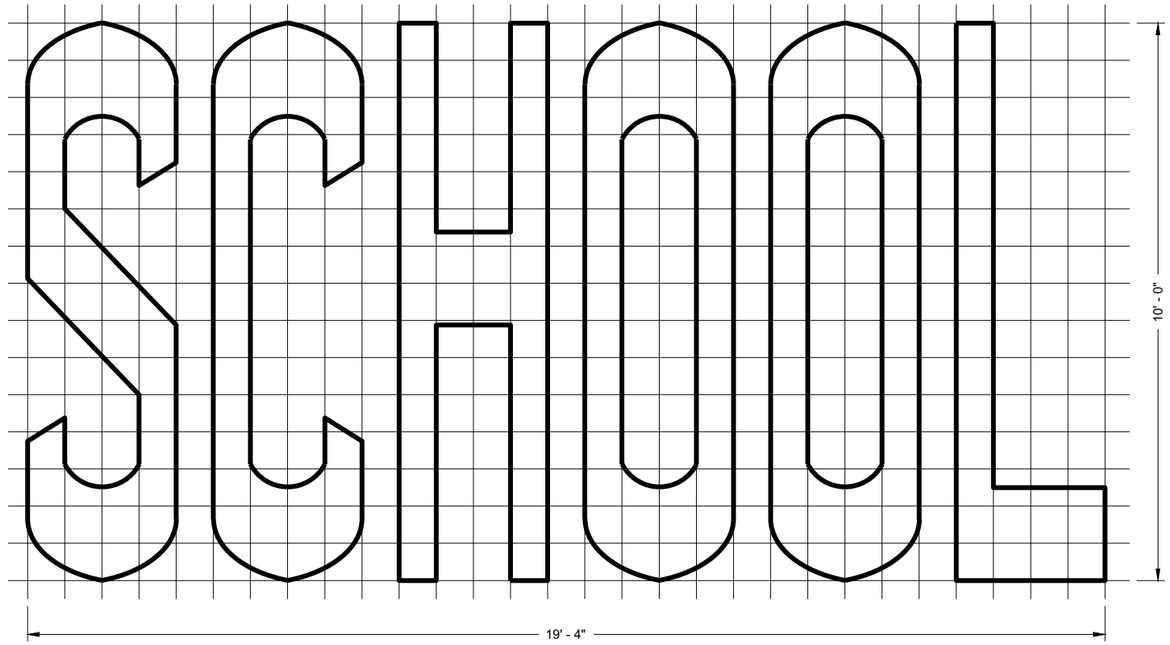
SDD 15C05 - 05





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

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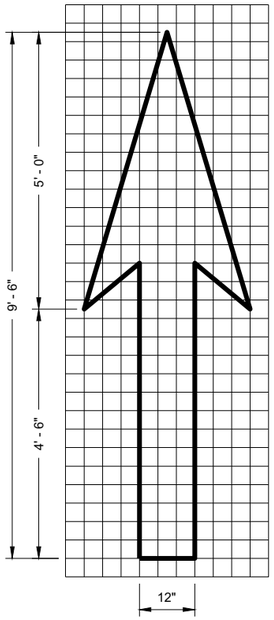
SDD 15C07 - 15b

6

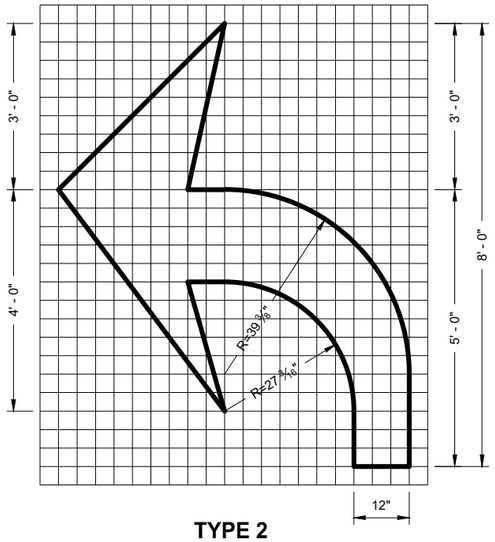
SDD 15C07 - 15b

GENERAL NOTES

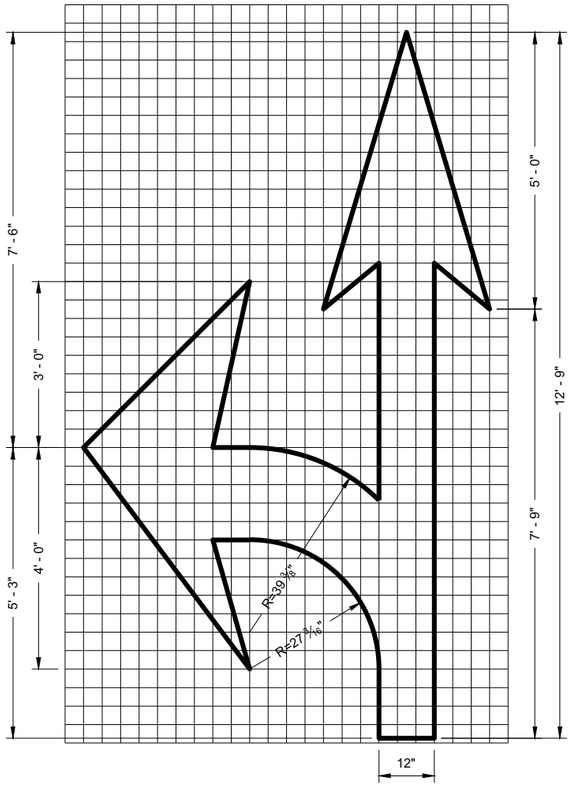
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



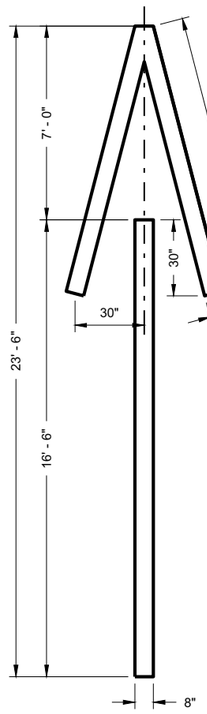
TYPE 1



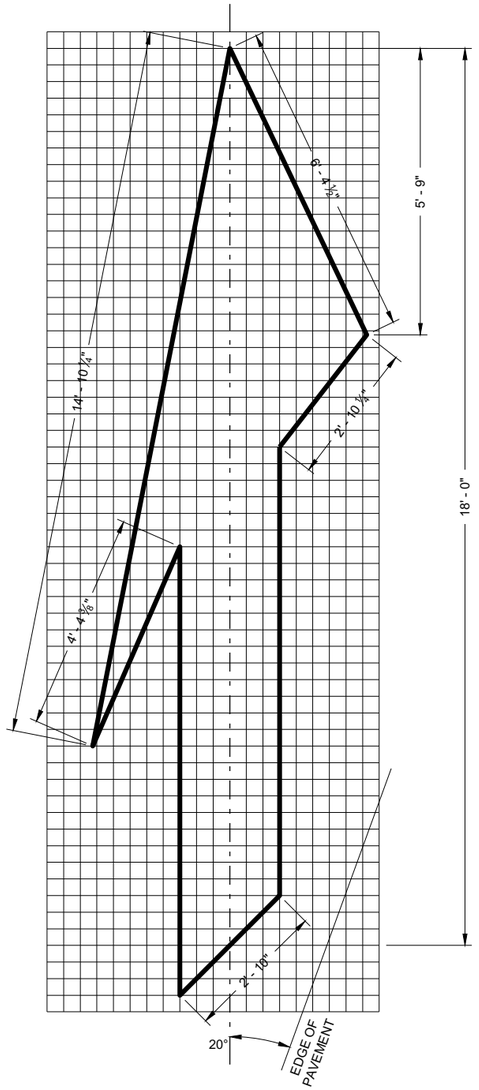
TYPE 2



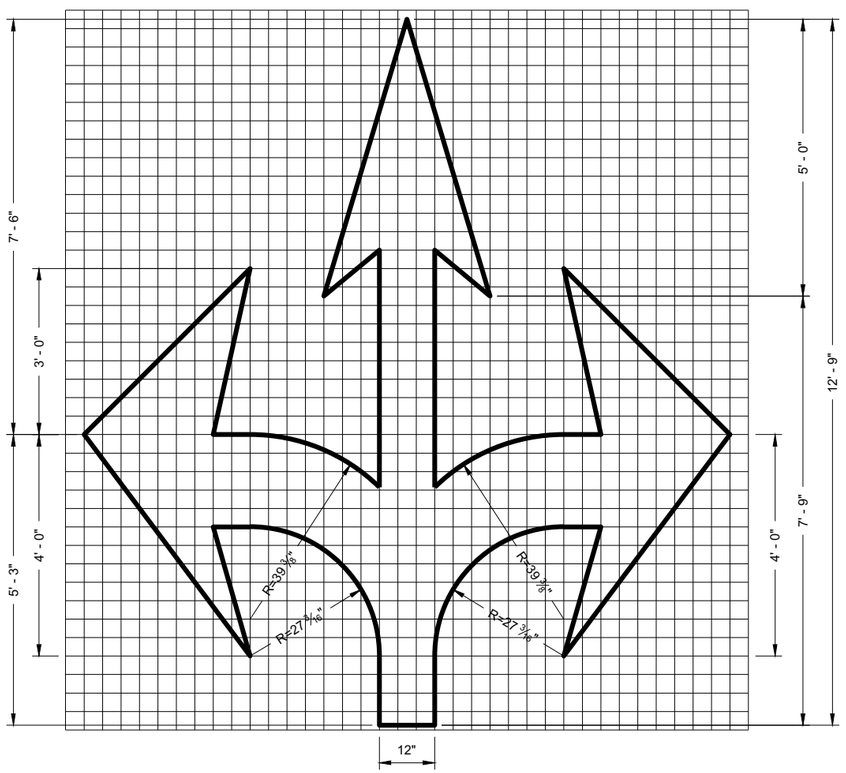
TYPE 3



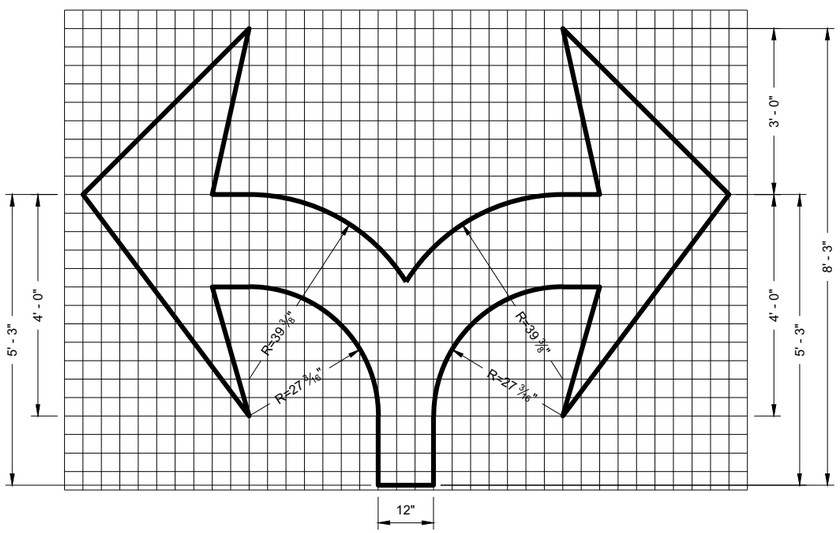
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

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SDD 15C07 - 15c

6

SDD 15C07 - 15c

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

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

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

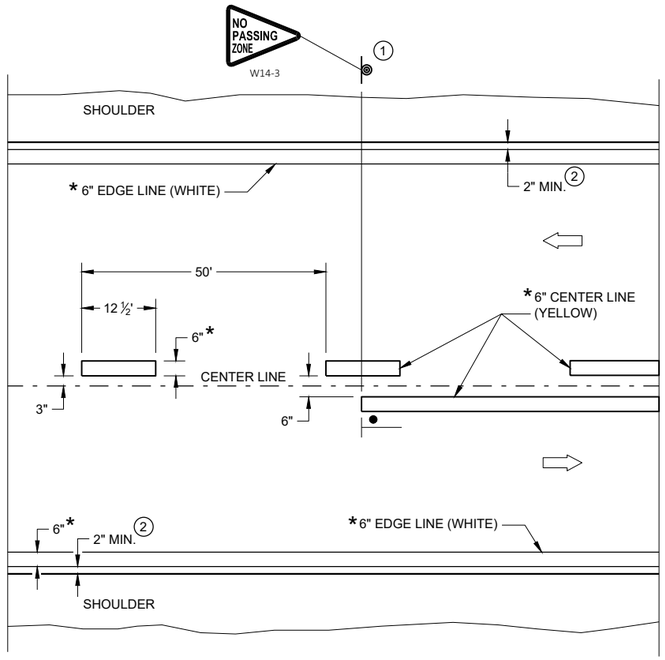
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

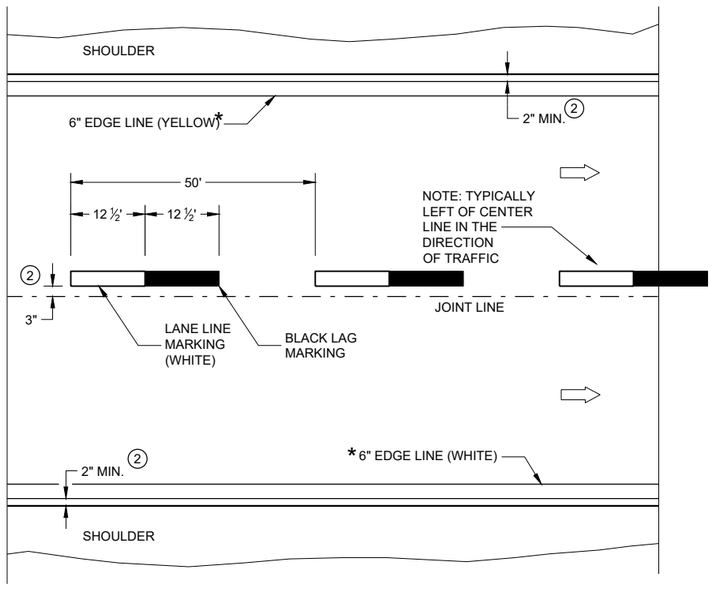
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER
FHWA

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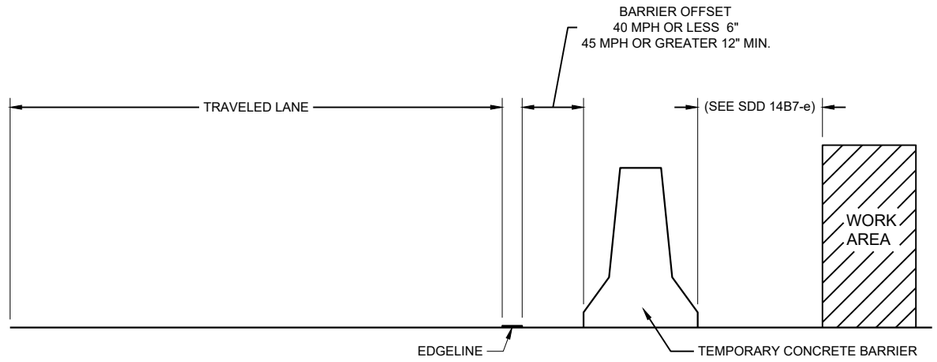
SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

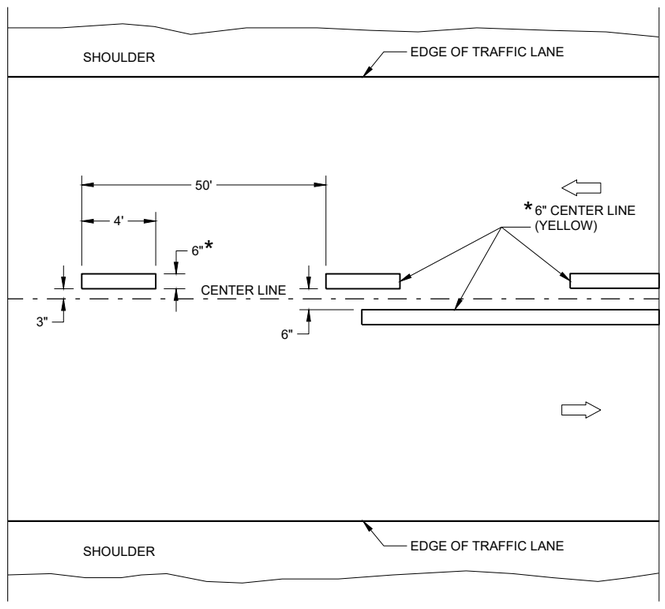
GENERAL NOTES

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

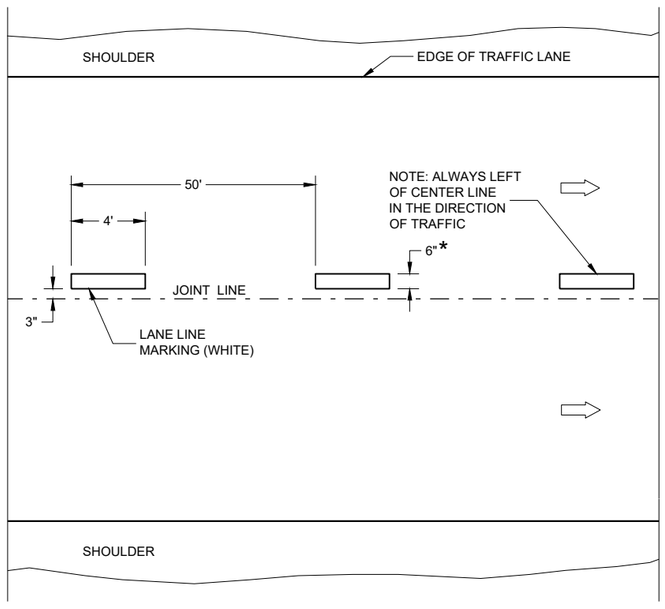
LEGEND

⇨ DIRECTION OF TRAFFIC

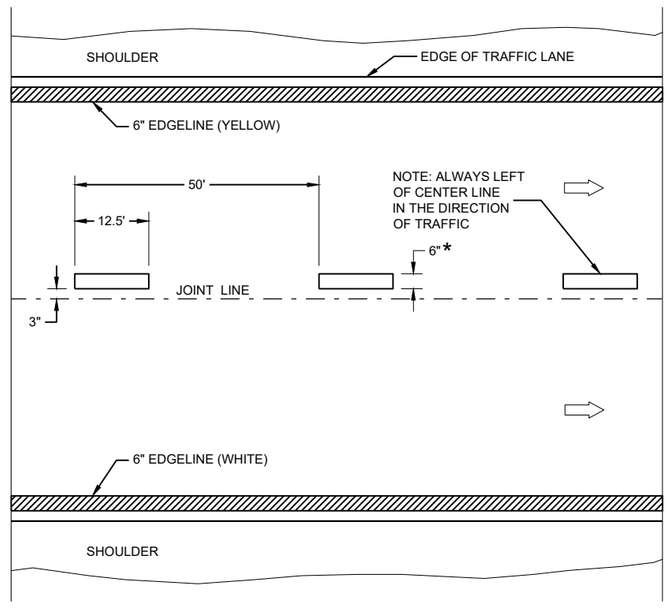
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Jeannie Silver STATEWIDE SIGNING AND M ENGINEER
FHWA	

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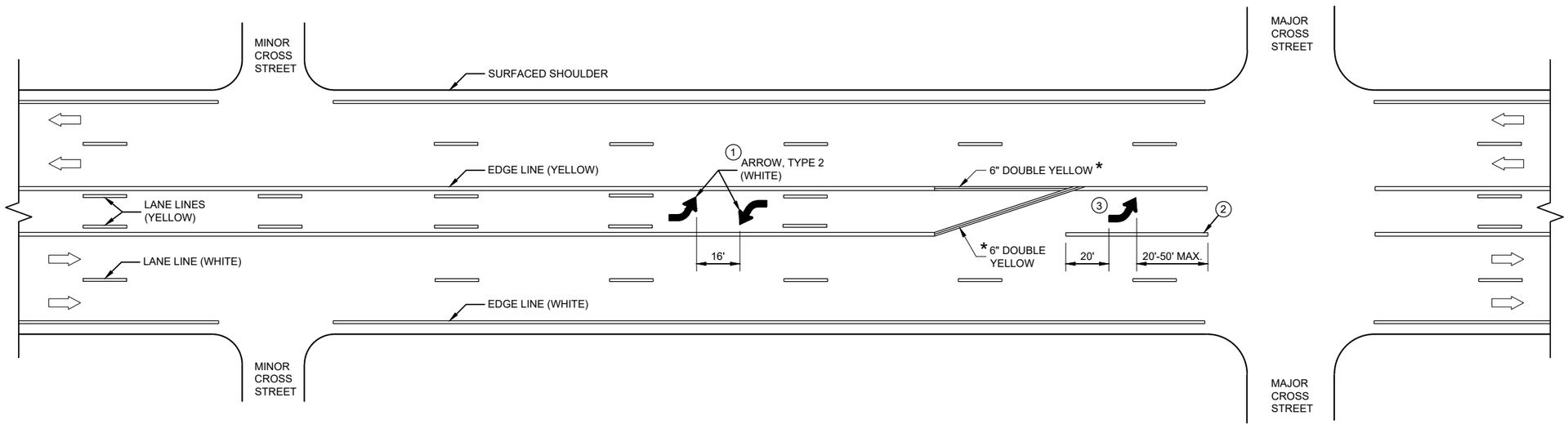
SDD 15C08-23b

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

⇨ DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY LEFT TURN LANE

6

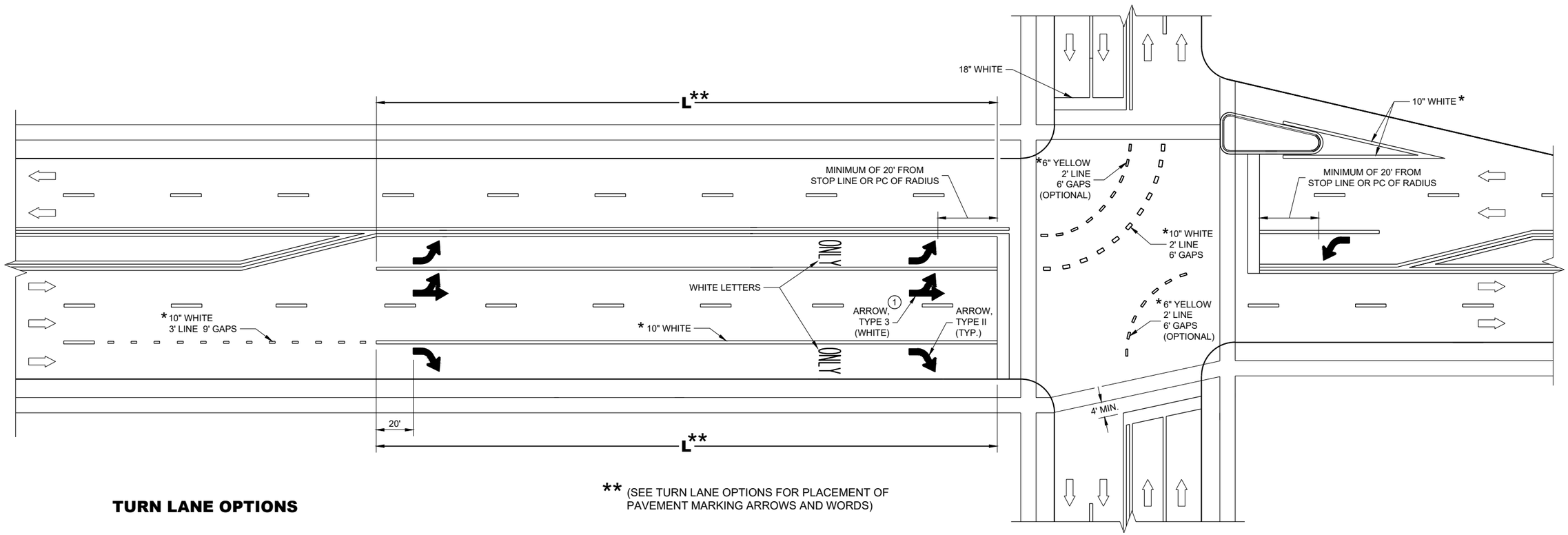
SDD 15C08-23c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 262

6

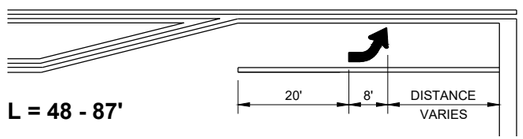
SDD 15C08-23c



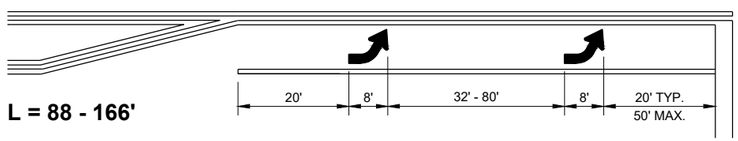
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

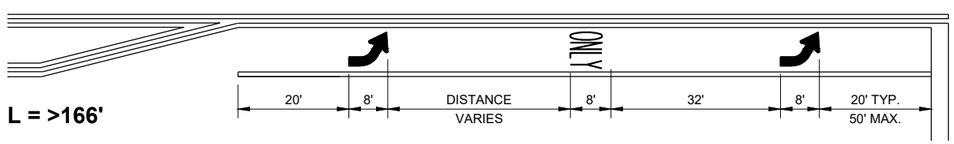
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

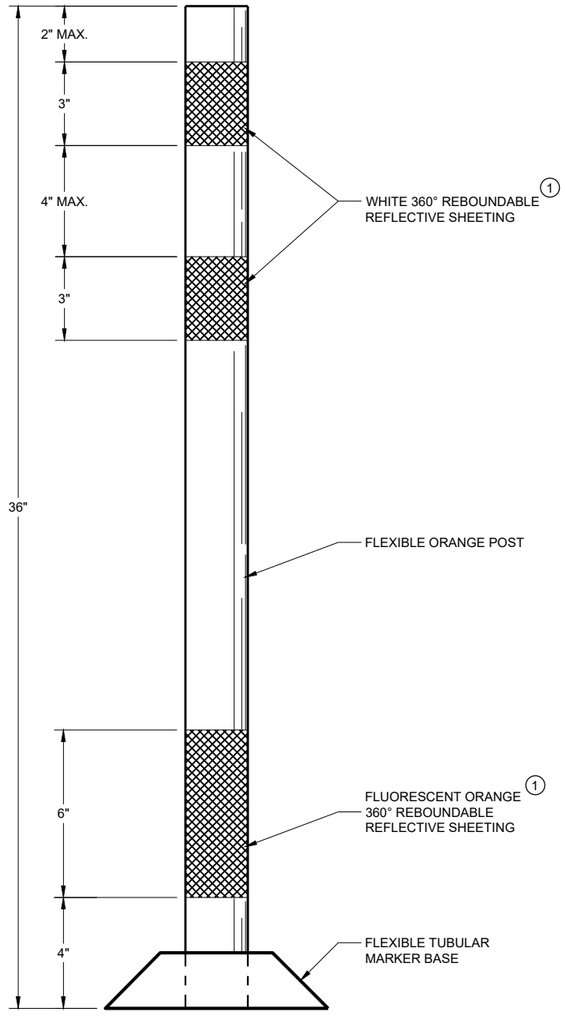
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08-23d



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

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

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

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

6

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

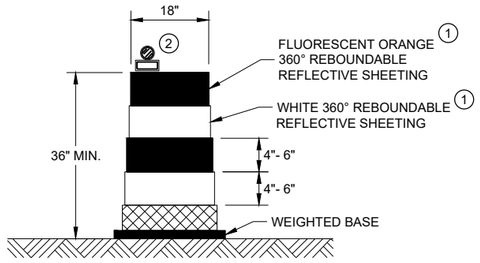
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15C11 - 10a

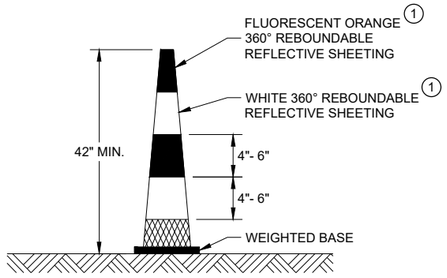
GENERAL NOTES

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



DRUM

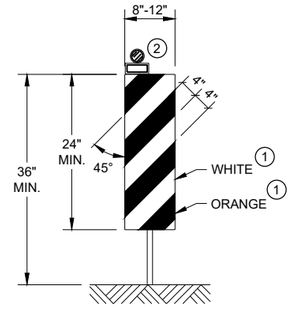
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

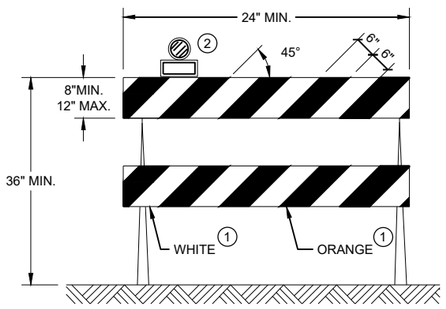
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



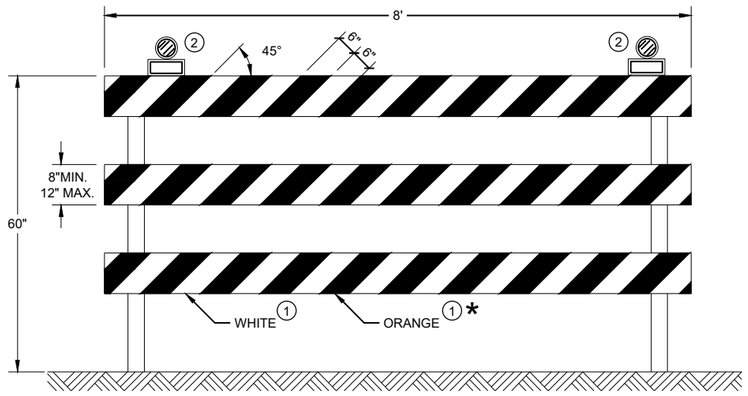
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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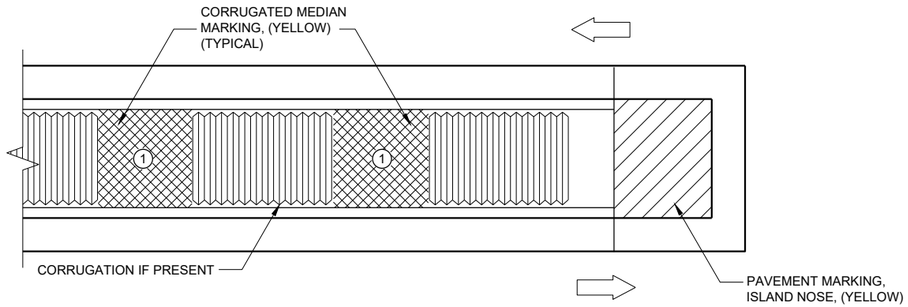
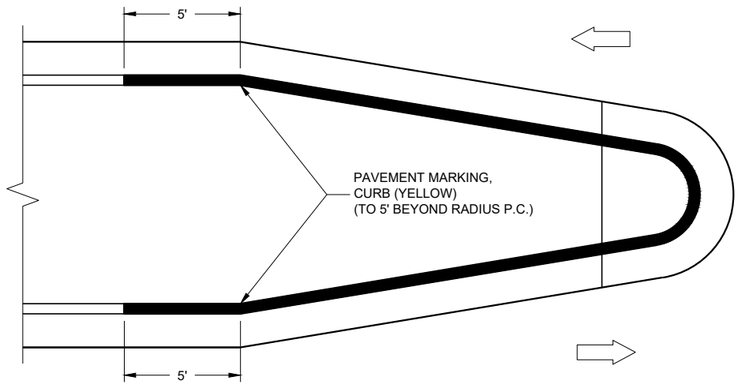
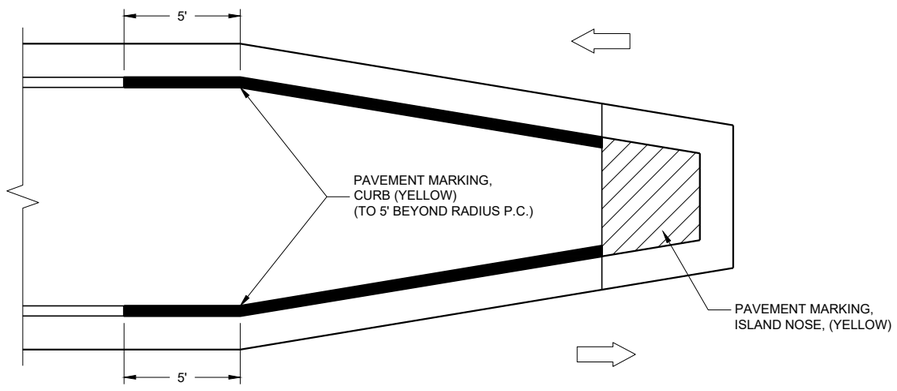
SDD 15C11 - 10b



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ Jeannie Silver
STATE SIGNING AND MAR ENGINEER

FHWA

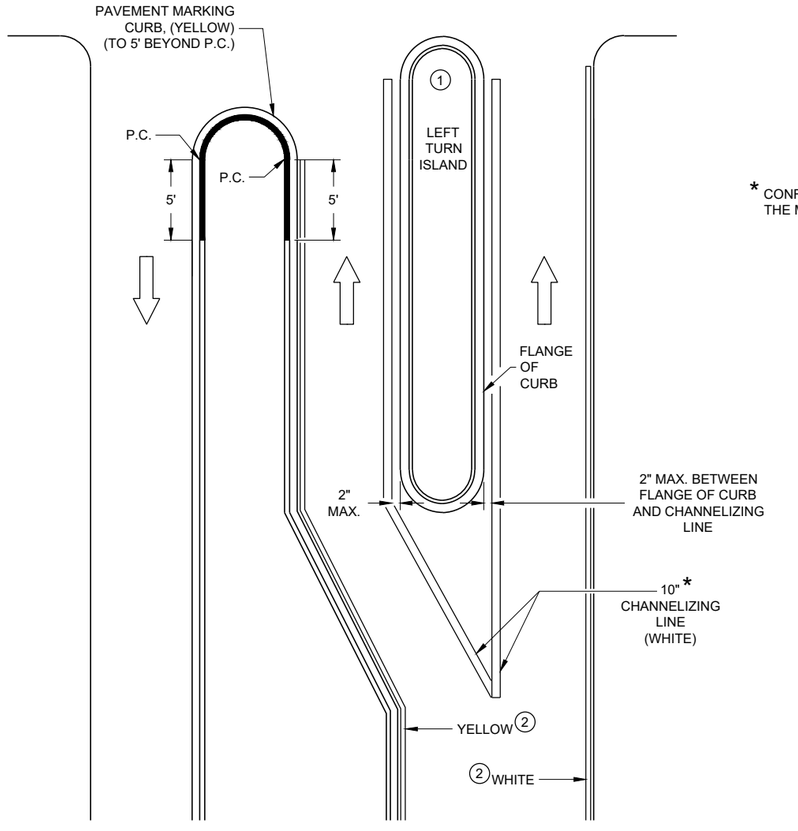
6

SDD 15C18-08b

6

SDD 15C18-08b

REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED



* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEFT TURN & MEDIAN ISLAND

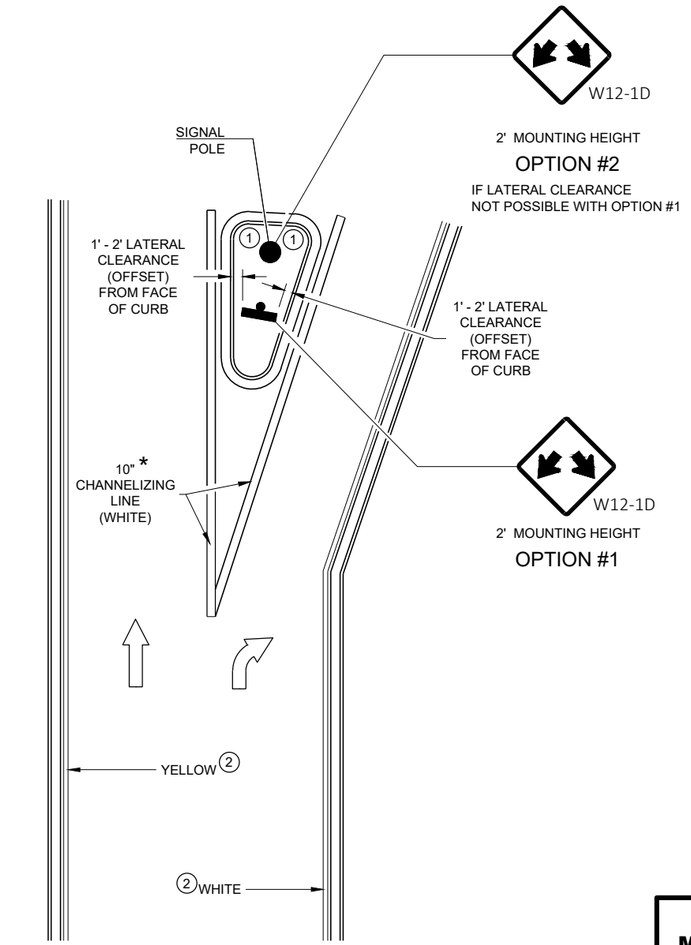
GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

1. MARK CURB NOSES YELLOW.
2. MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER

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SDD 15C18-08c

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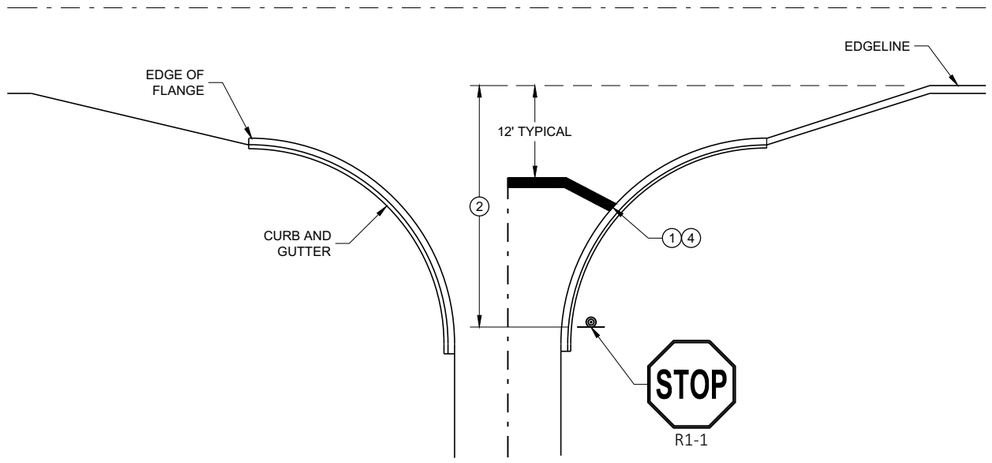
SDD 15C18-08c

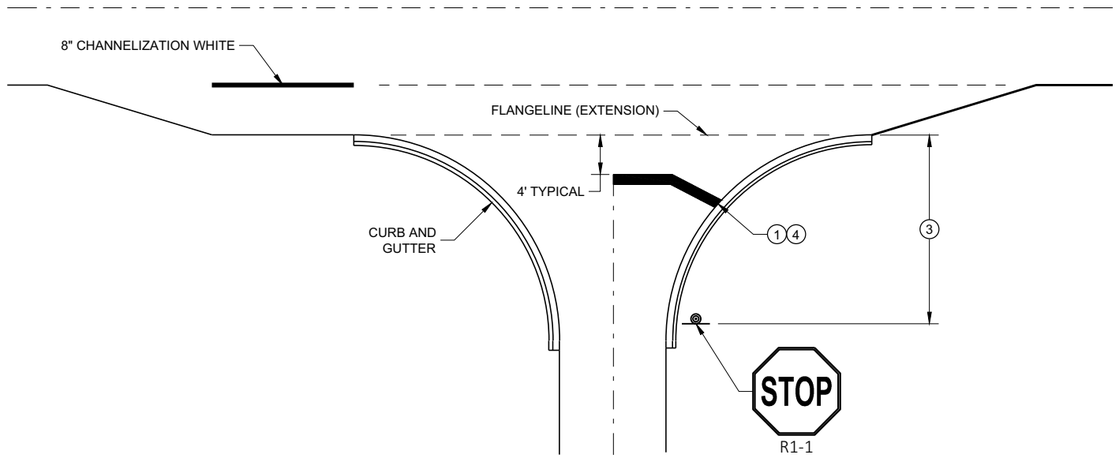
GENERAL NOTES

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

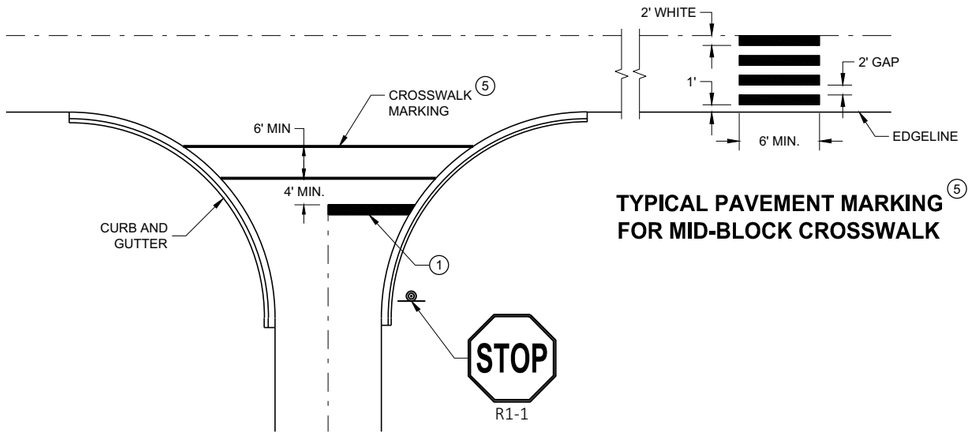
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

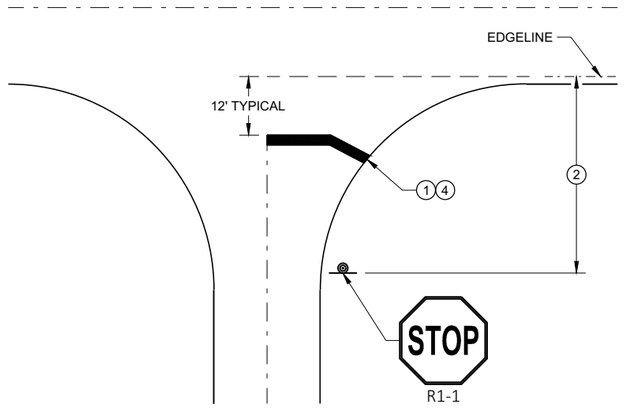


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

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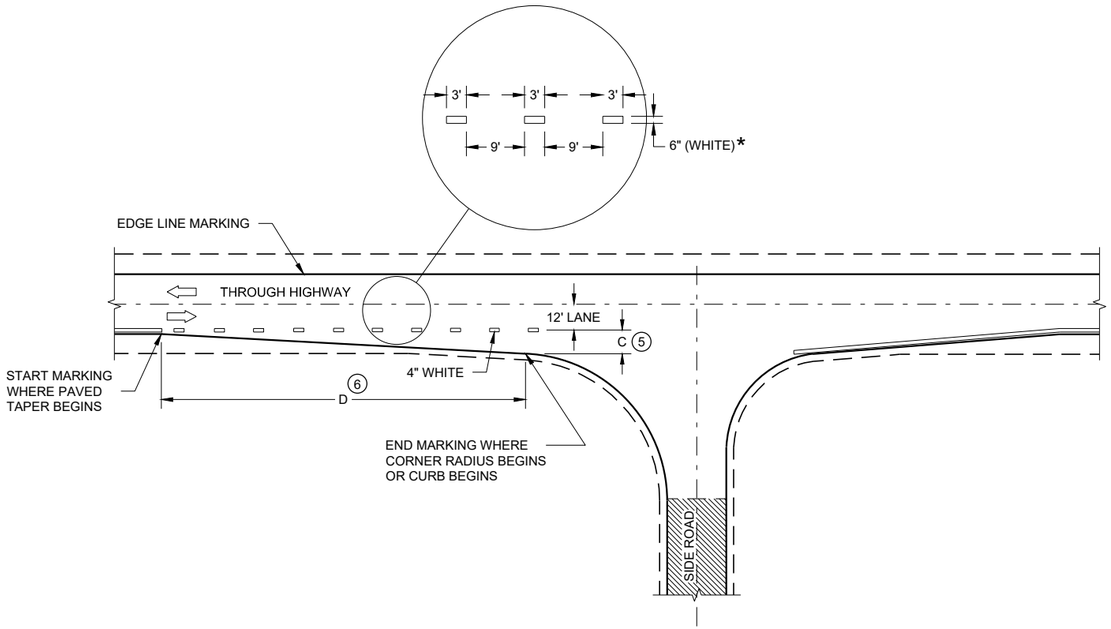
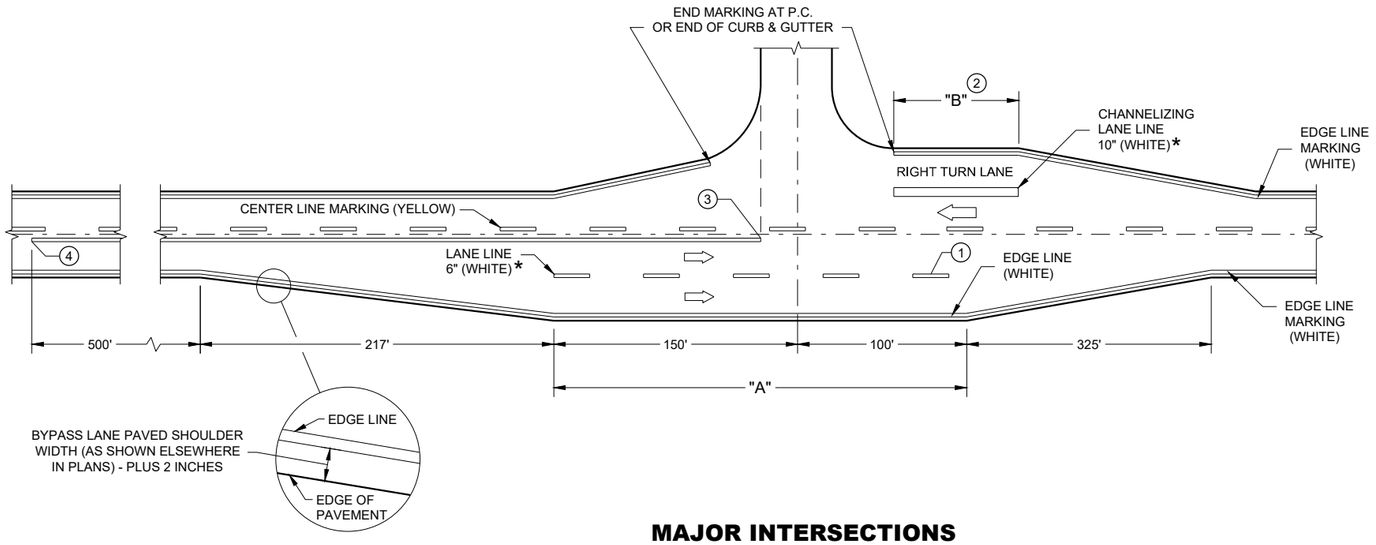
SDD 15C33 - 04



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

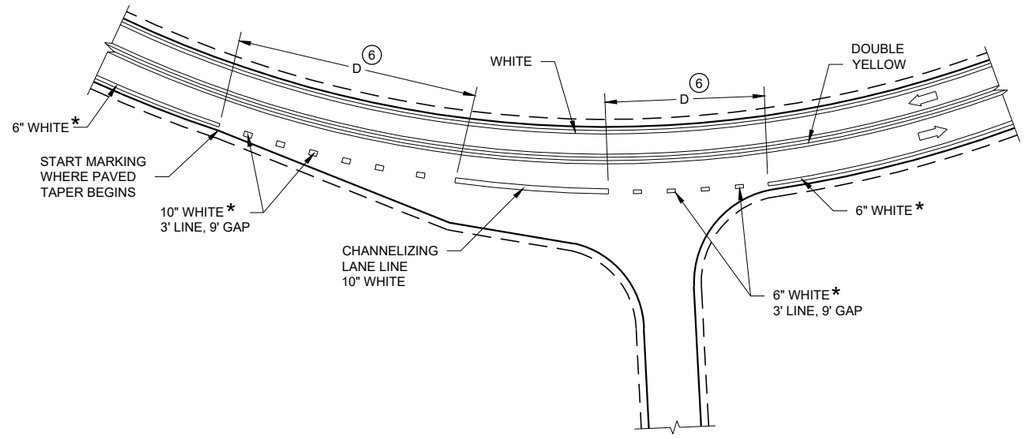
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

6
SDD 15C35-06a

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.

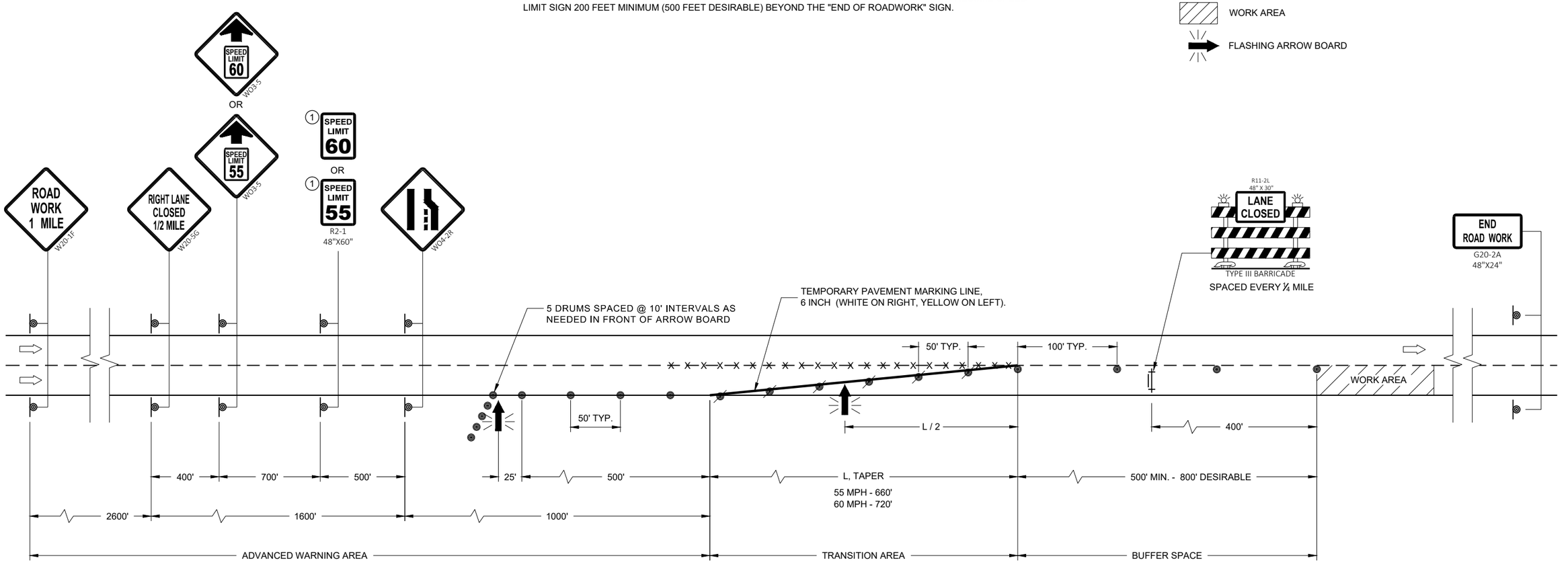
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D12 - 11b

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.

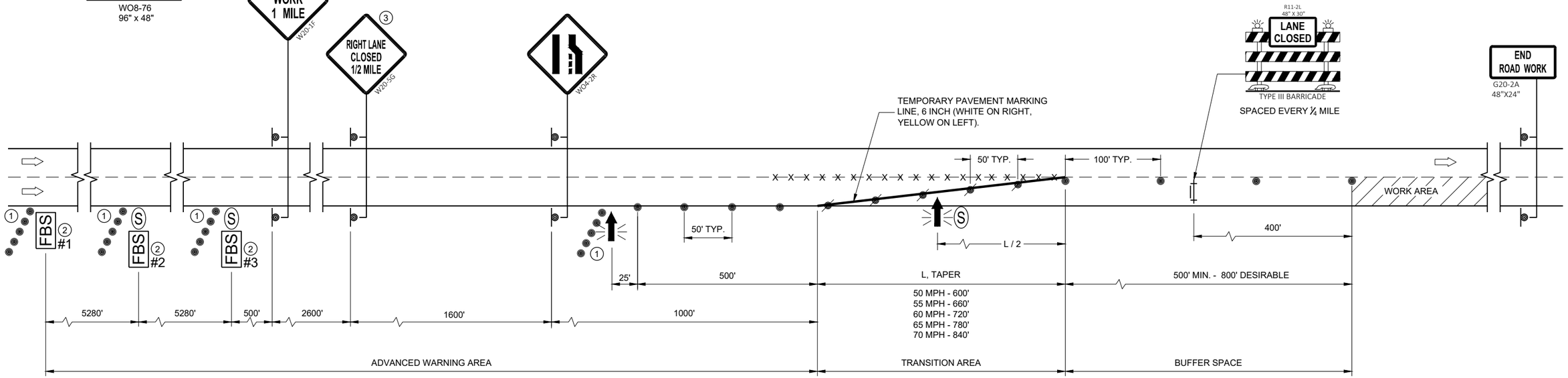
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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
May 2023
DATE
/S/ Erin Schwark
WORK ZONE ENGINEER

FHWA

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SDD 15D12 - 11d

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SDD 15D12 - 11d

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.

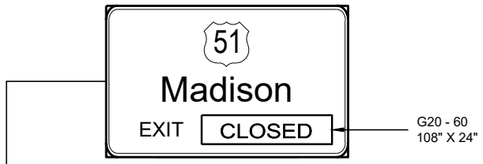
PLACE TEMPORARY PAVEMENT MARKING LINE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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.

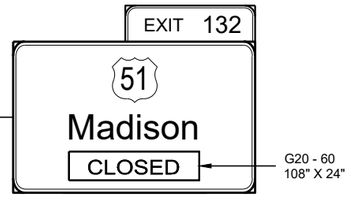
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

(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.

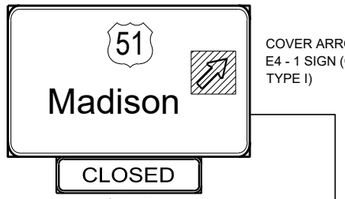
(2) PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



OR

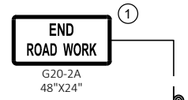


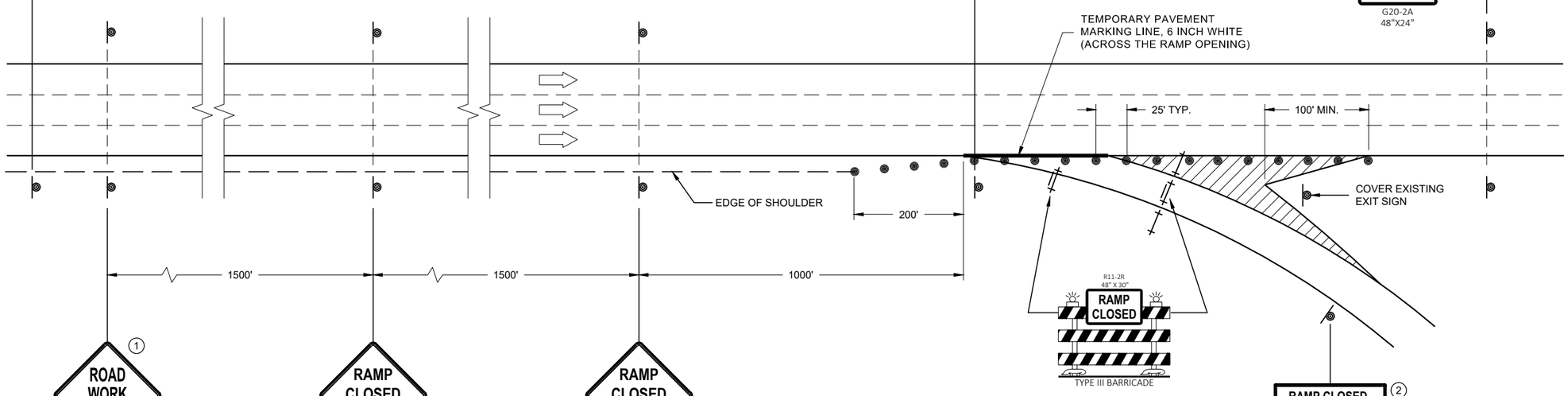
PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



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

6

SDD 15D16-06

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)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

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

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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 TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

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

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

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

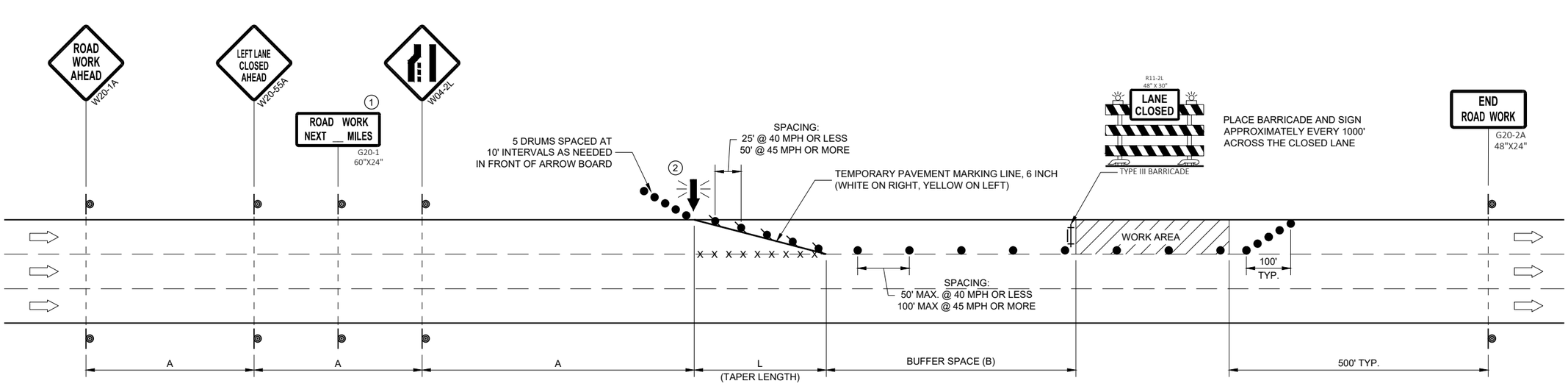
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

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

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D20-07a

6

SDD 15D20-07a

LEGEND

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

GENERAL NOTES

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

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

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

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

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

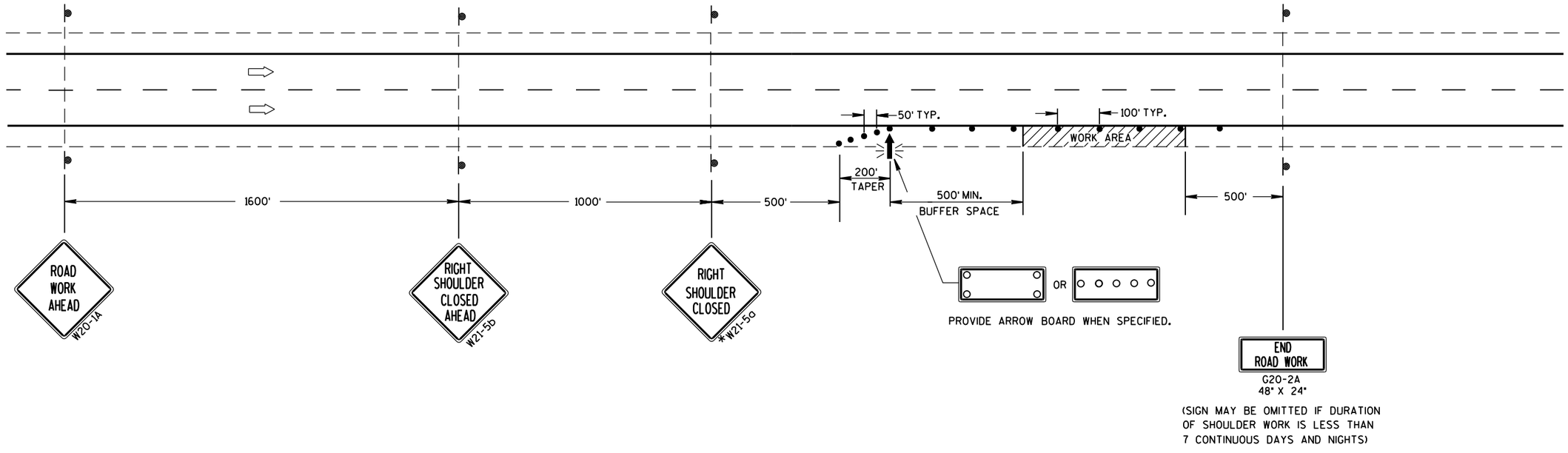
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

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



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

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

FHWA

6

S.D.D. 15 D 27-3

GENERAL NOTES

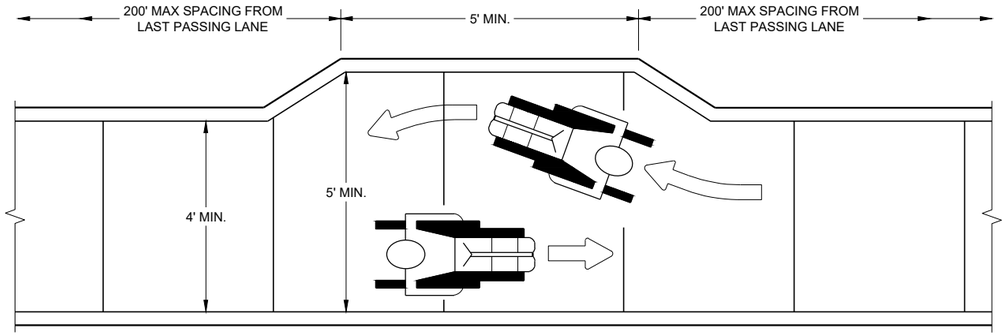
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

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

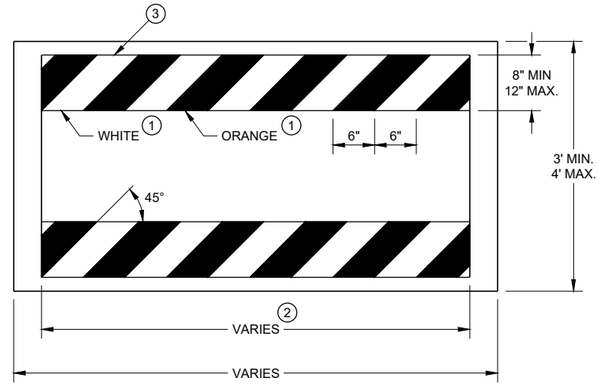
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

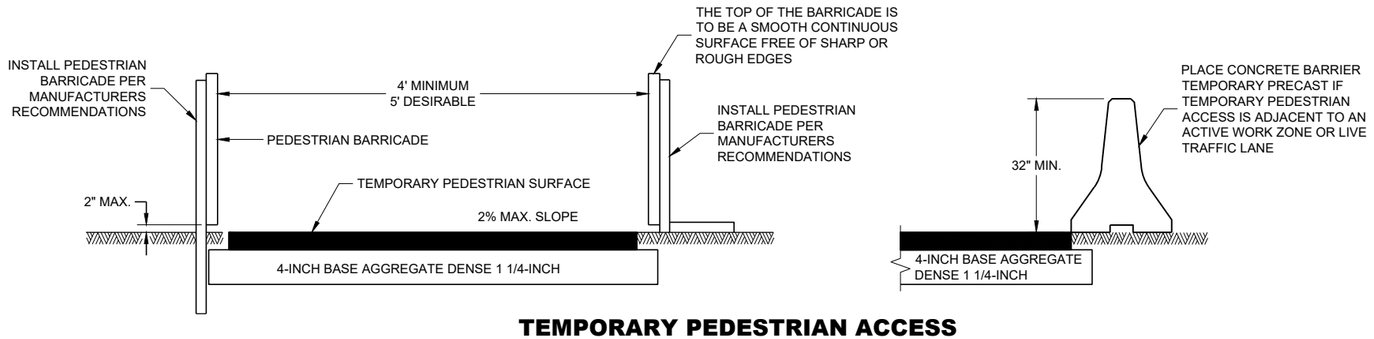
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

6

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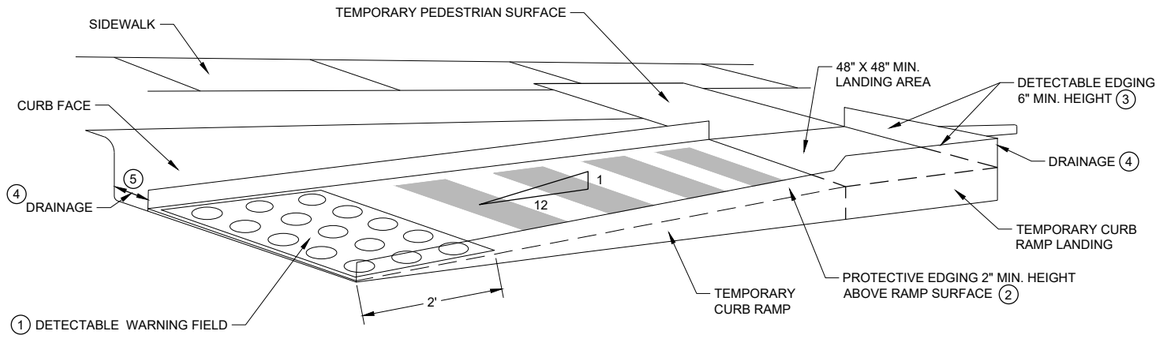
SDD 15D30 - 09a

SDD 15D30 - 09a

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



PERSPECTIVE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

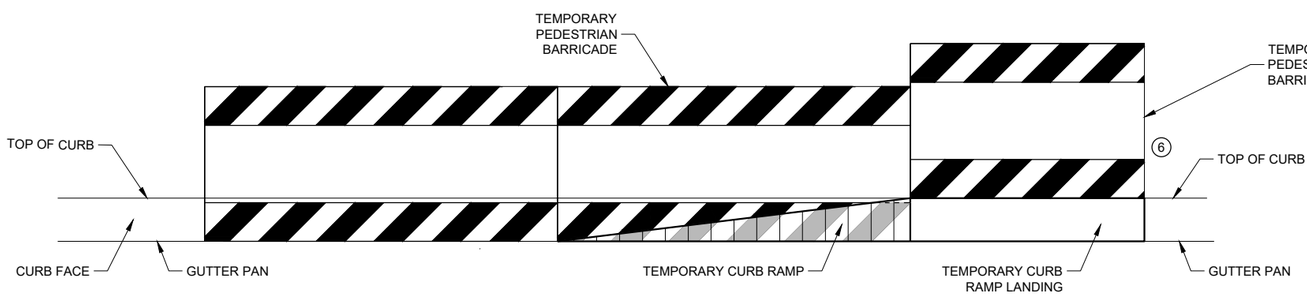
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

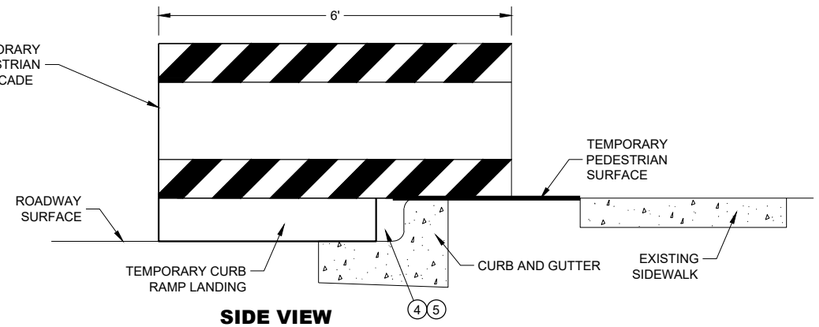
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

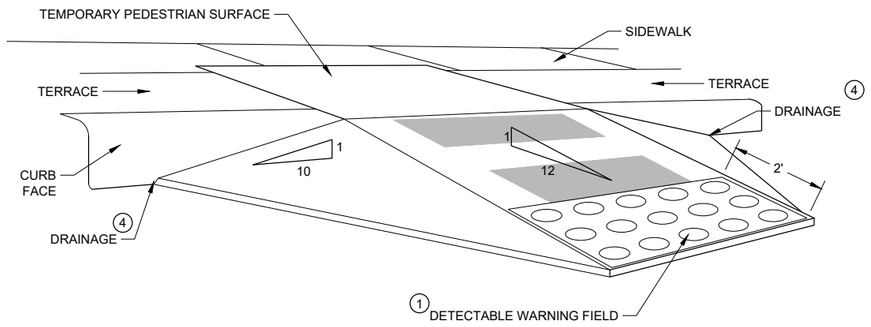
TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

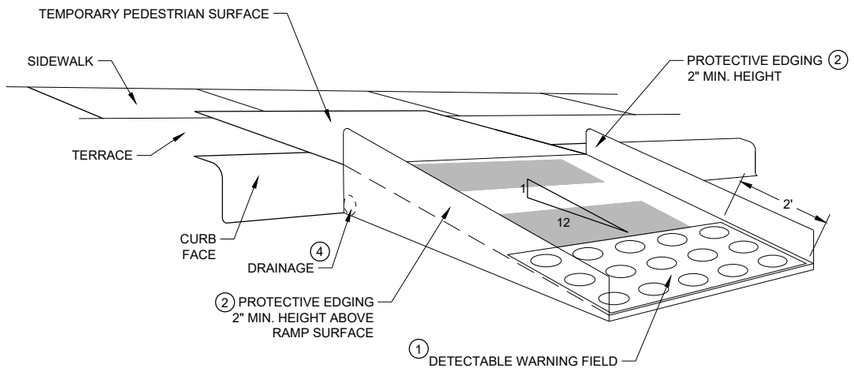
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

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

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

6

SDD 15D30 - 09c

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

GENERAL NOTES

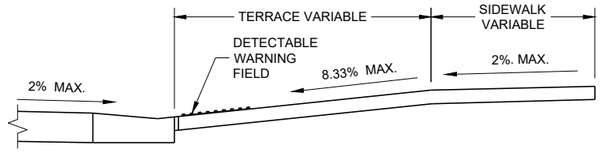
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

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

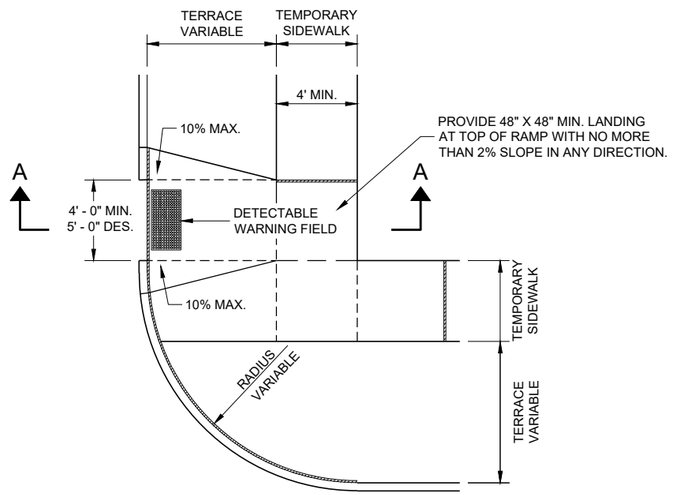
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



SECTION A - A



PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

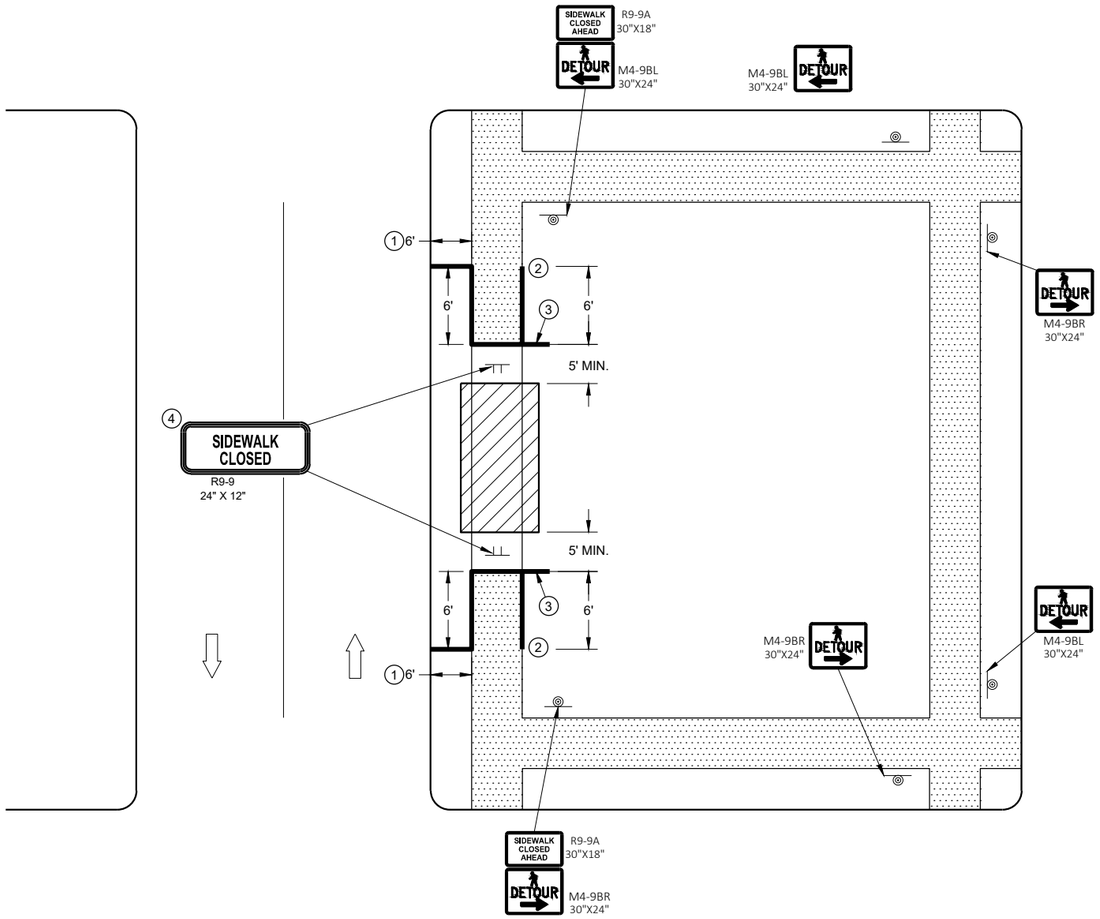
FHWA

6

SDD 15D30-09d

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

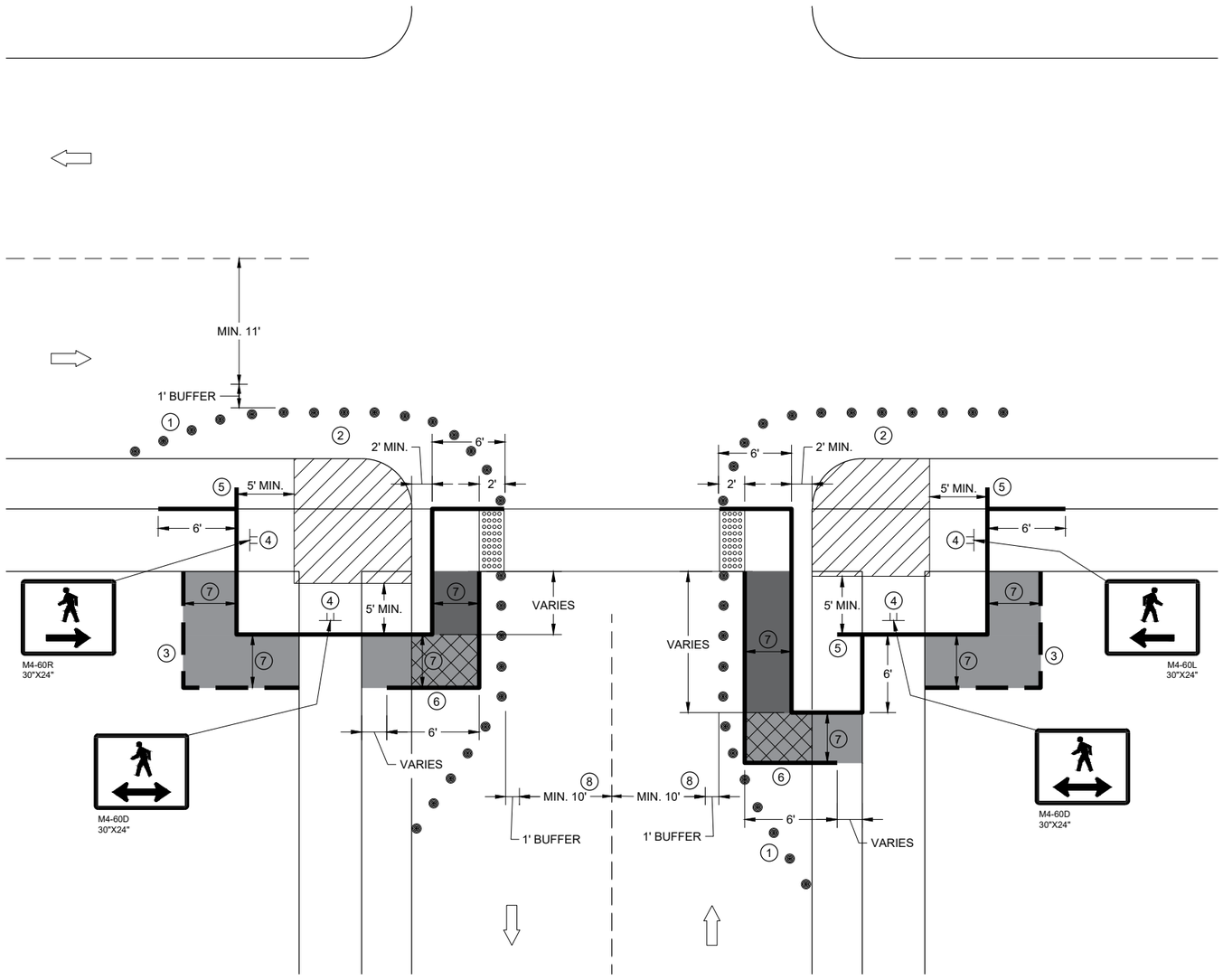
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS

(3) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(4) MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.

(5) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.

(6) IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.

(7) 4 FEET MINIMUM, 5 FEET DESIRABLE

(8) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

SDD 15D30 - 09i

6

LEGEND

SIGN ON PERMANENT SUPPORT

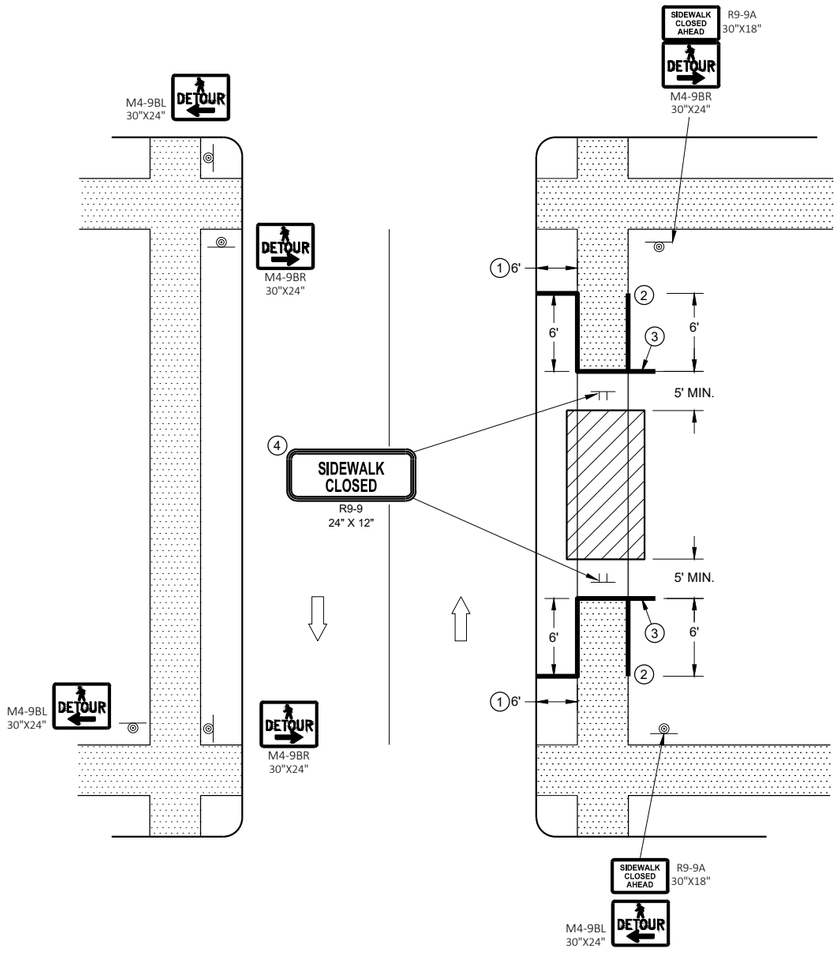
SIGN ON TEMPORARY SUPPORT

UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC



SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

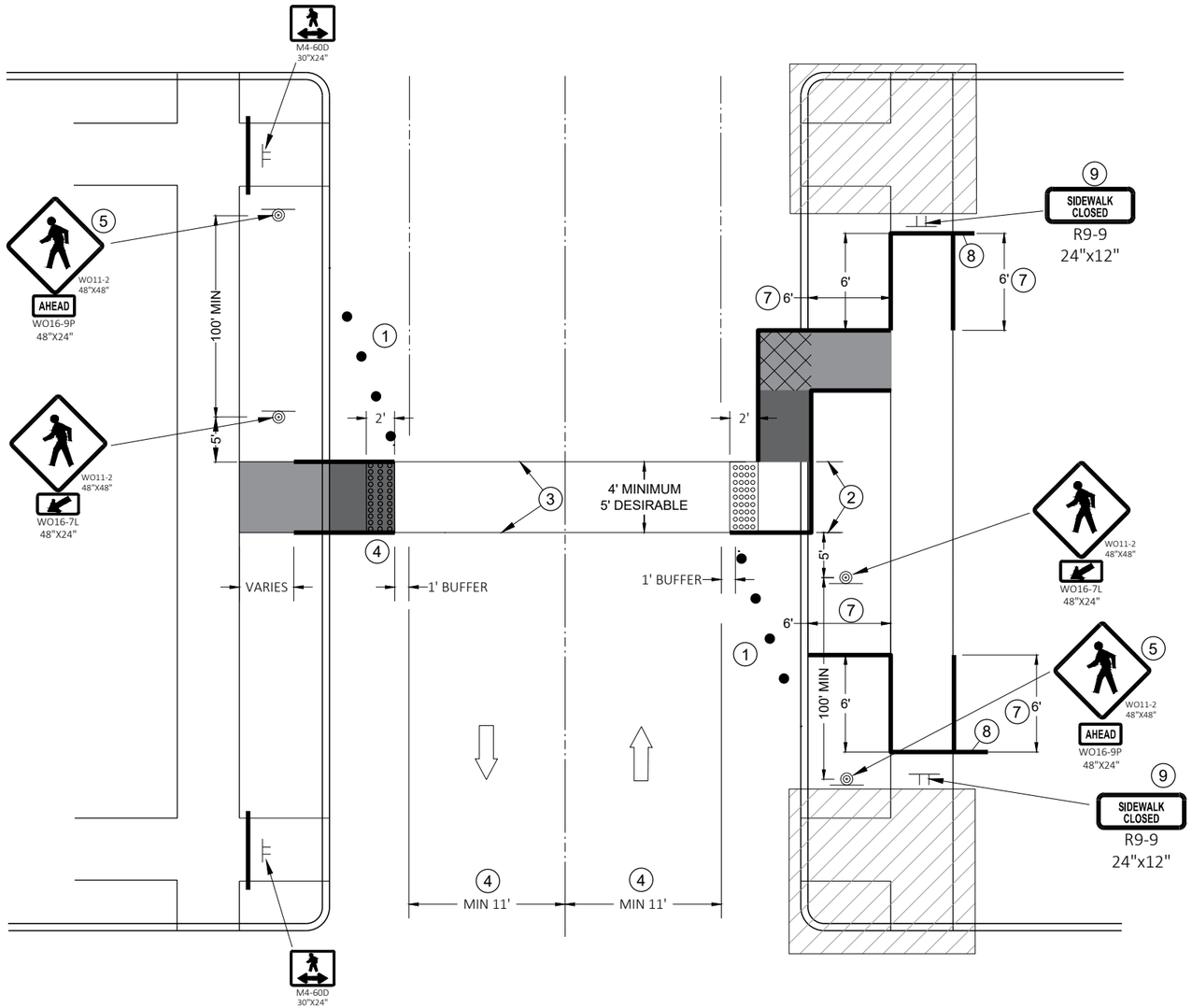
PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

SDD 15D30 - 09k



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

(1) SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) 4 FEET MINIMUM, 5 FEET DESIRABLE.

(3) WHITE 6" TEMPORARY PAVEMENT MARKING.

(4) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.

(5) IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.

(6) IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.

(7) PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.

(8) IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.

(9) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

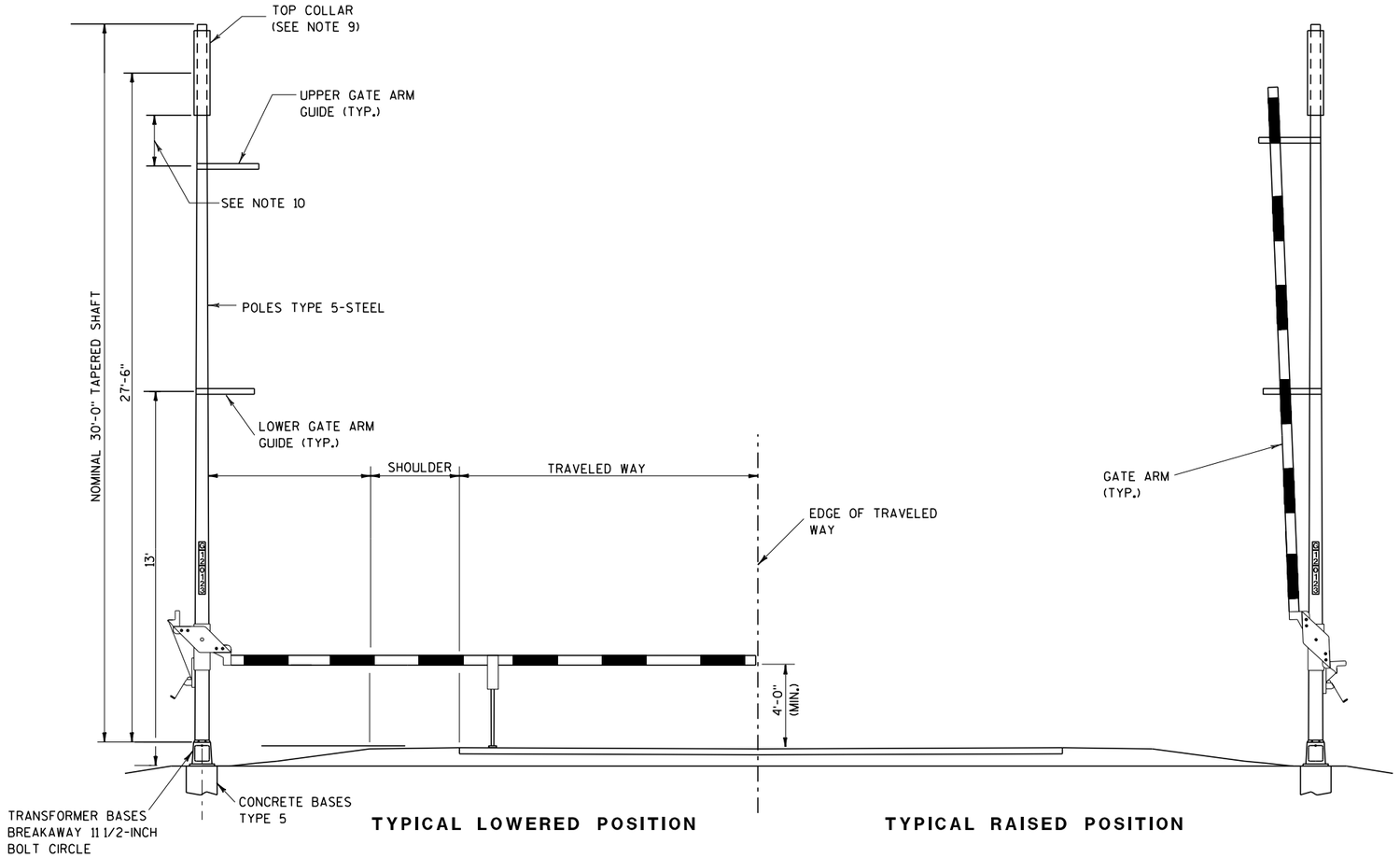
LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

6

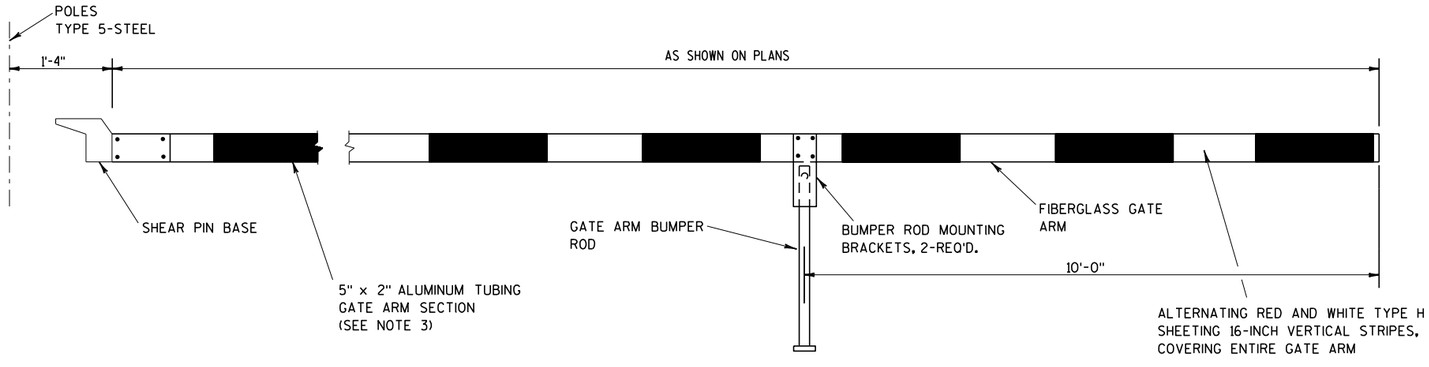
SDD 15D30 - 09L

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



TYPICAL LOWERED POSITION

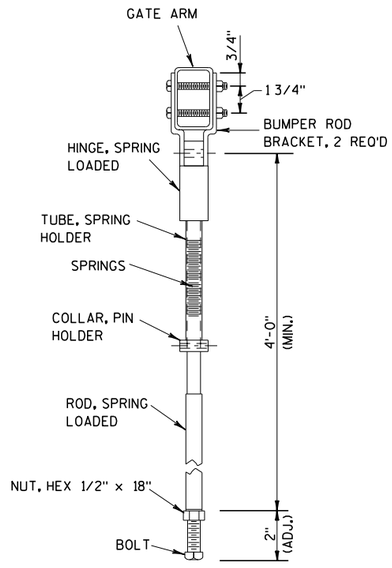
TYPICAL RAISED POSITION



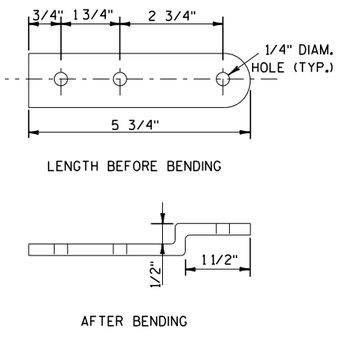
GATE DETAIL

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

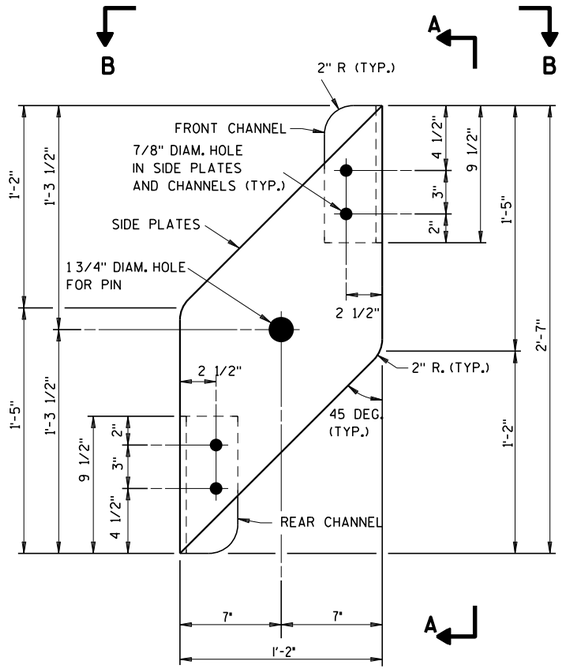


BUMPER ROD MOUNTING
BRACKET DETAIL

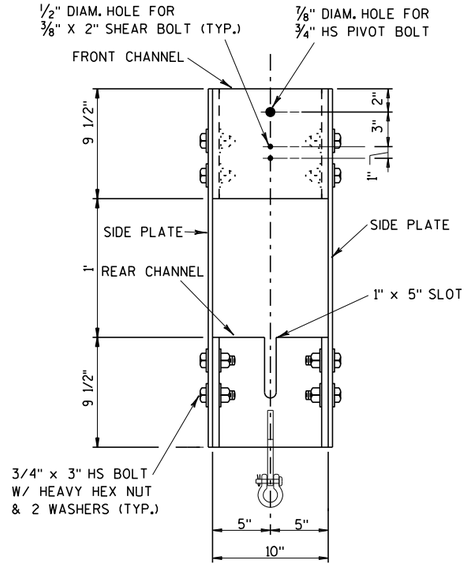
RAMP GATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

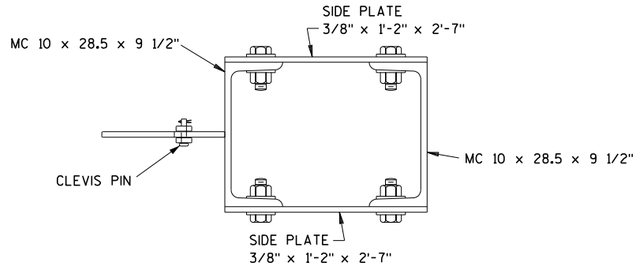
6
S.D.D. 15 D 35-3a



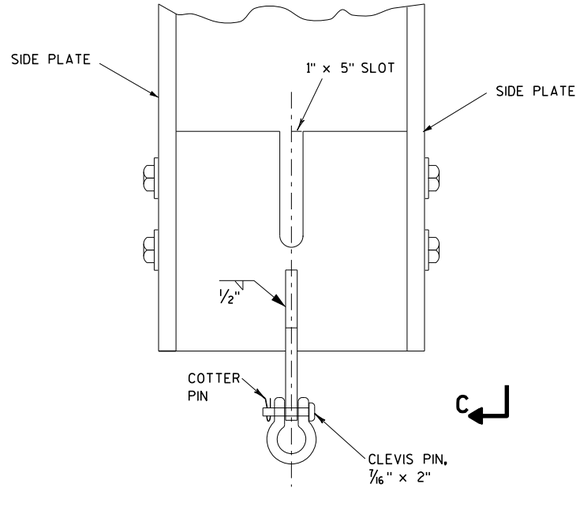
SIDE PLATE DETAIL



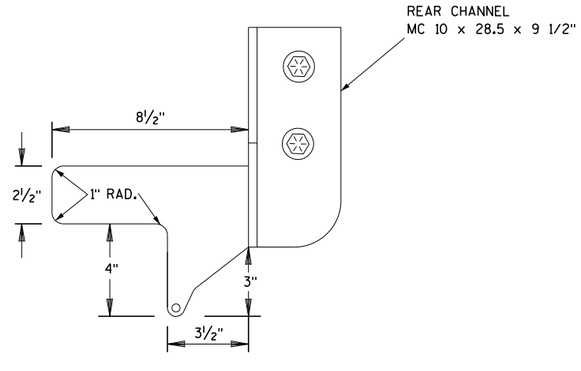
SECTION A-A



SECTION B-B



YOKE ASSEMBLY DETAIL



SECTION C-C

RAMP GATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 D 35-3b

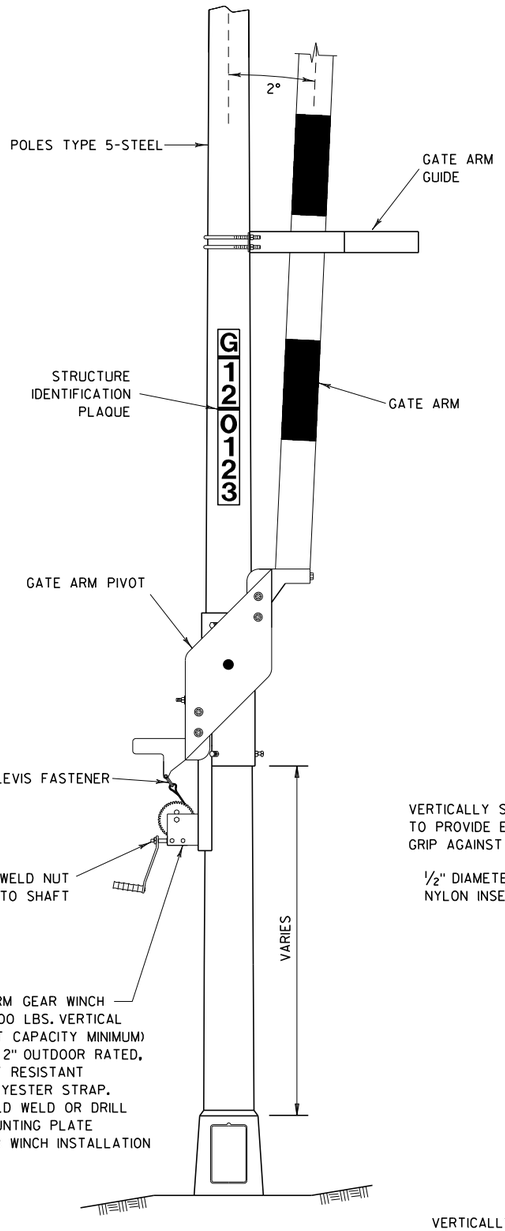
GENERAL NOTES

1. WHEN THE GATE IS FULLY RAISED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL.

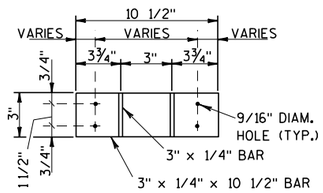
2. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL.

3. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.

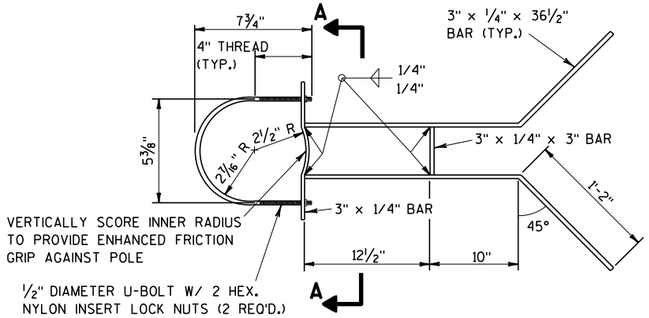
4. ALL BOLTS SHALL BE GALVANIZED AND CONFORM TO ASTM A307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A325. BOLTS OF ½" NOMINAL DIAMTER OR LESS MAY BE STAINLESS STEEL.



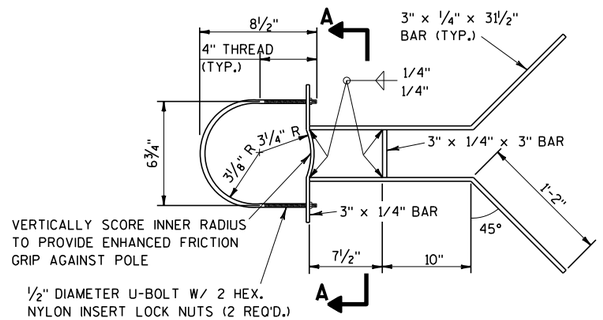
GATE PIVOT ASSEMBLY



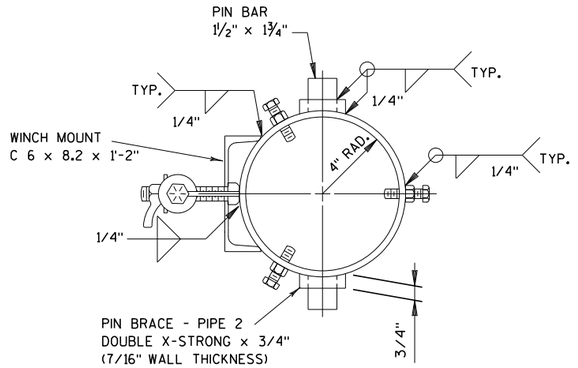
SECTION A-A
U-BOLTS NOT SHOWN



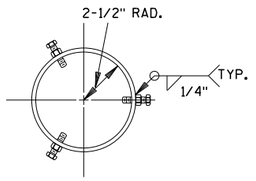
UPPER GATE ARM GUIDE DETAIL



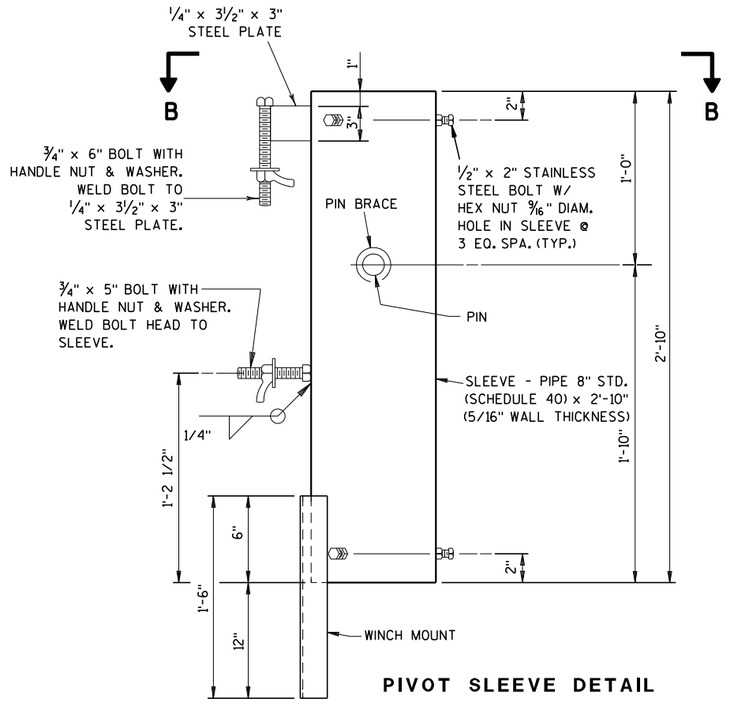
LOWER GATE ARM GUIDE DETAIL



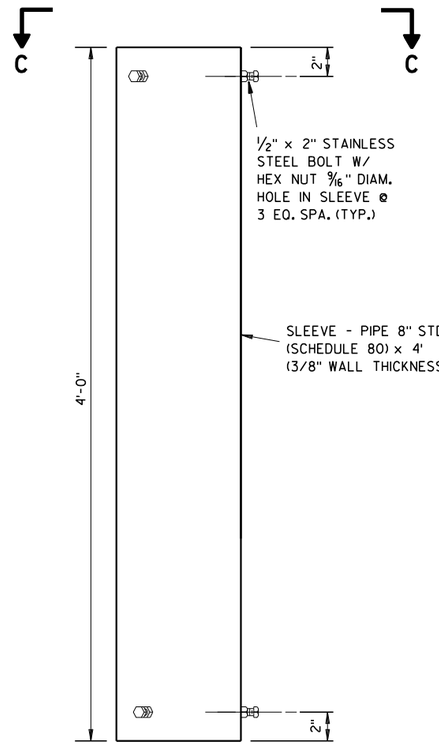
SECTION B-B



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

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					BUFFER SPACE (B) FEET
		10	11	12	13	14	
25	200	52	57	63	68	73	55
30	200	75	83	90	98	105	85
35	350	102	112	123	133	143	120
40	350	133	147	160	173	187	170
45	500	225	248	270	293	315	220

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

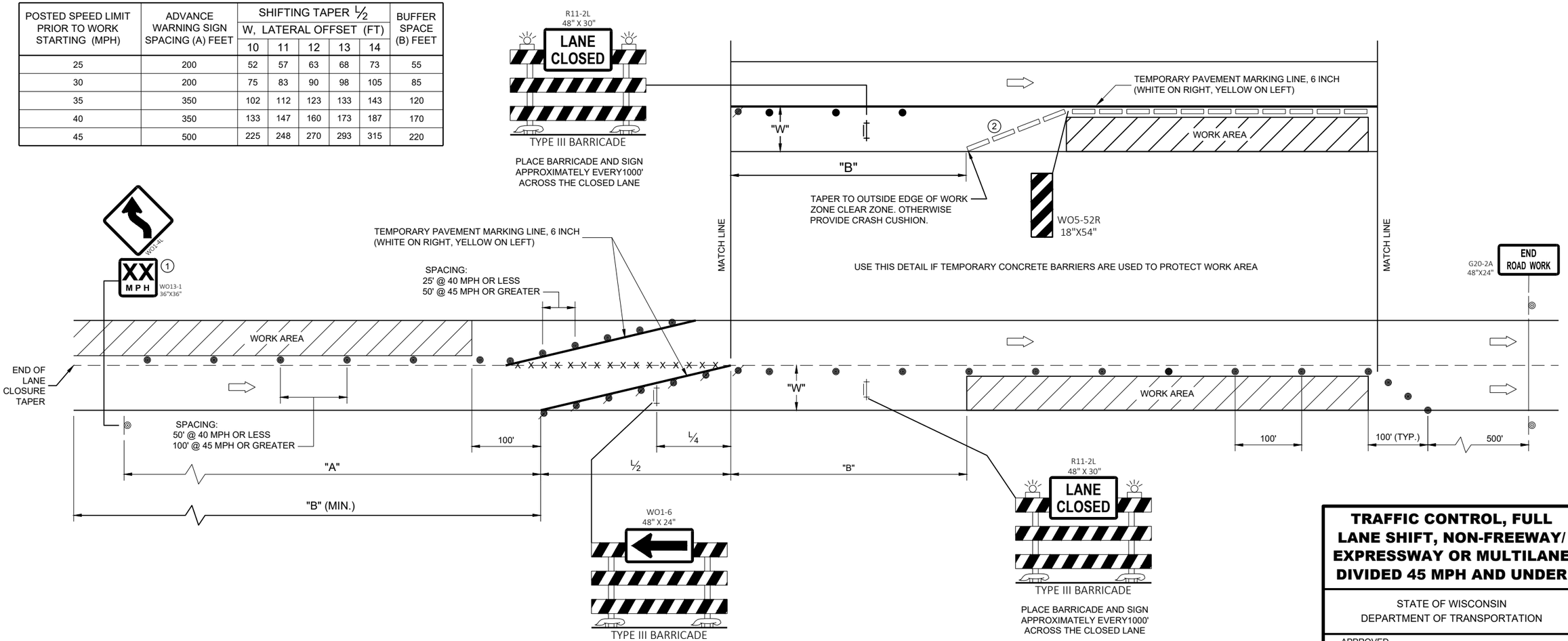
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER
SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL
CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(2) BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER



TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D40-05a

6

SDD 15D40-05a

LEGEND

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

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.

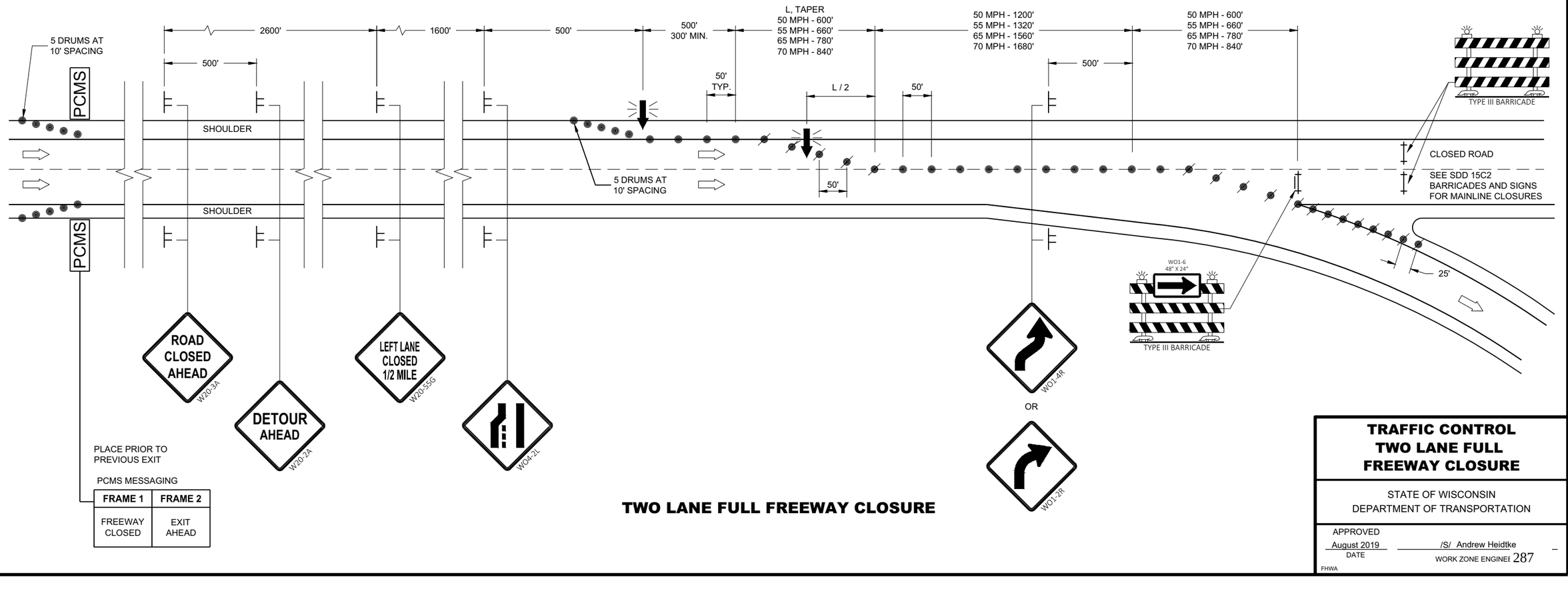
WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROL SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND / OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

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.



TWO LANE FULL FREEWAY CLOSURE

TRAFFIC CONTROL
TWO LANE FULL
FREEWAY CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

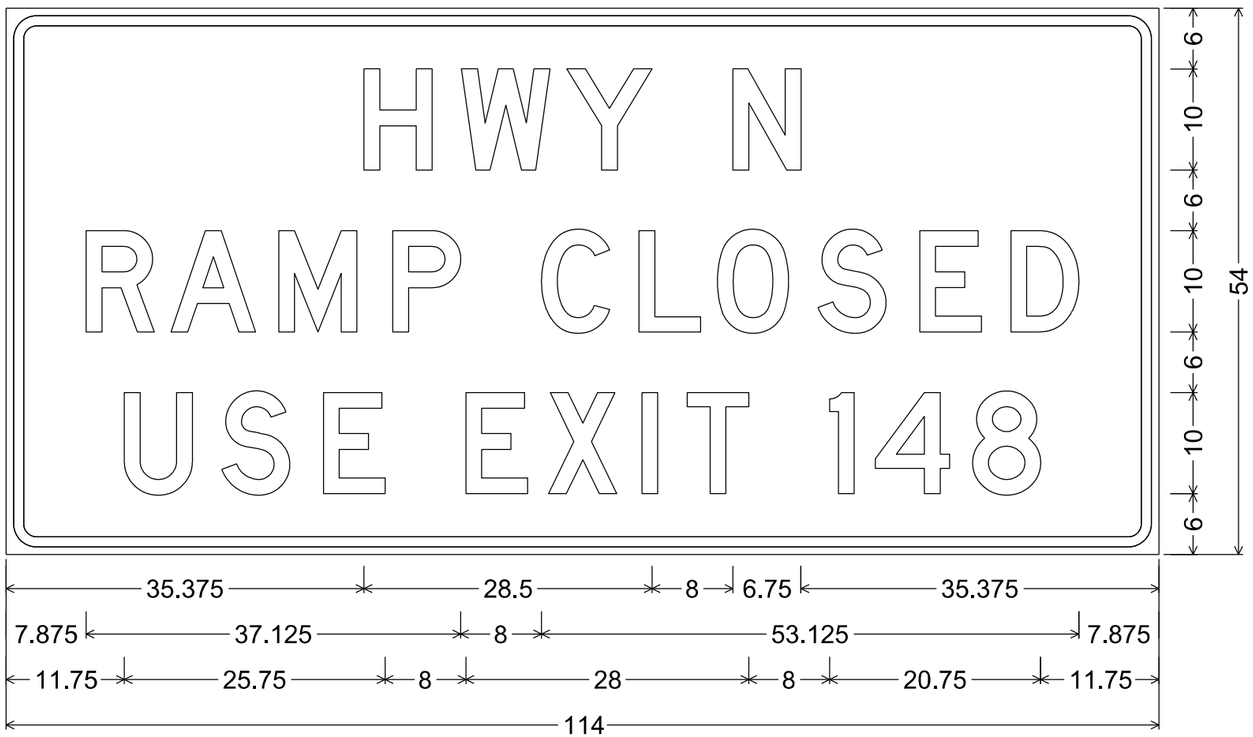
SDD 15D42 - 01

SDD 15D42 - 01

NOTES

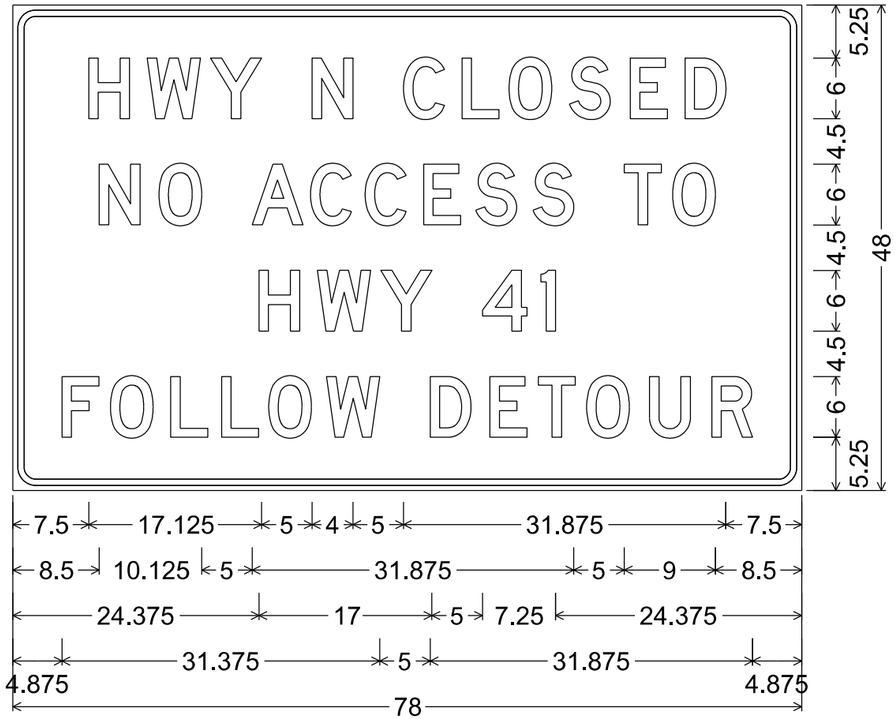
1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D

29



3.000" Radius, 1.000" Border, 0.750" Indent

30



2.250" Radius, 0.625" Border, 0.500" Indent

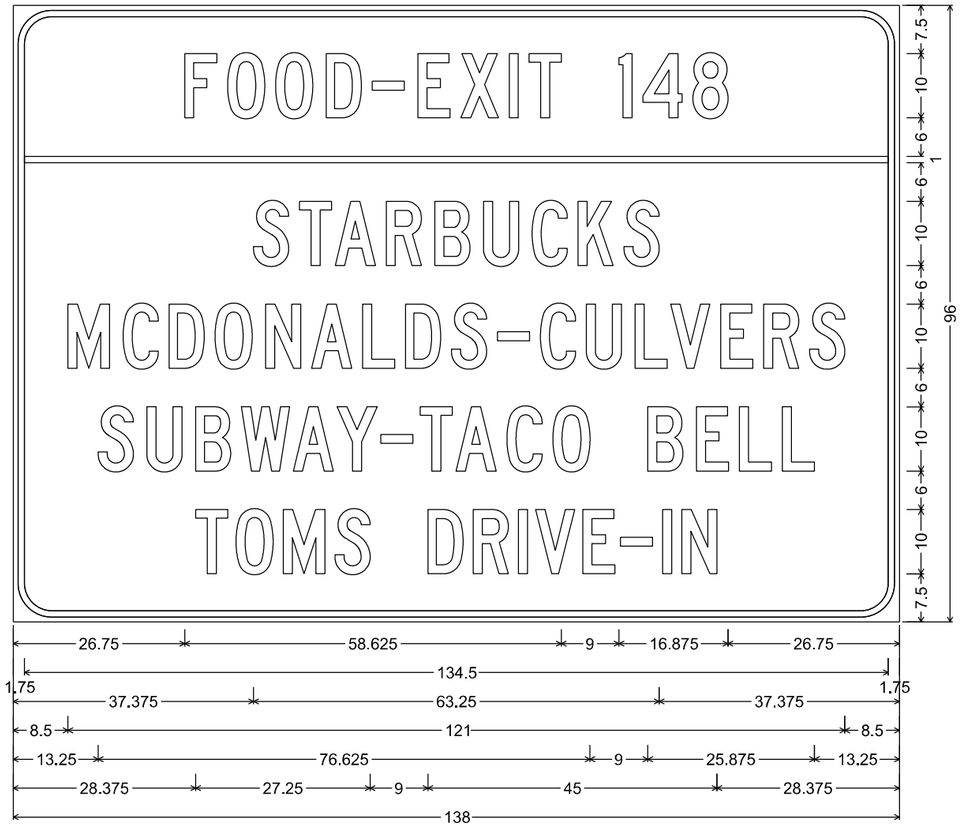
7

7

NOTES

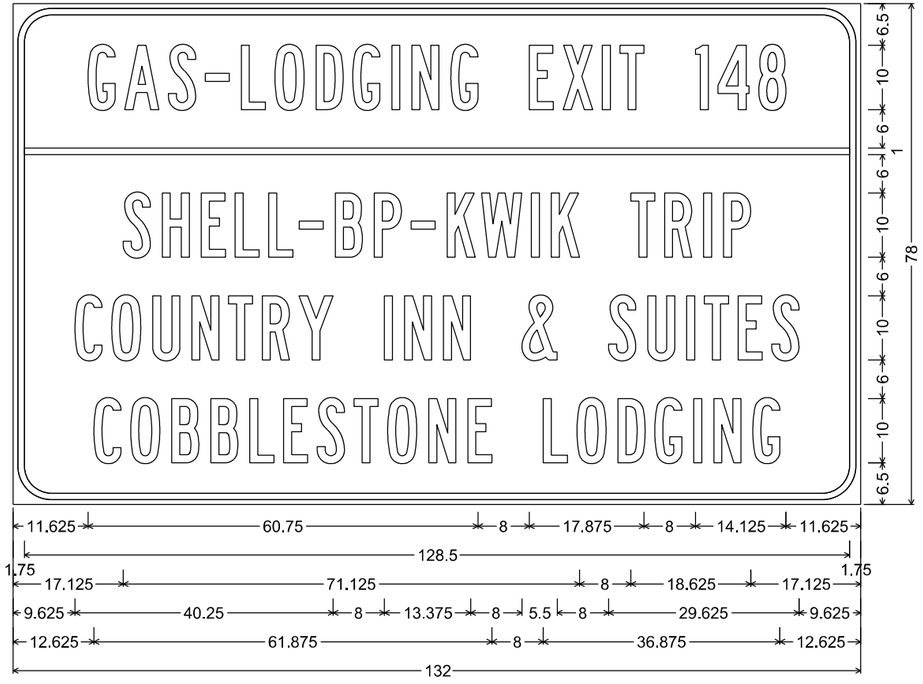
1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C or as noted

31



6.000" Radius, 1.000" Border, 0.750" Indent

32



6.000" Radius, 1.000" Border, 0.750" Indent
"GAS-LODGING", B; "EXIT", B; "148", B; "SHELL-BP-KWIK", B; "TRIP", B; "COUNTRY", B;
"INN", B; "&", B; "SUITES", B; "COBBLESTONE", B; "LODGING", B

7

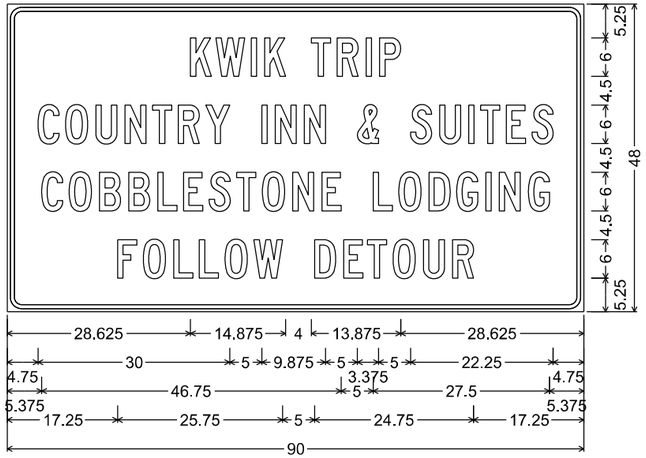
7

PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	TEMPORARY SIGNING	SHEET NO: 289	E

NOTES

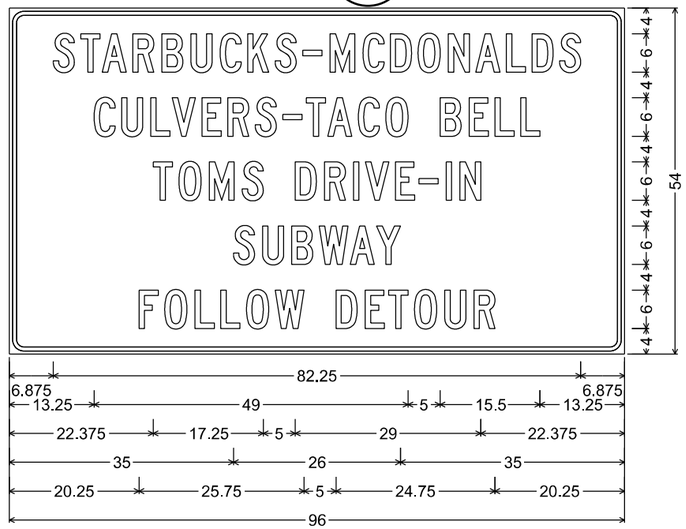
1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C

33



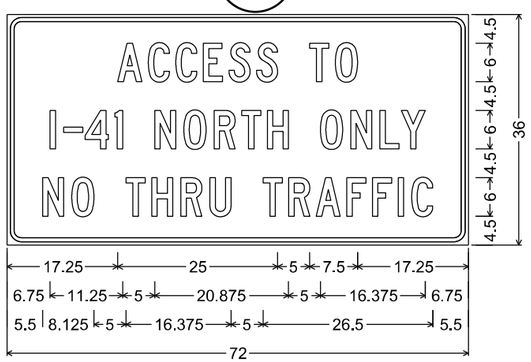
2.250" Radius, 0.625" Border, 0.500" Indent

34



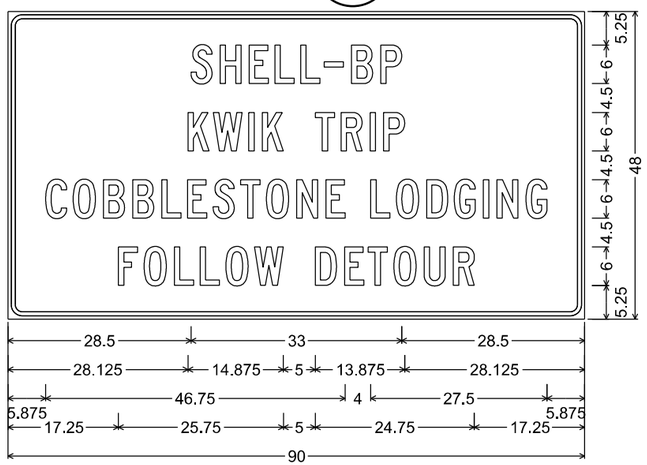
2.250" Radius, 0.625" Border, 0.500" Indent

36



2.250" Radius, 0.625" Border, 0.500" Indent

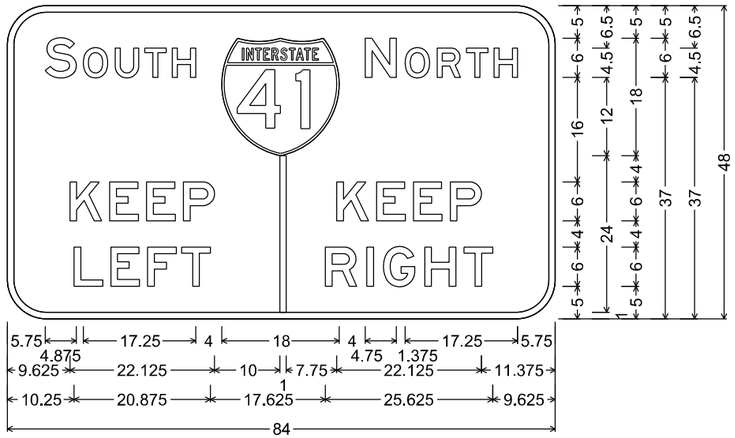
35



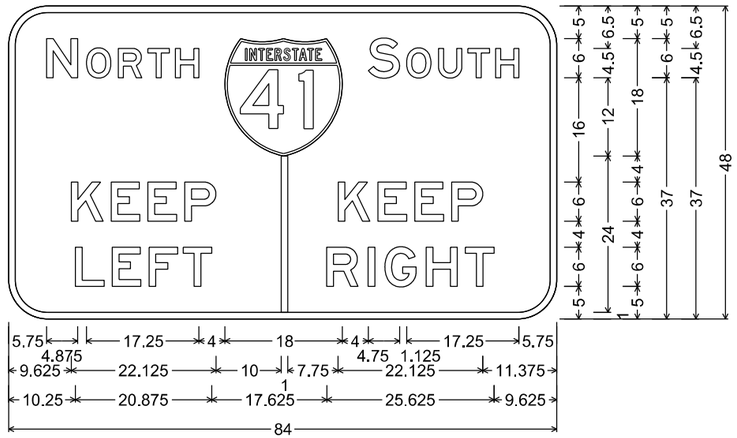
2.250" Radius, 0.625" Border, 0.500" Indent

NOTES

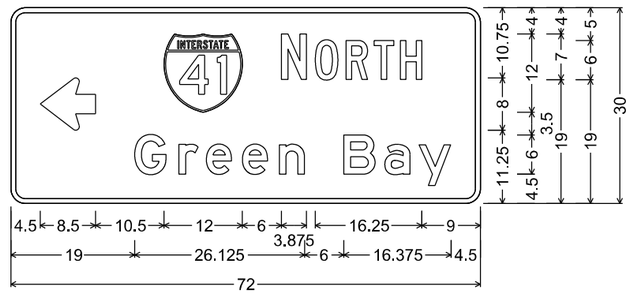
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E or as noted.



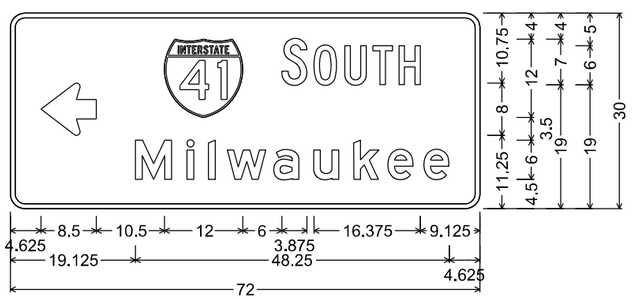
D1-72; 6.000" Radius, 1.000" Border



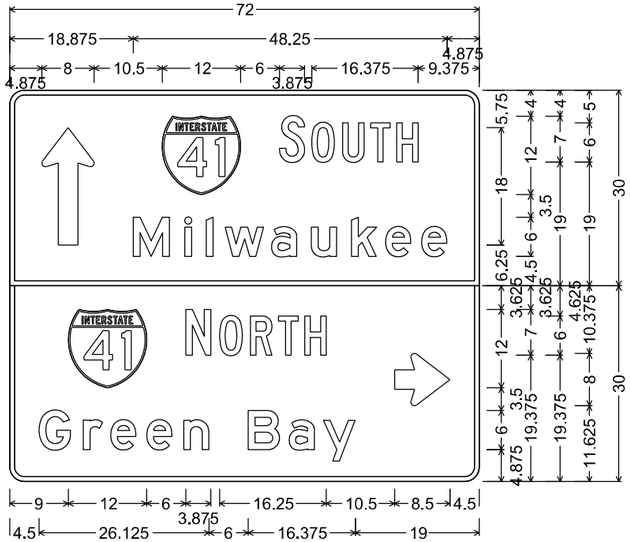
D1-72; 6.000" Radius, 1.000" Border



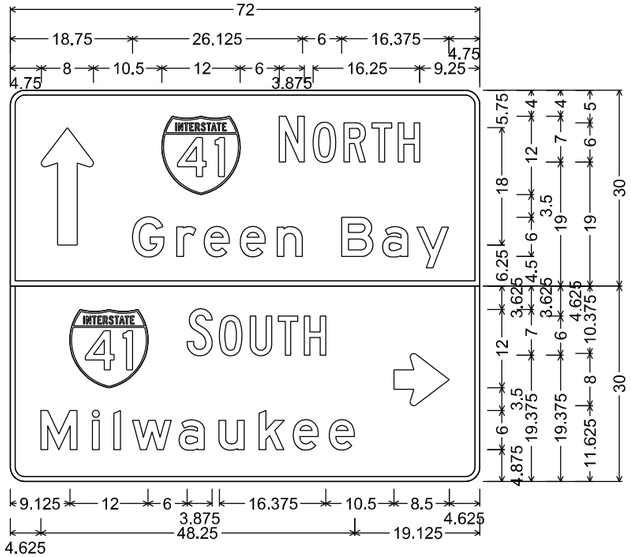
D1-70; 2.250" Radius, 0.750" Border
"NORTH", C



D1-70; 2.250" Radius, 0.750" Border
"SOUTH", C

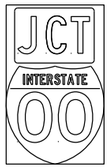


D1-71; 2.250" Radius, 0.750" Border
"SOUTH", C
2.250" Radius, 0.750" Border
"NORTH", C

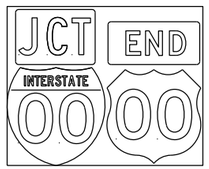


D1-71; 2.250" Radius, 0.750" Border
"NORTH", C
2.250" Radius, 0.750" Border
"SOUTH", C

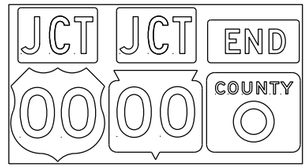
TYPICAL ASSEMBLIES



J1-1



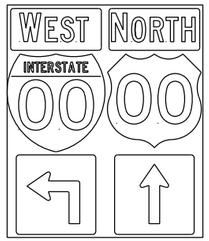
J1-2



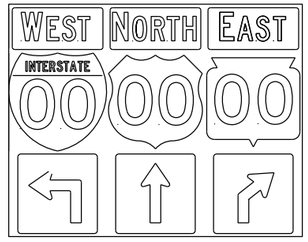
J1-3

JR1-1

J2-1

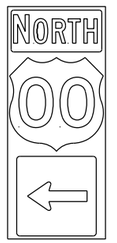


J2-2

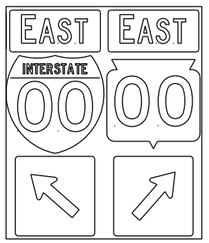


J2-3

JV
(Typical Vertical J-Assembly
See Note 10 and 11)



J3-1



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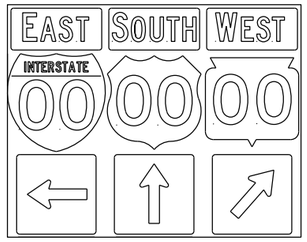
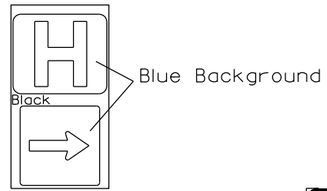
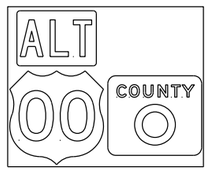


J3-3

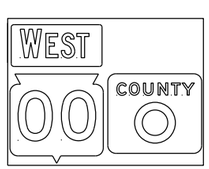


JH-1

J4-1

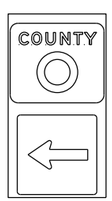


J4-2



J4-2

J12-1



J13-1

J32-1

J33-1

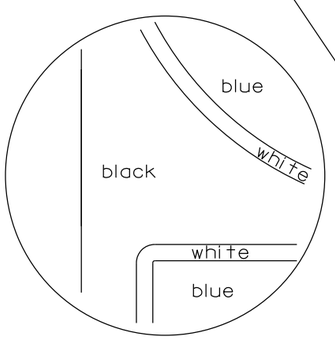
J22-1

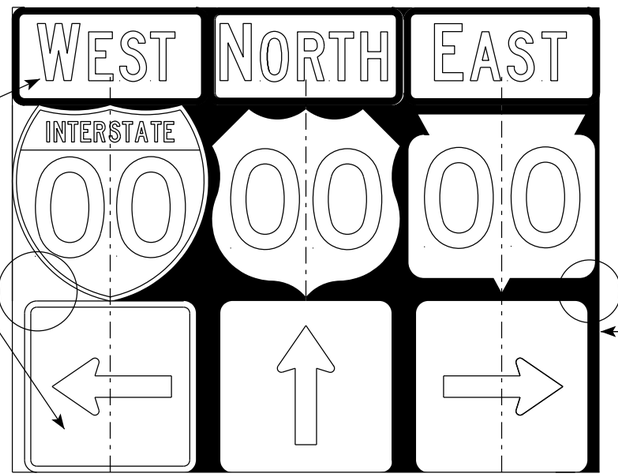
J23-1

JR13-1

JR23-1

JR99-1





NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/21 PLATE NO. A2-1S.9

PROJECT NO:

SHEET NO: 292 E

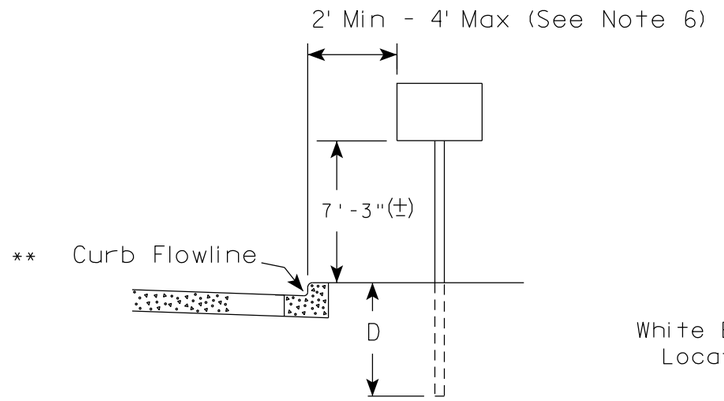
FILE NAME : C:\CAEfiles\Projects\tr_stdplate_A21S.dgn PLOT DATE : 18-MAR 2021 1:37 PLOT BY : mscj9h PLOT NAME :

WISDOT/CADDS SHEET 42

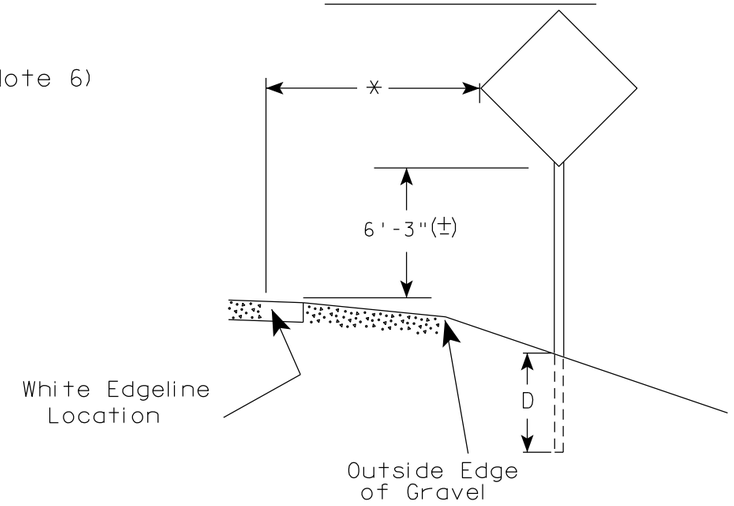
7

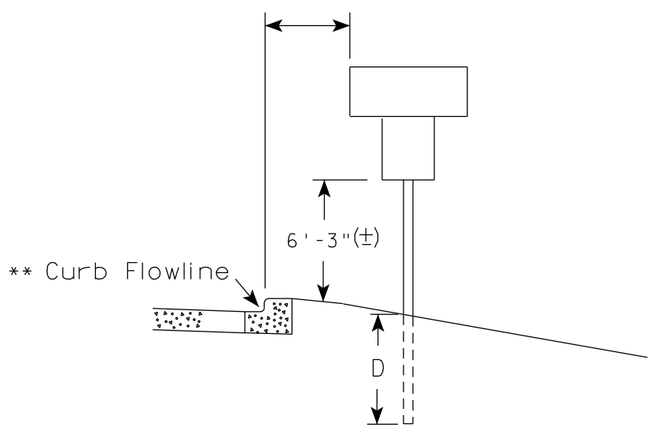
7

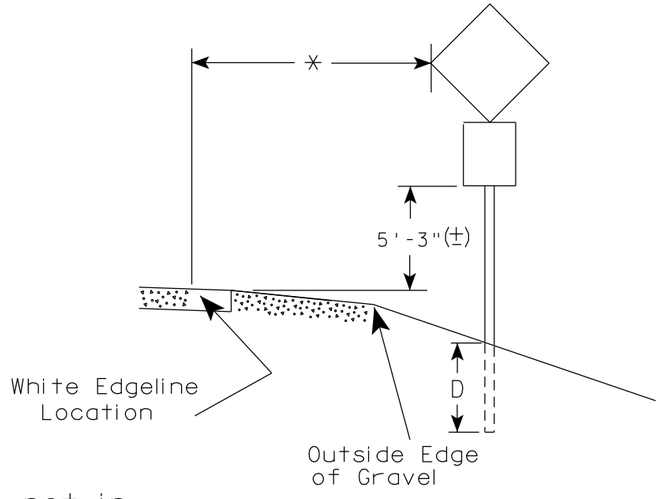
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

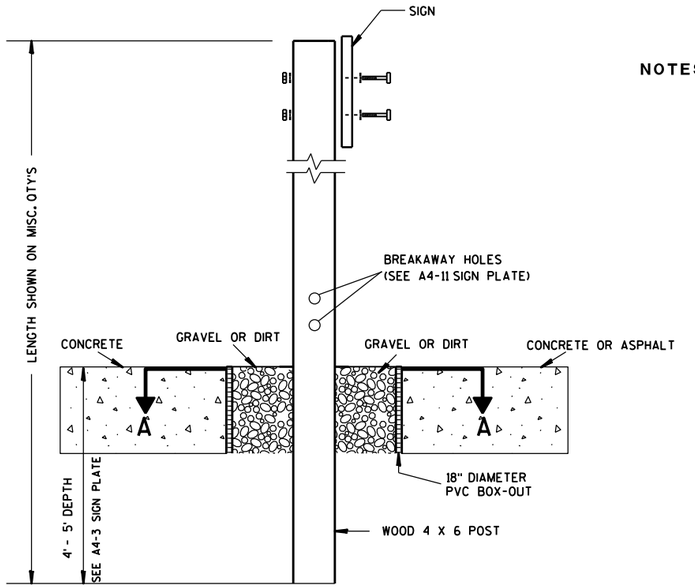
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

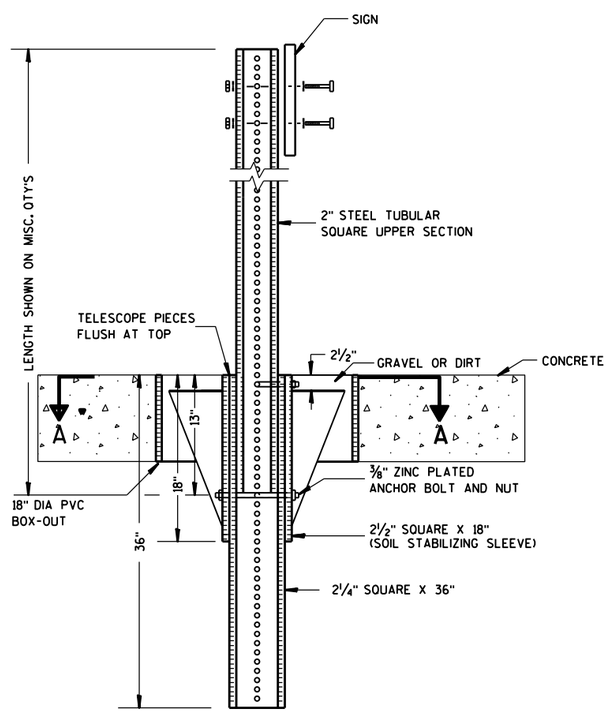
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 293	E



ELEVATION VIEW

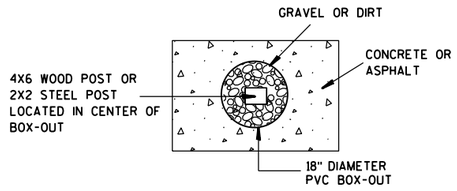
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

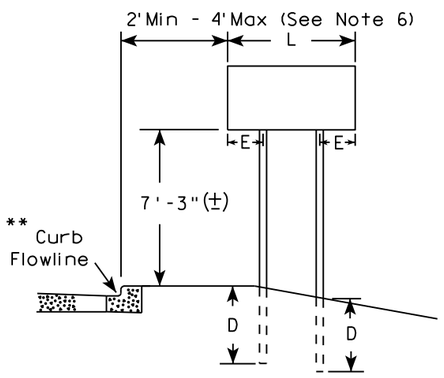
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

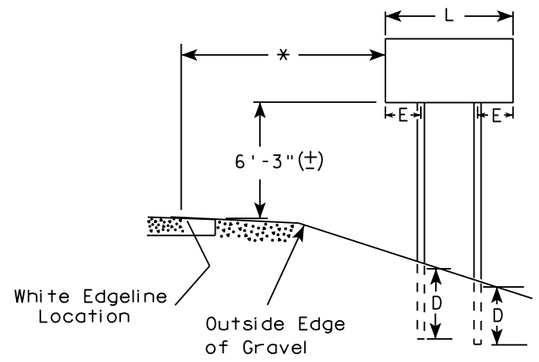
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

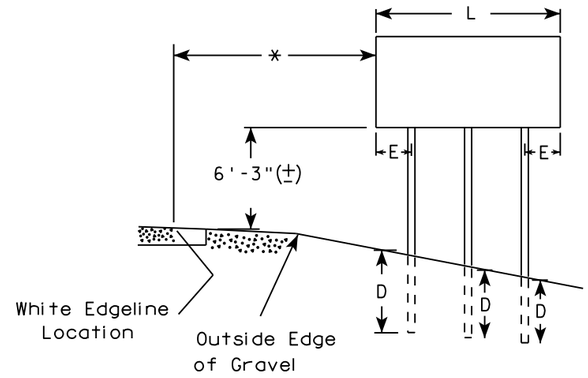
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

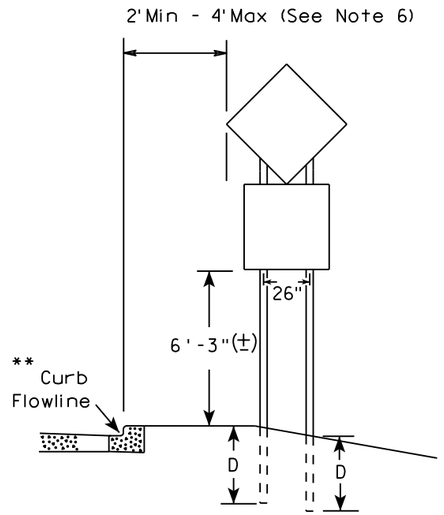
URBAN AREA



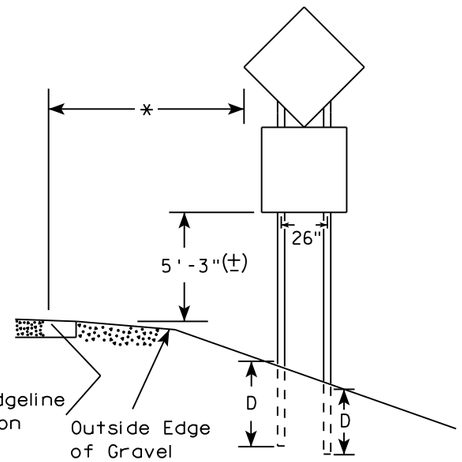
RURAL AREA (See Note 3)







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" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

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

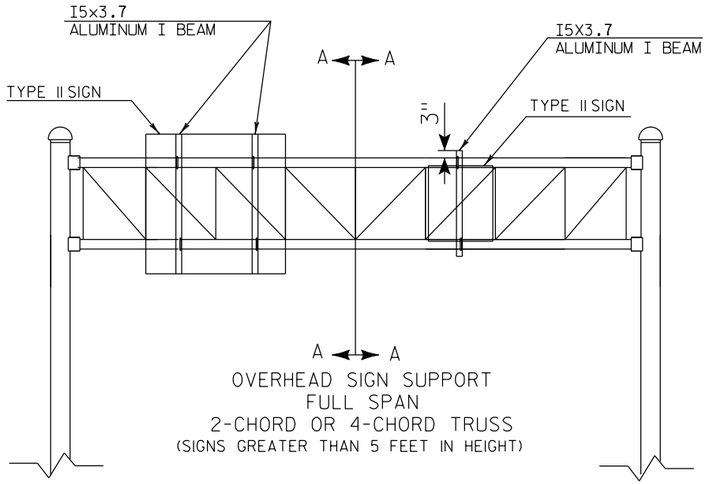
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

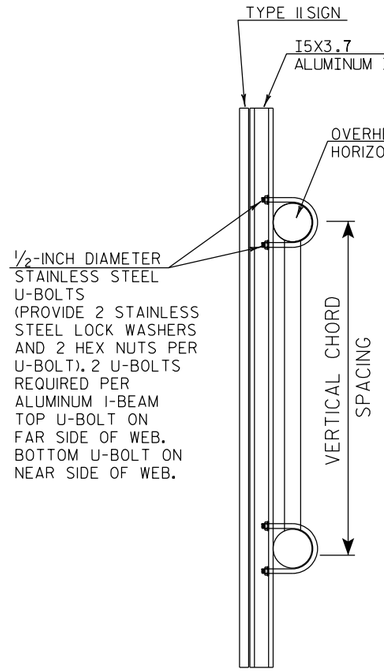
APPROVED Matthew R Rauch
For State Traffic Engineer

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

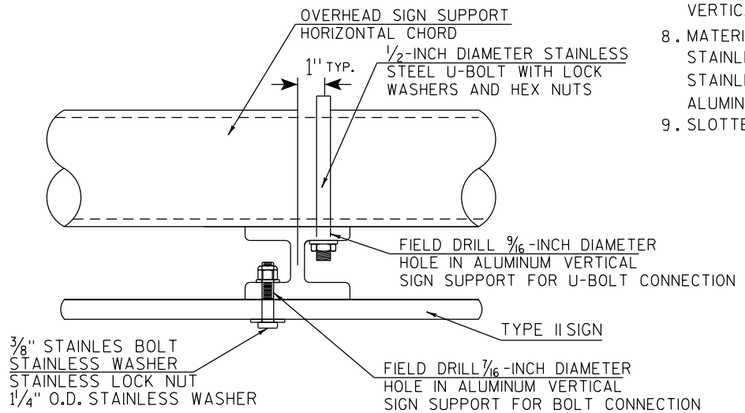
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 295	E



OVERHEAD SIGN SUPPORT
FULL SPAN
2-CHORD OR 4-CHORD TRUSS
(SIGNS GREATER THAN 5 FEET IN HEIGHT)



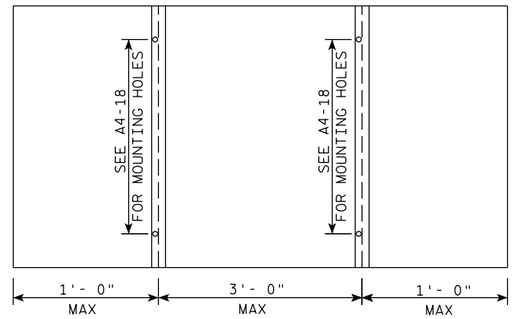
CUT SECTION A-A



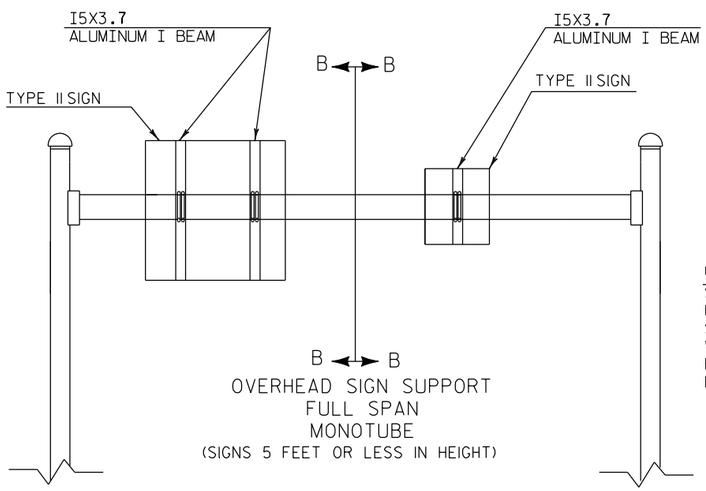
TYPICAL SIGN CONNECTION FOR
2-CHORD OR 4-CHORD TRUSS
PLAN VIEW

GENERAL NOTES

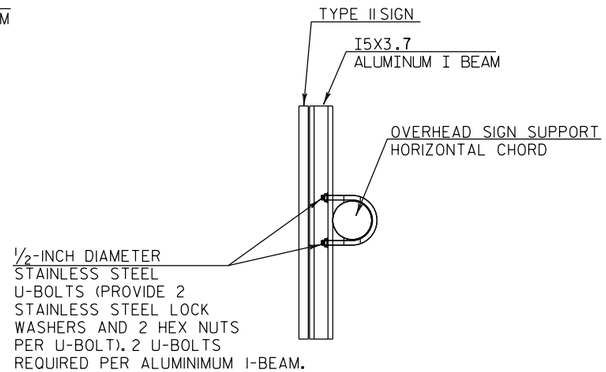
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE STAINLESS BOLTS AT BOLT HOLES IN SIGN PANEL PER SIGN PLATE A4-18.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
   STAINLESS STEEL U-BOLTS, BOLTS, AND LOCKWASHERS ASTM 304.
   STAINLESS STEEL HEX NUTS ASTM A276.
   ALUMINUM I-BEAMS ARE 6061-T6.
9. SLOTTED HOLES IN I-BEAMS ARE NOT ALLOWED



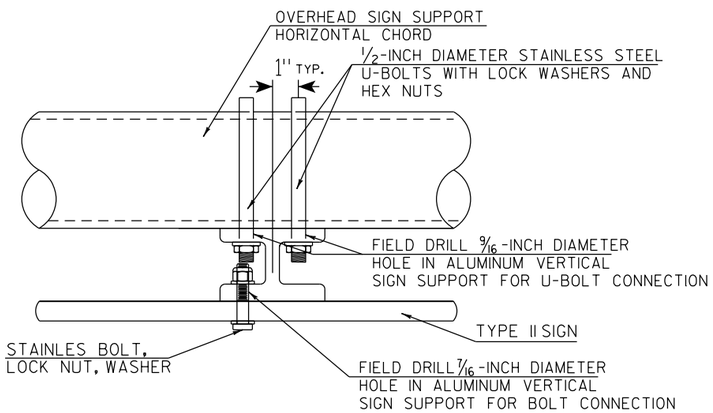
SPACING OF I5X3.7 ALUMINUM
MULTIPLE VERTICAL SIGN SUPPORTS



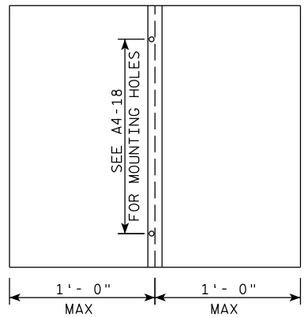
OVERHEAD SIGN SUPPORT
FULL SPAN
MONOTUBE
(SIGNS 5 FEET OR LESS IN HEIGHT)



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
MONOTUBE
PLAN VIEW



SPACING OF I5X3.7 ALUMINUM
SINGLE VERTICAL SIGN SUPPORT

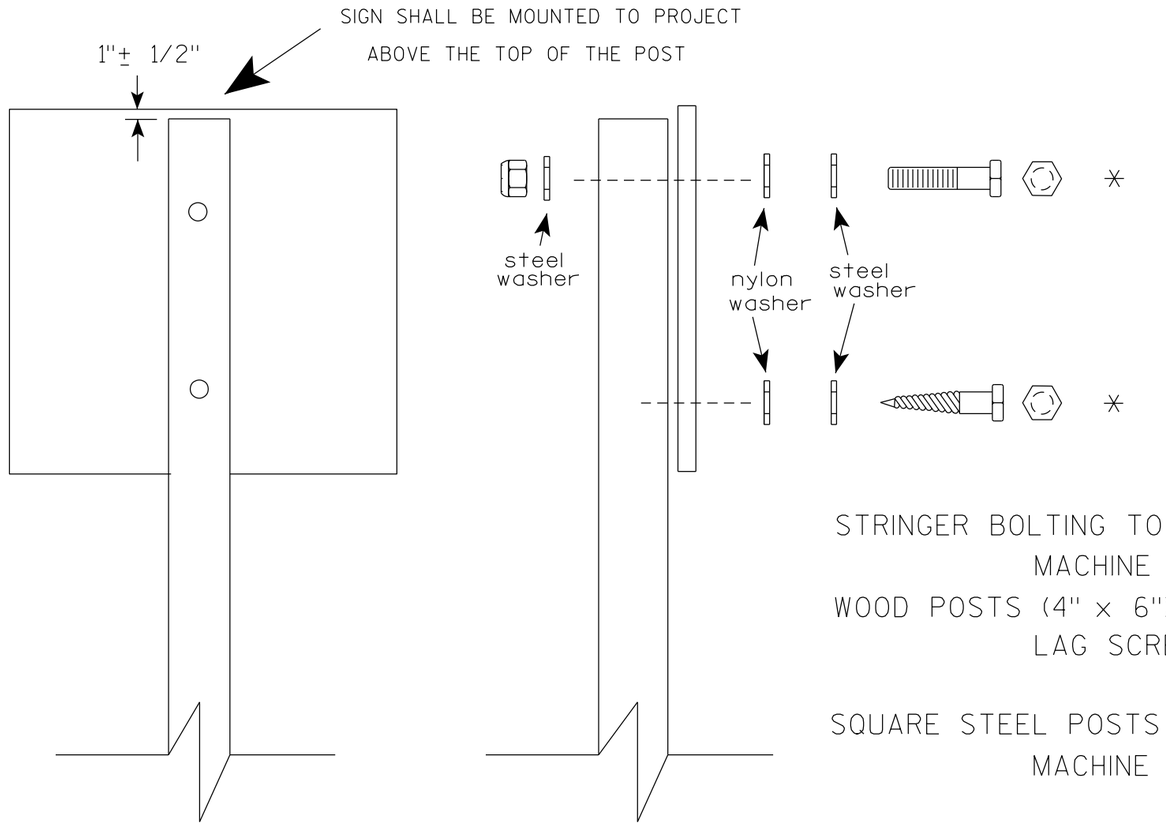
TYPE II SIGN CONNECTION
TO OVERHEAD SIGN SUPPORT

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-7B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 296	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

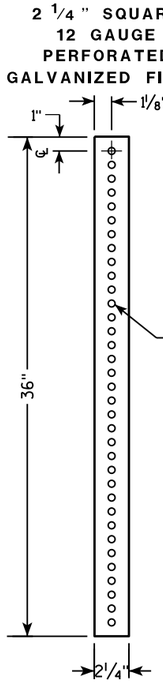
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

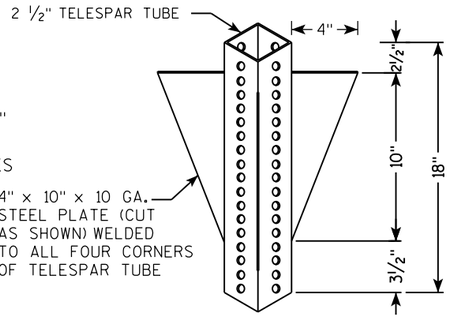
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

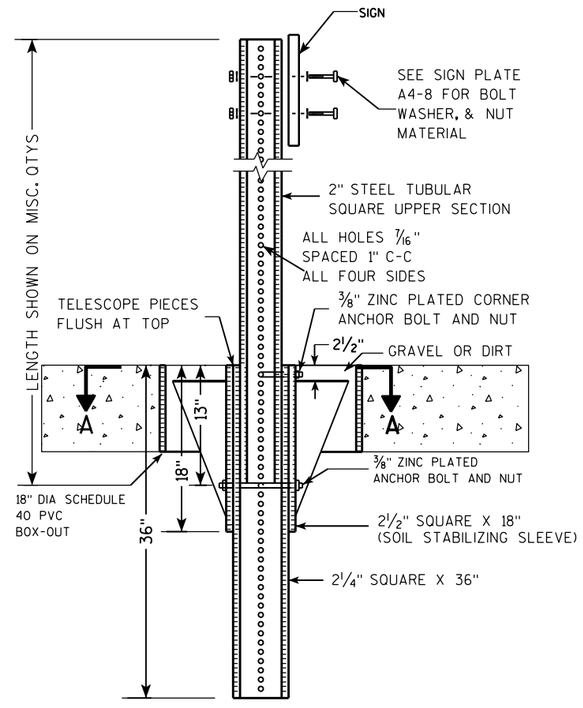
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



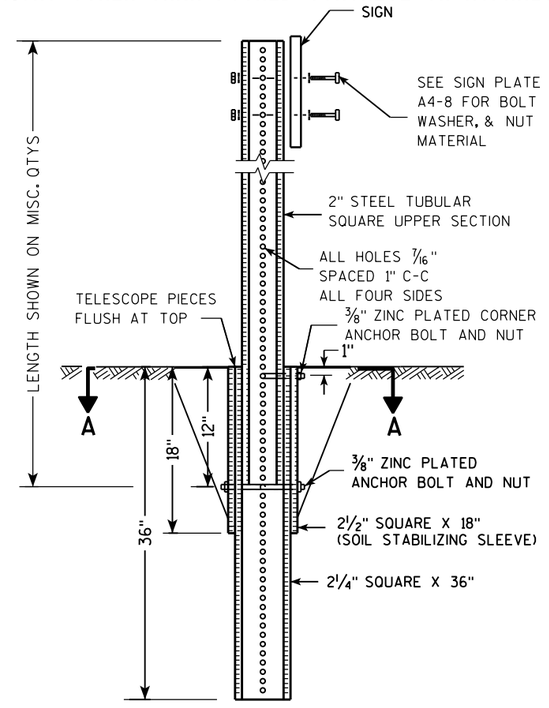
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

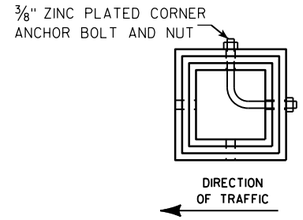


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

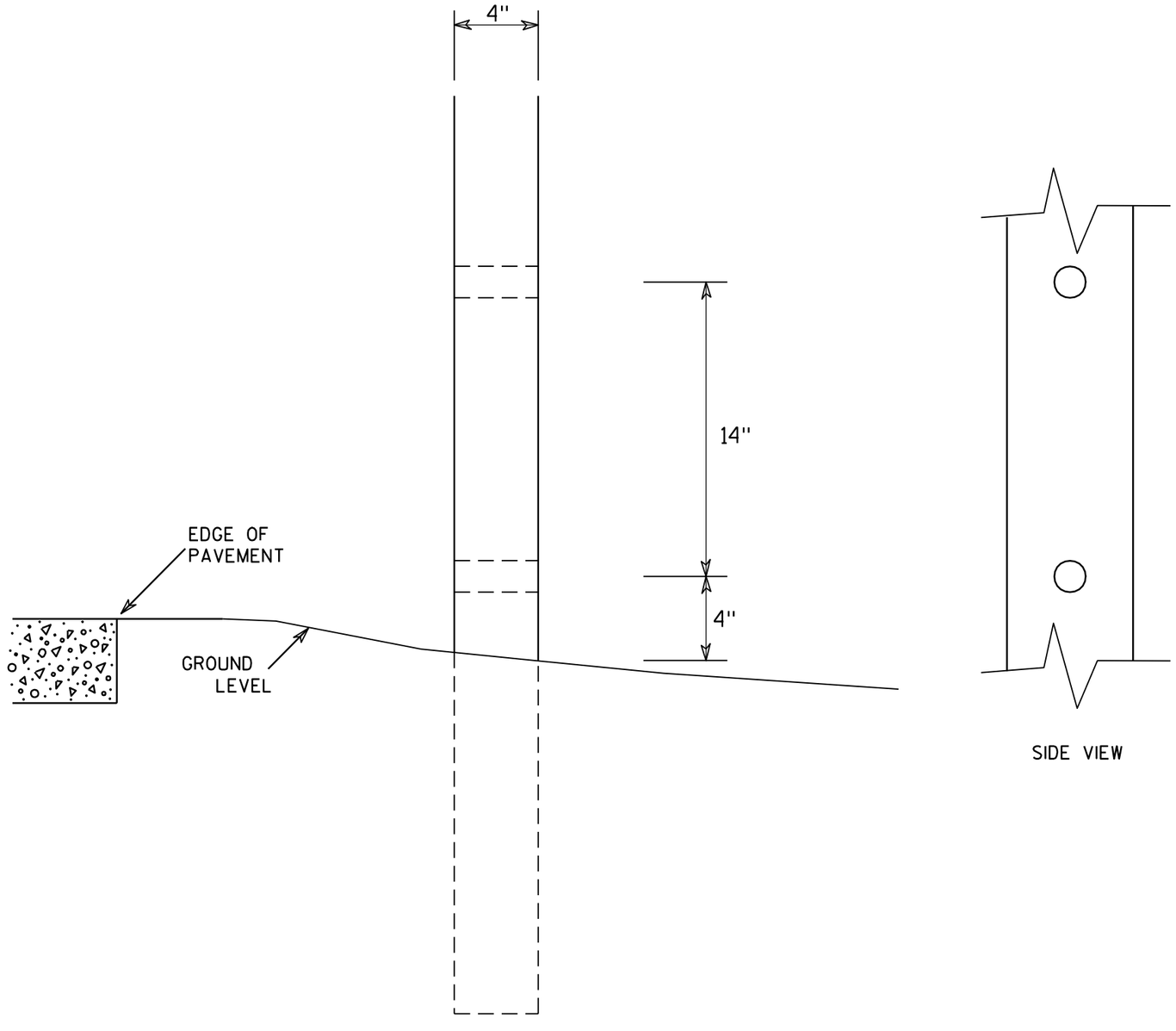
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 298 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

7

7

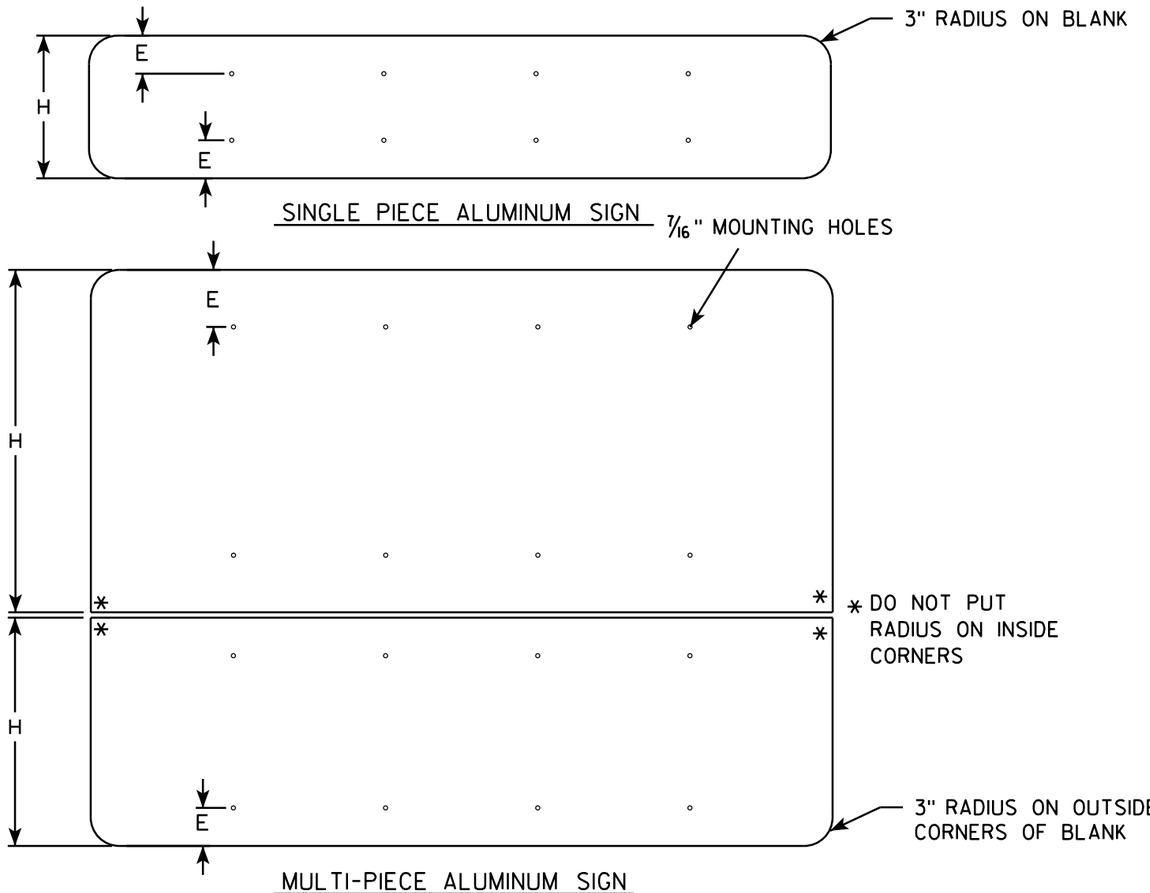
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

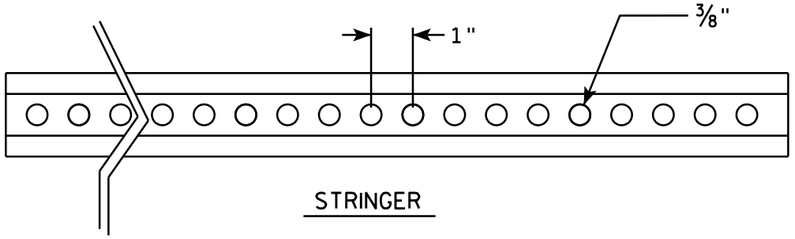
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 299	E



GENERAL NOTES

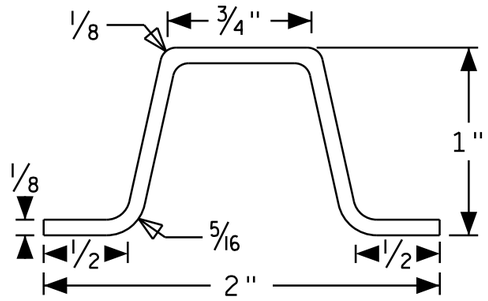
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 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"

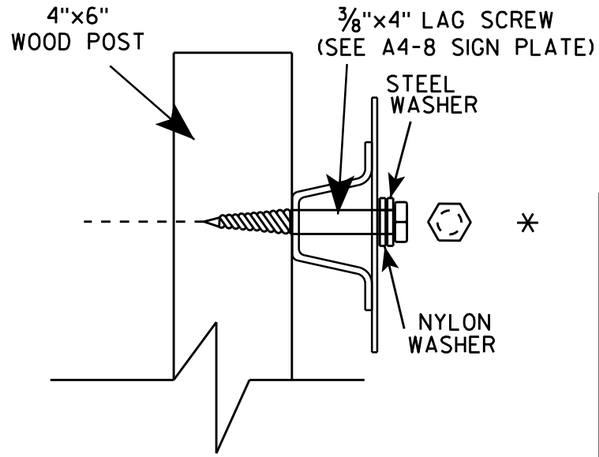


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

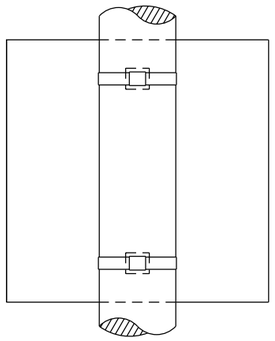
DATE 4/26/16 PLATE NO A4-18.1

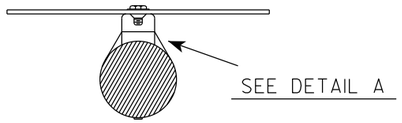
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

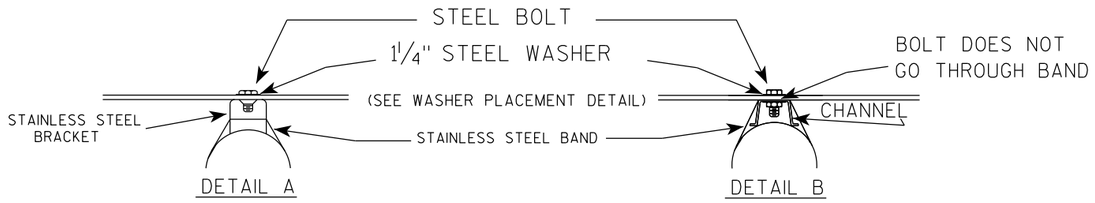
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000

BANDING

SINGLE SIGN



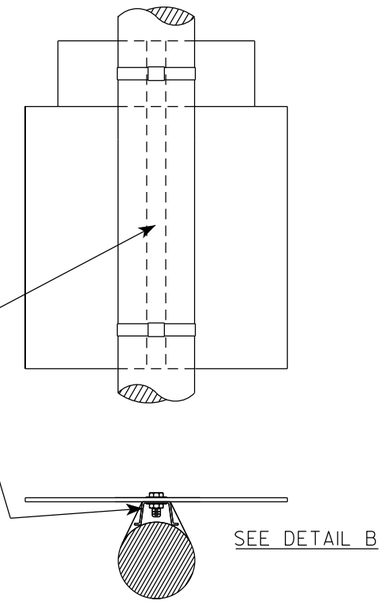




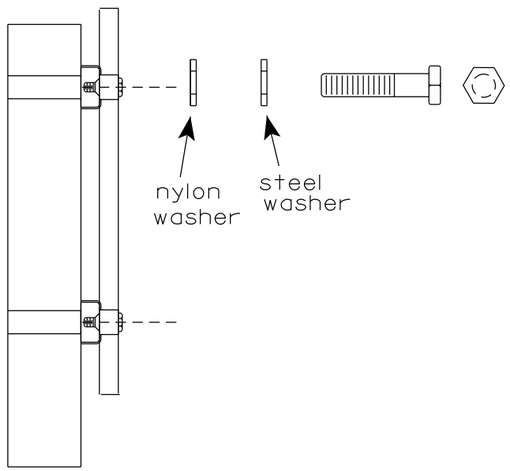
GENERAL NOTES

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

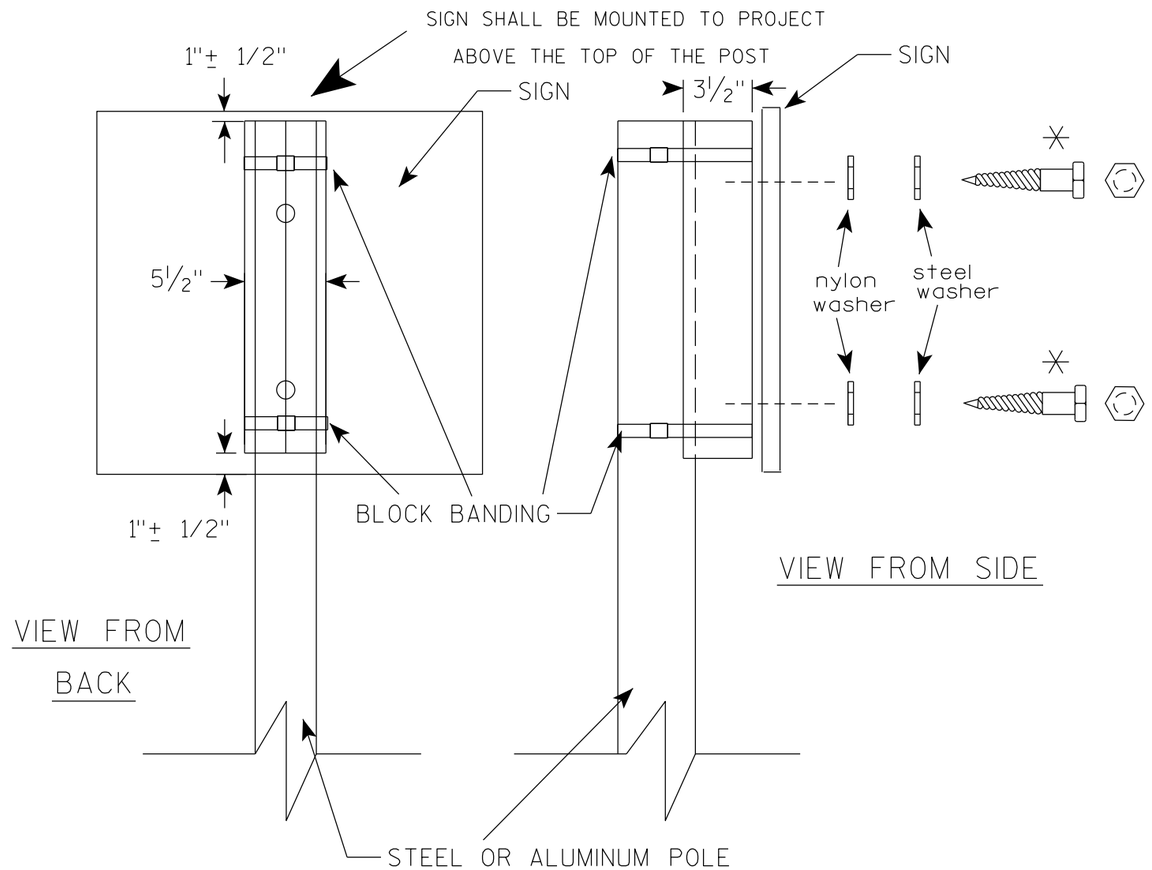
WISCONSIN DEPT OF TRANSPORTATION

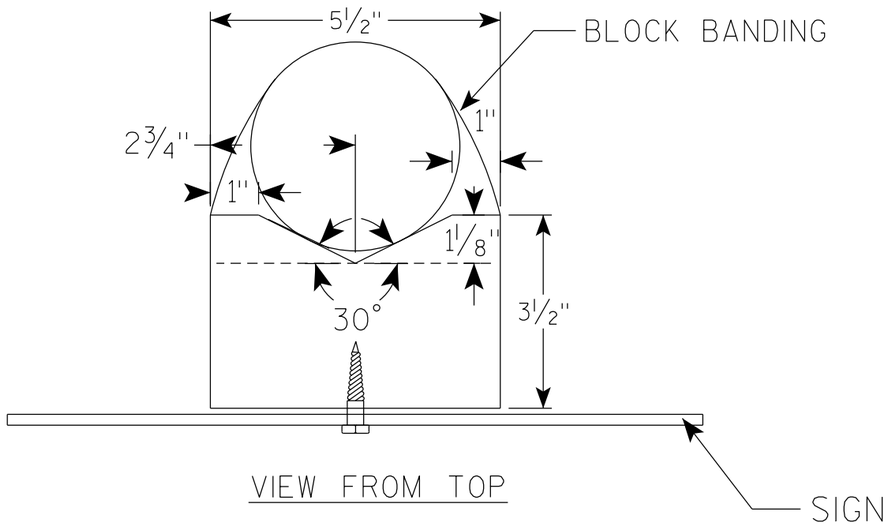
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 301	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

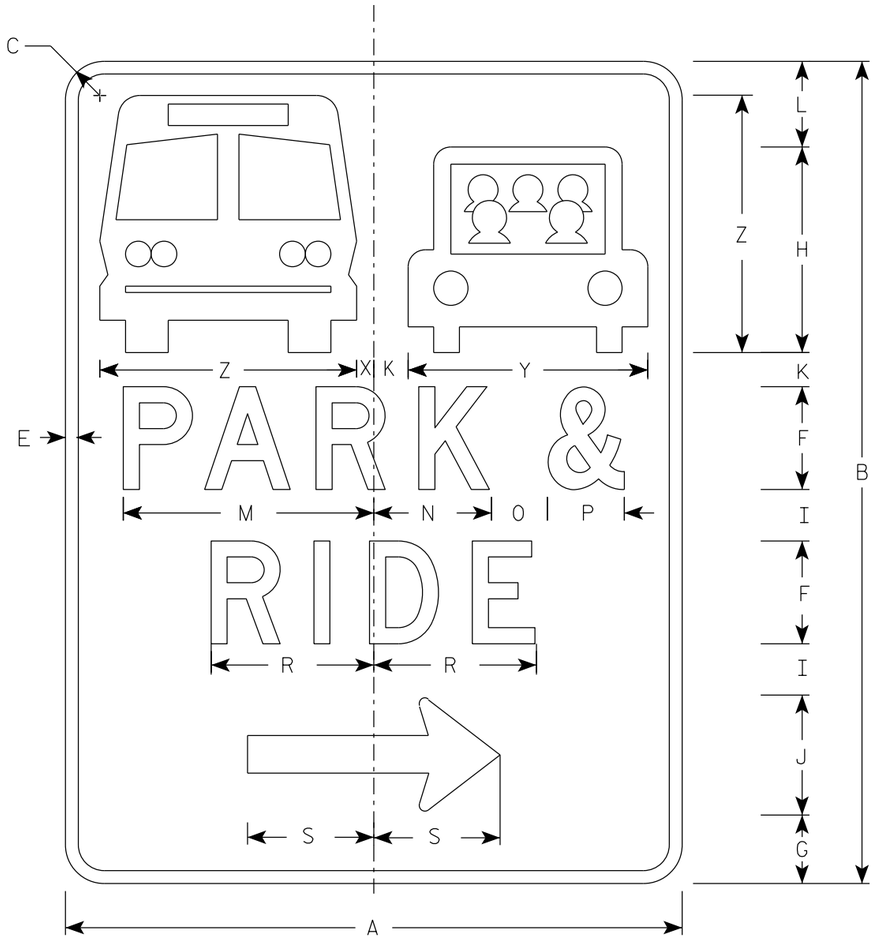
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

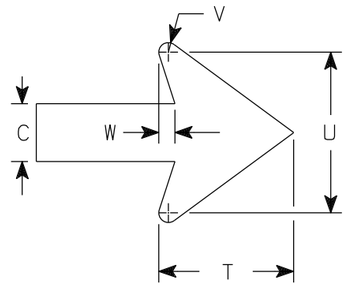
SHEET NO: 302 E



D4-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - D
4. The D4-2L is the same as a D4-2R 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	24	30	1 1/8		1/2	4	1 5/8	7 1/2	1 1/2	4 5/8	1 3/8	3 7/8	9 3/4	4	2 3/4	3		6 3/8	4 7/8	3 1/2	4 1/8	1/4	3/8	5/8	9 3/8	10	5.0
2S	30	36	1 3/8		5/8	5	2	9	1 5/8	5 1/2	1 5/8	4 5/8	12 1/4	5 1/8	3 3/8	3 3/4		8	6 1/8	4 3/8	5 1/4	3/8	1/2	7/8	11 3/4	12 1/2	7.50
2M	30	36	1 3/8		5/8	5	2	9	1 5/8	5 1/2	1 5/8	4 5/8	12 1/4	5 1/8	3 3/8	3 3/4		8	6 1/8	4 3/8	5 1/4	3/8	1/2	7/8	11 3/4	12 1/2	7.50
3	36	48	2 1/4		3/4	6	4	12	3	7	2	5	14 5/8	6 7/8	3 1/4	4 1/2		9 1/2	7 1/2	5 1/4	6 1/4	3/8	5/8	1	14	15	12.0
4																											
5																											

STANDARD SIGN
D4-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/19/2021 PLATE NO. D4-2.6

PROJECT NO:

SHEET NO: E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\D42.dgn PLOT DATE : 19-JAN 2021 11:51 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

7

7

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E

G20-61

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																											
3																											
4	120	30	6		2	12	9	21	78 1/4	20 3/4																	25.0
5																											

STANDARD SIGN
G20-61

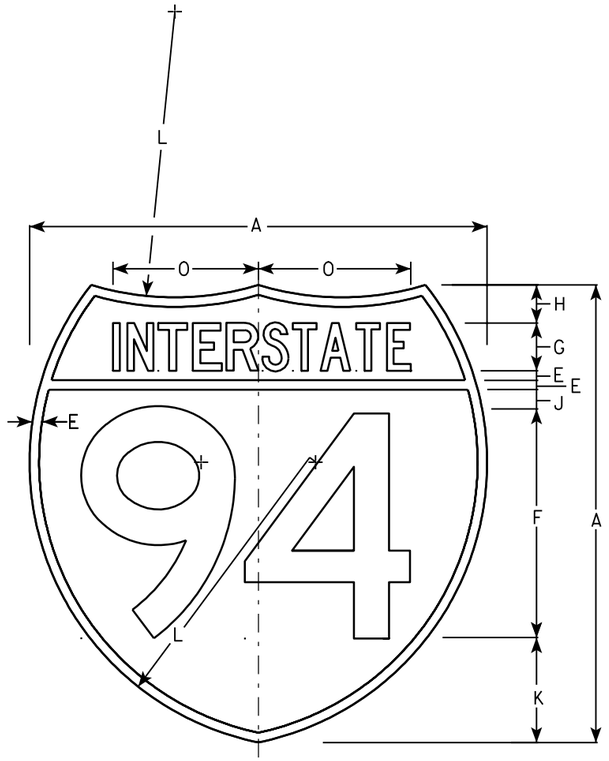
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

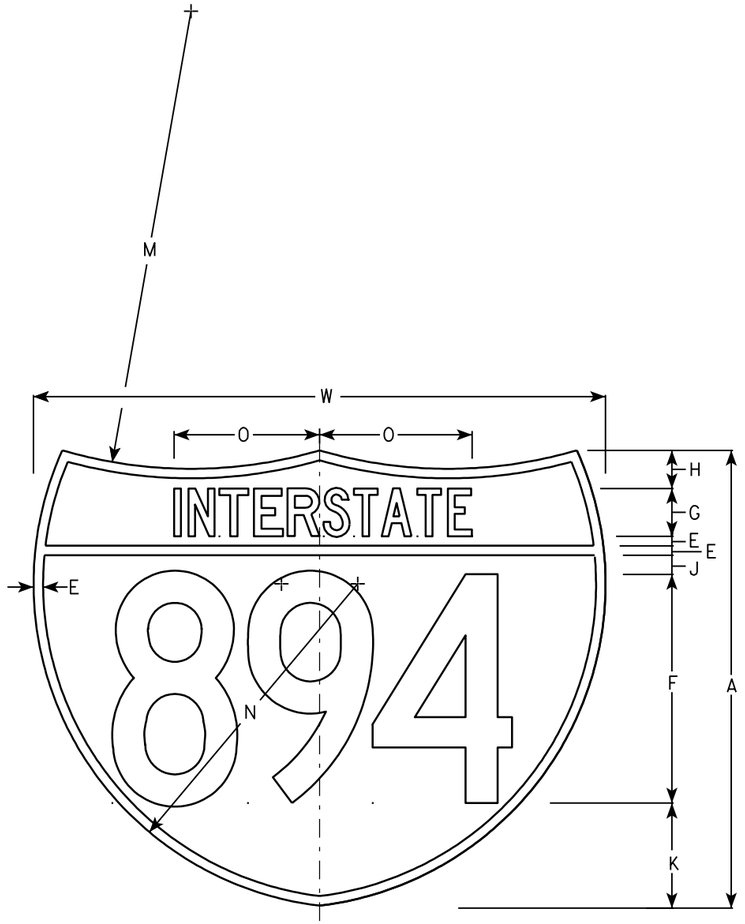
DATE 5/07/15 PLATE NO G20-61.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\G2061.DGN PLOT DATE : 07-MAY-2015 13:47 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 20.431338:1.000000 WISDOT/CADDS SHEET 42



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

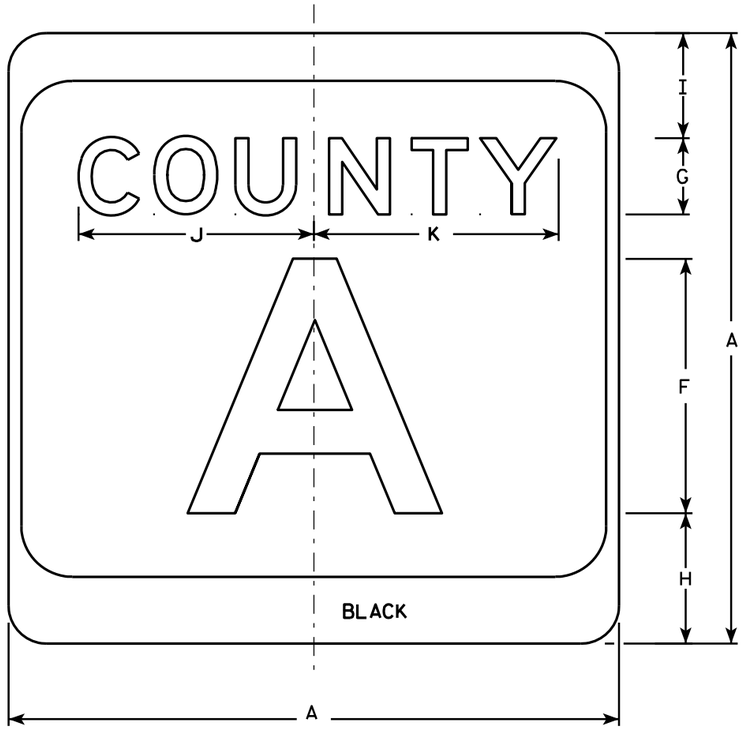
INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

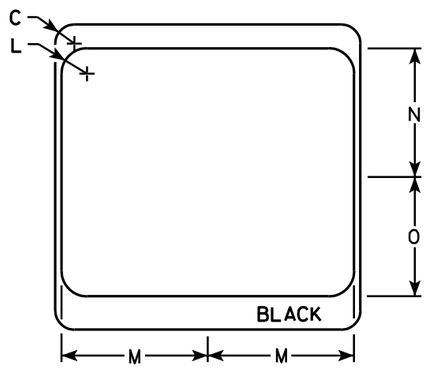
APPROVED Matthew R Rauch
for State Traffic Engineer

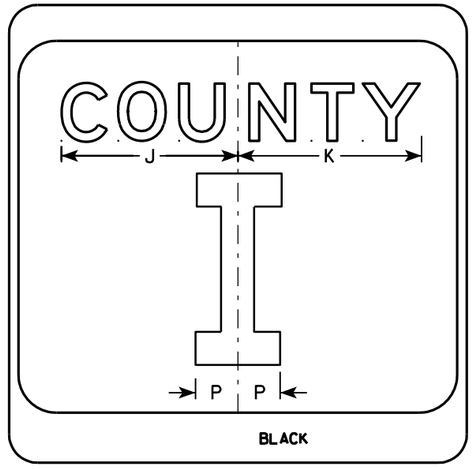
DATE 08/23/05 PLATE NO. M1-1.8

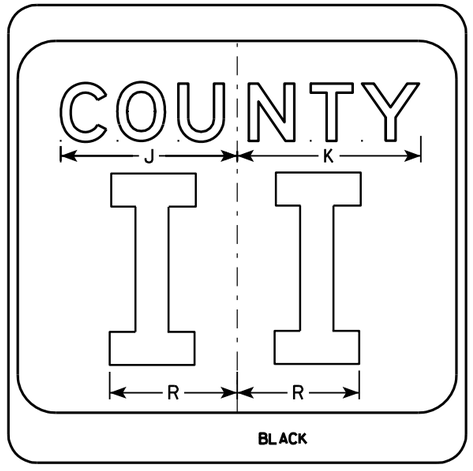
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 305	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

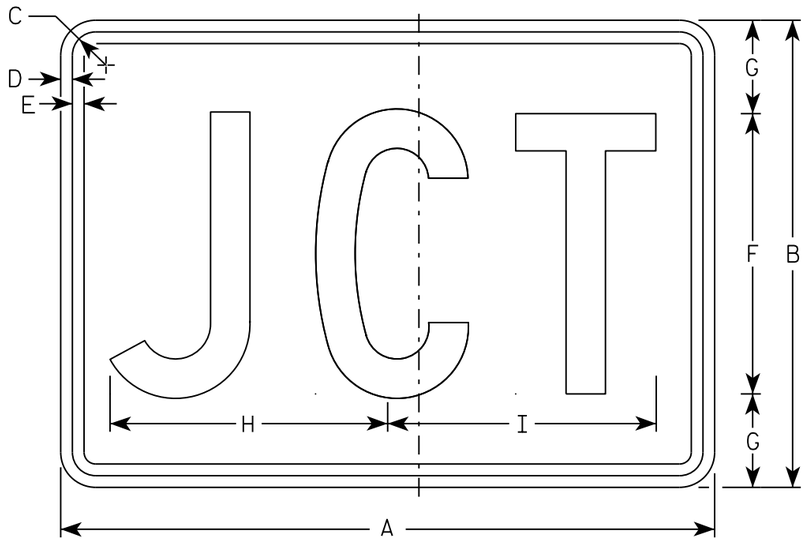
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

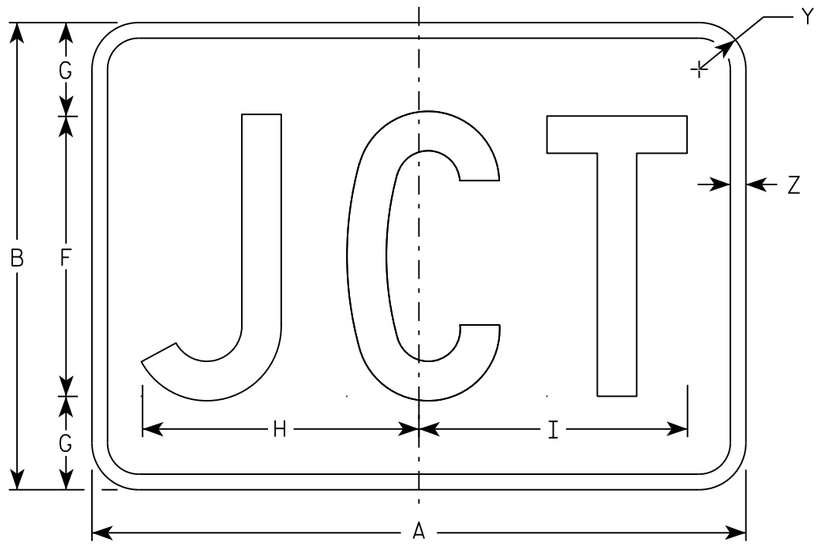
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 306 | E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

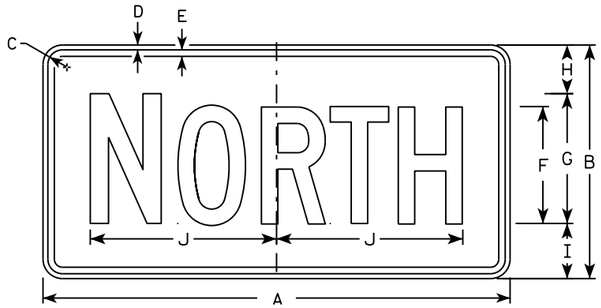
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

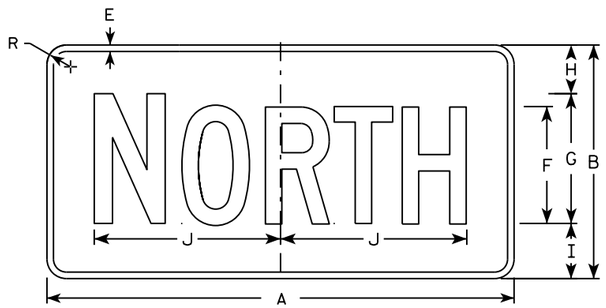
DATE 10/15/15 PLATE 307 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



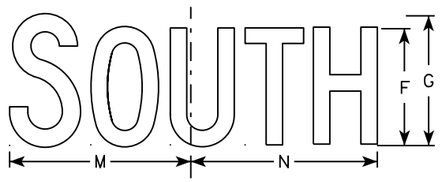
M3-1
MM3-1
MP3-1



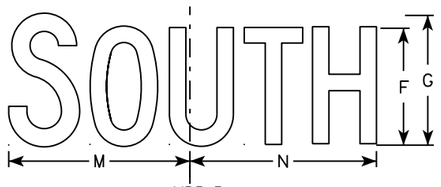
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

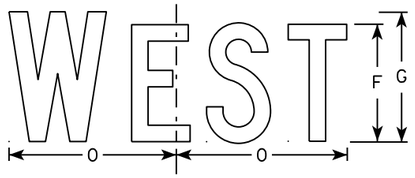
MB3-2
MK3-2
MN3-2



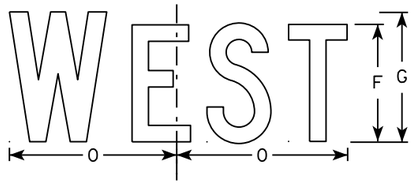
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

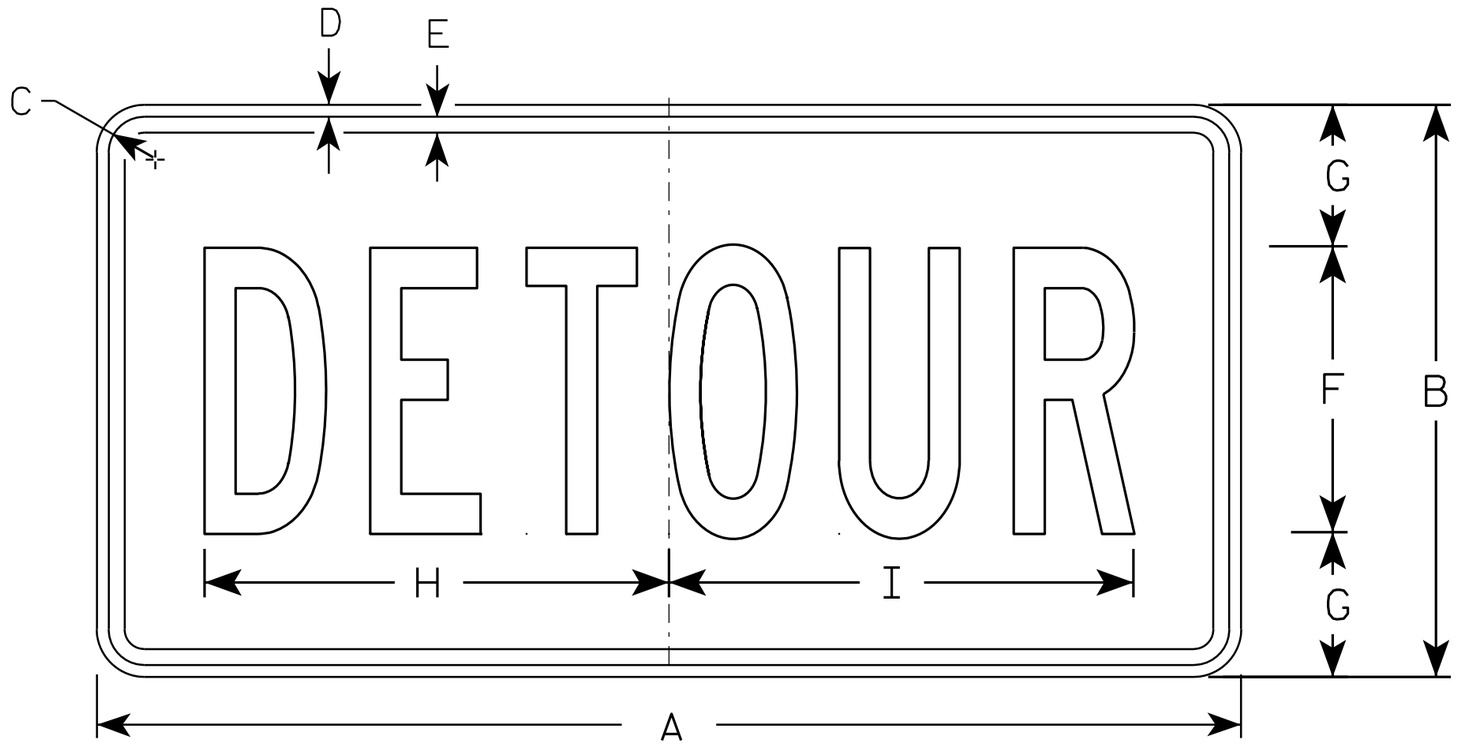
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

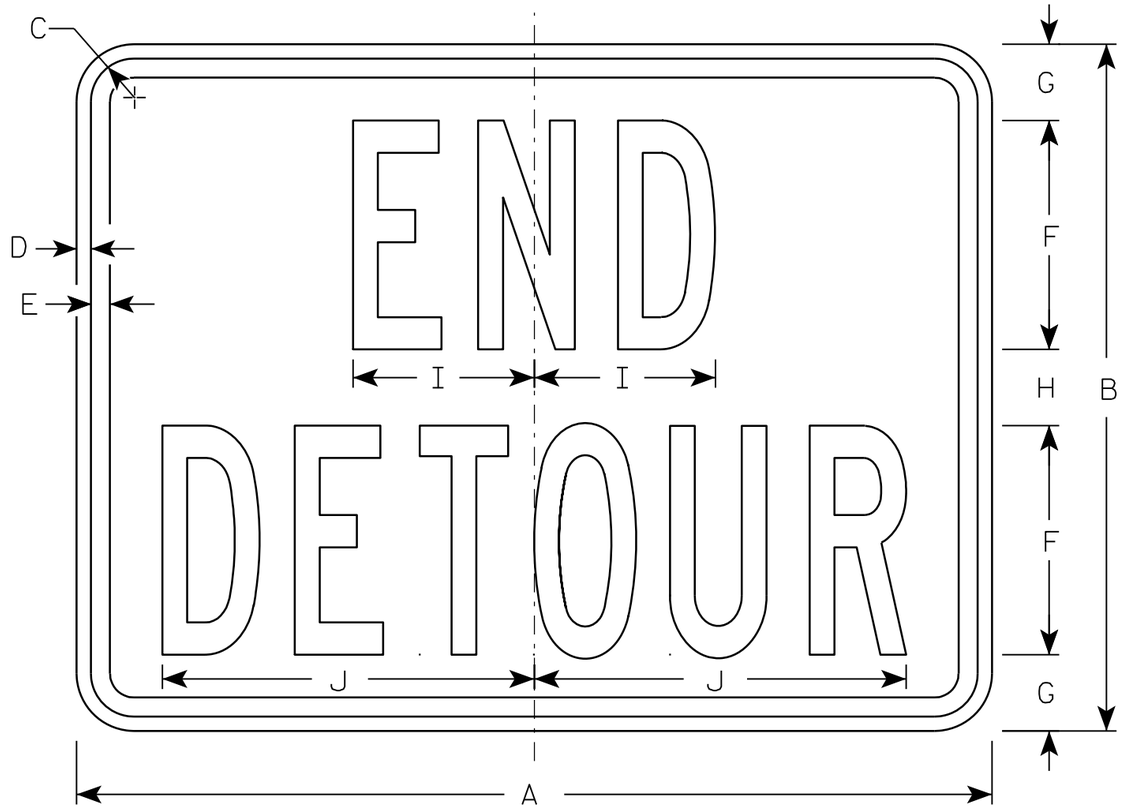
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 309	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

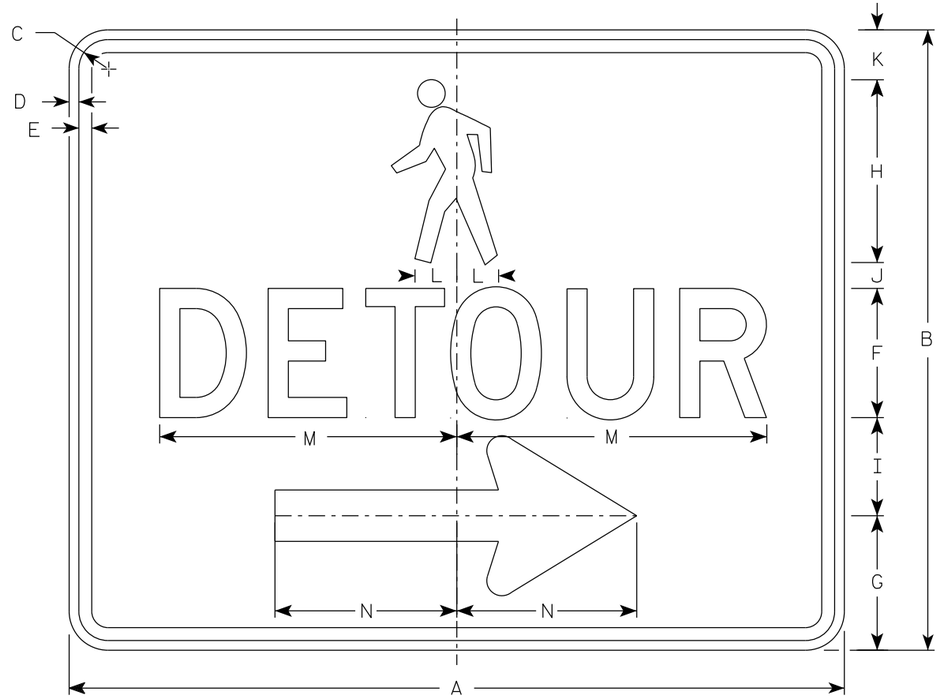
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

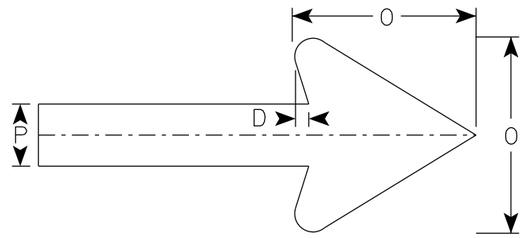
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 310	E



M4-9BR

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.
5. M4-9BL is the same as M4-9BR 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 1/8	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.00
3																											
4																											
5																											

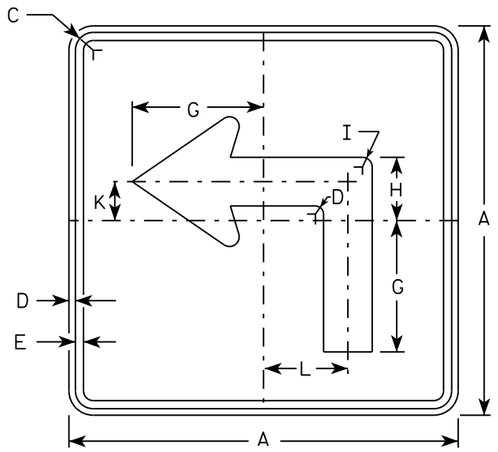
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

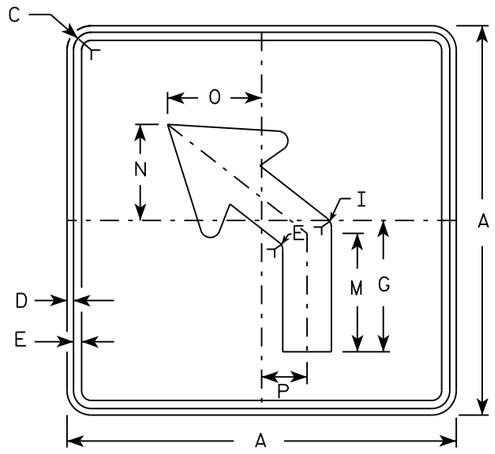
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 7/1/19 PLATE NO. M4-9B.2

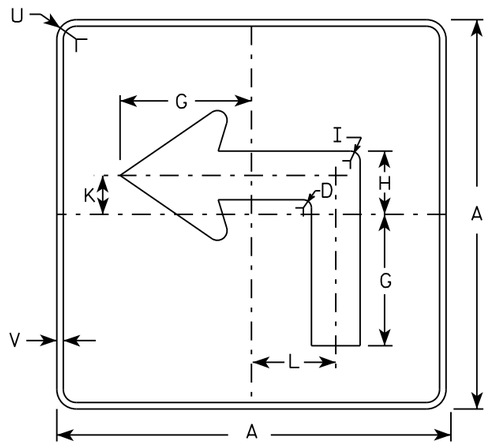
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 311 | E



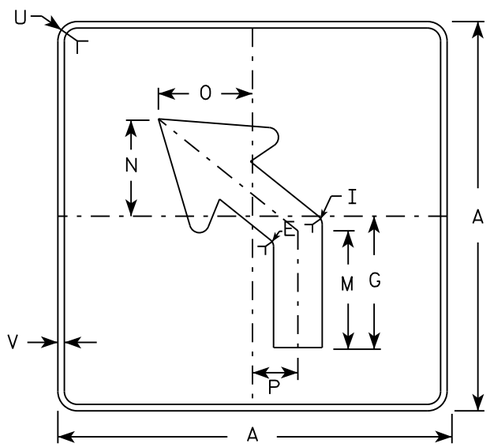
M5-1L
MM5-1L
MO5-1L
MP5-1L



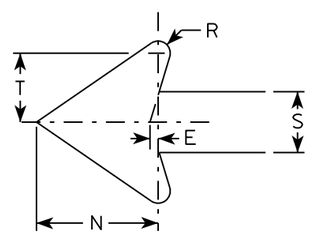
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

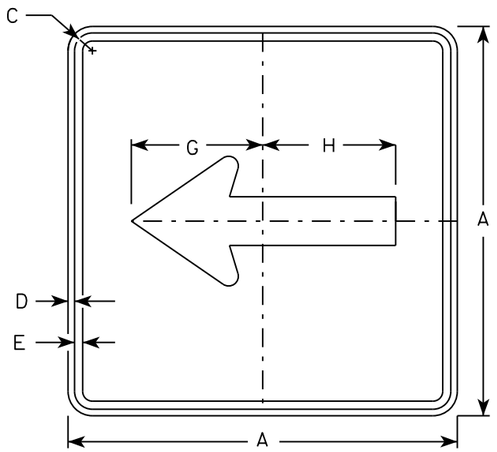
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

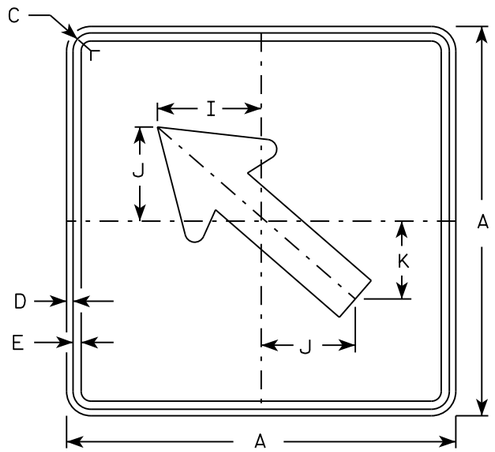
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



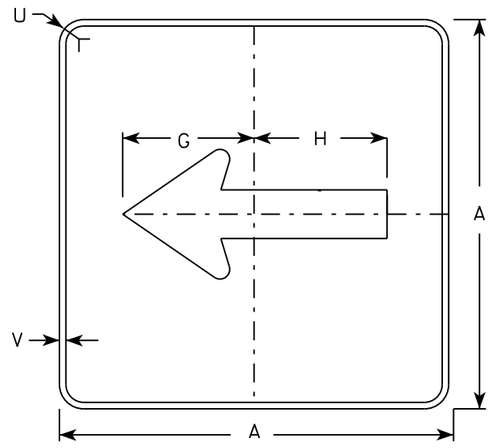
M6-1
MM6-1
MO6-1
MP6-1



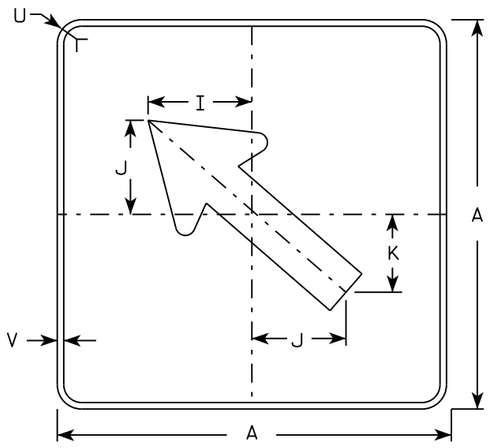
M6-2
MM6-2
MO6-2
MP6-2

NOTES

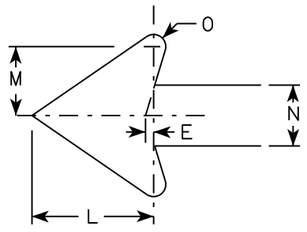
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

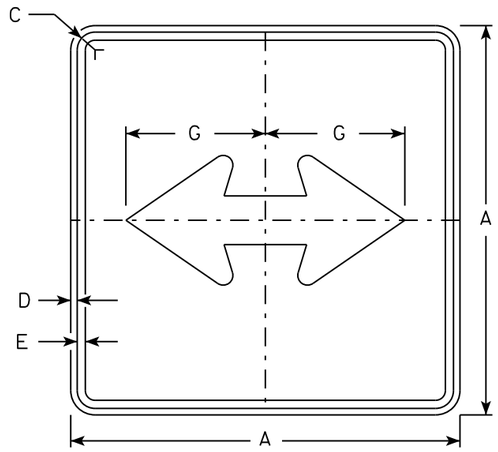
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

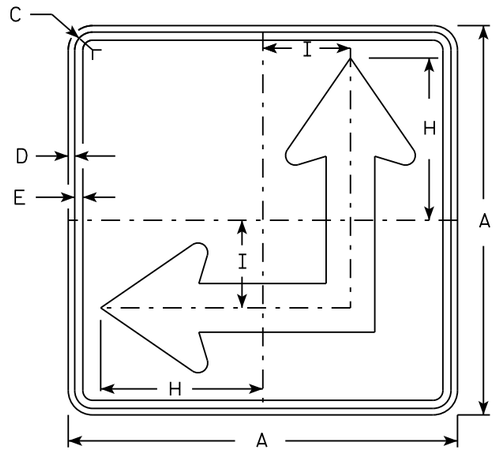
DATE 10/15/15 PLATE 313 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



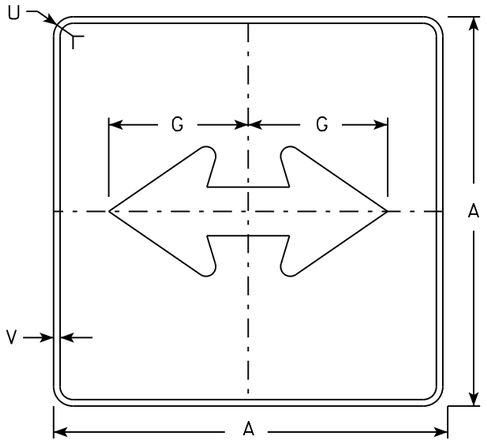
M6-4
MM6-4
MO6-4
MP6-4



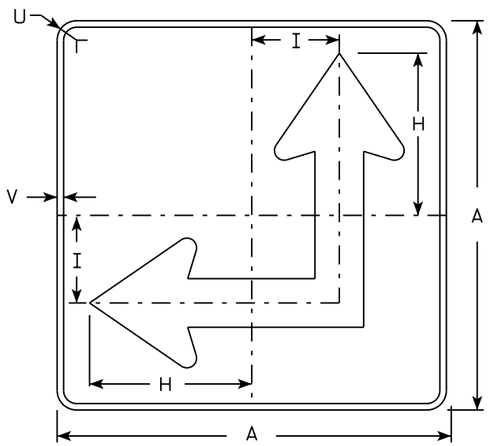
M6-6
MM6-6
MO6-6
MP6-6

NOTES

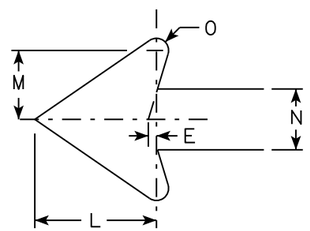
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

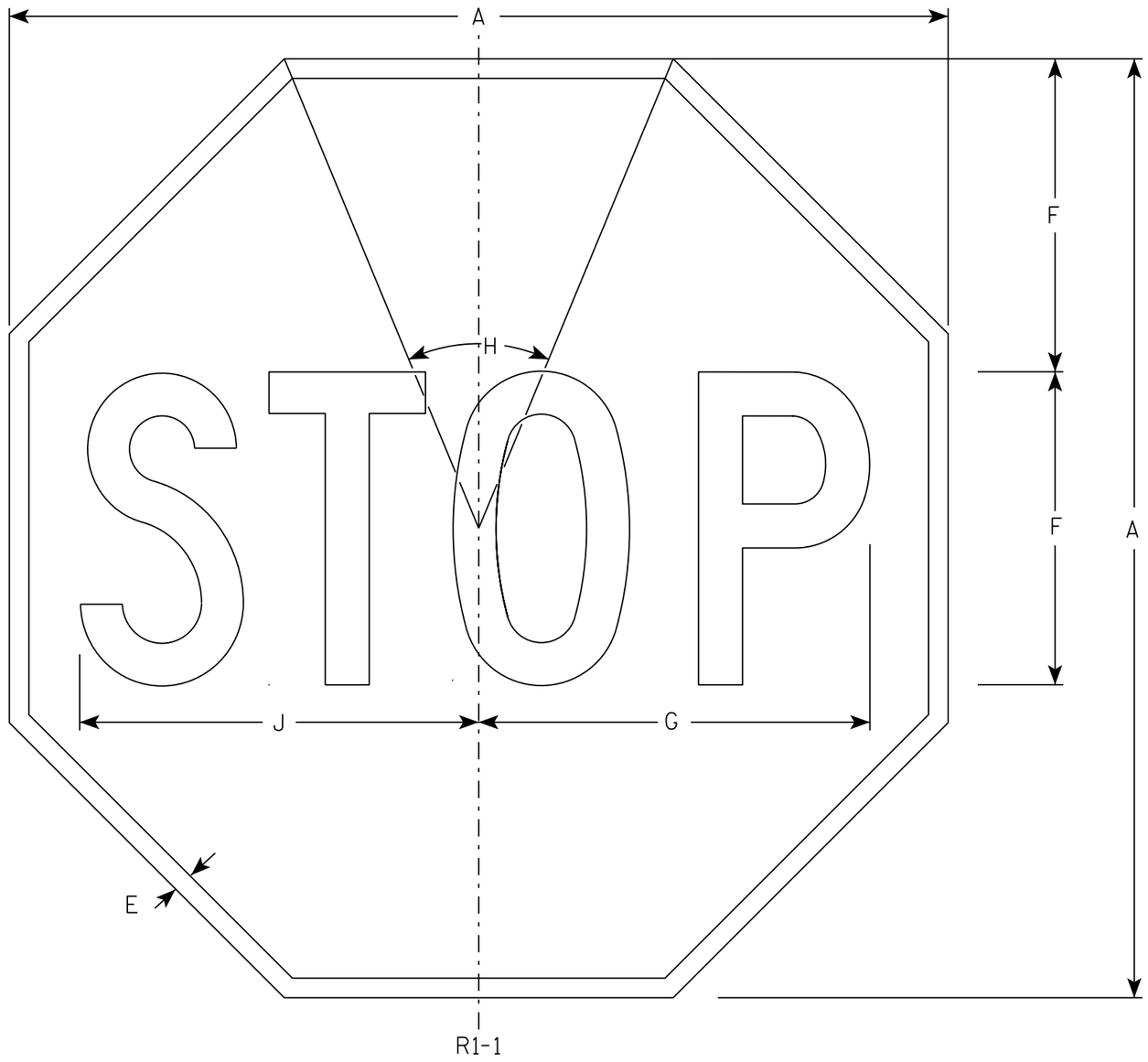
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 314 M6-4.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

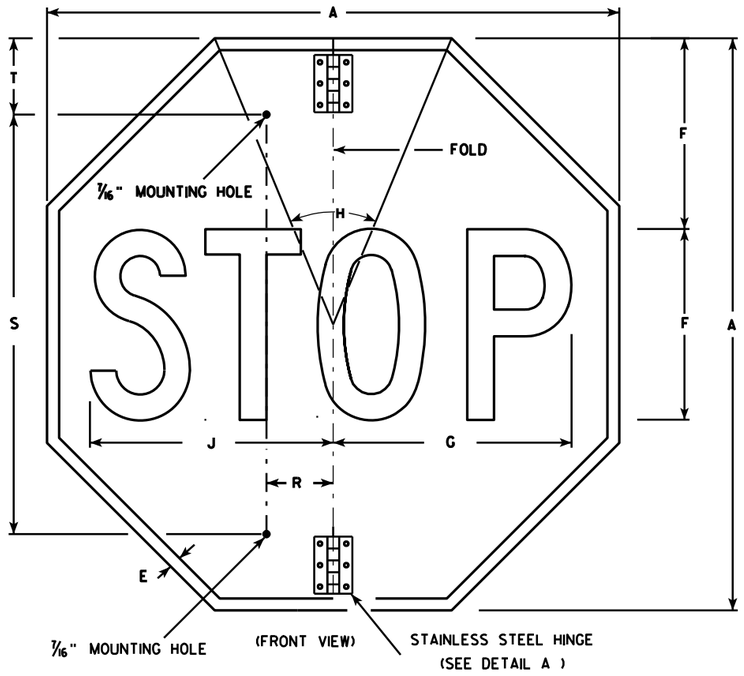
STANDARD SIGN
R1-1

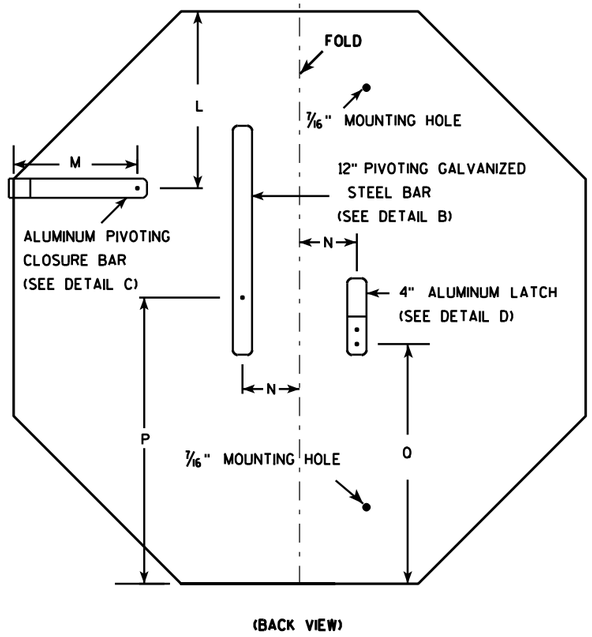
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

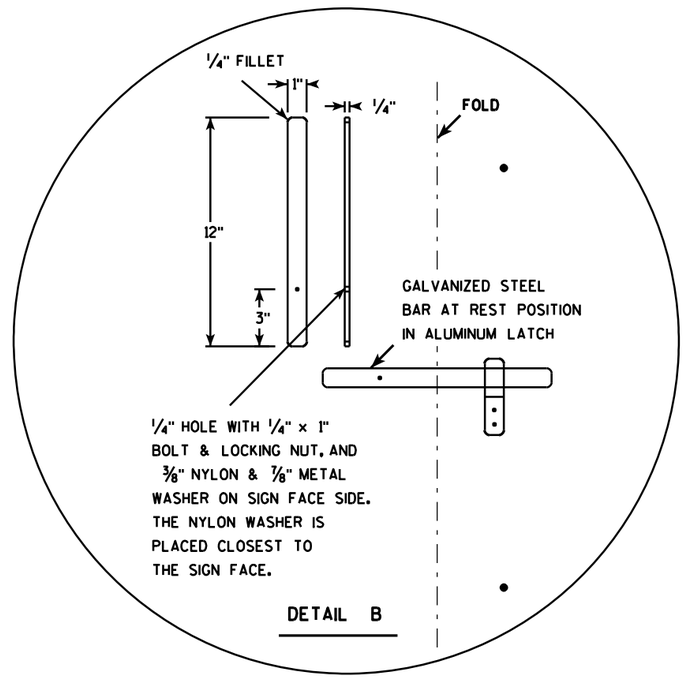
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 315	E



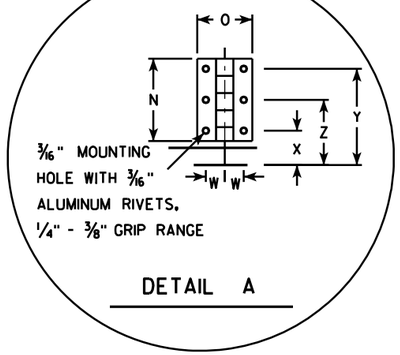


NOTES

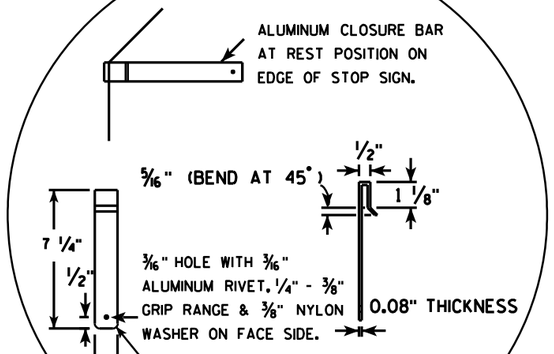
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



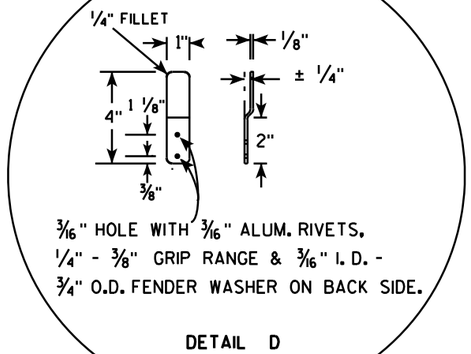
DETAIL B



DETAIL A



DETAIL C



DETAIL D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

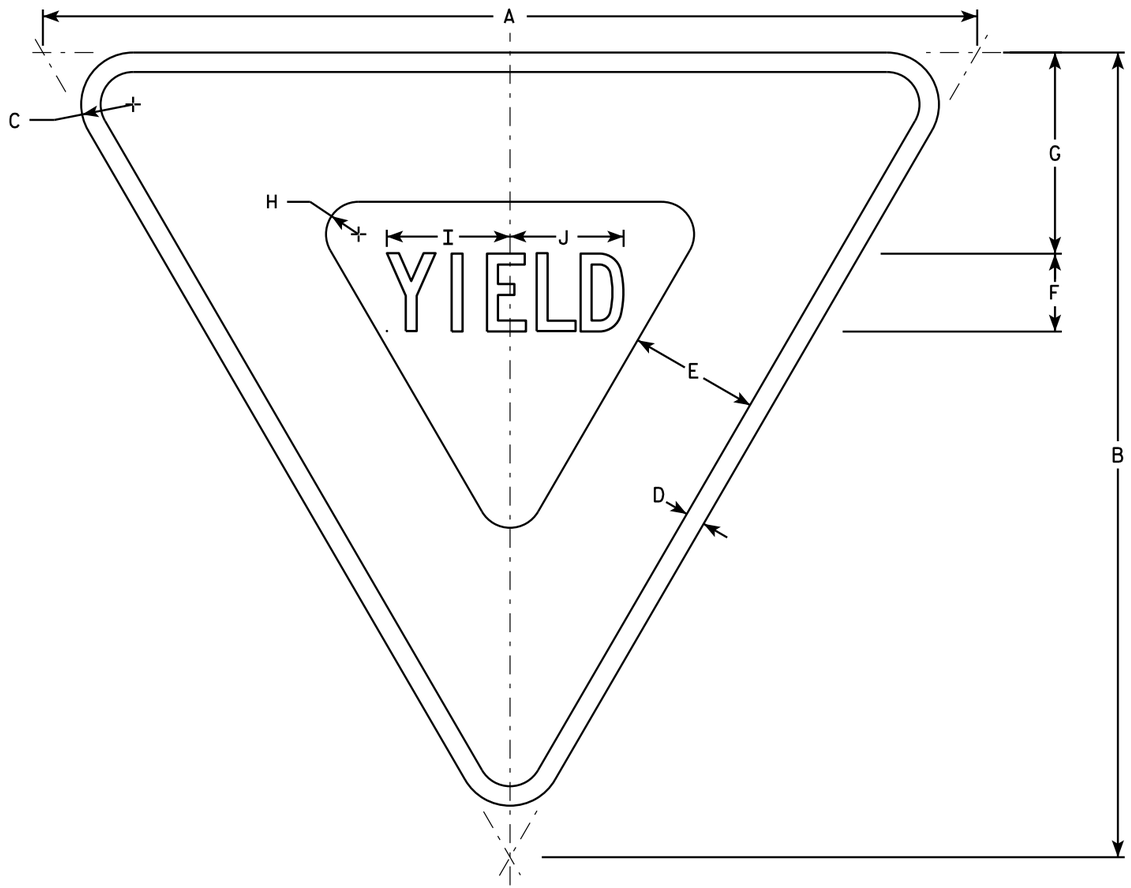
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 316 | 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

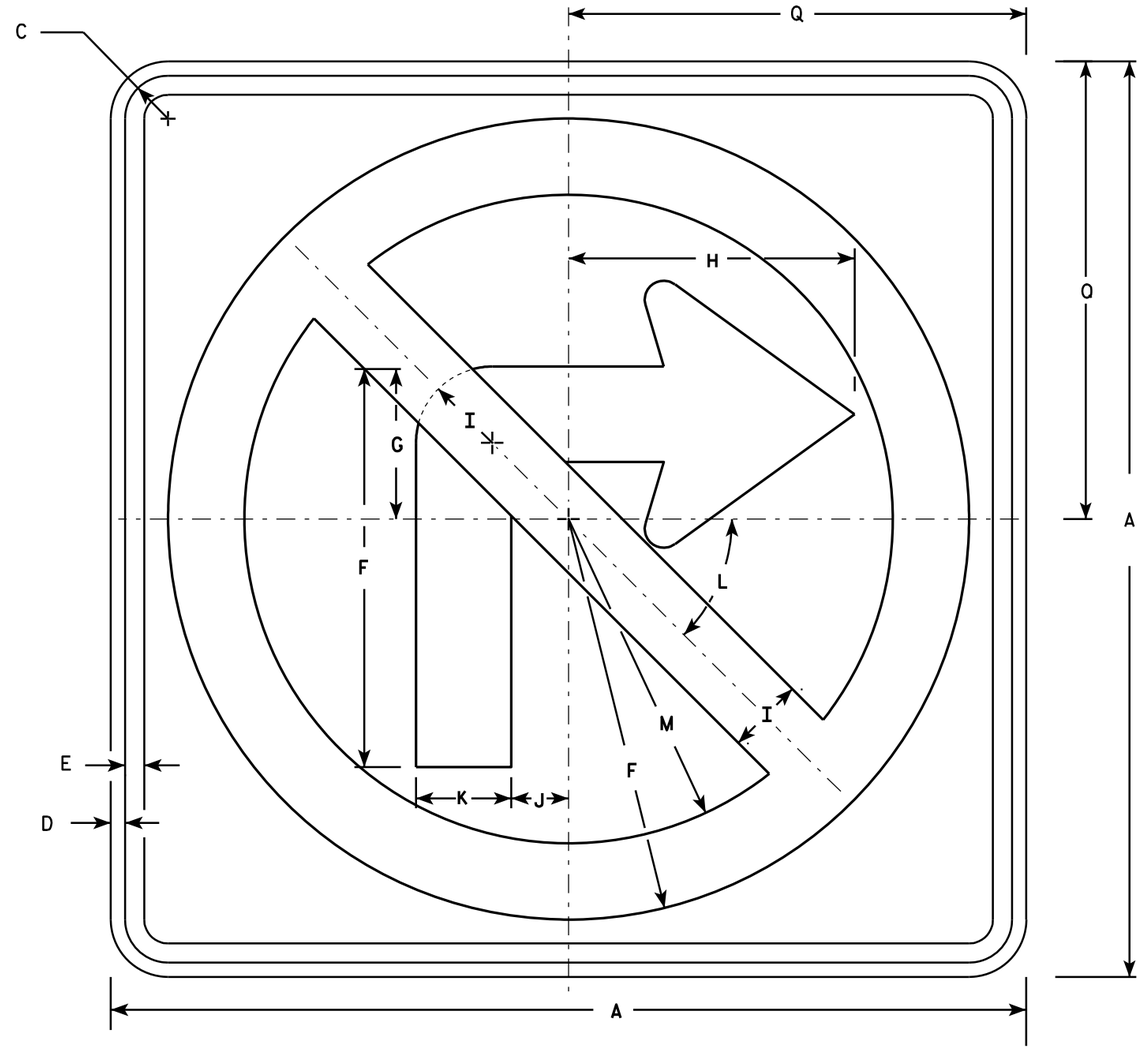
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

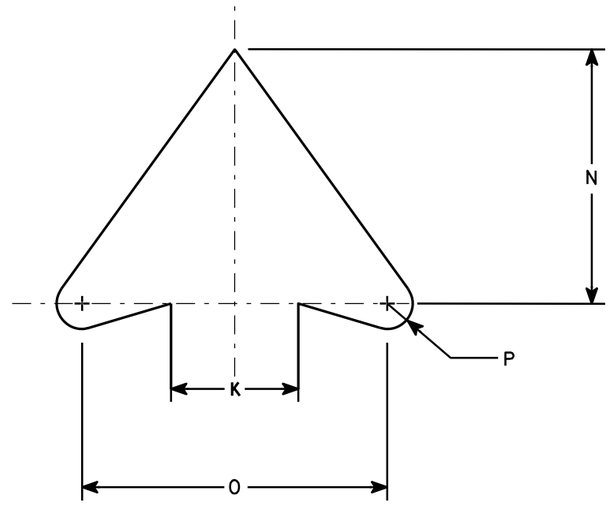
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

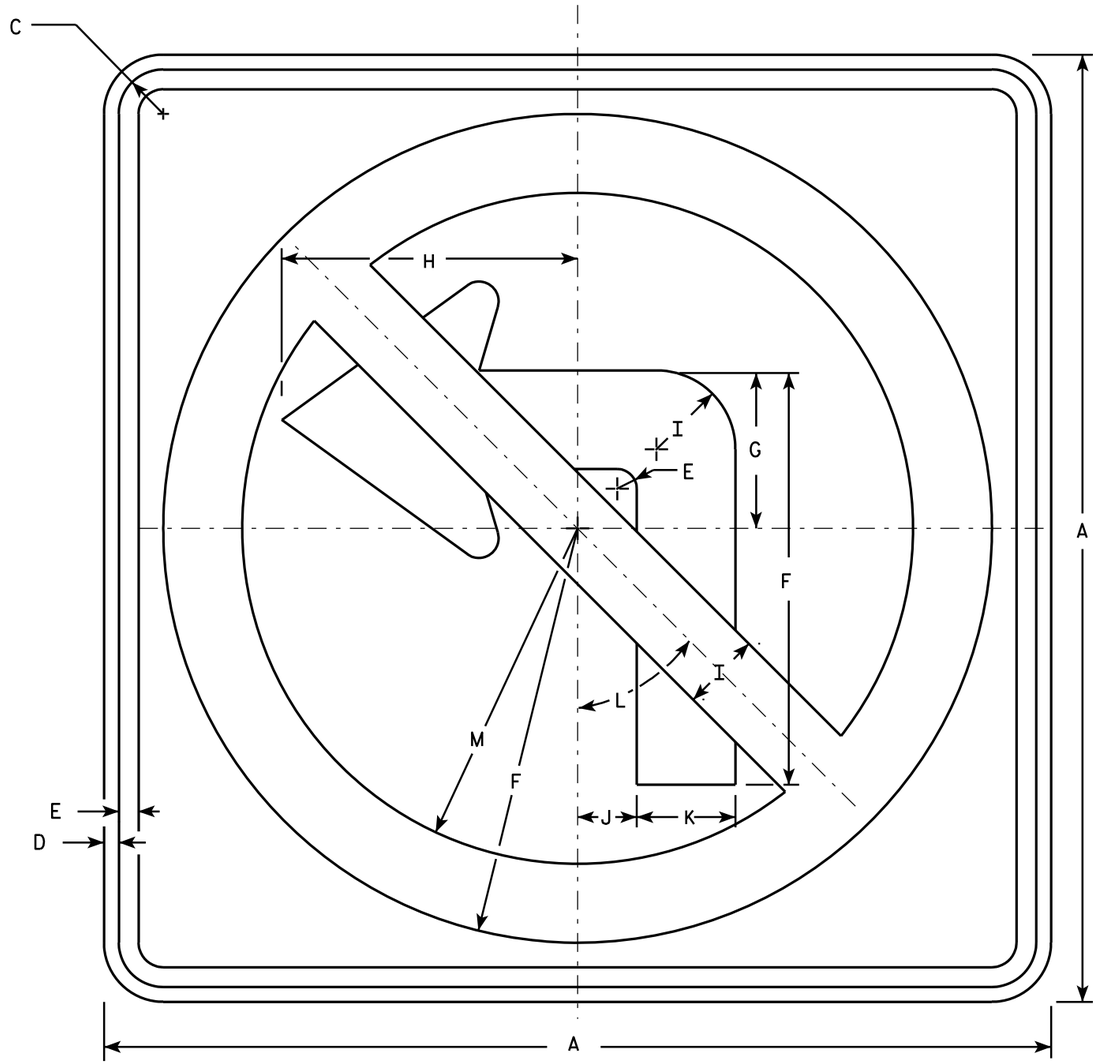
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

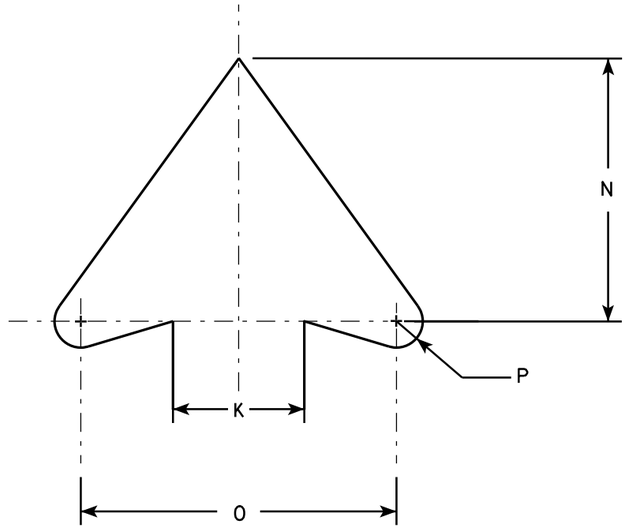
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 318	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

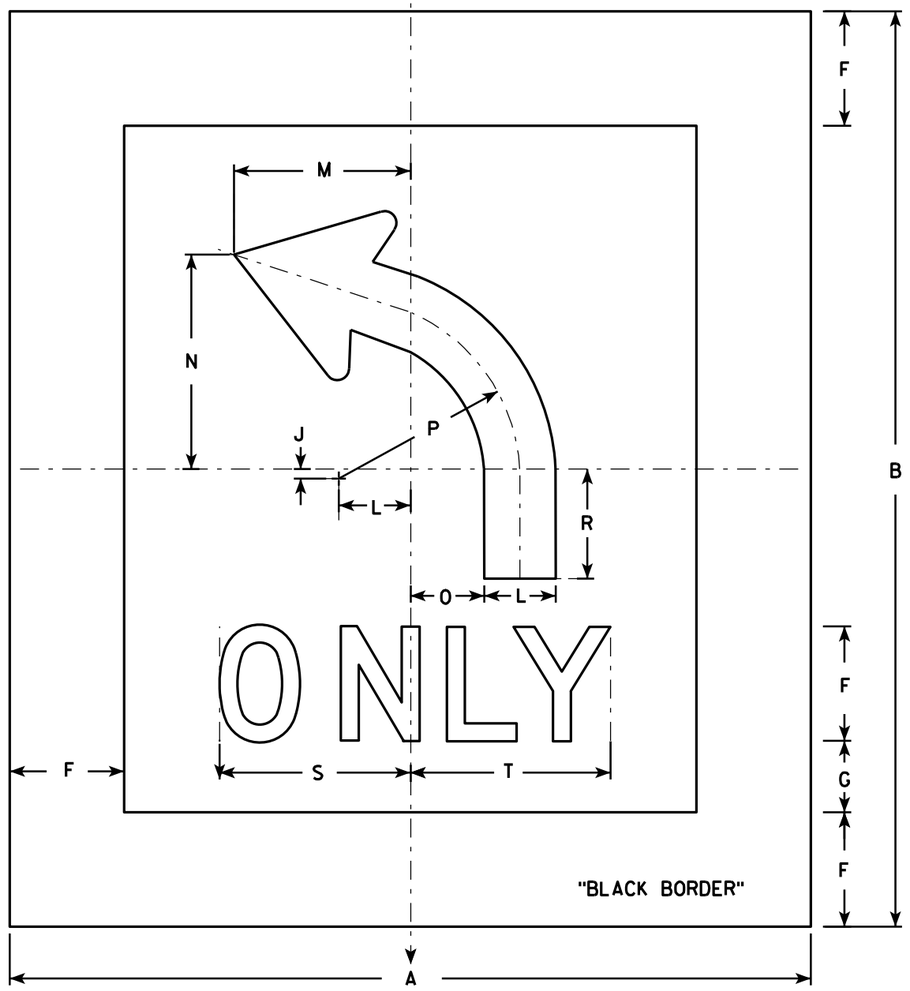
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

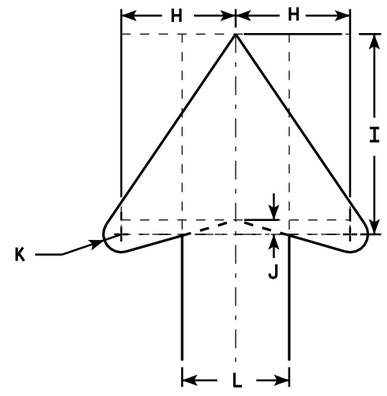
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 319	E



R3-5L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
5. R3-5R is the same as R3-5L except curved portion of arrow points right.
6. The 6" border is non-reflective black.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	42	48				6	3 3/4	4	7	1/2	5/8	3 3/4	9 1/4	11 1/4	3 7/8	9 1/2		5 3/4	10	10 1/2							1.26
2M	42	48				6	3 3/4	4	7	1/2	5/8	3 3/4	9 1/4	11 1/4	3 7/8	9 1/2		5 3/4	10	10 1/2							1.26
3																											
4																											
5																											

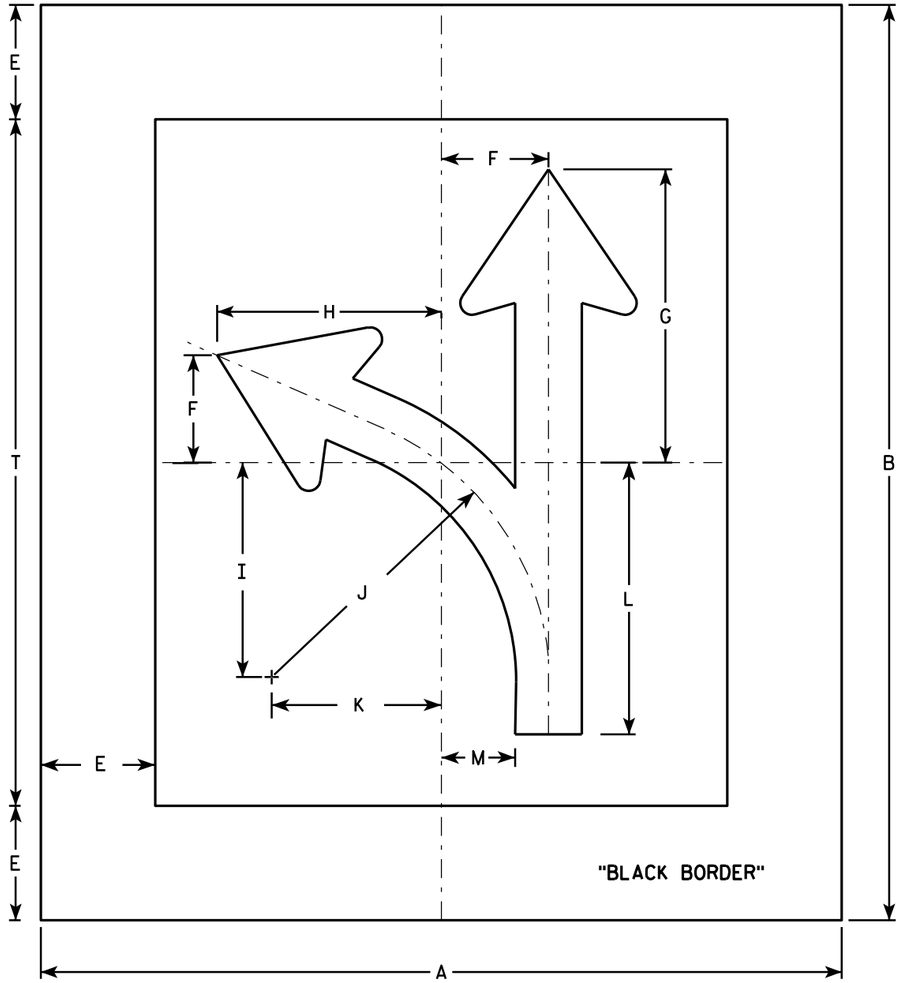
STANDARD SIGN
R3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/24/11 PLATE NO. R3-5.6

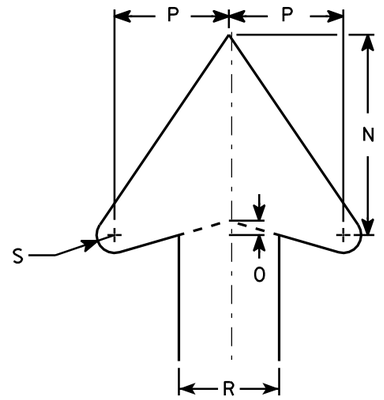
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 320 | E



R3-6L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
4. R3-6R is the same as R3-6L except curved portion of arrow points right.
5. The 6" border is non-reflective black.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	42	48			6	5 5/8	15 3/8	11 3/4	11 1/4	14 1/2	8 7/8	14 1/4	3 7/8	7	1/2	4		3 1/2	5/8	36							14.0
2M	42	48			6	5 5/8	15 3/8	11 3/4	11 1/4	14 1/2	8 7/8	14 1/4	3 7/8	7	1/2	4		3 1/2	5/8	36							14.0
3																											
4																											
5																											

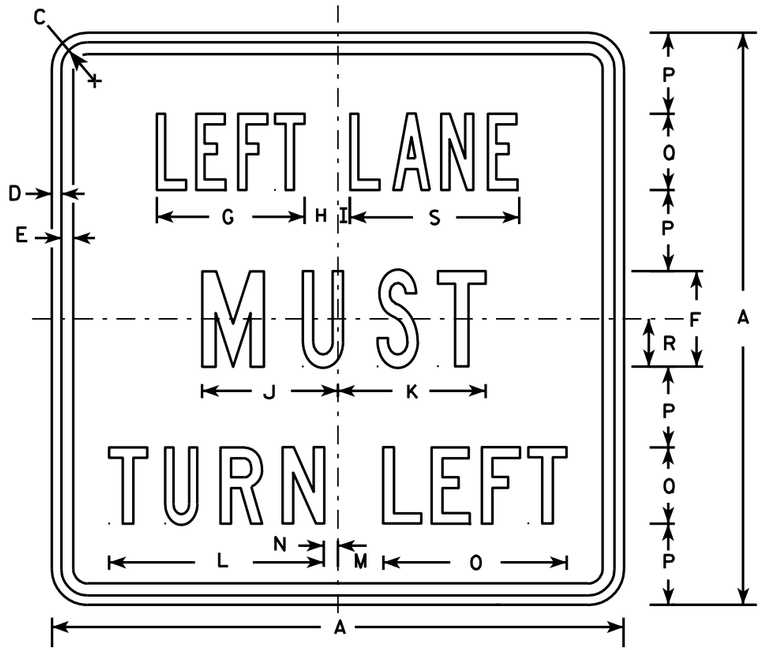
STANDARD SIGN
R3-6

WISCONSIN DEPT OF TRANSPORTATION

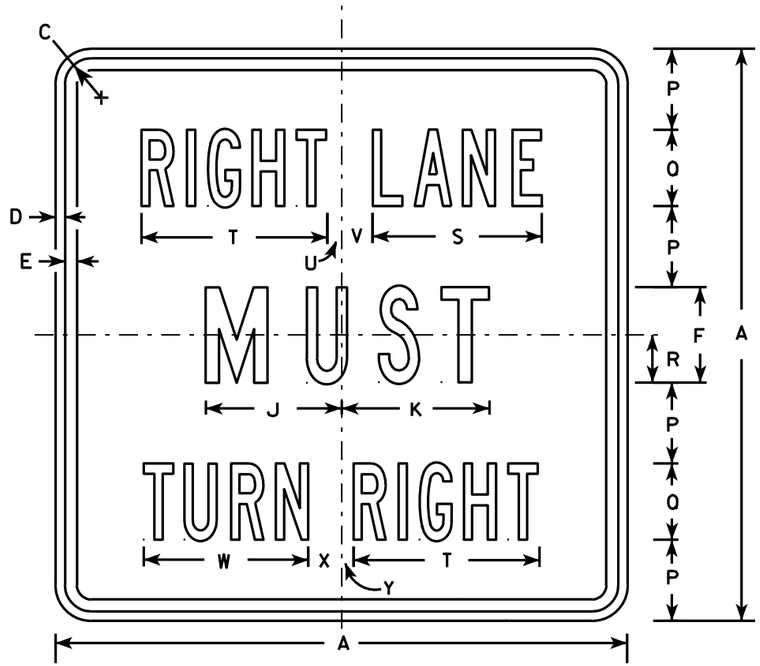
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/17/2011 PLATE NO. R3-6.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 321 | E



R3-7L



R3-7R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
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	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

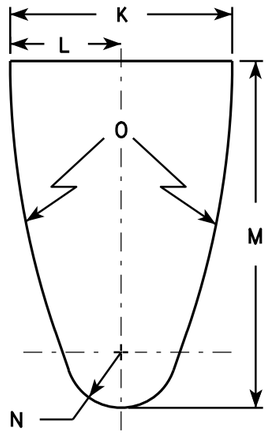
STANDARD SIGN
R3-7L & R3-7R

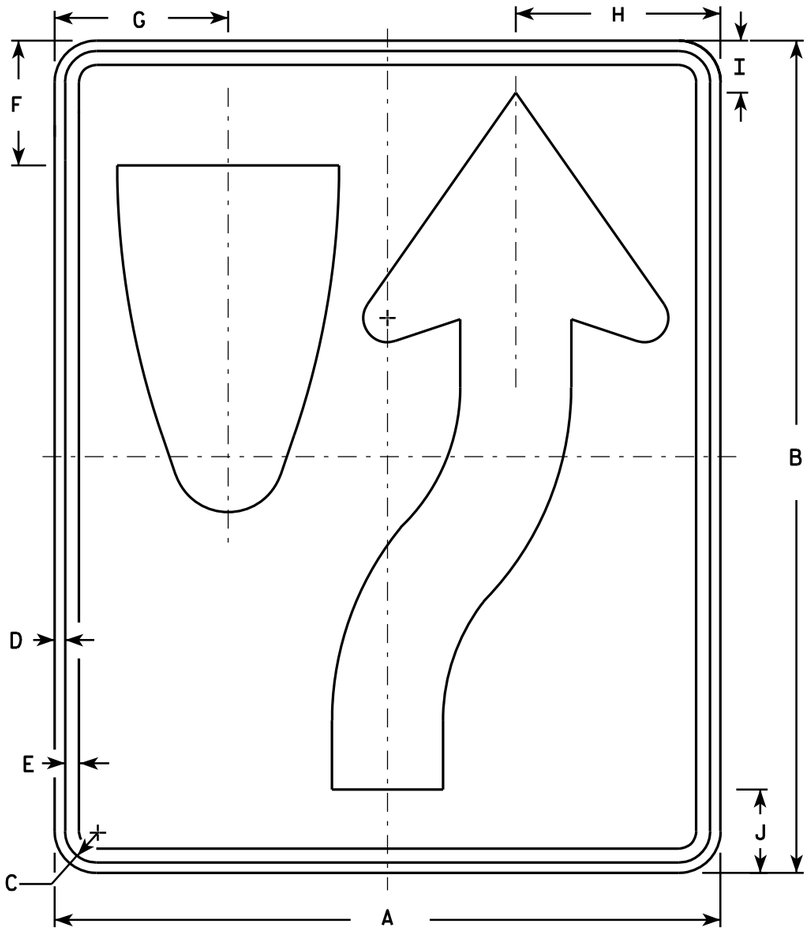
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 322 | E

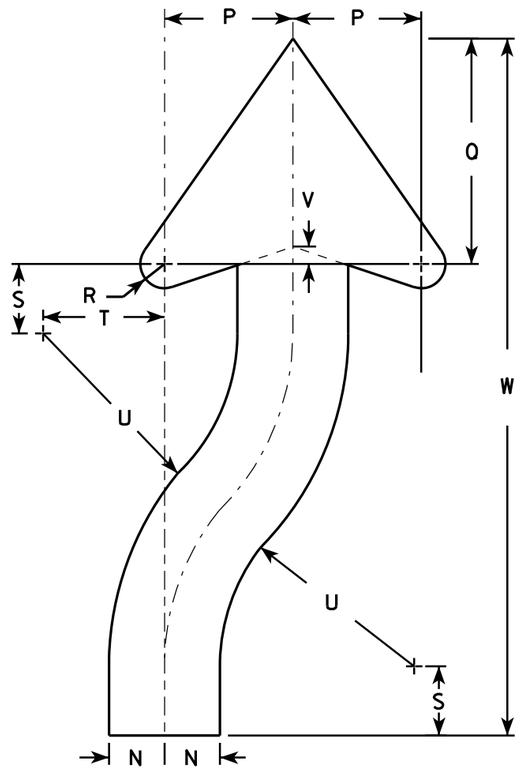




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

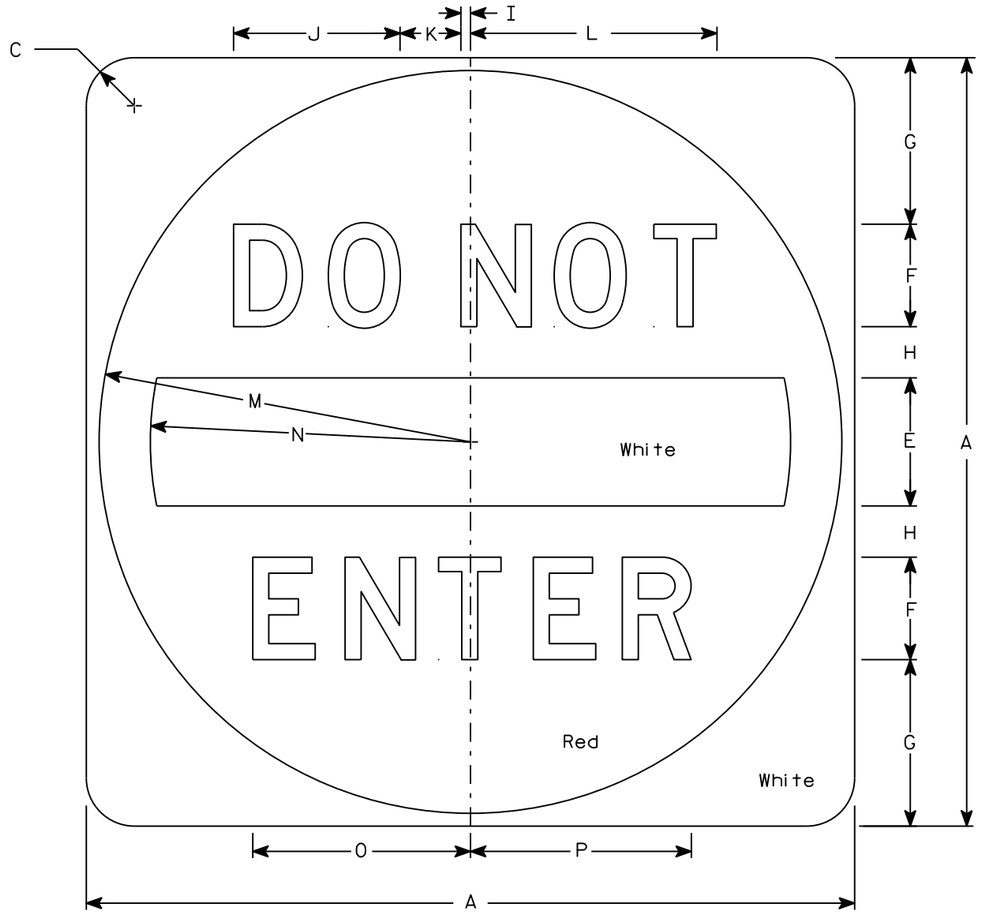
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 323	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

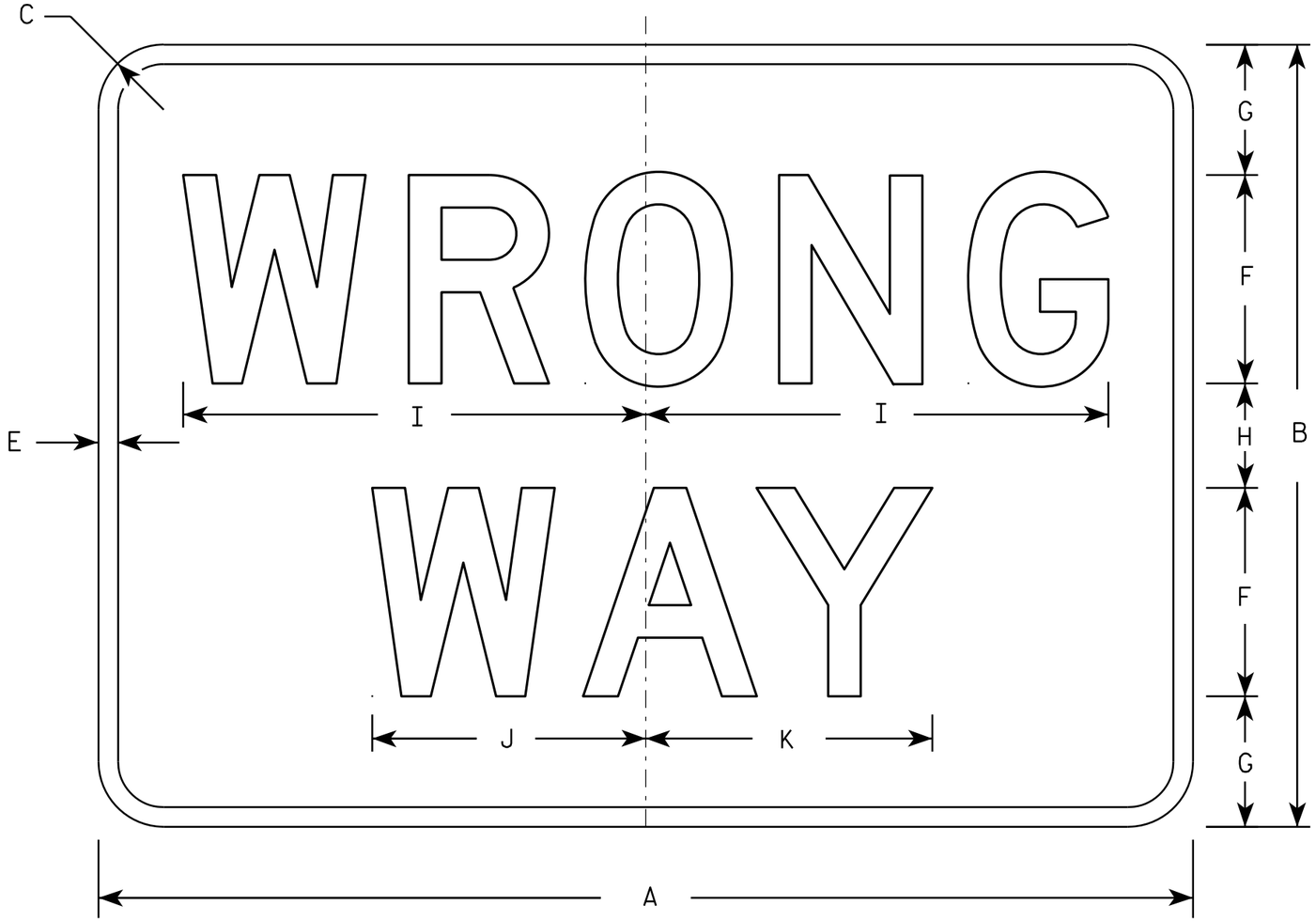
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 324 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - 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	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		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 12/17/10 PLATE NO. R5-1A.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 325 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R51A.DGN PLOT DATE : 17-DEC-2010 12:42 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.462457:1.000000

WISDOT/CADDS SHEET 42

7

7

R5-57

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Lines 1, 2, and 5 are Series C.
   Lines 3 and 4 are 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																											
2S																											
2M																											
3																											
4	36		1 5/8	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		1 5/8	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 3/29/2011 PLATE NO. R5-57.10

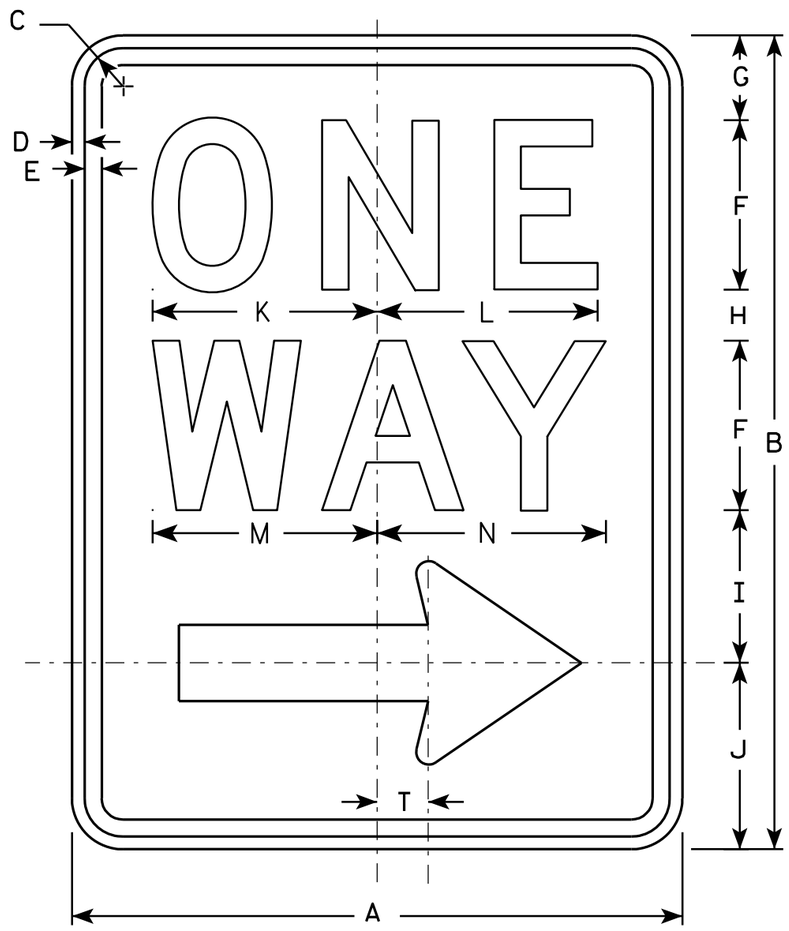
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 326 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R557.DGN PLOT DATE : 29-MAR-2011 14:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

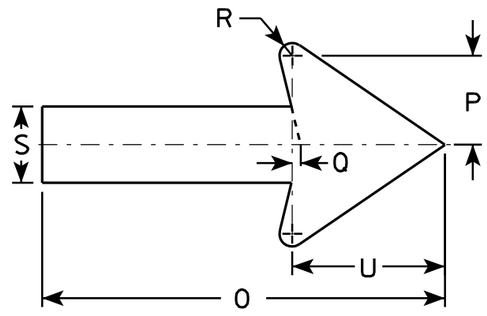
7



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

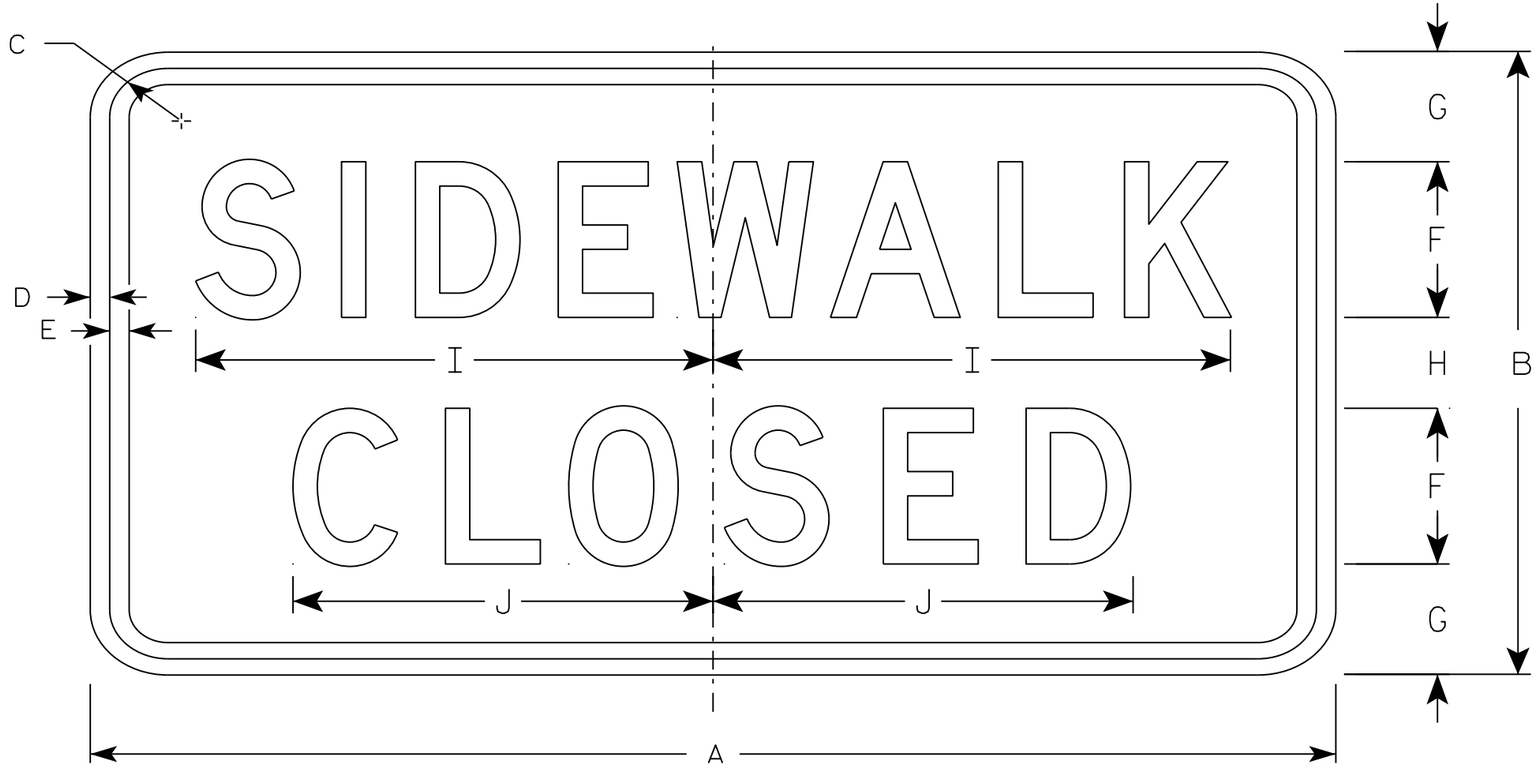
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 327 | E



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

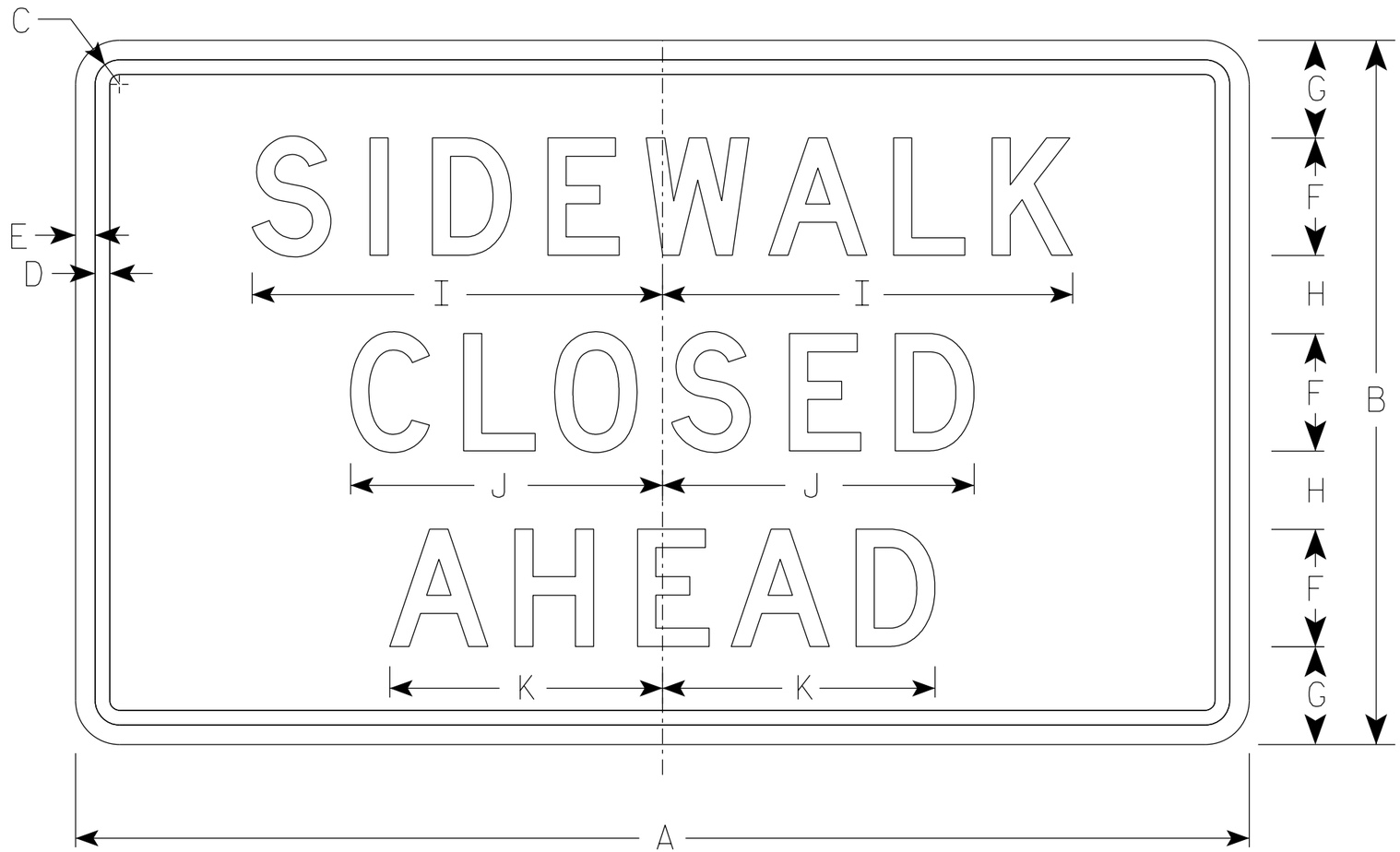
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 328 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-9A

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	30	18	1 1/8	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
2M	30	18	1 1/8	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
3																											
4																											
5																											

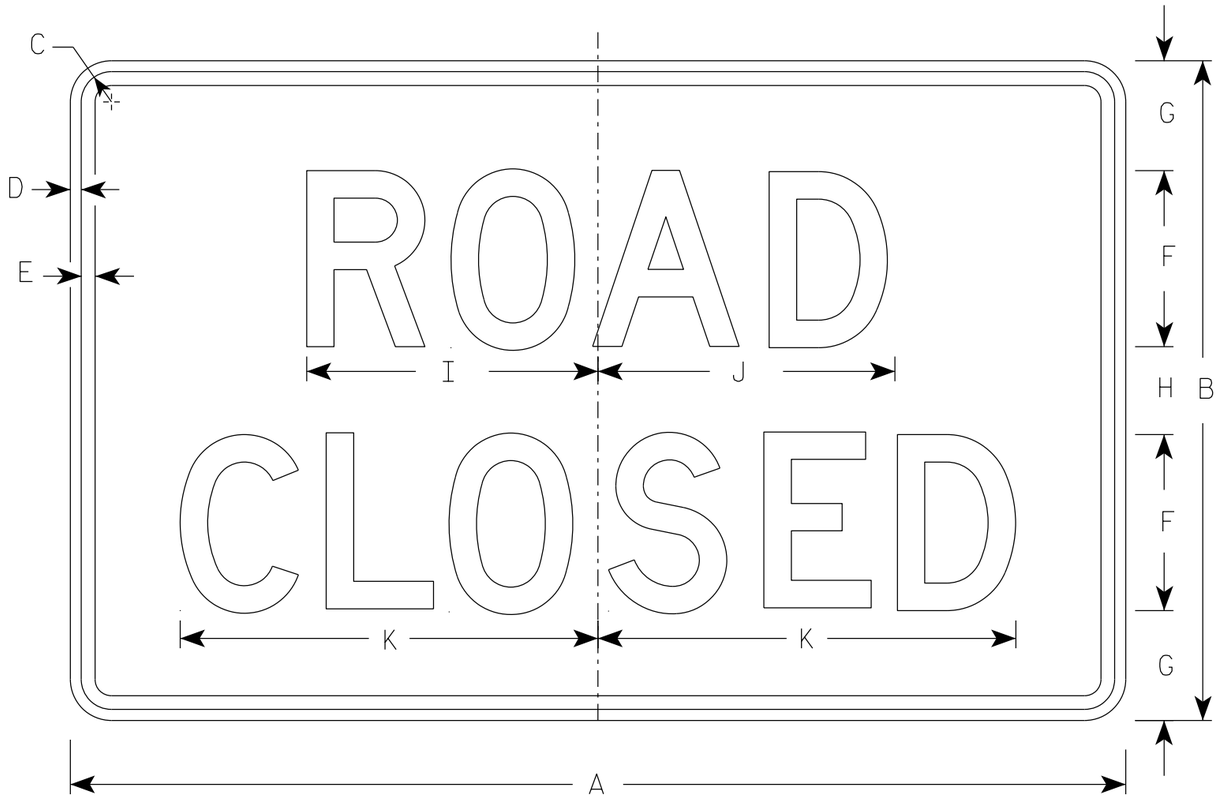
STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/31/2020 PLATE NO. R9-9A.1

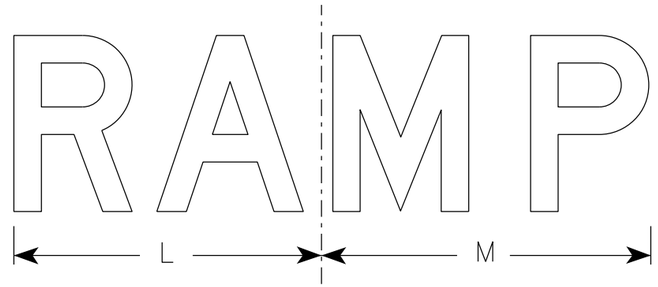
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 329 | E



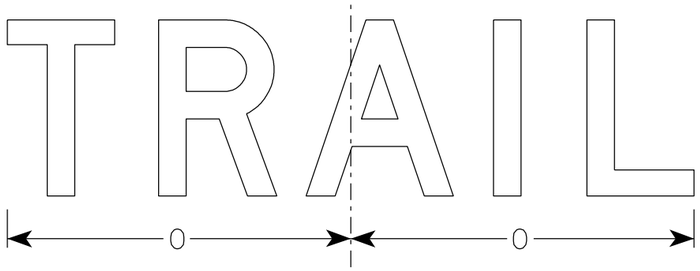
R11-2

NOTES

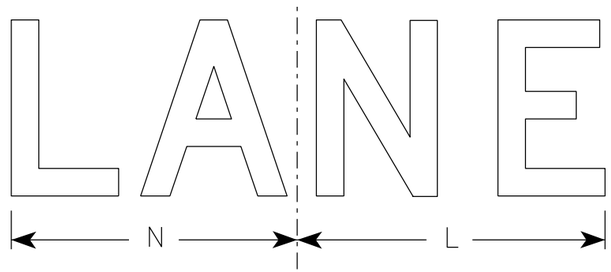
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

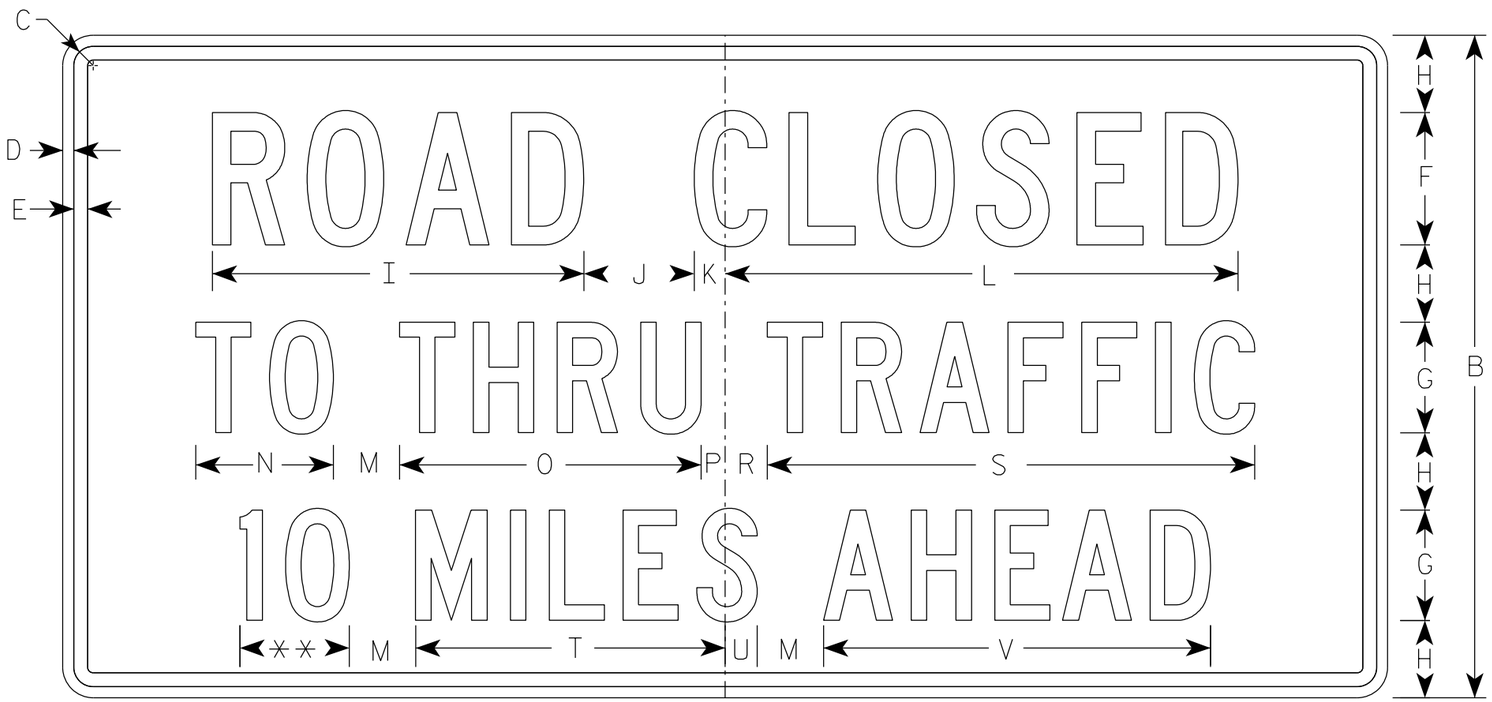
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 330	E

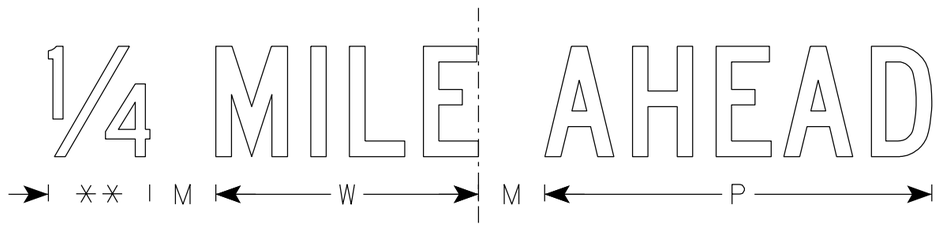
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



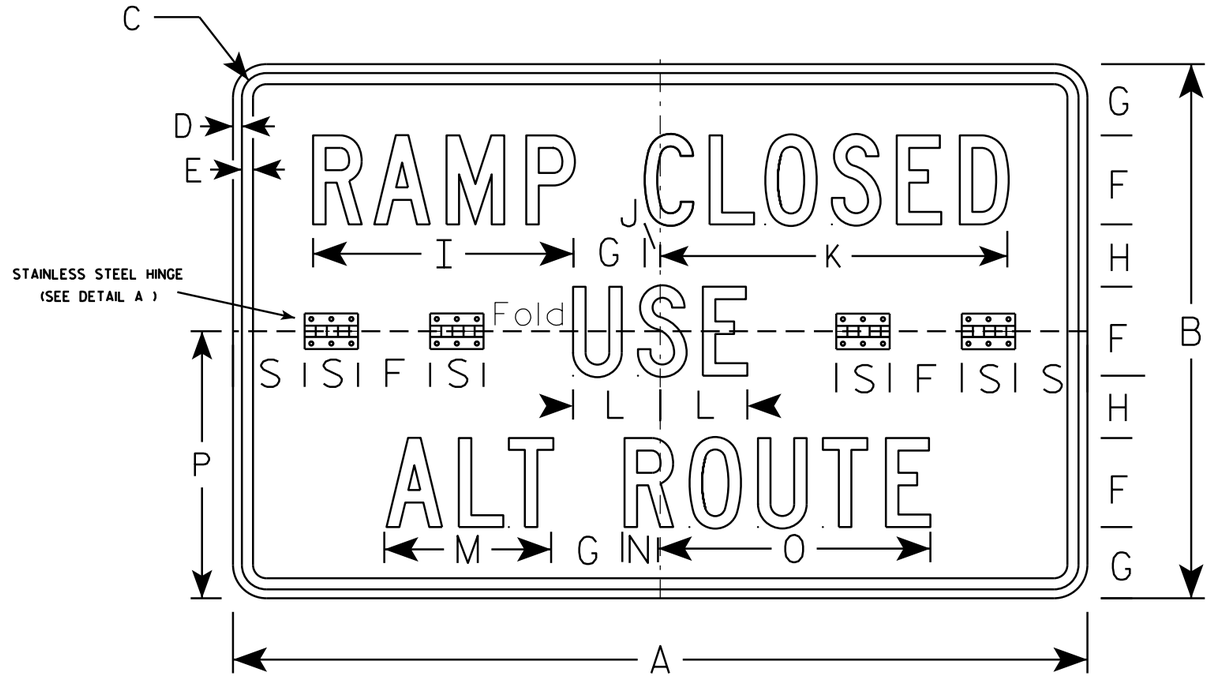
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/4	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

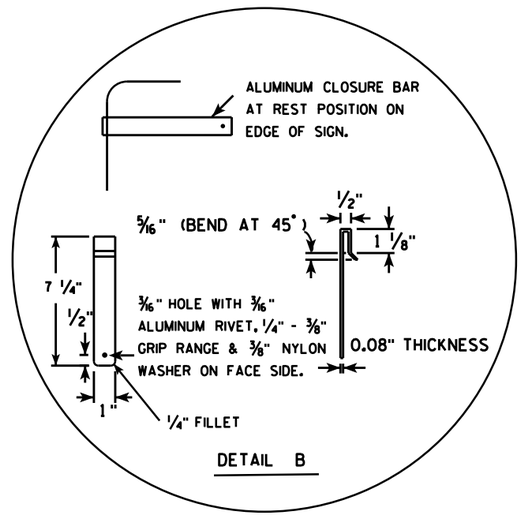
APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 6/14/2021 PLATE NO. R11-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 331	E



R11-54F

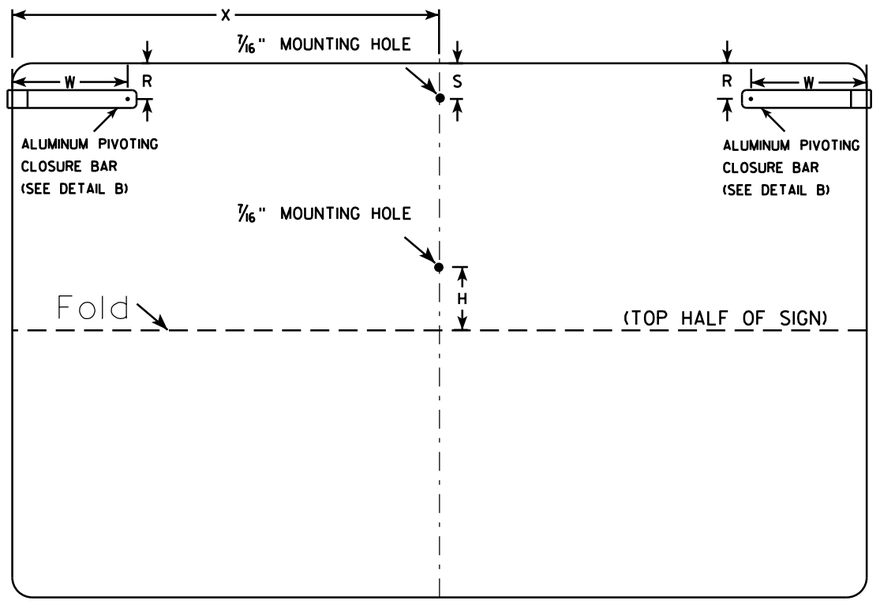
DETAIL A



DETAIL B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - C
4. Sign Base Material shall be aluminum, corners and borders shall be rounded.
5. All hardware used on the folding sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.
6. Refer to plate A5-3A for sign blank layout.



(BACK VIEW)

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
2M	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
3																											
4																											
5																											

STANDARD SIGN
R11-54F

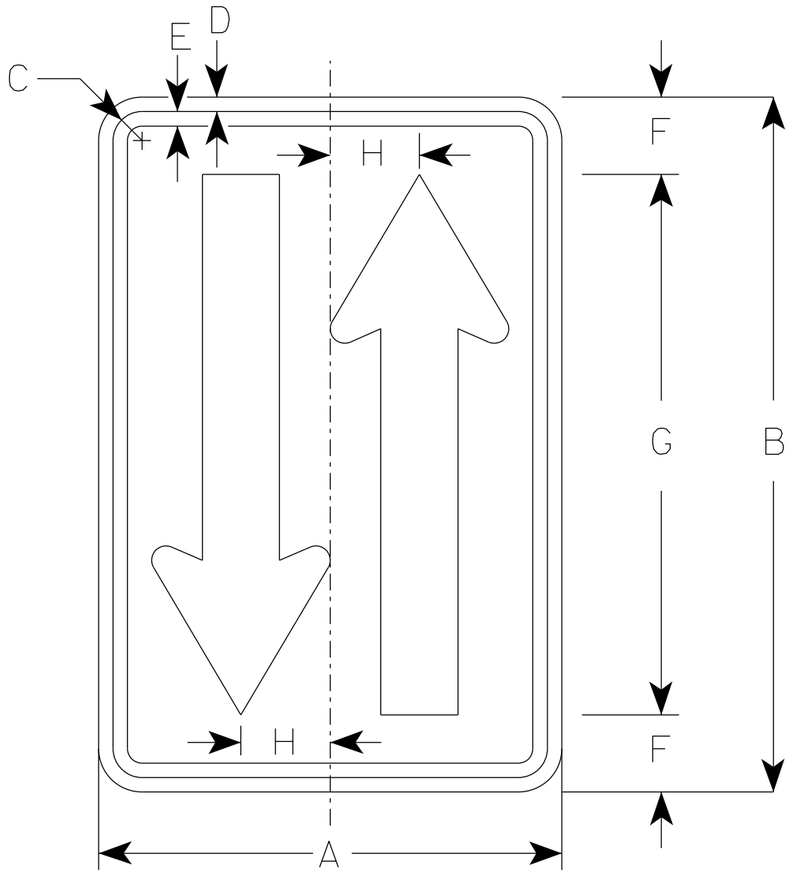
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/28/14 PLATE NO. R11-54F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

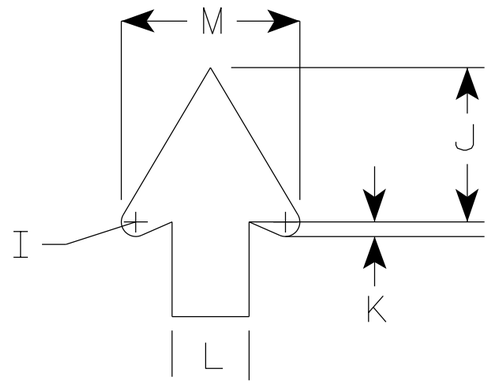
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R1154F.DGN PLOT DATE : 28-MAY-2014 14:15 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 8.511110:1.000000
WISDOT/CADDS SHEET 42



W6-4

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	18	1 1/8	3/8	3/8	2	14	2 1/4	3/8	4	1/8	2	4 5/8														1.5
2M	12	18	1 1/8	3/8	3/8	2	14	2 1/4	3/8	4	1/8	2	4 5/8														1.5
3																											
4																											
5																											

STANDARD SIGN
W6-4

WISCONSIN DEPT OF TRANSPORTATION

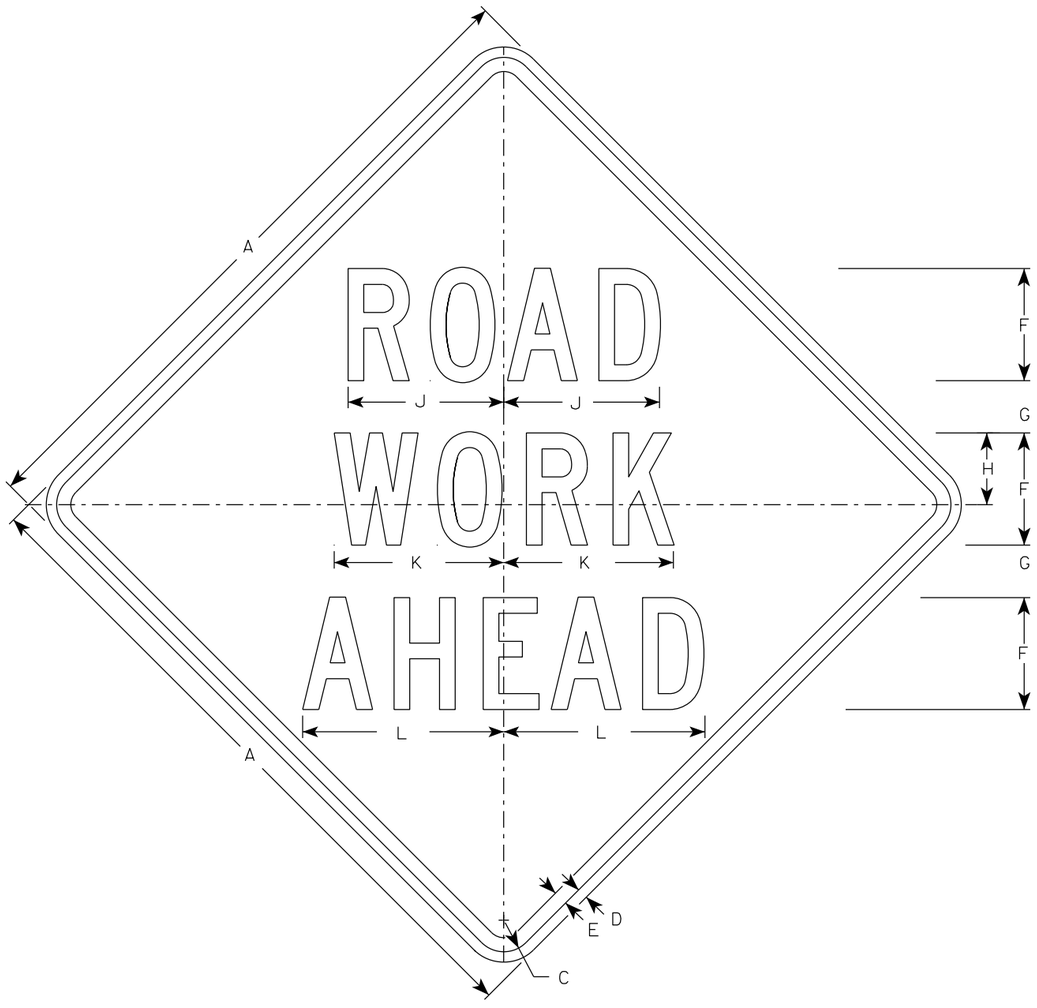
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2021 PLATE NO. W6-4.1

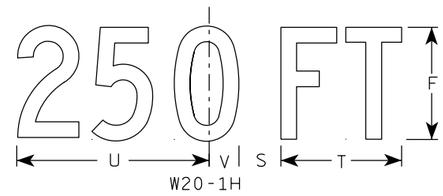
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

NOTES

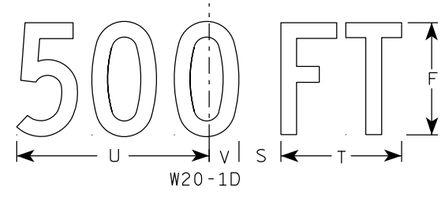
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1A

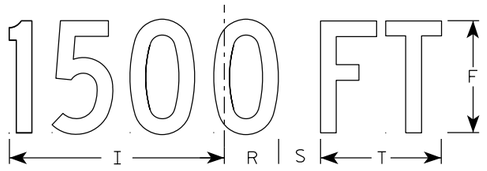


W20-1H

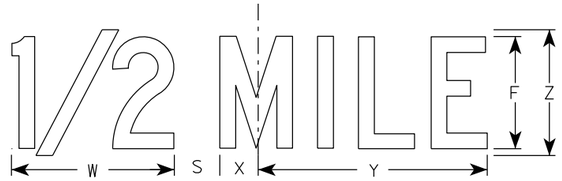


W20-1D

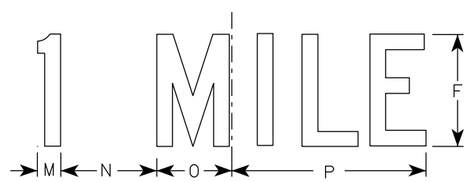
W20-1C



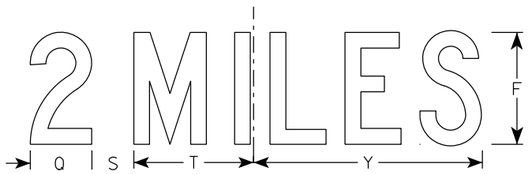
W20-1B



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		1 5/8	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		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

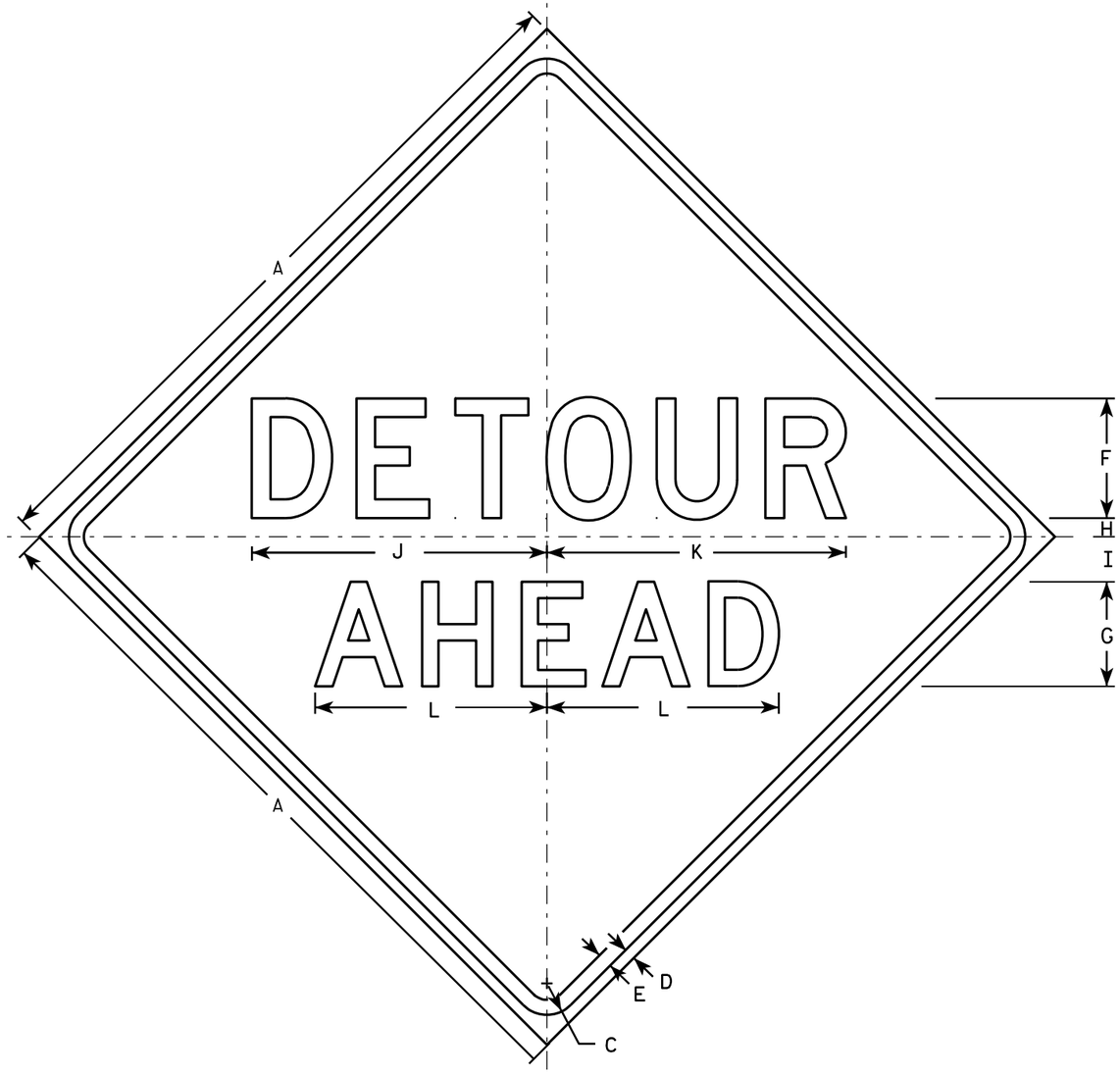
SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

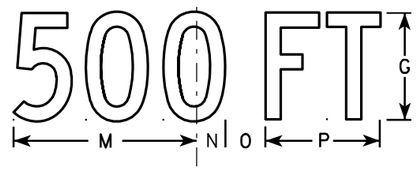
WISDOT/CADDS SHEET 42

7

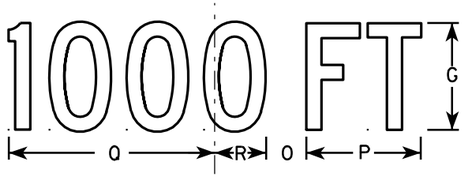
7



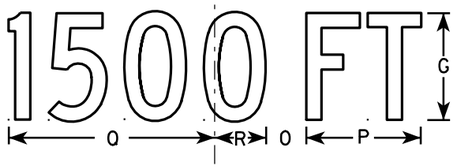
W20-2A



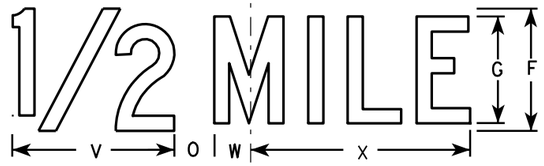
W20-2D



W20-2C



W20-2B



W20-2G

W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

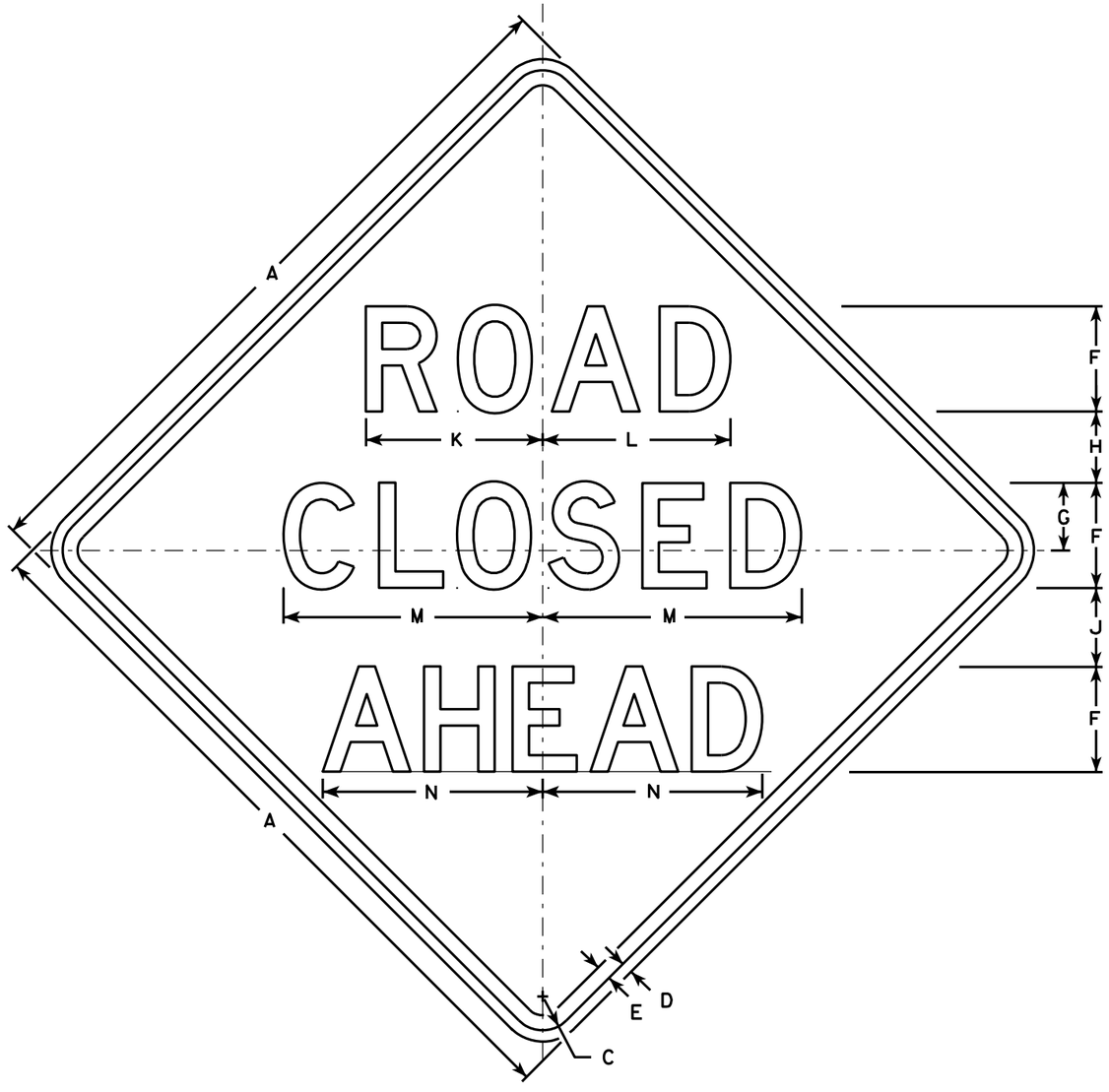
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

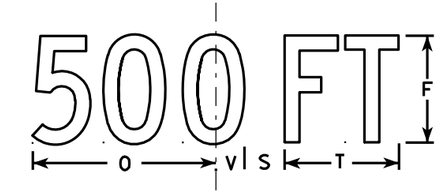
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

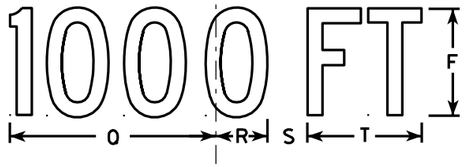
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 335 | E



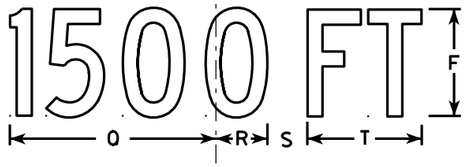
W20-3A



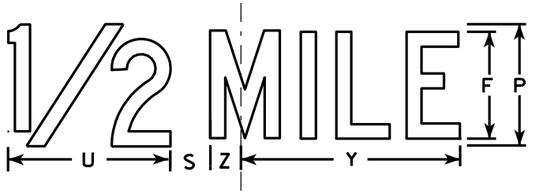
W20-3D



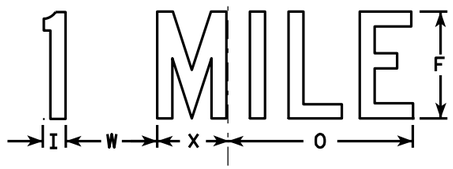
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

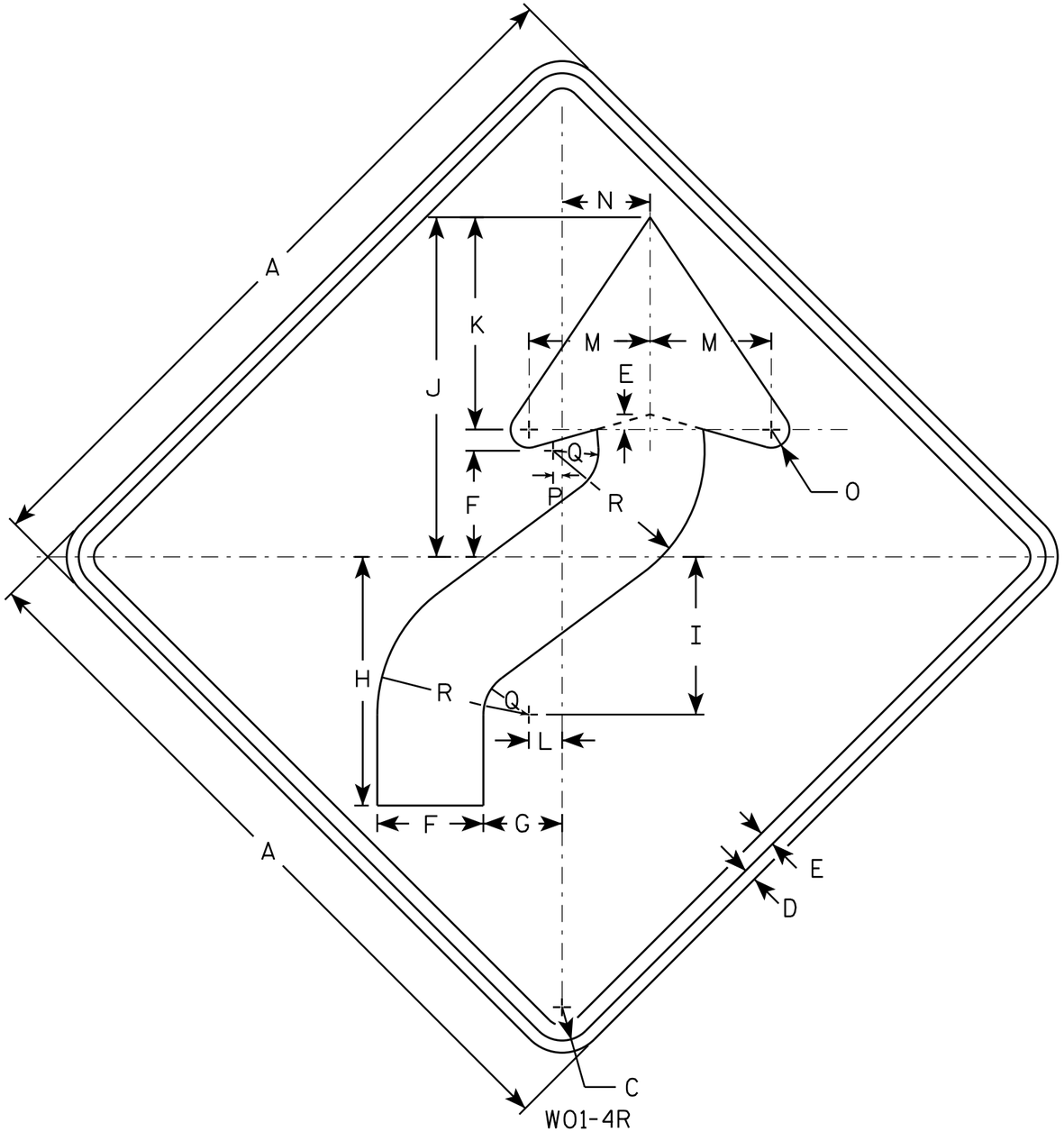
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 336 | E



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

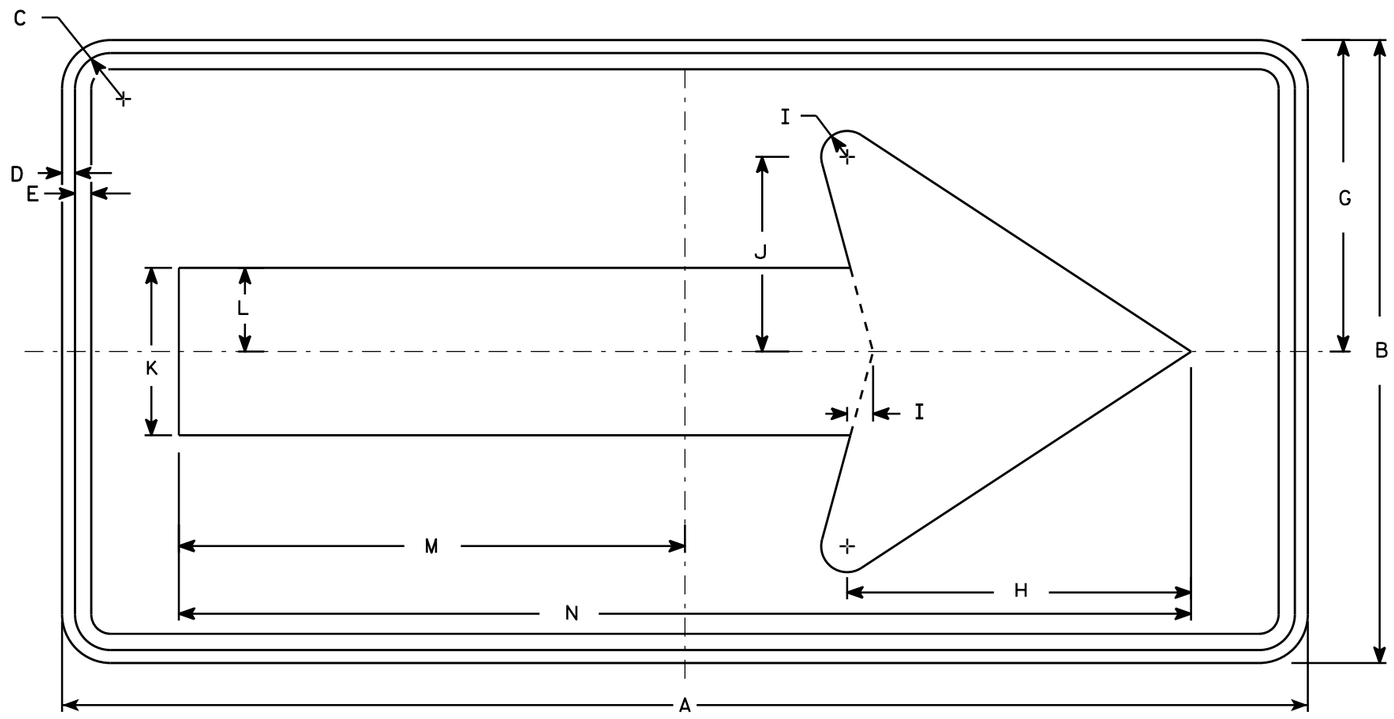
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

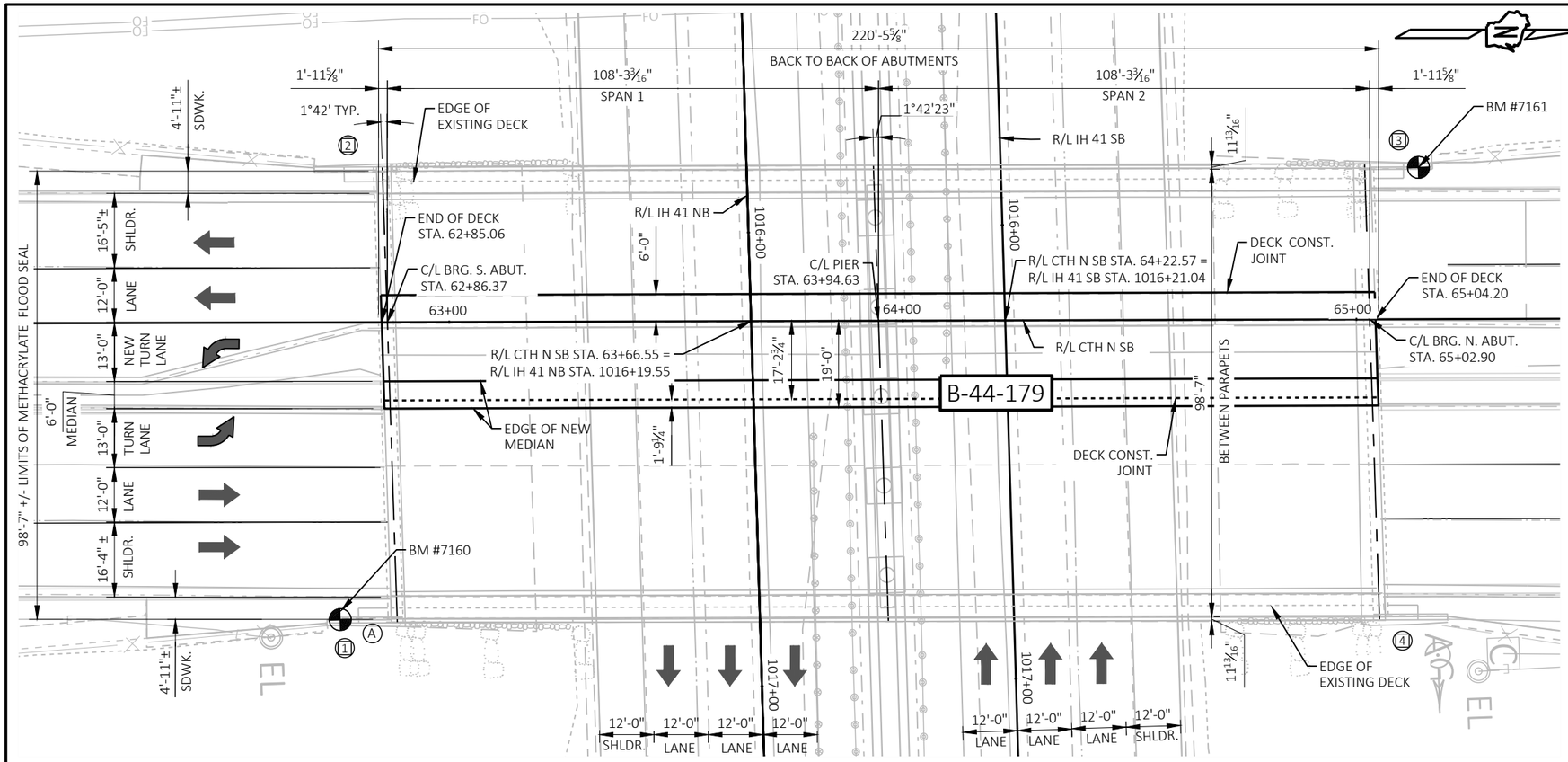
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

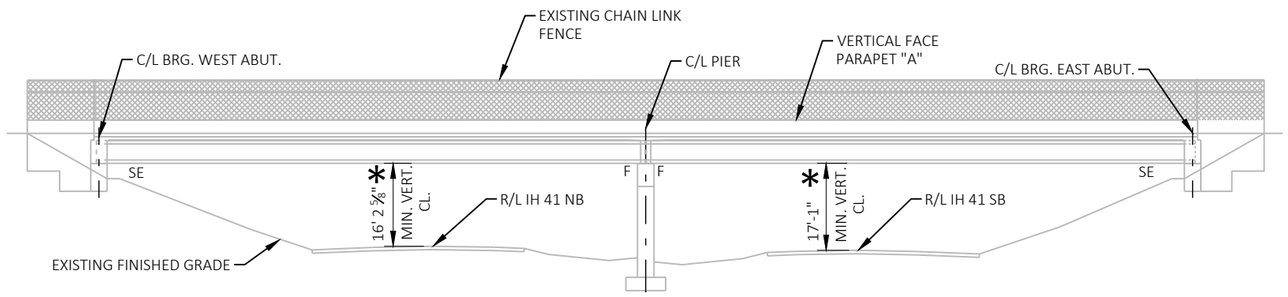
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



PLAN

REHABILITATION- TWO SPAN 54" PRESTRESSED GIRDER BRIDGE



ELEVATION

(LOOKING WEST)

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
7160	62+76, 65' RT	BM DISK	744.33
7161	65+14, 33' LT	BM DISK	746.41

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS-20
INVENTORY RATING: HS-21
OPERATING RATING: HS-40
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE — f'_c = 4,000 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — f_y = 60,000 PSI

TRAFFIC DATA

CTH N:
ADT (2020) = 11,350
ADT (2045) = 16,150
R.D.S. = 40 MPH

IH 41:
ADT (2020)= 61,290
ADT (2040) = 79,830
R.D.S = 75 MPH

LEGEND

(1) INDICATES WING NUMBER

* ELEVATIONS AND VERTICAL CLEARANCES BASED ON EXISTING 2002 AS-BUILT PLANS AND DATA FROM INSPECTION REPORT DATED 3/5/2017.

(A) NAME PLATE LOCATION

LIST OF DRAWINGS

1 GENERAL PLAN & ELEVATION
2 TYPICAL SECTION & QUANTITIES
3 SUPERSTRUCTURE DETAILS 1
4 SUPERSTRUCTURE DETAILS 2
5 DECK ELEV. & DEAD LOAD DEFLECTIONS

STRUCTURE DESIGN CONTACTS:

CONSULTANT: TONY CASTLE 414-935-5740
WISDOT BOS: AARON BONK 608-261-0261

ANTHONY J. CASTLE E-43345 OAK CREEK WI — WISCONSIN PROFESSIONAL ENGINEER

12/22/2023

NO.	DATE	REVISION	BY

emcs

STATE OF WISCONSIN DEPARTMENT OF TRANSPORATION

ACCEPTED SDR 02/05/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STATE PROJECT NUMBER
1130-66-76

STRUCTURE B-44-179

CTH N OVER IH 41

COUNTY: OUTAGAMIE
TOWN OF: VANDENBROEK

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
AJC	JRM	KRW	AJC

GENERAL PLAN & ELEVATION

SHEET 1 OF 5
339

SCALE =
I.D.
DATE:

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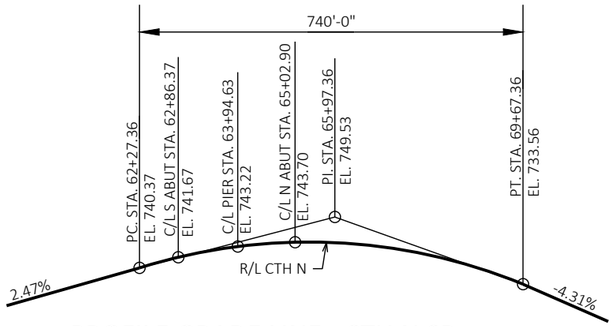
STATE PROJECT NUMBER

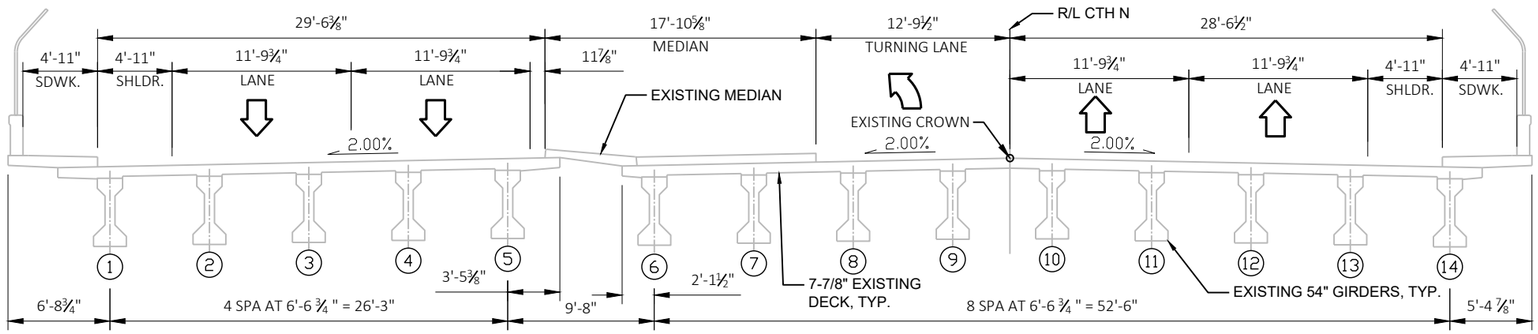
1130-66-76



PROFILE GRADE LINE - CTH N SB

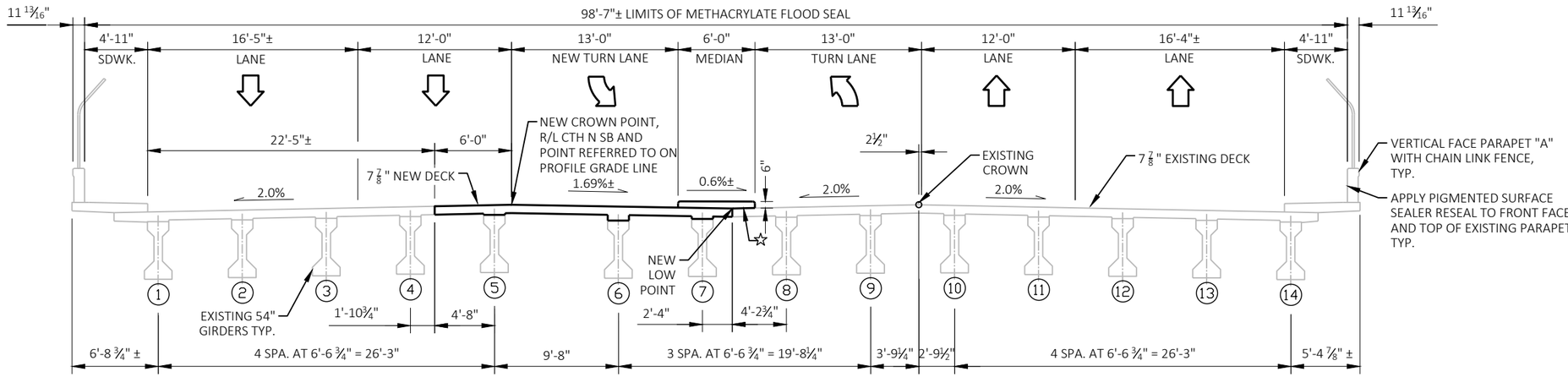
TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEMS	UNIT	TOTAL
203.0220	REMOVING STRUCTURE (B-44-179)	EACH	1
502.0100	CONCRETE MASONRY BRIDGES	CY	163
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	179
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	36
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	44,700
509.1500	CONCRETE SURFACE REPAIR	SF	6
SPV.0060.0401	TEMPORARY SUPPORT B-44-179	EACH	1
SPV.0180.0401	METHACRYLATE FLOOD SEAL	SY	2,459



EXISTING CROSS SECTION

LOOKING NORTH



PROPOSED CROSS SECTION

LOOKING NORTH

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.

DIMENSIONS SHOWN ARE BASED ON ORIGINAL STRUCTURE PLANS

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NAVD 88 DATUM (2012).

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL REINFORCING BARS ARE ENGLISH DESIGNATION AND THE FIRST DIGIT OF A 3-DIGIT BAR MARK OR FIRST TWO DIGITS OF A 4-DIGIT BAR MARK SIGNIFY THE BAR SIZE.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE DECK ELEVATION AND DEAD LOAD DEFLECTIONS SHEET.

APPLY METHACRYLATE FLOOD SEAL TO TOP OF EXISTING AND PROPOSED BRIDGE DECK, TOP AND EDGE OF MEDIANS, AND TOP AND EDGE OF EXISTING SIDEWALK.

APPLY PIGMENTED SURFACE RESEALER TO SIDE AND TOP OF PARAPETS.

CONCRETE SURFACE REPAIR QUANTITIES ARE AN ESTIMATE ONLY. ACTUAL QUANTITIES AND LOCATION OF REPAIRS TO BE DETERMINED IN THE FIELD AT THE DIRECTION OF THE FIELD ENGINEER.REPAIR AREAS AS OF FIELD REVIEW ON 5/26/2022 INCLUDE TOP OF SIDEWALK, ABUTMENT DIAPHRAGMS, AND PARAPETS.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

VARIATIONS TO THE NEW GRADE LINE OVER 1/4" MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.

CARE SHALL BE TAKEN TO AVOID DAMAGE TO EXISTING GIRDER, INCLUDING SHEAR STIRRUPS. SAW CUTTING OF THE EXISTING SHEAR STIRRUPS IS NOT ALLOWED. STIRRUPS DAMAGED DURING THE REMOVAL OF THE EXISTING DECK WILL BE THE CONTRACTORS RESPONSIBILITY AND REPLACED AT NO ADDITIONAL COTS TO THE OWNER.

ALL REMOVAL LINES SHALL BE DEFINED BY A 1" DEEP SAW CUT AT THE CONCRETE SURFACES.

ANY EXCAVATION REQUIRED TO COMPLETE MEDIAN AND DECK REPLACEMENT AT THE ABUTMENTS TO BE CONSIDERED INCLUDED IN BID ITEM "CONCRETE MASONRY BRIDGES."

(X) DENOTES GIRDER NUMBER.

☆ REMOVE AND GRIND EXISTING ANCHORS FROM MEDIAN, WORK INCLUDED IN BID ITEM "REMOVING STRUCTURE B-44-179".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-44-179

DRAWN BY KRW | PLANS CK'D AJC

TYPICAL SECTION & QUANTITIES

SHEET 2 OF 5

340

SCALE = 1" = 10'

8

8

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STATE PROJECT NUMBER

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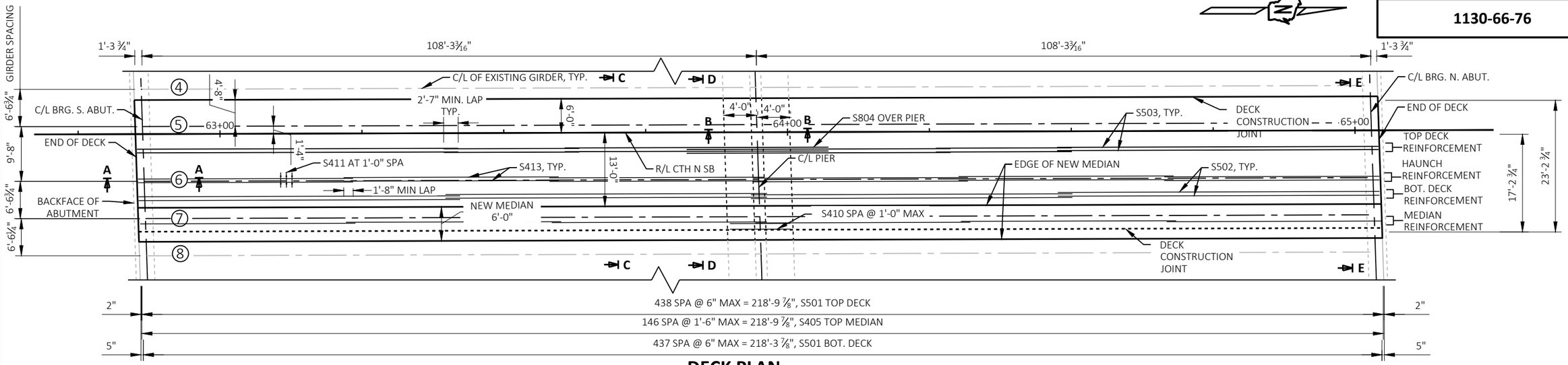
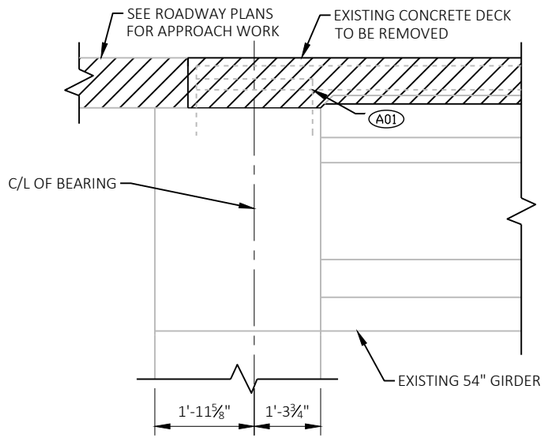
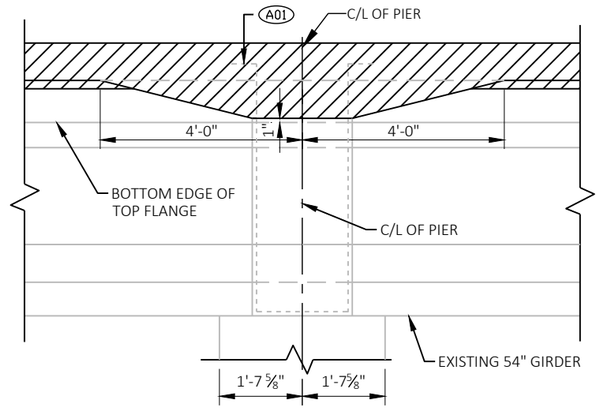


DECK PLAN



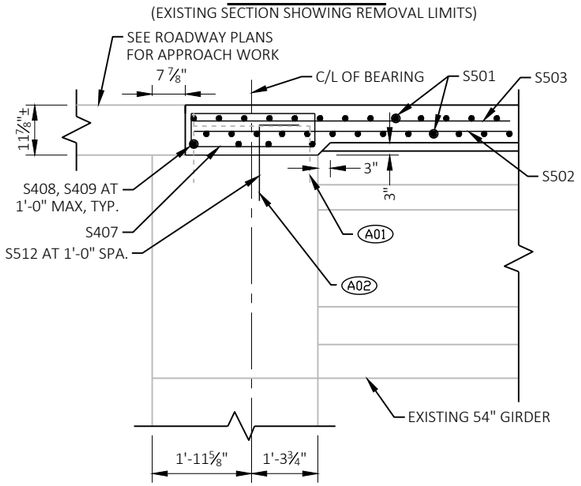
SECTION A-A

(EXISTING SECTION SHOWING REMOVAL LIMITS)



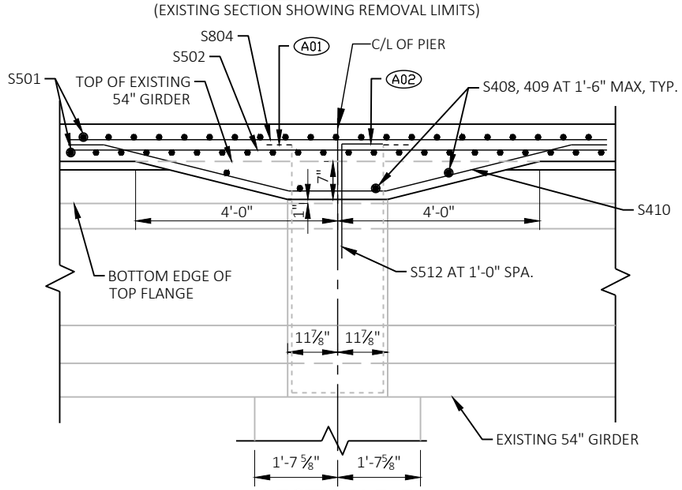
SECTION B-B

(EXISTING SECTION SHOWING REMOVAL LIMITS)



SECTION A-A

(PROPOSED SECTION. S ABUT SHOWN, N ABUT SIMILAR)



SECTION B-B

(PROPOSED SECTION)

NOTES:

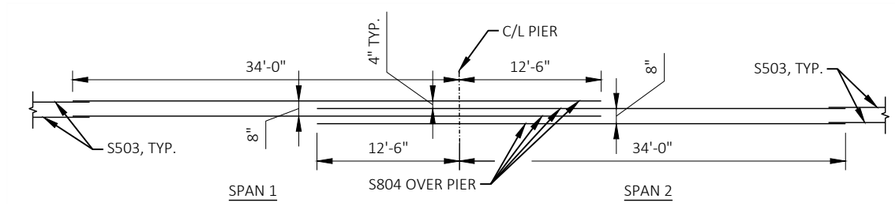
SEE "SUPERSTRUCTURE DETAILS 2" SHEET FOR SECTIONS AT C-C, D-D, AND E-E

(X) DENOTES GIRDER NUMBER

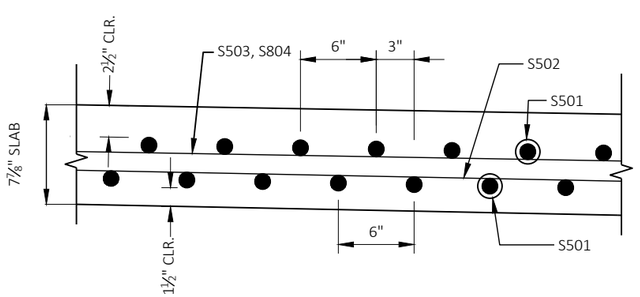
(A01) EXISTING BARS ARE LIKELY TO BE CORRODED AND/OR DAMAGED DURING CONCRETE REMOVAL. SALVAGE AND INCORPORATE AS MUCH REBAR AS PRACTICAL. SUPPLEMENT WITH THE BARS INDICATED BY (A02) TOTAL NUMBER OF SUPPLEMENT BARS PROVIDED IS AN ESTIMATE ONLY AND ASSUMED TO BE REQUIRED AT HALF OF POTENTIAL REINFORCEMENT LOCATIONS. ACTUAL NUMBER OF SUPPLEMENT BARS TO BE DETERMINED IN THE FIELD BY THE ENGINEER BASED ON CONDITION ASSESSMENT.

(A02) ADHESIVE ANCHORS S512. EMBED 1'-0" IN CONCRETE. SPACE AT 1'-0". TURN 10" LEG AS NECESSARY TO FIT.

INDICATES REMOVAL LIMITS OF EXISTING DECK



CONTINUITY REINFORCEMENT DETAIL



TYPICAL SECTION THRU DECK

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-44-179

DRAWN BY AMR | PLANS CK'D AJC

SUPERSTRUCTURE DETAILS 1

SHEET 3 OF 5
341

SCALE = 1" = 10'

8

8

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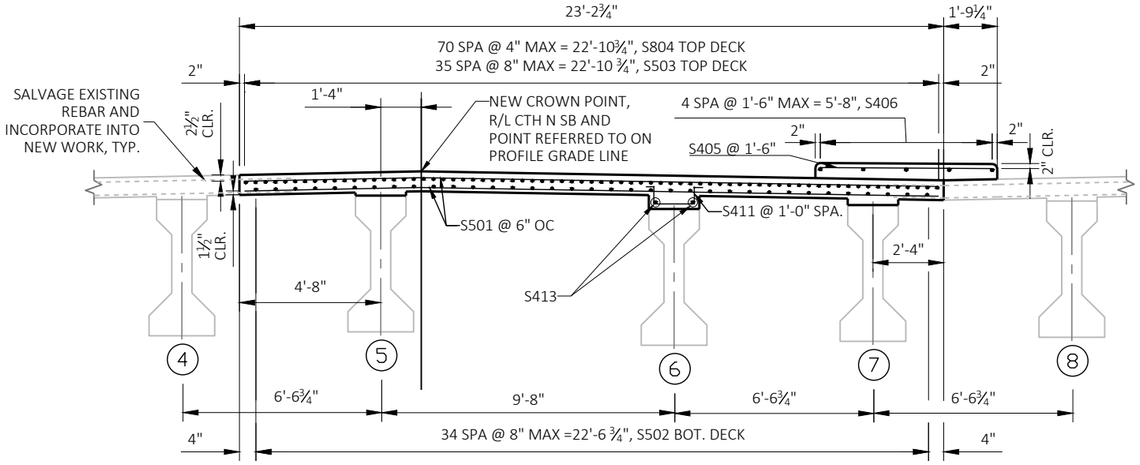
STATE PROJECT NUMBER

1130-66-76

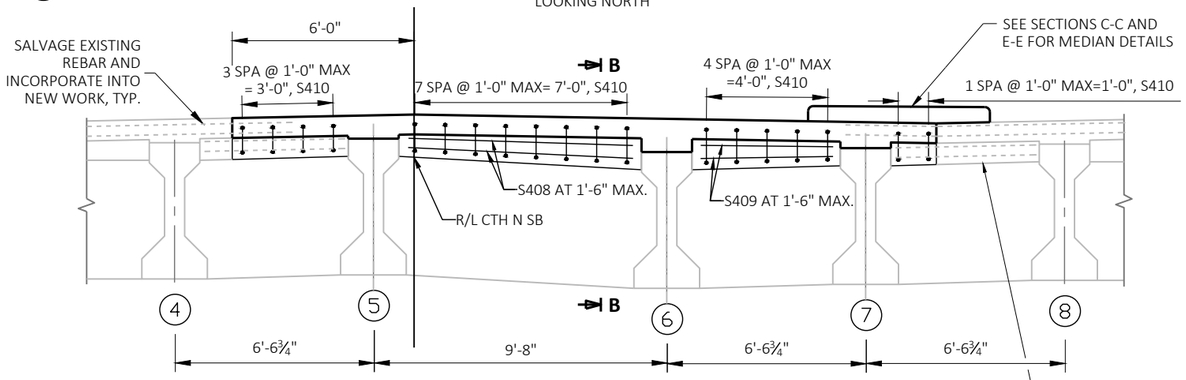


NOTE: SEE "SUPERSTRUCTURE DETAILS 1" FOR LOCATION OF SECTION CUT.

(X) DENOTES GIRDER NUMBER

SECTION C-C

(PROPOSED SECTION)
LOOKING NORTH



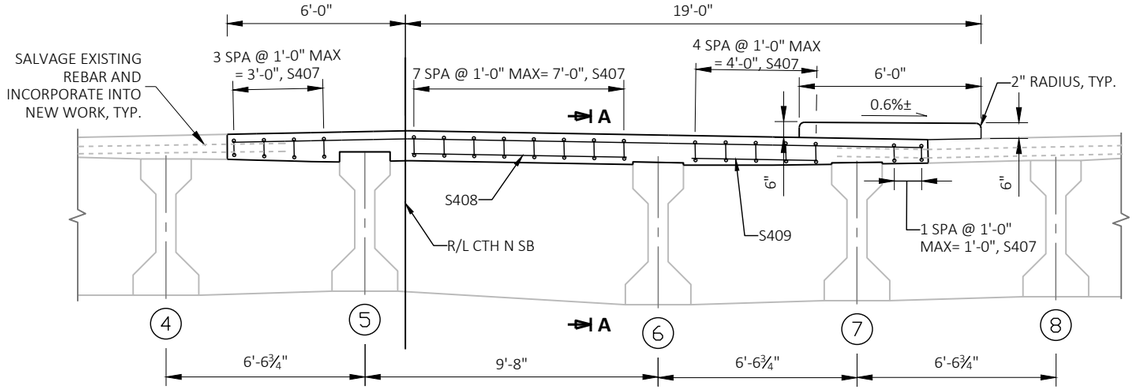
NOTE: DECK STEEL NOT SHOWN FOR CLARITY. SEE "SUPERSTRUCTURE DETAILS 1" FOR LOCATION OF SECTION CUT.

(X) DENOTES GIRDER NUMBER

SECTION D-D

(PROPOSED SECTION)
LOOKING NORTH

CONTRACTOR DESIGNED FALSEWORK REQ'D. IN THIS BAY. FALSEWORK REQ'D TO SUPPORT DEAD LOADS. WORK INCLUDED IN BID ITEM "TEMPORARY SUPPORT B-44-179".

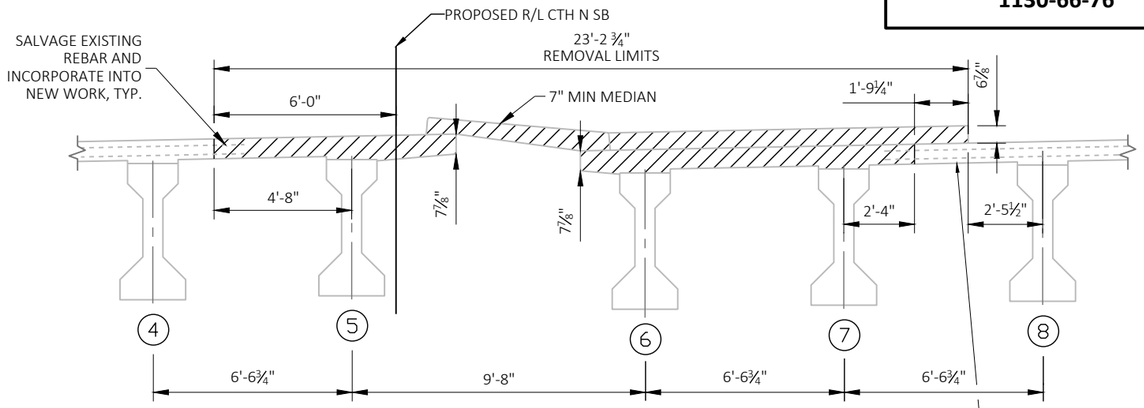


NOTE: DECK STEEL NOT SHOWN FOR CLARITY. SEE "SUPERSTRUCTURE DETAILS 1" FOR LOCATION OF SECTION CUT.

(X) DENOTES GIRDER NUMBER

SECTION E-E

(PROPOSED SECTION)
LOOKING NORTH



NOTE: DECK STEEL NOT SHOWN FOR CLARITY. SEE "SUPERSTRUCTURE DETAILS 1" FOR LOCATION OF SECTION CUT.

(X) DENOTES GIRDER NUMBER

SECTION C-C

(EXISTING SECTION SHOWING REMOVAL LIMITS)
LOOKING NORTH

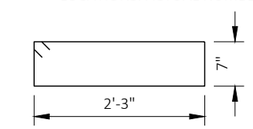
CONTRACTOR DESIGNED FALSEWORK REQ'D. IN THIS BAY. FALSEWORK REQ'D TO SUPPORT CONSTRUCTION LOADING. WORK INCLUDED IN BID ITEM "TEMPORARY SUPPORT B-44-179".

REMOVAL LIMITS OF EXISTING DECK AND MEDIAN

TOTAL WEIGHT = 44700 LBS

	BAR MARK	COAT	NO.	LENGTH	BENT	LOCATION
	S501	X	877	22'-11"		SLAB TRANS. TOP & BOT.
	S502	X	140	56'-8"		SLAB LONG. BOT.
	S503	X	144	40'-4"		SLAB LONG. TOP
	S804	X	71	46'-6"		SLAB LONG. TOP
	S405	X	147	5'-8"		MEDIAN TRANS.
	S406	X	30	37'-11"		MEDIAN LONG.
	S407	X	38	6'-2"	X	ABUTMENT DIA.
	S408	X	12	7'-6"		PIER & ABUT DIA. TRANS.
	S409	X	12	4'-6"		PIER & ABUT DIA. TRANS.
	S410	X	19	10'-4"	X	PIER DIA. LONG.
	S411	X	220	3'-10"	X	HAT BARS
△	S512	X	36	2'-3"	X	ANCHORS
	S413	X	12	37'-11"		GIRDER LONG.

△ ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0" IN CONCRETE. SPACE AT 1'-0". TURN 10" LEG AS NECESSARY TO FIT. TOTAL NUMBER OF SUPPLEMENT BARS PROVIDED IS AN ESTIMATE ONLY AND ASSUMED TO BE REQUIRED AT HALF OF POTENTIAL REINFORCEMENT LOCATIONS. ACTUAL NUMBER OF SUPPLEMENT BARS TO BE DETERMINED IN FIELD BY ENGINEER BASED ON CONDITION ASSESSMENT.



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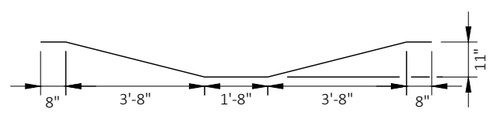

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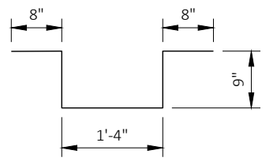

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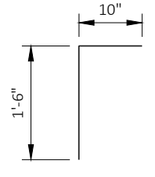

S512

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-44-179

DRAWN BY AMR | PLANS CK'D AJC

SUPERSTRUCTURE DETAILS 2

SHEET 4 OF 5
342

SCALE = 1" = 10'

8

8

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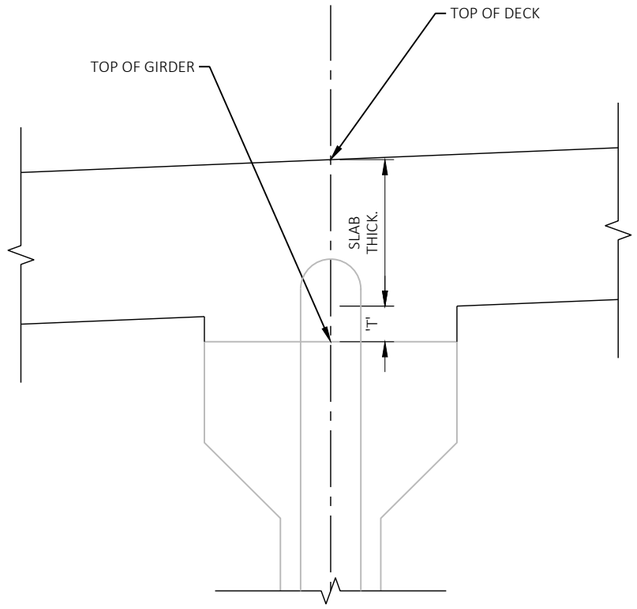
STATE PROJECT NUMBER

1130-66-76



SECTION THRU SLAB

NOTES:

CONTRACTOR TO SURVEY CENTERLINE OF BEARINGS, AND AT 0.1 POINTS ALONG TOP OF EXISTING GIRDERS AFTER REMOVAL OF EXISTING DECK AND PRIOR TO NEW DECK POUR. CONTRACTOR TO REPORT VALUES TO ENGINEER OF RECORD TO EVALUATE VERTICAL RESPONSE OF EXISTING GIRDERS. NEW DECK SHALL NOT BE POURED UNTIL GIVEN APPROVAL TO PROCEED BY ENGINEER OF RECORD. CONTRACTOR TO GIVE ENGINEER A MINIMUM OF 1 WEEK NOTICE WHEN MEASUREMENTS WILL BE TAKEN.

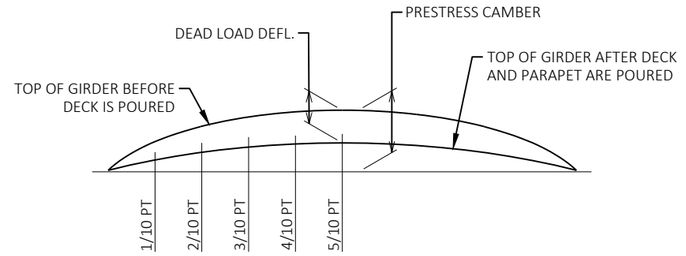
'T' = HAUNCH HEIGHT AT CENTERLINE OF GIRDER.

TO DETERMINE 'T': AFTER EXISTING DECK HAS BEEN REMOVED. ELEVATIONS OF THE TOP FLANGES SHALL BE TAKEN AT CENTERLINE OF BEARINGS AND AT 0.1 POINTS.

TOP OF DECK ELEV. AT FINAL GRADE.
\- TOP OF GIRDER ELEV. AFTER EXISTING DECK REMOVAL.
\+ CONC. ONLY DEFLECTION; DOWNWARD DEFLECTION IS ADDED, UPWARD DEFLECTION IS SUBTRACTED.
\- SLAB THICKNESS
= 'T' VALUE FOR SETTING HAUNCH.

THE AVERAGE HAUNCH THICKNESS ASSUMED FOR GIRDERS IN TABLE BELOW:

	SPAN 1	SPAN 2
GIRDER 5	1 ½"	2"
GIRDER 6	4 ½"	6"
GIRDER 7	1 ½"	3"



DEAD LOAD DEFLECTION DIAGRAM

DECK ELEVATIONS

LOCATION	SOUTH ABUT	1/10 PT	2/10 PT	3/10 PT	4/10 PT	5/10 PT	6/10 PT	7/10 PT	8/10 PT	9/10 PT	PIER 1
WEST CONST. JT	741.54	741.75	741.94	742.12	742.29	742.46	742.61	742.74	742.87	742.99	743.10
GIRDER 5	741.64	741.84	742.04	742.22	742.39	742.55	742.70	742.84	742.97	743.09	743.19
PGL	741.67	741.87	742.06	742.25	742.42	742.58	742.73	742.87	743.00	743.11	743.22
GIRDER 6	741.53	741.74	741.93	742.11	742.28	742.44	742.59	742.73	742.86	742.97	743.08
GIRDER 7	741.42	741.63	741.82	742.00	742.17	742.33	742.48	742.62	742.75	742.87	742.97
EAST CONST. JT	741.39	741.59	741.78	741.96	742.13	742.29	742.44	742.58	742.71	742.83	742.93

LOCATION	PIER 1	1/10 PT	2/10 PT	3/10 PT	4/10 PT	5/10 PT	6/10 PT	7/10 PT	8/10 PT	9/10 PT	NORTH ABUT
WEST CONST. JT	743.10	743.19	743.28	743.35	743.42	743.47	743.51	743.55	743.57	743.58	743.58
GIRDER 5	743.19	743.29	743.37	743.45	743.51	743.57	743.61	743.64	743.66	743.67	743.67
PGL	743.22	743.32	743.40	743.48	743.54	743.59	743.64	743.67	743.69	743.70	743.70
GIRDER 6	743.08	743.18	743.26	743.34	743.40	743.45	743.50	743.53	743.55	743.56	743.56
GIRDER 7	742.97	743.07	743.15	743.23	743.29	743.34	743.39	743.42	743.44	743.45	743.45
EAST CONST. JT	742.93	743.03	743.11	743.19	743.25	743.30	743.35	743.38	743.40	743.41	743.41

DEAD LOAD DEFLECTION DATA

GIRDER DATA									
SPAN 1									
GIRDER	DEAD LOAD DEFL. (IN)								
	1/10 PT	2/10 PT	3/10 PT	4/10 PT	5/10 PT	6/10 PT	7/10 PT	8/10 PT	9/10 PT
5	0.6	1.1	1.5	1.7	1.8	1.7	1.5	1.1	0.6
6	0.6	1.2	1.6	1.9	2.0	1.9	1.6	1.2	0.6
7	0.5	0.9	1.2	1.4	1.5	1.4	1.2	0.9	0.5
SPAN 2									
GIRDER	DEAD LOAD DEFL. (IN)								
	1/10 PT	2/10 PT	3/10 PT	4/10 PT	5/10 PT	6/10 PT	7/10 PT	8/10 PT	9/10 PT
5	0.6	1.1	1.5	1.7	1.8	1.7	1.5	1.1	0.6
6	0.6	1.2	1.6	1.9	2.0	1.9	1.6	1.2	0.6
7	0.5	0.9	1.2	1.5	1.5	1.5	1.2	0.9	0.5

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-44-179

DRAWN BY AMR | PLANS CK'D AJC

DECK ELEV. & DEAD LOAD DEFLECTIONS

SHEET 5 OF 5

343

SCALE = 1" = 10'

8

8

C:\Users\JWB\DCACCDocs\WisDOT\1130667\Project Files\Dgn\1130667\[stm]B-44-0179\Sheets\080104_super2.dwg, 12/21/2023 9:55:49 AM, LWB

DESIGN DATA

CONTRACTOR DESIGNED OVERHEAD SIGN STRUCTURES SHALL BE DESIGNED ACCORDING TO THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 1ST EDITION AND INTERIM SPECIFICATIONS, AND THE WISDOT BRIDGE MANUAL.

STANDARD FOUNDATIONS DESIGNED ACCORDING TO THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION.

DEAD LOAD: WT. OF SIGN AND SUPPORTING STRUCTURE
ICE LOAD: 3 PSF TO ONE FACE OF SIGN & SURFACE OF MEMBERS
WIND PRESSURE: 115 MPH (3-SEC. GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS (700 YEAR MEAN RECURRENCE INTERVAL)

WIND COMPONENTS	NORMAL	TRANSVERSE
LOAD CASE 1:	1.00	0.00
LOAD CASE 2:	0.00	1.00
LOAD CASE 3:	0.75	0.75

LOAD COMBINATIONS

STRENGTH I:	1.25 DC + 1.6 LL
EXTREME I (MAX DC):	1.1 DC + 1.0 W + 1.0 ICE
EXTREME I (MIN DC):	0.9 DC + 1.0 W
SERVICE I:	1.0 DC + 1.0 W
FATIGUE:	1.0 NW (NATURAL WIND GUST)
	1.0 TrG (TRUCK INDUCED GUST)
	1.0 GVW (GALLOPING - CANTILEVER ONLY)

MATERIAL PROPERTIES

CONCRETE MASONRY ——— f'_c = 3,500 PSI

HIGH STRENGTH STEEL REINFORCEMENT, GRADE 60 ——— f_y = 60,000 PSI

STRUCTURAL ANGLES, PLATES & BARS - ASTM A709 GRADE 36 ——— f_y = 36,000 PSI

HIGH STRENGTH BOLTS - ASTM A3125 GRADE A325 ——— f_y = 92,000 PSI

ANCHOR RODS - ASTM F1554 GRADE 55 ——— f_y = 55,000 PSI

HEAVY HEX NUTS - ASTM A563 GRADE DH OR ASTM A194 GRADE 2H

WASHERS - ASTM F436

DTI WASHERS - ASTM F959 TYPE 325

FOUNDATION DATA

SIGN STRUCTURE FOUNDATIONS ARE SUPPORTED ON DRILLED SHAFTS THAT HAVE BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 24° (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 750 PSF (COHESIVE SOILS) AND A UNIT WEIGHT OF 125 PCF. THE GROUND WATER TABLE FOR DESIGN IS ASSUMED TO BE AT A DEPTH OF 10'-0" BELOW THE GROUND SURFACE, ACTUAL WATER LEVEL AT SITE MAY VARY. THE REGION GEOTECHNICAL ENGINEER SHALL VISUALLY INSPECT THE SUBSURFACE SOILS DURING THE DRILLING OF THE SHAFT HOLE TO CONFRIM THESE PROPERTIES PRIOR TO PLACEMENT OF THE DRILLED SHAFT CONCRETE.

TOTAL ESTIMATED QUANTITES

BID ITEM NO.	BID ITEM	UNIT	S-44-383	S-44-384
531.2030	DRILLING SHAFT 30-INCH	LF	26	26
531.5220	FOUNDATION SINGLE-SHAFT TYPE MF-II S-44-383	EA	2	0
531.5220	FOUNDATION SINGLE-SHAFT TYPE MF-II S-44-384	EA	0	2
532.5220	MONOTUBE FULL SPAN TYPE II S-44-383	EA	1	0
532.5220	MONOTUBE FULL SPAN TYPE II S-44-384	EA	0	1

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALTERNATE DESIGNS ARE NOT ALLOWED.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), OUTAGAMIE COUNTY ZONE, NAD 83 (1997). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2007).

ALL REINFORCING BARS ARE IN ENGLISH UNITS. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

SIGN BRIDGE ID PLAQUES SHALL BE CONSIDERED INCIDENTAL TO THE TRUSS OR MONOTUBE BID ITEMS FOR EACH APPLICABLE SIGN STRUCTURE IN THE PLAN SET. LOCATE THE ID PLAQUE ON THE FREEWAY SIDE OF THE SUPPORT COLUMN SO THAT IT CAN BE SEEN FROM THE ROADWAY. FABRICATE AND INSTALL THE ID PLAQUE IN ACCORDANCE WITH S.D.D. 12 A4-3.

UNLESS DETAILED OTHERWISE IN THE PLANS, ALL H.S. BOLTED CONNECTIONS SHALL BE MADE WITH ¾" DIA. A325 GALVANIZED BOLTS. FIELD CONNECTIONS SHALL BE INSTALLED WITH DTI WASHERS.

WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF A TRUSS UNIT CAN BE GALVANIZED IN ONE PIECE.

WELD TEST AS PER AWS D1.1.

SEE SIGN PLATE NO. A4-6, A4-7A & A4-7B OF THE SIGN PLATE MANUAL FOR INSTRUCTIONS ON CENTERING SIGNS VERTICALLY ON THE TRUSS.

SIGNS OR BLANKS SHALL BE INSTALLED ON TRUSS AT TIME OF ERECTION. BLANKS SHALL BE ¼ THE LENGTH OF THE CANTILEVER SPAN, 2'-0" DEEPER THAN THE C/L TO C/L OF CHORDS, AND SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED ON THE PLANS.

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION OF THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PER THE REQUIREMENTS IN THE STANDARD SPECIFICATIONS PRIOR TO FABRICATION OF THE STRUCTURE. CONTRACTOR SHALL SHOW SIGNS ON THE SHOP DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRILLING OR EXCAVATING AND MAINTAINING A STABLE AND OPEN HOLE FOR SUBSEQUENT INSTALLATION OF CONCRETE MASONRY FOR THE DRILLED SHAFTS. PARTIAL OR FULL DEPTH TEMPORARY CASING MAY BE REQUIRED TO MAINTAIN THE STABILITY OF THE EXCAVATED HOLE FOR THE SIGN SUPPORT PRIOR TO FILLING THE HOLE WITH CONCRETE. PERMANENT CASING MADE FROM STEEL OR CORRUGATED METAL PIPE MAY BE USED IN LIEU OF TEMPORARY CASING. TEMPORARY/PERMANENT CASING, IF USED, SHALL BE INCIDENTAL TO THE BID ITEM "DRILLING SHAFT (DIA.)".

STRUCTURE DATA

STRUCTURE ID	SIGN AREA	SIGN DEPTH	FOUNDATION TYPE	TRUSS TYPE
S-44-383	42 SF	4'-0"	TYPE II	MONOTUBE FULL SPAN
S-44-384	42 SF	4'-0"	TYPE II	MONOTUBE FULL SPAN

STATE PROJECT NUMBER

1130-66-76

TRAFFIC VOLUME

	S-44-383	S-44-384
A.D.T. (2045) =	7,960	5,560
R.D.S. =	45 MPH	45 MPH

LIST OF DRAWINGS:

1. GENERAL NOTES & DESIGN DATA
2. LAYOUT S-44-383
3. LAYOUT S-44-384

LIST OF STANDARD DESIGN DRAWINGS

4. I. MONOTUBE & 2-CHORD TRUSS CONNECTIONS 1
5. II. MONOTUBE & 2-CHORD TRUSS CONNECTIONS 2
6. III. MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS
7. IV. MONOTUBE & 2-CHORD TRUSS FOUNDATIONS

THESE ARE STANDARD DESIGN PLANS DEVELOPED AND MAINTAINED BY THE WISDOT. THE DESIGNER CERTIFIES THAT THE DESIGN AND PLAN DETAILS CHOSEN ARE CONSISTENT WITH THE GUIDANCE PROVIDED IN THE CURRENT WISDOT BRIDGE MANUAL CHAPTER 39.

WISCONSIN
KEITH R. BEHREND
E-42073
MADISON
WI
PROFESSIONAL ENGINEER
12/1/2023

STRUCTURE DESIGN CONTACTS:

AARON BONK 608-261-0261
KEITH BEHREND 608-251-4843

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 02/16/24
CHIEF STRUCTURES DESIGN ENGINEER DATE

MONOTUBE FULL SPAN PLANS

LOCATION DESCRIPTION

COUNTY	TOWN/CITY/VILLAGE
OUTAGAMIE	VANDENBROEK

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JFG	KRB	ZHC	KRB

GENERAL NOTES & DESIGN DATA

SHEET 1 OF 7
344

SCALE =

I.D.

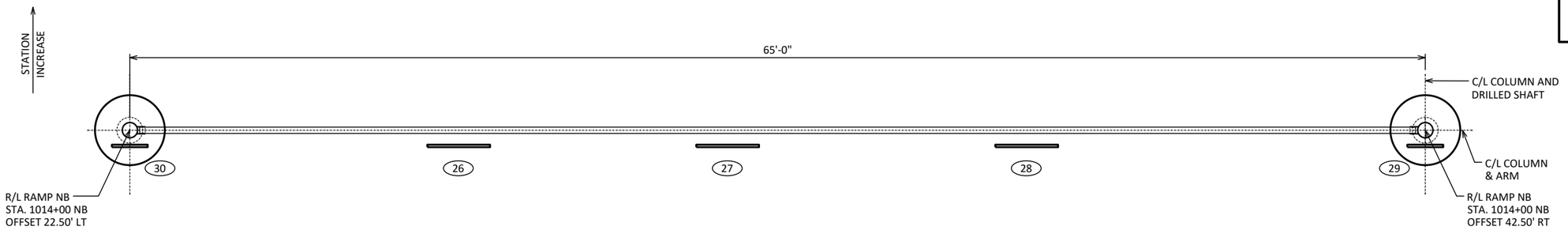
DATE:

8

8

STATE PROJECT NUMBER

1130-66-76



LEGEND

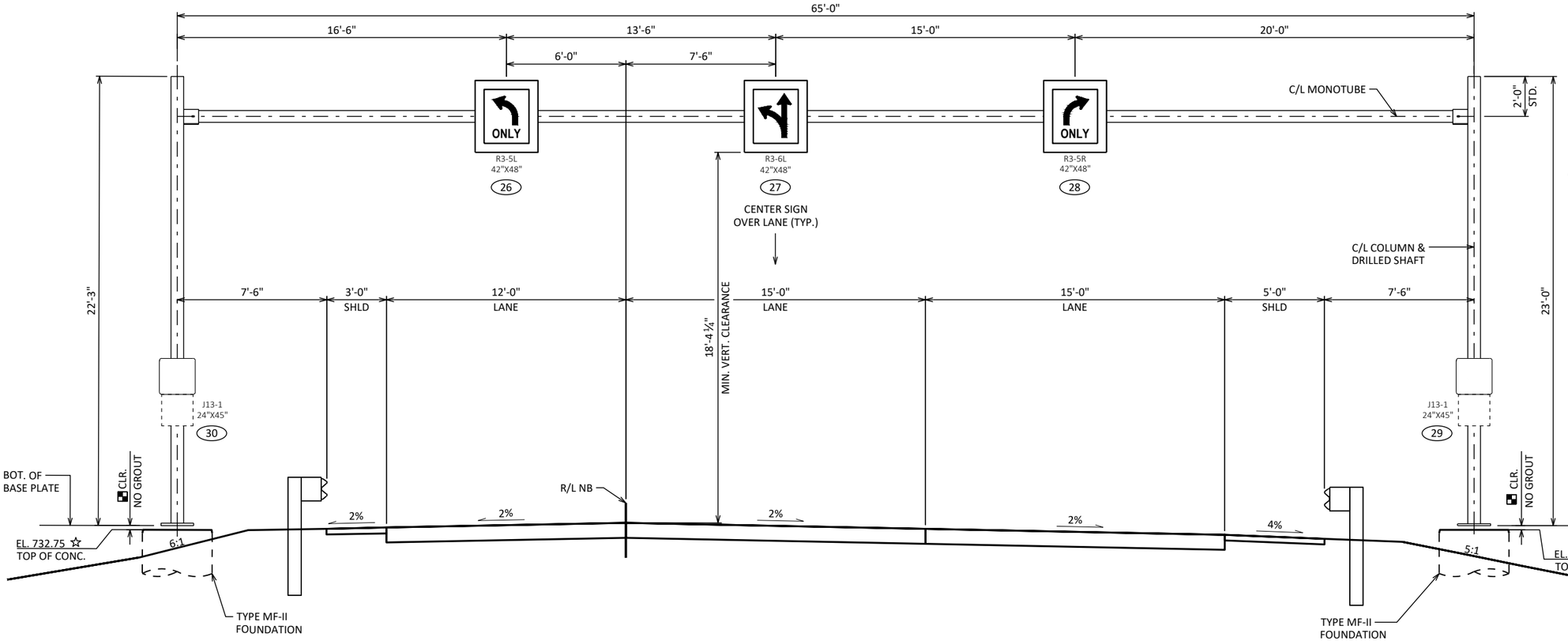
☆ ELEVATIONS GIVEN ALONG C/L STRUCTURE

(XXX) SIGN NUMBER, SEE PERMANENT SIGNING PLAN

▪ STANDOFF DIMENSION IS ASSUMED TO BE 2½", BUT IS A MAX. OF 2 x ANCHOR ROD DIAMETER. SEE FOUNDATION DETAILS SHEET AND SHOP DRAWINGS FOR MORE INFORMATION.

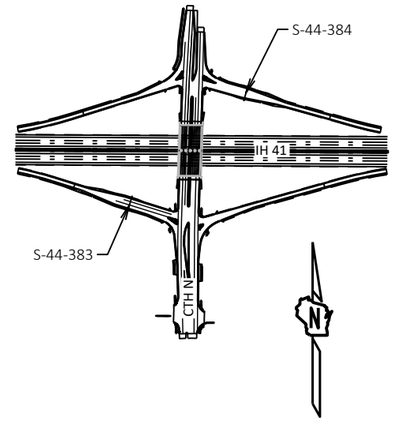
PLAN

STA. 1014+00
(RAMP NB I-41)
(CTH N OFF RAMP)



ELEVATION

LOOKING EAST AT F.F. OF SIGN



LOCATION MAP

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-44-383

DRAWN BY ZHC | PLANS CK'D KRB

LAYOUT

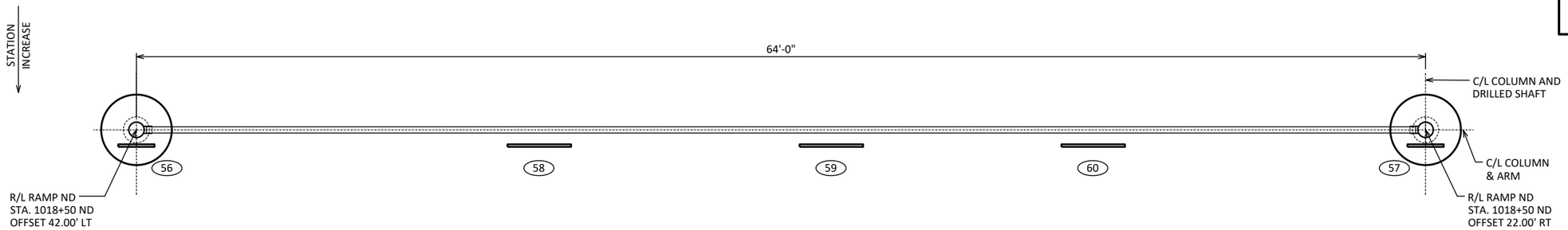
SHEET 2
345

SCALE =

8

8

STATE PROJECT NUMBER
1130-66-76

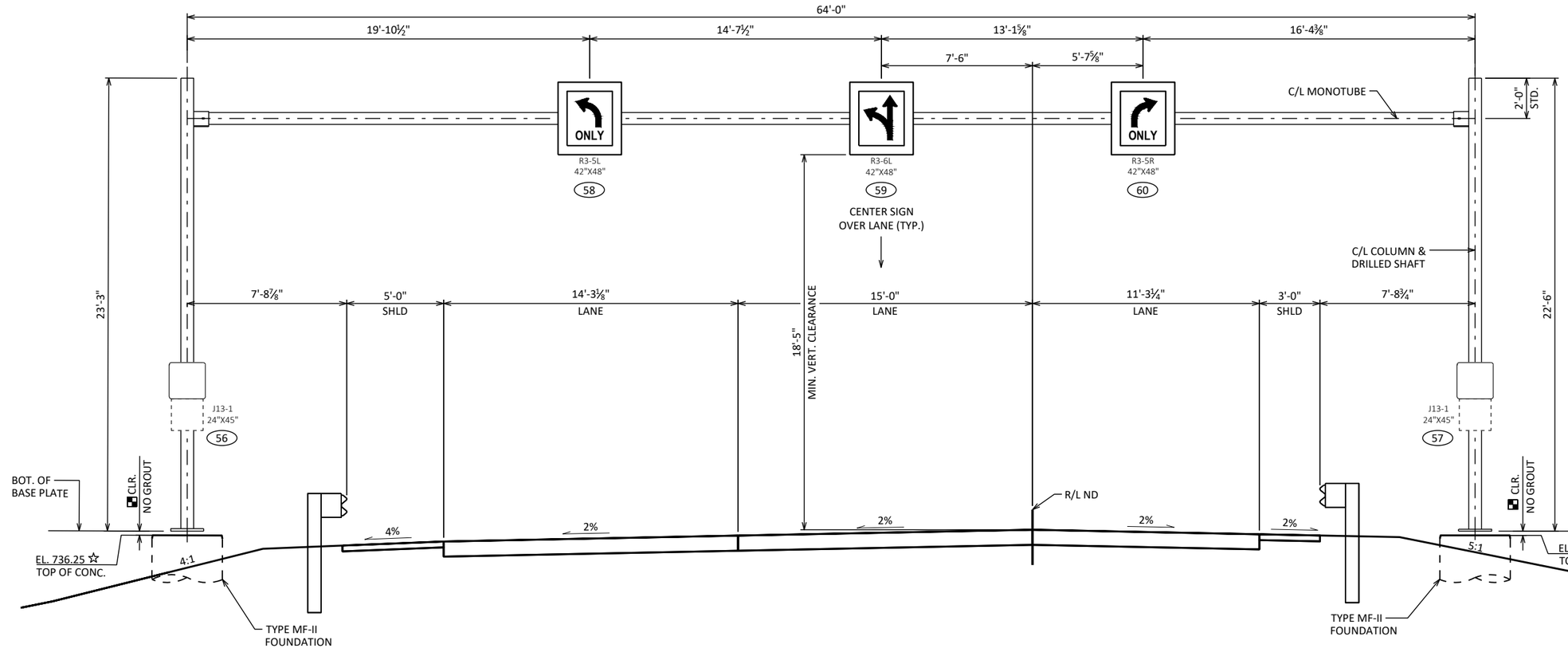


LEGEND

- ☆ ELEVATIONS GIVEN ALONG C/L STRUCTURE
- (XXX) SIGN NUMBER, SEE PERMANENT SIGNING PLAN
- ◪ STANDOFF DIMENSION IS ASSUMED TO BE 2½", BUT IS A MAX. OF 2 x ANCHOR ROD DIAMETER. SEE FOUNDATION DETAILS SHEET AND SHOP DRAWINGS FOR MORE INFORMATION.

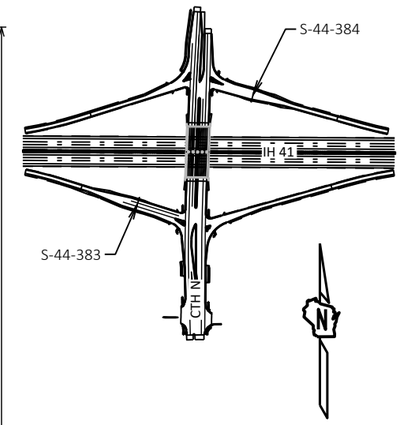
PLAN

STA. 1018+50
(RAMP ND I-41)
(CTH N OFF RAMP)



ELEVATION

LOOKING WEST AT F.F. OF SIGN
(DIMENSIONS SHOWN ARE MEASURED
ALONG STA 1018+50 ND)



LOCATION MAP

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-44-384

DRAWN BY	ZHC	PLANS CK'D	KRB

LAYOUT

SHEET 3
346

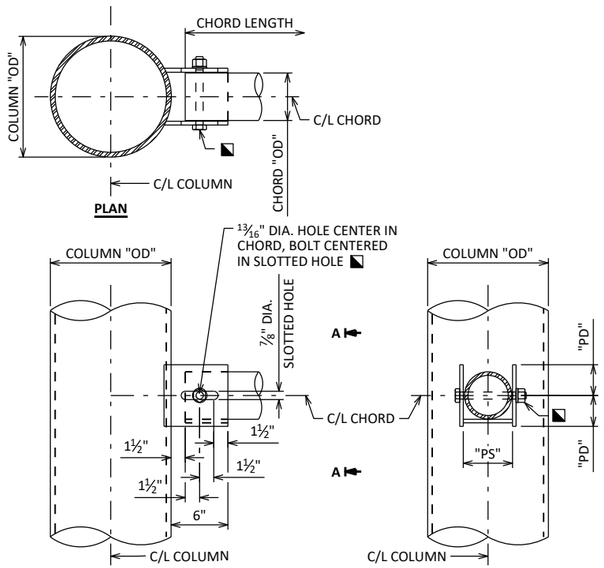
SCALE =

8

8

STATE PROJECT NUMBER

STANDARD



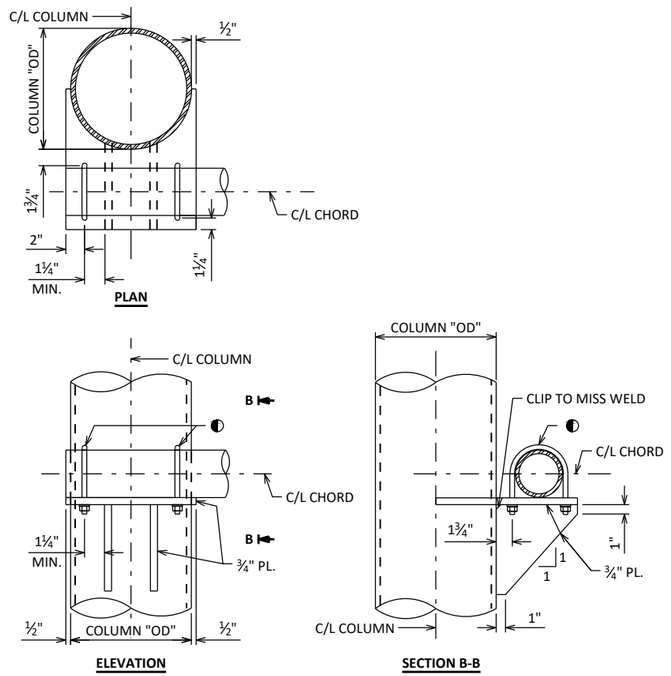
FULL SPAN SADDLE CONNECTION

PREFERRED OPTION

◪ ¾" GALVANIZED A325 OR A449 HEAVY HEX BOLT, NUT AND WASHER SNUG TIGHT ONLY, DO NOT OVER TIGHTEN

"PD" = CHORD "OD"/2 + ¾"

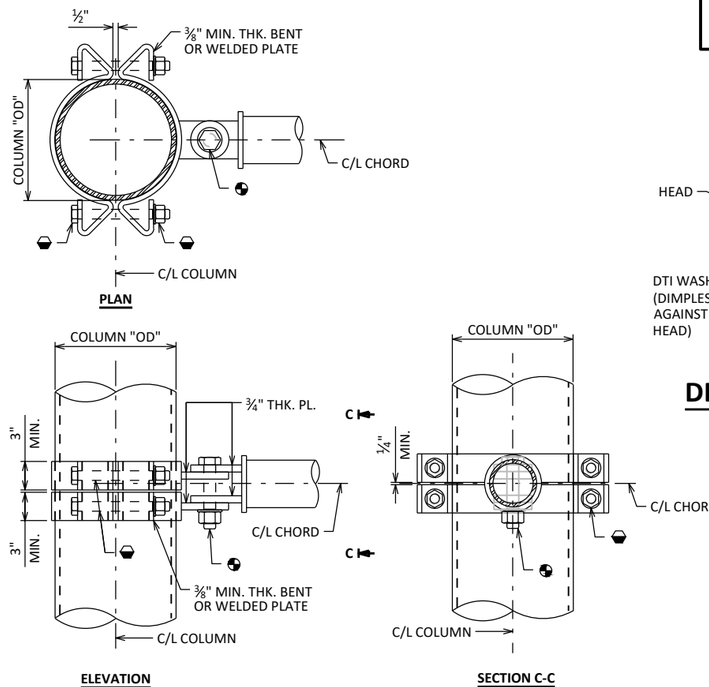
"PS" = CHORD "OD" + 1/16"



FULL SPAN STIFFENED BEARING CONNECTION

ALTERNATE 1

◐ MIN. (2) ½" MIN. GALVANIZED OR STAINLESS U-BOLT, LOCK NUT AND WASHER

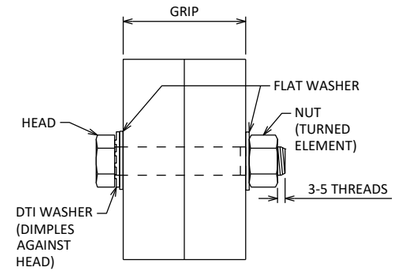


FULL SPAN CLAMP CONNECTION

ALTERNATE 2 - TAPERED COLUMNS ONLY

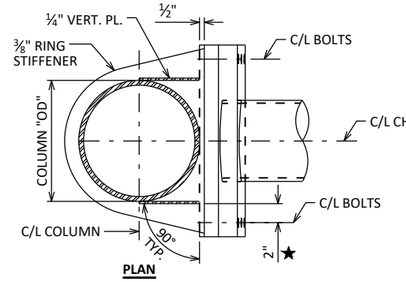
◓ 1¼" GALVANIZED A325 HEAVY HEX BOLT, NUT AND WASHER

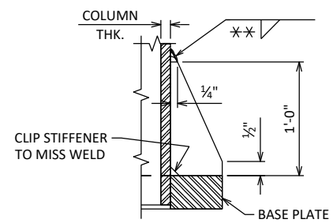
◒ 1" GALVANIZED A325 HEAVY HEX BOLT, NUT AND WASHER

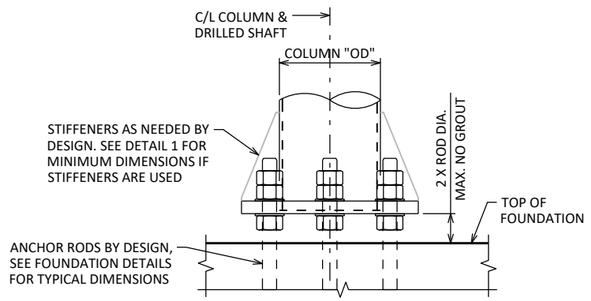


RECOMMENDED BOLT DETAIL WITH DTI WASHER

NUT IS TURNED ELEMENT

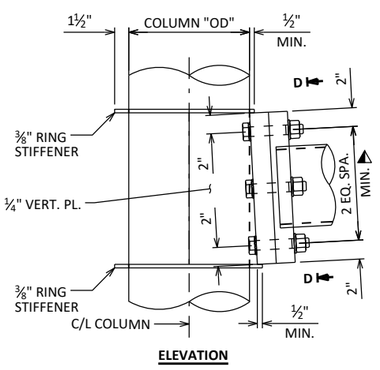


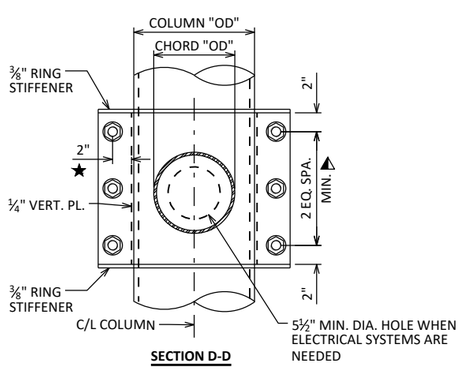




PREFERRED BASE PLATE CONNECTION

LOOKING AT F.F. OF STRUCTURE.
ALTERNATE BASE PLATE DESIGNS ALLOWED.

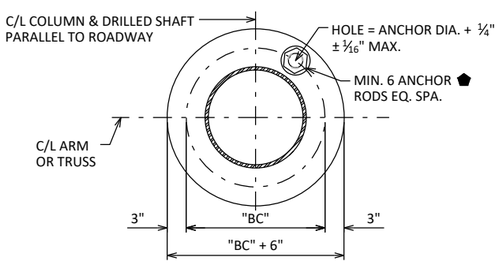




CANTILEVER POST TO CHORD CONNECTION

◭ MIN. (6) 1" GALVANIZED A325 HEAVY HEX BOLT, NUT, DTI WASHER AND WASHER

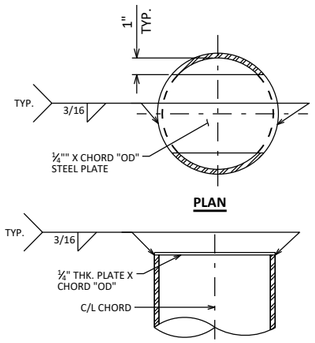
★ MIN. DIMENSIONS MEASURED FROM EXT. FACE OF VERTICAL PLATE.



BASE PLATE

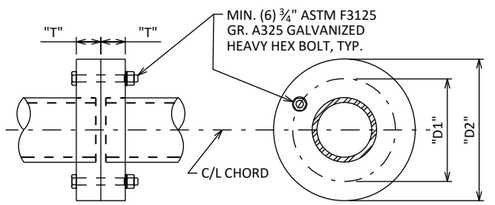
"BC" = COLUMN "OD" + 6"

⬟ ANCHOR SIZE AND ORIENTATION TO BE VERIFIED WITH SHOP DRAWINGS.



CHORD CAP DETAIL

CANTILEVERS ONLY



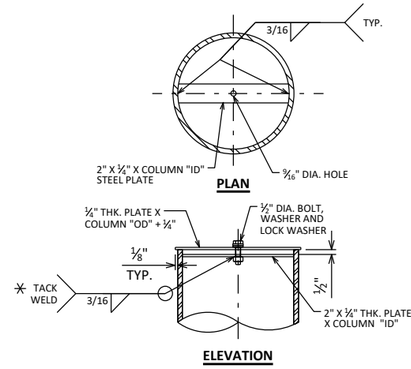
CHORD SPLICE DETAIL

"D1" = COLUMN "OD" + (1.5 x DB)

"D2" = COLUMN "OD" + (3 x DB)

"T" = (BY DESIGN)

DB = BOLT DIAMETER (BY DESIGN)



TOWER CAP DETAIL

✳ PLACE TACK WELD EVERY OTHER FLAT TO SECURE NUT.
ALTERNATE: USE ½" THK. PL. AND DRILL AND TAP HOLE FOR BOLT.

NOTES:

MINIMUM VALUES SHOWN. ALL CONNECTIONS ARE TO BE DESIGNED FOR ACTUAL STRUCTURAL LOADS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY: BOS | PLANS CK'D: BOS

MONOTUBE & 2-CHORD TRUSS CONNECTIONS 1

SHEET 1
347

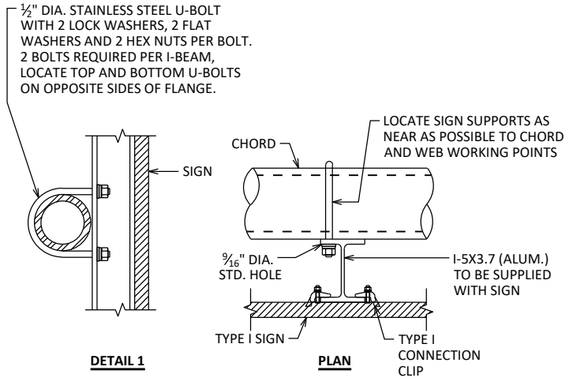
SCALE = 2.0

8

8

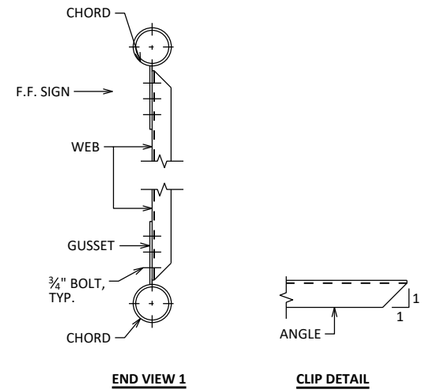
STATE PROJECT NUMBER

STANDARD



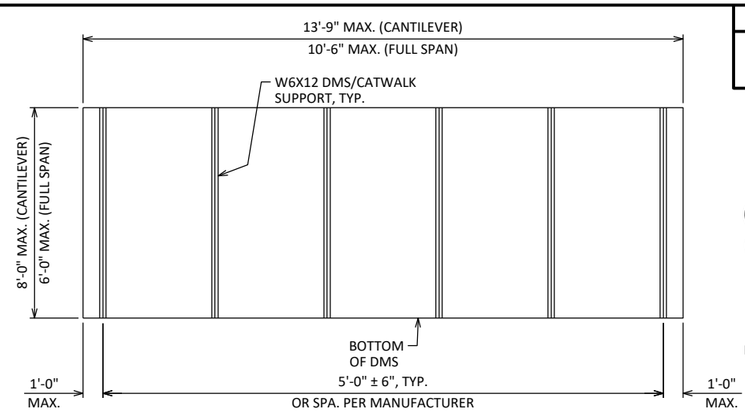
2-CHORD TRUSS SIGN CONNECTION

TYPE I SIGN PANEL SHOWN.
SEE SIGN PLATE MANUAL A4-7A AND A4-7BFOR DETAILS.
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH SIGN PANEL, HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.



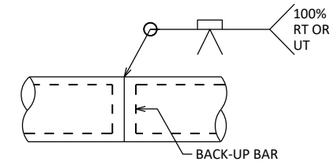
TRUSS CONNECTION DETAILS

MEMBER ORIENTATION FOR BOLTED CONNECTIONS SHOWN, WELDED CONNECTIONS SIMILAR



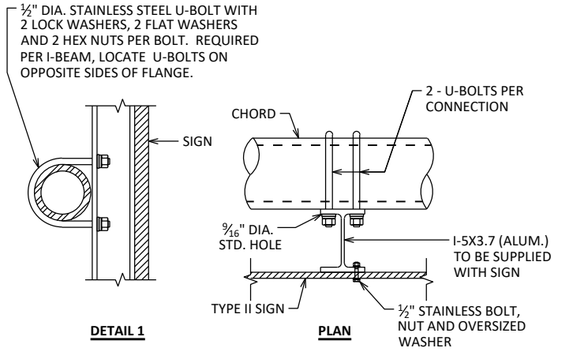
DMS MOUNTING POST DETAIL

POST SPACING MAY BE ADJUSTED AS REQUIRED IF SPACING CONFLICTS WITH GUSSET PLATES OF TRUSS WITHIN TOLERANCES NOTED.



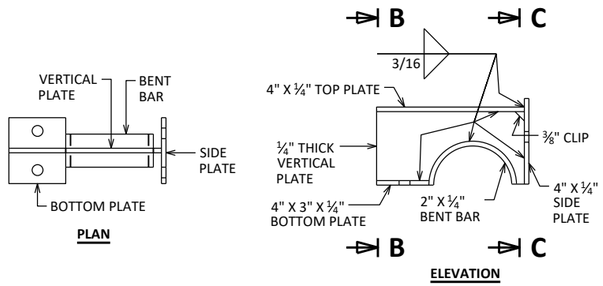
CHORD SPLICE

SEPARATE OPTIONAL SPLICE FROM GUSSET PLATES BY 6" MIN.

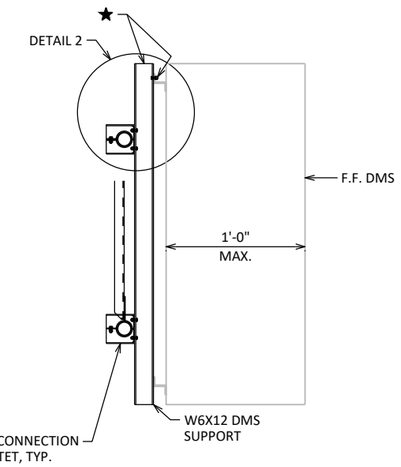


MONOTUBE SIGN CONNECTION

TYPE II SIGN PANEL SHOWN.
SEE SIGN PLATE MANUAL A4-7A AND A4-7B FOR DETAILS.
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH SIGN PANEL, HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.



DMS WELDED PLATE CONNECTION DETAILS

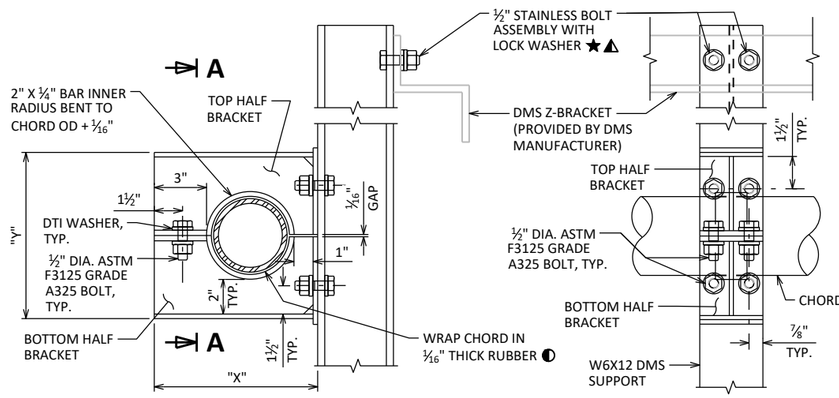


SECTION THRU TRUSS - DMS

FOR DMS/CATWALK CONNECTIONS

★ W6X12 SUPPORTS AND HARDWARE ARE TO BE SUPPLIED BY THE CONTRACTOR. ½" STAINLESS BOLT, NUT, WASHER AND LOCK WASHER REQUIRED, 4 PER W6X12

TOP HALF OF BRACKET SHOWN, BOTTOM HALF SIMILAR.

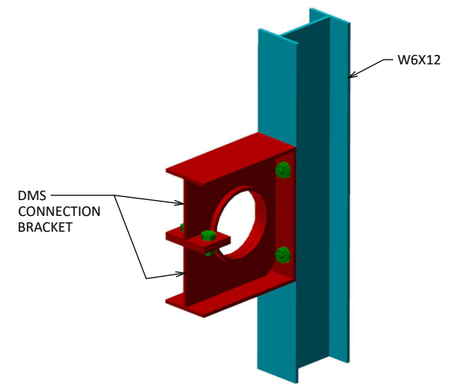


CHORD "OD"	"X"	"Y"
"OD"	"OD" + $4\frac{13}{16}$"	"OD" + $5\frac{5}{16}$"

TYPICAL DMS CONNECTION

◐ NEOPRENE, GRADE 45±5, OTHERWISE MEETING THE REQUIREMENTS OF STD. SPEC. 506.2.6.1

⚠ IF DMS CONNECTION BRACKET IS USED WITH A TYPE II SIGN PANEL, THE BOLT HOLE MUST BE GALVANIZED AND A STAINLESS WASHER USED BETWEEN THE I-BEAM AND SIGN PANEL.



3-D VIEW OF DMS CONNECTION

CHORD NOT SHOW FOR CLARITY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY BOS | PLANS CK'D BOS

MONOTUBE & 2-CHORD TRUSS CONNECTIONS 2

SHEET II
348

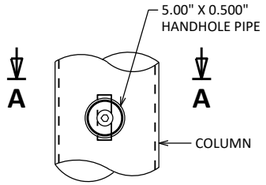
SCALE = 4.0

8

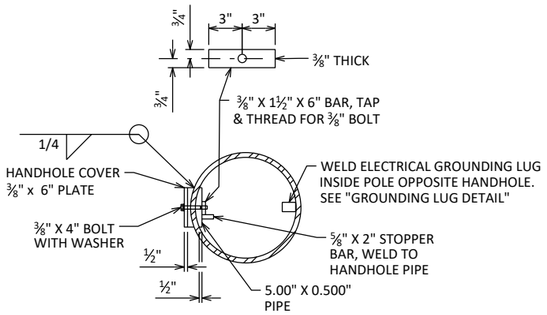
8

STATE PROJECT NUMBER

STANDARD



ELEVATION

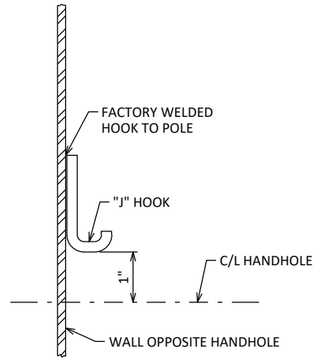


SECTION A-A

HANDHOLE DETAILS

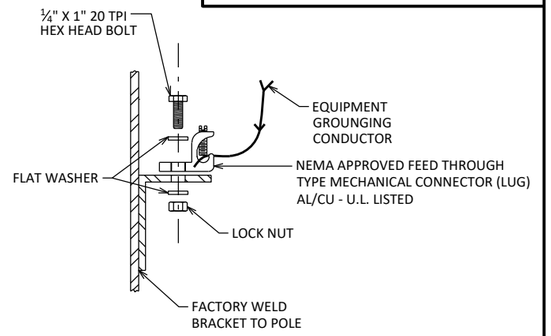
HANDHOLES SHALL BE LOCATED IN ONE COLUMN OF THE SIGN BRIDGE STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN BRIDGE COLUMNS AND MEMBERS. CONDUIT (AS REQ'D.) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL PLAN DETAIL SHEETS.

UNLESS OTHERWISE NOTED, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.



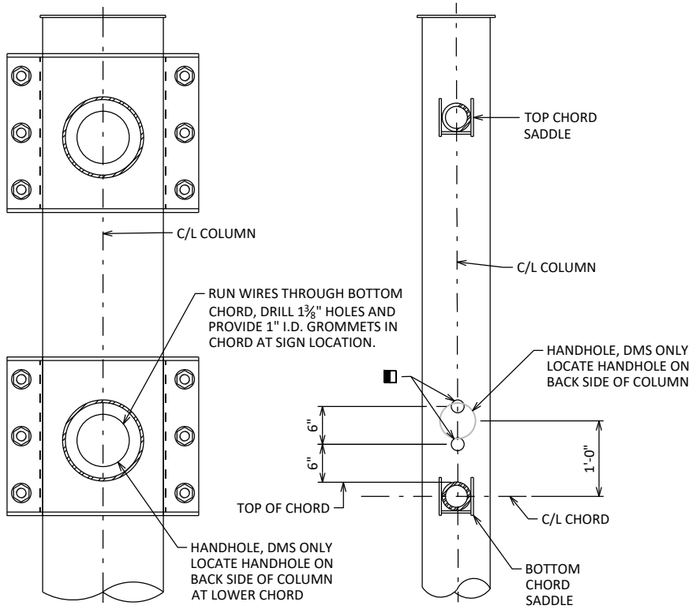
TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF THE COLUMN CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



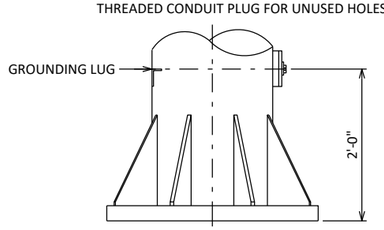
2-CHORD CANTILEVER

2-CHORD FULL SPAN

SADDLE CONNECTION SHOWN, OTHERS SIMILAR

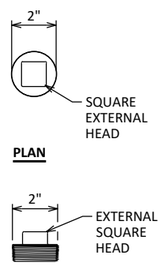
CONDUIT HOLE LOCATIONS

◧ 2" HOLE WITH STANDARD PIPE THREADS, USE THREADED CONDUIT PLUG FOR UNUSED HOLES



GROUNDING LUG LOCATION

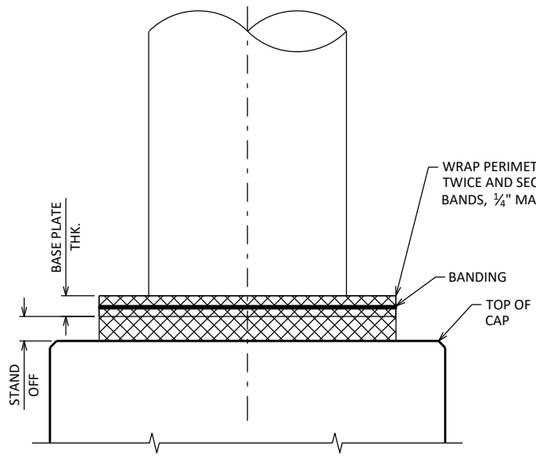
LOOKING AT THE F.F. OF STRUCTURE



PLAN

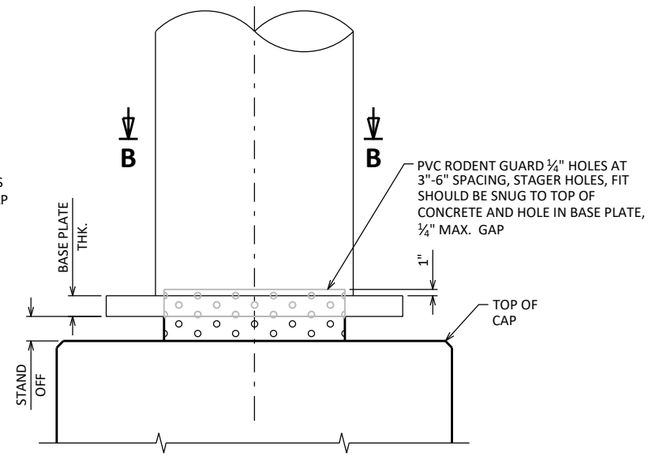
ELEVATION

CONDUIT PLUG DETAILS



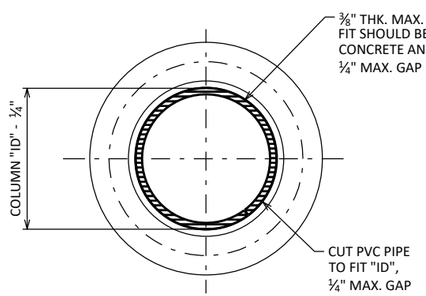
RODENT SCREEN

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



RODENT SCREEN - ALTERNATE

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



SECTION B-B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY: BOS | PLANS CK'D: BOS

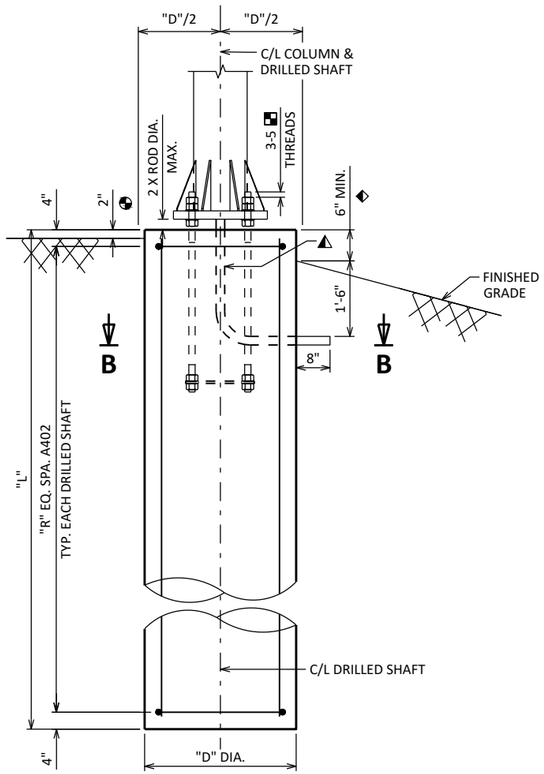
MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS

SHEET III
349

SCALE = 2.0

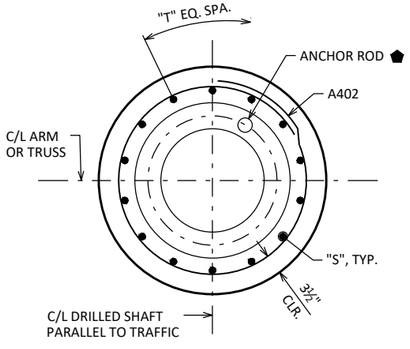
8

8



ELEVATION

- TYPICAL FOR DRILLED SHAFT FOOTINGS INSTALLED ADJACENT TO SIDEWALKS OR BEHIND CURB AND GUTTER ON LOW SPEED ROADS. TOP OF SHAFT SHALL BE FLUSH IF SURROUNDED BY CONCRETE AND 2" ABOVE FINISHED GRADE FOR ALL OTHER SURFACES.
- TYPICAL FOR EACH DRILLED SHAFT FOOTING INSTALLED ADJACENT TO ROADWAY FACILITIES OR ON SIDE SLOPES WITHIN CLEAR ZONE. BARRIER OR BEAMGUARD MAY BE REQUIRED.



SECTION B-B

TYPICAL FOR EACH DRILLED SHAFT FOOTING

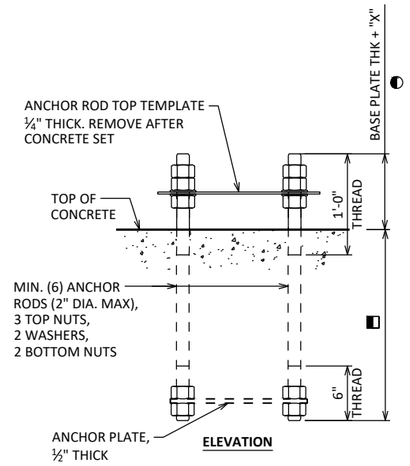
FOUNDATION DIMENSION DATA

STANDARD DESIGN TYPE	FOUNDATION DIMENSIONS					
	"D"	"L"	"R"	"S"	"T"	"BC" MAX.
MFI	2'-0"	12'-0"	12	A801	6	1'-0"
MFII	2'-6"	13'-0"	13	A801	10	1'-5"
MCI/MCII/TFI	2'-6"	17'-0"	17	A801	10	1'-5"
TCI	3'-0"	18'-0"	18	A801	14	1'-10"
TFII	3'-0"	20'-0"	20	A801	14	1'-10"
MCIII/TCII/TFIII	3'-6"	18'-0"	18	A901	14	2'-4"
MCIV/TFIV	3'-6"	23'-0"	23	A901	14	2'-4"
TCIII	4'-0"	23'-0"	23	A1001	14	2'-10"
TCIV	4'-0"	28'-0"	28	A1001	14	2'-10"

ESTIMATED QUANTITIES - FOUNDATION

STANDARD DESIGN TYPE	CONCRETE MASONRY	STEEL REINFORCEMENT HS	FOUNDATION DRILLING (DIA.) (LF)				
	(CY)	(LBS)	24"	30"	36"	42"	48
MFI	2	240	12	---	---	---	---
MFII	3	410	88	13	---	---	---
MCI/MCII/TFI	4	540	---	17	---	---	---
TCI	5	780	---	---	18	---	---
TFII	6	860	---	---	20	---	---
MCIII/TCII/TFIII	7	970	---	---	---	18	---
MCIV/TFIV	9	1,250	---	---	---	23	---
TCIII	11	1,560	---	---	---	---	23
TCIV	13	1,900	---	---	---	---	28

✶✶ QUANTITIES ARE FOR INFORMATION ONLY AND ARE BASED ON A SINGLE DRILLED SHAFT. MULTIPLY BY 2 FOR FULL SPAN STRUCTURES.



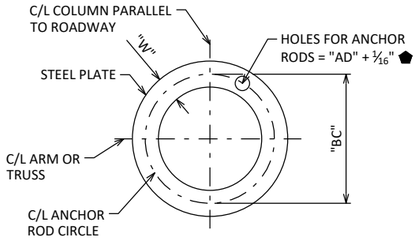
ANCHOR ROD ASSEMBLY DETAILS

◧ ANCHOR RODS PER ASSEMBLY TO BE DESIGNED BY CONTRACTOR AND SHOWN ON SHOP DRAWINGS. SHOW DIAMETER, NUMBER, ORIENTATION AND EMBEDMENT OF ANCHOR RODS.

CENTER ANCHOR ROD ASSEMBLY AND ENSURE ASSEMBLY IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE AS DETAILED. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHORS.

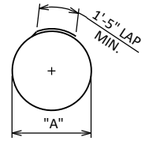
ANCHOR DIAMETER	MAX. STICK OUT ◐
	"X"
1"	5"
1¼"	6"
1½"	7"
1¾"	8"
2"	9"

◐ ADD BASE PLATE THICKNESS TO VALUE SHOWN FOR MAX. STICK OUT DIMENSION. CONTRACTOR TO COORDINATE WITH FABRICATOR FOR PROPER ANCHOR PLACEMENT.



ANCHOR PLATE & TOP TEMPLATE

⬟ ANCHOR SIZE AND POSITION TO BE VERIFIED WITH SHOP DRAWINGS.



A402

LEGEND

◪ ANCHOR ROD STICK OUT IN FINAL CONDITION. EXCESSIVE STICK OUT BEYOND DIMENSION SHOWN TO BE CUT OFF AFTER PLACING STRUCTURE. ANCHORS TO BE ULTRASONIC TESTED TO DETERMINE EMBEDDED LENGTH MEETS REQUIREMENTS PRIOR TO CUTTING. NOTE REMAINING LENGTH ON AS-BUILT.

◭ 2 - 2" DIA. NON-METALLIC CONDUITS. INSTALL ONLY WITH DMS. EXTEND CONDUITS AS SHOWN AND CAP OR SEAL EACH END WITH A SUITABLE REMOVABLE PLUG. PLACE CONDUITS UNDER COLUMN ADJACENT TO DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BILL OF BARS

STANDARD TYPE MFI

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		6	11'-8"			DRILLED SHAFT - VERTICAL
A402		13	5'-10"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE MFII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		10	12'-8"			DRILLED SHAFT - VERTICAL
A402		14	9'-4"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPES MCI/MCII/TFI

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		10	16'-8"			DRILLED SHAFT - VERTICAL
A402		18	9'-4"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE TCI

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		14	17'-8"			DRILLED SHAFT - VERTICAL
A402		19	10'-10"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE TFII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	19'-8"			DRILLED SHAFT - VERTICAL
A402		21	10'-10"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPES MCIII/TCII/TFIII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	17'-8"			DRILLED SHAFT - VERTICAL
A402		19	12'-5"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPES MCIV/TFIV

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	22'-8"			DRILLED SHAFT - VERTICAL
A402		24	12'-5"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE TCIII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	22'-8"			DRILLED SHAFT - VERTICAL
A402		24	14'-0"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE TCIV

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	27'-8"			DRILLED SHAFT - VERTICAL
A402		29	14'-0"	X		DRILLED SHAFT - HORIZONTAL

✶✶ VALUES IN BAR TABLES ARE FOR A SINGLE FOUNDATION ONLY. MULTIPLY BY 2 FOR FULL ✶✶ SPAN STRUCTURES.

STATE PROJECT NUMBER

STANDARD

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JUNE 2023

DRAWN BY: BOS | PLANS CK'D: BOS

MONOTUBE & 2-CHORD TRUSS FOUNDATIONS

SHEET IV
350

SCALE = 3.0

8

CTH N

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	MASS ORDINATE
										1.00	1.33	
						NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 8
56+30.863	0.00	102.72	22.08	0.00	0.00	0	0	0	0	0	0	0
56+50	19.14	101.83	22.08	0.00	0.00	72	16	0	0	72	0	56
56+69.635	19.63	100.85	22.08	0.00	0.00	74	16	0	0	146	0	114
56+94.617	24.98	105.07	22.08	0.00	0.00	95	20	0	0	241	0	189
57+00	5.38	105.90	22.08	0.00	0.00	21	4	0	0	262	0	206
57+19.603	19.60	102.62	22.08	0.00	0.00	76	16	0	0	338	0	266
57+25	5.40	102.76	22.08	0.00	0.00	21	4	0	0	359	0	283
57+44.592	19.59	106.32	22.08	0.00	0.00	76	16	0	0	435	0	343
57+50	5.41	106.65	22.08	0.00	0.00	21	4	0	0	456	0	360
57+69.976	19.98	126.98	22.08	0.00	0.00	86	16	0	0	542	0	430
57+75	5.02	128.29	22.08	0.00	0.00	24	4	0	0	566	0	450
57+85.742	10.74	129.54	22.08	0.00	0.00	51	9	0	0	617	0	492
57+94.566	8.82	142.28	22.08	0.00	0.00	44	7	0	0	661	0	529
58+00	5.43	142.04	22.08	0.00	0.00	29	4	0	0	690	0	554
58+50	50.00	139.70	22.08	0.00	0.00	261	41	0	0	951	0	774
58+81.91	31.91	135.01	22.08	0.00	0.00	162	26	0	0	1,113	0	910
58+87.478	5.57	129.29	22.08	0.00	0.00	27	5	0	0	1,140	0	932
59+00	12.52	134.66	22.08	0.00	0.00	61	10	0	0	1,201	0	983
59+02.7	2.70	134.13	22.08	0.00	0.00	13	2	0	0	1,214	0	994
59+15.392	12.69	137.69	22.08	0.00	0.00	64	10	0	0	1,278	0	1,048
59+50	34.61	129.90	22.08	0.21	0.00	171	28	0	0	1,449	0	1,191
59+69.503	19.50	139.45	22.08	0.08	0.00	97	16	0	0	1,546	0	1,272
59+75	5.50	141.02	22.08	0.07	0.00	29	4	0	0	1,575	0	1,297
60+00	25.00	153.44	22.08	0.00	0.00	136	20	0	0	1,711	0	1,413
60+10.707	10.71	157.82	22.08	0.00	0.00	62	9	0	0	1,773	0	1,466
60+19.497	8.79	160.73	22.08	0.00	0.00	52	7	0	0	1,825	0	1,511
60+25	5.50	162.72	22.08	0.00	0.00	33	5	0	0	1,858	0	1,539
60+37.896	12.90	179.97	22.08	0.02	0.00	82	11	0	0	1,940	0	1,610
60+44.499	6.60	176.85	22.08	0.17	0.00	44	5	0	0	1,984	0	1,649
60+50	5.50	180.51	22.08	0.23	0.00	36	4	0	0	2,020	0	1,681
60+69.43	19.43	181.18	22.08	0.28	0.00	130	16	0	0	2,150	0	1,795
60+75	5.57	190.67	22.08	0.27	0.00	38	5	0	0	2,188	0	1,828
60+94.235	19.24	203.88	22.08	0.49	0.00	141	16	0	0	2,329	0	1,953
61+00	5.76	233.04	22.08	0.78	0.00	47	5	0	0	2,376	0	1,995
61+08.531	8.53	242.11	22.08	0.54	0.00	75	7	0	0	2,451	0	2,063
61+19.058	10.53	240.19	22.08	0.00	0.00	94	9	0	0	2,545	0	2,148
61+25	5.94	263.73	22.08	0.00	0.00	55	5	0	0	2,600	0	2,198
61+43.879	18.88	173.51	22.08	0.54	0.00	153	15	0	0	2,753	0	2,336
61+50	6.12	169.30	22.08	0.00	0.00	39	5	0	0	2,792	0	2,370
61+68.699	18.70	141.98	22.08	0.00	0.00	108	15	0	0	2,900	0	2,463

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - MASS ORDINATE	EBS TO BE BACKFILLED WITH SELECT CRUSHED MATERIAL: [CUT - SALVAGED PAVT - (FILL - * FILL FACTOR)]

CTH N

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	MASS ORDINATE
										1.00	1.33	
						NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 8
61+75	6.30	154.05	22.08	0.00	0.00	35	5	0	0	2,935	0	2,493
61+79.027	4.03	141.77	22.08	0.00	0.00	22	3	0	0	2,957	0	2,512
61+93.6	14.57	236.64	22.08	0.00	0.00	102	12	0	0	3,059	0	2,602
62+00	6.40	236.57	22.08	0.00	0.00	56	5	0	0	3,115	0	2,653
62+18.596	18.60	235.83	22.08	0.00	0.00	163	15	0	0	3,278	0	2,801
62+43.602	25.01	231.72	22.08	0.00	0.00	217	20	0	0	3,495	0	2,998
62+50	6.40	225.63	22.08	0.00	0.00	54	5	0	0	3,549	0	3,047
62+68.598	18.60	232.51	22.08	0.00	0.00	158	15	0	0	3,707	0	3,190
62+93.599	25.00	256.09	22.08	0.20	0.00	226	20	0	0	3,933	0	3,396
63+00	6.40	258.04	22.08	0.00	0.00	61	5	0	0	3,994	0	3,452
63+02.444	2.44	256.51	22.08	0.01	0.00	23	2	0	0	4,017	0	3,473
65+23.295	0.00	122.70	22.08	0.00	0.00	0	0	0	0	4,017	0	3,473
65+31.101	7.81	252.00	22.08	0.40	0.00	54	6	0	0	4,071	0	3,521
65+43.602	12.50	236.30	22.08	0.00	0.00	113	10	0	0	4,184	0	3,624
65+50	6.40	232.70	22.08	0.00	0.00	56	5	0	0	4,240	0	3,675
65+68.602	18.60	235.92	22.08	0.00	0.00	161	15	0	0	4,401	0	3,821
65+93.602	25.00	235.97	22.08	0.00	0.00	218	20	0	0	4,619	0	4,019
66+00	6.40	235.71	22.08	0.00	0.00	56	5	0	0	4,675	0	4,070
66+18.595	18.60	236.76	22.08	0.00	0.00	163	15	0	0	4,838	0	4,218
66+43.605	25.01	125.30	22.08	0.00	0.00	168	20	0	0	5,006	0	4,366
66+50	6.40	123.82	22.08	0.00	0.00	30	5	0	0	5,036	0	4,391
66+68.602	18.60	112.74	22.08	0.00	0.00	81	15	0	0	5,117	0	4,457
66+93.59	24.99	207.10	22.08	0.00	0.00	148	20	0	0	5,265	0	4,585
67+00	6.41	207.27	22.08	0.00	0.00	49	5	0	0	5,314	0	4,629
67+13.72	13.72	223.52	22.08	0.00	0.00	109	11	0	0	5,423	0	4,727
67+18.588	4.87	231.47	22.08	0.26	0.00	41	4	0	0	5,464	0	4,764
67+43.584	25.00	326.41	22.08	0.26	0.00	258	20	0	0	5,722	0	5,002
67+50	6.42	292.17	22.08	0.22	0.00	73	5	0	0	5,795	0	5,070
67+68.621	18.62	197.91	22.08	5.03	0.00	169	15	2	0	5,964	3	5,221
67+93.683	25.06	163.45	22.08	21.50	0.00	168	20	12	0	6,132	19	5,353
68+00	6.32	162.79	22.08	22.86	0.00	38	5	5	0	6,170	25	5,380
68+18.726	18.73	157.84	22.08	49.49	0.00	111	15	25	0	6,281	59	5,442
68+27.759	9.03	157.84	22.08	86.70	0.00	53	7	23	0	6,334	89	5,458
68+50	22.24	160.47	22.08	139.51	0.00	131	18	93	0	6,465	213	5,447
68+68.829	18.83	159.94	22.08	169.24	0.00	112	15	108	0	6,577	356	5,401
68+74.78	5.95	159.65	22.08	174.96	0.00	35	5	38	0	6,612	407	5,380
68+80.032	5.25	159.49	22.08	178.75	0.00	31	4	34	0	6,643	452	5,362
68+93.869	13.84	157.77	22.08	184.24	0.00	81	11	93	0	6,724	576	5,308
69+00	6.13	157.67	22.08	177.55	0.00	36	5	41	0	6,760	630	5,285
69+16.564	16.56	158.73	22.08	162.22	0.00	97	14	104	0	6,857	769	5,229
69+18.913	2.35	158.43	22.08	160.32	0.00	14	2	14	0	6,871	787	5,223
69+43.938	25.02	84.47	22.08	127.44	0.00	113	20	133	0	6,984	964	5,139
69+50	6.06	82.23	22.08	119.14	0.00	19	5	28	0	7,003	1,001	5,116
69+68.966	18.97	75.09	22.08	98.84	0.00	55	16	77	0	7,058	1,104	5,052
69+93.997	25.03	68.25	22.08	54.45	0.00	66	20	71	0	7,124	1,198	5,004
70+00	6.00	66.43	22.08	51.68	0.00	15	5	12	0	7,139	1,214	4,998
70+14.29	14.29	61.22	22.08	14.51	0.00	34	12	18	0	7,173	1,238	4,996

RAMP NA

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
								1.00	1.33	
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
1017+25.962	0.00	140.53	23.00	2.43	0	0	0	0	0	0
1017+50	24.04	128.71	23.00	23.68	120	20	12	120	16	84
1018+00	50.00	126.40	23.00	35.53	236	43	55	356	89	204
1018+50	50.00	119.43	23.00	32.64	228	43	63	584	173	305
1019+00	50.00	138.25	23.00	27.85	239	43	56	823	247	427
1019+50	50.00	135.21	23.00	16.70	253	43	41	1,076	302	582
1020+00	50.00	120.67	23.00	10.56	237	43	25	1,313	335	743
1020+50	50.00	98.71	23.00	15.00	203	43	24	1,516	367	871
1021+00	50.00	76.39	23.00	10.67	162	43	24	1,678	399	958
1021+50	50.00	45.03	23.00	20.94	112	43	29	1,790	438	988
1022+00	50.00	37.04	23.00	23.14	76	43	41	1,866	492	967
1022+50	50.00	6.18	23.00	23.08	40	43	43	1,906	549	907
1023+00	50.00	9.73	23.00	10.98	15	43	32	1,921	592	836
1023+50.01	50.01	22.49	23.00	9.70	30	43	19	1,951	617	798
1024+00	49.99	34.97	23.00	2.51	53	43	11	2,004	632	793
1024+50	50.00	45.06	23.00	0.30	74	43	3	2,078	636	820
1024+75	25.00	50.71	23.00	0.00	44	21	0	2,122	636	843

RAMP NB

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
								1.00	1.33	
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
1009+00	0.00	72.73	23.00	0.00	0	0	0	0	0	0
1009+50	50.00	41.46	23.00	5.16	106	43	5	106	7	77
1010+00	50.00	25.97	23.00	13.55	62	43	17	168	29	80
1010+50	50.00	19.76	23.00	28.75	42	43	39	210	81	27
1011+00	50.00	15.44	23.00	23.42	33	43	48	243	145	-51
1011+50	50.00	24.40	23.00	36.31	37	43	55	280	218	-132
1011+87.498	37.50	120.10	23.00	45.91	100	32	57	380	294	-117
1012+00	12.50	133.02	23.00	43.90	59	11	21	439	322	-81
1012+12.025	12.03	119.95	23.00	42.34	56	10	19	495	347	-45
1012+37.01	24.99	128.94	23.00	16.02	115	21	27	610	383	44
1012+50	12.99	140.01	23.00	12.04	65	11	7	675	392	106
1012+71.506	21.51	156.22	23.00	16.82	118	18	11	793	407	225
1012+96.409	24.90	175.04	23.00	16.66	153	21	15	946	427	380
1013+00	3.59	176.25	23.00	17.40	23	3	2	969	430	404
1013+21.311	21.31	183.34	23.00	21.00	142	18	15	1,111	450	549
1013+50	28.69	187.12	23.00	0.00	197	24	11	1,308	464	765
1014+00	50.00	179.81	23.00	0.00	340	43	0	1,648	464	1,160
1014+50	50.00	169.57	23.00	0.00	323	43	0	1,971	464	1,532
1015+00	50.00	170.52	23.00	0.00	315	43	0	2,286	464	1,894
1015+50	50.00	186.11	23.00	0.00	330	43	0	2,616	464	2,276
1015+71.249	21.25	196.41	23.00	0.00	151	18	0	2,767	464	2,453

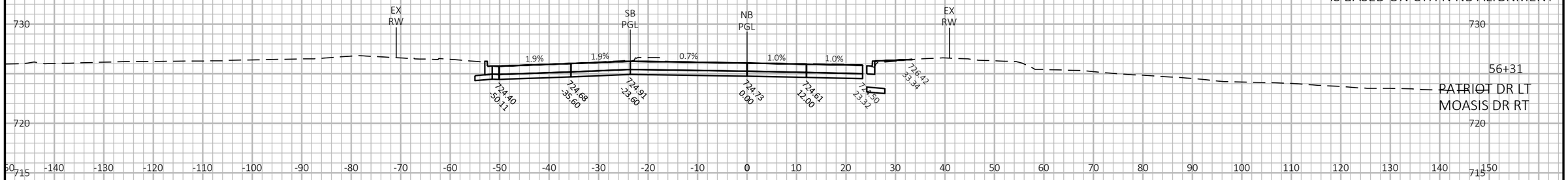
RAMP NC

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
								1.00	1.33	
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
1009+00	0.00	46.94	23.00	0.21	0	0	0	0	0	0
1009+50	50.00	33.26	23.00	0.82	74	43	1	74	1	30
1010+00	50.00	19.06	23.00	4.78	48	43	5	122	8	28
1010+50	50.00	11.14	23.00	12.48	28	43	16	150	29	-8
1011+00	50.00	3.24	23.00	35.64	13	43	45	163	89	-98
1011+50	50.00	0.00	23.00	42.56	3	43	72	166	185	-234
1011+90	40.00	51.35	23.00	4.33	38	34	35	204	231	-276
1012+00	10.00	63.85	23.00	3.81	21	9	2	225	234	-267
1012+50	50.00	105.60	23.00	0.36	157	43	4	382	239	-158
1013+00	50.00	175.18	23.00	0.00	260	43	0	642	239	59
1013+50	50.00	237.87	23.00	0.00	382	43	0	1,024	239	398
1014+00	50.00	281.83	23.00	0.00	481	43	0	1,505	239	836
1014+50	50.00	275.61	23.00	0.00	516	43	0	2,021	239	1,309
1015+00	50.00	250.84	23.00	0.00	487	43	0	2,508	239	1,753
1015+57.539	57.54	203.37	23.00	0.00	484	49	0	2,992	239	2,188

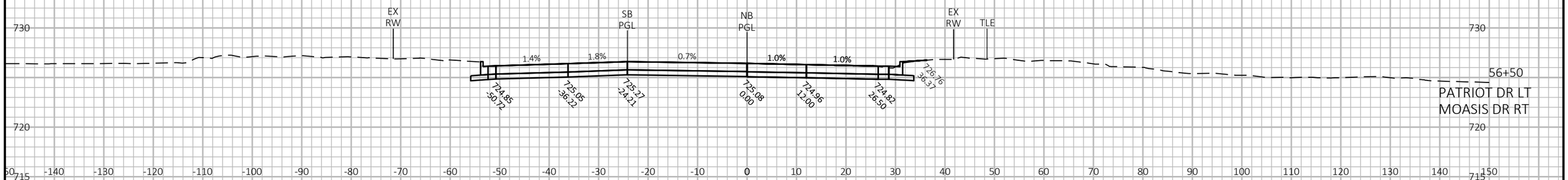
RAMP ND

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
								1.00	1.33	
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
1017+22.659	0.00	168.56	23.00	0.00	0	0	0	0	0	0
1017+49.995	27.34	256.25	23.00	0.00	215	23	0	215	0	192
1017+99.995	50.00	243.95	23.00	0.00	463	43	0	678	0	612
1018+49.995	50.00	231.35	23.00	0.00	440	43	0	1,118	0	1,009
1018+90.803	40.81	232.11	23.00	0.00	350	35	0	1,468	0	1,324
1018+99.995	9.19	235.43	23.00	0.00	80	8	0	1,548	0	1,396
1019+15.705	15.71	235.01	23.00	0.00	137	13	0	1,685	0	1,520
1019+28.108	12.40	238.38	23.00	0.00	109	11	0	1,794	0	1,618
1019+40.608	12.50	239.59	23.00	0.00	111	11	0	1,905	0	1,718
1019+49.995	9.39	243.24	23.00	0.00	84	8	0	1,989	0	1,794
1019+53.011	3.02	244.82	23.00	0.00	27	3	0	2,016	0	1,818
1019+77.914	24.90	235.89	23.00	0.00	222	21	0	2,238	0	2,019
1019+99.995	22.08	238.57	23.00	0.00	194	19	0	2,432	0	2,194
1020+49.995	50.00	210.20	23.00	0.00	416	43	0	2,848	0	2,567
1020+99.995	50.00	145.66	23.00	0.00	329	43	0	3,177	0	2,853
1021+49.995	50.00	98.17	23.00	10.93	226	43	10	3,403	13	3,023
1021+99.995	50.00	49.24	23.00	30.77	136	43	39	3,539	65	3,064
1022+49.995	50.00	1.45	23.00	43.16	47	43	68	3,586	156	2,977
1022+99.995	50.00	10.49	23.00	19.48	11	43	58	3,597	233	2,868
1023+49.995	50.00	20.26	23.00	27.41	28	43	43	3,625	290	2,796
1023+99.995	50.00	27.55	23.00	2.10	44	43	27	3,669	326	2,761
1024+49.995	50.00	41.85	23.00	0.03	64	43	2	3,733	329	2,779

CROSS SECTION STATIONING
IS BASED ON CTH N NB ALIGNMENT



56+31
PATRIOT DR LT
MOASIS DR RT



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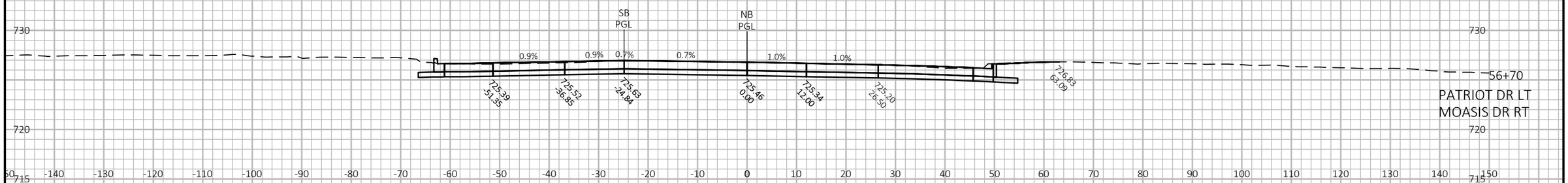
MOASIS DR RT



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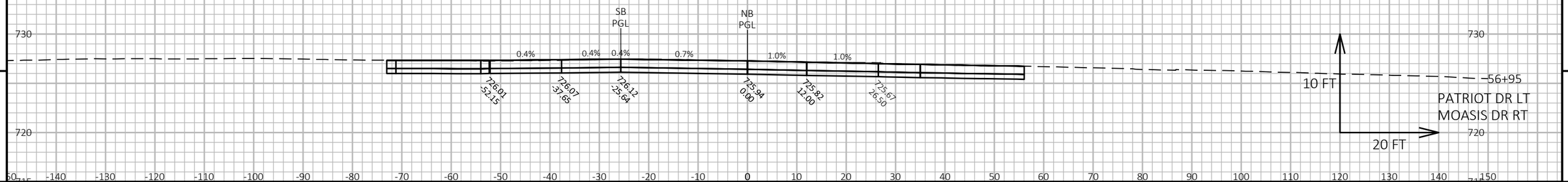
MOASIS DR RT



56+95
PATRIOT DR LT
MOASIS DR RT

10 FT
20 FT

9

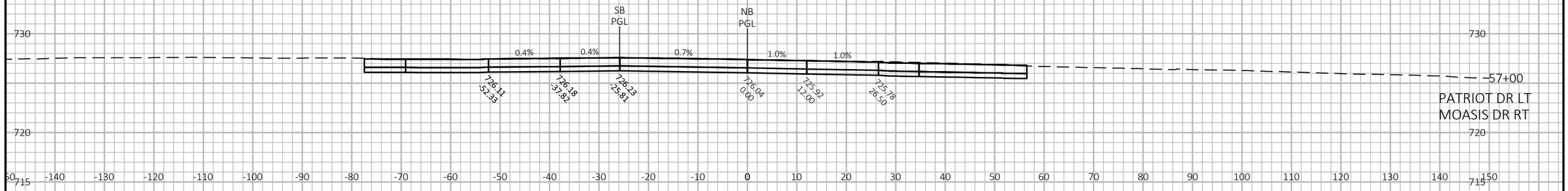
9

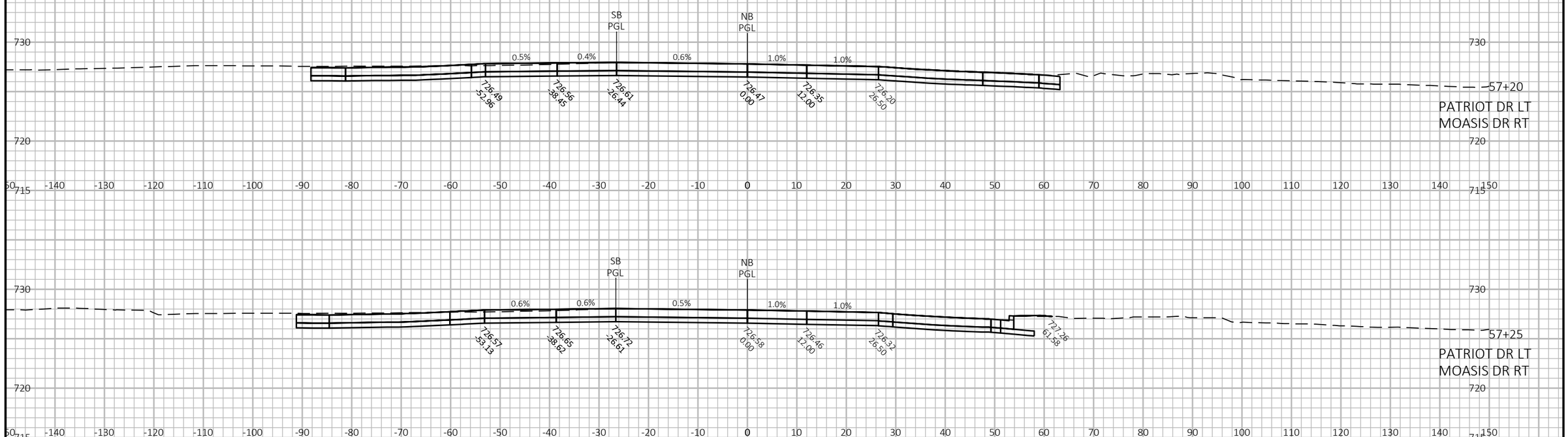
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 355	E

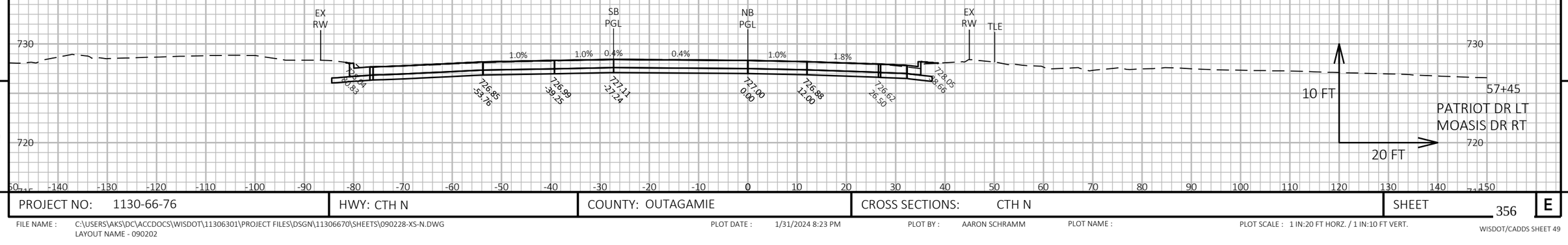
FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090201

PLOT DATE : 1/31/2024 8:23 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







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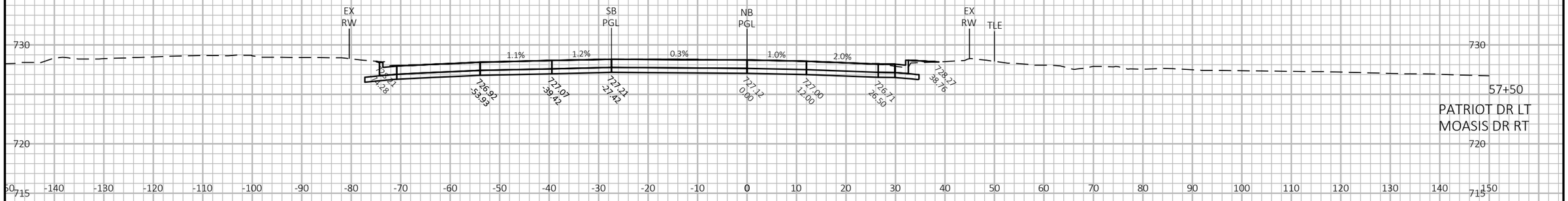
9

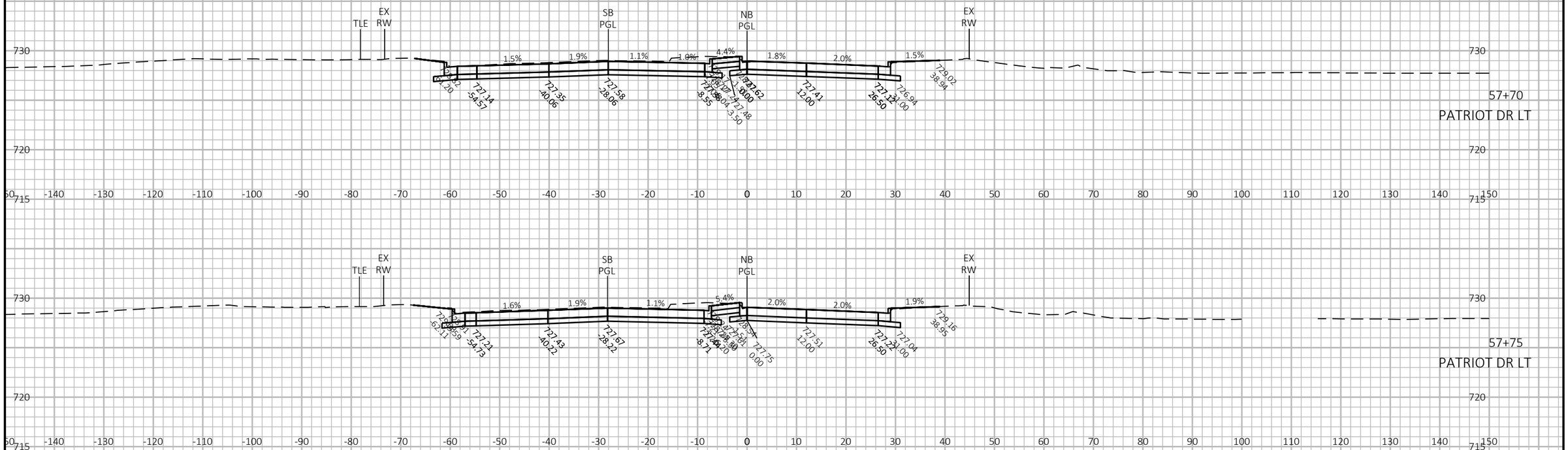
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 356	E

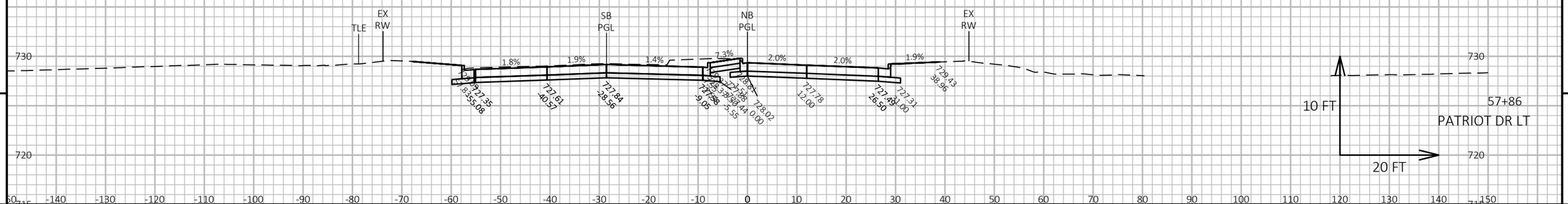
FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090202

PLOT DATE : 1/31/2024 8:23 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







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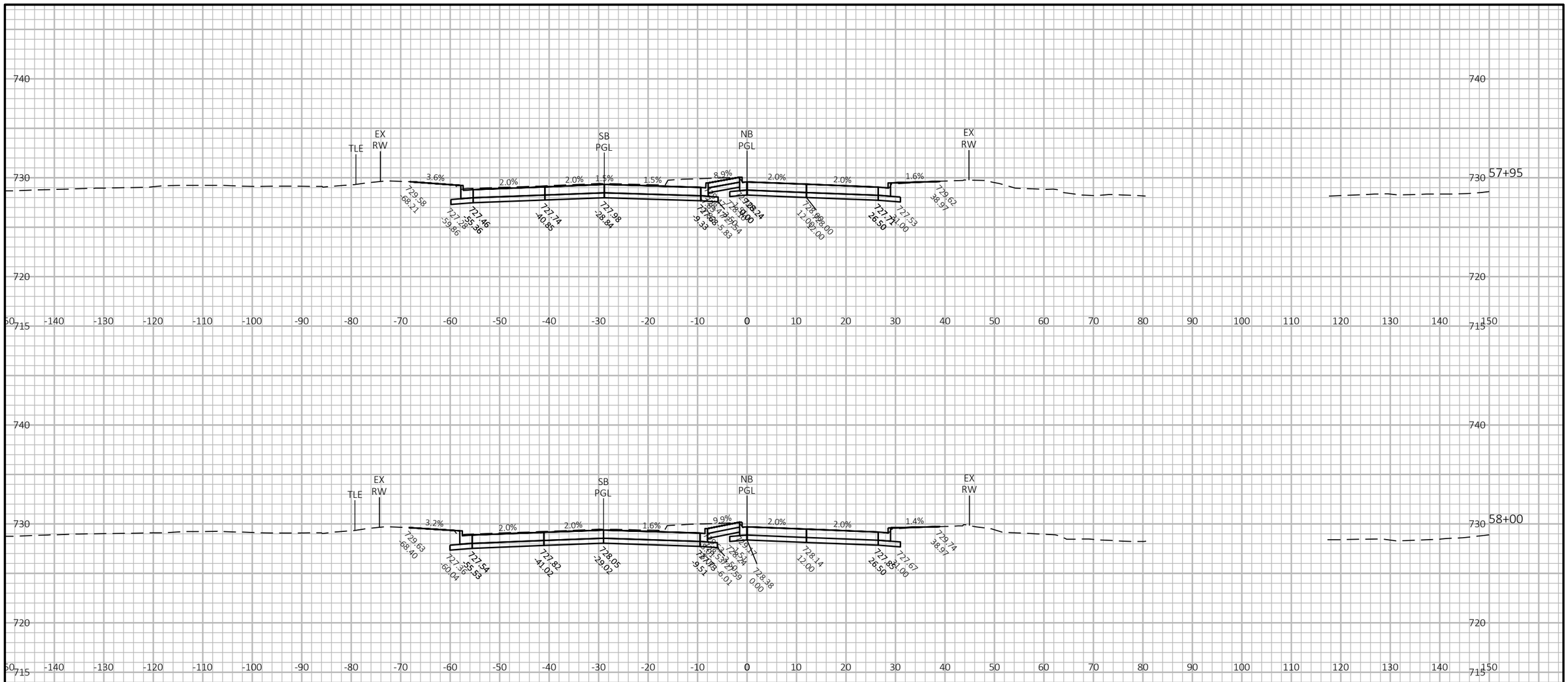
9

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 357	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090203

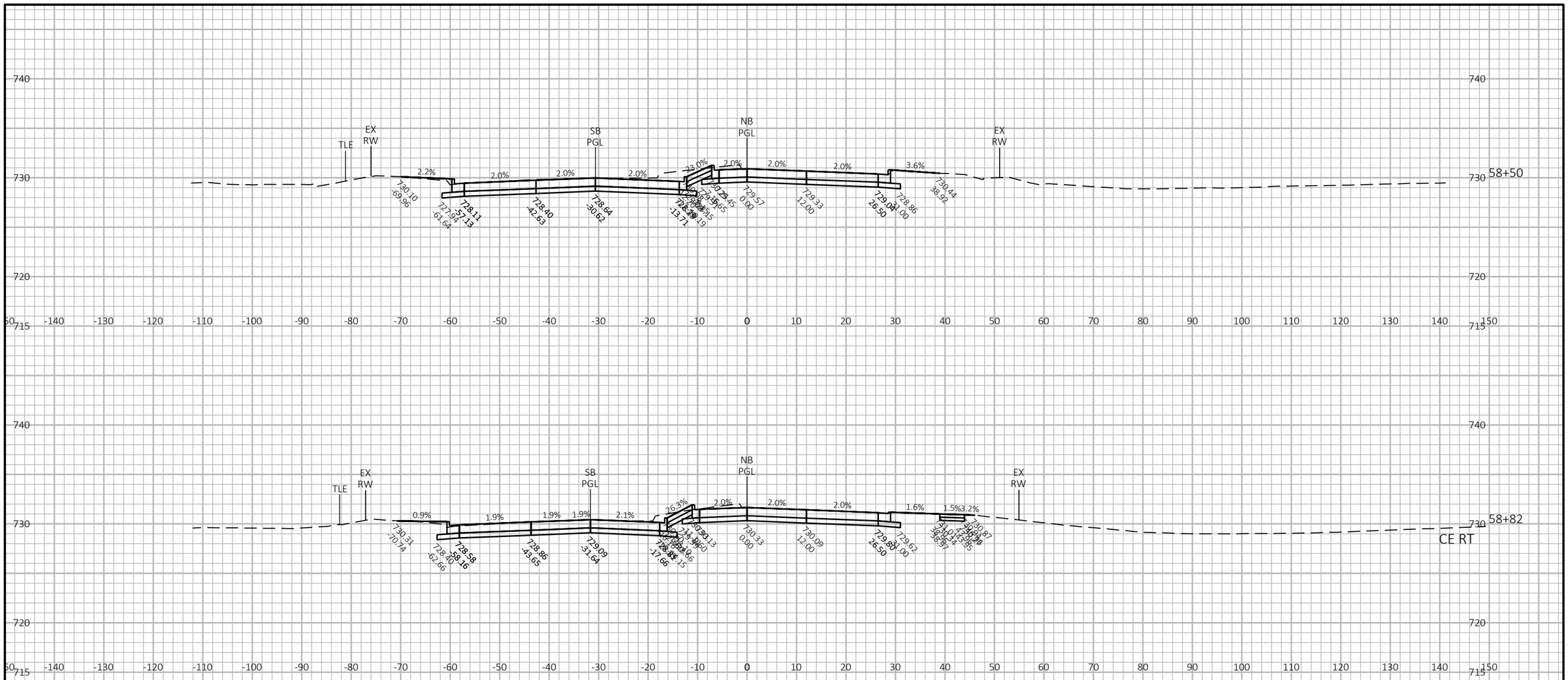
PLOT DATE : 1/31/2024 8:23 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 358	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090204
PLOT DATE : 1/31/2024 8:24 PM
PLOT BY : AARON SCHRAMM
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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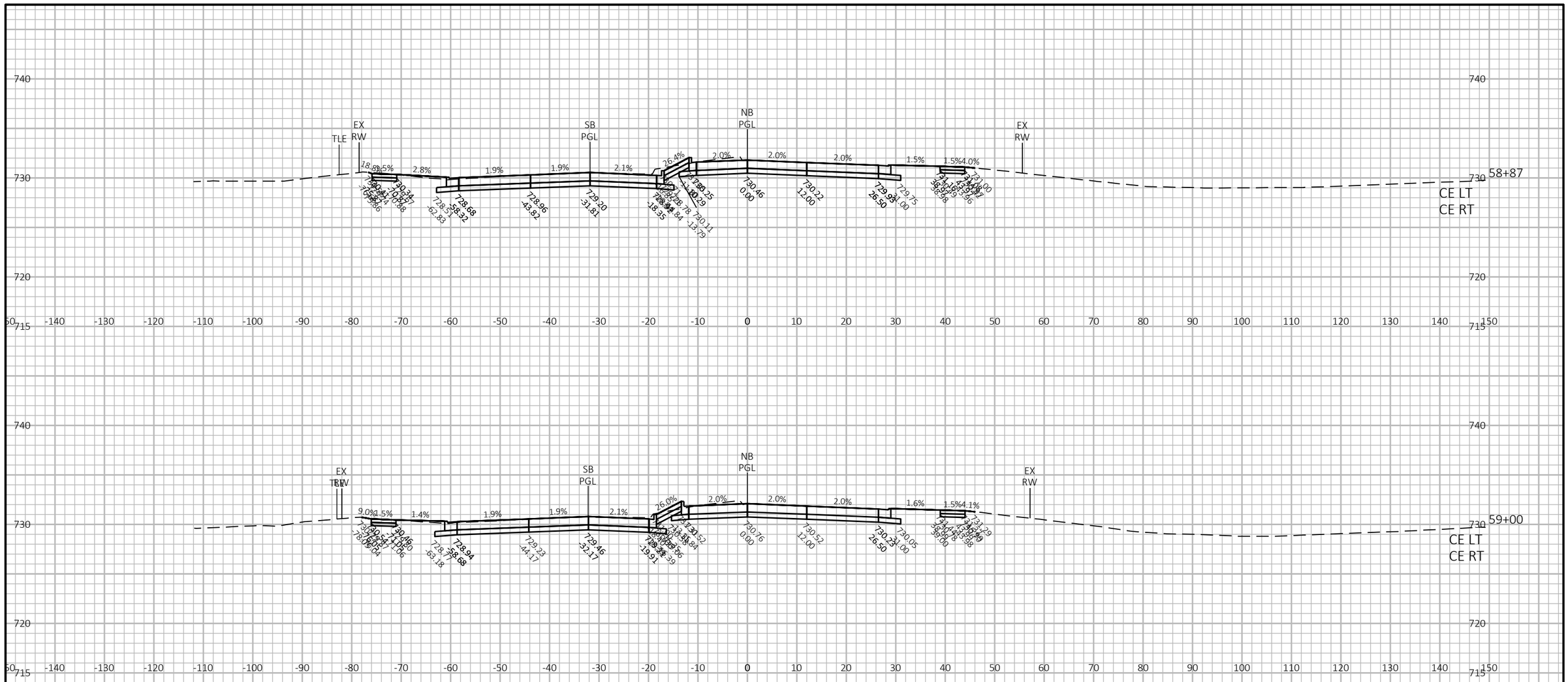
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 359	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090205

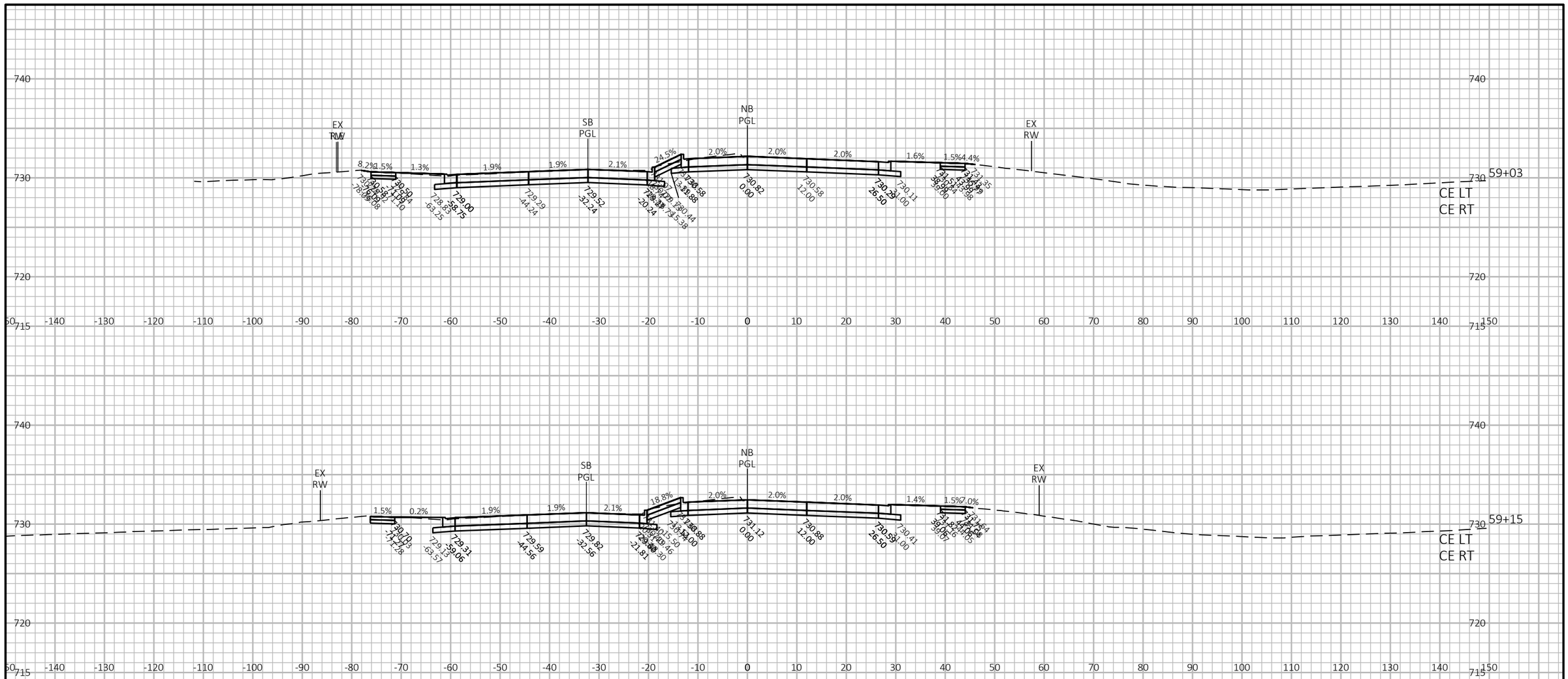
PLOT DATE : 1/31/2024 8:24 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 360	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090206

PLOT DATE : 1/31/2024 8:24 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



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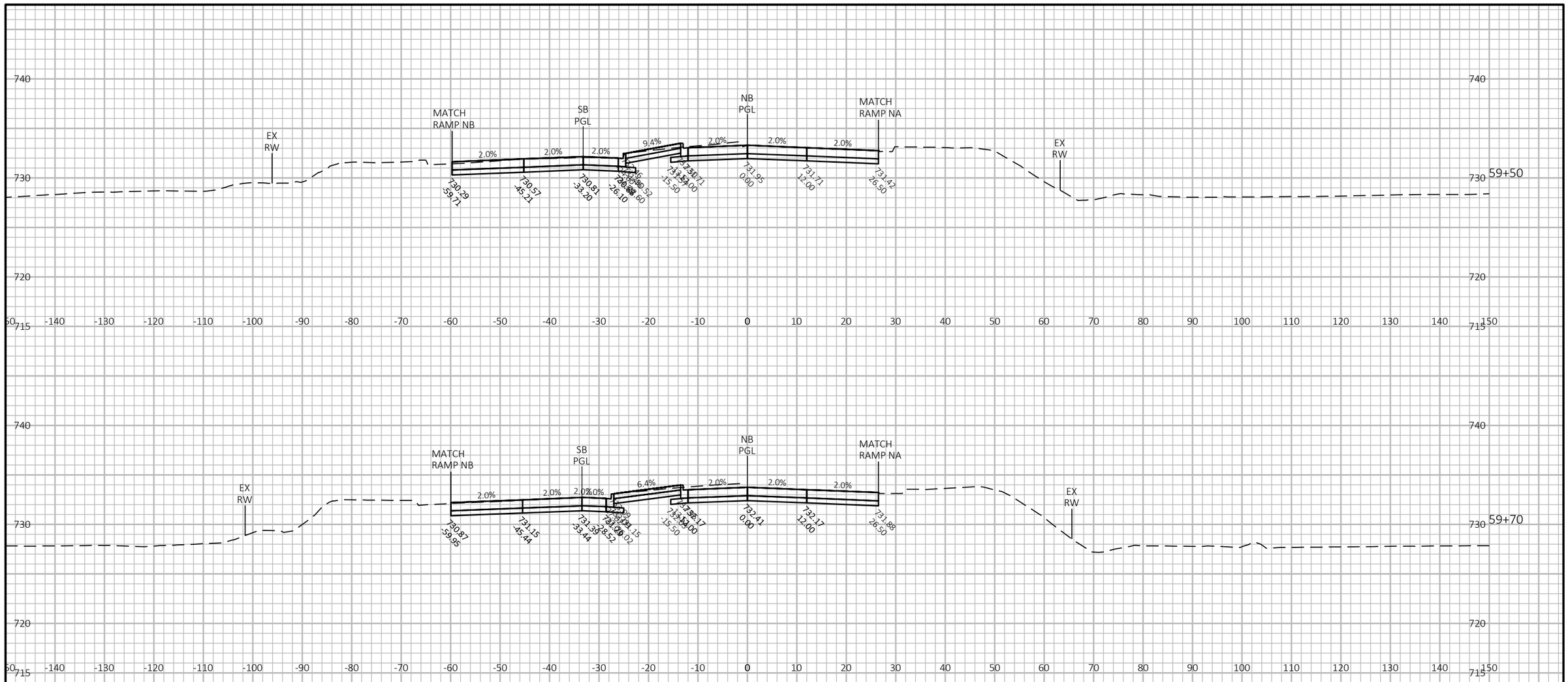
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 361	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090207
PLOT DATE : 1/31/2024 8:25 PM
PLOT BY : AARON SCHRAMM
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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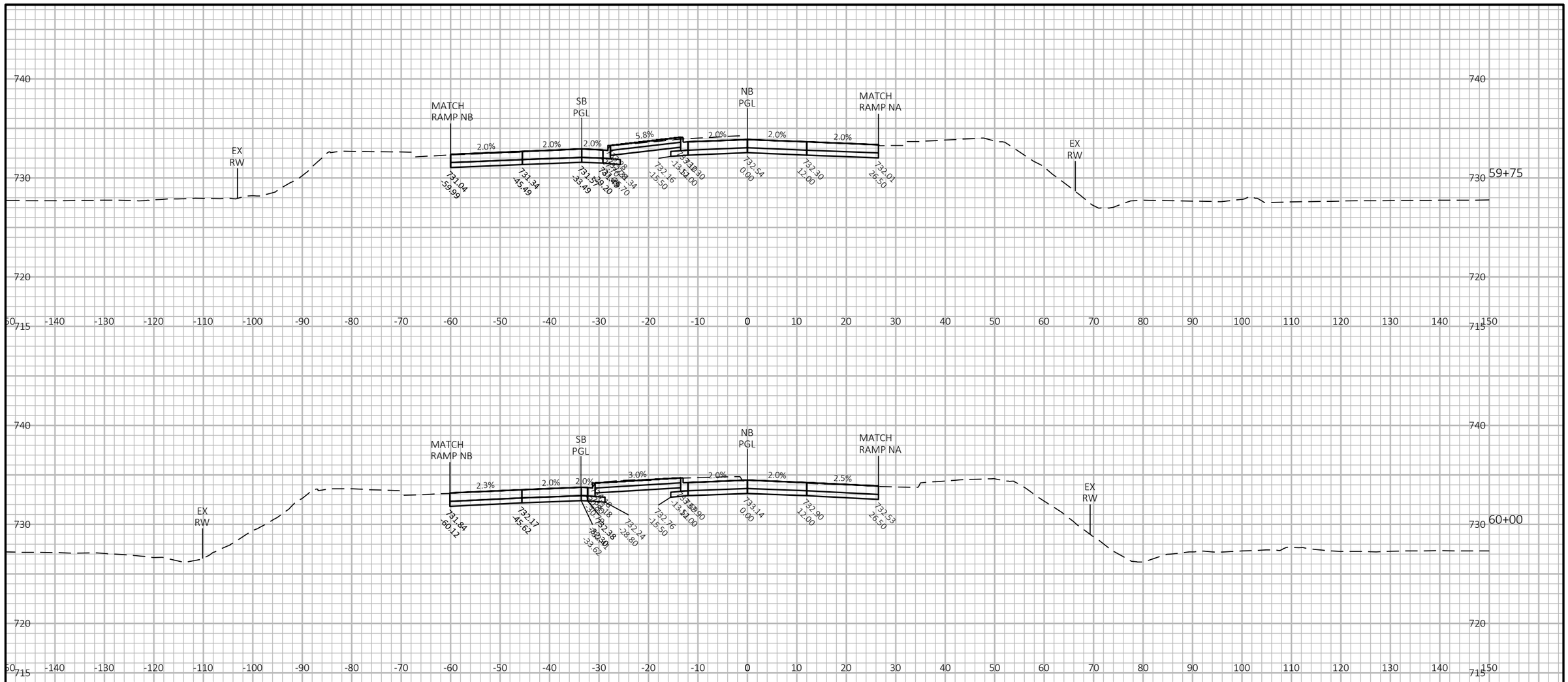
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 362	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090208

PLOT DATE : 1/31/2024 8:25 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



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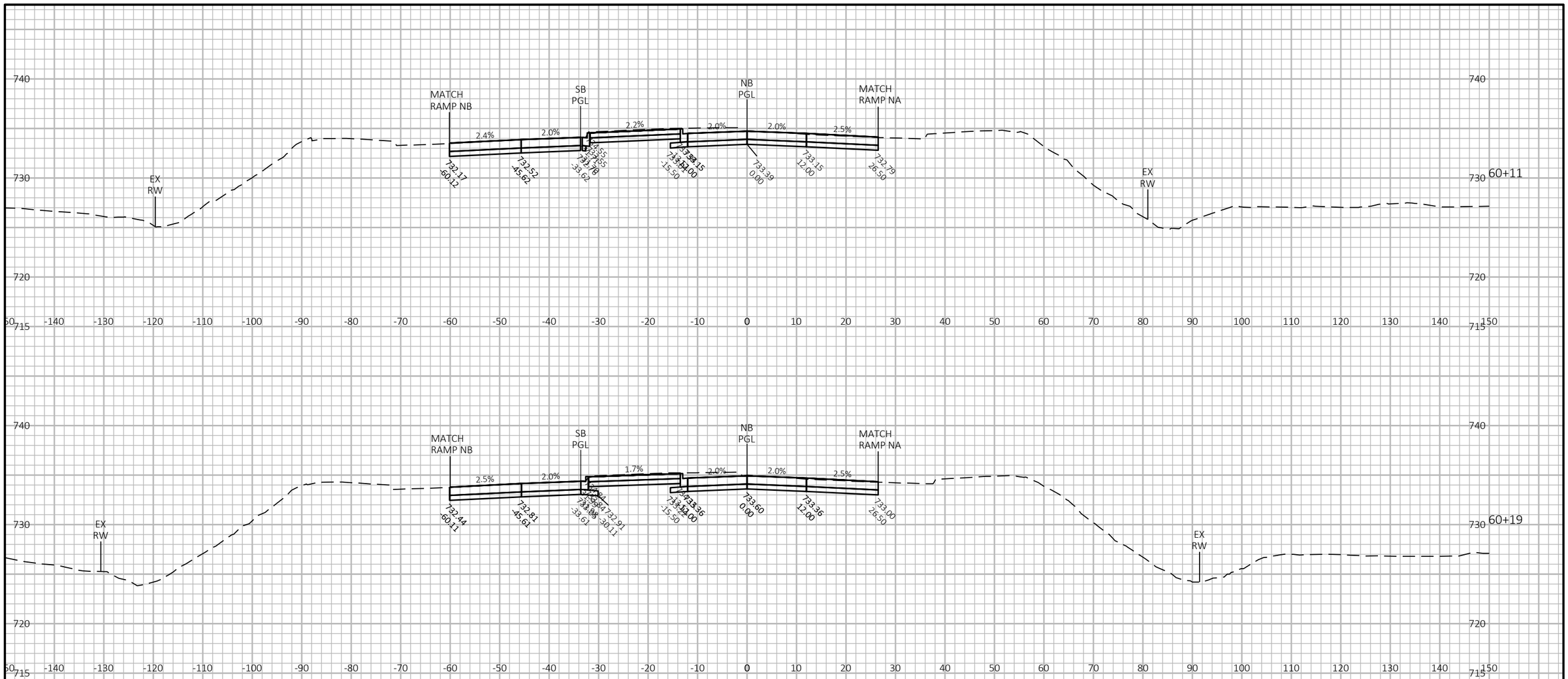
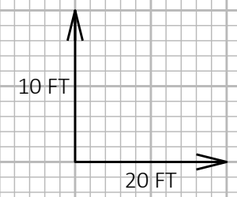
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 363	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090209

PLOT DATE : 1/31/2024 8:25 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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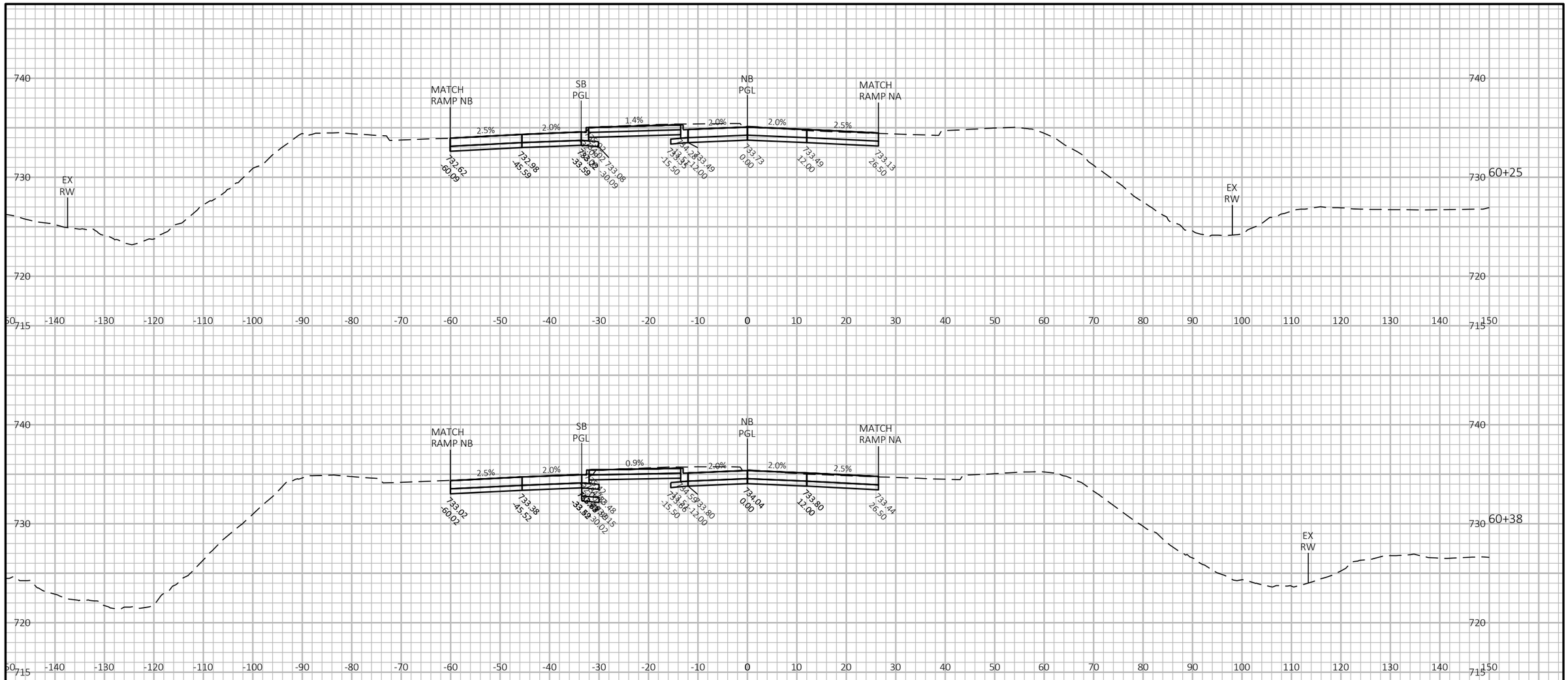
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 364	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090210

PLOT DATE : 1/31/2024 8:26 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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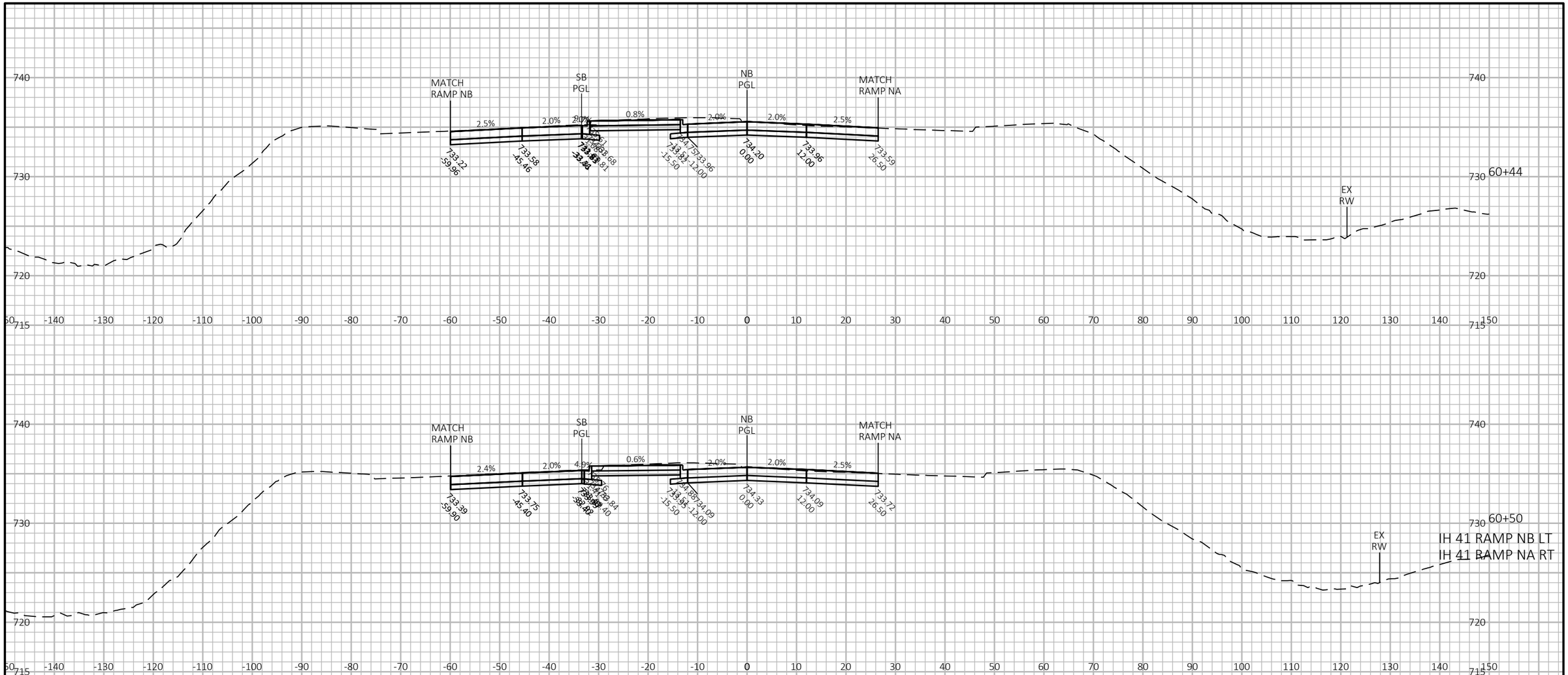
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 365	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090211

PLOT DATE : 1/31/2024 8:26 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



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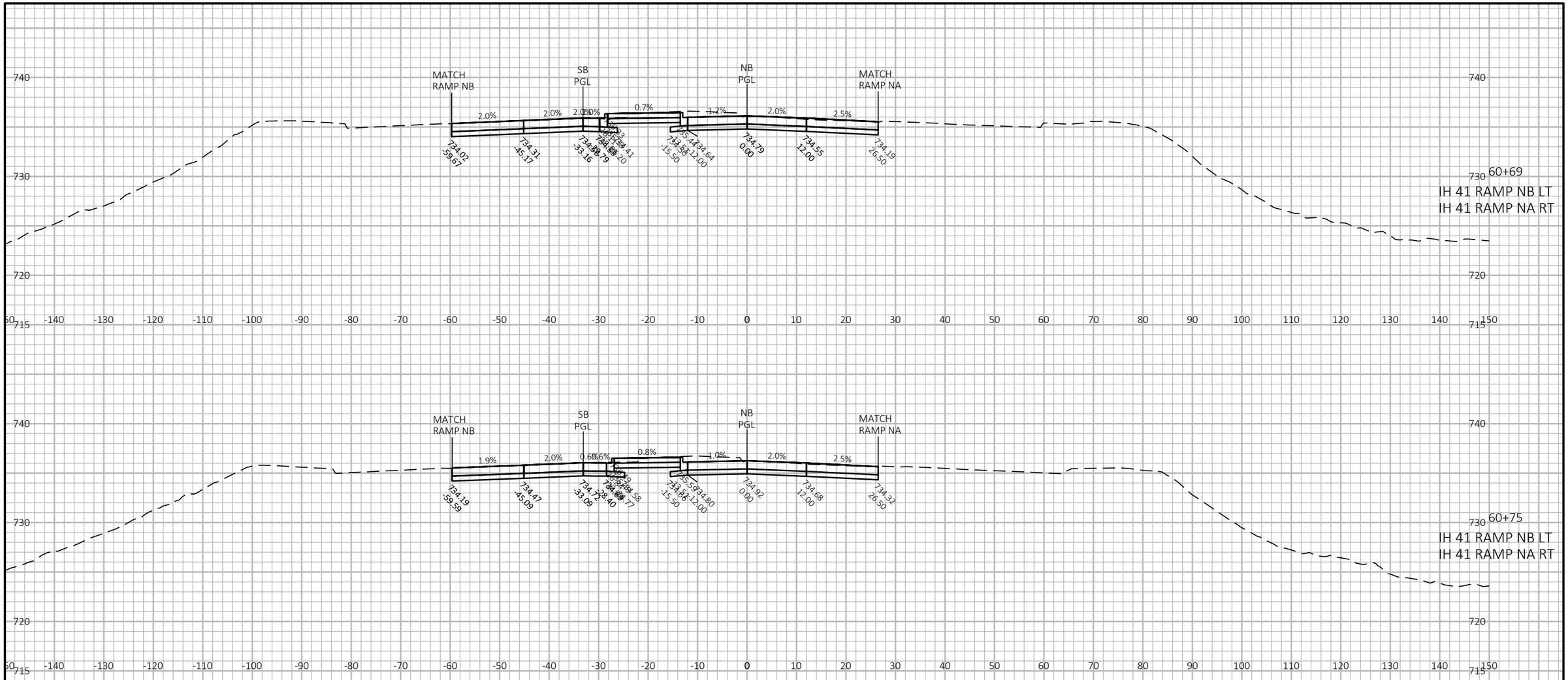
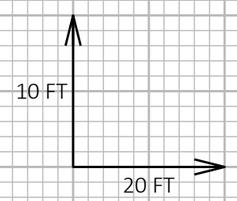
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 366	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090212

PLOT DATE : 1/31/2024 8:26 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.





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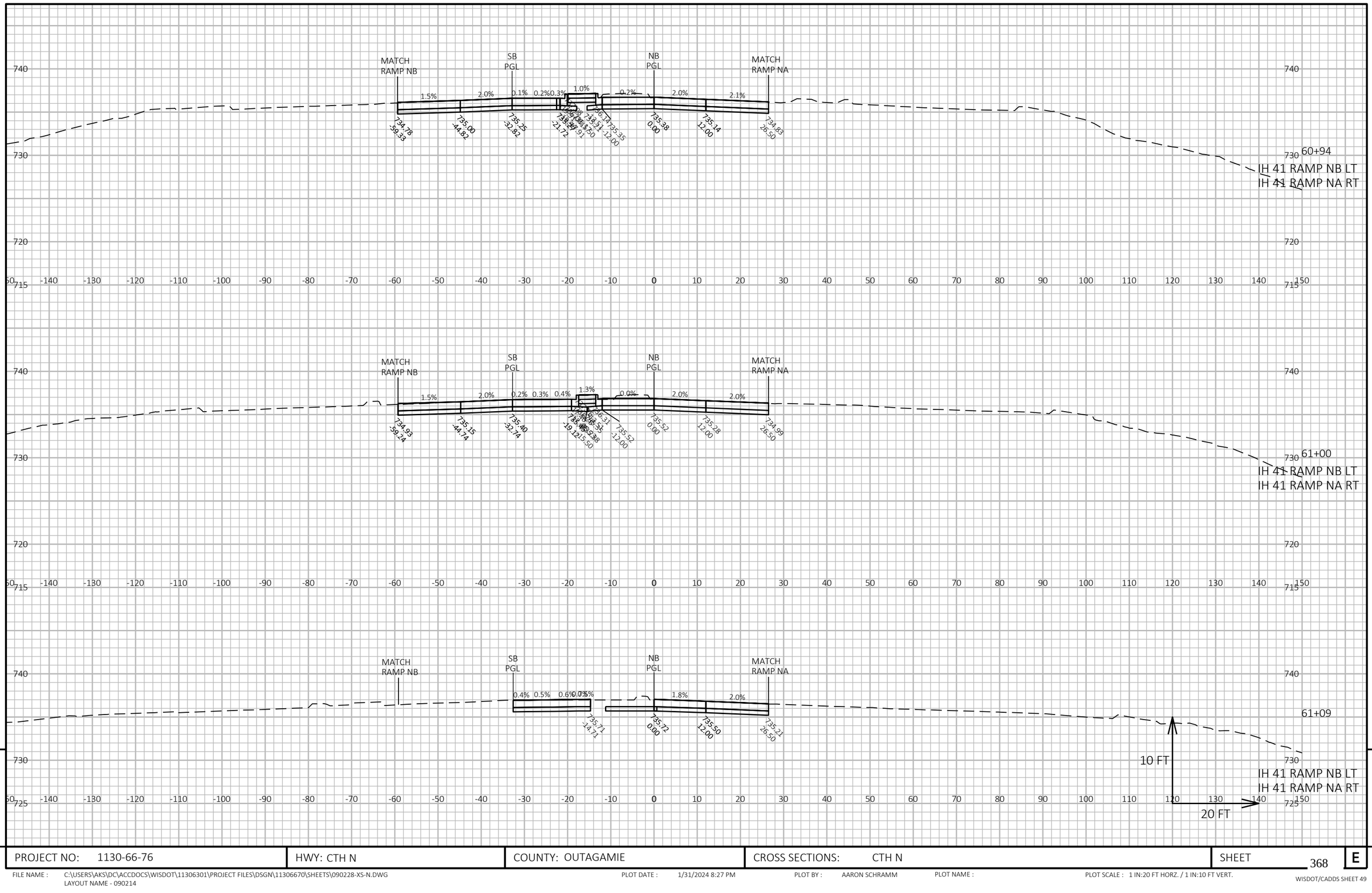
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 367	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090213

PLOT DATE : 1/31/2024 8:27 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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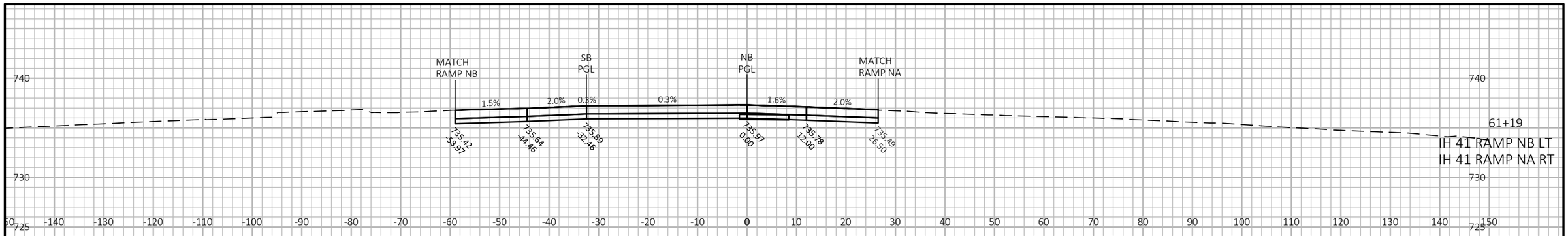
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 368	E

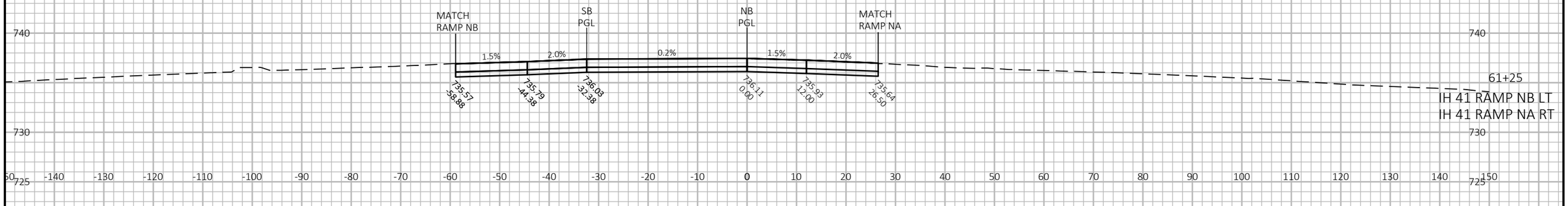
9

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090214

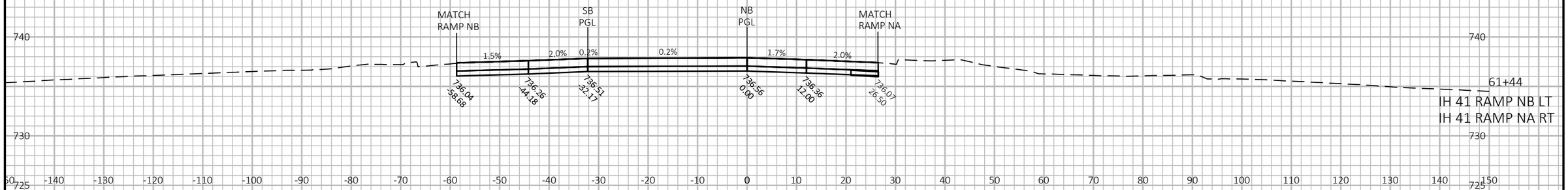
PLOT DATE : 1/31/2024 8:27 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



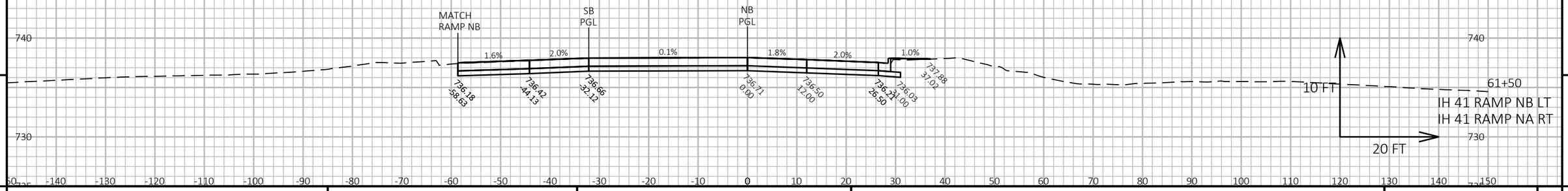
61+19
IH 41 RAMP NB LT
IH 41 RAMP NA RT



61+25
IH 41 RAMP NB LT
IH 41 RAMP NA RT



61+44
IH 41 RAMP NB LT
IH 41 RAMP NA RT



61+50
IH 41 RAMP NB LT
IH 41 RAMP NA RT

9

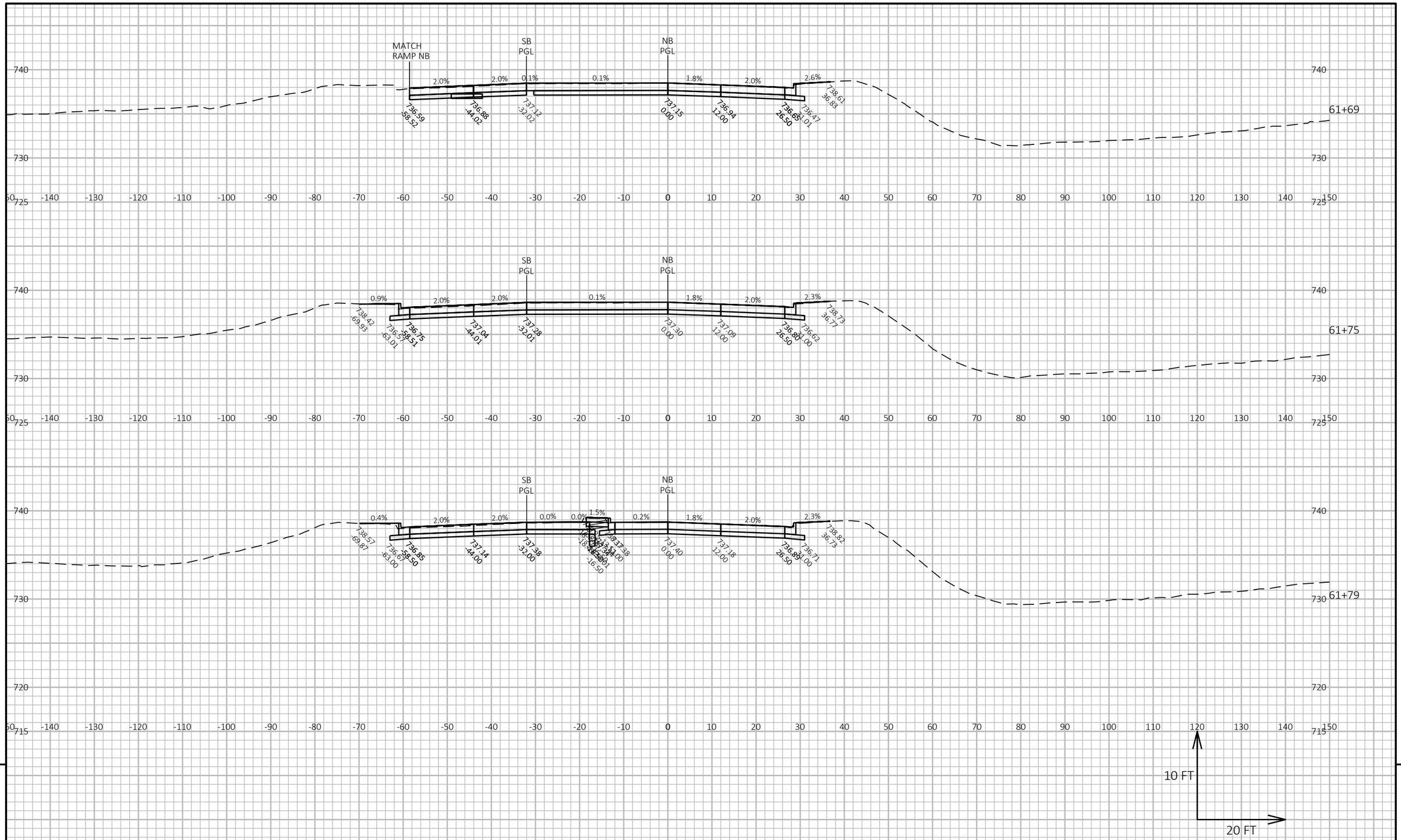
9

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 369	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090215

PLOT DATE : 1/31/2024 8:27 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

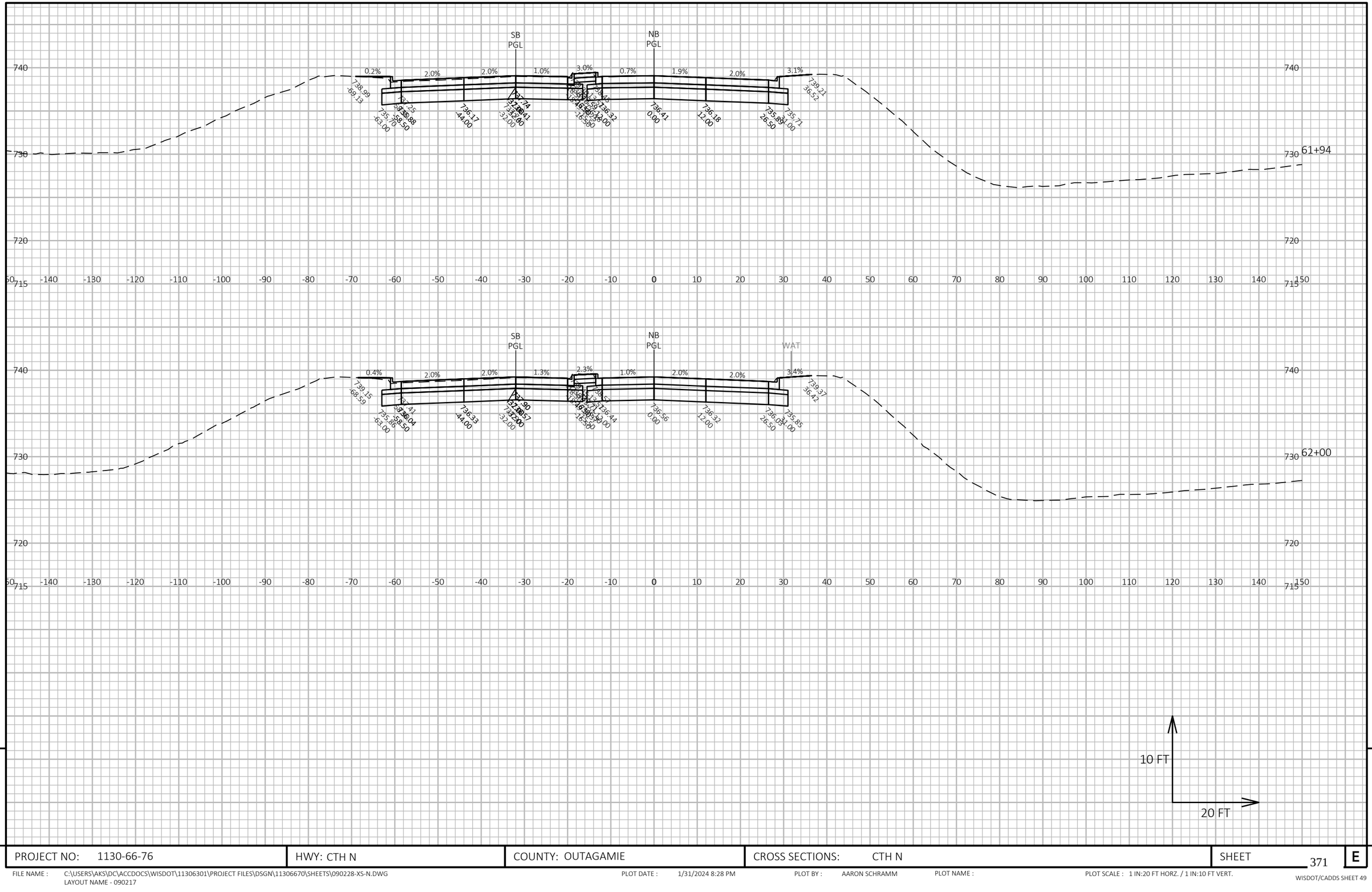


PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 370 E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090216

PLOT DATE : 1/31/2024 8:28 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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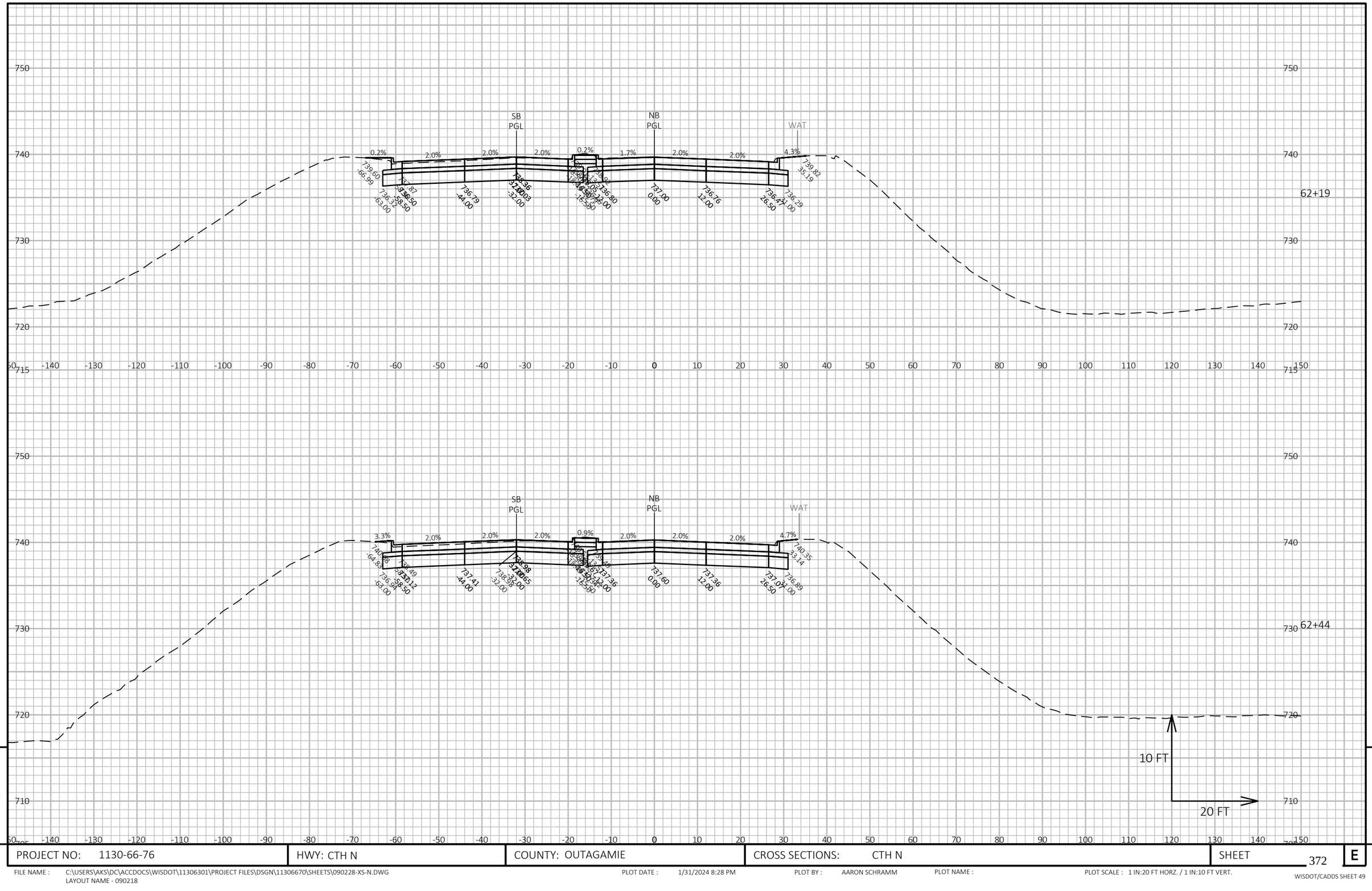
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 371	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090217

PLOT DATE : 1/31/2024 8:28 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

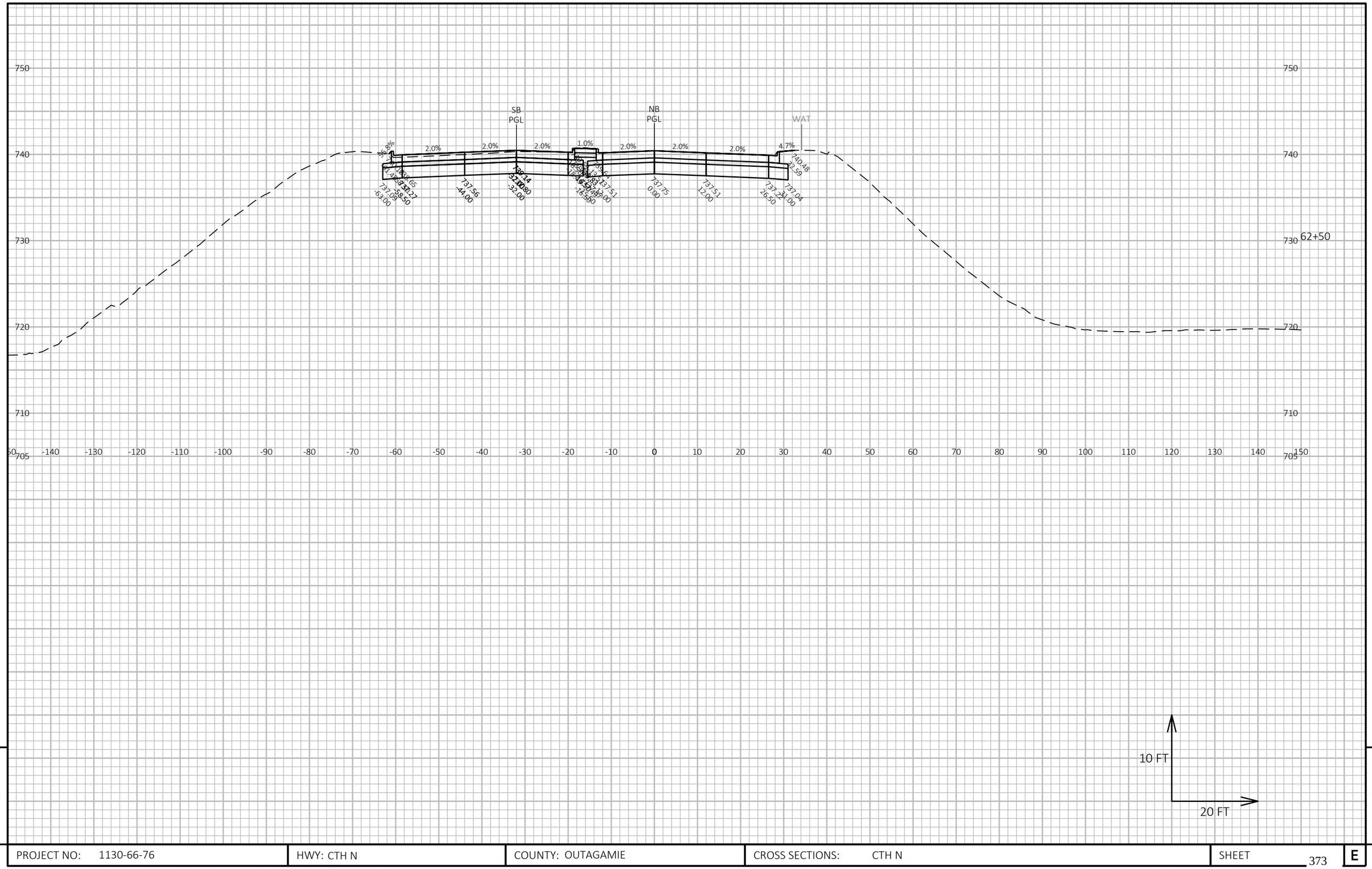


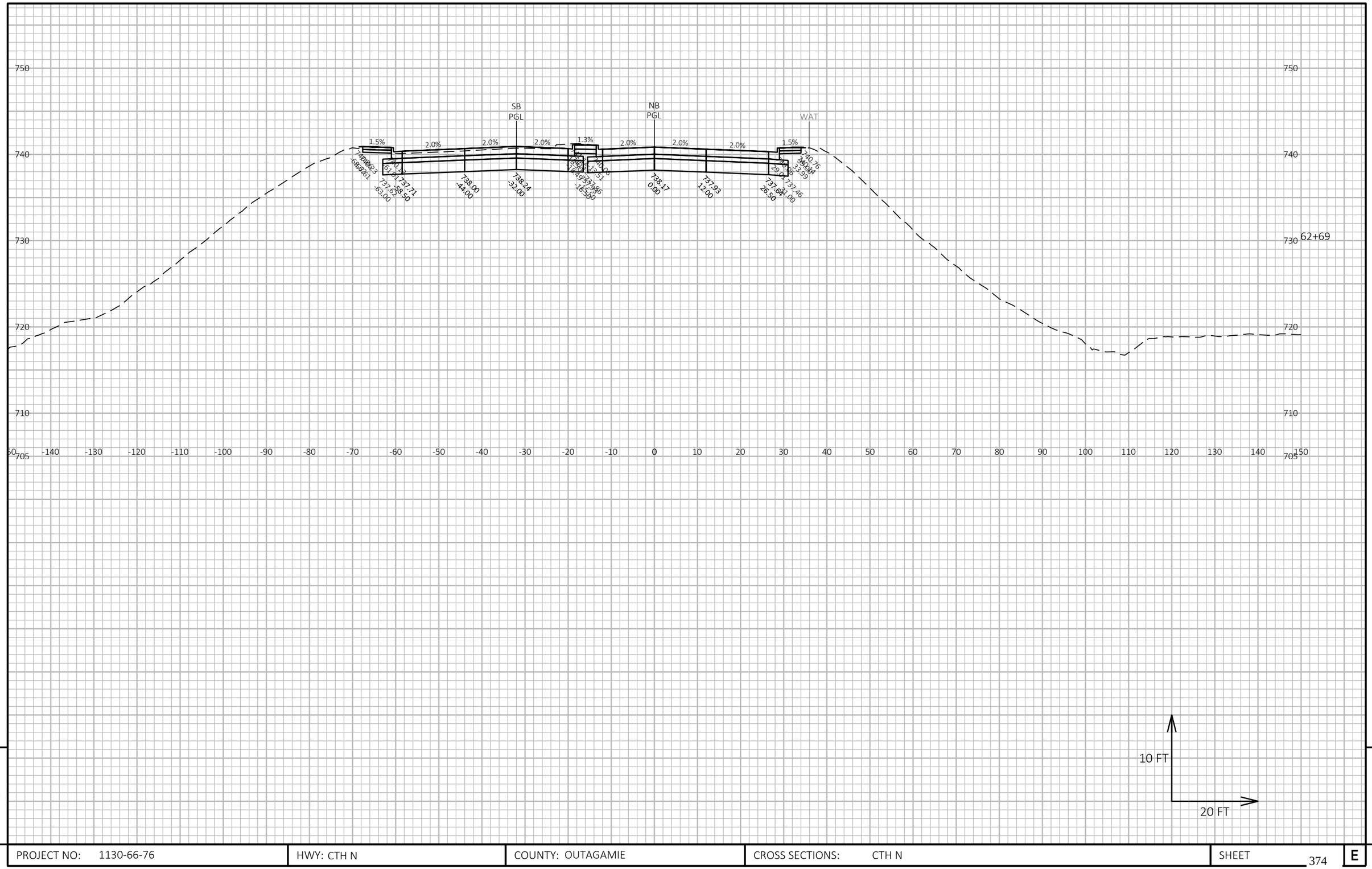
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 372 E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090218

PLOT DATE : 1/31/2024 8:28 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49


SB
PGL
NB
PGL
WAT
2.0%
2.0%
2.0%
1.0%
2.0%
2.0%
2.0%
4.7%
740.48
2.59
737.64
737.51
737.75
737.51
737.23
737.04
737.56
737.09
737.27
737.00
737.14
737.00
737.00
737.00


SB
PGL
NB
PGL
WAT
1.5%
2.0%
2.0%
2.0%
1.3%
2.0%
2.0%
2.0%
1.5%
737.71
738.00
44.00
738.24
32.00
738.17
0.00
737.93
12.00
737.68
26.50
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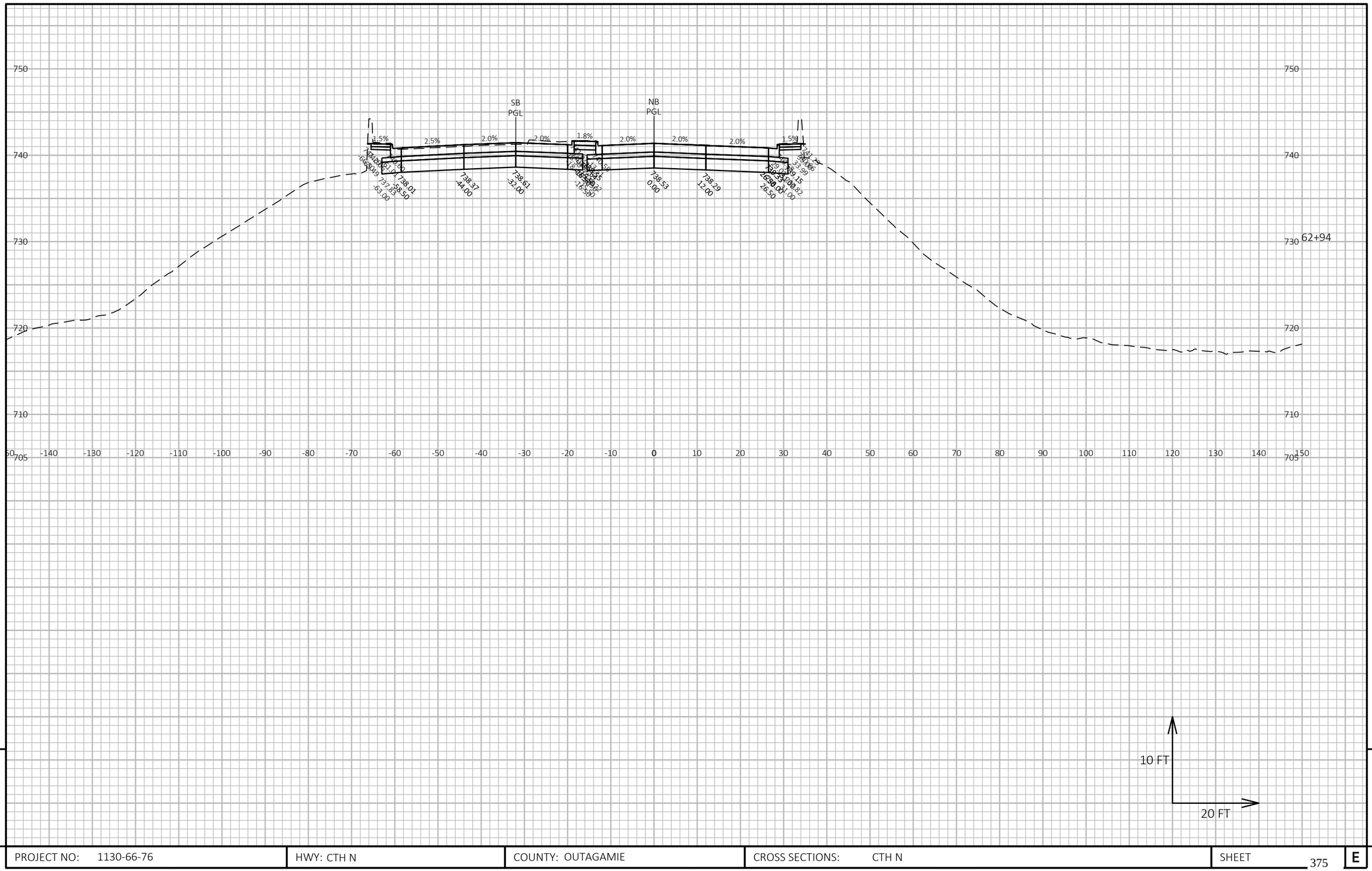
740.00
740.00



9

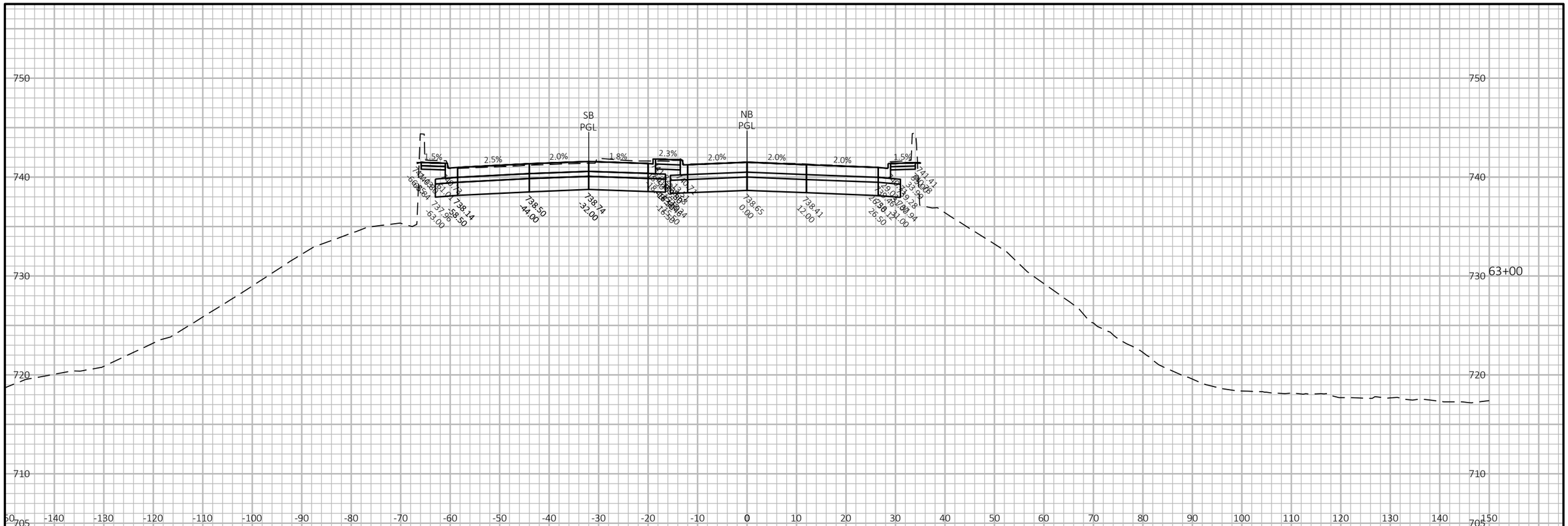
9

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 375	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090221

PLOT DATE : 1/31/2024 8:29 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

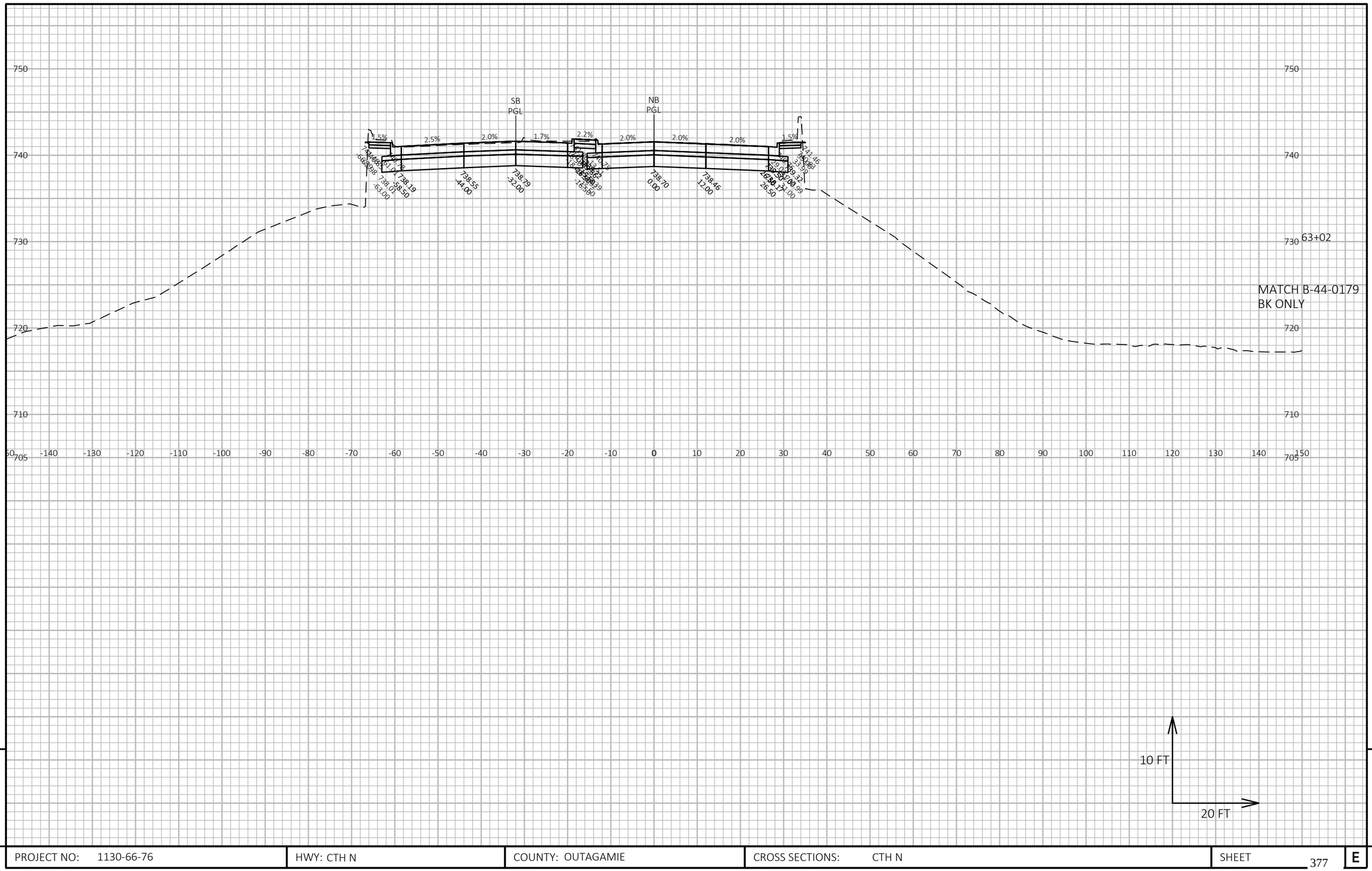
9

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 376	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090222

PLOT DATE : 1/31/2024 8:30 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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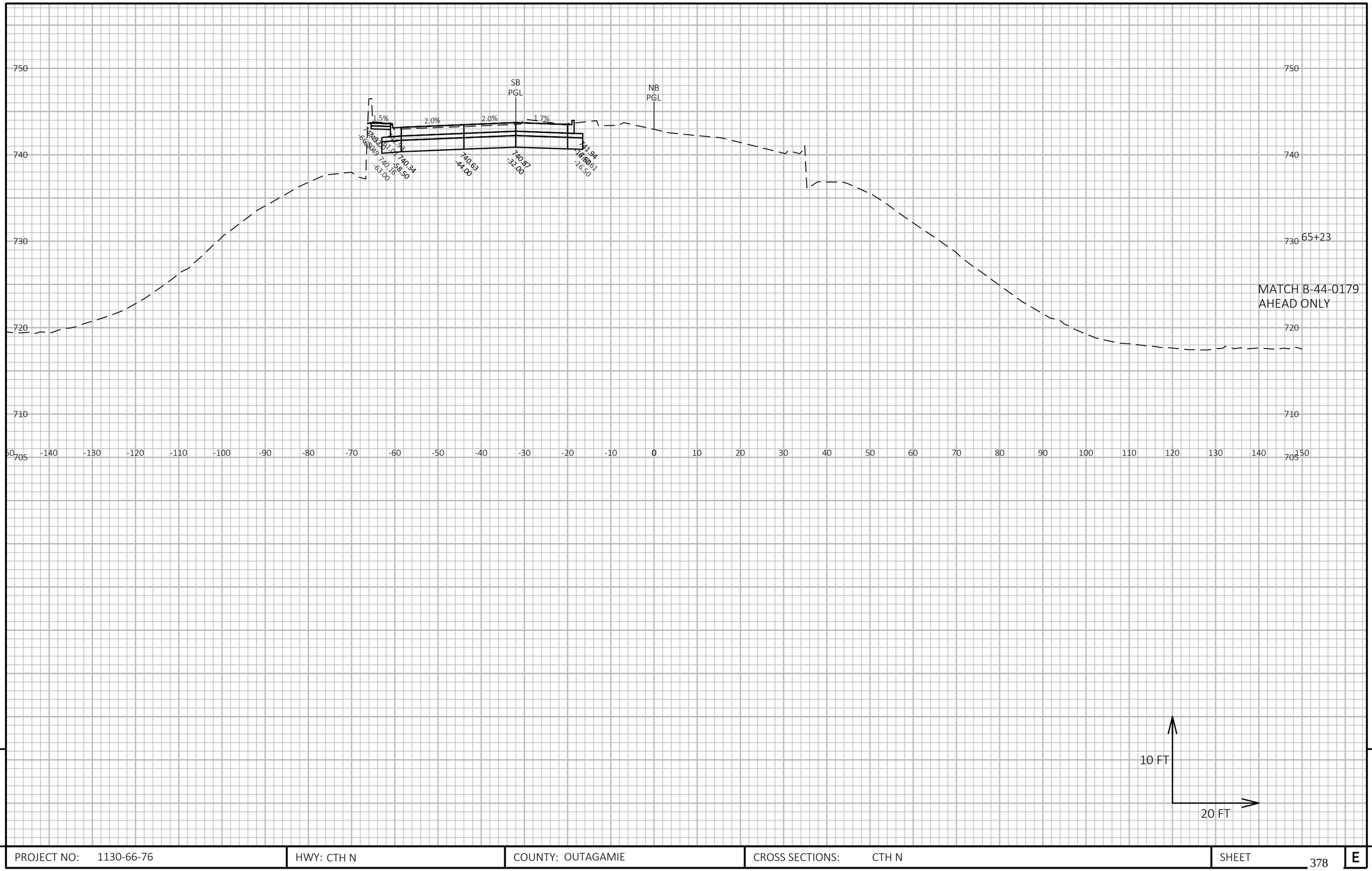
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 377	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090223

PLOT DATE : 1/31/2024 8:30 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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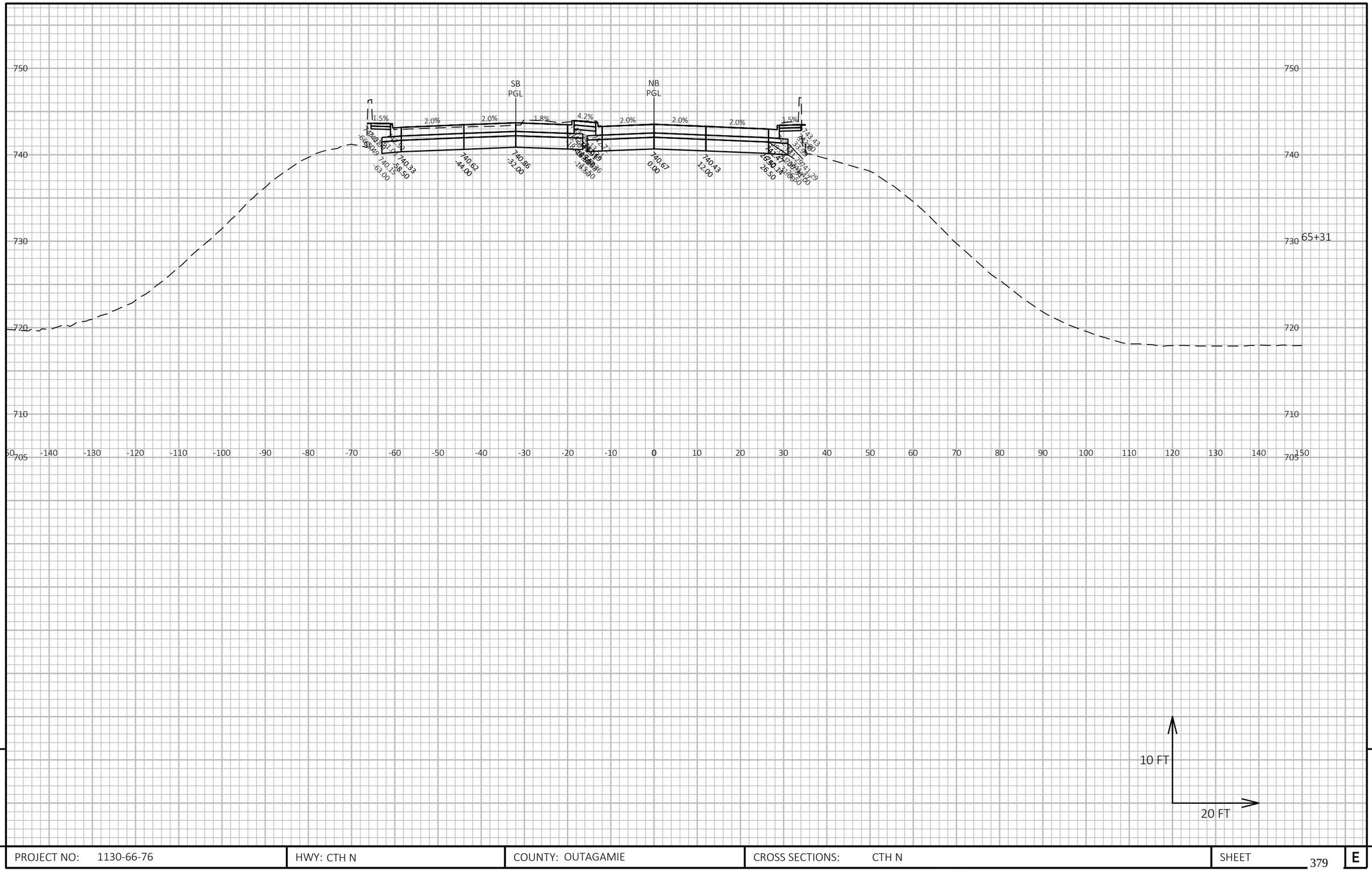
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 378	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090224

PLOT DATE : 1/31/2024 8:30 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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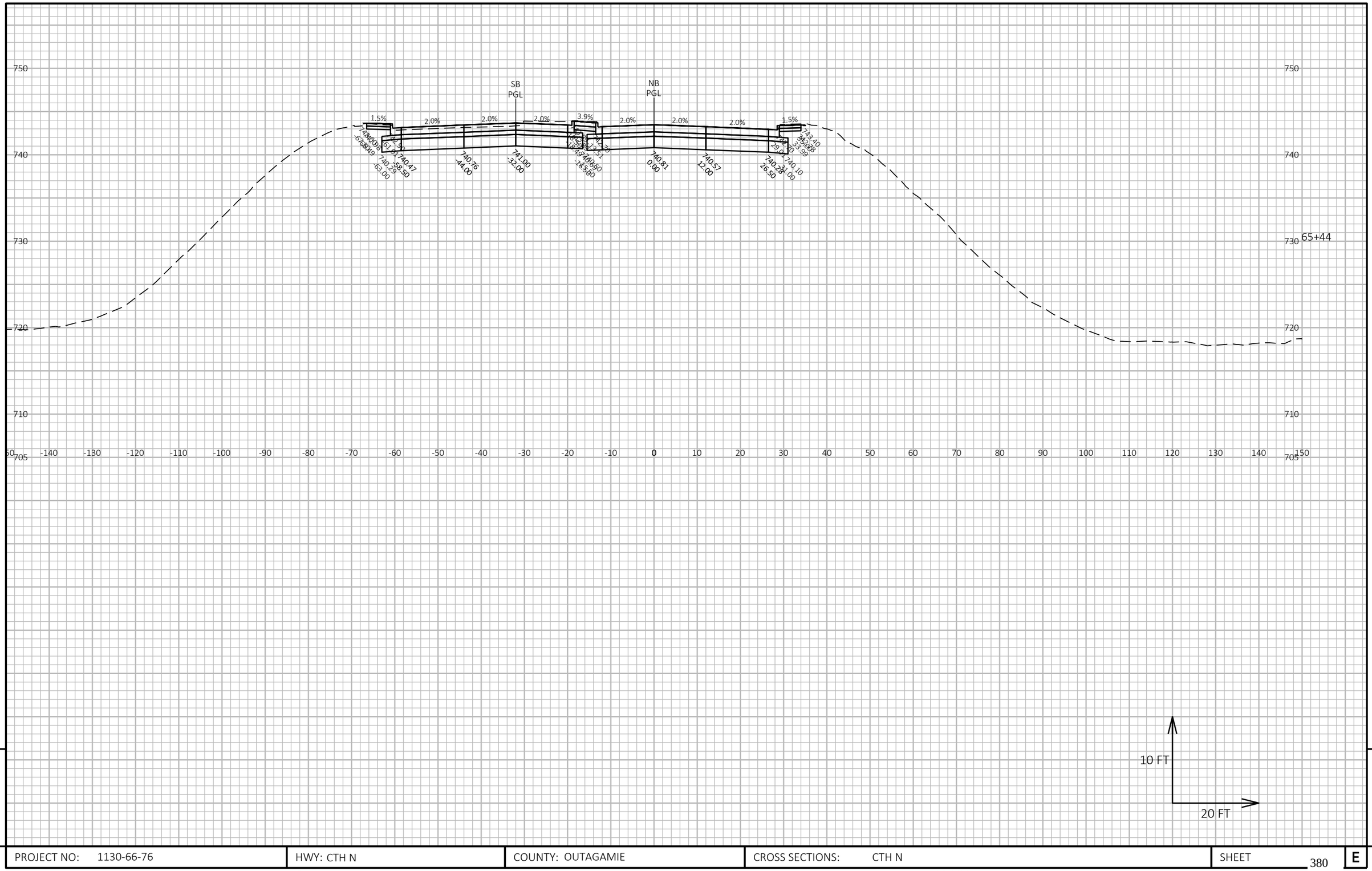
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 379	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090225

PLOT DATE : 1/31/2024 8:31 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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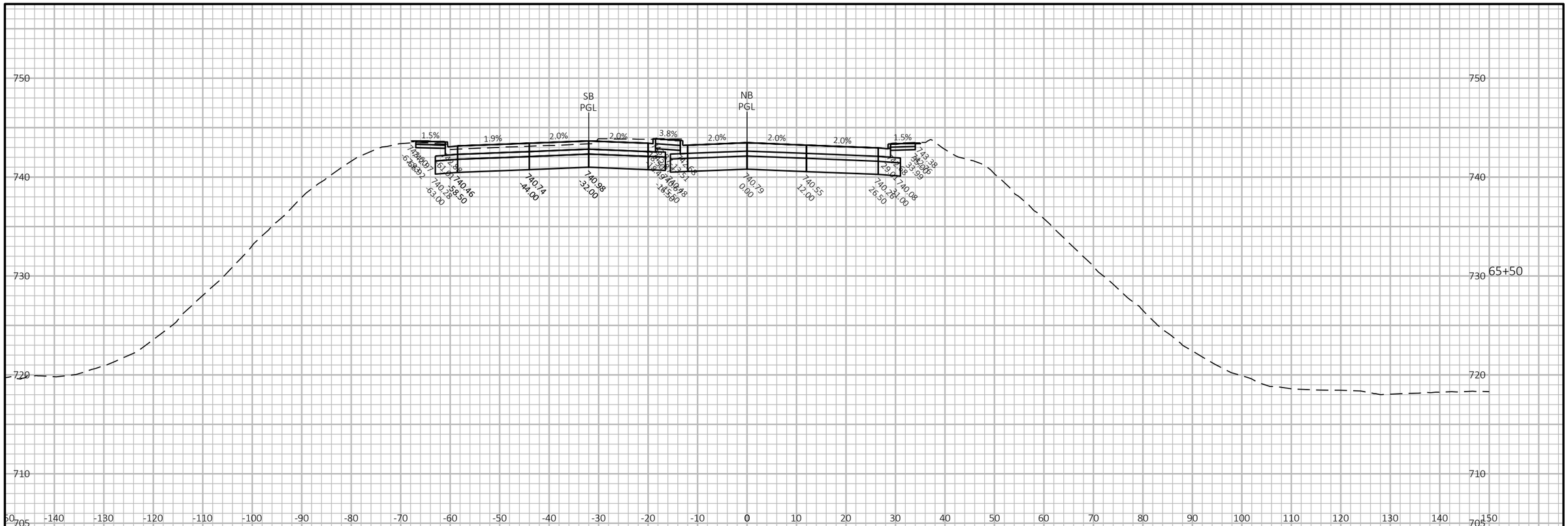
9

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 380	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090226

PLOT DATE : 1/31/2024 8:31 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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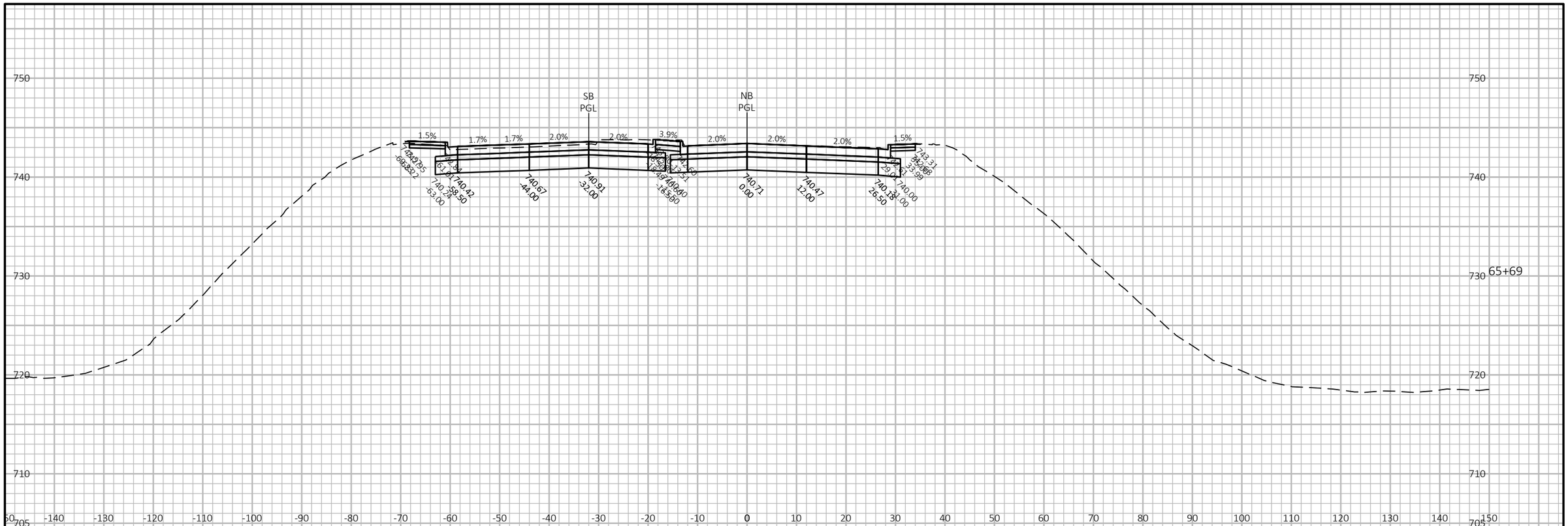
9

PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 381	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090227

PLOT DATE : 1/31/2024 8:31 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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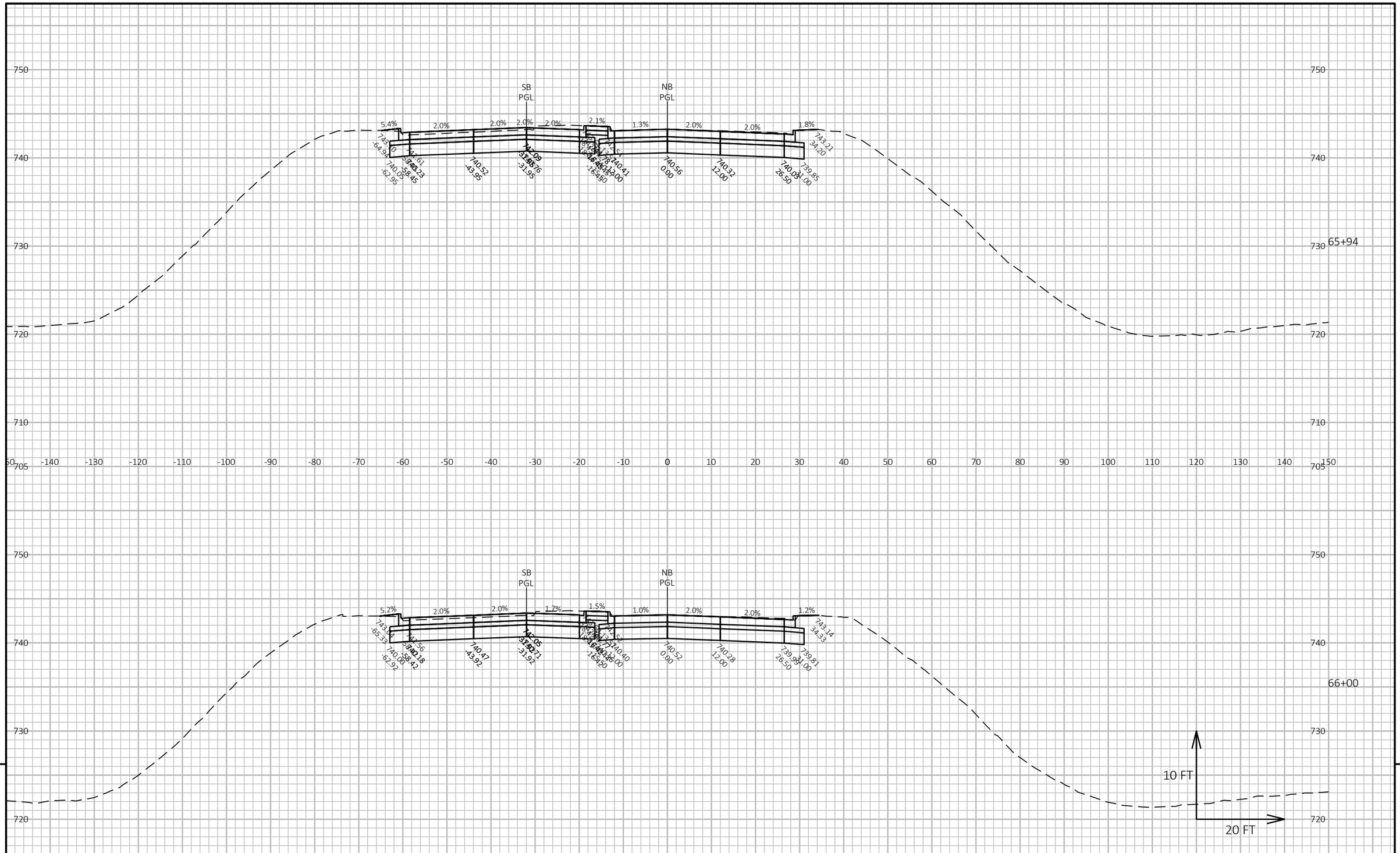
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 382	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090228

PLOT DATE : 1/31/2024 8:32 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

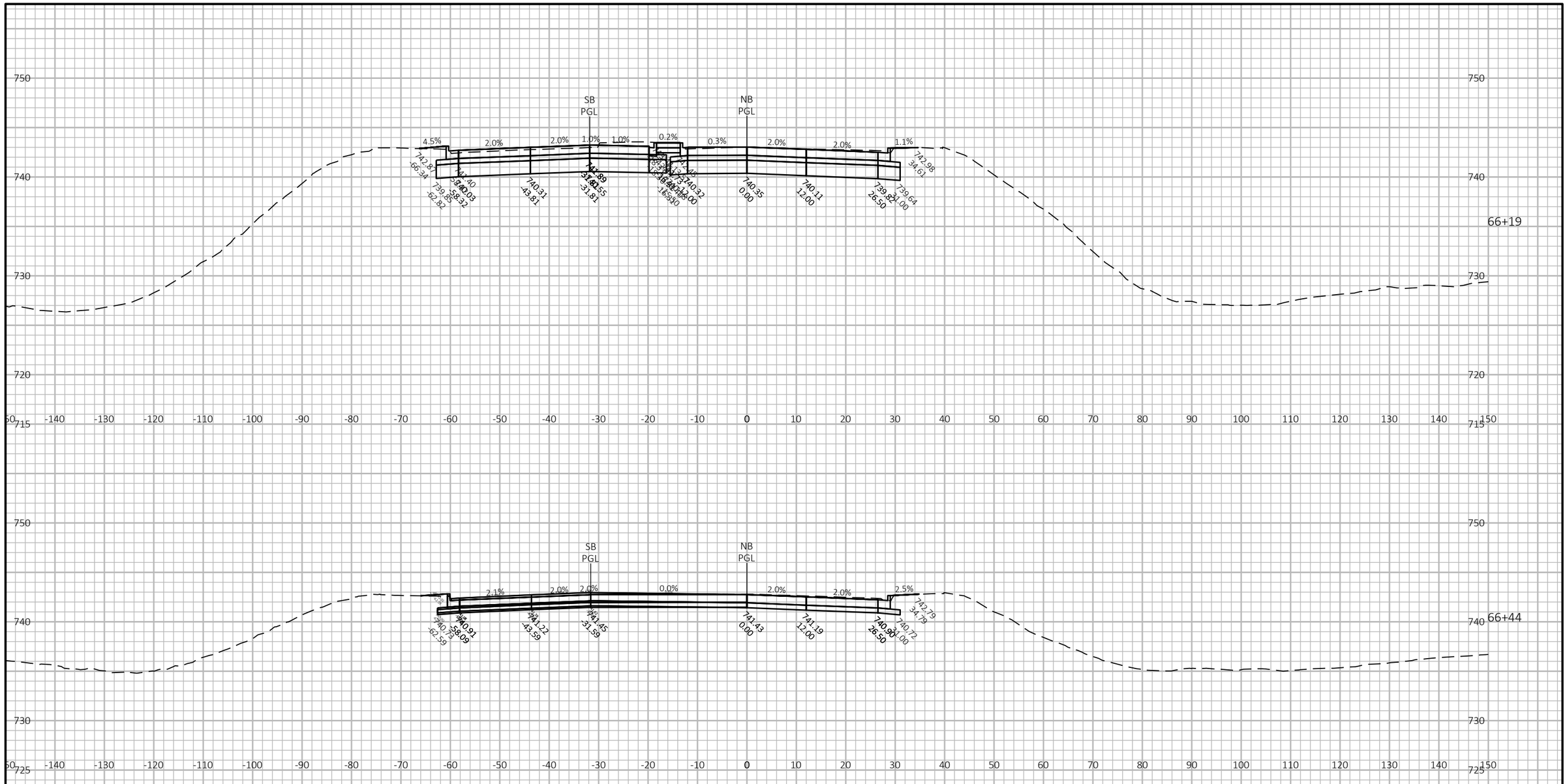


PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 383 E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090229

PLOT DATE : 1/31/2024 8:32 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

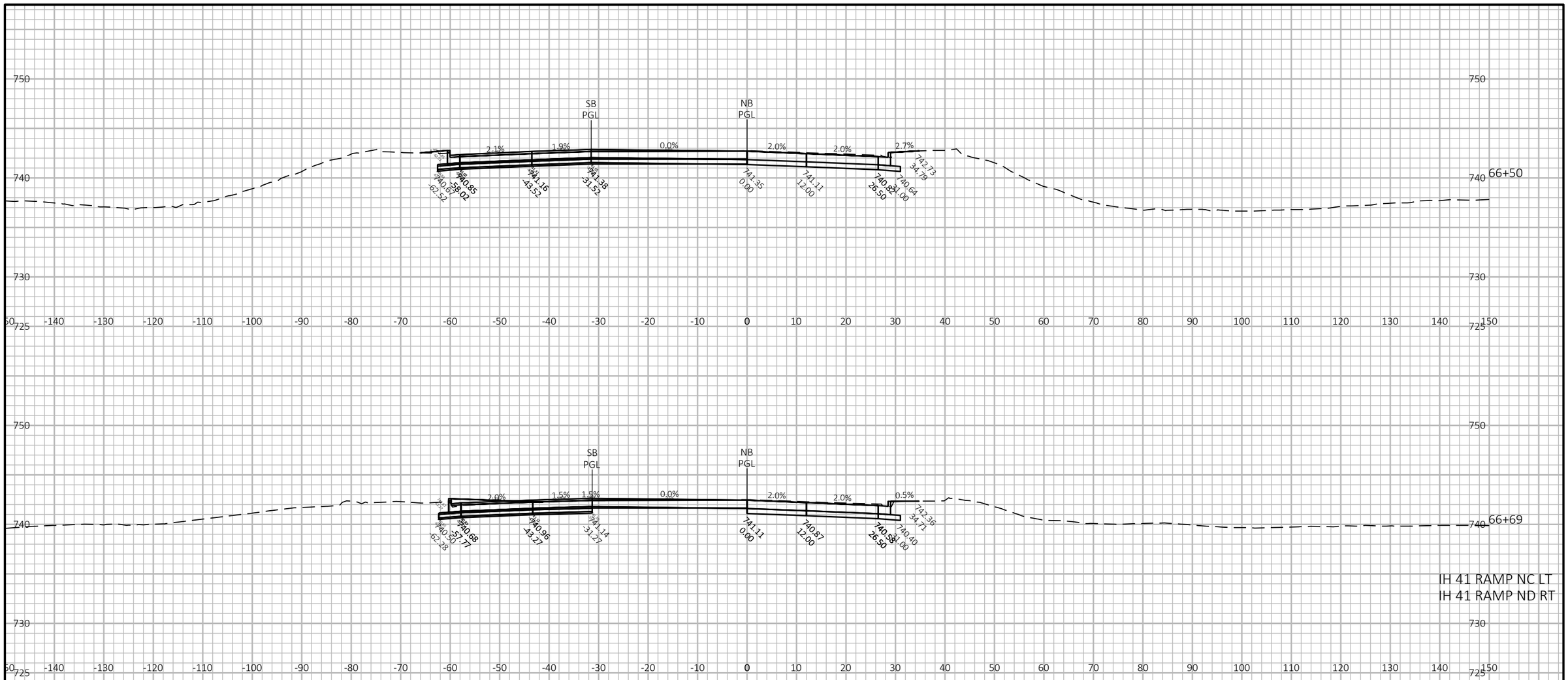


PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 384 E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090230

PLOT DATE : 1/31/2024 8:32 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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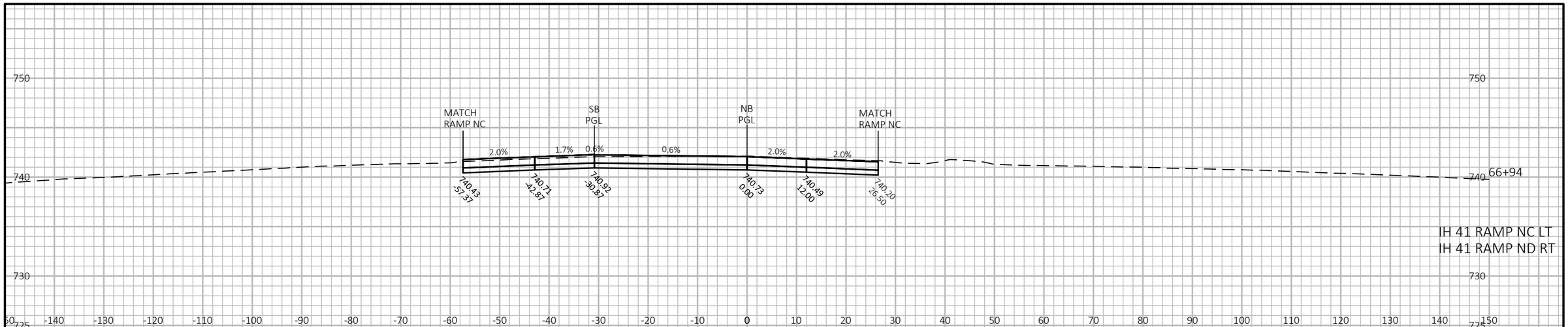
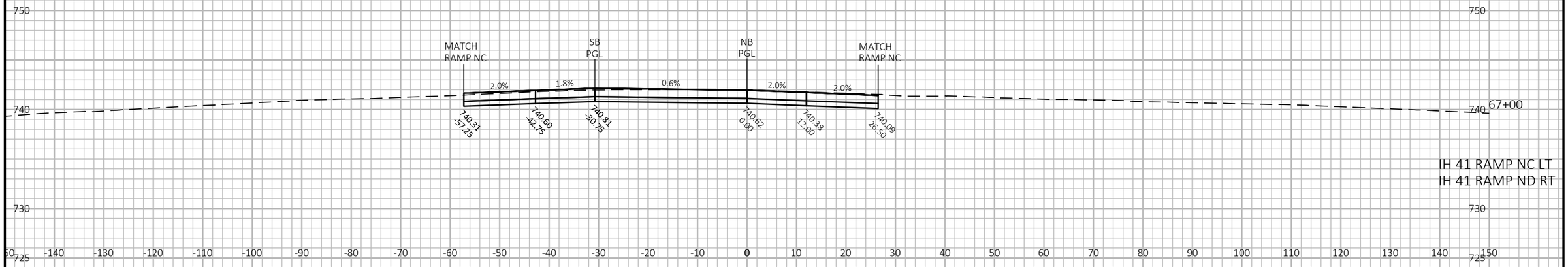
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 385	E

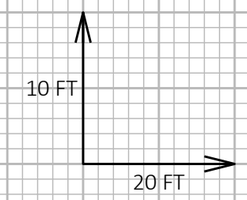
FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090231

PLOT DATE : 1/31/2024 8:33 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







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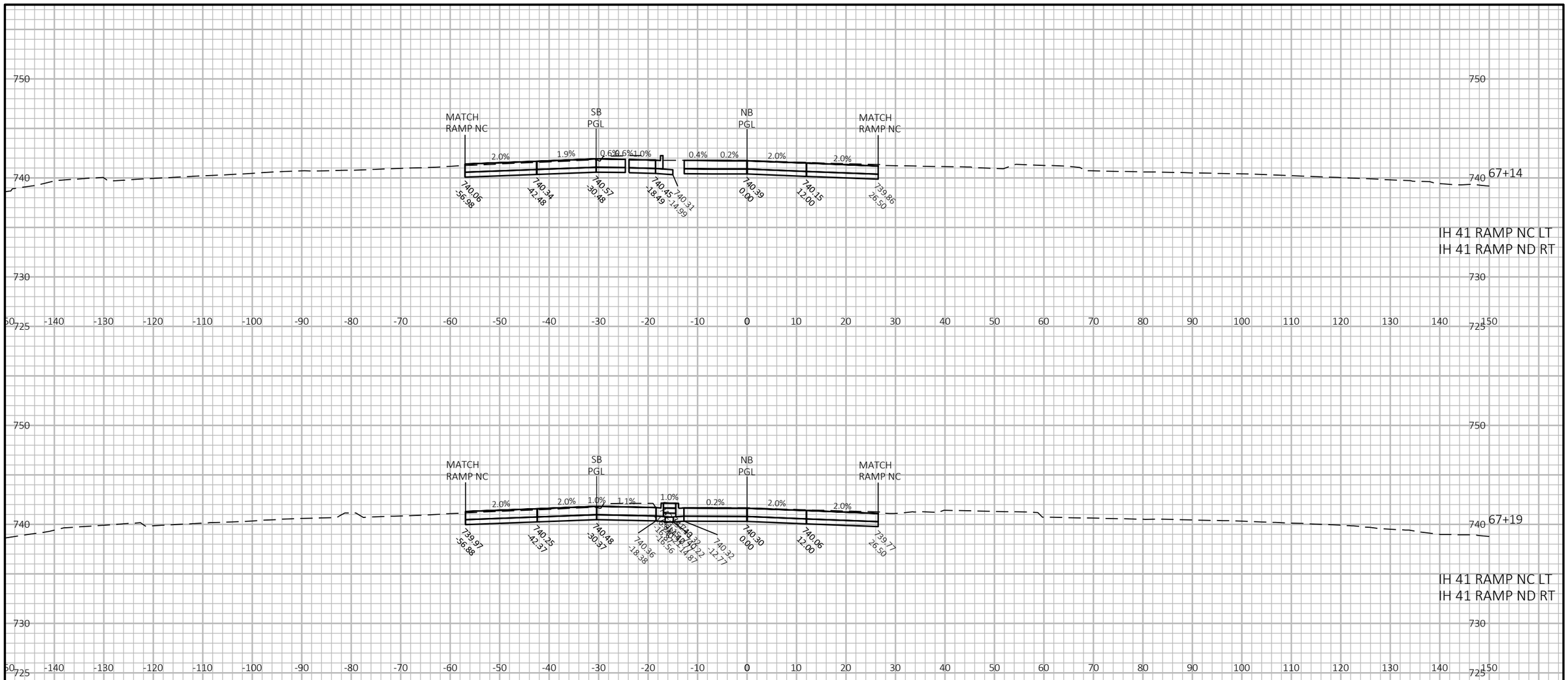
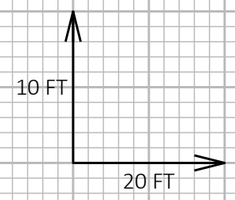
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 386	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090232

PLOT DATE : 1/31/2024 8:33 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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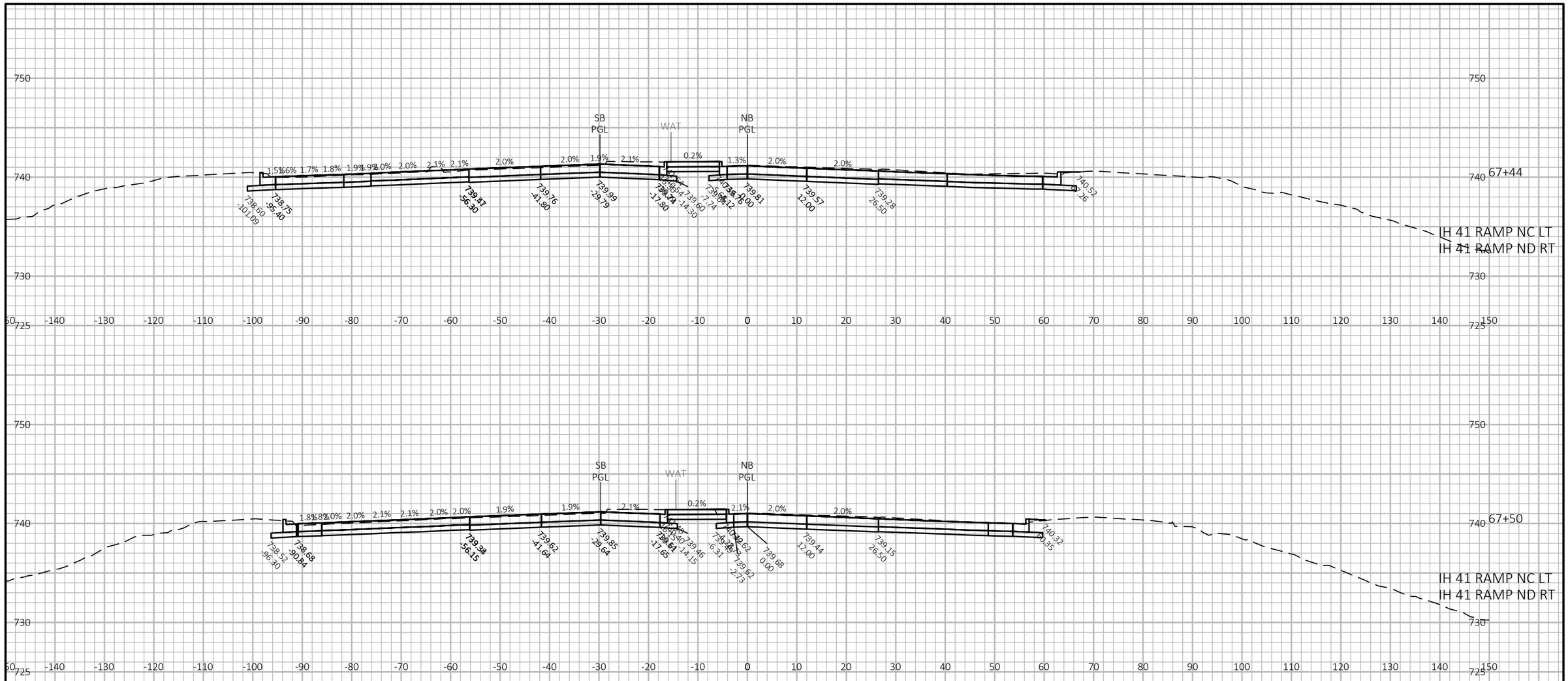
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 387	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090233

PLOT DATE : 1/31/2024 8:33 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

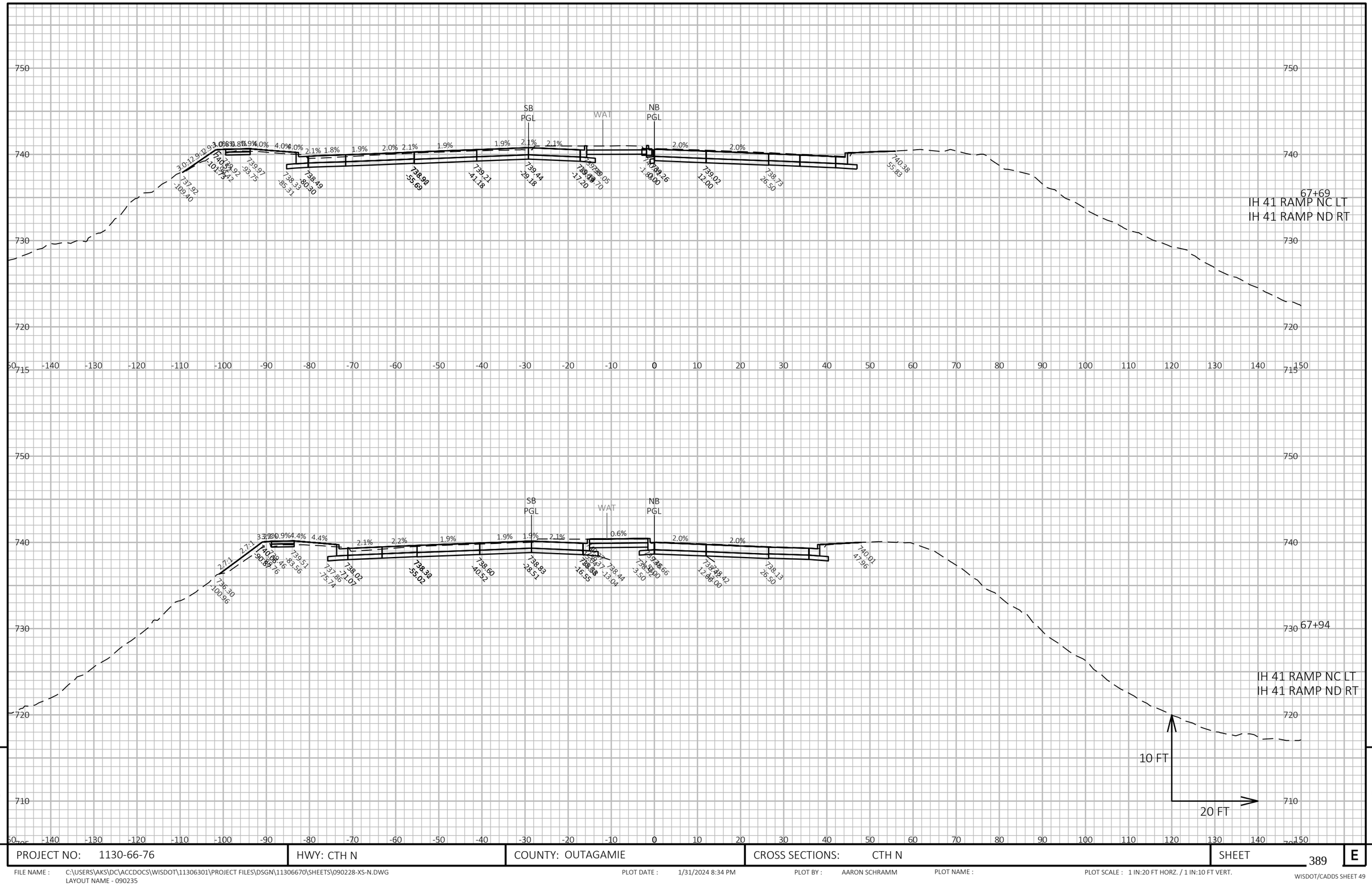


PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 388 E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090234

PLOT DATE : 1/31/2024 8:34 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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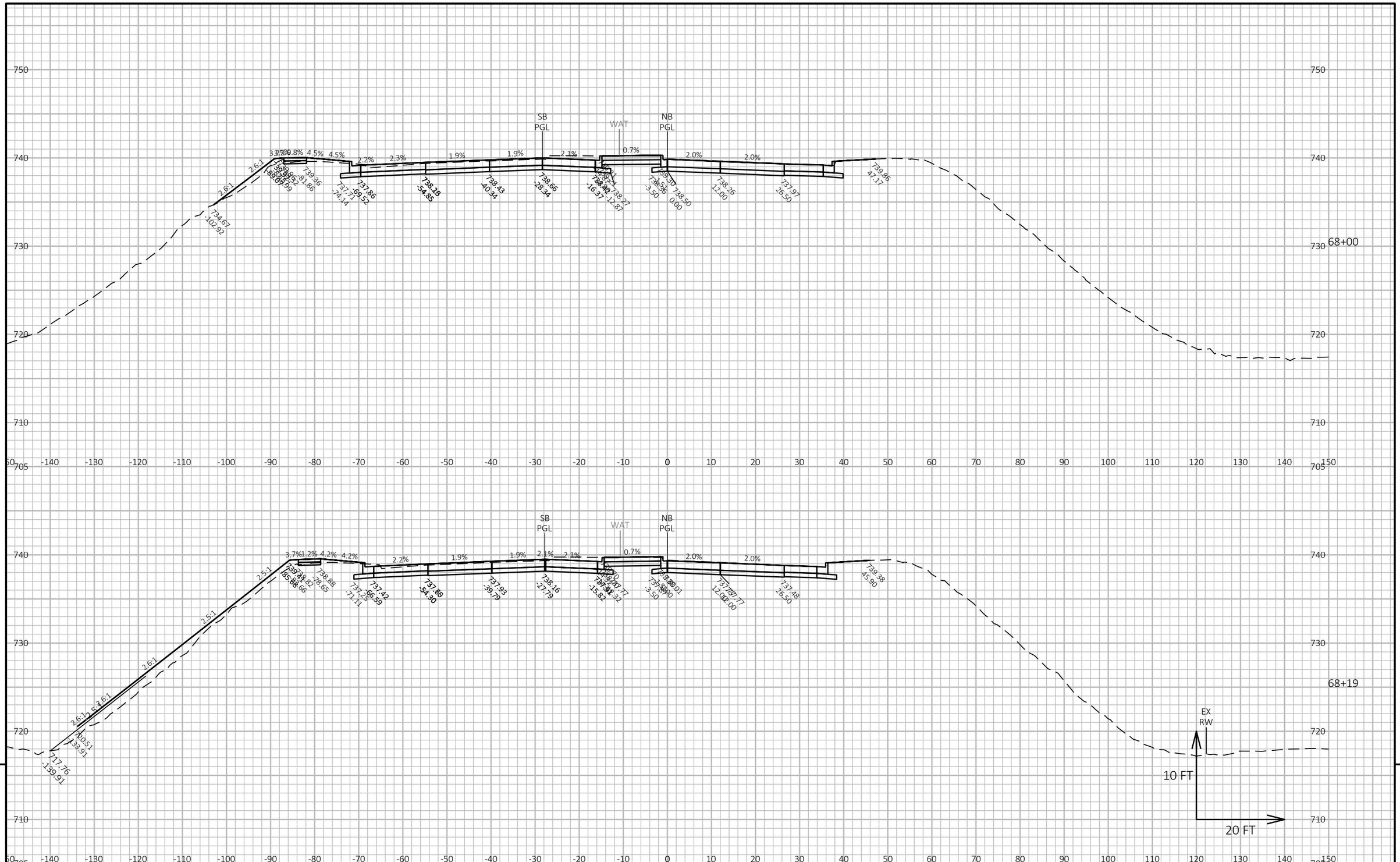
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 389	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090235

PLOT DATE : 1/31/2024 8:34 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

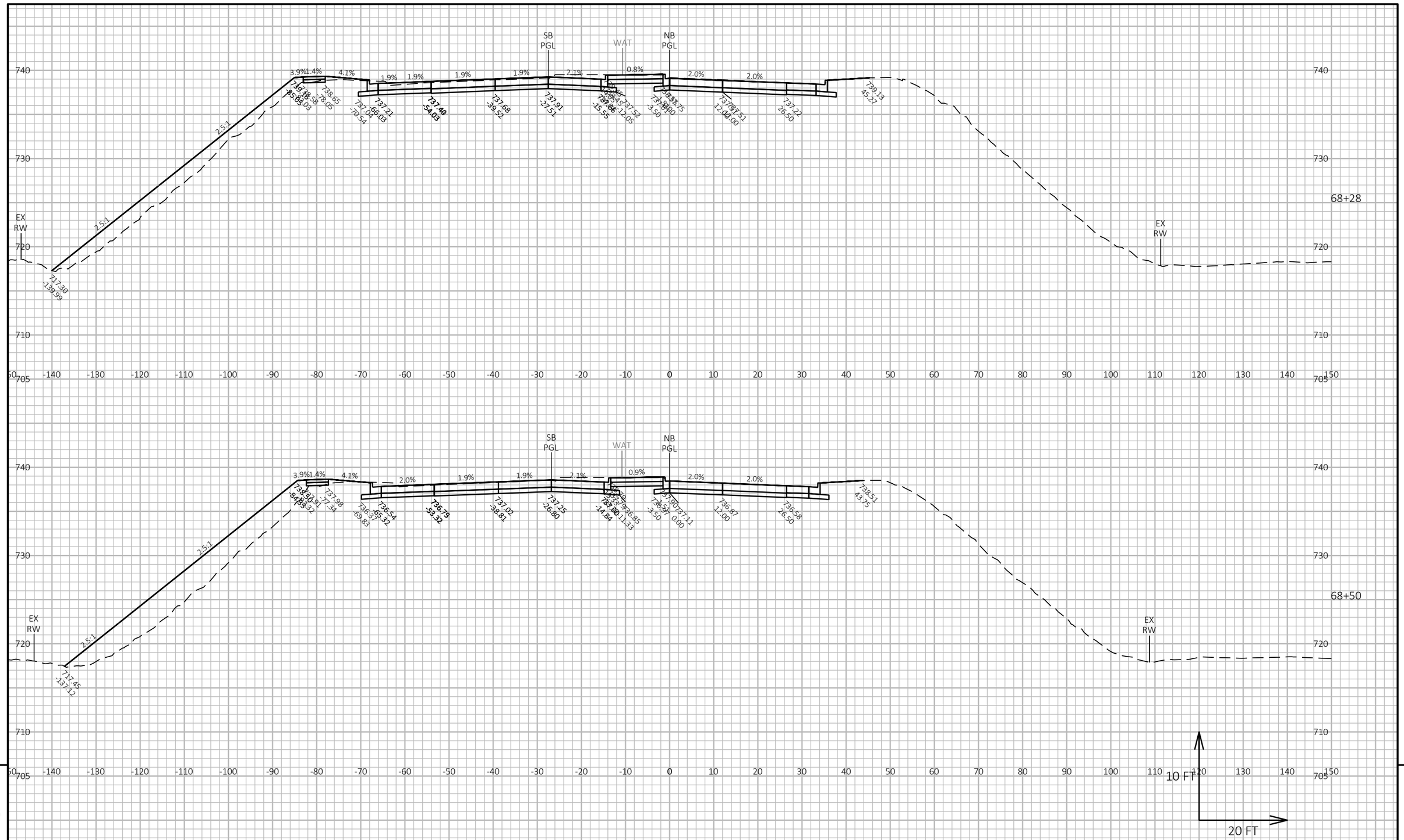


PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 390 E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090236

PLOT DATE : 1/31/2024 8:34 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

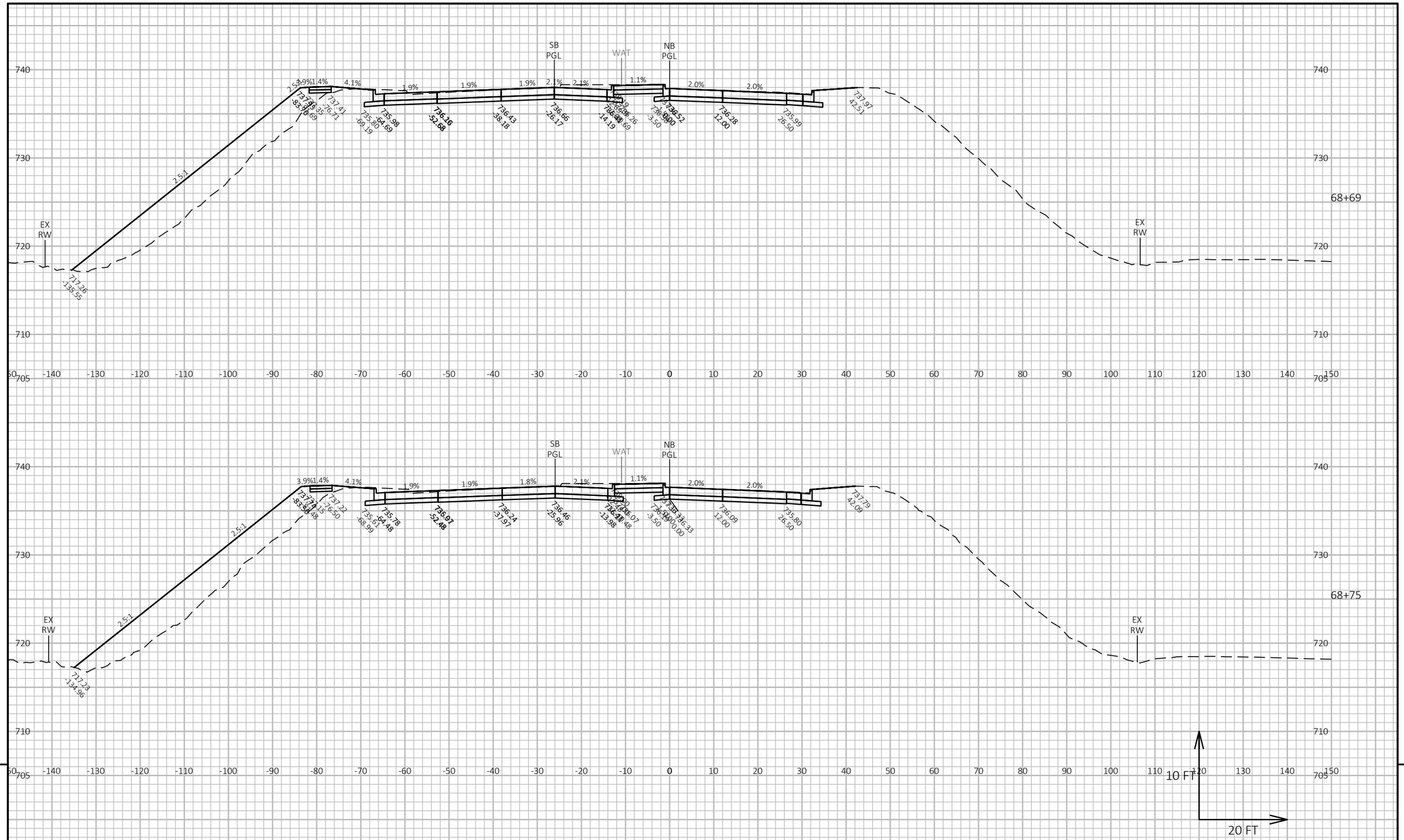


PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 391	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090237

PLOT DATE : 1/31/2024 8:35 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

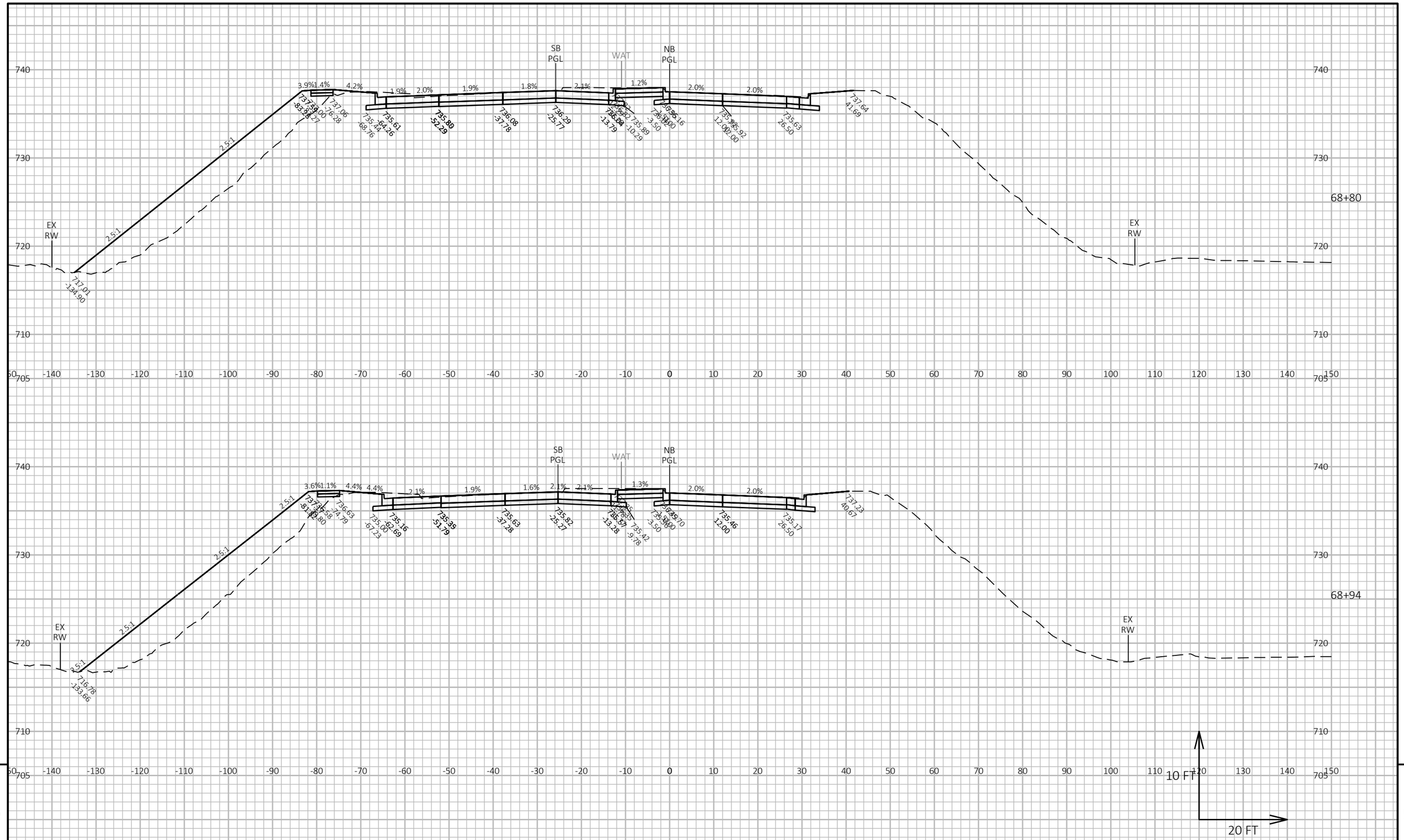


PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 392	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090238

PLOT DATE : 1/31/2024 8:35 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

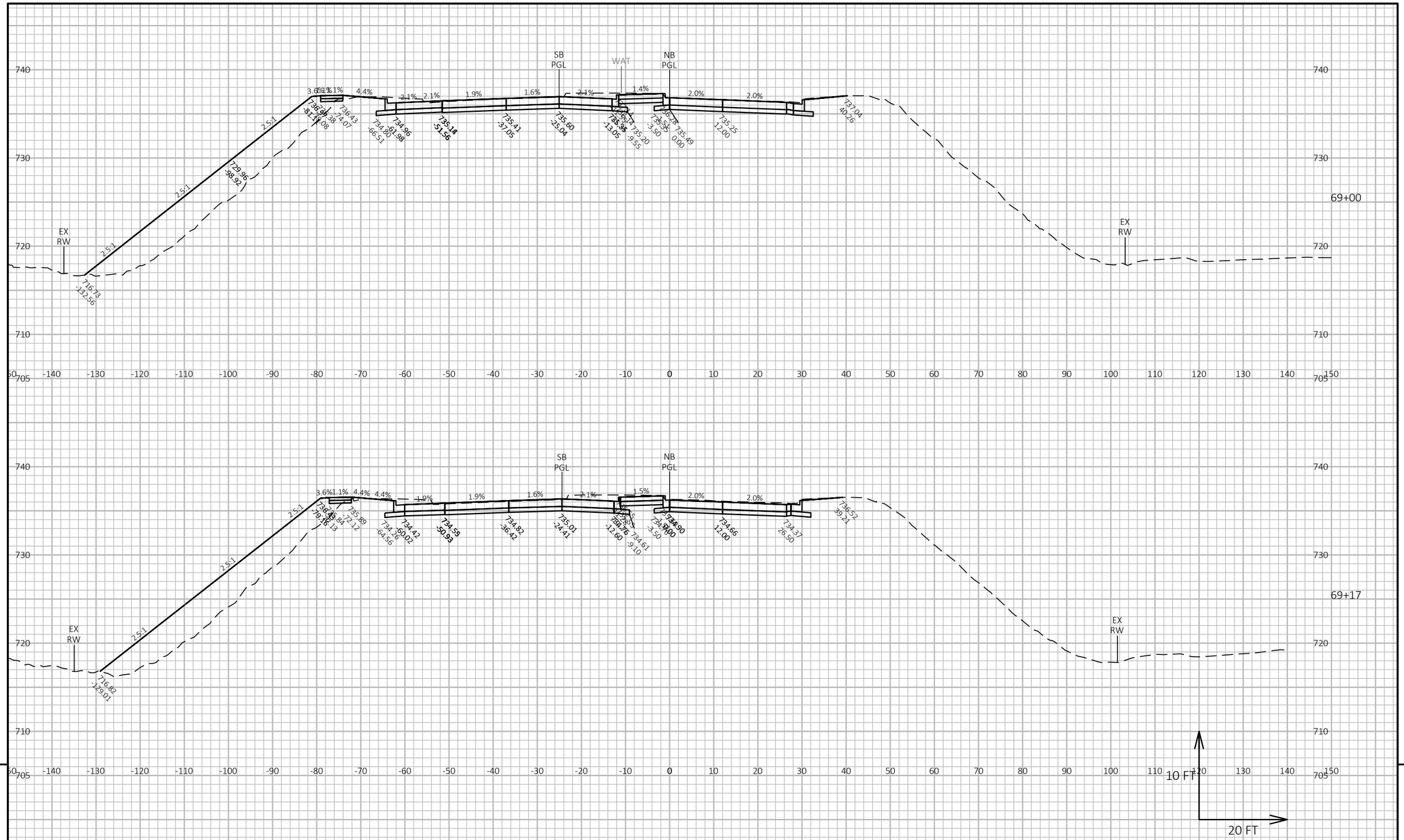


PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 393	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090239

PLOT DATE : 1/31/2024 8:35 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

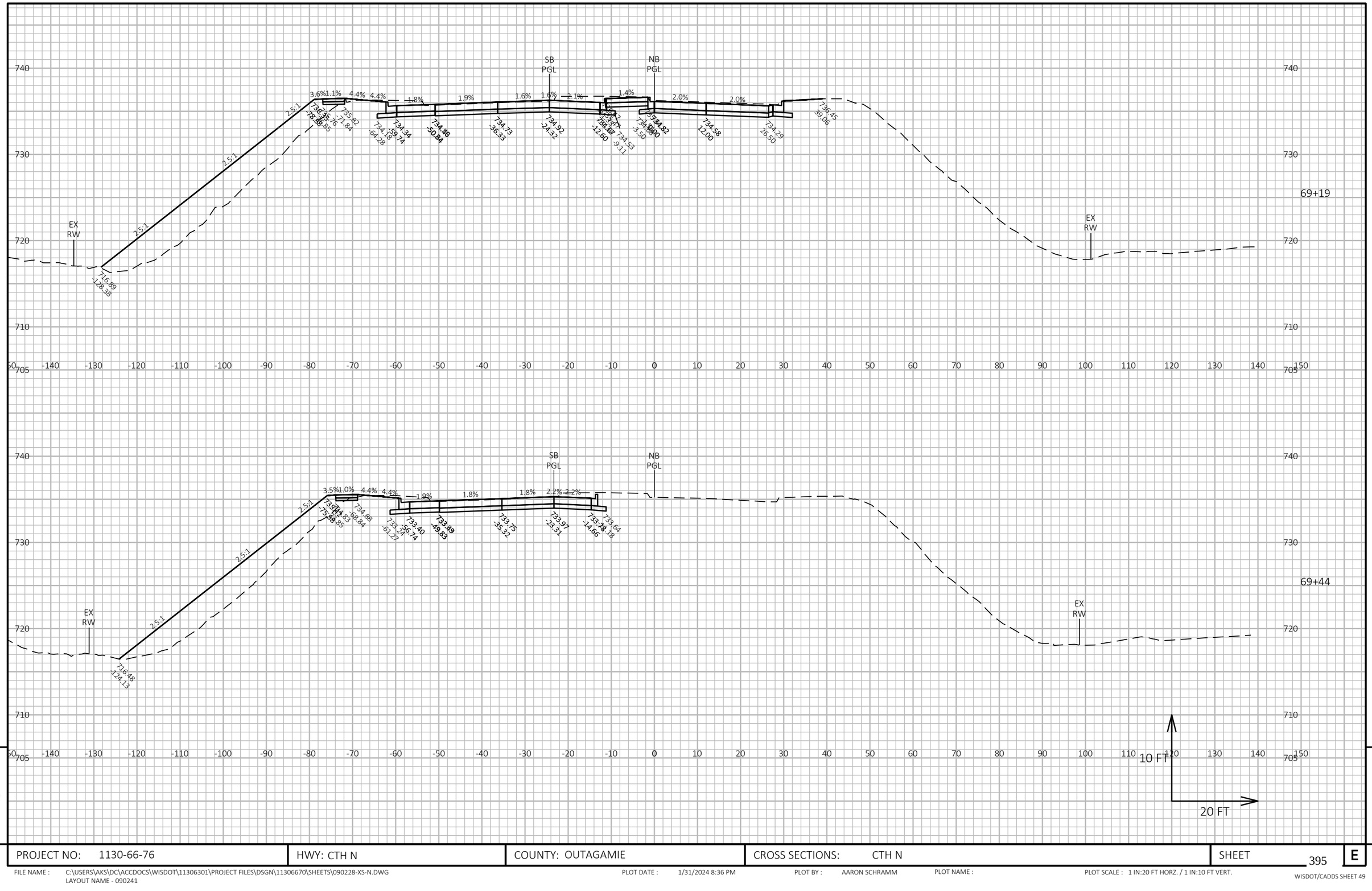


PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 394 E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090240

PLOT DATE : 1/31/2024 8:36 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

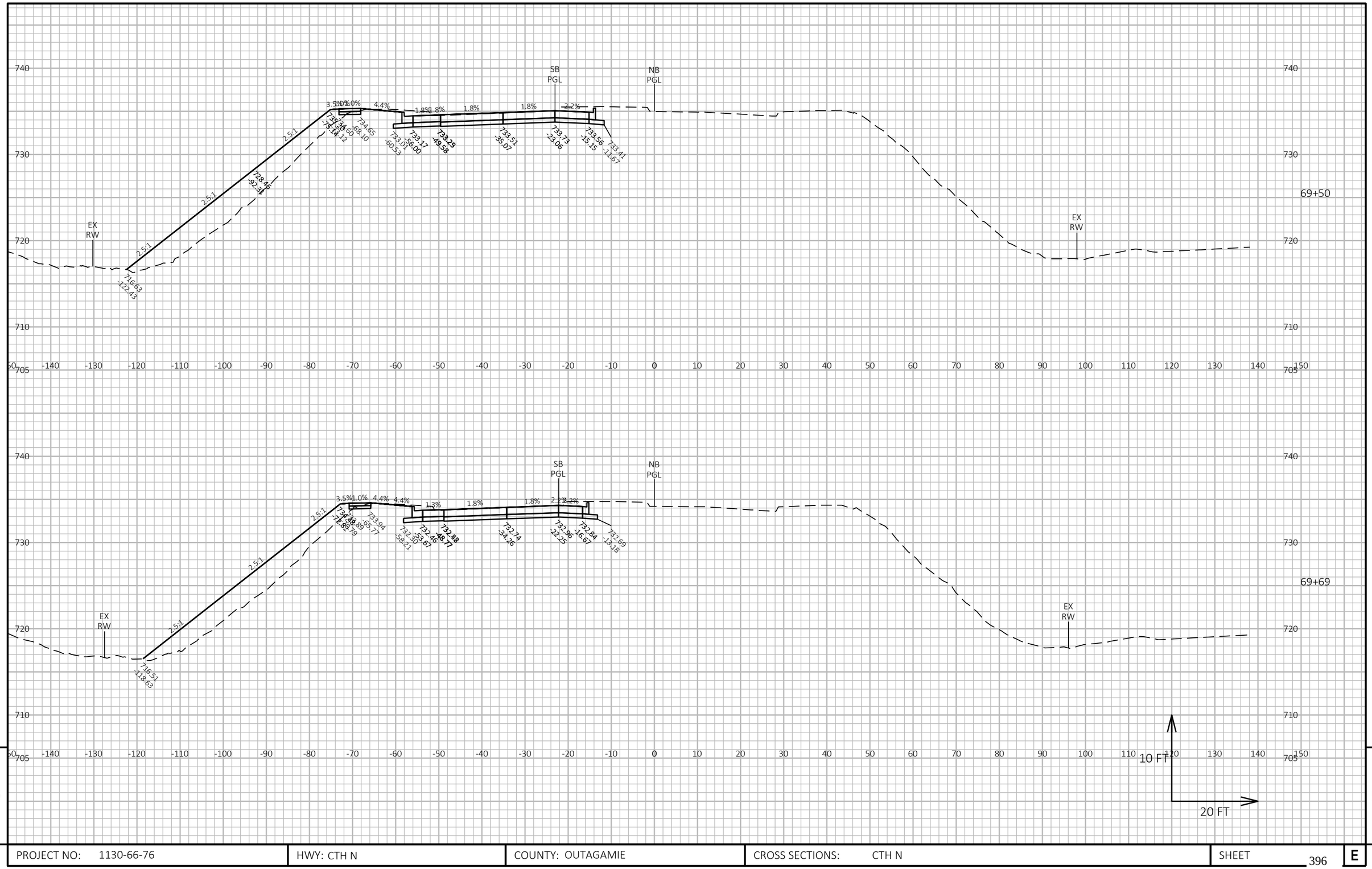


PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 395 E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090241

PLOT DATE : 1/31/2024 8:36 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

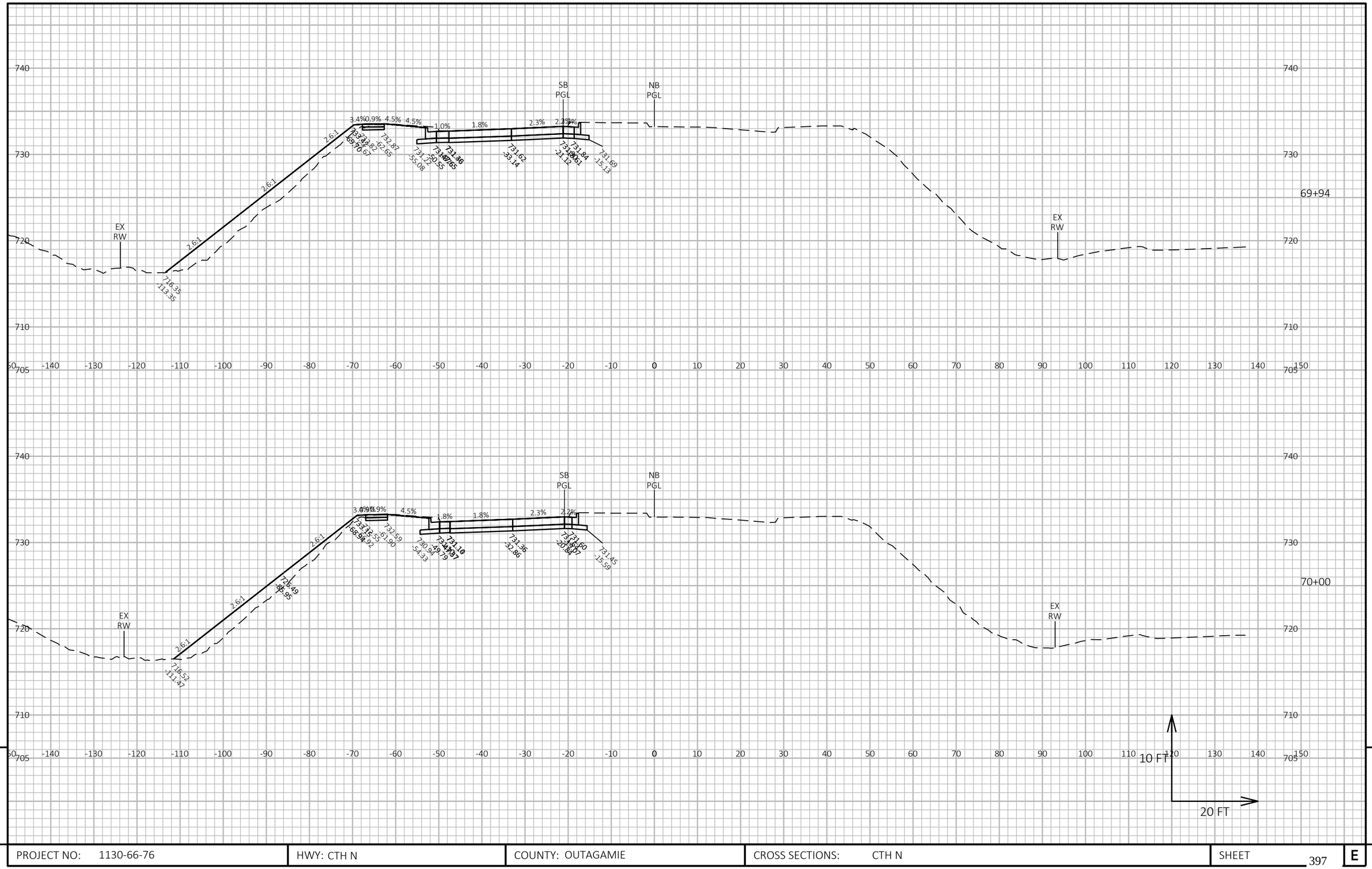


PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 396	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090242

PLOT DATE : 1/31/2024 8:36 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49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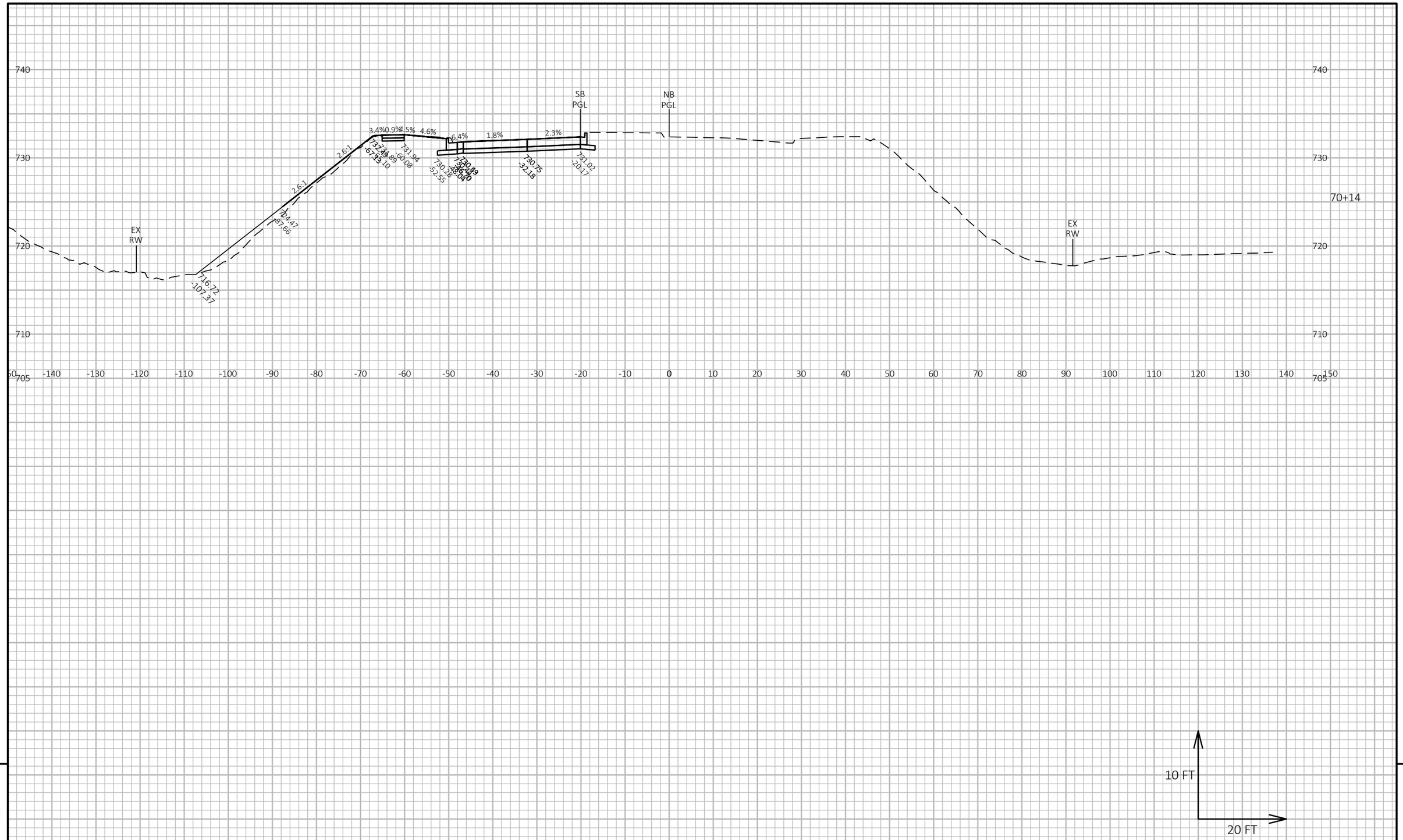

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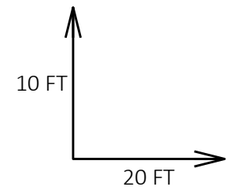
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 398	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090244

PLOT DATE : 1/31/2024 8:37 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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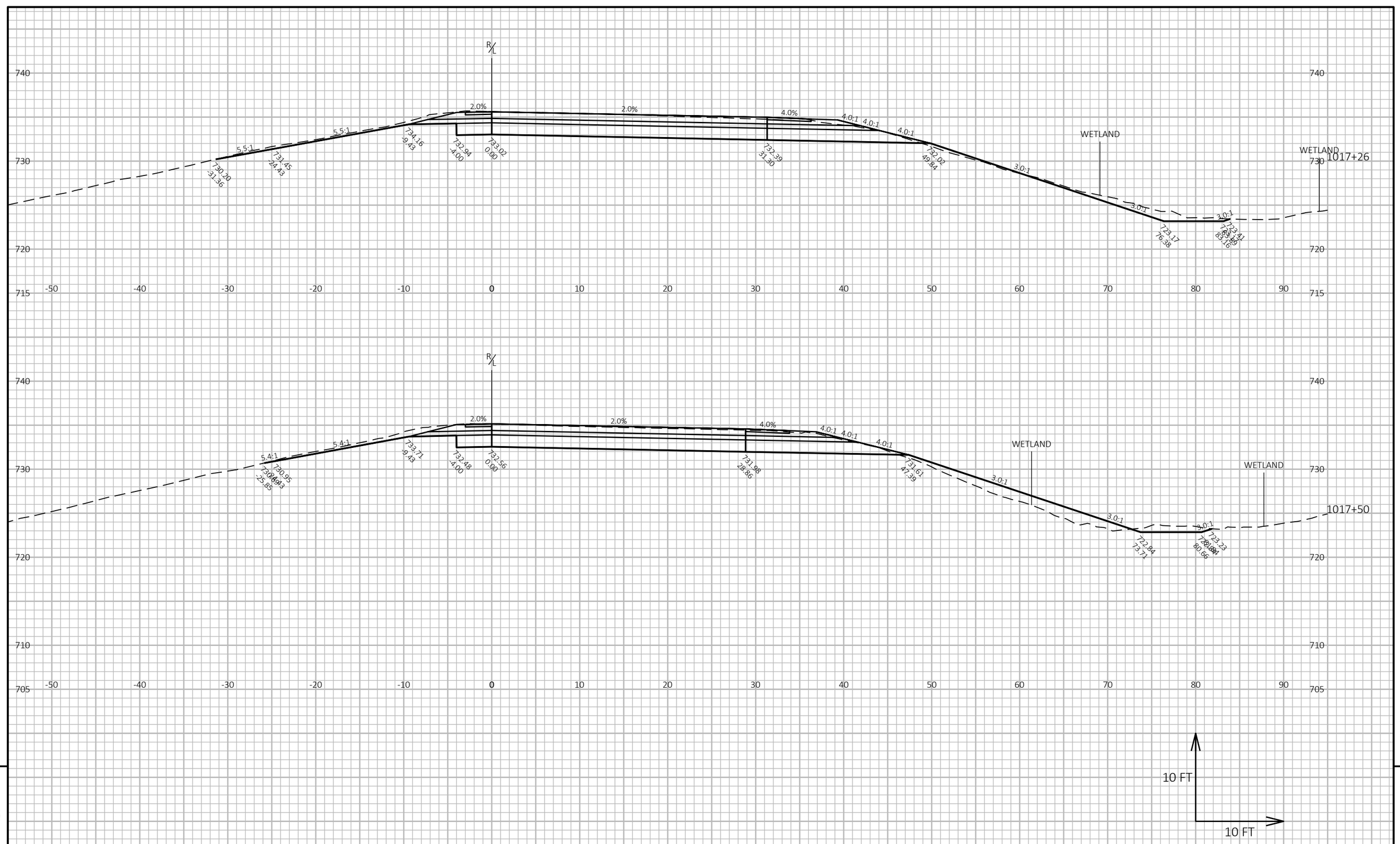
PROJECT NO: 1130-66-76	HWY: CTH N	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N	SHEET 399	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\090228-XS-N.DWG
LAYOUT NAME - 090245

PLOT DATE : 1/31/2024 8:37 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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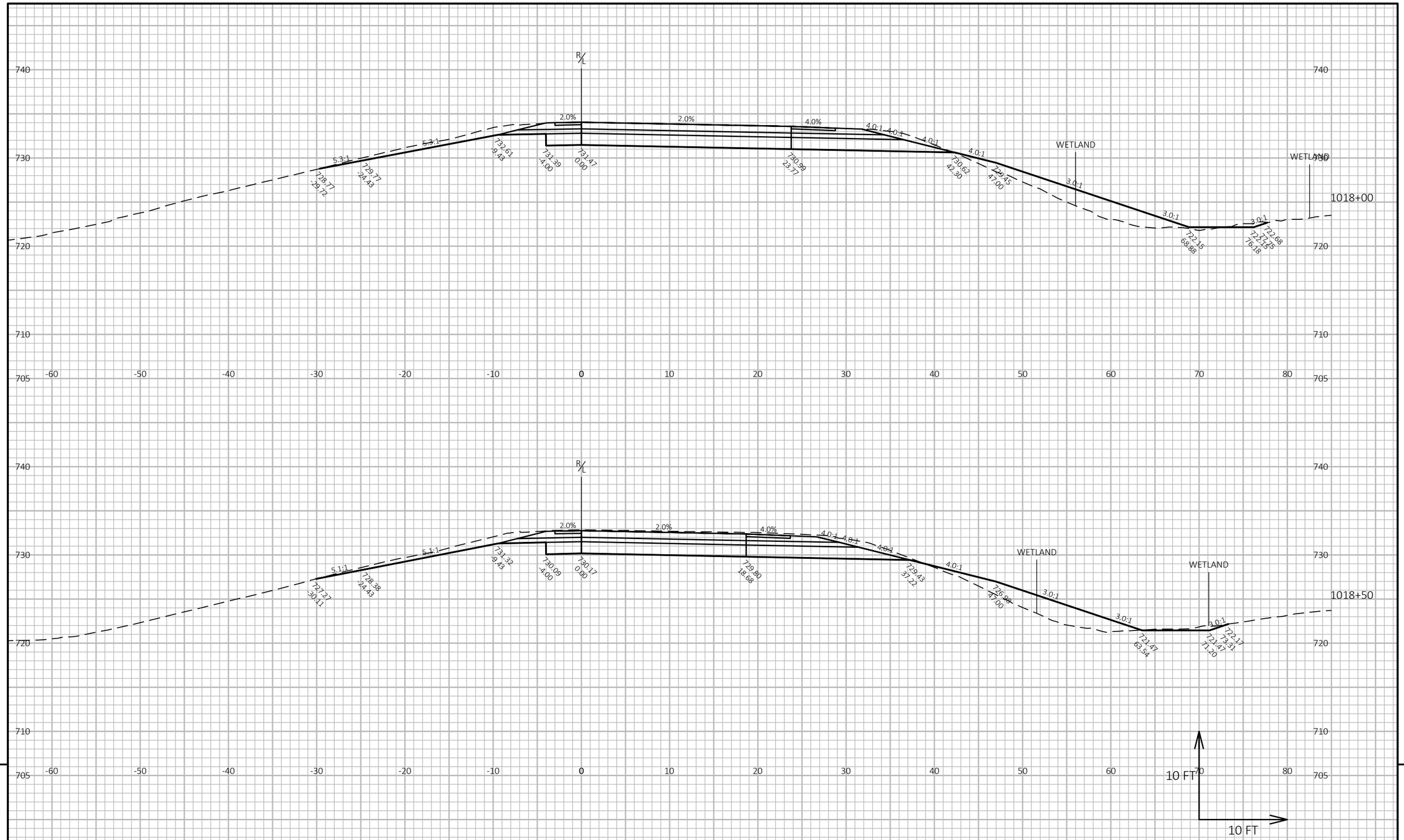
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NA	SHEET 400	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090209-XS-NA.DWG
LAYOUT NAME - 01

PLOT DATE : 1/31/2024 5:25 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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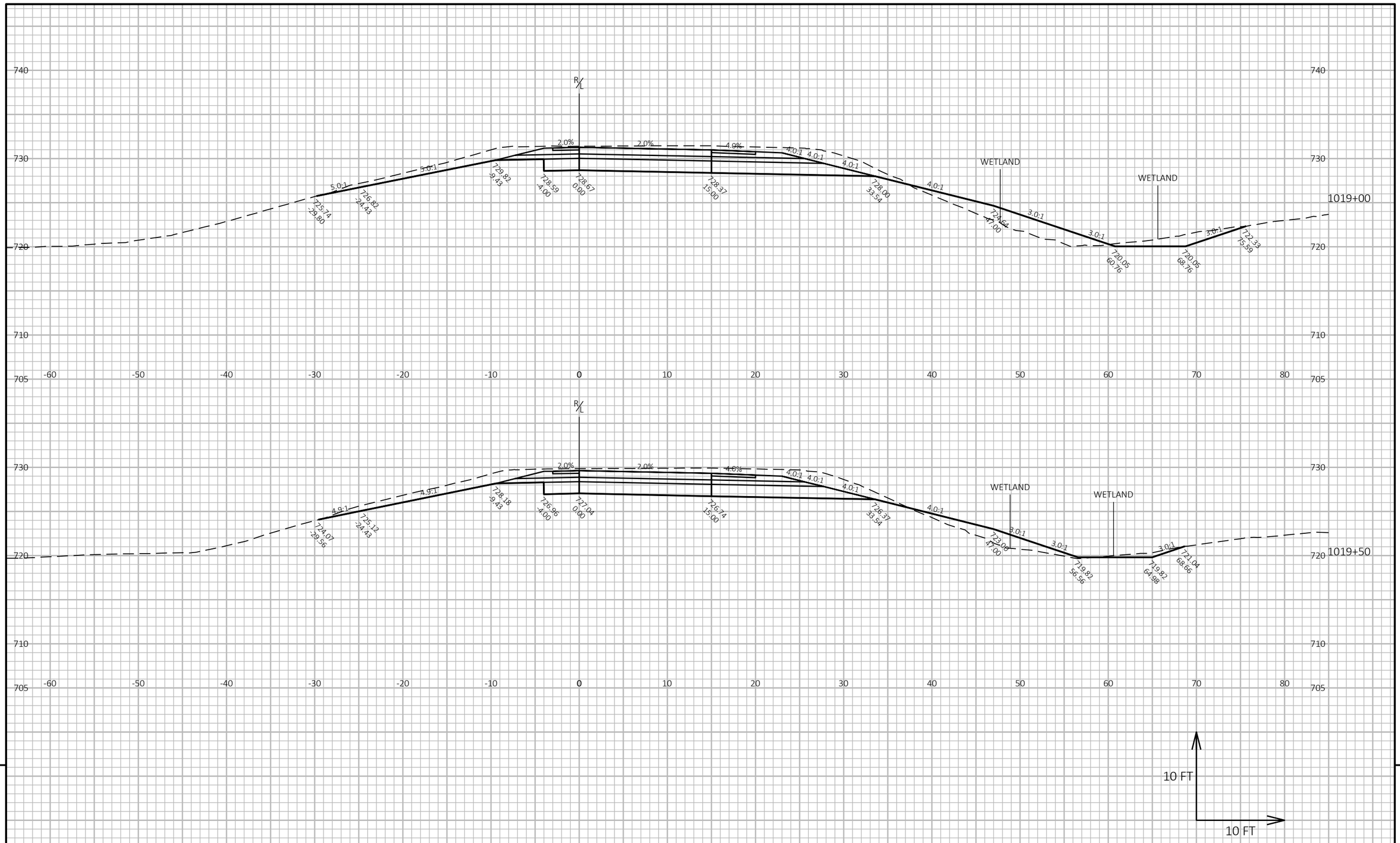
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NA	SHEET 401	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090209-XS-NA.DWG
LAYOUT NAME - 02

PLOT DATE : 1/31/2024 5:25 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NA	SHEET 402	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090209-XS-NA.DWG
LAYOUT NAME - 03

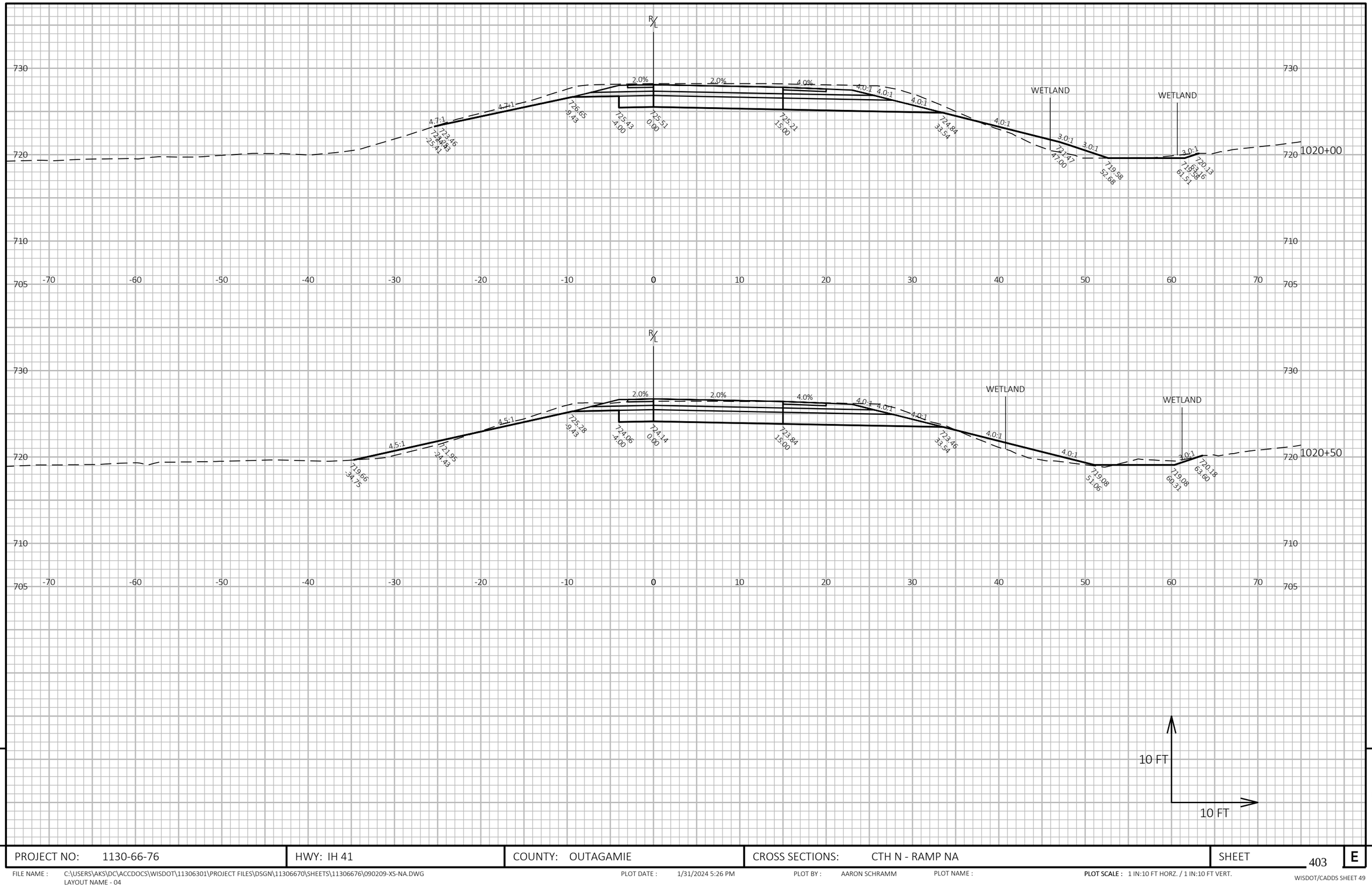
PLOT DATE : 1/31/2024 5:25 PM

PLOT BY : AARON SCHRAMM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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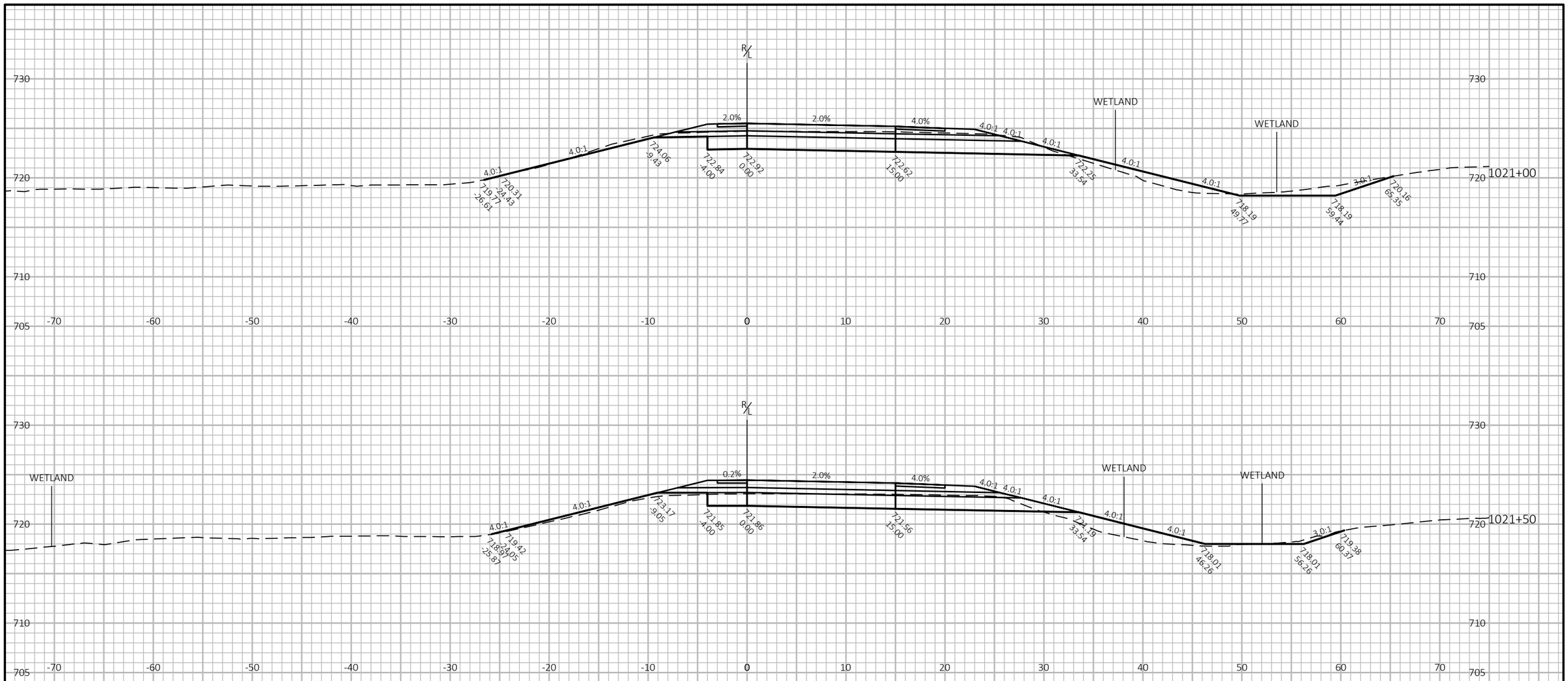
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NA	SHEET 403	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090209-XS-NA.DWG
LAYOUT NAME - 04

PLOT DATE : 1/31/2024 5:26 PM PLOT BY : AARON SCHRAMM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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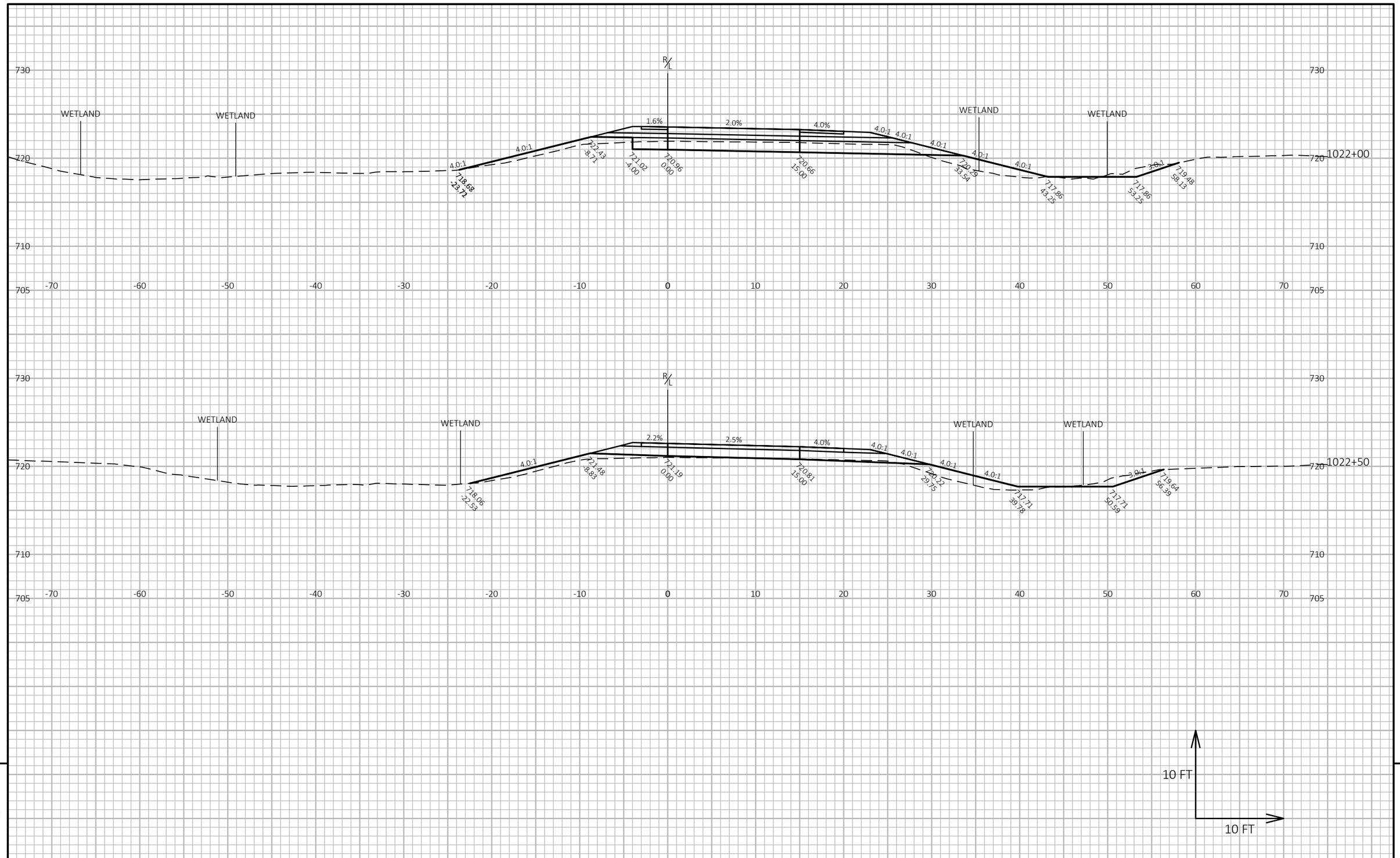
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NA	SHEET 404	E

9

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090209-XS-NA.DWG
LAYOUT NAME - 05

PLOT DATE : 1/31/2024 5:26 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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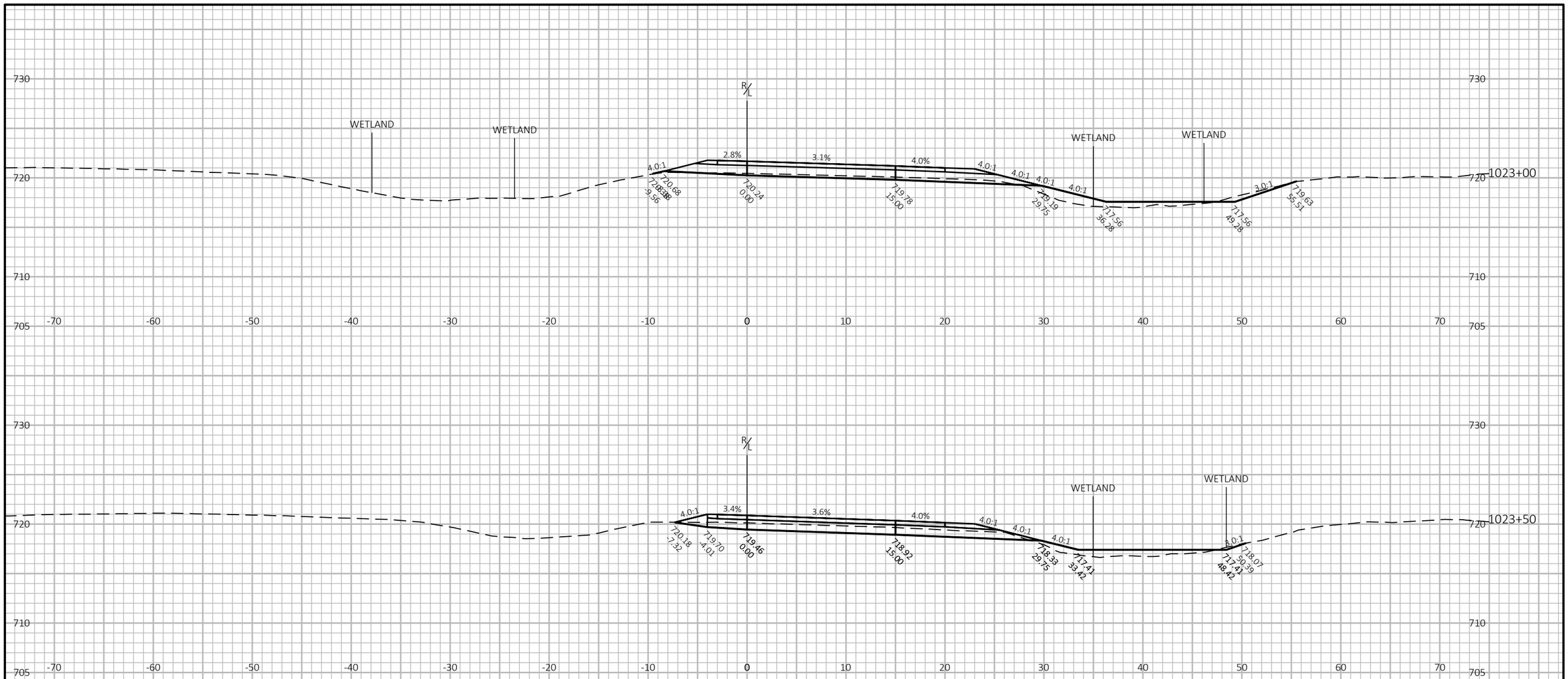
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NA	SHEET 405	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090209-XS-NA.DWG
LAYOUT NAME - 06

PLOT DATE : 1/31/2024 5:26 PM PLOT BY : AARON SCHRAMM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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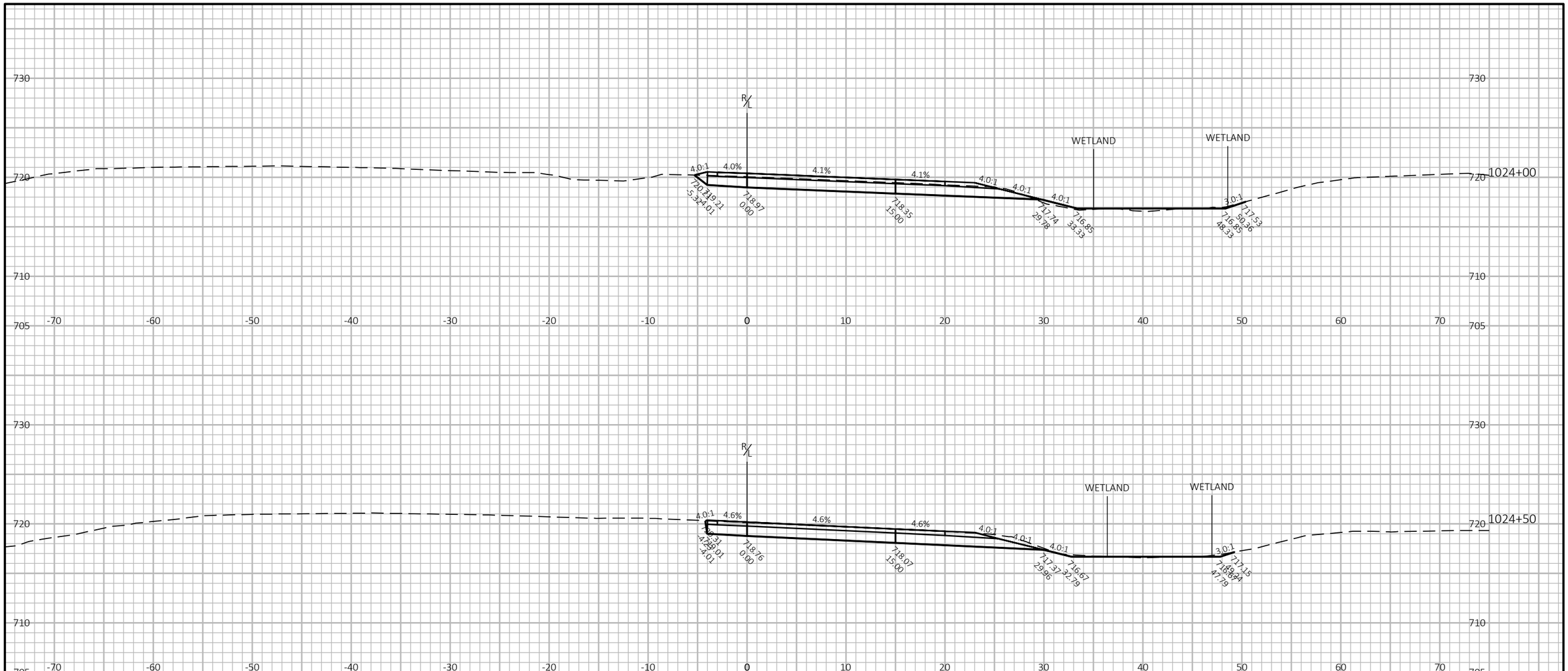
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NA	SHEET 406	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090209-XS-NA.DWG
LAYOUT NAME - 07

PLOT DATE : 1/31/2024 5:26 PM PLOT BY : AARON SCHRAMM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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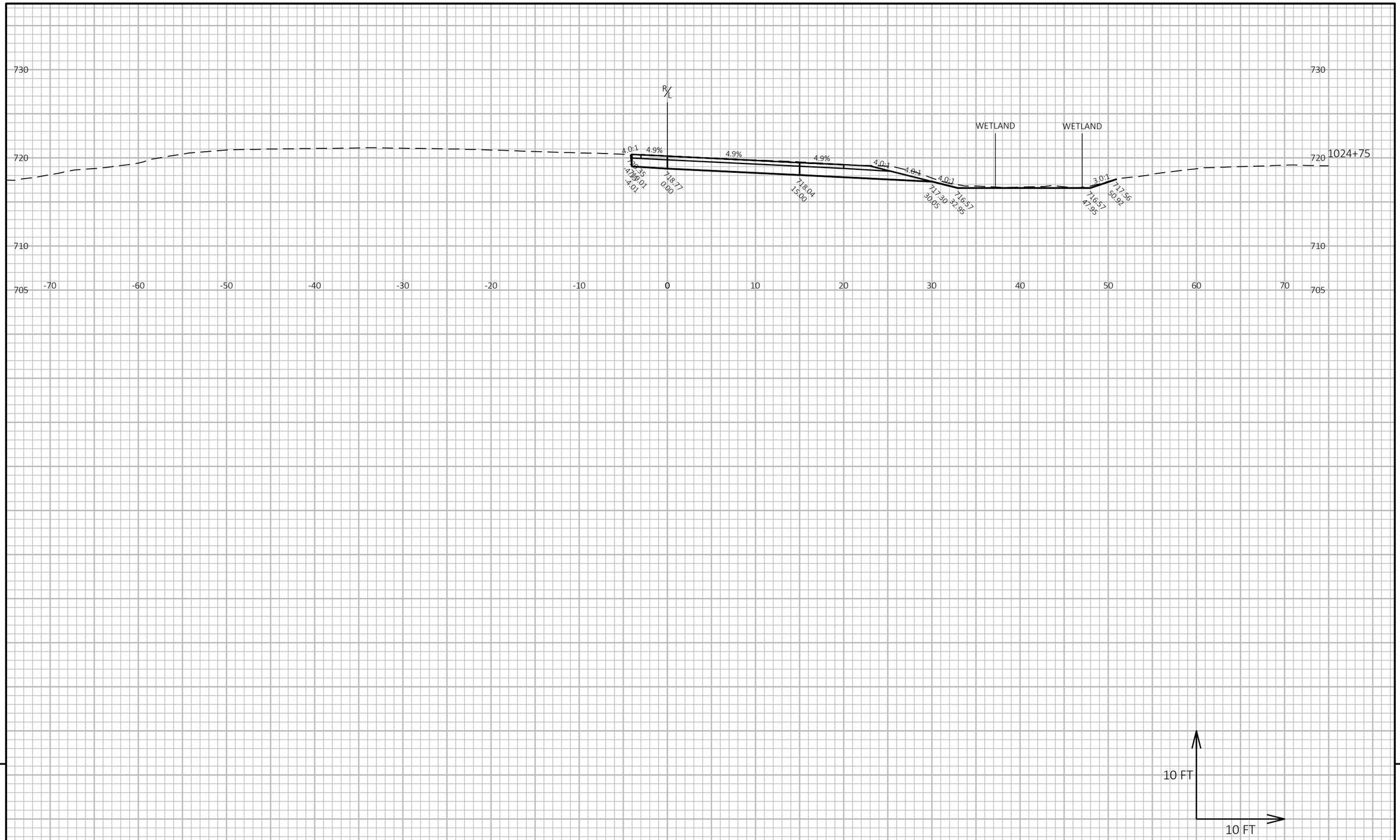
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NA	SHEET 407	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090209-XS-NA.DWG
LAYOUT NAME - 08

PLOT DATE : 1/31/2024 5:26 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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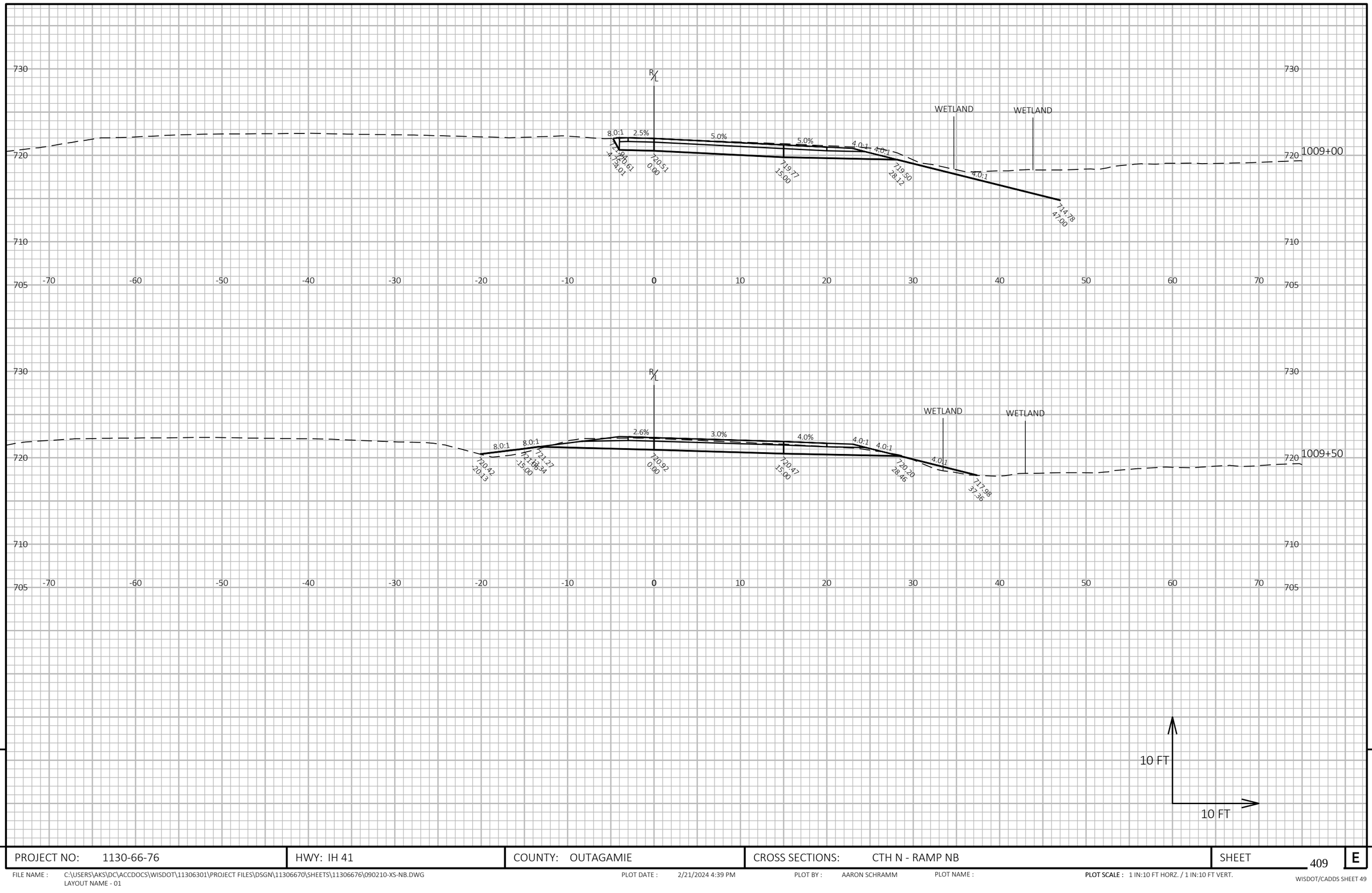
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NA	SHEET 408	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090209-XS-NA.DWG
LAYOUT NAME - 09

PLOT DATE : 1/31/2024 5:26 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



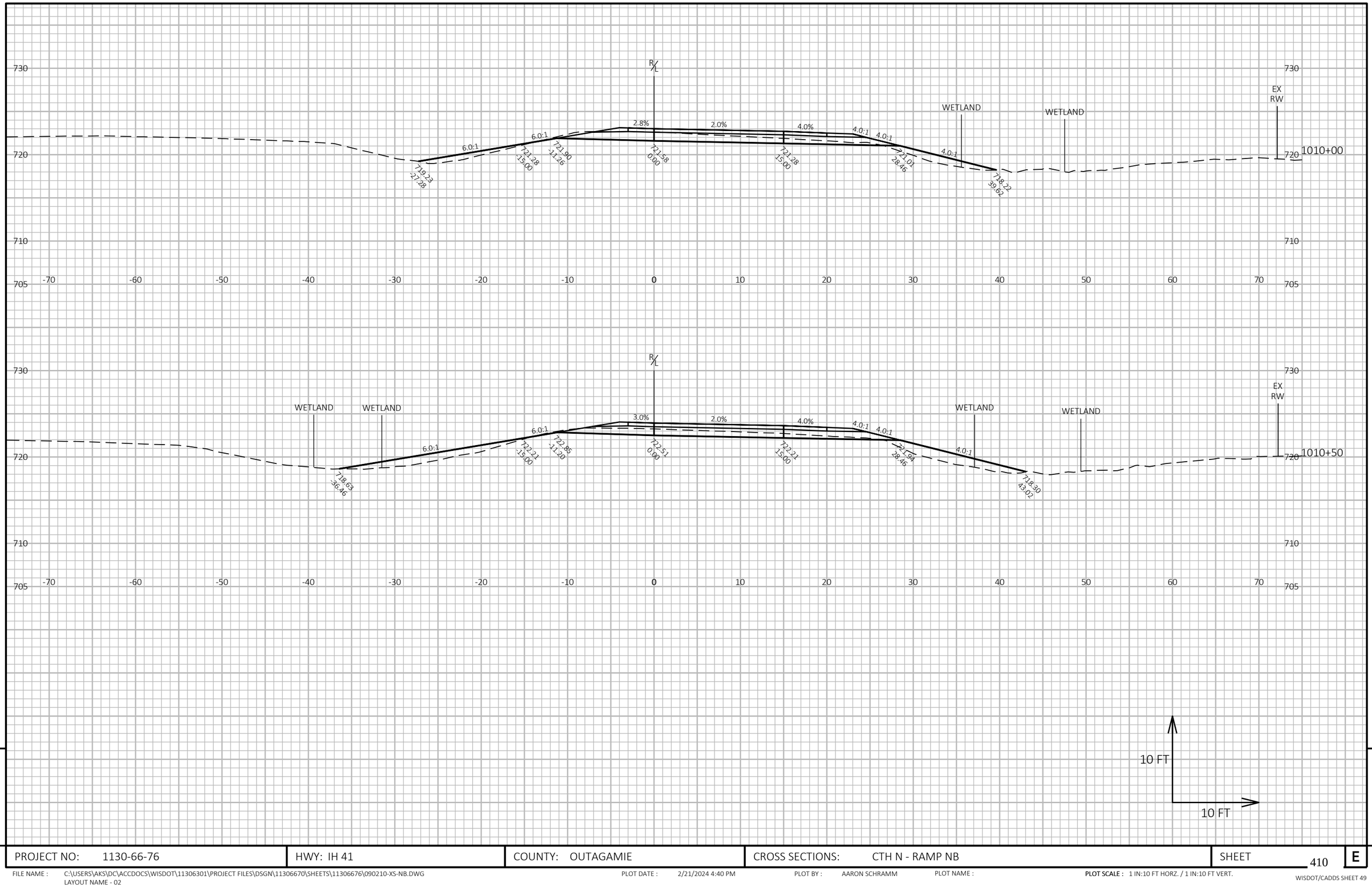
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NB	SHEET 409	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090210-XS-NB.DWG
LAYOUT NAME - 01

PLOT DATE : 2/21/2024 4:39 PM PLOT BY : AARON SCHRAMM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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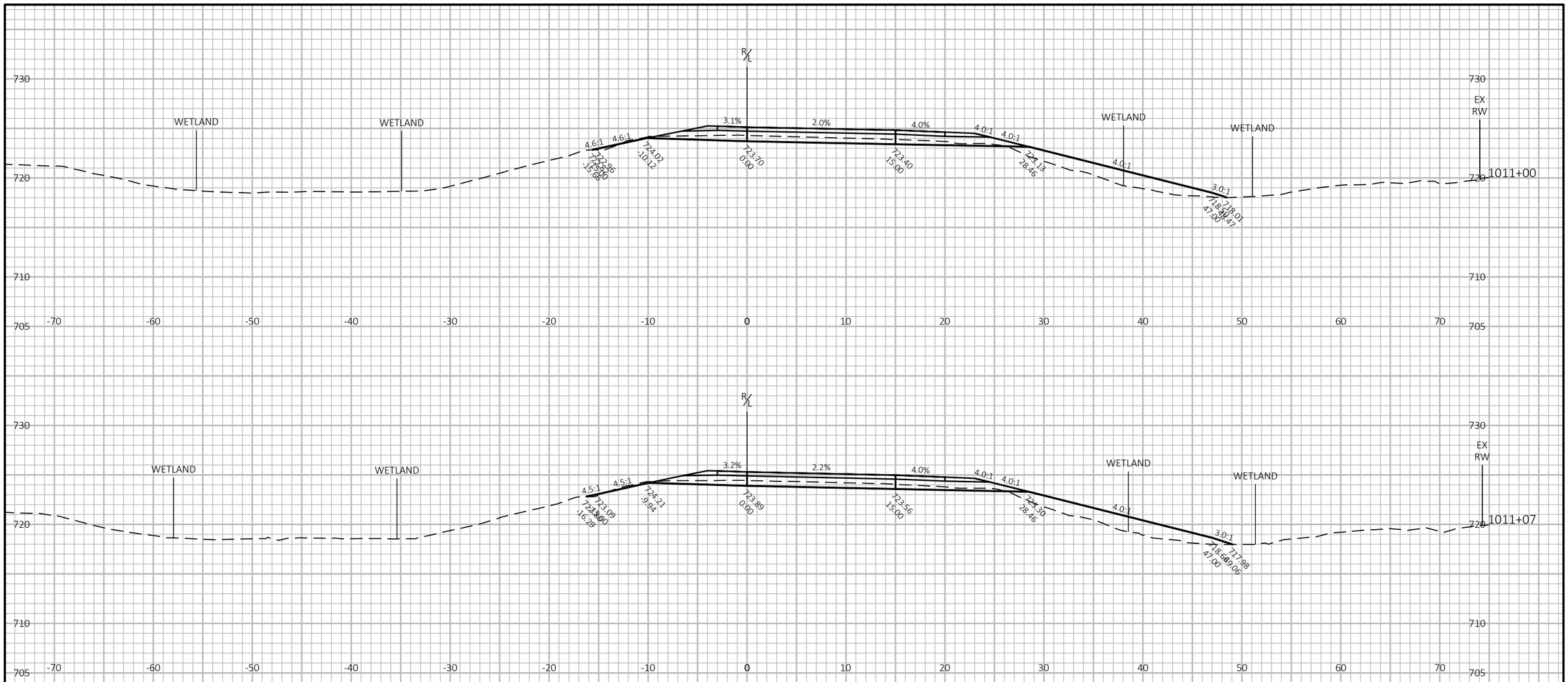
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NB	SHEET 410	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090210-XS-NB.DWG
LAYOUT NAME - 02

PLOT DATE : 2/21/2024 4:40 PM PLOT BY : AARON SCHRAMM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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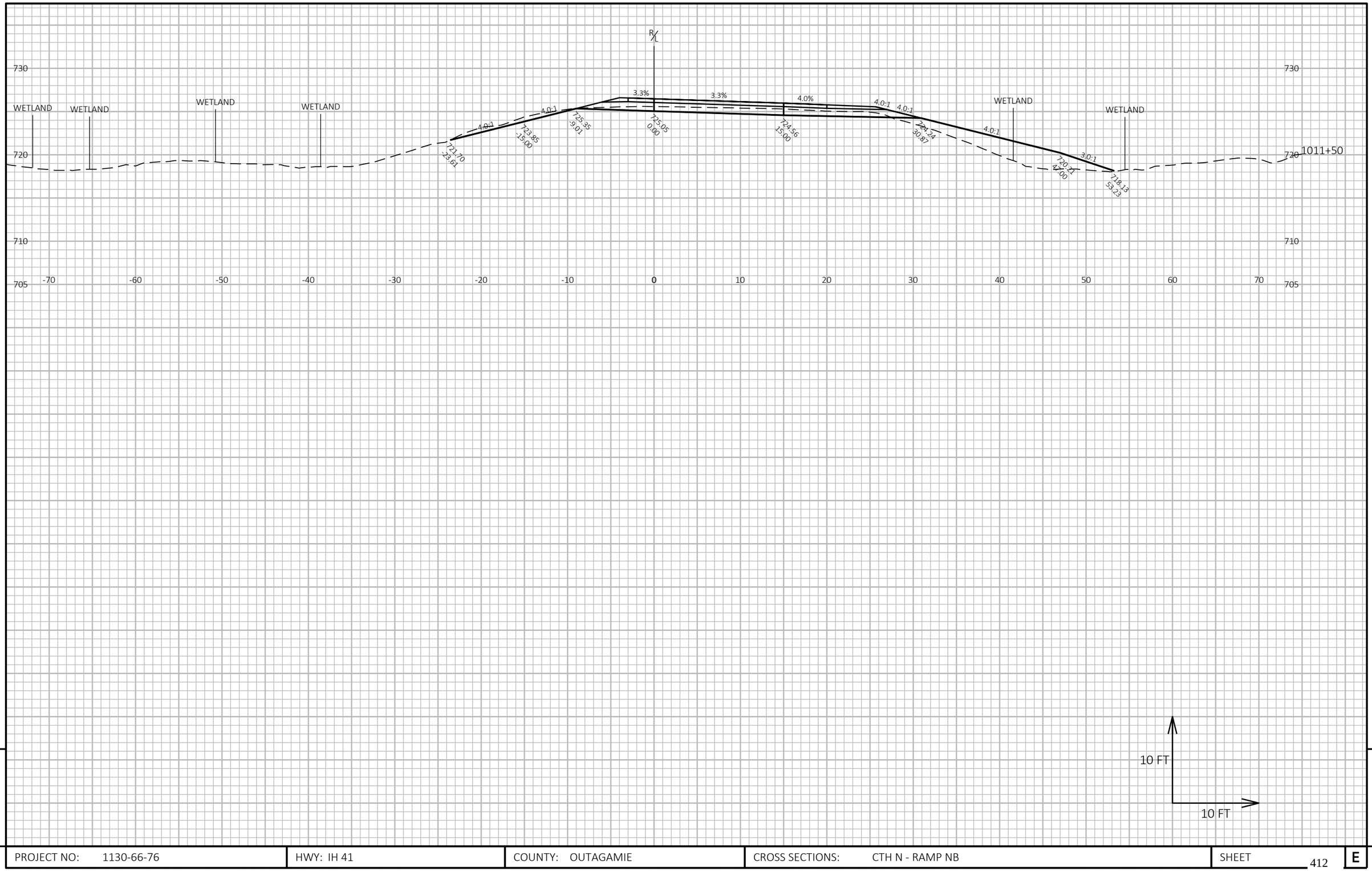
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NB	SHEET 411	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090210-XS-NB.DWG
LAYOUT NAME - 03

PLOT DATE : 2/21/2024 4:40 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

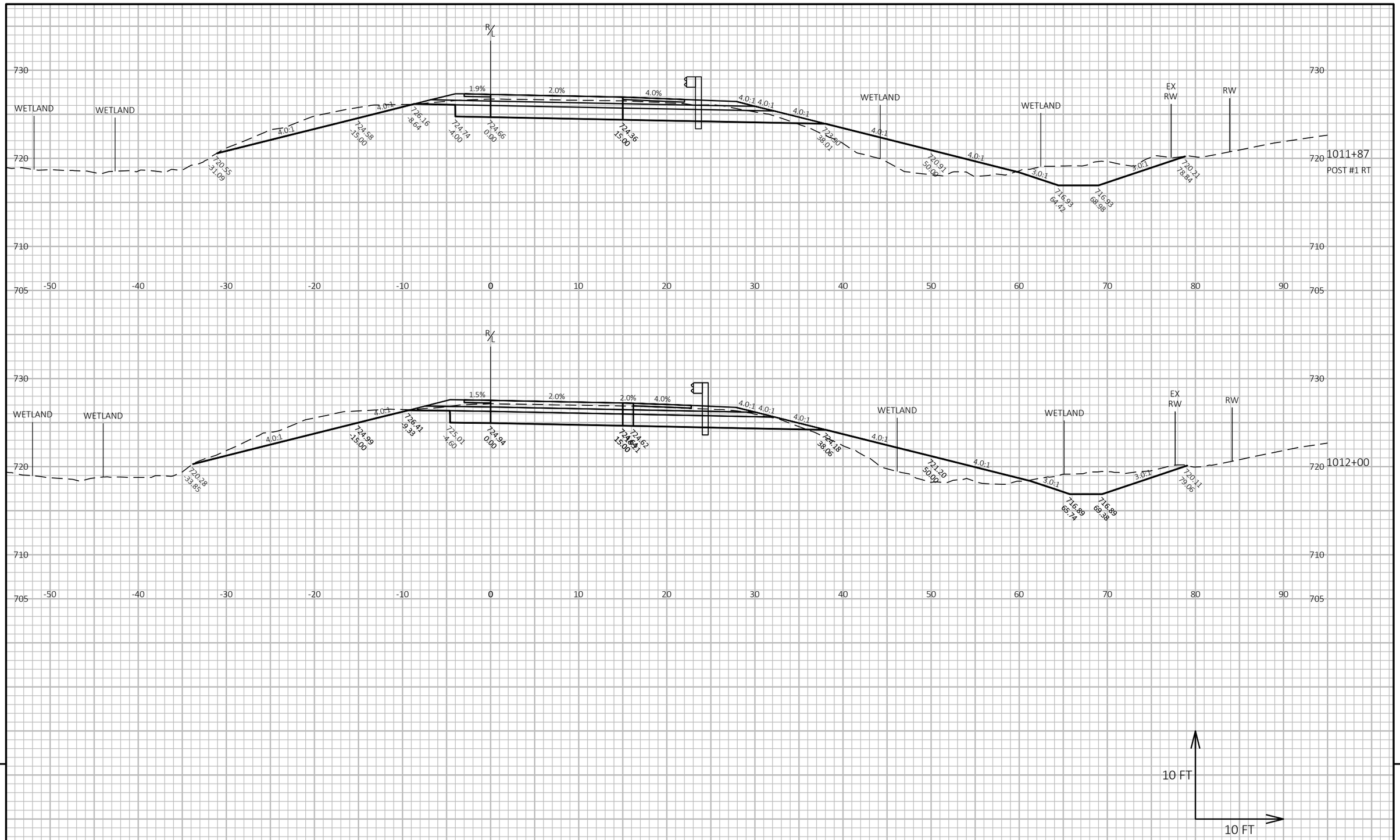


PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NB	SHEET 412	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090210-XS-NB.DWG
LAYOUT NAME - 04

PLOT DATE : 2/21/2024 4:40 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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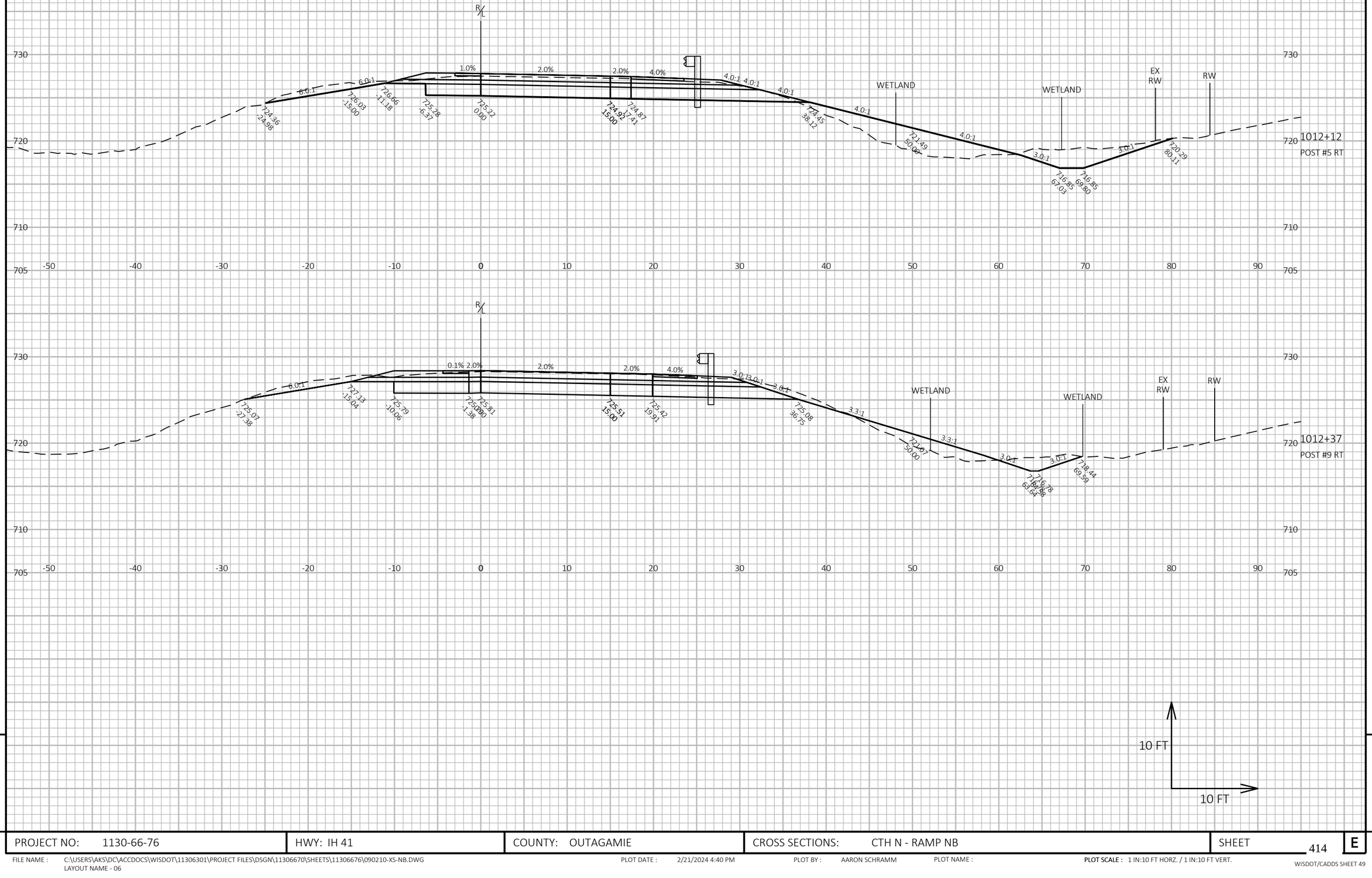
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NB	SHEET 413	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090210-XS-NB.DWG
LAYOUT NAME - 05

PLOT DATE : 2/21/2024 4:40 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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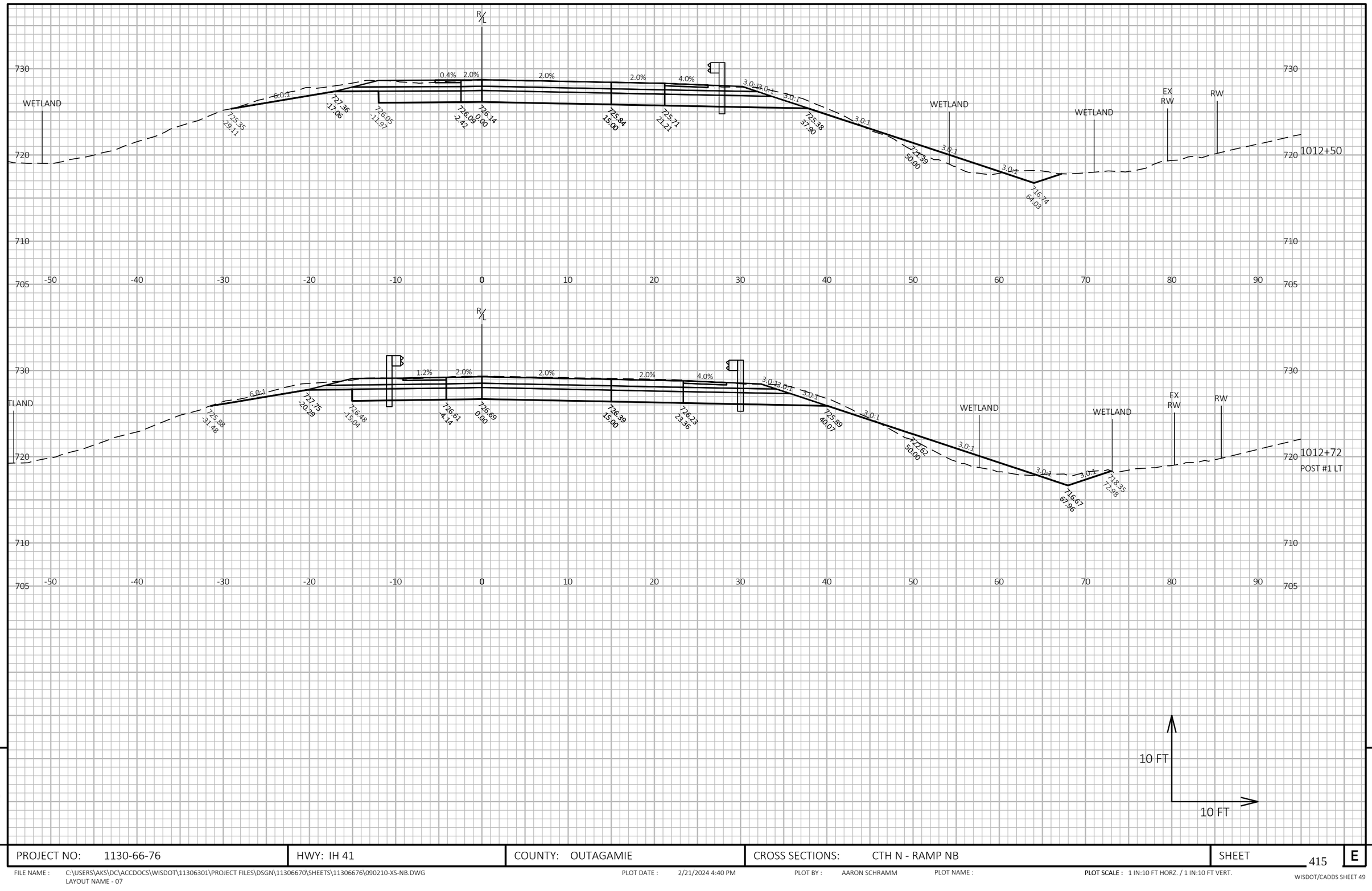
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NB	SHEET 414	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090210-XS-NB.DWG
LAYOUT NAME - 06

PLOT DATE : 2/21/2024 4:40 PM PLOT BY : AARON SCHRAMM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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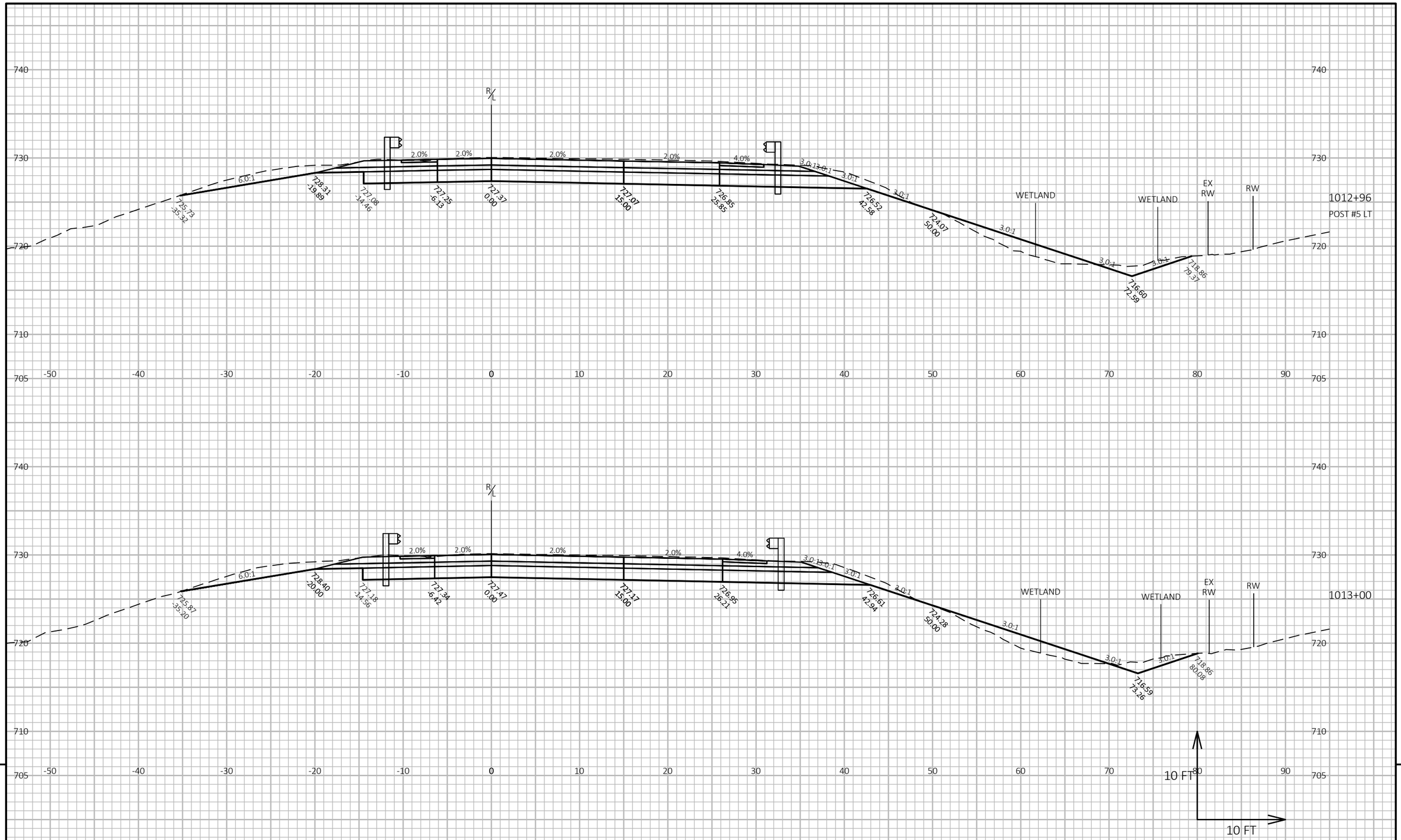
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NB	SHEET 415	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090210-XS-NB.DWG
LAYOUT NAME - 07

PLOT DATE : 2/21/2024 4:40 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

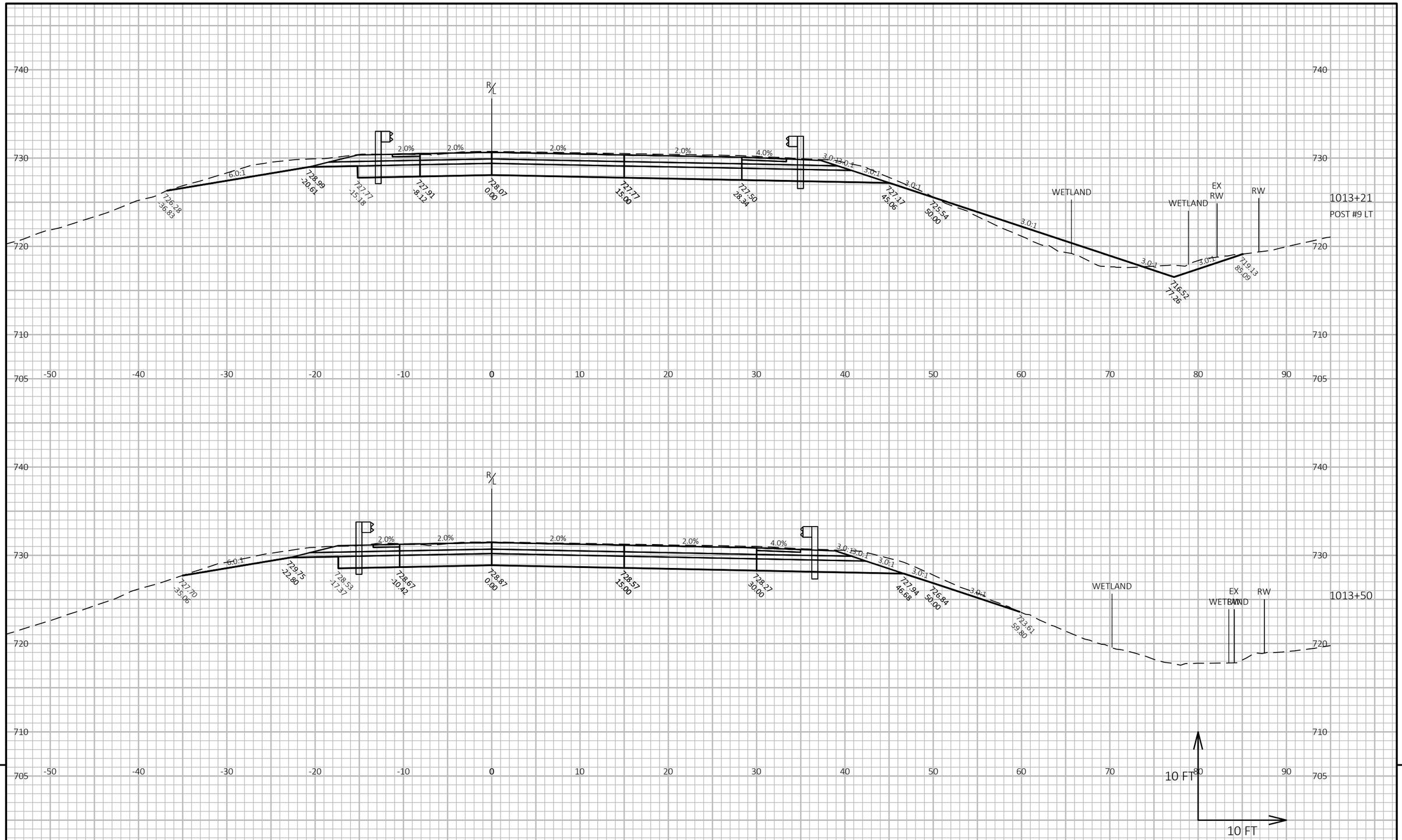


PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NB	SHEET 416 E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090210-XS-NB.DWG
LAYOUT NAME - 08

PLOT DATE : 2/21/2024 4:40 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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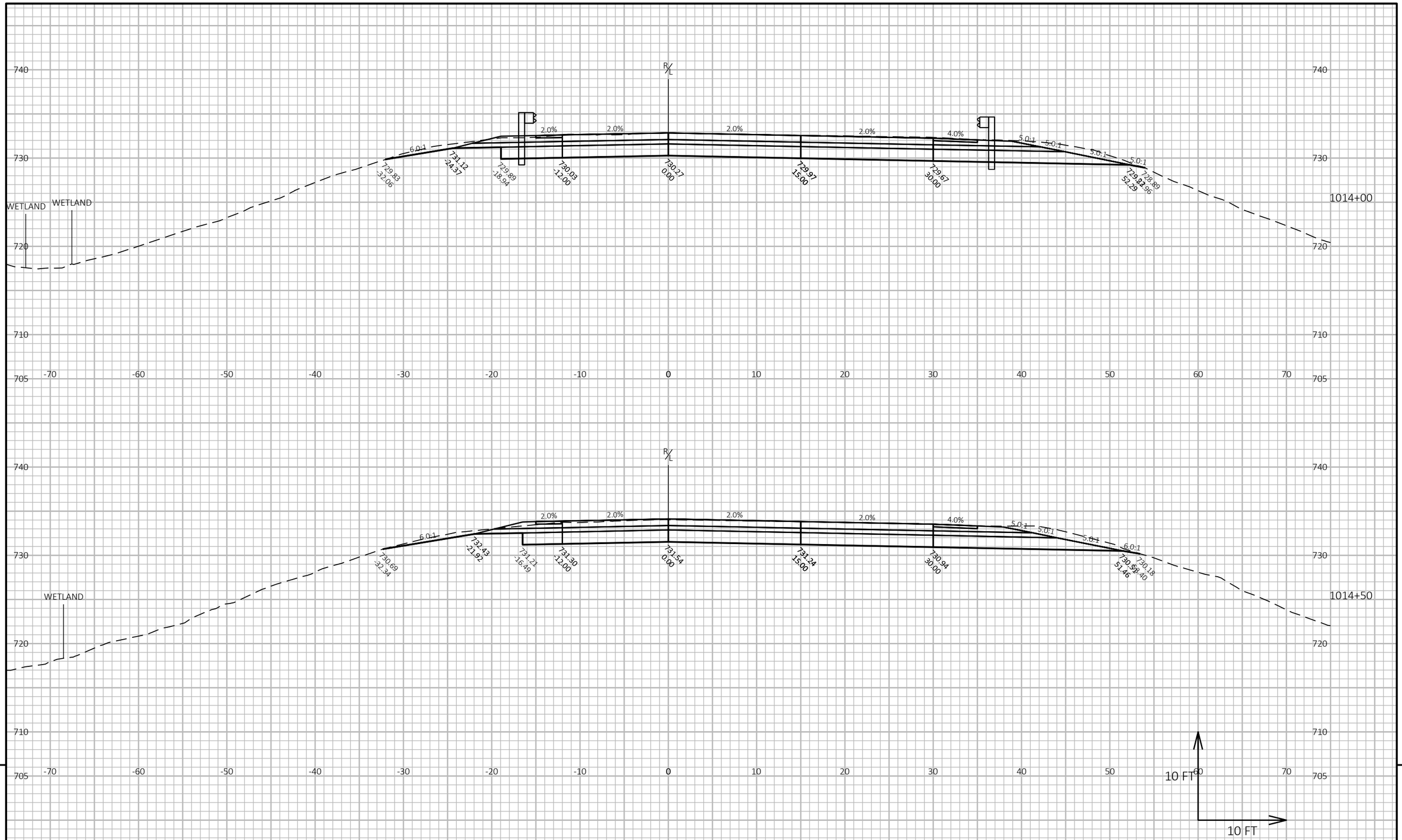
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NB	SHEET 417	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090210-XS-NB.DWG
LAYOUT NAME - 09

PLOT DATE : 2/21/2024 4:40 PM PLOT BY : AARON SCHRAMM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

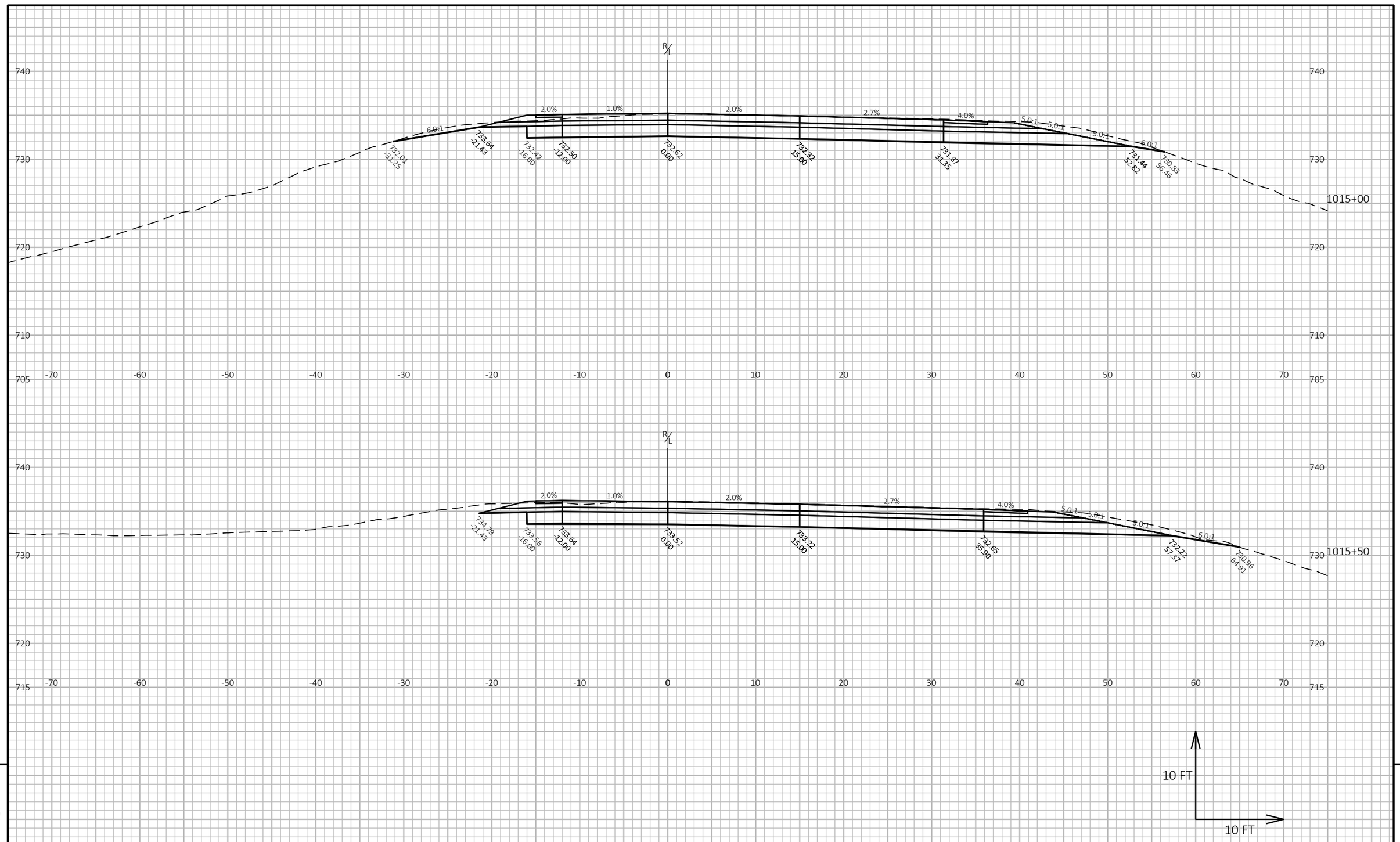


PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NB	SHEET 418 E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090210-XS-NB.DWG
LAYOUT NAME - 10

PLOT DATE : 2/21/2024 4:40 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

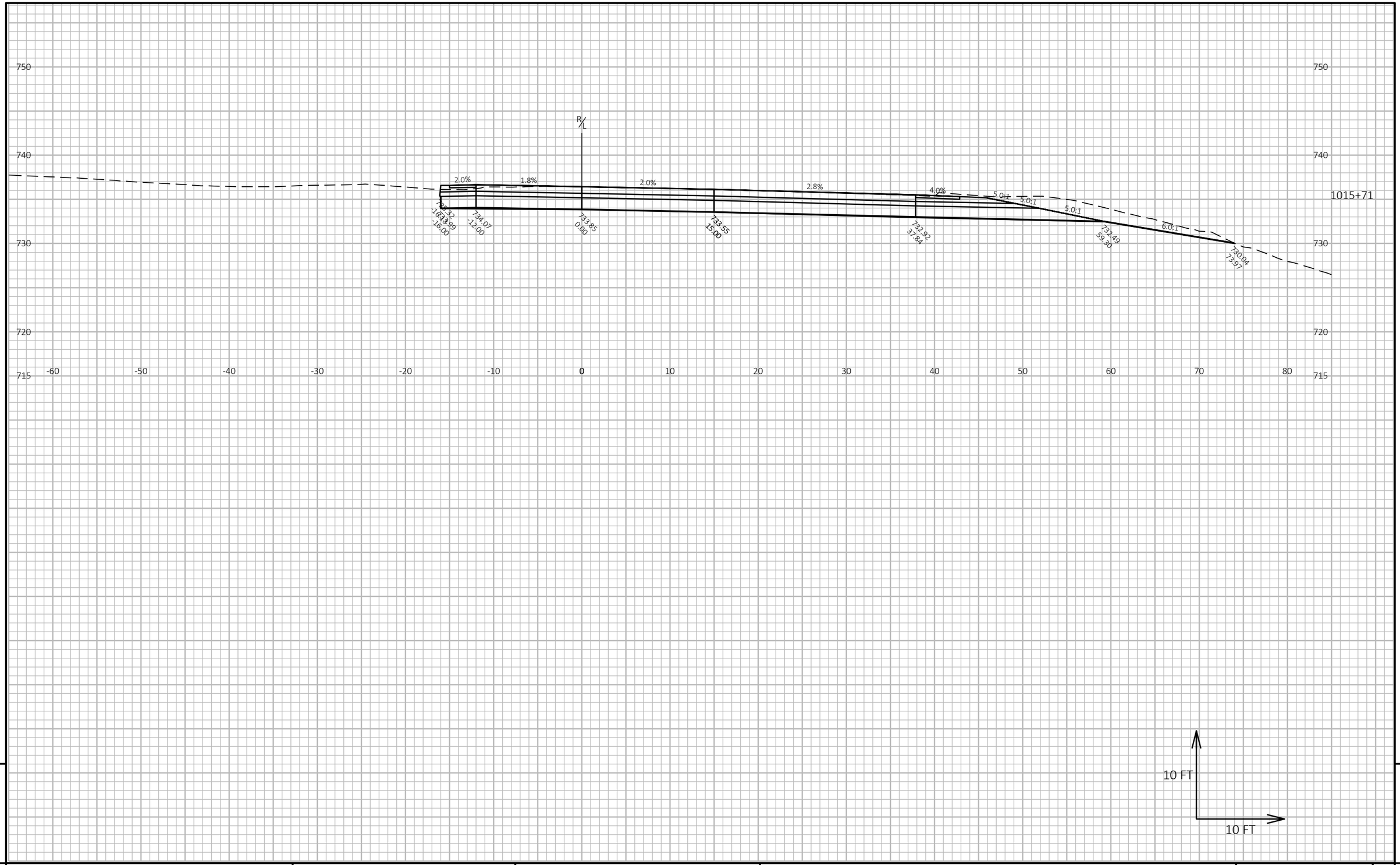


PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NB	SHEET 419	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090210-XS-NB.DWG
LAYOUT NAME - 11

PLOT DATE : 2/21/2024 4:40 PM PLOT BY : AARON SCHRAMM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

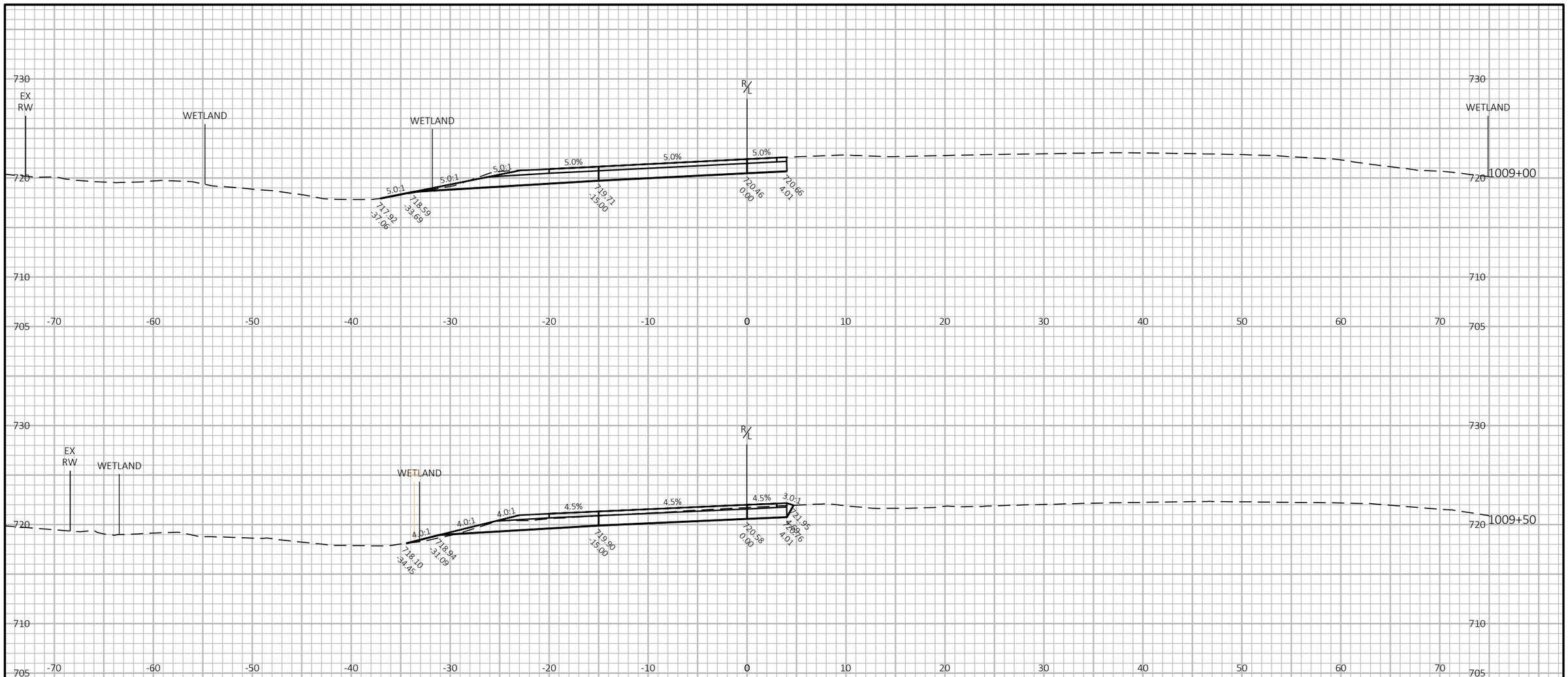


PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NB	SHEET 420	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090210-XS-NB.DWG
LAYOUT NAME - 12

PLOT DATE : 2/21/2024 4:40 PM PLOT BY : AARON SCHRAMM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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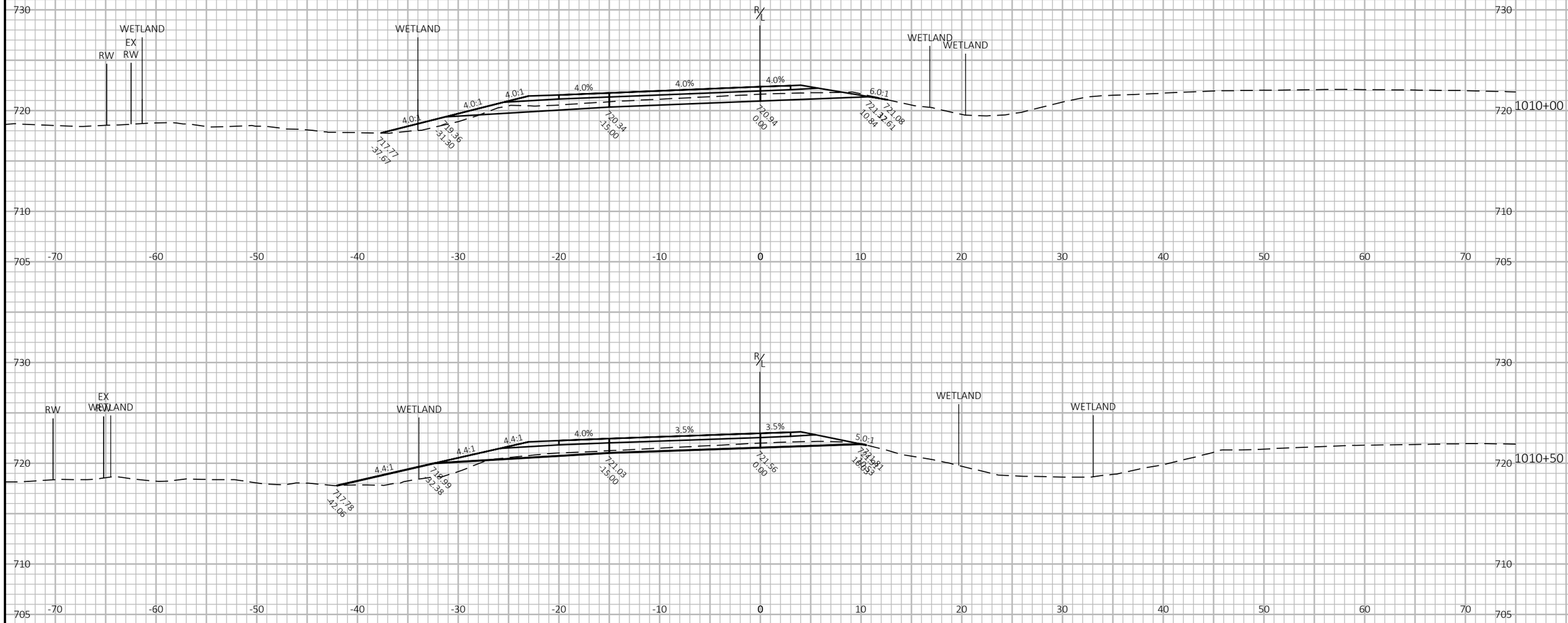
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NC	SHEET 421	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090211-XS-NC.DWG
LAYOUT NAME - 01

PLOT DATE : 1/31/2024 5:54 PM PLOT BY : AARON SCHRAMM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



10 FT

10 FT

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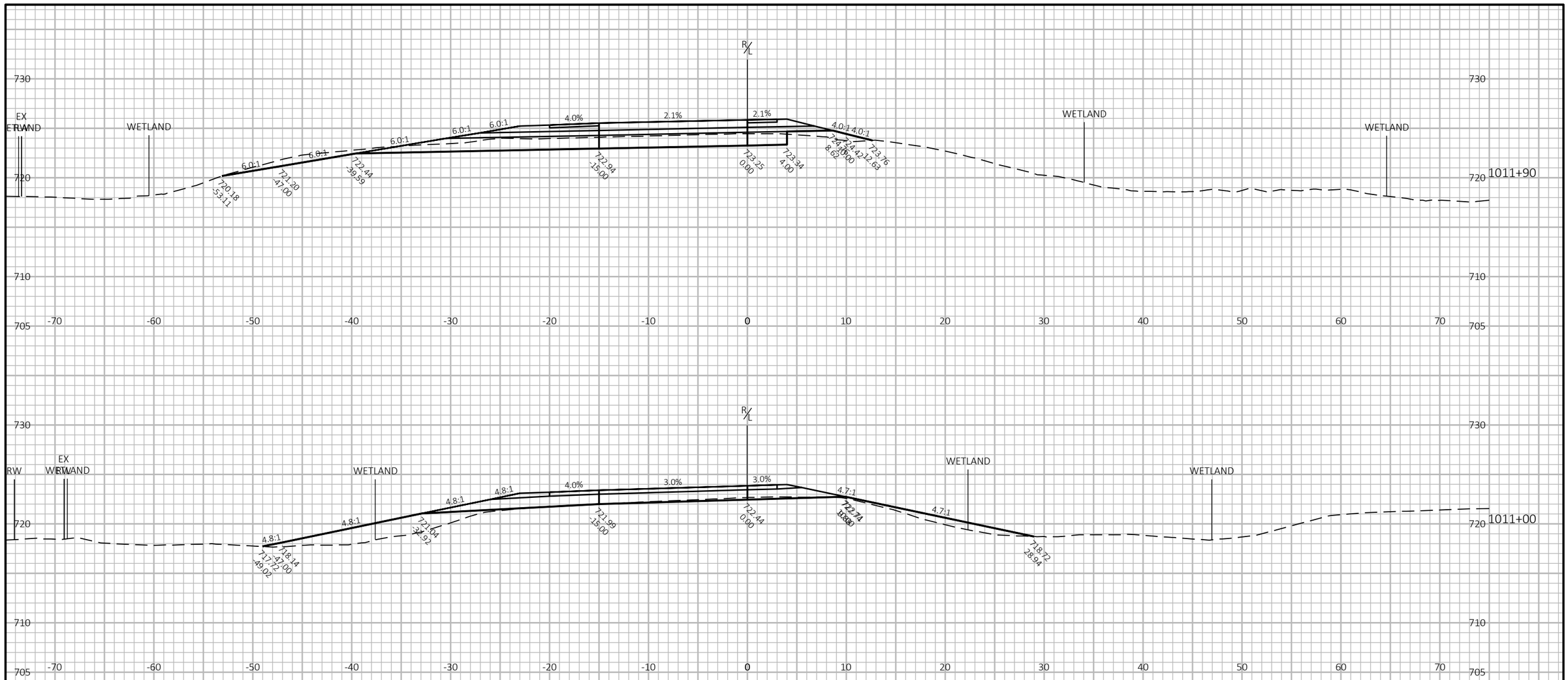
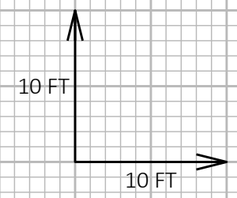
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NC	SHEET 422	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090211-XS-NC.DWG
LAYOUT NAME - 02

PLOT DATE : 1/31/2024 5:54 PM PLOT BY : AARON SCHRAMM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NC	SHEET 423	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090211-XS-NC.DWG
LAYOUT NAME - 03

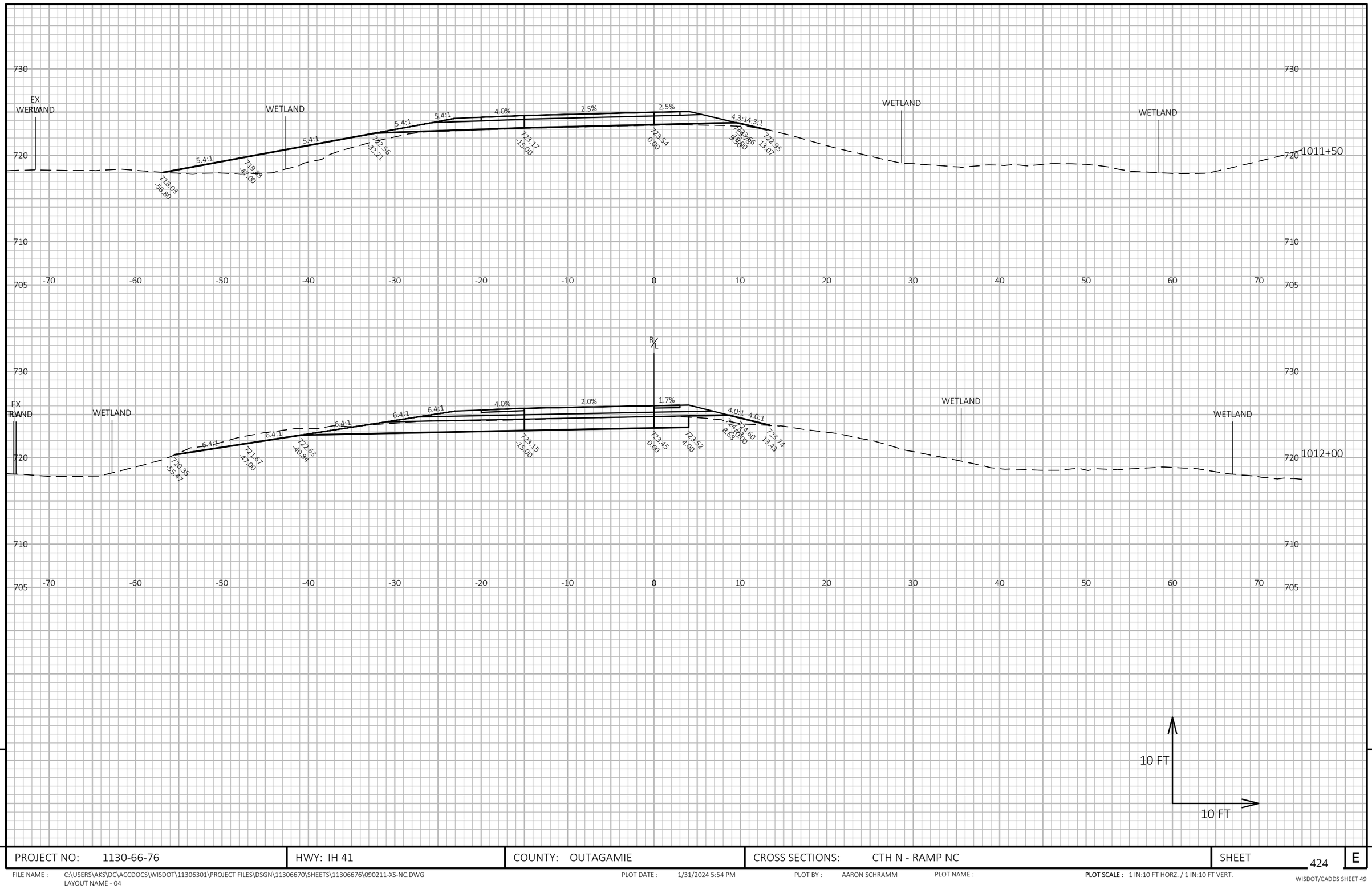
PLOT DATE : 1/31/2024 5:54 PM

PLOT BY : AARON SCHRAMM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



10 FT

10 FT

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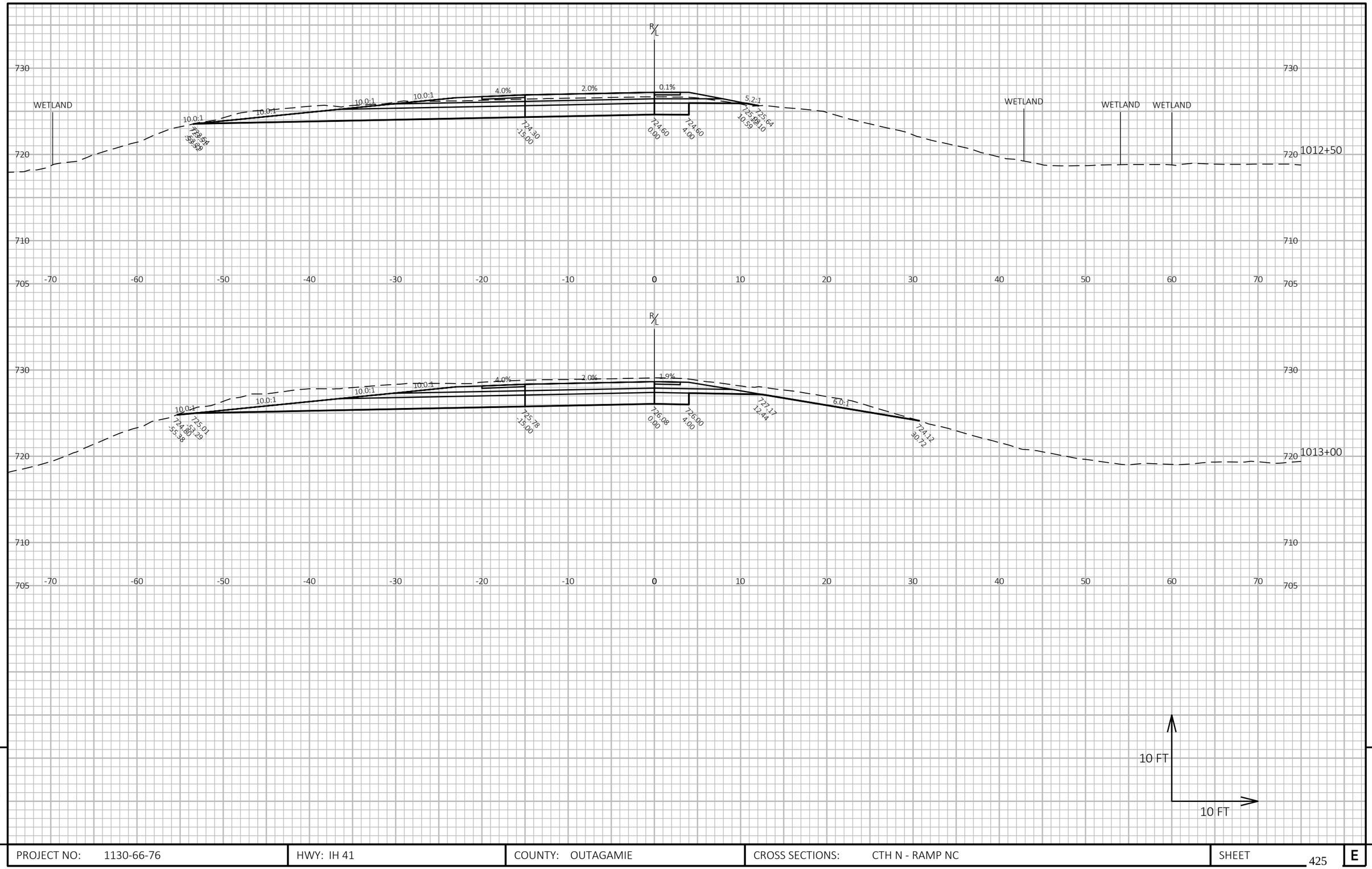
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NC	SHEET 424	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090211-XS-NC.DWG
LAYOUT NAME - 04

PLOT DATE : 1/31/2024 5:54 PM PLOT BY : AARON SCHRAMM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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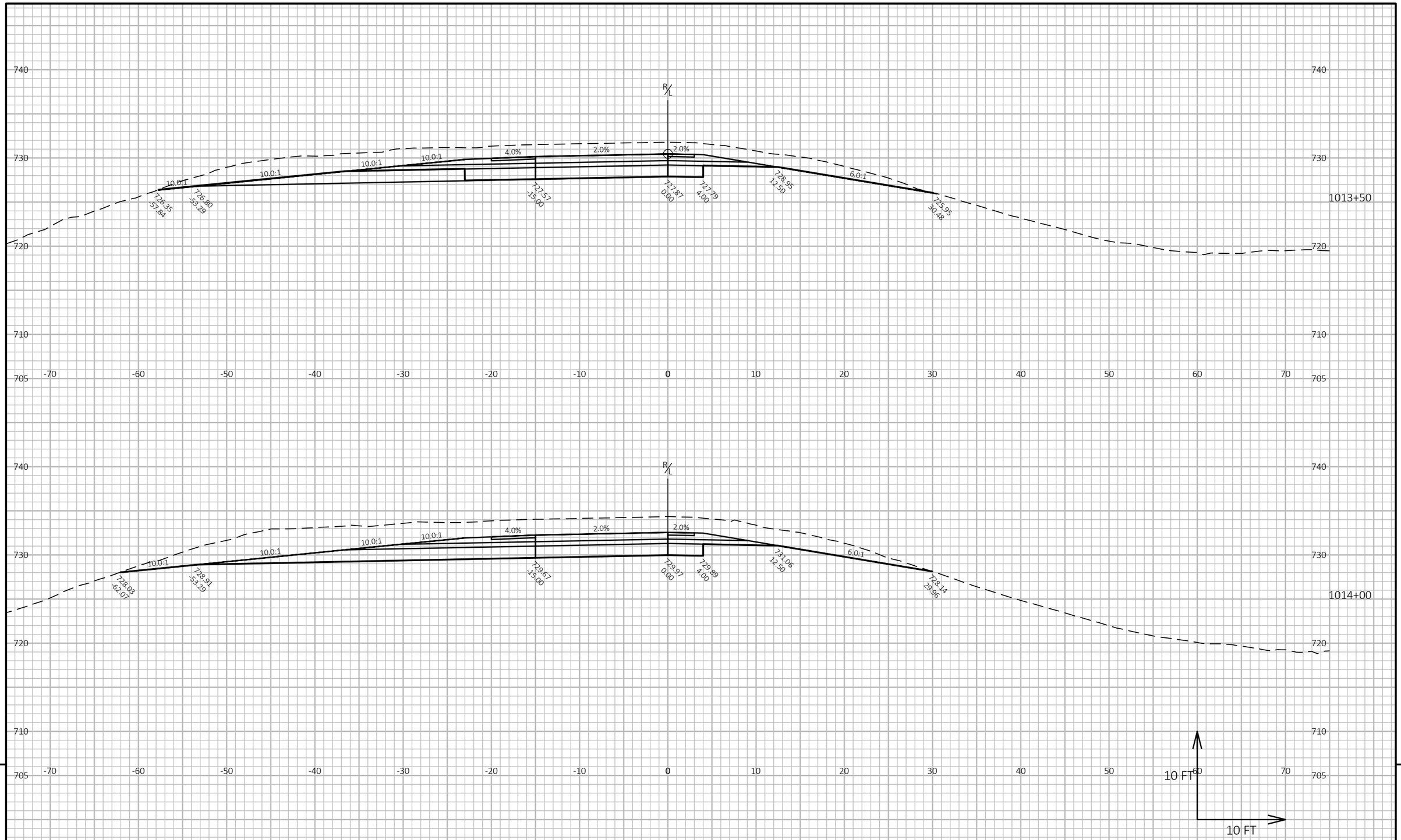
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NC	SHEET 425	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090211-XS-NC.DWG
LAYOUT NAME - 05

PLOT DATE : 1/31/2024 5:55 PM PLOT BY : AARON SCHRAMM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

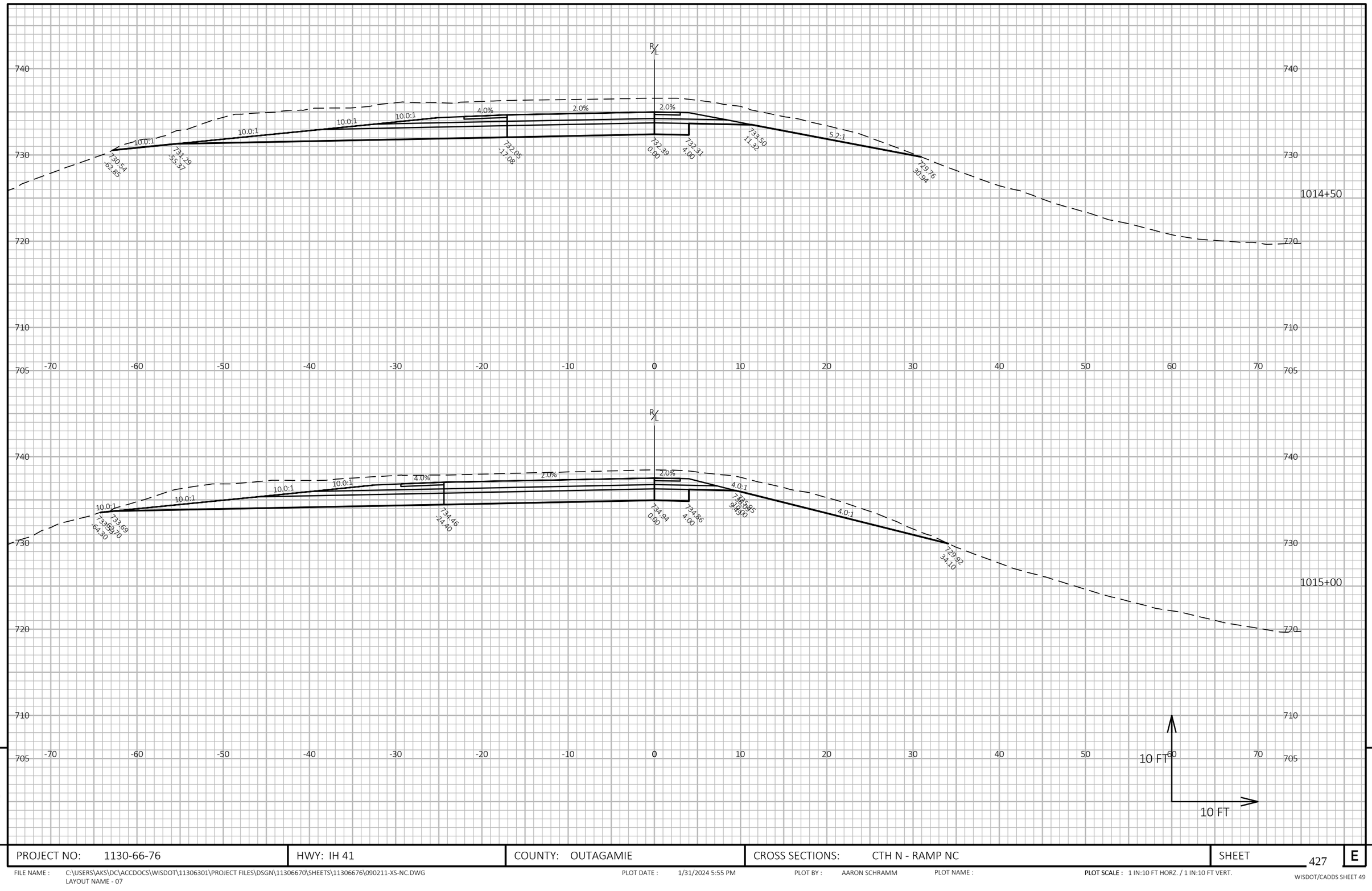


PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NC	SHEET 426	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090211-XS-NC.DWG
LAYOUT NAME - 06

PLOT DATE : 1/31/2024 5:55 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



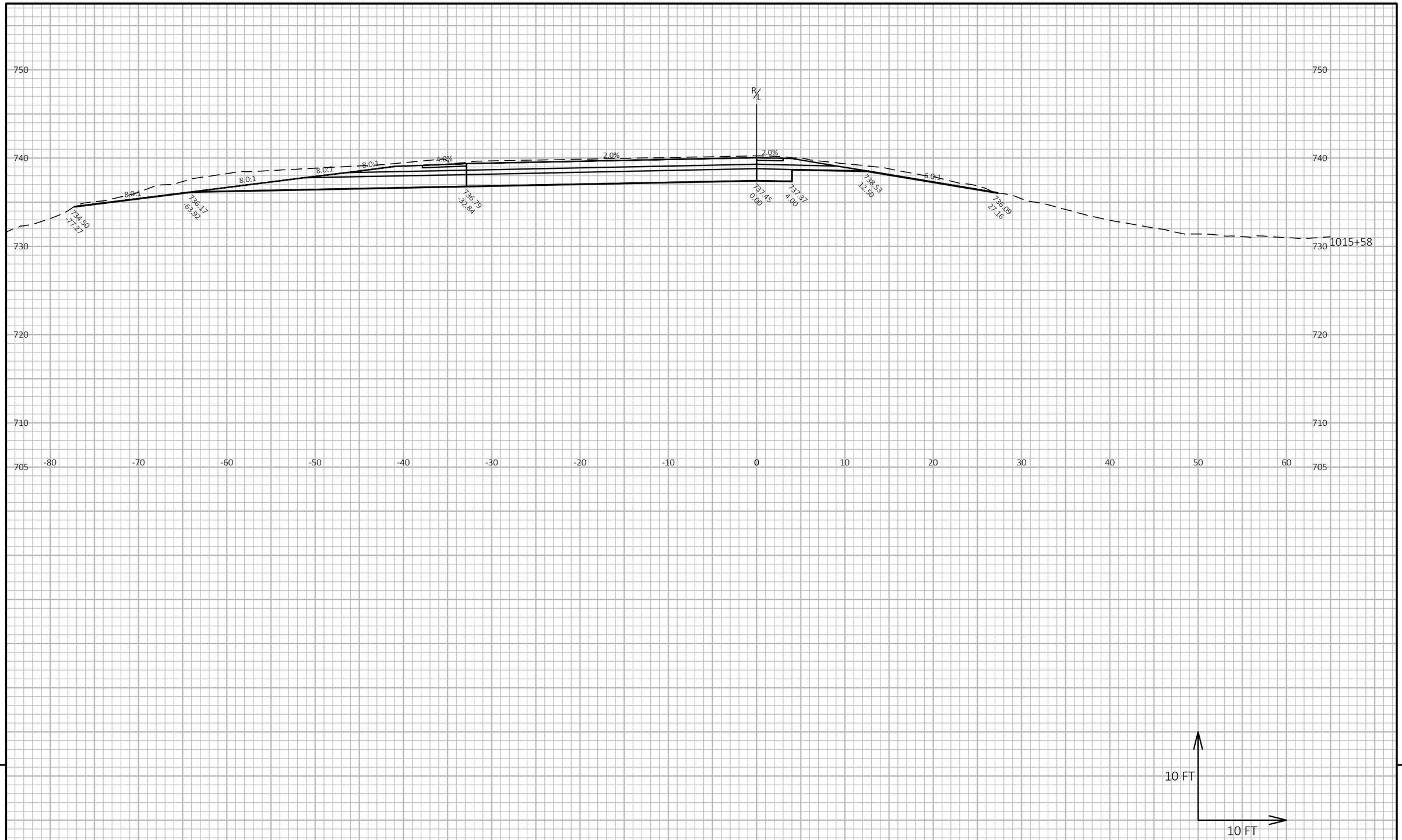
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NC	SHEET 427	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090211-XS-NC.DWG
LAYOUT NAME - 07

PLOT DATE : 1/31/2024 5:55 PM PLOT BY : AARON SCHRAMM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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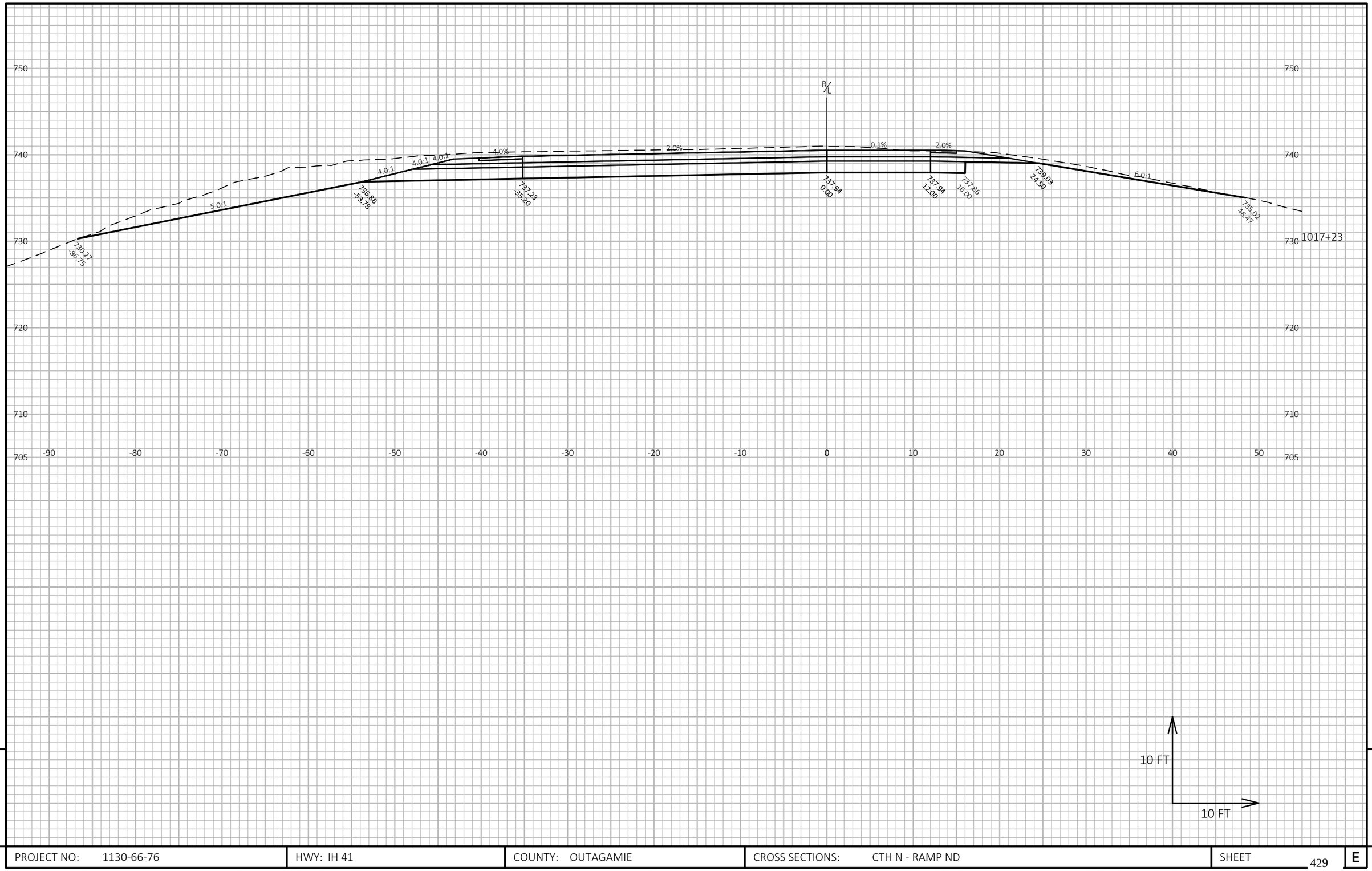
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP NC	SHEET 428	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090211-XS-NC.DWG
LAYOUT NAME - 08

PLOT DATE : 1/31/2024 5:55 PM PLOT BY : AARON SCHRAMM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



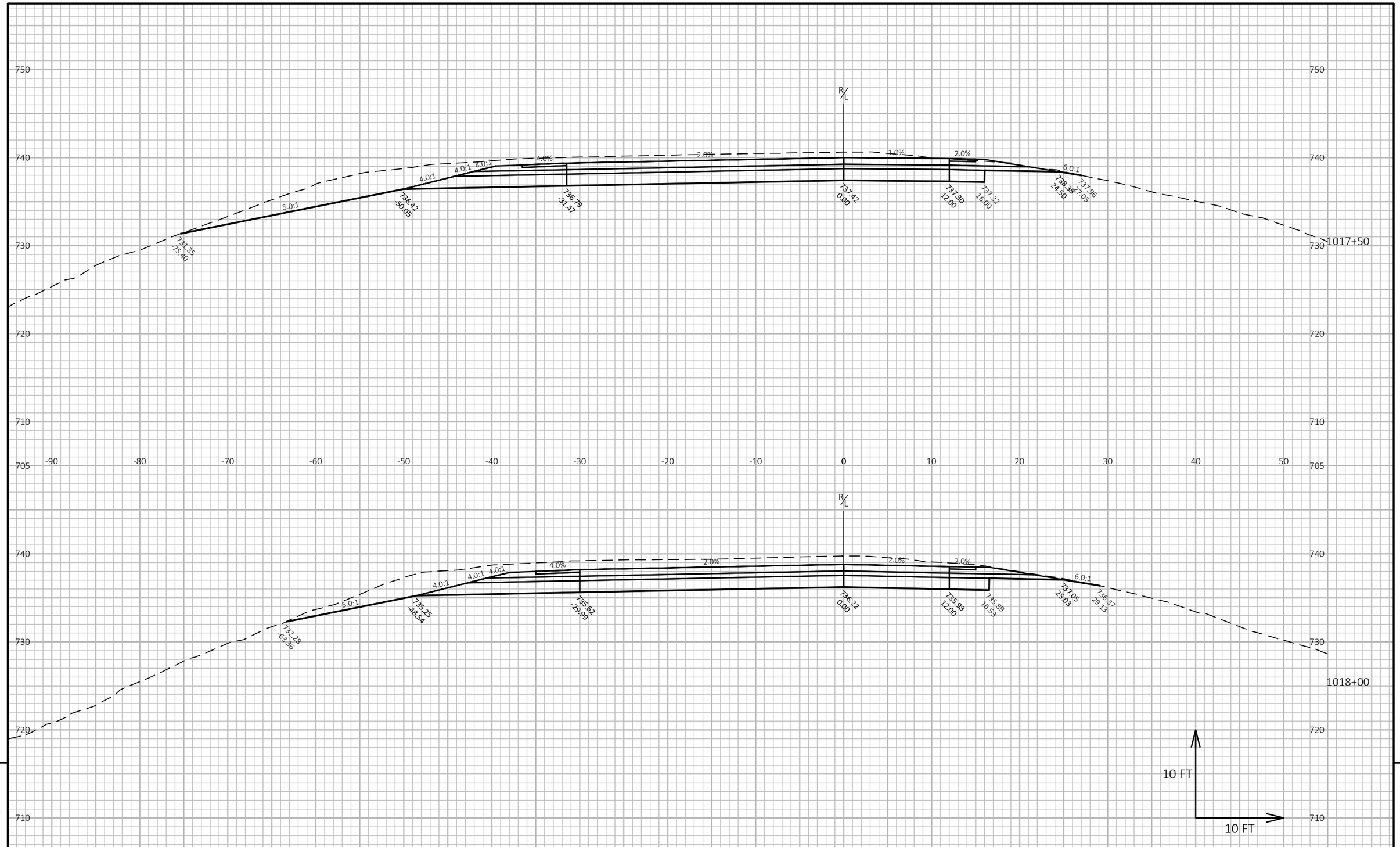
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP ND	SHEET 429	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090212-XS-ND.DWG
LAYOUT NAME - 01

PLOT DATE : 2/21/2024 4:10 PM PLOT BY : AARON SCHRAMM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

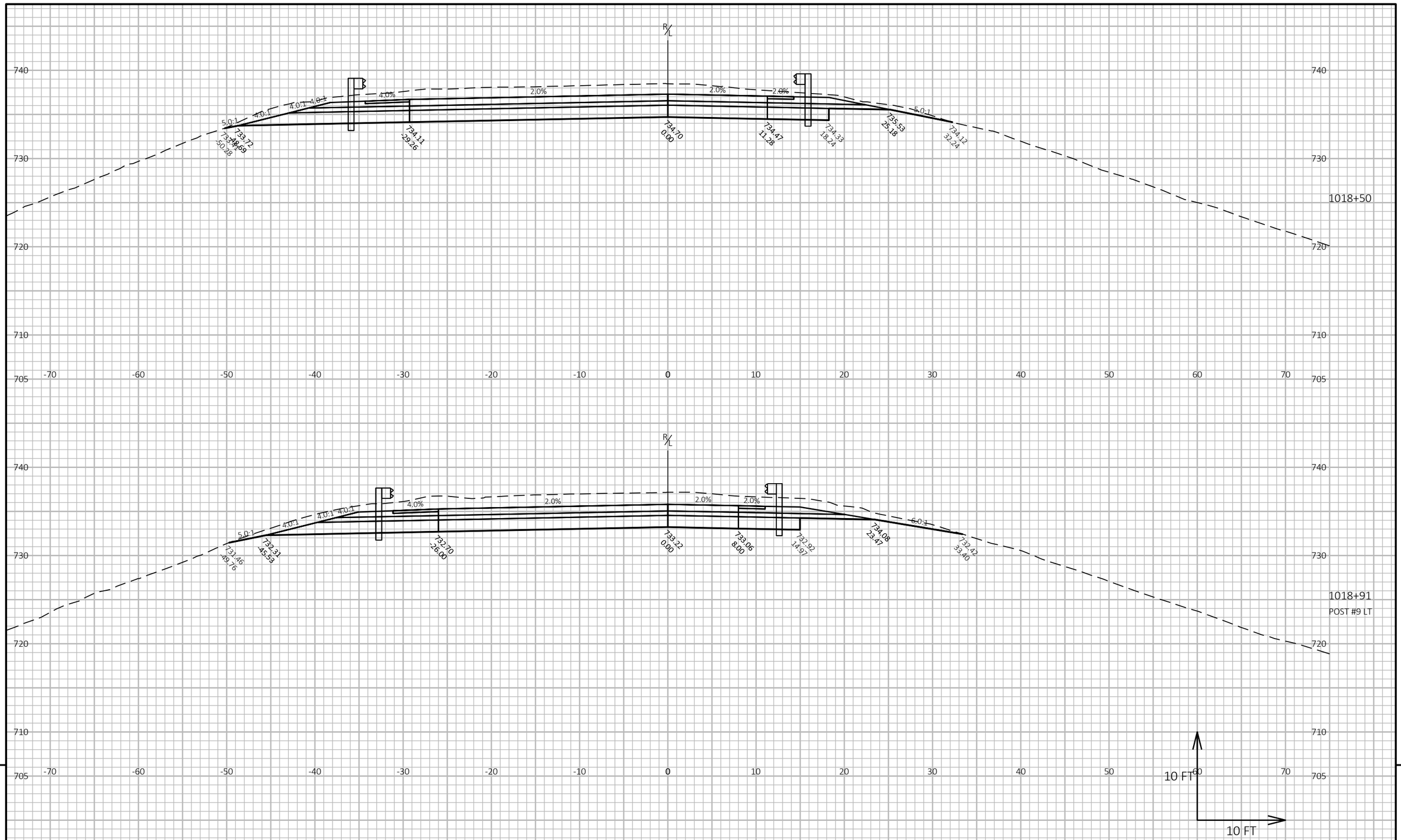


PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP ND	SHEET 430	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090212-XS-ND.DWG
LAYOUT NAME - 02

PLOT DATE : 2/21/2024 4:10 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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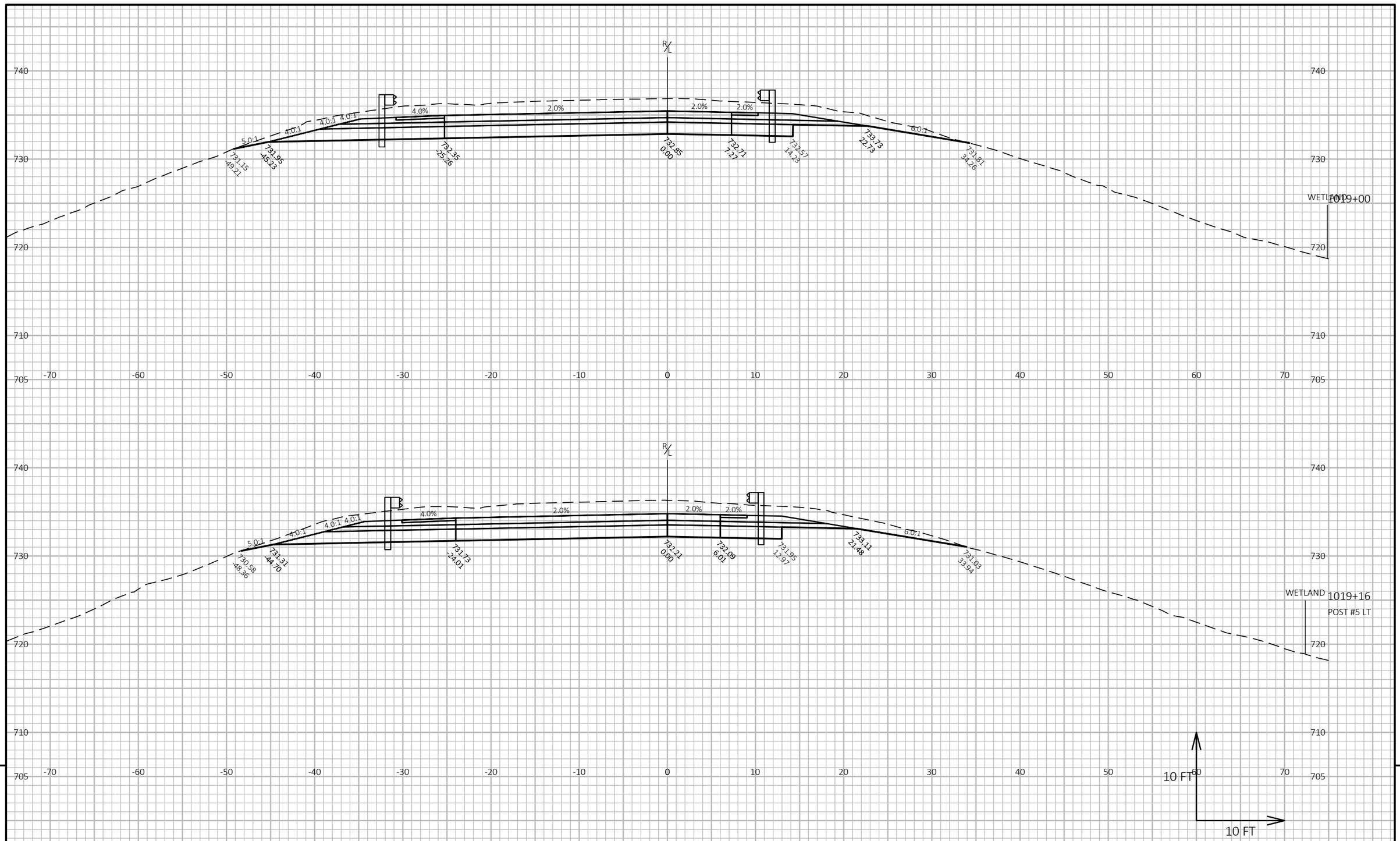
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP ND	SHEET 431	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090212-XS-ND.DWG
LAYOUT NAME - 03

PLOT DATE : 2/21/2024 4:10 PM PLOT BY : AARON SCHRAMM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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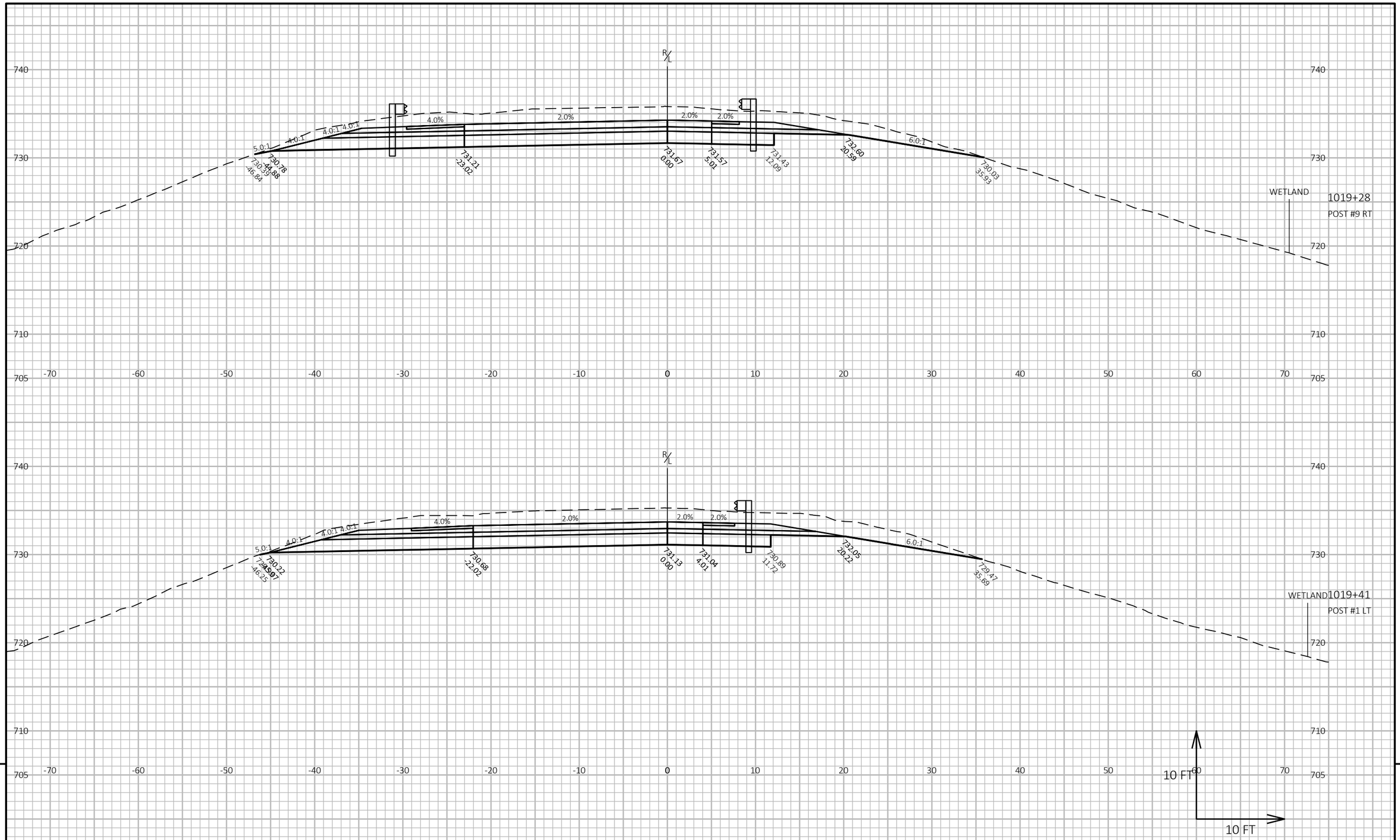
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP ND	SHEET 432	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090212-XS-ND.DWG
LAYOUT NAME - 04

PLOT DATE : 2/21/2024 4:10 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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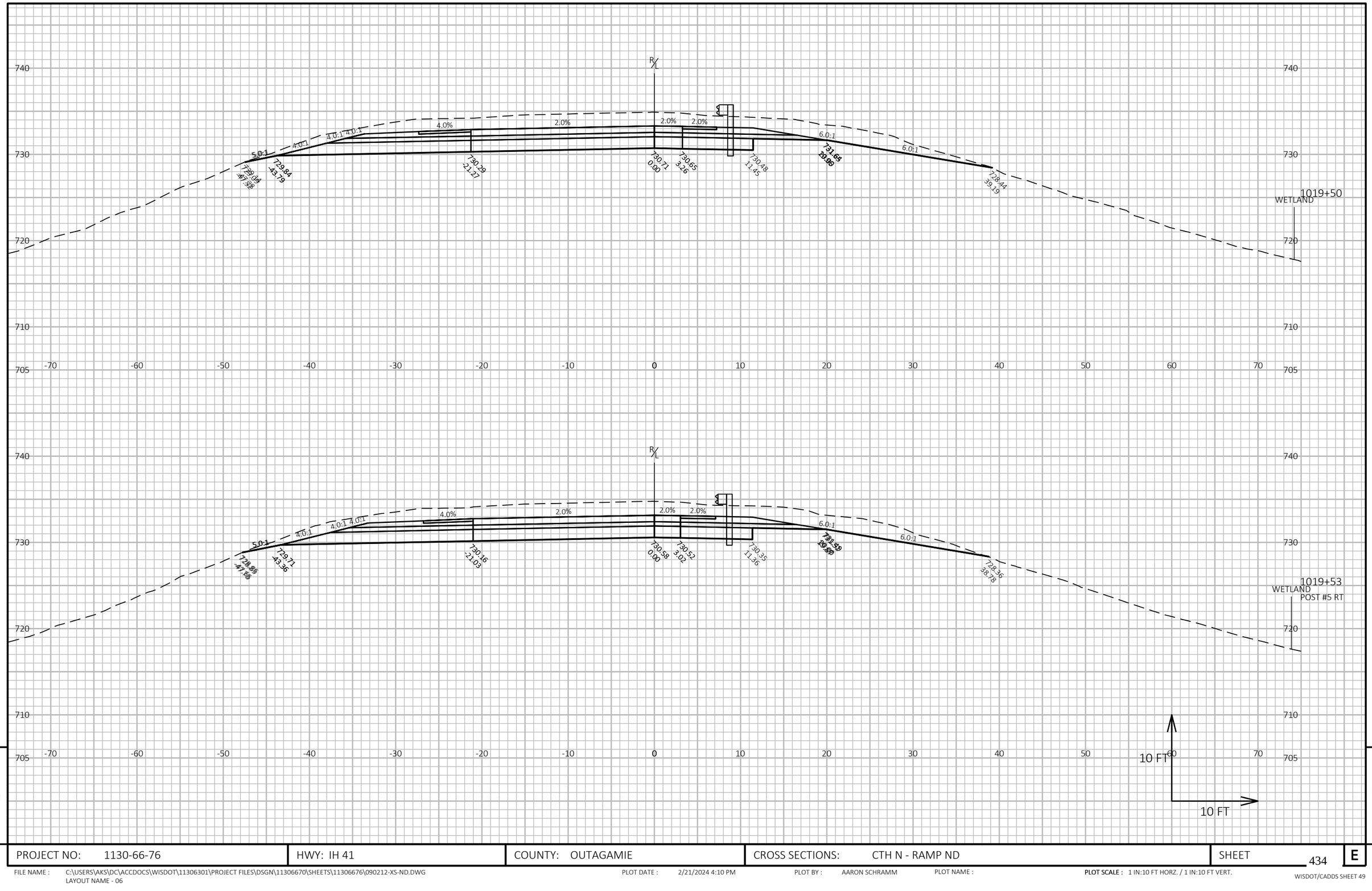
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP ND	SHEET 433	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090212-XS-ND.DWG
LAYOUT NAME - 05

PLOT DATE : 2/21/2024 4:10 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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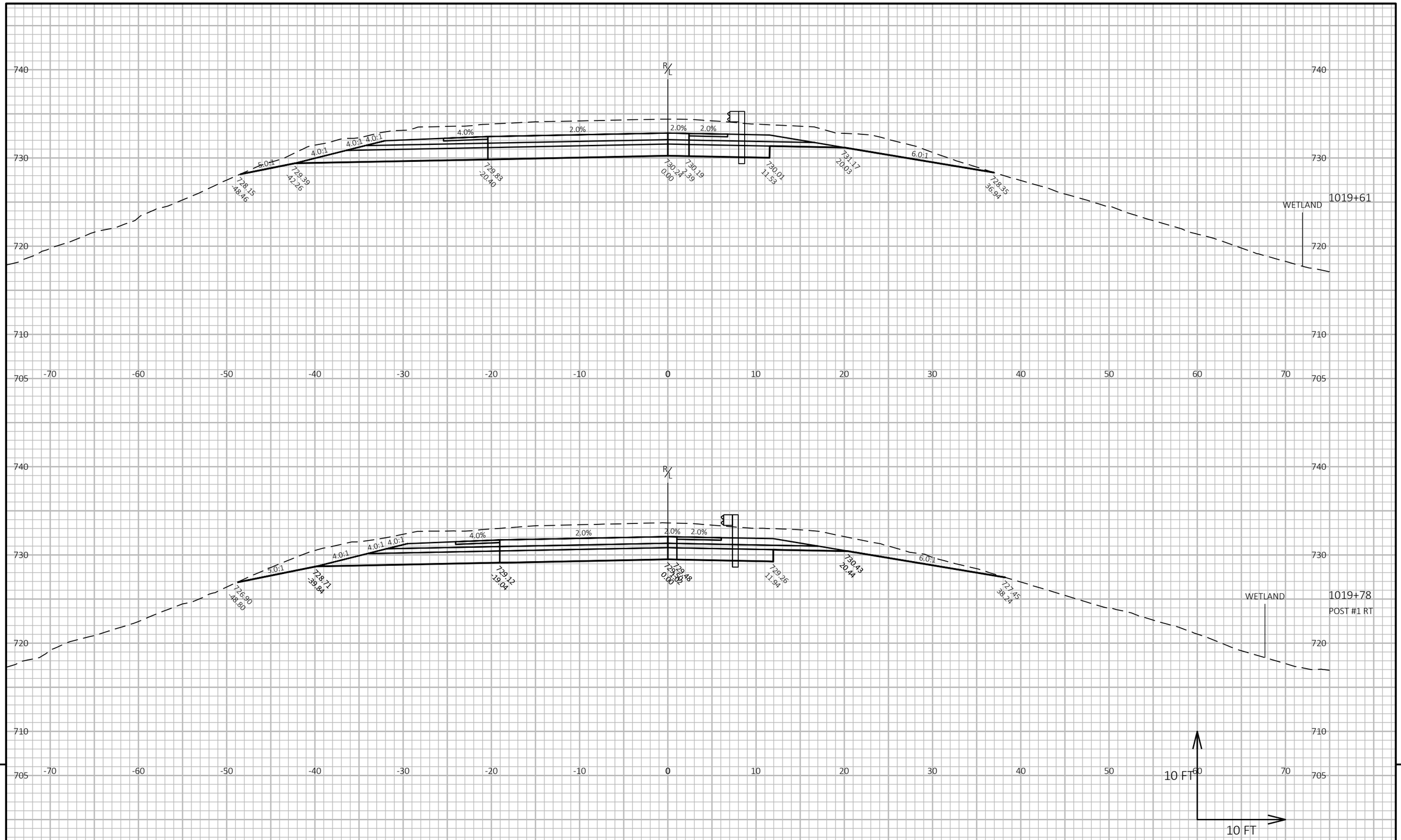
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP ND	SHEET 434	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090212-XS-ND.DWG
LAYOUT NAME - 06

PLOT DATE : 2/21/2024 4:10 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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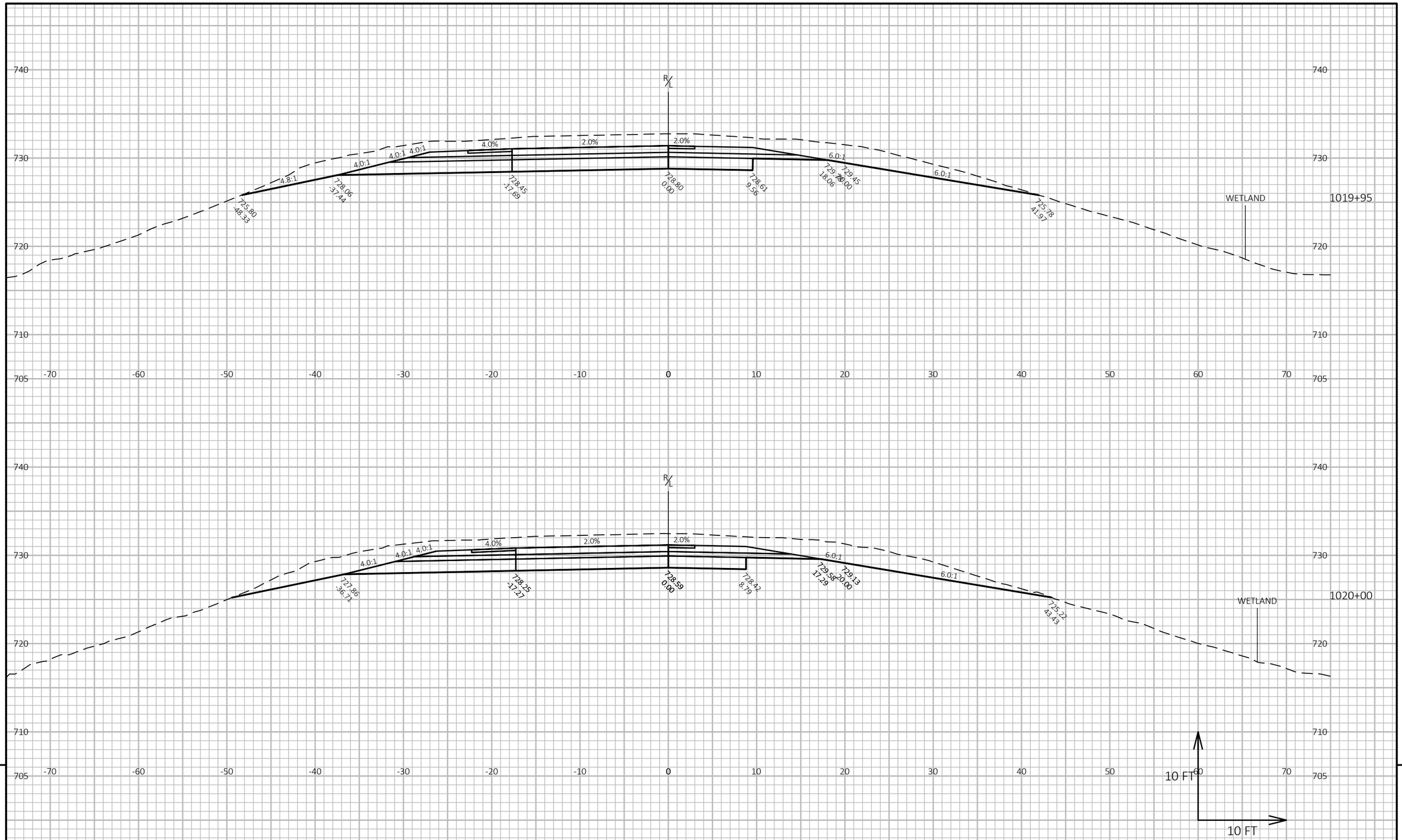
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP ND	SHEET 435	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090212-XS-ND.DWG
LAYOUT NAME - 07

PLOT DATE : 2/21/2024 4:10 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

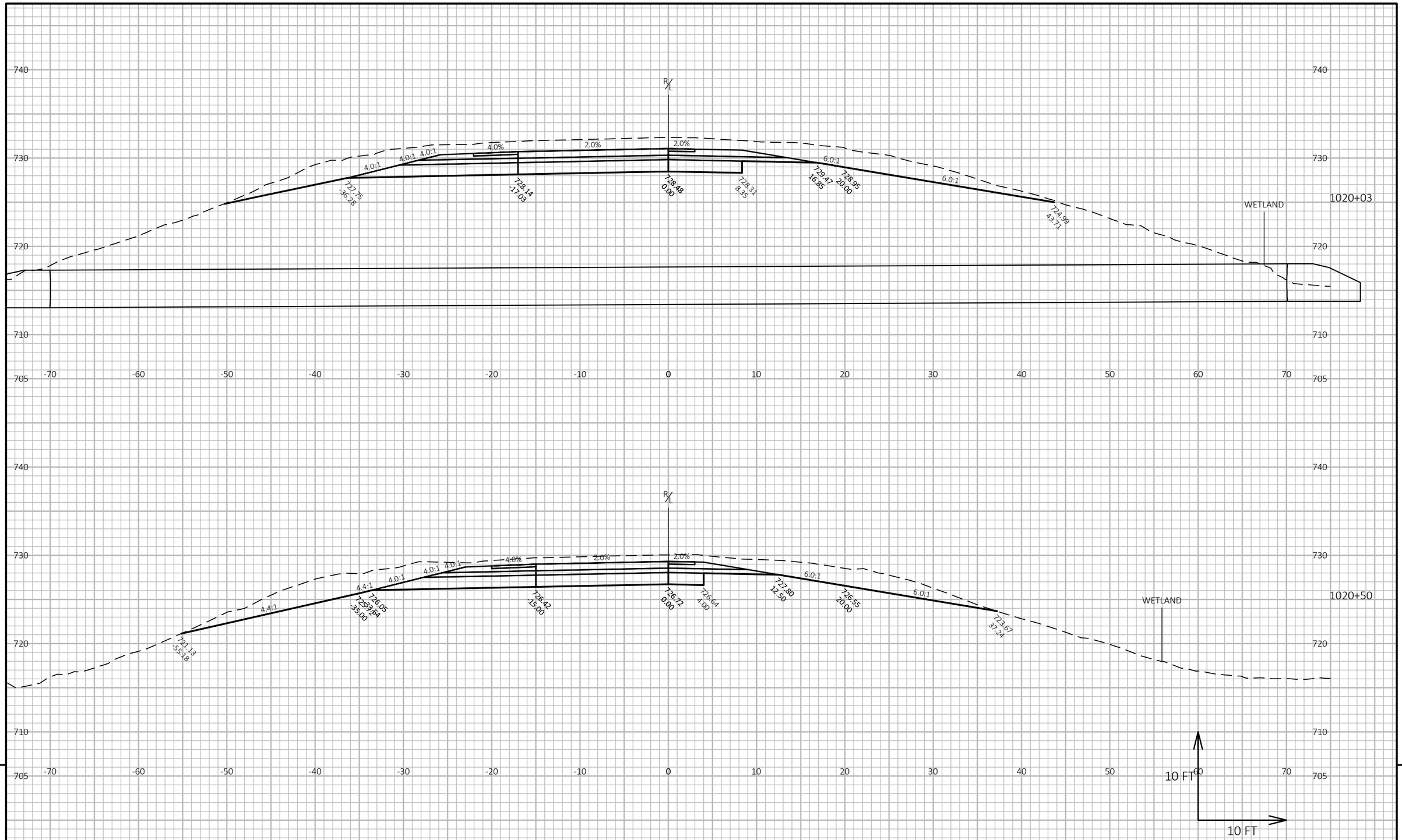


PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP ND	SHEET 436	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090212-XS-ND.DWG
LAYOUT NAME - 08

PLOT DATE : 2/21/2024 4:11 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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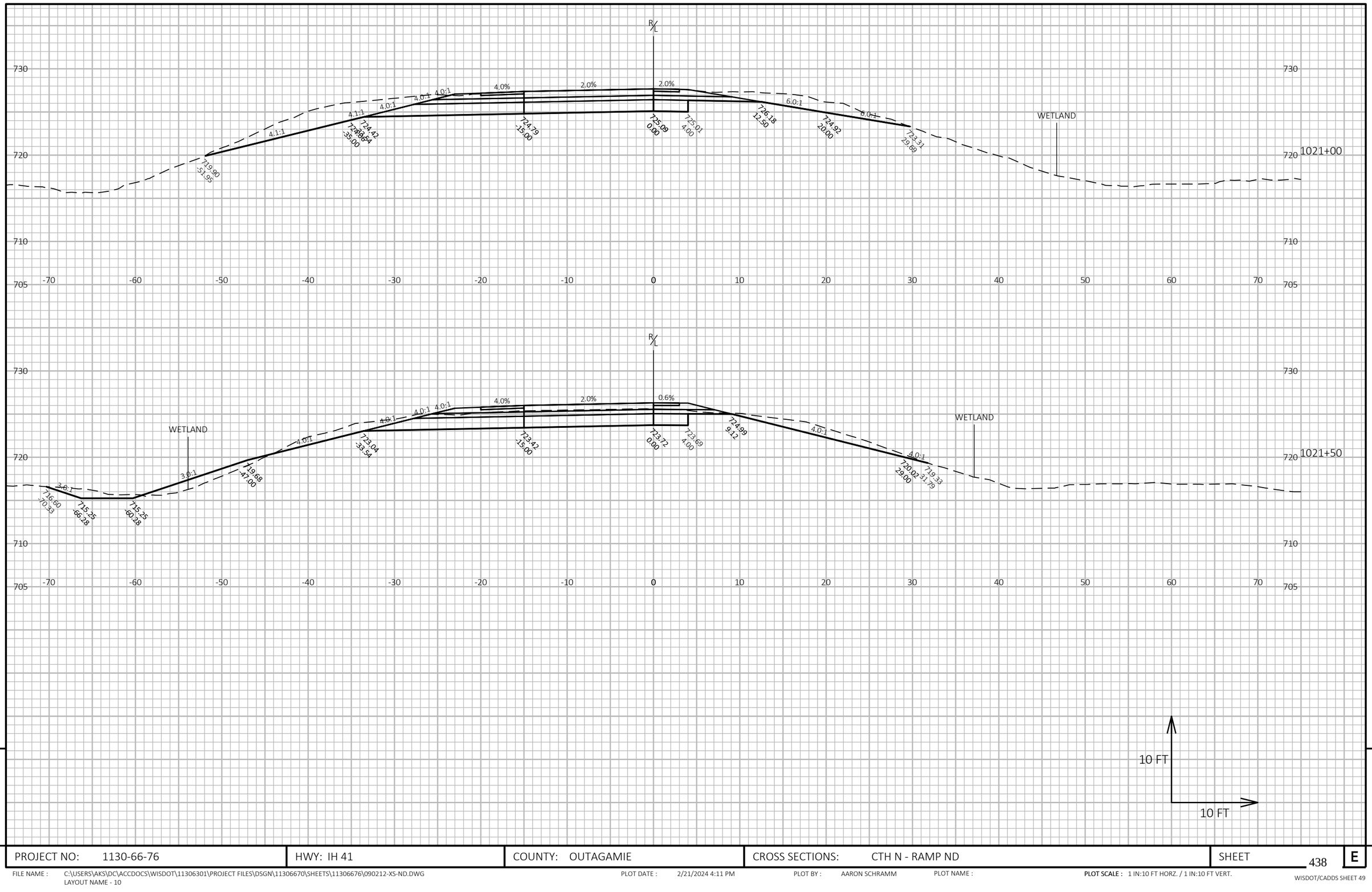
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP ND	SHEET 437	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090212-XS-ND.DWG
LAYOUT NAME - 09

PLOT DATE : 2/21/2024 4:11 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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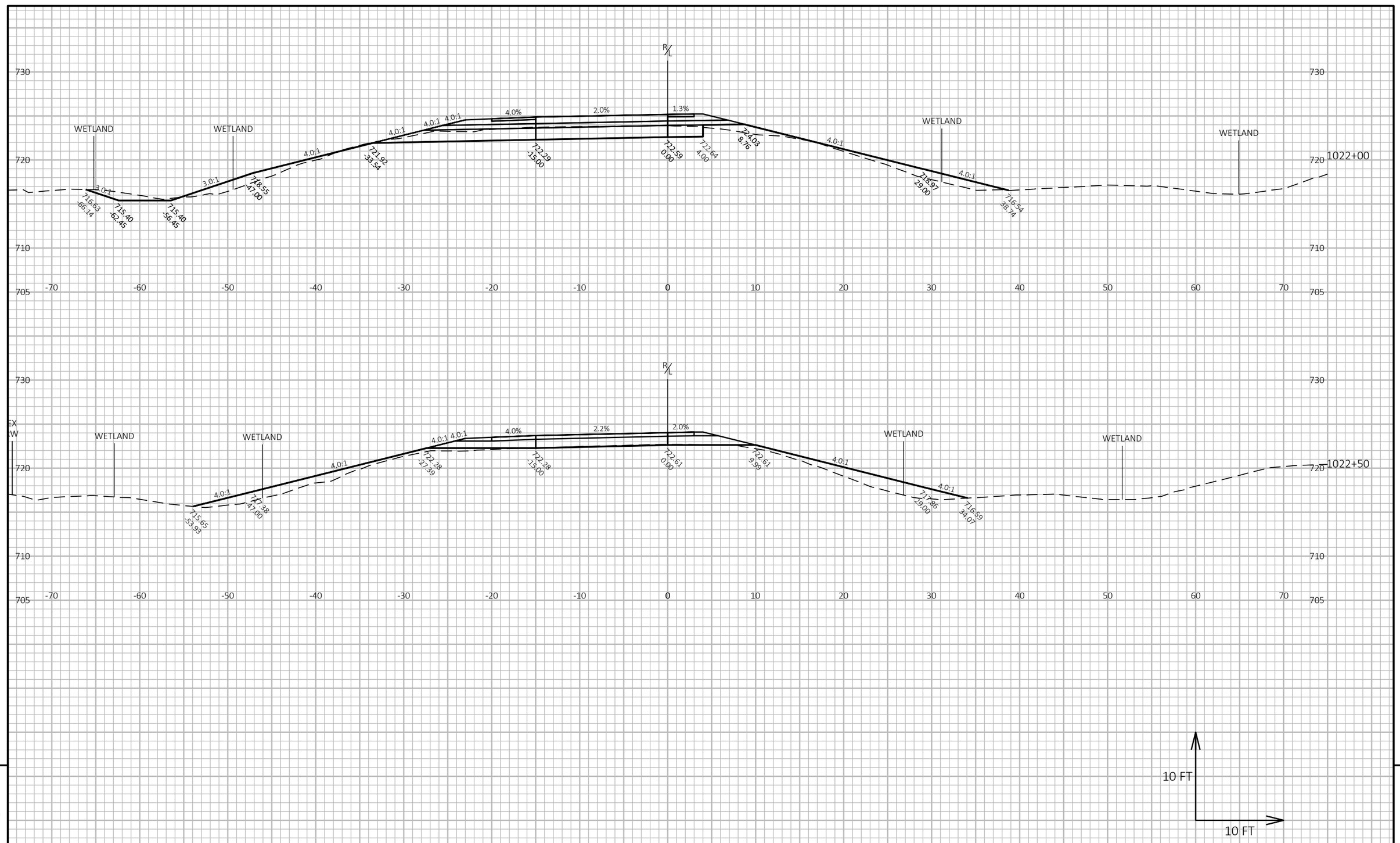
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP ND	SHEET 438	E



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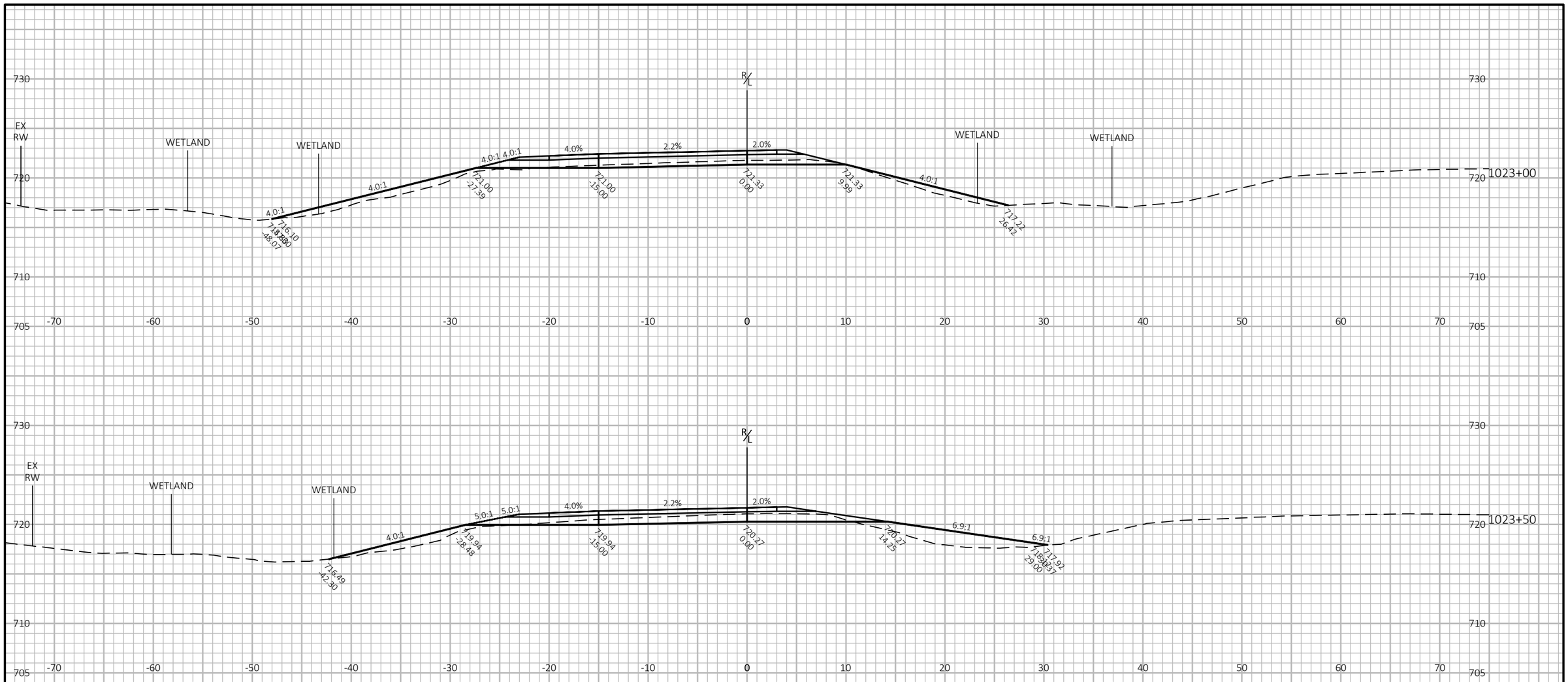
PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP ND	SHEET 439	E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090212-XS-ND.DWG
LAYOUT NAME - 11

PLOT DATE : 2/21/2024 4:11 PM PLOT BY : AARON SCHRAMM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

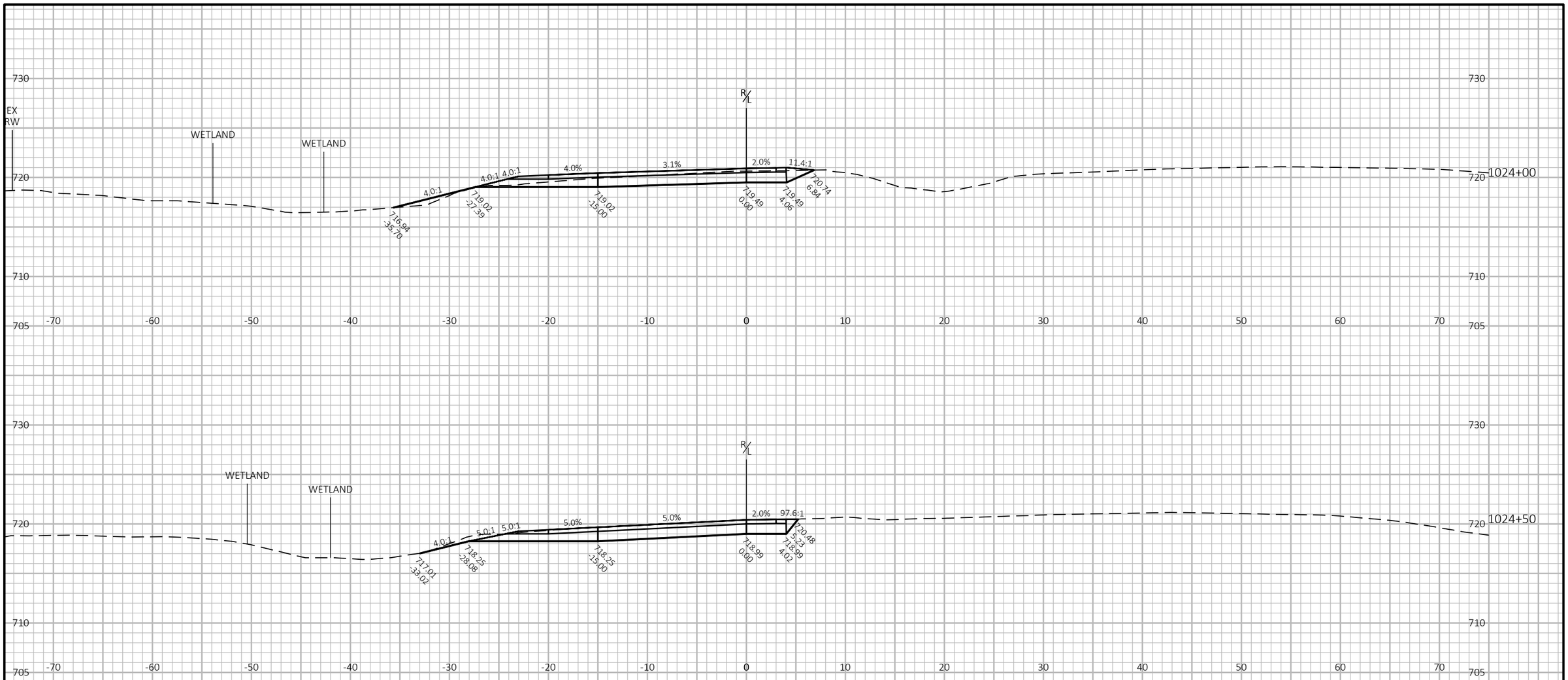


PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP ND	SHEET 440 E

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090212-XS-ND.DWG
LAYOUT NAME - 12

PLOT DATE : 2/21/2024 4:11 PM PLOT BY : AARON SCHRAMM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1130-66-76	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH N - RAMP ND	SHEET 441	E

9

FILE NAME : C:\USERS\AKS\DC\ACCDOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306670\SHEETS\11306676\090212-XS-ND.DWG
LAYOUT NAME - 13

PLOT DATE : 2/21/2024 4:37 PM PLOT BY : AARON SCHRAMM 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.

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