RHI | MARCH 2025

PROJECT ID: 9876-00-70
WITH: 9876-00-71

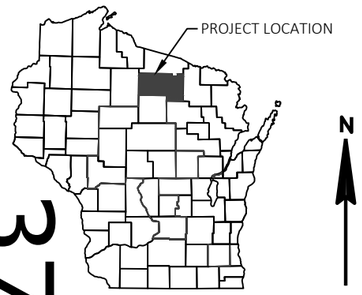
COUNTY: ONEIDA

37

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 = 84



DESIGN DESIGNATION 9876-00-00

A.A.D.T.	2025	=	2700
A.A.D.T.	2045	=	2900
D.H.V.		=	370
D.D.		=	61/39
T.		=	12.1%
DESIGN SPEED		=	50 MPH
ESALS		=	560,000

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

LINCOLN COUNTY LINE - USH 51

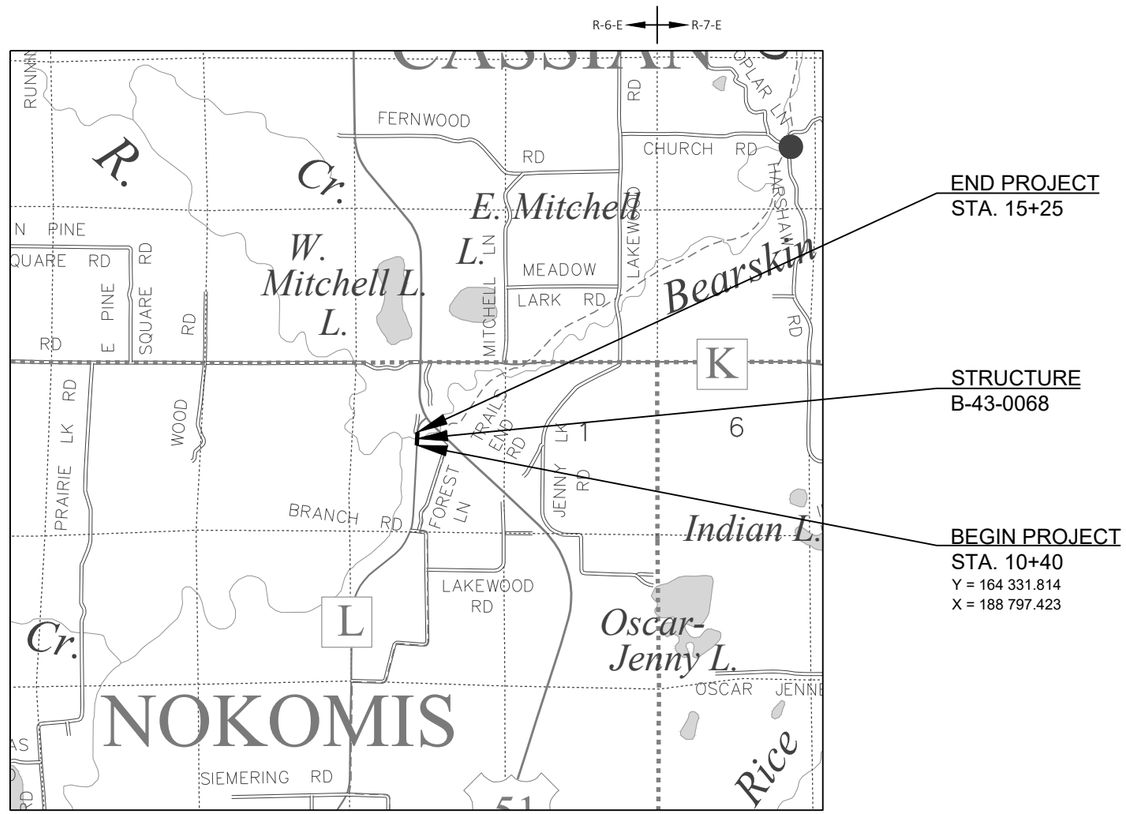
BEARSKIN CREEK BRIDGE, B-43-0068

CTH L

ONEIDA COUNTY

STATE PROJECT NUMBER
9876-00-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9876-00-70	WISC 2025389	1



END PROJECT
STA. 15+25

STRUCTURE
B-43-0068

BEGIN PROJECT
STA. 10+40
Y = 164 331.814
X = 188 797.423

LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.092 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), ONEIDA 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 18.

ACCEPTED FOR
ONEIDA COUNTY
10/17/24 (Date)
(Signature and Title of Official)

ORIGINAL PLANS PREPARED BY

WESTBROOK
Associated Engineers, Inc.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588
PHONE (608) 588-7866
FAX (608) 588-7954

WISCONSIN
AARON B. PALMER
E-35695
RICHLAND CENTER, WI
PROFESSIONAL ENGINEER

DATE: 10/17/24 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WESTBROOK ASSOCIATED ENGINEERS, INC.
Designer	WESTBROOK ASSOCIATED ENGINEERS, INC.
Project Manager	NATHAN WAITE
Regional Examiner	NC REGION
Regional Supervisor	DAN ERVA, P.E.

APPROVED FOR THE DEPARTMENT
DATE: 10/28/2024 (Signature)

E

STANDARD ABBREVIATIONS

ABUT	ABUTMENT
AC	ACRE
AGG	AGGREGATE
AH	AHEAD
∠	ANGLE
AADT	ANNUAL AVERAGE DAILY TRAFFIC
AEW	APRON ENDWALL
ASPH	ASPHALTIC
BK	BACK
BC	BACK OF CURB
BAD	BASE AGGREGATE DENSE
BL OR B/L	BASE LINE
BM	BENCH MARK
CB	CATCH BASIN
CL OR C/L	CENTER LINE
Δ	CENTRAL ANGLE OR DELTA
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CSW	CONCRETE SIDEWALK
CONST	CONSTRUCTION
CP	CONTROL POINT
CO	COUNTY
CTH	COUNTY TRUCK HIGHWAY
CY	CUBIC YARD
CP	CULVERT PIPE
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DIA	DIAMETER
DD	DIRECTIONAL DISTRIBUTION
DE	DRAINAGE EASEMENT
DWY	DRIVEWAY
EA	EACH
EB	EASTBOUND
EL OR ELEV	ELEVATION
EMB	EMBANKMENT
EW	ENDWALL
EAT	ENERGY ABSORBING TERMINAL
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
FERT	FERTILIZER
FE	FIELD ENTRANCE
FL OR F/L	FLOW LINE
FT	FOOT
FTMS	FREE TRAFFIC MANAGEMENT SYSTEM
HES	HIGH EARLY STRENGTH
HE	HIGHWAY EASEMENT
CWT	HUNDRED WEIGHT
IN DIA	INCH DIAMETER
INL	INLET
ID	INSIDE DIAMETER
INTERS	INTERSECTION
IH	INTERSTATE HIGHWAY
INV	INVERT
JT	JOINT
LT	LEFT
LHF	LEFT HAND FORWARD
L	LENGTH OF CURVE
LF	LINEAR FOOT
LC	LONG CHORD OF CURVE
LS	LUMP SUM
MGAL	ONE THOUSAND GALLONS
MH	MANHOLE
ML OR M/L	MATCH LINE
NOM	NOMINAL
NC	NORMAL CROWN
NB	NORTHBOUND
NO	NUMBER
OD	OUTSIDE DIAMETER
PAVT	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PCC	PORTLAND CEMENT CONCRETE
LB	POUND
PSI	POUNDS PER SQUARE INCH
PE	PRIVATE ENTRANCE
PROJ	PROJECT
PL	PROPERTY LINE
PRW	PROPOSED RIGHT OF WAY
R	RADIUS
RL OR R/L	REFERENCE LINE
REQD	REQUIRED
RT	RIGHT
RHF	RIGHT HAND FORWARD
R/W	RIGHT OF WAY
RD	ROAD
RDWY	ROADWAY
SHLDR	SHOULDER
SW	SIDEWALK
SB	SOUTHBOUND
SPECS	SPECIFICATIONS
SF	SQUARE FEET
SY	SQUARE YARD
SDD	STANDARD DETAIL DRAWINGS
STH	STATE TRUNK HIGHWAY
STA	STATION
SE	SUPERELEVATION
SL OR S/L	SURVEY LINE
TEMP	TEMPORARY
TI	TEMPORARY INTEREST
TLE	TEMPORARY LIMITED EASEMENT
TC	TOP OF CURB
TL OR T/L	TRANSIT LINE
T	TRUCKS (PERCENT OF)
TYP	TYPICAL
USH	UNITED STATES HIGHWAY
VAR	VARIABLE
VC	VERTICAL CURVE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WEST
WB	WESTBOUND

WISCONSIN DNR LIAISON

WENDY HENNIGES
NORTH CENTRAL REGION
107 SUTLIFF AVE
RHINELANDER, WI 54501
PHONE: (715) 365-8916
EMAIL: wendy.henniges@wisconsin.gov

COUNTY HIGHWAY COMMISSIONER

ALEX HEGEMAN
ONEIDA COUNTY
730 W. KEMP ST
RHINELANDER, WI 54501
PHONE: (715) 369-6131
EMAIL: ahegeman@oneidacountywi.gov

DESIGN CONSULTANT

AARON PALMER, P.E.
DESIGN CONSULTANT
619 EAST HOXIE ST
SPRING GREEN, WI 53588
PHONE: (608) 588-7866
EMAIL: apalmer@westbrookeng.com

UTILITIES CONTACTS

FRONTIER COMMUNICATIONS
COMMUNICATIONS
JEREMY ZEHM
154 E 2ND ST
NEW RICHMOND, WI 54017
PHONE: (715) 243-9243
EMAIL: jeremy.zehm@ftr.com

WISCONSIN PUBLIC SERVICE
ELECTRIC
RANDY MARVIN
2027 NAVAJO ST
RHINELANDER, WI 54501
PHONE: (715) 369-7166
EMAIL: randy.marvin@wisconsinpublicservice.com

GENERAL NOTES

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

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY OPERATIONS, OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN.

APPLY TACK COAT BETWEEN LAYERS OF ASPHALTIC SURFACE AT A RATE OF 0.05 GAL/SY.

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

RIGHT OF WAY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE.

THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER.

WHEN THE QUANTITY OF THE ITEMS OF BASE AGGREGATE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYERS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

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.

APPLY SEED, MULCH OR EROSION MAT, AND FERTILIZER TO ALL DISTURBED AREAS WITHIN 7 WORKING DAYS AFTER GRADING WORK IS COMPLETED.

SLOPES STEEPER THAN 3:1 REQUIRE EROSION MAT.

THE EXACT LOCATION AND WIDTH OF DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. DRIVEWAYS SHALL BE REPLACED IN KIND.

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PAVING REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAYS SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

THE PROPOSED SHOULDER WIDTH SHOWN IN THE TYPICAL SECTIONS ARE MINIMUM WIDTH. PERPETUATE EXISTING SHOULDERS THAT ARE WIDER THAN WHAT IS SHOWN IN THE TYPICAL SECTIONS.

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

THE 6-INCH ASPHALTIC SURFACE SHALL BE CONSTRUCTED USING ONE (1) 2.5-INCH UPPER LAYER AND ONE (1) 3.5-INCH LOWER LAYER. THE PREFERRED LOWER LAYER IS 3.5-INCHES OF 3 LT 58-28S. THE PREFERRED UPPER LAYER IS 2.5-INCHES OF 4 MT 58-28S.

SAWCUTS, AS SHOWN ON THE PLANS, ARE SUGGESTED LOCATIONS AND MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER TO BETTER SUIT FIELD CONDITIONS.

PRIOR TO PLACEMENT OF BEAM GUARD THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED.

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

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

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											

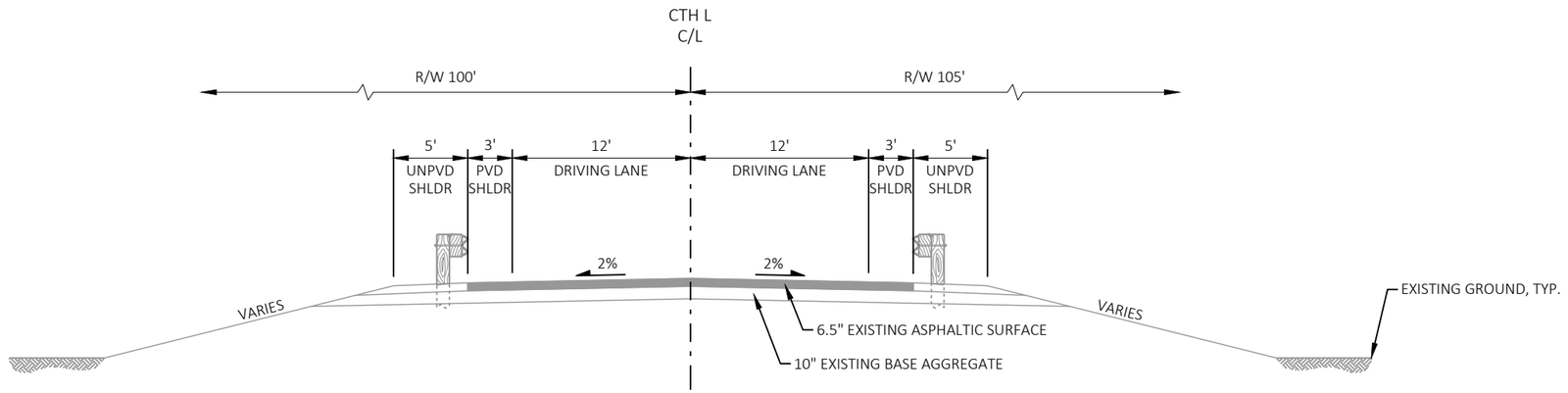
TOTAL PROJECT AREA = 2.33 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.70 ACRES

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

ORDER OF SECTION 2 DETAIL SHEETS

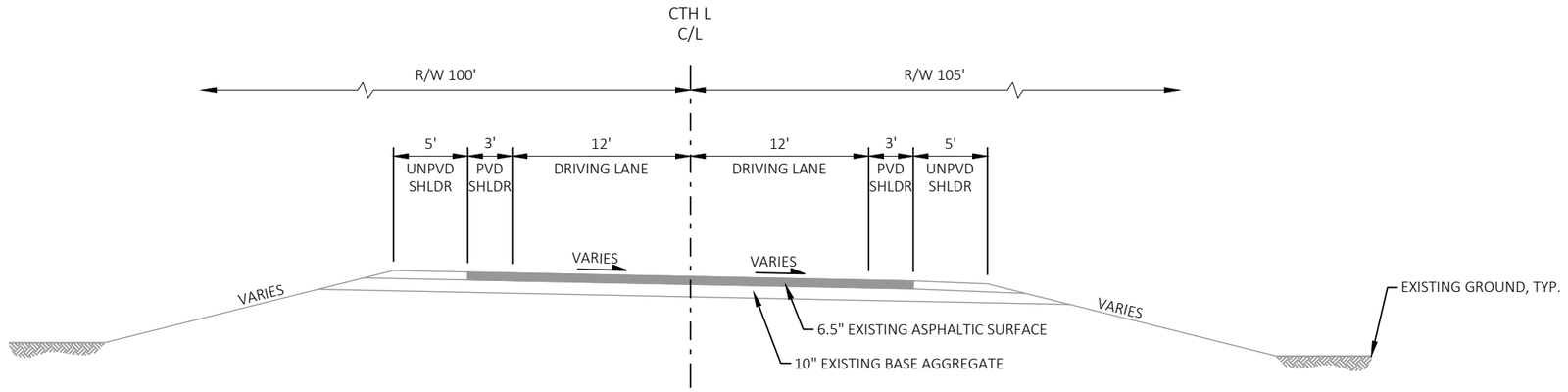
GENERAL NOTES
TYPICAL SECTIONS
BEAM GUARD DETAILS
CONSTRUCTION DETAILS
DETOUR ROUTE
ALIGNMENT DETAIL AND CONTROL POINT TIES

2



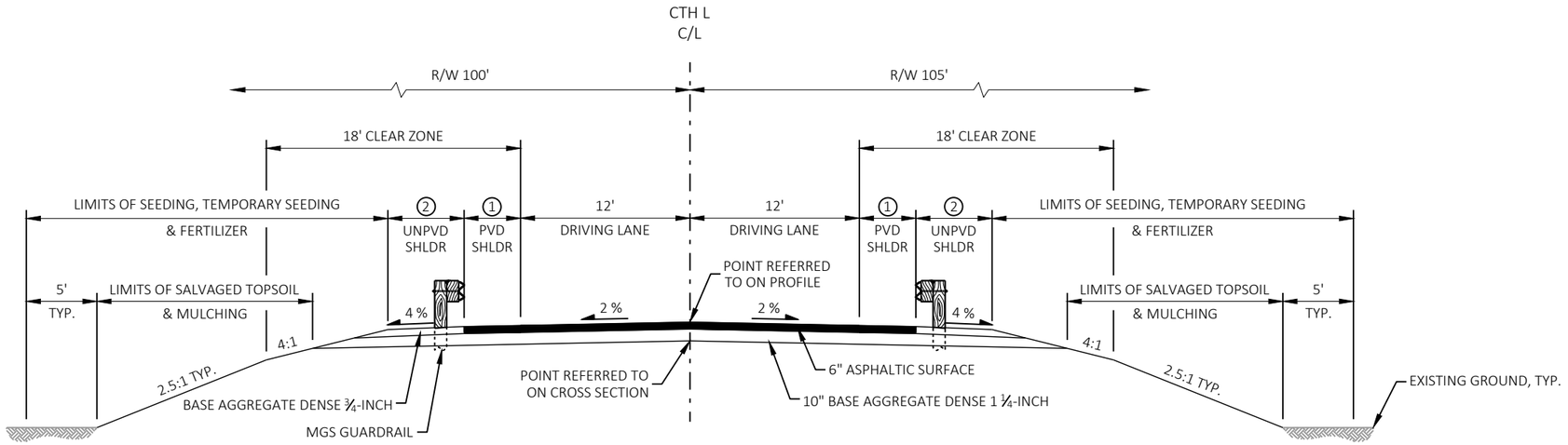
EXISTING TYPICAL SECTION

STA. 10+40.00 - STA. 12+73.75
STA. 13+26.25 - STA. 14+25.00



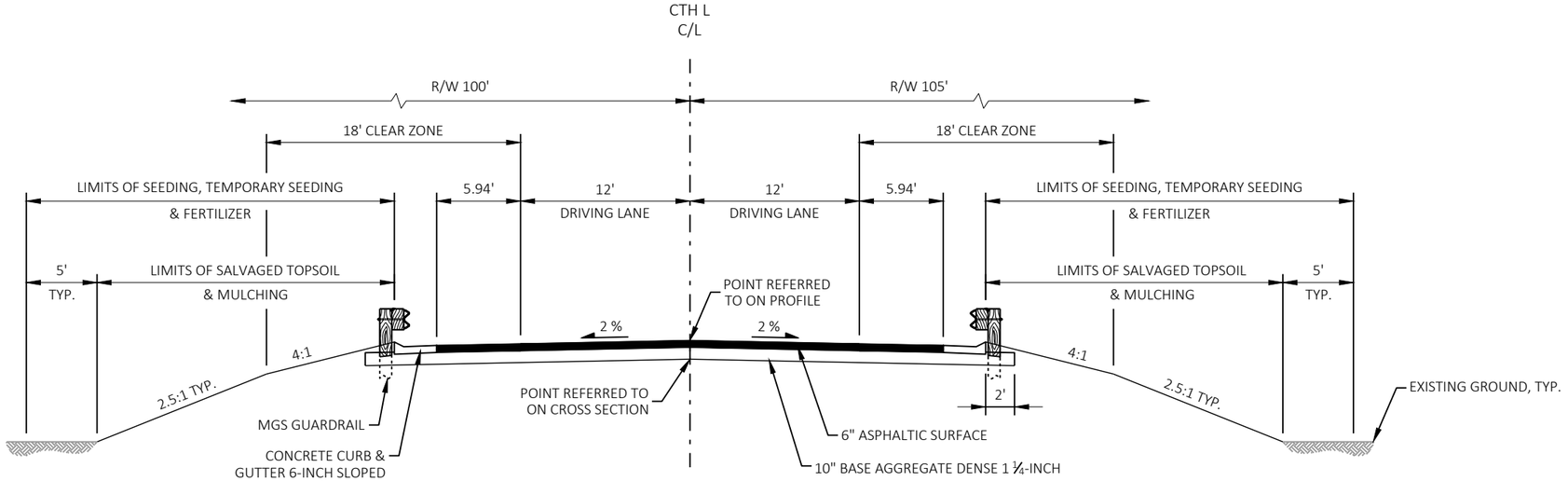
EXISTING TYPICAL SUPERELEVATED SECTION

STA. 14+25.00 - STA. 15+25.00



FINISHED TYPICAL SECTION

STA. 10+40.00 - STA. 12+15.01
STA. 13+26.25 - STA. 14+25.00



FINISHED TYPICAL SECTION - CURB AND GUTTER

STA 12+15.01 - STA 12+73.75

(1) PAVE TO FRONT FACE OF BEAM GUARD (3' TYP.). WIDTH VARIES AT GUARDRAIL FLARES.

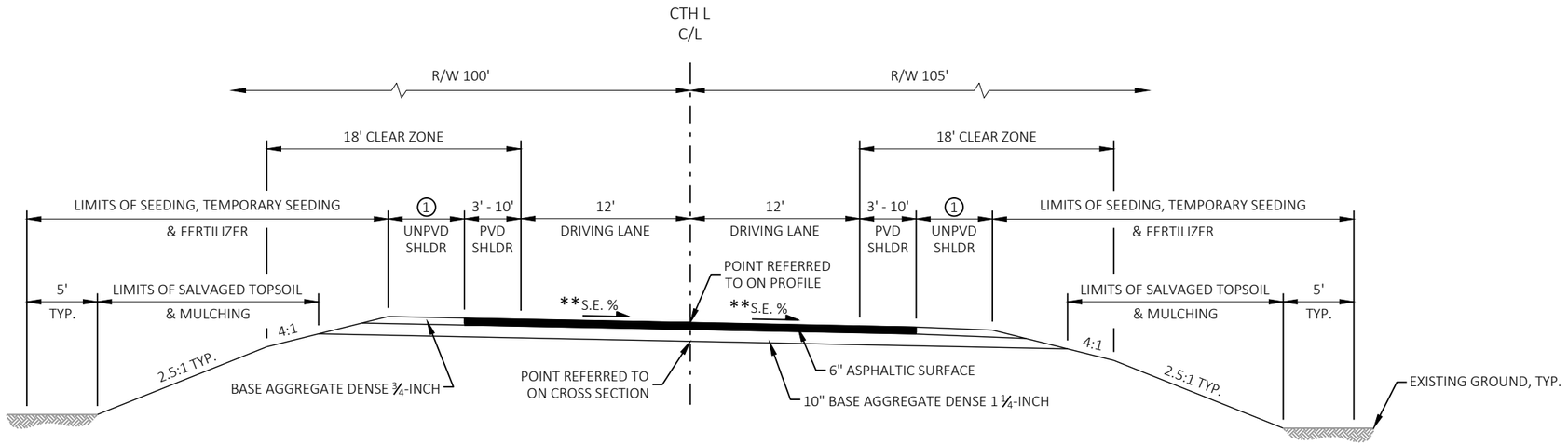
(2) VARIES FROM 4' TO 5' 11" WITH BEAM GUARD GRADING TAPER.

**SEE SUPERELEVATION TABLE.

PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\020301_TS.DWG
LAYOUT NAME - 020302_ts
PLOT DATE : 10/4/2024 12:14 PM PLOT BY : ERICA BAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



FINISHED TYPICAL SUPERELEVATED SECTION

STA. 14+25.00 - STA. 15+25.00

SUPERELEVATION TABLE						
STATION	UNPAVED SHOULDER	PAVED SHOULDER	LANE	LANE	PAVED SHOULDER	UNPAVED SHOULDER
14+25	-2.0%	-2.0%	-2.0%	-2.0%	-2.0%	-4.0%
14+50	-1.0%	-1.0%	-1.0%	-2.0%	-2.0%	-4.0%
15+00	0.6%	0.6%	0.6%	-2.0%	-2.0%	-4.0%
15+25	MATCH EXISTING	MATCH EXISTING	MATCH EXISTING	MATCH EXISTING	MATCH EXISTING	MATCH EXISTING

(1) VARIES FROM 4' TO 5' 11" WITH BEAM GUARD GRADING TAPER.

**SEE SUPERELEVATION TABLE.

PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\020301_TS.DWG
LAYOUT NAME - 020303_ts
PLOT DATE : 10/4/2024 12:14 PM PLOT BY : ERICA BAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

N

MGS EAT
STA. 11+83.77 - STA. 12+36.86

MGS THRIE BEAM TRANSITION
STA. 12+36.86 - STA. 12+76.25

MGS THRIE BEAM TRANSITION
STA. 13+23.75 - STA. 13+63.14

MGS EAT
STA. 13+63.14 - STA. 14+16.23

STA. 12+30.61, 20.24' RT
PERPENDICULAR CONCRETE FLUME REQ'D
4.0' X 9.4'

EXISTING R/W

FRONTIER COMMUNICATIONS

FRONTIER COMMUNICATIONS

WISCONSIN PUBLIC SERVICE

BM 1

END TAPER STA 11+27.96 -21.50' LT

POST #1 STA 11+83.77 -22.00' LT

BEGIN TAPER STA 11+14.40 -15.00' LT

BEGIN TAPER STA 11+78.77 -21.50' LT

POST #5 STA 12+08.82 -21.06' LT

POST #9 STA 12+33.81 -20.11' LT

BEARSKIN CREEK

POST #9 STA 13+66.19 -20.11' LT

POST #5 STA 13+91.18 -21.06' LT

POST #1 STA 14+16.20 -22.00' LT

END TAPER STA 14+86.23 -15.00' LT

GUY

GUY

FN: 3547

FN: 3539

BP: 10+00.00

EP: 15+50.00

FINISHED HINGE POINT

FINISHED EDGE OF ASPHALT

STRUCTURE B-43-0068

SLOPE INTERCEPT

EXISTING SHOULDER HINGE POINT, TYP.

EXISTING EDGE OF ASPHALT, TYP.

CP 4

15:1

10:1

2:1

11+00

12+00

13+00

CTH L

14+00

15+00

CP 2

CP 3

BEGIN PROJECT
STA 10+40
SAW CUT REQ'D

END PROJECT
STA 15+25
SAW CUT REQ'D

CP 1

10:1

15:1

1.5:1

FINISHED EDGE OF ASPHALT

FINISHED HINGE POINT

WISCONSIN PUBLIC SERVICE

BEGIN TAPER STA 11+14 15.00' RT

POST #1 STA 11+83.77 22.00' RT

POST #5 STA 12+08.82 21.06' RT

POST #9 STA 12+33.81 20.11' RT

POST #9 STA 13+66.19 20.11' RT

POST #5 STA 13+91.18 21.06' RT

POST #1 STA 14+16.20 22.00' RT

END TAPER STA 14+26.66 20.96' RT

BM 2

BEGIN TAPER STA 15+16.39 20.96' RT

END TAPER STA 15+25 15.00' RT

EXISTING R/W

STA. 12+30.61, 20.24' RT
PERPENDICULAR CONCRETE FLUME REQ'D
4.0' X 12.8'

MGS EAT
STA. 11+83.77 - STA. 12+36.86

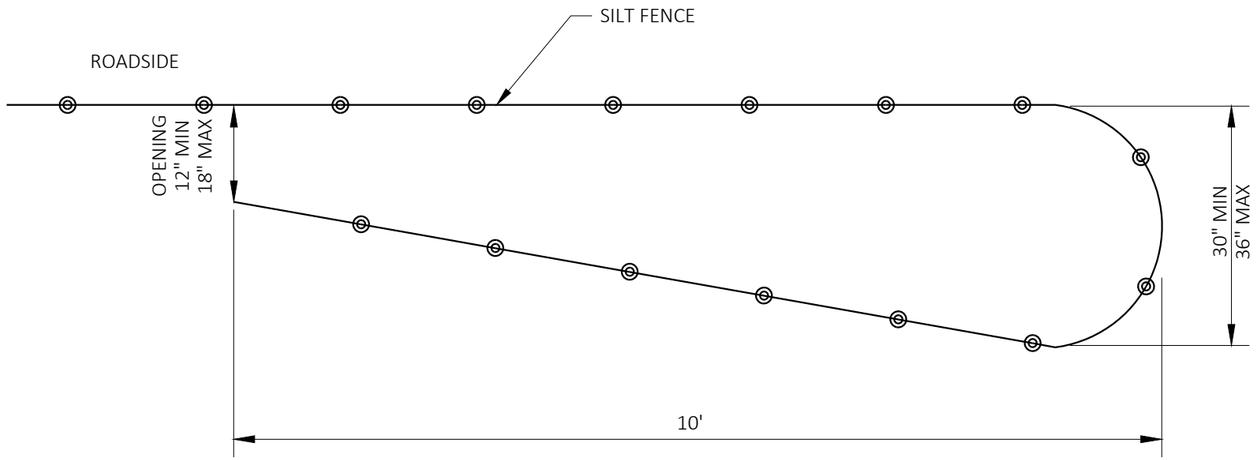
MGS THRIE BEAM TRANSITION
STA. 12+36.86 - STA. 12+76.25

MGS THRIE BEAM TRANSITION
STA. 13+23.75 - STA. 13+63.14

MGS EAT
STA. 13+63.14 - STA. 14+16.23

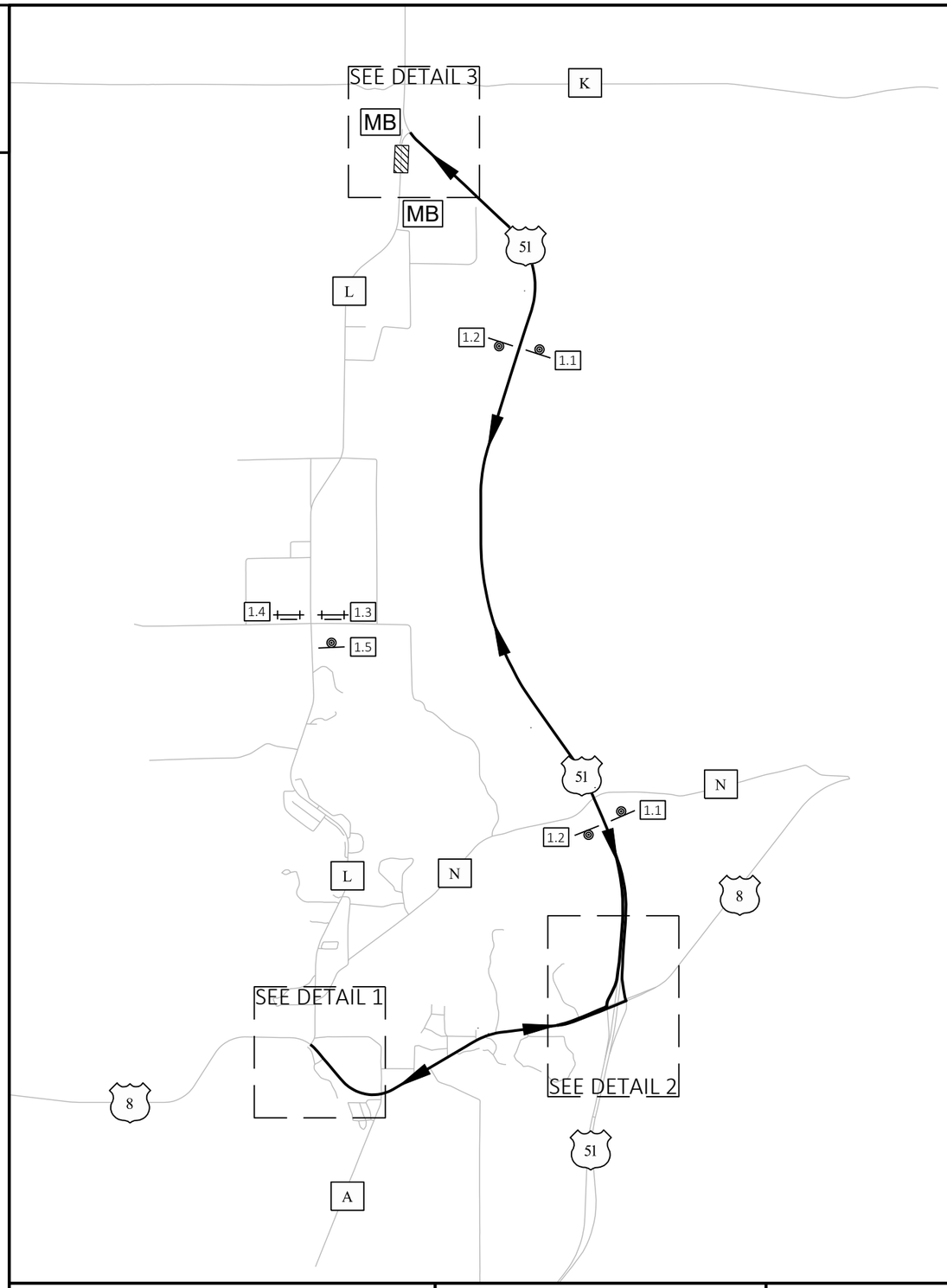
PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	BEAM GUARD DETAILS	SHEET 6	E

2



NOTES:
SILT FENCE POSTS SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS.

ANIMAL EXCLUSION FENCING TURN-AROUND



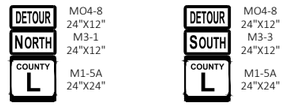
N

LEGEND

- WORK ZONE
- DETOUR ROUTE
- X — SIGN NUMBER
- PROPOSED SIGN MOUNTED ON TEMPORARY POSTS
- BARRICADE TYPE III WITH SIGN
- MB — PCMS BOARDS

NOTES

- ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND WISDOT SDD 15C2 "BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION".
- EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS, UNLESS OTHERWISE PROVIDED IN THE PLAN.
- 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'.
- USE SIGN SIZE 3 ON FREEWAY, USE SIGN SIZE 2 ON LOCAL HIGHWAYS AND RAMPS.
- IF THERE ARE EXISTING ROUTE MARKERS THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR SIGNS TO CORRESPOND WITH EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE.



MO4-8 24"X12"
M3-1 24"X12"
M1-5A 24"X24"

1.1

MO4-8 24"X12"
M3-3 24"X12"
M1-5A 24"X24"

1.2

R11-3 60"X30"

1.3

R11-3C 60"X24"

1.4

W20-3A

1.5

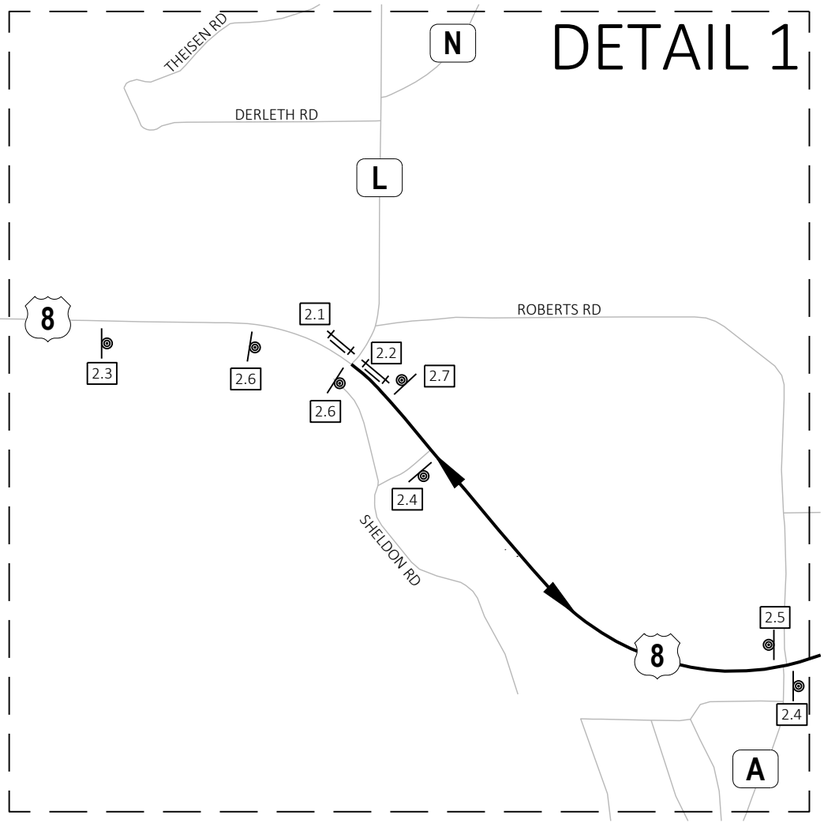
PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	DETOUR ROUTE	SHEET 8	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\027001_DT.DWG
LAYOUT NAME - 027001_dt
PLOT DATE : 10/7/2024 1:46 PM PLOT BY : ERICA BAUER PLOT NAME : PLOT SCALE : 1 IN:1 MI
WISDOT/CADDS SHEET 42

2

N

DETAIL 1

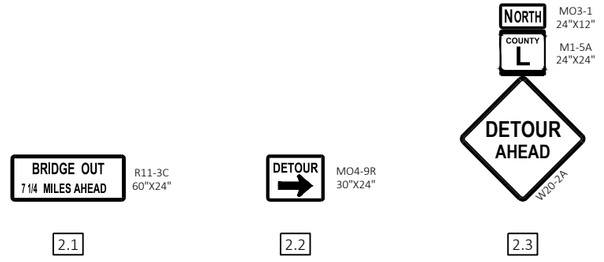


LEGEND

- WORK ZONE
- DETOUR ROUTE
- X — SIGN NUMBER
- PROPOSED SIGN MOUNTED ON TEMPORARY POSTS
- BARRICADE TYPE III WITH SIGN
- COVER EXISTING SIGNS

NOTES

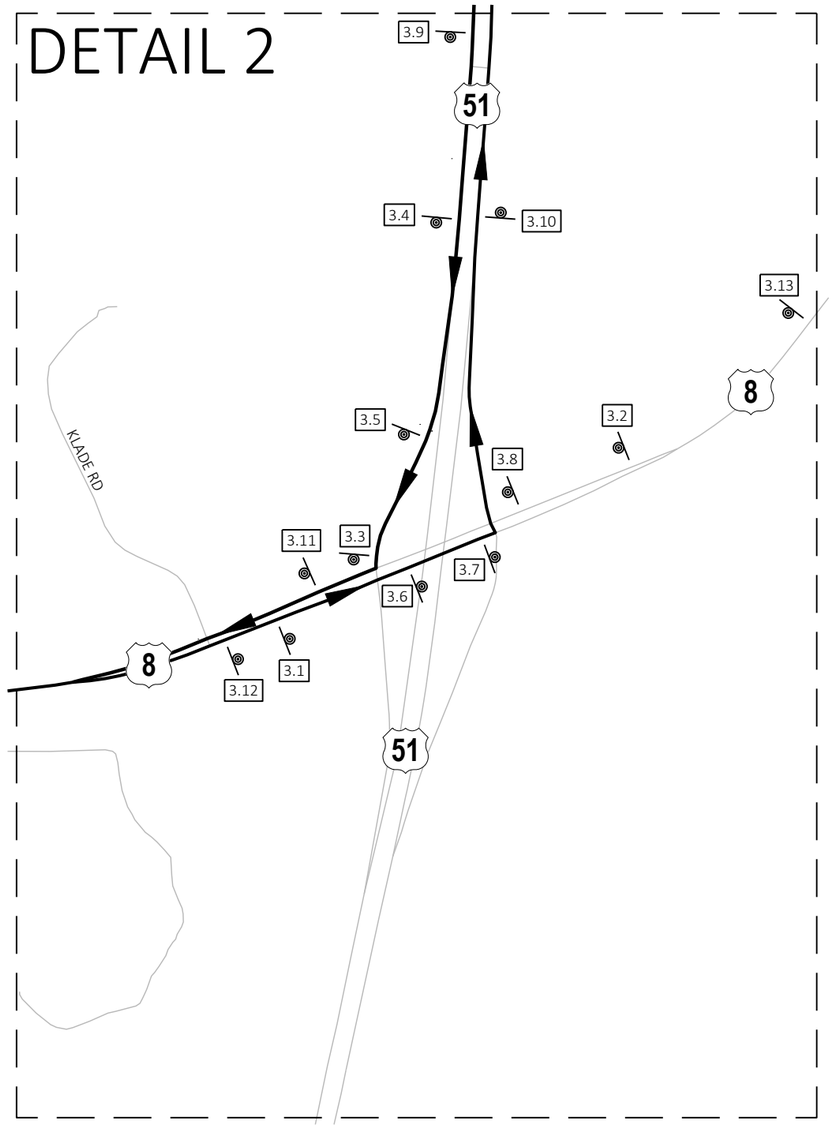
- ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND WISDOT SDD 15C2 "BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION".
- EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS, UNLESS OTHERWISE PROVIDED IN THE PLAN.
- 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'.
- USE SIGN SIZE 3 ON FREEWAY, USE SIGN SIZE 2 ON LOCAL HIGHWAYS AND RAMPS.
- IF THERE ARE EXISTING ROUTE MARKERS THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR SIGNS TO CORRESPOND WITH EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE.



PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	DETOUR ROUTE	SHEET 9	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\027001_DT.DWG
LAYOUT NAME - 027002_dt
PLOT DATE : 10/7/2024 1:46 PM
PLOT BY : ERICA BAUER
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

DETAIL 2

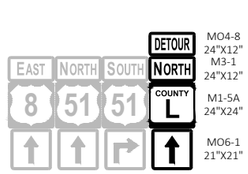


LEGEND

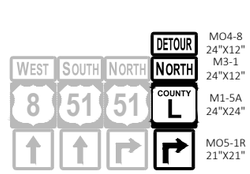
- WORK ZONE
- DETOUR ROUTE
- [X] SIGN NUMBER
- PROPOSED SIGN MOUNTED ON TEMPORARY POSTS
- BARRICADE TYPE III WITH SIGN

NOTES

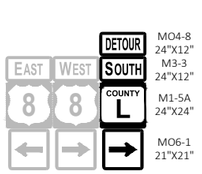
- ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND WISDOT SDD 15C2 "BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION".
- EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS, UNLESS OTHERWISE PROVIDED IN THE PLAN.
- 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'.
- USE SIGN SIZE 3 ON FREEWAY, USE SIGN SIZE 2 ON LOCAL HIGHWAYS AND RAMPS.
- IF THERE ARE EXISTING ROUTE MARKERS THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR SIGNS TO CORRESPOND WITH EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE.



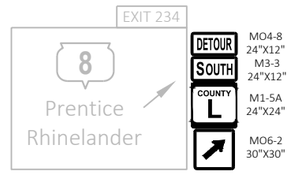
3.1



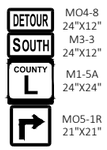
3.2



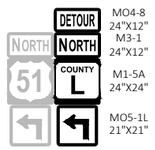
3.3



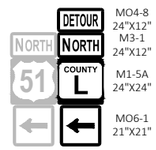
3.4



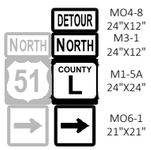
3.5



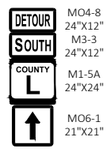
3.6



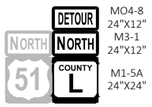
3.7



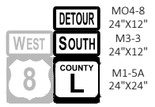
3.8



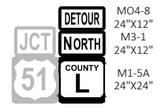
3.9



3.10



3.11



3.12

3.13

PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	DETOUR ROUTE	SHEET 10	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\027001_DT.DWG
LAYOUT NAME - 027003_dt
PLOT DATE : 10/7/2024 1:46 PM PLOT BY : ERICA BAUER PLOT NAME : PLOT SCALE : 1 IN:1000 FT

2

N

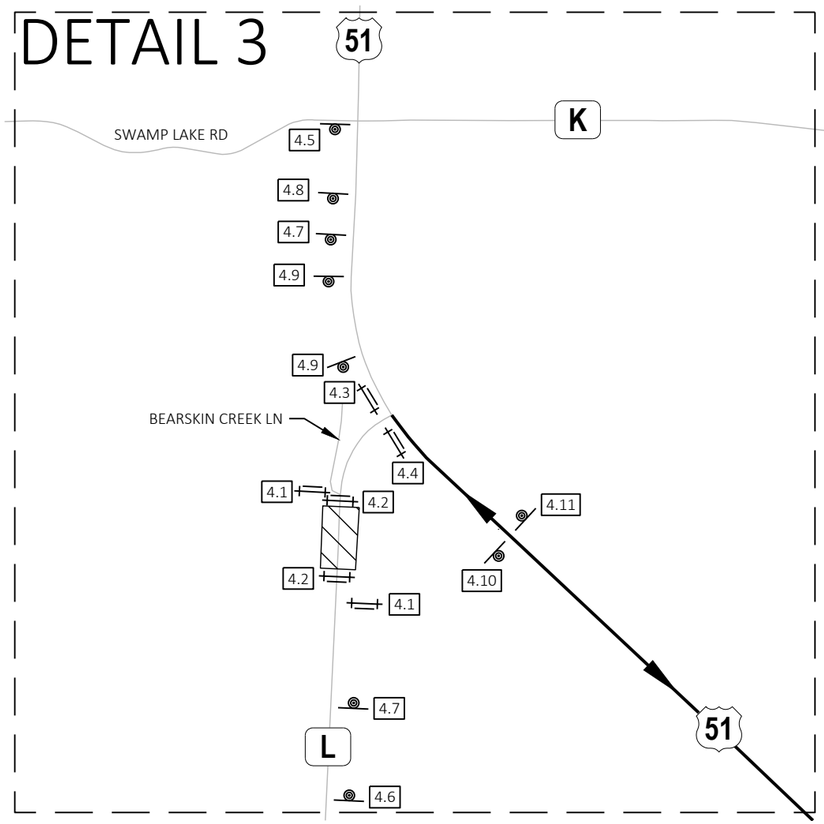
LEGEND

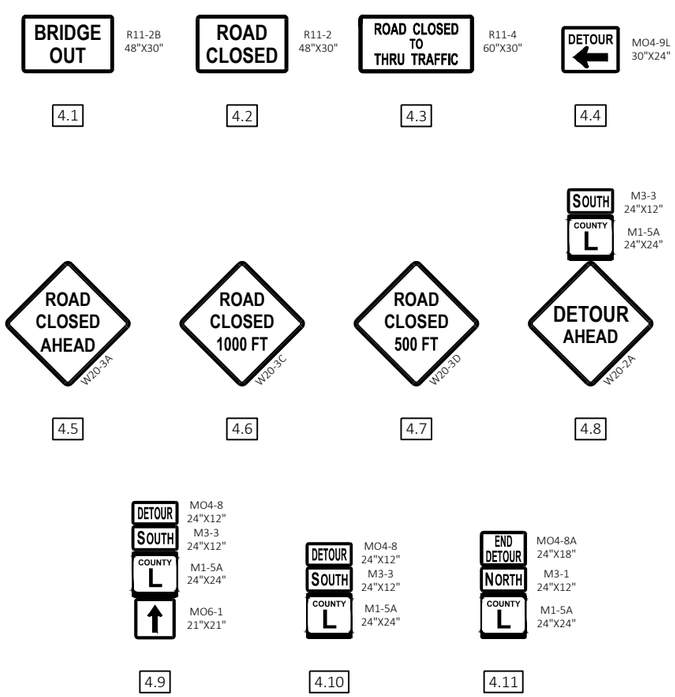
- WORK ZONE
- DETOUR ROUTE
- X — SIGN NUMBER
- PROPOSED SIGN MOUNTED ON TEMPORARY POSTS
- BARRICADE TYPE III WITH SIGN

NOTES

- ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND WISDOT SDD 15C2 "BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION".
- EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS, UNLESS OTHERWISE PROVIDED IN THE PLAN.
- 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'.
- USE SIGN SIZE 3 ON FREEWAY, USE SIGN SIZE 2 ON LOCAL HIGHWAYS AND RAMPS.
- IF THERE ARE EXISTING ROUTE MARKERS THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR SIGNS TO CORRESPOND WITH EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE.

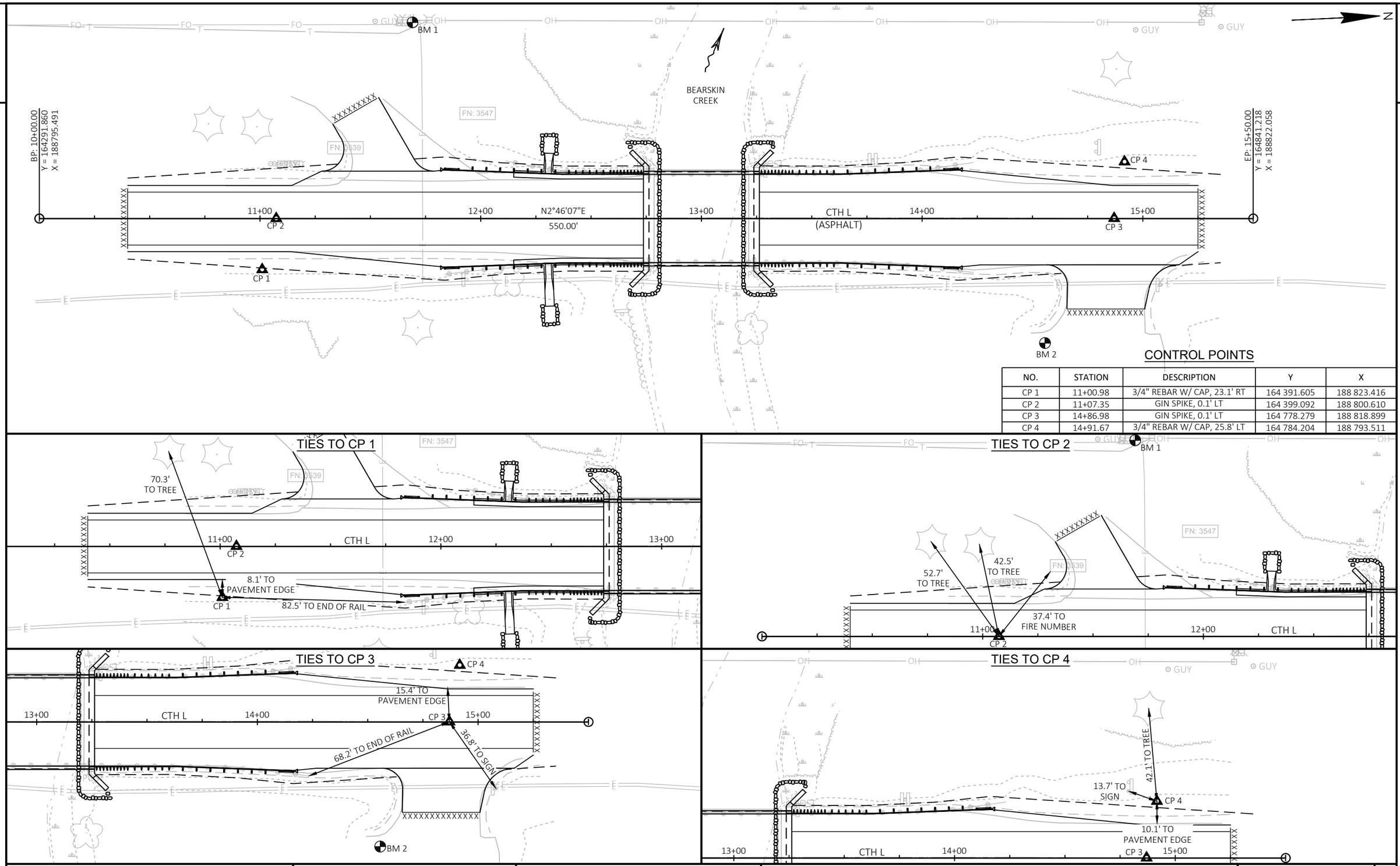
DETAIL 3





PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	DETOUR ROUTE	SHEET 11	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\027001_DT.DWG
LAYOUT NAME - 027004_dt
PLOT DATE : 10/7/2024 1:46 PM PLOT BY : ERICA BAUER PLOT NAME : PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42



CONTROL POINTS

NO.	STATION	DESCRIPTION	Y	X
CP 1	11+00.98	3/4" REBAR W/ CAP, 23.1' RT	164 391.605	188 823.416
CP 2	11+07.35	GIN SPIKE, 0.1' LT	164 399.092	188 800.610
CP 3	14+86.98	GIN SPIKE, 0.1' LT	164 778.279	188 818.899
CP 4	14+91.67	3/4" REBAR W/ CAP, 25.8' LT	164 784.204	188 793.511

PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	ALIGNMENT DETAILS AND CONTROL POINT TIES	SHEET 12	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\027201_AD.DWG
LAYOUT NAME - 027201_ad

PLOT DATE : 10/29/2024 10:59 AM PLOT BY : ERICA BAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

3

GRUBBING

STATION	LOCATION	201.0220 ID
12+12	SOUTH APPROACH, RT	24
	TOTAL	24

REMOVING ASPHALTIC SURFACE

STATION	LOCATION	204.0110 SY
11+43	DRIVEWAY, LT	157
14+83	DRIVEWAY, RT	88
	TOTAL	245

REMOVING GUARDRAIL

STATION	TO	STATION	LOCATION	204.0165 LF
11+83	-	12+80	SOUTH APPROACH, RT	97
12+11	-	12+80	SOUTH APPROACH, LT	69
13+20	-	14+24	NORTH APPROACH, LT	104
13+20	-	14+24	NORTH APPROACH, RT	104
			TOTAL	374

3

DIVISION	FROM/TO STATION	205.0100 COMMON EXCAVATION (CY) (1) CUT (2)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE
DIVISION 1								
SOUTH APPROACH	10+40.00/12+73.75	313	151	162	50	63	100	92
DIVISION 1 SUBTOTAL		313	151	162	50	63	100	100
DIVISION 2								
NORTH APPROACH	13+26.25/15+35.22	255	154	101	54	68	34	34
DIVISION 2 SUBTOTAL		255	154	101	54	68	34	34
GRAND TOTAL		568	305	263	104	130	133	133

NOTES:
(1) EXCAVATION COMMON IS THE CUT. ITEM NUMBER 205.0100
(2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) SALVAGED/UNUSABLE PAVEMENT MATERIAL INCLUDES EXISTING ASPHALT PAVEMENT.
(4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
(6) 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.
(7) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

BASE AGGREGATE DENSE

STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
10+40	-	12+74	SOUTH APPROACH	60	720	8.3
13+26	-	15+25	NORTH APPROACH	60	640	7.3
			DRIVEWAYS	---	60	0.6
			TOTAL	120	1,420	16.2

ASPHALT ITEMS

STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON
10+40	-	12+74	SOUTH APPROACH	68	324
13+26	-	15+25	NORTH APPROACH	61	293
			TOTAL	129	617

ASPHALTIC SURFACE DRIVEWAYS AND FILED ENTRANCES

STATION	LOCATION	465.0120 TON
11+43	DRIVEWAY, LT	16
14+83	DRIVEWAY, RT	15
	TOTAL	31

CURB AND GUTTER

STATION	TO	STATION	LOCATION	601.0588 4-INCH SLOPED 36-INCH TYPE TBT LF
12+15	-	12+74	SOUTH APPROACH, LT	59
12+15	-	12+74	SOUTH APPROACH, RT	59
			TOTAL	118

CONCRETE SURFACE DRAINS

STATION	TO	STATION	LOCATION	602.3010 CY
12+28	-	12+33	SOUTH APPROACH, LT	0.7
12+28	-	12+33	SOUTH APPROACH, RT	1.5
			TOTAL	2.2

RIPRAP AND GEOTEXTILE

STATION	TO	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
12+28	-	12+33	FLUME, LT	3	6
12+28	-	12+33	FLUME, RT	3	6
			TOTAL	6	12 *

* ADDITIONAL QUANTITIES ELSEWHERE IN PLANS. SEE STRUCTURE PLANS.

MGS GUARDRAIL

STATION	TO	STATION	LOCATION	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
11+84	-	12+76	SOUTH APPROACH, LT	39.40	1
11+84	-	12+76	SOUTH APPROACH, RT	39.40	1
13+24	-	14+16	NORTH APPROACH, LT	39.40	1
13+24	-	14+16	NORTH APPROACH, RT	39.40	1
			TOTAL	157.60	4

NOTE
ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	MISCELLANEOUS QUANTITIES	SHEET 13	E

3

FINISHING ITEMS

STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
10+40	-	12+73	SOUTH APPROACH, LT	100	100	0.20	4	6	4.9
10+40	-	12+73	SOUTH APPROACH, RT	225	225	0.40	9	14	10.9
13+27	-	15+25	NORTH APPROACH, LT	59	59	0.20	6	8	6.6
13+27	-	15+25	NORTH APPROACH, RT	149	149	0.30	7	10	7.7
			UNDISTRIBUTED	137	137	0.30	9	12	7.4
			TOTAL	670	670	1.40	35	50	37.5

SILT FENCE

STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
10+36	-	12+79	SOUTH APPROACH, LT	275	548
10+37	-	12+75	SOUTH APPROACH, RT	270	532
13+08	-	15+36	NORTH APPROACH, RT	230	456
13+20	-	15+39	NORTH APPROACH, LT	245	488
			UNDISTRIBUTED	255	---
			TOTAL	1,275	2,024

3

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT	3	2
TOTAL	3	2

TURBIDITY BARRIER

LOCATION	628.6005 SY
SOUTH APPROACH	70
NORTH APPROACH	53
UNDISTRIBUTED	32
TOTAL	155

PERMANENT SIGNING

STATION	LOCATION	SIGN NUMBER	SIGN CODE	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
11+94	MAINLINE, RT	1R	W3-1	---	---	---	---	1	1	STOP AHEAD
11+94	MAINLINE, RT	1	W3-1	---	1	6.25	---	---	---	STOP AHEAD
12+73	MAINLINE, RT	2	W5-52R	1	---	3	---	---	---	BRIDGE HASH MARKS
12+73	MAINLINE, LT	3	W5-52L	1	---	3	---	---	---	BRIDGE HASH MARKS
12+73	MAINLINE, LT	1M	---	---	---	---	2	---	---	FILL SITE & NOKOMIS FIRE DEPT WATER POINT
12+78	MAINLINE, RT	2R	W5-52R	---	---	---	---	1	1	BRIDGE HASH MARKS
12+78	MAINLINE, LT	3R	W5-52L	---	---	---	---	1	1	BRIDGE HASH MARKS
13+23	MAINLINE, RT	4R	W5-52L	---	---	---	---	1	1	BRIDGE HASH MARKS
13+27	MAINLINE, RT	4	W5-52L	1	---	3	---	---	---	BRIDGE HASH MARKS
13+27	MAINLINE, LT	5	W5-52R	1	---	3	---	---	---	BRIDGE HASH MARKS
13+28	MAINLINE, LT	5R	W5-52R	---	---	---	---	1	1	BRIDGE HASH MARKS
13+78	MAINLINE, LT	6R	W3-1	---	---	---	---	1	---	STOP AHEAD
13+78	MAINLINE, LT	6	W3-1	---	1	6.25	---	---	---	STOP AHEAD
13+78	MAINLINE, LT	2M	---	---	---	---	1	---	---	WELCOME TO NOKOMIS
			TOTAL	4	2	24.50	3	6	5	

TRAFFIC CONTROL

LOCATION	DURATION DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (NO.)	(DAY)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (NO.)	(DAY)	643.0900 TRAFFIC CONTROL SIGNS (NO.)	(DAY)	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS (NO.)	(DAY)	643.5000 TRAFFIC CONTROL EACH
CLOSURE	82	19	1,558	30	2,460	13	1,066	---	---	---	---
DETOUR	82	1	82	2	164	101	8,282	1	---	---	---
UNDISTRIBUTED	---	5	410	8	656	28	2,296	1	---	---	---
PROJECT	7	---	---	---	---	---	---	---	2	14	0.5
TOTAL	---	25	2,050	40	3,280	142	11,644	2	2	14	0.5

PLACE TRAFFIC CONTROL IN ACCORDANCE WITH SDD 15C2 "BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION."
PLACEMENT SUBJECT TO ENGINEER APPROVAL.

MARKING LINE EPOXY 4-INCH

STATION	TO	STATION	LOCATION	646.1005 LF	REMARKS
10+40	-	15+25	LANE EDGE	485	WHITE EDGELINE
10+40	-	15+25	LANE EDGE	485	WHITE EDGELINE
10+40	-	15+25	CENTERLINE	970	DOUBLE YELLOW
			TOTAL	1940	

CONSTRUCTION STAKING

LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.6501.01 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. B-43-0068 EACH	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 9876-00-70 EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF
SOUTH APPROACH	234	234	---	---	234	118
NORTH APPROACH	199	199	---	---	199	---
PROJECT	---	---	1	1	---	---
TOTAL	433	433	1**	1	433	118

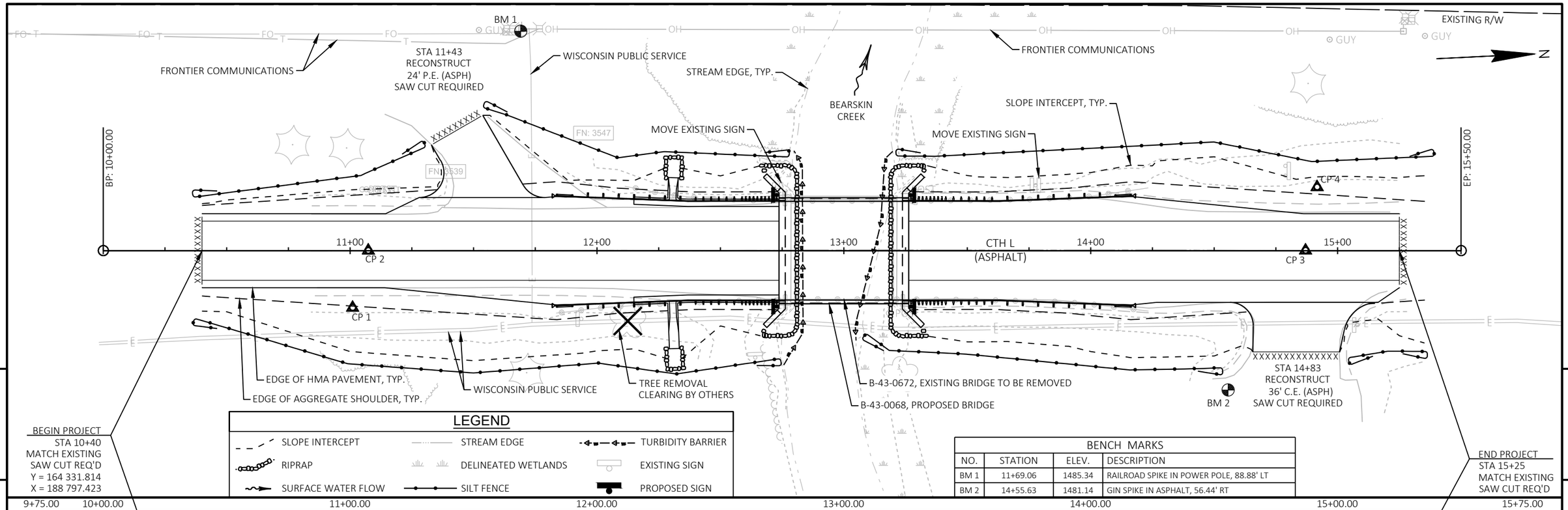
** CATEGORY 0020

SAWING ASPHALT

STATION	LOCATION	690.0150 LF
10+40	SOUTH APPROACH	30
11+43	DRIVEWAY, LT	24
14+83	DRIVEWAY, RT	35
15+25	NORTH APPROACH	30
	TOTAL	119

NOTE
ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	MISCELLANEOUS QUANTITIES	SHEET 14	E

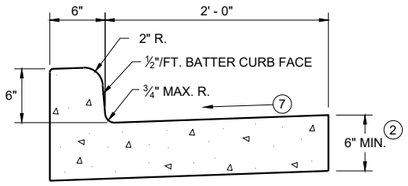


PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	PLAN AND PROFILE	SHEET 15	E

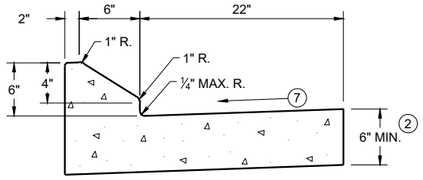
FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\050101_PP.DWG
LAYOUT NAME - 050101_pp
PLOT DATE : 11/1/2024 10:28 AM
PLOT BY : ERIK MEYER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

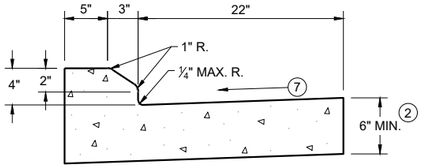
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-08A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
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)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C06-12	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS



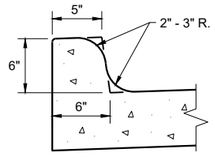
TYPES A (1) & D



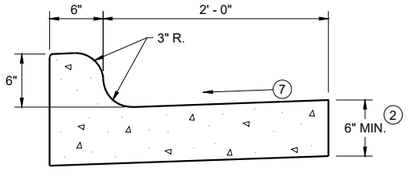
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

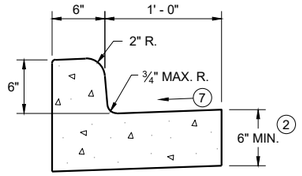


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



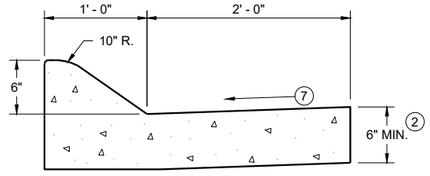
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

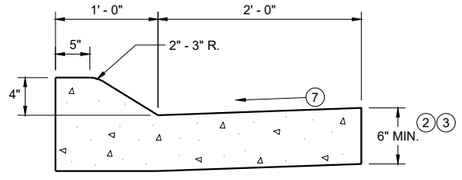


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

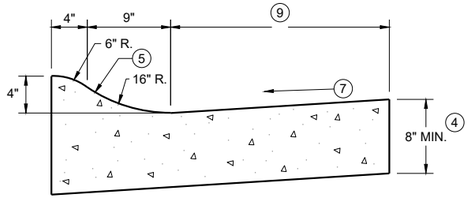


6" SLOPED CURB TYPES A (1) & D



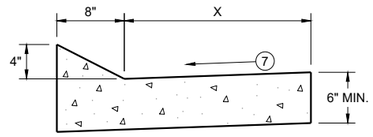
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"

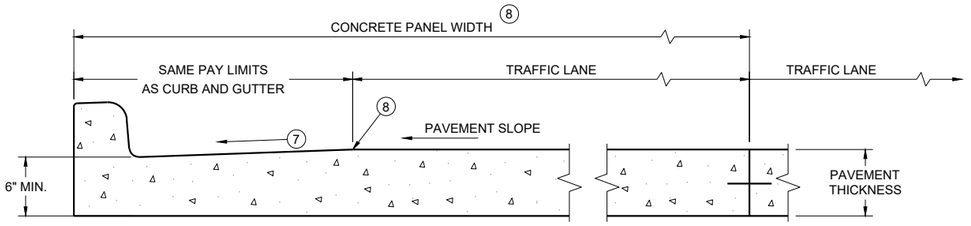


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

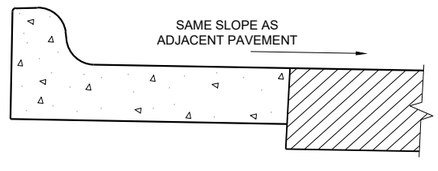
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

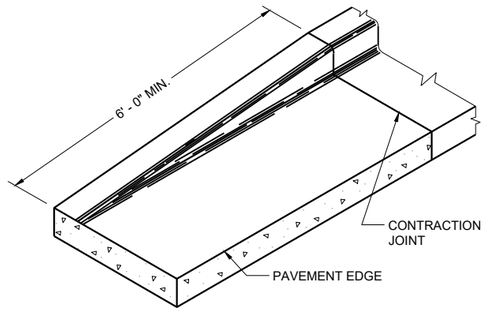
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(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

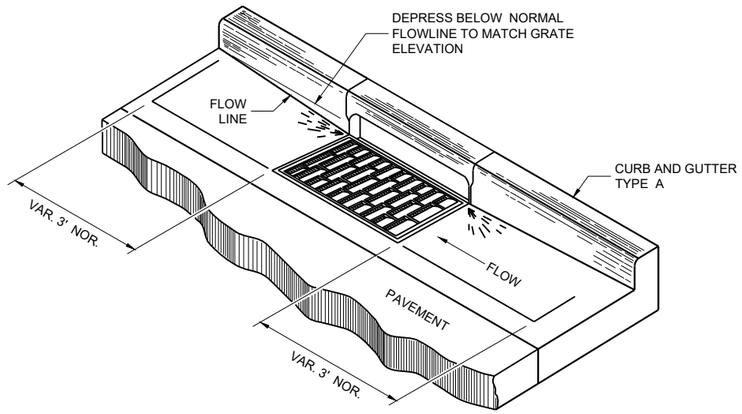
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

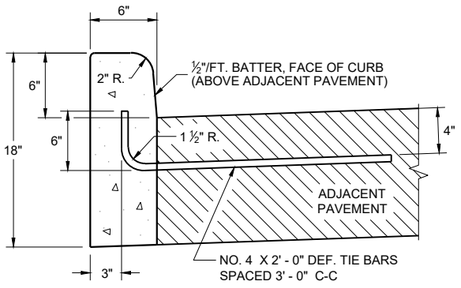
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

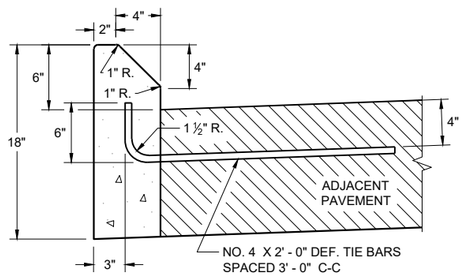
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

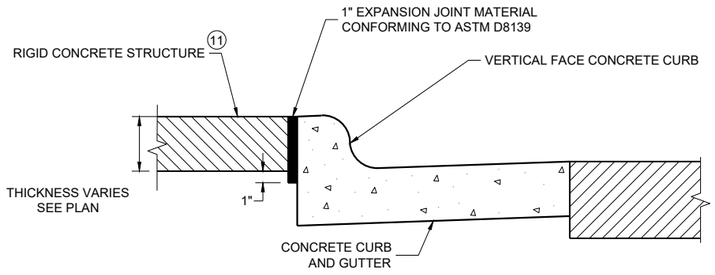


TYPES A (1) & D

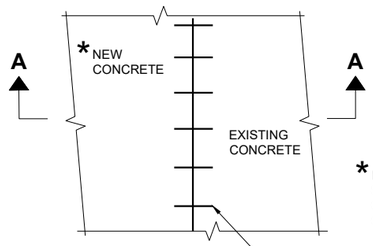


TYPES G (1) & J

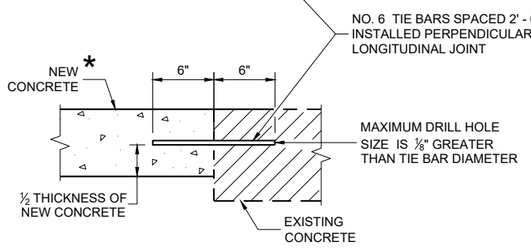
CONCRETE CURB



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)

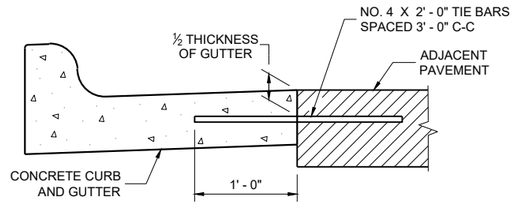


PLAN VIEW

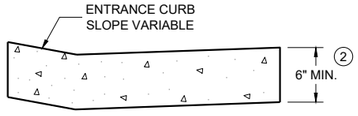


SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

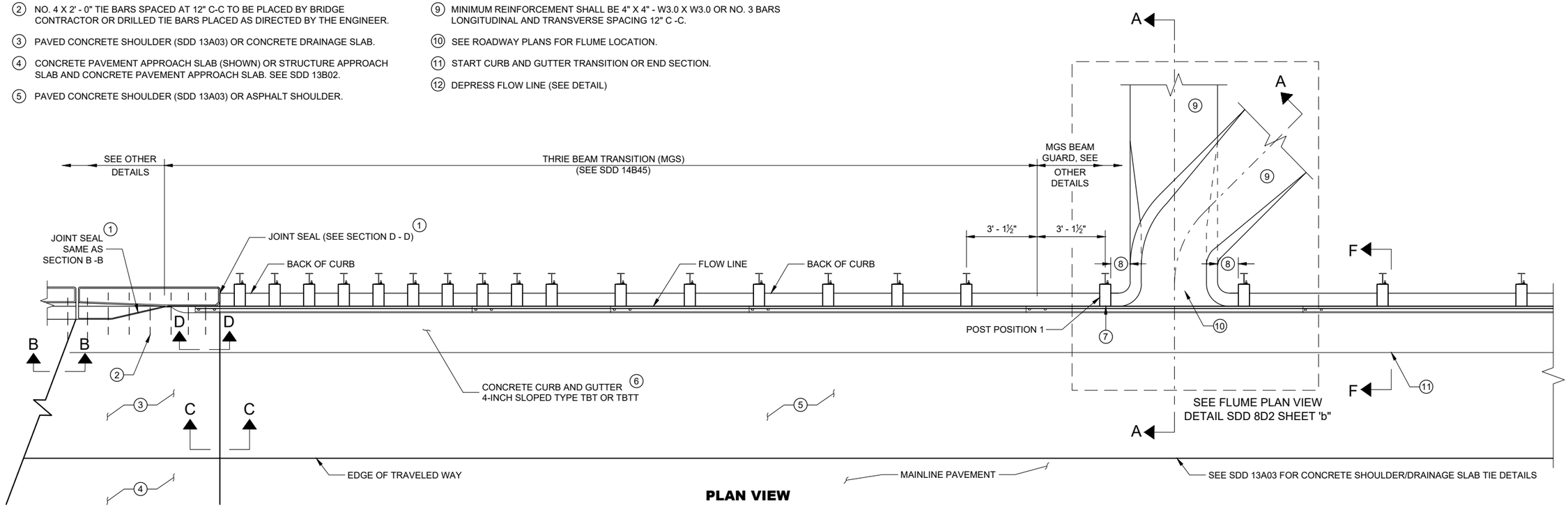
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

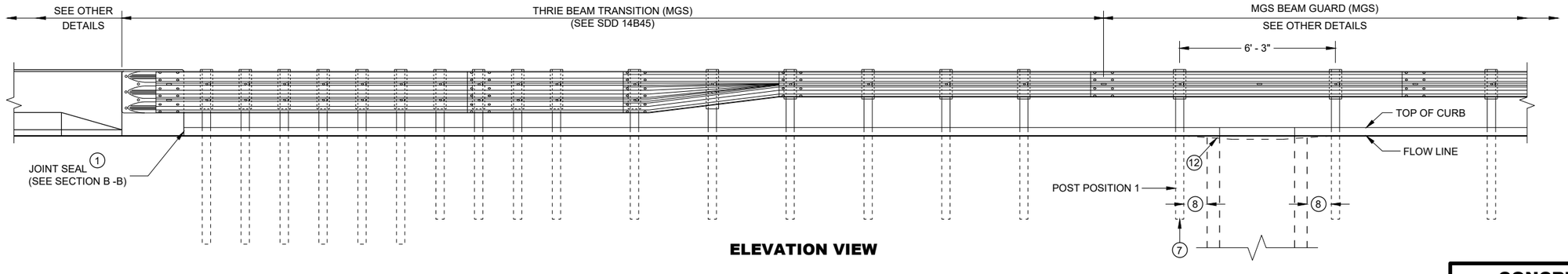
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



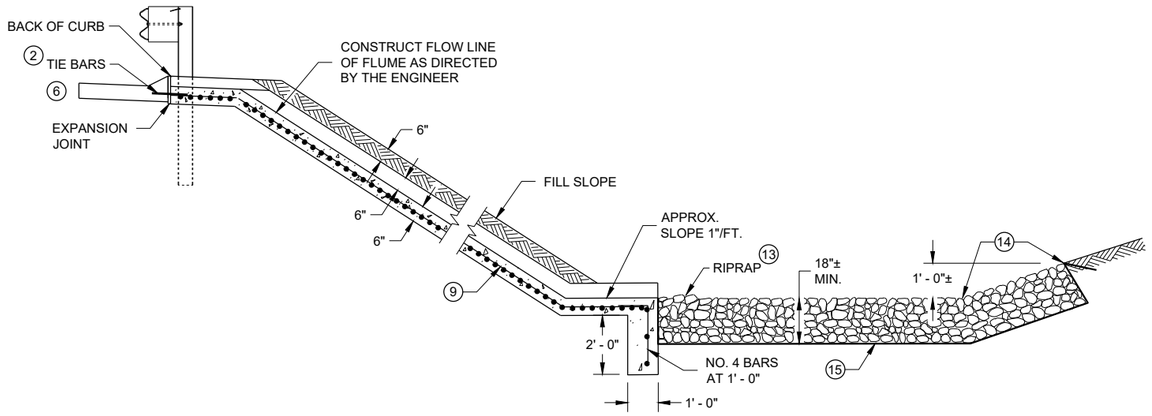
ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

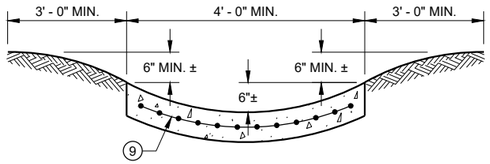
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

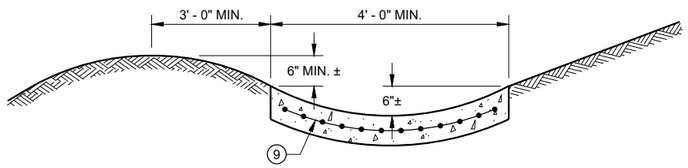
SDD 08D02 - 08a



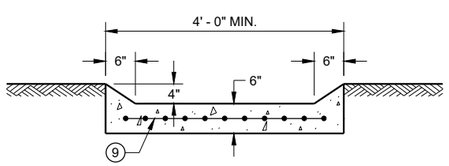
SECTION A - A



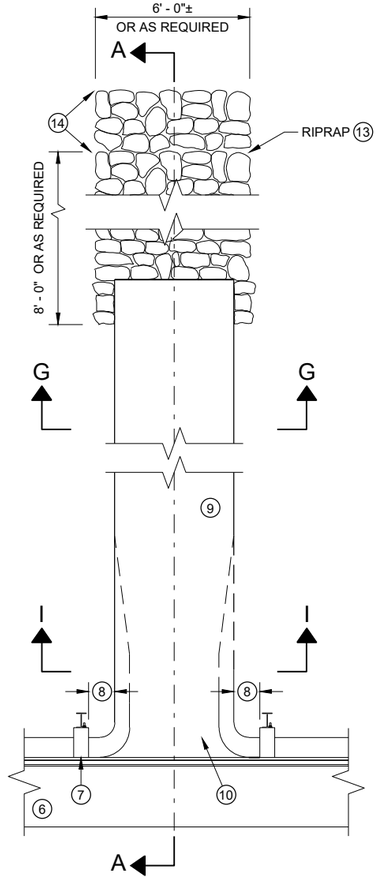
SECTION G - G



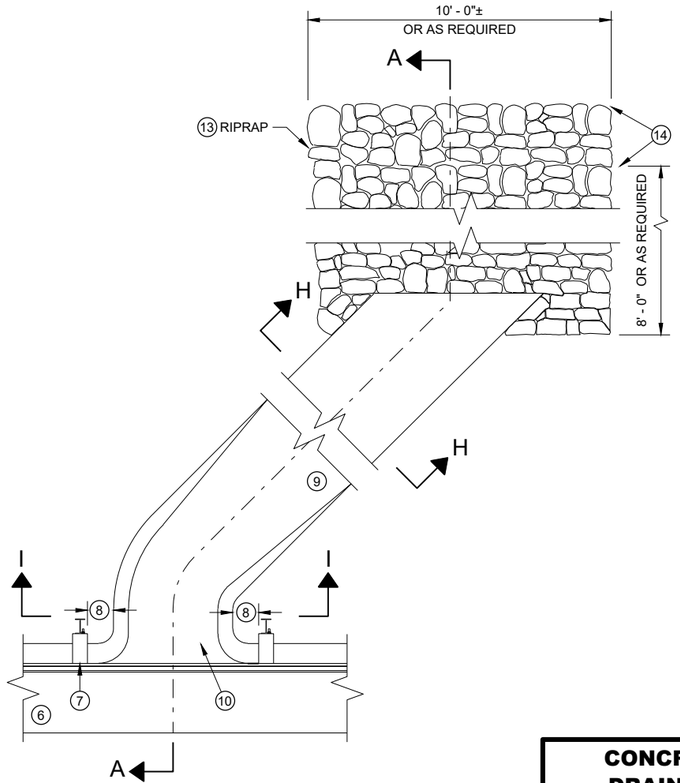
SECTION H - H



SECTION I - I



PLAN VIEW PERPENDICULAR FLUME



PLAN VIEW SKEWED FLUME

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.

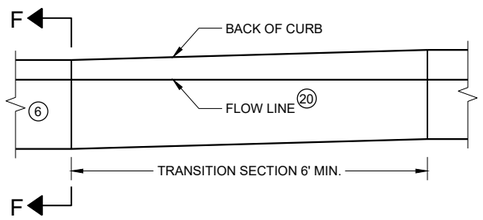
ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

1. USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
2. NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
3. PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.
4. CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.
5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)
8. CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.
9. MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.
10. SEE ROADWAY PLANS FOR FLUME LOCATION.
11. START CURB AND GUTTER TRANSITION OR END SECTION.
12. DEPRESS FLOW LINE (SEE DETAIL)
13. MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.
14. LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH AS REQUIRED.
15. GEOTEXTILE TYPE HR.

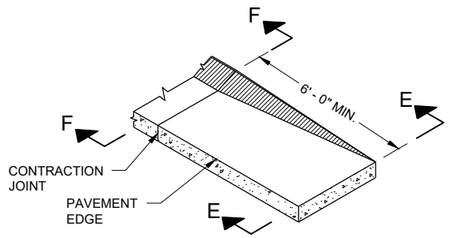
CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

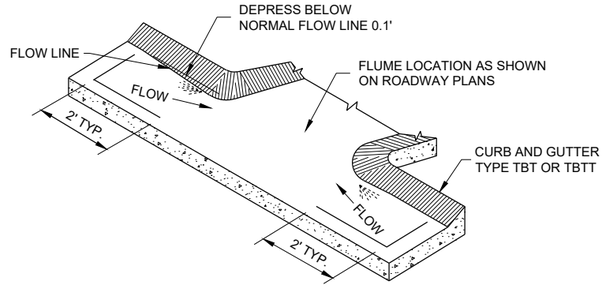
6
SDD 08D02 - 08b



CURB AND GUTTER TRANSITION SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT



CURB AND GUTTER END SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT



CURB AND GUTTER FLOW LINE DEPRESSION
AT FLUMES CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE TBT OR TBTT

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.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(14) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(15) GEOTEXTILE TYPE HR.

(16) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

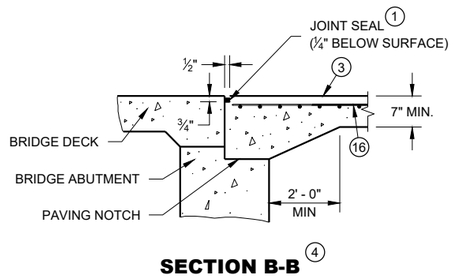
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(18) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

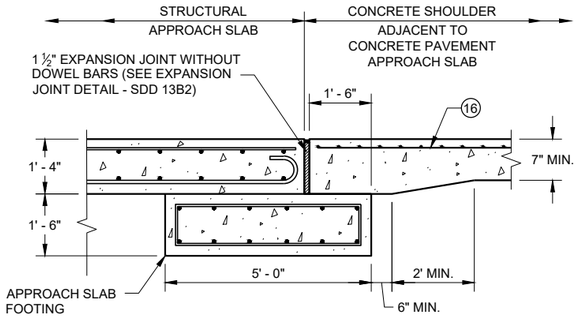
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

(20) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

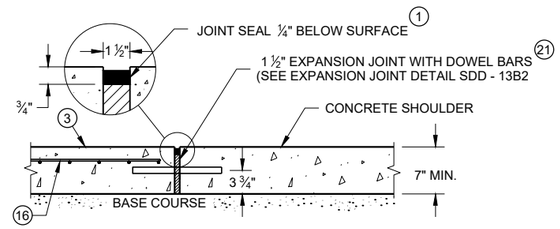
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



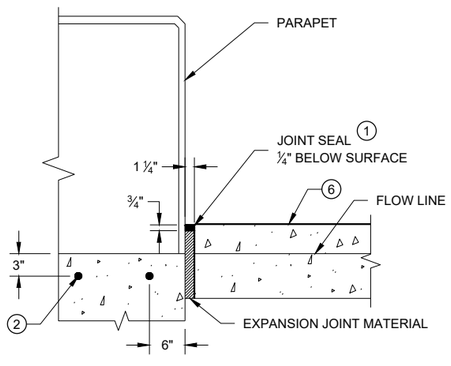
SECTION B-B (4)



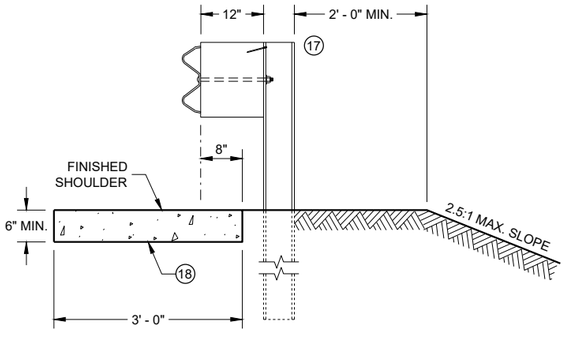
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



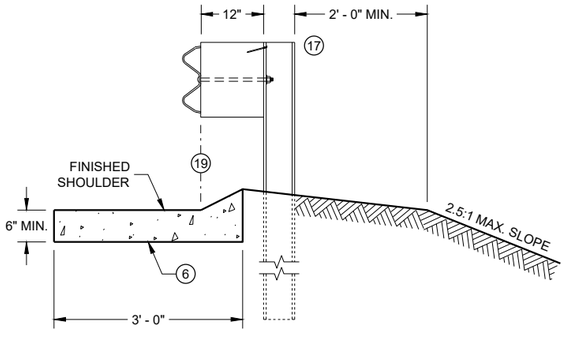
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

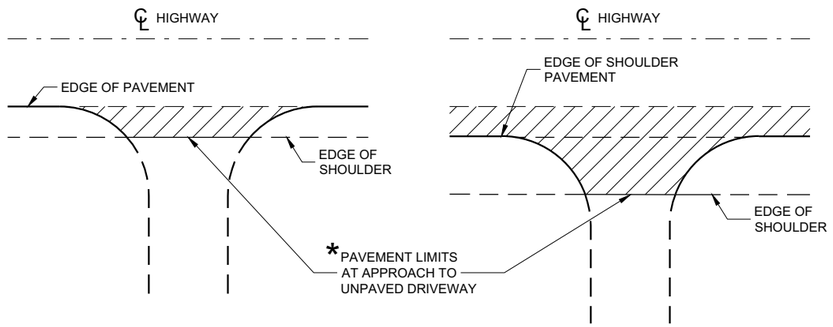
CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

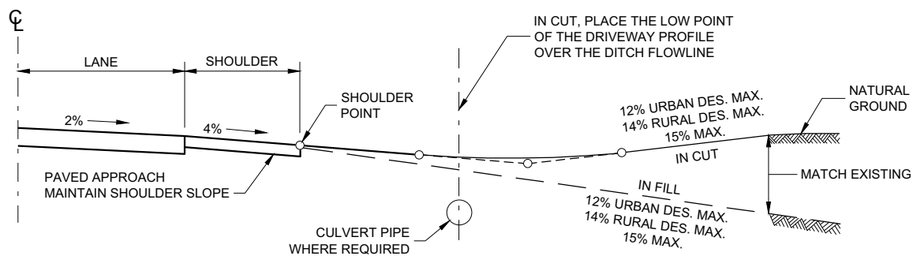
6
SDD 08D02 - 08c



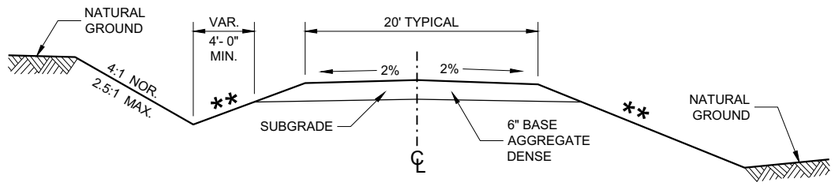
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

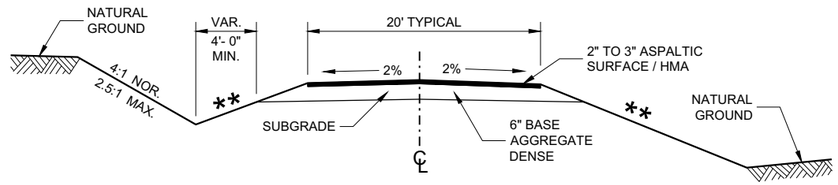


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

6

SDD 08D21 - 01

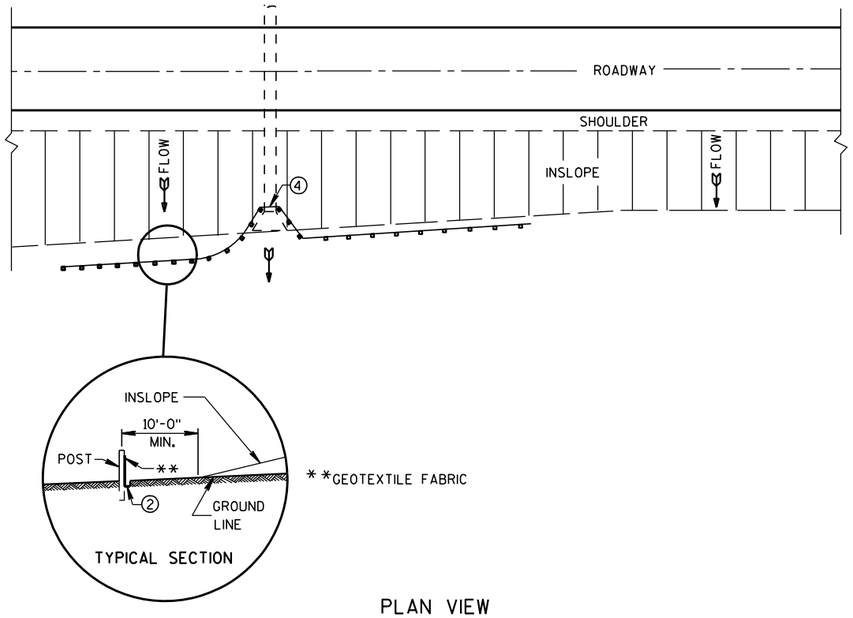
SDD 08D21 - 01

DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

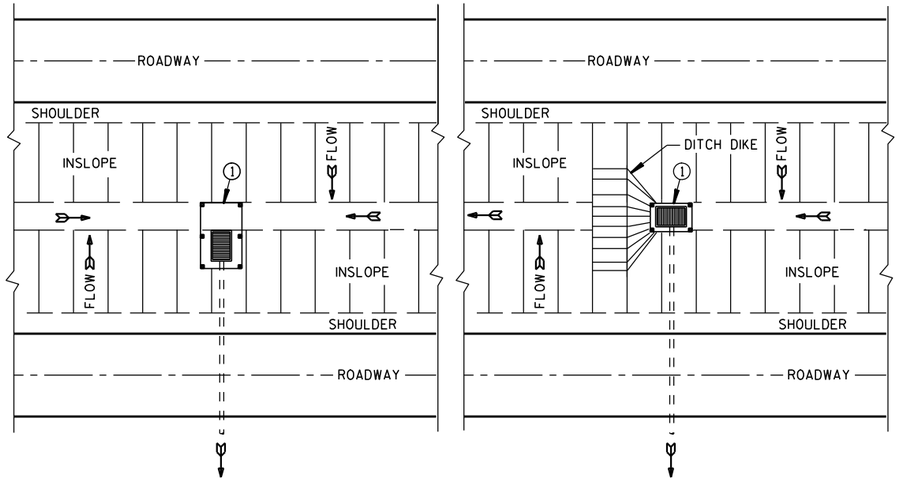
APPROVED
December 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

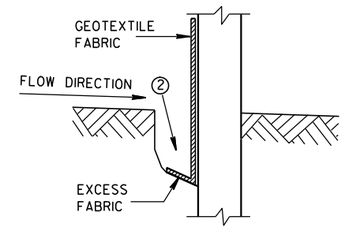
(1) HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

(2) FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

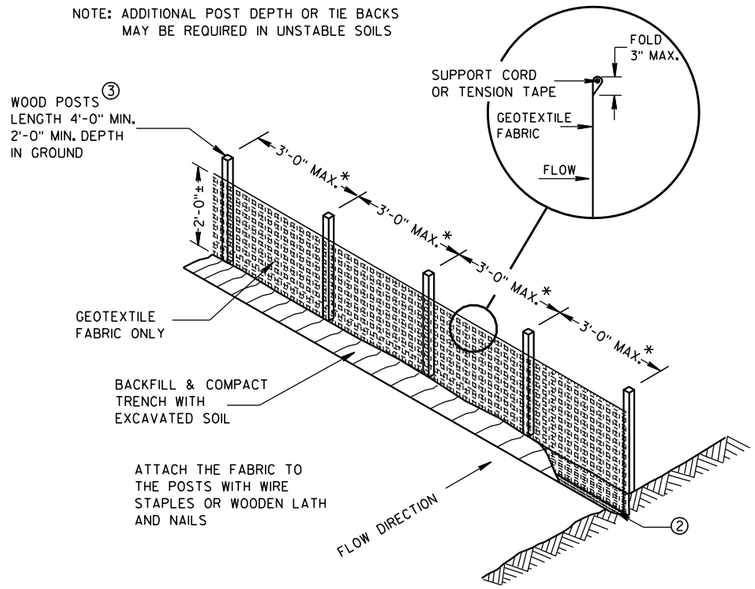
(3) WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

(4) SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

(5) CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

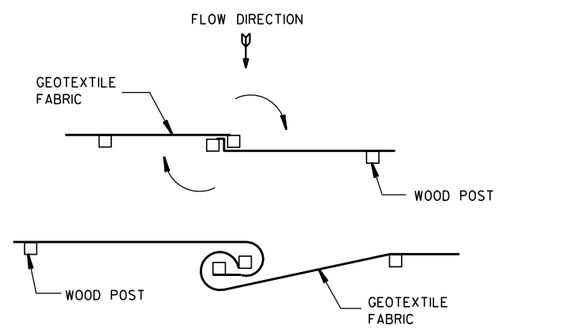


TRENCH DETAIL

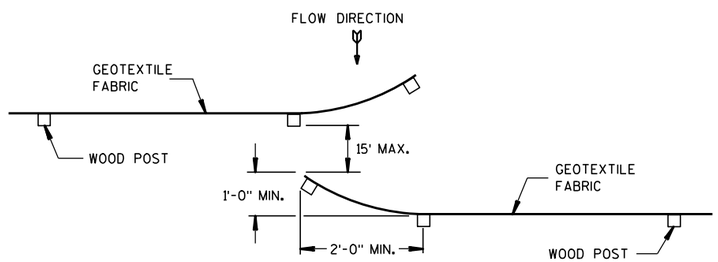


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

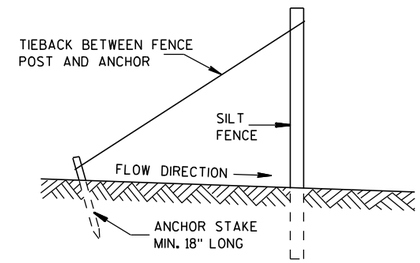


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

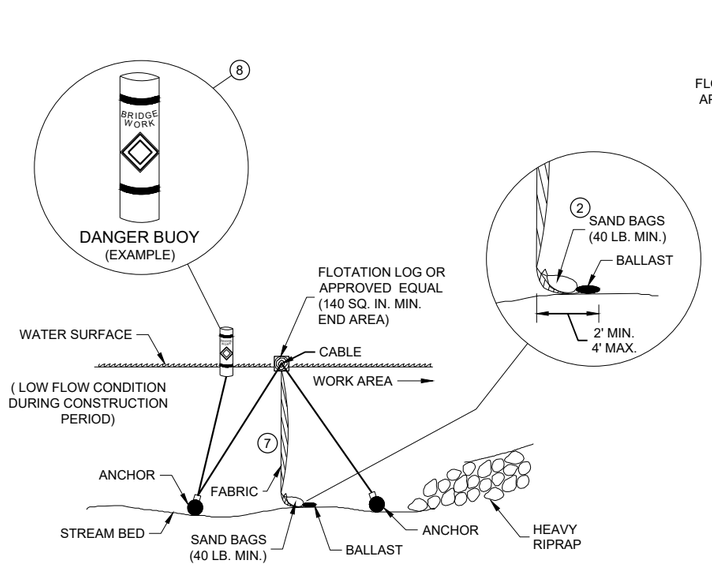
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

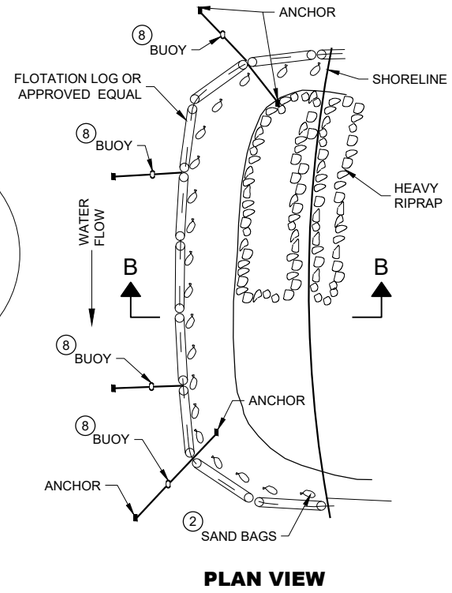
S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6

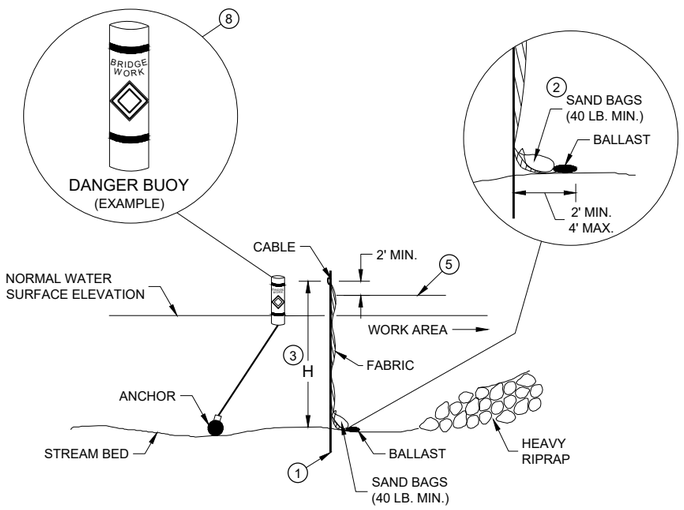


SECTION B - B

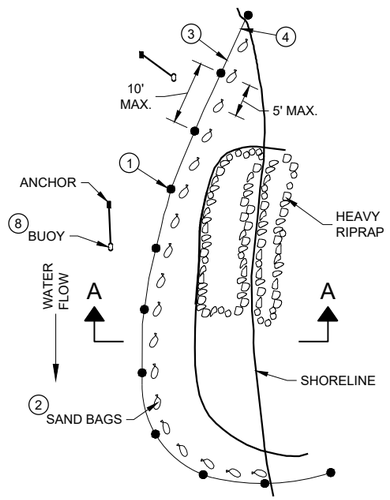


PLAN VIEW

TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A - A



PLAN VIEW

TURBIDITY BARRIER - STANDARD POST INSTALLATION

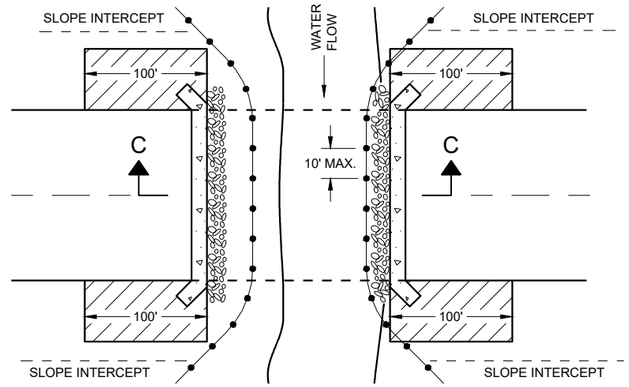
TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

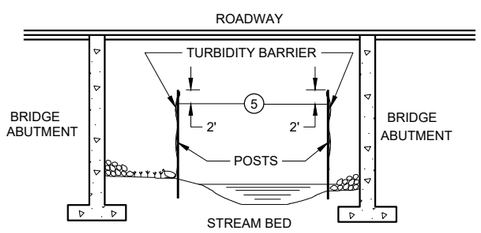
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

1. DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
2. SAND BAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
3. WHEN BARRIER HEIGHT "H" EXCEEDS 8 FEET, POST SPACING MAY NEED TO BE DECREASED.
4. IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
5. ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
6. FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.
7. ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
8. USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

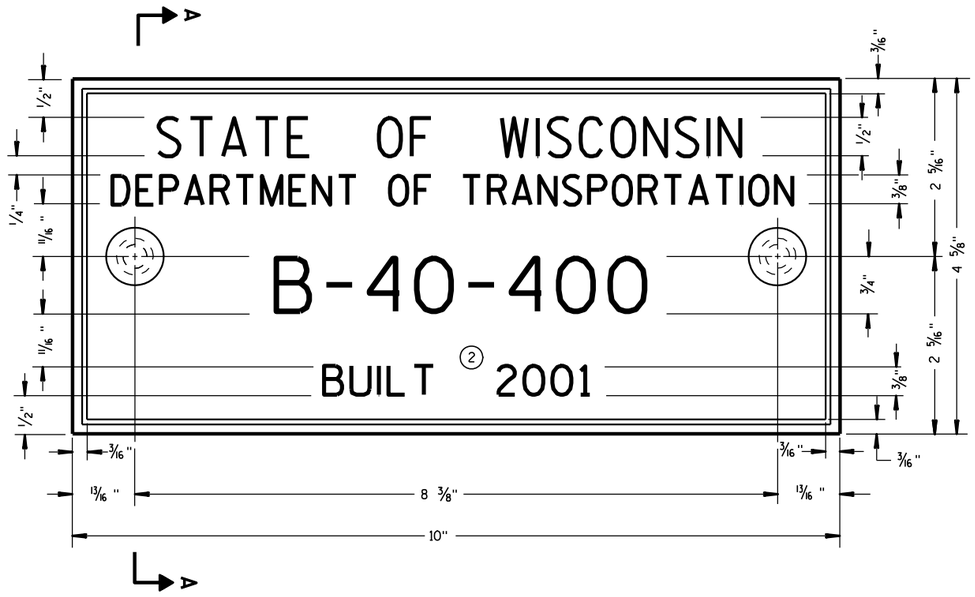
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/4/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOI
ENGINEER

FHWA

6

SDD 08E11 - 02



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

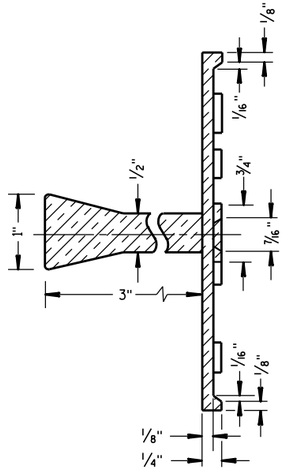
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

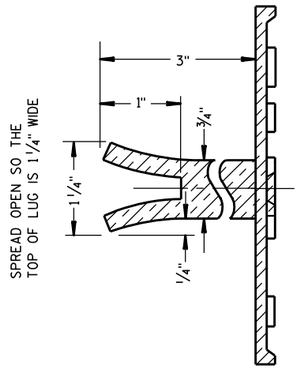
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

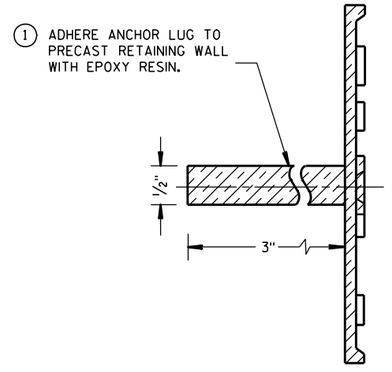
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

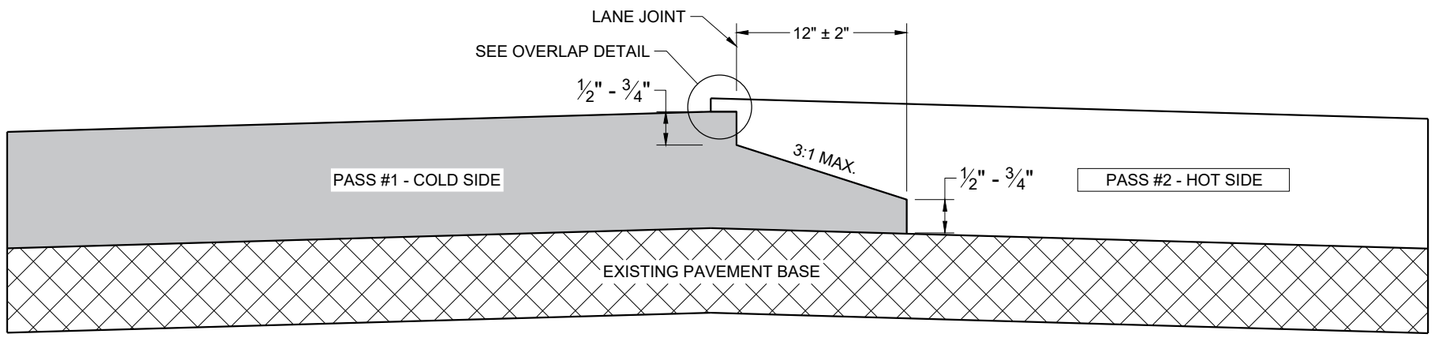
3/26/10 DATE

/S/ Scot Beck-- CHIEF STRUCTURAL DEVELOP ENGINEER

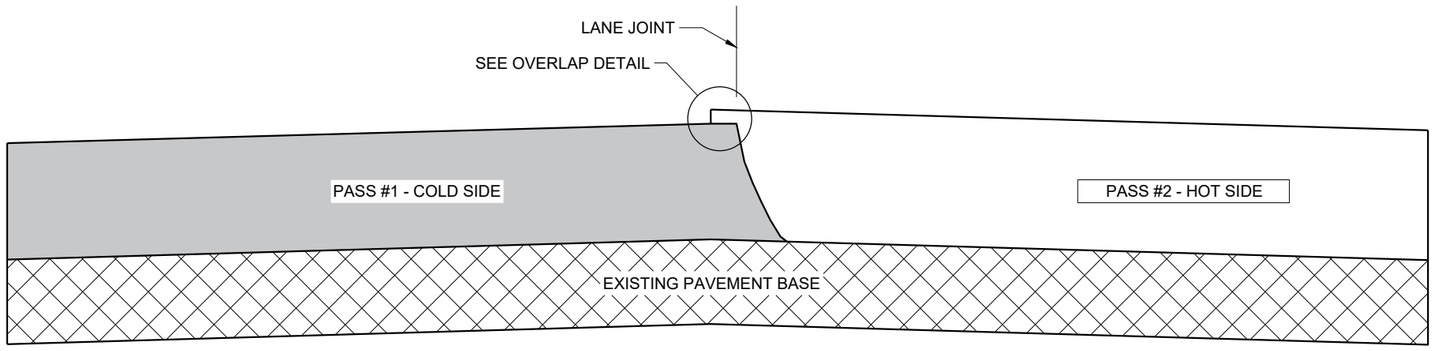
FHWA

6

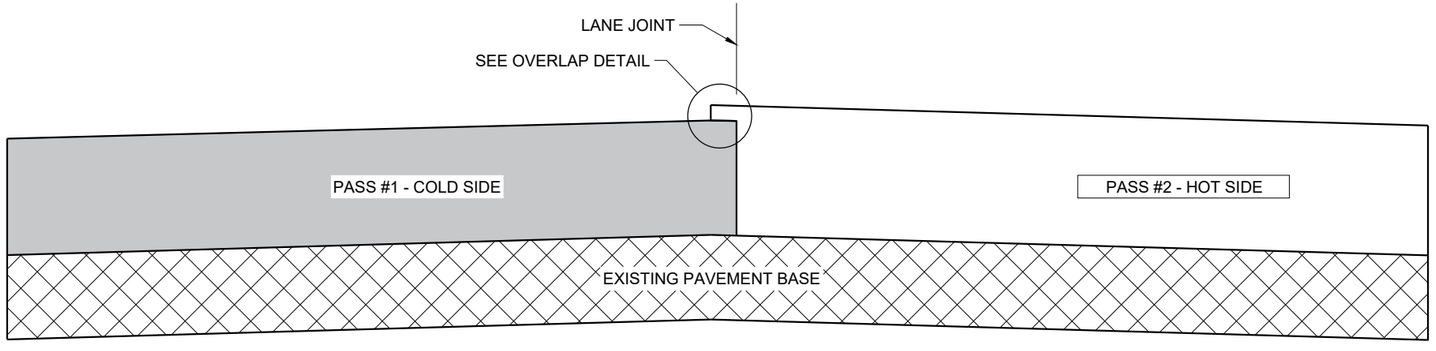
S.D.D. 12 A 3-10



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

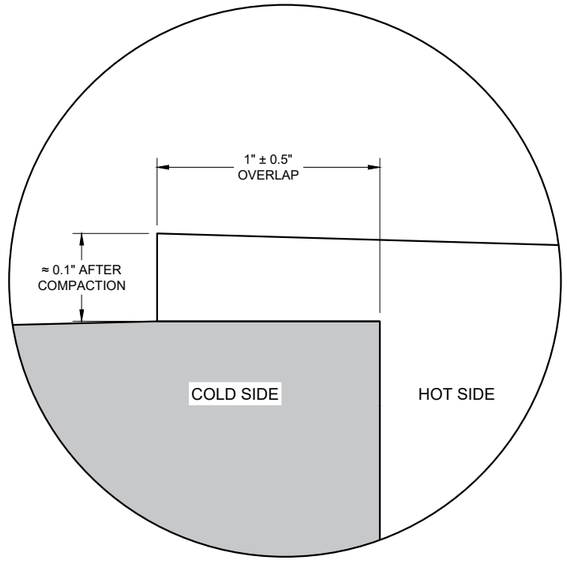
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

6

SDD 13C19 - 03

(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.

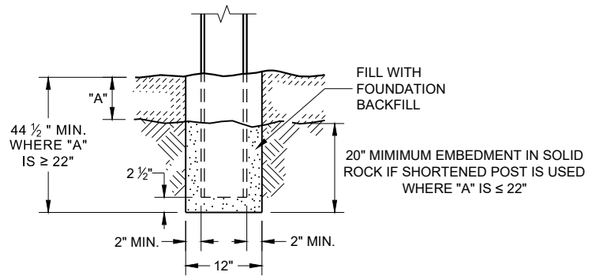
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL 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).

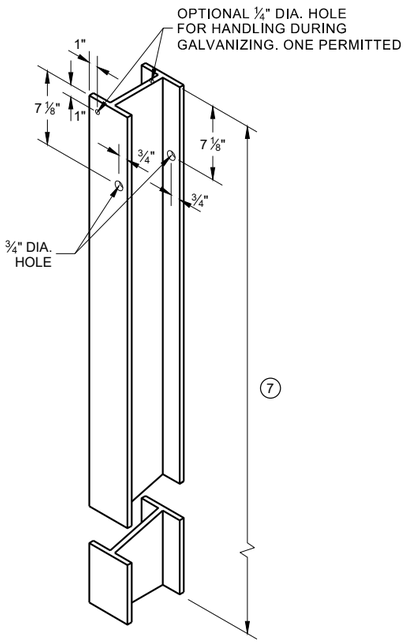
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

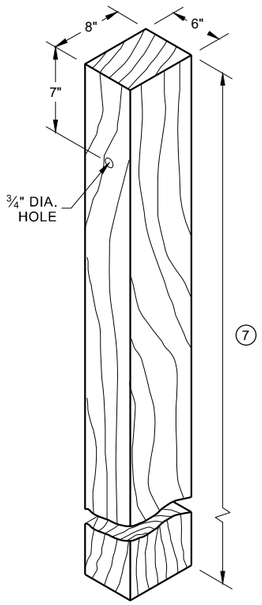
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



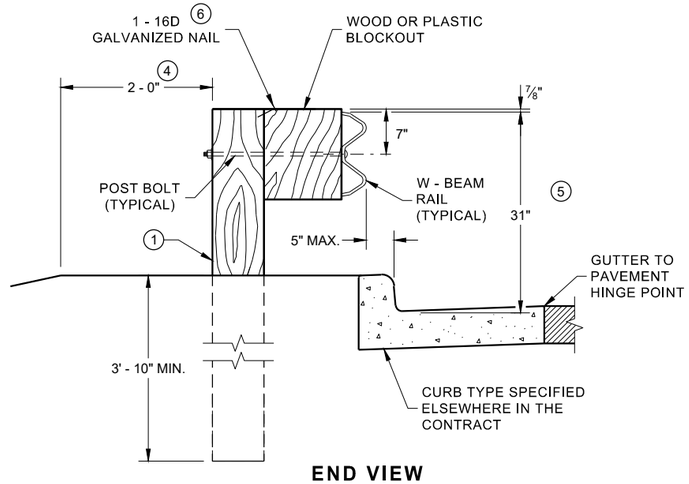
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



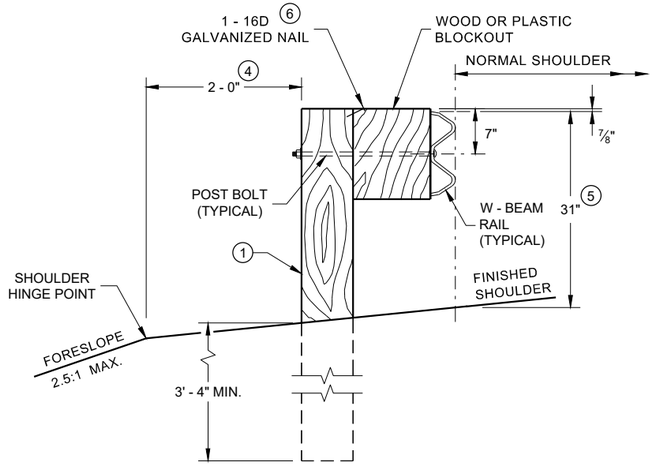
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



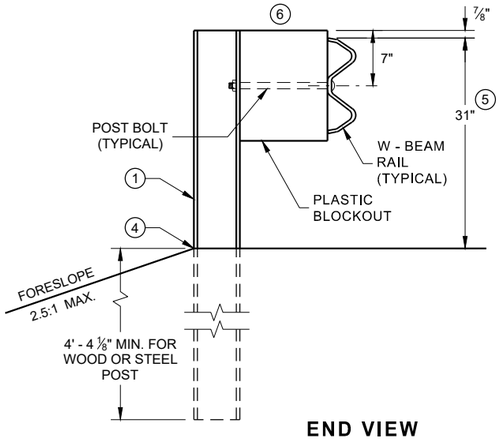
WOOD POST (6" X 8") NOMINAL (1)



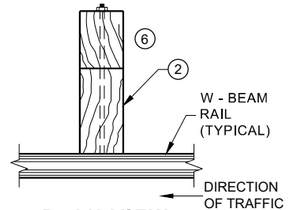
END VIEW
LOCATED ALONG A CURBED ROADWAY



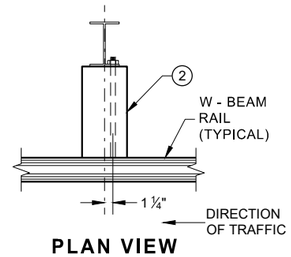
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



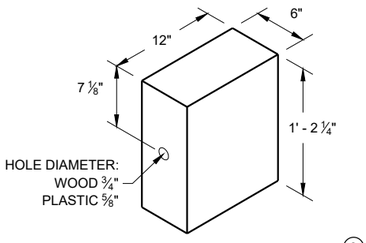
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



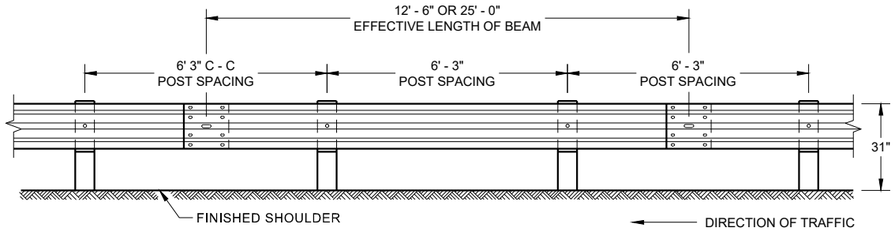
WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

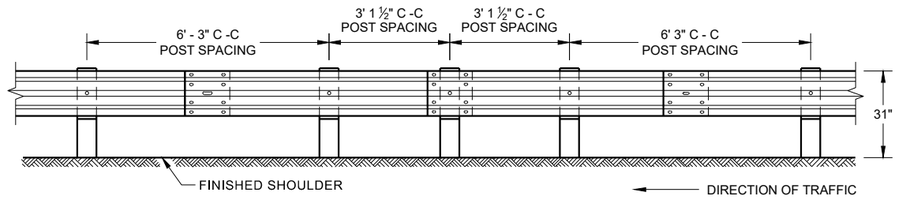
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07a

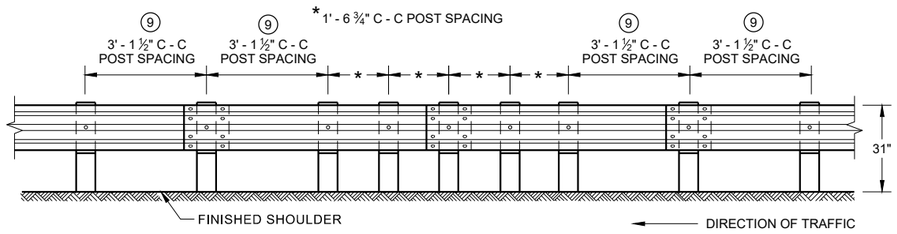
SDD 14B42 - 07a



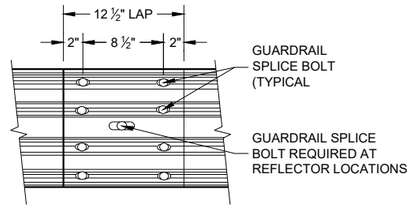
FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

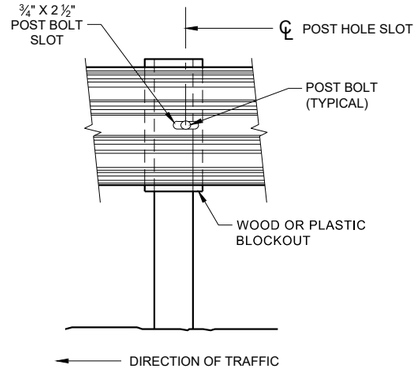
GENERAL NOTES

(8) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

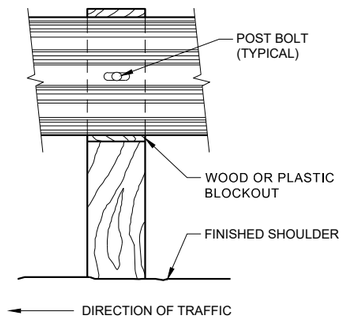
(9) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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.

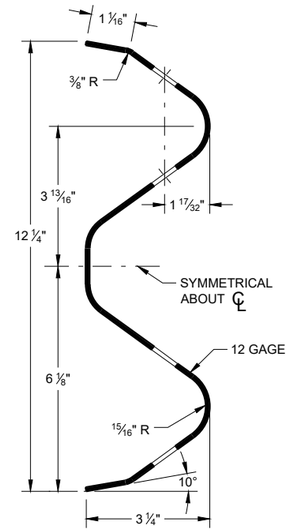
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



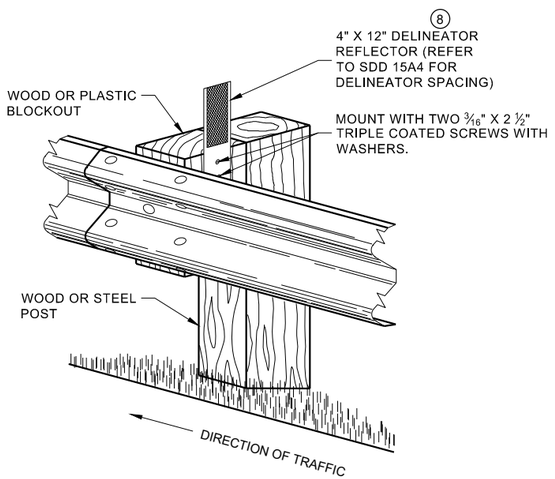
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



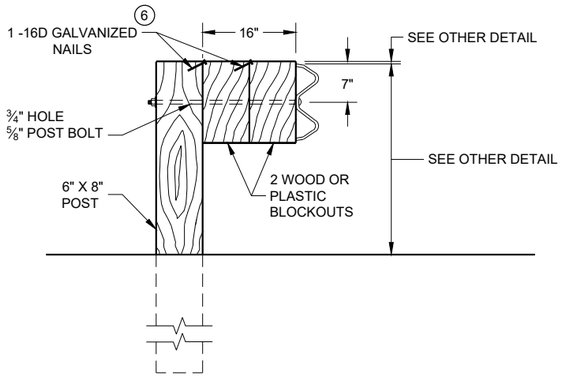
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b

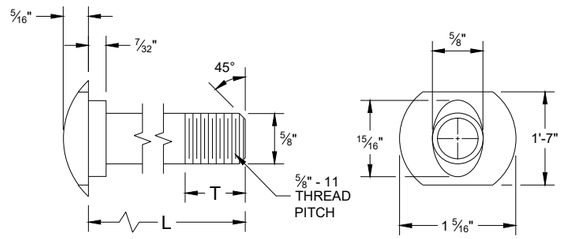


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

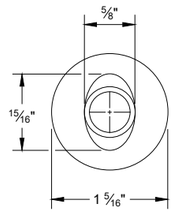
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

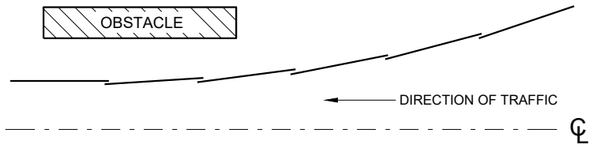


POST BOLT TABLE

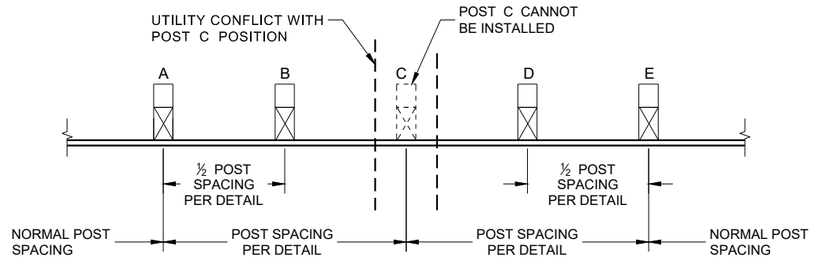
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



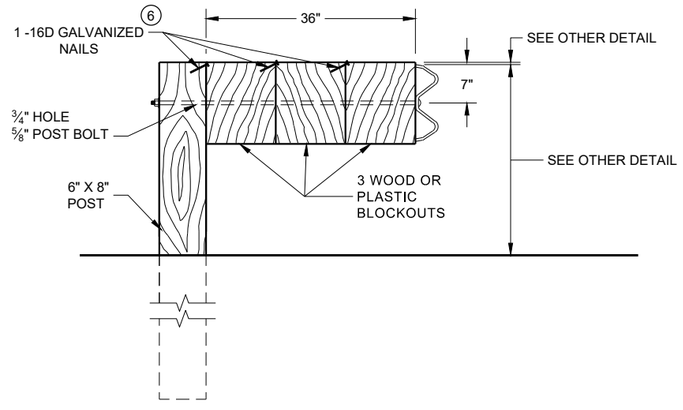
ALTERNATE BOLT HEAD



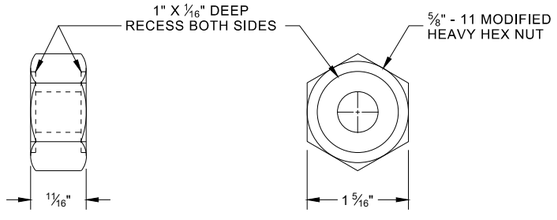
PLAN VIEW
BEAM LAPPING DETAIL



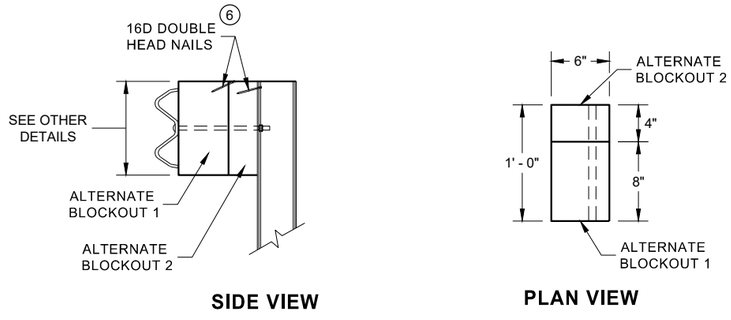
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW

PLAN VIEW

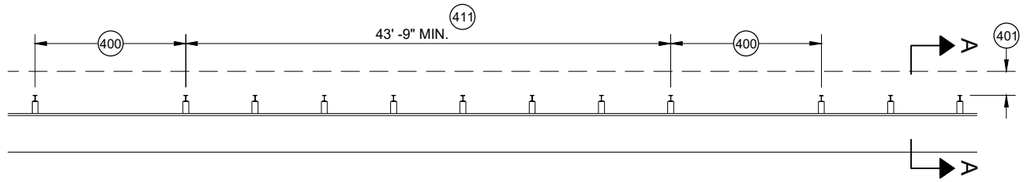
ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

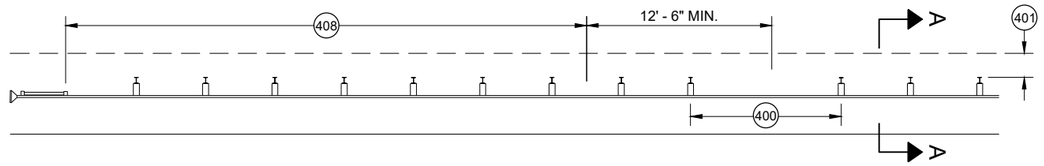
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

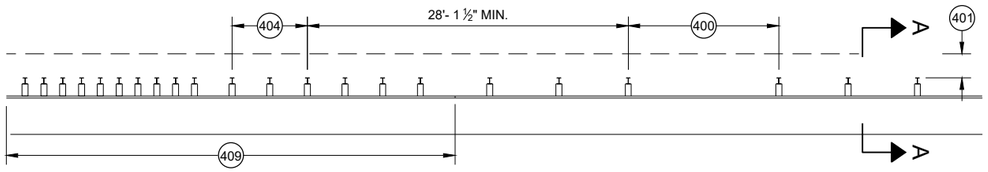
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



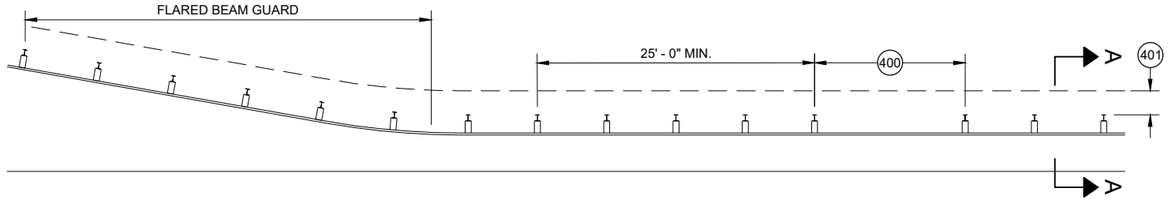
MISSING POST IN MGS GUARDRAIL



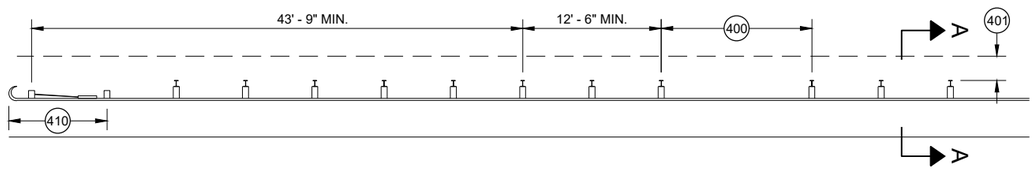
MISSING POST IN MGS GUARDRAIL NEAR EAT



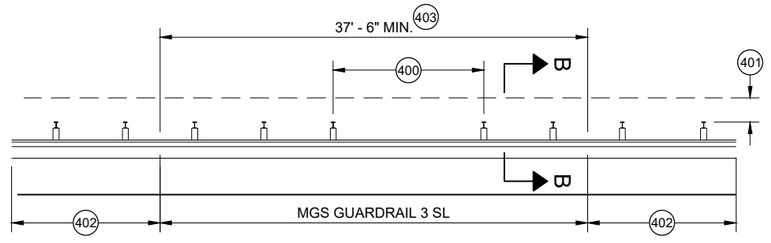
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

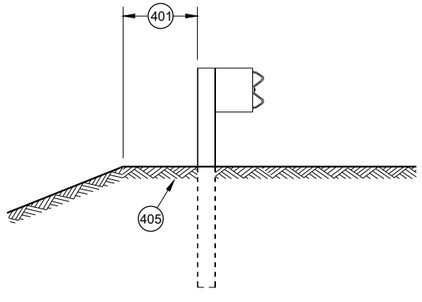


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

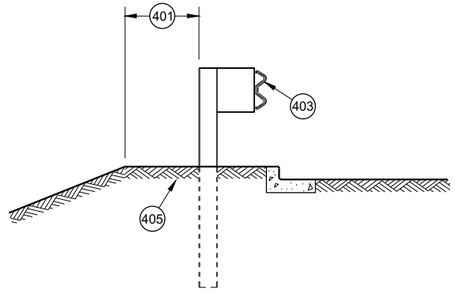


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

400 MAX SPAN 12' - 6"
401 2' MIN.
402 MGS GUARDRAIL 3
403 NESTING BEAM GUARD
404 ASYMMETRIC TRANSITION
405 SOIL WELL DRAINED AND COMPACTED
406 SEE OTHER DRAWINGS IN THIS SDD
407 SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
408 SEE SDD 14B44
409 SEE SDD 14B45
410 SEE SDD 14B47
411 MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

6

SDD 14B42 - 07d

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

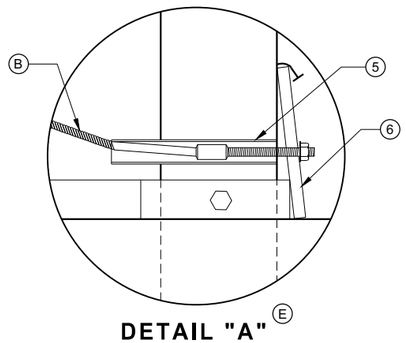
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

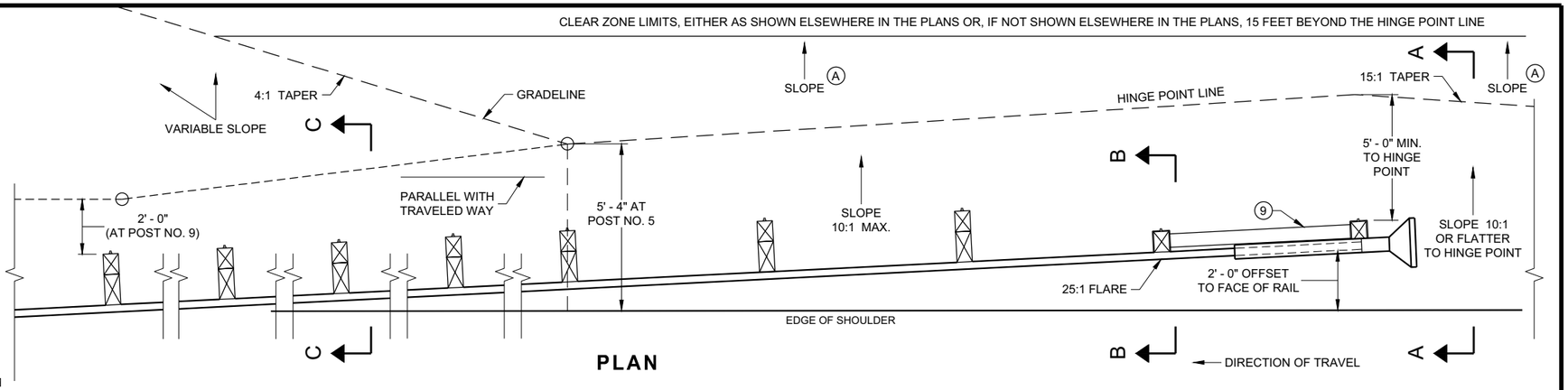
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

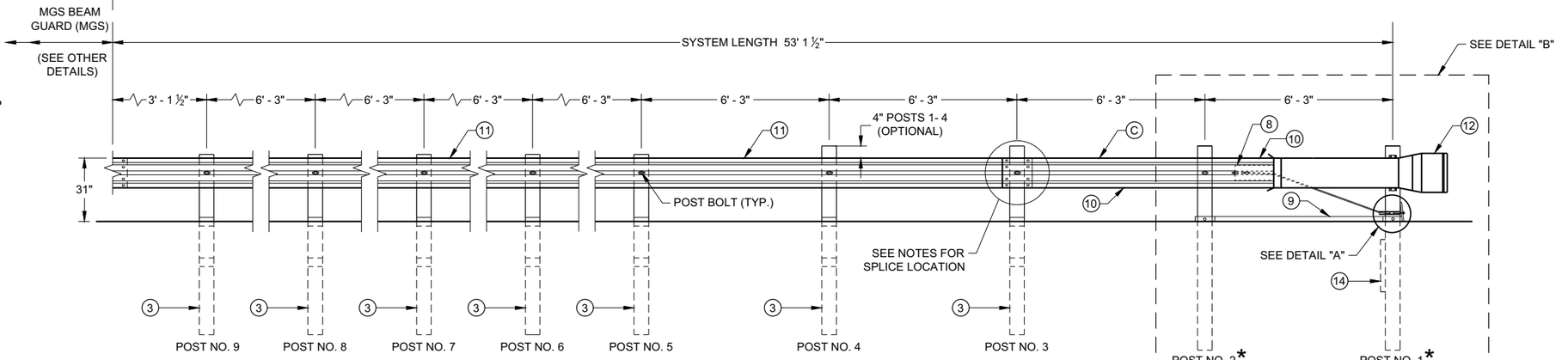
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



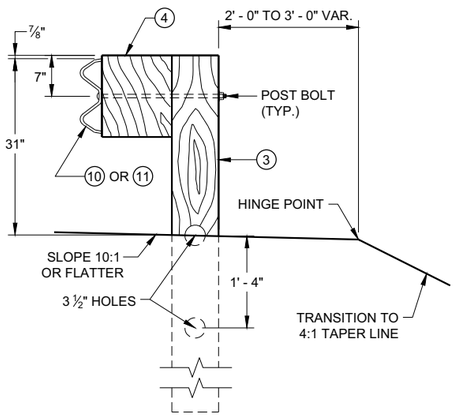
DETAIL "A" (E)



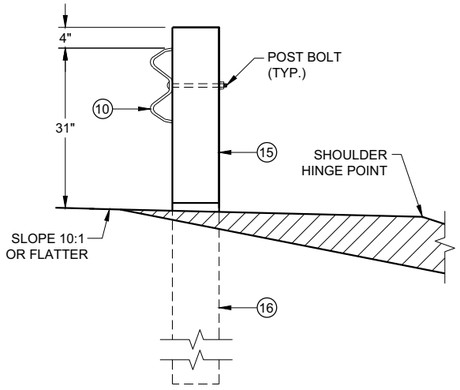
PLAN



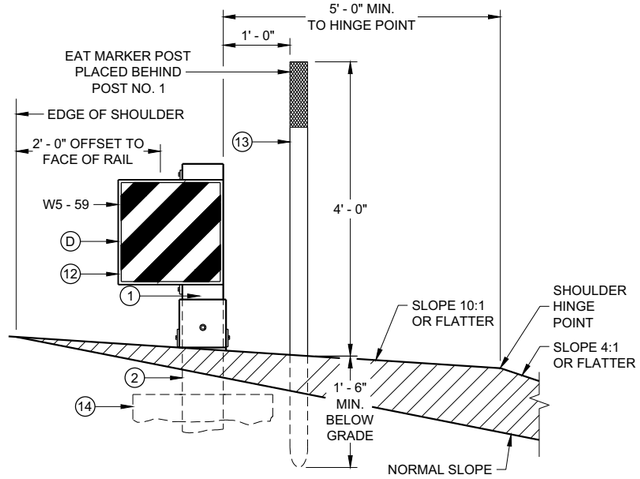
ELEVATION



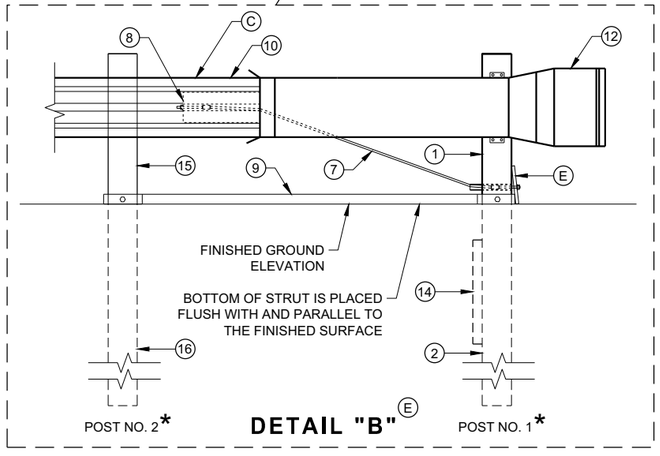
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



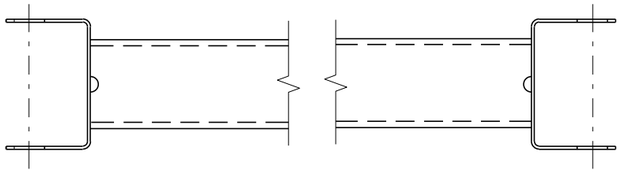
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

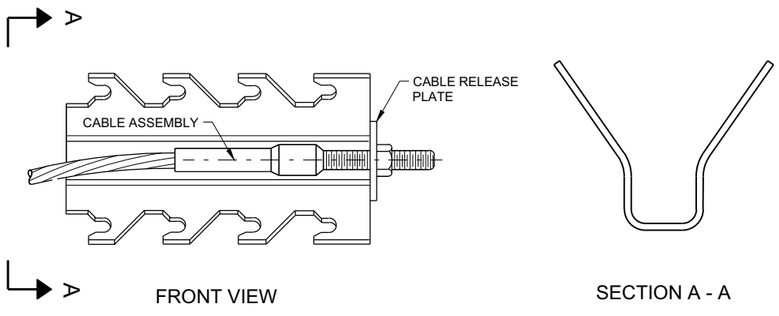
SDD 14B44 - 04a



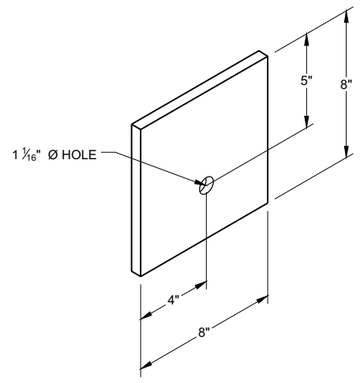
GENERIC GROUND STRUT ⑨ Ⓔ

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 ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

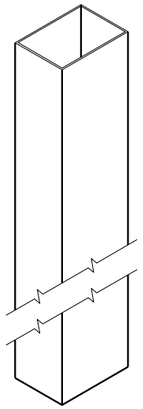
6

SDD 14B44 - 04b

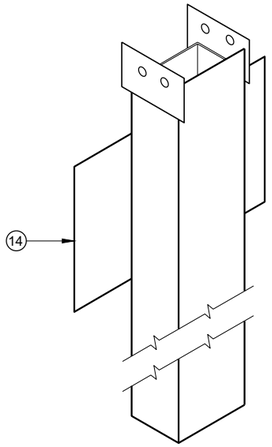
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

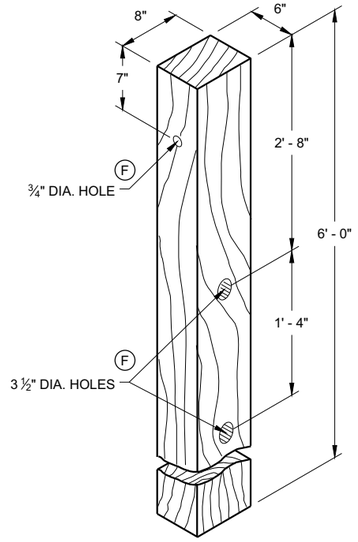
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



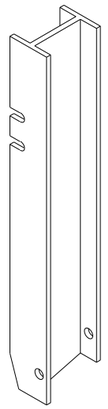
UPPER POST NO. 1 (1) (E)



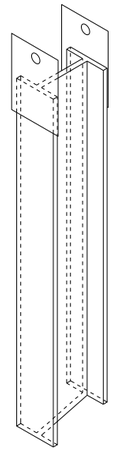
LOWER POST NO. 1 (2) (E)



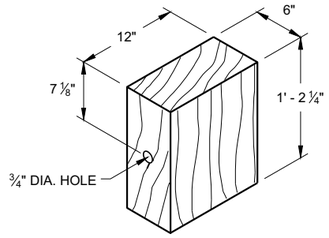
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



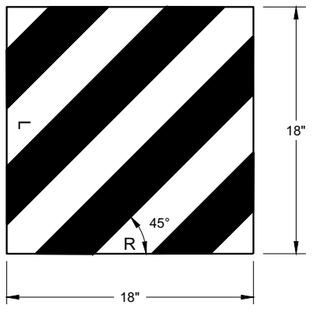
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

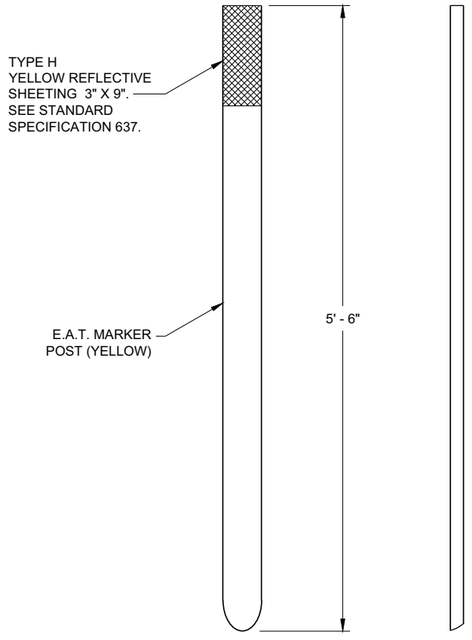


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



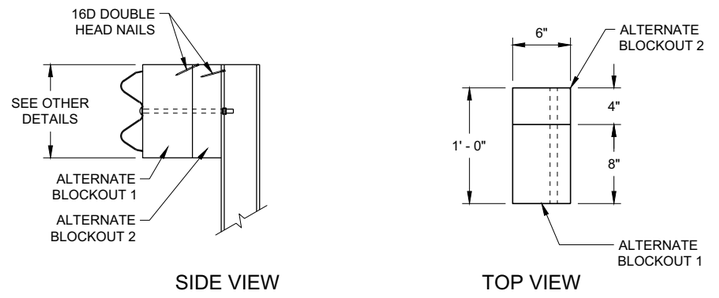
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

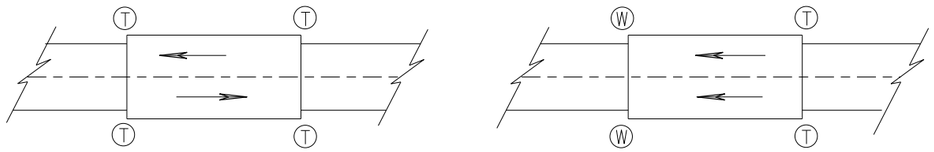
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

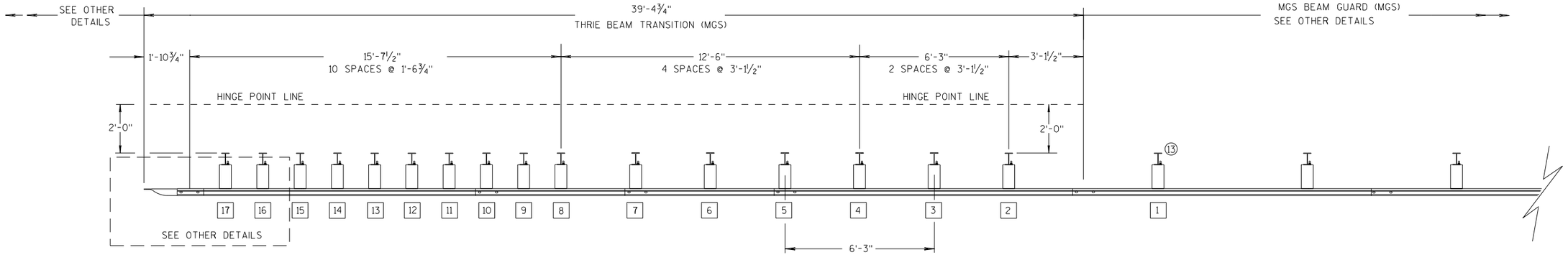
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

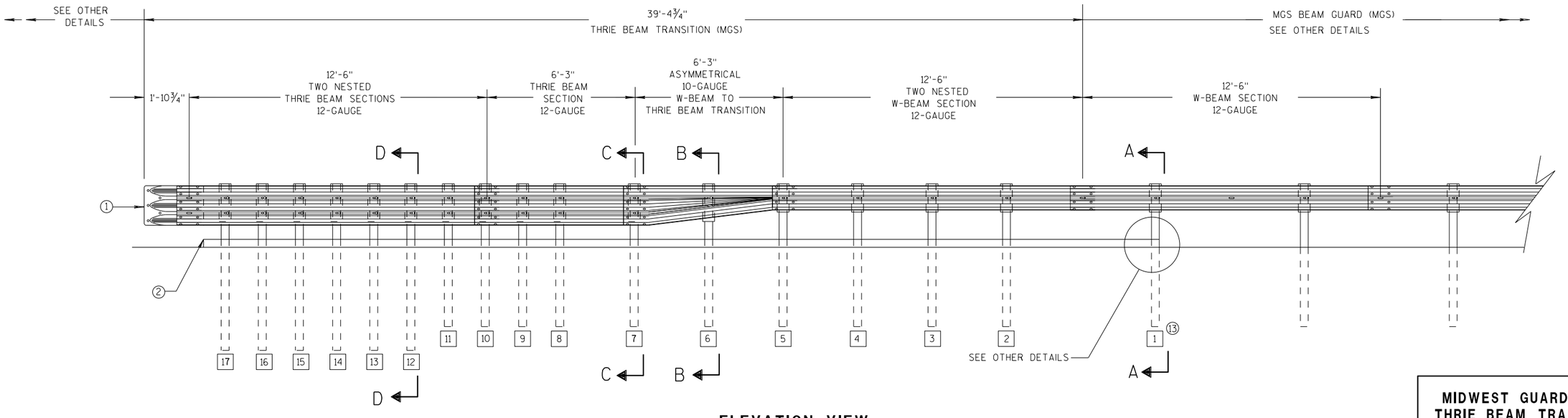
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5a

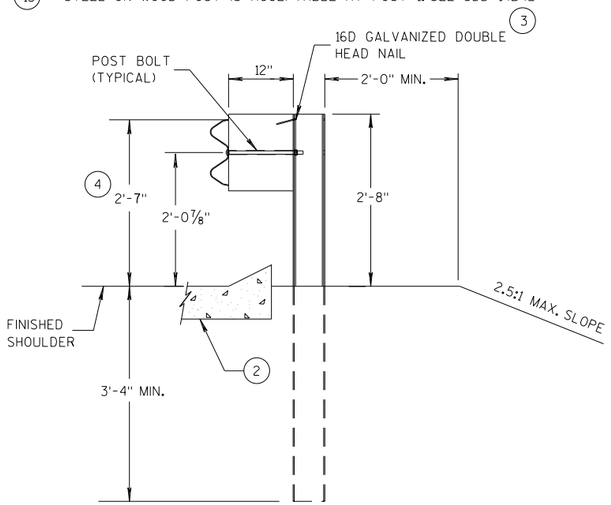
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

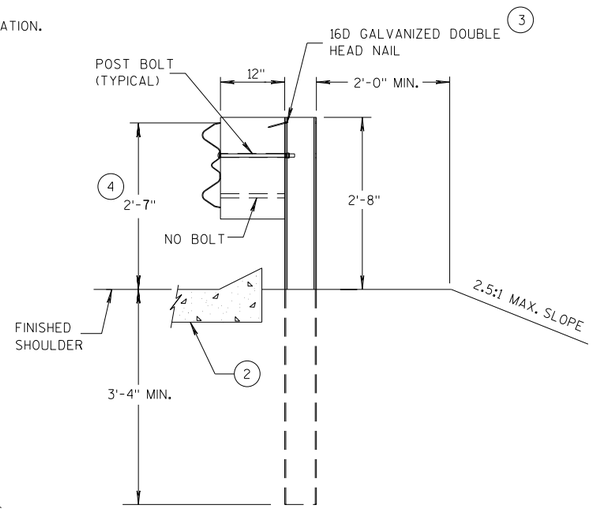
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



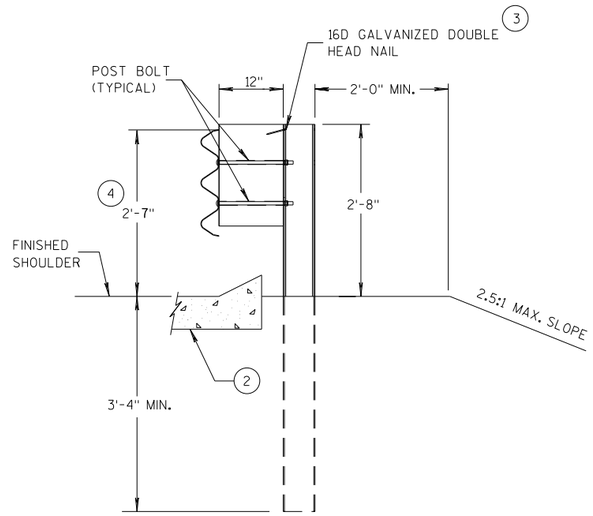
SECTION A-A (13)

POSTS 1-5



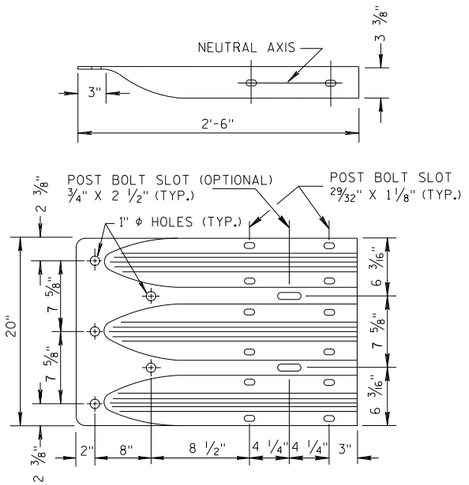
SECTION B-B

POST 6

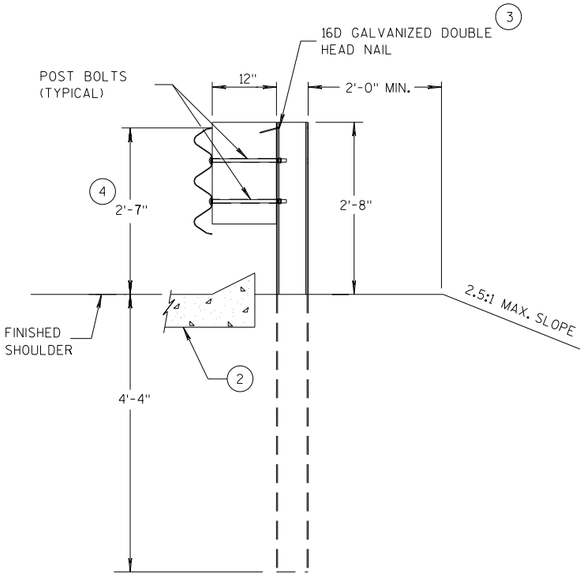


SECTION C-C

POSTS 7-11

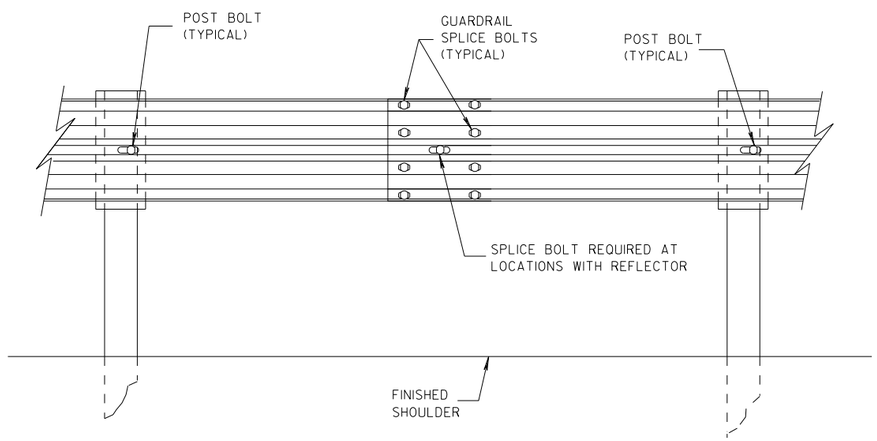


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

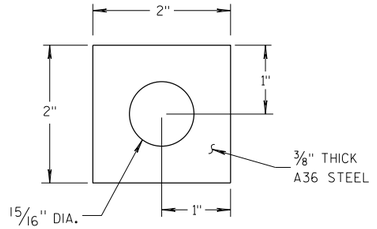
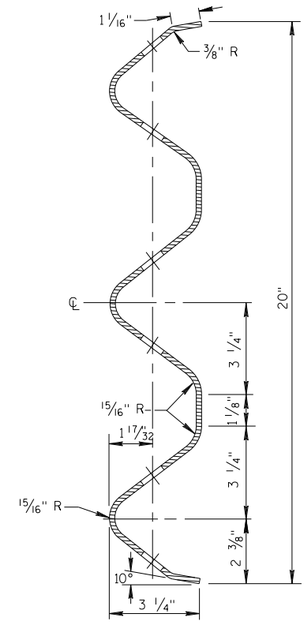


PLATE WASHER DETAIL



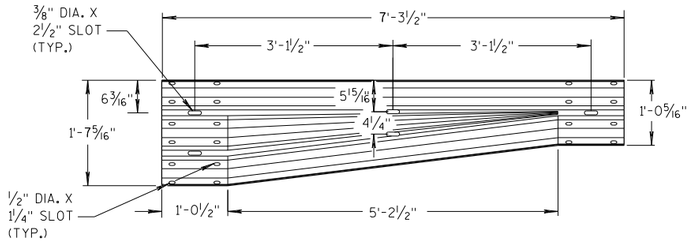
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

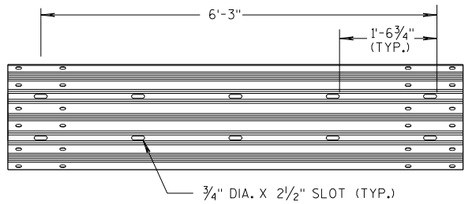
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

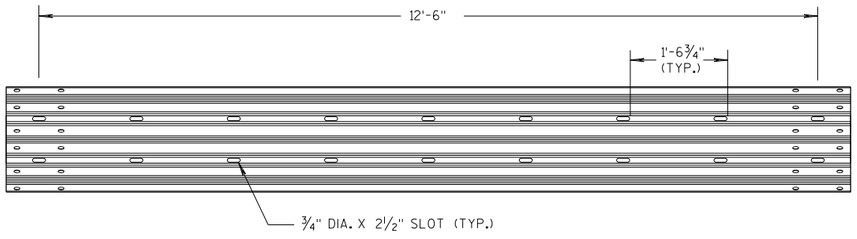
S.D.D. 14 B 45-5b



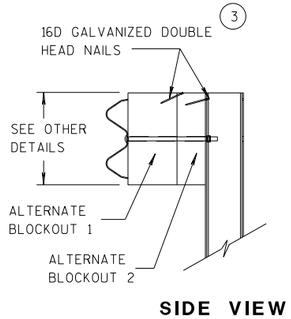
W-BEAM TO THRIE BEAM TRANSITION SECTION



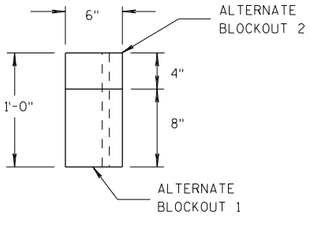
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

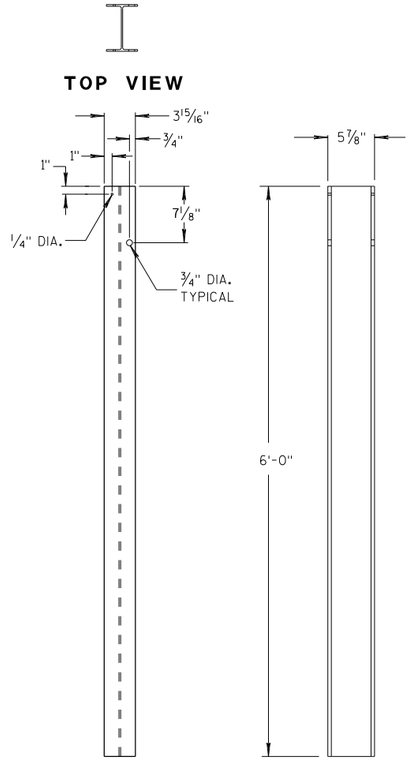


SIDE VIEW



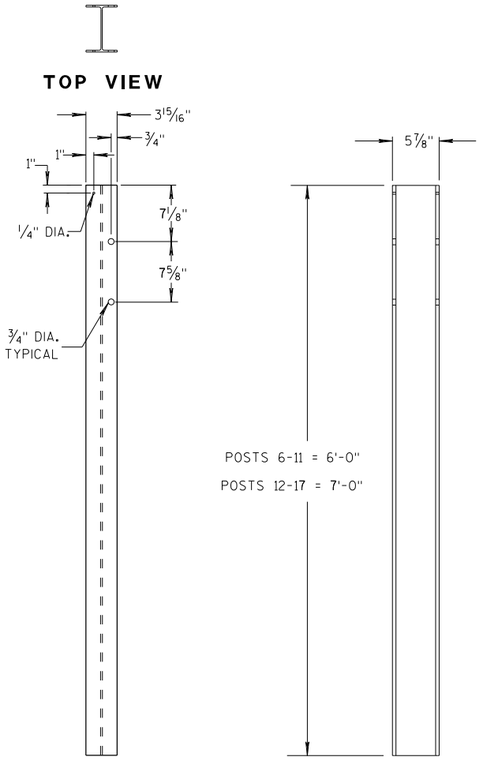
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



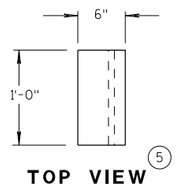
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

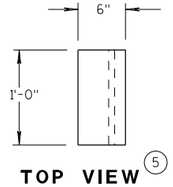


FRONT VIEW SIDE VIEW

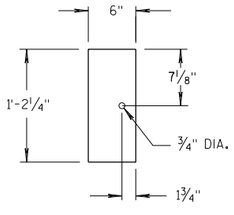
STEEL POSTS 6-17



TOP VIEW (5)

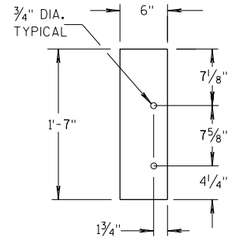


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

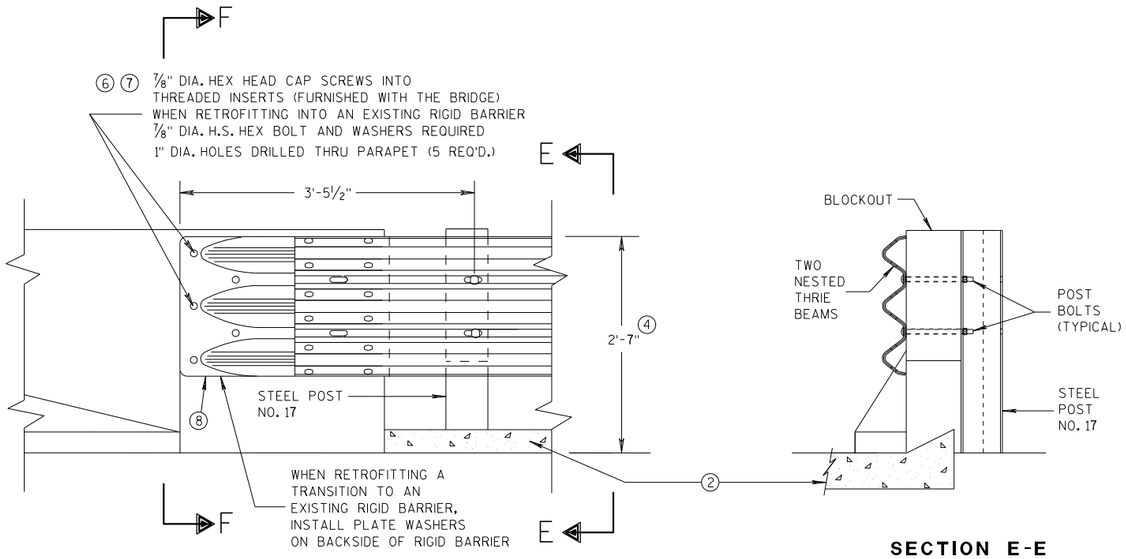
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

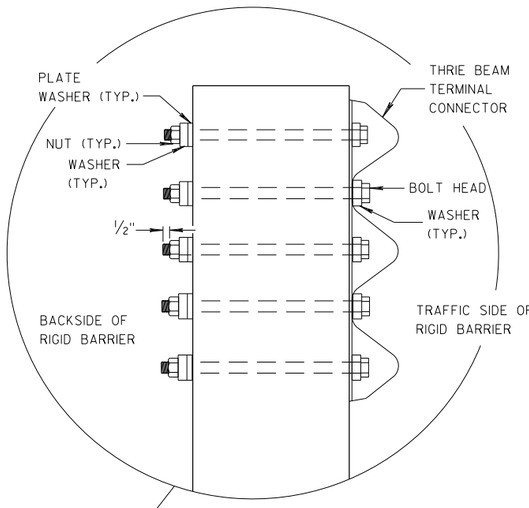
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

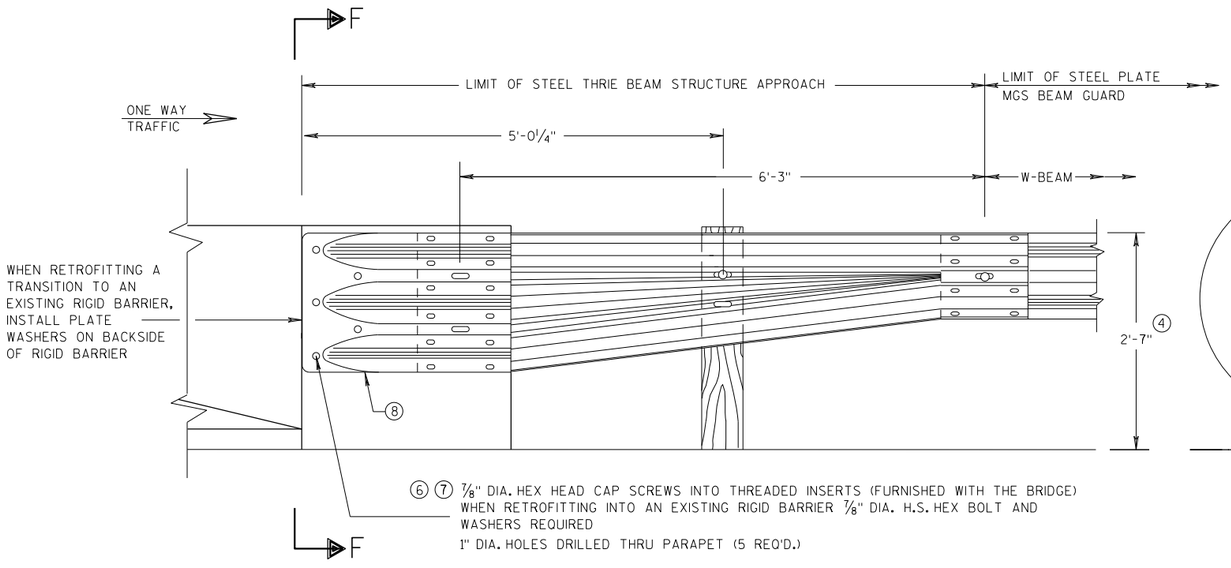
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

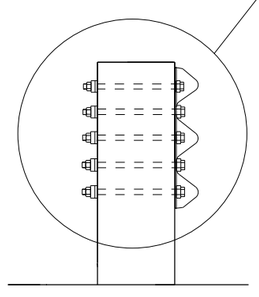
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

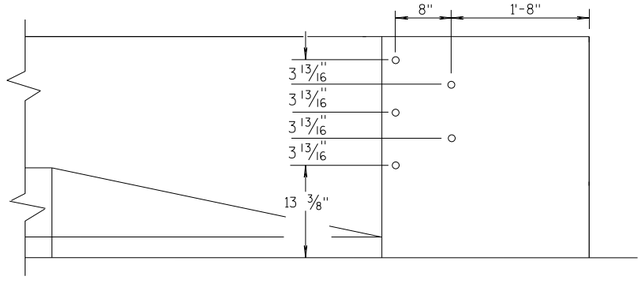




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

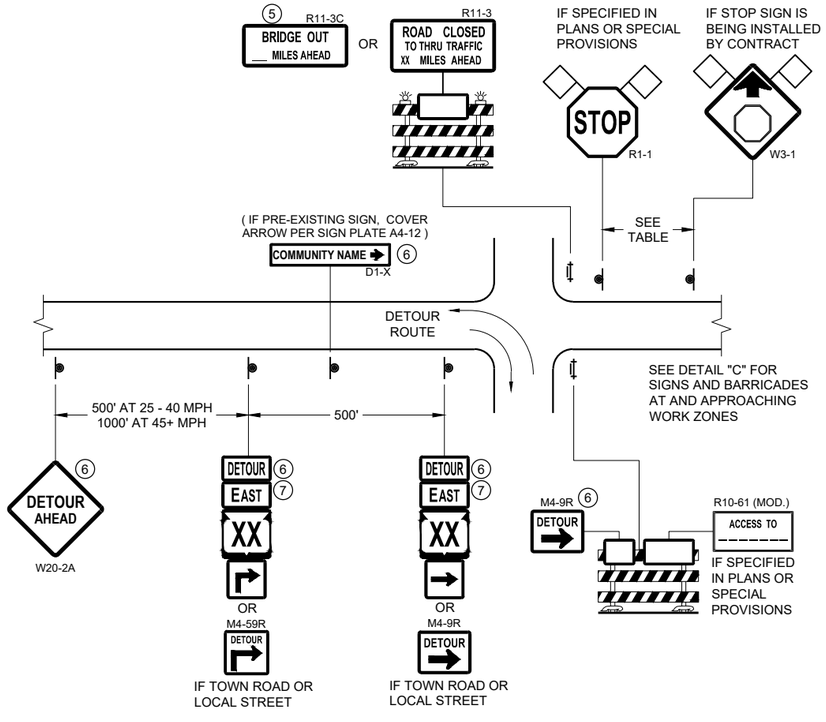
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D[UNIT SUPERVIS
NT
FHWA

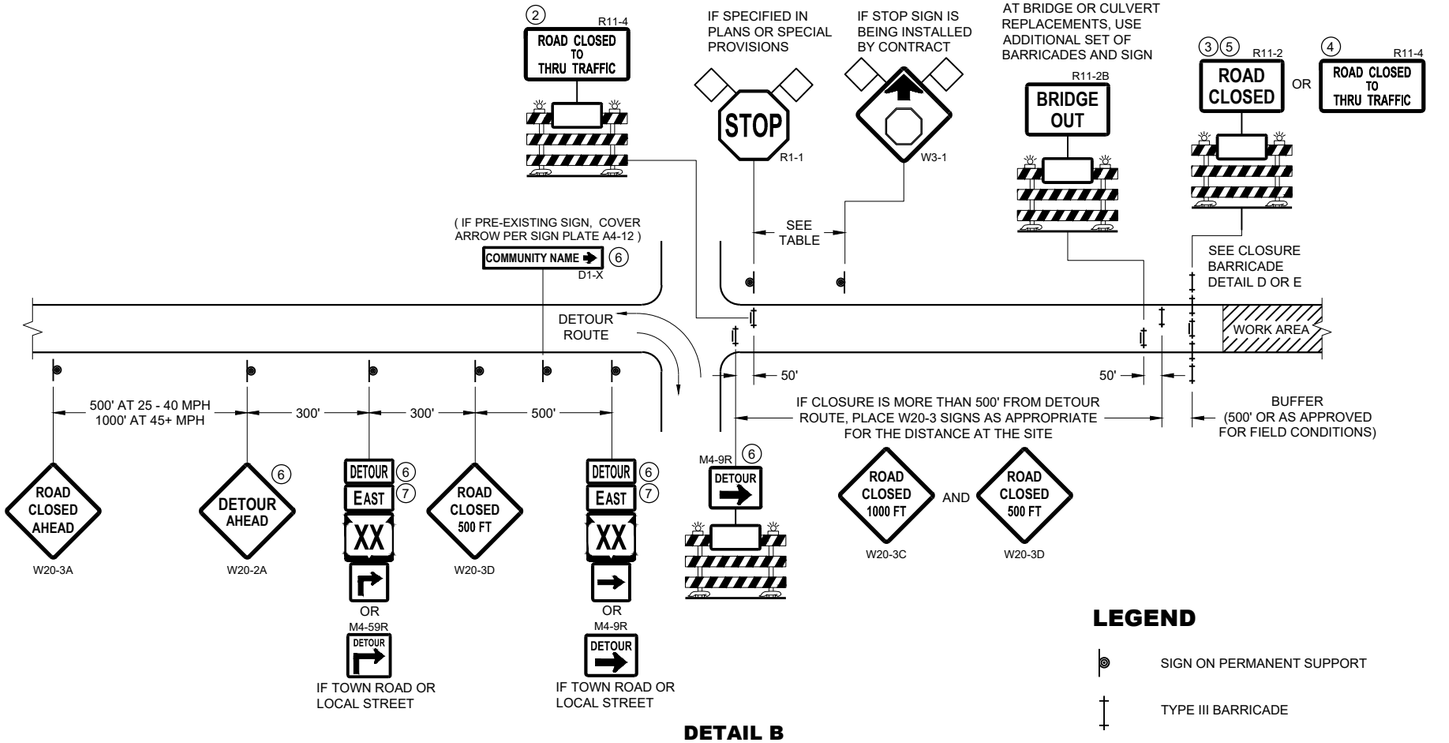
6

S.D.D. 14 B 45-5d



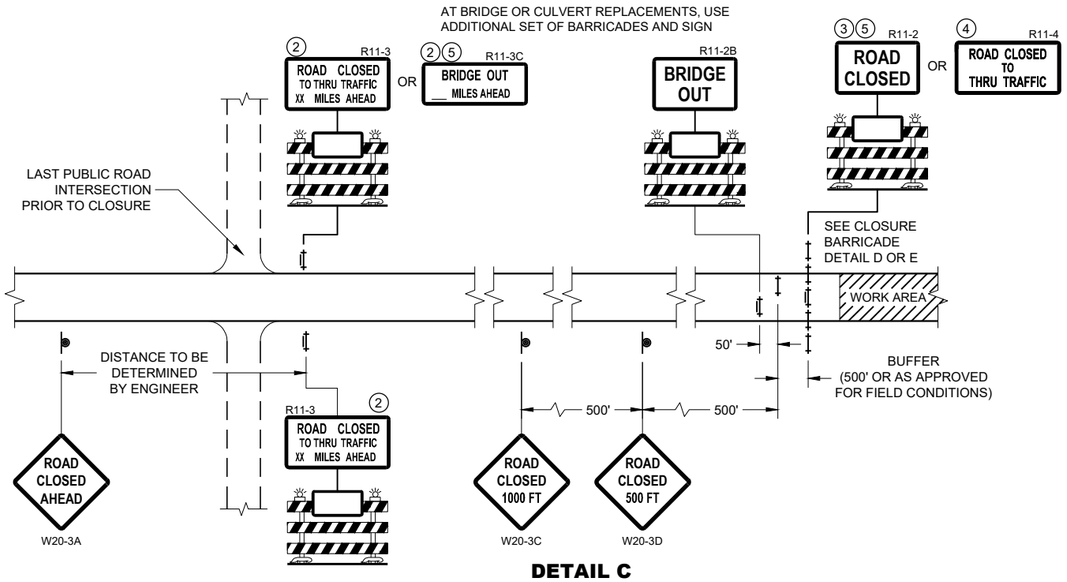
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

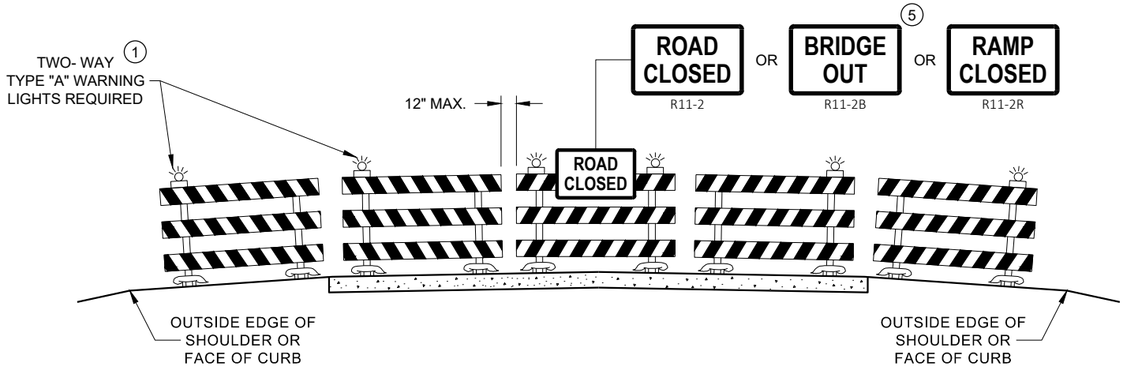
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

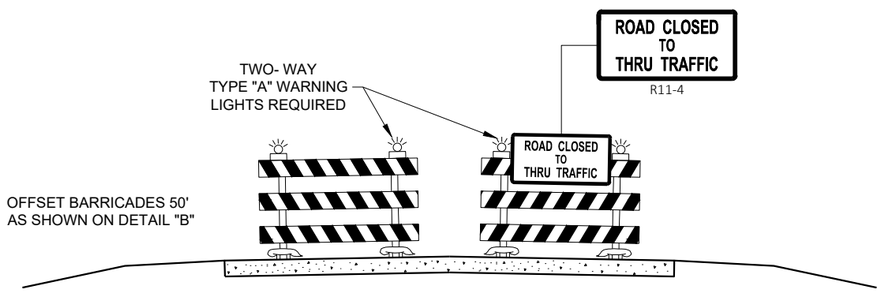
FHWA

SDD 15C02 - 09a

SDD 15C02 - 09a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 09b

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — 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.

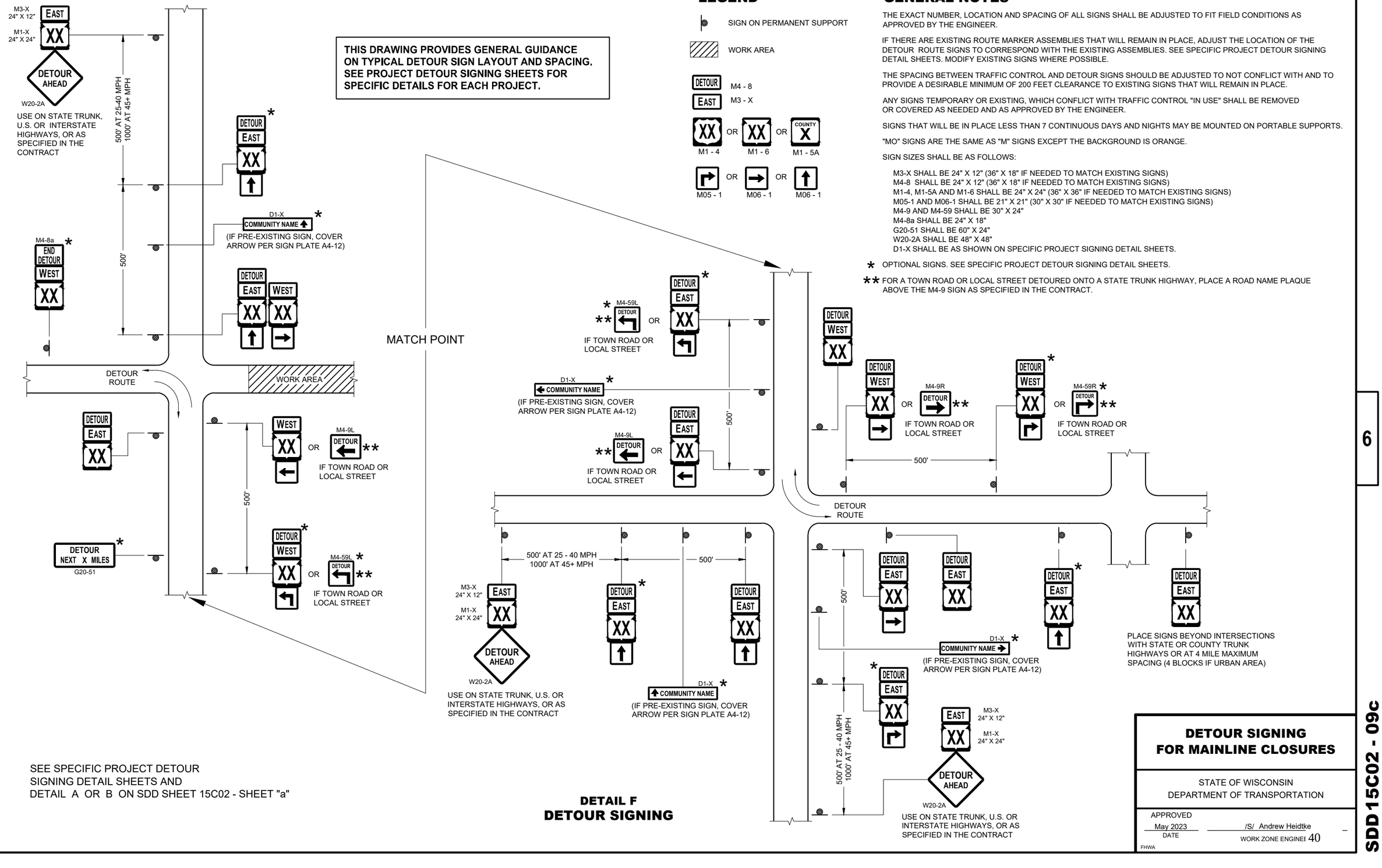
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

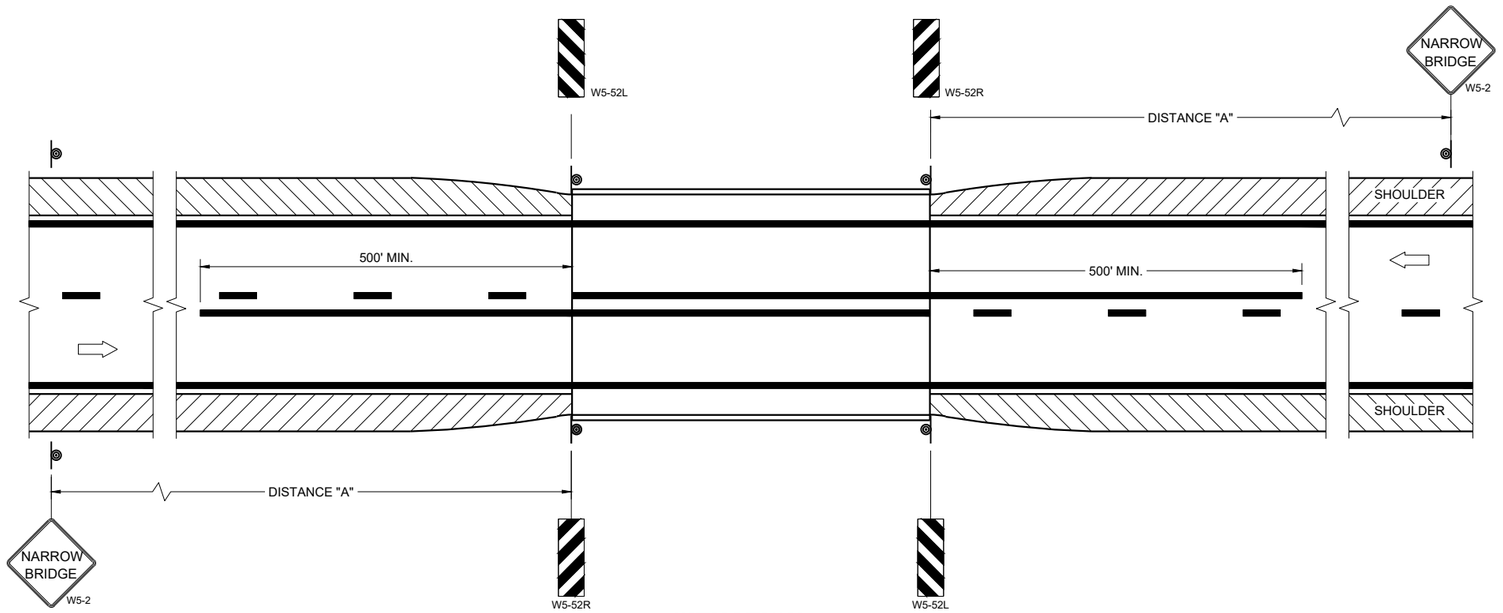
APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6

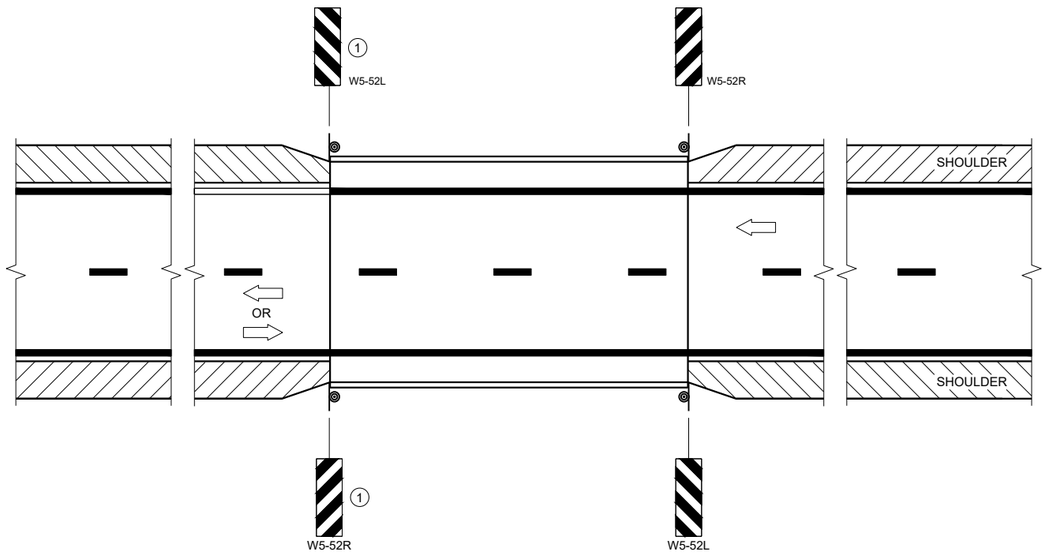
SDD 15C02 - 09c

SDD 15C02 - 09c



SITUATION 1

WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.



SITUATION 2

WARRANTING CRITERIA:
1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THE DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

ON BRIDGE ONLY PROJECTS, PLACE 300 FEET OF EDGELINE.

OMIT EDGELINES ON ROADWAYS WITHOUT EXISTING EDGELINES.

(1) OMIT ON ONE-WAY TRAVELED WAYS.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	700'

SIGNING AND MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer
FHWA

6

SDD 15C06-12

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.

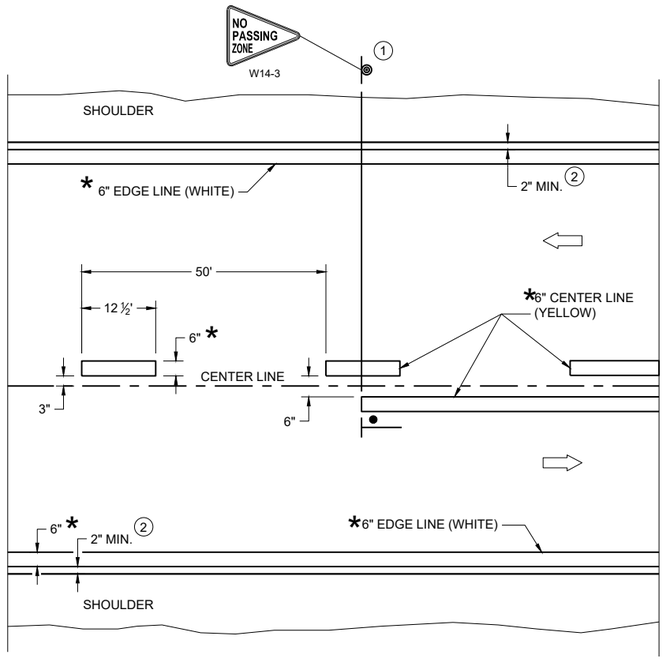
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

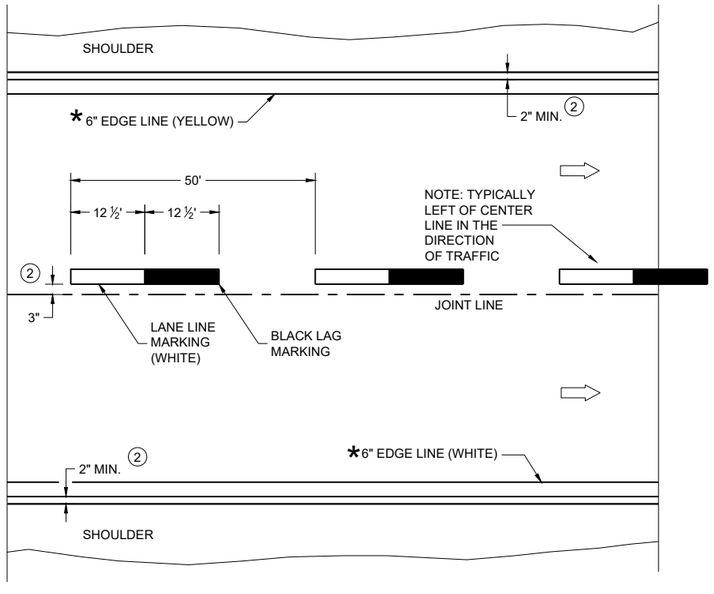
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

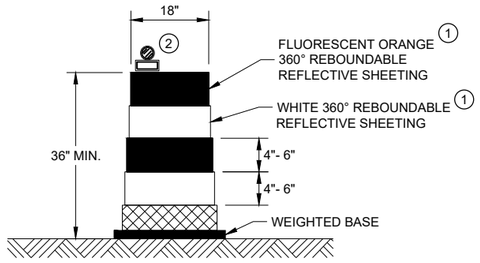
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

SDD 15C08-23a

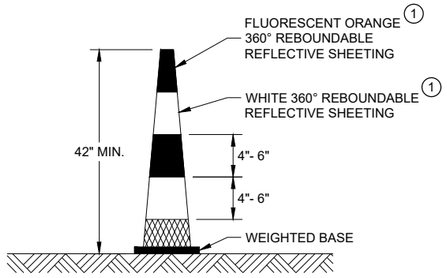
GENERAL NOTES

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



DRUM

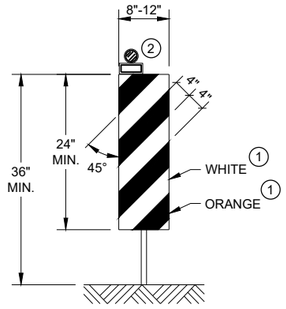
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

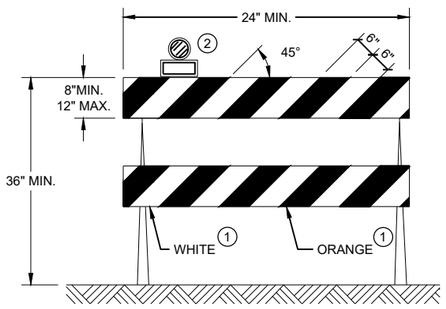
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



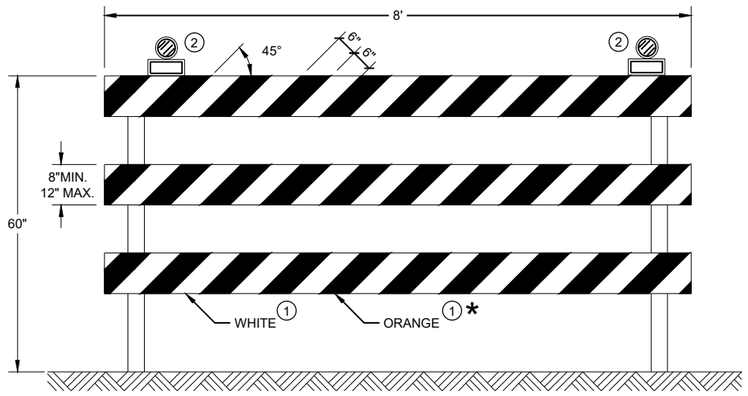
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

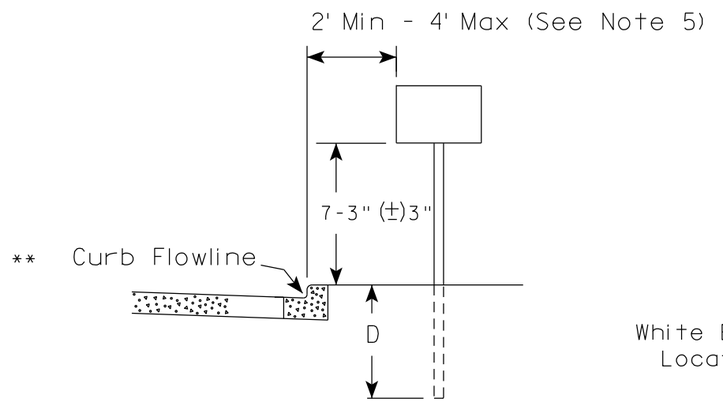
6

SDD 15C11 - 10b

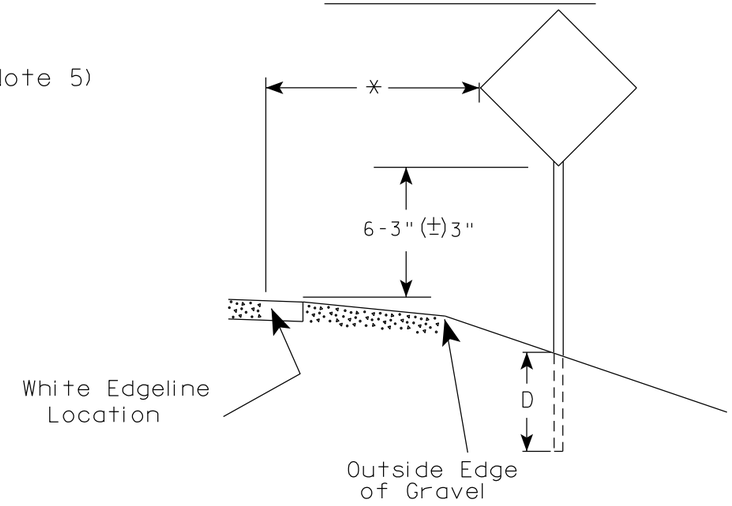
6

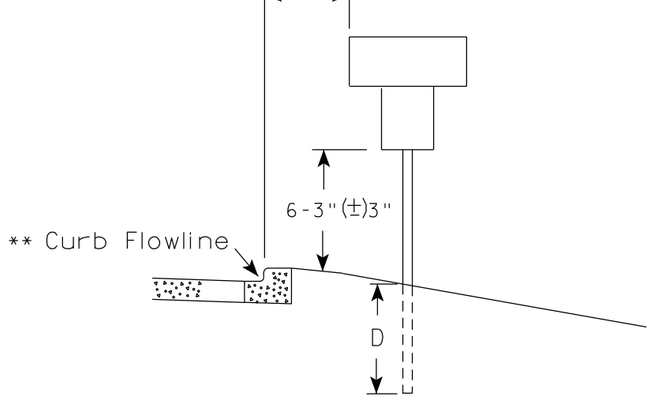
SDD 15C11 - 10b

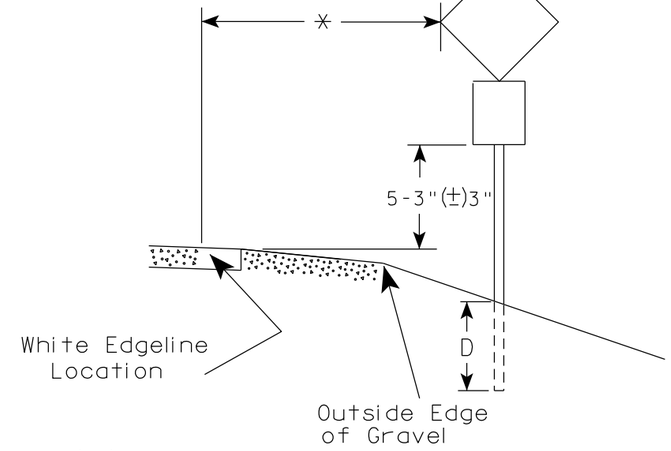
URBAN AREA



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" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

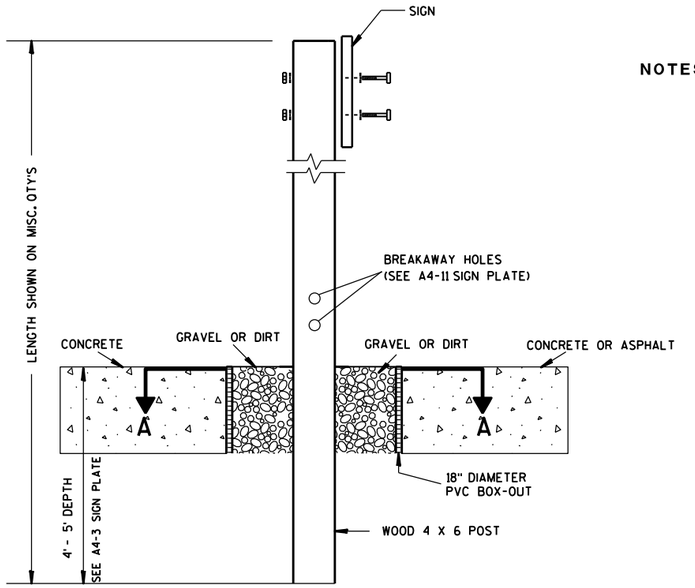
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

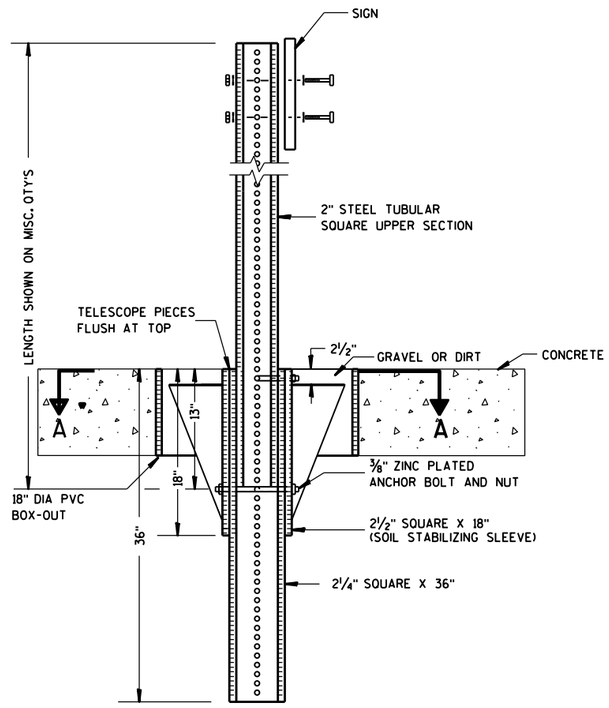
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 44	E



ELEVATION VIEW

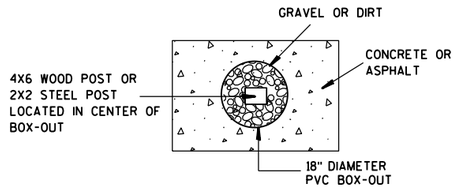
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

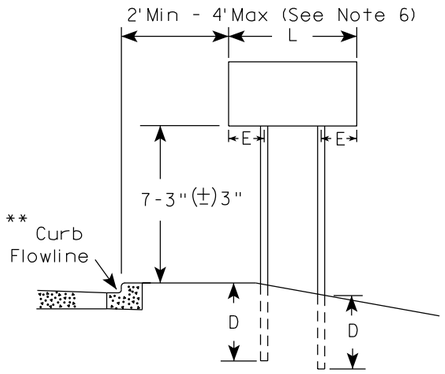
APPROVED Matthew R Rauch
for State Traffic Engineer

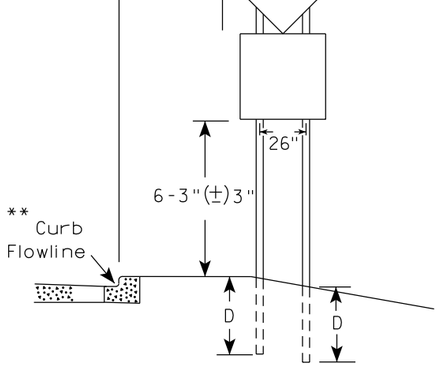
DATE 1/27/14 PLATE NO. A4-3B.1

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

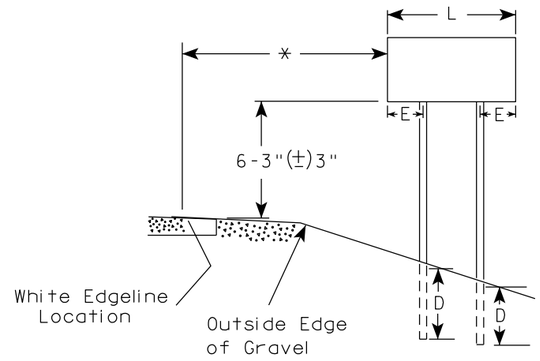
URBAN AREA

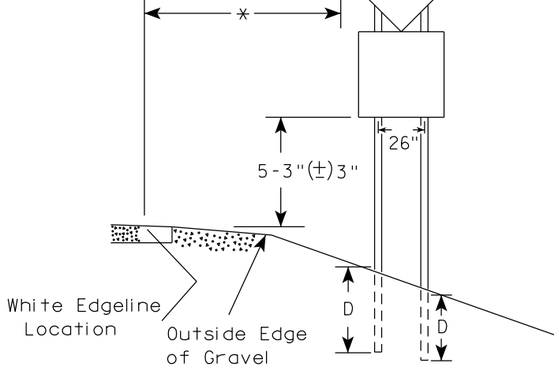




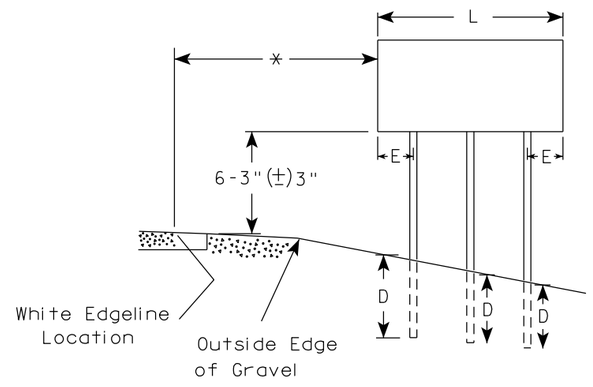
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

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"

POST EMBEDMENT DEPTH

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

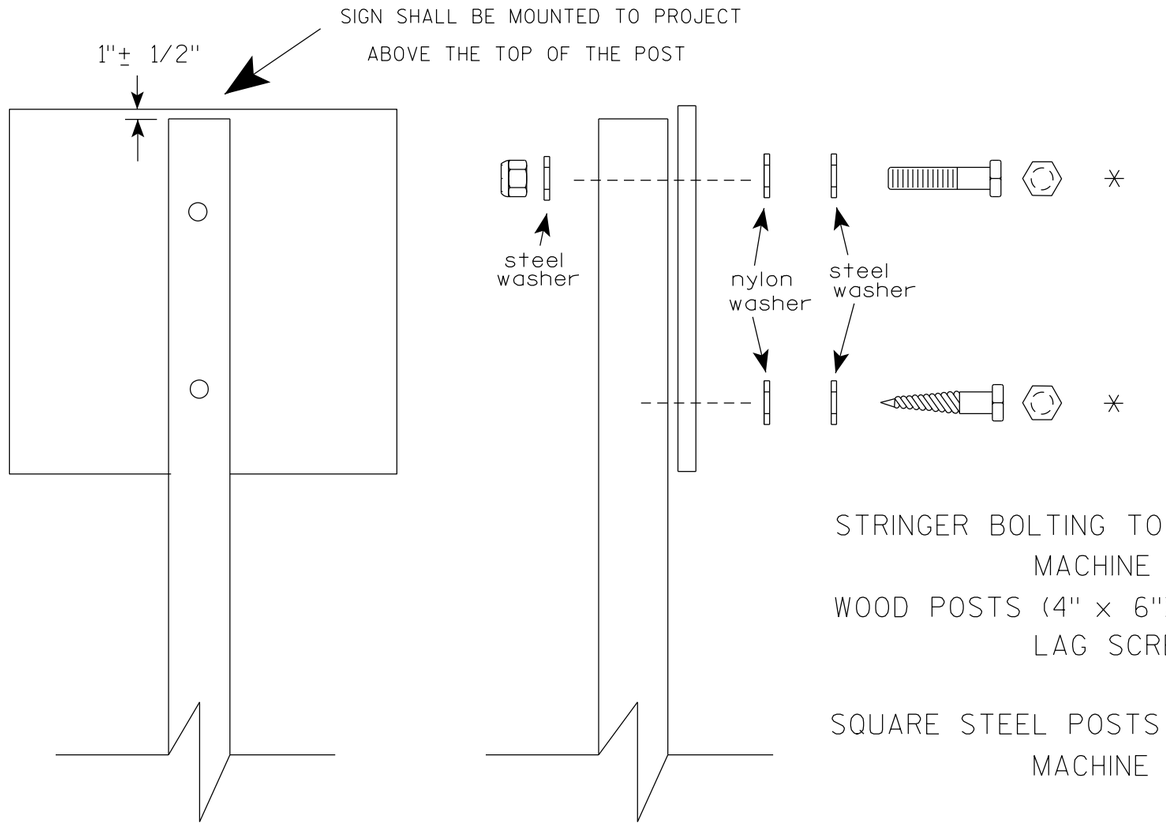
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 46	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

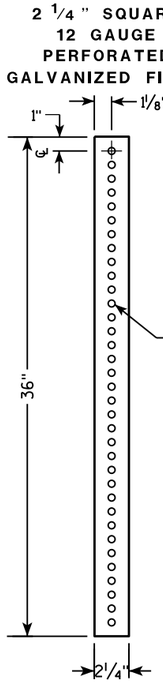
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

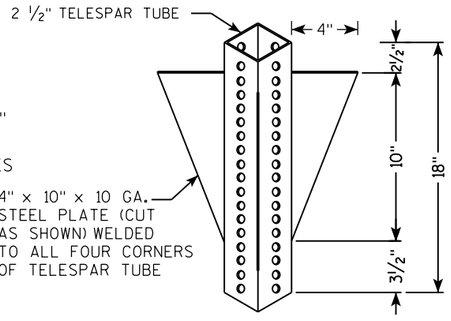
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

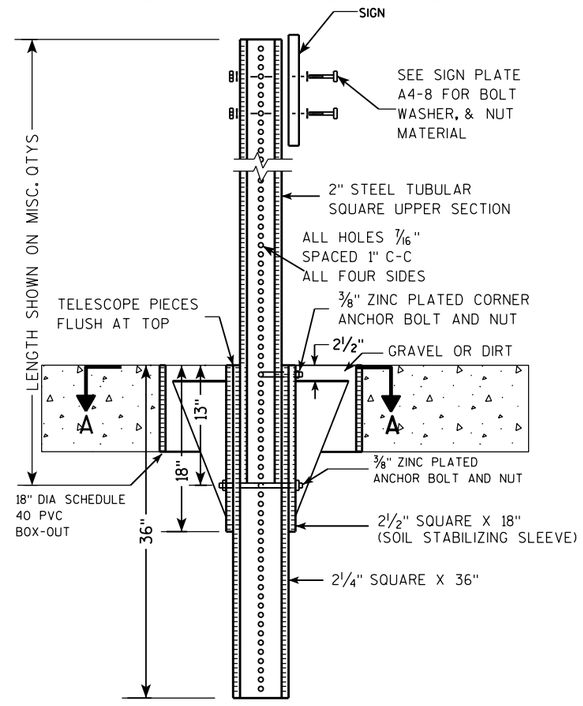
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



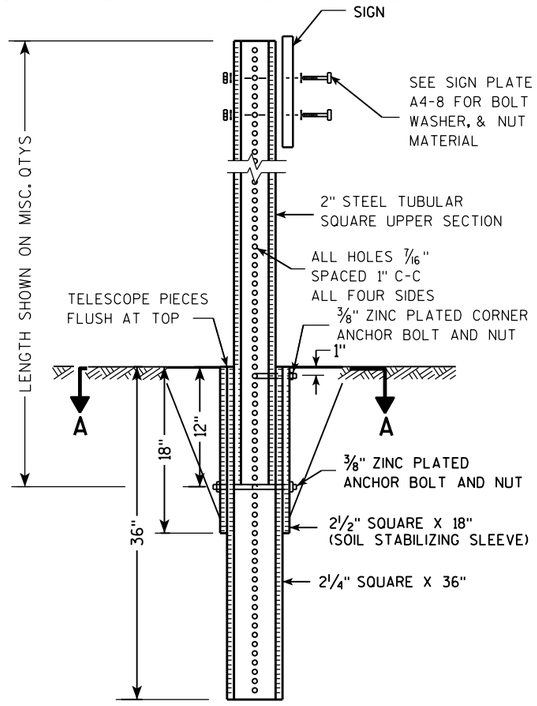
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

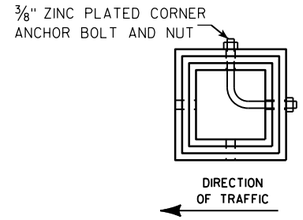


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

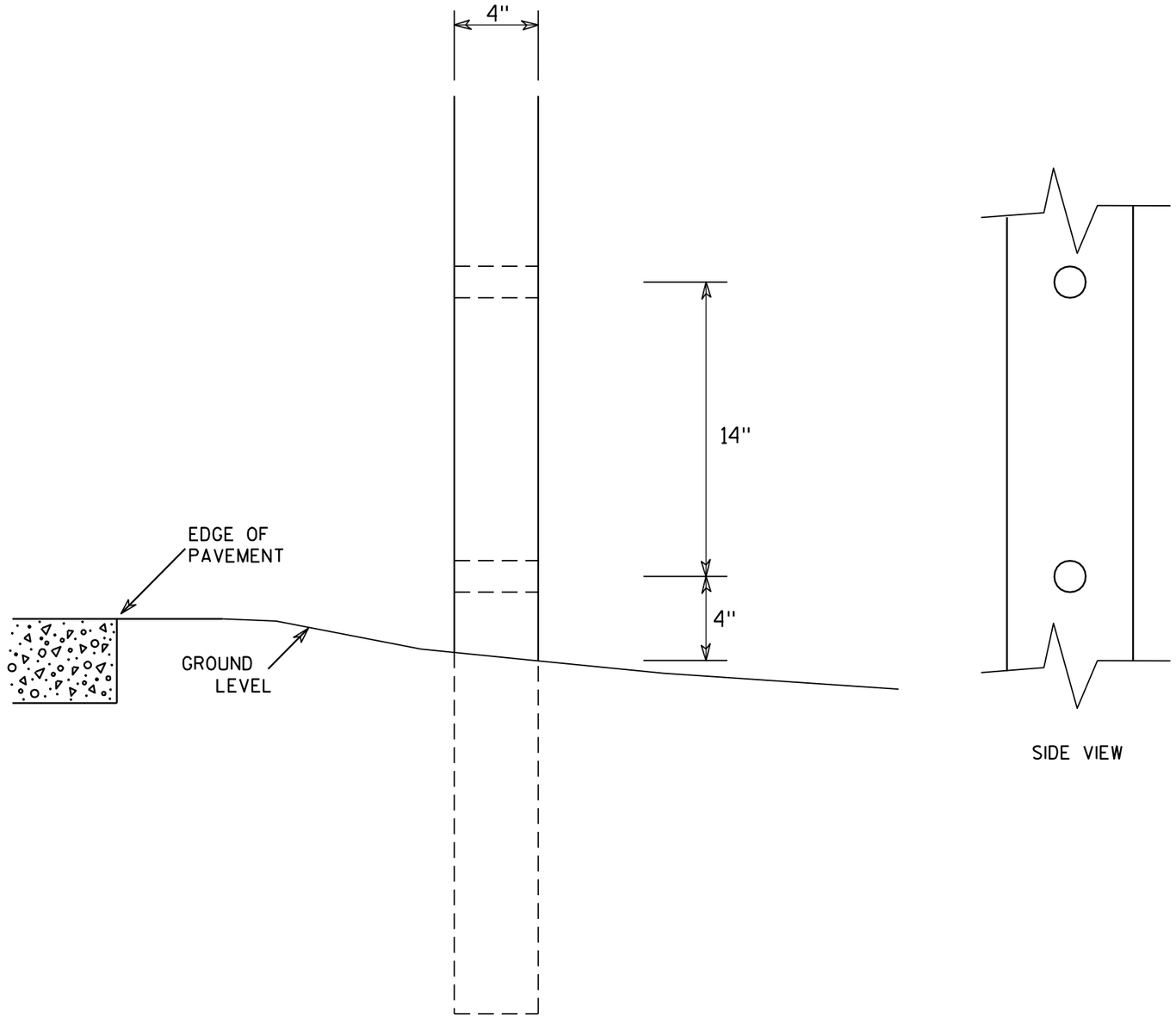
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 48 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

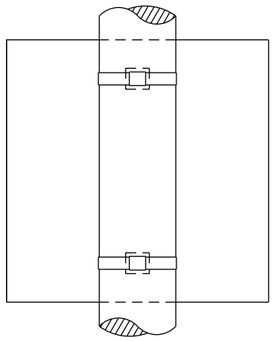
APPROVED Chester J Spang for State Traffic Engineer

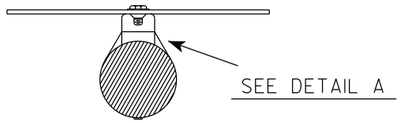
DATE 3/27/97 PLATE NO. A4-11.2

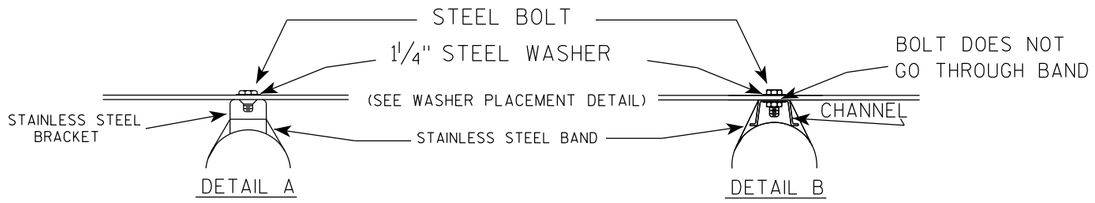
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 49	E

BANDING

SINGLE SIGN



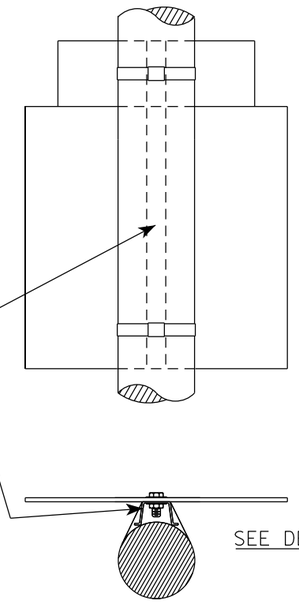




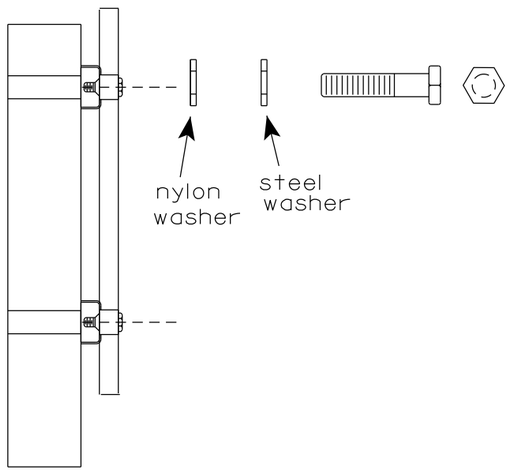
GENERAL NOTES

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

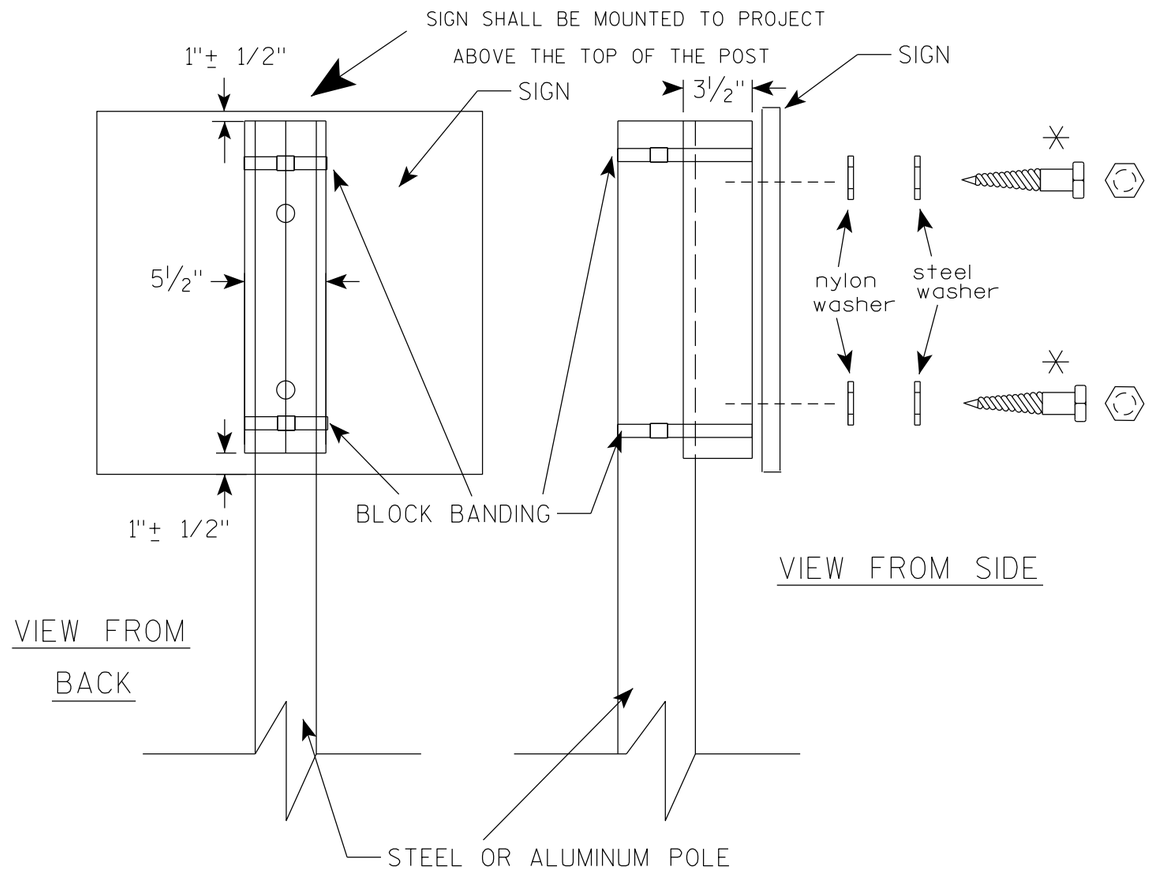
DATE 6/10/19 PLATE NO. A5-9.4

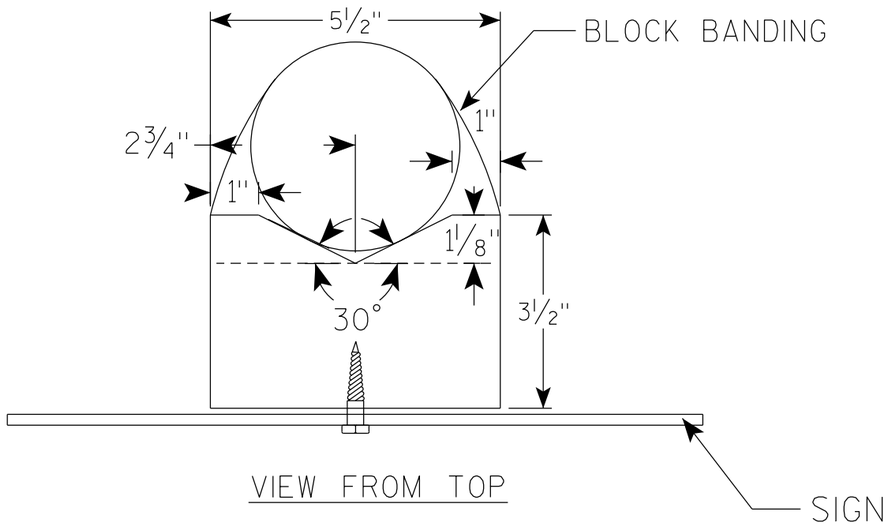
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 50	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

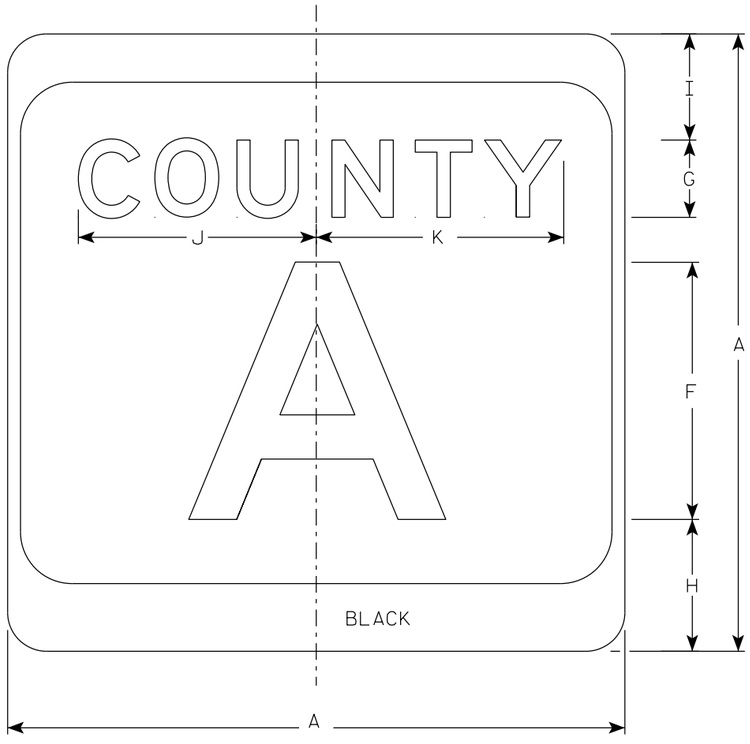
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

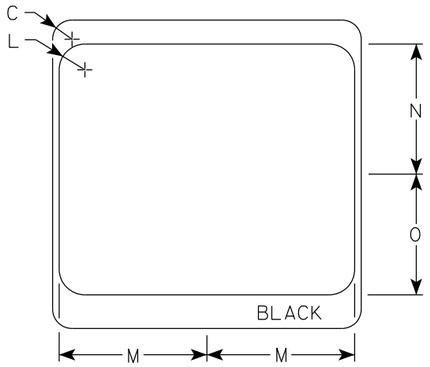
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 51 E

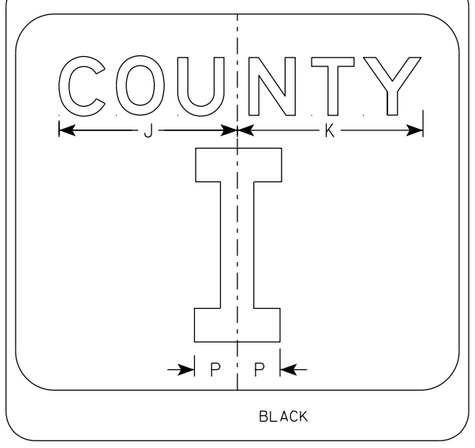


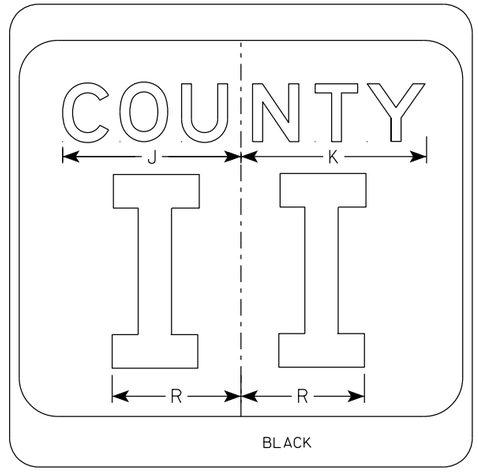
M1-5A



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White & Black
   Message - Black
3. Message Series - see Note 4
4. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
5. Substitute appropriate letters & optically center to achieve proper balance.





SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
2M	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

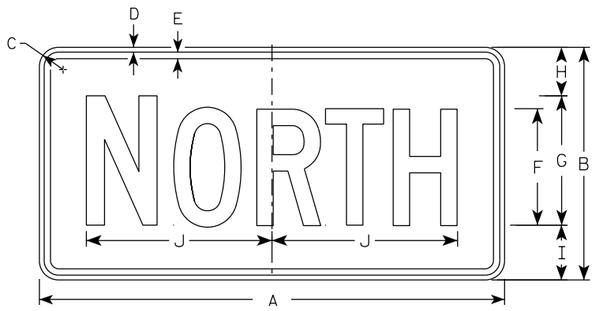
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-5A.9

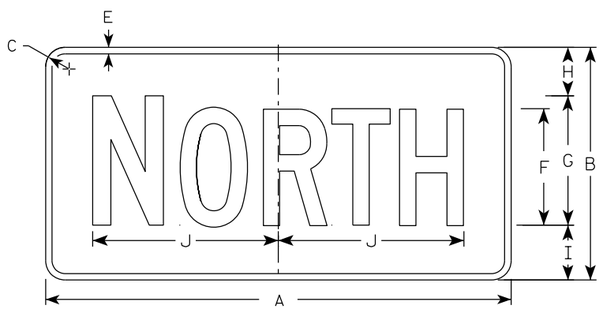
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M15A.dgn PLOT DATE : 8-NOV 2022 8:26 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

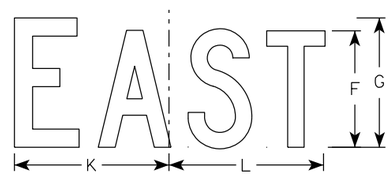
7



M3-1
MM3-1
MP3-1

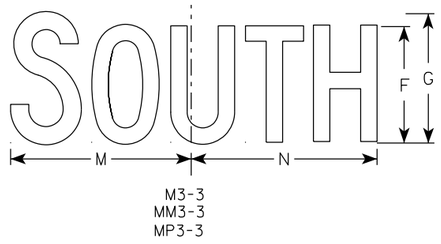


MB3-1
MK3-1
MN3-1

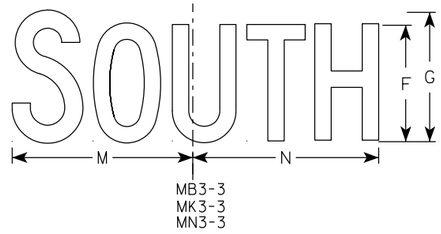


M3-2
MM3-2
MP3-2

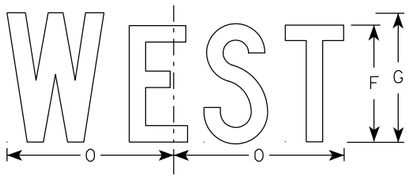
MB3-2
MK3-2
MN3-2



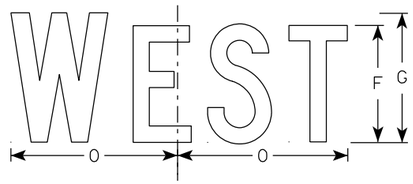
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
2M	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

STANDARD SIGNS
M3-1 THRU M3-4
SERIES

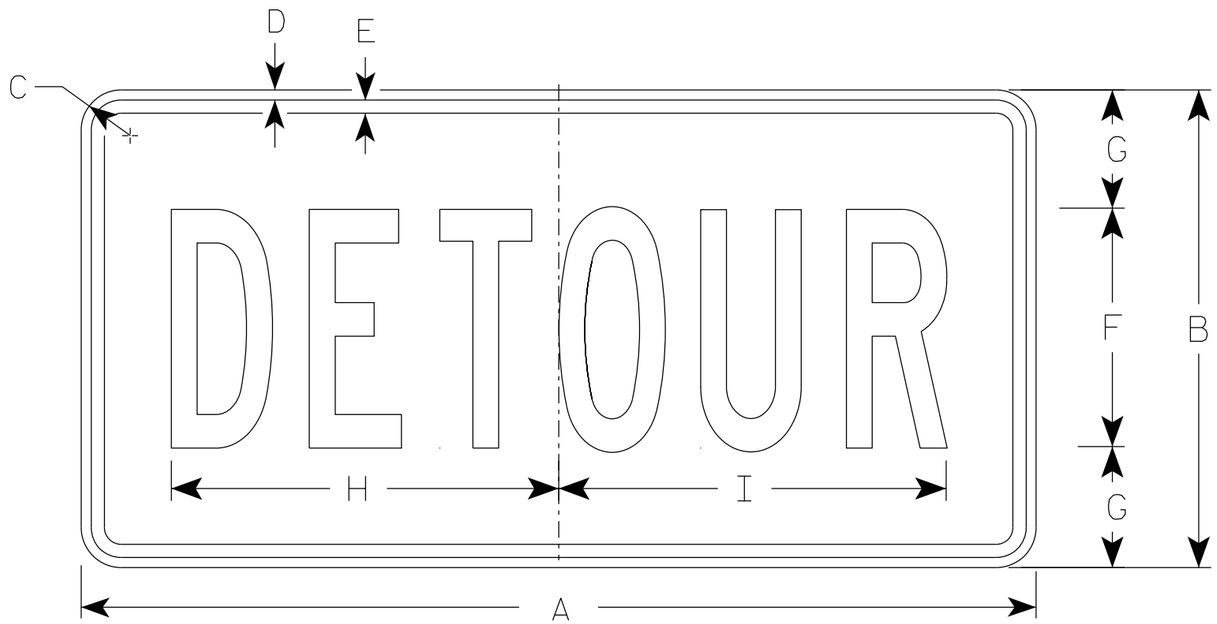
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 53 | E

7



M4-8

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
2M	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5

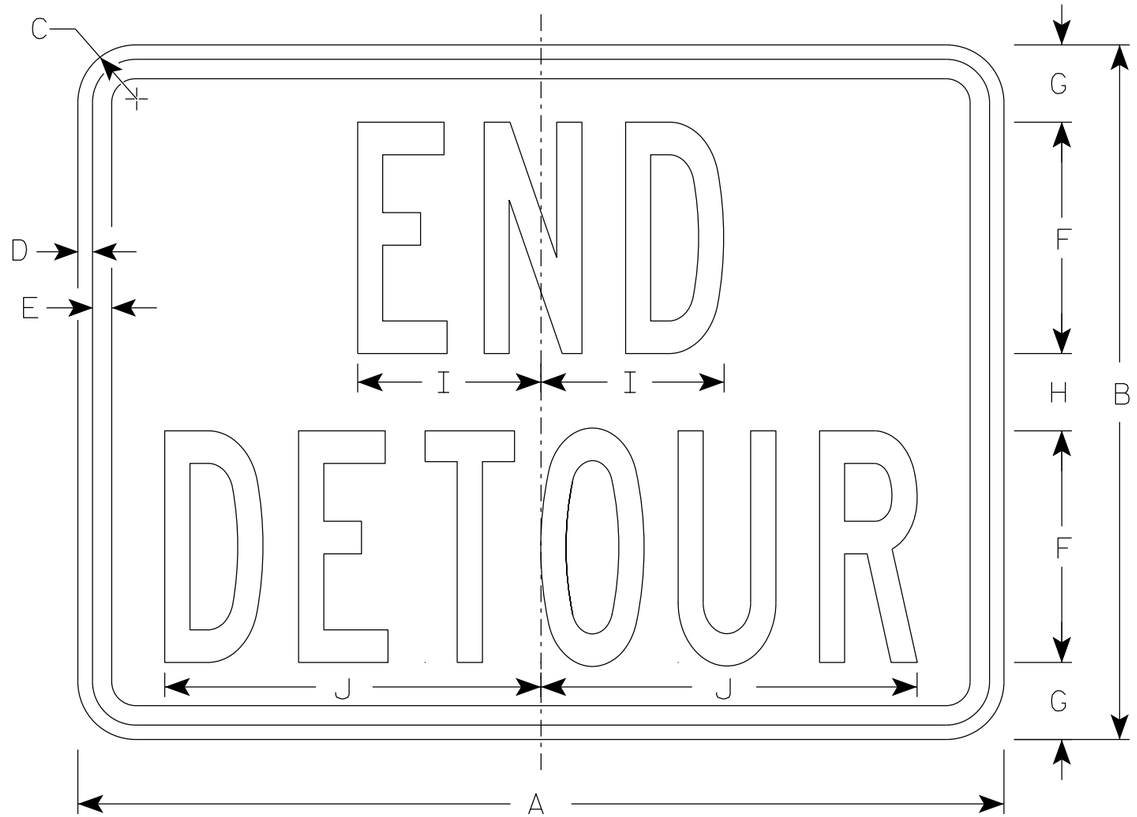
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 54 E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/2	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
2M	24	18	1 1/2	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/2	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4	30	24	1 1/2	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
5	30	24	1 1/2	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0

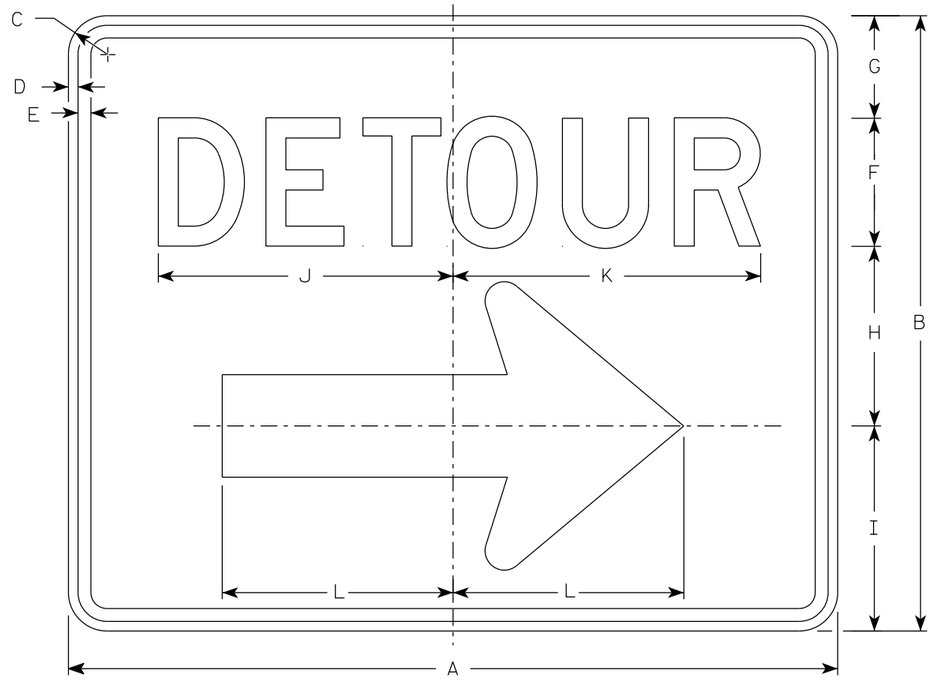
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

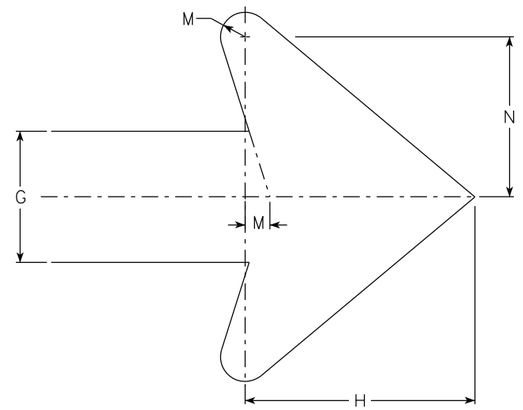
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 55 | E



M4-9R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
2M	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 7/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 7/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

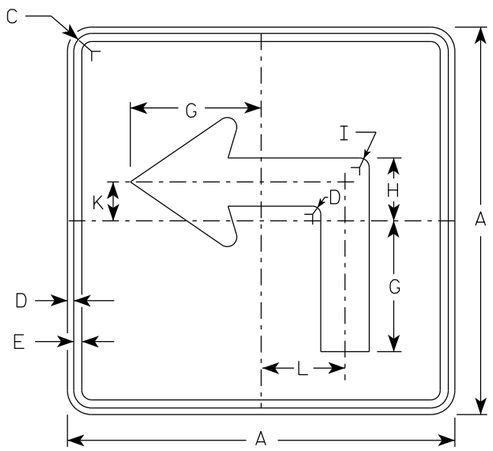
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

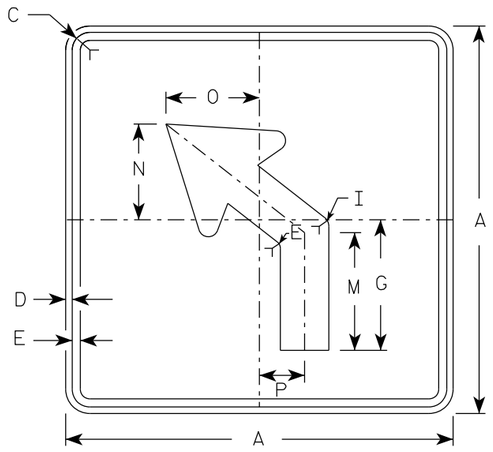
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9R.6

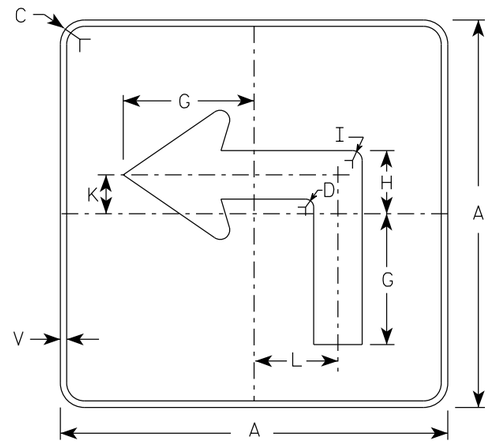
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



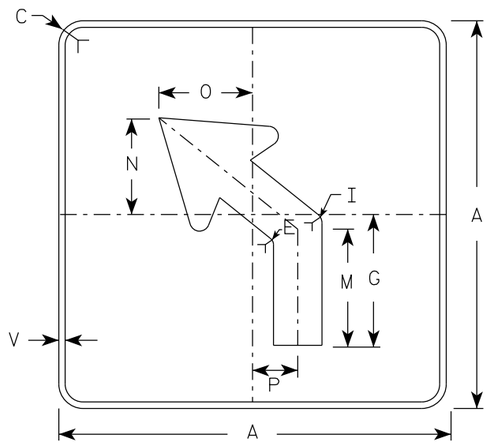
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

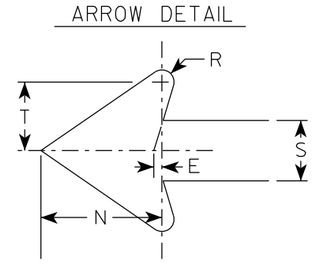


MB5-2L
MK5-2L
MN5-2L
MR5-2L

NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

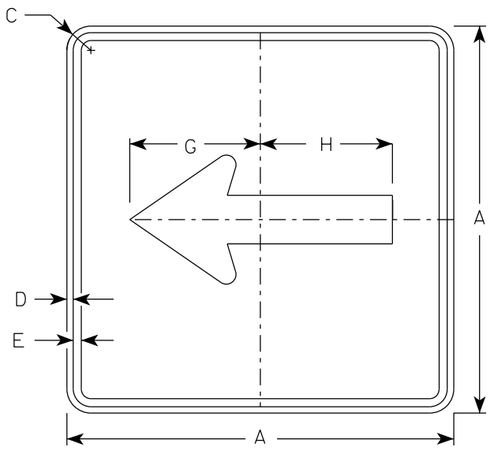
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

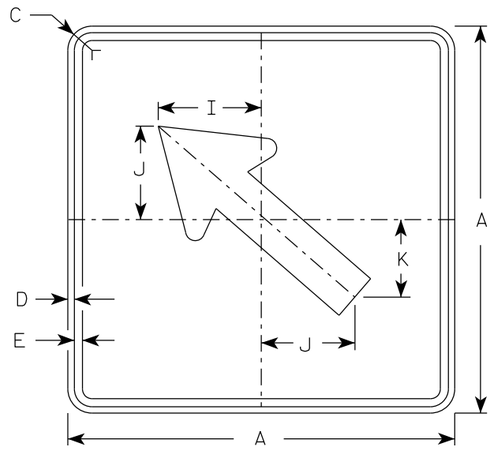
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

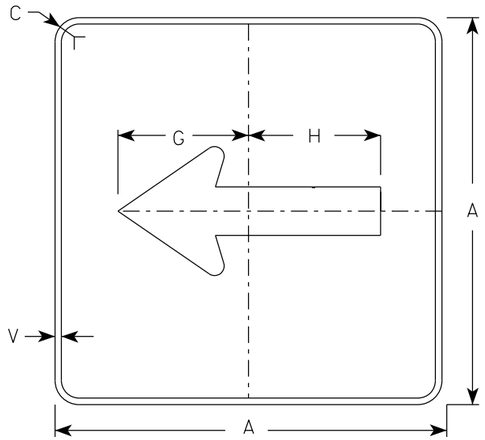
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 57 | E



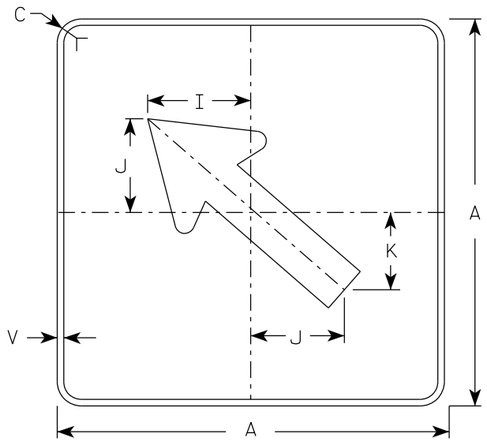
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

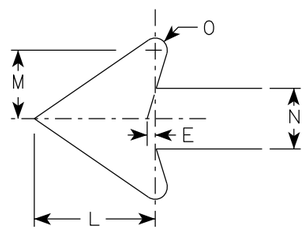


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

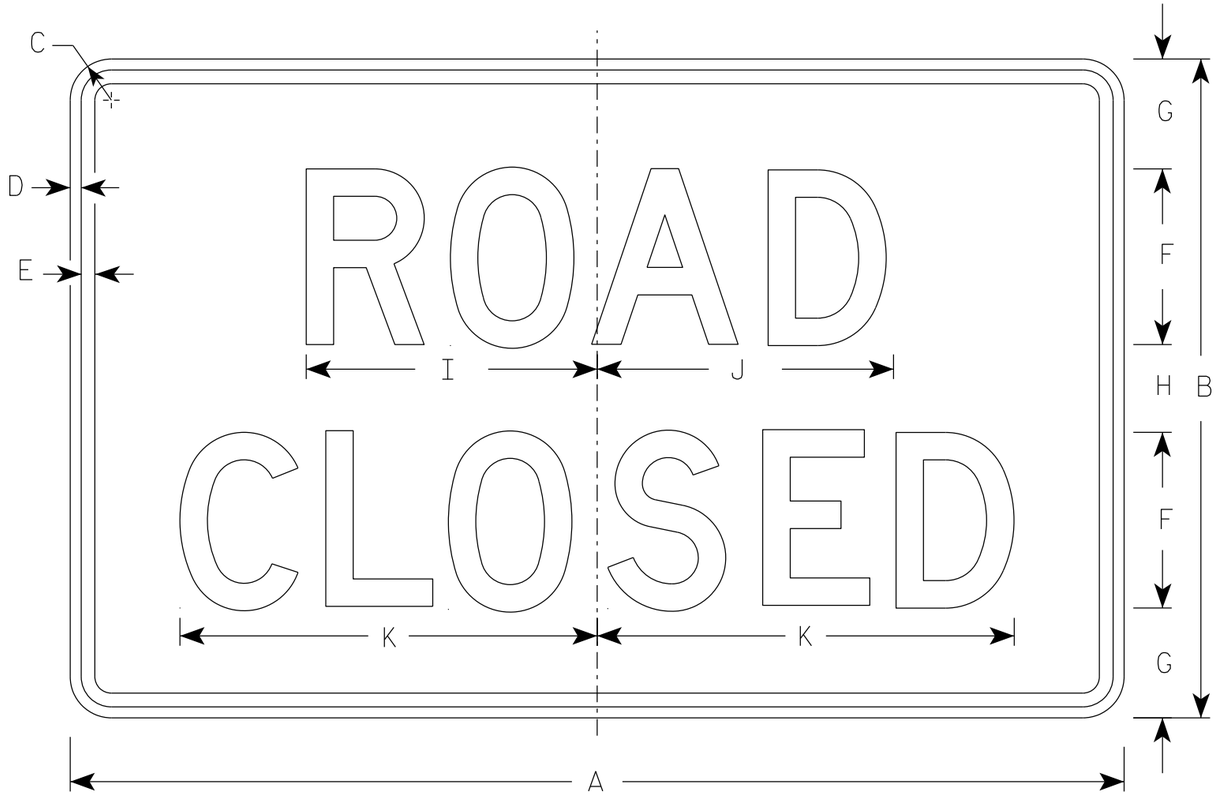
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

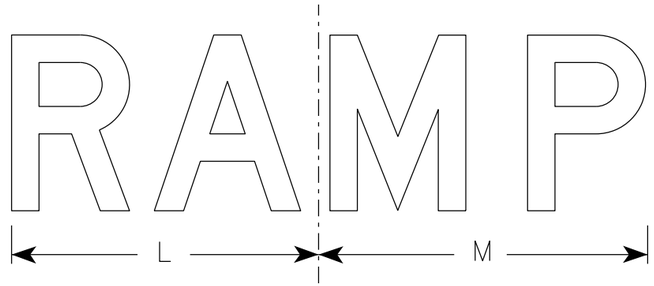
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 58 | E



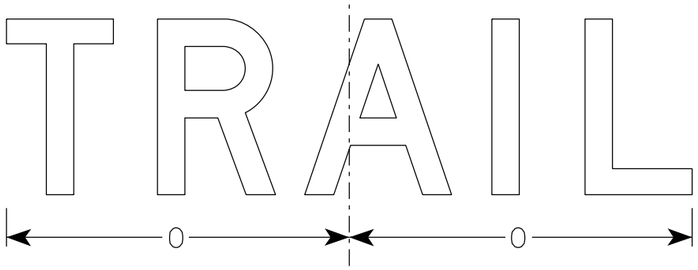
R11-2

NOTES

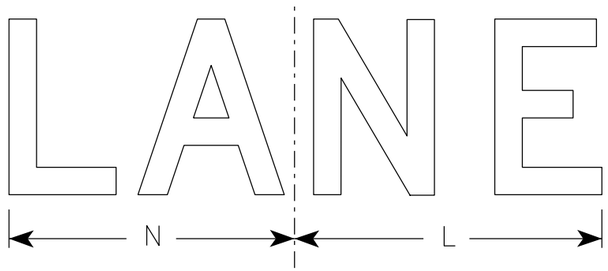
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the 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 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

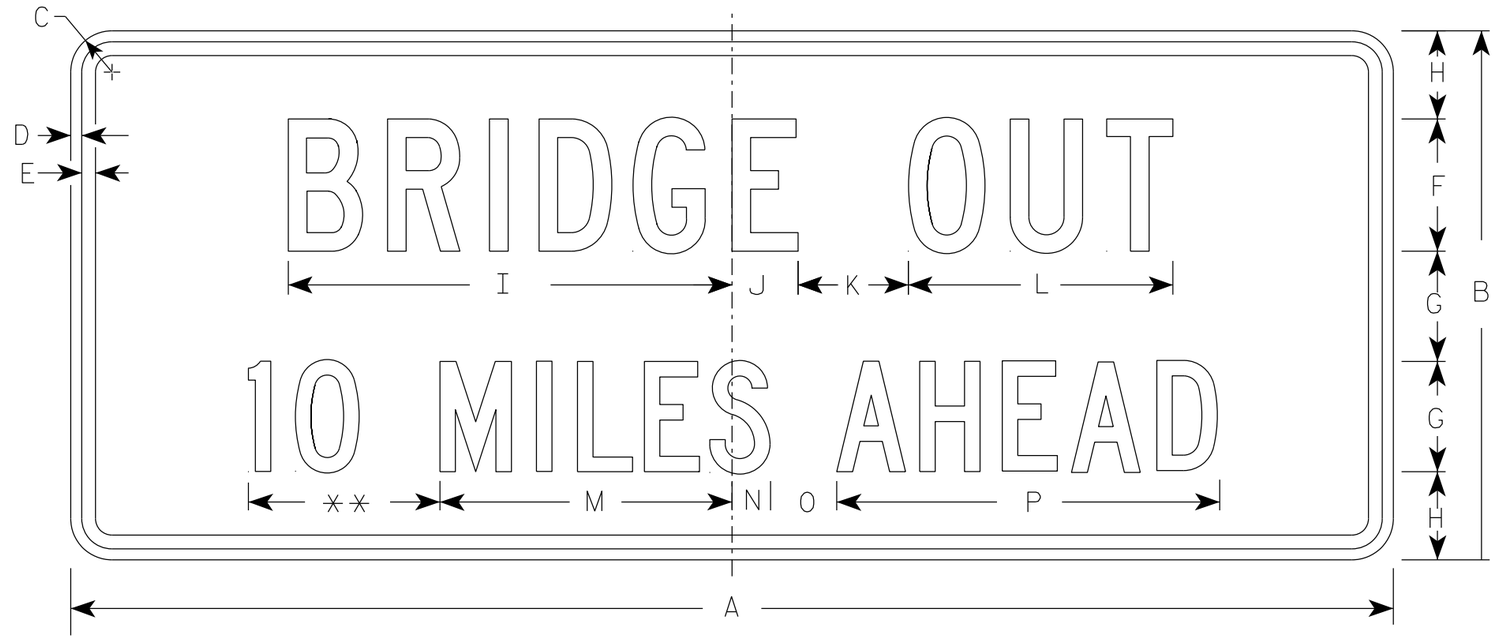
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 5-FEB 2024 2:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

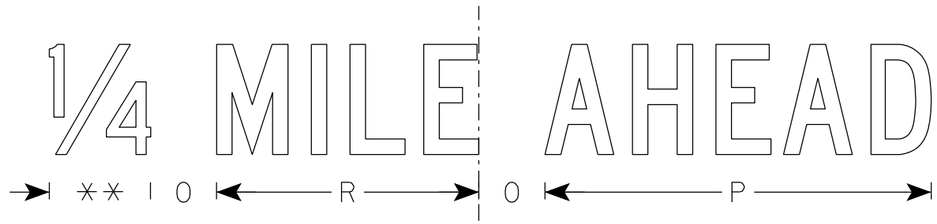
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3C

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	15	1 1/2	1/2	5/8	4	3	2 1/2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4		7 1/8									3.75
2S	60	24	1 7/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
2M	60	24	1 7/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
3																											
4																											
5																											

STANDARD SIGN
R11-3C

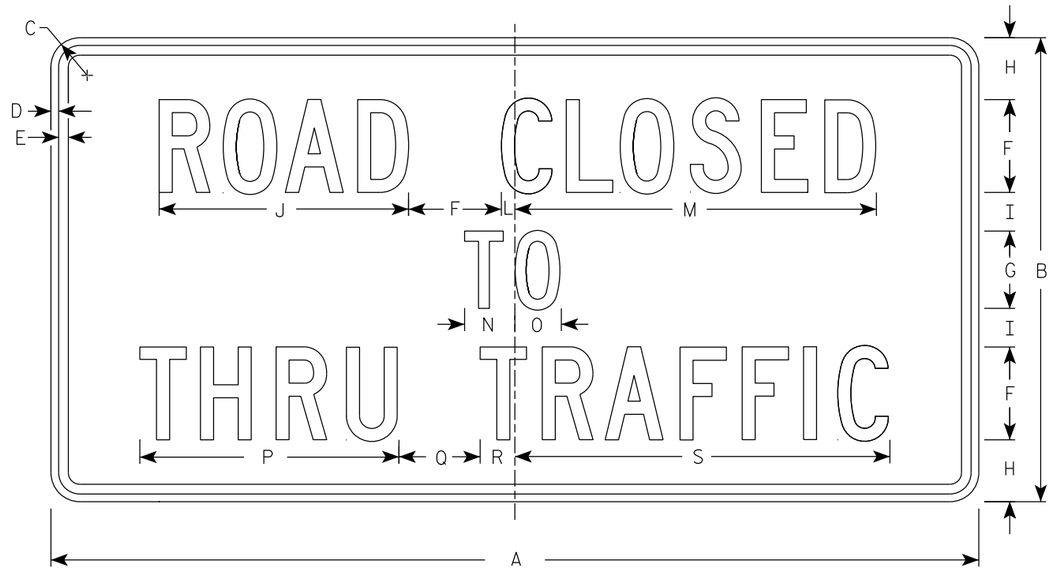
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-3C.4

PROJECT NO:

SHEET NO: 60 E



R11-4

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

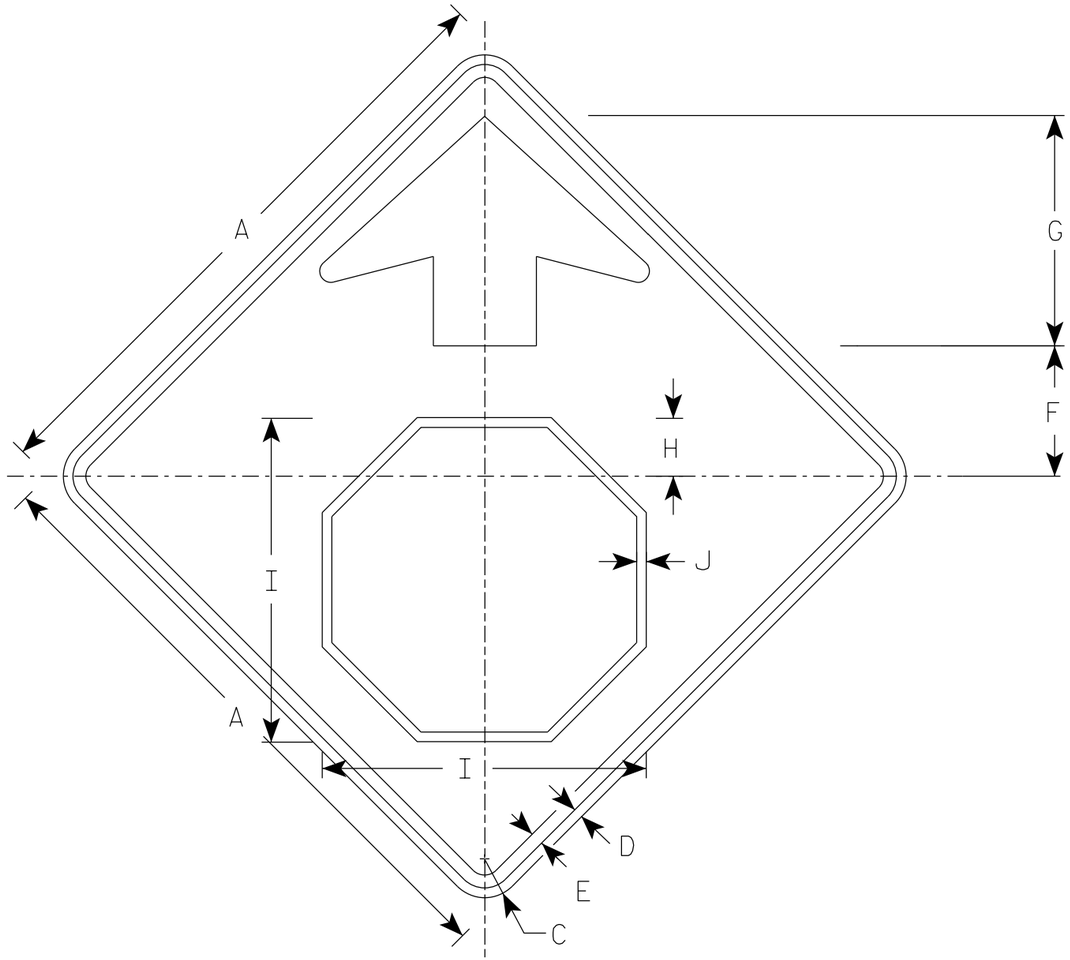
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-4.4

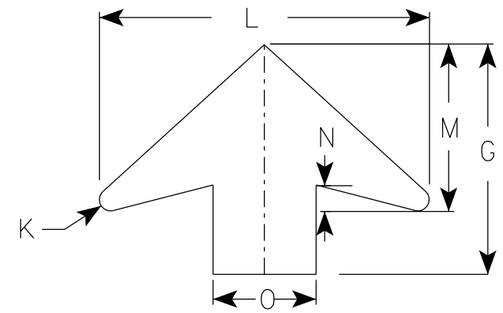
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 61	E



W3-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Arrow & Border - Black
   Stop Symbol - White Border on Red Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 7/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

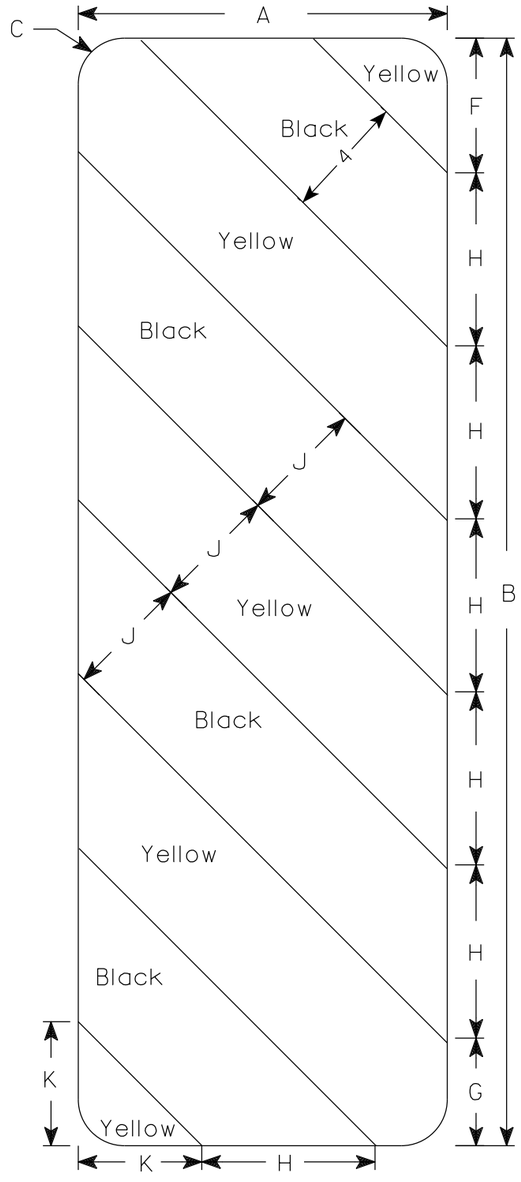
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

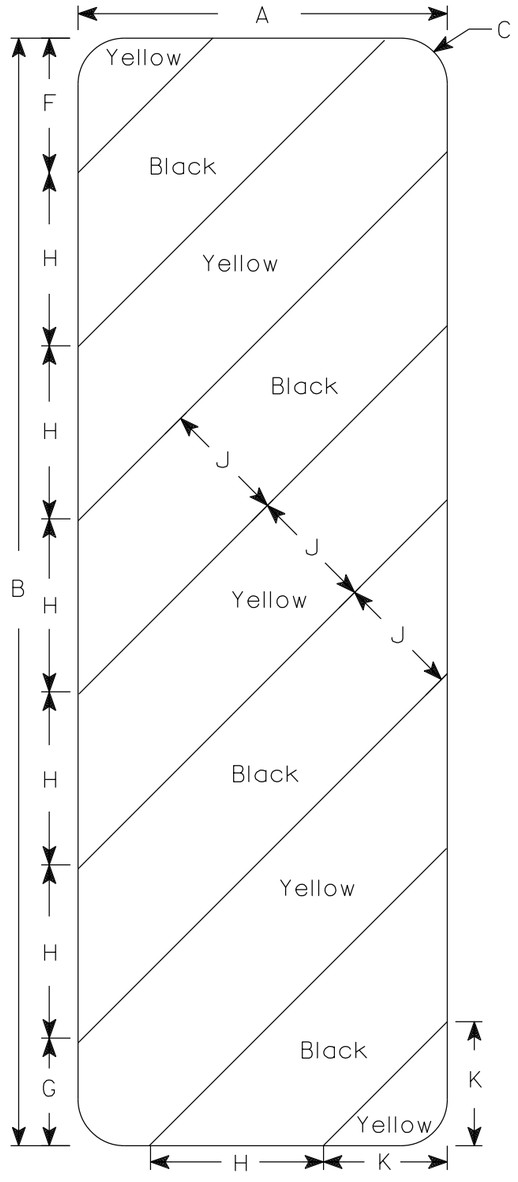
DATE 8/17/2023 PLATE NO. W3-1.13

PROJECT NO:

SHEET NO: 62 E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54	1 1/2			6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

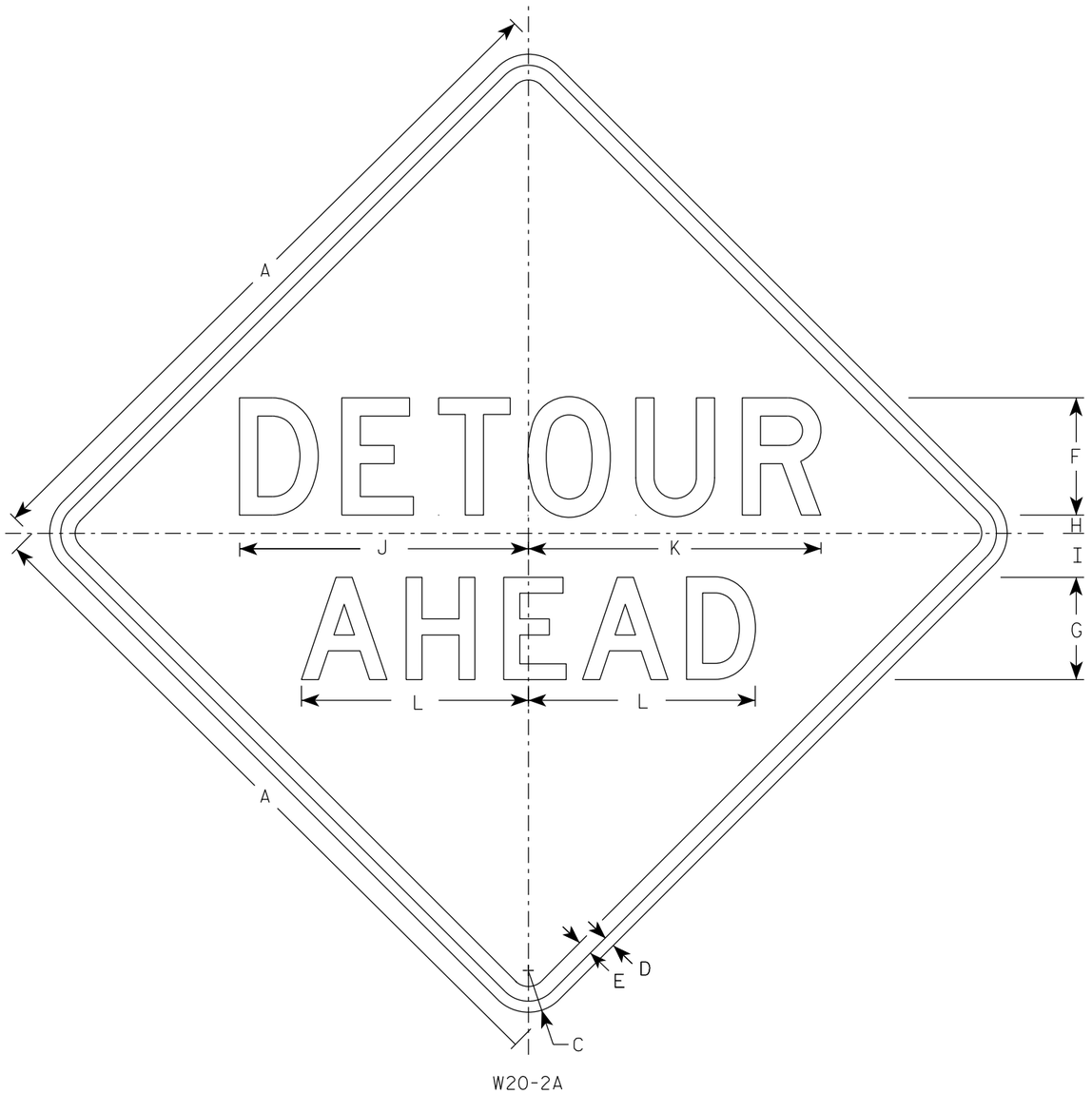
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

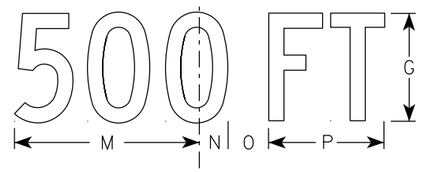
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/4/2024 PLATE NO. W5-52.10

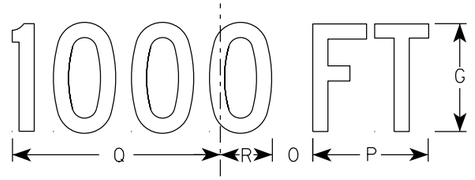
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 63 E



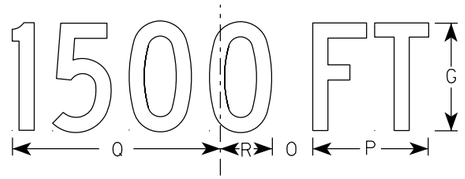
W20-2A



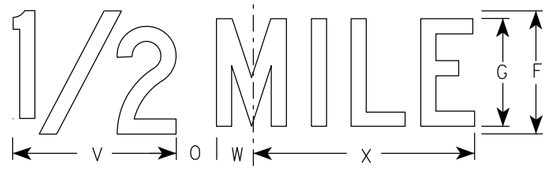
W20-2D



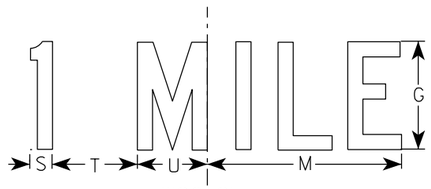
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

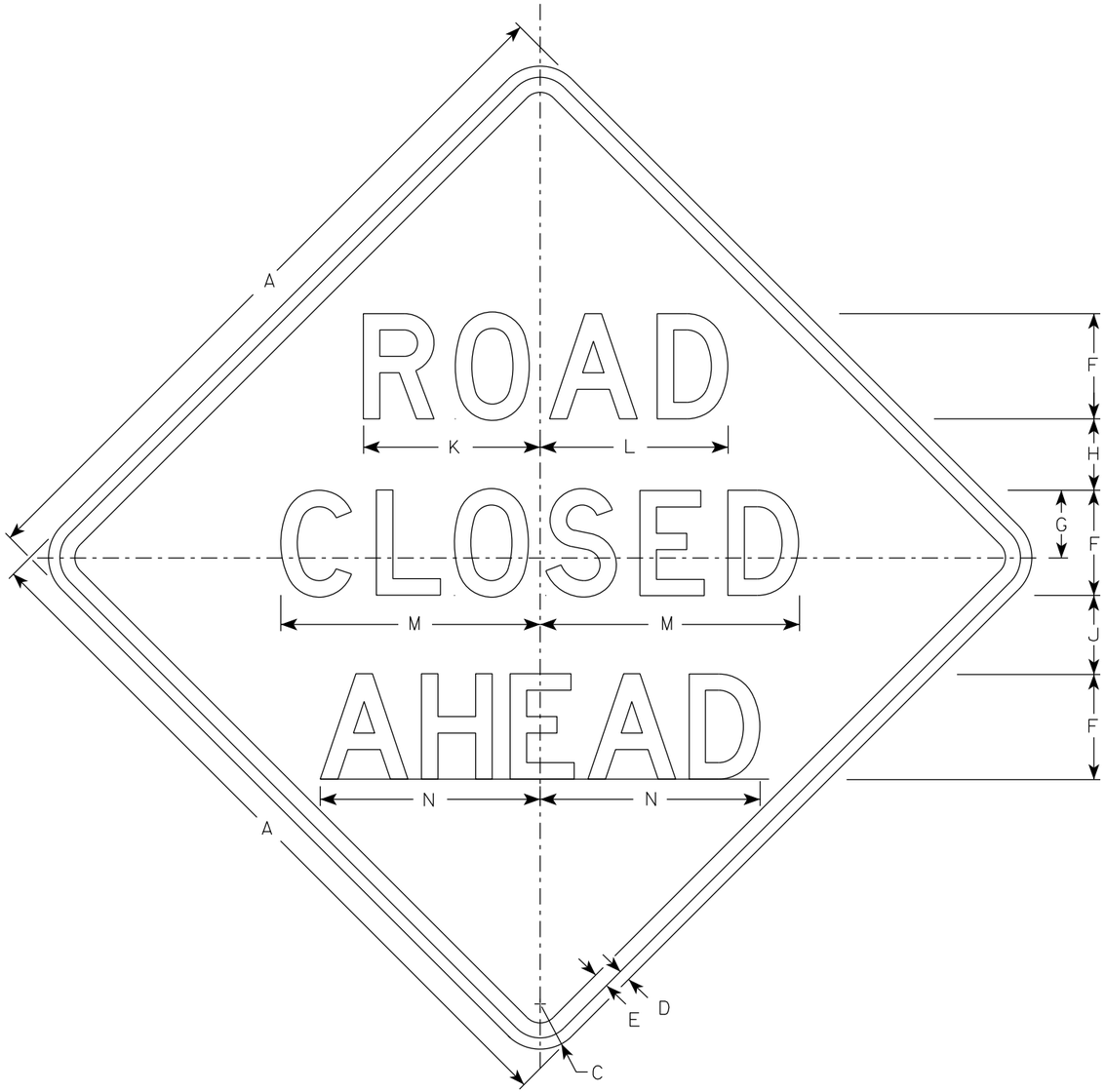
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

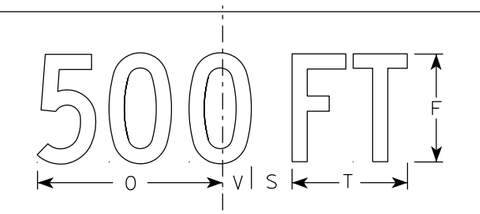
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

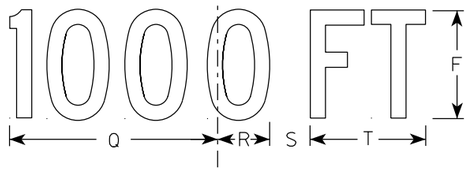
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



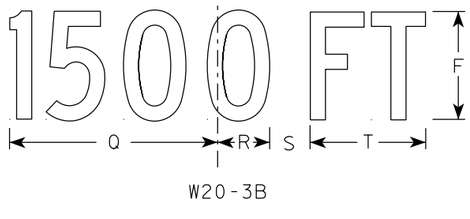
W20-3A



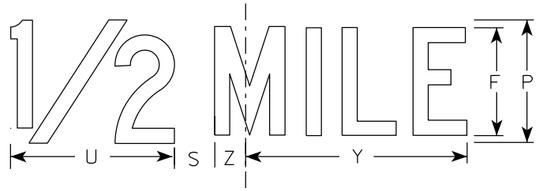
W20-3D



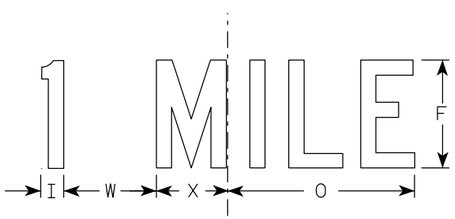
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

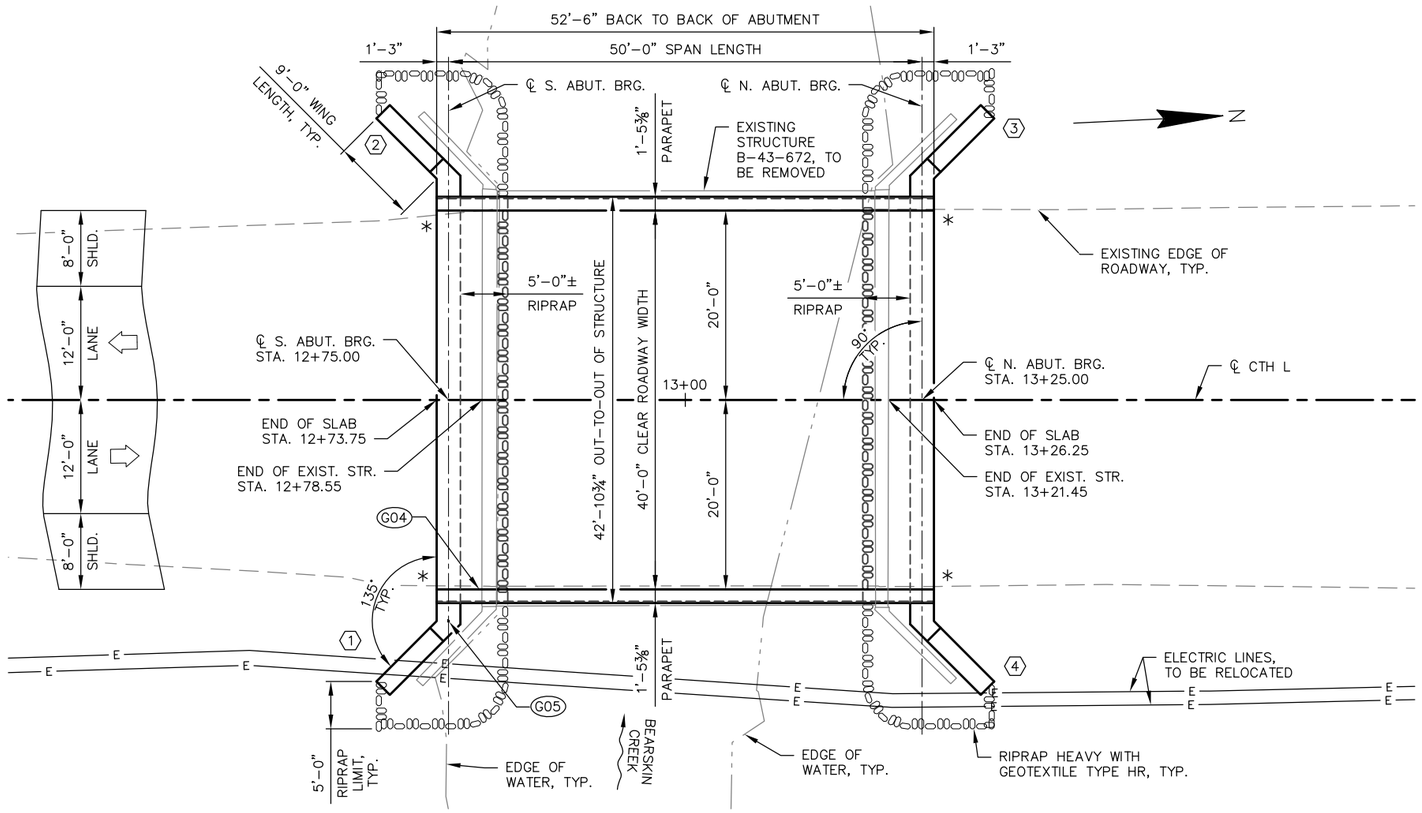
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-3.8

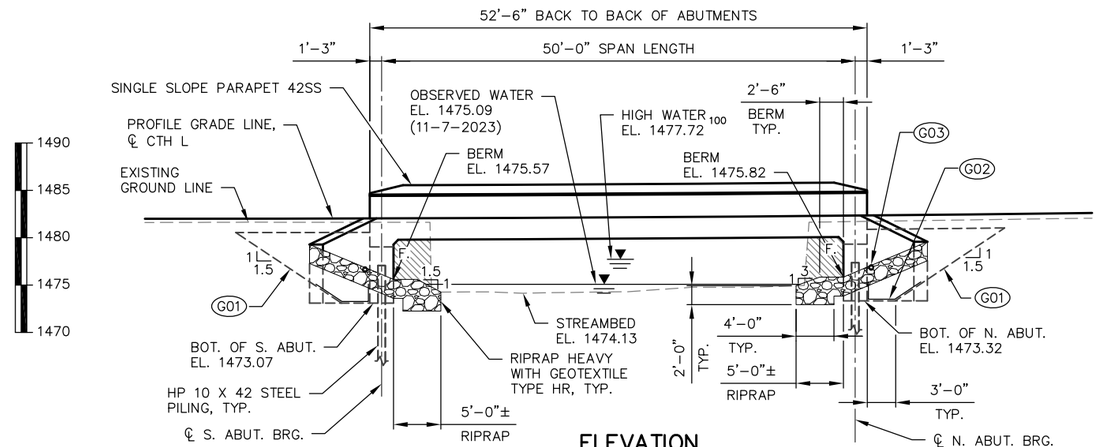
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W203.DGN PLOT DATE : 10-JAN 2024 12:02 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



PLAN B-43-68

(SINGLE SPAN CONCRETE FLAT SLAB BRIDGE)



ELEVATION

(THRU BEARSKIN CREEK, LOOKING WEST)

BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEVATION
BM #1	11+69.06, 88.88' LT.	RAILROAD SPIKE IN POWER POLE	1485.34
BM #2	14+55.63, 56.44' RT.	GIN SPIKE IN ASPHALT	1481.14

HORIZONTAL DATUM AND ADJUSTMENT: NAD 83 (2011)
VERTICAL DATUM AND ADJUSTMENT: NAVD 88 (2012)
COORDINATE REFERENCE SYSTEM: WISCRS ONEIDA CO.

TRAFFIC DATA:

CTH L
A.A.D.T. (2025) —— 2,700
A.A.D.T. (2045) —— 2,900
DESIGN SPEED —— 50 M.P.H.

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
(608) 261-0261

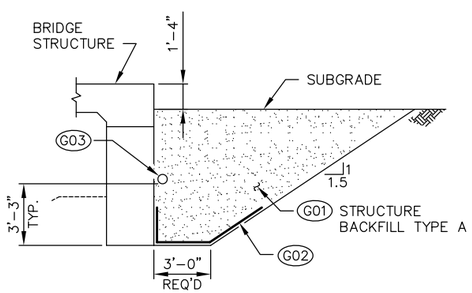
CONSULTANT CONTACT
ANDY KNUTSON, P.E., S.E.
(608) 588-7866

NOTES

- EXCAVATION AS INDICATED IN THE HATCH AREAS, TO BE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-43-68".
- (G01) BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCLUDED WITH BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-43-68". LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.
- (G02) "GEOTEXTILE TYPE DF SCHEDULE A" LIMITS. EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT FOR THE ENTIRE ABUTMENT BODY LENGTH.
- (G03) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED IN "ABUTMENT DETAILS" SHEET.
- (G04) NAME PLATE REQUIRED NEAR WING 1. FOR LOCATION SEE "PARAPET & SUPERSTRUCTURE" SHEET.
- (G05) BENCHMARK CAP (WHEN SUPPLIED) NEAR WING 1. FOR LOCATION SEE "ABUTMENTS" SHEET.
- ⬡ INDICATES WING NUMBER
- ∗ LOCATION OF BEAM GUARD ATTACHMENT

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION, GENERAL NOTES & QUANTITIES
3. SUBSURFACE EXPLORATION
4. ABUTMENTS
5. ABUTMENT DETAILS
6. SUPERSTRUCTURE
7. SUPERSTRUCTURE DETAILS
8. PARAPET & SUPERSTRUCTURE



ABUTMENT BACKFILL DETAIL

(TYPICAL AT BOTH ABUTMENTS)

STATE PROJECT NUMBER

9876-00-70

DESIGN DATA

LIVE LOAD:

DESIGN LOADING —— HL-93
INVENTORY RATING FACTOR —— RF=1.18
OPERATING RATING FACTOR —— RF=1.53
WISCONSIN STANDARD PERMIT VEHICLE RATING (WIS.-SPV): —— 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY, SLAB —— $f'c$ = 4,000 P.S.I.
ALL OTHER —— $f'c$ = 3,500 P.S.I.
HIGH-STRENGTH BAR STEEL REINFORCEMENT —— f_y = 60,000 P.S.I.

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 170 TONS PER PILE** AT S. ABUT. AND 170 TONS PER PILE** AT N. ABUT. AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 60 FT PILE LENGTHS AT S. ABUT. AND 60 FT PILE LENGTHS AT N. ABUT.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES DYNAMIC FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA:

100 YEAR DESIGN FREQUENCY:
Q_{100} —— 454 C.F.S.
DRAINAGE AREA —— 37.1 SQ. MI.
BRIDGE WATER AREA —— 124 SQ. FT.
BRIDGE VELOCITY —— 3.66 F.P.S.
HIGH WATER$_{100}$ EL. —— 1477.72 FT.
ROADWAY OVERTOPPING —— N/A
SCOUR CRITICAL CODE —— 8
Q_2 —— 169 C.F.S.
Q_2 ELEVATION —— 1476.45 FT.
Q_2 VELOCITY —— 2.65 F.P.S.

NO.	DATE	REVISION	BY

WESTBROOK Associated Engineers, Inc.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WI 53588
PHONE (608) 588-7866
FAX (608) 588-7954

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 11/18/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-43-68

CTH L OVER BEARSKIN CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
ONEIDA	NOKOMIS

DESIGN SPEC: AASHTO LRFD DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JDO	CDS	JDO	ACK

GENERAL PLAN

SHEET 1 OF 8

66

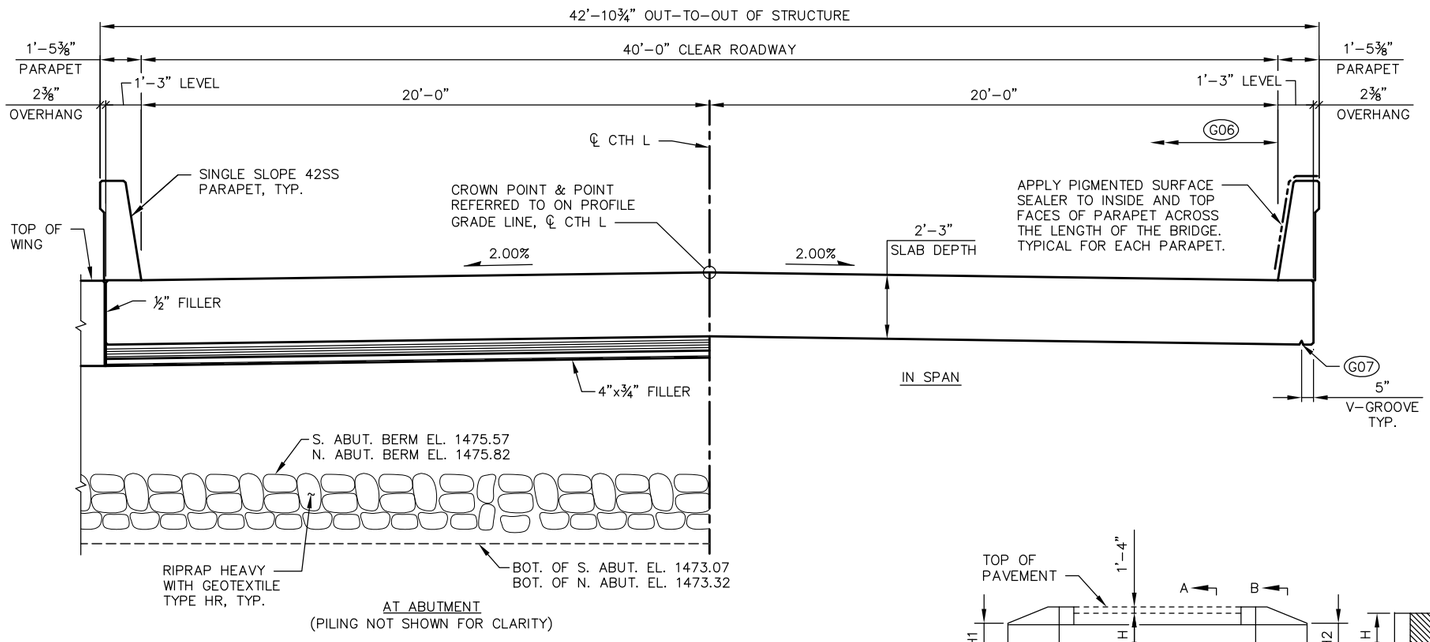
8

8

I.D. 9876-00-70

PLOT DATE: Sep 30, 2024

FILE: B430068_01_gen.dwg
PLOT SCALE:

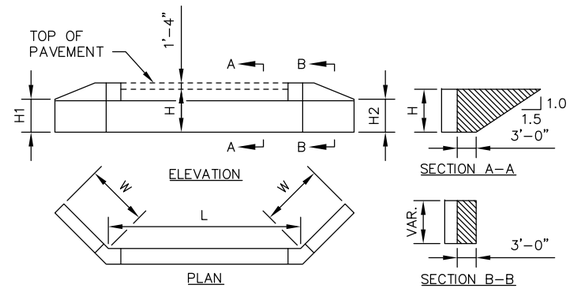


CROSS SECTION THRU ROADWAY
(LOOKING NORTH)

NOTES

(G06) COAT WITH "PROTECTIVE SURFACE TREATMENT" AS PER THE STANDARD SPECIFICATIONS. PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO TOP SURFACE OF SLAB BETWEEN THE PARAPETS.

(G07) ¾" V-GROOVE REQ'D. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENT.



ABUTMENT BACKFILL DIAGRAM

L = ABUTMENT BODY LENGTH AT BACKFACE (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
H1 = WING 1 HEIGHT AT TIP (FT)
H2 = WING 2 HEIGHT AT TIP (FT)
W = WING LENGTH (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H) + (3')(0.5)(H1+H2+H+H)(W)
V_{CY} = V_{CF}(EF)/27
V_{TON} = V_{CY}(2.0)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON THE "GENERAL PLAN" SHEET AND THE ABUTMENT SHEETS.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WING FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCLUDED WITH "EXCAVATION FOR STRUCTURES BRIDGES B-43-68".

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-43-68" SHALL BE THE EXISTING GROUND LINE.

AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

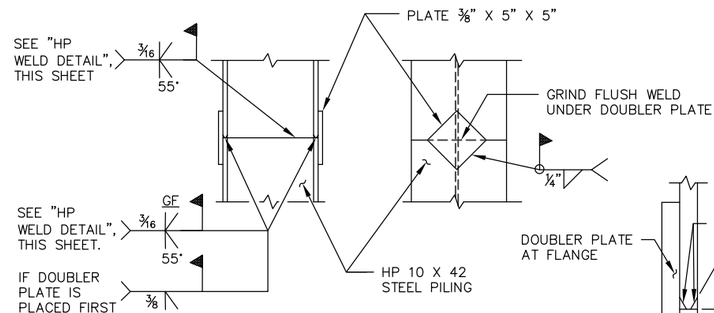
AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

DO NOT PLACE FILL ABOVE 3'-0" FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

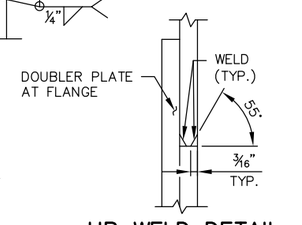
THE EXISTING STRUCTURE (B-43-672) IS A SINGLE-SPAN CAST IN PLACE GIRDER STRUCTURE WITH AN OVERALL WIDTH OF 43.8-FT AND TOTAL LENGTH OF 42.9 FT AND IS TO BE REMOVED PER BID ITEM "REMOVING STRUCTURE OVER REMOVE DEBRIS B-43-672".

TOTAL ESTIMATED QUANTITIES

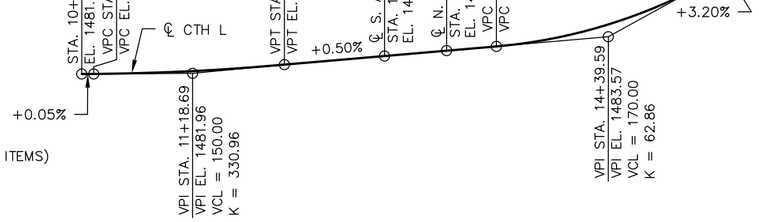
ITEM NO.	BID ITEMS	UNIT	S. ABUT.	N. ABUT.	SUPER.	TOTALS
203.0211.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-43-672	EACH	---	---	---	1
203.0250	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS B-43-672	EACH	---	---	---	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-43-68	EACH	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	280	280	---	560
502.0100	CONCRETE MASONRY BRIDGES	CY	41.0	41.0	206.9	289
502.3200	PROTECTIVE SURFACE TREATMENT	SY	---	---	234	234
502.3210	PIGMENTED SURFACE SEALER	SY	---	---	52	52
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	3065	3065	---	6130
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1500	1500	38410	41410
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	9	9	---	18
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	540	540	---	1080
606.0300	RIPRAP HEAVY	CY	45	45	---	90
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	85	85	---	170
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	---	---	4	4
645.0120	GEOTEXTILE TYPE DF SCHEDULE A	SY	45	45	---	90
645.0120	GEOTEXTILE TYPE HR	SY	90	90	---	180
(NON-BID ITEM)	FILLER	SIZE				½" & ¾"



PILE SPLICE DETAILS



HP WELD DETAIL
(FLANGE SHOWN, WEB SIMILAR)



PROFILE GRADE LINE, ℄ CTH L

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-43-68

DRAWN BY JDO | PLANS CK'D ACK

CROSS SECTION, GENERAL NOTES & QUANTITIES

SHEET 2 OF 8

67

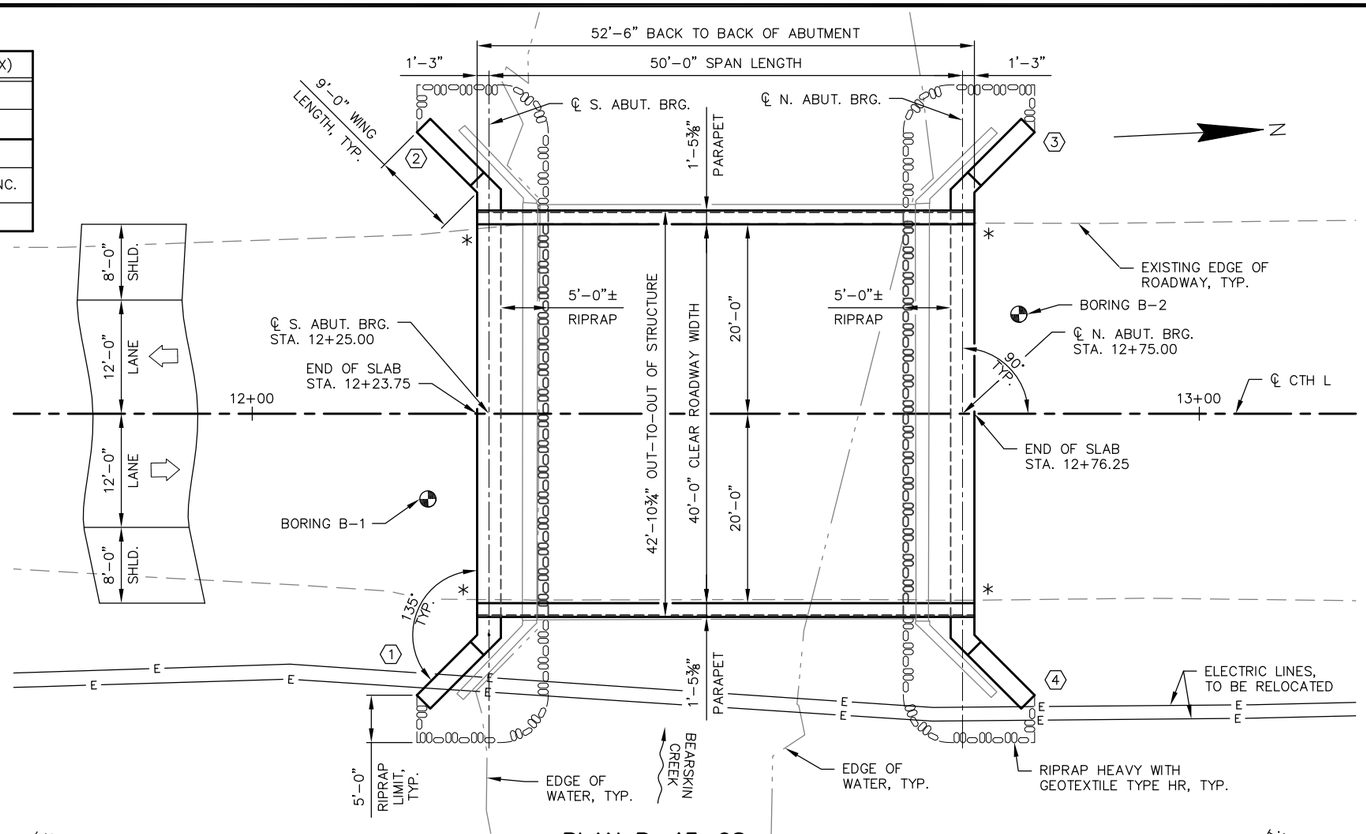
B-43-68 BORINGS

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BORING B-1	1/31/2024	164559.7	188817.5
BORING B-2	2/1/2024	164622.9	188801.0
BORINGS COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.			
SUBSURFACE INVESTIGATION REPORT: AMERICAN ENGINEERING TESTING, INC.			
ALL COORDINATES REFERENCED TO WISCRS, ONEIDA COUNTY			

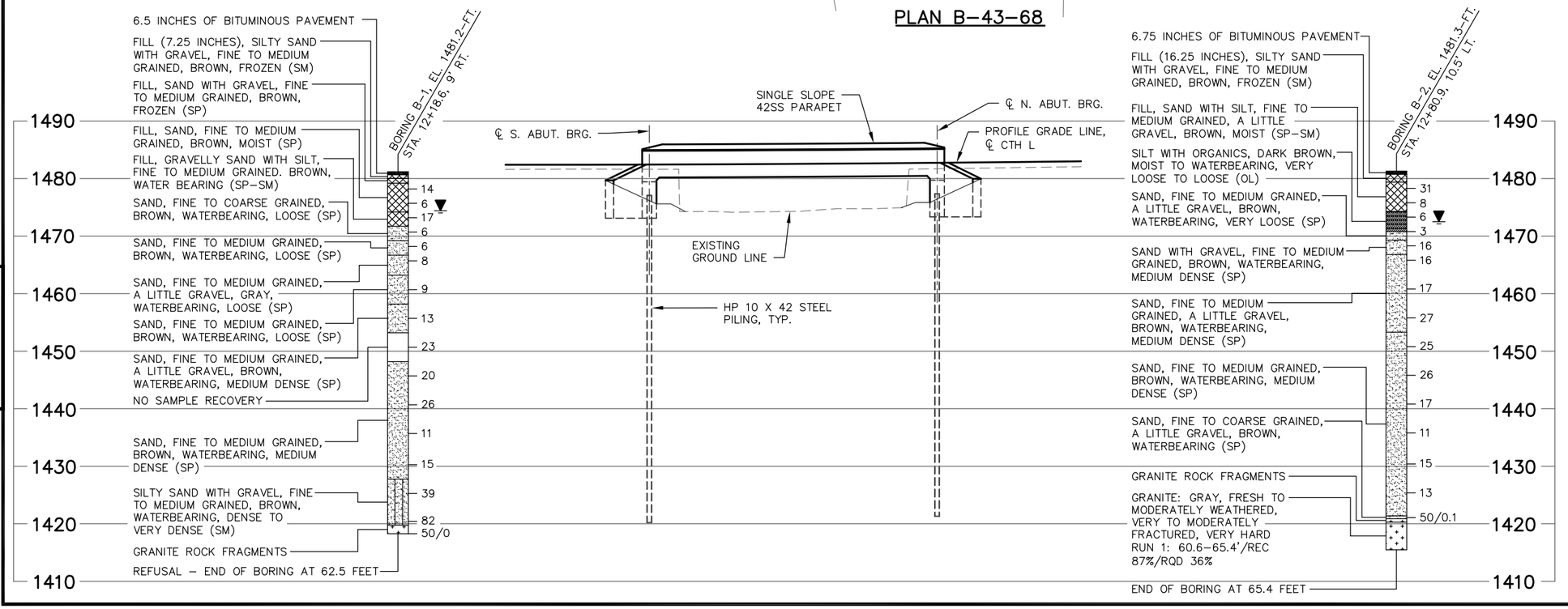
NOTES

⬡ INDICATES WING NUMBER

* LOCATION OF BEAM GUARD ATTACHMENT



PLAN B-43-68



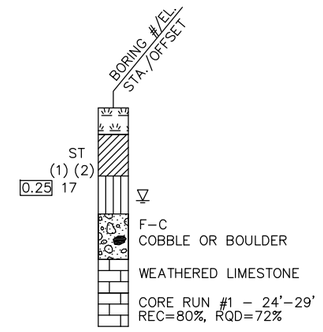
STATE PROJECT NUMBER

9876-00-70

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE SPECIFIED, THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

▽ AT TIME OF DRILLING

▼ END OF DRILLING

▼ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-43-68

DRAWN BY JDO | PLANS CK'D ACK

SUBSURFACE EXPLORATION

SHEET 3 OF 8

68

8

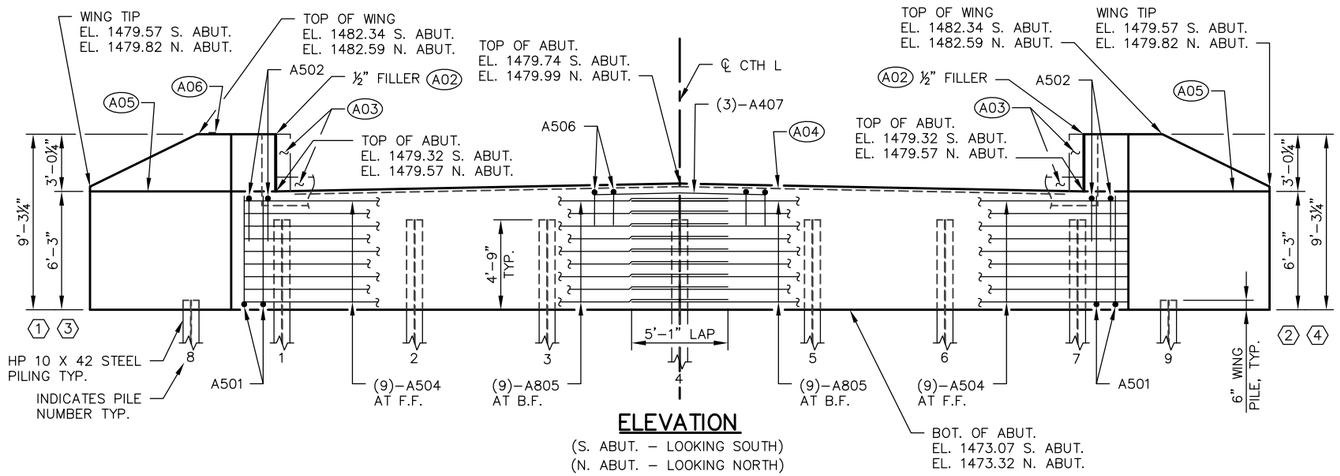
8

I.D. 9876-00-70 PLOT DATE: Sep 30, 2024

FILE: B430068_03_bor.dwg
PLOT SCALE:

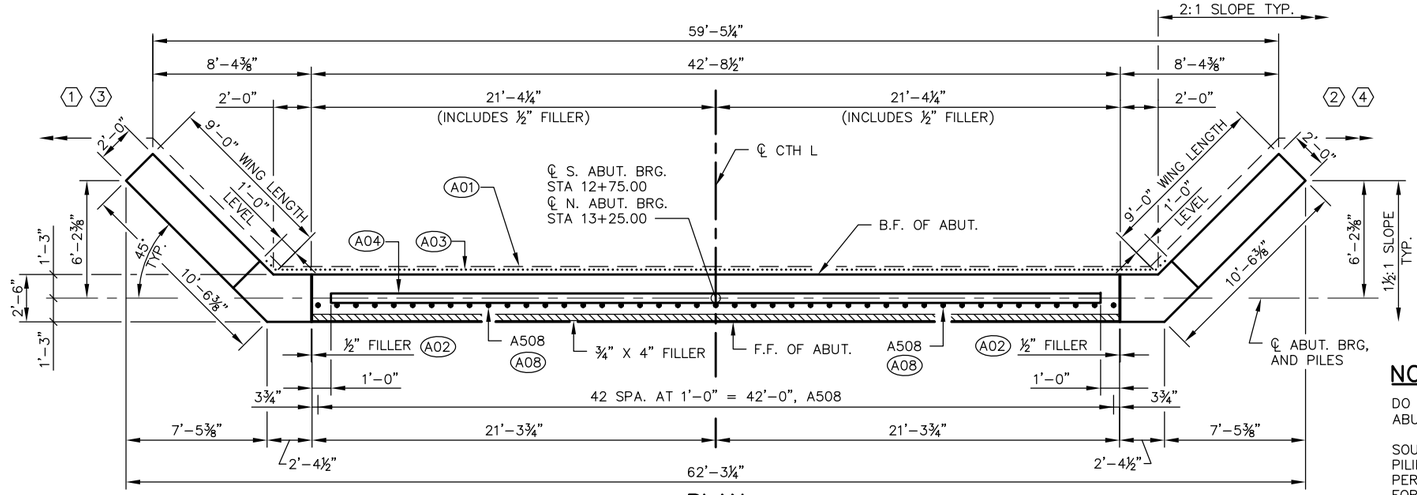
STATE PROJECT NUMBER

9876-00-70

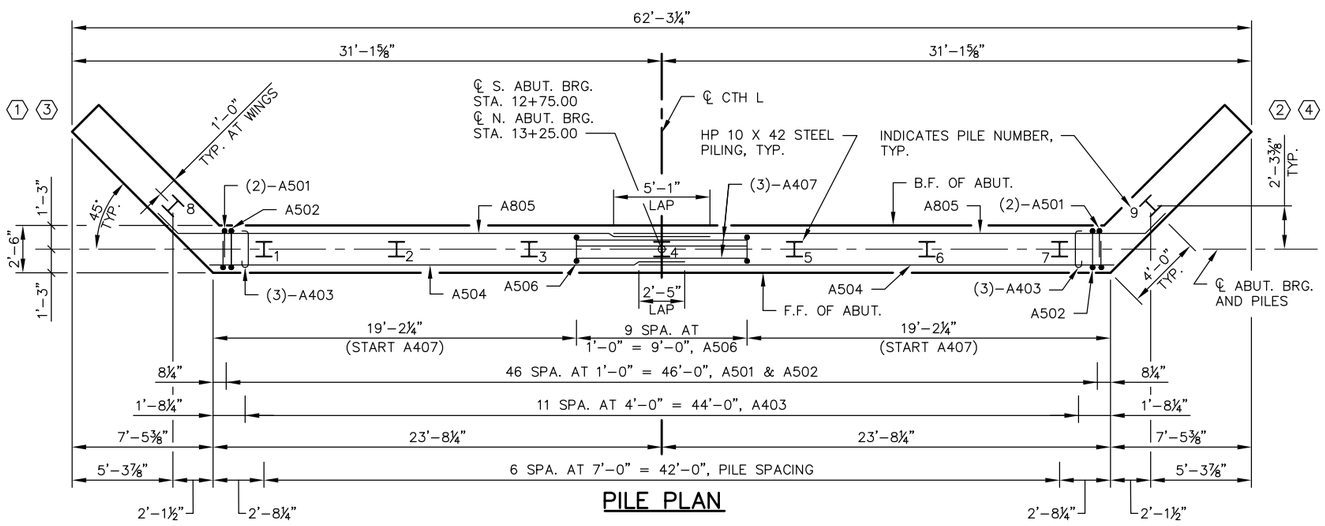


ELEVATION

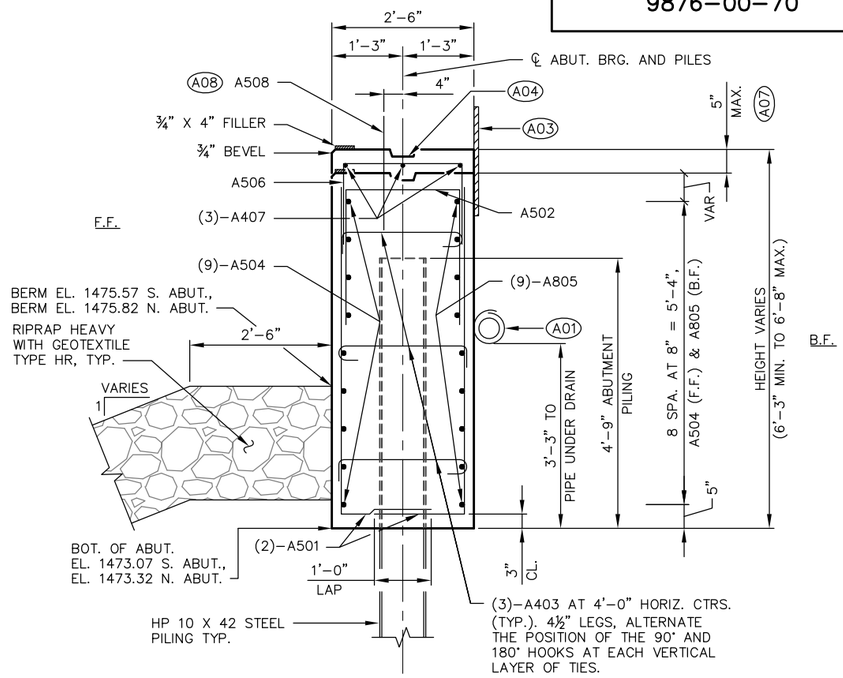
(S. ABUT. – LOOKING SOUTH)
(N. ABUT. – LOOKING NORTH)



PLAN



PILE PLAN



TYPICAL SECTION THRU ABUTMENT

NOTES

DO NOT PLACE FILL ABOVE 3'-0" FROM THE BOTTOM OF THE ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

SOUTH AND NORTH ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 170 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 60 FT PILE LENGTHS AT THE SOUTH AND NORTH ABUTMENT.

SEE "CROSS SECTION, GENERAL NOTES & QUANTITIES" SHEET FOR PILE SPLICE DETAILS.

(A01) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON "ABUTMENT DETAILS" SHEET. RODENT SHIELD SHALL BE INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(A02) SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). ½" FILLER TO EXTEND FROM BRIDGE SEAT TO TOP OF WING.

(A03) 18" RUBBERIZED MEMBRANE WATERPROOFING (R.M.W.), SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

(A04) KEYED CONST. JT. FORMED BY BEVELED 2 X 6

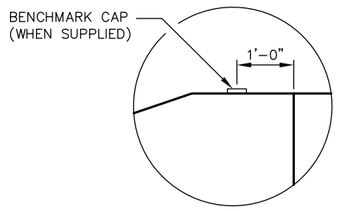
(A05) OPTIONAL KEYED CONST. JT. FORMED BY BEVELED 2 X 6, TYP.

(A06) BENCHMARK CAP (WHEN SUPPLIED) AT WING 1 ONLY. SEE "BENCHMARK CAP DETAIL", THIS SHEET.

(A07) A506 & A407 BARS REQUIRED WHERE DIMENSION EXCEEDS 4"

(A08) A508 BARS MAY BE PLACED AFTER CONCRETE HAS BEEN POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. EMBED 1'-0" INTO ABUTMENT BODY.

⬡ INDICATES WING NUMBER



BENCHMARK CAP DETAIL

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-43-68

DRAWN BY JDO | PLANS CK'D ACK

ABUTMENTS

SHEET 4 OF 8

69

8

8

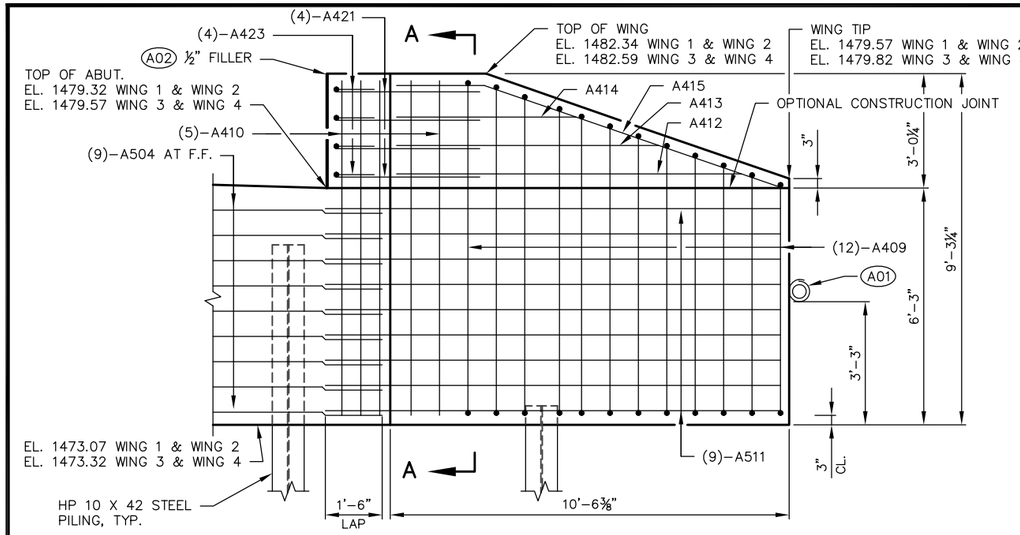
I.D. 9876-00-70

PLOT DATE: Sep 30, 2024

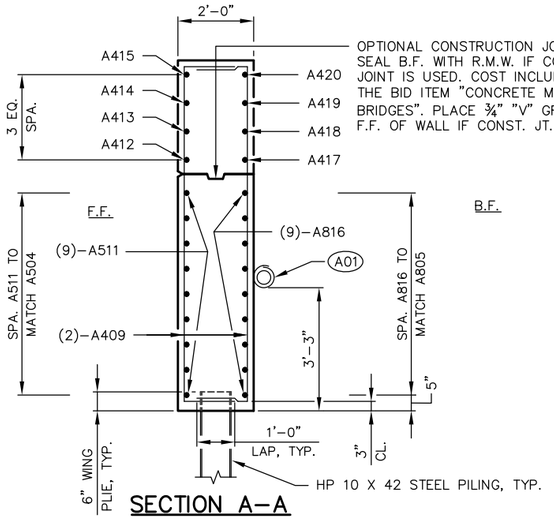
FILE: B430068_04-05_abut.dwg
PLOT SCALE:

STATE PROJECT NUMBER

9876-00-70



F.F. ELEVATION – WINGS 2 & 4
(WING 1 & 3 SIMILAR)



SECTION A–A

BILL OF BARS
BOTH ABUTMENTS

COATED = 3,000 LBS.
UNCOATED = 6,130 LBS.

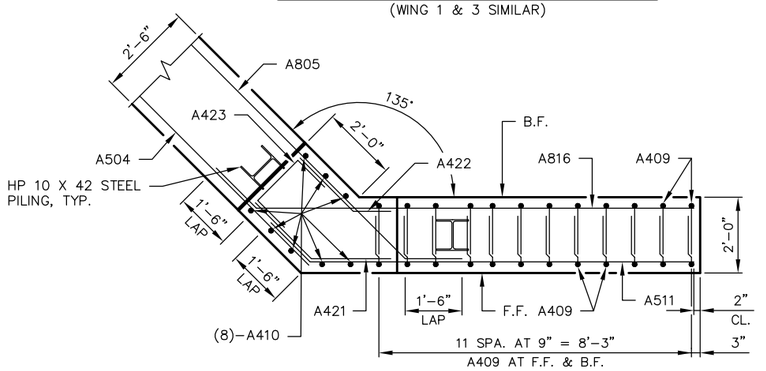
MARK	COATED	NUMBER S. ABUT.	NUMBER N. ABUT.	LENGTH	BENT	BAR SERIES	LOCATION	
A501		94	94	7'–3"	X		BODY – STIRRUP – F.F. & B.F.	VERT.
A502		47	47	6'–5"	X		BODY – STIRRUP – TOP	VERT.
A403		36	36	3'–1"	X		BODY – TIES	HORIZ.
A504		18	18	24'–11"			BODY – F.F.	HORIZ.
A805		18	18	29'–9"	X		BODY – B.F.	HORIZ.
A506		10	10	4'–9"	X		BODY – STIRRUP – TOP	VERT.
A407		3	3	9'–0"			BODY – F.F. & B.F. – TOP	HORIZ.
A508	X	43	43	2'–0"			BODY – TOP DOWELS	VERT.
A409	X	48	48	10'–0"	X	⚠	WINGS 1 THRU 4 – STIRRUP – F.F. & B.F.	VERT.
A410	X	16	16	8'–10"			WINGS 1 THRU 4 – F.F. & B.F.	VERT.
A511	X	18	18	11'–9"	X		WINGS 1 THRU 4 – F.F.	HORIZ.
A412	X	2	2	9'–5"			WINGS 1 THRU 4 – F.F.	HORIZ.
A413	X	2	2	7'–3"			WINGS 1 THRU 4 – F.F.	HORIZ.
A414	X	2	2	5'–1"			WINGS 1 THRU 4 – F.F.	HORIZ.
A415	X	2	2	10'–7"	X		WINGS 1 THRU 4 – F.F. – TOP	HORIZ.
A816	X	18	18	13'–3"	X		WINGS 1 THRU 4 – B.F.	HORIZ.
A417	X	2	2	7'–11"			WINGS 1 THRU 4 – B.F.	HORIZ.
A418	X	2	2	5'–9"			WINGS 1 THRU 4 – B.F.	HORIZ.
A419	X	2	2	3'–7"			WINGS 1 THRU 4 – B.F.	HORIZ.
A420	X	2	2	9'–0"	X		WINGS 1 THRU 4 – B.F. – TOP	HORIZ.
A421	X	8	8	4'–2"	X		WINGS 1 THRU 4 – F.F. CORNER	HORIZ.
A422	X	8	8	2'–9"	X		WINGS 1 THRU 4 – B.F. CORNER	HORIZ.
A423	X	8	8	3'–11"	X		WINGS 1 THRU 4 – TOP CORNER	HORIZ.

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

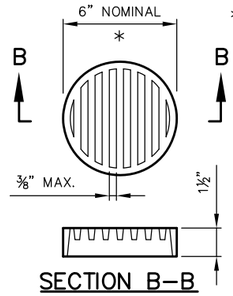
ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

BUNDLE EACH ABUTMENT BARS SEPARATELY.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE "BAR SERIES TABLE" FOR ACTUAL LENGTHS.



PLAN – WINGS 2 & 4
(WING 1 & 3 SIMILAR)



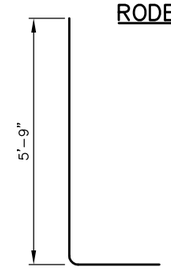
SECTION B–B

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

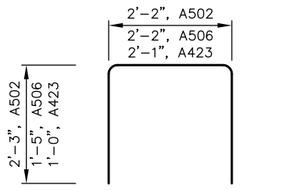
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X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

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

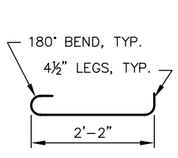
RODENT SHIELD DETAIL



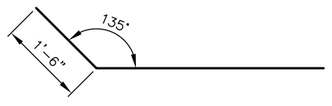
A501



A502, A506, & A423



A403

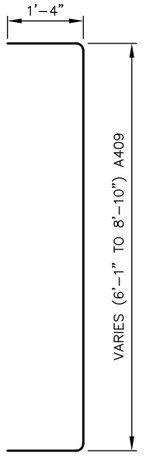


A805, A511 & A816

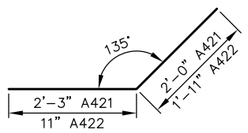
A415 & A420

BAR BEND DIMENSIONS

MARK	"A"	"B"
A415	8'–3"	2'–4"
A420	8'–3"	0'–9"



A409



A421 & A422

BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
A409	8 SERIES OF 12	8'–7" TO 11'–4"

BUNDLE AND TAG EACH SERIES SEPARATELY.

NOTES

DO NOT PLACE FILL ABOVE 3'–0" FROM THE BOTTOM OF THE ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

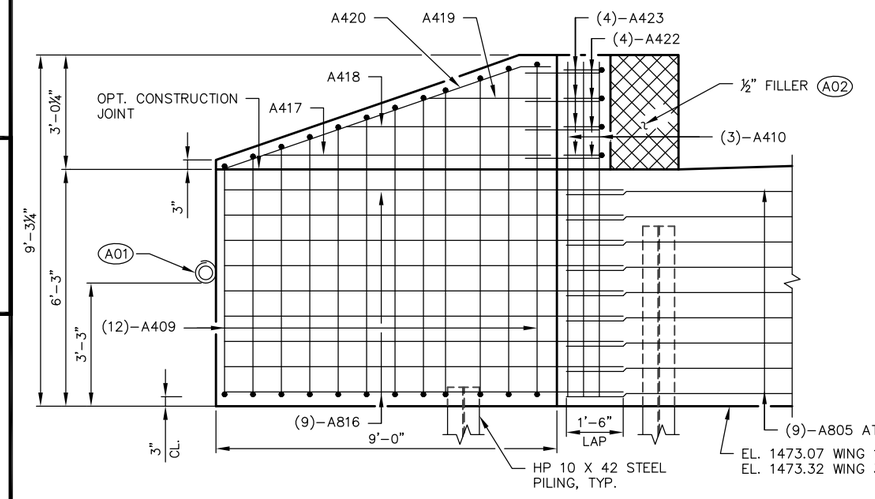
SOUTH AND NORTH ABUTMENT TO BE SUPPORTED ON HP 10 X 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 170 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 60 FT PILE LENGTHS AT THE SOUTH AND NORTH ABUTMENT.

SEE "CROSS SECTION, GENERAL NOTES & QUANTITIES" SHEET FOR PILE SPLICE DETAILS.

(A01) PIPE UNDERDRAIN WRAPPED (6–INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET. RODENT SHIELD SHALL BE INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6–INCH".

(A02) SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON–STAINING GRAY NON–BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.) ½" FILLER TO EXTEND FROM BRIDGE SEAT TO TOP OF WING.

F.F. – FRONT FACE
B.F. – BACK FACE



B.F. ELEVATION – WINGS 2 & 4
(WING 1 & 3 SIMILAR)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–43–68

DRAWN BY JDO | PLANS CK'D ACK

ABUTMENT DETAILS

SHEET 5 OF 8

70

8

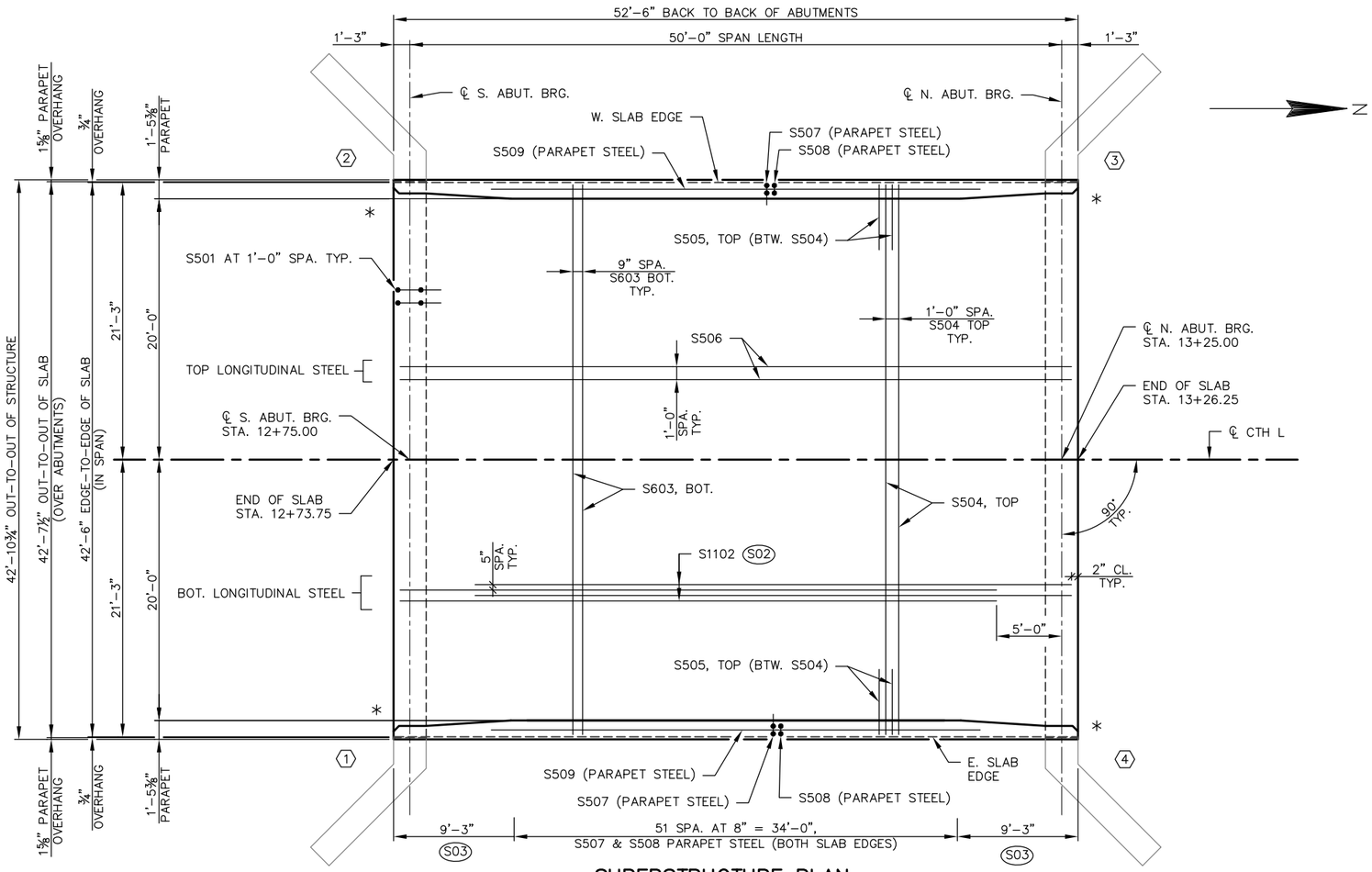
8

FILE: B430068_04–05_abut.dwg
PLOT SCALE:

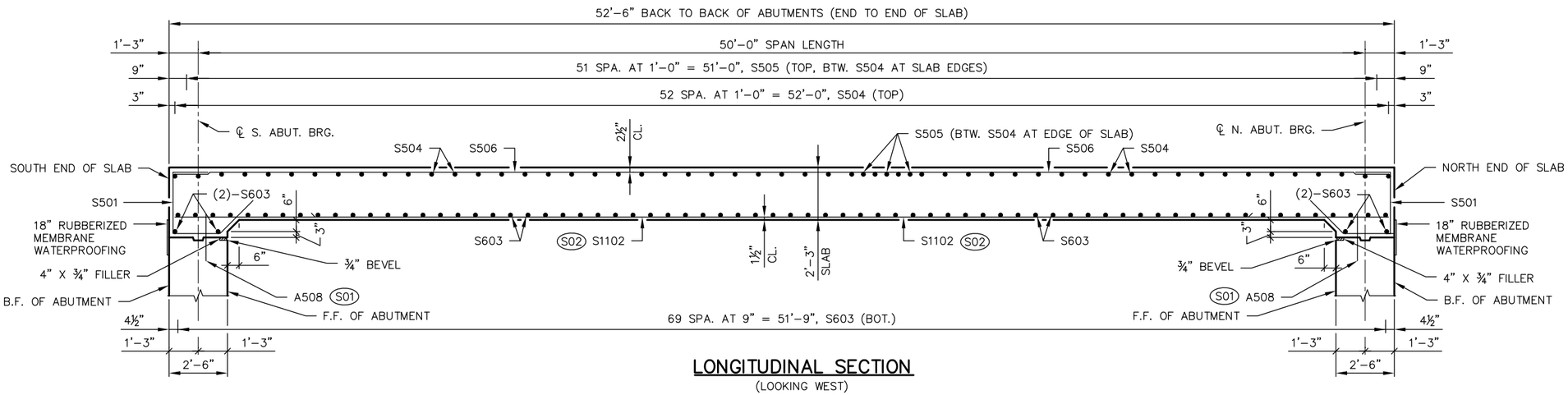
I.D. 9876–00–70

PLOT DATE: Sep 30, 2024

STATE PROJECT NUMBER
9876-00-70



SUPERSTRUCTURE PLAN



LONGITUDINAL SECTION
(LOOKING WEST)

NOTES

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY.

BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

PARAPETS TO BE CAST ON THE SLAB AFTER FALSEWORK HAS BEEN RELEASED.

(S01) SEE "ABUTMENTS" SHEET FOR PLACEMENT OF A508 BARS.

(S02) EXTEND ONE END OF THE S1102 BAR TO 2" CLEAR OF ONE BACK FACE OF ABUTMENT. ALTERNATE BETWEEN NORTH AND SOUTH ABUTMENTS ACROSS ENTIRE SLAB.

(S03) PARAPET STEEL IN TRANSITION ZONE. SEE DETAILS ON "PARAPET & SUPERSTRUCTURE" SHEET.

⬡ INDICATES WING NUMBER

* LOCATION OF BEAM GUARD ATTACHMENT

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-43-68

DRAWN BY JDO | PLANS CK'D ACK

SUPERSTRUCTURE

SHEET 6 OF 8

71

8

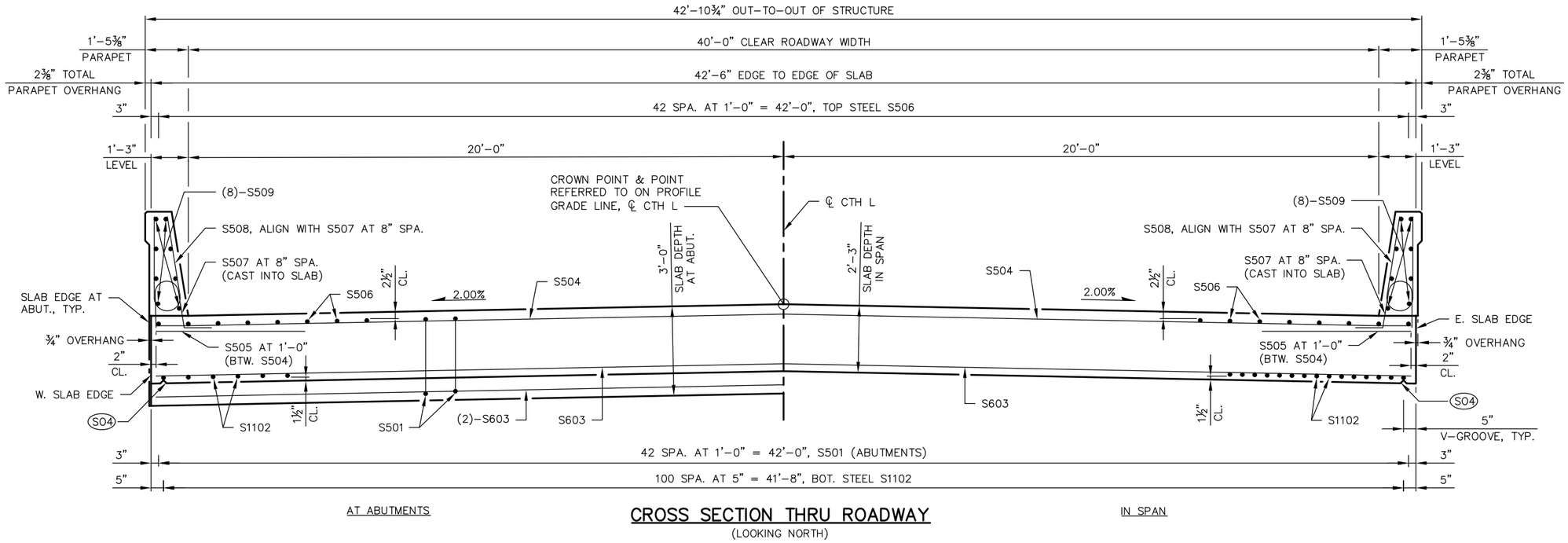
8

I.D. 9876-00-70

PLOT DATE: Sep 30, 2024

FILE: B430068_06-08_super.dwg
PLOT SCALE:

STATE PROJECT NUMBER
9876-00-70

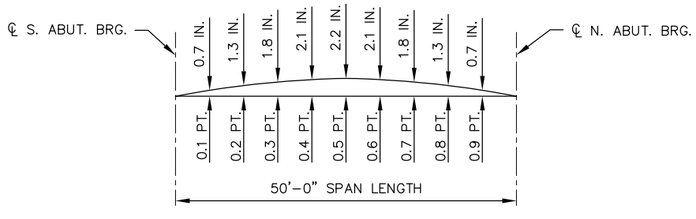


CROSS SECTION THRU ROADWAY
(LOOKING NORTH)

SURVEY TOP OF SLAB ELEVATIONS

	℄ S. ABUT. BRG.	5/10 PT.	℄ N. ABUT. BRG.
WEST SLAB EDGE			
℄ CTH L			
EAST SLAB EDGE			

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE ℄ OF ABUTMENTS AND AT 5/10 POINTS TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF SLAB AND REFERENCE LINE. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.



SLAB CAMBER DIAGRAM

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

	TOP OF SLAB ELEVATION AT FINAL GRADE
LESS	SLAB THICKNESS
PLUS	CAMBER
PLUS	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS	TOP OF SLAB FALSEWORK ELEVATION.

TOP OF SLAB ELEVATIONS

SPAN PT	WEST SLAB EDGE	℄ CTH L	EAST SLAB EDGE
℄ S. ABUT.	1482.32	1482.74	1482.32
0.1	1482.35	1482.77	1482.35
0.2	1482.37	1482.79	1482.37
0.3	1482.40	1482.82	1482.40
0.4	1482.42	1482.84	1482.42
0.5	1482.45	1482.87	1482.45
0.6	1482.47	1482.89	1482.47
0.7	1482.50	1482.92	1482.50
0.8	1482.52	1482.94	1482.52
0.9	1482.55	1482.97	1482.55
℄ N. ABUT.	1482.57	1482.99	1482.57

NOTES

CAMBER SPAN AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

(S04) ¾" V-GROOVE. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENT BODY. V-GROOVES ARE REQUIRED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-43-68

DRAWN BY JDO | PLANS CK'D ACK

SUPERSTRUCTURE DETAILS

SHEET 7 OF 8

72

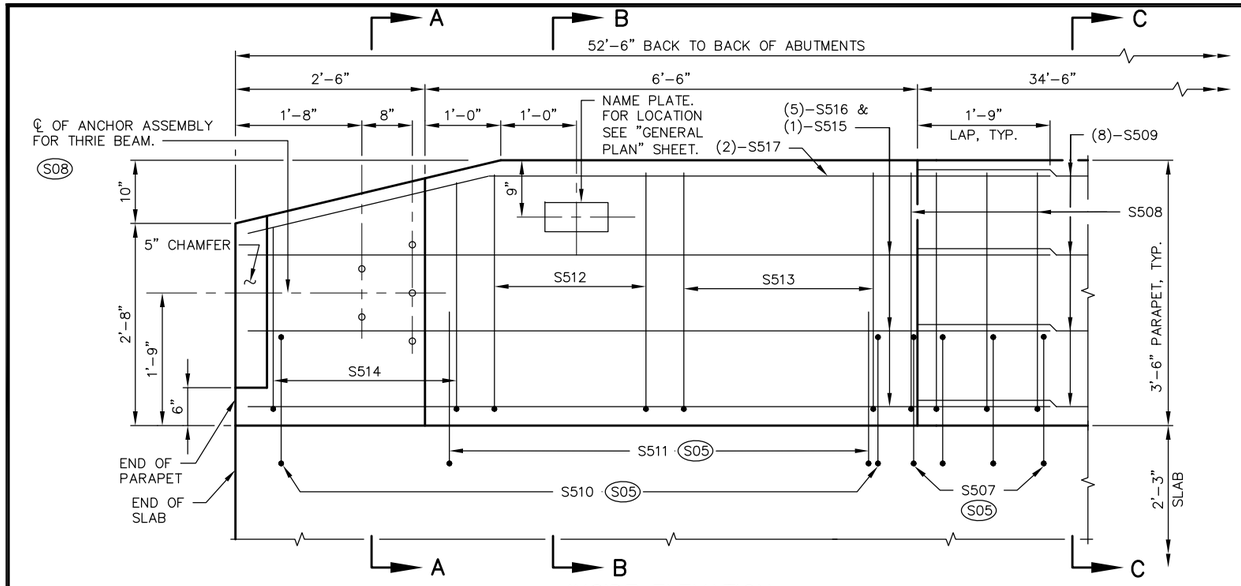
8

8

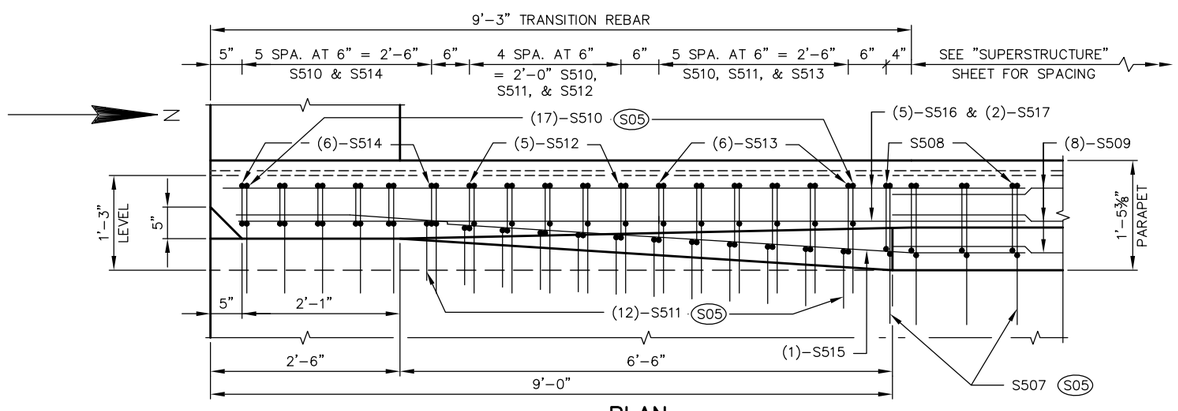
I.D. 9876-00-70

PLOT DATE: Sep 30, 2024

FILE: B430068_06-08_super.dwg
PLOT SCALE:

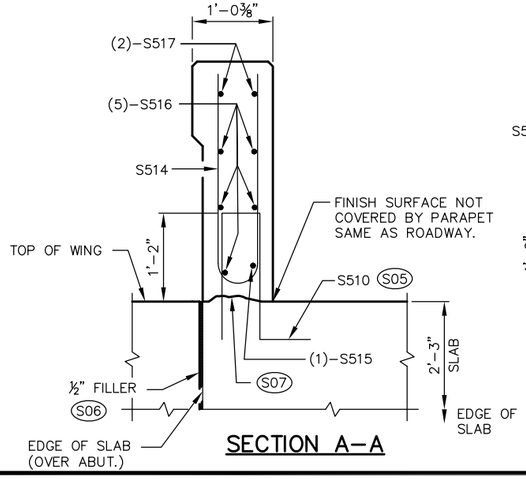


INSIDE ELEVATION

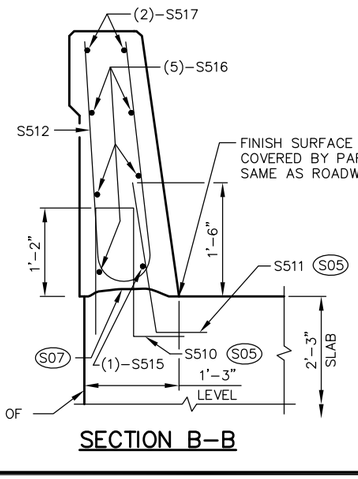


PLAN

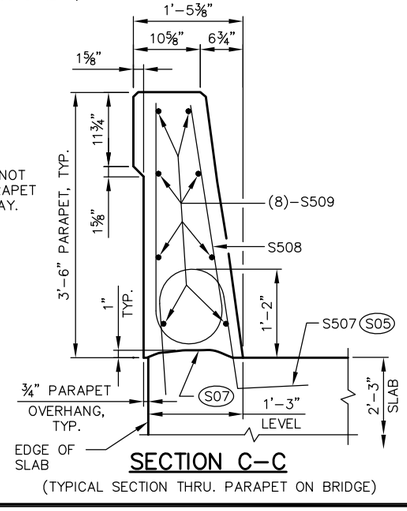
(END OF SLAB NEAR WING 2 SHOWN, END OF SLAB NEAR ALL OTHER WINGS SIMILAR)



SECTION A–A

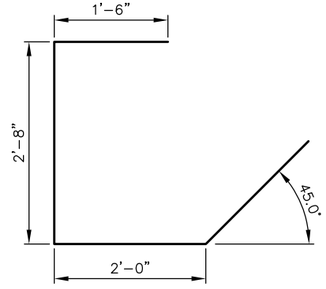


SECTION B–B

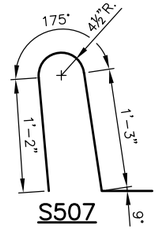


SECTION C–C

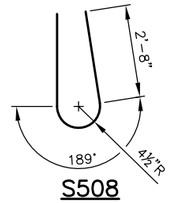
(TYPICAL SECTION THRU. PARAPET ON BRIDGE)



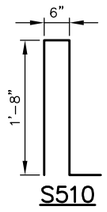
S501



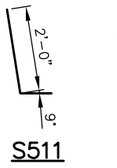
S507



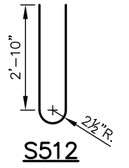
S508



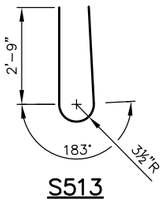
S510



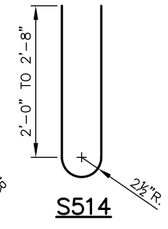
S511



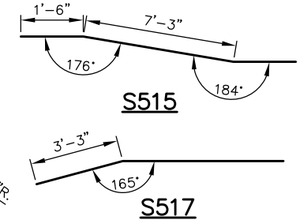
S512



S513



S514



S515

S517

BILL OF BARS SUPERSTRUCTURE

COATED = 38,410 LBS.

MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION	
S501	86		8'–0"	X		SLAB AT ABUTMENT – TIES	LONGIT.
S1102	101		46'–1"			SLAB – BOTTOM	LONGIT.
S603	74		42'–2"			SLAB – BOTTOM	TRANS.
S504	53		42'–2"			SLAB – TOP	TRANS.
S505	104		5'–0"			SLAB – TOP BTW. S504	TRANS.
S506	43		52'–2"			SLAB – TOP	LONGIT.
S507	108		4'–5"	X		PARAPET – STIRRUP	VERT.
S508	108		6'–8"	X		PARAPET – STIRRUP	VERT.
S509	16		34'–6"			PARAPET – HORIZ.	LONGIT.
S510	68		4'–4"	X		PARAPET – TRANSITION – STIRRUP	VERT.
S511	48		2'–9"	X		PARAPET – TRANSITION – STIRRUP	VERT.
S512	20		6'–5"	X		PARAPET – TRANSITION – STIRRUP	VERT.
S513	24		6'–6"	X		PARAPET – TRANSITION – STIRRUP	VERT.
S514	24		5'–5"	X	⚠	PARAPET – TRANSITION – STIRRUP	VERT.
S515	4		10'–8"	X		PARAPET – TRANSITION – HORIZ.	LONGIT.
S516	20		10'–7"			PARAPET – TRANSITION – HORIZ.	LONGIT.
S517	8		10'–9"	X		PARAPET – TRANSITION – HORIZ.	LONGIT.

THE FIRST OR FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

NOTES

(S05) S507, S510, AND S511 BARS TO BE TIED TO SUPERSTRUCTURE SLAB BEFORE CONCRETE IS POURED.

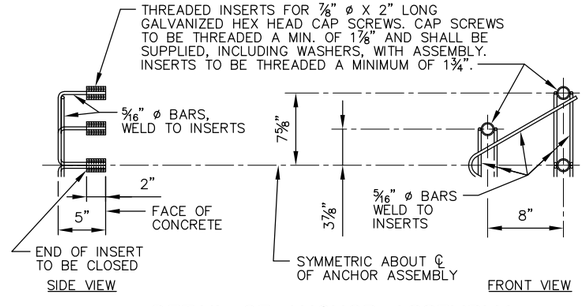
(S06) SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON–STAINING GRAY NON–BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

(S07) CONST. JOINT – STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(S08) SEE "GENERAL PLAN" SHEET FOR WING LOCATIONS OF ANCHOR ASSEMBLY FOR THRIE BEAM. SEE THIS SHEET FOR ANCHOR ASSEMBLY DETAILS.

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
S514	4 SERIES OF 6	4'–9" TO 6'–1"



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.

ASSEMBLY BID ITEM SHALL BE "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

STATE PROJECT NUMBER

9876–00–70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–43–68

DRAWN BY JDO | PLANS CK'D ACK

PARAPET & SUPERSTRUCTURE

SHEET 8 OF 8

73

8

8

I.D. 9876–00–70

PLOT DATE: Sep 30, 2024

FILE: B430068_06–08_super.dwg
PLOT SCALE:

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
10+40.00	0.00	26.85	16.25	0.00	0	0	0	0	0	0
10+50.00	10	26.19	16.25	0.00	10	6	0	10	0	4
11+00.00	50	56.33	16.16	2.86	76	30	3	86	4	46
11+14.00	14	55.98	16.15	4.70	29	8	2	115	6	65
11+50.00	36	46.87	17.47	13.95	69	22	12	184	21	97
11+83.77	33.77	34.64	17.32	11.00	51	22	16	235	41	106
12+00.00	16.23	28.37	17.65	9.33	19	11	6	254	49	106
12+08.82	8.82	27.57	17.90	6.84	9	6	3	263	53	106
12+33.81	24.99	20.47	18.75	1.32	22	17	4	285	58	106
12+50.00	16.19	18.01	19.57	0.35	12	11	1	297	59	105
12+67.39	17.39	18.64	20.74	6.99	12	13	2	309	61	102
12+73.75	6.36	18.34	21.21	0.00	4	5	1	313	63	100
STRUCTURE B-43-0672										
			DIVISION 1 TOTAL		313	151	50			

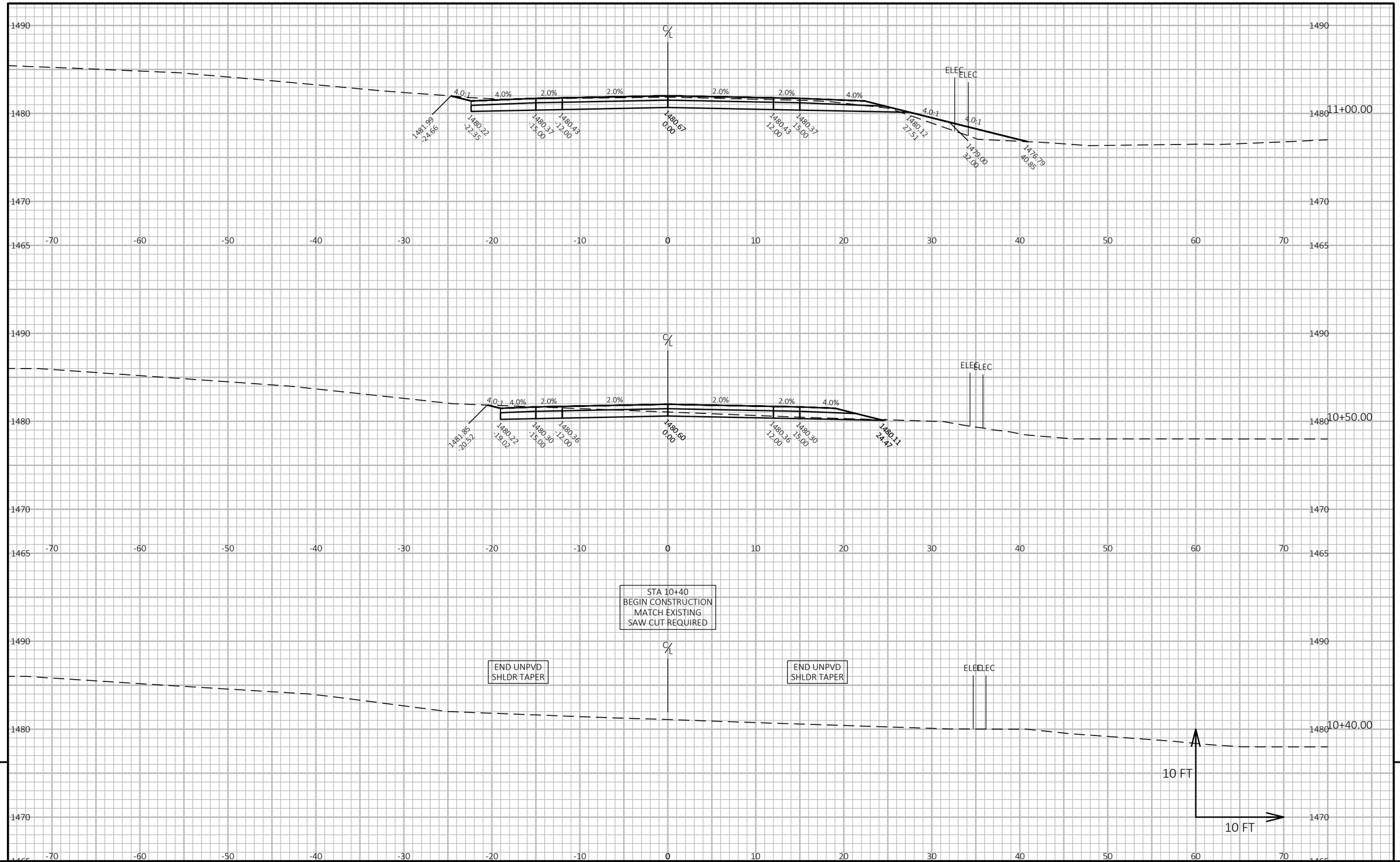
STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
STRUCTURE B-43-0672										
13+26.25	0.00	6.67	21.56	0.00	0	0	0	0	0	0
13+32.61	6.36	7.20	21.52	0.00	2	5	0	2	0	-3
13+50.00	17.39	16.08	21.54	7.88	7	14	3	9	4	-14
13+66.19	16.19	21.58	21.74	6.61	11	13	4	20	9	-21
13+91.18	24.99	27.19	22.48	8.43	23	20	7	43	18	-27
14+00.00	8.82	29.65	23.05	11.16	9	7	3	52	21	-28
14+16.20	16.20	34.68	22.81	14.60	19	14	8	71	31	-33
14+50.00	33.80	37.09	20.15	15.36	45	27	19	116	55	-39
14+86.23	36.23	43.13	19.65	0.27	54	27	10	170	68	-25
15+00.00	13.77	45.75	19.72	0.39	23	10	0	193	68	-12
15+25.00	25.00	57.35	16.25	0.00	48	17	0	241	68	20
15+35.22	10.22	18.58	0.00	0.00	14	0	0	255	68	34
			DIVISION 2 TOTAL		255	154	54			
			PROJECT TOTAL		568	305	110			

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	[(CUT) - (FILL*FILL FACTOR) - SALVAGED/UNUSABLE PAVEMENT MATERIAL)] PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

9

9

PROJECT NO: 9876-00-70 | HWY: CTH L | COUNTY: ONEIDA | EARTHWORK DATA | SHEET 74 | E



9

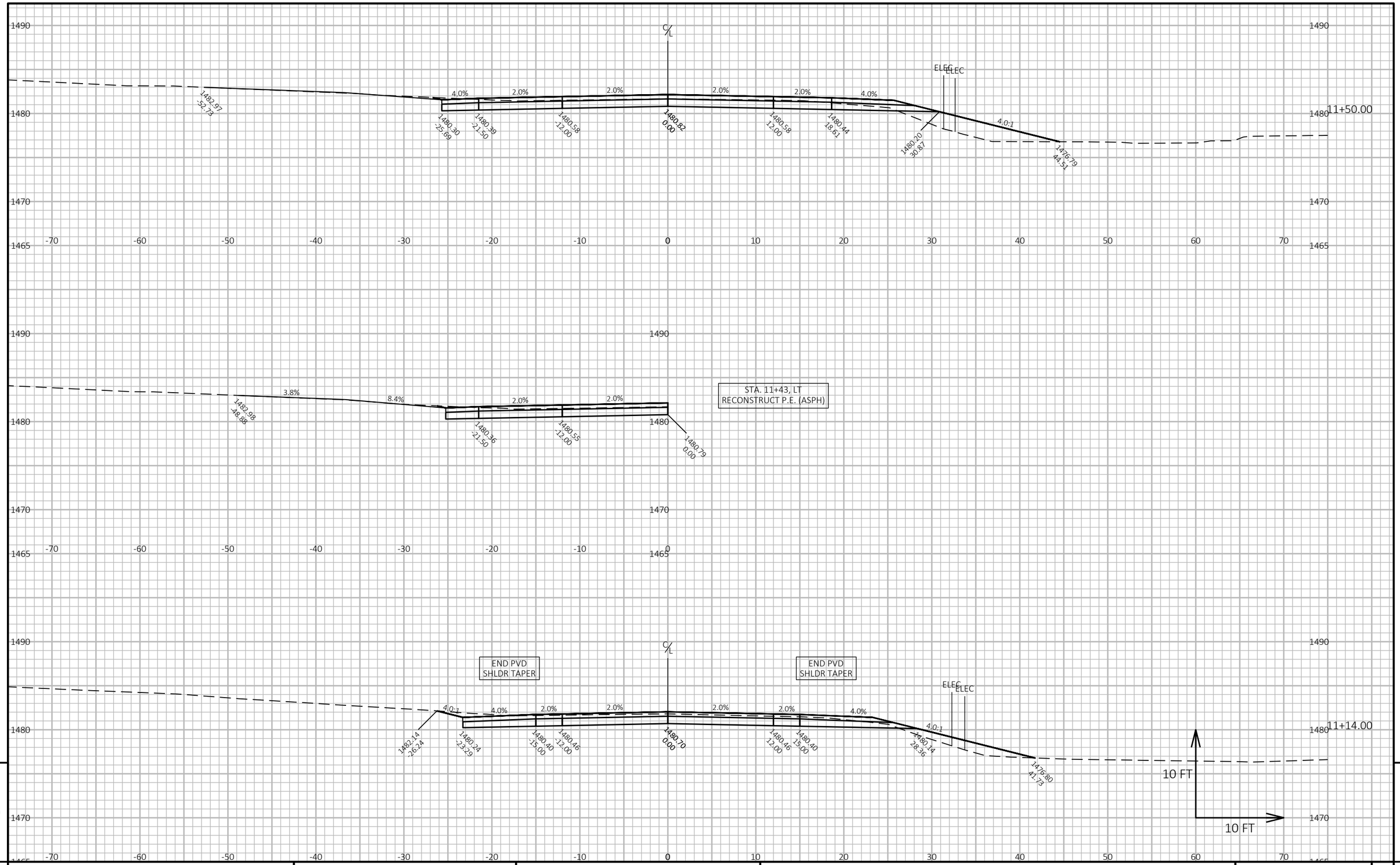
9

PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS	SHEET 75	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090201_xs

PLOT DATE : 10/7/2024 10:46 AM PLOT BY : ERICA BAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



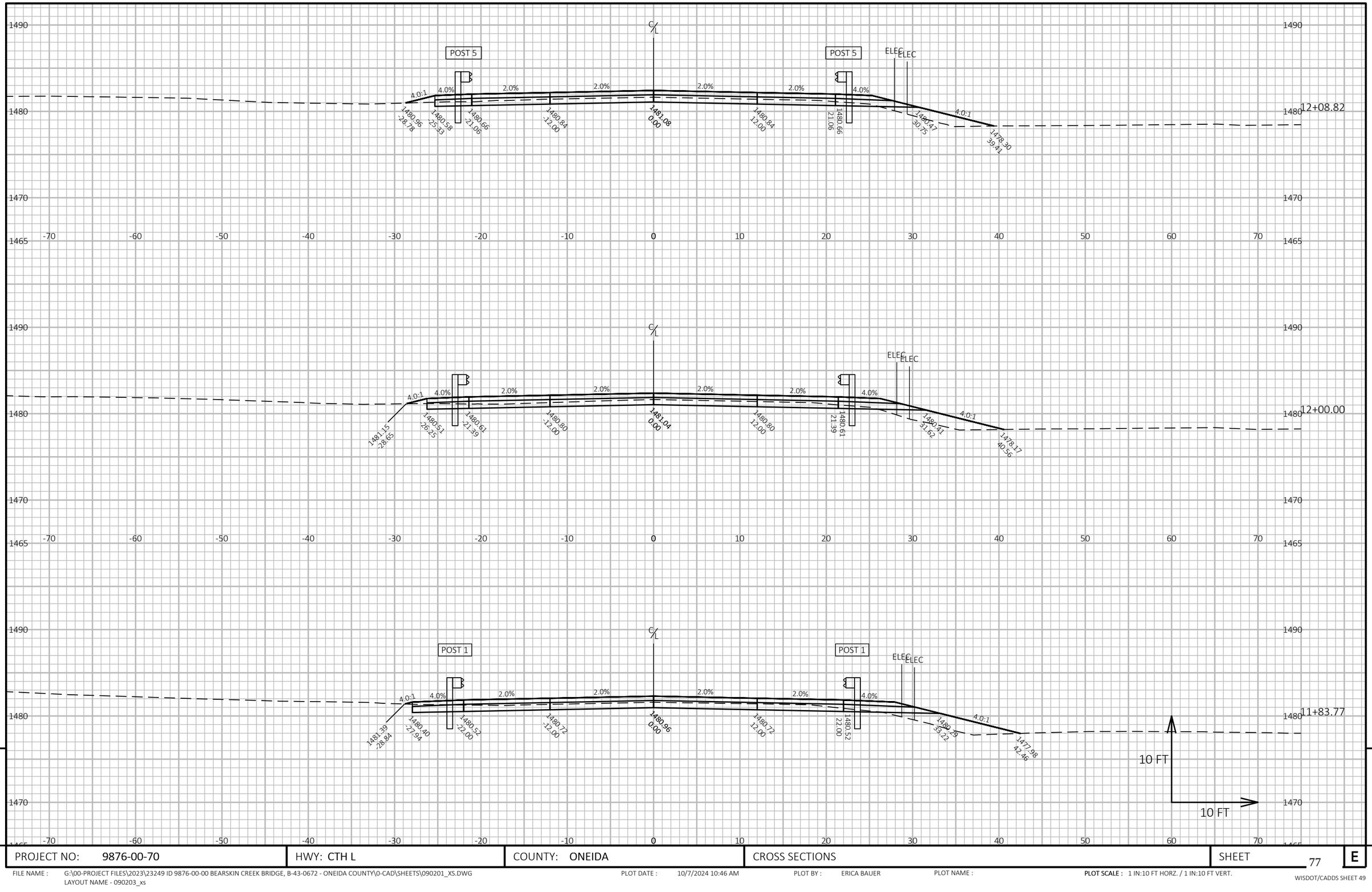
9

9

PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS	SHEET 76	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090202_xs

PLOT DATE : 10/7/2024 10:46 AM PLOT BY : ERICA BAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

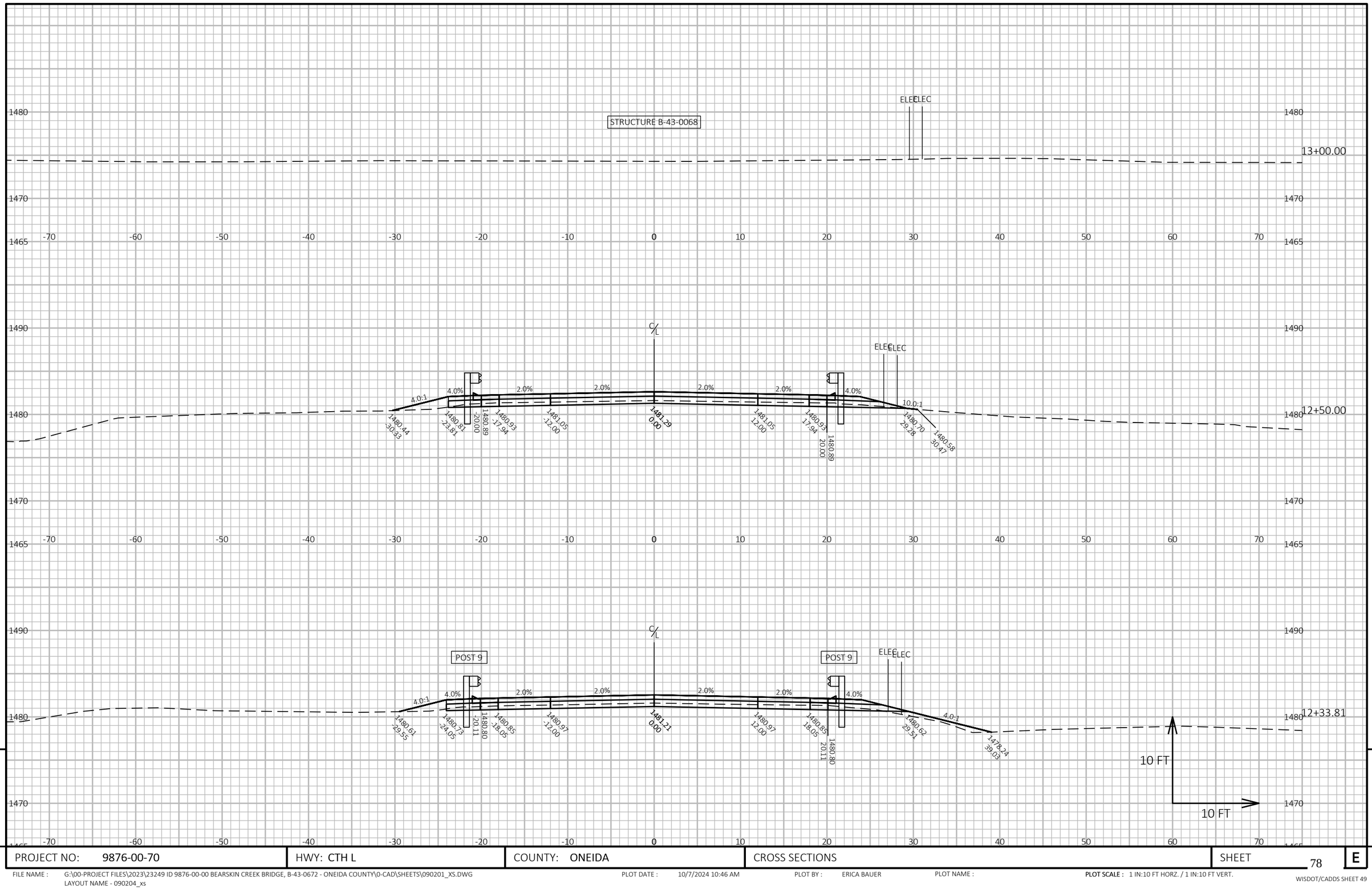
9

PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS	SHEET 77	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090203_xs

PLOT DATE : 10/7/2024 10:46 AM PLOT BY : ERICA BAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

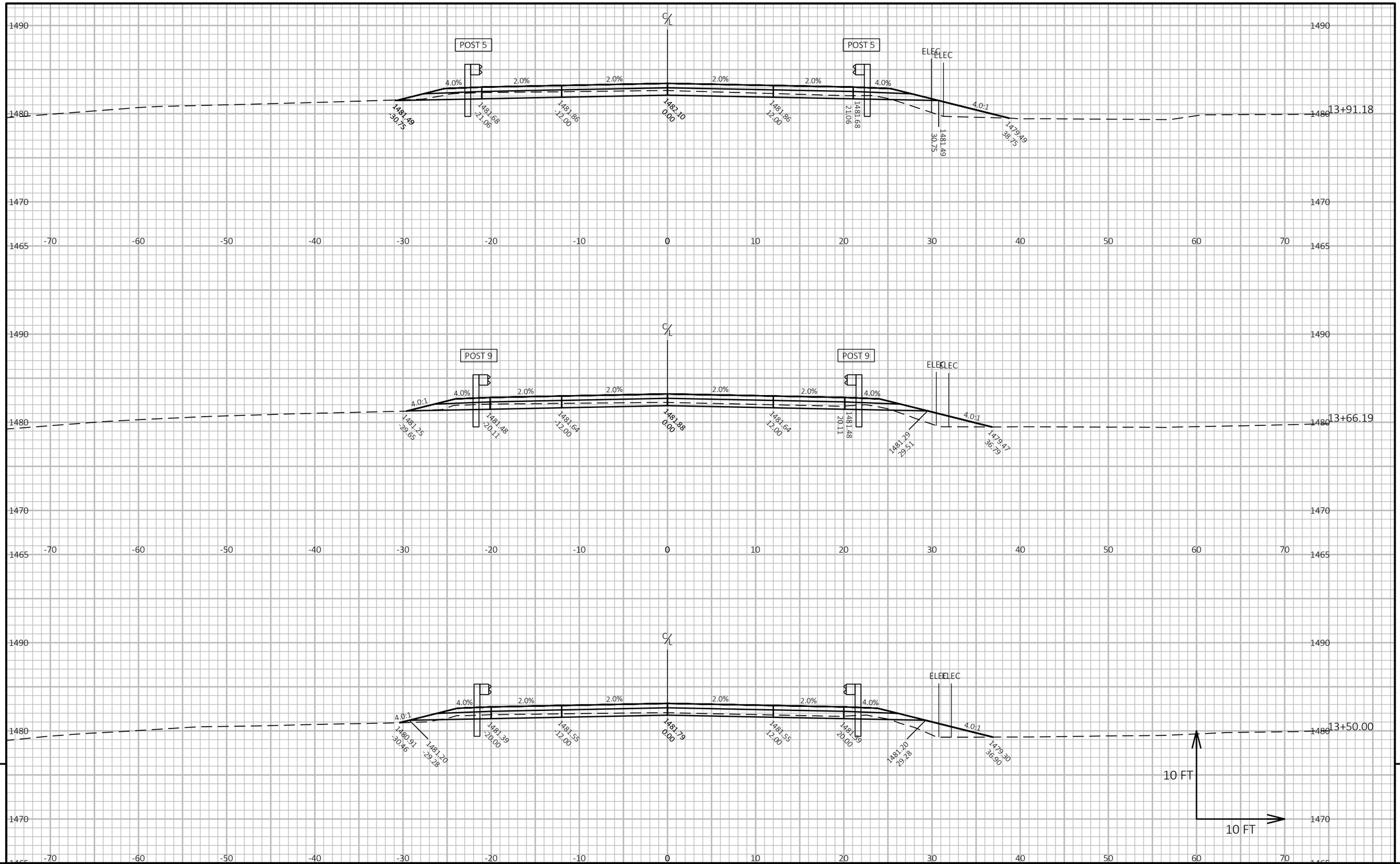


PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS	SHEET 78	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090204_xs

PLOT DATE : 10/7/2024 10:46 AM PLOT BY : ERICA BAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

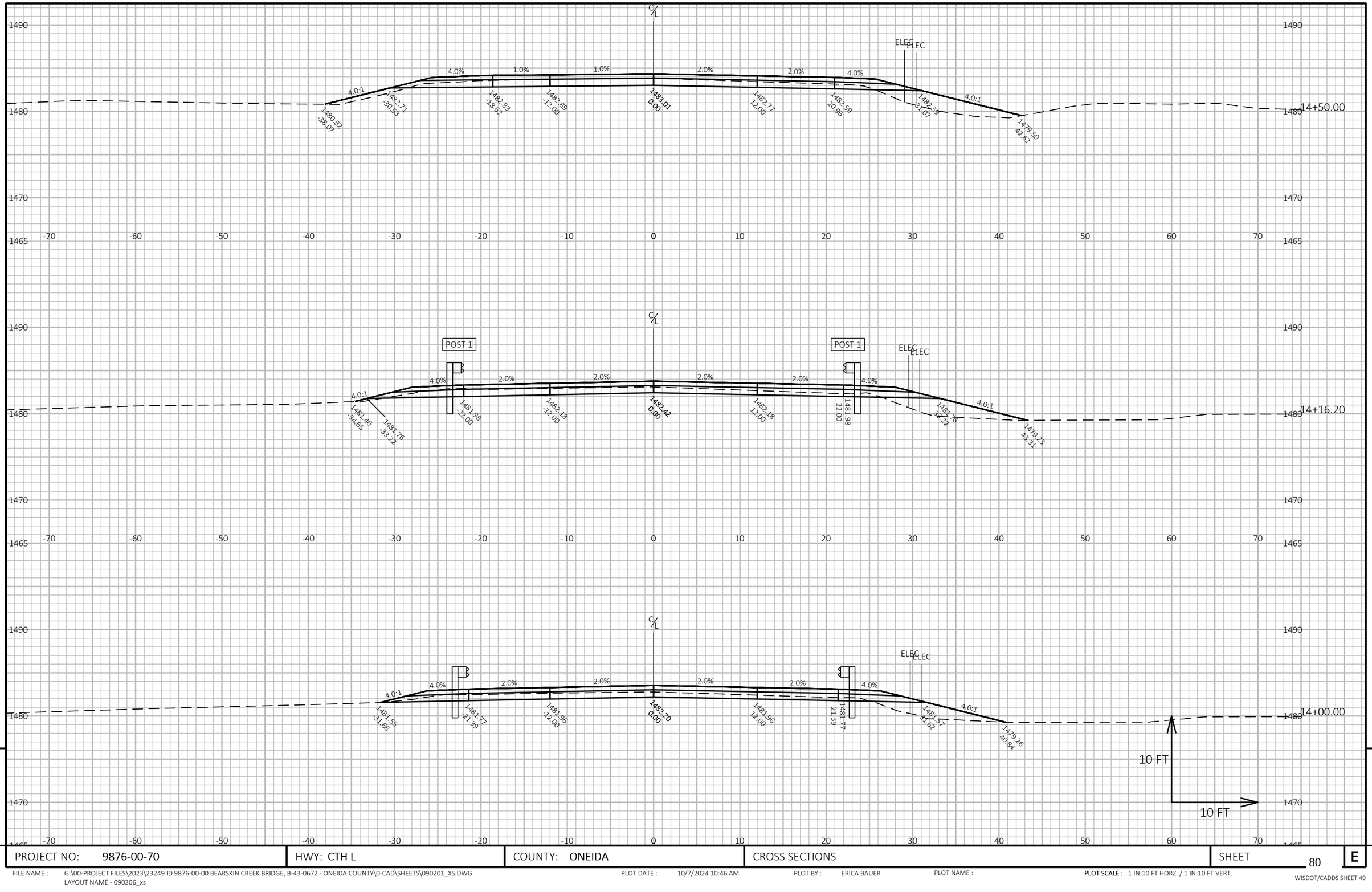
9

PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS	SHEET 79	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090205_xs

PLOT DATE : 10/7/2024 10:46 AM PLOT BY : ERICA BAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



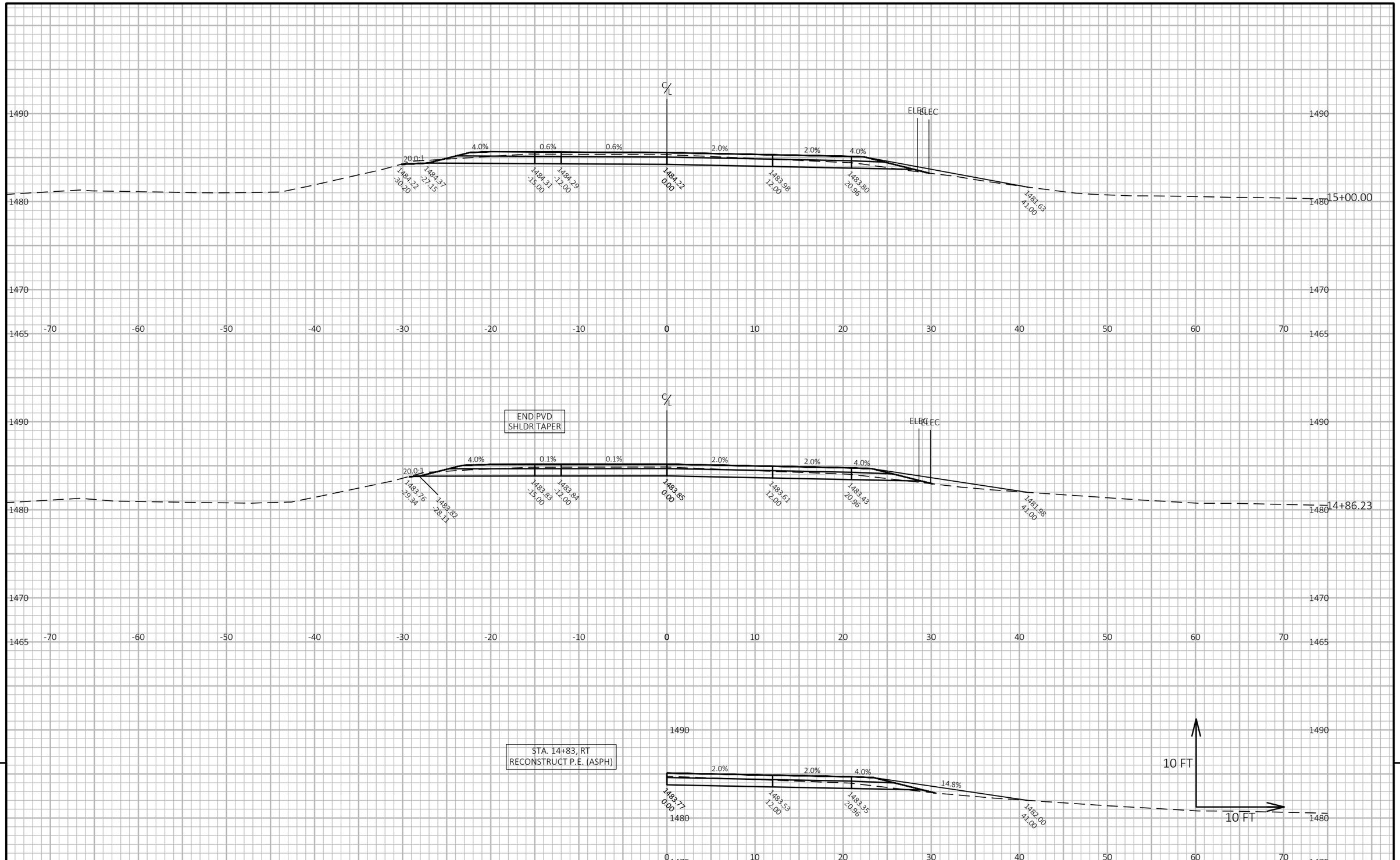
9 9

PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS	SHEET 80	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090206_xs

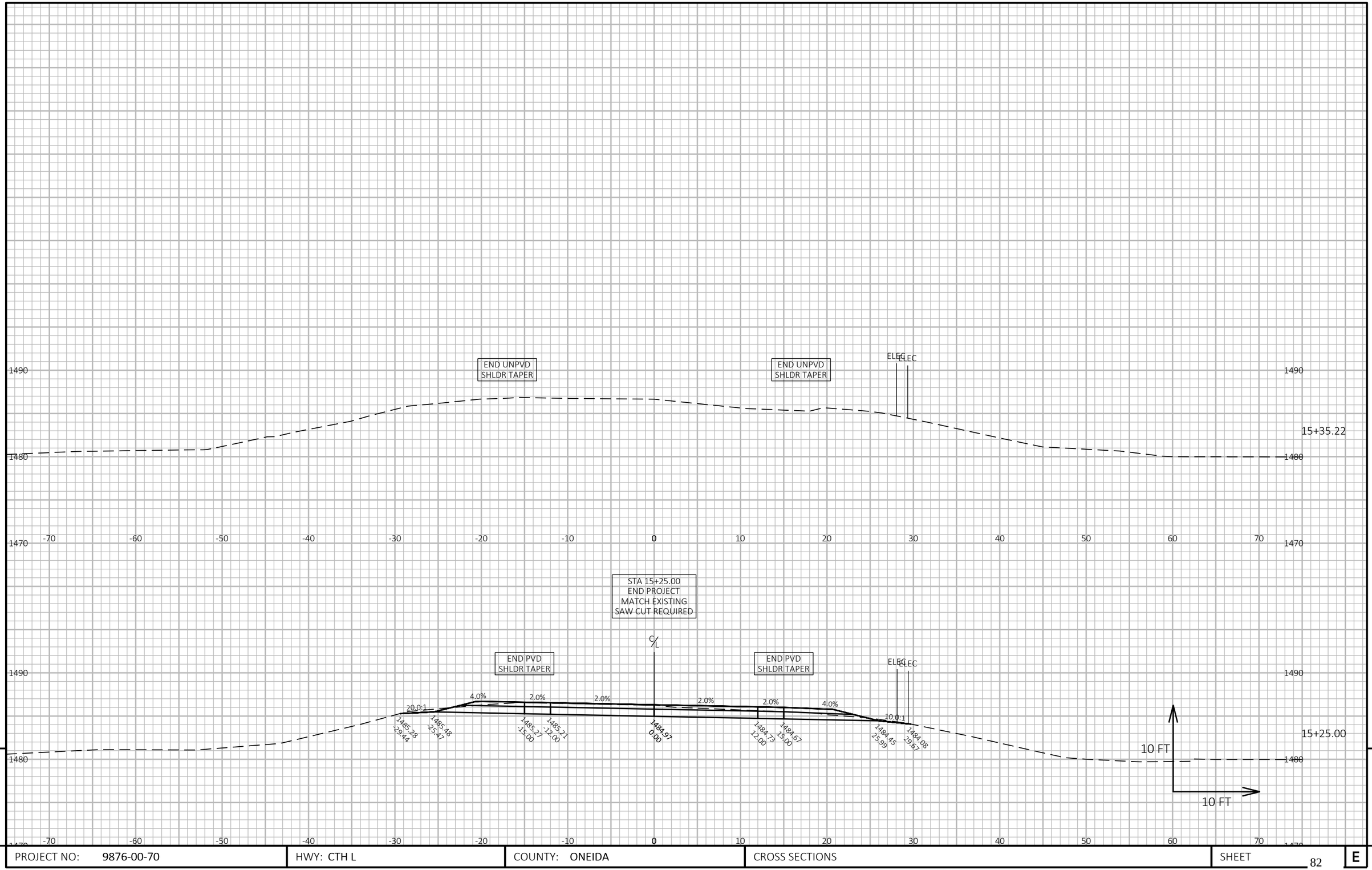
PLOT DATE : 10/7/2024 10:46 AM PLOT BY : ERICA BAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS	SHEET 81	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090207_xs
PLOT DATE : 10/7/2024 10:46 AM
PLOT BY : ERICA BAUER
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 9876-00-70	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS	SHEET 82	E

FILE NAME : G:\00-PROJECT FILES\2023\23249 ID 9876-00-00 BEARSKIN CREEK BRIDGE, B-43-0672 - ONEIDA COUNTY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090208_xs

PLOT DATE : 10/7/2024 10:46 AM PLOT BY : ERICA BAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

RHI | MARCH 2025

PROJECT ID: 9876-00-71

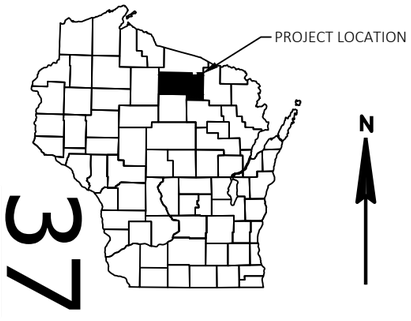
WITH: 9876-00-70

COUNTY: ONEIDA

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 = 80



DESIGN DESIGNATION 9876-00-01

A.A.D.T.	2025	=	2700
A.A.D.T.	2045	=	2900
D.H.V.		=	370
D.D.		=	61/39
T.		=	12.1%
DESIGN SPEED		=	50 MPH
ESALS		=	560,000

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

USH 8 - USH 51

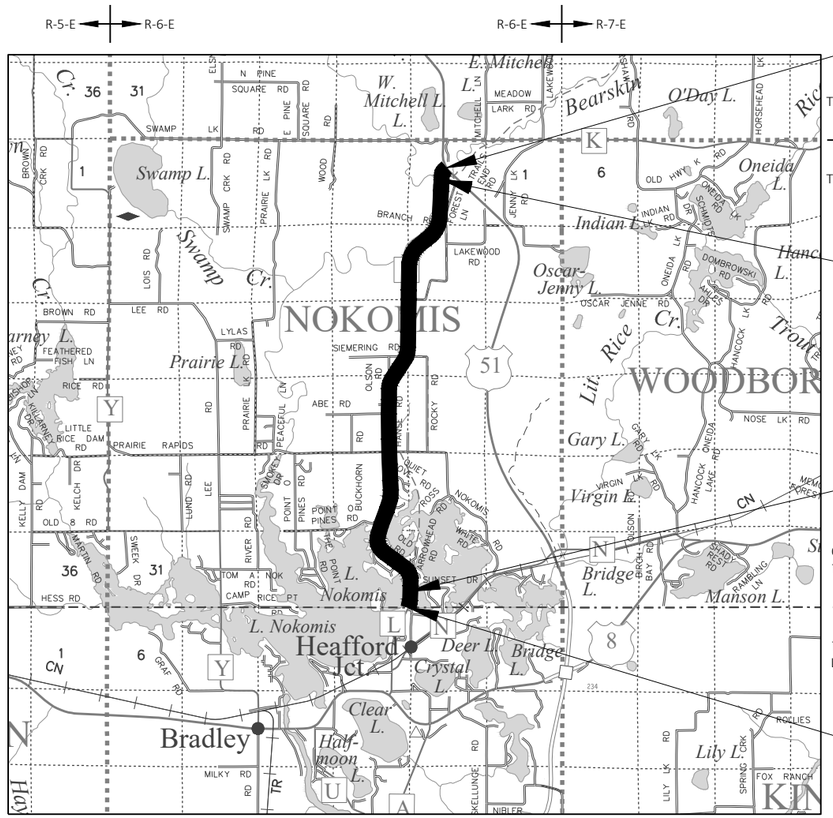
LINCOLN COUNTY LINE TO USH 51

CTH L

ONEIDA COUNTY

STATE PROJECT NUMBER
9876-00-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9876-00-71	WISC 2025390	1



END PROJECT
STA. 418+50

EXCEPTION TO C/L LENGTH
STA. 407+61 TO STA. 411+96

EXCEPTION TO C/L LENGTH
STA. 100+40 TO STA. 101+14

BEGIN PROJECT
STA 89+00
Y = 134 792.343
X = 186 495.563

LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 6.144 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), ONEIDA 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 18.

ACCEPTED FOR

ONEIDA COUNTY

10/17/24 (Signature and Title of Official)

Date

ORIGINAL PLANS PREPARED BY

WESTBROOK
Associated Engineers, Inc.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588
PHONE (608) 588-7866
FAX (608) 588-7954

WISCONSIN
AARON B. PALMER
E-35695
RICHLAND CENTER, WI
PROFESSIONAL ENGINEER

DATE: 10/17/24 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WESTBROOK ASSOCIATED ENGINEERS
Designer	WESTBROOK ASSOCIATED ENGINEERS
Project Manager	NATHANIEL WAITE
Regional Examiner	NC REGION
Regional Supervisor	DAN ERVA, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 10/28/2024 (Signature)

E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\010101_TI.DWG PLOT DATE : 9/17/2024 2:02 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME :

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	LC	LONG CHORD OF CURVE
AC	ACRE	LS	LUMP SUM
AGG	AGGREGATE	MGAL	ONE THOUSAND GALLONS
∠	ANGLE	ML OR M/L	MATCH LINE
AADT	ANNUAL AVERAGE DAILY TRAFFIC	NOM	NOMINAL
ASPH	ASPHALTIC	NC	NORMAL CROWN
BK	BACK	NB	NORTHBOUND
BAD	BASE AGGREGATE DENSE	NO	NUMBER
BL OR B/L	BASE LINE	PAVT	PAVEMENT
BM	BENCH MARK	PLE	PERMANENT LIMITED EASEMENT
CL OR C/L	CENTER LINE	PC	POINT OF CURVATURE
Δ	CENTRAL ANGLE OR DELTA	PI	POINT OF INTERSECTION
CE	COMMERCIAL ENTRANCE	PT	POINT OF TANGENCY
CONC	CONCRETE	PCC	PORTLAND CEMENT CONCRETE
CONST	CONSTRUCTION	LB	POUND
CP	CONTROL POINT	PSI	POUNDS PER SQUARE INCH
CO	COUNTY	PE	PRIVATE ENTRANCE
CTH	COUNTY TRUCK HIGHWAY	PROJ	PROJECT
CY	CUBIC YARD	PL	PROPERTY LINE
C & G	CURB AND GUTTER	PRW	PROPOSED RIGHT OF WAY
D	DEGREE OF CURVE	R	RADIUS
DHV	DESIGN HOUR VOLUME	RL OR R/L	REFERENCE LINE
DIA	DIAMETER	REQD	REQUIRED
DD	DIRECTIONAL DISTRIBUTION	RT	RIGHT
DWY	DRIVEWAY	R/W	RIGHT OF WAY
EA	EACH	RD	ROAD
EB	EASTBOUND	RDWY	ROADWAY
EL OR ELEV	ELEVATION	SHLDR	SHOULDER
EW	ENDWALL	SB	SOUTHBOUND
EAT	ENERGY ABSORBING TERMINAL	SPECS	SPECIFICATIONS
ESALS	EQUIVALENT SINGLE AXLE LOADS	SF	SQUARE FEET
EXC	EXCAVATION	SY	SQUARE YARD
EBS	EXCAVATION BELOW SUBGRADE	SDD	STANDARD DETAIL DRAWINGS
EXIST	EXISTING	STH	STATE TRUNK HIGHWAY
FERT	FERTILIZER	STA	STATION
FE	FIELD ENTRANCE	SE	SUPERELEVATION
FL OR F/L	FLOW LINE	SL OR S/L	SURVEY LINE
FT	FOOT	TEMP	TEMPORARY
HE	HIGHWAY EASEMENT	TI	TEMPORARY INTEREST
CWT	HUNDRED WEIGHT	TLE	TEMPORARY LIMITED EASEMENT
IN DIA	INCH DIAMETER	T	TRUCKS (PERCENT OF)
INTERS	INTERSECTION	TYP	TYPICAL
IH	INTERSTATE HIGHWAY	USH	UNITED STATES HIGHWAY
JT	JOINT	VAR	VARIABLE
LT	LEFT	W	WEST
L	LENGTH OF CURVE	WB	WESTBOUND
LF	LINEAR FOOT		

WISCONSIN DNR LIAISON

WENDY HENNIGES
DNR NORTHERN REGION HEADQUARTERS
107 SUTLIFF AVE
RHINELANDER, WI 54501
PHONE: (715) 365-8916
EMAIL: wendy.henniges@wisconsin.gov

DESIGN PROJECT MANAGER

NATHAN WAITE
NORTH CENTRAL REGION
510 HANSON LAKE RD
RHINELANDER, WI 54501
PHONE: (715) 365-5762
EMAIL: nathaniel.waite@dot.wi.gov

MISCELLANEOUS CONTACT

AARON PALMER, P.E.
WESTBROOK ASSOCIATED ENGINEERS, INC.
619 E HOXIE ST
SPRING GREEN, WI 53588
PHONE: (608) 588-7866
EMAIL: apalmer@westbrookeng.com

COUNTY HIGHWAY COMMISSIONER

ALEX HEGEMAN
ONEIDA COUNTY
730 W KEMP ST
RHINELANDER, WI 54501
PHONE: (715) 369-6131
EMAIL: ahegeman@oneidacountywi.gov

UTILITIES CONTACTS

WISCONSIN PUBLIC SERVICE
ELECTRIC
SCOTT KOLINSKI
2027 NAVAJO ST
RHINELANDER, WI 54501
PHONE: (715) 369-7148
EMAIL: scott.kolinski@wisconsinpublicservice.com

FRONTIER COMMUNICATIONS
COMMUNICATIONS
MIKE MYSZKA
315 OAK ST
OAKFIELD, WI 35065
PHONE: (715) 370-1685
EMAIL: michael.a.myszka@ftr.com

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

GENERAL NOTES

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

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY OPERATIONS, OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN.

THE 3.5-INCH ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH TWO (2) 1.75-INCH LAYERS OF HMA PAVEMENT 4 MT 58-28 S.

APPLY TACK COAT AT A RATE OF 0.07 GAL/SY TO MILLED SURFACES AND 0.05 GAL/SY BETWEEN LAYERS OF HMA PAVEMENT.

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

RIGHT OF WAY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE.

THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER.

WHEN THE QUANTITY OF THE ITEMS OF BASE AGGREGATE, SUBBASE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYERS SHOWN ON THE PLAN IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

EROSION CONTROL FEATURES AS SHOWN ON 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 NO LONGER NECESSARY.

APPLY SEED, MULCH OR EROSION MAT, AND FERTILIZER TO ALL DISTURBED AREAS WITHIN 7 WORKING DAYS AFTER GRADING WORK IS COMPLETED.

SLOPES STEEPER THAN 3:1 REQUIRE EROSION MAT.

THE LIMITS OF PAVEMENT REMOVAL ON SIDE STREETS ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD BY THE ENGINEER.

REMOVAL OF ASPHALTIC SURFACES WHERE AN ABUTTING ASPHALTIC SURFACE IS TO REMAIN IN PLACE SHALL REQUIRE A VERTICAL SAWCUT MEETING THE APPROVAL OF THE ENGINEER IN THE FIELD.

THE PROPOSED SHOULDER WIDTH SHOWN IN THE TYPICAL SECTIONS ARE MINIMUM WIDTH. PERPETUATE EXISTING SHOULDERS THAT ARE WIDER THAN WHAT IS SHOWN IN THE TYPICAL SECTIONS.

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

THE EXACT LOCATIONS AND LIMITS OF PRIVATE, COMMERCIAL, AND FIELD ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PAVING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAYS SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

PRIOR TO PLACING THE NEW BASE AGGREGATE DENSE COURSE OR PAVED SHOULDERS, EXISTING UNCOMPACTED SHOULDER MATERIAL SHALL BE REMOVED OR DEPOSITED ON THE OUTER PORTION OF THE EXISTING SHOULDER OR AS DIRECTED BY THE ENGINEER.

PRIOR TO PLACEMENT OF BEAM GUARD THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED.

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, ALL SIGNS RELATING TO THIS OPERATION SHALL BE COVERED OR REMOVED AND FACILITY RESTORED TO NORMAL OPERATIONS.

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

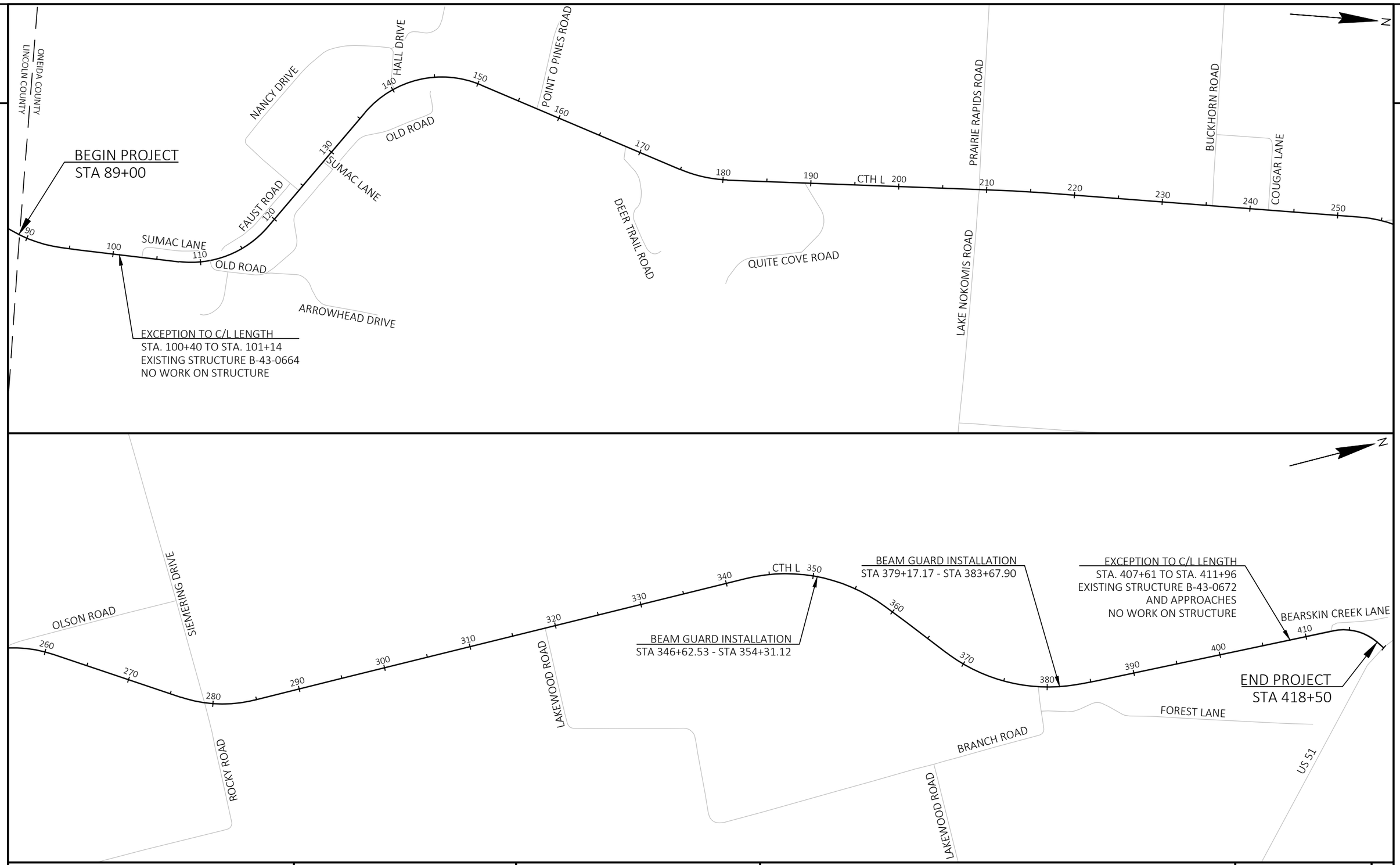
RUNOFF COEFFICIENT TABLE

	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 = 143 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.03 ACRES

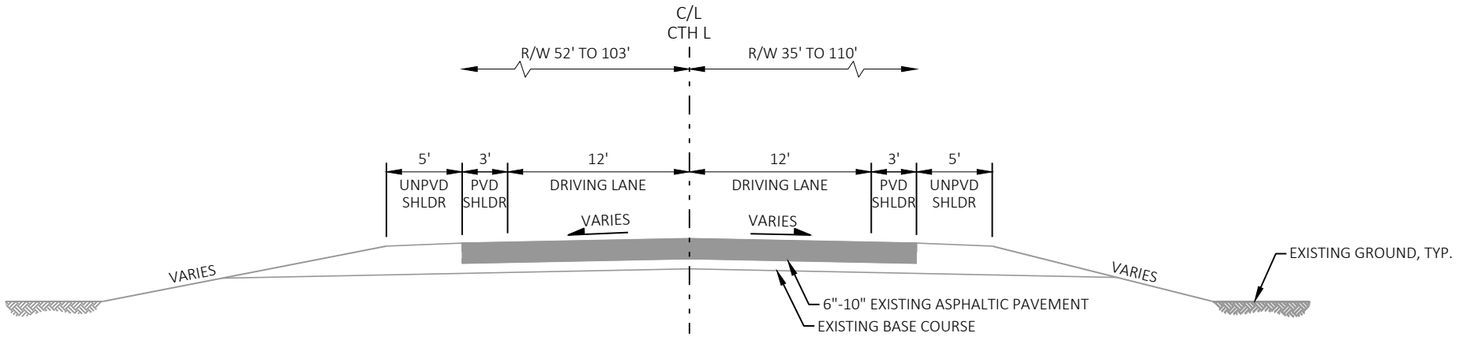
ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
BEAM GUARD DETAILS
EROSION CONTROL DETAILS
PERMANENT SIGNING AND MARKING



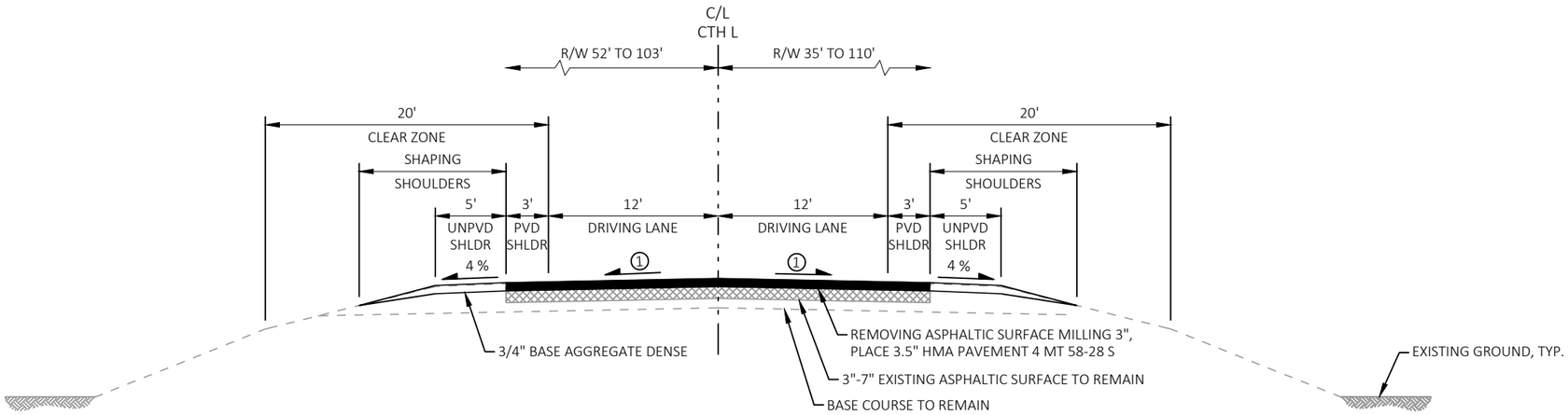
PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\020201_PO.DWG
LAYOUT NAME - 020201_po
PLOT DATE : 8/30/2024 8:15 AM
PLOT BY : GAVIN WIPPERFURTH
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42



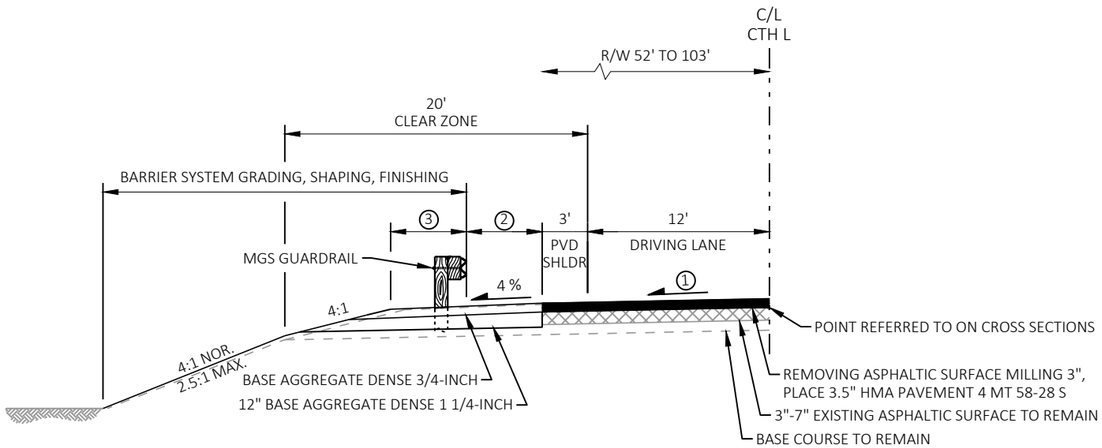
EXISTING TYPICAL SECTION

STA 89+00 - STA 418+50



PROPOSED TYPICAL SECTION

STA 89+00 - STA 418+50



PROPOSED TYPICAL HALF SECTION - GUARDRAIL

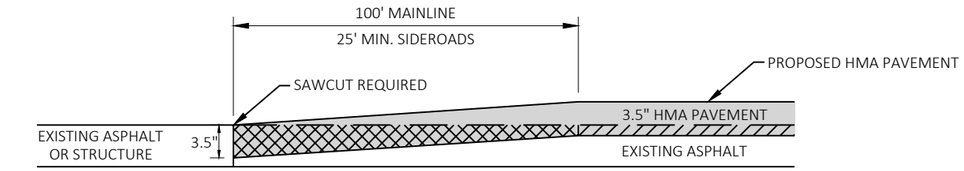
STA 346+62.53 - STA 354+31.12, LT
STA 379+17.17 - STA 383+67.90, RT

① 2% TYP. NO SUPERELEVATION CORRECTION ANTICIPATED. MATCH EXISTING SUPERELEVATION.

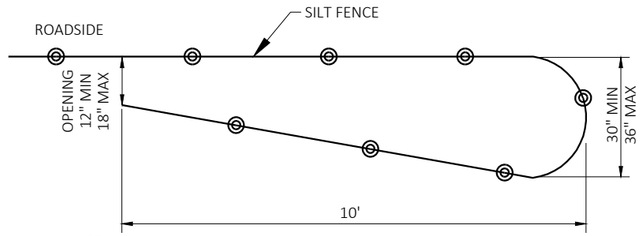
② WIDTH VARIES AT BEAM GUARD FLARES.

③ VARIES FROM POST 1 TO POST 9. SEE CROSS SECTIONS AND SDD 14B44-04a MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS).

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	TYPICAL SECTIONS	SHEET 4	E

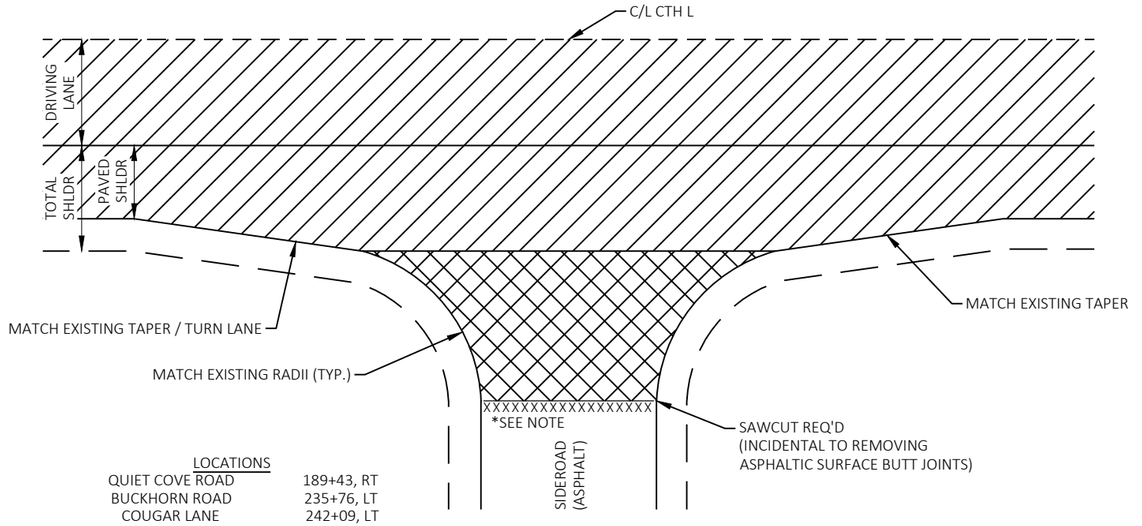


BUTT JOINT



NOTES:
SILT FENCE POSTS SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND
AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS.

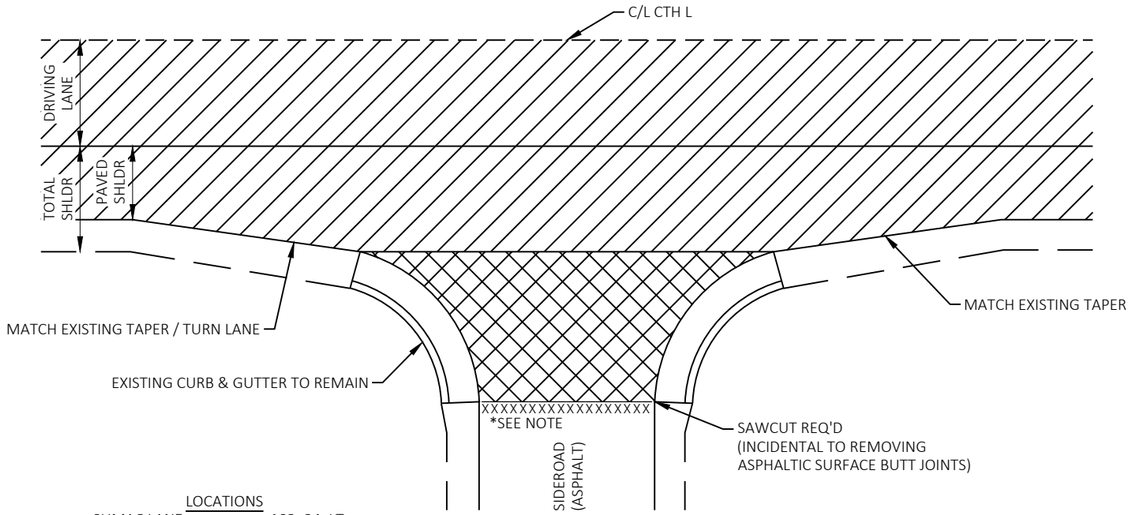
ANIMAL EXCLUSION FENCING TURN-AROUND



LOCATIONS	
QUIET COVE ROAD	189+43, RT
BUCKHORN ROAD	235+76, LT
COUGAR LANE	242+09, LT
OLSON ROAD	256+92, LT
SIEMERING DRIVE	278+80, LT
ROCKY ROAD	279+37, RT
PORCUPINE PATH	308+98, LT
BRANCH ROAD	379+04, RT
BEARSKIN CREEK LANE	413+17, LT

* SIDEROAD CONSTRUCTION LIMITS ARE TO
THE FURTHEST RADIUS POINT FROM THE
MAINLINE CENTERLINE OF EACH SIDEROAD (OR
AS DIRECTED BY THE ENGINEER)

PAVEMENT REMOVAL AT INTERSECTION DETAIL -
NO CURB & GUTTER



LOCATIONS	
SUMAC LANE	103+34, LT
OLD ROAD	111+14, RT
NANCY DRIVE	124+20, LT
SUMAC LANE	128+54, RT
HALL DRIVE	140+26, LT
POINT O PINES ROAD	157+21, LT
DEER TRAIL ROAD	168+46, RT
LAKE NOKOMIS ROAD	209+08, RT
PRAIRIE RAPIDS ROAD	209+15, LT
LAKEWOOD ROAD	318+79, RT

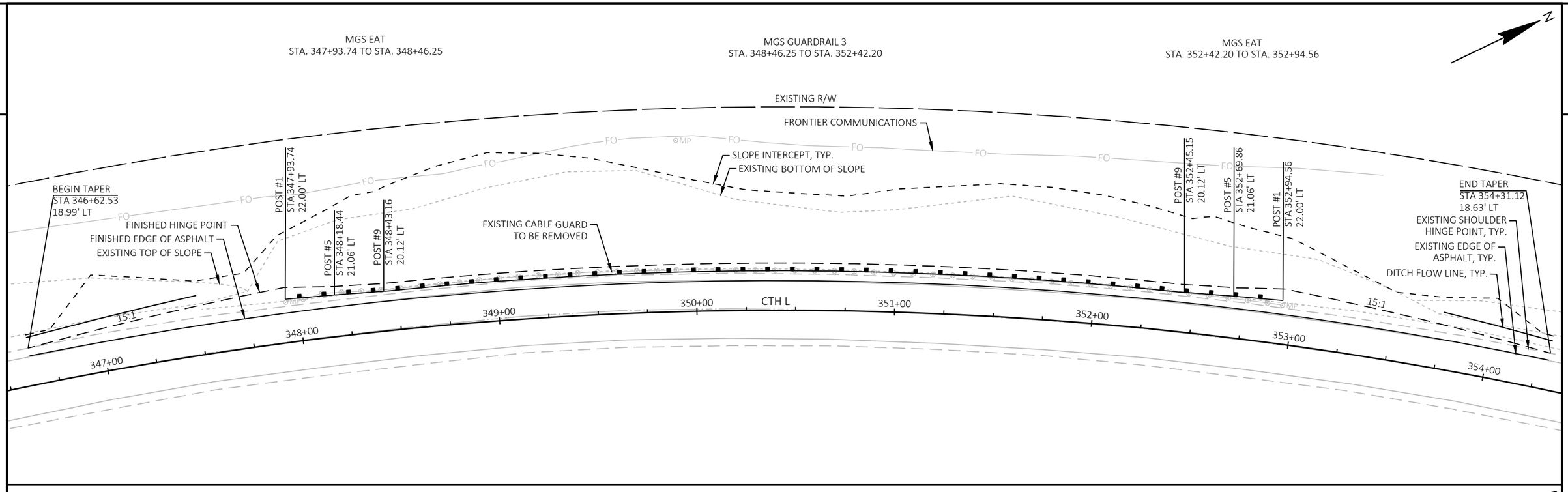
* SIDEROAD CONSTRUCTION LIMITS ARE TO
THE END OF CURB & GUTTER FURTHEST FROM
THE MAINLINE CENTERLINE (OR AS DIRECTED
BY THE ENGINEER).

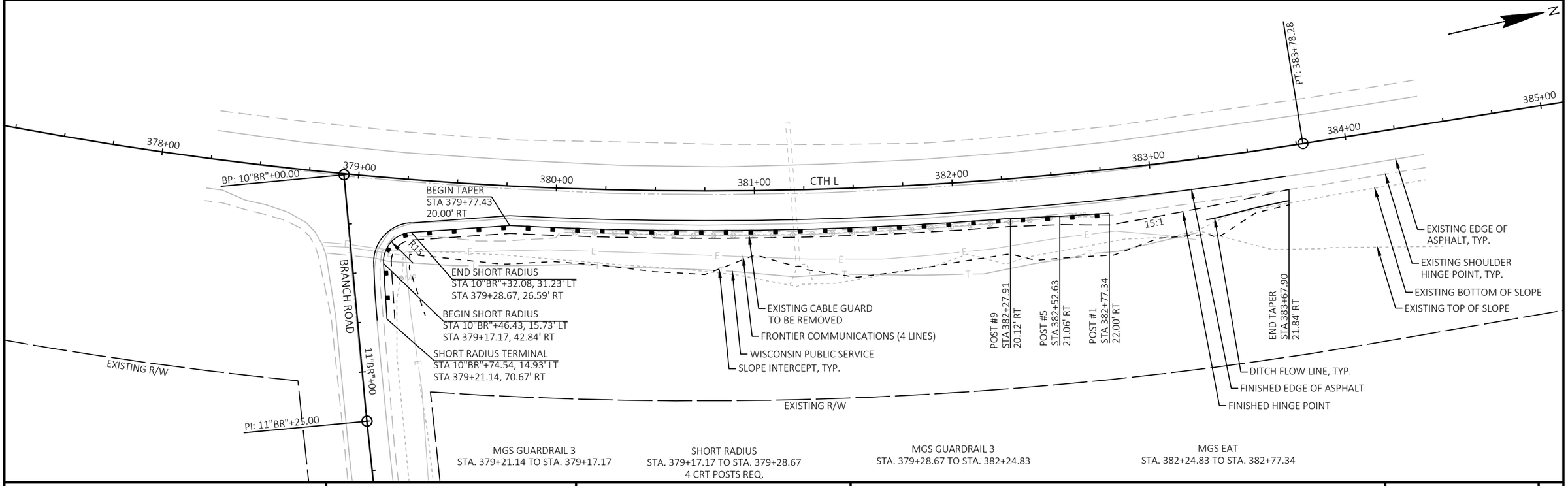
PAVEMENT REMOVAL AT INTERSECTION DETAIL -
CURB & GUTTER TO REMAIN

MGS EAT
STA. 347+93.74 TO STA. 348+46.25

MGS GUARDRAIL 3
STA. 348+46.25 TO STA. 352+42.20

MGS EAT
STA. 352+42.20 TO STA. 352+94.56





MGS GUARDRAIL 3
STA. 379+21.14 TO STA. 379+17.17

SHORT RADIUS
STA. 379+17.17 TO STA. 379+28.67
4 CRT POSTS REQ.

MGS GUARDRAIL 3
STA. 379+28.67 TO STA. 382+24.83

MGS EAT
STA. 382+24.83 TO STA. 382+77.34

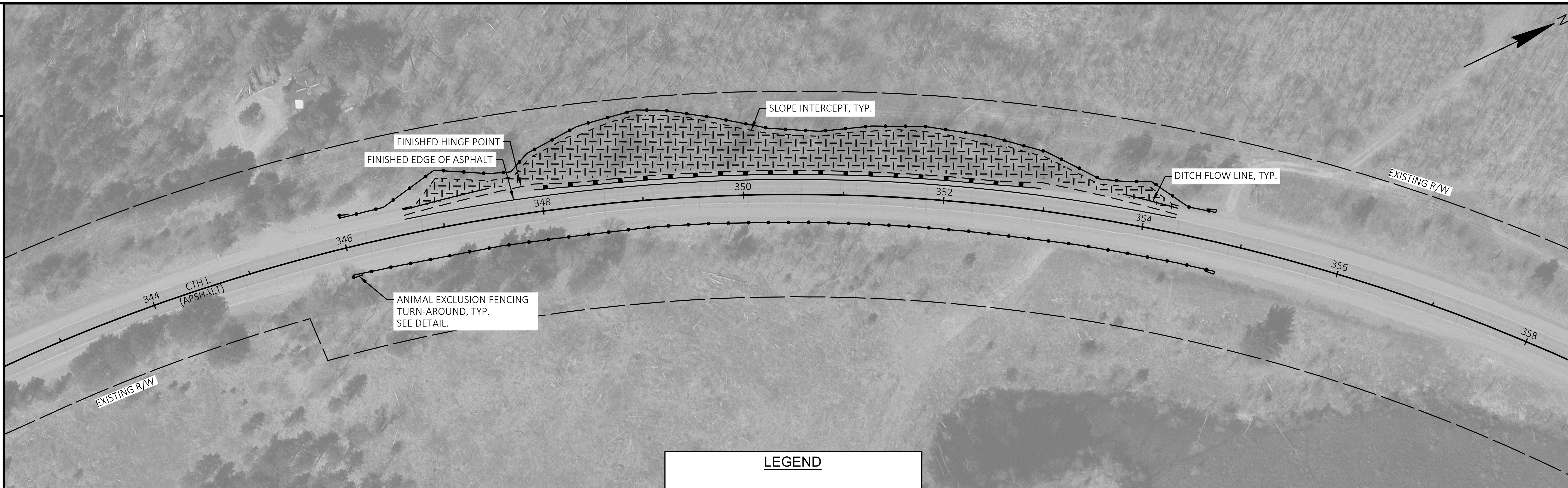
PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	BEAM GUARD DETAILS	SHEET 6	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\021002_BG.DWG
LAYOUT NAME - 021002_bg

PLOT DATE : 8/30/2024 8:30 AM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2



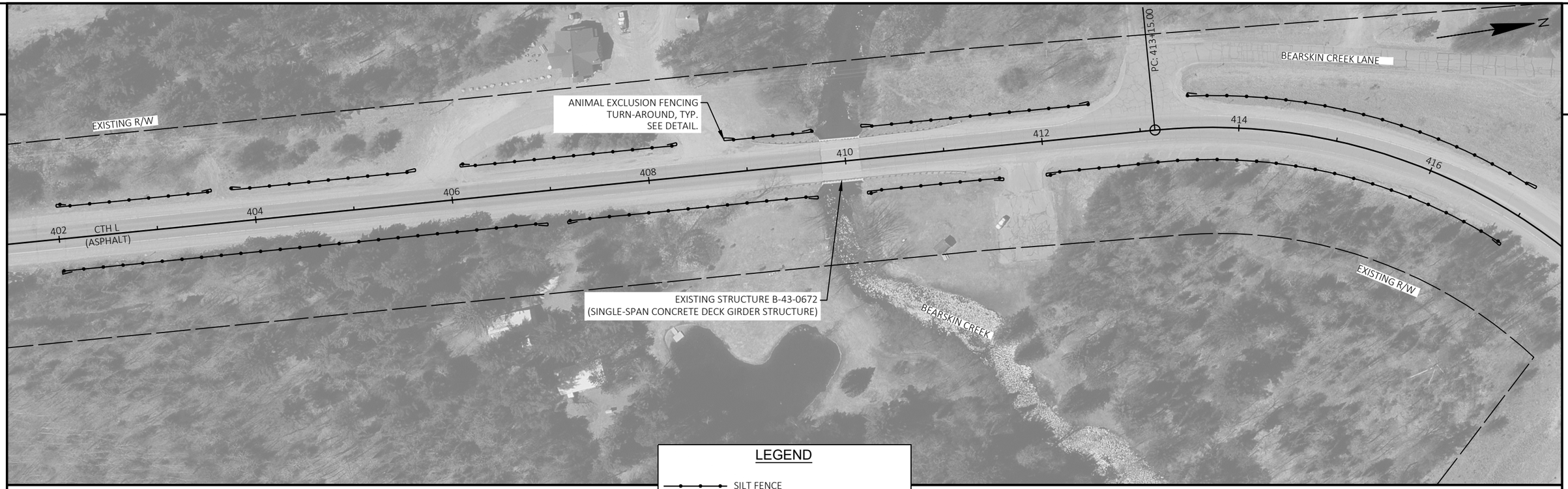
LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B URBAN (PAID AS BARRIER SYSTEM GRADING SHAPING FINISHING)

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	EROSION CONTROL DETAILS	SHEET 7	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\022001_EC.DWG
LAYOUT NAME - 022001_ec
PLOT DATE : 1/13/2025 12:19 PM PLOT BY : ERIK MEYER PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B URBAN (PAID AS BARRIER SYSTEM GRADING SHAPING FINISHING)

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	EROSION CONTROL DETAILS	SHEET 8	E

2

2

N

BP: 87+00.00

PC: 88+15.22

PT: 94+09.41

PI: 96+22.45

EXISTING STRUCTURE
B-43-0664

88 90 92 94 96 98 100

XX XX XX XXX XXX XXXX

2 1* 1* 2

LEGEND: PERMANENT SIGNING

- PROPOSED SIGN MOUNTED ON POST(S)
- EXISTING SIGN
- XX00-00 DENOTES SIGN NUMBER
  - SIGN COUNT SEQUENCE PER PAGE
  - PAGE NUMBER
  - WORK CODE: M=MOVE

LEGEND: PAVEMENT MARKING

1	MARKING LINE EPOXY 4-INCH (YELLOW)
2	MARKING LINE EPOXY 4-INCH (WHITE)
3	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
4	MARKING LINE EPOXY 4-INCH (WHITE) (3.0' LINE, 9.0' SKIP)
*	ADJUST CENTERLINE MARKING BASED ON "LOCATING NO-PASSING ZONES."

N

SUMAC LANE

XXXXX XXXXXX

102 104 106 108 110 112 114 116

PC: 107+55.00

XXX

2 1* 1* 2

XXXX

OLD ROAD

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PERMANENT SIGNING AND MARKING	SHEET 9	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\024501_PM.DWG
LAYOUT NAME - 024501_PM

PLOT DATE : 9/17/2024 3:20 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

NANCY DRIVE

PT: 118+83.08

XXXX

118 120 122 124 126 128 130 132

XXXXX

SUMAC LANE

HALL DRIVE

XXXX

PC: 135+91.00

134 136 138 140 142 144 146 148

XX

X

XX

N

LEGEND: PAVEMENT MARKING

1	MARKING LINE EPOXY 4-INCH (YELLOW)
2	MARKING LINE EPOXY 4-INCH (WHITE)
3	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
4	MARKING LINE EPOXY 4-INCH (WHITE) (3.0' LINE, 9.0' SKIP)
*	ADJUST CENTERLINE MARKING BASED ON "LOCATING NO-PASSING ZONES."

LEGEND: PERMANENT SIGNING

	PROPOSED SIGN MOUNTED ON POST(S)
	EXISTING SIGN
XX00-00	DENOTES SIGN NUMBER

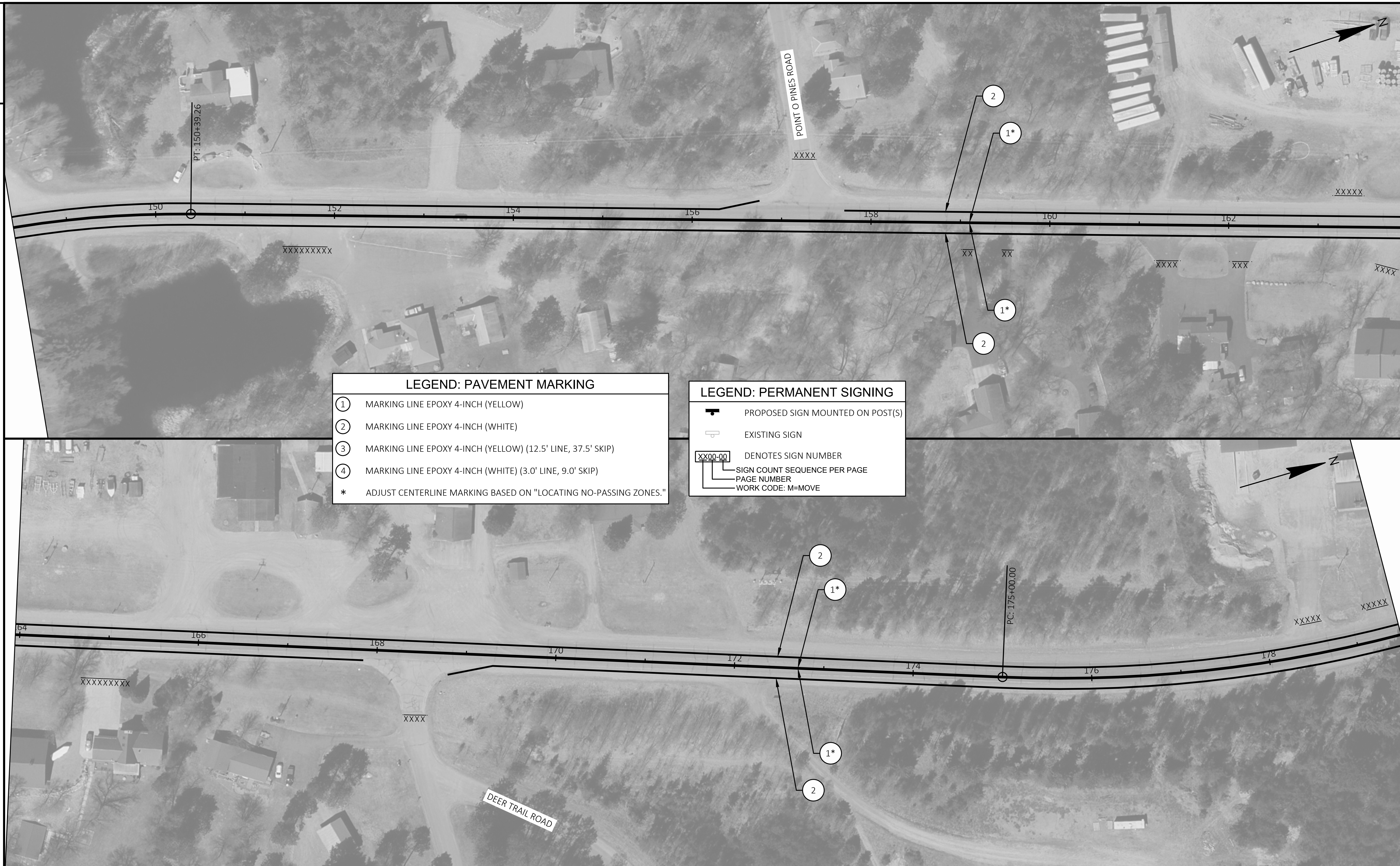
SIGN COUNT SEQUENCE PER PAGE
PAGE NUMBER
WORK CODE: M=MOVE

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PERMANENT SIGNING AND MARKING	SHEET 10	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\024501_PM.DWG
LAYOUT NAME - 024502_PM

PLOT DATE : 9/17/2024 3:20 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



LEGEND: PAVEMENT MARKING

1	MARKING LINE EPOXY 4-INCH (YELLOW)
2	MARKING LINE EPOXY 4-INCH (WHITE)
3	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
4	MARKING LINE EPOXY 4-INCH (WHITE) (3.0' LINE, 9.0' SKIP)
*	ADJUST CENTERLINE MARKING BASED ON "LOCATING NO-PASSING ZONES."

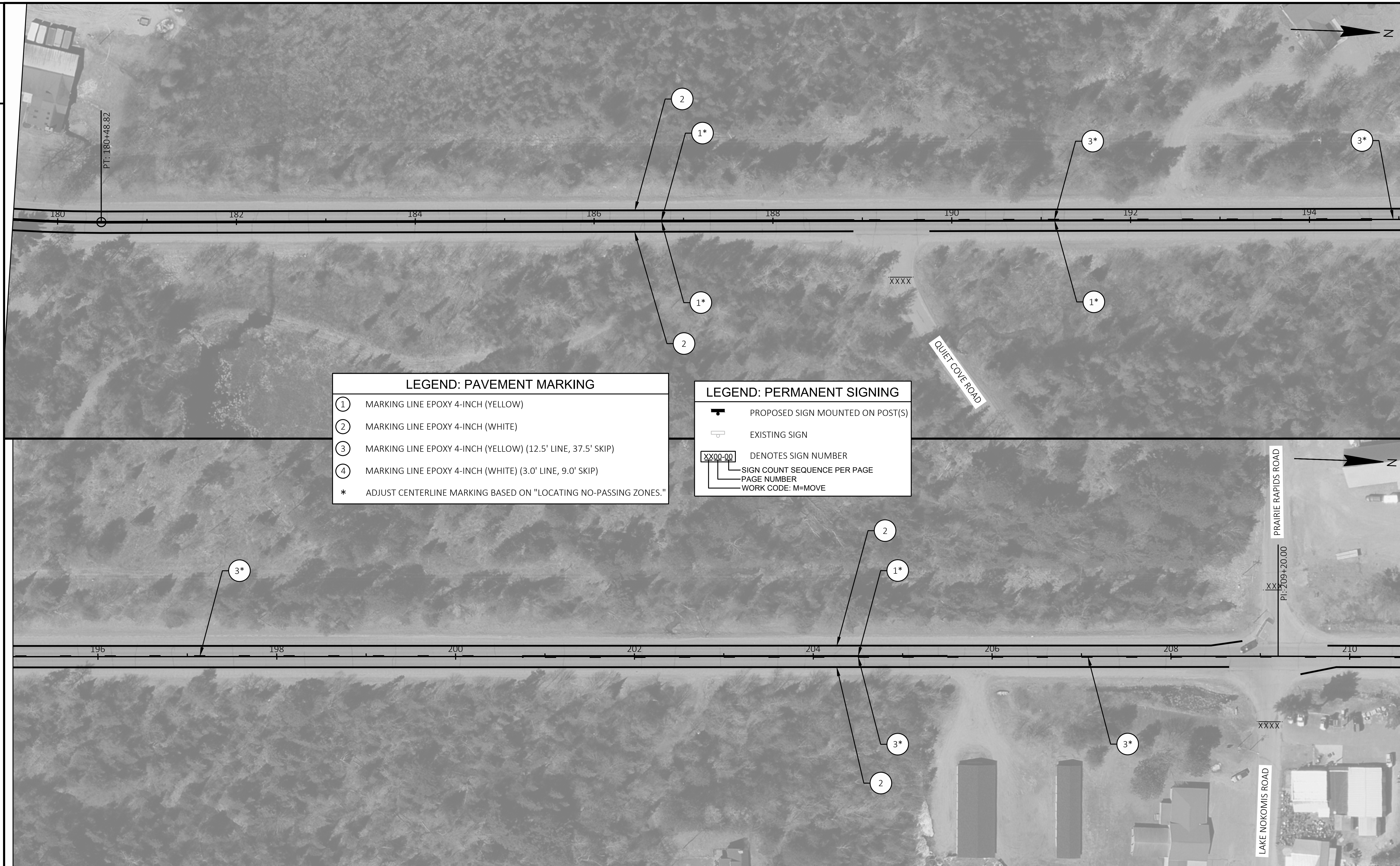
LEGEND: PERMANENT SIGNING

PROPOSED SIGN MOUNTED ON POST(S)

EXISTING SIGN

XX00-00 DENOTES SIGN NUMBER
- SIGN COUNT SEQUENCE PER PAGE
- PAGE NUMBER
- WORK CODE: M=MOVE

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PERMANENT SIGNING AND MARKING	SHEET 11	E



LEGEND: PAVEMENT MARKING

1	MARKING LINE EPOXY 4-INCH (YELLOW)
2	MARKING LINE EPOXY 4-INCH (WHITE)
3	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
4	MARKING LINE EPOXY 4-INCH (WHITE) (3.0' LINE, 9.0' SKIP)
*	ADJUST CENTERLINE MARKING BASED ON "LOCATING NO-PASSING ZONES."

LEGEND: PERMANENT SIGNING

PROPOSED SIGN MOUNTED ON POST(S)

EXISTING SIGN

XX00-00 DENOTES SIGN NUMBER

- SIGN COUNT SEQUENCE PER PAGE
- PAGE NUMBER
- WORK CODE: M=MOVE

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PERMANENT SIGNING AND MARKING	SHEET 12	E

2

2

PC: 212+91.00

PT: 216+48.44

212 214 216 218 220 222 224 226

XX

2

3*

2

N

LEGEND: PAVEMENT MARKING

(1)	MARKING LINE EPOXY 4-INCH (YELLOW)
(2)	MARKING LINE EPOXY 4-INCH (WHITE)
(3)	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
(4)	MARKING LINE EPOXY 4-INCH (WHITE) (3.0' LINE, 9.0' SKIP)
*	ADJUST CENTERLINE MARKING BASED ON "LOCATING NO-PASSING ZONES."

LEGEND: PERMANENT SIGNING

	PROPOSED SIGN MOUNTED ON POST(S)
	EXISTING SIGN
XX00-00	DENOTES SIGN NUMBER
	SIGN COUNT SEQUENCE PER PAGE
	PAGE NUMBER
	WORK CODE: M=MOVE

N

BUCKHORN ROAD

XXXX

XXXX

2

3*

228 230 232 234 236 238 240

3*

1*

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PERMANENT SIGNING AND MARKING	SHEET 13	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\024501_PM.DWG
LAYOUT NAME - 024505_PM

PLOT DATE : 9/17/2024 3:20 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND: PAVEMENT MARKING

1	MARKING LINE EPOXY 4-INCH (YELLOW)
2	MARKING LINE EPOXY 4-INCH (WHITE)
3	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
4	MARKING LINE EPOXY 4-INCH (WHITE) (3.0' LINE, 9.0' SKIP)
*	ADJUST CENTERLINE MARKING BASED ON "LOCATING NO-PASSING ZONES."

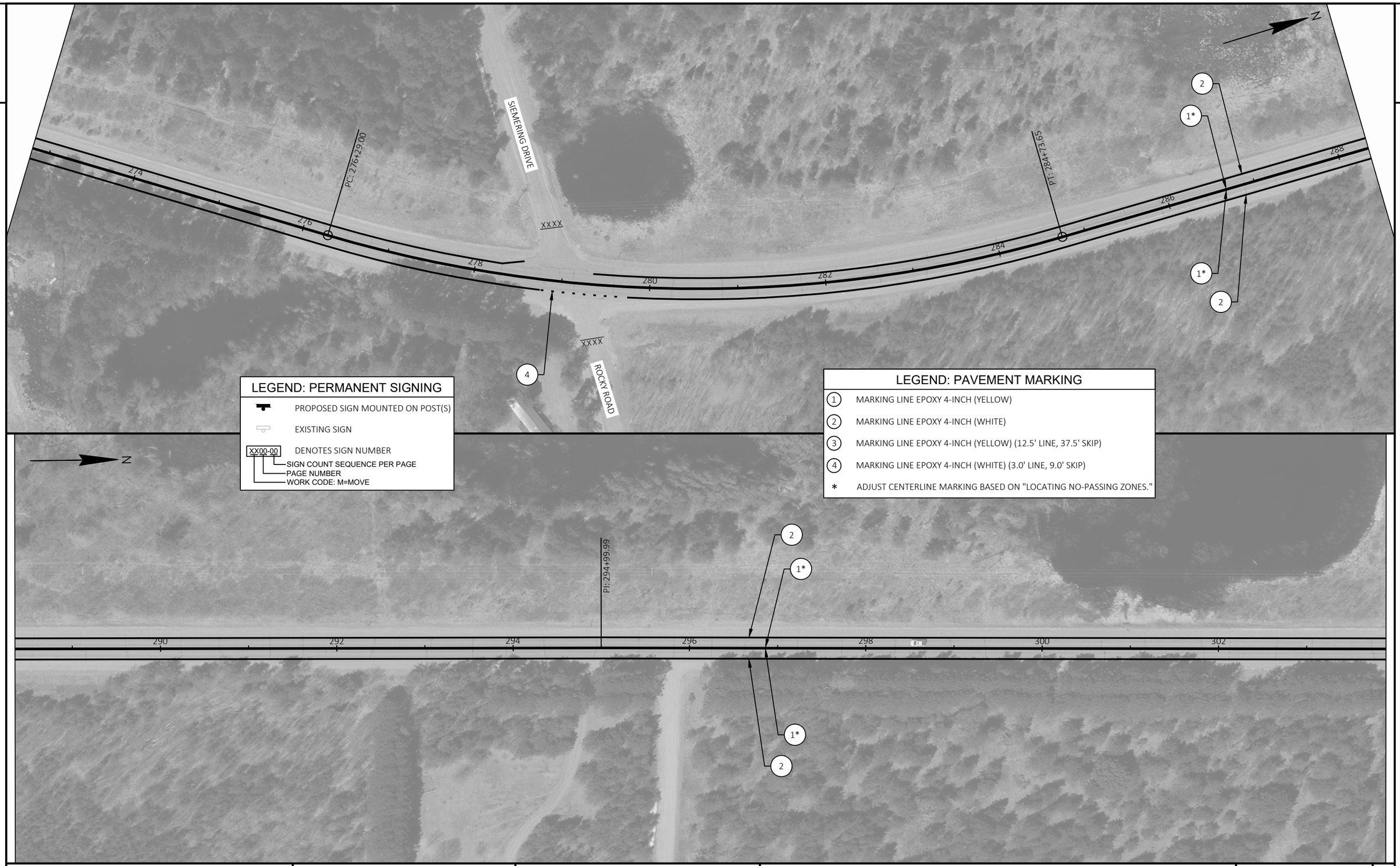
LEGEND: PERMANENT SIGNING

	PROPOSED SIGN MOUNTED ON POST(S)
	EXISTING SIGN
XX00-00	DENOTES SIGN NUMBER

XX00-00
- SIGN COUNT SEQUENCE PER PAGE
- PAGE NUMBER
- WORK CODE: M=MOVE

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PERMANENT SIGNING AND MARKING	SHEET 14 E

2



LEGEND: PERMANENT SIGNING

- PROPOSED SIGN MOUNTED ON POST(S)
- EXISTING SIGN
- XX00-00 DENOTES SIGN NUMBER
  - SIGN COUNT SEQUENCE PER PAGE
  - PAGE NUMBER
  - WORK CODE: M=MOVE

LEGEND: PAVEMENT MARKING

(1)	MARKING LINE EPOXY 4-INCH (YELLOW)
(2)	MARKING LINE EPOXY 4-INCH (WHITE)
(3)	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
(4)	MARKING LINE EPOXY 4-INCH (WHITE) (3.0' LINE, 9.0' SKIP)
*	ADJUST CENTERLINE MARKING BASED ON "LOCATING NO-PASSING ZONES."

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PERMANENT SIGNING AND MARKING	SHEET 15 E

2

2

N

304 306 308 310 312 314 316 318

2
1*
1*
2

XXXX

LAKEWOOD ROAD

LEGEND: PAVEMENT MARKING

1	MARKING LINE EPOXY 4-INCH (YELLOW)
2	MARKING LINE EPOXY 4-INCH (WHITE)
3	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
4	MARKING LINE EPOXY 4-INCH (WHITE) (3.0' LINE, 9.0' SKIP)
*	ADJUST CENTERLINE MARKING BASED ON "LOCATING NO-PASSING ZONES."

LEGEND: PERMANENT SIGNING

PROPOSED SIGN MOUNTED ON POST(S)

EXISTING SIGN

XX00-00 DENOTES SIGN NUMBER
- SIGN COUNT SEQUENCE PER PAGE
- PAGE NUMBER
- WORK CODE: M=MOVE

N

320 322 324 326 328 330 332 334

XXX

2
1*
1*
2

1*
3*

1*
1*

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PERMANENT SIGNING AND MARKING	SHEET 16	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\024501_PM.DWG
LAYOUT NAME - 024508_PM

PLOT DATE : 9/17/2024 3:20 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

PC: 342+30.49

ATV ROUTE
D11-10
M09-01

336 338 340 342 344 346 348 350

1* 2 3* 1* 2 1* 1*

LEGEND: PAVEMENT MARKING

1	MARKING LINE EPOXY 4-INCH (YELLOW)
2	MARKING LINE EPOXY 4-INCH (WHITE)
3	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
4	MARKING LINE EPOXY 4-INCH (WHITE) (3.0' LINE, 9.0' SKIP)
*	ADJUST CENTERLINE MARKING BASED ON "LOCATING NO-PASSING ZONES."

LEGEND: PERMANENT SIGNING

PROPOSED SIGN MOUNTED ON POST(S)

EXISTING SIGN

XX00-00 DENOTES SIGN NUMBER
- SIGN COUNT SEQUENCE PER PAGE
- PAGE NUMBER
- WORK CODE: M=MOVE

N

PT: 359+00.00

PI: 362+00.00

352 354 356 358 360 362 364 366

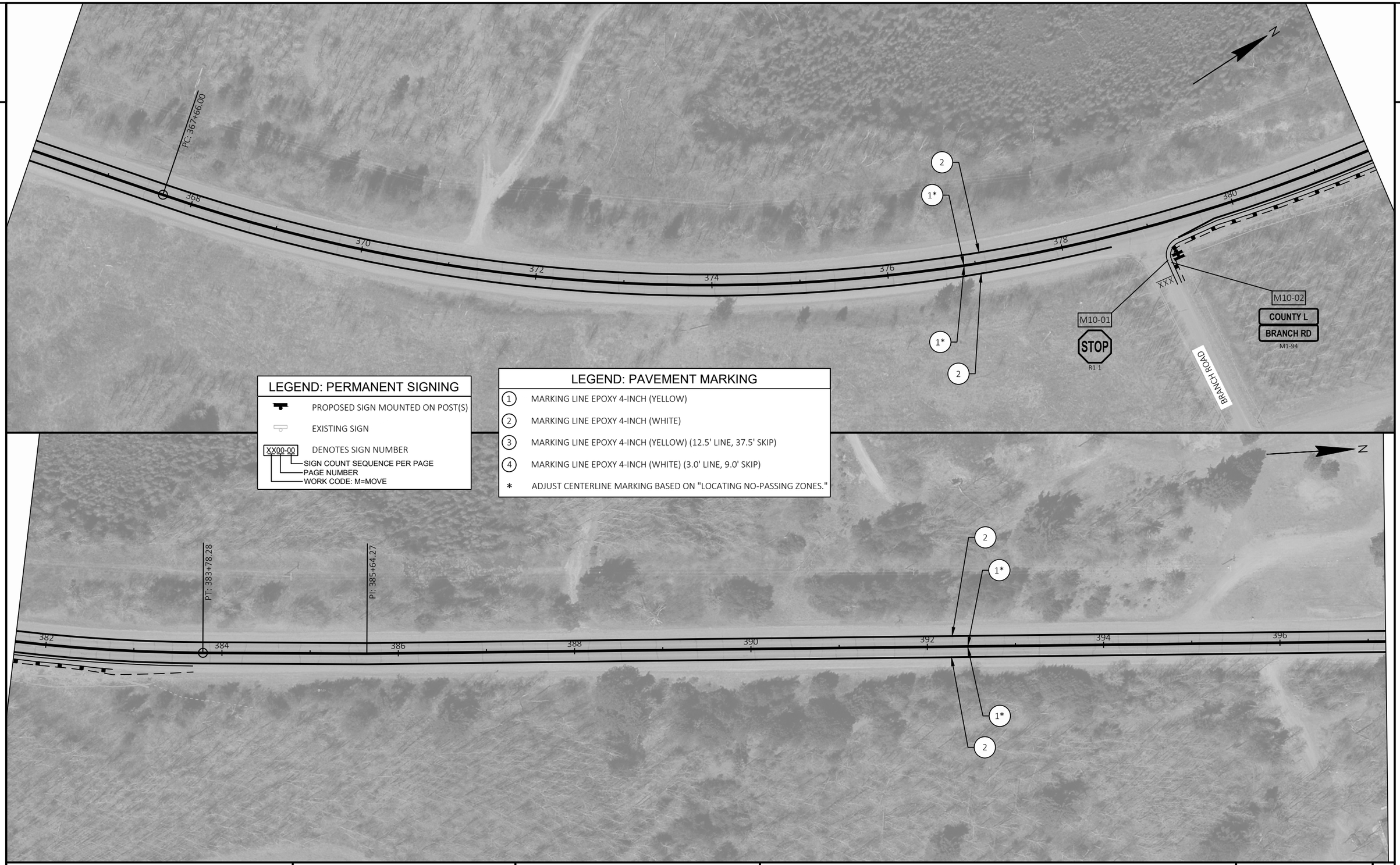
2 1* 1* 2

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PERMANENT SIGNING AND MARKING	SHEET 17	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\024501_PM.DWG
LAYOUT NAME - 024509_PM

PLOT DATE : 9/17/2024 3:20 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



LEGEND: PERMANENT SIGNING

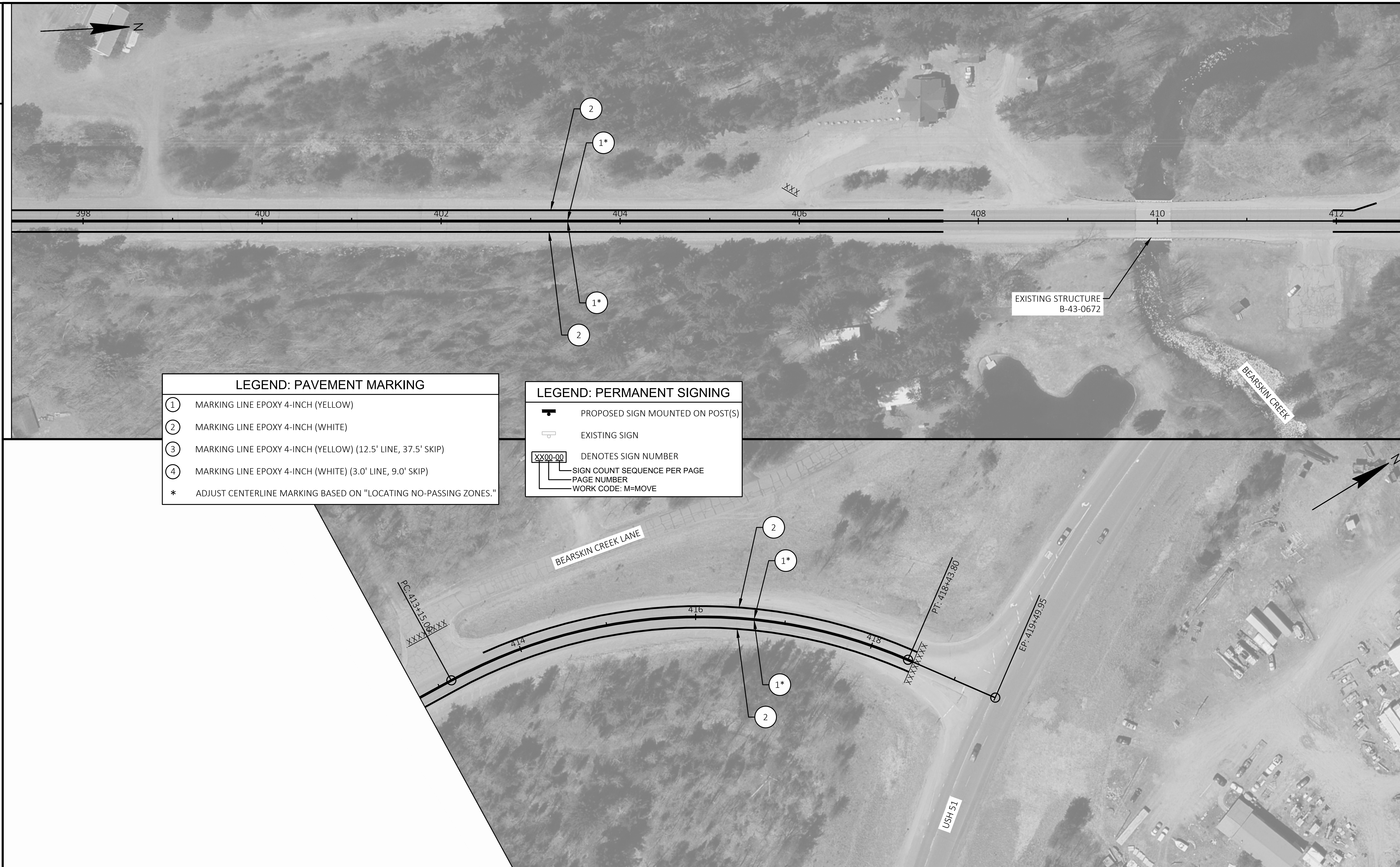
	PROPOSED SIGN MOUNTED ON POST(S)
	EXISTING SIGN
XX00-00	DENOTES SIGN NUMBER

XX00-00
- SIGN COUNT SEQUENCE PER PAGE
- PAGE NUMBER
- WORK CODE: M=MOVE

LEGEND: PAVEMENT MARKING

1	MARKING LINE EPOXY 4-INCH (YELLOW)
2	MARKING LINE EPOXY 4-INCH (WHITE)
3	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
4	MARKING LINE EPOXY 4-INCH (WHITE) (3.0' LINE, 9.0' SKIP)
*	ADJUST CENTERLINE MARKING BASED ON "LOCATING NO-PASSING ZONES."

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PERMANENT SIGNING AND MARKING	SHEET 18	E



LEGEND: PAVEMENT MARKING

1	MARKING LINE EPOXY 4-INCH (YELLOW)
2	MARKING LINE EPOXY 4-INCH (WHITE)
3	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
4	MARKING LINE EPOXY 4-INCH (WHITE) (3.0' LINE, 9.0' SKIP)
*	ADJUST CENTERLINE MARKING BASED ON "LOCATING NO-PASSING ZONES."

LEGEND: PERMANENT SIGNING

	PROPOSED SIGN MOUNTED ON POST(S)
	EXISTING SIGN
XX00-00	DENOTES SIGN NUMBER

SIGN COUNT SEQUENCE PER PAGE
PAGE NUMBER
WORK CODE: M=MOVE

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PERMANENT SIGNING AND MARKING	SHEET 19 E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\024501_PM.DWG
LAYOUT NAME - 0245011_PM
PLOT DATE : 9/17/2024 3:20 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : PLOT SCALE : 1 IN:100 FT

9876-00-71

Line	Item	Item Description	Unit	Total	Qty
0008	204.0110	Removing Asphaltic Surface	SY	1,384.000	1,384.000
0010	204.0115	Removing Asphaltic Surface Butt Joints	SY	6,490.000	6,490.000
0012	204.0120	Removing Asphaltic Surface Milling	SY	107,100.000	107,100.000
0016	204.0167	Removing Cable Barrier	LF	763.000	763.000
0026	213.0100	Finishing Roadway (project) 02. 9876-00-71	EACH	1.000	1.000
0028	305.0110	Base Aggregate Dense 3/4-Inch	TON	6,980.000	6,980.000
0030	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,995.000	2,995.000
0032	305.0500	Shaping Shoulders	STA	660.000	660.000
0034	455.0605	Tack Coat	GAL	13,575.000	13,575.000
0036	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0038	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0040	460.2005	Incentive Density PWL HMA Pavement	DOL	16,970.000	16,970.000
0042	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	12,410.000	12,410.000
0044	460.2010	Incentive Air Voids HMA Pavement	DOL	16,970.000	16,970.000
0046	460.6224	HMA Pavement 4 MT 58-28 S	TON	22,199.000	22,199.000
0050	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	229.000	229.000
0076	614.0010	Barrier System Grading Shaping Finishing	EACH	2.000	2.000
0080	614.2300	MGS Guardrail 3	LF	728.000	728.000
0082	614.2350	MGS Guardrail Short Radius	LF	23.500	23.500
0086	614.2610	MGS Guardrail Terminal EAT	EACH	3.000	3.000
0088	614.2630	MGS Guardrail Short Radius Terminal	EACH	1.000	1.000
0092	618.0100	Maintenance and Repair of Haul Roads (project) 02. 9876-00-71	EACH	1.000	1.000
0094	619.1000	Mobilization	EACH	0.500	0.500
0096	624.0100	Water	MGAL	88.000	88.000
0102	628.1504	Silt Fence	LF	6,420.000	6,420.000
0104	628.1520	Silt Fence Maintenance	LF	11,644.000	11,644.000
0106	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0108	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0126	638.2102	Moving Signs Type II	EACH	4.000	4.000
0128	638.2602	Removing Signs Type II	EACH	4.000	4.000
0130	638.3000	Removing Small Sign Supports	EACH	3.000	3.000
0132	638.4000	Moving Small Sign Supports	EACH	3.000	3.000
0134	642.5001	Field Office Type B	EACH	0.500	0.500
0136	643.0420	Traffic Control Barricades Type III	DAY	6,300.000	6,300.000
0138	643.0705	Traffic Control Warning Lights Type A	DAY	12,600.000	12,600.000
0140	643.0900	Traffic Control Signs	DAY	9,450.000	9,450.000
0144	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0146	643.3105	Temporary Marking Line Paint 4-Inch	LF	55,304.000	55,304.000
0148	643.5000	Traffic Control	EACH	0.500	0.500
0154	646.1020	Marking Line Epoxy 4-Inch	LF	120,039.000	120,039.000
0156	648.0100	Locating No-Passing Zones	MI	6.140	6.140
0166	650.8000	Construction Staking Resurfacing Reference	LF	32,391.000	32,391.000
0170	650.9911	Construction Staking Supplemental Control (project) 02. 9876-00-71	EACH	1.000	1.000
0174	690.0150	Sawing Asphalt	LF	580.000	580.000
0178	740.0440	Incentive IRI Ride	DOL	12,280.000	12,280.000
0180	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000
0182	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,260.000	1,260.000
0184	SPV.0060	Special 01. Verify Landmark Reference Monuments	EACH	3.000	3.000
0186	SPV.0195	Special 01. Base Aggregate Dense 3/4-Inch Beam Guard	TON	110.000	110.000

3

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION	TO	STATION	LOCATION	204.0115 SY
89+00	-	90+00	MAINLINE	330
99+40	-	100+40	MAINLINE	330
101+14	-	102+14	MAINLINE	330
407+36	-	407+61	MAINLINE	80
411+96	-	412+21	MAINLINE	80
417+50	-	418+50	MAINLINE	330
			SUBTOTAL	1,480
		103+34	SUMAC LANE	250
		111+14	OLD ROAD	300
		124+20	NANCY DRIVE	340
		128+54	SUMAC LANE	270
		140+26	HALL DRIVE	310
		157+21	POINT O PINES ROAD	330
		168+46	DEER TRAIL ROAD	320
		189+43	QUIET COVE ROAD	280
		209+08	LAKE NOKOMIS ROAD	340
		209+15	PRAIRIE RAPIDS ROAD	330
		235+76	BUCKHORN ROAD	260
		242+09	COUGAR LANE	70
		256+92	OLSON ROAD	130
		278+80	SIEMERING DRIVE	280
		279+37	ROCKY ROAD	290
		318+79	LAKEWOOD ROAD	350
		379+04	BRANCH ROAD	220
		413+17	BEARSKIN CREEK LANE	340
			SUBTOTAL	5,010
			TOTAL	6,490

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

REMOVING ASPHALTIC SURFACE MILLING

STATION	TO	STATION	LOCATION	204.0120 SY
90+00	-	99+40	MAINLINE	3,500
102+14	-	407+36	MAINLINE	101,800
412+21	-	417+50	MAINLINE	1,800
			TOTAL	107,100

REMOVING CABLE BARRIER

STATION	TO	STATION	LOCATION	204.0167 LF
347+93	-	352+95	MAINLINE, LT	507
380+04	-	382+58	MAINLINE, RT	256
			TOTAL	763

SHAPING SHOULDERS

STATION	TO	STATION	LOCATION	305.0500 STA
89+00	-	418+50	MAINLINE, LT	330
89+00	-	418+50	MAINLINE, RT	330
			TOTAL	660

* QUANTITIES INCLUDED ELSEWHERE IN PLAN

BASE AGGREGATE DENSE

STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	SPV.0195.01 BASE AGGREGATE DENSE 3/4-INCH BEAMGUARD TON
89+00	-	100+40	MAINLINE	170	---	3	70
101+14	-	407+61	MAINLINE	6,620	1,460	82	40
411+96	-	418+50	MAINLINE	130	---	2	---
			SUBTOTAL	6,920	1,460	87	110
		308+98	PORCUPINE PATH	60	---	1	---
			SUBTOTAL	60	0	1	0
			TOTAL	6,980	1,460	88	110

ASPHALT SURFACE ITEMS

STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	460.6224 HMA PAVEMENT 4 MT 58-28 S TON
89+00	-	100+40	MAINLINE	455	750
101+14	-	407+61	MAINLINE	12,260	20,030
411+96	-	418+50	MAINLINE	260	430
			SUBTOTAL	12,975	21,210
		103+34	SUMAC LANE	30	49
		111+14	OLD ROAD	36	59
		124+20	NANCY DRIVE	40	66
		128+54	SUMAC LANE	33	54
		140+26	HALL DRIVE	37	61
		157+21	POINT O PINES ROAD	39	65
		168+46	DEER TRAIL ROAD	39	64
		189+43	QUIET COVE ROAD	34	56
		209+08	LAKE NOKOMIS ROAD	40	66
		209+15	PRAIRIE RAPIDS ROAD	40	66
		235+76	BUCKHORN ROAD	31	51
		242+09	COUGAR LANE	9	15
		256+92	OLSON ROAD	15	26
		278+80	SIEMERING DRIVE	34	56
		279+37	ROCKY ROAD	35	57
		318+79	LAKEWOOD ROAD	41	68
		379+04	BRANCH ROAD	26	43
		413+17	BEARSKIN CREEK LANE	41	67
			SUBTOTAL	600	989
			TOTAL	13,575	22,199

3

* QUANTITIES INCLUDED ELSEWHERE IN PLAN

DRIVEWAYS AND FIELD ENTRANCES

STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	REMARKS
89+57	MAINLINE, LT	32	11	5	ASPHALT DRIVEWAY
91+37	MAINLINE, LT	27	9	4	ASPHALT DRIVEWAY
92+65	MAINLINE, LT	68	22	11	ASPHALT DRIVEWAY
96+93	MAINLINE, RT	31	10	5	ASPHALT DRIVEWAY
97+14	MAINLINE, LT	66	22	11	ASPHALT DRIVEWAY
102+31	MAINLINE, LT	39	13	6	ASPHALT DRIVEWAY
104+23	MAINLINE, RT	---	13	---	AGGREGATE DRIVEWAY
105+12	MAINLINE, RT	---	13	---	AGGREGATE DRIVEWAY
116+99	MAINLINE, RT	47	15	8	ASPHALT DRIVEWAY
143+77	MAINLINE, LT	34	11	6	ASPHALT DRIVEWAY
145+61	MAINLINE, LT	46	15	8	ASPHALT DRIVEWAY
146+79	MAINLINE, LT	---	35	---	AGGREGATE DRIVEWAY
146+79	MAINLINE, RT	42	14	7	ASPHALT DRIVEWAY
148+44	MAINLINE, LT	---	38	---	AGGREGATE DRIVEWAY
148+97	MAINLINE, RT	---	14	---	AGGREGATE DRIVEWAY
150+30	MAINLINE, LT	---	14	---	AGGREGATE DRIVEWAY
151+19	MAINLINE, LT	---	13	---	AGGREGATE DRIVEWAY
151+68	MAINLINE, RT	91	30	15	ASPHALT DRIVEWAY
153+22	MAINLINE, LT	---	18	---	AGGREGATE DRIVEWAY
157+22	MAINLINE, RT	---	6	---	AGGREGATE DRIVEWAY
159+09	MAINLINE, RT	20	6	3	ASPHALT DRIVEWAY
159+53	MAINLINE, RT	16	5	3	ASPHALT DRIVEWAY
161+30	MAINLINE, LT	---	13	---	AGGREGATE DRIVEWAY
161+32	MAINLINE, RT	90	30	15	ASPHALT DRIVEWAY
162+14	MAINLINE, RT	76	25	13	ASPHALT DRIVEWAY
163+34	MAINLINE, LT	66	22	11	ASPHALT DRIVEWAY

DRIVEWAYS AND FIELD ENTRANCES (CONT'D)

STATION	LOCATION	204.0110 SY	305.0120 TON	465.0120 TON	REMARKS
163+77	MAINLINE, RT	84	28	14	ASPHALT DRIVEWAY
164+96	MAINLINE, RT	161	54	27	ASPHALT DRIVEWAY
165+85	MAINLINE, LT	---	54	---	AGGREGATE DRIVEWAY
167+40	MAINLINE, LT	---	54	---	AGGREGATE DRIVEWAY
168+82	MAINLINE, LT	---	54	---	AGGREGATE DRIVEWAY
170+42	MAINLINE, LT	---	16	---	AGGREGATE DRIVEWAY
172+02	MAINLINE, LT	---	10	---	AGGREGATE DRIVEWAY
172+27	MAINLINE, RT	---	21	---	AGGREGATE DRIVEWAY
178+53	MAINLINE, LT	49	16	8	ASPHALT DRIVEWAY
179+31	MAINLINE, LT	52	17	9	ASPHALT DRIVEWAY
192+46	MAINLINE, LT	---	16	---	AGGREGATE DRIVEWAY
202+39	MAINLINE, RT	---	9	---	AGGREGATE DRIVEWAY
205+79	MAINLINE, RT	---	16	---	AGGREGATE DRIVEWAY
210+68	MAINLINE, RT	67	22	11	ASPHALT DRIVEWAY
211+94	MAINLINE, LT	---	19	---	AGGREGATE DRIVEWAY
213+06	MAINLINE, LT	---	17	---	AGGREGATE DRIVEWAY
218+62	MAINLINE, LT	---	28	---	AGGREGATE DRIVEWAY
218+85	MAINLINE, RT	---	12	---	AGGREGATE DRIVEWAY
221+27	MAINLINE, RT	---	12	---	AGGREGATE DRIVEWAY
223+37	MAINLINE, LT	---	28	---	AGGREGATE DRIVEWAY
224+87	MAINLINE, RT	---	9	---	AGGREGATE DRIVEWAY
226+10	MAINLINE, RT	---	16	---	AGGREGATE DRIVEWAY
227+50	MAINLINE, LT	---	16	---	AGGREGATE DRIVEWAY
228+32	MAINLINE, RT	---	21	---	AGGREGATE DRIVEWAY
230+36	MAINLINE, RT	---	12	---	AGGREGATE DRIVEWAY
231+52	MAINLINE, RT	---	12	---	AGGREGATE DRIVEWAY
234+63	MAINLINE, LT	---	22	---	AGGREGATE DRIVEWAY
235+16	MAINLINE, RT	---	22	---	AGGREGATE DRIVEWAY
239+18	MAINLINE, LT	51	17	8	ASPHALT DRIVEWAY
239+94	MAINLINE, RT	---	9	---	AGGREGATE DRIVEWAY
242+03	MAINLINE, RT	---	12	---	AGGREGATE DRIVEWAY
245+96	MAINLINE, RT	48	16	8	ASPHALT DRIVEWAY
250+07	MAINLINE, LT	---	24	---	AGGREGATE DRIVEWAY

DRIVEWAYS AND FIELD ENTRANCES (CONT'D)

STATION	LOCATION	204.0110 SY	305.0120 TON	465.0120 TON	REMARKS
250+61	MAINLINE, RT	---	16	---	AGGREGATE DRIVEWAY
255+64	MAINLINE, LT	---	13	---	AGGREGATE DRIVEWAY
264+86	MAINLINE, RT	---	17	---	AGGREGATE DRIVEWAY
268+91	MAINLINE, RT	---	22	---	AGGREGATE DRIVEWAY
270+13	MAINLINE, RT	---	22	---	AGGREGATE DRIVEWAY
294+82	MAINLINE, RT	---	10	---	AGGREGATE DRIVEWAY
295+77	MAINLINE, RT	---	13	---	AGGREGATE DRIVEWAY
304+54	MAINLINE, RT	---	11	---	AGGREGATE DRIVEWAY
307+31	MAINLINE, LT	---	9	---	AGGREGATE DRIVEWAY
318+22	MAINLINE, LT	---	16	---	AGGREGATE DRIVEWAY
319+09	MAINLINE, LT	---	12	---	AGGREGATE DRIVEWAY
320+42	MAINLINE, RT	44	15	7	ASPHALT DRIVEWAY
323+52	MAINLINE, LT	---	11	---	AGGREGATE DRIVEWAY
324+35	MAINLINE, RT	---	9	---	AGGREGATE DRIVEWAY
325+89	MAINLINE, LT	---	9	---	AGGREGATE DRIVEWAY
328+40	MAINLINE, RT	---	9	---	AGGREGATE DRIVEWAY
332+33	MAINLINE, RT	---	11	---	AGGREGATE DRIVEWAY
340+94	MAINLINE, RT	---	11	---	AGGREGATE DRIVEWAY
345+30	MAINLINE, LT	---	13	---	AGGREGATE DRIVEWAY
353+04	MAINLINE, RT	---	22	---	AGGREGATE DRIVEWAY
354+83	MAINLINE, LT	---	8	---	AGGREGATE DRIVEWAY
361+55	MAINLINE, LT	---	9	---	AGGREGATE DRIVEWAY
365+95	MAINLINE, LT	---	9	---	AGGREGATE DRIVEWAY
371+28	MAINLINE, LT	---	11	---	AGGREGATE DRIVEWAY
387+95	MAINLINE, LT	---	12	---	AGGREGATE DRIVEWAY
395+08	MAINLINE, LT	---	12	---	AGGREGATE DRIVEWAY
395+86	MAINLINE, RT	---	7	---	AGGREGATE DRIVEWAY
398+78	MAINLINE, LT	---	12	---	AGGREGATE DRIVEWAY
403+60	MAINLINE, LT	---	12	---	AGGREGATE DRIVEWAY
405+89	MAINLINE, LT	37	12	6	ASPHALT DRIVEWAY
407+20	MAINLINE, RT	---	12	---	AGGREGATE DRIVEWAY
	TOTAL	1,384	1,535	229	

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

3

THE FOLLOWING ACCEPTANCE CRITERIA ARE APPLICABLE FOR THIS PROJECT:

DESCRIPTION	STATION / STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO USE	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12-FOOT DRIVING LANES	89+00 - 100+40; 101+14 - 407+61; 411+96 - 418+50	UPPER LAYER	4 MT 58-28 S	4 MT 58-28 S	8485	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12-FOOT DRIVING LANES	89+00 - 100+40; 101+14 - 407+61; 411+96 - 418+50	LOWER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	8485	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
SHOULDERS	89+00 - 100+40; 101+14 - 407+61; 411+96 - 418+50	UPPER LAYER	4 MT 58-28 S	4 MT 58-28 S	2120	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTED BY DEPARTMENT TESTING, NOT ELIGBLE FOR INCENTIVE.
SHOULDERS	89+00 - 100+40; 101+14 - 407+61; 411+96 - 418+50	LOWER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	2120	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTED BY DEPARTMENT TESTING, NOT ELIGBLE FOR INCENTIVE.
INTERSECTIONS	89+00 - 100+40; 101+14 - 407+61; 411+96 - 418+50	UPPER LAYER	4 MT 58-28 S	4 MT 58-28 S	495	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTED BY DEPARTMENT TESTING, NOT ELIGBLE FOR INCENTIVE.
INTERSECTIONS	89+00 - 100+40; 101+14 - 407+61; 411+96 - 418+50	LOWER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	494	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTED BY DEPARTMENT TESTING, NOT ELIGBLE FOR INCENTIVE.

BARRIER SYSTEM GRADING SHAPING FINISHING

FOR INFORMATIONAL PURPOSES ONLY

STATION	TO	STATION	LOCATION	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EACH	EXCAVATION COMMON CY	BORROW CY	SALVAGED TOPSOIL SY	EROSION MAT URBAN CLASS I TYPE B SY	FERTILIZER TYPE B CWT	SEEDING MIXTURE NO. 30 LB	SEED WATER MGAL	CONSTRUCTION STAKING BASE LF	CONSTRUCTION STAKING SLOPE STAKES LF
346+62	-	354+32	MAINLINE, LT	1	136	2,418	2,630	2,630	2	65	78	770	770
379+17	-	383+68	MAINLINE, RT	1	146	258	570	570	1	25	27	480	480
			TOTAL	2	282	2,676	3,200	3,200	3	90	105	1,250	1,250

MGS GUARDRAIL

STATION	TO	STATION	LOCATION	614.2300 MGS GUARDRAIL 3 LF	614.2350 MGS GUARDRAIL SHORT RADIUS LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2630 MGS GUARDRAIL SHORT RADIUS TERMINAL EACH
347+93	-	354+32	MAINLINE, LT	400	---	2	---
379+17	-	382+78	MAINLINE, RT	328	23.5	1	1
			TOTAL	728	23.5	3	1

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
ID 9876-00-71	5	3
TOTAL	5	3

SILT FENCE

STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
346+00	-	354+68	MAINLINE, LT	950	1,900
346+00	-	354+80	MAINLINE, RT	891	1,782
378+50	-	384+00	MAINLINE, LT	566	1,132
379+34	-	384+00	MAINLINE, RT	543	1,086
402+00	-	403+58	MAINLINE, LT	183	366
402+00	-	406+94	MAINLINE, RT	520	1,040
403+78	-	405+66	MAINLINE, LT	212	424
406+11	-	408+32	MAINLINE, LT	245	490
407+14	-	409+69	MAINLINE, RT	280	560
408+80	-	409+69	MAINLINE, LT	114	228
410+19	-	412+51	MAINLINE, LT	257	514
410+19	-	411+58	MAINLINE, RT	163	326
412+01	-	417+00	MAINLINE, RT	502	1,004
413+49	-	417+00	MAINLINE, LT	396	792
			UNDISTRIBUTED	598	---
			TOTAL	6,420	11,644

PERMANENT SIGNING

SIGN #	STATION	LOCATION	SIGN CODE	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
M09-01	347+65	MAINLINE, LT	D11-10	1	1	1	1	ATV ROUTE
M10-01	379+17	MAINLINE, RT	R1-1	1	1	1	1	STOP
M10-02	379+20	MAINLINE, RT	M1-94	2	2	1	1	BRANCH RD & COUNTY L
		TOTAL		4	4	3	3	

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

3

TRAFFIC CONTROL

LOCATION	DURATION DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO.	DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO.	DAY	643.0900 TRAFFIC CONTROL SIGNS NO.	DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS NO.	DAY	643.5000 TRAFFIC CONTROL EACH
CLOSURE	105	48	5,040	96	10,080	72	7,560	---	---	---
UNDISTRIBUTED	105	12	1,260	24	2,520	18	1,890	---	---	---
PROJECT	7	---	---	---	---	---	---	2	14	0.5
TOTAL		60	6,300	120	12,600	90	9,450	2	14	0.5

PLACE TRAFFIC CONTROL IN ACCORDANCE WITH SDD 15C2 "BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION."
PLACEMENT SUBJECT TO ENGINEER APPROVAL.

MARKING LINE ITEMS

STATION	TO	STATION	LOCATION	643.3105 TEMPORARY MARKING LINE PAINT 4-INCH SOLID YELLOW LF	4' LINE 36' SKIP YELLOW LF	SOLID WHITE	SOLID YELLOW	646.1020 MARKING LINE EPOXY 4-INCH 3' LINE 9' SKIP WHITE	12.5' LINE 37.5' SKIP YELLOW LF
89+00	-	188+90	DOUBLE YELLOW	19980	---	19261	19980	31	---
188+90	-	194+70	SB PASSING ONLY	580	47	1160	580	---	145
194+70	-	200+50	PASSING	---	47	1160	---	---	145
200+50	-	205+50	NB PASSING ONLY	500	40	1000	500	---	125
205+50	-	232+25	PASSING	---	214	5167	---	---	669
232+25	-	244+00	SB PASSING ONLY	1175	94	2217	1175	---	294
244+00	-	328+50	DOUBLE YELLOW	16900	---	16547	16900	40	---
328+50	-	334+00	NB PASSING ONLY	550	44	1100	550	---	138
334+00	-	336+25	DOUBLE YELLOW	450	---	450	450	---	---
336+25	-	346+00	SB PASSING ONLY	975	78	1950	975	---	244
346+00	-	407+61	DOUBLE YELLOW	12322	---	12251	12322	---	---
411+96	-	418+50	DOUBLE YELLOW	1308	---	1205	1308	---	---
			SUBTOTAL	54,740	564	63,468	54,740	71	1,760
			TOTAL	55,304		120,039			

LOCATING NO PASSING ZONES

STATION	TO	STATION	LOCATION	648.0100 MI
89+00	-	418+50	MAINLINE	6.14
			TOTAL	6.14

3

CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL 01. 9876-00-71 EACH
89+00	-	418+50	MAINLINE	32,391	---
			PROJECT	---	1
			TOTAL	32,391	1

SAWING ASPHALT

STATION	LOCATION	690.0150 LF	REMARKS
89+57	MAINLINE, LT	14	ASPHALT DRIVEWAY
91+37	MAINLINE, LT	14	ASPHALT DRIVEWAY
92+65	MAINLINE, LT	18	ASPHALT DRIVEWAY
96+93	MAINLINE, RT	20	ASPHALT DRIVEWAY
97+14	MAINLINE, LT	20	ASPHALT DRIVEWAY
102+31	MAINLINE, LT	34	ASPHALT DRIVEWAY
116+99	MAINLINE, RT	24	ASPHALT DRIVEWAY
143+77	MAINLINE, LT	14	ASPHALT DRIVEWAY
145+61	MAINLINE, LT	12	ASPHALT DRIVEWAY
146+79	MAINLINE, RT	18	ASPHALT DRIVEWAY
151+68	MAINLINE, RT	50	ASPHALT DRIVEWAY
159+09	MAINLINE, RT	15	ASPHALT DRIVEWAY
159+53	MAINLINE, RT	13	ASPHALT DRIVEWAY
161+32	MAINLINE, RT	29	ASPHALT DRIVEWAY
162+14	MAINLINE, RT	25	ASPHALT DRIVEWAY
163+34	MAINLINE, LT	35	ASPHALT DRIVEWAY
163+77	MAINLINE, RT	27	ASPHALT DRIVEWAY
164+96	MAINLINE, RT	50	ASPHALT DRIVEWAY
178+53	MAINLINE, LT	25	ASPHALT DRIVEWAY
179+31	MAINLINE, LT	25	ASPHALT DRIVEWAY
210+68	MAINLINE, RT	16	ASPHALT DRIVEWAY
239+18	MAINLINE, LT	26	ASPHALT DRIVEWAY
245+96	MAINLINE, RT	15	ASPHALT DRIVEWAY
320+42	MAINLINE, RT	22	ASPHALT DRIVEWAY
405+89	MAINLINE, LT	19	ASPHALT DRIVEWAY
	TOTAL	580	

VERIFY LANDMARK REFERENCE MONUMENTS

LOCATION	SPV.0060.01 EACH	REMARKS
SEC 22, T36N, R6E	1	GPS STATION
SEC 14 / 15, T36N, R6E	1	QUARTER CORNER
SEC 10 / 11 / 14 / 15, T36N, R6E	1	SECTION CORNER
TOTAL	3	

BP: 87+00.00
Y = 134610.804
X = 186411.706

PC: 88+15.22
Y = 134714.833
X = 186461.245

PI STA = 91+16.08
Y = 134986.467
X = 186590.601
DELTA = 22°11'09" LT
D = 3°44'02"
T = 300.86'
L = 594.19'
R = 1534.52'
PC STA = 88+15.22
PT STA = 94+09.41

STA. 89+57
14' P.E. (ASPHALT)

STA. 91+37
14' P.E. (ASPHALT)

STA. 92+65
18' P.E. (ASPHALT)

PT: 94+09.41
Y = 135286.837
X = 186607.807

PI: 96+22.45
Y = 135499.527
X = 186619.991

STA. 96+93
20' P.E. (ASPHALT)

STA. 97+14
20' P.E. (ASPHALT)

END MILL AND OVERLAY
STA. 100+40
BUTT JOINT REQ'D

BEGIN PROJECT LIMITS
STA. 89+00
BUTT JOINT REQ'D

N3°16'43"E
213.04'

CTH L
(ASPHALT)

EXCEPTION TO C/L LENGTH
STA. 100+40 TO STA. 101+14
EXISTING STRUCTURE B-43-0664
NO WORK ON STRUCTURE

BEGIN MILL AND OVERLAY
STA. 101+14
BUTT JOINT REQ'D

STA. 102+31
34' C.E. (ASPHALT)

STA. 103+34, LT
SIDEROAD W/ CURB AND GUTTER
SEE DETAIL.

SUMAC LANE

N2°26'39"E
1132.55'

STA. 104+23
31' C.E. (B.A.D.)

STA. 105+12
34' P.E. (B.A.D.)

PC: 107+55.00
Y = 136631.048
X = 186668.292

PI STA = 113+69.42
Y = 137244.907
X = 186694.495
DELTA = 56°22'11" LT
D = 4°59'49"
T = 614.42'
L = 1128.08'
R = 1146.61'
PC STA = 107+55.00
PT STA = 118+83.08

PT: 118+83.08
Y = 137606.700
X = 186197.891

EXISTING R/W

OLD ROAD

STA. 111+14, RT
SIDEROAD W/ CURB AND GUTTER
SEE DETAIL.

EXISTING R/W

NANCY DRIVE

STA 124+20, LT
SIDEROAD W/ CURB AND GUTTER
SEE DETAIL.

PT: 118+83.08
Y = 137606.700
X = 186197.891

CTH L
(ASPHALT)

N53°55'32"W
1707.92'

SUMAC LANE

STA. 128+54, RT
SIDEROAD W/ CURB AND GUTTER
SEE DETAIL.

STA. 116+99
24' C.E. (ASPHALT)

PC: 135+91.00
Y = 138612.387
X = 184817.465

STA. 140+26, LT
SIDEROAD W/ CURB AND GUTTER
SEE DETAIL.

EXISTING R/W

HALL DRIVE

STA. 143+77
14' P.E. (ASPHALT)

STA. 145+61
12' P.E. (ASPHALT)

STA. 146+79
34' C.E. (B.A.D.)

PI STA = 144+30.56
Y = 139106.750
X = 184138.890
DELTA = 72°35'27" RT
D = 5°00'44"
T = 839.56'
L = 1448.26'
R = 1143.11'
PC STA = 135+91.00
PT STA = 150+39.26

STA. 146+79
18' P.E. (ASPHALT)

STA. 148+97
15' P.E. (B.A.D.)

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PLAN DETAILS	SHEET 24	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\050201_PN.DWG
LAYOUT NAME - 050201_pn

PLOT DATE : 10/30/2024 9:12 AM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

PI STA = 144+30.56
Y = 139106.750
X = 184138.890
DELTA = 72°35'27" RT
D = 5°00'44"
T = 839.56'
L = 1448.26'
R = 1143.11'
PC STA = 135+91.00
PT STA = 150+39.26

PT: 150+39.26
Y = 139902.151
X = 184407.585

STA. 148+44
33' C.E. (B.A.D.)

STA. 150+30
21' C.E. (B.A.D.)

STA. 151+19
20' C.E. (B.A.D.)

STA. 153+22
31' P.E. (B.A.D.)

POINT O PINES ROAD

STA. 157+21, LT
SIDEROAD W/ CURB AND GUTTER
SEE DETAIL.

EXISTING R/W

STA. 161+30
15' P.E. (B.A.D.)

STA. 163+34
35' P.E. (ASPHALT)

STA. 165+85
52' P.E. (B.A.D.)

STA. 167+40
45' P.E. (B.A.D.)

STA. 168+82
51' P.E. (B.A.D.)

STA. 170+42
13' P.E. (B.A.D)

STA. 172+02
14' P.E. (B.A.D.)

PC: 175+00.00
Y = 142233.459
X = 185195.126

STA. 178+53
25' C.E. (ASPHALT)

148 150 152 154 156 158 160 162 164 CTH L (ASPHALT) 166 168 170 172 174 176 178

N18°39'56"E
2460.74'

STA. 148+97
15' P.E. (B.A.D.)

STA. 151+68
50' C.E. (ASPHALT)

STA. 157+22
15' P.E. (B.A.D.)

STA. 159+53
13' P.E. (ASPHALT)

STA. 159+09
15' P.E. (ASPHALT)

STA. 161+32
29' C.E. (ASPHALT)

STA. 162+14
25' C.E. (ASPHALT)

STA. 163+77
27' P.E. (ASPHALT)

STA. 164+96
50' P.E. (ASPHALT)

EXISTING R/W

STA. 172+27
30' P.E. (B.A.D.)

DEER TRAIL ROAD

STA 168+46, RT
SIDEROAD W/ CURB AND GUTTER
SEE DETAIL.

PI STA = 177+77.47
Y = 142496.338
X = 185283.929
DELTA = 20°49'52" LT
D = 3°47'44"
T = 277.47'
L = 548.82'
R = 1509.53'
PC STA = 175+00.00
PT STA = 180+48.82

PT: 180+48.82
Y = 142773.613
X = 185273.444

STA. 179+31
25' C.E. (ASPHALT)

STA. 178+53
25' C.E. (ASPHALT)

EXISTING R/W

STA. 192+46
20' P.E. (B.A.D.)

180 182 184 186 188 190 192 194 196 198 200 CTH L (ASPHALT) 202 204 206 208

N2°09'56"W
2871.18'

EXISTING R/W

QUIET COVE ROAD

STA. 189+43, RT
SIDEROAD W/O CURB AND GUTTER
SEE DETAIL.

STA. 202+39
12' P.E. (B.A.D.)

STA. 205+79
24' P.E. (B.A.D.)

PRAIRIE RAPIDS ROAD

PI: 209+20.00
Y = 145642.745
X = 185164.951

STA. 209+15, LT
SIDEROAD W/ CURB AND GUTTER
SEE DETAIL.

STA. 209+08, RT
SIDEROAD W/ CURB AND GUTTER
SEE DETAIL.

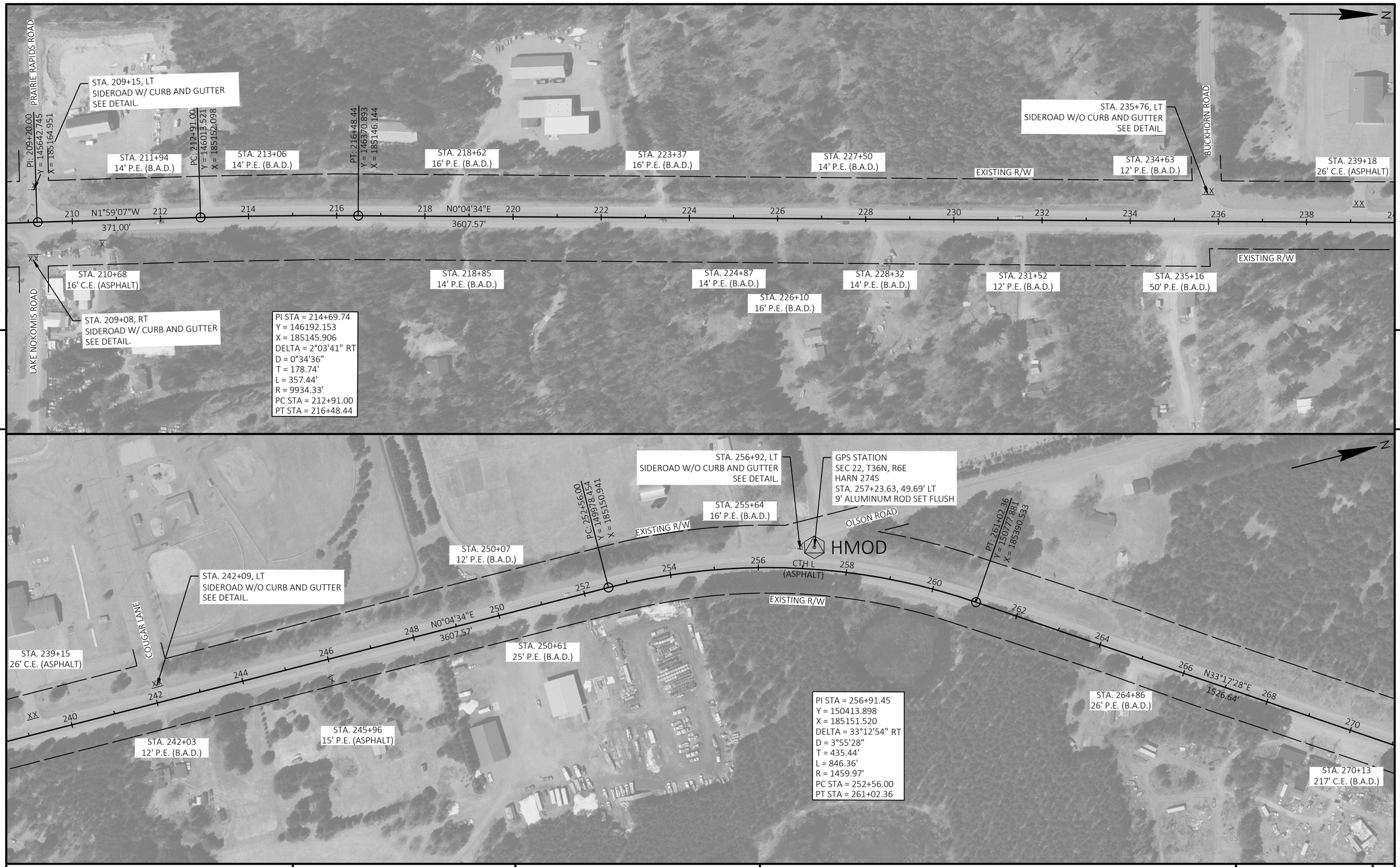
LAKE NOKOMIS ROAD

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PLAN DETAILS	SHEET 25	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\050201_PN.DWG
LAYOUT NAME - 050202_pn

PLOT DATE : 10/30/2024 9:12 AM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

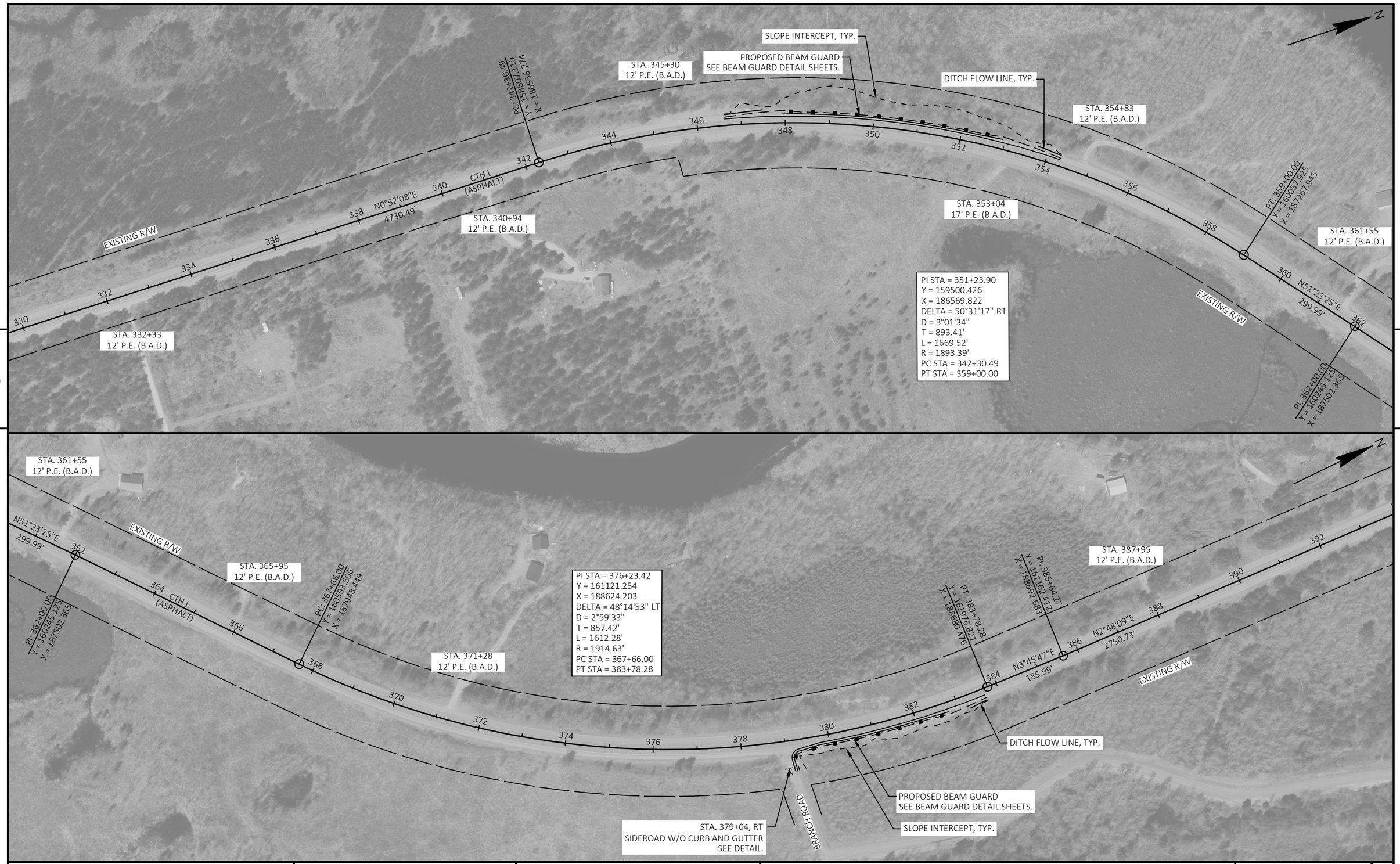


PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PLAN DETAILS	SHEET 26	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\050201_PN.DWG
LAYOUT NAME - 050203_pn
PLOT DATE : 10/30/2024 9:12 AM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44


PI STA = 280+63.10
Y = 152416.841
X = 186466.770
DELTA = 32°35'39" LT
D = 3°51'32"
T = 434.10'
L = 844.65'
R = 1484.77'
PC STA = 276+29.00
PT STA = 284+73.65
EXISTING R/W
STA. 270+13
217' C.E. (B.A.D.)
N33°17'28"E
1526.64'
CTH L
(ASPHALT)
PC: 276+29.00
Y = 152053.984
X = 186228.497
SIEMERING DRIVE
STA. 278+80, LT
SIDEROAD W/O CURB AND GUTTER
SEE DETAIL.
PT: 284+73.65
Y = 152850.904
X = 186472.050
QUARTER CORNER
SEC 14 / 15, T36N, R6E
STA. 292+44.86, 0.57' RT
ALUMINUM MONUMENT
PI: 294+99.99
Y = 153877.169
X = 186484.535
N0°41'49"E
1026.34'
N0°52'08"E
4730.49'
STA. 294+82
12' P.E. (B.A.D.)
STA. 295+77
20' P.E. (B.A.D.)
STA. 279+37, RT
SIDEROAD W/O CURB AND GUTTER
SEE DETAIL.
ROCKY ROAD
EXISTING R/W
5
5
PORCUPINE PATH
STA. 308+98, LT
SIDEROAD W/O CURB AND GUTTER
EXISTING R/W
STA. 307+31
12' P.E. (B.A.D.)
STA. 318+22
16' P.E. (B.A.D.)
STA. 319+09
16' P.E. (B.A.D.)
STA. 323+52
12' P.E. (B.A.D.)
N0°52'08"E
4730.49'
CTH L
(ASPHALT)
STA. 304+54
12' P.E. (B.A.D.)
SECTION CORNER
SEC 10 / 11 / 14 / 15, T36N R6E
STA. 318+79.92, 2.59' RT
3/4" STEEL SHAFT
LAKEWOOD ROAD
STA. 320+42
22' P.E. (ASPHALT)
STA. 318+79, RT
SIDEROAD W/ CURB AND GUTTER
SEE DETAIL.
EXISTING R/W
STA. 328+40
12' P.E. (B.A.D.)

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PLAN DETAILS	SHEET 27	E

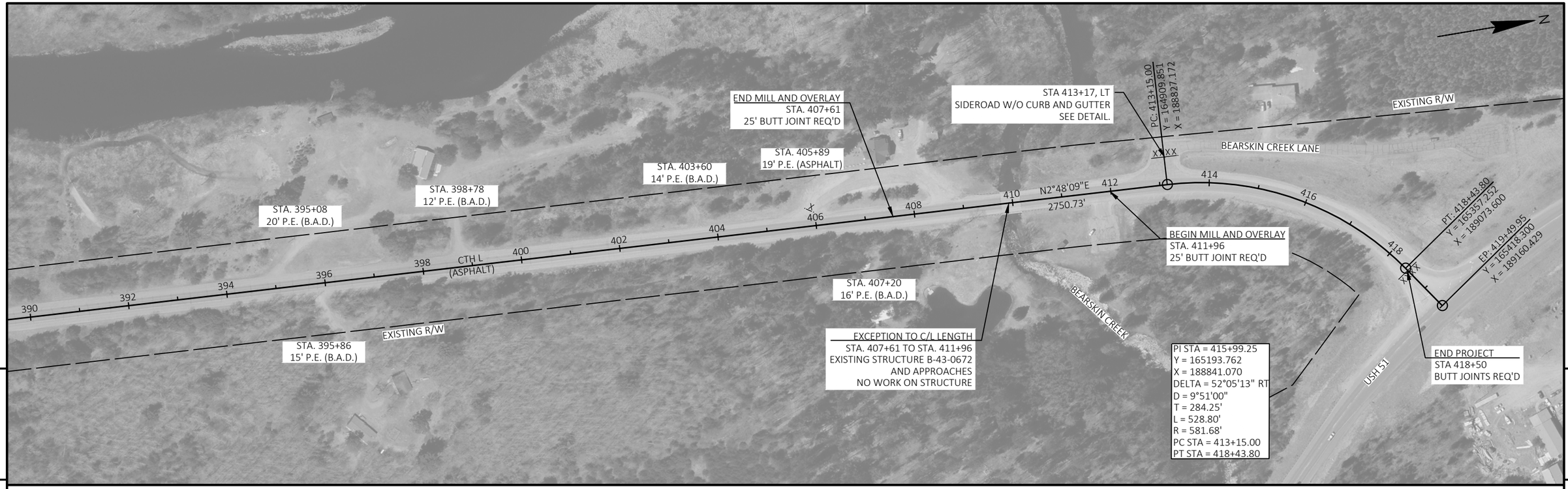


PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PLAN DETAILS	SHEET 28	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\050201_PN.DWG
LAYOUT NAME - 050205_pn

PLOT DATE : 10/30/2024 9:12 AM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44



5 5

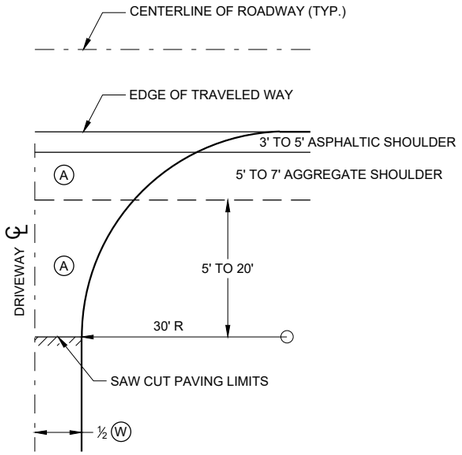
PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	PLAN DETAILS	SHEET 29	E

Standard Detail Drawing List

08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E09-06	SILT FENCE
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)
14B53-02A	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02B	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02C	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02D	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02E	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02F	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02G	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02H	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02I	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

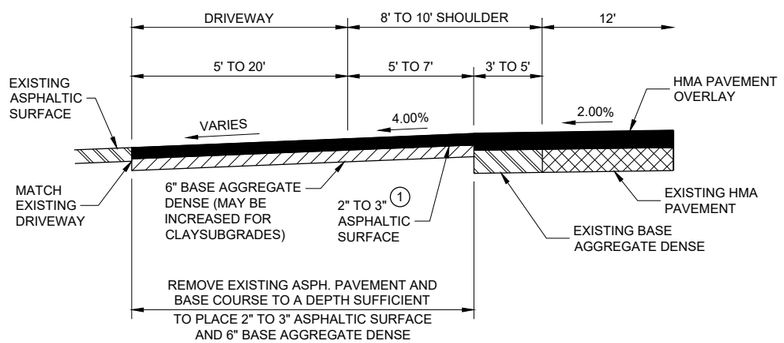
GENERAL NOTES

(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PLAN VIEW

HALF SECTION



PROFILE VIEW

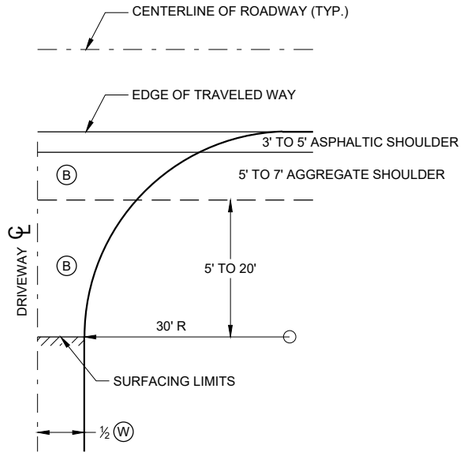
RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS

(A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)

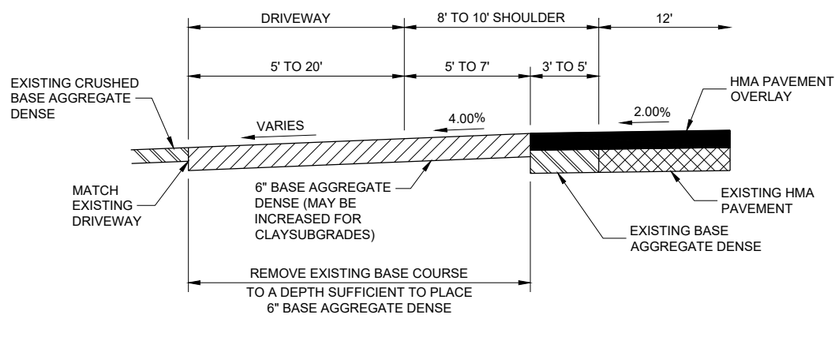
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

(W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



PLAN VIEW

HALF SECTION



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE

RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

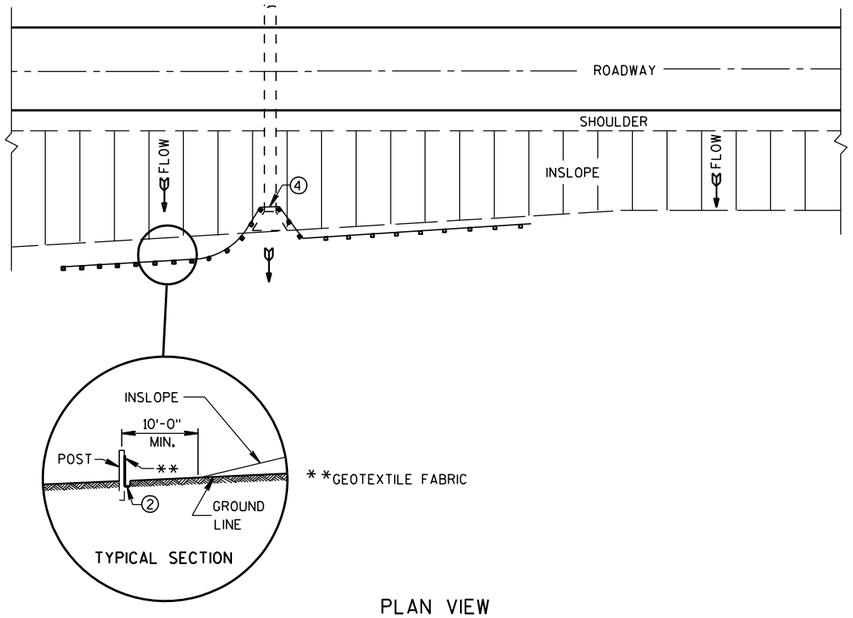
APPROVED
December 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

6

SDD 08D22 - 01

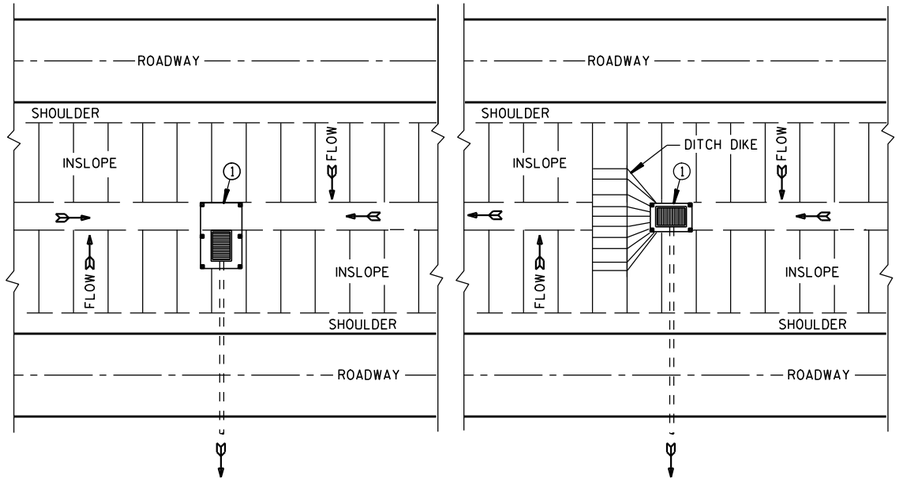
6

SDD 08D22 - 01



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



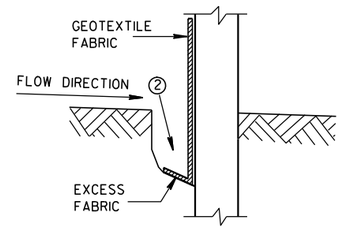
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

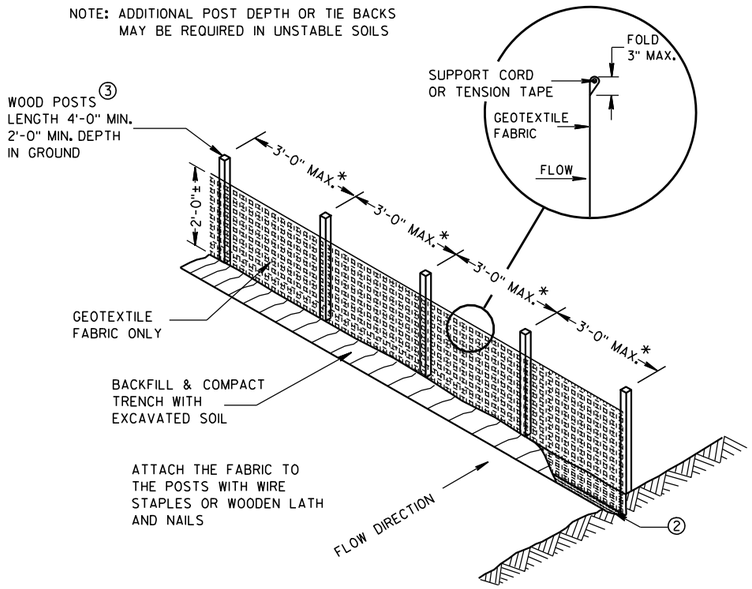
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

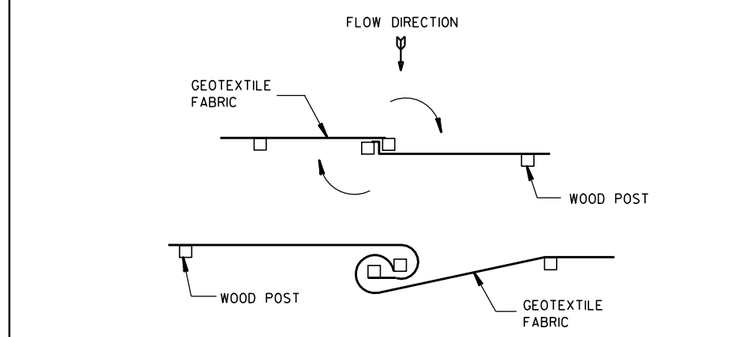


TRENCH DETAIL

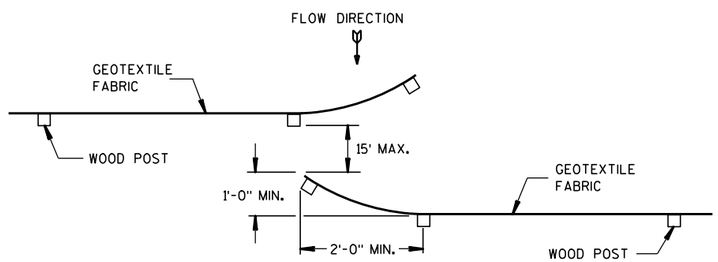


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

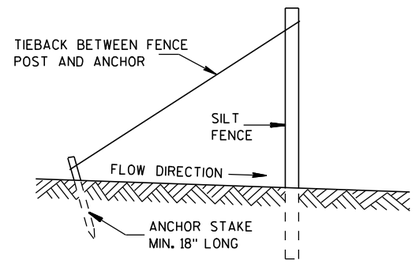


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

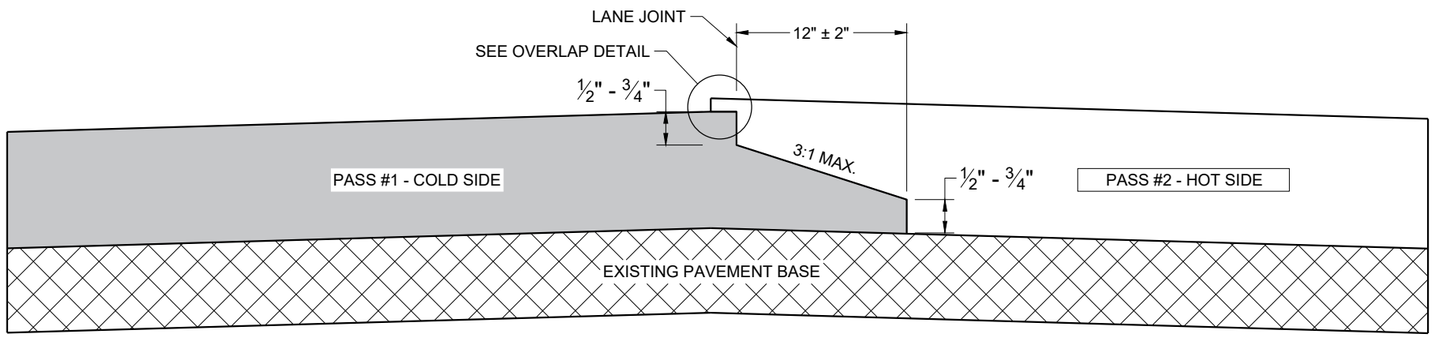
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

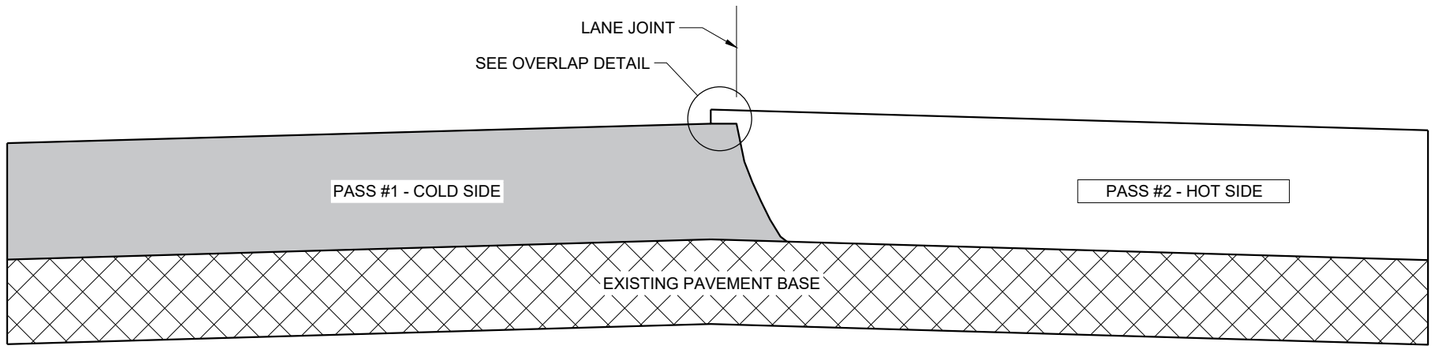
S.D.D. 8 E 9-6

6

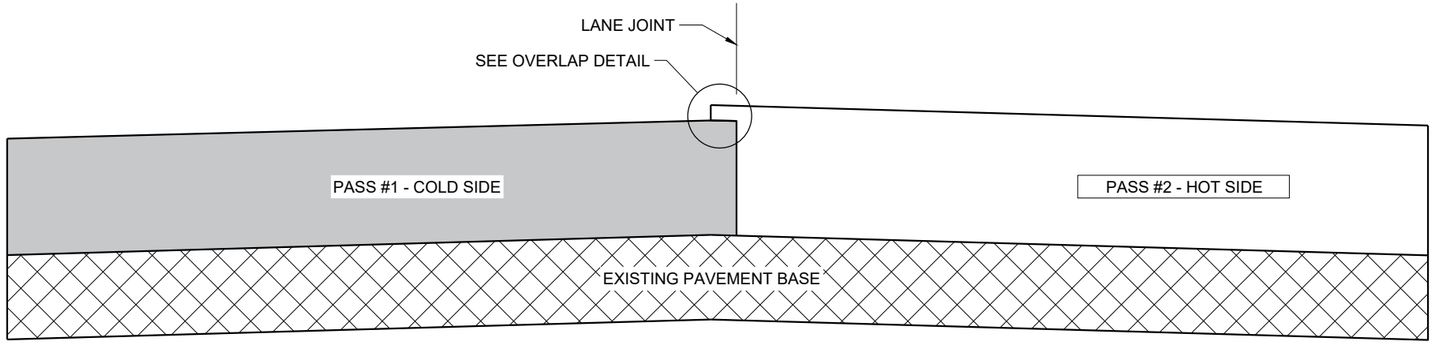
S.D.D. 8 E 9-6



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

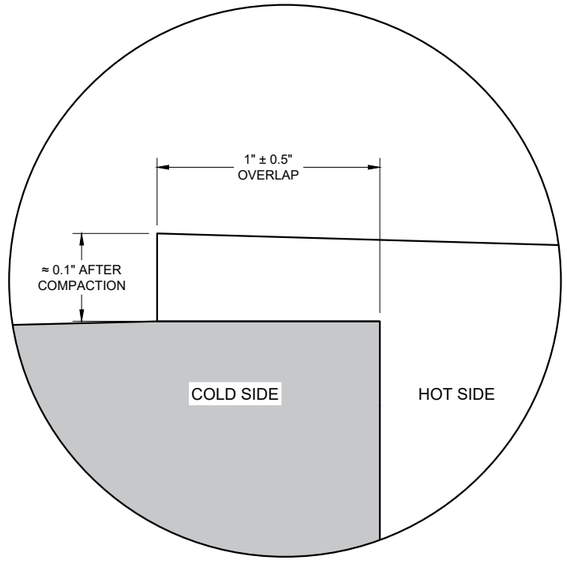
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

(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.

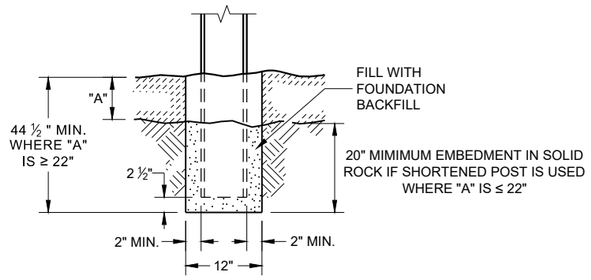
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL 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).

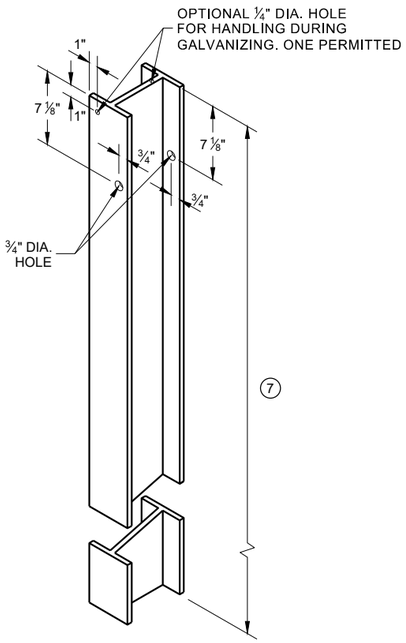
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

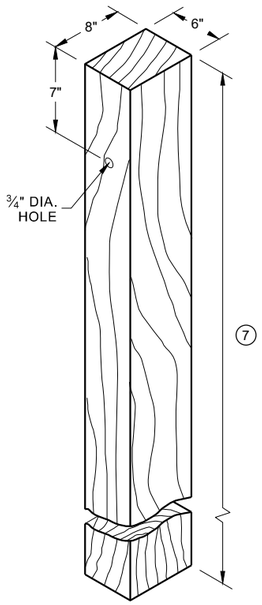
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



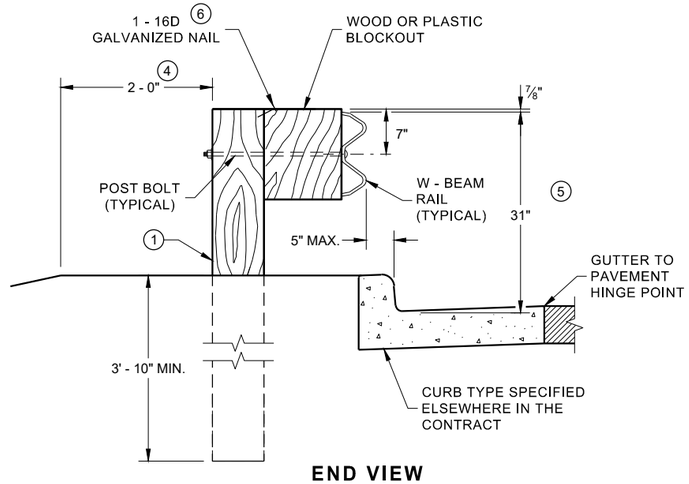
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



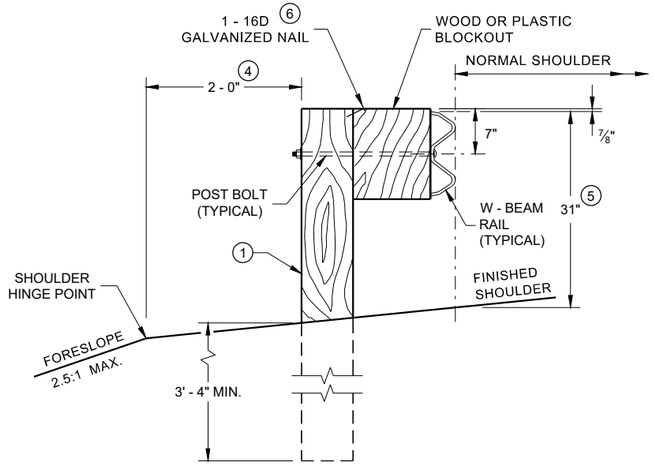
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



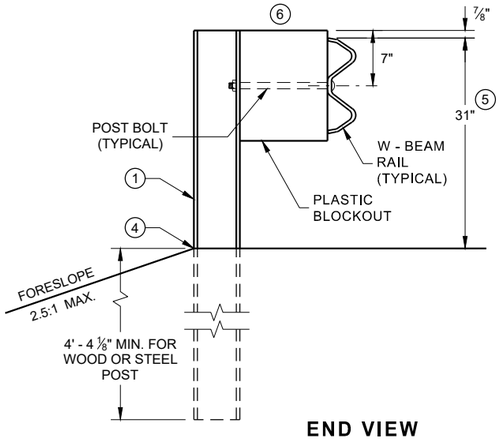
WOOD POST (6" X 8") NOMINAL (1)



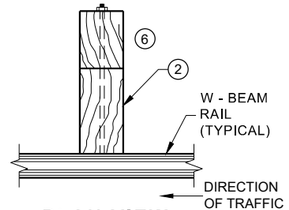
END VIEW
LOCATED ALONG A CURBED ROADWAY



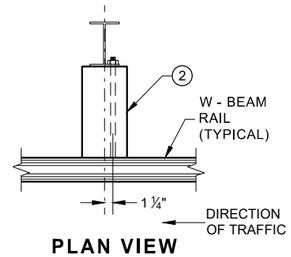
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



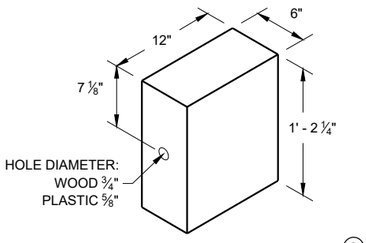
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

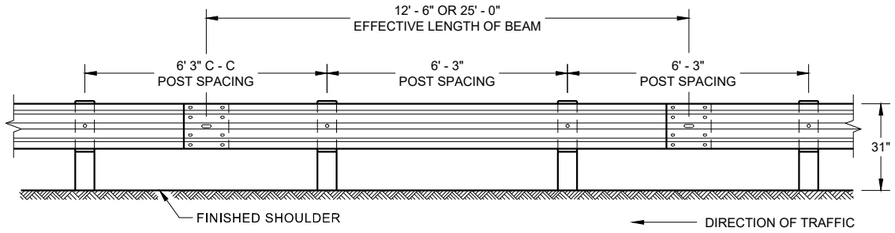
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

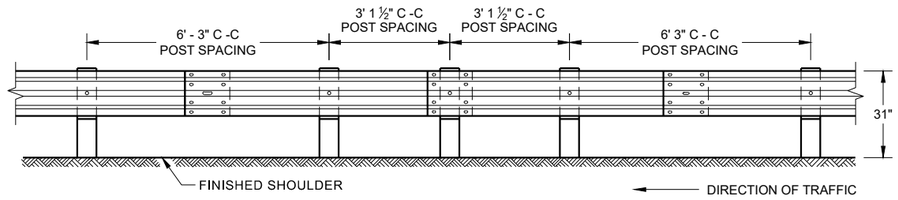
SDD 14B42 - 07a

6

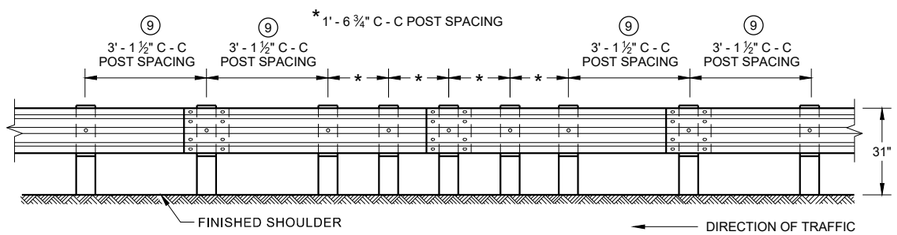
SDD 14B42 - 07a



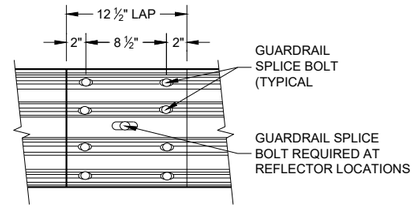
FRONT VIEW
POST SPACING STANDARD INSTALLATION



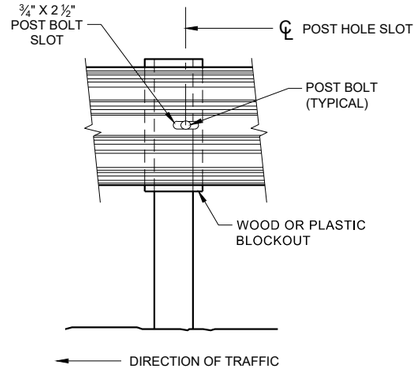
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



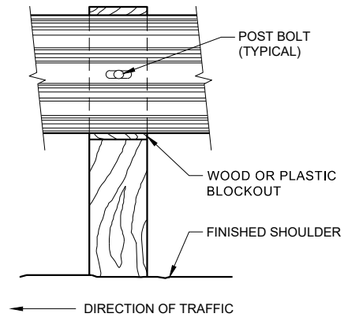
FRONT VIEW
QUARTER POST SPACING (QS)



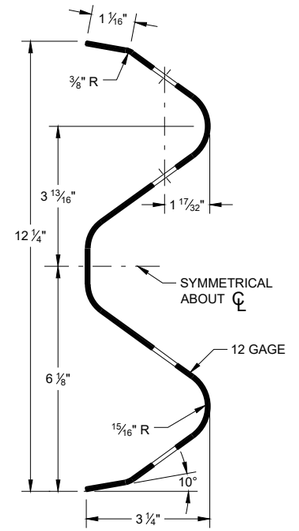
FRONT VIEW
MID-SPAN BEAM SPLICE



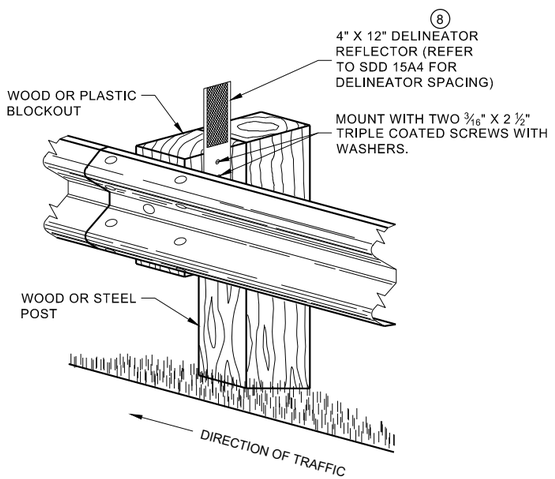
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

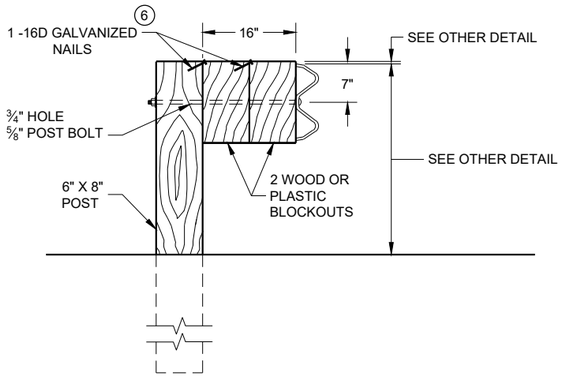
POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B42 - 07b

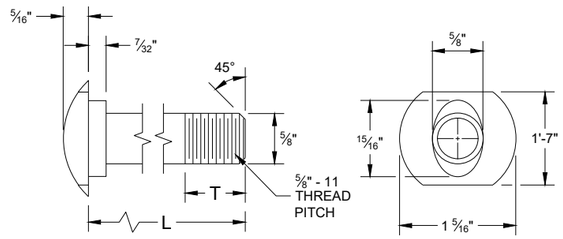


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

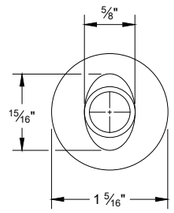
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

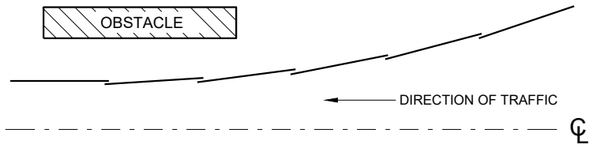


POST BOLT TABLE

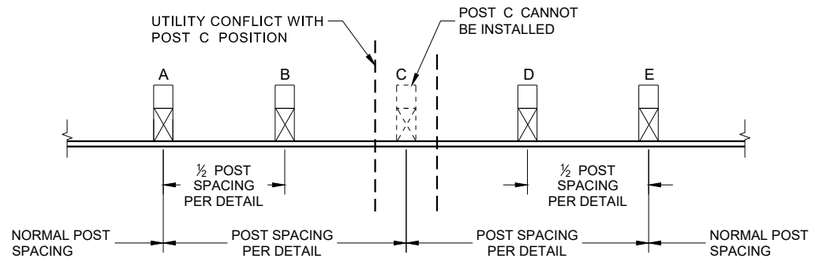
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



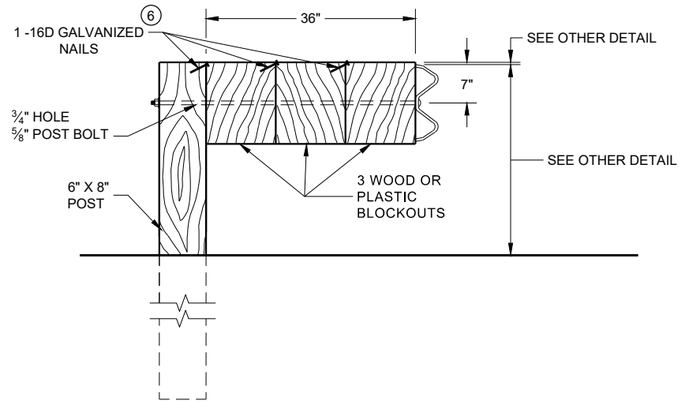
ALTERNATE BOLT HEAD



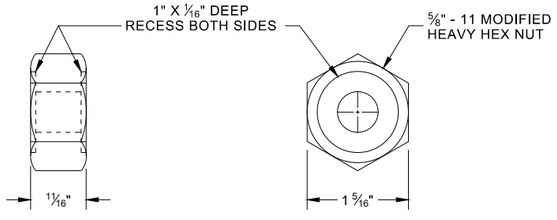
PLAN VIEW
BEAM LAPPING DETAIL



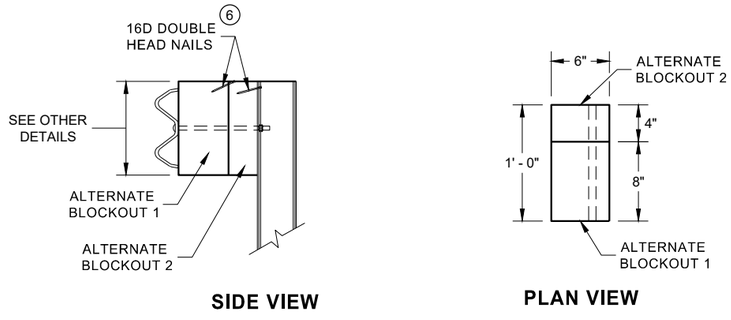
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW

PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

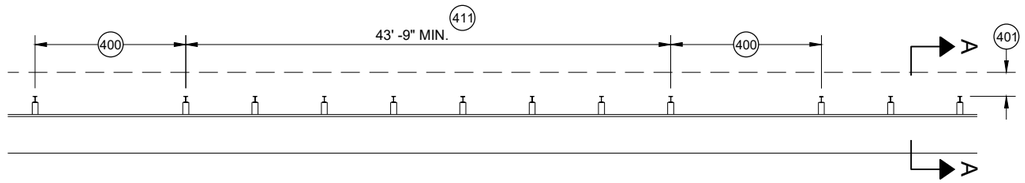
(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

6

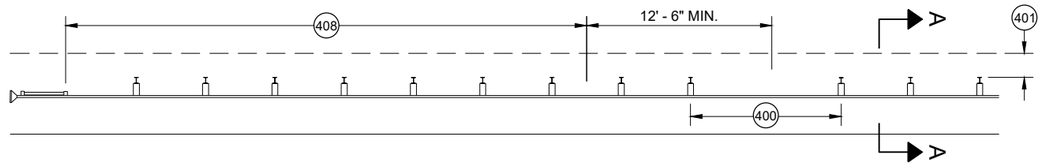
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

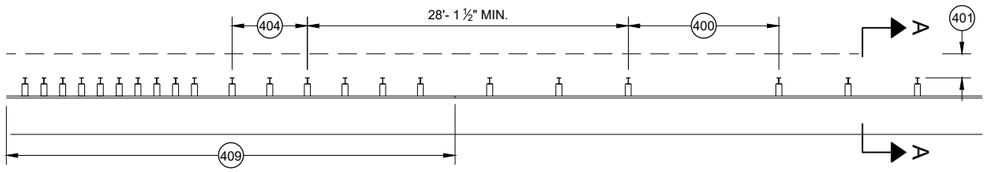
SDD 14B42 - 07c



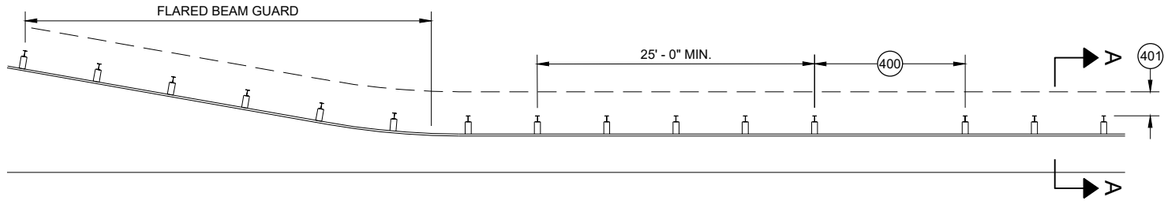
MISSING POST IN MGS GUARDRAIL



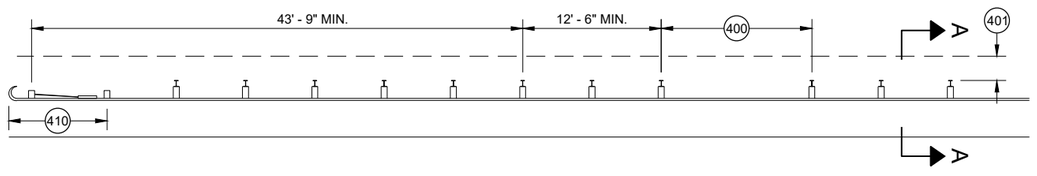
MISSING POST IN MGS GUARDRAIL NEAR EAT



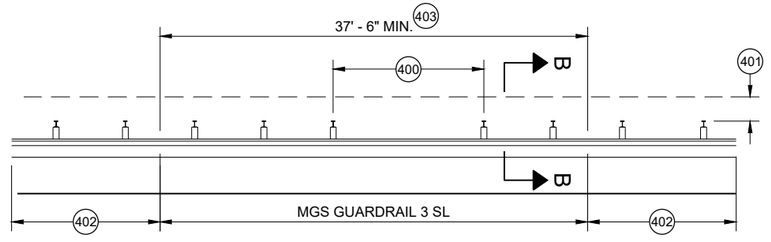
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

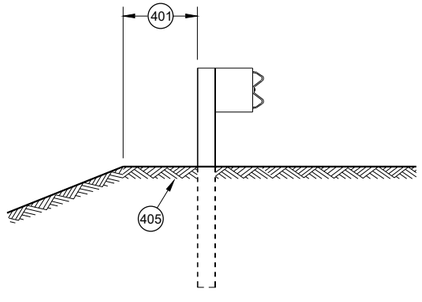


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

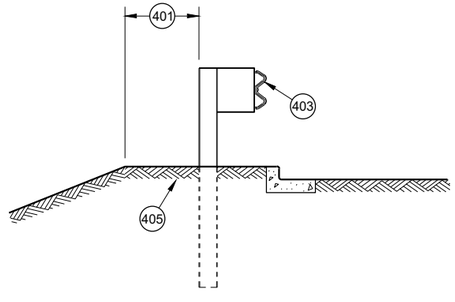


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

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.

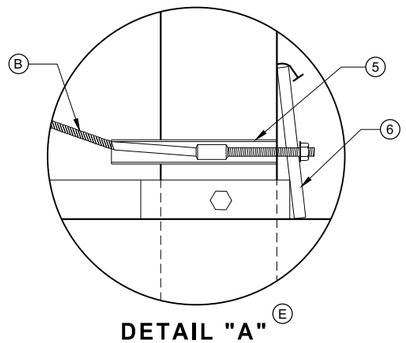
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

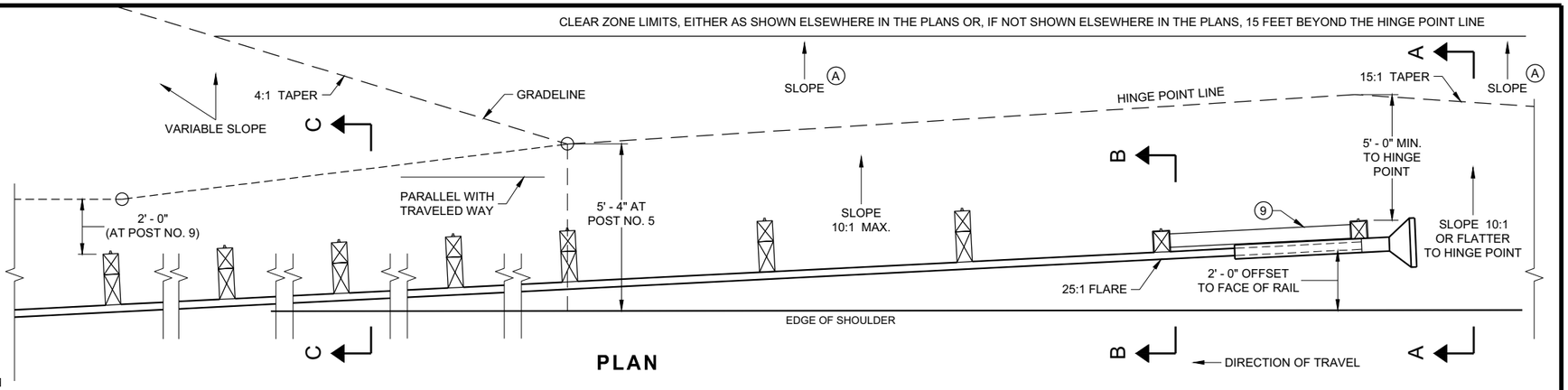
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

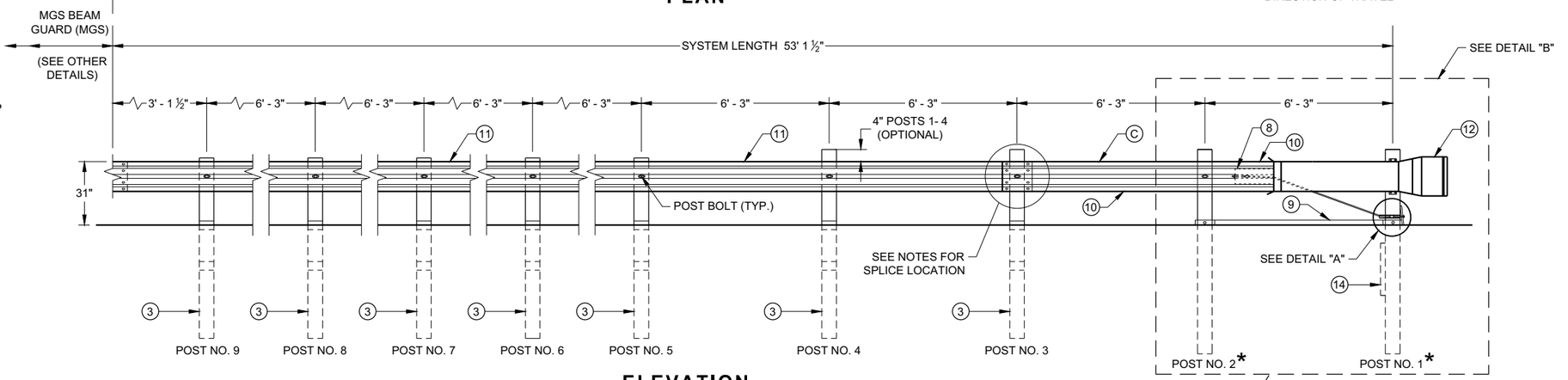
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

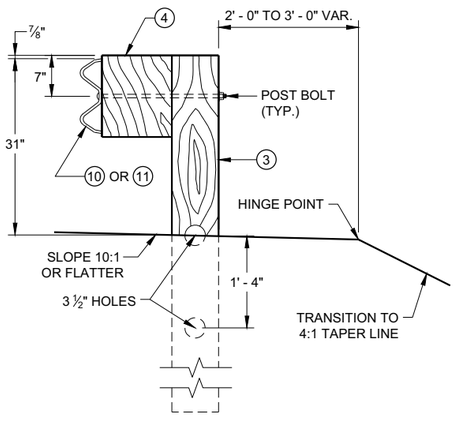
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



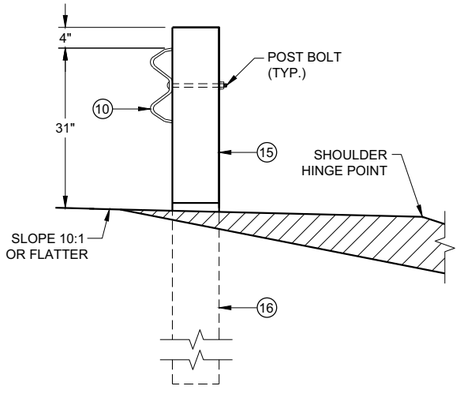
DETAIL "A" (E)



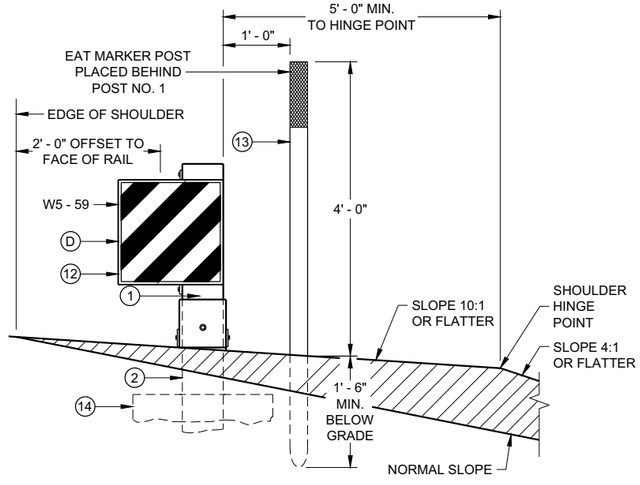




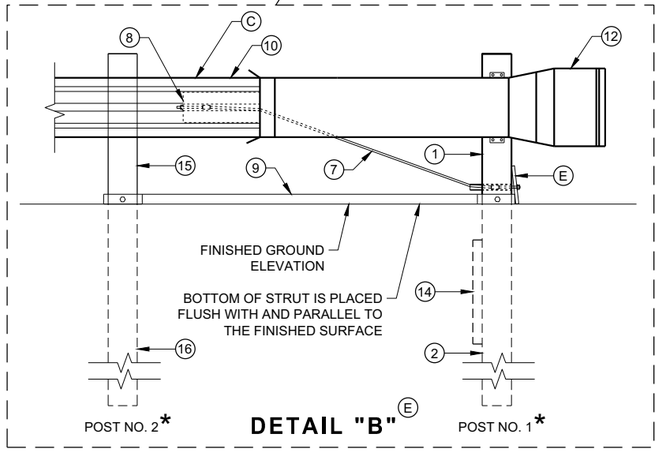
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*

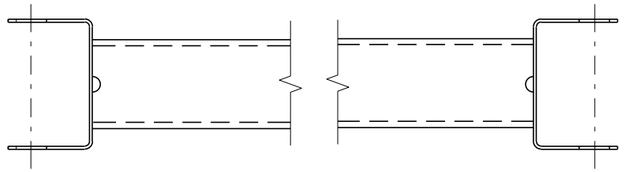


MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

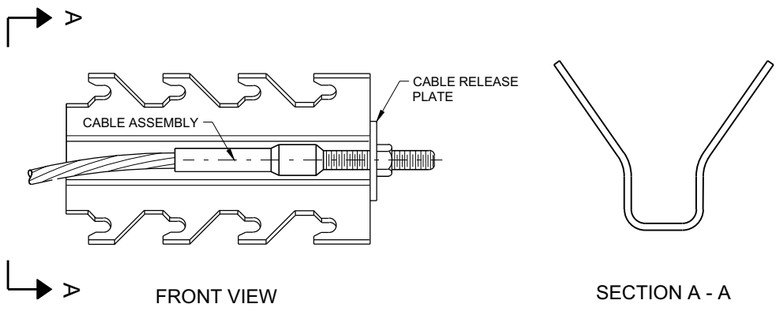
SDD 14B44 - 04a



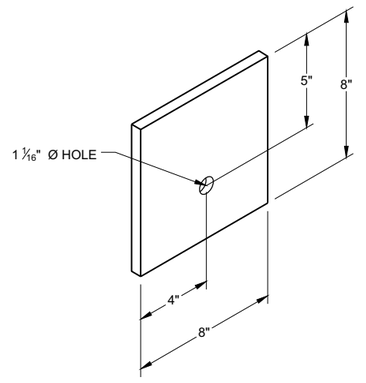
GENERIC GROUND STRUT ⑨ Ⓔ

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

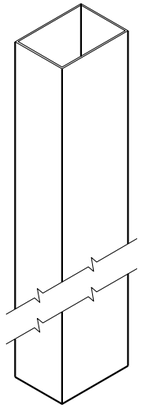
6

SDD 14B44 - 04b

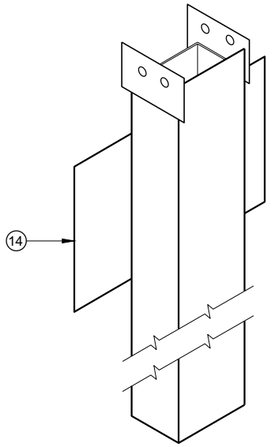
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

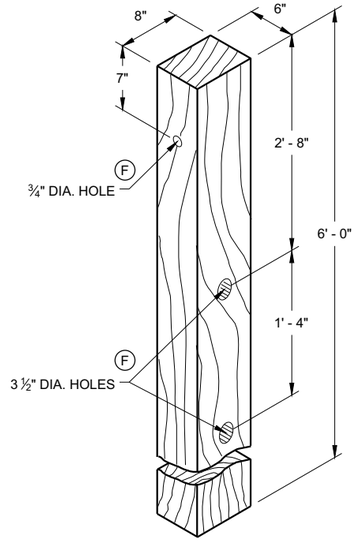
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



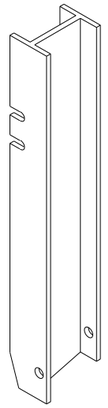
UPPER POST NO. 1 (1) (E)



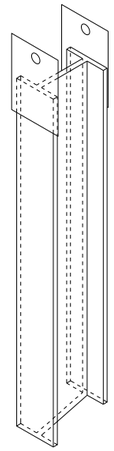
LOWER POST NO. 1 (2) (E)



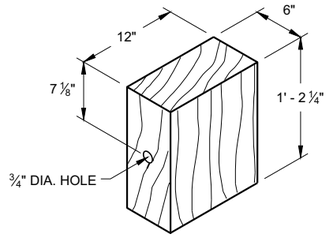
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



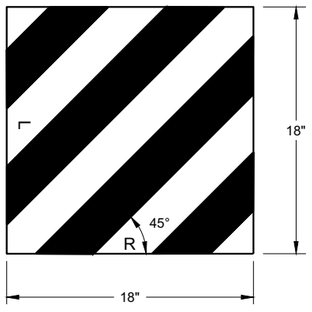
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

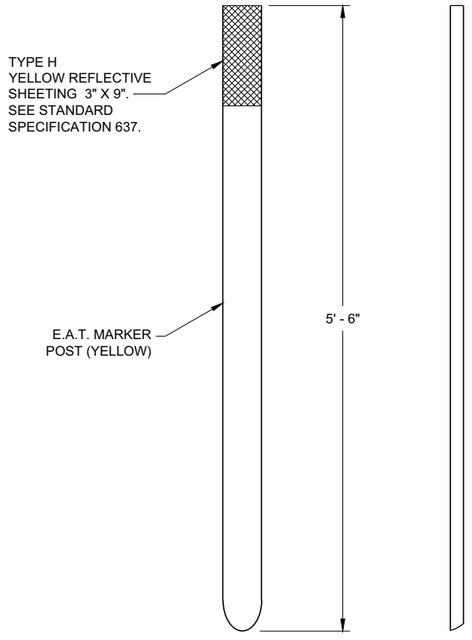


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



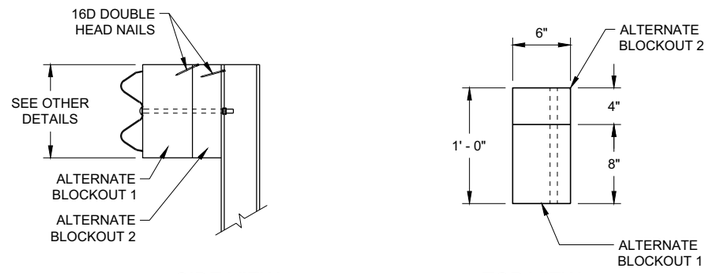
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

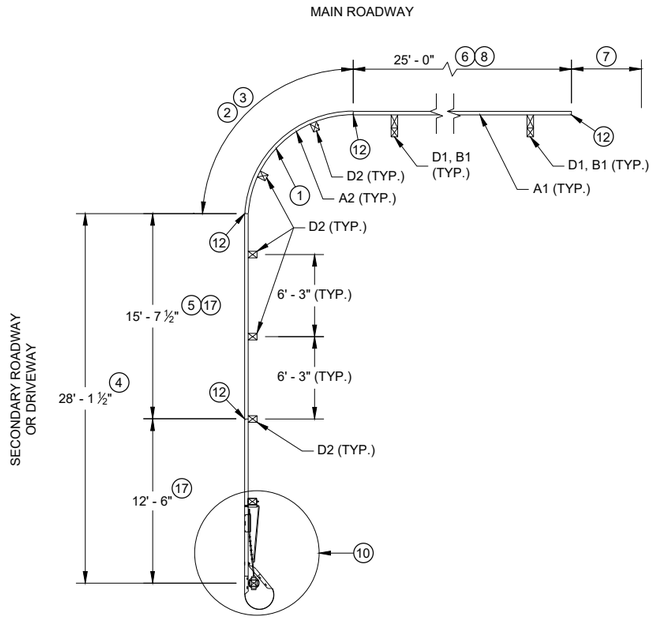
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

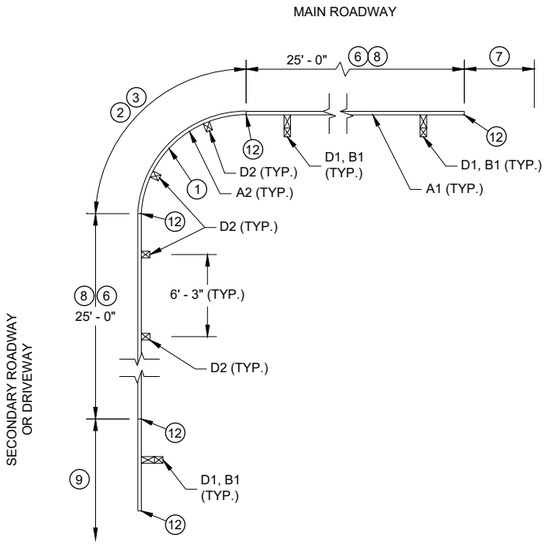
6

SDD 14B44 - 04c



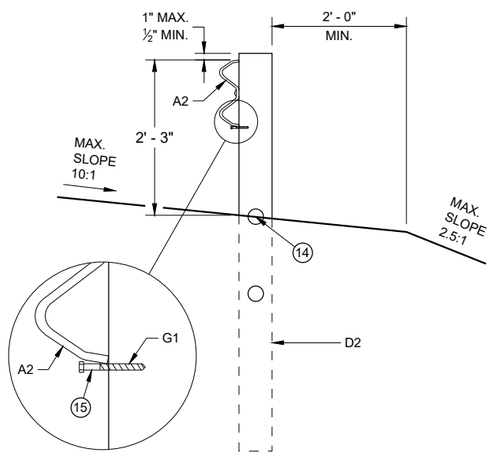
PLAN VIEW

SHORT RADIUS BEAM GUARD WITH SHORT RADIUS TERMINAL ON SECONDARY ROAD OR DRIVEWAY

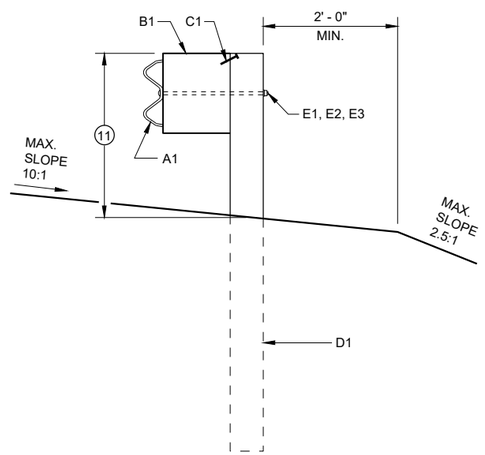


PLAN VIEW

SHORT RADIUS BEAM GUARD WITH EAT, ADDITIONAL BEAM GUARD OR TRANSITION TO RIGID BARRIER ON SECONDARY ROAD OR DRIVEWAY



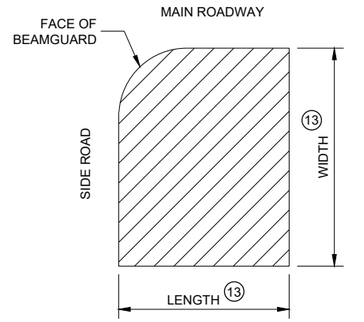
CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



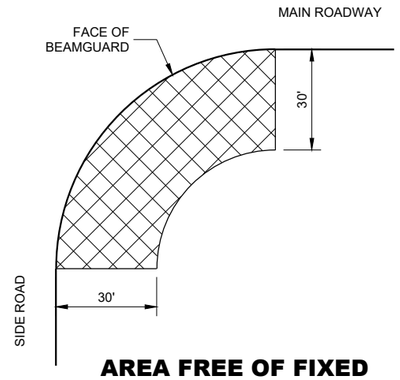
BEAM GUARD POSTS IN HEIGHT TRANSITION

TABLE FOR RADIUS OF 32' AND LESS

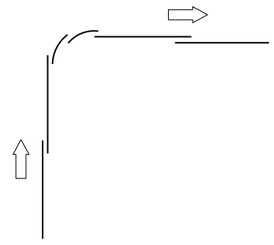
RADIUS (FT)	LENGTH (FT)	WIDTH (FT)
8	25	15
16	30	15
24	40	20
32	50	30



AREA FREE OF FIXED OBJECTS FOR RADIUS 32' AND LESS (16)



AREA FREE OF FIXED OBJECTS FOR RADIUS GREATER THAN 32'



LAP SPLICE DETAIL

GENERAL NOTES

SEE PLANS FOR OTHER BARRIER SYSTEM AND LOCATION SPECIFICS.

SEE SDD 14B42 FOR MORE INFORMATION ON BEAM GUARD INSTALLATION, PARTS, MATERIALS, AND INSTALLATION INFORMATION.

GALVANIZE PARTS AFTER FABRICATION.

WELDING TO FOLLOW CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI / AWS D1.1.

UNLESS NOTED OTHERWISE, ALL PLATES ARE FLAT AND FREE OF WARP.

UNLESS NOTED OTHERWISE, ALL EDGES ARE SMOOTH, STRAIGHT AND VERTICAL.

ALL CUTS AND HOLES, EXCEPT IN BEAM GUARD RAIL ARE TO BE MACHINED OR MACHINE FLAME CUT.

UNLESS NOTED OTHERWISE, CUT OR PROVIDE BOLTS THAT ARE ¼" TO ½" BEYOND THE NUT.

DRAWINGS ARE NOT TO SCALE.

(1) RADIUS MEASURE FROM INSIDE OF RAIL. LENGTH OF BEAM GUARD SHORT RADIUS GUARD MEASURED ALONG TRAFFIC SIDE OF RAIL. RADIUS BETWEEN 8 FEET TO 150 FEET. SEE PLAN FOR REQUIRED RADIUS. BEAM GUARD RAIL IN RADIUS IS SHOP BENT. ODD RAIL LENGTH OR FIELD CUTS MAY BE REQUIRED.

(2) CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE USED IN THE RADIUS. CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE SPACED 6' - 3". SEE PLAN FOR NUMBER OF CONTROLLED RELEASE (CRT) POSTS.

(3) WITHIN RADIUS BEAM GUARD RAILS ARE NOT BOLTED TO POSTS. BEAM GUARD RAIL IS RESTED ON TOP OF LAG SCREW.

(4) MINIMUM LENGTH OF BEAM GUARD ALONG SIDE ROAD OR DRIVEWAY TO INSTALL SHORT RADIUS TERMINAL. BEAM GUARD IS PAID WITH BEAM GUARD ITEM.

(5) ODD LENGTH OF BEAM GUARD REQUIRED TO INSTALL SHORT RADIUS TERMINAL.

(6) MINIMUM AMOUNT OF BEAM GUARD TO BE INSTALLED PRIOR TO TRANSITION TO RIGID BARRIER. ADDITIONAL BEAM GUARD, OR EAT. BEAM GUARD PAID FOR WITH BEAM GUARD ITEM. SEE PLANS FOR MORE DETAIL.

(7) BEAM GUARD, EAT, OR TRANSITION TO RIGID BARRIER. SEE PLAN.

(8) TOP OF BEAM GUARD BY THE RADIUS IS 27". HEIGHT OF BEAM GUARD IS 31" BY TRANSITION TO RIGID BARRIER, ADDITIONAL BEAM GUARD OR EAT.

(9) ADDITIONAL BEAM GUARD, EAT OR TRANSITION TO RIGID BARRIER. BEAM GUARD SHOWN. SEE PLAN FOR DETAILS.

(10) SHORT RADIUS TERMINAL (SEE OTHER DETAILS).

(11) HEIGHT VARIES. SEE NOTE (8) AND (8).

(12) BEAM GUARD RAIL SPLICE LOCATION. SPLICE LOCATION REQUIRES PART F1 AND F2. SEE SDD 14B42 FOR DETAILS.

(13) SEE TABLE FOR VALUES.

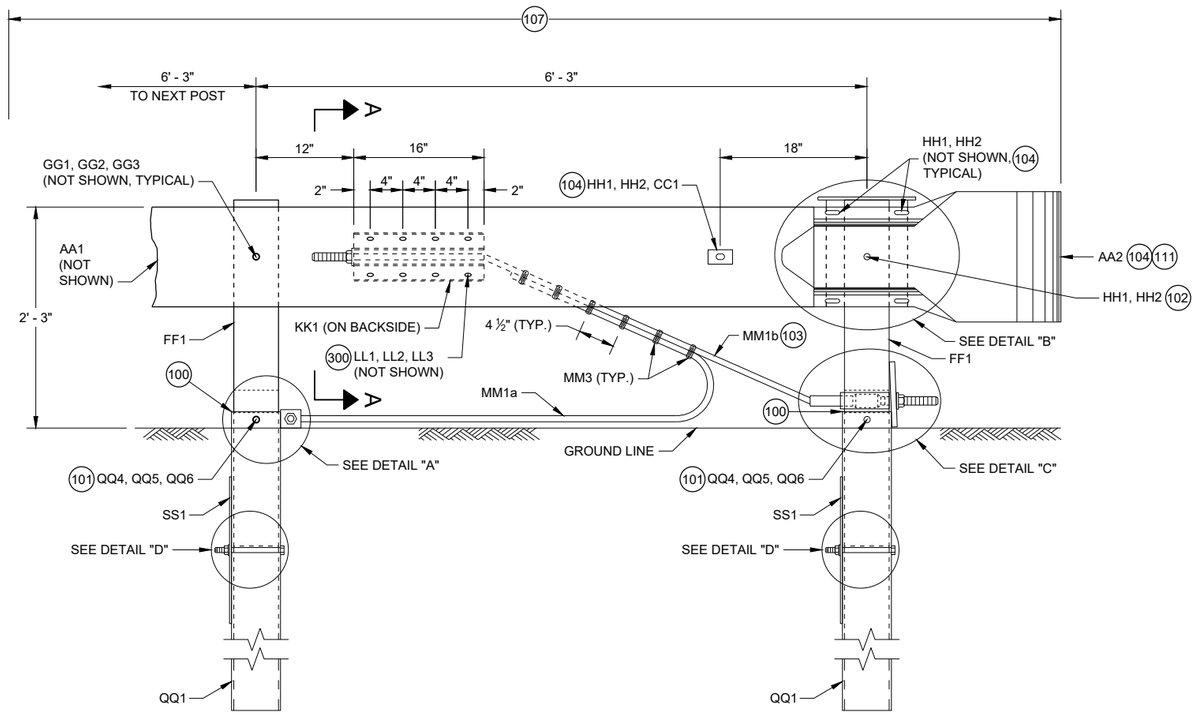
(14) MAXIMUM HEIGHT FOR CENTER OF HOLE IS ¾" ABOVE FINISHED GROUND ±1".

(15) DRILL POST $^{15}/_{64}$" DIA. PILOT HOLE. DO NOT HAMMER LAG SCREW INTO POST.

(16) SMALL SIGNS ON BREAKAWAY HARDWARE ARE ACCEPTABLE.

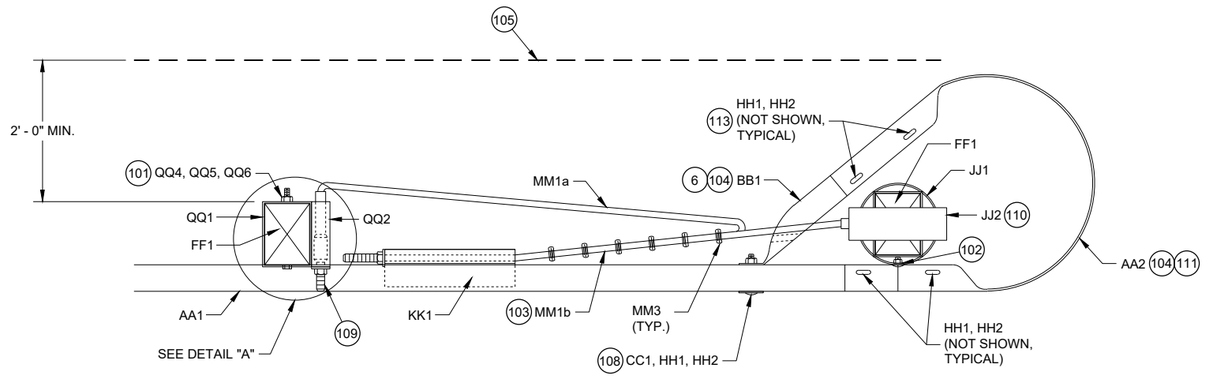
(17) TOP OF RAIL HEIGHT IS 27" WHEN USING A SHORT RADIUS TERMINAL (CRT).

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)



PROFILE VIEW

SHORT RADIUS TERMINAL



TOP VIEW

SHORT RADIUS TERMINAL

GENERAL NOTES

100 TOP OF FOUNDATION TUBE 2 INCHES MAXIMUM ABOVE FINISHED GROUND.

101 WASHERS REQUIRED BETWEEN BOLT HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

102 SPLICE BOLT AND NUT CONNECTS BEAM GUARD RAIL, W-BEAM SECTION BUFFER, AND STEEL PIPE ASSEMBLY. NO WASHER REQUIRED. SEE DETAIL "B".

103 CABLE IS TAUT.

104 ADJUST AA2 AND BB1 TO FIT.

105 BREAK POINT OF SHOULDER.

106 TACK WELD CABLE CONNECTOR TUBE PLATE TO CABLE CONNECTION TUBE. SEE DETAIL "A" PROFILE VIEW.

107 PAY LIMIT FOR BEAM GUARD.

108 SQUARE WASHER BETWEEN HEAD OF BOLT AND TRAFFIC FACE OF BEAM GUARD. ROUND WASHER REQUIRED BETWEEN NUT AND BB1.

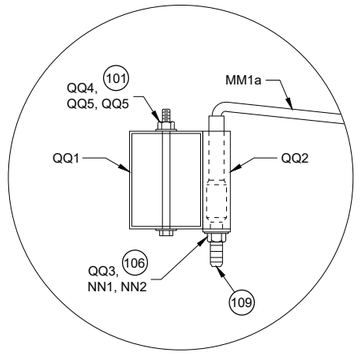
109 CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS ½" TOLERANCE). DEBURR AFTER CUTTING.

110 SEE STEEL PIPE ASSEMBLY DETAILS.

111 ATTACH UU2 WITH UU3. SHOP APPLY UU1 TO UU2.

112 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA1 TO AA2.

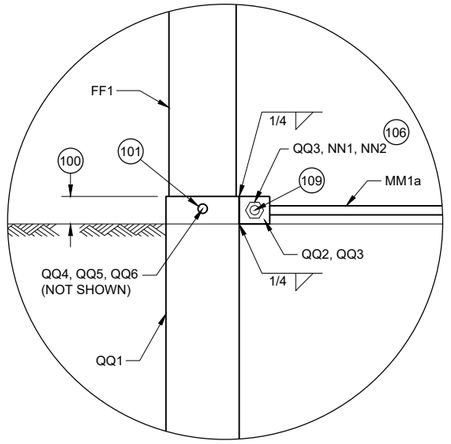
113 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



TOP VIEW

DETAIL "A"

(WOOD BREAKAWAY AND BEAM GUARD RAIL POSTS NOT SHOWN)



PROFILE VIEW

DETAIL "A"

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

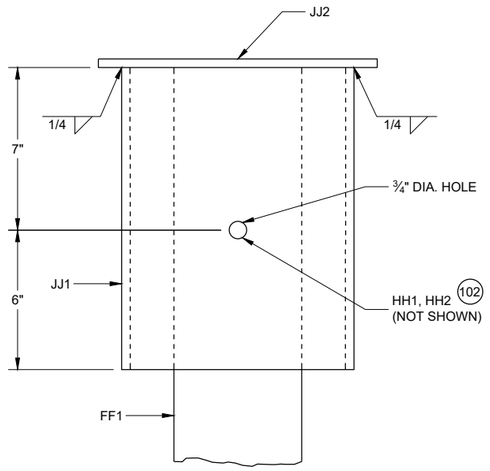
6

SDD 14B53 - 02b

SDD 14B53 - 02b

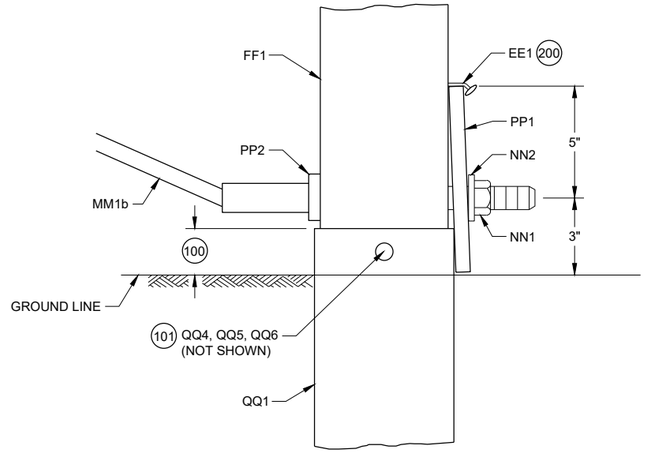
GENERAL NOTES

(200) TWO (2) NAILS SPACED 4 INCHES CENTER TO CENTER.



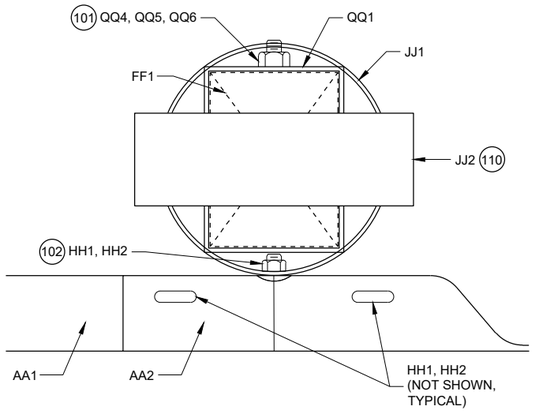
PROFILE VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY
(BEAM GUARD AND W BEAM END SECTION NOT SHOWN)



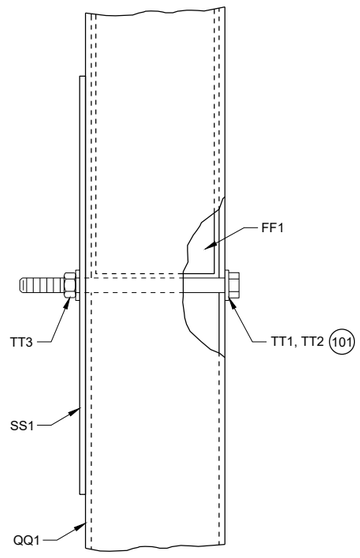
PROFILE VIEW

DETAIL "C"



PLAN VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY



PROFILE VIEW

DETAIL "D"

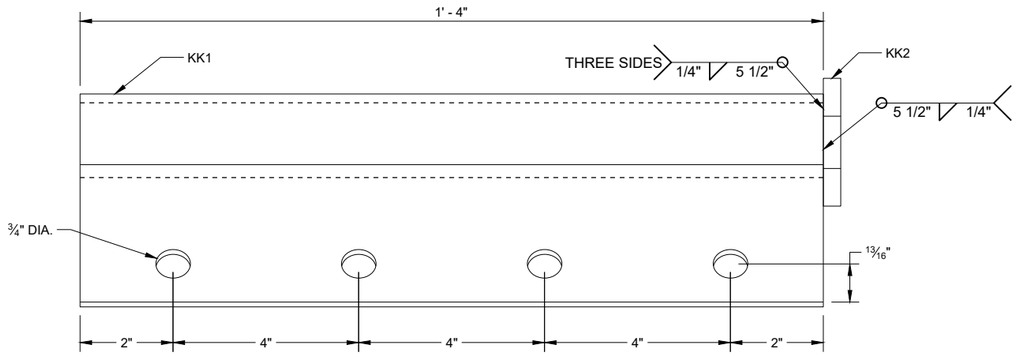
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

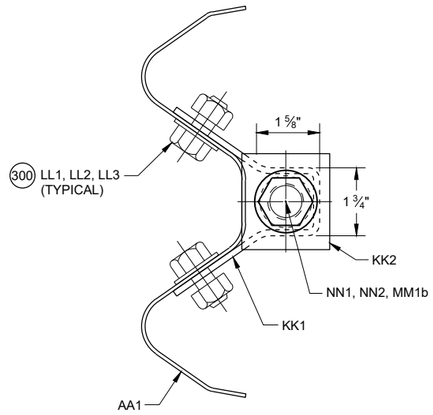
6

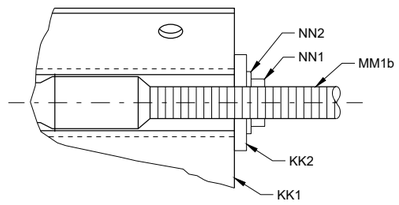
SDD 14B53 - 02c

GENERAL NOTES

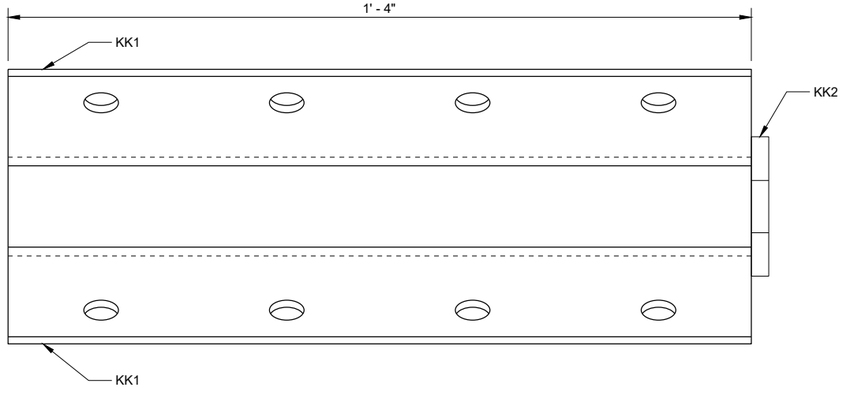
(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT (8) LL1 AND LL3 REQUIRED. SIXTEEN (16) LL2 REQUIRED.

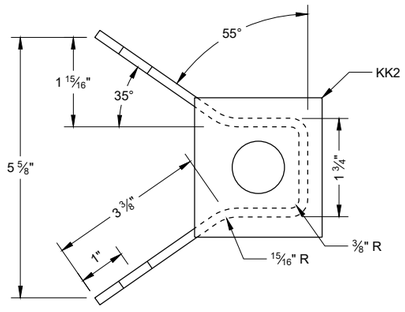




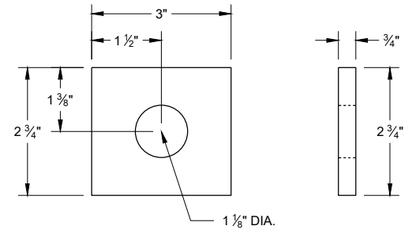


SECTION A - A





ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

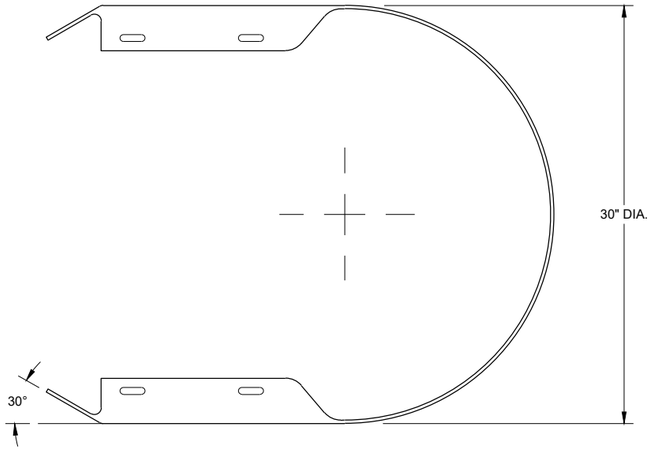
6

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

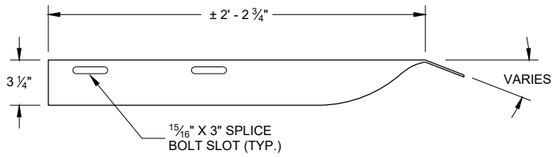
GENERAL NOTES

(400) CROSS SECTION OF PART IS TO FIT OVER AA1 .

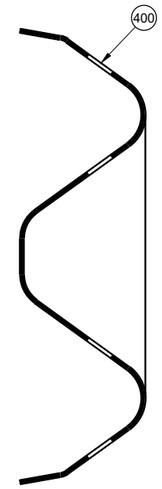
(401) CROSS SECTION OF PART IS TO FIT OVER OR UNDER AA1 .



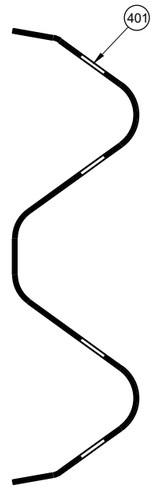
TOP VIEW



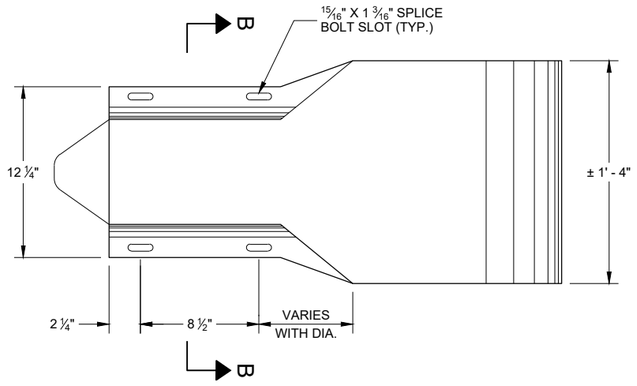
TOP VIEW



SECTION B -B

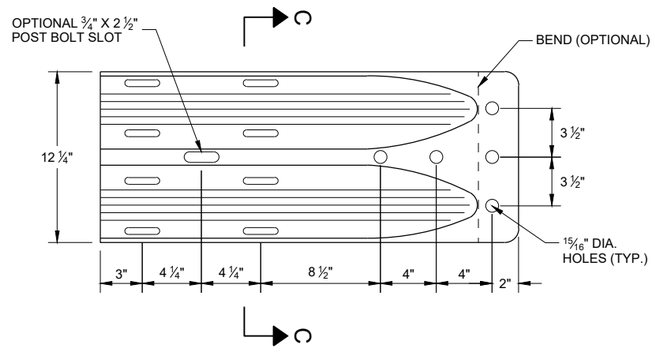


SECTION C -C



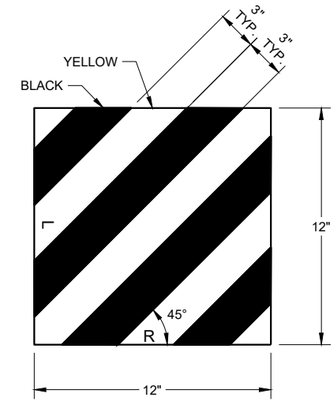
PROFILE VIEW

W BEAM
END SECTION BUFFER (AA2)



PROFILE VIEW

W BEAM
TERMINAL CONNECTOR (BB1)



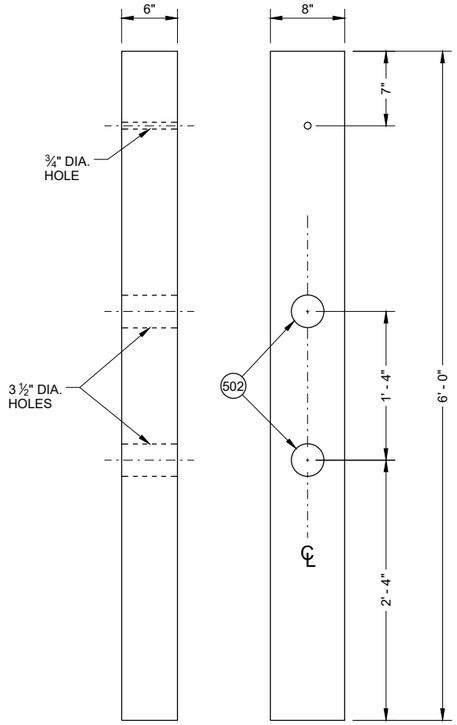
REFLECTIVE SHEETING (UU1, UU2)

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

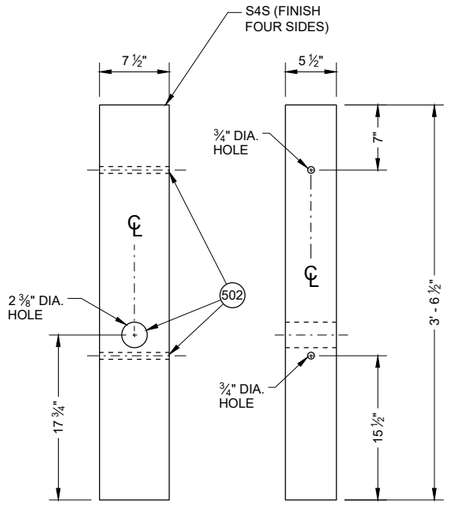
6

SDD 14B53 - 02e



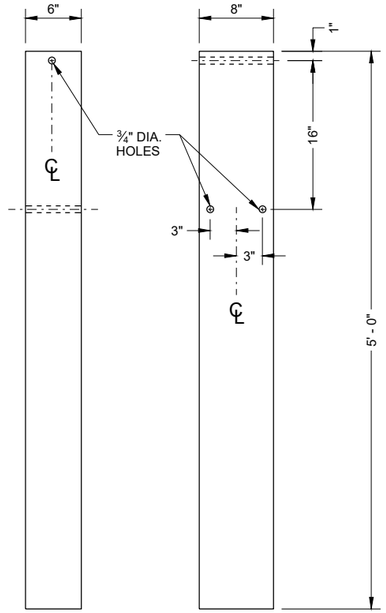
FRONT VIEW SIDE VIEW

CONTROLLED RELEASE POST (CRT) (DD2)



FRONT VIEW SIDE VIEW

WOOD BREAKAWAY POST (FF1)



FRONT VIEW SIDE VIEW

FOUNDATION TUBE (QQ1) 500

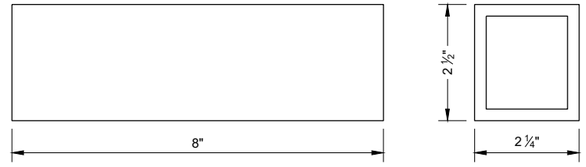
GENERAL NOTES

500 SEE DETAIL "D" FOR LOCATION AND ATTACHMENT OF SS1.

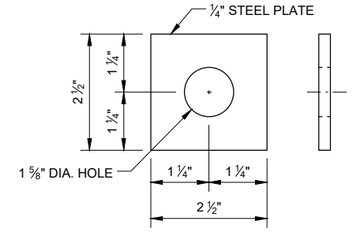
501 FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

502 LOCATE HOLES ON THE CENTERLINE OF THE SIDE OF THE POST.

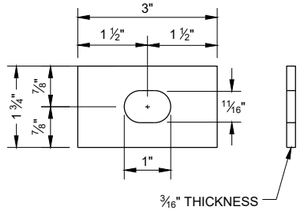
503 MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE 109.



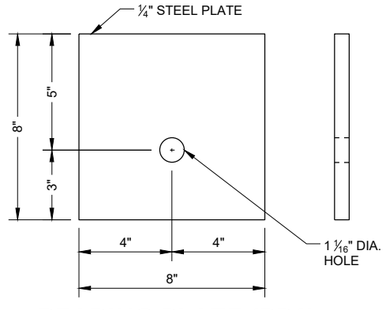
FOUNDATION TUBE - ANCHOR CABLE TUBE (QQ2)



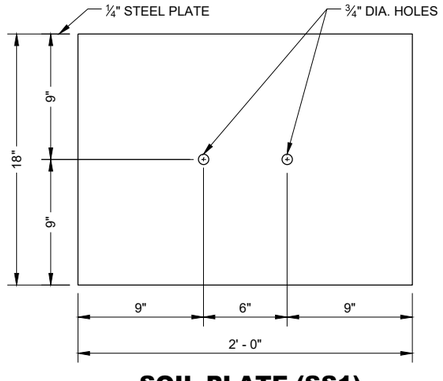
ANCHOR CABLE TUBE END PLATE (QQ3)



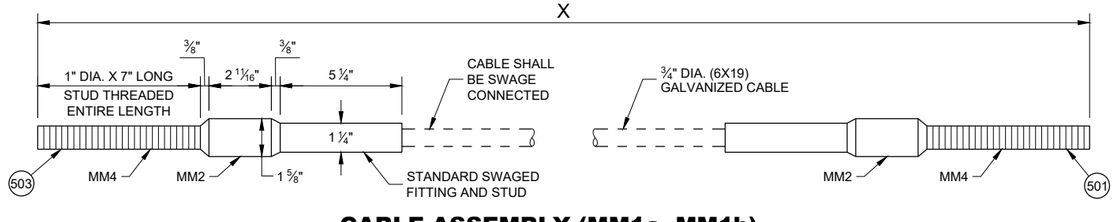
RECTANGULAR PLATE WASHER (CC1)



BEARING PLATE (PP1)



SOIL PLATE (SS1)



CABLE ASSEMBLY (MM1a, MM1b)

"X" LENGTH

MM1b	9' - 0"
MM1b	6' - 8"

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B53 - 02f

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	BEAM GUARD RAIL	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
A2	BEAM GUARD RAIL - SHOP BENT	INDICATE ON BACK OF RAIL THE RADIUS THAT RAIL WAS BENT TO. SHOP BEND RADIUS IS TO THE NEAREST FOOT. FOLLOW AASHTO M180 ON HOW TO MARK RADIUS INFORMATION.	
		AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
B1	BLOCK - WOOD	WISDOT SPEC. 614	SEE SDD 14B42
C1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEAD)	
D1	POST-STRONG POST-WOOD	WISDOT SPEC. 614	SEE SDD 14B42
D2	POST-CRT-WOOD	WISDOT SPEC. 614	
E1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
E2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	5/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
E3	POST BOLT - NUT	AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
F1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
F2	SPLICE BOLT - NUT	ASTM A563 GRADE A	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
G1	LAG SCREW	ASTM A308 GRADE A ASTM A153 CLASS D	1/2" DIA. 6" LONG
H1	DELINEATOR - BEAM GUARD		SEE SDD 14B42 FOR MORE INFORMATION
H2	DELINEATION - SHEETING	YELLOW OR WHITE	
		WISDOT SPEC 637 TYPE SH	
		APPROVED PRODUCT LIST	
J1	FOUNDATION BACKFILL	STANDARD SPEC. 614	
AA1	BEAM GUARD RAIL - PUNCHED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
AA2	BEAM GUARD RAIL - END SECTION BUFFER	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
BB1	BEAM GUARD RAIL - TERMINAL CONNECTOR MODIFIED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
CC1	SHORT RADIUS - SQUARE WASHER	AASHTO M180	
		GALV. AASHTO M111 / ASTM A123	
EE1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)	
FF1	POST - BCT - WOOD	S4S FINISH ON 4 SIDES	
		WISDOT SPEC. 614	
GG1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	3/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
GG2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	3/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

6

SDD 14B53 - 02g

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
GG3	POST BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE 14B42 FOR GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
HH1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180 HEAD GEOMETRY	
HH2	SPLICE BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
JJ1	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	10" O.D.
JJ2	TOP PLATE	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	DIMENSIONS ⅜" X 4" X 1' - 0"
		GALV. AASHTO M111 / ASTM A123	
KK1	ANCHOR BRACKET	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	
		GALV. AASHTO M111 / ASTM A123	
KK2	ANCHOR BRACKET - BEARING PLATE	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	
		GALV. AASHTO M111 / ASTM A123	
LL1	ANCHOR BRACKET - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
LL2	ANCHOR BRACKET - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	⅝" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
LL3	ANCHOR BRACKET - NUT	ASTM A563 GRADE A	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
MM1a	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM1b	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM2	ANCHOR CABLE - SWAGE FITTING	ASTM A576 GRADE 1035	
		SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. WITH A BREAKING STRENGTH 40,000 LBS.	
		GALV. AASHTO M111 / ASTM A123	
		ASME B30.26 FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING INTO CONNECTION: NAME OF MANUFACTURER OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE.	
MM3	WIRE ROPE CABLE CLAMPS	FF-C-450D TYPE 1 CLASS 1	¾"
		ASTM A153 HOT DIP CLASS D	
MM4	ANCHOR CABLE - SWAGE FITTING - STUD	ASTM F3125 GRADE A325 TYPE 1 OR SAE GRADE 5 OR ASTM A449 TYPE 1 HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
NN1	ANCHOR CABLE - NUT	ASTM A563 GRADE A	1" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
NN2	ANCHOR CABLE - NUT - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	1" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
PP1	BEARING PLATE AT POST	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	
		GALV. AASHTO M111 / ASTM A123	
PP2	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	2" DIA. x 6" LONG
QQ1	FOUNDATION TUBE	ASTM A500 GRADE B	8" X 6" X 3/16"
		GALV. AASHTO M111 / ASTM A123	
QQ2	SHORT RADIUS - FOUNDATION TUBE - ANCHOR CABLE - TUBE	ASTM A500 GRADE B	DIMENSIONS 2 1/2" X 2 1/4" X 1/4" X 8"
		GALV. AASHTO M111 / ASTM A123	
QQ3	SHORT RADIUS - SOIL TUBE - ANCHOR CABLE - TUBE - END PLATE	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	DIMENSIONS 2 1/2" X 2 1/2" X 1/4"
		GALV. AASHTO M111 / ASTM A123	
QQ4	GROUND STRUT AND YOKE - BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
		ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	
		UNC	
QQ5	GROUND PLATE AND YOKE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
QQ6	GROUND STRUT AND YOKE - NUT	HEAVY HEX	5/8 DIA.
		UNC	
		ASTM A563 GRADE A	
		OVER TAPPED NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
SS1	SOIL PLATE	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	
		GALV. AASHTO M111 / A123	
TT1	SOIL PLATE - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	5/8 DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
TT2	SOIL PLATE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
TT3	SOIL PLATE - NUT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
UU1	OBJECT MARKER - SHEETING	MUTCD / WISDOT OBJECT MARKER TYPE 3	PATTERN AND COLOR FOR SHEETING. SHEETING TYPE FOR MARKER.
		WISDOT SPEC 637 TYPE F	
		APPROVED PRODUCT LIST	
UU2	OBJECT MARKER - ALUMINUM PLATE	WISDOT SPEC 637 ALUMINUM PLATE	MATERIAL AND THICKNESS OF MATERIALS
UU3	OBJECT MARKER - SCREWS	STAINLESS SELF-TAPPING SCREWS	
VV1	FOUNDATION BACKFILL	WISDOT SPEC 614	

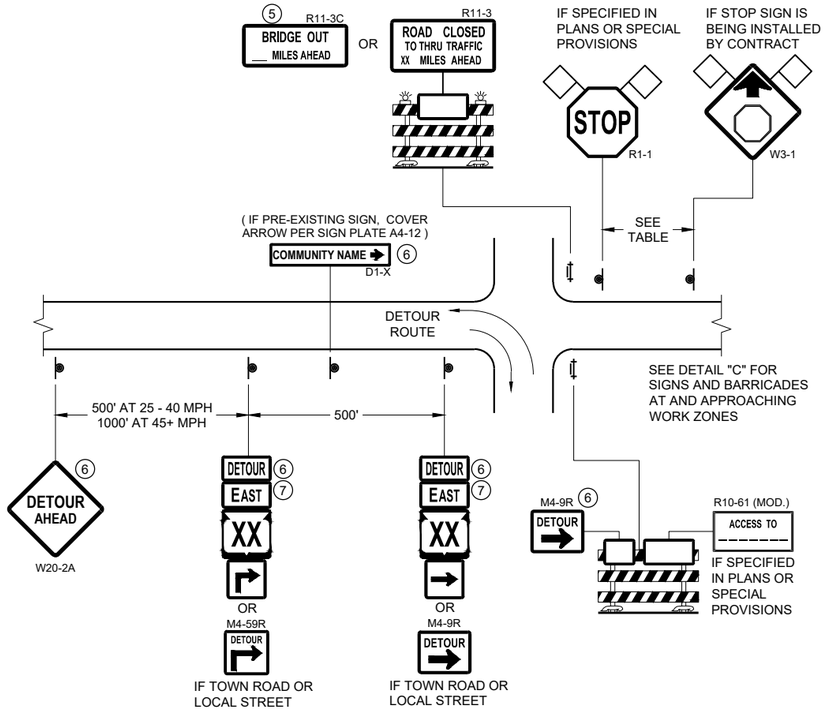
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

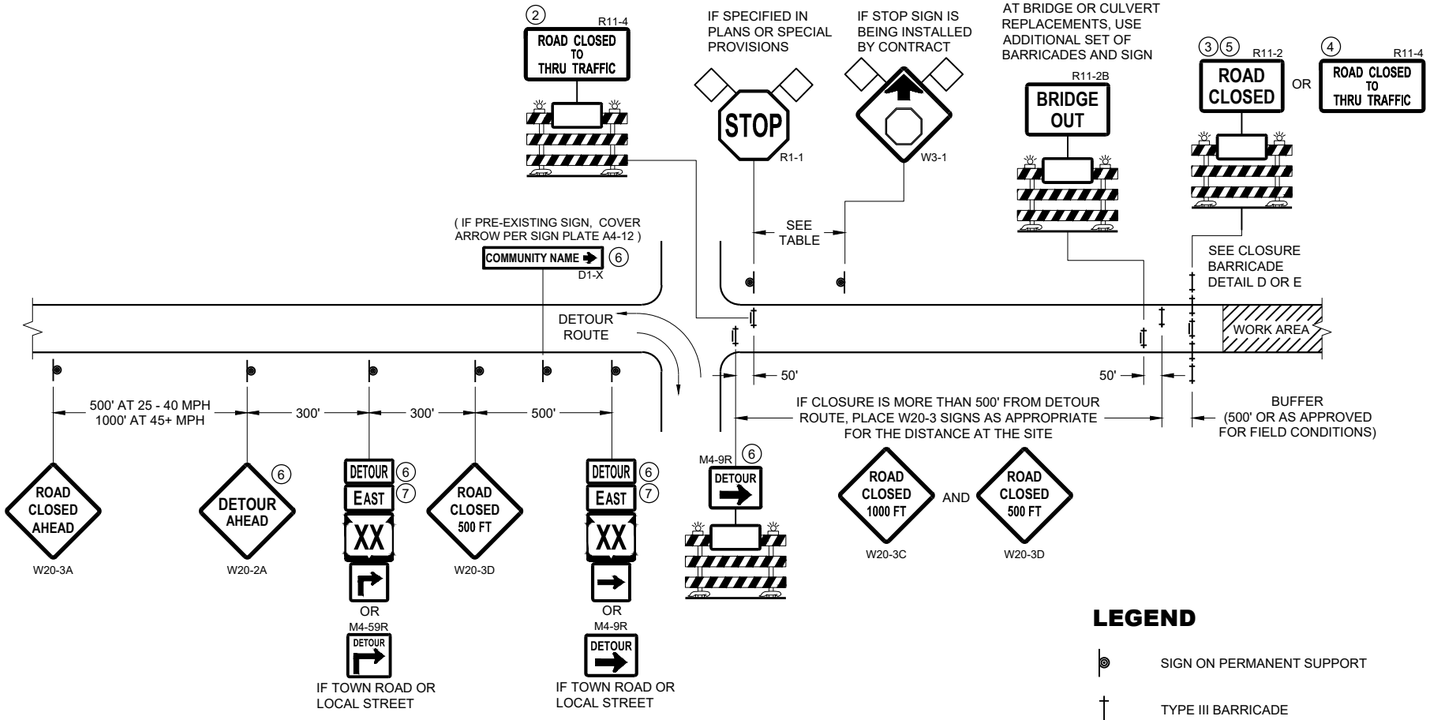
6

SDD 14B53 - 02i



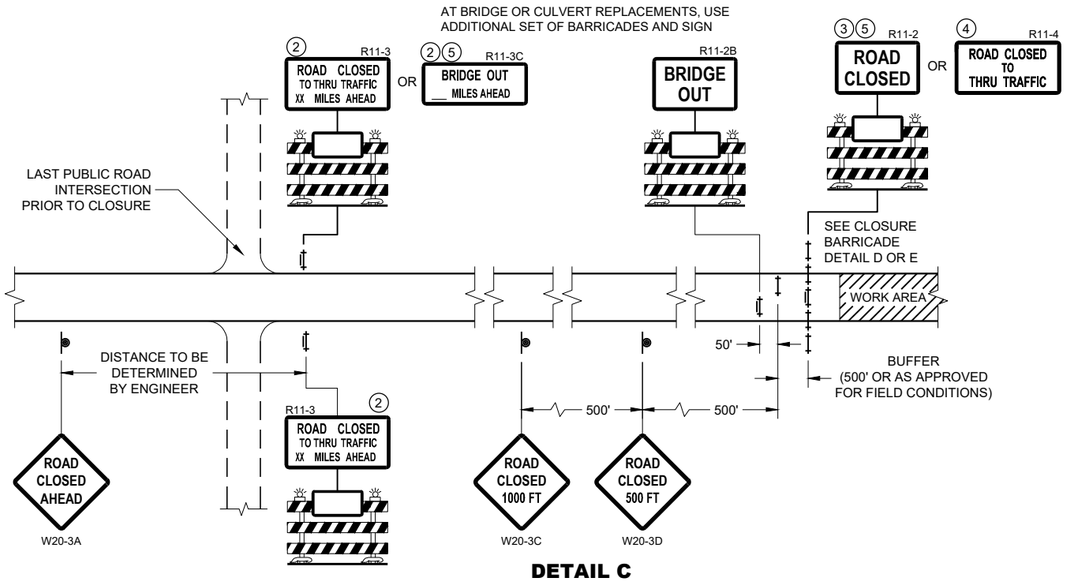
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

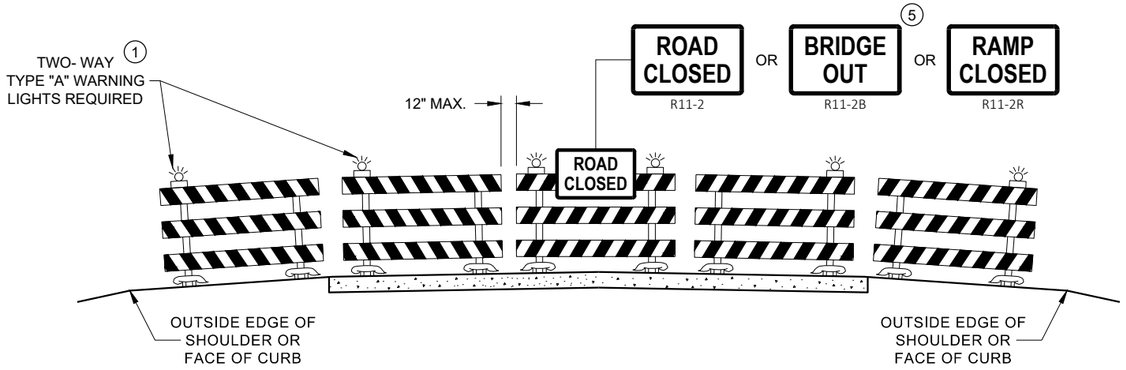
APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

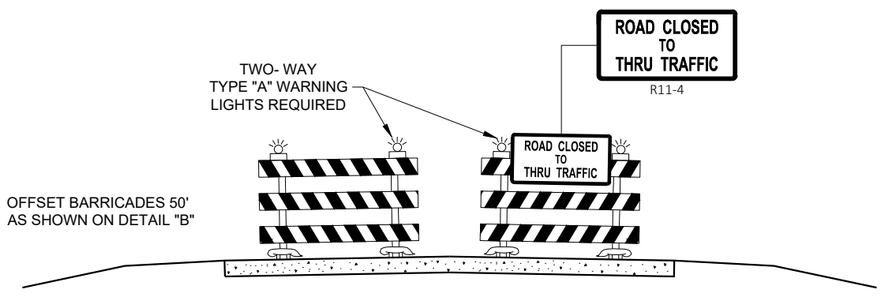
6

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

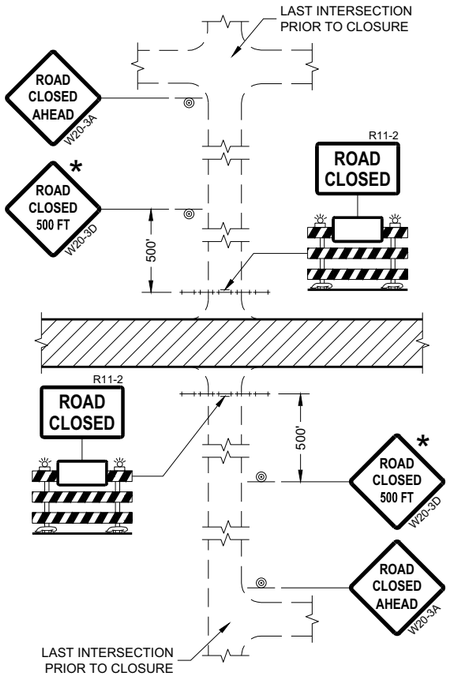
APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

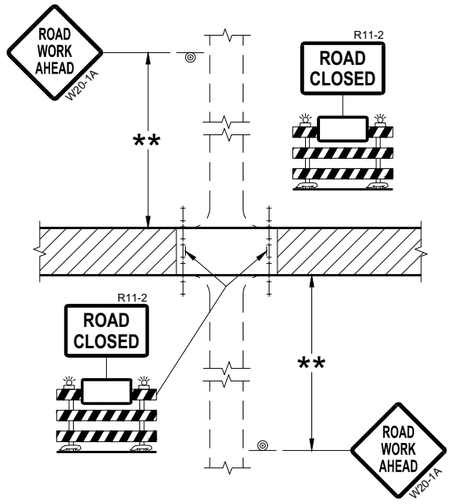
SDD 15C02 - 09b

6

SDD 15C02 - 09b



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO 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.

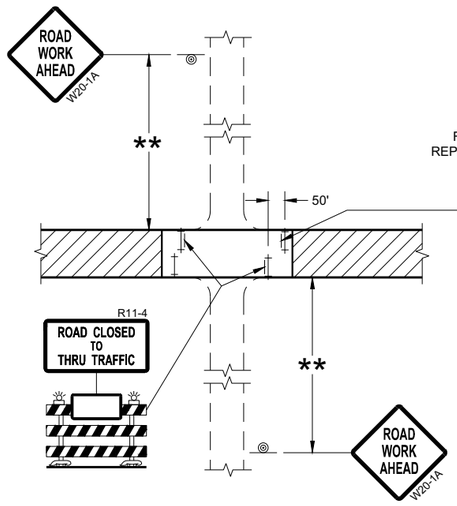
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

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.

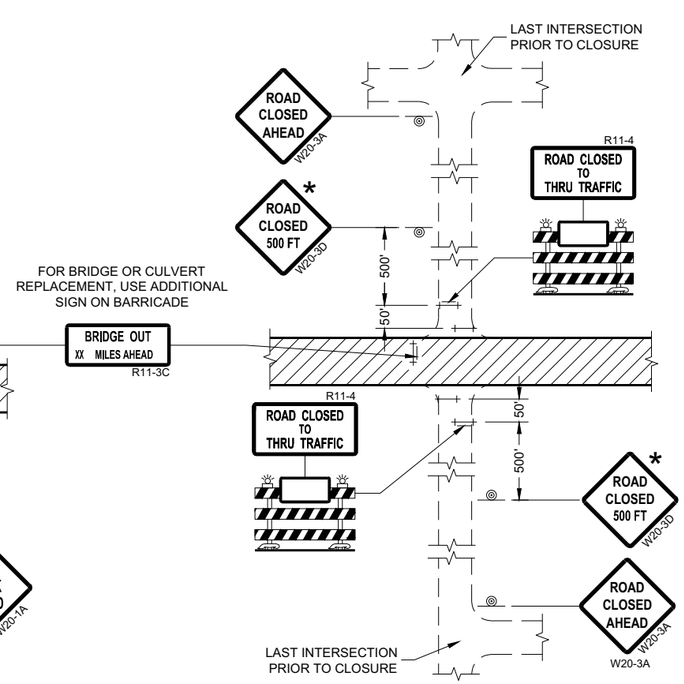
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* 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.



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

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 ENGINEER

FHWA

6

SDD 15C03 - 05

SDD 15C03 - 05

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.

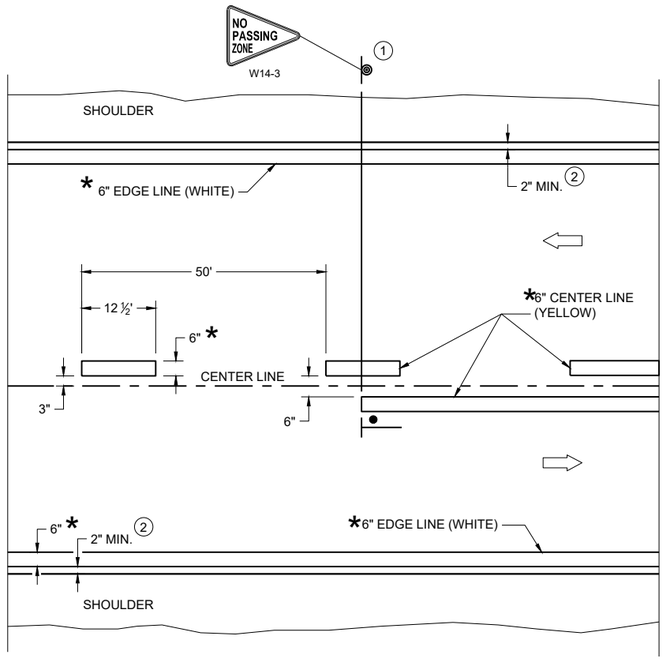
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

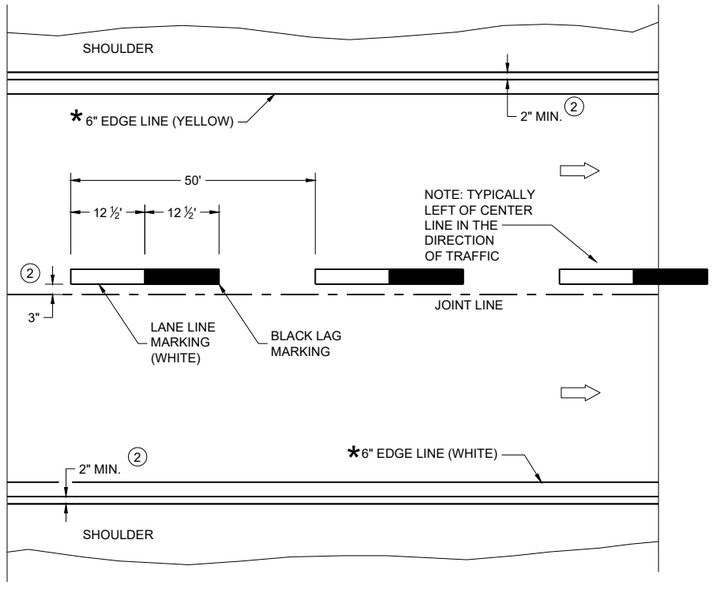
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

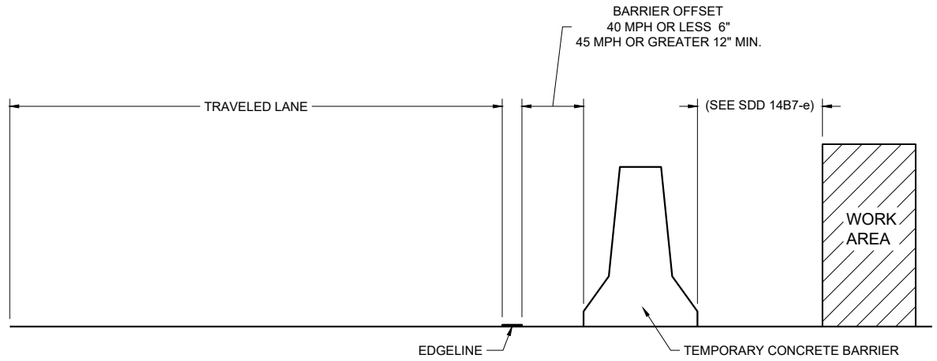
APPROVED

May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

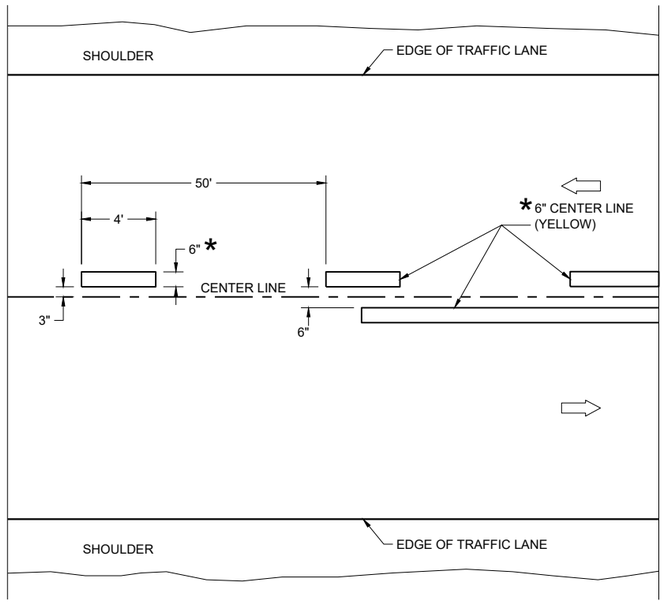
GENERAL NOTES

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

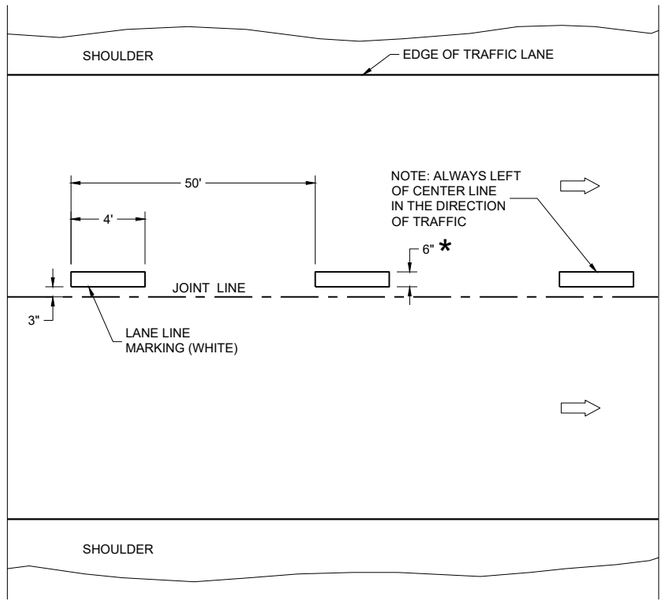
LEGEND

DIRECTION OF TRAFFIC

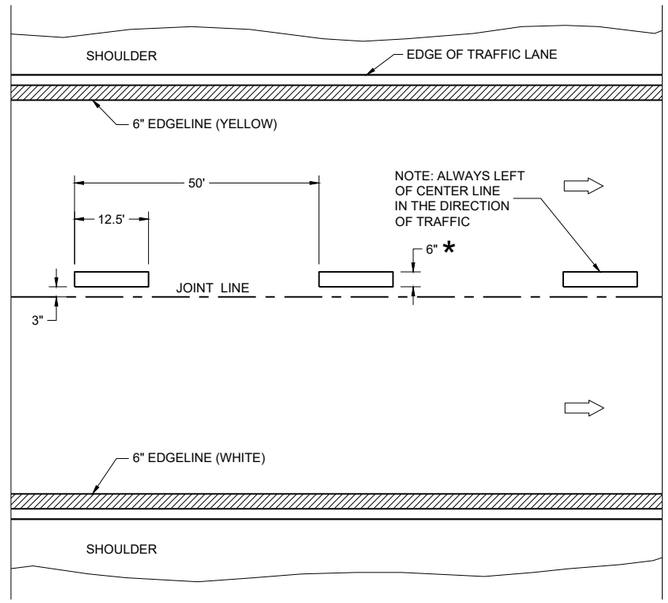
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



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 Pavement Marking Engineer

FHWA

6

SDD 15C08-23b

6

SDD 15C08-23b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

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

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

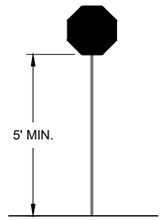
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



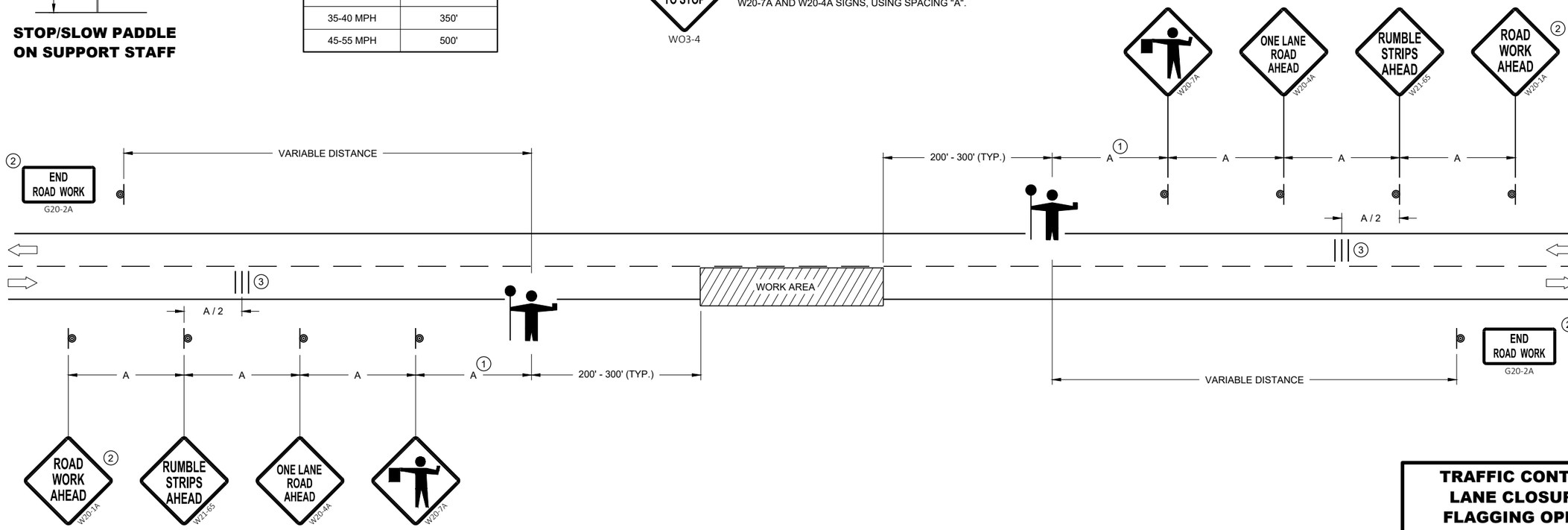
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

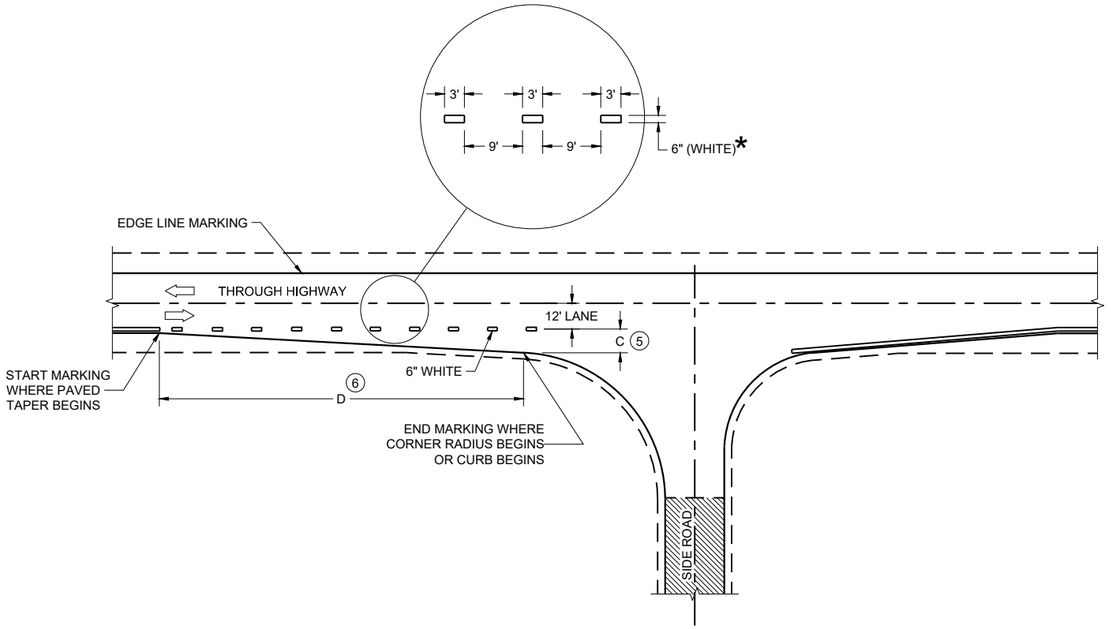
FHWA

6

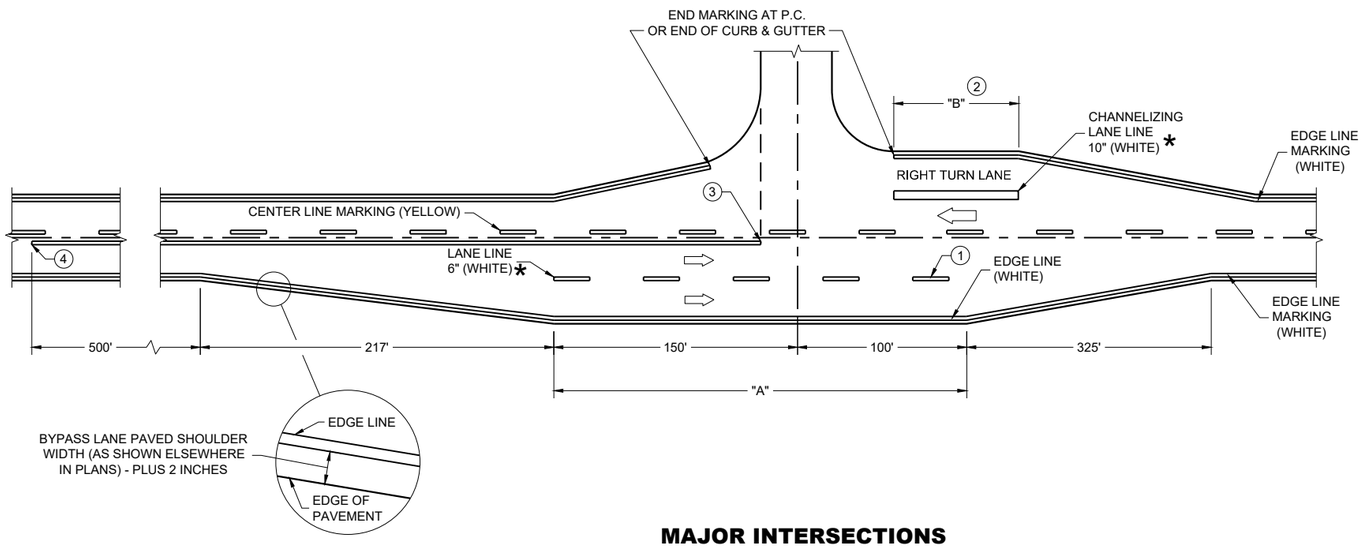
SDD 15C12 - 09a

6

SDD 15C12 - 09a



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

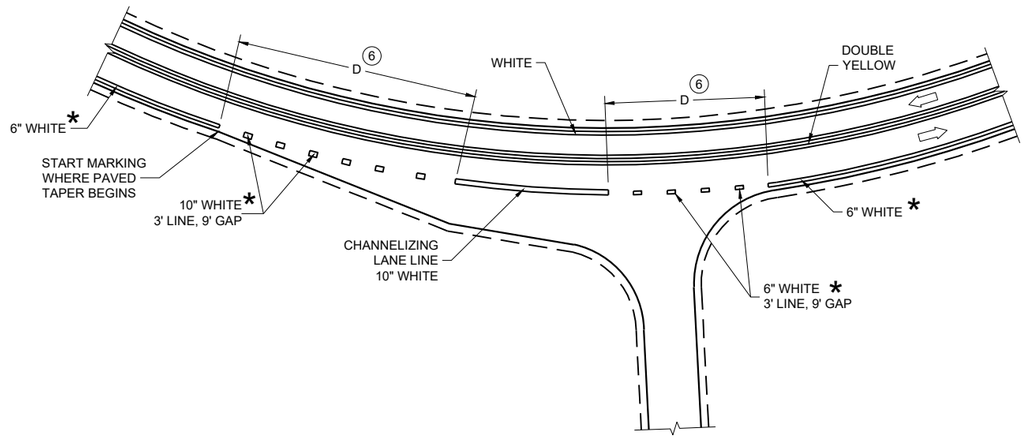
GENERAL NOTES

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)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

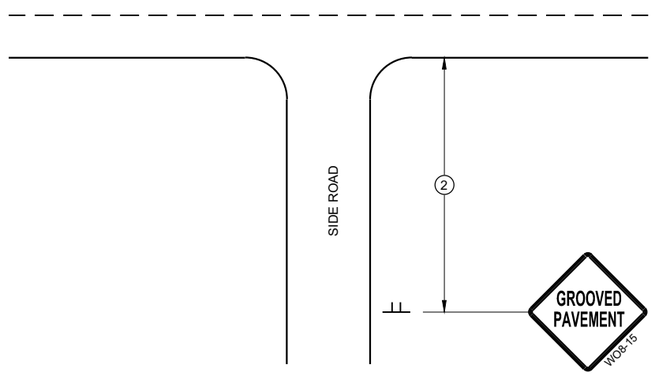
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

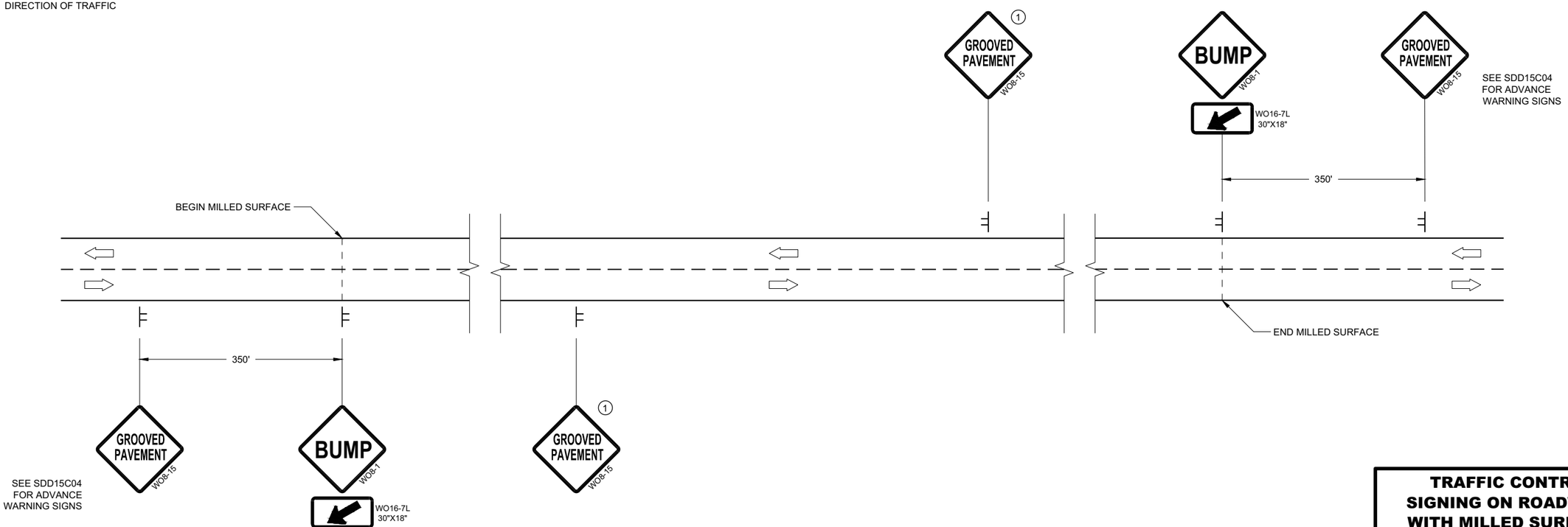
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

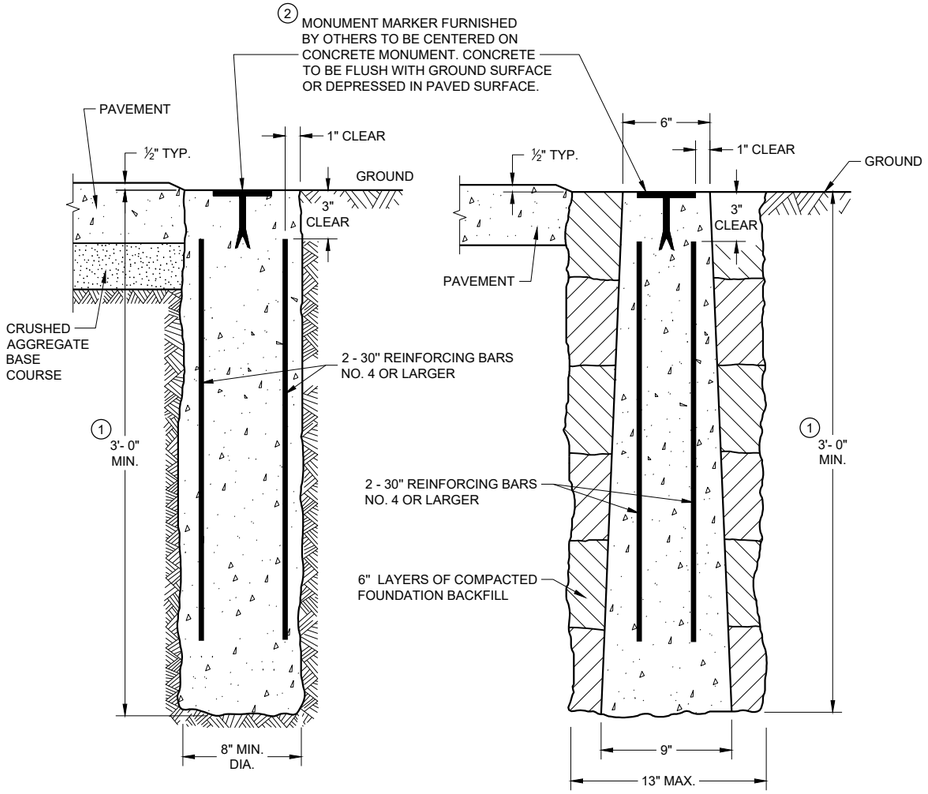
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

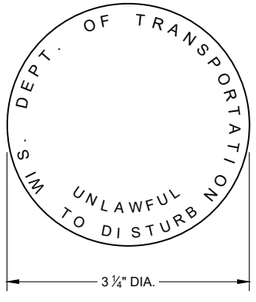
SDD 15D44 - 02

SDD 15D44 - 02



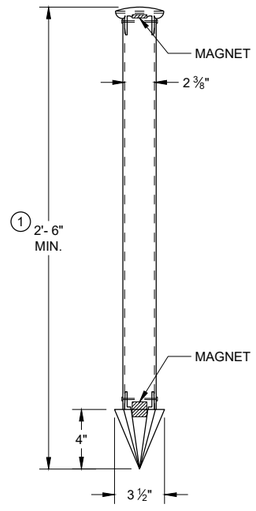
CAST-IN-PLACE **PRECAST**

CONCRETE MONUMENTS
TYPE A

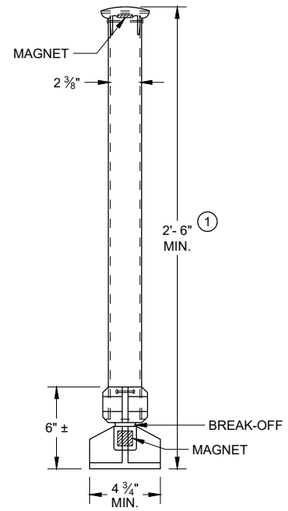


② **WIS DOT MONUMENT MARKER LOGO**

FOR TYPES "A", "C" & "D"

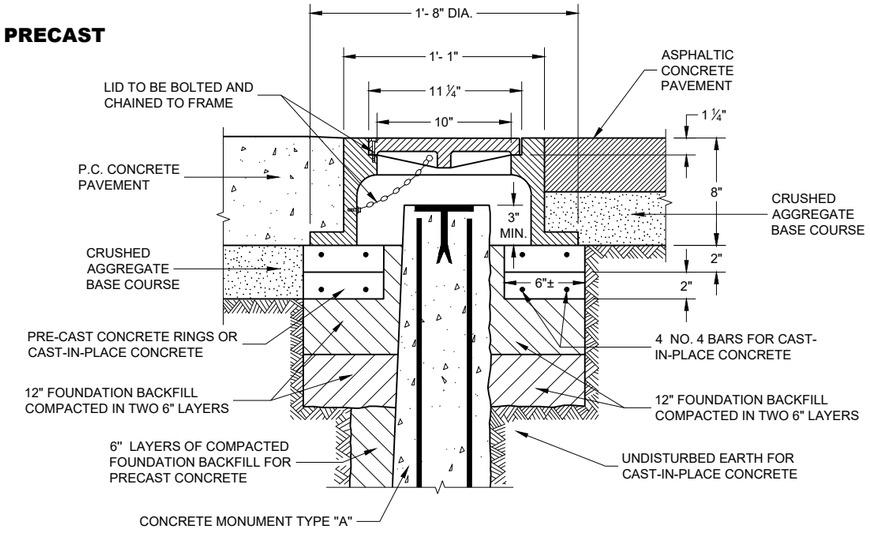


TYPE C
DRIVEN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS
(INCLUDES MARKER)



CAST IRON MONUMENT COVER
(APPROXIMATE WEIGHT 95 LBS)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

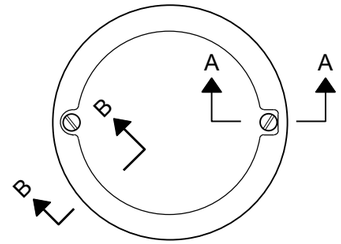
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

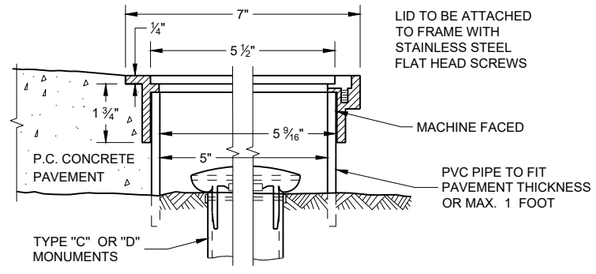
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WISDOT MARKER.



TOP VIEW



SECTION B-B **SECTION A-A**

ALUMINUM MONUMENT COVER
(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

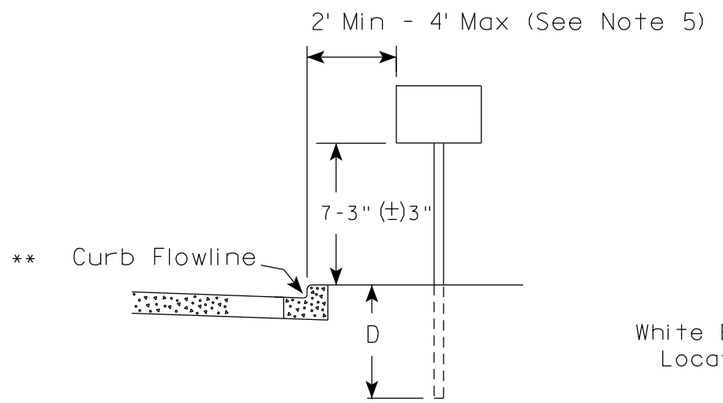
/S/ Raymond A. Kumapayii
CHIEF SURVEYING AND MAPPING ENGINEER

FHWA

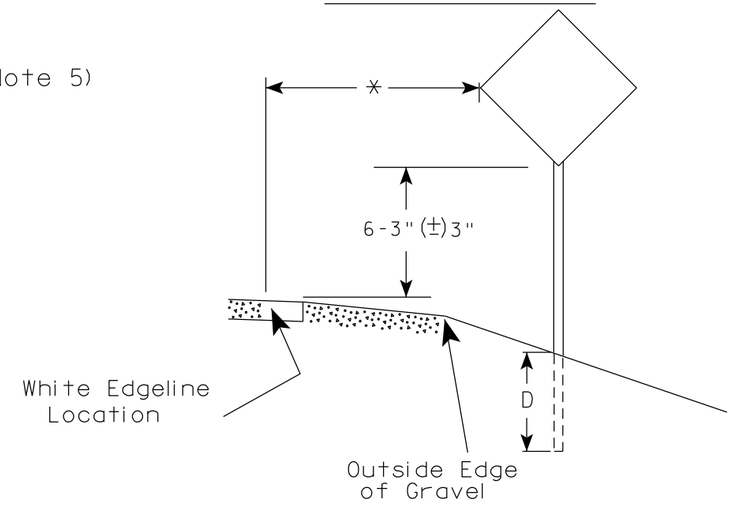
6

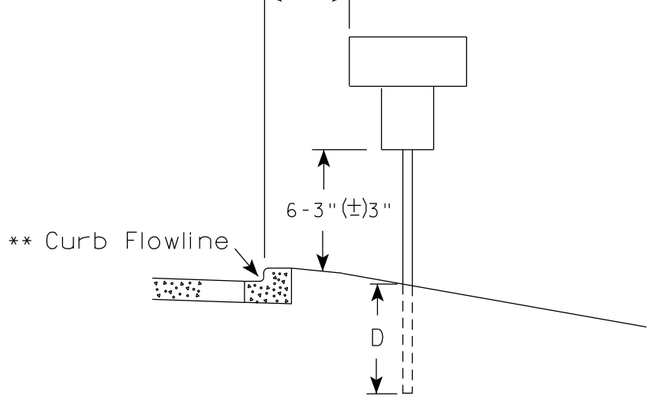
SDD 16A01 - 07

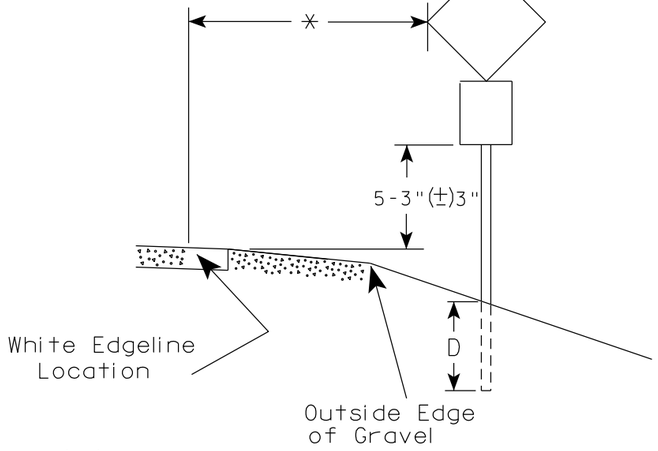
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

POST EMBEDMENT DEPTH

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

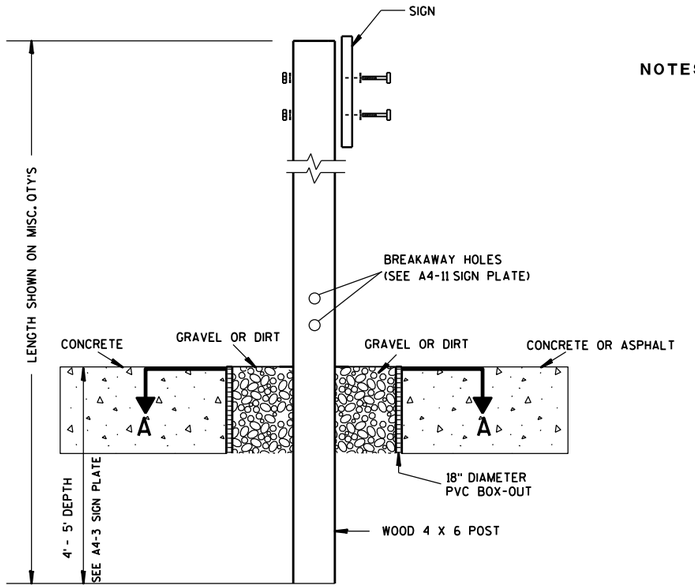
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

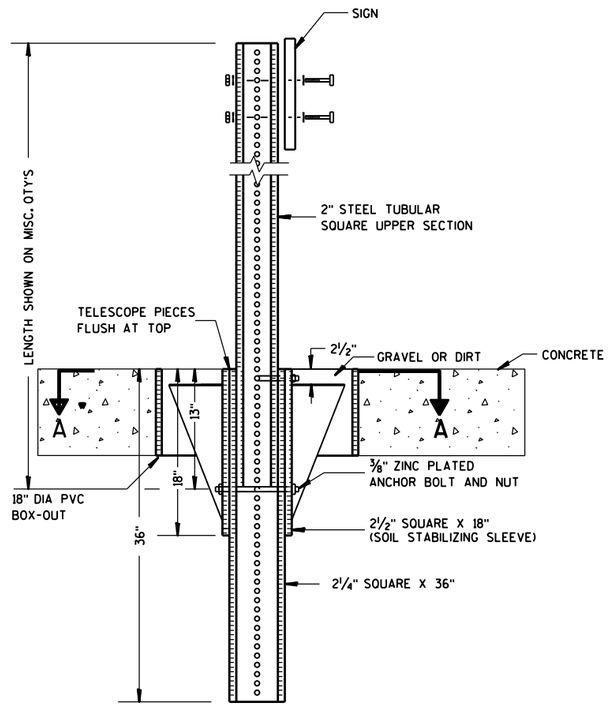
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 59	E



ELEVATION VIEW

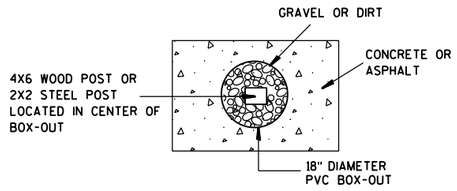
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

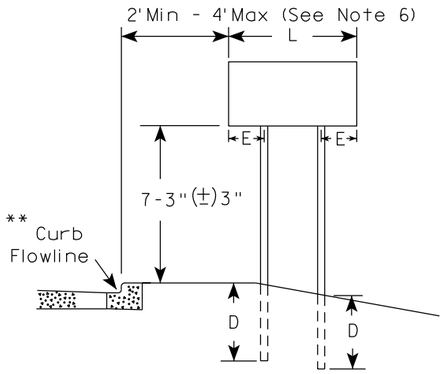
APPROVED Matthew R Rauch
for State Traffic Engineer

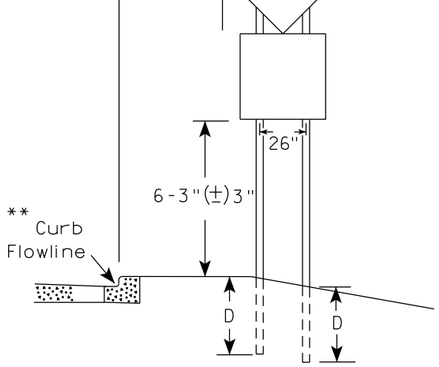
DATE 1/27/14 PLATE NO. A4-3B.1

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

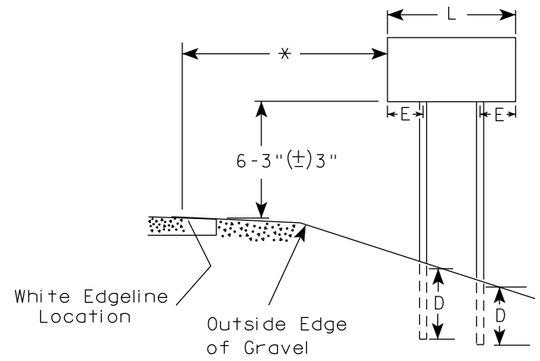
URBAN AREA

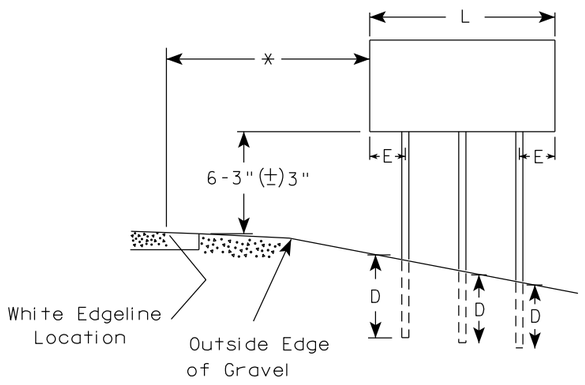


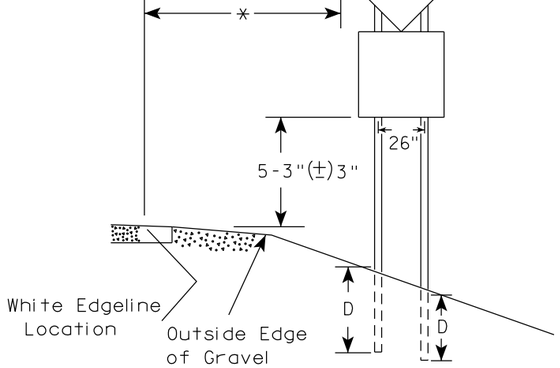


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

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"

POST EMBEDMENT DEPTH

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

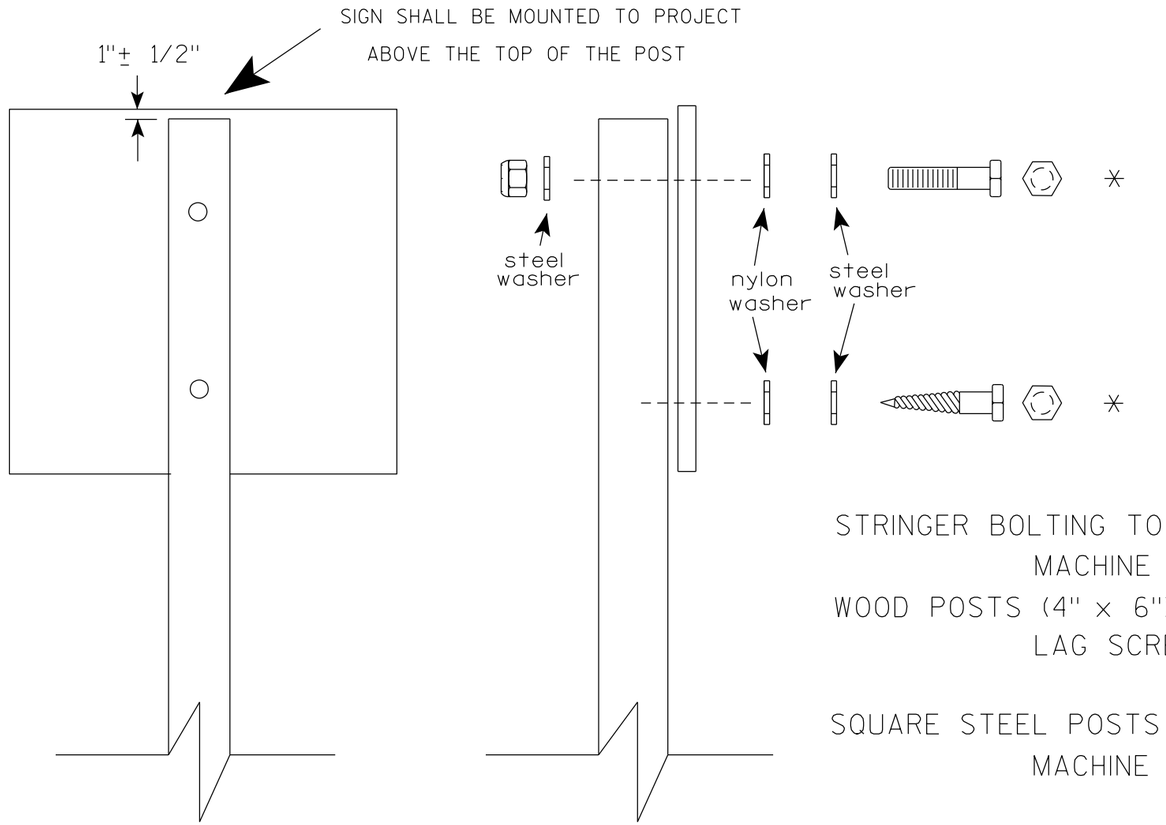
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 61	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

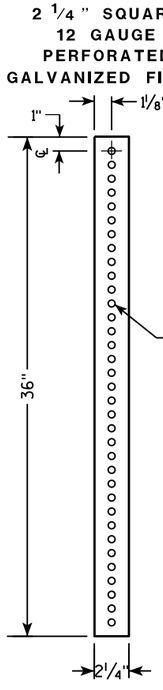
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

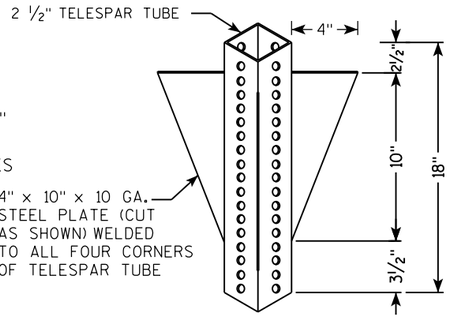
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

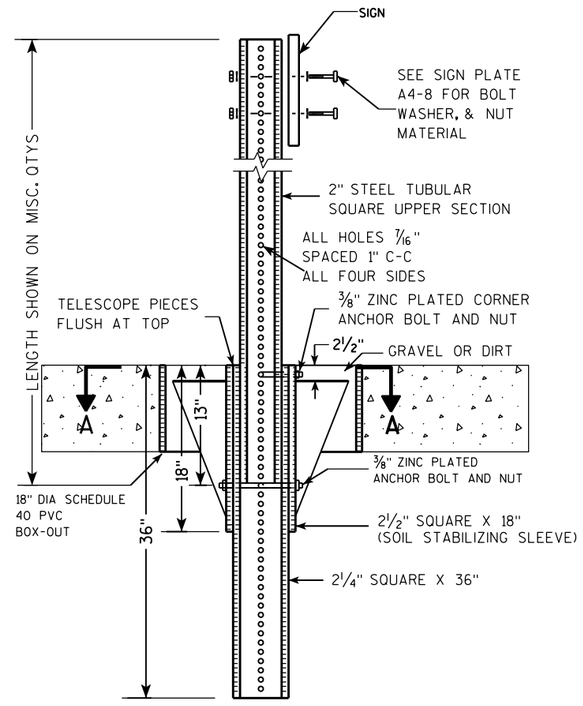
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



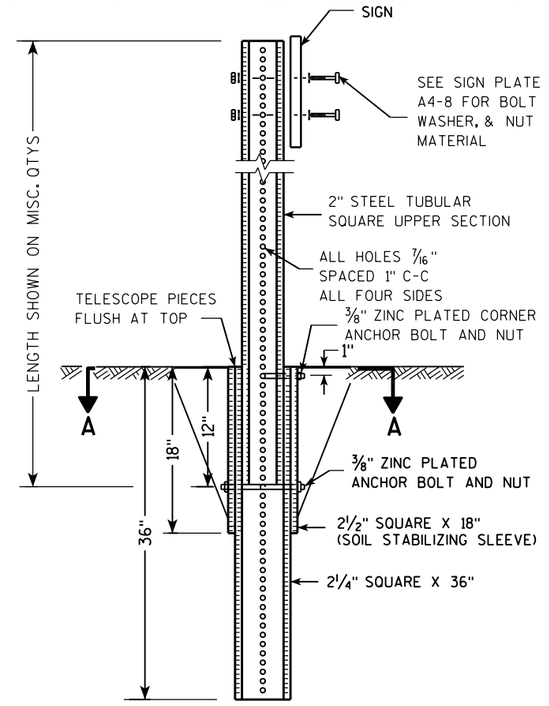
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

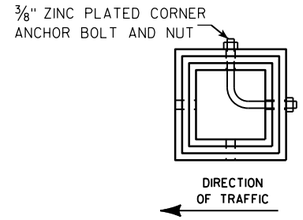


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

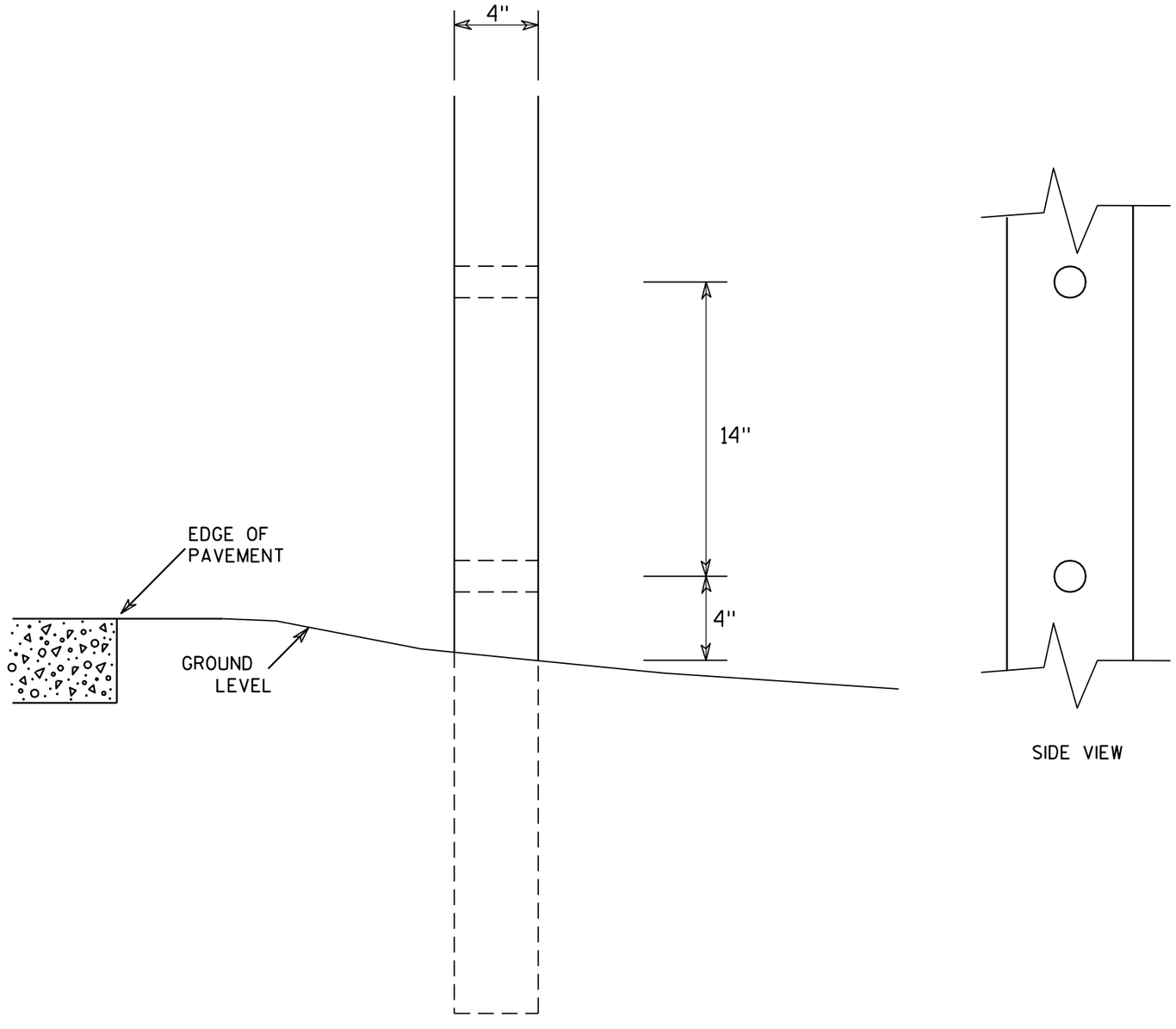
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000
WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

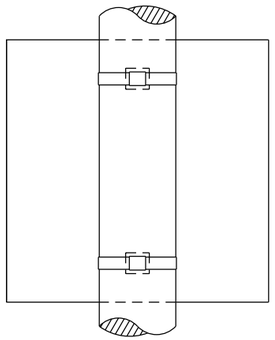
APPROVED Chester J Spang
for State Traffic Engineer

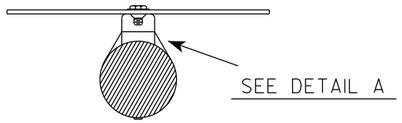
DATE 3/27/97 PLATE NO. A4-11.2

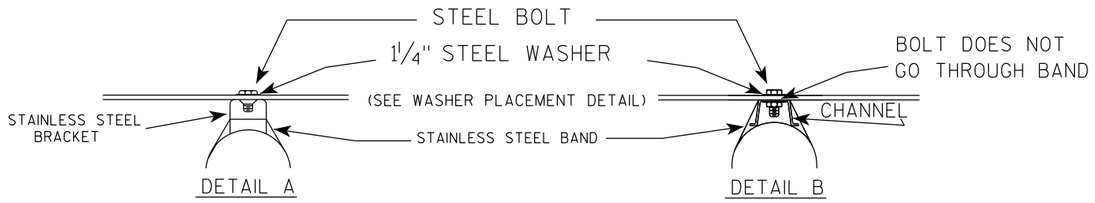
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 64	E

BANDING

SINGLE SIGN



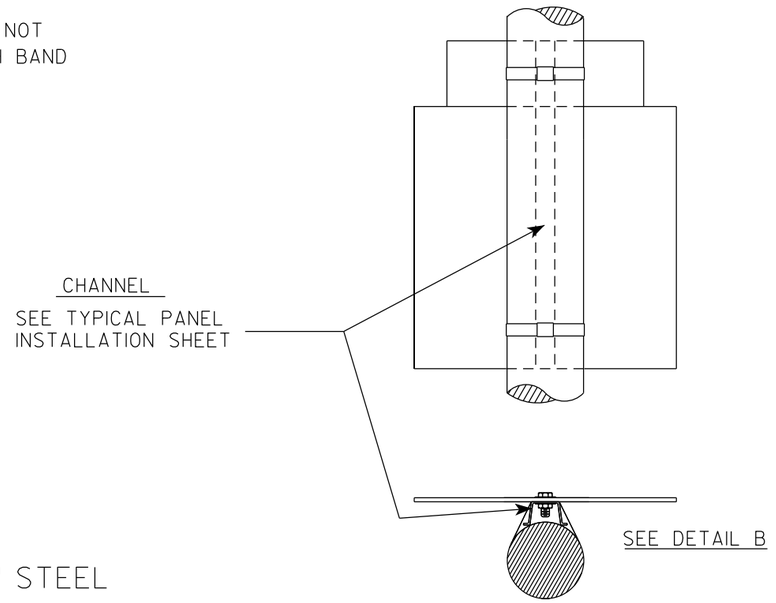




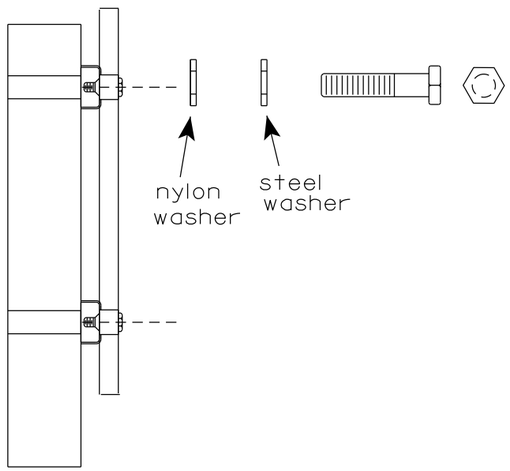
GENERAL NOTES

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

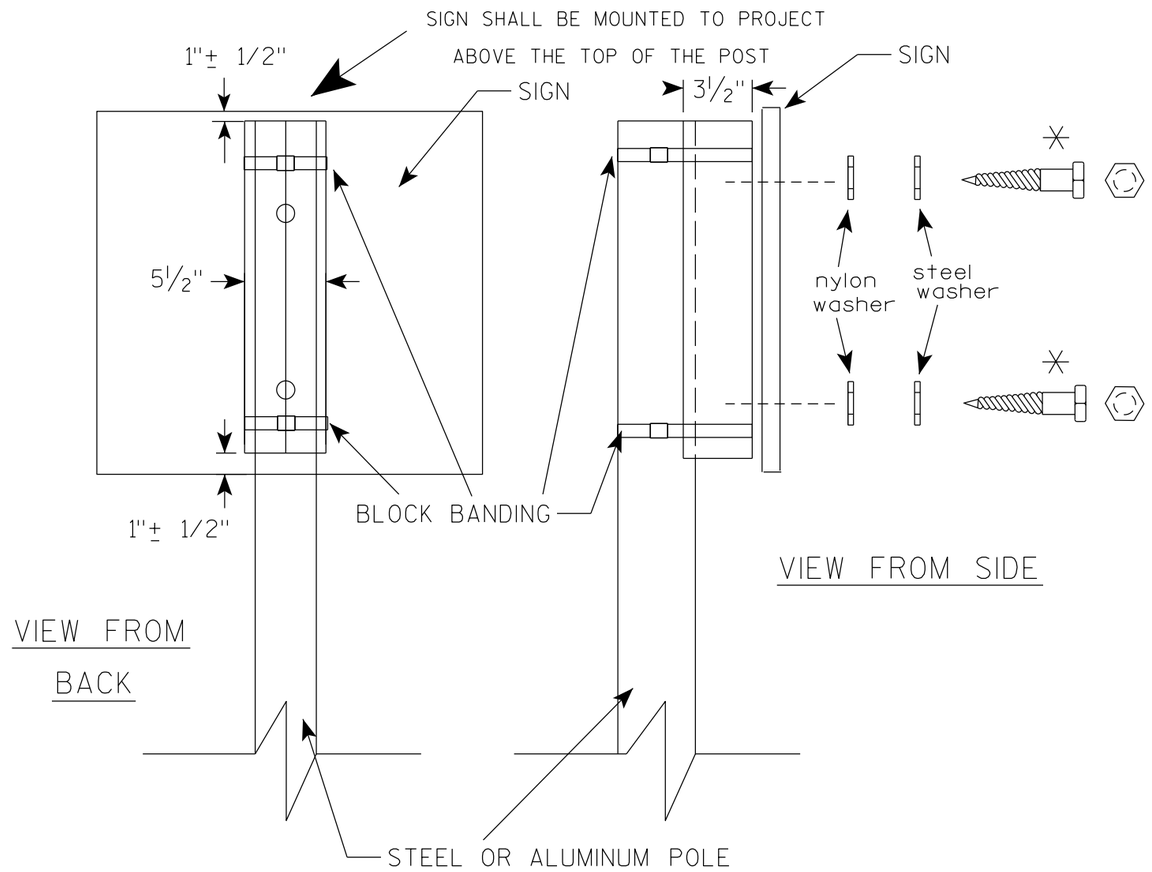
WISCONSIN DEPT OF TRANSPORTATION

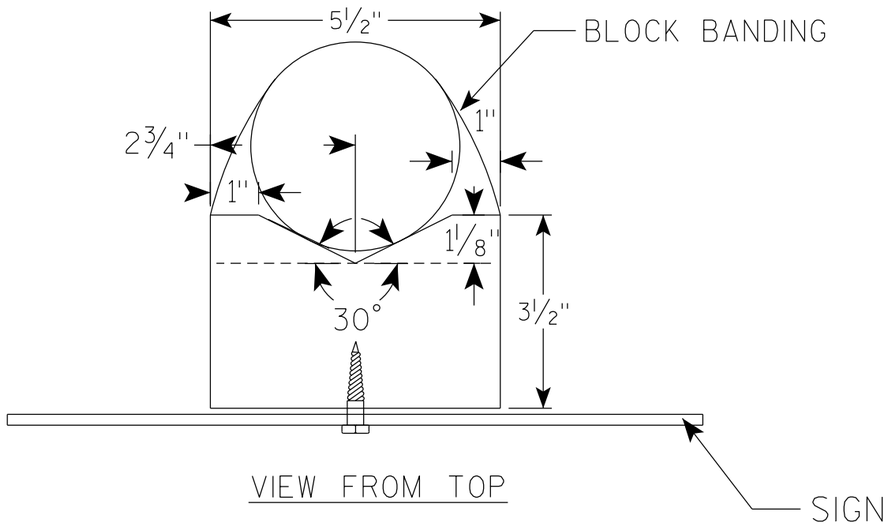
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 65	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42





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)

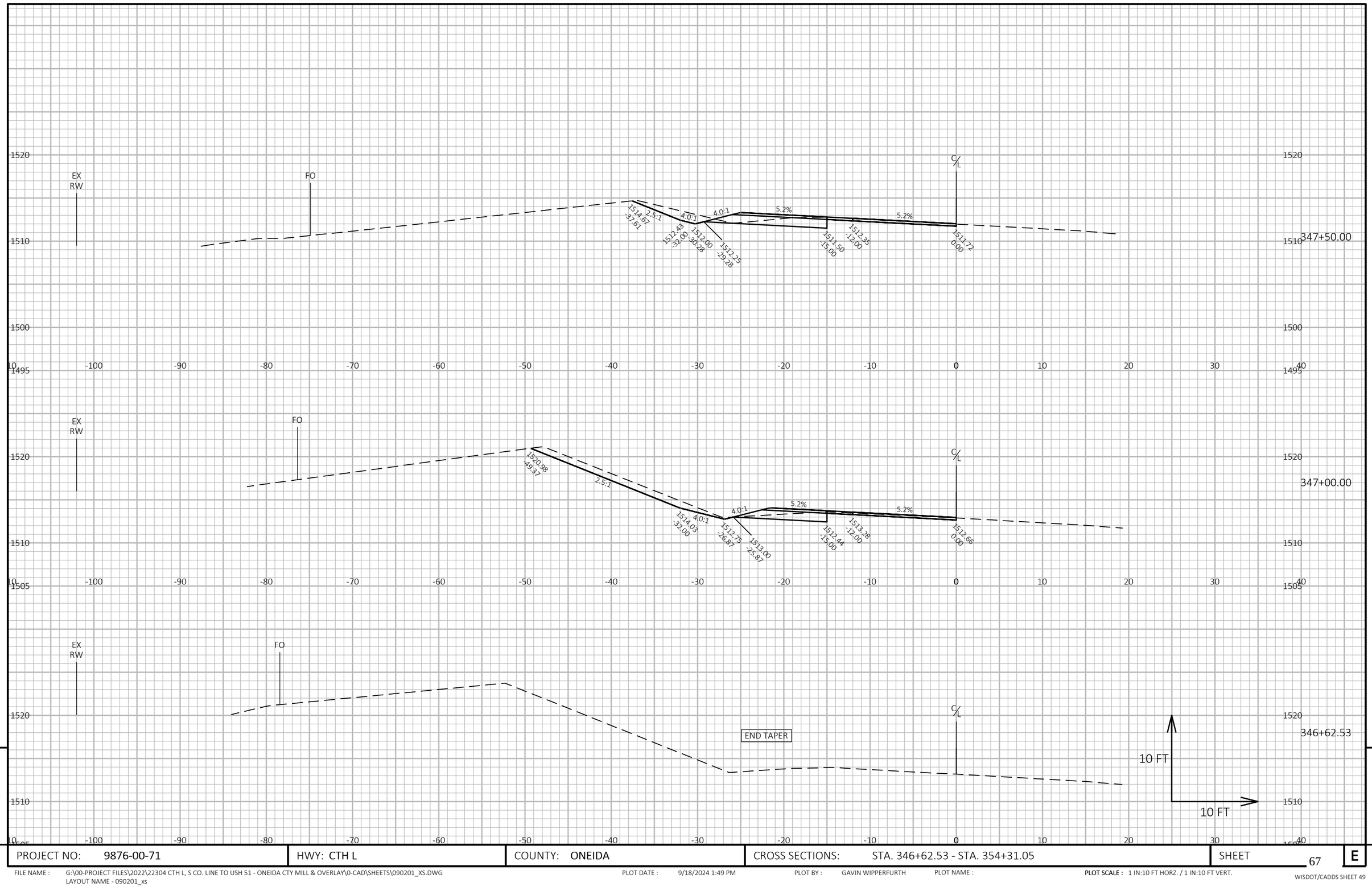
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 66 E



9

9

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS: STA. 346+62.53 - STA. 354+31.05	SHEET 67	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090201_xs

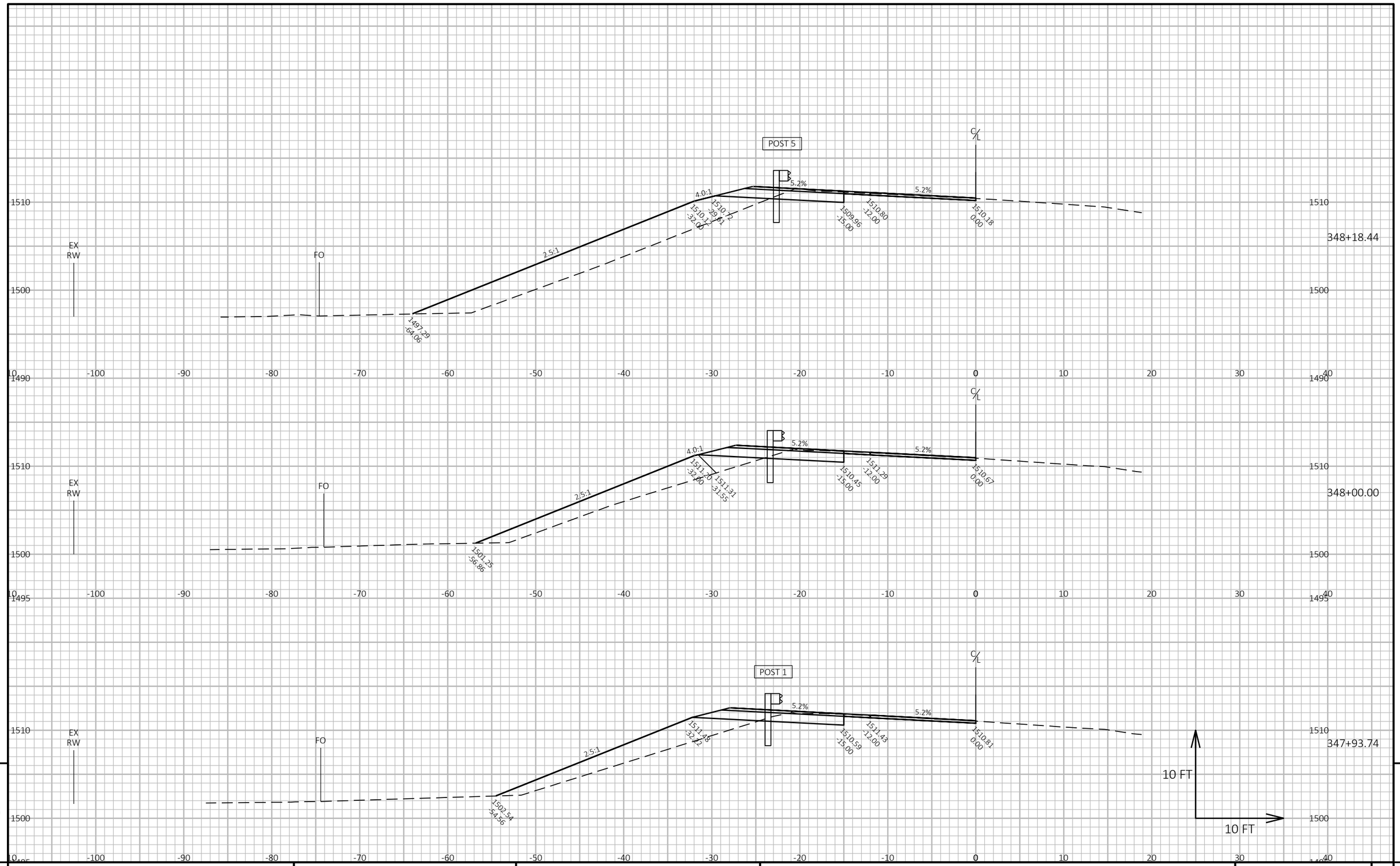
PLOT DATE : 9/18/2024 1:49 PM

PLOT BY : GAVIN WIPPERFURTH

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

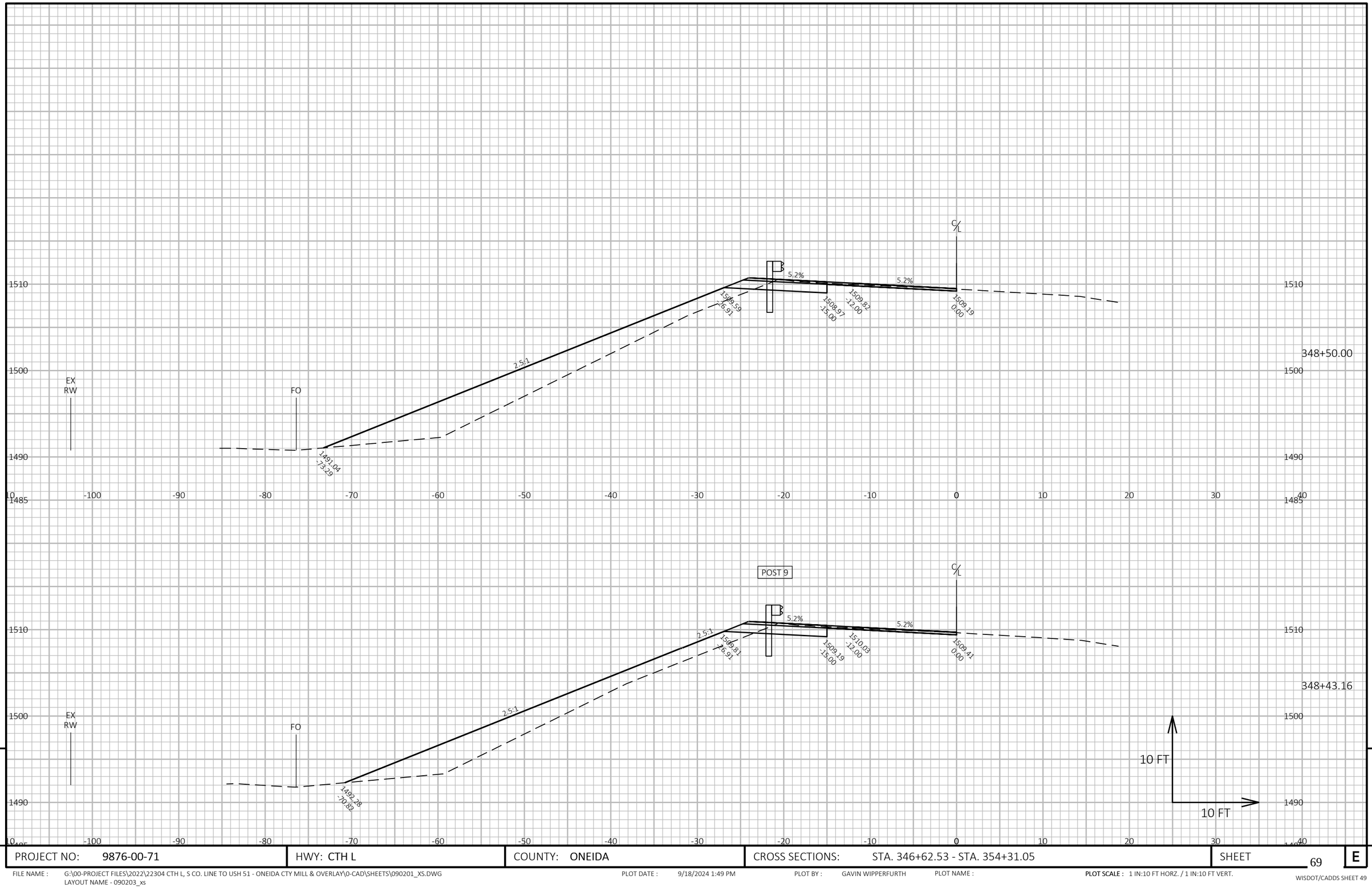
9

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS: STA. 346+62.53 - STA. 354+31.05	SHEET 68	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090202_xs

PLOT DATE : 9/18/2024 1:49 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



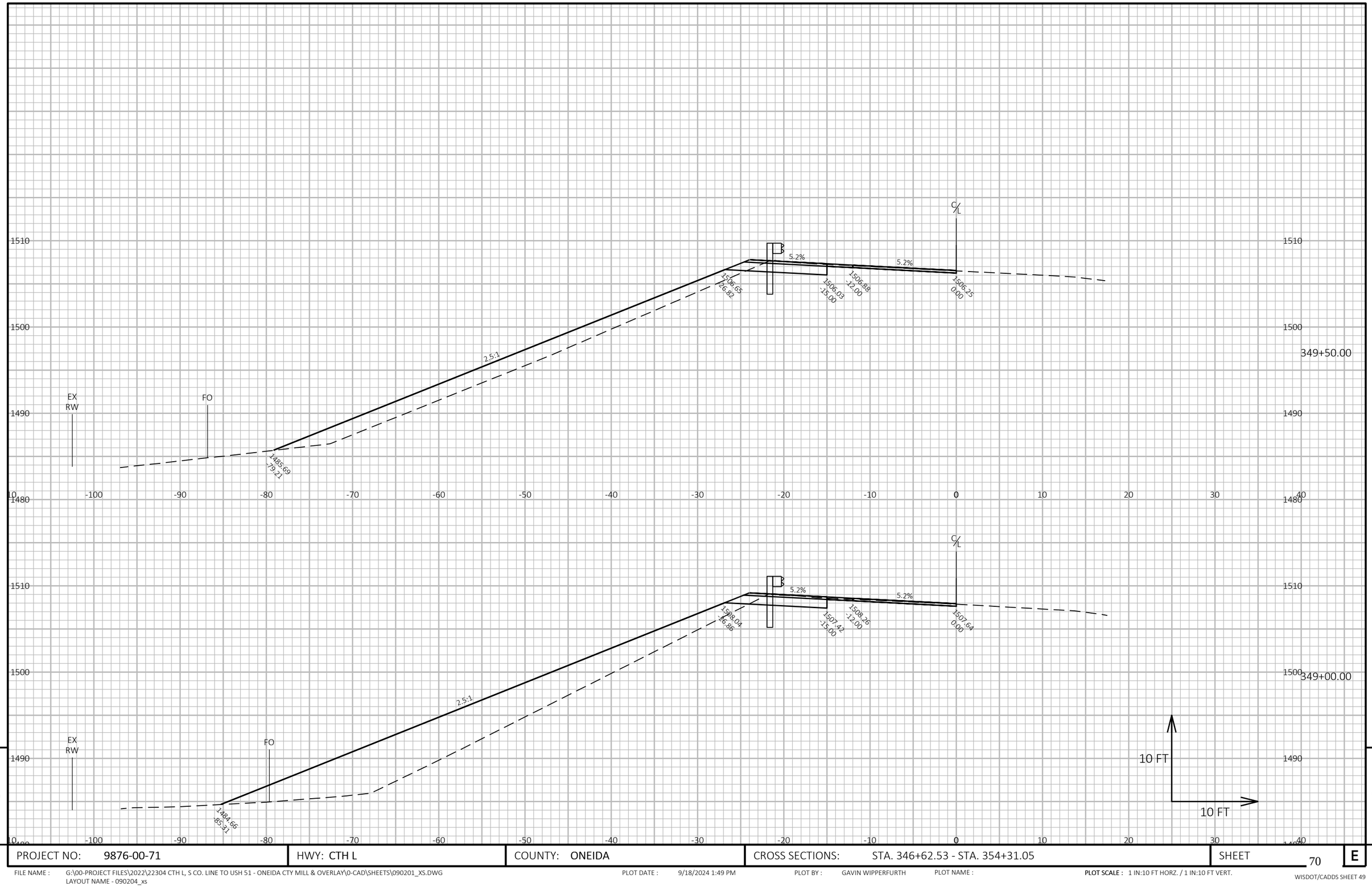
9 9

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS: STA. 346+62.53 - STA. 354+31.05	SHEET 69	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090203_xs

PLOT DATE : 9/18/2024 1:49 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

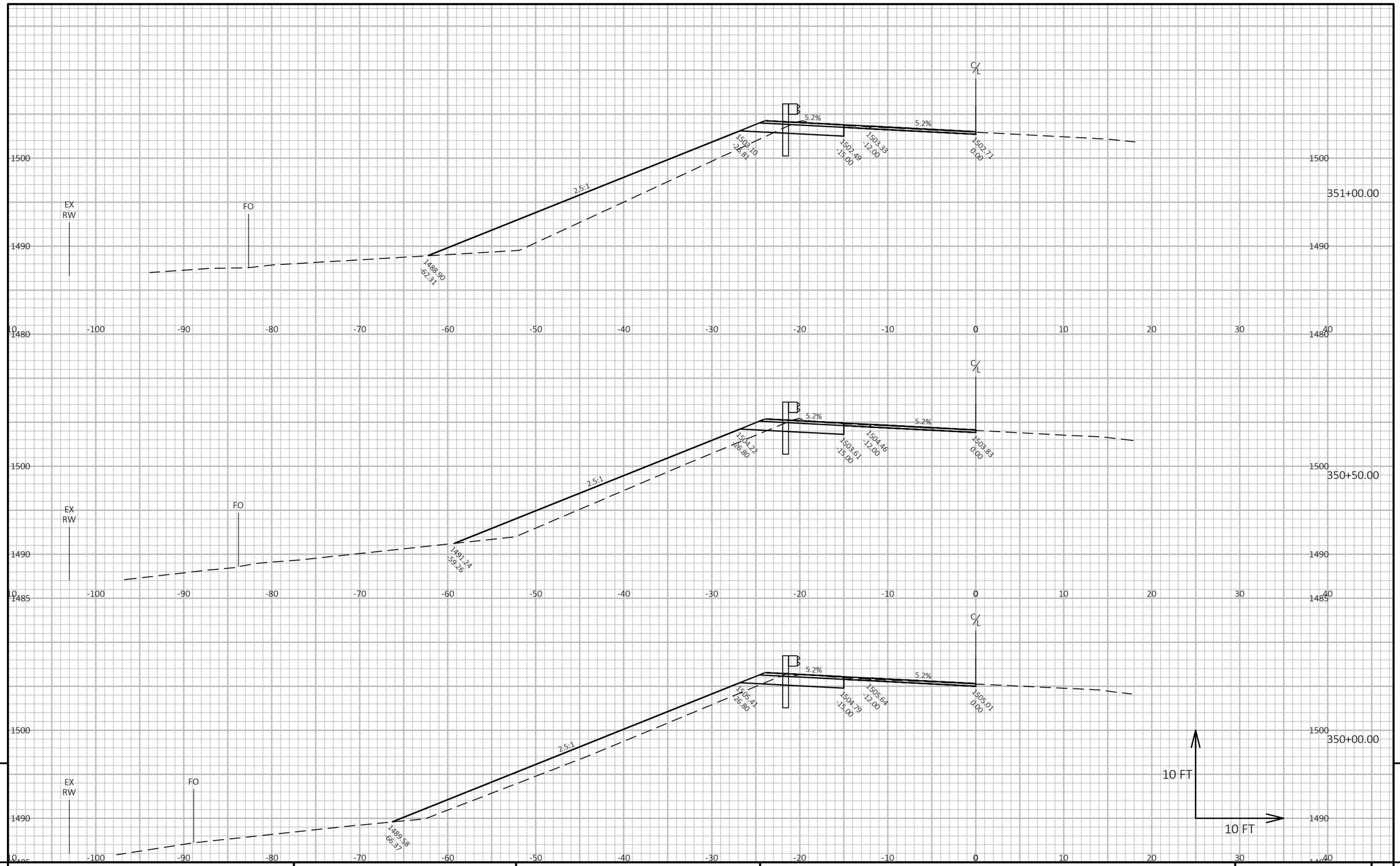


PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS: STA. 346+62.53 - STA. 354+31.05	SHEET 70	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090204_xs

PLOT DATE : 9/18/2024 1:49 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

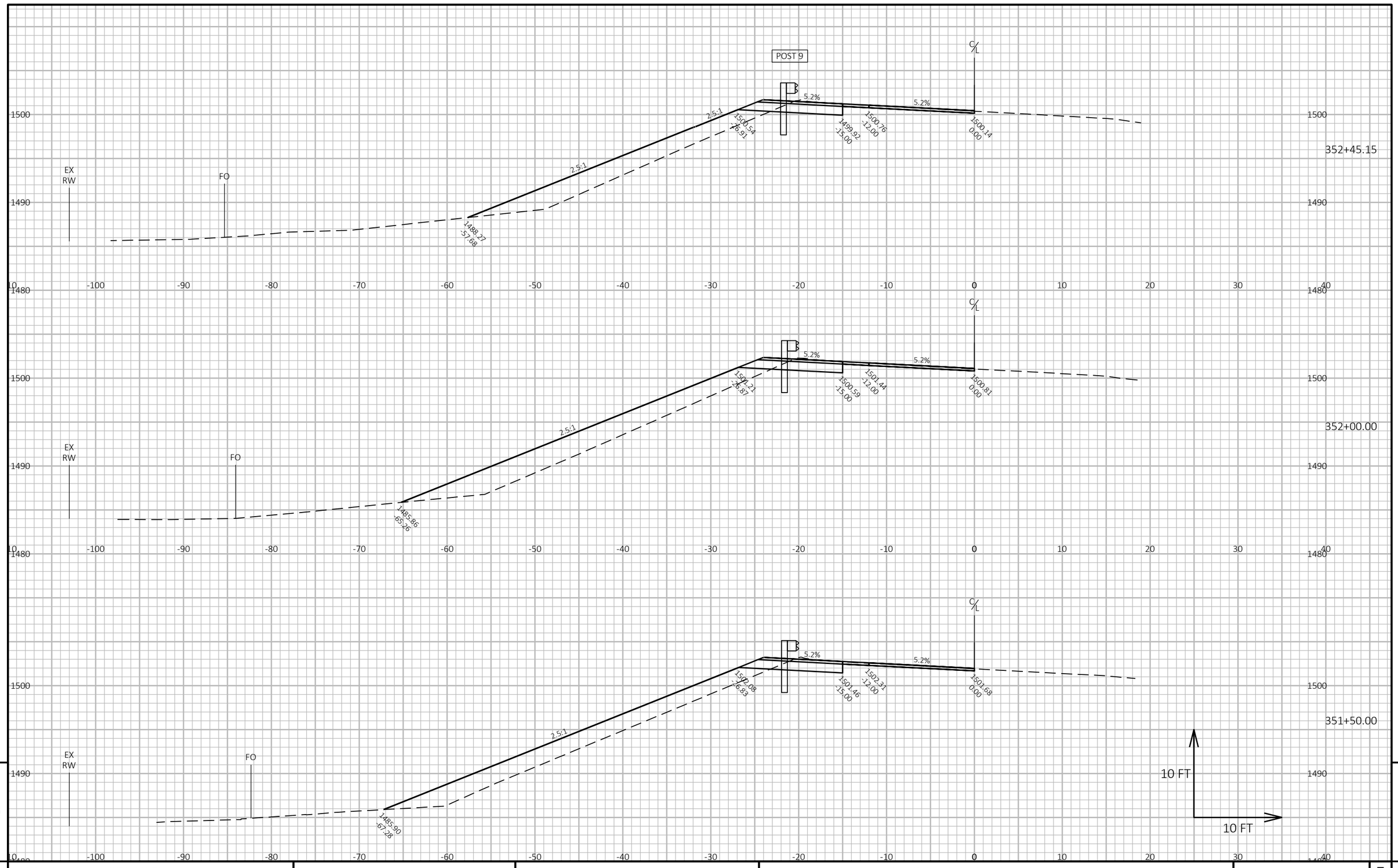
9

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS: STA. 346+62.53 - STA. 354+31.05	SHEET 71	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090205_xs

PLOT DATE : 9/18/2024 1:49 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

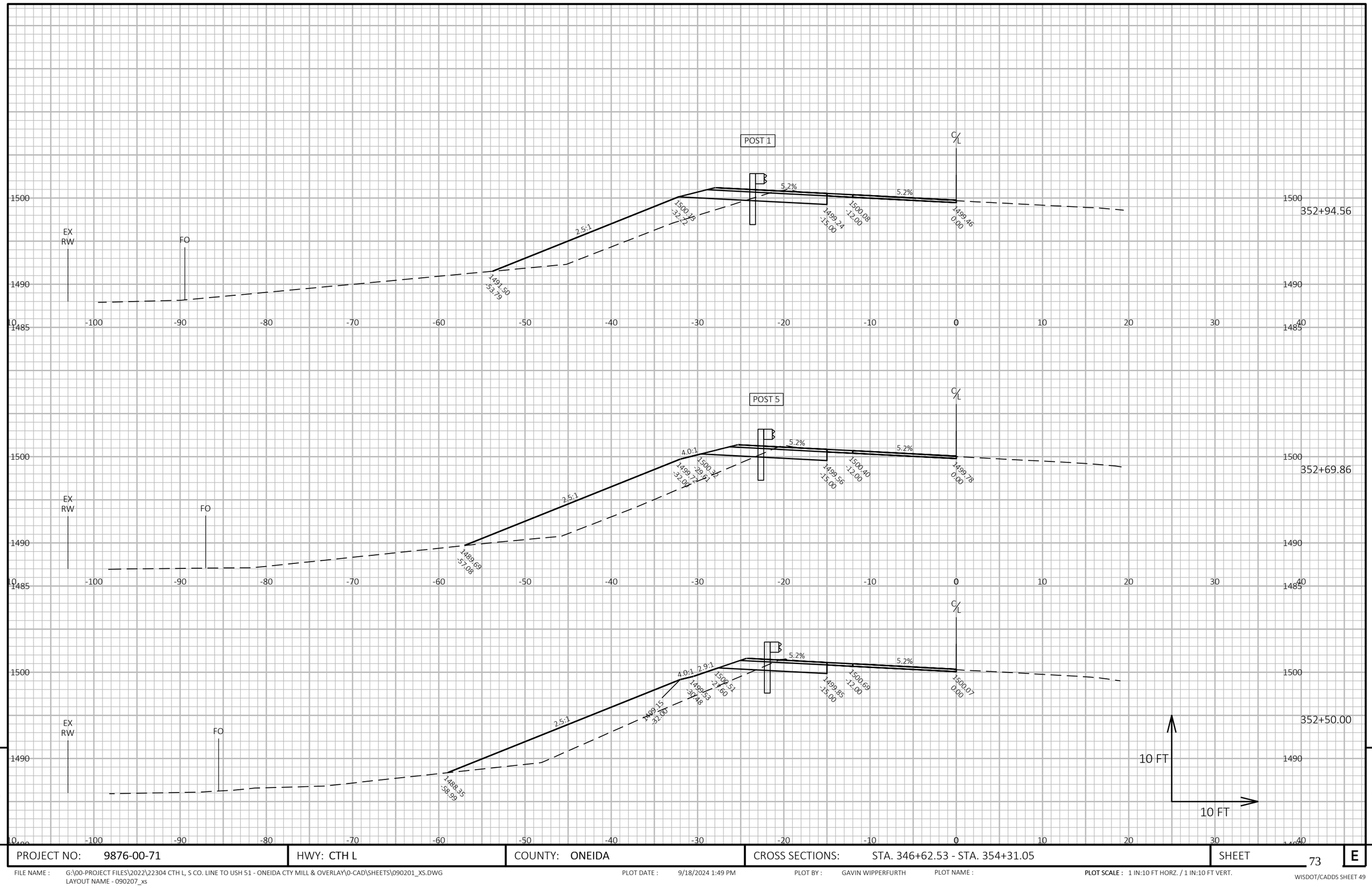
WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS: STA. 346+62.53 - STA. 354+31.05	SHEET 72	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090206_xs
PLOT DATE : 9/18/2024 1:49 PM
PLOT BY : GAVIN WIPPERFURTH
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



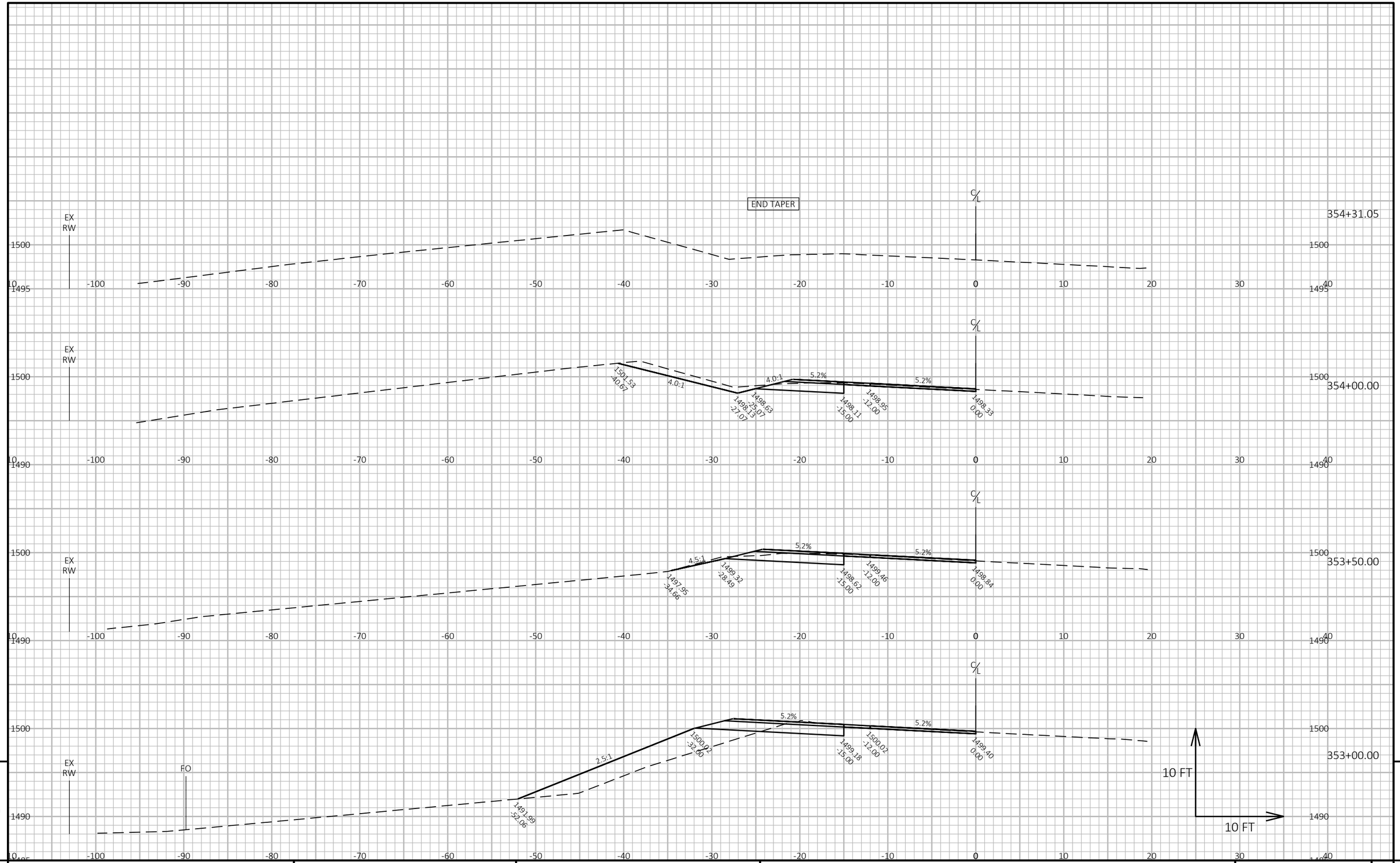
9

9

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS: STA. 346+62.53 - STA. 354+31.05	SHEET 73	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090207_xs

PLOT DATE : 9/18/2024 1:49 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

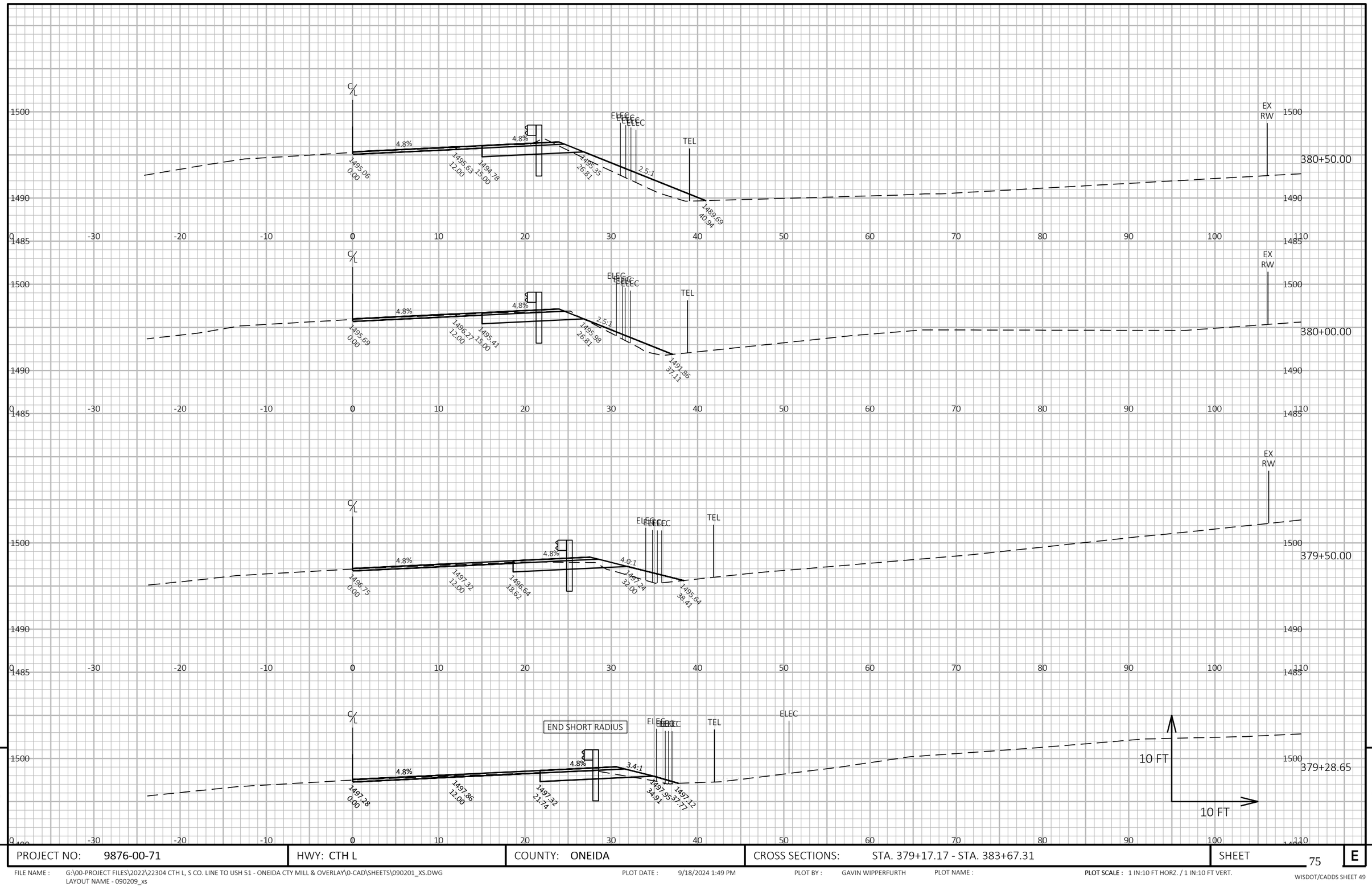
9

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS: STA. 346+62.53 - STA. 354+31.05	SHEET 74	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090208_xs

PLOT DATE : 9/18/2024 1:49 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



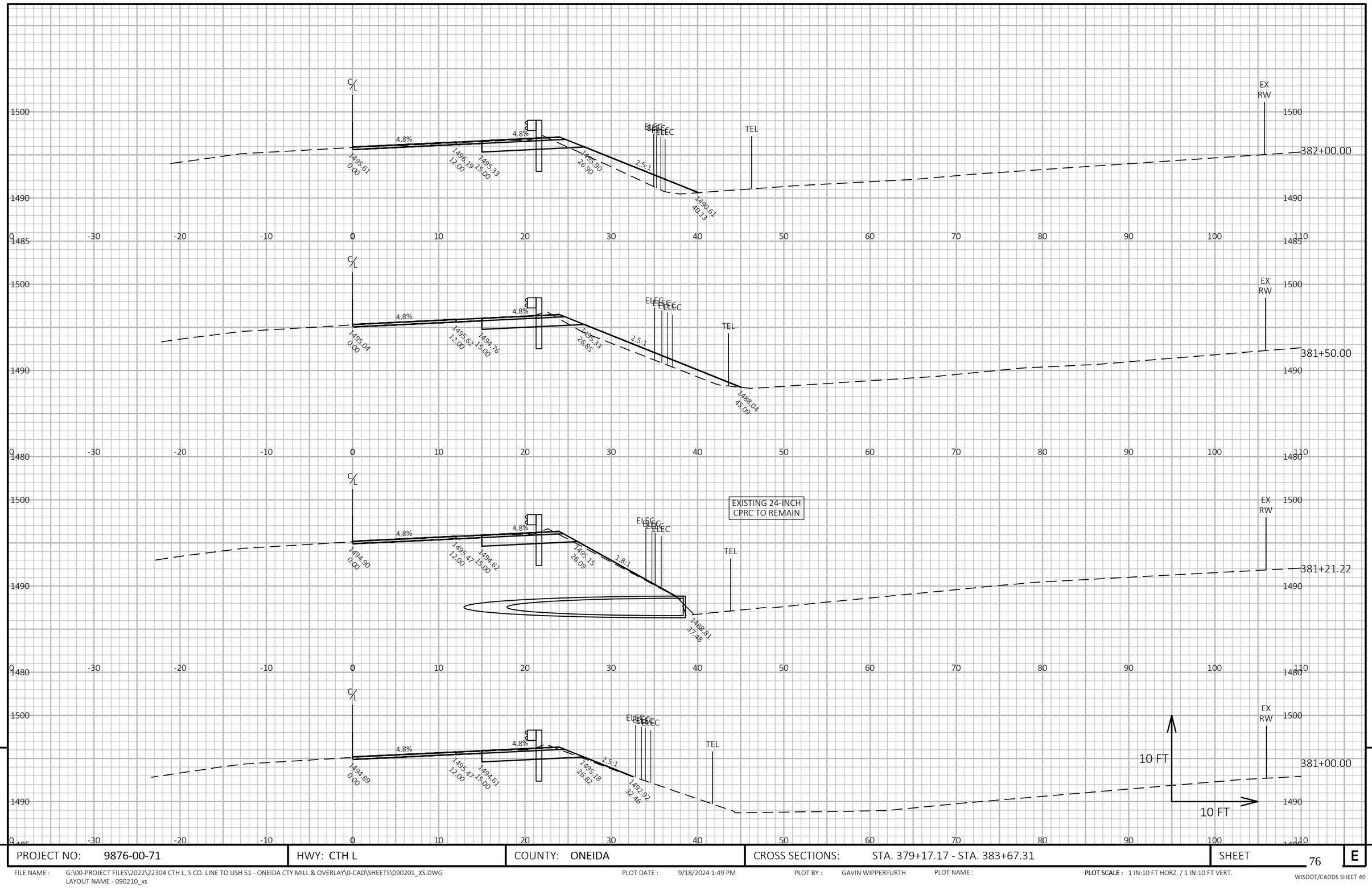
9

9

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS: STA. 379+17.17 - STA. 383+67.31	SHEET 75	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090209_xs

PLOT DATE : 9/18/2024 1:49 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

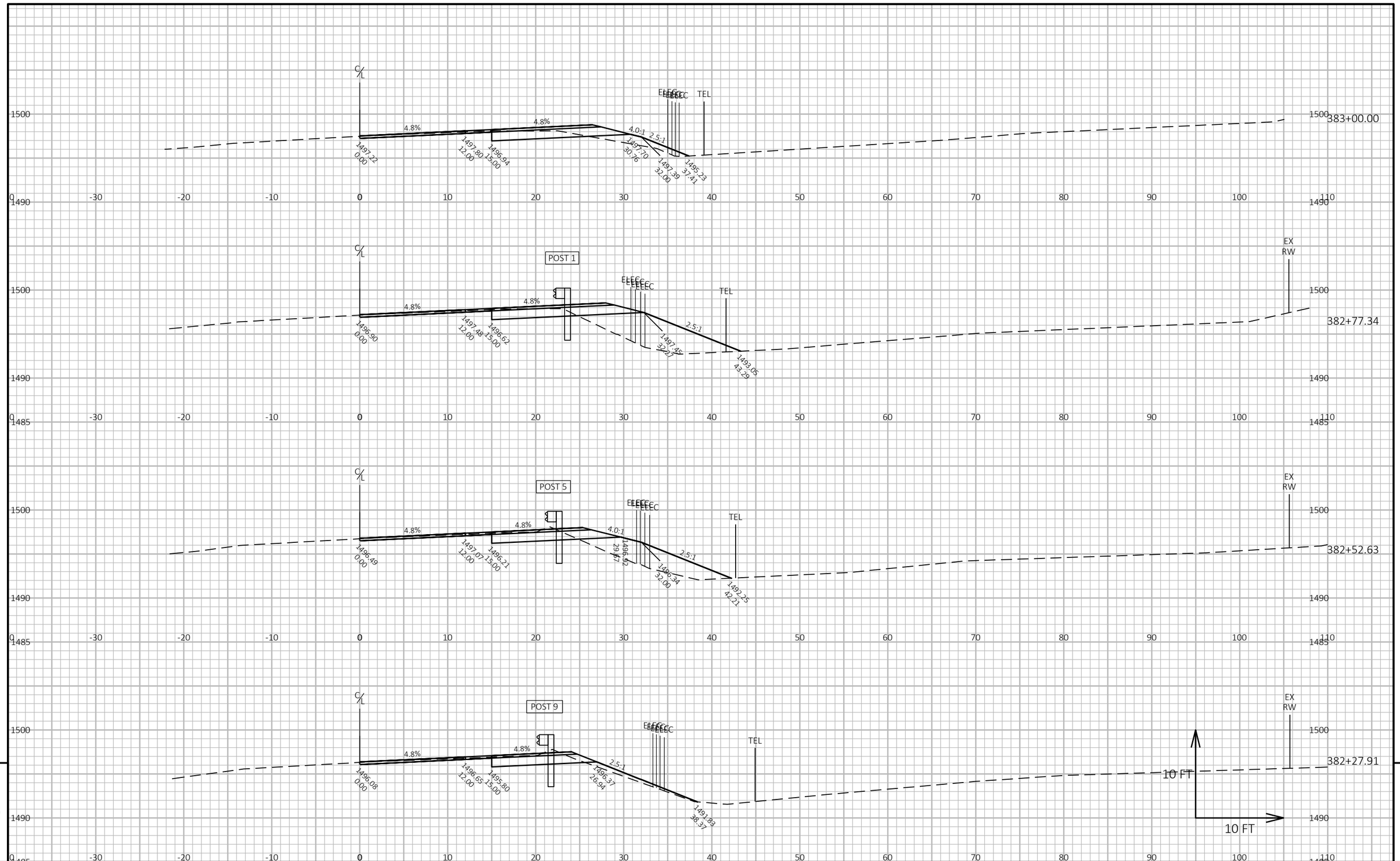
9

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS: STA. 379+17.17 - STA. 383+67.31	SHEET 76	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090210_xs

PLOT DATE : 9/18/2024 1:49 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

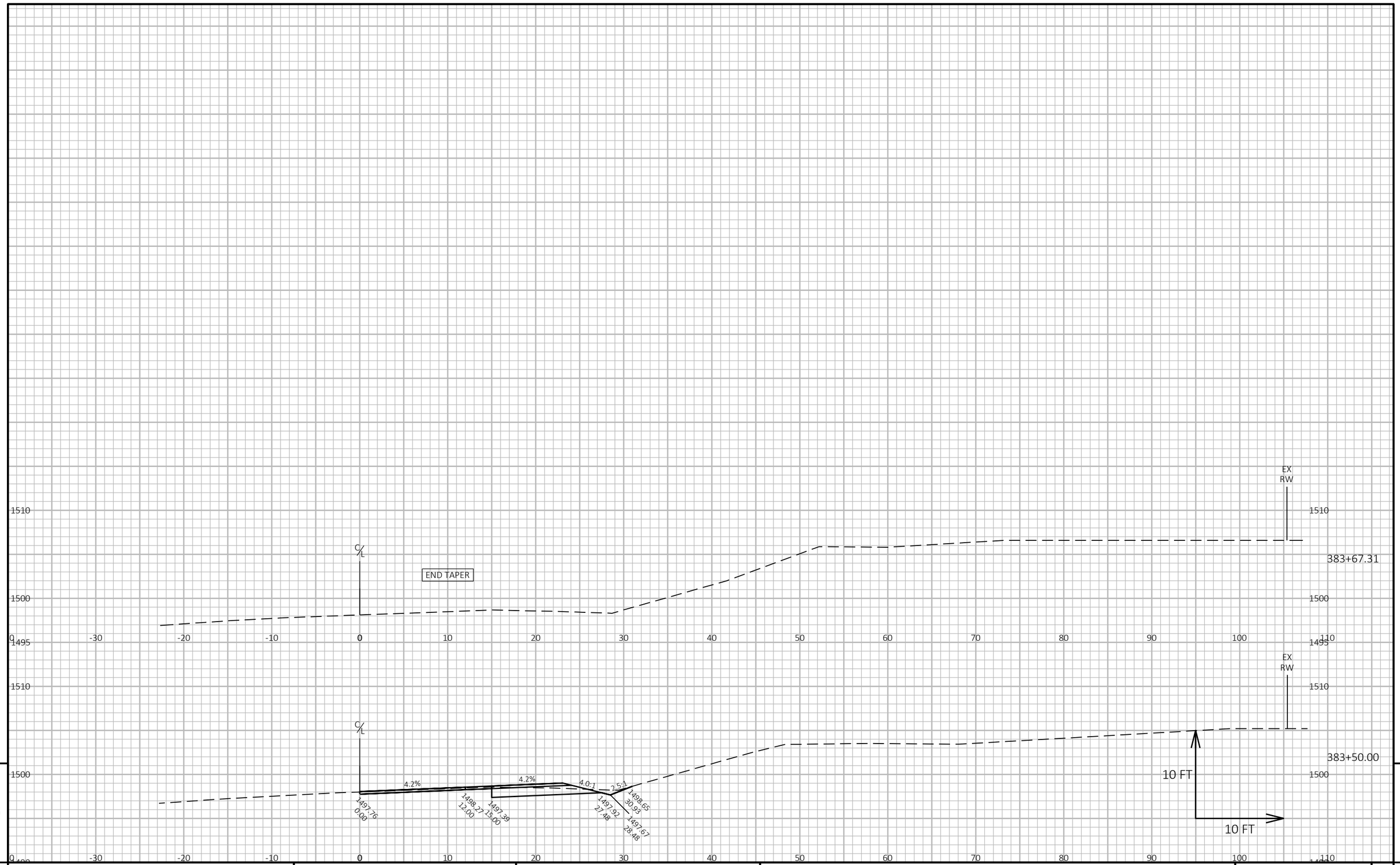
9

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS: STA. 379+17.17 - STA. 383+67.31	SHEET 77	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090211_xs

PLOT DATE : 9/18/2024 1:49 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

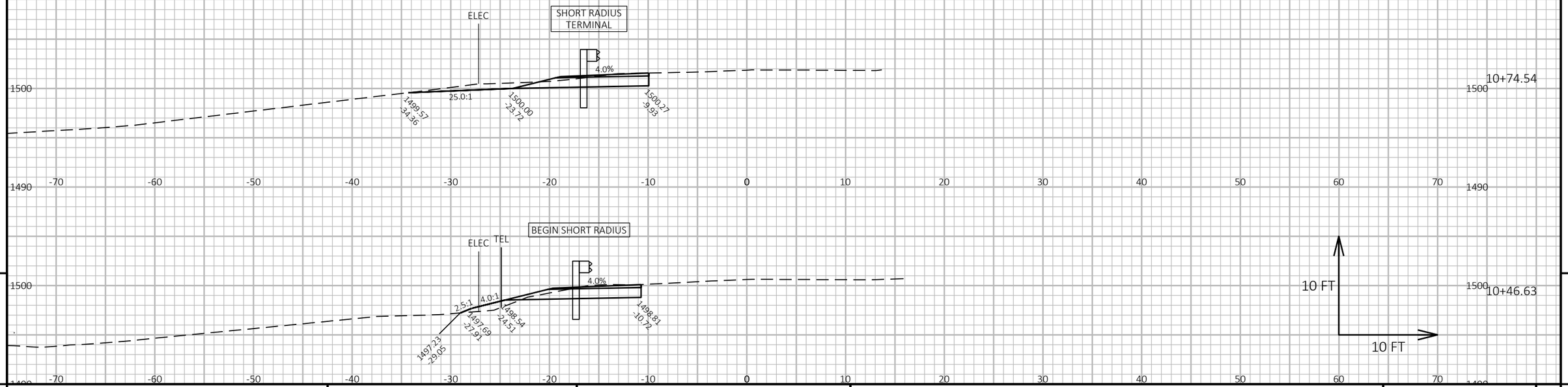
9

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS: STA. 379+17.17 - STA. 383+67.31	SHEET 78	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090212_xs

PLOT DATE : 9/18/2024 1:49 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 9876-00-71	HWY: CTH L	COUNTY: ONEIDA	CROSS SECTIONS: BRANCH ROAD	SHEET 79	E

FILE NAME : G:\00-PROJECT FILES\2022\22304 CTH L, S CO. LINE TO USH 51 - ONEIDA CTY MILL & OVERLAY\0-CAD\SHEETS\090201_XS.DWG
LAYOUT NAME - 090213_xs

PLOT DATE : 9/18/2024 1:49 PM PLOT BY : GAVIN WIPPERFURTH PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov