RHI

JUNE 2021

PROJECT ID: 1176-22-72 / 1176-22-73

WITH: N/A

COUNTY: LINCOLN

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1176-22-72	WISC 2021355	1
1176-22-73	WISC 2021356	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WAUSAU - MERRILL
MARATHON COUNTY LINE TO CTH K, SB

USH 51
LINCOLN COUNTY

STATE PROJECT NUMBER
1176-22-72

WAUSAU - MERRILL
MARATHON COUNTY LINE TO CTH K, NB

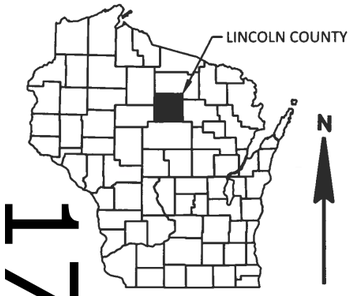
USH 51
LINCOLN COUNTY

STATE PROJECT NUMBER
1176-22-73

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 = 212



17

DESIGN DESIGNATION 1176-22-72/73

A.A.D.T.	2021	=	20,400
A.A.D.T.	2041	=	23,000
D.H.V.		=	20.2
D.D.		=	60/40
T.		=	24.1%
DESIGN SPEED		=	70 MPH
ESALS		=	

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'ER)
- 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

STA 477+61.84 'SB' AHD=
STA 477+81.14 'SB' BK

STA 450+20.54.84 'SB' AHD=
STA 450+77.28 'SB' BK

END PROJECT 1176-22-72
STA 441+65.35 SB

STA 450+20.54 'SB' AHD=
STA 450+77.28 'SB' BK

EXCEPTION TO NET CENTERLINE LENGTH
B-35-32
STA 409+09 SB TO STA 411+35 SB

STA 376+11.81 'SB' AHD=
STA 375+33.47 'SB' BK

EXCEPTION TO NET CENTERLINE LENGTH
B-35-29
STA 295+47 SB TO STA 297+82 SB

STA 290+82.29 'SB' AHD=
STA 291+03.30 'SB' BK

EXCEPTION TO NET CENTERLINE LENGTH
B-35-37
STA 241+87 SB TO STA 243+51 SB

STA 247+91.26 'SB' AHD=
STA 247+61.72 'SB' BK

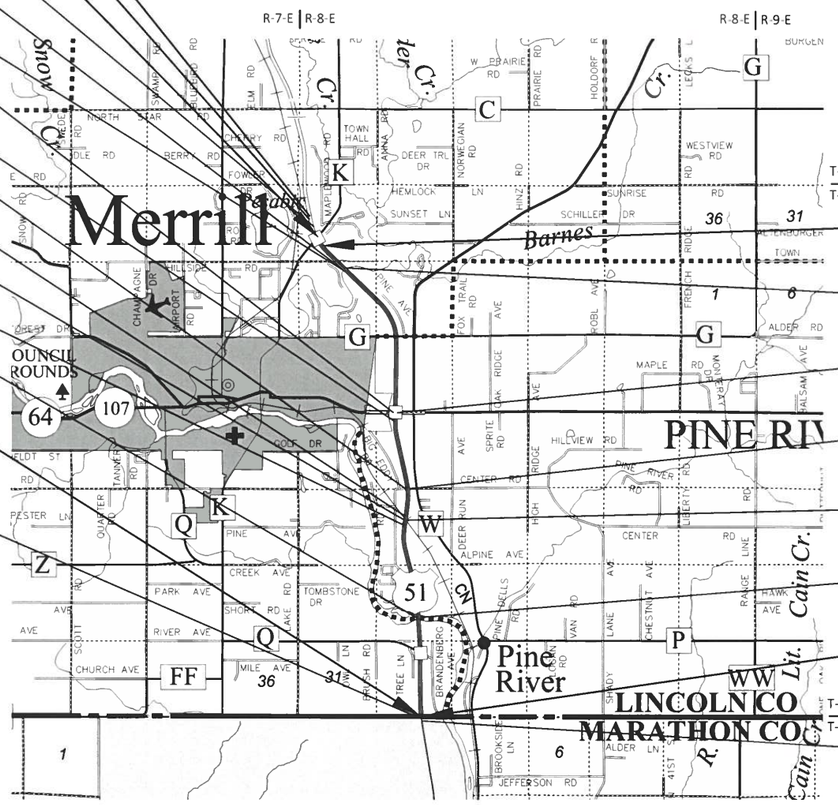
EXCEPTION TO NET CENTERLINE LENGTH
B-35-27
STA 220+64 SB TO STA 223+19 SB

STA 215+98.87 'SB' AHD=
STA 216+27.47 'SB' BK

EXCEPTION TO NET CENTERLINE LENGTH
B-35-25
STA 150+09 SB TO STA 155+12 SB

BEGIN PROJECT 1176-22-72
STA 84+48.72 SB
Y=100,563.139
X=405,075.195

STA 82+91.15 'SB' AHD=
STA 771+23.82 'SB' BK



END PROJECT 1176-22-73
STA 435+03.03NB

EXCEPTION TO NET CENTERLINE LENGTH
B-35-31
STA 408+76 NB TO STA 411+02 NB

EXCEPTION TO NET CENTERLINE LENGTH
B-35-28
STA 295+47 NB TO STA 297+85 NB

EXCEPTION TO NET CENTERLINE LENGTH
B-35-36
STA 241+95 NB TO STA 243+61 NB

EXCEPTION TO NET CENTERLINE LENGTH
B-35-26
STA 219+56 NB TO STA 222+12 NB

EXCEPTION TO NET CENTERLINE LENGTH
B-35-22
STA 149+20 NB TO STA 154+24 NB

BEGIN PROJECT 1176-22-73
STA 82+69.13 NB
Y=100,423.640
X=405,285.176

STA 82+58.10 'NB' AHD=
STA 771+02.83 'NB' BK

LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 6.478 MILES SB
6.410 MILES NB

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

ORIGINAL PLANS PREPARED BY
Westwood

WISCONSIN PROFESSIONAL ENGINEER
DAVID S. GALE
E-26283
Luxemburg, Wis.
2/23/21

DATE: _____ (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	OMNNI ASSOCIATES / WESTWOOD
Designer	OMNNI ASSOCIATES / WESTWOOD
Project Manager	STACY HAGENBUCHER
Regional Examiner	
Regional Supervisor	JED PETERS

APPROVED FOR THE DEPARTMENT — DocuSigned by:
DATE: 2/23/21 Robin Stafford (Signature)
ECB41D59D625461...

E

GENERAL NOTES

CURVE DATA IS BASED ON THE ARC DEFINITION.

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.

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

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.

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES, THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF A LANDMARK IN ALL AREAS WHERE SUCH A LANDMARK MAY EXIST.

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

UTILITIES

ANR PIPELINE CO - GAS/PETROLEUM
TODD BRISTER
W3925 PIPELINE LANE
EDEN, WI 53019
PHONE: (920) 477-2235 WORK
PHONE: (920) 979-0060 MOBILE
E-MAIL: TODD_BRISTER@tcenergy.com

ATC MANAGEMENT INC - ELECTRICITY TRANSMISSION
DOUG VOSBERG
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
PHONE: (608) 877-7650
E-MAIL: DVOSBERG@atcllc.com

WISCONSIN PUBLIC SERVICE CORP- ELECTRICITY
CLAYTON VIRCKS
P.O. BOX 1166
WAUSAU, WI 54402
PHONE: (715) 848-7317
E-MAIL: CLAYTON.VIRCKS@wisconsinpublicservice.com

WISCONSIN PUBLIC SERVICE CORP- GAS/PETROLEUM
SHANE SARKKINEN
1700 SHERMAN ST
WAUSAU, WI 54401
PHONE: (715) 848-7387
E-MAIL: SHANE.SARKKINEN@wisconsinpublicservice.com

FRONTIER COMMUNICATIONS OF WI LLC
RUSS RYAN
315 OAK STREET
OAKFIELD, WI 53065
PHONE: (920) 583-3275
E-MAIL: RUSSELL.RYAN@ftr.com

NET LEC LLC
RICK VINCENT
450 SECURITY BLVD
GREEN BAY, WI 54313
PHONE: (920) 617-7316
E-MAIL: RICK.VINCENT@nsight.com

CHARTER COMMUNICATIONS
SCOTT OLSON
853 MCINTOSH ST
WAUSAU, WI 54402
PHONE: (715) 301-4079 WORK
E-MAIL: SCOTT.OLSON@charter.com

DNR
WENDY HENNIGES
107 SUTLIFF AVENUE
RHINELANDER , WI 54501
PHONE: (715) 365-8916 WORK
PHONE: (715) 365-8932 FAX
E-MAIL: wendy.henniges@Wisconsin.gov

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
EROSION CONTROL
TRAFFIC CONTROL
DETOUR PLAN
ALIGNMENT DIAGRAM

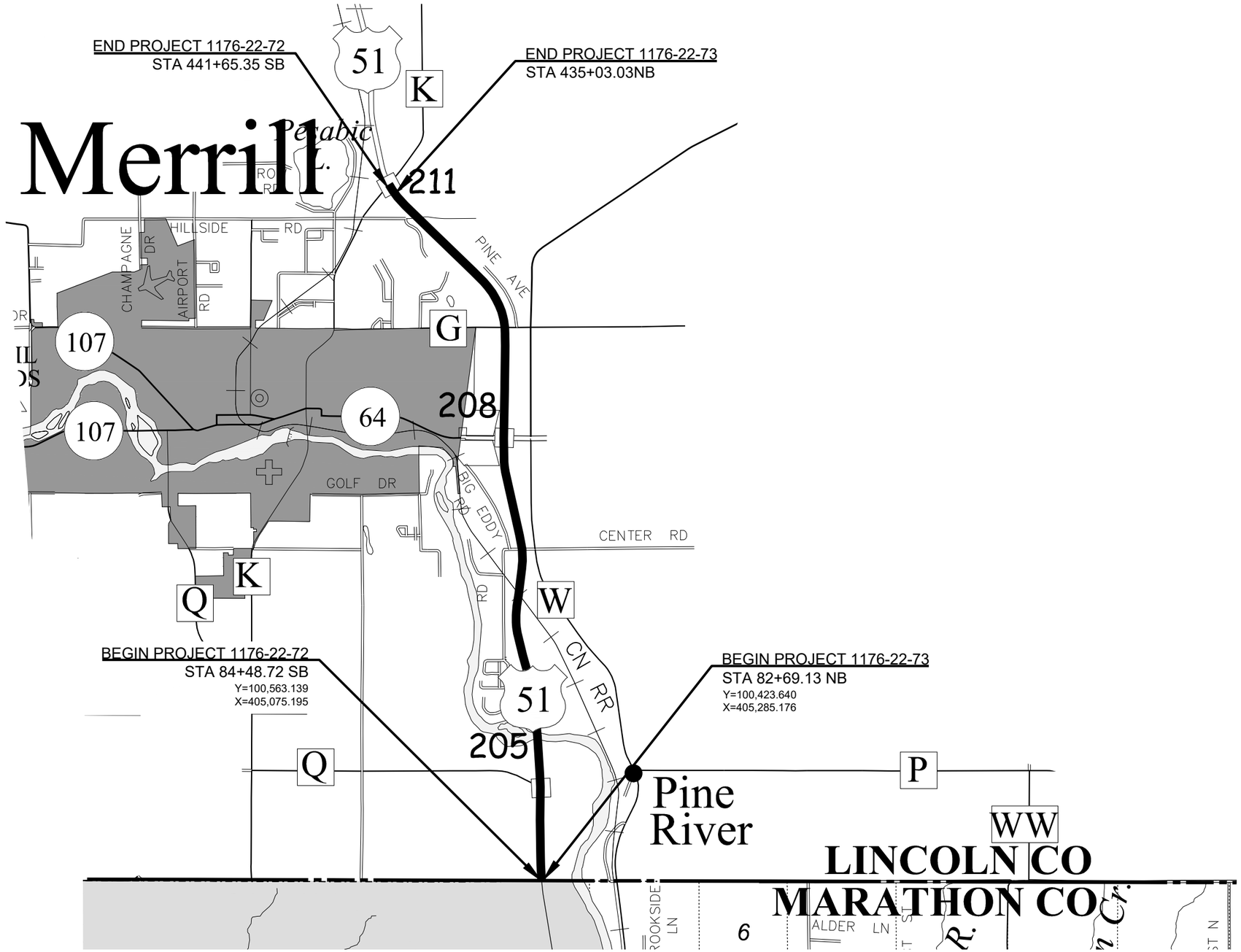
RUNOFF COEFFICIENT TABLE

	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 CORPS	0.08 0.22	0.16 0.30	0.22 0.38	0.12 0.26	0.20 0.34	0.27 0.44	0.15 0.30	0.24 0.37	0.33 0.50	0.19 0.34	0.28 0.41	0.38 0.56
MEDIAN STRIP TURF	0.19 0.24	0.20 0.26	0.24 0.30	0.19 0.25	0.22 0.28	0.26 0.33	0.20 0.26	0.23 0.30	0.30 0.37	0.20 0.27	0.25 0.32	0.30 0.40
SIDE SLOPE- TURF			0.25 0.32			0.27 0.34			0.28 0.36			0.30 0.38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVE ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 460 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 80 ACRES

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

2

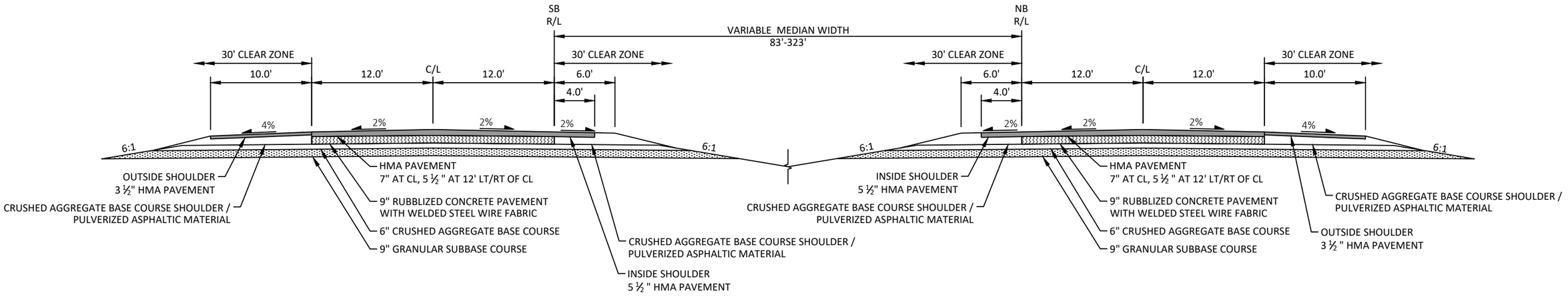


PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-020201-PO.DWG
LAYOUT NAME - 117622-020201-po

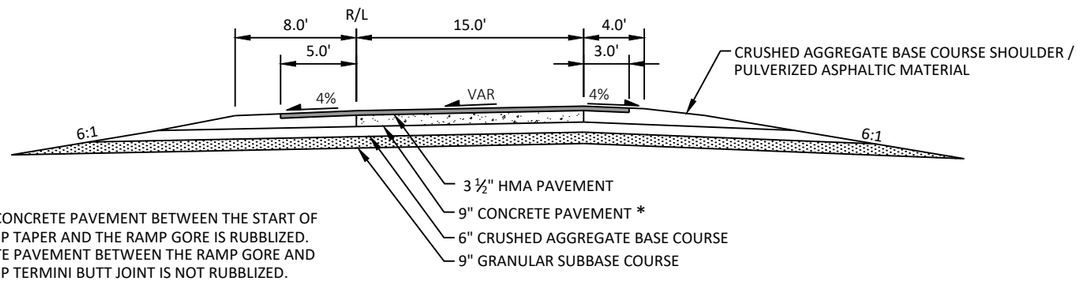
PLOT DATE : 1/21/2020 2:06 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:1 MI

2



EXISTING TYPICAL SECTION USH 51

STA 84'SB'+48.72 TO STA 441'SB'+65.35
STA 82'NB'+69.13 TO STA 435'NB'+03.03
(EXCLUDES STRUCTURE OVERPASS AND STRUCTURE APPROACH AREAS)



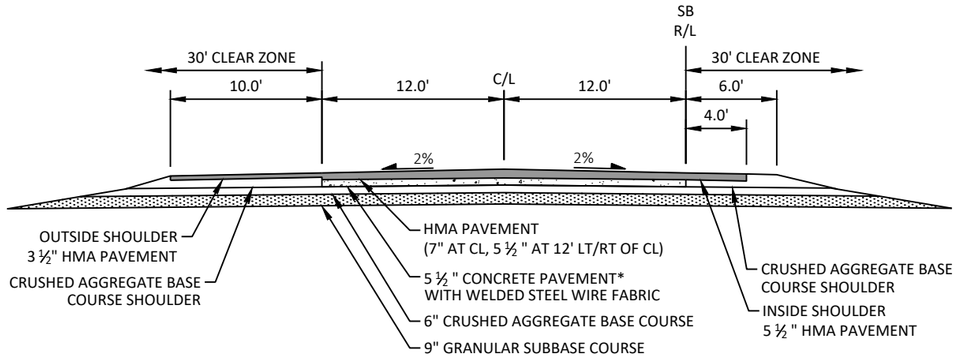
*NOTE: CONCRETE PAVEMENT BETWEEN THE START OF THE RAMP TAPER AND THE RAMP GORE IS RUBBLIZED. CONCRETE PAVEMENT BETWEEN THE RAMP GORE AND THE RAMP TERMINI BUTT JOINT IS NOT RUBBLIZED.

EXISTING TYPICAL SECTION RAMP

SOUTHBOUND RAMPS
CTH Q SB ENTRANCE - STA 106'AC'+57.87 TO STA 129'AC'+53.80
CTH Q SB EXIT - STA 130'AD'+89.37 TO STA 148'AD'+45.99
STH 64 SB ENTRANCE - STA 268'CC'+93.65 TO STA 296'CC'+39.85
STH 64 SB EXIT - STA 297'CD'+12.71 TO STA 316'CD'+65.70
CTH K SB ENTRANCE - STA 415'DC'+24.43 TO STA 438'DC'+02.69
CTH K SB EXIT - STA 437'DD'+63.03 TO STA 457'DD'+85.45

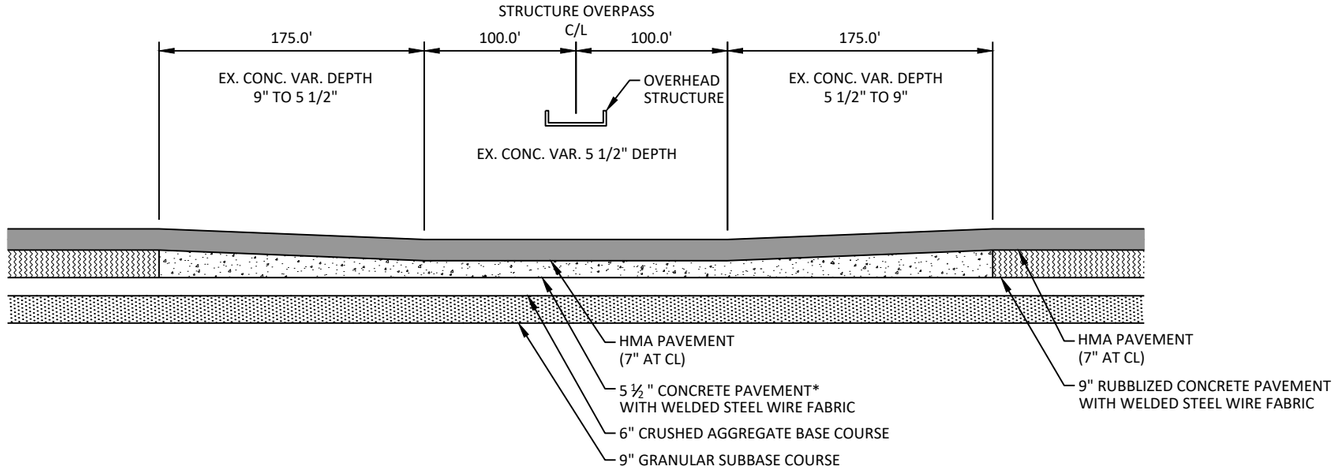
NORTHBOUND RAMPS
CTH Q NB EXIT - STA 108'AB'+09.01 TO STA 124'AB'81.72
CTH Q NB ENTRANCE - STA 125'AA'+92.59 TO STA 146'AA'+70.65
STH 64 NB EXIT - STA 272'CB'+59.45 TO STA 295'CB'+79.22
STH 64 NB ENTRANCE - STA 297'CA'+48.54 TO STA 319'CA'+69.91
CTH K NB EXIT - STA 420'DB'+07.80 TO STA 439'DB'+66.96
CTH K NB ENTRANCE - STA 441'DA'+83.89 TO STA 464'DA'+37.64

2



EXISTING TYPICAL HALF SECTION USH 51
AT UNDERPASS AREAS

CTH Q OVERPASS - STA 125+53 SB TO STA 129+03 SB
CTH G OVERPASS - STA 347+79 SB TO STA 351+29 SB
POPE RD OVERPASS - STA 416+94 SB TO STA 420+44 SB
CTH K OVERPASS - STA 437+67 SB TO STA 441+17 SB
CTH Q OVERPASS - STA 125+60 NB TO STA 129+10 NB
CTH G OVERPASS - STA 349+81 NB TO STA 351+31 NB
POPE RD OVERPASS - STA 416+17 NB TO STA 419+67 NB

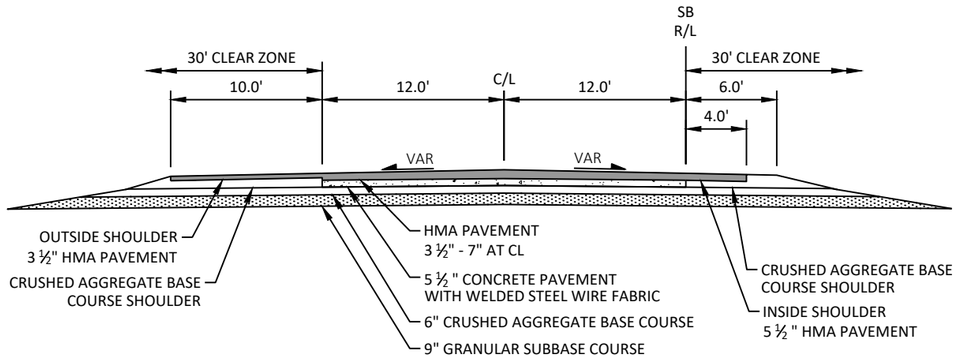


EXISTING USH 51 AT UNDERPASS AREAS
PROFILE VIEW

CTH Q OVERPASS C/L = STA 128+28 SB
CTH G OVERPASS C/L = STA 349+54 SB
POPE RD OVERPASS C/L = STA 418+69 SB
CTH Q OVERPASS C/L = STA 127+35 NB
CTH G OVERPASS C/L = STA 349+56 NB
POPE RD OVERPASS C/L = STA 417+92 NB

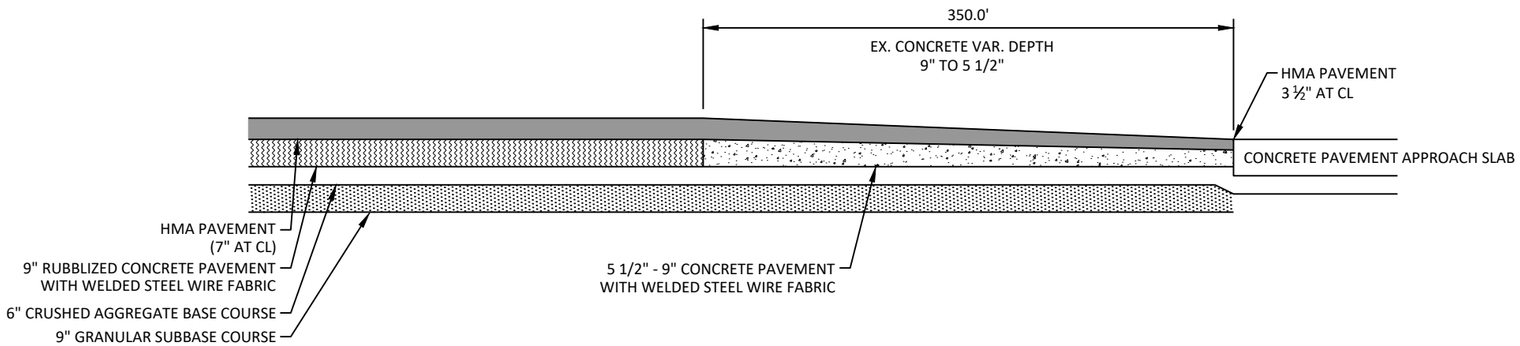
*NOTE: CONCRETE PAVEMENT AT CTH Q OVERPASS IS RUBBLIZED

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	TYPICAL SECTIONS	SHEET 5	E



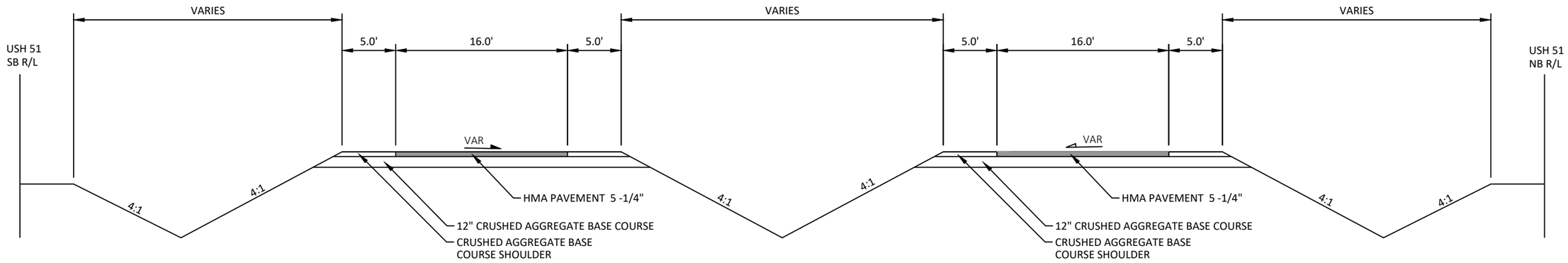
EXISTING TYPICAL HALF SECTION USH 51
STRUCTURE APPROACH AREAS

WISCONSIN RIVER -	STA 146+59 SB TO STA 150+09 SB AND STA 155+12 SB TO STA 158+62 SB
CN RAILROAD -	STA 217+14 SB TO STA 220+64 SB AND STA 223+19 SB TO STA 226+69 SB
CENTER RD -	STA 238+37 SB TO STA 241+87 SB AND STA 243+51 SB TO STA 247+01 SB
STH 64 -	STA 291+97 SB TO STA 295+47 SB AND STA 297+82 SB TO STA 301+32 SB
PRAIRIE RIVER -	STA 405+59 SB TO STA 409+09 SB AND STA 411+35 SB TO STA 414+85 SB
WISCONSIN RIVER -	STA 145+70 NB TO STA 149+20 NB AND STA 154+24 NB TO STA 157+74 NB
CN RAILROAD -	STA 216+06 NB TO STA 219+56 NB AND STA 222+12 NB TO STA 225+62 NB
CENTER RD -	STA 238+45 NB TO STA 241+95 NB AND STA 243+61 NB TO STA 247+11 NB
STH 64 -	STA 291+97 NB TO STA 295+47 NB AND STA 297+85 NB TO STA 301+35 NB
PRAIRIE RIVER -	STA 405+26 NB TO STA 408+76 NB AND STA 411+02 NB TO STA 414+52 NB



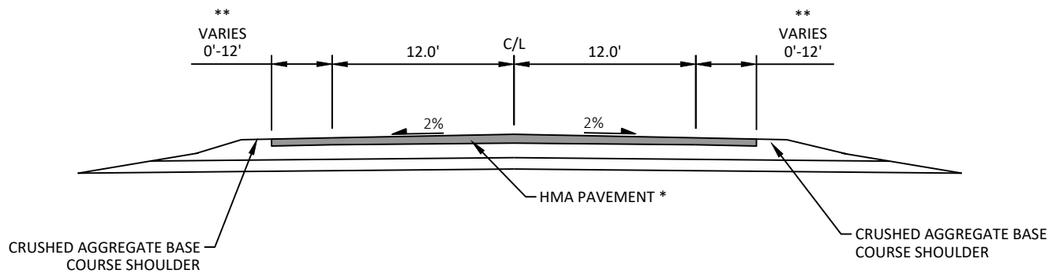
EXISTING STRUCTURE APPROACH AREA
PROFILE VIEW

2



EXISTING TYPICAL SECTION SINGLE LANE AND RAMP CROSSOVER

STA 749+00 SB AND STA 749+00 NB
STA 112+80 SB AND STA 112+25 NB
STA 143+50 SB TO STA 143+00 NB
STA 273+40 SB TO STA 273+40 NB
STA 316+40 SB TO STA 316+40 NB
STA 421+70 SB TO STA 421+70 NB
STA 472+00 SB TO STA 471+80 NB



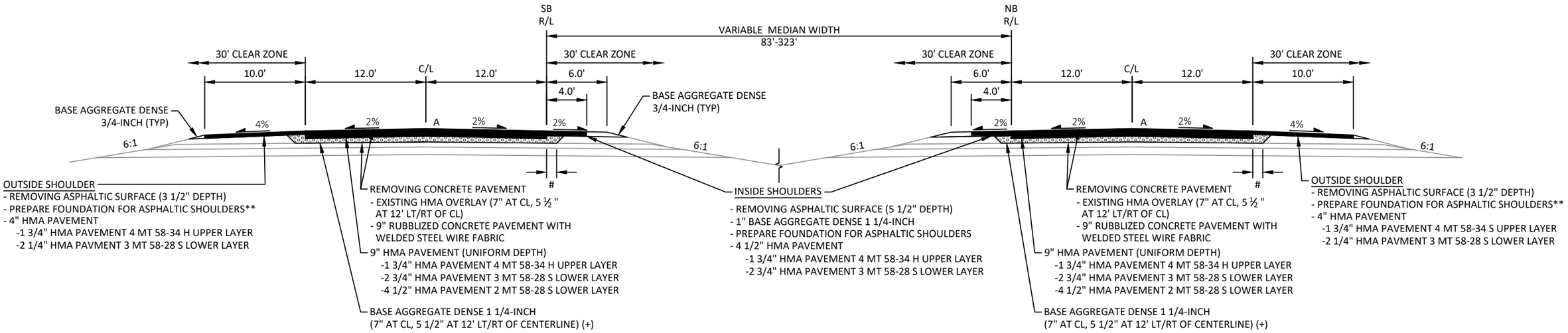
EXISTING TYPICAL SECTION SIDE ROADS

STA 10+68 TO STA 15+52 AND STA 19+11 TO STA 22+89 CTH Q
STA 31+67 TO STA 34+32 AND STA 37+59 TO STA 40+53 CTH K

* CTH Q - 6" HMA PAVEMENT (3.5" OVERLAY IN 2008)
CTH K - HMA PAVEMENT DEPTH UNKNOWN

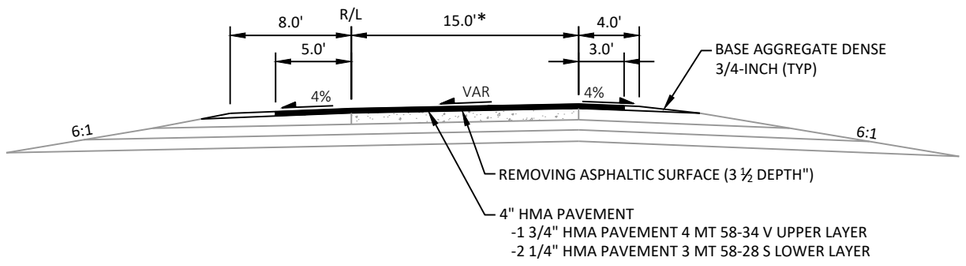
** BEAMGUARD
STA 14+32 - 15+52 LT CTH Q
STA 14+58 - 15+52 RT CTH Q
STA 19+11 - 20+05 LT CTH Q
STA 19+11 - 20+21 RT CTH Q
STA 32+83 - 34+32 RT CTH K
STA 33+21 - 34+22 LT CTH K
STA 37+59 - 38+70 RT CTH K
STA 37+59 - 39+15 LT CTH K

2



FINISHED TYPICAL SECTION USH 51

STA 84'SB'+48.72 TO STA 441'SB'+65.35
STA 82'NB'+69.13 TO STA 435'NB'+03.03
(EXCLUDES STRUCTURE OVERPASS AND STRUCTURE APPROACH AREAS)



FINISHED TYPICAL SECTION RAMP

SOUTHBOUND RAMPS
CTH Q SB ENTRANCE - STA 118'AC'+81.05 TO STA 129'AC'+53.80
CTH Q SB EXIT - STA 130'AD'+89.37 TO STA 141'AD'+39.22
STH 64 SB ENTRANCE - STA 281'CC'+98.03 TO STA 296'CC'+39.85
STH 64 SB EXIT - STA 297'CD'+12.71 TO STA 309'CD'+67.68
CTH K SB ENTRANCE - STA 430'DC'+02.69 TO STA 438'DC'+02.69
CTH K SB EXIT - STA 437'DD'+63.03 TO STA 457'DD'+85.45

NORTHBOUND RAMPS
CTH Q NB EXIT - STA 116'AB'+21.62 TO STA 124'AB'81.72
CTH Q NB ENTRANCE - STA 125'AA'+92.59 TO STA 134'AA'+56.14
STH 64 NB EXIT - STA 280'CB'+80.04 TO STA 295'CB'+79.22
STH 64 NB ENTRANCE - STA 297'CA'+48.54 TO STA 308'CA'+28.93
CTH K NB EXIT - STA 427'DB'+79.35 TO STA 439'DB'+66.96
CTH K NB ENTRANCE - STA 441'DA'+83.89 TO STA 464'DA'+37.64

NOTES:

A FINISHED ELEVATION TO MATCH EXISTING ELEVATION.

(+) CROWN CORRECTION TO 2% REQUIRED IN BASE AGGREGATE DENSE LAYER.

MAXIMUM 1' ADDITIONAL EXCAVATION WIDTH ALLOWED FOR CONCRETE PAVEMENT REMOVAL (INCIDENTAL TO REMOVAL ITEM).

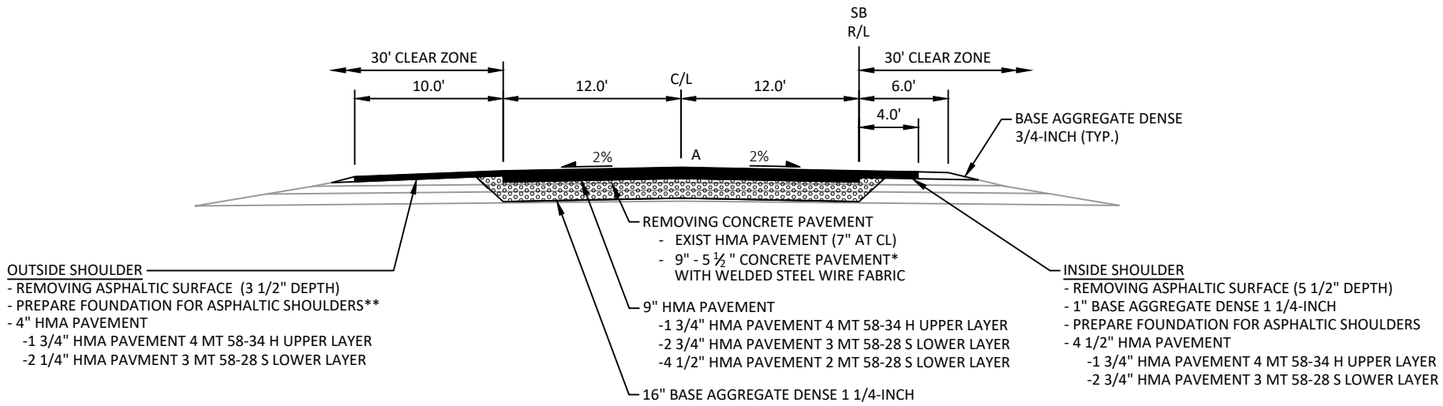
* NO LONGITUDINAL PAVEMENT JOINTS ALLOWED ON RAMP MAINLINE.

** PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS ITEM INCLUDES ADDITION EXCAVATION REQUIRED FOR PROPOSED HMA DEPTH.

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	TYPICAL SECTIONS	SHEET 8	E

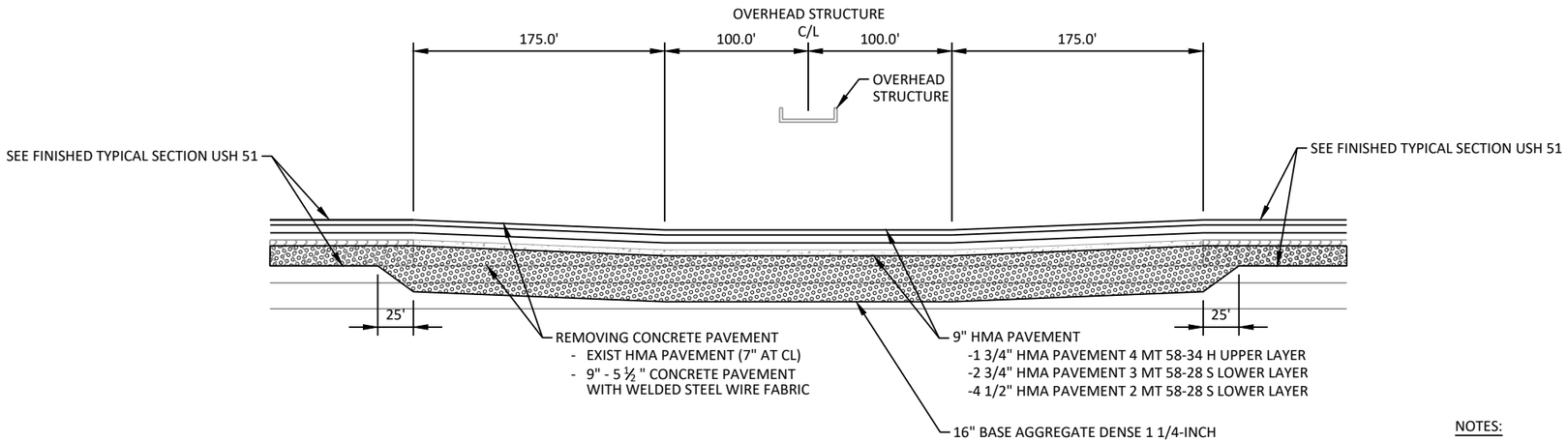
FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-020301-TS.DWG
LAYOUT NAME - 117622-020305-ts
PLOT DATE : 2/17/2021 10:48 AM PLOT BY : CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:10 FT
117622-020305-ts
WISDOT/CADDS SHEET 42

2



FINISHED TYPICAL HALF SECTION USH 51 AT UNDERPASS AREAS

CTH Q OVERPASS - STA 125+53 SB TO STA 131+03 SB
CTH G OVERPASS - STA 346+79 SB TO STA 352+29 SB
POPE RD OVERPASS - STA 415+94 SB TO STA 421+44 SB
CTH Q OVERPASS - STA 124+60 NB TO STA 130+10 NB
CTH G OVERPASS - STA 346+81 NB TO STA 352+31 NB
POPE RD OVERPASS - STA 415+17 NB TO STA 420+67 NB



FINISHED USH 51 UNDERPASS AREAS PROFILE VIEW

CTH Q OVERPASS C/L = STA 128+28 SB
CTH G OVERPASS C/L = STA 349+54 SB
POPE RD OVERPASS C/L = STA 418+69 SB
CTH Q OVERPASS C/L = STA 127+35 NB *
CTH G OVERPASS C/L = STA 349+56 NB
POPE RD OVERPASS C/L = STA 417+92 NB

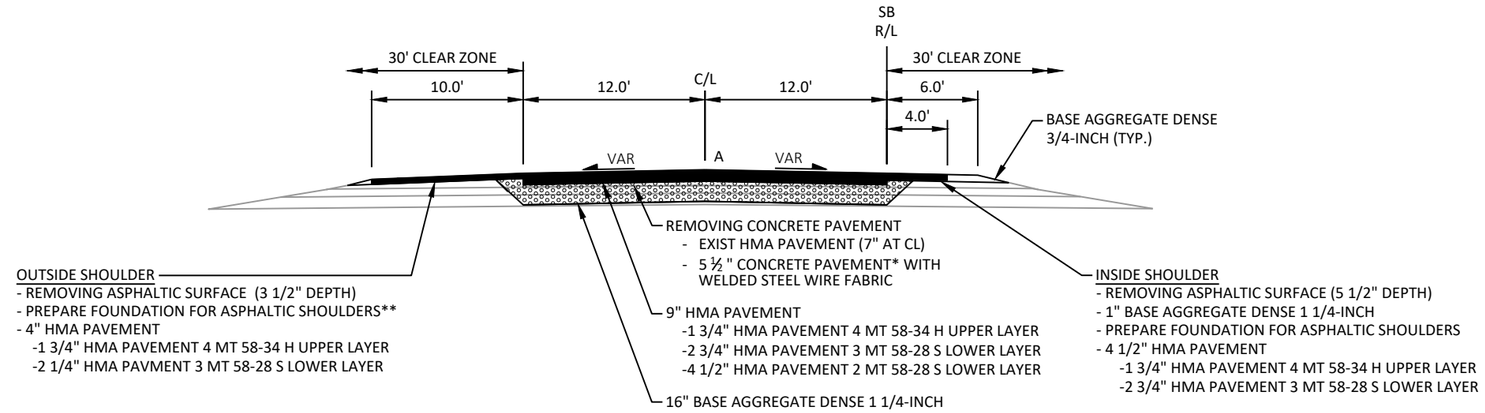
NOTES:

A FINISHED ELEVATION TO MATCH EXISTING ELEVATION EXCEPT IF ELEVATION ADJUSTMENT REQUIRED FOR 16'-0" MINIMUM CLEARANCE AT UNDERPASSES.

* EXISTING CONCRETE PAVEMENT RUBBLIZED AT THIS LOCATION ONLY

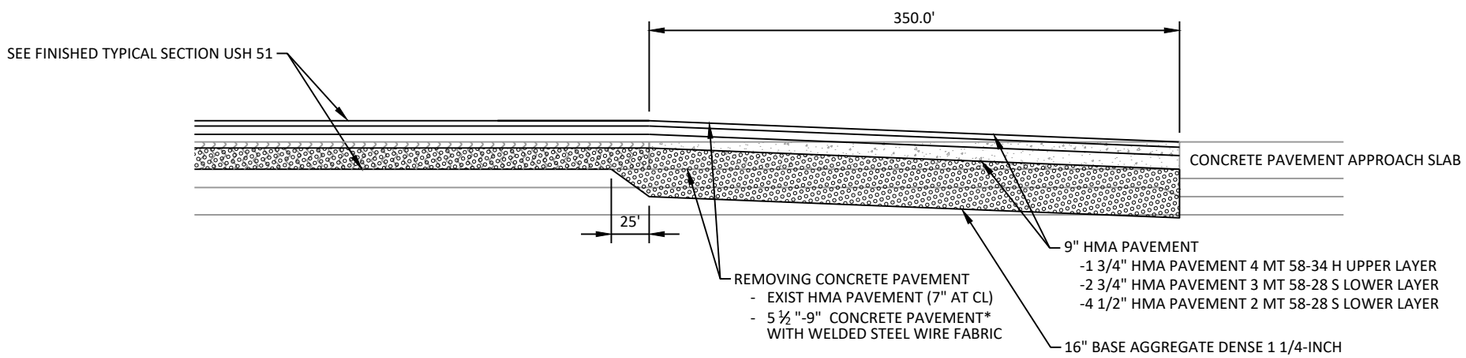
** PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS ITEM INCLUDES ADDITION EXCAVATION REQUIRED FOR PROPOSED HMA DEPTH.

2



FINISHED TYPICAL HALF SECTION USH 51
STRUCTURE APPROACH AREAS

WISCONSIN RIVER -	STA 146+59 SB TO STA 150+09 SB AND STA 155+12 SB TO STA 158+62 SB
CN RAILROAD -	STA 217+14 SB TO STA 220+64 SB AND STA 223+19 SB TO STA 226+69 SB
CENTER RD -	STA 238+37 SB TO STA 241+87 SB AND STA 243+51 SB TO STA 247+01 SB
STH 64 -	STA 291+97 SB TO STA 295+47 SB AND STA 297+82 SB TO STA 301+32 SB
PRAIRIE RIVER -	STA 405+59 SB TO STA 409+09 SB AND STA 411+35 SB TO STA 414+85 SB
WISCONSIN RIVER -	STA 145+70 NB TO STA 149+20 NB AND STA 154+24 NB TO STA 157+74 NB
CN RAILROAD -	STA 216+06 NB TO STA 219+56 NB AND STA 222+12 NB TO STA 225+62 NB
CENTER RD -	STA 238+45 NB TO STA 241+95 NB AND STA 243+61 NB TO STA 247+11 NB
STH 64 -	STA 291+97 NB TO STA 295+47 NB AND STA 297+85 NB TO STA 301+35 NB
PRAIRIE RIVER -	STA 405+26 NB TO STA 408+76 NB AND STA 411+02 NB TO STA 414+52 NB



FINISHED STRUCTURE APPROACH AREA
PROFILE VIEW

NOTES:

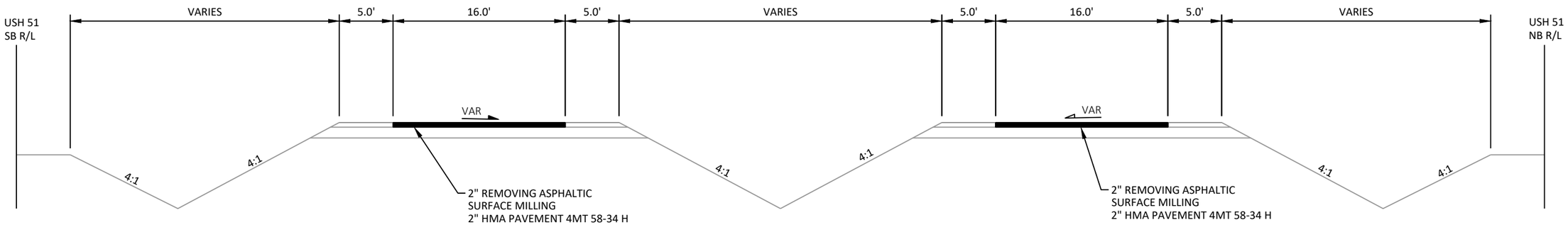
A FINISHED ELEVATION TO MATCH EXISTING ELEVATION.

* SEE EXISTING STRUCTURE APPROACH DETAIL

** PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS ITEM INCLUDES ADDITION EXCAVATION REQUIRED FOR PROPOSED HMA DEPTH.

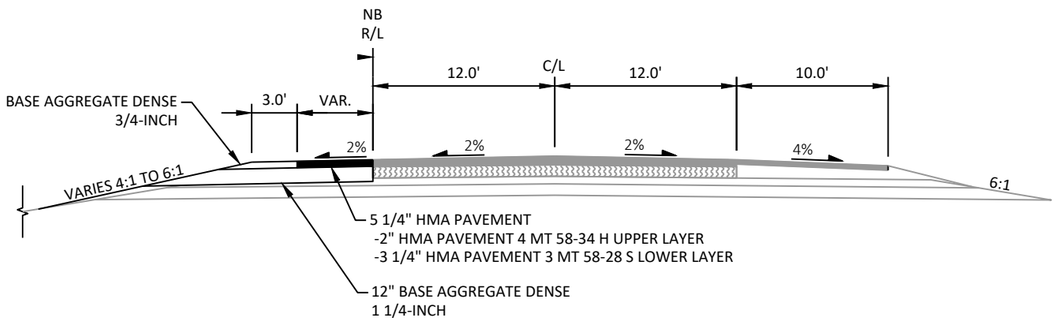
PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	TYPICAL SECTIONS	SHEET 10	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-020301-TS.DWG
LAYOUT NAME - 117622-020307-ts
PLOT DATE : 1/8/2021 10:33 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



FINISHED TYPICAL SECTION SINGLE LANE AND RAMP CROSSOVER

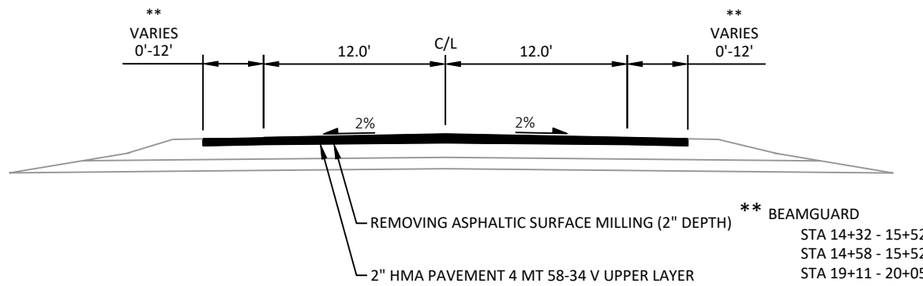
STA 749+00 SB AND STA 749+00 NB
STA 112+80 SB AND STA 112+25 NB
STA 143+50 SB TO STA 143+00 NB
STA 273+40 SB TO STA 273+40 NB
STA 316+40 SB TO STA 316+40 NB
STA 421+70 SB TO STA 421+70 NB
STA 472+00 SB TO STA 471+80 NB



FINISHED TYPICAL SECTION CROSSOVER TAPER WIDENING

(MIRROR FOR SB ROADWAY)

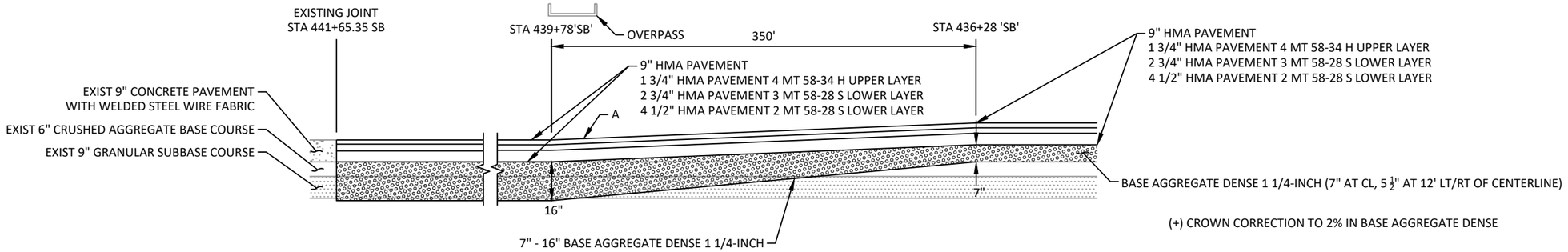
XO2 SB: STA 106+03 - STA 109+25
XO2 NB: STA 103+40 - STA 109+09
XO3 SB: STA 145+07 - STA 148+12
XO3 NB: STA 145+69 - STA 146+61
XO4 SB: STA 268+04 - STA 271+82
XO4 NB: STA266+54 - STA 271+90
XO5 SB: STA 317+98 - STA 323+34
XO5 NB: STA 414+29 - STA 419+66



FINISHED TYPICAL SECTION SIDE ROADS

CTH Q - STA 11+68 TO STA 15+52 AND STA 19+11 TO STA 22+89
CTH K - STA 31+67 TO STA 34+32 AND STA 37+59 TO STA 40+53

** BEAMGUARD
STA 14+32 - 15+52 LT CTH Q
STA 14+58 - 15+52 RT CTH Q
STA 19+11 - 20+05 LT CTH Q
STA 19+11 - 20+21 RT CTH Q
STA 32+83 - 34+32 RT CTH K
STA 33+21 - 34+22 LT CTH K
STA 37+59 - 38+70 RT CTH K
STA 37+59 - 39+15 LT CTH K

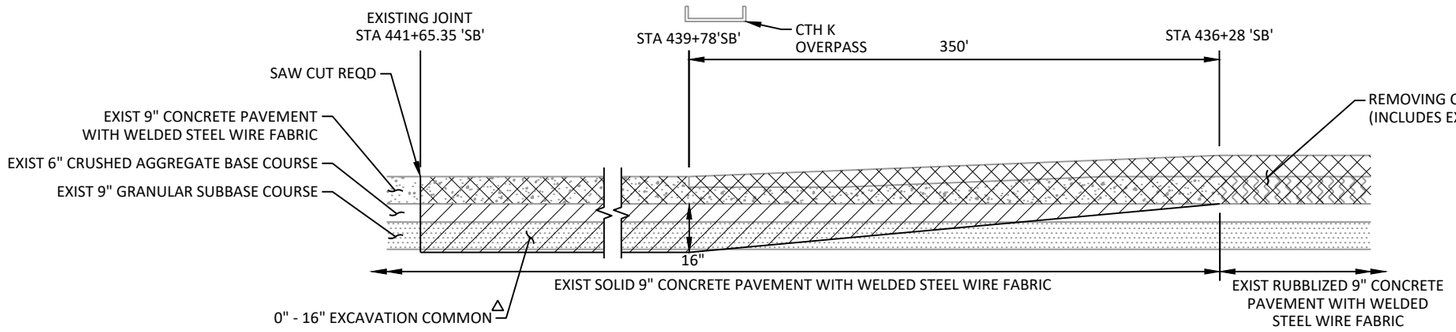


PROPOSED PAVEMENT

NOTES:

△ PAYMENT FOR EXCAVATION COMMON ONLY INCLUDES AREA SHOWN. DOES NOT INCLUDE EXISTING ASPHALT OR CONCRETE PAVEMENT AREAS, WHICH ARE PAID UNDER THE REMOVING CONCRETE PAVEMENT ITEM.

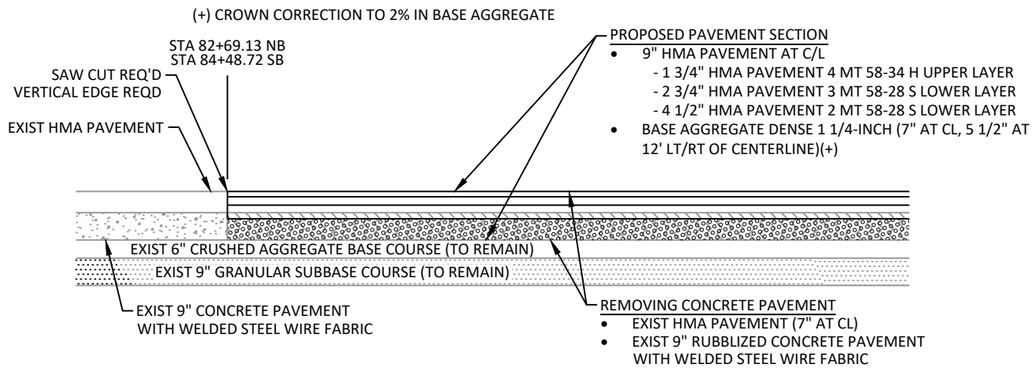
A FINISHED ELEVATION TO MATCH EXISTING ELEVATION EXCEPT IF ELEVATION ADJUSTMENT REQUIRED FOR 16'-0" MINIMUM CLEARANCE AT UNDERPASS.



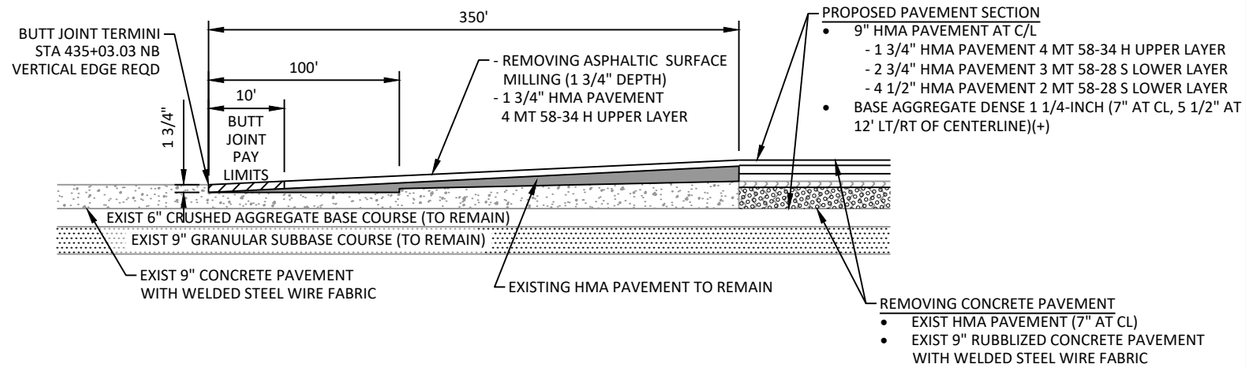
REMOVALS

MAINLINE JOINT DETAIL NORTH END - SB

STA 438+28 TO STA 441+65.35 SB

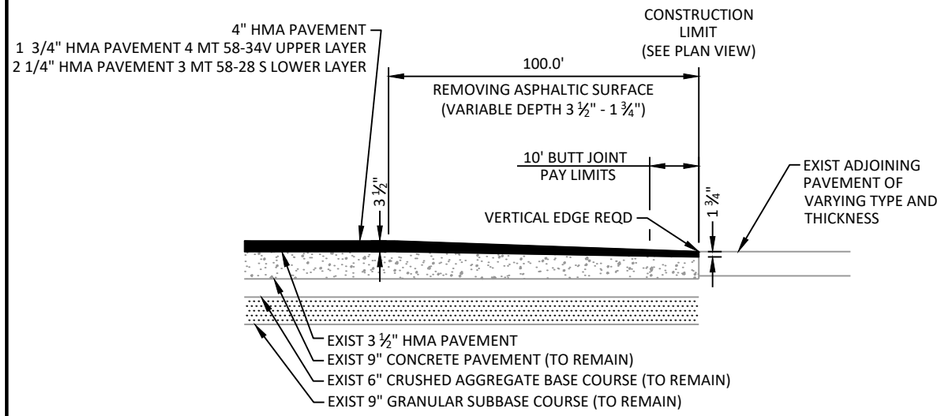


MAINLINE DETAIL SOUTH END - NB/SB



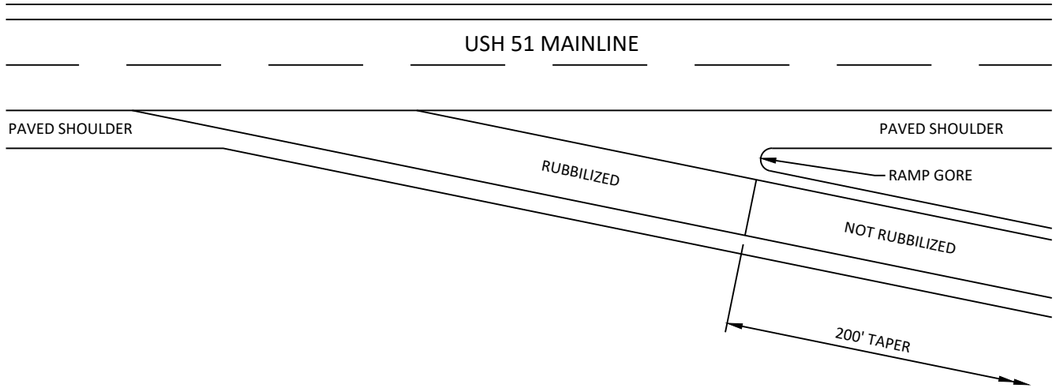
MAINLINE BUTT JOINT DETAIL NORTH END - NB

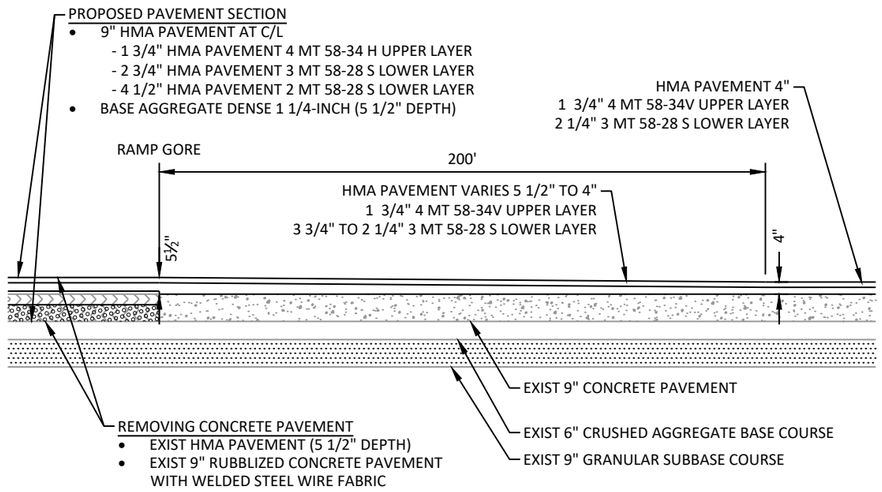
STA 431+53.03 NB TO STA 435+03.03 NB



RAMP BUTT JOINT DETAIL

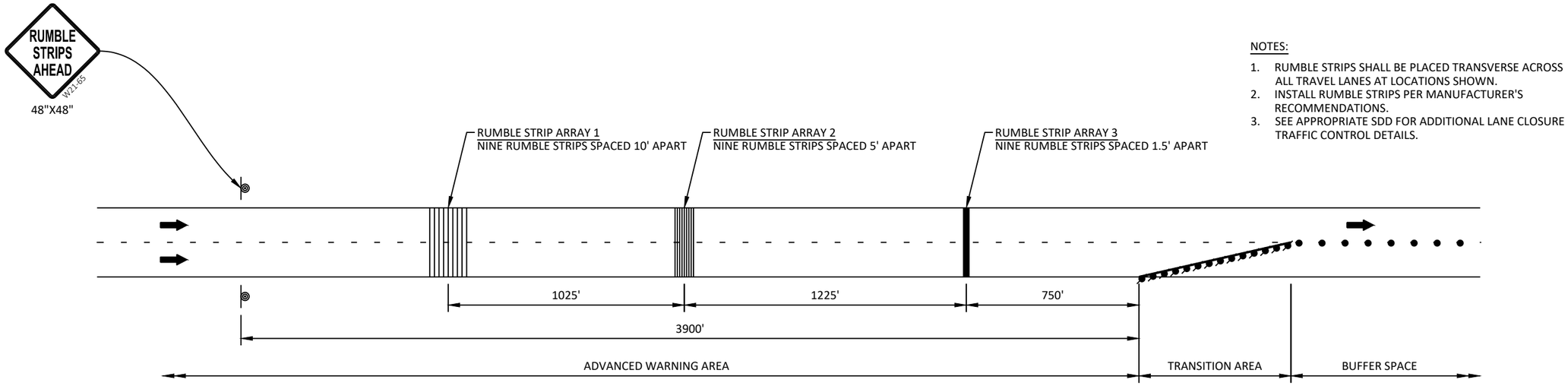
STA 128'AC'+53.80 TO STA 129'AC'+53.80 CTH Q SB ENTRANCE
STA 130'AD'+89.37 TO STA 131'AD'+89.37 CTH Q SB EXIT
STA 295'CC'+39.85 TO STA 296'CC'+39.85 STH 64 SB ENTRANCE
STA 297'CD'+12.71 TO STA 298'CD'+12.71 STH 64 SB EXIT
STA 437'DC'+13.01 TO STA 438'DC'+13.01 CTH K SB ENTRANCE
STA 437'DD'+63.03 TO STA 438'DD'+63.03 CTH K SB EXIT
STA 123'AB'+81.72 TO STA 124'AB'+81.72 CTH Q NB EXIT
STA 125'CB'+92.59 TO STA 126'AA'+92.59 CTH Q NB ENTRANCE
STA 294'CB'+79.22 TO STA 295'CB'+79.22 STH 64 NB EXIT
STA 297'CA'+48.54 TO STA 298'CA'+48.54 STH 64 NB ENTRANCE
STA 438'DB'+66.96 TO STA 439'DB'+66.96 CTH K NB EXIST
STA 441'DA'+83.89 TO STA 442'DA'+83.89 CTH K NB ENTRANCE





MAINLINE RAMP TAPER

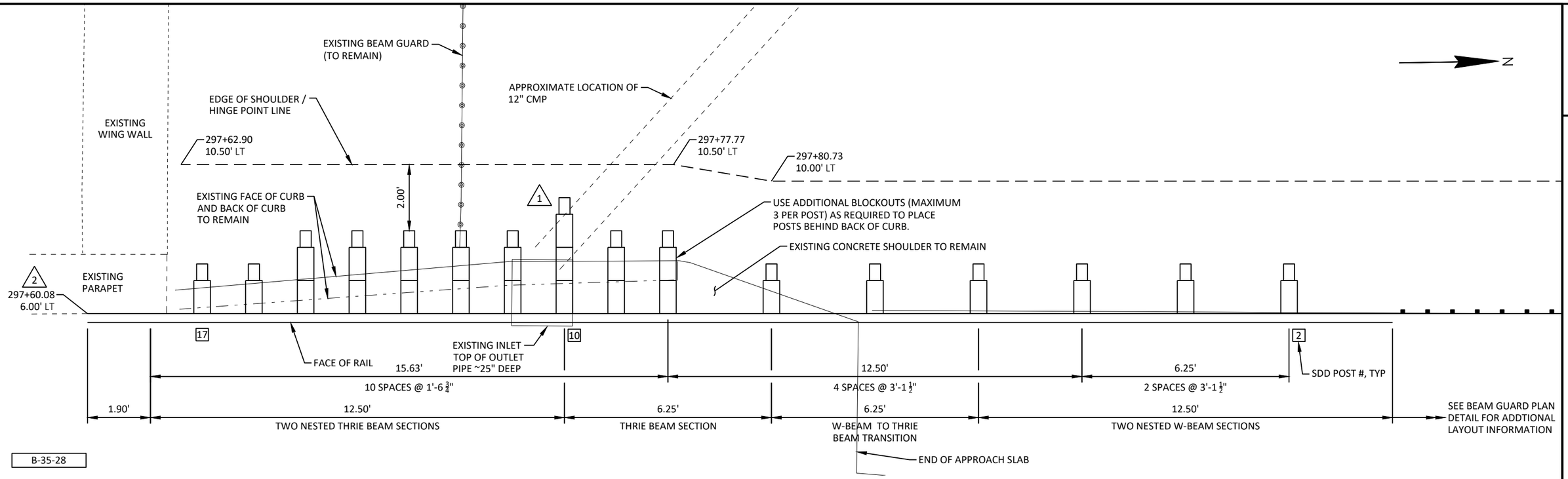
2



NOTES:

1. RUMBLE STRIPS SHALL BE PLACED TRANSVERSE ACROSS ALL TRAVEL LANES AT LOCATIONS SHOWN.
2. INSTALL RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.
3. SEE APPROPRIATE SDD FOR ADDITIONAL LANE CLOSURE TRAFFIC CONTROL DETAILS.

TEMPORARY RUMBLE STRIPS (ORANGE) IN ADVANCE OF LANE CLOSURE



B-35-28
1.90'
12.50'
TWO NESTED THRIE BEAM SECTIONS
6.25'
THRIE BEAM SECTION
6.25'
W-BEAM TO THRIE
BEAM TRANSITION
12.50'
TWO NESTED W-BEAM SECTIONS
SEE BEAM GUARD PLAN
DETAIL FOR ADDTIONAL
LAYOUT INFORMATION
END OF APPROACH SLAB
15.63'
10 SPACES @ 1'-6 3/4"
12.50'
4 SPACES @ 3'-1 1/2"
6.25'
2 SPACES @ 3'-1 1/2"
SDD POST #, TYP
17
FACE OF RAIL
10
2
EXISTING
PARAPET
297+60.08
34.50' RT
EXISTING CONCRETE SHOULDER TO REMAIN
EXISTING FACE OF CURB
AND BACK OF CURB
TO REMAIN
EXISTING INLET
TOP OF OUTLET
PIPE ~31" DEEP
297+62.90
39.00' RT
2.00'
297+80.90
39.00' RT
297+83.86
38.50' RT
EXISTING
WING WALL
EDGE OF SHOULDER /
HINGE POINT LINE
APPROXIMATE LOCATION OF
12" CMP
USE ADDITIONAL BLOCKOUTS (MAXIMUM
3 PER POST) AS REQUIRED TO PLACE
POSTS BEHIND BACK OF CURB.

1. "THRIE BEAM APPROACH RETROFIT INSTALLATION OF MISSING POST" (SDD 14B-50) MAY BE REQUIRED. IF STANDARD RETROFIT BEAM SPAN IS INSUFFICIENT TO CLEAR PIPE, THE SPAN MY BE LENGTHENED TO PROVIDE CLEARANCE.

2. VERIFY THRIE BEAM CONNECTION POINT PRIOR TO DETERMINING FINAL TRANSITION LAYOUT.

PROJECT NO: 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	CONSTRUCTION DETAIL: B-35-28 THRIE BEAM TRANSITION MGS SPECIAL	SHEET 15	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-021010-CD.DWG
LAYOUT NAME - 117622-021010-cd
PLOT DATE : 2/17/2021 11:06 AM PLOT BY : CRAIG KNUTH PLOT NAME : PLOT SCALE : ##########
117622-021010-cd
WISDOT/CADDS SHEET 42

2

BEGIN CONSTRUCTION
STA 742'SB'+30

BP: 21+00.00

BP: 1+00.00

PC: 23+18.04

742 'SB'

N9° 31' 59"W

218.04'

22 '01B'

USH 51 SB

744 'SB'

24 '01B'

PI STA = 25+68.18
Y = 97887.152
X = 405523.020
DELTA = 8°56'22"
D = 1°47'26"
T = 250.14'
L = 499.27'
R = 3200.00'
PC STA = 23+18.04
PT STA = 28+17.30

746 'SB'

26 '01B'

SINGLE LANE CROSS OVER #1
NO GRADING REQUIRED.
MILLING AND OVERLAY REQUIRED.

N

748 'SB'

PT: 28+17.30

PC: 9+71.12

N18° 17' 53"W

178.91'

SALVAGE
3 DELINEATOR POSTS
AND DELINEATORS

PT: 7+92.21

N0° 35' 38"W

156.14'

PC: 3+02.70

2 '01A'

N9° 31' 59"W

202.70'

742 'NB'

4 '01A'

744 'NB'

6 '01A'

746 'NB'

748 'NB'

USH 51 NB

BEGIN CONSTRUCTION
STA 742'NB'+69

PI STA = 5+47.93
Y = 97882.092
X = 405615.130
DELTA = 8°45'53"
D = 1°47'26"
T = 245.24'
L = 489.52'
R = 3200.00'
PC STA = 3+02.70
PT STA = 7+92.21

SALVAGE CONCRETE
BARRIER TEMPORARY PRECAST

MILL AND OVERLAY CROSSOVER
PER TYPICAL SECTIONS

PI STA = 12+16.36
Y = 98517.630
X = 405404.971
DELTA = 8°45'53"
D = 1°47'26"
T = 245.24'
L = 489.52'
R = 3200.00'
PC STA = 9+71.12
PT STA = 14+60.64

N

PT: 14+60.64

750 'SB'

12 '01A'

752 'SB'

14 '01A'

754 'SB'

16 '01A'

756 'SB'

N9° 31' 59"W

345.26'

USH 51 SB

PC: 9+71.12

10 '01A'

N18° 17' 53"W

178.91'

SALVAGE 3 DELINEATOR
POSTS AND DELINEATORS

N0° 35' 38"W

156.14'

PC: 29+73.44

30 '01B'

750 'NB'

32 '01B'

752 'NB'

754 'NB'

34 '01B'

756 'NB'

N9° 31' 59"W

2238.10'

USH 51 NB

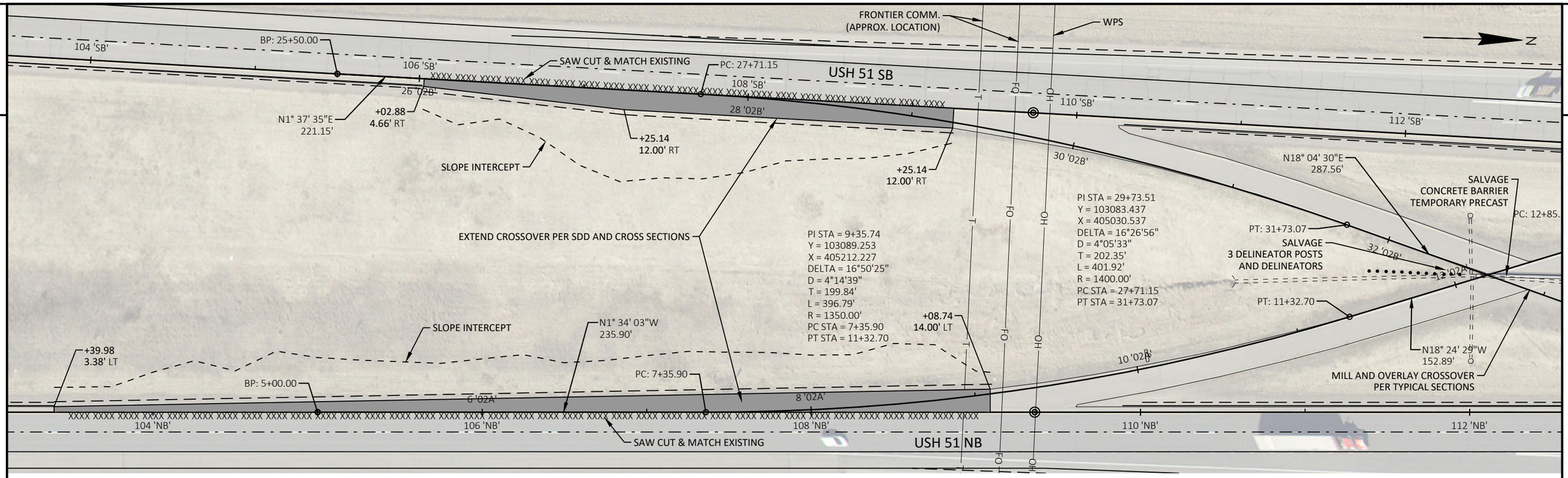
PT: 34+72.71

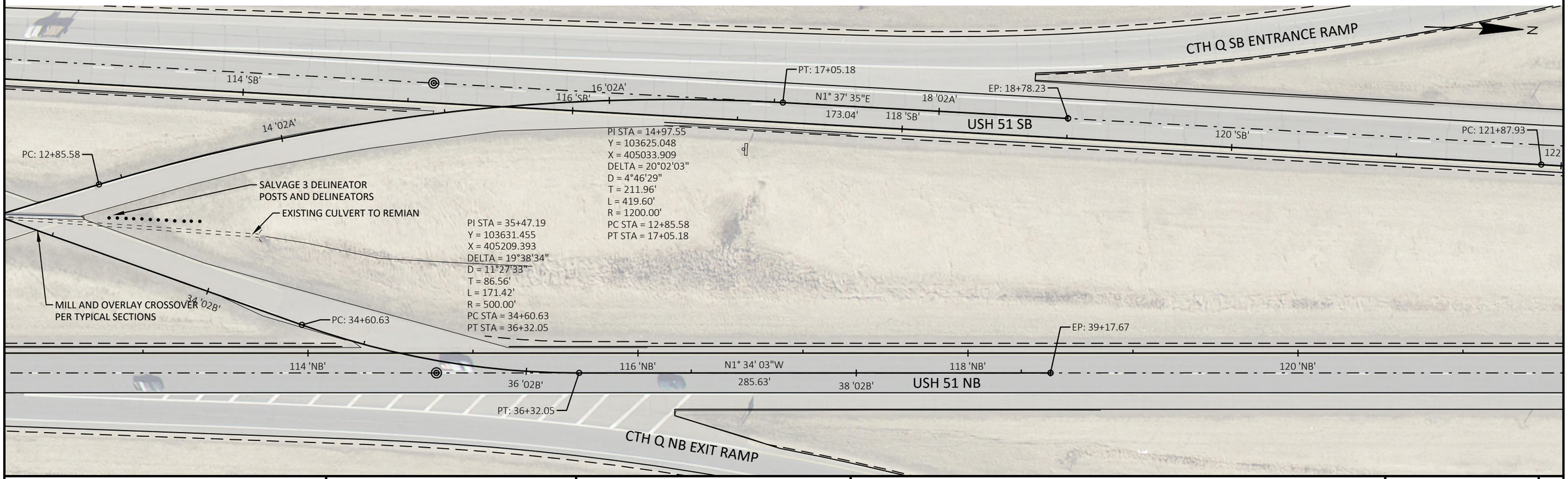
MILL AND OVERLAY CROSSOVER
PER TYPICAL SECTIONS

PI STA = 32+23.58
Y = 98543.537
X = 405516.217
DELTA = 8°56'22"
D = 1°47'26"
T = 250.14'
L = 499.27'
R = 3200.00'
PC STA = 29+73.44
PT STA = 34+72.71

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: CROSSOVER 1	SHEET 16	E

2





PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: CROSSOVER 2	SHEET 17	E

2

2

N

CTH Q SB EXIT RAMP

142'AD'

BP: 143'AD'

142 'SB'

140 'SB'

138 'SB'

USH 51 SB

136 'SB'

PT: 137+15.29

SALVAGE
3 DELINEATOR POSTS
AND DELINEATORS

16 '03B'

8 '03A'

FO

CHARTER (APROX. LOCATION)

BP: 5+00.00

6 '03A'

N23° 54' 30"W
514.12'

MILL AND OVERLAY CROSSOVER
PER TYPICAL SECTIONS

SALVAGE
CONCRETE BARRIER
TEMPORARY PRECAST

4 'NB'

136 'NB'

138 'NB'

USH 51 NB

140 'NB'

142 'NB'

SAW CUT AND MATCH EXISTING

CTH Q NB ENTRANCE RAMP

134'AA'

136'AA'

137'AA'

138'AA'

139'AA'

140'AA'

141'AA'

142'AA'

143'AA'

+14.12

144'AD'

145'AD'

146'AD'

147'AD'

148'AD'

150 'SB'

USH 51 SB

144 'SB'

146 'SB'

148 'SB'

10 '03A'

+11.90
5.53' RT

SAW CUT AND MATCH EXISTING

+06.76
14.00' RT

SLOPE INTERCEPT

EXTEND CROSSOVERS PER SDD AND CROSS SECTIONS

16 '03B'

SALVAGE 3 DELINEATOR
POSTS AND DELINEATORS

8 '03A'

EXISTING CULVERT TO REMAIN

18 '03B'

N22° 53' 06"E
418.37'

+69.47
14.43' LT

EP: 19+18.37

SLOPE INTERCEPT

MILL AND OVERLAY CROSSOVER
PER TYPICAL SECTIONS

+61.24
7.24' LT

144 'NB'

SAW CUT AND MATCH EXISTING

146 'NB'

USH 51 NB

148 'NB'

150 'NB'

152 'NB'

143'AA'

144'AA'

145'AA'

146'AA'

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: CROSSOVER 3	SHEET 18	E

2

2

N

USH 51 SB

266 'SB' 268 'SB' 270 'SB' 272 'SB'

BP: 15+00.00

SALVAGE
3 DELINEATOR POSTS
AND DELINEATORS

+03.94
4.00' RT

+37.27
12.00' RT

SLOPE INTERCEPT

+81.73
12.00' RT

16 '04B'

N0° 37' 49"E
372.80'

EXTEND CROSSOVERS PER SDD
AND CROSS SECTIONS

+90.11
14.00' LT

6 '04A'

+54.39
4.00' LT

SAW CUT AND MATCH EXISTING

BP: 5+00.00

266 'NB' 268 'NB' 270 'NB' 272 'NB'

USH 51 NB

SALVAGE CONCRETE
BARRIER TEMPORARY PRECAST

MILL AND OVERLAY CROSSOVER
PER TYPICAL SECTIONS

STH 64 SB ENTRANCE RAMP

EP: 8+62.76

USH 51 SB

274 'SB' 276 'SB' 278 'SB' 280 'SB' 282 'SB'

8 '04A'

N25° 46' 49"W
362.76'

N0° 37' 49"E
372.80'

PC: 280+37.88

SALVAGE
3 DELINEATOR POSTS
AND DELINEATORS

EXISTING CULVERT TO REMAIN

18 '04B'

EP: 18+72.80

PC: 279+75.98

274 'NB' 276 'NB' 278 'NB' 280 'NB' 282 'NB'

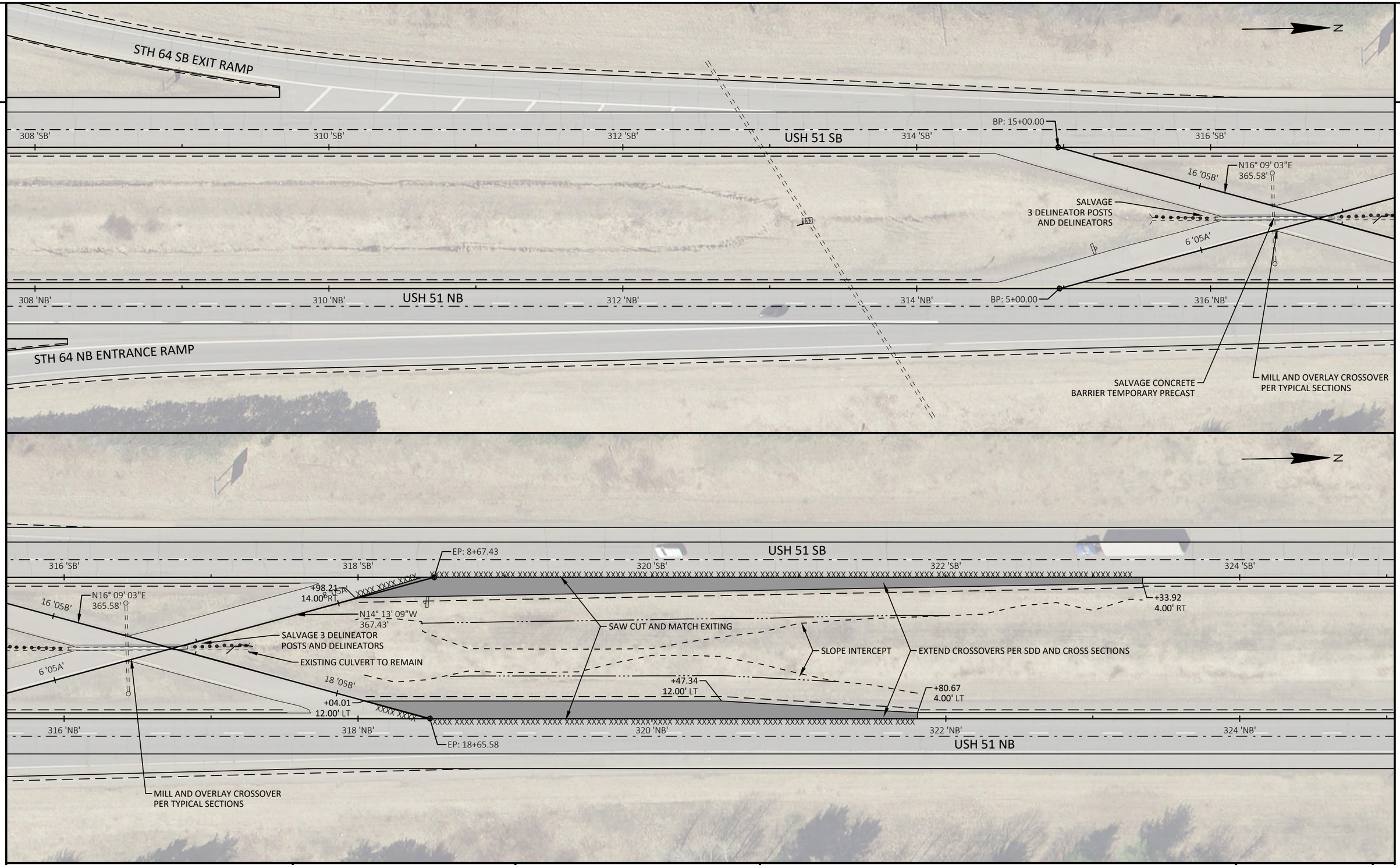
USH 51 NB

MILL AND OVERLAY CROSSOVER
PER TYPICAL SECTIONS

STH 64 NB EXIT RAMP

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: CROSSOVER 4	SHEET 19	E

2



PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: CROSSOVER 5	SHEET 20	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-021201-PD.DWG
LAYOUT NAME - 117622-021205-pd
PLOT DATE : 1/15/2021 9:49 AM
PLOT BY : JAIRO MAZARIEGOS
PLOT NAME :
PLOT SCALE : 1 IN:60 FT
WISDOT/CADDS SHEET 42

2

2

HO
HO
HO
ATC
WPS
WPS
FRONTIER COMM. (APPROX. LOCATION)
T
G
HO
G
HO
RD
POPE
USH 51 SB
USH 51 NB
414 'SB'
416 'SB'
418 'SB'
420 'SB'
422 'SB'
414 'NB'
416 'NB'
418 'NB'
420 'NB'
422 'NB'
416'DC'
417'DC'
418'DC'
419'DC'
420'DC'
421'DC'
422'DC'
421'DB'
422'DB'
BP: 16+00.00
PC: 17+60.63
PC: 17+63.05
PT: 21+27.90
PT: 21+28.64
+09.73
4.00' RT
+45.32
12.00' RT
+45.32
12.00' RT
+66.54
14.00' LT
+29.13
4.00' LT
18 '06B'
18 '06A'
20 '06B'
20 '06A'
22 '06A'
22 '06B'
N45° 49' 48"W
160.63'
N45° 49' 48"W
163.05'
N59° 47' 40"W
141.36'
N31° 48' 05"W
137.94'
EXTEND CROSSOVERS PER SDD AND CROSS SECTIONS
SLOPE INTERCEPT
SAW CUT AND
MATCH EXISTING
SALVAGE 3 DELINEATOR
POSTS AND DELINEATORS
SALVAGE CONCRETE
BARRIER TEMPORARY PRECAST
MILL AND OVERLAY CROSSOVER
PER TYPICAL SECTIONS
PI STA = 19+45.18
Y = 132158.572
X = 399162.598
DELTA = 14°01'43"
D = 3°49'11"
T = 184.56'
L = 367.27'
R = 1500.00'
PC STA = 17+60.63
PT STA = 21+27.90
PI STA = 19+46.76
Y = 132228.526
X = 399228.363
DELTA = 13°57'52"
D = 3°49'11"
T = 183.71'
L = 365.59'
R = 1500.00'
PC STA = 17+63.05
PT STA = 21+28.64
CTH K SB ENTRANCE RAMP
CTH K NB EXIT RAMP
422'DC'
423'DC'
424'DC'
425'DC'
426'DC'
427'DC'
428'DC'
429'DC'
430'DC'
422 'SB'
424 'SB'
426 'SB'
428 'SB'
430 'SB'
422 'NB'
424 'NB'
426 'NB'
428 'NB'
430 'NB'
422'DB'
423'DB'
424'DB'
425'DB'
426'DB'
427'DB'
428'DB'
429'DB'
PT: 25+13.73
EP: 27+10.19
PT: 25+10.68
EP: 27+10.21
PC: 427+80.37
PC: 427+80.37
N45° 49' 48"W
196.47'
N45° 49' 48"W
199.53'
26 '06A'
26 '06B'
PC: 22+70.00
PC: 22+65.83
PI STA = 23+92.47
Y = 132453.683
X = 398841.591
DELTA = 13°57'52"
D = 5°43'46"
T = 122.47'
L = 243.73'
R = 1000.00'
PC STA = 22+70.00
PT STA = 25+13.73
PI STA = 23+88.87
Y = 132537.222
X = 398927.814
DELTA = 14°01'43"
D = 5°43'46"
T = 123.04'
L = 244.85'
R = 1000.00'
PC STA = 22+65.83
PT STA = 25+10.68

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: CROSSOVER 6	SHEET 21	E

2

2

PI STA = 7+60.33
Y = 136519.888
X = 397076.508
DELTA = 13°43'42"
D = 1°50'54"
T = 373.17'
L = 742.77'
R = 3100.00'
PC STA = 3+87.15
PT STA = 11+29.93

N

PC: 3+87.15

2 '07B' | 464 'SB' | 4 '07B' | 466 'SB' | 6 '07B' | 468 'SB' | 8 '07B' | 470 'SB' | 10 '07B' | 472 'SB'

PC: 466+10.29

MILL AND OVERLAY CROSSOVER
PER TYPICAL SECTIONS

USH 51 SB

PC: 466+10.29

2 '07A' | 464 'NB' | 4 '07A' | 466 'NB' | 6 '07A' | 468 'NB' | 8 '07A' | 470 'NB' | 10 '07A' | 472 'NB'

PC: 10+89.77

N13° 36' 31"W
737.84'

PI: 3+51.94

USH 51 NB

SALVAGE 3 DELINEATOR
POSTS AND DELINEATORS

SALVAGE CONCRETE
BARRIER TEMPORARY PRECAST

SINGLE LANE CROSSOVER #7
NO GRADING REQUIRED.
MILLING AND OVERLAY REQUIRED.

PI STA = 14+70.43
Y = 137232.338
X = 397015.392
DELTA = 13°09'37"
D = 1°44'10"
T = 380.66'
L = 757.97'
R = 3300.00'
PC STA = 10+89.77
PT STA = 18+47.74

N

END CONSTRUCTION
STA 479'SB'+35

SALVAGE 3 DELINEATOR
POSTS AND DELINEATORS

USH 51 SB

472 'SB' | 474 'SB' | 476 'SB' | 16 '07A' | 478 'SB' | 18 '07A' | 480 'SB' | 20 '07A'

PT: 18+47.74

PT: 477+61.84
STA AHEAD = 477+61.84
STA BACK = 477+81.14

PT: 11+29.93

12 '07A' | 12 '07B' | 14 '07A'

N1° 45' 52"E
674.76'

14 '07B' | 16 '07B' | 18 '07B' | 20 '07B'

PT: 477+61.84

472 'NB' | 474 'NB' | 476 'NB' | 478 'NB' | 480 'NB'

USH 51 NB

PI: 18+04.69

MILL AND OVERLAY CROSSOVER
PER TYPICAL SECTIONS

END CONSTRUCTION
STA 479'NB'+76

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: CROSSOVER 7	SHEET 22	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-021201-PD.DWG
LAYOUT NAME - 117622-021207-pd

PLOT DATE : 1/15/2021 9:52 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:60 FT

WISDOT/CADDS SHEET 42

2

2

N

NETLEC LLC
(APPROX. LOCATION)

WPS (APPROX. LOCATION)

USH 51 SB

298 'SB'

300 'SB'

302 'SB'

EXISTING BEAM GUARD
(TO REMAIN)

THRIE BEAM
TRANSITION MGS
SPECIAL
SEE CONSTRUCTION
DETAIL

W-BEAM MGS

EAT MGS

+77.60
10.00' LT

+27.56
14.00' LT

+02.59
11.33' LT

+50.47
5.74' LT

+27.56
8.00' LT

+67.56
4.00' LT

+60.08
6.00' LT

298 'NB'

300 'NB'

302 'NB'

B-35-28

USH 51 NB

+60.08
34.50' RT

+65.06
36.50' RT

+90.06
34.00' RT

+85.06
34.50' RT

+40.08
39.83' RT

+65.06
42.50' RT

+15.10
38.50' RT

SLOPE INTERCEPT, TYP

THRIE BEAM
TRANSITION MGS
SPECIAL
SEE CONSTRUCTION
DETAIL

W-BEAM
MGS

EAT MGS

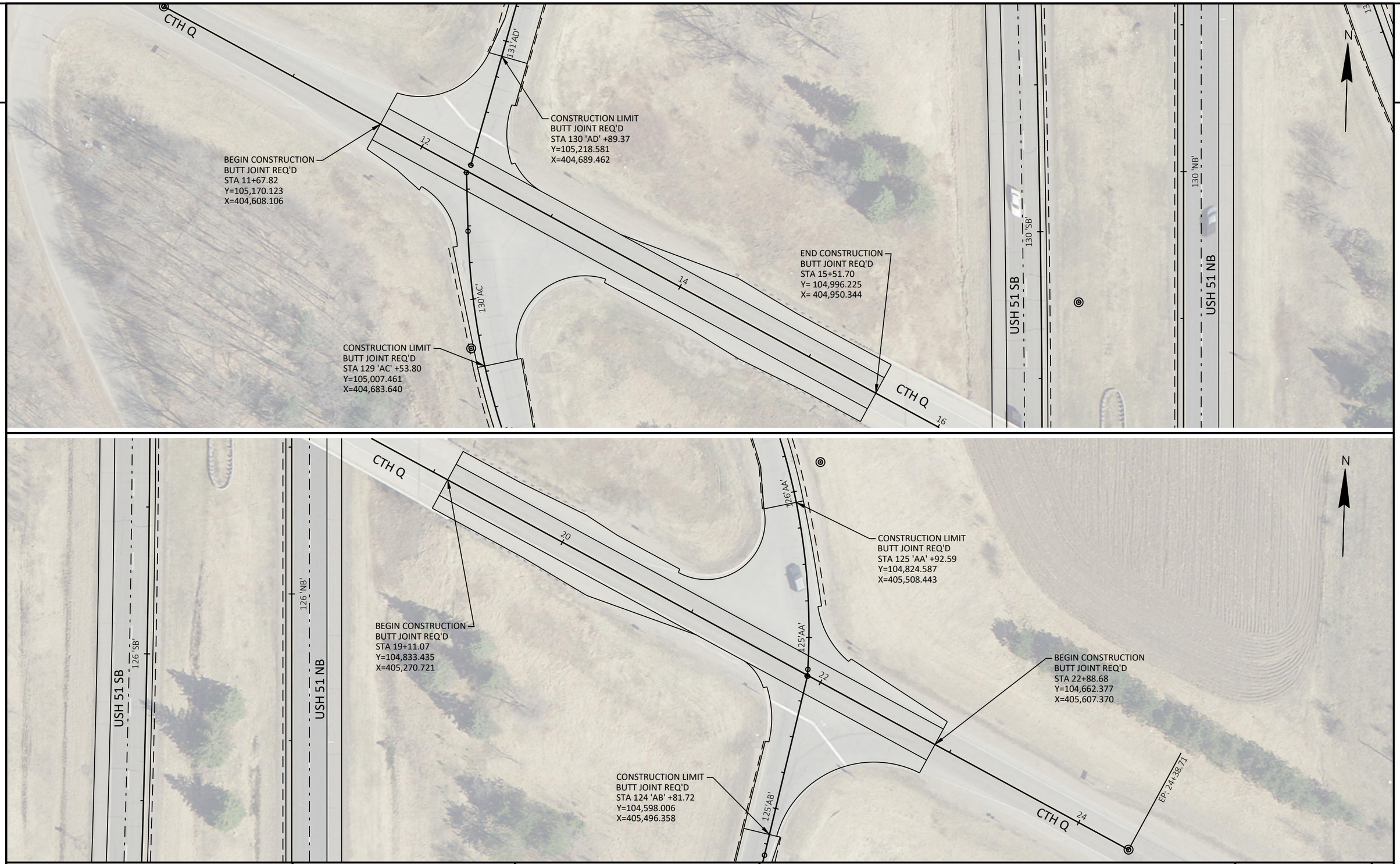
PROJECT NO: 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: B-35-28 BEAM GUARD	SHEET 23	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-021201-PD.DWG
LAYOUT NAME - 117622-021208-pd

PLOT DATE : 2/25/2021 12:41 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: CTH Q	SHEET 24	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-021201-PD.DWG
LAYOUT NAME - 117622-021210-pd

117622-021210-pd

PLOT DATE : 2/18/2021 9:04 AM PLOT BY : CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:60 FT

2



PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: CTH K	SHEET 25	E

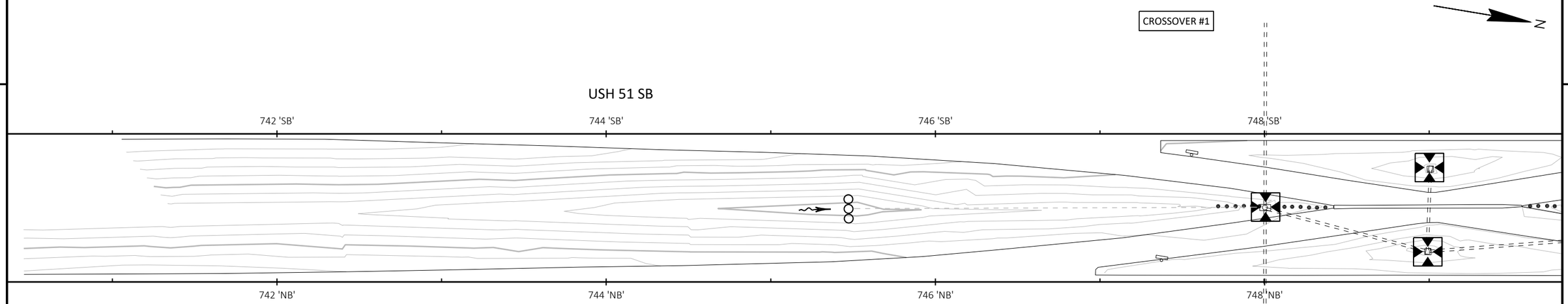
FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-021201-PD.DWG
LAYOUT NAME - 117622-021211-pd

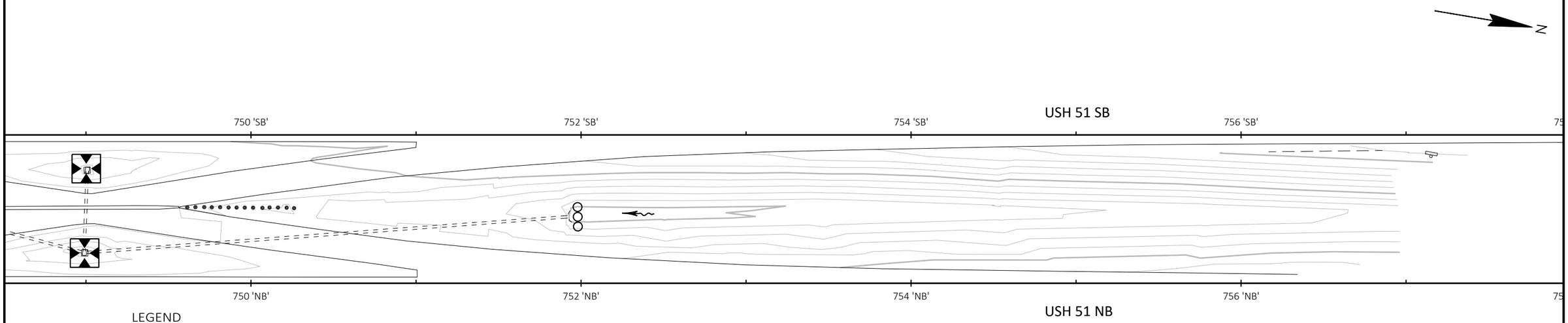
117622-021211-pd

PLOT DATE : 2/18/2021 9:04 AM PLOT BY : CRAIG KNUTH PLOT NAME : PLOT SCALE : 1 IN:60 FT

WISDOT/CADDS SHEET 42

2





LEGEND

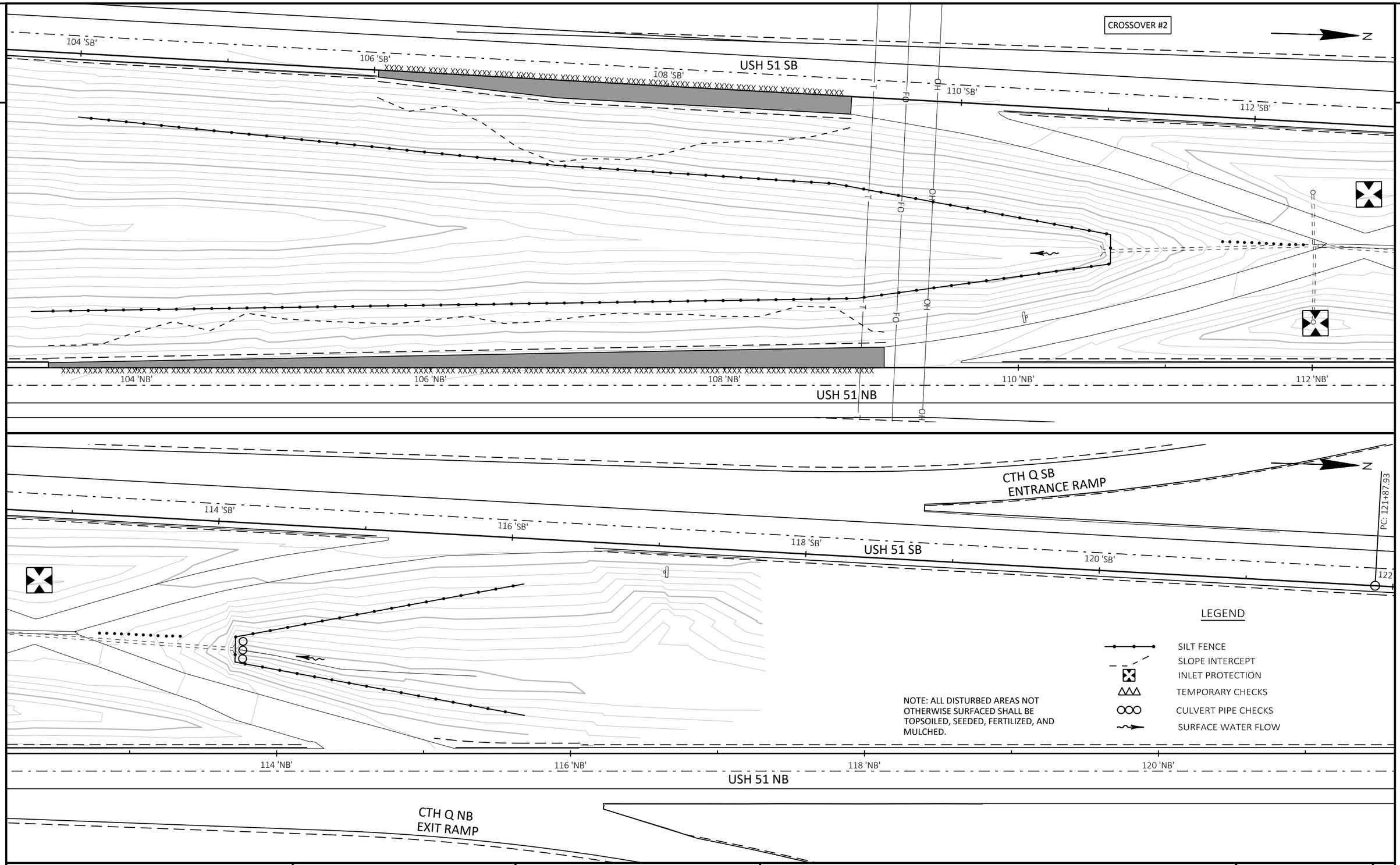
- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW

NOTE: ALL DISTURBED AREAS NOT OTHERWISE SURFACED SHALL BE TOPSOILED, SEEDED, FERTILIZED, AND MULCHED.

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: EROSION CONTROL	SHEET 26	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-022001-EC.DWG
LAYOUT NAME - 117622-022001-ec

PLOT DATE : 1/11/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:60 FT



PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: EROSION CONTROL	SHEET 27	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-022001-EC.DWG
LAYOUT NAME - 117622-022002-ec

PLOT DATE : 1/11/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:60 FT

2

N

CTH Q SB
EXIT RAMP

CROSS OVER #3

136 'SB'
138 'SB'
140 'SB'
142 'SB'

USH 51 SB

PT: 137+15.29

4 'NB'
136 'NB'
138 'NB'
140 'NB'
142 'NB'

USH 51 NB

CTH Q NB ENTRANCE RAMP

144 'SB'
146 'SB'
148 'SB'
150 'SB'

USH 51 SB

XXXX XXXX XXXX

2

2

CROSS OVER #4

N

USH 51 SB

266 'SB' 268 'SB' 270 'SB' 272 'SB'

266 'NB' 268 'NB' 270 'NB' 272 'NB'

USH 51 NB

STH 64 SB ENTRANCE RAMP

USH 51 SB

274 'SB' 276 'SB' 278 'SB' 280 'SB' 282 'SB'

PC: 280+37.88

PC: 279+75.98

274 'NB' 276 'NB' 278 'NB' 280 'NB' 282 'NB'

USH 51 NB

STH 64 NB
EXIT RAMP

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW

NOTE: ALL DISTURBED AREAS NOT OTHERWISE SURFACED SHALL BE TOPSOILED, SEEDED, FERTILIZED, AND MULCHED.

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: EROSION CONTROL	SHEET 29	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-022001-EC.DWG
LAYOUT NAME - 117622-022004-ec
PLOT DATE : 1/11/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:60 FT
WISDOT/CADDS SHEET 42

2

STH 64 SB EXIT RAMP

N

CROSS OVER #5

2

308 'SB' 310 'SB' 312 'SB' USH 51 SB 314 'SB' 316 'SB'

308 'NB' 310 'NB' USH 51 NB 312 'NB' 314 'NB' 316 'NB'

STH 64 NB ENTRANCE RAMP

N

316 'SB' 318 'SB' 320 'SB' 322 'SB' 324 'SB'

USH 51 SB

316 'NB' 318 'NB' 320 'NB' 322 'NB'

USH 51 NB

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW

NOTE: ALL DISTURBED AREAS NOT OTHERWISE SURFACED SHALL BE TOPSOILED, SEEDED, FERTILIZED, AND MULCHED.

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: EROSION CONTROL	SHEET 30	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-022001-EC.DWG
LAYOUT NAME - 117622-022005-ec

PLOT DATE : 1/11/2021 11:17 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:60 FT

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW

NOTE: ALL DISTURBED AREAS NOT OTHERWISE SURFACED SHALL BE TOPSOILED, SEEDED, FERTILIZED, AND MULCHED.

CROSS OVER #6

RD

USH 51 SB

416 'SB' 418 'SB' 420 'SB' 422 'SB'

414 'NB' 416 'NB' 418 'NB' 420 'NB' 422 'NB'

USH 51 NB

POPE

CROSS OVER #6

CTH K SB ENTRANCE RAMP

USH 51 SB

422 'SB' 424 'SB' 426 'SB' 428 'SB' 430 'SB'

PC: 427+80.37

PC: 427+80.37

422 'NB' 424 'NB' 426 'NB' 428 'NB' 430 'NB'

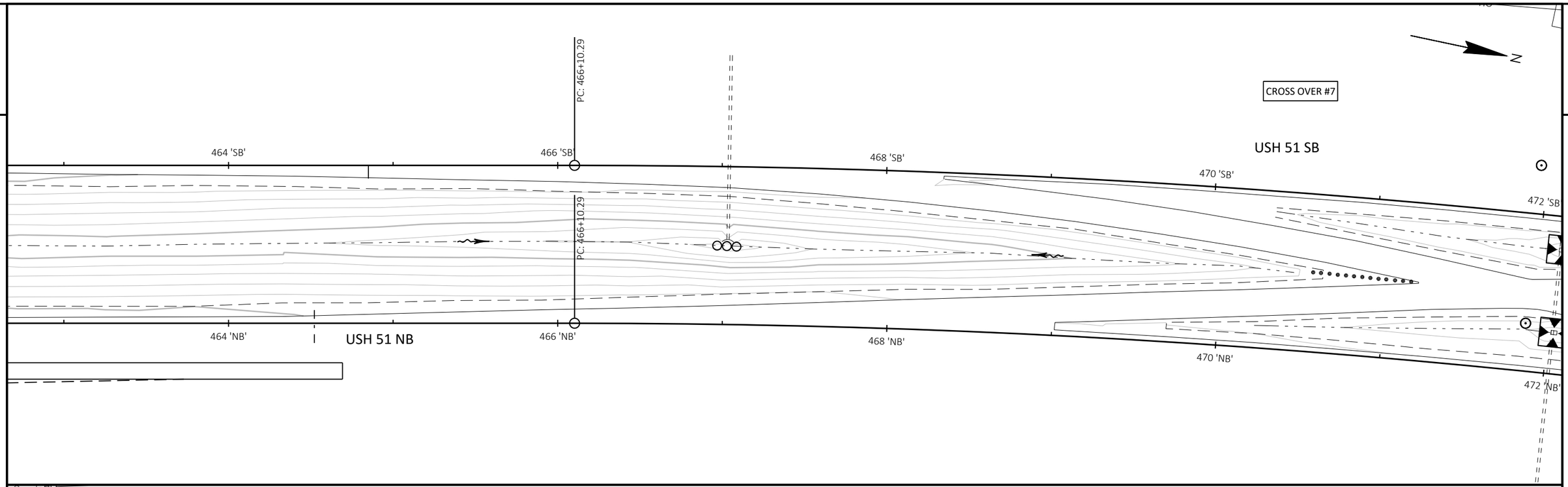
USH 51 NB

CTH K NB EXIT RAMP

2

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: EROSION CONTROL	SHEET 31	E

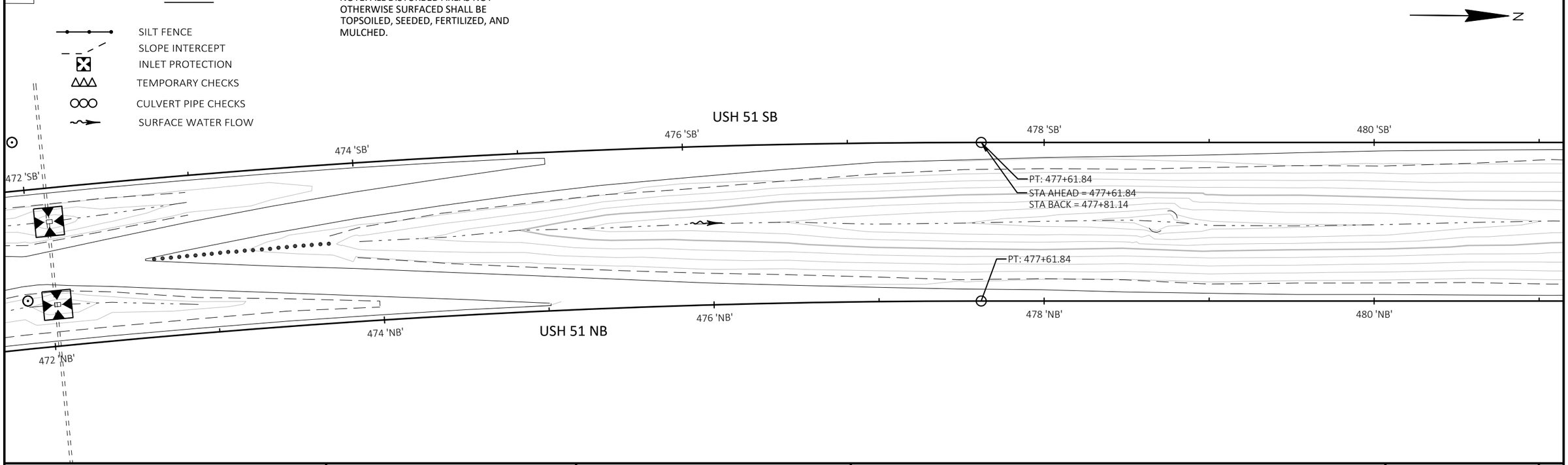
2



LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW

NOTE: ALL DISTURBED AREAS NOT OTHERWISE SURFACED SHALL BE TOPSOILED, SEEDED, FERTILIZED, AND MULCHED.



PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: EROSION CONTROL	SHEET 32	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-022001-EC.DWG
LAYOUT NAME - 117622-022007-ec
PLOT DATE : 1/11/2021 11:18 AM
PLOT BY : ANDY WESTBROOK
PLOT NAME :
PLOT SCALE : 1 IN:60 FT
WISDOT/CADDS SHEET 42

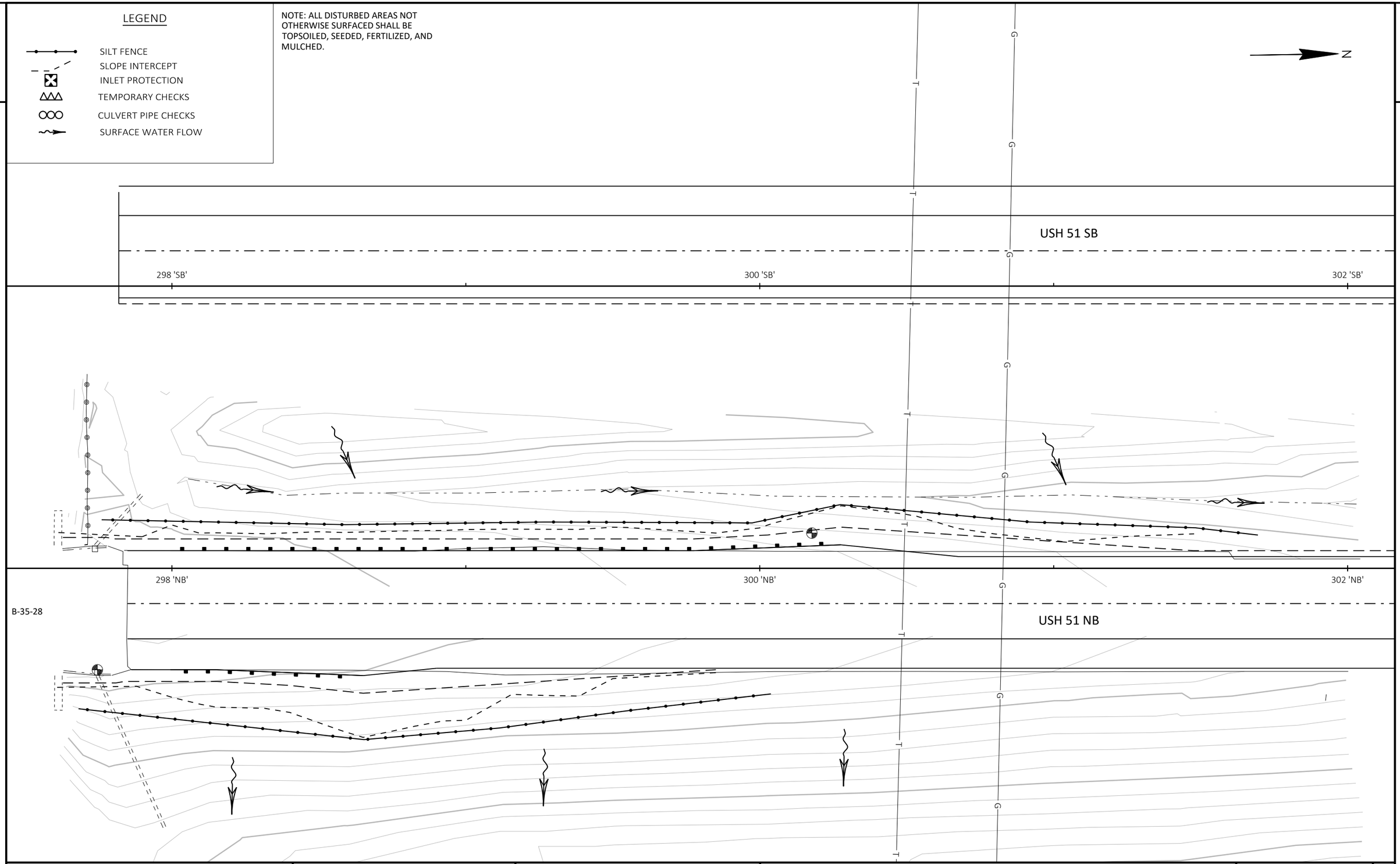
2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW

NOTE: ALL DISTURBED AREAS NOT OTHERWISE SURFACED SHALL BE TOPSOILED, SEEDED, FERTILIZED, AND MULCHED.

N



2

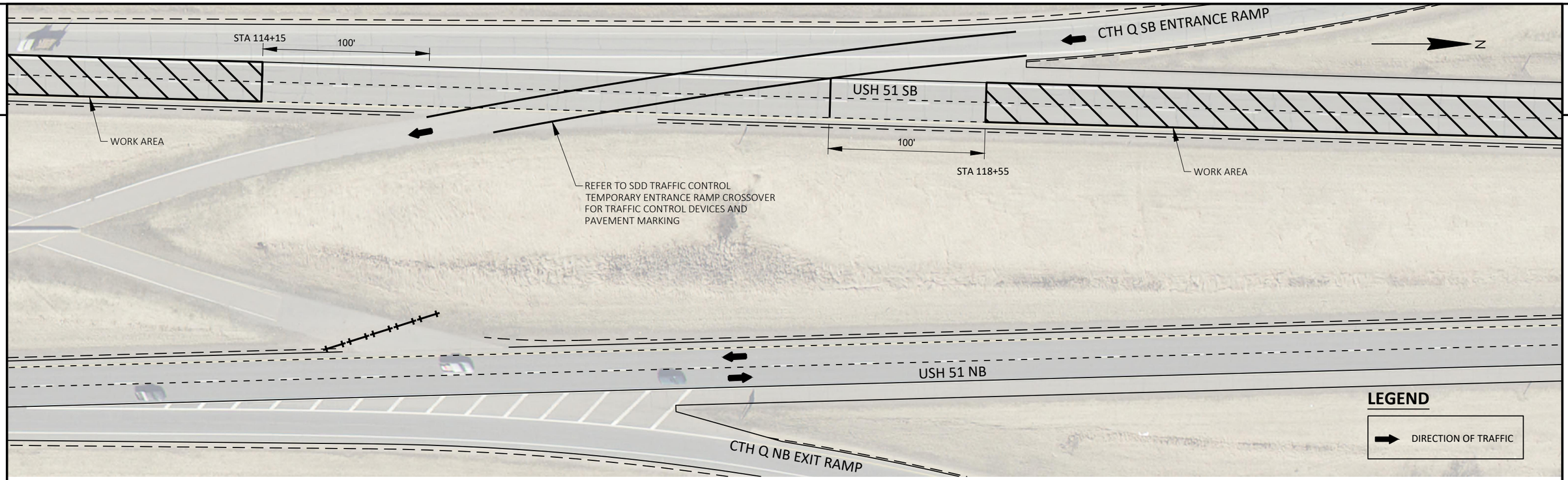
PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	PLAN DETAIL: EROSION CONTROL	SHEET 33	E

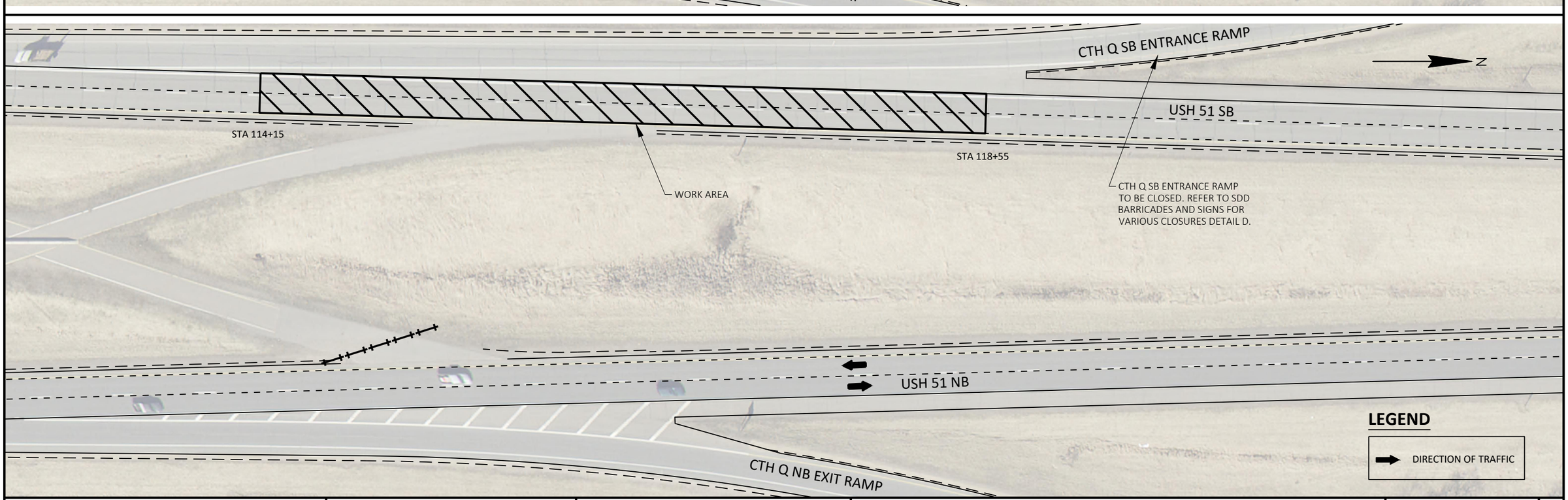
FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-022001-EC.DWG
LAYOUT NAME - 117622-022008-ec

PLOT DATE : 2/25/2021 12:43 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

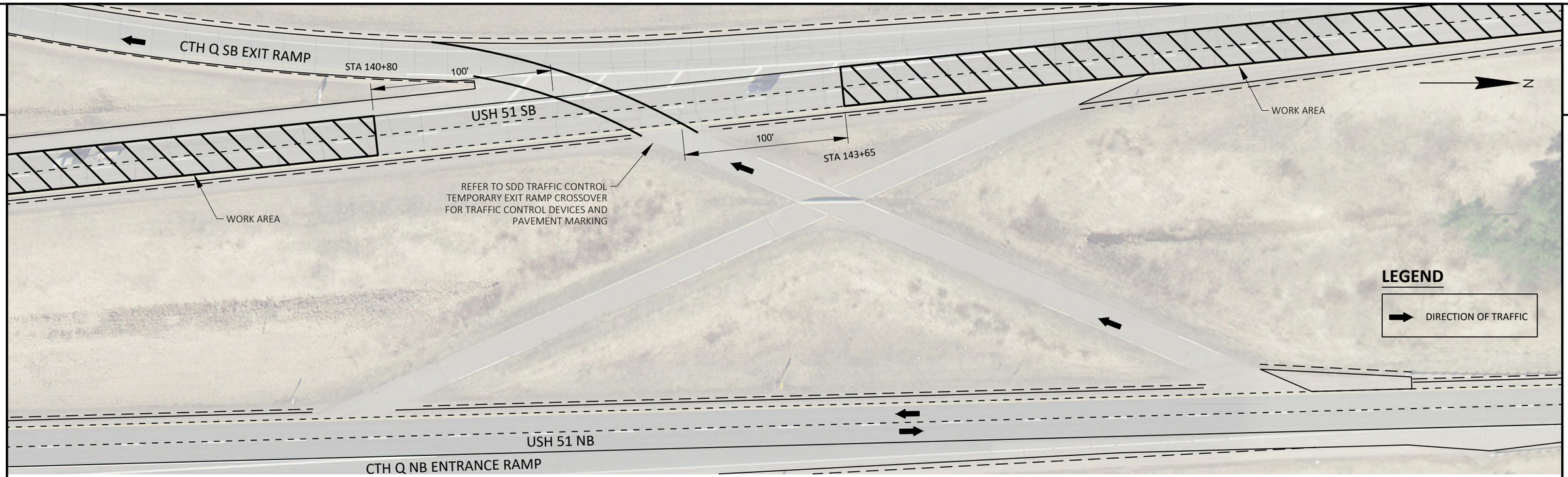


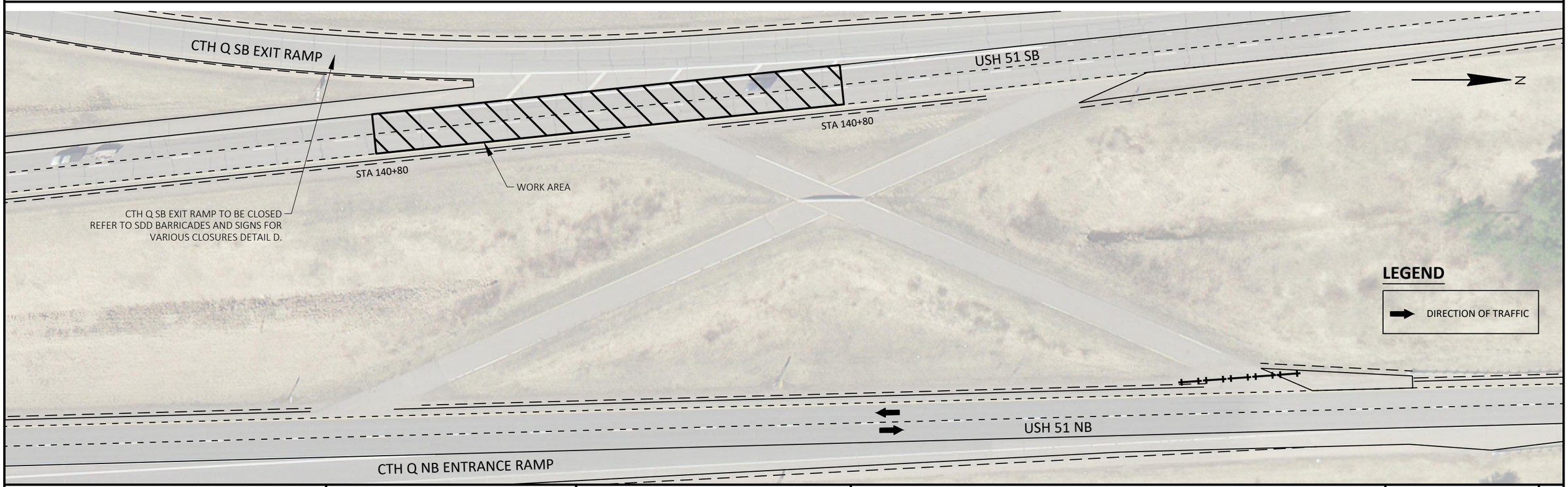


2

PROJECT NO: 1176-22-72	HWY: USH 51 SB	COUNTY: LINCOLN	TRAFFIC CONTROL STAGE 2A AND 2B MAINLINE AT CROSSOVER 2	SHEET 34	E

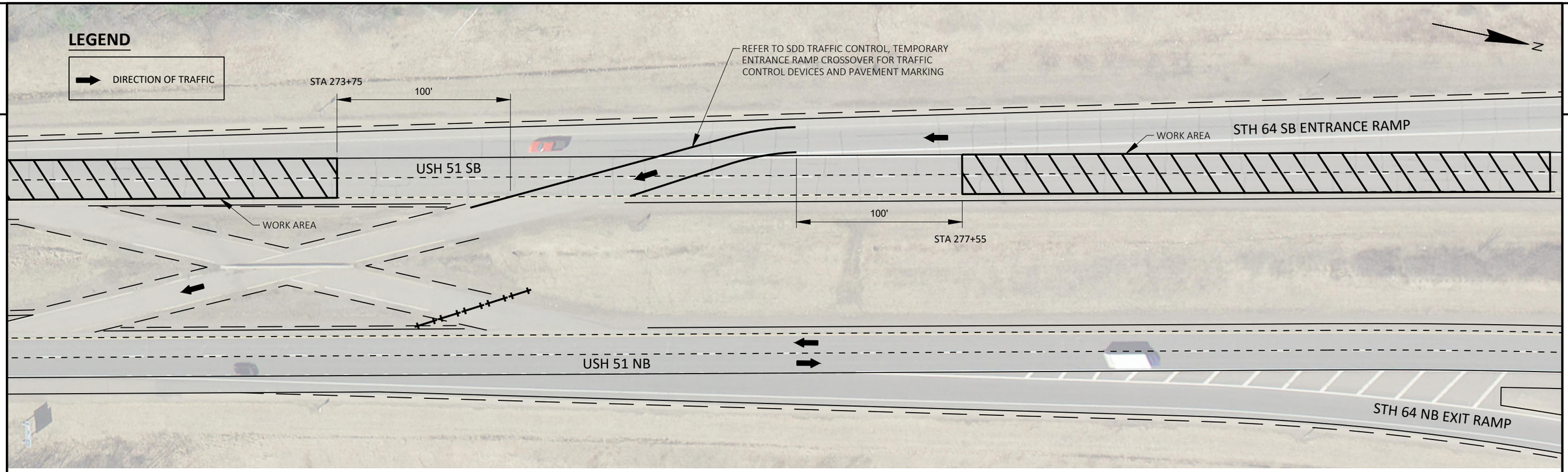
FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-025001-TC.DWG
LAYOUT NAME - 117622-025001-tc
PLOT DATE : 1/11/2021 11:21 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:60 FT
WISDOT/CADDS SHEET 44

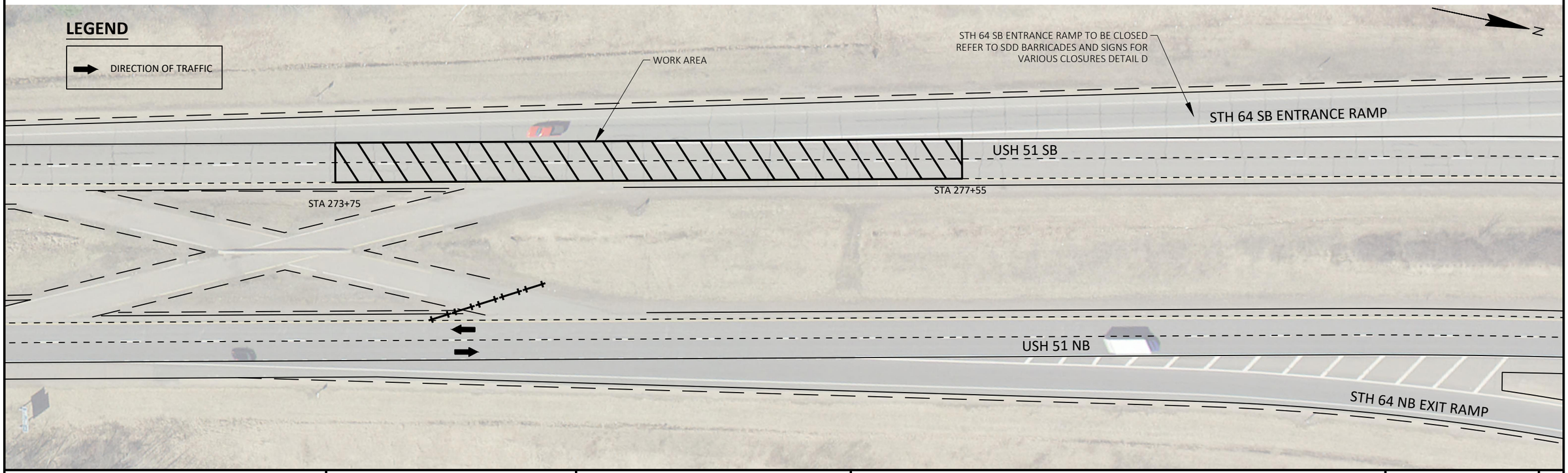




PROJECT NO: 1176-22-72	HWY: USH 51 SB	COUNTY: LINCOLN	TRAFFIC CONTROL STAGE 2A AND 2B MAINLINE AT CROSSOVER 3	SHEET 35	E

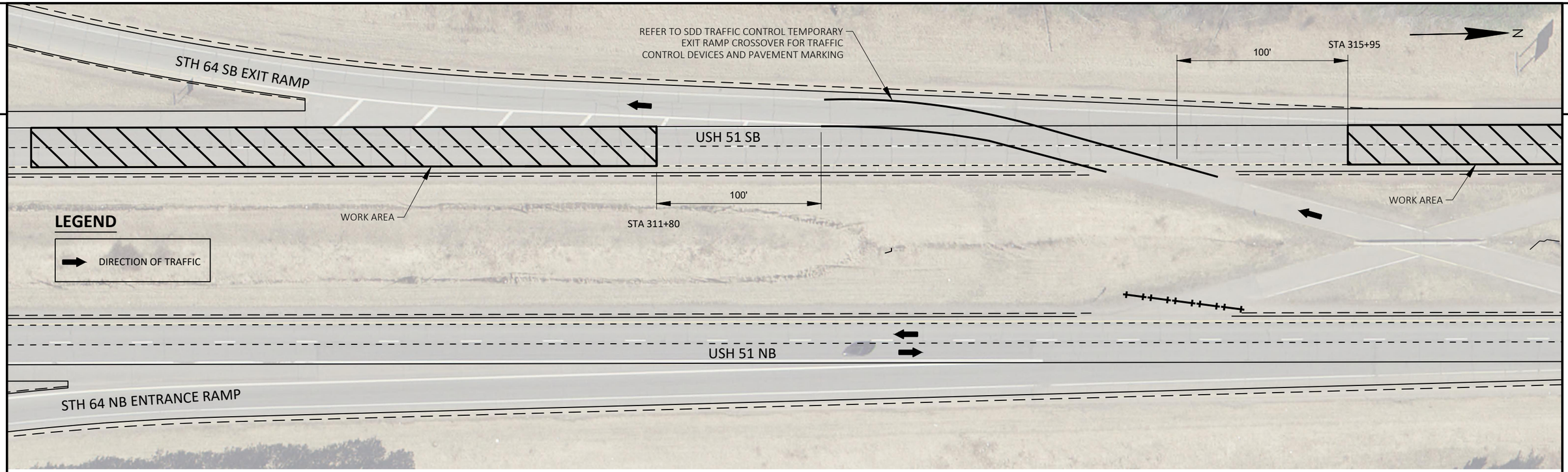
FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-025001-TC.DWG
LAYOUT NAME - 117622-025002-tc
PLOT DATE : 1/11/2021 11:21 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:60 FT
WISDOT/CADDS SHEET 44

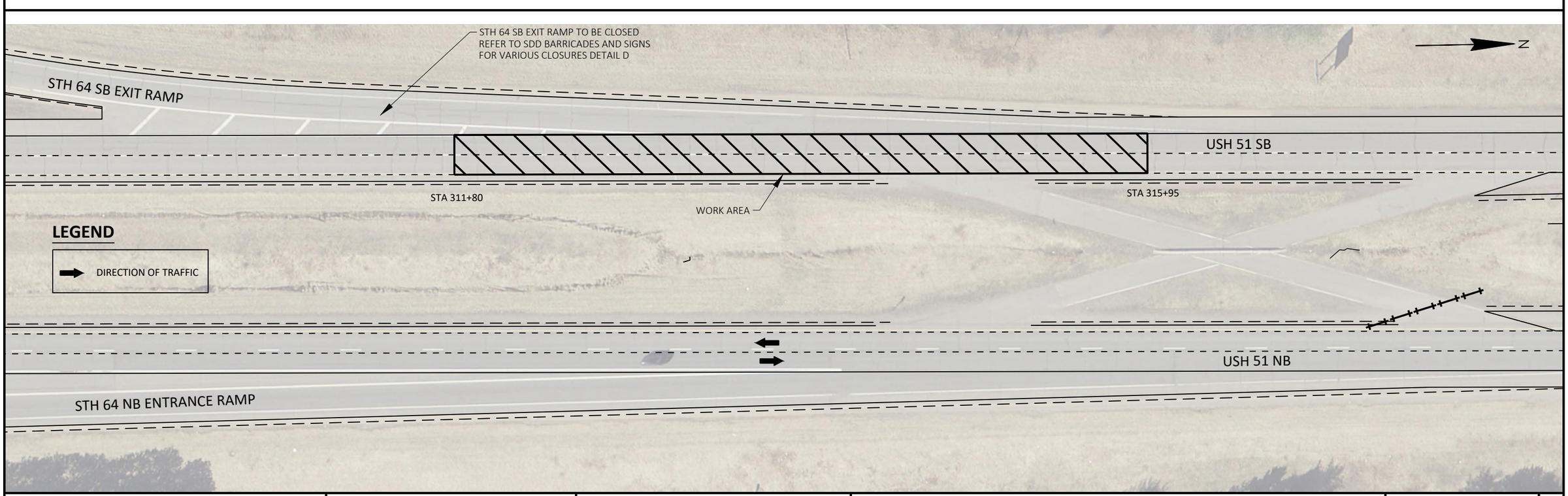




PROJECT NO: 1176-22-72	HWY: USH 51 SB	COUNTY: LINCOLN	TRAFFIC CONTROL STAGE 2A AND 2B MAINLINE AT CROSSOVER 4	SHEET 36	E

2

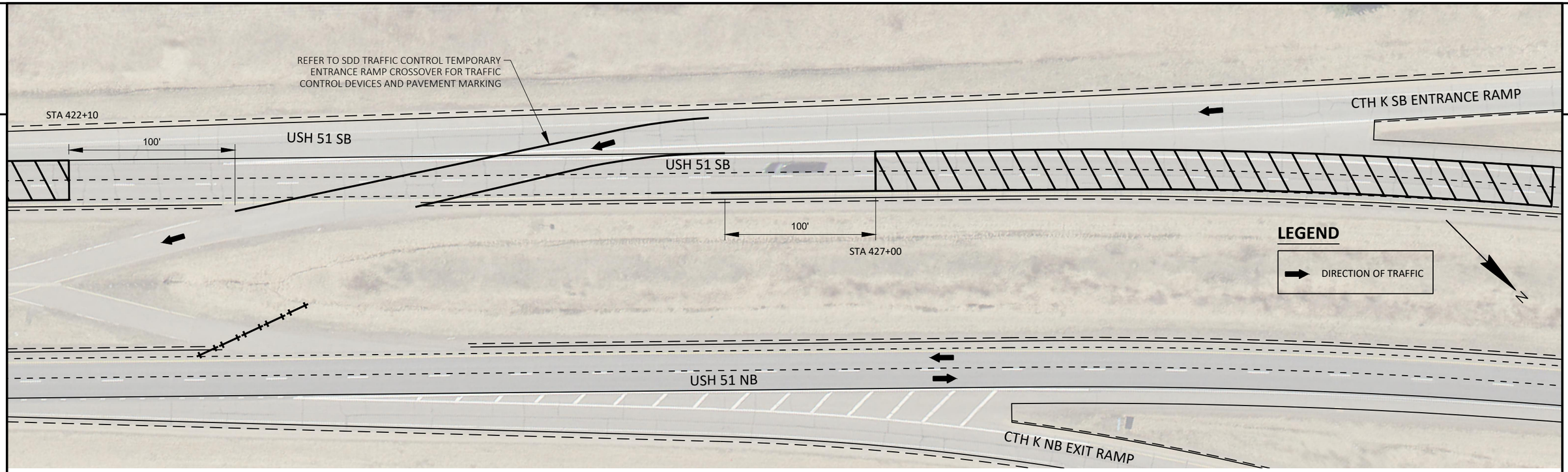


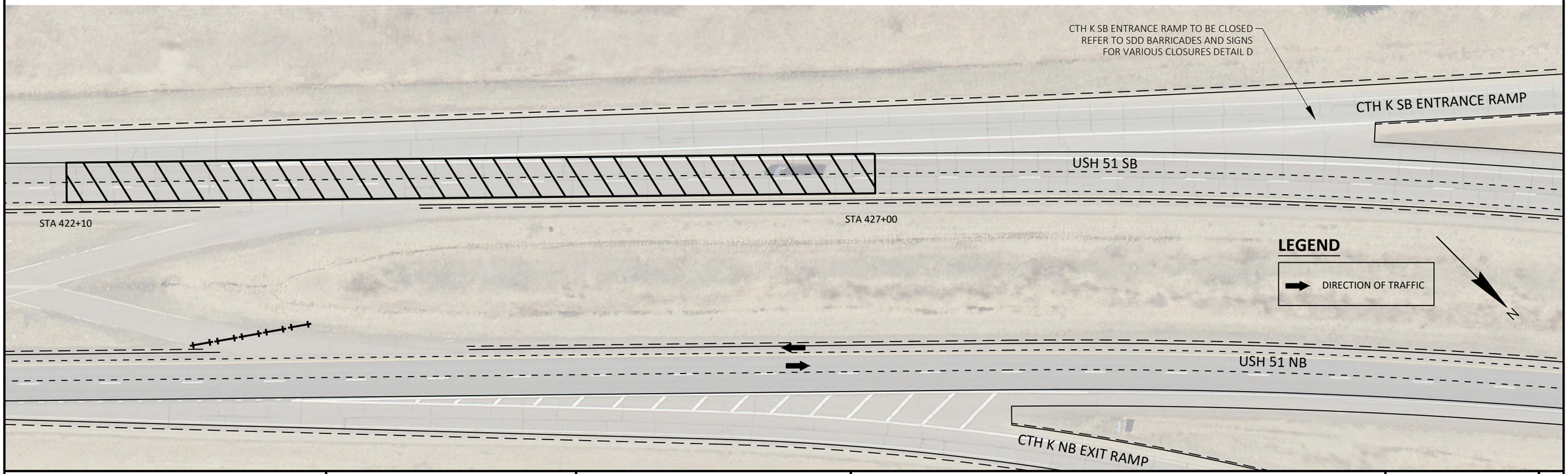


2

PROJECT NO: 1176-22-72	HWY: USH 51 SB	COUNTY: LINCOLN	TRAFFIC CONTROL STAGE 2A AND 2B MAINLINE AT CROSSOVER 5	SHEET 37	E

2

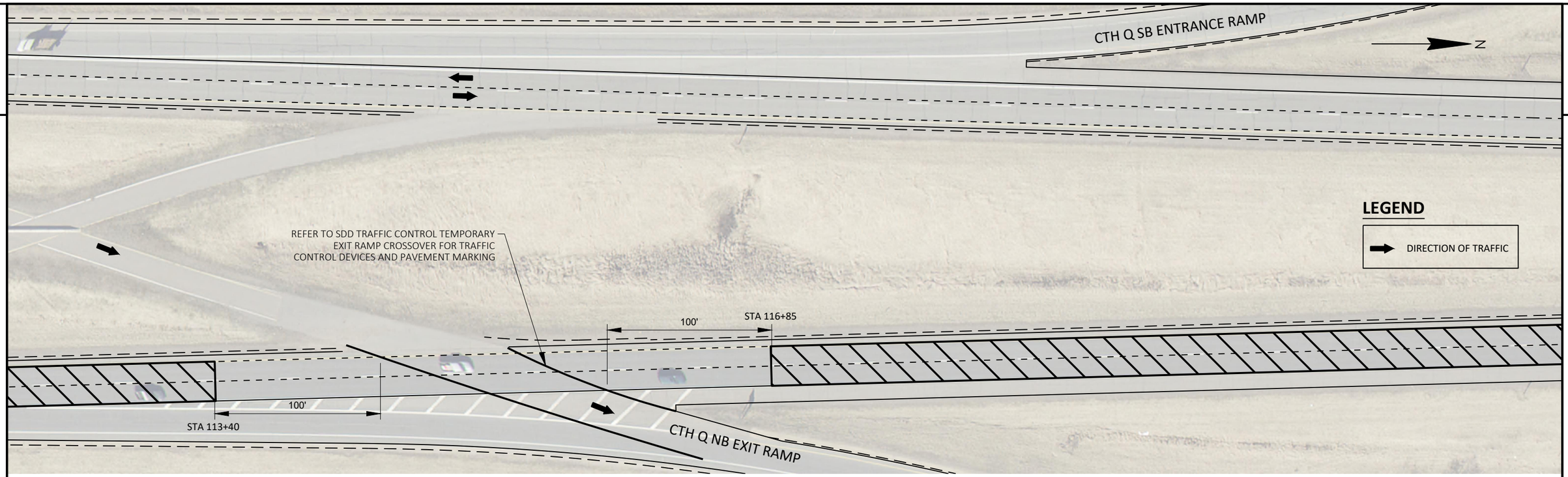


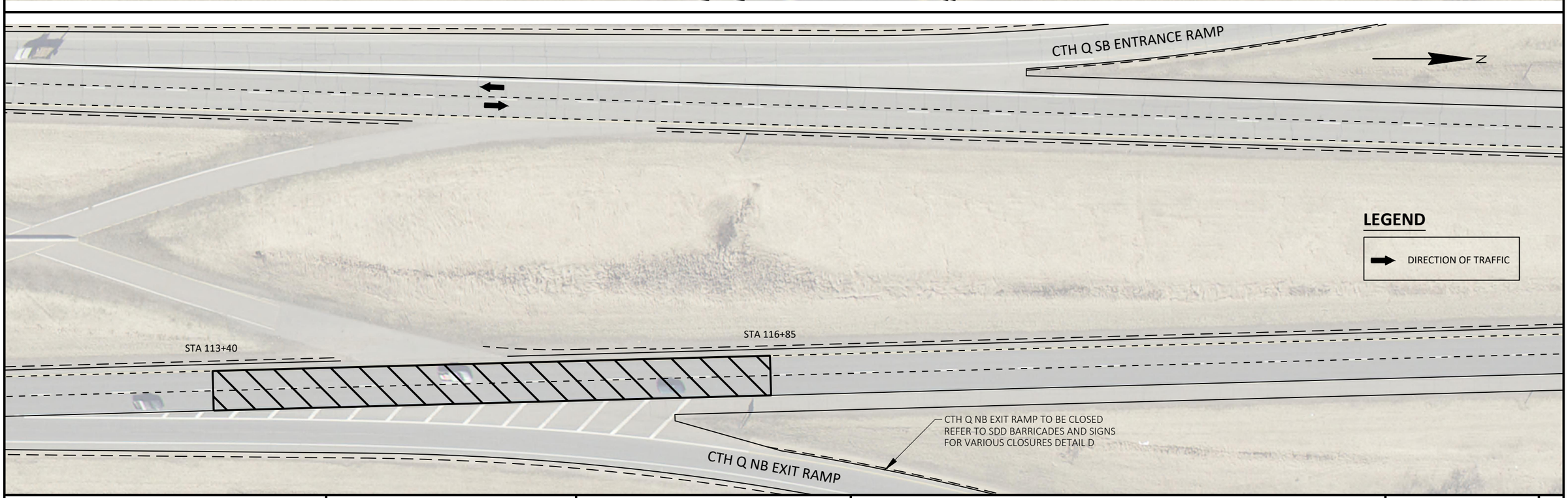


PROJECT NO: 1176-22-72	HWY: USH 51 SB	COUNTY: LINCOLN	TRAFFIC CONTROL STAGE 2A AND 2B MAINLINE AT CROSSOVER 6	SHEET 38	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-025001-TC.DWG
LAYOUT NAME - 117622-025005-tc
PLOT DATE : 1/11/2021 11:21 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

2





2

PROJECT NO: 1176-22-73	HWY: USH 51 NB	COUNTY: LINCOLN	TRAFFIC CONTROL STAGE 4A AND 4B MAINLINE AT CROSSOVER 2	SHEET 39	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-025001-TC.DWG
LAYOUT NAME - 117622-025006-tc
PLOT DATE : 1/11/2021 11:21 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:60 FT
WISDOT/CADDS SHEET 44

2

2

CTH Q SB EXIT RAMP

N

REFER TO SDD TRAFFIC CONTROL TEMPORARY ENTRANCE RAMP CROSSOVER FOR TRAFFIC CONTROL DEVICES AND PAVEMENT MARKING

110'

STA 141+40

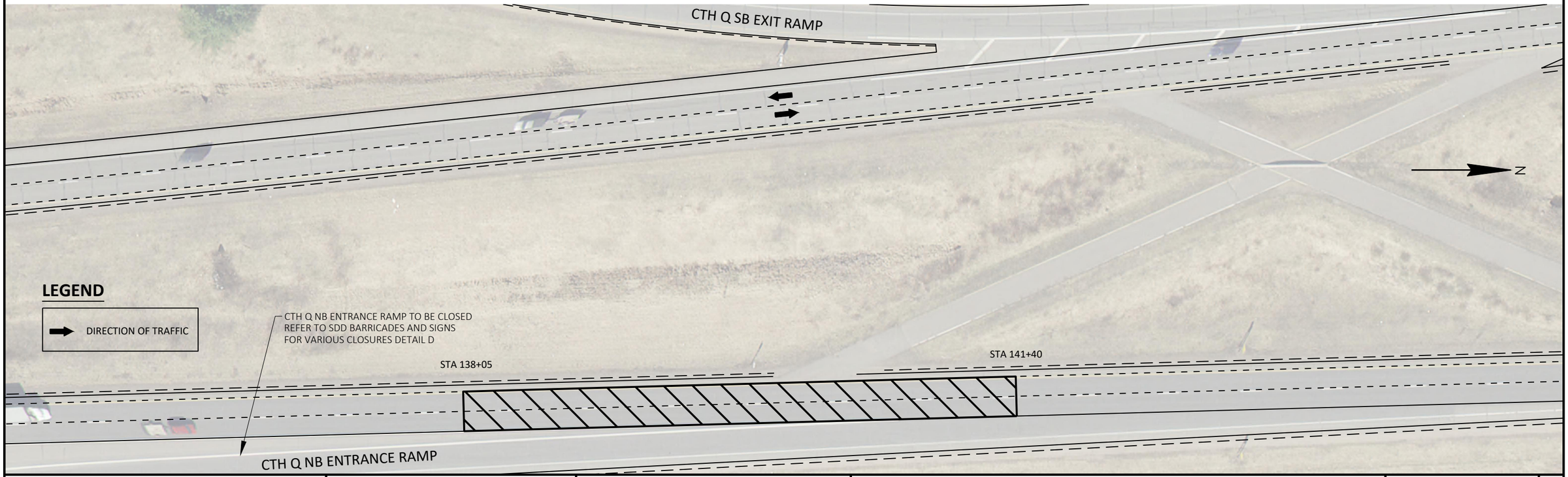
LEGEND

DIRECTION OF TRAFFIC

STA 138+05

100'

CTH Q NB ENTRANCE RAMP



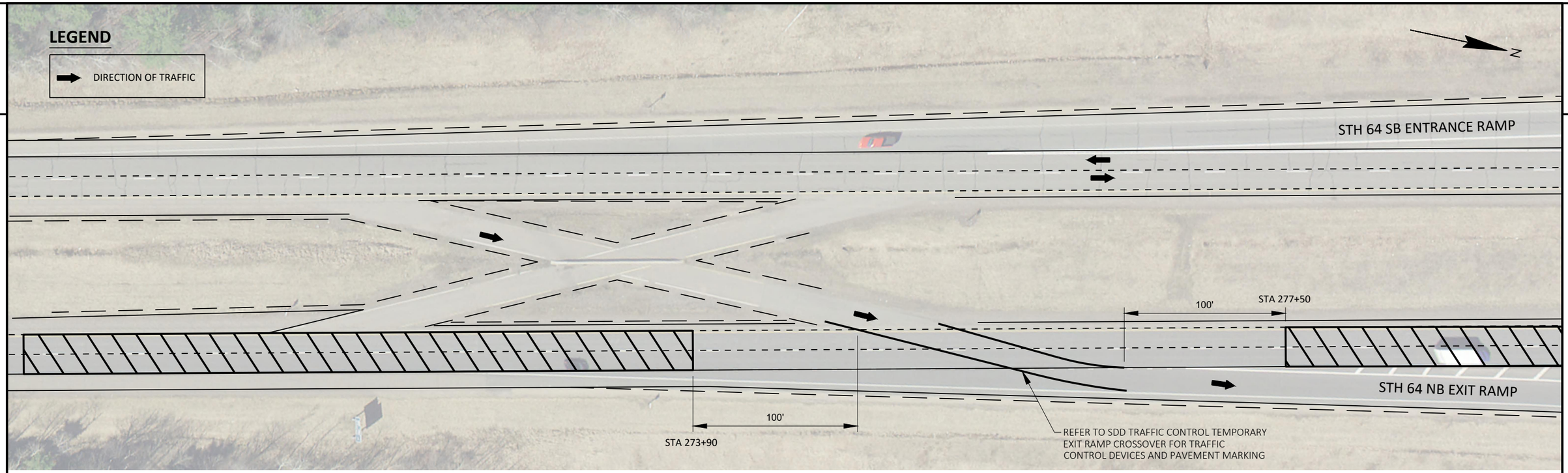
PROJECT NO: 1176-22-73	HWY: USH 51 NB	COUNTY: LINCOLN	TRAFFIC CONTROL STAGE 4A AND 4B MAINLINE AT CROSSOVER 3	SHEET 40	E

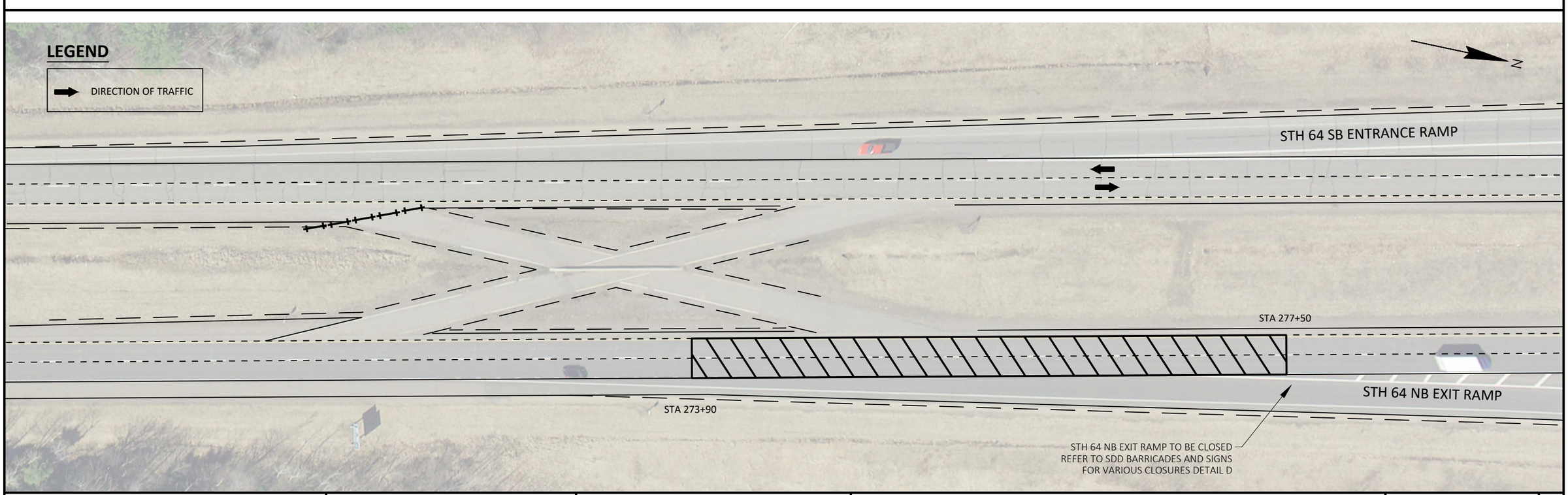
FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-025001-TC.DWG
LAYOUT NAME - 117622-025007-tc

PLOT DATE : 1/11/2021 11:21 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:60 FT

WISDOT/CADDS SHEET 44

2



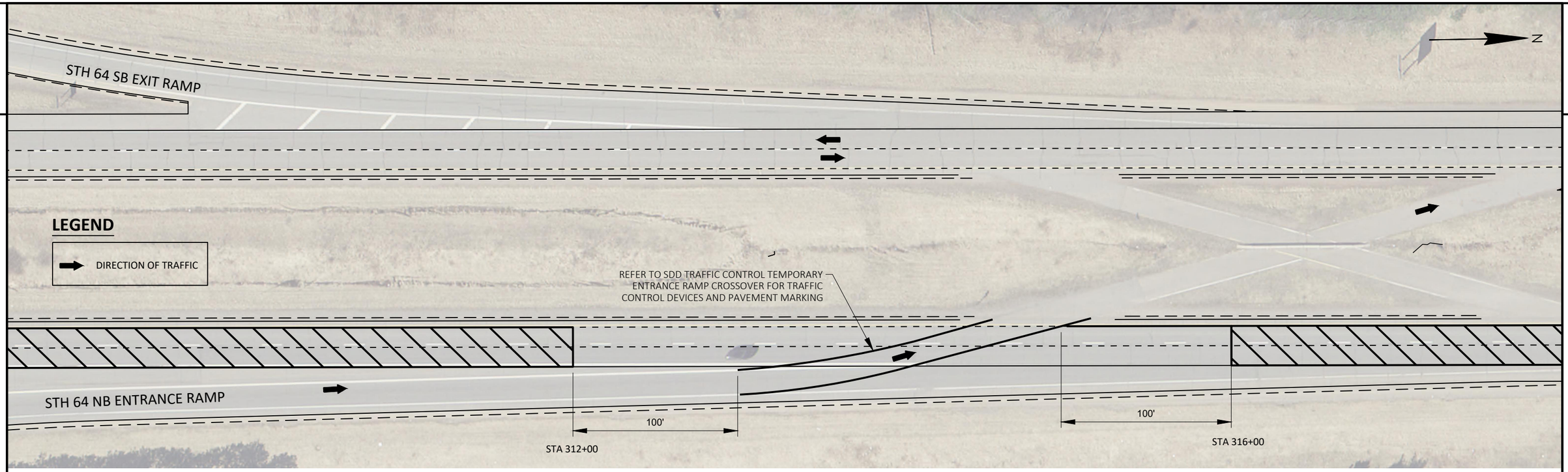


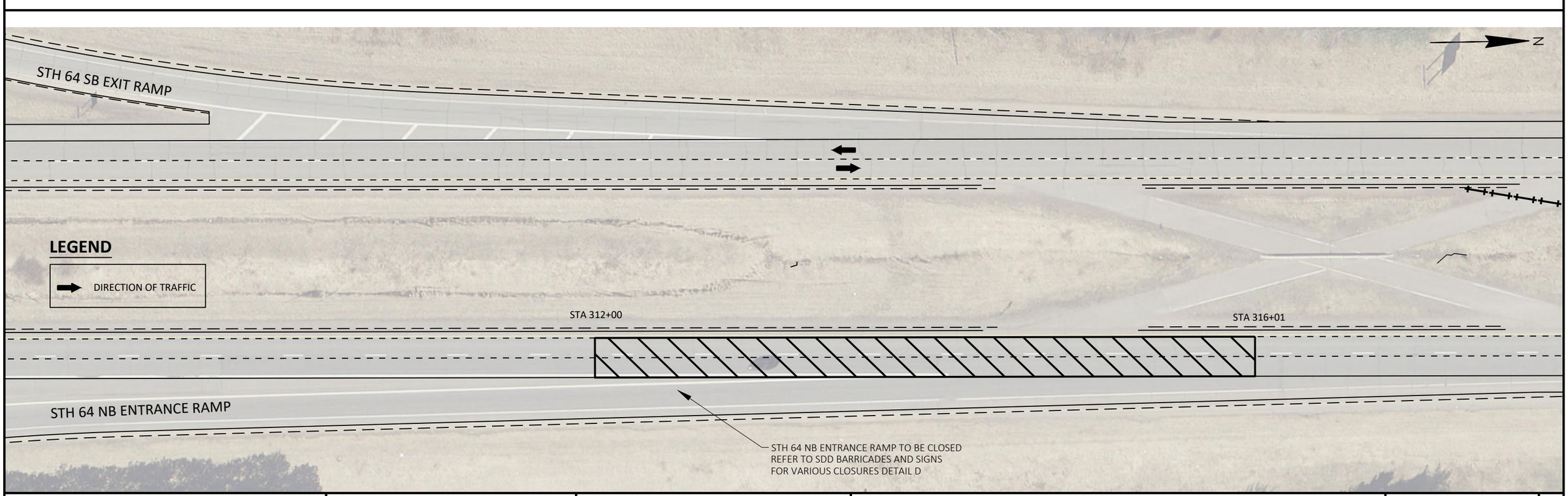
2

PROJECT NO: 1176-22-73	HWY: USH 51 NB	COUNTY: LINCOLN	TRAFFIC CONTROL STAGE 4A AND 4B MAINLINE AT CROSSOVER 4	SHEET 41	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-025001-TC.DWG
LAYOUT NAME - 117622-025008-tc
PLOT DATE : 1/11/2021 11:21 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

2





2

PROJECT NO: 1176-22-73	HWY: USH 51 NB	COUNTY: LINCOLN	TRAFFIC CONTROL STAGE 4A AND 4B MAINLINE AT CROSSOVER 5	SHEET 42	E

2

2

LEGEND

DIRECTION OF TRAFFIC

CTH K SB ENTRANCE RAMP

REFER TO SDD TRAFFIC CONTROL TEMPORARY
EXIT RAMP CROSSOVER FOR TRAFFIC
CONTROL DEVICES AND PAVEMENT MARKING

N

100'

STA 422+35

100'

STA 427+00

CTH K NB EXIT RAMP

LEGEND

DIRECTION OF TRAFFIC

CTH K SB ENTRANCE RAMP

CTH K NB EXIT RAMP TO BE CLOSED
REFER TO SDD BARRICADES AND SIGNS
FOR VARIOUS CLOSURES DETAIL D

N

STA 422+35

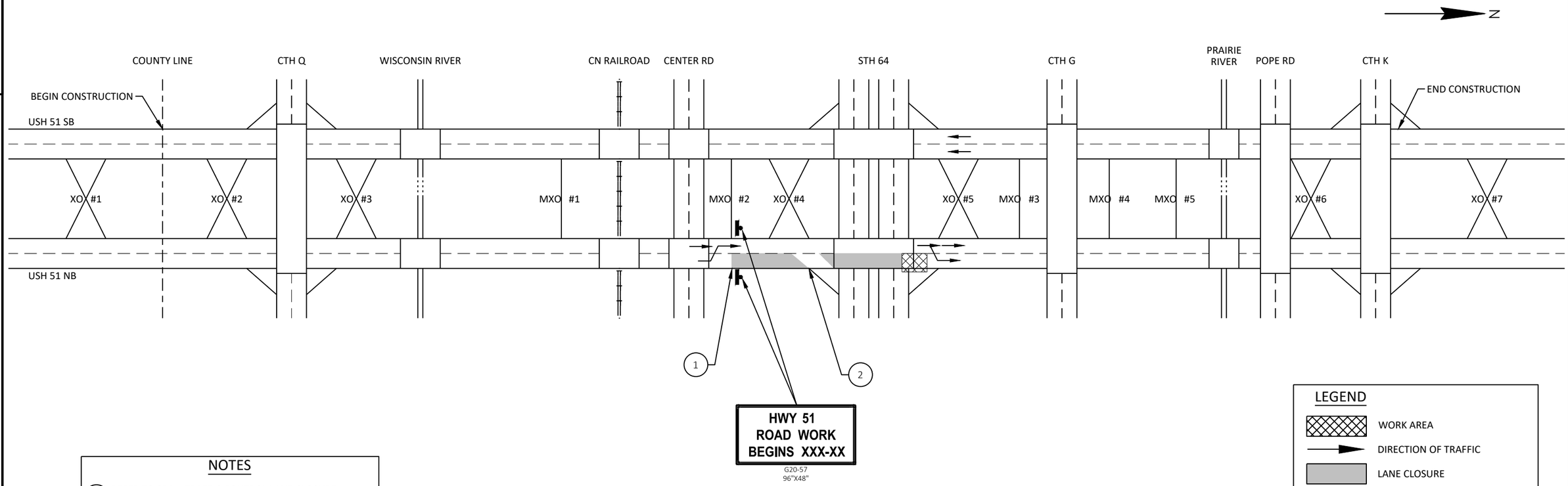
STA 427+00

CTH K NB EXIT RAMP

PROJECT NO: 1176-22-73	HWY: USH 51 NB	COUNTY: LINCOLN	TRAFFIC CONTROL STAGE 4A AND 4B MAINLINE AT CROSSOVER 6	SHEET 43	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-025001-TC.DWG
LAYOUT NAME - 117622-025010-tc
PLOT DATE : 1/11/2021 11:22 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : ##########

2



NOTES

1. REFER TO SDD "TRAFFIC CONTROL LANE CLOSURE, SPEED REDUCTION". USE 55 MPH REDUCED SPEED.
2. REFER TO SDD "TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE".

LEGEND

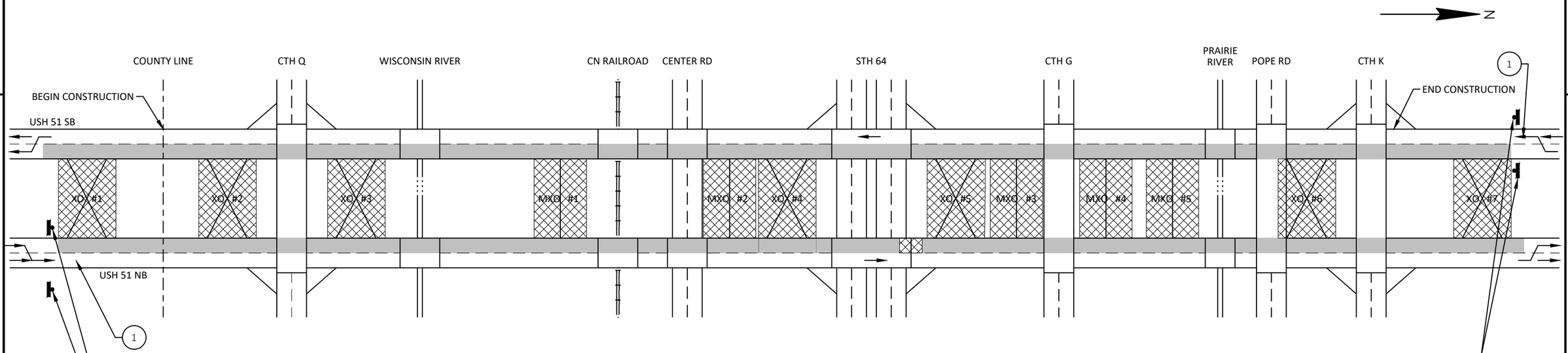
	WORK AREA
	DIRECTION OF TRAFFIC
	LANE CLOSURE
XO #	TRAFFIC CONTROL CROSSOVER
MXO #	MAINTENANCE CROSSOVER
	SIGN ON PERMANENT SUPPORT

PROJECT NO: 1176-22-72	HWY: USH 51 SB	COUNTY: LINCOLN	STAGE CONSTRUCTION - STAGE 1A	SHEET 44	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-026001-S1A.DWG
LAYOUT NAME - 117622-026001-s1a

PLOT DATE : 2/16/2021 10:42 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



HWY 51
ROAD WORK
BEGINS XXX-XX

G20-57
96"X48"

HWY 51
ROAD WORK
BEGINS XXX-XX

G20-57
96"X48"

NOTES

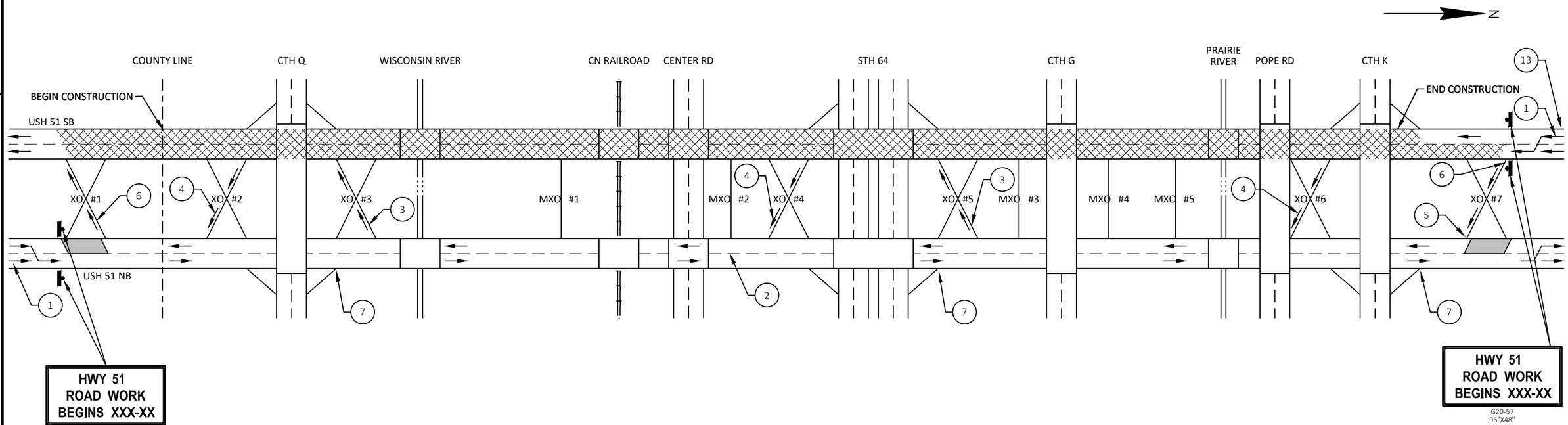
1. REFER TO SDD "TRAFFIC CONTROL LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM". USE 55 MPH REDUCED SPEED. STATIC QUEUE WARNING SYSTEM REQUIRED.

LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC
- LANE CLOSURE
- XO # — TRAFFIC CONTROL CROSSOVER
- MXO # — MAINTENANCE CROSSOVER
- SIGN ON PERMANENT SUPPORT

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51 NB/SB	COUNTY: LINCOLN	STAGE CONSTRUCTION - STAGE 1B	SHEET 45	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-026002-S1B.DWG
LAYOUT NAME - 117622-026001-s1b
PLOT DATE : 2/16/2021 11:07 AM
PLOT BY : JAIRO MAZARIEGOS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



NOTES

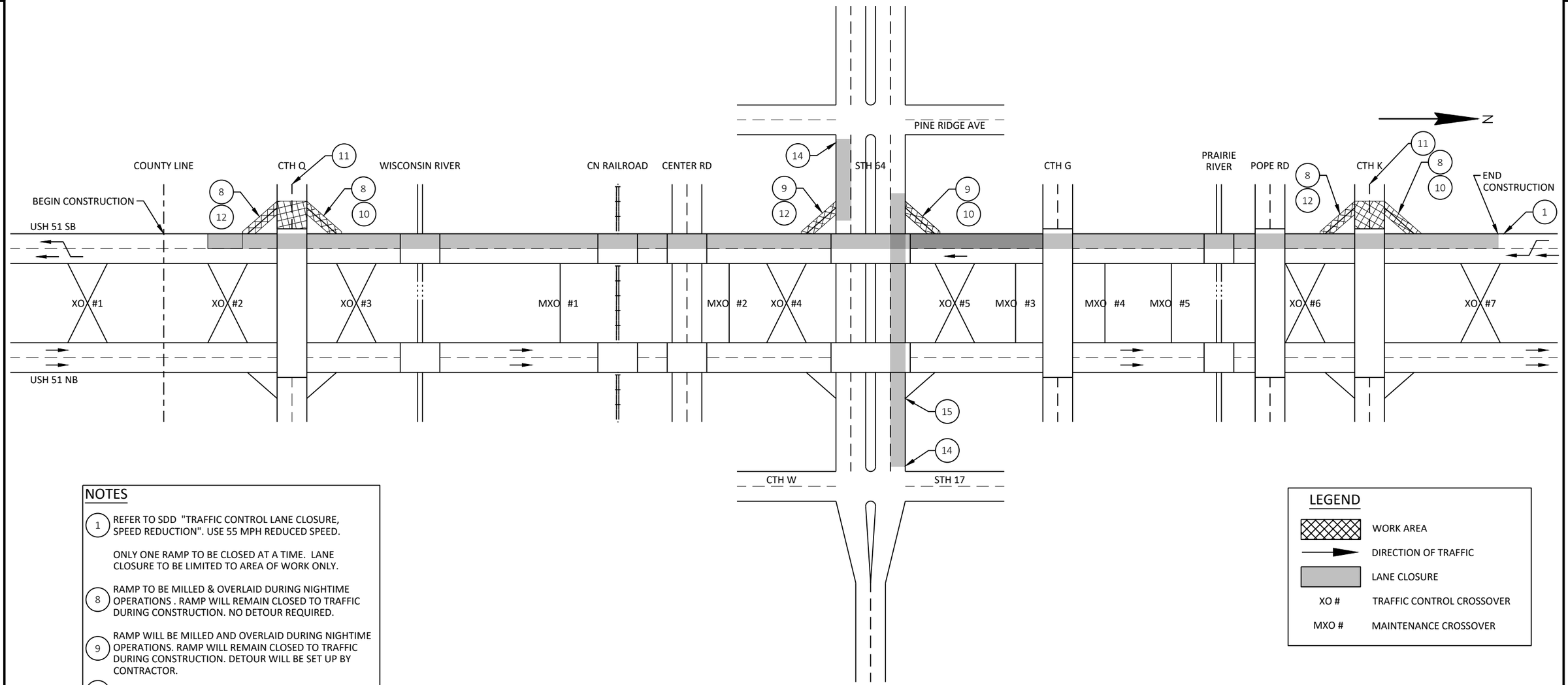
1. REFER TO SDD "TRAFFIC CONTROL LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM". USE 55 MPH REDUCED SPEED. STATIC QUEUE WARNING SYSTEM REQUIRED.
2. REFER TO SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION"
3. REFER TO SDD "TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER"
4. REFER TO SDD "TRAFFIC CONTROL, TEMPORARY ENTRANCE RAMP CROSSOVER"
5. REFER TO SDD "TRAFFIC CONTROL, SINGLE LANE CROSSOVER EXIT"
6. REFER TO SDD "TRAFFIC CONTROL, SINGLE LANE CROSSOVER"
7. REFER TO SDD "TRAFFIC CONTROL ENTRANCE RAMP WITHIN LANE CLOSURE"
13. INSTALL TEMPORARY RUMBLE STRIPS (ORANGE)

LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC
- LANE CLOSURE
- XO # — TRAFFIC CONTROL CROSSOVER
- MXO # — MAINTENANCE CROSSOVER
- SIGN ON PERMANENT SUPPORT

PROJECT NO: 1176-22-72	HWY: USH 51 SB	COUNTY: LINCOLN	STAGE CONSTRUCTION - STAGE 2A AND 2B	SHEET 46	E

2



NOTES

1. REFER TO SDD "TRAFFIC CONTROL LANE CLOSURE, SPEED REDUCTION". USE 55 MPH REDUCED SPEED.

   ONLY ONE RAMP TO BE CLOSED AT A TIME. LANE CLOSURE TO BE LIMITED TO AREA OF WORK ONLY.

8. RAMP TO BE MILLED & OVERLAID DURING NIGHTIME OPERATIONS . RAMP WILL REMAIN CLOSED TO TRAFFIC DURING CONSTRUCTION. NO DETOUR REQUIRED.

9. RAMP WILL BE MILLED AND OVERLAID DURING NIGHTIME OPERATIONS. RAMP WILL REMAIN CLOSED TO TRAFFIC DURING CONSTRUCTION. DETOUR WILL BE SET UP BY CONTRACTOR.

10. REFER TO SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE"

11. REFER TO SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"

12. REFER TO SDD "BARRICADES AND SIGNS FOR VARIOUS CLOSURES"

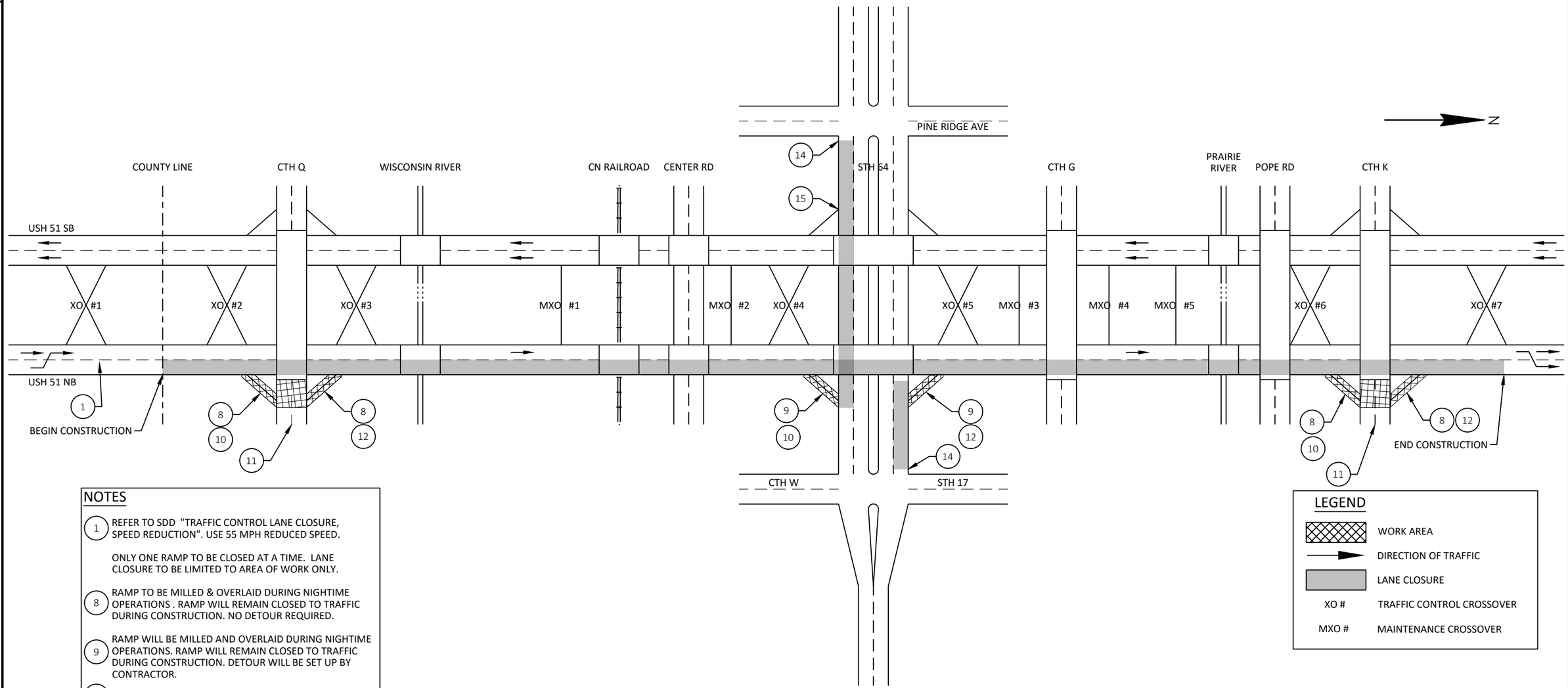
14. REFER TO SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"

15. REFER TO SDD "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE"

LEGEND

	WORK AREA
	DIRECTION OF TRAFFIC
	LANE CLOSURE
XO #	TRAFFIC CONTROL CROSSOVER
MXO #	MAINTENANCE CROSSOVER

2



NOTES

1. REFER TO SDD "TRAFFIC CONTROL LANE CLOSURE, SPEED REDUCTION". USE 55 MPH REDUCED SPEED.

   ONLY ONE RAMP TO BE CLOSED AT A TIME. LANE CLOSURE TO BE LIMITED TO AREA OF WORK ONLY.

8. RAMP TO BE MILLED & OVERLAID DURING NIGHTIME OPERATIONS . RAMP WILL REMAIN CLOSED TO TRAFFIC DURING CONSTRUCTION. NO DETOUR REQUIRED.

9. RAMP WILL BE MILLED AND OVERLAID DURING NIGHTIME OPERATIONS. RAMP WILL REMAIN CLOSED TO TRAFFIC DURING CONSTRUCTION. DETOUR WILL BE SET UP BY CONTRACTOR.

10. REFER TO SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE"

11. REFER TO SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"

12. REFER TO SDD "BARRICADES AND SIGNS FOR VARIOUS CLOSURES"

14. REFER TO SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"

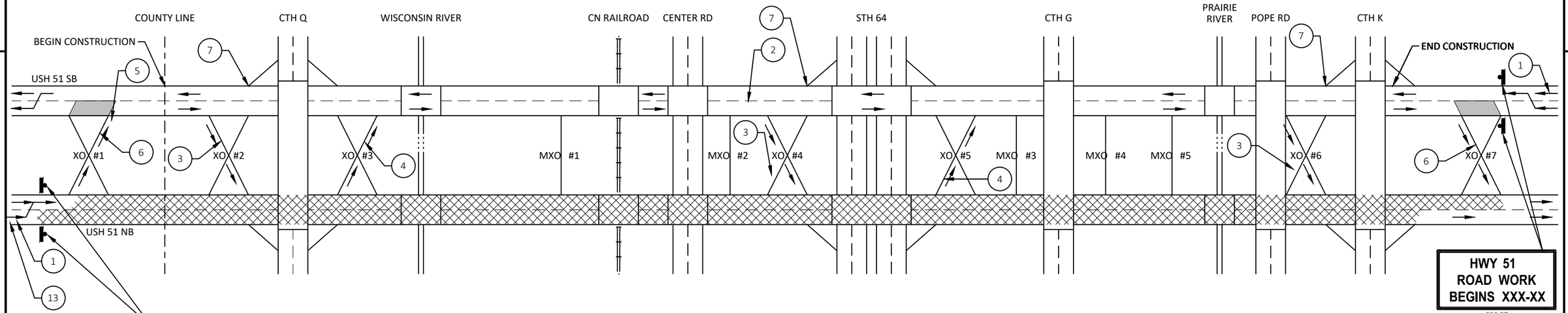
15. REFER TO SDD "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE"

LEGEND

	WORK AREA
→	DIRECTION OF TRAFFIC
	LANE CLOSURE
XO #	TRAFFIC CONTROL CROSSOVER
MXO #	MAINTENANCE CROSSOVER

PROJECT NO: 1176-22-73	HWY: USH 51 NB	COUNTY: LINCOLN	STAGE CONSTRUCTION - STAGE 3B	SHEET 48	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-026003-S3B.DWG
LAYOUT NAME - 117622-026003-s3b
117622-026003-s3b
PLOT DATE : 2/18/2021 11:28 AM
PLOT BY : CRAIG KNUTH
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



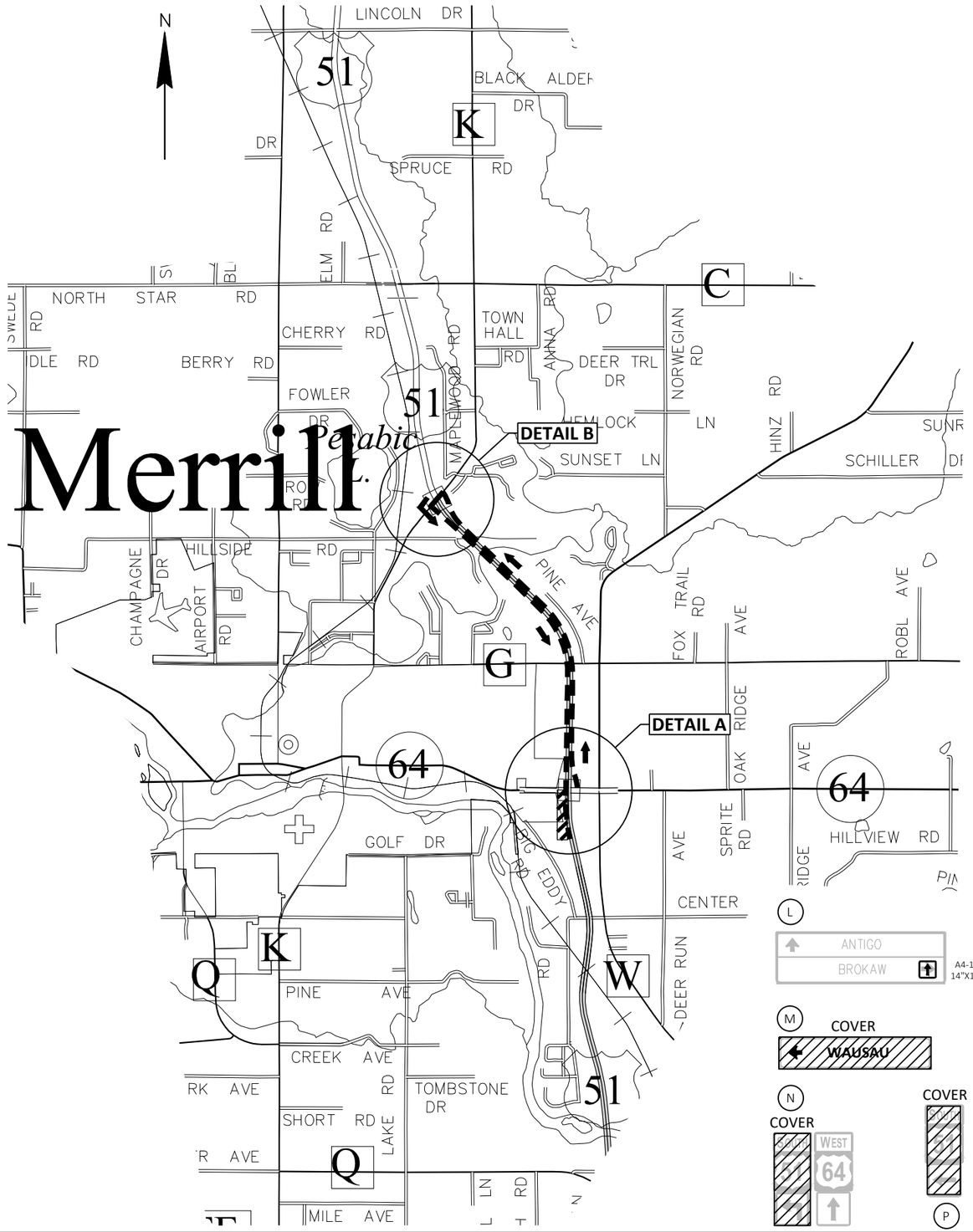
NOTES

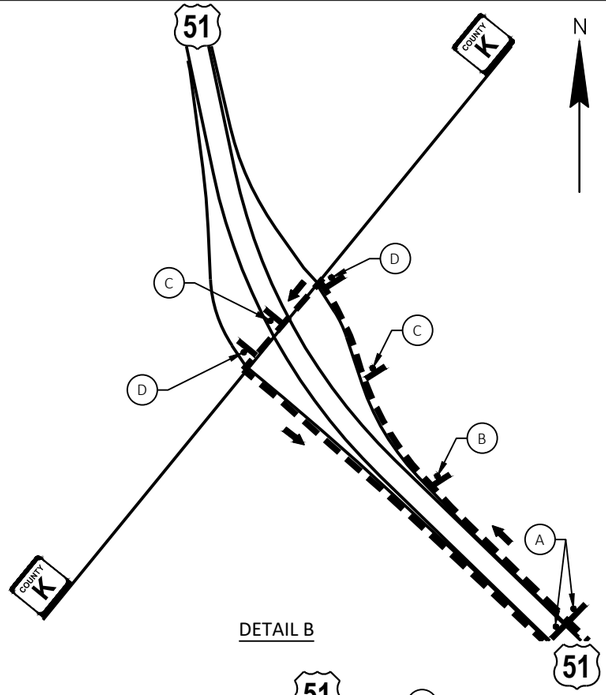
1. REFER TO SDD "TRAFFIC CONTROL LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM". USE 55 MPH REDUCED SPEED. STATIC QUEUE WARNING SYSTEM REQUIRED.
2. REFER TO SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION"
3. REFER TO SDD "TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER"
4. REFER TO SDD "TRAFFIC CONTROL, TEMPORARY ENTRANCE RAMP CROSSOVER"
5. REFER TO SDD "TRAFFIC CONTROL, SINGLE LANE CROSSOVER EXIT"
6. REFER TO SDD "TRAFFIC CONTROL, SINGLE LANE CROSSOVER"
7. REFER TO SDD "TRAFFIC CONTROL ENTRANCE RAMP WITHIN LANE CLOSURE"
13. INSTALL TEMPORARY RUMBLE STRIPS (ORANGE)

LEGEND

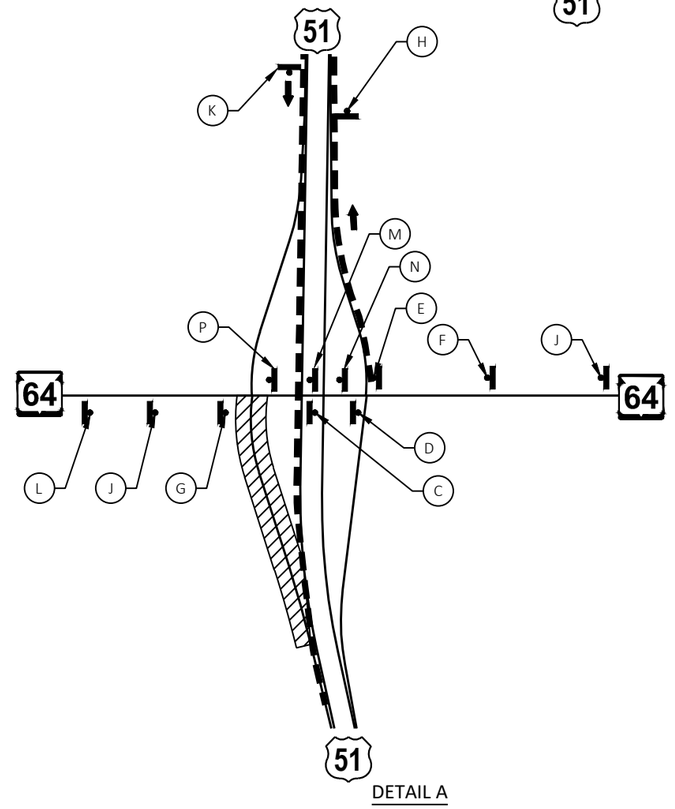
- WORK AREA
- DIRECTION OF TRAFFIC
- LANE CLOSURE
- XO # — TRAFFIC CONTROL CROSSOVER
- MXO # — MAINTENANCE CROSSOVER
- SIGN ON PERMANENT SUPPORT

PROJECT NO: 1176-22-73	HWY: USH 51 NB	COUNTY: LINCOLN	STAGE CONSTRUCTION - STAGE 4A AND 4B	SHEET 49	E

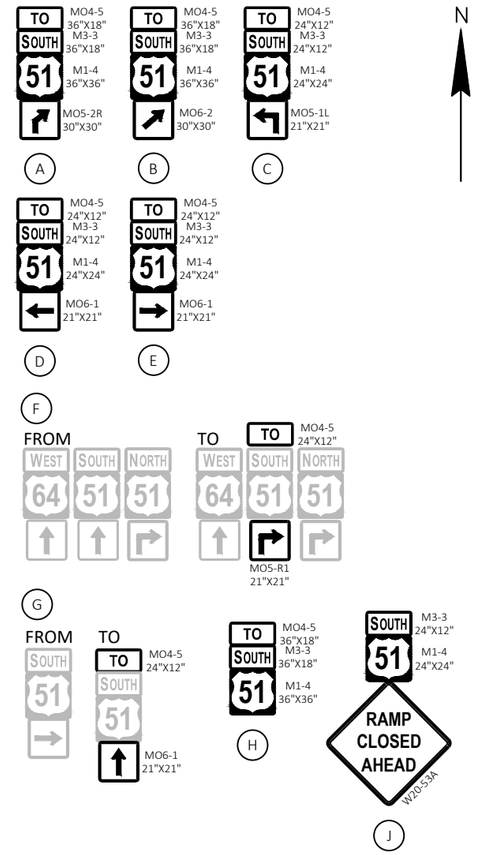




DETAIL B



DETAIL A



NO SOUTHBOUND
RE-ENTRY
TO FREEWAY

W6-54C
138"X54"

K

DETOUR ROUTE OVERVIEW

USH 51 SB ENTRANCE RAMP AT STH 64:
- USH 51 NB TO CTH K EXIT RAMP
- CTH K WB TO USH 51 SB ENTRANCE RAMP
- USH 51 SB

REFER TO SDD "ON RAMP LANE CLOSURE"

LEGEND

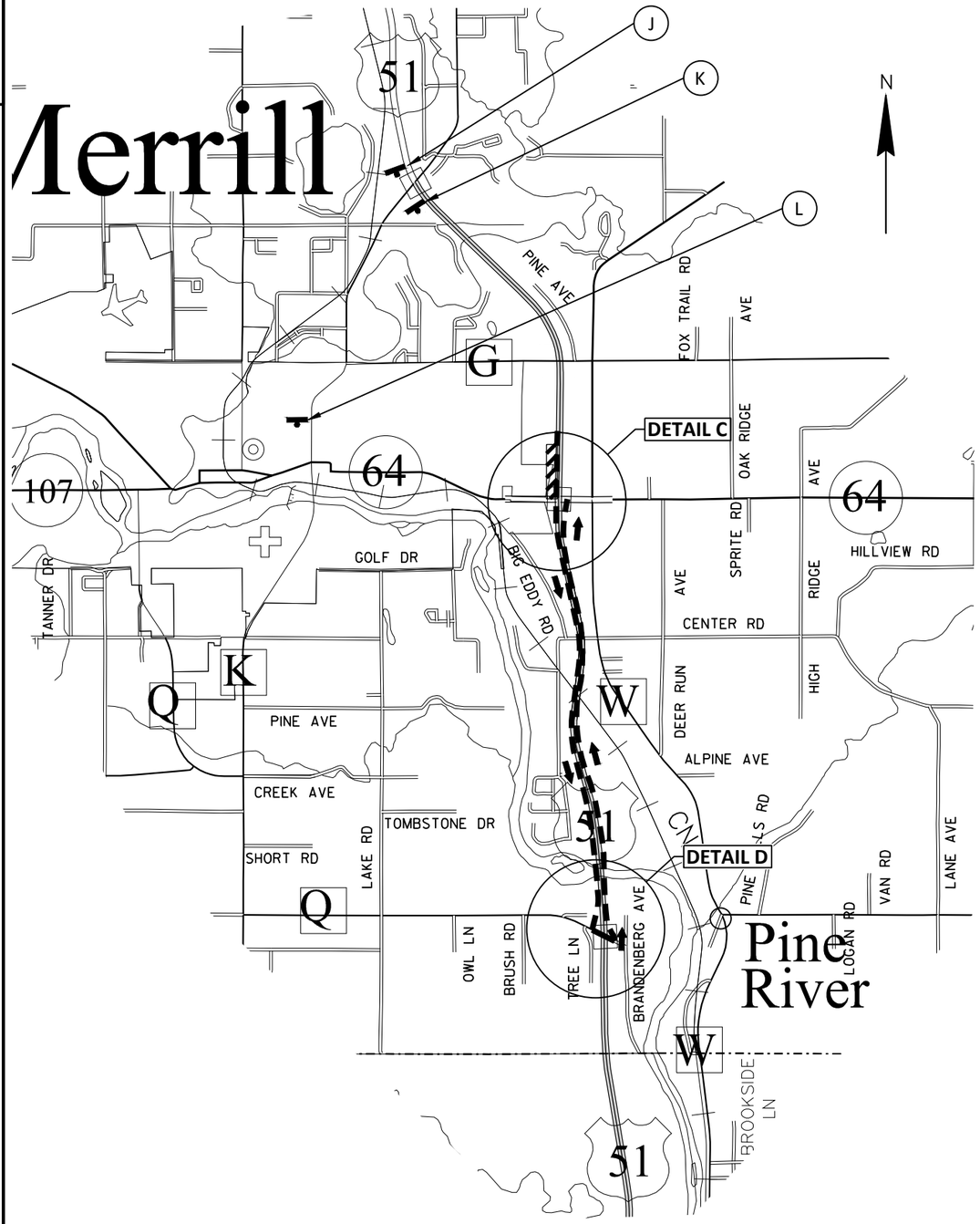
DETOUR ROUTE

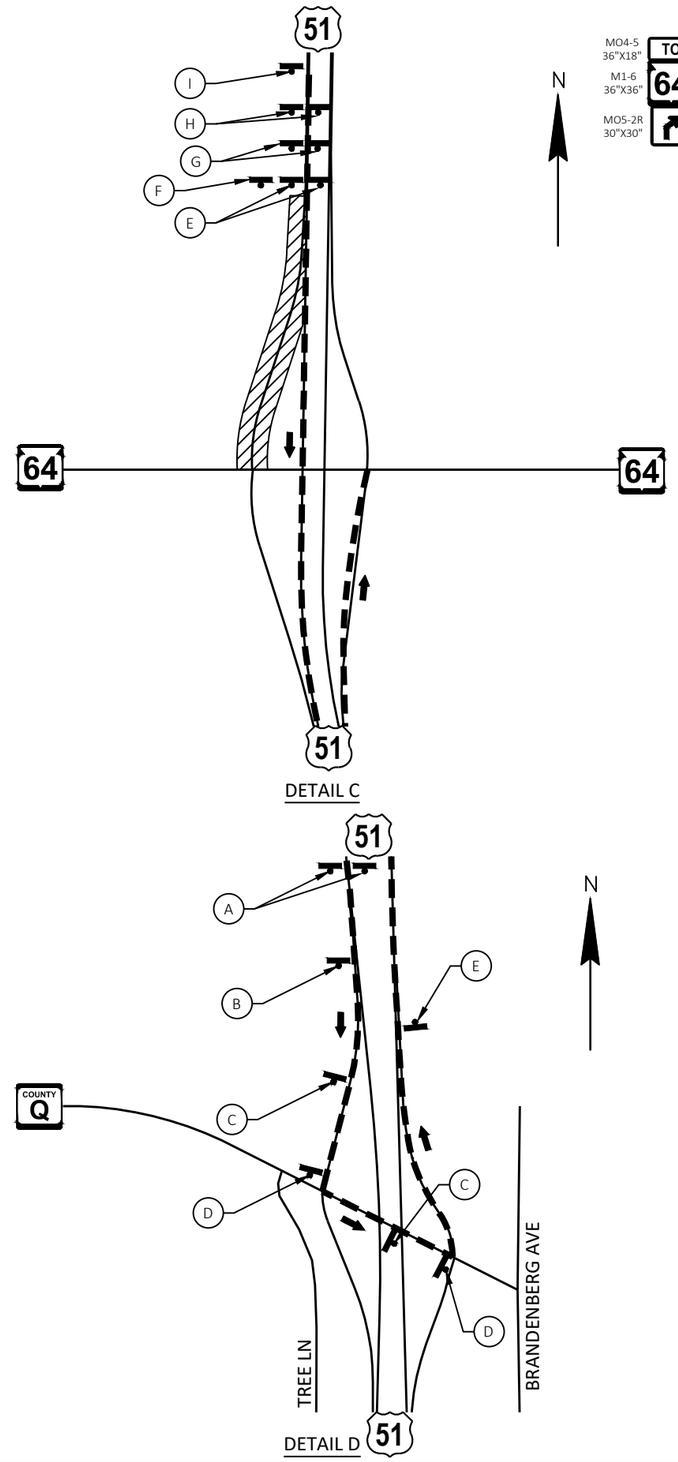
WORK AREA

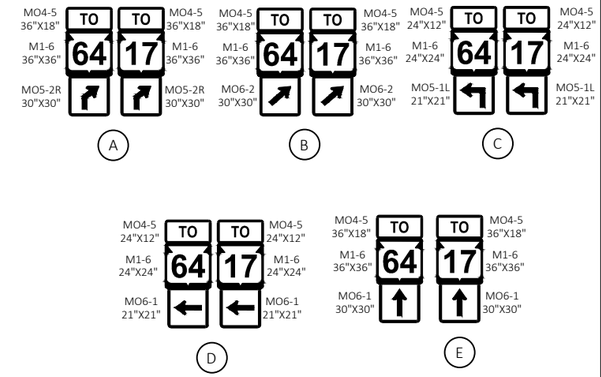
NOTE:
ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

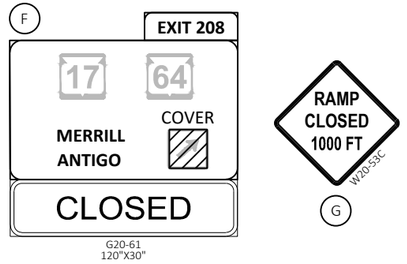
PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	DETOUR PLAN - USH 51 SOUTHBOUND ENTRANCE RAMP AT STH 64	SHEET 50	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-027001-DT_64.DWG
LAYOUT NAME - 117622-027001-dt_64
PLOT DATE : 3/4/2021 9:00 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:1 MI
WISDOT/CADDS SHEET 42



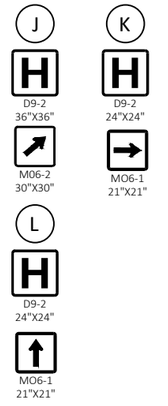












DETOUR ROUTE OVERVIEW

USH 51 SB EXIT RAMP AT STH 64:

- USH 51 SB TO CTH Q EXIT RAMP
- CTH Q EB TO USH 51 NB ENTRANCE RAMP
- USH 51 NB TO STH 64 EXIT RAMP

REFER TO SDD "OFF-RAMP LANE CLOSURE"

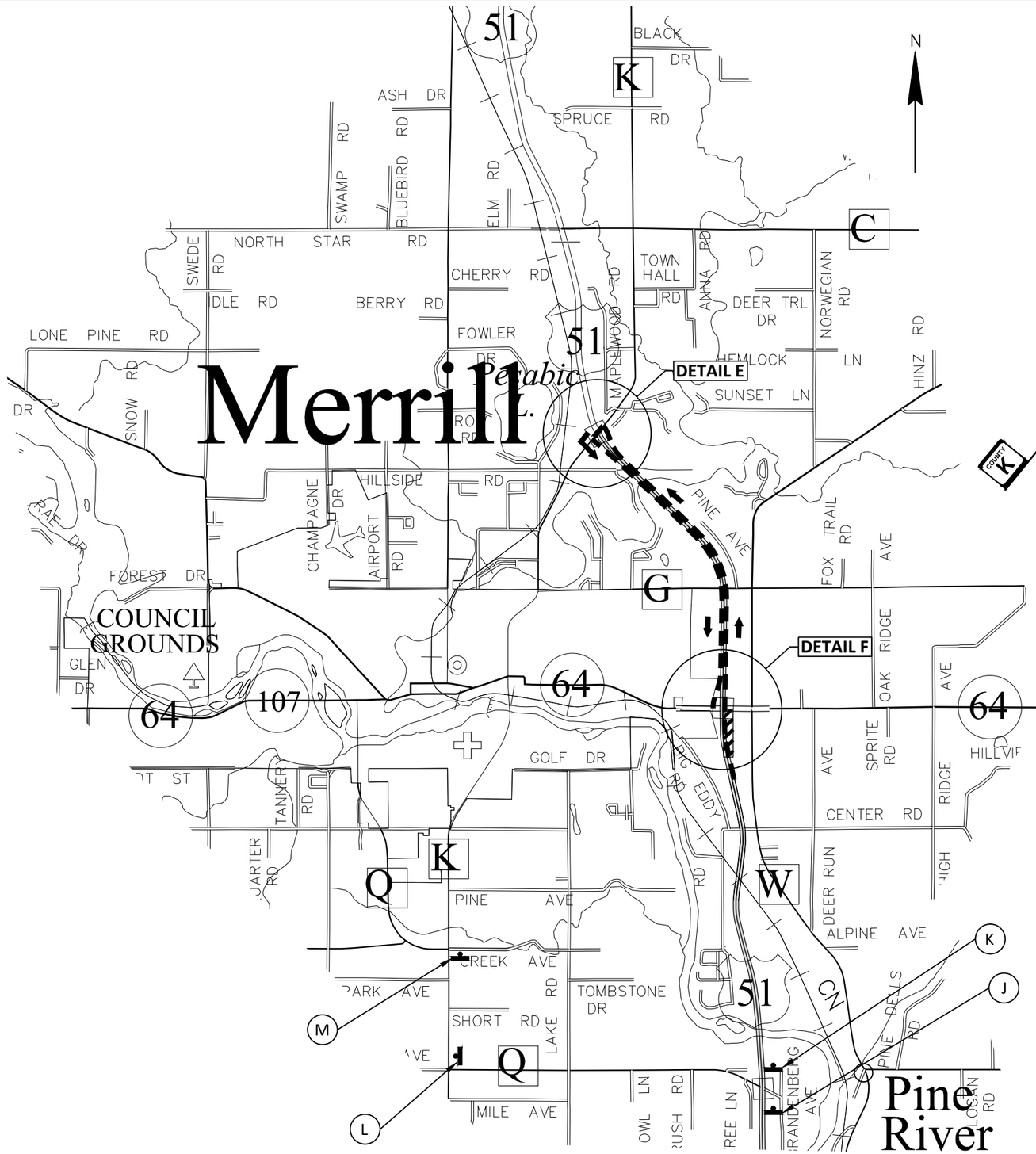
LEGEND

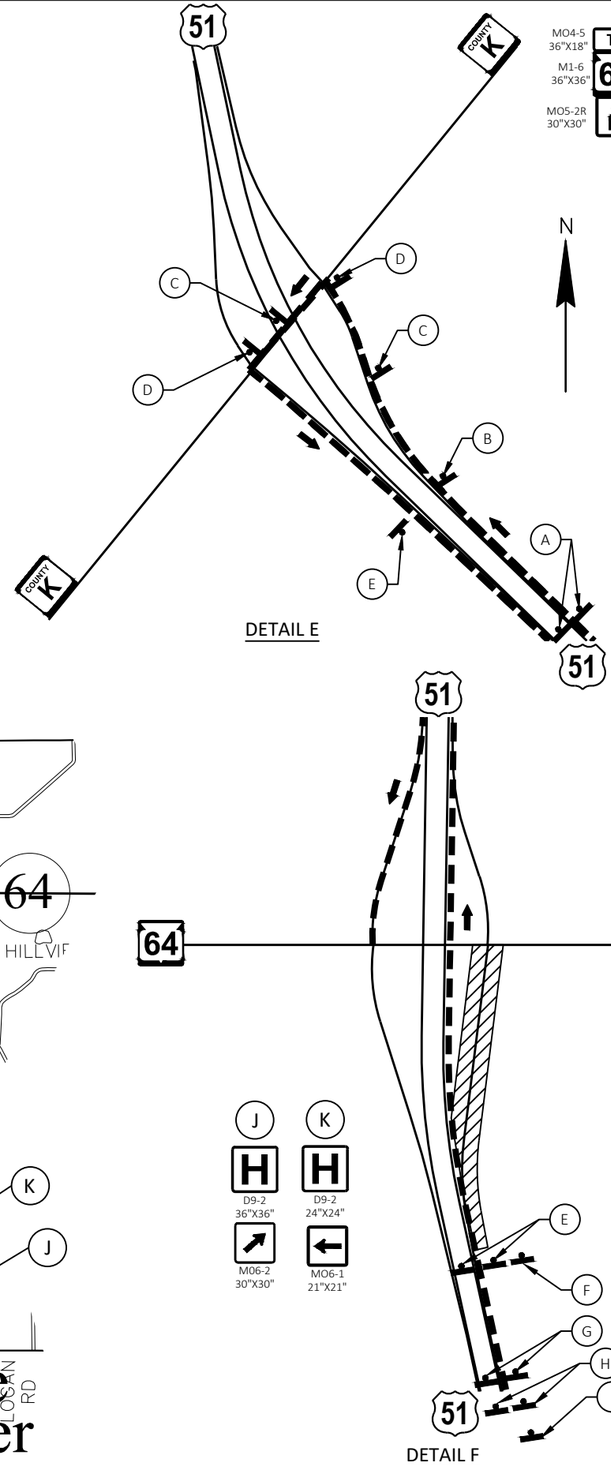
- DETOUR ROUTE
- WORK AREA

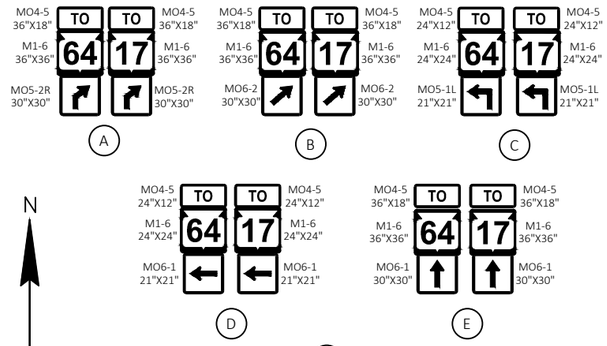
NOTE:
ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

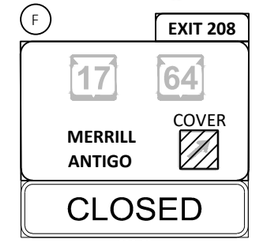
PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	DETOUR PLAN - USH 51 SOUTHBOUND EXIT RAMP AT STH 64	SHEET 51	E

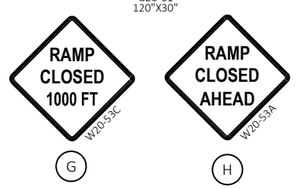
FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-027001-DT_64.DWG
LAYOUT NAME - 117622-027005-dt_64
PLOT DATE : 2/17/2021 1:49 PM
PLOT BY : JAIRO MAZARIEGOS
PLOT NAME :
PLOT SCALE : 1 IN:1 MI
WISDOT/CADDS SHEET 42



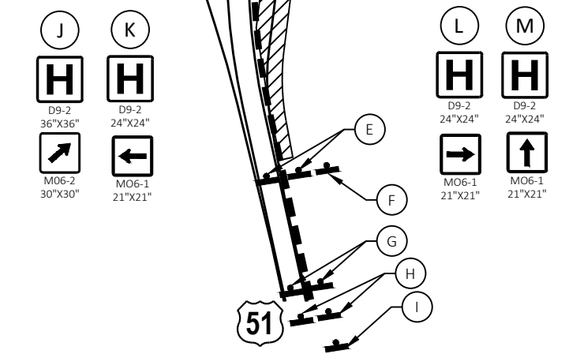












DETOUR ROUTE OVERVIEW

USH 51 NB EXIT RAMP AT STH 64:

- USH 51 NB TO CTH K EXIT RAMP
- CTH K WB TO USH 51 SB ENTRANCE RAMP
- USH 51 SB TO STH 64 EXIT RAMP

REFER TO SDD "OFF-RAMP LANE CLOSURE

LEGEND

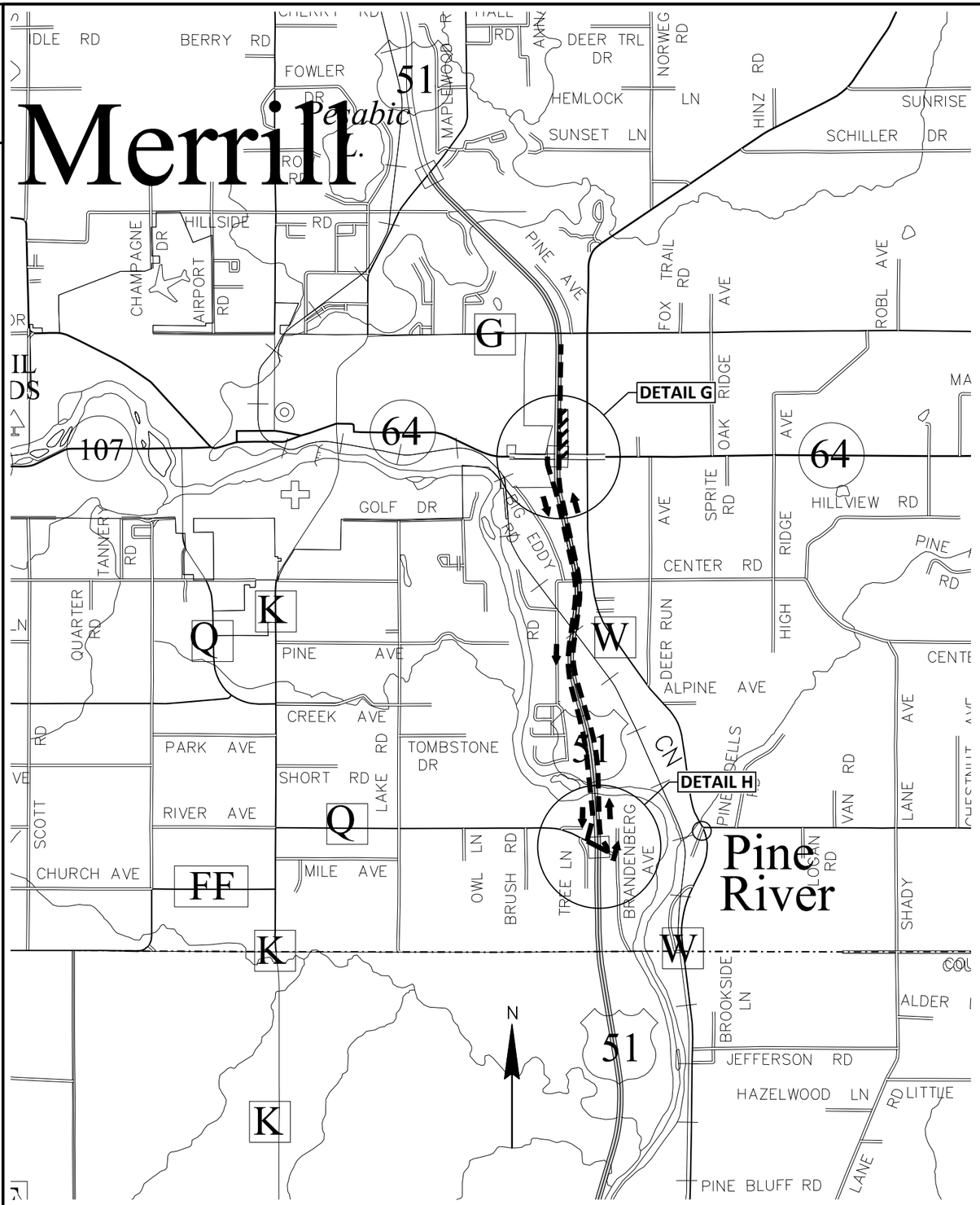
DETOUR ROUTE

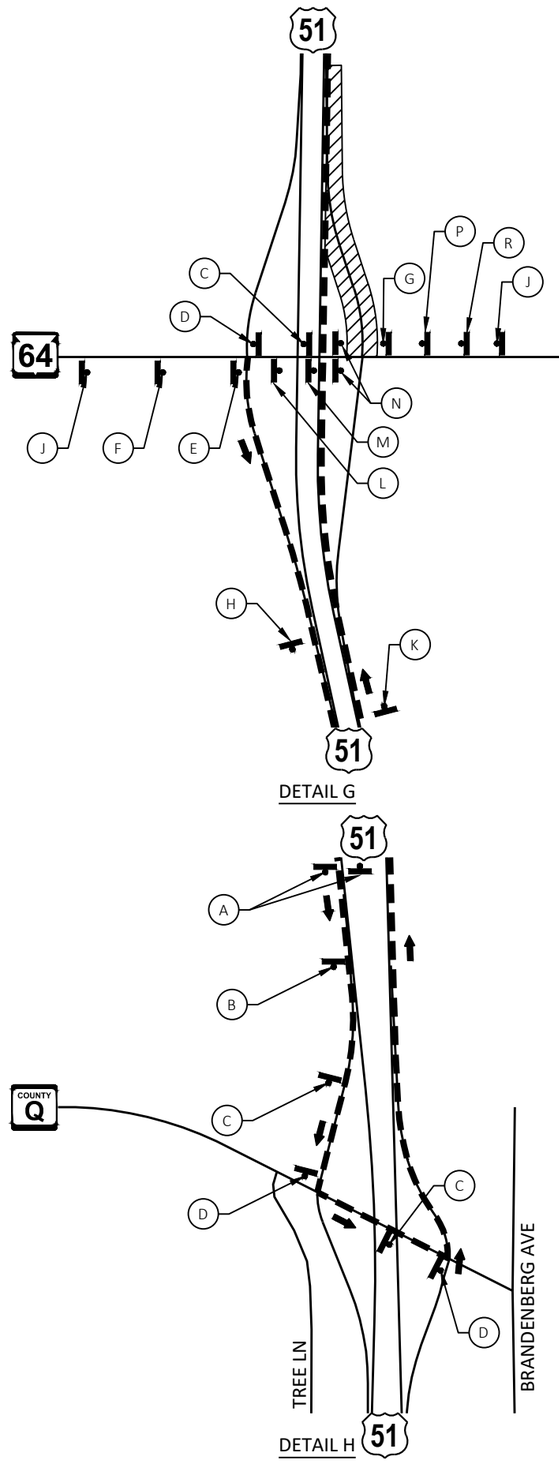
WORK AREA

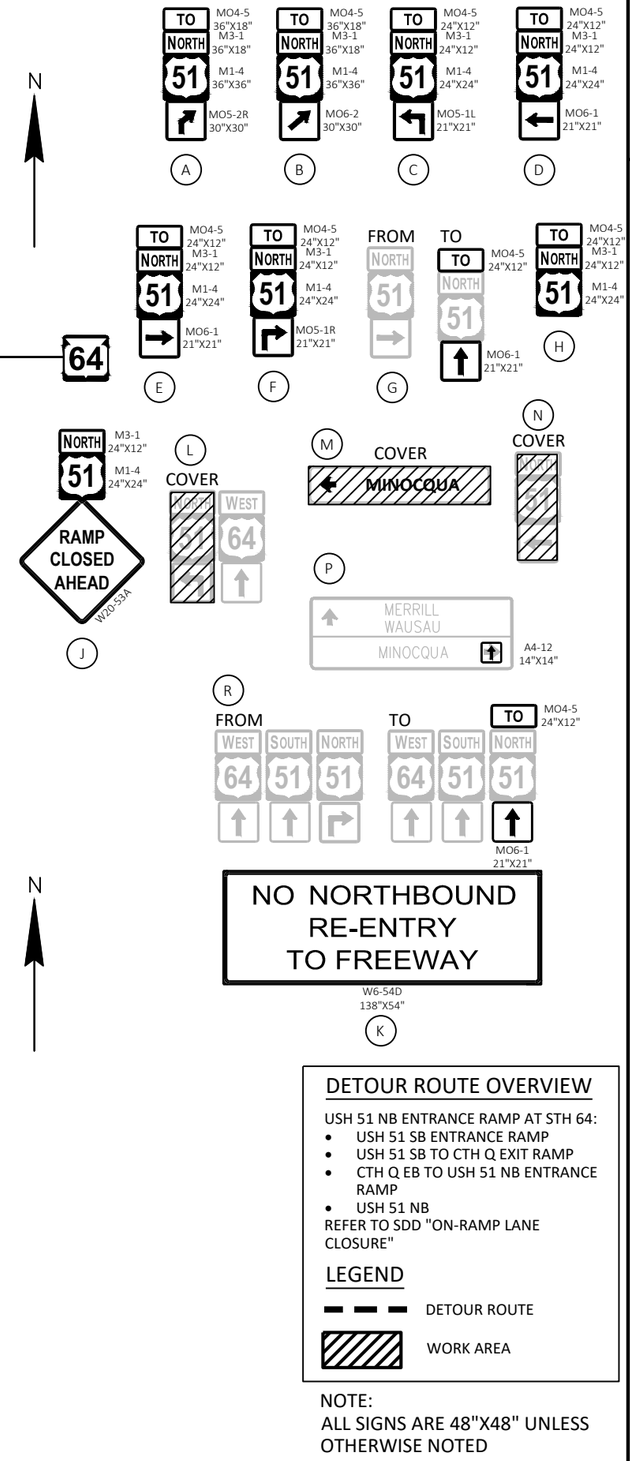
NOTE:
ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

PROJECT NO: 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	DETOUR PLAN - USH 51 NORTHBOUND EXIT RAMP AT STH 64	SHEET 52	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-027001-DT_64.DWG
LAYOUT NAME - 117622-027011-dt_64
PLOT DATE : 2/17/2021 1:50 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:1 MI
WISDOT/CADDS SHEET 42

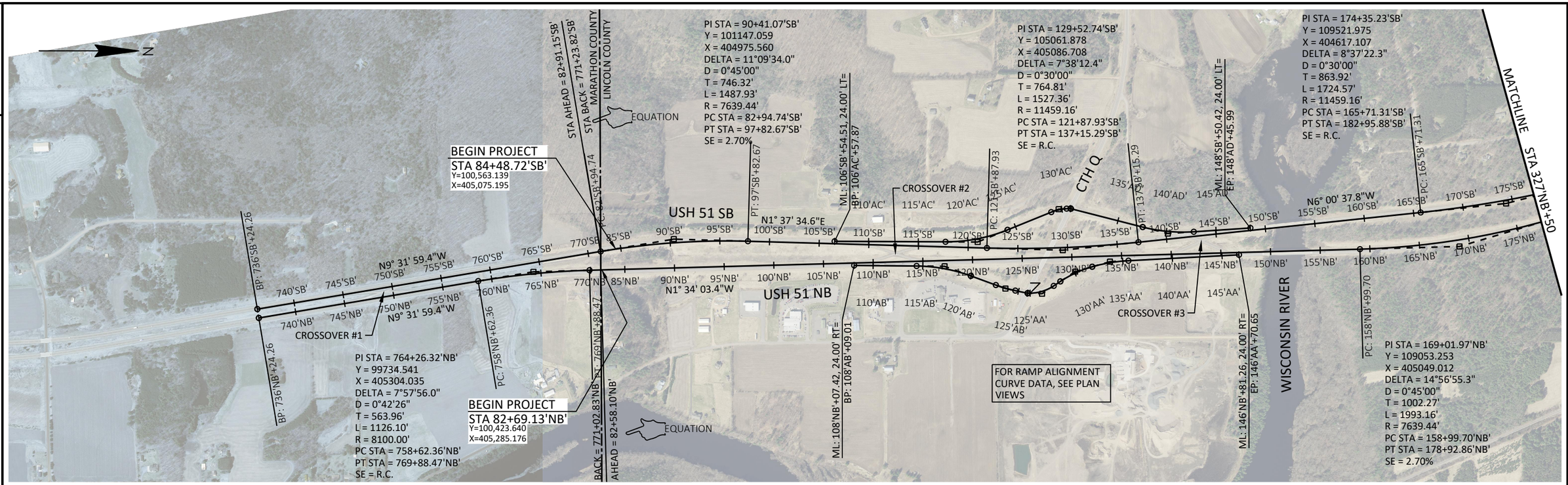


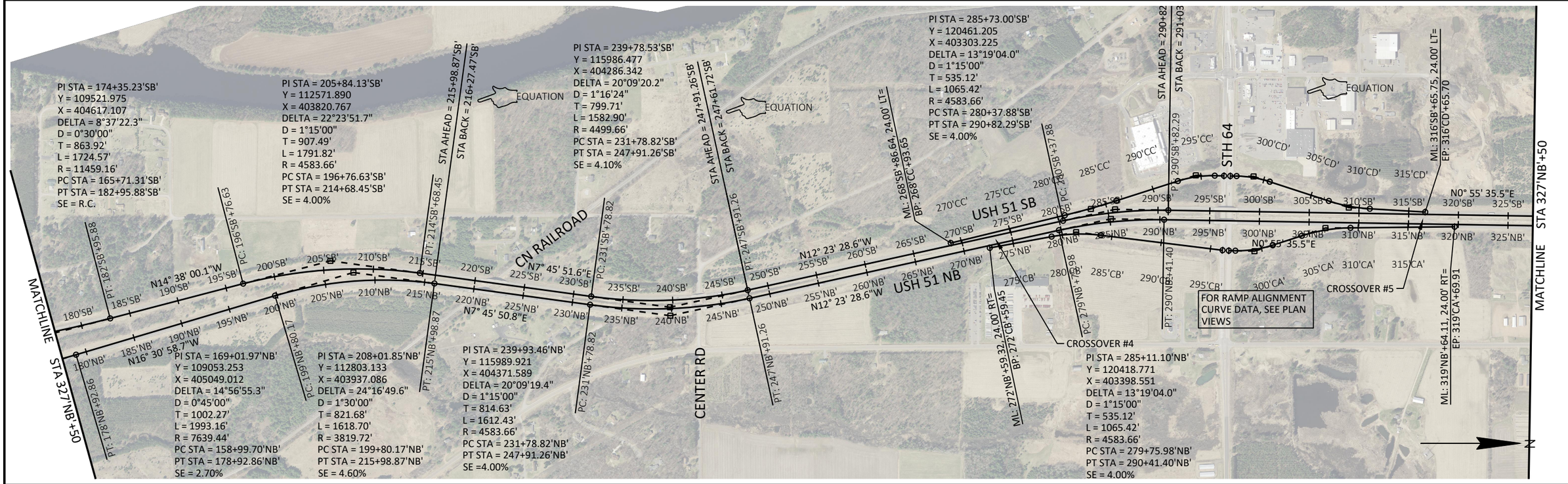




PROJECT NO: 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	DETOUR PLAN - USH 51 NORTHBOUND ENTRANCE RAMP AT STH 64	SHEET 53	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-027001-DT_64.DWG
LAYOUT NAME - 117622-027015-dt_64
PLOT DATE : 3/4/2021 9:00 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : #########

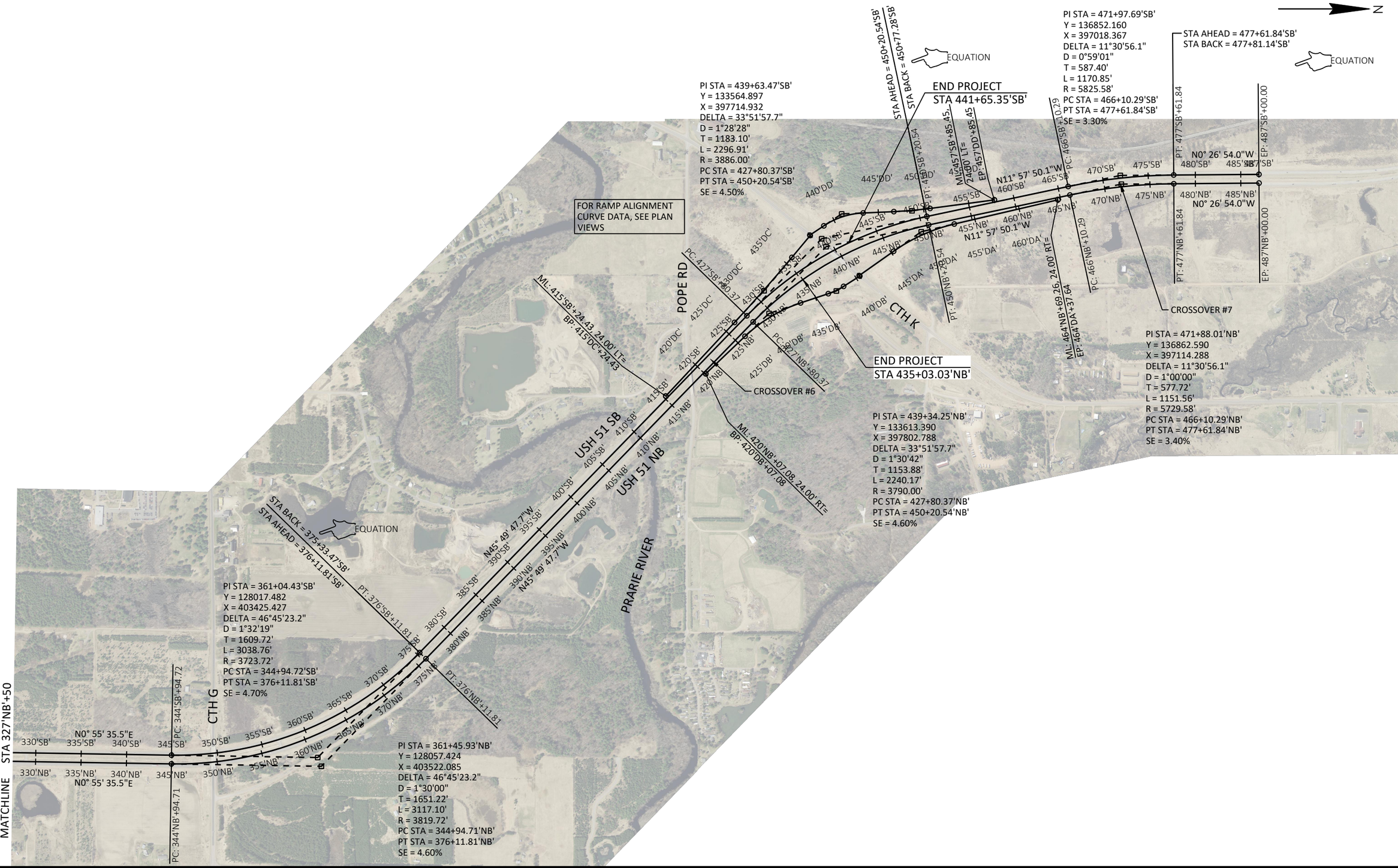




PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	ALIGNMENT DIAGRAM	SHEET 54	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-027201-AD.DWG
LAYOUT NAME - 117622-027201-ad
117622-027201-ad
PLOT DATE : 6/29/2020 3:31 PM
PLOT BY : CRAIG KNUTH
PLOT NAME :
PLOT SCALE : ##########

2



PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	ALIGNMENT DIAGRAM	SHEET 55	E

					1176-22-72	1176-22-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0002	204.0100	Removing Concrete Pavement	SY	199,190.000	100,560.000	98,630.000
0004	204.0110	Removing Asphaltic Surface	SY	136,145.000	68,455.000	67,690.000
0006	204.0115	Removing Asphaltic Surface Butt Joints	SY	816.000	774.000	42.000
0008	204.0120	Removing Asphaltic Surface Milling	SY	25,290.000	20,535.000	4,755.000
0010	205.0100	Excavation Common	CY	12,968.000	7,968.000	5,000.000
0012	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	1,329.000	671.000	658.000
0014	213.0100	Finishing Roadway (project) 01. 1176-22-72	EACH	1.000	1.000	
0016	213.0100	Finishing Roadway (project) 02. 1176-22-73	EACH	1.000		1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	13,368.000	7,028.000	6,340.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	5,381.000	5,381.000	
0022	305.0125	Base Aggregate Dense 1 1/4-Inch	CY	49,605.000	25,726.000	23,879.000
0024	450.4000	HMA Cold Weather Paving	TON	56,000.000	25,000.000	31,000.000
0026	455.0605	Tack Coat	GAL	37,614.000	19,306.000	18,308.000
0028	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	6.000	3.000	3.000
0030	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	6.000	3.000	3.000
0032	460.2000	Incentive Density HMA Pavement	DOL	22,780.000	12,320.000	10,460.000
0034	460.2005	Incentive Density PWL HMA Pavement	DOL	103,420.000	51,460.000	51,960.000
0036	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	27,280.000	13,740.000	13,540.000
0038	460.2010	Incentive Air Voids HMA Pavement	DOL	134,890.000	68,670.000	66,220.000
0040	460.6222	HMA Pavement 2 MT 58-28 S	TON	51,670.000	25,700.000	25,970.000
0042	460.6223	HMA Pavement 3 MT 58-28 S	TON	50,470.000	25,560.000	24,910.000
0044	460.6444	HMA Pavement 4 MT 58-34 H	TON	32,100.000	17,110.000	14,990.000
0046	460.6644	HMA Pavement 4 MT 58-34 V	TON	5,090.000	2,550.000	2,540.000
0048	465.0400	Asphaltic Shoulder Rumble Strips	LF	121,044.000	61,036.000	60,008.000
0050	614.0010	Barrier System Grading Shaping Finishing	EACH	2.000		2.000
0052	614.2300	MGS Guardrail 3	LF	187.500		187.500
0054	614.2610	MGS Guardrail Terminal EAT	EACH	2.000		2.000
0056	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1172-22-72	EACH	1.000	1.000	
0058	618.0100	Maintenance And Repair of Haul Roads (project) 02. 1172-22-73	EACH	1.000		1.000
0060	619.1000	Mobilization	EACH	1.000	0.500	0.500
0062	624.0100	Water	MGAL	1,229.000	664.000	565.000
0064	625.0100	Topsoil	SY	13,425.000	13,425.000	
0066	627.0200	Mulching	SY	13,425.000	13,425.000	
0068	628.1504	Silt Fence	LF	6,350.000	6,350.000	
0070	628.1520	Silt Fence Maintenance	LF	6,350.000	6,350.000	
0072	628.1905	Mobilizations Erosion Control	EACH	8.000	8.000	
0074	628.1910	Mobilizations Emergency Erosion Control	EACH	12.000	12.000	
0076	628.7005	Inlet Protection Type A	EACH	13.000	13.000	

					1176-22-72	1176-22-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0078	628.7504	Temporary Ditch Checks	LF	125.000	125.000	
0080	628.7555	Culvert Pipe Checks	EACH	56.000	56.000	
0082	628.7570	Rock Bags	EACH	50.000	50.000	
0084	629.0210	Fertilizer Type B	CWT	9.000	9.000	
0086	630.0130	Seeding Mixture No. 30	LB	241.000	241.000	
0088	630.0200	Seeding Temporary	LB	30.000	30.000	
0090	630.0500	Seed Water	MGAL	300.000	300.000	
0092	633.1100	Delineators Temporary	EACH	675.000	338.000	337.000
0094	642.5401	Field Office Type D	EACH	1.000	0.500	0.500
0096	643.0300	Traffic Control Drums	DAY	82,883.000	49,597.000	33,286.000
0098	643.0420	Traffic Control Barricades Type III	DAY	10,503.000	5,795.000	4,708.000
0100	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	4,360.000	2,215.000	2,145.000
0102	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	4,360.000	2,215.000	2,145.000
0104	643.0705	Traffic Control Warning Lights Type A	DAY	8,994.000	5,584.000	3,410.000
0106	643.0715	Traffic Control Warning Lights Type C	DAY	23,712.000	12,745.000	10,967.000
0108	643.0800	Traffic Control Arrow Boards	DAY	748.000	407.000	341.000
0110	643.0900	Traffic Control Signs	DAY	26,202.000	13,849.000	12,353.000
0112	643.0910	Traffic Control Covering Signs Type I	EACH	8.000	4.000	4.000
0114	643.0920	Traffic Control Covering Signs Type II	EACH	37.000	20.000	17.000
0116	643.1000	Traffic Control Signs Fixed Message	SF	553.860	356.130	197.730
0118	643.1050	Traffic Control Signs PCMS	DAY	139.000	70.000	69.000
0120	643.1205.S	Basic Traffic Queue Warning System	DAY	339.000	185.000	154.000
0122	643.5000	Traffic Control	EACH	1.000	0.500	0.500
0124	646.1020	Marking Line Epoxy 4-Inch	LF	1,900.000	912.000	988.000
0126	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	187,791.000	94,681.000	93,110.000
0128	646.1555	Marking Line Grooved Contrast Permanent Tape 4-Inch	LF	19,513.000	9,994.000	9,519.000
0130	646.3555	Marking Line Grooved Contrast Permanent Tape 8-Inch	LF	12,810.000	6,306.000	6,504.000
0132	646.6120	Marking Stop Line Epoxy 18-Inch	LF	203.000	97.000	106.000
0134	646.6464	Cold Weather Marking Epoxy 4-Inch	LF	83,060.000	34,195.000	48,865.000
0136	646.7220	Marking Chevron Epoxy 24-Inch	LF	992.000	413.000	579.000
0138	646.9000	Marking Removal Line 4-Inch	LF	60,518.000	28,734.000	31,784.000
0140	646.9100	Marking Removal Line 8-Inch	LF	4,240.000	2,348.000	1,892.000
0142	646.9200	Marking Removal Line Wide	LF	218.000	32.000	186.000
0144	649.0105	Temporary Marking Line Paint 4-Inch	LF	539,646.000	277,554.000	262,092.000
0146	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	8,148.000	5,508.000	2,640.000
0148	649.0205	Temporary Marking Line Paint 8-Inch	LF	4,268.000	2,112.000	2,156.000
0150	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	400.000	400.000	
0152	649.0760	Temporary Marking Raised Pavement Marker Type I	EACH	733.000	354.000	379.000
0154	650.4500	Construction Staking Subgrade	LF	3,988.000	3,988.000	
0156	650.5000	Construction Staking Base	LF	3,988.000	3,988.000	

					1176-22-72	1176-22-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0158	650.8000	Construction Staking Resurfacing Reference	LF	39,912.000	27,355.000	12,557.000
0160	650.9910	Construction Staking Supplemental Control (project) 01. 1172-22-72	LS	1.000	1.000	
0162	650.9910	Construction Staking Supplemental Control (project) 02. 1172-22-73	LS	1.000		1.000
0164	650.9920	Construction Staking Slope Stakes	LF	3,988.000	3,988.000	
0166	690.0150	Sawing Asphalt	LF	4,309.000	2,030.000	2,279.000
0168	690.0250	Sawing Concrete	LF	72.000	24.000	48.000
0170	740.0440	Incentive IRI Ride	DOL	60,685.000	30,543.000	30,142.000
0172	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,100.000	1,050.000	1,050.000
0174	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	4,800.000	2,400.000	2,400.000
0176	SPV.0060	Special 01. Salvage Delineator Posts and Delineators	EACH	42.000	42.000	
0178	SPV.0090	Special 01. MGS Thrie Beam Transition Special	LF	78.800		78.800
0180	SPV.0090	Special 02. Salvage Concrete Barrier Temporary Precast	LF	600.000	600.000	
0182	SPV.0090	Special 03. Construction Staking Pavement Replacement Reference	LF	68,049.000	34,205.000	33,844.000
0184	SPV.0090	Special 04. Temporary Rumble Strips (Orange) In Advance of Lane Closure	LF	2,592.000	1,296.000	1,296.000

REMOVING CONCRETE PAVEMENT

STATION		TO STATION	LOCATION	204.0100 SY
PROJECT 1176-22-72				
CATEGORY 0010				
STAGE 2				
84+49	-	125+53	USH 51 SB	10,950
125+53	-	131+03	USH 51 SB	1,470
131+03	-	146+59	USH 51 SB	4,150
146+59	-	150+09	USH 51 SB	940
155+12	-	158+62	USH 51 SB	940
158+62	-	217+14	USH 51 SB	15,690
217+14	-	220+64	USH 51 SB	940
223+19	-	226+69	USH 51 SB	940
226+69	-	238+37	USH 51 SB	3,110
238+37	-	241+87	USH 51 SB	940
243+51	-	247+01	USH 51 SB	940
247+01	-	291+97	USH 51 SB	11,980
291+97	-	295+47	USH 51 SB	940
297+82	-	301+32	USH 51 SB	940
301+32	-	346+79	USH 51 SB	12,130
346+79	-	352+29	USH 51 SB	1,470
352+29	-	405+59	USH 51 SB	13,990
405+59	-	409+09	USH 51 SB	940
411+35	-	414+85	USH 51 SB	940
414+85	-	415+94	USH 51 SB	300
415+94	-	421+44	USH 51 SB	1,470
421+44	-	436+28	USH 51 SB	3,970
436+28	-	441+65	USH 51 SB	1,490
CTH Q SB ENTRANCE FROM GORE			USH 51 SB	1,980
CTH Q SB EXIT TO GORE			USH 51 SB	1,100
STH 64 ENTRANCE FROM GORE			USH 51 SB	2,150
STH 64 EXIT TO GORE			USH 51 SB	1,180
CTH K SB ENTRANCE FROM GORE			USH 51 SB	2,580

PROJECT -72 SUBTOTAL 100,560

REMOVING CONCRETE PAVEMENT - CONTINUED

STATION		TO STATION	LOCATION	204.0100 SY
PROJECT 1176-22-73				
CATEGORY 0010				
STAGE 4				
82+69	-	124+60	USH 51 NB	11,180
124+60	-	130+10	USH 51 NB	1,470
130+10	-	145+70	USH 51 NB	4,160
145+70	-	149+20	USH 51 NB	940
154+24	-	157+74	USH 51 NB	940
157+74	-	216+06	USH 51 NB	15,550
216+06	-	219+56	USH 51 NB	940
222+12	-	225+62	USH 51 NB	940
225+62	-	238+45	USH 51 NB	3,430
238+45	-	241+95	USH 51 NB	940
243+61	-	247+11	USH 51 NB	940
247+11	-	291+97	USH 51 NB	11,960
291+97	-	295+47	USH 51 NB	940
297+85	-	301+35	USH 51 NB	950
301+35	-	346+81	USH 51 NB	12,200
346+81	-	352+31	USH 51 NB	1,480
352+31	-	405+26	USH 51 NB	14,140
405+26	-	408+76	USH 51 NB	940
411+02	-	414+52	USH 51 NB	940
414+52	-	415+17	USH 51 NB	180
415+17	-	420+67	USH 51 NB	1,470
420+67	-	435+03	USH 51 NB	3,830
CTH Q SB EXIT TO GORE			USH 51 NB	1,440
CTH Q SB ENTRANCE FROM GORE			USH 51 NB	2,090
STH 64 EXIT TO GORE			USH 51 NB	1,410
STH 64 ENTRANCE FROM GORE			USH 51 NB	1,880
CTH K SB EXIT TO GORE			USH 51 NB	1,350

PROJECT -73 SUBTOTAL 98,630

CONTRACT TOTAL 199,190

3

REMOVING ASPHALTIC SURFACE

STATION TO STATION	ROADWAY	204.0110 SY	COMMENTS
PROJECT 1176-22-72			
CATEGORY 0010			
STAGE 2			
MAINLINE INSIDE SHOULDER	USH 51 SB	15,460	5-1/2" DEPTH (FULL DEPTH)
MAINLINE OUTSIDE SHOULDER	USH 51 SB	33,275	3-1/2" DEPTH (FULL DEPTH)
STAGE 2 SUBTOTAL		48,735	
STAGE 3A			
CTH Q RAMPS	USH 51 SB	5,510	3-1/2" DEPTH (FULL DEPTH)
STH 64 RAMPS	USH 51 SB	6,985	3-1/2" DEPTH (FULL DEPTH)
CTH K RAMPS	USH 51 SB	7,225	3-1/2" DEPTH (FULL DEPTH)
STAGE 3A SUBTOTAL		19,720	
PROJECT -72 TOTAL		68,455	
PROJECT 1176-22-73			
CATEGORY 0010			
STAGE 3B			
CTH Q RAMPS	USH 51 SB	4,450	3-1/2" DEPTH (FULL DEPTH)
STH 64 RAMPS	USH 51 SB	6,740	3-1/2" DEPTH (FULL DEPTH)
CTH K RAMPS	USH 51 SB	8,270	3-1/2" DEPTH (FULL DEPTH)
STAGE 3B SUBTOTAL		19,460	
STAGE 4			
MAINLINE INSIDE SHOULDER	USH 51 NB	15,160	5-1/2" DEPTH (FULL DEPTH)
MAINLINE OUTSIDE SHOULDER	USH 51 NB	33,070	3-1/2" DEPTH (FULL DEPTH)
STAGE 4 SUBTOTAL		48,230	
PROJECT -73 TOTAL		67,690	
CONTRACT TOTAL		136,145	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION TO STATION	ROADWAY	204.0115 SY
PROJECT 1176-22-72		
CATEGORY 0010		
STAGE 3		
CTH Q RAMPS	USH 51 SB	61
STH 64 RAMPS	USH 51 SB	83
CTH K RAMPS	USH 51 SB	58
CTH Q RAMPS	USH 51 NB	57
STH 64 RAMPS	USH 51 NB	83
CTH K RAMPS	USH 51 NB	54
MAINLINE	CTH Q	190
MAINLINE	CTH K	188
STAGE 3 SUBTOTAL		774
PROJECT -72 TOTAL		774
PROJECT 1176-22-73		
CATEGORY 0010		
STAGE 4		
NORTHERN PROJ LIMIT	USH 51 NB	42
STAGE 4 SUBTOTAL		42
PROJECT -73 TOTAL		42
CONTRACT TOTAL		817

REMOVING ASPHALTIC SURFACE MILLING

STATION TO STATION	ROADWAY	204.0120 SY	COMMENTS
PROJECT 1176-22-72			
CATEGORY 0010			
STAGE 1B			
CROSSOVER 1	USH 51 SB	3,015	2" DEPTH (PARTIAL DEPTH)
CROSSOVER 2	USH 51 SB	2,250	2" DEPTH (PARTIAL DEPTH)
CROSSOVER 3	USH 51 SB	1,535	2" DEPTH (PARTIAL DEPTH)
CROSSOVER 4	USH 51 SB	1,120	2" DEPTH (PARTIAL DEPTH)
CROSSOVER 5	USH 51 SB	1,125	2" DEPTH (PARTIAL DEPTH)
CROSSOVER 6	USH 51 SB	1,485	2" DEPTH (PARTIAL DEPTH)
CROSSOVER 7	USH 51 SB	3,985	2" DEPTH (PARTIAL DEPTH)
MAINTENANCE CROSSOVERS	USH 51 SB	1,575	2" DEPTH (PARTIAL DEPTH)
STAGE 1B SUBTOTAL		16,090	
STAGE 3A			
MAINLINE	CTH Q	2,605	2" DEPTH (PARTIAL DEPTH)
MAINLINE	CTH K	1,840	2" DEPTH (PARTIAL DEPTH)
STAGE 3A SUBTOTAL		4,445	
PROJECT -72 TOTAL		20,535	
PROJECT 1176-22-73			
CATEGORY 0010			
STAGE 3B			
MAINLINE	CTH Q	2,620	2" DEPTH (PARTIAL DEPTH)
MAINLINE	CTH K	2,135	2" DEPTH (PARTIAL DEPTH)
STAGE 3B SUBTOTAL		4,755	
PROJECT -73 TOTAL		4,755	
CONTRACT TOTAL		25,290	

EARTHWORK SUMMARY

DIVISION	FROM/TO STATION	205.0100 COMMON EXCAVATION CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	AVAILABLE MATERIAL	UNEXPANDED FILL	EXPANDED FILL FACTOR 1.25	MASS ORDINATE +/-	WASTE	COMMENT
PROJECT 1176-22-72									
CATEGORY 0010									
STAGE 1B									
CROSSOVER 2 NB	103+40 - 109+09	342	0	342	95	119	223	223	
CROSSOVER 2 SB	106+03 - 109+25	201	0	201	126	158	44	44	
CROSSOVER 3 NB	145+69 - 146+61	72	0	72	3	4	68	68	
CROSSOVER 3 SB	145+07 - 148+12	193	0	193	102	128	66	66	
CROSSOVER 4 NB	266+54 - 271+90	294	0	294	280	350	-56	0	USE WASTE FROM SB CROSSOVER
CROSSOVER 4 SB	268+04 - 271+82	244	0	244	32	40	204	204	
CROSSOVER 5 NB	318+05 - 321+81	229	0	229	91	114	115	115	
CROSSOVER 5 SB	317+98 - 323+34	380	0	380	127	159	221	221	
CROSSOVER 6 NB	414+29 - 419+67	340	0	340	45	56	284	284	
CROSSOVER 6 SB	416+10 - 419+45	223	0	223	37	46	177	177	
	STAGE 1B SUBTOTAL	2,518	0	2,518	938	1,173	1,346	1,402	
STAGE 2									
US 51 SB	125+53 - 131+03	500	0	500	0	0	500	500	OVERPASS
US 51 SB	146+59 - 150+09	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 SB	155+12 - 158+62	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 SB	217+14 - 220+64	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 SB	223+19 - 226+69	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 SB	238+37 - 241+87	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 SB	243+51 - 247+01	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 SB	291+97 - 295+47	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 SB	297+82 - 301+32	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 SB	346+81 - 352+31	500	0	500	0	0	500	500	OVERPASS
US 51 SB	405+59 - 409+09	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 SB	411+35 - 414+85	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 SB	415+17 - 420+67	500	0	500	0	0	500	500	OVERPASS
US 51 SB	436+28 - 441+65	450	0	450	0	0	450	450	TIEBACK JOINT
	STAGE 2 SUBTOTAL	5,450	0	5,450	0	0	5,450	5,450	
	PROJECT -72 TOTAL	7,968	0	7,968	938	1,173	6,796	6,852	
PROJECT 1176-22-73									
CATEGORY 0010									
STAGE 4									
US 51 NB	124+60 - 130+10	500	0	500	0	0	500	500	OVERPASS
US 51 NB	145+70 - 149+20	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 NB	154+24 - 157+74	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 NB	216+06 - 219+56	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 NB	222+12 - 225+62	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 NB	238+45 - 241+95	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 NB	243+61 - 274+11	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 NB	291+97 - 295+47	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 NB	297+85 - 301+35	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 NB	346+81 - 352+31	500	0	500	0	0	500	500	OVERPASS
US 51 NB	405+26 - 408+76	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 NB	411+02 - 414+52	350	0	350	0	0	350	350	STRUCTURE APPROACH
US 51 NB	415+17 - 420+67	500	0	500	0	0	500	500	OVERPASS
	STAGE 4 SUBTOTAL	5,000	0	5,000	0	0	5,000	5,000	
	PROJECT -73 TOTAL	5,000	0	5,000	0	0	5,000	5,000	
	PROJECT TOTALS	12,968	0	12,968	938	1,173	11,796	11,852	

3

BASE AGGREGATE DENSE AND PREPARING FOUNDATION

STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	305.0125 1 1/4-INCH CY	624.0100 WATER MGAL	COMMENTS
PROJECT 1176-22-72									
CATEGORY 0010									
STAGE 1B									
106+03	-	109+25	XO 2 TAPER USH 51 SB	---	46	472	---	5	
145+07	-	148+12	XO 3 TAPER USH 51 SB	---	43	403	---	4	
268+04	-	271+82	XO 4 TAPER USH 51 SB	---	54	531	---	6	
317+98	-	323+34	XO 5 TAPER USH 51 SB	---	76	692	---	8	
416+10	-	419+45	XO 6 TAPER USH 51 SB	---	48	485	---	5	
103+40	-	109+09	XO 2 TAPER USH 51 NB	---	81	748	---	8	
145+69	-	146+61	XO 3 TAPER USH 51 NB	---	13	118	---	1	
266+54	-	271+90	XO 4 TAPER USH 51 NB	---	76	684	---	8	
318+04	-	321+81	XO 5 TAPER USH 51 NB	---	54	529	---	6	
414+29	-	419+66	XO 6 TAPER USH 51 NB	6	76	719	---	8	
			STAGE 1B SUBTOTALS	6	567	5,381	0	59	
STAGE 2									
84+49	-	125+53	USH 51 SB	66	545	---	2,296	54	
125+53	-	131+03	USH 51 SB	11	88	---	713	16	
131+03	-	146+59	USH 51 SB	24	201	---	870	20	
146+59	-	150+09	USH 51 SB	6	37	---	453	10	
155+12	-	158+62	USH 51 SB	7	56	---	453	10	
158+62	-	217+14	USH 51 SB	118	942	---	3,274	78	
217+14	-	220+64	USH 51 SB	8	57	---	453	10	
223+19	-	226+69	USH 51 SB	7	56	---	453	10	
226+69	-	238+37	USH 51 SB	24	187	---	653	16	
238+37	-	241+87	USH 51 SB	7	56	---	453	10	
243+51	-	247+01	USH 51 SB	7	56	---	453	10	
247+01	-	291+97	USH 51 SB	74	613	---	2,515	59	
291+97	-	295+47	USH 51 SB	7	56	---	453	10	
297+82	-	301+32	USH 51 SB	7	56	---	453	10	
301+32	-	346+79	USH 51 SB	79	624	---	2,544	60	
346+79	-	352+29	USH 51 SB	11	88	---	713	16	
352+29	-	405+59	USH 51 SB	105	841	---	2,982	71	
405+59	-	409+09	USH 51 SB	7	56	---	453	10	
411+35	-	414+85	USH 51 SB	7	56	---	453	10	
414+85	-	415+94	USH 51 SB	3	17	---	61	1	
415+94	-	421+44	USH 51 SB	4	22	---	713	15	
421+44	-	436+28	USH 51 SB	20	192	---	1,923	42	
436+28	-	441+65	USH 51 SB	11	86	---	567	13	
CTH Q SB ENTRANCE FROM GORE				10	94	---	301	7	
CTH Q SB EXIT TO GORE				6	47	---	167	4	
STH 64 ENTRANCE FROM GORE				11	102	---	328	8	
STH 64 EXIT TO GORE				6	53	---	180	4	
CTH K SB ENTRANCE FROM GORE				12	109	---	394	9	
			STAGE 2 SUBTOTALS	665	5,396	0	25,726	594	

BASE AGGREGATE DENSE AND PREPARING FOUNDATION - CONTINUED

STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	305.0125 1 1/4-INCH CY	624.0100 WATER MGAL	COMMENTS
PROJECT 1176-22-72									
CATEGORY 0010									
STAGE 3A									
118+81	-	129+54	CTH Q RAMP 'AC'	---	155	0	---	2	
130+89	-	141+40	CTH Q RAMP 'AD'	---	151	0	---	2	
281+98	-	296+40	STH 64 RAMP 'CC'	---	210	0	---	2	
297+13	-	309+68	STH 64 RAMP 'CD'	---	168	0	---	2	
430+03	-	438+13	CTH K RAMP 'DC'	---	119	0	---	1	
437+63	-	457+85	CTH K RAMP 'DD'	---	262	0	---	3	
			STAGE 3A SUBTOTALS	0	1,065	0	0	11	
			PROJECT -72 TOTALS	671	7,028	5,381	25,726	664	
PROJECT 1176-22-73									
CATEGORY 0010									
STAGE 3B									
125+93	-	134+56	CTH Q RAMP 'AA'	---	123	0	---	1	
116+21		124+82	CTH Q RAMP 'AB'	---	123	0	---	1	
297+49	-	308+29	STH64 RAMP 'CA'	---	158	0	---	2	
280+80		295+79	STH 64 RAMP 'CB'	---	210	0	---	2	
441+84	-	464+38	CTH K RAMP 'DA'	---	263	0	---	3	
427+79		439+67	CTH K RAMP 'DB'	---	171	0	---	2	
			STAGE 3B SUBTOTALS	0	1,048	0	0	10	
STAGE 4									
82+69	-	124+60	USH 51 NB	70	550	---	2,345	55	
124+60	-	130+10	USH 51 NB	11	88	---	713	16	
130+10	-	145+70	USH 51 NB	20	200	---	873	20	
145+70	-	149+20	USH 51 NB	6	41	---	453	10	
154+24	-	157+74	USH 51 NB	7	56	---	453	10	
157+74	-	216+06	USH 51 NB	117	934	---	3,263	78	
216+06	-	219+56	USH 51 NB	7	56	---	453	10	
222+12	-	225+62	USH 51 NB	7	56	---	453	10	
225+62	-	238+45	USH 51 NB	26	206	---	718	17	
238+45	-	241+95	USH 51 NB	8	56	---	453	10	
243+61	-	247+11	USH 51 NB	8	56	---	453	10	
247+11	-	291+97	USH 51 NB	76	608	---	2,510	59	
291+97	-	295+47	USH 51 NB	7	56	---	453	10	
297+85	-	301+35	USH 51 NB	7	56	---	453	10	
301+35	-	346+81	USH 51 NB	77	631	---	2,543	60	
346+81	-	352+31	USH 51 NB	12	88	---	713	16	
352+31	-	405+26	USH 51 NB	107	849	---	2,962	71	
405+26	-	408+76	USH 51 NB	7	56	---	453	10	
411+02	-	414+52	USH 51 NB	7	53	---	453	10	
414+52	-	415+17	USH 51 NB	1	2	---	36	1	
415+17	-	420+67	USH 51 NB	6	20	---	713	15	
420+67	-	435+03	USH 51 NB	21	183	---	803	19	
CTH Q SB EXIT TO GORE				7	65	---	301	7	
CTH Q SB ENTRANCE FROM GORE				12	112	---	167	5	
STH 64 EXIT TO GORE				7	64	---	328	8	
STH 64 ENTRANCE FROM GORE				10	86	---	180	5	
CTH K SB EXIT TO GORE				7	62	---	180	4	
			STAGE 4 SUBTOTALS	658	5,292	0	23,879	554	
			PROJECT -73 TOTALS	658	6,340	0	23,879	565	
			CONTRACT TOTALS	1,329	13,368	5,381	49,606	1,229	

3

ASPHALTIC ITEMS

STATION		TO STATION	LOCATION	STAGE	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.6222 HMA PAVEMENT 2 MT 58-28 S TON	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6444 HMA PAVEMENT 4 MT 58-34 H TON	460.6644 HMA PAVEMENT 4 MT 58-34 V TON	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	COMMENTS
PROJECT 1176-22-72												
CATEGORY 0010												
STAGE 1B												
2+69 / 22+29	-	13+61 / 36+16	XO 1		---	181	---	---	350	---	---	
9+09 / 29+26	-	16+47 / 35+85	XO 2		---	135	---	---	260	---	---	
5+00 / 15+00	-	10+14 / 19+18	XO 3		---	92	---	---	180	---	---	
5+00 / 15+00	-	8+63 / 18+73	XO 4		---	67	---	---	130	---	---	
5+00 / 15+00	-	8+67 / 18+66	XO 5		---	68	---	---	130	---	---	
19+46 / 19+67	-	24+63 / 24+29	XO 6		---	89	---	---	180	---	---	
2+80 / 3+32	-	17+92 / 18+48	XO 7		---	239	---	---	460	---	---	
106+03	-	109+25	XO 2 TAPER USH 51 SB		---	23	---	80	50	---	---	
145+07	-	148+12	XO 3 TAPER USH 51 SB		---	18	---	60	40	---	---	
268+04	-	271+82	XO 4 TAPER USH 51 SB	STAGE 1B	---	25	---	80	50	---	---	
317+98	-	323+34	XO 5 TAPER USH 51 SB		---	30	---	100	60	---	---	
416+10	-	419+45	XO 6 TAPER USH 51 SB		---	23	---	80	50	---	---	
103+40	-	109+09	XO 2 TAPER USH 51 NB		---	33	---	110	70	---	---	
145+69	-	146+61	XO 3 TAPER USH 51 NB		---	5	---	20	10	---	---	
266+54	-	271+90	XO 4 TAPER USH 51 NB		---	29	---	100	60	---	---	
318+04	-	321+81	XO 5 TAPER USH 51 NB		---	25	---	80	50	---	---	
414+29	-	419+66	XO 6 TAPER USH 51 NB		---	32	---	110	70	---	---	
MAINTENANCE CROSSOVERS			USH 51		---	95	---	---	190	---	---	
STAGE 1B SUBTOTAL					0	1,209	0	820	2,390	0	0	

ASPHALTIC ITEMS - CONTINUED

STATION	TO	STATION	LOCATION	STAGE	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.6222 HMA PAVEMENT 2 MT 58-28 S TON	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6444 HMA PAVEMENT 4 MT 58-34 H TON	460.6644 HMA PAVEMENT 4 MT 58-34 V TON	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	COMMENTS
STAGE 2												
84+49	-	125+53	USH 51 SB			1,600	2,840	2,390	1,590	---	6,962	
125+53	-	131+03	USH 51 SB			315	380	350	240	---	1,099	
131+03	-	146+59	USH 51 SB		---	605	1,080	910	600	---	2,361	
146+59	-	150+09	USH 51 SB		---	202	250	230	160	---	356	
155+12	-	158+62	USH 51 SB		---	200	250	230	150	---	700	
158+62	-	217+14	USH 51 SB		---	2,432	4,060	3,750	2,500	---	11,767	
217+14	-	220+64	USH 51 SB		---	203	250	230	160	---	739	
223+19	-	226+69	USH 51 SB		---	200	250	230	150	---	693	
226+69	-	238+37	USH 51 SB		---	482	810	750	500	---	2,332	
238+37	-	241+87	USH 51 SB		---	200	250	230	150	---	698	
243+51	-	247+01	USH 51 SB		---	200	250	230	150	---	698	
247+01	-	291+97	USH 51 SB		---	1,720	3,100	2,530	1,680	---	7,160	
291+97	-	295+47	USH 51 SB		---	201	250	230	150	---	700	
297+82	-	301+32	USH 51 SB		---	201	250	230	150	---	700	
301+32	-	346+79	USH 51 SB	STAGE 2	---	1,828	3,140	2,780	1,850	---	7,746	
346+79	-	352+29	USH 51 SB		---	314	380	350	240	---	1,096	
352+29	-	405+59	USH 51 SB		---	2,167	3,620	3,340	2,230	---	10,488	
405+59	-	409+09	USH 51 SB		---	201	250	230	150	---	700	
411+35	-	414+85	USH 51 SB		---	202	250	230	160	---	700	
414+85	-	415+94	USH 51 SB		---	45	80	70	50	---	152	
415+94	-	421+44	USH 51 SB		---	286	380	290	190	---	133	
421+44	-	436+28	USH 51 SB		---	122	90	250	180	---	1,978	
436+28	-	441+65	USH 51 SB		---	223	380	350	230	---	1,078	
CTH Q SB ENTRANCE FROM GORE			USH 51 SB		---	295	640	390	250	---	---	
CTH Q SB EXIT TO GORE			USH 51 SB		---	154	340	210	130	---	---	
STH 64 ENTRANCE FROM GORE			USH 51 SB		---	321	700	430	270	---	---	
STH 64 EXIT TO GORE			USH 51 SB		---	174	380	230	150	---	---	
CTH K SB ENTRANCE FROM GORE			USH 51 SB		---	369	800	490	310	---	---	
UNDISTRIBUTED			USH 51 SB		25,000	---	---	---	---	---	---	
STAGE 2 SUBTOTAL					25,000	15,464	25,700	22,160	14,720	0	61,036	
STAGE 3A												
108+82	-	129+54	CTH Q ON RAMP		---	338	---	370	---	290	---	
130+89	-	146+44	CTH Q OFF RAMP		---	323	---	350	---	280	---	
271+18	-	296+40	STH 64 ON RAMP		---	444	---	480	---	380	---	
297+13	-	315+36	STH 64 OFF RAMP	STAGE 3A	---	394	---	430	---	340	---	
418+40	-	438+13	CTH K ON RAMP		---	253	---	280	---	220	---	
437+63	-	457+85	CTH K OFF RAMP		---	614	---	670	---	520	---	
11+68	-	15+52	CTH Q		---	156	---	---	---	300	---	
31+67	-	34+32	CTH K		---	110	---	---	---	220	---	
STAGE 3A SUBTOTAL					0	2,633	0	2,580	0	2,550	0	
PROJECT -72 TOTALS					25,000	19,306	25,700	25,560	17,110	2,550	61,036	

ASPHALTIC ITEMS - CONTINUED

STATION		TO STATION	LOCATION	STAGE	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.6222 HMA PAVEMENT 2 MT 58-28 S TON	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6444 HMA PAVEMENT 4 MT 58-34 H TON	460.6644 HMA PAVEMENT 4 MT 58-34 V TON	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	COMMENTS
PROJECT 1176-22-73												
CATEGORY 0010												
STAGE 3B												
109+34	-	124+82	CTH Q OFF-RAMP	STAGE 3B	---	268	---	290	---	230	---	
125+93	-	146+50	CTH Q ON RAMP		---	266	---	290	---	230	---	
273+96	-	295+79	STH 64 OFF RAMP		---	476	---	520	---	400	---	
297+49	-	317+44	STH 64 ON RAMP		---	333	---	360	---	280	---	
421+17	-	439+67	CTH K OFF RAMP		---	364	---	400	---	310	---	
441+84	-	464+37	CTH K ON RAMP		---	629	---	680	---	530	---	
19+11	-	22+89	CTH Q		---	157	---	---	---	310	---	
31+67	-	37+59	CTH K		---	128	---	---	---	250	---	
STAGE 3B SUBTOTAL						2,621	0	2,540	0	2,540	0	
STAGE 4												
82+69	-	124+60	USH 51 NB		---	1,671	2,900	2,530	1,680	---	6,824	
124+60	-	130+10	USH 51 NB		---	315	380	350	240	---	1,100	
130+10	-	145+70	USH 51 NB		---	571	1,080	840	540	---	1,906	
145+70	-	149+20	USH 51 NB		---	195	250	220	140	---	491	
154+24	-	157+74	USH 51 NB		---	201	250	230	150	---	700	
157+74	-	216+06	USH 51 NB		---	2,410	4,030	3,710	2,480	---	11,670	
216+06	-	219+56	USH 51 NB		---	200	250	230	150	---	686	
222+12	-	225+62	USH 51 NB		---	201	250	230	150	---	700	
225+62	-	238+45	USH 51 NB		---	531	890	820	550	---	2,570	
238+45	-	241+95	USH 51 NB		---	202	250	230	150	---	702	
243+61	-	247+11	USH 51 NB		---	201	250	230	150	---	702	
247+11	-	291+97	USH 51 NB		---	1,791	3,100	2,710	1,810	---	7,445	
291+97	-	295+47	USH 51 NB		---	201	250	230	150	---	700	
297+85	-	301+35	USH 51 NB		---	208	250	240	160	---	700	
301+35	-	346+81	USH 51 NB	STAGE 4	---	1,818	3,160	2,750	1,830	---	7,443	
346+81	-	352+31	USH 51 NB		---	316	390	360	240	---	1,104	
352+31	-	405+26	USH 51 NB		---	2,192	3,660	3,380	2,260	---	10,605	
405+26	-	408+76	USH 51 NB		---	200	250	230	150	---	700	
411+02	-	414+52	USH 51 NB		---	202	250	230	160	---	676	
414+52	-	415+17	USH 51 NB		---	25	50	40	30	---	65	
415+17	-	420+67	USH 51 NB		---	303	380	320	220	---	517	
420+67	-	431+53	USH 51 NB		---	404	750	600	390	---	1,302	
431+53	-	435+03	USH 51 NB		---	88	---	---	150	---	700	
CTH Q SB EXIT TO GORE			USH 51 NB		---	214	470	290	180	---	---	
CTH Q SB ENTRANCE FROM GORE			USH 51 NB		---	335	730	450	290	---	---	
STH 64 EXIT TO GORE			USH 51 NB		---	210	460	280	180	---	---	
STH 64 ENTRANCE FROM GORE			USH 51 NB		---	278	600	370	240	---	---	
CTH K SB EXIT TO GORE			USH 51 NB		---	202	440	270	170	---	---	
UNDISTRIBUTED			USH 51 NB		31,000	---	---	---	---	---	---	
STAGE 4 SUBTOTAL					31,000	15,688	25,970	22,370	14,990	0	60,008	
PROJECT -73 TOTALS					31,000	18,308	25,970	24,910	14,990	2,540	60,008	
CONTRACT TOTALS					56,000	37,614	51,670	50,470	32,100	5,090	121,044	

HMA MIXTURE ACCEPTANCE 1176-22-72

STATION TO STATION			ROADWAY	LOCATION	UNDERLAYING SURFACE	MIXTURE USE	BID ITEM	AVG LAYER DEPTH (IN)	TONNAGE	QMP TO BE USED FOR: MIXTURE ACCEPTANCE	QMP TO BE USED FOR: DENSITY ACCEPTANCE
PROJECT 1176-22-72											
CATEGORY 0010											
STAGE 1B											
STAGING CROSSOVERS 1 - 7					EX ASPHALT	UPPER LAYER	4 MT 58-34H	2.00	1,670	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY HMA PAVEMENT 460.2000
MAINTENANCE CROSSOVERS					EX ASPHALT	UPPER LAYER	4 MT 58-34H	2.00	181		
STAGING CROSSOVER TAPERS					3 MT 58-28S	UPPER LAYER	4 MT 58-34H	2.00	466		
					BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	3.25	757		
STAGE 1B SUBTOTAL									3,074		
STAGE 2											
84+49	-	125+53	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	1,102	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	1,731	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	2,833	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
84+49	-	125+53	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	133	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	209	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
84+49	-	125+53	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	348	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	447	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
125+53	-	131+03	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	147	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	232	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	379	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
125+53	-	131+03	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
125+53	-	131+03	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	61	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	79	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
131+03	-	146+59	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	417	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	656	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	1,073	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
131+03	-	146+59	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	64	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	101	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
131+03	-	146+59	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	116	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	149	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
146+59	-	150+09	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	241	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
146+59	-	150+09	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	17	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	27	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
146+59	-	150+09	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	40	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	52	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
155+12	-	158+62	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	147	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	241	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
PAGE SUBTOTAL									14,517		

HMA MIXTURE ACCEPTANCE 1176-22-72 CONTINUED

STATION TO STATION			ROADWAY	LOCATION	UNDERLAYING SURFACE	MIXTURE USE	BID ITEM	AVG LAYER DEPTH (IN)	TONNAGE	QMP TO BE USED FOR:	
										MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
PROJECT 1176-22-72											
CATEGORY 0010											
STAGE 2 CONTINUED											
155+12	-	158+62	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
155+12	-	158+62	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	50	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
158+62	-	217+14	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	1,579	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	2,481	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	4,060	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
158+62	-	217+14	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	263	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	413	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
158+62	-	217+14	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	658	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	846	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
217+14	-	220+64	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	241	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
217+14	-	220+64	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	24	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
217+14	-	220+64	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	44	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	56	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
223+19	-	226+69	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	147	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	241	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
223+19	-	226+69	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
223+19	-	226+69	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	38	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	49	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
226+69	-	238+37	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	313	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	492	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	805	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
226+69	-	238+37	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	52	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	82	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
226+69	-	238+37	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	130	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	167	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
238+37	-	241+87	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	147	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	241	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
238+37	-	241+87	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
238+37	-	241+87	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	50	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
243+51	-	247+01	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	147	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	241	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
							PAGE SUBTOTAL		14,797		

HMA MIXTURE ACCEPTANCE 1176-22-72 CONTINUED

STATION TO STATION			ROADWAY	LOCATION	UNDERLAYING SURFACE	MIXTURE USE	BID ITEM	AVG LAYER DEPTH (IN)	TONNAGE	QMP TO BE USED FOR:	
										MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
PROJECT 1176-22-72											
CATEGORY 0010											
STAGE 2 CONTINUED											
243+51	-	247+01	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
243+51	-	247+01	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	50	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
247+01	-	291+97	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	1,205	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	1,893	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	3,098	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
247+01	-	291+97	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	93	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	146	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
247+01	-	291+97	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	382	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	491	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
291+97	-	295+47	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	242	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
291+97	-	295+47	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
291+97	-	295+47	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	50	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
297+82	-	301+32	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	242	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
297+82	-	301+32	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
297+82	-	301+32	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	50	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
301+32	-	346+79	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	1,220	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	1,917	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	3,137	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
301+32	-	346+79	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	181	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	285	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
301+32	-	346+79	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	445	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	572	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
346+79	-	352+29	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	147	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	231	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	378	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
346+79	-	352+29	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
346+79	-	352+29	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	61	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	78	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
352+29	-	405+59	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	1,407	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	2,211	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	3,619	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
PAGE SUBTOTAL									24,615		

HMA MIXTURE ACCEPTANCE 1176-22-72 CONTINUED

STATION TO STATION			ROADWAY	LOCATION	UNDERLAYING SURFACE	MIXTURE USE	BID ITEM	AVG LAYER DEPTH (IN)	TONNAGE	QMP TO BE USED FOR:	
										MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
PROJECT 1176-22-72											
CATEGORY 0010											
STAGE 2 CONTINUED											
352+29	-	405+59	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	235	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	369	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
352+29	-	405+59	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	585	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	752	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
405+59	-	409+09	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	242	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
405+59	-	409+09	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
405+59	-	409+09	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	50	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
411+35	-	414+85	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	147	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	241	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
411+35	-	414+85	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	18	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	29	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
411+35	-	414+85	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	50	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
414+85	-	415+94	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	29	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	46	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	75	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
414+85	-	415+94	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	5	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	8	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
414+85	-	415+94	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	12	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
415+94	-	421+44	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	232	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	380	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
415+94	-	421+44	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	9	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	14	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
415+94	-	421+44	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	27	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	35	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
421+44	-	436+28	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	34	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	53	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	87	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
421+44	-	436+28	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	66	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	104	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
421+44	-	436+28	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	71	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	91	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
436+28	-	441+65	USH 51 SB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	145	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	227	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	372	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
436+28	-	441+65	USH 51 SB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	24	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	38	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
436+28	-	441+65	USH 51 SB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	61	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	78	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
SB ENTRANCE/EXIT TO GORES					3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	1,102	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
					2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	1,731	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
					BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	2,833	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
STAGE 2 SUBTOTAL									62,181		

HMA MIXTURE ACCEPTANCE 1176-22-72 CONTINUED

STATION TO STATION	ROADWAY	LOCATION	UNDERLAYING SURFACE	MIXTURE USE	BID ITEM	AVG LAYER DEPTH (IN)	TONNAGE	QMP TO BE USED FOR: MIXTURE ACCEPTANCE	QMP TO BE USED FOR: DENSITY ACCEPTANCE
PROJECT 1176-22-72									
CATEGORY 0010									
STAGE 3A									
CTH Q, STH 64, AND CTH K RAMPS			3 MT 58-28S	UPPER LAYER	4 MT 58-34V	1.75	1,984	AS PER SS 460	INCENTIVE DENSITY HMA
			EX CONCRETE	LOWER LAYER	3 MT 58-28S	2.25	2,551	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA
CTH Q AND CTH K MAINLINE OVERLAY			EX ASPHALT	UPPER LAYER	4 MT 58-34V	2.00	511	AS PER SS 460	INCENTIVE DENSITY HMA
				STAGE 3A SUBTOTAL			5,046		

PROJECT -72 TOTALS 70,301

HMA MIXTURE ACCEPTANCE 1176-22-73

STATION TO STATION			ROADWAY	LOCATION	UNDERLAYING SURFACE	MIXTURE USE	BID ITEM	AVG LAYER DEPTH (IN)	TONNAGE	QMP TO BE USED FOR: MIXTURE ACCEPTANCE	QMP TO BE USED FOR: DENSITY ACCEPTANCE
PROJECT 1176-22-73											
CATEGORY 0010											
STAGE 3B											
CTH Q, STH 64, AND CTH K RAMPS					3 MT 58-28S	UPPER LAYER	4 MT 58-34V	1.75	1,958	AS PER SS 460	INCENTIVE DENSITY HMA
					EX CONCRETE	LOWER LAYER	3 MT 58-28S	2.25	2,518	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA
CTH Q AND CTH K MAINLINE OVERLAY					EX ASPHALT	UPPER LAYER	4 MT 58-34V	2.00	547	AS PER SS 460	INCENTIVE DENSITY HMA
						STAGE 3B SUBTOTAL			5,023		
STAGE 4											
82+69	-	124+60	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	1,125	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	1,767	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	2,892	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
82+69	-	124+60	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	162	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	255	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
82+69	-	124+60	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	391	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	503	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
124+60	-	130+10	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	232	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	4.50	380	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
124+60	-	130+10	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
124+60	-	130+10	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	61	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	79	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
130+10	-	145+70	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	419	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	658	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	1,076	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	

PAGE SUBTOTAL 15,233

HMA MIXTURE ACCEPTANCE 1176-22-73 CONTINUED

STATION TO STATION			ROADWAY	LOCATION	UNDERLAYING SURFACE	MIXTURE USE	BID ITEM	AVG LAYER DEPTH (IN)	TONNAGE	QMP TO BE USED FOR:	
										MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
PROJECT 1176-22-73											
CATEGORY 0010											
STAGE 4 CONTINUED											
130+10	-	145+70	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	70	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	110	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
130+10	-	145+70	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	51	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	66	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
145+70	-	149+20	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	242	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
145+70	-	149+20	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	14	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	22	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
145+70	-	149+20	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	32	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	41	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
154+24	-	157+74	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	242	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
154+24	-	157+74	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
154+24	-	157+74	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	50	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
157+74	-	216+06	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	1,564	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	2,458	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	4,023	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
157+74	-	216+06	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	261	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	410	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
157+74	-	216+06	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	652	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	838	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
216+06	-	219+56	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	242	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
216+06	-	219+56	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
216+06	-	219+56	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	38	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	48	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
222+12	-	225+62	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	241	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
222+12	-	225+62	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
222+12	-	225+62	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	50	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
225+62	-	238+45	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	345	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	542	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	886	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
225+62	-	238+45	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	57	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	90	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
225+62	-	238+45	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	144	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	185	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
								PAGE SUBTOTAL	15,178		

HMA MIXTURE ACCEPTANCE 1176-22-73 CONTINUED

STATION TO STATION			ROADWAY	LOCATION	UNDERLAYING SURFACE	MIXTURE USE	BID ITEM	AVG LAYER DEPTH (IN)	TONNAGE	QMP TO BE USED FOR: MIXTURE ACCEPTANCE	QMP TO BE USED FOR: DENSITY ACCEPTANCE
PROJECT 1176-22-73											
CATEGORY 0010											
STAGE 4 CONTINUED											
238+45	-	241+95	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	242	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
238+45	-	241+95	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
238+45	-	241+95	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	51	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
243+61	-	247+11	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	242	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
243+61	-	247+11	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
243+61	-	247+11	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	51	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
247+11	-	291+97	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	1,203	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	1,891	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	3,094	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
247+11	-	291+97	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	173	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	272	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
247+11	-	291+97	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	424	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	545	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
291+97	-	295+47	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	242	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
291+97	-	295+47	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
291+97	-	295+47	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	50	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
297+85	-	301+35	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	95	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	149	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	245	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
297+85	-	301+35	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	21	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	34	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
297+85	-	301+35	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	42	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	54	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
301+35	-	346+81	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	1,227	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	1,928	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	3,155	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
301+35	-	346+81	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	188	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	296	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
301+35	-	346+81	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	408	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	524	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
346+81	-	352+31	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	233	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	381	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
								PAGE SUBTOTAL	18,573		

HMA MIXTURE ACCEPTANCE 1176-22-73 CONTINUED

STATION TO STATION			ROADWAY	LOCATION	UNDERLAYING SURFACE	MIXTURE USE	BID ITEM	AVG LAYER DEPTH (IN)	TONNAGE	QMP TO BE USED FOR: MIXTURE ACCEPTANCE	QMP TO BE USED FOR: DENSITY ACCEPTANCE
PROJECT 1176-22-73											
CATEGORY 0010											
STAGE 4 CONTINUED											
346+81	-	352+31	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
346+81	-	352+31	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	62	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	80	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
352+31	-	405+26	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	1,423	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	2,236	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	3,659	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
352+31	-	405+26	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	237	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	372	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
352+31	-	405+26	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	594	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	764	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
405+26	-	408+76	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	147	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	241	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
405+26	-	408+76	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	25	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
405+26	-	408+76	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	50	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
411+02	-	414+52	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	242	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
411+02	-	414+52	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	18	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	28	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
411+02	-	414+52	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	50	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
414+52	-	415+17	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	17	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	27	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	45	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
414+52	-	415+17	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	0	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	0	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
414+52	-	415+17	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	7	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	9	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
415+17	-	420+67	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	148	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	232	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	380	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
415+17	-	420+67	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	4	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	7	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
415+17	-	420+67	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	61	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	79	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
420+67	-	431+53	USH 51 NB	MAINLINE LANES	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	291	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
				MAINLINE LANES	2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	457	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				MAINLINE LANES	BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	749	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
420+67	-	431+53	USH 51 NB	INSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	49	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY HMA PAVEMENT 460.2000
				INSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.75	76	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
420+67	-	431+53	USH 51 NB	OUTSIDE SHOULDER	3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	47	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
				OUTSIDE SHOULDER	BASE AGGREGATE	LOWER LAYER	3 MT 58-28S	2.25	60	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
431+53	-	435+03	USH 51 NB	MAINLINE LANES	EX ASPHALT	UPPER LAYER	4 MT 58-34H	1.75	94	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
431+53	-	435+03	USH 51 NB	INSIDE SHOULDER	EX ASPHALT	LOWER LAYER	4 MT 58-34H	1.75	16	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
431+53	-	435+03	USH 51 NB	OUTSIDE SHOULDER	EX ASPHALT	LOWER LAYER	4 MT 58-34H	1.75	39	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
NB ENTRANCE/EXIT TO GORES					3 MT 58-28S	UPPER LAYER	4 MT 58-34H	1.75	1,039	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
					2 MT 58-28S	LOWER LAYER	3 MT 58-28S	2.75	1,633	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
					BASE AGGREGATE	LOWER LAYER	2 MT 58-28S	4.50	2,673	PWL INCENTIVE AIR VOIDS HMA PAVEMENT	
							STAGE 4 SUBTOTAL		62,920		
							PROJECT -73 TOTALS		67,943		
							CONTRACT TOTALS		138,243		

GUARDRAIL

STATION TO STATION	DIR	ROADWAY	614.2300 MGS GUARDRAIL 3 LF	SPV.0090.01 MGS THRIE BEAM TRANSITION SPECIAL LF	614.2610 MGS GUARDRAIL TERMINAL EAT EA	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EA	FOR GRADING SHAPING FINISHING INFORMATION ONLY					
							EXCAVATION COMMON CY	BORROW CY	TOPSOIL SY	FERTILIZER TYPE B CWT	SEEDING MIXTURE #30 LB	MULCHING SY
PROJECT 1176-22-73												
CATEGORY 0010												
STAGE 1A												
B-35-28 DEPARTURE	OUTSIDE	USH 51 NB	12.5	39.4	1	1	0	15	200	0.1	4	200
STAGE 1A SUBTOTAL			12.5	39.4	1	1						
STAGE 1B												
B-35-28 DEPARTURE	INSIDE	USH 51 NB	175	39.4	1	1	5	0	240	0.2	4	240
STAGE 1B SUBTOTAL			175	39.4	1	1						
PROJECT -73 TOTALS			187.5	78.8	2	2						
CONTRACT TOTALS			187.5	78.8	2	2						

HMA PAVEMENT PWL TEST STRIP

	460.0105.S VOLUMETRICS EACH	460.0110.S DENSITY EACH
PROJECT 1176-22-72		
CATEGORY 0010		
	3	3
PROJECT -72 TOTALS	3	3
PROJECT 1176-22-73		
CATEGORY 0010		
	3	3
PROJECT -73 TOTALS	3	3
CONTRACT TOTALS	6	6

RESTORATION

STATION TO STATION	ROADWAY	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE #30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
PROJECT 1176-22-72							
CATEGORY 0010							
CROSSOVER 2 TAPERS	USH 51	2,510	2,510	1.6	45	-	56
CROSSOVER 3 TAPERS	USH 51	1,350	1,350	0.9	24	-	30
CROSSOVER 4 TAPERS	USH 51	2,660	2,660	1.7	48	-	60
CROSSOVER 5 TAPERS	USH 51	2,510	2,510	1.6	45	-	56
CROSSOVER 6 TAPERS	USH 51	1,710	1,710	1.1	31	-	38
UNDISTRIBUTED		2685	2685	2	48	30	60
PROJECT -72 TOTALS		13,425	13,425	9	241	30	300
CONTRACT TOTALS		13,425	13,425	9	241	30	300

EROSION CONTROL

STATION TO STATION	ROADWAY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EA	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EA	628.7005 INLET PROTECTION TYPE A EA	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EA	628.7570 ROCK BAGS EA
PROJECT 1176-22-72									
CATEGORY 0010									
CROSSOVER 1	USH 51	---	---	---	---	3	---	10	---
CROSSOVER 2	USH 51	1,880	1,880	---	---	2	---	5	---
CROSSOVER 3	USH 51	620	620	---	---	---	---	10	---
CROSSOVER 4	USH 51	420	420	---	---	---	20	5	---
CROSSOVER 5	USH 51	380	380	---	---	2	40	5	---
CROSSOVER 6	USH 51	1,150	1,150	---	---	2	40	5	---
CROSSOVER 7	USH 51	---	---	---	---	2	---	5	---
297+60 - 301+72	USH 51 NB	630	630	---	---	---	---	---	---
UNDISTRIBUTED		1,270	1,270	8	12	2	25	11	50
PROJECT TOTALS		6,350	6,350	8	12	13	125	56	50
CONTRACT TOTALS		6,350	6,350	8	12	13	125	56	50

TRAFFIC CONTROL

STAGE	LOCATION	APPROX. SERVICE PERIOD DAYS	633.1100 DELINEATORS TEMPORARY EACH	643.0300 DRUMS NO.	643.0300 DRUMS DAYS	643.0420 BARRICADES TYPE III NO.	643.0420 BARRICADES TYPE III DAYS	643.0500 FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 WARNING LIGHTS TYPE A NO.	643.0705 WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C NO.	643.0715 WARNING LIGHTS TYPE C DAYS	643.0800 ARROW BOARDS NO.	643.0800 ARROW BOARDS DAYS	643.0900 SIGNS NO.	643.0900 SIGNS DAYS	643.1000 SIGNS FIXED MESSAGE SF	643.1050 SIGNS PCMS NO.	643.1050 SIGNS PCMS DAYS	NOTES
PROJECT 1176-22-72 CATEGORY 0010																					
1A	US 51 (NB)	2	--	85	170	4	8	--	--	8	16	21	42	2	4	17	34	80.00	--	--	NOTE 1
	STAGE 1A SUBTOTALS		0		170		8	0	0		16		42		4		34	80.00		0	
1B	US 51 (NB)	14	--	481	6,734	35	490	--	--	70	980	13	182	2	28	47	658	--	--	--	
	US 51 (SB)	14	--	481	6,734	35	490	--	--	70	980	13	182	2	28	47	658	64.00	--	--	NOTE 2
	STAGE 1B SUBTOTALS		0		13,468		980	0	0		1,960		364		56		1,316	64.00		0	
2A	US 51 (NB)	30	--	56	1,680	2	60	801	801	4	120	13	390	2	60	56	1,680	--	--	--	
	US 51 NB, CTH Q NB ON RAMP	30	--	29	870	0	0	--	--	0	0	12	360	0	0	3	90	--	1	7	
	US 51 NB, STH 64 NB ON RAMP	30	--	29	870	0	0	--	--	0	0	12	360	0	0	3	90	--	1	7	
	US 51 NB, CTH K NB ON RAMP	30	--	29	870	0	0	--	--	0	0	12	360	0	0	3	90	--	1	7	
	US 51 (SB)	30	--	56	1,680	2	60	--	--	4	120	13	390	2	60	16	480	--	--	--	
	US 51 SB, XO #1	30	22	25	750	8	240	--	--	2	60	7	210	0	0	2	60	--	--	--	
	US 51 SB, XO #2	30	28	44	1,320	7	210	22	22	4	120	28	840	0	0	10	300	--	--	--	
	US 51 SB, XO #3	30	12	14	420	7	210	31	31	4	120	9	270	0	0	9	270	--	--	--	
	US 51 SB, XO #4	30	21	33	990	7	210	22	22	4	120	18	540	0	0	10	300	--	--	--	
	US 51 SB, XO #5	30	16	19	570	7	210	29	29	4	120	8	240	0	0	9	270	--	--	--	
	US 51 SB, XO #6	30	23	34	1,020	7	210	22	22	4	120	19	570	0	0	10	300	--	--	--	
	US 51 SB, XO #7	30	33	47	1,410	8	240	36	36	2	60	7	210	0	0	4	120	--	--	--	
	US 51 SB ENTRANCE RAMP STH 64 DETOUR	5	--	8	40	6	30	--	--	12	60	0	0	0	0	55	275	51.75	--	--	NOTE 5
	US 51 SB EXIT RAMP STH 64 DETOUR	5	--	--	--	5	25	--	--	10	50	0	0	0	0	70	350	--	--	--	
	STAGE 2A SUBTOTALS		155		12,490		1,705	963	963		1,070		4,740		120		4,675	51.75		21	
2B	US 51 (NB)	40	--	56	2,240	2	80	801	801	4	160	13	520	2	80	56	2,240	64.00	--	--	NOTE 3
	US 51 NB, CTH Q NB ON RAMP	40	--	29	1,160	0	0	--	--	0	0	12	480	0	0	3	120	--	--	--	
	US 51 NB, STH 64 NB ON RAMP	40	--	29	1,160	0	0	--	--	0	0	12	480	0	0	3	120	--	--	--	
	US 51 NB, CTH K NB ON RAMP	40	--	29	1,160	0	0	--	--	0	0	12	480	0	0	3	120	--	--	--	
	US 51 (SB)	40	--	56	2,240	2	80	--	--	4	160	13	520	2	80	16	640	64.00	--	--	NOTE 3
	US 51 SB, XO #1	40	22	25	1,000	8	320	--	--	2	80	4	160	0	0	2	80	--	--	--	
	US 51 SB, XO #2	40	28	44	1,760	7	280	22	22	4	160	28	1,120	0	0	10	400	--	--	--	
	US 51 SB, XO #3	40	11	14	560	7	280	31	31	4	160	9	360	0	0	9	360	--	--	--	
	US 51 SB, XO #4	40	21	33	1,320	7	280	22	22	4	160	18	720	0	0	10	400	--	--	--	
	US 51 SB, XO #5	40	16	19	760	7	280	29	29	4	160	8	320	0	0	9	360	--	--	--	
	US 51 SB, XO #6	40	22	34	1,360	7	280	22	22	4	160	19	760	0	0	10	400	--	--	--	
	US 51 SB, XO #7	40	33	47	1,880	8	320	36	36	2	80	7	280	0	0	4	160	--	--	--	
	STAGE 2B SUBTOTALS		153		16,600		2,200	963	963		1,280		6,200		160		5,400	128.00		0	
3A	US 51 (SB)	10	--	46	460	3	30	--	--	6	60	13	130	2	20	15	150	--	--	--	
	US 51 SB, CTH Q OFF RAMP	10	--	40	400	4	40	--	--	8	80	0	0	0	0	8	80	--	1	7	
	US 51 SB, STH 64 OFF RAMP	10	--	40	400	4	40	--	--	8	80	0	0	0	0	8	80	--	1	7	
	US 51 SB, CTH K OFF RAMP	10	--	40	400	4	40	--	--	8	80	0	0	0	0	8	80	--	1	7	
	US 51 SB, CTH Q ON RAMP	10	--	10	100	5	50	--	--	10	100	0	0	0	0	1	10	--	1	7	
	US 51 SB, STH 64 ON RAMP	10	--	10	100	5	50	--	--	10	100	0	0	0	0	1	10	--	1	7	
	US 51 SB, CTH K ON RAMP	10	--	10	100	5	50	--	--	10	100	0	0	0	0	1	10	--	1	7	
	US 51 SB ENTRANCE RAMP STH 64 DETOUR	5	--	8	40	6	30	--	--	12	60	0	0	0	0	55	275	--	--	--	
	US 51 SB EXIT RAMP STH 64 DETOUR	5	--	--	--	5	25	--	--	10	50	0	0	0	0	70	350	--	--	--	
	STH 64 EB	5	--	34	170	2	10	--	--	4	20	11	55	1	5	12	60	--	--	--	
	STH 64 WB	5	--	38	190	2	10	--	--	4	20	11	55	1	5	12	60	--	--	--	
	STAGE 3A SUBTOTALS		0		2,360		375	0	0		750		240		30		1,165	0.00		42	
	PROJECT 1176-22-72 SUBTOTALS		308		45,088		5,268	1,926	1,926		5,076		11,586		370		12,590	323.75		63	
	UNDISTRIBUTED		30		4,509		527	289	289		508		1,159		37		1,259	32.38		7	
	PROJECT 1176-22-72 TOTALS		338		49,597		5,795	2,215	2,215		5,584		12,745		407		13,849	356.13		70	

TRAFFIC CONTROL CONTINUED

STAGE	LOCATION	APPROX. SERVICE	633.1100 DELINEATORS TEMPORARY	643.0300 DRUMS		643.0420 BARRICADES TYPE III		643.0500 FLEXIBLE TUBULAR MARKER POSTS	643.0600 FLEXIBLE TUBULAR MARKER BASES	643.0705 WARNING LIGHTS TYPE A		643.0715 WARNING LIGHTS TYPE C		643.0800 ARROW BOARDS		643.0900 SIGNS		643.1000 SIGNS FIXED MESSAGE	643.1050 SIGNS PCMS		NOTES
		DAYS	EACH	NO.	DAYS	NO.	DAYS	EACH	EACH	NO.	DAYS	NO.	DAYS	NO.	DAYS	NO.	DAYS	SF	NO.	DAYS	
PROJECT 1176-22-73 CATEGORY 0010																					
3B	US 51 (NB)	10	--	46	460	3	30	--	--	6	60	13	130	2	20	15	150	--	--	--	
	US 51 NB, CTH Q OFF RAMP	10	--	40	400	4	40	--	--	8	80	0	0	0	0	8	80	--	1	7	
	US 51 NB, STH 64 OFF RAMP	10	--	40	400	4	40	--	--	8	80	0	0	0	0	8	80	--	1	7	
	US 51 NB, CTH K OFF RAMP	10	--	40	400	4	40	--	--	8	80	0	0	0	0	8	80	--	1	7	
	US 51 NB, CTH Q ON RAMP	10	--	10	100	5	50	--	--	10	100	0	0	0	0	1	10	--	1	7	
	US 51 NB, STH 64 ON RAMP	10	--	10	100	5	50	--	--	10	100	0	0	0	0	1	10	--	1	7	
	US 51 NB, CTH K ON RAMP	10	--	10	100	5	50	--	--	10	100	0	0	0	0	1	10	--	1	7	
	US 51 NB EXIT RAMP STH 64 DETOUR	5	--	--	--	5	25	--	--	10	50	0	0	0	0	72	360	--	--	--	
	US 51 NB ENTRANCE RAMP STH 64 DETOUR	5	--	8	40	6	30	--	--	12	60	0	0	0	0	59	295	51.75	--	--	NOTE 6
	STH 64 EB	5	--	38	190	2	10	--	--	4	20	11	55	1	5	12	60	--	--	--	
	STH 64 WB	5	--	34	170	2	10	--	--	4	20	11	55	1	5	12	60	--	--	--	
	STAGE 3B SUBTOTALS		0		2,360		375	0	0		750		240		30		1,195	51.75		42	
4A	US 51 (NB)	30	--	56	1,680	2	60	--	--	4	120	13	390	2	60	16	480	--	--	--	
	US 51 NB, XO #1	30	29	38	1,140	8	240	36	36	2	60	7	210	0	0	4	120	--	--	--	
	US 51 NB, XO #2	30	20	20	600	7	210	31	31	4	120	12	360	0	0	9	270	--	--	--	
	US 51 NB, XO #3	30	20	28	840	7	210	18	18	4	120	17	510	0	0	10	300	--	--	--	
	US 51 NB, XO #4	30	16	18	540	7	210	32	32	4	120	8	240	0	0	9	270	--	--	--	
	US 51 NB, XO #5	30	22	32	960	7	210	22	22	4	120	17	510	0	0	10	300	--	--	--	
	US 51 NB, XO #6	30	12	20	600	7	210	35	35	4	120	9	270	0	0	9	270	--	--	--	
	US 51 NB, XO #7	30	34	43	1,290	8	240	--	--	2	60	7	210	0	0	2	60	--	--	--	
	US 51 (SB)	30	--	56	1,680	2	60	801	801	4	120	13	390	2	60	56	1,680	--	--	--	
	US 51 SB, CTH Q SB ON RAMP	30	--	29	870	0	0	--	--	0	0	12	360	0	0	3	90	--	1	7	
	US 51 SB, STH 64 SB ON RAMP	30	--	29	870	0	0	--	--	0	0	12	360	0	0	3	90	--	1	7	
	US 51 SB, CTH K SB ON RAMP	30	--	29	870	0	0	--	--	0	0	12	360	0	0	3	90	--	1	7	
	US 51 NB EXIT RAMP STH 64 DETOUR	5	--	--	--	5	25	--	--	10	50	0	0	0	0	72	360	--	--	--	
	US 51 NB ENTRANCE RAMP STH 64 DETOUR	5	--	8	40	6	30	--	--	12	60	0	0	0	0	59	295	--	--	--	
	STAGE 4A SUBTOTALS		153		11,980		1,705	975	975		1,070		4,170		120		4,675	0.00		21	
4B	US 51 (NB)	40	--	56	2,240	2	80	--	--	4	160	13	520	2	80	16	640	64.00	--	--	NOTE 4
	US 51 NB, XO #1	40	29	38	1,520	8	320	36	36	2	80	7	280	0	0	4	160	--	--	--	
	US 51 NB, XO #2	40	20	20	800	7	280	31	31	4	160	12	480	0	0	9	360	--	--	--	
	US 51 NB, XO #3	40	20	28	1,120	7	280	18	18	4	160	17	680	0	0	10	400	--	--	--	
	US 51 NB, XO #4	40	16	18	720	7	280	32	32	4	160	8	320	0	0	9	360	--	--	--	
	US 51 NB, XO #5	40	22	32	1,280	7	280	22	22	4	160	17	680	0	0	10	400	--	--	--	
	US 51 NB, XO #6	40	12	20	800	7	280	35	35	4	160	9	360	0	0	9	360	--	--	--	
	US 51 NB, XO #7	40	34	43	1,720	8	320	--	--	2	80	7	280	0	0	2	80	--	--	--	
	US 51 (SB)	40	--	56	2,240	2	80	801	801	4	160	13	520	2	80	56	2,240	64.00	--	--	NOTE 4
	US 51 SB, CTH Q SB ON RAMP	40	--	29	1,160	0	0	--	--	0	0	12	480	0	0	3	120	--	--	--	
	US 51 SB, STH 64 SB ON RAMP	40	--	29	1,160	0	0	--	--	0	0	12	480	0	0	3	120	--	--	--	
	US 51 SB, CTH K SB ON RAMP	40	--	29	1,160	0	0	--	--	0	0	12	480	0	0	3	120	--	--	--	
	STAGE 4A SUBTOTALS		153		15,920		2,200	975	975		1,280		5,560		160		5,360	128.00		0	
	PROJECT 1176-22-73 SUBTOTALS		306		30,260		4,280	1,950	1,950		3,100		9,970		310		11,230	179.75		63	
	UNDISTRIBUTED		31		3,026		428	195	195		310		997		31		1,123	17.98		6	
	PROJECT 1176-22-73 TOTALS		337		33,286		4,708	2,145	2,145		3,410		10,967		341		12,353	197.73		69	
	CONTRACT TOTALS		675		82,883		10,503	4,360	4,360		8,994		23,712		748		26,202	553.85		139	

NOTES 1. INSTALL G20-57 FOR NB TRAFFIC A MINIMUM OF 7 DAYS PRIOR TO START OF CONSTRUCTION. REMOVE WHEN CONSTRUCTION STARTS
2. STAGE 1A AND 1B TO OCCUR FALL 2021. INSTALL G20-57 FOR SB TRAFFIC A MINIMUM OF 7 DAYS PRIOR TO START OF CONSTRUCTION. REMOVE WHEN CONSTRUCTION STARTS
3. STAGE 2B TO OCCUR SPRING 2022. NEED NEW FMS - INSTALL G20-57 A MINIMUM OF 7 DAYS PRIOR TO START OF CONSTRUCTION. REMOVE WHEN CONSTRUCTION STARTS
4. STAGE 4B TO OCCUR FALL 2022. NEED NEW FMS - INSTALL G20-57 A MINIMUM OF 7 DAYS PRIOR TO START OF CONSTRUCTION. REMOVE WHEN CONSTRUCTION STARTS
5. FIXED MESSAGE SIGN TO BE REUSED IN STAGE 3A
6. FIXED MESSAGE SIGN TO BE REUSED IN STAGE 4A

3

COVERING SIGNS

STAGE	LOCATION	DESCRIPTION	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I			643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II		
			EACH	NUMBER OF CYCLES	NUMBER OF SIGNS	EACH	NUMBER OF CYCLES	NUMBER OF SIGNS
PROJECT ID 1176-22-72 CATEGORY 0010								
1B	USH 51 SB	SPEED LIMIT SIGNS	0	0	0	3	1	3
	USH 51 NB	SPEED LIMIT SIGNS	0	0	0	3	1	3
		STAGE 1B SUBTOTALS	0			6		
2A	STH 64	USH 51 SB ENTRANCE RAMP AT STH 64	0	0	0	3	1	3
	USH 51 SB	USH 51 SB 64 EXIT RAMP AT STH 64	2	1	2	0	0	0
	USH 51 NB	SPEED LIMIT SIGNS	0	0	0	3	1	3
		STAGE 2A SUBTOTALS	2			6		
2B	USH 51 NB	SPEED LIMIT SIGNS	0	0	0	3	1	3
		STAGE 2B SUBTOTALS	0			3		
3A	STH 64	USH 51 SB ENTRANCE RAMP AT STH 64	0	0	0	3	1	3
	USH 51 SB	USH 51 SB 64 EXIT RAMP AT STH 64	2	1	2	0	0	0
	USH 51 SB	SPEED LIMIT SIGNS	0	0	0	2	1	2
		STAGE 3A SUBTOTALS	2			5		
		PROJECT 1176-22-72 SUBTOTALS	4			20		
PROJECT ID 1176-22-73 CATEGORY 0010								
3B	USH 51 NB	SPEED LIMIT SIGNS	0	0	0	3	1	3
	USH 51 NB	USH 51 NB EXIT RAMP AT STH 64	2	1	2	0	0	0
	STH 64	USH 51 NB ENTRANCE RAMP AT STH 64	0	0	0	3	1	3
		STAGE 3B SUBTOTALS	2			6		
4A	USH 51 SB	SPEED LIMIT SIGNS	0	0	0	3	1	3
	USH 51 NB	SPEED LIMIT SIGNS	0	0	0	1	1	1
	USH 51 NB	USH 51 NB EXIT RAMP AT STH 64	2	1	2	0	0	0
	STH 64	USH 51 NB ENTRANCE RAMP AT STH 64	0	0	0	3	1	3
		STAGE 4A SUBTOTALS	2			7		
4B	USH 51 SB	SPEED LIMIT SIGNS	0	0	0	3	1	3
	USH 51 NB	SPEED LIMIT SIGNS	0	0	0	1	1	1
		STAGE 4B SUBTOTALS	0			4		
		PROJECT 1176-22-73 SUBTOTALS	4			17		
		CONTRACT TOTALS	8			37		

BASIC QUEUE WARNING SYSTEM

STAGE	LOCATION	FLASHING BEACON SIGNS (FBS)	643.1205.S BASIC TRAFFIC QUEUE WARNING SYSTEM DAYS
PROJECT ID 1176-22-72 CATEGORY 0010			
1B	USH 51 NB	6	14
	USH 51 SB	6	14
	STAGE 1B SUBTOTALS		28
2A	USH 51 NB	6	30
	USH 51 SB	6	30
	STAGE 2A SUBTOTALS		60
2B	USH 51 NB	6	40
	USH 51 SB	6	40
	STAGE 2B SUBTOTALS		80
	PROJECT 1176-22-72 SUBTOTALS		168
	UNDISTRIBUTED		17
	PROJECT 1176-22-72 TOTALS		185
PROJECT ID 1176-22-73 CATEGORY 0010			
4A	USH 51 NB	6	30
	USH 51 SB	6	30
	STAGE 4A SUBTOTALS		60
4B	USH 51 NB	6	40
	USH 51 SB	6	40
	STAGE 4B SUBTOTALS		80
	PROJECT 1176-22-73 SUBTOTALS		140
	UNDISTRIBUTED		14
	PROJECT 1176-22-73 TOTALS		154
	CONTRACT TOTALS		339

PAVEMENT MARKING

STATION		TO STATION	LOCATION	STAGE	646.1020 MARKING LINE EPOXY 4-INCH (YELLOW) LF	646.1040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH SOLID (WHITE) LF	646.1040 SOLID (YELLOW) LF	646.1555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH SKIPS (WHITE) LF	646.3555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) LF	646.6464 COLD WEATHER MARKING EPOXY 4-INCH (WHITE) EACH	646.6464 (YELLOW) LF	646.7220 MARKING CHEVRON EPOXY 24-INCH (WHITE) LF	646.6120 MARKING STOP LINE EPOXY 18-INCH (WHITE) LF
PROJECT 1176-22-72			CATEGORY 0010										
728+90	-	736+00	USH 51 NB	1B	--	--	--	178	--	--	--	--	--
488+00	-	495+10	USH 51 SB		--	--	--	178	--	--	--	--	--
			STAGE 1B SUBTOTALS		0	0	0	355	0	0	0	0	0
84+49	-	441+66	USH 51 SB	2A/2B	--	29,989	35,717	8,929	--	15,567	14,287	--	--
			STAGE 2A/2B SUBTOTALS		0	29,989	35,717	8,929	0	15,567	14,287	0	0
728+90	-	736+00	USH 51 NB	2A	--	--	--	178	--	178	--	--	--
751+90	-	756+00	USH 51 NB @ XO #1		--	--	410	--	--	--	410	--	--
101+59	-	109+44	USH 51 NB @ XO #2		--	--	785	--	--	--	785	--	--
146+00	-	147+54	USH 51 NB @ XO #3		--	--	154	--	--	--	154	--	--
264+40	-	272+00	USH 51 NB @ XO #4		--	--	760	--	--	--	760	--	--
318+05	-	322+47	USH 51 NB @ XO #5		--	--	442	--	--	--	442	--	--
412+14	-	419+20	USH 51 NB @ XO #6		--	--	706	--	--	--	706	--	--
460+52	-	467+81	USH 51 NB @ XO #7		--	--	729	--	--	--	729	--	--
488+00		495+10	USH 51 SB		--	--	--	178	--	178	--	--	--
			STAGE 2A SUBTOTALS		0	0	3,986	355	0	355	3,986	0	0
728+90	-	736+00	USH 51 NB	2B	--	--	--	178	--	--	--	--	--
751+90	-	756+00	USH 51 NB @ XO #1		--	--	410	--	--	--	--	--	--
101+59	-	109+44	USH 51 NB @ XO #2		--	--	785	--	--	--	--	--	--
146+00	-	147+54	USH 51 NB @ XO #3		--	--	154	--	--	--	--	--	--
264+40	-	272+00	USH 51 NB @ XO #4		--	--	760	--	--	--	--	--	--
318+05	-	322+47	USH 51 NB @ XO #5		--	--	442	--	--	--	--	--	--
412+14	-	419+20	USH 51 NB @ XO #6		--	--	706	--	--	--	--	--	--
460+52	-	467+81	USH 51 NB @ XO #7		--	--	729	--	--	--	--	--	--
488+00		495+10	USH 51 SB		--	--		178	--	--	--	--	--
			STAGE 2B SUBTOTALS		0	0	3,986	355	0	0	0	0	0
106+55	-	119+29	USH 51 SB (CTH Q ENTR RAMP)	3A	--	2,379	1,025	--	1,275	--	--	--	--
140+93	-	148+50	USH 51 SB (CTH Q EXIT RAMP)		--	1,757	1,034	--	733	--	--	126	59
268+87	-	282+40	USH 51 SB (STH 64 ENTR RAMP)		--	2,746	1,388	--	1,374	--	--	--	--
309+17	-	316+66	USH 51 SB (STH 64 EXIT RAMP)		--	1,977	1,226	--	788	--	--	159	
415+24	-	430+51	USH 51 SB (CTH K ENTR RAMP)		--	2,290	806	--	1,559	--	--	--	--
453+03	-	457+85	USH 51 SB (CTH K EXIT RAMP)		--	2,032	1,533	--	577	--	--	128	38
			CTH Q WEST		532	511	--	--	--	--	--	--	--
			CTH K WEST		380	299	--	--	--	--	--	--	--
			STAGE 3A SUBTOTALS		912	13,991	7,012	0	6,306	0	0	413	97
			PROJECT 1176-22-72 SUBTOTALS		912	43,980	50,701	9,994	6,306	15,922	18,273	413	97
			PROJECT 1176-22-72 TOTALS		912	94,681		9,994	6,306	34,195		413	97

PAVEMENT MARKING CONTINUED

STATION		TO STATION	LOCATION	STAGE	646.1020 MARKING LINE EPOXY 4-INCH (YELLOW) LF	646.1040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH SOLID (WHITE) LF	646.1040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH SOLID (YELLOW) LF	646.1555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH SKIPS (WHITE) LF	646.3555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) LF	646.6464 COLD WEATHER MARKING EPOXY 4-INCH (WHITE) EACH	646.6464 COLD WEATHER MARKING EPOXY 4-INCH (YELLOW) LF	646.7220 MARKING CHEVRON EPOXY 24-INCH (WHITE) LF	646.6120 MARKING STOP LINE EPOXY 18-INCH (WHITE) LF
PROJECT 1176-22-73			CATEGORY 0010										
108+07	-	116+72	USH 51 NB (CTH Q EXIT RAMP)	3B	--	1,673	871	--	922	--	--	204	70
134+16	-	146+81	USH 51 NB (CTH Q ENTR RAMP)		--	2,150	815	--	1,343	--	--	--	--
272+59	-	281+33	USH 51 NB (STH 64 EXIT RAMP)		--	2,329	1,463	--	902	--	--	191	
307+72	-	319+64	USH 51 NB (STH 64 ENTR RAMP)		--	2,221	1,055	--	1,222	--	--	--	--
420+07	-	428+32	USH 51 NB (CTH K EXIT RAMP)		--	1,959	1,137	--	872	--	--	184	36
451+24	-	457+46	USH 51 NB (CTH K ENTR RAMP)		--	2,254	992	--	1,243	--	--	--	--
			CTH Q EAST		556	482	--	--	--	--	--	--	--
			CTH K EAST		432	351	--	--	--	--	--	--	--
			STAGE 3B SUBTOTALS		988	13,419	6,333	0	6,504	0	0	579	106
82+69	-	435+03	USH 51 NB	4A/4B	--	30,230	35,234	8,809	--	23,423	21,140	--	--
			STAGE 4A/4B SUBTOTALS		0	30,230	35,234	8,809	0	23,423	21,140	0	0
728+90	-	736+00	USH 51 NB	4A	--	--	--	178	--	--	--	--	--
751+78	-	758+71	USH 51 SB @ XO #1		--	--	693	--	--	--	--	--	--
105+25	-	109+54	USH 51 SB @ XO #2		--	--	429	--	--	--	--	--	--
144+98	-	150+09	USH 51 SB @ XO #3		--	--	511	--	--	--	--	--	--
267+37	-	271+81	USH 51 SB @ XO #4		--	--	444	--	--	--	--	--	--
317+91	-	325+48	USH 51 SB @ XO #5		--	--	757	--	--	--	--	--	--
415+42	-	419+50	USH 51 NB @ XO #6		--	--	408	--	--	--	--	--	--
460+85	-	467+90	USH 51 SB @ XO #7		--	--	705	--	--	--	--	--	--
488+00	-	495+10	USH 51 SB		--	--	--	178	--	--	--	--	--
			STAGE 4A SUBTOTALS		0	0	3,947	355	0	0	0	0	0
728+90	-	736+00	USH 51 NB	4B	--	--	--	178	--	178	--	--	--
751+78	-	758+71	USH 51 SB @ XO #1		--	--	693	--	--	--	693	--	--
105+25	-	109+54	USH 51 SB @ XO #2		--	--	429	--	--	--	429	--	--
144+98	-	150+09	USH 51 SB @ XO #3		--	--	511	--	--	--	511	--	--
267+37	-	271+81	USH 51 SB @ XO #4		--	--	444	--	--	--	444	--	--
317+91	-	325+48	USH 51 SB @ XO #5		--	--	757	--	--	--	757	--	--
415+42	-	419+50	USH 51 NB @ XO #6		--	--	408	--	--	--	408	--	--
460+85	-	467+90	USH 51 SB @ XO #7		--	--	705	--	--	--	705	--	--
488+00	-	495+10	USH 51 SB		--	--	--	178	--	178	--	--	--
			STAGE 4B SUBTOTALS		0	0	3,947	355	0	355	3,947	0	0
			PROJECT 1176-22-73 SUBTOTALS		988	43,649	49,461	9,519	6,504	23,778	25,087	579	106
			PROJECT 1176-22-73 TOTALS		988	93,110		9,519	6,504	48,865		579	106
			CONTRACT TOTALS		1,900	187,791		19,513	12,810	83,060		992	203

3

REMOVING PAVEMENT MARKINGS

STAGE	STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF	NOTES
PROJECT 1176-22-72		CATEGORY 0010						
1B	728+90	-	736+00	USH 51 NB	178	---	---	SKIP DASH
	488+00	-	495+10	USH 51 SB	178	---	---	SKIP DASH
				STAGE 1B SUBTOTALS	355	0	0	
2A	728+90	-	736+00	USH 51 NB	178	---	---	SOLID
	743+18	-	746+38	USH 51 SB EDGELINE	320	---	---	SOLID
	751+90	-	756+00	USH 51 NB EDGELINE	410	---	---	SOLID
	754+67	-	771+03	USH 51 NB CENTERLINE	409	---	---	SKIP DASH
	82+58	-	420+82	USH 51 NB CENTERLINE	8,456			SKIP DASH
	101+59	-	109+44	USH 51 NB EDGELINE	785	---	---	SOLID
	115+56	-	116+50	USH 51 SB EDGELINE	94	---	---	SOLID
	116+29	-	117+29	USH 51 SB CENTERLINE	25	---	---	SKIP DASH
	117+02	-	118+02	USH 51 SB AT CTH Q ON RAMP	---	100	---	SOLID
	117+72	-	119+51	USH 51 SB AT CTH Q ON RAMP	---	179	---	SOLID
	140+45	-	141+97	USH 51 SB AT CTH Q OFF RAMP	---	152	---	SOLID
	141+86	-	142+20	USH 51 SB AT CTH Q OFF RAMP	---	34	---	SOLID
	142+08	-	142+41	USH 51 SB	8	---	---	SKIP DASH
	142+30	-	142+63	USH 51 SB	33	---	---	SOLID
	141+69	-	141+78	USH 51 SB AT CTH Q OFF RAMP	---	---	16	DIAGONALS
	146+00	-	147+54	USH 51 NB	154	---	---	SOLID
	264+40	-	272+00	USH 51 NB	760	---	---	SOLID
	274+84	-	275+53	USH 51 SB	69	---	---	SOLID
	275+34	-	276+10	USH 51 SB	19	---	---	SKIP DASH
	275+85	-	276+99	USH 51 SB AT STH 64 ON RAMP	---	114	---	SOLID
	275+88	-	277+66	USH 51 SB AT STH 64 ON RAMP	---	178	---	SOLID
	312+20	-	313+10	USH 51 SB AT STH 64 OFF RAMP	---	90	---	SOLID
	312+66	-	313+10	USH 51 SB AT STH 64 OFF RAMP	---	44	---	SOLID
	313+65	-	314+48	USH 51 SB	21	---	---	SKIP DASH
	314+29	-	314+96	USH 51 SB	67	---	---	SOLID
	318+05	-	322+47	USH 51 NB	442	---	---	SOLID
	412+14	-	419+20	USH 51 NB	706	---	---	SOLID
	423+33	-	423+99	USH 51 SB	66	---	---	SOLID
	423+81	-	424+53	USH 51 SB	18	---	---	SKIP DASH
	424+32	-	425+31	USH 51 SB	---	99	---	SOLID
	424+49	-	426+33	USH 51 SB	---	184	---	SOLID
	460+52	-	467+81	USH 51 NB	729	---	---	SOLID
	476+03	-	479+35	USH 51 SB	332	---	---	SOLID
	488+00	-	495+10	USH 51 SB	178	---	---	SKIP DASH
				STAGE 2A SUBTOTALS	14,278	1,174	16	
				PAGE SUBTOTALS	14,633	1,174	16	

REMOVING PAVEMENT MARKINGS CONTINUED

STAGE	STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	649.9200 MARKING REMOVAL LINE WIDE LF	NOTES
PROJECT 1176-22-72 CATEGORY 0010								
	743+18	-	746+38	USH 51 SB EDGELINE	320	---	---	SOLID
	751+90	-	756+00	USH 51 NB EDGELINE	410	---	---	SOLID
	754+67	-	771+03	USH 51 NB CENTERLINE	409	---	---	SKIP DASH
	82+58	-	420+82	USH 51 NB CENTERLINE	8,456			SKIP DASH
	101+59	-	109+44	USH 51 NB EDGELINE	785	---	---	SOLID
	115+56	-	116+50	USH 51 SB EDGELINE	94	---	---	SOLID
	116+29	-	117+29	USH 51 SB CENTERLINE	25	---	---	SKIP DASH
	117+02	-	118+02	USH 51 SB AT CTH Q ON RAMP	---	100	---	SOLID
	117+72	-	119+51	USH 51 SB AT CTH Q ON RAMP	---	179	---	SOLID
	140+45	-	141+97	USH 51 SB AT CTH Q OFF RAMP	---	152	---	SOLID
	141+86	-	142+20	USH 51 SB AT CTH Q OFF RAMP	---	34	---	SOLID
	142+08	-	142+41	USH 51 SB	8	---	---	SKIP DASH
	142+30	-	142+63	USH 51 SB	33	---	---	SOLID
	141+69	-	141+78	USH 51 SB AT CTH Q OFF RAMP	---	---	16	DIAGONALS
	146+00	-	147+54	USH 51 NB	154	---	---	SOLID
	264+40	-	272+00	USH 51 NB	760	---	---	SOLID
2B	274+84	-	275+53	USH 51 SB	69	---	---	SOLID
	275+34	-	276+10	USH 51 SB	19	---	---	SKIP DASH
	275+85	-	276+99	USH 51 SB AT STH 64 ON RAMP	---	114	---	SOLID
	275+88	-	277+66	USH 51 SB AT STH 64 ON RAMP	---	178	---	SOLID
	312+20	-	313+10	USH 51 SB AT STH 64 OFF RAMP	---	90	---	SOLID
	312+66	-	313+10	USH 51 SB AT STH 64 OFF RAMP	---	44	---	SOLID
	313+65	-	314+48	USH 51 SB	21	---	---	SKIP DASH
	314+29	-	314+96	USH 51 SB	67	---	---	SOLID
	318+05	-	322+47	USH 51 NB	442	---	---	SOLID
	412+14	-	419+20	USH 51 NB	706	---	---	SOLID
	423+33	-	423+99	USH 51 SB	66	---	---	SOLID
	423+81	-	424+53	USH 51 SB	18	---	---	SKIP DASH
	424+32	-	425+31	USH 51 SB	---	99	---	SOLID
	424+49	-	426+33	USH 51 SB	---	184	---	SOLID
	460+52	-	467+81	USH 51 NB	729	---	---	SOLID
	476+03	-	479+35	USH 51 SB	332	---	---	SOLID
	488+00	-	495+10	USH 51 SB	178	---	---	SKIP DASH
				STAGE 2B SUBTOTALS	14,101	1,174	16	
				PAGE SUBTOTALS	14,101	1,174	16	
				PROJECT 1176-22-72 TOTALS	28,734	2,348	32	

REMOVING PAVEMENT MARKINGS CONTINUED

STAGE	STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF	NOTES
PROJECT 1176-22-73 CATEGORY 0010								
	728+90	-	736+00	USH 51 NB	178	---	---	SKIP DASH
	743+03	-	746+23	USH 51 NB @ XO #1	320	---	---	SOLID
	751+78	-	758+71	USH 51 SB @ XO #1	693	---	---	SOLID
	751+78	-	771+24	USH 51 SB CENTERLINE	487	---	---	SKIP DASH
	82+91	-	467+90	USH 51 SB CENTERLINE	9,625			SKIP DASH
	105+25	-	109+54	USH 51 SB @ XO #2	429	---	---	SOLID
	112+11	-	112+62	XO #2	54	---	---	SOLID
	114+44	-	114+92	USH 51 NB @ XO #2	48	---	---	SOLID
	114+78	-	115+25	USH 51 NB @ XO #2	12	---	---	SKIP DASH
	115+11	-	115+59	USH 51 NB @ XO #2	---	48	---	SOLID
	115+61	-	116+35	USH 51 NB @ XO #2	---	74	---	SOLID
	115+26	-	116+13	USH 51 NB @ XO #2	---	---	63	DIAGONALS
	138+30	-	139+54	USH 51 NB @ XO #3	---	124	---	SOLID
	138+92	-	139+65	USH 51 NB @ XO #3	---	73	---	SOLID
	139+49	-	140+01	USH 51 NB @ XO #3	13	---	---	SKIP DASH
	139+87	-	140+30	USH 51 NB @ XO #3	43	---	---	SOLID
	142+90	-	143+30	XO #3	44	---	---	SOLID
	144+98	-	150+09	USH 51 SB @ XO #3	511	---	---	SOLID
	267+37	-	271+81	USH 51 SB @ XO #4	444	---	---	SOLID
	273+09	-	273+79	XO #4	72	---	---	SOLID
4A	274+92	-	275+63	USH 51 NB @ XO #4	71	---	---	SOLID
	275+44	-	276+22	USH 51 NB @ XO #4	20	---	---	SKIP DASH
	275+99	-	277+23	USH 51 NB @ XO #4	31	---	---	SKIP DASH 3'/9'GAP
	276+81	-	277+54	USH 51 NB @ XO #4	---	73	---	SOLID
	312+30	-	314+02	USH 51 NB @ XO #5	---	172	---	SOLID
	312+85	-	314+02	USH 51 NB @ XO #5	---	117	---	SOLID
	313+77	-	314+52	USH 51 NB @ XO #5	19	---	---	SKIP DASH
	314+34	-	314+97	USH 51 NB @ XO #5	63	---	---	SOLID
	316+12	-	316+73	XO #5	64	---	---	SOLID
	317+91	-	325+48	USH 51 SB @ XO #5	757	---	---	SOLID
	415+42	-	419+50	USH 51 NB @XO #6	408	---	---	SOLID
	421+39	-	422+05	XO #6	68	---	---	SOLID
	423+29	-	423+95	USH 51 NB @ XO #6	66	---	---	SOLID
	423+77	-	424+47	USH 51 NB @ XO #6	18	---	---	SKIP DASH
	424+27	-	425+20	USH 51 NB @ XO #6	---	93	---	SOLID
	424+34	-	426+06	USH 51 NB @ XO #6	---	172	---	SOLID
	424+27		426+06	USH 51 NB @ XO #6	---	---	30	DIAGONALS
	460+85	-	467+90	USH 51 SB @ XO #7	705	---	---	SOLID
	471+30	-	472+56	XO #7	128	---	---	SOLID
	475+63	-	478+89	USH 51 NB @ XO #7	326	---	---	SOLID
	488+00	-	495+10	USH 51 SB	178	---	---	SKIP DASH
				STAGE 4A SUBTOTALS	15,892	946	93	
				PAGE SUBTOTALS	15,892	946	93	

REMOVING PAVEMENT MARKINGS CONTINUED

STAGE	STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF	NOTES
PROJECT 1176-22-73	CATEGORY 0010							
	728+90	-	736+00	USH 51 NB	178	---	---	SKIP DASH
	743+03	-	746+23	USH 51 NB @ XO #1	320	---	---	SOLID
	751+78	-	758+71	USH 51 SB @ XO #1	693	---	---	SOLID
	751+78	-	771+24	USH 51 SB CENTERLINE	487	---	---	SKIP DASH
	82+91	-	467+90	USH 51 SB CENTERLINE	9,625			SKIP DASH
	105+25	-	109+54	USH 51 SB @ XO #2	429	---	---	SOLID
	112+11	-	112+62	XO #2	54	---	---	SOLID
	114+44	-	114+92	USH 51 NB @ XO #2	48	---	---	SOLID
	114+78	-	115+25	USH 51 NB @ XO #2	12	---	---	SKIP DASH
	115+11	-	115+59	USH 51 NB @ XO #2	---	48	---	SOLID
	115+61	-	116+35	USH 51 NB @ XO #2	---	74	---	SOLID
	115+26	-	116+13	USH 51 NB @ XO #2	---	---	63	DIAGONALS
	138+30	-	139+54	USH 51 NB @ XO #3	---	124	---	SOLID
	138+92	-	139+65	USH 51 NB @ XO #3	---	73	---	SOLID
	139+49	-	140+01	USH 51 NB @ XO #3	13	---	---	SKIP DASH
	139+87	-	140+30	USH 51 NB @ XO #3	43	---	---	SOLID
	142+90	-	143+30	XO #3	44	---	---	SOLID
	144+98	-	150+09	USH 51 SB @ XO #3	511	---	---	SOLID
	267+37	-	271+81	USH 51 SB @ XO #4	444	---	---	SOLID
	273+09	-	273+79	XO #4	72	---	---	SOLID
4B	274+92	-	275+63	USH 51 NB @ XO #4	71	---	---	SOLID
	275+44	-	276+22	USH 51 NB @ XO #4	20	---	---	SKIP DASH
	275+99	-	277+23	USH 51 NB @ XO #4	31	---	---	SKIP DASH 3'/9'GAP
	276+81	-	277+54	USH 51 NB @ XO #4	---	73	---	SOLID
	312+30	-	314+02	USH 51 NB @ XO #5	---	172	---	SOLID
	312+85	-	314+02	USH 51 NB @ XO #5	---	117	---	SOLID
	313+77	-	314+52	USH 51 NB @ XO #5	19	---	---	SKIP DASH
	314+34	-	314+97	USH 51 NB @ XO #5	63	---	---	SOLID
	316+12	-	316+73	XO #5	64	---	---	SOLID
	317+91	-	325+48	USH 51 SB @ XO #5	757	---	---	SOLID
	415+42	-	419+50	USH 51 NB @XO #6	408	---	---	SOLID
	421+39	-	422+05	XO #6	68	---	---	SOLID
	423+29	-	423+95	USH 51 NB @ XO #6	66	---	---	SOLID
	423+77	-	424+47	USH 51 NB @ XO #6	18	---	---	SKIP DASH
	424+27	-	425+20	USH 51 NB @ XO #6	---	93	---	SOLID
	424+34	-	426+06	USH 51 NB @ XO #6	---	172	---	SOLID
	424+27		426+06	USH 51 NB @ XO #6	---	---	30	DIAGONALS
	460+85	-	467+90	USH 51 SB @ XO #7	705	---	---	SOLID
	471+30	-	472+56	XO #7	128	---	---	SOLID
	475+63	-	478+89	USH 51 NB @ XO #7	326	---	---	SOLID
	488+00	-	495+10	USH 51 SB	178	---	---	SKIP DASH
				STAGE 4B SUBTOTALS	15,892	946	93	
				PAGE SUBTOTALS	15,892	946	93	
				PROJECT 1176-22-73 TOTALS	31,784	1,892	186	
				CONTRACT TOTALS	60,517	4,240	218	

3

TEMPORARY MARKING

STAGE	STATION	TO	STATION	LOCATION	649.0105 LINE PAINT 4-INCH SOLID (WHITE) LF	649.0105 LINE PAINT 4-INCH SOLID (YELLOW) LF	649.0105 LINE PAINT 4-INCH DOUBLE (YELLOW) LF	649.0150 LINE REMOVABLE TAPE 4-INCH SOLID (WHITE) LF	649.0150 LINE REMOVABLE TAPE 4-INCH SOLID (YELLOW) LF	649.0205 LINE PAINT 8-INCH SOLID (WHITE) LF	649.0250 LINE REMOVABLE TAPE 8-INCH SOLID (WHITE) LF	649.0760 RAISED PAVEMENT MARKER TYPE I EACH
PROJECT 1176-22-72 CATEGORY 0010												
	256+73	-	278+83	USH 51 NB	--	--	--	860	--	--	400	--
	729+40	-	736+00	USH 51 NB	--	--	--	--	660	--	--	--
1B	488+00	-	494+60	USH 51 SB	--	--	--	--	660	--	--	--
				STAGE 1B SUBTOTALS	0	0	0	860	1,320	0	400	0
	729+40	-	736+00	USH 51 NB	--	--	--	--	660	--	--	--
	743+18	-	754+67	USH 51 NB, XO #1	834	1,155	--	321	--	--	--	68
	754+67	-	771+03	USH 51 NB	1,636	--	3,272	--	--	--	--	--
	82+58		101+59	USH 51 NB	1,901	--	3,802	--	--	--	--	--
	101+59	-	110+44	USH 51 NB, XO #2	1,773	888	1,770	--	--	200		--
	110+44	-	144+62	USH 51 NB	3,418	--	6,836	--	--	--	--	--
	144+62	-	147+54	USH 51 NB, XO #3	708	417	584	--	--	239		--
2A	147+54	-	264+40	USH 51 NB	11,686	--	23,372	--	--	--	--	--
	262+40	-	273+00	USH 51 NB, XO #4	1,338	478	2,120	--	--	200		--
	273+00	-	316+88	USH 51 NB	4,388	--	8,776	--	--	--	--	--
	316+88	-	322+47	USH 51 NB, XO #5	1,042	482	1,118	--	--	217		--
	322+47	-	412+14	USH 51 NB	8,967	--	17,934	--	--	--	--	--
	412+14	-	420+83	USH 51 NB, XO #6	1,433	565	1,738	--	--	200		--
	420+83	-	460+52	USH 51 NB	3,969	--	7,938	--	--	--	--	--
	420+83	-	467+81	USH 51 NB, XO #7	1,546	1,167	9,396	353	--	--	--	109
	488+00	-	494+60	USH 51 SB	--	--	--	660	--	--	--	--
				STAGE 2A SUBTOTALS	44,639	5,152	88,656	1,334	660	1,056	0	177
	729+40	-	736+00	USH 51 NB	--	--	660	--	--	--	--	--
	743+18	-	754+67	USH 51 NB, XO #1	834	1,155	--	321	--	--	--	68
	754+67	-	771+03	USH 51 NB	1,636	--	3,272	--	--	--	--	--
	82+58		101+59	USH 51 NB	1,901	--	3,802	--	--	--	--	--
	101+59	-	110+44	USH 51 NB, XO #2	1,773	888	1,770	--	--	200	--	--
	110+44	-	144+62	USH 51 NB	3,418	--	6,836	--	--	--	--	--
	144+62	-	147+54	USH 51 NB, XO #3	708	417	584	--	--	239	--	--
2B	147+54	-	264+40	USH 51 NB	11,686	--	23,372	--	--	--	--	--
	262+40	-	273+00	USH 51 NB, XO #4	1,338	478	2,120	--	--	200	--	--
	273+00	-	316+88	USH 51 NB	4,388	--	8,776	--	--	--	--	--
	316+88	-	322+47	USH 51 NB, XO #5	1,042	482	1,118	--	--	217	--	--
	322+47	-	412+14	USH 51 NB	8,967	--	17,934	--	--	--	--	--
	412+14	-	420+83	USH 51 NB, XO #6	1,433	565	1,738	--	--	200	--	--
	420+83	-	460+52	USH 51 NB	3,969	--	7,938	--	--	--	--	--
	420+83	-	467+81	USH 51 NB, XO #7	1,546	1,167	9,396	353	--	--	--	109
	488+00	-	494+60	USH 51 SB	--	--	--	660	--	--	--	--
				STAGE 2B SUBTOTALS	44,639	5,152	89,316	1,334	0	1,056	0	177
				PROJECT 1176-22-72 TOTALS		277,554			5,508	2,112	400	354

TEMPORARY MARKING CONTINUED

STAGE	STATION	TO	STATION	LOCATION	649.0105 LINE PAINT 4-INCH SOLID (WHITE) LF	649.0105 LINE PAINT 4-INCH SOLID (YELLOW) LF	649.0105 LINE PAINT 4-INCH DOUBLE (YELLOW) LF	649.0150 LINE REMOVABLE TAPE 4-INCH SOLID (WHITE) LF	649.0150 LINE REMOVABLE TAPE 4-INCH SOLID (YELLOW) LF	649.0205 LINE PAINT 8-INCH SOLID (WHITE) LF	649.0250 LINE REMOVABLE TAPE 8-INCH SOLID (WHITE) LF	649.0760 RAISED PAVEMENT MARKER TYPE I EACH
PROJECT 1176-22-73 CATEGORY 0010												
4A	729+40	-	736+00	USH 51 NB	--	--	--	660	--	--	--	--
	751+78	-	758+70	USH 51 SB, XO #1	1,574	1,158	1,384	--	--	--	--	85
	758+70	-	771+24	USH 51 SB	1,254	--	2,508	--	--	--	--	--
	82+91	-	105+25	USH 51 SB	2,234	--	4,468	--	--	--	--	--
	105+25	-	110+83	USH 51 SB, XO #2	1,183	629	1,116	--	--	229	--	--
	110+83	-	143+98	USH 51 SB	3,315	--	6,630	--	--	--	--	--
	143+98	-	150+11	USH 51 SB, XO #3	1,179	565	1,226	--	--	200	--	--
	150+11	-	267+37	USH 51 SB	11,726	--	23,452	--	--	--	--	--
	267+37	-	273+00	USH 51 SB, XO #4	1,028	466	1,126	--	--	219	--	--
	273+00	-	316+91	USH 51 SB	4,391	--	8,782	--	--	--	--	--
	316+91	-	325+48	USH 51 SB, XO #5	1,333	476	1,714	--	--	200	--	--
	325+48	-	415+42	USH 51 SB	8,994	--	17,988	--	--	--	--	--
	415+42	-	420+80	USH 51 SB, XO #6	875	539	1,076	--	--	230	--	--
	420+80	-	460+85	USH 51 SB	4,005	--	8,010	--	--	--	--	--
	460+85	-	467+89	USH 51 SB, XO #7	1,816	1,418	1,408	--	--	--	--	104
	488+00	-	494+60	USH 51 SB	--	--	--	--	660	--	--	--
				STAGE 4A SUBTOTALS	44,907	5,251	80,888	660	660	1,078	0	190
4B	729+40	-	736+00	USH 51 NB	--	--	--	660	--	--	--	--
	751+78	-	758+70	USH 51 SB, XO #1	1,574	1,158	1,384	--	--	--	--	85
	758+70	-	771+24	USH 51 SB	1,254	--	2,508	--	--	--	--	--
	82+91	-	105+25	USH 51 SB	2,234	--	4,468	--	--	--	--	--
	105+25	-	110+83	USH 51 SB, XO #2	1,183	629	1,116	--	--	229	--	--
	110+83	-	143+98	USH 51 SB	3,315	--	6,630	--	--	--	--	--
	143+98	-	150+11	USH 51 SB, XO #3	1,179	565	1,226	--	--	200	--	--
	150+11	-	267+37	USH 51 SB	11,726	--	23,452	--	--	--	--	--
	267+37	-	273+00	USH 51 SB, XO #4	1,028	466	1,126	--	--	219	--	--
	273+00	-	316+91	USH 51 SB	4,391	--	8,782	--	--	--	--	--
	316+91	-	325+48	USH 51 SB, XO #5	1,333	476	1,714	--	--	200	--	--
	325+48	-	415+42	USH 51 SB	8,994	--	17,988	--	--	--	--	--
	415+42	-	420+80	USH 51 SB, XO #6	875	539	1,076	--	--	230	--	--
	420+80	-	460+85	USH 51 SB	4,005	--	8,010	--	--	--	--	--
	460+85	-	467+89	USH 51 SB, XO #7	1,816	1,418	1,408	--	--	--	--	104
	488+00	-	494+60	USH 51 SB	--	--	--	--	660	--	--	--
				STAGE 4B SUBTOTALS	44,907	5,251	80,888	660	660	1,078	0	190
				PROJECT 1176-22-73 TOTALS		262,092		2,640		2,156	0	379
				CONTRACT TOTALS		539,646		8,148		4,268	400	733

CONSTRUCTION STAKING

STATION		TO STATION	ROADWAY	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.8000 RESURFACING REFERENCE LF	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF	SPV.0090.03 PAVEMENT REPLACEMENT REFERENCE LF
PROJECT 1176-22-72										
CATEGORY 0010										
84+49	-	441+65	USH 51 SB	USH 51 SB	---	---	---	---	---	34,205
2+69 / 22+29	-	13+61 / 36+16	XO 1	XO 1	---	---	2,479	---	---	---
9+09 / 29+26	-	16+47 / 35+85	XO 2	XO 2	---	---	1,397	---	---	---
5+00 / 15+00	-	10+14 / 19+18	XO 3	XO 3	---	---	2,417	---	---	---
5+00 / 15+00	-	8+63 / 18+73	XO 4	XO 4	---	---	2,221	---	---	---
5+00 / 15+00	-	8+67 / 18+66	XO 5	XO 5	---	---	2,218	---	---	---
19+46 / 19+67	-	24+63 / 24+29	XO 6	XO 6	---	---	979	---	---	---
2+80 / 3+32	-	17+92 / 18+48	XO 7	XO 7	---	---	3,028	---	---	---
106+03	-	109+25	USH 51 SB	XO 2 TAPER	322	322	---	---	322	---
145+07	-	148+12	USH 51 SB	XO 3 TAPER	305	305	---	---	305	---
268+04	-	271+82	USH 51 SB	XO 4 TAPER	378	378	---	---	378	---
317+98	-	323+34	USH 51 SB	XO 5 TAPER	536	536	---	---	536	---
416+10	-	419+45	USH 51 SB	XO 6 TAPER	335	335	---	---	335	---
103+40	-	109+09	USH 51 NB	XO 2 TAPER	569	569	---	---	569	---
145+69	-	146+61	USH 51 NB	XO 3 TAPER	92	92	---	---	92	---
266+54	-	271+90	USH 51 NB	XO 4 TAPER	536	536	---	---	536	---
318+04	-	321+81	USH 51 NB	XO 5 TAPER	377	377	---	---	377	---
414+29	-	419+67	USH 51 NB	XO 6 TAPER	538	538	---	---	538	---
108+82	-	129+54	CTH Q ON RAMP	RAMP	---	---	2,072	---	---	---
130+89	-	146+44	CTH Q OFF RAMP	RAMP	---	---	1,555	---	---	---
271+18	-	296+40	STH 64 ON RAMP	RAMP	---	---	2,522	---	---	---
297+13	-	315+36	STH 64 OFF RAMP	RAMP	---	---	1,823	---	---	---
418+40	-	438+13	CTH K ON RAMP	RAMP	---	---	1,973	---	---	---
437+63	-	457+85	CTH K OFF RAMP	RAMP	---	---	2,022	---	---	---
11+68	-	15+52	CTH Q	MAINLINE	---	---	384	---	---	---
31+67	-	34+32	CTH K	MAINLINE	---	---	265	---	---	---
UNDISTRIBUTED					---	---	---	1	---	---
PROJECT -72 TOTALS					3,988	3,988	27,355	1	3,988	34,205
PROJECT 1176-22-73										
CATEGORY 0010										
82+69	-	435+03	USH 51 NB	USH 51 NB	---	---	---	---	---	33,844
109+34	-	124+82	CTH Q OFF-RAMP	RAMP	---	---	1,548	---	---	---
125+93	-	146+50	CTH Q ON RAMP	RAMP	---	---	2,057	---	---	---
273+96	-	295+79	STH 64 OFF RAMP	RAMP	---	---	2,183	---	---	---
297+49	-	317+44	STH 64 ON RAMP	RAMP	---	---	1,995	---	---	---
421+17	-	439+67	CTH K OFF RAMP	RAMP	---	---	1,850	---	---	---
441+84	-	464+37	CTH K ON RAMP	RAMP	---	---	2,253	---	---	---
19+11	-	22+89	CTH Q	MAINLINE	---	---	378	---	---	---
37+59	-	40+52	CTH K	MAINLINE	---	---	293	---	---	---
UNDISTRIBUTED					---	---	---	1	---	---
PROJECT -73 TOTALS					0	0	12,557	1	0	33,844
CONTRACT TOTALS					3,988	3,988	39,912	2	3,988	68,049

SAWING

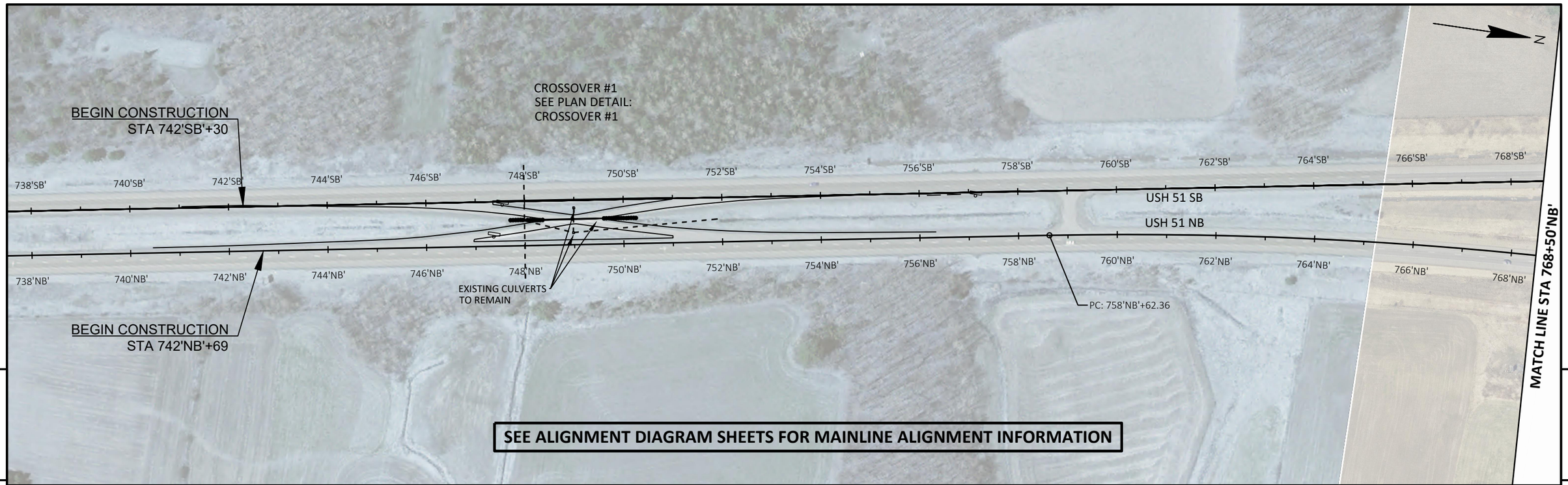
STATION TO STATION			ROADWAY	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
PROJECT 1176-22-72						
CATEGORY 0010						
84+49			USH 51 SB	MAINLINE	14	24
106+03	-	109+25	USH 51 SB	XO 2 TAPER	339	---
145+07	-	148+12	USH 51 SB	XO 3 TAPER	313	---
268+04	-	271+82	USH 51 SB	XO 4 TAPER	383	---
317+98	-	323+34	USH 51 SB	XO 5 TAPER	542	---
416+10	-	419+45	USH 51 SB	XO 6 TAPER	352	---
11+68			CTH Q	MAINLINE	43	---
31+67			CTH K	MAINLINE	44	---
				PROJECT -72 TOTALS	2,030	24
PROJECT 1176-22-73						
CATEGORY 0010						
82+69			USH 51 NB	MAINLINE	14	24
103+40	-	109+09	USH 51 NB	XO 2 TAPER	586	---
145+69	-	146+61	USH 51 NB	XO 3 TAPER	102	---
266+54	-	271+90	USH 51 NB	XO 4 TAPER	541	---
318+04	-	321+81	USH 51 NB	XO 5 TAPER	382	---
414+29	-	419+67	USH 51 NB	XO 6 TAPER	555	---
435+02			USH 51 NB	MAINLINE	14	24
22+89			CTH Q	MAINLINE	40	---
40+52			CTH K	MAINLINE	45	---
				PROJECT -73 TOTALS	2,279	48
				CONTRACT TOTALS	4,309	72

CROSSOVER DELINEATORS AND BARRIERS

LOCATION	SPV.0060.01 SALVAGE DELINEATOR POSTS AND DELINEATORS EA	SPV.0090.02 SALVAGE CONCRETE BARRIER TEMPORARY PRECAST LF
PROJECT 1176-22-72		
CATEGORY 0010		
CROSSOVER 1	6	116
CROSSOVER 2	6	60
CROSSOVER 3	6	42
CROSSOVER 4	6	85
CROSSOVER 5	6	82
CROSSOVER 6	6	73
CROSSOVER 7	6	142
PROJECT -72 TOTALS	42	600
CONTRACT TOTALS	42	600

TEMPORARY RUMBLE STRIPS (ORANGE) IN ADVANCE OF LANE CLOSURE

STAGE	LOCATION	SPV.0090.04 TEMPORARY RUMBLE STRIPS (ORANGE) IN ADVANCE OF LANE CLOSURE LF
PROJECT ID 1176-22-72 CATEGORY 0010		
2A	USH 51 SB	648
	STAGE 2A SUBTOTALS	648
2B	USH 51 SB	648
	STAGE 2B SUBTOTALS	648
	PROJECT 1176-22-72 SUBTOTALS	1,296
PROJECT ID 1176-22-73 CATEGORY 0010		
4A	USH 51 NB	648
	STAGE 4A SUBTOTALS	648
4B	USH 51 NB	648
	STAGE 4B SUBTOTALS	648
	PROJECT 1176-22-73 SUBTOTALS	1,296
	CONTRACT TOTALS	2,592



PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN - USH 51	SHEET 89	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-050200-PN.DWG
LAYOUT NAME - 117622-050201-pn

PLOT DATE : 4/1/2021 11:12 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

MATCH LINE STA 110+50'NB'

MATCH LINE STA 141+00'NB'

CROSSOVER #2
SEE PLAN DETAIL:
CROSSOVER #2

PI STA = 120'AC'+97.56
Y = 104204.923
X = 405004.495
DELTA = 22°22'11"
D = 3°30'00"
T = 323.69'
L = 639.13'
R = 1637.02'
PC STA = 117+73.87
PT STA = 124+13.00
SE = 5.90%

PI STA = 129'AC'+68.00
Y = 105019.100
X = 404674.042
DELTA = 19°00'00"
D = 12°00'00"
T = 79.90'
L = 158.33'
R = 477.46'
PC STA = 128+88.09
PT STA = 130+46.43
SE = N.C.

CTH Q SB ENTR-RAMP

CONSTRUCTION LIMIT
BUTT JOINT REQ'D
STA 129'AC'+53.80
Y=105007.461
X=404683.608

CONSTRUCTION LIMIT
BUTT JOINT REQ'D
STA 130'AD'+89.37
Y=105218.581
X=404689.462

CTH Q SB EXIT-RAMP

END OVERLAY
BEGIN FULL DEPTH
141+39.22

MILL AND OVERLAY REQ'D
SEE PLAN DETAIL:
CTH Q

END UNDERPASS TRANSITION AREA:
SEE CONSTRUCTION DETAIL

END FULL DEPTH
BEGIN OVERLAY
118+81.05

USH 51 SB

PC: 121'SB'+87.93

BEGIN UNDERPASS TRANSITION AREA:
SEE CONSTRUCTION DETAIL

CTH Q

END UNDERPASS TRANSITION AREA:
SEE CONSTRUCTION DETAIL

PT: 137'SB'+15.29

CHARTER (APROX. LOCATION)

USH 51 NB

EXISTING CULVERT
TO REMAIN

END FULL DEPTH
BEGIN OVERLAY
116+21.62

CTH Q NB EXIT-RAMP

BEGIN UNDERPASS TRANSITION AREA:
SEE CONSTRUCTION DETAIL

MILL AND OVERLAY REQ'D
SEE PLAN DETAIL:
CTH Q

CTH Q NB ENTR-RAMP

END OVERLAY
BEGIN FULL DEPTH
134+56.14

PI STA = 140'AD'+18.10
Y = 106118.436
X = 404919.256
DELTA = 18°08'21"
D = 3°30'00"
T = 261.32'
L = 518.26'
R = 1637.02'
PC STA = 137+56.78
PT STA = 142+75.04
SE = 5.90%

PI STA = 117'AB'+18.96
Y = 103871.539
X = 405248.579
DELTA = 19°30'42"
D = 3°30'00"
T = 281.46'
L = 557.48'
R = 1637.02'
PC STA = 114+37.49
PT STA = 119+94.97
SE = 5.90%

PI STA = 123'AB'+65.44
Y = 104483.885
X = 405472.290
DELTA = 8°09'36"
D = 4°00'00"
T = 102.17'
L = 204.00'
R = 1432.39'
PC STA = 122+63.27
PT STA = 124+67.26
SE =

CONSTRUCTION LIMIT
BUTT JOINT REQ'D
STA 124'AB'+81.72
Y=104598.006
X=405496.358

CONSTRUCTION LIMIT
BUTT JOINT REQ'D
STA 125'AA'+92.59
Y=104824.587
X=405508.443

PI STA = 126'AA'+19.68
Y = 104852.451
X = 405524.120
DELTA = 35°34'33"
D = 13°00'00"
T = 141.40'
L = 273.66'
R = 440.74'
PC STA = 124+78.28
PT STA = 127+51.94
SE = 5.80%

PI STA = 130'AA'+10.66
Y = 105185.465
X = 405302.303
DELTA = 17°42'36"
D = 5°00'00"
T = 178.52'
L = 354.20'
R = 1145.92'
PC STA = 128+32.14
PT STA = 131+86.34
SE = 5.70%

PI STA = 133'AA'+72.33
Y = 105535.932
X = 405202.093
DELTA = 12°56'36"
D = 3°30'00"
T = 185.70'
L = 369.81'
R = 1637.02'
PC STA = 131+86.63
PT STA = 135+56.44
SE = 5.90%

SEE ALIGNMENT DIAGRAM SHEETS FOR MAINLINE ALIGNMENT INFORMATION

MATCH LINE STA 141+00'NB'

MATCH LINE STA 171+50'NB'

CROSSOVER #3
SEE PLAN DETAIL:
CROSSOVER #3

ML: 148'SB'+50.42, 24.00' LT=
EP: 148'AD'+45.99

N3° 48' 50"W

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

EXCEPTION TO NET CENTERLINE LENGTH
STA 150'SB'+09 TO STA 155'SB'+12
B-35-25

SLOPE INTERCEPT

EXTEND CROSSOVER PER SDD
MINOR GRADING REQUIRED

USH 51 SB

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

PC: 165'SB'+71.31

EXCEPTION TO NET CENTERLINE LENGTH
STA 149'NB'+20 TO STA 154'NB'+24
B-35-22

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

PC: 158'NB'+99.70

USH 51 NB

N3° 00' 49"W

ML: 146'NB'+81.26, 24.00' RT=
EP: 146'AA'+70.65

EXISTING CULVERTS
TO REMAIN

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

WISCONSIN RIVER

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN - USH 51	SHEET 90	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-050200-PN.DWG
LAYOUT NAME - 117622-050202-pn

PLOT DATE : 2/24/2021 10:09 AM PLOT BY : MATT BERG PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

MATCH LINE STA 171+50'NB'

172'SB' 174'SB' 176'SB' 178'SB' 180'SB' 182'SB' 184'SB' 186'SB' 188'SB' 190'SB' 192'SB' 194'SB' 196'SB' 198'SB' 200'SB'

PT: 182'SB'+95.88

USH 51 SB

PC: 196'SB'+76.63

PC: 199'NB'+80.17

PT: 178'NB'+92.86

USH 51 NB

172'NB' 174'NB' 176'NB' 178'NB' 180'NB' 182'NB' 184'NB' 186'NB' 188'NB' 190'NB' 192'NB' 194'NB' 196'NB' 198'NB' 200'NB'

MATCH LINE STA 202+00'NB'

N

SEE ALIGNMENT DIAGRAM SHEETS FOR MAINLINE ALIGNMENT INFORMATION

5

5

MATCH LINE STA 202+00'NB'

WPS
(APPROX. LOCATION)

STA AHEAD = 215+98.87'SB'
STA BACK = 216+27.47'SB'

EXCEPTION TO NET CENTERLINE LENGTH
STA 220'SB'+64 TO STA 223'SB'+19
B-35-27

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

CANADIAN NATIONAL RAILROAD

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

204'SB' 206'SB' 208'SB' 210'SB' 212'SB' 214'SB' 216'SB' 218'SB' 220'SB' 222'SB' 224'SB' 226'SB' 228'SB' 230'SB' 232'SB'

USH 51 SB

2" MILL AND OVERLAY
REQ'D ON MAINTENANCE
CROSSOVER

PT: 214'SB'+68.45

PT: 215'NB'+98.87

1.76 MILES TO CTH Q INTERCHANGE

USH 51 NB

204'NB' 206'NB' 208'NB' 210'NB' 212'NB' 214'NB' 216'NB' 218'NB' 220'NB' 222'NB' 224'NB' 226'NB' 228'NB' 230'NB' 232'NB'

PC: 231'SB'+78.82
PC: 231'NB'+78.82

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

EXCEPTION TO NET CENTERLINE LENGTH
STA 219'NB'+56 TO STA 222'NB'+12
B-35-26

MATCH LINE STA 232+50'NB'

N

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN - USH 51	SHEET 91	E

MATCH LINE STA 232+50'NB'

MATCH LINE STA 263+00'NB'

N

CENTER ROAD

EXCEPTION TO NET CENTERLINE LENGTH
STA 241'SB'+87 TO STA 243'SB'+51
B-35-37

STA AHEAD = 247+91.26'SB'
STA BACK = 247+61.72'SB'

6" AND 8" ANR PIPELINES
(APPROX. LOCATION)

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

234'SB' 236'SB' 238'SB' 240'SB' 242'SB' 244'SB' 246'SB' 248'SB' 250'SB' USH 51 SB 252'SB' 254'SB' 256'SB' 258'SB' 260'SB' 262'SB'

PT: 247'SB'+91.26

PT: 247'NB'+91.26

234'NB' 236'NB' 238'NB' 240'NB' 242'NB' 244'NB' 246'NB' 248'NB' 250'NB' USH 51 NB 252'NB' 254'NB' 256'NB' 258'NB' 260'NB' 262'NB'

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

EXCEPTION TO NET CENTERLINE LENGTH
STA 241'NB'+95 TO STA 243'NB'+61
B-35-36

WPS (APPROX. LOCATION)

SEE ALIGNMENT DIAGRAM SHEETS FOR MAINLINE ALIGNMENT INFORMATION

5

5

PI STA = 283'CC'+43.91
Y = 120218.108
X = 403298.694
DELTA = 4°02'50"
D = 0°45'00"
T = 269.93'
L = 539.64'
R = 7639.44'
PC STA = 280+73.98
PT STA = 286+13.62
SE = 5.90%

PI STA = 294'CC'+51.70
Y = 121273.512
X = 402961.339
DELTA = 18°50'00"
D = 5°00'00"
T = 190.05'
L = 376.67'
R = 1145.92'
PC STA = 292+61.65
PT STA = 296+38.32
SE = 3.90%

CROSSOVER #4
SEE PLAN DETAIL:
CROSSOVER #4

END FULL DEPTH
BEGIN OVERLAY
281+98.03

STH 64 SB ENTR-RAMP

EXISTING CULVERT
TO REMAIN

ML: 268'SB'+86.64, 24.00' LT=
BP: 268'CC'+93.65

N13° 40' 44"W

264'SB' 266'SB' 268'SB' 270'SB' 272'SB' 274'CC' 274'SB' 276'CC' 276'SB' USH 51 SB 278'CC' 278'SB' 280'CC' 280'SB' 282'CC' 282'SB' 284'CC' 284'SB' 286'CC' 286'SB' 288'CC' 288'SB' 290'CC' 290'SB' 292'CC' 292'SB' 294'CC'

PC: 280'SB'+37.88

EXISTING CULVERT
TO REMAIN

PC: 279'NB'+75.98

USH 51 NB

SLOPE INTERCEPT

264'NB' 266'NB' 268'NB' 270'NB' 272'NB' 274'NB' 274'CB' 276'NB' 276'CB' 278'NB' 278'CB' 280'NB' 280'CB' 282'NB' 282'CB' 284'NB' 284'CB' 286'NB' 286'CB' 288'NB' 288'CB' 290'NB' 290'CB' 292'NB' 292'CB'

N10° 21' 08"W

STA AHEAD = 290+82.29'SB'
STA BACK = 291+03.30'SB'

BEGIN TRANSITION AREA:
SEE CONSTRUCTION DETAIL

PT: 290'SB'+82.29

PT: 290'NB'+41.40

BEGIN TRANSITION AREA:
SEE CONSTRUCTION DETAIL

ML: 272'NB'+59.32, 24.00' RT=
BP: 272'CB'+59.45

EXISTING CULVERT
TO REMAIN

EXTEND CROSSOVER PER SDD
MINOR GRADING REQUIRED

2" MILL AND OVERLAY
REQ'D ON MAINTENANCE
CROSSOVER

END FULL DEPTH
BEGIN OVERLAY
280+80.04

STH 64 NB EXIT-RAMP

PI STA = 281'CB'+42.45
Y = 120069.925
X = 403531.934
DELTA = 17°24'04"
D = 3°30'00"
T = 250.51'
L = 497.17'
R = 1637.02'
PC STA = 278+91.94
PT STA = 283+89.11
SE = 5.90%

ATC OR WPS

MATCH LINE STA 263+00'NB'

MATCH LINE STA 293+50'NB'

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN - USH 51	SHEET 92	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-050200-PN.DWG
LAYOUT NAME - 117622-050204-pn

PLOT DATE : 2/24/2021 10:09 AM PLOT BY : MATT BERG PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

MATCH LINE STA 293+50'NB'

MATCH LINE STA 324+00'NB'

MATCH LINE STA 324+00'NB'

MATCH LINE STA 354+50'NB'

5

5

296'CC'

298'CD'

300'CD'

302'CD'

304'CD'

306'CD'

308'CD'

310'CD'

312'CD'

314'CD'

316'CD'

318'SB'

320'SB'

322'SB'

294'SB'

296'SB'

298'SB'

300'SB'

302'SB'

304'SB'

306'SB'

308'SB'

310'SB'

312'SB'

314'SB'

316'SB'

294'NB'

296'NB'

298'NB'

300'NB'

302'NB'

304'NB'

306'NB'

308'NB'

310'NB'

312'NB'

314'NB'

316'NB'

318'NB'

320'NB'

322'NB'

294'CB'

296'CB'

298'CA'

300'CA'

302'CA'

304'CA'

306'CA'

308'CA'

310'CA'

312'CA'

314'CA'

316'CA'

318'CA'

STH 64

CTH G

USH 51 SB

USH 51 NB

STH 64 SB EXIT-RAMP

STH 64 NB ENTR-RAMP

N3° 20' 32"E

N0° 33' 09"W

CONSTRUCTION LIMIT
BUTT JOINT REQ'D
STA 296'CC'+39.85
Y=121465.059
X=402965.041

END TRANSITION AREA:
SEE CONSTRUCTION DETAIL

CONSTRUCTION LIMIT
BUTT JOINT REQ'D
STA 297'CD'+12.71
Y=121672.956
X=402968.933

WPS
(APPROX. LOCATION)

EXCEPTION TO NET CENTERLINE LENGTH
STA 295'SB'+47 TO STA 297'SB'+82
B-35-29

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

MGS REQUIRED
SEE CONSTRUCTION
AND PLAN DETAILS

END TRANSITION AREA:
SEE CONSTRUCTION DETAIL

MGS REQUIRED
SEE CONSTRUCTION
AND PLAN DETAILS

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

EXCEPTION TO NET CENTERLINE LENGTH
STA 295'NB'+47 TO STA 297'NB'+85
B-35-28

CONSTRUCTION LIMIT
BUTT JOINT REQ'D
STA 295'CB'+79.22
Y=121499.658
X=403708.719

CONSTRUCTION LIMIT
BUTT JOINT REQ'D
STA 297'CA'+48.54
Y=121683.743
X=403719.281

FRONTIER COMMUNICATIONS
(APPROX. LOCATION)

NET LEC LLC
(APPROX. LOCATION)

PI STA = 298'CD'+93.89
Y = 121854.104
X = 402972.433
DELTA = 16°57'47"
D = 5°00'00"
T = 170.88'
L = 339.26'
R = 1145.92'
PC STA = 297+23.01
PT STA = 300+62.27
SE = 3.90%

PI STA = 308'CD'+98.42
Y = 122811.463
X = 403284.788
DELTA = 14°43'40"
D = 3°30'00"
T = 211.56'
L = 420.79'
R = 1637.02'
PC STA = 306+86.85
PT STA = 311+07.65
SE = 5.90%

END OVERLAY
BEGIN FULL DEPTH
309+67.68

END OVERLAY
BEGIN FULL DEPTH
308+28.93

CROSSOVER #5
SEE PLAN DETAIL:
CROSSOVER #5

ML: 316'SB'+65.75, 24.00' LT=
EP: 316'CD'+65.70

SLOPE INTERCEPT

EXISTING CULVERTS
TO REMAIN

EXISTING CULVERTS
TO REMAIN

ML: 319'NB'+64.11, 24.00' RT=
EP: 319'CA'+69.91

EXTEND CROSSOVER PER SDD
MINOR GRADING REQUIRED

PI STA = 299'CA'+28.23
Y = 121863.401
X = 403722.829
DELTA = 19°06'43"
D = 5°00'00"
T = 192.91'
L = 382.24'
R = 1145.92'
PC STA = 297+35.32
PT STA = 301+17.56
SE = 3.90%

PI STA = 306'CA'+74.70
Y = 122576.720
X = 403490.991
DELTA = 17°27'08"
D = 3°30'00"
T = 251.26'
L = 498.64'
R = 1637.02'
PC STA = 304+23.43
PT STA = 309+22.07
SE = 5.90%

SEE ALIGNMENT DIAGRAM SHEETS FOR MAINLINE ALIGNMENT INFORMATION

N

WPS
(APPROX. LOCATION)

BEGIN UNDERPASS
TRANSITION AREA:
SEE CONSTRUCTION DETAIL

END UNDERPASS
TRANSITION AREA:
SEE CONSTRUCTION DETAIL

326'SB'

328'SB'

330'SB'

332'SB'

334'SB'

336'SB'

338'SB'

340'SB'

342'SB'

344'SB'

346'SB'

348'SB'

350'SB'

352'SB'

354'SB'

326'NB'

328'NB'

330'NB'

332'NB'

334'NB'

336'NB'

338'NB'

340'NB'

342'NB'

344'NB'

346'NB'

348'NB'

350'NB'

352'NB'

354'NB'

PC: 344'SB'+94.72
PC: 344'NB'+94.71

CHARTER (APPROX. LOCATION)

2" MILL AND OVERLAY
REQ'D ON MAINTENANCE
CROSSOVER

ATR STATION
NEW LOOPS IN BASE AND PIEZO AXLE SENSORS IN PAVEMENT REQUIRED.
SUPPLIED AND INSTALLED BY WISDOT DTIM FIELD OPERATIONS UNIT.
COORDINATION WITH WISDOT BY CONTRACTOR IS REQUIRED.

BEGIN UNDERPASS
TRANSITION AREA:
SEE CONSTRUCTION DETAIL

WPS

WPS

END UNDERPASS
TRANSITION AREA:
SEE CONSTRUCTION DETAIL

FRONTIER COMMUNICATIONS
(APPROX. LOCATION)

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN - USH 51	SHEET 93	E

MATCH LINE STA 354+50'NB'

MATCH LINE STA 385+00'NB'

ATC

OH

HO

N

356'SB' 358'SB' 360'SB' 362'SB' 364'SB' 366'SB' 368'SB' 370'SB' 372'SB' 374'SB' 378'SB' 380'SB' 382'SB' 384'SB'

USH 51 SB

356'NB' 358'NB' 360'NB' 362'NB' 364'NB' 366'NB' 368'NB' 370'NB' 372'NB' 374'NB' 376'NB' 378'NB' 380'NB' 382'NB' 384'NB'

USH 51 NB

STA AHEAD = 376+11.81'SB'
STA BACK = 375+33.47'SB'

PT: 376'SB'+11.81

PT: 376'NB'+11.81

2" MILL AND OVERLAY REQ'D ON MAINTENANCE CROSSOVER

6" AND 8" ANR PIPELINES (APPROX. LOCATION)

5

5

SEE ALIGNMENT DIAGRAM SHEETS FOR MAINLINE ALIGNMENT INFORMATION

MATCH LINE STA 385+00'NB'

MATCH LINE STA 415+50'NB'

ATC

HO

N

386'SB' 388'SB' 390'SB' 392'SB' 394'SB' 396'SB' 398'SB' 400'SB' 402'SB' 404'SB' 406'SB' 408'SB' 410'SB' 412'SB' 414'SB'

USH 51 SB

386'NB' 388'NB' 390'NB' 392'NB' 394'NB' 396'NB' 398'NB' 400'NB' 402'NB' 404'NB' 406'NB' 408'NB' 410'NB' 412'NB' 414'NB'

USH 51 NB

EXCEPTION TO NET CENTERLINE LENGTH
STA 409'SB'+09 TO STA 411'SB'+35
B-35-32

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

FRONTIER COMMUNICATIONS (APPROX. LOCATION)

ML: 415'SB'+24.43, 24.00' LT=
BP: 415'DC'+24.43

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

2" MILL AND OVERLAY REQ'D ON MAINTENANCE CROSSOVER

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

TRANSITION AREA:
SEE CONSTRUCTION DETAIL

EXCEPTION TO NET CENTERLINE LENGTH
STA 408'NB'+76 TO STA 411'NB'+02
B-35-31

WPS (APROX. LOCATION)

BEGIN UNDERPASS TRANSITION AREA:
SEE CONSTRUCTION DETAIL

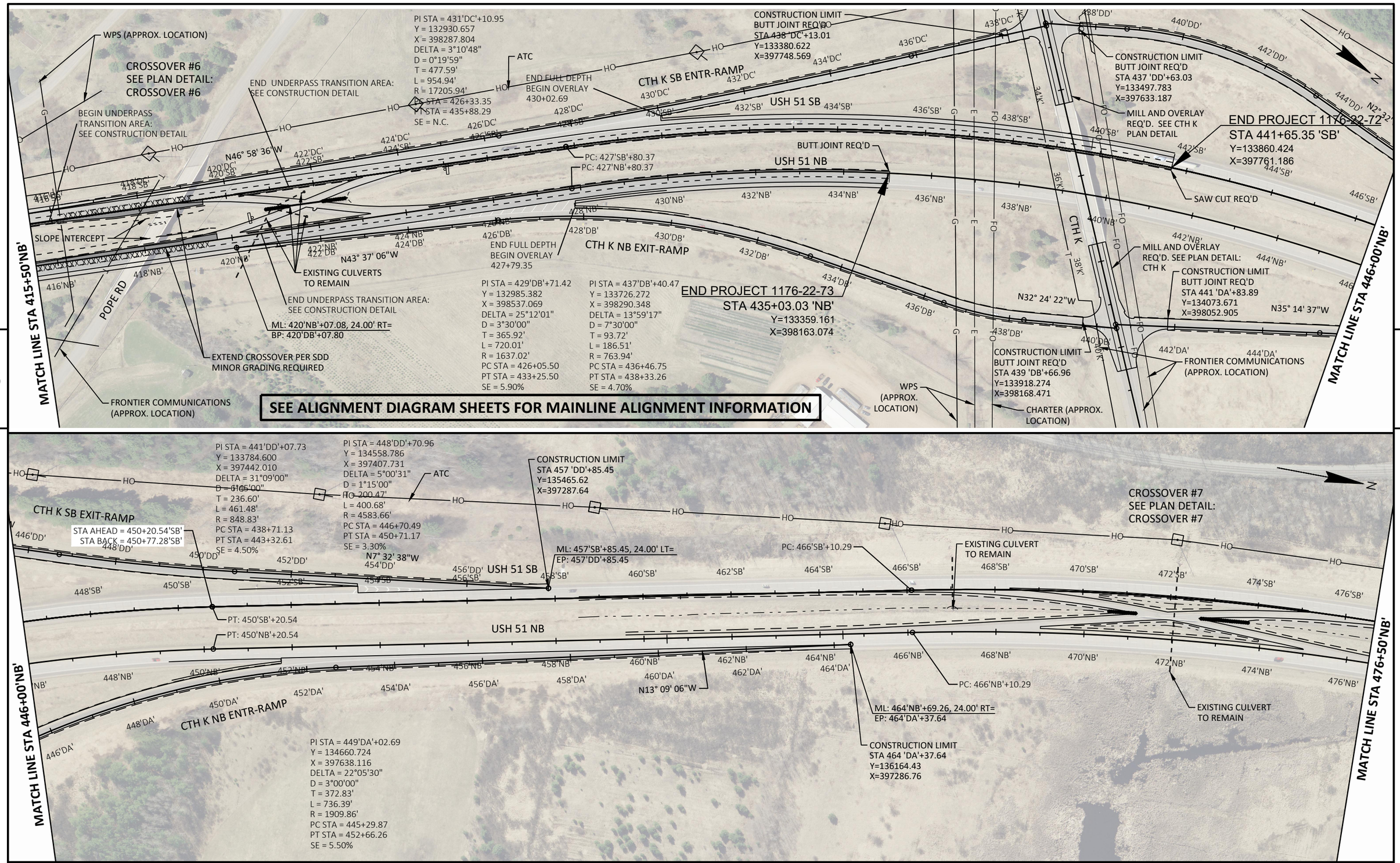
PRAIRIE RIVER

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN - USH 51	SHEET 94	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-050200-PN.DWG
LAYOUT NAME - 117622-050206-pn

PLOT DATE : 2/24/2021 10:09 AM PLOT BY : MATT BERG PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

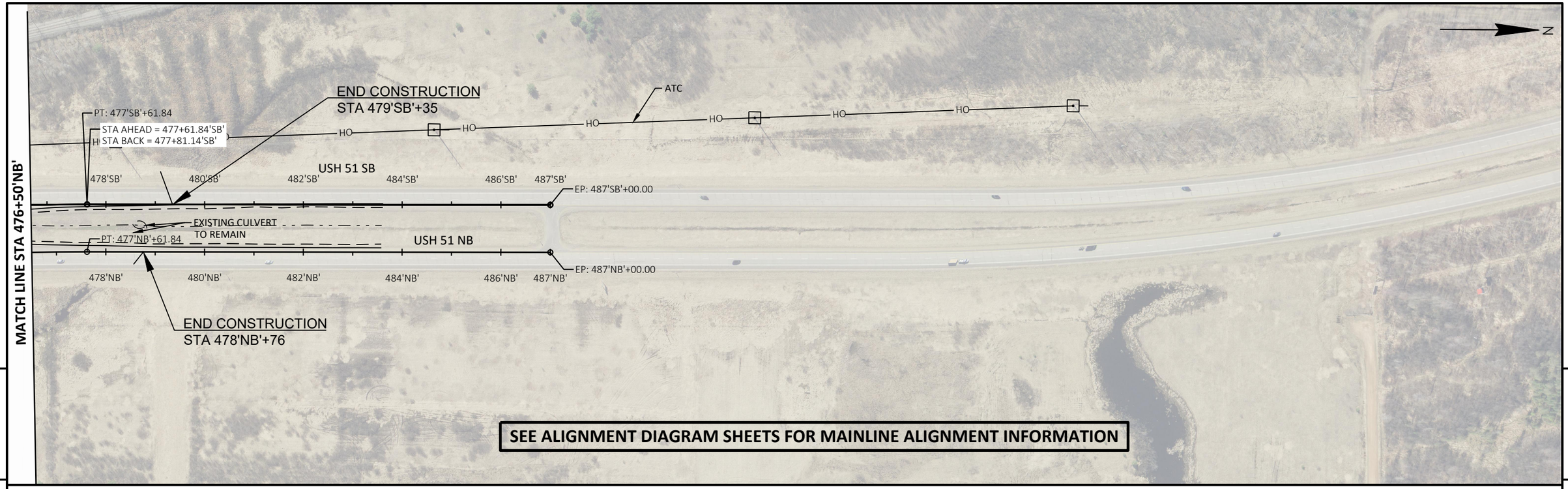


PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN - USH 51	SHEET 95	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-050200-PN.DWG
LAYOUT NAME - 117622-050207-pn

PLOT DATE : 2/24/2021 10:10 AM PLOT BY : MATT BERG PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44



5

5

PROJECT NO: 1176-22-72 / 1176-22-73	HWY: USH 51	COUNTY: LINCOLN	PLAN - USH 51	SHEET 96	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-050200-PN.DWG
LAYOUT NAME - 117622-050208-pn

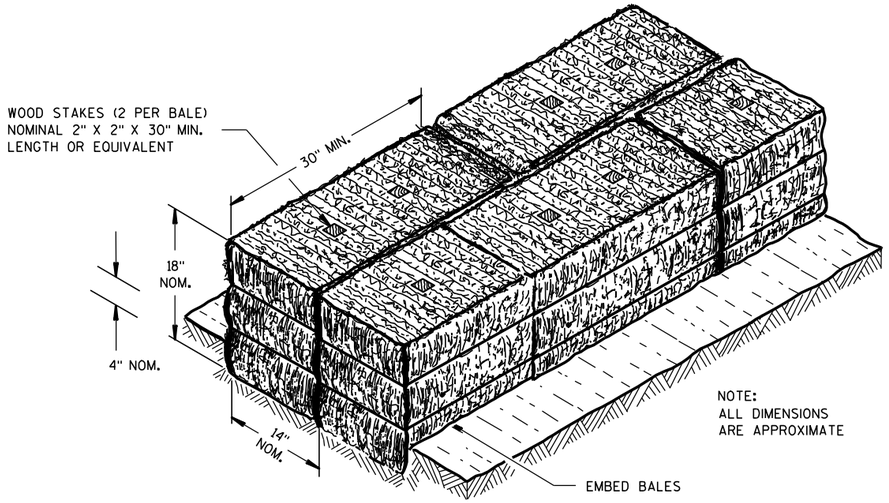
PLOT DATE : 1/11/2021 11:20 AM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

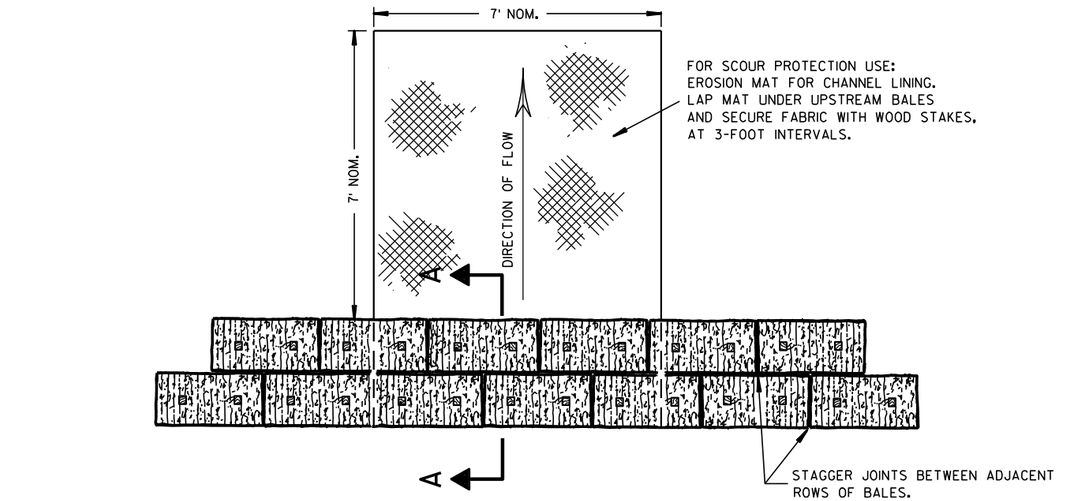
Standard Detail Drawing List

08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
11A01-06	MAINTENANCE CROSSOVER FOR FREEWAYS
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B42-06A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06D	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)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-08D	ON RAMP LANE CLOSURE
15C02-08E	OFF RAMP LANE CLOSURE
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-08A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-08B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C31-03A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-03C	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D06-04	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D07-04	TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER
15D08-07	TRAFFIC CONTROL, TEMPORARY ENTRANCE RAMP CROSSOVER
15D09-05	TRAFFIC CONTROL, SINGLE LANE CROSSOVER EXIT
15D11-07	TRAFFIC CONTROL, SINGLE LANE CROSSOVER
15D12-09B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D12-09D	TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
15D15-05B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D16-04	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-05A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

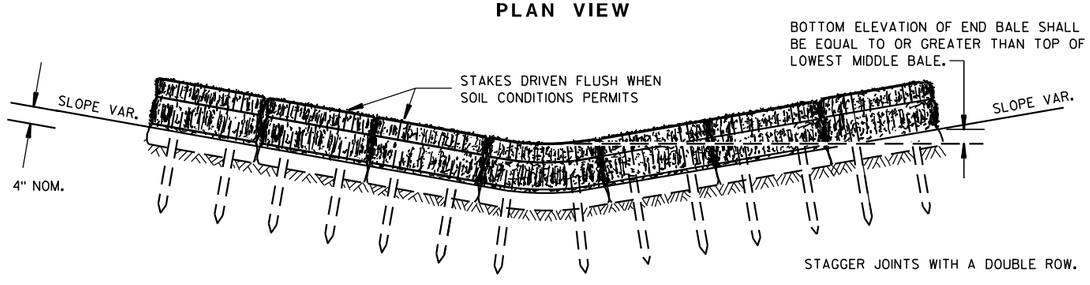
6



SECTION A-A



PLAN VIEW



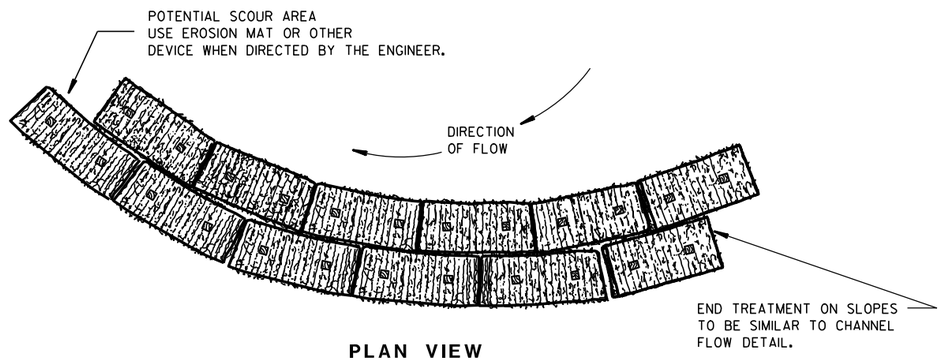
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

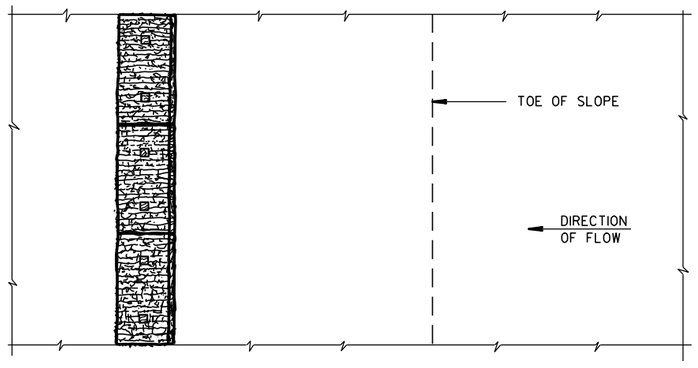
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

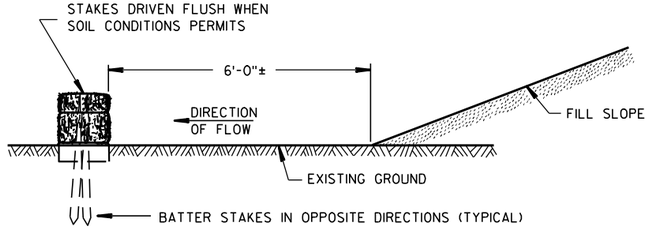


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

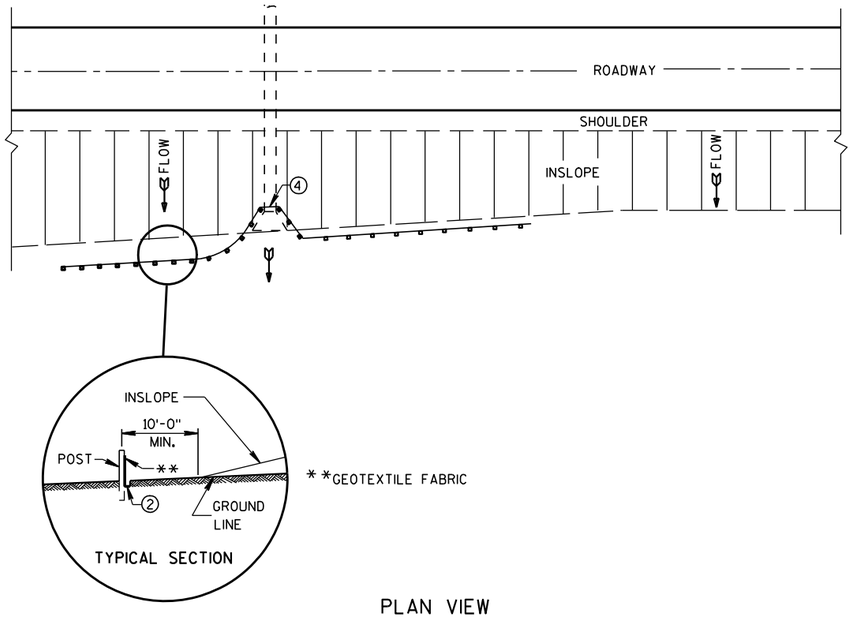
FHWA

6

S.D.D. 8 E 8-3

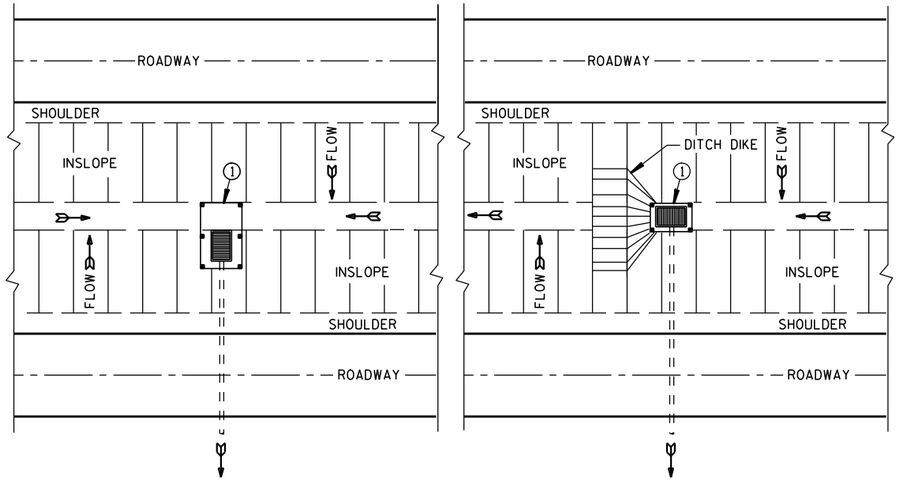
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

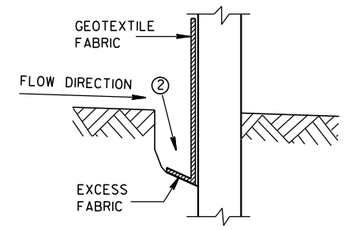
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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

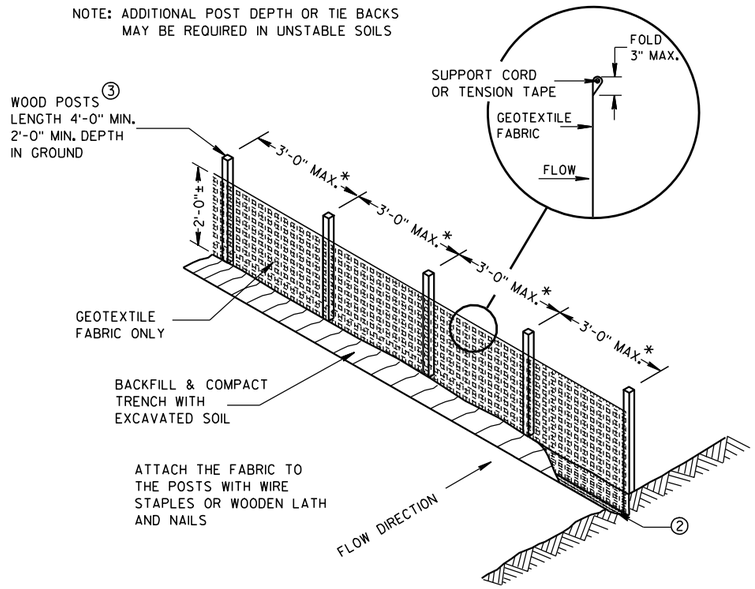
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

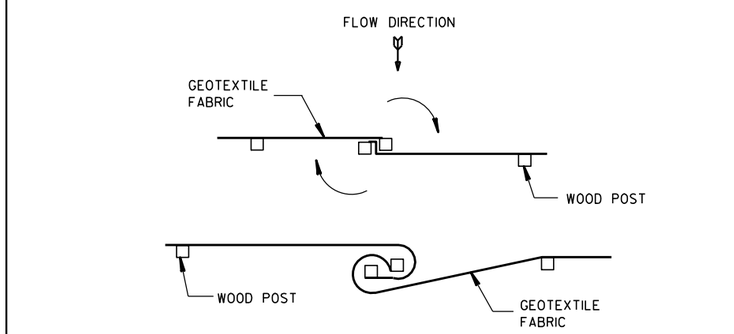
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



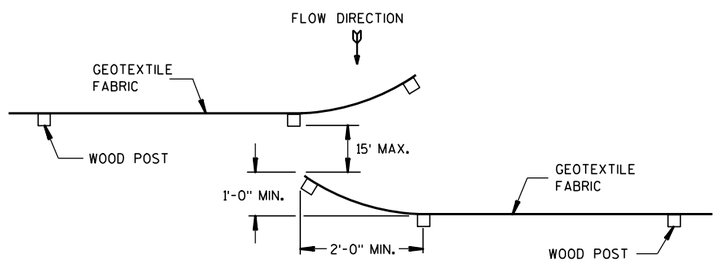
TRENCH DETAIL



SILT FENCE

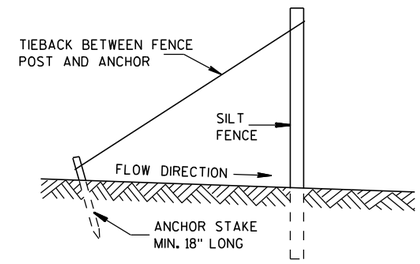


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

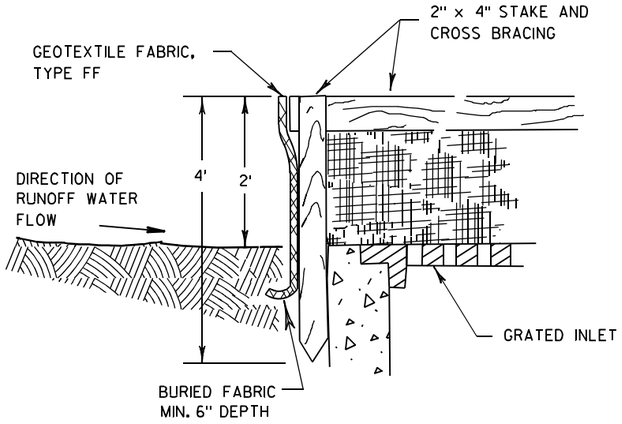
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

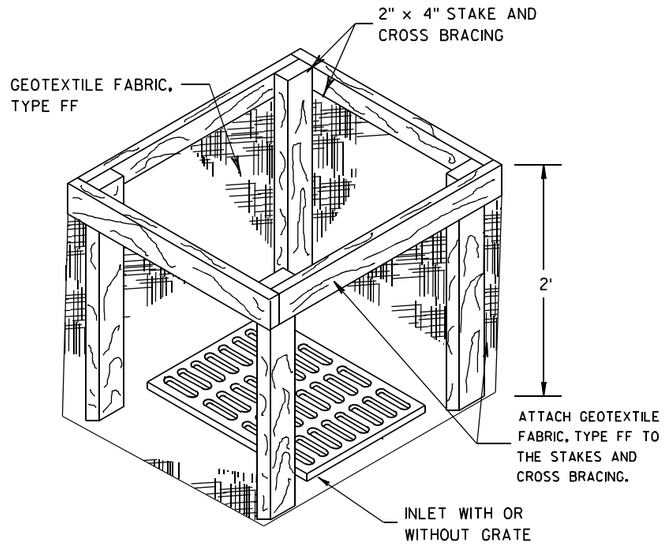
6

S.D.D. 8 E 9-6

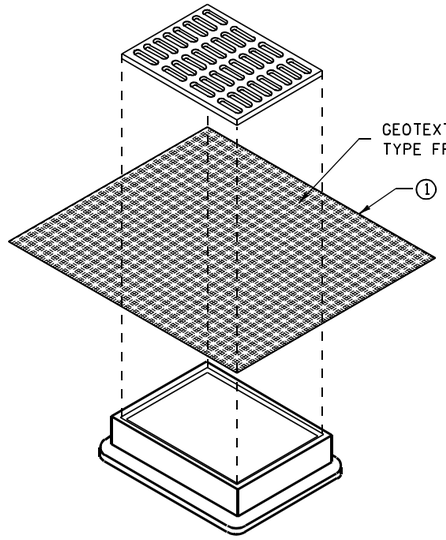
6

S.D.D. 8 E 9-6



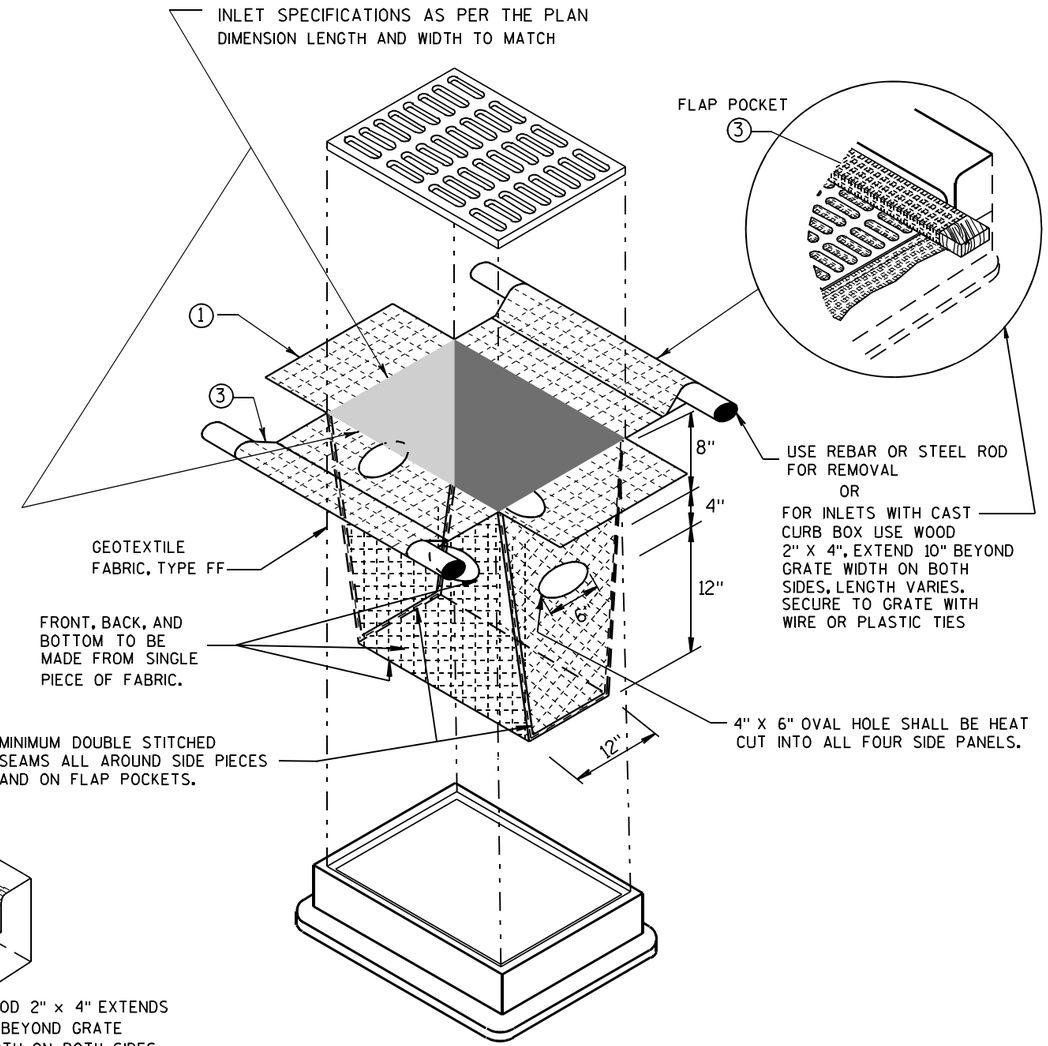


INLET PROTECTION, TYPE A



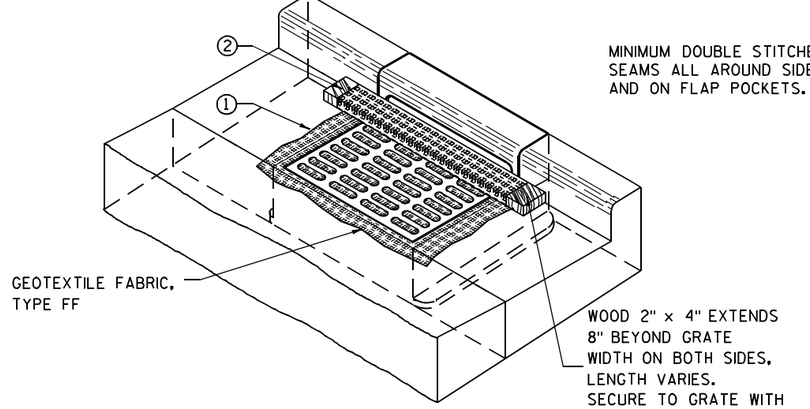
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

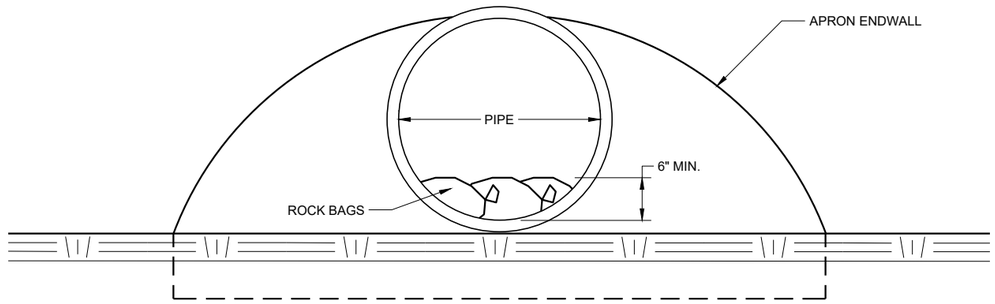
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

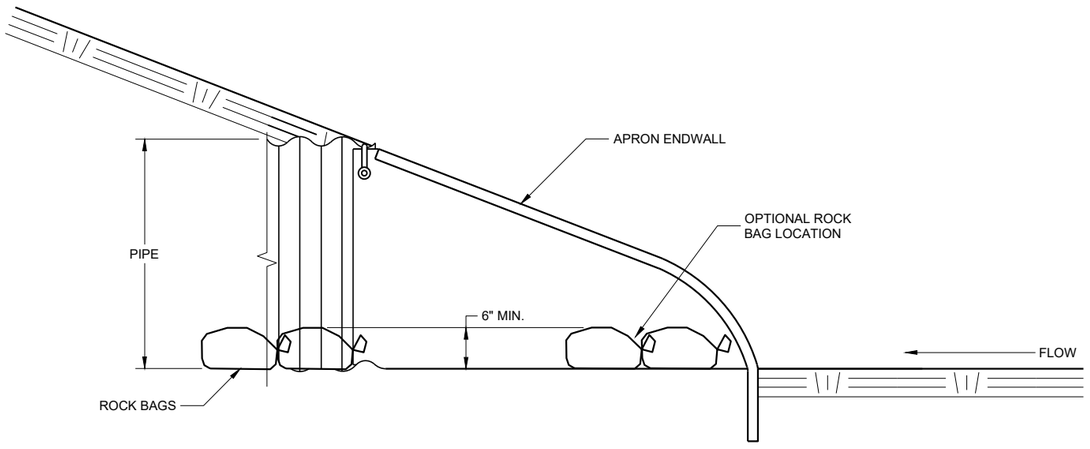
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

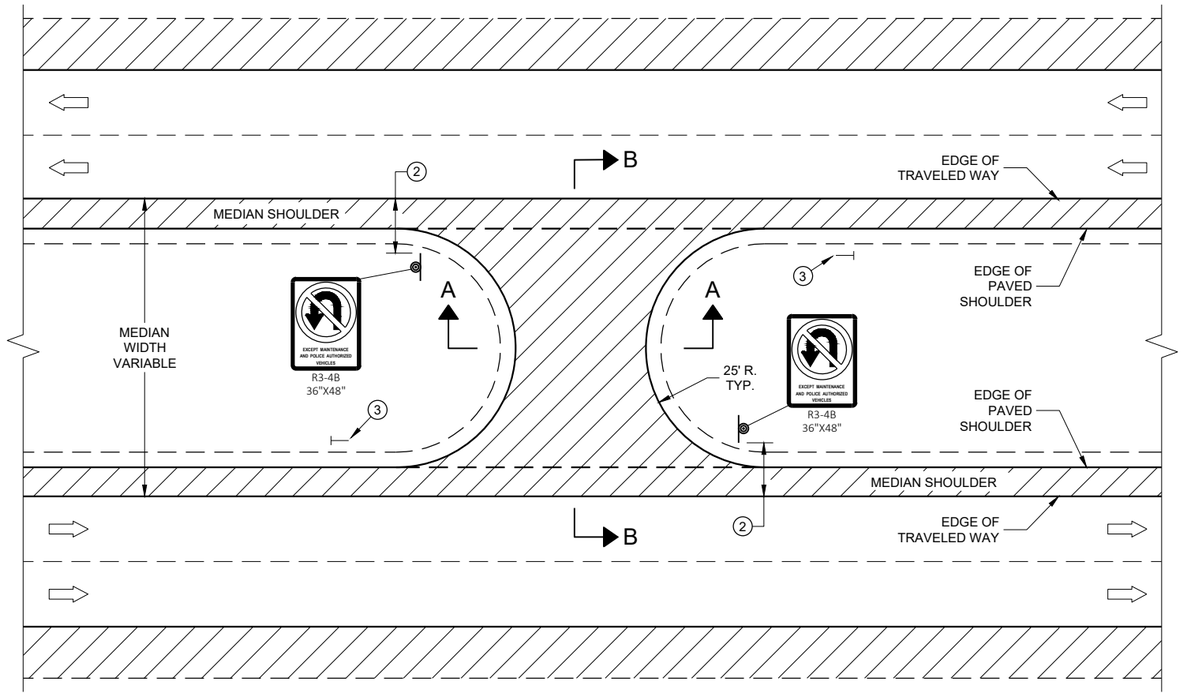
FHWA

6

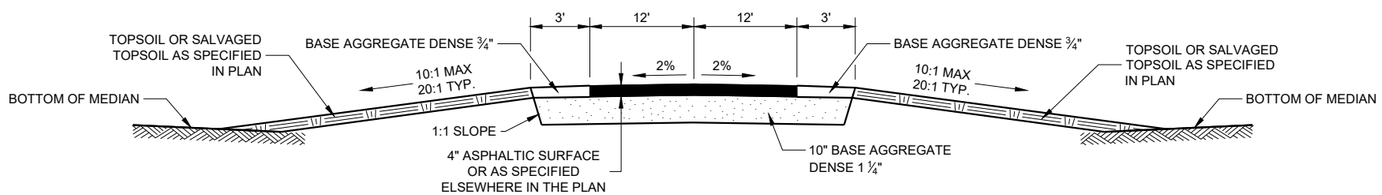
SDD 08E15 - 01

6

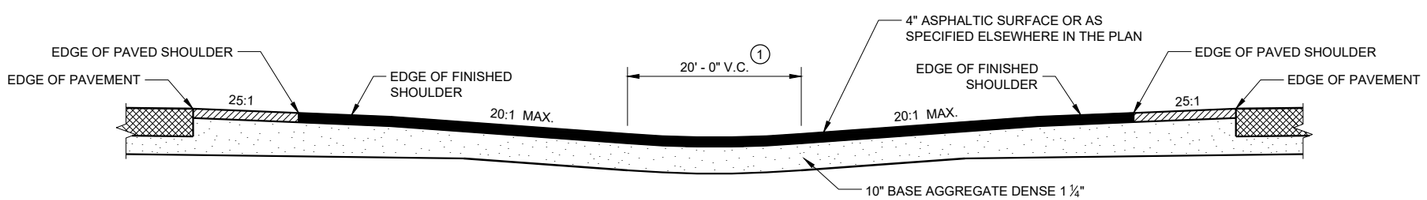
SDD 08E15 - 01



PLAN VIEW



SECTION A-A



SECTION B-B

GENERAL NOTES

1. ADJUST VERTICAL CURVE LOCATION LATERALLY TO MAINTAIN 20:1 MAX.
2. SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.
3. INSTALL DELINEATOR. SEE STANDARD DETAIL DRAWING 15A4.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR
- DIRECTION OF TRAFFIC

MAINTENANCE CROSSOVER FOR FREEWAYS

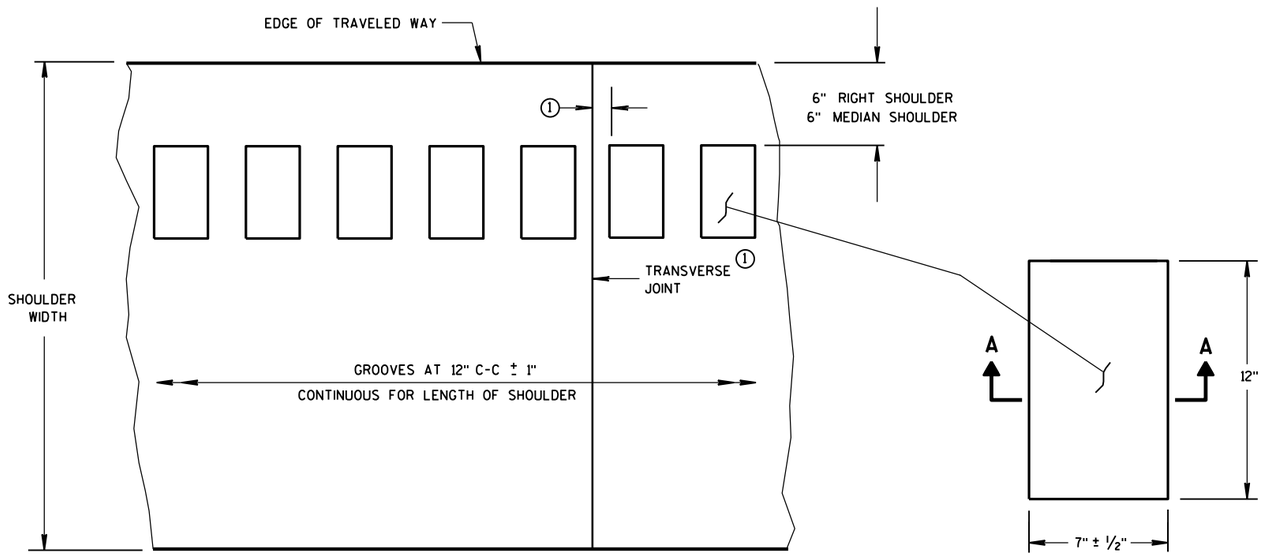
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6
SDD 11A01 - 06



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

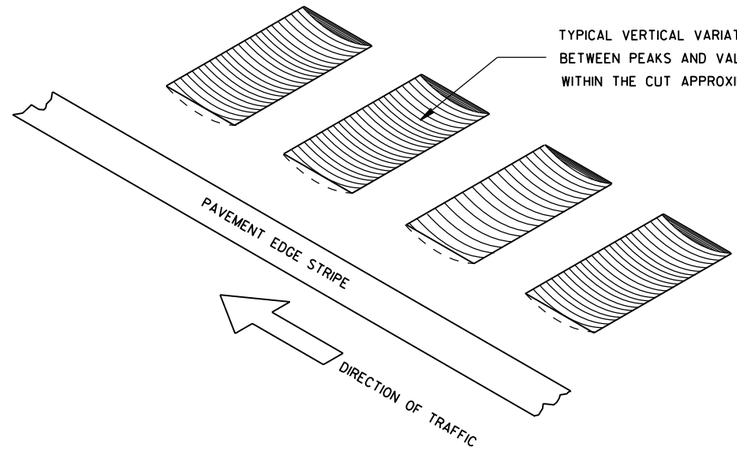
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

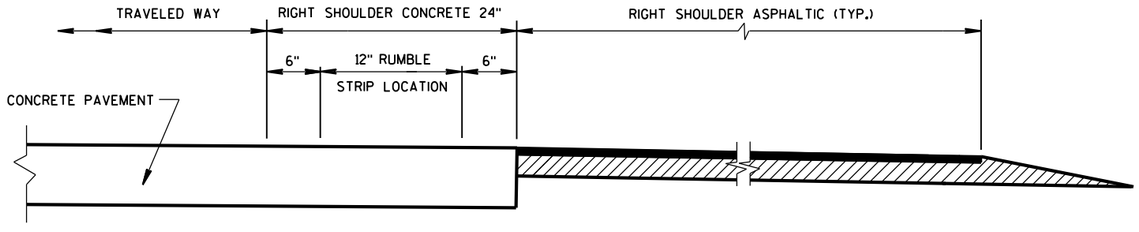
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

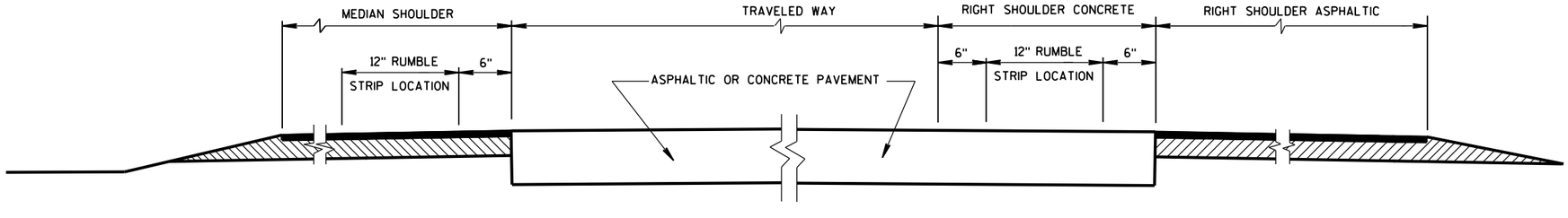
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



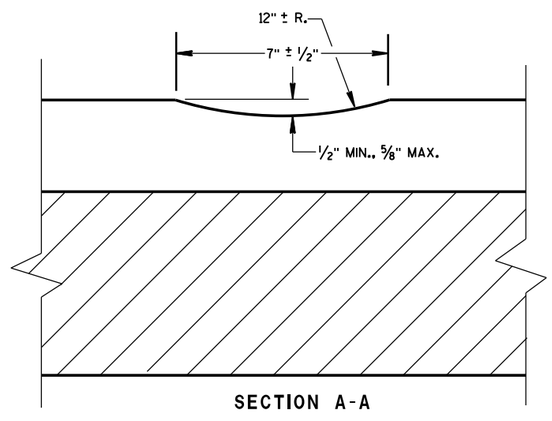
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

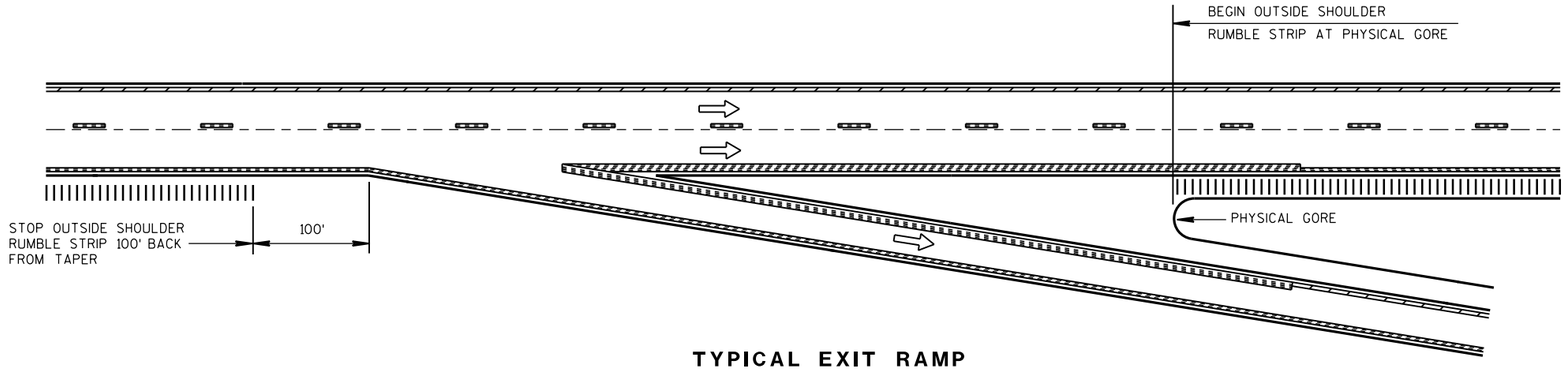
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 A 5-5a

6

S.D.D. 13 A 5-5a



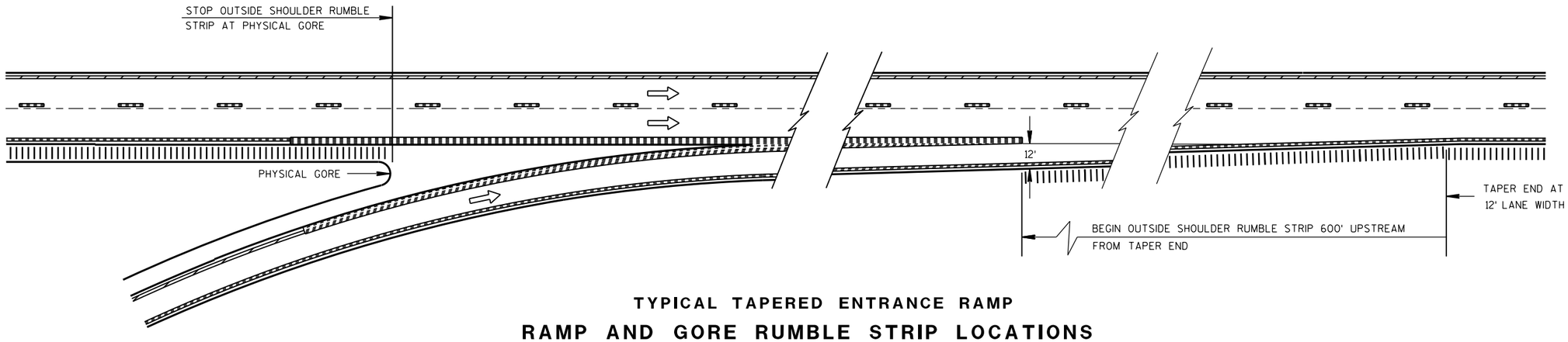
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

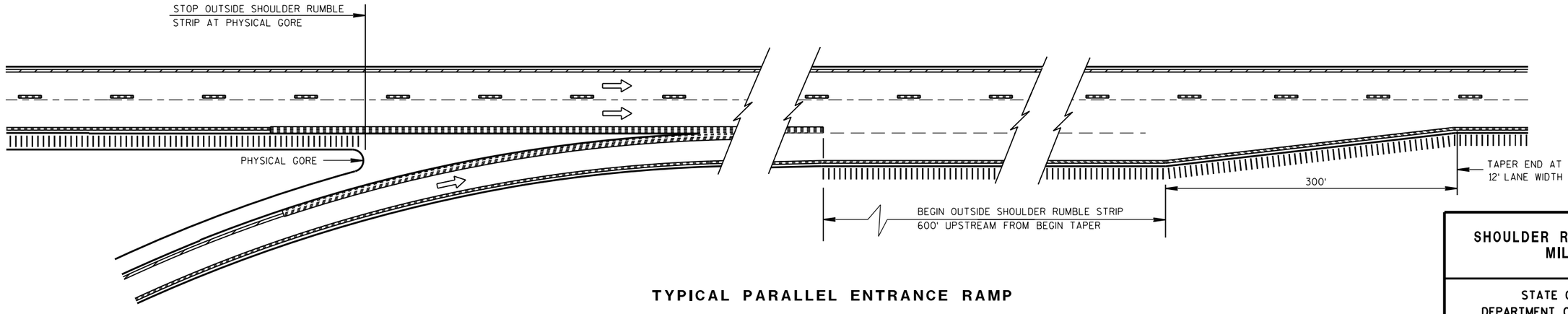
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

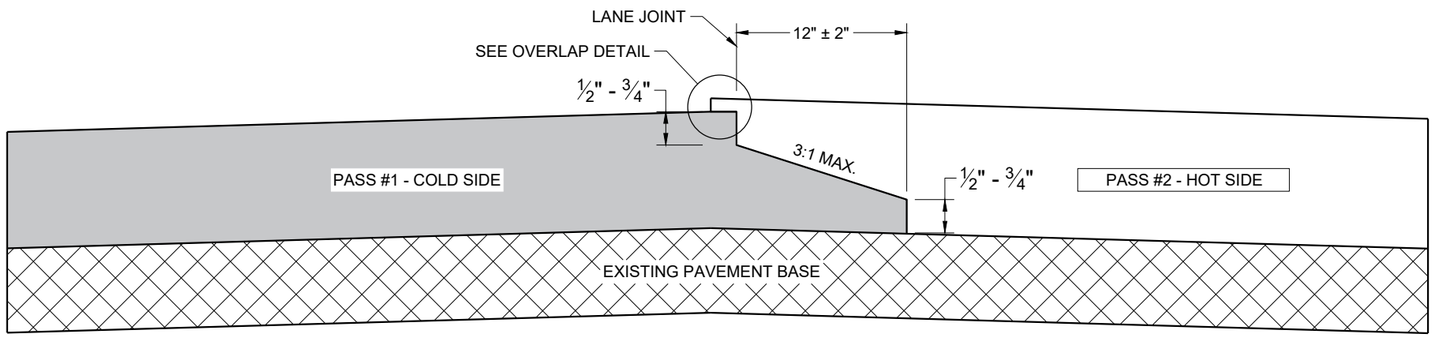
FHWA

6

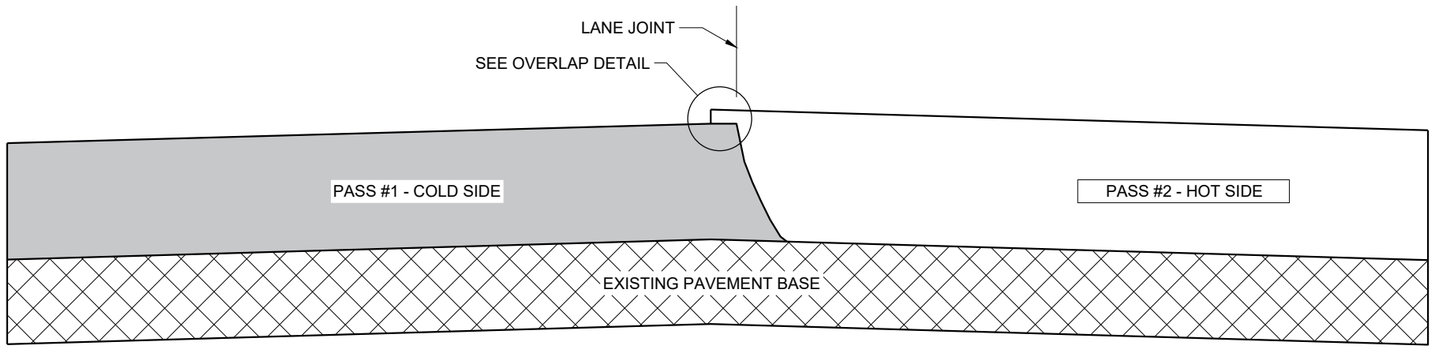
S.D.D. 13 A 5-5b

6

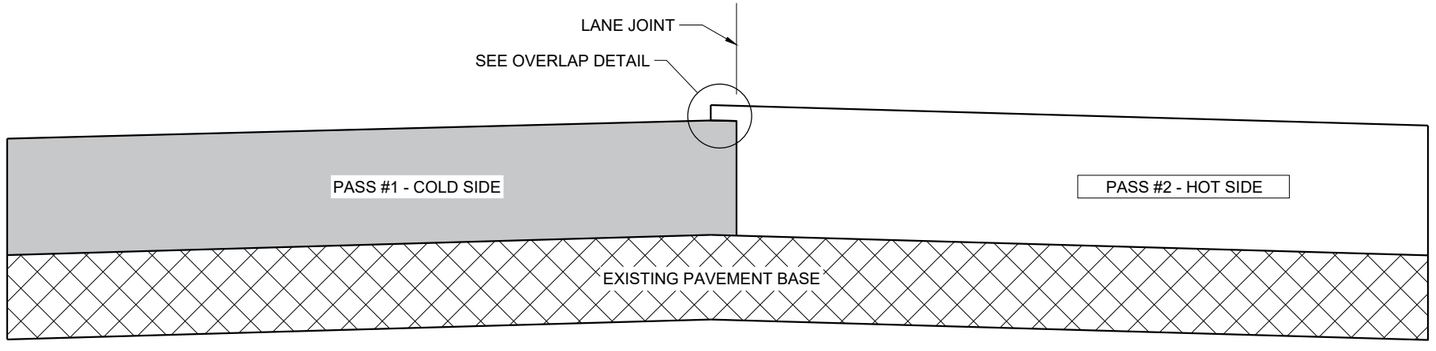
S.D.D. 13 A 5-5b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

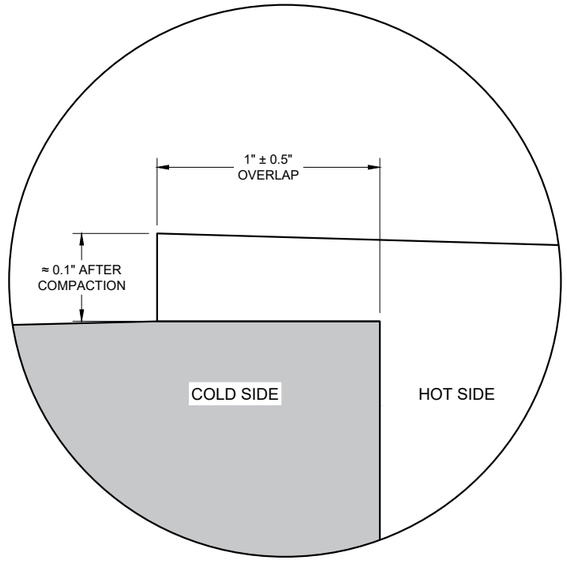
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

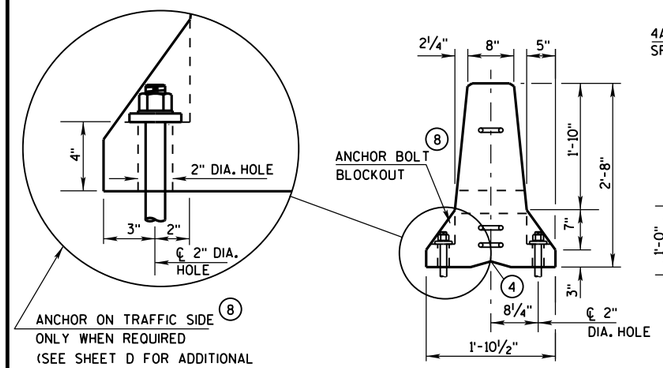
FHWA

6

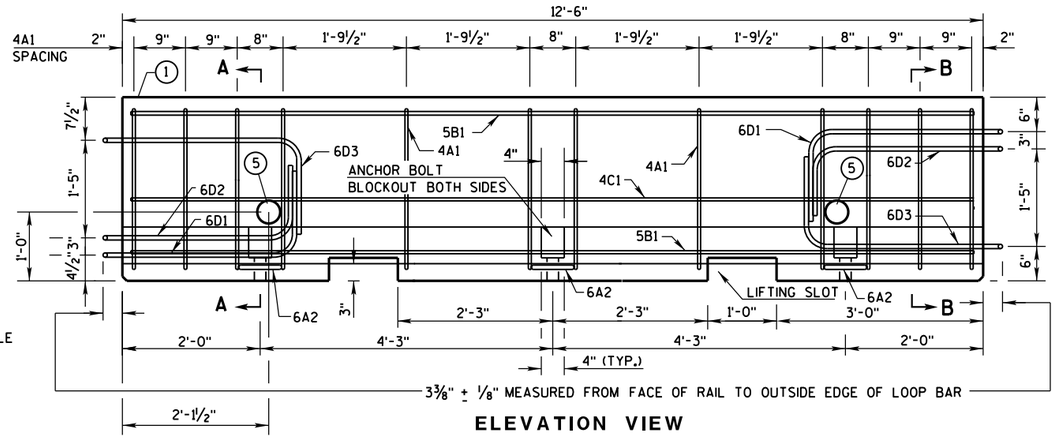
SDD 13C19 - 03

6

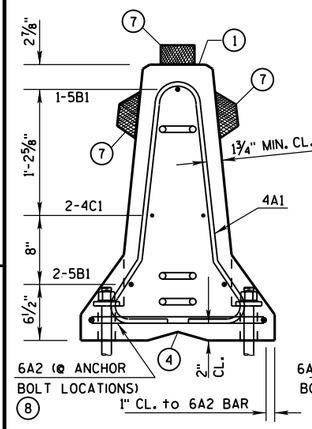
SDD 13C19 - 03



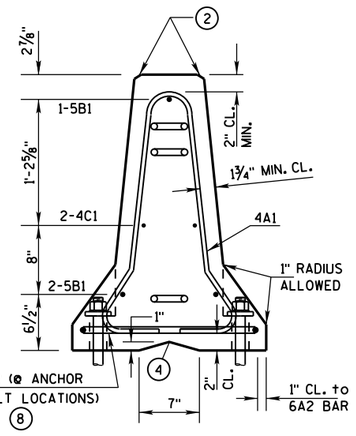
END VIEW



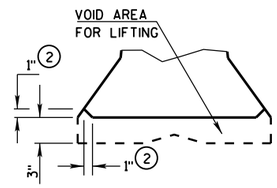
ELEVATION VIEW



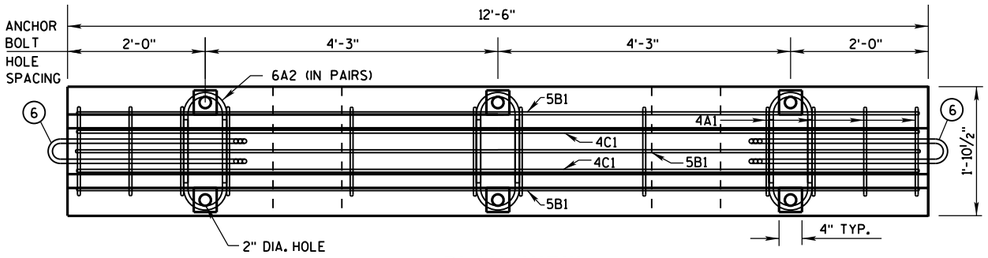
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

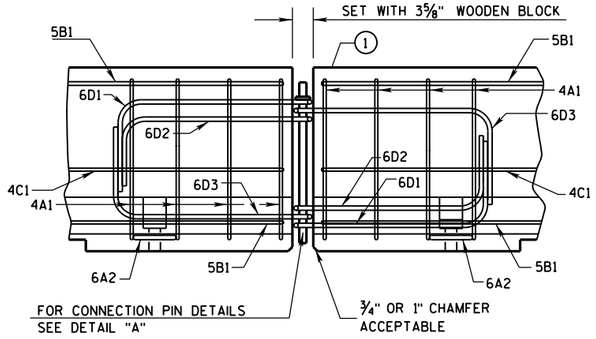


DETAIL "B"
LIFTING SLOT DETAIL

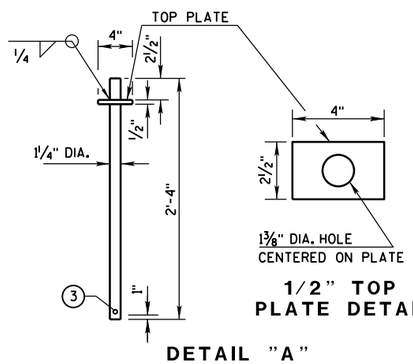


PLAN VIEW

DETAILS OF BARRIER SECTION

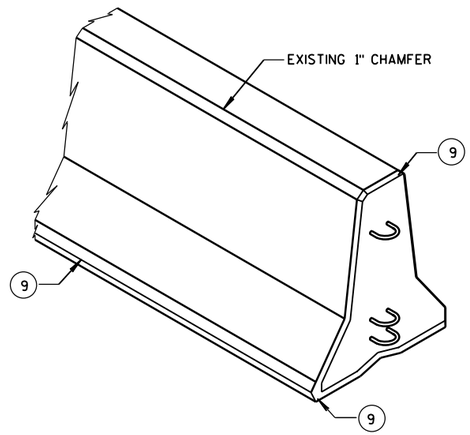


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-15(a) THRU 14B7-15(i).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

(8) SEE SHEET D FOR HOW TO ANCHOR BARRIER. SEE SHEET E FOR WHEN TO ANCHOR BARRIER.

(9) 1" CHAMFER OPTIONAL.

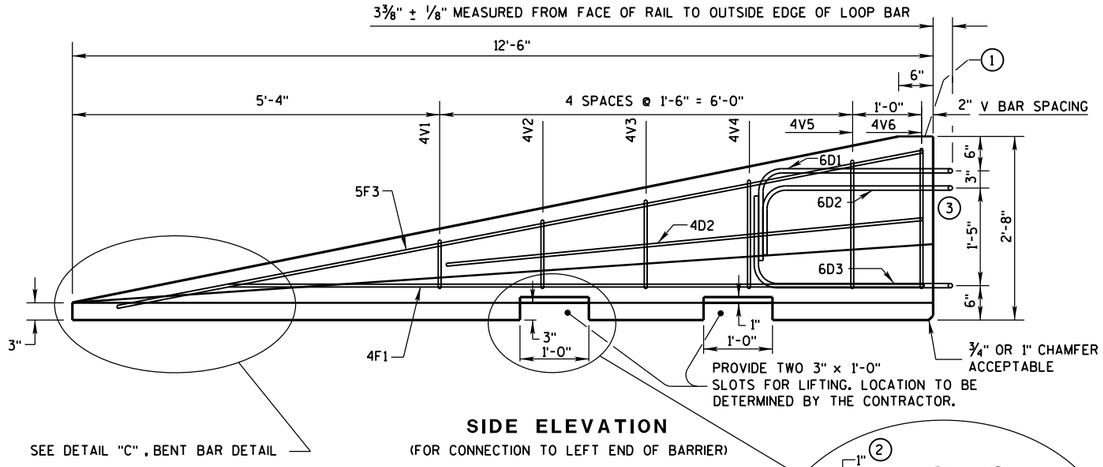
f'c = 4,000 psi

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

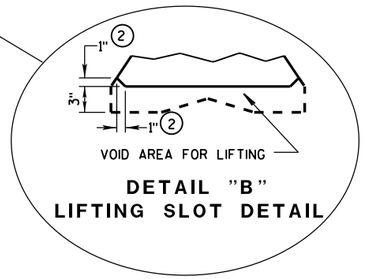
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

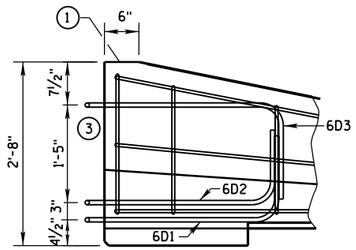
S.D.D. 14 B 7-15a



SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



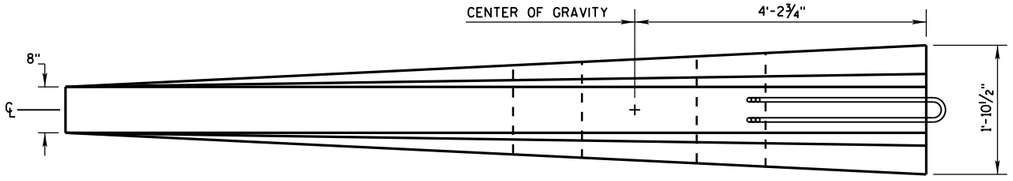
DETAIL "B"
LIFTING SLOT DETAIL



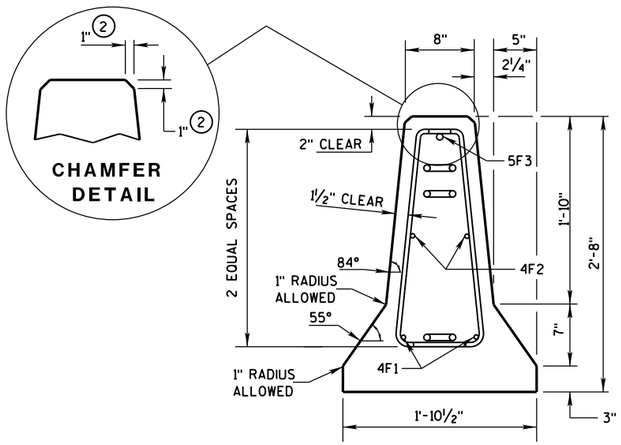
SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

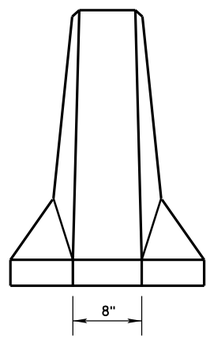
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



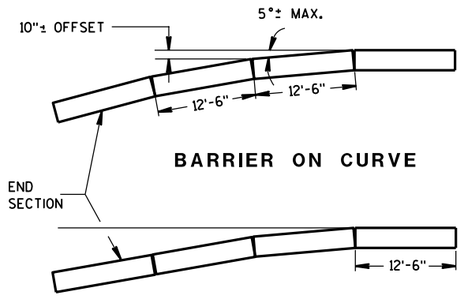
PLAN VIEW



END SECTION



FRONT ELEVATION



BARRIER ON CURVE

FLARE AT BARRIER END

POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

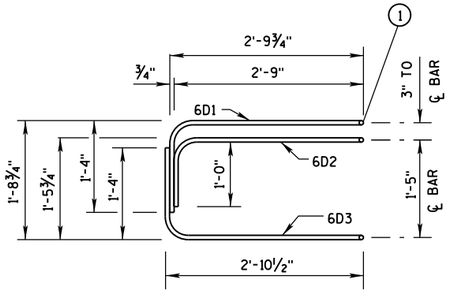
6

S.D.D. 14 B 7-15b

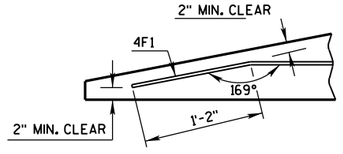
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

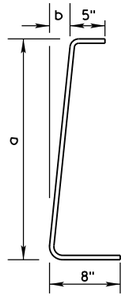
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

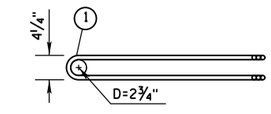
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

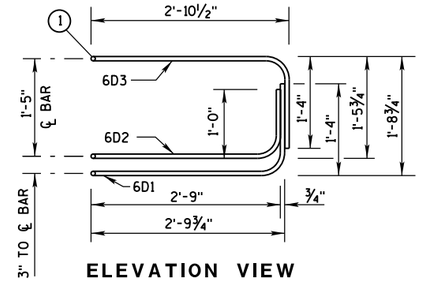
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

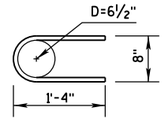
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



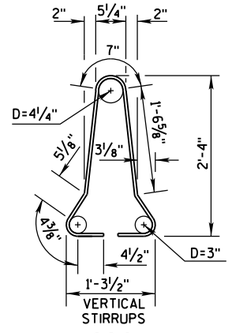
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2



4A1

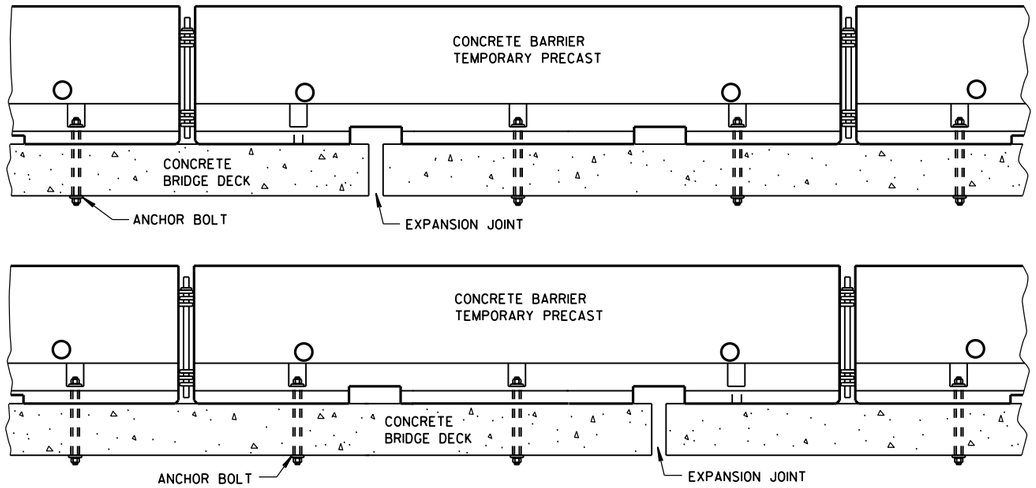
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 7-15c



TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)

GENERAL NOTES

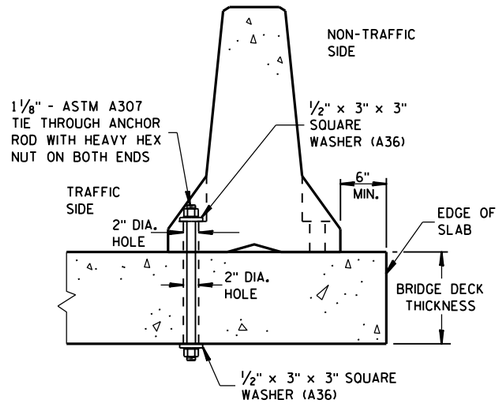
SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERICAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

(1) 1⅛" DIAMENTER A307 THREADED ROD. ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL. ASTM A563A HEAVY HEX NUT.

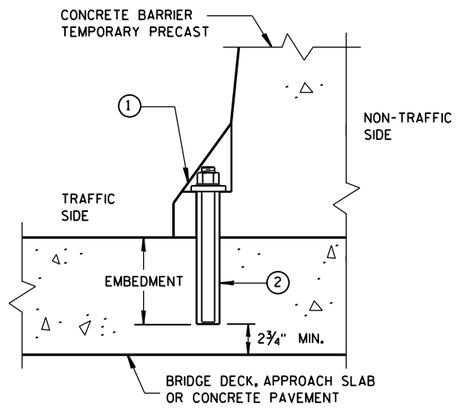
(2) ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

(3) ASPHALT SURFACE SHOWN. CONTRACTOR MAY DRILL THROUGH CONCRETE PAVEMENT AND THAN DRIVE ASPHALT ANCHOR PIN.



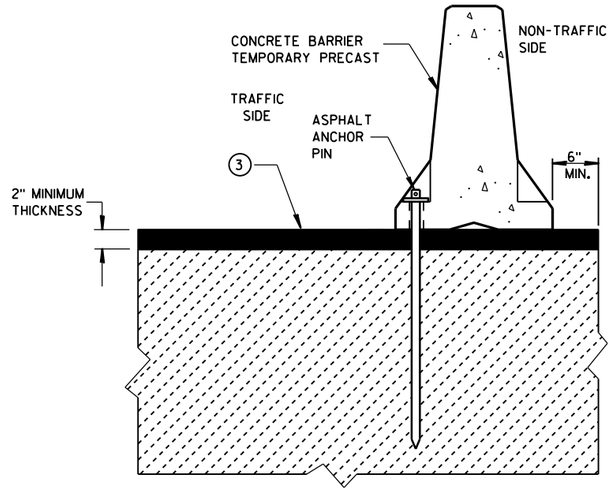
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)

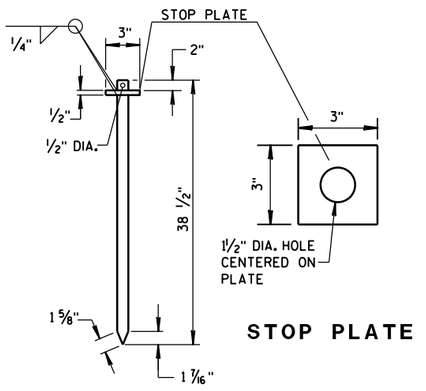


REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



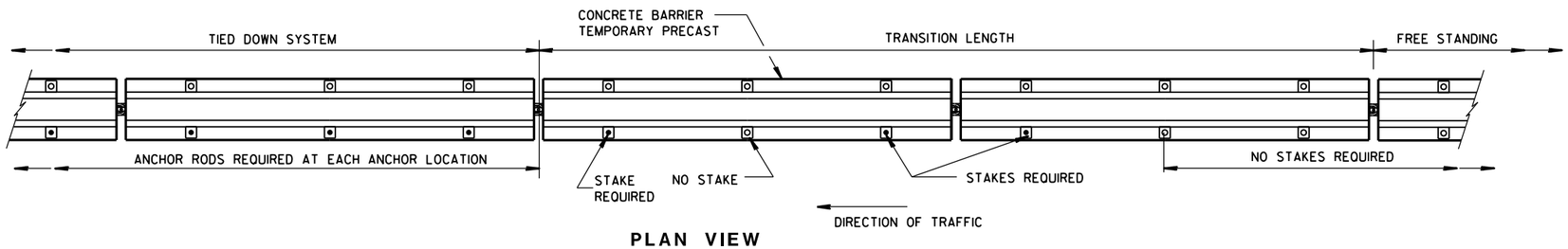
STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE



STOP PLATE

ASPHALT ANCHOR PIN

(ASTM A36 STEEL)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

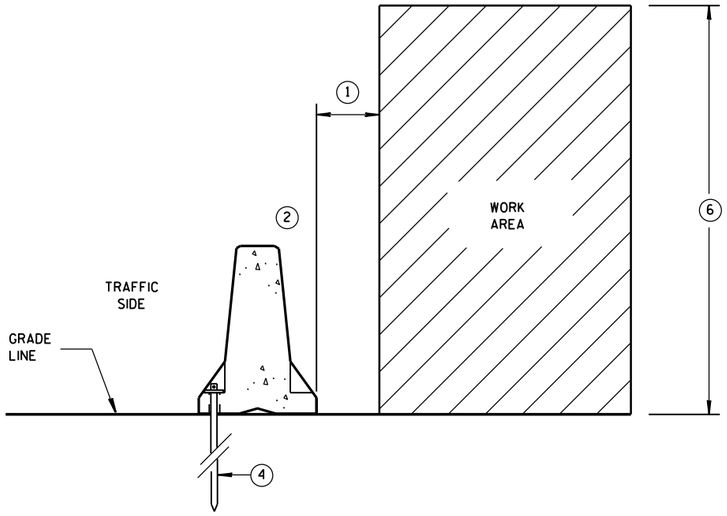
(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

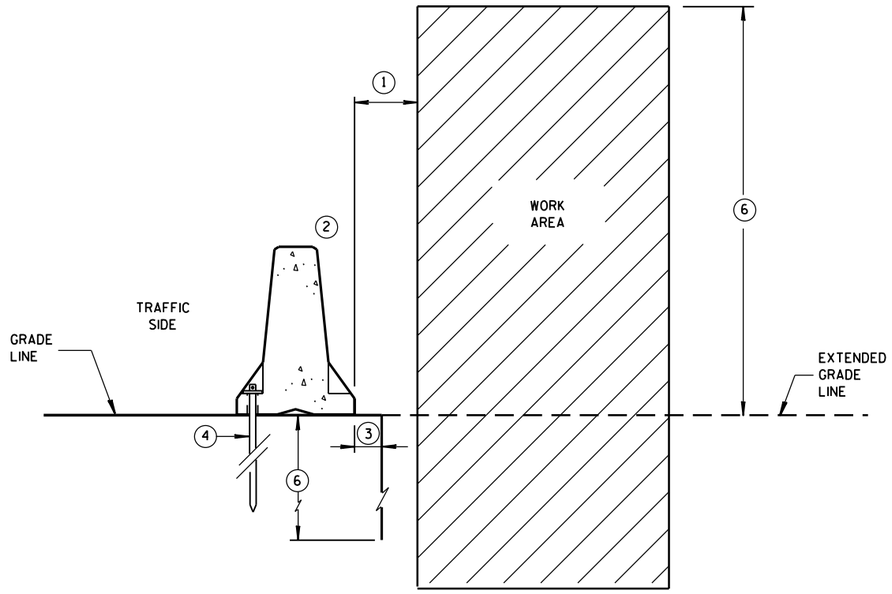
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-15d



ANCHORED BARRIER SPACE REQUIREMENTS FOR HAZARDS EXTENDED ABOVE THE GRADE LINE

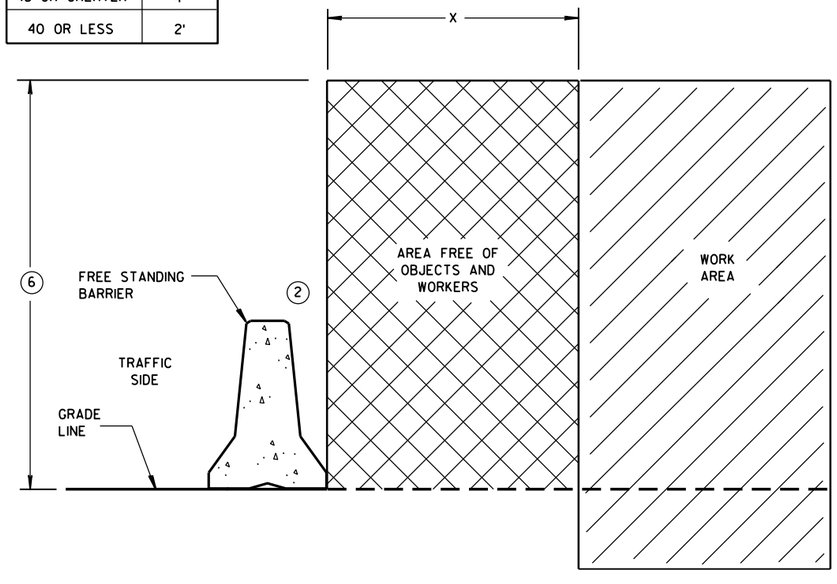


ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS

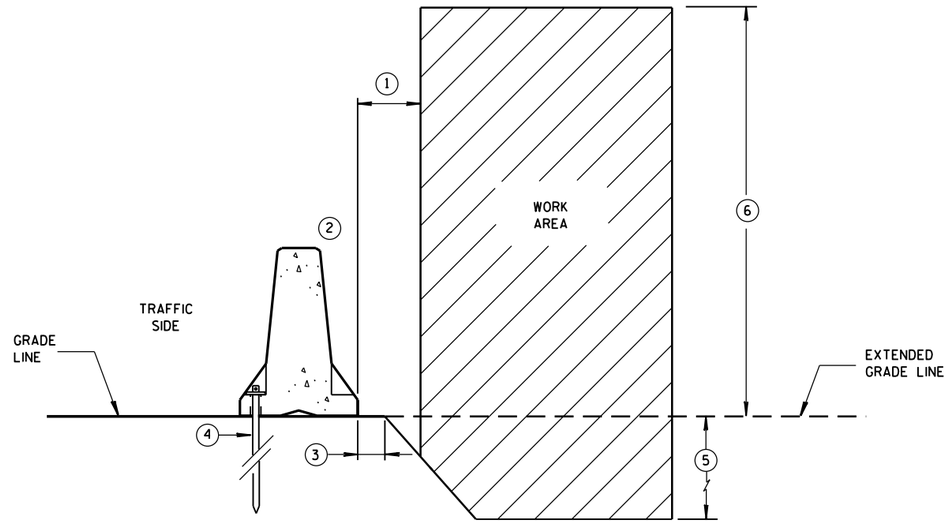
GENERAL NOTES

1. WHEN OBJECTS EXTEND ABOVE THE GRADE, A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT. SEE OTHER DETAILS FOR FOR THE MINIMUM OFFSET FROM BACK OF BARRIER TO SLOPES OR VERTICAL DROPS.
2. OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR LEANED AGAINST THE BARRIER WITHOUT PERMISSION OF THE PROJECT ENGINEER.
3. SEE OTHER DETAIL ON SHEET "D" FOR SPACE REQUIREMENTS.
4. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR A STAKE DOWN FOR ASPHALTIC SURFACE TREATMENT DETAILS. ASPHALTIC ANCHOR SHOWN.
5. DEPTH OF 3 FEET OR MORE.
6. Y = 6'-6".

POSTED SPEED MPH	X
45 OR GREATER	4'
40 OR LESS	2'



FREE STANDING BARRIER SPACE REQUIREMENTS



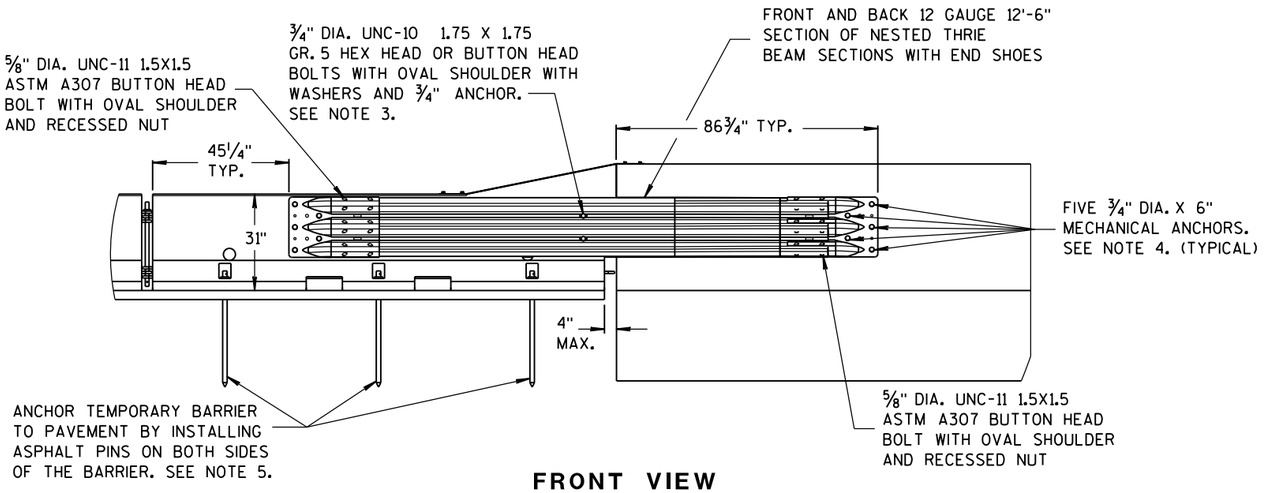
ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

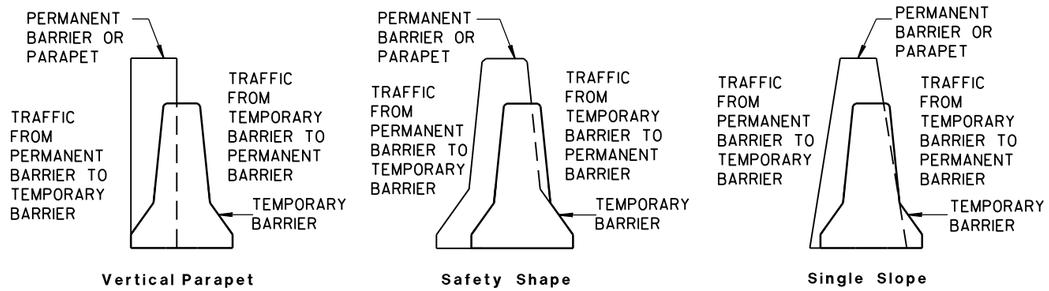
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-15e



FRONT VIEW

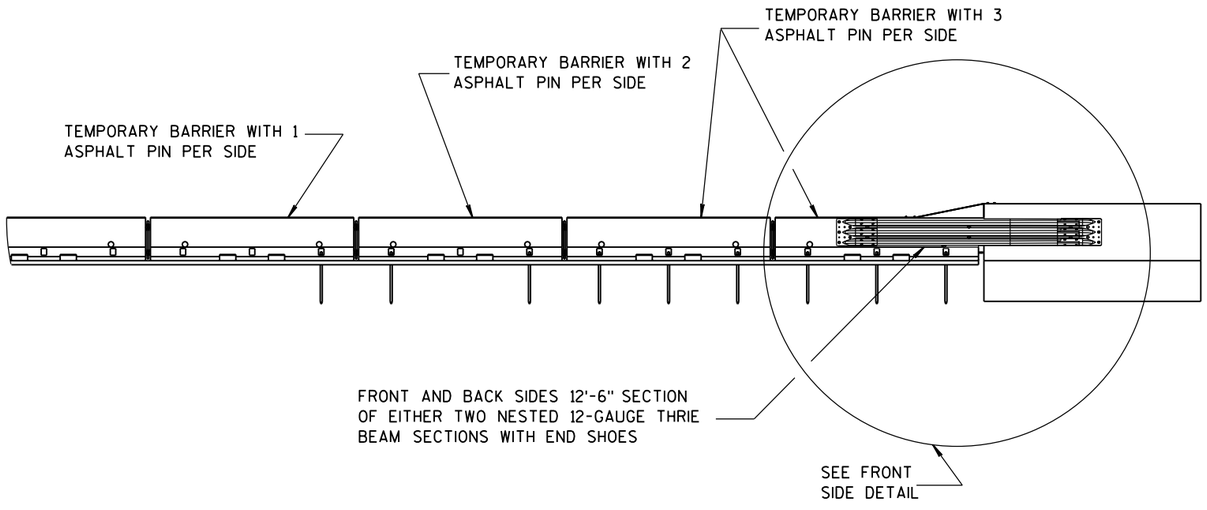


TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

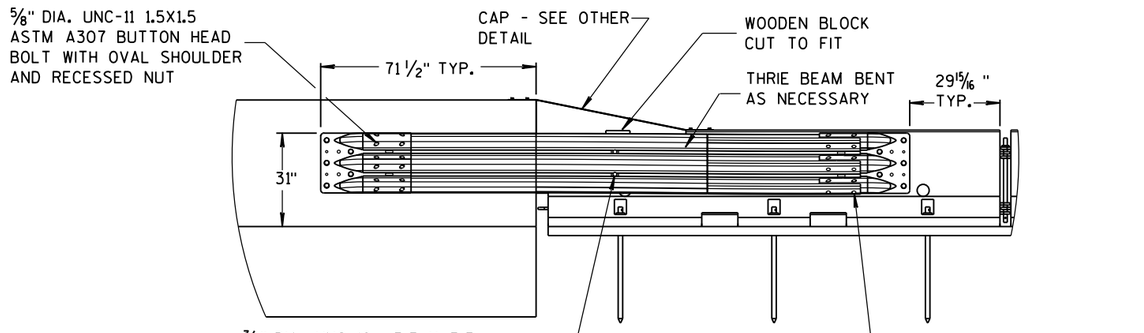
NOTES

NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS REGARDLESS OF TRAFFIC.

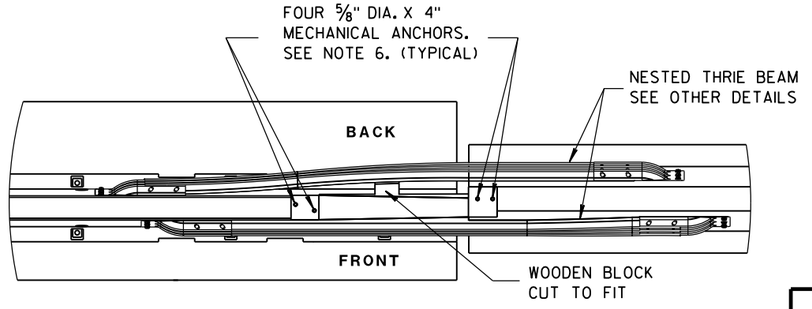
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



FRONT VIEW



BACK VIEW



PLAN VIEW

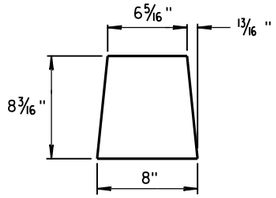
BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

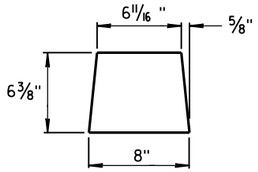
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

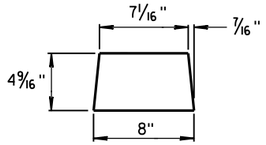
S.D.D. 14 B 7-15f



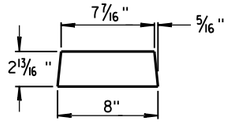
GUSSET 1



GUSSET 2

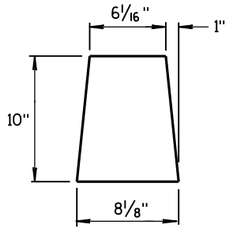


GUSSET 3

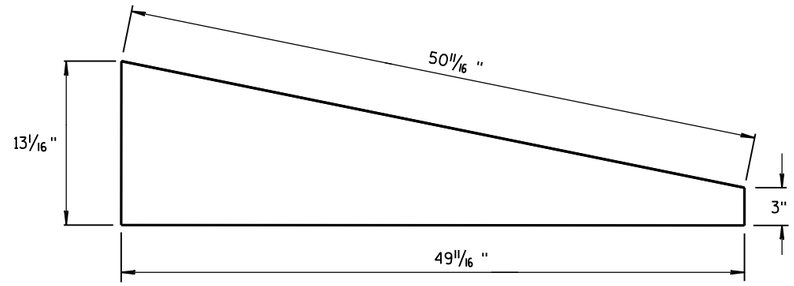


GUSSET 4

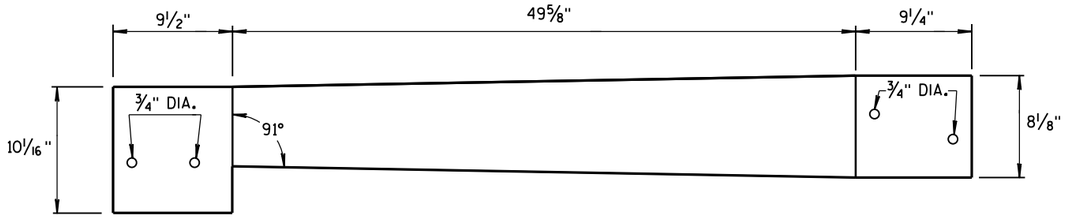
GUSSETS

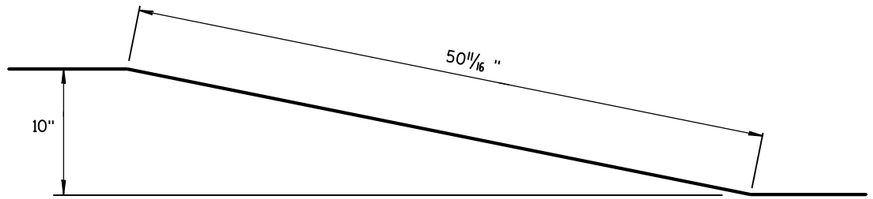


END PLATE



SIDE PLATE

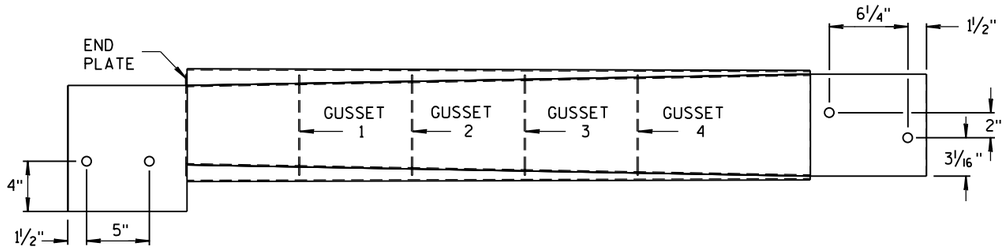


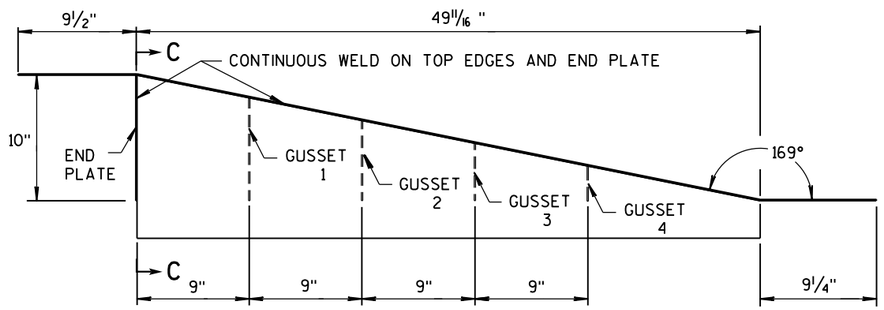


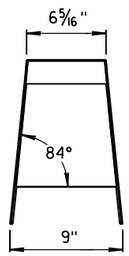
TOP PLATE

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.







SECTION C-C

NOTES

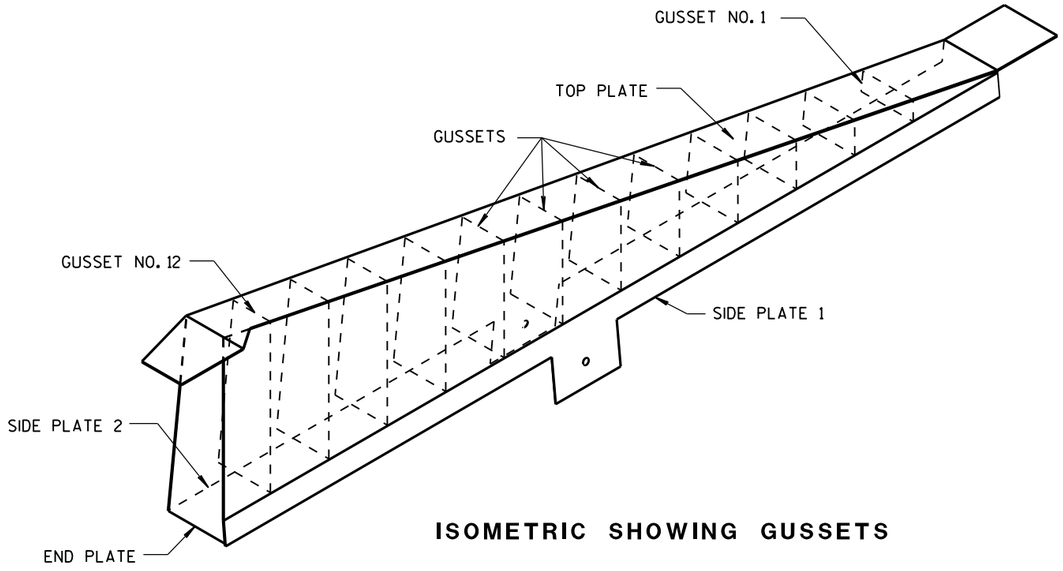
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

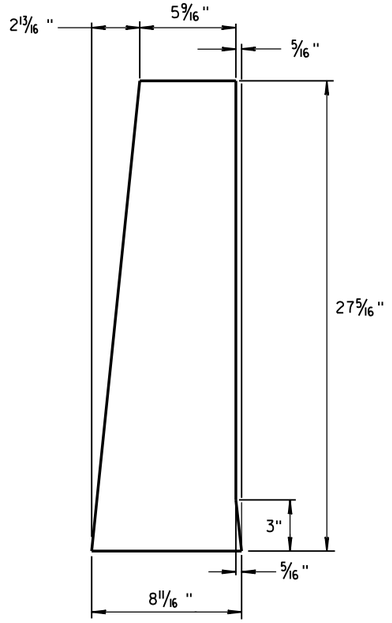
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-15g

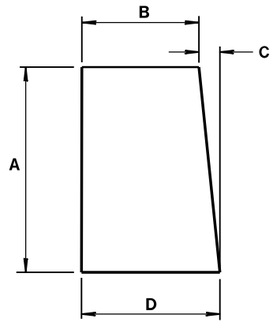


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



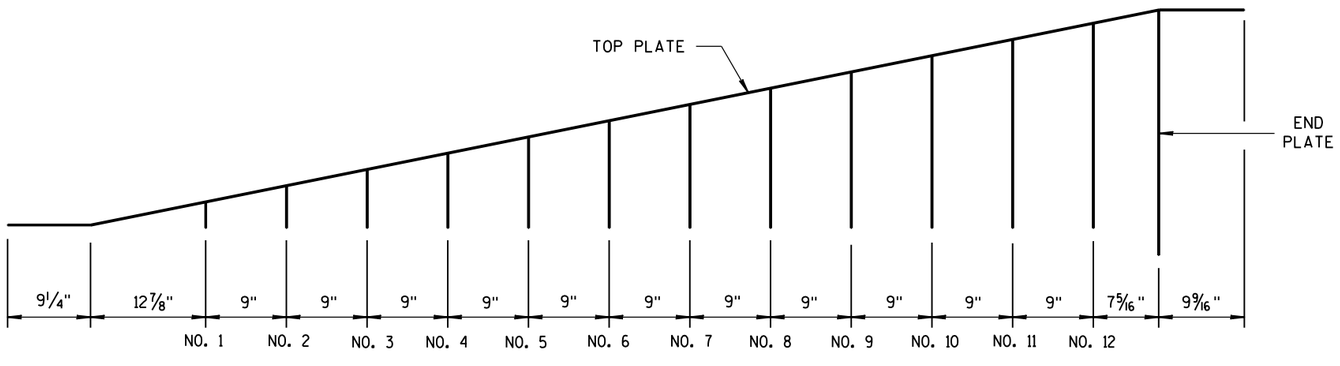
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

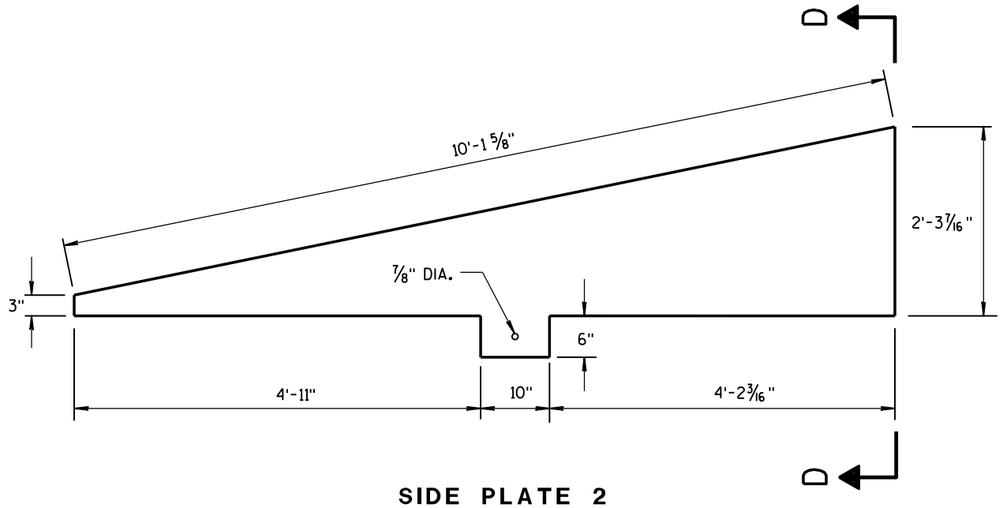
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

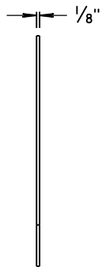
S.D.D. 14 B 7-15h

6

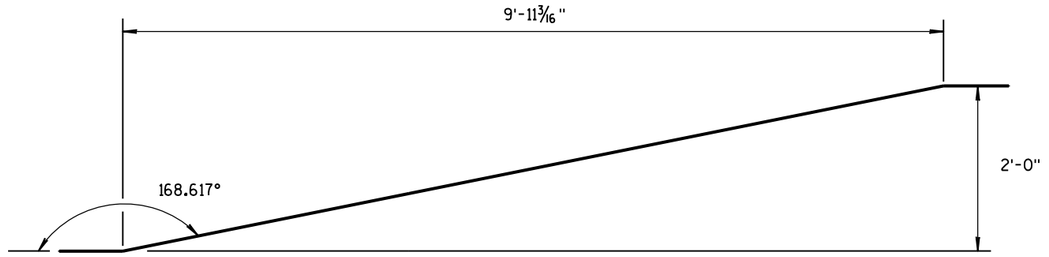
S.D.D. 14 B 7-15h



SIDE PLATE 2

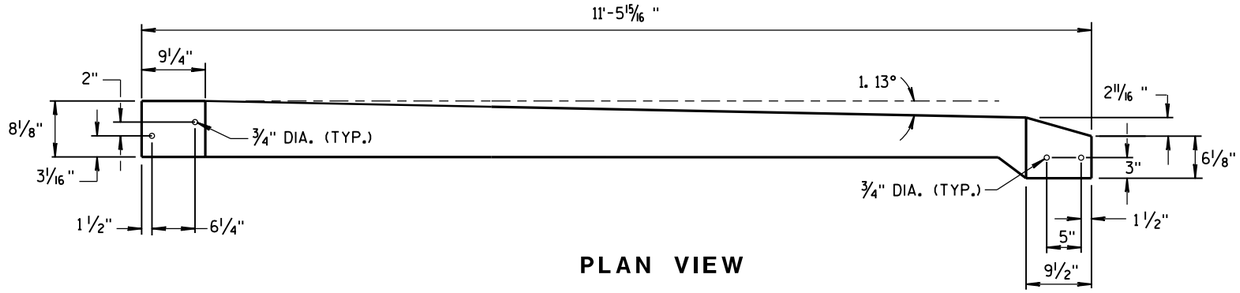


END VIEW



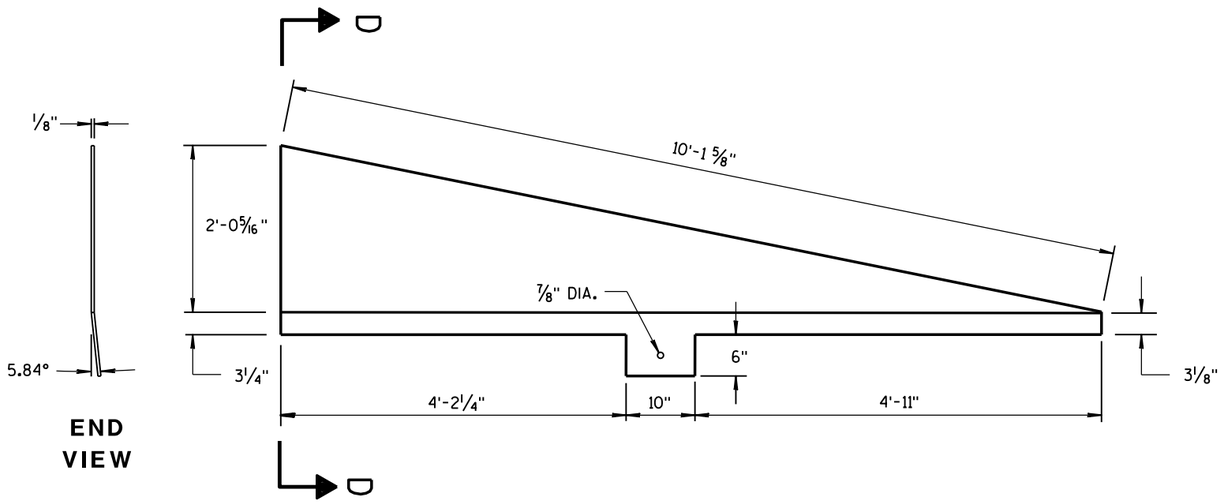
SIDE VIEW

TOP PLATE



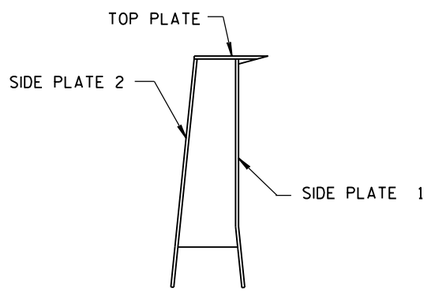
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERV
FHWA

6

S.D.D. 14 B 7-15i

6

S.D.D. 14 B 7-15i

(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.

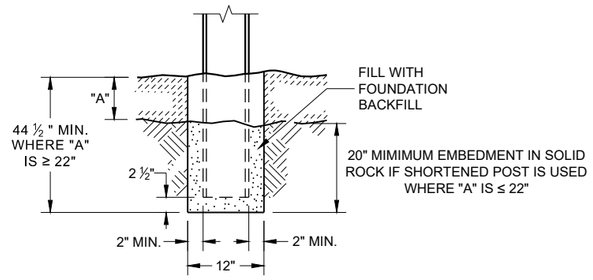
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

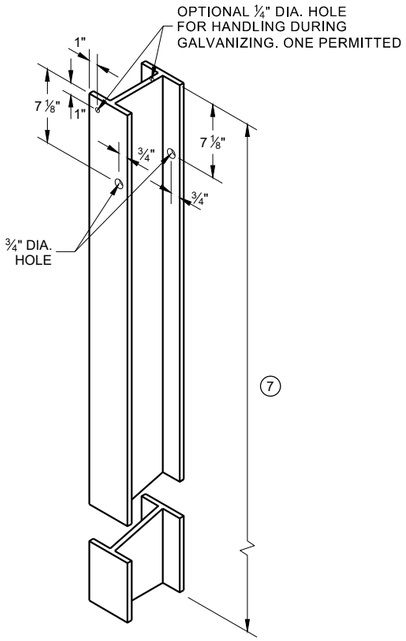
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS +1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

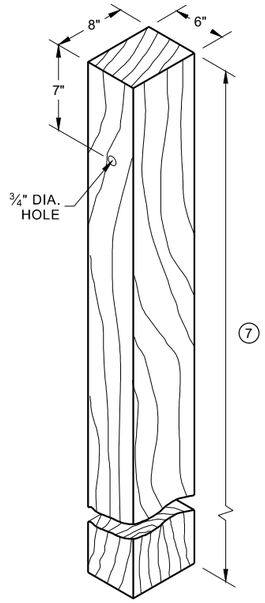
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



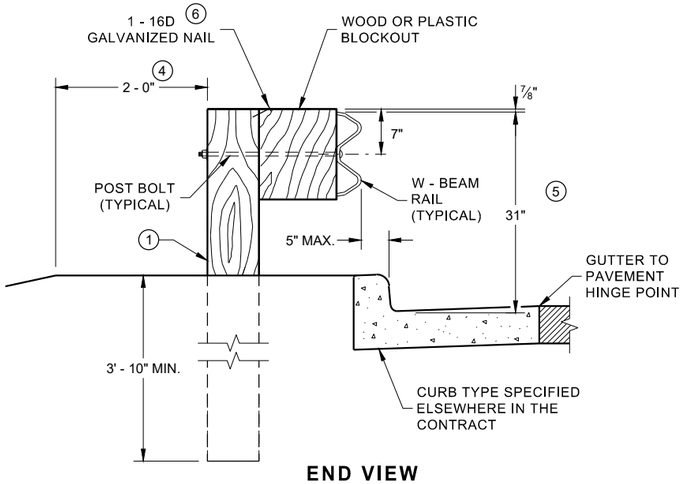
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



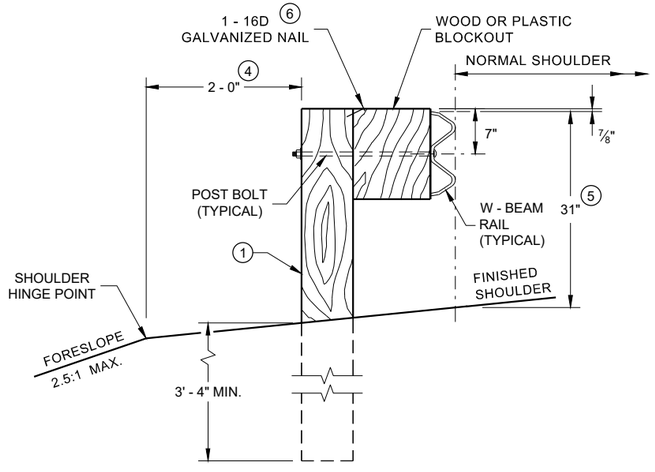
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



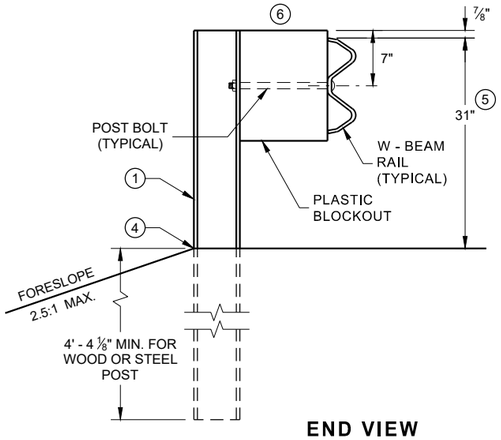
WOOD POST (6" X 8") NOMINAL (1)



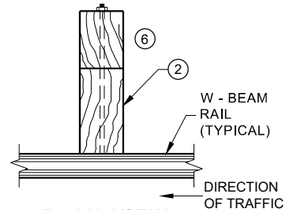
END VIEW
LOCATED ALONG A CURBED ROADWAY



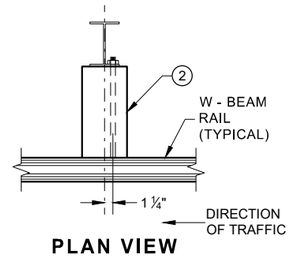
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



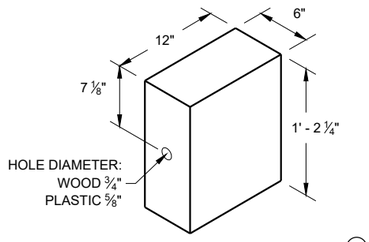
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



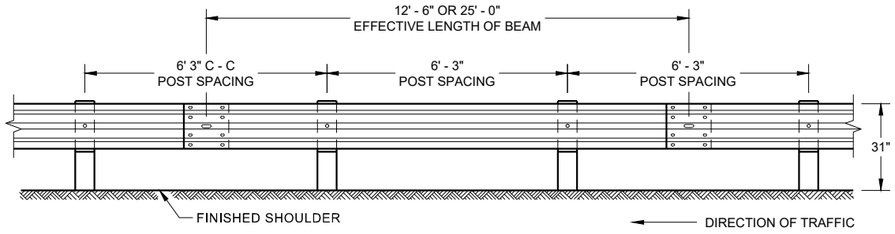
WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

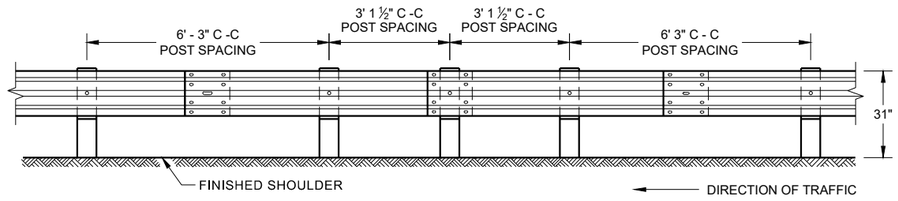
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 06a

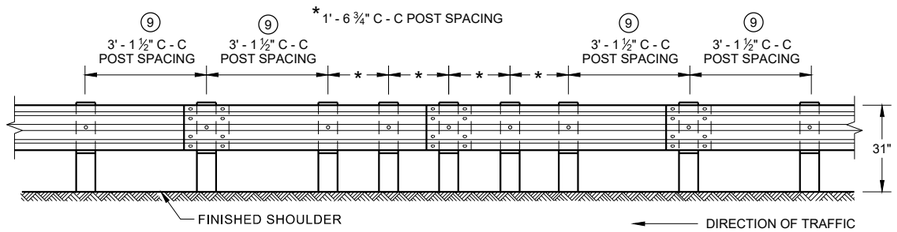
6
SDD 14B42 - 06a



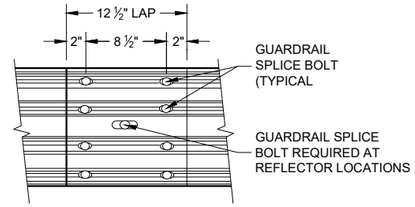
FRONT VIEW
POST SPACING STANDARD INSTALLATION



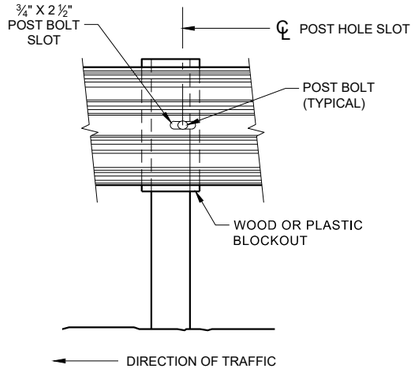
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



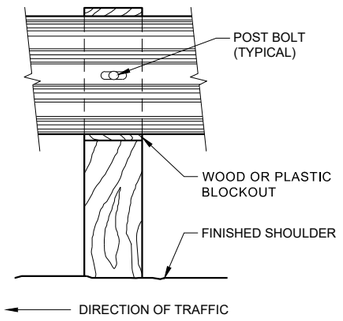
FRONT VIEW
QUARTER POST SPACING (QS)



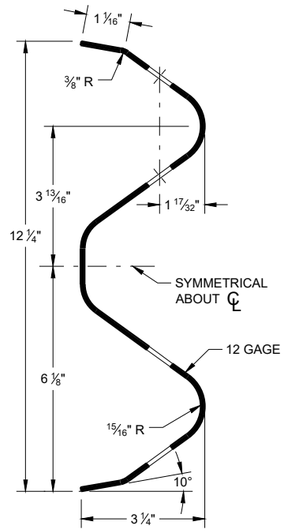
FRONT VIEW
MID-SPAN BEAM SPLICE



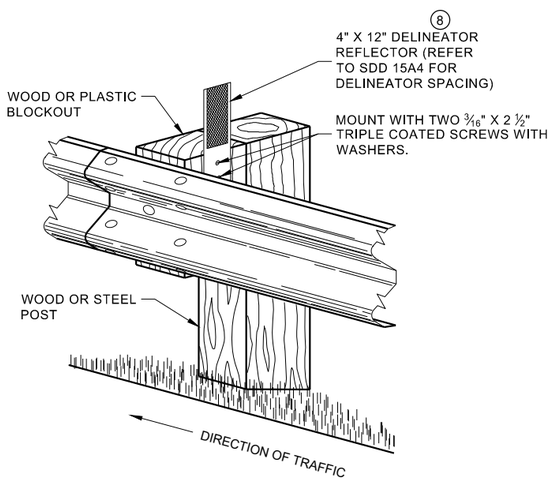
FRONT VIEW AT STEEL POST



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.

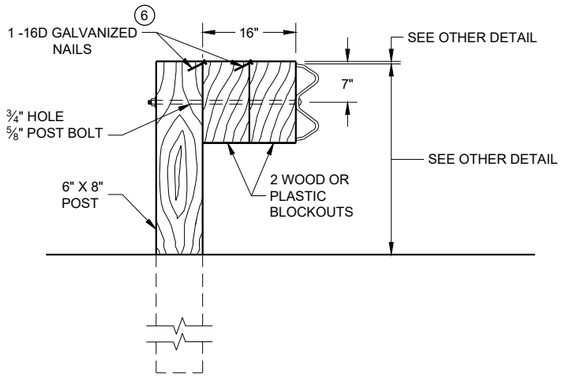
POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

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 - 06b

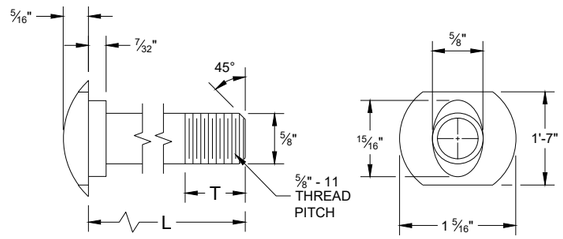


DETAIL FOR 16" BLOCKOUT DEPTH

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.

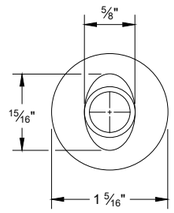
NOTE:

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.

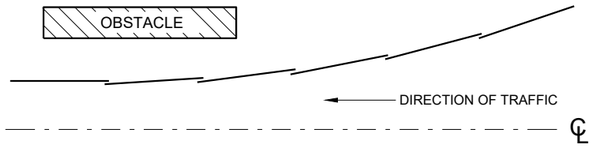


POST BOLT TABLE

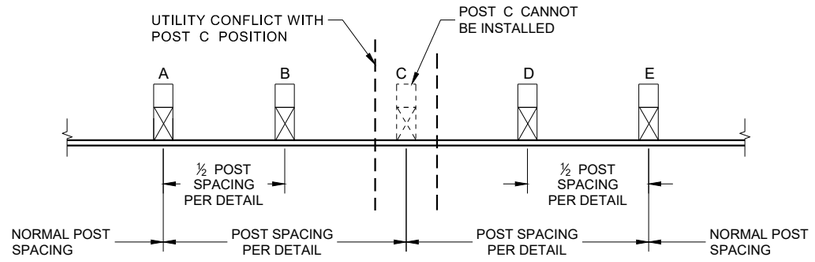
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



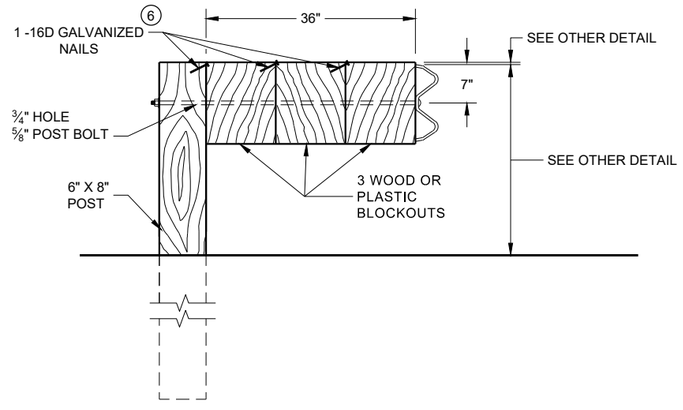
ALTERNATE BOLT HEAD



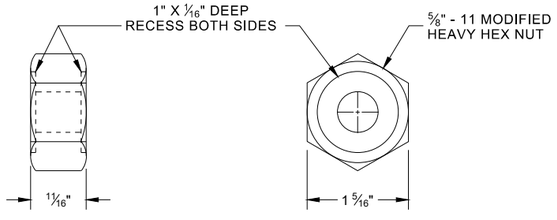
PLAN VIEW
BEAM LAPPING DETAIL



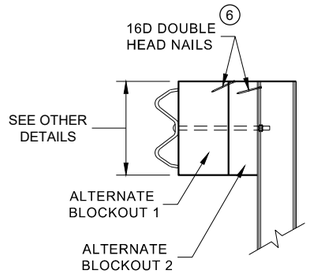
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



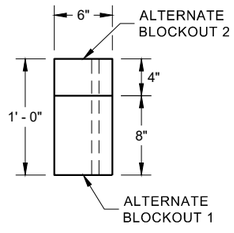
DETAIL FOR 36" BLOCKOUT DEPTH



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.

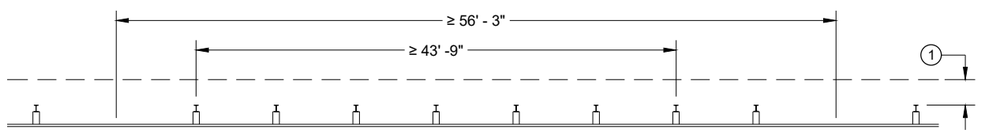
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(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.

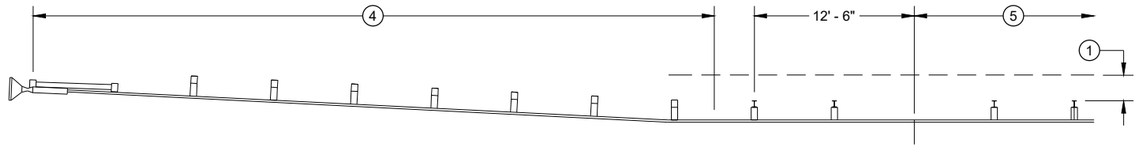
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

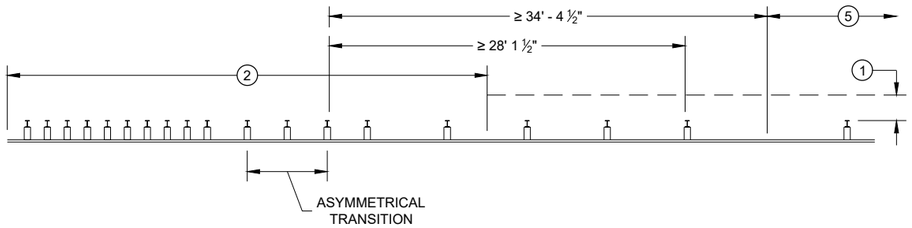
SDD 14B42 - 06c



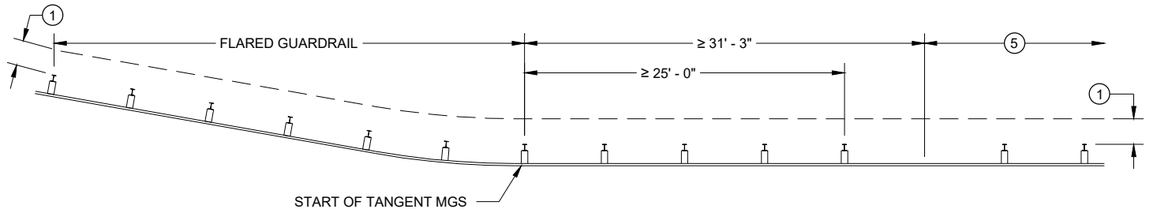
MISSING POST IN NORMAL BEAM GUARD RUN



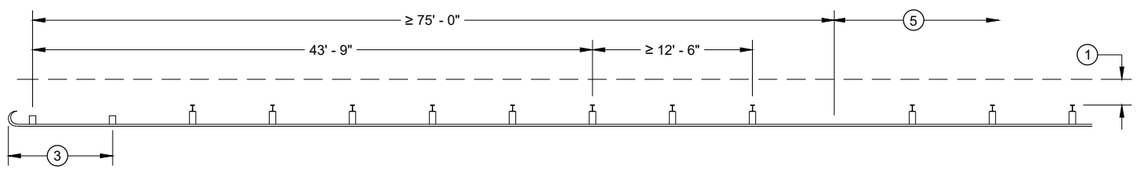
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



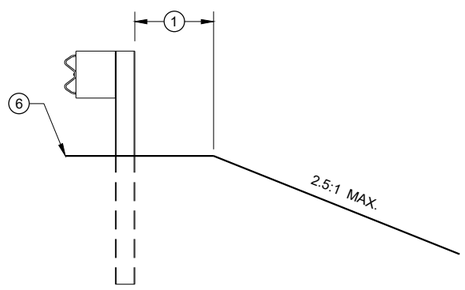
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

1. MINIMUM OF 2 FEET OF GRADING BEHIND POST.
2. SEE SDD 14B45 FOR MORE DETAILS.
3. SEE SDD 14B47 FOR MORE DETAILS.
4. SEE SDD 14B44 FOR MORE DETAILS.
5. SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
6. SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

SDD 14B42 - 06d

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.

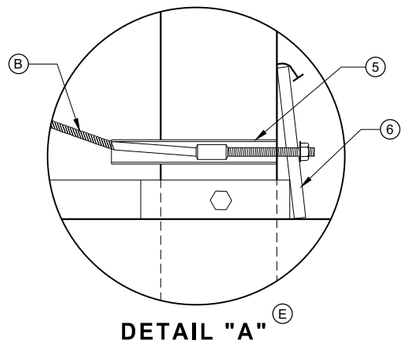
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

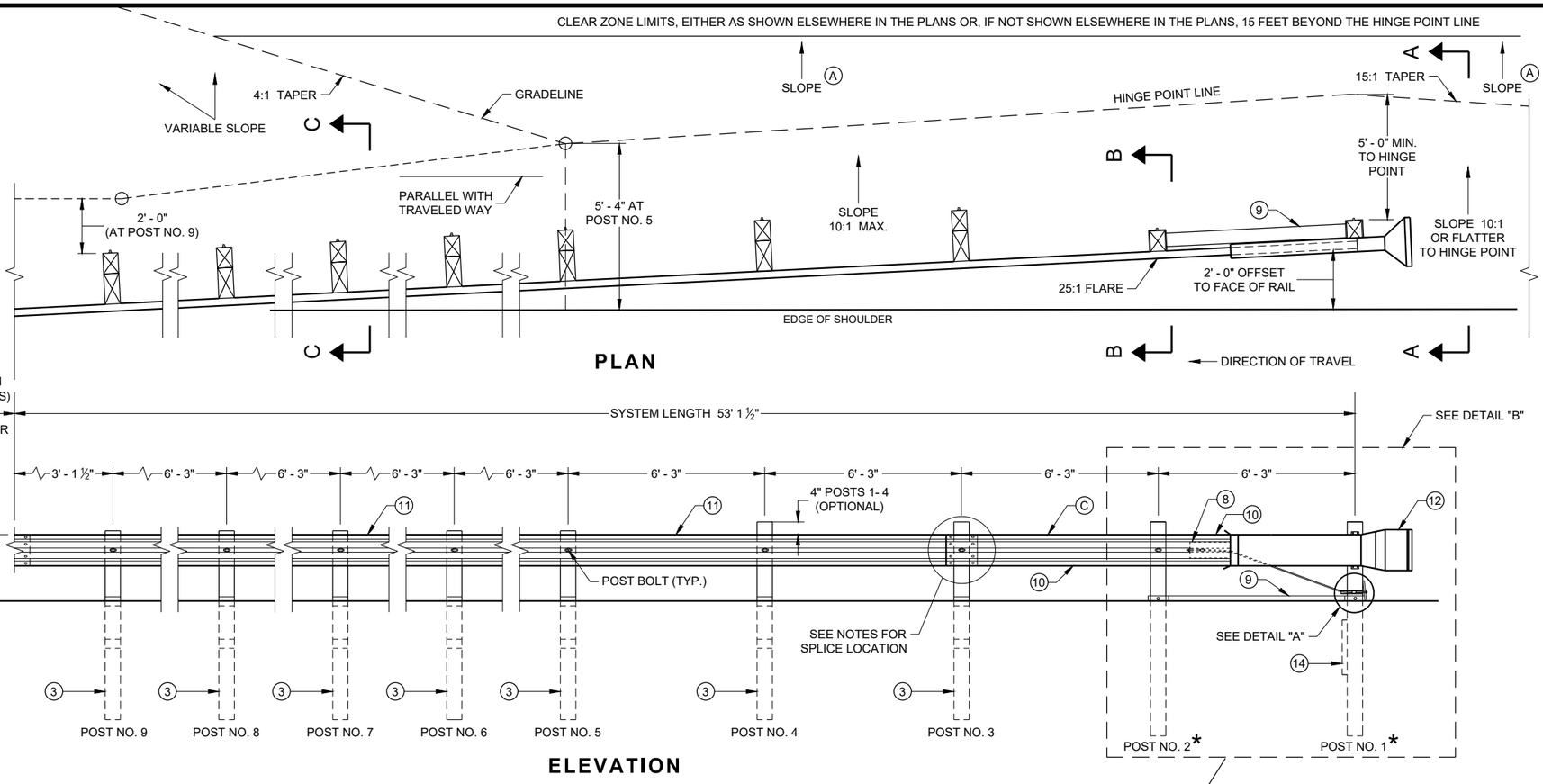
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

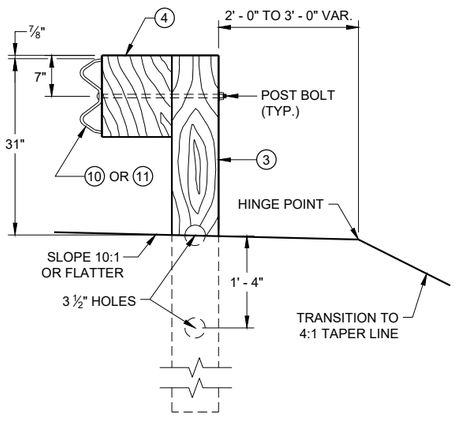
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

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.

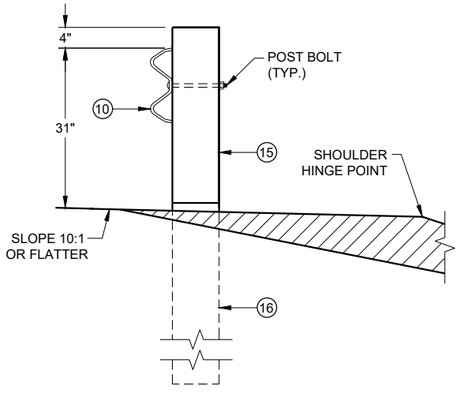


DETAIL "A" (E)

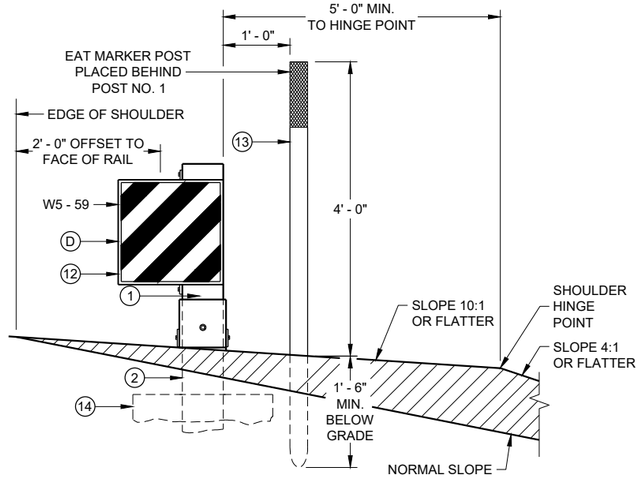




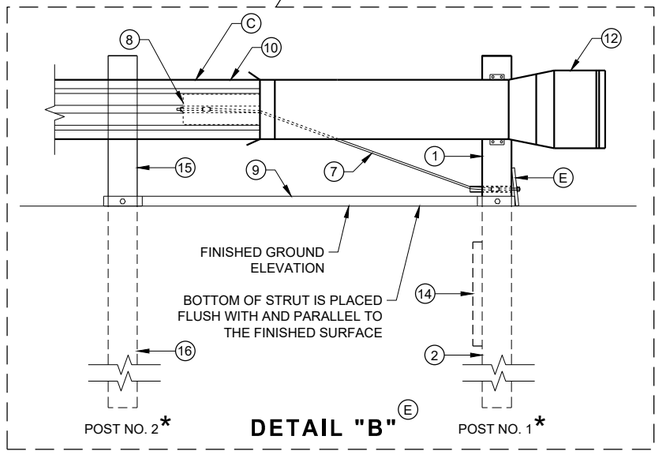
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*

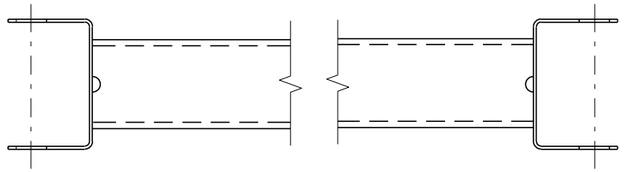


MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

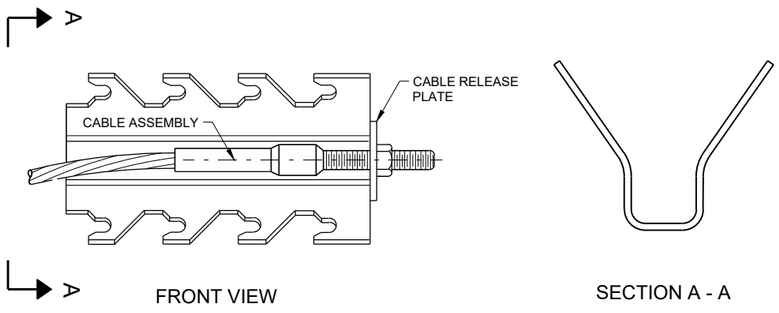
6



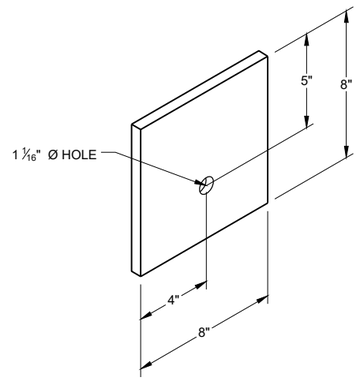
GENERIC GROUND STRUT ⑨ Ⓔ

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

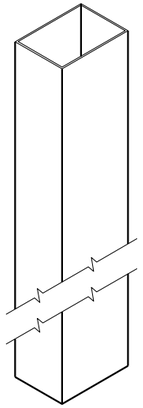
6

SDD 14B44 - 04b

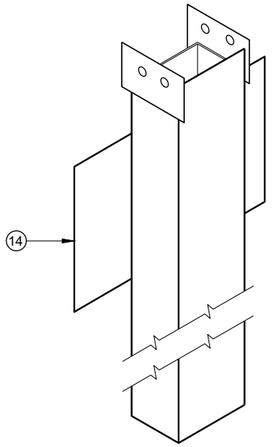
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

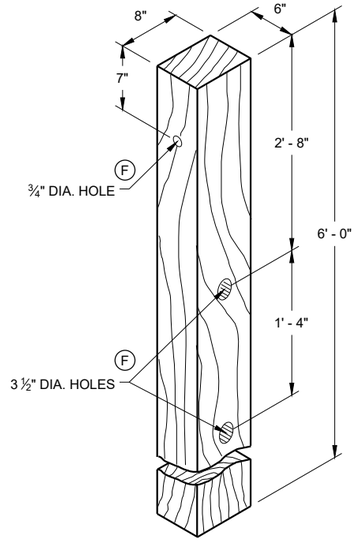
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



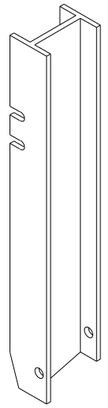
UPPER POST NO. 1 ① Ⓔ



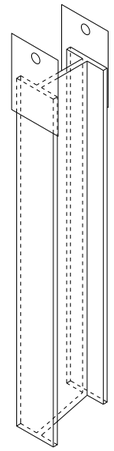
LOWER POST NO. 1 ② Ⓔ



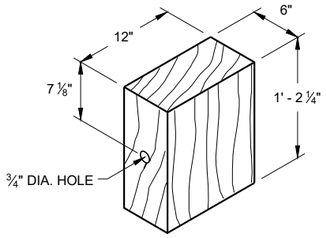
WOOD CRT POST ③ Ⓔ
POSTS NUMBER 3-9



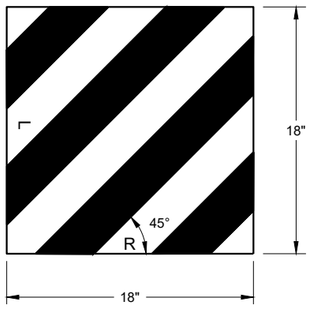
UPPER POST NO. 2 ⑮ Ⓔ



LOWER POST NO. 2 ⑯ Ⓔ

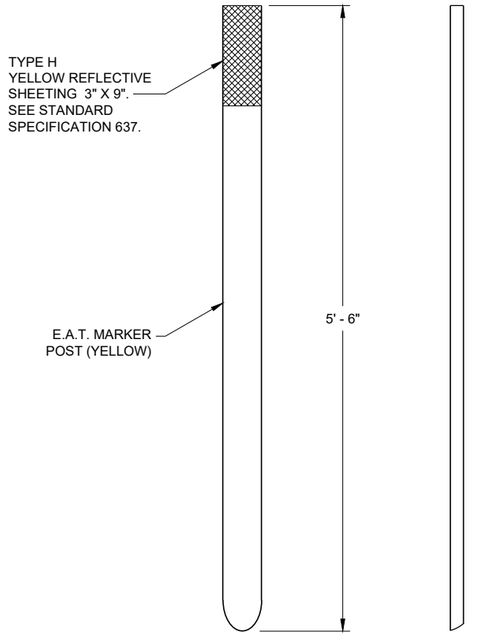


WOOD BLOCKOUT ④
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



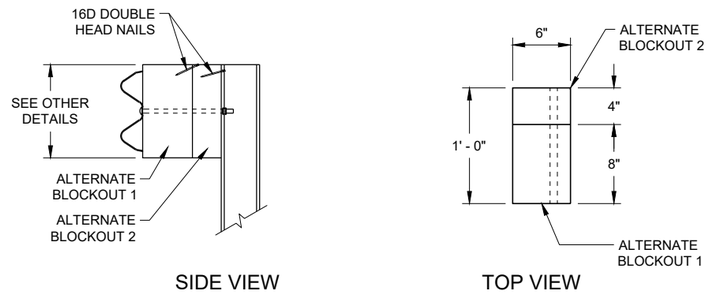
W5 - 59

REFLECTIVE SHEETING DETAIL Ⓔ



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)

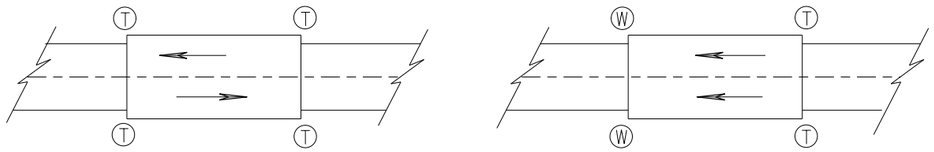
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

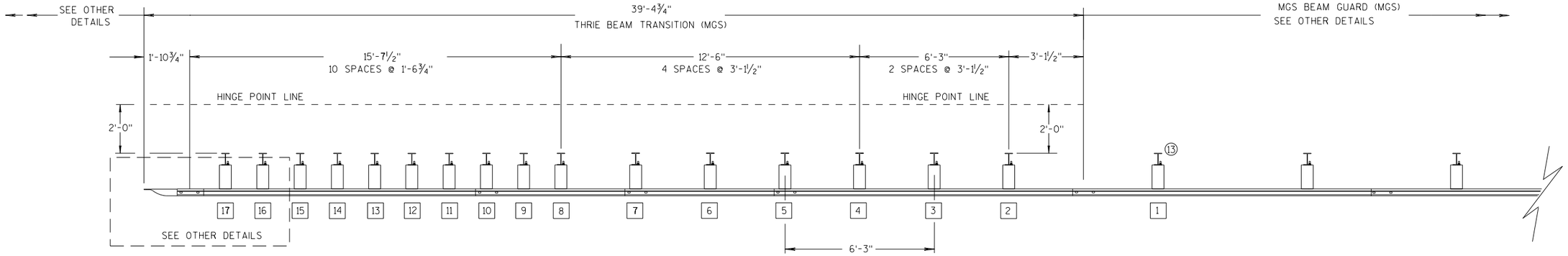
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

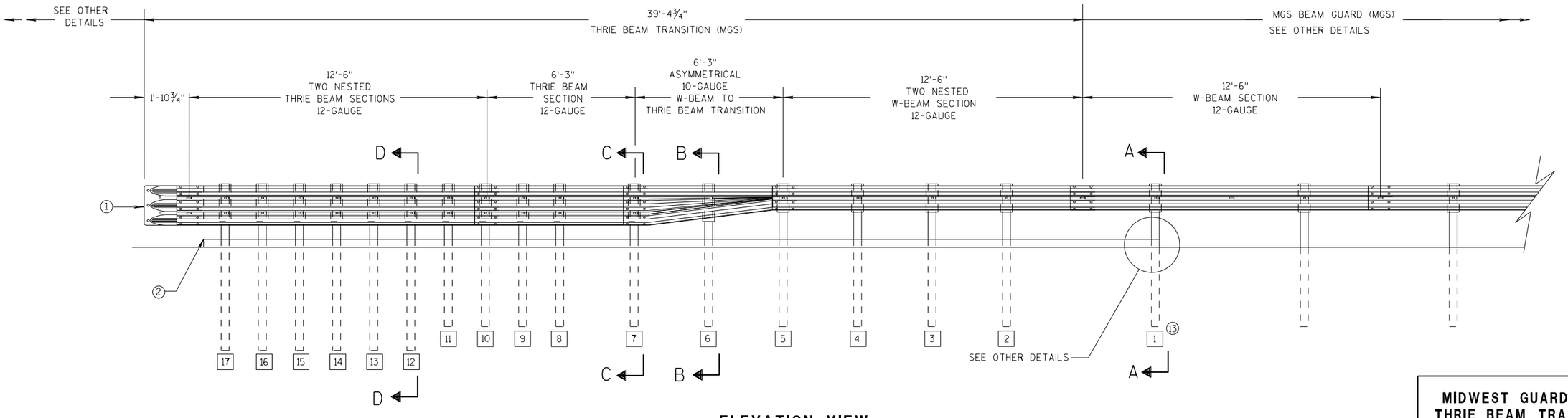
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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

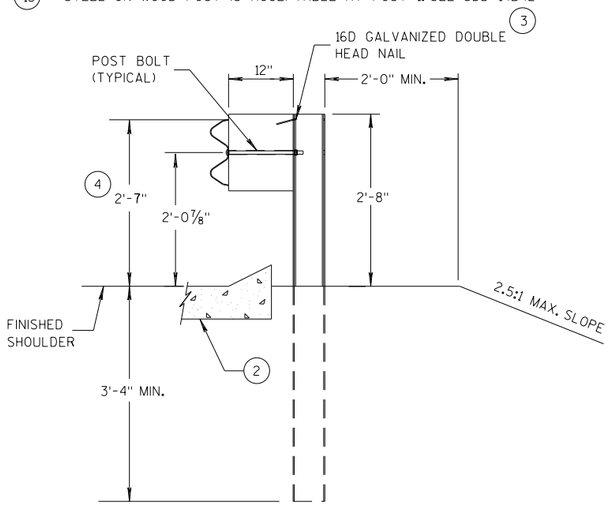
GENERAL NOTES

(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.

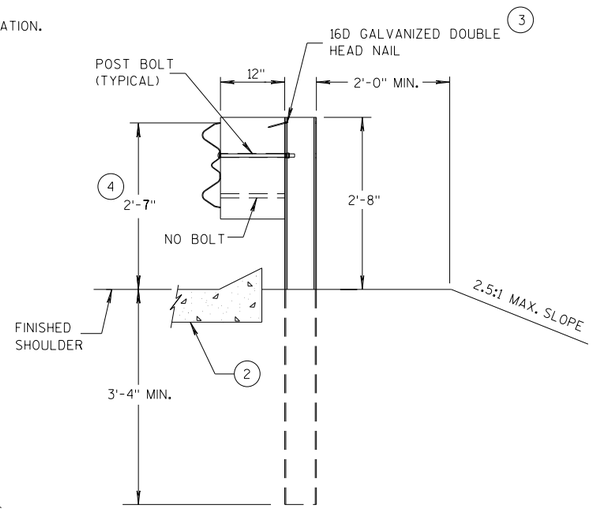
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



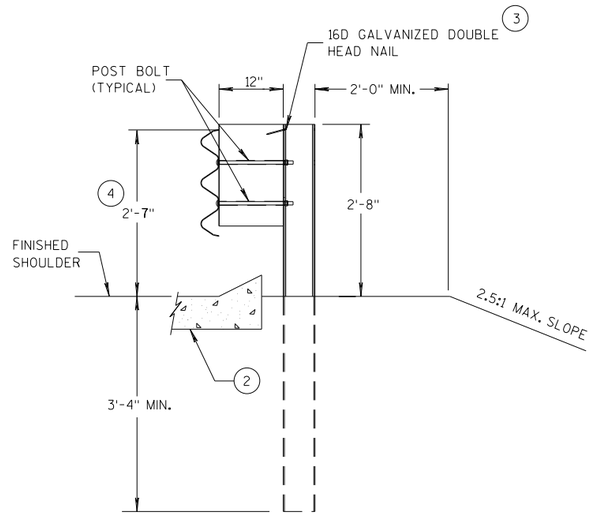
SECTION A-A (13)

POSTS 1-5



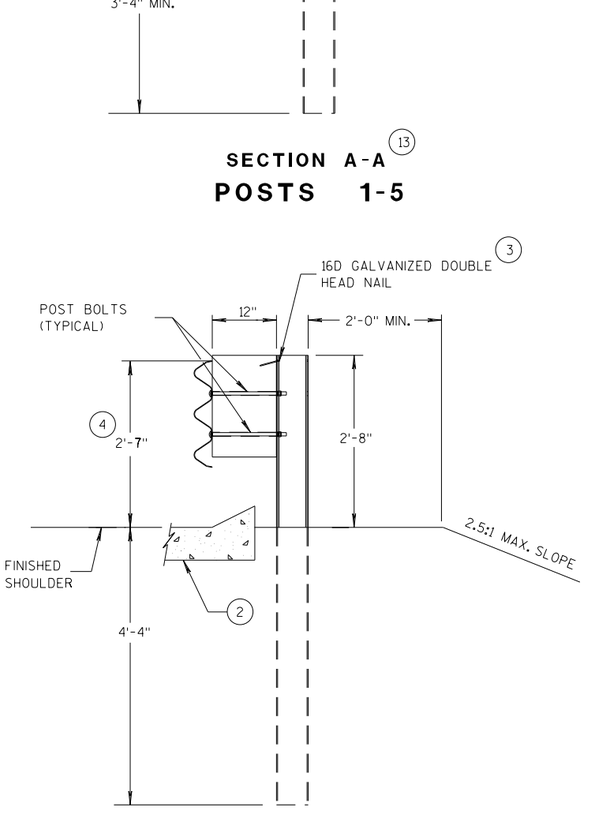
SECTION B-B

POST 6



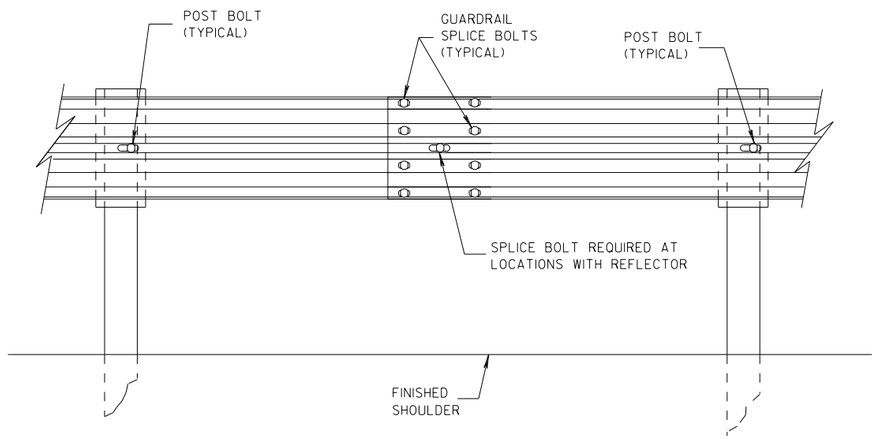
SECTION C-C

POSTS 7-11



SECTION D-D

POSTS 12-17



SPLICE DETAIL

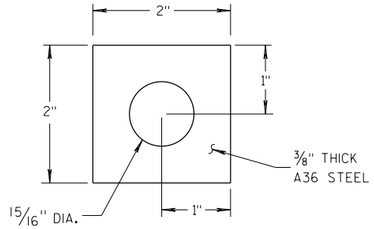
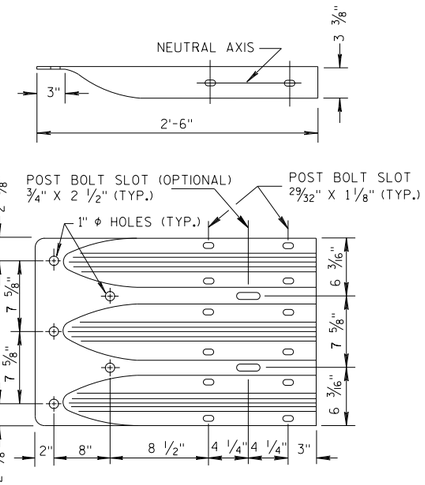
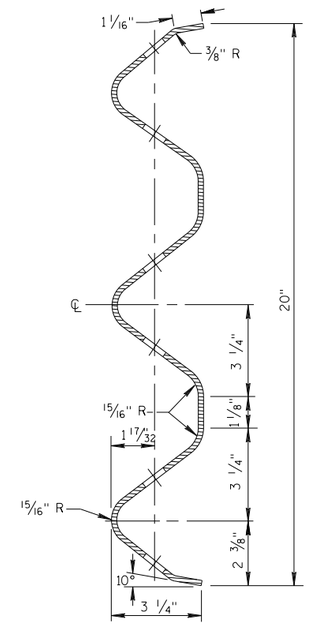


PLATE WASHER DETAIL



THRIE BEAM TERMINAL CONNECTOR



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

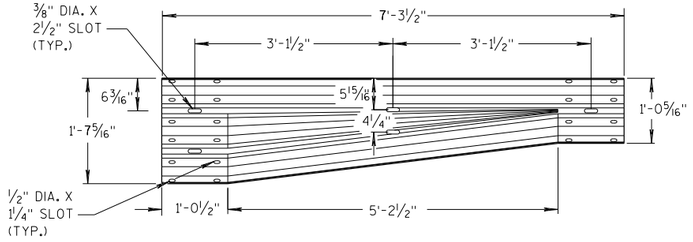
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 123

6

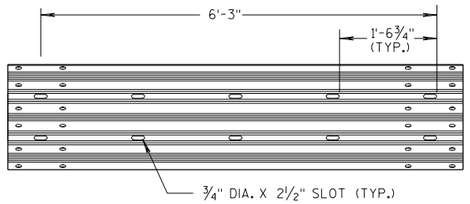
S.D.D. 14 B 45-5b

6

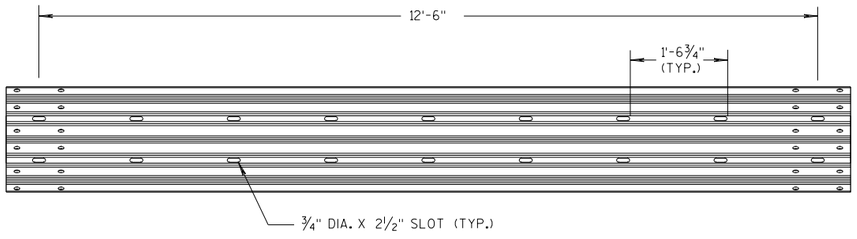
S.D.D. 14 B 45-5b



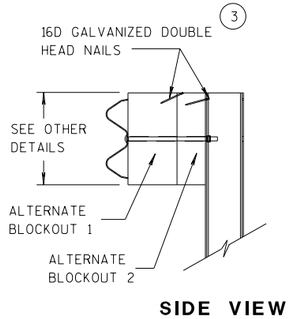
W-BEAM TO THRIE BEAM TRANSITION SECTION



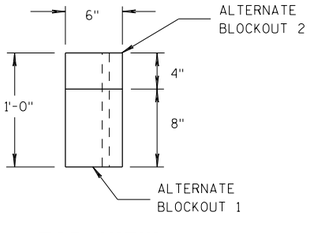
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

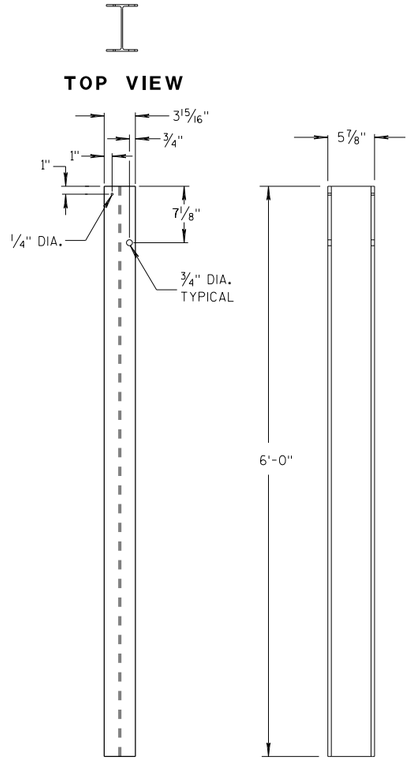


SIDE VIEW



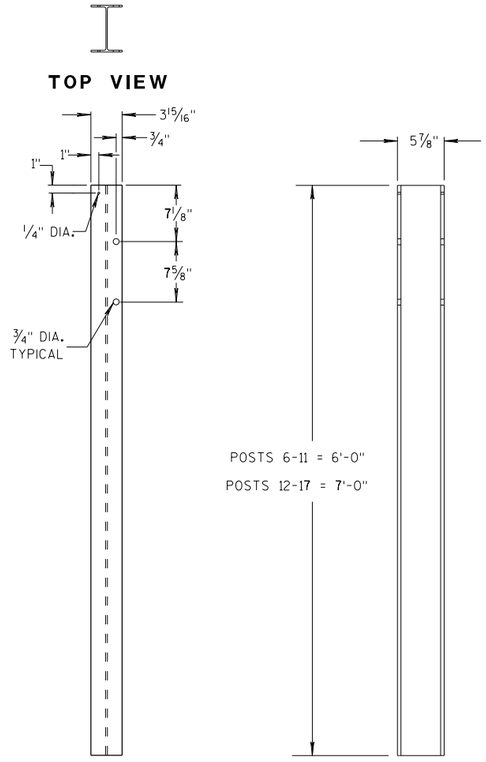
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



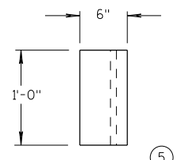
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

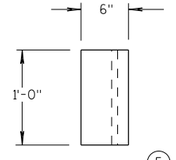


FRONT VIEW SIDE VIEW

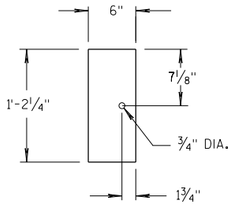
STEEL POSTS 6-17



TOP VIEW (5)

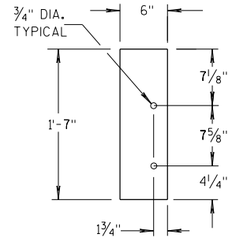


TOP VIEW (5)



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.

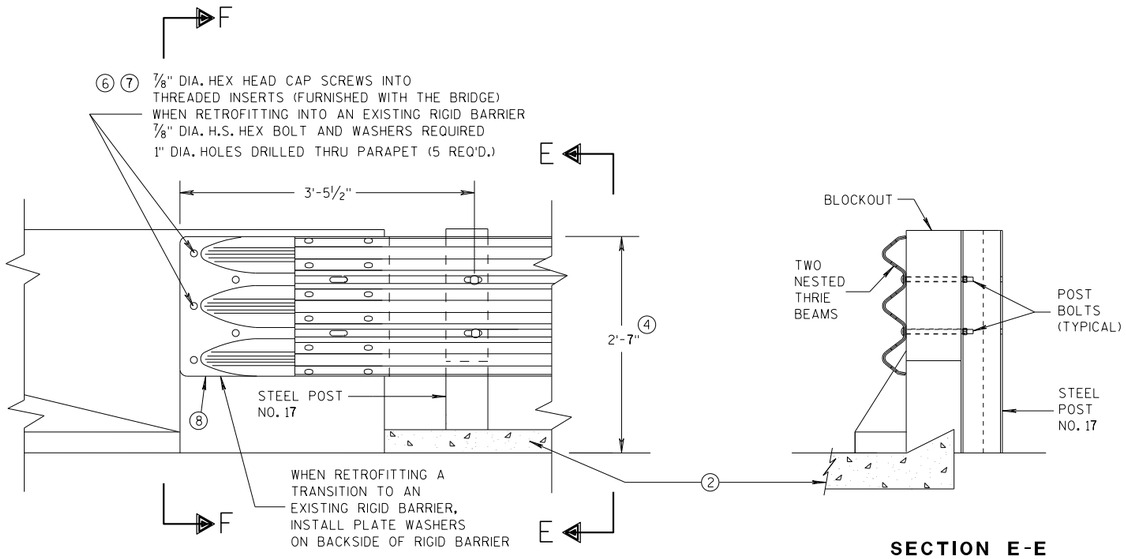
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

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.

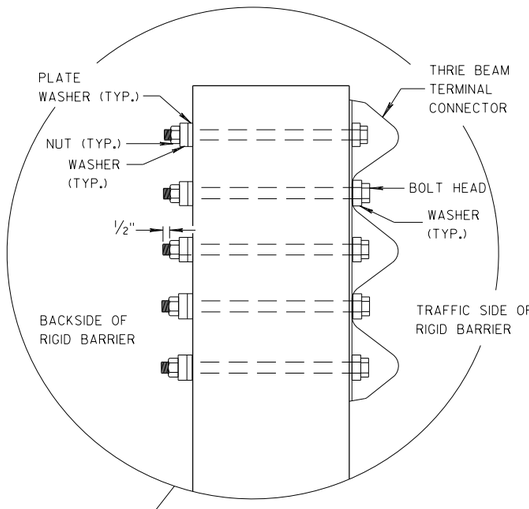
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

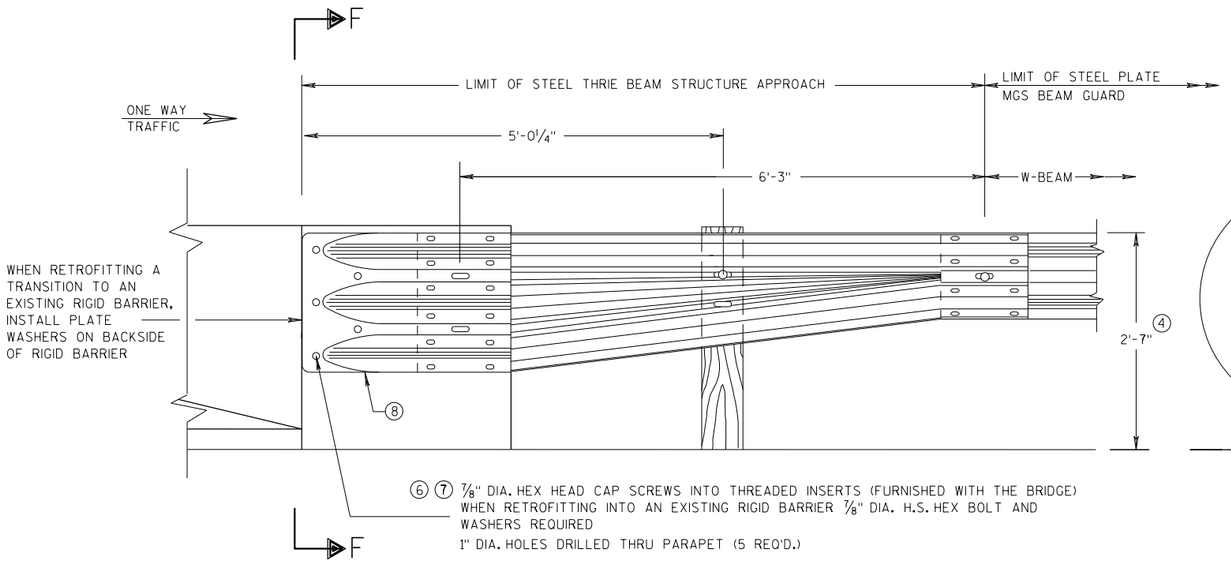
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

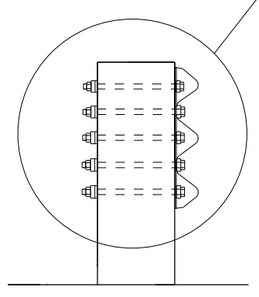
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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".

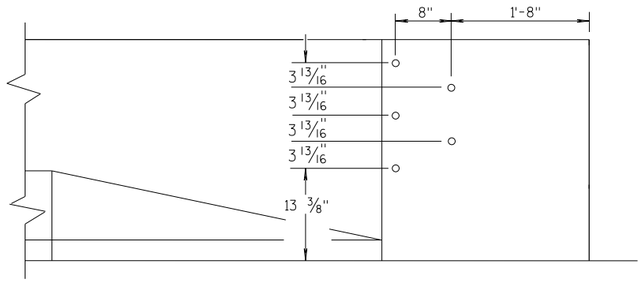




FRONT VIEW



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[illegible] UNIT SUPERVIS[illegible]
FHWA

6

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

6

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

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.

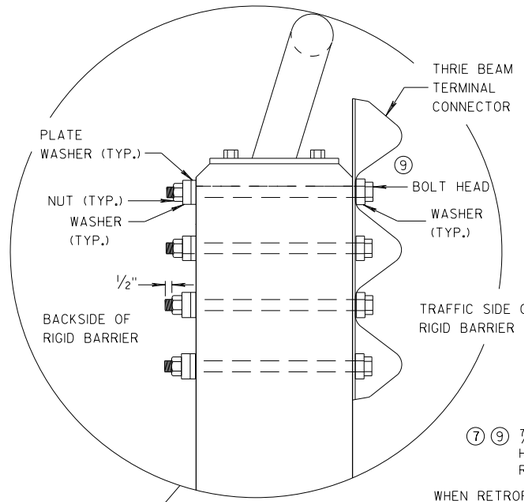
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

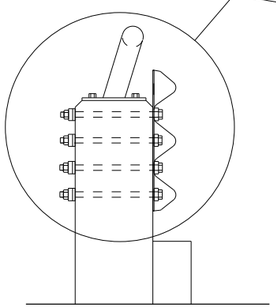
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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.

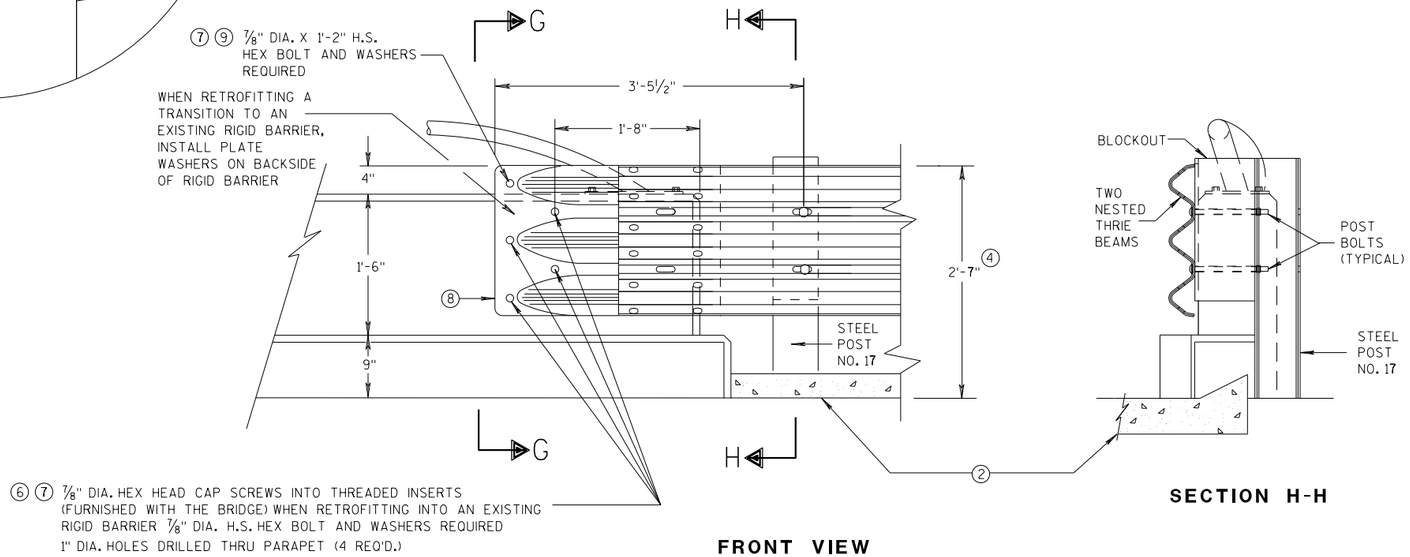
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





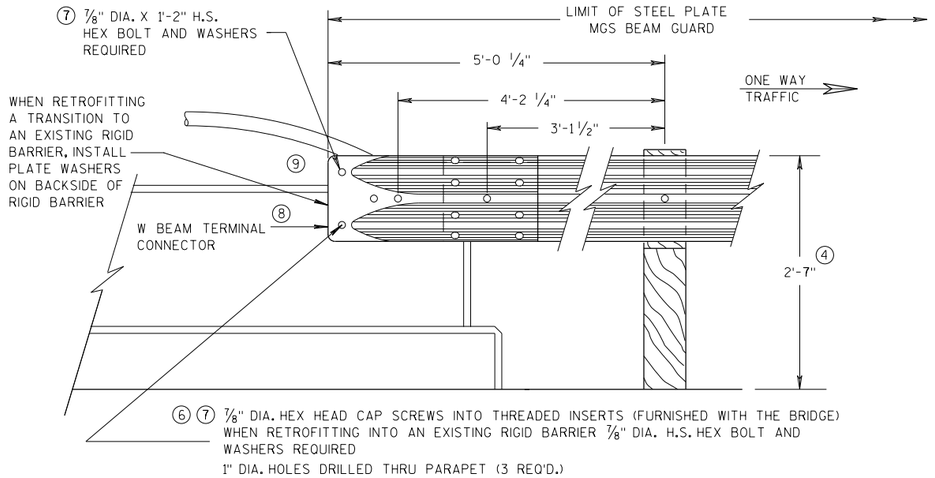
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

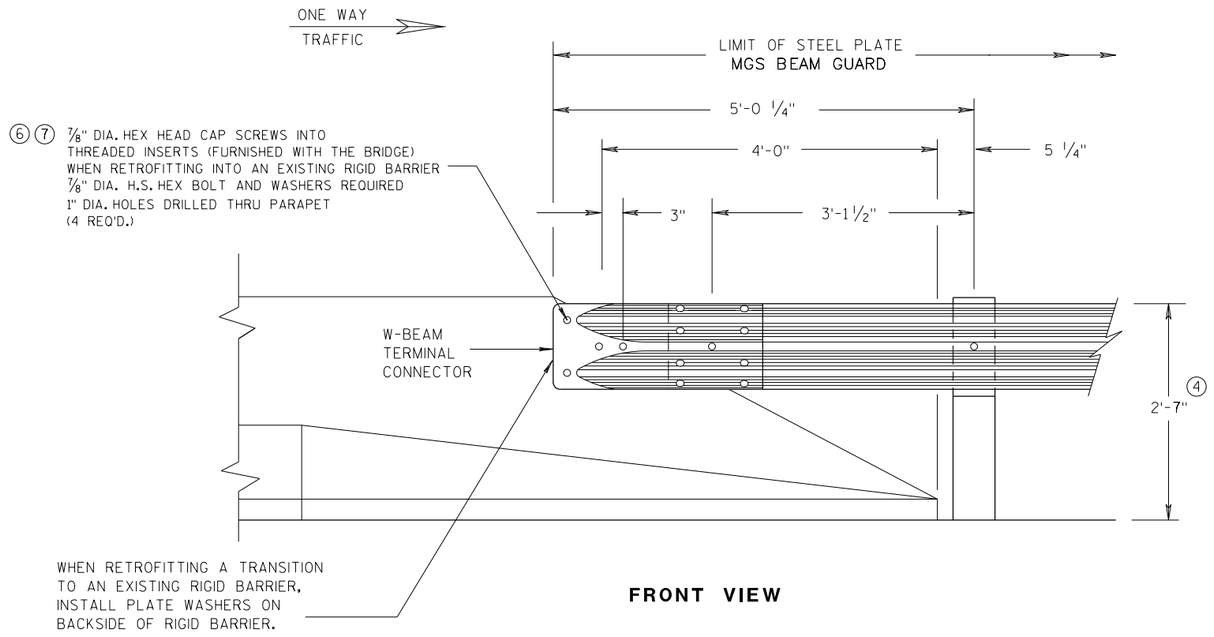
APPROVED
07/2018 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVIS NT
FHWA

6

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

6

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



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

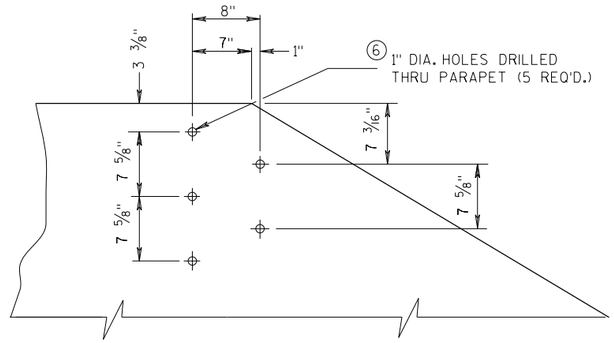
GENERAL NOTES

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

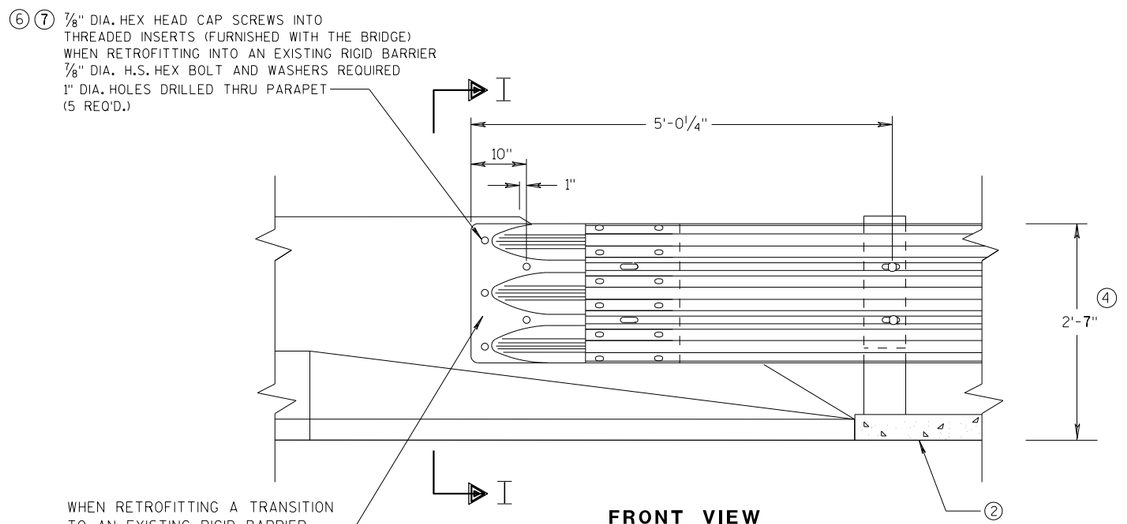
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

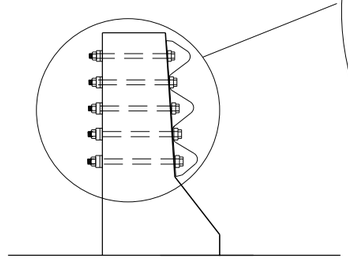
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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.



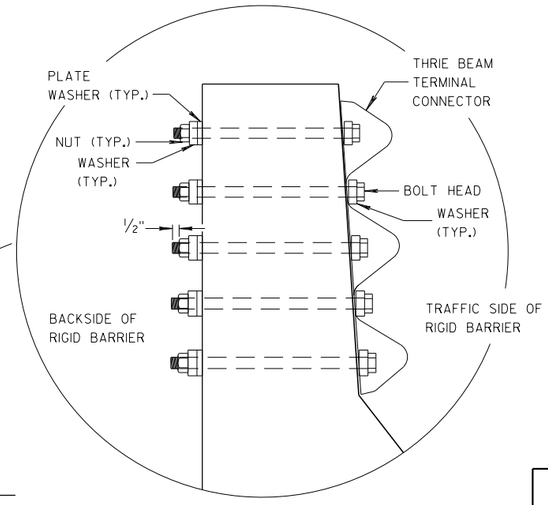
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

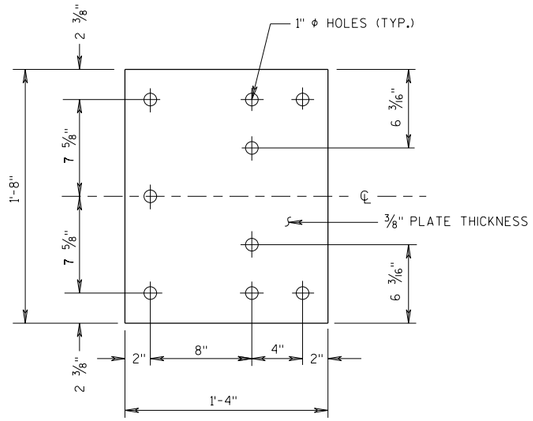
APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS I[illegible]ENT UNIT SUPERVI
FHWA

6

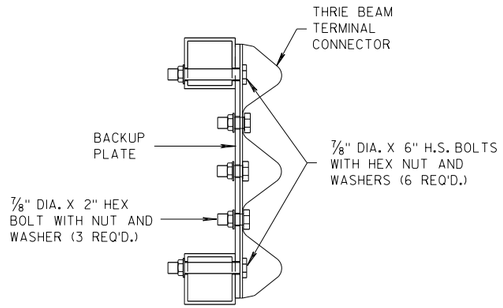
S.D.D. 14 B 45-5f

6

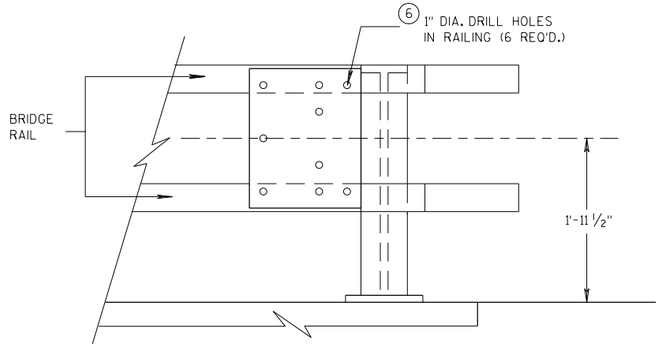
S.D.D. 14 B 45-5f



BACK-UP PLATE DETAIL



SECTION J-J

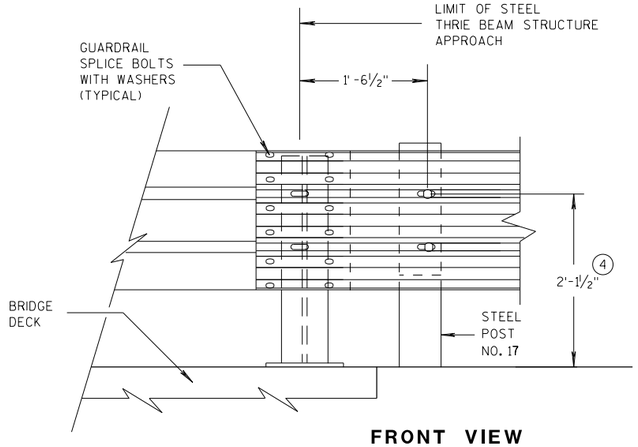


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

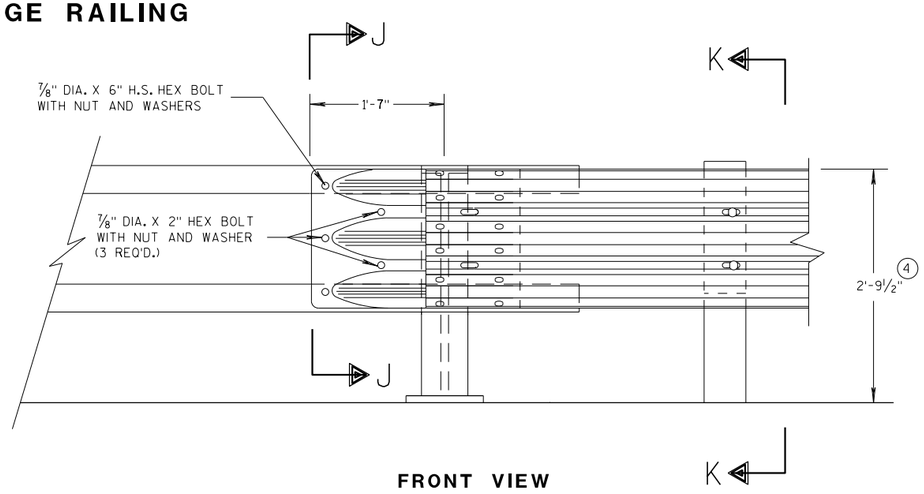
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

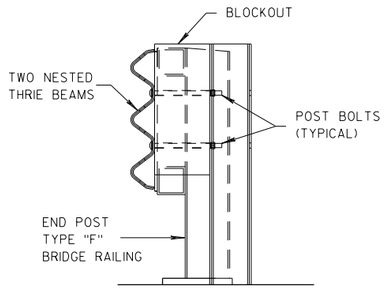


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE
FHWA

/S/ Rodney Taylor 128
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

6

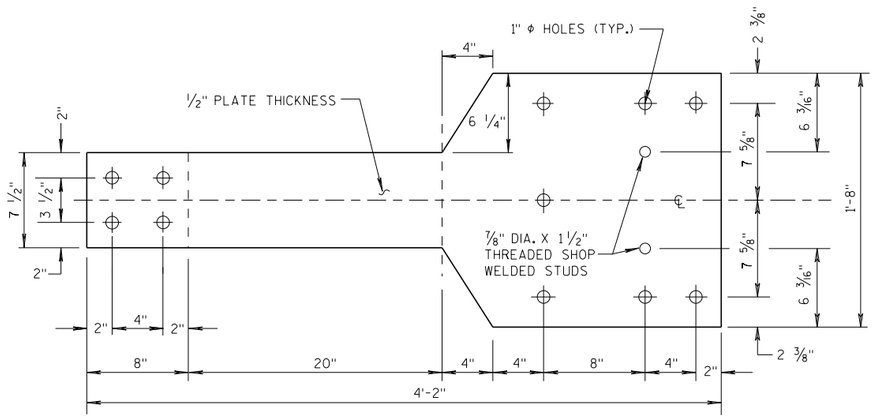
S.D.D. 14 B 45-5g

6

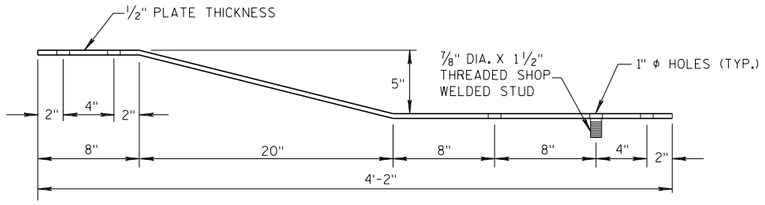
S.D.D. 14 B 45-5g

GENERAL NOTES

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

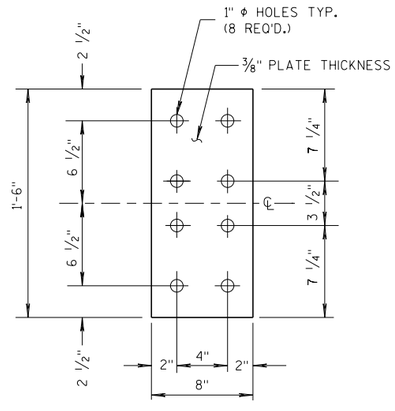


FRONT VIEW



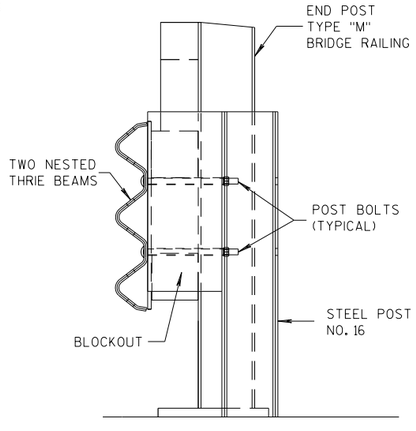
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

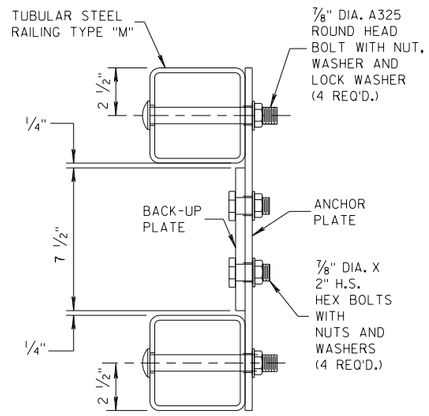


FRONT VIEW

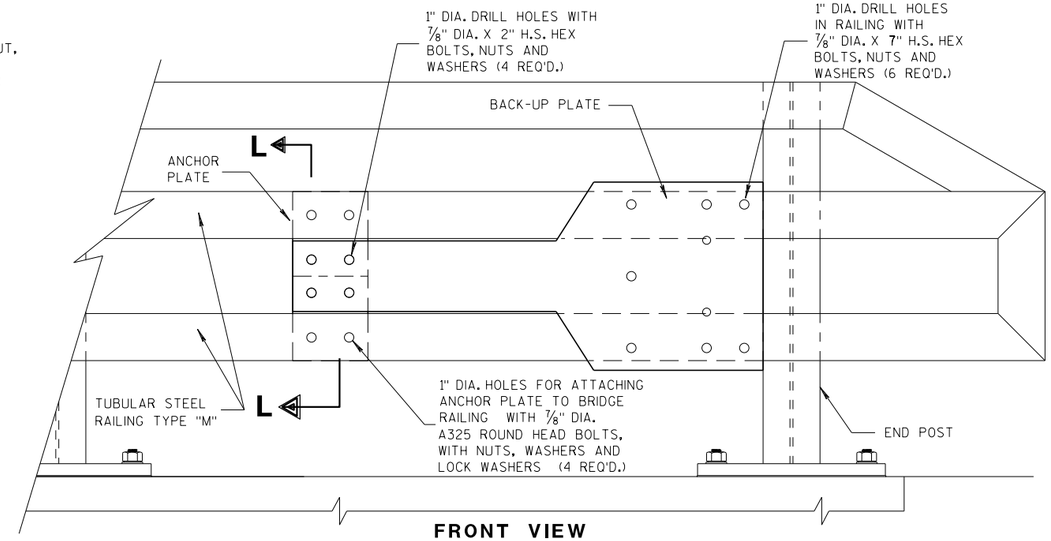
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

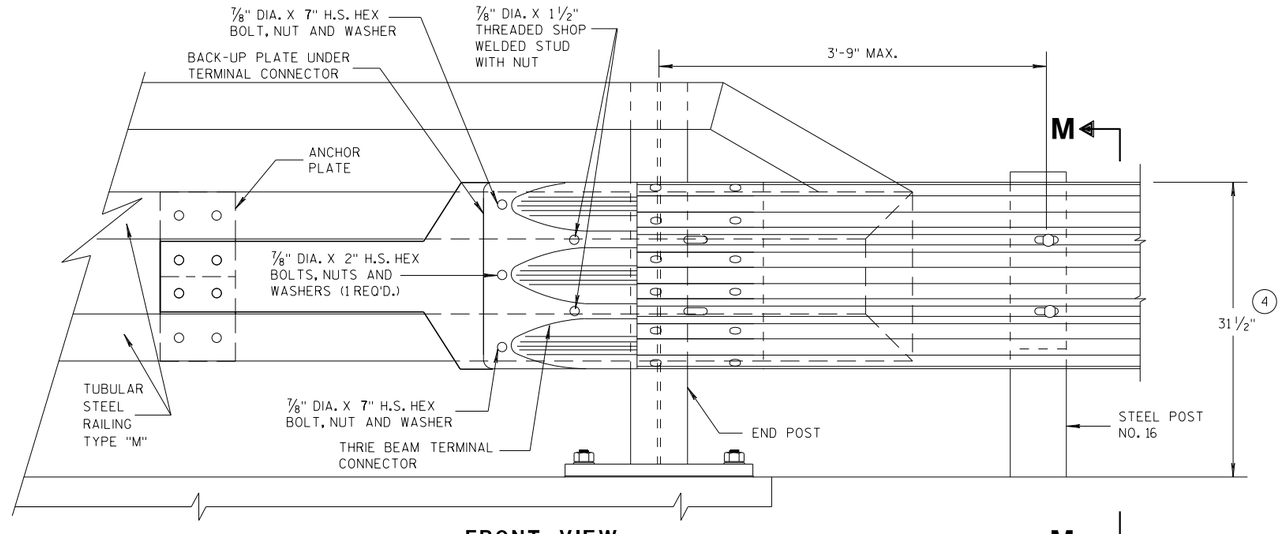


SECTION L-L

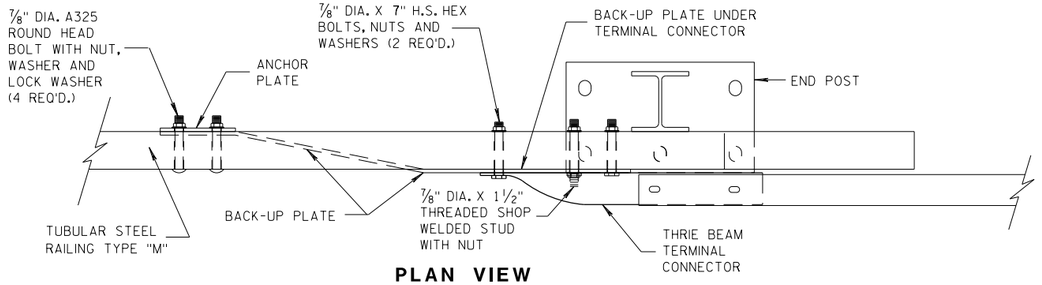


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

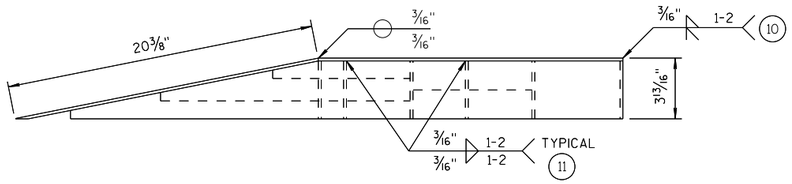
APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

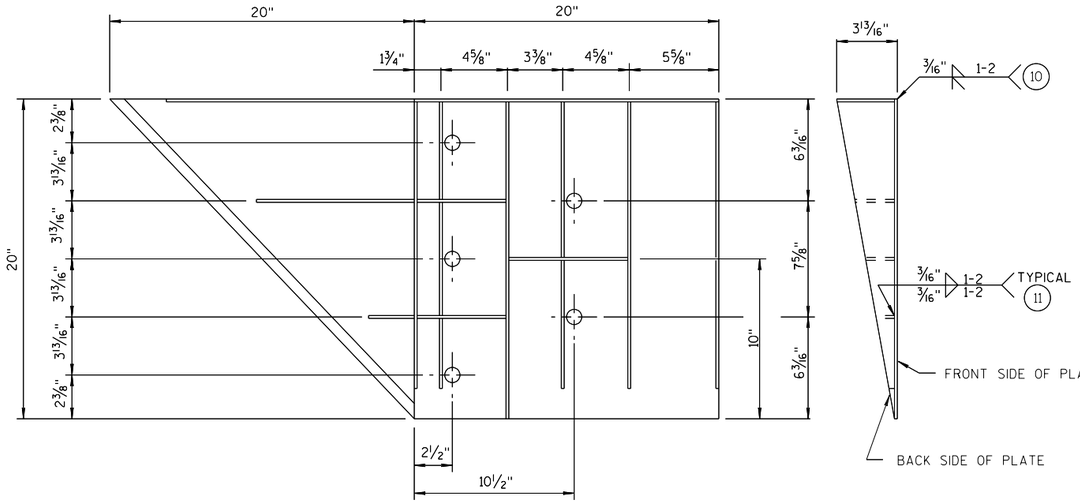
6

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

6

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





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

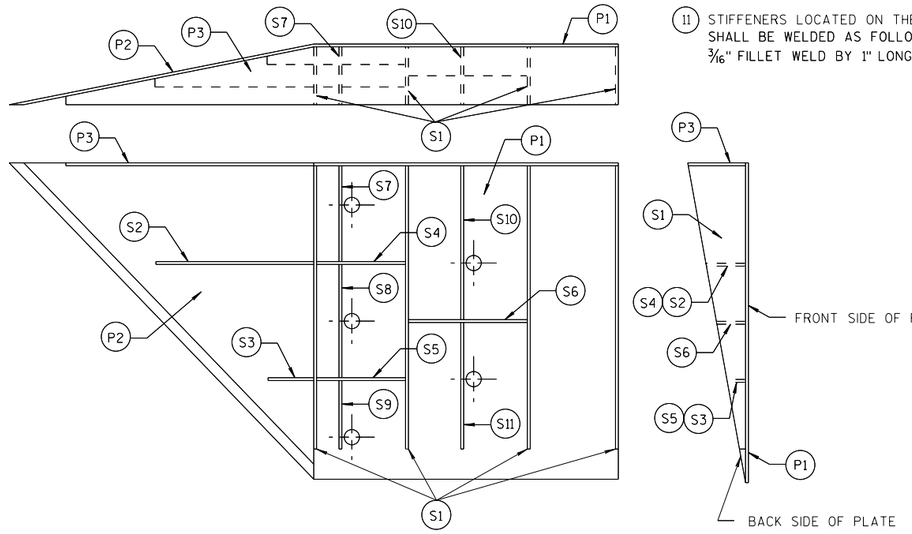


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

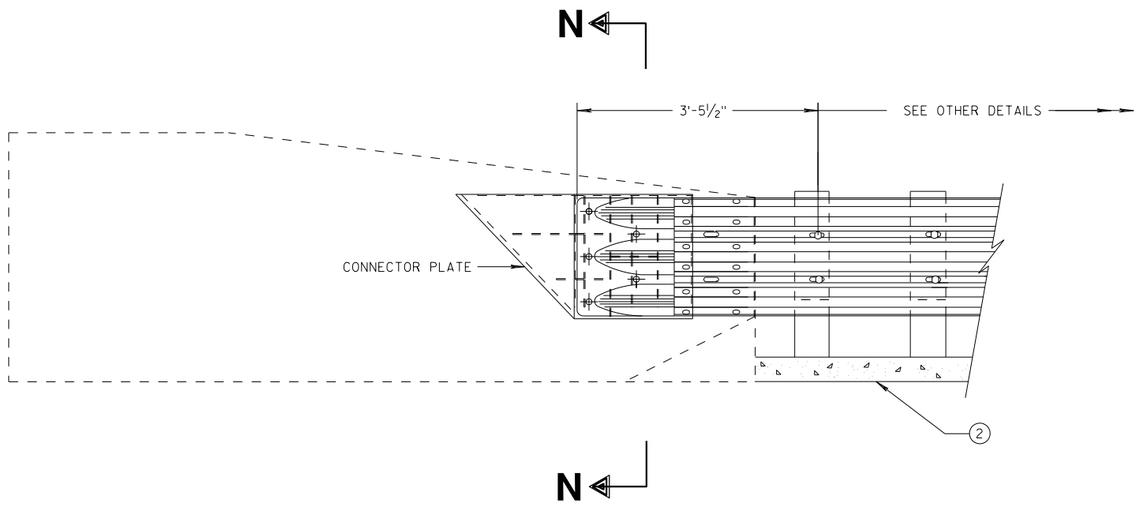
/S/ Rodney Taylor
ROADWAY STANDARDS I
UNIT SUPERVI

6

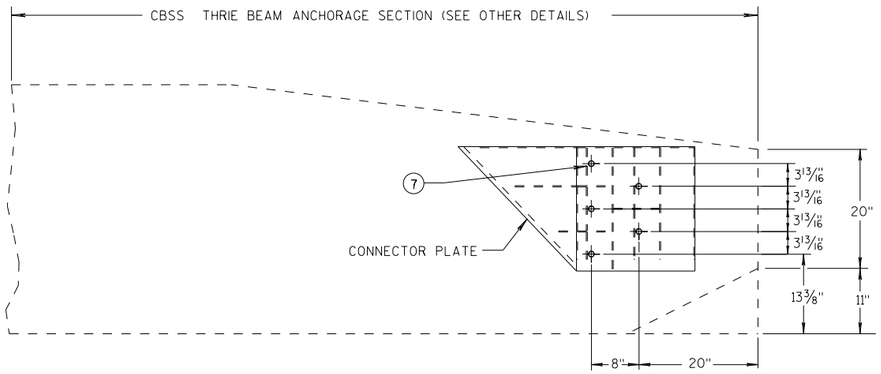
S.D.D. 14 B 45-5i

6

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



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



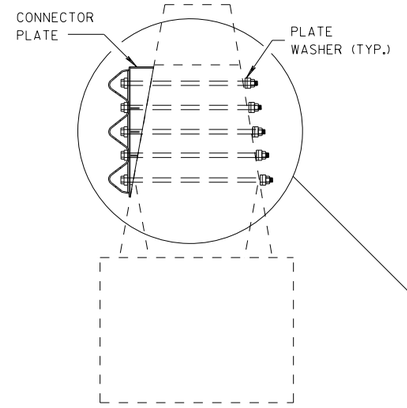
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

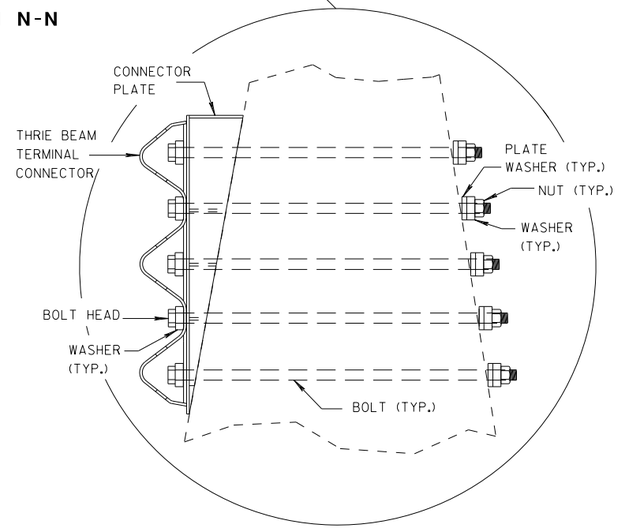
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

(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.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

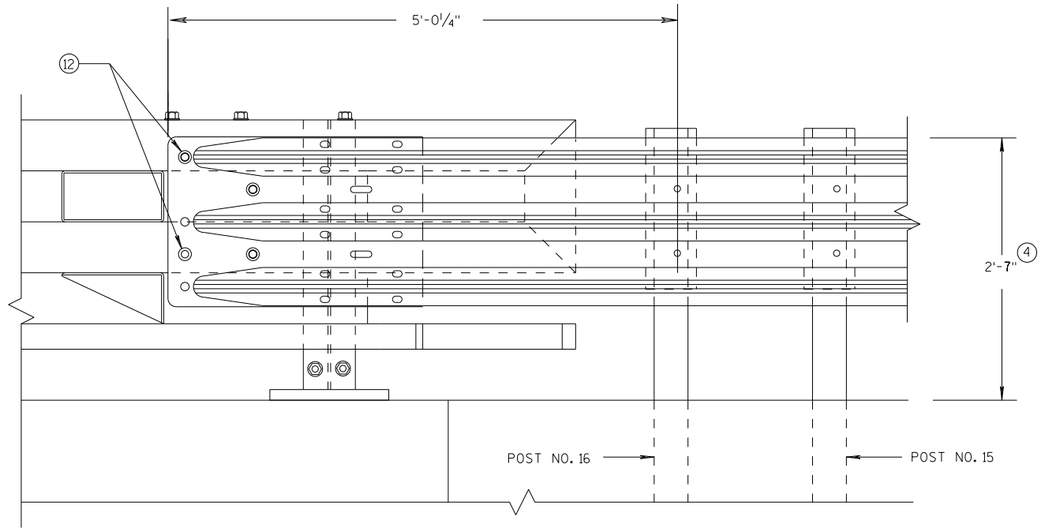
/S/ Rodney Taylor
ROADWAY STANDARDS DI
UNIT SUPERVIS

6

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

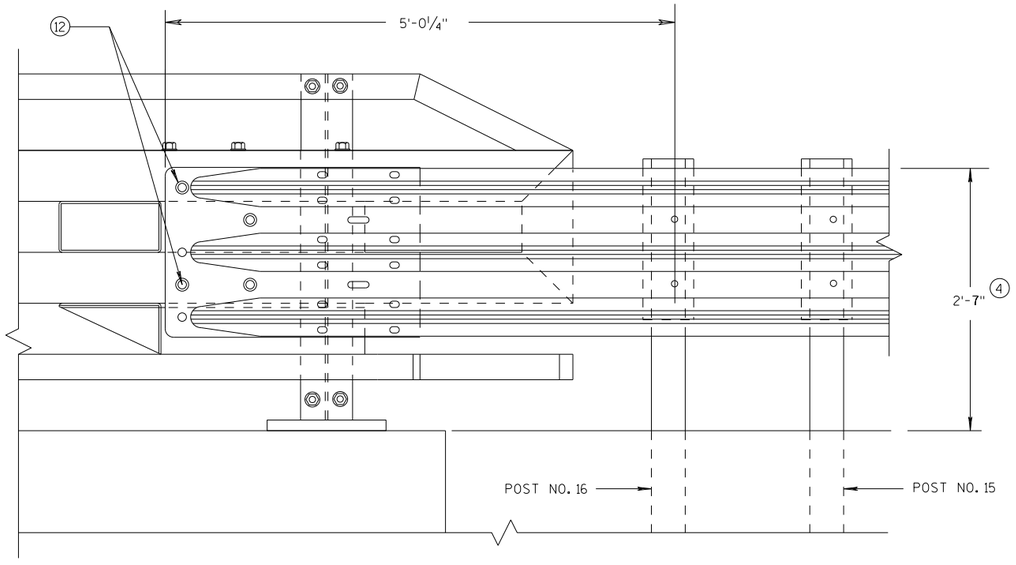
6

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



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

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

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D
UNIT SUPERVIS

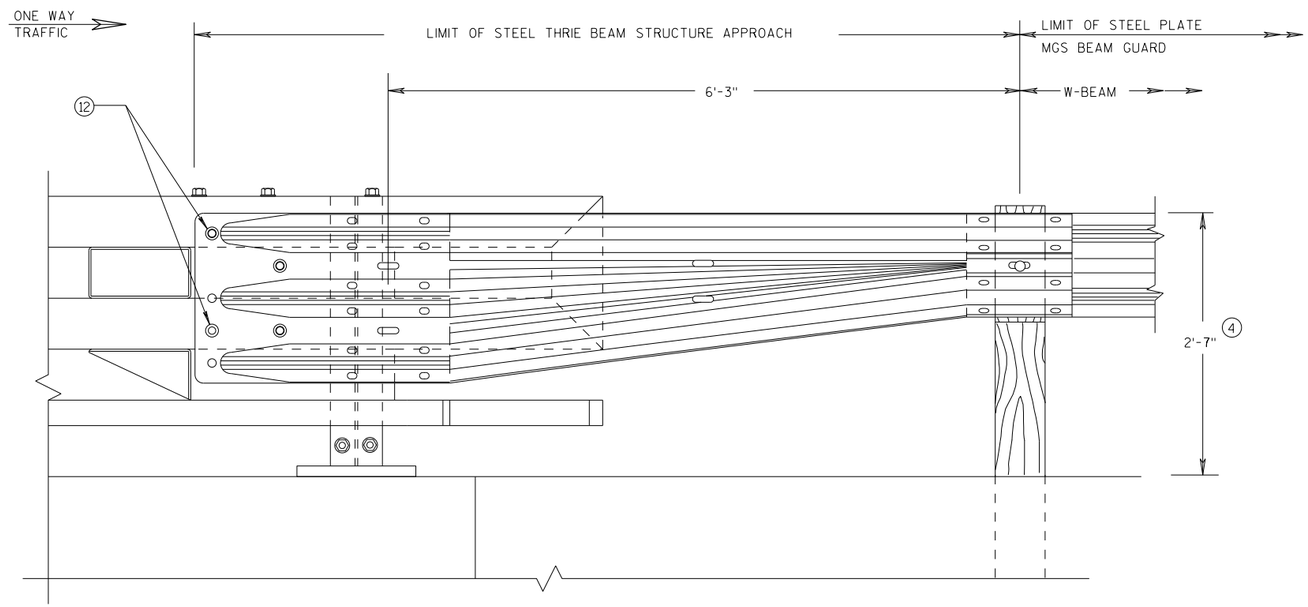
NT

6

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

6

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



FRONT VIEW

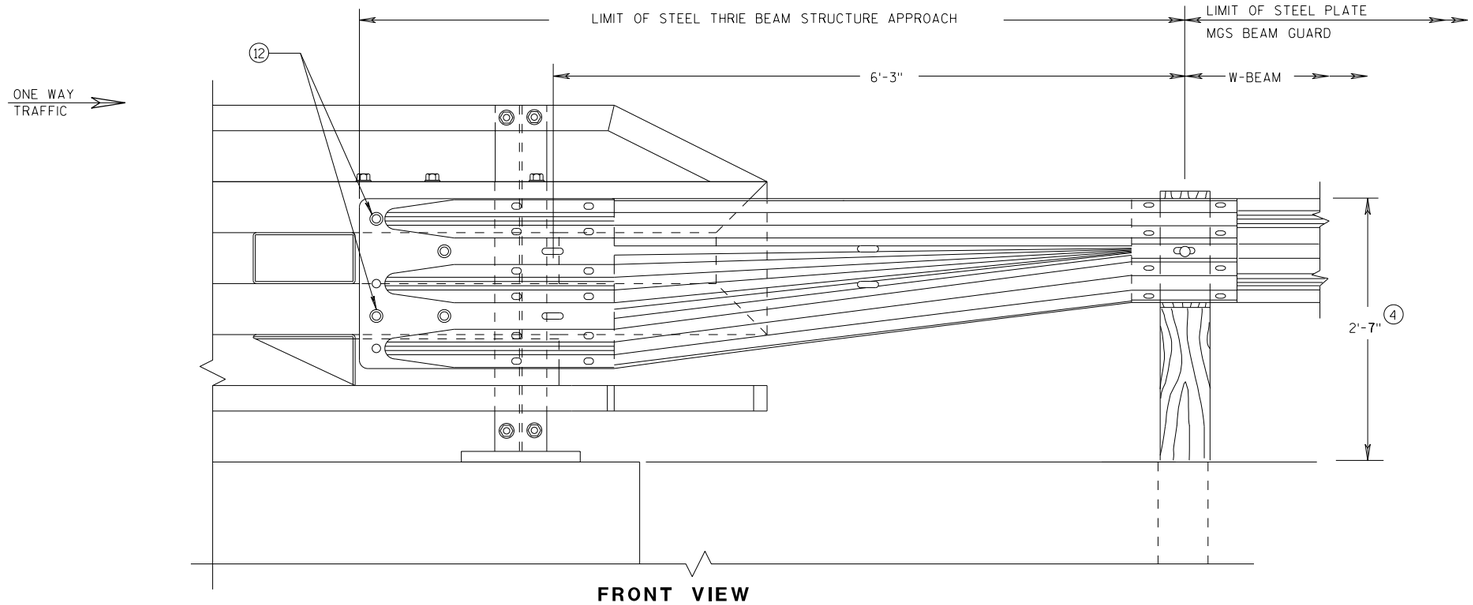
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

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

GENERAL NOTES

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

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(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
7/2018 DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D
UNIT SUPERVIS

133

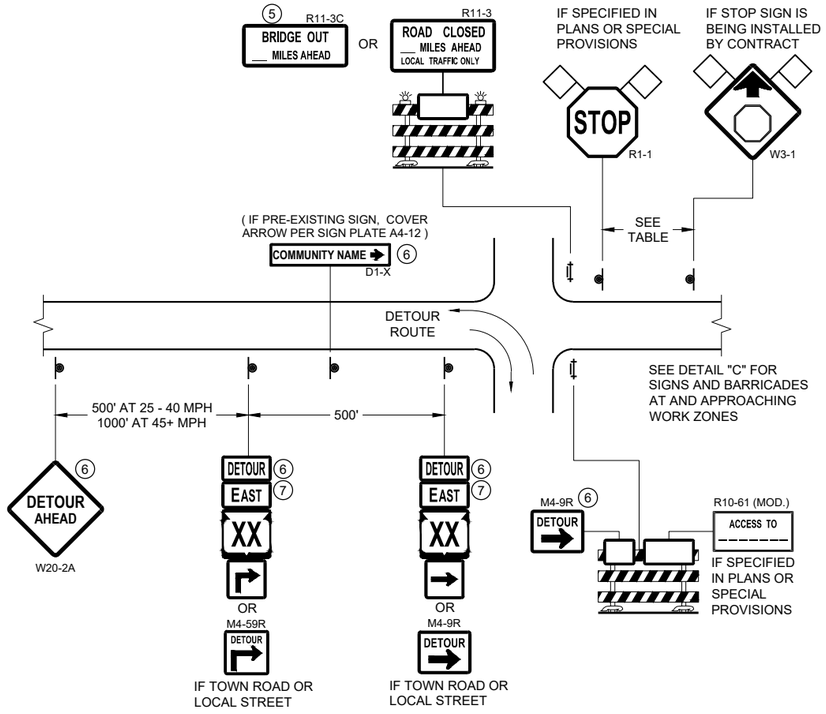
NT

6

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

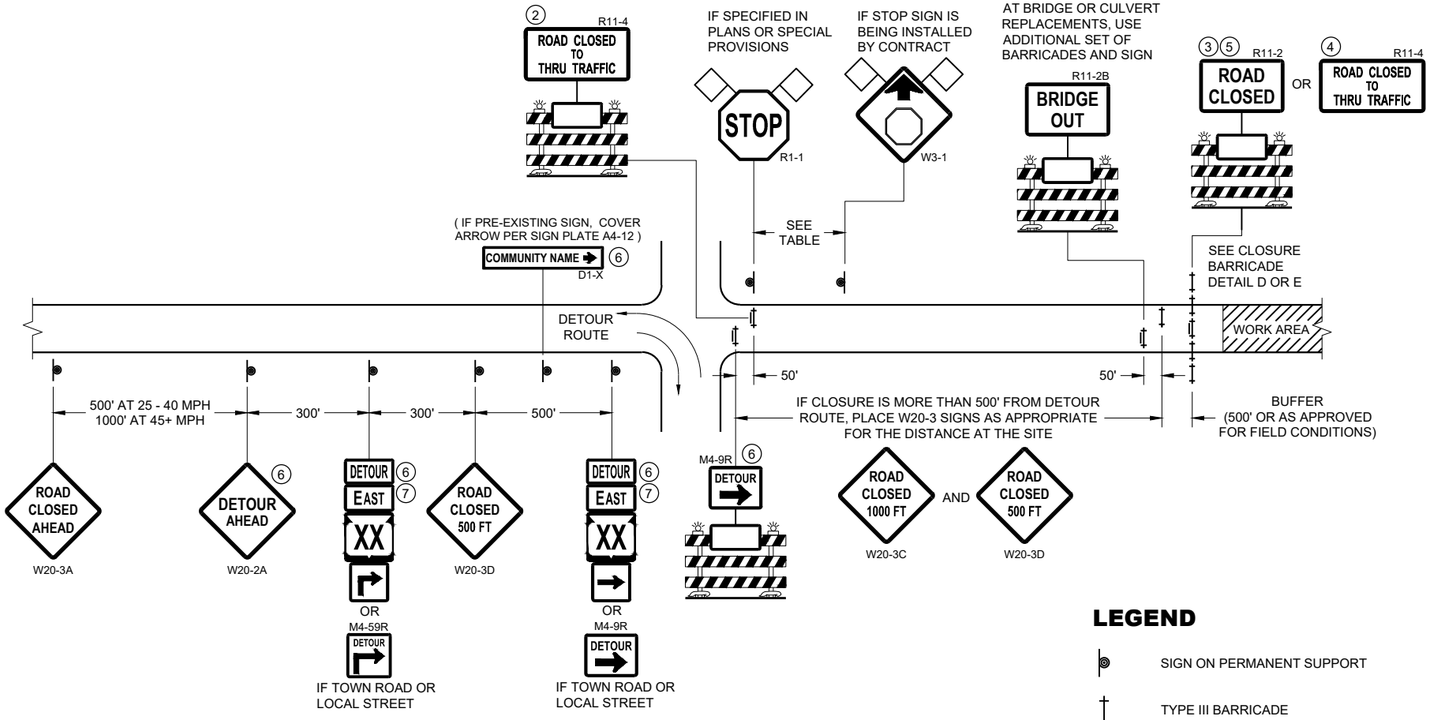
6

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



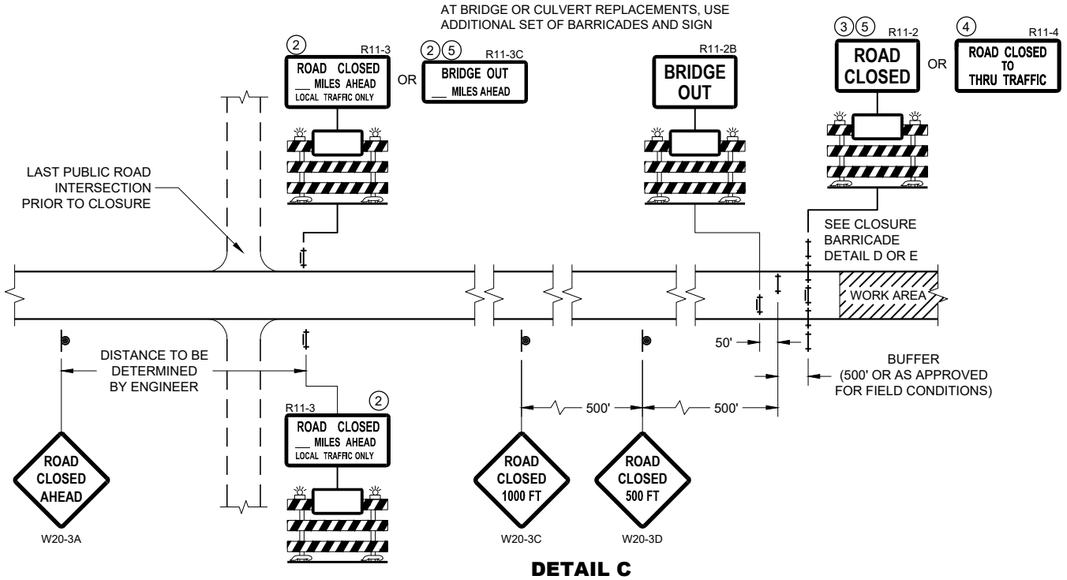
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

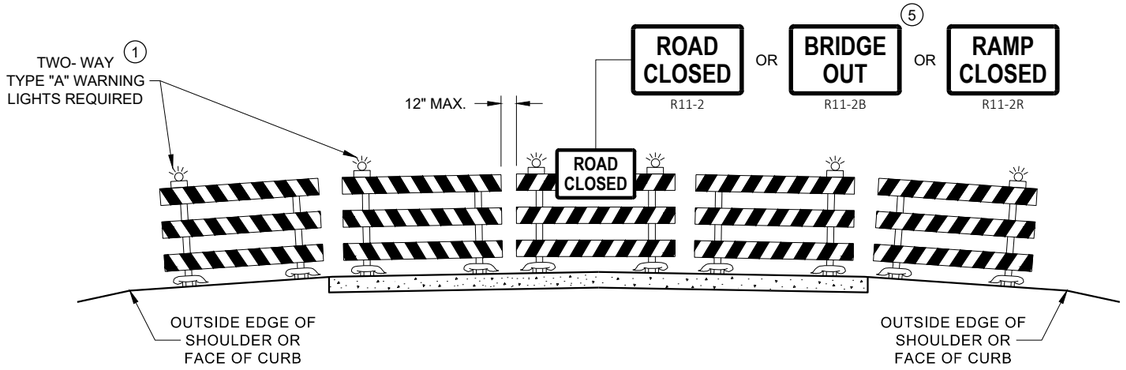
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

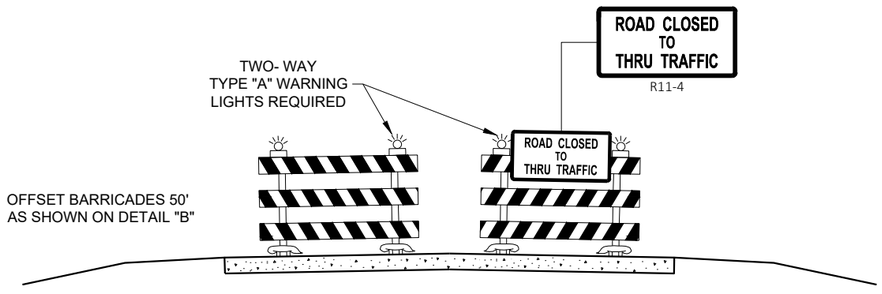
6

SDD 15C02 - 08a

SDD 15C02 - 08a



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
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 08b

6

SDD 15C02 - 08b

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.

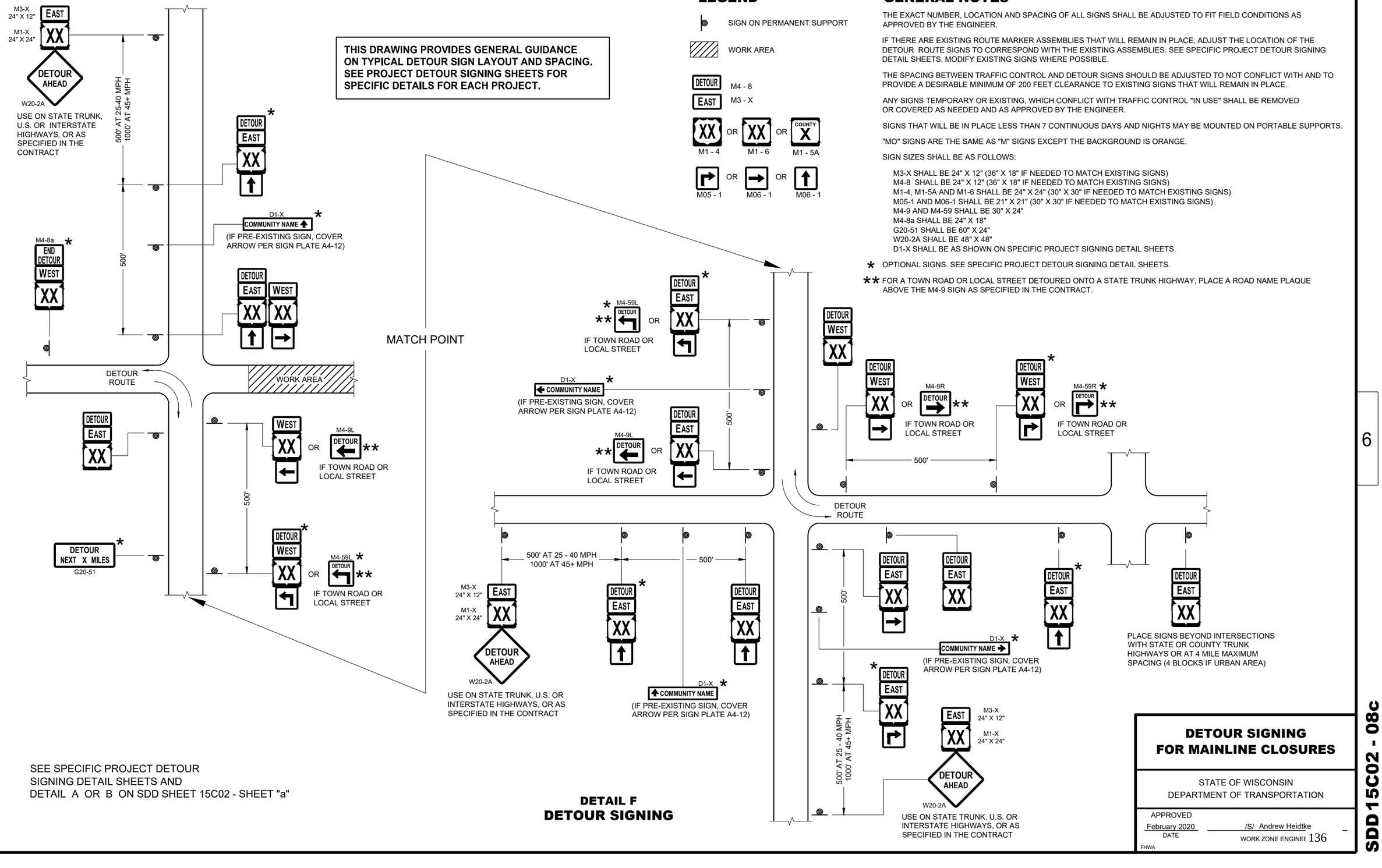
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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" (30" X 30" 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

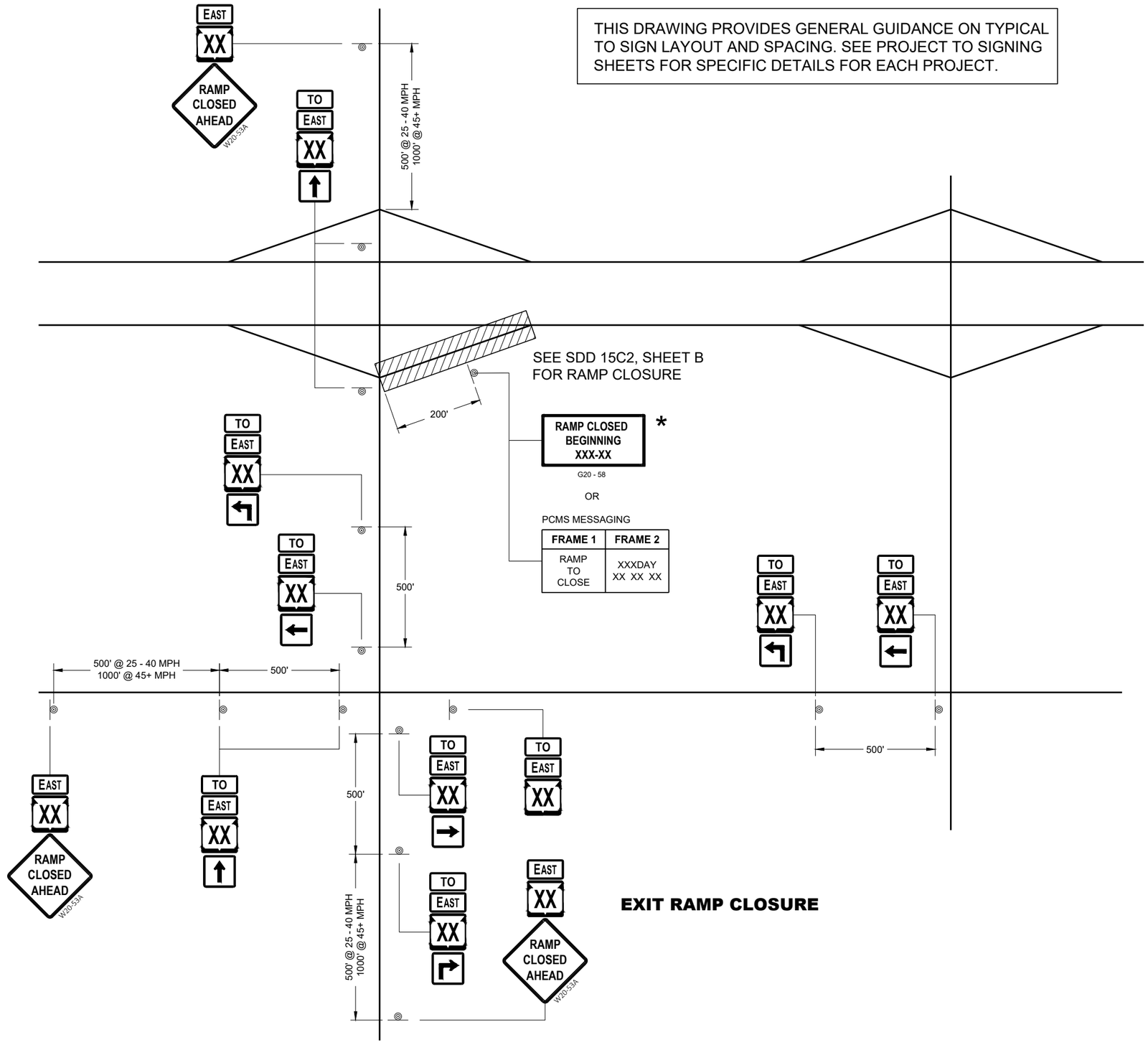
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08c

SDD 15C02 - 08c



EXIT RAMP CLOSURE

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

LEGEND

SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

ON RAMP LANE CLOSURE

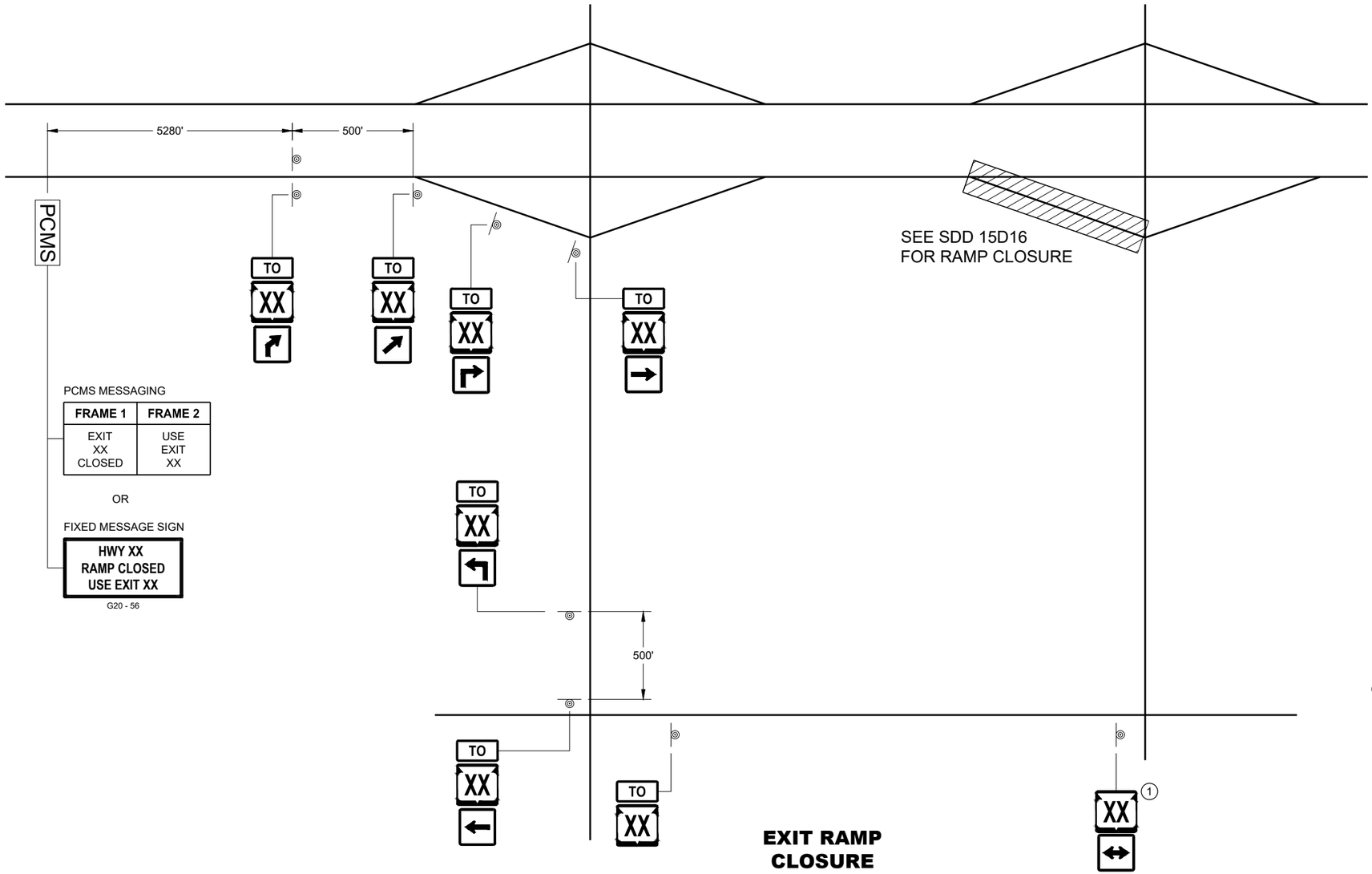
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEER

FHWA

6
SDD 15C02 - 08d

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

EXIT RAMP CLOSURE

LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M05 - 2 OR M06 - 1 OR M06 - 2 OR M06 - 4

GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE "TO" MO-4 ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 4, M1 - 5A, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

(1) ONLY ADD IF THERE ARE NO EXISTING ROUTE MARKERS FOR THE INTERSECTING ROADWAY.

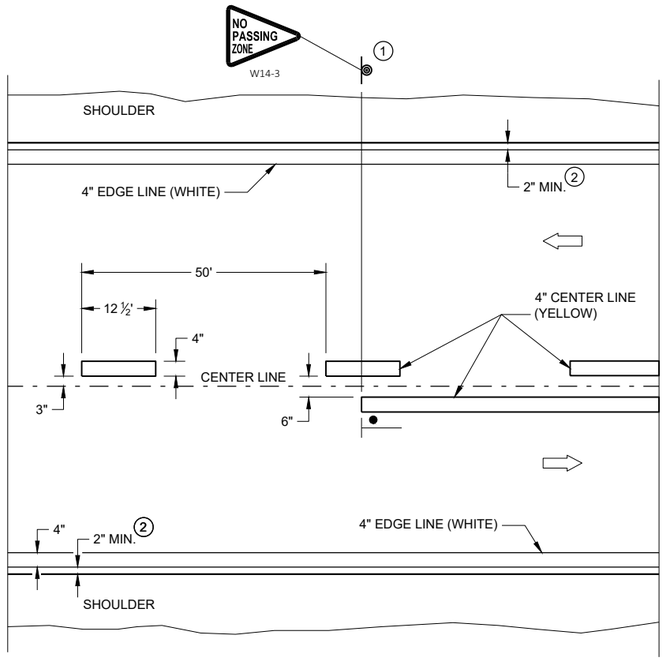
OFF RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

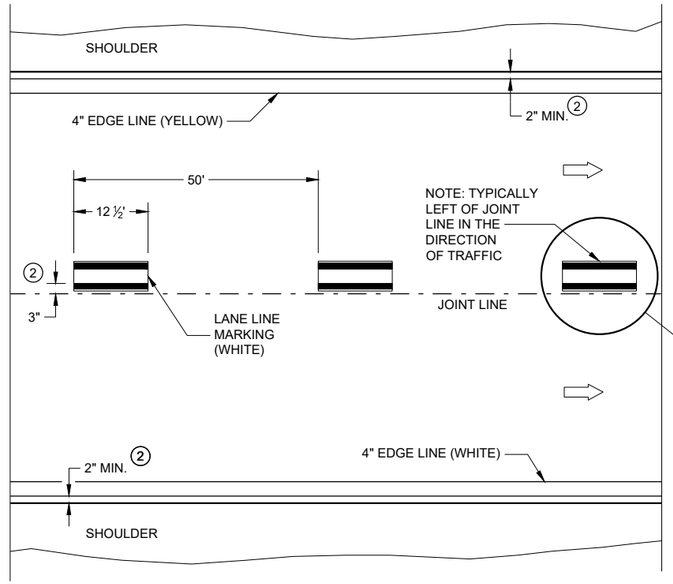
APPROVED
February 2020 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEE
FHWA

SDD 15C02 - 08e

SDD 15C02 - 08e

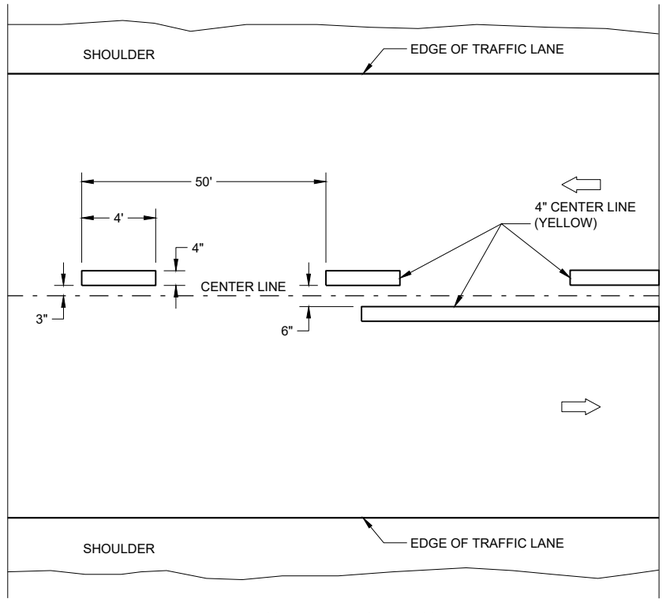


TWO WAY TRAFFIC

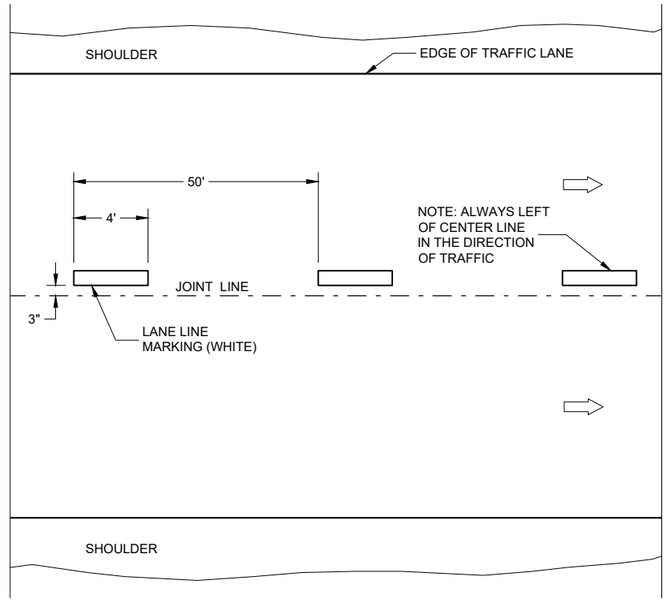


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

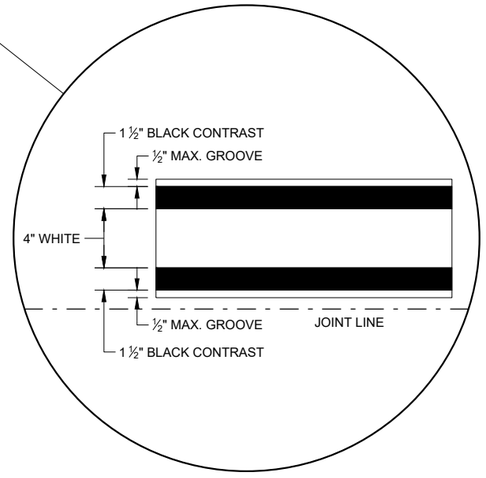
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

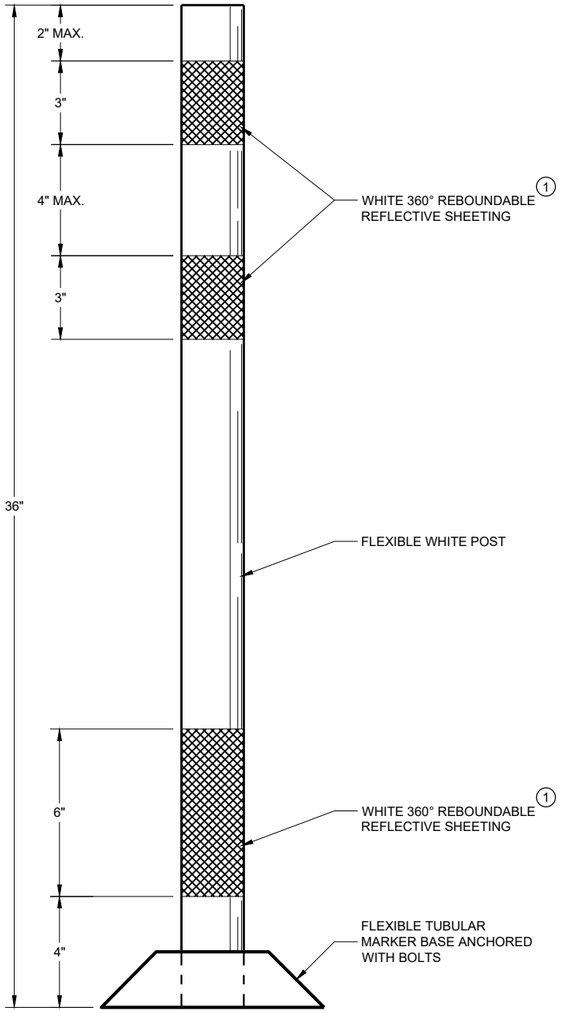
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

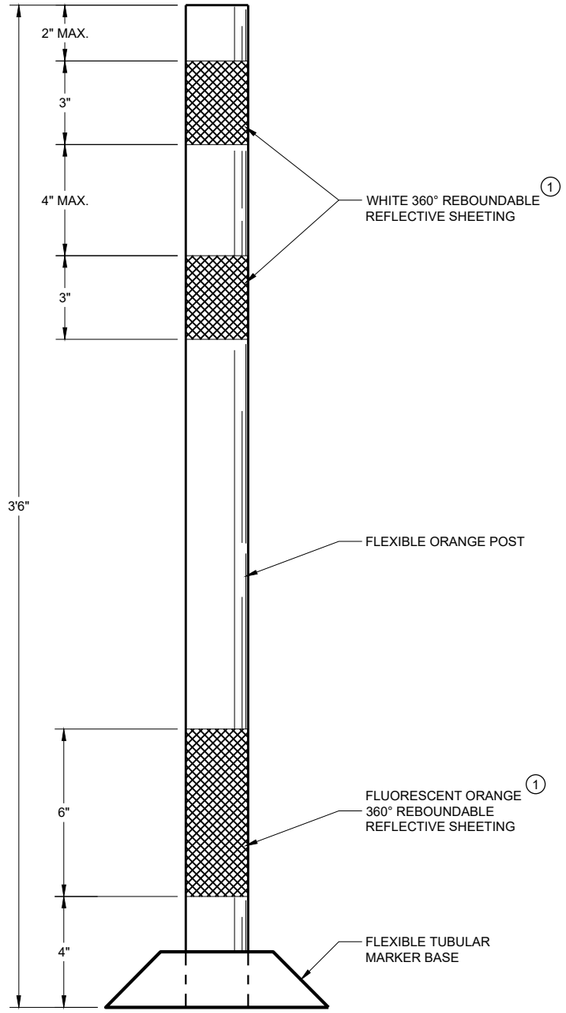
FHWA

SDD 15C08 - 20a

SDD 15C08 - 20a



FLEXIBLE TUBULAR MARKER POST PERMANENT CROSSOVER



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

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

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

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

6

SDD 15C11 - 08a

CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

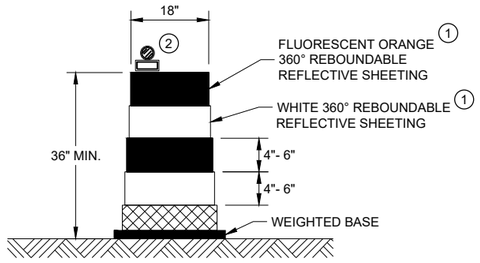
FHWA

6

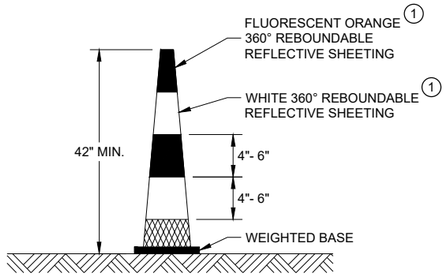
SDD 15C11 - 08a

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.

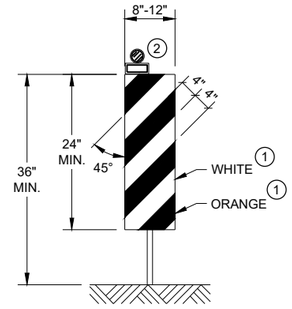


DRUM



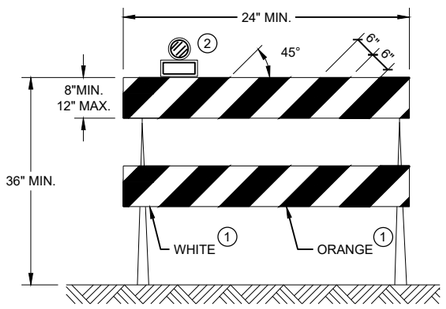
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



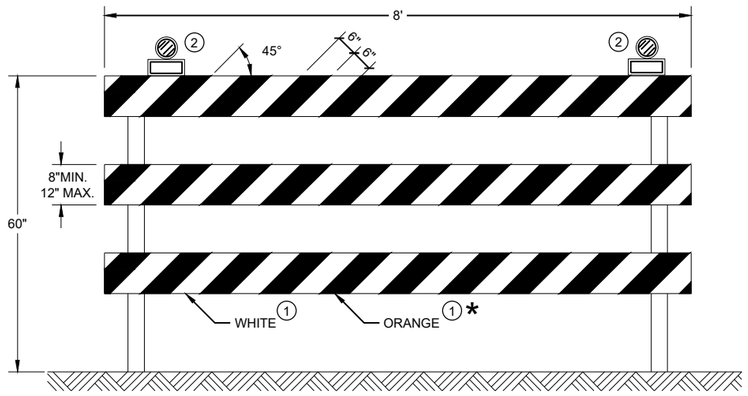
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD15C11 - 08b

6

SDD15C11 - 08b

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.

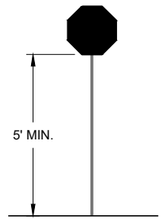
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR 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

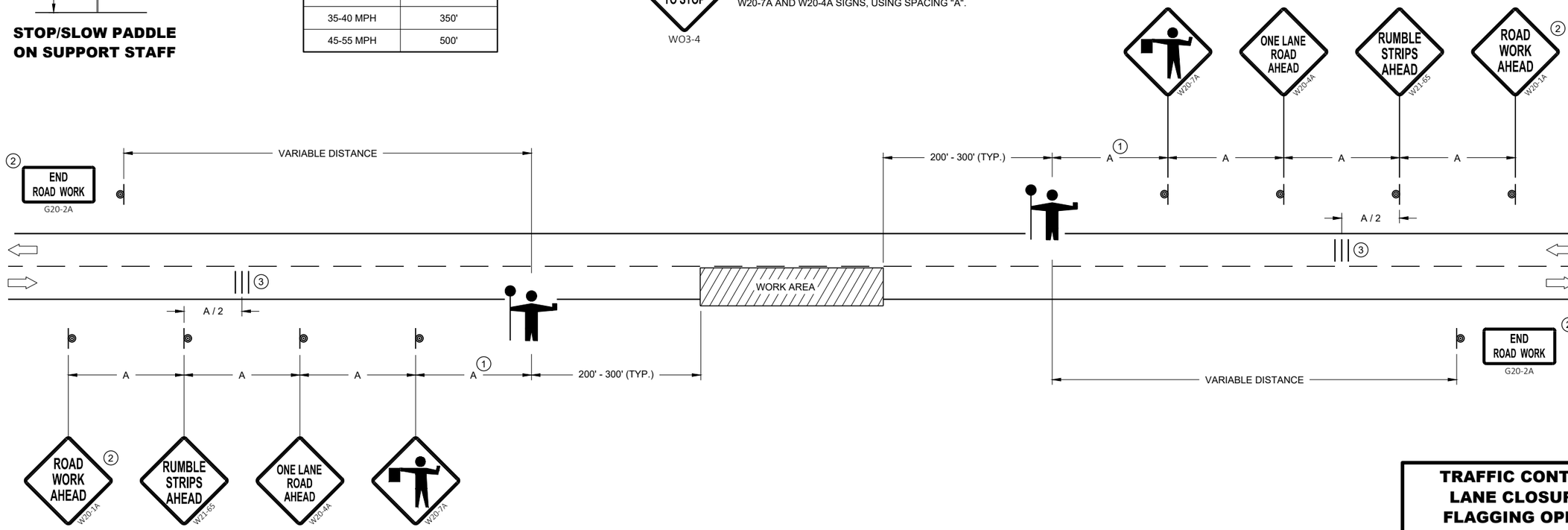
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

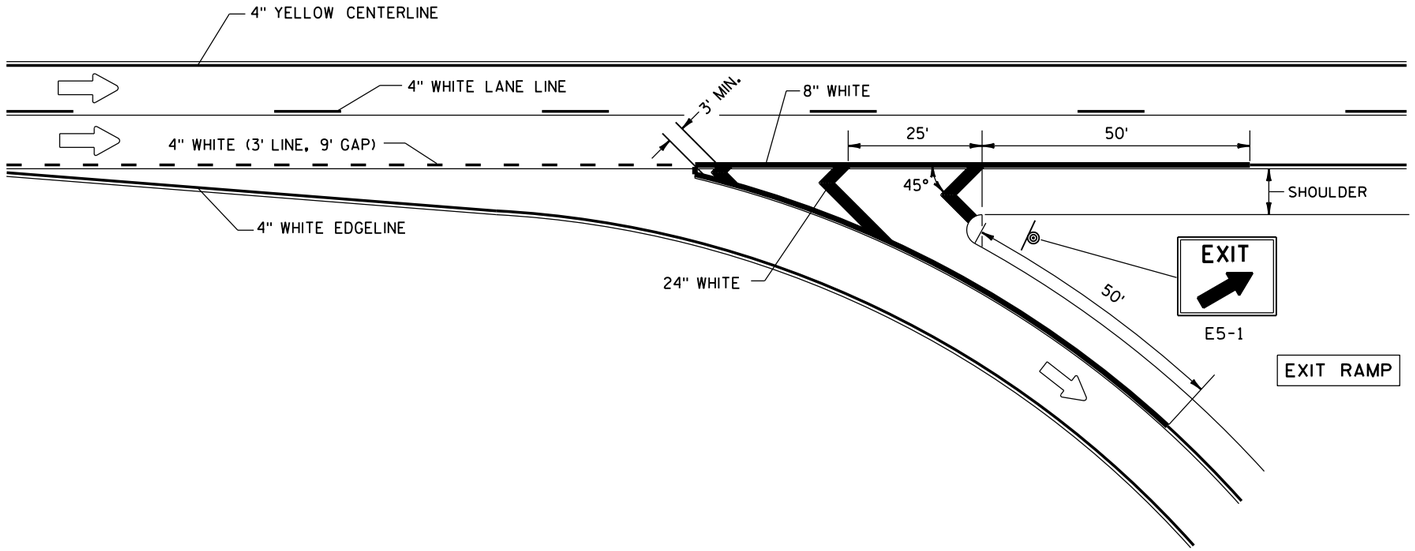
APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C12 - 07



PAVEMENT MARKING FOR EXIT RAMP

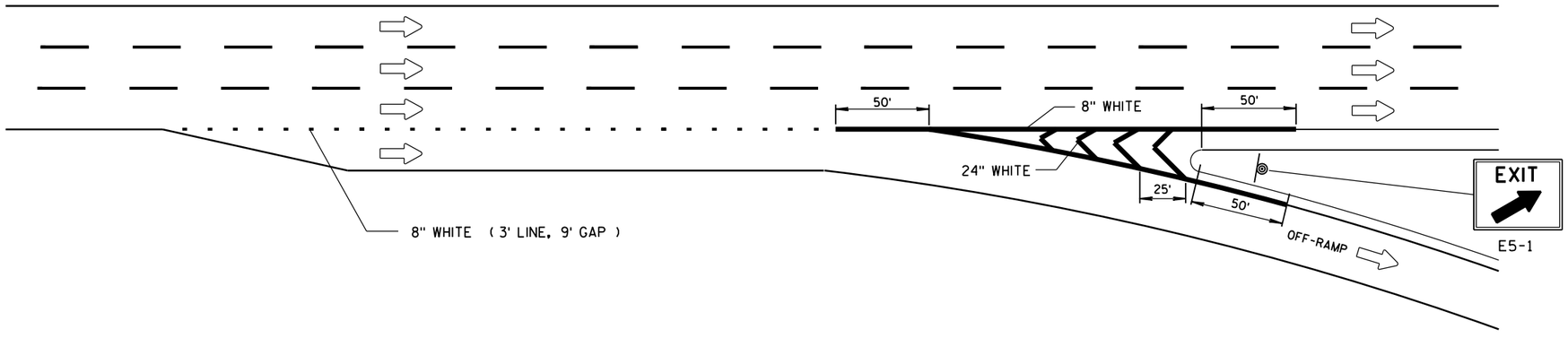
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

DIRECTION OF TRAVEL

SIGN ON PERMANENT SUPPORT



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT-RAMP

6

S.D.D. 15 C 31-3a

PAVEMENT MARKING (RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

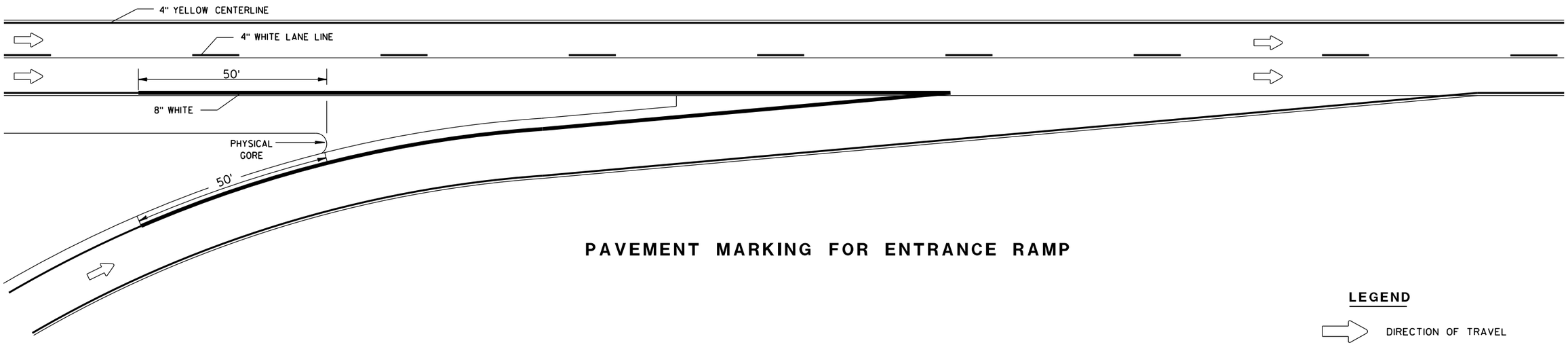
6

S.D.D. 15 C 31-3a

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

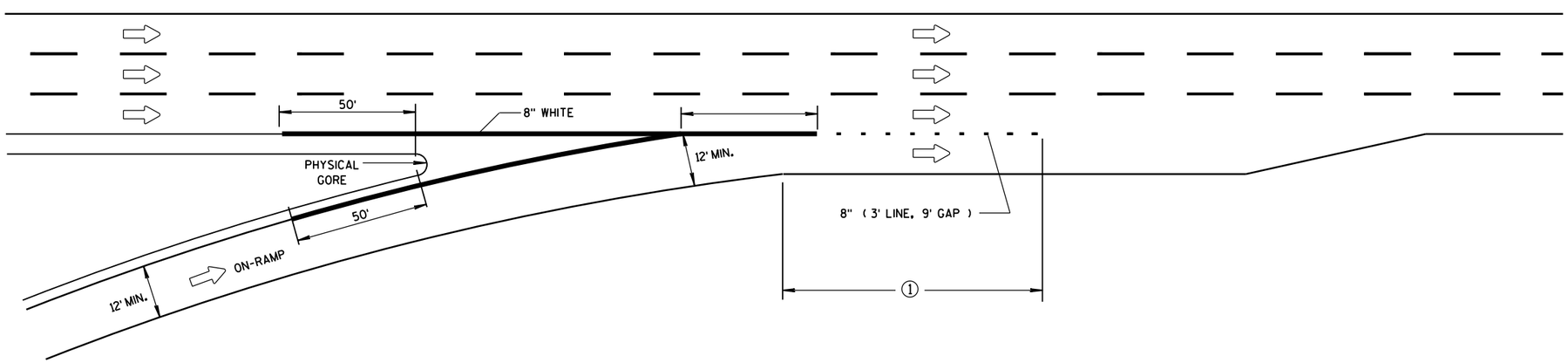
① ½ LENGTH OF FULL WIDTH ACCELERATION LANE.



PAVEMENT MARKING FOR ENTRANCE RAMP

LEGEND

DIRECTION OF TRAVEL



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP

PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

6

S.D.D. 15 C 31-3c

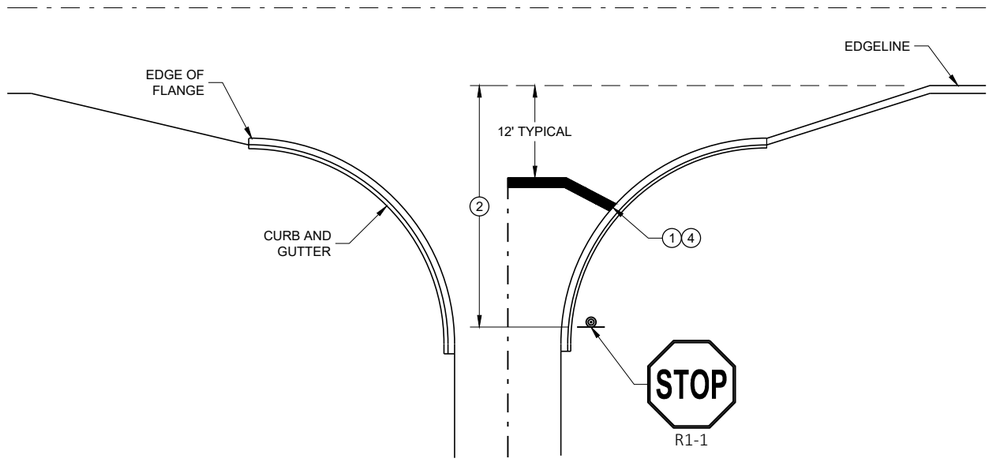
6

S.D.D. 15 C 31-3c

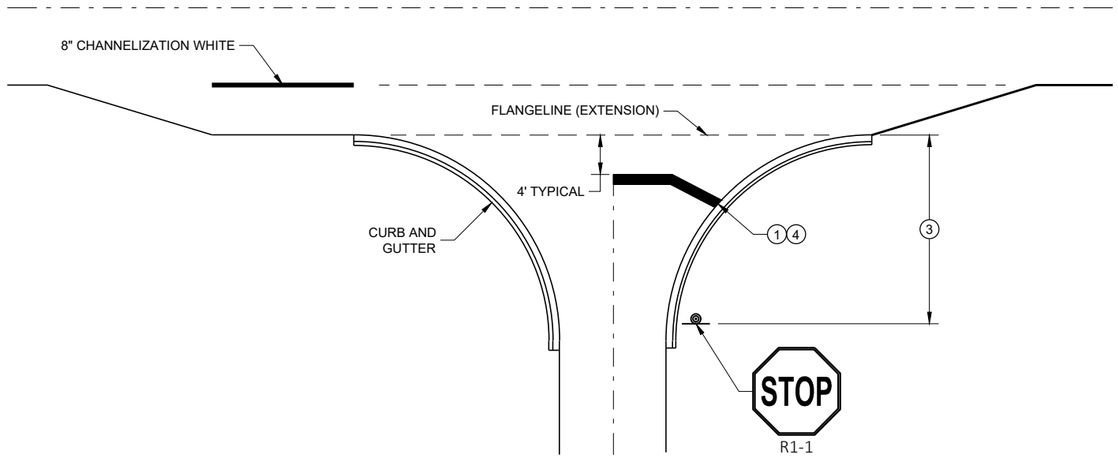
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

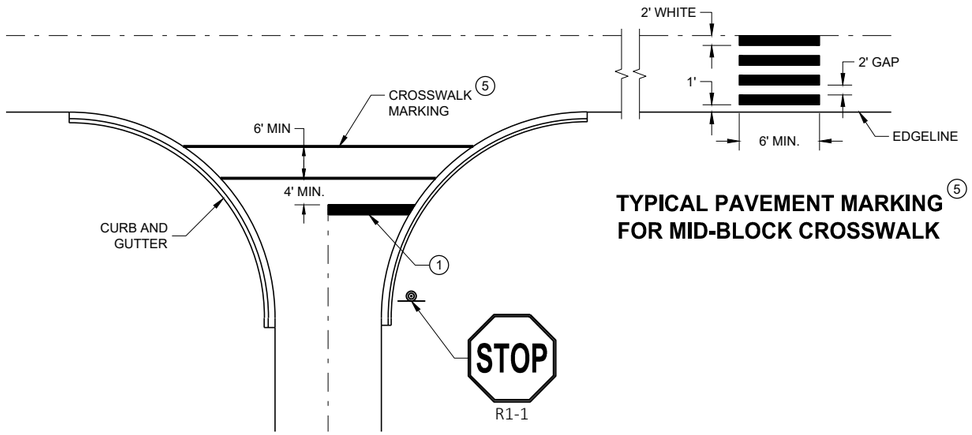
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

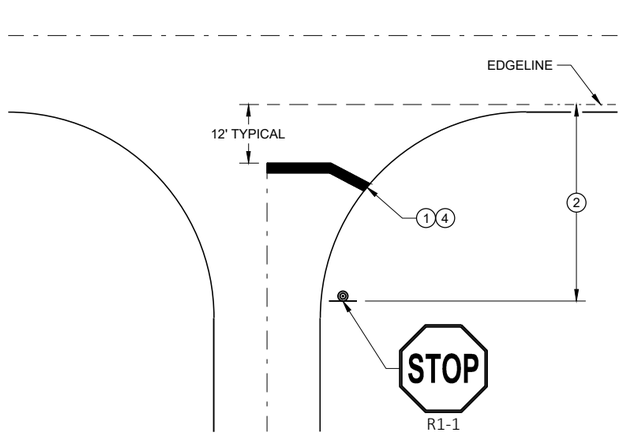


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING 5 FOR MID-BLOCK CROSSWALK



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C33 - 04

LEGEND

SIGN ON PERMANENT SUPPORT

DELINEATOR, FLEXIBLE/TUBULAR MARKER

DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50 FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4 INCH DOUBLE YELLOW.



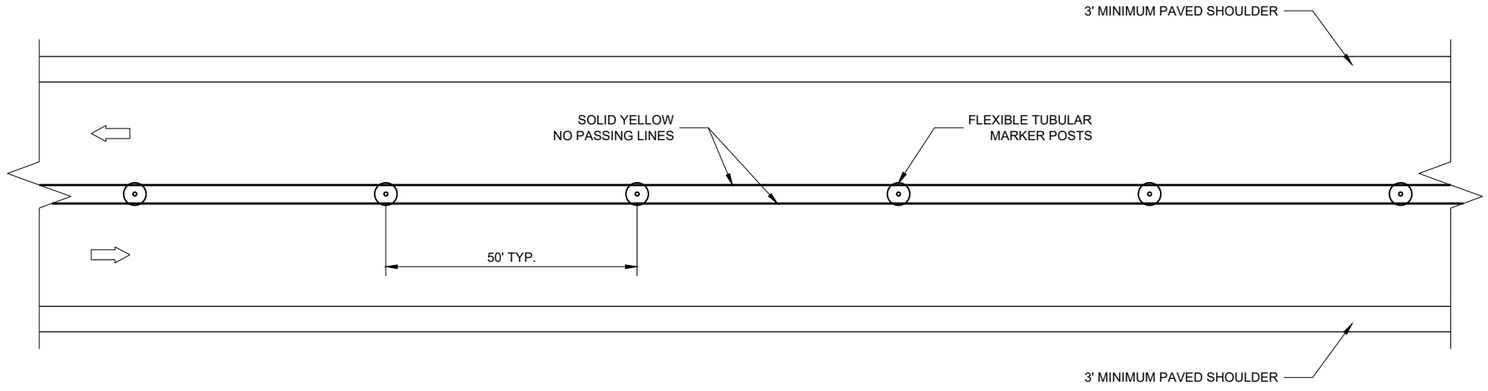
(1)



(2)

(1) THE WO6-3 AND WO57-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND / OR 500 FEET BEYOND ANY SIDE ROAD. THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE WO6-3 AND THE WO57-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN THE SIGNS.

(2) CONVENTIONAL: 24" X 30"
FREEWAY AND EXPRESSWAY: 36" X 48"



TWO LANE, TWO WAY OPERATION

TRAFFIC CONTROL
TWO LANE TWO WAY
OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
STATE TRAFFIC ENGINEER

FHWA

6

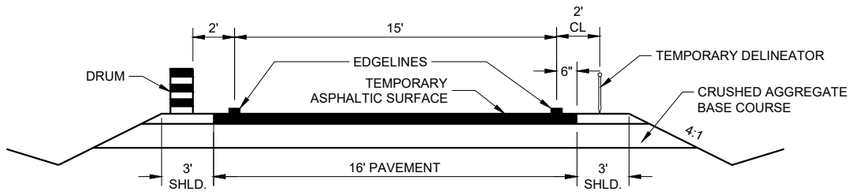
SDD 15D06 - 04

6

SDD 15D06 - 04

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- DELINEATOR FLEXIBLE / TUBULAR MARKER
- TEMPORARY DELINEATOR - WHITE (STEEL POST WITH SINGLE DELINEATOR)
- TYPE "A" WARNING LIGHT (FLASHING)
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGS, 16" X 16" MIN., ORANGE
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKINGS
- WORK AREA
- TEMPORARY CROSSOVER ASPHALTIC PAVEMENT



TYPICAL RAMP CROSSOVER ROADWAY DIMENSIONS

** ADJUST RAMP SPEED AS NEEDED IN THE FIELD. DISTANCE TO SIGN LOCATION SHALL ALSO BE PLACED ACCORDING TO TABLE.

** TABLE FOR ADVANCE WARNING SIGN DISTANCE (FT)

POSTED SPEED LIMIT (MPH)	DESIRED EXIT RAMP SPEED (MPH)					
	10	20	30	40	50	60
45	350	300	250			
50	425	400	325	225		
55	500	475	400	300		
60	575	550	500	400	300	
65	650	625	575	500	375	100
70	650	625	575	500	375	375

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

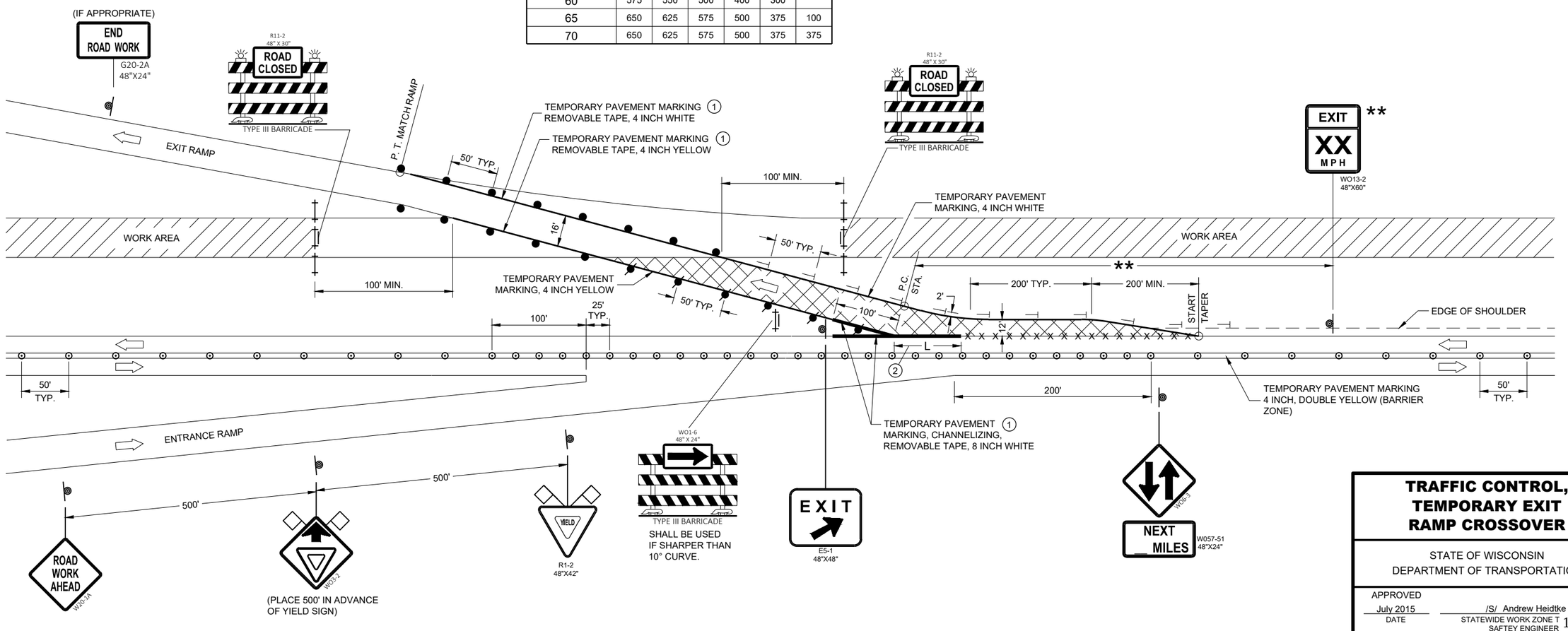
THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

WORK ALONG EDGES OF RAMP SHALL MAINTAIN A 10 FOOT AREA CLEAR OF PHYSICAL OBSTRUCTIONS SUCH AS DROP OFFS FROM PAVEMENT REMOVAL OR BROKEN CONCRETE CHUNKS DURING PAVEMENT REMOVAL. THESE AREAS SHALL BE LEVELED WITH TEMPORARY FILL TO PROTECT THE TRAVELING PUBLIC WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE CROSSOVER.

TRAFFIC CONTROL FOR RAMP CROSSOVERS ARE TYPICAL FOR ALL CONSTRUCTION PHASES.

(1) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USE OF CROSSOVER. OTHERWISE TEMPORARY PAVEMENT MARKING MAY BE USED.

(2) LENGTH "L" SHALL BE REQUIRED WHEN TANGENT LENGTH OF EXIT RAMP PARALLEL TO MAINLINE EXCEEDS 300 FEET. LENGTH SHALL BE EQUAL TO THE EXIT RAMP TANGENT LENGTH MINUS 300 FEET OR AS APPROVED BY THE ENGINEER AND SHALL CHANGE TO ACCOMMODATE PAVING GAPS.



TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2015
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFTEY ENGINEER

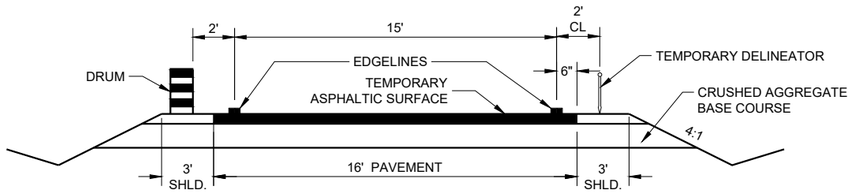
FHWA

SDD 15D07 - 04

SDD 15D07 - 04

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- DELINEATOR FLEXIBLE / TUBULAR MARKER
- TEMPORARY DELINEATOR - WHITE (STEEL POST WITH SINGLE DELINEATOR)
- TYPE "A" WARNING LIGHT (FLASHING)
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGS, 16" X 16" MIN., ORANGE
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKINGS
- WORK AREA
- TEMPORARY CROSSOVER ASPHALTIC PAVEMENT



TYPICAL RAMP CROSSOVER ROADWAY DIMENSIONS

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

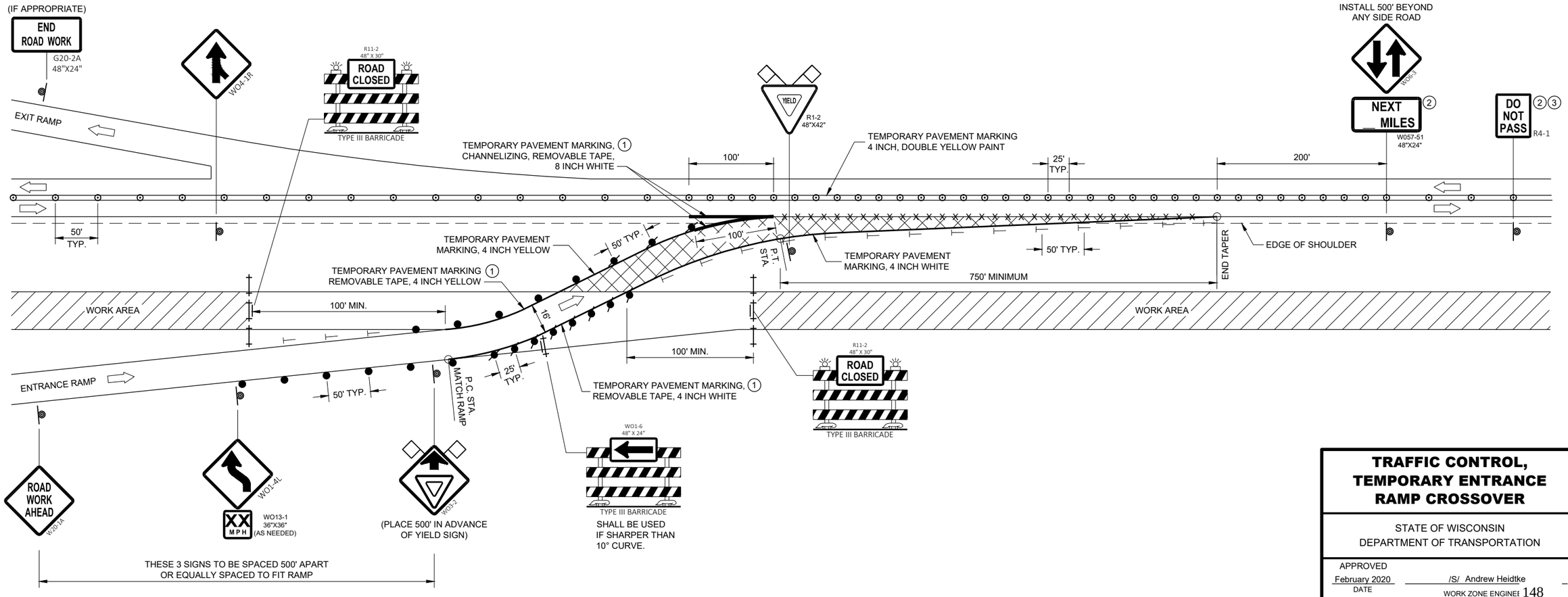
WORK ALONG EDGES OF RAMP SHALL MAINTAIN A 10 FOOT AREA CLEAR OF PHYSICAL OBSTRUCTIONS SUCH AS DROP OFFS FROM PAVEMENT REMOVAL OR BROKEN CONCRETE CHUNKS DURING PAVEMENT REMOVAL. THESE AREAS SHALL BE LEVELED WITH TEMPORARY FILL TO PROTECT THE TRAVELING PUBLIC WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE CROSSOVER.

TRAFFIC CONTROL FOR RAMP CROSSOVERS ARE TYPICAL FOR ALL CONSTRUCTION PHASES.

(1) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USE OF CROSSOVER.

(2) INSTALL THE WO6-3 SIGN WITH THE R4-1 SIGN 1000 FEET BEYOND THE WO6-3 SIGN WITH THE WO57-51 AND ALTERNATE THE SEQUENCE OF THESE SIGNS EVERY 1 MILE.

(3) CONVENTIONAL: 24" X 30"
FREEWAY AND EXPRESSWAY: 36" X 48"



TRAFFIC CONTROL, TEMPORARY ENTRANCE RAMP CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D08 - 07

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DELINEATOR FLEXIBLE / TUBULAR MARKER
- TEMPORARY DELINEATOR (STEEL POST DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE RESPECTIVE EDGE LINE MARKING
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKINGS

DO NOT PASS ①
R4-1
24"X30"

INSTALL THE R4-1 SIGN 1000 FEET BEYOND THE WO6-3 SIGN WITH THE WO57-51 AND ALTERNATE THE SEQUENCE OF THESE SIGNS EVERY 1 MILE.

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

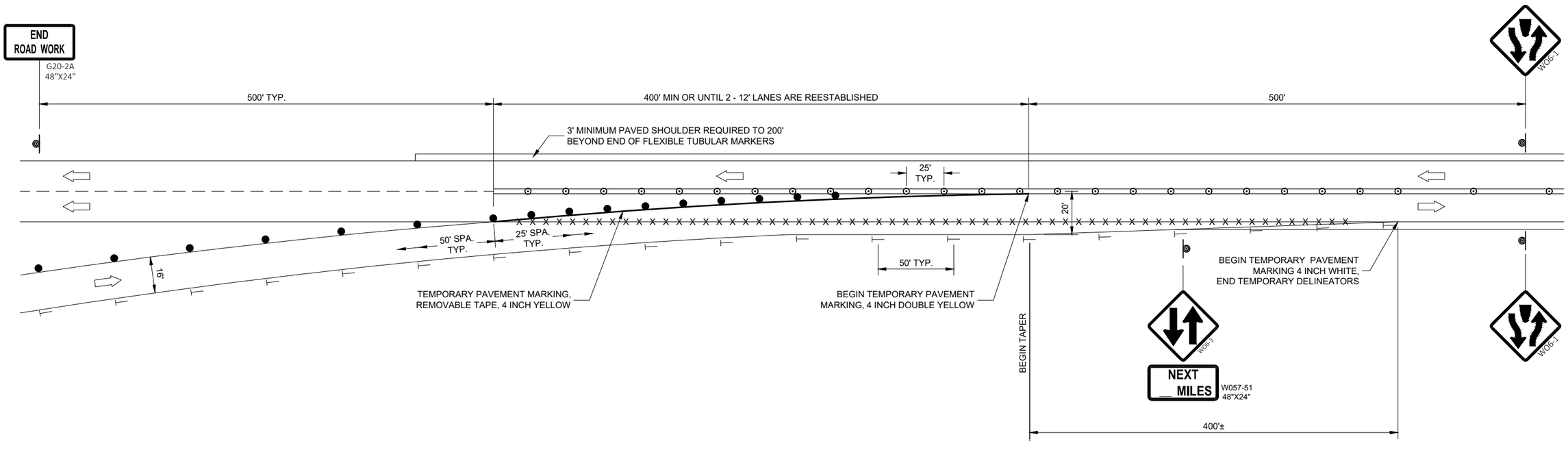
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USED OF CROSSOVER.

① CONVENTIONAL: 24" X 30"
FREEWAY AND EXPRESSWAY: 36" X 48"



TRAFFIC CONTROL, SINGLE LANE CROSSOVER EXIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

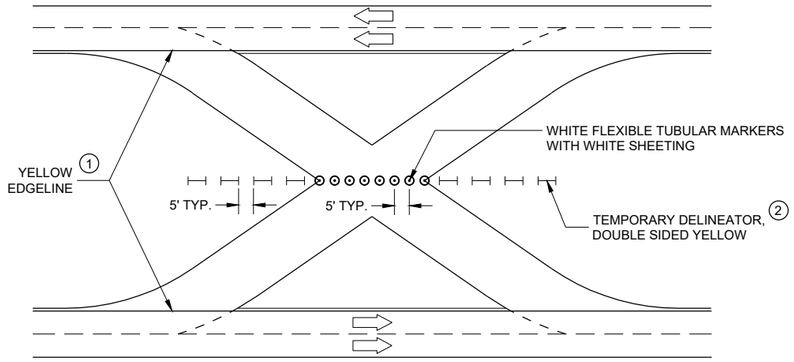
FHWA

SDD 15D09 - 05

SDD 15D09 - 05

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- DELINEATOR FLEXIBLE / TUBULAR MARKER
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- TEMPORARY DELINEATOR (DOUBLE SIDED)
- TYPE "A" WARNING LIGHT (FLASHING)
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKINGS
- WORK AREA



TRAFFIC CONTROL FOR CROSSOVER THAT IS NOT IN USE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

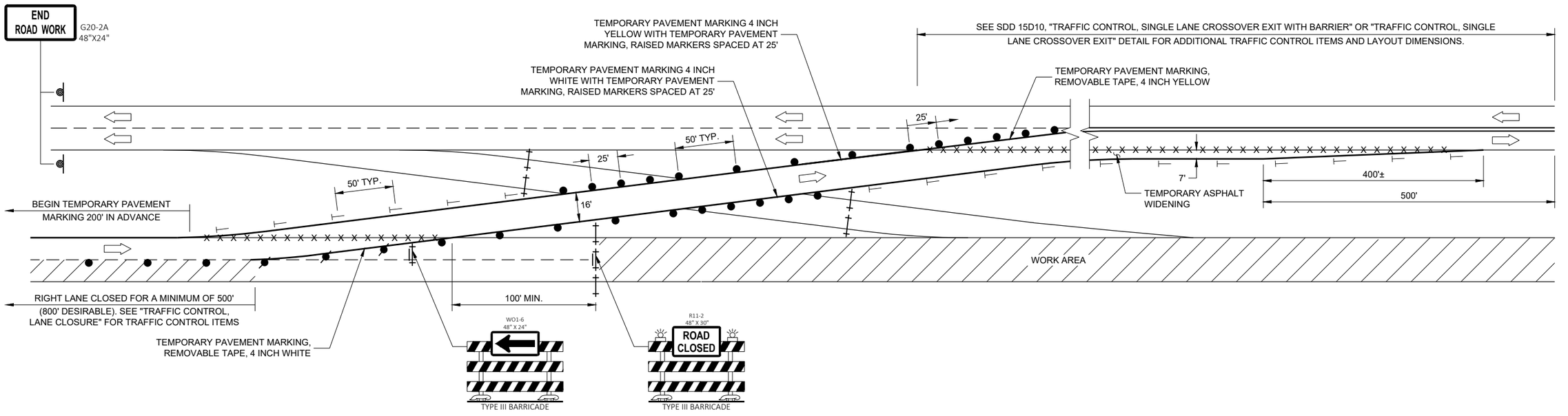
THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

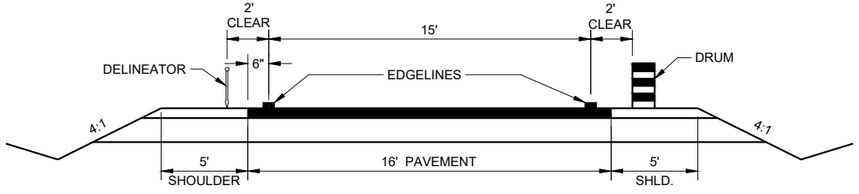
THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USED OF CROSSOVER AND TEMPORARY PAVEMENT MARKING WHERE USED.

REVERSE DEVICES WHEN OTHER LEG OF CROSSOVER IS IN USE.

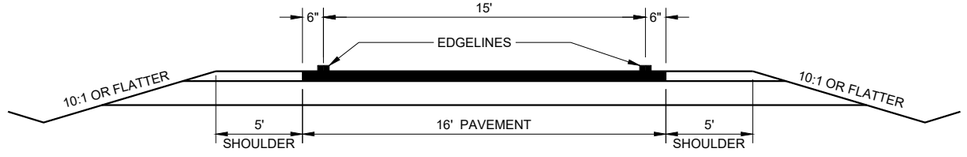
1. FOR PERMANENT CROSSOVER, PAVEMENT MARKING SHOULD CONFORM TO SECTION 646 OF THE STANDARD SPECIFICATIONS.
2. FOR PERMANENT CROSSOVER, INSTALL PERMANENT DELINEATORS ACCORDING TO SECTION 633 OF THE STANDARD SPECIFICATIONS.





TYPICAL TEMPORARY CROSSOVER ROADWAY DIMENSIONS

(SEE PLAN FOR ROADWAY DESIGN ELEMENTS)



TYPICAL CROSSOVER TO REMAIN IN PLACE ROADWAY DIMENSIONS

(SEE PLAN FOR ROADWAY DESIGN ELEMENTS)

TRAFFIC CONTROL, SINGLE LANE CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D11 - 07

SDD 15D11 - 07

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

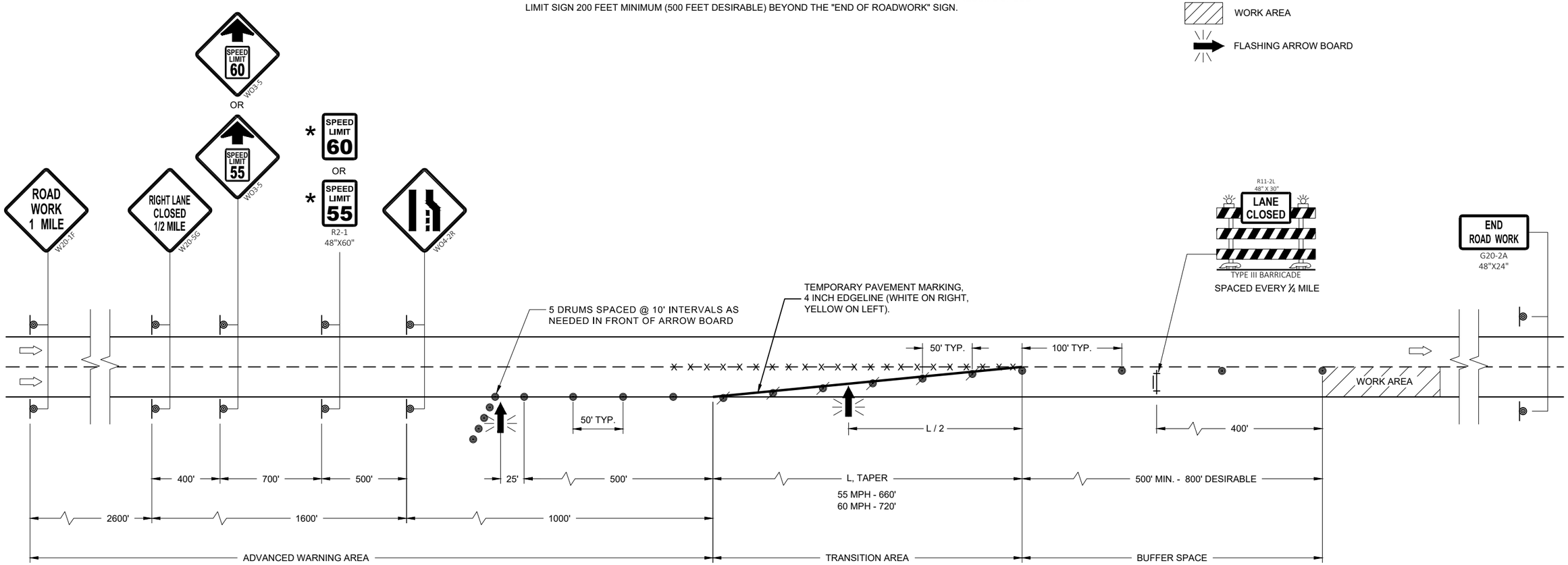
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D12 - 09b

SDD 15D12 - 09b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD
- (S) PORTABLE TRAFFIC SENSOR (PTS)
- FBS FLASHING BEACON SIGN

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED SIGNS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

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

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

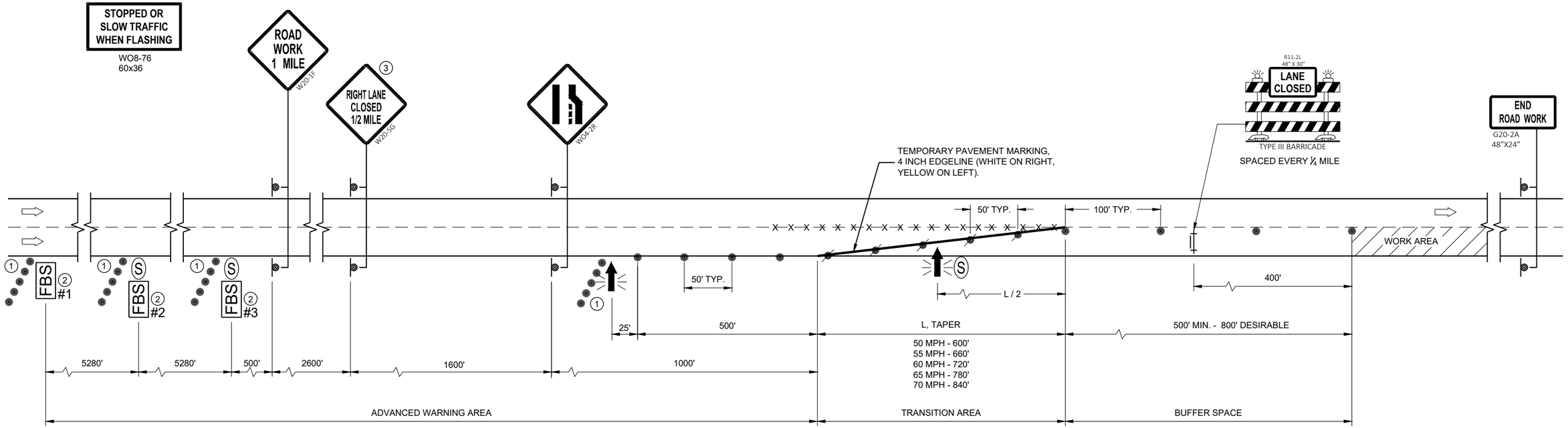
CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

PORTABLE TRAFFIC SENSOR (PTS) MAY BE MOUNTED ON THE FBS, ARROW BOARD OR OTHER TRAILER DEVICES.

(1) 5 DRUMS SPACED AT 10 FOOT INTERVALS AS NEEDED.

(2) IF THERE ARE MORE THAN TWO LANES OR IF SPECIFIED IN THE PLANS, PLACE FBS ON BOTH SIDES OF THE ROADWAY.

(3) IF THERE IS AN APPROVED TEMPORARY SPEED DECLARATION, ADD WO-3-5 SIGNS 400 FEET AFTER THE W20-5G SIGNS AND ADD R2-1 SIGNS (48"x60") 700 FEET AFTER THE WO3-5 SIGNS. A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A "RESUME SPEED LIMIT" SIGN 200 FEET MINIMUM (800 FEET DESIRABLE) BEYOND THE G30-3A "END ROAD WORK" SIGN.



TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D12 - 09d

SDD 15D12 - 09d

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS /OR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

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

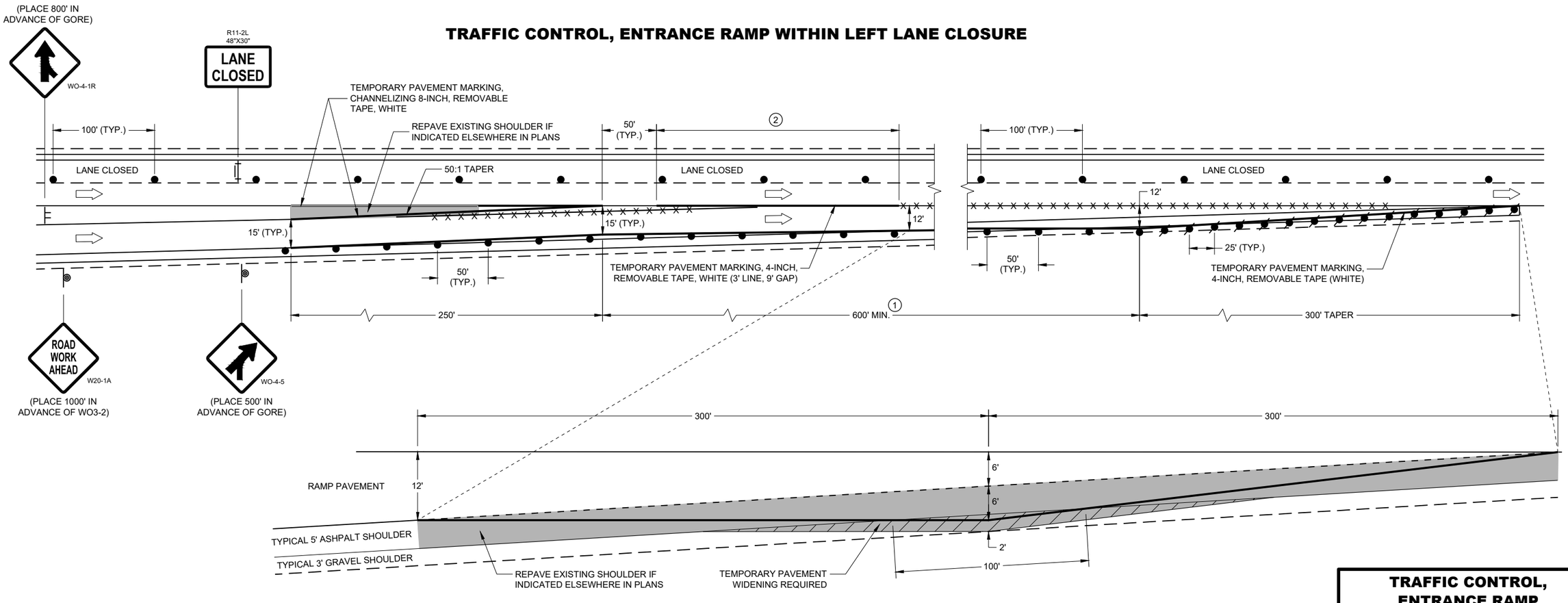
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

(1) EXTEND THE LENGTH OF THE MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY MARKING AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LEFT LANE CLOSURE



TEMPORARY PAVEMENT DETAIL

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

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 05b

6

SDD15D15 - 05b

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

TYPE III BARRICADE WITH ATTACHED SIGN

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

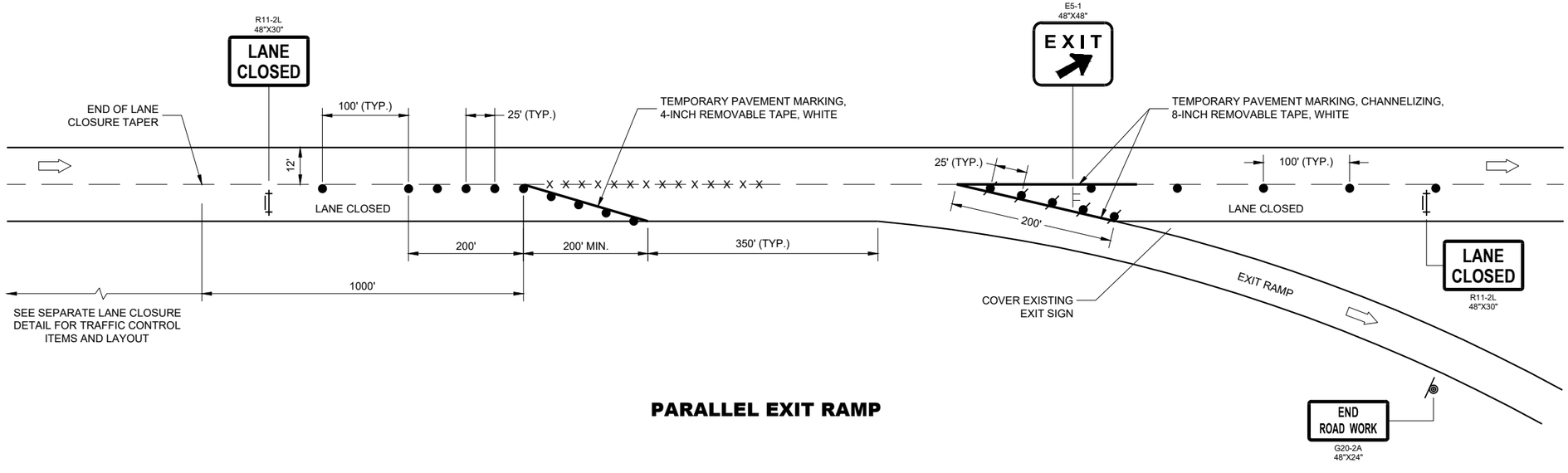
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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



PARALLEL EXIT RAMP

TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 05e

6

SDD15D15 - 05e

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

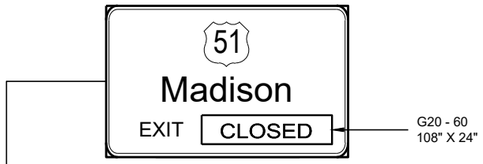
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

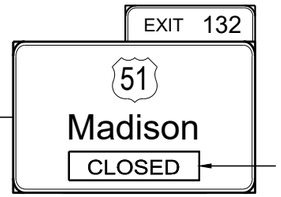
* W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



G20 - 60
108" X 24"

OR



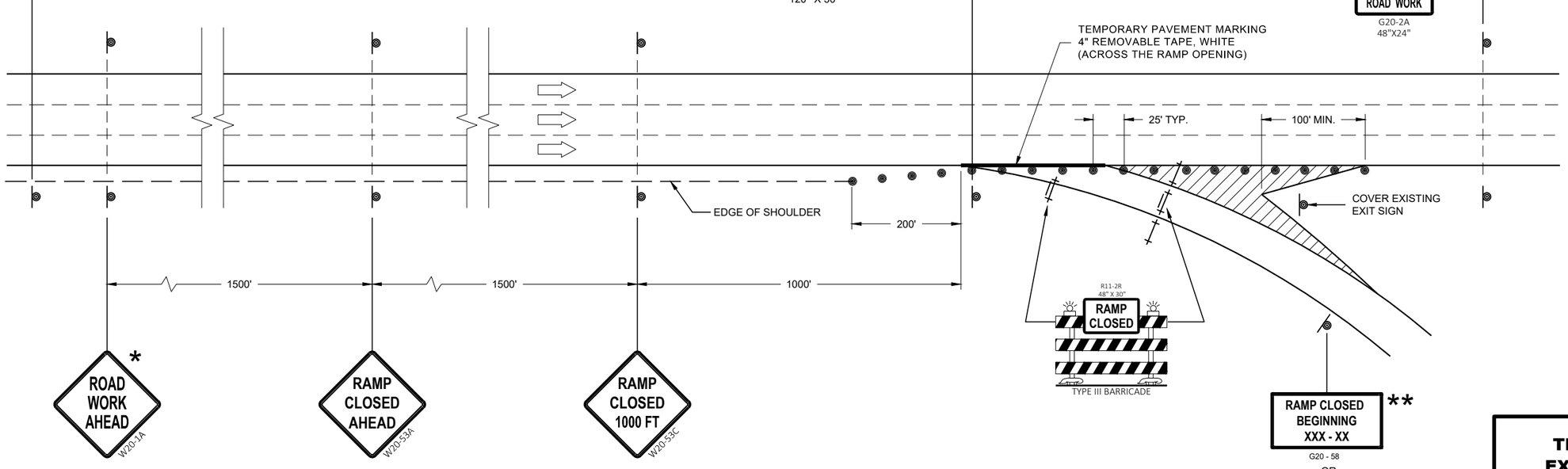
G20 - 60
108" X 24"

PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)

G20 - 61
120 ' X 30"



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D16 - 04

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

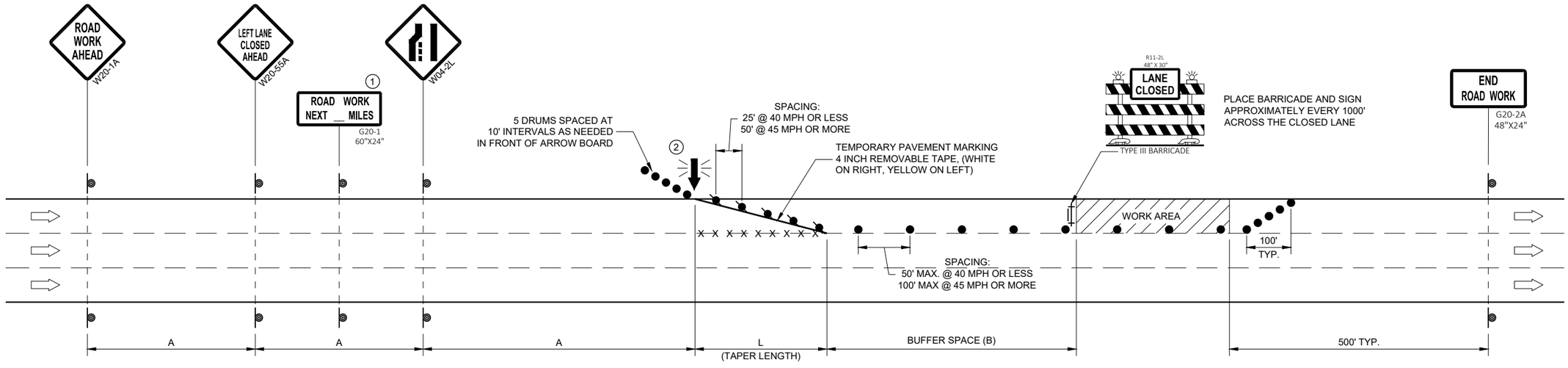
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

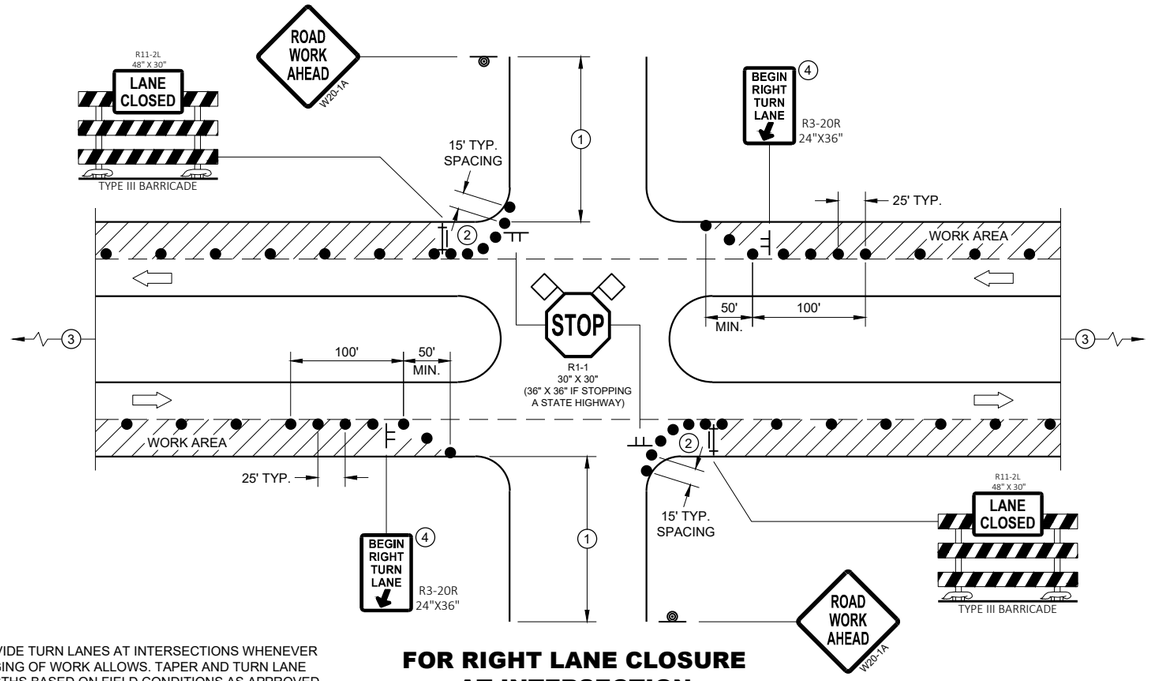
TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

6

SDD 15D20 - 05a
SDD15D20 - 05a



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

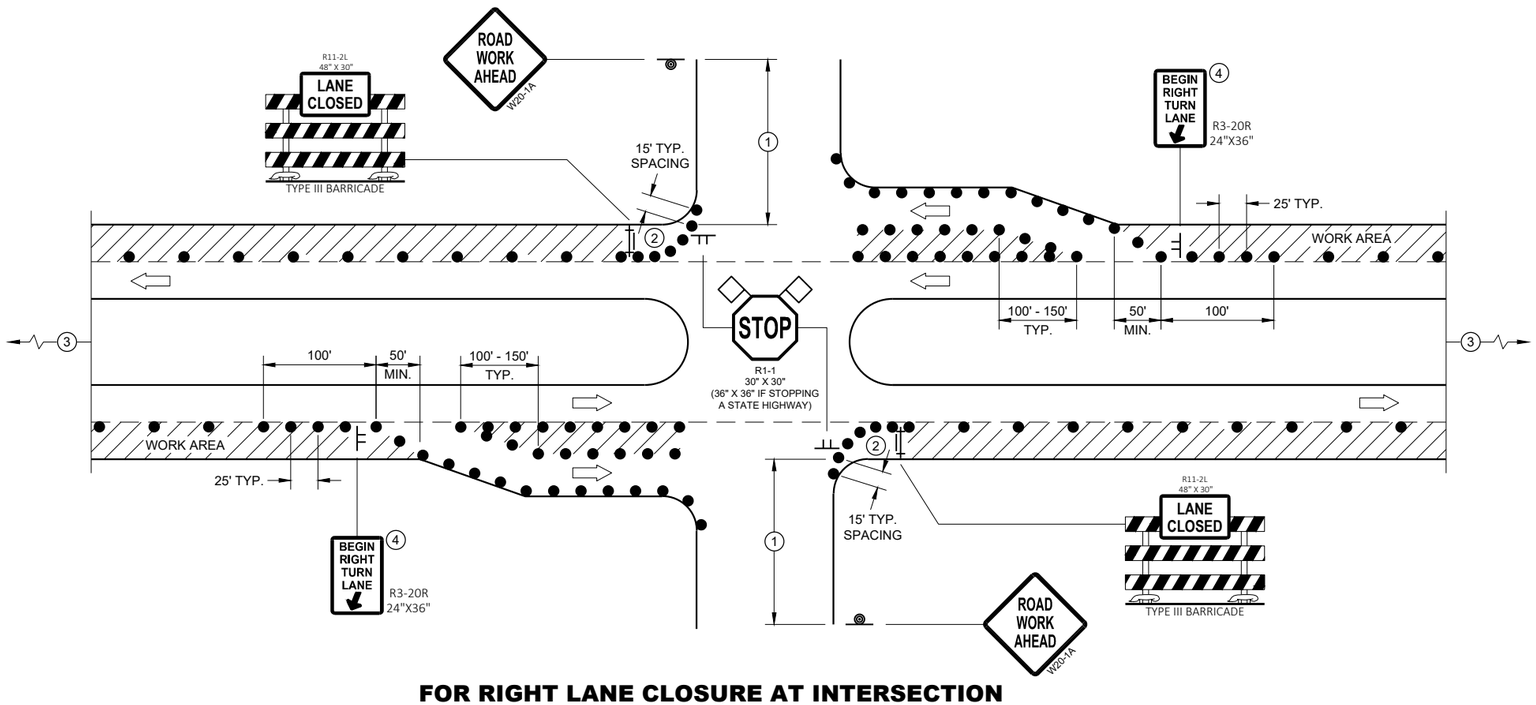
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

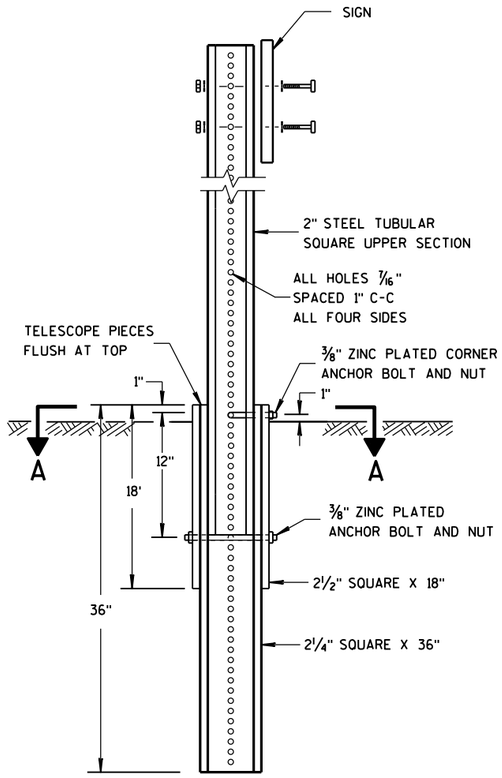
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

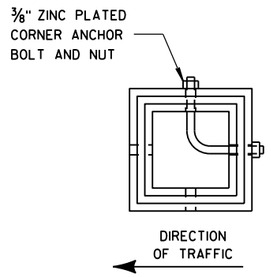
SDD 15D21 - 07a

6

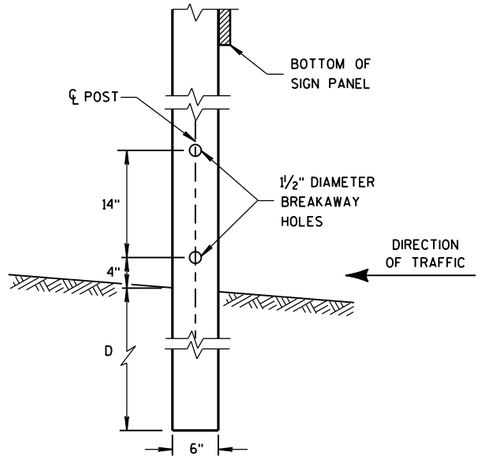
SDD 15D21 - 07a



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



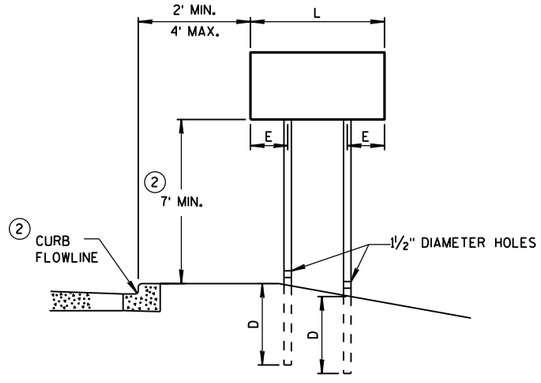
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

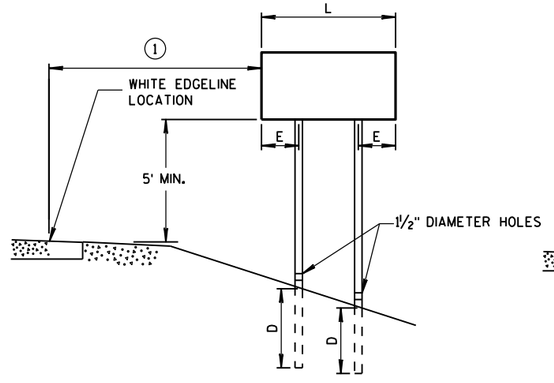
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

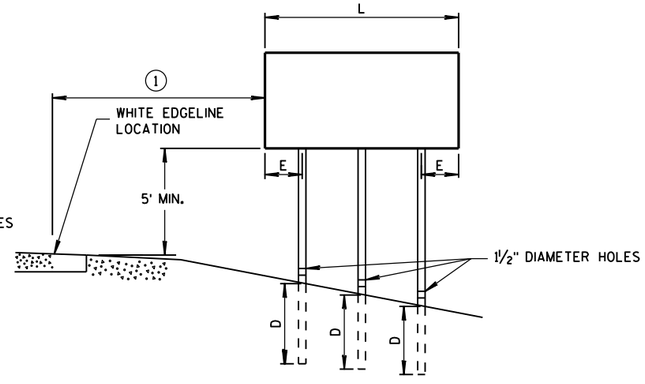
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL 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).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

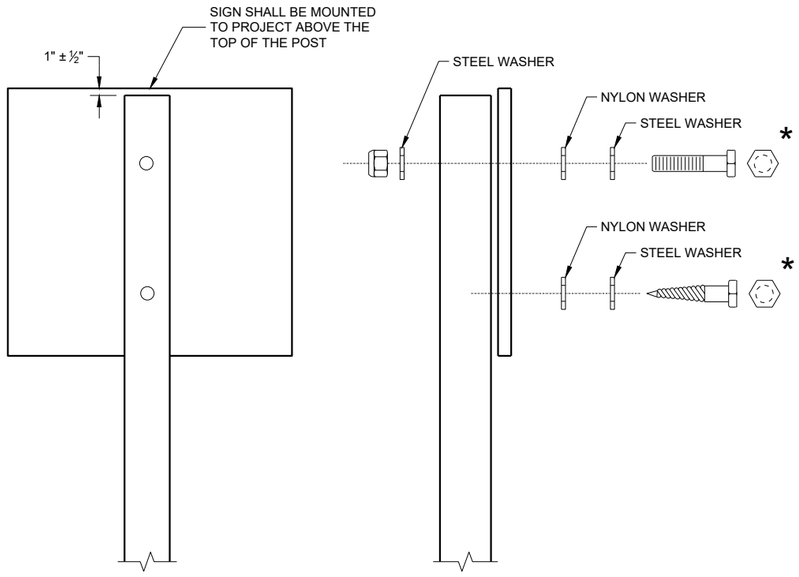
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 D 38-2a



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.

WOOD POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM
BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH,
GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

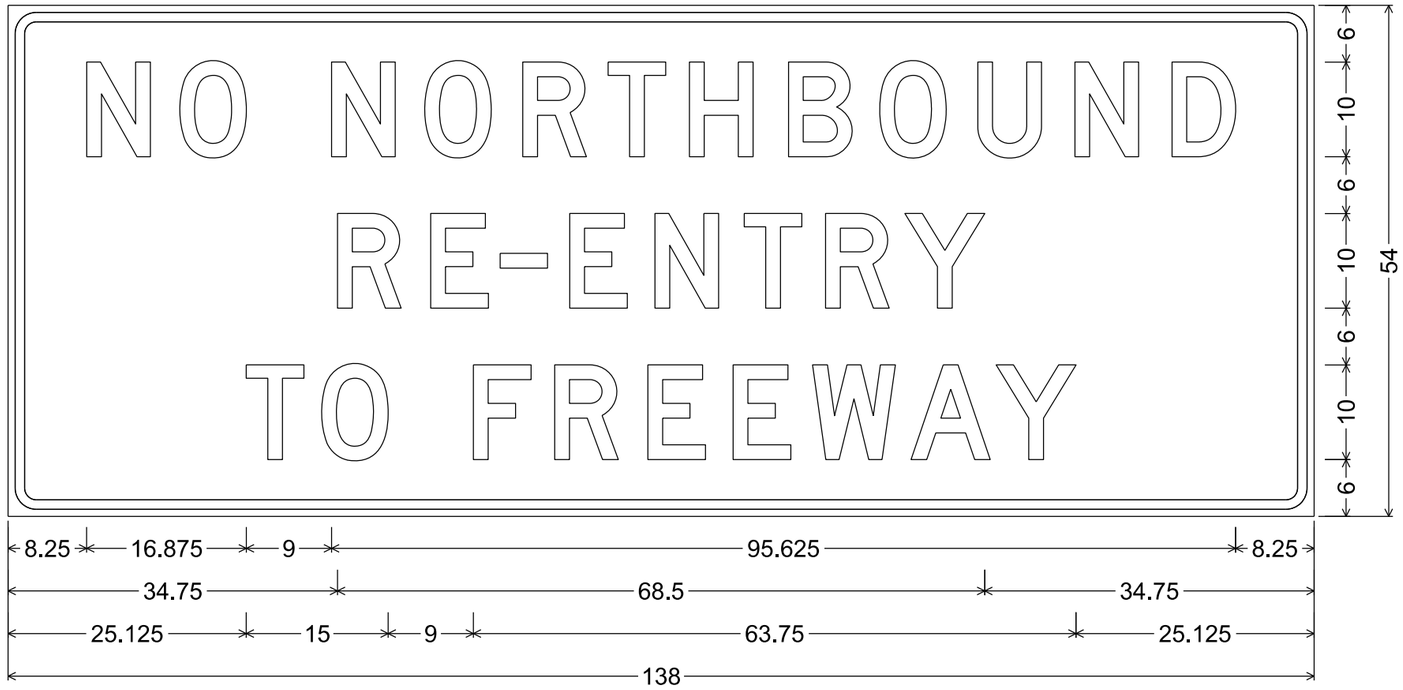
SDD 15D38 - 02b

SDD 15D38 - 02b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

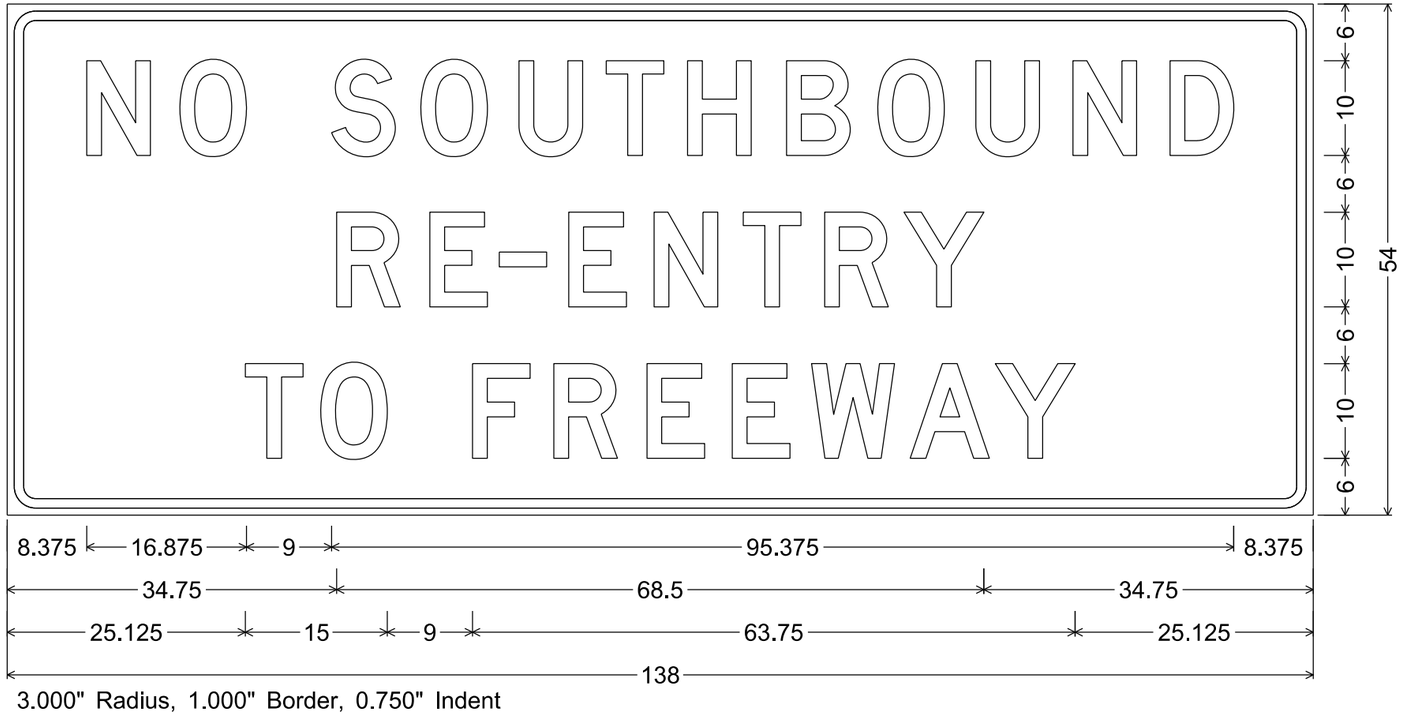
APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA



3.000" Radius, 1.000" Border, 0.750" Indent

NOTES

1. Fixed Message Type II Sign - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D



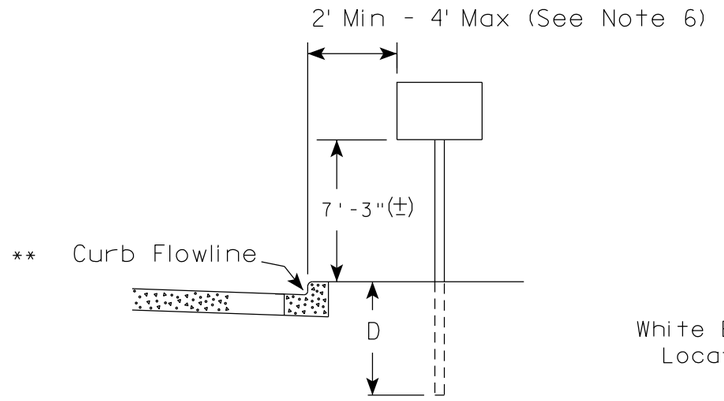
3.000" Radius, 1.000" Border, 0.750" Indent

7

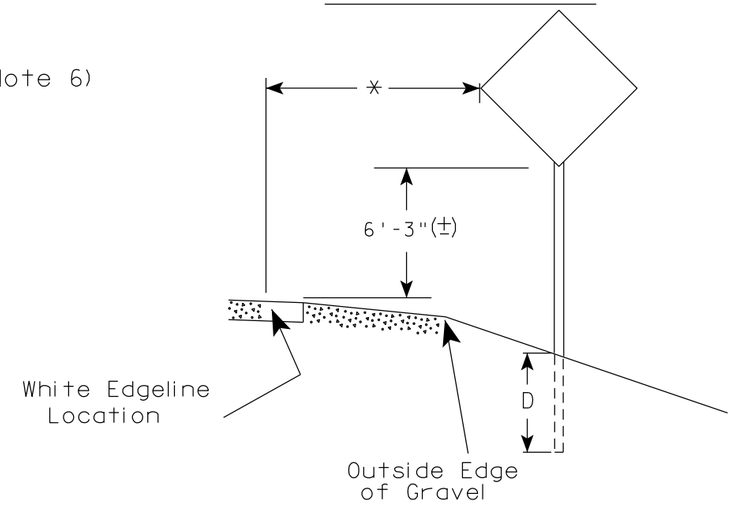
7

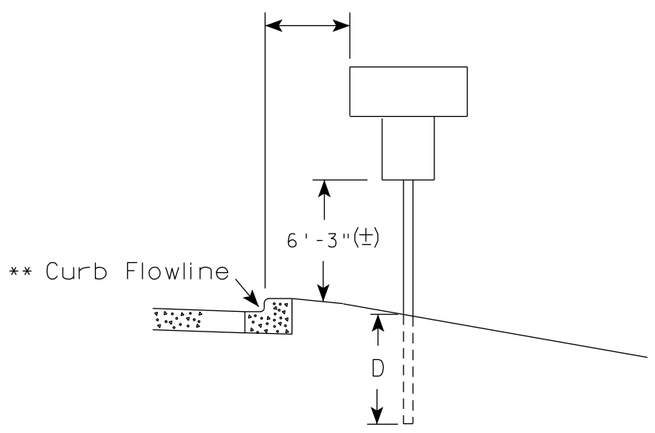
PROJECT: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	TEMPORARY SIGNING	SHEET NO: 160	E

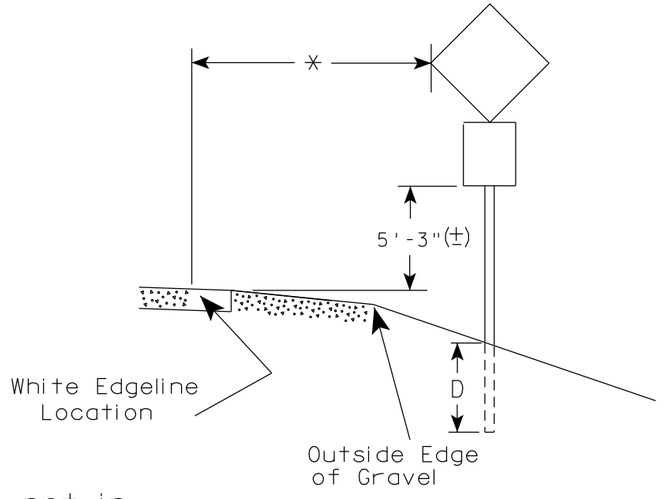
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

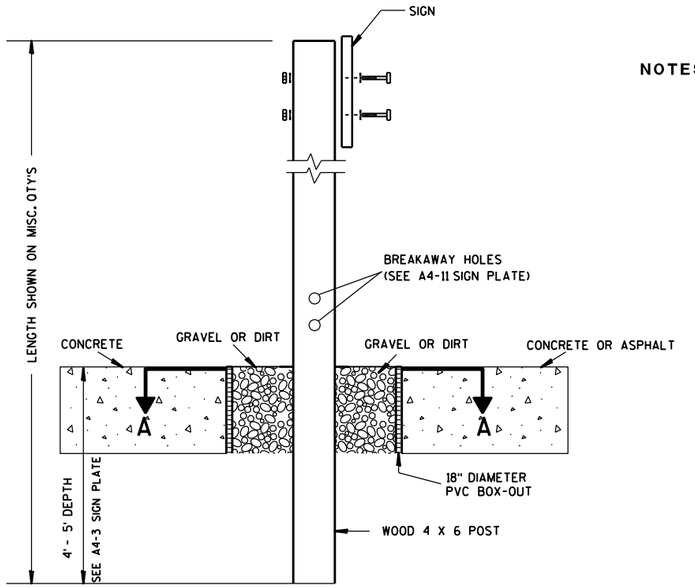
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

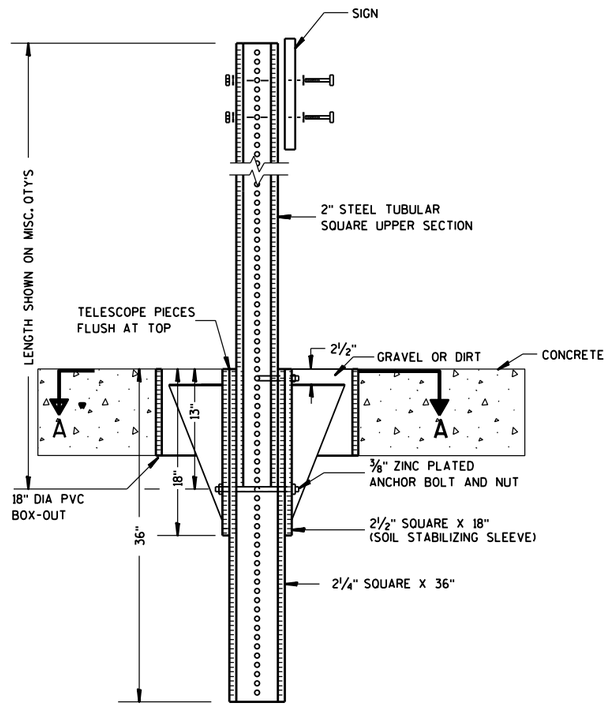
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 161	E



ELEVATION VIEW

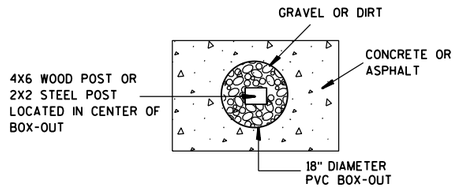
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

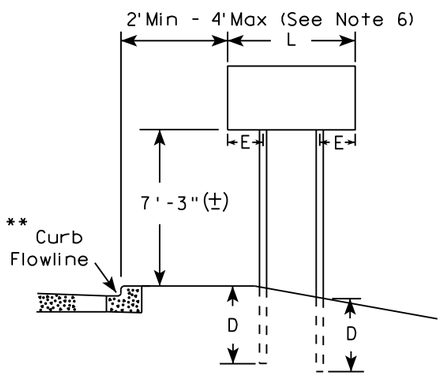
APPROVED Matthew R Rauch
for State Traffic Engineer

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

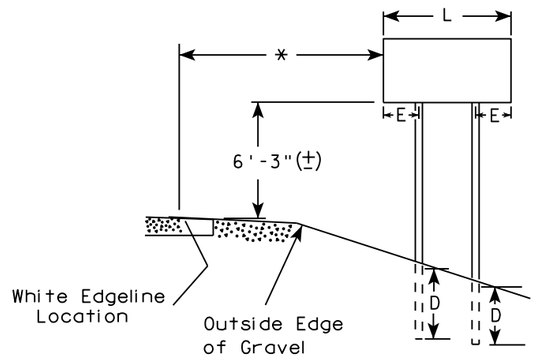
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

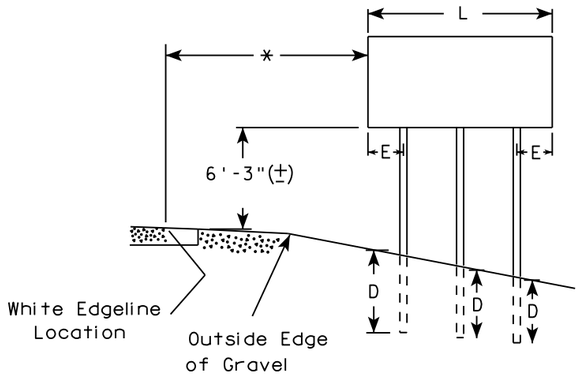
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

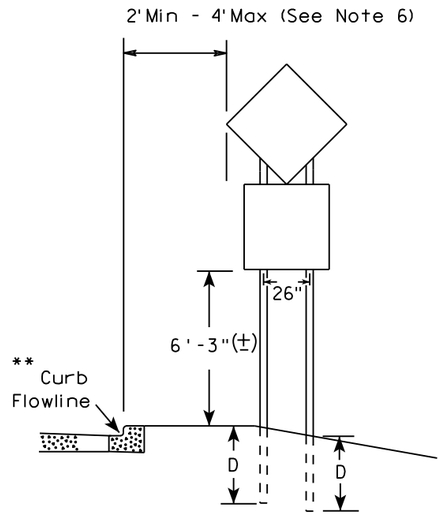
URBAN AREA



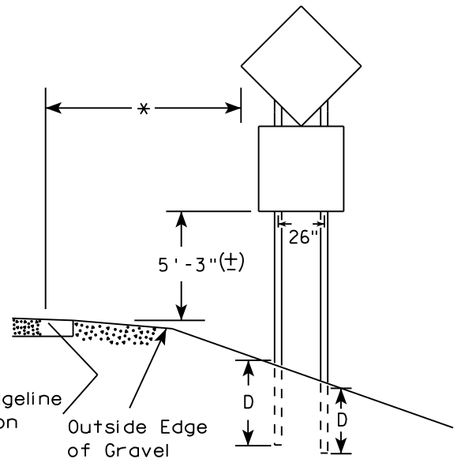
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

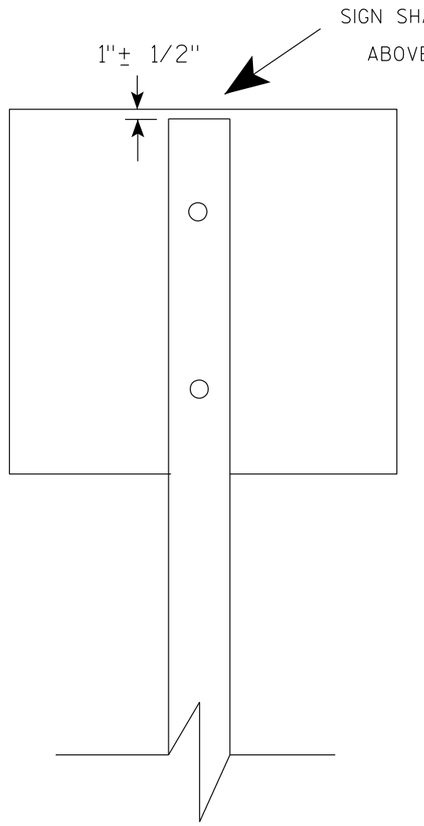
APPROVED Matthew R Rauch
For State Traffic Engineer

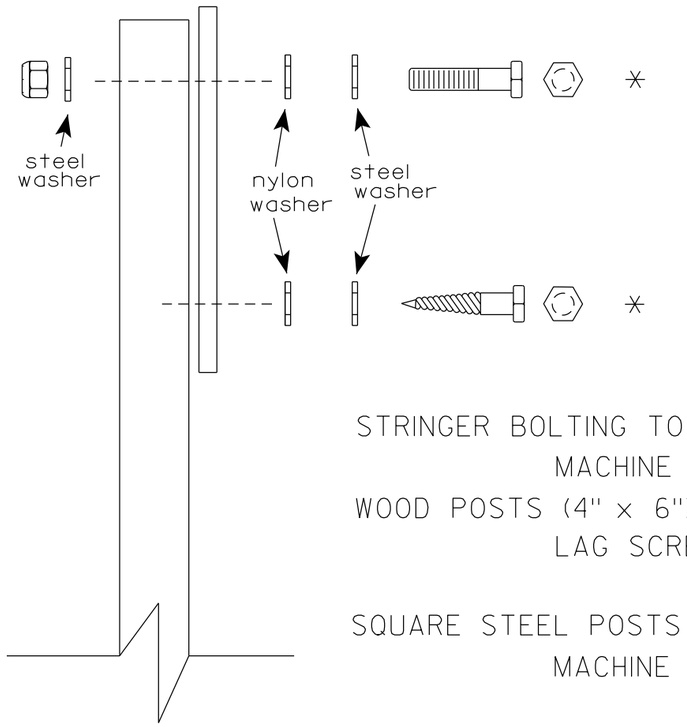
DATE 8/21/17 PLATE NO. A4-4.15

7

7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 163	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

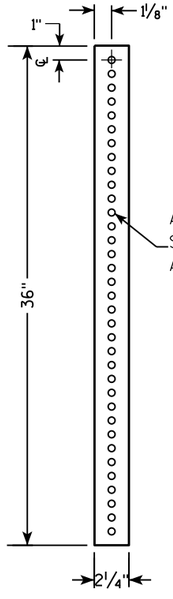
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

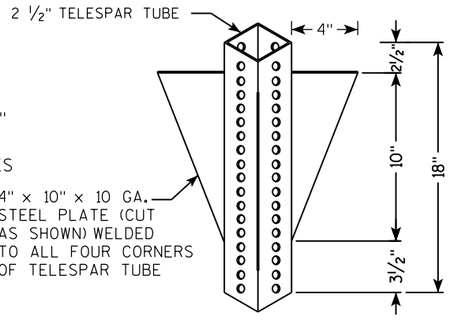
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

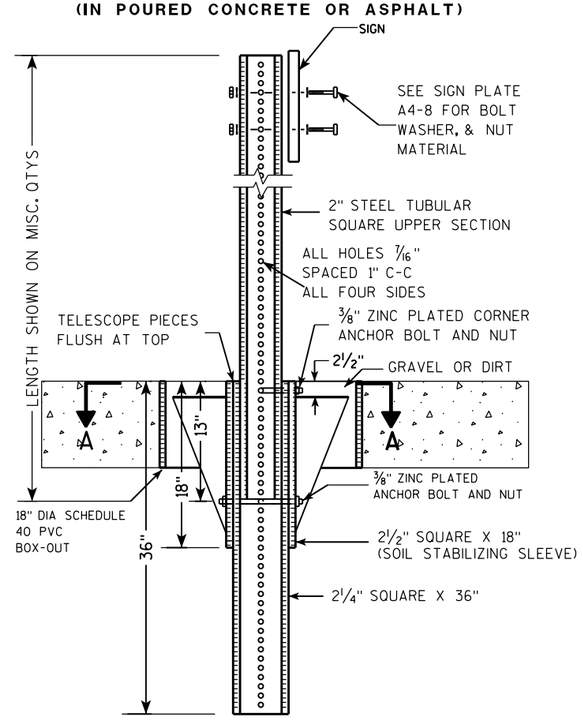
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



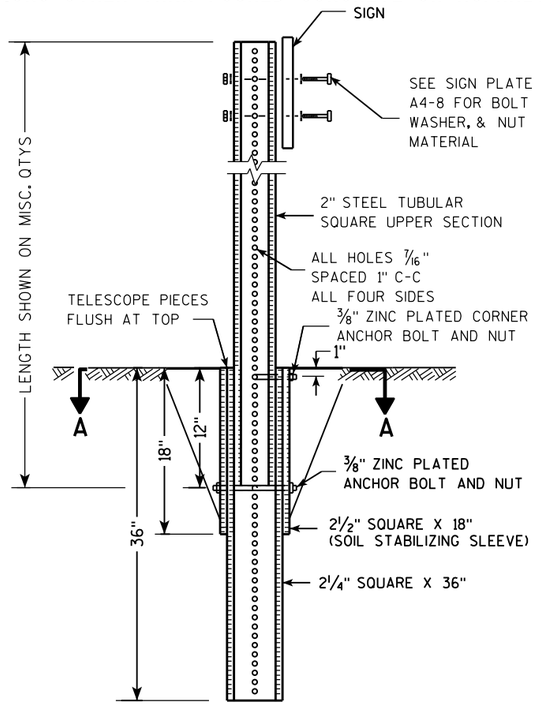
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

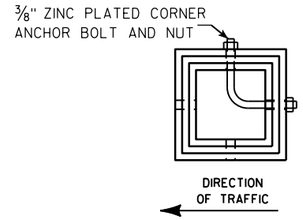


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

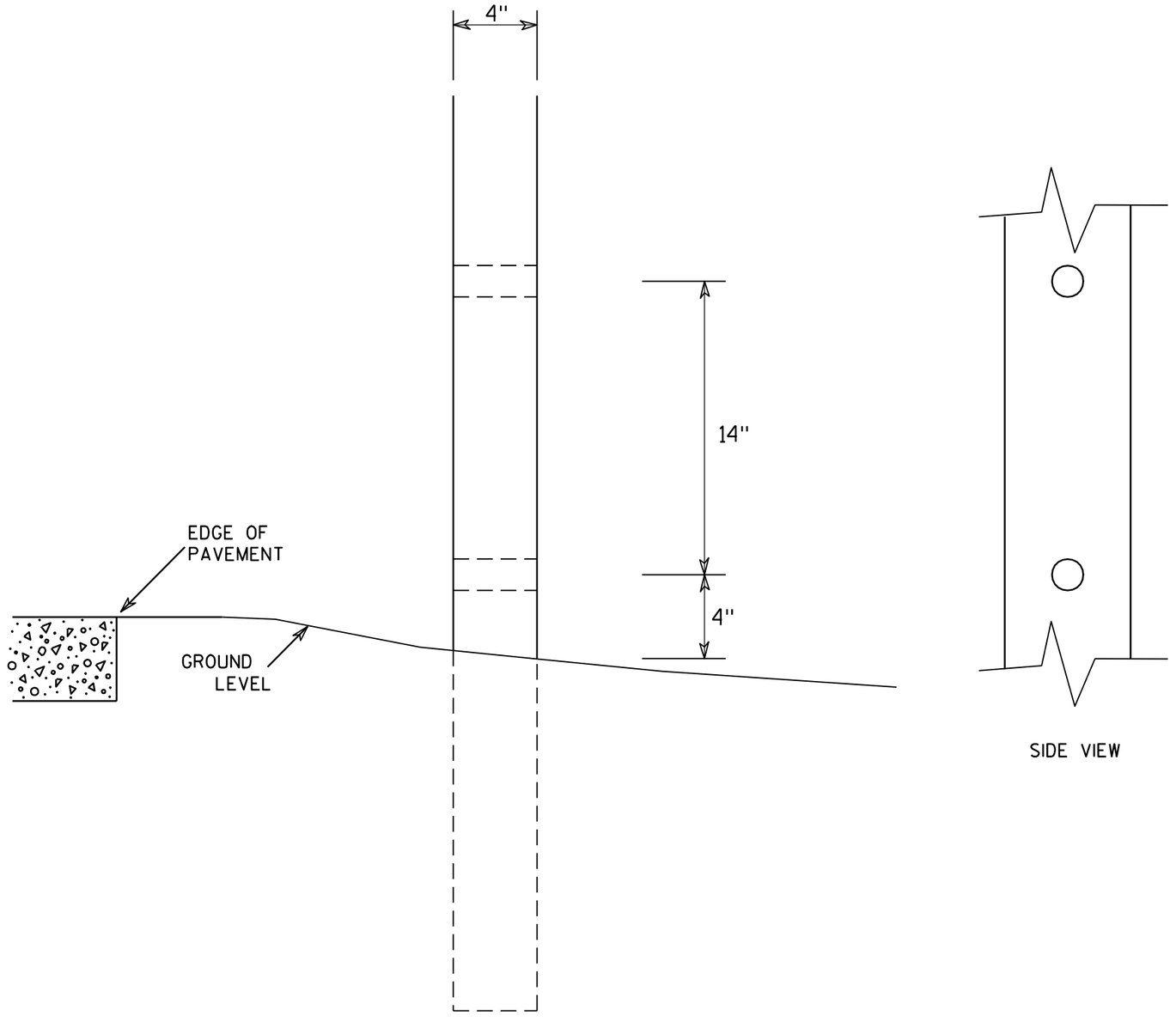
WISCONSIN DEPT OF TRANSPORTATION

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

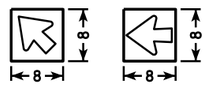
APPROVED Chester J Spang for State Traffic Engineer

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

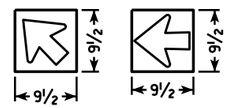
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 166	E

SIGN LAYOUT WITH VARIOUS SIZED MESSAGES

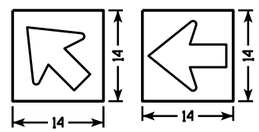




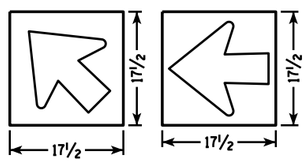










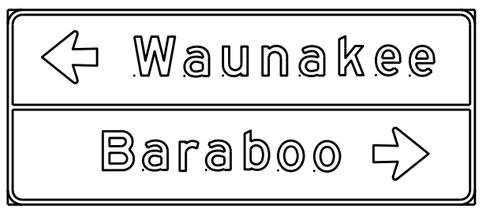


GENERAL NOTES

1. Materials shall conform to Standard Specification Section 637.
   Base - Sheet Aluminum 0.040" Thickness
   Sheeting - Orange Type F Reflective
   Arrow - Black Non-Reflective
2. Arrow signs shall be fastened to permanent sign by either aluminum rivets or aluminum self-tapping sheet metal screws. There shall be a minmum of 2 fasteners used per arrow sign.
3. There shall be a spacer consisting of a 0.08" nylon washer between the back of the arrow sign and the face of the permanent sign.
4. Arrows are per standard plate A1-2
5. Use separate arrow sign for each destination
6. Tilt arrow is always at 45 degrees
7. Arrow is centered on arrow sign

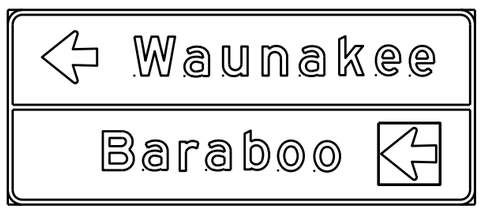
Lower Case Copy Size	Standard Width (Single Arrow)	2 Line Tilt Arrow Cover Width	3 Line Tilt Arrow Cover Width	Height
3¾" Series C	8	9 ½	14 ½	8
4½" Series D & E	9 ½	10	15	9 ½
6" Series D & E	14	16	20 ½	14
8" Series E	17 ½	20 ½	25	17 ½

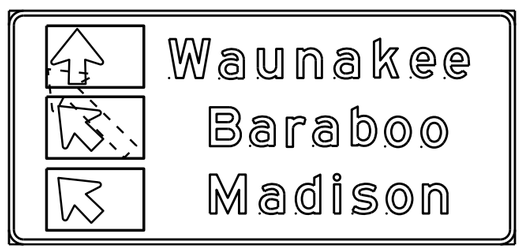
BEFORE





AFTER





DESTINATION DIRECTIONAL ARROW FOR DETOUR SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/08/14

A4-12.2

PROJECT NO:

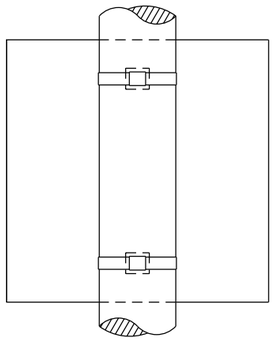
SHEET NO: E

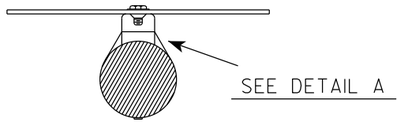
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A412.DGN PLOT DATE : 08-OCT-2014 11:50 PLOT BY : mscsja

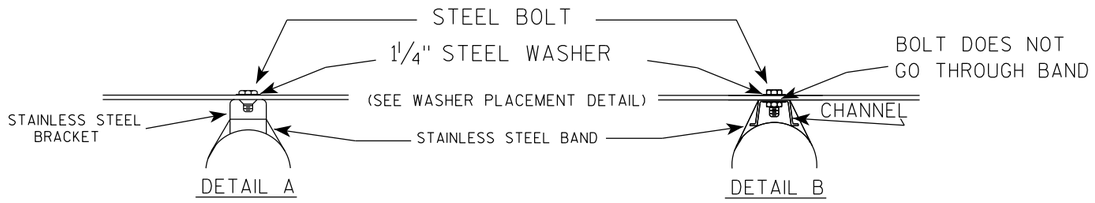
WISDOT/CADDS SHEET 42

BANDING

SINGLE SIGN



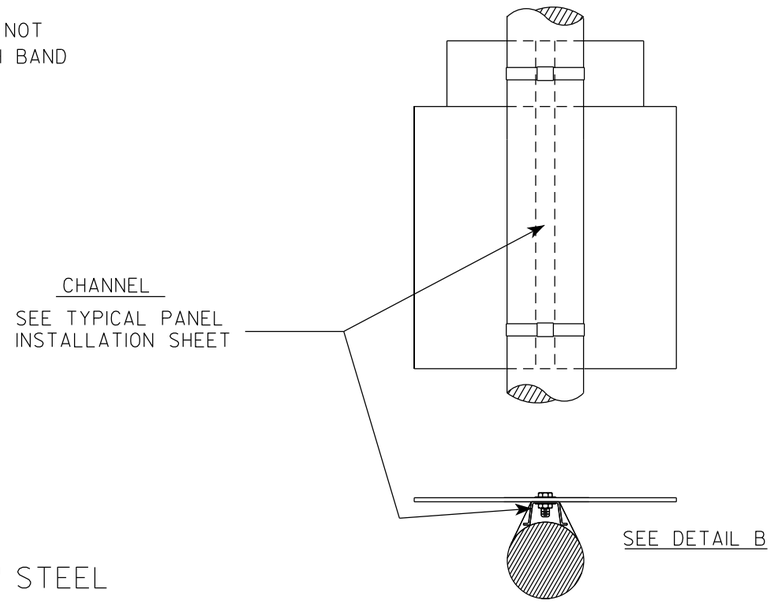




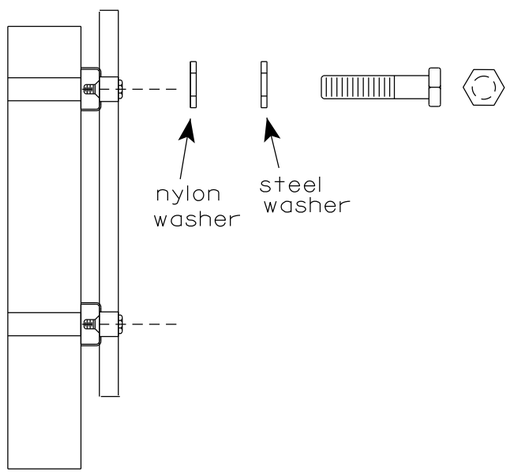
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

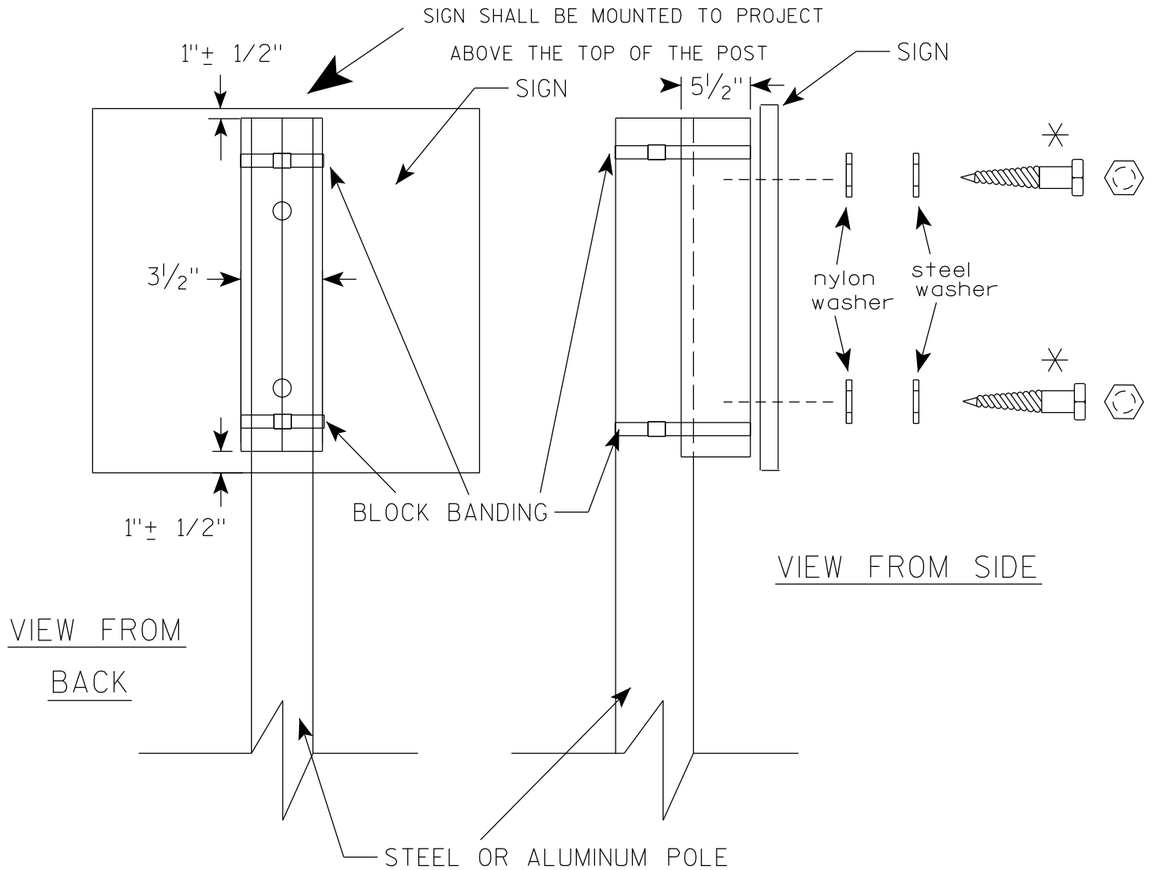
DATE 6/10/19 PLATE NO. A5-9.4

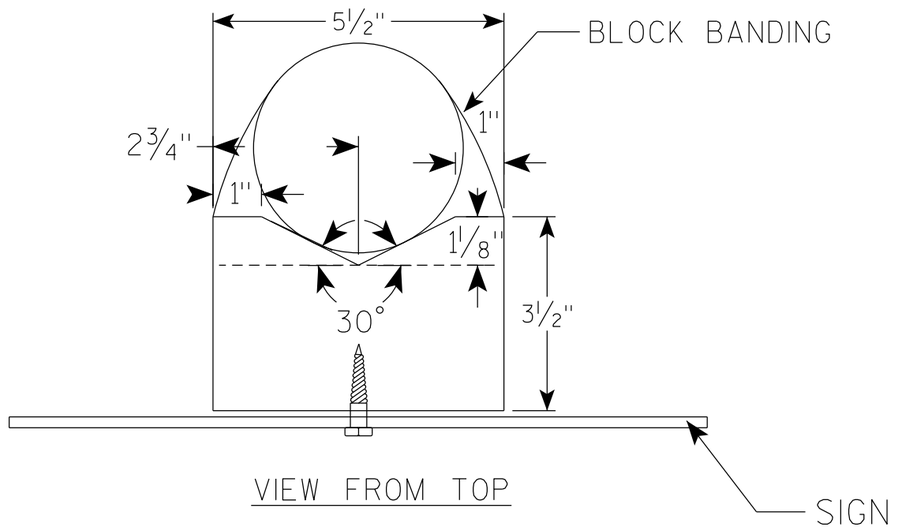
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 168	E

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"

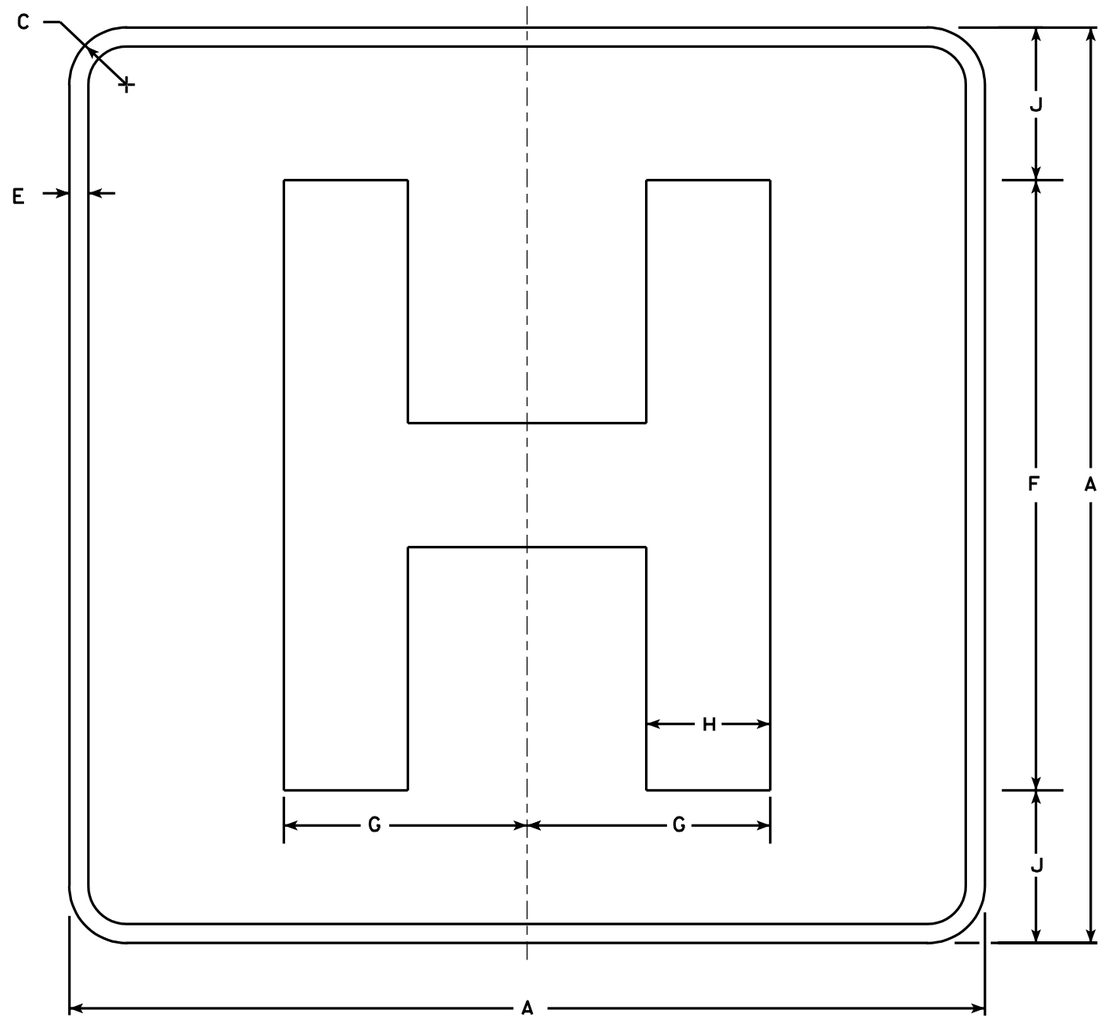
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO: | SHEET NO: 169 | E



D9-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White - Type H Reflective
3. Message Series - E Modified
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	450 mmX 450 mm
2	600 mmX 600 mm
3	900 mmX 900 mm
4	X
5	X

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8		1/2	12	4 3/4	2 3/8		3																	4.0
2	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

STANDARD SIGN
D9-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spong
for State Traffic Engineer

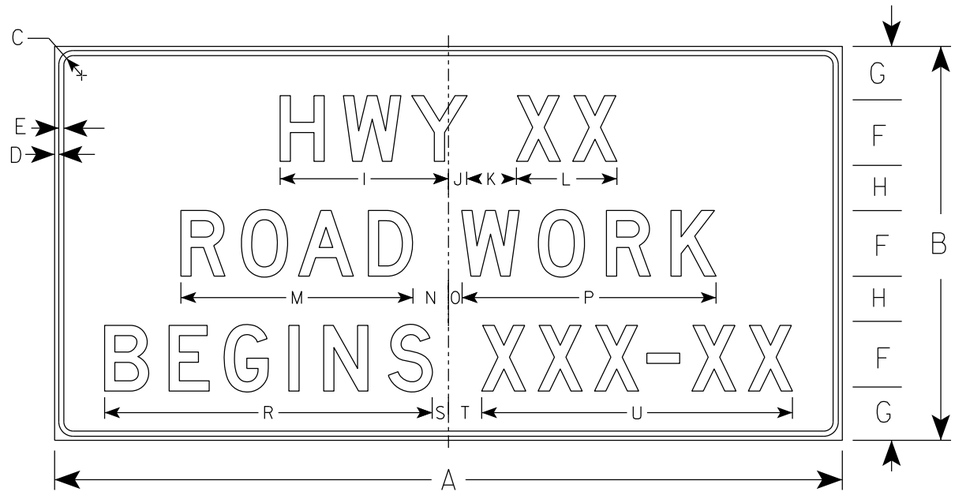
DATE 1/15/02 PLATE NO. D9-2.4

PROJECT NO:

SHEET NO: 170 E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Substitute appropriate numeral and adjust spacing to achieve proper balance.



G20-57

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3	72	36	1 1/8	1/2	5/8	6	5	4	15 5/8	1 5/8	5	9 1/4	21 1/4	3 1/2	1 1/2	23 1/4		29 7/8	1 3/4	3 1/4	28 1/2						18.0
4	96	48	2 1/4	3/4	1	8	6 1/2	5 1/2	20 5/8	2 1/4	6	12 1/4	28 1/4	4 3/8	1 5/8	31		39 1/4	2	4	37 7/8						32.0
5																											

STANDARD SIGN
G20-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/22/19 PLATE NO. G20-57.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 171 | E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E



G20-61

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	120	30	6		2	12	9	21	78 1/4	20 3/4																	25.0
5																											

STANDARD SIGN
G20-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

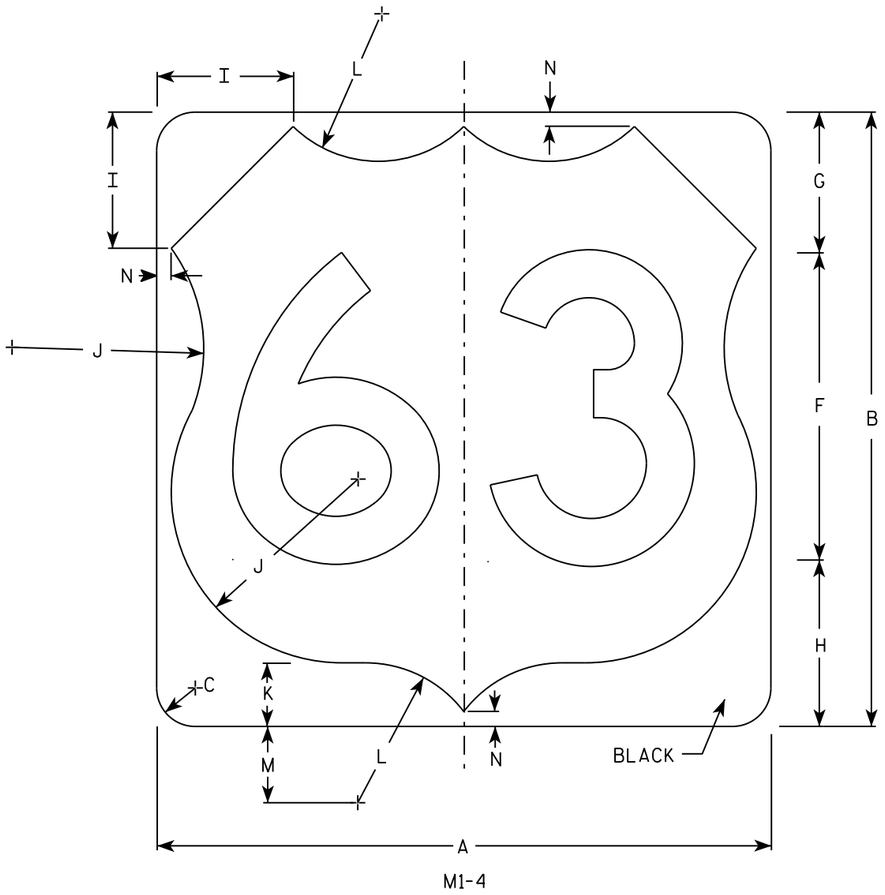
DATE 5/07/15 PLATE NO G20-61.1

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

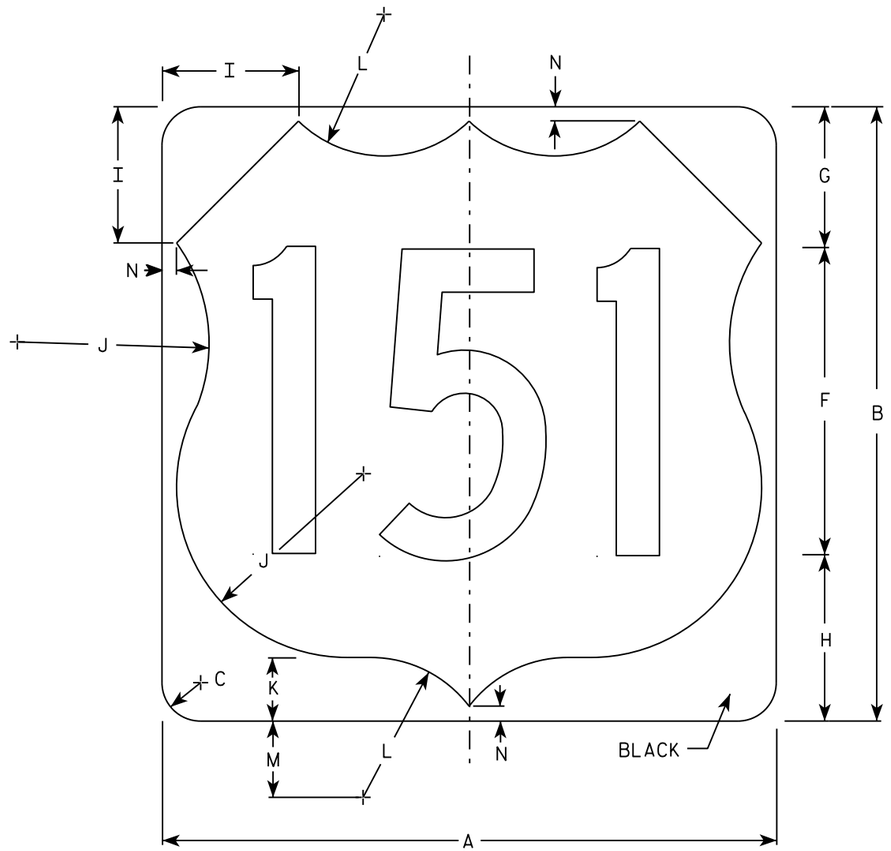
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\G2061.DGN PLOT DATE : 07-MAY-2015 13:47 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 20.431338:1.000000 WISDOT/CADDS SHEET 42

NOTES

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



M1-4



M1-4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area Sq. ft.
1																											
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0

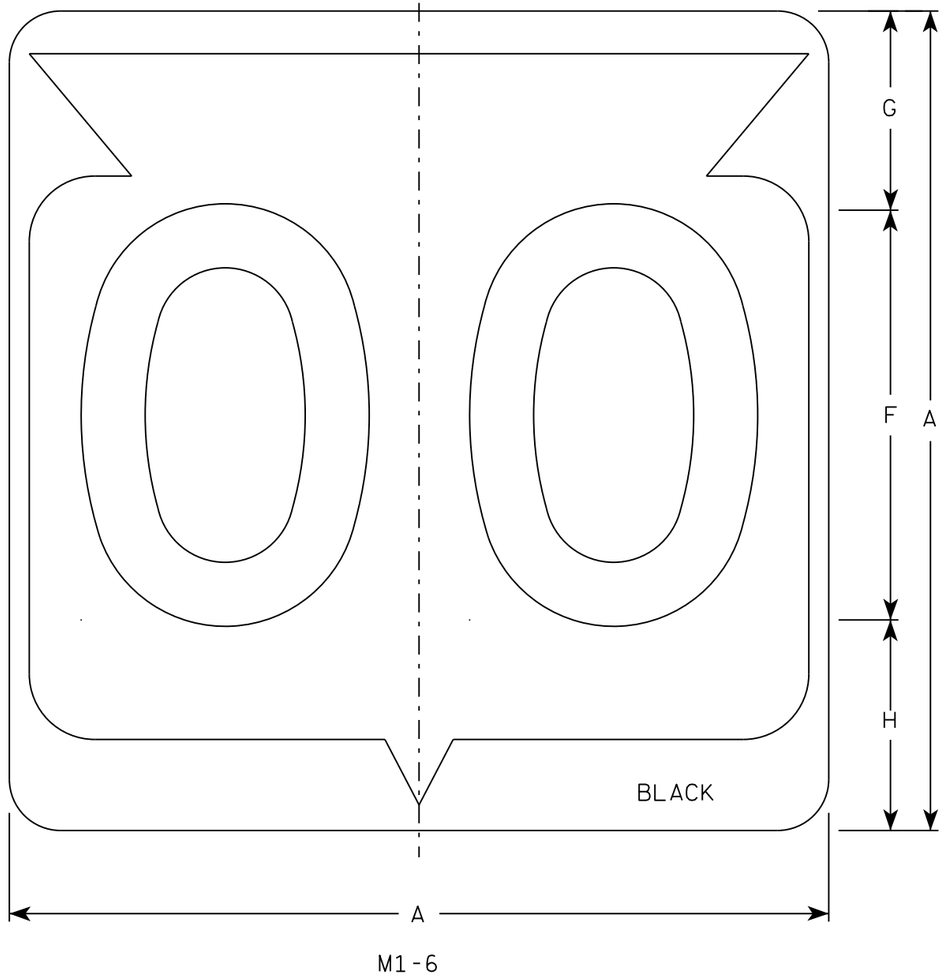
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-4.10

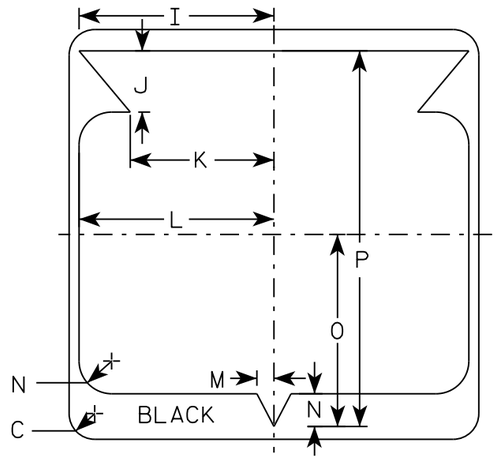
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 173	E



M1-6

NOTES

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



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			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

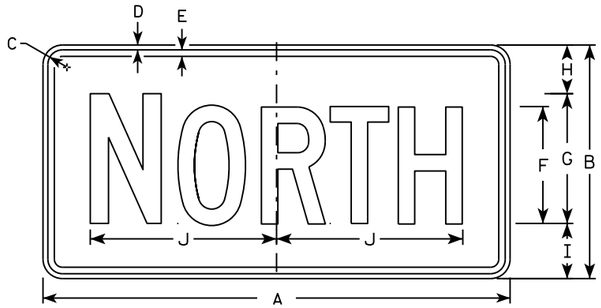
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

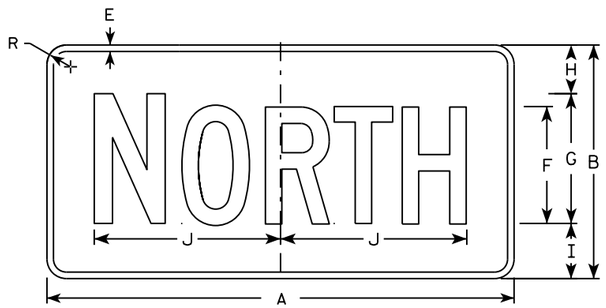
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 174 | E



M3-1
MM3-1
MP3-1



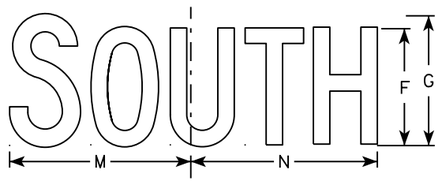
MB3-1
MK3-1
MN3-1



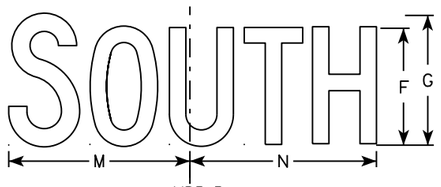
M3-2
MM3-2
MP3-2



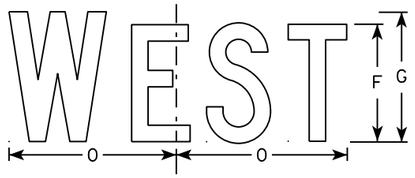
MB3-2
MK3-2
MN3-2



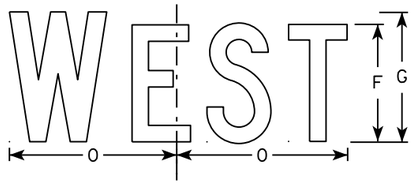
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

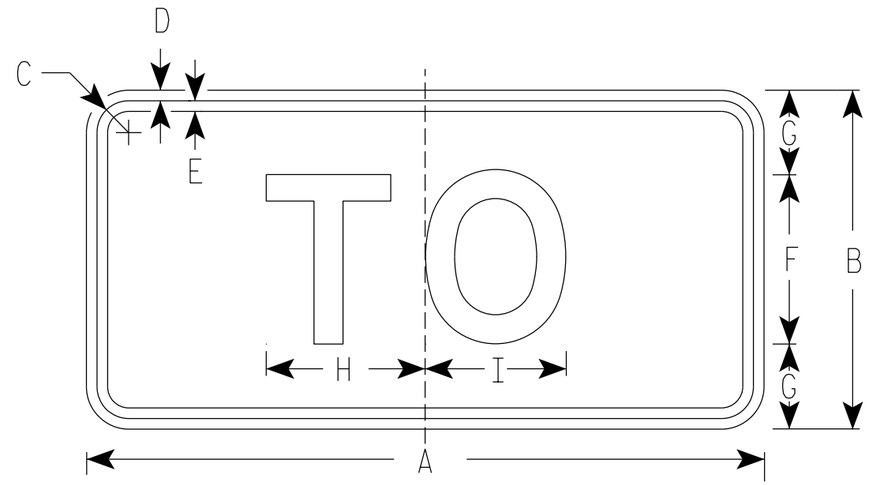
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

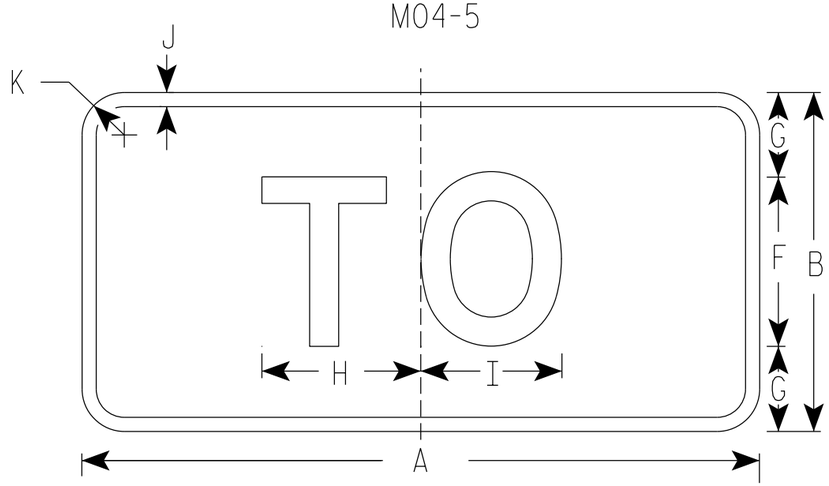
DATE 10/15/15 PLATE NO M3-1.14

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-5
MM4-5
MP4-5
MO4-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   MO4-5 Background - Orange Type F Reflective
   Message - Black

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

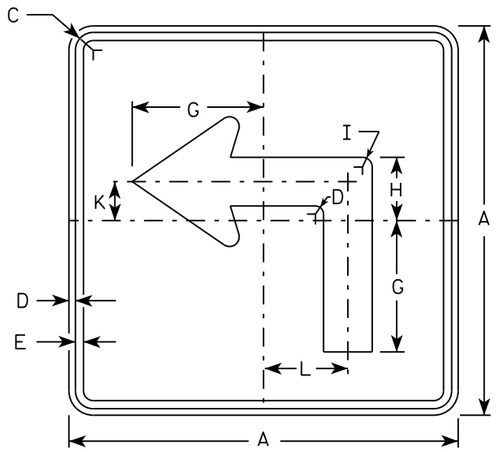
STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

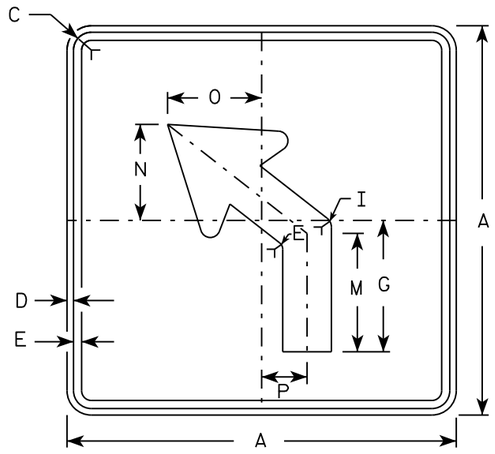
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/7/19 PLATE NO. M4-5.9

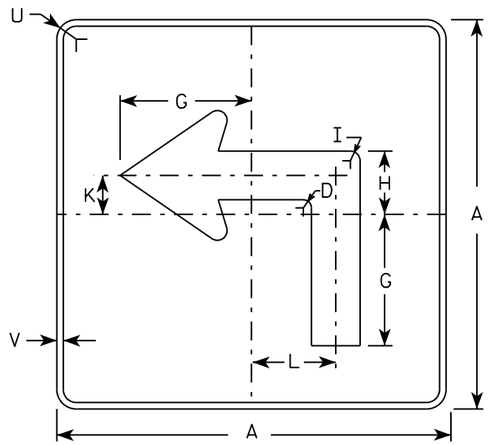
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 176 | E



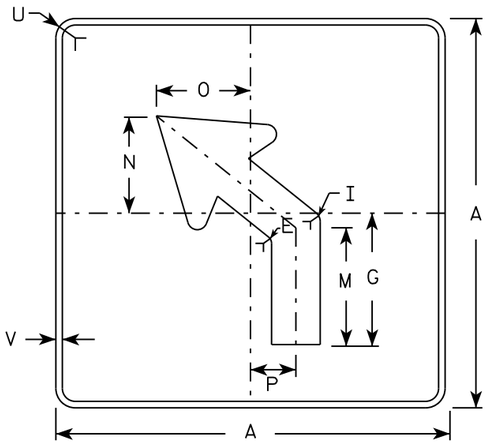
M5-1L
MM5-1L
MO5-1L
MP5-1L



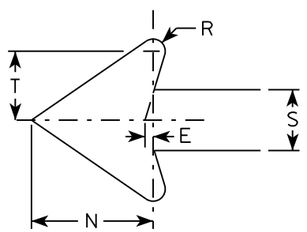
M5-2L
MM5-2L
MO5-2L
MP5-2L



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



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



NOTES

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

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

STANDARD SIGN
M5-1 & M5-2

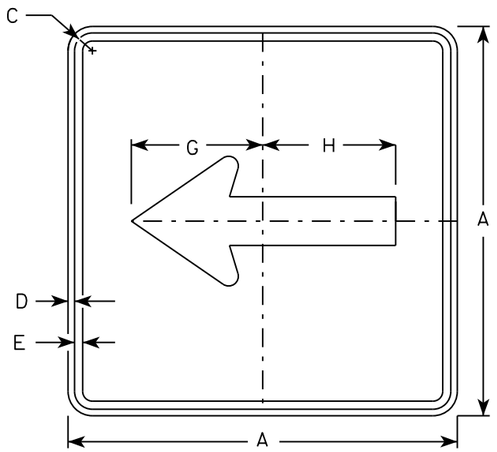
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

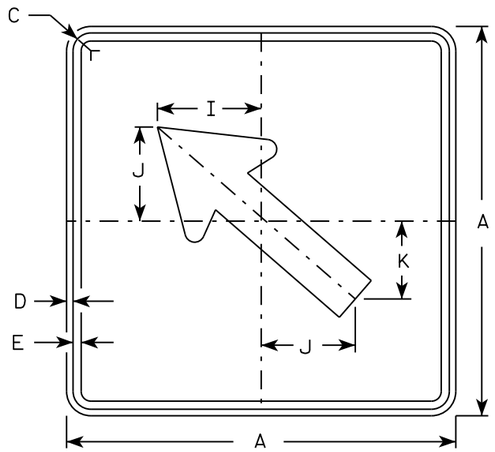
DATE 10/15/15 PLATE NO. M5-1.13

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



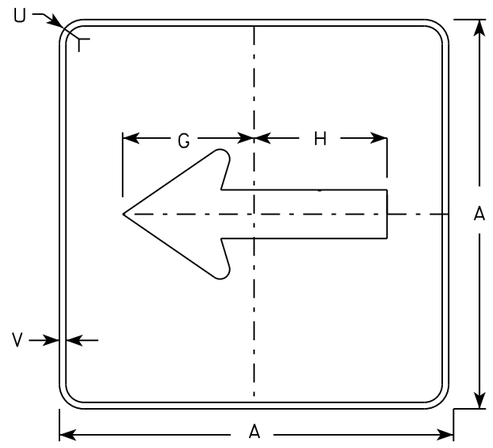
M6-1
MM6-1
MO6-1
MP6-1



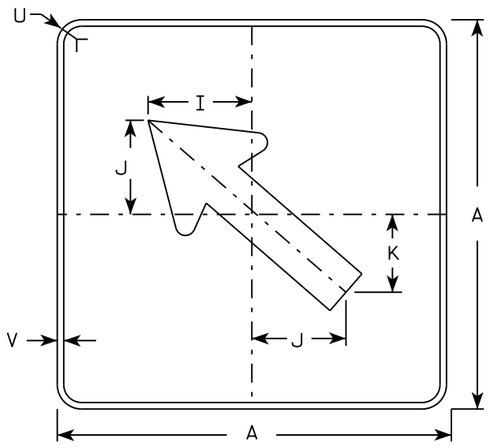
M6-2
MM6-2
MO6-2
MP6-2

NOTES

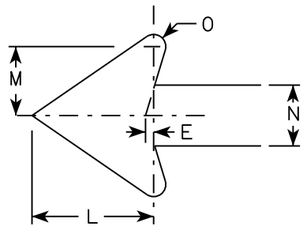
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background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



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



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



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

STANDARD SIGN
M6-1 & M6-2
SERIES

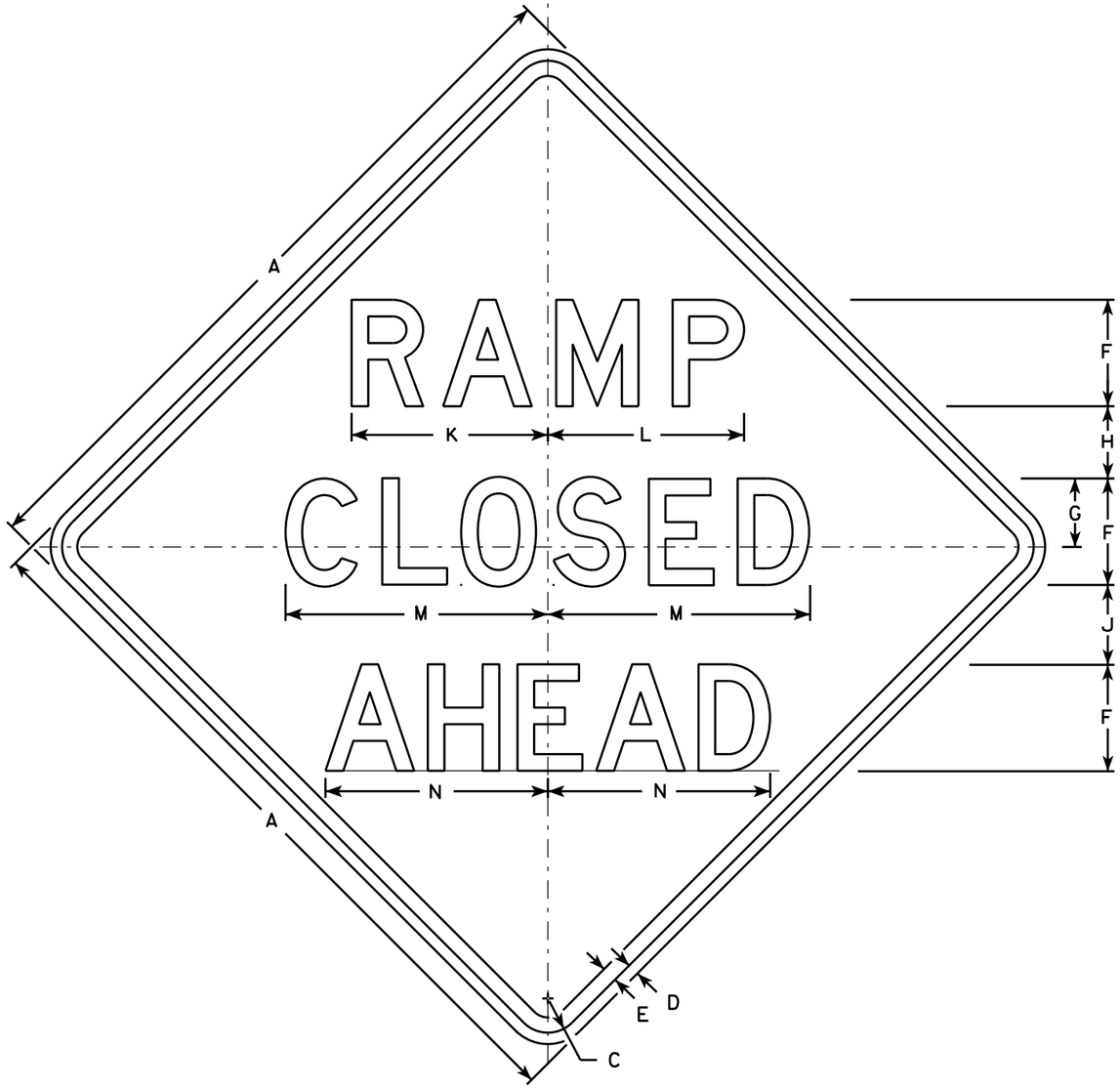
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

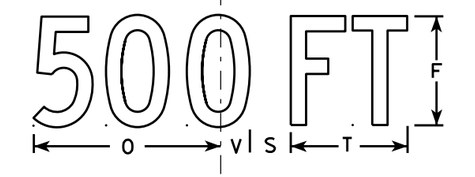
DATE 10/15/15 PLATE 178 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

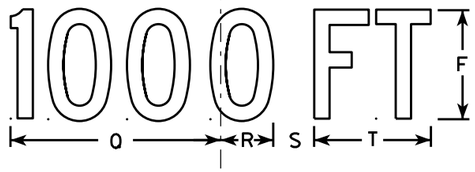
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



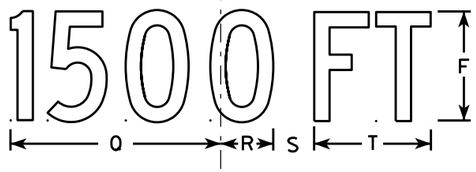
W20-53A



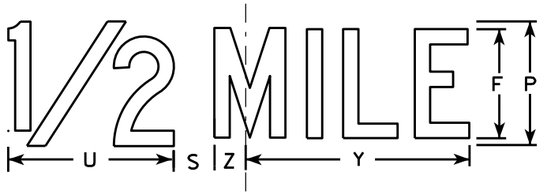
W20-53D



W20-53C



W20-53B



W20-53G



W20-53F

NOTES

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

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

STANDARD SIGN
W20-53A,B,C,D,F,G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/27/15 PLATE NO. W20-53.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 27-MAY-2015 19:40 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.729210:1.000000
WISDOT/CADDS SHEET 42

CROSSOVER 2 NB TAPER EARTHWORK DETAIL

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
103+40	0.00	13.83	0.00	0.00	0	0	0	0	0	0
104+00	60.02	13.92	0.00	1.91	31	0	2	31	3	29
104+50	50.00	14.18	0.00	2.49	26	0	4	57	8	50
105+00	50.00	13.90	0.00	7.09	26	0	9	83	19	64
105+50	50.00	13.75	0.00	6.06	26	0	12	109	34	75
106+00	50.00	14.59	0.00	5.54	26	0	11	135	48	88
106+50	50.00	15.42	0.00	2.92	28	0	8	163	58	106
107+00	50.00	15.37	0.00	5.54	29	0	8	192	68	125
107+50	50.00	16.00	0.00	7.82	29	0	12	221	83	139
108+00	50.00	18.07	0.00	4.72	32	0	12	253	98	156
108+50	50.00	21.69	0.00	6.84	37	0	11	290	111	179
109+00	50.00	25.77	0.00	0.00	44	0	6	334	119	215
109+09	8.74	26.71	0.00	0.00	8	0	0	342	119	223

CROSSOVER 2 SB TAPER EARTHWORK DETAIL

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
106+03	0.00	15.45	0.00	0.27	0	0	0	0	0	0
106+50	47.12	15.95	0.00	1.08	27	0	1	27	1	26
107+00	50.00	15.95	0.00	17.57	30	0	17	57	23	35
107+50	50.00	14.46	0.00	24.19	28	0	39	85	71	14
108+00	50.00	15.62	0.00	17.25	28	0	38	113	119	-6
108+50	50.00	18.19	0.00	6.32	31	0	22	144	146	-2
109+00	50.00	21.20	0.00	1.79	36	0	8	180	156	24
109+25	25.00	24.37	0.00	0.00	21	0	1	201	158	44

CROSSOVER 3 NB TAPER EARTHWORK DETAIL

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 8
145+69	0.00	20.31	0.00	0.00	0	0	0	0	0	0
146+00	30.53	21.60	0.00	2.39	24	0	1	24	1	23
146+50	50.00	20.59	0.00	0.00	39	0	2	63	4	59
146+61	11.24	20.29	0.00	0.00	9	0	0	72	4	68

CROSSOVER 3 SB TAPER EARTHWORK DETAIL

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 8
145+07	0.00	8.91	0.00	0.00	0	0	0	0	0	0
145+50	43.24	17.19	0.00	24.85	21	0	20	21	25	-4
146+00	50.00	17.42	0.00	12.02	32	0	34	53	68	-15
146+50	50.00	17.04	0.00	12.60	32	0	23	85	96	-11
147+00	50.00	17.47	0.00	7.12	32	0	18	117	119	-2
147+50	50.00	17.94	0.00	0.20	33	0	7	150	128	23
148+00	50.00	19.22	0.00	0.00	34	0	0	184	128	57
148+12	11.90	19.87	0.00	0.00	9	0	0	193	128	66

CROSSOVER 4 NB TAPER EARTHWORK DETAIL

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 8
266+54	0.00	14.80	0.00	0.06	0	0	0	0	0	0
267+00	45.61	14.58	0.00	1.89	25	0	2	25	3	23
267+50	50.00	14.45	0.00	4.02	27	0	5	52	9	43
268+00	50.00	15.64	0.00	5.09	28	0	8	80	19	61
268+04	3.94	15.64	0.00	5.30	2	0	1	82	20	62
268+50	46.06	15.78	0.00	8.70	27	0	12	109	35	74
269+00	50.00	16.10	0.00	9.81	30	0	17	139	56	83
269+50	50.00	15.30	0.00	18.60	29	0	26	168	89	79
270+00	50.00	14.83	0.00	24.07	28	0	40	196	139	57
270+50	50.00	14.48	0.00	30.99	27	0	51	223	203	21
271+00	50.00	15.15	0.00	30.52	27	0	57	250	274	-24
271+50	50.00	13.48	0.00	23.79	27	0	50	277	336	-59
271+75	25.00	10.37	0.00	0.74	11	0	11	288	350	-62
271+90	15.11	9.76	0.00	0.00	6	0	0	294	350	-56

CROSSOVER 4 SB TAPER EARTHWORK DETAIL

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 8
268+04	0.00	16.93	0.00	0.00	0	0	0	0	0	0
268+50	46.06	17.53	0.00	0.54	29	0	0	29	0	29
269+00	50.00	17.67	0.00	2.70	33	0	3	62	4	58
269+50	50.00	17.86	0.00	3.55	33	0	6	95	11	84
270+00	50.00	18.17	0.00	3.91	33	0	7	128	20	108
270+50	50.00	17.37	0.00	4.63	33	0	8	161	30	131
271+00	50.00	18.66	0.00	2.25	33	0	6	194	38	157
271+50	50.00	18.09	0.00	0.00	34	0	2	228	40	188
271+82	31.73	9.24	0.00	0.36	16	0	0	244	40	204

CROSSOVER 5 NB TAPER EARTHWORK DETAIL

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 8
318+05	0.00	15.04	0.00	0.00	0	0	0	0	0	0
318+50	44.76	17.62	0.00	1.40	27	0	1	27	1	26
319+00	50.00	15.53	0.00	8.34	31	0	9	58	13	46
319+50	50.00	15.03	0.00	11.10	28	0	18	86	35	51
320+00	50.00	20.09	0.00	10.66	33	0	20	119	60	59
320+50	50.00	18.05	0.00	10.56	35	0	20	154	85	69
321+00	50.00	15.02	0.00	5.62	31	0	15	185	104	81
321+50	50.00	14.66	0.00	1.82	27	0	7	212	113	100
321+81	30.67	14.53	0.00	0.20	17	0	1	229	114	115

CROSSOVER 5 SB TAPER EARTHWORK DETAIL

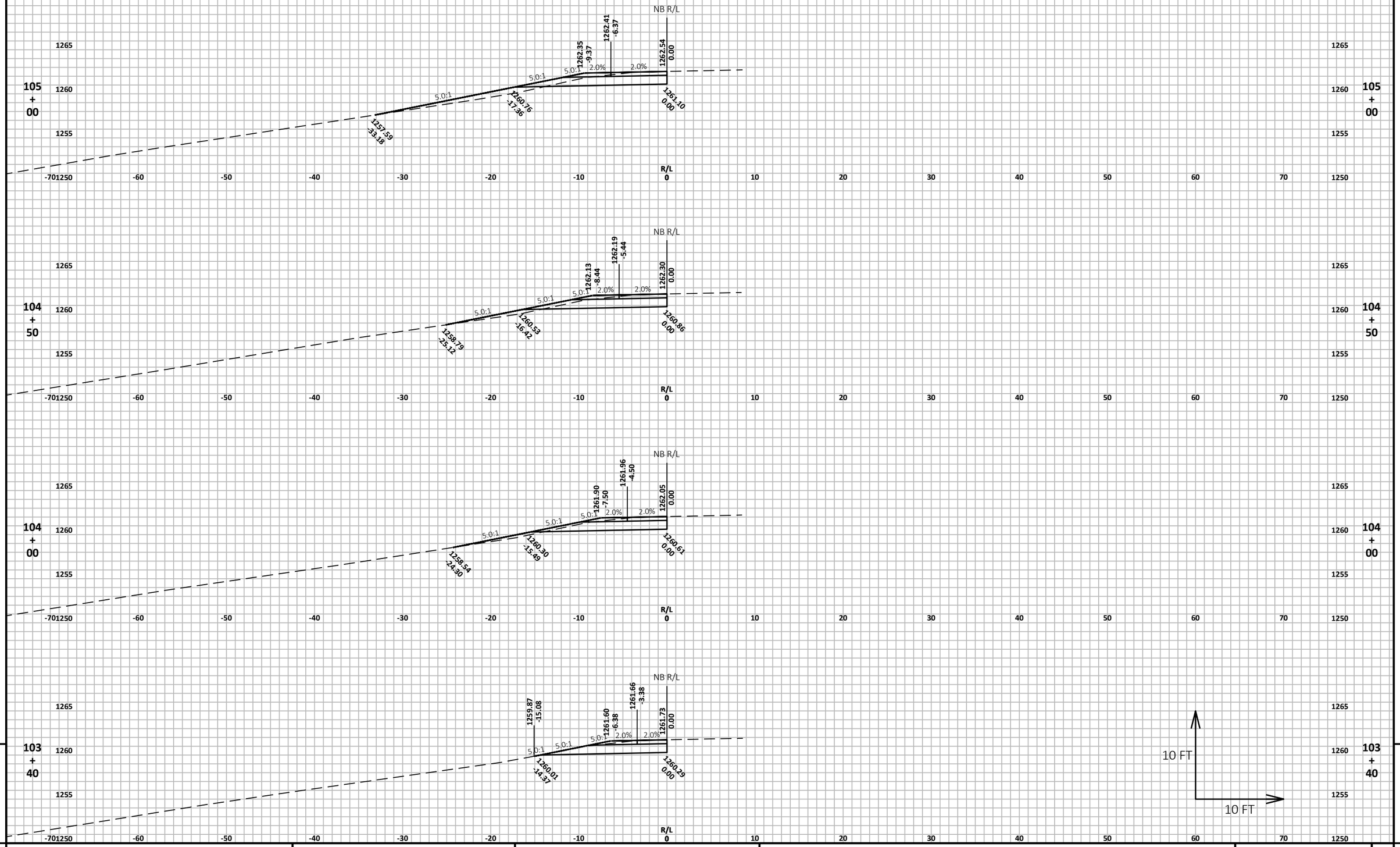
STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
317+98	0.00	12.62	0.00	0.00	0	0	0	0	0	0
318+50	51.79	19.64	0.00	8.13	31	0	8	31	10	21
319+00	50.00	28.04	0.00	10.10	44	0	17	75	31	44
319+50	50.00	29.04	0.00	10.85	53	0	19	128	55	73
320+00	50.00	20.42	0.00	12.63	46	0	22	174	83	92
320+50	50.00	16.99	0.00	12.15	35	0	23	209	111	98
321+00	50.00	16.65	0.00	6.03	31	0	17	240	133	108
321+50	50.00	15.88	0.00	4.72	30	0	10	270	145	125
322+00	50.00	16.29	0.00	2.73	30	0	7	300	154	146
322+50	50.00	16.01	0.00	0.18	30	0	3	330	158	173
323+00	50.00	15.90	0.00	0.64	30	0	1	360	159	201
323+34	33.92	16.62	0.00	0.00	20	0	0	380	159	221

CROSSOVER 6 NB TAPER EARTHWORK DETAIL

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 8
414+29	0.00	16.22	0.00	0.00	0	0	0	0	0	0
414+50	20.87	16.40	0.00	0.00	13	0	0	13	0	13
415+00	50.00	15.92	0.00	0.99	30	0	1	43	1	42
415+50	50.00	16.13	0.00	1.41	30	0	2	73	4	69
416+00	50.00	16.29	0.00	1.90	30	0	3	103	8	96
416+10	9.73	16.33	0.00	1.91	6	0	1	109	9	100
416+50	40.27	16.64	0.00	2.01	25	0	3	134	13	122
417+00	50.00	17.45	0.00	2.46	32	0	4	166	18	149
417+50	50.00	18.64	0.00	2.69	33	0	5	199	24	175
418+00	50.00	17.99	0.00	1.70	34	0	4	233	29	204
418+50	50.00	17.36	0.00	5.90	33	0	7	266	38	229
419+00	50.00	20.24	0.00	5.86	35	0	11	301	51	250
419+00	0.00	0.00	0.00	0.00	0	0	0	301	51	250
419+50	50.00	25.15	0.00	3.37	23	0	3	324	55	269
419+67	16.54	28.49	0.00	0.19	16	0	1	340	56	284

CROSSOVER 6 SB TAPER EARTHWORK DETAIL

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 8
416+10	0.00	14.49	0.00	0.76	0	0	0	0	0	0
416+50	40.27	14.49	0.00	1.84	22	0	2	22	3	20
417+00	50.00	15.02	0.00	4.72	27	0	6	49	10	39
417+50	50.00	16.63	0.00	4.43	29	0	8	78	20	58
418+00	50.00	17.92	0.00	2.25	32	0	6	110	28	83
418+50	50.00	19.73	0.00	3.52	35	0	5	145	34	111
419+00	50.00	21.62	0.00	3.67	38	0	7	183	43	141
419+45	45.32	26.29	0.00	0.13	40	0	3	223	46	177



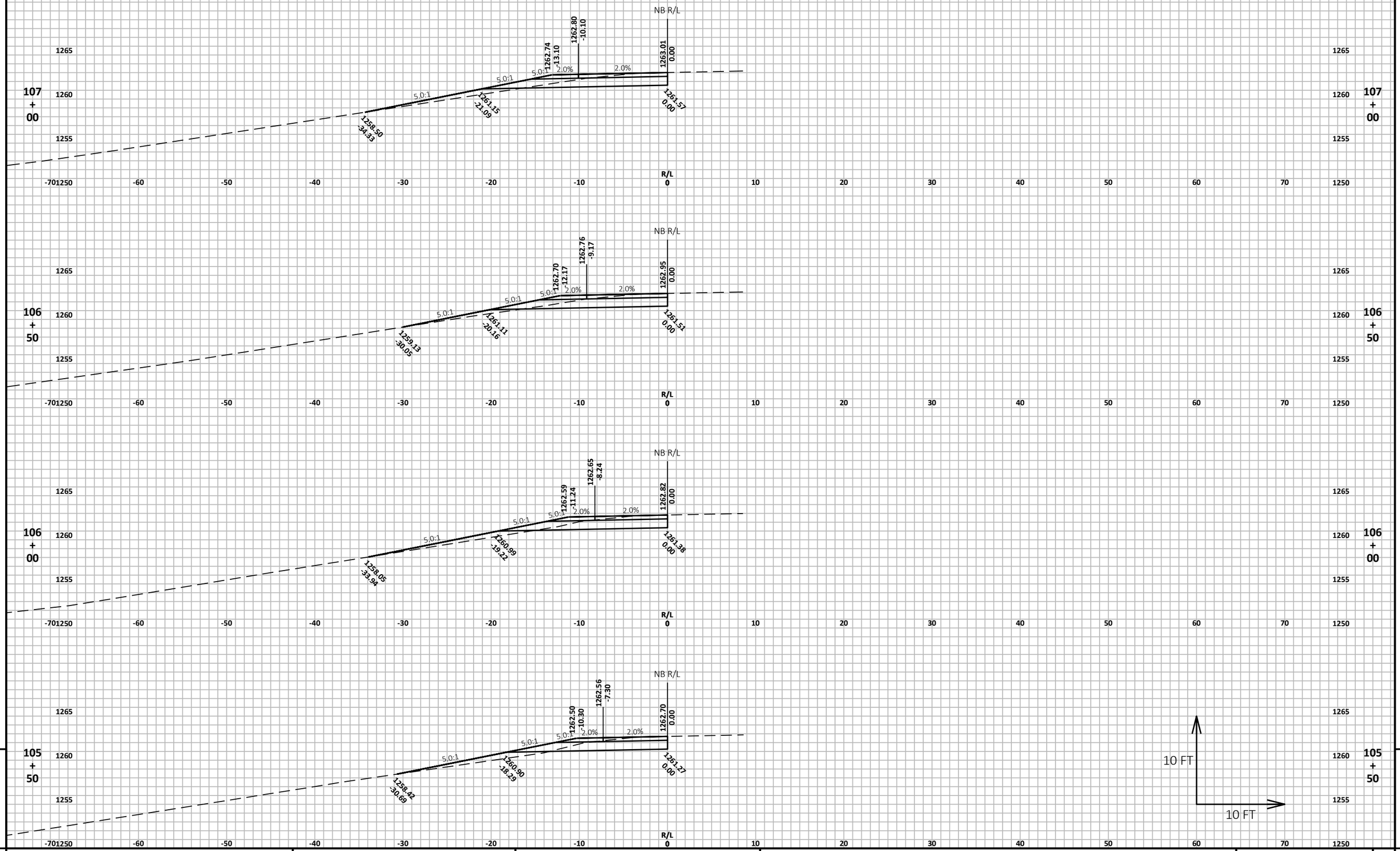
9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 2 NB	SHEET 184	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090221-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



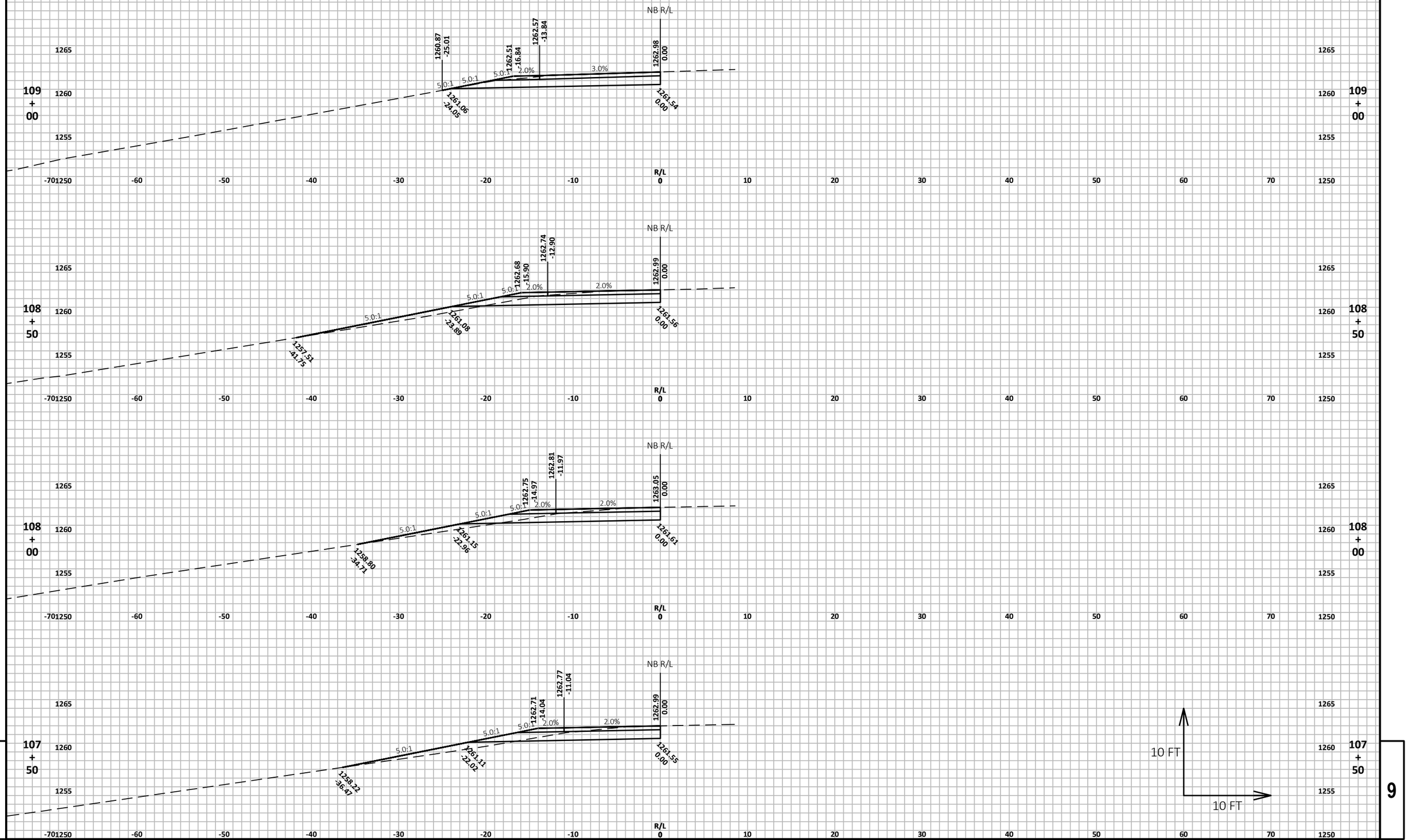
9

9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 2 NB	SHEET 185	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090222-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



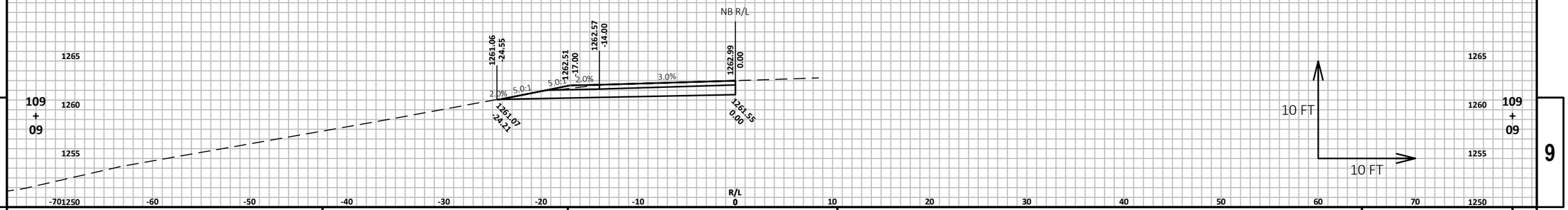
9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 2 NB	SHEET 186	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090223-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

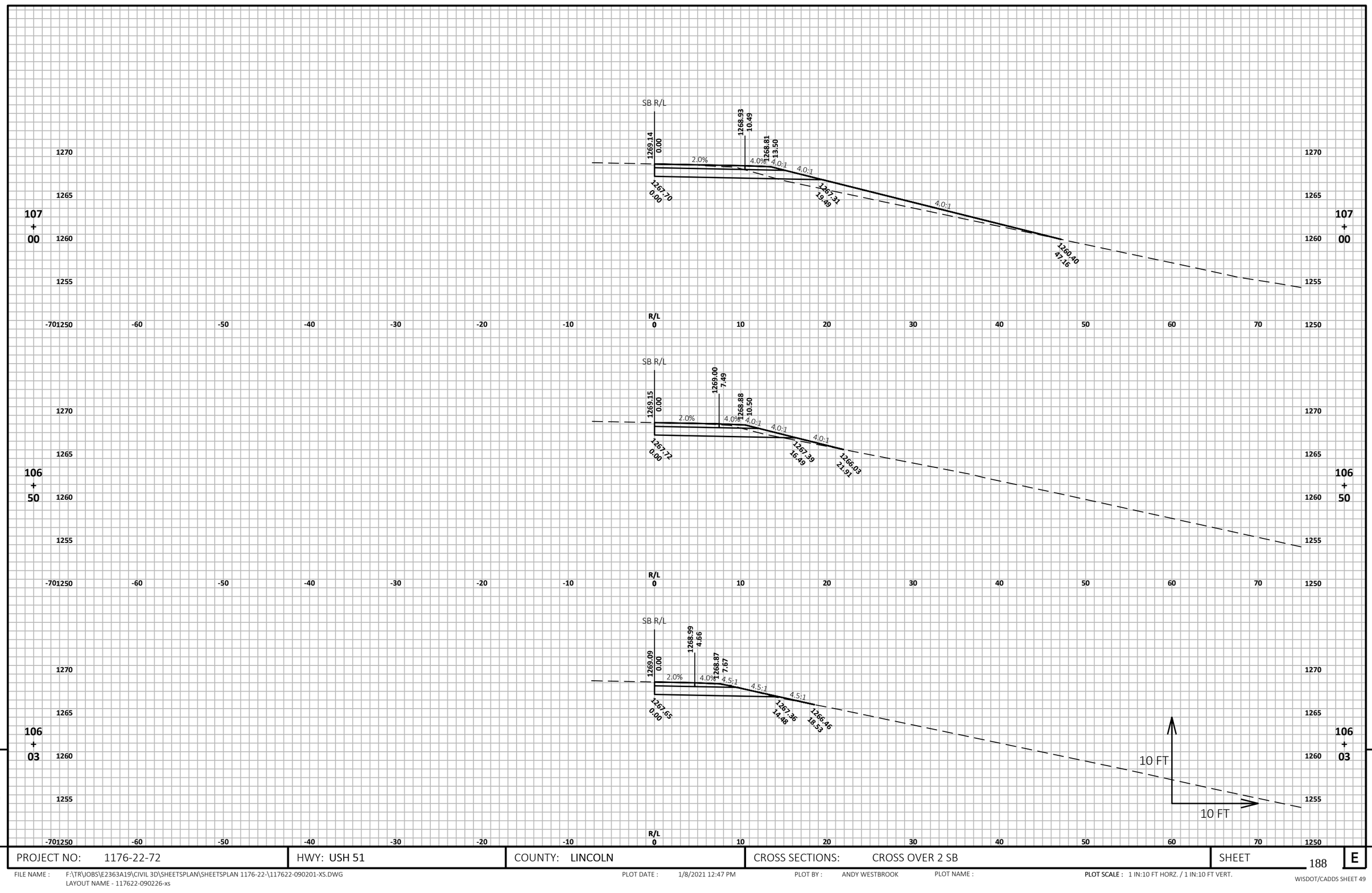
PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 2 NB	SHEET 187	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090224-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

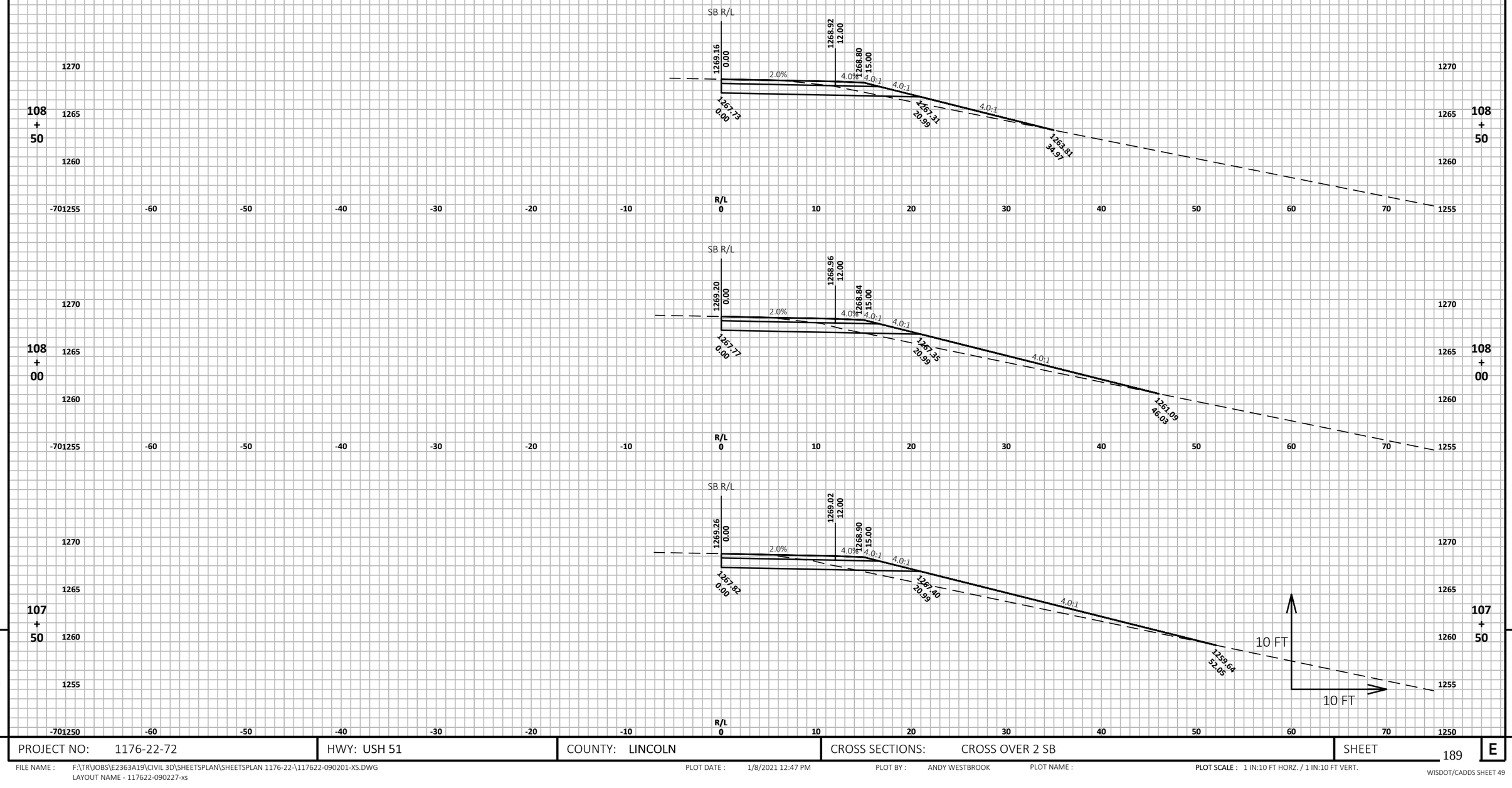
WISDOT/CADDS SHEET 49



PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 2 SB	SHEET 188	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090226-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



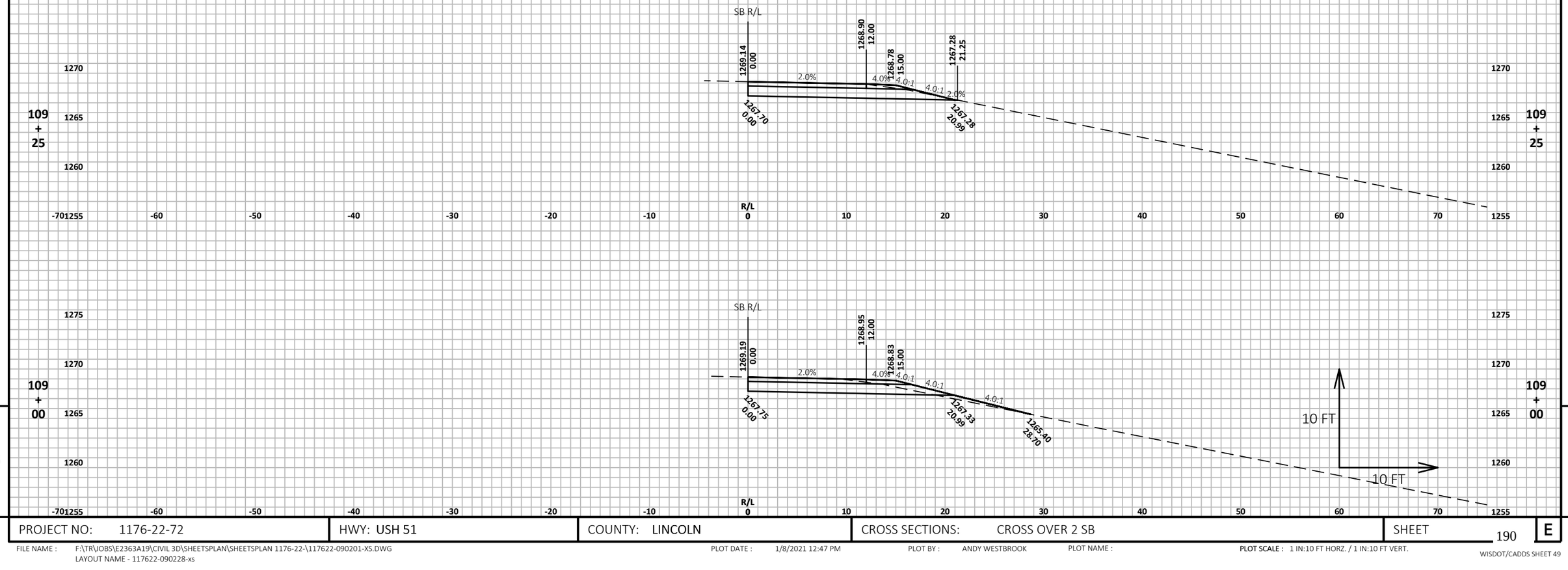
9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 2 SB	SHEET 189	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090227-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

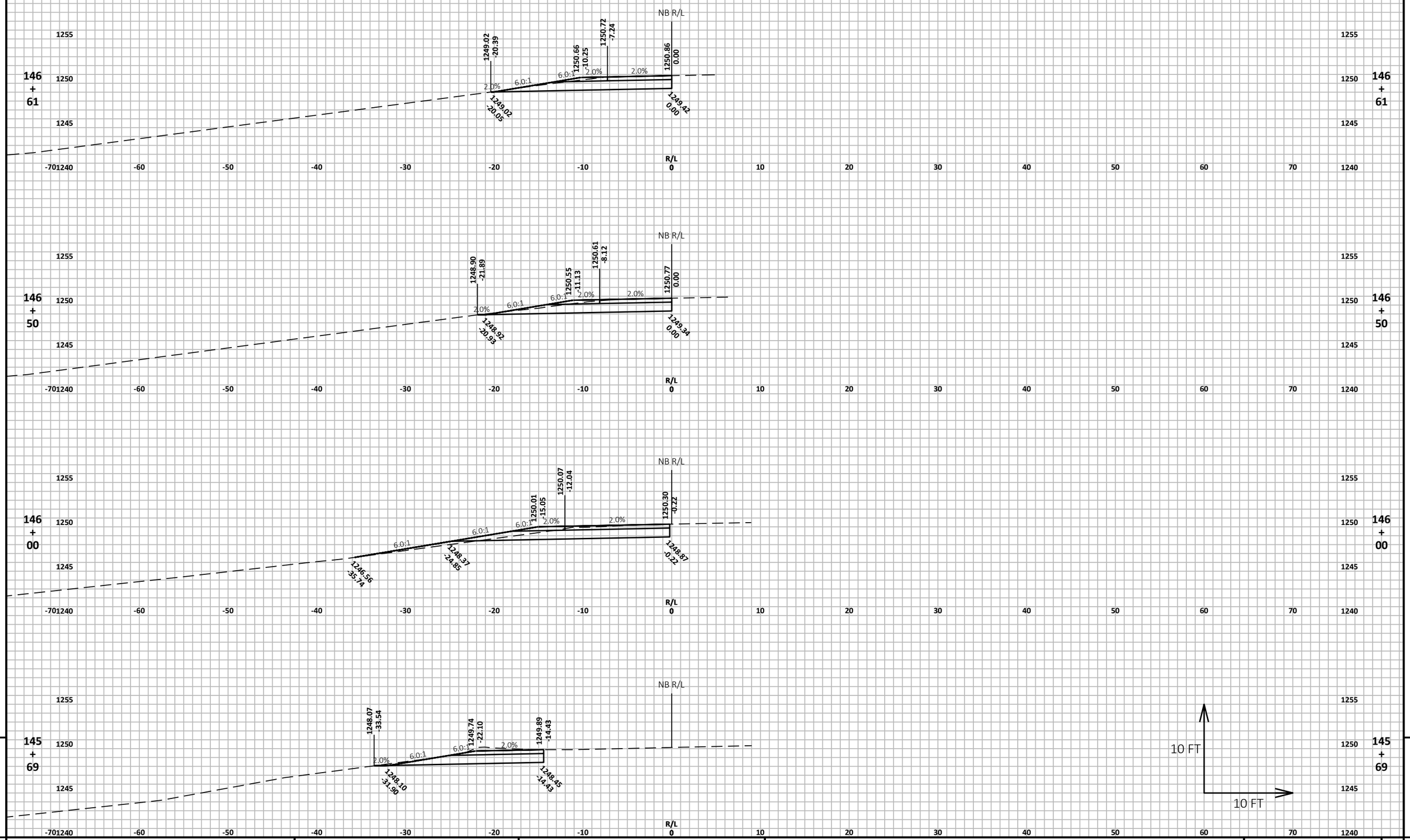


PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 2 SB	SHEET 190	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090228-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

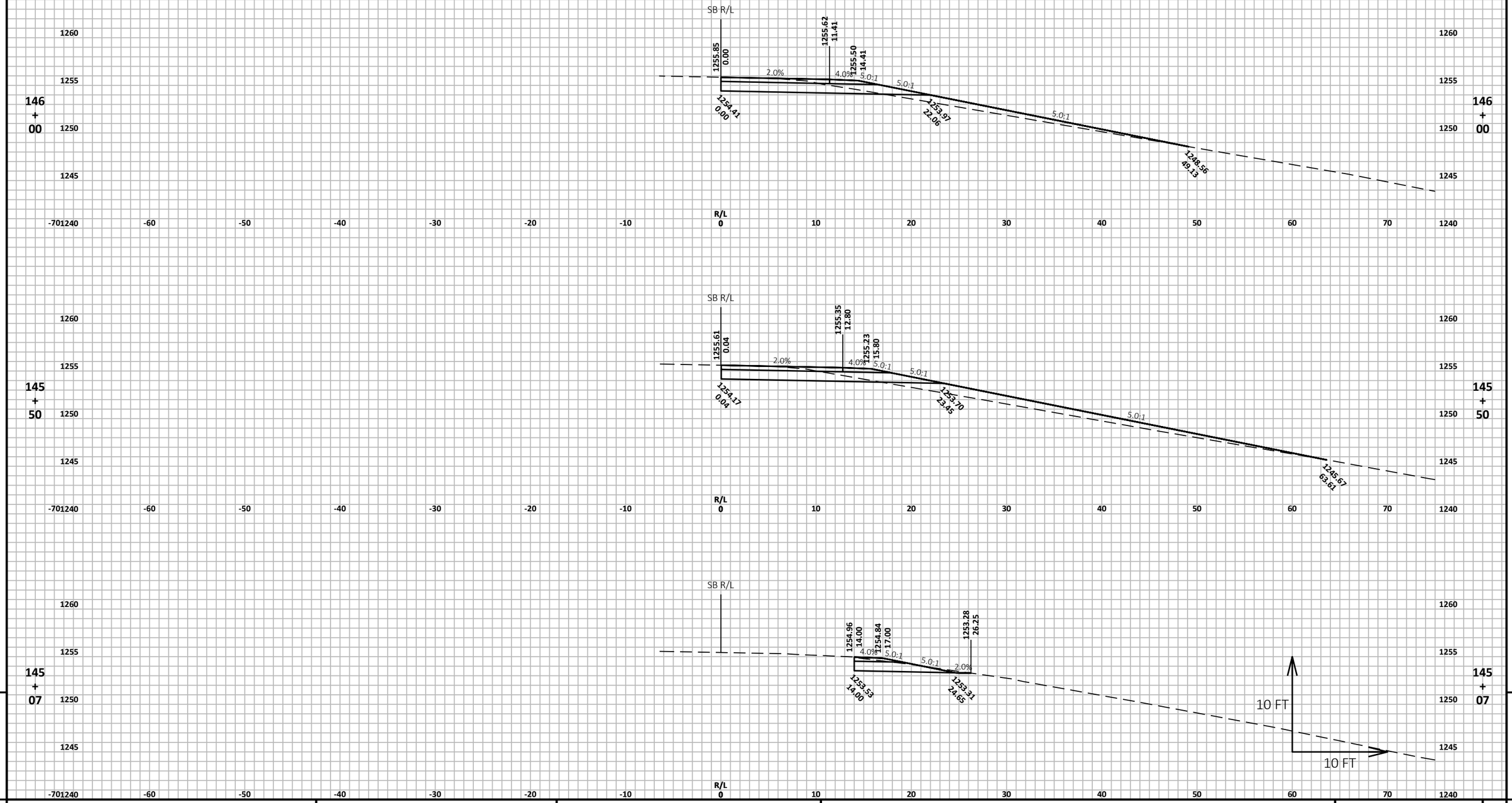
PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 3 NB	SHEET 191	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090231-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

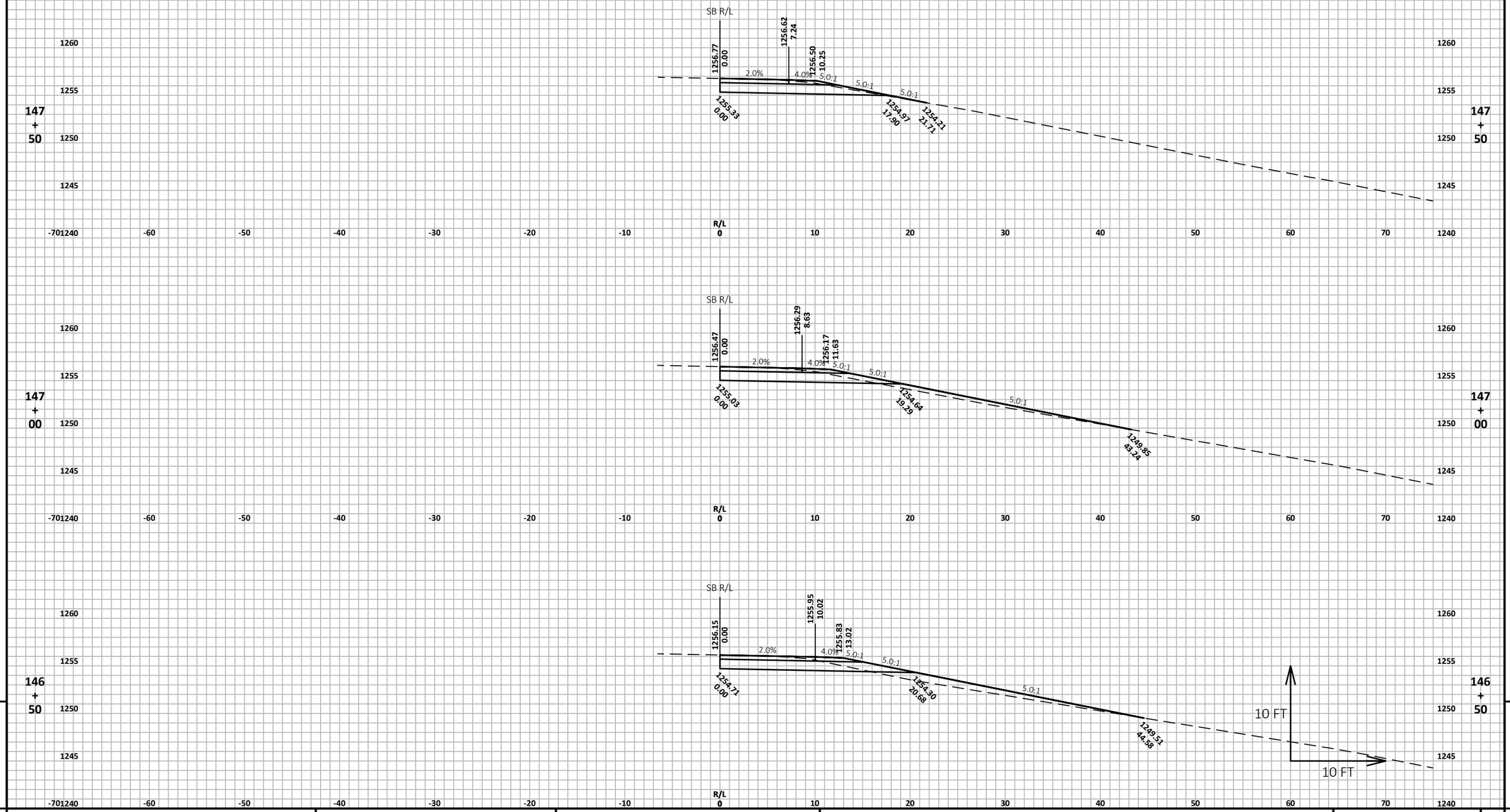
9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 3 SB	SHEET 192	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090235-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

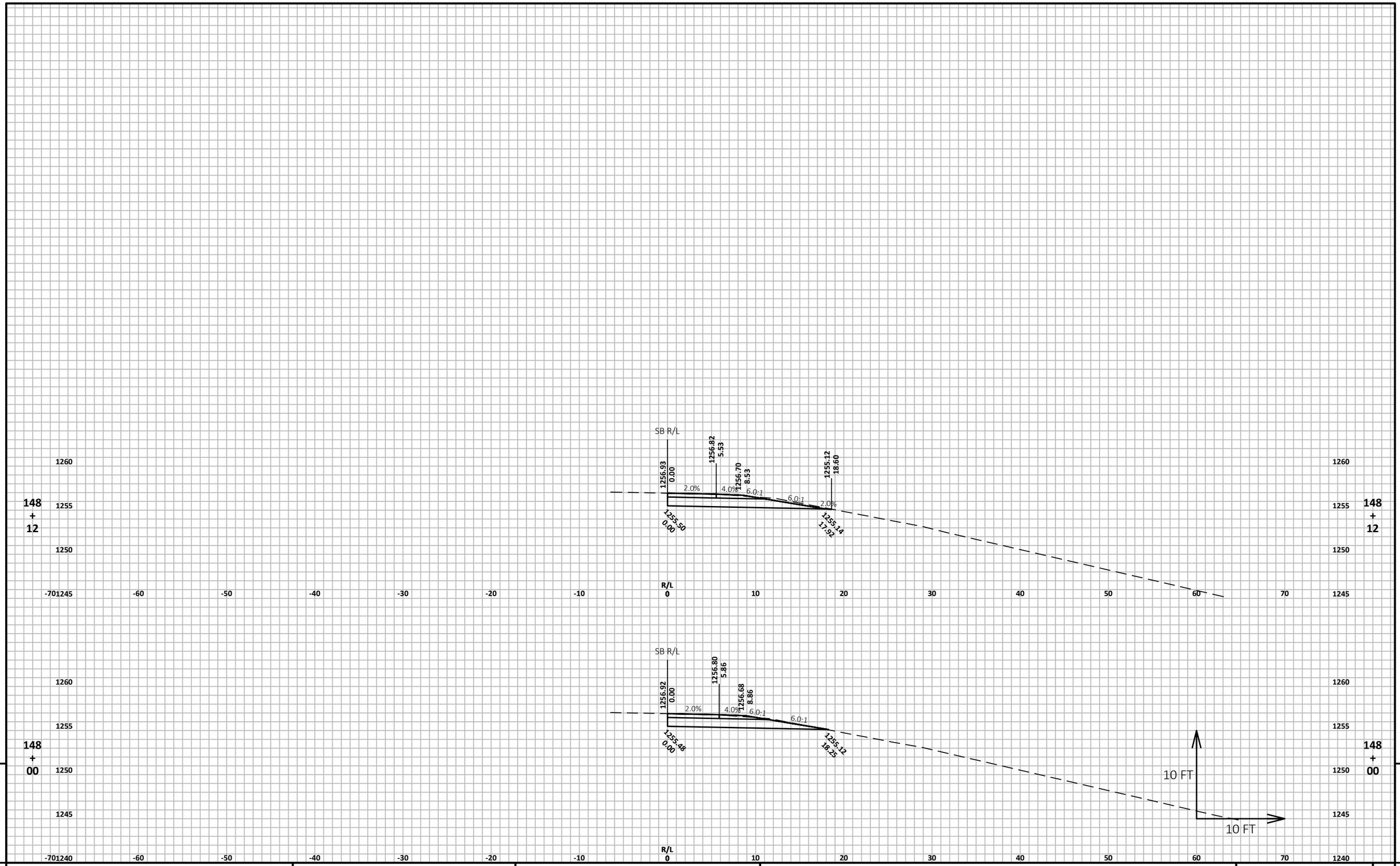
PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 3 SB	SHEET 193	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090236-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

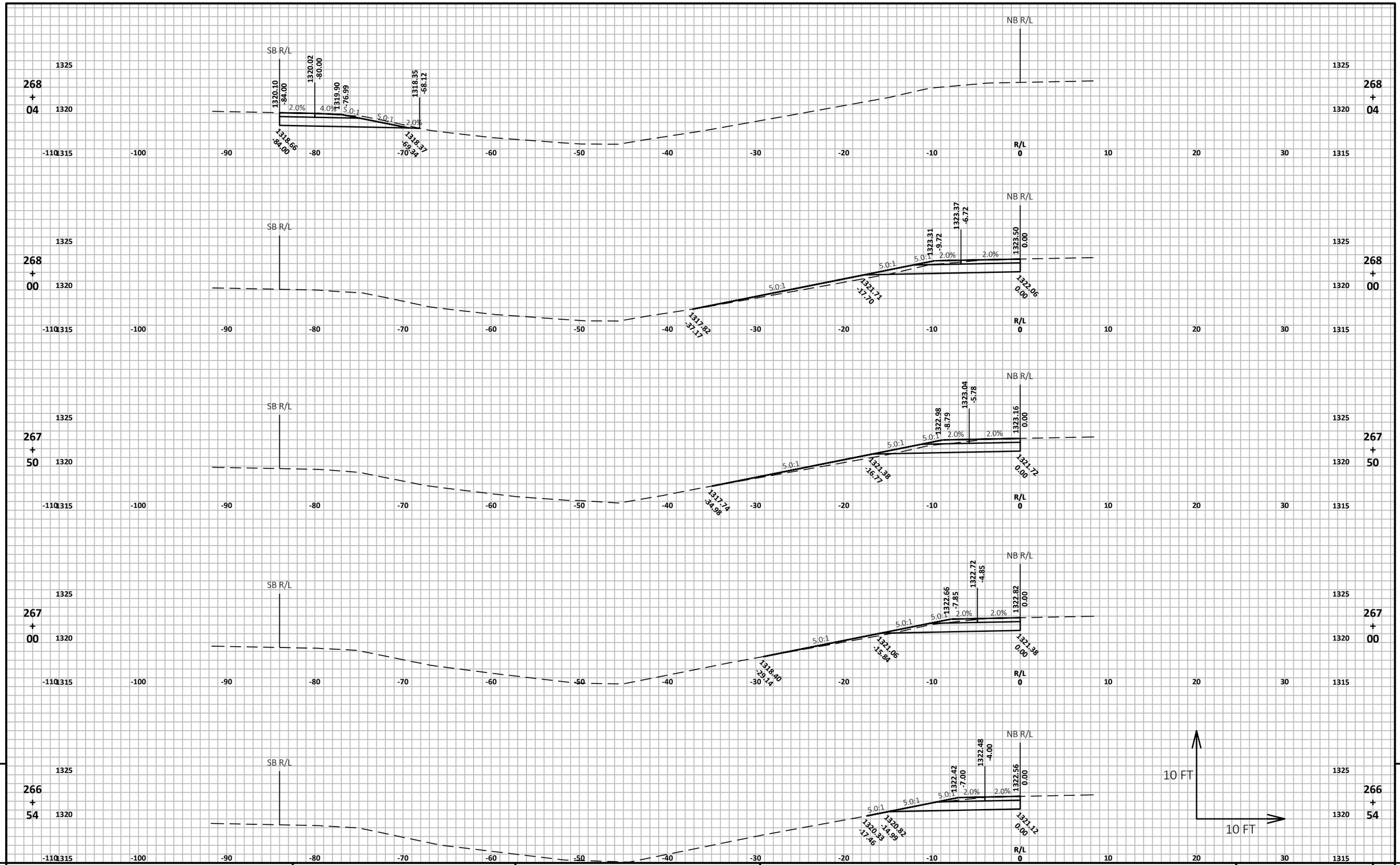
9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 3 SB	SHEET 194	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090237-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



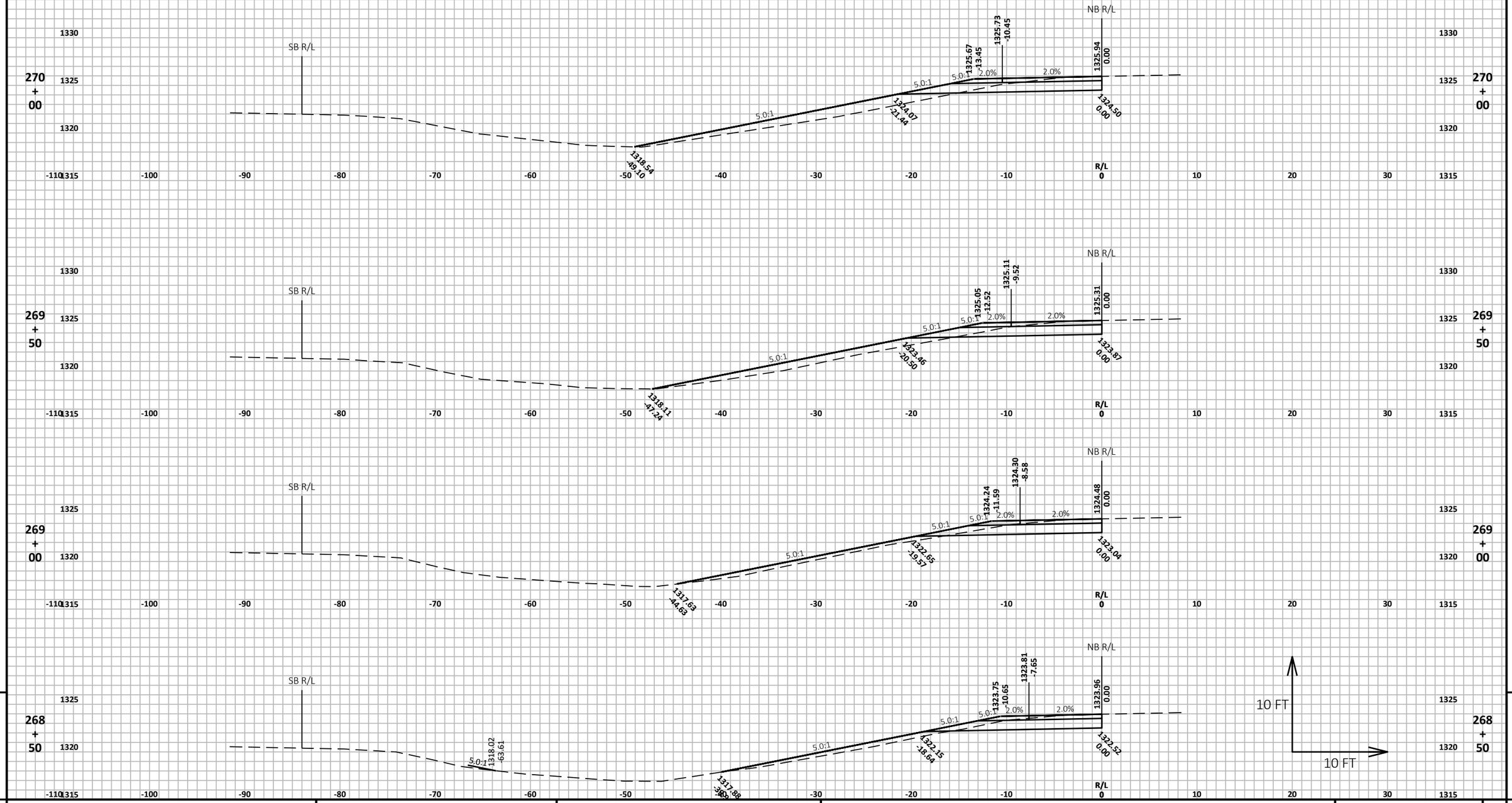
9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 4 NB & SB	SHEET 195	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090241-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



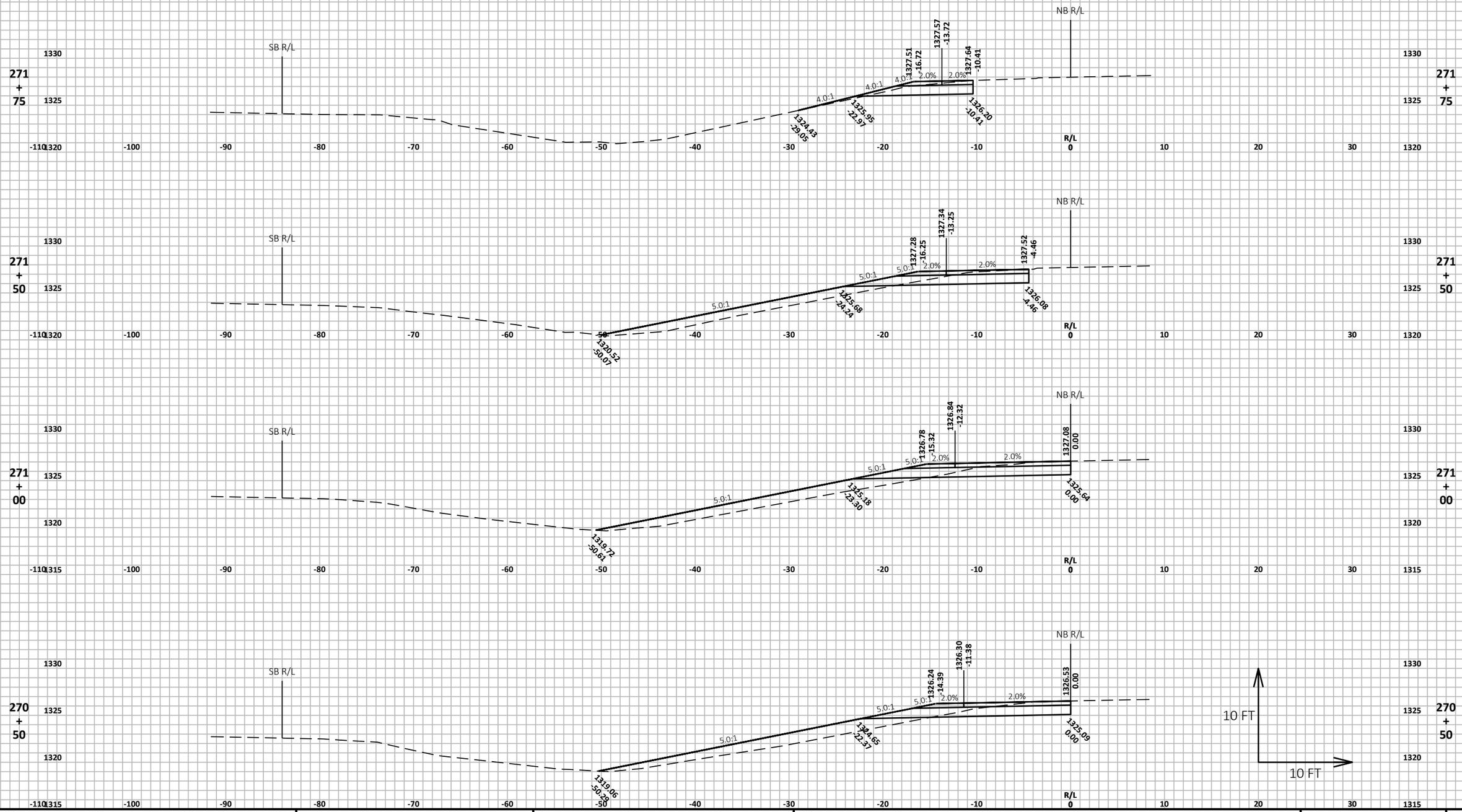
9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 4 NB & SB	SHEET 196	E

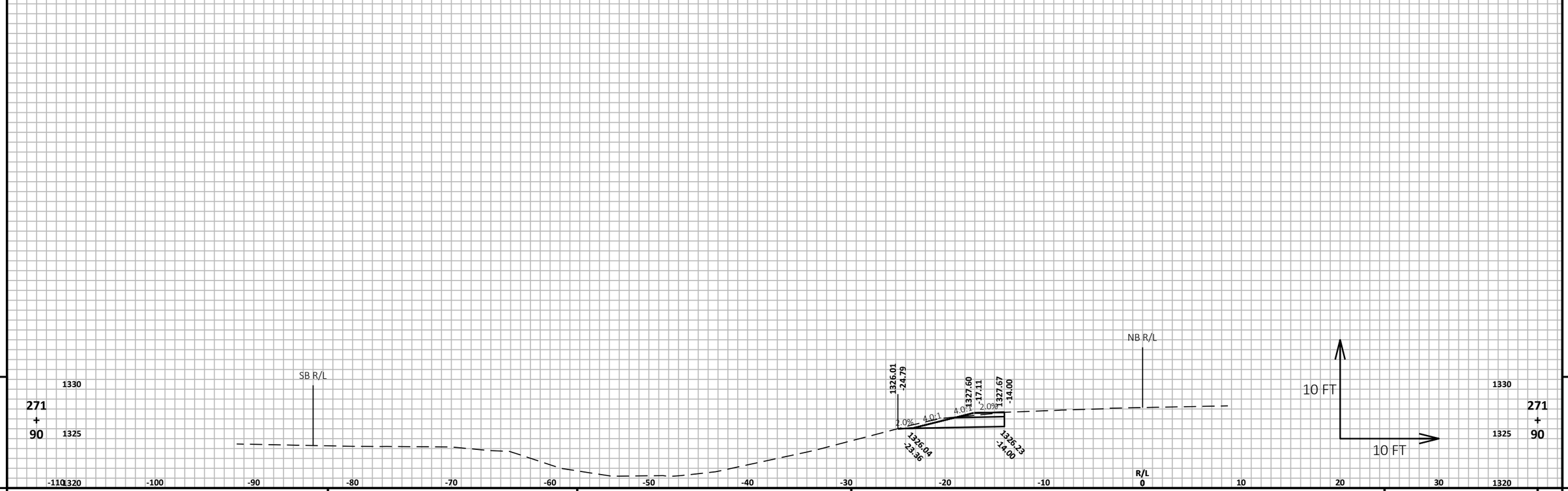
FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090242-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 4 NB & SB	SHEET 197	E



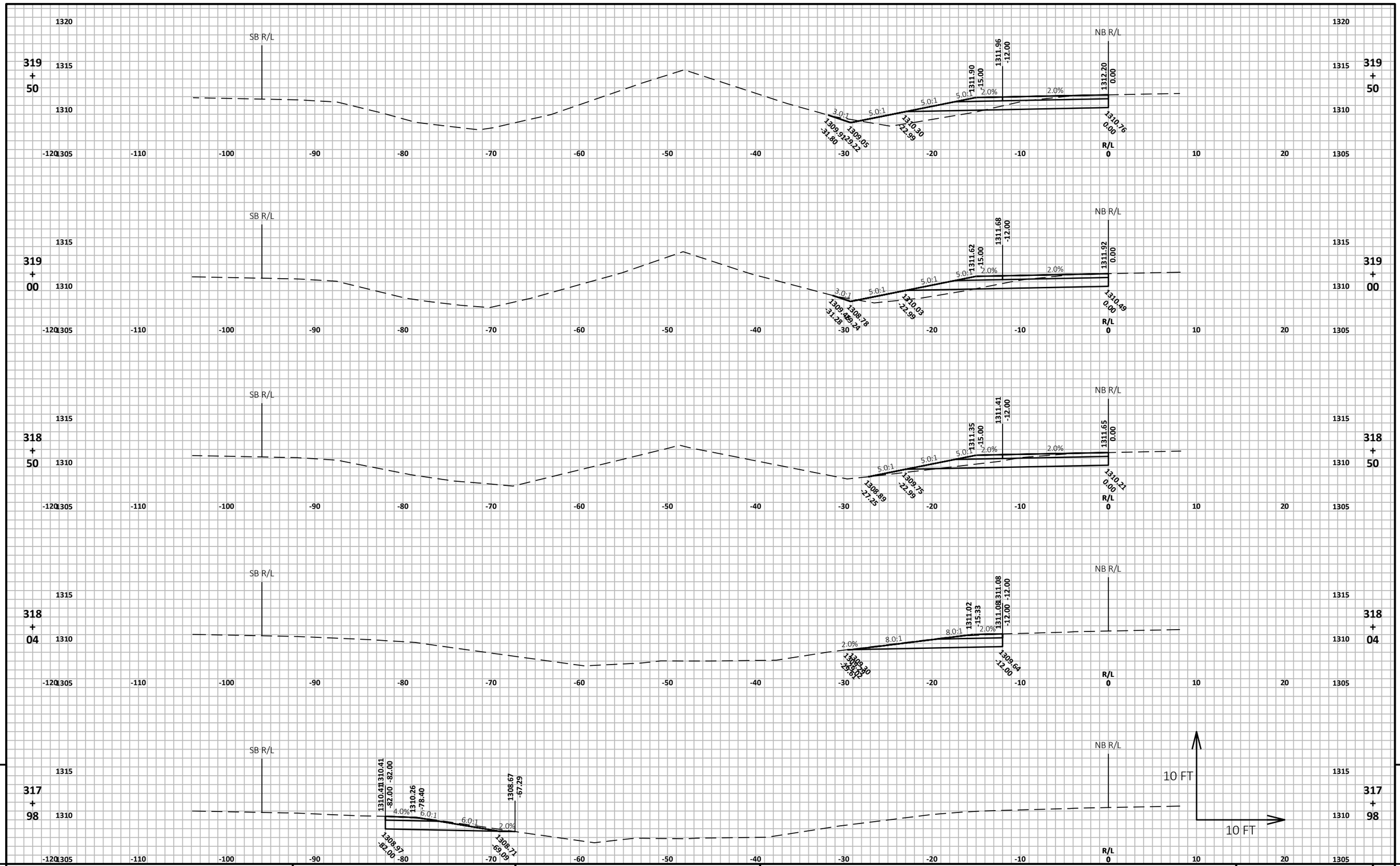
9 9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 4 NB & SB	SHEET 198	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090244-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



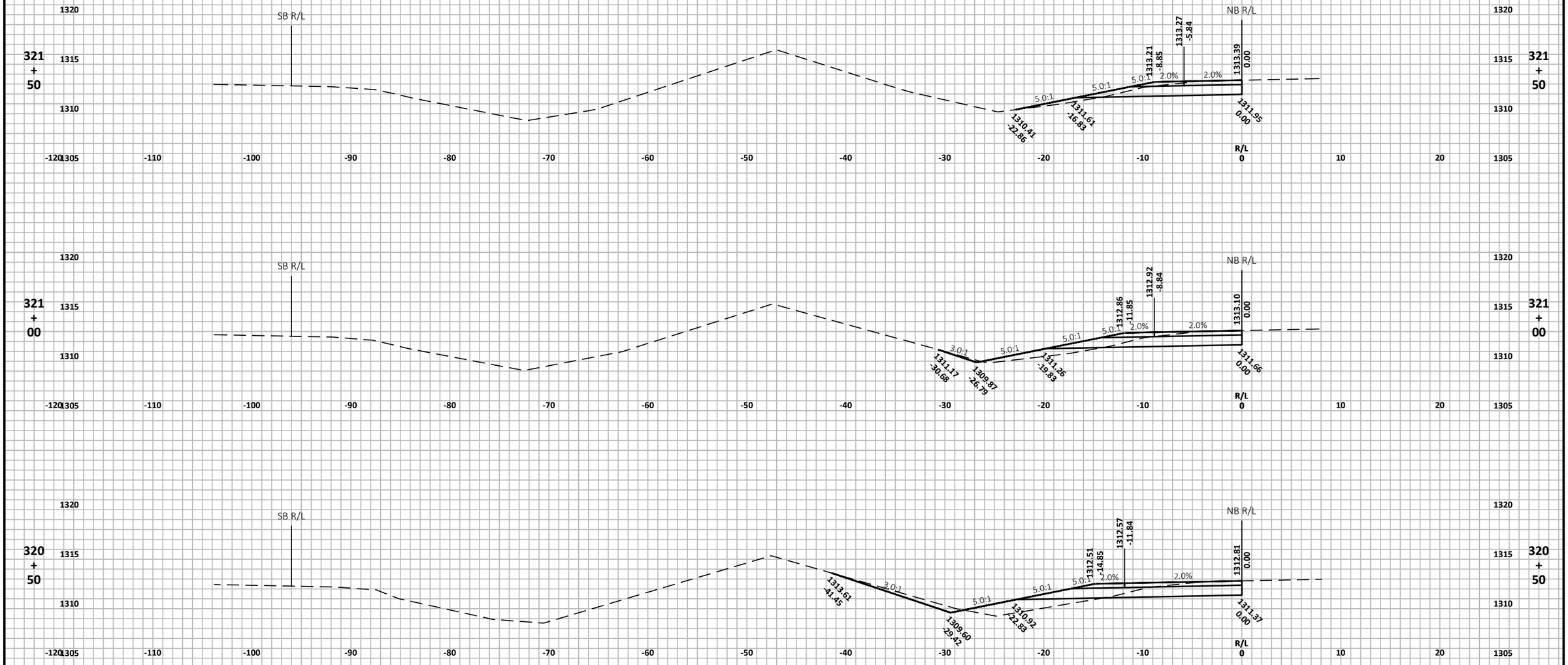
9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 5 NB & SB	SHEET 199	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090251-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 5 NB & SB	SHEET 200	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090252-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 5 NB & SB	SHEET 201	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090253-xs

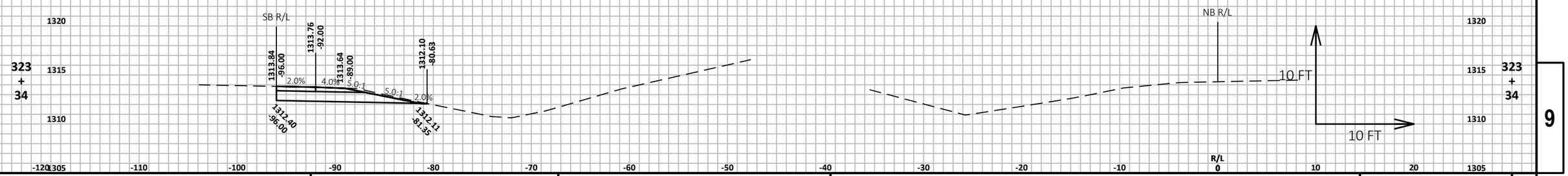
PLOT DATE : 1/8/2021 12:47 PM

PLOT BY : ANDY WESTBROOK

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

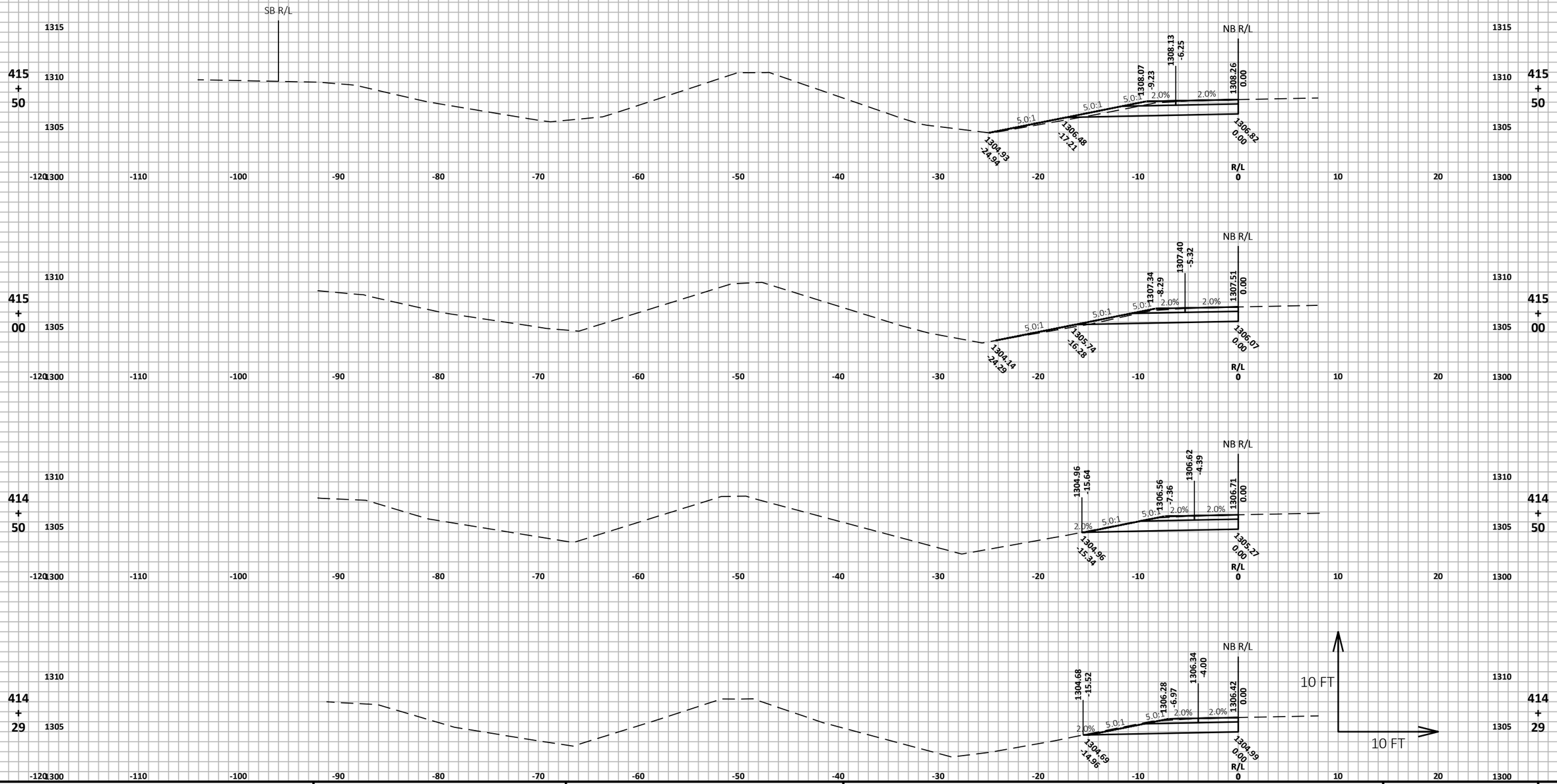
PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 5 NB & SB	SHEET 202	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090254-xs

PLOT DATE : 1/8/2021 12:47 PM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



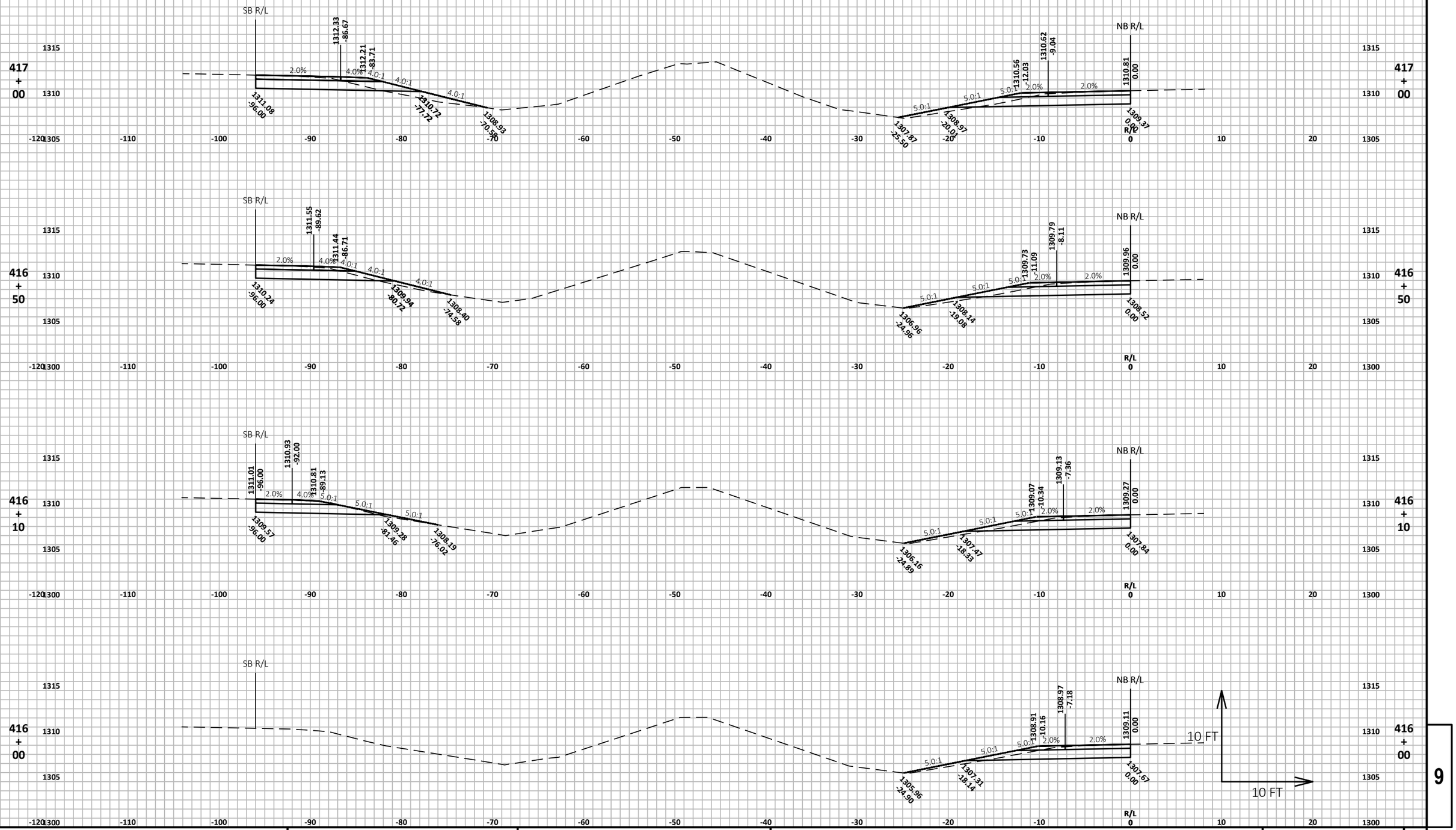
9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 6 NB & SB	SHEET 203	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090261-xs

PLOT DATE : 1/8/2021 12:48 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

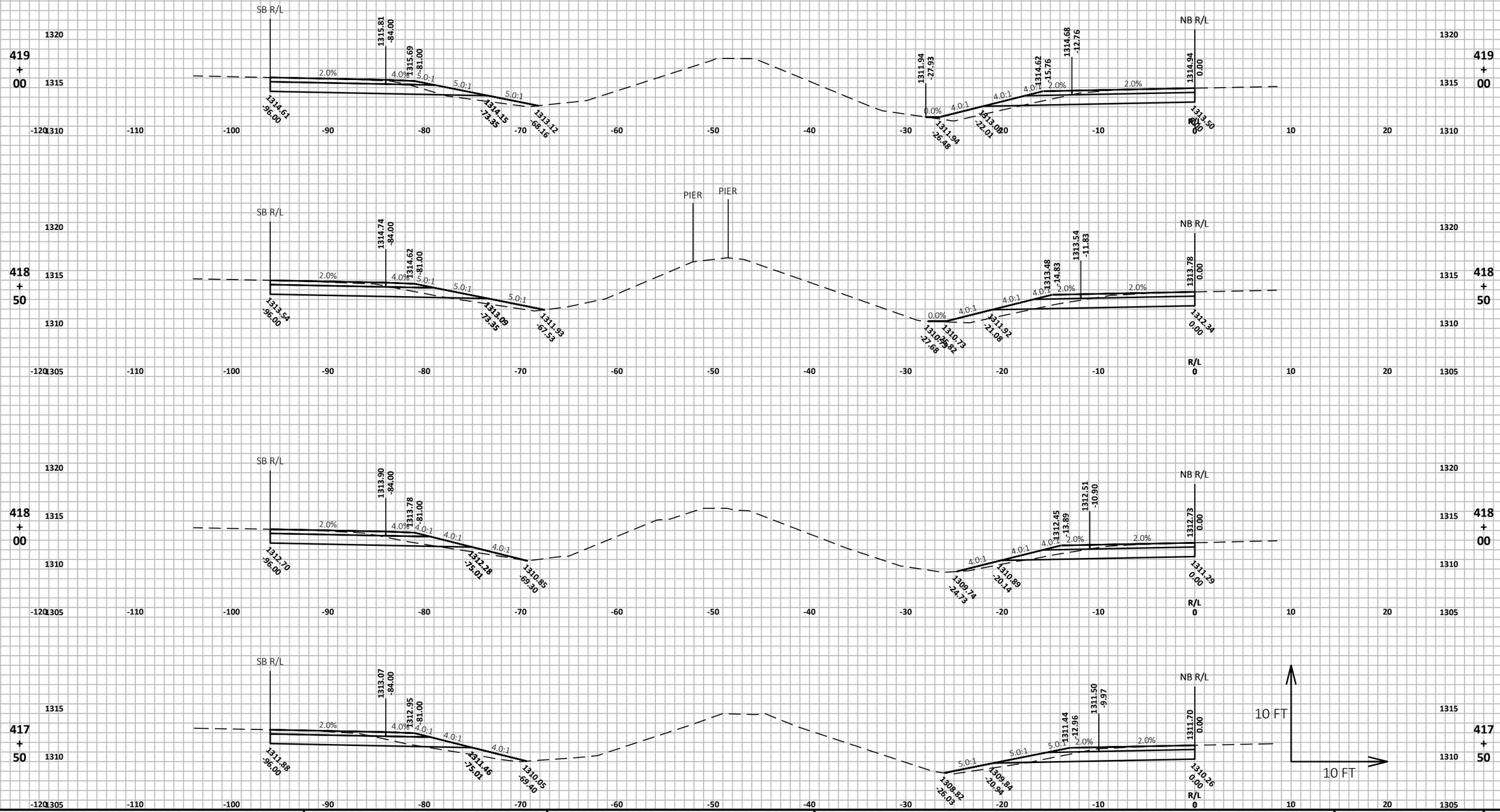
PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 6 NB & SB	SHEET 204	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090262-xs

PLOT DATE : 1/8/2021 12:48 PM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



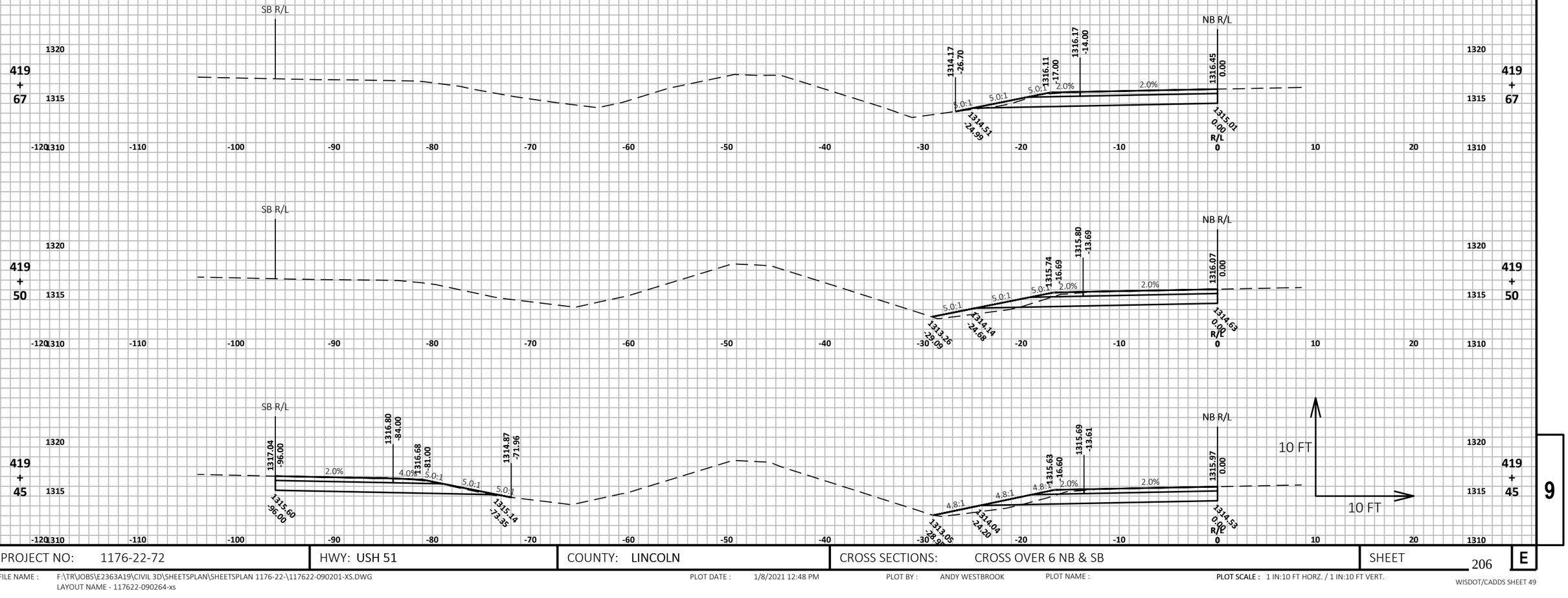
9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 6 NB & SB	SHEET 205	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090263-xs

PLOT DATE : 1/8/2021 12:48 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



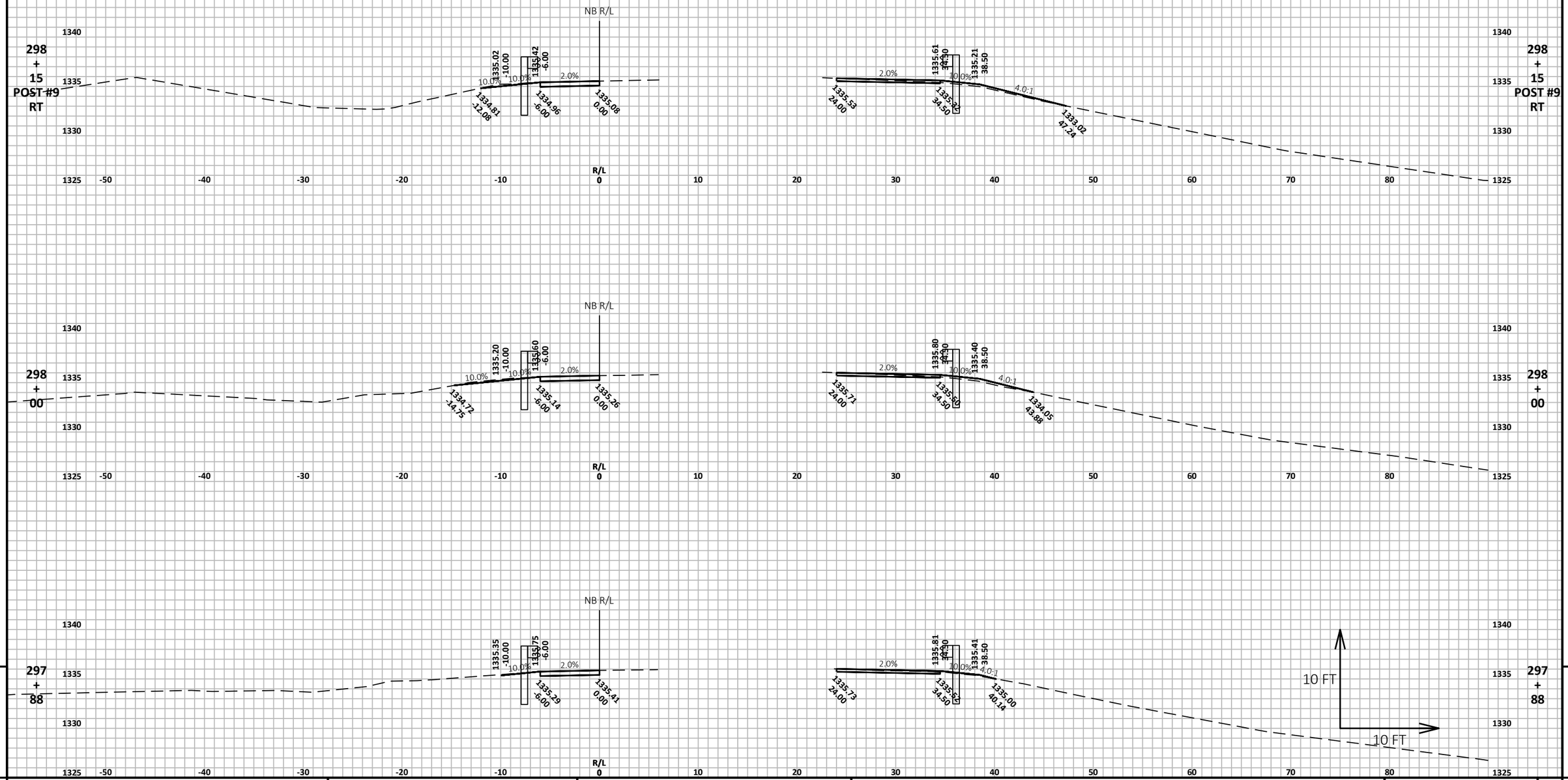
9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: CROSS OVER 6 NB & SB	SHEET 206	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090264-xs

PLOT DATE : 1/8/2021 12:48 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

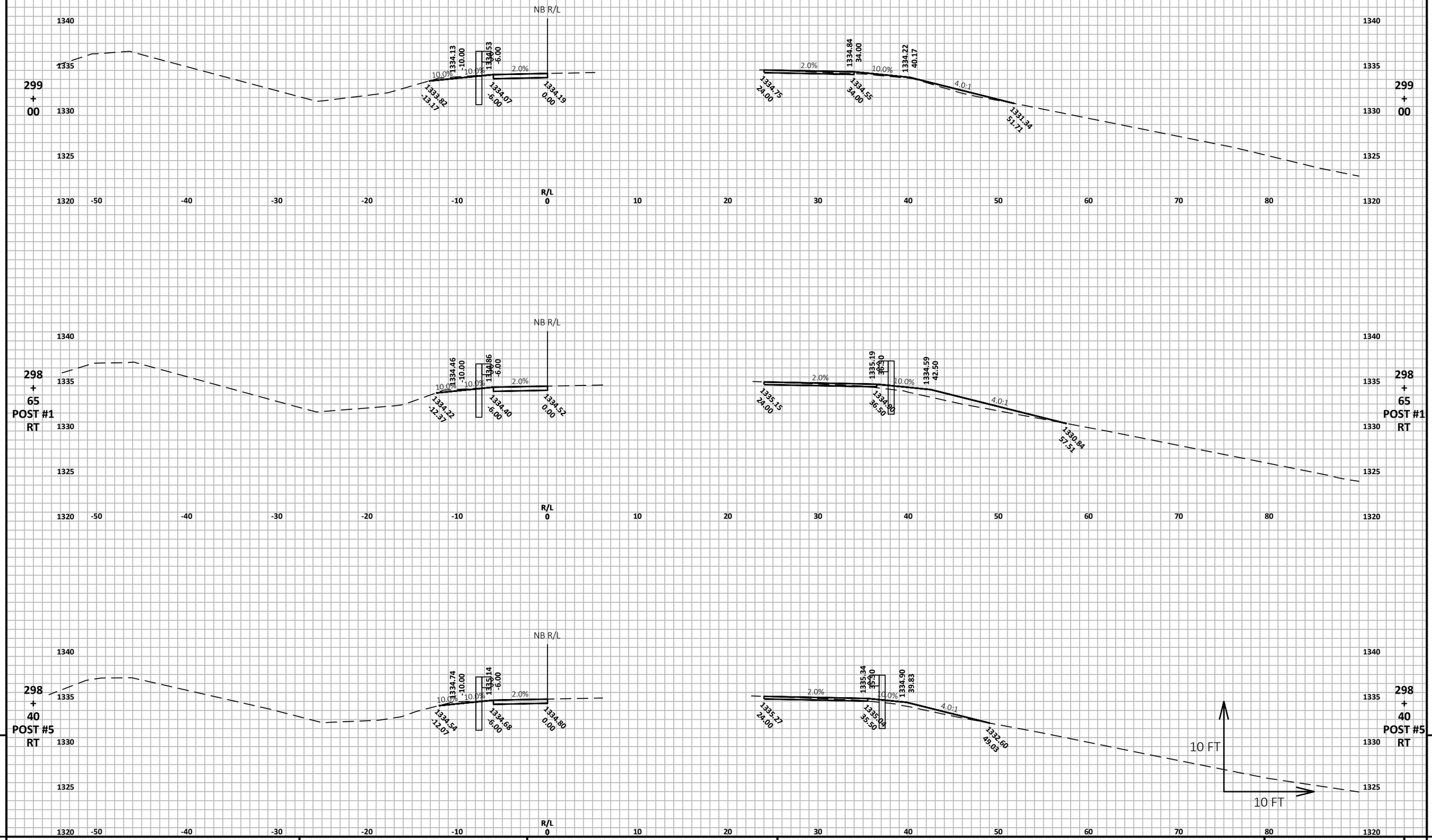
PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: B-25-28 BEAM GUARD	SHEET 207	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090281-xs

PLOT DATE : 2/25/2021 12:53 PM PLOT BY : ANDY WESTBROOK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

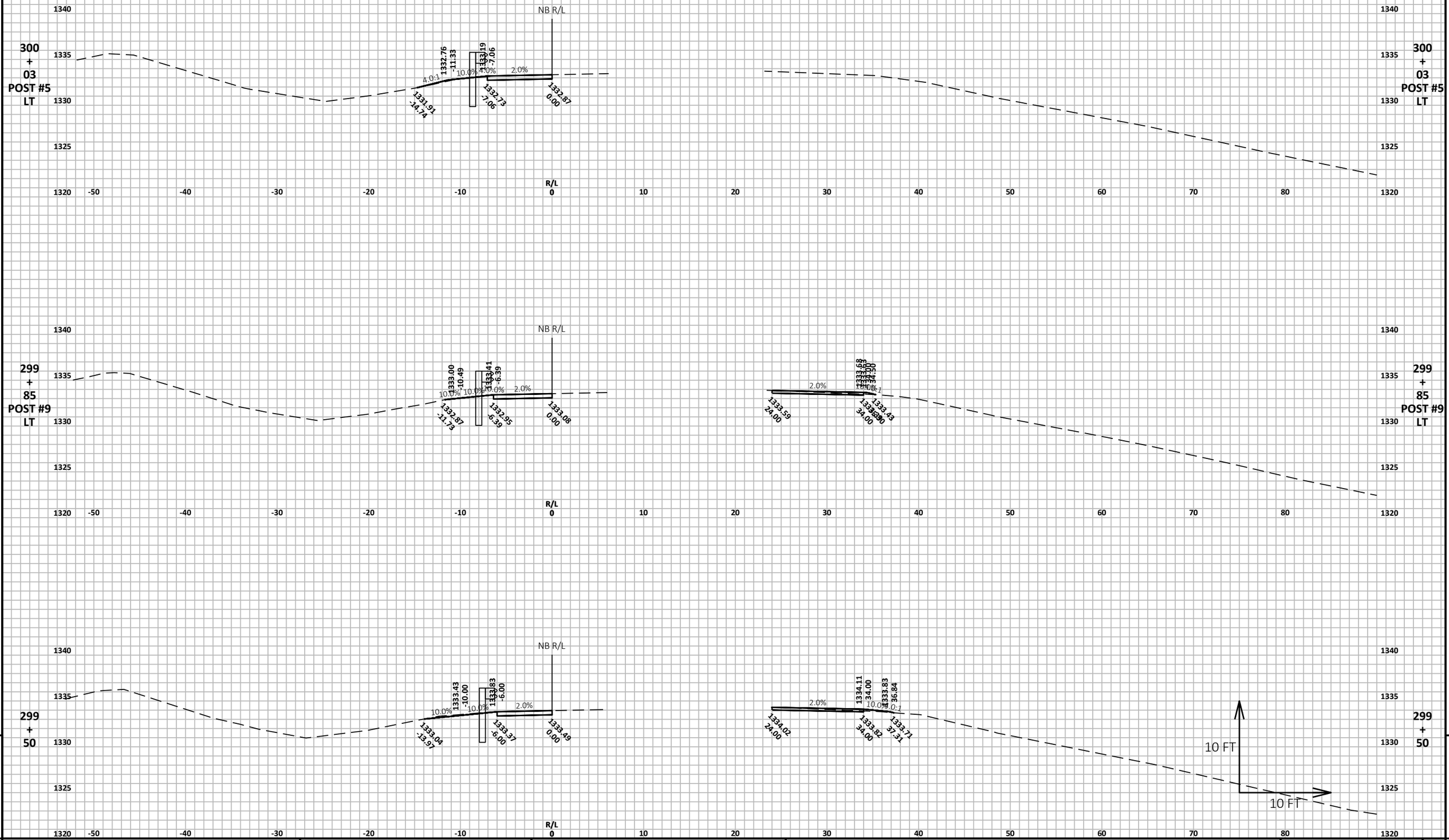


PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: B-25-28 BEAM GUARD	SHEET 208 E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090282-xs

PLOT DATE : 2/25/2021 12:53 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

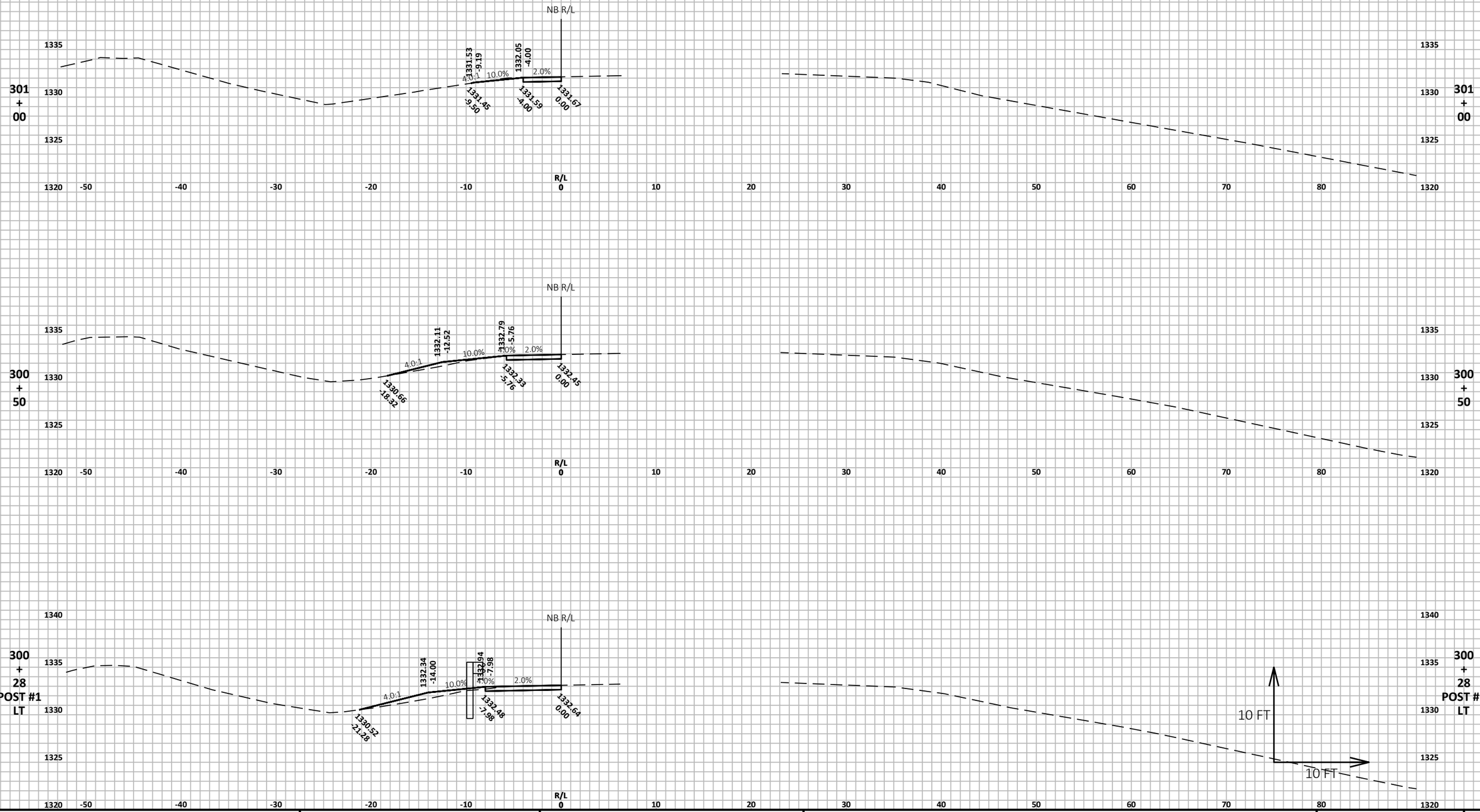


PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: B-25-28 BEAM GUARD	SHEET 209	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090283-xs

PLOT DATE : 2/25/2021 12:53 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

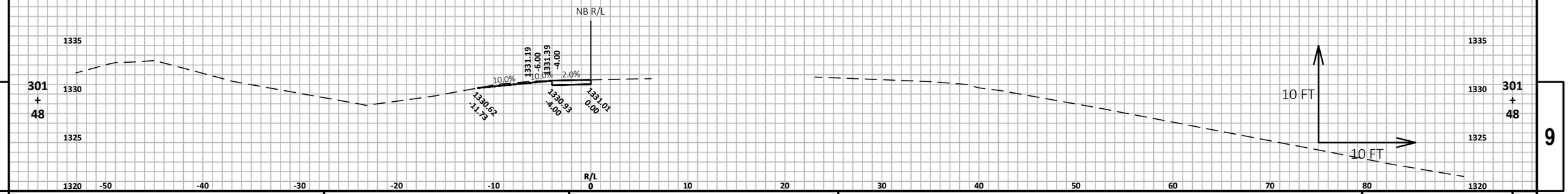
9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: B-25-28 BEAM GUARD	SHEET 210	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090284-xs

PLOT DATE : 2/25/2021 12:53 PM PLOT BY : ANDY WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1176-22-72	HWY: USH 51	COUNTY: LINCOLN	CROSS SECTIONS: B-25-28 BEAM GUARD	SHEET 211	E

FILE NAME : F:\TR\JOBS\E2363A19\CIVIL 3D\SHEETSPLAN\SHEETSPLAN 1176-22-\117622-090201-XS.DWG
LAYOUT NAME - 117622-090285-xs

PLOT DATE : 2/25/2021 12:54 PM PLOT BY : ANDY WESTBROOK 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