MAD

MAY 2022

PROJECT ID: 1011-01-65

WITH: 1012-01-74

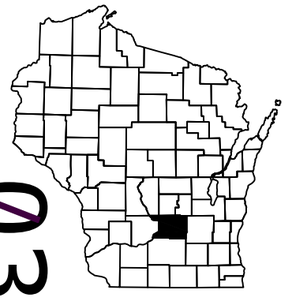
COUNTY: COLUMBIA

03

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 = 64



N

DESIGN DESIGNATION 1011-01-35

A.A.D.T. (2022)	=	59,500
A.A.D.T. (2042)	=	66,800
D.H.V. (2042)	=	8,580
D.D.	=	58/42
T.	=	22.7%
DESIGN SPEED	=	70 MPH
ESALS	=	36,000,000

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MADISON - PORTAGE

SOUTH COUNTY LINE TO STH 60

IH 39

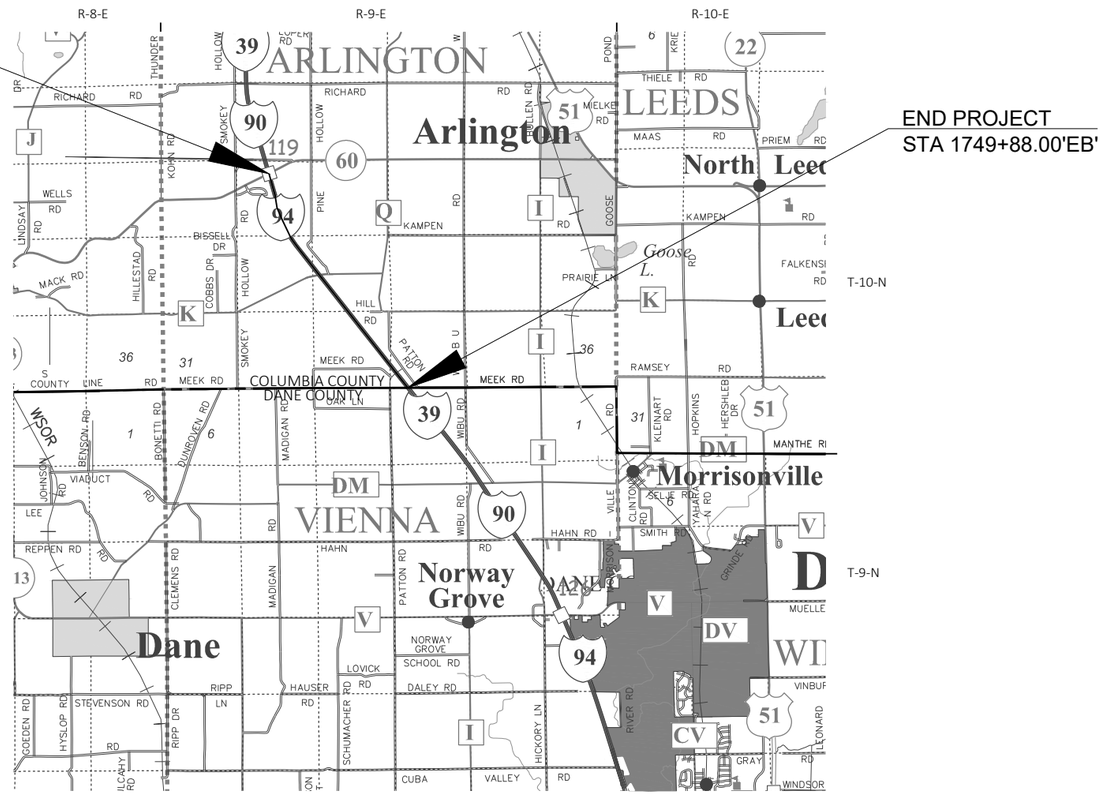
COLUMBIA COUNTY

STATE PROJECT NUMBER
1011-01-65

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1011-01-65	WISC 2022374	1
1012-01-74	———	—

BEGIN PROJECT
STA 1570+72.00'EB
Y = 319,573.104
X = 539,201.716

END PROJECT
STA 1749+88.00'EB'



LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI

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

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88 (2012).

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	
Designer	AMY COUGHLIN
Project Manager	AMY COUGHLIN
Regional Examiner	SW REGION
Regional Supervisor	ALEX HAGEN

APPROVED FOR THE DEPARTMENT

DATE: 1/12/2022 Amy Coughlin (Signature)

E

FILE NAME : 010101-TI.DWG PLOT DATE : 2/10/2021 8:24 AM PLOT BY : DEGNER, MARK PLOT NAME :

GENERAL NOTES:

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

BE AWARE THAT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT WILL NOT BE LOCATED IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES.

STATIONING OF CONCRETE PAVEMENT REPAIR & REPLACEMENT LOCATIONS IN PLAN ARE APPROXIMATE. VERIFY LOCATIONS WITH ENGINEER.

PLAN REMOVAL AREAS ARE APPROXIMATE. EXACT LIMITS SHALL BE DETERMINED IN THE FIELD.

SAWING CONCRETE WILL BE MEASURED AND PAID FOR ONLY ONCE WHEN REPAIRS ARE ADJACENT ALONG THE C/L OF THE NB LANES (IN BOTH MEDIAN AND OUTSIDE LANES).

OVERSAWING INTO PAVEMENT THAT IS TO REMAIN TO FACILITATE REMOVAL OF REPAIR AREAS SHALL BE SEALED WITH AN APPROVED EPOXY. THE OVERSAWING AND EPOXY ARE INCIDENTAL TO BID ITEMS 416.1710, 416.1715, 416.1720 & 416.1725.

IN CONCRETE PAVEMENT REPLACEMENT SECTIONS, THE NEW JOINTS SHALL MATCH ADJACENT CONCRETE JOINT. THE NEW TINING SHALL MATCH THE ADJACENT PAVEMENT PATTERN.

RADII, ELEVATIONS, AND DIMENSIONS ARE GIVEN AT THE PAVEMENT EDGES, UNLESS OTHERWISE NOTED IN THE PLANS.

ADJUST TRAFFIC CONTROL DEVICE LOCATIONS TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. ALL SIGNS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5-FEET.

EROSION CONTROL ITEMS SHOWN IN THE MISCELLANEOUS QUANTITIES ARE AT SUGGESTED LOCATIONS. THE ENGINEER MAY MODIFY LOCATIONS TO FIT FIELD CONDITIONS.

WETLANDS, WATERWAYS, AND OTHER ENVIRONMENTALLY SENSITIVE AREAS SHALL BE PROTECTED AT ALL TIMES. DO NOT STORE EQUIPMENT OR MATERIALS NEAR THESE SITES UNLESS APPROVED BY THE ENGINEER.

PAVEMENT MARKING SHALL FOLLOW STANDARD DETAIL DRAWING LONGITUDINAL MARKING (MAINLINE).

ABBREVIATIONS

AHEAD	AH
BACK	BK
CENTERLINE	CL or C/L
CONCRETE	CONC
COUNTY TRUNK HIGHWAY	CTH
EXISTING	EX
GRID NORTH	GN
LEFT	LT
POINT OF TANGENCY	PT
REFERENCE LINE	RL or R/L
POINT OF CURVATURE	PC
POINT OF INTERSECTION	PI
RIGHT	RT
RIGHT OF WAY	RW or R/W
SQUARE FEET	SF
STATE TRUNK HIGHWAY	STH
STATION	STA
VOLUME	V

WISDOT DESIGN PROJECT MANAGER

AMY COUGHLIN
SOUTHWEST REGION, MADISON OFFICE
2101 WRIGHT ST
MADISON, WI 53704
(608) 245-5358
amy.coughlin@dot.wi.gov

WISDNR

(SOUTHWEST REGION)
ERIC HEGGELUND
3911 FISH HATCHERY RD
FITCHBURG, WI 53711
(608) 228-7927
eric.heggelund@wisconsin.gov

WISDOT COMMUNICATIONS CONTACT

WISCONSIN DEPARTMENT OF TRANSPORTATION
JEFF MADSON
433 W ST PAUL AVE, STE 300
MILWAUKEE, WI 53203-3007
(414) 225-3723
Jeffrey.Madson@dot.wi.gov

UTILITIES AND OTHER AGENCIES

COMMUNICATIONS

AT&T LEGACY
KENNETH NINE
JMC ENGINEERS & ASSOCIATES
110 N MAIN ST
CULVER, IN 46511
knine@jmceainc.com
(574) 842-8830
CC: VANESSA ROSS
vF2021@ATT.com

ELECTRICITY

ALLIANT ENERGY
RYAN SMEDEMA
2777 COLUMBIA CR
PORTAGE, WI 53901
(608) 963-0880
ryansmedema@alliantenergy.com

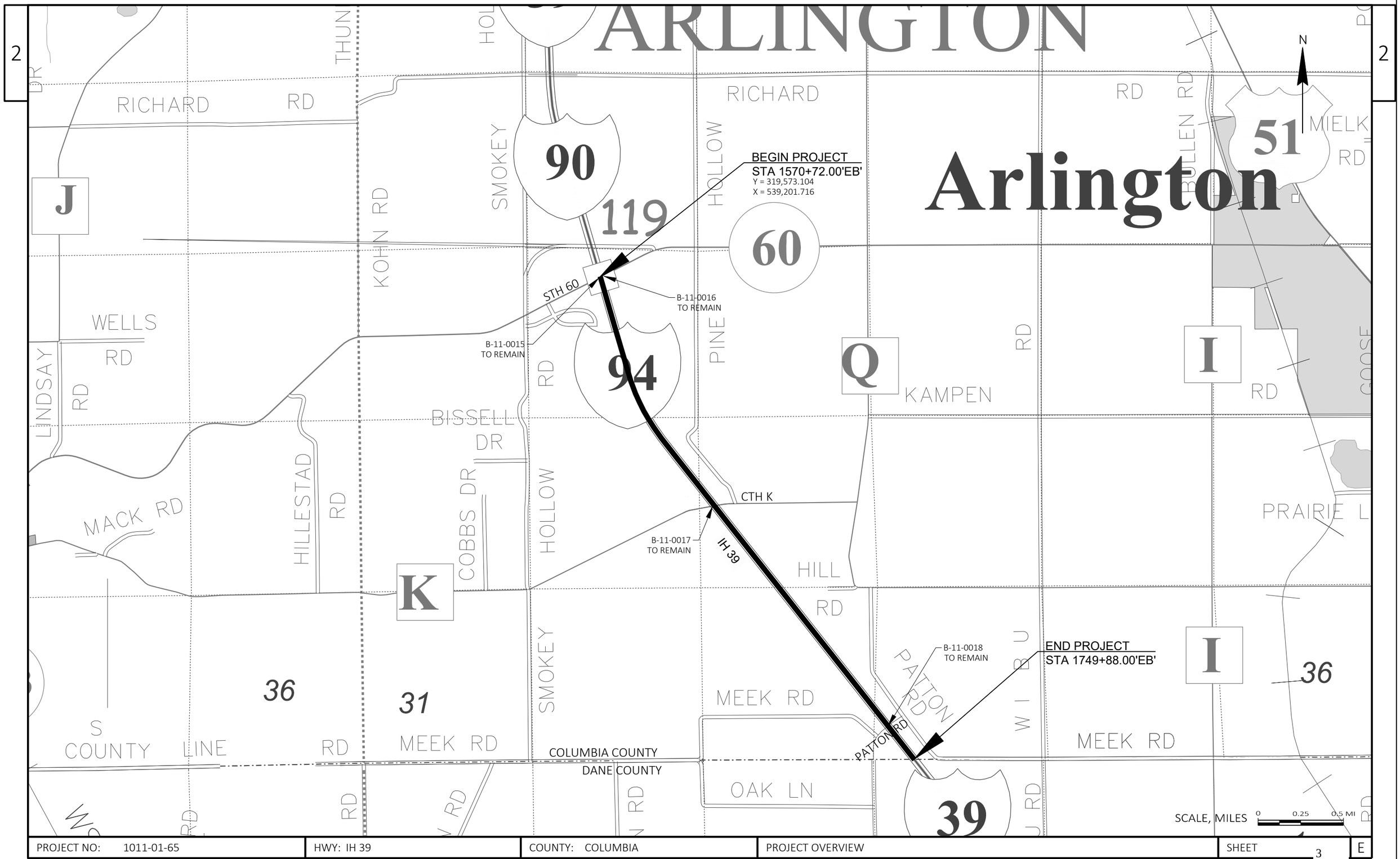
ATC MANAGEMENT, INC
DOUG VOSBERG
2489 RIDEN ROAD
COTTAGE GROVE, WI 53527
(608) 887-7650
DVosberg@atcllc.com

2

DETAIL SHEET INDEX

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
TRAFFIC CONTROL
DETOUR
ALIGNMENT DATA

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

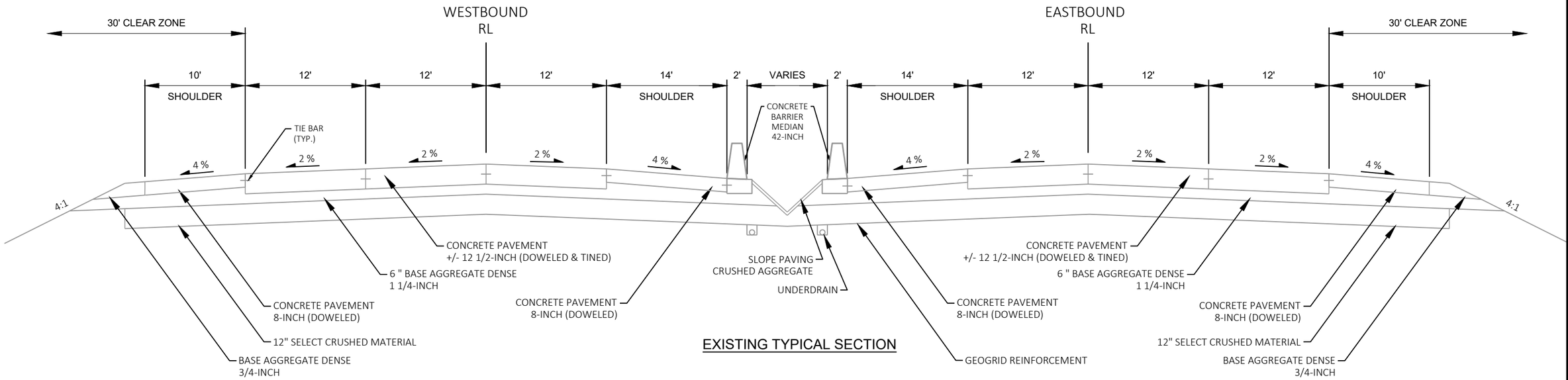


PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : 020201-PO.DWG
LAYOUT NAME - 01

PLOT DATE : 2/10/2021 8:35 AM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:0.5 MI

WISDOT/CADDS SHEET 42



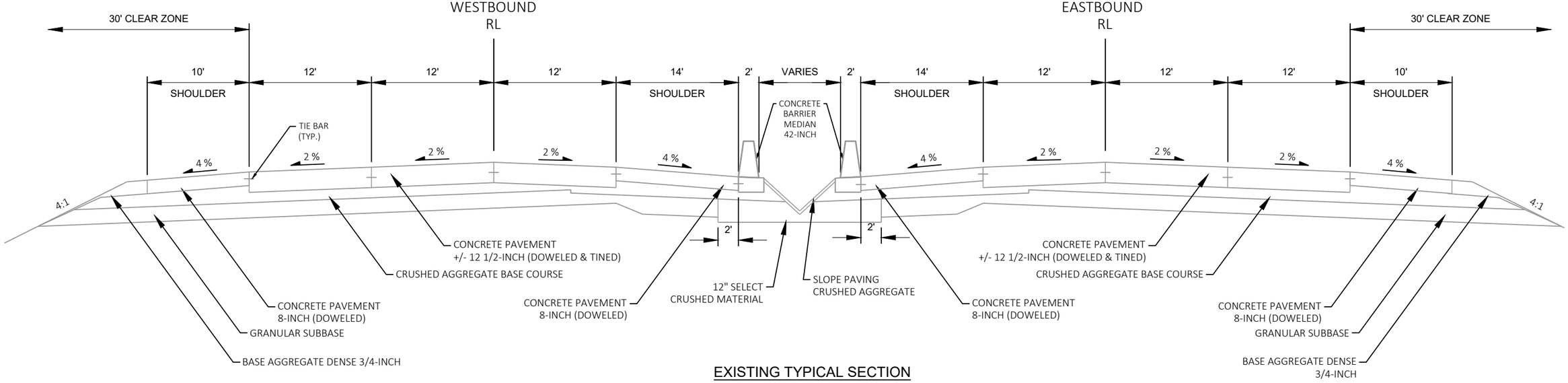
EXISTING TYPICAL SECTION

WESTBOUND

STA. 1570+72'WB' - 1592+00'WB'
STA. 1647+00'WB' - 1655+00'WB'
STA. 1731+00'WB' - 1750+38'WB'

EASTBOUND

STA. 1570+72'EB' - 1595+00'EB'
STA. 1645+00'EB' - 1662+00'EB'
STA. 1730+00'EB' - 1749+88'EB'



EXISTING TYPICAL SECTION

WESTBOUND

STA. 1592+00'WB' - 1599+85'WB'
STA. 1625+68'WB' - 1647+00'WB'
STA. 1655+00'WB' - 1731+00'WB'

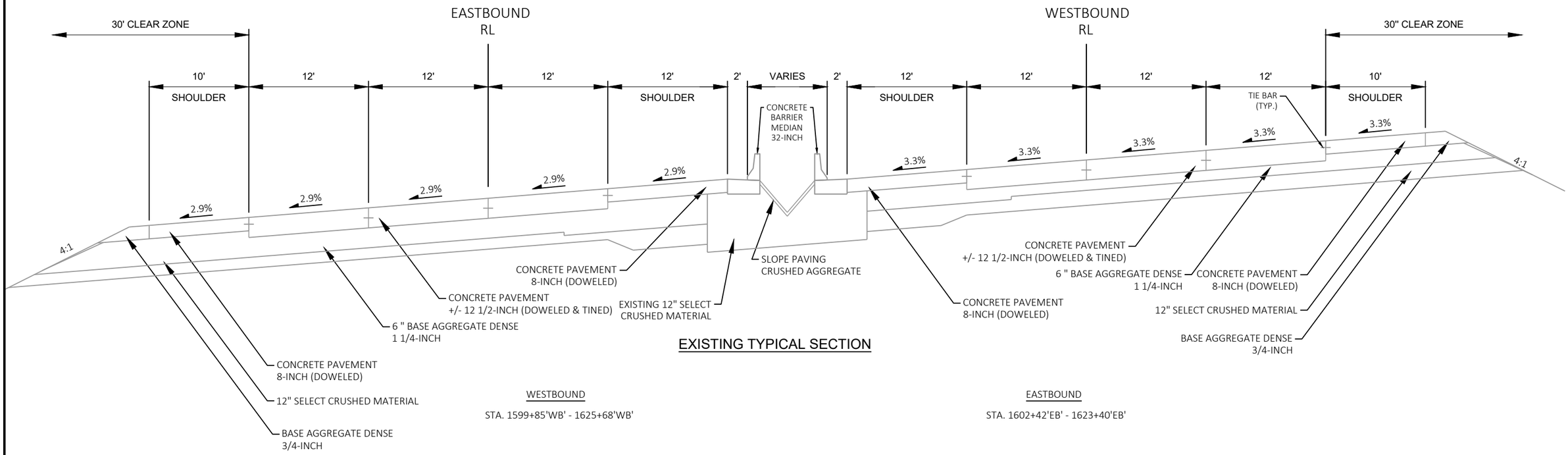
EASTBOUND

STA. 1595+00'EB' - 1602+42'EB'
STA. 1623+40'EB' - 1645+00'EB'
STA. 1662+00'EB' - 1730+00'EB'

PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\020301-TS.DWG PLOT DATE : 12/28/2021 12:00 PM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 01
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION

WESTBOUND

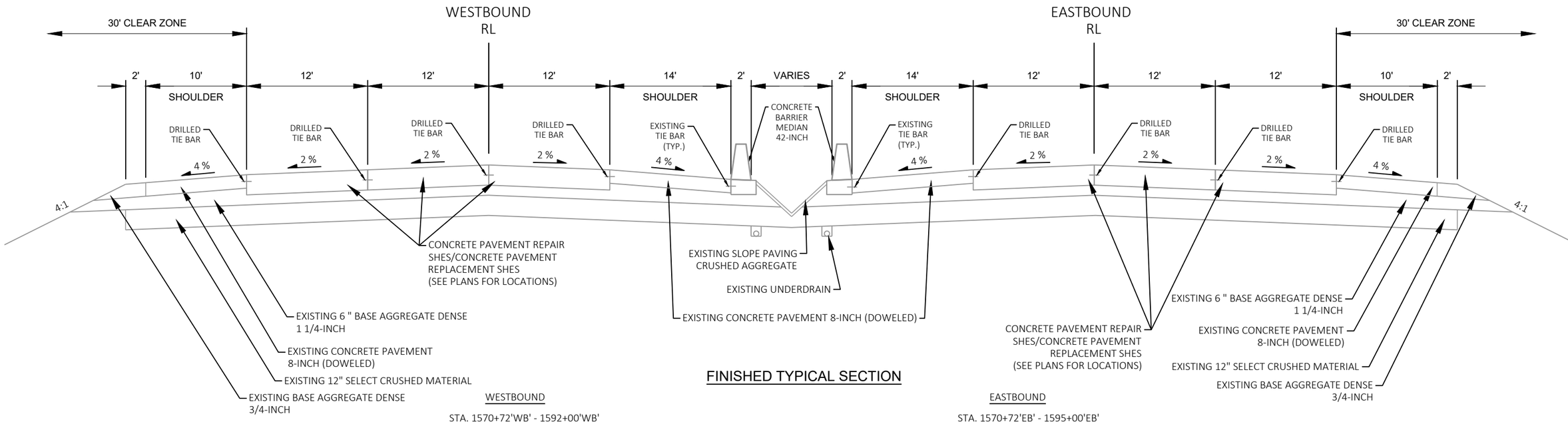
STA. 1599+85'WB' - 1625+68'WB'

EASTBOUND

STA. 1602+42'EB' - 1623+40'EB'

PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\020301-TS.DWG PLOT DATE : 12/28/2021 12:00 PM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 02



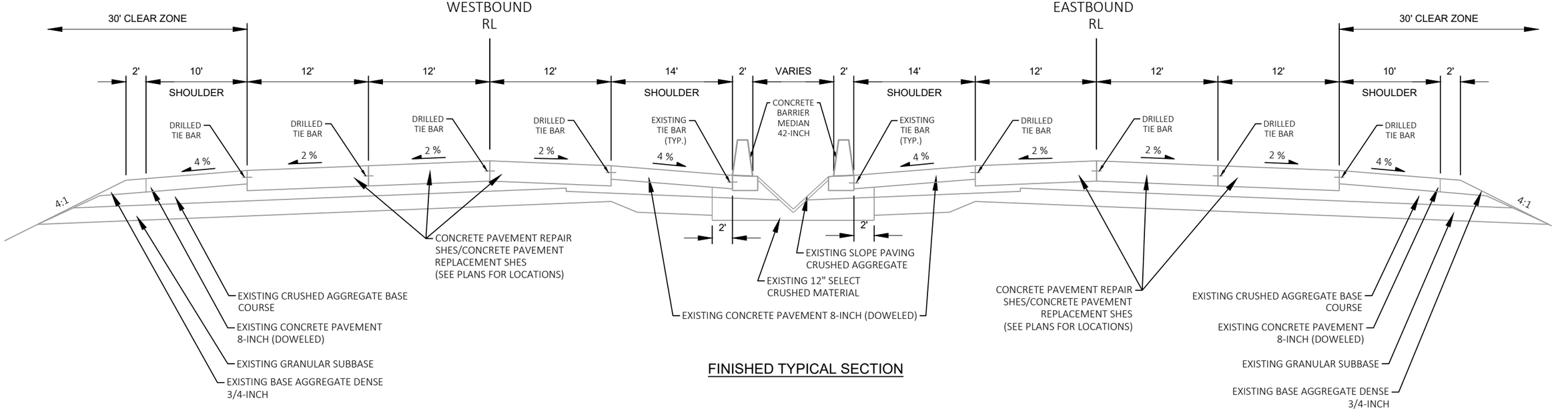
FINISHED TYPICAL SECTION

WESTBOUND

STA. 1570+72'WB' - 1592+00'WB'
STA. 1647+00'WB' - 1655+00'WB'
STA. 1731+00'WB' - 1750+38'WB'

EASTBOUND

STA. 1570+72'EB' - 1595+00'EB'
STA. 1645+00'EB' - 1662+00'EB'
STA. 1730+00'EB' - 1749+88'EB'



FINISHED TYPICAL SECTION

WESTBOUND

STA. 1592+00'WB' - 1599+85'WB'
STA. 1625+68'WB' - 1647+00'WB'
STA. 1655+00'WB' - 1731+00'WB'

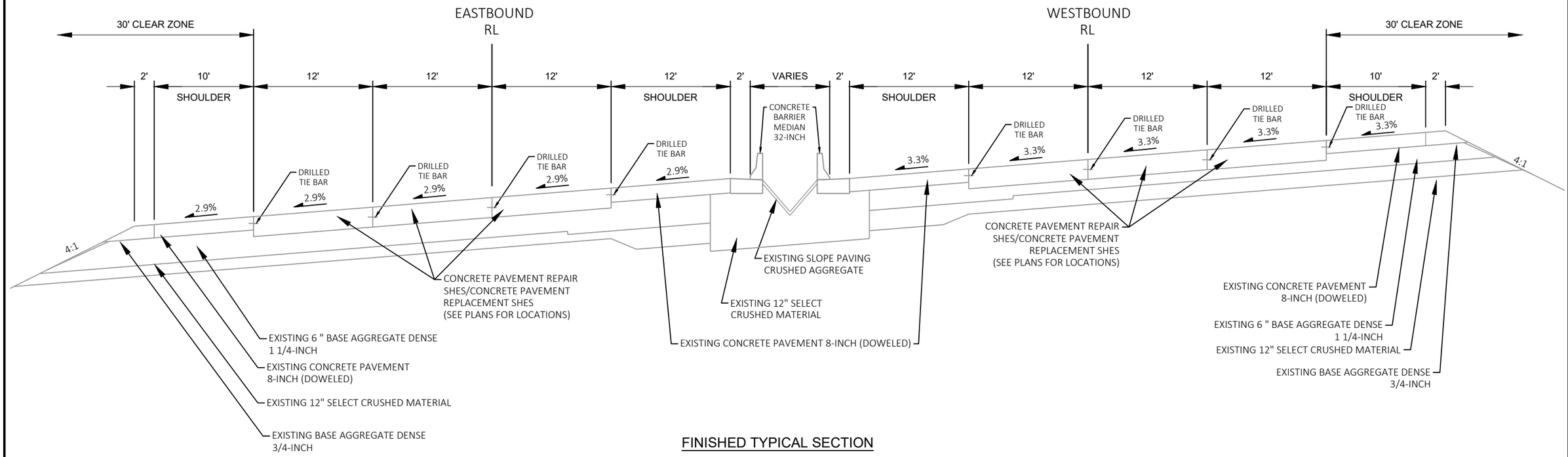
EASTBOUND

STA. 1595+00'EB' - 1602+42'EB'
STA. 1623+40'EB' - 1645+00'EB'
STA. 1662+00'EB' - 1730+00'EB'

PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET 6	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\020301-TS.DWG PLOT DATE : 12/28/2021 12:00 PM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 03
WISDOT/CADDS SHEET 42

2



FINISHED TYPICAL SECTION

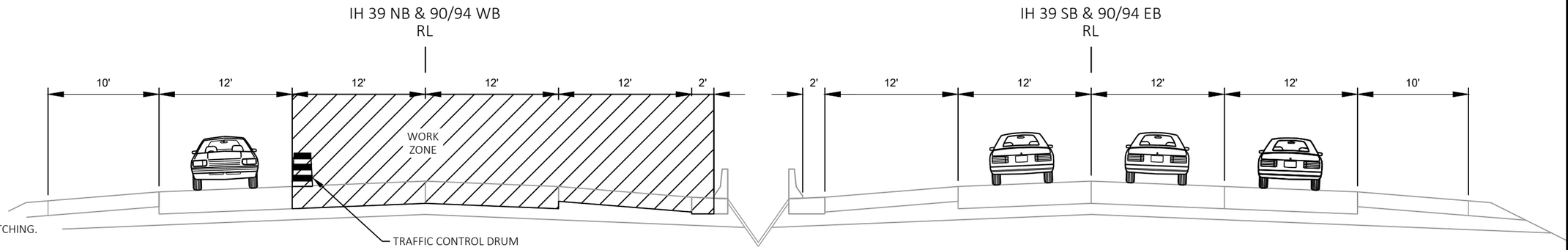
WESTBOUND

STA. 1599+85'WB' - 1625+68'WB'

EASTBOUND

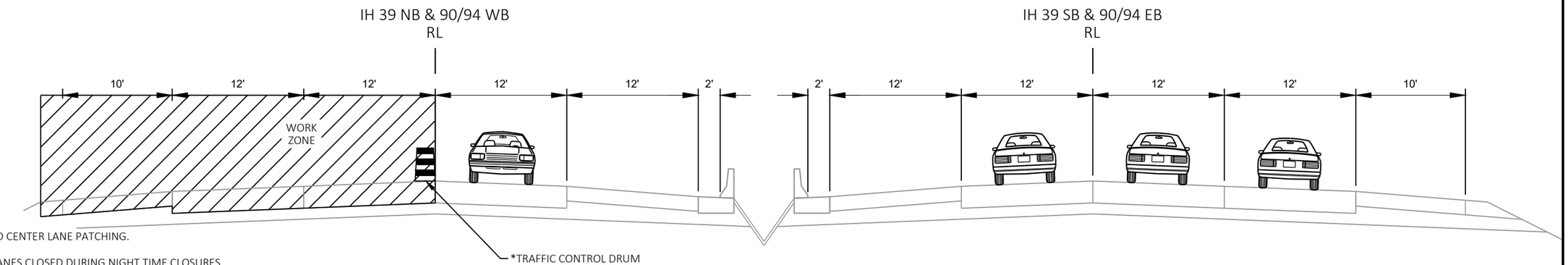
STA. 1602+42'EB' - 1623+40'EB'

PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET 7	E



STAGE 1A:
CONSTRUCTION ACTIVITIES
1) COMPLETE INSIDE LANE PATCHING.
TRAFFIC
1) CENTER AND INSIDE LANES CLOSED DURING NIGHT TIME CLOSURES
STANDARD DETAIL DRAWINGS REQUIRED
1) TRAFFIC CONTROL, DROP OFF SIGNING
2) TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)
3) TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LEFT LANE CLOSURE

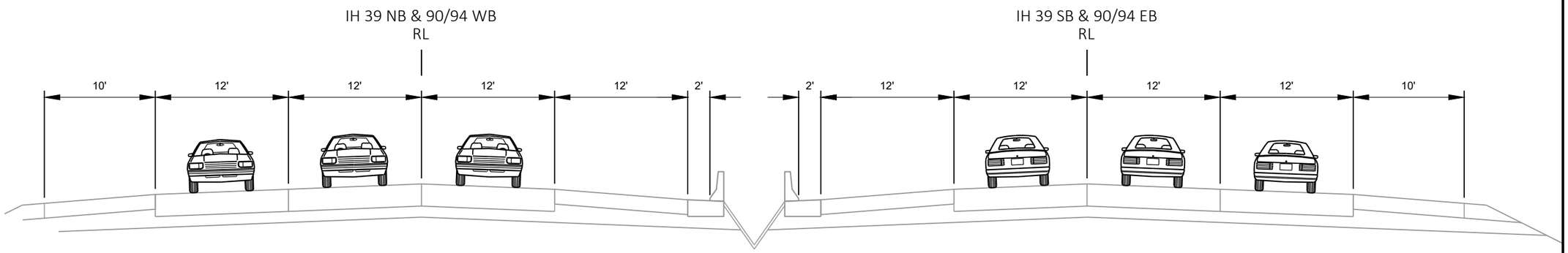
TRAFFIC CONTROL TYPICAL SECTION
STAGE 1A NIGHT TIME LANE CLOSURE



STAGE 1B:
CONSTRUCTION ACTIVITIES
1) COMPLETE OUTSIDE AND CENTER LANE PATCHING.
TRAFFIC
1) CENTER AND OUTSIDE LANES CLOSED DURING NIGHT TIME CLOSURES.
STANDARD DETAIL DRAWINGS REQUIRED
1) TRAFFIC CONTROL, DROP OFF SIGNING
2) TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)
3) TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE
4) TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

TRAFFIC CONTROL TYPICAL SECTION
STAGE 1B NIGHT TIME LANE CLOSURE

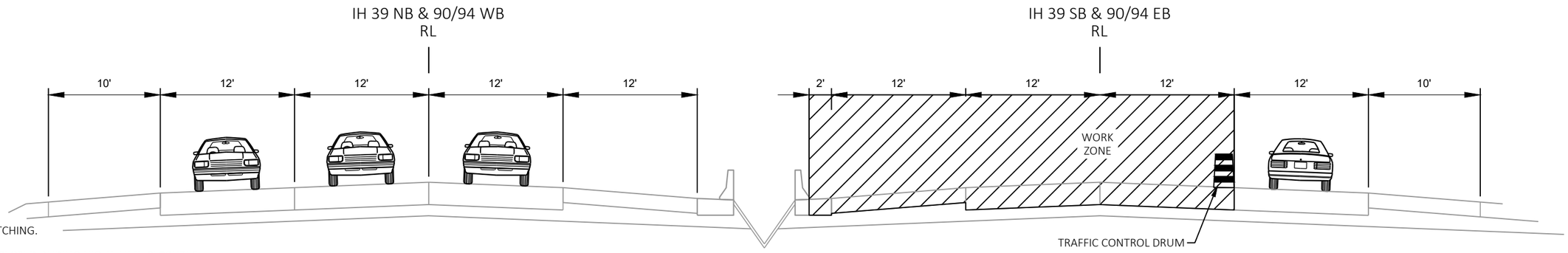
*DRUM MAY BE TEMPORARILY MOVED INTO THE ADJACENT LANE WHILE PATCHING CENTER LANES. IMMEDIATELY MOVE DRUM BACK TO LOCATION SHOWN AFTER PATCHING OPERATION COMPLETE



STAGE 1A & 1B DAYTIME:
CONSTRUCTION ACTIVITIES
1) NONE
TRAFFIC
1) ALL THREE LANES OPEN TO TRAFFIC
STANDARD DETAIL DRAWINGS REQUIRED
1) NONE

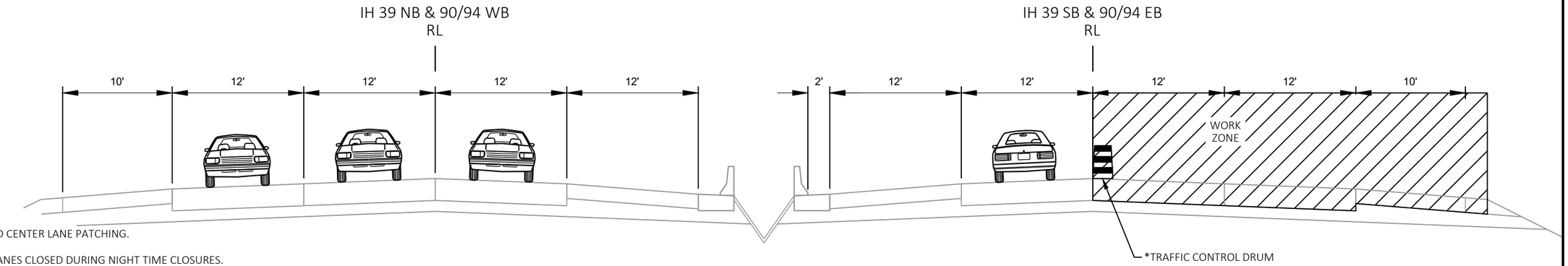
TRAFFIC CONTROL TYPICAL SECTION
STAGE 1A & 1B DAYTIME

PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 8	E



STAGE 2A:
CONSTRUCTION ACTIVITIES
1) COMPLETE INSIDE LANE PATCHING.
TRAFFIC
1) CENTER AND INSIDE LANES CLOSED DURING NIGHT TIME CLOSURES
STANDARD DETAIL DRAWINGS REQUIRED
1) TRAFFIC CONTROL, DROP OFF SIGNING
2) TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)
3) TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LEFT LANE CLOSURE

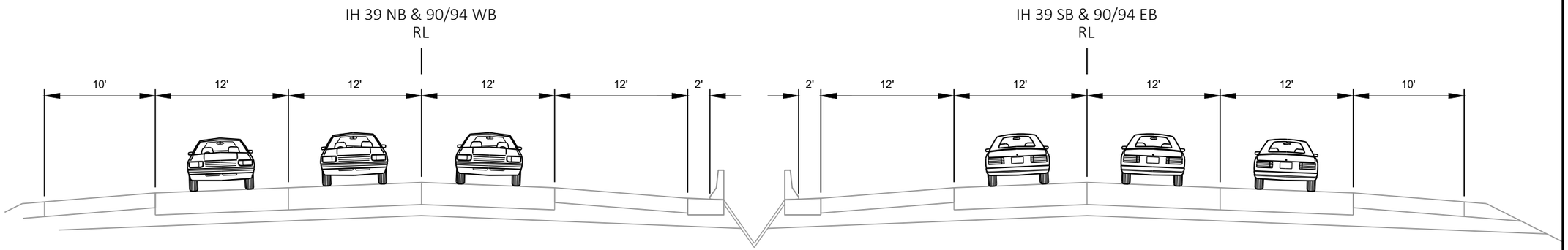
TRAFFIC CONTROL TYPICAL SECTION
STAGE 2A NIGHT TIME LANE CLOSURE



STAGE 2B:
CONSTRUCTION ACTIVITIES
1) COMPLETE OUTSIDE AND CENTER LANE PATCHING.
TRAFFIC
1) CENTER AND OUTSIDE LANES CLOSED DURING NIGHT TIME CLOSURES.
STANDARD DETAIL DRAWINGS REQUIRED
1) TRAFFIC CONTROL, DROP OFF SIGNING
2) TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)
3) TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE
4) TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

TRAFFIC CONTROL TYPICAL SECTION
STAGE 2B NIGHT TIME LANE CLOSURE

*DRUM MAY BE TEMPORARILY MOVED INTO THE ADJACENT LANE WHILE PATCHING CENTER LANES. IMMEDIATELY MOVE DRUM BACK TO LOCATION SHOWN AFTER PATCHING OPERATION COMPLETE



STAGE 2A & 2B DAYTIME:
CONSTRUCTION ACTIVITIES
1) NONE
TRAFFIC
1) ALL THREE LANES OPEN TO TRAFFIC
STANDARD DETAIL DRAWINGS REQUIRED
1) NONE

TRAFFIC CONTROL TYPICAL SECTION
STAGE 2A & 2B DAYTIME

PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 9	E

STH 60 OFF RAMP CLOSED

SEE DETAIL 1 SHEET FOR SIGNING

SEE DETAIL 2 SHEET FOR SIGNING

LEGEND

PCMS	PORTABLE CHANGEABLE MESSAGE BOARD
	DETOUR ROUTE
XXXXX	RAMP CLOSURE
●	TC DRUM
●	TC DRUM W/ TYPE C LIGHT
	EXISTING POST MOUNTED SIGN
	TC BARRICADE TYPE III
	TC BARRICADE TYPE III W/ SIGN

North Leeds

Leeds

Goose L.

Morrisonville

VIENNA

Norway Grove

Dane

WIN

De

KAMPEN

FALKENSEIN

MANTHE RD

RAMSEY

MUELLER

HAHN

NORWAY GROVE

WELLS RD

MACK RD

HILL RD

MEEK RD

OAK LN

PRAIRIE LN

SELJE RD

HAHN RD

VIADUCT

REPPEN RD

LEE

PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	DETOUR - IH 39 SB & 90/94 EB OFF RAMP TO STH 60

SHEET 10 E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\027001-DT.DWG PLOT DATE : 1/6/2022 10:03 PM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : Custom

LAYOUT NAME - det 60 off ramp close

WISDOT/CADDS SHEET 42

2

LEGEND

PCMS	PORTABLE CHANGEABLE MESSAGE BOARD
	DETOUR ROUTE
XXXXX	RAMP CLOSURE
	TC DRUM
	TC DRUM W/ TYPE C LIGHT
	EXISTING POST MOUNTED SIGN
	TC BARRICADE TYPE III
	TC BARRICADE TYPE III W/ SIGN

N

IH 39 NB/ 90/94 WB

IH 39 SB/ 90/94 EB

MATCH ADJACENT TRAFFIC CONTROL

PCMS

DURING CLOSURE

FRAME 1	FRAME 2
EXIT 119 CLOSED	USE EXIT 126

EXIT 119

60

Lodi

Arlington

1 MILE

EXIT 119

60

Lodi

Arlington

MATCH ADJACENT TRAFFIC CONTROL

IH 39 NB/ 90/94 WB

IH 39 SB/ 90/94 EB

1350'

25' TYP.

IH 39/90/94 OFF RAMP TO STH 60

PCMS

FRAME 1	FRAME 2
RAMP CLOSED BEGINS	{DAY} {DATE} {TIME}

EXIT 119

60

Lodi

Arlington

R11-2R
48" X 30"

RAMP CLOSED

TYPE III BARRICADE

R11-2R
48" X 30"

RAMP CLOSED

TYPE III BARRICADE

N

2

PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	DETOUR - DETAIL 1 - IH 39 SB & 90/94 EB TO STH 60	SHEET 11	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\027001-DT.DWG PLOT DATE : 1/6/2022 10:03 PM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : ############
LAYOUT NAME - DETAIL 1

WISDOT/CADDS SHEET 42

2

LEGEND

PCMS	PORTABLE CHANGEABLE MESSAGE BOARD
	DETOUR ROUTE
XXXXX	RAMP CLOSURE
	TC DRUM
	TC DRUM W/ TYPE C LIGHT
	EXISTING POST MOUNTED SIGN
	TC BARRICADE TYPE III
	TC BARRICADE TYPE III W/ SIGN

N

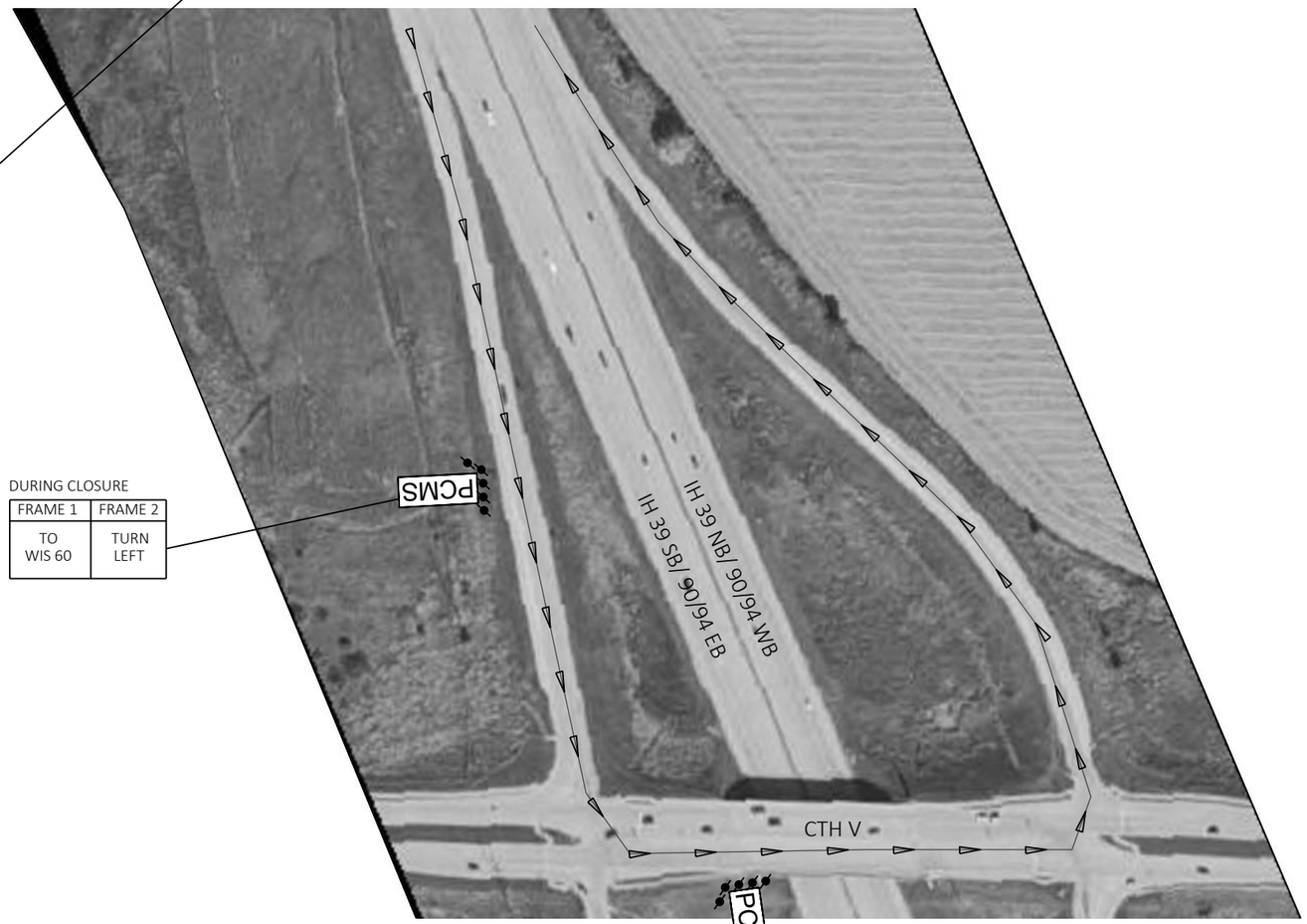
EXIT 126
V
Dane
DeForest
1 MILE

PCMS

DURING CLOSURE

FRAME 1	FRAME 2
TO WIS 60	USE EXIT 126

EXIT 126
V
Dane
DeForest



DURING CLOSURE

FRAME 1	FRAME 2
TO WIS 60	TURN LEFT

PCMS

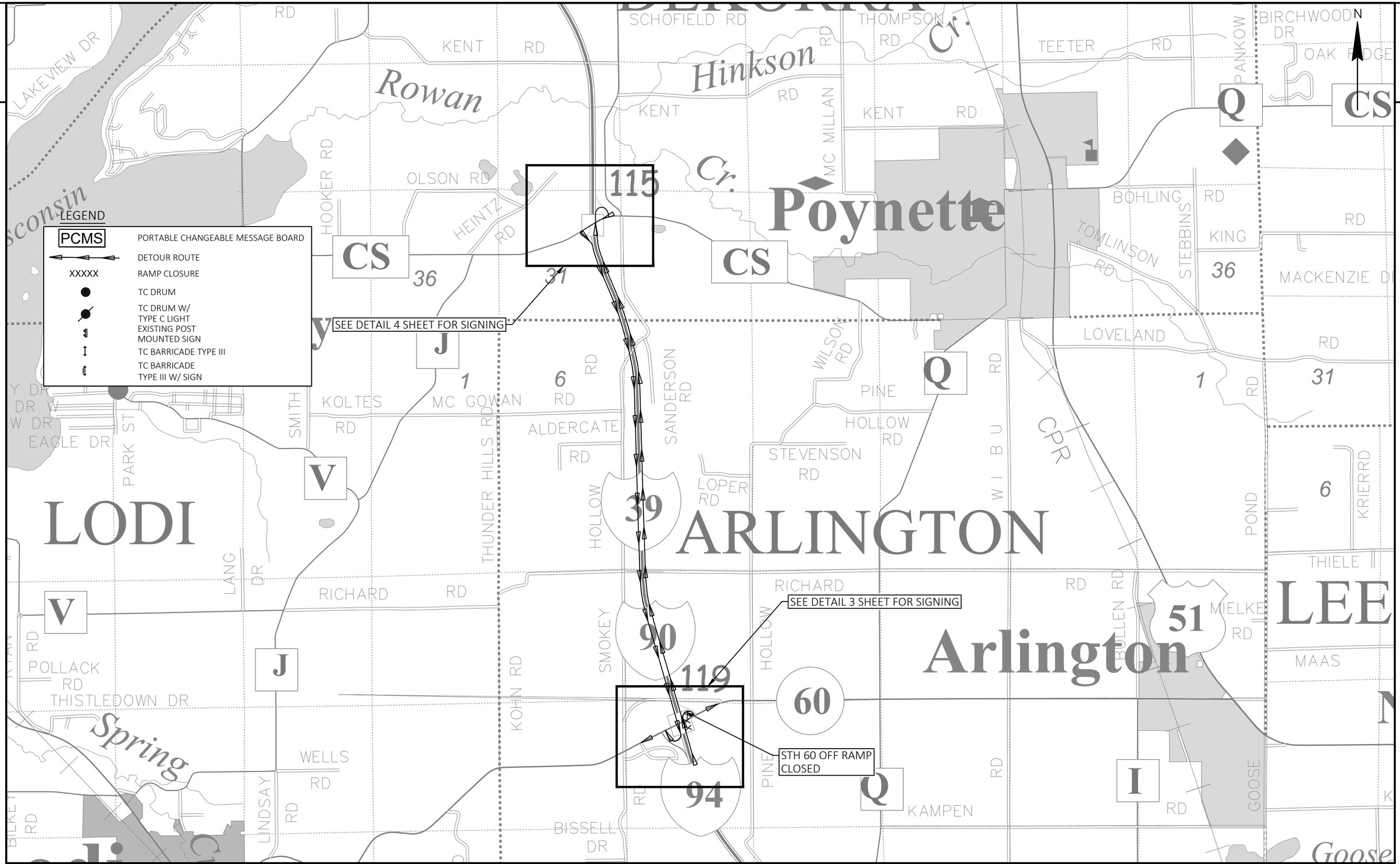
PCMS

DURING CLOSURE

FRAME 1	FRAME 2
TO WIS 60	TURN LEFT

PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	DETOUR - DETAIL 2 - IH 39 SB & 90/94 EB TO STH 60	SHEET 12	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\027001-DT.DWG
LAYOUT NAME - DETAIL 2
PLOT DATE : 1/6/2022 10:03 PM
PLOT BY : DEGNER, MARK
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

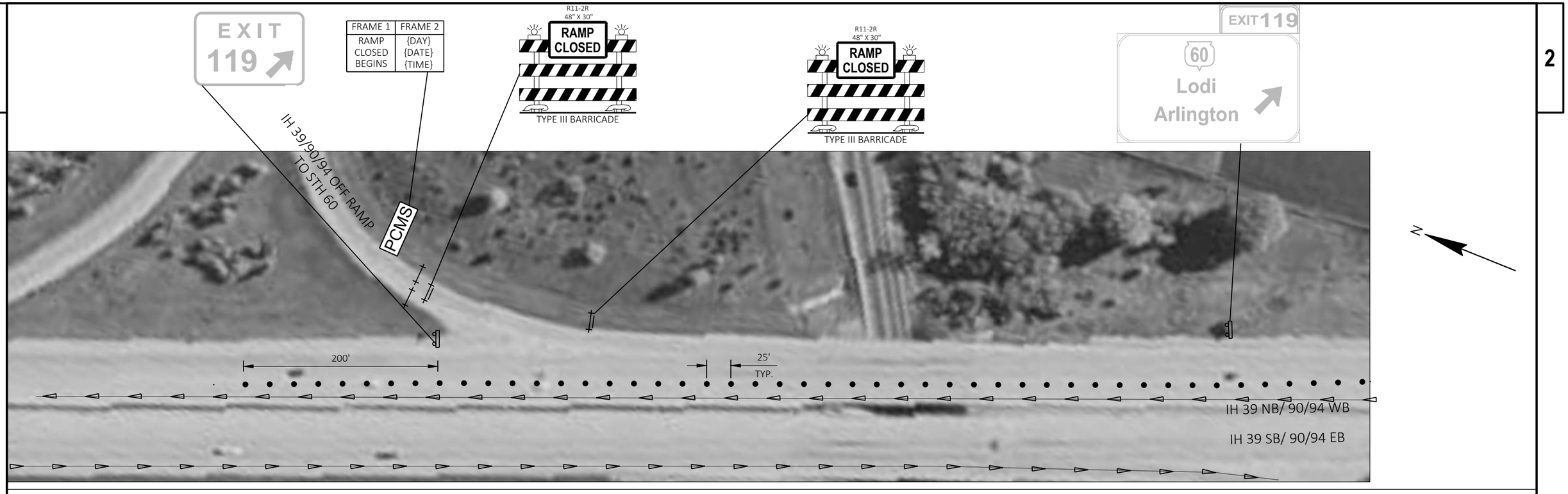


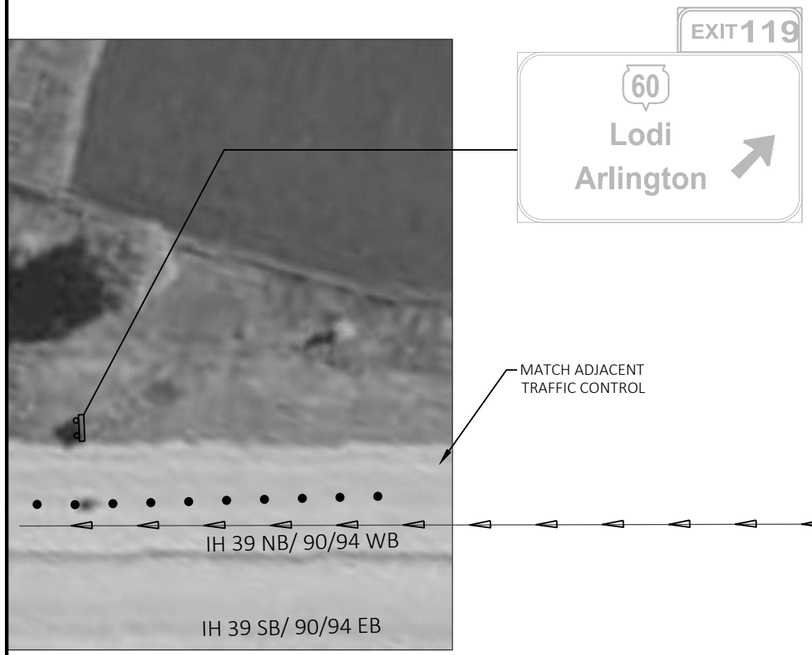
PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	DETOUR - IH 39 NB & 90/94 WB OFF RAMP TO STH 60	SHEET 13	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\027002-DT.DWG PLOT DATE : 1/6/2022 10:26 PM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : Custom

LAYOUT NAME - det 60 off ramp close

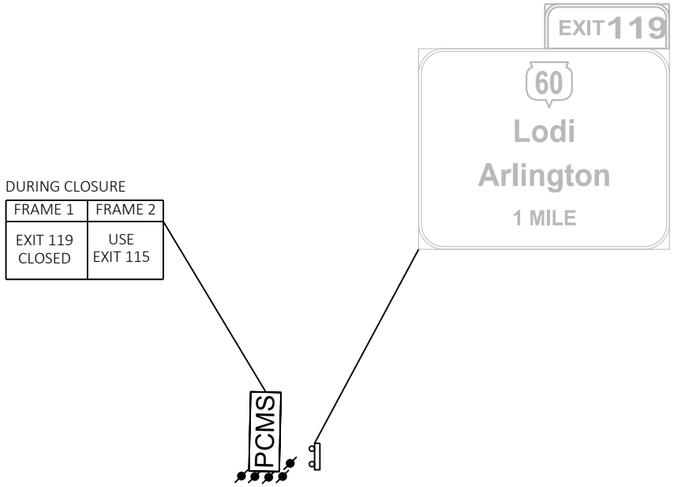
WISDOT/CADDS SHEET 42





LEGEND

PCMS	PORTABLE CHANGEABLE MESSAGE BOARD
	DETOUR ROUTE
XXXXX	RAMP CLOSURE
	TC DRUM
	TC DRUM W/ TYPE C LIGHT
	EXISTING POST MOUNTED SIGN
	TC BARRICADE TYPE III
	TC BARRICADE TYPE III W/ SIGN



PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	DETOUR - DETAIL 3 - IH 39 NB & 90/94 WB TO STH 60	SHEET 14 E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\027002-DT.DWG PLOT DATE : 1/6/2022 10:26 PM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : ##########
LAYOUT NAME - DETAIL 3
WISDOT/CADDS SHEET 42

2

N

EXIT 115

PCMS

DURING CLOSURE

FRAME 1	FRAME 2
TO WIS 60	TURN RIGHT

CTH CS

DURING CLOSURE

FRAME 1	FRAME 2
TO WIS 60	TURN LEFT

PCMS

IH 39 SB/ 90/94 EB

IH 39 NB/ 90/94 WB

DURING CLOSURE

FRAME 1	FRAME 2
TO WIS 60	USE EXIT 115

EXIT 115

CS

Poynette

Lake Wisconsin

1 MILE

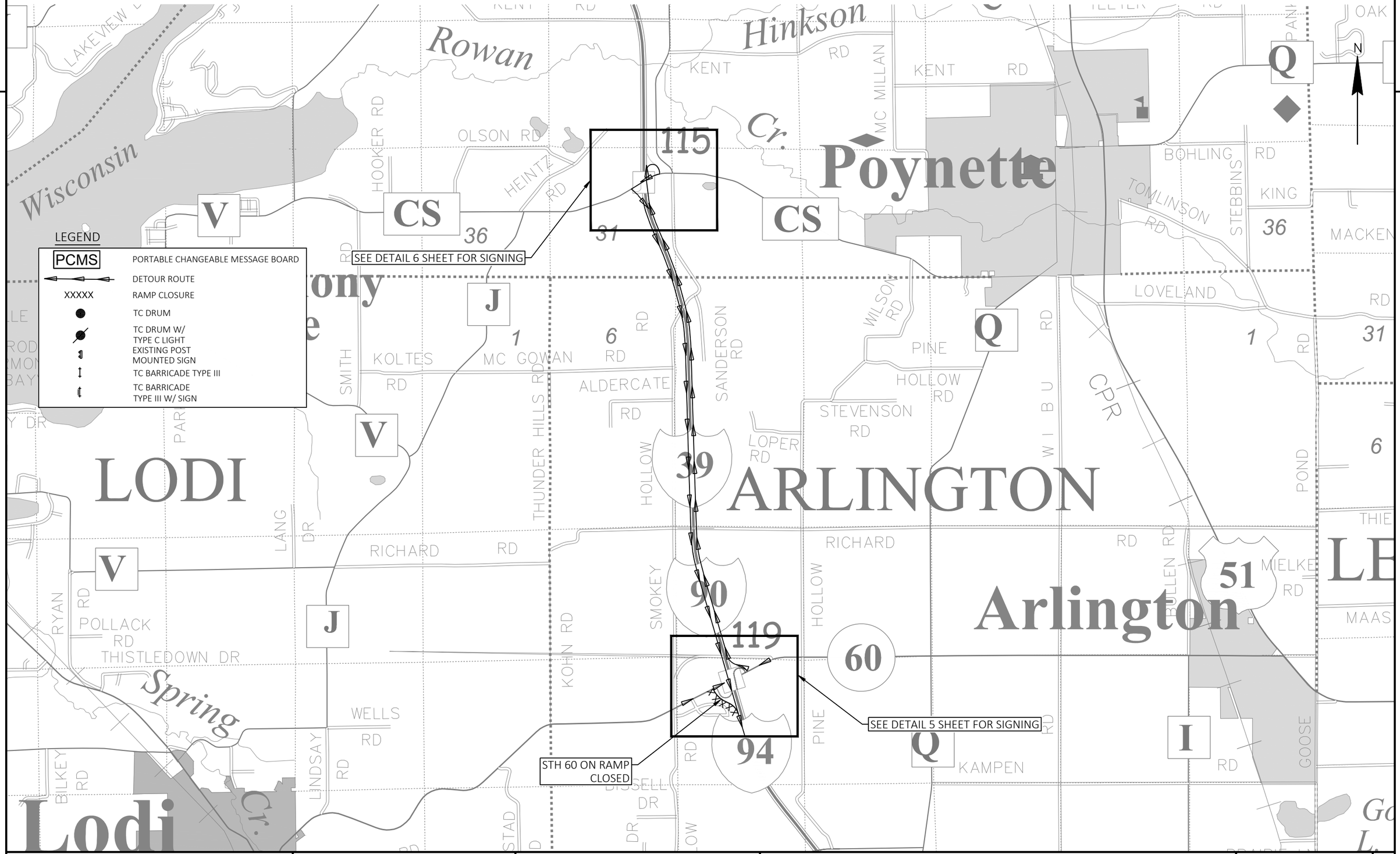
PCMS

LEGEND

PCMS	PORTABLE CHANGEABLE MESSAGE BOARD
	DETOUR ROUTE
XXXXX	RAMP CLOSURE
	TC DRUM
	TC DRUM W/ TYPE C LIGHT
	EXISTING POST MOUNTED SIGN
	TC BARRICADE TYPE III
	TC BARRICADE TYPE III W/ SIGN

PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	DETOUR - DETAIL 4 - IH 39 NB & 90/94 WB TO STH 60	SHEET 15	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\027002-DT.DWG PLOT DATE : 1/6/2022 10:26 PM PLOT BY : DEGNER, MARK PLOT NAME :
LAYOUT NAME - DETAIL 4 PLOT SCALE : 1 IN:200 FT WISDOT/CADDS SHEET 42



PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	DETOUR - STH 60 ON RAMP TO IH 39 SB & 90/94 EB	SHEET 16	E

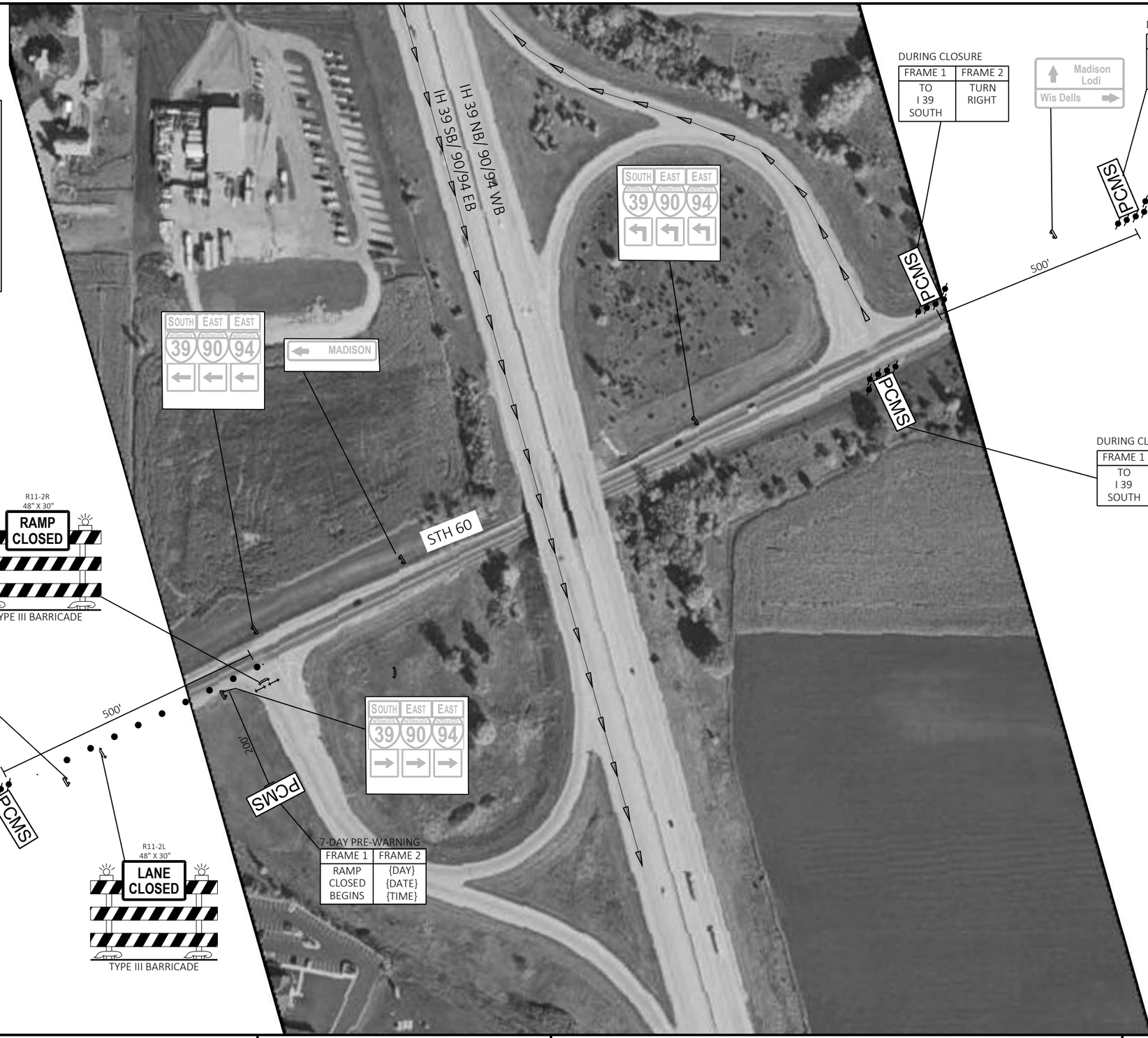
FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\027002-DT.DWG PLOT DATE : 1/6/2022 10:26 PM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : Custom
LAYOUT NAME - det 60 on ramp close
WISDOT/CADDS SHEET 42

2

LEGEND

PCMS	PORTABLE CHANGEABLE MESSAGE BOARD
	DETOUR ROUTE
XXXXX	RAMP CLOSURE
	TC DRUM
	TC DRUM W/ TYPE C LIGHT
	EXISTING POST MOUNTED SIGN
	TC BARRICADE TYPE III
	TC BARRICADE TYPE III W/ SIGN

N



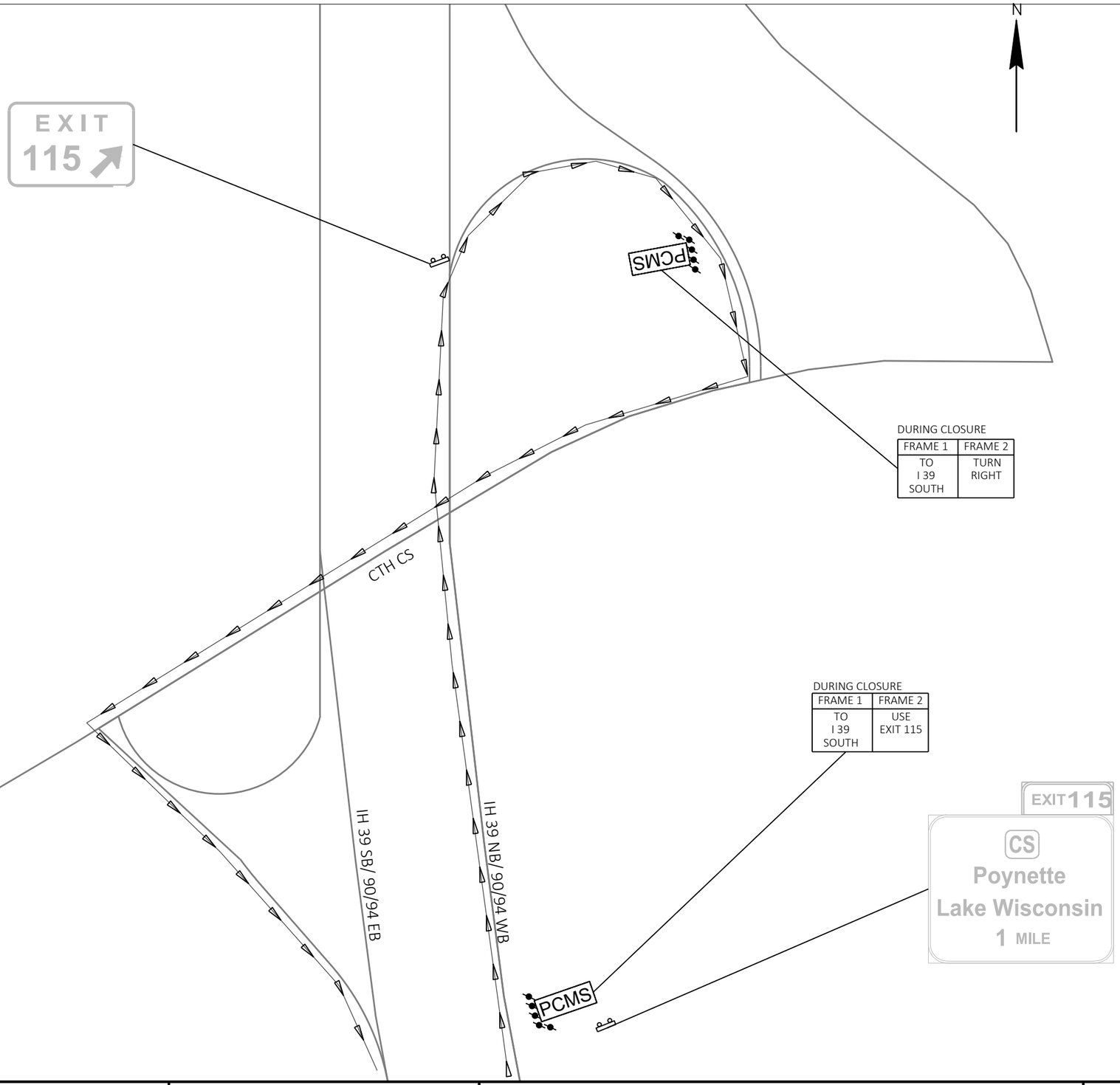
PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	DETOUR - DETAIL 5 - STH 60 ON RAMP TO IH 39 SB & 90/94 EB	SHEET 17	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\027002-DT.DWG PLOT DATE : 1/6/2022 10:26 PM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : ########## WISDOT/CADDS SHEET 42
LAYOUT NAME - DETAIL 5

2

LEGEND

PCMS	PORTABLE CHANGEABLE MESSAGE BOARD
←	DETOUR ROUTE
XXXXX	RAMP CLOSURE
●	TC DRUM
●	TC DRUM W/ TYPE C LIGHT
	EXISTING POST MOUNTED SIGN
	TC BARRICADE TYPE III
	TC BARRICADE TYPE III W/ SIGN

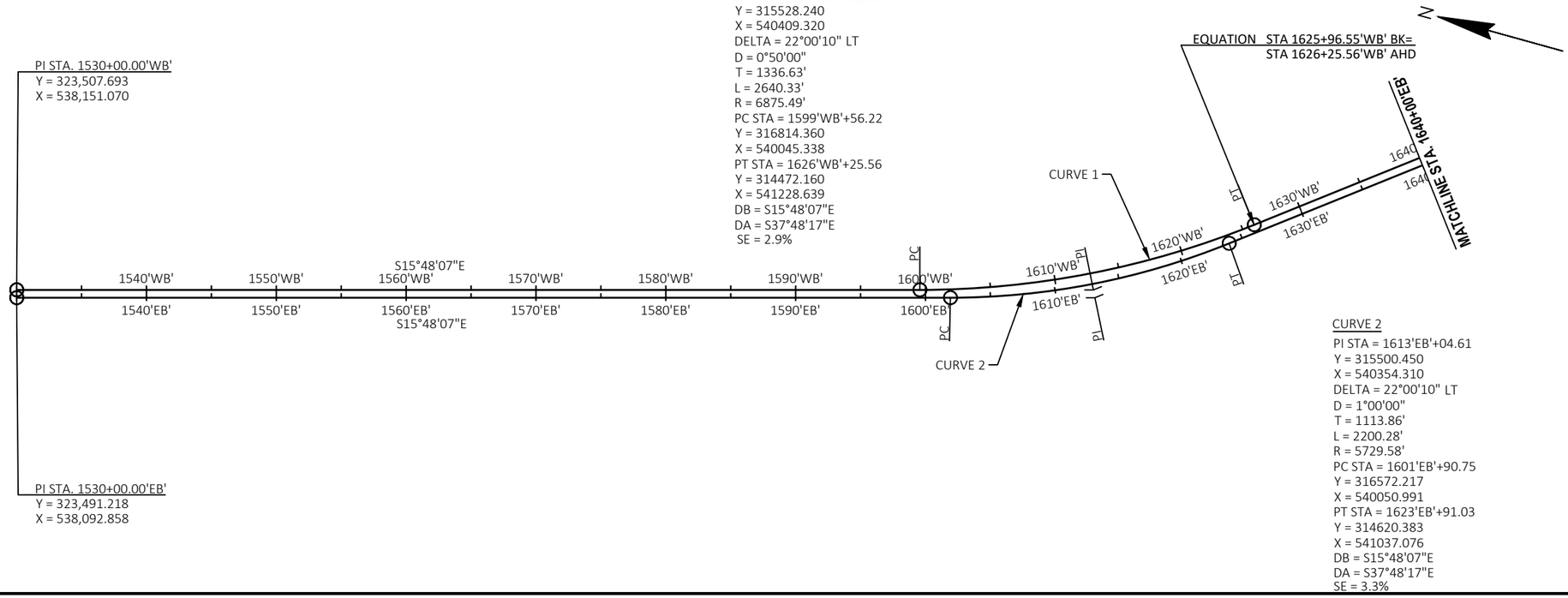


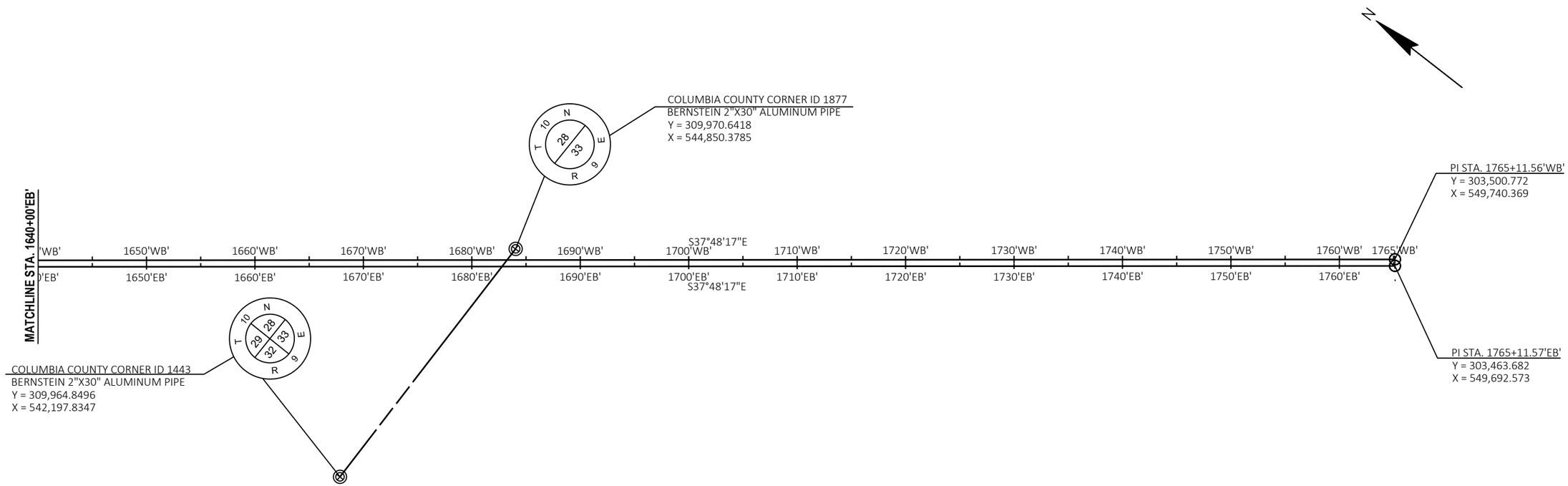
PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	DETOUR - DETAIL 6 - STH 60 ON RAMP TO IH 39 SB & 90/94 EB	SHEET 18 E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\027002-DT.DWG PLOT DATE : 1/6/2022 10:26 PM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : ############
LAYOUT NAME - DETAIL 6

WISDOT/CADDS SHEET 42

2





PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT DATA	SHEET 19	E

1011-01-65

Line	Item	Item Description	Unit	Total	Qty
0064	213.0100	Finishing Roadway (project) 01. 1011-01-65	EACH	1.000	1.000
0088	416.0610	Drilled Tie Bars	EACH	3,082.000	3,082.000
0090	416.0620	Drilled Dowel Bars	EACH	8,947.000	8,947.000
0094	416.1715	Concrete Pavement Repair SHES	SY	4,655.000	4,655.000
0096	416.1725	Concrete Pavement Replacement SHES	SY	4,081.000	4,081.000
0298	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1011-01-65	EACH	1.000	1.000
0302	619.1000	Mobilization	EACH	0.150	0.150
0316	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0318	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0328	628.7010	Inlet Protection Type B	EACH	2.000	2.000
0386	642.5001	Field Office Type B	EACH	0.150	0.150
0388	643.0300	Traffic Control Drums	DAY	12,348.000	12,348.000
0390	643.0420	Traffic Control Barricades Type III	DAY	540.000	540.000
0392	643.0705	Traffic Control Warning Lights Type A	DAY	1,068.000	1,068.000
0394	643.0715	Traffic Control Warning Lights Type C	DAY	3,936.000	3,936.000
0396	643.0800	Traffic Control Arrow Boards	DAY	144.000	144.000
0398	643.0900	Traffic Control Signs	DAY	3,568.000	3,568.000
0404	643.1050	Traffic Control Signs PCMS	DAY	49.000	49.000
0408	643.4100.S	Traffic Control Interim Lane Closure	EACH	48.000	48.000
0410	643.5000	Traffic Control	EACH	0.200	0.200
0418	646.1020	Marking Line Epoxy 4-Inch	LF	4,224.000	4,224.000
0424	646.1555	Marking Line Grooved Contrast Permanent Tape 4-Inch	LF	575.000	575.000
0426	646.3020	Marking Line Epoxy 8-Inch	LF	20.000	20.000
0484	650.8000	Construction Staking Resurfacing Reference	LF	35,832.000	35,832.000
0490	650.9910	Construction Staking Supplemental Control (project) 01. 1011-01-65	LS	1.000	1.000
0580	690.0250	Sawing Concrete	LF	26,323.000	26,323.000
0584	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	300.000	300.000
0586	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	200.000	200.000

CONCRETE PAVEMENT

STATION	TO	STATION	416.0610 DRILLED TIE BARS (EACH)	416.0620 DRILLED DOWEL BARS (EACH)	416.1715 CONCRETE PAVEMENT REPAIR SHES (SY)	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES (SY)	690.0250 SAWING CONCRETE (LF)	COMMENT
1570+70'WB'	-	1594+00'WB'	0	16	11	--	40	STAGE 1A
1594+00'WB'	-	1623+00'WB'	0	16	12	--	41	
1623+00'WB'	-	1652+00'WB'	0	0	--	--	-	
1652+00'WB'	-	1681+00'WB'	0	32	23	--	82	
1681+00'WB'	-	1710+00'WB'	0	48	31	--	118	
1710+00'WB'	-	1739+00'WB'	0	32	19	--	76	
1739+00'WB'	-	1750+00'WB'	0	48	27	--	112	
		'WB' STAGE 1A TOTALS	0	192	123	0	469	
1570+70'WB'	-	1594+00'WB'	161	912	485	188	2,351	STAGE 1B
1594+00'WB'	-	1623+00'WB'	320	576	293	426	1,917	
1623+00'WB'	-	1652+00'WB'	19	288	159	26	708	
1652+00'WB'	-	1681+00'WB'	155	304	139	207	1,009	
1681+00'WB'	-	1710+00'WB'	264	256	115	353	1,126	
1710+00'WB'	-	1739+00'WB'	192	736	386	256	2,042	
1739+00'WB'	-	1750+00'WB'	34	592	314	46	1,408	
		'WB' STAGE 1B TOTALS	1,145	3,664	1,891	1,502	10,561	
		'WB' TOTALS	1,145	3,856	2,014	1,502	11,030	
1570+75'EB'	-	1594+00'EB'	0	32	19	--	75	STAGE 2A
1594+00'EB'	-	1623+00'EB'	21	16	--	28	65	
1623+00'EB'	-	1652+00'EB'	0	0	--	--	-	
1652+00'EB'	-	1681+00'EB'	0	0	--	--	-	
1681+00'EB'	-	1710+00'EB'	0	0	--	--	-	
1710+00'EB'	-	1739+00'EB'	0	16	11	--	40	
1739+00'EB'	-	1750+00'EB'	--	--	--	--	--	
		'EB' STAGE 2A TOTALS	21	64	30	28	180	
1570+75'EB'	-	1594+00'EB'	--	384	238	--	911	STAGE 2B
1594+00'EB'	-	1623+00'EB'	174	256	125	233	899	
1623+00'EB'	-	1652+00'EB'	189	528	264	252	1,549	
1652+00'EB'	-	1681+00'EB'	374	656	313	499	2,168	
1681+00'EB'	-	1710+00'EB'	402	544	254	535	2,018	
1710+00'EB'	-	1739+00'EB'	117	832	461	157	2,145	
1739+00'EB'	-	1750+00'EB'	146	336	180	195	1,036	
		'EB' STAGE 2B TOTALS	1,402	3,536	1,835	1,871	10,726	
		'EB' TOTALS	1,423	3,600	1,865	1,899	10,906	
		UNDISTRIBUTED	514	1,491	776	680	4,387	
		PROJECT TOTALS	3,082	8,947	4,655	4,081	26,323	

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

INLET PROTECTION TYPE B

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)	628.7010 INLET PROTECTION TYPE B (EACH)	COMMENTS
UNDISTRIBUTED	1	1	2	MEDIAN INLET PROTECTION AGAINST SAW SLURRY IF DETERMINED BY ENGINEER
PROJECT TOTALS	1	1	2	

TRAFFIC CONTROL - DRUMS, BARRICADES, WARNING LIGHTS, ARROW BOARDS, AND SIGNS

ROADWAY	DAYS IN SERVICE	643.0300 DRUMS NO.	643.0300 DRUMS (DAY)	643.0420 BARRICADES TYPE III NO.	643.0420 BARRICADES TYPE III (DAY)	643.0705 WARNING LIGHTS TYPE A NO.	643.0705 WARNING LIGHTS TYPE A (DAY)	643.0715 WARNING LIGHTS TYPE C NO.	643.0715 WARNING LIGHTS TYPE C (DAY)	643.0800 TRAFFIC CONTROL ARROW BOARDS NO.	643.0800 TRAFFIC CONTROL ARROW BOARDS (DAY)	643.0900 SIGNS NO.	643.0900 SIGNS (DAY)	643.1050 TRAFFIC CONTROL SIGNS PCMS NO.	643.1050 TRAFFIC CONTROL SIGNS PCMS (DAY)	643.4100.S TRAFFIC CONTROL INTERIM LANE CLOSURE (EACH)
PRE WARNING MAINLINE																
EB	7	5	35	--	--	--	--	--	--	--	--	--	--	1	7	--
WB	7	5	35	--	--	--	--	--	--	--	--	--	--	1	7	--
IH 39 NB/ 90/94 WB - STAGE 1A																
ADV. WARNING	3	5	15	--	--	--	--	--	--	--	--	--	--	--	--	--
DAYTIME/NIGHTTIME 2 LANE CLOSURE	3	199	596	11	33	22	66	61	183	3	9	16	48	--	--	3
IH 39 NB/ 90/94 WB - STAGE 1B																
DAYTIME/NIGHTTIME 2 LANE CLOSURE	19	258	4,897	11	209	22	418	84	1,596	3	57	84	1596	--	--	19
DETOUR PREWARN	7	5	35	--	--	--	--	--	--	--	--	--	--	1	7	--
DETOUR FOR IH 39 WB OFF RAMP TO STH 60	1	77	77	4	4	4	4	20	20	--	--	4	4	4	4	--
IH 39 SB/ 90/94 EB - STAGE 2A																
ADV. WARNING	3	5	15	--	--	--	--	--	--	--	--	--	--	--	--	--
DAYTIME/NIGHTTIME 2 LANE CLOSURE	4	199	795	11	44	22	88	61	244	3	12	16	64	--	--	4
IH 39 SB/ 90/94 EB - STAGE 2B																
DAYTIME/NIGHTTIME 2 LANE CLOSURE	22	258	5,670	11	242	22	484	84	1,848	3	66	84	1848	--	--	22
DETOUR PREWARN	7	10	70	--	--	--	--	--	--	--	--	--	--	2	14	--
DETOUR FOR IH 39 EB OFF RAMP TO STH 60	1	74	74	4	4	4	4	20	20	--	--	4	4	4	4	--
DETOUR FOR STH 60 ON RAMP TO IH 39 EB	1	34	34	4	4	4	4	25	25	--	--	4	4	6	6	--
PROJECT TOTALS			12,348		540		1,068		3,936		144		3,568		49	48

PAVEMENT MARKING

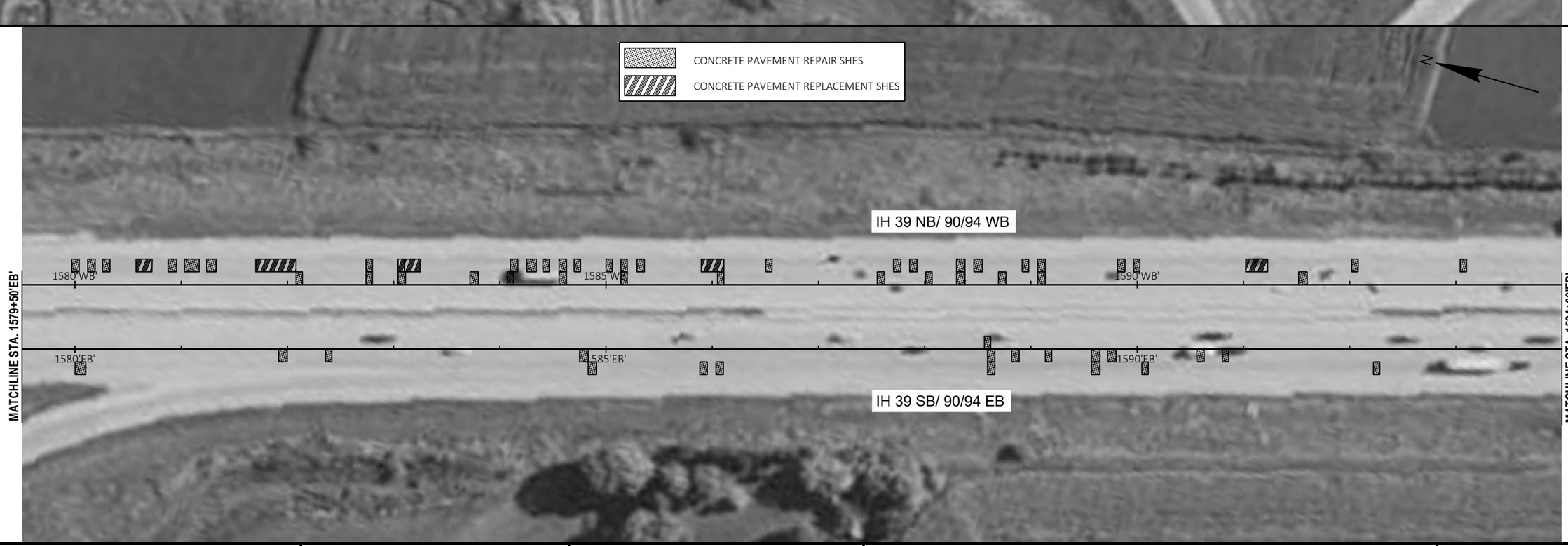
STATION	-	STATION	646.1020 MARKING LINE EPOXY 4-INCH YELLOW (LF)	646.1020 MARKING LINE EPOXY 4-INCH WHITE (LF)	646.1555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH WHITE (LF)	646.3020 MARKING LINE EPOXY 8-INCH WHITE (LF)	COMMENTS
1570+70'WB'	-	1594+00'WB'	8	--	--	--	
1594+00'WB'	-	1623+00'WB'	--	--	--	--	
1623+00'WB'	-	1652+00'WB'	--	--	--	--	
1652+00'WB'	-	1681+00'WB'	17	--	--	--	
1681+00'WB'	-	1710+00'WB'	23	--	37.5	--	
1710+00'WB'	-	1739+00'WB'	14	--	--	--	
1739+00'WB'	-	1750+00'WB'	20	--		--	
		'WB' STAGE 1A TOTALS	82	-	37.5	-	
1570+70'WB'	-	1594+00'WB'	--	393	50.0	--	
1594+00'WB'	-	1623+00'WB'	--	468	62.5	--	
1623+00'WB'	-	1652+00'WB'	--	117	-	--	
1652+00'WB'	-	1681+00'WB'	--	228	-	--	
1681+00'WB'	-	1710+00'WB'	--	156	12.5	--	
1710+00'WB'	-	1739+00'WB'	--	385	37.5	--	
1739+00'WB'	-	1750+00'WB'	--	179	25.0	--	
		'WB' STAGE 1B TOTALS	-	1,926	187.5	-	
		'WB' TOTALS	82	1,926	225.0	0	
1570+75'EB'	-	1594+00'EB'	14	1	12.5	--	
1594+00'EB'	-	1623+00'EB'	21		--	--	
1623+00'EB'	-	1652+00'EB'	--	--	--	--	
1652+00'EB'	-	1681+00'EB'	--	--	--	--	
1681+00'EB'	-	1710+00'EB'	55	--	--	--	
1710+00'EB'	-	1739+00'EB'	8	--	12.5	--	
1739+00'EB'	-	1750+00'EB'	--	--	--	--	
		'EB' STAGE 2A TOTALS	98	1	25.0	-	
1570+75'EB'	-	1594+00'EB'	--	34	62.5	20	
1594+00'EB'	-	1623+00'EB'	--	196	62.5	--	
1623+00'EB'	-	1652+00'EB'	--	283	50.0	--	
1652+00'EB'	-	1681+00'EB'	--	537	37.5	--	
1681+00'EB'	-	1710+00'EB'	--	525	12.5	--	
1710+00'EB'	-	1739+00'EB'	--	356	62.5	--	
1739+00'EB'	-	1750+00'EB'	--	186	37.5	--	
		'EB' STAGE 2B TOTALS	-	2,117	325.0	20	
		'EB' TOTALS	98	2,118	350.0	20	
		PROJECT TOTALS	4,224		575.0	20	

CONSTRUCTION STAKING

LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE (LF)	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (LS)	COMMENTS
PROJECT	--	1	
'EB' ALIGNMENT	17,916	--	
'WB' ALIGNMENT	17,916	--	
PROJECT TOTALS	35,832	1	

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.



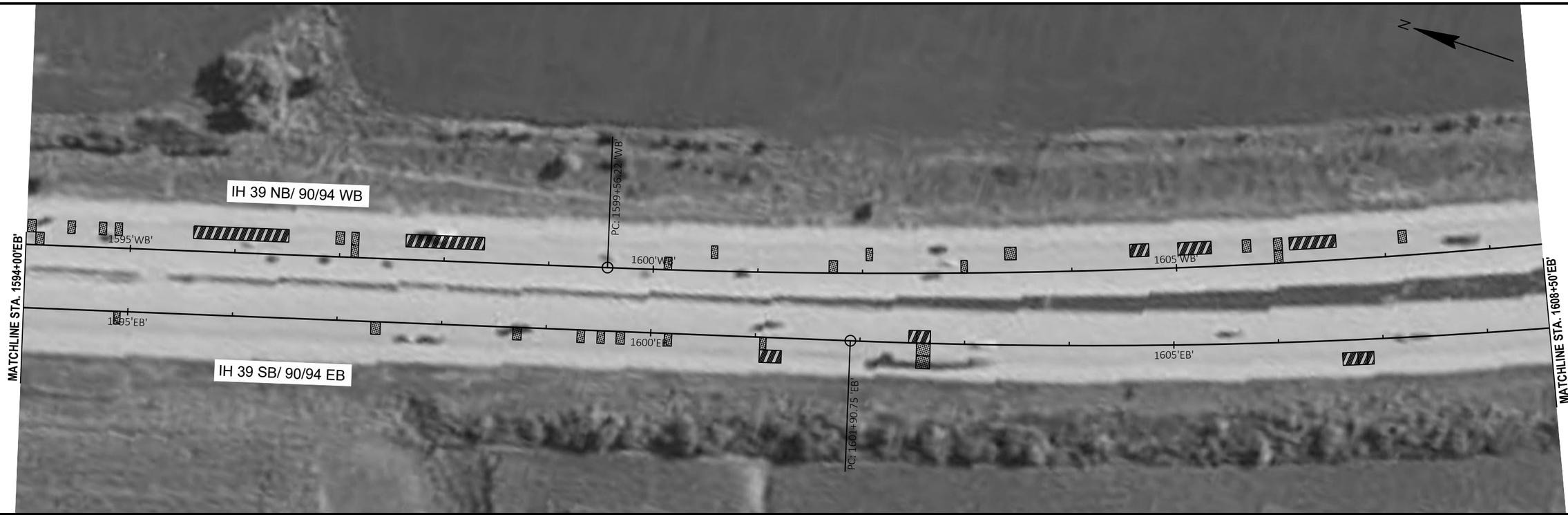


PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	PLAN SHEETS	SHEET 24	E

FILE NAME : 050201-PN.DWG
LAYOUT NAME - 01

PLOT DATE : 11/23/2021 10:15 AM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



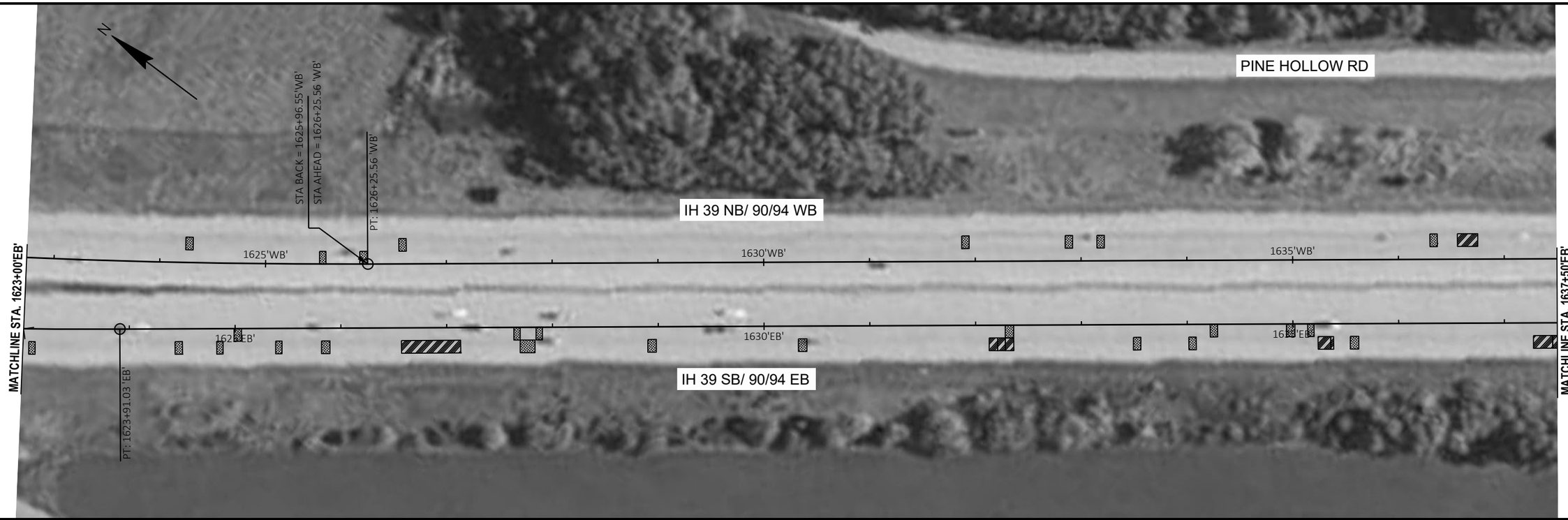


PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	PLAN SHEETS	SHEET 25	E

FILE NAME : 050201-PN.DWG
LAYOUT NAME - 02

PLOT DATE : 11/23/2021 10:15 AM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44





PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	PLAN SHEETS	SHEET 26	E

FILE NAME : 050201-PN.DWG
LAYOUT NAME - 03

PLOT DATE : 11/23/2021 10:15 AM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



5 5

PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	PLAN SHEETS	SHEET 27	E

FILE NAME : 050201-PN.DWG
LAYOUT NAME - 04

PLOT DATE : 11/23/2021 10:15 AM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



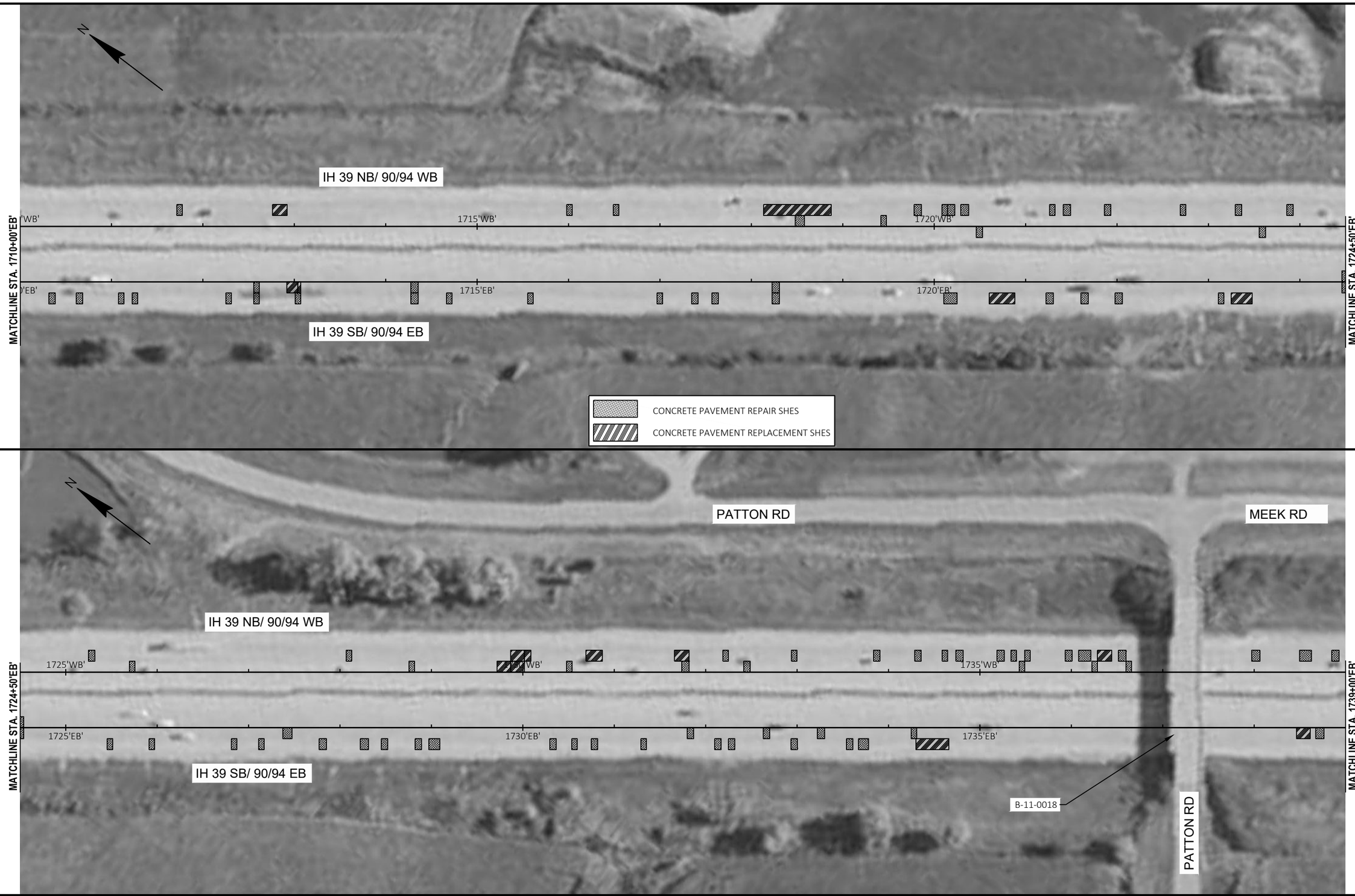
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PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	PLAN SHEETS	SHEET 28	E

FILE NAME : 050201-PN.DWG
LAYOUT NAME - 05

PLOT DATE : 11/23/2021 10:15 AM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



5

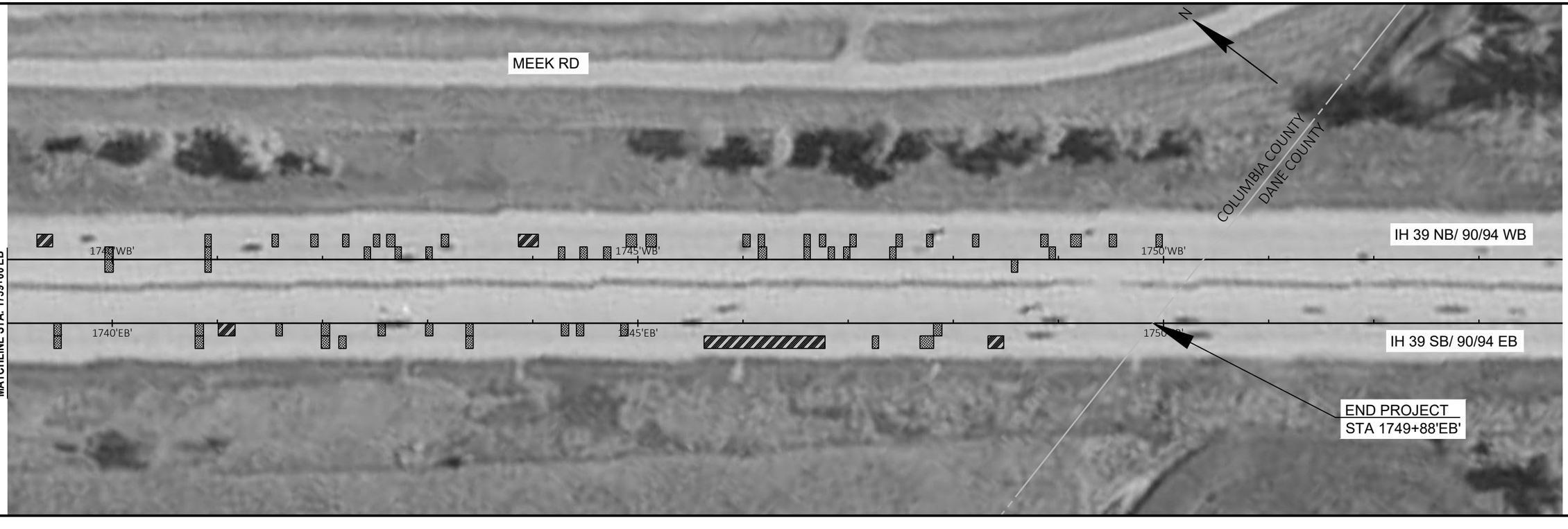
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PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	PLAN SHEETS	SHEET 29	E

FILE NAME : 050201-PN.DWG
LAYOUT NAME - 06

PLOT DATE : 11/23/2021 10:15 AM PLOT BY : DEGNER, MARK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



5

5

CONCRETE PAVEMENT REPAIR SHES

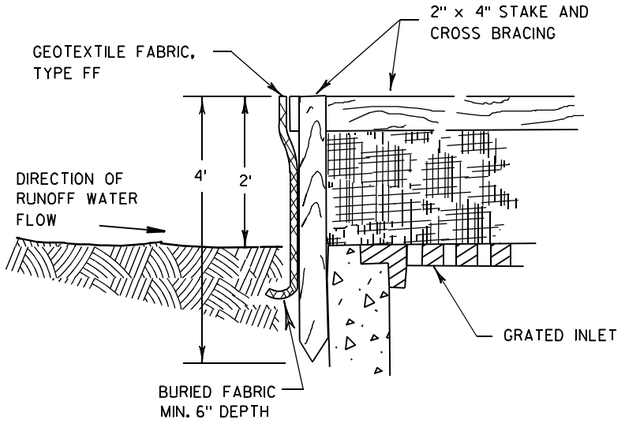
CONCRETE PAVEMENT REPLACEMENT SHES

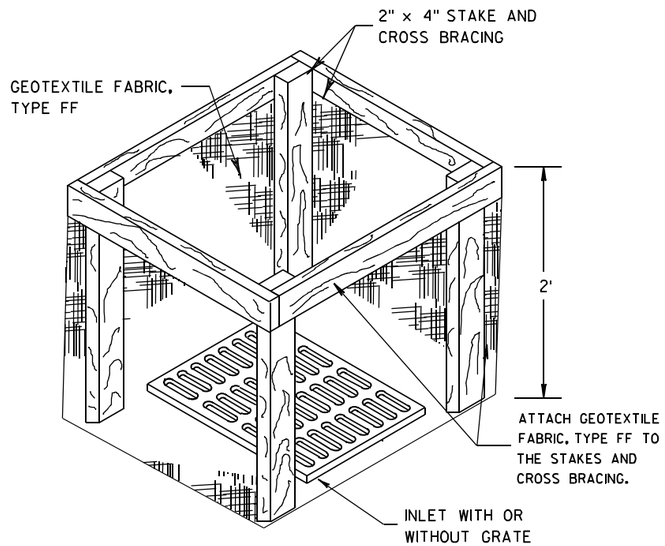
PROJECT NO: 1011-01-65	HWY: IH 39	COUNTY: COLUMBIA	PLAN SHEETS	SHEET 30	E

Standard Detail Drawing List

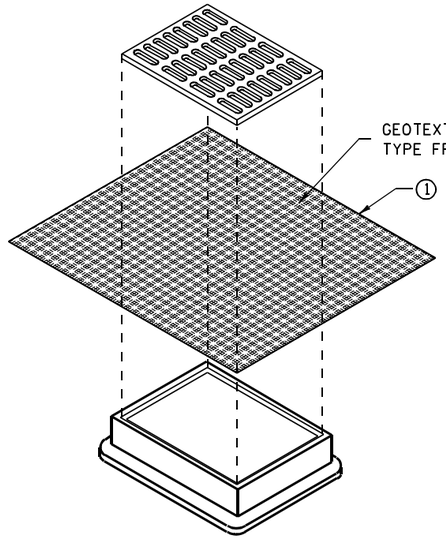
08E10-02	INLET PROTECTION TYPE A, B, C AND D
13A03-06	CONCRETE PAVEMENT SHOULDERS
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-15A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C11-12A	RURAL DOWELED CONCRETE PAVEMENT
13C11-12B	RURAL DOWELED CONCRETE PAVEMENT
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C18-07F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
13C18-07G	CONCRETE PAVEMENT JOINTING ACCELERATION/DECELERATION LANE
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-08E	OFF RAMP LANE CLOSURE
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D12-09A	TRAFFIC CONTROL, LANE CLOSURE
15D12-09B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D14-04	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)
15D15-05A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D16-04	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING

6



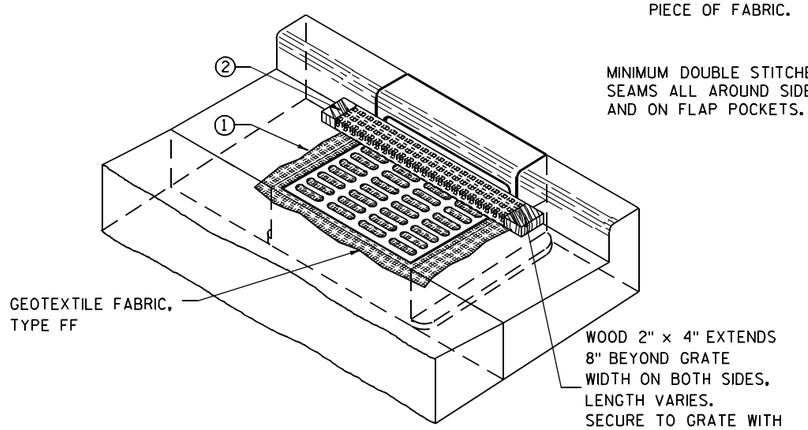


INLET PROTECTION, TYPE A

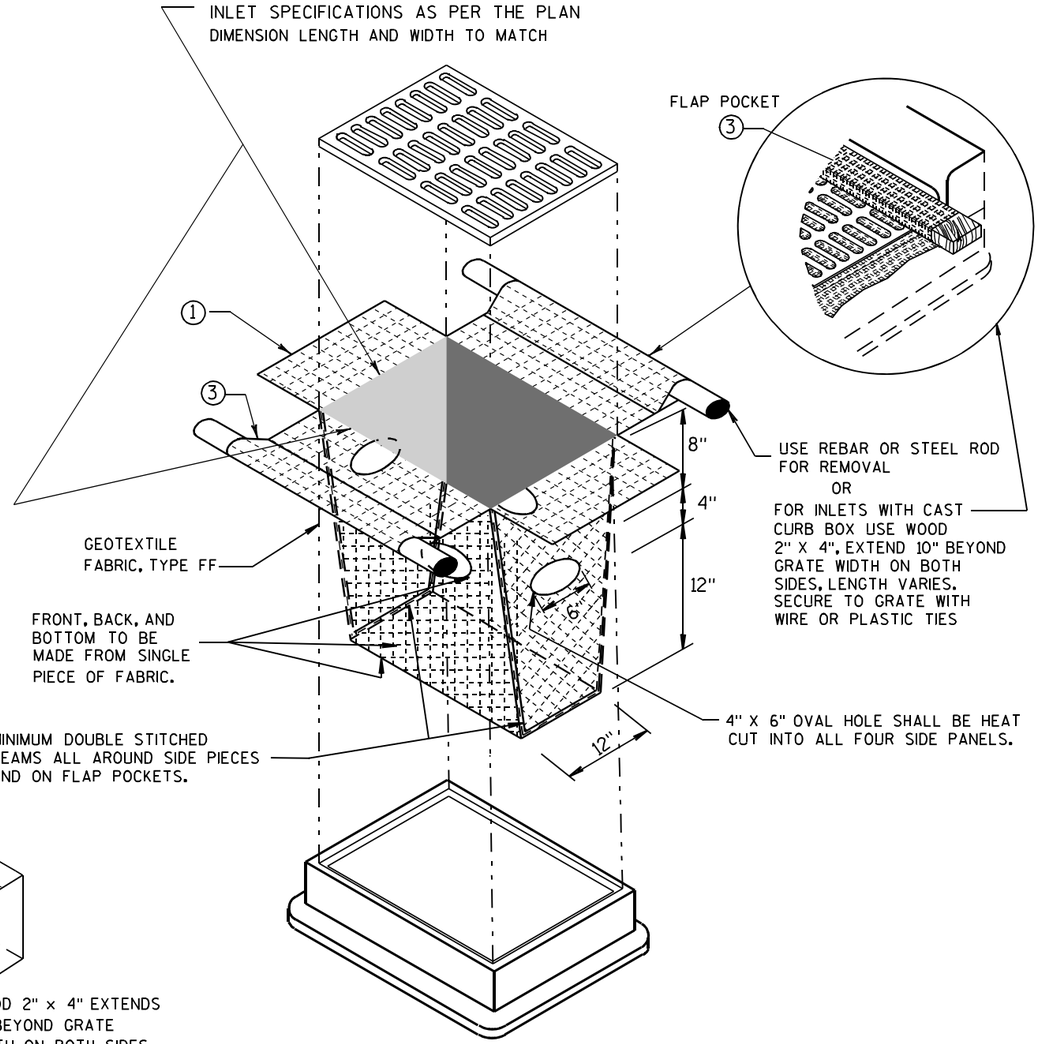


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

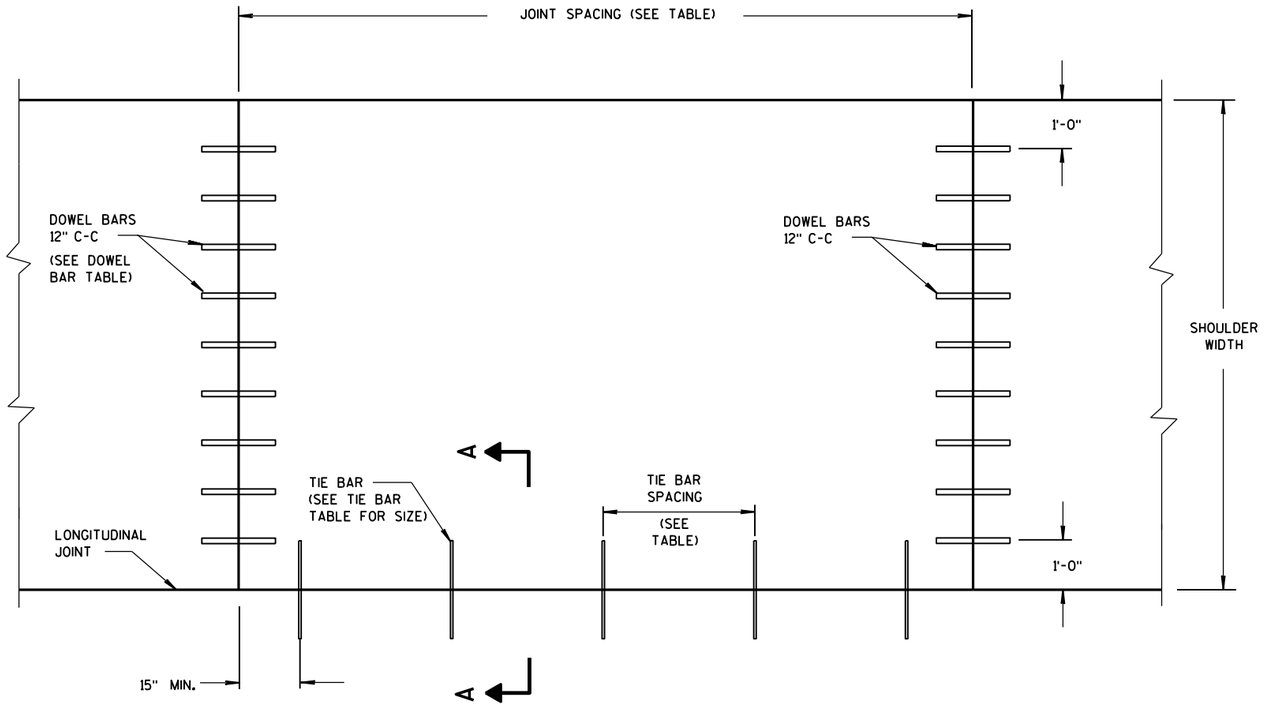
FHWA

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S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

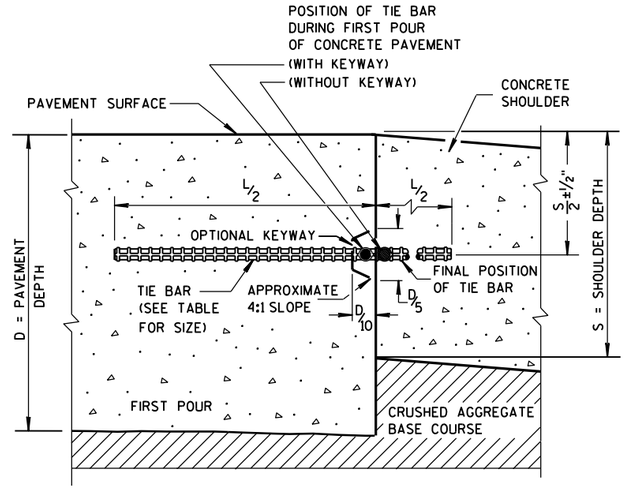
GENERAL NOTES

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.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER***	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

*** FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FOR THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

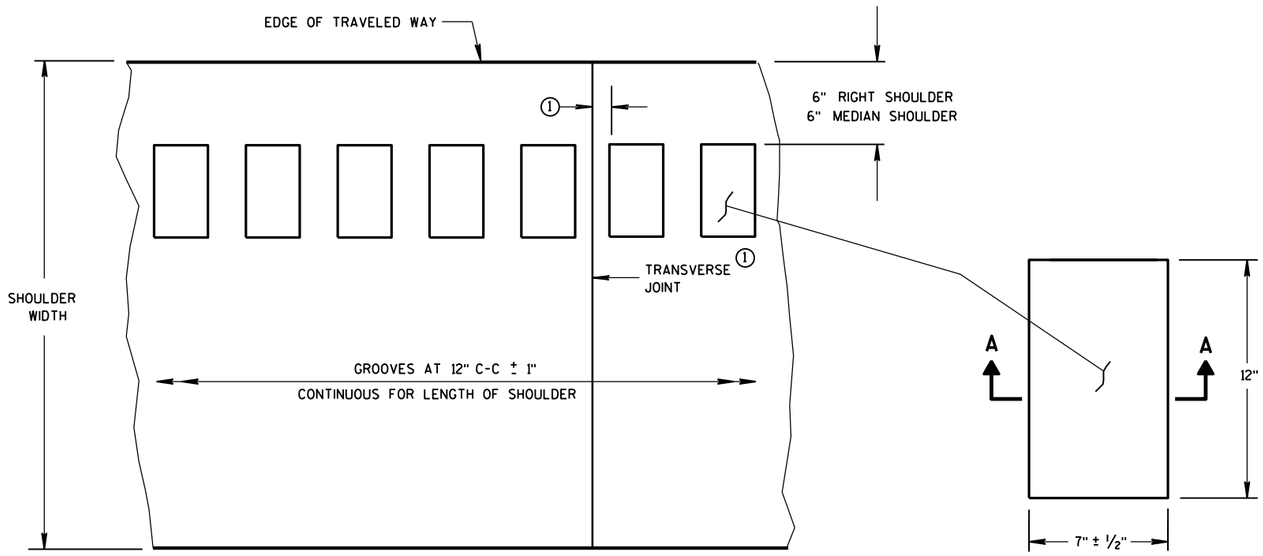
APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPERINTENDENT
FHWA

6

S.D.D. 13 A 3-6

6

S.D.D. 13 A 3-6



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

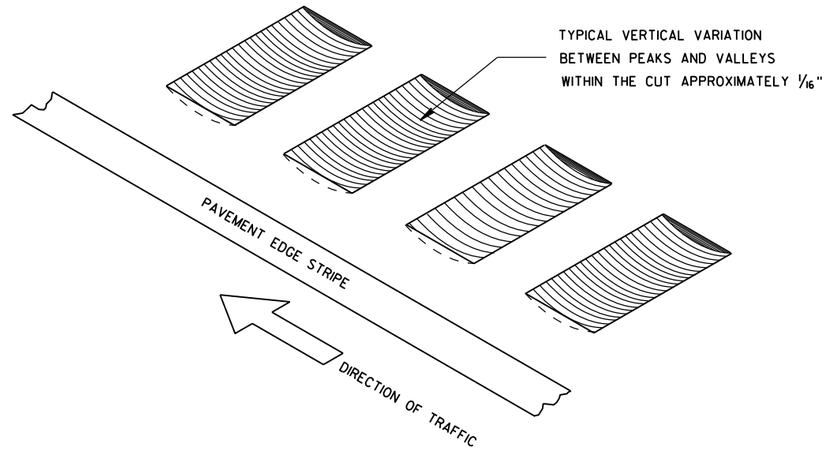
GENERAL NOTES

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

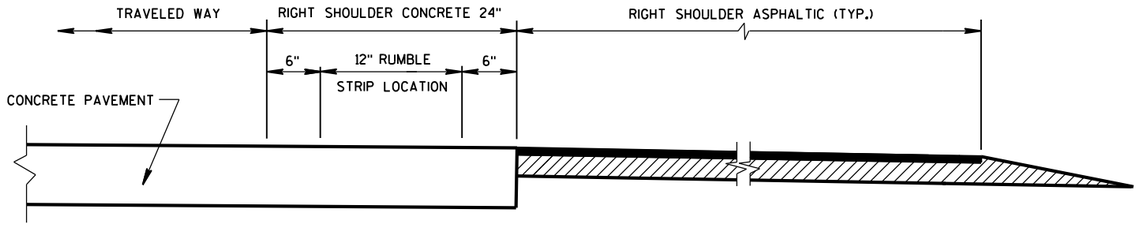
RUMBLE STRIPS ON EXPRESSWAYS

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.

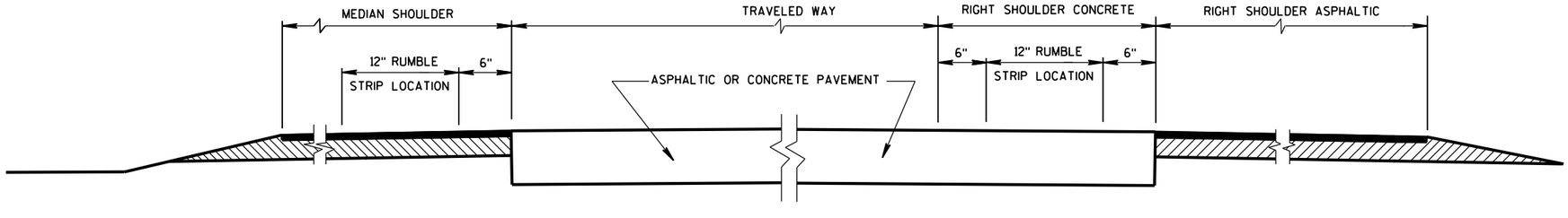
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



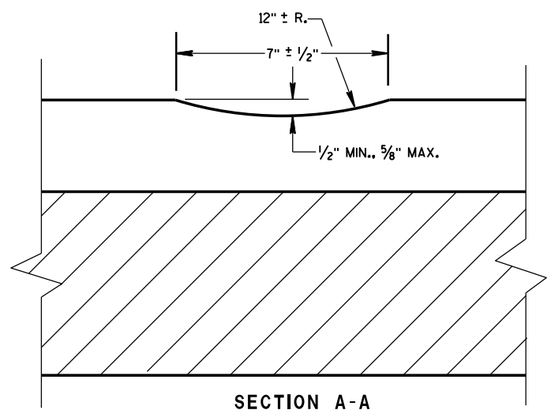
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

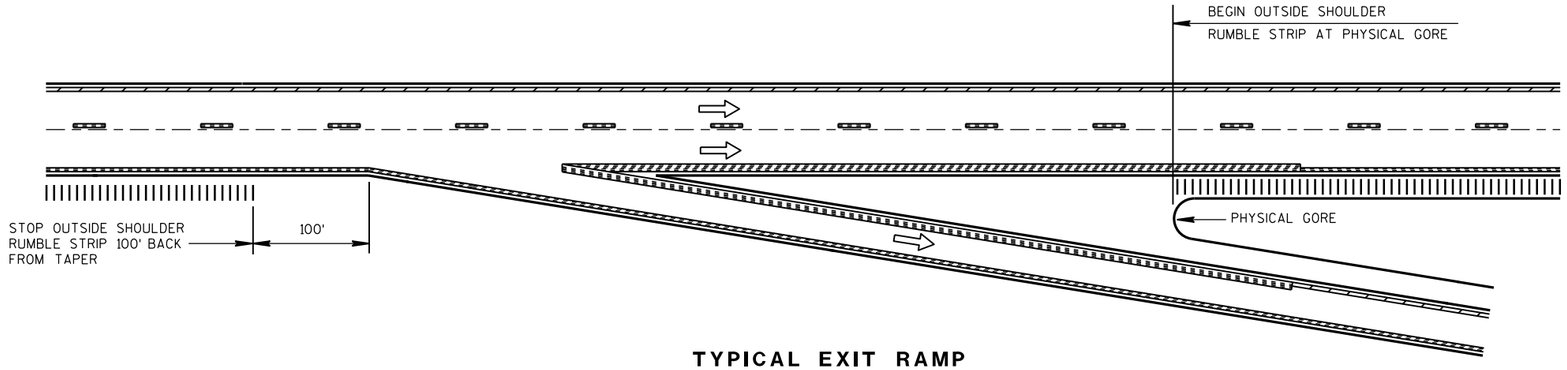
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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

6

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



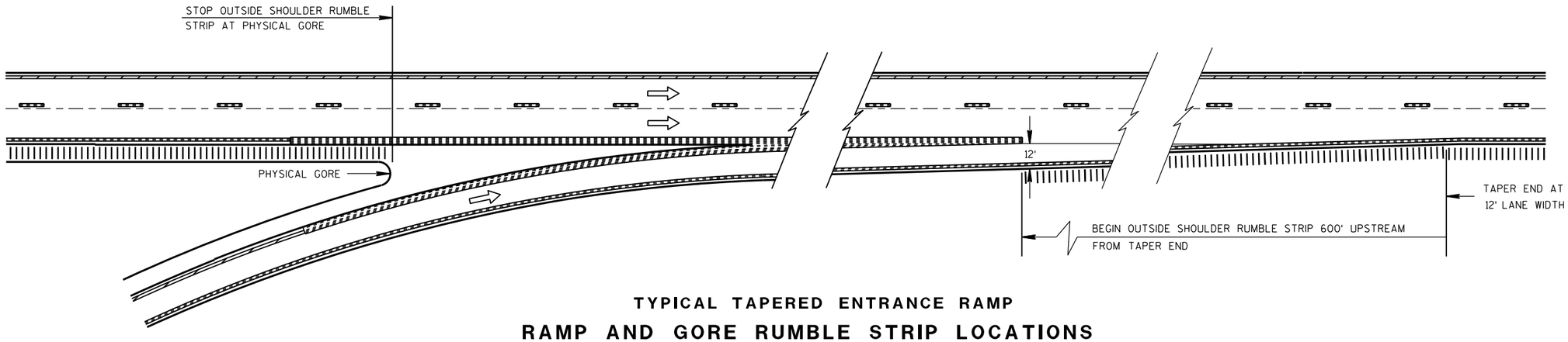
TYPICAL EXIT RAMP

NOTES:

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

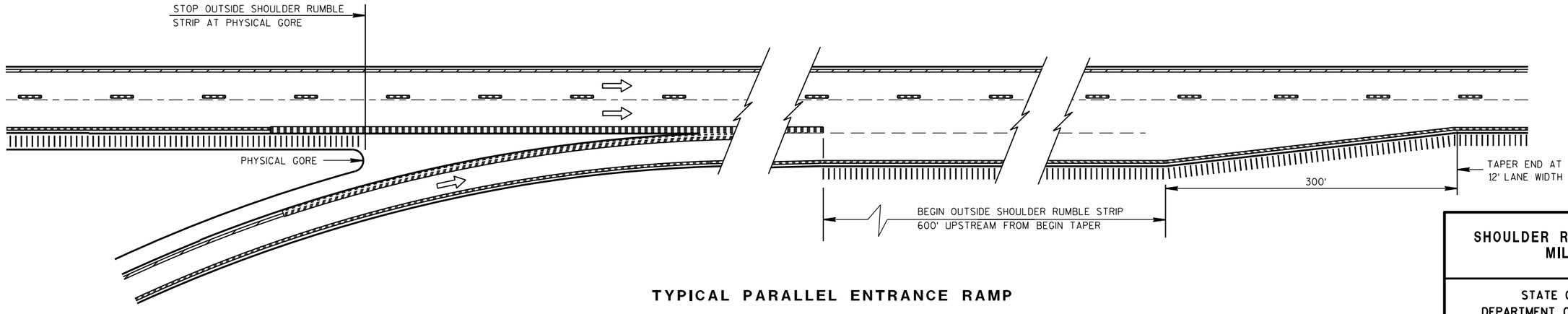
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

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

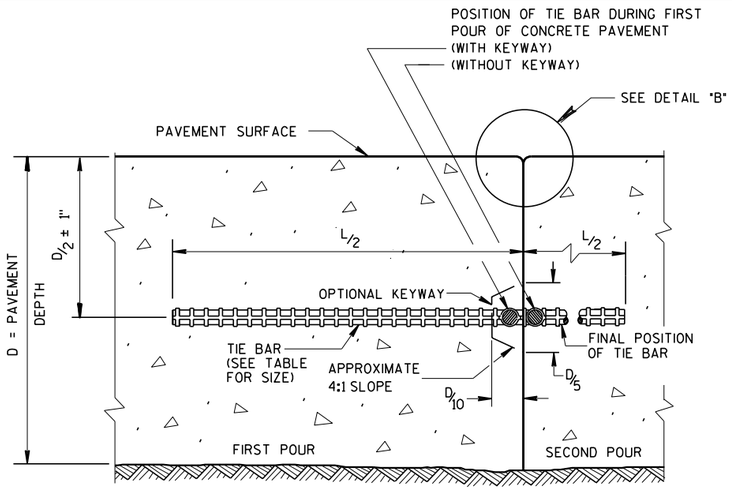
FHWA

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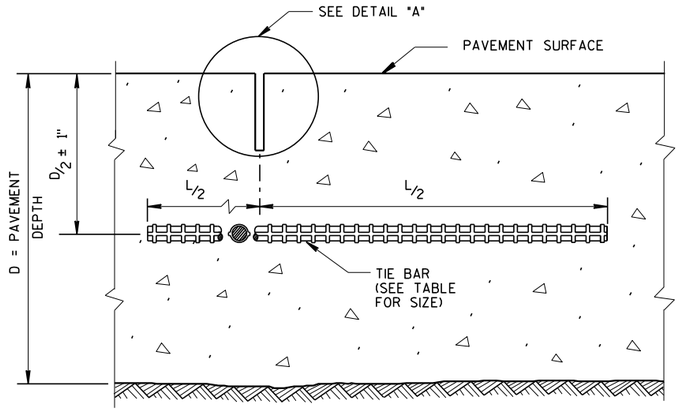
S.D.D. 13 A 5-5b

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



CONSTRUCTION JOINT



SAWED JOINT

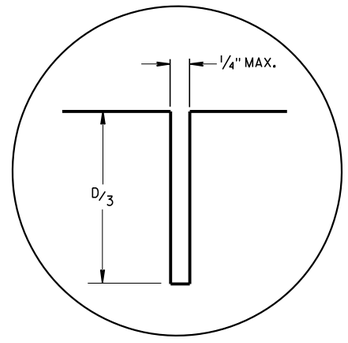
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

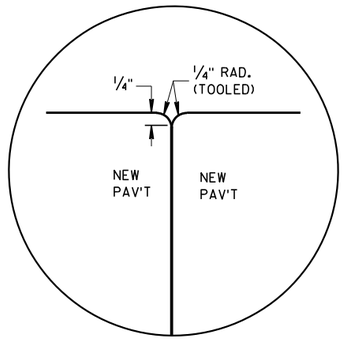
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

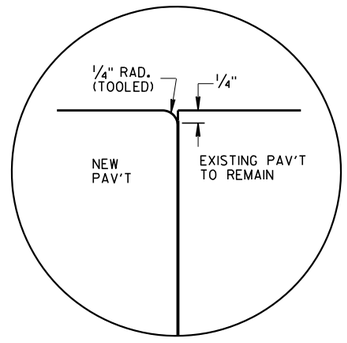
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



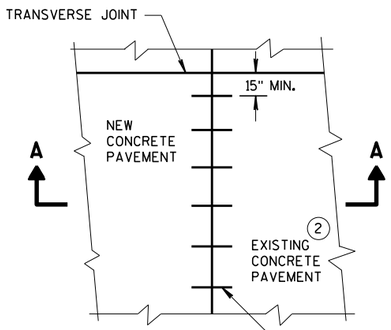
DETAIL "A"



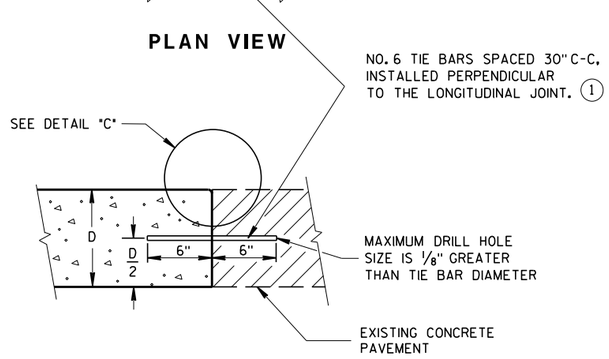
DETAIL "B"



DETAIL "C"



PLAN VIEW



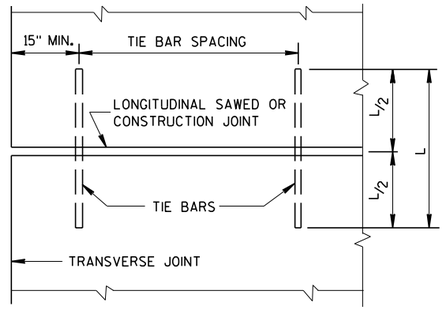
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp — PAVEMENT SUPE
FHWA

6

S.D.D. 13 C 1-19

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S.D.D. 13 C 1-19

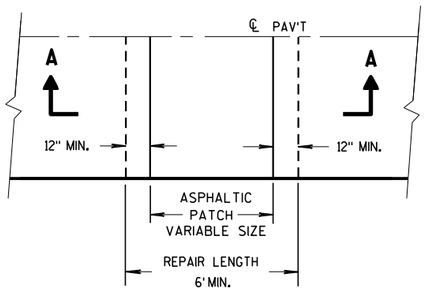
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

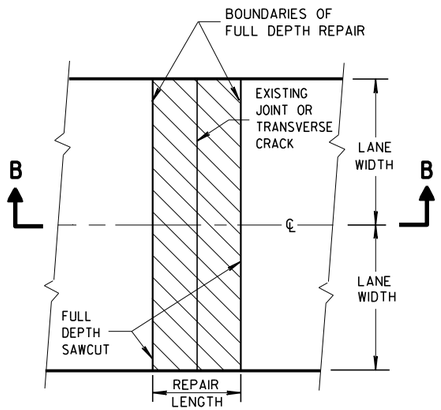
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

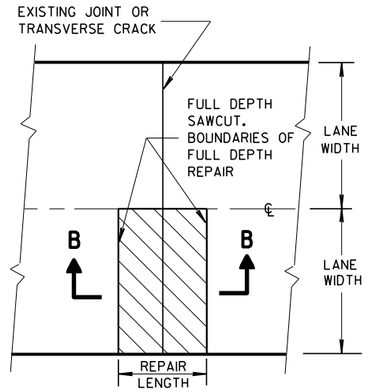
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

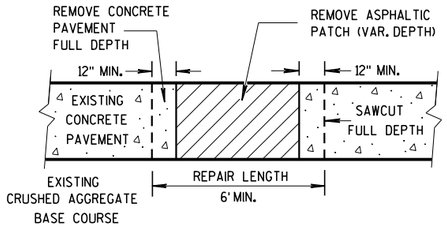


PLAN VIEW
(DOUBLE LANE REPAIR)



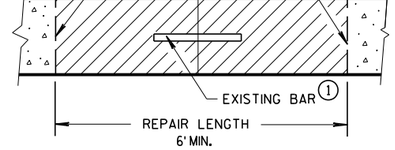
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

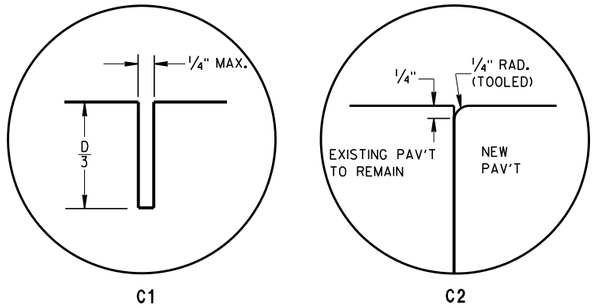
HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT



C1 C2

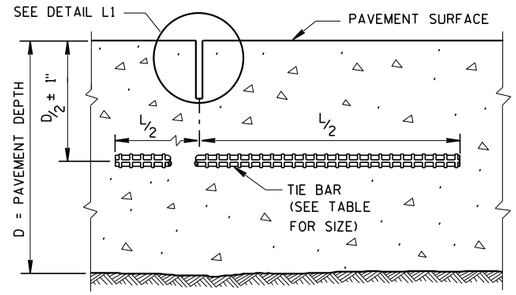
TRANSVERSE JOINTS

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

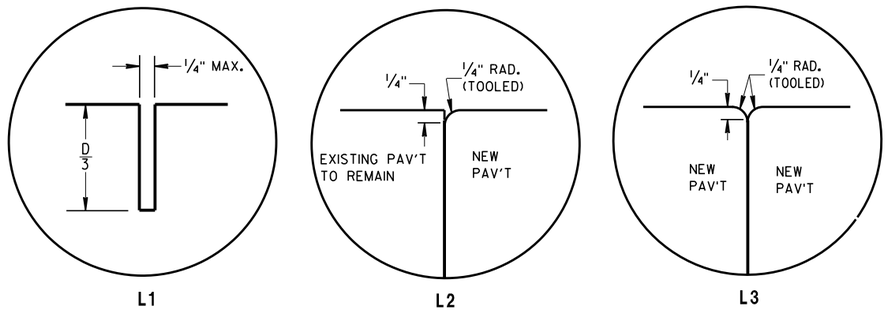
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

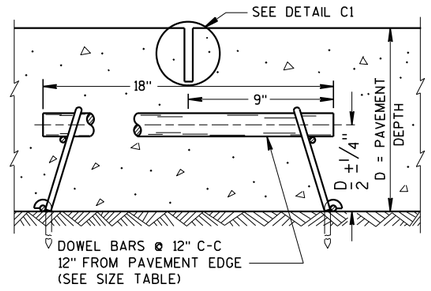
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.



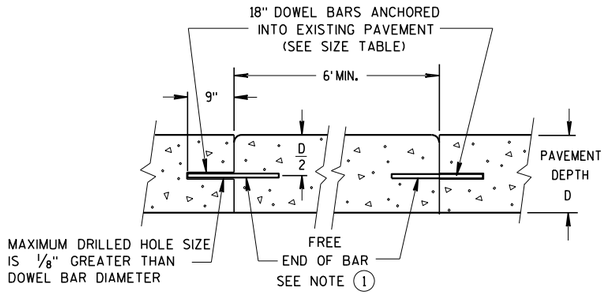
L1 L2 L3

LONGITUDINAL JOINTS

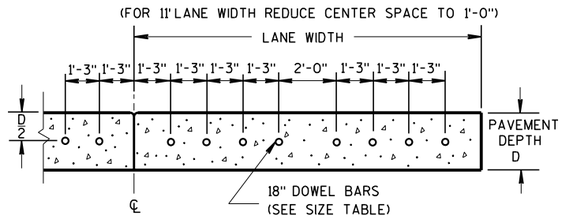


SECTION F-F

CONTRACTION JOINT



SECTION D-D

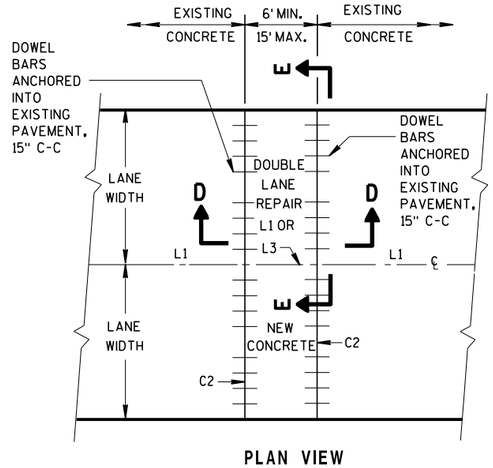


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

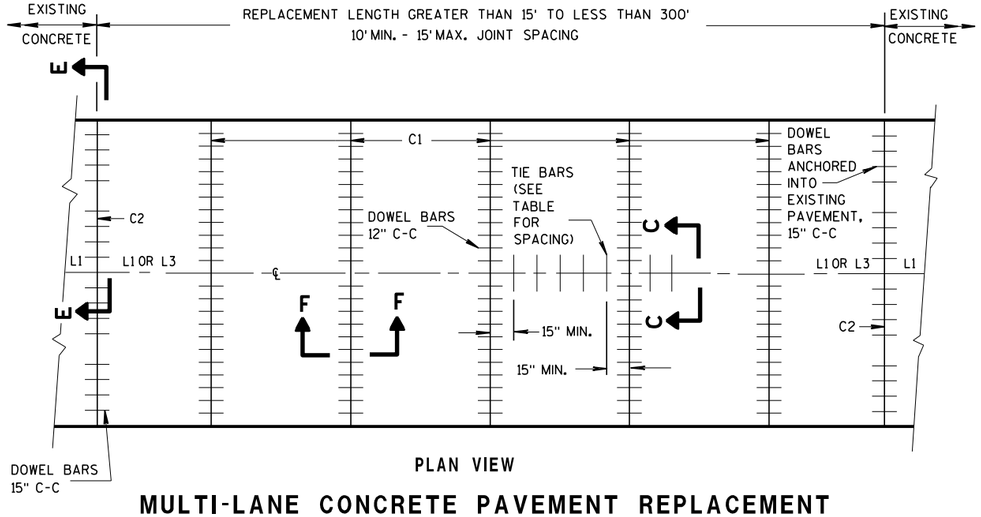
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	NONE	12'
7", 7 1/2"	1"	1"	14'
8", 8 1/2"	1 1/4"	1 1/4"	15'
9", 9 1/2"	1 1/4"	1 1/4"	15'
10" & ABOVE	1 1/2"	1 1/4"	15'



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

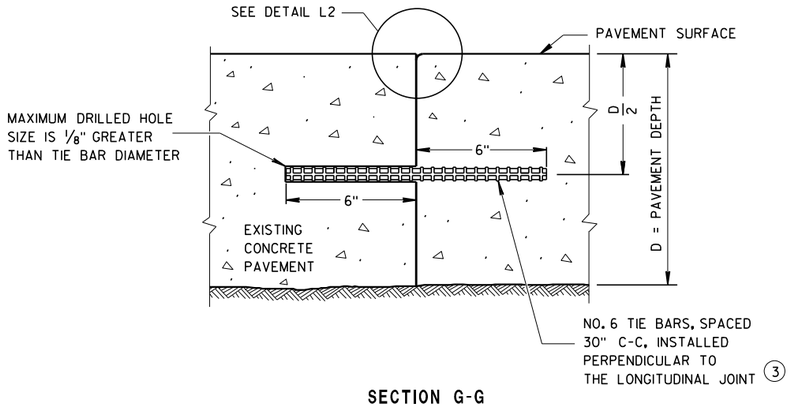
MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 13 C 9-15b



SECTION G-G

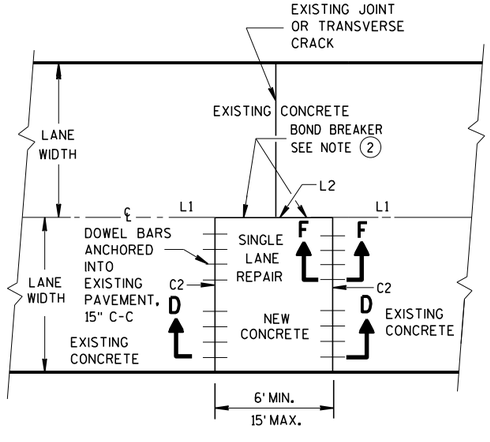
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

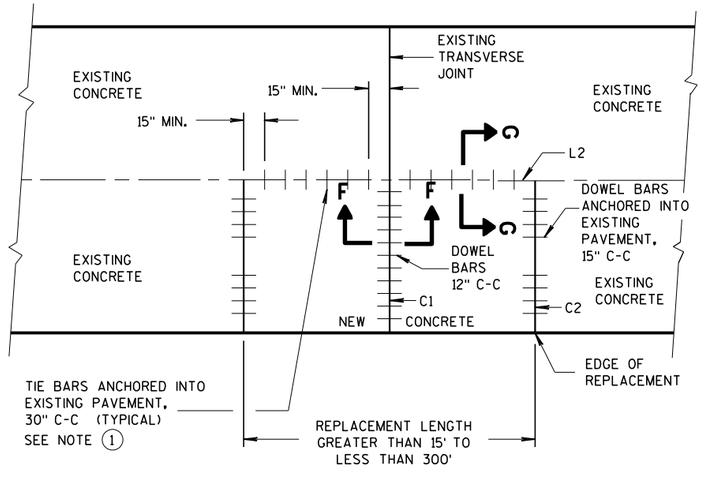
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

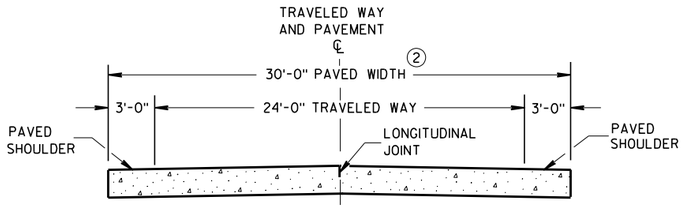
SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

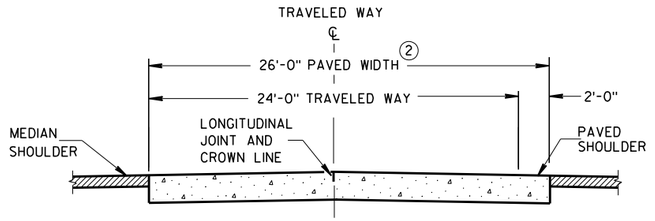
APPROVED
March 2018 — DATE
/S/ Peter Ken... — PAVEMENT SUPE...
FHWA

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S.D.D. 13 C 9-15c

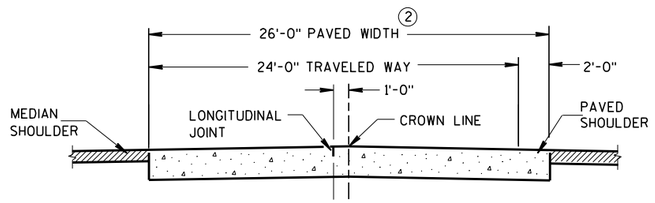


SECTION A-A ①

TWO-LANE TWO-WAY HIGHWAY



SECTION B-B



ALTERNATIVE SECTION B-B

①

DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

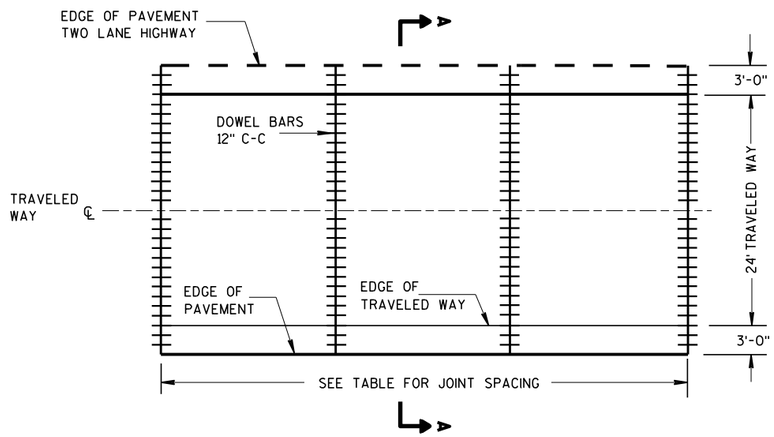
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

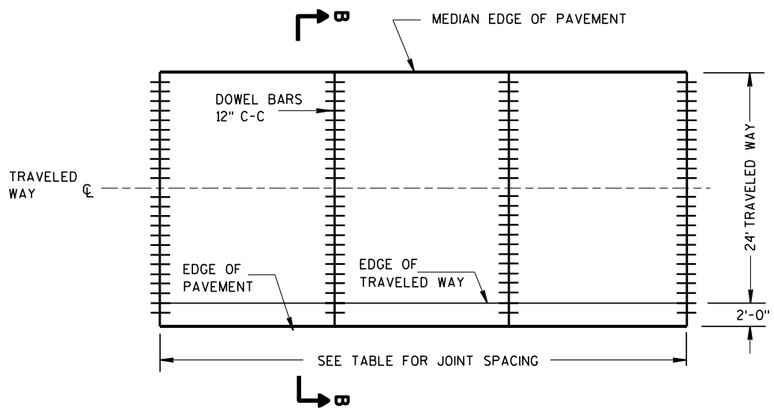
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



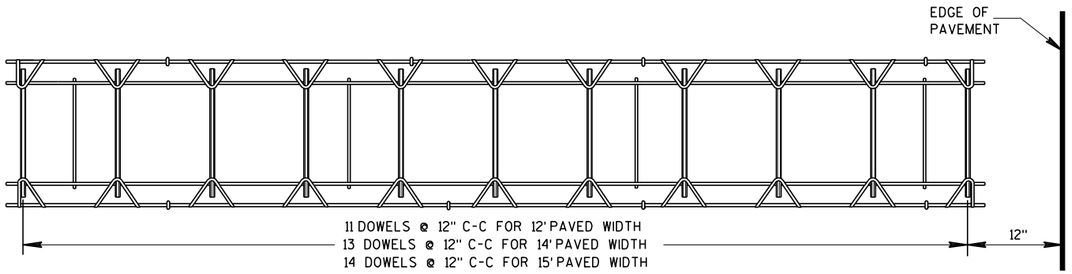
CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY



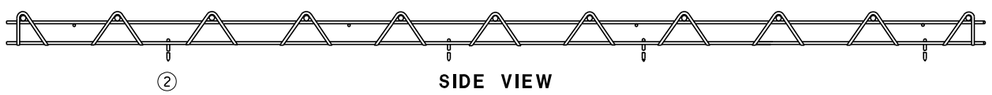
CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



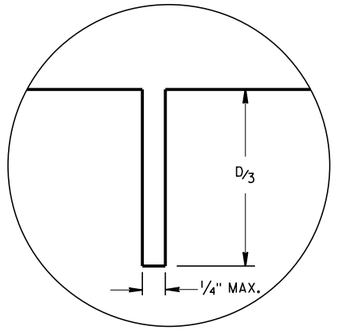
PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

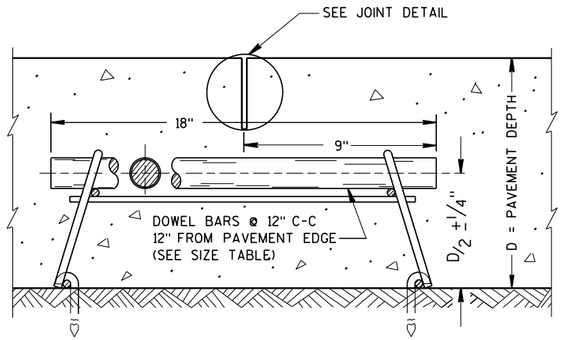
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

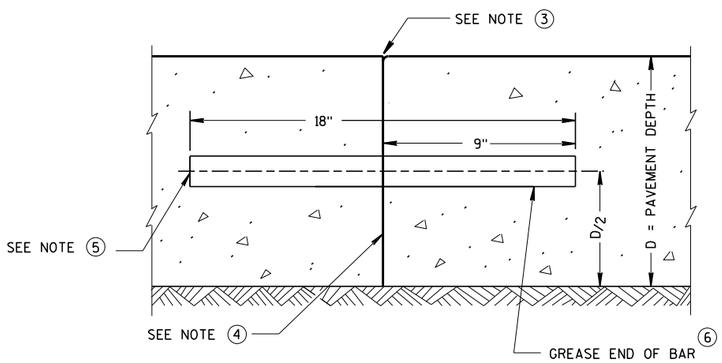
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

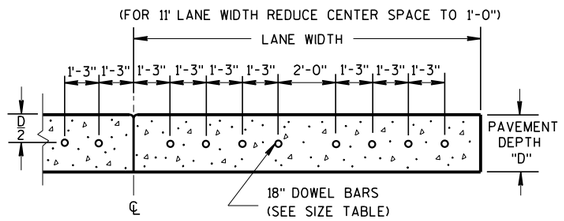
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

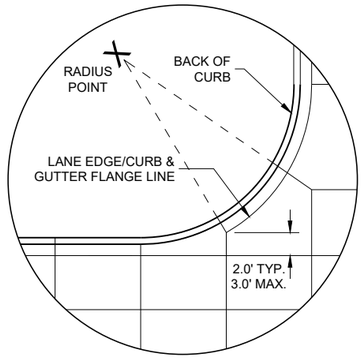
RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

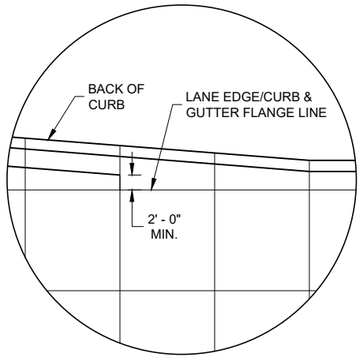
APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUP
FHWA

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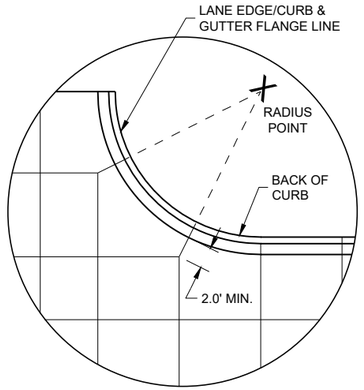
S.D.D. 13 C 11-12b



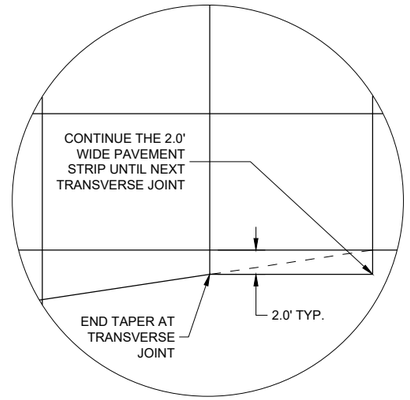
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

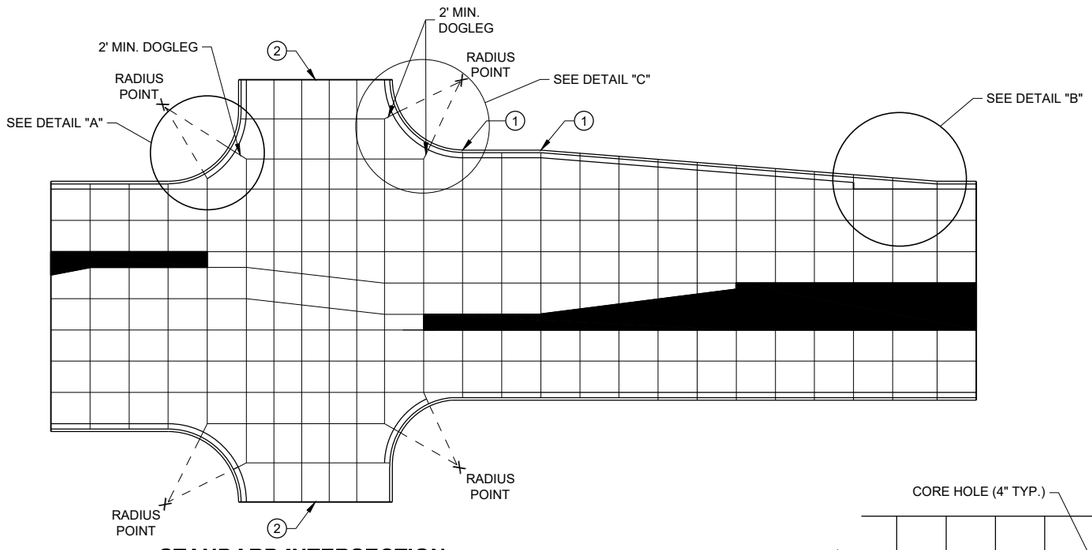
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.

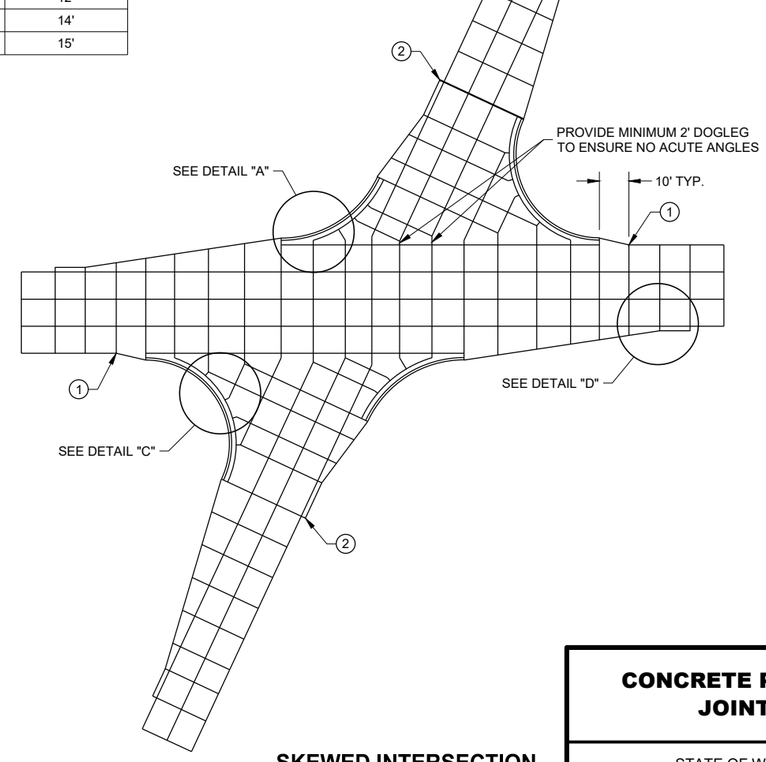
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



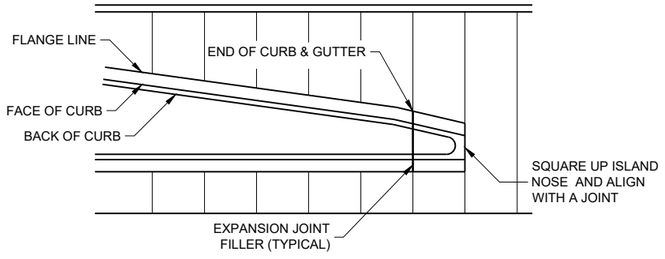
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

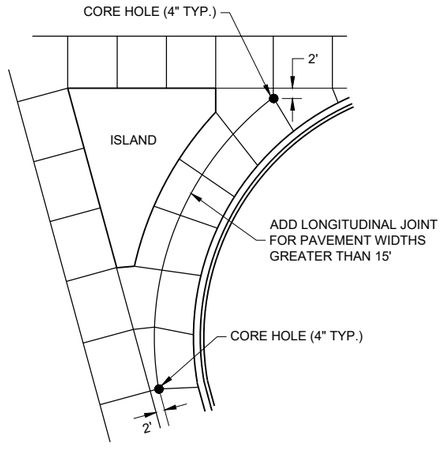
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 13C18 - 07a

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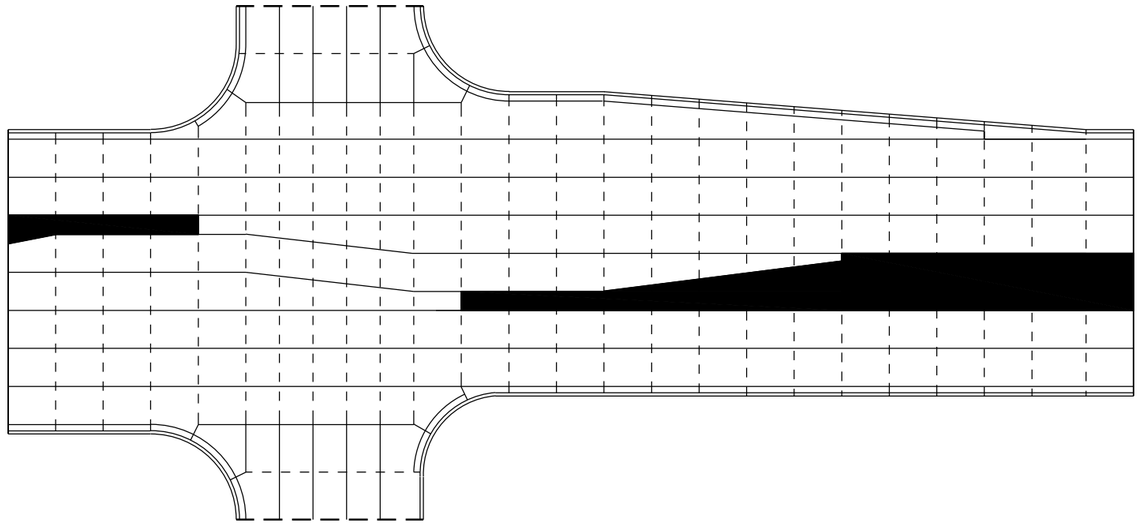
SDD 13C18 - 07a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

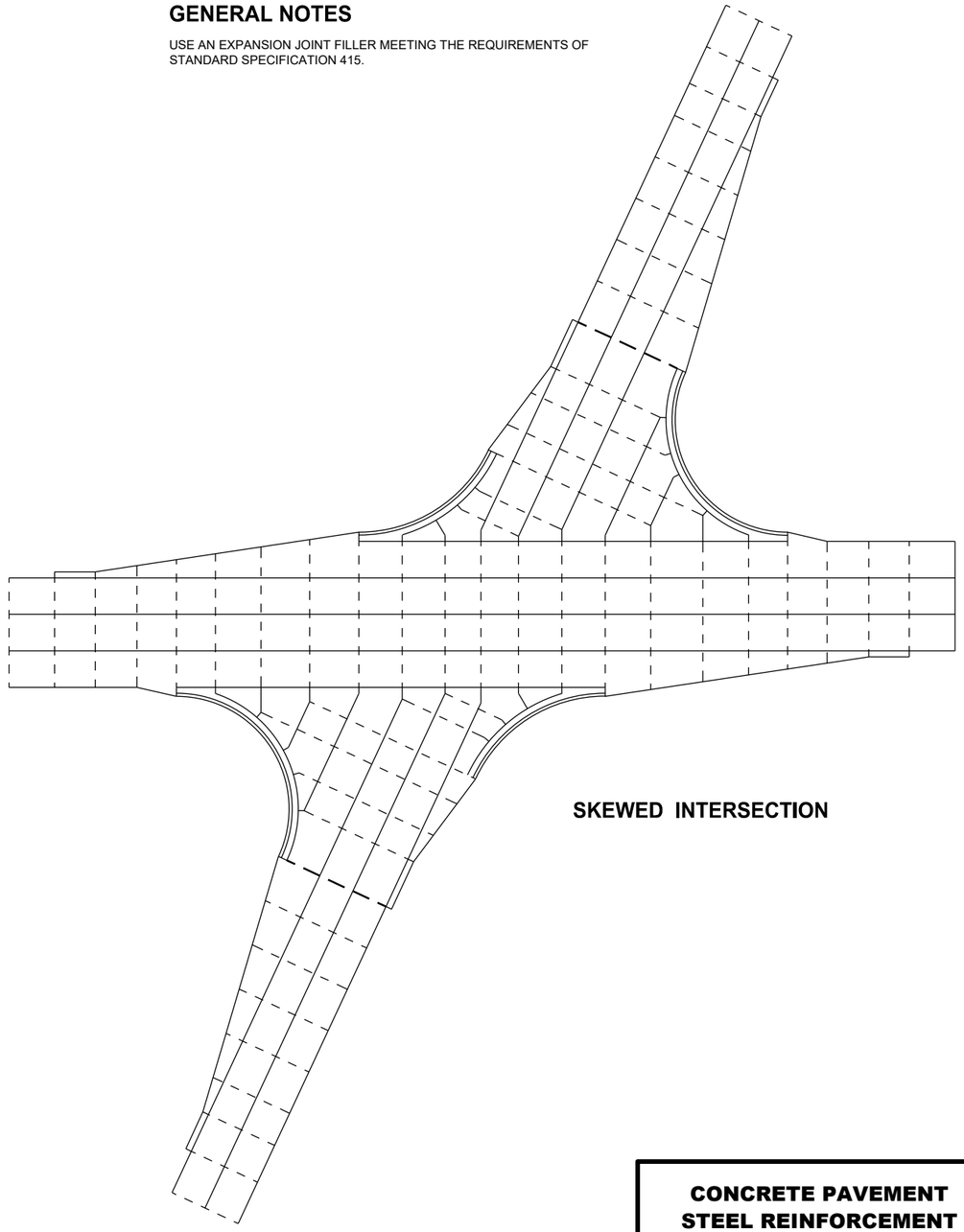
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

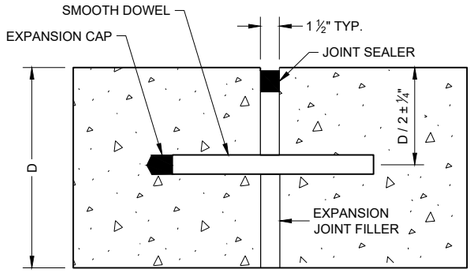
SDD 13C18 - 07b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

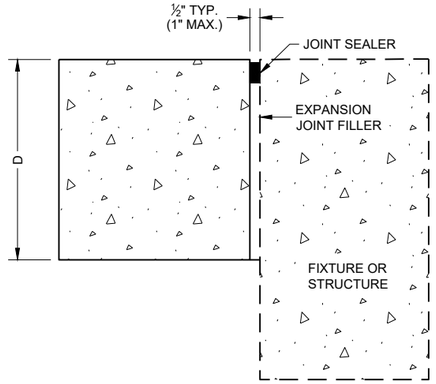
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

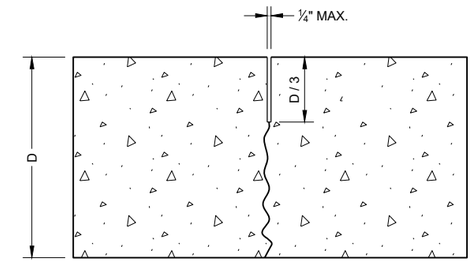
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

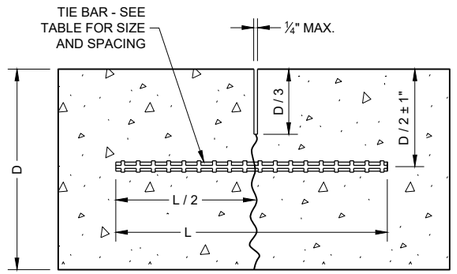
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

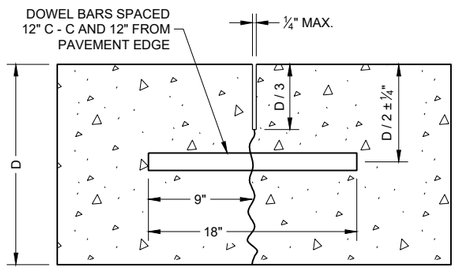
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

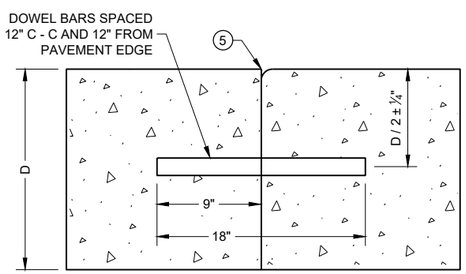


TIED LONGITUDINAL

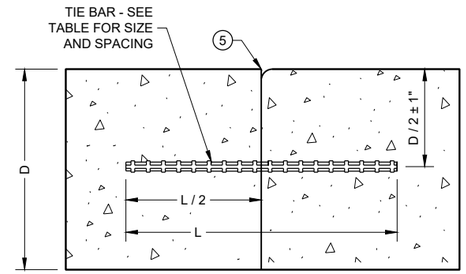


DOWELED TRANSVERSE

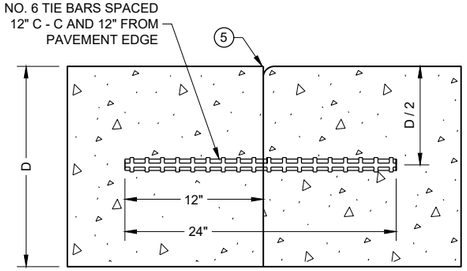
CONTRACTION JOINTS (2)



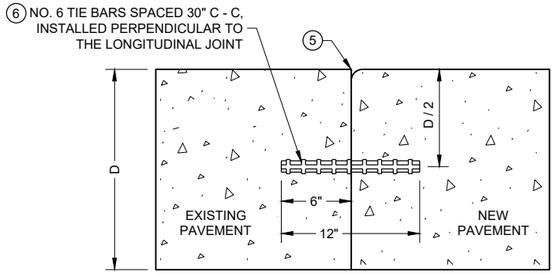
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



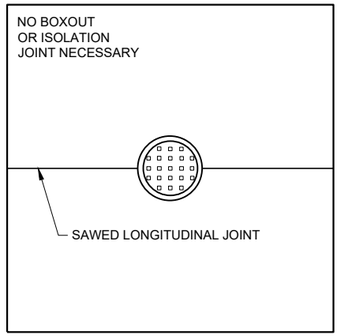
TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

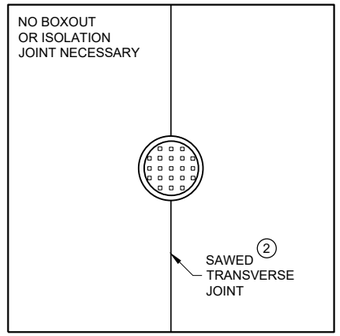
CONCRETE PAVEMENT JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

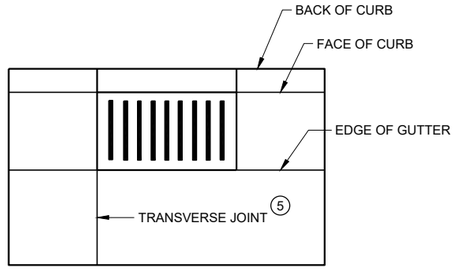
6
SDD 13C18 - 07c



MANHOLE WITH LONGITUDINAL JOINT



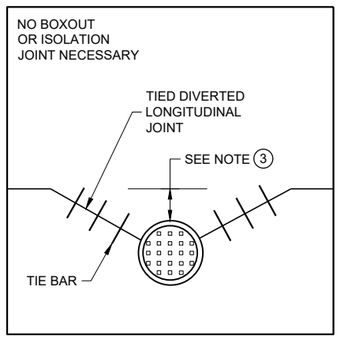
MANHOLE WITH TRANSVERSE JOINT



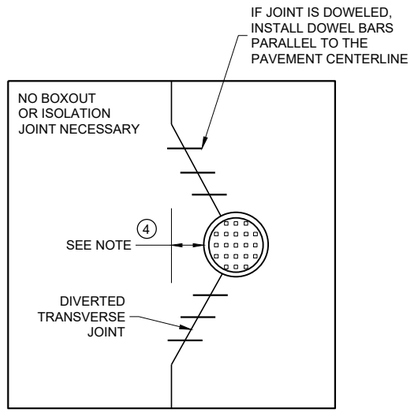
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

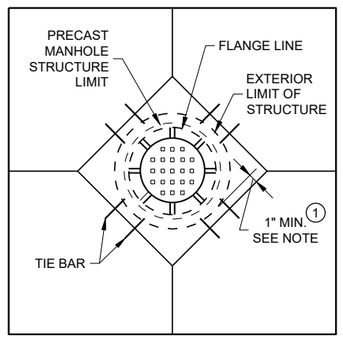
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

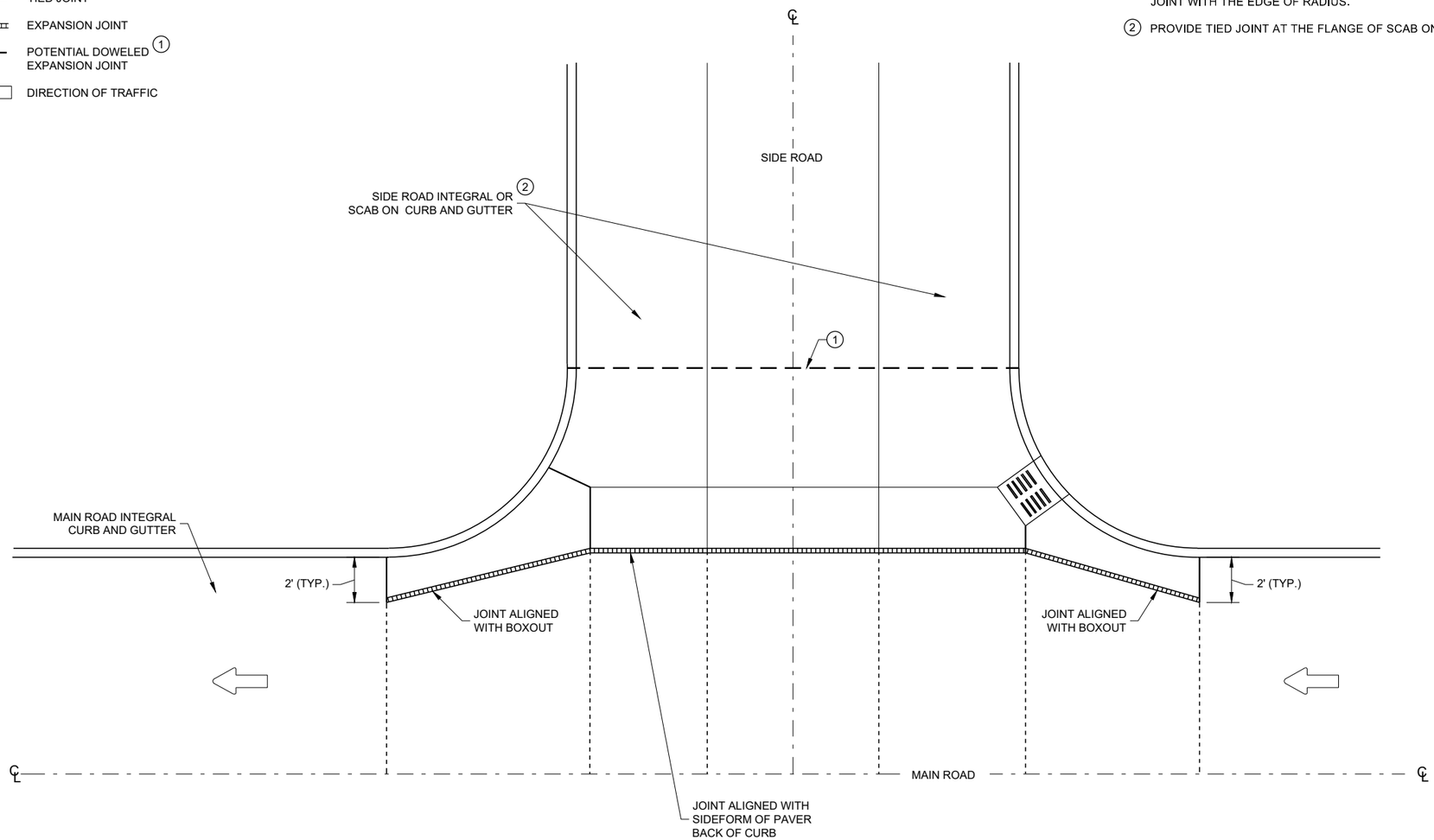
FHWA

SDD13C18 - 07d

SDD13C18 - 07d

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

6

SDD 13C18 - 07f

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

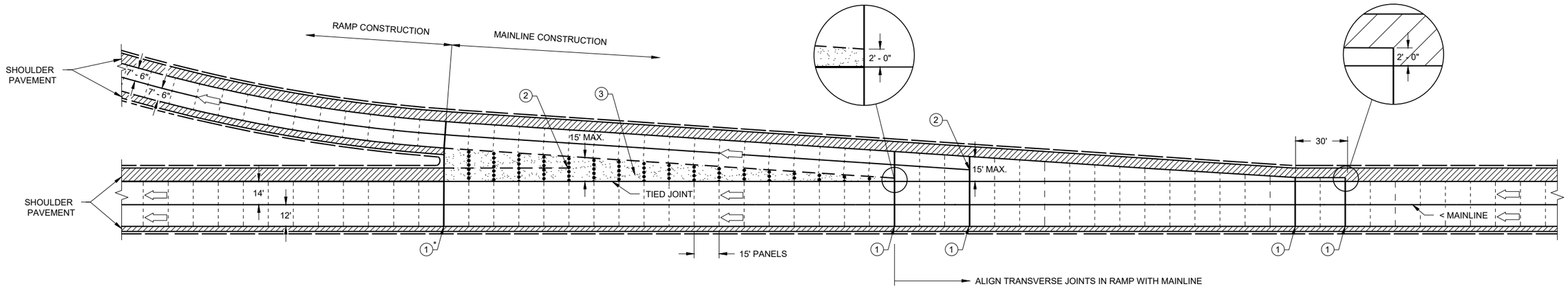
November 2018
DATE

/S/ Peter Kemp P.E.
ROADWAY STANDARDS DEVE ENGINEER

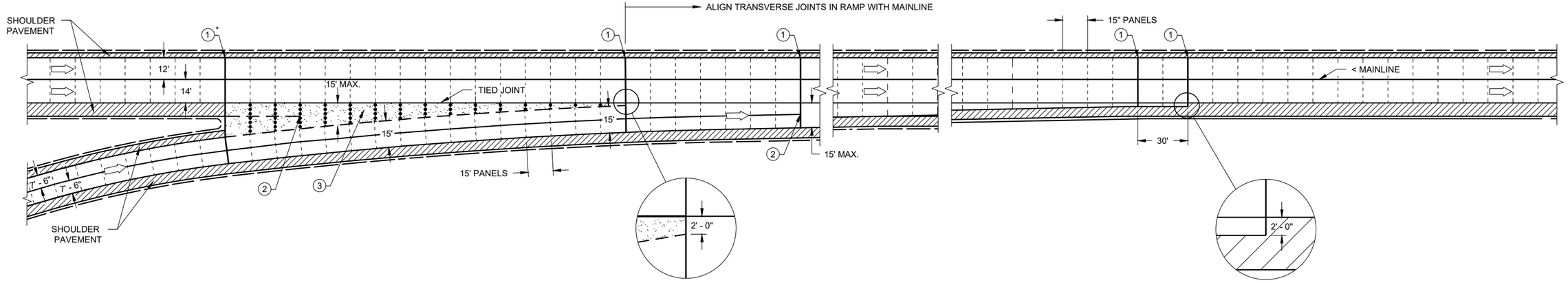
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SDD 13C18 - 07f



DECELERATION LANE



ACCELERATION LANE

GENERAL NOTES

PAVEMENT AND BASE THICKNESS, PANEL LENGTHS, JOINTS AND REINFORCEMENT FOR THE DECELERATION AND ACCELERATION LANES, INCLUDING TAPERS, SHALL BE THE SAME AS THE MAINLINE, EXCEPT WHERE OTHERWISE NOTED.

ALL REINFORCEMENT BARS SHALL BE EPOXY COATED CONFORMING TO SUBSECTION 505.2.6 OF THE STANDARD SPECIFICATIONS.

LANE AND SHOULDER WIDTHS MAY VARY FROM SHOWN. SEE CONSTRUCTION PLANS FOR ACTUAL PROPOSED WIDTHS.

(1) CRITICAL TRANSVERSE JOINT LOCATIONS AT PAVEMENT WIDTH CHANGES.
((1)* IS NOT A CRITICAL TRANSVERSE JOINT WHEN ASPHALTIC GORE IS INSTALLED).

(2) STOP LONGITUDINAL JOINT WITH CORE HOLE (2" TYP.) WHEN IT MEETS THE FIRST TRANSVERSE JOINT LESS THAN 15' WIDE OR STOP LONGITUDINAL JOINT WHEN IT MEETS 2' AWAY FROM THE TIED JOINT OF THE MAINLINE.

(3) DISREGARD THE JOINT DETAILS IN AND AROUND THE GORE WHEN ASPHALTIC GORE IS INSTALLED.

LEGEND

- DOWELED JOINT
- UNDOWELED JOINT
- TIED JOINT
- UNTIED JOINT
- GORE
- DIRECTION OF TRAVEL

CONCRETE PAVEMENT JOINTING ACCELERATION/ DECELERATION LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
ROADWAY STANDARDS DEVE ENGINEER

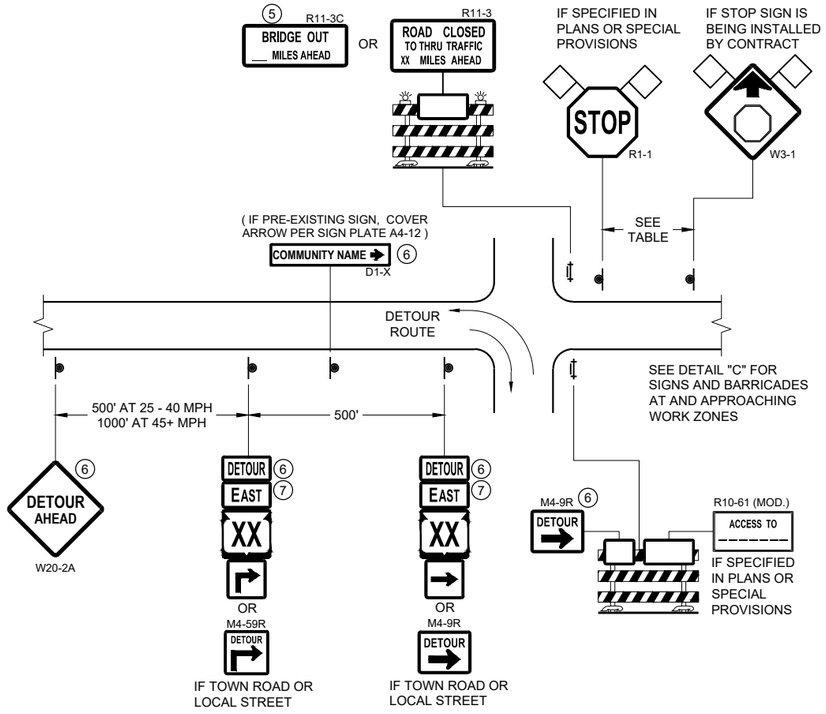
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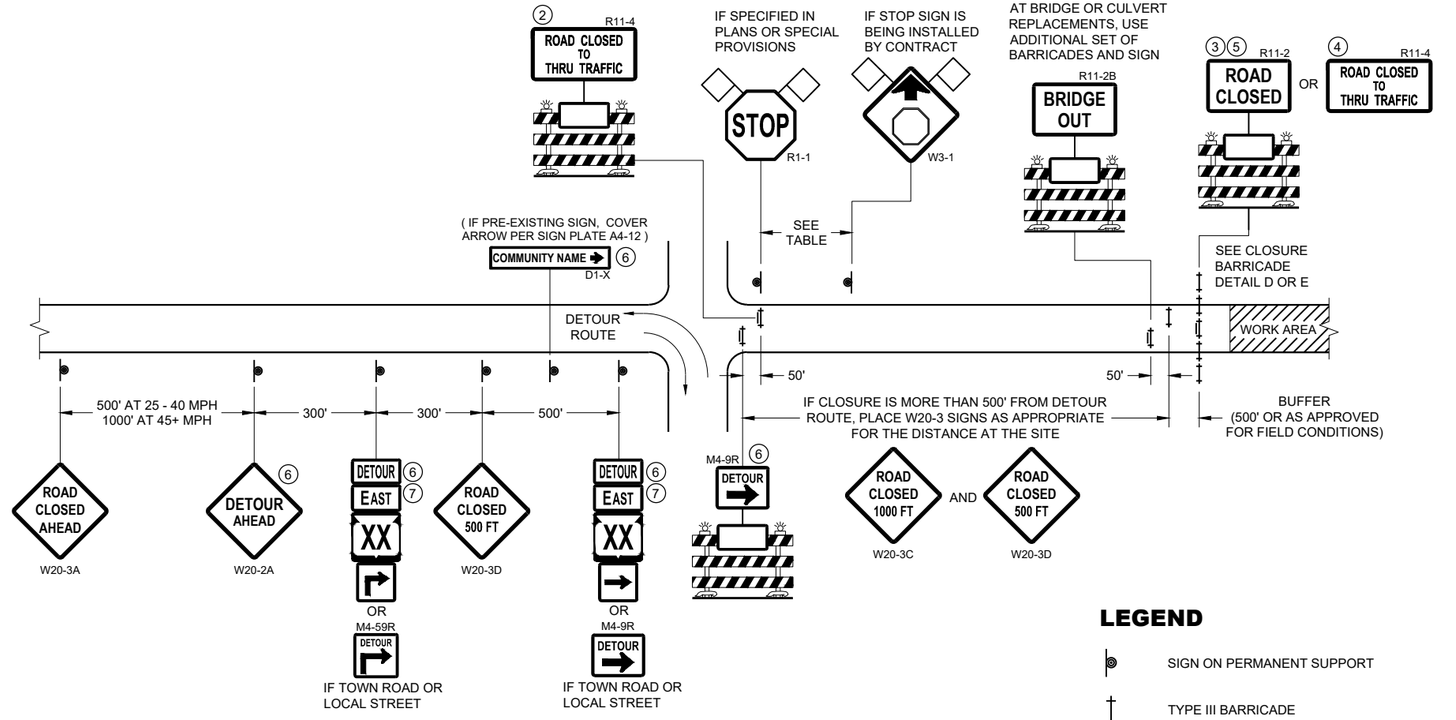
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SDD13C18 - 07g

SDD13C18 - 07g



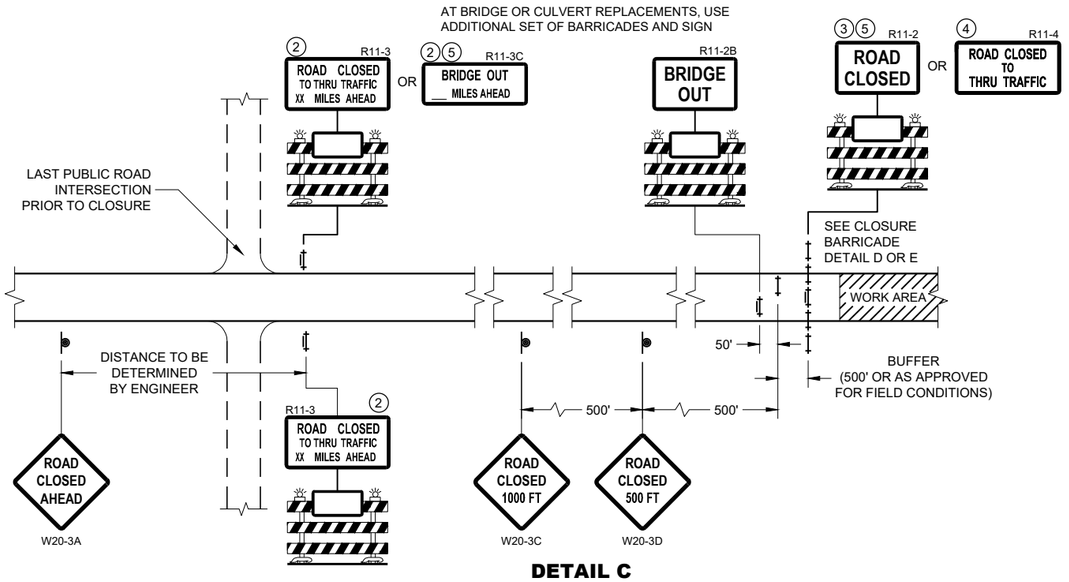


DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

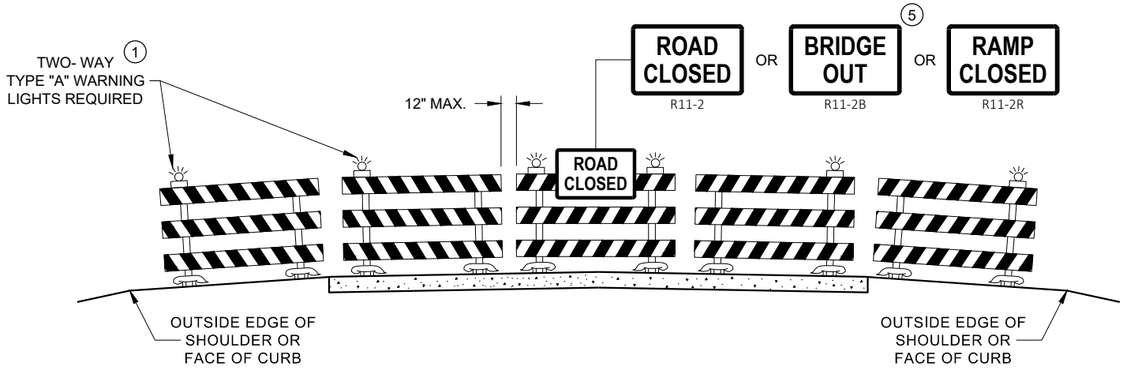
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

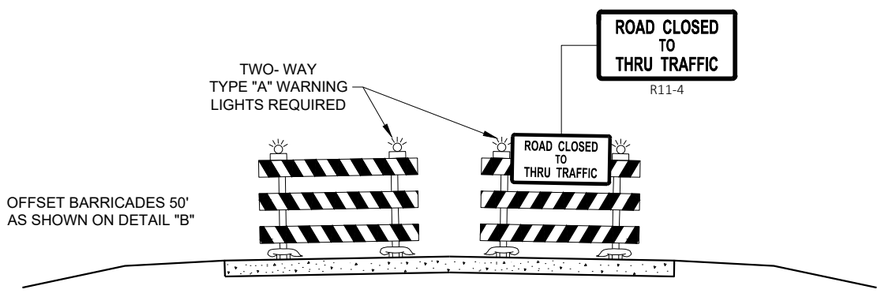
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SDD 15C02 - 08a

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

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SDD 15C02 - 08b

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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 / EAST — M4 - 8, M3 - X
- XX — M1 - 4
- XX — M1 - 6
- COUNTY / X — M1 - 5A
- M05 - 1
- M06 - 1
- M06 - 1

GENERAL NOTES

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

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

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
M4-9 AND M4-59 SHALL BE 30" X 24"
M4-8a SHALL BE 24" X 18"
G20-51 SHALL BE 60" X 24"
W20-2A SHALL BE 48" X 48"
D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

500' AT 25-40 MPH
1000' AT 45+ MPH

500'

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M4-8a END DETOUR WEST *

DETOUR ROUTE

WORK AREA

DETOUR NEXT X MILES *
G20-51

M4-9L DETOUR ** OR
IF TOWN ROAD OR LOCAL STREET

M4-59L DETOUR * ** OR
IF TOWN ROAD OR LOCAL STREET

MATCH POINT

M4-59L DETOUR * ** OR
IF TOWN ROAD OR LOCAL STREET

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M4-9L DETOUR ** OR
IF TOWN ROAD OR LOCAL STREET

M4-9R DETOUR ** OR
IF TOWN ROAD OR LOCAL STREET

M4-59R DETOUR * ** OR
IF TOWN ROAD OR LOCAL STREET

500' AT 25 - 40 MPH
1000' AT 45+ MPH

500'

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR ROUTE

500' AT 25 - 40 MPH
1000' AT 45+ MPH

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

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

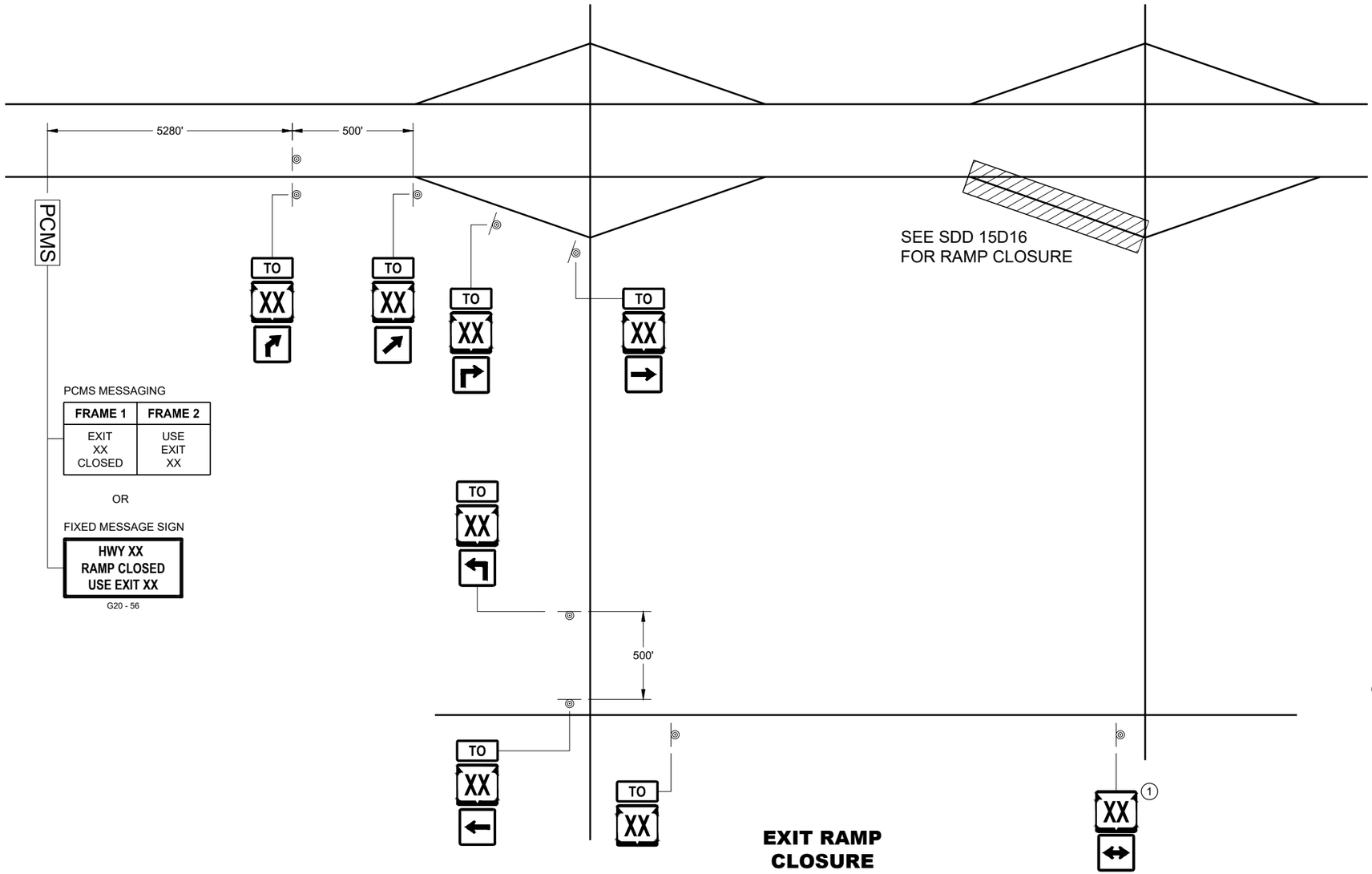
FHWA

SDD 15C02 - 08c

6

SDD 15C02 - 08c

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.

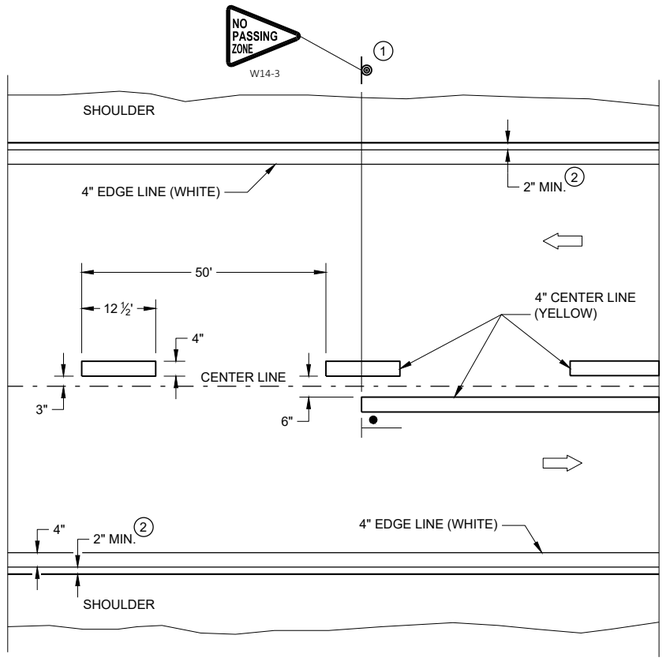
OFF RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

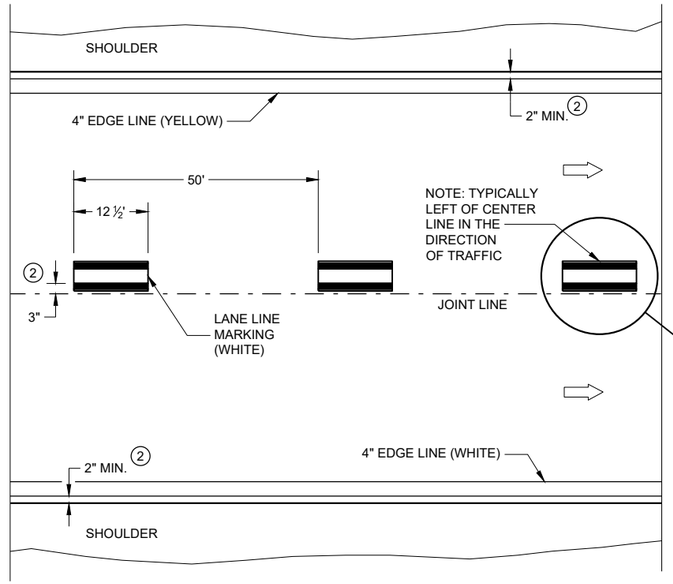
APPROVED
February 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

SDD 15C02 - 08e

SDD 15C02 - 08e

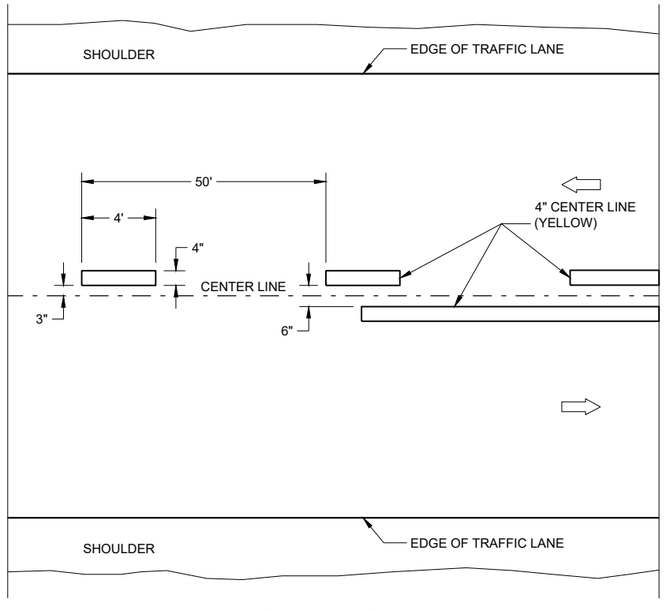


TWO WAY TRAFFIC

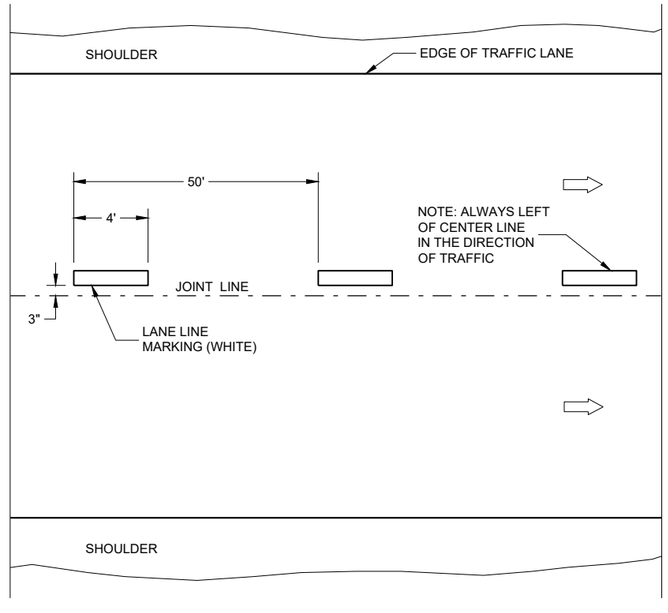


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

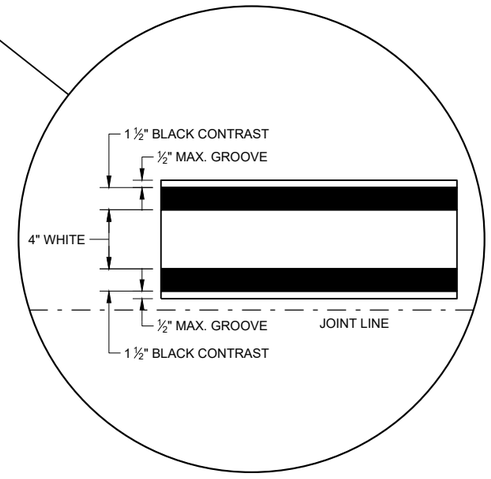
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

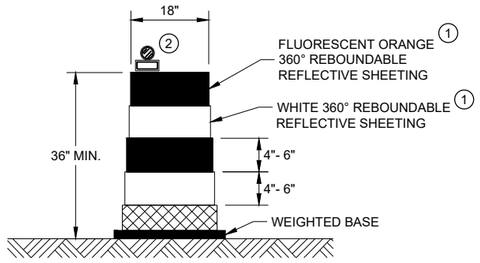
FHWA

SDD 15C08 - 20a

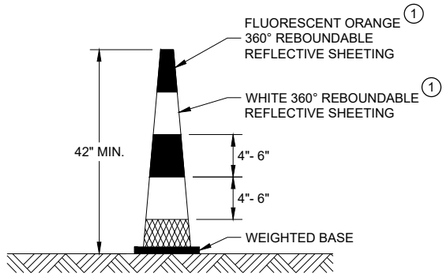
6

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.

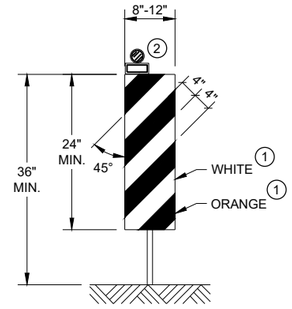


DRUM



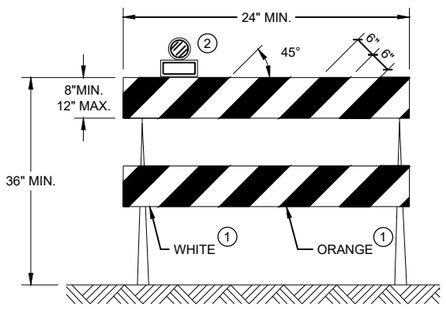
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



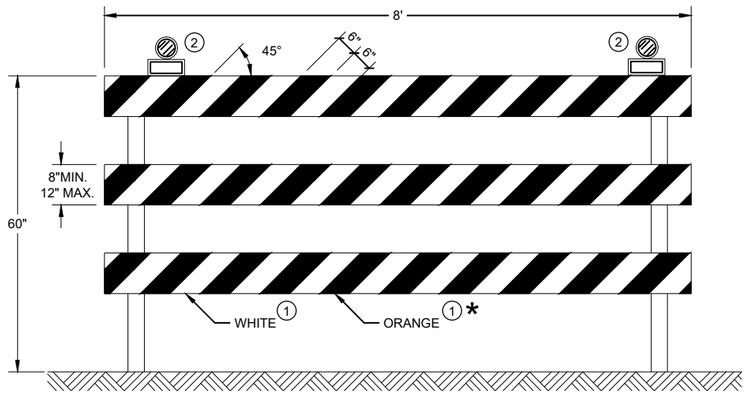
VERTICAL PANEL

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
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD15C11 - 09b

6

SDD15C11 - 09b

GENERAL NOTES

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

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

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

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

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

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

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

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

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

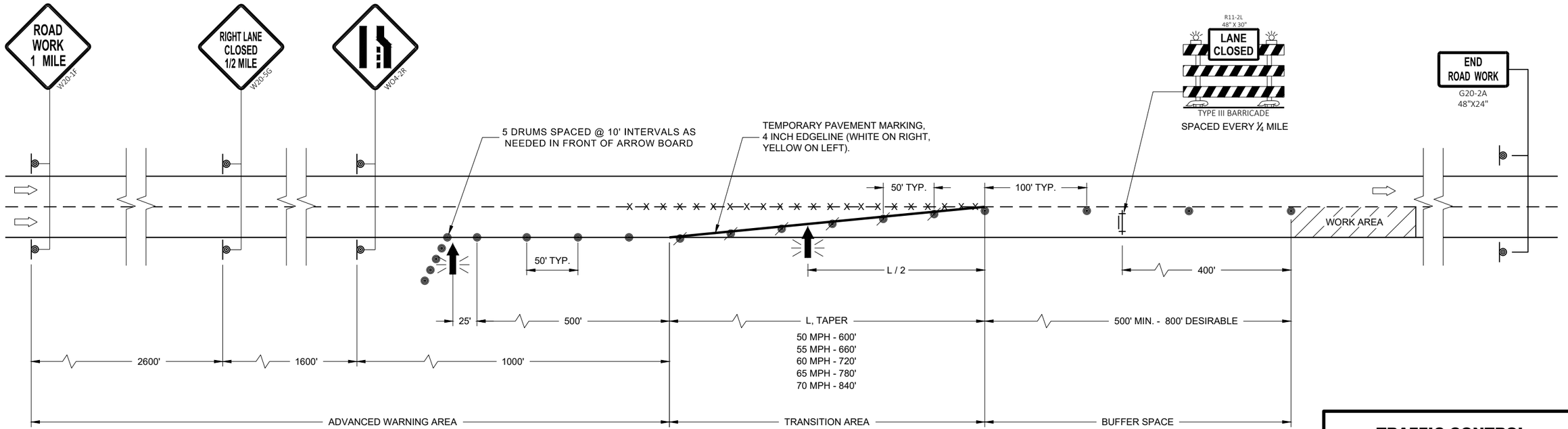
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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

LEGEND

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



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D12 - 09a

6

SDD 15D12 - 09a

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.

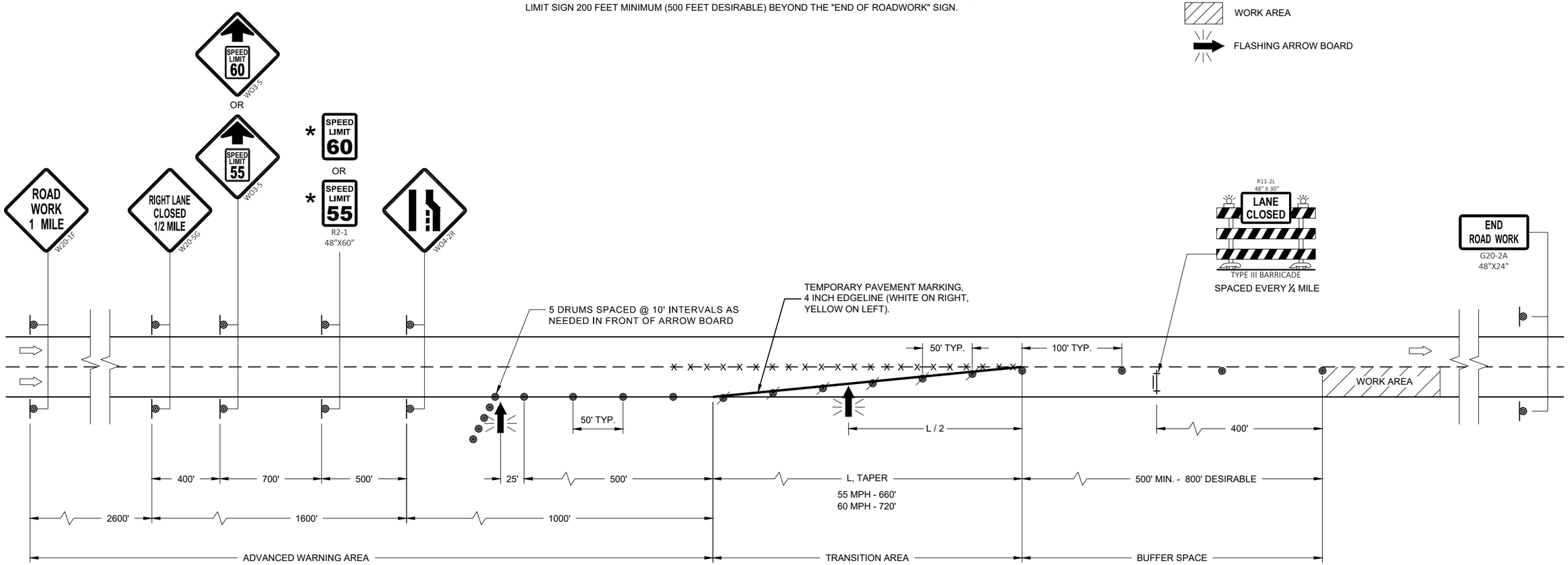
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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 ENGINEER

FHWA

SDD 15D12 - 09b

6
SDD 15D12 - 09b

LEGEND

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

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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 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

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

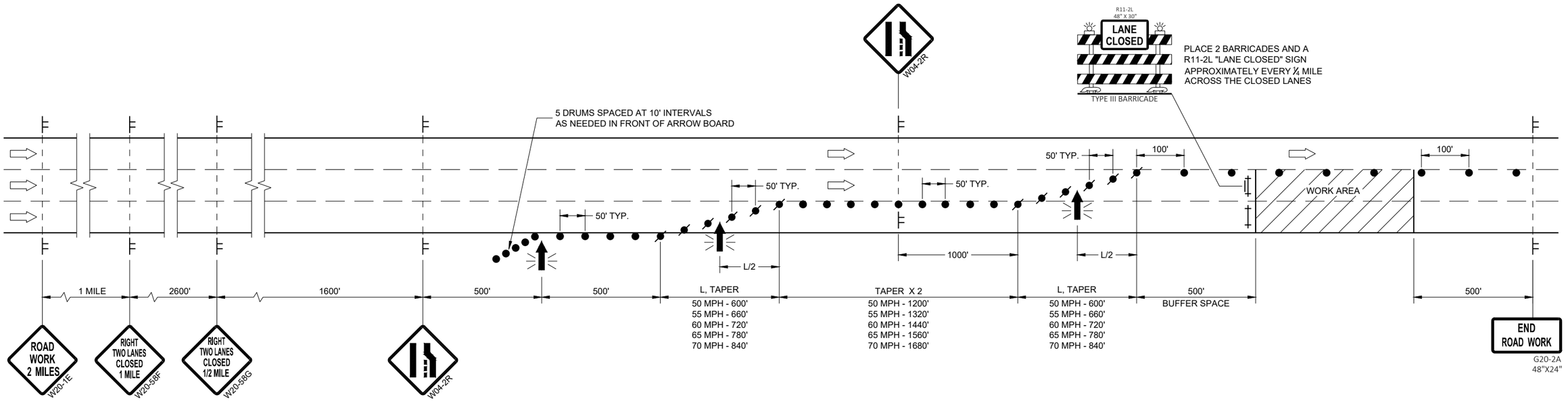
CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS.

WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

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.



TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

SDD 15D14 - 04

SDD 15D14 - 04

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. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE 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.

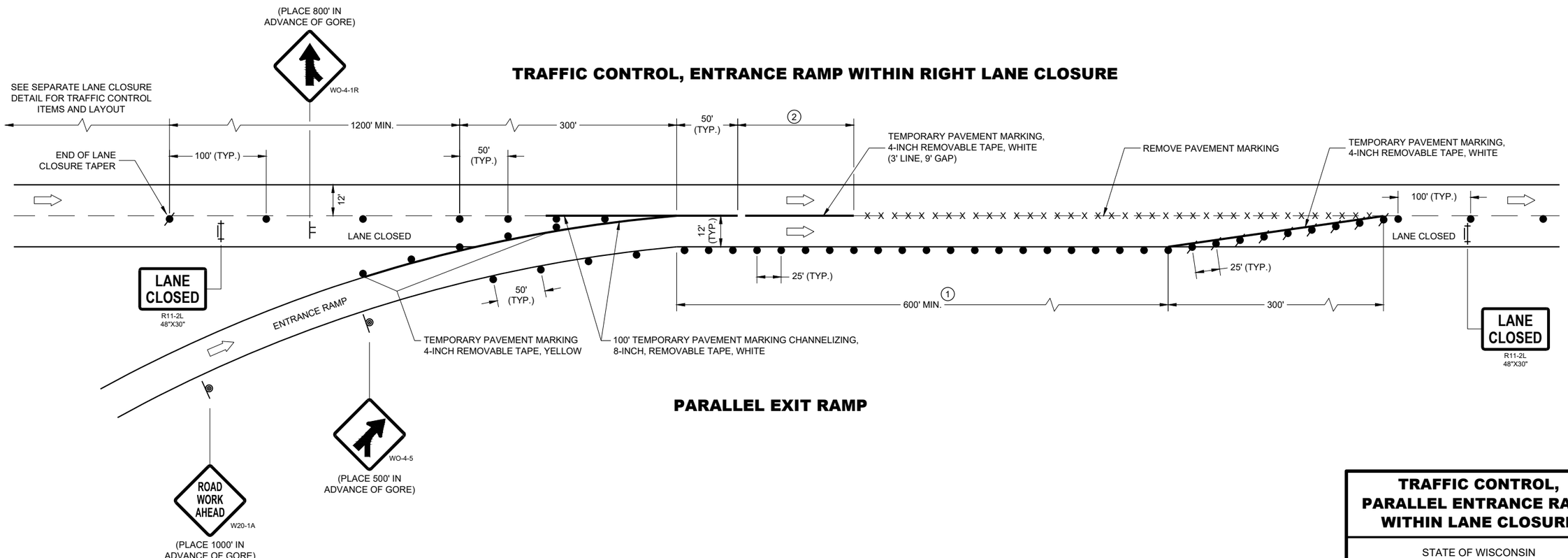
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

(1) EXTEND THE LENGTH OF THE MERGE ARE IF THE ENTERING (DESIGN) SPEED IS LESS THAN 50MPH 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 RIGHT LANE CLOSURE



PARALLEL EXIT RAMP

TRAFFIC CONTROL, PARALLEL 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 - 05a

6

SDD 15D15 - 05a

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

FLAGS, 16" X 16" MIN., ORANGE

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.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

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. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

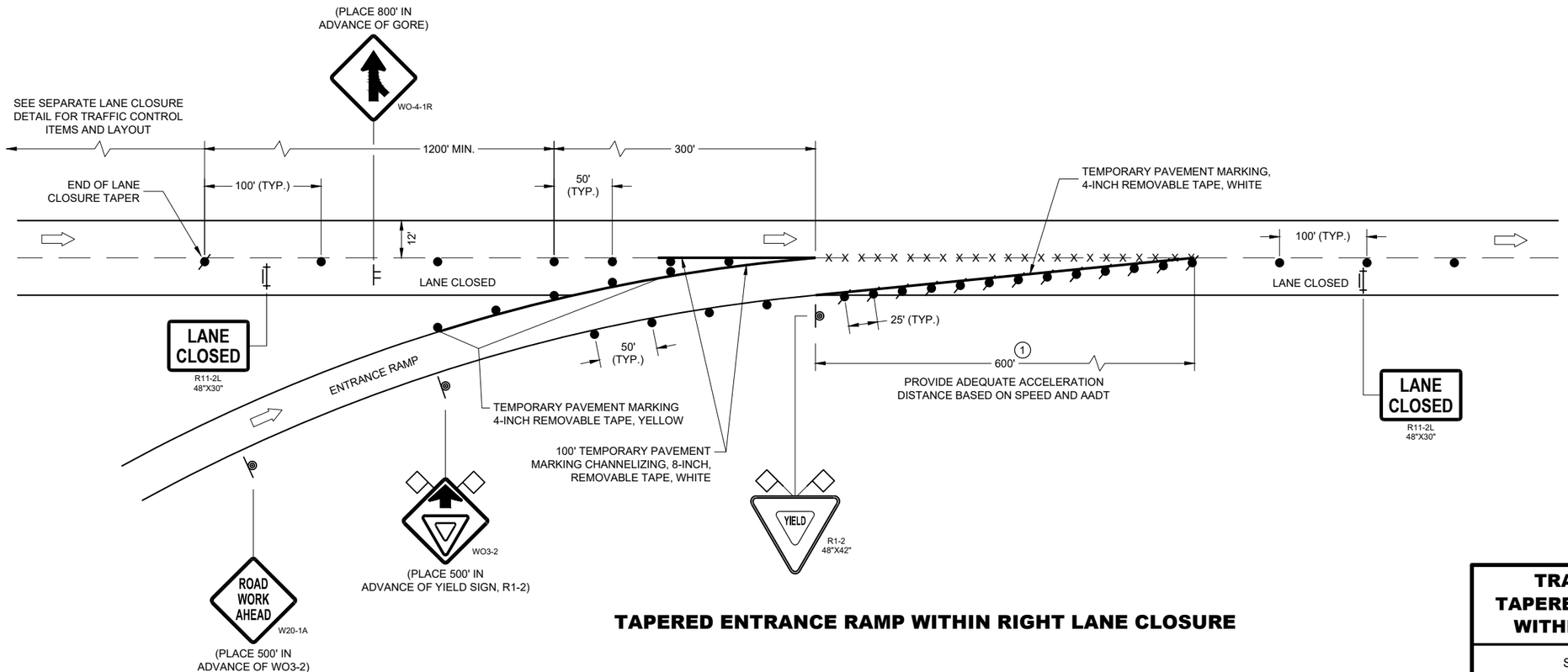
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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) CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.



TAPERED ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15D15 - 05c

6

SDD 15D15 - 05c

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

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.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

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. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

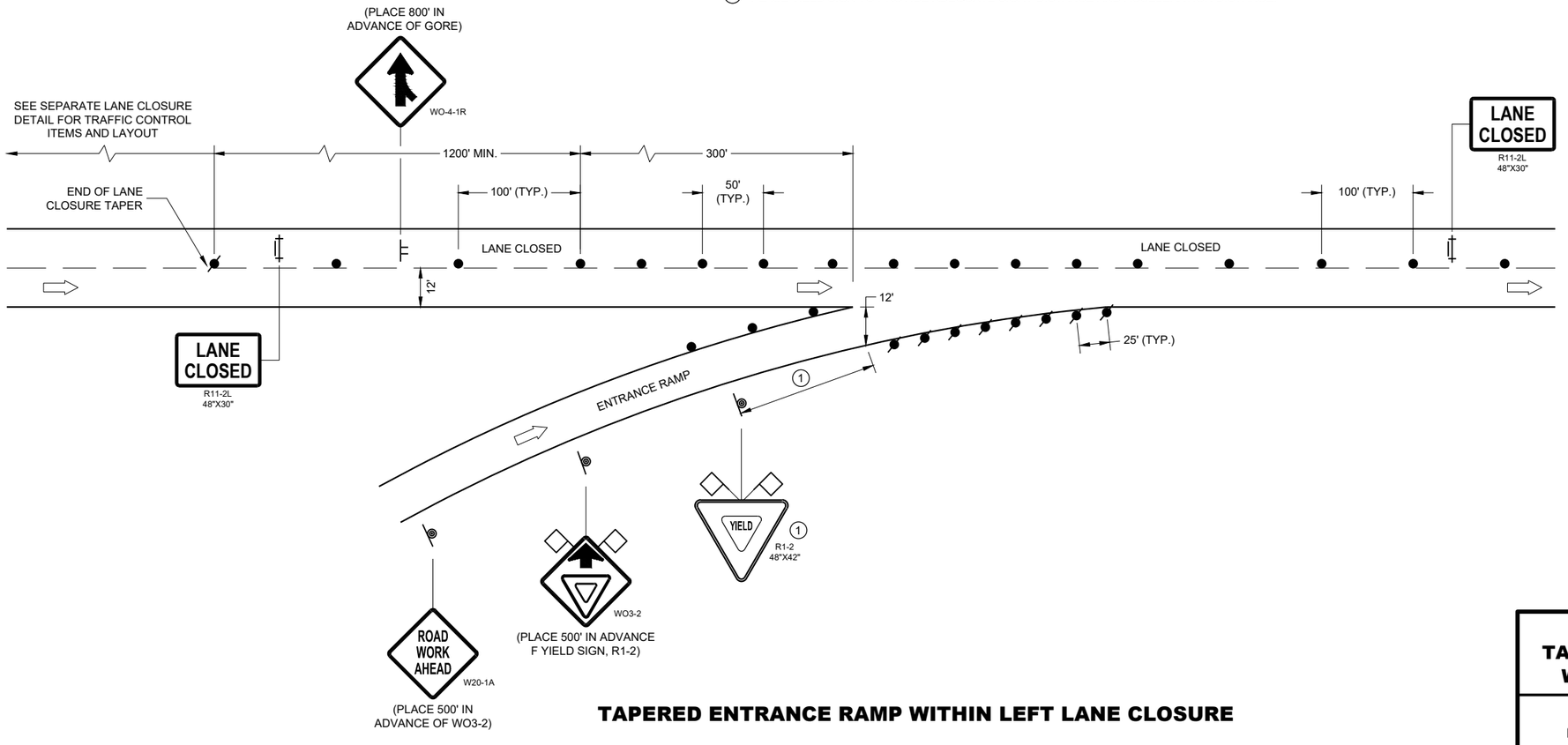
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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) PLACE YIELD SIGN TO PROVIDE ADEQUATE SIGHT DISTANCE AND ACCELERATION DISTANCE.



TAPERED ENTRANCE RAMP WITHIN LEFT LANE CLOSURE

TRAFFIC CONTROL, TAPERED 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 - 05d

6

SDD 15D15 - 05d

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.

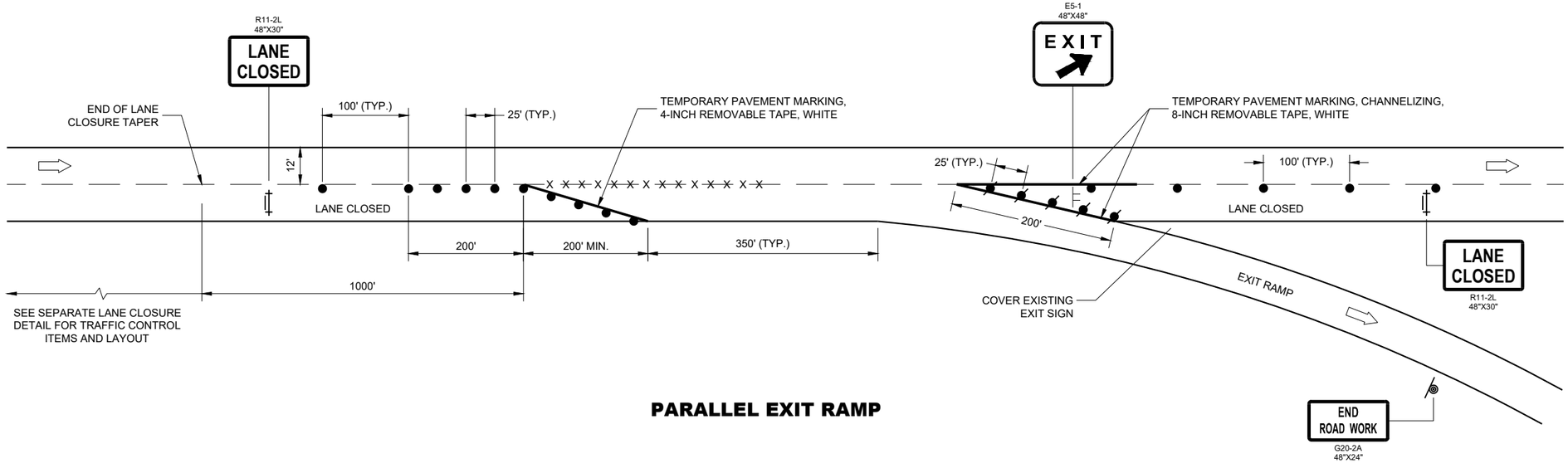
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

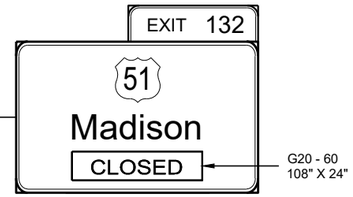
SDD 15D15 - 05e

6

SDD15D15 - 05e



OR



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

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.

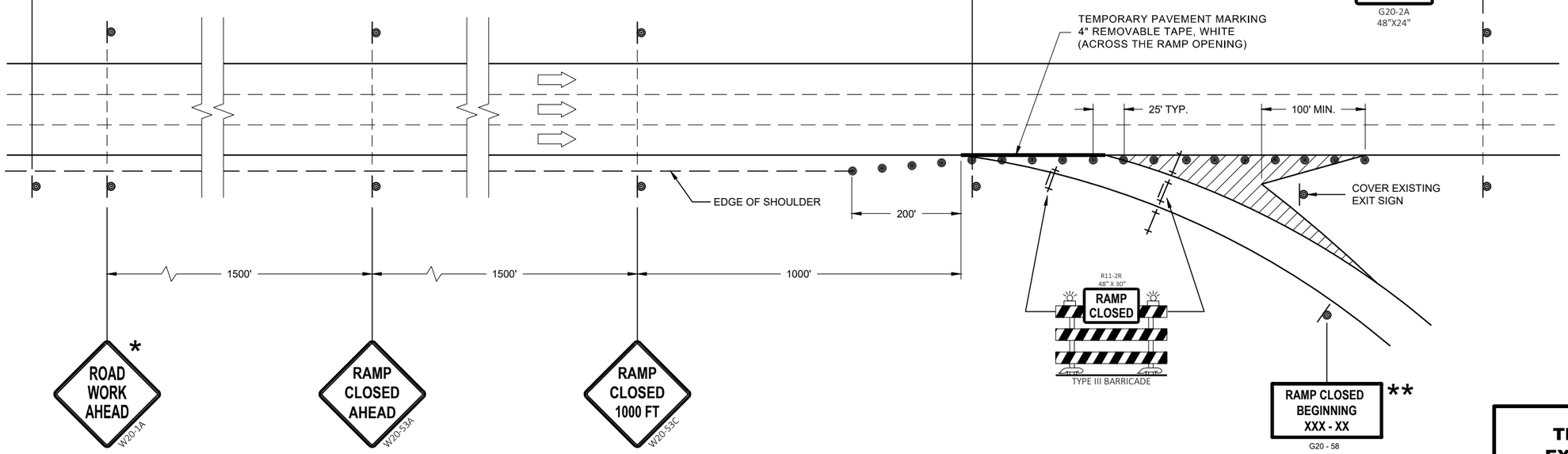
* W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** 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.



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

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

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

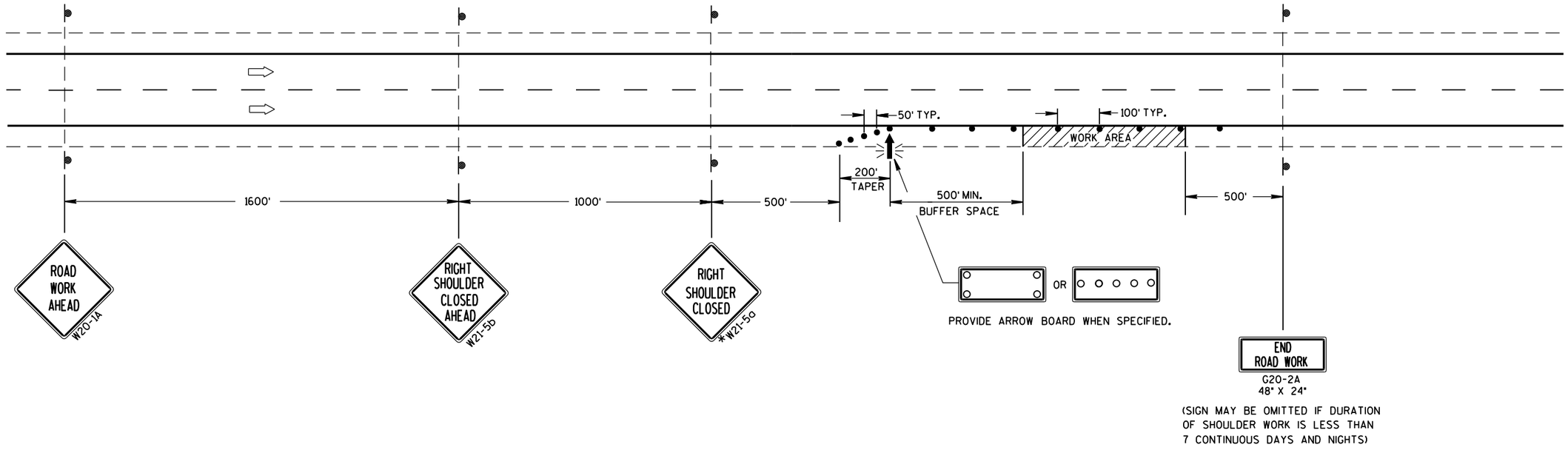
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

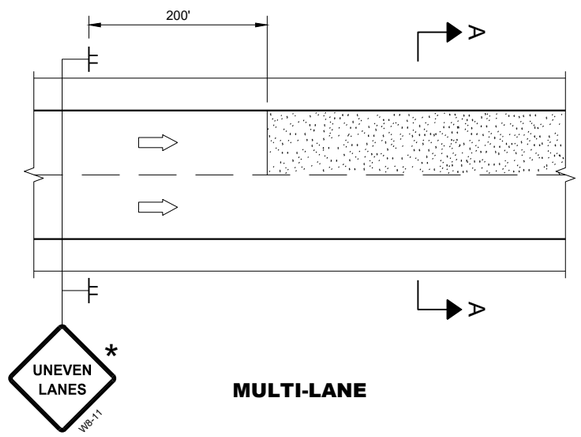
June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

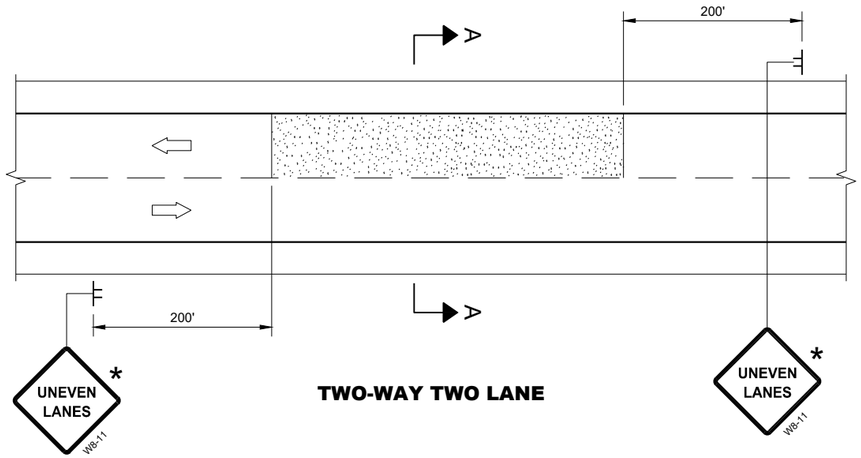
FHWA

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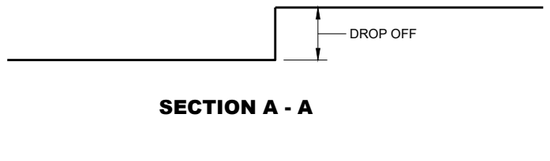
S.D.D. 15 D 27-3



MULTI-LANE

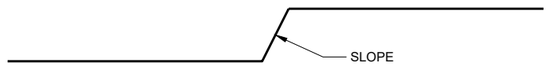


TWO-WAY TWO LANE

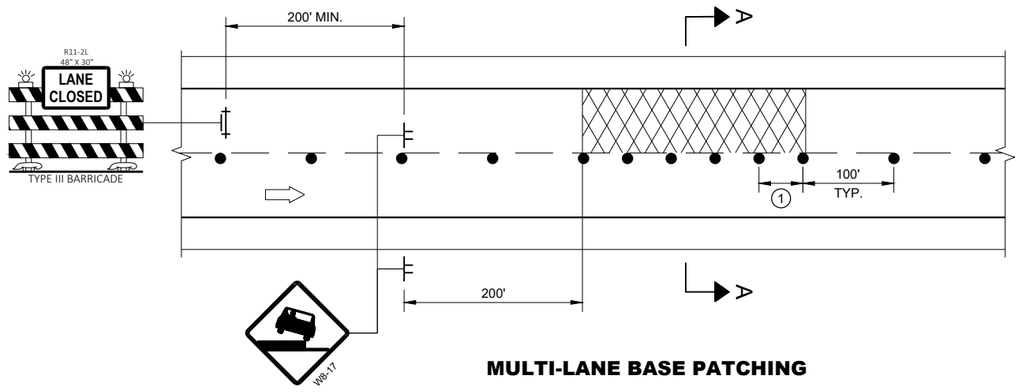


SECTION A - A

OR

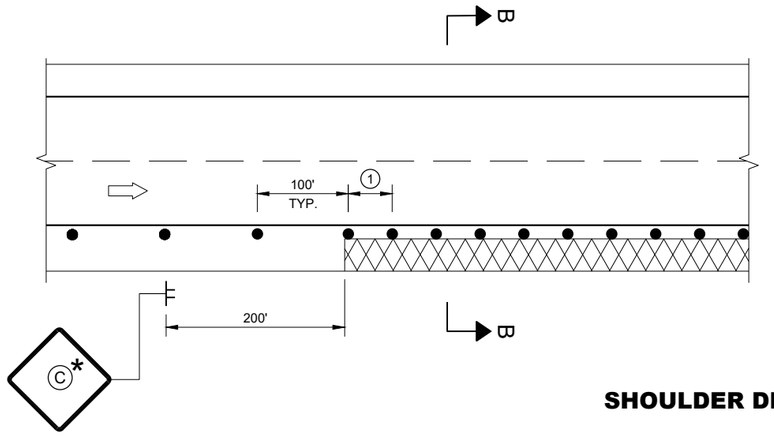


SECTION A - A

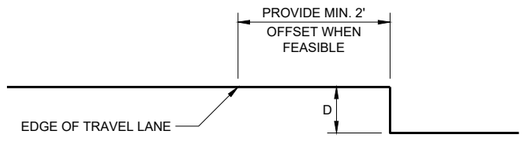


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

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

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEE

FHWA

6

SDD 15D39 - 02

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

MAD

PROJECT ID: 1012-01-74

WITH:

COUNTY: COLUMBIA

MAY 2022

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 = 652



03

N

DESIGN DESIGNATION 1012-01-04

A.A.D.T.	2022	=	57200 (IH 39) / 6300 (STH 60)
A.A.D.T.	2042	=	66200 (IH 39) / 7700 (STH 60)
D.H.V.		=	12930 (IH 39) / 960 (STH 60)
D.D.		=	58/42 (IH 39) / 60/40 (STH 60)
T.		=	22.0% (IH 39) / 15.8% (STH 60)
DESIGN SPEED		=	70 MPH(IH 39) / 25 MPH & 60 MPH (STH 60)
ESALS		=	68,000,000 (IH 39) / 2,100,000 (STH 60)

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

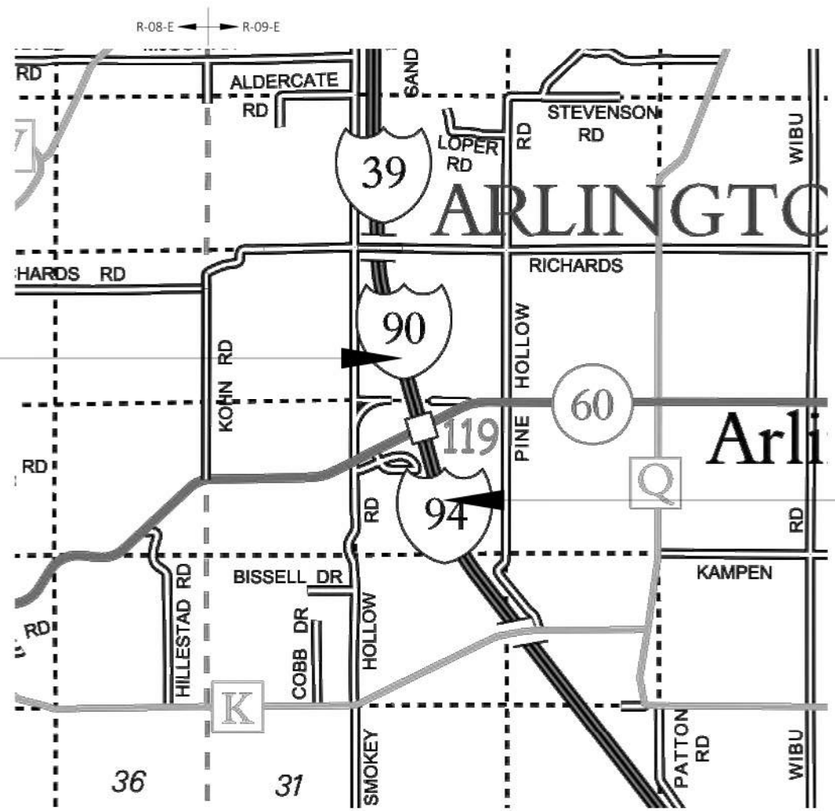
MADISON - PORTAGE

STH 60 INTERCHANGE, B-11-165 & 166

IH 39

COLUMBIA COUNTY

STATE PROJECT NUMBER
1012-01-74



END PROJECT
STA 283"NB"+70

BEGIN PROJECT
STA 237"NB"+50
X=539,880.78
Y=317,484.15

LAYOUT

SCALE 0 1.0 MI

TOTAL NET LENGTH OF CENTERLINE = 0.9 MILES

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

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1012-01-74	———	—

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SW REGION
Designer	SHAUN ANDERSON
Project Manager	CHRIS HAZARD
Regional Examiner	SW REGION
Regional Supervisor	KURT JOHNSON

APPROVED FOR THE DEPARTME
DATE: 2/1/2022 (Signature)

E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\010101-TI.DWG PLOT DATE : 1/19/2022 5:29 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME :

GENERAL NOTES

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

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.

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

PLACE 5.5" OF 4 MT 58-28 S PAVEMENT IN TWO LAYERS. A 3" LOWER LAYER AND A 2.5" UPPER LAYER.

PLACE 4" OF 4 MT 58-28 S PAVEMENT IN TWO LAYERS. A 2" LOWER LAYER AND A 2" UPPER LAYER.

PLACE 3.5" OF 4 LT 58-28 S FOR SHOULDERS ABUTTING CONCRETE IN A SINGLE LAYER.

APPLY TACK COAT BETWEEN MILLED SURFACES AND NEW HMA PAVEMENT LAYER AT AN APPLICATION RATE OF 0.07 GALLONS PER SQUARE YARD, OR AS DIRECTED BY THE ENGINEER.

APPLY TACK COAT BETWEEN NEW HMA PAVEMENT LAYERS AT AN APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD, OR AS DIRECTED BY THE ENGINEER.

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

EXACT SIGN LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND THE EXACT LOCATIONS OF SIGNS ARE TO BE DETERMINED IN THE FIELD, BY THE ENGINEER.

THE EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL SHEETS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

INLETS SHALL BE COVERED AS NECESSARY TO PREVENT CONSTRUCTION MATERIAL FROM FALLING INTO THE INLETS.

PAVING LIMITS AT INTERSECTIONS AND AT THE PROJECT BEGINNING AND END ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER
THE LOCATION OF STOP LINES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

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

IN AREAS OF SHALLOW ROCK (<1') NO SUBGRADE IMPROVEMENT IS NEEDED, BASE AGGREGATE DENSE 1-1/4-INCH SHOULD BE EXTENDED TO THE ROCK.

LIST OF STANDARD ABBREVIATIONS

ABUT	ABUTMENT
AC	ACRE
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ASPH	ASPHALT
AVG	AVERAGE
BL	BASE LINE
BM	BENCH MARK
CB	CATCH BASIN
C/L	CENTER LINE
CC	CENTER TO CENTER
CE	COMERCIAL ENTRANCE
CONE	CONCRETE
CO	COUNTY
CTH	COUNTY TRUNK HIGHWAY
CY	CUBIC YARD
C&G	CURB AND GUTTER
CULV	CULVERT
CPAS	CONCRETE PAVEMENT APPROACH SLAB
DHV	DESIGN HOUR VOLUME
DIA	DIAMETER
DD	DIRECTIONAL DISTRIBUTION
E	EAST
X	EAST GRD COORDINATE
ELEC	ELECTRIC
ELEV	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
FE	FIELD ENTRANCE
FF	FACE TO FACE
FG	FINISHED GRADE
FL	FLOW LINE
FT	FOOT
HES	HIGH EARLY STRENGTH
CWT	HUNDREDWEIGHT
HYD	HYDRANT
IN DIA	INCH DIAMETER
INL	INLET
ID	INSIDE DIAMETER
INV	INVERT
IP	IRON PIPE
JT	JOINT
JCT	JUNCTION
LT	LEFT
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
LF	LENEAR FOOT
L	LITER
LS	LUMP SUM
MH	MANHOLE
MB	MESSAGE BOARD
MLB	MAILBOX
ML	MATCH LINE
NC	NORMAL CROWN
N	NORTH
Y	NORTH GRD COORDINATE
NB	NORTHBOUND
NO	NUMBER
OD	OUTSIDE DIAMETER
PAVT	PAVEMENT
PERM	PERMANENT
PLE	PERMANENT LIMITED EASEMENT
PT	POINT
PCC	PORTLAND CEMENT CONCRETE
PCS	PAVED CONCRETE SHOULDER
PE	PRIVATE ENTRANCE
PROJ	PROJECT
PL	PROPERTY LINE
R	RADIUS
R/L	REFERENCE LINE
REQD	REQUIRED
RT	RIGHT
RHF	RIGHT HAND FORWARD
R/W	RIGHT-OF-WAY
RD	ROAD
RDWY	ROADWAY
SALV	SALVAGED
SSS	SANITARY AND STORM SEWER
SAN	SANITARY SEWER
SEC	SECTION
SHLDR	SHOULDER
SW	SIDEWALK
S	SOUTH
SB	SOUTHBOUND
SP	SPECIAL
SPECS	SPECIFICATIONS
SQ	SQUARE
SF	SQUARE FEET
SY	SQUARE YARD
STD	STANDARD
SDD	STANDARD DETAILS DRAWINGS
STH	STATE TRUNK HIGHWAYS
STA	STATION
SS	STORM SEWER
STR	STRUCTURE OR STRUCTURAL
SL	SURVEY LINE
TEL	TELEPHONE
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
T	TON
TC	TOP OF CURB
T	TRUCKS (PERCENT OF)
TYP	TYPICAL
UG	UNDERGROUND
USH	UNITED STATES HIGHWAY
VAR	VARIABLE
VERT	VERTICAL
W	WATER
WM	WATER MAIN
WV	WATER VALVE
W	WEST
WB	WEST BOUND
YD	YARD

ORDER OF SECTION 2 SHEETS

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

ALLIANT ENERGY	RYAN SMEDEMA 2777 COLUMBIA DR. PORTAGE, WI 53901 (608)-742-0848 RYANSMEDEMA@ALLIANTENERGY.COM	ELECTRIC AND GAS
AT&T LEGACY CORP.	VANESSA ROSS 555 E. COOK ST. SPRINGFIELD, IL 62703 (217)-814-2314 C: (217)-381-4284 VF2021@ATT.COM	COMMUNICATIONS
ATC MANAGEMENT, INC.	DOUG VOSBERG 5303 FEN OAK DRIVE MADISON, WI 53718 (608)-877-7650 DVOBERG@ATCLLC.COM	ELECTRIC
FRONTIER COMMUNICATIONS	JERRY MOORE 2222 W. WI ST. PORTAGE, WI 53901 (608)-742-9507 JERALD.R.MOORE@FTR.COM	COMMUNICATIONS
MADISON GAS AND ELECTRIC COMPANY	ROGER AHLES 623 RAILROAD STREET MADISON, WI 53701 (608)-252-5682 RAHLES@MGE.COM	GAS

DIGGERS HOTLINE

Dial 811 or (800) 242-8511

www.DiggersHotline.com

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WISDOT CONTACT

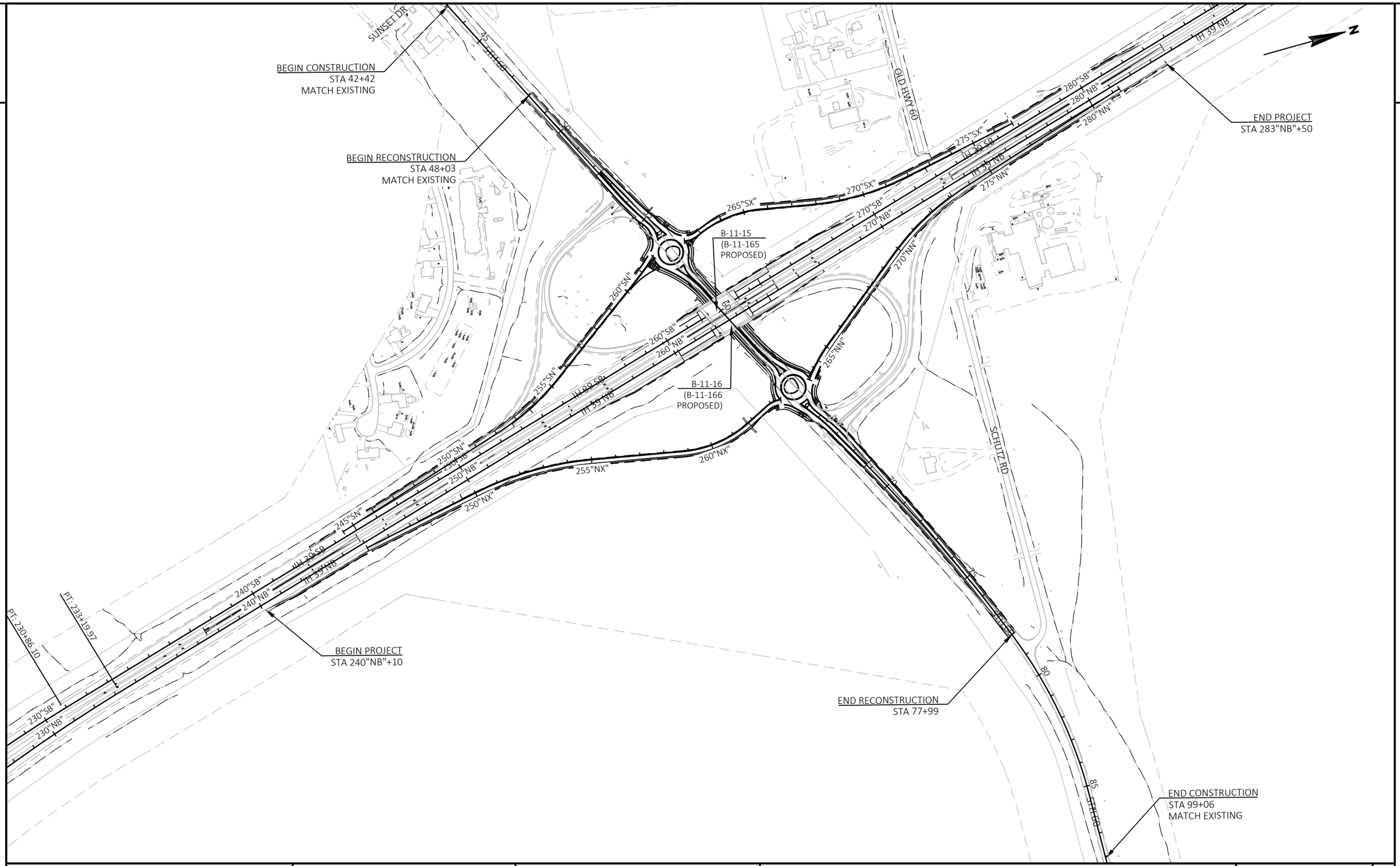
CHRIS HAZARD
WISDOT PROJECT MANAGER
2101 WRIGHT STREET
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WISCONSIN DEPARTMENT OF TRANSPORTATION - COMMUNICATIONS CONTACT

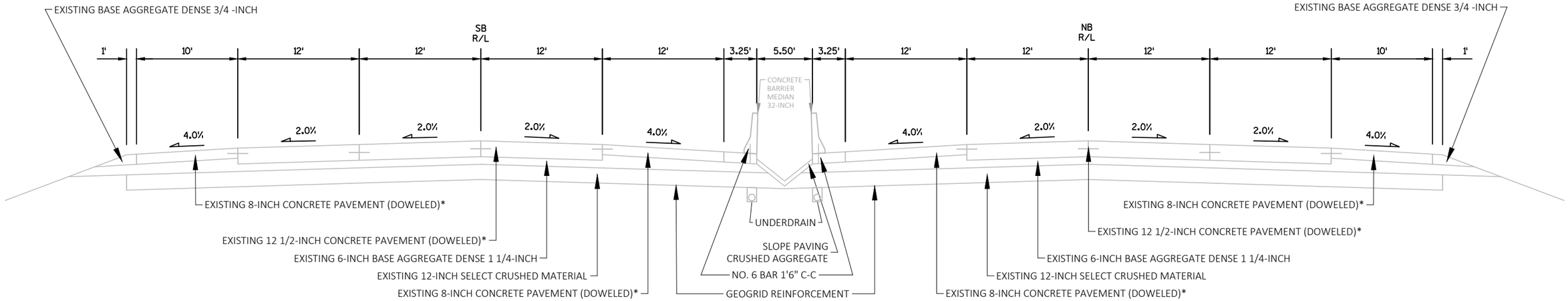
JEFF MADSON
STE. 300
433 W. ST. PAUL AVE.
MILWAUKEE, WI 53203-3007
(414)-225-3723
JEFFREY.MADSON@DOT.WI.GOV



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 020201-PO

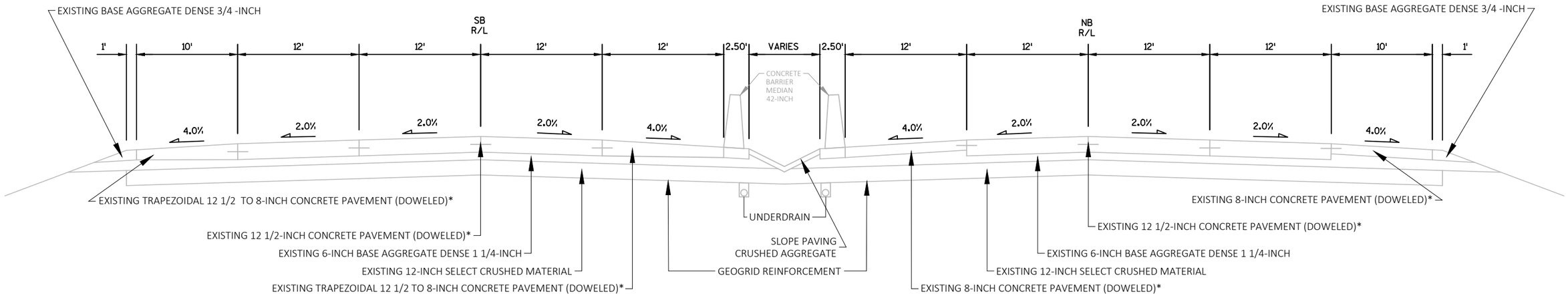
PLOT DATE : 1/19/2022 5:30 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : Custom



TYPICAL EXISTING SECTION
IH 39

SOUTHBOUND
242"SB"+97 - 275"SB"+00

NORTHBOUND
240"NB"+10 - 275"NB"+00



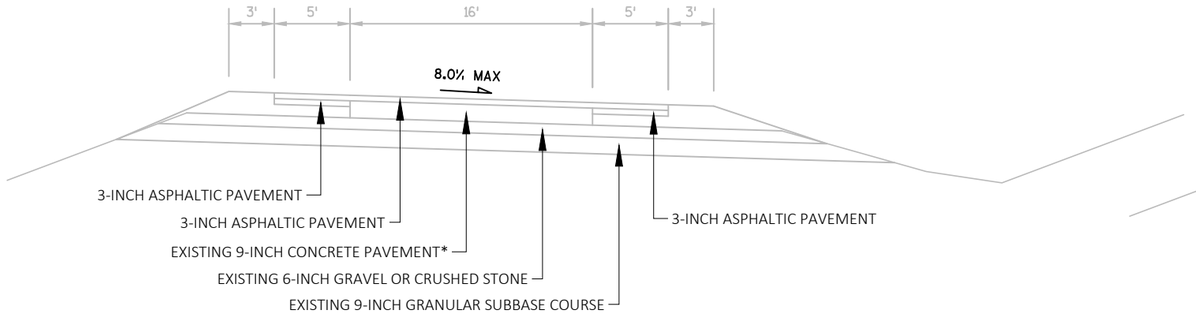
TYPICAL EXISTING SECTION
IH 39

SOUTHBOUND
275"SB"+00 -283"SB"+70

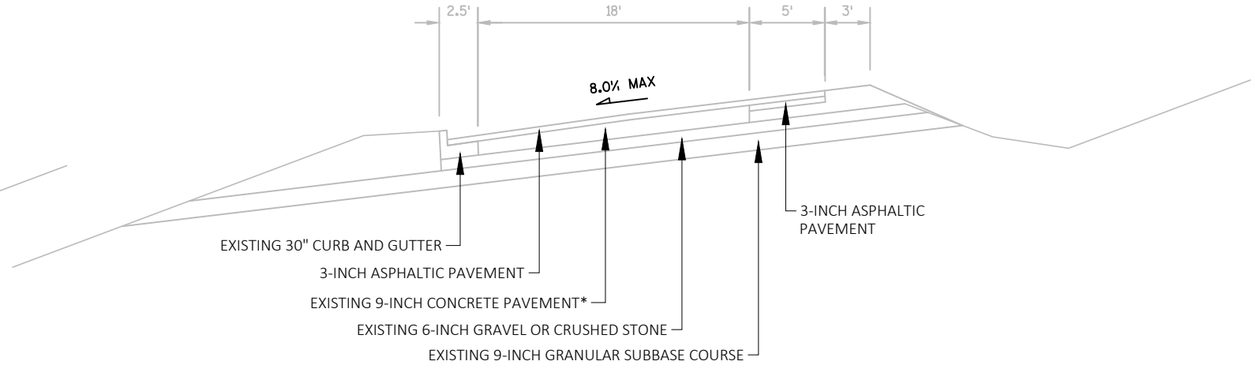
NORTHBOUND
275"NB"+00 - 283"NB"+70

* THICKNESS BASED ON PAST PROJECT INFORMATION. MAY VARY 1-INCH +/-

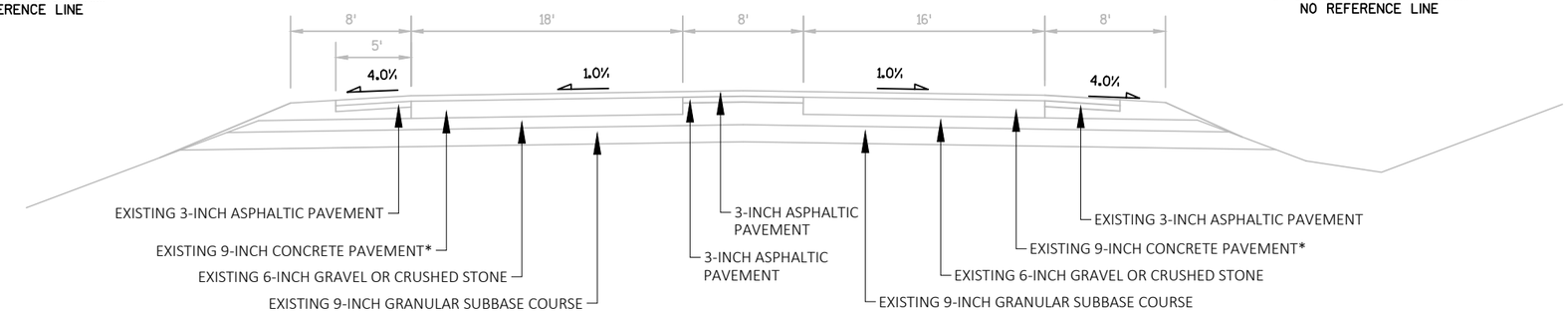
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET 4	E



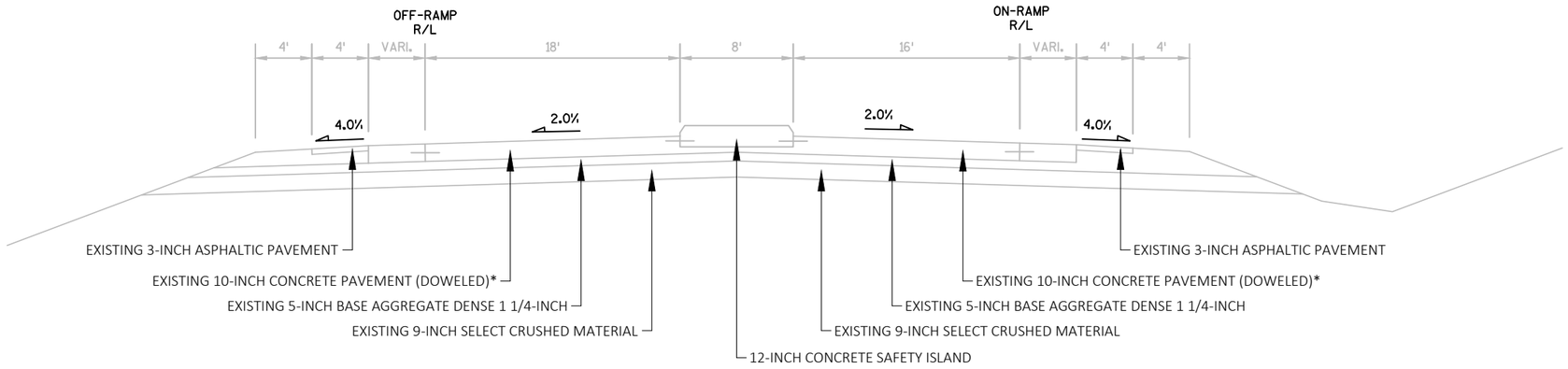
TYPICAL EXISTING SECTION
IH 39 NB AND SB ON-RAMP
NO REFERENCE LINE



TYPICAL EXISTING SECTION
IH 39 NB AND SB OFF-RAMP
NO REFERENCE LINE



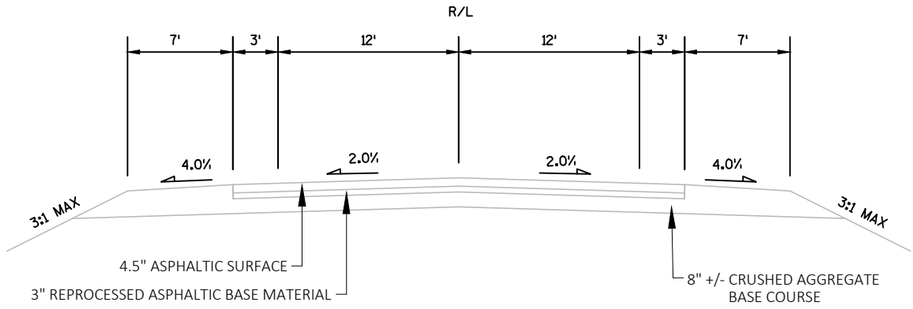
TYPICAL EXISTING SECTION
IH 39 NB AND SB ON/OFF-RAMPS
NO REFERENCE LINE



TYPICAL EXISTING SECTION
IH 39 NB AND SB ON/OFF-RAMPS TERMINALS
NO REFERENCE LINE

* THICKNESS BASED ON PAST PROJECT INFORMATION. MAY VARY 1-INCH +/-

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET 5 E



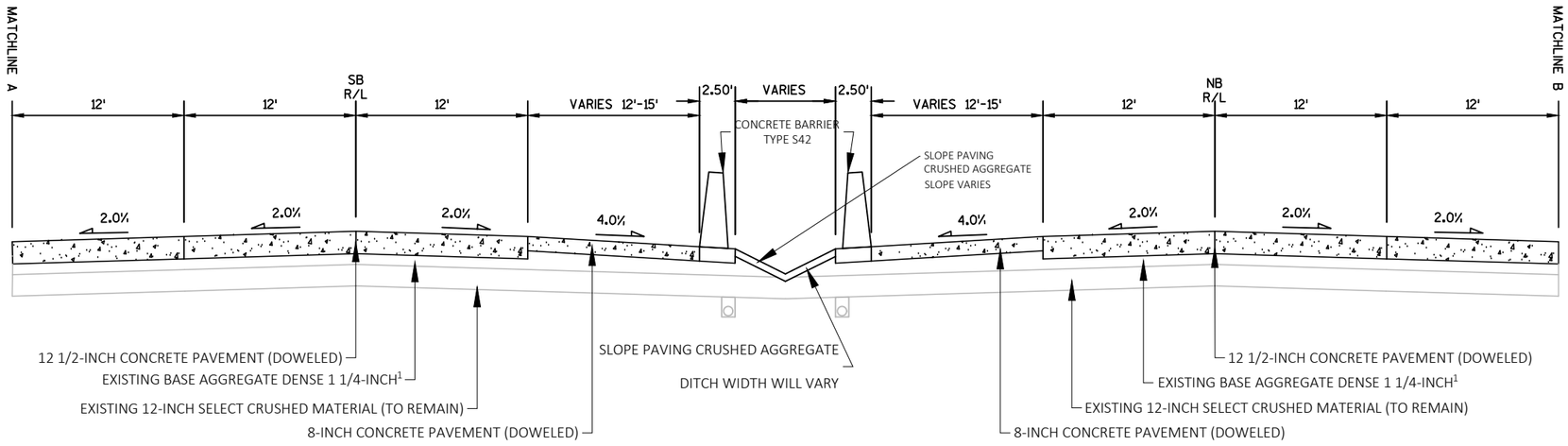
TYPICAL EXISTING SECTION
STH 60
42+42 - 90+06

PROJECT NO: 1012-01-74	HWY: STH 60	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET 6 E

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1012-01-74 - 020303_TS

PLOT DATE : 1/19/2022 5:30 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : Custom

WISDOT/CADDS SHEET 42



TYPICAL PROPOSED SECTION - MAINLINE
IH 39

SOUTHBOUND	NORTHBOUND
259"SB"+80 - 261"SB"+80	260"NB"+16 - 261"NB"+95
263"SB"+27 - 264"SB"+50	263"NB"+42 - 264"NB"+50

[1] 3-INCH OF BASE AGGREGATE DENSE 1 1/4-INCH ESTIMATED FOR PAVEMENT REMOVAL LOSSES.

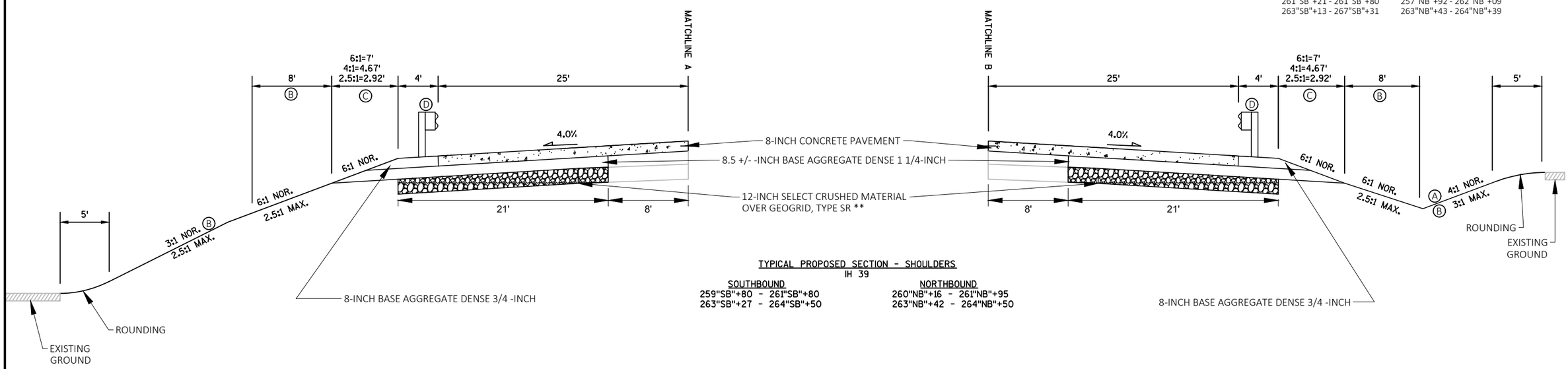
** APPROX. 8-FEET OF EXISTING BASE AND SUBBASE MAY REMAIN IN PLACE IF DEEMED COMPETENT BY FIELD ENGINEER, OVERLAY EXISTING GEOGIRD MIN. 24-INCHES

(A) SALVAGED TOPSOIL, MULCHING, SEEDING MIXTURE NO. 30 & FERTILIZER TYPE B

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

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

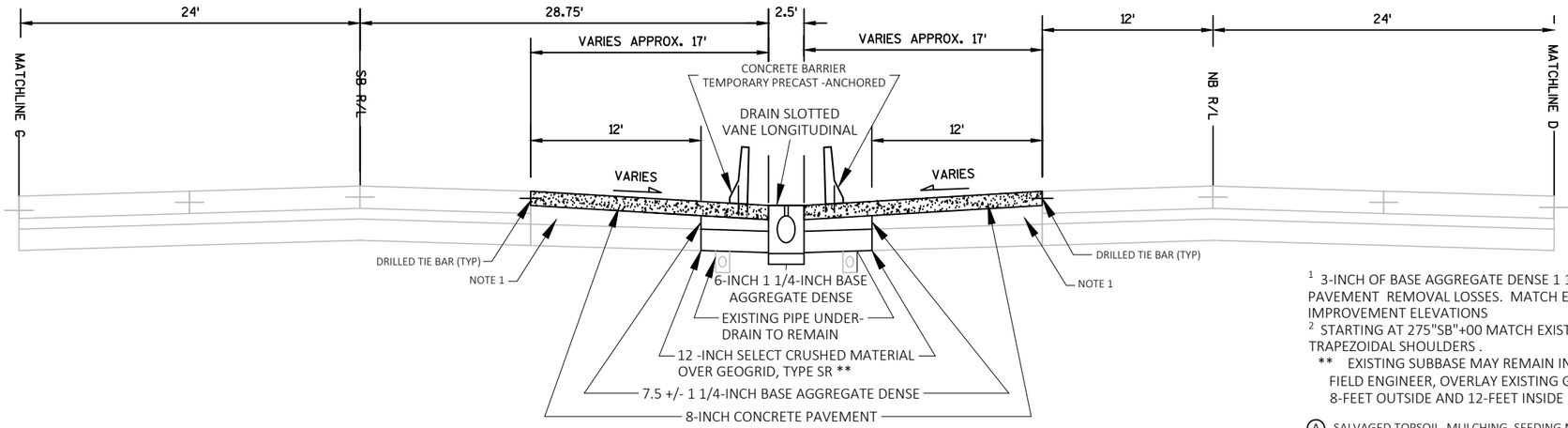
(D) MGS GUARDRAIL 3
261"SB"+21 - 261"SB"+80 257"NB"+92 - 262"NB"+09
263"SB"+13 - 267"SB"+31 263"NB"+43 - 264"NB"+39



TYPICAL PROPOSED SECTION - SHOULDERS
IH 39

SOUTHBOUND	NORTHBOUND
259"SB"+80 - 261"SB"+80	260"NB"+16 - 261"NB"+95
263"SB"+27 - 264"SB"+50	263"NB"+42 - 264"NB"+50

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET 7 E



TYPICAL PROPOSED SECTION - PERMANENT CROSSOVER
IH 39
SOUTHBOUND
237"SB"+50 - 244"SB"+70
273"SB"+50[2] - 283"SB"+70

[1] 3-INCH OF BASE AGGREGATE DENSE 1 1/4-INCH ESTIMATED FOR PAVEMENT REMOVAL LOSSES. MATCH EXISTING BASE AND SUBGRADE IMPROVEMENT ELEVATIONS

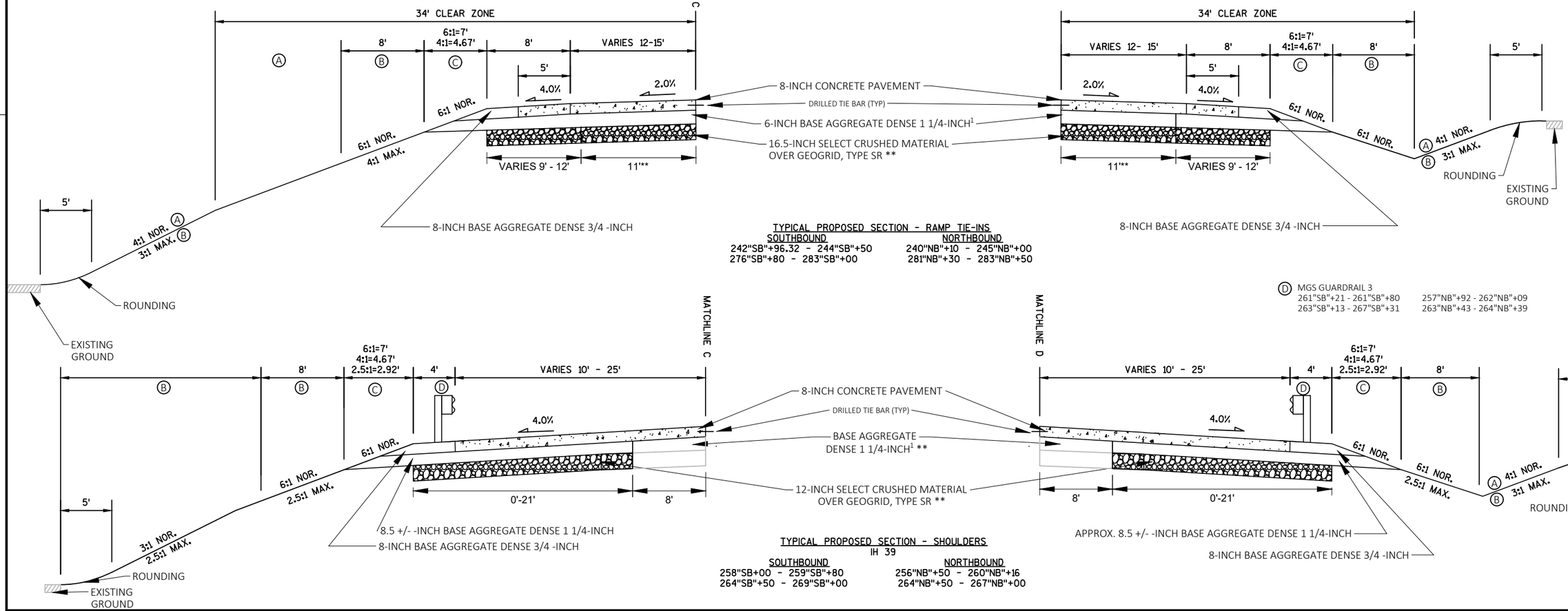
[2] STARTING AT 275"SB"+00 MATCH EXISTING 12.5-INCH TO 8-INCH TRAPEZOIDAL SHOULDERS .

** EXISTING SUBBASE MAY REMAIN IN PLACE IF DEEMED COMPETENT BY FIELD ENGINEER, OVERLAY EXISTING GEOGIRD MIN. 24-INCHES (APPROX. 8-FEET OUTSIDE AND 12-FEET INSIDE MAY REMAIN)

(A) SALVAGED TOPSOIL, MULCHING, SEEDING MIXTURE NO. 30 & FERTILIZER TYPE B

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

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



TYPICAL PROPOSED SECTION - RAMP TIE-INS

SOUTHBOUND	NORTHBOUND
242"SB"+96.32 - 244"SB"+50	240"NB"+10 - 245"NB"+00
276"SB"+80 - 283"SB"+00	281"NB"+30 - 283"NB"+50

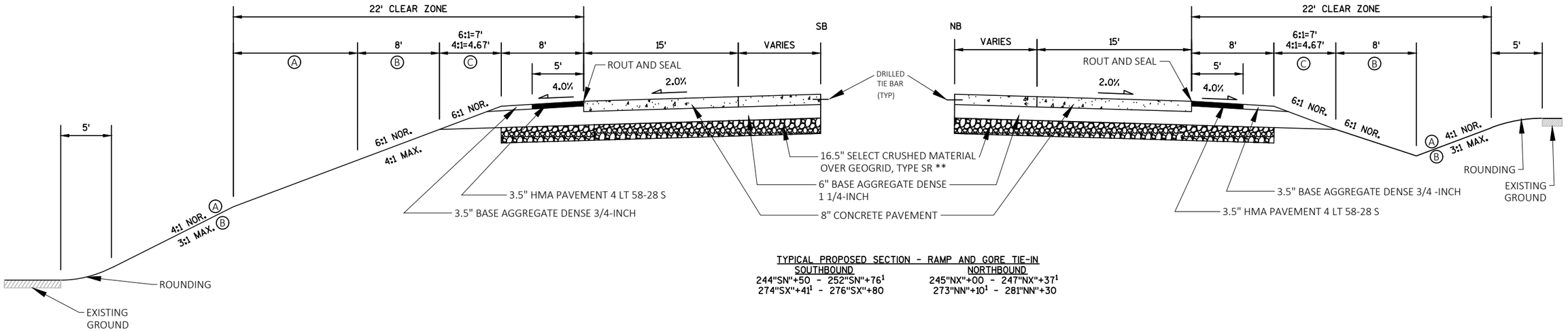
(D) MGS GUARDRAIL 3

261"SB"+21 - 261"SB"+80	257"NB"+92 - 262"NB"+09
263"SB"+13 - 267"SB"+31	263"NB"+43 - 264"NB"+39

TYPICAL PROPOSED SECTION - SHOULDERS
IH 39

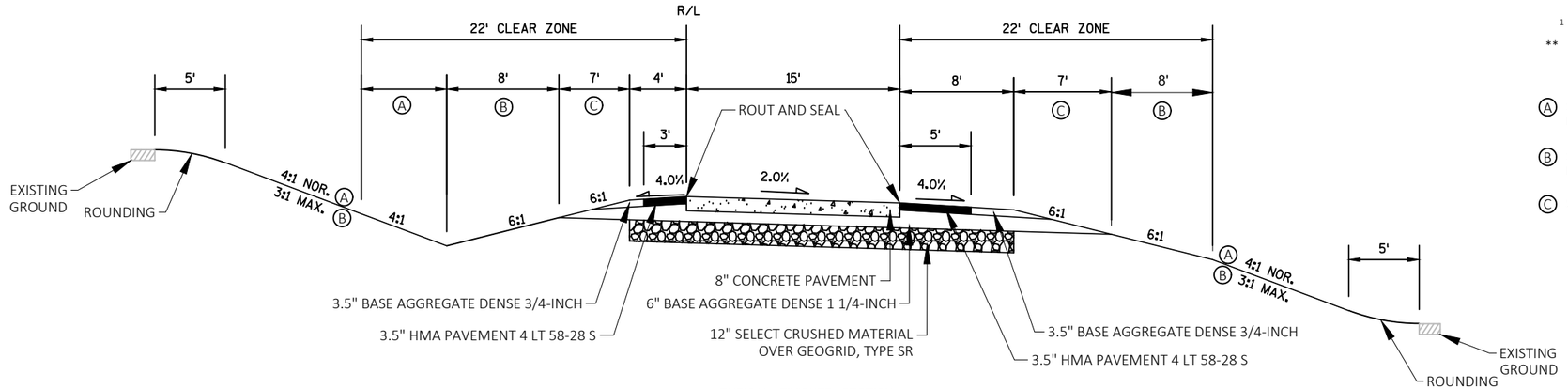
SOUTHBOUND	NORTHBOUND
258"SB+00 - 259"SB"+80	256"NB"+50 - 260"NB"+16
264"SB"+50 - 269"SB"+00	264"NB"+50 - 267"NB"+00

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET 8 E

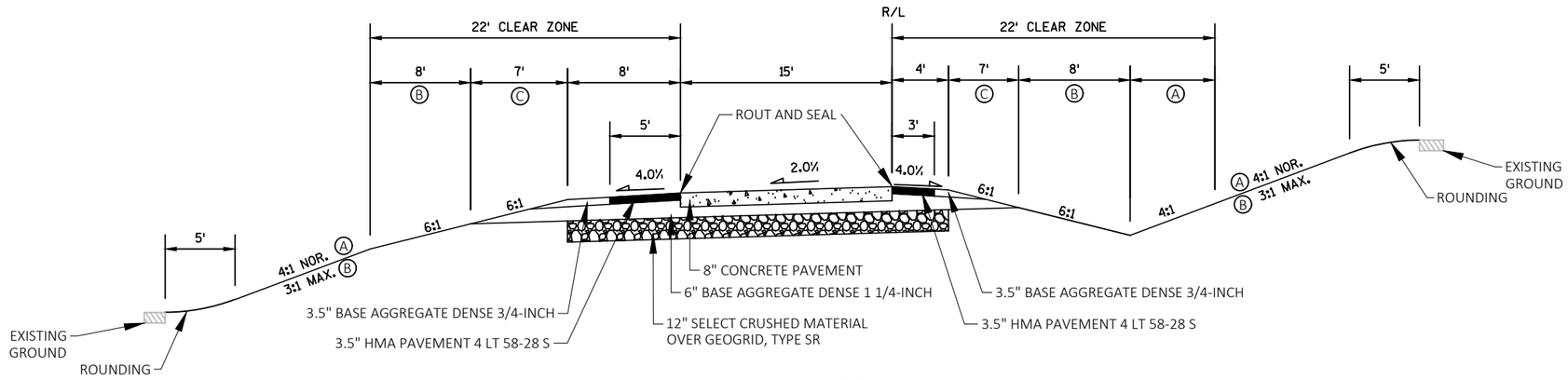


TYPICAL PROPOSED SECTION - RAMP AND GORE TIE-IN

SOUTHBOUND	NORTHBOUND
244"SN"+50 - 252"SN"+76[1]	245"NX"+00 - 247"NX"+37[1]
274"SX"+41[1] - 276"SX"+80	273"NN"+10[1] - 281"NN"+30



TYPICAL FINISHED SECTION
NX AND NN RAMPS



TYPICAL FINISHED SECTION
SN AND SX RAMPS

[1] PLACE SUBGRADE RELIEF TRENCH

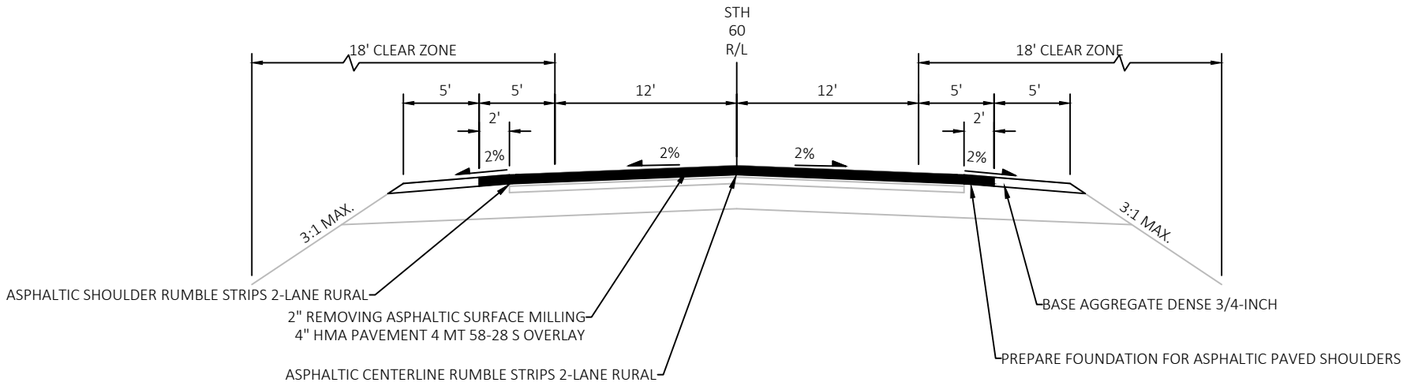
** APPROX. 8-FEET OF EXISTING BASE AND SUBBASE MAY REMAIN IN PLACE IF DEEMED COMPETENT BY FIELD ENGINEER, OVERLAY EXISTING GEOGIRD MIN. 24-INCHES

(A) SALVAGED TOPSOIL, MULCHING, SEEDING MIXTURE NO. 30 & FERTILIZER TYPE B

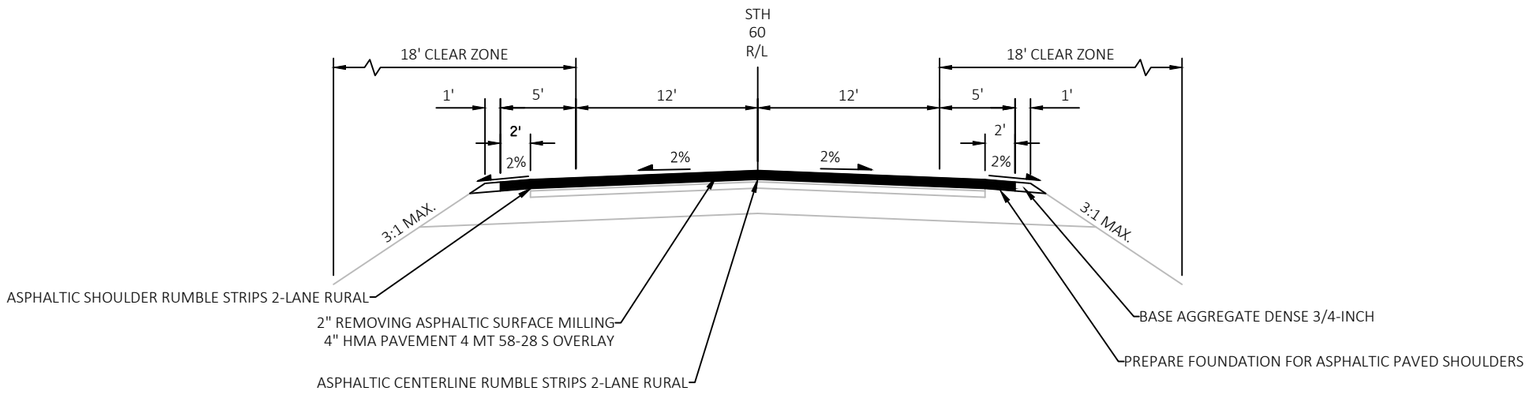
(B) SALVAGED TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, EROSION MAT CLASS 1 TYPE B

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

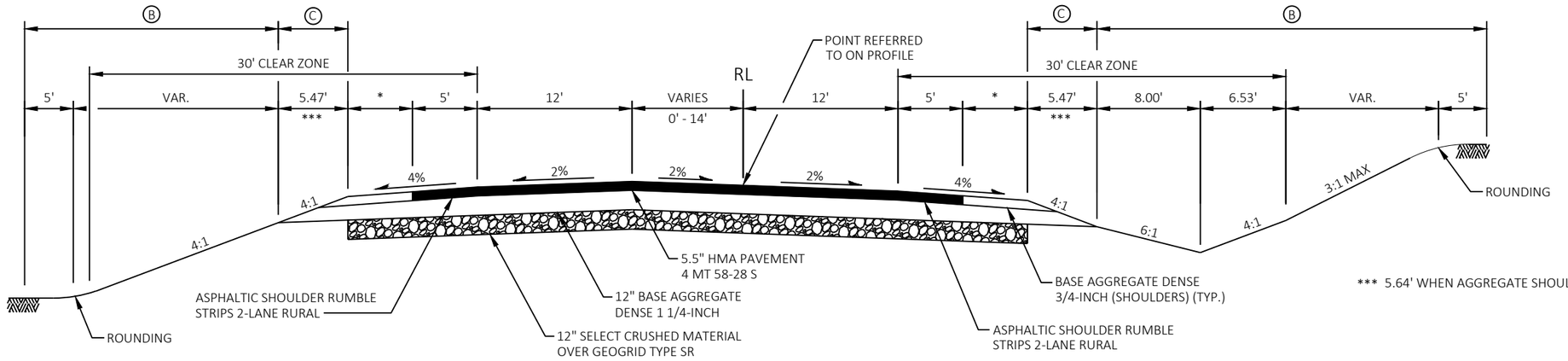
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET 9 E



TYPICAL FINISHED SECTION
STH 60
42+42 - 48+03



TYPICAL FINISHED SECTION
STH 60
77+99 - 90+06



*** 5.64' WHEN AGGREGATE SHOULDER IS 3 FEET

TYPICAL FINISHED STH 60

STA. 48+02.90 - STA. 52+34.25
STA. 68+77.74 - STA. 77+99.20

* 5' STA. 48+02.90 - STA. 52+34.25

3' STA. 68+77.74 - STA. 77+99.20

Ⓐ SALVAGED TOPSOIL, MULCHING, SEEDING MIXTURE NO. 30, & FERTILIZER TYPE B.

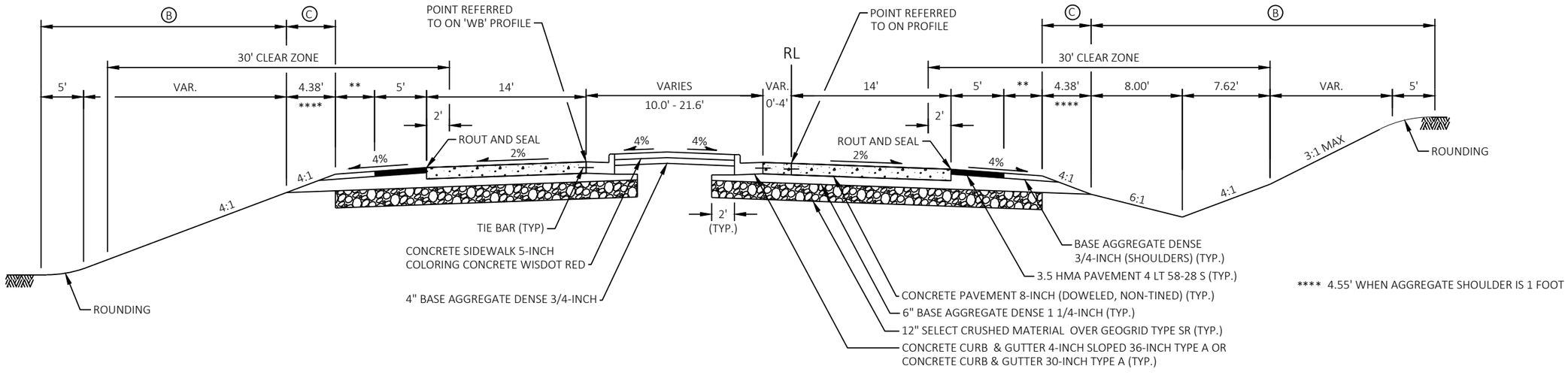
Ⓑ SALVAGED TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B.

Ⓒ SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B.

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

** 3' STA. 52+34.25 RT - STA. 54+68.71 RT
STA. 52+34.25 LT - STA. 54+98.99 LT

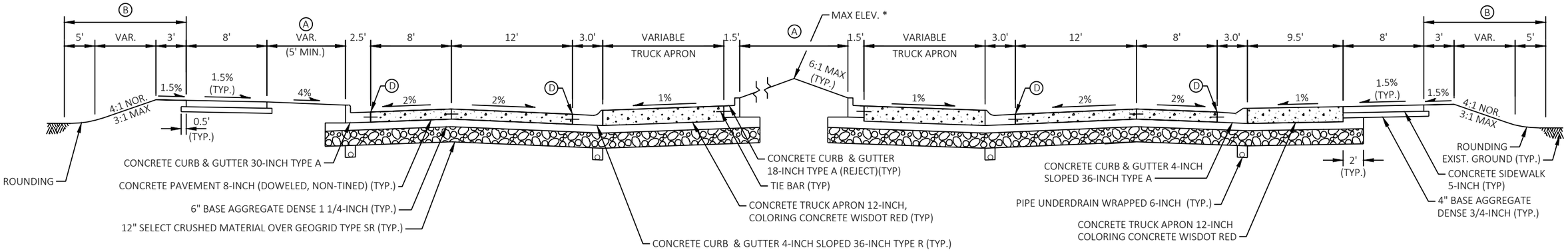
1' STA. 66+11.81 RT - STA. 68+77.74 RT
STA. 66+15.68 LT - STA. 68+77.74 LT



**** 4.55' WHEN AGGREGATE SHOULDER IS 1 FOOT

TYPICAL FINISHED STH 60

STA. 52+34.25 RT - STA. 54+68.71 RT
STA. 52+34.25 LT - STA. 54+98.99 LT
STA. 66+11.81 RT - STA. 68+77.74 RT
STA. 66+15.68 LT - STA. 68+77.74 LT



TYPICAL FINISHED SECTION THROUGH ROUNDABOUT

STA. 10+00.00 SB A - STA. 13+33.01 SB A
STA. 10+00.00 NB A - STA. 13+33.01 NB A

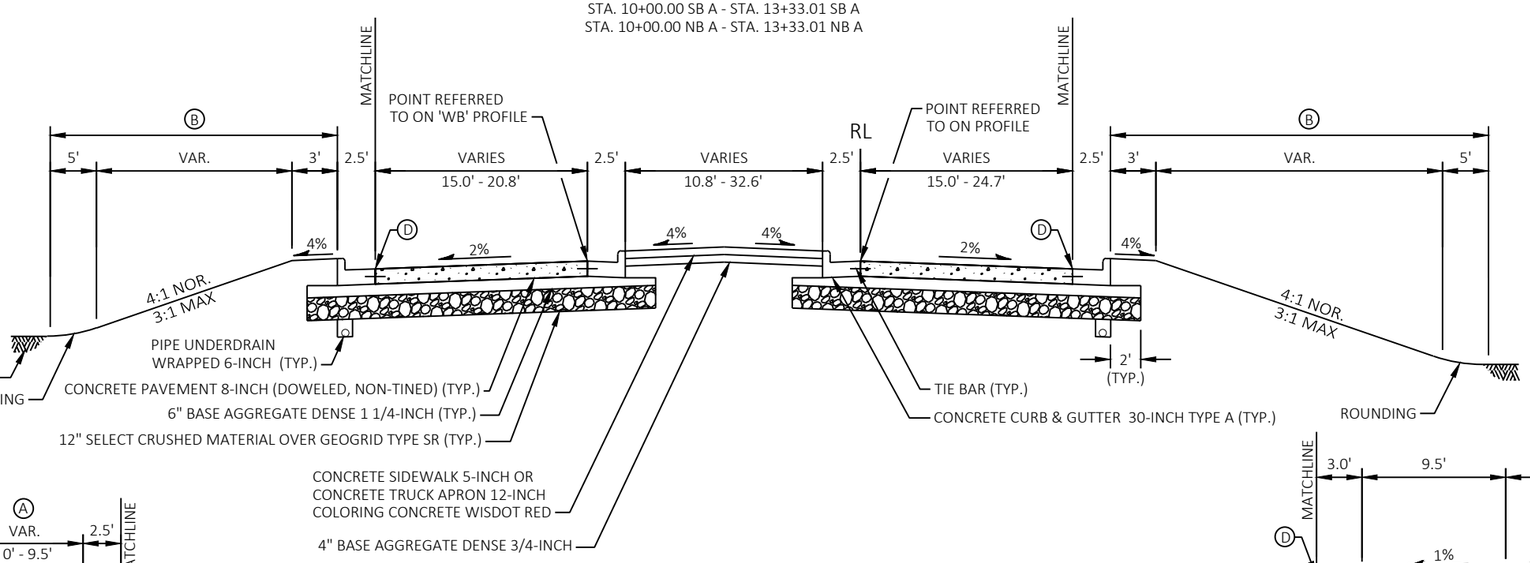
* NORTHBOUND - 1080.60
SOUTHBOUND - 1072.20

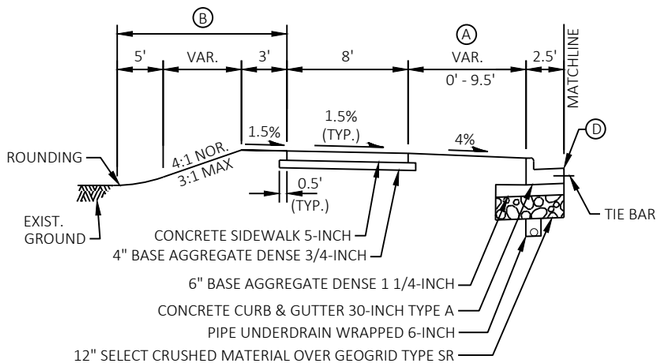
Ⓐ SALVAGED TOPSOIL, MULCHING, SEEDING MIXTURE NO. 30, & FERTILIZER TYPE B.

Ⓑ SALVAGED TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE B.

Ⓒ SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B.

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

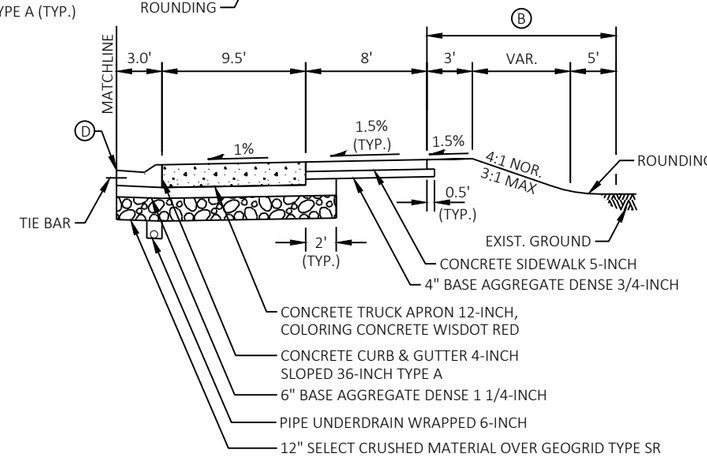




STA. 54+87.30 RT - STA. 55+13.95 RT
STA. 55+17.55 LT - STA. 55+67.77 LT
STA. 57+46.33 RT - STA. 59+31.23 RT
STA. 58+30.78 LT - STA. 59+41.16 LT
STA. 61+01.23 RT - STA. 62+81.56 RT
STA. 61+11.16 LT - STA. 63+54.59 LT
STA. 65+55.87 RT - STA. 65+96.87 RT
* REVERSED FOR RIGHT SIDE

TYPICAL FINISHED SECTION STH 60

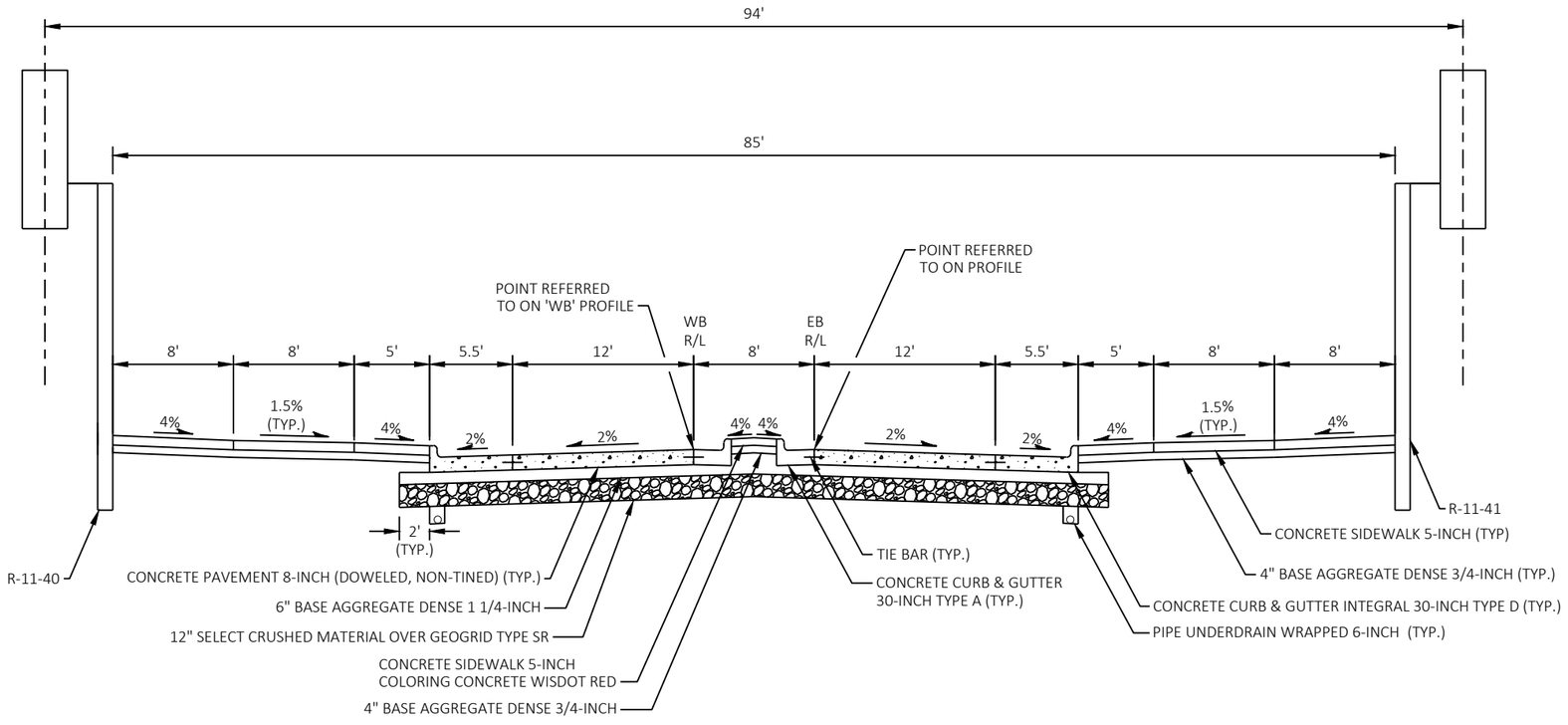
STA. 54+68.71 RT - STA. 56+05.26 RT
STA. 54+98.99 LT - STA. 55+93.90 LT
STA. 57+46.33 RT - STA. 59+31.23 RT
STA. 57+63.08 LT - STA. 59+41.16 LT
STA. 61+01.23 RT - STA. 63+64.59 RT
STA. 61+11.16 LT - STA. 63+54.59 LT
STA. 65+06.15 RT - STA. 66+11.81 RT
STA. 65+17.54 LT - STA. 66+15.68 LT



STA. 55+13.95 RT - STA. 56+05.26 RT
STA. 55+67.77 LT - STA. 55+93.90 LT
STA. 57+63.08 LT - STA. 58+30.78 LT
STA. 62+81.56 RT - STA. 63+64.59 RT
STA. 65+06.15 RT - STA. 65+55.93 RT
STA. 65+17.54 LT - STA. 65+91.47 LT
* REVERSED FOR LEFT SIDE

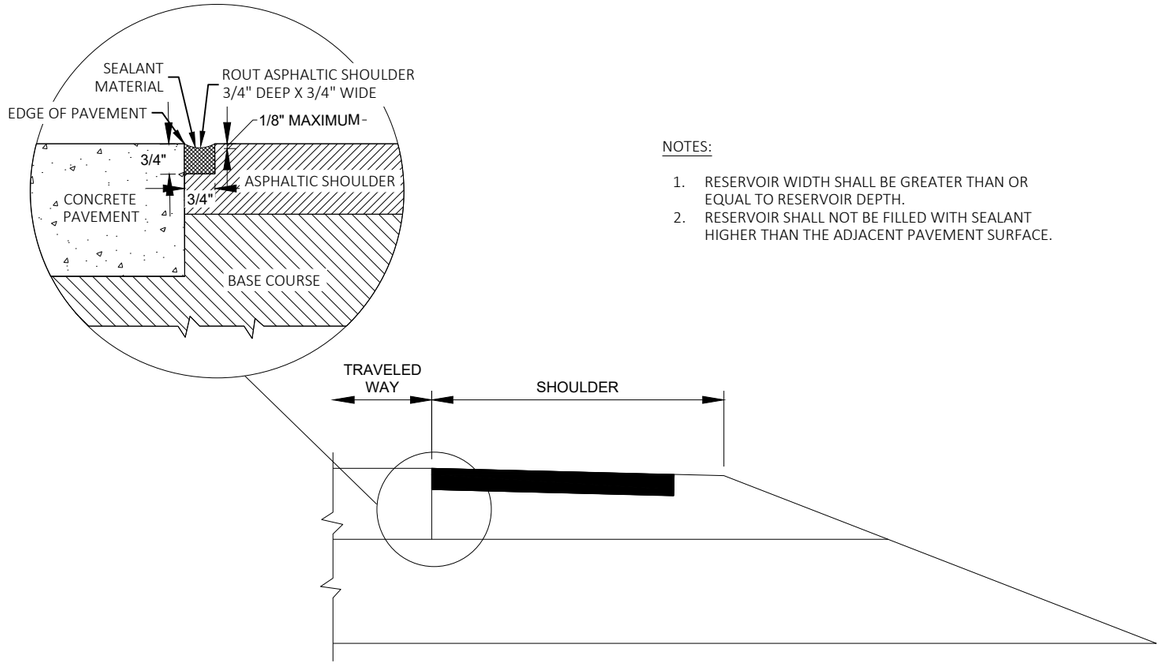
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET 12	E

2



TYPICAL FINISHED STH 60 - B-11-15 & B-11-16

STA. 59+31.23 RT - STA. 61+01.23 RT
STA. 59+41.16 LT - STA. 61+11.16 LT

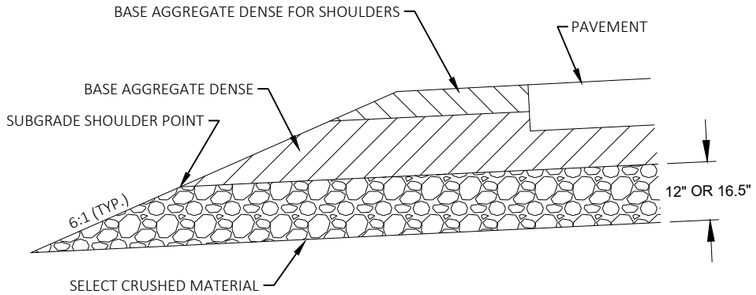


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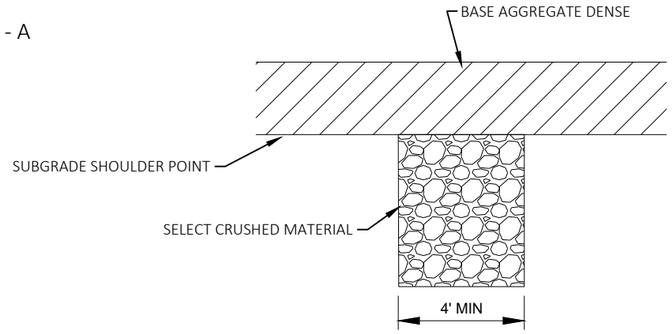
1. RESERVOIR WIDTH SHALL BE GREATER THAN OR EQUAL TO RESERVOIR DEPTH.
2. RESERVOIR SHALL NOT BE FILLED WITH SEALANT HIGHER THAN THE ADJACENT PAVEMENT SURFACE.

ROUT AND SEAL DETAIL

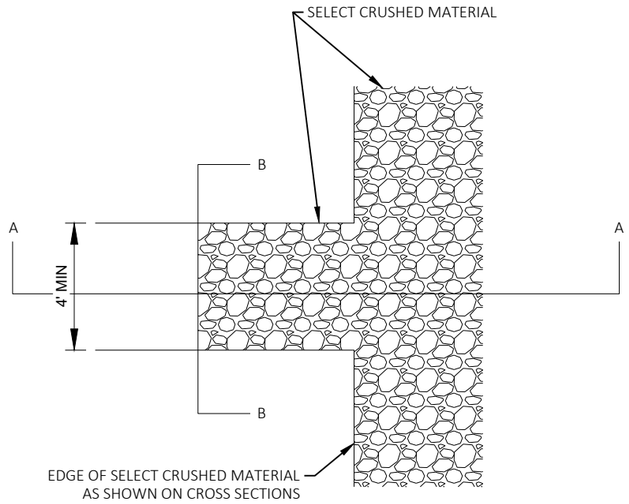
SEE TYPICAL FINISHED SECTIONS AND MISCELLANEOUS QUANTITIES FOR LOCATIONS
REFER TO SPECIAL PROVISIONS FOR ADDITIONAL DETAILS



SECTION A - A



SECTION B - B

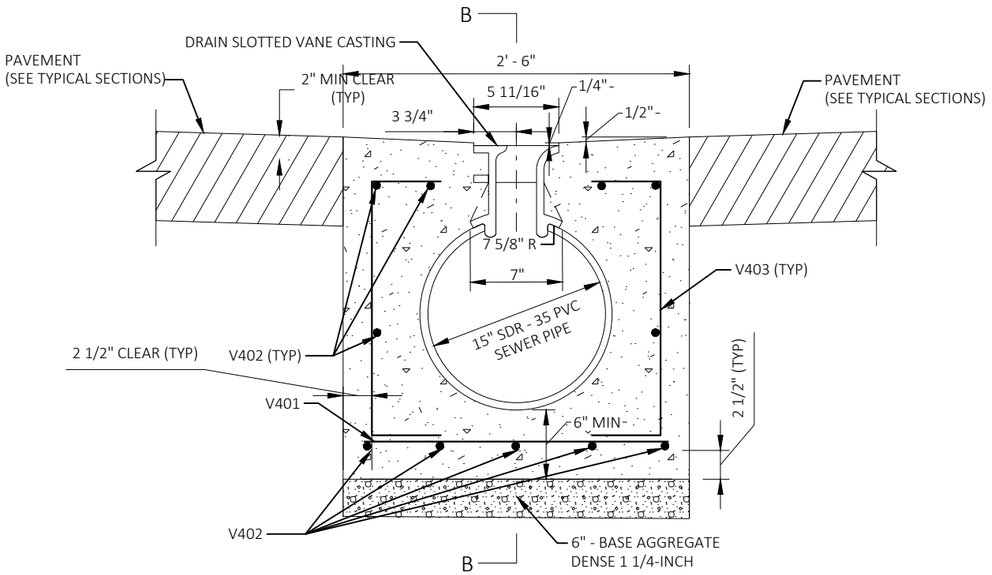


DETAIL FOR RELIEF TRENCHES

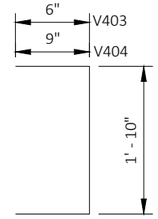
CONSTRUCT RELIEF TRENCHES AT LEAST EVERY 250' AND AT EACH SAG VERTICAL CURVE IN THE PROFILE

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

EXCAVATION REQUIRED TO CONSTRUCT RELIEF TRENCHES INCLUDED IN THE ITEM SELECT CRUSHED MATERIAL



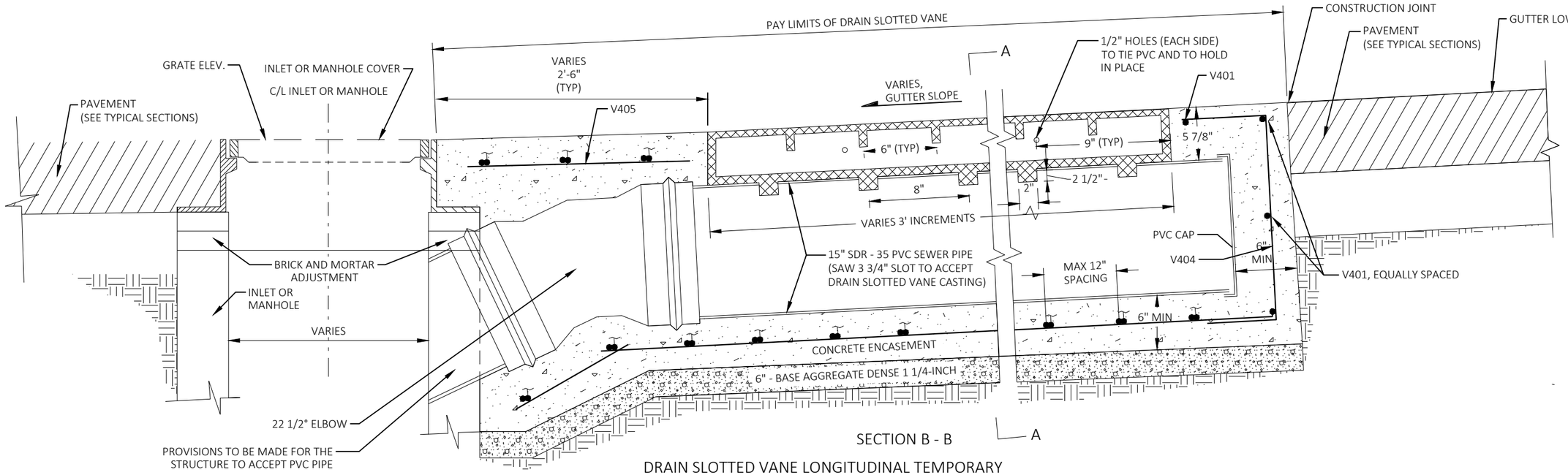
SECTION A - A



V403, V404

NOTES

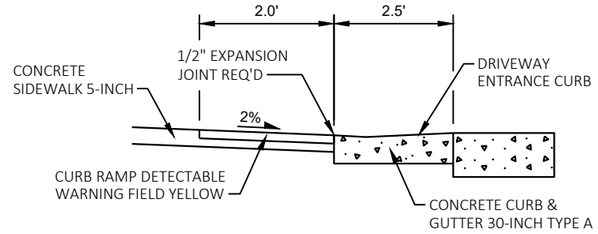
1. THE FIRST DIGIT OF BAR MARK SIGNIFIES THE BAR SIZE.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR.
3. APPROXIMATE WEIGHT OF DRAIN SLOTTED VANE CASTING = 87 POUNDS.
4. THE CASTING AND PVC PIPE SHALL BE SECURELY STAKED AND ANCHORED INTO PLACE DURING THE POURING OF THE CONCRETE ENCASEMENT.



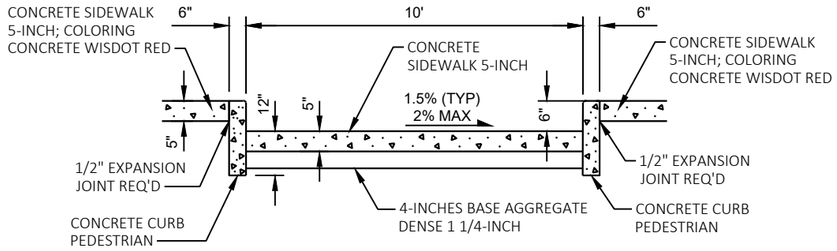
SECTION B - B

DRAIN SLOTTED VANE LONGITUDINAL TEMPORARY

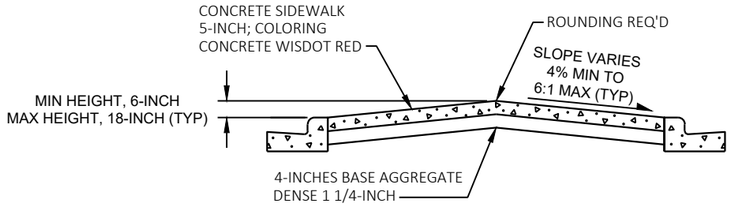
STA 238+15 TO 243+57
STA 276+80 TO 281+98



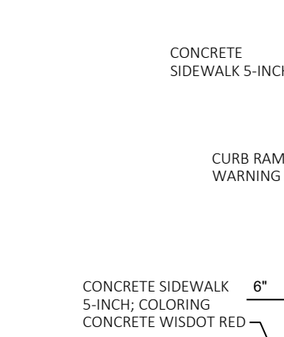
SECTION A-A



SECTION B-B



SECTION C-C

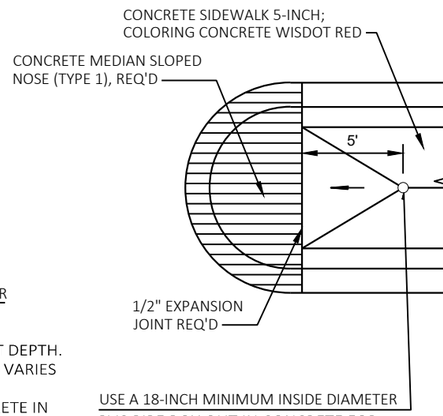


* DISTANCE TO BE LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.

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

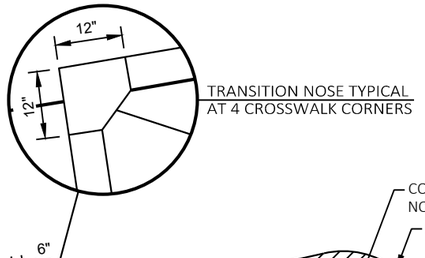
USE A 18-INCH MINIMUM INSIDE DIAMETER PVC PIPE BOX OUT IN CONCRETE FOR SIGN POST (TYP). PVC BOX OUT DEPTH SHOULD MATCH ADJACENT PAVEMENT DEPTH. THE NUMBER OF BOX OUTS REQUIRED VARIES BY WIDTH OF THE SIGN AND SHALL BE VERIFIED BEFORE PLACING THE CONCRETE IN THE ISLAND. GRAVEL BACKFILL IS INCIDENTAL TO POSTS WOOD BID ITEM. SEE A4-3B SIGN PLATE FOR BOX OUT DETAIL.

CENTER AND SPLITTER ISLAND SIGN LOCATION DETAIL (TYP)

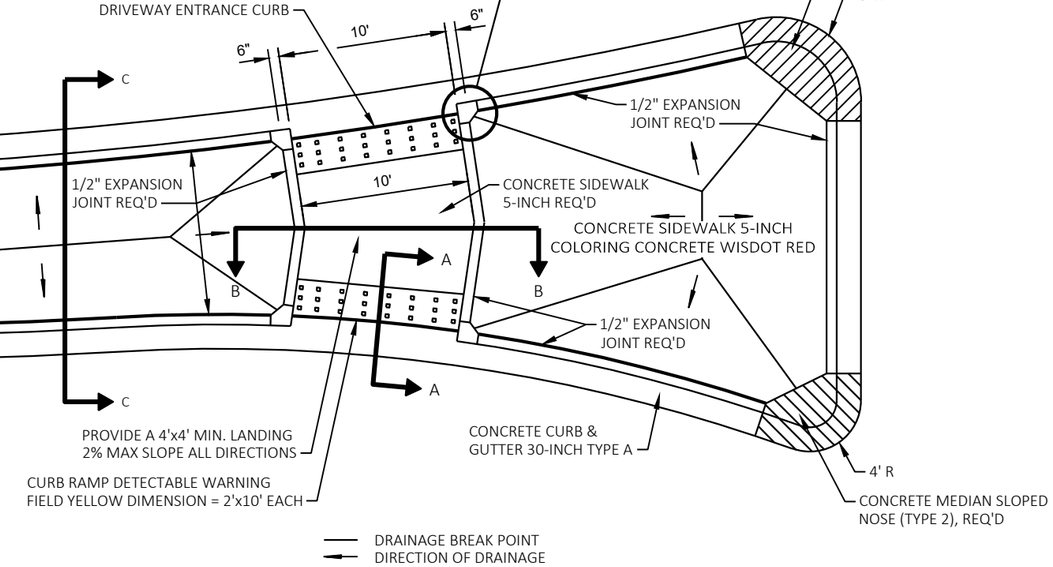


USE A 18-INCH MINIMUM INSIDE DIAMETER PVC PIPE BOX OUT IN CONCRETE FOR SIGN POST (TYP). THE NUMBER OF BOX OUTS REQUIRED VARIES BY WIDTH OF THE SIGN AND SHALL BE VERIFIED BEFORE PLACING THE CONCRETE IN THE ISLAND. SEE A4-3B SIGN PLATE FOR BOX OUT DETAIL.

SPLITTER ISLAND DETAIL

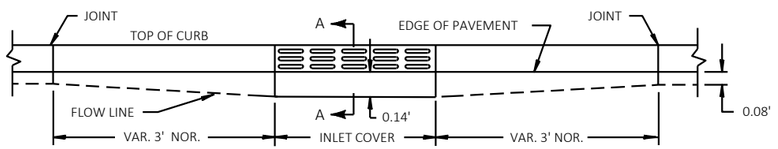


TRANSITION NOSE TYPICAL
AT 4 CROSSWALK CORNERS

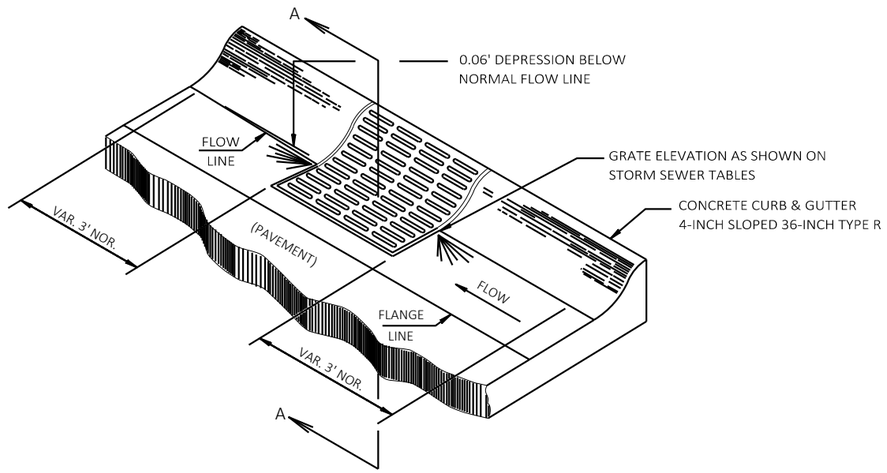


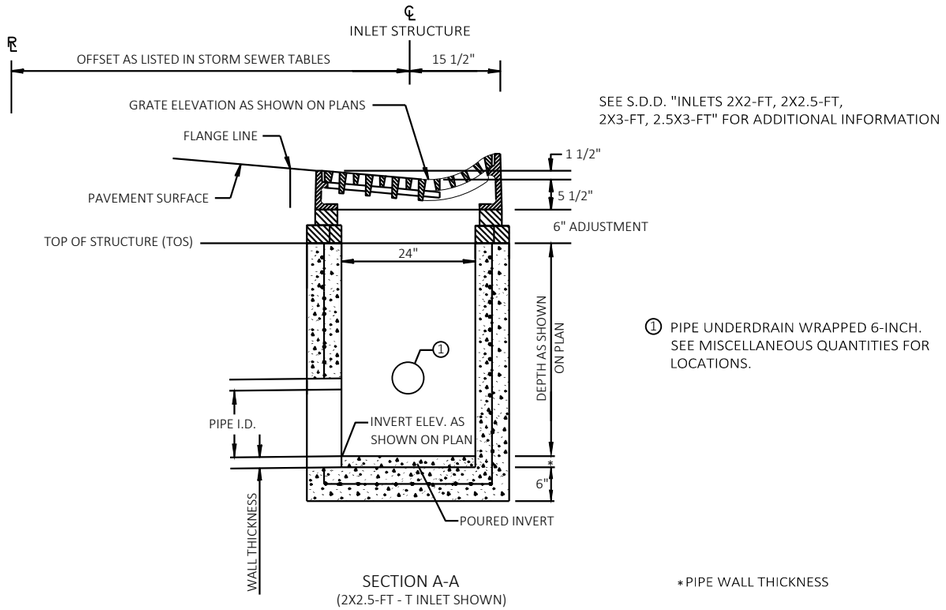
DRAINAGE BREAK POINT
DIRECTION OF DRAINAGE

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



ELEVATION





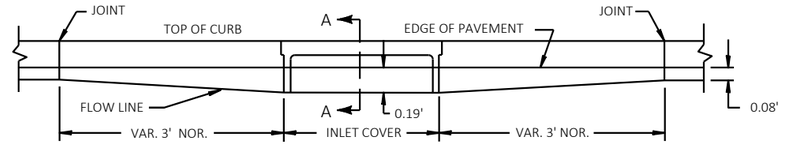
SEE S.D.D. "INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT" FOR ADDITIONAL INFORMATION

① PIPE UNDERDRAIN WRAPPED 6-INCH. SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS.

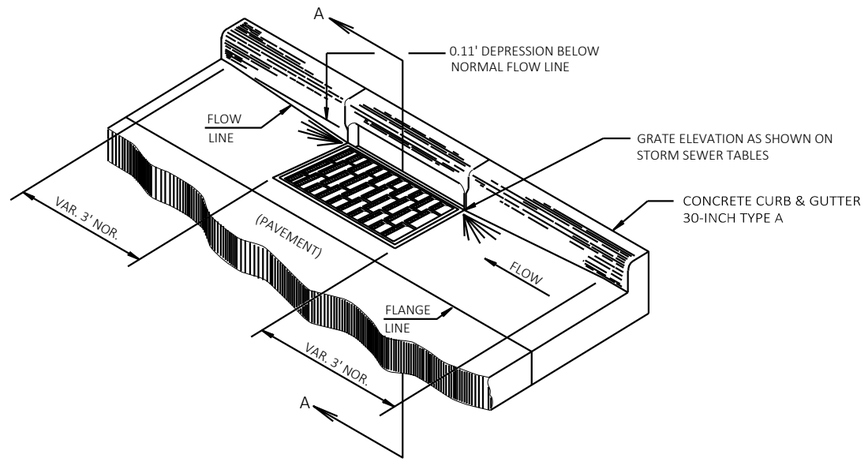
SECTION A-A
(2X2.5-FT - T INLET SHOWN)

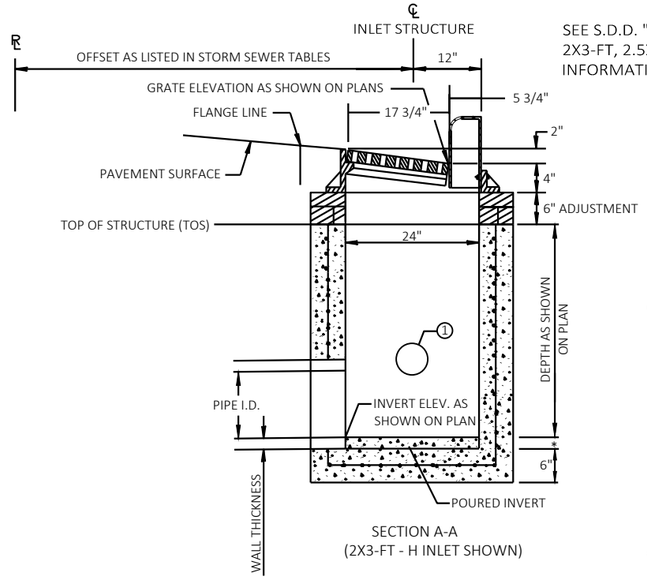
*PIPE WALL THICKNESS

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



ELEVATION





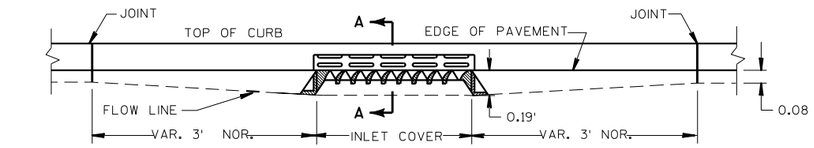
SEE S.D.D. "INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT" FOR ADDITIONAL INFORMATION

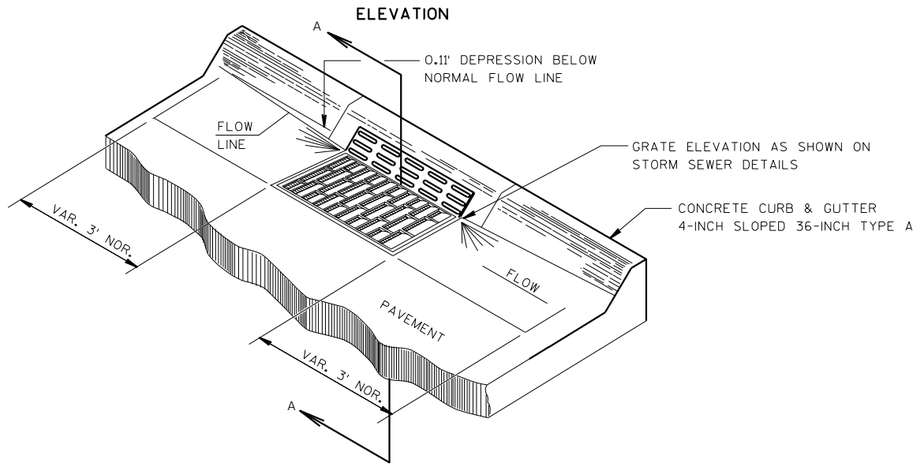
① PIPE UNDERDRAIN WRAPPED 6-INCH. SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS.

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

*PIPE WALL THICKNESS

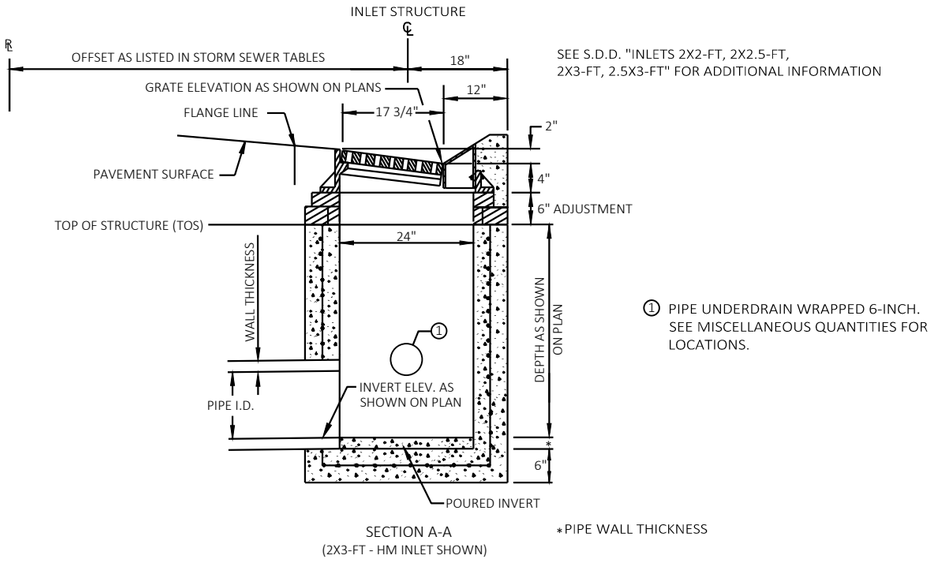
DETAIL OF CONCRETE CURB & GUTTER 30-INCH TYPE A AT INLETS





DETAIL OF CURB AND GUTTER AT INLETS

(2X3-FT - HM INLET SHOWN)



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

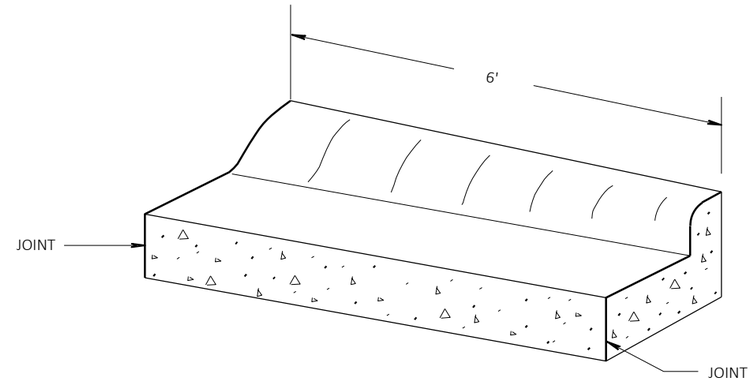
① PIPE UNDERDRAIN WRAPPED 6-INCH. SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS.

SECTION A-A

(2X3-FT - HM INLET SHOWN)

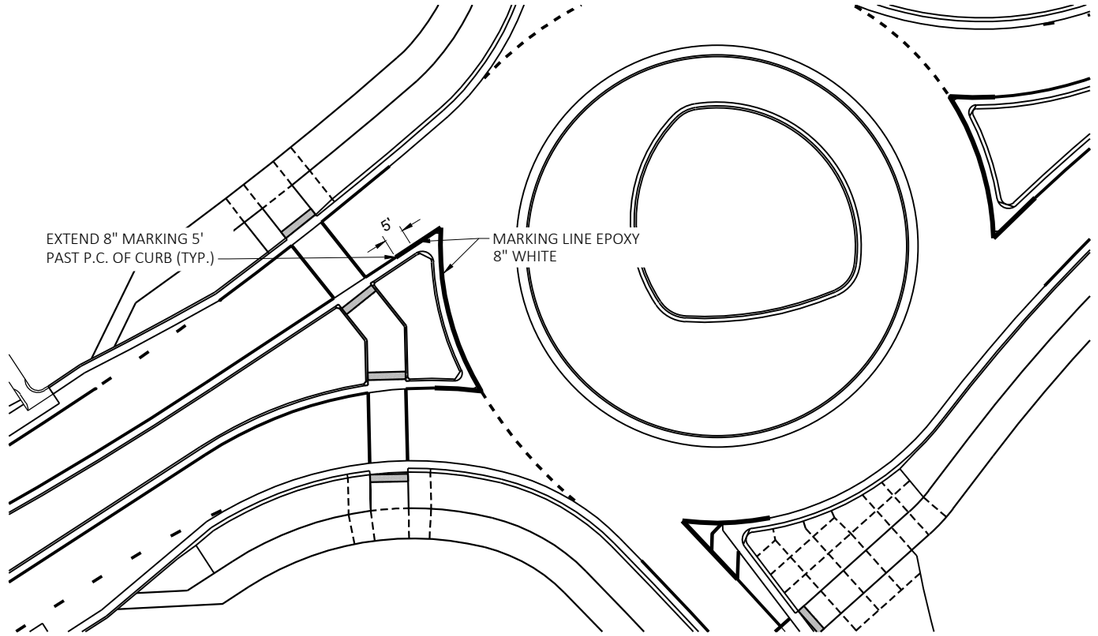
*PIPE WALL THICKNESS

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

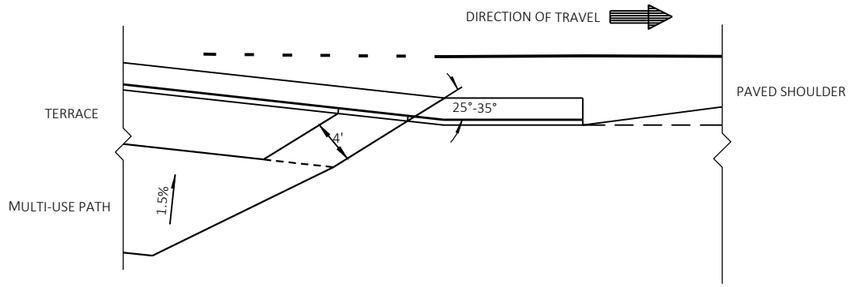


TRANSITION DETAIL

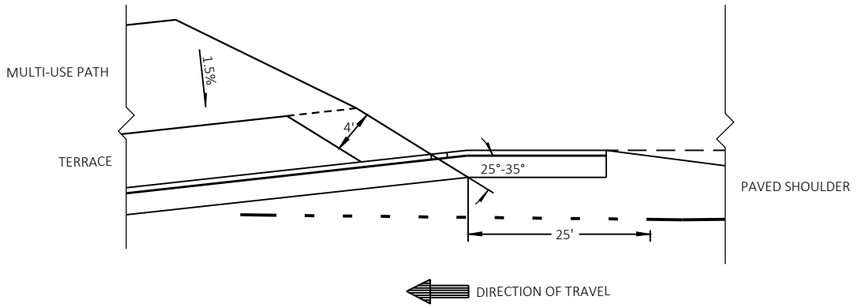
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A TO CONCRETE CURB AND GUTTER 30-INCH TYPE A CURB & GUTTER
(TO BE MEASURED & PAID FOR AS CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A)



ROUNDABOUT PAVEMENT MARKING DETAILS

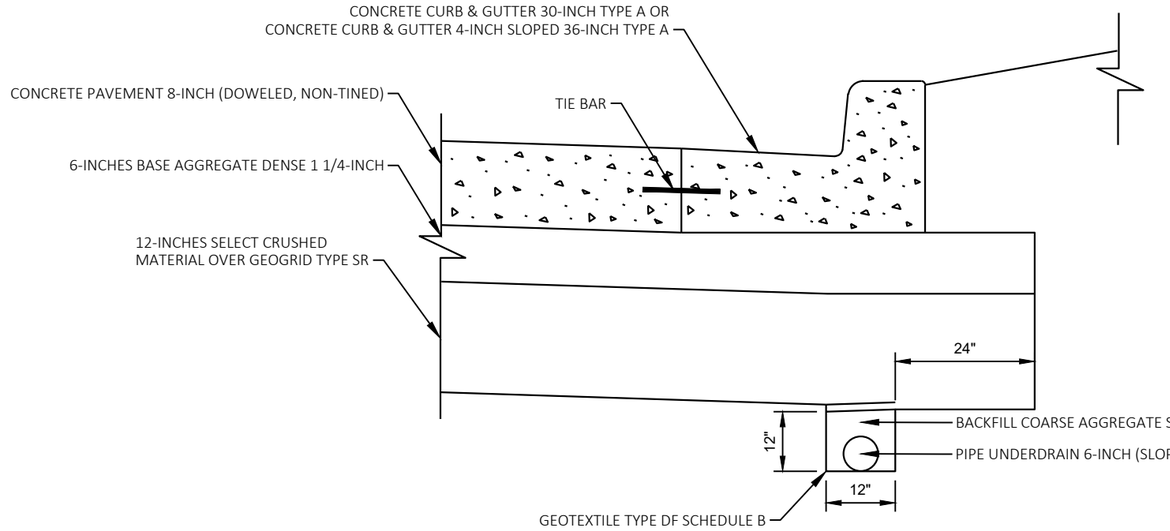


BIKE RAMP ENTRANCE



BIKE RAMP EXIT

BIKE RAMP ENTRANCE AND EXIT

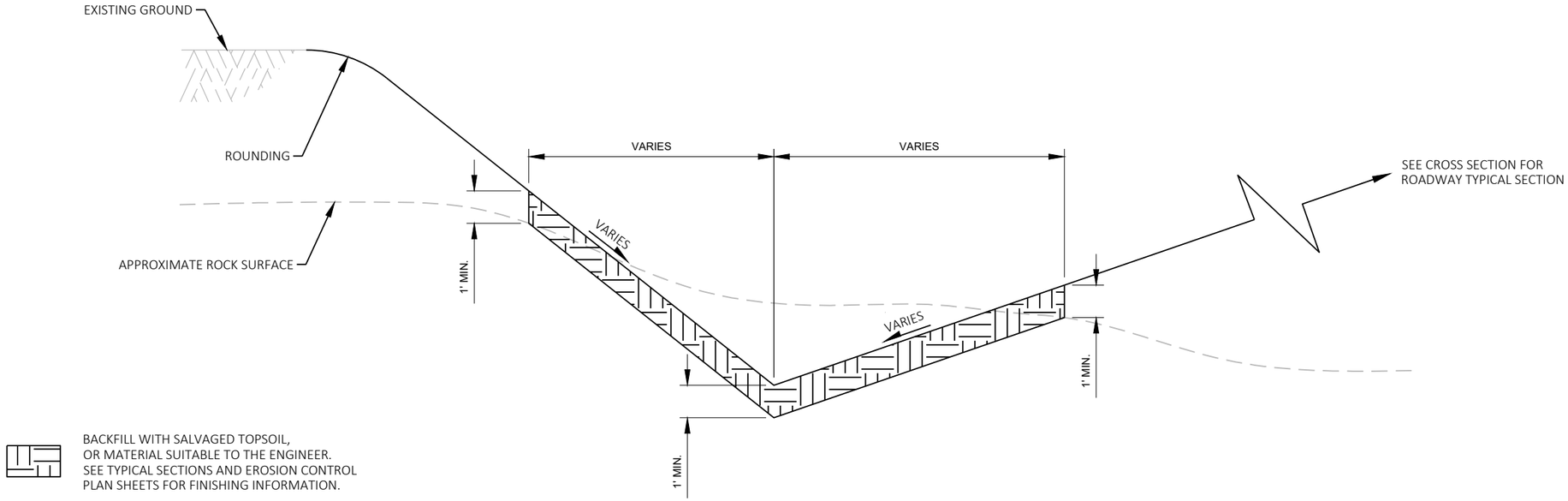


DETAIL FOR PIPE UNDERDRAIN 6-INCH

NOTE: PIPE UNDERDRAIN IS TO BE DISCHARGED INTO THE INLET STRUCTURES.

2

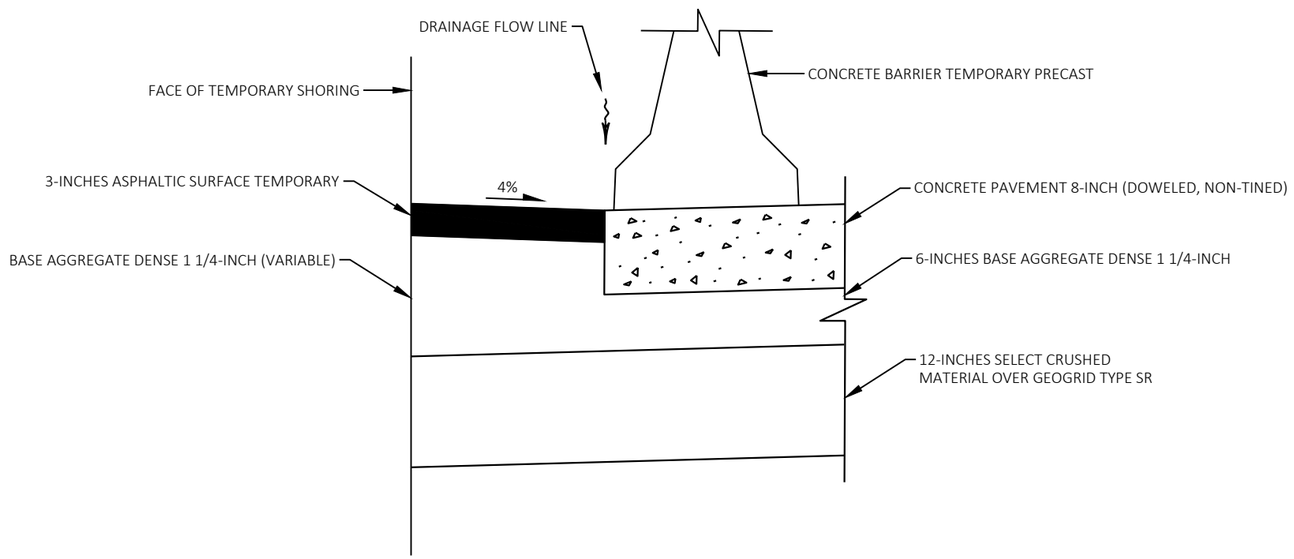
2



DITCH ROCK CUT DETAIL

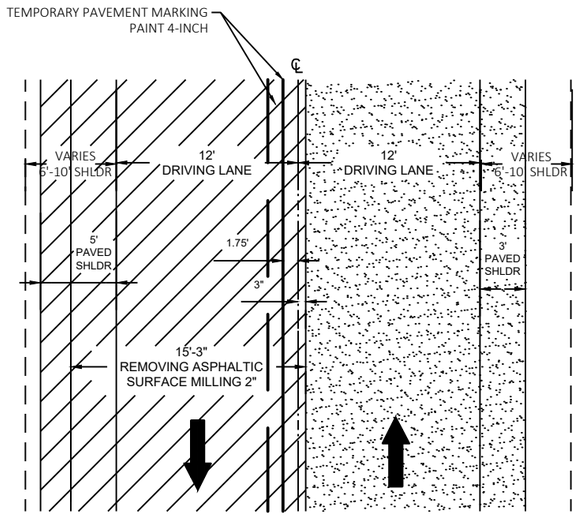
SEE CROSS SECTIONS FOR LOCATIONS

NOTE: LEFT SIDE SHOWN; MIRRORED FOR RIGHT.



STAGE 1 - TEMPORARY WIDENING ADJACENT TO TEMPORARY SHORING

NOTE: LEFT SIDE SHOWN; MIRRORED FOR RIGHT.

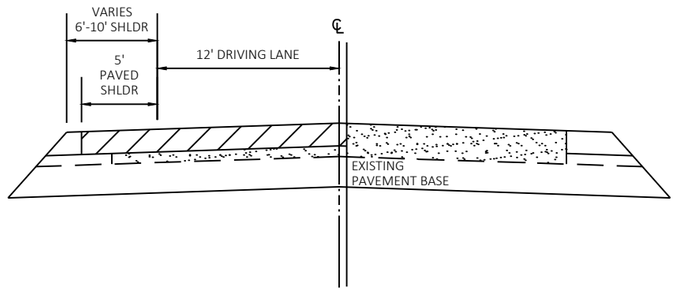


PLAN VIEW

FIRST PASS WB 2" HMA PAVEMENT 4 MT 58-28 S PAVING LIMITS

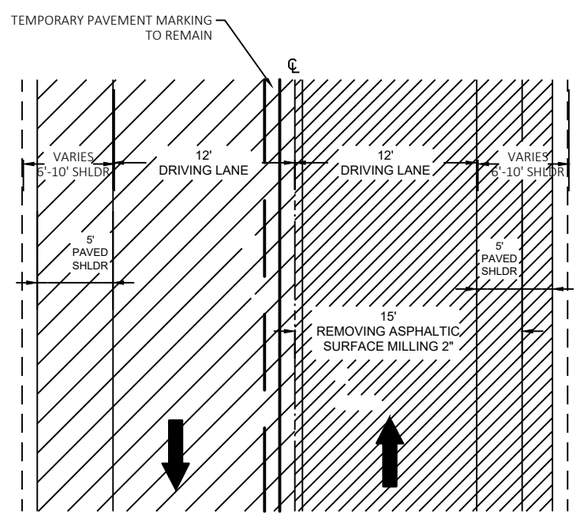
EXISTING ASPHALT SURFACE TO REMAIN

*LOCATING NO PASSING ZONES REQUIRED PRIOR TO TEMPORARY PAVEMENT MARKING PAINT 4-INCH PLACEMENT



CROSS SECTION VIEW

MILLING & PAVING
FIRST PASS WB DETAIL

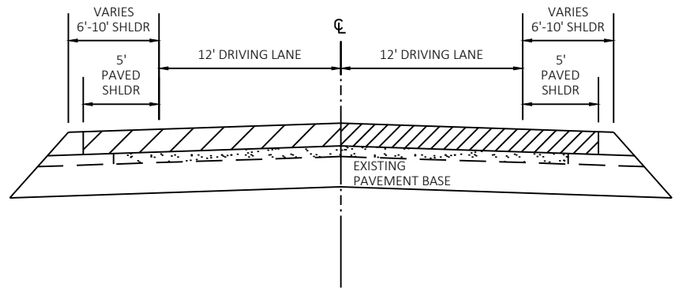


PLAN VIEW

FIRST PASS WB 2" HMA PAVEMENT 4 MT 58-28 S PAVING LIMITS

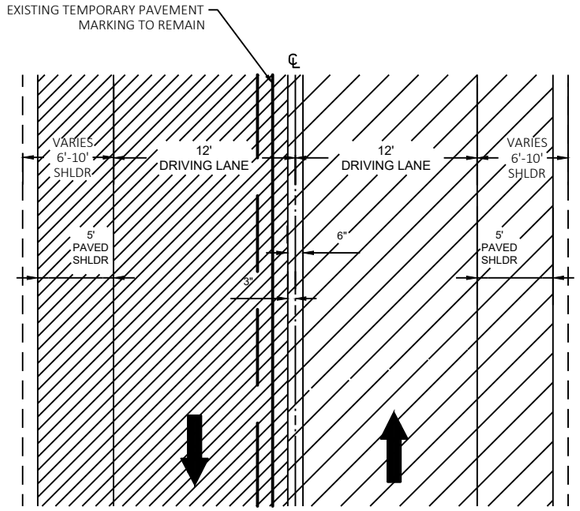
EXISTING ASPHALT SURFACE TO REMAIN

FIRST PASS EB 2" HMA PAVEMENT 4 MT 58-28 S PAVING LIMITS



CROSS SECTION VIEW

MILLING & PAVING
FIRST PASS EB DETAIL



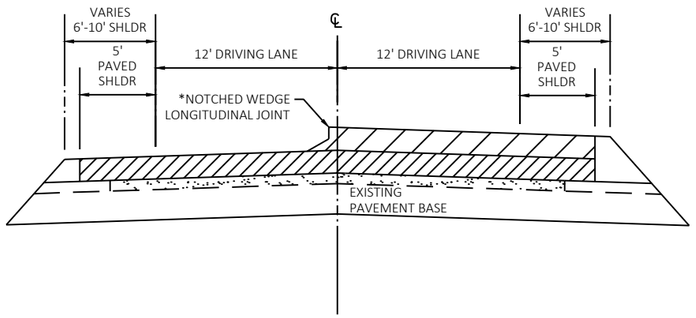
PLAN VIEW

SECOND PASS EB 2" HMA PAVEMENT 4 MT 58-28 S PAVING LIMITS

FIRST PASS 2" HMA PAVEMENT 4 MT 58-28 S PAVING LIMITS

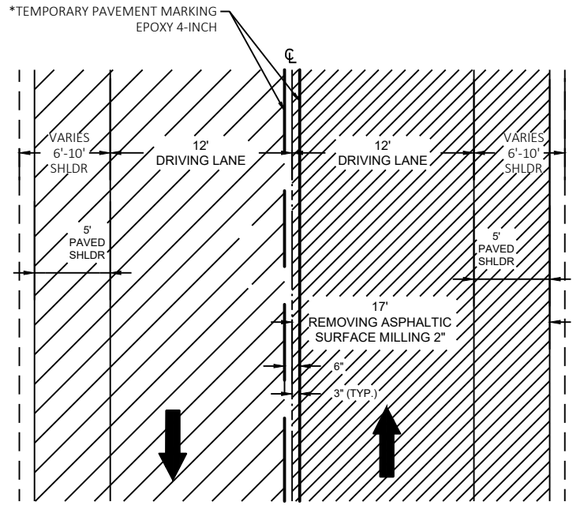
EXISTING ASPHALT SURFACE TO REMAIN

*SEE SDD 15 D 39-2 "TRAFFIC CONTROL, DROP-OFF SIGNING"



CROSS SECTION VIEW

MILLING & PAVING SECOND PASS EB DETAIL



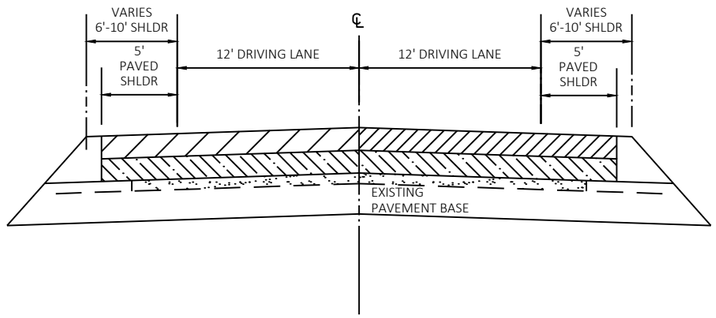
PLAN VIEW

SECOND PASS WB 2" HMA PAVEMENT 4 MT 58-28 S PAVING LIMITS

SECOND PASS EB 2" HMA PAVEMENT 4 MT 58-28 S PAVING LIMITS

FIRST PASS 2" HMA PAVEMENT 4 MT 58-28 S PAVING LIMITS

EXISTING ASPHALT SURFACE TO REMAIN

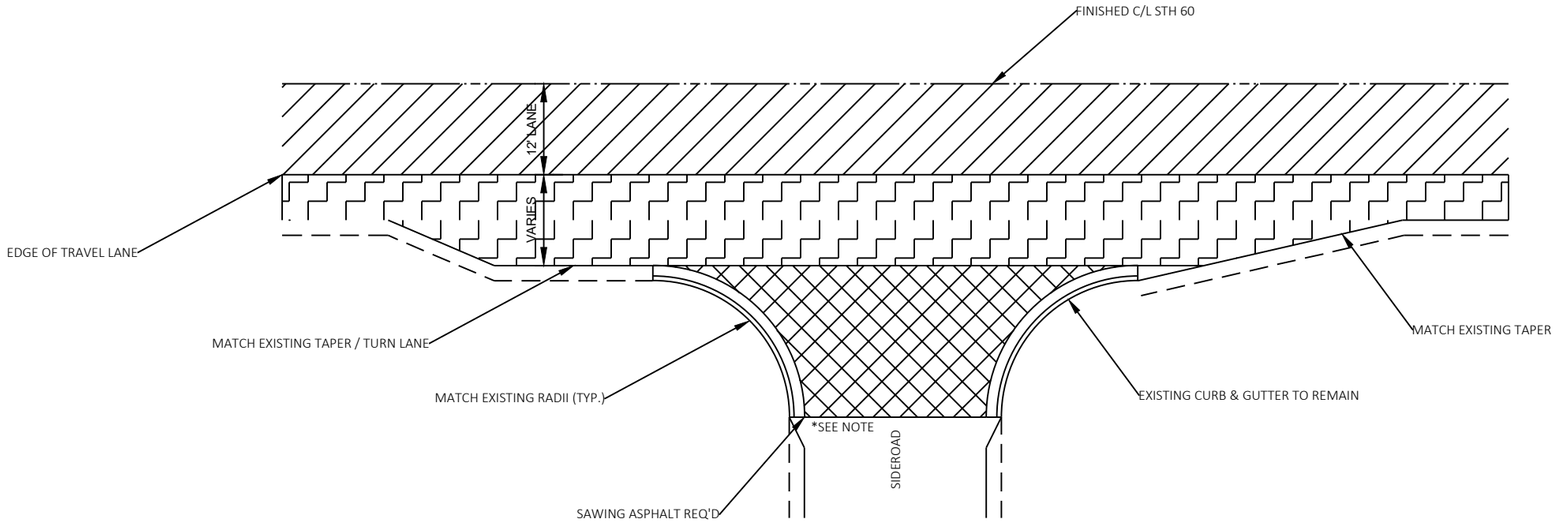


CROSS SECTION VIEW

MILLING & PAVING SECOND PASS WB DETAIL

PROJECT NO: 1012-01-74	HWY: STH 60	COUNTY: COLUMBIA	CONSTRUCTION DETAILS	SHEET 22	E

2



2" ASPHALTIC SURFACE MILLING AND PLACE 4" HMA PAVEMENT 4 MT 58-28 S

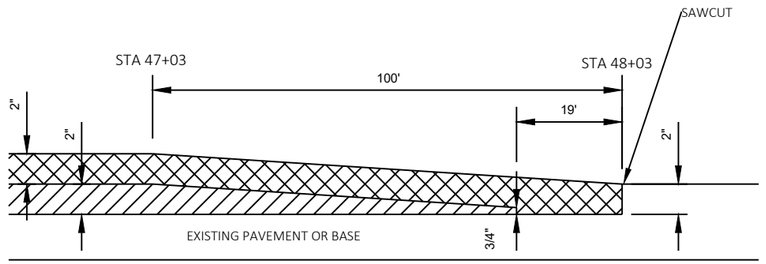
2" ASPHALTIC SURFACE MILLING AND PLACE 4" TO 2" TRANSITION HMA PAVEMENT 4 MT 58-28 S **

LIMITS OF REMOVING ASPHALTIC SURFACE MILLING AND PLACE 2" HMA PAVEMENT 4 MT 58-28 S

*MILL TO CURB FARTHEST FROM MAINLINE

** FIT THE 4" TO 2" HMA PAVEMENT TRANSITION TO FIELD CONDITIONS. TRANSITION ZONE MAY BE EXTENDED FURTHER INTO THE SIDE ROAD IF NECESSARY

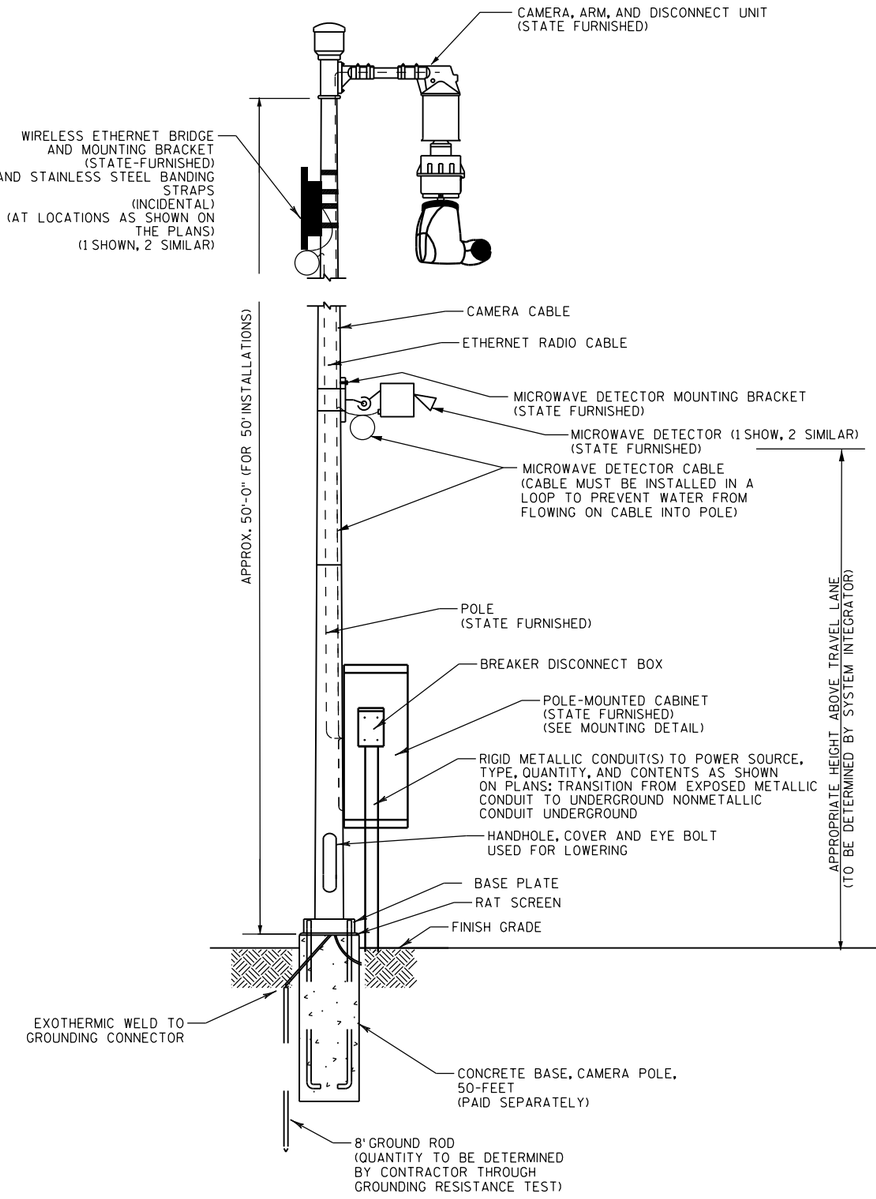
TYPICAL SIDEROAD DETAIL WITH CURB & GUTTER



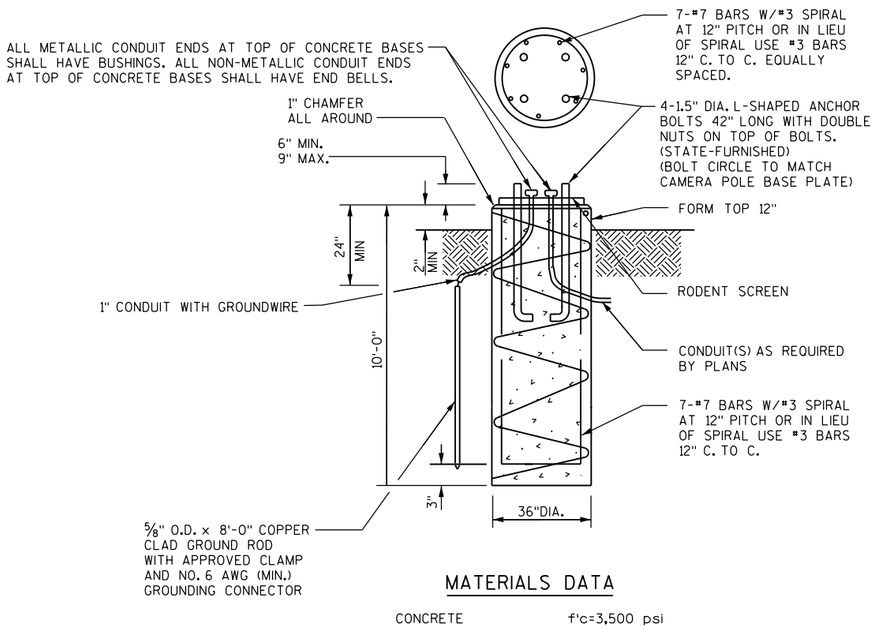
PLACE 2" HMA PAVEMENT 4 MT 58-28 S

REMOVING ASPHALTIC SURFACE MILLING AND PLACE 2" HMA PAVEMENT 4 MT 58-28 S

MAINLINE BUTT JOINT



CAMERA POLE WITH CAMERA LOWERING HARDWARE

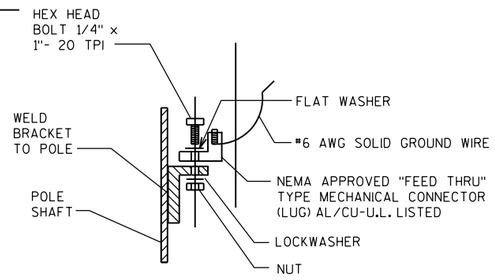


MATERIALS DATA

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

CONCRETE BASE, 50' CAMERA POLE

NOT TO SCALE



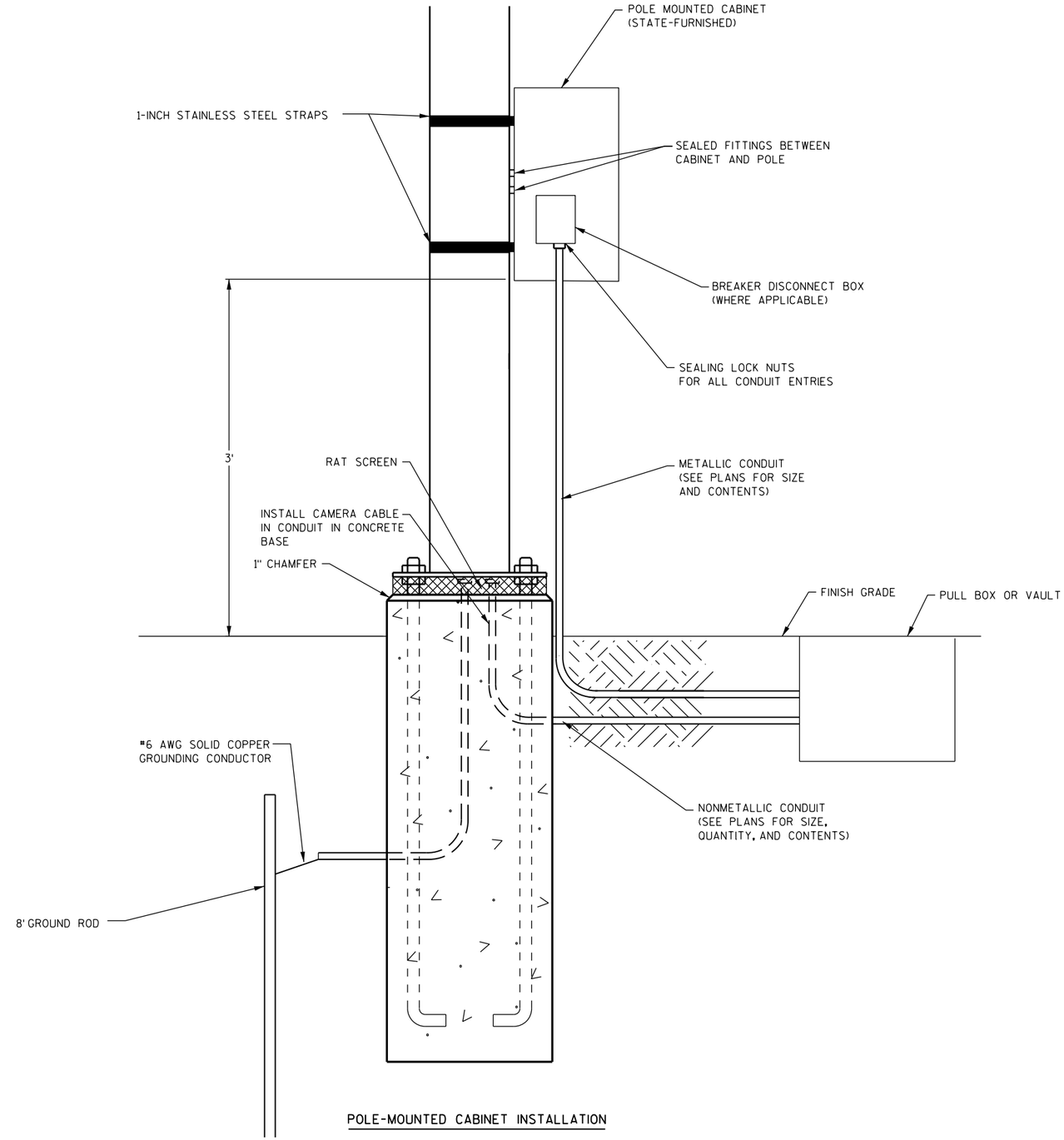
FIELD INSTALLED GROUNDING LUG

NOTES

1) ALL HARDWARE AND FASTENERS SHALL BE STAINLESS STEEL
2) POLE DRAWINGS SHOWN FOR BIDDING INFORMATION PURPOSES ONLY. POLES WILL BE STATE FURNISHED. BASE TO BE CONTRACTOR DESIGNED.
3) CONTRACTOR SHALL CONFIRM BOLT PATTERN OF CAMERA POLE PRIOR TO CONSTRUCTION OF CONCRETE BASE.
4) CONTRACTOR SHALL INSTALL GROUNDING LUG AS SHOWN

CAMERA POLES & FOUNDATIONS

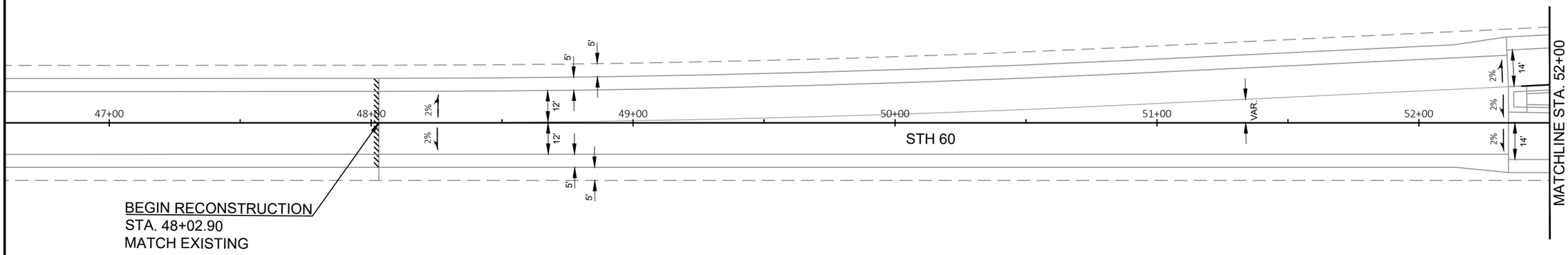
2



POLE-MOUNTED CABINET INSTALLATION

LEGEND

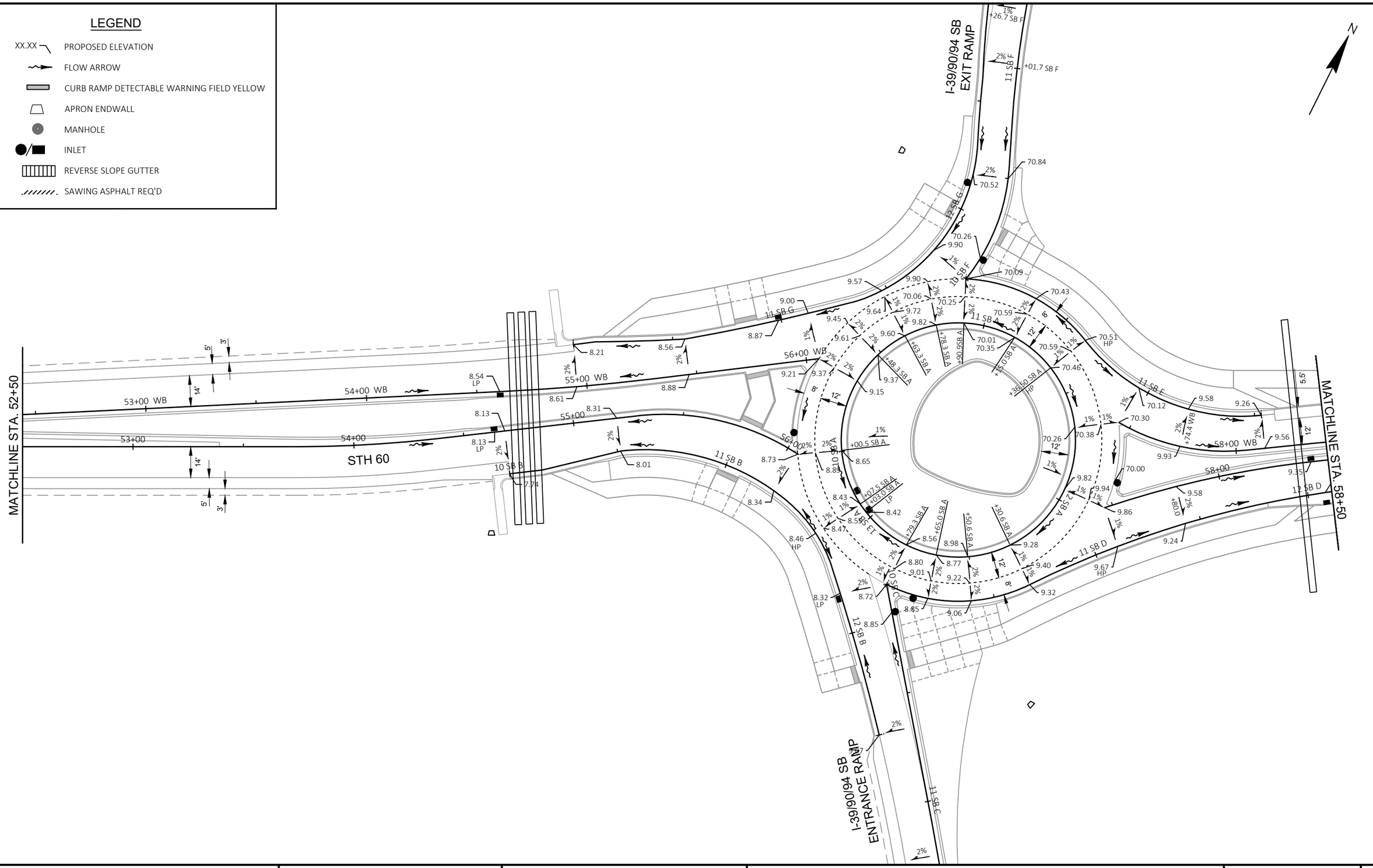
- XX.XX — PROPOSED ELEVATION
- FLOW ARROW
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- APRON ENDWALL
- MANHOLE
- INLET
- REVERSE SLOPE GUTTER
- SAWING ASPHALT REQ'D



2

LEGEND

- XX.XX — PROPOSED ELEVATION
- FLOW ARROW
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- APRON ENDWALL
- MANHOLE
- INLET
- REVERSE SLOPE GUTTER
- SAWING ASPHALT REQ'D



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	INTERSECTION DETAILS	SHEET 27	E

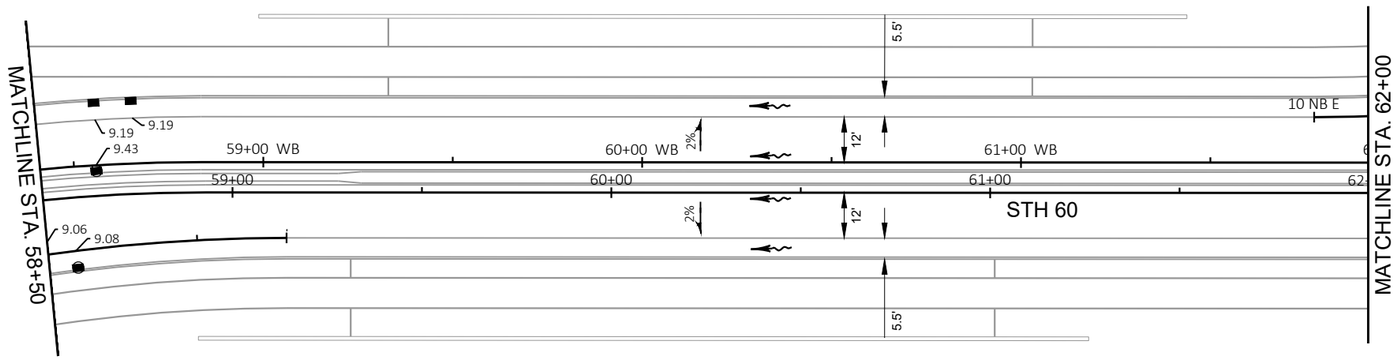
FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021102_id

PLOT DATE : 1/10/2022 10:29 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

LEGEND

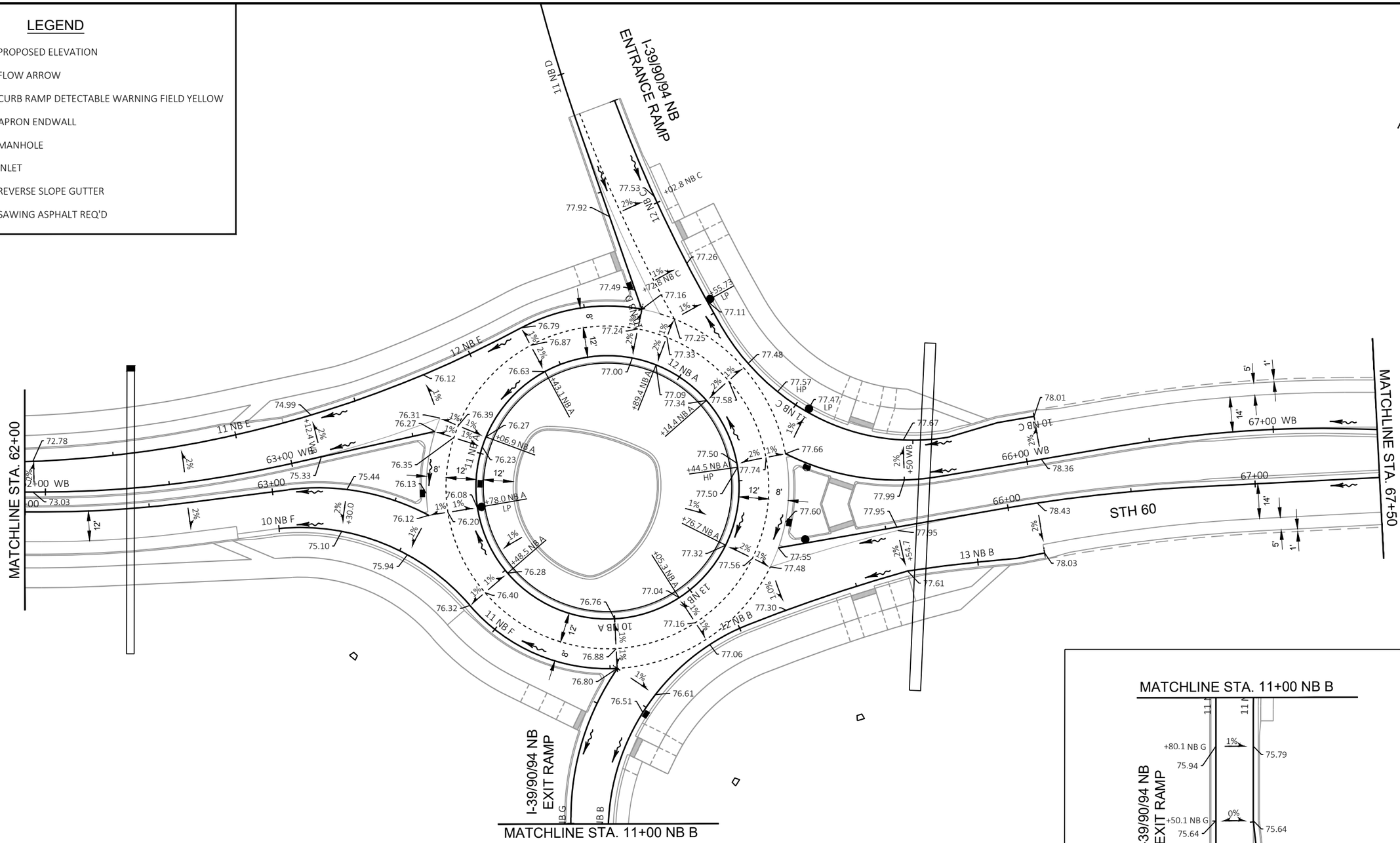
- XX.XX — PROPOSED ELEVATION
- FLOW ARROW
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- APRON ENDWALL
- MANHOLE
- INLET
- REVERSE SLOPE GUTTER
- SAWING ASPHALT REQ'D

2



LEGEND

- XX.XX — PROPOSED ELEVATION
- FLOW ARROW
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- APRON ENDWALL
- MANHOLE
- INLET
- REVERSE SLOPE GUTTER
- SAWING ASPHALT REQ'D



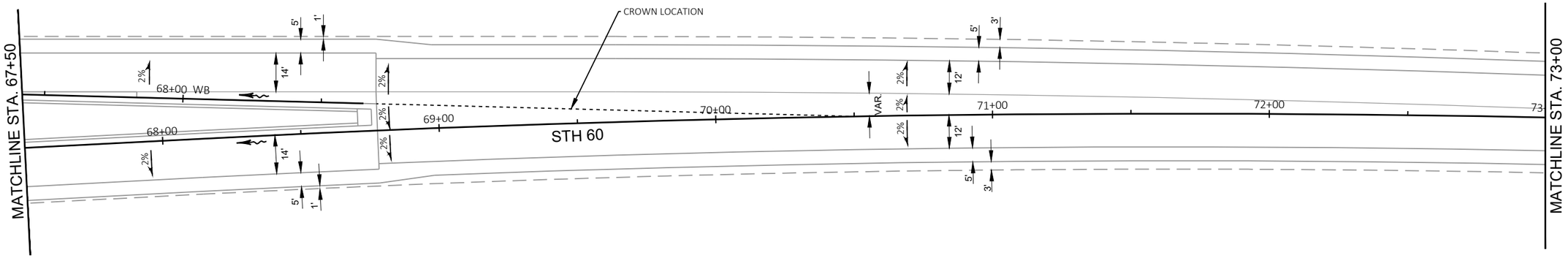
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	INTERSECTION DETAILS	SHEET 29	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021104_id

PLOT DATE : 1/10/2022 10:30 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

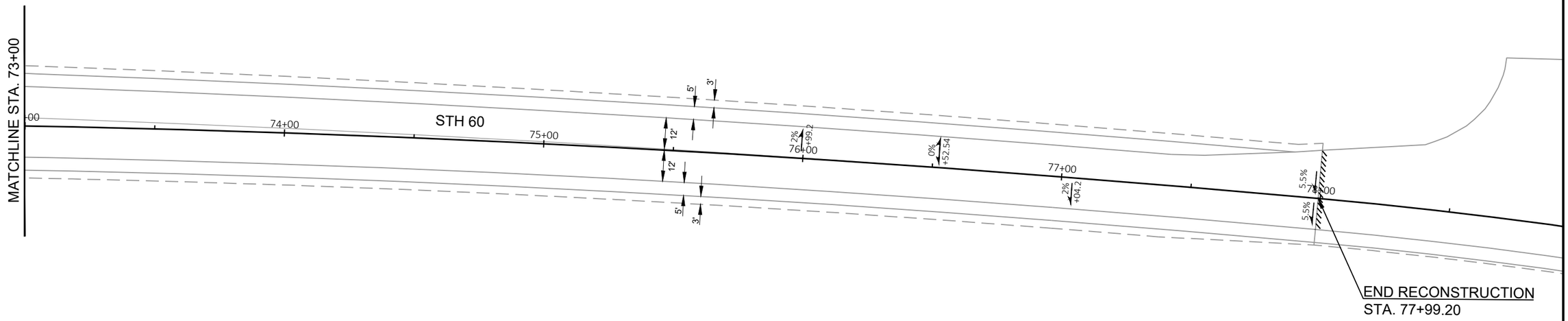


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	INTERSECTION DETAILS	SHEET 30	E

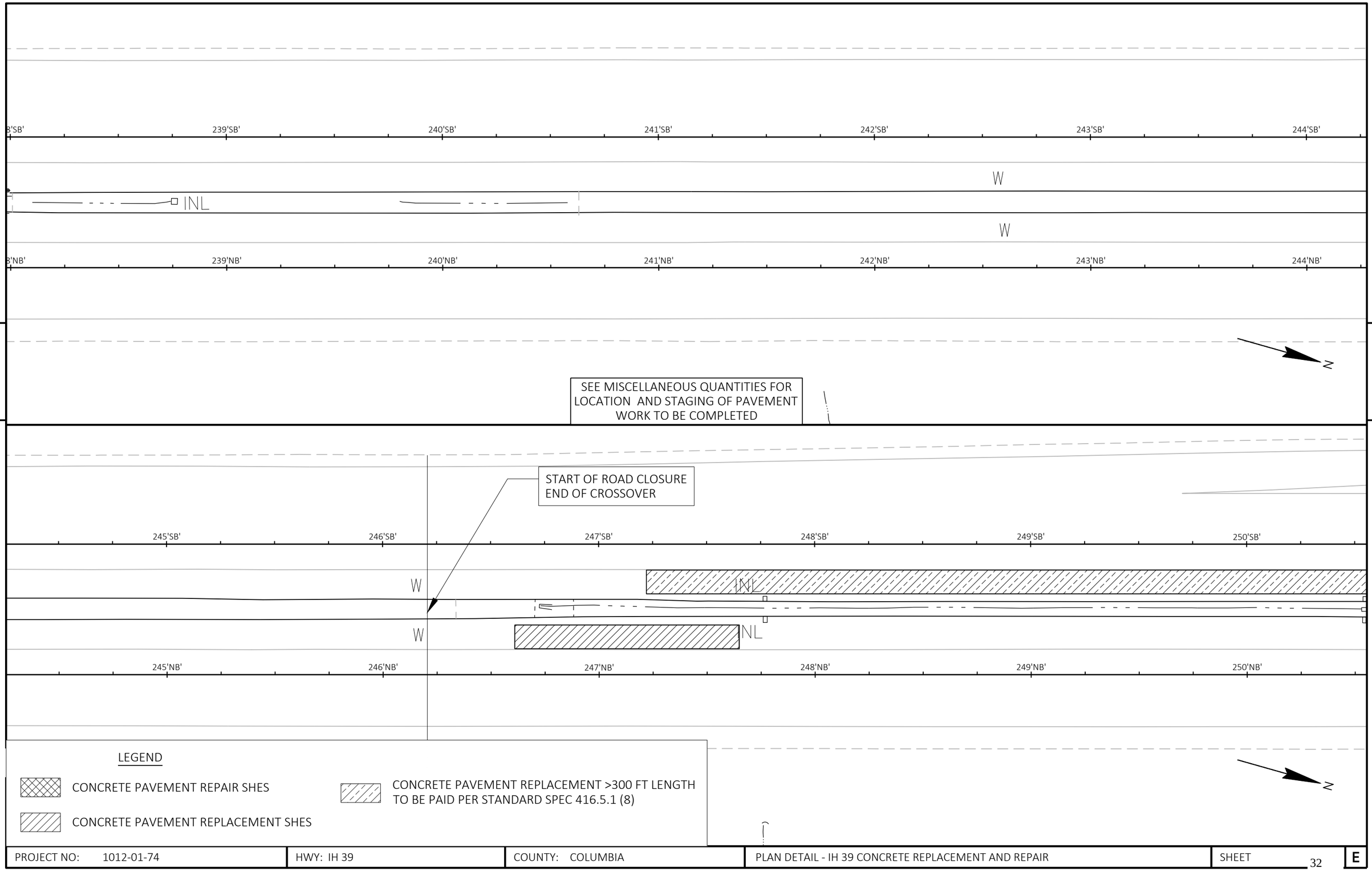
FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021105_id

PLOT DATE : 1/10/2022 10:30 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

2



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	INTERSECTION DETAILS	SHEET 31	E



5

5

LEGEND

CONCRETE PAVEMENT REPAIR SHES

CONCRETE PAVEMENT REPLACEMENT SHES

CONCRETE PAVEMENT REPLACEMENT >300 FT LENGTH TO BE PAID PER STANDARD SPEC 416.5.1 (8)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN DETAIL - IH 39 CONCRETE REPLACEMENT AND REPAIR	SHEET 32	E

251'SB' 252'SB' 253'SB' 254'SB' 255'SB' 256'SB'

INL INL W IN

INL INL W IN

251'NB' 252'NB' 253'NB' 254'NB' 255'NB' 256'NB'

5

SEE MISCELLANEOUS QUANTITIES FOR LOCATION AND STAGING OF PAVEMENT WORK TO BE COMPLETED

N

5

257'SB' 258'SB' 259'SB' 260'SB' 261'SB' 262'SB' 263'SB'

INL W

INL W

257'NB' 258'NB' 259'NB' 260'NB' 261'NB' 262'NB' 263'NB'

INL

N

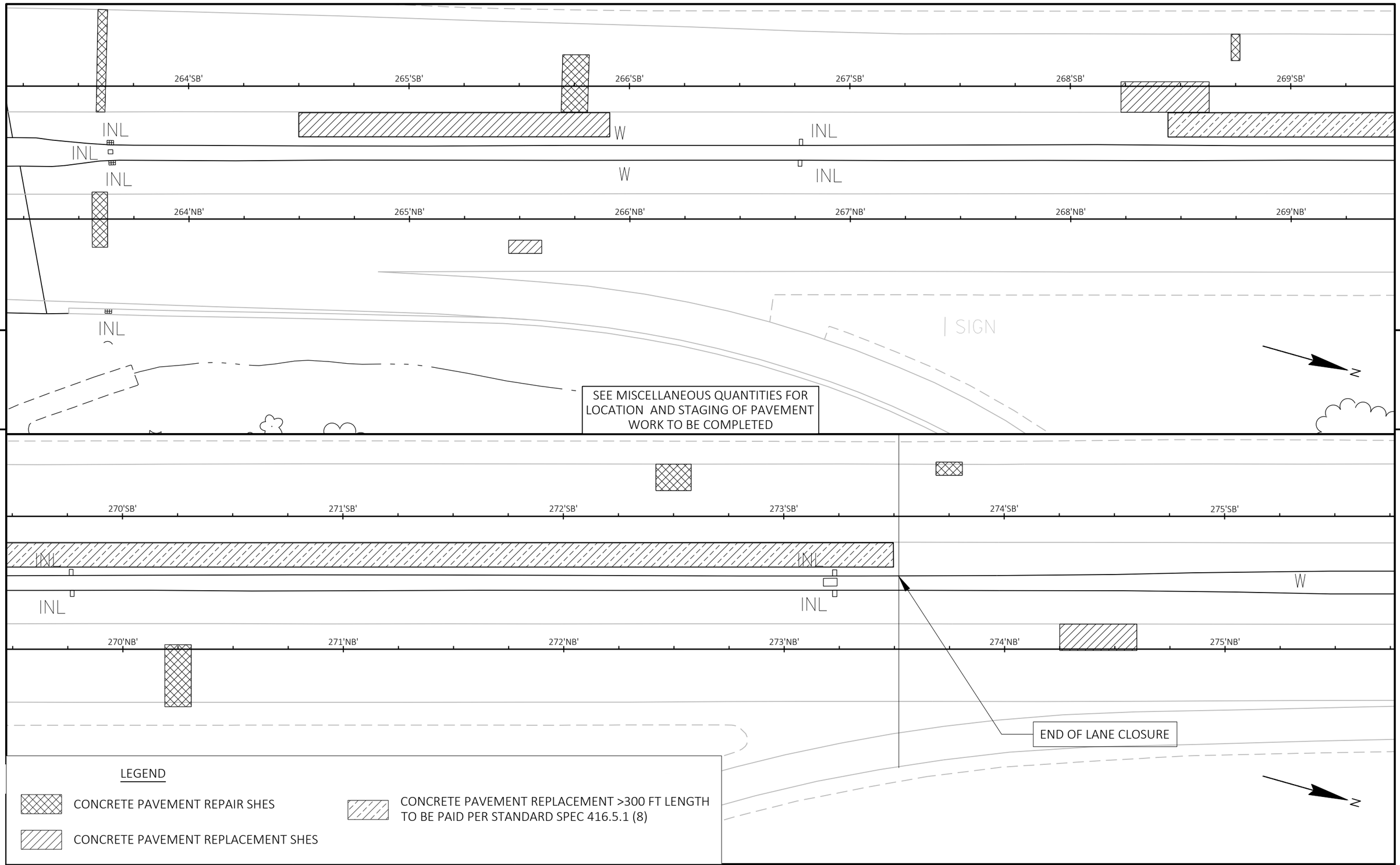
LEGEND

CONCRETE PAVEMENT REPAIR SHES

CONCRETE PAVEMENT REPLACEMENT SHES

CONCRETE PAVEMENT REPLACEMENT >300 FT LENGTH TO BE PAID PER STANDARD SPEC 416.5.1 (8)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN DETAIL - IH 39 CONCRETE REPLACEMENT AND REPAIR	SHEET 33	E

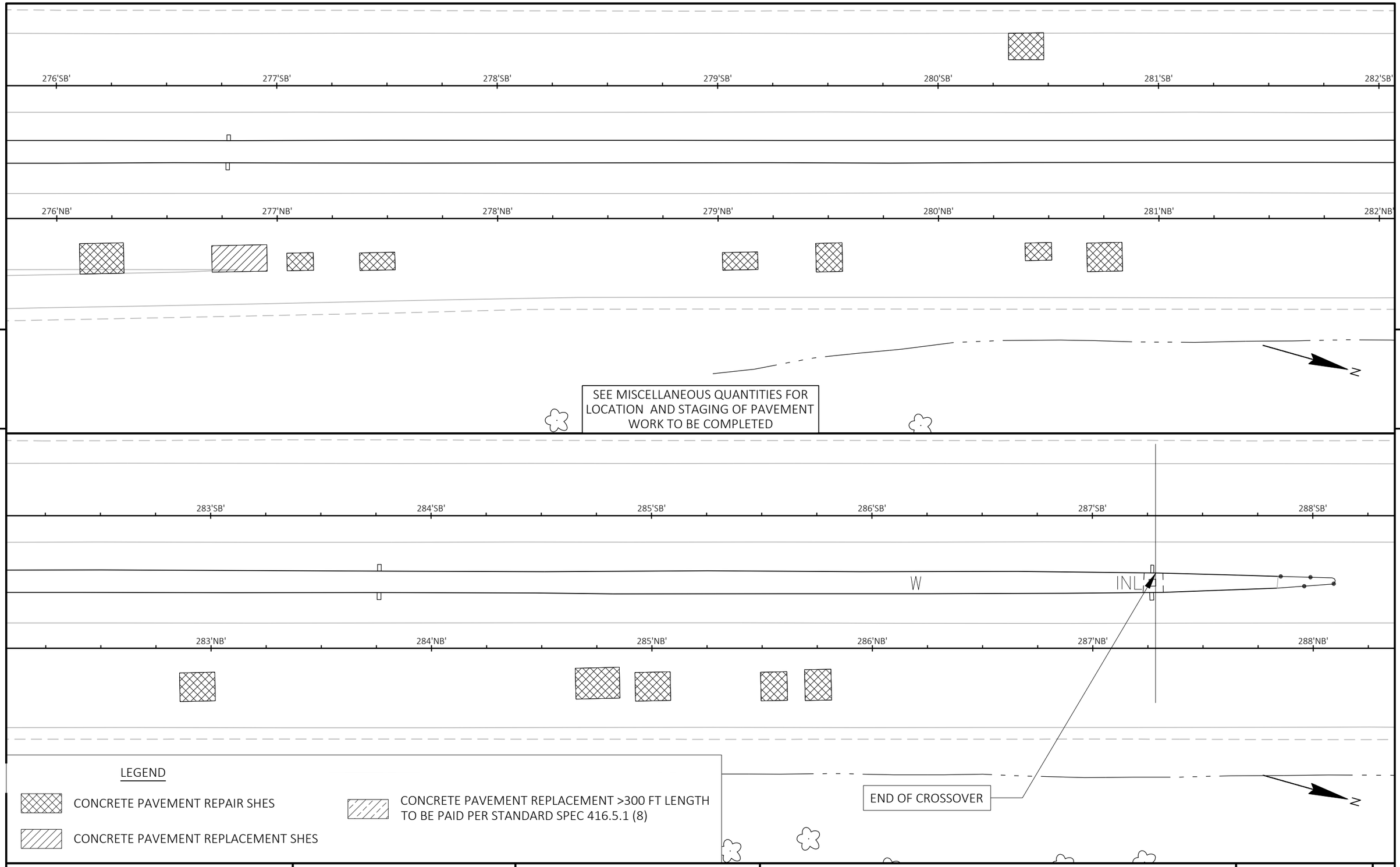


5 5

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN DETAIL - IH 39 CONCRETE REPLACEMENT AND REPAIR	SHEET 34	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\021203-PD_CONCRETE PATCHING DETAILS.DWG
LAYOUT NAME - 03

PLOT DATE : 1/19/2022 5:32 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN DETAIL - IH 39 CONCRETE REPLACEMENT AND REPAIR	SHEET 35	E

CPAS = CONCRETE PAVEMENT APPROACH SLAB

"SB"+00.00
-34.00'L

"SB"+80.00
-34.00'L

"SB"+10.00
-49.00'L

"SB"+31.00
-46.94'L

"SB"+77.27
-49.94'L

CONCRETE CURB & GUTTER
4-INCH SLOPED
36-INCH TYPE TBTT

"SB"+77.27
-46.94'L

"SB"+64.70
-36.00'L

42-INCH CONCRETE BARRIER
SINGLE SLOPE

"SB"+64.70
-24.00'L

CPAS

260"SB"

"SB"+64.70
12.00'R

"SB"+80.00
28.33'R

"SB"+00.00
28.33'R

"SB"+25.00
29.33'R

"SB"+91.51
29.33'R

15' 10.5'

EXISTING CONCRETE BARRIER
SINGLE-FACED 32-INCH

15' 10.5'

"NB"+15.95
-28.33'L

"NB"+92.48
-29.33'L

"NB"+00.00
-28.33'L

"NB"+25.00
-29.33'L

"NB"+80.29
-12.00'L

260"NB"

"NB"+80.29
24.00'R

CPAS

"NB"+80.29
36.00'R

"NB"+05.06
47.27'R

"NB"+25.00
36.00'R

"NB"+45.00
36.00'R

"NB"+75.00
49.00'R

CONCRETE BARRIER TRANSITIONS:
32-INCH SINGLE-FACED F SHAPE TO
36-INCH SINGLE SLOPE
AND 36-INCH TO 42-INCH SINGLE SLOPE

"NB"+15.95
49.00'R

"NB"+47.50
47.27'R

CONCRETE CURB & GUTTER
4-INCH SLOPED
36-INCH TYPE TBTT

"NB"+05.06
49.94'R

CPAS = CONCRETE PAVEMENT APPROACH SLAB

"SB"+15.81
-49.00'L

"SB"+50.10
-49.00'L

"SB"+80.10
-36.00'L

"SB"+42.25
-36.00'L

"SB"+50.00
-34.00'L

"SB"+04.82
-34.00'L

"SB"+00.10
-36.00'L

"SB"+42.25
-24.00'L

"SB"+50.00
-24.00'L

CPAS

42-INCH CONCRETE BARRIER
SINGLE SLOPE

265"SB"

270"SB"

"SB"+50.00
12.00'R

"SB"+30.06
29.33'R

"SB"+90.00
29.33'R

"SB"+18.80
28.33'R

"SB"+00.00
12.00'R

"NB"+00.00
-28.33'L

10.5' 15'

10.5' 15'

"NB"+31.02
-29.33'L

"NB"+90.00
-29.33'L

"NB"+18.80
-28.33'L

"NB"+50.00
-12.00'L

CONCRETE BARRIER TRANSITIONS:
32-INCH SINGLE-FACED F SHAPE TO
36-INCH SINGLE SLOPE
AND 36-INCH TO 42-INCH SINGLE SLOPE

"NB"+57.83
-12.00'L

265"NB"

270"NB"

CPAS

"NB"+57.83
24.00'R

"NB"+50.00
24.00'R

"NB"+40.00
34.00'R

"NB"+00.00
24.00'R

"NB"+00.00
34.00'R

"NB"+57.83
36.00'R

"NB"+50.00
49.00'R

"NB"+45.26
49.00'R

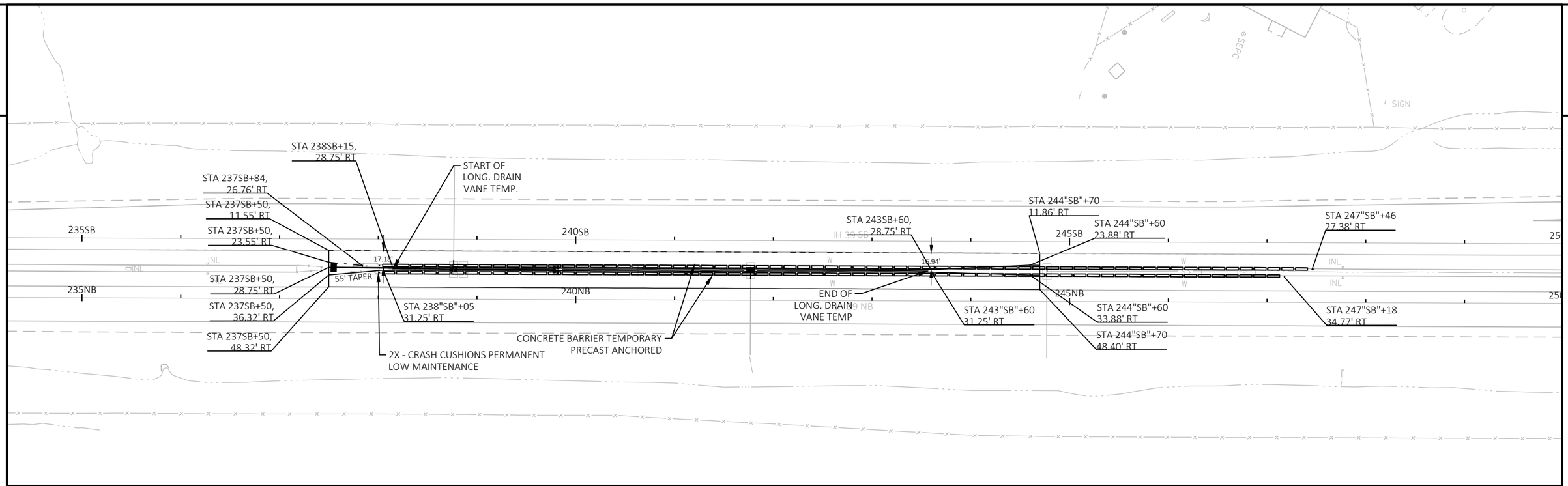
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN DETAIL: IH 39	SHEET 36	E

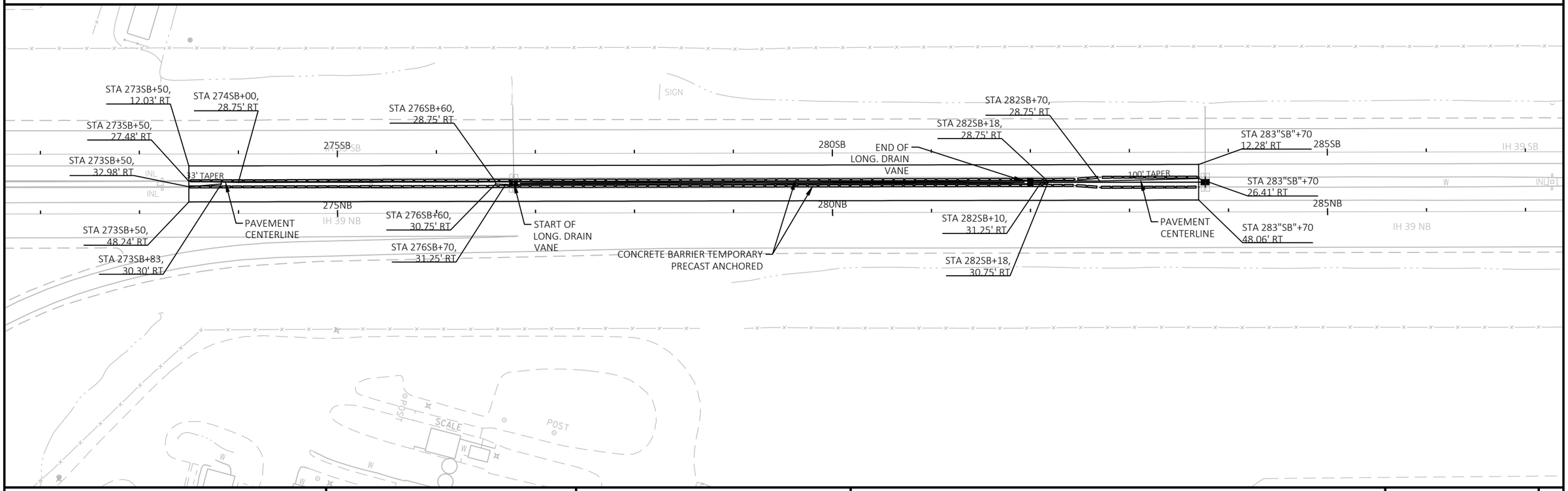
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\021101_PD.DWG
LAYOUT NAME - 021102_pd

PLOT DATE : 1/19/2022 5:33 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



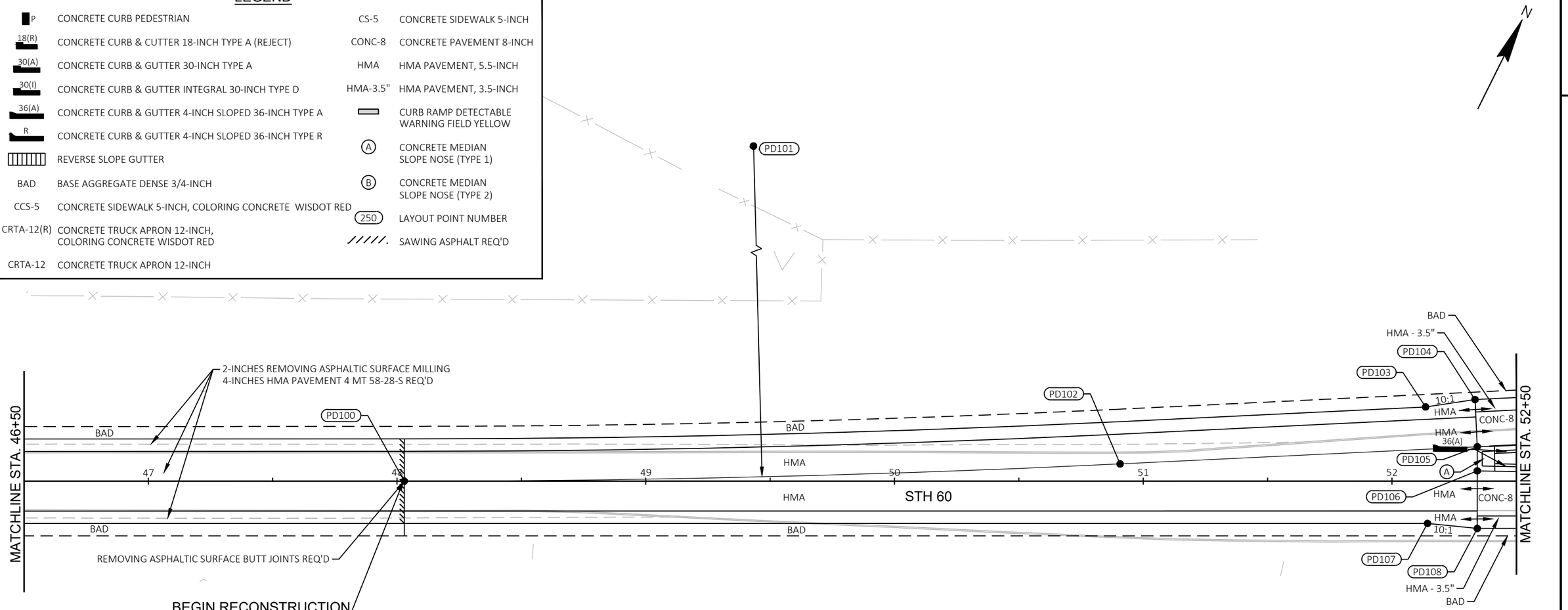


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN DETAIL: CROSSOVER PAVEMENT PERMANENT DETAIL	SHEET 37	E

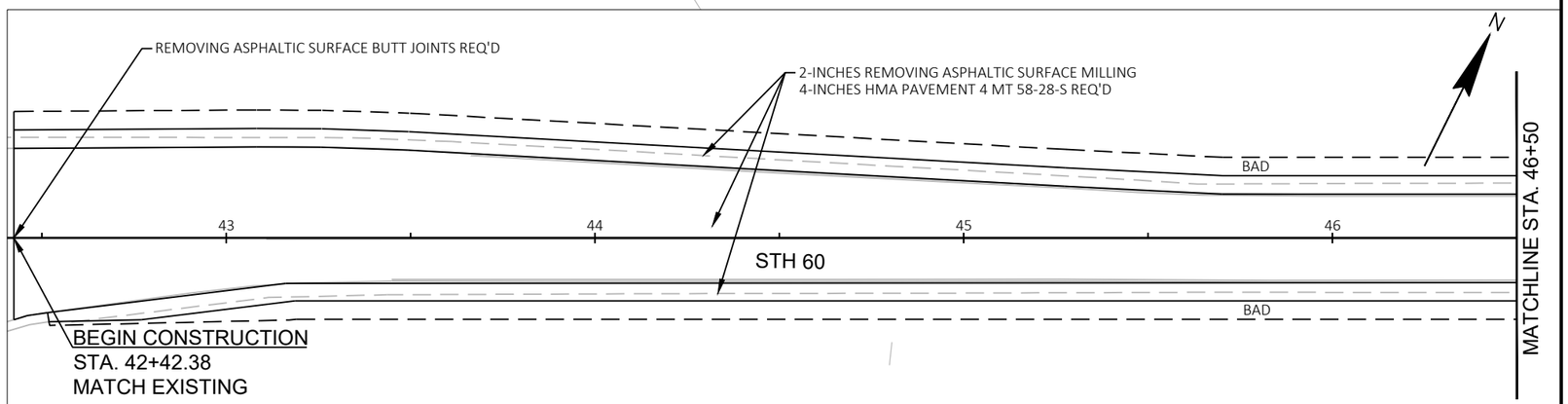
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\021202-PD_XO DETAILS.DWG
LAYOUT NAME - XO DETAIL
PLOT DATE : 1/19/2022 5:34 PM
PLOT BY : ANDERSON, SHAUN M
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

LEGEND

P	CONCRETE CURB PEDESTRIAN	CS-5	CONCRETE SIDEWALK 5-INCH
18(R)	CONCRETE CURB & CUTTER 18-INCH TYPE A (REJECT)	CONC-8	CONCRETE PAVEMENT 8-INCH
30(A)	CONCRETE CURB & GUTTER 30-INCH TYPE A	HMA	HMA PAVEMENT, 5.5-INCH
30(I)	CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D	HMA-3.5"	HMA PAVEMENT, 3.5-INCH
36(A)	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A		CURB RAMP DETECTABLE WARNING FIELD YELLOW
R	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	A	CONCRETE MEDIAN SLOPE NOSE (TYPE 1)
	REVERSE SLOPE GUTTER	B	CONCRETE MEDIAN SLOPE NOSE (TYPE 2)
BAD	BASE AGGREGATE DENSE 3/4-INCH	250	LAYOUT POINT NUMBER
CCS-5	CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE WISDOT RED		SAWING ASPHALT REQ'D
CRTA-12(R)	CONCRETE TRUCK APRON 12-INCH, COLORING CONCRETE WISDOT RED		
CRTA-12	CONCRETE TRUCK APRON 12-INCH		



STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	REMARKS
PD100	48+02.90 EB	0.00	319096.70	538132.45	– – –	MATCH EXISTING
PD101	48+02.90	6000.00 LT	324468.72	535460.10	– – –	R=1000'
PD102	50+90.66	6.90 LT	319231.05	538387.02	1070.540	END OF RADIUS
PD103	52+13.45	29.82 LT	319306.26	538486.75	1069.760	BEGIN TAPER
PD104	52+33.34	32.78 LT	319317.76	538503.24	1069.580	END TAPER
PD105	52+34.25	13.80 LT	319301.18	538512.51	1069.990	PAVEMENT TYPE TRANSITION
PD106	52+34.25	4.13 LT	319292.52	538516.81	1069.800	PAVEMENT TYPE TRANSITION
PD107	52+14.25	17.00 RT	319264.69	538508.32	1069.500	BEGIN TAPER
PD108	52+34.25	19.00 RT	319271.81	538527.11	1069.300	END TAPER

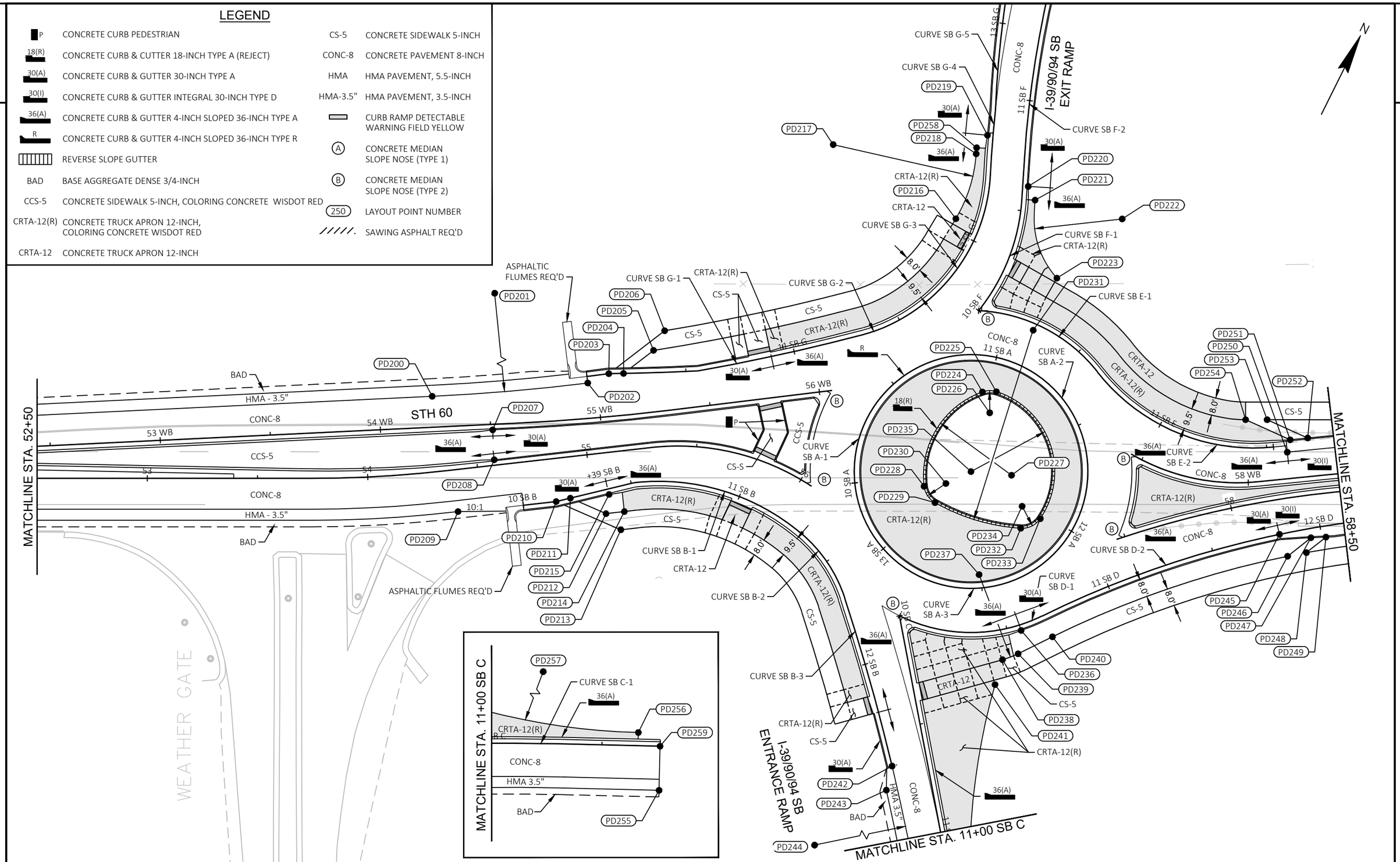


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN DETAILS	SHEET 38	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021201_pd
PLOT DATE : 1/17/2022 6:57 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

LEGEND

P	CONCRETE CURB PEDESTRIAN	CS-5	CONCRETE SIDEWALK 5-INCH
18(R)	CONCRETE CURB & CUTTER 18-INCH TYPE A (REJECT)	CONC-8	CONCRETE PAVEMENT 8-INCH
30(A)	CONCRETE CURB & GUTTER 30-INCH TYPE A	HMA	HMA PAVEMENT, 5.5-INCH
30(I)	CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D	HMA-3.5"	HMA PAVEMENT, 3.5-INCH
36(A)	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A		CURB RAMP DETECTABLE WARNING FIELD YELLOW
R	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	A	CONCRETE MEDIAN SLOPE NOSE (TYPE 1)
	REVERSE SLOPE GUTTER	B	CONCRETE MEDIAN SLOPE NOSE (TYPE 2)
BAD	BASE AGGREGATE DENSE 3/4-INCH	250	LAYOUT POINT NUMBER
CCS-5	CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE WISDOT RED	//////	SAWING ASPHALT REQ'D
CRTA-12(R)	CONCRETE TRUCK APRON 12-INCH, COLORING CONCRETE WISDOT RED		
CRTA-12	CONCRETE TRUCK APRON 12-INCH		



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN DETAILS	SHEET 39 E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021202_pd

PLOT DATE : 1/11/2022 5:04 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

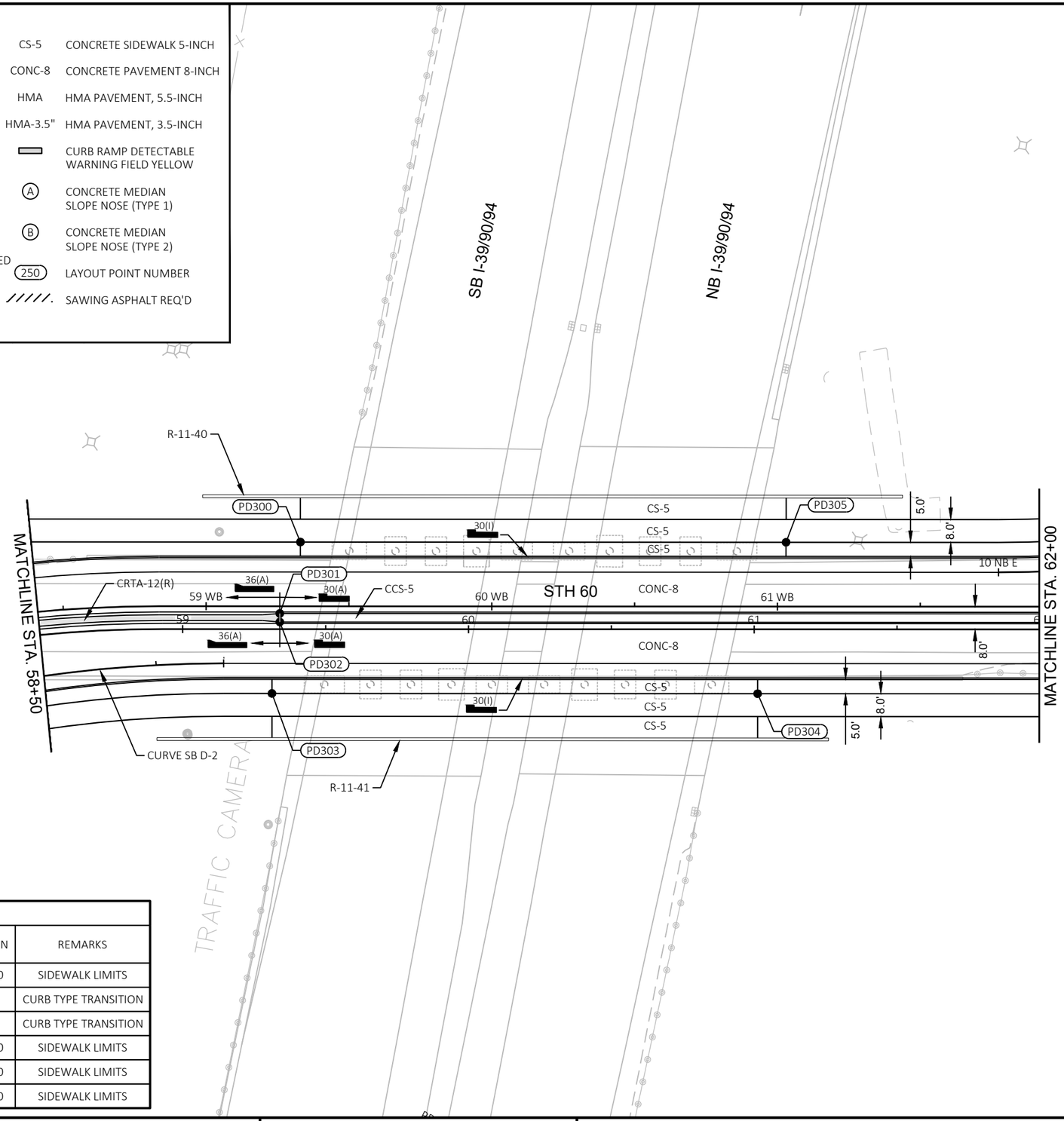
STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	REMARKS
PD200	54+24.19 WB	14.00 LT	319408.95	538676.66	1068.340	END OF RADIUS
PD201	54+24.19 WB	962.00 LT	320236.50	538214.21	– – –	R=948'
PD202	10+05.00 SB G	3.00 RT	319445.79	538737.17	1068.290	END OF RADIUS
PD203	10+15.00 SB G	0.00	319453.86	538743.82	1068.270	BIKE OPENING
PD204	10+21.68 SB G	0.00	319456.91	538749.77	1068.320	BIKE OPENING
PD205	10+35.61 SB G	10.12 LT	319472.33	538757.30	– – –	FOS
PD206	10+41.03 SB G	18.86 LT	319482.55	538757.84	– – –	BOS
PD207	54+50.90 WB	2.50 RT	319407.58	538708.03	– – –	CURB TYPE TRANSITION
PD208	54+57.92	2.50 LT	319395.73	538714.67	– – –	CURB TYPE TRANSITION
PD209	54+38.97	18.99 RT	319367.39	538710.45	1067.790	BEGIN TAPER
PD210	10+15.00 SB B	0.00	319391.28	538748.28	1067.760	BIKE OPENING
PD211	10+21.63 SB B	0.00	319395.55	538753.36	1067.800	BIKE OPENING
PD212	10+35.70 SB B	10.65 RT	319396.44	538770.98	– – –	FOS
PD213	10+40.51 SB B	19.31 RT	319392.91	538780.24	– – –	BOS
PD214	10+44.01 SB B	11.69 RT	319401.00	538778.01	– – –	TRUCK APRON LIMITS
PD215	10+39.09 SB B	2.50 RT	319404.87	538768.33	– – –	CURB TYPE TRANSITION
PD216	12+06.57 SB G	11.34 LT	319586.87	538853.51	1070.760	END OF RADIUS
PD217	12+40.16 SB G	72.00 LT	319592.17	538788.73	– – –	R=65'
PD218	12+40.16 SB G	7.00 LT	319617.32	538848.67	1071.270	END OF RADIUS
PD219	12+48.87 SB G	2.50 LT	319627.16	538849.50	– – –	CURB TYPE TRANSITION
PD220	10+61.11 SB F	2.50 RT	319614.60	538876.38	– – –	CURB TYPE TRANSITION
PD221	10+55.11 SB F	6.00 RT	319610.42	538881.93	1071.240	END OF RADIUS
PD222	10+51.16 SB F	46.13 RT	319620.40	538921.12	– – –	R=40'
PD223	10+27.08 SB E	22.97 LT	319583.15	538906.54	1070.850	END OF RADIUS
PD224	10+95.93 SB A	16.50 RT	319521.92	538899.30	1070.480	END OF RADIUS
PD225	11+04.68 SB A	15.00 RT	319524.81	538904.92	1070.590	END OF RADIUS
PD226	11+04.68 SB A	25.00 RT	319514.93	538906.45	– – –	R=10'
PD227	11+76.35 SB A	34.56 RT	319493.98	538927.92	– – –	R=40'
PD228	13+22.15 SB A	30.67 RT	319471.83	538894.62	1069.050	END OF RADIUS
PD229	13+00.47 SB A	31.43 RT	319467.38	538902.39	1068.970	END OF RADIUS

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	REMARKS
PD230	13+14.75 SB A	40.39 RT	319477.36	538902.95	– – –	R=10'
PD231	10+26.83 SB E	2.95 RT	319557.24	538907.43	– – –	R=90'
PD232	12+16.72 SB A	18.82 RT	319474.30	538942.39	1069.910	END OF RADIUS
PD233	12+03.22 SB A	15.00 RT	319482.18	538948.41	1070.070	END OF RADIUS
PD234	12+03.22 SB A	25.00 RT	319483.52	538938.50	– – –	R=10'
PD235	11+11.00 SB A	53.00 RT	319487.26	538910.75	– – –	R=38'
PD236	10+55.99 SB D	2.50 RT	319432.93	538963.17	– – –	CURB TYPE TRANSITION
PD237	12+50.75 SB A	6.15 RT	319447.08	538934.83	– – –	R=40'
PD238	10+45.77 SB D	13.46 RT	319417.28	538961.51	1069.650	FOS / END OF RADIUS
PD239	10+52.14 SB D	12.29 RT	319422.85	538966.66	1069.790	FOS / END OF RADIUS
PD240	10+67.10 SB D	10.50 RT	319436.65	538977.17	– – –	FOS
PD241	10+41.85 SB D	24.19 RT	319405.64	538963.51	1069.730	END OF RADIUS
PD242	10+66.31 SB C	15.99 RT	319351.78	538938.16	1069.070	END OF CURB & GUTTER
PD243	10+76.53 SB C	20.58 RT	319340.87	538940.68	1069.080	END TAPER
PD244	11+31.65 SB C	965.00 RT	318743.21	538208.67	– – –	R=950'
PD245	11+81.25 SB D	0.00	319524.15	539048.68	1069.060	CURB TYPE TRANSITION
PD246	11+82.88 SB D	10.50 RT	319516.88	539056.43	1069.800	FOS
PD247	11+95.06 SB D	4.21 RT	319529.13	539062.17	– – –	BIKE OPENING
PD248	11+91.76 SB D	10.50 RT	319522.14	539063.32	1069.790	FOS
PD249	12+01.88 SB D	5.05 RT	319532.41	539068.13	– – –	BIKE OPENING
PD250	58+18.98 WB	12.00 LT	319559.04	539035.29	1069.290	CURB TYPE TRANSITION
PD251	58+20.86 WB	17.50 LT	319564.69	539033.94	– – –	BIKE OPENING
PD252	58+28.86 WB	17.50 LT	319568.95	539040.71	– – –	BIKE OPENING
PD253	11+51.25 SB E	12.57 LT	319568.18	539020.55	1069.660	FOS
PD254	11+39.89 SB E	12.74 LT	319563.83	539011.81	1069.740	FOS
PD255	11+76.38 SB C	20.00 RT	319261.31	539000.26	– – –	EDGE OF SHOULDER
PD256	11+66.38 SB C	6.00 LT	319284.66	539015.45	1070.670	TRUCK APRON LIMITS
PD257	11+66.41 SB C	306.00 LT	319460.62	539258.43	– – –	R=300'
PD258	12+42.90 SB G	7.00 LT	319619.88	538847.60	1071.320	TRUCK APRON LIMITS
PD259	11+76.37 SB C	0.00	319273.05	539016.45	1070.490	END OF CURB & GUTTER

2

LEGEND

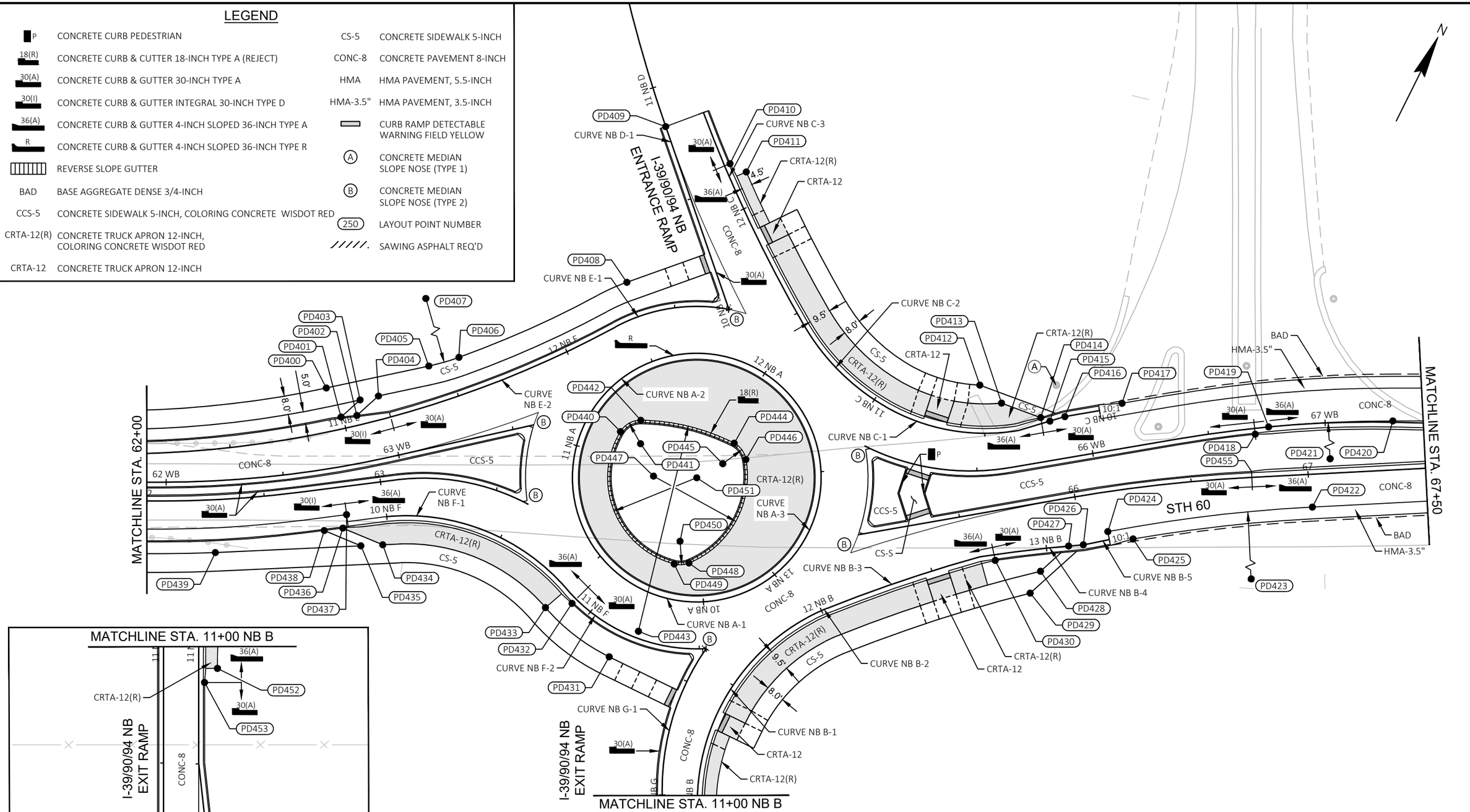
P	CONCRETE CURB PEDESTRIAN	CS-5	CONCRETE SIDEWALK 5-INCH
18(R)	CONCRETE CURB & CUTTER 18-INCH TYPE A (REJECT)	CONC-8	CONCRETE PAVEMENT 8-INCH
30(A)	CONCRETE CURB & GUTTER 30-INCH TYPE A	HMA	HMA PAVEMENT, 5.5-INCH
30(I)	CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D	HMA-3.5"	HMA PAVEMENT, 3.5-INCH
36(A)	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A		CURB RAMP DETECTABLE WARNING FIELD YELLOW
R	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	(A)	CONCRETE MEDIAN SLOPE NOSE (TYPE 1)
	REVERSE SLOPE GUTTER	(B)	CONCRETE MEDIAN SLOPE NOSE (TYPE 2)
BAD	BASE AGGREGATE DENSE 3/4-INCH	250	LAYOUT POINT NUMBER
CCS-5	CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE WISDOT RED	//////	SAWING ASPHALT REQ'D
CRTA-12(R)	CONCRETE TRUCK APRON 12-INCH, COLORING CONCRETE WISDOT RED		
CRTA-12	CONCRETE TRUCK APRON 12-INCH		



STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	REMARKS
PD300	59+33.01 WB	22.50 LT	319623.44	539131.78	1070.230	SIDEWALK LIMITS
PD301	59+25.82 WB	2.50 RT	319597.85	539136.46	– – –	CURB TYPE TRANSITION
PD302	59+33.97	2.50 LT	319595.16	539137.79	– – –	CURB TYPE TRANSITION
PD303	59+31.23	22.50 RT	319571.56	539146.47	1070.210	SIDEWALK LIMITS
PD304	61+01.23	22.50 RT	319647.20	539298.71	1072.000	SIDEWALK LIMITS
PD305	61+03.01 WB	22.50 LT	319699.08	539284.03	1072.020	SIDEWALK LIMITS

LEGEND

P	CONCRETE CURB PEDESTRIAN	CS-5	CONCRETE SIDEWALK 5-INCH
18(R)	CONCRETE CURB & CUTTER 18-INCH TYPE A (REJECT)	CONC-8	CONCRETE PAVEMENT 8-INCH
30(A)	CONCRETE CURB & GUTTER 30-INCH TYPE A	HMA	HMA PAVEMENT, 5.5-INCH
30(I)	CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D	HMA-3.5"	HMA PAVEMENT, 3.5-INCH
36(A)	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A		CURB RAMP DETECTABLE WARNING FIELD YELLOW
R	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	A	CONCRETE MEDIAN SLOPE NOSE (TYPE 1)
	REVERSE SLOPE GUTTER	B	CONCRETE MEDIAN SLOPE NOSE (TYPE 2)
BAD	BASE AGGREGATE DENSE 3/4-INCH	250	LAYOUT POINT NUMBER
CCS-5	CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE WISDOT RED		SAWING ASPHALT REQ'D
CRTA-12(R)	CONCRETE TRUCK APRON 12-INCH, COLORING CONCRETE WISDOT RED		
CRTA-12	CONCRETE TRUCK APRON 12-INCH		



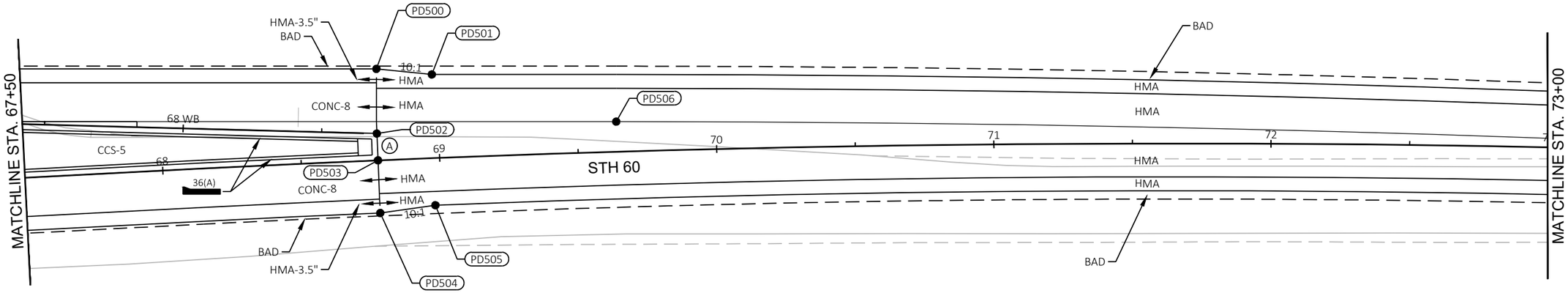
2

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	REMARKS
PD400	10+95.50 NB E	18.50 LT	319788.44	539424.14	1075.000	BOS
PD401	10+99.10 NB E	5.05 LT	319780.16	539435.30	– – –	BIKE OPENING
PD402	11+05.90 NB E	4.21 LT	319783.79	539441.03	– – –	BIKE OPENING
PD403	11+08.81 NB E	10.31 LT	319790.30	539439.30	1075.190	FOS
PD404	11+17.01 NB E	10.00 LT	319795.30	539445.57	1075.340	FOS
PD405	11+41.95 NB E	16.19 LT	319816.31	539459.08	1075.820	BOS / END OF RADIUS
PD406	11+55.81 NB E	15.50 LT	319825.35	539468.97	1076.140	BOS / END OF RADIUS
PD407	11+55.81 NB E	115.50 LT	319894.49	539396.72	– – –	R=100'
PD408	12+34.27 NB E	15.50 LT	319885.89	539518.81	1077.610	BOS
PD409	10+82.59 NB D	0.00 LT	319952.70	539504.07	1078.100	END OF CURB & GUTTER
PD410	12+20.05 NB C	2.50 RT	319950.79	539535.68	– – –	CURB TYPE TRANSITION
PD411	12+14.04 NB C	7.50 RT	319950.73	539543.46	1078.110	END TRUCK APRON
PD412	10+52.88 NB C	20.50 RT	319913.68	539673.12	1078.200	BOS
PD413	10+41.69 NB C	12.50 RT	319910.92	539684.84	1078.180	FOS
PD414	10+24.97 NB C	2.56 RT	319912.87	539702.52	– – –	CURB TYPE TRANSITION
PD415	10+21.65 NB C	0.00 LT	319913.26	539706.69	1077.880	BIKE OPENING
PD416	10+15.00 NB C	0.00 LT	319917.81	539711.55	1077.910	BIKE OPENING
PD417	66+15.86 WB	19.00 LT	319933.76	539730.86	1078.010	END TAPER
PD418	66+69.81 WB	2.50 RT	319947.25	539787.58	– – –	CURB TYPE TRANSITION
PD419	66+75.84 WB	0.00	319952.58	539791.33	1078.840	END OF RADIUS
PD420	67+28.85 WB	0.57 LT	319978.46	539837.61	1079.190	END OF RADIUS
PD421	67+43.38 WB	549.25 RT	319486.02	540082.57	– – –	R=550'
PD422	67+01.08	14.00 RT	319930.28	539823.24	1078.760	EOP / END OF RADIUS
PD423	67+01.08	662.00 RT	319365.76	540141.39	– – –	R=648'
PD424	66+11.68	16.85 RT	319882.07	539749.82	1078.100	EOP / END OF RADIUS
PD425	66+22.17	21.48 RT	319884.05	539760.83	1078.090	END OF TAPER
PD426	13+15.79 NB B	0.00 LT	319872.40	539742.96	1077.920	BIKE OPENING
PD427	13+09.49 NB B	0.00 LT	319869.12	539737.58	1077.880	BIKE OPENING

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	REMARKS
PD428	12+96.36 NB B	9.51 RT	319854.13	539731.63	– – –	FOS
PD429	12+90.80 NB B	18.26 RT	319843.82	539731.85	– – –	BOS
PD430	12+77.64 NB B	2.50 RT	319849.68	539712.31	– – –	CURB TYPE TRANSITION
PD431	11+15.76 NB F	12.00 RT	319739.55	539583.21	1077.330	FOS
PD432	10+91.88 NB F	2.50 RT	319752.89	539558.86	– – –	CURB TYPE TRANSITION
PD433	10+86.08 NB F	12.00 RT	319746.24	539549.55	1076.660	TRUCK APRON LIMITS
PD434	62+97.53	26.72 RT	319739.31	539475.47	– – –	FOS
PD435	62+88.21	25.96 RT	319734.77	539467.30	– – –	FOS
PD436	62+81.56	17.50 RT	319738.11	539457.07	– – –	BIKE OPENING
PD437	62+83.86	12.00 RT	319743.96	539455.93	1074.280	CURB TYPE TRANSITION
PD438	62+73.56	17.50 RT	319733.66	539450.42	– – –	BIKE OPENING
PD439	62+28.08	22.50 RT	319704.57	539413.02	1073.780	FOS
PD440	11+14.99 NB A	15.00 RT	319827.69	539544.74	1076.730	END OF RADIUS
PD441	11+14.99 NB A	25.00 RT	319826.87	539554.71	– – –	R=10'
PD442	11+28.48 NB A	18.82 RT	319835.87	539550.35	1076.900	END OF RADIUS
PD443	11+22.47 NB F	2.95 LT	319754.84	539589.53	– – –	R=90'
PD444	12+13.23 NB A	31.28 RT	319844.84	539590.38	1077.790	END OF RADIUS
PD445	12+26.51 NB A	40.39 RT	319834.84	539589.90	– – –	R=10'
PD446	12+33.91 NB A	30.67 RT	319840.80	539597.93	1077.870	END OF RADIUS
PD447	10+88.11 NB A	34.56 RT	319816.96	539565.81	– – –	R=40'
PD448	10+07.69 NB A	16.50 RT	319790.54	539595.84	1077.080	END OF RADIUS
PD449	10+16.45 NB A	15.00 RT	319787.35	539590.37	1076.970	END OF RADIUS
PD450	10+16.45 NB A	25.00 RT	319797.14	539588.33	– – –	R=10'
PD451	12+21.60 NB A	53.00 RT	319824.55	539582.61	– – –	R=38'
PD452	10+90.63 NB B	8.00 RT	319698.53	539654.55	1076.230	TRUCK APRON LIMITS
PD453	10+84.63 NB B	2.50 RT	319690.70	539652.32	– – –	CURB TYPE TRANSITION
PD454	12+00.83 SB G	808.20 RT	319606.80	539673.00	1075.080	END OF CURB & GUTTER
PD455	66+75.96	2.50 LT	319932.32	539793.26	– – –	CURB TYPE TRANSITION

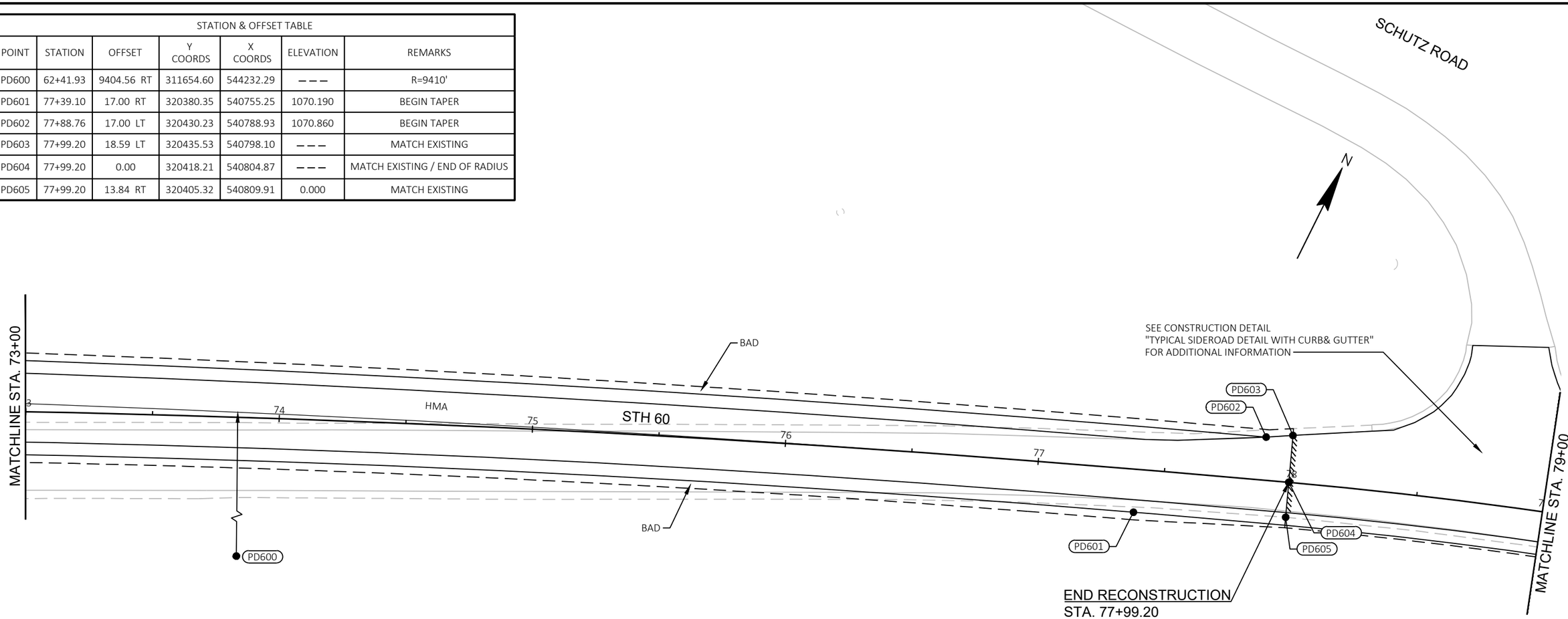
LEGEND

P	CONCRETE CURB PEDESTRIAN	CS-5	CONCRETE SIDEWALK 5-INCH
18(R)	CONCRETE CURB & CUTTER 18-INCH TYPE A (REJECT)	CONC-8	CONCRETE PAVEMENT 8-INCH
30(A)	CONCRETE CURB & GUTTER 30-INCH TYPE A	HMA	HMA PAVEMENT, 5.5-INCH
30(I)	CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D	HMA-3.5"	HMA PAVEMENT, 3.5-INCH
36(A)	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A		CURB RAMP DETECTABLE WARNING FIELD YELLOW
R	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	A	CONCRETE MEDIAN SLOPE NOSE (TYPE 1)
	REVERSE SLOPE GUTTER	B	CONCRETE MEDIAN SLOPE NOSE (TYPE 2)
BAD	BASE AGGREGATE DENSE 3/4-INCH	250	LAYOUT POINT NUMBER
CCS-5	CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE WISDOT RED	//////	SAWING ASPHALT REQ'D
CRTA-12(R)	CONCRETE TRUCK APRON 12-INCH, COLORING CONCRETE WISDOT RED		
CRTA-12	CONCRETE TRUCK APRON 12-INCH		



STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	REMARKS
PD500	68+78.54	32.94 LT	320058.19	539955.22	1079.260	BEGIN TAPER
PD501	68+98.35	30.13 LT	320065.30	539974.02	1079.300	END TAPER
PD502	68+77.74	9.67 LT	320037.42	539965.75	1079.800	PAVEMENT TYPE TRANSITION
PD503	68+77.74	0.00	320028.95	539970.42	1079.570	PAVEMENT TYPE TRANSITION
PD504	68+77.74	19.00 RT	320012.31	539979.59	1079.150	BEGIN TAPER
PD505	68+97.79	17.00 RT	320023.69	539996.16	1079.240	END TAPER
PD506	69+64.05	10.85 LT	320079.71	540041.15	1079.460	END OF RADIUS

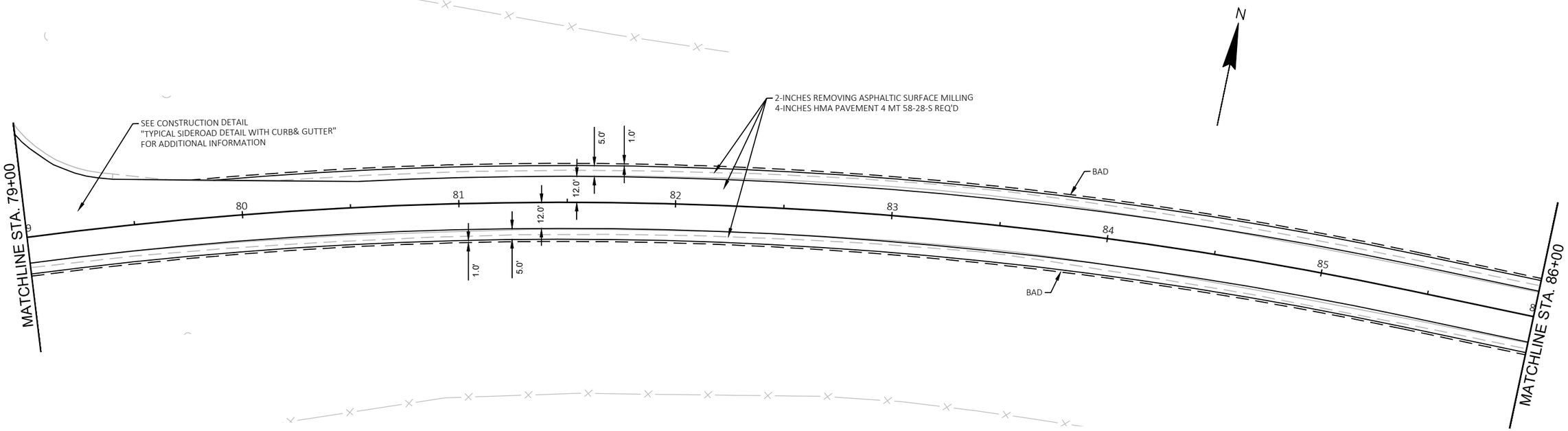
STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	REMARKS
PD600	62+41.93	9404.56 RT	311654.60	544232.29	– – –	R=9410'
PD601	77+39.10	17.00 RT	320380.35	540755.25	1070.190	BEGIN TAPER
PD602	77+88.76	17.00 LT	320430.23	540788.93	1070.860	BEGIN TAPER
PD603	77+99.20	18.59 LT	320435.53	540798.10	– – –	MATCH EXISTING
PD604	77+99.20	0.00	320418.21	540804.87	– – –	MATCH EXISTING / END OF RADIUS
PD605	77+99.20	13.84 RT	320405.32	540809.91	0.000	MATCH EXISTING

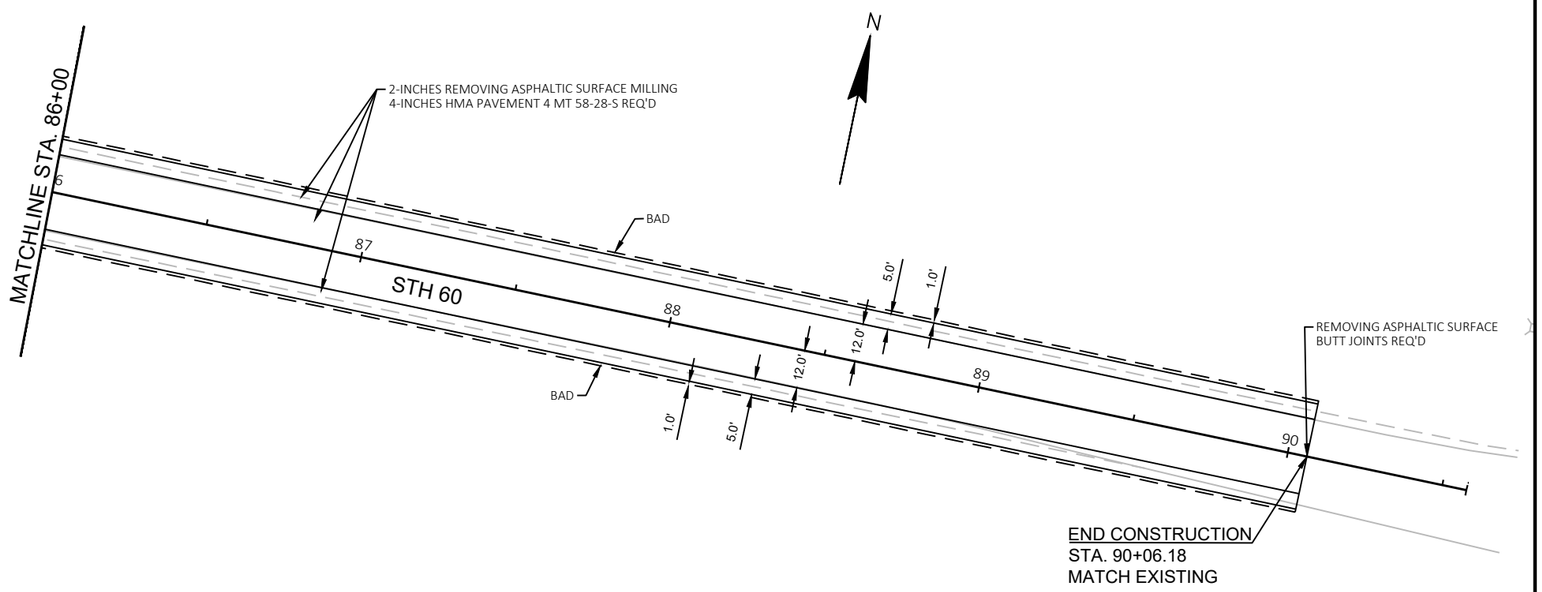


LEGEND

P	CONCRETE CURB PEDESTRIAN	CS-5	CONCRETE SIDEWALK 5-INCH
18(R)	CONCRETE CURB & CUTTER 18-INCH TYPE A (REJECT)	CONC-8	CONCRETE PAVEMENT 8-INCH
30(A)	CONCRETE CURB & GUTTER 30-INCH TYPE A	HMA	HMA PAVEMENT, 5.5-INCH
30(I)	CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D	HMA-3.5"	HMA PAVEMENT, 3.5-INCH
36(A)	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A		CURB RAMP DETECTABLE WARNING FIELD YELLOW
R	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	A	CONCRETE MEDIAN SLOPE NOSE (TYPE 1)
	REVERSE SLOPE GUTTER	B	CONCRETE MEDIAN SLOPE NOSE (TYPE 2)
BAD	BASE AGGREGATE DENSE 3/4-INCH	250	LAYOUT POINT NUMBER
CCS-5	CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE WISDOT RED		SAWING ASPHALT REQ'D
CRTA-12(R)	CONCRETE TRUCK APRON 12-INCH, COLORING CONCRETE WISDOT RED		
CRTA-12	CONCRETE TRUCK APRON 12-INCH		

2





LEGEND

P	CONCRETE CURB PEDESTRIAN	CS-5	CONCRETE SIDEWALK 5-INCH
18(R)	CONCRETE CURB & CUTTER 18-INCH TYPE A (REJECT)	CONC-8	CONCRETE PAVEMENT 8-INCH
30(A)	CONCRETE CURB & GUTTER 30-INCH TYPE A	HMA	HMA PAVEMENT, 5.5-INCH
30(I)	CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D	HMA-3.5"	HMA PAVEMENT, 3.5-INCH
36(A)	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A		CURB RAMP DETECTABLE WARNING FIELD YELLOW
R	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	A	CONCRETE MEDIAN SLOPE NOSE (TYPE 1)
	REVERSE SLOPE GUTTER	B	CONCRETE MEDIAN SLOPE NOSE (TYPE 2)
BAD	BASE AGGREGATE DENSE 3/4-INCH	250	LAYOUT POINT NUMBER
CCS-5	CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE WISDOT RED		SAWING ASPHALT REQ'D
CRTA-12(R)	CONCRETE TRUCK APRON 12-INCH, COLORING CONCRETE WISDOT RED		
CRTA-12	CONCRETE TRUCK APRON 12-INCH		

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN DETAILS	SHEET 46	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021208a_pd
PLOT DATE : 1/17/2022 7:00 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

SB A LINE

CURVE SB A-1
PI STA = 10+91.80 SB A
Y = 319537.029
X = 538817.162
DELTA = 120°00'00"
D = 108°06'19"
T = 91.80'
L = 111.00'
R = 53.00'
PC STA = 10+00.00 SB A
Y = 319459.179
X = 538865.808
PT STA = 11+11.00 SB A
Y = 319540.233
X = 538908.905
BK = N32°00'00.0"W
AH = N88°00'00.0"E

CURVE SB A-2
PI STA = 12+02.80 SB A
Y = 319543.436
X = 539000.647
DELTA = 120°00'00"
D = 108°06'19"
T = 91.80'
L = 111.00'
R = 53.00'
PC STA = 11+11.00 SB A
Y = 319540.233
X = 538908.905
PT STA = 12+22.01 SB A
Y = 319462.383
X = 538957.551
BK = N88°00'00.0"E
AH = S28°00'00.0"W

CURVE SB A-3
PI STA = 13+13.80 SB A
Y = 319381.332
X = 538914.455
DELTA = 119°59'55"
D = 108°06'19"
T = 91.80'
L = 111.00'
R = 53.00'
PC STA = 12+22.01 SB A
Y = 319462.383
X = 538957.551
PT STA = 13+33.01 SB A
Y = 319459.178
X = 538865.808
BK = S28°00'00.0"W
AH = N32°00'05.1"W

SB B LINE

10+00.00 SB B
Y = 319,383.13
X = 538,735.69

10+15.00 SB B
Y = 319,391.28
X = 538,748.28

CURVE SB B-1
PI STA = 10+94.51 SB B
Y = 319438.119
X = 538812.349
DELTA = 46°45'42"
D = 57°17'45"
T = 43.23'
L = 81.61'
R = 100.00'
PC STA = 10+51.28 SB B
Y = 319414.624
X = 538776.056
PCC STA = 11+32.89 SB B
Y = 319427.774
X = 538854.328
BK = N57°04'56.1"E
AH = S76°09'21.9"E

CURVE SB B-2
PI STA = 11+51.26 SB B
Y = 319423.380
X = 538872.158
DELTA = 31°33'08"
D = 88°08'50"
T = 18.36'
L = 35.79'
R = 65.00'
PCC STA = 11+32.89 SB B
Y = 319427.774
X = 538854.328
PCC STA = 11+68.69 SB B
Y = 319410.305
X = 538885.053
BK = S76°09'21.9"E
AH = S44°36'14.4"E

CURVE SB B-3
PI STA = 12+08.24 SB B
Y = 319382.150
X = 538912.823
DELTA = 4°46'03"
D = 6°01'52"
T = 39.55'
L = 79.05'
R = 950.00'
PCC STA = 11+68.69 SB B
Y = 319410.305
X = 538885.053
PT STA = 12+47.74 SB B
Y = 319351.783
X = 538938.156
BK = S44°36'14.4"E
AH = S39°50'11.7"E

SB C LINE

10+00.00 SB C
Y = 319,414.27
X = 538,910.79

CURVE SB C-1
PI STA = 11+20.71 SB C
Y = 319318.131
X = 538983.797
DELTA = 1°17'56"
D = 5°56'15"
T = 10.94'
L = 21.88'
R = 965.00'
PC STA = 11+09.78 SB C
Y = 319326.842
X = 538977.181
PT STA = 11+31.65 SB C
Y = 319309.272
X = 538990.213
BK = S37°12'51.3"E
AH = S35°54'55.4"E

11+76.38 SB C
Y = 319,273.04
X = 539,016.45

SB D LINE

CURVE SB D-1
PI STA = 10+36.15 SB D
Y = 319414.282
X = 538946.936
DELTA = 52°41'06"
D = 78°29'15"
T = 36.15'
L = 67.13'
R = 73.00'
PC STA = 10+00.00 SB D
Y = 319414.265
X = 538910.789
PRC STA = 10+67.13 SB D
Y = 319443.040
X = 538968.834
BK = N89°58'21.0"E
AH = N37°17'15.1"E

CURVE SB D-2
PI STA = 11+72.23 SB D
Y = 319526.659
X = 539032.505
DELTA = 26°17'32"
D = 12°43'57"
T = 105.10'
L = 206.50'
R = 450.00'
PCC STA = 10+67.13 SB D
Y = 319443.040
X = 538968.834
PT STA = 12+73.62 SB D
Y = 319573.423
X = 539126.628
BK = N37°17'15.1"E
AH = N63°34'47.3"E

SB E LINE

CURVE SB E-1
PI STA = 10+33.39 SB E
Y = 319567.531
X = 538911.885
DELTA = 49°09'32"
D = 78°29'15"
T = 33.39'
L = 62.63'
R = 73.00'
PC STA = 10+00.00 SB E
Y = 319554.071
X = 538881.328
PRC STA = 10+62.63 SB E
Y = 319553.216
X = 538942.051
BK = N66°13'39.5"E
AH = S64°36'48.1"E

CURVE SB E-2
PI STA = 11+12.11 SB E
Y = 319532.003
X = 538986.751
DELTA = 57°36'00"
D = 63°39'43"
T = 49.48'
L = 90.48'
R = 90.00'
PRC STA = 10+62.63 SB E
Y = 319553.216
X = 538942.051
PT STA = 11+53.11 SB E
Y = 319558.379
X = 539028.613
BK = S64°36'48.1"E
AH = N57°47'11.4"E

SB F LINE

CURVE SB F-1
PI STA = 10+28.45 SB F
Y = 319581.865
X = 538887.400
DELTA = 35°05'01"
D = 63°39'43"
T = 28.45'
L = 55.11'
R = 90.00'
PC STA = 10+00.00 SB F
Y = 319554.071
X = 538881.328
PT STA = 10+55.11 SB F
Y = 319608.099
X = 538876.393
BK = N12°19'24.1"E
AH = N22°45'37.4"W

CURVE SB F-2
PI STA = 11+46.51 SB F
Y = 319692.380
X = 538841.033
DELTA = 17°16'43"
D = 12°03'44"
T = 72.17'
L = 143.24'
R = 475.00'
PC STA = 10+74.34 SB F
Y = 319625.830
X = 538868.954
PT STA = 12+17.58 SB F
Y = 319764.220
X = 538834.139
BK = N22°45'37.4"W
AH = N05°28'54.6"W

SB G LINE

10+05.00 SB G
Y = 319,448.30
X = 538,735.51

10+15.00 SB G
Y = 319,453.86
X = 538,743.82

CURVE SB G-1
PI STA = 10+94.23 SB G
Y = 319496.044
X = 538810.634
DELTA = 4°39'57"
D = 6°01'52"
T = 38.70'
L = 77.36'
R = 950.00'
PC STA = 10+55.52 SB G
Y = 319473.014
X = 538779.530
PCC STA = 11+32.88 SB G
Y = 319521.528
X = 538839.761
BK = N53°28'55.4"E
AH = N48°48'58.8"E

CURVE SB G-2
PI STA = 11+36.85 SB G
Y = 319524.143
X = 538842.749
DELTA = 7°34'17"
D = 95°29'35"
T = 3.97'
L = 7.93'
R = 60.00'
PCC STA = 11+32.88 SB G
Y = 319521.528
X = 538839.761
PCC STA = 11+40.81 SB G
Y = 319527.128
X = 538845.366
BK = N48°48'58.8"E
AH = N41°14'41.5"E

CURVE SB G-3
PI STA = 11+90.81 SB G
Y = 319564.719
X = 538878.327
DELTA = 64°00'19"
D = 71°37'11"
T = 49.99'
L = 89.37'
R = 80.00'
PCC STA = 11+40.81 SB G
Y = 319527.128
X = 538845.366
PT STA = 12+30.18 SB G
Y = 319610.820
X = 538858.985
BK = N41°14'41.5"E
AH = N22°45'37.4"W

CURVE SB G-4
PI STA = 12+50.48 SB G
Y = 319629.535
X = 538851.133
DELTA = 2°24'40"
D = 11°41'35"
T = 10.31'
L = 20.62'
R = 490.00'
PC STA = 12+40.16 SB G
Y = 319620.026
X = 538855.122
PCC STA = 12+60.79 SB G
Y = 319639.204
X = 538847.547
BK = N22°45'37.4"W
AH = N20°20'57.1"W

CURVE SB G-5
PI STA = 13+03.72 SB G
Y = 319678.415
X = 538830.057
DELTA = 9°58'29"
D = 11°38'44"
T = 42.94'
L = 85.65'
R = 492.00'
PCC STA = 12+60.79 SB G
Y = 319639.204
X = 538847.547
PT STA = 13+46.44 SB G
Y = 319720.063
X = 538819.623
BK = N24°02'22.1"W
AH = N14°03'52.8"W

NB A LINE

CURVE NB A-1
PI STA = 10+91.00 NB A
Y = 319733.553
X = 539529.611
DELTA = 119°33'53"
D = 108°06'19"
T = 91.00'
L = 110.60'
R = 53.00'
PC STA = 10+00.00 NB A
Y = 319778.452
X = 539608.761
PT STA = 11+10.60 NB A
Y = 319824.552
X = 539529.611
BK = S60°26'07.4"W
AH = N00°00'00.0"E

CURVE NB A-2
PI STA = 12+02.40 NB A
Y = 319916.350
X = 539529.611
DELTA = 120°00'00"
D = 108°06'19"
T = 91.80'
L = 111.00'
R = 53.00'
PC STA = 11+10.60 NB A
Y = 319824.552
X = 539529.611
PT STA = 12+21.60 NB A
Y = 319870.451
X = 539609.111
BK = N00°00'00.0"E
AH = S60°00'00.0"E

CURVE NB A-3
PI STA = 13+14.21 NB A
Y = 319824.146
X = 539689.313
DELTA = 120°26'07"
D = 108°06'19"
T = 92.61'
L = 111.41'
R = 53.00'
PC STA = 12+21.60 NB A
Y = 319870.451
X = 539609.111
PT STA = 13+33.01 NB A
Y = 319778.452
X = 539608.761
BK = S60°00'00.0"E
AH = S60°26'06.9"W

NB B LINE

10+00.00 NB B
Y = 319,616.63
X = 539,692.72

10+50.44 NB B
Y = 319,659.01
X = 539,665.37

CURVE NB B-1
PI STA = 11+51.59 NB B
Y = 319749.485
X = 539620.136
DELTA = 62°49'37"
D = 63°39'43"
T = 54.97'
L = 98.69'
R = 90.00'
PC STA = 10+96.63 NB B
Y = 319700.320
X = 539644.714
PCC STA = 11+95.31 NB B
Y = 319793.802
X = 539652.651
BK = N26°33'37.2"W
AH = N36°16'00.1"E

CURVE NB B-2
PI STA = 11+98.97 NB B
Y = 319796.754
X = 539654.817
DELTA = 5°35'22"
D = 76°23'40"
T = 3.66'
L = 7.32'
R = 75.00'
PCC STA = 11+95.31 NB B
Y = 319793.802
X = 539652.651
PCC STA = 12+02.63 NB B
Y = 319799.481
X = 539657.260
BK = N36°16'00.1"E
AH = N41°51'22.1"E

CURVE NB B-3
PI STA = 12+37.06 NB B
Y = 319825.126
X = 539680.235
DELTA = 6°03'52"
D = 8°48'53"
T = 34.43'
L = 68.80'
R = 650.00'
PCC STA = 12+02.63 NB B
Y = 319799.481
X = 539657.260
PT STA = 12+71.43 NB B
Y = 319848.201
X = 539705.791
BK = N41°51'22.1"E
AH = N47°55'14.3"E

CURVE NB B-4
PI STA = 12+93.79 NB B
Y = 319861.041
X = 539724.098
DELTA = 3°59'01"
D = 8°54'39"
T = 22.36'
L = 44.70'
R = 643.00'
PC STA = 12+71.43 NB B
Y = 319848.201
X = 539705.791
PRC STA = 13+16.13 NB B
Y = 319872.578
X = 539743.254
BK = N54°57'24.3"E
AH = N58°56'24.9"E

CURVE NB B-5
PI STA = 13+21.62 NB B
Y = 319875.966
X = 539747.567
DELTA = 0°58'31"
D = 8°53'24"
T = 5.49'
L = 10.97'
R = 644.50'
PCC STA = 13+16.13 NB B
Y = 319872.578
X = 539743.254
PT STA = 13+27.10 NB B
Y = 319879.281
X = 539751.938
BK = N51°50'52.5"E
AH = N52°49'23.4"E

NB C LINE

10+00.00 NB C
Y = 319,926.65
X = 539,723.67

10+15.00 NB C
Y = 319,917.81
X = 539,711.55

CURVE NB C-1
PI STA = 10+66.38 NB C
Y = 319885.588
X = 539671.649
DELTA = 39°47'25"
D = 67°24'24"
T = 30.76'
L = 59.03'
R = 85.00'
PC STA = 10+35.62 NB C
Y = 319903.723
X = 539696.497
PCC STA = 10+94.65 NB C
Y = 319887.555
X = 539640.951
BK = S53°52'34.9"W
AH = N86°20'00.1"W

CURVE NB C-2
PI STA = 11+19.91 NB C
Y = 319889.171
X = 539615.743
DELTA = 29°46'49"
D = 60°18'41"
T = 25.26'
L = 49.38'
R = 95.00'
PCC STA = 10+94.65 NB C
Y = 319887.555
X = 539640.951
PCC STA = 11+44.02 NB C
Y = 319903.093
X = 539594.666
BK = N86°20'00.1"W
AH = N56°33'11.5"W

CURVE NB C-3
PI STA = 11+94.41 NB C
Y = 319930.864
X = 539552.624
DELTA = 9°36'02"
D = 9°32'57"
T = 50.39'
L = 100.54'
R = 600.00'
PCC STA = 11+44.02 NB C
Y = 319903.093
X = 539594.666
PT STA = 12+44.56 NB C
Y = 319965.257
X = 539515.802
BK = N56°33'11.5"W
AH = N46°57'09.8"W

NB D LINE

10+00.00 NB D
Y = 319,894.88
X = 539,563.04

CURVE NB D-1
PI STA = 11+20.18 NB D
Y = 319979.020
X = 539477.231
DELTA = 7°10'13"
D = 9°32'57"
T = 37.59'
L = 75.09'
R = 600.00'
PC STA = 10+82.59 NB D
Y = 319952.701
X = 539504.073
PT STA = 11+57.67 NB D
Y = 320008.484
X = 539453.885
BK = N45°33'47.5"W
AH = N38°23'34.5"W

13+77.33 NB D
Y = 320,180.64
X = 539,317.47

NB E LINE

CURVE NB E-1
PI STA = 11+13.93 NB E
Y = 319773.456
X = 539457.317
DELTA = 28°24'54"
D = 12°43'57"
T = 113.93'
L = 223.17'
R = 450.00'
PC STA = 10+00.00 NB E
Y = 319722.763
X = 539355.286
PRC STA = 12+23.17 NB E
Y = 319866.594
X = 539522.933
BK = N63°34'47.3"E
AH = N35°09'53.0"E

CURVE NB E-2
PI STA = 12+49.23 NB E
Y = 319887.895
X = 539537.940
DELTA = 39°17'10"
D = 78°29'15"
T = 26.06'
L = 50.05'
R = 73.00'
PRC STA = 12+23.17 NB E
Y = 319866.594
X = 539522.933
PT STA = 12+73.23 NB E
Y = 319894.880
X = 539563.042
BK = N35°09'53.0"E
AH = N74°27'03.4"E

NB F LINE

CURVE NB F-1
PI STA = 10+46.65 NB F
Y = 319775.446
X = 539511.237
DELTA = 54°48'07"
D = 63°39'43"
T = 46.65'
L = 86.08'
R = 90.00'
PC STA = 10+00.00 NB F
Y = 319750.785
X = 539471.635
PRC STA = 10+86.08 NB F
Y = 319757.300
X = 539554.217
BK = N58°05'16.9"E
AH = S67°06'36.5"E

CURVE NB F-2
PI STA = 11+22.05 NB F
Y = 319743.312
X = 539587.348
DELTA = 52°27'17"
D = 78°29'15"
T = 35.96'
L = 66.83'
R = 73.00'
PRC STA = 10+86.08 NB F
Y = 319757.300
X = 539554.217
PT STA = 11+52.91 NB F
Y = 319761.056
X = 539618.629
BK = S67°06'36.5"E
AH = N60°26'06.9"E

NB G LINE

10+00.00 NB G
Y = 319,607.47
X = 539,674.36

10+15.14 NB G
Y = 319,621.01
X = 539,667.59

CURVE NB G-1
PI STA = 11+35.26 NB G
Y = 319728.450
X = 539613.882
DELTA = 34°50'41"
D = 54°34'03"
T = 32.95'
L = 63.86'
R = 105.00'
PC STA = 11+02.31 NB G
Y = 319698.977
X = 539628.615
PT STA = 11+66.17 NB G
Y = 319761.056
X = 539618.629
BK = N26°33'37.2"W
AH = N08°17'03.8"E

2

N

I-39/90/94 SB
EXIT RAMP

CR-1

CR-2

CR-7

CR-6

CR-5

CR-4

CR-3

STH 60

55'/60'

56'/60'

CONCRETE TRUCK APRON 12-INCH. SEE PLAN DETAIL FOR
COLORING CONCRETE WISDOT RED LOCATIONS

I-39/90/94 NB
ENTRANCE RAMP

CR-9

CR-10

CR-8

CR-11

CR-12

CR-14

CR-13

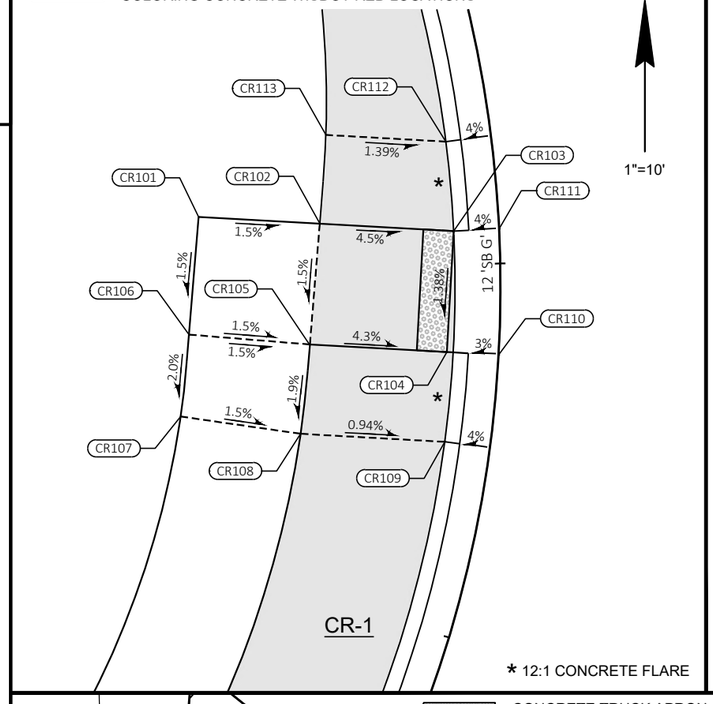
I-39/90/94 NB
EXIT RAMP

CONCRETE TRUCK APRON 12-INCH. SEE PLAN DETAIL FOR
COLORING CONCRETE WISDOT RED LOCATIONS

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CURB RAMP DETAILS	SHEET 49	E

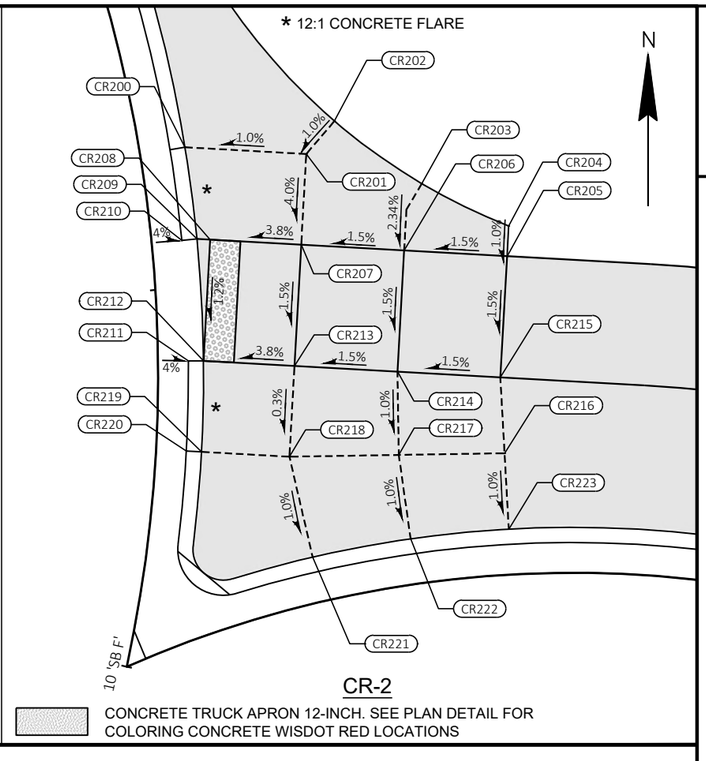
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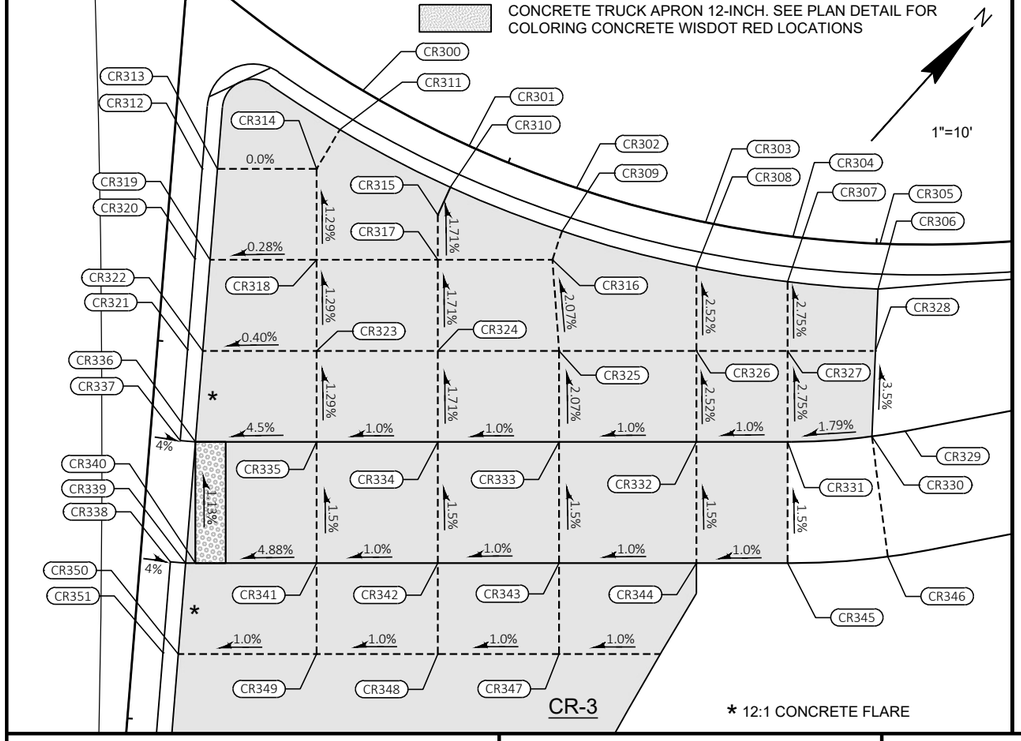
PLOT DATE : 1/11/2022 5:08 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########



CR-1 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR101	12+04.6 'SB G'	19.7' LT	1070.76	538845.30	319584.55
CR102	12+03.4 'SB G'	11.8' LT	1070.64	538853.29	319584.10
CR103	12+02.3 'SB G'	3.0' LT	1070.24	538862.12	319583.61
CR104	11+94.0 'SB G'	3.4' LT	1070.13	538861.68	319575.62
CR105	11+94.0 'SB G'	12.5' LT	1070.52	538852.61	319576.13
CR106	11+94.2 'SB G'	20.5' LT	1070.64	538844.66	319576.78
CR107	11+86.9 'SB G'	20.5' LT	1070.53	538844.10	319571.37
CR108	11+86.9 'SB G'	12.5' LT	1070.41	538852.02	319570.23
CR109	11+87.8 'SB G'	3.0' LT	1070.32	538861.54	319569.70
CR110	11+94.0 'SB G'	0.0'	1070.11	538865.09	319575.43
CR111	12+02.3 'SB G'	0.0'	1070.30	538865.12	319583.76
CR112	12+08.4 'SB G'	3.0' LT	1070.64	538861.61	319589.51
CR113	12+10.1 'SB G'	10.8' LT	1070.75	538853.69	319589.95

CR-2 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR200	10+34.0 'SB F'	3.0' RT	1070.85	538885.17	319588.34
CR201	10+32.4 'SB F'	10.8' RT	1070.93	538893.18	319587.89
CR202	10+34.1 'SB F'	13.0' RT	1070.96	538895.04	319590.06
CR203	10+29.9 'SB F'	18.1' RT	1070.90	538900.80	319585.94
CR204	10+27.2 'SB F'	23.6' RT	1070.85	538906.54	319583.15
CR205	10+25.6 'SB F'	23.3' RT	1070.83	538906.43	319581.15
CR206	10+26.3 'SB F'	16.6' RT	1070.79	538899.64	319581.53
CR207	10+27.1 'SB F'	9.8' RT	1070.69	538892.84	319581.90
CR208	10+28.0 'SB F'	3.9' RT	1070.46	538886.84	319582.24
CR209	10+28.1 'SB F'	3.0' RT	1070.45	538885.96	319582.29
CR210	10+28.1 'SB F'	2.0' RT	1070.51	538884.97	319582.19
CR211	10+20.3 'SB F'	2.0' RT	1070.40	538885.40	319574.24
CR212	10+20.3 'SB F'	3.0' RT	1070.34	538886.40	319574.25
CR213	10+19.9 'SB F'	9.0' RT	1070.57	538892.40	319573.92
CR214	10+19.6 'SB F'	15.8' RT	1070.67	538899.19	319573.54
CR215	10+19.3 'SB F'	22.6' RT	1070.71	538905.99	319573.16
CR216	10+15.3 'SB F'	23.0' RT	1070.66	538906.26	319568.15
CR217	10+14.9 'SB F'	16.0' RT	1070.61	538899.28	319568.04
CR218	10+14.5 'SB F'	8.8' RT	1070.55	538892.07	319567.93
CR219	10+14.5 'SB F'	3.0' RT	1070.56	538886.27	319568.25
CR220	10+14.5 'SB F'	2.0' RT	1070.31	538885.27	319568.30
CR221	10+08.6 'SB F'	10.9' RT	1070.48	538893.60	319561.30
CR222	10+10.3 'SB F'	17.2' RT	1070.55	538900.07	319562.51
CR223	10+11.3 'SB F'	23.6' RT	1070.61	538906.54	319563.15





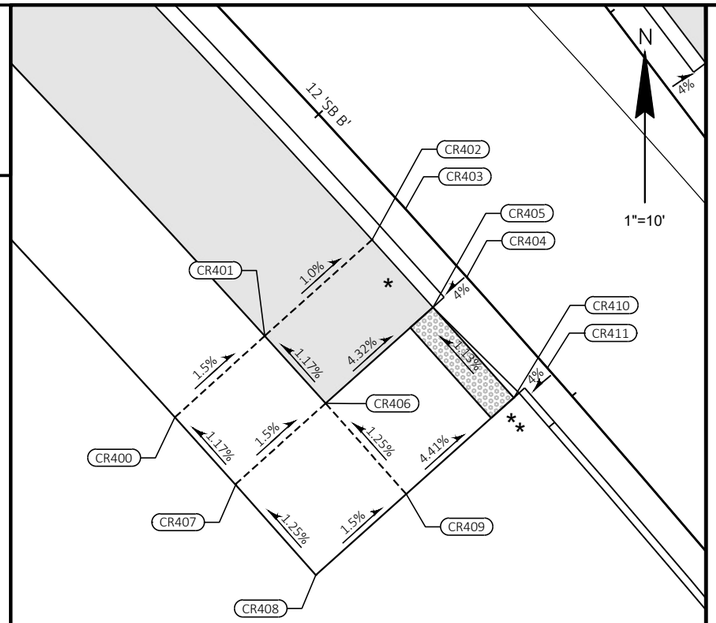
CR-3 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR300	10+07.5 'SB C'	12.2' LT	1068.82	538924.98	319415.67
CR301	10+10.5 'SB C'	19.4' LT	1068.88	538932.64	319417.62
CR302	10+12.7 'SB C'	26.7' LT	1068.96	538939.76	319420.27
CR303	10+14.3 'SB C'	35.4' LT	1069.05	538947.63	319424.27
CR304	10+14.8 'SB C'	41.2' LT	1069.11	538952.55	319427.41
CR305	10+14.8 'SB C'	47.0' LT	1069.16	538957.14	319430.89
CR306	10+17.8 'SB C'	47.1' LT	1069.41	538959.04	319428.58
CR307	10+17.8 'SB C'	41.1' LT	1069.36	538954.27	319424.95
CR308	10+17.3 'SB C'	35.0' LT	1069.30	538949.15	319421.68
CR309	10+15.6 'SB C'	26.0' LT	1069.21	538940.95	319417.52
CR310	10+13.3 'SB C'	18.4' LT	1069.13	538933.53	319414.79
CR311	10+10.2 'SB C'	10.8' LT	1069.07	538925.57	319412.72
CR312	10+13.5 'SB C'	2.0' LT	1068.86	538920.53	319404.75
CR313	10+13.4 'SB C'	3.0' LT	1069.11	538921.28	319405.41
CR314	10+12.9 'SB C'	9.5' LT	1069.11	538926.15	319409.78
CR315	10+15.2 'SB C'	17.7' LT	1069.16	538934.14	319412.85
CR316	10+17.6 'SB C'	25.5' LT	1069.25	538941.75	319415.69
CR317	10+18.2 'SB C'	18.0' LT	1069.21	538936.12	319410.65

CR-3 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR318	10+18.8 'SB C'	10.0' LT	1069.19	538930.16	319405.31
CR319	10+19.4 'SB C'	3.0' LT	1069.17	538924.92	319400.62
CR320	10+19.4 'SB C'	2.0' LT	1068.92	538924.12	319400.02
CR321	10+25.4 'SB C'	2.0' LT	1068.98	538927.76	319395.22
CR322	10+25.4 'SB C'	3.0' LT	1069.23	538928.56	319395.83
CR323	10+24.8 'SB C'	10.5' LT	1069.26	538934.16	319400.84
CR324	10+24.2 'SB C'	18.5' LT	1069.32	538940.12	319406.17
CR325	10+23.5 'SB C'	26.4' LT	1069.38	538946.08	319411.51
CR326	10+22.8 'SB C'	35.5' LT	1069.44	538952.83	319417.56
CR327	10+22.3 'SB C'	41.5' LT	1069.49	538957.30	319421.56
CR328	10+21.8 'SB C'	47.2' LT	1069.55	538961.63	319425.43
CR329	10+27.0 'SB C'	49.6' LT	1069.79	538966.61	319422.79
CR330	10+27.5 'SB C'	47.5' LT	1069.75	538965.22	319421.07
CR331	10+28.3 'SB C'	41.9' LT	1069.65	538961.31	319417.09
CR332	10+28.8 'SB C'	36.0' LT	1069.59	538956.84	319413.09
CR333	10+29.5 'SB C'	26.9' LT	1069.50	538950.08	319407.04
CR334	10+30.2 'SB C'	18.9' LT	1069.42	538944.12	319401.70
CR335	10+30.8 'SB C'	11.0' LT	1069.34	538938.16	319396.37

CR-3 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR336	10+31.4 'SB C'	3.0' LT	1068.98	538932.20	319391.03
CR337	10+31.4 'SB C'	2.0' LT	1069.04	538931.40	319390.43
CR338	10+39.5 'SB C'	2.0' LT	1069.12	538936.26	319384.04
CR339	10+39.5 'SB C'	3.0' LT	1069.06	538937.05	319384.64
CR340	10+39.4 'SB C'	3.6' LT	1069.07	538937.54	319385.07
CR341	10+38.8 'SB C'	11.6' LT	1069.46	538943.50	319390.41
CR342	10+38.1 'SB C'	19.6' LT	1069.54	538949.46	319395.74
CR343	10+37.5 'SB C'	27.6' LT	1069.62	538955.42	319401.08
CR344	10+36.8 'SB C'	36.6' LT	1069.71	538962.17	319407.13
CR345	10+36.3 'SB C'	42.6' LT	1069.77	538966.64	319411.13
CR346	10+35.3 'SB C'	49.2' LT	1069.87	538971.30	319415.87
CR347	10+43.5 'SB C'	28.1' LT	1069.68	538959.42	319396.61
CR348	10+44.1 'SB C'	20.1' LT	1069.60	538953.46	319391.27
CR349	10+44.8 'SB C'	12.1' LT	1069.52	538947.50	319385.94
CR350	10+45.5 'SB C'	3.0' LT	1069.43	538940.70	319379.85
CR351	10+45.5 'SB C'	2.0' LT	1069.18	538939.90	319379.24

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CURB RAMP DETAILS	SHEET 50	E

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PLOT DATE : 1/10/2022 10:25 AM
PLOT BY : JACK, ROBERT A.
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



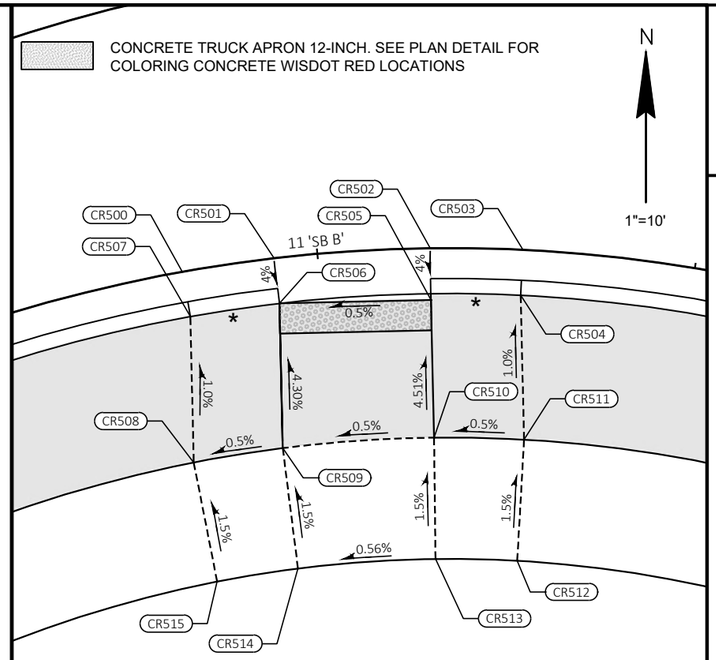
CR-4

CONCRETE TRUCK APRON 12-INCH. SEE PLAN DETAIL FOR COLORING CONCRETE WISDOT RED LOCATIONS

CR-4 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR400	12+08.4 'SB B'	20.5' RT	1069.08	538897.18	319367.66
CR401	12+08.4 'SB B'	12.5' RT	1068.96	538903.10	319373.03
CR402	12+08.5 'SB B'	3.0' RT	1068.86	538910.20	319379.38
CR403	12+08.5 'SB B'	0.0'	1068.61	538912.39	319381.40
CR404	12+14.5 'SB B'	0.0'	1068.68	538916.43	319376.91
CR405	12+14.5 'SB B'	3.0' RT	1068.62	538914.20	319374.91
CR406	12+14.5 'SB B'	12.5' RT	1069.03	538907.12	319368.58
CR407	12+14.6 'SB B'	20.5' RT	1069.15	538901.18	319363.22
CR408	12+22.7 'SB B'	20.5' RT	1069.25	538906.47	319357.26
CR409	12+22.6 'SB B'	12.5' RT	1069.13	538912.43	319362.59
CR410	12+22.5 'SB B'	3.0' RT	1068.71	538919.53	319368.95
CR411	12+22.5 'SB B'	0.0'	1068.78	538921.76	319370.91

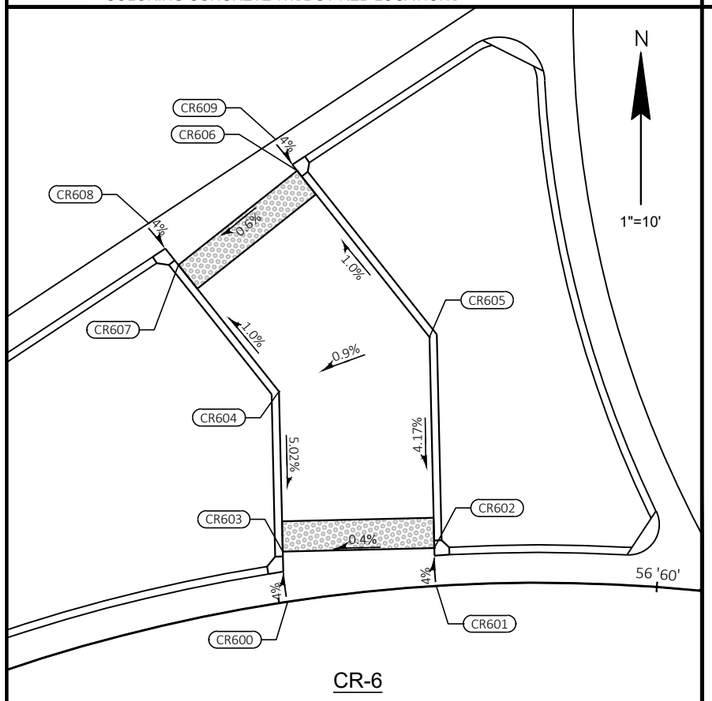
CR-5 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR500	10+91.0 'SB B'	0.0'	1068.19	538812.77	319429.11
CR501	10+97.1 'SB B'	0.0'	1068.21	538818.83	319430.01
CR502	11+07.5 'SB B'	0.0'	1068.26	538829.12	319430.67
CR503	11+13.6 'SB B'	0.0'	1068.29	538835.24	319430.56
CR504	11+13.6 'SB B'	3.0' RT	1068.54	538835.10	319427.57
CR505	11+07.5 'SB B'	3.4' RT	1068.20	538829.17	319427.26
CR506	10+97.1 'SB B'	3.0' RT	1068.15	538819.17	319427.03
CR507	10+91.0 'SB B'	3.0' RT	1068.44	538813.30	319426.16
CR508	10+89.3 'SB B'	12.5' RT	1068.53	538813.52	319416.54
CR509	10+96.1 'SB B'	12.5' RT	1068.56	538819.39	319417.48
CR510	11+07.6 'SB B'	12.5' RT	1068.61	538829.38	319418.17
CR511	11+14.4 'SB B'	12.5' RT	1068.64	538835.32	319418.04
CR512	11+14.4 'SB B'	20.5' RT	1068.76	538834.87	319410.05
CR513	11+07.6 'SB B'	20.5' RT	1068.73	538829.47	319410.17
CR514	10+96.1 'SB B'	20.5' RT	1068.68	538820.40	319409.55
CR515	10+89.3 'SB B'	20.5' RT	1068.65	538815.06	319408.69

CONCRETE TRUCK APRON 12-INCH. SEE PLAN DETAIL FOR COLORING CONCRETE WISDOT RED LOCATIONS



CR-5

* 12:1 CONCRETE FLARE

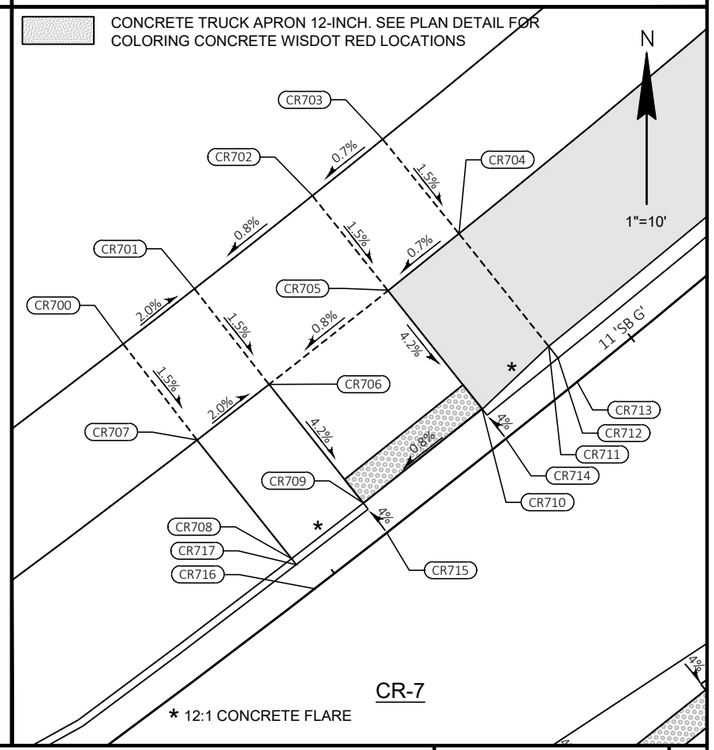


CR-6

CR-6 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR600	55+75.6 '60'	0.0'	1068.59	538818.93	319448.65
CR601	55+85.4 '60'	0.0'	1068.64	538828.73	319449.69
CR602	55+85.5 '60'	2.5' LT	1068.57	538828.60	319452.19
CR603	55+75.7 '60'	3.3' LT	1068.53	538818.60	319451.96
CR604	55+76.9 '60'	13.8' LT	1069.06	538818.35	319462.51
CR605	55+85.9 '60'	16.4' LT	1069.15	538828.27	319466.11
CR606	55+79.5 '60'	28.1' LT	1069.01	538819.54	319477.08
CR607	55+72.4 '60'	23.1' LT	1068.95	538811.72	319470.86
CR608	55+71.3 '60'	26.2' LT	1069.02	538809.75	319473.62
CR609	55+78.6 '60'	30.3' LT	1069.08	538818.13	319479.15

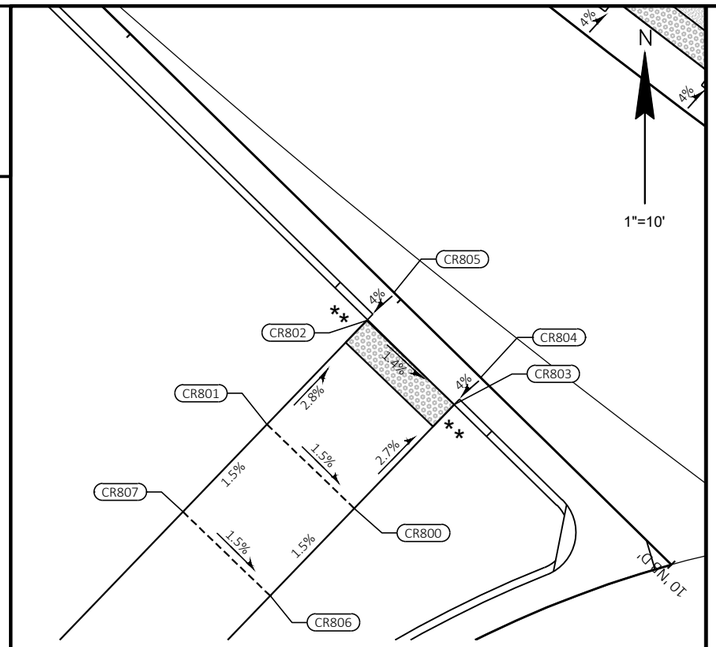
CR-7 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR700	10+73.2 'SB G'	20.5' LT	1069.33	538781.12	319499.90
CR701	10+79.3 'SB G'	20.5' LT	1069.21	538785.82	319503.54
CR702	10+89.4 'SB G'	20.6' LT	1069.29	538793.57	319509.72
CR703	10+95.5 'SB G'	20.5' LT	1069.33	538798.24	319513.40
CR704	10+95.5 'SB G'	12.5' LT	1069.21	538803.27	319507.18
CR705	10+89.4 'SB G'	12.5' LT	1069.17	538798.58	319503.44
CR706	10+79.3 'SB G'	12.5' LT	1069.09	538790.74	319497.23
CR707	10+73.2 'SB G'	12.5' LT	1069.21	538785.99	319493.57
CR708	10+73.3 'SB G'	2.5' LT	1069.11	538792.22	319485.73
CR709	10+79.4 'SB G'	2.5' LT	1068.67	538796.96	319489.40
CR710	10+89.4 'SB G'	2.5' LT	1068.75	538804.79	319495.63
CR711	10+95.4 'SB G'	3.0' LT	1069.11	538809.19	319499.74
CR712	10+95.4 'SB G'	2.0' LT	1068.78	538809.81	319498.96
CR713	10+95.4 'SB G'	0.0'	1068.86	538811.07	319497.41
CR714	10+89.4 'SB G'	0.0'	1068.82	538806.37	319493.64
CR715	10+79.4 'SB G'	0.0'	1068.74	538798.50	319487.43
CR716	10+73.4 'SB G'	0.0'	1068.69	538793.76	319483.75
CR717	10+73.4 'SB G'	2.0' LT	1068.61	538792.54	319485.34

CONCRETE TRUCK APRON 12-INCH. SEE PLAN DETAIL FOR COLORING CONCRETE WISDOT RED LOCATIONS



CR-7

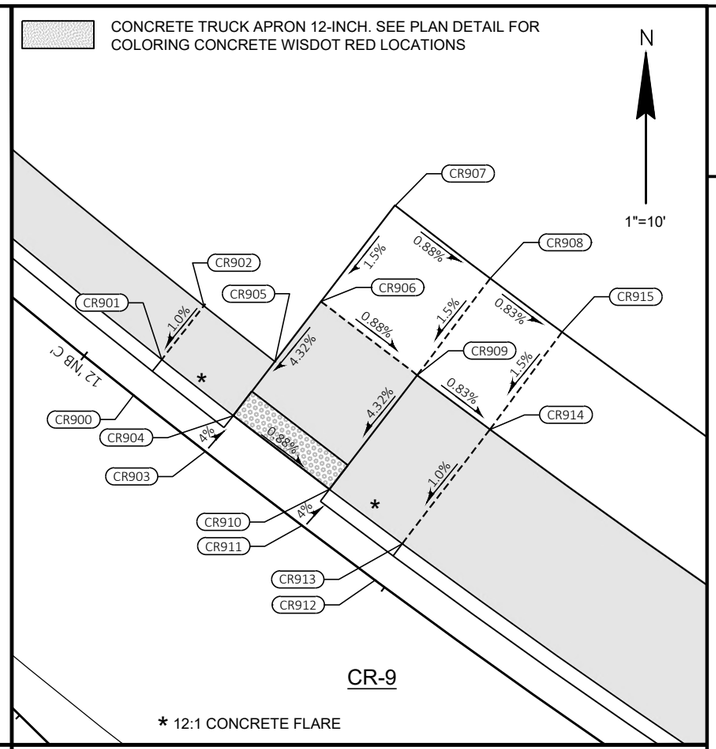
* 12:1 CONCRETE FLARE



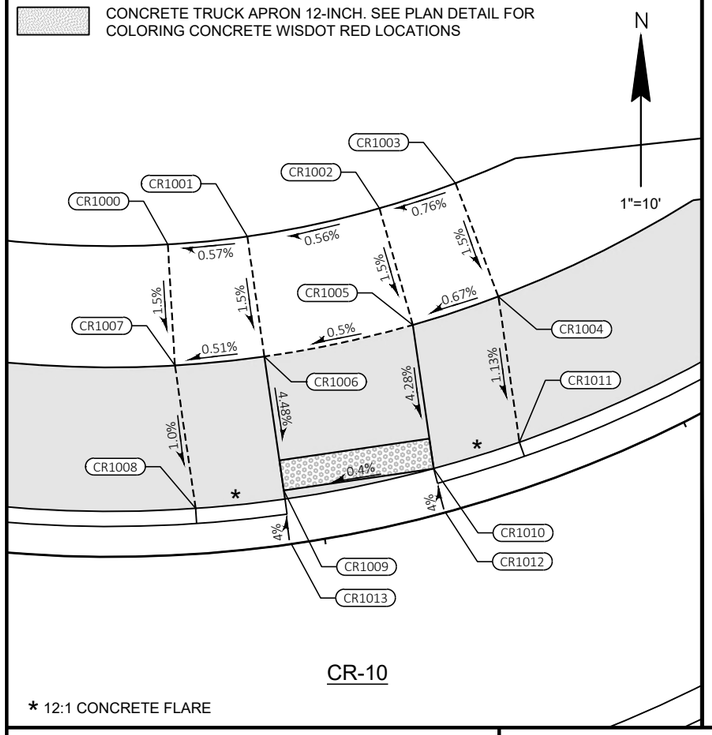
CR-8

CR-8 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR800	10+17.5 'NB D'	12.0' LT	1077.81	539542.12	319898.59
CR801	10+25.5 'NB D'	12.1' LT	1077.93	539536.35	319904.13
CR802	10+25.6 'NB D'	2.6' LT	1077.66	539542.94	319910.98
CR803	10+17.6 'NB D'	2.5' LT	1077.55	539548.71	319905.44
CR804	10+17.6 'NB D'	0.0'	1077.62	539550.46	319907.22
CR805	10+25.6 'NB D'	0.0'	1077.73	539544.74	319912.83
CR806	10+17.5 'NB D'	20.0' LT	1077.69	539536.58	319892.82
CR807	10+25.5 'NB D'	20.1' LT	1077.81	539530.81	319898.37

CR-9 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR900	11+95.8 'NB C'	0.0'	1077.47	539552.71	319933.49
CR901	11+95.8 'NB C'	3.0' RT	1077.72	539554.57	319935.84
CR902	11+95.9 'NB C'	7.5' RT	1077.77	539557.35	319939.38
CR903	11+89.8 'NB C'	0.0'	1077.41	539557.44	319929.77
CR904	11+89.8 'NB C'	3.0' RT	1077.35	539559.28	319932.14
CR905	11+89.8 'NB C'	7.5' RT	1077.54	539562.04	319935.70
CR906	11+89.9 'NB C'	12.5' RT	1077.76	539565.08	319939.67
CR907	11+89.9 'NB C'	20.5' RT	1077.88	539569.99	319945.99
CR908	11+81.7 'NB C'	20.5' RT	1077.81	539576.25	319941.19
CR909	11+81.7 'NB C'	12.5' RT	1077.69	539571.43	319934.81
CR910	11+81.8 'NB C'	3.0' RT	1077.28	539565.64	319927.28
CR911	11+81.8 'NB C'	0.0'	1077.34	539563.83	319924.89
CR912	11+75.8 'NB C'	0.0'	1077.29	539568.65	319921.28
CR913	11+75.8 'NB C'	3.0' RT	1077.54	539570.44	319923.70
CR914	11+75.6 'NB C'	12.5' RT	1077.64	539576.23	319931.22
CR915	11+75.6 'NB C'	20.5' RT	1077.76	539580.99	319937.66



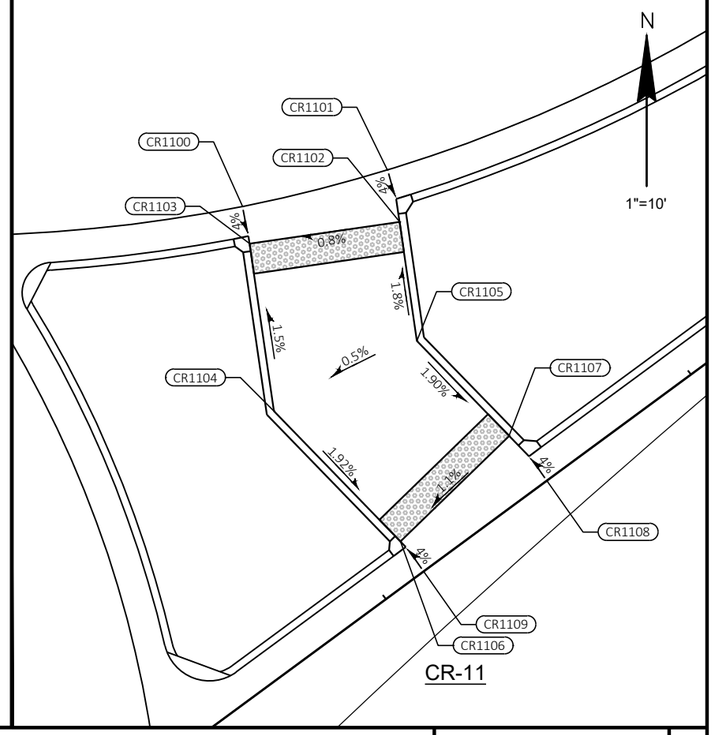
CR-9



CR-10

CR-10 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR1000	10+84.2 'NB C'	20.5' RT	1077.99	539650.17	319907.99
CR1001	10+77.3 'NB C'	20.5' RT	1078.02	539655.41	319908.52
CR1002	10+65.5 'NB C'	20.5' RT	1078.07	539664.14	319910.37
CR1003	10+58.5 'NB C'	20.5' RT	1078.11	539669.16	319912.03
CR1004	10+58.5 'NB C'	12.5' RT	1077.99	539671.98	319904.55
CR1005	10+65.5 'NB C'	12.5' RT	1077.95	539666.34	319902.68
CR1006	10+77.3 'NB C'	12.5' RT	1077.90	539656.53	319900.60
CR1007	10+84.2 'NB C'	12.5' RT	1077.87	539650.64	319900.01
CR1008	10+83.4 'NB C'	3.0' RT	1077.77	539652.00	319890.57
CR1009	10+77.2 'NB C'	3.6' RT	1077.50	539657.81	319891.77
CR1010	10+66.8 'NB C'	3.0' RT	1077.54	539667.71	319893.20
CR1011	10+60.7 'NB C'	3.0' RT	1077.88	539673.37	319894.95
CR1012	10+66.8 'NB C'	0.0'	1077.60	539668.49	319890.31
CR1013	10+77.2 'NB C'	0.0'	1077.55	539658.32	319888.22

CR-11 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR1100	65+32.8 '60'	26.5' LT	1077.79	539660.78	319870.53
CR1101	65+41.9 '60'	22.8' LT	1077.86	539670.34	319872.93
CR1102	65+40.5 '60'	19.5' LT	1077.80	539671.14	319869.51
CR1103	65+31.7 '60'	24.2' LT	1077.72	539661.25	319868.07
CR1104	65+26.4 '60'	14.4' LT	1077.89	539662.85	319857.02
CR1105	65+36.8 '60'	12.5' LT	1077.94	539672.28	319861.66
CR1106	65+28.0 '60'	2.5' LT	1077.66	539671.20	319848.42
CR1107	65+37.9 '60'	3.9' LT	1077.77	539678.37	319855.38
CR1108	65+38.2 '60'	0.0'	1077.82	539680.87	319852.43
CR1109	65+28.1 '60'	0.0'	1077.73	539672.74	319846.44

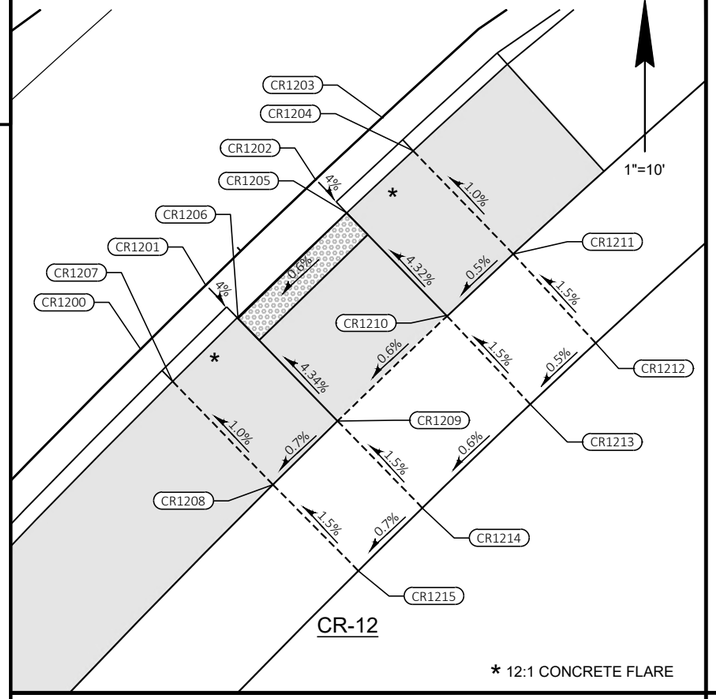


CR-11

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CURB RAMP DETAILS	SHEET 52	E

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CONCRETE TRUCK APRON 12-INCH. SEE PLAN DETAIL FOR COLORING CONCRETE WISDOT RED LOCATIONS



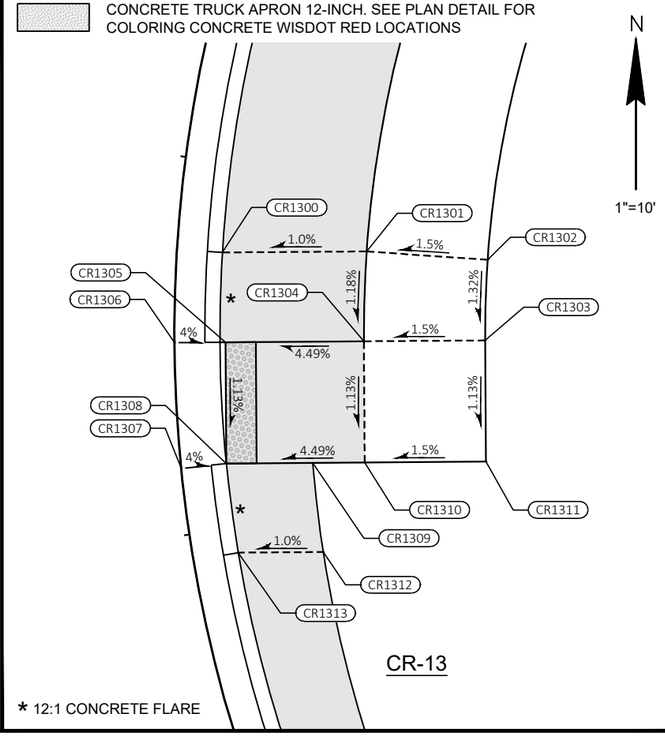
CR-12

* 12:1 CONCRETE FLARE

CR-12 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR1200	12+40.7 'NB B'	0.0'	1077.42	539683.51	319827.10
CR1201	12+46.8 'NB B'	0.0'	1077.46	539687.80	319831.32
CR1202	12+56.8 'NB B'	0.0'	1077.52	539695.05	319838.28
CR1203	12+62.8 'NB B'	0.0' RT	1077.55	539699.46	319842.37
CR1204	12+62.8 'NB B'	3.0' RT	1077.80	539701.48	319840.19
CR1205	12+56.8 'NB B'	3.0' RT	1077.46	539697.11	319836.10
CR1206	12+46.8 'NB B'	3.1' RT	1077.40	539689.94	319829.13
CR1207	12+40.7 'NB B'	3.0' RT	1077.67	539685.62	319824.98
CR1208	12+40.6 'NB B'	12.5' RT	1077.77	539692.24	319818.16
CR1209	12+46.8 'NB B'	12.5' RT	1077.81	539696.51	319822.36
CR1210	12+56.9 'NB B'	12.4' RT	1077.87	539703.68	319829.33
CR1211	12+63.0 'NB B'	12.5' RT	1077.90	539708.10	319833.38
CR1212	12+63.0 'NB B'	20.5' RT	1078.00	539713.54	319827.51
CR1213	12+56.9 'NB B'	20.5' RT	1177.00	539709.22	319823.47
CR1214	12+46.8 'NB B'	20.5' RT	1177.93	539702.09	319816.63
CR1215	12+40.6 'NB B'	20.5' RT	1077.89	539697.88	319812.48

CR-13 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR1300	11+43.8 'NB B'	3.0' RT	1076.73	539638.38	319745.87
CR1301	11+44.6 'NB B'	12.5' RT	1076.83	539647.90	319745.94
CR1302	11+44.6 'NB B'	20.5' RT	1076.95	539655.88	319745.39
CR1303	11+37.7 'NB B'	20.5' RT	1076.88	539655.72	319740.07
CR1304	11+37.7 'NB B'	12.5' RT	1076.76	539647.72	319740.01
CR1305	11+37.7 'NB B'	3.4' RT	1076.35	539638.59	319739.95
CR1306	11+37.7 'NB B'	0.0'	1076.41	539635.22	319739.92
CR1307	11+29.4 'NB B'	0.0'	1076.32	539635.66	319731.65
CR1308	11+29.4 'NB B'	3.0' RT	1076.26	539638.64	319731.95
CR1309	11+28.8 'NB B'	8.7' RT	1076.52	539644.35	319731.99
CR1310	11+28.4 'NB B'	12.1' RT	1076.67	539647.77	319732.01
CR1311	11+27.4 'NB B'	20.0' RT	1076.79	539655.77	319732.07
CR1312	11+22.3 'NB B'	8.5' RT	1076.56	539645.04	319726.10
CR1313	11+23.3 'NB B'	3.0' RT	1076.50	539639.43	319726.06

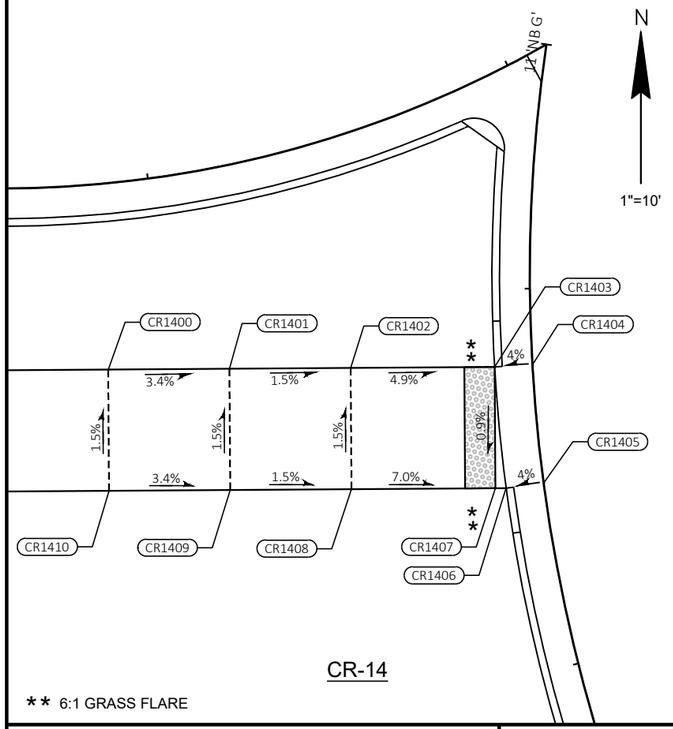
CONCRETE TRUCK APRON 12-INCH. SEE PLAN DETAIL FOR COLORING CONCRETE WISDOT RED LOCATIONS



CR-13

* 12:1 CONCRETE FLARE

2



CR-14

** 6:1 GRASS FLARE

CR-14 POINTS					
POINT NO.	STATION	OFFSET	ELEV.	X	Y
CR1400	11+46.0 'NB G'	28.0' LT	1077.38	539589.71	319739.60
CR1401	11+45.7 'NB G'	20.0' LT	1077.11	539597.71	319739.66
CR1402	11+45.4 'NB G'	12.0' LT	1076.99	539605.71	319739.71
CR1403	11+45.0 'NB G'	2.5' LT	1076.52	539615.21	319739.78
CR1404	11+45.0 'NB G'	0.0'	1076.59	539617.71	319739.92
CR1405	11+37.1 'NB G'	0.0'	1076.51	539618.45	319732.12
CR1406	11+37.1 'NB G'	2.5' LT	1076.44	539615.97	319731.79
CR1407	11+37.2 'NB G'	3.2' LT	1076.45	539615.27	319731.78
CR1408	11+38.3 'NB G'	12.6' LT	1077.11	539605.77	319731.71
CR1409	11+39.0 'NB G'	20.6' LT	1077.23	539597.77	319731.66
CR1410	11+39.7 'NB G'	28.5' LT	1077.50	539589.77	319731.60

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CURB RAMP DETAILS	SHEET 53 E

2

BP: 244+50.00

12'

15'

+96.32, -24.00' LT

1063.60 1063.80 1064.03 1064.29 1064.57 1064.87 1065.21 1065.57 1065.97 1066.39 1066.84 1067.32 1067.83 1068.38 1068.95 1069.54
1063.80 1064.00 1064.23 1064.49 1064.77 1065.07 1065.41 1065.77 1066.17 1066.59 1067.04 1067.52 1068.03 1068.58 1069.15 1069.74
1064.04 1064.26 1064.51 1064.79 1065.07 1065.37 1065.71 1066.07 1066.46 1066.89 1067.34 1067.82 1068.33 1068.88 1069.45 1070.04
245 "NN" 1065.10 1065.45 246 "NN" 1065.82 1066.23 247 "NN" 1066.65 1067.11 248 "NN" 1067.58 1068.15 249 "NN" 1068.73 1069.31 250 "NN" 1069.90 1070.51

243"SB" 244"SB" 245"SB" 246"SB" 247"SB" 248"SB" 249"SB" 250"SB"

W INL W INL INL INL

NB

PC: 252+00.00

PT: 255+40.00

2.0% 4.0% 5.9% 15

1069.54 1069.74 1070.04 1070.51
1070.17 1070.37 1070.67 1071.14
1070.81 1071.01 1071.31 1071.88
1071.15 1071.35 1071.95 1072.61
1071.40 1071.70 1072.58 1073.32
1071.73 1072.03 1072.91 1073.04 1073.74
1072.04 1072.34 1073.22 1073.40
1072.66 1072.96 1073.84 1074.02
251 "NN" 252 "NN" 253 "NN" 254 "NN" 255 "NN" 256 "NN" 257 "NN" 258 "NN"

+75.66 19.00' RT

+69 22.20' RT

251"SB" 252"SB" 253"SB" 254"SB" 255"SB" 256"SB" 257"SB" 258"SB"

IH 39 SB

INL INL INL INL INL INL W W

/ SIGN

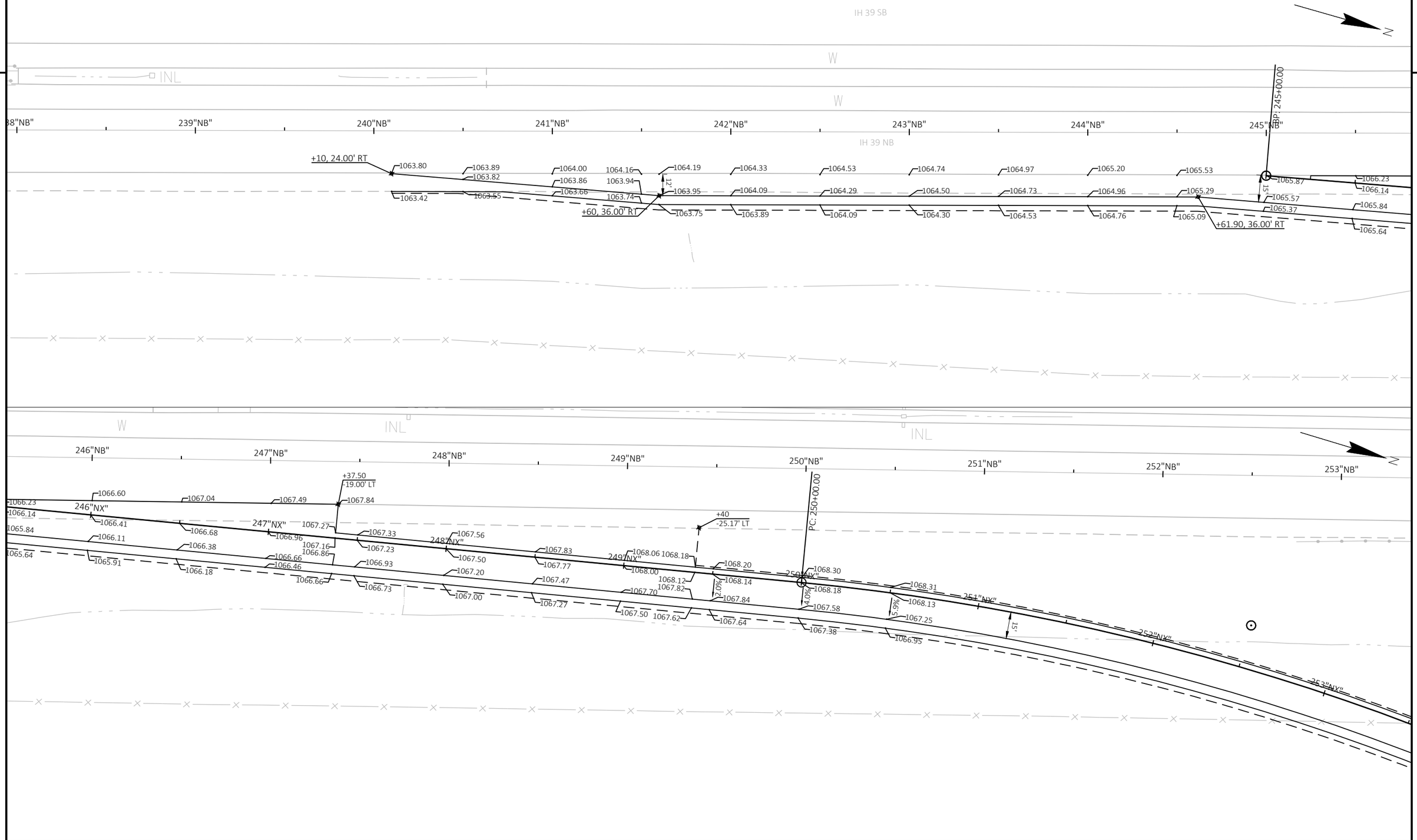
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	INTERCHANGE - PAVING DETAIL GORE - IH 39 SB ON	SHEET 54	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\021202-PD_PAVING DETAILS.DWG
LAYOUT NAME - SB ON

PLOT DATE : 1/19/2022 5:35 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

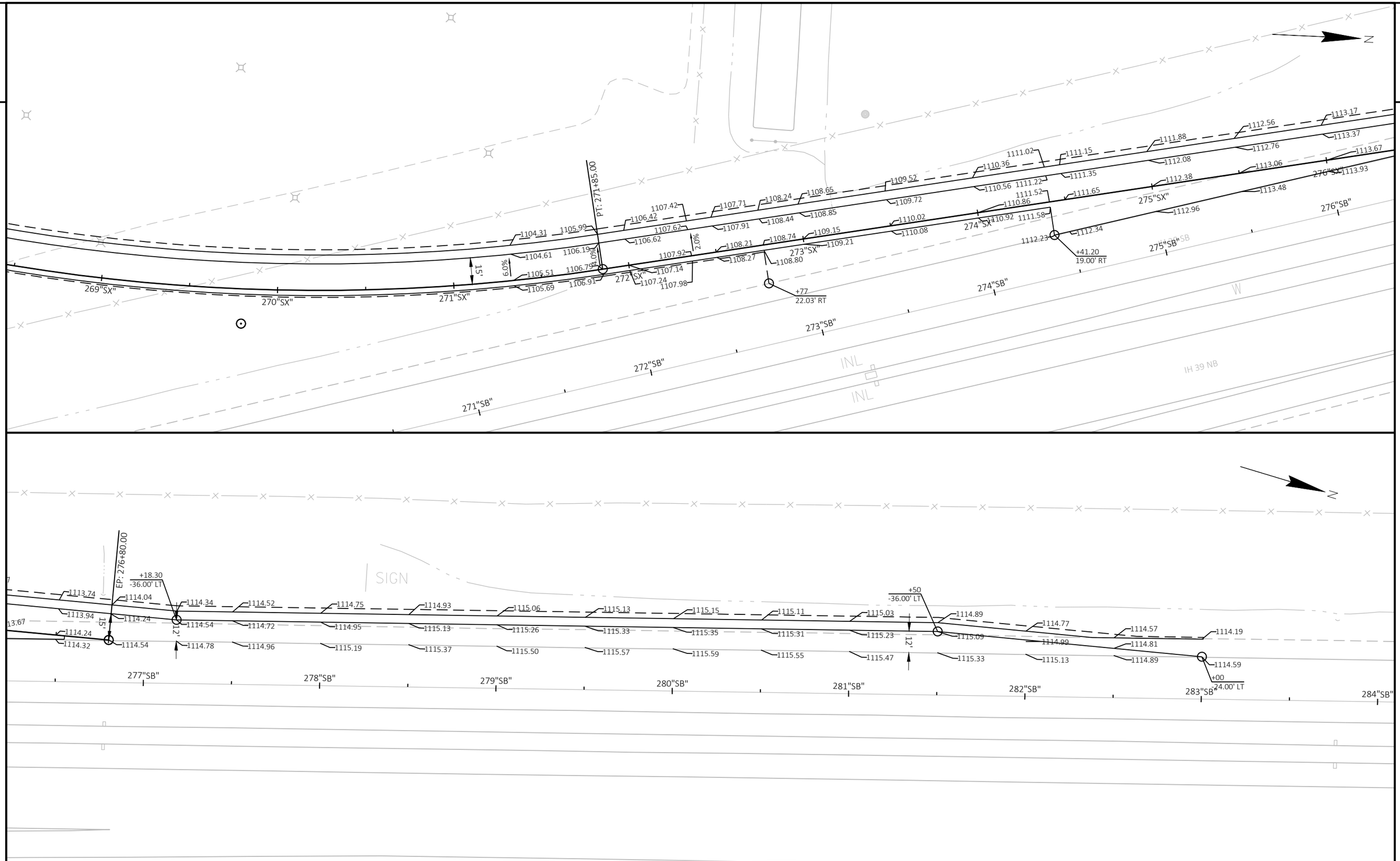
2



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	INTERCHANGE - PAVING DETAIL GORE - IH 39 NB OFF	SHEET 55	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\021202-PD_PAVING DETAILS_NB OFF.DWG
LAYOUT NAME - INTERCHANGE PAVING - NB OFF

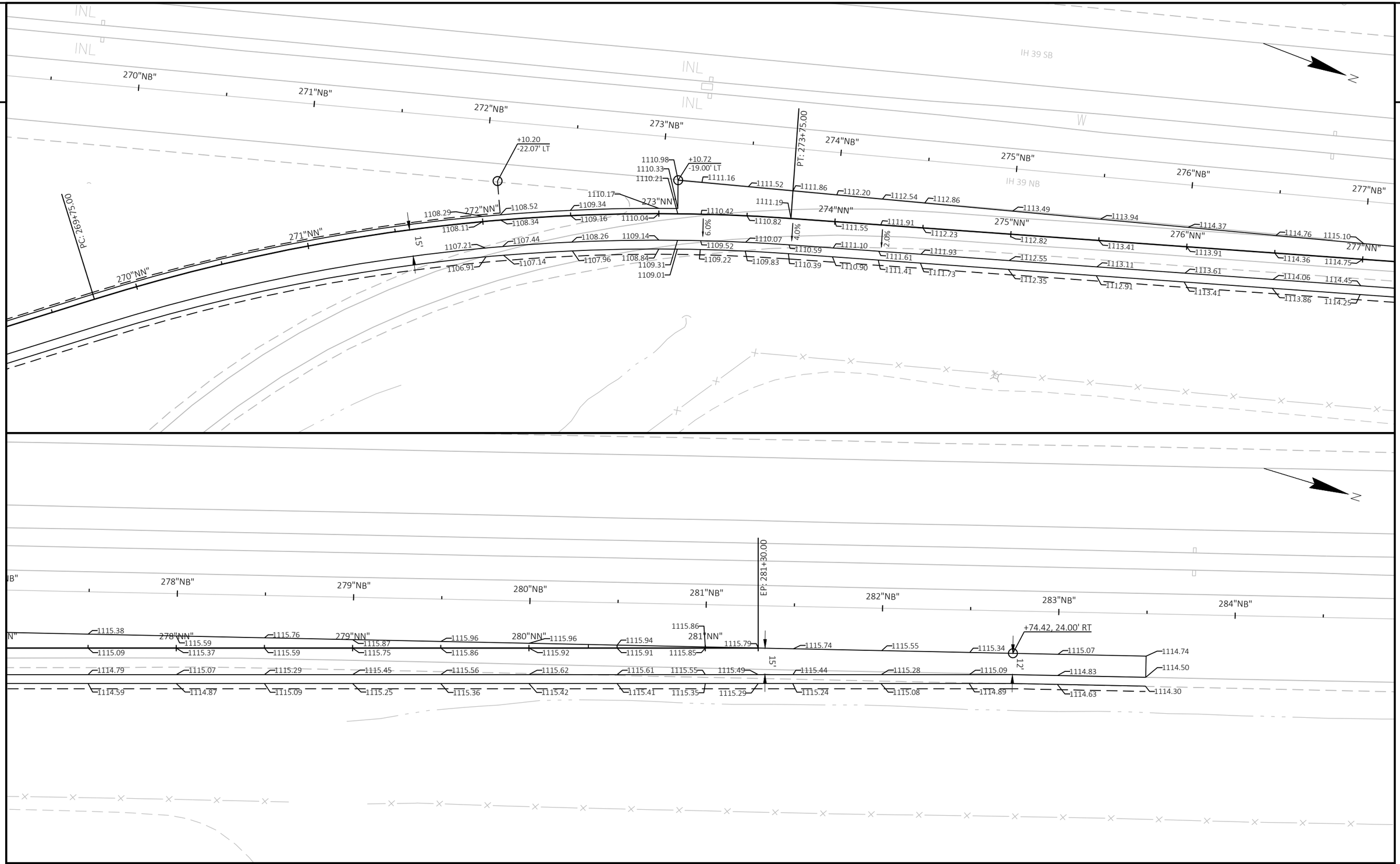
PLOT DATE : 1/19/2022 5:36 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:50 FT



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	INTERCHANGE - PAVING DETAIL GORE - IH 39 SB OFF	SHEET 56	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\021202-PD_PAVING DETAILS_SB OFF.DWG
LAYOUT NAME - SB OFF
PLOT DATE : 1/19/2022 5:37 PM
PLOT BY : ANDERSON, SHAUN M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

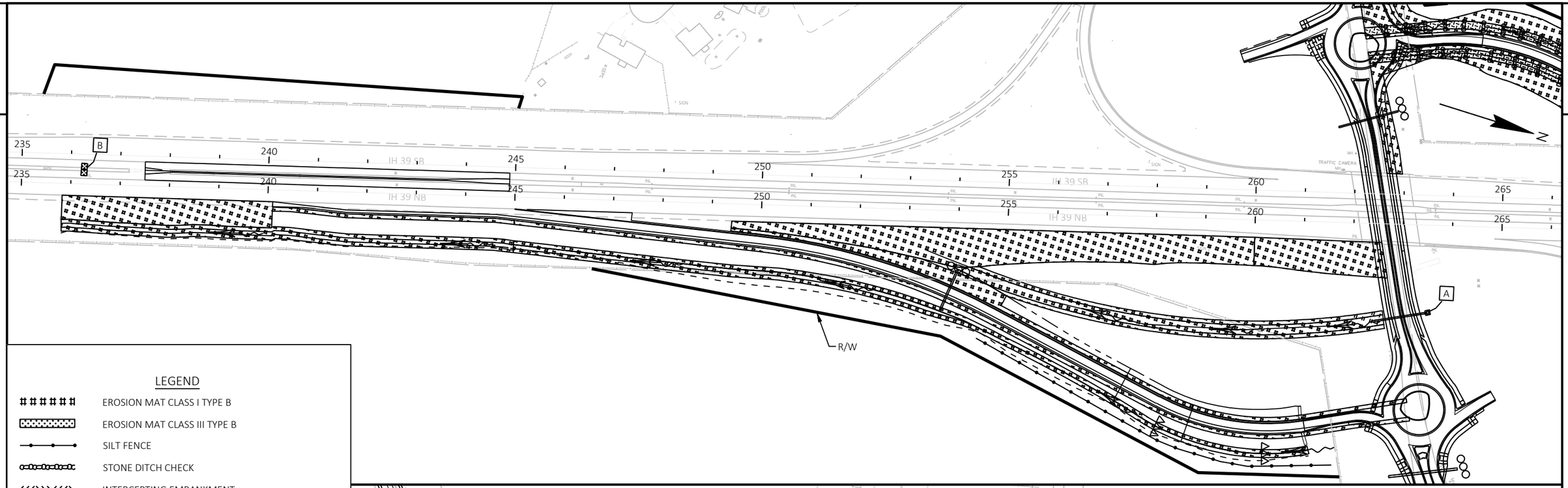
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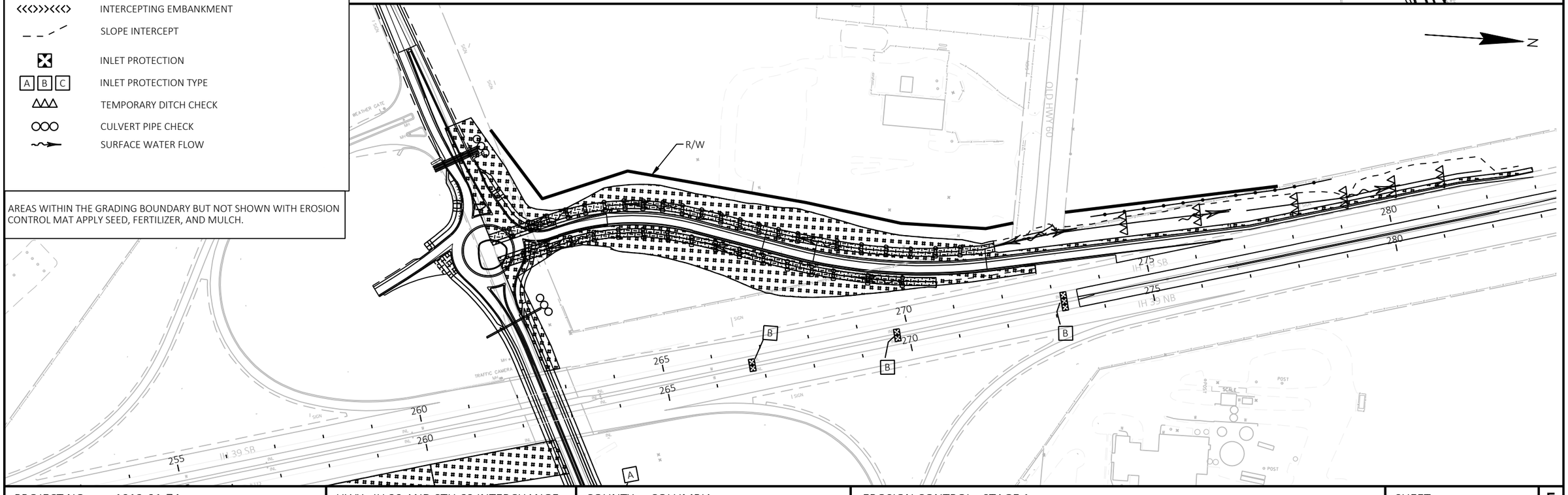


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	INTERCHANGE - PAVING DETAIL GORE - IH 39 NB ON	SHEET 57	E

2

2





LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS III TYPE B
- SILT FENCE
- STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- A B C INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

AREAS WITHIN THE GRADING BOUNDARY BUT NOT SHOWN WITH EROSION CONTROL MAT APPLY SEED, FERTILIZER, AND MULCH.

PROJECT NO: 1012-01-74	HWY: IH 39 AND STH 60 INTERCHANGE	COUNTY: COLUMBIA	EROSION CONTROL - STAGE 1	SHEET 58	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\022001-EC_S1.DWG
LAYOUT NAME - Stage 1

PLOT DATE : 2/25/2022 8:53 AM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

N

R/W

R/W

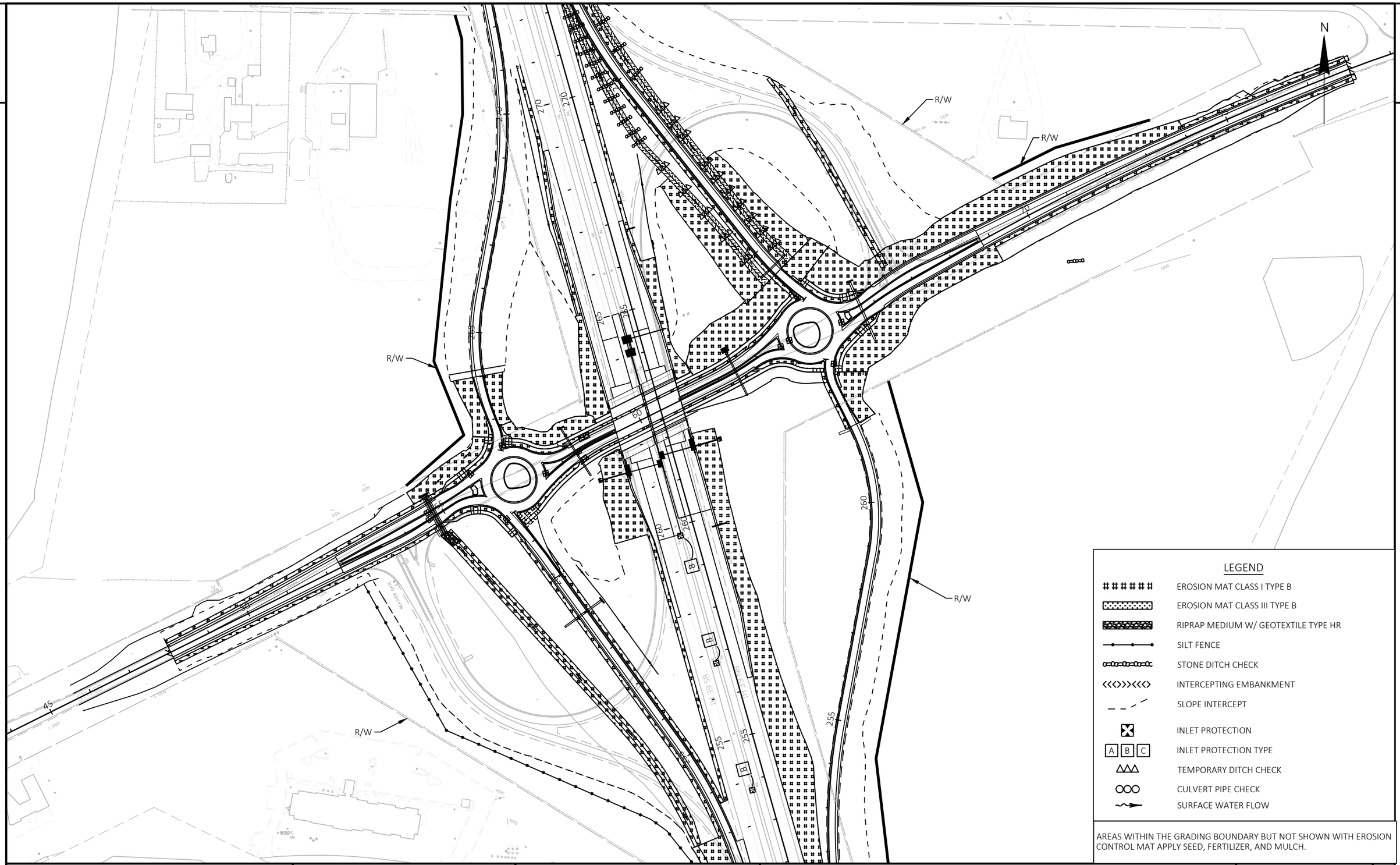
LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS III TYPE B
- RIPRAP MEDIUM W/ GEOTEXTILE TYPE HR
- SILT FENCE
- STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- A B C INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

AREAS WITHIN THE GRADING BOUNDARY BUT NOT SHOWN WITH EROSION CONTROL MAT APPLY SEED, FERTILIZER, AND MULCH.

PROJECT NO: 1012-01-74	HWY: IH 39 AND STH 60 INTERCHANGE	COUNTY: COLUMBIA	EROSION CONTROL - IH 39 AND STH 60 INTERCHANGE	SHEET 59	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\022001-EC_S4.DWG
LAYOUT NAME - STAGE 2-4 1
PLOT DATE : 2/25/2022 8:53 AM
PLOT BY : COLE, RYAN DAVID
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

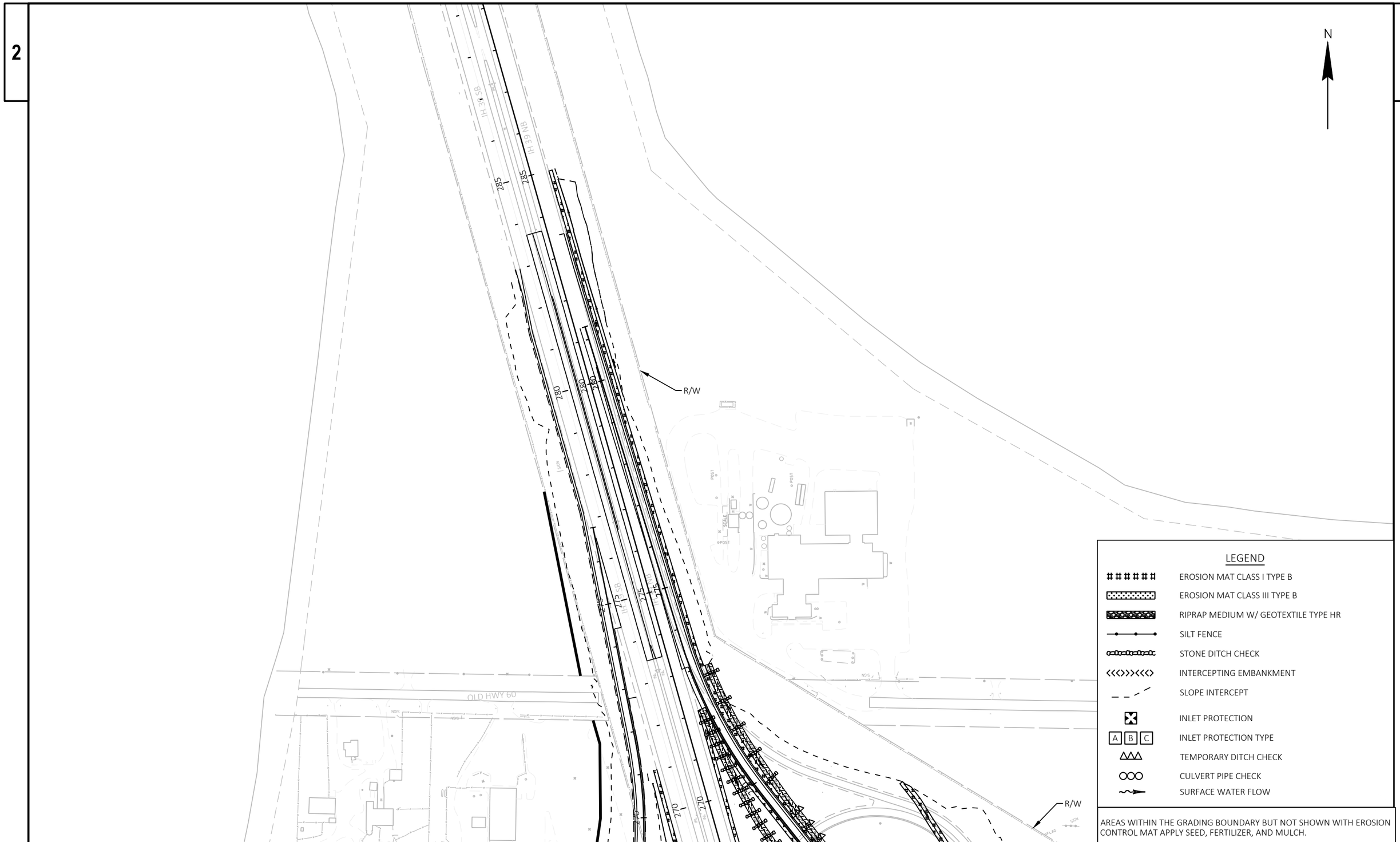


PROJECT NO: 1012-01-74	HWY: IH 39 AND STH 60 INTERCHANGE	COUNTY: COLUMBIA	EROSION CONTROL - IH 39 AND STH 60 INTERCHANGE	SHEET 60	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\022001-EC_S4.DWG
LAYOUT NAME - STAGE 2-4 2

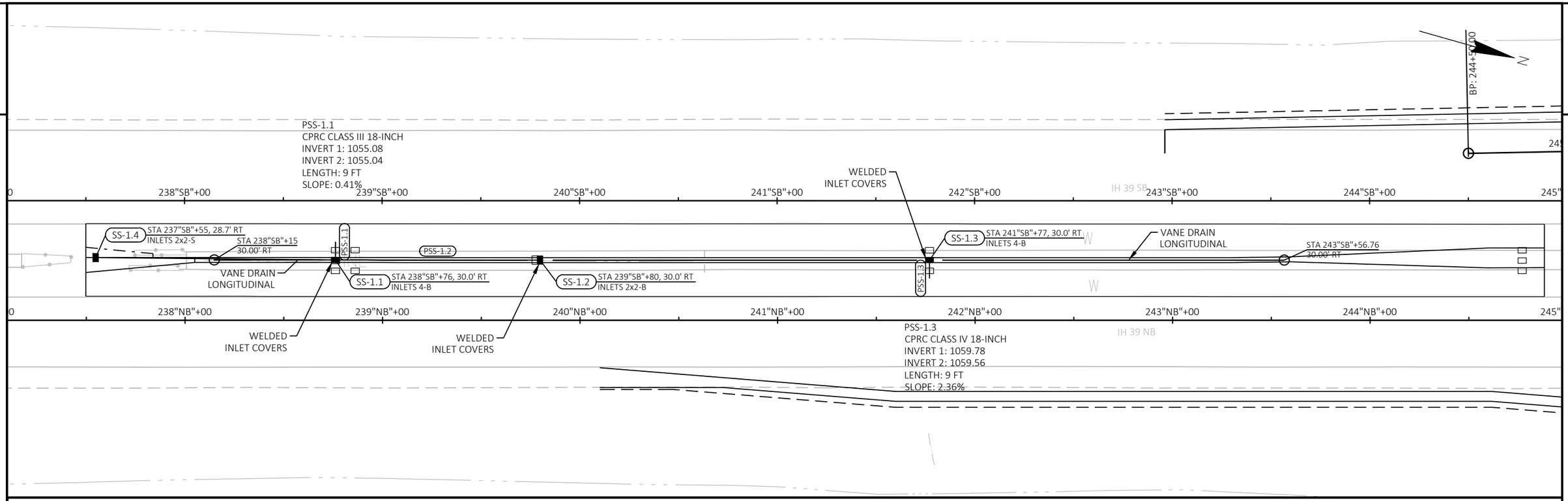
PLOT DATE : 2/25/2022 8:53 AM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:200 FT

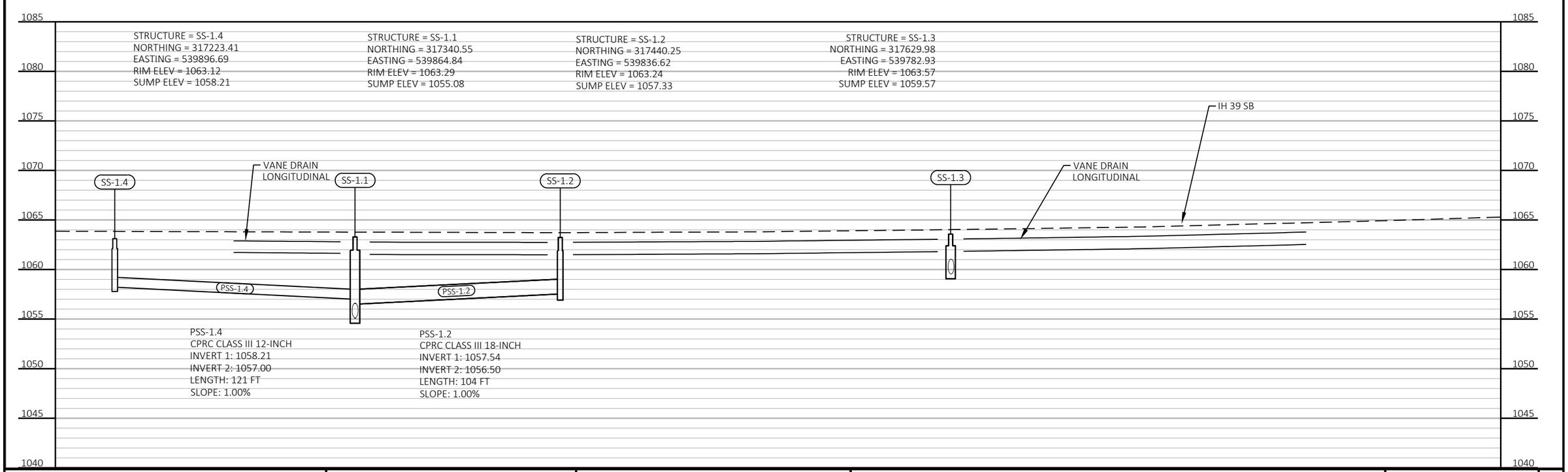
WISDOT/CADDS SHEET 42



PROJECT NO: 1012-01-74	HWY: IH 39 AND STH 60 INTERCHANGE	COUNTY: COLUMBIA	EROSION CONTROL - IH 39 AND STH 60 INTERCHANGE	SHEET 61	E

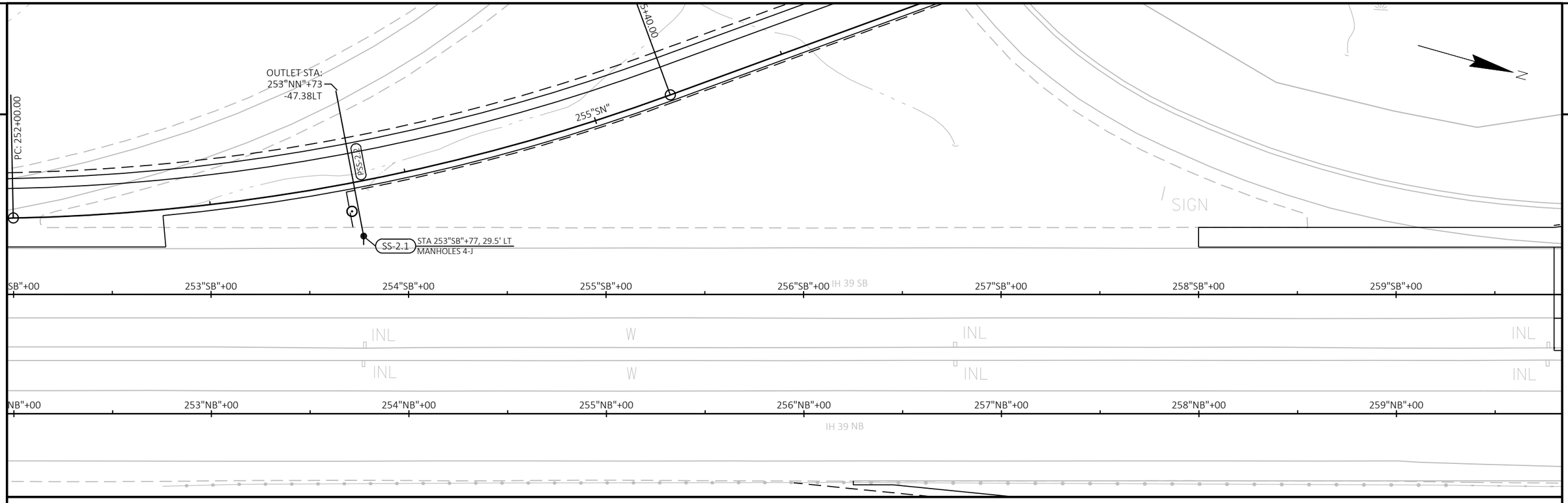
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\022001-EC_S4.DWG
LAYOUT NAME - STAGE 2-4 3
PLOT DATE : 2/25/2022 8:53 AM
PLOT BY : COLE, RYAN DAVID
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42





PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	STORM SEWER	SHEET 62	E

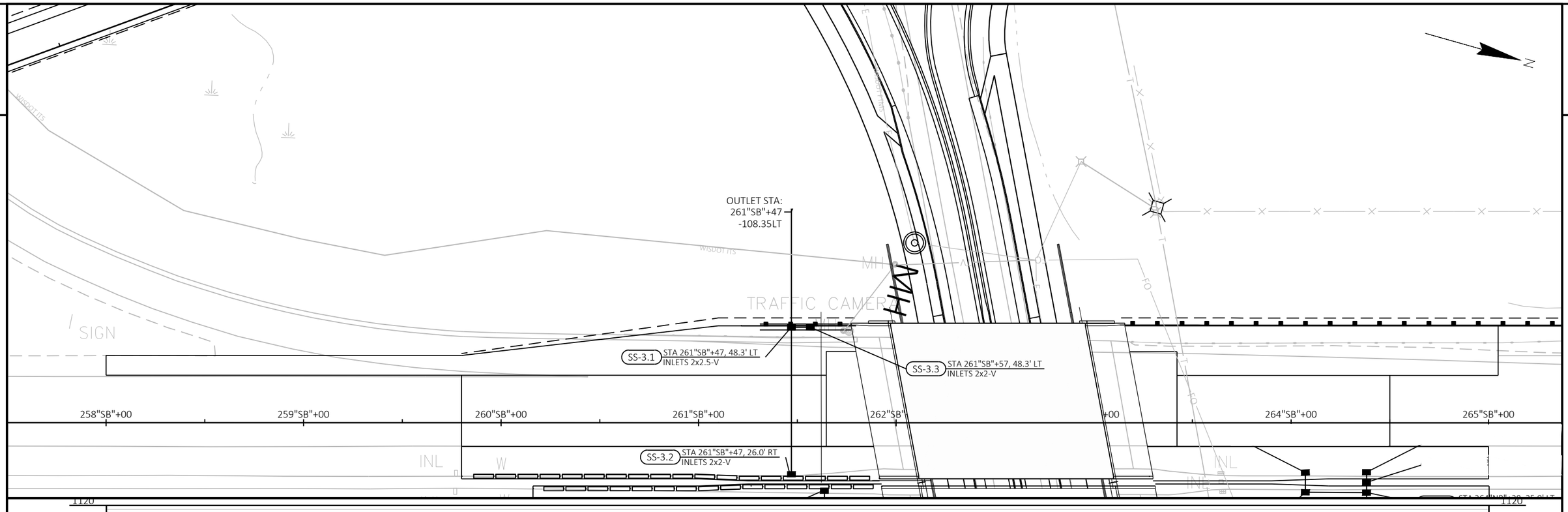
2





PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	STORM SEWER	SHEET 63	E

2



STRUCTURE = SS-3.1
NORTHING = 319504.04
EASTING = 539171.20
RIM ELEV = 1089.10
SUMP ELEV = 1082.18

STRUCTURE = SS-3.3
NORTHING = 319513.26
EASTING = 539168.59
RIM ELEV = 1089.33
SUMP ELEV = 1082.71

SS-3.3
SS-3.1
PSS-3.2

PSS-3.2
CPRC CLASS III 12-INCH
INVERT 1: 1082.88
INVERT 2: 1082.69
LENGTH: 10 FT
SLOPE: 2.00%

SS-3.1
SS-3.2
PDPS-3.3(S1)
PSS-3.1
PDPS-3.3(S2)
PDPS-3.3(S3)

STRUCTURE = SS-3.2
NORTHING = 319524.27
EASTING = 539242.66
RIM ELEV = 1089.55
SUMP ELEV = 1083.63

PDPS-3.3(S3)
CPCPE 18-INCH
INVERT 1: 1067.24
INVERT 2: 1067.09
LENGTH: 19 FT
SLOPE: 0.81%

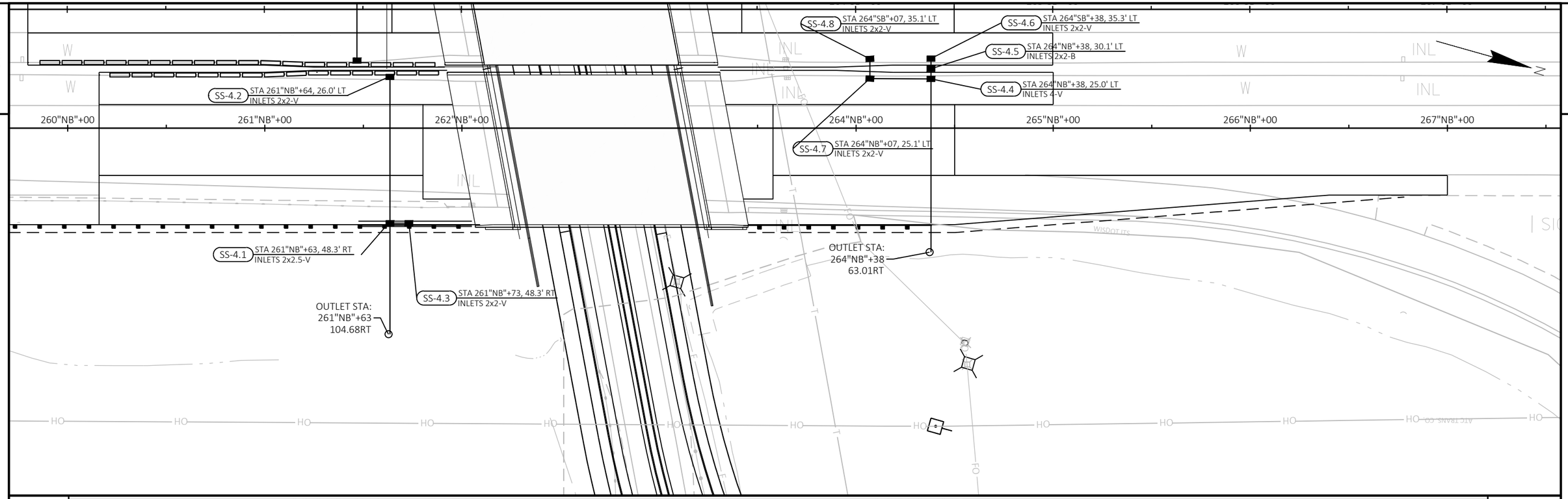
PDPS-3.3(S2)
CPCPE 18-INCH
INVERT 1: 1082.09
INVERT 2: 1067.24
LENGTH: 37 FT
SLOPE: 40.39%

PDPS-3.3(S1)
CPCPE 18-INCH
INVERT 1: 1082.19
INVERT 2: 1082.09
LENGTH: 5 FT
SLOPE: 2.00%

PSS-3.1
CPRC CLASS III 12-INCH
INVERT 1: 1083.80
INVERT 2: 1082.69
LENGTH: 74 FT
SLOPE: 1.50%

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	STORM SEWER	SHEET 64	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\022501-SS_V2.DWG
LAYOUT NAME - 03
PLOT DATE : 1/20/2022 6:05 AM
PLOT BY : ANDERSON, SHAUN M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44



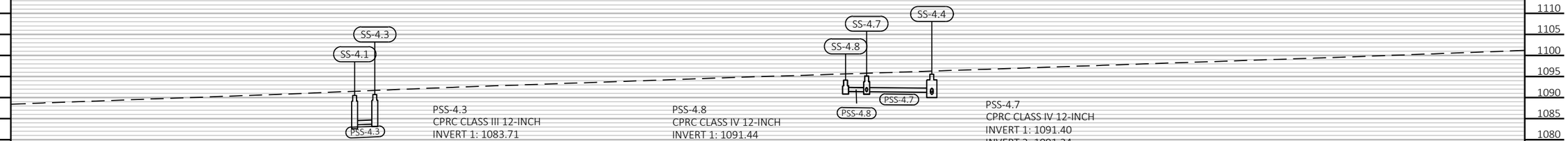
STRUCTURE = SS-4.1
NORTHING = 319562.84
EASTING = 539317.55
RIM ELEV = 1090.52
SUMP ELEV = 1083.01

STRUCTURE = SS-4.3
NORTHING = 319572.06
EASTING = 539314.94
RIM ELEV = 1090.71
SUMP ELEV = 1083.54

STRUCTURE = SS-4.8
NORTHING = 319774.41
EASTING = 539170.97
RIM ELEV = 1094.14
SUMP ELEV = 1091.28

STRUCTURE = SS-4.7
NORTHING = 319777.14
EASTING = 539180.59
RIM ELEV = 1095.15
SUMP ELEV = 1091.23

STRUCTURE = SS-4.4
NORTHING = 319807.00
EASTING = 539172.29
RIM ELEV = 1095.57
SUMP ELEV = 1090.53

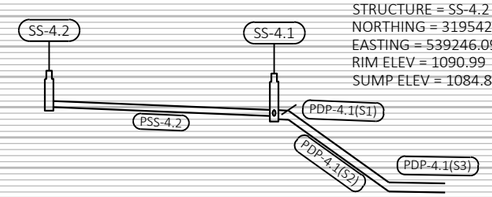


PSS-4.3
CPRC CLASS III 12-INCH
INVERT 1: 1083.71
INVERT 2: 1083.52
LENGTH: 10 FT
SLOPE: 2.00%

PSS-4.8
CPRC CLASS IV 12-INCH
INVERT 1: 1091.44
INVERT 2: 1091.40
LENGTH: 10 FT
SLOPE: 0.50%

PSS-4.7
CPRC CLASS IV 12-INCH
INVERT 1: 1091.40
INVERT 2: 1091.24
LENGTH: 31 FT
SLOPE: -0.50%

STRUCTURE = SS-4.2
NORTHING = 319542.61
EASTING = 539246.09
RIM ELEV = 1090.99
SUMP ELEV = 1084.83



PSS-4.2
CPRC CLASS III 12-INCH
INVERT 1: 1085.00
INVERT 2: 1083.51
LENGTH: 74 FT
SLOPE: 2.00%

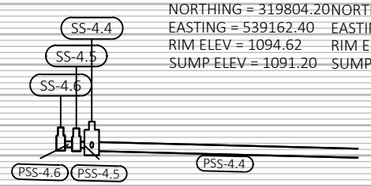
PDP-4.1(S1)
CPCPE 18-INCH
INVERT 1: 1083.02
INVERT 2: 1082.92
LENGTH: 5 FT
SLOPE: 2.00%

PDP-4.1(S2)
CPCPE 18-INCH
INVERT 1: 1082.92
INVERT 2: 1071.07
LENGTH: 33 FT
SLOPE: 35.80%

PDP-4.1(S3)
CPCPE 18-INCH
INVERT 1: 1071.07
INVERT 2: 1070.92
LENGTH: 19 FT
SLOPE: 0.81%

STRUCTURE = SS-4.6
NORTHING = 319804.20
EASTING = 539162.40
RIM ELEV = 1094.62
SUMP ELEV = 1091.20

STRUCTURE = SS-4.5
NORTHING = 319805.60
EASTING = 539167.34
RIM ELEV = 1094.45
SUMP ELEV = 1091.14



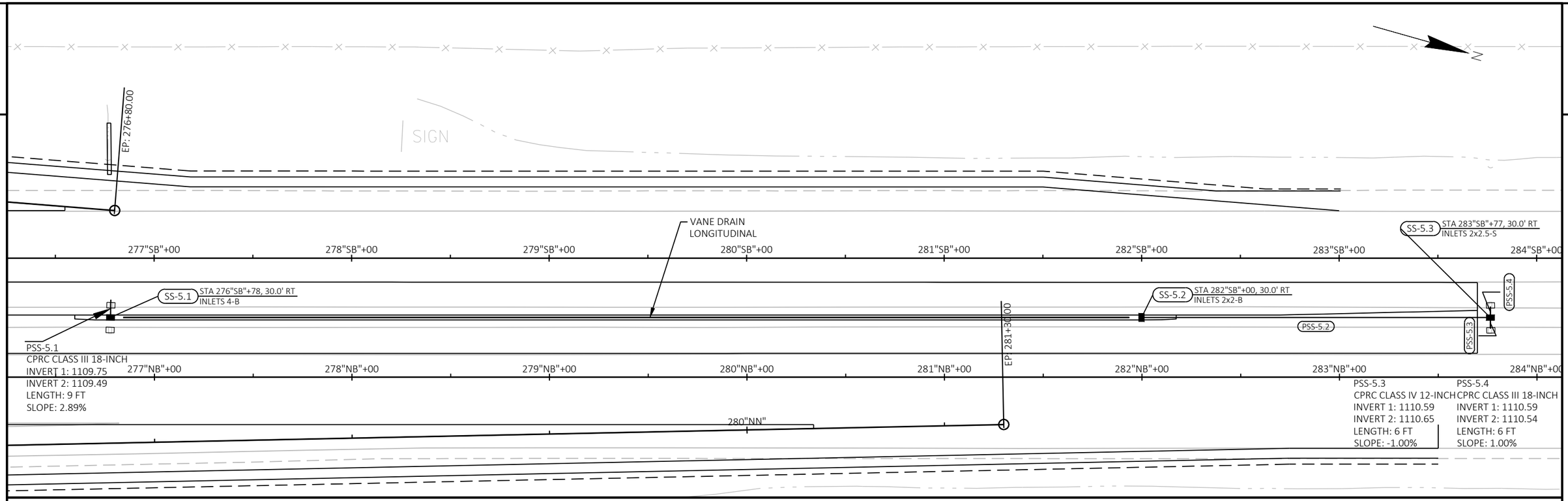
PSS-4.6
CPRC CLASS IV 12-INCH
INVERT 1: 1091.37
INVERT 2: 1091.30
LENGTH: 5 FT
SLOPE: 1.27%

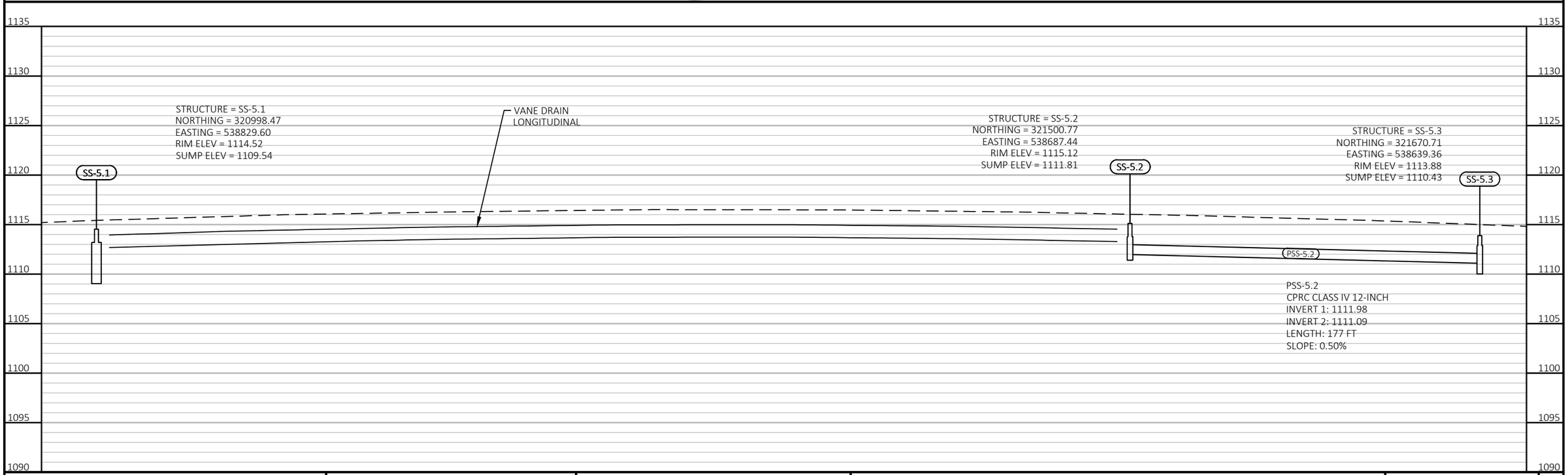
PSS-4.5
CPRC CLASS IV 12-INCH
INVERT 1: 1091.31
INVERT 2: 1091.24
LENGTH: 5 FT
SLOPE: 1.27%

PSS-4.4
CPRC CLASS III 18-INCH
INVERT 1: 1090.74
INVERT 2: 1089.62
LENGTH: 88 FT
SLOPE: 1.27%

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	STORM SEWER	SHEET 65	E

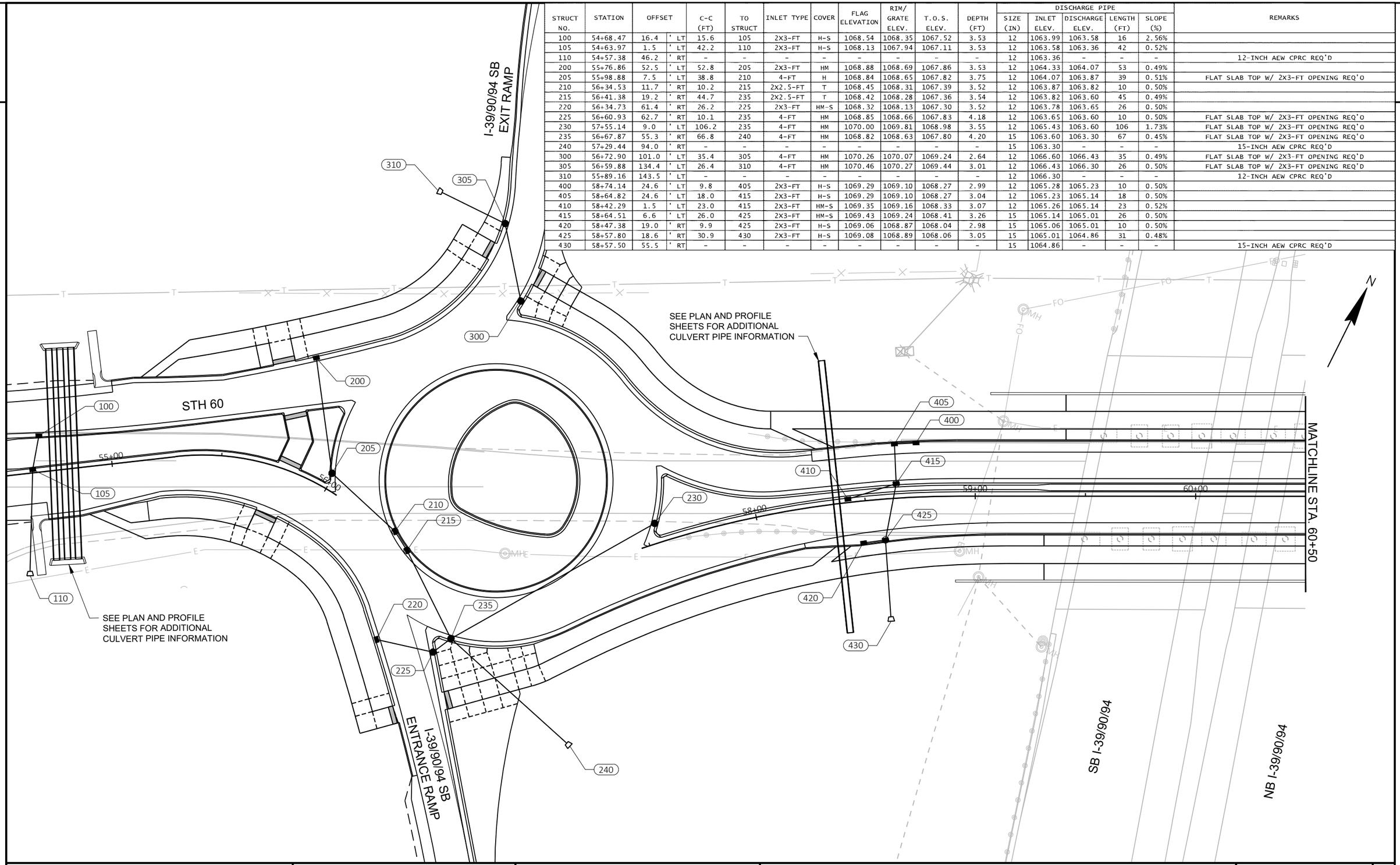
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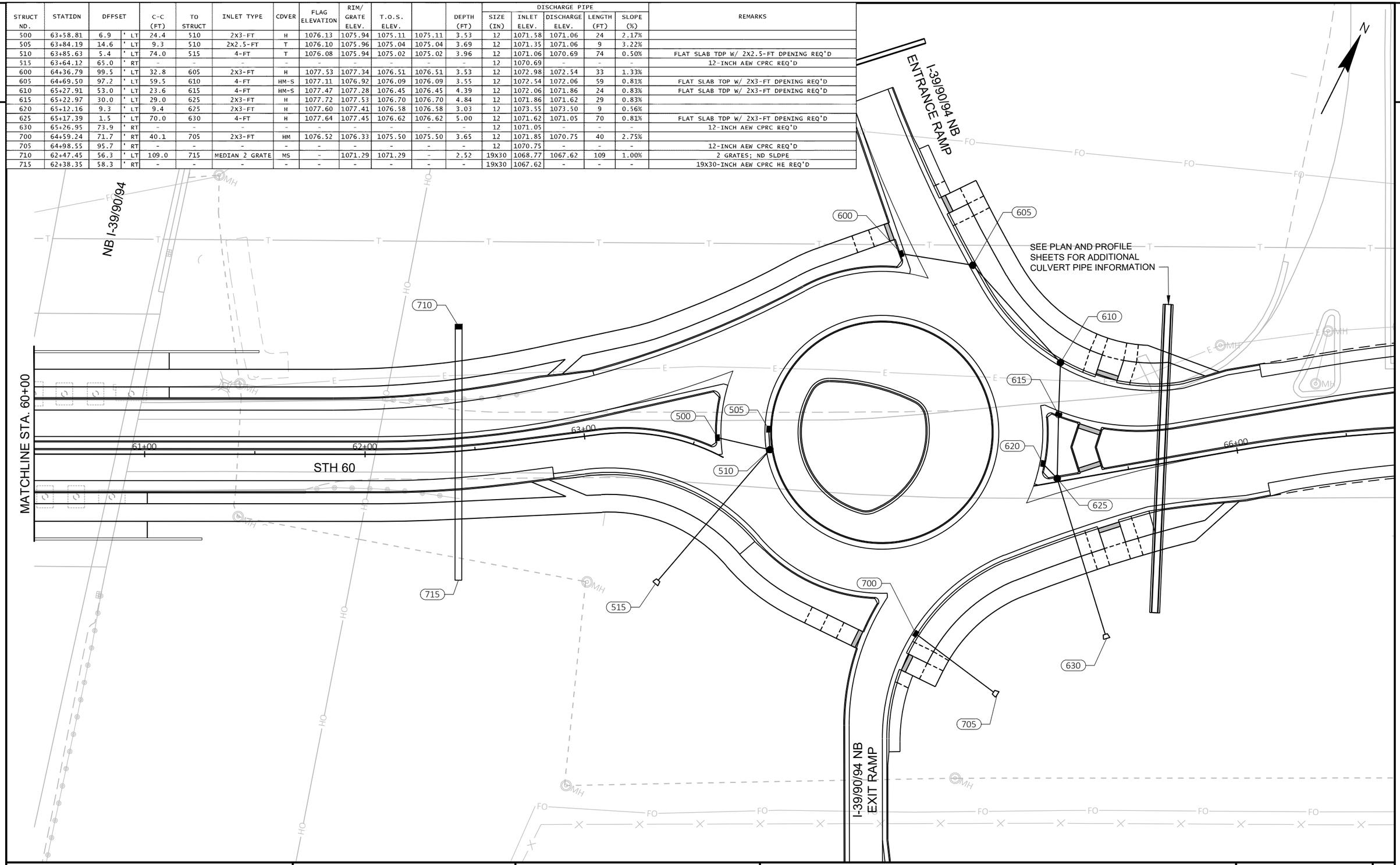
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	STORM SEWER	SHEET 66	E

STRUCT NO.	STATION	OFFSET	C-C (FT)	TO STRUCT	INLET TYPE	COVER	FLAG ELEVATION	RIM/ GRATE ELEV.	T.O.S. ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	DISCHARGE PIPE INLET ELEV.	DISCHARGE PIPE DISCHARGE ELEV.	DISCHARGE PIPE LENGTH (FT)	DISCHARGE PIPE SLOPE (%)	REMARKS
100	54+68.47	16.4 ' LT	15.6	105	2X3-FT	H-S	1068.54	1068.35	1067.52	3.53	12	1063.99	1063.58	16	2.56%	
105	54+63.97	1.5 ' LT	42.2	110	2X3-FT	H-S	1068.13	1067.94	1067.11	3.53	12	1063.58	1063.36	42	0.52%	
110	54+57.38	46.2 ' RT	-	-	-	-	-	-	-	-	12	1063.36	-	-	-	12-INCH AEW CPRC REQ'D
200	55+76.86	52.5 ' LT	52.8	205	2X3-FT	HM	1068.88	1068.69	1067.86	3.53	12	1064.33	1064.07	53	0.49%	
205	55+98.88	7.5 ' LT	38.8	210	4-FT	H	1068.84	1068.65	1067.82	3.75	12	1064.07	1063.87	39	0.51%	FLAT SLAB TOP W/ 2X3-FT OPENING REQ'O
210	56+34.53	11.7 ' RT	10.2	215	2X2.5-FT	T	1068.45	1068.31	1067.39	3.52	12	1063.87	1063.82	10	0.50%	
215	56+41.38	19.2 ' RT	44.7	235	2X2.5-FT	T	1068.42	1068.28	1067.36	3.54	12	1063.82	1063.60	45	0.49%	
220	56+34.73	61.4 ' RT	26.2	225	2X3-FT	HM-S	1068.32	1068.13	1067.30	3.52	12	1063.78	1063.65	26	0.50%	
225	56+60.93	62.7 ' RT	10.1	235	4-FT	HM	1068.85	1068.66	1067.83	4.18	12	1063.65	1063.60	10	0.50%	FLAT SLAB TOP W/ 2X3-FT OPENING REQ'O
230	57+55.14	9.0 ' LT	106.2	235	4-FT	HM	1070.00	1069.81	1068.98	3.55	12	1065.43	1063.60	106	1.73%	FLAT SLAB TOP W/ 2X3-FT OPENING REQ'O
235	56+67.87	55.3 ' RT	66.8	240	4-FT	HM	1068.82	1068.63	1067.80	4.20	15	1063.60	1063.30	67	0.45%	FLAT SLAB TOP W/ 2X3-FT OPENING REQ'O
240	57+29.44	94.0 ' RT	-	-	-	-	-	-	-	-	15	1063.30	-	-	-	15-INCH AEW CPRC REQ'D
300	56+72.90	101.0 ' LT	35.4	305	4-FT	HM	1070.26	1070.07	1069.24	2.64	12	1066.60	1066.43	35	0.49%	FLAT SLAB TOP W/ 2X3-FT OPENING REQ'D
305	56+59.88	134.4 ' LT	26.4	310	4-FT	HM	1070.46	1070.27	1069.44	3.01	12	1066.43	1066.30	26	0.50%	FLAT SLAB TOP W/ 2X3-FT OPENING REQ'D
310	55+89.16	143.5 ' LT	-	-	-	-	-	-	-	-	12	1066.30	-	-	-	12-INCH AEW CPRC REQ'D
400	58+74.14	24.6 ' LT	9.8	405	2X3-FT	H-S	1069.29	1069.10	1068.27	2.99	12	1065.28	1065.23	10	0.50%	
405	58+64.82	24.6 ' LT	18.0	415	2X3-FT	H-S	1069.29	1069.10	1068.27	3.04	12	1065.23	1065.14	18	0.50%	
410	58+42.29	1.5 ' LT	23.0	415	2X3-FT	HM-S	1069.35	1069.16	1068.33	3.07	12	1065.26	1065.14	23	0.52%	
415	58+64.51	6.6 ' LT	26.0	425	2X3-FT	HM-S	1069.43	1069.24	1068.41	3.26	15	1065.14	1065.01	26	0.50%	
420	58+47.38	19.0 ' RT	9.9	425	2X3-FT	H-S	1069.06	1068.87	1068.04	2.98	15	1065.06	1065.01	10	0.50%	
425	58+57.80	18.6 ' RT	30.9	430	2X3-FT	H-S	1069.08	1068.89	1068.06	3.05	15	1065.01	1064.86	31	0.48%	
430	58+57.50	55.5 ' RT	-	-	-	-	-	-	-	-	15	1064.86	-	-	-	15-INCH AEW CPRC REQ'D



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	STORM SEWER	SHEET 67	E

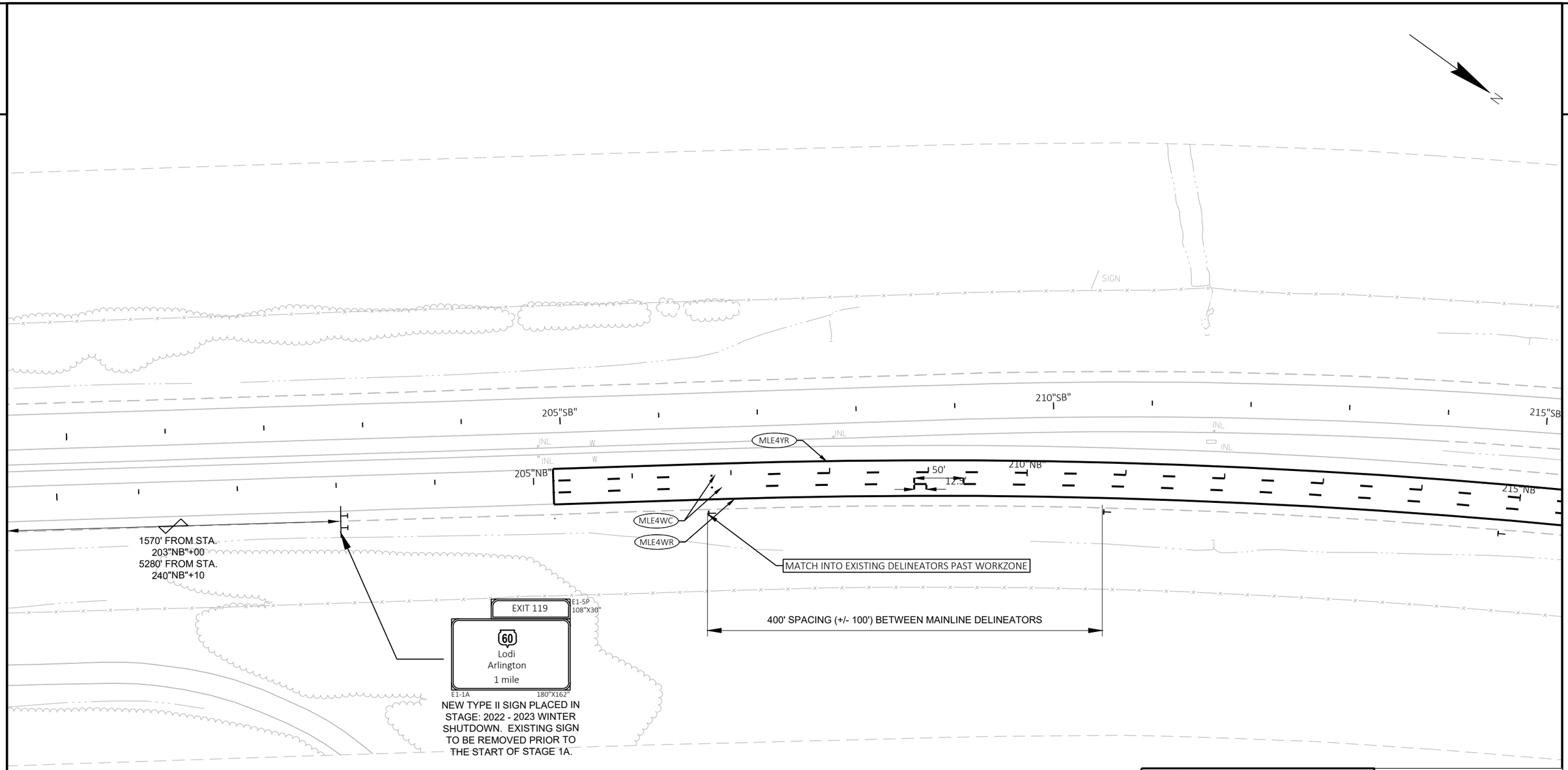
STRUCT ND.	STATIDN	DFFSET		C-C (FT)	TO STRUCT	INLET TYPE	CDVER	FLAG ELEVATION	RIM/ GRATE ELEV.	T.O.S. ELEV.		DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	DISCHARGE PIPE INLET ELEV.	DISCHARGE PIPE DISCHARGE ELEV.	DISCHARGE PIPE LENGTH (FT)	DISCHARGE PIPE SLOPE (%)	REMARKS
500	63+58.81	6.9	' LT	24.4	510	2X3-FT	H	1076.13	1075.94	1075.11	1075.11	3.53	12	1071.58	1071.06	24	2.17%	
505	63+84.19	14.6	' LT	9.3	510	2X2.5-FT	T	1076.10	1075.96	1075.04	1075.04	3.69	12	1071.35	1071.06	9	3.22%	
510	63+85.63	5.4	' LT	74.0	515	4-FT	T	1076.08	1075.94	1075.02	1075.02	3.96	12	1071.06	1070.69	74	0.50%	FLAT SLAB TOP W/ 2X2.5-FT OPENING REQ'D
515	63+64.12	65.0	' RT	-	-	-	-	-	-	-	-	-	12	1070.69	-	-	-	12-INCH AEW CPRC REQ'D
600	64+36.79	99.5	' LT	32.8	605	2X3-FT	H	1077.53	1077.34	1076.51	1076.51	3.53	12	1072.98	1072.54	33	1.33%	
605	64+69.50	97.2	' LT	59.5	610	4-FT	HM-S	1077.11	1076.92	1076.09	1076.09	3.55	12	1072.54	1072.06	59	0.81%	FLAT SLAB TOP W/ 2X3-FT OPENING REQ'D
610	65+27.91	53.0	' LT	23.6	615	4-FT	HM-S	1077.47	1077.28	1076.45	1076.45	4.39	12	1072.06	1071.86	24	0.83%	FLAT SLAB TOP W/ 2X3-FT OPENING REQ'D
615	65+22.97	30.0	' LT	29.0	625	2X3-FT	H	1077.72	1077.53	1076.70	1076.70	4.84	12	1071.86	1071.62	29	0.83%	
620	65+12.16	9.3	' LT	9.4	625	2X3-FT	H	1077.60	1077.41	1076.58	1076.58	3.03	12	1073.55	1073.50	9	0.56%	
625	65+17.39	1.5	' LT	70.0	630	4-FT	H	1077.64	1077.45	1076.62	1076.62	5.00	12	1071.62	1071.05	70	0.81%	FLAT SLAB TOP W/ 2X3-FT OPENING REQ'D
630	65+26.95	73.9	' RT	-	-	-	-	-	-	-	-	-	12	1071.05	-	-	-	12-INCH AEW CPRC REQ'D
700	64+59.24	71.7	' RT	40.1	705	2X3-FT	HM	1076.52	1076.33	1075.50	1075.50	3.65	12	1071.85	1070.75	40	2.75%	
705	64+98.55	95.7	' RT	-	-	-	-	-	-	-	-	-	12	1070.75	-	-	-	12-INCH AEW CPRC REQ'D
710	62+47.45	56.3	' LT	109.0	715	MEDIAN 2 GRATE	MS	-	1071.29	1071.29	-	2.52	19X30	1068.77	1067.62	109	1.00%	2 GRATES; ND SLDPE
715	62+38.35	58.3	' RT	-	-	-	-	-	-	-	-	-	19X30	1067.62	-	-	-	19X30-INCH AEW CPRC HE REQ'D



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	STORM SEWER	SHEET 68	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022502_ss
PLOT DATE : 1/12/2022 5:00 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2



SDD LIST:
SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)

NOTE:
SIGNS NOT SHOWN ARE EXISTING SIGNS TO REMAIN.

DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF SHOULDER FOR THE LENGTH OF THE INSTALLATION, TYPICALLY 4 FEET. IF A BARRIER WALL OR PARAPET IS PRESENT PLACE THE DELINEATORS ON THE WALL.

	DELINEATOR SINGLE/DOUBLE
MLE4WR	MARKING LINE GROOVED WET REF EPOXY 4-INCH- WHITE
MLE4WC	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH-WHITE
MLE4YR	MARKING LINE GROOVED WET REF EPOXY 4-INCH-YELLOW
MLE8W	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH
MCE24	MARKING CHEVRON EPOXY 24-INCH-WHITE
MLE4W	MARKING LINE EPOXY 4-INCH- WHITE
MLE4Y	MARKING LINE EPOXY 4-INCH- YELLOW

2

2

N

215"SB"

220"SB"

225"SB"

230"S

215"NB"

220"NB"

225"NB"

230"NB"

MLE4YR

50'

12.5'

MLE4WC

MLE4WR

400' SPACING (+/- 100') BETWEEN MAINLINE DELINEATORS

SDD LIST:
SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)

NOTE:
SIGNS NOT SHOWN ARE EXISTING SIGNS TO REMAIN.

DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF SHOULDER FOR THE LENGTH OF THE INSTALLATION, TYPICALLY 4 FEET. IF A BARRIER WALL OR PARAPET IS PRESENT PLACE THE DELINEATORS ON THE WALL.

	DELINEATOR SINGLE/DOUBLE
MLE4WR	MARKING LINE GROOVED WET REF EPOXY 4-INCH- WHITE
MLE4WC	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH-WHITE
MLE4YR	MARKING LINE GROOVED WET REF EPOXY 4-INCH-YELLOW
MLE8W	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH
MCE24	MARKING CHEVRON EPOXY 24-INCH-WHITE
MLE4W	MARKING LINE EPOXY 4-INCH- WHITE
MLE4Y	MARKING LINE EPOXY 4-INCH- YELLOW

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING AND MARKING	SHEET 70	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\023201_PS - I39.DWG
LAYOUT NAME - 02

PLOT DATE : 1/19/2022 5:45 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

400' SPACING (+/- 100') BETWEEN MAINLINE DELINEATORS

EAST 90 MILE 119 .8
D10-5 21"X60"

EAST 90 MILE 119 .8
D10-5 21"X60"

PLACE DOUBLE DELINEATORS FROM THE TIP OF THE GORE TO THE BEGINNING OF THE ON RAMP TAPER

MATCH INTO EXISTING DELINEATORS PAST WORKZONE

EXISTING REMAINS

MLE4WR
MLE4WC

230'SB'

235'SB'

12.5'

50'

240'SB'

"SB"+89.0

IH 39 SB

"SB"+00.0

"SB"+50

MLE4YR

MLE8W
(3' LINE 9' GAP)

MLE8W

230'NB'

235'NB'

12.5'

50'

240'NB'

IH 39 NB

"NB"+50.0

MLE4WC
MLE4WR

MLE4WR

AERIAL ENFORCEMENT BARS
PAVEMENT MARKING
SDD 15C14-04

100' SPACING (+/- 25') BETWEEN RAMP DELINEATORS

FOOD

EXISTING SPECIFIC INFORMATION SIGNS TO BE MOVED BY OTHERS

GAS
LODGING

EXISTING SPECIFIC INFORMATION SIGNS TO BE MOVED BY OTHERS

EXIT 119
E1-5P
108"X30"

60
Lodi
Arlington

E4-1A
216"X132"

NEW TYPE II SIGN PLACED IN STAGE: 2022 - 2023 WINTER SHUTDOWN. EXISTING SIGN TO BE REMOVED PRIOR TO THE START OF STAGE 1A

PLACE DOUBLE DELINEATORS FROM THE BEGINNING OF THE OFF RAMP TAPER TO THE TIP OF THE GORE

SDD LIST:
SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
SDD 15C31-A PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP
SDD 15C31-C PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

NOTE:
SIGNS NOT SHOWN ARE EXISTING SIGNS TO REMAIN.

DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF SHOULDER FOR THE LENGTH OF THE INSTALLATION, TYPICALLY 4 FEET. IF A BARRIER WALL OR PARAPET IS PRESENT PLACE THE DELINEATORS ON THE WALL.

	DELINEATOR SINGLE/DOUBLE
MLE4WR	MARKING LINE GROOVED WET REF EPOXY 4-INCH- WHITE
MLE4WC	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH-WHITE
MLE4YR	MARKING LINE GROOVED WET REF EPOXY 4-INCH-YELLOW
MLE8W	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH
MCE24	MARKING CHEVRON EPOXY 24-INCH-WHITE
MLE4W	MARKING LINE EPOXY 4-INCH- WHITE
MLE4Y	MARKING LINE EPOXY 4-INCH- YELLOW

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING AND MARKING	SHEET 71	E

MLE4WR	DELINEATOR SINGLE/DOUBLE
MLE4WC	MARKING LINE GROOVED WET REF EPOXY 4-INCH- WHITE
MLE4YR	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH-WHITE
MLE8W	MARKING LINE GROOVED WET REF EPOXY 4-INCH-YELLOW
MCE24	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH
MLE4W	MARKING CHEVRON EPOXY 24-INCH-WHITE
MLE4Y	MARKING LINE EPOXY 4-INCH- WHITE
	MARKING LINE EPOXY 4-INCH- YELLOW

SDD LIST:
SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
SDD 15C31-A PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP
SDD 15C31-C PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

NOTE:
SIGNS NOT SHOWN ARE EXISTING SIGNS TO REMAIN.

DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF SHOULDER FOR THE LENGTH OF THE INSTALLATION, TYPICALLY 4 FEET. IF A BARRIER WALL OR PARAPET IS PRESENT PLACE THE DELINEATORS ON THE WALL.

RAMP 40 MPH REMOVE
PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED REMOVE
REMOVE
FOOD
EXISTING SPECIFIC INFORMATION SIGNS TO BE MOVED BY OTHERS
WEST ALT 60 / ALTERNATE 39 / EAST 60 REMOVE
WRONG WAY REMOVE
DO NOT ENTER REMOVE
GAS LODGING
EXISTING SPECIFIC INFORMATION SIGNS TO BE MOVED BY OTHERS
WRONG WAY REMOVE
REMOVE
REMOVE
EXIT 119 REMOVE
100' SPACING (+/- 25') BETWEEN RAMP DELINEATORS
MLE4WR
MLE8W
MLE4YR
EXISTING REMAINS
MLE4WC
MLE4WR
245"SN"
"SB"+50.0
245"SB"
250"SN"
250"SB"
"SN"+75.7
"SB"+77.1
"SN"+25.7
"SB"+27.1
255"SN"
255"SB"
IH 39 SB
12.5'
50'
260"SN"
SIGN
AERIAL ENFORCEMENT BARS PAVEMENT MARKING SDD 15C14-04
MLE8W
MCE24
MLE4YR
245"NB"
"NB"+50.0
"NB"+38.3
"NB"+88.3
250"NB"
255"NB"
IH 39 NB
12.5'
30'
MLE4YR
"NX"+37.5
"NX"+87.5
250"NX"
MLE4WC
MLE4WR
MLE4WR
400' SPACING (+/- 100') BETWEEN MAINLINE DELINEATORS
SIGN
ALTERNATE 39 M4-1 36"X18" M1-1 36"X36"
EXIT 119
E5-1A 60"X90"
255"NX"
260"NX"
25.00'
45°0'0"
MCE24
MLE8W

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING AND MARKING	SHEET 72 E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\023201_PS - I39.DWG
LAYOUT NAME - 04
PLOT DATE : 1/19/2022 5:45 PM
PLOT BY : ANDERSON, SHAUN M
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

260"SN"

265"SX"

270"SX"

EXIT 119
60
Lodi
Arlington
REMOVE

EXIT
30
MPH
REMOVE

EAST 90 MILE 119 .4 D10-5 21"X60"

EAST 90 MILE 119 .2 D10-5 21"X60"

100' SPACING (+/- 25') BETWEEN RAMP DELINEATORS

MLE4WR
MLE4WC
MLE4W
MLE4YR
MLE4Y
MLE8W

B-11-165
USE MARKING LINE EPOXY 4-INCH FOR ALL BRIDGE AND BRIDGE APPROACH PAVEMENT MARKING.

"SX"+91.2
"SB"+90.4

260"SB"
265"SB"
270"SB"
12.5'
50'

260"NB"
265"NB"
270"NB"

"NB"+59.4
"NB"+09.4
"NN"+60.7
"NN"+10.7
"NN"+75.0

B-11-166
USE MARKING LINE EPOXY 4-INCH FOR ALL BRIDGE AND BRIDGE APPROACH PAVEMENT MARKING.

ALTERNATE 39 REMOVE

EXISTING REMAINS

270"NN"

400' SPACING (+/- 100') BETWEEN MAINLINE DELINEATORS

DELINEATORS IN A LOCATION WITH BARRIER WALL OR GUARDRAIL ARE TO BE INSTALLED AS PART OF THE BARRIER WALL OR GUARDRAIL, NOT PLACED BEHIND

265"NN"

260"NX"

WRONG WAY REMOVE

DO NOT ENTER REMOVE

FOOD

EAST 60 ALT 39 WEST 60 REMOVE

GAS LODGING

EXISTING SPECIFIC INFORMATION SIGNS TO BE MOVED BY OTHERS

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED REMOVE

RAMP 40 MPH REMOVE

SDD LIST:
SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
SDD 15C31-A PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP
SDD 15C31-C PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

NOTE:
SIGNS NOT SHOWN ARE EXISTING SIGNS TO REMAIN.

DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF SHOULDER FOR THE LENGTH OF THE INSTALLATION, TYPICALLY 4 FEET. IF A BARRIER WALL OR PARAPET IS PRESENT PLACE THE DELINEATORS ON THE WALL.

	DELINEATOR SINGLE/DOUBLE
MLE4WR	MARKING LINE GROOVED WET REF EPOXY 4-INCH- WHITE
MLE4WC	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH-WHITE
MLE4YR	MARKING LINE GROOVED WET REF EPOXY 4-INCH-YELLOW
MLE8W	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH
MCE24	MARKING CHEVRON EPOXY 24-INCH-WHITE
MLE4W	MARKING LINE EPOXY 4-INCH- WHITE
MLE4Y	MARKING LINE EPOXY 4-INCH- YELLOW

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING AND MARKING	SHEET 73	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\023201_PS - I39.DWG
LAYOUT NAME - 05
PLOT DATE : 1/19/2022 5:45 PM
PLOT BY : ANDERSON, SHAUN M
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

OLD HWY 60

275"SX"

25.00'

45°0'0"

"SB"+40.4

MLE8W

MCE24

N

EXIT 119

E1-5P
108"X30"

60
Lodi
Arlington

E4-1A

216"X132"

PLACE IN STAGE:
WINTER SHUTDOWN

EXIT
119

E5-1A
60"X90"

ALTERNATE
ALTERSTATE
39

M4-1
36"X18"

M1-1
36"X36"

GAS
LODGING

EXISTING SPECIFIC INFORMATION SIGNS TO BE MOVED BY OTHERS

100' SPACING (+/- 25') BETWEEN RAMP DELINEATORS

PLACE DOUBLE DELINEATORS FROM THE BEGINNING OF THE OFF RAMP TAPER TO THE TIP OF THE GORE

"SX"+41.2

"SX"+91.2

275"SX"

"SB"+90.4

"SB"+40.4

275"SB"

"SB"+80.0

"SB"+30.0

"SB"+00.0

12.5'

50'

280"SB"

285"SB"

MLE8W

MLE8W
(3" LINE 9' GAP)

MLE4WR

MLE4WC

MCE24

IH 39 SB

275"NB"

IH 39 NB

280"NB"

280"NN"

275"NN"

"NB"+30.0

"NB"+80.0

"NB"+74.5

"NN"+75.0

MLE4YR

PLACE DOUBLE DELINEATORS FROM THE TIP OF THE GORE TO THE BEGINNING OF THE ON RAMP TAPER

EAST
90
MILE
119
.0

D10-5

EXISTING REMAINS

400' SPACING (+/- 100') BETWEEN MAINLINE DELINEATORS

SCALE

POST

SDD LIST:
SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
SDD 15C31-A PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP
SDD 15C31-C PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

NOTE:
SIGNS NOT SHOWN ARE EXISTING SIGNS TO REMAIN.

DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF SHOULDER FOR THE LENGTH OF THE INSTALLATION, TYPICALLY 4 FEET. IF A BARRIER WALL OR PARAPET IS PRESENT PLACE THE DELINEATORS ON THE WALL.

	DELINEATOR SINGLE/DOUBLE
MLE4WR	MARKING LINE GROOVED WET REF EPOXY 4-INCH- WHITE
MLE4WC	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH-WHITE
MLE4YR	MARKING LINE GROOVED WET REF EPOXY 4-INCH-YELLOW
MLE8W	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH
MCE24	MARKING CHEVRON EPOXY 24-INCH-WHITE
MLE4W	MARKING LINE EPOXY 4-INCH- WHITE
MLE4Y	MARKING LINE EPOXY 4-INCH- YELLOW

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING AND MARKING	SHEET 74	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\023201_PS - I39.DWG
LAYOUT NAME - 06

PLOT DATE : 1/19/2022 5:46 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

400' SPACING (+/- 100') BETWEEN MAINLINE DELINEATORS

MLE4WR
MLE4WC

290"SB"
12.5'
50'
295"SB"
300"SB"

INL
MLE4YR
W
INL
INL
INL
INL
W

290"NB"
12.5'
50'
295"NB"
300"NB"

MLE4WC
MLE4WR

MATCH INTO EXISTING DELINEATORS PAST WORKZONE

RIPRAP
SIGN
RIPRAP

SDD LIST:
SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)

NOTE:
SIGNS NOT SHOWN ARE EXISTING SIGNS TO REMAIN.

DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF SHOULDER FOR THE LENGTH OF THE INSTALLATION, TYPICALLY 4 FEET. IF A BARRIER WALL OR PARAPET IS PRESENT PLACE THE DELINEATORS ON THE WALL.

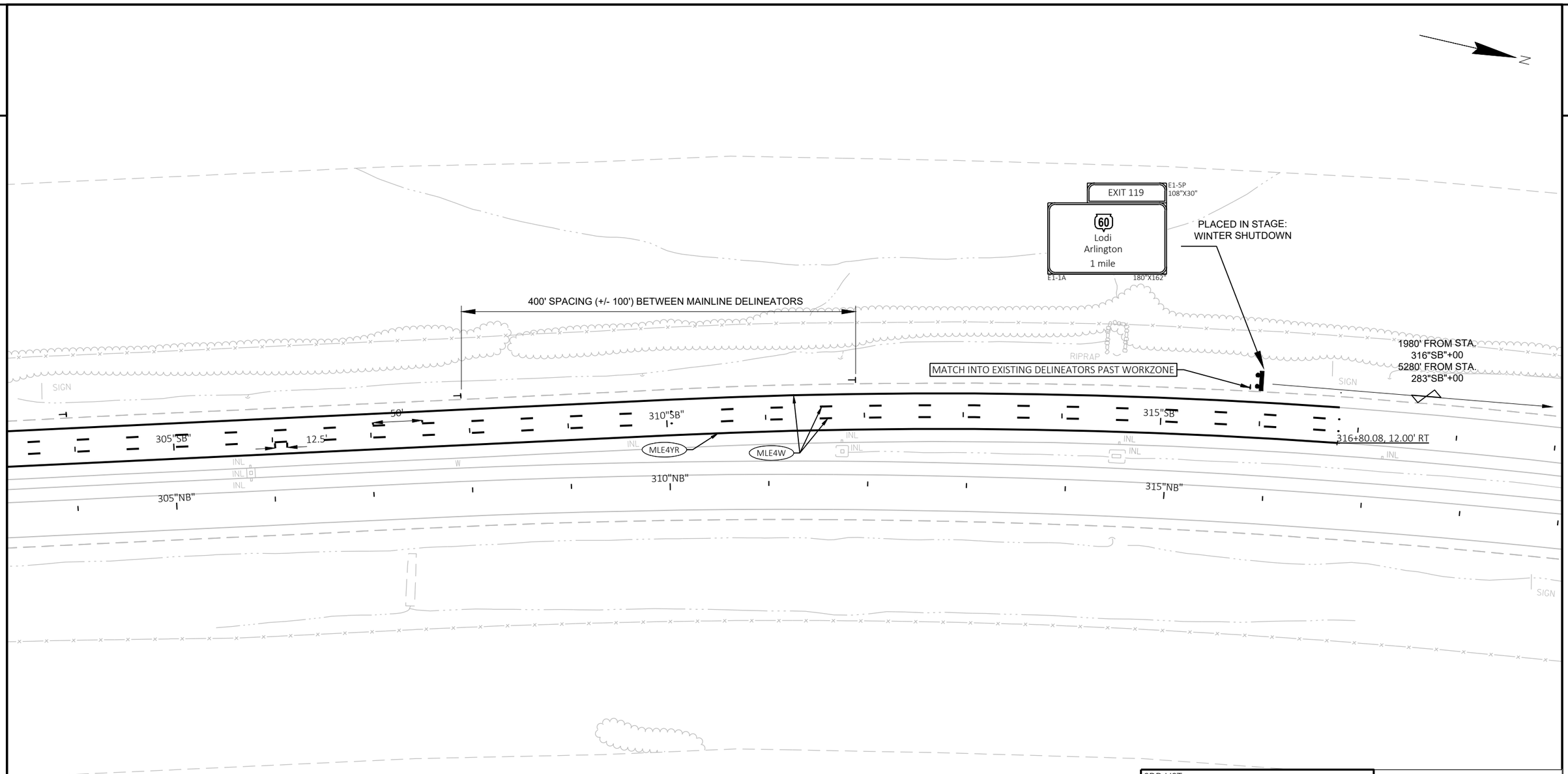
	DELINEATOR SINGLE/DOUBLE
MLE4WR	MARKING LINE GROOVED WET REF EPOXY 4-INCH- WHITE
MLE4WC	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH-WHITE
MLE4YR	MARKING LINE GROOVED WET REF EPOXY 4-INCH-YELLOW
MLE8W	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH
MCE24	MARKING CHEVRON EPOXY 24-INCH-WHITE
MLE4W	MARKING LINE EPOXY 4-INCH- WHITE
MLE4Y	MARKING LINE EPOXY 4-INCH- YELLOW

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING AND MARKING	SHEET 75	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\023201_PS - I39.DWG
LAYOUT NAME - 07

PLOT DATE : 1/19/2022 5:46 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



SDD LIST:
SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)

NOTE:
SIGNS NOT SHOWN ARE EXISTING SIGNS TO REMAIN.

DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF SHOULDER FOR THE LENGTH OF THE INSTALLATION, TYPICALLY 4 FEET. IF A BARRIER WALL OR PARAPET IS PRESENT PLACE THE DELINEATORS ON THE WALL.

	DELINEATOR SINGLE/DOUBLE
MLE4WR	MARKING LINE GROOVED WET REF EPOXY 4-INCH- WHITE
MLE4WC	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH-WHITE
MLE4YR	MARKING LINE GROOVED WET REF EPOXY 4-INCH-YELLOW
MLE8W	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH
MCE24	MARKING CHEVRON EPOXY 24-INCH-WHITE
MLE4W	MARKING LINE EPOXY 4-INCH- WHITE
MLE4Y	MARKING LINE EPOXY 4-INCH- YELLOW

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING AND MARKING	SHEET 76	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\023201_PS - I39.DWG
LAYOUT NAME - 08
PLOT DATE : 1/19/2022 5:46 PM
PLOT BY : ANDERSON, SHAUN M
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

PROPOSED SIGN SUPPORTS

EXISTING SIGN SUPPORTS

X-XX DENOTES PROPOSED SIGN NUMBER

R DENOTES REMOVABLE POST

N

SIGN

1-1

NO PASSING ZONE

W14-3
48"X36"

43+00 44+00 45+00 46+00

STH 60

MATCHLINE STA. 46+50

EX1-1

JCT JCT JCT
39 90 94
INTERSTATE INTERSTATE INTERSTATE

REMOVE

NORTH WEST WEST EAST
39 90 94 60
INTERSTATE INTERSTATE INTERSTATE

REMOVE

EX1-2

SIGN

NE

VACUUM

1-2

W6-1
36"X36"

SIGN

SOUTH EAST EAST
39 90 94
INTERSTATE INTERSTATE INTERSTATE

RAMP CLOSED
WHEN FLASHING
USE
ALT ROUTE

REMOVE

EX1-3

JCT JCT JCT
39 90 94
INTERSTATE INTERSTATE INTERSTATE

J1-3
72"X39"

1-3

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 77	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023201_ps

PLOT DATE : 1/10/2022 10:36 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

2

LEGEND

PROPOSED SIGN SUPPORTS

EXISTING SIGN SUPPORTS

X-XX DENOTES PROPOSED SIGN NUMBER

R DENOTES REMOVABLE POST

N

SIGN

EX2-1 NO PASSING ZONE REMOVE

EX2-2 SPEED LIMIT 55 REMOVE

2-1 W6-3 36"X36"

EX2-3 Lodi 4 Sauk City 14 REMOVE

2-2 Lodi 4 Sauk City 16 D2-2 78"X24"

EX2-4 WEST 60 REMOVE

2-3 SPEED LIMIT 55 R2-1 24"X30"

2-5 DO NOT ENTER R5-1 30"X30"

MATCHLINE STA. 46+50

47+00

48+00

49+00

50+00

51+00

52+00

STH 60

MATCHLINE STA. 52+50

2-6 W2-6 36"X36" W13-1 24"X24" 20 MPH

SIGN

EX2-5 Wis Dells Arlington Madison REMOVE

2-7 60 EAST SOUTH EAST EAST 39 90 94 D1-62 120"X66"

SIGN

EX2-6 SOUTH EAST EAST 39 90 94 RAMP CLOSED WHEN FLASHING USE ALT ROUTE REMOVE

2-8 R4-7 24"X30" W5-54 18"X18"

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 78	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023202_ps

PLOT DATE : 1/10/2022 10:36 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

2

LEGEND

PROPOSED SIGN SUPPORTS

EXISTING SIGN SUPPORTS

X-XX DENOTES PROPOSED SIGN NUMBER

R DENOTES REMOVABLE POST

N

MATCHLINE STA. 263+50 SX

I-39/90/94 SB EXIT RAMP

263+00 'SX'

3-4 R — R1-2 36"X31"

3-5 — DO NOT ENTER R5-1 30"X30"

3-3 R — R1-2 36"X31"

3-6 R — ONE WAY R6-1L 36"X12"

3-8 R — R1-2 36"X31"

3-7 R — R3-1 24"X24"

3-9 R — R1-2 36"X31"

EX3-4 — REMOVE

SIGN

SIGN

WRONG WAY R5-1A 36"X24" — 3-20

3-19 — W6-2 36"X36"

SOUTH EAST EAST 39 90 94 / 60 WEST — D1-4 84"X48" — 3-2

WEST 60 — J4-1 24"X36" — 3-1

SOUTH EAST EAST 39 90 94 — EX3-1 — REMOVE

EX3-2 — Lodi / Arlington — REMOVE

Madison — EX3-3 — REMOVE

11+00 'SB A'

STH 60

MATCHLINE STA. 52+50

53+00

54+00

55+00

MATCHLINE STA. 58+50

58+00

13+00 'SB A'

12+00 'SB A'

ONE WAY R6-4B 60"X24" — 3-15 / 3-16 / 3-17

R6-1B 36"X12"

3-11 — YIELD R1-2 36"X31"

3-12 R — YIELD R1-2 36"X31"

3-10 — Wis Dells / Arlington / Madison D1-3 72"X36"

EX3-10 — DO NOT ENTER — REMOVE

EX3-9 — STOP — REMOVE

EX3-8

EX3-7 — REMOVE

EX3-5 — REMOVE

RAMP 40 MPH — EX3-6 — REMOVE

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED R5-57 36"X36" — 3-13

I-39/90/94 SB ENTRANCE RAMP

11+00 'SB'

3-14 R — 60 EAST / SOUTH EAST EAST 39 90 94 — D1-4 84"X48"

EX3-11 — NORTH WEST WEST 39 90 94 — REMOVE

3-18 R — EAST 60 — D1-1 42"X30"

EX3-12 — REMOVE

MB4-1

M1-1

MB6-1

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 79	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023203_ps

PLOT DATE : 1/12/2022 6:45 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

LEGEND

PROPOSED SIGN SUPPORTS

EXISTING SIGN SUPPORTS

X-XX DENOTES PROPOSED SIGN NUMBER

R DENOTES REMOVABLE POST

MB4-1 ALTERNATE
M1-1 INTERSTATE 39
MB5-1L
J2-1
24"X57"

4-6

4-3

Arlington
Lodi
D1-2
72"X30"

I-39/90/94 SB
EXIT RAMP

MATCHLINE STA. 263+50 SX

264+00 'SX'

265+00 'SX'

266+00 'SX'

267+00 'SX'

268+00 'SX'

MATCHLINE STA. 269+00 SX

WRONG WAY
R5-1A
36"X24"

4-1

4-2

SOUTH EAST EAST
39 90 94
EAST 60
WEST 60
D1-62
102"X78"

4-4

SIGN

N

W2-6
36"X36"

W13-1
24"X24"
20 MPH

4-5

MATCHLINE STA. 269+00 SX

270+00 'SX'

271+00 'SX'

272+00 'SX'

I-39/90/94 SB
EXIT RAMP

273+00 'SX'

274+00 'SX'

N

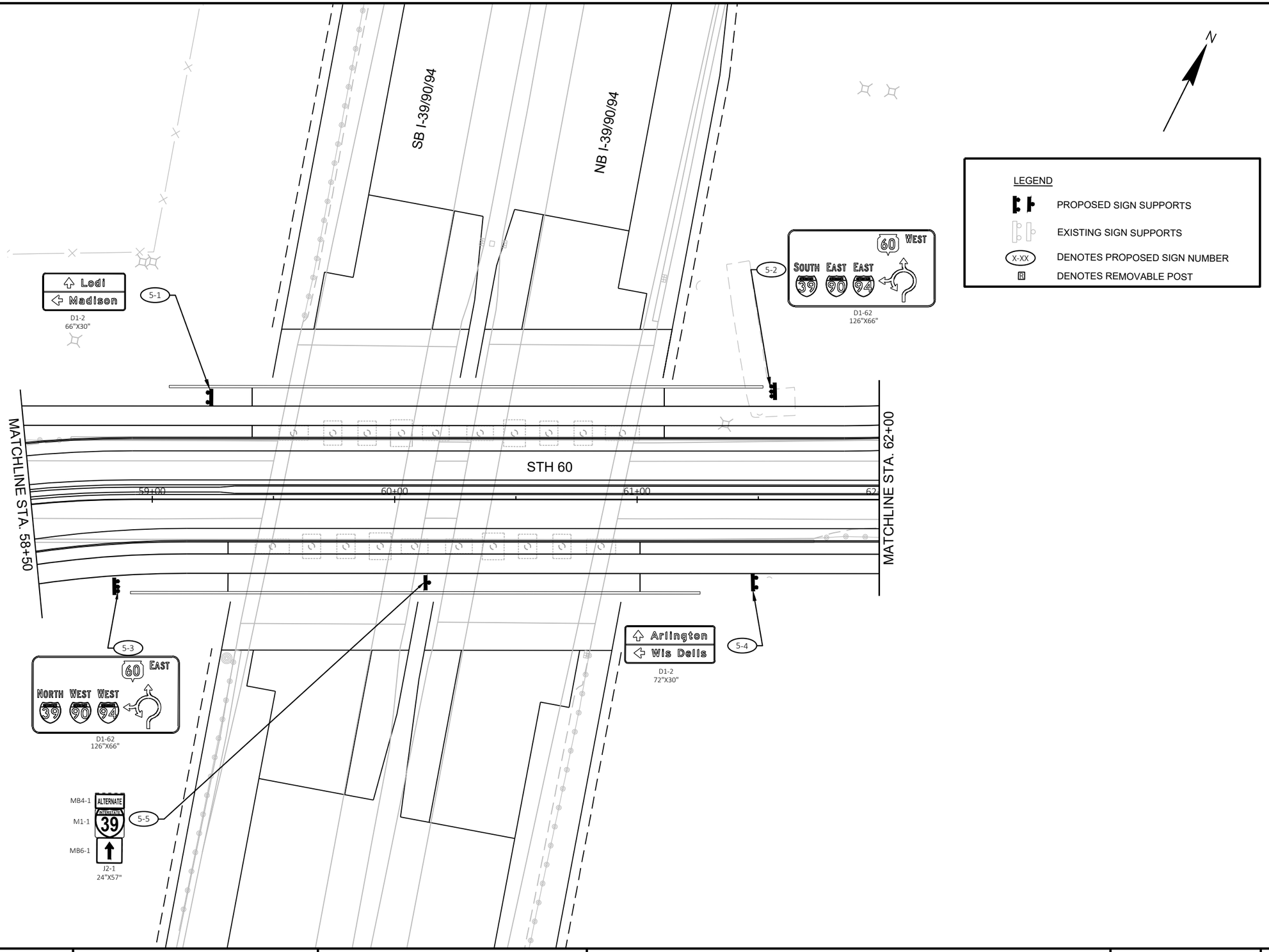
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 80	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023204_ps

PLOT DATE : 1/12/2022 6:49 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 81	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023205_ps

PLOT DATE : 1/12/2022 6:45 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

2

LEGEND

PROPOSED SIGN SUPPORTS

EXISTING SIGN SUPPORTS

X-XX DENOTES PROPOSED SIGN NUMBER

R DENOTES REMOVABLE POST

N

I-39/90/94 NB ENTRANCE RAMP

I-39/90/94 NB EXIT RAMP

STH 60

MATCHLINE STA. 62+00

MATCHLINE STA. 67+50

MATCHLINE STA. 262+50 NX

12+00 'NB A'

11+00 'NB A'

13+00 'NB A'

263+00 'X'

63+00

66+00

67+00

6-1 WEST 60 — J4-2, 48"X36"

6-2 WEST 60 — D1-1, 42"X30"

6-3 ONE WAY — R6-1R, 36"X12"; R6-4B, 60"X24"

6-4 ONE WAY

6-5 ONE WAY

6-6 NORTH 39 WEST 90 WEST 94 — D1-4, 90"X48"

6-7 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED — R5-57, 36"X36"

6-8 R — YIELD — R1-2, 36"X31"

6-9 YIELD — R1-2, 36"X31"

6-10 YIELD — R1-2, 36"X31"

6-11 R YIELD — R1-2, 36"X31"

6-12 — R3-1, 24"X24"

6-13 YIELD — R1-2, 36"X31"

6-14 DO NOT ENTER — R5-1, 30"X30"

6-15 ONE WAY — R6-1L, 36"X12"

6-16 R YIELD — R1-2, 36"X31"

6-17 NORTH 39 WEST 90 WEST 94 / 60 EAST — D1-4, 90"X48"

6-18 — W6-2, 36"X36"

6-19 WRONG WAY — R5-1A, 36"X24"

EX6-1 REMOVE

EX6-2 SOUTH 39 EAST 90 EAST 94 REMOVE

EX6-3 DO NOT ENTER REMOVE

EX6-4 STOP REMOVE

EX6-5 REMOVE

EX6-6 REMOVE

EX6-7 REMOVE

EX6-8 REMOVE

EX6-9 Wis Dells REMOVE

EX6-10 Arlington Lodi REMOVE

EX6-11 NORTH 39 WEST 90 WEST 94 REMOVE

SIGN

SIGN

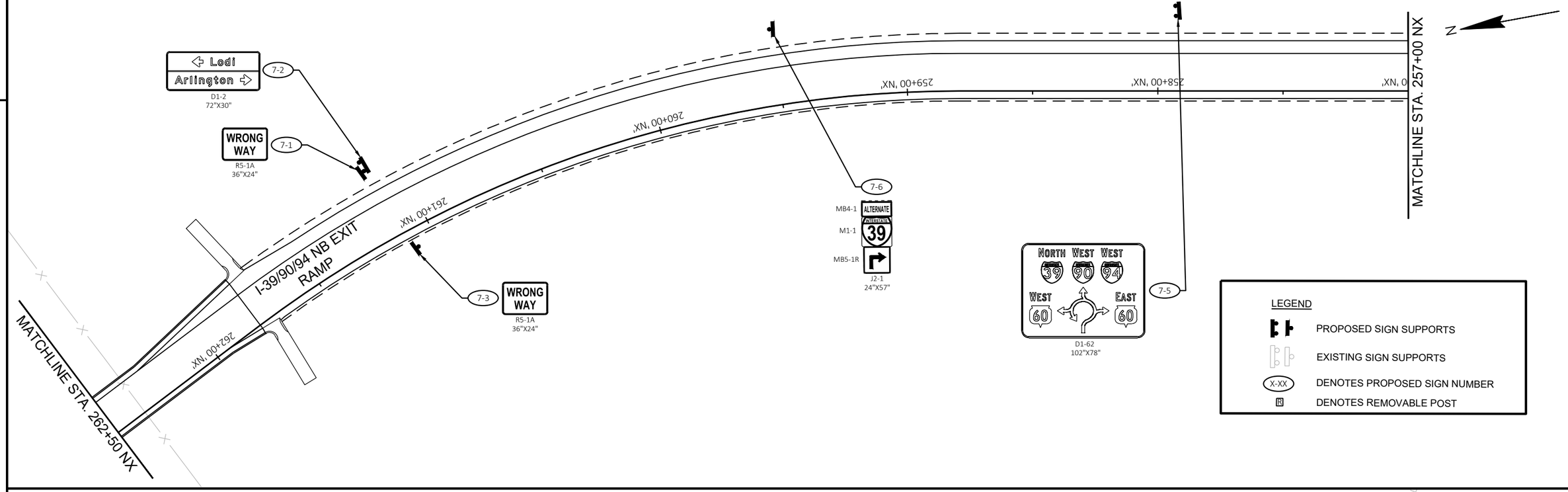
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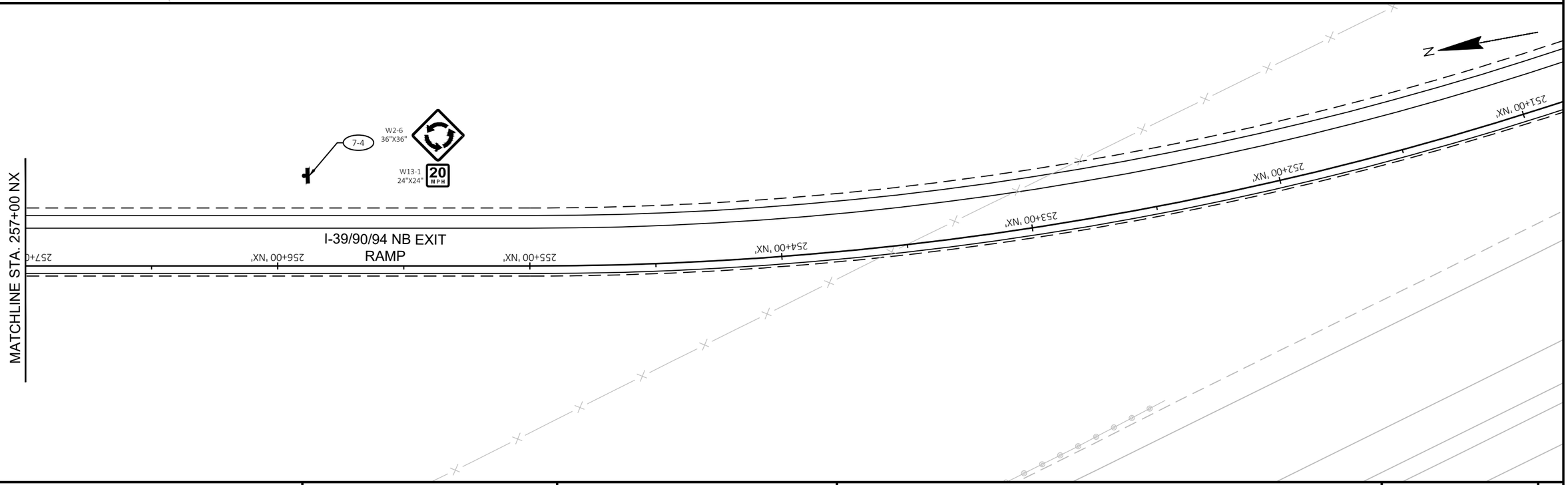
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 82	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023206_ps

PLOT DATE : 1/12/2022 6:46 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42





PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 83	E

2

LEGEND

PROPOSED SIGN SUPPORTS

EXISTING SIGN SUPPORTS

X-XX DENOTES PROPOSED SIGN NUMBER

R DENOTES REMOVABLE POST

N

8-1

Madison
Lodi
Wis Dells

D1-3
72"X36"

NORTH WEST WEST
INTERSTATE INTERSTATE INTERSTATE
39 90 94

EX8-1

RAMP CLOSED
WHEN FLASHING
USE
ALT ROUTE

REMOVE

60 WEST

NORTH WEST WEST
39 90 94

D1-62
120"X66"

8-2

Madison
Lodi
Wis Dells

REMOVE

EX8-2

MATCHLINE STA. 67+50

SIGN

68+00

69+00

70+00

71+00

72+00

73

STH 60

MATCHLINE STA. 73+00

8-3

R4-7
24"X30"

W5-54
18"X18"

8-5

DO NOT
ENTER

R5-1
30"X30"

8-4

SPEED
LIMIT
55

R2-1
24"X30"

EAST ALTERNATE
60 39

EX8-3

REMOVE

8-6

Arlington 4
Columbus 23

MOVED FROM STA. 79+36

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 84	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023208_ps

PLOT DATE : 1/10/2022 10:37 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

SCHUTZ ROAD

N

LEGEND

PROPOSED SIGN SUPPORTS

EXISTING SIGN SUPPORTS

X-XX DENOTES PROPOSED SIGN NUMBER

R DENOTES REMOVABLE POST

9-1

W2-6
36"X36"

20 MPH

W13-1
24"X24"

MATCHLINE STA. 73+00

NORTH WEST WEST
INTERSTATE INTERSTATE INTERSTATE
39 90 94

RAMP CLOSED
WHEN FLASHING
USE
ALT ROUTE

REMOVE

EX9-1

9-3

JCT JCT JCT
INTERSTATE INTERSTATE INTERSTATE
39 90 94

J1-3
72"X39"

00

74+00

75+00

STH 60

76+00

77+00

78

MATCHLINE STA. 78+00

SPEED LIMIT 55

REMOVE

EX9-2

9-2

W6-3
36"X36"

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 85	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023209_ps

PLOT DATE : 1/10/2022 10:37 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

LEGEND

PROPOSED SIGN SUPPORTS

EXISTING SIGN SUPPORTS

X-XX DENOTES PROPOSED SIGN NUMBER

DENOTES REMOVABLE POST

N

SCHUTZ ROAD

SOUTH EAST EAST WEST
INTERSTATE INTERSTATE INTERSTATE
39 90 94 60

EX10-1

REMOVE

10-1

W6-1
36"X36"

JCT JCT JCT
INTERSTATE INTERSTATE INTERSTATE
39 90 94

EX10-2

REMOVE

STH 60

79+00

80+00

81+00

82+00

83+00

MATCHLINE STA. 78+00

Arlington 4
Columbus 23

EX10-3

MOVE

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 86	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023210_ps

PLOT DATE : 1/10/2022 10:37 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

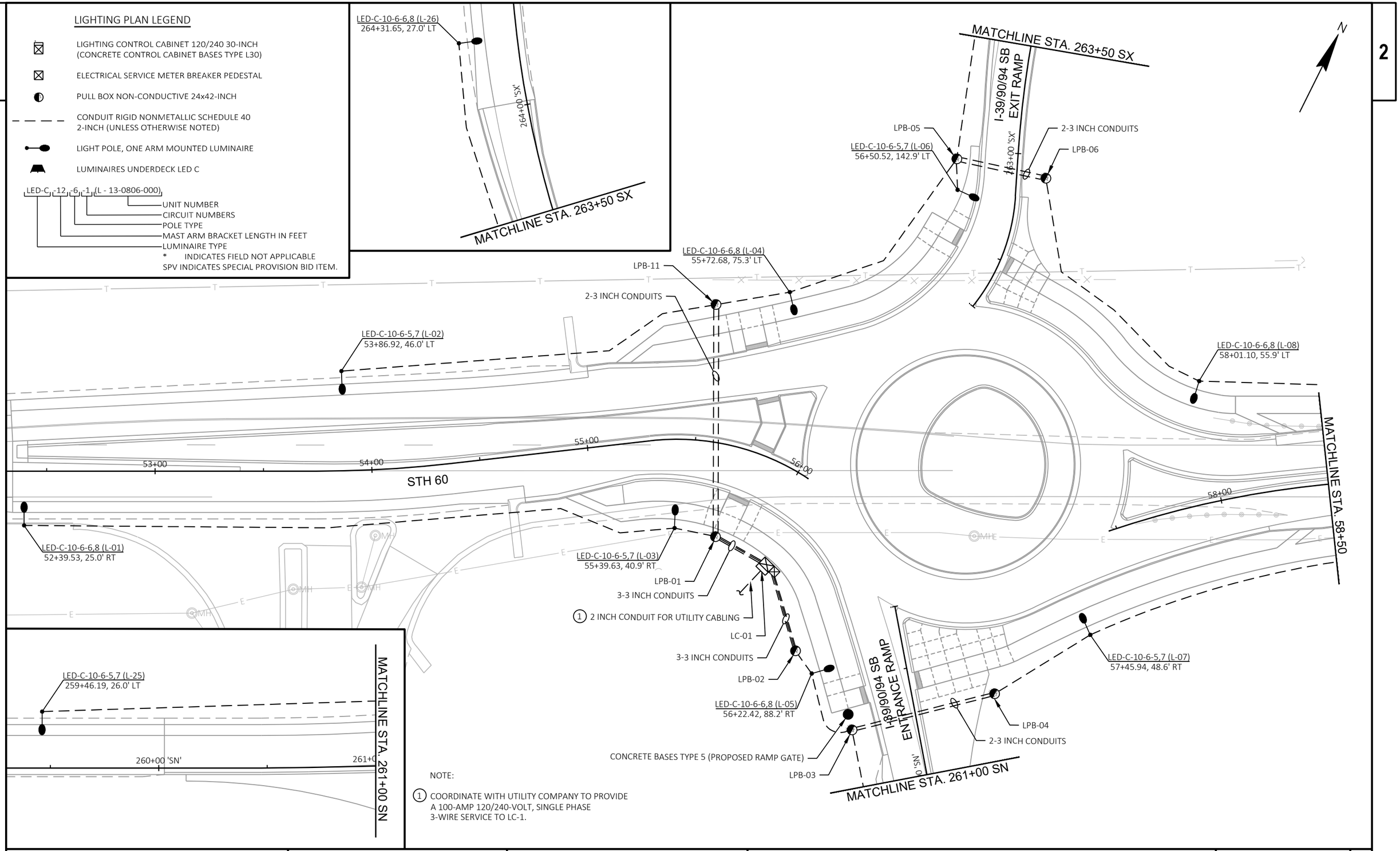
LIGHTING PLAN LEGEND

- LIGHTING CONTROL CABINET 120/240 30-INCH (CONCRETE CONTROL CABINET BASES TYPE L30)
- ELECTRICAL SERVICE METER BREAKER PEDESTAL
- PULL BOX NON-CONDUCTIVE 24x42-INCH
- CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (UNLESS OTHERWISE NOTED)
- LIGHT POLE, ONE ARM MOUNTED LUMINAIRE
- LUMINAIRES UNDERDECK LED C

LED-C -12 -6 -1 (L - 13-0806-000)

- UNIT NUMBER
- CIRCUIT NUMBERS
- POLE TYPE
- MAST ARM BRACKET LENGTH IN FEET
- LUMINAIRE TYPE

* INDICATES FIELD NOT APPLICABLE
SPV INDICATES SPECIAL PROVISION BID ITEM.



NOTE:

1 COORDINATE WITH UTILITY COMPANY TO PROVIDE A 100-AMP 120/240-VOLT, SINGLE PHASE 3-WIRE SERVICE TO LC-1.

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	LIGHTING - LAYOUT	SHEET 87	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023501_LP.DWG
LAYOUT NAME - 023501_lp

PLOT DATE : 1/12/2022 7:23 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN=40 FT

WISDOT/CADDS SHEET 42

LIGHTING PLAN LEGEND

- LIGHTING CONTROL CABINET 120/240 30-INCH (CONCRETE CONTROL CABINET BASES TYPE L30)
- ELECTRICAL SERVICE METER BREAKER PEDESTAL
- PULL BOX NON-CONDUCTIVE 24x42-INCH
- CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (UNLESS OTHERWISE NOTED)
- LIGHT POLE, ONE ARM MOUNTED LUMINAIRE
- LUMINAIRES UNDERDECK LED C

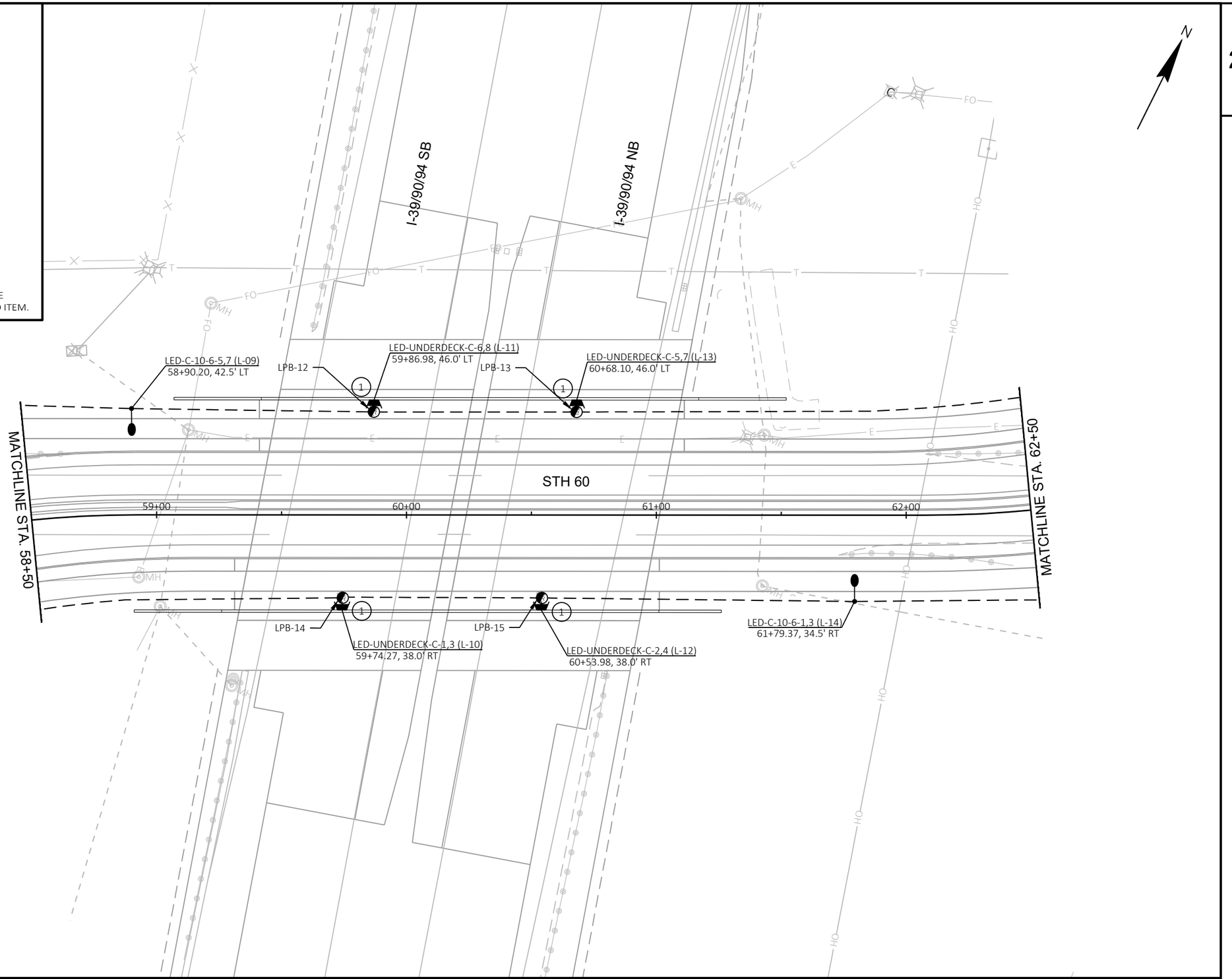
LED-C -12 -6 -1 (L - 13-0806-000)

- UNIT NUMBER
- CIRCUIT NUMBERS
- POLE TYPE
- MAST ARM BRACKET LENGTH IN FEET
- LUMINAIRE TYPE
- * INDICATES FIELD NOT APPLICABLE

SPV INDICATES SPECIAL PROVISION BID ITEM.

KEY NOTES:

(1) LIGHT FIXTURES SHALL BE MOUNTED AT 11 FEET ABOVE ROADWAY, INSTALLED ON RETAINING WALL



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	LIGHTING - LAYOUT	SHEET 88	E

2

2

MATCHLINE STA. 264+25 NN

2-3 INCH CONDUITS

LPB-10

CONCRETE BASES TYPE 5 (PROPOSED RAMP GATE)

LPB-09

264+00 NN'

I-39/90/94 NB ENTRANCE RAMP

LED-C-10-6-2,4 (L-18)
64+81.23, 121.1' LT

LED-C-10-6-1,3 (L-16)
63+51.53, 87.2' LT

LED-C-10-6-1,3 (L-20)
65+78.66, 52.5' LT

LED-C-10-6-2,4 (L-22)
68+72.35, 37.2' LT

MATCHLINE STA. 62+50

63+00

66+00

67+00

68+00

STH 60

LED-C-10-6-1,3 (L-21)
67+25.54, 23.0' RT

LED-C-10-6-2,4 (L-15)
63+40.35, 41.5' RT

LED-C-10-6-2,4 (L-19)
65+17.13, 48.0' RT

LPB-07

263+00 NN'

I-39/90/94 NB EXIT RAMP

LPB-08

LED-C-10-6-1,3 (L-17)
262+94.32, 27.3' RT

2-3 INCH CONDUITS

0 'NX'

MATCHLINE STA. 262+00 NX

LED-C-10-6-1,3 (L-23)
265+71.14, 26.0' RT

265+00 NN'

MATCHLINE STA. 264+25 NN

MATCHLINE STA. 262+00 NX

262+

LED-C-10-6-2,4 (L-24)
261+33.45, 26.0' RT

261+00 NN'

LIGHTING PLAN LEGEND

- LIGHTING CONTROL CABINET 120/240 30-INCH (CONCRETE CONTROL CABINET BASES TYPE L30)
- ELECTRICAL SERVICE METER BREAKER PEDESTAL
- PULL BOX NON-CONDUCTIVE 24x42-INCH
- CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (UNLESS OTHERWISE NOTED)
- LIGHT POLE, ONE ARM MOUNTED LUMINAIRE
- LUMINAIRES UNDERDECK LED C

LED-C - 12 - 6 - 1 (L - 13-0806-000)

- UNIT NUMBER
- CIRCUIT NUMBERS
- POLE TYPE
- MAST ARM BRACKET LENGTH IN FEET
- LUMINAIRE TYPE
- * INDICATES FIELD NOT APPLICABLE

SPV INDICATES SPECIAL PROVISION BID ITEM.

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	LIGHTING - LAYOUT	SHEET 89	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023501_LP.DWG
LAYOUT NAME - 023503_lp
PLOT DATE : 1/12/2022 7:09 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN=40 FT
WISDOT/CADDS SHEET 42

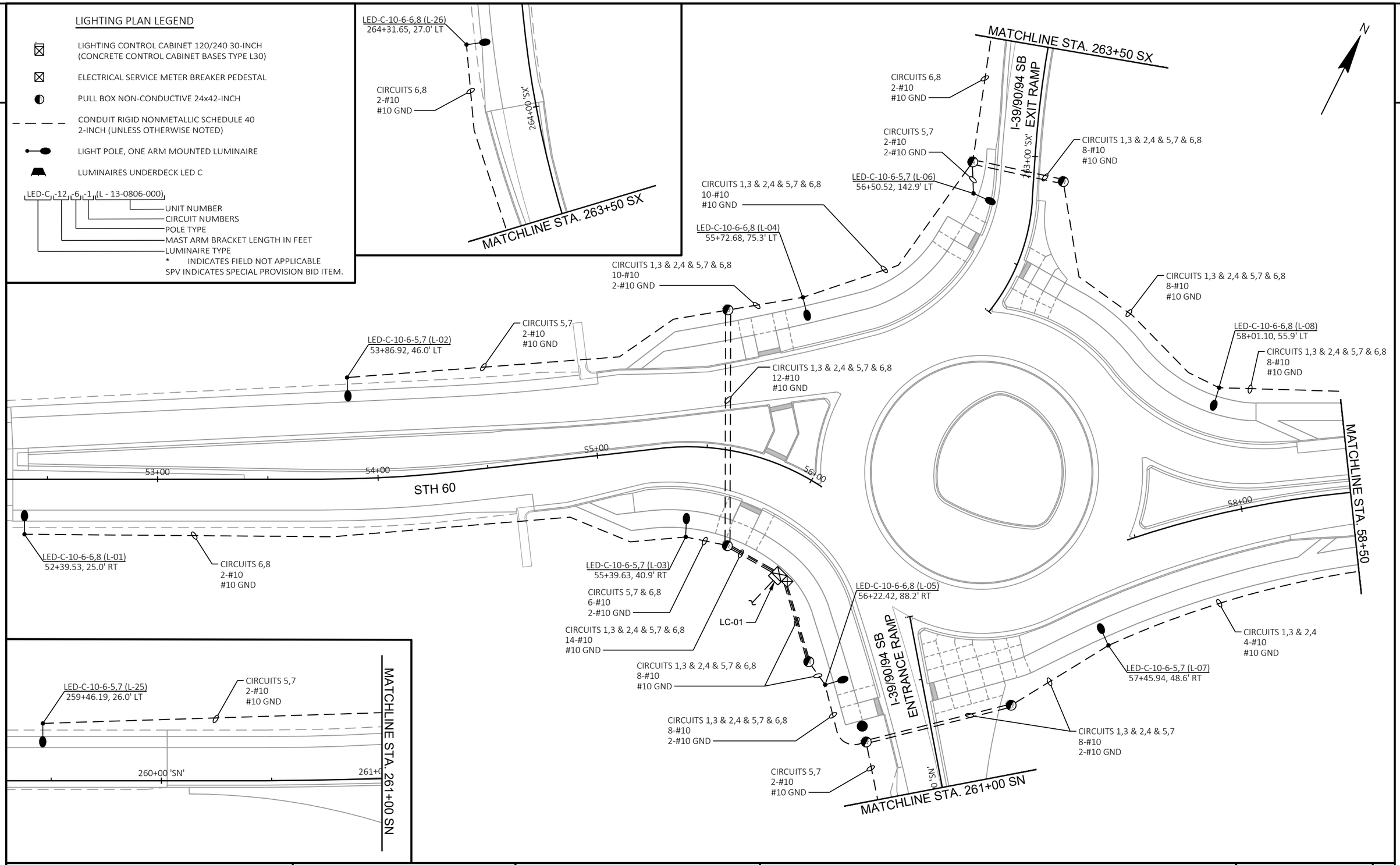
LIGHTING PLAN LEGEND

- LIGHTING CONTROL CABINET 120/240 30-INCH (CONCRETE CONTROL CABINET BASES TYPE L30)
- ELECTRICAL SERVICE METER BREAKER PEDESTAL
- PULL BOX NON-CONDUCTIVE 24x42-INCH
- CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (UNLESS OTHERWISE NOTED)
- LIGHT POLE, ONE ARM MOUNTED LUMINAIRE
- LUMINAIRES UNDERDECK LED C

LED-C -12 -6 -1 (L - 13-0806-000)

- UNIT NUMBER
- CIRCUIT NUMBERS
- POLE TYPE
- MAST ARM BRACKET LENGTH IN FEET
- LUMINAIRE TYPE
- * INDICATES FIELD NOT APPLICABLE

SPV INDICATES SPECIAL PROVISION BID ITEM.



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	LIGHTING - DIAGRAM	SHEET 90	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\023510_LP.DWG
LAYOUT NAME - 023510_lp
PLOT DATE : 1/12/2022 7:05 PM
PLOT BY : JACK, ROBERT A.
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

LIGHTING PLAN LEGEND

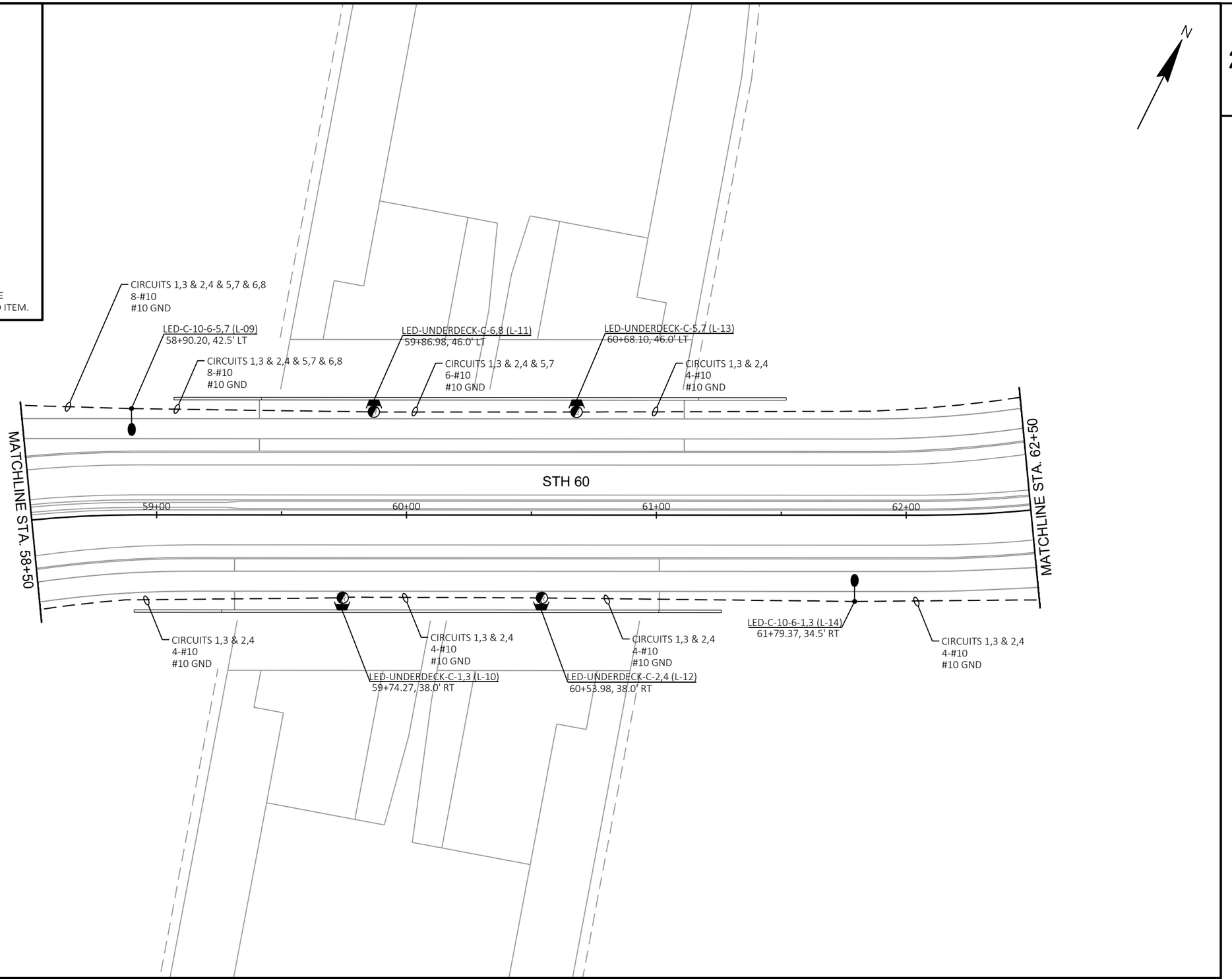
- LIGHTING CONTROL CABINET 120/240 30-INCH (CONCRETE CONTROL CABINET BASES TYPE L30)
- ELECTRICAL SERVICE METER BREAKER PEDESTAL
- PULL BOX NON-CONDUCTIVE 24x42-INCH
- CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (UNLESS OTHERWISE NOTED)
- LIGHT POLE, ONE ARM MOUNTED LUMINAIRE
- LUMINAIRES UNDERDECK LED C

LED-C -12 -6 -1 (L - 13-0806-000)

- UNIT NUMBER
- CIRCUIT NUMBERS
- POLE TYPE
- MAST ARM BRACKET LENGTH IN FEET
- LUMINAIRE TYPE

* INDICATES FIELD NOT APPLICABLE

SPV INDICATES SPECIAL PROVISION BID ITEM.



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	LIGHTING - DIAGRAM	SHEET 91	E

2

2

MATCHLINE STA. 264+25 NN

CIRCUITS 1,3
2-#10
#10 GND

CIRCUITS 1,3 & 2,4
6-#10
2-#10 GND

LED-C-10-6-2,4 (L-18)
64+81.23, 121.1' LT

CIRCUITS 1,3 & 2,4
4-#10
#10 GND

264+00 NN

I-39/90/94 NB
ENTRANCE RAMP

CIRCUITS 1,3 & 2,4
4-#10
#10 GND

LED-C-10-6-1,3 (L-16)
63+51.53, 87.2' LT

CIRCUITS 1,3 & 2,4
6-#10
#10 GND

CIRCUITS 1,3 & 2,4
4-#10
#10 GND

LED-C-10-6-1,3 (L-20)
65+78.66, 52.5' LT

CIRCUITS 2,4
2-#10
#10 GND

LED-C-10-6-2,4 (L-22)
68+72.35, 37.2' LT

MATCHLINE STA. 62+50

63+00

66+00

67+00

68+00

STH 60

CIRCUITS 1,3 & 2,4
4-#10
#10 GND

LED-C-10-6-2,4 (L-15)
63+40.35, 41.5' RT

LED-C-10-6-1,3 (L-21)
67+25.54, 23.0' RT

CIRCUITS 1,3
2-#10
#10 GND

CIRCUITS 1,3 & 2,4
4-#10
#10 GND

LED-C-10-6-2,4 (L-19)
65+19.88, 47.6' RT

CIRCUITS 1,3 & 2,4
4-#10
2-#10 GND

CIRCUITS 1,3 & 2,4
6-#10
2-#10 GND

262+00 NX

I-39/90/94 NB
EXIT RAMP

CIRCUITS 1,3
4-#10
2-#10 GND

LED-C-10-6-1,3 (L-17)
262+94.32, 27.3' RT

CIRCUITS 2,4
2-#10
#10 GND

260 NX

MATCHLINE STA. 262+00 NX

LED-C-10-6-1,3 (L-23)
265+71.14, 26.0' RT

265+00 NN

CIRCUITS 1,3
2-#10
#10 GND

MATCHLINE STA. 264+25 NN

MATCHLINE STA. 262+00 NX

262+0

CIRCUITS 2,42-#10
2#10 GND
#10 GND

LED-C-10-6-2,4 (L-24)
261+33.45, 26.0' RT

261+00 NX

LIGHTING PLAN LEGEND

- LIGHTING CONTROL CABINET 120/240 30-INCH (CONCRETE CONTROL CABINET BASES TYPE L30)
- ELECTRICAL SERVICE METER BREAKER PEDESTAL
- PULL BOX NON-CONDUCTIVE 24x42-INCH
- CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (UNLESS OTHERWISE NOTED)
- LIGHT POLE, ONE ARM MOUNTED LUMINAIRE
- LUMINAIRES UNDERDECK LED C

LED-C -12 -6 -1 (L - 13-0806-000)

- UNIT NUMBER
- CIRCUIT NUMBERS
- POLE TYPE
- MAST ARM BRACKET LENGTH IN FEET
- LUMINAIRE TYPE

* INDICATES FIELD NOT APPLICABLE
SPV INDICATES SPECIAL PROVISION BID ITEM.

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	LIGHTING - DIAGRAM	SHEET 92	E

LEGEND

FTMS CONVENTIONAL SYMBOLS

	PROPOSED	EXISTING
POLE MOUNTED CABINET	⊠	⊠
METER BREAKER PEDESTAL	⊠	⊠
24X42-INCH CSCP PULL BOX	⊖	⊖
FTMS (ITS) CONDUIT	– –	– –
BREAKER DISCONNECT BOX	⊞	⊞
COMMUNICATIONS VAULT, TYPE 1		CV
POLE AND MICROWAVE VEHICLE DETECTOR		◆●
MICROWAVE VEHICLE DETECTOR DETECTION ZONE	⬭	
CCTV CAMERA SITE	CAMERA ORIENTATION ◀■●◆	CAMERA ORIENTATION ◀■●◆
ETHERNET RADIO	⚡	⚡
MICROWAVE VEHICLE DETECTOR	◆	

FTMS STANDARD ABBREVIATIONS

CB	CONTROLLER CABINET
CCTV	CLOSED CIRCUIT TELEVISION SITE
CV	COMMUNICATIONS VAULT
PB	PULL BOX
EX	EXISTING
FOC	FIBER OPTIC CABLE
F.O.	FIBER OPTIC
MD	MICROWAVE DETECTOR
S-F	STATE-FURNISHED

FTMS GENERAL NOTES

1. THESE PLANS AND THE ASSOCIATED SPECIAL PROVISIONS REFLECT CONDITIONS KNOWN DURING THE DEVELOPMENT OF THE PLANS AND TECHNICAL SPECIAL PROVISIONS. ALL SCALES, DIMENSIONS AND LOCATIONS SHOWN IN THESE PLANS ARE APPROXIMATE. ACTUAL PHYSICAL FIELD CONDITIONS SHALL PROVIDE THE BASIS FOR THE APPLICATION OF WORK SHOWN IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE APPLICATION OF ALL WORK SHOWN IN THE PLANS TO THE ACTUAL PHYSICAL FIELD CONDITIONS TO PROVIDE A COMPLETE AND ACCEPTED PROJECT. IN THE EVENT THAT ACTUAL PHYSICAL FIELD CONDITIONS AFFECT OR PREVENT THE APPLICATION OR PROGRESSION OF ANY WORK SHOWN IN THE PLANS OR TECHNICAL SPECIAL PROVISIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY, AND PRIOR TO ANY FURTHER WORK ACTIVITY. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY LOCATION CHANGES OTHER THAN MINOR ADJUSTMENTS.
2. BE AWARE THAT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES.
3. BE AWARE THAT NO TEST BORINGS WERE MADE WHERE CONDUITS, PULLBOXES, POLES, CABINET FOUNDATIONS, OR OTHER EQUIPMENT IS TO BE INSTALLED. THE CONTRACTOR IS FULLY RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.
4. NO TREES (AND/OR SHRUBS) SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
5. AREAS WITHIN THE RIGHT-OF-WAY DISTURBED SPECIFICALLY FOR FTMS CONSTRUCTION SHALL BE RESTORED TO THE ORIGINAL CONDITION WITH TOPSOIL, FERTILIZER, SEED, AND EROSION MAT, AND SHALL BE INCLUDED IN THE COST OF INSTALLING FTMS ITEMS. RESTORATION FOR AREAS DISTURBED FOR OTHER CONSTRUCTION OPERATIONS BUT ALSO CONTAINING FTMS CONSTRUCTION SHALL BE DONE ACCORDING TO REQUIREMENTS AND PAYMENT PROVISIONS FOR THE OTHER CONSTRUCTION OPERATIONS.
6. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
7. DUE TO RAMP, LANE, SHOULDER CLOSURE RESTRICTIONS, AND WORK UNDER OTHER CONTRACTS, SOME WORK MAY BE REQUIRED TO BE PERFORMED AT NIGHT.
8. THE CONTRACTOR IS FULLY RESPONSIBLE FOR COORDINATING RAMP, LANE, SHOULDER, AND ROADWAY CLOSURES WITH OTHER CONTRACTS IN THE AREA.
9. THE CONTRACTOR SHALL CONTACT THE WISDOT STATEWIDE TRAFFIC OPERATIONS CENTER AT (414) 227-2166 FIVE (5) WORKING DAYS PRIOR TO ENTERING ANY EXISTING WISDOT FTMS OR ITS CABINET.
10. ALL LOOP DETECTORS ARE STATIONED TO CENTER OF LEADING EDGE AS APPROACHED BY NORMAL VEHICLE PATH.
11. HAND DIG TRENCHES CROSSING EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE.
12. VISUALLY VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE OR SPECIAL METHOD.

LEGEND

1. REMOVE PULL BOX
2. REMOVE ON-RAMP CLOSURE GATE AND CONCRETE BASE
3. REMOVE MICROWAVE DETECTOR POLE AND CONCRETE BASE
4. REMOVE CABLE
5. REMOVE CONTROLLER CABINET AND CONTROLLER CABINET BASE
6. REMOVE CCTV CAMERA, CAMERA POLE, AND CONCRETE BASE
7. REMOVE EXISTING COMMUNICATIONS VAULT
8. REMOVE CONCRETE BASE

NOTES

THE LOCATION OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN INCLUDING BUILDING SERVICES AND LATERALS.

FOR REMOVAL OF LIGHTING, BRIDGE, OR SIGN ITEMS, REFER TO RESPECTIVE REMOVAL PLAN SECTIONS.

REMOVALS AND DISCONNECTION OF EQUIPMENT OR UTILITY SERVICES MUST BE PROPOSED TO WISDOT STOC A MINIMUM OF TWO WEEKS PRIOR TO SCHEDULED REMOVAL WORK. UNLESS FTMS REMOVALS WORK IS DEMONSTRATED TO BE CRITICAL TO PROJECT COMPLETION SCHEDULE, STOC MAY DENY PROPOSED SCHEDULE AND REQUIRE THAT LOCATIONS BE MAINTAINED UNTIL REMOVALS ARE NECESSARY.

EXMB6001
EXPBW6001
EX-G-11-01
EXPBW6002
EXPBW6003
EXPBW6005
EXPBW6004
EXCB-CCTV-11-0025
SALVAGE EXISTING COMPONENTS FOR LATER REINSTALLATION IN NEW CB-11-0025
EXPBW6006
EXPBW6008
EXPBW6010
EXPBW6009
EXPBW6007
EXPBW6011
EXPBW6915
EXPBW6012
EXPBW6013
EXDP6001
EXPBW6016
EXPBW6015
EXPBW6014
EX-CCTV-11-0025
(SALVAGE SPREAD SPECTRUM SERIAL RADIO, ANTENNA CABLE, AND ANTENNA FOR LATER REINSTALLATION)
EXPBE6030
EXPBE6029
EXPBE6031
EXPBE6028
EXCVE6001
EXDP6002
EXCV6002
INITIAL STAGE
(2) F.O. SPLICES IN EXISTING F.O. SPLICE ENCLOSURE TO ELIMINATE DROP SPLICE TO EX-CCTV-11-0025
(SEE DESIGN SHEET FOR LATER STAGE INSTRUCTIONS)
EXPBE6017
EXPBE6018
EXPBE6019
EX-G-11-02
EXPBE6020
EXPBE6021
EXPBE6022
EXPBE6023
EXPBE6024
EXPBE6025
EXPBE6026
EXPBE6027
STH 60
I SIGN
139/190/194
190ML
192ML
194ML
196ML
198ML
INL
W
F.O.
MH
TRAFFIC CAMERA
WEATHER GATE
T-44
1089.90
T-32
1083.76

PROJECT NO: 1012-01-74	HWY: IH 39 / 90 / 94	COUNTY: COLUMBIA	FTMS REMOVALS PLANS	SHEET 94 E

FILE NAME : \\milw00\ingrproj\77532\base\columbia\10120174_colco_3960_fm.dgn
PLOT DATE : 12/15/2021
PLOT BY : PKutz
PLOT NAME :
PLOT SCALE : 100:1

2

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EXMB6001

INSTALL IN EXISTING CONDUIT
(3) NO. 2 AWG TRAFFIC SIGNAL WIRES

PB6101
INTERCEPT EXISTING CONDUIT
TO WEST WITH NEW PULL BOX

(1) 2-INCH NONMETALLIC CONDUIT WITH
(3) NO. 2 AWG TRAFFIC SIGNAL WIRES

PB6102

(1) 2-INCH NONMETALLIC CONDUIT WITH
(3) NO. 2 AWG TRAFFIC SIGNAL WIRES

PB6001

(1) 2-INCH METALLIC CONDUIT WITH
(3) NO. 2 AWG TRAFFIC SIGNAL WIRES

CCTV-11-0025
(1) 50-FOOT CONCRETE CAMERA POLE BASE
(1) 50-FOOT CAMERA POLE (S-F)
(1) CCTV CAMERA (S-F)
(2) MICROWAVE VEHICLE DETECTORS (S-F)
(1) SPREAD SPECTRUM RADIO (SALVAGED)
(1) YAGI ANTENNA (SALVAGED)
(1) POLE-MOUNTED CABINET (S-F)
(1) 12-COUNT F.O. TERMINATION PANEL (S-F)
(6) F.O. TERMINATIONS
(1) ETHERNET SWITCH (S-F)
(1) ELECTRICAL SERVICE BREAKER DISCONNECT BOX

G-11-01
(1) TYPE 5 CONCRETE BASE
(1) 11-1/2-INCH TRANSFORMER BASE
(1) RAMP CLOSURE GATE 24-FT

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (1) 6-COUNT FOC (S-F) AND
(1) NO. 10 AWG TRAFFIC SIGNAL WIRE

PB6002

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (1) 6-COUNT FOC (S-F) AND
(1) NO. 10 AWG TRAFFIC SIGNAL WIRE

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (1) 6-COUNT FOC (S-F) AND
(1) NO. 10 AWG TRAFFIC SIGNAL WIRE

PB6003

PB6004

G-11-02
(1) TYPE 5 CONCRETE BASE
(1) 11-1/2-INCH TRANSFORMER BASE
(1) RAMP CLOSURE GATE 32-FT

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (1) 6-COUNT FOC (S-F) AND
(1) NO. 10 AWG TRAFFIC SIGNAL WIRE

EXCV6002
(1) INSTALL PROPOSED CONDUIT INTO
EXISTING COMMUNICATIONS VAULT
(4) F.O. SPLICES IN EXISTING F.O.
SPLICE ENCLOSURE TO CONNECT TO
CCTV-11-0025

PROJECT NO: 1012-01-74	HWY: IH 39 / 90 / 94	COUNTY: COLUMBIA	FTMS DESIGN SHEETS	SHEET 95	E

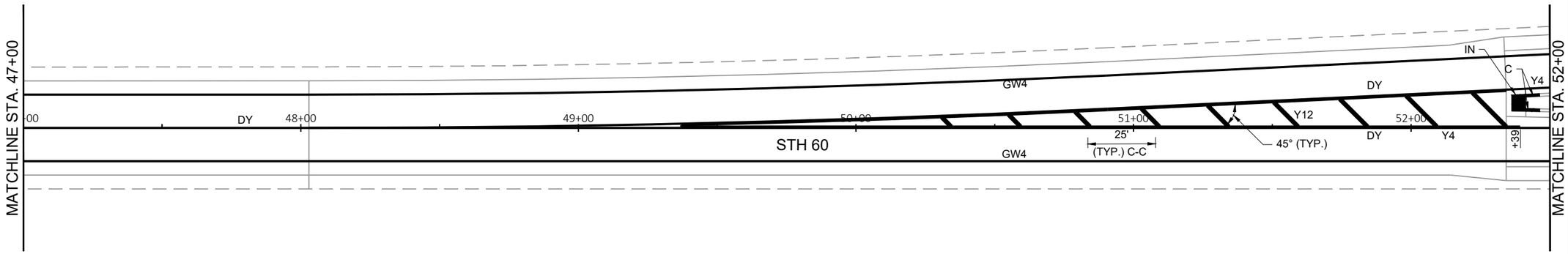
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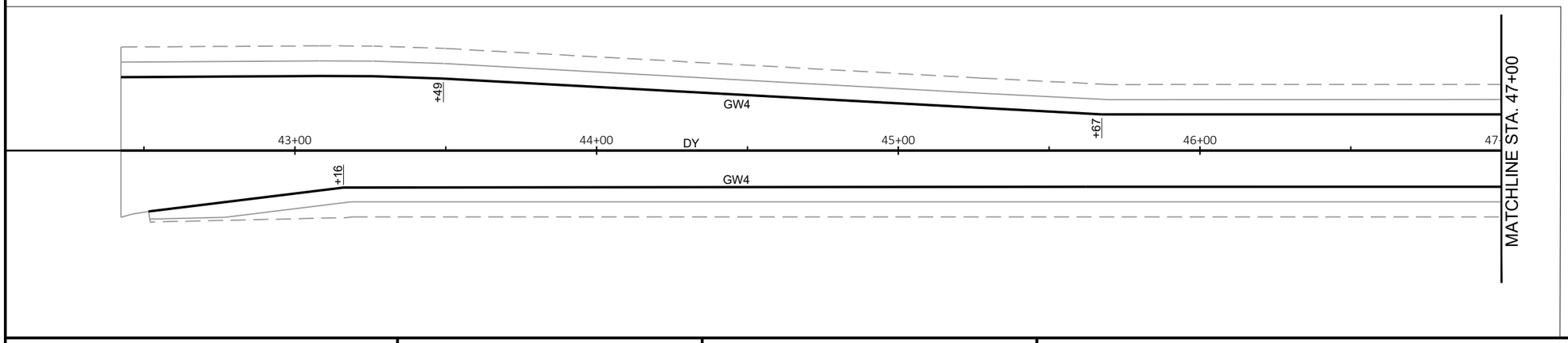
WISDOT/CADDS SHEET 42

2

LEGEND

W4	MARKING LINE EPOXY 4-INCH, (WHITE)
Y4	MARKING LINE EPOXY 4-INCH, (YELLOW)
DY	MARKING LINE EPOXY 4-INCH, (DOUBLE YELLOW)
GW4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, (WHITE)
GY4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, (YELLOW)
Y12	MARKING DIAGONAL EPOXY 12-INCH, (YELLOW)
W12	MARKING DIAGONAL EPOXY 12-INCH, (WHITE)
WS-2	MARKING DOTTED EXTENSION EPOXY 18-INCH, (WHITE SKIP, 2' SEG., 2' GAP)
WS-9	MARKING LINE EPOXY 4-INCH, (WHITE SKIP, 3' SEG., 9' GAP)
WC6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, (WHITE)
W8	MARKING LINE EPOXY 8-INCH, (WHITE)
IN	MARKING ISLAND NOSE EPOXY, (YELLOW)
C	MARKING CURB EPOXY, (YELLOW).

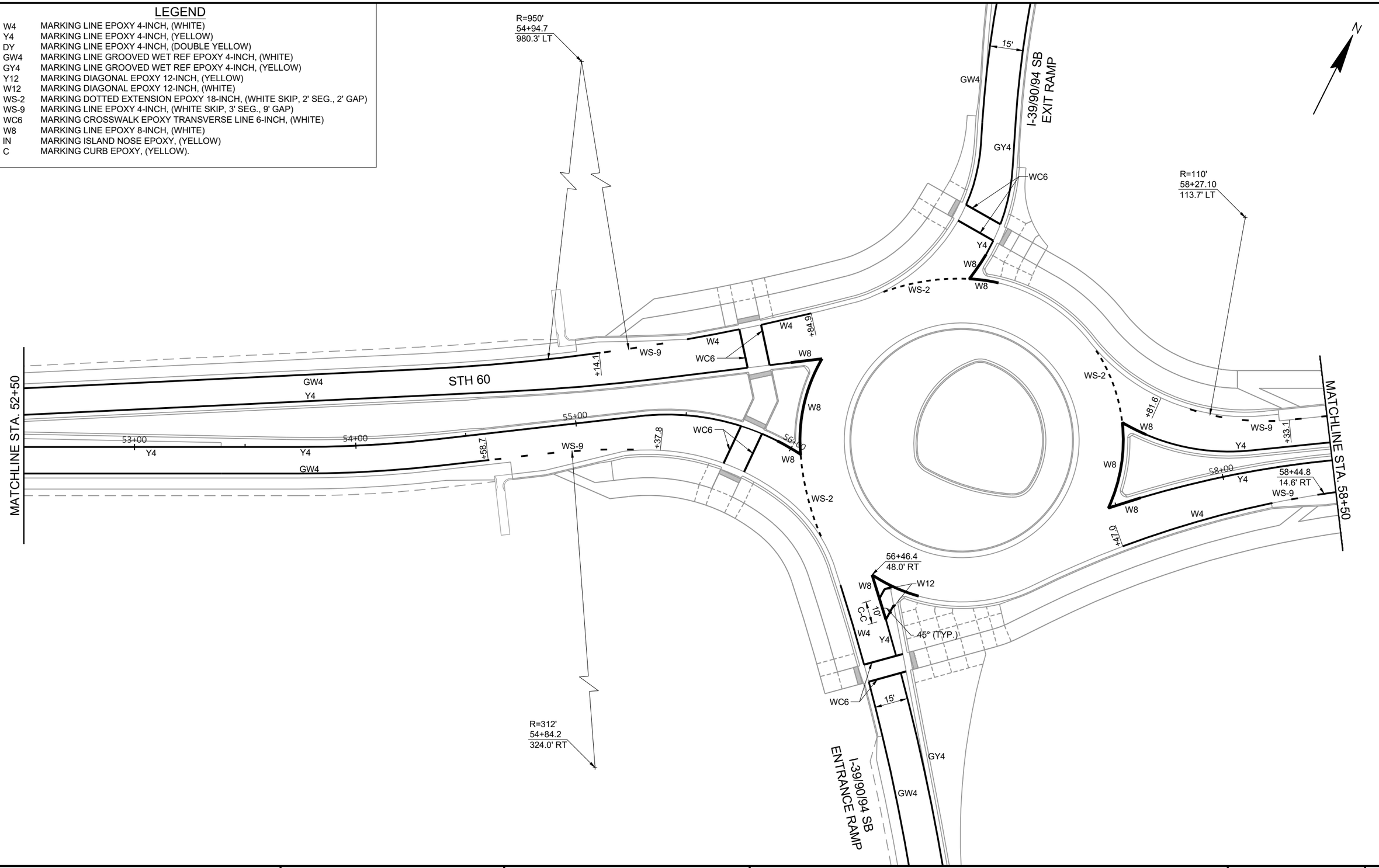




PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKING	SHEET 96	E

LEGEND

W4	MARKING LINE EPOXY 4-INCH, (WHITE)
Y4	MARKING LINE EPOXY 4-INCH, (YELLOW)
DY	MARKING LINE EPOXY 4-INCH, (DOUBLE YELLOW)
GW4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, (WHITE)
GY4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, (YELLOW)
Y12	MARKING DIAGONAL EPOXY 12-INCH, (YELLOW)
W12	MARKING DIAGONAL EPOXY 12-INCH, (WHITE)
WS-2	MARKING DOTTED EXTENSION EPOXY 18-INCH, (WHITE SKIP, 2' SEG., 2' GAP)
WS-9	MARKING LINE EPOXY 4-INCH, (WHITE SKIP, 3' SEG., 9' GAP)
WC6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, (WHITE)
W8	MARKING LINE EPOXY 8-INCH, (WHITE)
IN	MARKING ISLAND NOSE EPOXY, (YELLOW)
C	MARKING CURB EPOXY, (YELLOW).

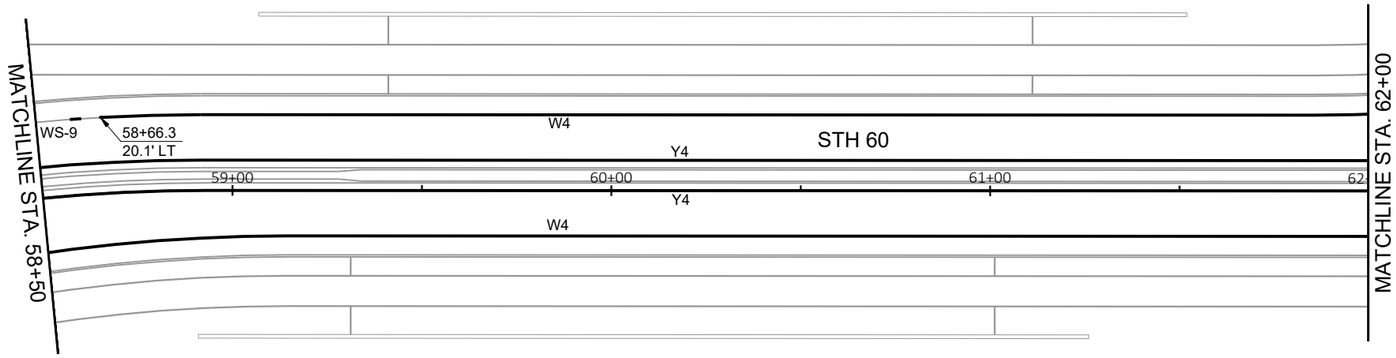


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKING	SHEET 97	E

LEGEND

W4	MARKING LINE EPOXY 4-INCH, (WHITE)
Y4	MARKING LINE EPOXY 4-INCH, (YELLOW)
DY	MARKING LINE EPOXY 4-INCH, (DOUBLE YELLOW)
GW4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, (WHITE)
GY4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, (YELLOW)
Y12	MARKING DIAGONAL EPOXY 12-INCH, (YELLOW)
W12	MARKING DIAGONAL EPOXY 12-INCH, (WHITE)
WS-2	MARKING DOTTED EXTENSION EPOXY 18-INCH, (WHITE SKIP, 2' SEG., 2' GAP)
WS-9	MARKING LINE EPOXY 4-INCH, (WHITE SKIP, 3' SEG., 9' GAP)
WC6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, (WHITE)
W8	MARKING LINE EPOXY 8-INCH, (WHITE)
IN	MARKING ISLAND NOSE EPOXY, (YELLOW)
C	MARKING CURB EPOXY, (YELLOW).

2

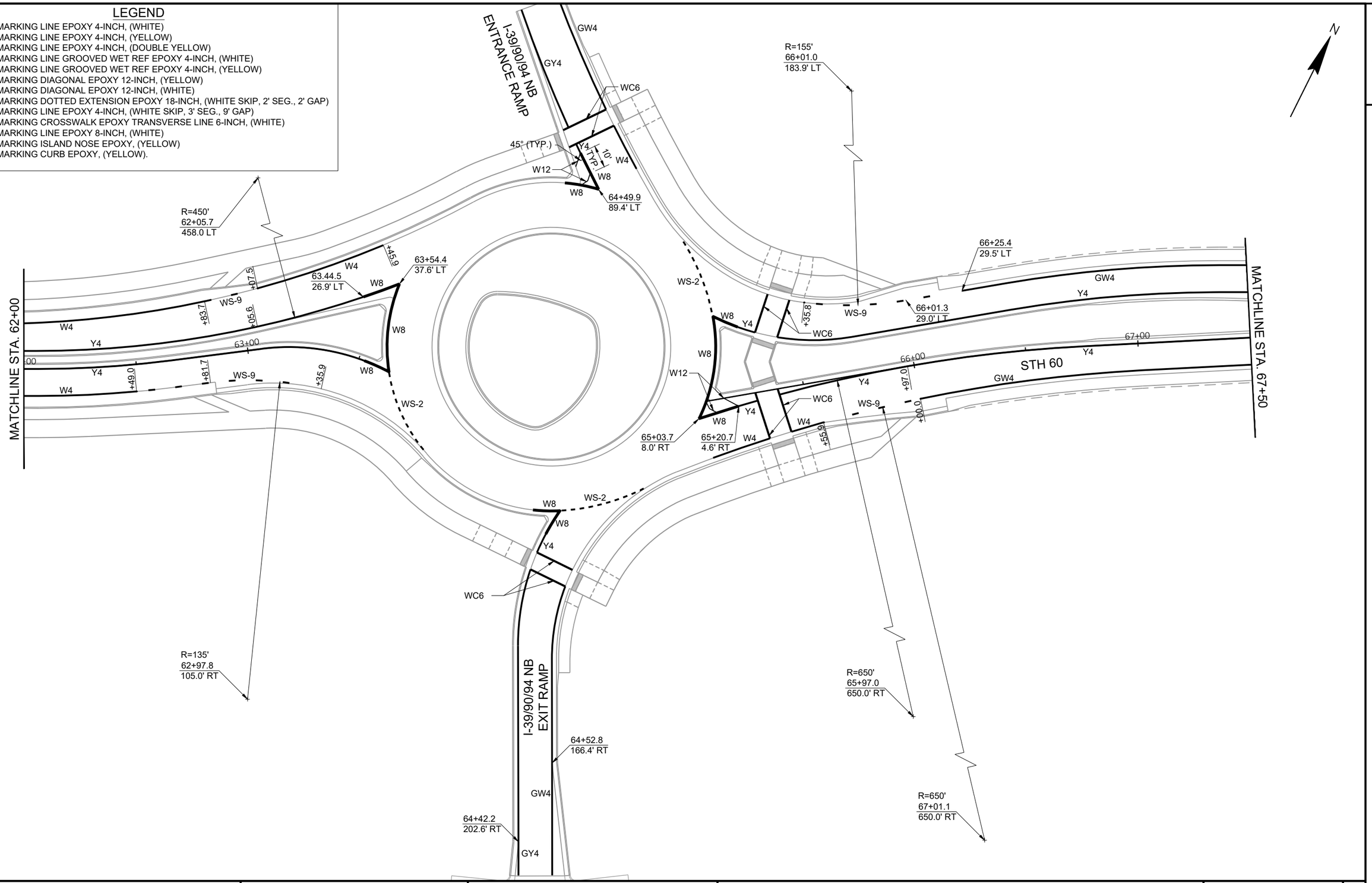


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKING	SHEET 98 E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024503_pm
PLOT DATE : 1/10/2022 5:06 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

LEGEND

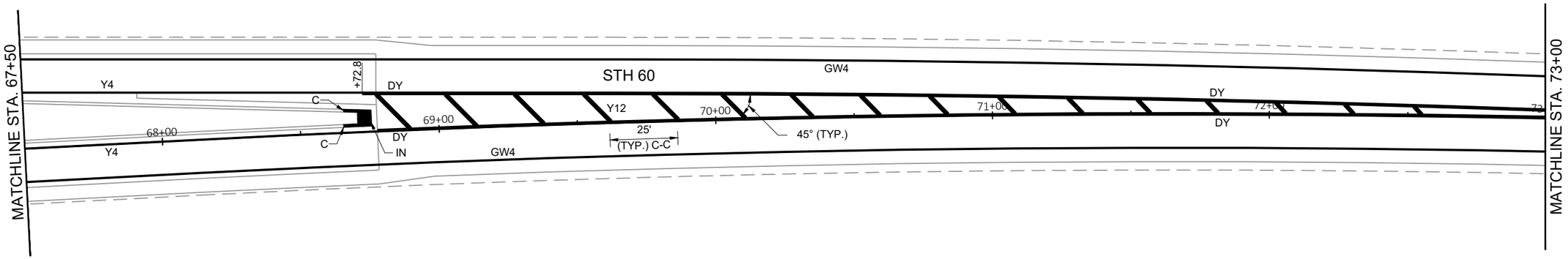
W4	MARKING LINE EPOXY 4-INCH, (WHITE)
Y4	MARKING LINE EPOXY 4-INCH, (YELLOW)
DY	MARKING LINE EPOXY 4-INCH, (DOUBLE YELLOW)
GW4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, (WHITE)
GY4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, (YELLOW)
Y12	MARKING DIAGONAL EPOXY 12-INCH, (YELLOW)
W12	MARKING DIAGONAL EPOXY 12-INCH, (WHITE)
WS-2	MARKING DOTTED EXTENSION EPOXY 18-INCH, (WHITE SKIP, 2' SEG., 2' GAP)
WS-9	MARKING LINE EPOXY 4-INCH, (WHITE SKIP, 3' SEG., 9' GAP)
WC6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, (WHITE)
W8	MARKING LINE EPOXY 8-INCH, (WHITE)
IN	MARKING ISLAND NOSE EPOXY, (YELLOW)
C	MARKING CURB EPOXY, (YELLOW).



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKING	SHEET 99	E

LEGEND

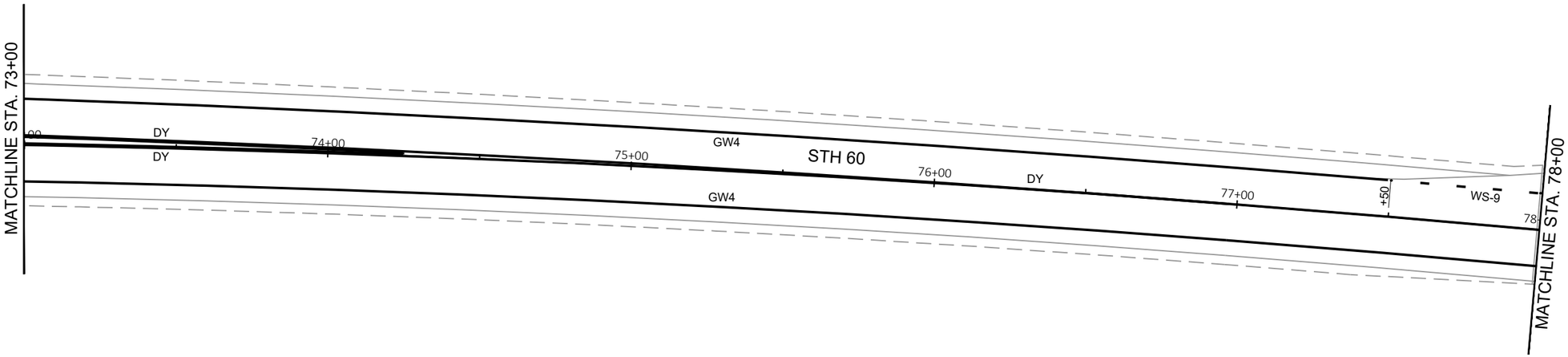
W4	MARKING LINE EPOXY 4-INCH, (WHITE)
Y4	MARKING LINE EPOXY 4-INCH, (YELLOW)
DY	MARKING LINE EPOXY 4-INCH, (DOUBLE YELLOW)
GW4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, (WHITE)
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Y12	MARKING DIAGONAL EPOXY 12-INCH, (YELLOW)
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WS-2	MARKING DOTTED EXTENSION EPOXY 18-INCH, (WHITE SKIP, 2' SEG., 2' GAP)
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WC6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, (WHITE)
W8	MARKING LINE EPOXY 8-INCH, (WHITE)
IN	MARKING ISLAND NOSE EPOXY, (YELLOW)
C	MARKING CURB EPOXY, (YELLOW).



2

LEGEND

W4	MARKING LINE EPOXY 4-INCH, (WHITE)
Y4	MARKING LINE EPOXY 4-INCH, (YELLOW)
DY	MARKING LINE EPOXY 4-INCH, (DOUBLE YELLOW)
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W8	MARKING LINE EPOXY 8-INCH, (WHITE)
IN	MARKING ISLAND NOSE EPOXY, (YELLOW)
C	MARKING CURB EPOXY, (YELLOW).



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKING	SHEET 101	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024506_pm
PLOT DATE : 1/10/2022 5:06 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

2

2

N

SCHUTZ ROAD

MATCHLINE STA. 78+00

MATCHLINE STA. 84+00

WS-9

79+00

80+00

+38

81+00

GW4

DY

82+00

83+00

84

STH 60

GW4

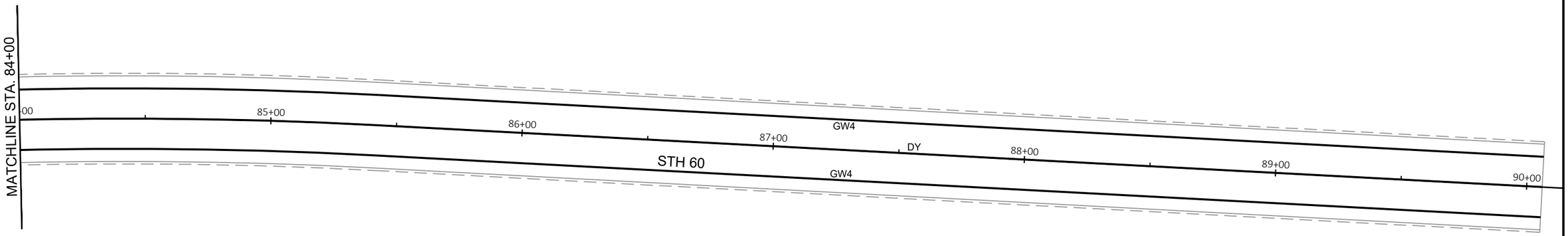
LEGEND

W4	MARKING LINE EPOXY 4-INCH, (WHITE)
Y4	MARKING LINE EPOXY 4-INCH, (YELLOW)
DY	MARKING LINE EPOXY 4-INCH, (DOUBLE YELLOW)
GW4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, (WHITE)
GY4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, (YELLOW)
Y12	MARKING DIAGONAL EPOXY 12-INCH, (YELLOW)
W12	MARKING DIAGONAL EPOXY 12-INCH, (WHITE)
WS-2	MARKING DOTTED EXTENSION EPOXY 18-INCH, (WHITE SKIP, 2' SEG., 2' GAP)
WS-9	MARKING LINE EPOXY 4-INCH, (WHITE SKIP, 3' SEG., 9' GAP)
WC6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, (WHITE)
W8	MARKING LINE EPOXY 8-INCH, (WHITE)
IN	MARKING ISLAND NOSE EPOXY, (YELLOW)
C	MARKING CURB EPOXY, (YELLOW).

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKING	SHEET 102	E

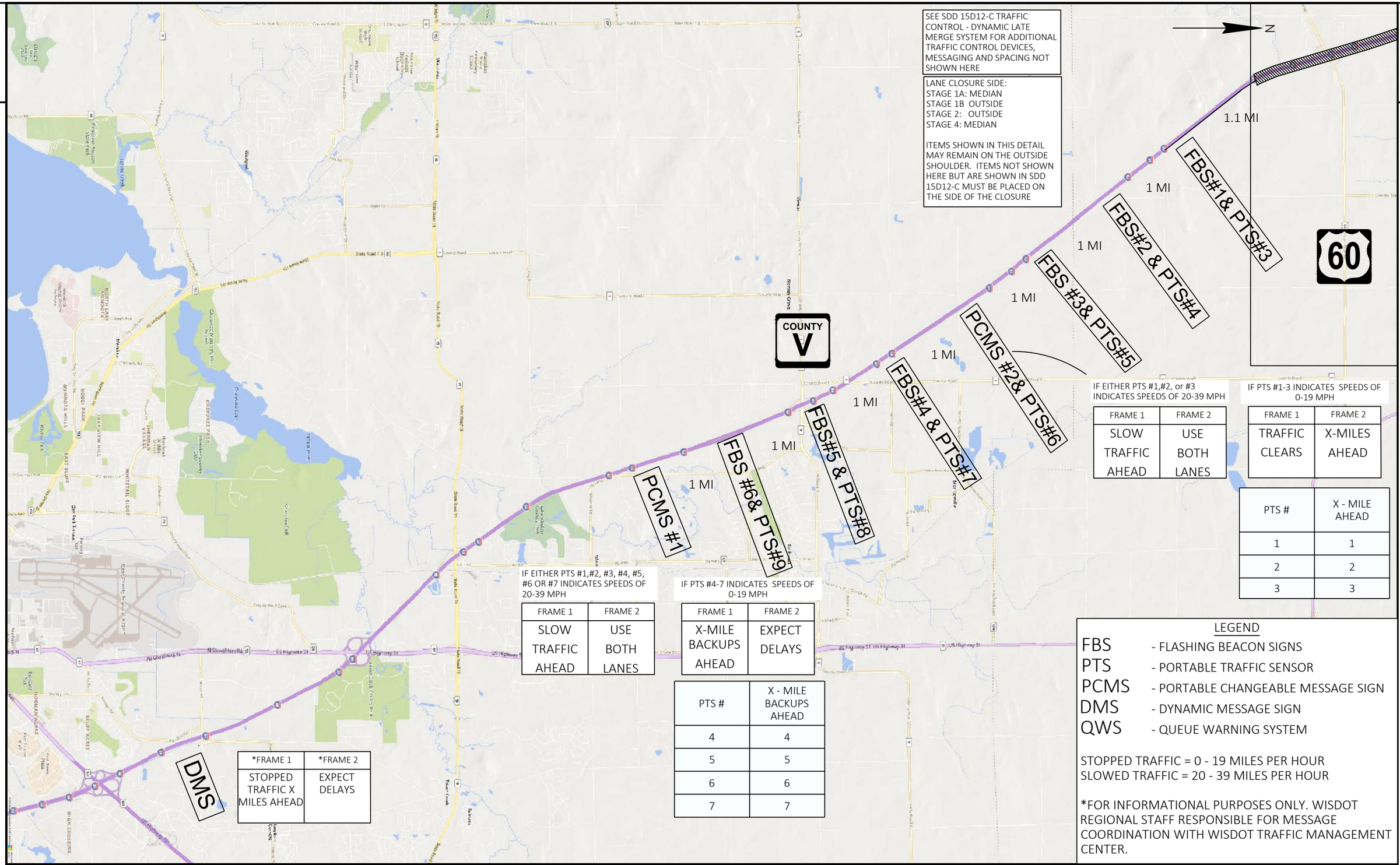
FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024507_pm
PLOT DATE : 1/11/2022 9:25 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2



LEGEND

W4	MARKING LINE EPOXY 4-INCH, (WHITE)
Y4	MARKING LINE EPOXY 4-INCH, (YELLOW)
DY	MARKING LINE EPOXY 4-INCH, (DOUBLE YELLOW)
GW4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, (WHITE)
GY4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, (YELLOW)
Y12	MARKING DIAGONAL EPOXY 12-INCH, (YELLOW)
W12	MARKING DIAGONAL EPOXY 12-INCH, (WHITE)
WS-2	MARKING DOTTED EXTENSION EPOXY 18-INCH, (WHITE SKIP, 2' SEG., 2' GAP)
WS-9	MARKING LINE EPOXY 4-INCH, (WHITE SKIP, 3' SEG., 9' GAP)
WC6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, (WHITE)
W8	MARKING LINE EPOXY 8-INCH, (WHITE)
IN	MARKING ISLAND NOSE EPOXY, (YELLOW)
C	MARKING CURB EPOXY, (YELLOW).



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DYNAMIC LATE MERGE SYSTEM	SHEET 104	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025001-TC_DLMS.DWG
LAYOUT NAME - 025001_tc DLMS
PLOT DATE : 3/16/2022 1:10 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : Custom

2

2

N

Merrimac

Lake Wisconsin

Okee

Lake Wisconsin

Durwards Glen

DMS

*FRAME 1	*FRAME 2
STOPPED TRAFFIC X MILES AHEAD	EXPECT DELAYS

IF EITHER PTS #1, #2, #3, OR #4 INDICATES SPEEDS OF 20-39 MPH

FRAME 1	FRAME 2
SLOW TRAFFIC AHEAD	USE BOTH LANES

IF PTS #3 OR # 4 INDICATES SPEEDS OF 0-19 MPH

FRAME 1	FRAME 2
X-MILE BACKUPS AHEAD	EXPECT DELAYS

PTS #	X - MILE BACKUPS AHEAD
3	3
4	4

IF PTS #4 INDICATES SPEEDS OF 0-19 MPH

FRAME 1	FRAME 2
STOPPED TRAFFIC I-39 SB	XX-MILES AHEAD

Wisconsin River

FBS#1 & PTS#3

FBS#2 & PTS#4

FBS#3 & PTS#5

FBS#4 & PTS#6

PCMS #1

DMS

1 MI

1 MI

1 MI

1 MI

1.1 MI

APPX. 1 MI FROM EXIT 92

PCMS

*FRAME 1	*FRAME 2
STOPPED TRAFFIC X MILES AHEAD	EXPECT DELAYS

Dekorra

Portage

Poynette

Pacific

US Highway 51

N US Highway 51

US Highway 51

SEE SDD 15D12-C TRAFFIC CONTROL - DYNAMIC LATE MERGE SYSTEM FOR ADDITIONAL TRAFFIC CONTROL DEVICES, MESSAGING AND SPACING NOT SHOWN HERE

LANE CLOSURE SIDE:
STAGE 1A: MEDIAN
STAGE 1B OUTSIDE
STAGE 2: MEDIAN
STAGE 4: OUTSIDE

ITEMS SHOWN IN THIS DETAIL MAY REMAIN ON THE OUTSIDE SHOULDER. ITEMS NOT SHOWN HERE BUT ARE SHOWN IN SDD 15D12-C MUST BE PLACED ON THE SIDE OF THE CLOSURE

LEGEND

FBS	- FLASHING BEACON SIGNS
PTS	- PORTABLE TRAFFIC SENSOR
PCMS	- PORTABLE CHANGEABLE MESSAGE SIGN
DMS	- DYNAMIC MESSAGE SIGN
QWS	- QUEUE WARNING SYSTEM

STOPPED TRAFFIC = 0 - 19 MILES PER HOUR
SLOWED TRAFFIC = 20 - 39 MILES PER HOUR

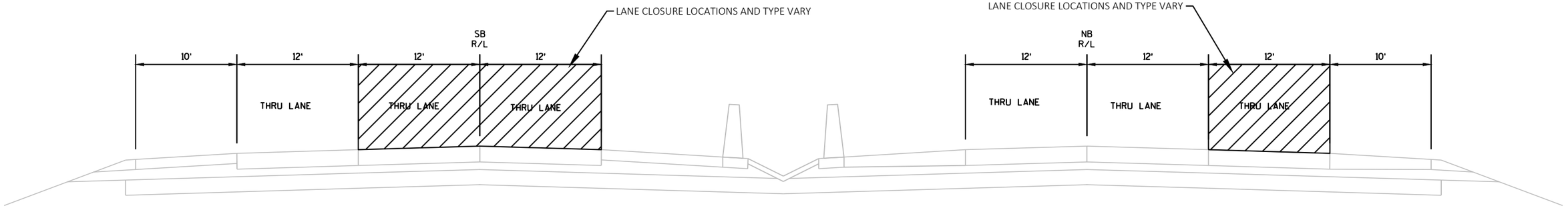
*FOR INFORMATIONAL PURPOSES ONLY. WISDOT REGIONAL STAFF RESPONSIBLE FOR MESSAGE COORDINATION WITH WISDOT TRAFFIC MANAGEMENT CENTER.

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DYNAMIC LATE MERGE SYSTEM	SHEET 105	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025001-TC_DLMS.DWG
LAYOUT NAME - 025002-tc_DLMS

PLOT DATE : 3/16/2022 1:10 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : Custom

WISDOT/CADDS SHEET 42



STAGE 1

IH 39

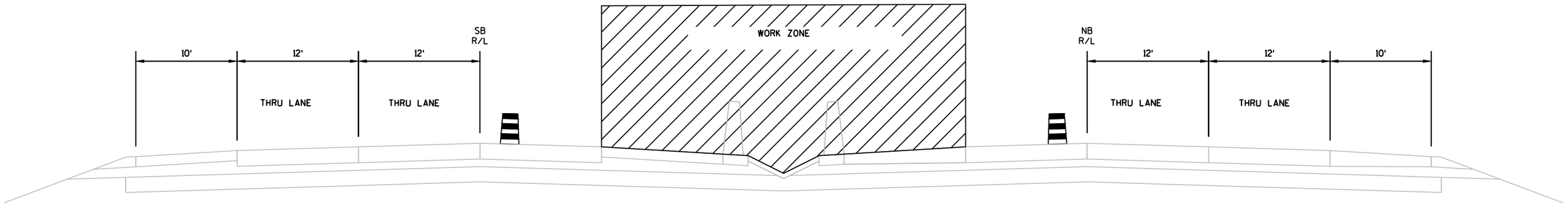
PAVEMENT REPAIR AND REPLACEMENT

LANE CLOSURES VARY DEPENDING ON CONSTRUCTION ACTIVITIES:

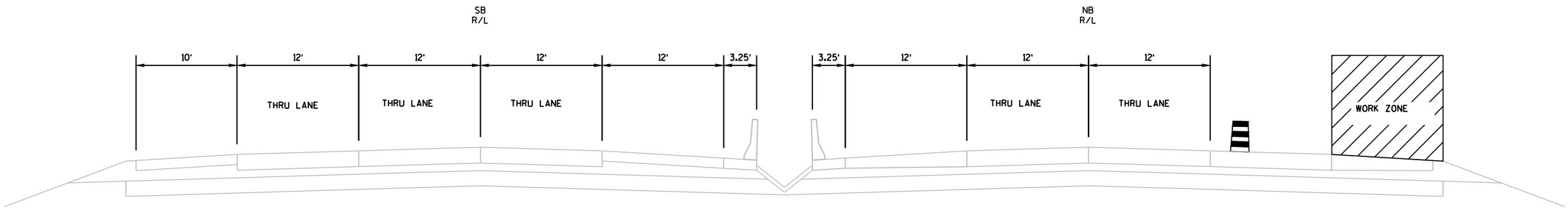
DOUBLE LANE CLOSURE: SDD 15D14-04
SINGLE LANE CLOSURE: SDD 15D20-05A
SHOULDER CLOSURE: SDD 15D27-03

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1	SHEET 106 E

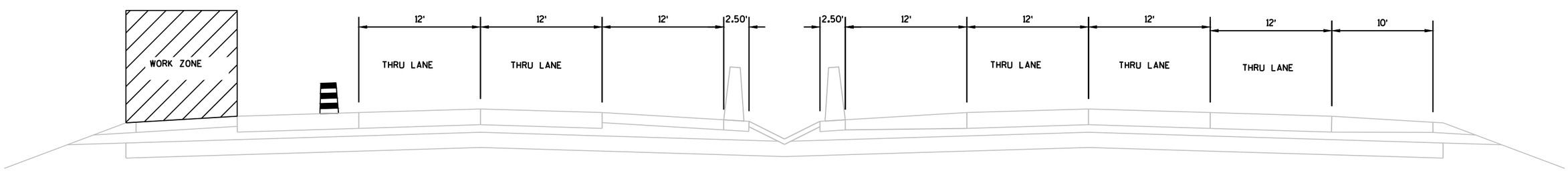
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\020301_TS.DWG
1012-01-74 - S1 025001-TC
PLOT DATE : 3/16/2022 1:10 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



STAGE 1-A
IH 39
MEDIAN BARRIER REMOVAL AND CROSSOVER CONSTRUCTION



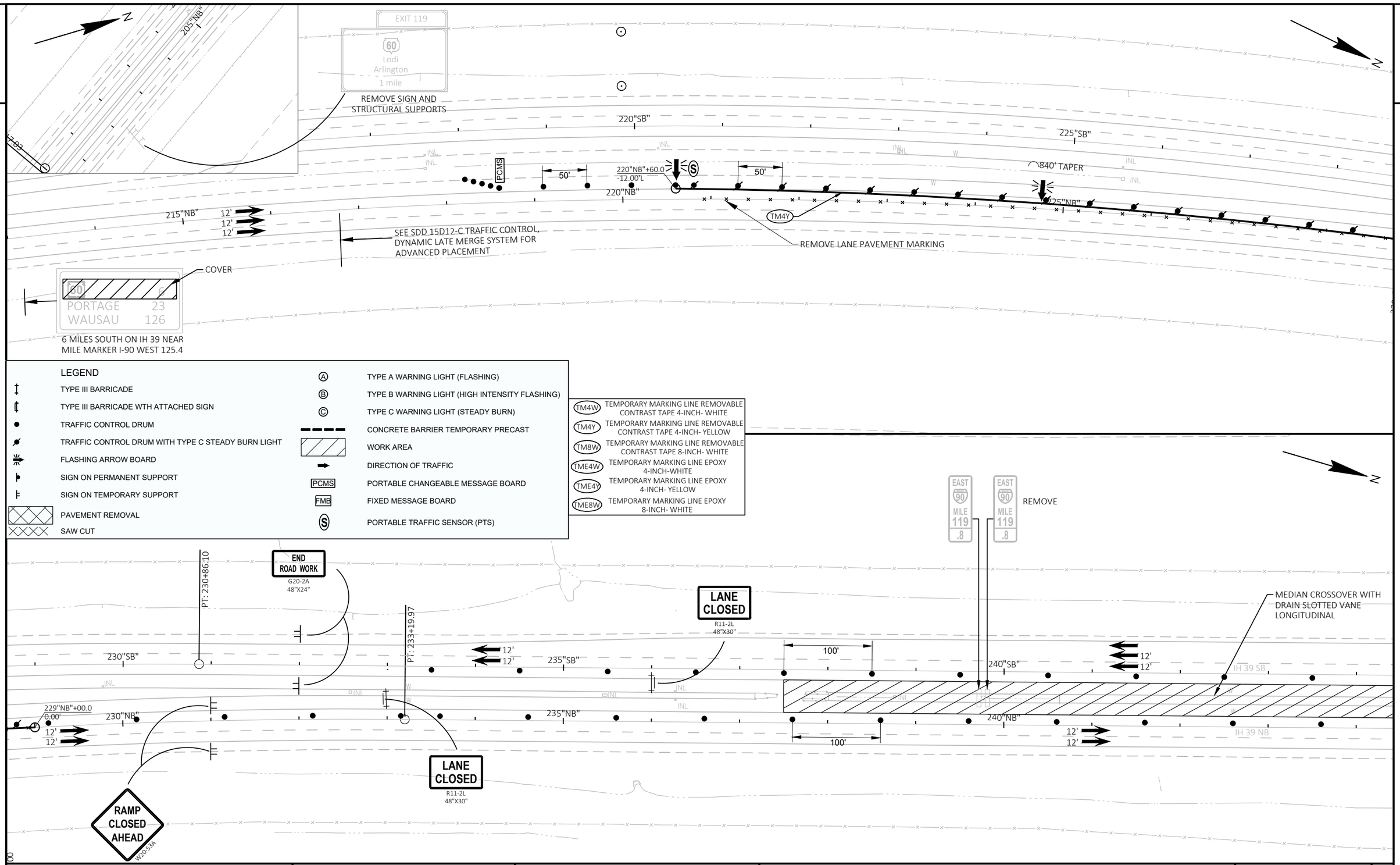
STAGE 1-B
IH 39
RAMP "NX" TIE-IN
237"SB"+77 - 274"SB"+77



STAGE 1-B
IH 39
RAMP "SX" TIE-IN
274"SB"+77 - 286"SB"+00

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1-A & 1-B	SHEET 107 E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\020301_TS.DWG
1012-01-74 - S1A&B 025002-TC
PLOT DATE : 3/16/2022 1:10 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



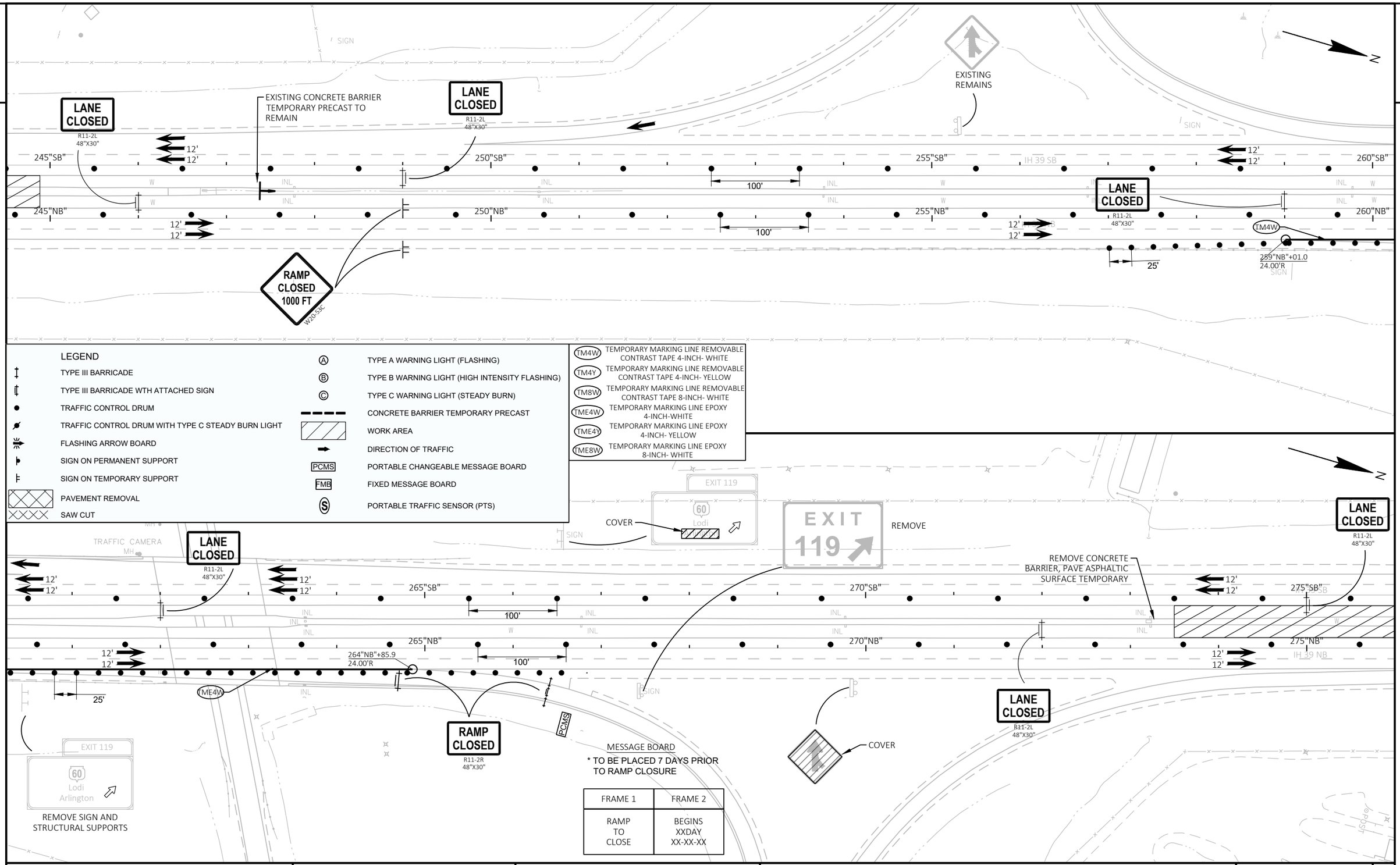
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- PAVEMENT REMOVAL
- SAW CUT
- (A) TYPE A WARNING LIGHT (FLASHING)
- (B) TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
- (C) TYPE C WARNING LIGHT (STEADY BURN)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS PORTABLE CHANGEABLE MESSAGE BOARD
- FMB FIXED MESSAGE BOARD
- (S) PORTABLE TRAFFIC SENSOR (PTS)

- (TM4W) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
- (TM4Y) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
- (TM8W) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
- (TME4W) TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
- (TME4Y) TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
- (TME8W) TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1A	SHEET 108 E

2

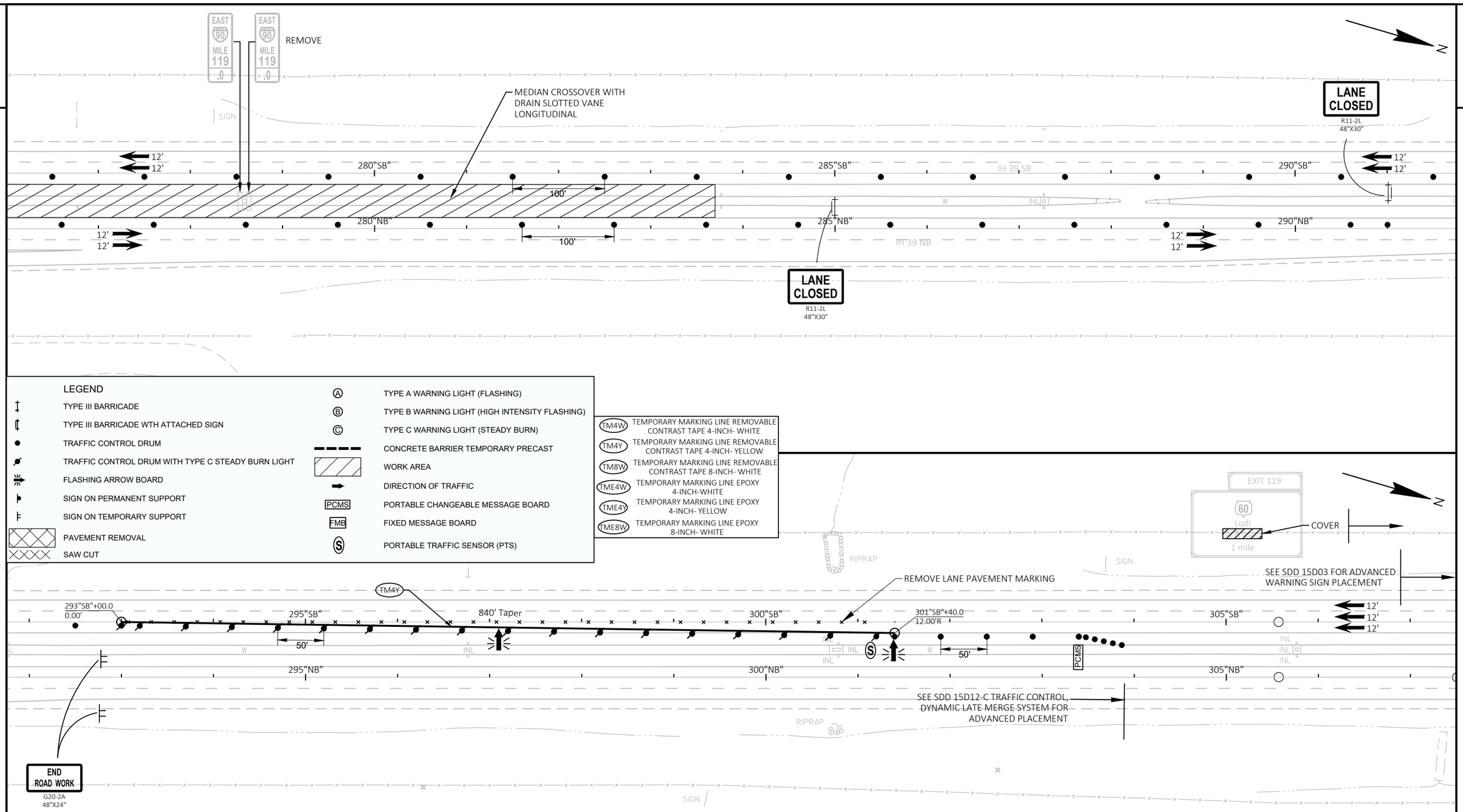


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1A	SHEET 109	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025001-TC_STAGE1A.DWG
LAYOUT NAME - S1A 025004-tc

PLOT DATE : 3/16/2022 1:11 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1A	SHEET 110	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025001-TC_STAGE1A.DWG
LAYOUT NAME - S1A 025005-tc

PLOT DATE : 3/16/2022 1:11 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

220"SB"

225"SB"

230"SB"

15"SB"

220"NB"

221"NB"+60.0
24.00'R

225"NB"

230"NB"+00.0
12.00'R

230"NB"

TM4W

REMOVE LANE PAVEMENT MARKING

50'

50'

840' TAPER

12'
12'
12'

12'
12'

SEE SDD 15D12-C TRAFFIC CONTROL, DYNAMIC LATE MERGE SYSTEM FOR ADVANCED PLACEMENT

PCMS

60

6

PORTAGE 23

WAUSAU 126

COVERED IN STAGE 1A

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- PAVEMENT REMOVAL
- SAW CUT
- (A) TYPE A WARNING LIGHT (FLASHING)
- (B) TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
- (C) TYPE C WARNING LIGHT (STEADY BURN)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- FMB FIXED MESSAGE BOARD
- (S) PORTABLE TRAFFIC SENSOR (PTS)

- (TM4W) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
- (TM4Y) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
- (TM8W) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
- (TME4W) TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
- (TME4Y) TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
- (TME8W) TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE

PLACE BARRELS AND TEMPORARY PAVEMENT MARKING ON SB LANE CLOSURE IN ACCORDANCE WITH SDD 15D-A "TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE"

500'

END ROAD WORK
G20-2A
48"X24"

100'

TM4W

COVER

TEMP. CRASH CUSHION

PT: 233+19.9

235"SB"

240"SB"

245"SB"

IH 39 SB

235"NB"

240"NB"

245"NB"

IH 39 NB

12'
12'

12'
12'

100'

LANE CLOSED
R11-2L
48"X30"

RAMP CLOSED AHEAD
W20-5SA

LANE CLOSED
R11-2L
48"X30"

CONCRETE BARRIER
TEMP. PRECAST
(NO ANCHORING*)
*ANCHOR RIGID BARRIER TO
FREESTANDING BARRIER PER SDD 14B7-D

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL-STAGE 1B	SHEET 111	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025001-TC_STAGE1B.DWG
LAYOUT NAME - S1B 025006-tc

PLOT DATE : 3/16/2022 1:11 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

PLACE BARRELS AND TEMPORARY PAVEMENT MARKING ON SB LANE CLOSURE IN ACCORDANCE WITH SDD 15D-A "TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE"

R=1095' MIN

WO4-3R 48"X48"

(PLACE 500' IN ADVANCE OF GORE)

ROAD WORK AHEAD W20-1A

(PLACE 1000' IN ADVANCE OF GORE)

COVER

(PLACE 800' IN ADVANCE OF GORE)

WO4-3R 48"X48"

LANE CLOSED R11-2L 48"X30"

EXIT E5-1 48"X48"

TRAFFIC CAMERA

TM4W TM4Y TM8W

250"SB" 100' 255"SB" 50' 260"SB" 25' 261"SB"+77.7 -11.84'L

500'

250"NB" 255"NB" 260"NB"

12' 12' 12' 12' 12' 12'

100' 25'

IH 39 SB IH 39 NB

RAMP CLOSED 1000 FT W20-3C

LANE CLOSED R11-2L 48"X30"

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- PAVEMENT REMOVAL
- SAW CUT
- Ⓐ TYPE A WARNING LIGHT (FLASHING)
- Ⓑ TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
- Ⓒ TYPE C WARNING LIGHT (STEADY BURN)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- FMB FIXED MESSAGE BOARD
- Ⓢ PORTABLE TRAFFIC SENSOR (PTS)

- (TM4W) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
- (TM4Y) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
- (TM8W) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
- (TME4W) TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
- (TME4Y) TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
- (TME8W) TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE

EXIT 119 60 Lodi Arlington

COVERED IN STAGE 1A

LANE CLOSED R11-2L 48"X30"

LANE CLOSED R11-2L 48"X30"

264"SB"+00.0 -33.72'L 25' TM4W 265"SB" 267"SB"+00.0 -12.00'L 269"SB"+00.00 -12.00'L 270"SB" 100' 275"SB"

265"NB" 270"NB" 275"NB"

CONCRETE BARRIER TEMP. PRECAST (NO ANCHORING*) *ANCHOR RIGID BARRIER TO FREESTANDING BARRIER PER SDD 14B7-D

RAMP CLOSED R11-2R 48"X30"

END ROAD WORK G20-2A 48"X24"

COVERED IN 1A

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL-STAGE 1B	SHEET 112	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025001-TC_STAGE1B.DWG
LAYOUT NAME - S1B 025007-tc

PLOT DATE : 3/16/2022 1:11 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

LANE CLOSED
R11-2L
48"X30"

100

280"SB"

12'
12'

285"SB"

IH 39 SB

290"SB"

292"SB"+00.0
12.00'L

50'

12'
12'

280"NB"

285"NB"

290"NB"

CONCRETE BARRIER
TEMP. PRECAST
(NO ANCHORING*)
*ANCHOR RIGID BARRIER TO
FREESTANDING BARRIER PER SDD 14B7-D

IH 39 NB

SIGN

INL

W

N

LEGEND

TYPE III BARRICADE	TYPE A WARNING LIGHT (FLASHING)
TYPE III BARRICADE WTH ATTACHED SIGN	TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
TRAFFIC CONTROL DRUM	TYPE C WARNING LIGHT (STEADY BURN)
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	CONCRETE BARRIER TEMPORARY PRECAST
FLASHING ARROW BOARD	WORK AREA
SIGN ON PERMANENT SUPPORT	DIRECTION OF TRAFFIC
SIGN ON TEMPORARY SUPPORT	PORTABLE CHANGEABLE MESSAGE BOARD
PAVEMENT REMOVAL	FIXED MESSAGE BOARD
SAW CUT	PORTABLE TRAFFIC SENSOR (PTS)

TM4W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
TM4Y	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
TM8W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
TME4W	TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
TME4Y	TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
TME8W	TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE

EXIT 119
60
Lodi
Arlington
1 mile

COVERED IN STAGE 1A

SEE SDD 15D12-C TRAFFIC CONTROL, DYNAMIC LATE MERGE SYSTEM FOR ADVANCED PLACEMENT

RIPRAP

TM4W

840' TAPER

50'

300"SB"+40.0
-24.00'L

50'

PCMS

295"SB"

300"SB"

305"SB"

12'
12'
12'

PC: 307+50.65

REMOVE LANE PAVEMENT MARKING

295"NB"

300"NB"

305"NB"

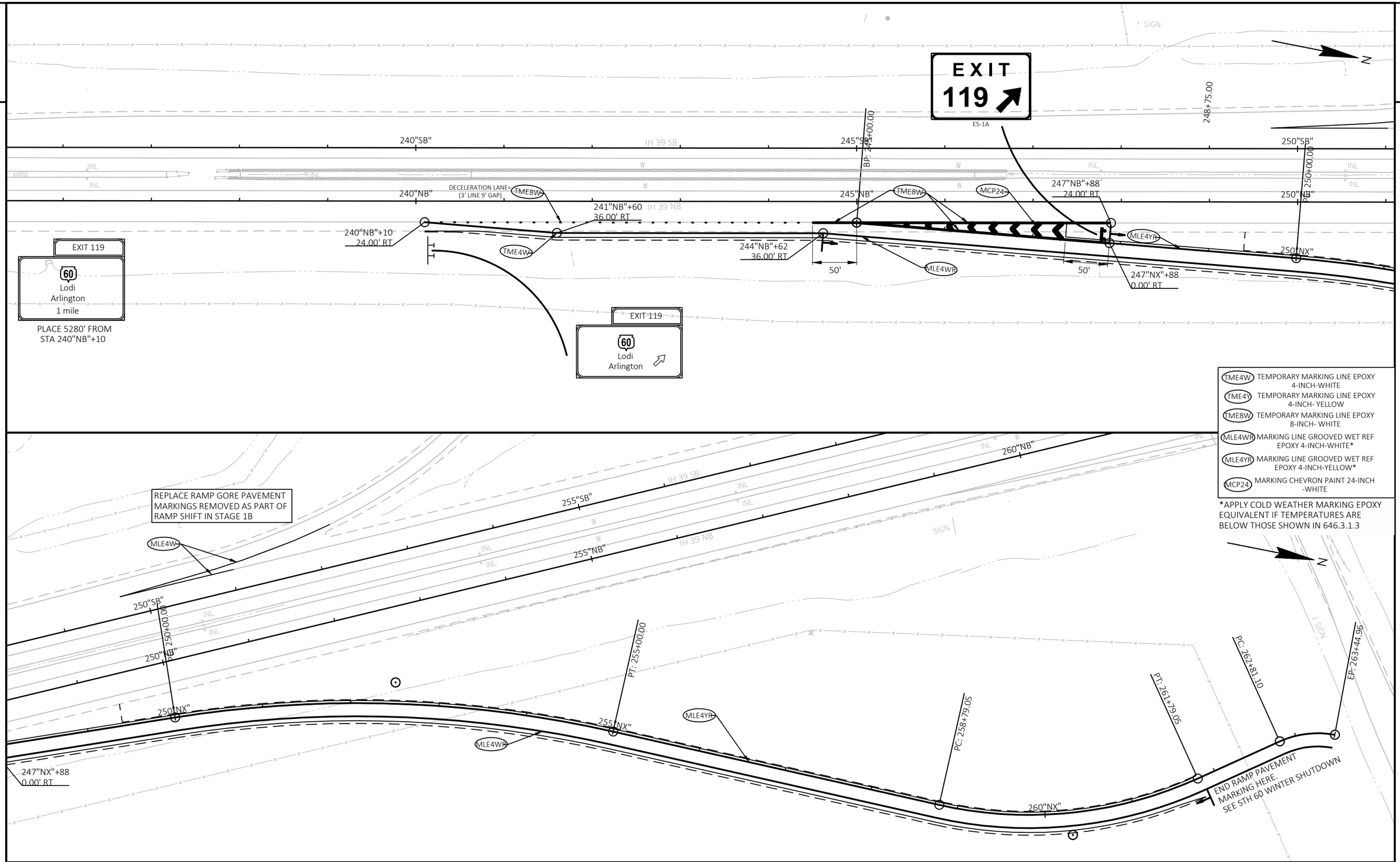
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL-STAGE 1B	SHEET 113	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025001-TC_STAGE1B.DWG
LAYOUT NAME - S1B 025008-tc

PLOT DATE : 3/16/2022 1:11 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2



TME4W TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE

TME4Y TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW

TME8W TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE

MLE4WR MARKING LINE GROOVED WET REF EPOXY 4-INCH-WHITE*

MLE4YR MARKING LINE GROOVED WET REF EPOXY 4-INCH-YELLOW*

MCP24 MARKING CHEVRON PAINT 24-INCH -WHITE

*APPLY COLD WEATHER MARKING EPOXY EQUIVALENT IF TEMPERATURES ARE BELOW THOSE SHOWN IN 646.3.1.3

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (WINTER SHUTDOWN)	SHEET 114	E

ALL OTHER EXISTING SIGNS ON IH 39 SB OFF RAMP REMAIN IN PLACE UNTIL STAGE 3 IS COMPLETED.

EXIT 119

COVER

SIGN REMAINS COVERED FOR USE IN STAGE 3.

RAMP CLOSED
R11-2R
48"X30"

CONCRETE BARRIER TEMP. PRECAST

RAMP 30 MPH

COVER

SIGN REMAINS COVERED FOR USE IN STAGE 3.

PC: 267+75.00

PT: 271+85.00

260"SB" 265"SB" 270"SB"

260"NB" 265"NB" 270"NB"

MLE4W

TRAFFIC CAMERA

MOVE SIGN

CONCRETE BARRIER TEMP. PRECAST

RAMP CLOSED
R11-2R
48"X30"

EXIT 119
E5-1A

PC: 267+75.00

PT: 271+85.00

270"SX"

273"SX"+91
0.00'

273"SB"+90
-24.00' LT

MLE4WR

MLE4YR

50'

275"SX"

275"SB"+81
-46.95' LT

275"SB"

MCP24

TME8W

EP: 276+80.00

277"SB"+18
-36.00' LT

DECELERATION LANE
(3' LINE 9' GAP)

50'

TME8W

TME4W

281"SB"+50
-36.00' LT

283"SB"+00
-24.00' LT

270"SB" 275"SB" 280"SB"

270"NB" 275"NB" 280"NB"

IH 39 NB

EXIT 119
60
Lodi
Arlington

TME4W	TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
TME4Y	TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
TME8W	TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE
MLE4WR	MARKING LINE GROOVED WET REF EPOXY 4-INCH-WHITE*
MLE4YR	MARKING LINE GROOVED WET REF EPOXY 4-INCH-YELLOW*
MCP24	MARKING CHEVRON PAINT 24-INCH -WHITE

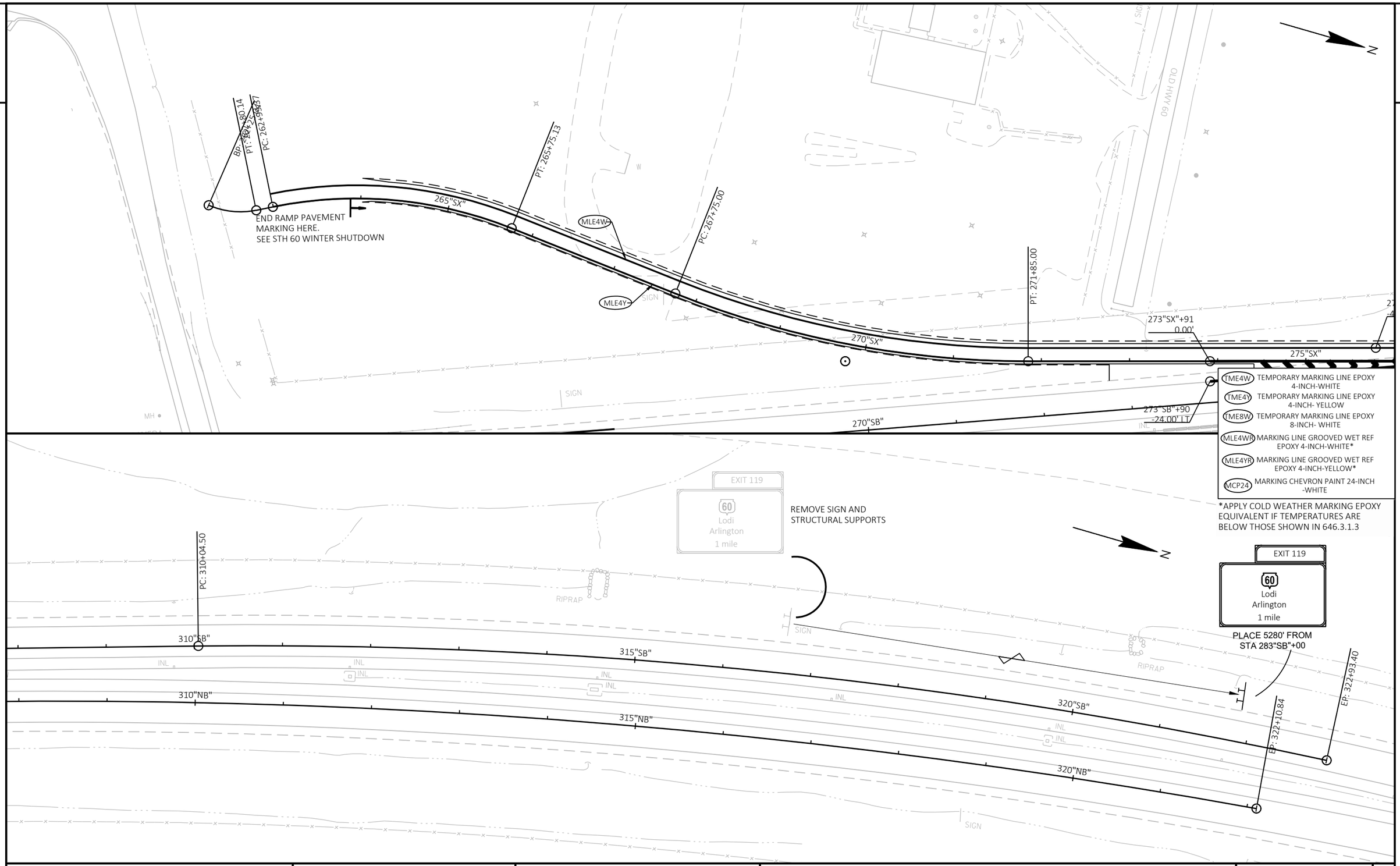
*APPLY COLD WEATHER MARKING EPOXY EQUIVALENT IF TEMPERATURES ARE BELOW THOSE SHOWN IN 646.3.1.3

TME4W TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
TME4Y TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
TME8W TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE
MLE4WR MARKING LINE GROOVED WET REF EPOXY 4-INCH-WHITE*
MLE4YR MARKING LINE GROOVED WET REF EPOXY 4-INCH-YELLOW*
MCP24 MARKING CHEVRON PAINT 24-INCH -WHITE

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (WINTER SHUTDOWN)	SHEET 115 E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025001-TC_WINTERSHUT DOWN.DWG
LAYOUT NAME - WS_2022-1
PLOT DATE : 3/16/2022 1:12 PM
PLOT BY : COLE, RYAN DAVID
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

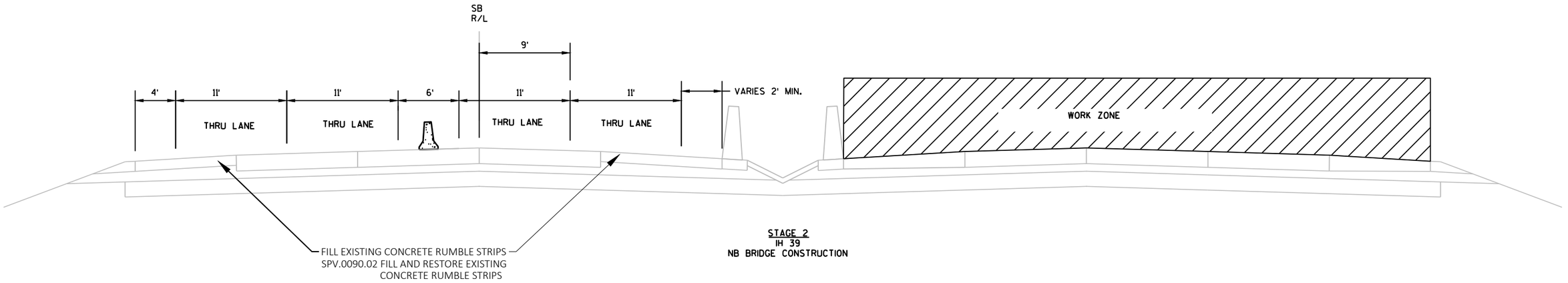


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (WINTER SHUTDOWN)	SHEET 116	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025001-TC_WINTERSHUT DOWN.DWG
LAYOUT NAME - WS_2022-2

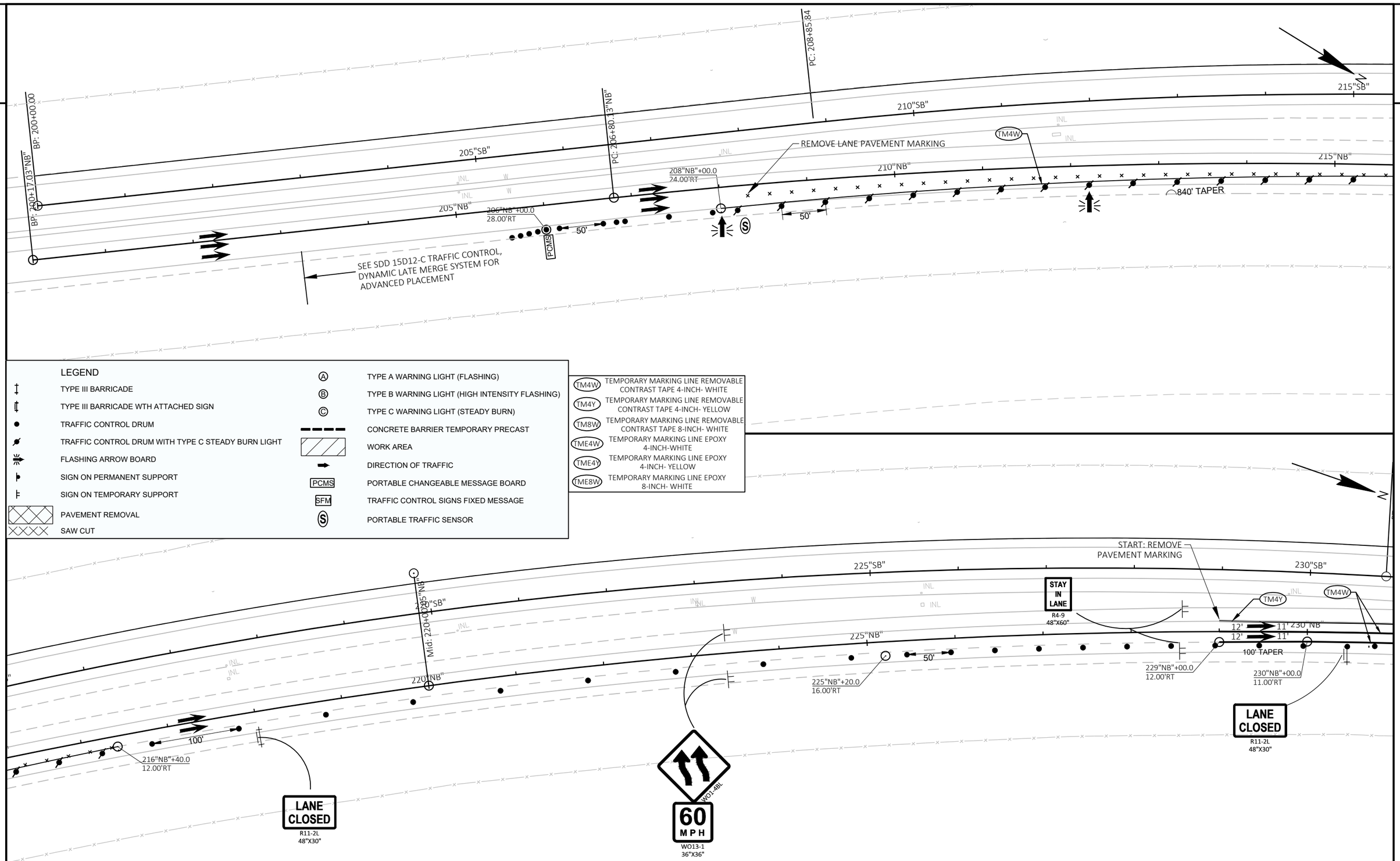
PLOT DATE : 3/16/2022 1:12 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



STAGE 2
IH 39
NB BRIDGE CONSTRUCTION

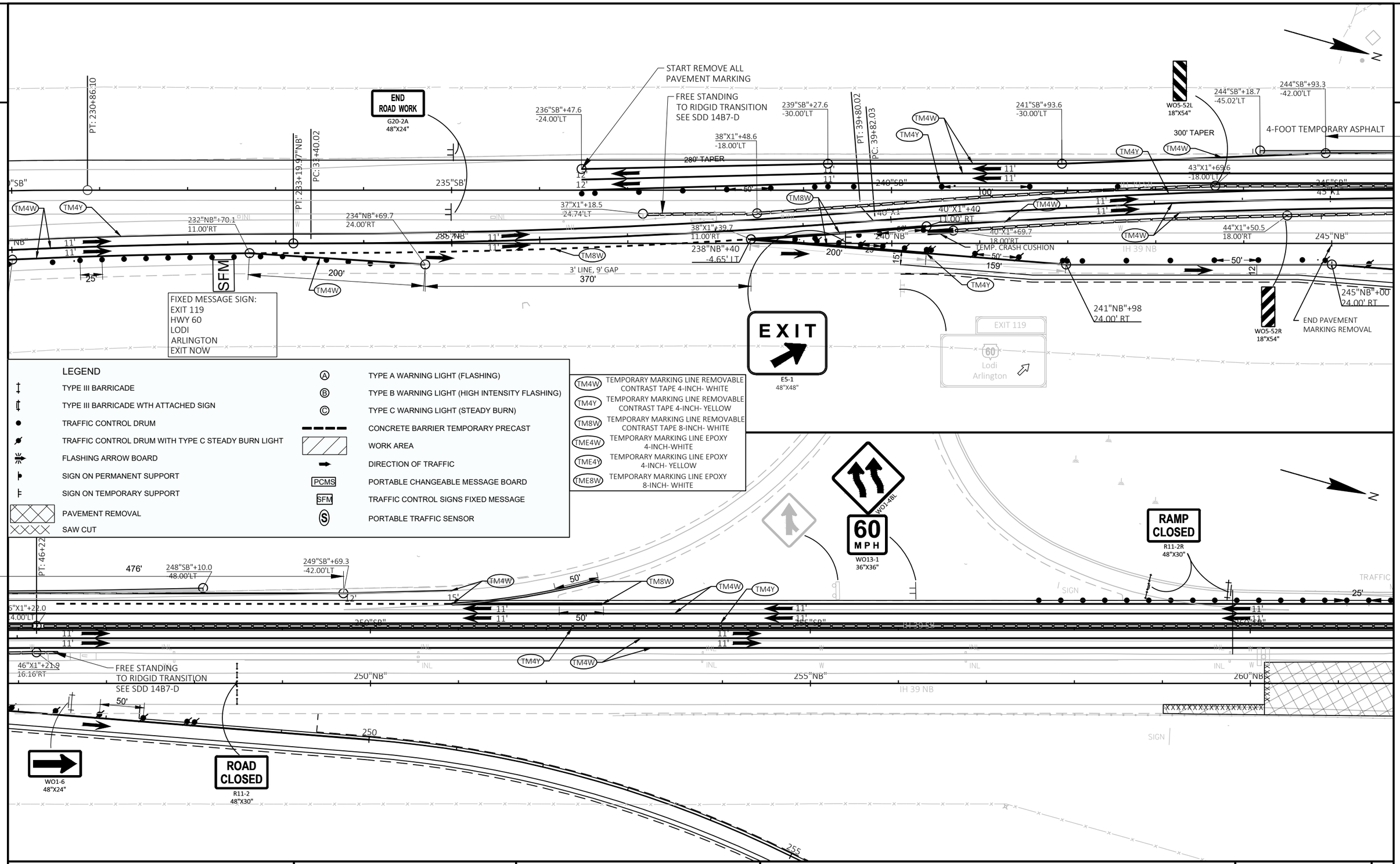
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET 117 E



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 - IH 39	SHEET 118	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025001-TC_STAGE2.DWG
LAYOUT NAME - S2 025010-tc

PLOT DATE : 3/16/2022 1:13 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 - IH 39	SHEET 119	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025001-TC_STAGE2.DWG
LAYOUT NAME - S2 025011-tc

PLOT DATE : 3/16/2022 1:13 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

2

2

EXIT

E5-1
78"X48"

PC 73+50.00"X2"

TM8W

275"SB"+79
-30.00'LT

WO5-52L
18"X54"

TRAFFIC CAMERA

MH

SIGN

25'

TM4Y

TM4W

11'

265"SB"

270"SB"

73"X2"+50.0
-14.00'LT

50'

76"X2"+20.3
-30.00'LT

75"X2"

275"SB"

265"NB"

270"NB"

275"NB"

IH 39 NB

WO13-48R

60
MPH

WO13-1
36"X36"

NB ON RAMP CLOSED
SPRING OF 2023.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- PAVEMENT REMOVAL
- SAW CUT
- (A) TYPE A WARNING LIGHT (FLASHING)
- (B) TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
- (C) TYPE C WARNING LIGHT (STEADY BURN)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS PORTABLE CHANGEABLE MESSAGE BOARD
- SFM TRAFFIC CONTROL SIGNS FIXED MESSAGE
- (S) PORTABLE TRAFFIC SENSOR

- (TM4W) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
- (TM4Y) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
- (TM8W) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
- (TME4W) TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
- (TME4Y) TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
- (TME8W) TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE

EXIT 119

60
Lodi
Arlington

STAY
IN
LANE
R4-9
48"X60"

277"SB"+93.7
-30.00'LT

PC 77+50.00"X2"

CL 8 PC 80.00"X2"

76'

100'

280"SB"

80'X2

280"NB"

50'

25'

11'

12'

6"X2"+20.3
-30.00'LT

83"X2"+72.9
-19.04'LT

83"X2"+47.2
-18.00'LT

285"SB"

285"NB"

PT 87+80.00"X2"

288"SB"+80.0
-30.00'LT

288"SB"+80.0
-8.00'LT

290"SB"

290"NB"

IH 39 NB

FREE STANDING
TO RIDGID TRANSITION
SEE SDD 14B7-D

NB ON RAMP CLOSED
SPRING OF 2023.

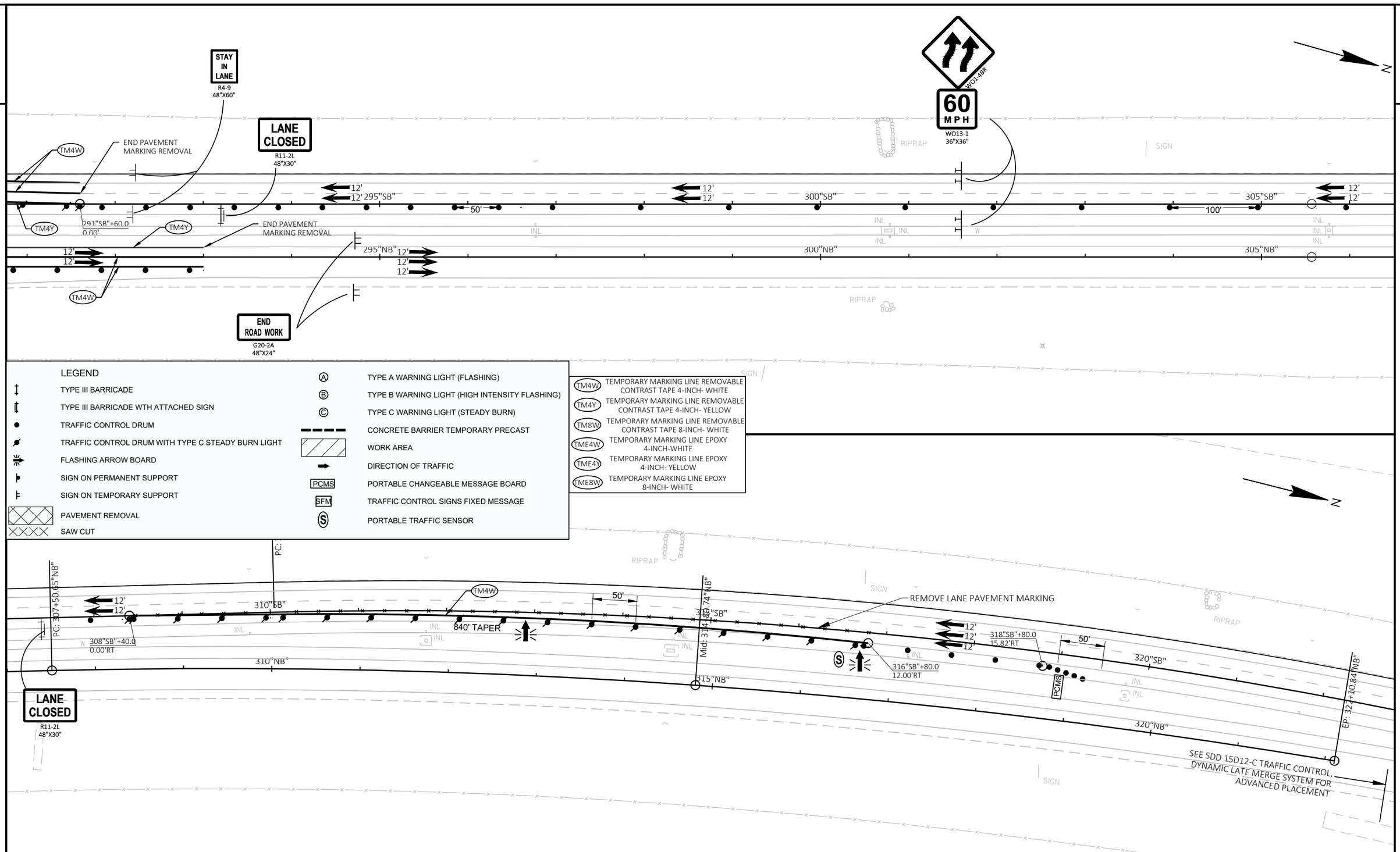
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 - IH 39	SHEET 120	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025001-TC_STAGE2.DWG
LAYOUT NAME - S2 025012-tc

PLOT DATE : 3/16/2022 1:13 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : ##########

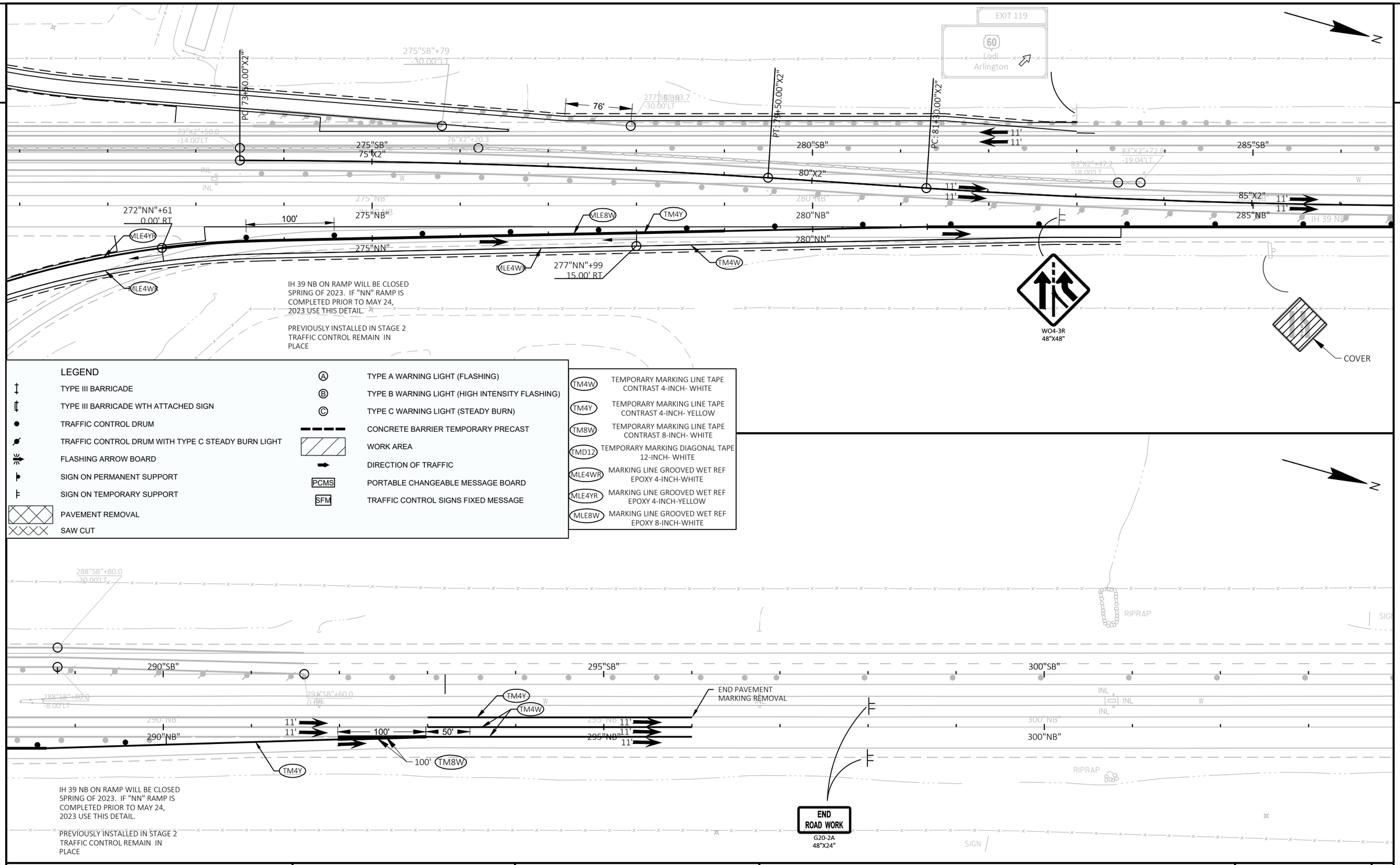
WISDOT/CADDS SHEET 44

2



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 - IH 39	SHEET 121	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025001-TC_STAGE2.DWG
LAYOUT NAME - S2 025013-tc
PLOT DATE : 3/16/2022 1:13 PM
PLOT BY : COLE, RYAN DAVID
PLOT NAME :
PLOT SCALE : ############
WISDOT/CADDS SHEET 44



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 - "NN RAMP" OPEN	SHEET 122	E

2

2

PT: 230+86.10

PT: 233+19.97

233"SB"+17
0.00'

TM4W
LANE LINE:
(12.5' LINE 37.5' GAP)

236"SB"+84
-36.00' LT

CONCRETE BARRIER
TEMP. PRECAST
(NO ANCHORING*)
*ANCHOR RIGID BARRIER TO
FREESTANDING BARRIER PER SDD 14B7-D

241"SB"+29,
-24.00' LT

250"SB"+84
-44.08' LT

252"SB"+61
-57.61' LT

ACCELERATION LANE=
(3' LINE 9' GAP)

TM8W

50'

50'

230"SB"

235"SB"

240"SB"

245"SB"

250"SB"

255"SB"

230"NB"

235"NB"

240"NB"

245"NB"

249"SB"+84
-24.00' LT

250"NB"

255"NB"

TM4Y

TM4W
LANE LINE:
(12.5' LINE 37.5' GAP)

TM8W
DECELERATION LANE=
(3' LINE 9' GAP)

IH 39 SB

IH 39 NB

N

LEGEND

TYPE III BARRICADE	TYPE A WARNING LIGHT (FLASHING)
TYPE III BARRICADE WTH ATTACHED SIGN	TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
TRAFFIC CONTROL DRUM	TYPE C WARNING LIGHT (STEADY BURN)
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	CONCRETE BARRIER TEMPORARY PRECAST
FLASHING ARROW BOARD	WORK AREA
SIGN ON PERMANENT SUPPORT	DIRECTION OF TRAFFIC
SIGN ON TEMPORARY SUPPORT	PCMS PORTABLE CHANGEABLE MESSAGE BOARD
	SFM TRAFFIC CONTROL SIGNS FIXED MESSAGE

TM4W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
TM4Y	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
TM8W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
TME4W	TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
TME4Y	TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
TME8W	TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE

EXIT
119

COVER SIGN

EXIT 119

60
Lodi
Arlington

RAMP
30
MPH

FIXED MESSAGE SIGN:
EXIT 119
HWY 60
LODI
ARLINGTON
EXIT NOW

SFM

RAMP
CLOSED
R11-2R
48"X30"

25'

258"SB"+23,
-24.00' LT

258"SB"+57
-46.69' LT

260"SB"+23
-24.00' LT

DECELERATION LANE=
(3' LINE 9' GAP)

268"SB"+07
-24.00' LT

TM4W
LANE LINE:
(12.5' LINE 37.5' GAP)

260"SB"

265"SB"

270"SB"

275"SB"

280"SB"

285"SB"

260"NB"

265"NB"

270"NB"

275"NB"

280"NB"

285"NB"

259"NB"+00
0.00'

266"NB"+99
0.00'

272"NB"+58,
24.00' RT

281"NB"+29,
24.00' RT

287"NB"+15,
24.00' RT

ACCELERATION LANE=
(3' LINE 9' GAP)

CONCRETE BARRIER
TEMP. PRECAST
(NO ANCHORING*)
*ANCHOR RIGID BARRIER TO
FREESTANDING BARRIER PER SDD 14B7-D

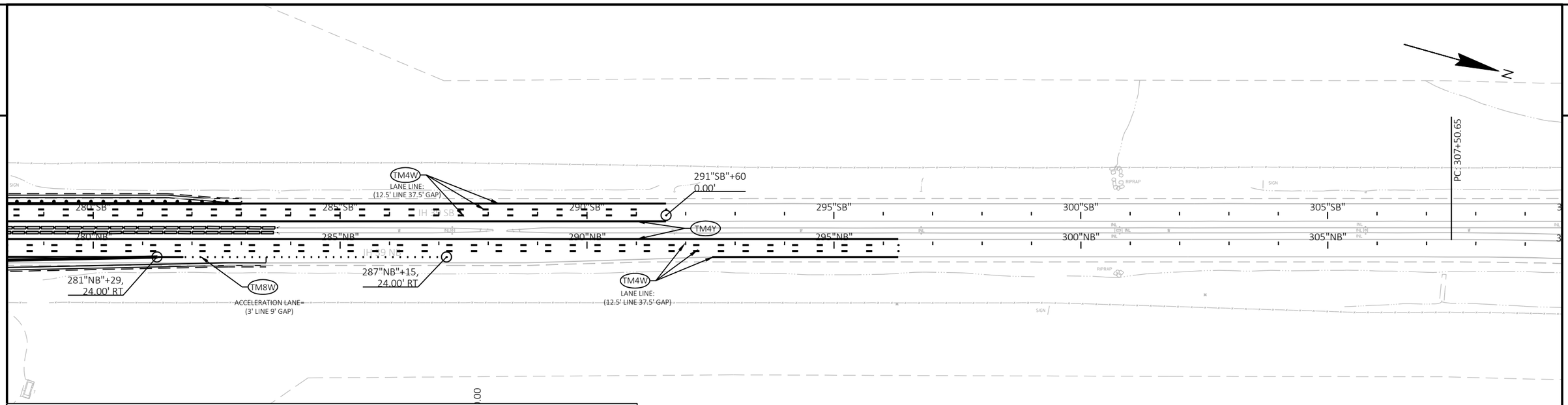
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3A	SHEET 123 E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025002-TC_STAGE3.DWG
LAYOUT NAME - S3A 025015-tc

PLOT DATE : 3/16/2022 1:14 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

2



LEGEND

‡	TYPE III BARRICADE
‡	TYPE III BARRICADE WTH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
Ⓐ	TYPE A WARNING LIGHT (FLASHING)
Ⓑ	TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
Ⓒ	TYPE C WARNING LIGHT (STEADY BURN)
	CONCRETE BARRIER TEMPORARY PRECAST
	WORK AREA
	DIRECTION OF TRAFFIC
PCMS	PORTABLE CHANGEABLE MESSAGE BOARD
SFM	TRAFFIC CONTROL SIGNS FIXED MESSAGE

TM4W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
TM4Y	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
TM8W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
TME4W	TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
TME4Y	TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
TME8W	TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3A	SHEET 124	E

2

2

PT: 230+86.10

PT: 233+19.97

IH 39 SB

IH 39 NB

N

LEGEND

TYPE III BARRICADE	TYPE A WARNING LIGHT (FLASHING)
TYPE III BARRICADE WTH ATTACHED SIGN	TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
TRAFFIC CONTROL DRUM	TYPE C WARNING LIGHT (STEADY BURN)
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	CONCRETE BARRIER TEMPORARY PRECAST
FLASHING ARROW BOARD	WORK AREA
SIGN ON PERMANENT SUPPORT	DIRECTION OF TRAFFIC
SIGN ON TEMPORARY SUPPORT	PORTABLE CHANGEABLE MESSAGE BOARD
	FIXED MESSAGE BOARD

TM4W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
TM4Y	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
TM8W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
MLE4WR	MARKING LINE GROOVED WET REF EPOXY 4-INCH- WHITE
MLE8W	MARKING LINE GROOVED WET REF EPOXY 8-INCH- WHITE
MCE24	MARKING CHEVRON EPOXY 24-INCH

RAMP CLOSED
R11-2R
48"X30"

TM4W
267+12.92, -24.00' LT
260+22.81, -24.00' LT

273+90.44, -24.00' LT
MCE24
MLE8W
275+80.72, -46.95' LT
276+80.00, -24.00' LT
277+30.00, -24.00' LT
50'
50'
TM8W
MLE4WR
DECELERATION LANE=
(3' LINE 9' GAP)
281+50.00, -36.00' LT
283+00.00, -24.00' LT

OLD HWY 60

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3B	SHEET 125	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025002-TC_STAGE3B.DWG
LAYOUT NAME - S3B 025017-tc

PLOT DATE : 3/16/2022 1:14 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

ACCELERATION LANE=(3' LINE 9' GAP)
APPLY MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH

END ROAD WORK
G20-2A
48"X24"

WORK ZONE

BP: 244+50.00

MLE4W

245"SN"

TM4Y

IH 39 SB

IH 39 NB

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- PAVEMENT REMOVAL
- SAW CUT
- (A) TYPE A WARNING LIGHT (FLASHING)
- (B) TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
- (C) TYPE C WARNING LIGHT (STEADY BURN)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS PORTABLE CHANGEABLE MESSAGE BOARD
- FMB FIXED MESSAGE BOARD

- TM4W TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
- TM4Y TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
- TM8W TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
- TMD12 TEMPORARY MARKING DIAGONAL TAPE 12-INCH- WHITE
- MLE4W MARKING LINE GROOVED WET REF EPOXY 4-INCH-WHITE
- MLE4Y MARKING LINE GROOVED WET REF EPOXY 4-INCH-YELLOW

140.00

WORK ZONE

WORK ZONE

MLE4W

255"SN"

250"SN"

253"SN"+25.67
0.00'RT

MLE4Y

TM4Y

100'

SIGN

SIGN

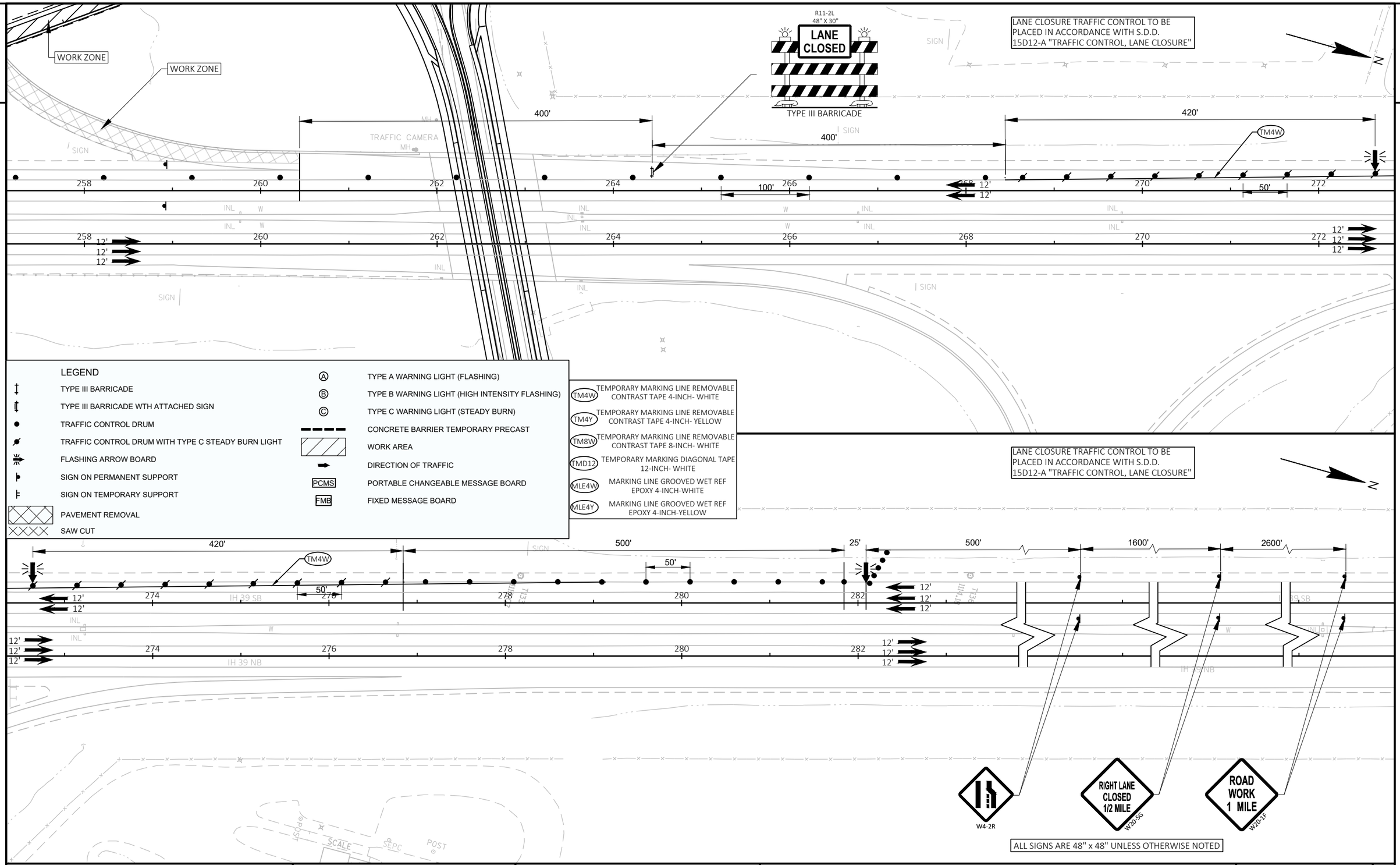
R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3D - SB RAMP	SHEET 126	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025002-TC_STAGE3D.DWG
LAYOUT NAME - S3D 025018-tc

PLOT DATE : 3/16/2022 1:15 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



LEGEND

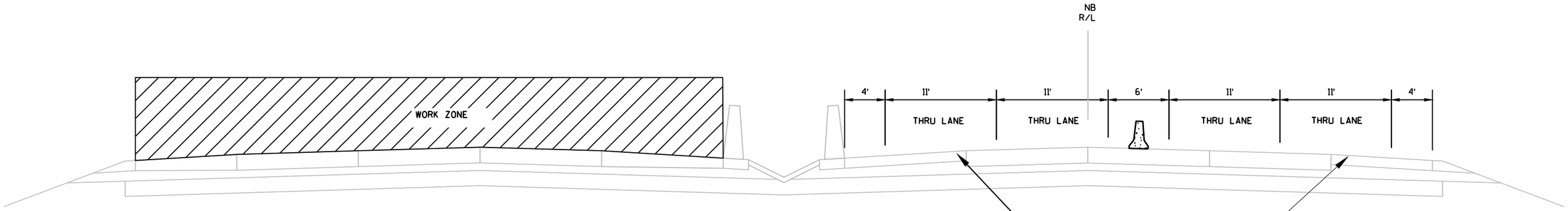
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- PAVEMENT REMOVAL
- SAW CUT
- (A) TYPE A WARNING LIGHT (FLASHING)
- (B) TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
- (C) TYPE C WARNING LIGHT (STEADY BURN)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS PORTABLE CHANGEABLE MESSAGE BOARD
- FMB FIXED MESSAGE BOARD

- TM4W TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
- TM4Y TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
- TM8W TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
- TMD12 TEMPORARY MARKING DIAGONAL TAPE 12-INCH- WHITE
- MLE4W MARKING LINE GROOVED WET REF EPOXY 4-INCH-WHITE
- MLE4Y MARKING LINE GROOVED WET REF EPOXY 4-INCH-YELLOW

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3D - SB RAMP	SHEET 127	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025002-TC_STAGE3D.DWG
LAYOUT NAME - S3D 025019-tc

PLOT DATE : 3/16/2022 1:15 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:100 FT

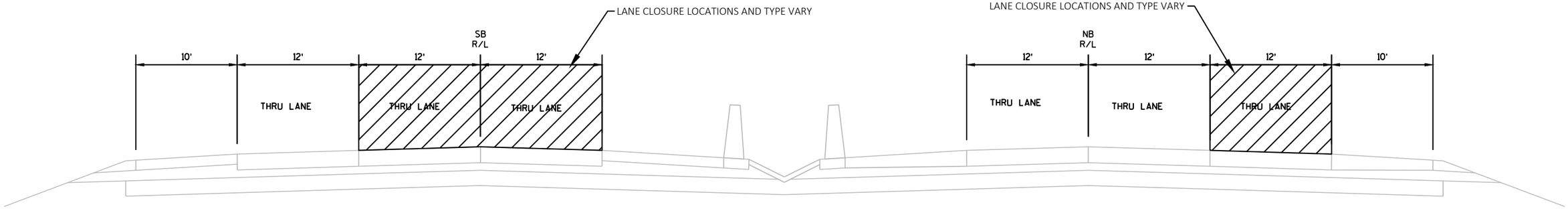


STAGE 4
IH 39
SB BRIDGE CONSTRUCTION

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4	SHEET 128 E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\020301_TS.DWG
1012-01-74 - S4 025020-TC

PLOT DATE : 3/16/2022 1:15 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:10 FT



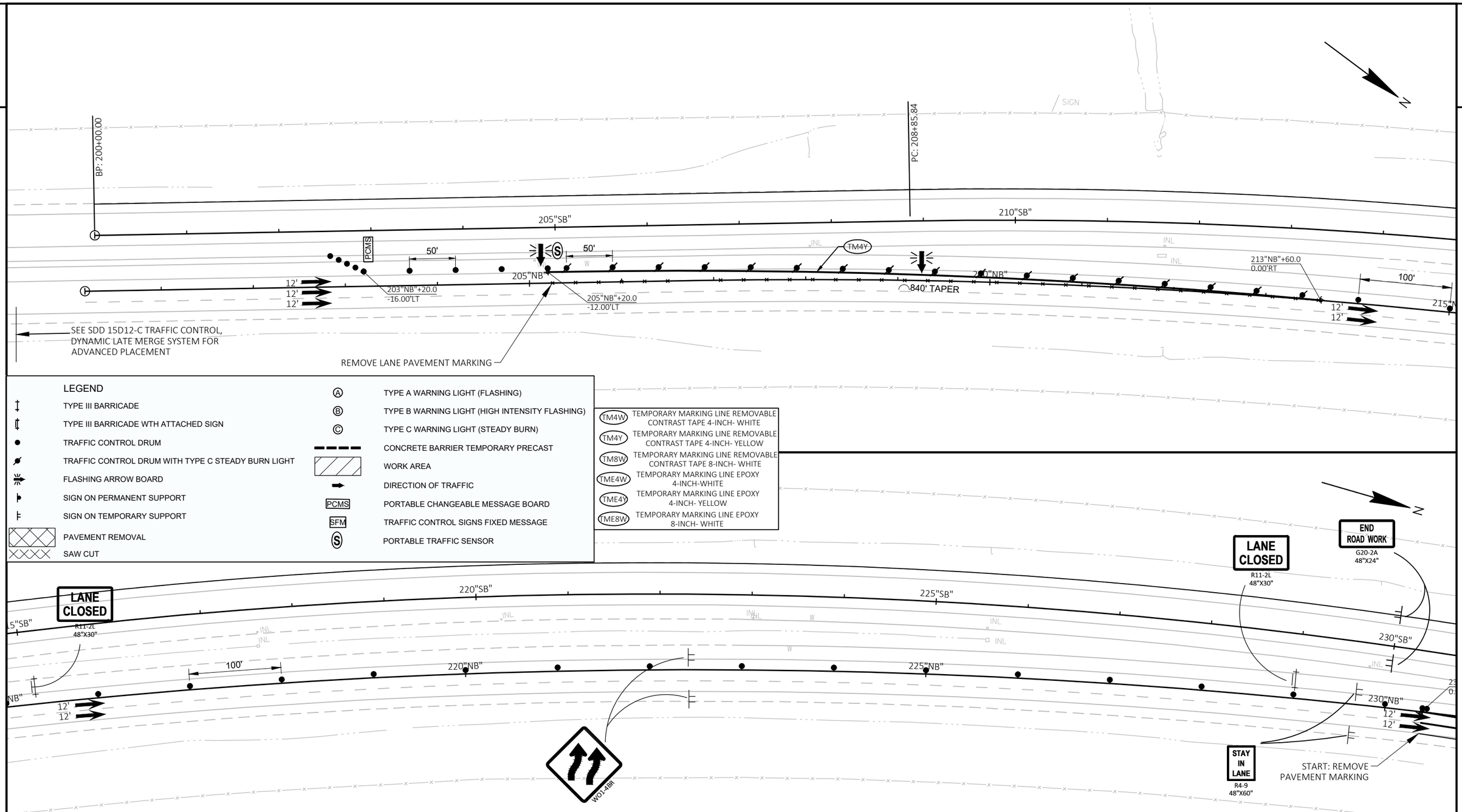
STAGE 5
IH 39
PAVEMENT MARKING, LANDSCAPING, AND BARRIER WALL

LANE CLOSURES VARY DEPENDING ON
CONSTRUCTION ACTIVITIES:

DOUBLE LANE CLOSURE: SDD 15D14-04
SINGLE LANE CLOSURE: SDD 15D20-05A
SHOULDER CLOSURE: SDD 15D27-03

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 5	SHEET 129 E

2



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- PAVEMENT REMOVAL
- SAW CUT
- (A) TYPE A WARNING LIGHT (FLASHING)
- (B) TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
- (C) TYPE C WARNING LIGHT (STEADY BURN)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS PORTABLE CHANGEABLE MESSAGE BOARD
- SFM TRAFFIC CONTROL SIGNS FIXED MESSAGE
- (S) PORTABLE TRAFFIC SENSOR

TM4W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
TM4Y	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
TM8W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
TME4W	TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
TME4Y	TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
TME8W	TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4	SHEET 130	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025002-TC_STAGE4A.DWG
LAYOUT NAME - S4 025022-tc

PLOT DATE : 3/16/2022 1:15 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

PT: 230+86.10

PC: 33+49.94

231"SB"+00.0
-11.00'LT

230"NB"+40.0
0.00'

START REMOVE ALL
PAVEMENT MARKING
100'

232"NB"+50.0
6.00'RT

START REMOVE ALL
PAVEMENT MARKING

TM4W

TM4Y

TM4W

TM4Y

FREE STANDING
TO RIDGID TRANSITION
SEE SDD 14B7-D

PT: 39+79.94
PC: 39+89.92

239"NB"+80.0
2.00'RT

40' X3

240"SB"

240"NB"

25'

25'

50'

ROAD
CLOSED
R11-2
48"X30"

43"X3"+64.9
18.00'RT

45' X3'

245"SB"

245"NB"

25'

TM4W

LANE
CLOSED
R11-2L
48"X30"

STAY
IN
LANE
R4-9
48"X60"

WO5-52L
18"X54"

EXIT 119

60
Lodi
Arlington

LEGEND

TYPE III BARRICADE	TYPE A WARNING LIGHT (FLASHING)
TYPE III BARRICADE WTH ATTACHED SIGN	TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
TRAFFIC CONTROL DRUM	TYPE C WARNING LIGHT (STEADY BURN)
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	CONCRETE BARRIER TEMPORARY PRECAST
FLASHING ARROW BOARD	WORK AREA
SIGN ON PERMANENT SUPPORT	DIRECTION OF TRAFFIC
SIGN ON TEMPORARY SUPPORT	PORTABLE CHANGEABLE MESSAGE BOARD
PAVEMENT REMOVAL	TRAFFIC CONTROL SIGNS FIXED MESSAGE
SAW CUT	PORTABLE TRAFFIC SENSOR

TM4W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
TM4Y	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
TM8W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
TME4W	TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
TME4Y	TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
TME8W	TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE

RAMP CLOSED

24" CP Remove

WO1-48R

60
MPH
WO13-1
36"X36"

SIGN

SIGN

PT: 46+19.92

50'

50'

250"SB"

255"SB"

260"SB"

250"NB"

255"NB"

260"NB"

TM8W

225'

100'

245"NB"+50
28.00 RT

247"NB"+74
45.94 RT

EXIT
119

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4	SHEET 131	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025002-TC_STAGE4A.DWG
LAYOUT NAME - S4 025023-tc

PLOT DATE : 3/16/2022 1:15 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

N

ROAD CLOSED
R11-2
48"X30"

WO5-52R
18"X54"

PC: 73+10.04

Mid: 76+05.04

FREE STANDING
TO RIDGID TRANSITION
SEE SDD 14B7-D

74"X4"+54.6
-13.95'LT

75"X4"
16.66'RT

275"SB"

275"NB"

73"X4"+10.0
14.00'RT

WO5-52L
18"X54"

265"SB"

270"SB"

265"NB"

270"NB"

TM4W

TM4Y

11'

11'

11'

11'

SIGN

TRAFFIC CAMERA

MH

INL

W

EXISTING RAMP
REMOVED STAGE 2

COVER

WO1-4BL

WO4-3R
48"X48"

EXISTING RAMP
REMOVED STAGE 2

LEGEND

TYPE III BARRICADE	TYPE A WARNING LIGHT (FLASHING)
TYPE III BARRICADE WTH ATTACHED SIGN	TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
TRAFFIC CONTROL DRUM	TYPE C WARNING LIGHT (STEADY BURN)
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	CONCRETE BARRIER TEMPORARY PRECAST
FLASHING ARROW BOARD	WORK AREA
SIGN ON PERMANENT SUPPORT	DIRECTION OF TRAFFIC
SIGN ON TEMPORARY SUPPORT	PORTABLE CHANGEABLE MESSAGE BOARD
PAVEMENT REMOVAL	TRAFFIC CONTROL SIGNS FIXED MESSAGE
SAW CUT	PORTABLE TRAFFIC SENSOR

TM4W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
TM4Y	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
TM8W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
TME4W	TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
TME4Y	TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
TME8W	TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE

EXIT

E5-1
48"X48"

EXIT 119
60
Lodi
Arlington

RIGHT LANE
MUST EXIT
R3-33R
78"X36"

EXIT 119
HWY 60
LODI/ARLINGTON
EXIT ONLY

PT: 86+80.00

Mid: 83+85.00

STAY
IN
LANE
R4-9
48"X60"

TEMP. CRASH CUSHION

Mid: 76+05.04

PT: 79+00.04

PC: 80+90.00

80"X4"+89.1
-42.75'LT

78"X4"+50.0
-18.00'LT

75"X4"+83.3
18.00'RT

280"SB"

280"NB"

83"X4"+31.1
11.00'LT

83"X4"+11.1
18.00'RT

83"X4"+86.7
19.07'RT

283"NB"+43.2
0.00'

281"NB"+68.2
6.00'RT

88"X4"+27.1
16.48'RT

285"NB"

290"SB"

290"NB"

289"SB"+00.0
11.00'LT

SFM

3' LINE, 9' GAP

IH 39 NB

REMOVE EXITING
RAMP LANE EDGE
PAVEMENT MARKING

END REMOVE ALL
PAVEMENT MARKING

FREE STANDING
TO RIDGID TRANSITION
SEE SDD 14B7-D

END
ROAD WORK
G20-2A
48"X24"

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4	SHEET 132	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\025002-TC_STAGE4A.DWG
LAYOUT NAME - S4 025024-tc

PLOT DATE : 3/16/2022 1:16 PM

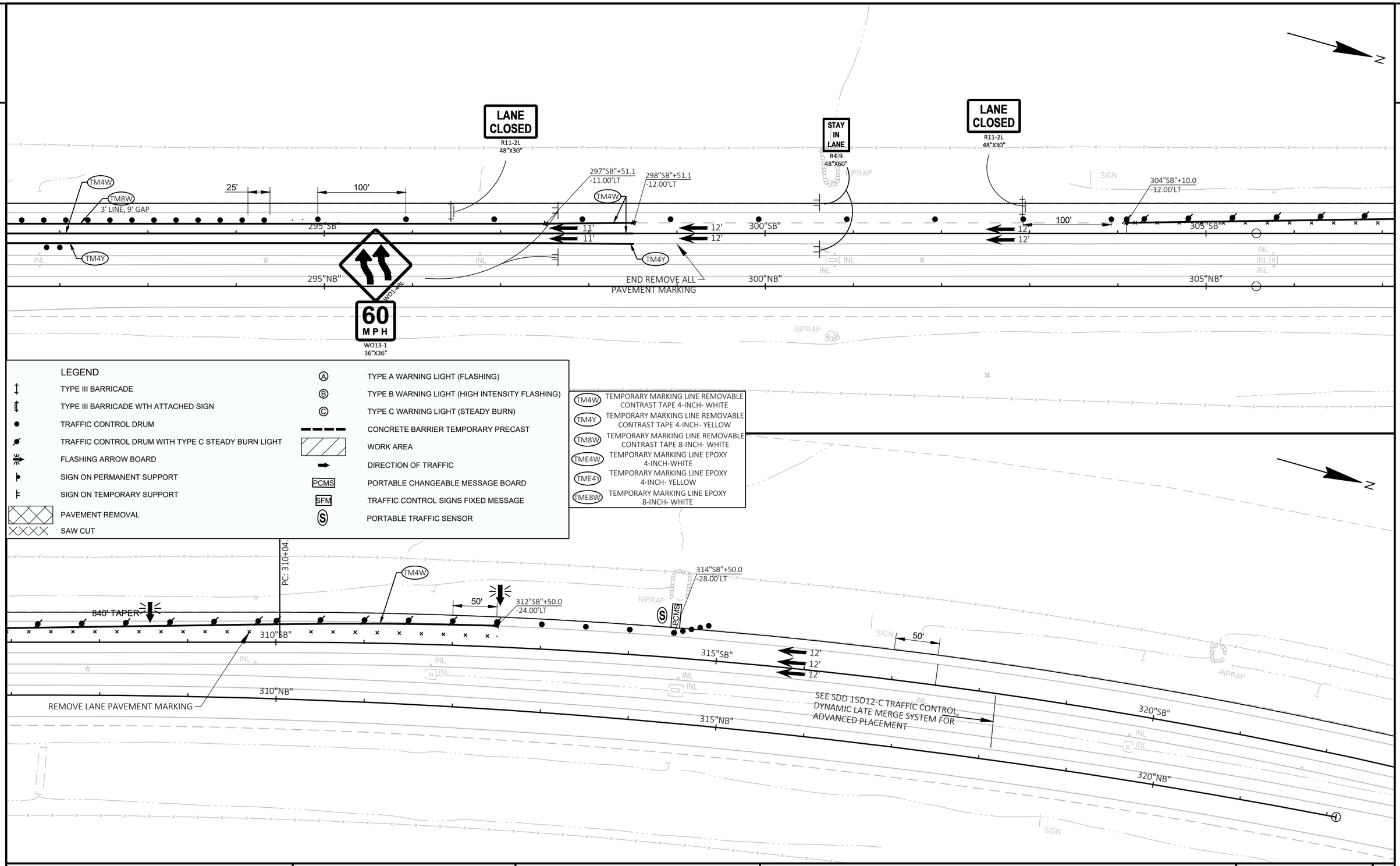
PLOT BY : COLE, RYAN DAVID

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- PAVEMENT REMOVAL
- SAW CUT
- (A) TYPE A WARNING LIGHT (FLASHING)
- (B) TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
- (C) TYPE C WARNING LIGHT (STEADY BURN)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS PORTABLE CHANGEABLE MESSAGE BOARD
- SFM TRAFFIC CONTROL SIGNS FIXED MESSAGE
- (S) PORTABLE TRAFFIC SENSOR

- (TM4W) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
- (TM4Y) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
- (TM8W) TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
- (TME4W) TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
- (TME4Y) TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
- (TME8W) TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4	SHEET 133	E

2

2

N

+73.12,
0.0' R

STH 60

46+00

47+00

48+00

49+00

50+00

51+00

50' (TYP.)

25' (TYP.)

4YT

MATCHLINE STA. 51+50

LEGEND

	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
	WORK ZONE
	SAWING ASPHALT REQ'D
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
	MARKING REMOVAL LINE WATER BLASTING (SIZE)
	TRAFFIC FLOW ARROW
	CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 1	SHEET 134	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001_S1.DWG
LAYOUT NAME - 026000_s1

PLOT DATE : 3/2/2022 7:15 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

2

N

MATCHLINE STA. 51+50

STH 60

52+00

53+00

54+00

50' (TYP.)

ROAD CLOSED
R11-2
48"X30"

+63.03,
-18.5' L

+95.89,
-14.8' L

+00

56+00

+59.17,
32.9' R

+92.45,
30.9' R

MATCHLINE STA. 56+25

I-39/90/94 SB
ENTRANCE RAMP

10' TYP.

LANE CLOSED
R11-2L
48"X30"

INSTALL CULVERT CROSSING UNDER STH 60 DURING FULL CLOSURE. PIPE WILL NOT BE ACTIVE UNTIL STAGE 3B DUE TO TEMPORARY WIDENING NEEDS IN FUTURE STAGES.

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

2

2

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

(1) COVER PLATES TEMPORARY REQ'D

I-39/90/94 SB EXIT RAMP

SB I-39/90/94

NB I-39/90/94

STH 60

MATCHLINE STA. 56+25

MATCHLINE STA. 62+00

+61.43, -152.0' L
+78.33, -153.8' L
2'
3'
12'
2%
94' LT
+69.17, -62.0' L
+88.08, -63.8' L
1070.35
0.68%
63' LT
1070.48
+62.72, -40.0' L
+42.57, -28.9' L
+96.63, -41.4' L
R=550'
+68.30, -31.3' L
1069.98
0.65%
+11.71, -37.4' L
0.68%
+72.21, -3.6' L
0.69%
+92.34, 0.0'
+28.80, -20.5' L
+28.31, -8.6' L
+50.20, -20.1' L
+72.94, -24.0' L
+49.42, -22.9' L
+08.09, -23.4' L
+21.28, 12.0' R
+41.13, 15.5' R
+92.75, 15.2' R
+74.83, 15.0' R
4%
3'

TEMPORARY SHORING REQUIRED; PAVE TEMPORARY PAVEMENT TO FACE OF TEMPORARY SHORING

TEMPORARY SHORING REQUIRED; PAVE TEMPORARY PAVEMENT TO FACE OF TEMPORARY SHORING

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 1	SHEET 136	E

2

TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH

WORK ZONE

SAWING ASPHALT REQ'D

TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)

TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)

TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)

MARKING REMOVAL LINE WATER BLASTING (SIZE)

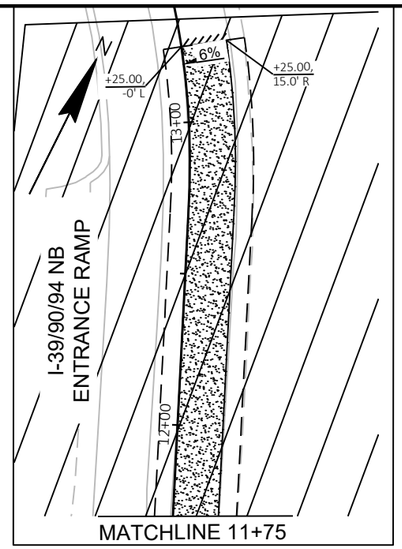
TRAFFIC FLOW ARROW

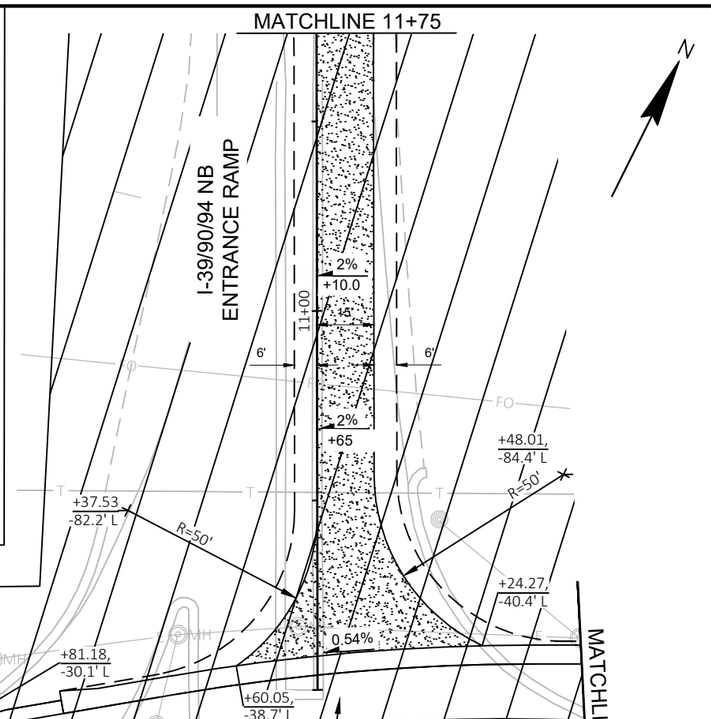
CONCRETE BARRIER TEMPORARY PRECAST

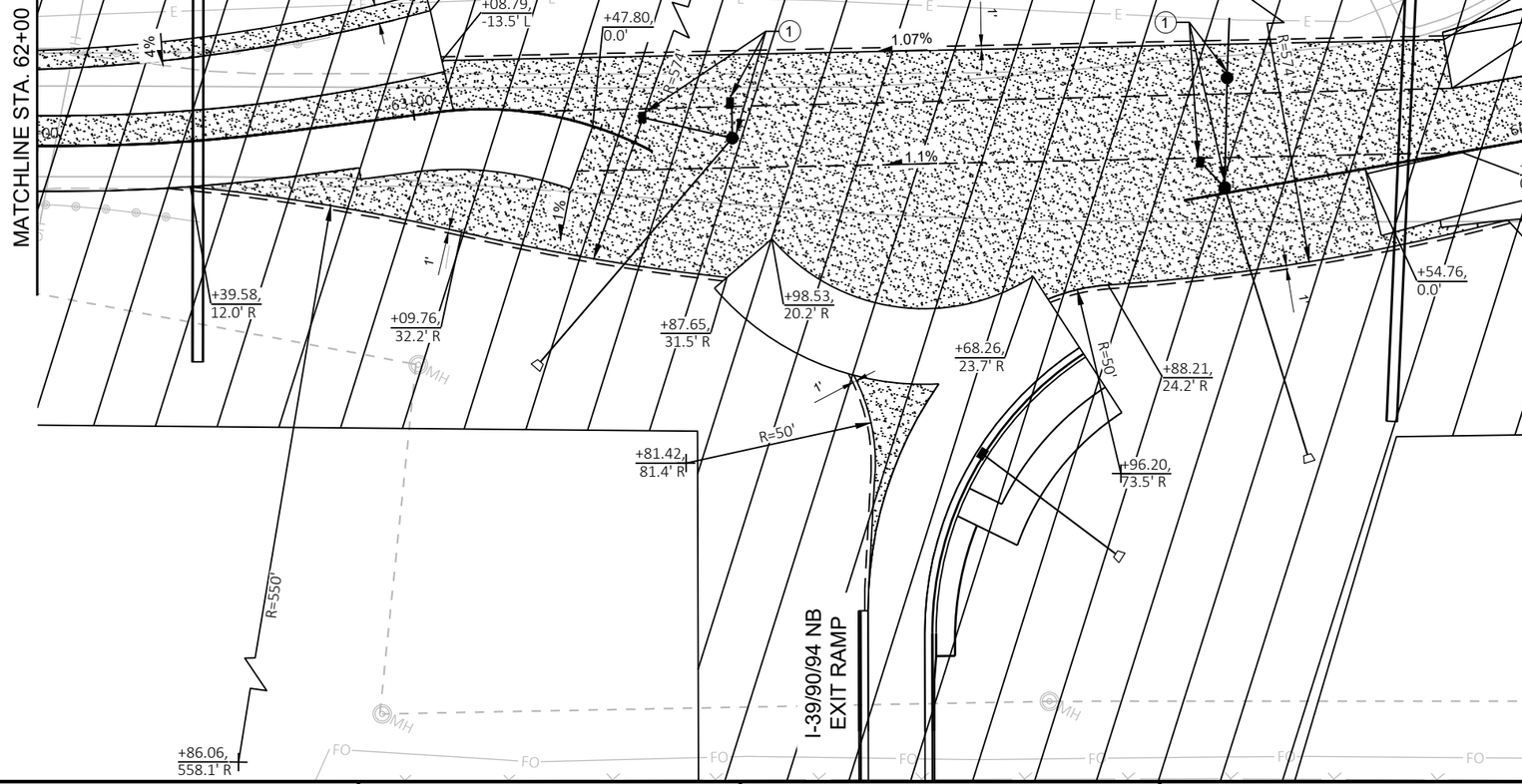
LEGEND

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

(1) COVER PLATES TEMPORARY REQ'D



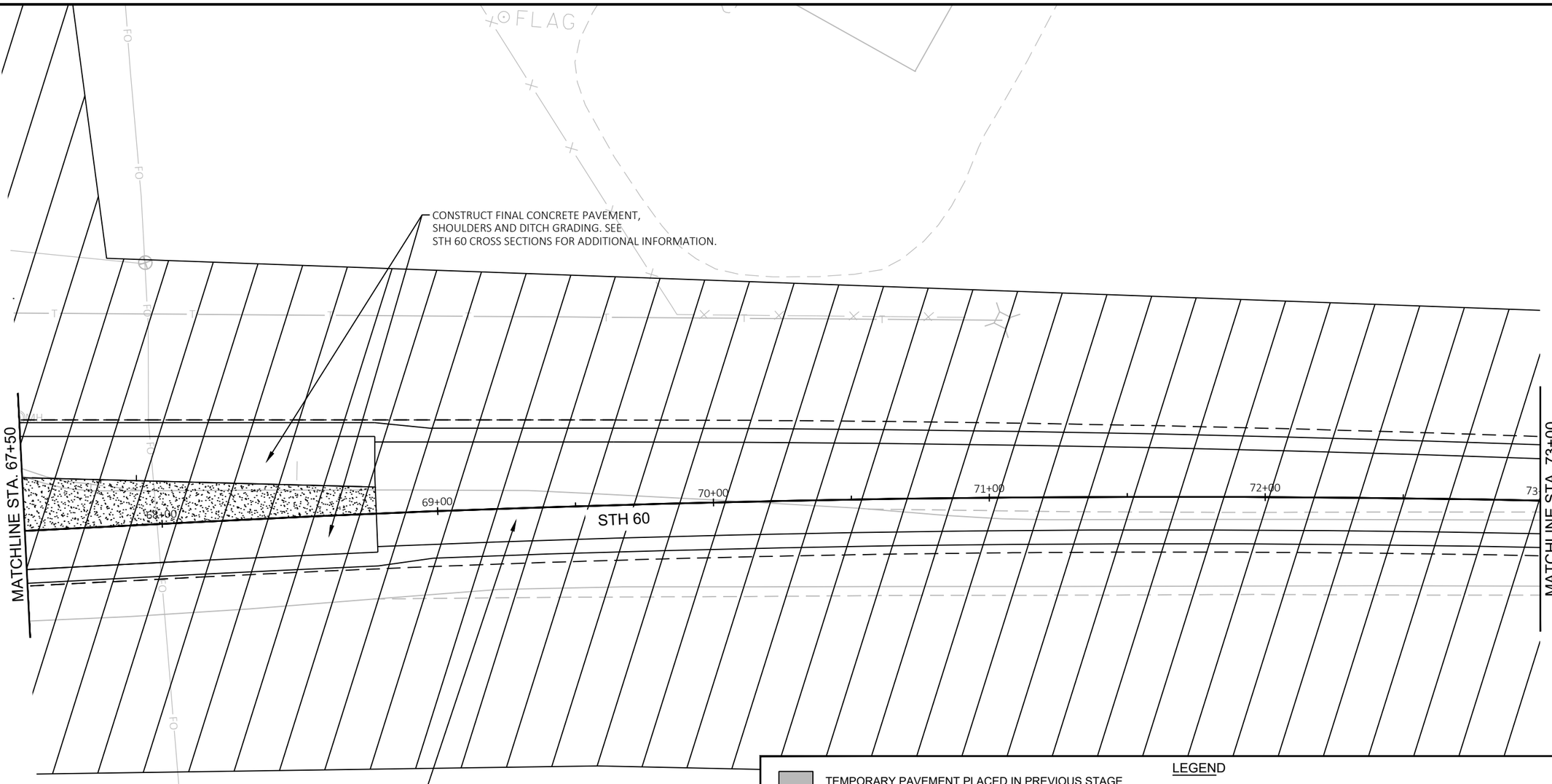




PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 1	SHEET 137	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026001_S1.DWG
LAYOUT NAME - 026002_s1
PLOT DATE : 3/2/2022 7:18 AM
PLOT BY : JACK, ROBERT A.
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

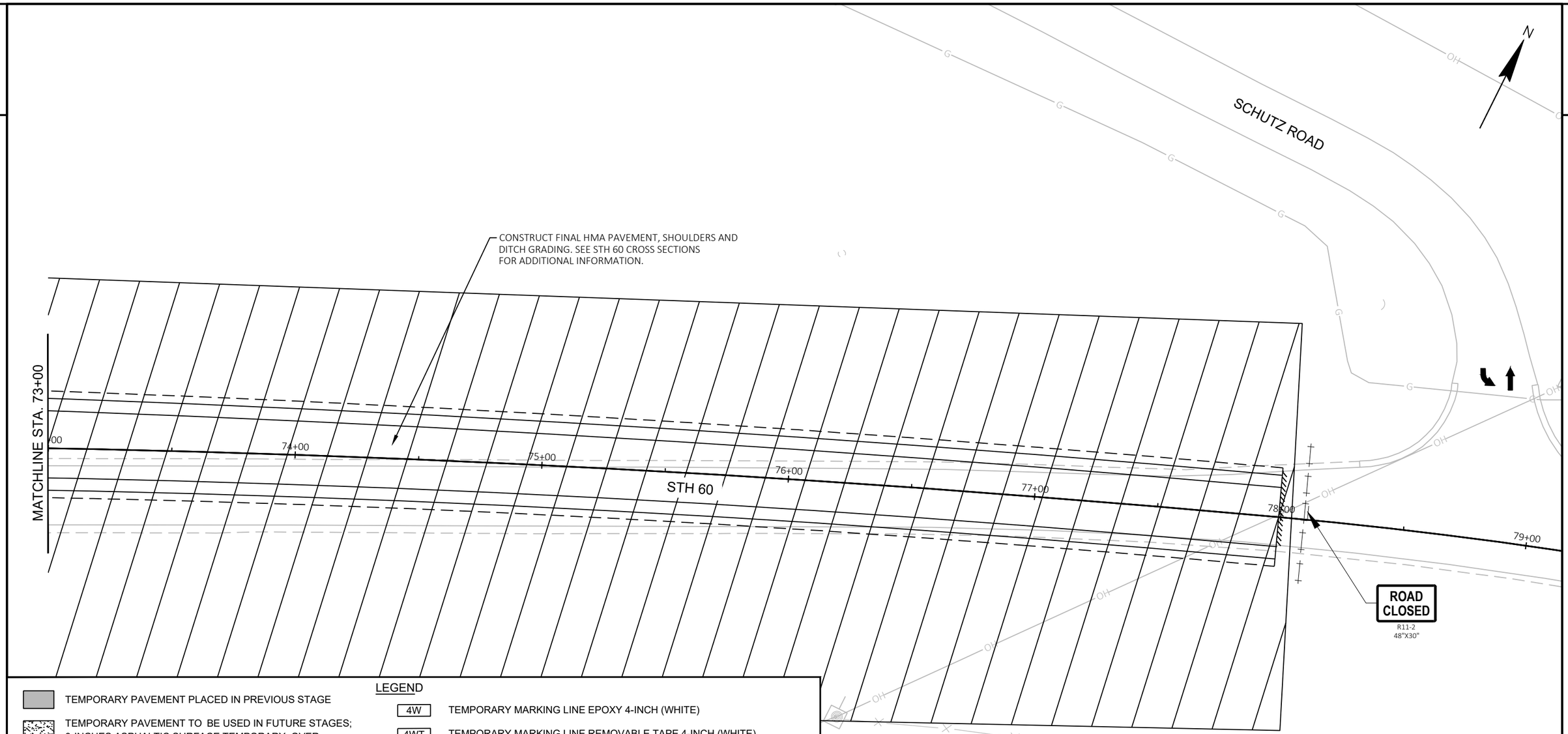


LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

2



LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 1	SHEET 139	E

2

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

N

SIGN

Lodi
Arlington
MOVE TO
STA. 64+36 LT

SEE S.D.D "TRAFFIC CONTROL, ADVANCED WARNING 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

STH 60

50+00 51+00 52+00 53+00 54+00 55+00 56+00

4W
4W
DY

MATCHLINE STA. 56+05

SIGN

I-39/90/94 NB
ENTRANCE RAMP

WEST ALTERNATE EAST
60 39 60

MOVE TO NB
OFF-RAMP

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 1 (WINTER SHUTDOWN)	SHEET 140	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026002_S1WS.DWG
LAYOUT NAME - 026001_s1sw
PLOT DATE : 3/2/2022 7:20 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

2

2

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

WRONG WAY R5-1A 36"X24"

WRONG WAY R5-1A 36"X24"

I-39/90/94 SB EXIT RAMP

EAST ALTERNATE WEST 60 39 60

MOVED FROM NB OFF-RAMP

5' 15' 5'

4Y

STOP R1-1 36"X36"

4W

25' (TYP.)

18W

+87.32, -53.0' L

DO NOT ENTER R5-1 30"X30"

DO NOT ENTER R5-1 30"X30"

R3-1 24"X24"

+71.79, -23.3' L

4W

+11.99, -35.4' L

12'

12'

4DY

+01.00, -20.2' L

59+00

60+00

61+00

62+00

58+00

4W

+85.19, 0.0'

+89.60, 15.7' R

+90.11, 11.0' R

WO5-52R 12"X36"

W5-52L 12"X36"

+60.46, -19.0' L

STH 60

4'

2'

12'

12'

2'

WO5-52R 12"X36"

+92.07, 11.0' R

+72.97, 13.1' R

W5-52L 12"X36"

MATCHLINE STA. 56+05

MATCHLINE STA. 62+00

R3-2 24"X24"

Arlington

Lodi

MOVED FROM STA. 66+60 RT

SB I-39/90/94

NB I-39/90/94

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 1 (WINTER SHUTDOWN)	SHEET 141	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026002_S1WS.DWG
LAYOUT NAME - 026001A_s1sw

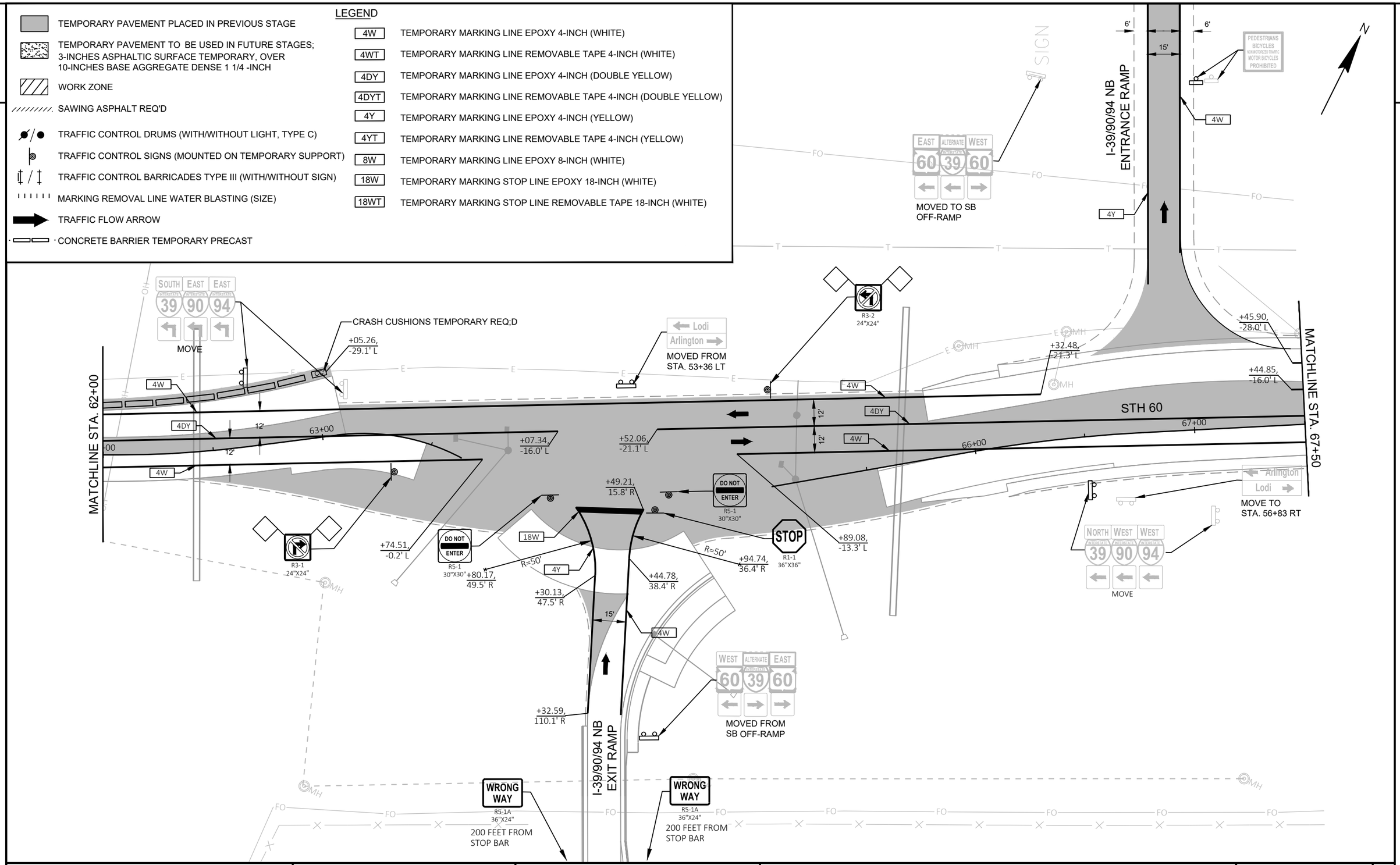
PLOT DATE : 3/2/2022 7:20 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

2

LEGEND

	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
	WORK ZONE
	SAWING ASPHALT REQ'D
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
	MARKING REMOVAL LINE WATER BLASTING (SIZE)
	TRAFFIC FLOW ARROW
	CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
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4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

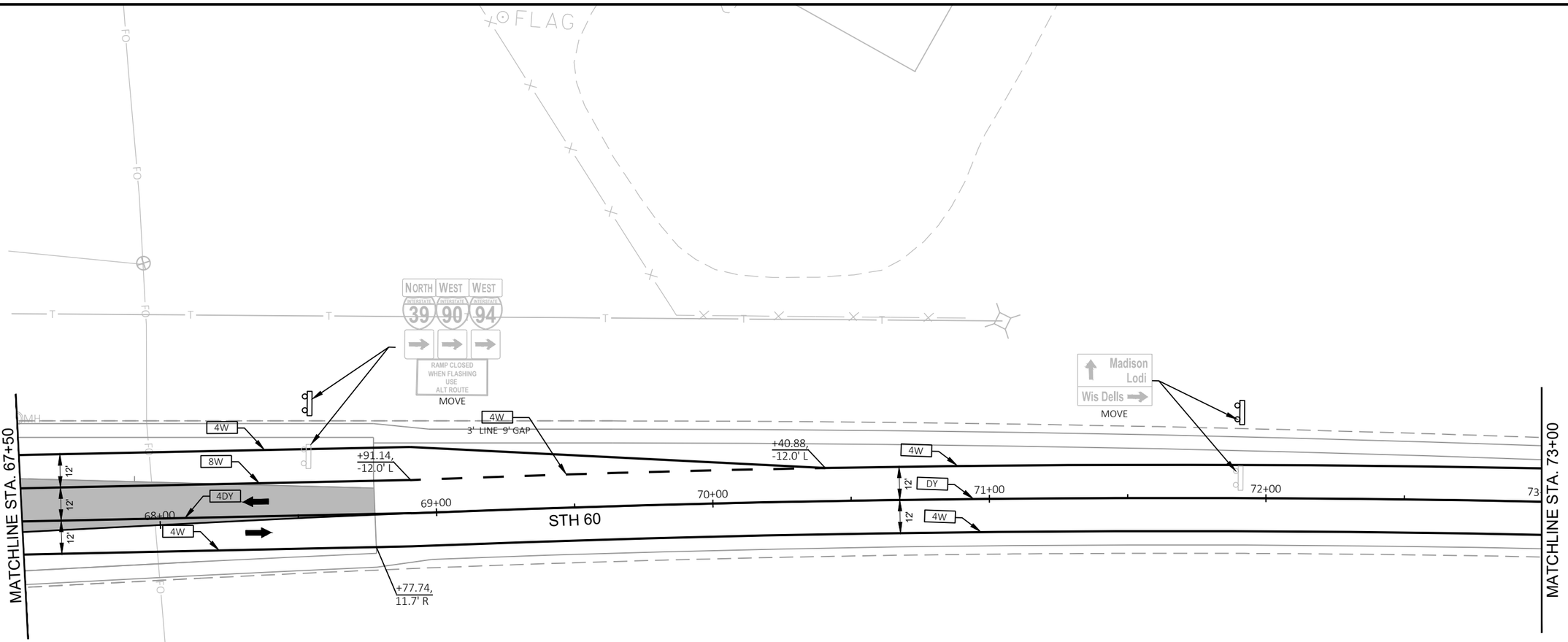


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 1 (WINTER SHUTDOWN)	SHEET 142	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026002_S1WS.DWG
LAYOUT NAME - 026002_s1ws

PLOT DATE : 3/2/2022 7:21 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

2



LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
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4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
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4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 1 (WINTER SHUTDOWN)	SHEET 143	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026002_S1WS.DWG
LAYOUT NAME - 026003_s1ws
PLOT DATE : 3/2/2022 7:22 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

SCHUTZ ROAD

NORTH WEST WEST
INTERSTATE INTERSTATE INTERSTATE
39 90 94
RAMP CLOSED
WHEN FLASHING
USE
ALT ROUTE
MOVE

MATCHLINE STA. 73+00

74+00 75+00 76+00 77+00 78+00 79+00

12'
12'

4W
DY
4W
STH 60

SEE S.D.D "TRAFFIC CONTROL, ADVANCED WARNING 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
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4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 1 (WINTER SHUTDOWN)	SHEET 144	E

2

2

N

SIGN

SEE S.D.D "TRAFFIC CONTROL, ADVANCED WARNING
45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD
OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

+52.9,
546' L

R=576'

46+00 47+00 48+00 49+00 50+00 51+00

MATCHLINE STA. 51+00

STH 60

2%

+54.35,
21.5' R

R=524'

+52.90,
30.0' R

+65.69,
13.8' R

+64.7,
537.8' R

COMPLETE SHOULDER PAVING UNDER FLAGGING OPERATIONS. SEE S.D.D. "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATIONS" AND "TRAFFIC CONTROL , WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR ADDITIONAL INFORMATION.

LEGEND

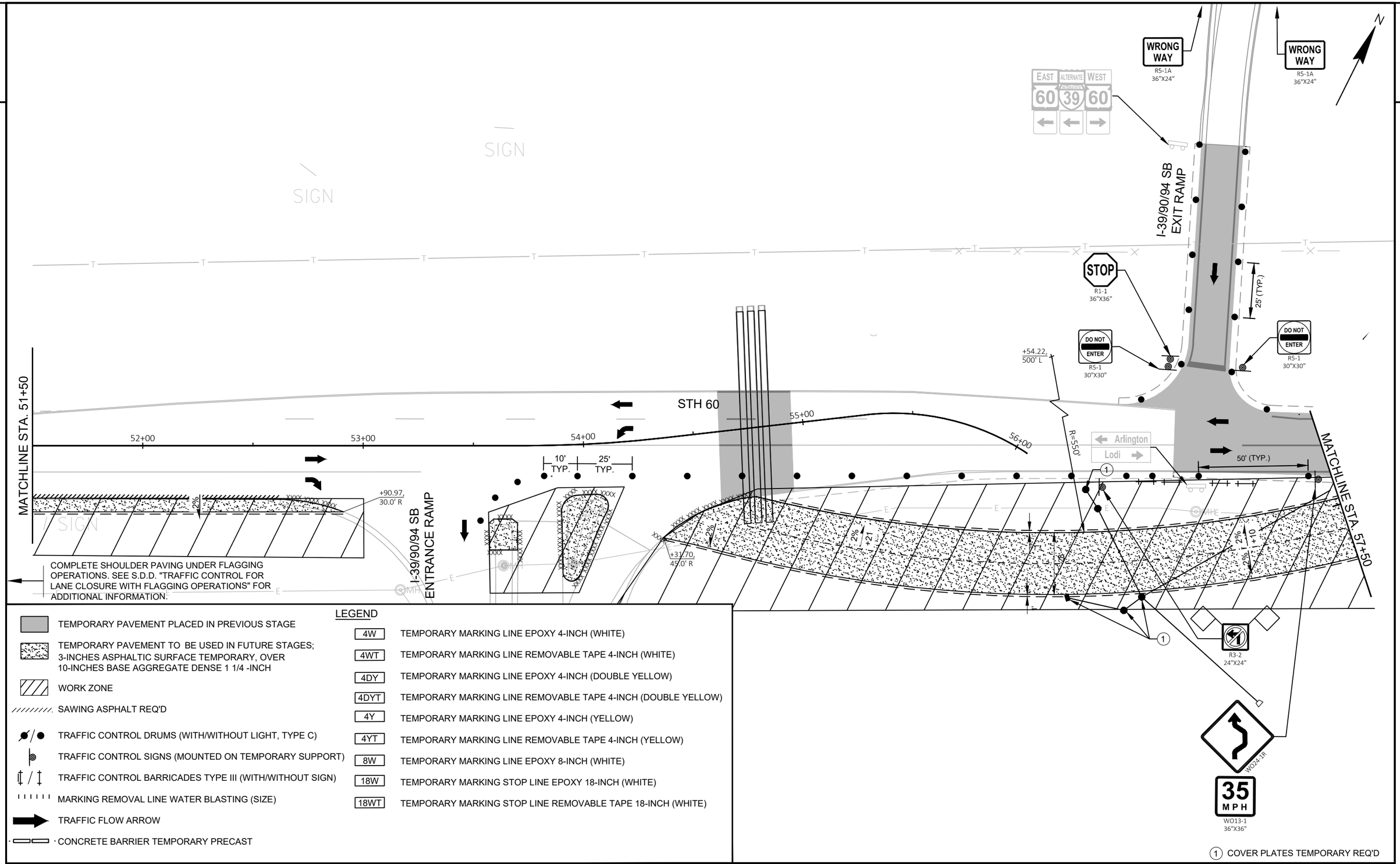
- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
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- TRAFFIC FLOW ARROW
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8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 2A	SHEET 145	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026003_S2A.DWG
LAYOUT NAME - 026001_2a
PLOT DATE : 3/2/2022 7:23 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2



LEGEND

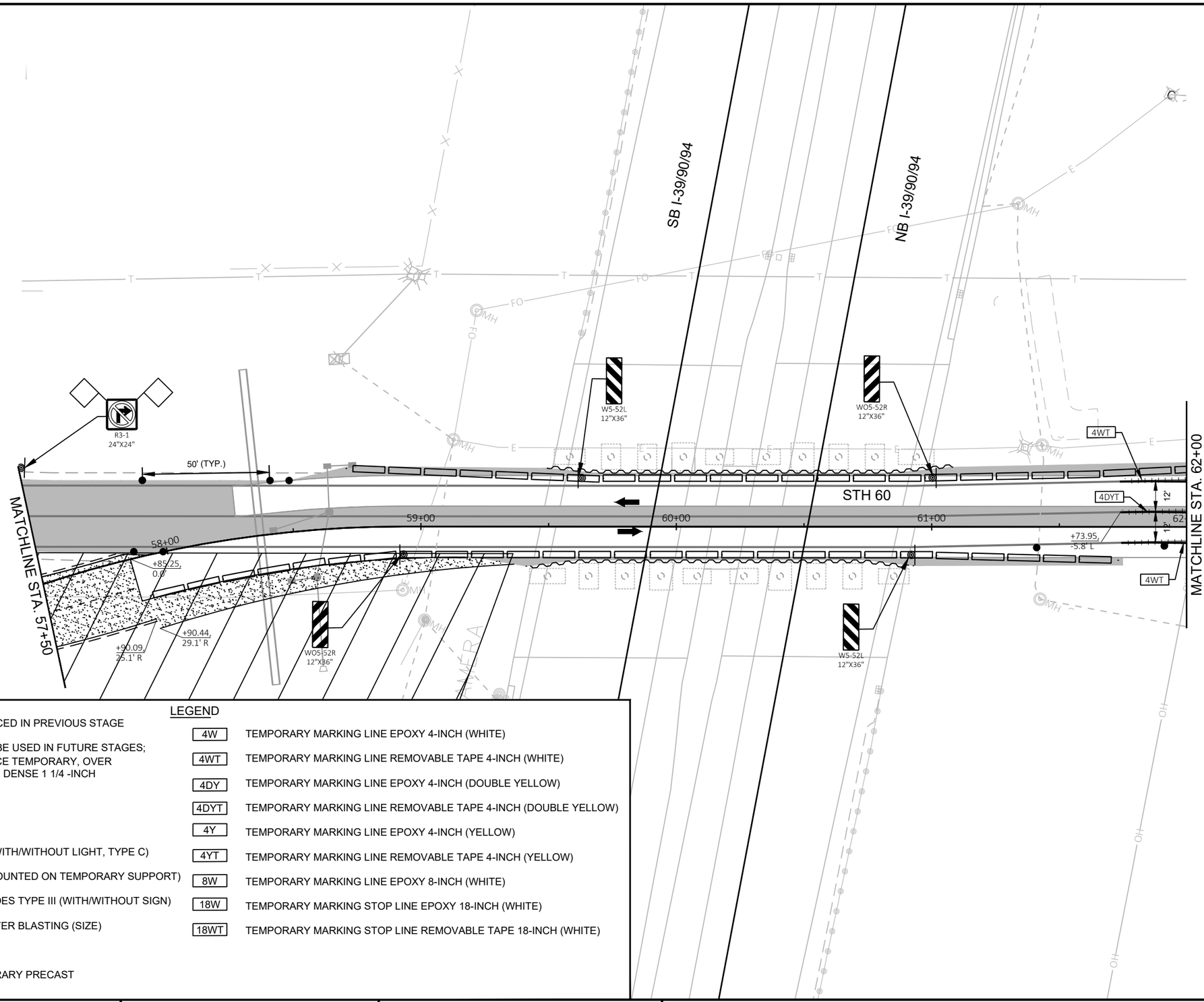
- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
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8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

(1) COVER PLATES TEMPORARY REQ'D

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 2A	SHEET 146	E

2



LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

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4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 2A	SHEET 147	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026003_S2A.DWG
LAYOUT NAME - 026003_2a
PLOT DATE : 3/2/2022 7:24 AM
PLOT BY : JACK, ROBERT A.
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH

WORK ZONE

SAWING ASPHALT REQ'D

TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)

TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)

TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)

MARKING REMOVAL LINE WATER BLASTING (SIZE)

TRAFFIC FLOW ARROW

CONCRETE BARRIER TEMPORARY PRECAST

LEGEND

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

N

RAMP CLOSED
R11-2
48"X30"

R3-2
24"X24"

SOUTH 39 EAST 90 EAST 94

MATCHLINE STA. 62+00

MATCHLINE STA. 67+50

63+00

66+00

67+00

STH 60

+18.69, 7.2' R

+59.19, -9.5' L

+37.41, 538.8' L

+13.98, -20.8' L

+97.73, -7.0' L

+40.92, 7.8' R

50' (TYP.)

+10.69, 30.3' R

+03.98, 5.5' R

+13.66, 17.3' R

+53.75, 14.6' R

+94.33, 26.0' R

+00.24, 16.9' R

+24.02, 559.6' R

+86.06, 558.1' R

+79.49, 35.2' R

+81.42, 81.4' R

+96.20, 73.5' R

R=552'

R=50'

4WT

4DYT

18WT

12'

R3-1
24"X24"

WO1-7
48"X24"

DO NOT ENTER
R5-1
30"X30"

STOP
R1-1
36"X36"

Lodi
Arlington
MOVED FROM STA. 64+36 LT

I-39/90/94 NB EXIT RAMP

WEST 60 ALTERNATE AMERICAN 39 EAST 60

WRONG WAY
R5-1A
36"X24"
200 FEET FROM STOP BAR

FO

T

E

MH

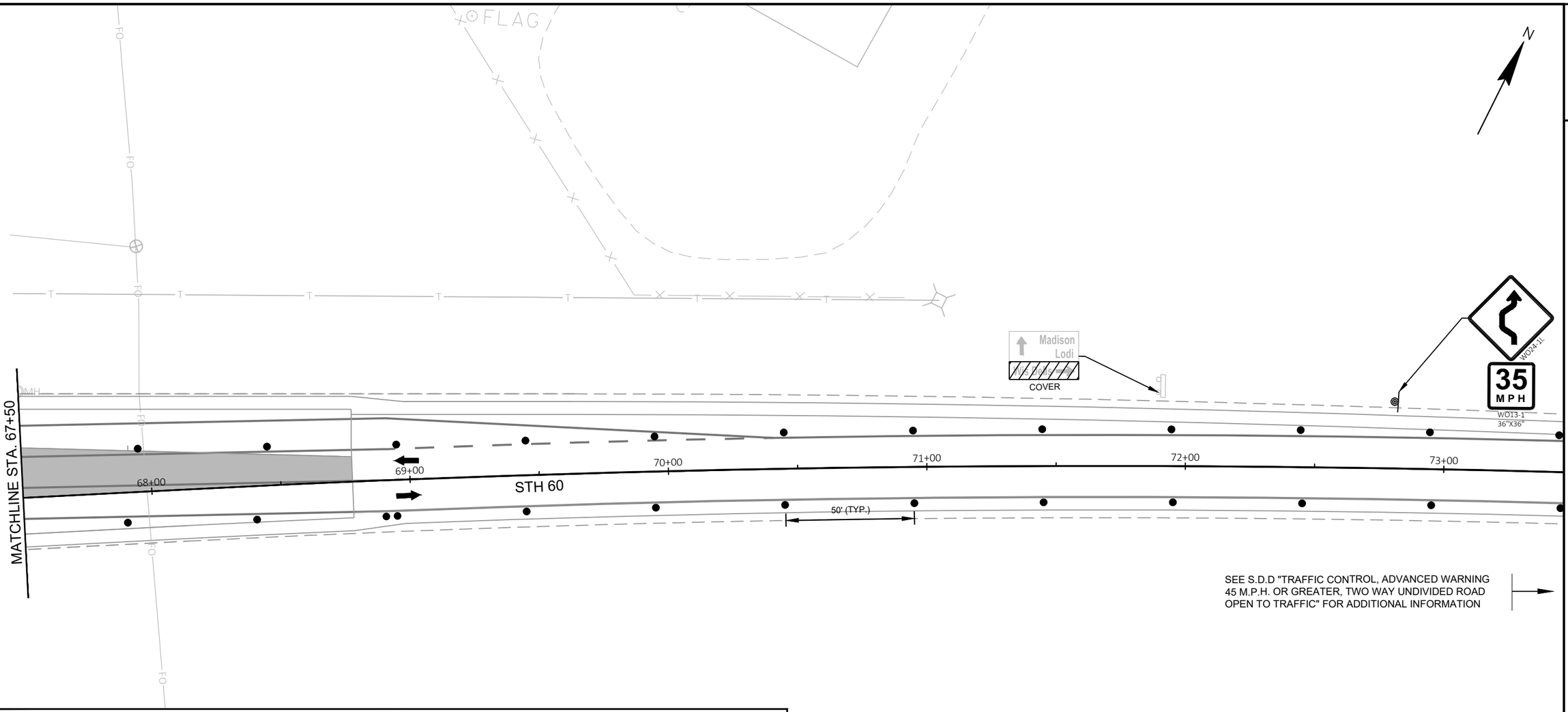
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 2A	SHEET 148	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026003_S2A.DWG
LAYOUT NAME - 026004_2a

PLOT DATE : 3/2/2022 7:25 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2



SEE S.D.D "TRAFFIC CONTROL, ADVANCED WARNING 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
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- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
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18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

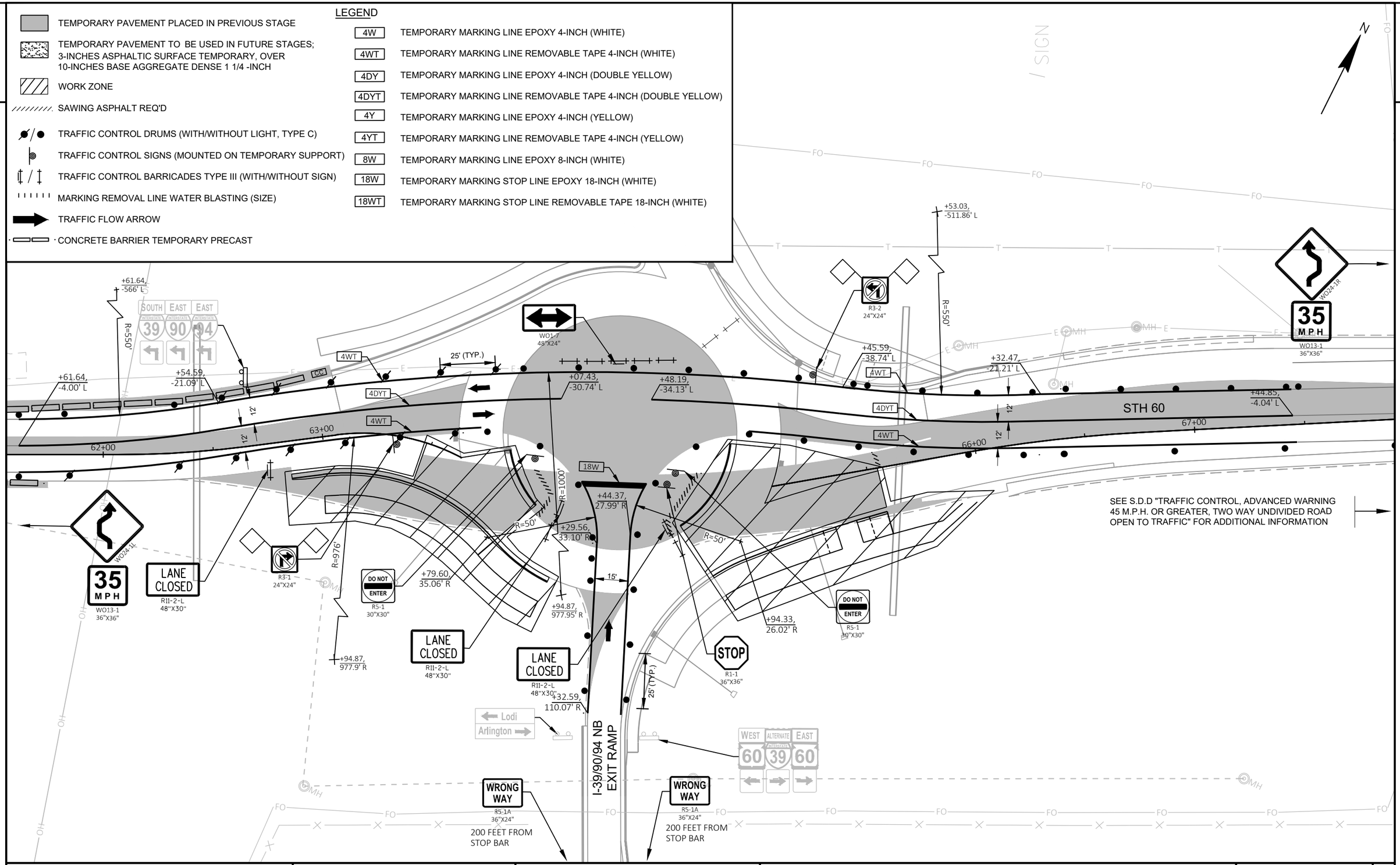
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 2A	SHEET 149	E

2

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
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18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

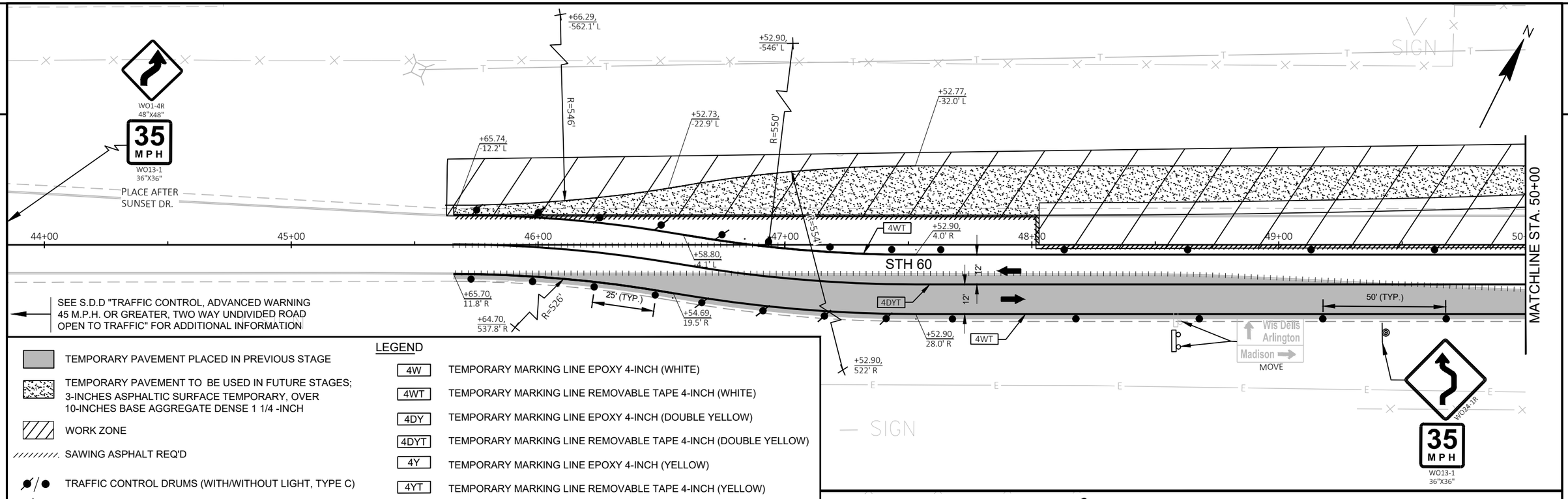


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 2B	SHEET 150	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026004_S2B.DWG
LAYOUT NAME - 026001_2b

PLOT DATE : 3/2/2022 7:27 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

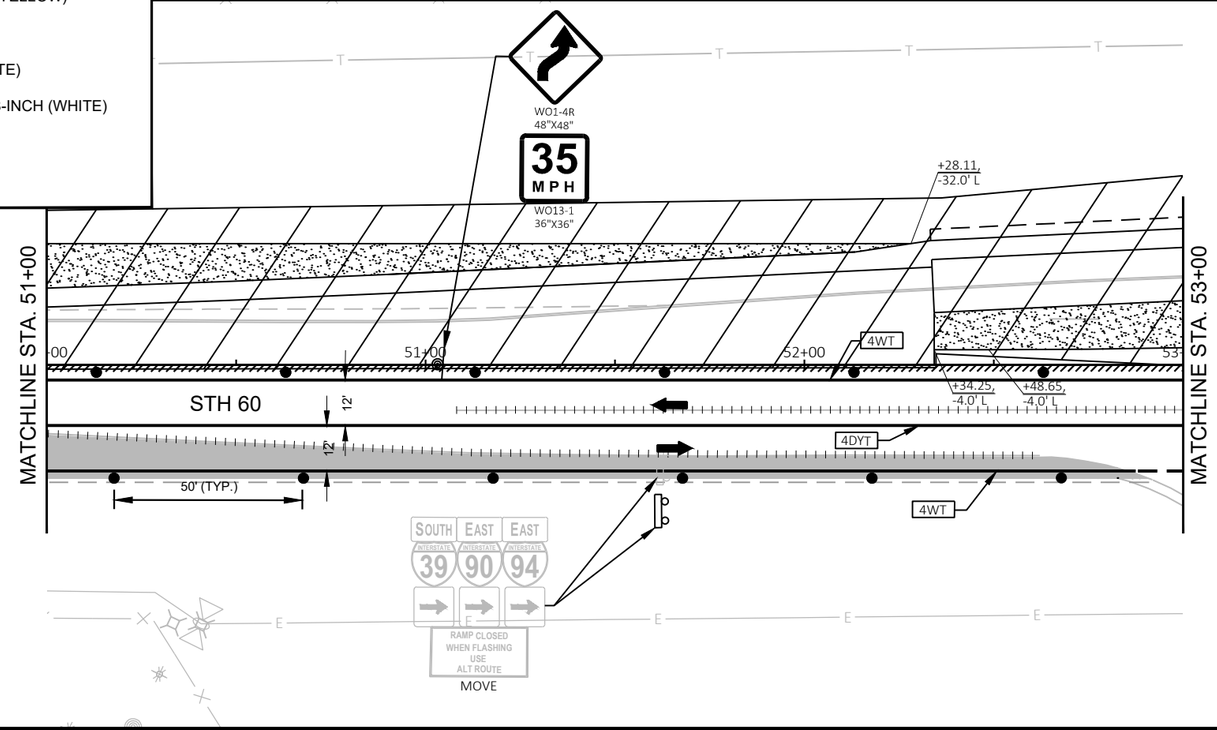
WISDOT/CADDS SHEET 42



LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY:COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 3A	SHEET 151	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026005_S3A.DWG
LAYOUT NAME - 026001_3a

PLOT DATE : 3/2/2022 7:29 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

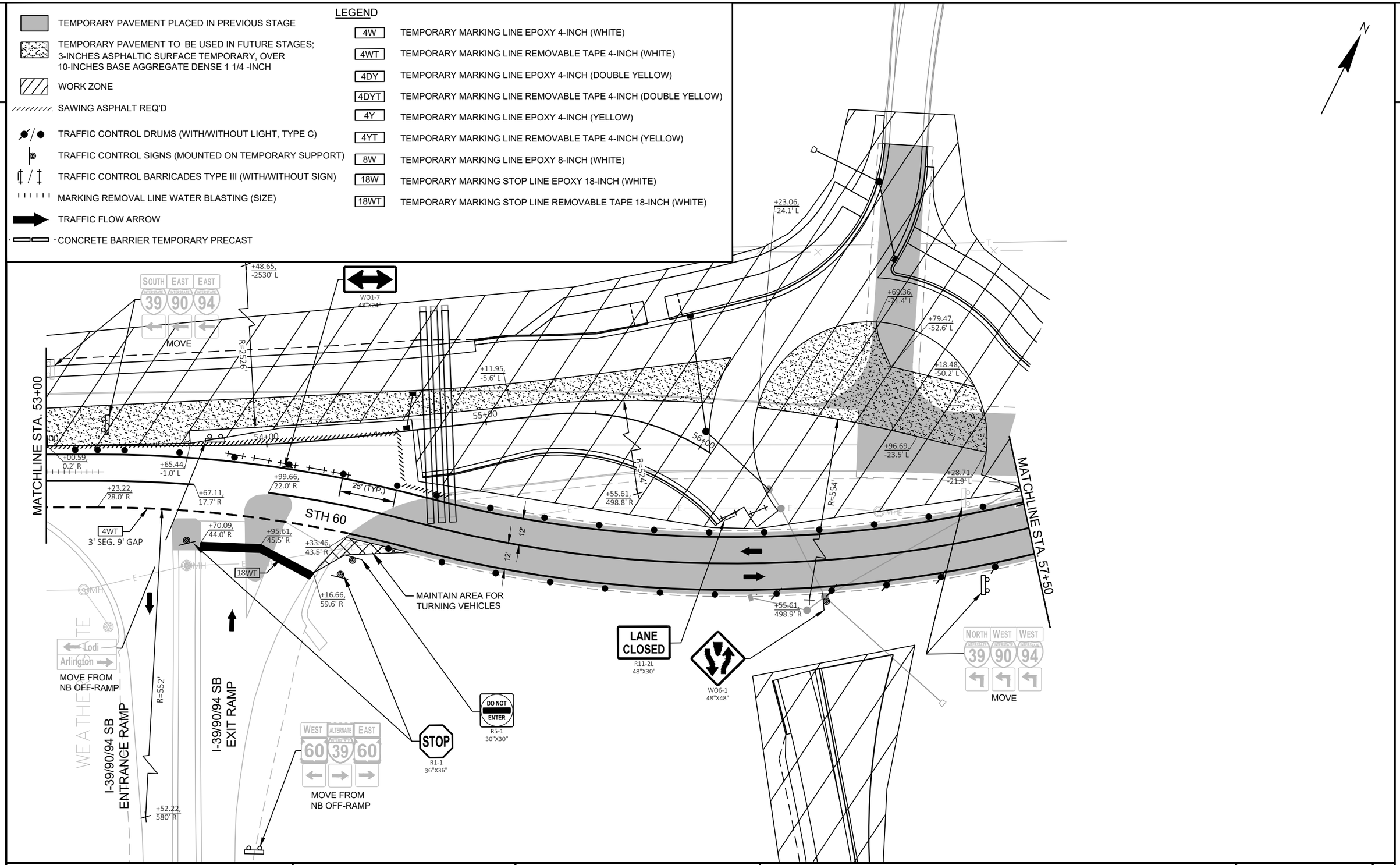
WISDOT/CADDS SHEET 42

2

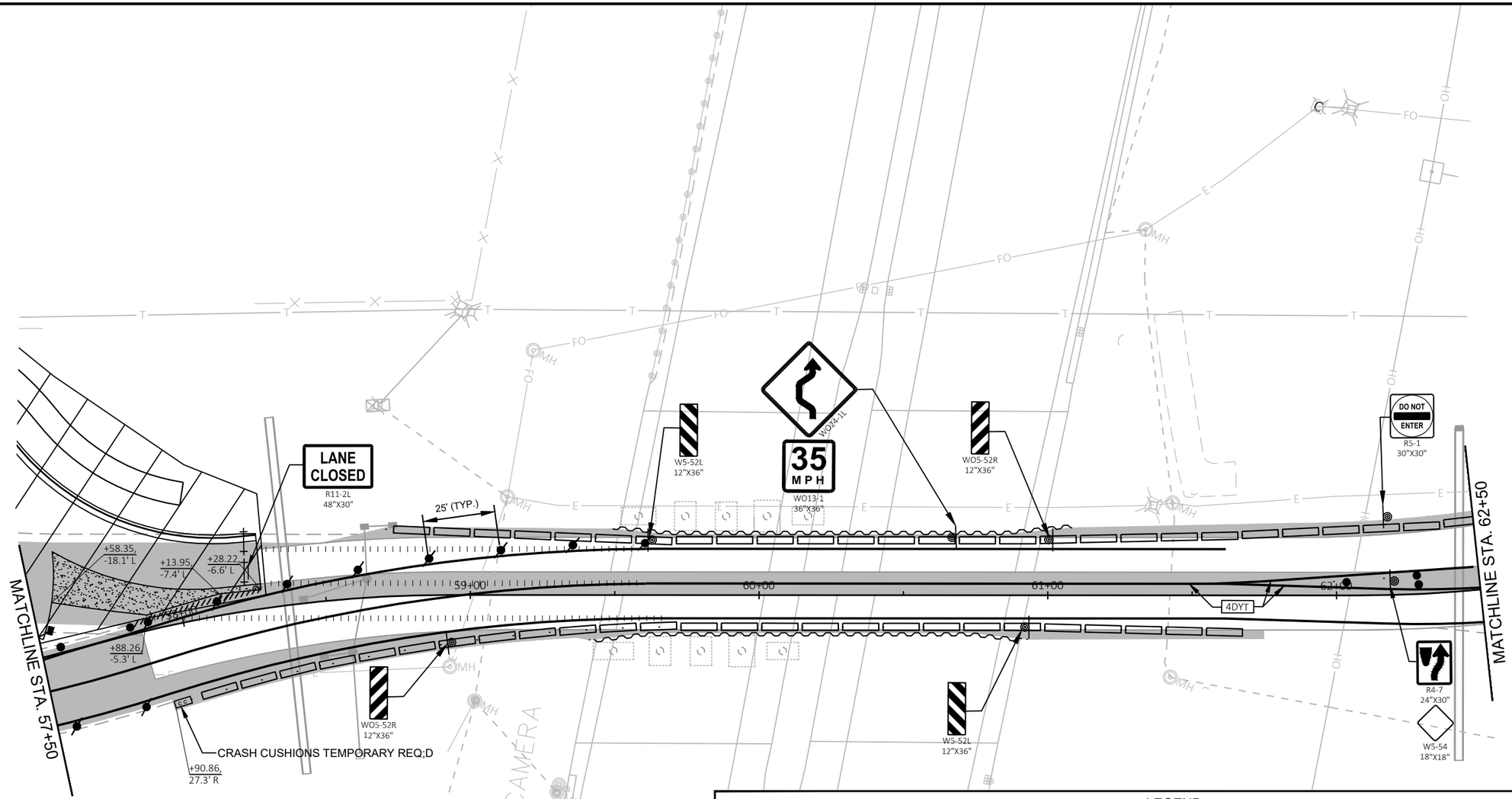
LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)


N
SOUTH EAST EAST
INTERSTATE 39 90 94
MOVE
WO1-7
48"X24"
+48.65,
-2530' L
R=2226'
MATCHLINE STA. 53+00
+00.59,
0.2' R
+65.44,
-1.0' L
+23.22,
28.0' R
+67.11,
17.7' R
+99.66,
22.0' R
25' (TYP.)
54+00
55+00
56+00
+11.95,
-5.6' L
+23.06,
-24.1' L
+69.36,
-71.4' L
+79.47,
-52.6' L
+18.48,
-50.2' L
+96.69,
-23.5' L
+28.71,
-21.9' L
R=524'
+55.61,
498.8' R
R=554'
MATCHLINE STA. 57+50
STH 60
4WT
3' SEG. 9' GAP
+70.09,
44.0' R
+95.61,
45.5' R
+33.46,
43.5' R
18WT
12'
12'
+16.66,
59.6' R
MAINTAIN AREA FOR
TURNING VEHICLES
+55.61,
498.9' R
LANE
CLOSED
R11-2L
48"X30"
WO6-1
48"X48"
NORTH WEST WEST
INTERSTATE 39 90 94
MOVE
WEST ALTERNATE EAST
INTERSTATE 60 39 60
MOVE FROM
NB OFF-RAMP
DO NOT
ENTER
R5-1
30"X30"
STOP
R1-1
36"X36"
Lodi
Arlington
MOVE FROM
NB OFF-RAMP
R=552'
I-39/90/94 SB
ENTRANCE RAMP
I-39/90/94 SB
EXIT RAMP
+52.22,
580' R
WE ATHE TE
S MH
E
E
E

2



LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 3A	SHEET 153	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026005_S3A.DWG
LAYOUT NAME - 026002A_3a

PLOT DATE : 3/2/2022 7:30 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

2

I-39/90/94 NB
ENTRANCE RAMP

/ SIGN

SEE S.D.D "TRAFFIC CONTROL, ADVANCED WARNING 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

PERMANENT SIGNING EAST OF THE NORTHBOUND ROUNDABOUT (OUTSIDE OF THE MEDIAN) INSTALLED

SOUTH 39 EAST 90 EAST 94

WO1-6
48"X24"

MATCHLINE STA. 62+50

25' (TYP.)

63+00

66+00

67+00

68+00

STH 60

**

WO1-6
48"X24"

MAINTAIN AREA FOR
TURNING VEHICLES

WO1-6
48"X24"

NOTE: FINAL PAVEMENT MARKING AND SIGNING TO BE PLACED AND IN USE WHERE WORK IS COMPLETED. PLACE DIRECTIONAL SIGNAGE IN MEDIANS UNDER CONSTRUCTION ON TEMPORARY SUPPORTS, TO BE PAID FOR AS TRAFFIC CONTROL SIGNS.

Lodi
Arlington

MOVE TO
STA. 53+75

WEST 60 ALTERNATE 39 EAST 60

MOVE TO SB
OFF-RAMP

I-39/90/94 NB
EXIT RAMP

** WORK ALONG THE SPLITTER ISLAND MEDIAN AND CIRCULATORY ROADWAY MEDIAN SHALL NOT BE CONSTRUCTED CONCURRENTLY. CONSTRUCT CENTRAL ISLAND FIRST, WHILE UTILIZING TEMPORARY PAVEMENT IN SPLITTER ISLAND FOR TURNING VEHICLES.

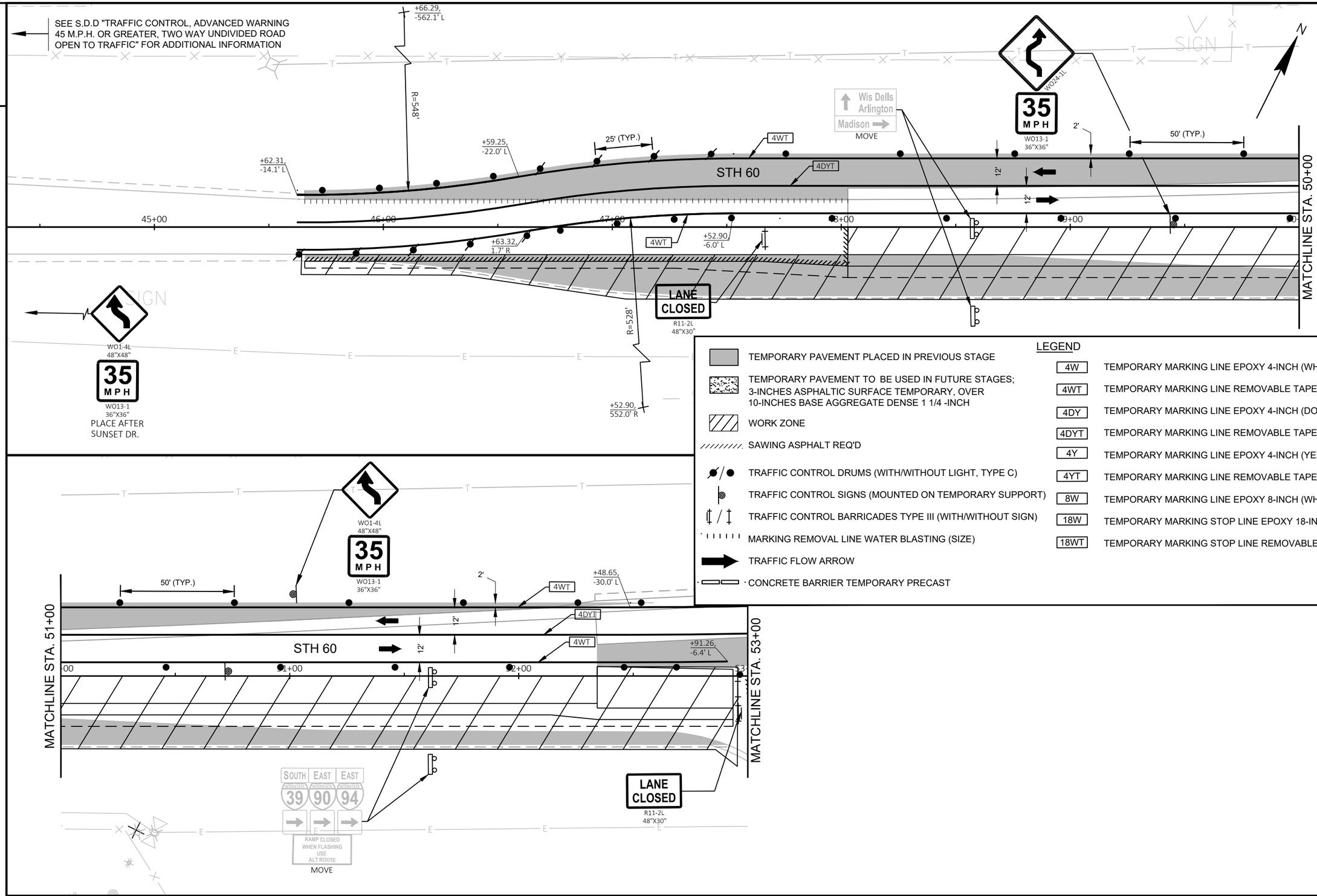
LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 3A	SHEET 154 E

SEE S.D.D "TRAFFIC CONTROL, ADVANCED WARNING 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION



TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH

WORK ZONE

SAWING ASPHALT REQ'D

TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)

TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)

TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)

MARKING REMOVAL LINE WATER BLASTING (SIZE)

TRAFFIC FLOW ARROW

CONCRETE BARRIER TEMPORARY PRECAST

LEGEND

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
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4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 3B	SHEET 155	E

2

SIGN

+48.65, 2530' L

R=2500'

LANE CLOSED
R11-2L
48"X30"

25' (TYP.)

+12.19, -31.6' L

12'

12'

STH 60

MATCHLINE STA. 53+00

54+00

55+00

+11.97, -7.6' L

+01.99, 11.9' R

+79.84, -9.4' L

+64.41, 13.7' R

STOP
R1-1
36"X36"

I-39/90/94 SB EXIT RAMP

4WT

15'

LANE CLOSED
R11-2L
48"X30"

+82.22, -93.7' L

DO NOT ENTER
R5-1
30"X30"

R=50'

+45.91, -75.1' L

4YT

4WT

4DYT

4WT

+92.24, -46.4' L

18WT

WRONG WAY
R5-1A
36"X24"
200' FROM STOP BAR

DO NOT ENTER
R5-1
30"X30"

R=50'

+17.10, -85.9' L

+72.49, 567.1' L

R=550'

R3-1
24"X24"

WO24-1R

35 MPH
WO13-1
36"X36"

N

+98.73, -49.4' L

+81.89, -50.5' L

+96.85, -25.5' L

+48.40, -18.3' L

56+00

57+00

58+00

59+00

**

R3-2
24"X24"

LANE CLOSED
R11-2L
48"X30"

NORTH WEST WEST
39 90 94
MOVE

WO1-7
48"X24"

R=526'

+55.6, 498.9' R

WEATHER GATE

I-39/90/94 SB ENTRANCE RAMP

TRAFFIC CAMERA

MH

E

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 3B	SHEET 156	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026006_S3B.DWG
LAYOUT NAME - 026002_3b

PLOT DATE : 3/2/2022 7:33 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

2

SIGN

+48.65,
2530' L

R=2500'

RAMP CLOSED
R11-2R
48"X30"

LANE CLOSED
R11-2L
48"X30"

STOP
R1-1
36"X36"

I-39/90/94 SB
EXIT RAMP

DO NOT ENTER
R5-1
30"X30"

WRONG WAY
R5-1A
36"X24"
200' FROM
STOP BAR

DO NOT ENTER
R5-1
30"X30"

R3-1
24"X24"

WO24-1R

35
MPH
WO13-1
36"X36"

N

25' (TYP.)

12'

12'

STH 60

53+50

54+00

55+00

56+00

58+00

59+00

**

R3-2
24"X24"

WO1-7
48"X24"

NORTH WEST WEST
INTERSTATE INTERSTATE INTERSTATE
39 90 94
MOVE

LANE CLOSED
R11-2L
48"X30"

WEATHER GATE

TRAFFIC CAMERA

** PRIOR TO TRAFFIC CONTROL SHIFT TO STAGE 3C CONFIGURATION ALONG STH 60, CLOSE SOUTHBOUND I-39/90/94 ON-RAMP AND COMPLETE WORK SHOWN. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION REGARDING RAMP CLOSURE.

LEGEND

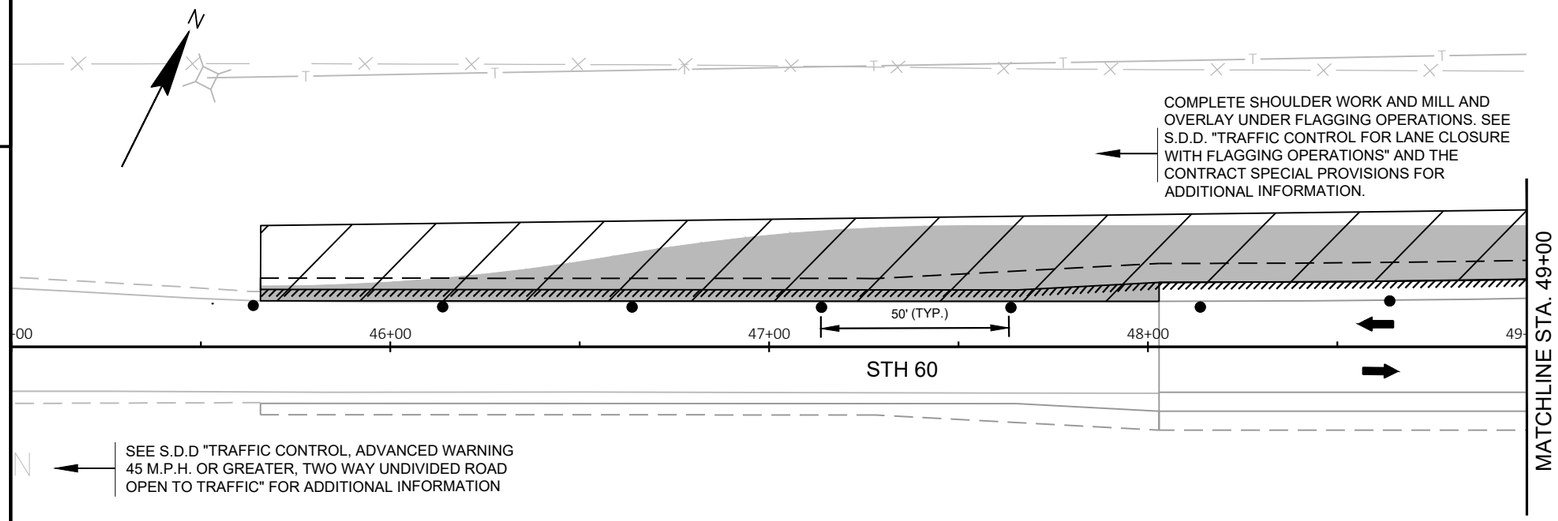
- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
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- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 3B	SHEET 157	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026006_S3B PART 2.DWG
LAYOUT NAME - 026003_3b
PLOT DATE : 3/8/2022 9:38 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

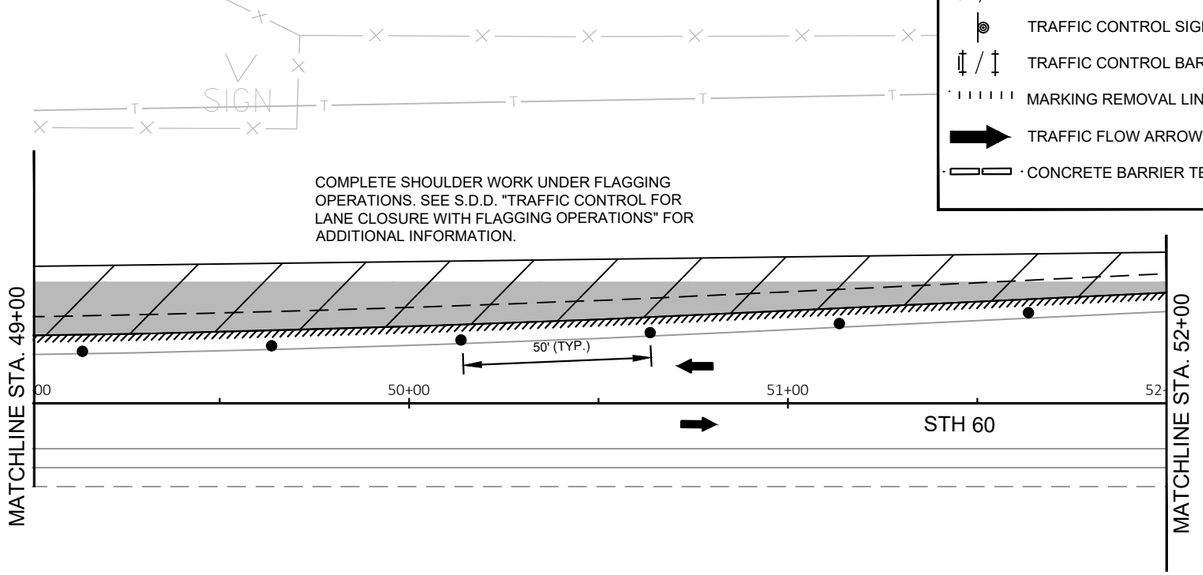


NOTE: FINAL PAVEMENT MARKING AND SIGNING TO BE PLACED AND IN USE WHERE WORK IS COMPLETED.

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

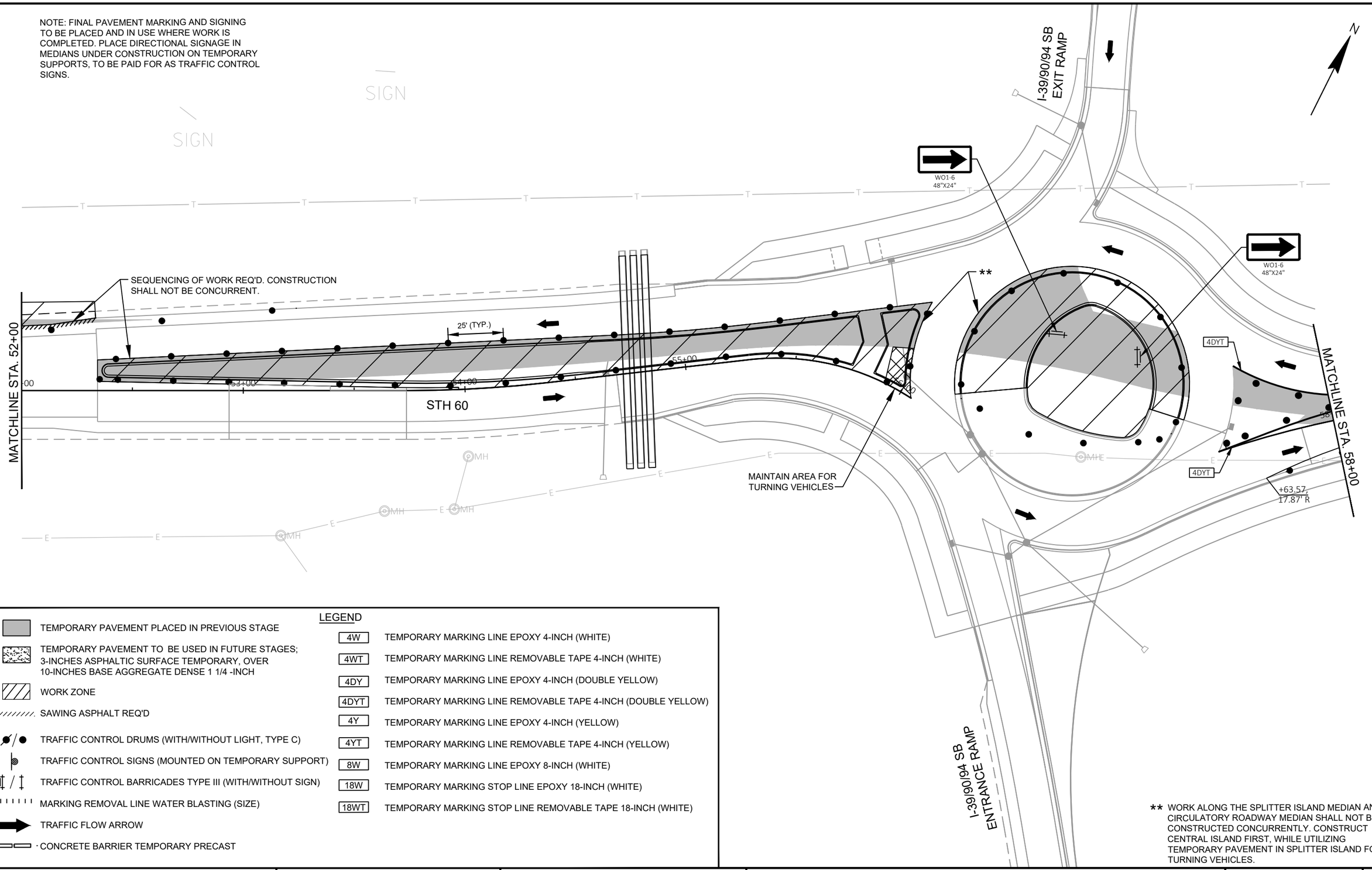


NOTE: FINAL PAVEMENT MARKING AND SIGNING TO BE PLACED AND IN USE WHERE WORK IS COMPLETED.

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 3C	SHEET 158	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026007_S4.DWG
LAYOUT NAME - 026001A_4
PLOT DATE : 3/8/2022 9:30 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

NOTE: FINAL PAVEMENT MARKING AND SIGNING TO BE PLACED AND IN USE WHERE WORK IS COMPLETED. PLACE DIRECTIONAL SIGNAGE IN MEDIANS UNDER CONSTRUCTION ON TEMPORARY SUPPORTS, TO BE PAID FOR AS TRAFFIC CONTROL SIGNS.



LEGEND

	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4W — TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
	TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH	4WT — TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
	WORK ZONE	4DY — TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
	SAWING ASPHALT REQ'D	4DYT — TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)	4Y — TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)	4YT — TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)	8W — TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
	MARKING REMOVAL LINE WATER BLASTING (SIZE)	18W — TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
	TRAFFIC FLOW ARROW	18WT — TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
	CONCRETE BARRIER TEMPORARY PRECAST	

** WORK ALONG THE SPLITTER ISLAND MEDIAN AND CIRCULATORY ROADWAY MEDIAN SHALL NOT BE CONSTRUCTED CONCURRENTLY. CONSTRUCT CENTRAL ISLAND FIRST, WHILE UTILIZING TEMPORARY PAVEMENT IN SPLITTER ISLAND FOR TURNING VEHICLES.

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 3C	SHEET 159	E

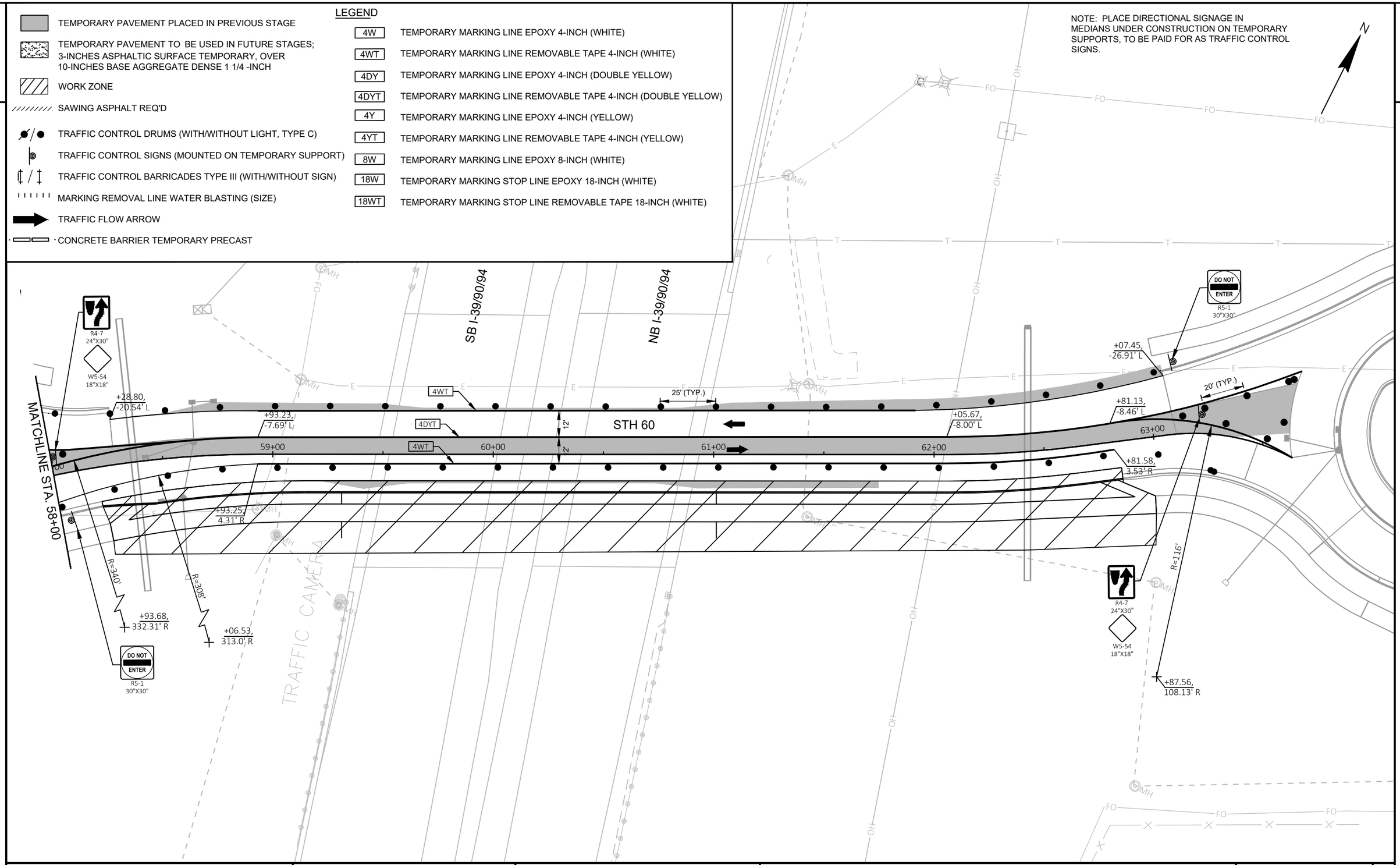
2

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

NOTE: PLACE DIRECTIONAL SIGNAGE IN MEDIANS UNDER CONSTRUCTION ON TEMPORARY SUPPORTS, TO BE PAID FOR AS TRAFFIC CONTROL SIGNS.



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 4	SHEET 160	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026007_S4.DWG
LAYOUT NAME - 026002_4

PLOT DATE : 3/2/2022 7:38 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

NOTE: PLACE DIRECTIONAL SIGNAGE IN MEDIANS UNDER CONSTRUCTION ON TEMPORARY SUPPORTS, TO BE PAID FOR AS TRAFFIC CONTROL SIGNS.

SB I-39/90/94

NB I-39/90/94

+38.32, -124.62' L

+66.52, -223.00' L

R=125'

R=225'

R4-7 24"X30"

W5-54 18"X18"

DO NOT ENTER R5-1 30"X30"

MATCHLINE STA. 58+00

59+00

60+00

61+00

62+00

63+00

+93.00, 2.00' R

+66.52, 2.00' R

+37.82, -17.53' L

25' (TYP.)

20' (TYP.)

4WT

4DYT

12'

12'

STH 60

AMERA

LEGEND

- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH
- WORK ZONE
- SAWING ASPHALT REQ'D
- TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
- TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
- TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)
- MARKING REMOVAL LINE WATER BLASTING (SIZE)
- TRAFFIC FLOW ARROW
- CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 4	SHEET 161	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026007_S4B.DWG
LAYOUT NAME - 026004_4

PLOT DATE : 3/2/2022 7:39 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

2

2

N

SB I-39/90/94

NB I-39/90/94

STH 60

MATCHLINE STA. 58+00

59+00

60+00

61+00

62+00

63+00

4YT

4YT

12'

12'

25' (TYP.)

CAMERA

LEGEND

TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE

TEMPORARY PAVEMENT TO BE USED IN FUTURE STAGES; 3-INCHES ASPHALTIC SURFACE TEMPORARY, OVER 10-INCHES BASE AGGREGATE DENSE 1 1/4 -INCH

WORK ZONE

SAWING ASPHALT REQ'D

TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)

TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)

TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGN)

MARKING REMOVAL LINE WATER BLASTING (SIZE)

TRAFFIC FLOW ARROW

CONCRETE BARRIER TEMPORARY PRECAST

4W	TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE)
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4DY	TEMPORARY MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
4DYT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
4Y	TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8W	TEMPORARY MARKING LINE EPOXY 8-INCH (WHITE)
18W	TEMPORARY MARKING STOP LINE EPOXY 18-INCH (WHITE)
18WT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION STAGING: STH 60 - STAGE 4	SHEET 162	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\026007_S4C.DWG
LAYOUT NAME - 026003_4

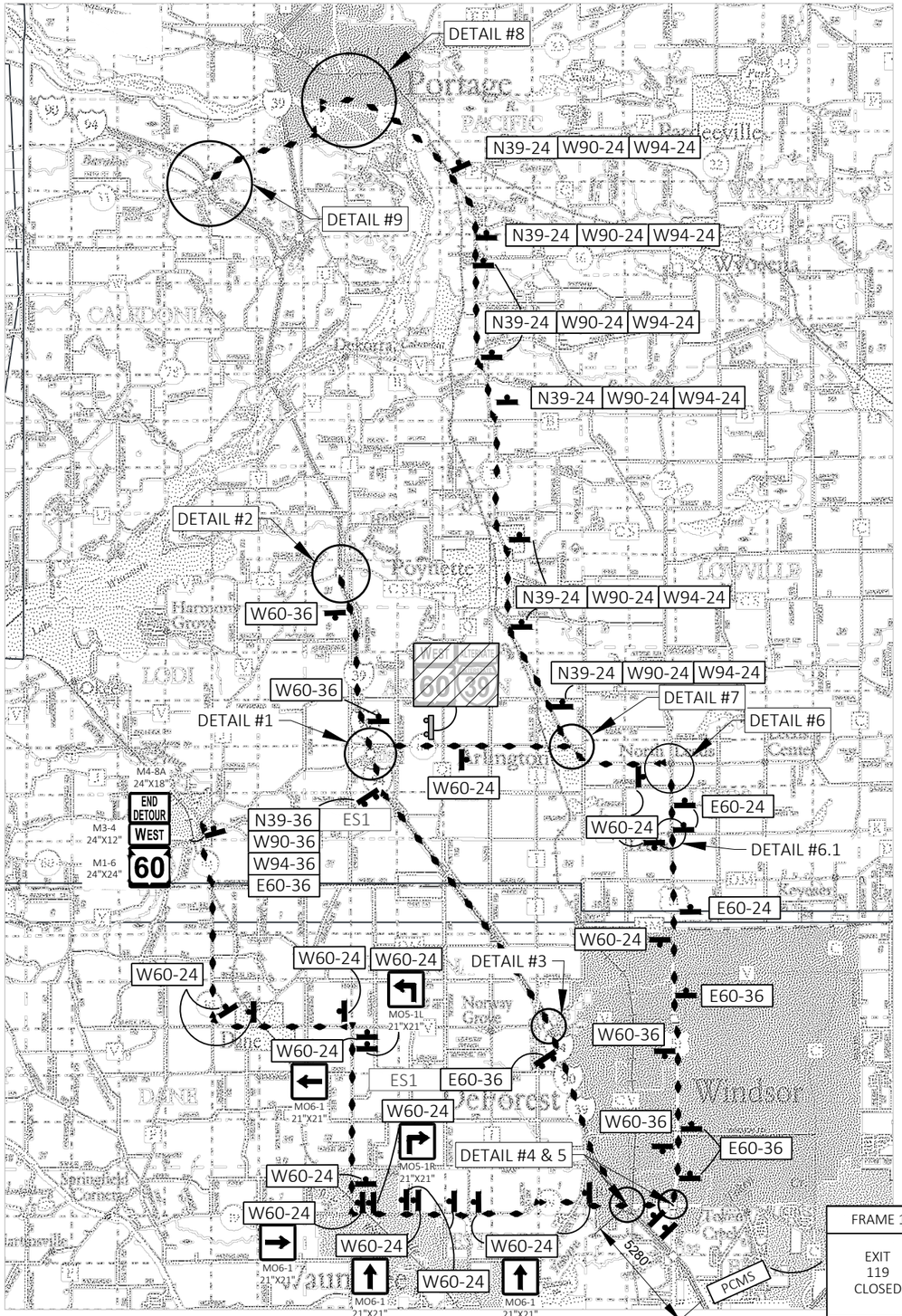
PLOT DATE : 3/2/2022 7:40 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

SIGN CODES

E60-36	W60-36	N39-36	W90-36	W94-36
M4-8 36"X18" DETOUR EAST 60; M3-2 36"X18"; M1-6 36"X36"	M4-8 36"X18" DETOUR WEST 60; M3-4 36"X18"; M1-6 36"X36"	MO4-5 36"X18" TO NORTH INTERSTATE 39; MB3-1 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO WEST INTERSTATE 90; MB3-4 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO WEST INTERSTATE 94; MB3-4 36"X18"; M1-1 36"X36"
E60-24	W60-24	N39-24	W90-24	W94-24
M4-8 24"X12" DETOUR EAST 60; M3-2 24"X12"; M1-6 24"X24"	M4-8 24"X12" DETOUR WEST 60; M3-4 24"X12"; M1-6 24"X24"	MO4-5 24"X12" TO NORTH INTERSTATE 39; MB3-1 24"X12"; M1-1 24"X24"	MO4-5 24"X12" TO WEST INTERSTATE 90; MB3-4 24"X12"; M1-1 24"X24"	MO4-5 24"X12" TO WEST INTERSTATE 94; MB3-4 24"X12"; M1-1 24"X24"
EXISTING SIGN 1 (ES1)		S39-36	E90-36	E94-36
SOUTH INTERSTATE 39 EAST INTERSTATE 90 EAST INTERSTATE 94		MO4-5 36"X18" TO SOUTH INTERSTATE 39; MB3-4 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO EAST INTERSTATE 90; MB3-2 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO EAST INTERSTATE 94; MB3-2 36"X18"; M1-1 36"X36"

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C
"DETOUR SIGNING FOR MAINLINE CLOSURES"
UNLESS OTHERWISE NOTED.



FRAME 1	FRAME 2
EXIT 119 CLOSED	USE EXIT 131

LEGEND

- DETOUR ROUTE
- EXISTING SIGN
- TRAFFIC CONTROL SIGN
- COVER EXISTING SIGN
- NEW SIGN SINGLE/DOUBLE POST
- EXISTING SIGN SINGLE/DOUBLE POST
- TRAFFIC CONTROL BARRICADE TYPE III WITH/WITHOUT SIGN
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

N

2

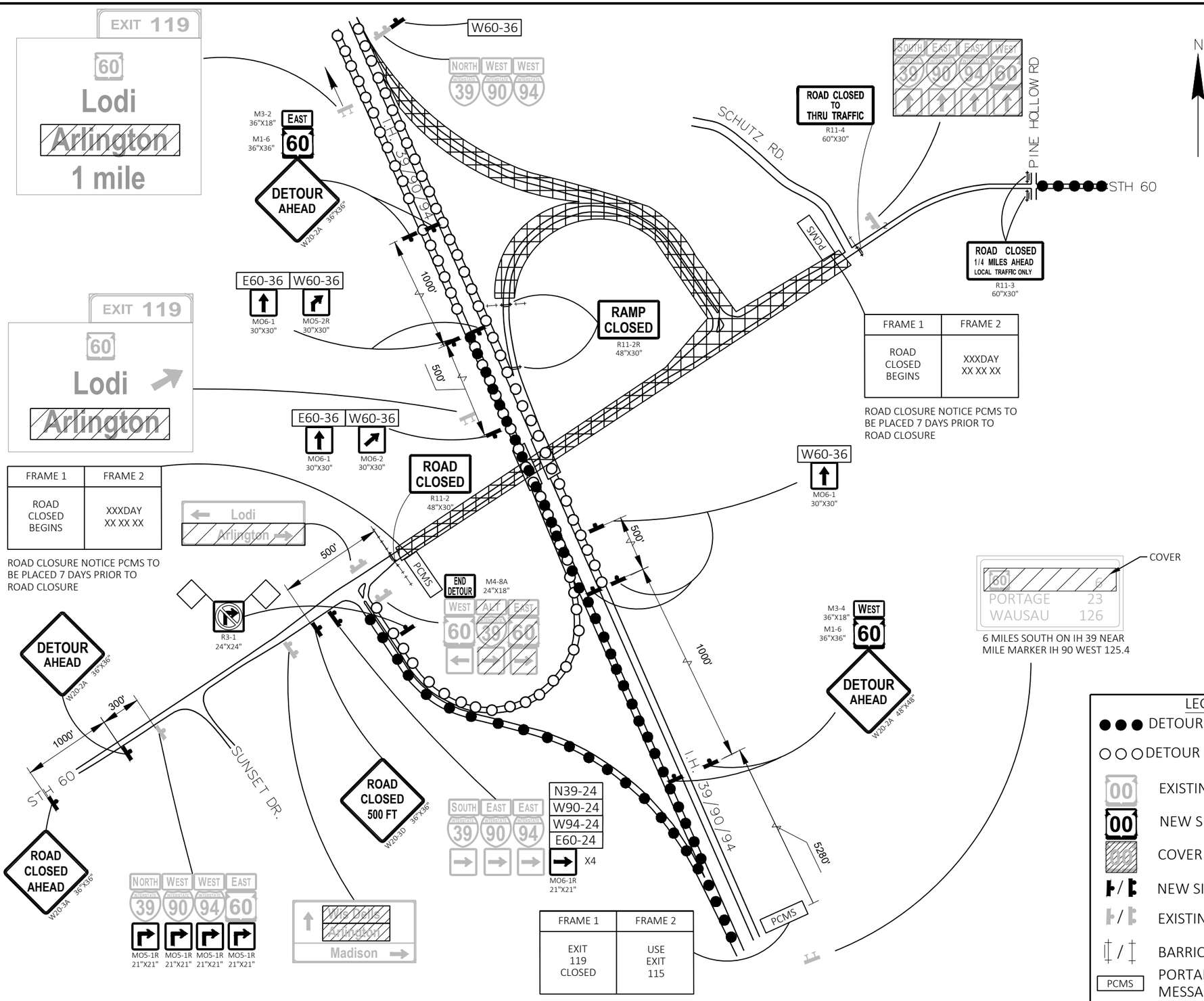
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR OVERVIEW - STAGE 1	SHEET 163	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - OVERVIEW STAGE 1
PLOT DATE : 1/19/2022 6:00 PM
PLOT BY : ANDERSON, SHAUN M
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

SIGN CODES

E60-36	W60-36
M4-8 36"X18" DETOUR EAST 60; M3-2 36"X18"; M1-6 36"X36"	M4-8 36"X18" DETOUR WEST 60; M3-4 36"X18"; M1-6 36"X36"
E60-24	**W60-24**
M4-8 24"X12" DETOUR EAST 60; M3-2 24"X12"; M1-6 24"X24"	M4-8 24"X12" DETOUR WEST 60; M3-4 24"X12"; M1-6 24"X24"
N39-36	**W90-36**
MO4-5 36"X18" TO NORTH INTERSTATE 39; MB3-1 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO WEST INTERSTATE 90; MB3-4 36"X18"; M1-1 36"X36"
N39-24	**W90-24**
MO4-5 24"X12" TO NORTH INTERSTATE 39; MB3-1 24"X12"; M1-1 24"X24"	MO4-5 24"X12" TO WEST INTERSTATE 90; MB3-4 24"X12"; M1-1 24"X24"
W94-36	**S39-36**
MO4-5 36"X18" TO WEST INTERSTATE 94; MB3-4 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO SOUTH INTERSTATE 39; MB3-4 36"X18"; M1-1 36"X36"
W94-24	**E90-36**
MO4-5 24"X12" TO WEST INTERSTATE 94; MB3-4 24"X12"; M1-1 24"X24"	MO4-5 36"X18" TO EAST INTERSTATE 90; MB3-2 36"X18"; M1-1 36"X36"
	E94-36
	MO4-5 36"X18" TO EAST INTERSTATE 94; MB3-2 36"X18"; M1-1 36"X36"

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C "DETOUR SIGNING FOR MAINLINE CLOSURES" AND SDD 15D16 - 04 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" UNLESS OTHERWISE NOTED.

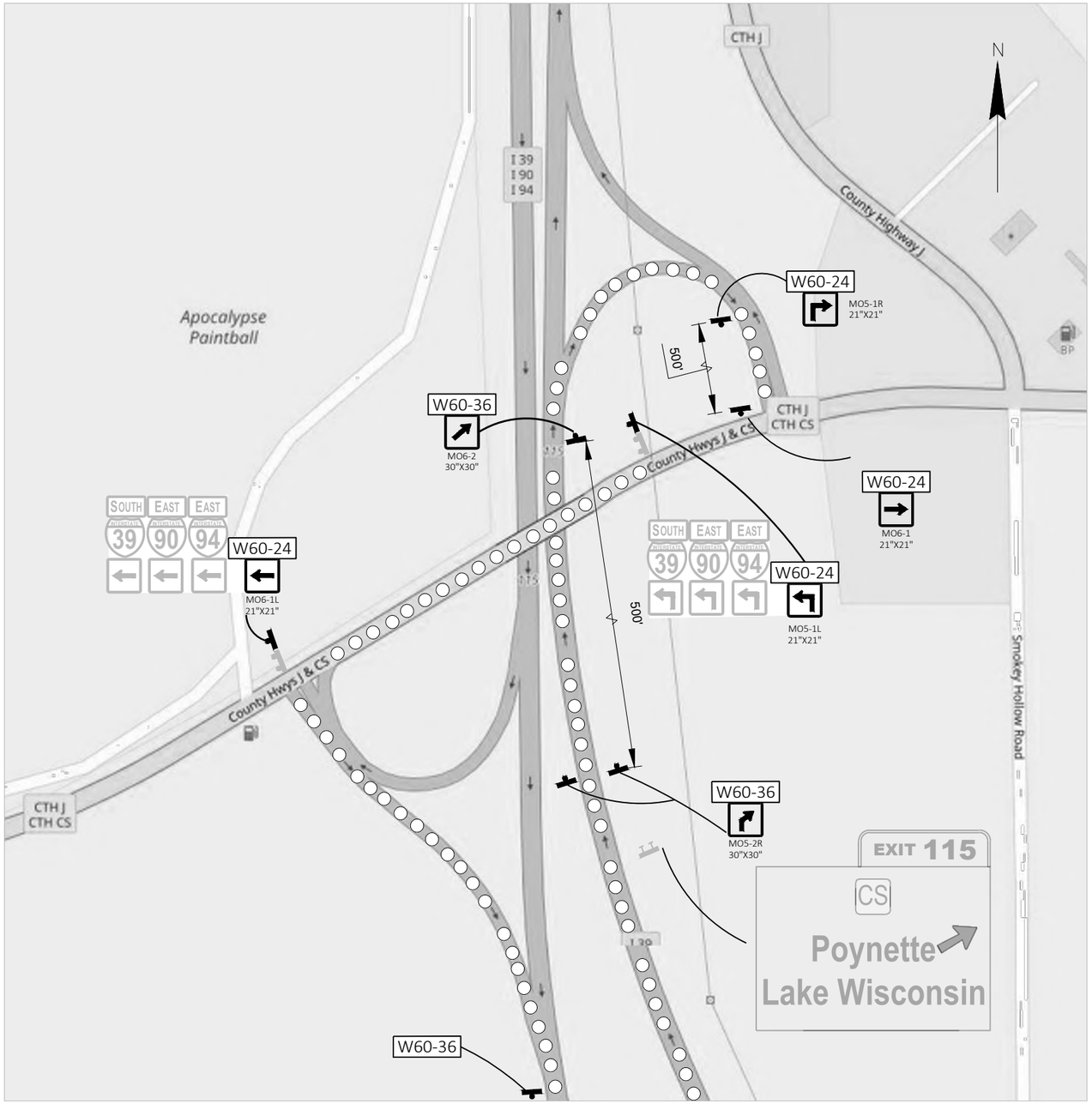


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #1	SHEET 164	E

SIGN CODES

E60-36	W60-36
M4-8 36"X18" DETOUR EAST; M3-2 36"X18"; M1-6 36"X36" 60	M4-8 36"X18" DETOUR WEST; M3-4 36"X18"; M1-6 36"X36" 60
E60-24	**W60-24**
M4-8 24"X12" DETOUR EAST; M3-2 24"X12"; M1-6 24"X24" 60	M4-8 24"X12" DETOUR WEST; M3-4 24"X12"; M1-6 24"X24" 60
N39-36	**W90-36**
MO4-5 36"X18" TO NORTH INTERSTATE 39; MB3-1 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO WEST INTERSTATE 90; MB3-4 36"X18"; M1-1 36"X36"
N39-24	**W90-24**
MO4-5 24"X12" TO NORTH INTERSTATE 39; MB3-1 24"X12"; M1-1 24"X24"	MO4-5 24"X12" TO WEST INTERSTATE 90; MB3-4 24"X12"; M1-1 24"X24"
W94-36	**S39-36**
MO4-5 36"X18" TO WEST INTERSTATE 94; MB3-4 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO SOUTH INTERSTATE 39; MB3-4 36"X18"; M1-1 36"X36"
W94-24	**E90-36**
MO4-5 24"X12" TO WEST INTERSTATE 94; MB3-4 24"X12"; M1-1 24"X24"	MO4-5 36"X18" TO EAST INTERSTATE 90; MB3-2 36"X18"; M1-1 36"X36"
	E94-36
	MO4-5 36"X18" TO EAST INTERSTATE 94; MB3-2 36"X18"; M1-1 36"X36"

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C "DETOUR SIGNING FOR MAINLINE CLOSURES" UNLESS OTHERWISE NOTED



LEGEND

- DETOUR ROUTE EB
- DETOUR ROUTE WB
- EXISTING SIGN
- NEW SIGN
- COVER EXISTING SIGN
- NEW SIGN SINGLE/DOUBLE POST
- EXISTING SIGN SINGLE/DOUBLE POST
- BARRICADE WITH/WITHOUT SIGN
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #2	SHEET 165 E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - BLOW UP #2

PLOT DATE : 1/19/2022 6:00 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : ##########

2

SIGN CODES

E60-36	W60-36
M4-8 36"X18" DETOUR EAST M3-2 36"X18" M1-6 36"X36" 60	M4-8 36"X18" DETOUR WEST M3-4 36"X18" M1-6 36"X36" 60
E60-24	W60-24
M4-8 24"X12" DETOUR EAST M3-2 24"X12" M1-6 24"X24" 60	M4-8 24"X12" DETOUR WEST M3-4 24"X12" M1-6 24"X24" 60
N39-36	W90-36
MO4-5 36"X18" TO NORTH MB3-1 36"X18" M1-1 36"X36" INTERSTATE 39	MO4-5 36"X18" TO WEST MB3-4 36"X18" M1-1 36"X36" INTERSTATE 90
N39-24	W90-24
MO4-5 24"X12" TO NORTH MB3-1 24"X12" M1-1 24"X24" INTERSTATE 39	MO4-5 24"X12" TO WEST MB3-4 24"X12" M1-1 24"X24" INTERSTATE 90
W94-36	S39-36
MO4-5 36"X18" TO WEST MB3-4 36"X18" M1-1 36"X36" INTERSTATE 94	MO4-5 36"X18" TO SOUTH MB3-4 36"X18" M1-1 36"X36" INTERSTATE 39
W94-24	E90-36
MO4-5 24"X12" TO WEST MB3-4 24"X12" M1-1 24"X24" INTERSTATE 94	MO4-5 36"X18" TO EAST MB3-2 36"X18" M1-1 36"X36" INTERSTATE 90
	E94-36
	MO4-5 36"X18" TO EAST MB3-2 36"X18" M1-1 36"X36" INTERSTATE 94

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C "DETOUR SIGNING FOR MAINLINE CLOSURES" UNLESS OTHERWISE NOTED

N39-36
W90-36
E60-36 W94-36
MO6-1 30"X30" MO5-2R 30"X30" X3

STAGE 1 ONLY

500'

N39-36
W90-36
E60-36 W94-36
MO6-1 30"X30" MO6-2 30"X30" X3

N39-24
W90-24
W94-24
3X MO5-1L 21"X21"

500'

N39-24
W90-24
W94-24
COUNTY V
3X MO6-1L 21"X21"

NORTH WEST WEST
INTERSTATE 39 INTERSTATE 90 INTERSTATE 94

County Road I
County Road V
Morrisonville Rd
Hickory Ln

N

2

LEGEND

- DETOUR ROUTE EB
- DETOUR ROUTE WB
- EXISTING SIGN
- NEW SIGN
- COVER EXISTING SIGN
- NEW SIGN SINGLE/DOUBLE POST
- EXISTING SIGN SINGLE/DOUBLE POST
- BARRICADE WITH/WITHOUT SIGN
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #3	SHEET 166 E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - BLOW UP #3

PLOT DATE : 1/19/2022 6:00 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : ##########

2

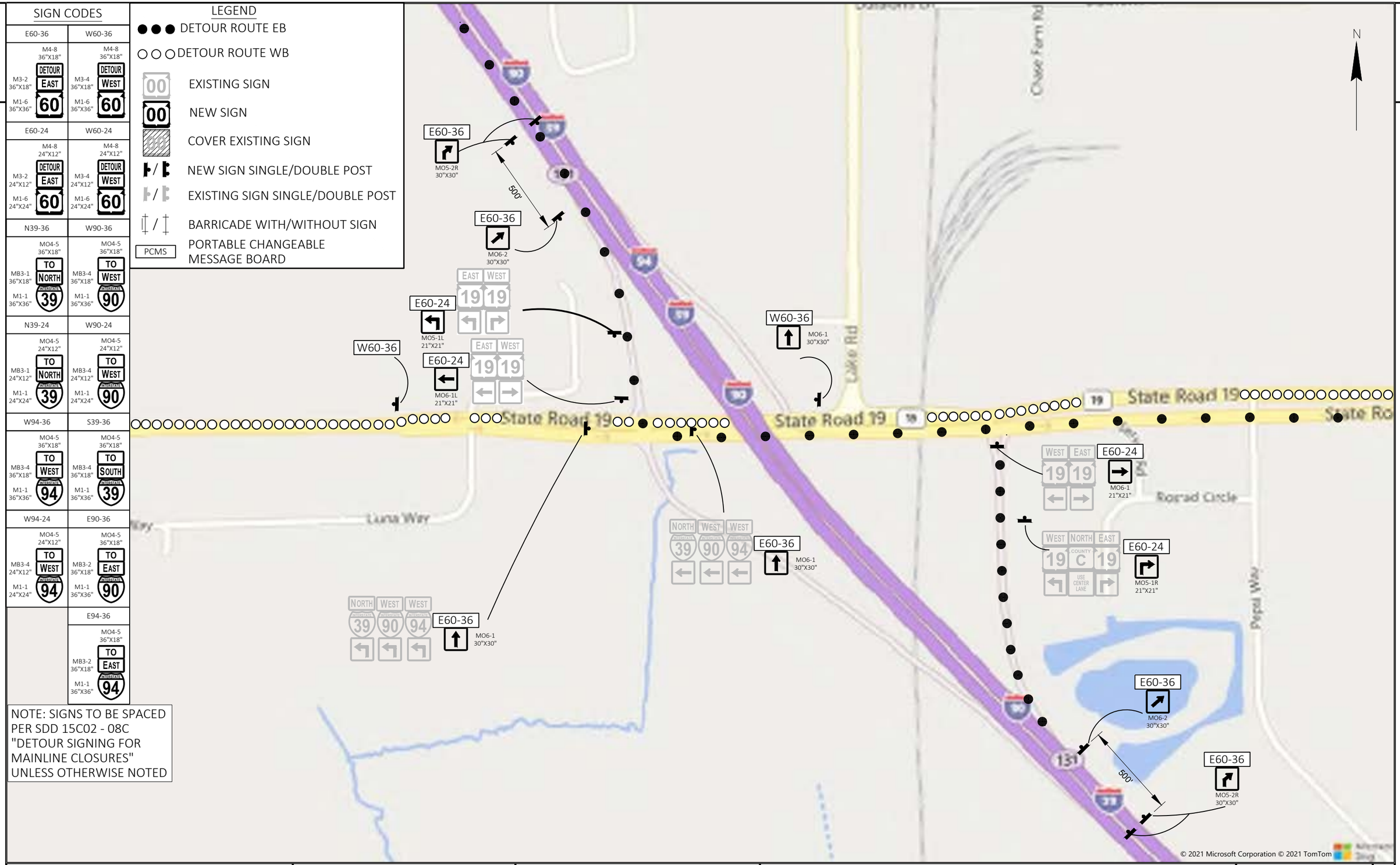
SIGN CODES

E60-36	W60-36
M4-8 36"X18" DETOUR; M3-2 36"X18" EAST; M1-6 36"X36" 60	M4-8 36"X18" DETOUR; M3-4 36"X18" WEST; M1-6 36"X36" 60
E60-24	W60-24
M4-8 24"X12" DETOUR; M3-2 24"X12" EAST; M1-6 24"X24" 60	M4-8 24"X12" DETOUR; M3-4 24"X12" WEST; M1-6 24"X24" 60
N39-36	W90-36
MO4-5 36"X18" TO; MB3-1 36"X18" NORTH; M1-1 36"X36" INTERSTATE 39	MO4-5 36"X18" TO; MB3-4 36"X18" WEST; M1-1 36"X36" INTERSTATE 90
N39-24	W90-24
MO4-5 24"X12" TO; MB3-1 24"X12" NORTH; M1-1 24"X24" INTERSTATE 39	MO4-5 24"X12" TO; MB3-4 24"X12" WEST; M1-1 24"X24" INTERSTATE 90
W94-36	S39-36
MO4-5 36"X18" TO; MB3-4 36"X18" WEST; M1-1 36"X36" INTERSTATE 94	MO4-5 36"X18" TO; MB3-4 36"X18" SOUTH; M1-1 36"X36" INTERSTATE 39
W94-24	E90-36
MO4-5 24"X12" TO; MB3-4 24"X12" WEST; M1-1 24"X24" INTERSTATE 94	MO4-5 36"X18" TO; MB3-2 36"X18" EAST; M1-1 36"X36" INTERSTATE 90
	E94-36
	MO4-5 36"X18" TO; MB3-2 36"X18" EAST; M1-1 36"X36" INTERSTATE 94

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C "DETOUR SIGNING FOR MAINLINE CLOSURES" UNLESS OTHERWISE NOTED

LEGEND

- DETOUR ROUTE EB
- DETOUR ROUTE WB
- EXISTING SIGN
- NEW SIGN
- COVER EXISTING SIGN
- NEW SIGN SINGLE/DOUBLE POST
- EXISTING SIGN SINGLE/DOUBLE POST
- BARRICADE WITH/WITHOUT SIGN
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #4	SHEET 167	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - BLOW UP # 4

PLOT DATE : 1/19/2022 6:00 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

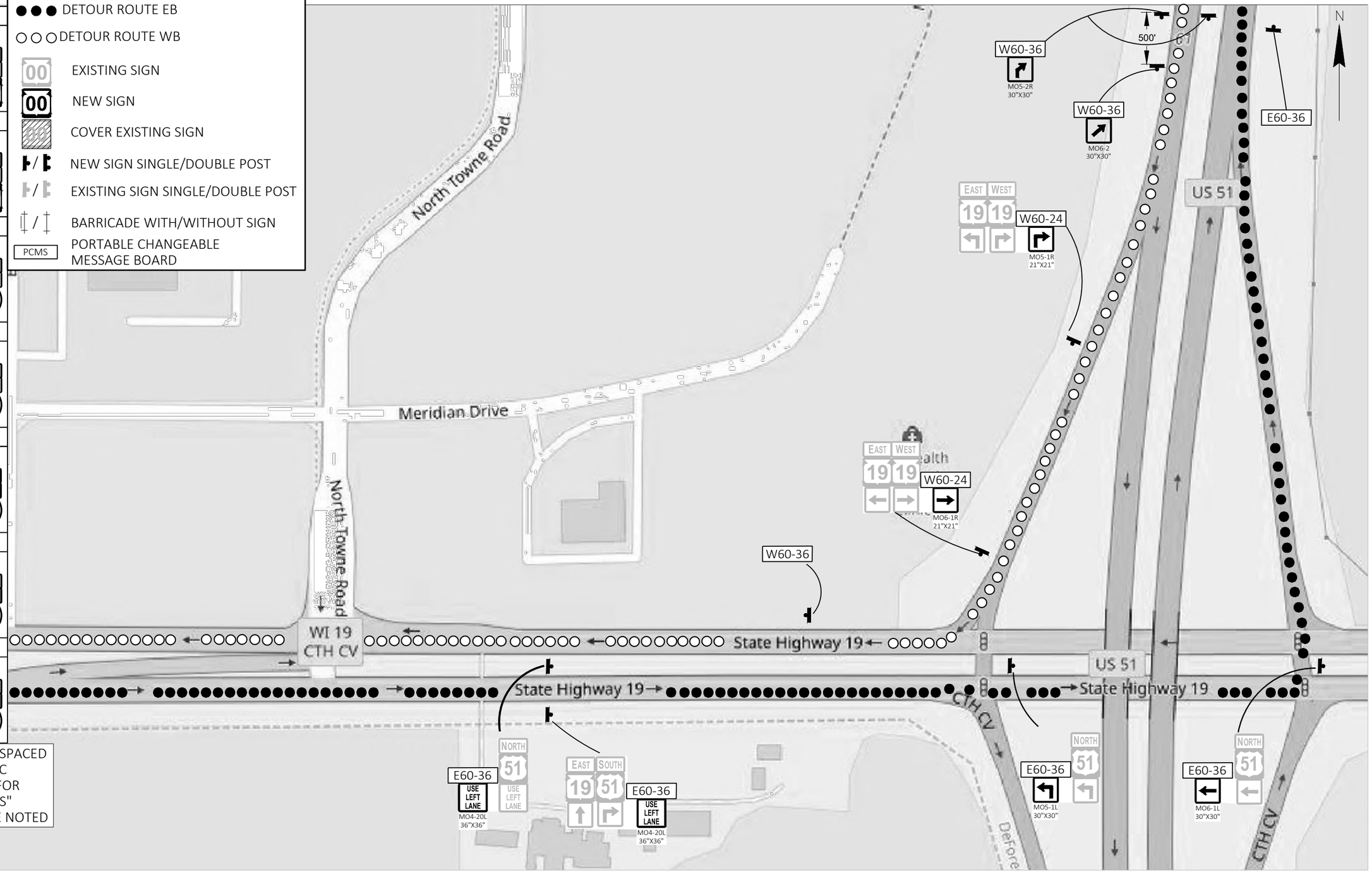
SIGN CODES

E60-36	W60-36
M4-8 36"X18" DETOUR EAST; M3-2 36"X18"; M1-6 36"X36" 60	M4-8 36"X18" DETOUR WEST; M3-4 36"X18"; M1-6 36"X36" 60
E60-24	**W60-24**
M4-8 24"X12" DETOUR EAST; M3-2 24"X12"; M1-6 24"X24" 60	M4-8 24"X12" DETOUR WEST; M3-4 24"X12"; M1-6 24"X24" 60
N39-36	**W90-36**
MO4-5 36"X18" TO NORTH INTERSTATE 39; MB3-1 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO WEST INTERSTATE 90; MB3-4 36"X18"; M1-1 36"X36"
N39-24	**W90-24**
MO4-5 24"X12" TO NORTH INTERSTATE 39; MB3-1 24"X12"; M1-1 24"X24"	MO4-5 24"X12" TO WEST INTERSTATE 90; MB3-4 24"X12"; M1-1 24"X24"
W94-36	**S39-36**
MO4-5 36"X18" TO WEST INTERSTATE 94; MB3-4 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO SOUTH INTERSTATE 39; MB3-4 36"X18"; M1-1 36"X36"
W94-24	**E90-36**
MO4-5 24"X12" TO WEST INTERSTATE 94; MB3-4 24"X12"; M1-1 24"X24"	MO4-5 36"X18" TO EAST INTERSTATE 90; MB3-2 36"X18"; M1-1 36"X36"
	E94-36
	MO4-5 36"X18" TO EAST INTERSTATE 94; MB3-2 36"X18"; M1-1 36"X36"

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C "DETOUR SIGNING FOR MAINLINE CLOSURES" UNLESS OTHERWISE NOTED

LEGEND

- DETOUR ROUTE EB
- DETOUR ROUTE WB
- EXISTING SIGN
- NEW SIGN
- COVER EXISTING SIGN
- NEW SIGN SINGLE/DOUBLE POST
- EXISTING SIGN SINGLE/DOUBLE POST
- BARRICADE WITH/WITHOUT SIGN
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD



2

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #5	SHEET 168	E

2

N

FOR INFORMATIONAL PURPOSES ONLY. DETOUR SIGNS WILL BE PLACED AS A PART OF CONTRACT 6020-00-70. COORDINATE WITH PROJECT PRIOR TO IH 39 AND STH 60 PROJECT DETOUR BEGINNING.

STH 60 / USH 51

602 604 606 608 610 612

60 ROAD CLOSED AHEAD

60 DETOUR AHEAD

45 M.P.H.

DETOUR SOUTH ALTERNATE 60 51 INTERSTATE 39

2

N

FOR INFORMATIONAL PURPOSES ONLY. DETOUR SIGNS WILL BE PLACED AS A PART OF CONTRACT 6020-00-70. COORDINATE WITH PROJECT PRIOR TO IH 39 AND STH 60 PROJECT DETOUR BEGINNING.

614 616 618 620 622 624 626 628

USH 51

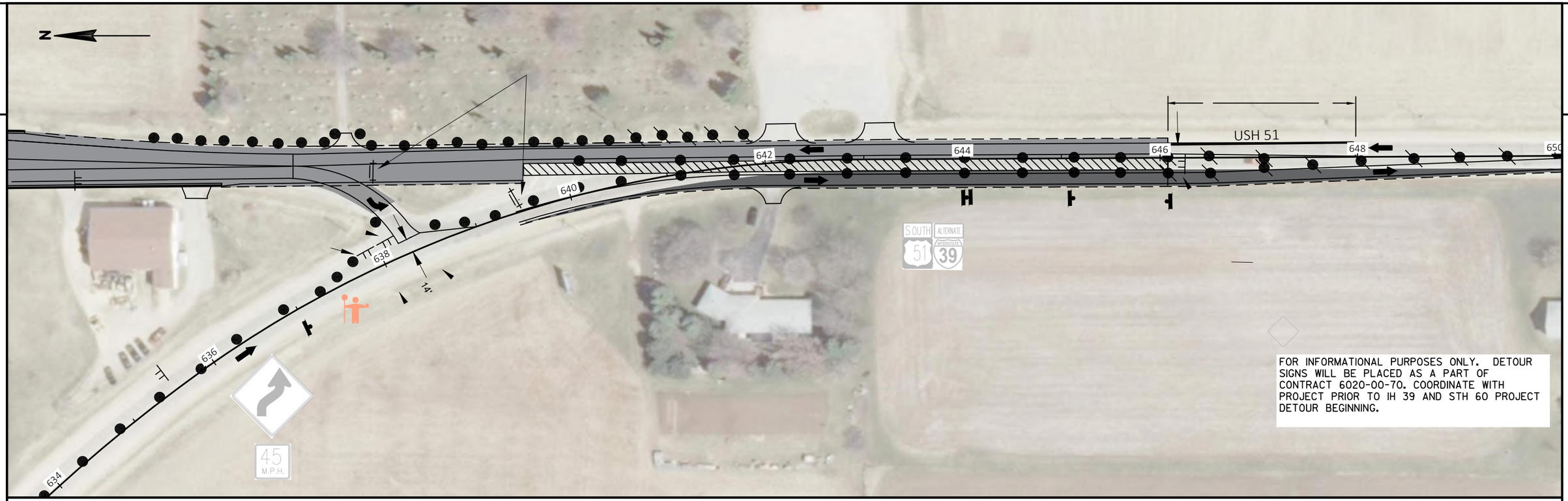
DETOUR SOUTH ALTERNATE 60 51 INTERSTATE 39

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #6A-1 - STH 60 - USH 51 AND STH 22 INTERSECTION	SHEET 169	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT S3_60200070.DWG
LAYOUT NAME - 027001_dt BLOW UP #6A_FYI1

PLOT DATE : 1/19/2022 6:01 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #6A-2 - STH 60 - USH 51 AND STH 22 INTERSECTION	SHEET 170	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT S3_60200070.DWG
LAYOUT NAME - 027001_dt BLOW UP #6A FYI2
PLOT DATE : 1/19/2022 6:02 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LEGEND

- DETOUR ROUTE EB
- DETOUR ROUTE WB
- EXISTING SIGN
- NEW SIGN
- COVER EXISTING SIGN
- NEW SIGN SINGLE/DOUBLE POST
- EXISTING SIGN SINGLE/DOUBLE POST
- BARRICADE WITH/WITHOUT SIGN

N

2

R10-61 60" x 30" ROAD OPEN TO ARLINGTON

Arlington 2 / Portage 16

M3-4 24"X12" / M1-6 24"X24" WEST 60 DETOUR AHEAD W20-2A

M4-8 24"X12" DETOUR WEST 60 MO6-1 21"X21"

M4-8 24"X12" DETOUR WEST 60 MO5-1R 21"X21"

M4-8 24"X12" DETOUR WEST 60 MO5-1L 21"X21"

Madison / Columbus / Portage

Portage / Madison / Wyocena

Wyocena / Portage / Columbus

1000'

108"EB" 110"EB" 112"EB" 114"EB" 116"EB" 118"EB" 120"EB" 122"EB" 126"EB" 128"EB" 130"EB" 132"EB" 134"EB" 136"EB"

218"NB" 220"NB" 222"NB" 224"NB" 216"NB" 214"NB" 212"NB"

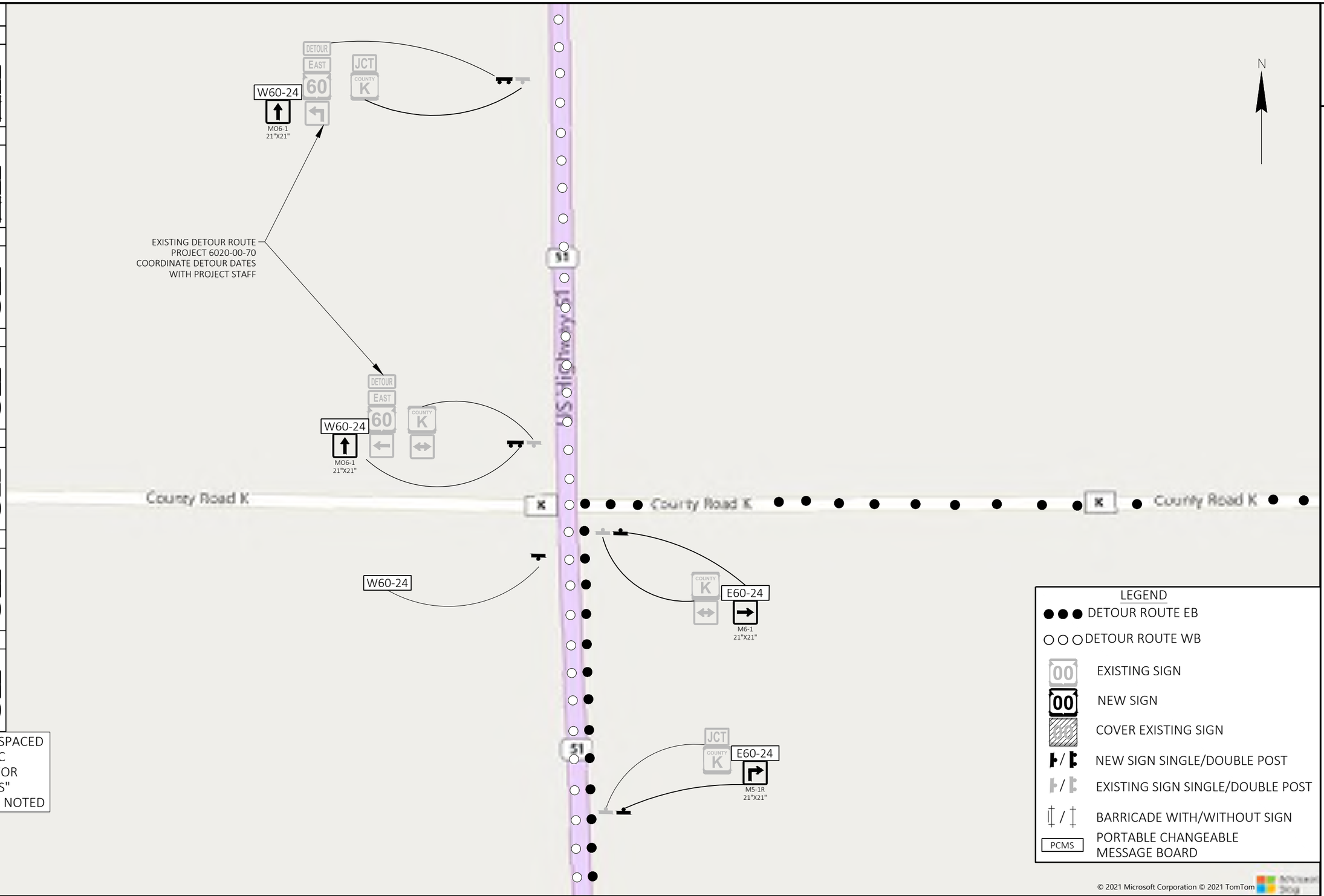
JCT 51 / JCT 22

2

SIGN CODES

E60-36	W60-36
M4-8 36"X18" DETOUR EAST; M3-2 36"X18"; M1-6 36"X36" 60	M4-8 36"X18" DETOUR WEST; M3-4 36"X18"; M1-6 36"X36" 60
E60-24	**W60-24**
M4-8 24"X12" DETOUR EAST; M3-2 24"X12"; M1-6 24"X24" 60	M4-8 24"X12" DETOUR WEST; M3-4 24"X12"; M1-6 24"X24" 60
N39-36	**W90-36**
MO4-5 36"X18" TO NORTH; MB3-1 36"X18"; M1-1 36"X36" INTERSTATE 39	MO4-5 36"X18" TO WEST; MB3-4 36"X18"; M1-1 36"X36" INTERSTATE 90
N39-24	**W90-24**
MO4-5 24"X12" TO NORTH; MB3-1 24"X12"; M1-1 24"X24" INTERSTATE 39	MO4-5 24"X12" TO WEST; MB3-4 24"X12"; M1-1 24"X24" INTERSTATE 90
W94-36	**S39-36**
MO4-5 36"X18" TO WEST; MB3-4 36"X18"; M1-1 36"X36" INTERSTATE 94	MO4-5 36"X18" TO SOUTH; MB3-4 36"X18"; M1-1 36"X36" INTERSTATE 39
W94-24	**E90-36**
MO4-5 24"X12" TO WEST; MB3-4 24"X12"; M1-1 24"X24" INTERSTATE 94	MO4-5 36"X18" TO EAST; MB3-2 36"X18"; M1-1 36"X36" INTERSTATE 90
	E94-36
	MO4-5 36"X18" TO EAST; MB3-2 36"X18"; M1-1 36"X36" INTERSTATE 94

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C "DETOUR SIGNING FOR MAINLINE CLOSURES" UNLESS OTHERWISE NOTED

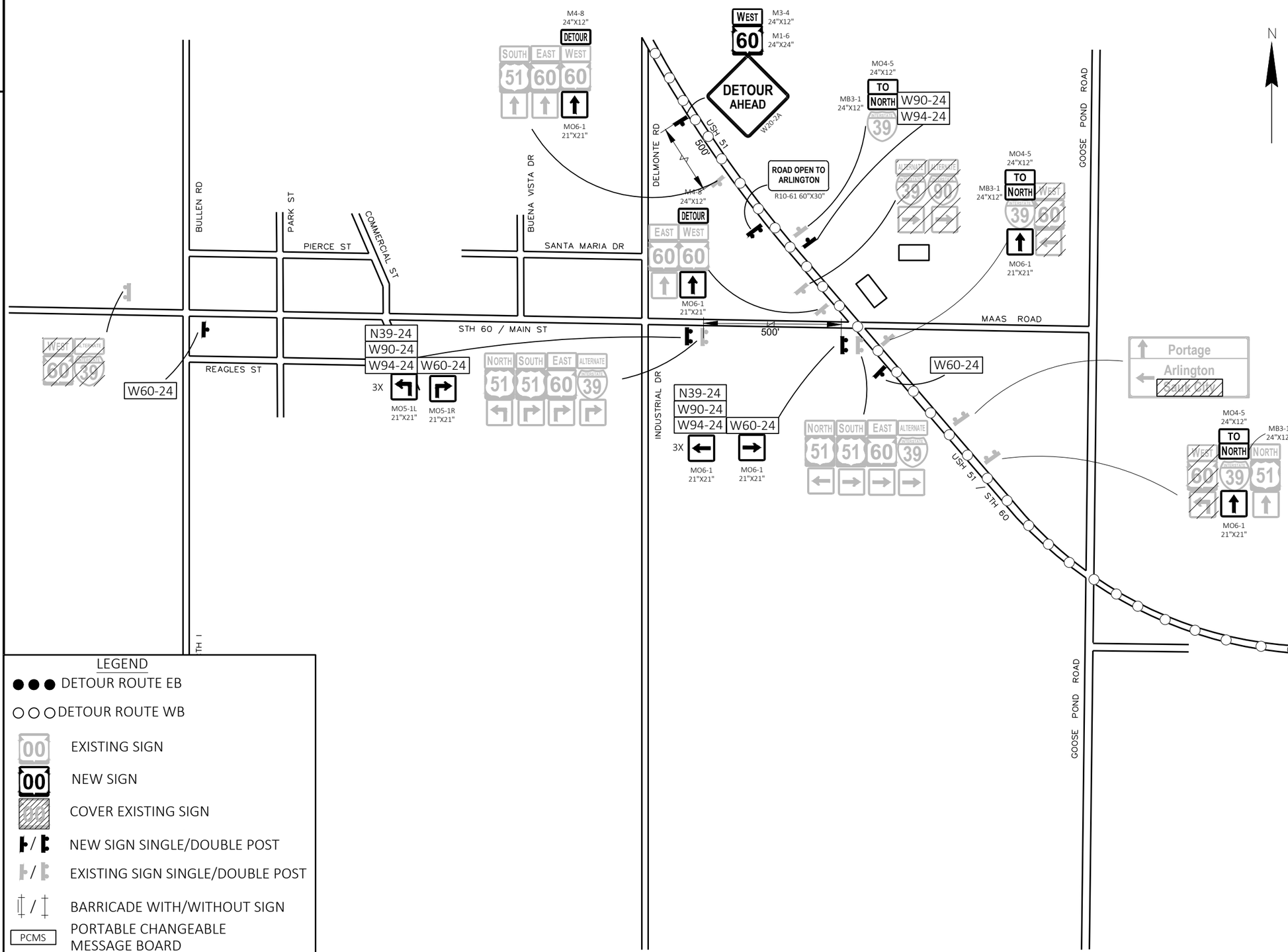


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #6.1	172	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - BLOW UP #6.1

PLOT DATE : 1/19/2022 6:36 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44



SIGN CODES

E60-36	W60-36
M4-8 36"X18" DETOUR EAST; M3-2 36"X18"; M1-6 36"X36" 60	M4-8 36"X18" DETOUR WEST; M3-4 36"X18"; M1-6 36"X36" 60
E60-24	**W60-24**
M4-8 24"X12" DETOUR EAST; M3-2 24"X12"; M1-6 24"X24" 60	M4-8 24"X12" DETOUR WEST; M3-4 24"X12"; M1-6 24"X24" 60
N39-36	**W90-36**
MO4-5 36"X18" TO NORTH; MB3-1 36"X18"; M1-1 36"X36" INTERSTATE 39	MO4-5 36"X18" TO WEST; MB3-4 36"X18"; M1-1 36"X36" INTERSTATE 90
N39-24	**W90-24**
MO4-5 24"X12" TO NORTH; MB3-1 24"X12"; M1-1 24"X24" INTERSTATE 39	MO4-5 24"X12" TO WEST; MB3-4 24"X12"; M1-1 24"X24" INTERSTATE 90
W94-36	**S39-36**
MO4-5 36"X18" TO WEST; MB3-4 36"X18"; M1-1 36"X36" INTERSTATE 94	MO4-5 36"X18" TO SOUTH; MB3-4 36"X18"; M1-1 36"X36" INTERSTATE 39
W94-24	**E90-36**
MO4-5 24"X12" TO WEST; MB3-4 24"X12"; M1-1 24"X24" INTERSTATE 94	MO4-5 36"X18" TO EAST; MB3-2 36"X18"; M1-1 36"X36" INTERSTATE 90
	E94-36
	MO4-5 36"X18" TO EAST; MB3-2 36"X18"; M1-1 36"X36" INTERSTATE 94

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C "DETOUR SIGNING FOR MAINLINE CLOSURES" UNLESS OTHERWISE NOTED

LEGEND

- ●●● DETOUR ROUTE EB
- ○○○ DETOUR ROUTE WB
- 00 EXISTING SIGN
- 00 NEW SIGN
- 00 COVER EXISTING SIGN
- NEW SIGN SINGLE/DOUBLE POST
- EXISTING SIGN SINGLE/DOUBLE POST
- BARRICADE WITH/WITHOUT SIGN
- PCMS PORTABLE CHANGEABLE MESSAGE BOARD

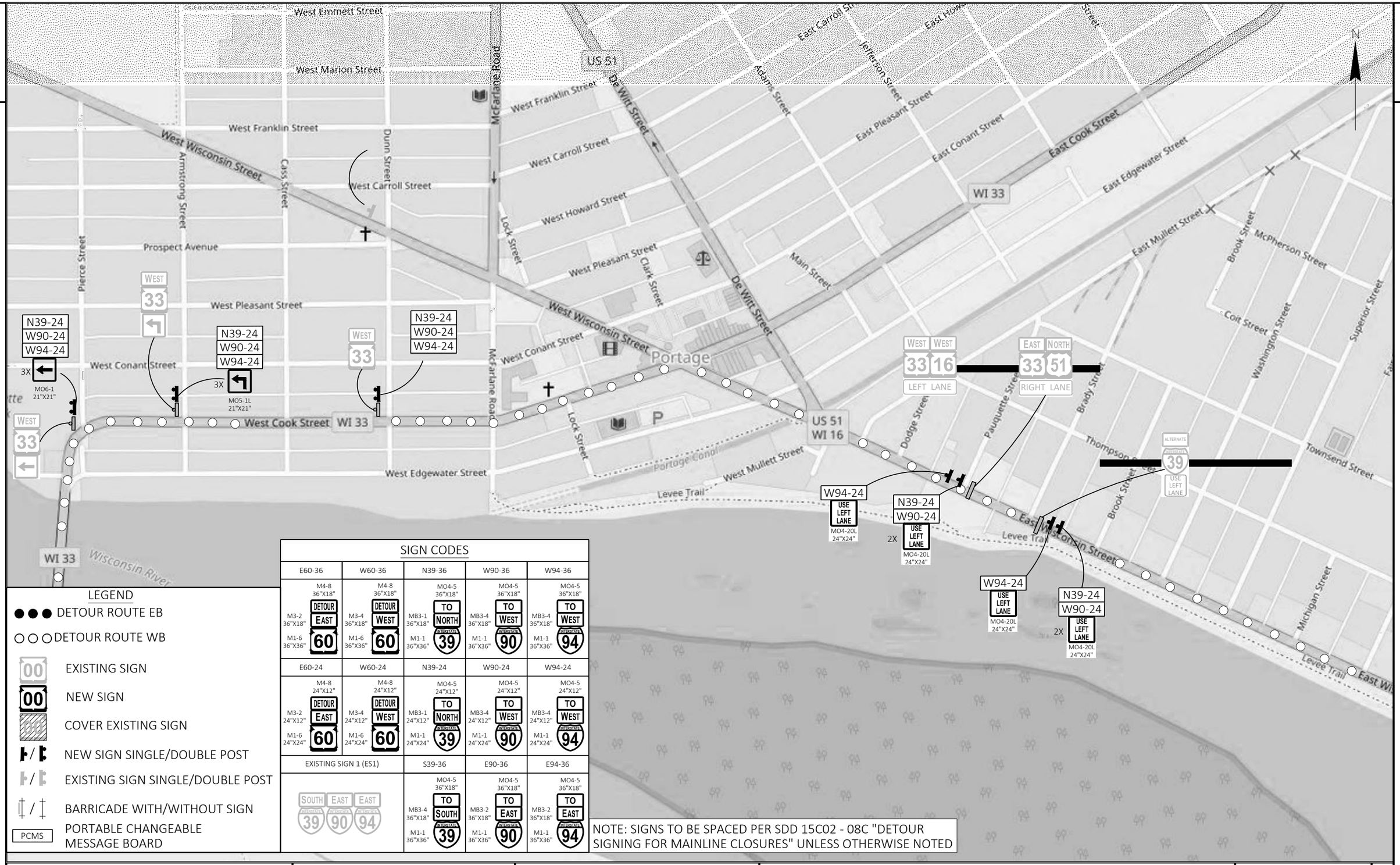
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #7	173	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - BLOW UP #7

PLOT DATE : 1/19/2022 6:37 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

2



SIGN CODES

E60-36	W60-36	N39-36	W90-36	W94-36
M4-8 36"X18" DETOUR EAST; M3-2 36"X18"; M1-6 36"X36" 60	M4-8 36"X18" DETOUR WEST; M3-4 36"X18"; M1-6 36"X36" 60	MO4-5 36"X18" TO NORTH INTERSTATE 39; MB3-1 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO WEST INTERSTATE 90; MB3-4 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO WEST INTERSTATE 94; MB3-4 36"X18"; M1-1 36"X36"
E60-24	W60-24	N39-24	W90-24	W94-24
M4-8 24"X12" DETOUR EAST; M3-2 24"X12"; M1-6 24"X24" 60	M4-8 24"X12" DETOUR WEST; M3-4 24"X12"; M1-6 24"X24" 60	MO4-5 24"X12" TO NORTH INTERSTATE 39; MB3-1 24"X12"; M1-1 24"X24"	MO4-5 24"X12" TO WEST INTERSTATE 90; MB3-4 24"X12"; M1-1 24"X24"	MO4-5 24"X12" TO WEST INTERSTATE 94; MB3-4 24"X12"; M1-1 24"X24"
EXISTING SIGN 1 (ES1)		S39-36	E90-36	E94-36
SOUTH EAST EAST INTERSTATE 39 90 94		MO4-5 36"X18" TO SOUTH INTERSTATE 39; MB3-4 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO EAST INTERSTATE 90; MB3-2 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO EAST INTERSTATE 94; MB3-2 36"X18"; M1-1 36"X36"

LEGEND

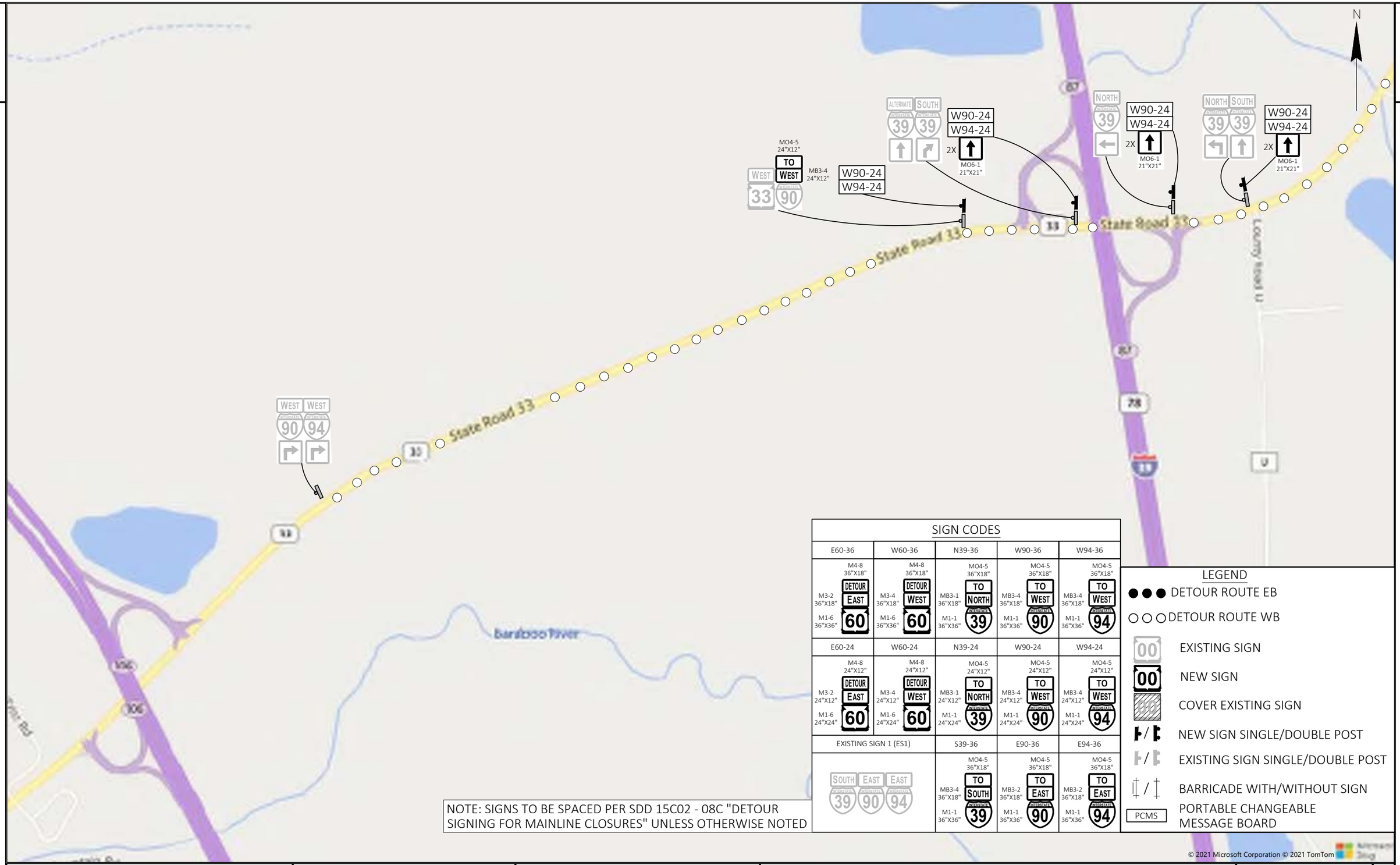
- DETOUR ROUTE EB
- DETOUR ROUTE WB
- 00 EXISTING SIGN
- 00 NEW SIGN
- 00 COVER EXISTING SIGN
- NEW SIGN SINGLE/DOUBLE POST
- EXISTING SIGN SINGLE/DOUBLE POST
- BARRICADE WITH/WITHOUT SIGN
- PCMS PORTABLE CHANGEABLE MESSAGE BOARD

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C "DETOUR SIGNING FOR MAINLINE CLOSURES" UNLESS OTHERWISE NOTED

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #8	SHEET 174	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - BLOW UP #8

PLOT DATE : 1/19/2022 6:37 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : ##########



SIGN CODES

E60-36	W60-36	N39-36	W90-36	W94-36
M4-8 36"X18" DETOUR EAST; M3-2 36"X18"; M1-6 36"X36" 60	M4-8 36"X18" DETOUR WEST; M3-4 36"X18"; M1-6 36"X36" 60	MO4-5 36"X18" TO NORTH 39; MB3-1 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO WEST 90; MB3-4 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO WEST 94; MB3-4 36"X18"; M1-1 36"X36"
E60-24	**W60-24**	**N39-24**	**W90-24**	**W94-24**
M4-8 24"X12" DETOUR EAST; M3-2 24"X12"; M1-6 24"X24" 60	M4-8 24"X12" DETOUR WEST; M3-4 24"X12"; M1-6 24"X24" 60	MO4-5 24"X12" TO NORTH 39; MB3-1 24"X12"; M1-1 24"X24"	MO4-5 24"X12" TO WEST 90; MB3-4 24"X12"; M1-1 24"X24"	MO4-5 24"X12" TO WEST 94; MB3-4 24"X12"; M1-1 24"X24"
EXISTING SIGN 1 (ES1)		S39-36	E90-36	E94-36
SOUTH EAST EAST 39 90 94		MO4-5 36"X18" TO SOUTH 39; MB3-4 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO EAST 90; MB3-2 36"X18"; M1-1 36"X36"	MO4-5 36"X18" TO EAST 94; MB3-2 36"X18"; M1-1 36"X36"

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C "DETOUR SIGNING FOR MAINLINE CLOSURES" UNLESS OTHERWISE NOTED

LEGEND

- DETOUR ROUTE EB
- DETOUR ROUTE WB
- EXISTING SIGN
- NEW SIGN
- COVER EXISTING SIGN
- NEW SIGN SINGLE/DOUBLE POST
- EXISTING SIGN SINGLE/DOUBLE POST
- BARRICADE WITH/WITHOUT SIGN
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #9	SHEET 175	E

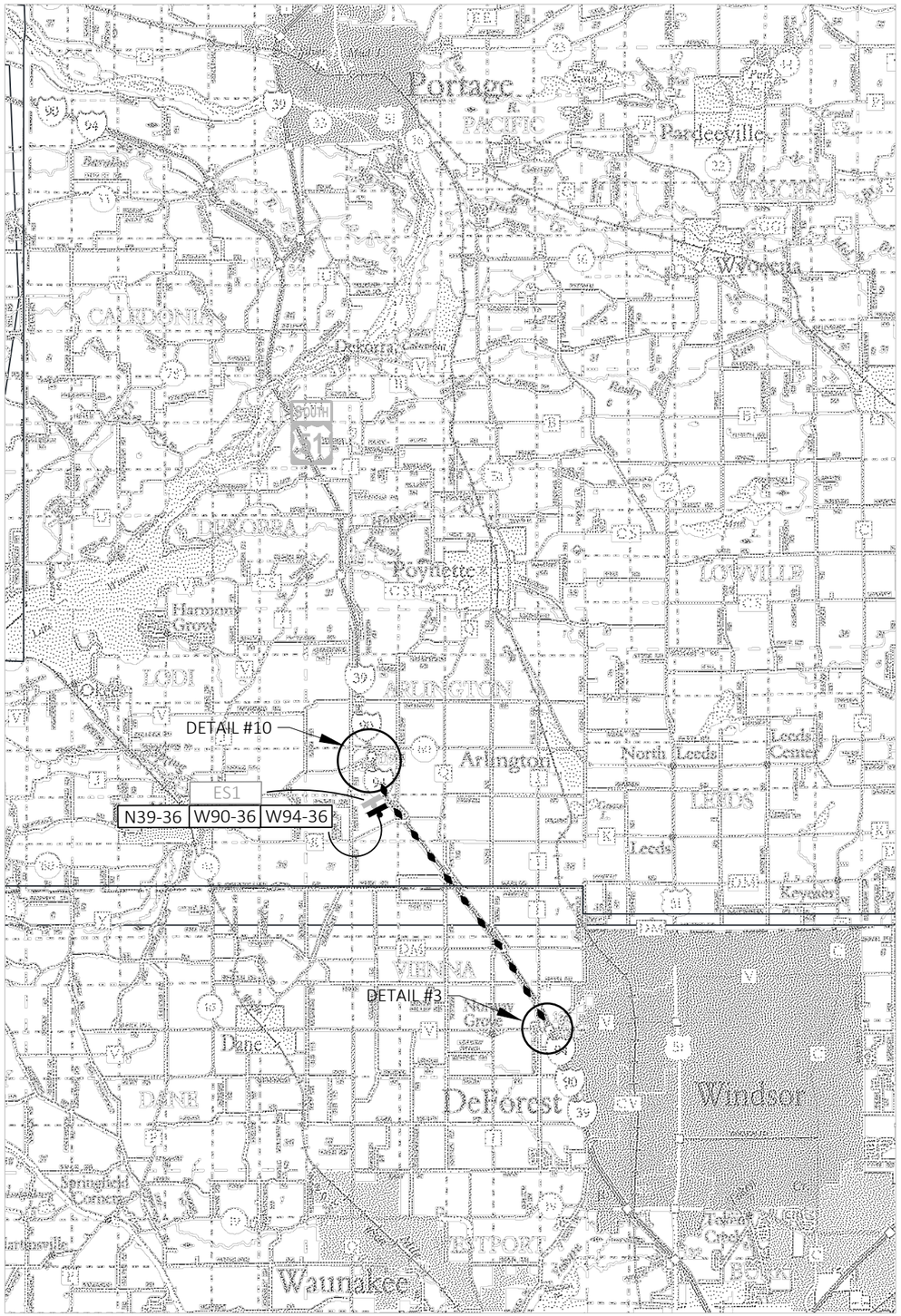
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - BLOW UP #9

PLOT DATE : 1/19/2022 6:37 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : ##########

SIGN CODES

E60-36	W60-36	N39-36	W90-36	W94-36
M4-8 36"X18" DETOUR EAST 60 M3-2 36"X18" M1-6 36"X36"	M4-8 36"X18" DETOUR WEST 60 M3-4 36"X18" M1-6 36"X36"	MO4-5 36"X18" TO NORTH 39 MB3-1 36"X18" M1-1 36"X36"	MO4-5 36"X18" TO WEST 90 MB3-4 36"X18" M1-1 36"X36"	MO4-5 36"X18" TO WEST 94 MB3-4 36"X18" M1-1 36"X36"
E60-24	**W60-24**	**N39-24**	**W90-24**	**W94-24**
M4-8 24"X12" DETOUR EAST 60 M3-2 24"X12" M1-6 24"X24"	M4-8 24"X12" DETOUR WEST 60 M3-4 24"X12" M1-6 24"X24"	MO4-5 24"X12" TO NORTH 39 MB3-1 24"X12" M1-1 24"X24"	MO4-5 24"X12" TO WEST 90 MB3-4 24"X12" M1-1 24"X24"	MO4-5 24"X12" TO WEST 94 MB3-4 24"X12" M1-1 24"X24"
EXISTING SIGN 1 (ES1)		**S39-36**	**E90-36**	**E94-36**
SOUTH 39 EAST 90 EAST 94		MO4-5 36"X18" TO SOUTH 39 MB3-4 36"X18" M1-1 36"X36"	MO4-5 36"X18" TO EAST 90 MB3-2 36"X18" M1-1 36"X36"	MO4-5 36"X18" TO EAST 94 MB3-2 36"X18" M1-1 36"X36"

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C
"DETOUR SIGNING FOR MAINLINE CLOSURES"
UNLESS OTHERWISE NOTED.



N

LEGEND

- DETOUR ROUTE
- EXISTING SIGN
- TRAFFIC CONTROL SIGN
- COVER EXISTING SIGN
- NEW SIGN SINGLE/DOUBLE POST
- EXISTING SIGN SINGLE/DOUBLE POST
- TRAFFIC CONTROL BARRICADE TYPE III WITH/WITHOUT SIGN
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

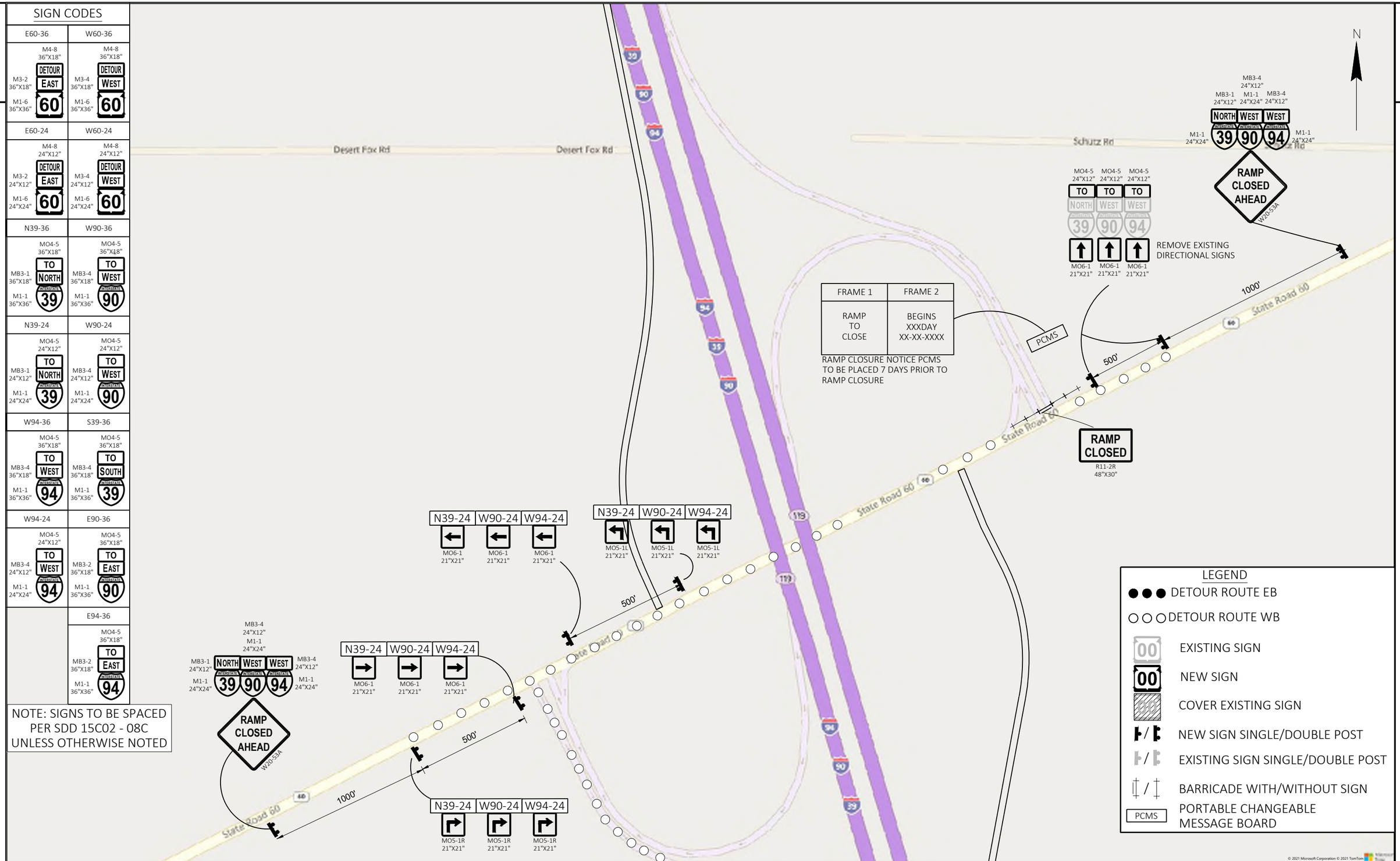
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR OVERVIEW - STAGE 2 - IH 39 NB ON	SHEET 176	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT_S3 NB ON.DWG
LAYOUT NAME - OVERVIEW STAGE 3
PLOT DATE : 1/19/2022 6:37 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : ##########

SIGN CODES

E60-36	W60-36
M4-8 36"X18" DETOUR EAST; M3-2 36"X18"; M1-6 36"X36" 60	M4-8 36"X18" DETOUR WEST; M3-4 36"X18"; M1-6 36"X36" 60
E60-24	**W60-24**
M4-8 24"X12" DETOUR EAST; M3-2 24"X12"; M1-6 24"X24" 60	M4-8 24"X12" DETOUR WEST; M3-4 24"X12"; M1-6 24"X24" 60
N39-36	**W90-36**
MO4-5 36"X18" TO NORTH; MB3-1 36"X18"; M1-1 36"X36" INTERSTATE 39	MO4-5 36"X18" TO WEST; MB3-4 36"X18"; M1-1 36"X36" INTERSTATE 90
N39-24	**W90-24**
MO4-5 24"X12" TO NORTH; MB3-1 24"X12"; M1-1 24"X24" INTERSTATE 39	MO4-5 24"X12" TO WEST; MB3-4 24"X12"; M1-1 24"X24" INTERSTATE 90
W94-36	**S39-36**
MO4-5 36"X18" TO WEST; MB3-4 36"X18"; M1-1 36"X36" INTERSTATE 94	MO4-5 36"X18" TO SOUTH; MB3-4 36"X18"; M1-1 36"X36" INTERSTATE 39
W94-24	**E90-36**
MO4-5 24"X12" TO WEST; MB3-4 24"X12"; M1-1 24"X24" INTERSTATE 94	MO4-5 36"X18" TO EAST; MB3-2 36"X18"; M1-1 36"X36" INTERSTATE 90
	E94-36
	MO4-5 36"X18" TO EAST; MB3-2 36"X18"; M1-1 36"X36" INTERSTATE 94

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C UNLESS OTHERWISE NOTED



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #10	SHEET 177	E

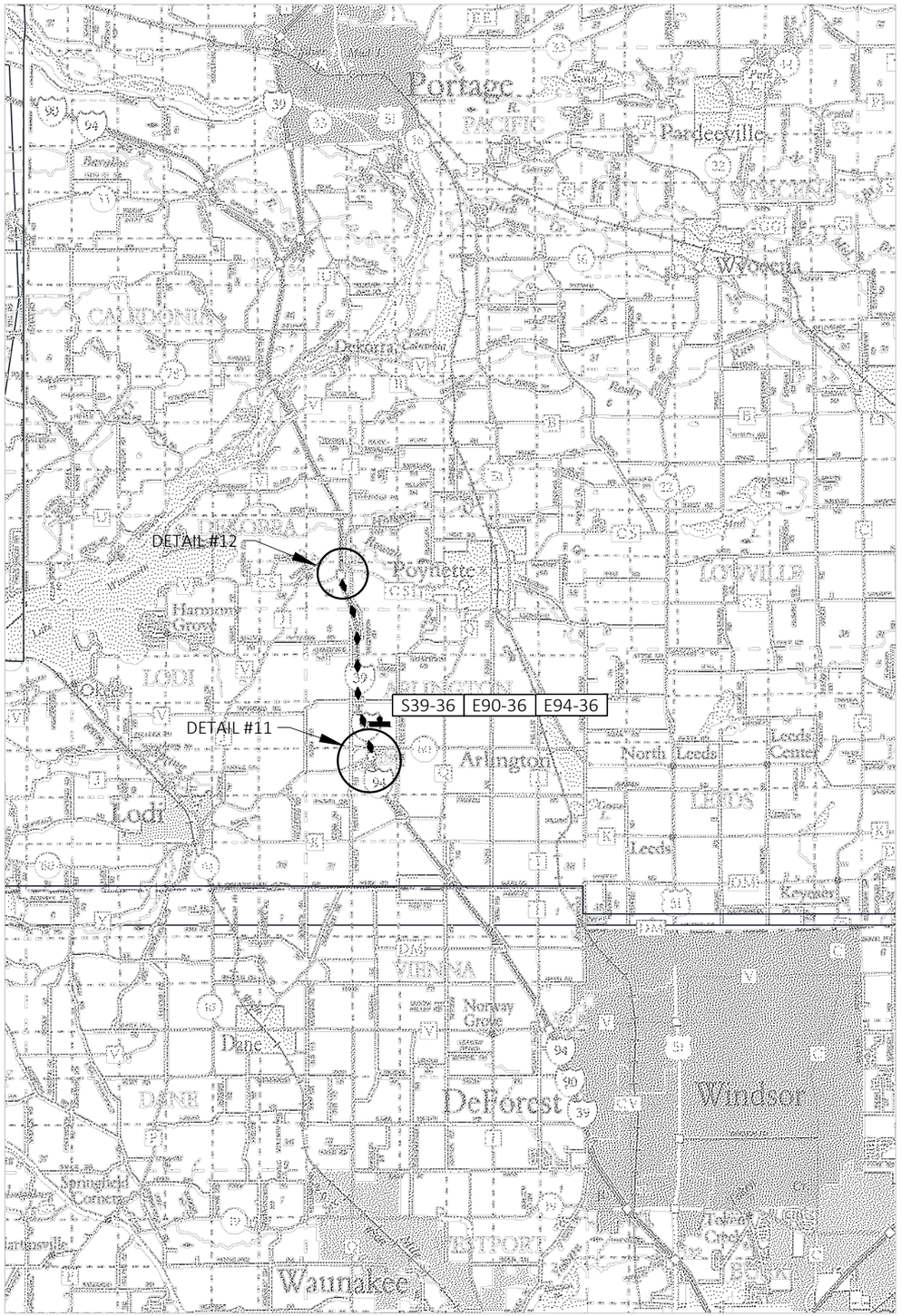
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT_S3 NB ON.DWG
LAYOUT NAME - BLOW UP #10

PLOT DATE : 1/19/2022 6:37 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : ##########

SIGN CODES

E60-36	W60-36	N39-36	W90-36	W94-36
M4-8 36"X18" DETOUR EAST 60 M3-2 36"X18" M1-6 36"X36"	M4-8 36"X18" DETOUR WEST 60 M3-4 36"X18" M1-6 36"X36"	MO4-5 36"X18" TO NORTH INTERSTATE 39 MB3-1 36"X18" M1-1 36"X36"	MO4-5 36"X18" TO WEST INTERSTATE 90 MB3-4 36"X18" M1-1 36"X36"	MO4-5 36"X18" TO WEST INTERSTATE 94 MB3-4 36"X18" M1-1 36"X36"
E60-24	**W60-24**	**N39-24**	**W90-24**	**W94-24**
M4-8 24"X12" DETOUR EAST 60 M3-2 24"X12" M1-6 24"X24"	M4-8 24"X12" DETOUR WEST 60 M3-4 24"X12" M1-6 24"X24"	MO4-5 24"X12" TO NORTH INTERSTATE 39 MB3-1 24"X12" M1-1 24"X24"	MO4-5 24"X12" TO WEST INTERSTATE 90 MB3-4 24"X12" M1-1 24"X24"	MO4-5 24"X12" TO WEST INTERSTATE 94 MB3-4 24"X12" M1-1 24"X24"
EXISTING SIGN 1 (ES1)		**S39-36**	**E90-36**	**E94-36**
SOUTH INTERSTATE 39 EAST INTERSTATE 90 EAST INTERSTATE 94		MO4-5 36"X18" TO SOUTH INTERSTATE 39 MB3-4 36"X18" M1-1 36"X36"	MO4-5 36"X18" TO EAST INTERSTATE 90 MB3-2 36"X18" M1-1 36"X36"	MO4-5 36"X18" TO EAST INTERSTATE 94 MB3-2 36"X18" M1-1 36"X36"

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C "DETOUR SIGNING FOR MAINLINE CLOSURES" UNLESS OTHERWISE NOTED.



N

LEGEND

- DETOUR ROUTE
- EXISTING SIGN
- TRAFFIC CONTROL SIGN
- COVER EXISTING SIGN
- NEW SIGN SINGLE/DOUBLE POST
- EXISTING SIGN SINGLE/DOUBLE POST
- TRAFFIC CONTROL BARRICADE TYPE III WITH/WITHOUT SIGN
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR OVERVIEW - STAGE 4	SHEET 178	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - OVERVIEW STAGE 4

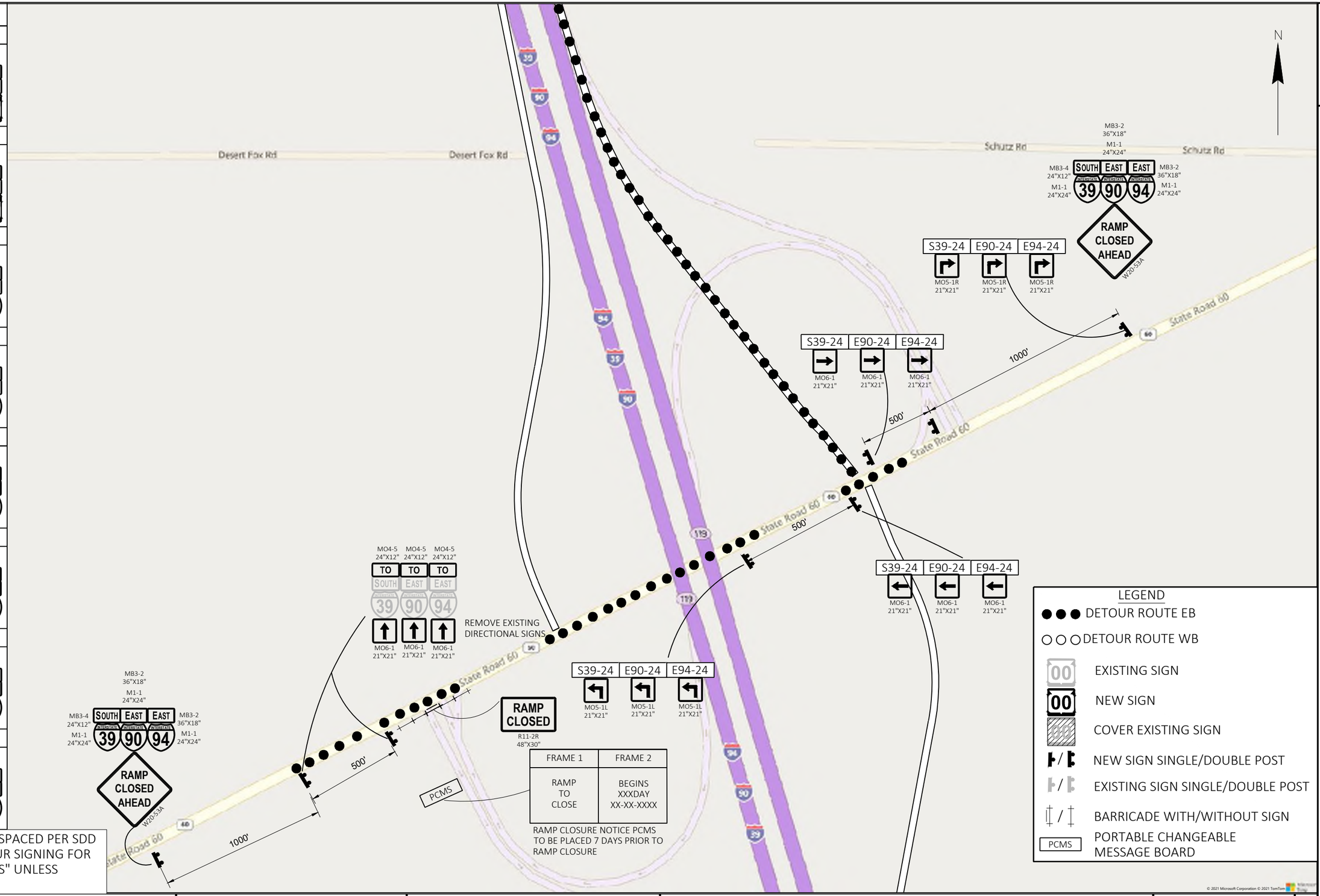
PLOT DATE : 1/19/2022 6:38 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

SIGN CODES

E60-36	W60-36
M4-8 36"X18" DETOUR EAST; M3-2 36"X18"; M1-6 36"X36" 60	M4-8 36"X18" DETOUR WEST; M3-4 36"X18"; M1-6 36"X36" 60
E60-24	**W60-24**
M4-8 24"X12" DETOUR EAST; M3-2 24"X12"; M1-6 24"X24" 60	M4-8 24"X12" DETOUR WEST; M3-4 24"X12"; M1-6 24"X24" 60
N39-36	**W90-36**
MO4-5 36"X18" TO NORTH; MB3-1 36"X18"; M1-1 36"X36" INTERSTATE 39	MO4-5 36"X18" TO WEST; MB3-4 36"X18"; M1-1 36"X36" INTERSTATE 90
N39-24	**W90-24**
MO4-5 24"X12" TO NORTH; MB3-1 24"X12"; M1-1 24"X24" INTERSTATE 39	MO4-5 24"X12" TO WEST; MB3-4 24"X12"; M1-1 24"X24" INTERSTATE 90
W94-36	**S39-36**
MO4-5 36"X18" TO WEST; MB3-4 36"X18"; M1-1 36"X36" INTERSTATE 94	MO4-5 36"X18" TO SOUTH; MB3-4 36"X18"; M1-1 36"X36" INTERSTATE 39
W94-24	**S39-24**
MO4-5 24"X12" TO WEST; MB3-4 24"X12"; M1-1 24"X24" INTERSTATE 94	MO4-5 24"X12" TO SOUTH; MB3-4 24"X12"; M1-1 24"X24" INTERSTATE 39
E90-36	**E94-36**
MO4-5 36"X18" TO EAST; MB3-2 36"X18"; M1-1 36"X36" INTERSTATE 90	MO4-5 36"X18" TO EAST; MB3-2 36"X18"; M1-1 36"X36" INTERSTATE 94
E90-24	**E94-24**
MO4-5 24"X12" TO EAST; MB3-2 24"X12"; M1-1 24"X24" INTERSTATE 90	MO4-5 24"X12" TO EAST; MB3-2 24"X12"; M1-1 24"X24" INTERSTATE 94

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C "DETOUR SIGNING FOR MAINLINE CLOSURES" UNLESS OTHERWISE NOTED



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #11	SHEET 179	E

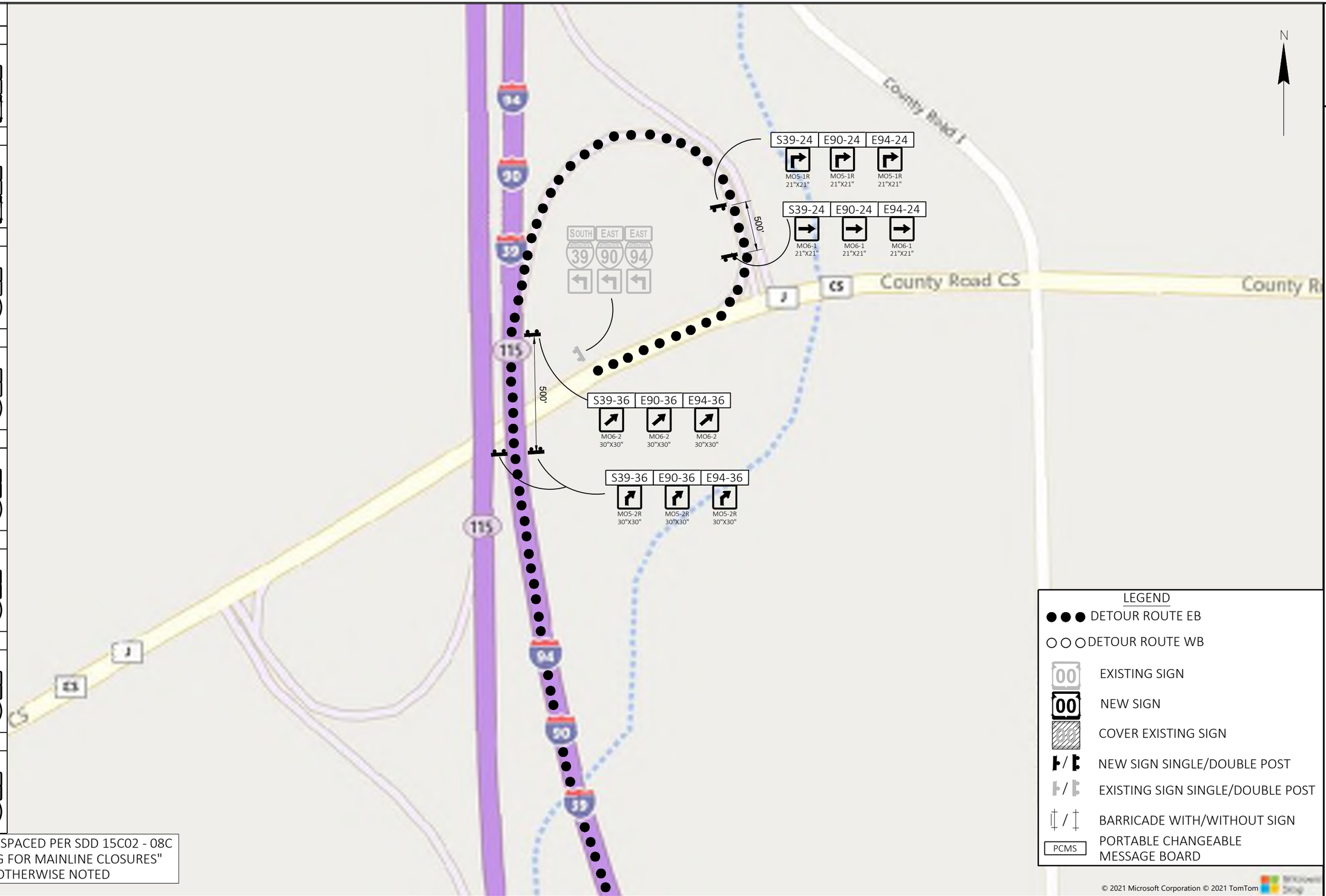
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - BLOW UP #11

PLOT DATE : 1/19/2022 6:38 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : ##########

SIGN CODES

E60-36	W60-36
M4-8 36"X18" DETOUR; M3-2 36"X18" EAST; M1-6 36"X36" 60	M4-8 36"X18" DETOUR; M3-4 36"X18" WEST; M1-6 36"X36" 60
E60-24	**W60-24**
M4-8 24"X12" DETOUR; M3-2 24"X12" EAST; M1-6 24"X24" 60	M4-8 24"X12" DETOUR; M3-4 24"X12" WEST; M1-6 24"X24" 60
N39-36	**W90-36**
MO4-5 36"X18" TO; MB3-1 36"X18" NORTH; M1-1 36"X36" INTERSTATE 39	MO4-5 36"X18" TO; MB3-4 36"X18" WEST; M1-1 36"X36" INTERSTATE 90
N39-24	**W90-24**
MO4-5 24"X12" TO; MB3-1 24"X12" NORTH; M1-1 24"X24" INTERSTATE 39	MO4-5 24"X12" TO; MB3-4 24"X12" WEST; M1-1 24"X24" INTERSTATE 90
W94-36	**S39-36**
MO4-5 36"X18" TO; MB3-4 36"X18" WEST; M1-1 36"X36" INTERSTATE 94	MO4-5 36"X18" TO; MB3-4 36"X18" SOUTH; M1-1 36"X36" INTERSTATE 39
W94-24	**S39-24**
MO4-5 24"X12" TO; MB3-4 24"X12" WEST; M1-1 24"X24" INTERSTATE 94	MO4-5 24"X12" TO; MB3-4 24"X12" SOUTH; M1-1 24"X24" INTERSTATE 39
E90-36	**E94-36**
MO4-5 36"X18" TO; MB3-2 36"X18" EAST; M1-1 36"X36" INTERSTATE 90	MO4-5 36"X18" TO; MB3-2 36"X18" EAST; M1-1 36"X36" INTERSTATE 94
E90-24	**E94-24**
MO4-5 24"X12" TO; MB3-2 24"X12" EAST; M1-1 24"X24" INTERSTATE 90	MO4-5 24"X12" TO; MB3-2 24"X12" EAST; M1-1 24"X24" INTERSTATE 94

NOTE: SIGNS TO BE SPACED PER SDD 15C02 - 08C "DETOUR SIGNING FOR MAINLINE CLOSURES" UNLESS OTHERWISE NOTED



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR ROUTE - DETAIL #12	SHEET 180	E

LEGEND

TYPE III BARRICADE	TYPE A WARNING LIGHT (FLASHING)
TYPE III BARRICADE WTH ATTACHED SIGN	TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
TRAFFIC CONTROL DRUM	TYPE C WARNING LIGHT (STEADY BURN)
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	CONCRETE BARRIER TEMPORARY PRECAST
FLASHING ARROW BOARD	WORK AREA
SIGN ON PERMANENT SUPPORT	DIRECTION OF TRAFFIC
SIGN ON TEMPORARY SUPPORT	PCMS — PORTABLE CHANGEABLE MESSAGE BOARD
PAVEMENT REMOVAL	SFM — TRAFFIC CONTROL SIGNS FIXED MESSAGE
SAW CUT	PORTABLE TRAFFIC SENSOR

TM4W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- WHITE
TM4Y	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH- YELLOW
TM8W	TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH- WHITE
TME4W	TEMPORARY MARKING LINE EPOXY 4-INCH-WHITE
TME4Y	TEMPORARY MARKING LINE EPOXY 4-INCH- YELLOW
TME8W	TEMPORARY MARKING LINE EPOXY 8-INCH- WHITE

PC: 81+30.00"X2"

PT: 79+50.00"X2"

PC: 73+50.00"X2"

N

FOR BRIDGE WORK ON B-11-15 AND B-11-16, USE ROAD CLOSURES AT NIGHT. SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES".

ROAD CLOSED AHEAD W20-3A

ROAD CLOSED 1000 FT W20-3C

ROAD CLOSED 500 FT W20-3D

ROAD CLOSED R11-2 48"X30"

PCMS

DURING NIGHTTIME CLOSURES:

DAYTIME (HWY 60 OPEN):

FRAME 1	FRAME 2
NIGHTLY ROAD CLOSURE	XPM TO XAM

NIGHTTIME (HWY 60 CLOSED):

FRAME 1	FRAME 2
HWY 60 CLOSED AHEAD	USE I-39 SOUTH

PREWARNING:

FRAME 1	FRAME 2
NIGHTLY ROAD CLOSURE	BEGINS XXXDAY XX XX XX

NIGHTLY ROAD CLOSURE PREWARNING PCMS TO BE PLACED 7 DAYS PRIOR TO START OF NIGHTLY ROAD CLOSURE.

PREWARNING:

FRAME 1	FRAME 2
NIGHTLY ROAD CLOSURE	BEGINS XXXDAY XX XX XX

NIGHTLY ROAD CLOSURE PREWARNING PCMS TO BE PLACED 7 DAYS PRIOR TO START OF NIGHTLY ROAD CLOSURE.

DURING NIGHTTIME CLOSURES:

DAYTIME (HWY 60 OPEN):

FRAME 1	FRAME 2
NIGHTLY ROAD CLOSURE	XPM TO XAM

NIGHTTIME (HWY 60 CLOSED):

FRAME 1	FRAME 2
HWY 60 CLOSED AHEAD	USE I-39 NORTH

PROJECT NO: 1012-01-74	HWY: STH 60	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4 NIGHT CLOSURE - STH 60	SHEET 181 E

FILE NAME : N:\PDS\C3D\10120104\SHEETSOTHER\CONCEPT - NIGHTLY CLOSURE - STAGE 4.DWG
LAYOUT NAME - Stage 4

PLOT DATE : 1/18/2022 1:49 PM PLOT BY : COLE, RYAN DAVID PLOT NAME : PLOT SCALE : Custom

WISDOT/CADDS SHEET 44

2

LEGEND

PCMS	PORTABLE CHANGEABLE MESSAGE BOARD
	DETOUR ROUTE
XXXXX	RAMP CLOSURE
	TC DRUM
	TC DRUM W/ TYPE C LIGHT
	EXISTING POST MOUNTED SIGN
	TC BARRICADE TYPE III
	TC BARRICADE TYPE III W/ SIGN

N

EXIT 126
V
Dane
DeForest
1 MILE

PCMS

DURING CLOSURE

FRAME 1	FRAME 2
TO I39 NORTH/ HWY 60EB	USE EXIT 126

EXIT 126
V
Dane
DeForest



DURING CLOSURE

FRAME 1	FRAME 2
TO I39 NORTH/ HWY 60EB	TURN LEFT

PCMS

PCMS

DURING CLOSURE

FRAME 1	FRAME 2
TO HWY 60 EB	TURN LEFT

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR - STH 60 NIGHTLY CLOSURES	SHEET 182	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\027001-DT.DWG PLOT DATE : 11/23/2021 12:35 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:200 FT
LAYOUT NAME - DETAIL 2
WISDOT/CADDS SHEET 42

2

2

N

EXIT
115

PCMS

DURING CLOSURE

FRAME 1	FRAME 2
TO I39 SOUTH/ HWY 60WB	TURN RIGHT

CTH CS

DURING CLOSURE

FRAME 1	FRAME 2
TO HWY 60 WB	TURN LEFT

PCMS

IH 39 SB/ 90/94 EB

IH 39 NB/ 90/94 WB

DURING CLOSURE

FRAME 1	FRAME 2
TO I39 SOUTH/ HWY 60WB	USE EXIT 115

EXIT 115
CS
Poynette
Lake Wisconsin
1 MILE

PCMS

LEGEND

PCMS	PORTABLE CHANGEABLE MESSAGE BOARD
	DETOUR ROUTE
XXXXX	RAMP CLOSURE
	TC DRUM
	TC DRUM W/ TYPE C LIGHT
	EXISTING POST MOUNTED SIGN
	TC BARRICADE TYPE III
	TC BARRICADE TYPE III W/ SIGN

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	DETOUR - STH 60 NIGHTLY CLOSURES	SHEET 183	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - I-39 PATCHING_1011-01-30\900_CAD_GIS\910_CAD\1011-01-30_60_75\PLAN SHEETS\1011-01-35_COLUMBIA\027002-DT.DWG PLOT DATE : 11/29/2021 9:53 AM PLOT BY : OLSON, JOSHUA PLOT NAME :
LAYOUT NAME - DETAIL 4

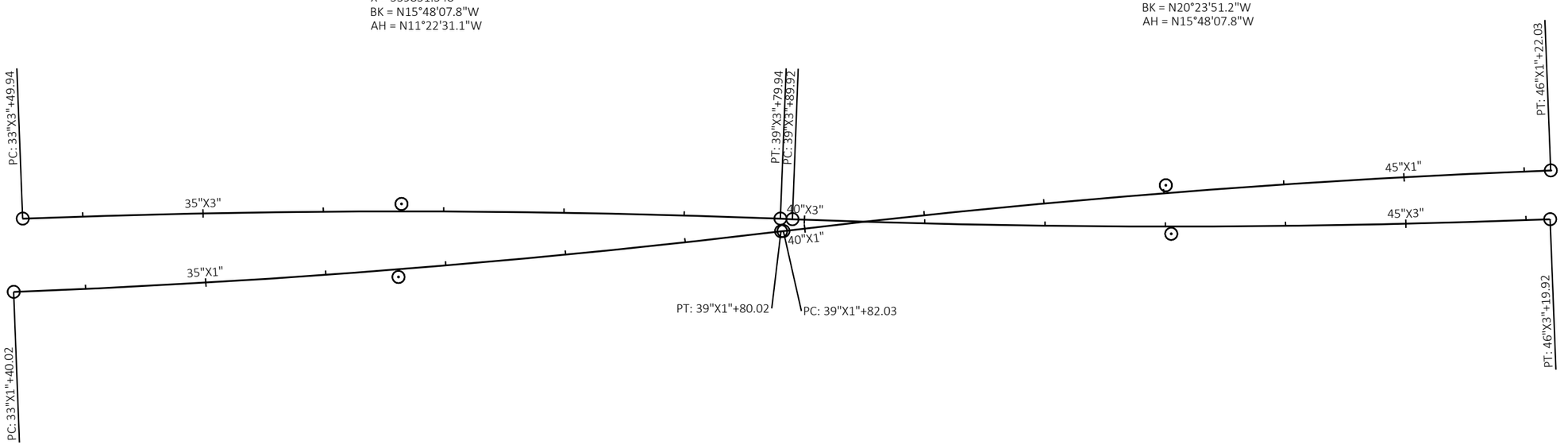
PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

PI STA = 36"X3"+65.10
Y = 317129.082
X = 539893.508
DELTA = 4°25'37"
D = 0°42'10"
T = 315.16'
L = 630.00'
R = 8153.95'
PC STA = 33"X3"+49.94
Y = 316825.836
X = 539979.330
PT STA = 39"X3"+79.94
Y = 317438.048
X = 539831.348
BK = N15°48'07.8"W
AH = N11°22'31.1"W

PI STA = 43"X1"+02.20
Y = 317742.964
X = 539729.125
DELTA = 4°35'43"
D = 0°43'05"
T = 320.17'
L = 640.00'
R = 7979.57'
PC STA = 39"X1"+82.03
Y = 317442.868
X = 539840.715
PT STA = 46"X1"+22.03
Y = 318051.035
X = 539641.937
BK = N20°23'51.2"W
AH = N15°48'07.8"W



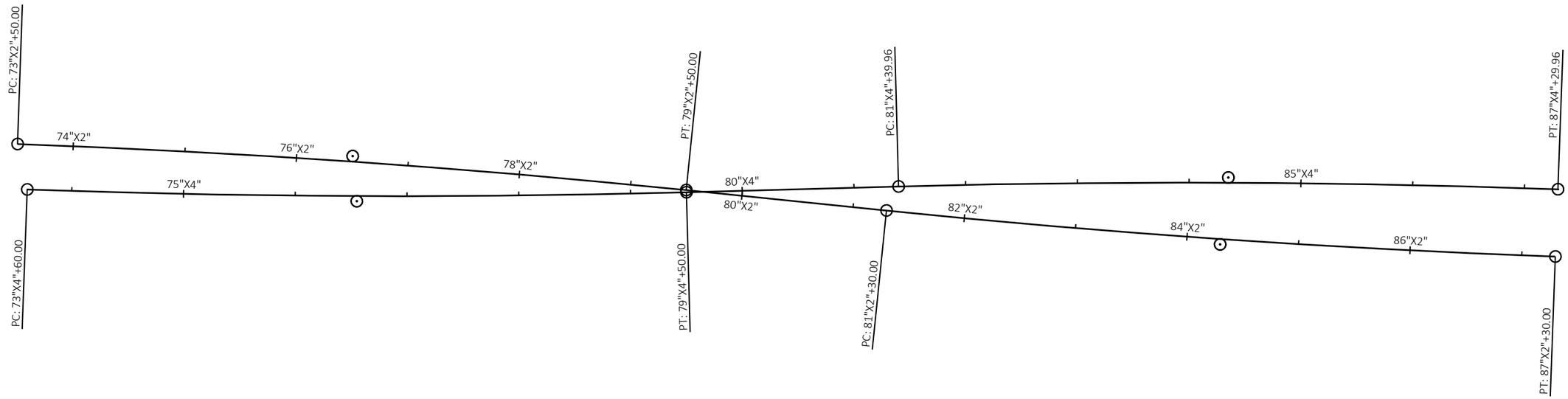
PI STA = 36"X1"+60.19
Y = 317140.884
X = 539953.007
DELTA = 4°35'29"
D = 0°43'03"
T = 320.17'
L = 640.00'
R = 7986.32'
PC STA = 33"X1"+40.02
Y = 316832.819
X = 540040.216
PT STA = 39"X1"+80.02
Y = 317440.980
X = 539841.417
BK = N15°48'21.8"W
AH = N20°23'51.2"W

PI STA = 43"X3"+05.07
Y = 317756.791
X = 539767.221
DELTA = 4°25'51"
D = 0°42'12"
T = 315.16'
L = 630.00'
R = 8146.80'
PC STA = 39"X3"+89.92
Y = 317447.825
X = 539829.381
PT STA = 46"X3"+19.92
Y = 318060.031
X = 539681.378
BK = N11°22'31.1"W
AH = N15°48'21.8"W

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSSOVER ALIGNMENT	SHEET 184	E

PI STA = 76"X2"+50.11
Y = 320965.883
X = 538816.999
DELTA = 3°45'30"
D = 0°37'35"
T = 300.11'
L = 600.00'
R = 9146.95'
PC STA = 73"X2"+50.00
Y = 320677.117
X = 538898.723
PT STA = 79"X2"+50.00
Y = 321259.385
X = 538754.379
BK = N15°48'07.8"W
AH = N12°02'37.7"W

PI STA = 84"X4"+35.06
Y = 321717.533
X = 538594.919
DELTA = 3°36'55"
D = 0°36'46"
T = 295.10'
L = 590.00'
R = 9350.40'
PC STA = 81"X4"+39.96
Y = 321439.220
X = 538693.024
PT STA = 87"X4"+29.96
Y = 322001.479
X = 538514.559
BK = N19°25'02.9"W
AH = N15°48'07.8"W

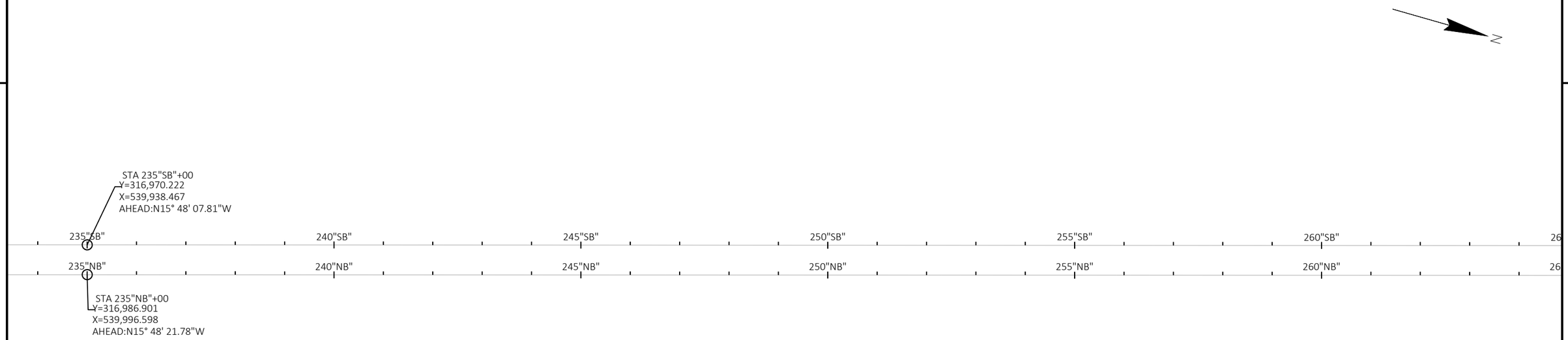


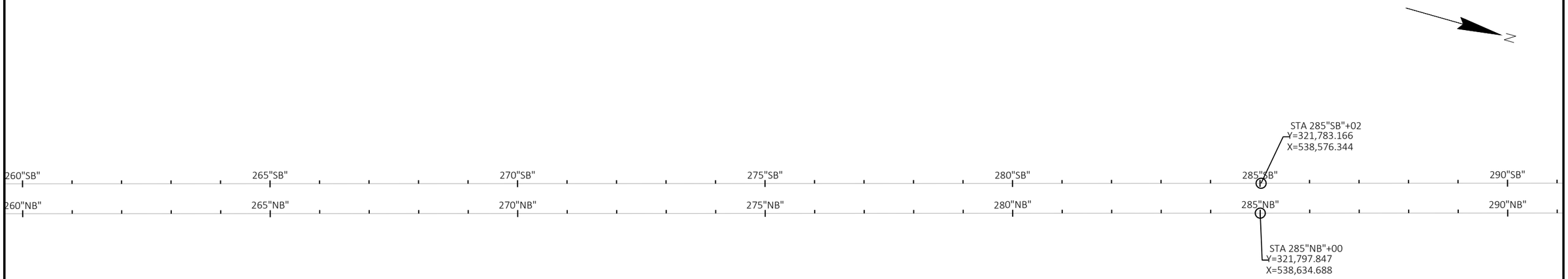
PI STA = 76"X4"+55.10
Y = 320981.752
X = 538854.281
DELTA = 3°36'41"
D = 0°36'44"
T = 295.10'
L = 590.00'
R = 9360.45'
PC STA = 73"X4"+60.00
Y = 320697.812
X = 538934.660
PT STA = 79"X4"+50.00
Y = 321260.065
X = 538756.176
BK = N15°48'21.8"W
AH = N19°25'02.9"W

PI STA = 84"X2"+30.11
Y = 321728.923
X = 538654.200
DELTA = 3°45'44"
D = 0°37'37"
T = 300.11'
L = 600.00'
R = 9137.51'
PC STA = 81"X2"+30.00
Y = 321435.421
X = 538716.820
PT STA = 87"X2"+30.00
Y = 322017.683
X = 538572.456
BK = N12°02'37.7"W
AH = N15°48'21.8"W

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSSOVER ALIGNMENT	SHEET 185	E

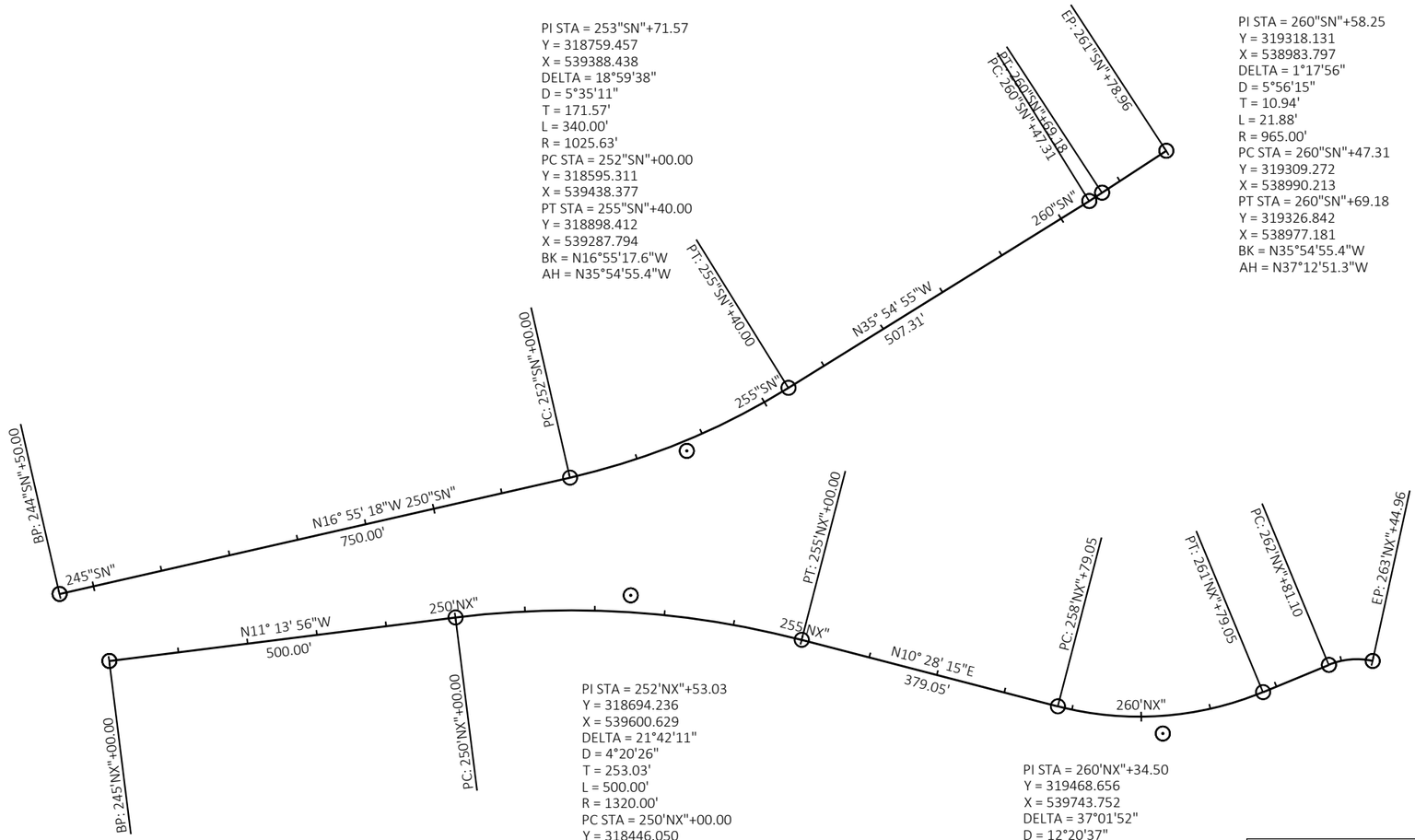
2





PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT: EXISTING IH 39 NB AND SB (FOR INFORMATIONAL PURPOSES)	SHEET 186	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\027203-AD_EX IH 39 NB SB.DWG
LAYOUT NAME - Plan Dbl 1 IN 200 FT
PLOT DATE : 1/24/2022 1:25 PM
PLOT BY : ANDERSON, SHAUN M
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44



SUPERELEVATION REPORT FOR 'IH 39 SB ON ("SN") RAMP'

TRANSITION EVENT POINTS		RATE (FT/FT)		
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE
LOCATION	STATION	LEFT SHOULDER	LEFT LANE	RIGHT SHOULDER
CURVE 1				
End Normal Crown	251+50.00'	-0.040	-0.020	
Low Shoulder Match	252+00.00'	-0.040	-0.040	
Begin Full Super	252+50.00'	-0.059	-0.059	
Gore Shoulder Match	252+75.66'	-0.059	-0.059	0.044
Begin Full Shoulder Super	253+00.00'	-0.059	-0.059	0.059
End Full Super	255+00.00'	-0.059	-0.059	0.059
Low Shoulder Match	255+50.00'	-0.040	-0.040	0.040
Reverse Crown	256+00.00'	-0.040	-0.020	0.020
Level Crown	256+50.00'	-0.040	-0.020	0.000
Begin Normal Crown	257+00.00'	-0.040	-0.020	-0.020
Begin Normal Shoulder	257+50.00'	-0.040	-0.020	-0.040
CURVE 2				
End Normal Shoulder	258+84.00	-0.040	-0.020	-0.040
Begin Shoulder Crown Match	260+00.00	-0.020	-0.020	0.020

SUPERELEVATION REPORT FOR 'IH 39 NB OFF ("NX") RAMP'

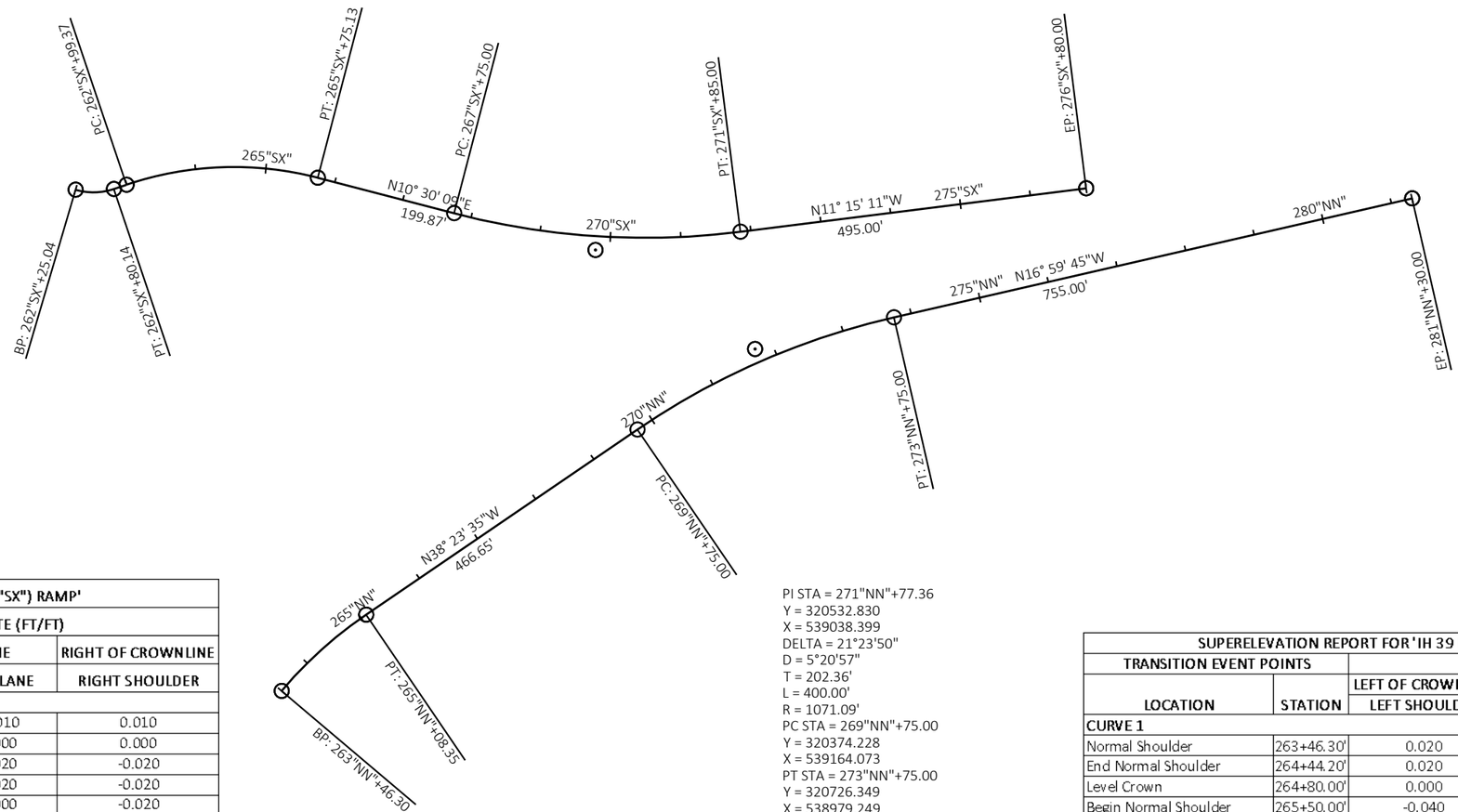
TRANSITION EVENT POINTS		RATE (FT/FT)		
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE
LOCATION	STATION	LEFT SHOULDER	RIGHT LANE	RIGHT SHOULDER
CURVE 1				
Gore Shoulder Match	247+37.50	0.036	-0.020	-0.040
High Shoulder Match	248+00.00	0.020	-0.020	-0.040
End Normal Crown	249+50.00	0.020	-0.020	-0.040
Low Shoulder Match	250+00.00	0.040	-0.040	-0.040
Begin Full Super	250+50.00	0.059	-0.059	-0.059
End Full Super	254+50.00	0.059	-0.059	-0.059
Low Shoulder Match	255+00.00	0.040	-0.040	-0.040
Reverse Crown	255+50.00	0.020	-0.020	-0.040
Level Crown	256+00.00	0.000	-0.020	-0.040
Begin Normal Crown	256+50.00	-0.020	-0.020	-0.040
Begin Normal Shoulder	257+00.00	-0.040	-0.020	-0.040
CURVE 2				
End Normal Shoulder	257+75.00	-0.040	-0.020	-0.040
End Normal Crown	258+14.00	-0.040	-0.020	-0.020
Level Crown	258+53.00	-0.040	0.000	0.000
Begin Reverse Crown	258+92.00	-0.040	0.020	0.020
End Normal Low Shoulder	261+34.00	-0.040	0.020	0.020
End Reverse Crown	261+54.00	-0.020	0.020	0.020
Level Crown	262+28.92	0.000	0.000	0.000
Begin Normal Crown/Shoulder	262+58.92	0.010	-0.010	-0.010

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT SN AND SX RAMP	SHEET 187	E

2

PI STA = 264"SX"+41.26
Y = 319756.669
X = 538814.061
DELTA = 33°15'46"
D = 12°03'44"
T = 141.89'
L = 275.76'
R = 475.00'
PC STA = 262"SX"+99.37
Y = 319625.830
X = 538868.954
PT STA = 265"SX"+75.13
Y = 319896.179
X = 538839.924
BK = N22°45'37.4"W
AH = N10°30'09.1"E

PI STA = 269"SX"+82.50
Y = 320296.721
X = 538914.179
DELTA = 21°45'20"
D = 5°18'22"
T = 207.50'
L = 410.00'
R = 1079.78'
PC STA = 267"SX"+75.00
Y = 320092.698
X = 538876.356
PT STA = 271"SX"+85.00
Y = 320500.231
X = 538873.686
BK = N10°30'09.1"E
AH = N11°15'11.2"W



PI STA = 271"NN"+77.36
Y = 320532.830
X = 539038.399
DELTA = 21°23'50"
D = 5°20'57"
T = 202.36'
L = 400.00'
R = 1071.09'
PC STA = 269"NN"+75.00
Y = 320374.228
X = 539164.073
PT STA = 273"NN"+75.00
Y = 320726.349
X = 538979.249
BK = N38°23'34.5"W
AH = N16°59'44.8"W

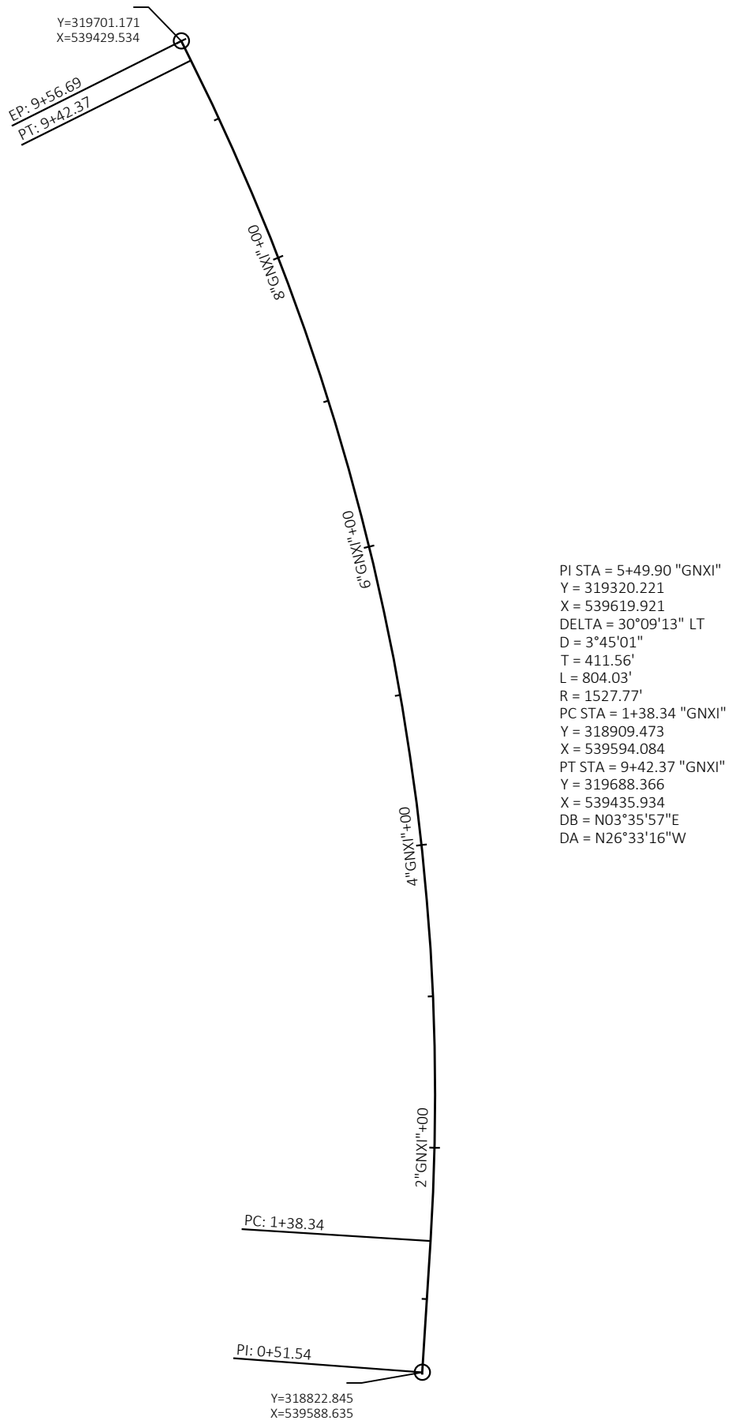
SUPERELEVATION REPORT FOR 'IH 39 SB OFF ("SX") RAMP'

TRANSITION EVENT POINTS		RATE (FT/FT)		
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE
LOCATION	STATION	LEFT SHOULDER	LEFT LANE	RIGHT SHOULDER
CURVE 1				
End Normal Crown	263+51.76'	-0.010	-0.010	0.010
Level Crown	263+76.65'	0.000	0.000	0.000
Reverse Crown	264+26.76'	0.020	0.020	-0.020
Reverse Crown	265+62.00'	0.020	0.020	-0.020
Level Crown	266+00.00'	0.000	0.000	-0.020
Begin Shoulder Match	266+40.00'	-0.020	-0.020	-0.020
CURVE 2				
Level Outside Shoulder	266+73.00'	-0.040	-0.020	0.000
Reverse Shoulder	267+24.00'	-0.040	-0.020	0.020
Low Shoulder Match	267+75.00'	-0.040	-0.040	0.040
Begin Full Super	268+26.00'	-0.060	-0.060	0.060
End Full Super	271+34.00'	-0.060	-0.060	0.060
Low Shoulder Match	271+85.00'	-0.040	-0.040	0.040
Begin High Shoulder Match	272+36.00'	-0.040	-0.020	0.020
End High Shoulder Match	273+89.00'	-0.040	-0.020	0.020
Gore Shoulder Match	274+41.02'	-0.040	-0.020	0.037

SUPERELEVATION REPORT FOR 'IH 39 NB ON ("NN") RAMP'

TRANSITION EVENT POINTS		RATE (FT/FT)		
		LEFT OF CROWNLINE	RIGHT OF CROWNLINE	
LOCATION	STATION	LEFT SHOULDER	RIGHT LANE	RIGHT SHOULDER
CURVE 1				
Normal Shoulder	263+46.30'	0.020	-0.020	-0.020
End Normal Shoulder	264+44.20'	0.020	-0.020	-0.020
Level Crown	264+80.00'	0.000	-0.020	-0.040
Begin Normal Shoulder	265+50.00'	-0.040	-0.020	-0.040
CURVE 2				
End Normal Shoulder	267+71.00'	-0.040	-0.020	-0.040
Level Shoulder	268+73.00'	0.000	-0.020	-0.040
Reverse Shoulder	269+24.00'	0.020	-0.020	-0.040
Low Shoulder Match	269+75.00'	0.040	-0.040	-0.040
Begin Full Super	270+26.00'	0.060	-0.060	-0.060
End High Shoulder Match	272+59.00'	0.060	-0.060	-0.060
Gore Shoulder Match	273+10.00'	0.040	-0.060	-0.060
End Full Super	273+24.00'		-0.060	-0.060
Low Shoulder Match	273+75.00'		-0.040	-0.040
Begin Normal Crown	274+26.00'		-0.020	-0.040

2



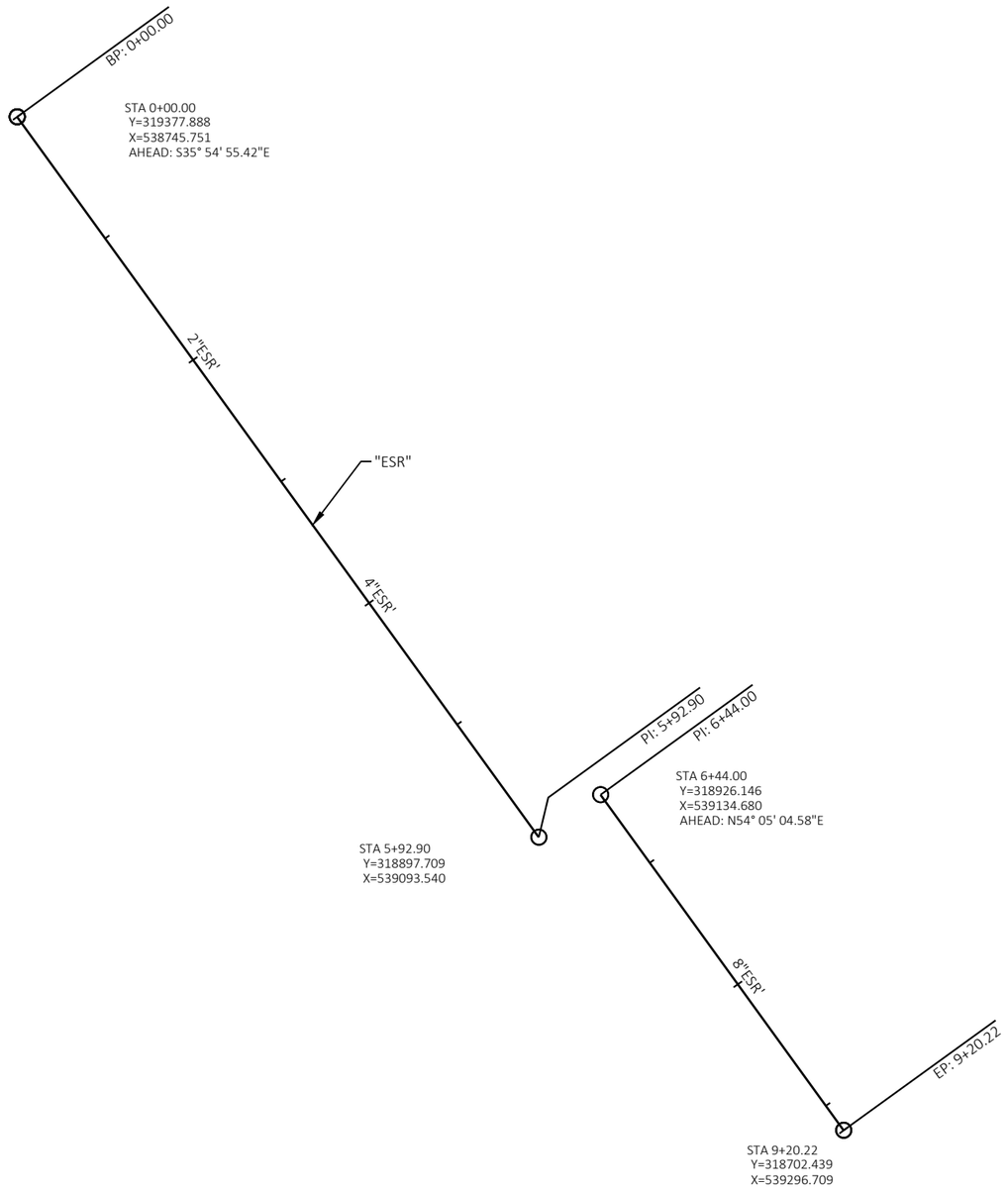


PI STA = 5+49.90 "GNXI"
Y = 319320.221
X = 539619.921
DELTA = 30°09'13" LT
D = 3°45'01"
T = 411.56'
L = 804.03'
R = 1527.77'
PC STA = 1+38.34 "GNXI"
Y = 318909.473
X = 539594.084
PT STA = 9+42.37 "GNXI"
Y = 319688.366
X = 539435.934
DB = N03°35'57"E
DA = N26°33'16"W

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT - IH 39 NB OFF "GNXI" INFIELD GRADING ALIGNMENT	SHEET 189	E

2

N



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT: EXISTING SB ON/OFF GRADING ALIGNMENT	SHEET 190	E

2

N

STA 15+04.87
Y=320669.835
X=539041.728

EP: 15+04.87

PT: 14+63.90

14"ENR2"

PI STA = 13+71.72
Y = 320549.919
X = 539101.500
DELTA = 13°17'01" RT
D = 7°10'21"
T = 93.02'
L = 185.20'
R = 798.83'
PC STA = 12+78.70
Y = 320478.431
X = 539161.015
PT STA = 14+63.90
Y = 320633.168
X = 539060.004
DB = N39°46'40"W
DA = N26°29'39"W

PC: 12+78.70

12"ENR2"

STA 10+00.00
Y=320264.243
X=539339.328

BP: 10+00.00

EP: 5+34.83

PI: 5+34.80

PI: 4+76.77

PI: 4+20.70

4"ENR1"

"ENR1"

PI: 3+16.73

2"ENR1"

STA 0+00.00
Y=319940.672
X=539768.474

BP: 0+00.00

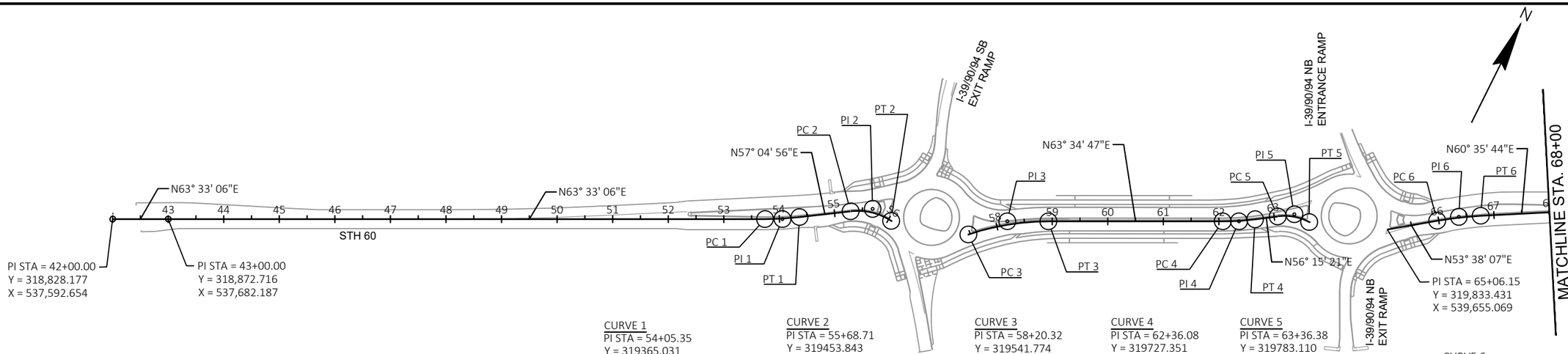
PI: 5+34.80
Y: 320397.740
X: 539492.111
BEHIND:N38° 10' 57.18"W
AHEAD:N41° 15' 03.63"W

PI: 4+76.77
Y: 320352.127
X: 539527.982
BEHIND:N32° 05' 40.53"W
AHEAD:N38° 10' 57.18"W

PI: 4+20.70
Y: 320304.625
X: 539557.774
BEHIND:N32° 48' 42.28"W
AHEAD:N32° 05' 40.53"W

PI: 3+16.73
Y: 320217.244
X: 539614.113
BEHIND:N29° 10' 00.71"W
AHEAD:N32° 48' 42.28"W

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT: EXISTING NB ON/OFF GRADING ALIGNMENT	SHEET 191	E



CURVE 1
PI STA = 54+05.35
Y = 319365.031
X = 538671.848
DELTA = 6°28'09"
D = 10°25'03"
T = 31.08'
L = 62.10'
R = 550.00'
PC STA = 53+74.27
Y = 319351.187
X = 538644.017
PT STA = 54+36.37
Y = 319381.923
X = 538697.941

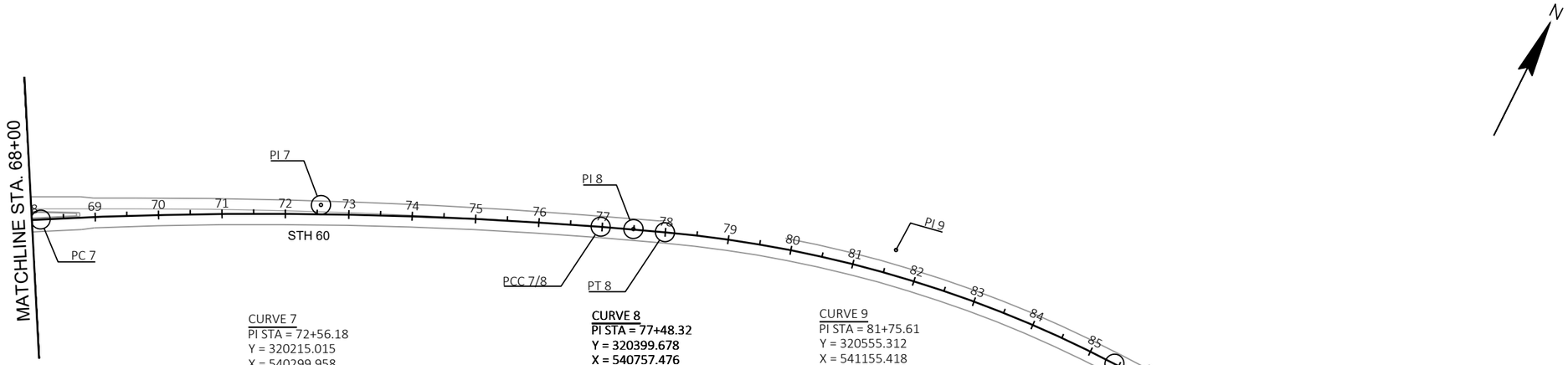
CURVE 2
PI STA = 55+68.71
Y = 319453.843
X = 538809.037
DELTA = 39°44'46"
D = 52°05'13"
T = 39.76'
L = 76.31'
R = 110.00'
PC STA = 55+28.95
Y = 319432.236
X = 538775.659
PT STA = 56+05.26
Y = 319449.116
X = 538848.516

CURVE 3
PI STA = 58+20.32
Y = 319541.774
X = 539035.958
DELTA = 18°40'30"
D = 12°43'57"
T = 73.99'
L = 146.67'
R = 450.00'
PC STA = 57+46.33
Y = 319489.366
X = 538983.724
PT STA = 58+93.00
Y = 319574.697
X = 539102.223

CURVE 4
PI STA = 62+36.08
Y = 319727.351
X = 539409.470
DELTA = 7°19'26"
D = 12°30'36"
T = 29.31'
L = 58.54'
R = 458.00'
PC STA = 62+06.77
Y = 319714.308
X = 539383.219
PT STA = 62+65.32
Y = 319743.634
X = 539433.844

CURVE 5
PI STA = 63+36.38
Y = 319783.110
X = 539492.937
DELTA = 35°10'22"
D = 60°18'41"
T = 30.11'
L = 58.32'
R = 95.00'
PC STA = 63+06.27
Y = 319766.384
X = 539467.899
PT STA = 63+64.59
Y = 319782.359
X = 539523.039

CURVE 6
PI STA = 66+36.57
Y = 319910.760
X = 539760.090
DELTA = 6°57'37"
D = 8°48'53"
T = 39.53'
L = 78.96'
R = 650.00'
PC STA = 65+97.04
Y = 319887.322
X = 539728.259
PT STA = 66+76.01
Y = 319930.168
X = 539794.527



CURVE 7
PI STA = 72+56.18
Y = 320215.015
X = 540299.958
DELTA = 7°25'28"
D = 0°50'24"
T = 442.49'
L = 883.75'
R = 6820.00'
PC STA = 68+13.68
Y = 319997.763
X = 539914.469
PCC STA = 76+97.43
Y = 320380.632
X = 540710.288

CURVE 8
PI STA = 77+48.32
Y = 320399.678
X = 540757.476
DELTA = 0°37'11"
D = 0°36'32"
T = 50.89'
L = 101.77'
R = 9410.00'
PCC STA = 76+97.43
Y = 320380.632
X = 540710.288
PT STA = 77+99.20
Y = 320418.213
X = 540804.868

CURVE 9
PI STA = 81+75.61
Y = 320555.312
X = 541155.418
DELTA = 22°24'41"
D = 3°00'56"
T = 376.41'
L = 743.19'
R = 1900.00'
PC STA = 77+99.20
Y = 320418.213
X = 540804.868
PT STA = 85+42.39
Y = 320548.408
X = 541531.761

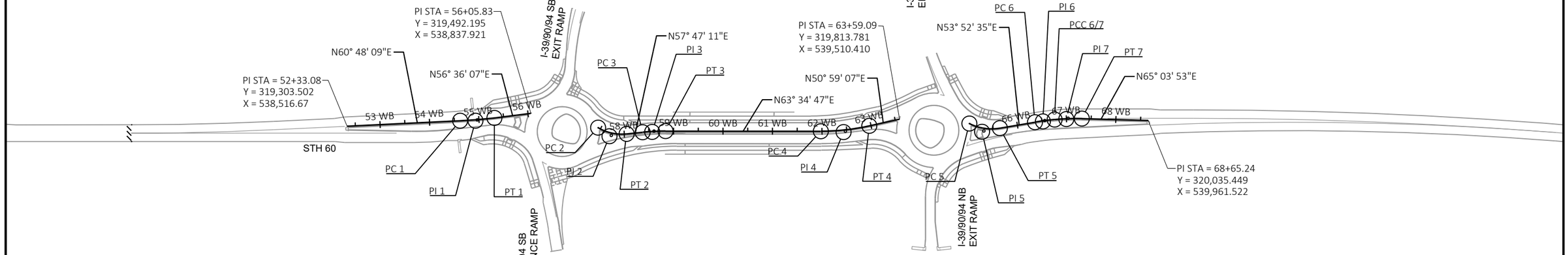
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT DETAILS	SHEET 192	E

2

CURVE 1
PI STA = 54+96.60 WB
Y = 319432.050
X = 538746.699
DELTA = 4°12'03"
D = 6°01'52"
T = 34.84'
L = 69.65'
R = 950.00'
PC STA = 54+61.76 WB
Y = 319415.054
X = 538716.285
PT STA = 55+31.41 WB
Y = 319451.228
X = 538775.787

CURVE 2
PI STA = 57+75.49 WB
Y = 319524.594
X = 539003.130
DELTA = 36°12'10"
D = 60°18'41"
T = 31.05'
L = 60.03'
R = 95.00'
PC STA = 57+44.44 WB
Y = 319526.754
X = 538972.152
PT STA = 58+04.47 WB
Y = 319541.147
X = 539029.403

CURVE 5
PI STA = 65+33.37 WB
Y = 319868.473
X = 539673.643
DELTA = 36°20'04"
D = 57°17'45"
T = 32.82'
L = 63.42'
R = 100.00'
PC STA = 65+00.56 WB
Y = 319868.594
X = 539640.828
PT STA = 65+63.98 WB
Y = 319887.819
X = 539700.149



CURVE 3
PI STA = 58+60.39 WB
Y = 319570.957
X = 539076.715
DELTA = 5°47'36"
D = 12°30'36"
T = 23.17'
L = 46.31'
R = 458.00'
PC STA = 58+37.21 WB
Y = 319558.603
X = 539057.108
PT STA = 58+83.52 WB
Y = 319581.268
X = 539097.469

CURVE 4
PI STA = 62+47.18 WB
Y = 319743.078
X = 539423.144
DELTA = 12°35'40"
D = 12°43'57"
T = 49.66'
L = 98.92'
R = 450.00'
PC STA = 61+97.52 WB
Y = 319720.983
X = 539378.673
PT STA = 62+96.44 WB
Y = 319774.339
X = 539461.728

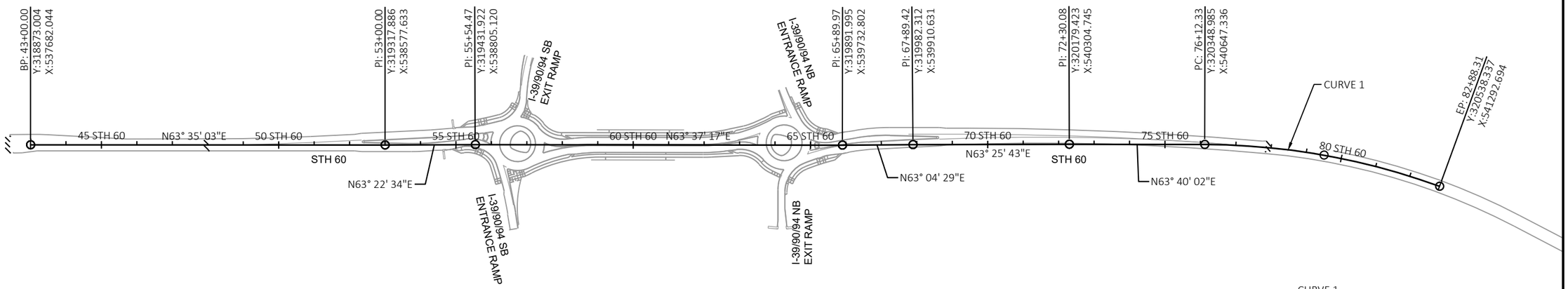
CURVE 6
PI STA = 66+55.93 WB
Y = 319942.028
X = 539774.425
DELTA = 4°08'58"
D = 10°25'03"
T = 19.92'
L = 39.83'
R = 550.00'
PC STA = 66+36.01 WB
Y = 319930.282
X = 539758.331
PCC STA = 66+75.84 WB
Y = 319952.579
X = 539791.326

CURVE 7
PI STA = 67+03.51 WB
Y = 319967.235
X = 539814.804
DELTA = 7°02'20"
D = 12°43'57"
T = 27.68'
L = 55.28'
R = 450.00'
PCC STA = 66+75.84 WB
Y = 319952.579
X = 539791.326
PT STA = 67+31.12 WB
Y = 319978.903
X = 539839.901

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT DETAILS - WB ALIGNMENT	SHEET 193	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027202_AD.DWG
LAYOUT NAME - 027202_ad
PLOT DATE : 1/10/2022 10:42 AM
PLOT BY : JACK, ROBERT A.
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

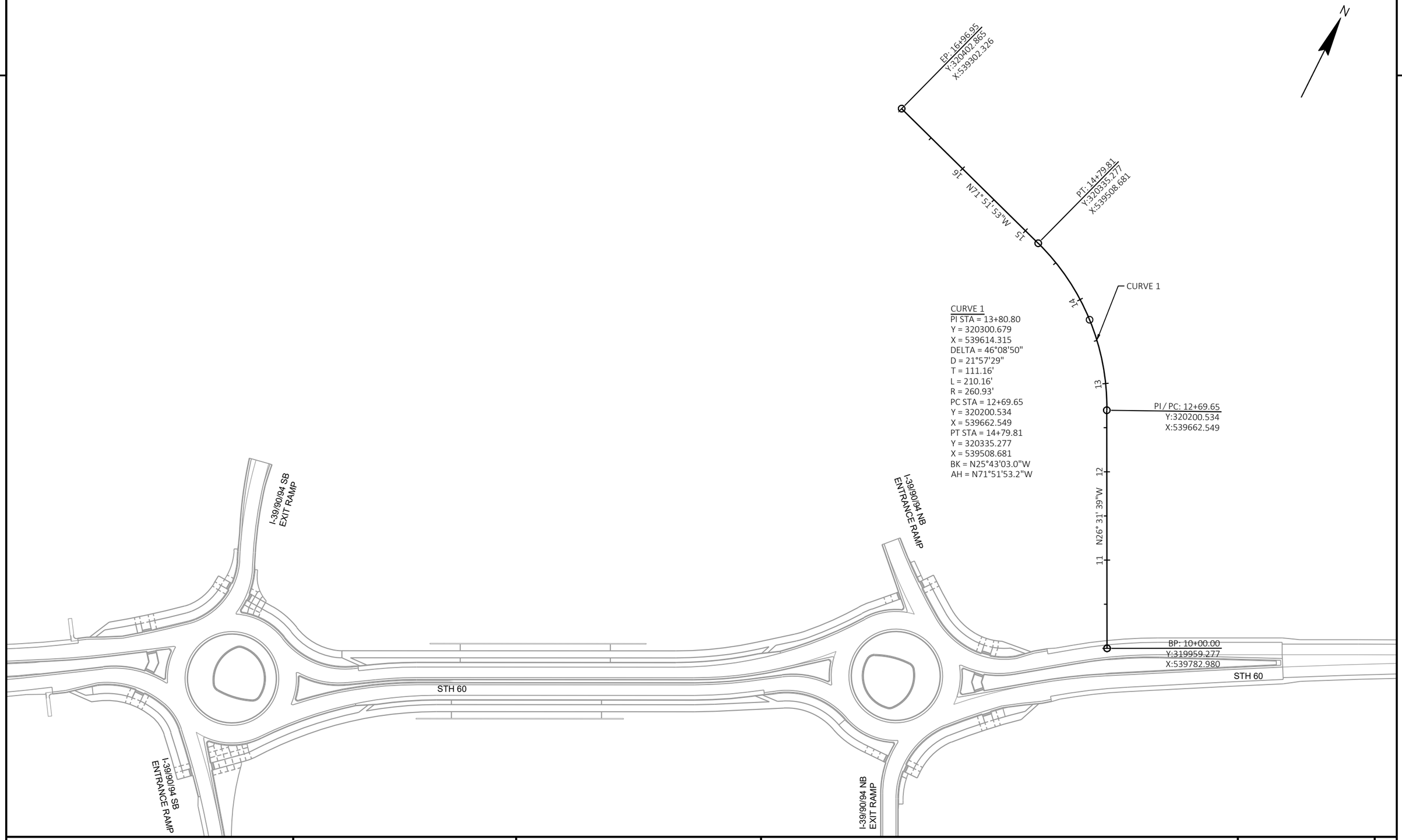


CURVE 1
PI STA = 79+53.78 STH 60
Y = 320500.447
X = 540953.354
DELTA = 19°57'42"
D = 2°57'11"
T = 341.45'
L = 675.98'
R = 1940.25'
PC STA = 76+12.33 STH 60
Y = 320348.985
X = 540647.336
PT STA = 82+88.31 STH 60
Y = 320538.337
X = 541292.694
BK = N63°40'01.9"E
AH = N83°37'43.7"E

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT DETAILS - EXISTING STH 60	SHEET 194	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\027203_AD.DWG
LAYOUT NAME - 027203_ad
PLOT DATE : 1/10/2022 10:42 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

2



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT DETAILS - TEMPORARY NB ON-RAMP - STAGE 1	SHEET 195	E

1012-01-74

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	63.000	63.000
0004	201.0205	Grubbing	STA	63.000	63.000
0006	203.0100	Removing Small Pipe Culverts	EACH	6.000	6.000
0008	203.0220	Removing Structure (structure) 01. B-11-15	EACH	1.000	1.000
0010	203.0220	Removing Structure (structure) 02. B-11-16	EACH	1.000	1.000
0012	204.0100	Removing Concrete Pavement	SY	29,100.000	29,100.000
0014	204.0115	Removing Asphaltic Surface Butt Joints	SY	450.000	450.000
0016	204.0120	Removing Asphaltic Surface Milling	SY	5,530.000	5,530.000
0018	204.0130	Removing Curb	LF	204.000	204.000
0020	204.0157	Removing Concrete Barrier	LF	5,380.000	5,380.000
0022	204.0165	Removing Guardrail	LF	1,560.000	1,560.000
0024	204.0170	Removing Fence	LF	3,860.000	3,860.000
0026	204.0180	Removing Delineators and Markers	EACH	44.000	44.000
0028	204.0190	Removing Surface Drains	EACH	5.000	5.000
0030	204.0195	Removing Concrete Bases	EACH	5.000	5.000
0032	204.0220	Removing Inlets	EACH	17.000	17.000
0034	204.0245	Removing Storm Sewer (size) 01. 12-INCH	LF	240.000	240.000
0036	204.0245	Removing Storm Sewer (size) 02. 18-INCH	LF	276.000	276.000
0038	204.0245	Removing Storm Sewer (size) 03. 21-INCH	LF	11.000	11.000
0040	204.0245	Removing Storm Sewer (size) 04. 30-INCH	LF	6.000	6.000
0042	204.9060.S	Removing (item description) 01. Removing Business Sign	EACH	1.000	1.000
0044	204.9060.S	Removing (item description) 02. Removing Business Water System	EACH	1.000	1.000
0046	204.9060.S	Removing (item description) 03. Removing Business Electrical System	EACH	1.000	1.000
0048	205.0100	Excavation Common	CY	238,100.000	238,100.000
0050	205.0200	Excavation Rock	CY	4,200.000	4,200.000
0052	206.1000	Excavation for Structures Bridges (structure) 01. B-11-165	LS	1.000	1.000
0054	206.1000	Excavation for Structures Bridges (structure) 02. B-11-166	LS	1.000	1.000
0056	209.0300.S	Backfill Coarse Aggregate (size) 01. NO. 1	CY	22.000	22.000
0058	209.2500	Backfill Granular Grade 2	TON	8,906.000	8,906.000
0060	210.1500	Backfill Structure Type A	TON	1,337.000	1,337.000
0062	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1012-01-74	LS	1.000	1.000
0064	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	35.000	35.000
0068	213.0100	Finishing Roadway (project) 02. 1012-01-74	EACH	1.000	1.000
0070	305.0110	Base Aggregate Dense 3/4-Inch	TON	4,900.000	4,900.000
0072	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	32,392.000	32,392.000
0074	312.0110	Select Crushed Material	TON	38,300.000	38,300.000
0076	405.0100	Coloring Concrete WisDOT Red	CY	1,012.000	1,012.000
0078	415.0080	Concrete Pavement 8-Inch	SY	36,020.000	36,020.000
0080	415.0125	Concrete Pavement 12 1/2-Inch	SY	2,200.000	2,200.000
0082	415.1080	Concrete Pavement HES 8-Inch	SY	2,030.000	2,030.000
0084	415.4100	Concrete Pavement Joint Filling	SY	9,520.000	9,520.000
0086	415.6000.S	Rout and Seal	LF	16,462.000	16,462.000
0088	416.0512	Concrete Truck Apron 12-Inch	SY	2,540.000	2,540.000
0090	416.0610	Drilled Tie Bars	EACH	7,780.000	7,780.000
0092	416.0620	Drilled Dowel Bars	EACH	1,090.000	1,090.000
0094	416.1110	Concrete Shoulder Rumble Strips	LF	8,587.000	8,587.000
0096	416.1715	Concrete Pavement Repair SHES	SY	260.000	260.000
0098	416.1725	Concrete Pavement Replacement SHES	SY	750.000	750.000
0100	450.4000	HMA Cold Weather Paving	TON	3,510.000	3,510.000

1012-01-74

Line	Item	Item Description	Unit	Total	Qty
0102	455.0605	Tack Coat	GAL	1,150.000	1,150.000
0104	460.2000	Incentive Density HMA Pavement	DOL	2,190.000	2,190.000
0106	460.5224	HMA Pavement 4 LT 58-28 S	TON	1,060.000	1,060.000
0108	460.6224	HMA Pavement 4 MT 58-28 S	TON	3,370.000	3,370.000
0110	465.0125	Asphaltic Surface Temporary	TON	1,540.000	1,540.000
0112	465.0315	Asphaltic Flumes	SY	61.000	61.000
0114	465.0400	Asphaltic Shoulder Rumble Strips	LF	1,200.000	1,200.000
0116	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	6,848.000	6,848.000
0118	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	1,845.000	1,845.000
0120	502.0100	Concrete Masonry Bridges	CY	1,386.000	1,386.000
0122	502.3200	Protective Surface Treatment	SY	2,424.000	2,424.000
0124	502.3210	Pigmented Surface Sealer	SY	274.000	274.000
0126	503.0137	Prestressed Girder Type I 36W-Inch	LF	2,716.000	2,716.000
0128	504.0900	Concrete Masonry Endwalls	CY	4.200	4.200
0130	505.0400	Bar Steel Reinforcement HS Structures	LB	22,350.000	22,350.000
0132	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	176,590.000	176,590.000
0134	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	5,380.000	5,380.000
0136	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	56.000	56.000
0138	506.4000	Steel Diaphragms (structure) 01. B-11-165	EACH	26.000	26.000
0140	506.4000	Steel Diaphragms (structure) 02. B-11-166	EACH	26.000	26.000
0142	511.1100	Temporary Shoring	SF	1,301.000	1,301.000
0144	511.1200	Temporary Shoring (structure) 01. B-11-166	SF	2,075.000	2,075.000
0146	516.0500	Rubberized Membrane Waterproofing	SY	70.000	70.000
0148	520.2024	Culvert Pipe Temporary 24-Inch	LF	81.000	81.000
0150	520.8000	Concrete Collars for Pipe	EACH	13.000	13.000
0152	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	2.000	2.000
0154	522.0118	Culvert Pipe Reinforced Concrete Class III 18-Inch	LF	140.000	140.000
0156	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	44.000	44.000
0158	522.0136	Culvert Pipe Reinforced Concrete Class III 36-Inch	LF	88.000	88.000
0160	522.0436	Culvert Pipe Reinforced Concrete Class IV 36-Inch	LF	72.000	72.000
0162	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	5.000	5.000
0164	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	2.000	2.000
0166	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	9.000	9.000
0168	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	3.000	3.000
0170	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	1.000	1.000
0172	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	4.000	4.000
0174	522.2419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	569.000	569.000
0176	522.2429	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch	LF	140.000	140.000
0178	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	5.000	5.000
0180	522.2629	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch	EACH	2.000	2.000
0182	530.0118	Culvert Pipe Corrugated Polyethylene 18-Inch	LF	117.000	117.000
0184	531.1100	Concrete Masonry Ancillary Structures Type NS	CY	12.000	12.000
0186	531.1140	Steel Reinforcement HS Ancillary Structures Type NS	LB	1,800.000	1,800.000
0188	531.2024	Drilling Shaft 24-Inch	LF	100.000	100.000
0190	531.2036	Drilling Shaft 36-Inch	LF	10.000	10.000
0192	531.4050	Foundation Camera Pole 50-FT	EACH	1.000	1.000
0194	550.0020	Pre-Boring Rock or Consolidated Materials	LF	330.000	330.000
0196	550.1120	Piling Steel HP 12-Inch X 53 Lb	LF	2,850.000	2,850.000
0198	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	358.000	358.000

1012-01-74

Line	Item	Item Description	Unit	Total	Qty
0200	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	2,604.000	2,604.000
0202	601.0452	Concrete Curb & Gutter Integral 30-Inch Type D	LF	940.000	940.000
0204	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A	LF	2,478.000	2,478.000
0206	601.0580	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R	LF	638.000	638.000
0208	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	106.000	106.000
0210	601.0600	Concrete Curb Pedestrian	LF	97.000	97.000
0212	602.0410	Concrete Sidewalk 5-Inch	SF	31,850.000	31,850.000
0214	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	576.000	576.000
0216	603.0105	Concrete Barrier Single-Faced 32-Inch	LF	40.000	40.000
0218	603.1142	Concrete Barrier Type S42	LF	587.000	587.000
0220	603.3213	Concrete Barrier Transition Type F32SF to S36	EACH	4.000	4.000
0222	603.3535	Concrete Barrier Transition Type S36 to S42	EACH	4.000	4.000
0224	603.8000	Concrete Barrier Temporary Precast Delivered	LF	22,264.000	22,264.000
0226	603.8125	Concrete Barrier Temporary Precast Installed	LF	18,520.000	18,520.000
0228	603.8500	Anchoring Concrete Barrier Temporary Precast	LF	3,904.000	3,904.000
0230	604.0400	Slope Paving Concrete	SY	110.000	110.000
0232	604.0500	Slope Paving Crushed Aggregate	SY	92.000	92.000
0234	606.0200	Riprap Medium	CY	47.000	47.000
0236	608.0005	Storm Sewer Rock Excavation	CY	300.000	300.000
0238	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	301.000	301.000
0240	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	289.000	289.000
0242	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	1,062.000	1,062.000
0244	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	134.000	134.000
0246	611.0430	Reconstructing Inlets	EACH	3.000	3.000
0248	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0250	611.0606	Inlet Covers Type B	EACH	6.000	6.000
0252	611.0624	Inlet Covers Type H	EACH	6.000	6.000
0254	611.0627	Inlet Covers Type HM	EACH	7.000	7.000
0256	611.0636	Inlet Covers Type HM-S	EACH	5.000	5.000
0258	611.0639	Inlet Covers Type H-S	EACH	6.000	6.000
0260	611.0642	Inlet Covers Type MS	EACH	2.000	2.000
0262	611.0651	Inlet Covers Type S	EACH	2.000	2.000
0264	611.0652	Inlet Covers Type T	EACH	4.000	4.000
0266	611.0654	Inlet Covers Type V	EACH	10.000	10.000
0268	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0270	611.3004	Inlets 4-FT Diameter	EACH	14.000	14.000
0272	611.3220	Inlets 2x2-FT	EACH	11.000	11.000
0274	611.3225	Inlets 2x2.5-FT	EACH	6.000	6.000
0276	611.3230	Inlets 2x3-FT	EACH	15.000	15.000
0278	611.3902	Inlets Median 2 Grate	EACH	2.000	2.000
0280	611.8120.S	Cover Plates Temporary	EACH	16.000	16.000
0282	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	1,265.000	1,265.000
0284	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	8.000	8.000
0286	614.0805	Crash Cushions Permanent Low Maintenance	EACH	2.000	2.000
0288	614.0905	Crash Cushions Temporary	EACH	8.000	8.000
0290	614.2300	MGS Guardrail 3	LF	787.500	787.500
0292	614.2500	MGS Thrie Beam Transition	LF	95.000	95.000
0294	614.2610	MGS Guardrail Terminal EAT	EACH	2.000	2.000
0296	614.2620	MGS Guardrail Terminal Type 2	EACH	2.000	2.000

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Line	Item	Item Description	Unit	Total	Qty
0298	616.0100	Fence Woven Wire (height) 01. 4 FEET	LF	3,552.000	3,552.000
0302	618.0100	Maintenance And Repair of Haul Roads (project) 02. 1012-01-74	EACH	1.000	1.000
0304	619.1000	Mobilization	EACH	0.850	0.850
0306	620.0300	Concrete Median Sloped Nose	SF	515.000	515.000
0308	624.0100	Water	MGAL	290.000	290.000
0310	625.0500	Salvaged Topsoil	SY	173,020.000	173,020.000
0312	627.0200	Mulching	SY	163,010.000	163,010.000
0314	628.1504	Silt Fence	LF	2,412.000	2,412.000
0316	628.1520	Silt Fence Maintenance	LF	2,412.000	2,412.000
0318	628.1905	Mobilizations Erosion Control	EACH	17.000	17.000
0320	628.1910	Mobilizations Emergency Erosion Control	EACH	17.000	17.000
0322	628.2004	Erosion Mat Class I Type B	SY	79,796.000	79,796.000
0324	628.2006	Erosion Mat Urban Class I Type A	SY	1,570.000	1,570.000
0326	628.2033	Erosion Mat Class III Type B	SY	6,320.000	6,320.000
0328	628.7005	Inlet Protection Type A	EACH	1.000	1.000
0330	628.7010	Inlet Protection Type B	EACH	37.000	37.000
0332	628.7015	Inlet Protection Type C	EACH	15.000	15.000
0334	628.7504	Temporary Ditch Checks	LF	368.000	368.000
0336	628.7555	Culvert Pipe Checks	EACH	8.000	8.000
0338	629.0210	Fertilizer Type B	CWT	113.000	113.000
0340	630.0130	Seeding Mixture No. 30	LB	3,032.000	3,032.000
0342	630.0200	Seeding Temporary	LB	1,776.000	1,776.000
0344	630.0500	Seed Water	MGAL	3,661.000	3,661.000
0346	633.0100	Delineator Posts Steel	EACH	106.000	106.000
0348	633.0500	Delineator Reflectors	EACH	125.000	125.000
0350	633.1000	Delineators Barrier Wall	EACH	5.000	5.000
0352	633.5200	Markers Culvert End	EACH	25.000	25.000
0354	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	12.000	12.000
0356	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	19.000	19.000
0358	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	32.000	32.000
0360	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	21.000	21.000
0362	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	12.000	12.000
0364	634.0811	Posts Tubular Steel 2x2-Inch X 11-FT	EACH	9.000	9.000
0366	634.0812	Posts Tubular Steel 2x2-Inch X 12-FT	EACH	1.000	1.000
0368	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	3.000	3.000
0370	635.0200	Sign Supports Structural Steel HS	LB	3,892.000	3,892.000
0372	637.1220	Signs Type I Reflective SH	SF	891.000	891.000
0374	637.2210	Signs Type II Reflective H	SF	1,072.000	1,072.000
0376	637.2230	Signs Type II Reflective F	SF	117.000	117.000
0378	638.2102	Moving Signs Type II	EACH	20.000	20.000
0380	638.2601	Removing Signs Type I	EACH	8.000	8.000
0382	638.2602	Removing Signs Type II	EACH	116.000	116.000
0384	638.3000	Removing Small Sign Supports	EACH	114.000	114.000
0386	638.3100	Removing Structural Steel Sign Supports	EACH	8.000	8.000
0388	642.5001	Field Office Type B	EACH	0.850	0.850
0390	643.0300	Traffic Control Drums	DAY	136,791.000	136,791.000
0392	643.0420	Traffic Control Barricades Type III	DAY	11,058.000	11,058.000
0394	643.0705	Traffic Control Warning Lights Type A	DAY	17,477.000	17,477.000
0396	643.0715	Traffic Control Warning Lights Type C	DAY	28,563.000	28,563.000

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Line	Item	Item Description	Unit	Total	Qty
0398	643.0800	Traffic Control Arrow Boards	DAY	1,425.000	1,425.000
0400	643.0900	Traffic Control Signs	DAY	95,725.000	95,725.000
0402	643.0910	Traffic Control Covering Signs Type I	EACH	7.000	7.000
0404	643.0920	Traffic Control Covering Signs Type II	EACH	16.000	16.000
0406	643.1050	Traffic Control Signs PCMS	DAY	1,468.000	1,468.000
0408	643.1100.S	Dynamic Late Merge System	DAY	470.000	470.000
0410	643.4100.S	Traffic Control Interim Lane Closure	EACH	17.000	17.000
0412	643.5000	Traffic Control	EACH	0.800	0.800
0414	645.0112	Geotextile Type DF Schedule B	SY	425.000	425.000
0416	645.0120	Geotextile Type HR	SY	93.000	93.000
0418	645.0220	Geogrid Type SR	SY	51,100.000	51,100.000
0420	646.1020	Marking Line Epoxy 4-Inch	LF	12,562.000	12,562.000
0422	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	50,375.000	50,375.000
0424	646.1545	Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch	LF	8,440.000	8,440.000
0428	646.3020	Marking Line Epoxy 8-Inch	LF	415.000	415.000
0430	646.3545	Marking Line Grooved Wet Ref Contrast Epoxy 8-Inch	LF	5,290.000	5,290.000
0432	646.5420	Marking Aerial Enforcement Bar Epoxy	EACH	6.000	6.000
0434	646.6320	Marking Dotted Extension Epoxy 18-Inch	LF	122.000	122.000
0436	646.6464	Cold Weather Marking Epoxy 4-Inch	LF	48,360.000	48,360.000
0438	646.6468	Cold Weather Marking Epoxy 8-Inch	LF	4,120.000	4,120.000
0440	646.7120	Marking Diagonal Epoxy 12-Inch	LF	565.000	565.000
0442	646.7205	Marking Chevron Paint 24-Inch	LF	260.000	260.000
0444	646.7220	Marking Chevron Epoxy 24-Inch	LF	260.000	260.000
0446	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	300.000	300.000
0448	646.8120	Marking Curb Epoxy	LF	20.000	20.000
0450	646.8220	Marking Island Nose Epoxy	EACH	2.000	2.000
0452	646.9000	Marking Removal Line 4-Inch	LF	23,210.000	23,210.000
0454	646.9010	Marking Removal Line Water Blasting 4-Inch	LF	5,000.000	5,000.000
0456	646.9100	Marking Removal Line 8-Inch	LF	1,307.000	1,307.000
0458	646.9110	Marking Removal Line Water Blasting 8-Inch	LF	523.000	523.000
0460	646.9200	Marking Removal Line Wide	LF	420.000	420.000
0462	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	17,955.000	17,955.000
0464	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	22,075.000	22,075.000
0466	649.0155	Temporary Marking Line Removable Contrast Tape 4-Inch	LF	109,604.000	109,604.000
0468	649.0220	Temporary Marking Line Epoxy 8-Inch	LF	6,155.000	6,155.000
0470	649.0255	Temporary Marking Line Removable Contrast Tape 8-Inch	LF	6,280.000	6,280.000
0472	649.0820	Temporary Marking Stop Line Epoxy 18-Inch	LF	47.000	47.000
0474	649.0850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	155.000	155.000
0476	650.4000	Construction Staking Storm Sewer	EACH	48.000	48.000
0478	650.4500	Construction Staking Subgrade	LF	11,242.000	11,242.000
0480	650.5000	Construction Staking Base	LF	8,992.000	8,992.000
0482	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	96.000	96.000
0484	650.7000	Construction Staking Concrete Pavement	LF	9,888.000	9,888.000
0488	650.8500	Construction Staking Electrical Installations (project) 01. 1012-01-74	LS	1.000	1.000
0490	650.9000	Construction Staking Curb Ramps	EACH	16.000	16.000
0494	650.9910	Construction Staking Supplemental Control (project) 02. 1012-01-74	LS	1.000	1.000
0496	650.9920	Construction Staking Slope Stakes	LF	10,638.000	10,638.000
0498	652.0110	Conduit Rigid Metallic 1-Inch	LF	10.000	10.000
0500	652.0125	Conduit Rigid Metallic 2-Inch	LF	10.000	10.000

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Line	Item	Item Description	Unit	Total	Qty
0502	652.0210	Conduit Rigid Nonmetallic Schedule 40 1-Inch	LF	80.000	80.000
0504	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	2,920.000	2,920.000
0506	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	3,612.000	3,612.000
0508	652.0325	Conduit Rigid Nonmetallic Schedule 80 2-Inch	LF	844.000	844.000
0510	652.0700.S	Install Conduit into Existing Item	EACH	1.000	1.000
0512	653.0140	Pull Boxes Steel 24x42-Inch	EACH	6.000	6.000
0514	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	15.000	15.000
0516	653.0905	Removing Pull Boxes	EACH	32.000	32.000
0518	654.0105	Concrete Bases Type 5	EACH	2.000	2.000
0520	654.0106	Concrete Bases Type 6	EACH	22.000	22.000
0522	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
0524	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	990.000	990.000
0526	655.0535	Electrical Wire Traffic Signals 2 AWG	LF	2,760.000	2,760.000
0528	655.0610	Electrical Wire Lighting 12 AWG	LF	3,294.000	3,294.000
0530	655.0615	Electrical Wire Lighting 10 AWG	LF	23,340.000	23,340.000
0532	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STA. 11+34 SB B	LS	1.000	1.000
0534	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	24.000	24.000
0536	657.0327	Poles Type 6-Aluminum	EACH	22.000	22.000
0538	657.0705	Luminaire Arms Truss Type 4 1/2-Inch Clamp 10-FT	EACH	22.000	22.000
0540	659.1125	Luminaires Utility LED C	EACH	22.000	22.000
0542	659.1215	Luminaires Underdeck LED C	EACH	4.000	4.000
0544	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0546	662.1024.S	Ramp Closure Gates 24-FT	EACH	1.000	1.000
0548	662.1032.S	Ramp Closure Gates 32-FT	EACH	1.000	1.000
0550	670.0100	Field System Integrator	LS	1.000	1.000
0552	670.0200	ITS Documentation	LS	1.000	1.000
0554	673.0200	Tracer Wire Marker Posts	EACH	2.000	2.000
0556	673.1225.S	Install Pole Mounted Cabinet	EACH	1.000	1.000
0558	674.0300	Remove Cable	LF	4,085.000	4,085.000
0560	675.0300	Install Mounted Controller Microwave Detector Assembly	EACH	2.000	2.000
0562	677.0150	Install Camera Pole 50-FT	EACH	1.000	1.000
0564	677.0200	Install Camera Assembly	EACH	1.000	1.000
0566	677.9051.S	Removing 50-FT Camera Pole	EACH	1.000	1.000
0568	677.9200.S	Removing CCTV Camera	EACH	1.000	1.000
0570	678.0006	Install Fiber Optic Cable Outdoor Plant 6-CT	LF	1,090.000	1,090.000
0572	678.0300	Fiber Optic Splice	EACH	4.000	4.000
0574	678.0400	Fiber Optic Termination	EACH	6.000	6.000
0576	678.0500	Communication System Testing	LS	1.000	1.000
0578	678.0600	Install Ethernet Switches	EACH	1.000	1.000
0580	690.0150	Sawing Asphalt	LF	3,858.000	3,858.000
0582	690.0250	Sawing Concrete	LF	15,081.000	15,081.000
0584	715.0502	Incentive Strength Concrete Structures	DOL	500.000	500.000
0590	SPV.0035	Special 01. Temporary Stone Ditch Checks	CY	330.000	330.000
0592	SPV.0060	Special 01. Verify Landmark Reference Monuments	EACH	1.000	1.000
0594	SPV.0060	Special 02. Removing Controller Cabinet	EACH	1.000	1.000
0596	SPV.0060	Special 03. Removing Controller Cabinet Base	EACH	1.000	1.000
0598	SPV.0060	Special 04. Remove Pole	EACH	2.000	2.000
0600	SPV.0060	Special 05. Remove Microwave Detector	EACH	4.000	4.000
0602	SPV.0060	Special 06. Removing On-Ramp Closure Gate	EACH	2.000	2.000

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Line	Item	Item Description	Unit	Total	Qty
0604	SPV.0060	Special 07. Removing Communication Vault	EACH	1.000	1.000
0606	SPV.0060	Special 08. Install Spread Spectrum Radio	EACH	1.000	1.000
0608	SPV.0060	Special 09. Ground Rod	EACH	1.000	1.000
0610	SPV.0060	Special 10. Welded Inlet Covers	EACH	3.000	3.000
0612	SPV.0060	Special 11. Clean and Fill Anchor Hole	EACH	115.000	115.000
0614	SPV.0060	Special 12. Pull Boxes Non-Conductive 18X24-Inch	EACH	4.000	4.000
0616	SPV.0060	Special 13. Temporary Lighting System Northbound Ramp Terminal	EACH	1.000	1.000
0618	SPV.0060	Special 14. Construction Staking Roundabout Terminal	EACH	1.000	1.000
0620	SPV.0090	Special 01. Drain Slotted Vane Longitudinal	LF	1,020.000	1,020.000
0622	SPV.0090	Special 02. Fill and Restore Existing Concrete Rumble Strips	LF	20,743.000	20,743.000
0624	SPV.0090	Special 03. Concrete Barrier Temporary Precast Left in Place	LF	3,904.000	3,904.000
0626	SPV.0165	Special 01. Temporary Wall Wire Faced Mechanically Stabilized Earth	SF	1,657.000	1,657.000
0628	SPV.0165	Special 02. Wall Concrete Panel Mechanically Stabilized Earth	SF	6,795.000	6,795.000

EARTHWORK SUMMARY

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)	SALVAGED/ UNUSABLE PAVEMENT MATERIAL (2)	AVAILABLE MATERIAL (3)	205.0200 ROCK EXCAVATION	EXPANDED ROCK FACTOR (4) 1.10	UNEXPANDED FILL	EXPANDED FILL FACTOR (5) 1.25	MASS ORDINATE +/- (6)	COMMENT
					STAGE 1A						
CROSSOVER GRADING	238"SB"+09-283"SB"+70		3,183	1,640	1,543	0	0	0	0	1,543	
STAGE 1A SUBTOTAL			3,183	1,640	1,543	0	0	0	0	1,543	
					STAGE 1A&B						
IH 39 NB	235"NB"+83-244"NB"+90	RT	1,708	240	1,468	0	0	1,201	1,501	-33	
IH 39 NB	249"NB"+35-262"NB"+41	RT	38	0	38	0	0	11,230	14,038	-14,000	
IH 39 NB	00"GNXI"+70 - 09"GNXI"+35	LT/RT	3,489	0	3,489	0	0	21,428	26,785	-23,296	NB OFF INFIELD
IH 39 SB	243"SB"+76-248"SB"+56	LT	225	0	225	0	0	215	269	-44	
IH 39 SB	277"SB"+18-282"SB"+75	LT	1,534	218	1,316	0	0	593	741	575	
IH 39 NB OFF	245"NX"+00-261"NX"+70		4,182	0	4,182	0	0	15,139	18,924	-14,742	
IH 39 SB OFF	264"SX"+01-276"SX"+80		44,751	0	44,751	0	0	2,629	3,286	41,465	
STH 60	58+50 - 63+00		4,165	0	4,165	28	31	0	0	4,195	
STH 60	65+06 - 77+99		34,925	0	34,925	4	4	38	42	34,882	
NB A 1/2			11,072	0	11,072	2,273	2,500	0	0	13,572	
NB G			2,166	0	2,166	0	0	539	673	1,493	
SB F			2,106	0	2,106	0	0	4	4	2,101	
TEMPORARY NB ON RAMP			4,138	360	3,778	0	0	0	0	3,778	
TEMPORARY PAVEMENT			775	0	775	0	0	0	0	775	
STAGE 1 A&B SUBTOTAL			115,272	818	114,454	2,305	2,535	53,016	66,264	50,721	
					STAGE 2A						
IH 39 NB	249"NB"+32-261"NB"+92	RT	1,937	490	1,447	0	0	0	0	1,447	
IH 39 NB	263"NB"+45-271"NB"+80	RT	6,607	690	5,917	0	0	140	175	5,742	
IH 39 NB	281"NB"+30-285"NB"+00	RT	637	0	637	0	0	47	59	578	
IH 39 NB ON	264"NN"+34-281"NN"+30		28,770	1,070	27,700	107	118	1,595	1,847	29,547	
EXISTING NB ON/OFF RAMPS			4,744	960	3,784	0	0	7,224	9,030	-5,246	
STH 60 WIDENING RIGHT-STAGE 2A			495	0	495	0	0	1,822	2,277	-1,783	
NB D			7,078	0	7,078	667	734	0	0	7,812	
TEMPORARY PAVEMENT (REMOVAL)			56	0	56	0	0	0	0	56	
TEMPORARY PAVEMENT			437	0	437	0	0	0	0	437	
STAGE 2A SUBTOTAL			50,761	3,210	47,551	774	851	10,828	13,388	38,590	
					STAGE 2B						
TEMPORARY PAVEMENT (REMOVAL)			498	0	498	0	0	0	0	498	
			498	0	498	0	0	0	0	498	
					STAGE 3A						
STH 60 WIDENING LEFT - STAGE 3A			207	0	207	0	0	570	713	-506	
STH 60 (48+03 TO 56+05)			3,213	0	3,213	0	0	130	163	3,050	
WB STH 60			7,410	0	7,410	910	1,001	376	470	7,941	
SB A			774	0	774	0	0	0	0	774	
SB C			2	0	2	0	0	2,306	2,883	-2,881	
TEMPORARY PAVEMENT			188	0	188	0	0	0	0	188	
STAGE 3A SUBTOTAL			11,795	0	11,795	910	1,001	3,382	4,228	8,568	
					STAGE 3B						
STH 60 (48+03 TO 56+05)			3,213	181	3,032	0	0	130	163	2,869	
SB A			387	0	387	0	0	0	0	387	
STAGE 3B SUBTOTAL			3,600	181	3,419	0	0	130	163	3,256	

NOTES:

1) EXCAVATION COMMON IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100.

2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

3) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL.

4) EXPANDED ROCK = UNEXPANDED ROCK * EXPANDED ROCK FACTOR. EXPANDED FILL FACTOR = 1.10.

5) EXPANDED FILL =

- IF EXPANDED ROCK IS LESS THEN UNEXPANDED FILL THEN EXPANDED FILL = (UNEXPANDED FILL-EXPANDED ROCK) * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR (1.25)
- IF EXPANDED ROCK IS GREATER THEN UNEXPANDED FILL THEN EXPANDED FILL = (UNEXPANDED FILL * EXPANDED FILL FACTOR (1.25))

6) MASS ORDINATE: MASS ORDINATE = (AVAILABLE MATERIAL - EXPANDED FILL)

PLUS MASS ORDINATE QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS MASS ORDINATE QUANTITY INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

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CONTINUED EARTHWORK SUMMARY

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)	SALVAGED/ UNUSABLE PAVEMENT MATERIAL (2)	AVAILABLE MATERIAL (3)	205.0200 ROCK EXCAVATION	EXPANDED ROCK FACTOR (4) 1.10	UNEXPANDED FILL	EXPANDED FILL FACTOR (5) 1.25	MASS ORDINATE +/- (6)	COMMENT
STH 60 (56+05 - 58+00)			2,000	0	2,000	0	0	0	0	2,000	
TEMPORARY PAVEMENT (REMOVAL)			318	0	318	0	0	0	0	318	
STAGE 3C SUBTOTAL			2,318	0	2,318	0	0	0	0	2,318	
					STAGE 3D						
EXISTING SB ON/OFF RAMPS			13,757	1,020	12,737	0	0	15,777	19,721	-6,984	
IH 39 SB ON	244"SN"+50-260"SN"+00		12,955	970	11,985	0	0	10,334	12,918	-933	
STAGE 3D SUBTOTAL			26,712	1,990	24,722	0	0	26,111	32,639	-7,917	
					STAGE 4						
IH 39 SB	235"SB"+27-244"SB"+50	LT	6,415	100	6,315	0	0	68	85	6,230	
IH 39 SB -SW QUAD	253"SB"+70-261"SB"+77	LT	4,330	830	3,500	0	0	1,574	1,968	1,533	
IH 39 SB -NW QUAD	263"SB"+30-271"SB"+00	LT	3,562	360	3,202	0	0	818	1,023	2,180	
STH 60 (BETWEEN RABS)			5,902	200	5,702	200	220	191	239	5,683	
DIVISION 4 SUBTOTAL			20,209	1,490	18,719	200	220	2,651	3,314	15,625	
GRAND TOTAL			234,300	9,300	225,000	4,200	4,600	96,100	120,000	113,200	

NOTES:

1) EXCAVATION COMMON IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100.

2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

3) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL.

4) EXPANDED ROCK = UNEXPANDED ROCK * EXPANDED ROCK FACTOR. EXPANDED FILL FACTOR = 1.10.

5) EXPANDED FILL =

- IF EXPANDED ROCK IS LESS THEN UNEXPANDED FILL THEN EXPANDED FILL = (UNEXPANDED FILL-EXPANDED ROCK) * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR (1.25)
- IF EXPANDED ROCK IS GREATER THEN UNEXPANDED FILL THEN EXPANDED FILL = (UNEXPANDED FILL * EXPANDED FILL FACTOR (1.25))

6) MASS ORDINATE: MASS ORDINATE = (AVAILABLE MATERIAL - EXPANDED FILL)

PLUS MASS ORDINATE QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS MASS ORDINATE QUANTITY INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

CLEARING AND GRUBBING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA	REMARKS
0010		61+00	-	66+00	STH 60 LT/RT	10	10	
		70+00	-	72+00	STH 60 LT	2	2	
		245+00	-	251+00	IH 39 SB ON LT	6	6	
		257+00	-	261+00	IH 39 SB ON LT/RT	8	8	
		260+00	-	262+00	IH NB RT	2	2	
		262+00	-	264+00	IH 39 NB OFF LT/RT	4	4	
		263+00	-	268+00	IH 39 NB ON LT/RT	10	10	
		266+00	-	270+00	IH 39 SB LT	4	4	
		268+00	-	270+00	IH 39 SB OFF RT	2	2	
		268+00	-	271+00	IH 39 NB ON RT	3	3	
		274+00	-	277+00	IH 39 SB OFF LT	3	3	
		277+00	-	283+00	IH 39 SB LT	6	6	
		282+00	-	285+00	IH 39 NB RT	3	3	
					PROJECT ID 1012-01-74 TOTAL:	63	63	

REMOVING SMALL PIPE CULVERTS

CATEGORY	STAGE	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	REMARKS
0010	STAGE 1A	47+22	LT/RT	1	REMOVE 1 - 30" CMCP - 75' LENGTH
		55+32	LT/RT	1	REMOVE 1 - 36" CMCP - 90' LENGTH
		61+52	LT/RT	1	REMOVE 1 - 30" CMCP - 60' LENGTH
			STAGE 1 TOTAL:	3	
	STAGE 2	269''NB''+75	RT	1	REMOVE 1 - 24" CMCP - 60' LENGTH
			STAGE 2 TOTAL:	1	
	STAGE 4	254''SB''+92	LT	1	REMOVE 1 - 24" CMCP - 130' LENGTH
		256''SB''+47	LT	1	REMOVE 1 - 36" RCCP - 120' LENGTH
			STAGE 4 TOTAL:	2	
			PROJECT ID 1012-01-74 TOTAL:	6	

FILE NAME : C:\BoxDrv\Box\DTSD-Projects-Public\SWR-Projects-State\Design\10120104\Design\QuantityEstimate\MiscQ PLOT DATE : March 23, 2022 PLOT BY : R.D.C. PLOT NAME : MQ Sheets PLOT SCALE : 1:1

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REMOVING CONCRETE PAVEMENT

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	204.0100 REMOVING CONCRETE PAVEMENT SY	REMARKS
0010	STAGE 1A	237''NB''+50	-	244''NB''+89	IH 39 MEDIAN	1,410	
		237''SB''+50	-	244''SB''+89	IH 39 MEDIAN	1,410	
		273''NB''+50	-	283''NB''+60	IH 39 MEDIAN	760	
		273''SB''+50	-	283''SB''+60	IH 39 MEDIAN	760	
		247''SB''+21	-	258''SB''+75	AT PATCH LOCATION	1,410	
		268''SB''+45	-	274''SB''+51	AT PATCH LOCATION	740	
					STAGE 1A TOTAL:	6,490	
	STAGE 1A - STH 60	48+00	-	54+50	LT/RT	1,350	STH 60
		54+50	-	62+00	LT/RT	40	STH 60
		62+00	-	69+00	LT/RT	1,382	STH 60
					STAGE 1A - STH 60 TOTAL:	2,771	
	STAGE 1B	240''NB''+10	-	247''NB''+38	RT	850	NB OFF
		274''SB''+41	-	283''SB''+00	LT	990	SB OFF
					STAGE 1B TOTAL:	1,840	
					STAGE 1 TOTAL:	11,101	
	STAGE 2	259''NB''+01	-	260''NB''+16	RT	140	
		260''NB''+16	-	262''NB''+18	LT/RT	1,340	
		263''NB''+23	-	264''NB''+50	LT/RT	940	
		264''NB''+50	-	268''NB''+89	RT	2,450	EXISTING NB OFF RAMP
		264''NB''+50	-	273''NB''+50	LT-IH 39 MEDIAN	90	
		265''NB''+78	-	283''NB''+50	RT	3,910	EXISTING NB ON RAMP
					STAGE 2 TOTAL:	8,870	
	STAGE 3D	242''SB''+96	-	259''SB''+80	LT	3,990	EXISTING SB ON RAMP
		256''SB''+33	-	259''SB''+80	LT	2,290	EXISTING SB OFF RAMP
					STAGE 3D TOTAL:	6,280	
					STAGE 3 TOTAL:	6,280	
	STAGE 4	253''SB''+67	-	253''SB''+79	LT	17	FOR SS 2.1
		259''SB''+80	-	262''SB''+04	LT/RT	1,710	
		263''SB''+09	-	264''SB''+50	LT/RT	980	
		264''SB''+50	-	265''SB''+05	LT	20	
		264''SB''+50	-	273''SB''+50	RT-IH 39 MEDIAN	90	
					STAGE 4 TOTAL:	2,817	
					PROJECT ID 1012-01-74 TOTAL:	29,100	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	REMARKS
0010	STAGE 1	89+98	-	90+06	LT/RT	30	STH 60
	STAGE 4	42+42	-	42+50	LT/RT	40	STH 60
	STAGE 4	47+03	-	48+03	LT/RT	378	STH 60
					PROJECT ID 1012-01-74 TOTAL:	450	

REMOVING ASPHALTIC SURFACE

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	REMARKS
0010	STAGE 1	77+99	-	90+06	STH 60	3,715	
	STAGE 4	42+42	-	48+03	STH 60	1,814	
					PROJECT ID 1012-01-74 TOTAL:	5,530	

REMOVING CURB

CATEGORY	STATION	TO	STATION	LOCATION	204.0130 REMOVING CURB LF	REMARKS
0010	48+00	-	54+50	LT/RT	101	STH 60
	54+50	-	62+00	LT/RT	-	STH 60
	62+00	-	69+00	LT/RT	103	STH 60
				PROJECT ID 1012-01-74 TOTAL:	204	

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REMOVING CONCRETE BARRIER

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	204.0157 REMOVING CONCRETE BARRIER LF	SPV.0060.11 SPECIAL (11. CLEAN AND FILL ANCHOR HOLE) EACH	REMARKS
0010	STAGE 1A	238''NB''+01	-	247''NB''+17	IH 39 MEDIAN	916	54	
		238''SB''+01	-	247''SB''+47	IH 39 MEDIAN	946	61	
		273''NB''+50	-	283''NB''+70	IH 39 MEDIAN	1,020	-	
		273''SB''+50	-	283''SB''+70	IH 39 MEDIAN	1,020	-	
					STAGE 1A TOTAL:	3,902	115	
	STAGE 1A - STH 60	54+50	-	62+00	LT/RT	675	-	STH 60
		62+00	-	69+00	LT/RT	8	-	STH 60
					STAGE 1A - STH 60 TOTAL:	683	0	
					STAGE 1 TOTAL:	4,585	115	
	STAGE 2	260''NB''+16	-	262''NB''+18	LT/RT	202	-	
		263''NB''+23	-	265''NB''+00	LT/RT	177	-	
					STAGE 2 TOTAL:	379	0	
	STAGE 4	259''SB''+80	-	262''SB''+04	LT/RT	224	-	
		263''SB''+09	-	265''SB''+00	LT/RT	191	-	
					STAGE 4 TOTAL:	415	0	
					PROJECT ID 1012-01-74 TOTAL:	5,380	115	

REMOVING DELINEATORS

CATEGORY	STATION	TO	STATION	LOCATION	204.0180 REMOVING DELINEATORS AND MARKERS EACH	REMARKS
0010	204''NB''+91	-	258''NB''+62	RT	13	
	231''SB''+00	-	233''SB''+17	LT	1	
	233''SB''+17	-	267''SB''+25	OLD SB RAMPS - LT	9	
	258''NB''+62	-	292''NB''+54	OLD NB RAMPS - RT	8	
	267''SB''+25	-	316''SB''+80	LT	12	
	292''NB''+54	-	296''NB''+36	RT	1	
				PROJECT ID 1012-01-74 TOTAL:	44	

REMOVING GUARDRAIL

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF	REMARKS
0010	STAGE 1A - STH 60	54+50	-	62+00	LT/RT	167	STH 60
		62+00	-	69+00	LT/RT	113	STH 60
					STAGE 1A - STH 60 TOTAL:	280	
					STAGE 1 TOTAL:	280	
	STAGE 2	252''NB''+75	-	262''NB''+07	RT	932	STAGE 2
					STAGE 2 TOTAL:	932	
	STAGE 4	260''SB''+62	-	261''SB''+80	LT	118	STAGE 4
		263''SB''+18	-	265''SB''+52	LT	234	STAGE 4
					STAGE 4 TOTAL:	352	
					PROJECT ID 1012-01-74 TOTAL:	1,560	

REMOVING FENCE

CATEGORY	STATION	TO	STATION	LOCATION	204.0170 REMOVING FENCE LF	REMARKS
0010	235''SB''+43	-	245''SB''+03	LT	1028	
	246'NX'+76	-	262'NX'+37	LT/RT	1,770	
	262''SB''+64	-	277''SB''+78	LT	1,700	
	69+64	-	73+41	LT	385	STH 60
				PROJECT ID 1012-01-74 TOTAL:	3,860	

REMOVING CONCRETE BASES

CATEGORY	STATION	TO	STATION	LOCATION	204.0195 REMOVING CONCRETE BASES EACH	REMARKS
0010	54+50	-	60+00	LT/RT	4	STH 60
	60+00	-	69+00	LT	1	STH 60
				PROJECT ID 1012-01-74 TOTAL:	5	

REMOVING INLETS

CATEGORY	STAGE	STATION	TO STATION	LOCATION	204.0190 REMOVING SURFACE DRAINS EACH	204.0220 REMOVING INLETS EACH	REMARKS
0010	STAGE 1A	238''NB''+76		LT	-	3	
		238''NB''+86		LT	-	2	
		239''NB''+77		LT	-	1	
		241''NB''+77		LT	-	2	FIELD VERIFY EXISTING INLETS FOR COMPETENCE
		276''NB''+78		LT	-	2	
				STAGE 1A TOTAL:	0	10	
	STAGE 1A - STH 60	48+00	- 54+50	LT/RT	2	-	
		61+52		RT/LT	1	-	STH 60
		62+00	- 69+00	LT/RT	2	-	
				STAGE 1A - STH 60 TOTAL:	5	0	
				STAGE 1 TOTAL:	5	10	
	STAGE 2	262''NB''+06		RT	-	1	STAGE 2
		263''NB''+65		LT	-	2	STAGE 2
		263''NB''+65		RT	-	1	STAGE 2
				STAGE 2 TOTAL:	0	4	
	STAGE 4	256''SB''+54		LT	-	1	EXISTING SB OFF RAMP
		258''SB''+58		LT	-	1	EXISTING SB OFF RAMP
		263''SB''+65		RT	-	1	
				STAGE 4 TOTAL:	0	3	
				PROJECT ID 1012-01-74 TOTAL:	5	17	

REMOVING BUS. ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	204.9060.S.01 REMOVING BUSINESS SIGN EACH	204.9060.S.02 REMOVING BUSINESS WATER SYSTEM EACH	204.9060.S.03 REMOVING BUSINESS ELECTRICAL SYSTEM EACH	REMARKS
0010	267'SX'+00	-	273'SX'+00		1	1	1	
				PROJECT ID 1012-01-74 TOTAL:	1	1	1	

REMOVING STORM SEWER

CATEGORY	STAGE	STATION	LOCATION	204.0245.01 REMOVING STORM SEWER (SIZE) (01. 12-INCH) LF	204.0245.02 REMOVING STORM SEWER (SIZE) (02. 18-INCH) LF	204.0245.03 REMOVING STORM SEWER (SIZE) (03. 21-INCH) LF	204.0245.04 REMOVING STORM SEWER (SIZE) (04. 30-INCH) LF	REMARKS
0010	STAGE 1A	238''NB''+76	LT	-	15	-	-	
		238''NB''+86	LT	20	-	-	-	
		239''NB''+77	LT	100	-	-	-	
		241''NB''+77	LT	10	5	-	-	FIELD VERIFY EXISTING INLETS FOR COMPETENCE
		276''NB''+78	LT	12	5	-	-	
		283''NB''+77	LT	-	12	-	-	
			STAGE 1A TOTAL:	142	37	0	0	
	STAGE 1B	241''NB''+77	RT	-	6	-	-	APRON ENDWALL
		244''NB''+77	RT	-	6	-	-	APRON ENDWALL
		247''NB''+77	RT	-	6	-	-	APRON ENDWALL
		273''SB''+21	LT	-	-	-	6	APRON ENDWALL
		276''SB''+76	RT	-	6	-	-	APRON ENDWALL
			STAGE 1B TOTAL:	0	24	0	6	
			STAGE 1 TOTAL:	142	61	0	6	
	STAGE 2	259''NB''+77	RT	-	6	-	-	APRON ENDWALL
		262''NB''+06	RT	48	-	-	-	
		263''NB''+65	LT	-	73	-	-	
		263''NB''+65	RT	-	-	11	-	
		266''NB''+78	RT	-	46	-	-	REMOVE 46 FT
		269''NB''+77	RT	-	14	-	-	REMOVE 14 FT
			STAGE 2 TOTAL:	48	139	11	0	
	STAGE 4	250''SB''+54	LT	-	6	-	-	APRON ENDWALL
		253''SB''+79	LT	-	14	-	-	
		256''SB''+54	LT	45	-	-	-	EXISTING SB OFF RAMP
		258''SB''+58	LT	-	56	-	-	EXISTING SB OFF RAMP
		263''SB''+65	RT	5	-	-	-	
			STAGE 4 TOTAL:	50	76	0	0	
			PROJECT ID 1012-01-74 TOTAL:	240	276	11	6	

BASE COURSE ITEMS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	* 205.0100 EXCAVATION COMMON CY	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	* 312.0110 SELECT CRUSHED MATERIAL TON	REMARKS
0010	STAGE 1A - IH 39	238'SB'+00	-	244'SB'+70	RT	-	-	990	520	SOUTH CROSSOVER
		273'SB'+50	-	283'SB'+70	RT	-	-	1560	760	NORTH CROSSOVER
					STAGE 1A - UH 39 SUBTOTAL:	0	0	2550	1280	
	STAGE 1A -STH 60	54+50	-	62+00	LT/RT	-	0	780	1500	STH 60
		62+00	-	69+00	LT/RT	-	120	1850	3100	STH 60
		69+00	-	77+99	LT/RT	-	380	3350	2550	STH 60
		77+99	-	90+06	LT/RT	-	535	-	-	STH 60
					STAGE 1A - STH 60 SUBTOTAL:	0	1035	5980	7150	
	STAGE 1B - IH 39	240'NB'+10	-	245'NB'+00	RT	-	110	450	870	IH 39 NB
		243'SB'+68	-	248'SB'+60	LT	-	-	210	140	IH 39 SB - TEMP PAVMENT SB ON
		245'NX'+00	-	247'NX'+38	LT/RT	-	-	440	750	IH 39 NB OFF RAMP
		247'NX'+38	-	261'NX'+79	LT/RT	-	-	2920	2730	IH 39 NB OFF RAMP
		264'SX'+02	-	274'SX'+41	LT/RT	-	-	2120	1970	IH 39 SB OFF RAMP
		274'SX'+41	-	276'SX'+80	LT/RT	-	-	440	750	IH 39 SB OFF RAMP
		276'SB'+80	-	283'SB'+00	LT	-	165	600	1120	IH 39 SB
		245'NX'+00	-	261'NX'+79	RT	-	200	-	-	IH 39 NB OFF RAMP
		247'NX'+38	-	261'NX'+79	LT	-	140	-	-	IH 39 NB OFF RAMP
		264'SX'+02	-	276'SX'+80	LT	-	150	-	-	IH 39 SB OFF RAMP
		264'SX'+02	-	274'SX'+41	RT	-	105	-	-	IH 39 SB OFF RAMP
					STAGE 1B - IH 39 SUBTOTAL:	0	870	7180	8330	
					STAGE 1 TOTAL:	0	1905	15710	16760	
	STAGE 2A - IH 39	256'NB'+25	-	260'NB'+16	RT	-	140	730	390	
		260'NB'+16	-	262'NB'+04	RT	-	45	410	220	
		260'NB'+16	-	261'NB'+95	LT	-	-	110	20	
		263'NB'+30	-	264'NB'+50	LT	-	-	70	10	
		263'NB'+43	-	264'NB'+50	RT	-	25	220	160	
		264'NB'+50	-	267'NB'+00	RT	-	65	270	180	
		264'NB'+50	-	265'NB'+00	LT	-	-	20	-	
		281'NB'+30	-	283'NB'+50	RT	-	55	210	450	
		264'NN'+34	-	273'NN'+11	LT/RT	-	-	1760	1660	
		273'NN'+11	-	281'NN'+30	LT/RT	-	-	1440	2500	
		264'NN'+34	-	281'NN'+30	RT	-	195	-	-	IH 39 NB ON RAMP
		264'NN'+34	-	273'NN'+11	LT	-	65	-	-	IH 39 NB ON RAMP
					STAGE 2A - IH 39 SUBTOTAL:	0	590	5240	5590	
	STAGE 2A - STH 60	54+50	-	62+00	LT/RT	-	-	230	490	STH 60
		62+00	-	69+00	LT/RT	-	-	260	550	STH 60
		69+00	-	78+00	LT/RT	-	60	590	1150	STH 60
					STAGE 2A - STH 60 SUBTOTAL:	0	60	1080	2190	
	STAGE 2B - STH 60	62+00	-	69+00	LT/RT	-	45	240	450	STH 60
					STAGE 2B - STH 60 SUBTOTAL:	0	45	240	450	

CONTINUED BASE COURSE ITEMS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	205.0100 EXCAVATION COMMON CY	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON	REMARKS
	STAGE 3A - STH 60	48+00	-	54+50	LT/RT	-	45	1200	1500	STH 60
		54+50	-	62+00	LT/RT	-	45	1100	2100	STH 60
		62+00	-	69+00	LT/RT	-	110	190	350	STH 60
					STAGE 3A - STH 60 SUBTOTAL:	0	200	2490	3950	
	STAGE 3B - STH 60	48+00	-	54+50	LT/RT	-	180	1150	1050	STH 60
		54+50	-	62+00	LT/RT	-	90	430	800	STH 60
					STAGE 3B - STH 60 SUBTOTAL:	0	270	1580	1850	
	STAGE 3C - STH 60	42+42	-	48+03	LT/RT	-	755	-	-	STH 60
		48+00	-	54+50	LT/RT	-	190	-	-	STH 60
		62+00	-	69+00	LT/RT	-	70	35	65	STH 60
					STAGE 3C - STH 60 SUBTOTAL:	0	1015	35	65	
	STAGE 3D - STH 60	244'SN'+50	-	252'SN'+76	LT/RT	-	-	1420	2490	
		252'SN'+76	-	260'SN'+03	LT/RT	-	-	1450	1380	
		244'SN'+50	-	260'SN'+03	LT	-	175	-	-	IH 39 SB ON RAMP
		252'SN'+76	-	260'SN'+03	RT	-	60	-	-	IH 39 SB ON RAMP
					STAGE 3D - STH 60 SUBTOTAL:	0	235	2870	3870	
					STAGE 3 TOTAL:	0	1720	6975	9735	
	STAGE 4 - STH 60	54+50	-	62+00	LT/RT	-	320	230	430	STH 60
					STAGE 4 - STH 60 SUBTOTAL:	0	320	230	430	
	STAGE 4 - IH 39	242'SB'+96	-	244'SB'+50	LT	-	30	140	320	
		258'SB'+00	-	259'SB'+80	LT	-	30	40	-	
		259'SB'+80	-	261'SB'+77	LT	-	40	360	180	
		259'SB'+80	-	261'SB'+92	RT	-	-	120	10	
		263'SB'+16	-	264'SB'+50	LT	-	35	290	190	
		263'SB'+25	-	264'SB'+50	RT	-	-	70	10	
		264'SB'+50	-	265'SB'+00	RT	-	-	20	-	
		264'SB'+50	-	269'SB'+00	LT	-	155	840	590	
					STAGE 4 - IH 39 SUBTOTAL:	0	290	1880	1300	
					STAGE 4 TOTAL:	0	610	2110	1730	
EXCAVATION BELOW SUBGRADE (EBS)						3800	-	-	1,800	
					PROJECT ID 1012-01-74 TOTAL:	3,800	4,900	31,400	38,300	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

CONCRETE ITEMS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	* 405.0100 COLORING CONCRETE WISDOT RED CY	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0125 CONCRETE PAVEMENT 12 1/2-INCH SY	415.1080 CONCRETE PAVEMENT HES 8-INCH SY	* 415.4100 CONCRETE PAVEMENT JOINT FILLING SY	416.0512 CONCRETE TRUCK APRON 12-INCH SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	REMARKS
0010	STAGE 1 - IH 39			263"SB"+60	AT PATCH LOCATION	-	-	-	-	-	-	6	116	24	-	
				265"SB"+75	AT PATCH LOCATION	-	-	-	-	-	-	8	40	21	-	
				268"SB"+40	AT PATCH LOCATION	-	-	-	-	-	-	34	20	-	47	
				268"SB"+75	AT PATCH LOCATION	-	-	-	-	-	-	6	20	8	-	
				272"SB"+50	AT PATCH LOCATION	-	-	-	-	-	-	8	20	11	-	
				273"SB"+75	AT PATCH LOCATION	-	-	-	-	-	-	6	20	8	-	
				280"SB"+40	AT PATCH LOCATION	-	-	-	-	-	-	8	20	11	-	
				263"NB"+60	AT PATCH LOCATION	-	-	-	-	-	-	12	40	32	-	
				265"NB"+60	AT PATCH LOCATION	-	-	-	-	-	-	14	20	-	20	
				270"NB"+25	AT PATCH LOCATION	-	-	-	-	-	-	10	40	27	-	
				274"NB"+50	AT PATCH LOCATION	-	-	-	-	-	-	24	16	-	50	
				276"NB"+20	AT PATCH LOCATION	-	-	-	-	-	-	10	20	13	-	
				276"NB"+90	AT PATCH LOCATION	-	-	-	-	-	-	20	20	-	27	
				277"NB"+10	AT PATCH LOCATION	-	-	-	-	-	-	6	20	8	-	
				277"NB"+45	AT PATCH LOCATION	-	-	-	-	-	-	8	20	11	-	
				279"NB"+10	AT PATCH LOCATION	-	-	-	-	-	-	8	20	11	-	
				279"NB"+50	AT PATCH LOCATION	-	-	-	-	-	-	6	20	8	-	
				280"NB"+45	AT PATCH LOCATION	-	-	-	-	-	-	6	20	8	-	
				280"NB"+75	AT PATCH LOCATION	-	-	-	-	-	-	8	20	11	-	
				283"NB"+00	AT PATCH LOCATION	-	-	-	-	-	-	8	20	11	-	
				284"NB"+75	AT PATCH LOCATION	-	-	-	-	-	-	10	20	13	-	
				285"NB"+00	AT PATCH LOCATION	-	-	-	-	-	-	8	20	11	-	
				285"NB"+55	AT PATCH LOCATION	-	-	-	-	-	-	6	20	8	-	
				285"NB"+75	AT PATCH LOCATION	-	-	-	-	-	-	6	20	8	-	
		246''NB''+61	-	247''NB''+65	AT PATCH LOCATION	-	-	-	-	-	-	98	18	-	127	
		247''SB''+21	-	258''SB''+75	AT PATCH LOCATION	-	-	-	1,410	-	-	1,078	18	-	-	
		256''NB''+13	-	258''NB''+60	AT PATCH LOCATION	-	-	-	-	-	-	232	18	-	302	
		264''SB''+50	-	265''SB''+91	AT PATCH LOCATION	-	-	-	-	-	-	132	18	-	172	
		268''SB''+45	-	273''SB''+50	AT PATCH LOCATION	-	-	-	620	-	-	402	18	-	-	
					STAGE 1 - IH 39 TOTAL:	0	0	0	2,030	0	0	2,188	722	261	745	
	STAGE 1A - IH 39	237''SB''+50	-	244''SB''+70	RT	-	1,370	-	-	-	-	576	26	-	-	IH 39 SB
		237''NB''+50	-	244''NB''+70	LT	-	1,410	-	-	-	-	576	30	-	-	IH 39 NB
		273''SB''+50	-	283''SB''+70	RT	-	1,860	-	-	-	-	816	16	-	-	IH 39 SB
		273''NB''+50	-	283''NB''+50	LT	-	2,060	-	-	-	-	800	32	-	-	IH 39 NB
					STAGE 1A - IH 39 TOTAL:	0	6,700	0	0	0	0	2,768	104	0	0	
	STAGE 1A - STH 60	54+50	-	62+00	LT/RT	-	1300	-	-	1300	-	-	-	-	-	STH 60
		62+00	-	69+00	LT/RT	26	1960	-	-	1960	77	-	-	-	-	STH 60
					STAGE 1A - STH 60 TOTAL:	26	3260	0	0	3260	77	0	0	0	0	
	STAGE 1B	240'NB'+10	-	245'NB'+00	RT	-	828	-	-	-	-	196	9	-	-	NB - RAMP
		276'SB'+80	-	283'SB'+00	LT	-	1073	-	-	-	-	248	9	-	-	SB-RAMP
		245'NX'+00	-	247'NX'+38	LT/RT	-	643	-	-	-	-	95	-	-	-	RAMP-GORE
		247'NX'+38	-	261'NX'+79	RT	-	2406	-	-	-	-	-	-	-	-	NB OFF RAMP
		264'SX'+02	-	274'SX'+41	LT	-	1732	-	-	-	-	-	-	-	-	SB OFF RAMP
		274'SX'+41	-	276'SX'+80	LT/RT	-	650	-	-	-	-	248	-	-	-	SB OFF RAMP-GORE
					STAGE 1B TOTAL:	0	7332	0	0	0	0	787	18	0	0	
					STAGE 1 TOTAL:	26	17292	0	2030	3260	77	5743	844	261	745	

CONTINUED CONCRETE ITEMS

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	* 405.0100 COLORING CONCRETE WISDOT RED CY	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0125 CONCRETE PAVEMENT 12 1/2-INCH SY	415.1080 CONCRETE PAVEMENT HES 8-INCH SY	* 415.4100 CONCRETE PAVEMENT JOINT FILLING SY	416.0512 CONCRETE TRUCK APRON 12-INCH SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	REMARKS
		260'NB'+16		262'NB'+04	RT	-	493	-	-	-	-	-	8	-	-	IH 39 NB-SHOULDER
		260'NB'+16	-	261'NB'+80	LT/RT	-	-	657	-	-	-	-	34	-	-	IH 39 NB - MAINLINE
		260'NB'+16	-	261'NB'+95	LT	-	309	-	-	-	-	-	11	-	-	IH 39 NB-SHOULDER
		263'NB'+31	-	264'NB'+50	LT	-	199	-	-	-	-	-	6	-	-	IH 39 NB-SHOULDER
		263'NB'+43	-	267'NB'+00	RT	-	712	-	-	-	-	100	8	-	-	IH 39 NB-SHOULDER
		263'NB'+58	-	264'NB'+50	LT/RT	-	-	369	-	-	-	-	34	-	-	IH 39 NB - MAINLINE
		264'NB'+50	-	273'NB'+50	LT	-	650	-	-	-	-	360	-	-	-	IH 39 NB-SHOULDER
		281'NB'+30	-	283'NB'+50	RT	-	439	-	-	-	-	88	9	-	-	IH 39 NB - RAMP
		264'NN'+34	-	273'NN'+11	RT	-	1467	-	-	-	-	-	-	-	-	NB ON RAMP
		273'NN'+11	-	281'NN'+30	LT/RT	-	2145	-	-	-	-	328	-	-	-	NB ON RAMP-GORE
					STAGE 2 - IH 39 TOTAL:	0	7376	1026	0	0	0	1032	110	0	0	
	STAGE 2A - STH 60	62+00		69+00	LT/RT	56	1020	-	-	1020	170	-	-	-	-	STH 60
					STAGE 2A TOTAL:	56	1020	0	0	1020	170	0	0	0	0	
	STAGE 2B - STH 60	62+00		69+00	LT/RT	57	410	-	-	410	170	-	-	-	-	STH 60
					STAGE 2B TOTAL:	57	410	0	0	410	170	0	0	0	0	
					STAGE 2 TOTAL:	113	8806	1026	0	1430	340	1032	110	0	0	
	STAGE 3A - STH 60	48+00	-	54+50	LT/RT	195	330	-	-	330	585	-	-	-	-	STH 60
		54+50	-	62+00	LT/RT	185	1710	-	-	1710	555	-	-	-	-	STH 60
					STAGE 3A TOTAL:	380	2040	0	0	2040	1140	0	0	0	0	
	STAGE 3B - STH 60	48+00	-	54+50	LT/RT	-	380	-	-	380	-	-	-	-	-	STH 60
		54+50	-	62+00	LT/RT	190	570	-	-	570	565	-	-	-	-	STH 60
					STAGE 3B TOTAL:	190	950	0	0	950	565	0	0	0	0	
	STAGE 3C - STH 60	62+00	-	69+00	LT/RT	3	-	-	-	-	8	-	-	-	-	STH 60
					STAGE 3C TOTAL:	3	0	0	0	0	8	0	0	0	0	
	STAGE 3D - IH 39	244'SN'+50	-	252'SN'+76	LT/RT	-	2124	-	-	-	-	331	-	-	-	SB ON RAMP-GORE
		252'SN'+76	-	260'SN'+03	LT	-	1208	-	-	-	-	-	-	-	-	SB ON RAMP
					STAGE 3D TOTAL:	0	3333	0	0	0	0	331	0	0	0	
					STAGE 3 TOTAL:	573	6323	0	0	2990	1713	331	0	0	0	
	STAGE 4	242'SB'+96	-	244'SB'+50	LT	-	315	-	-	-	-	62	15	-	-	IH 39 SB-RAMP
		258'SB'+00	-	259'SB'+80	LT	-	200	-	-	-	-	72	8	-	-	IH 39 SB-SHOULDER
		259'SB'+80	-	261'SB'+80	LT	-	408	-	-	-	-	-	-	-	-	IH 39 SB-SHOULDER
		259'SB'+80	-	261'SB'+65	LT/RT	-	-	739	-	-	-	-	34	-	-	IH 39 SB - MAINLINE
		259'SB'+80	-	261'SB'+92	RT	-	363	-	-	-	-	-	13	-	-	IH 39 SB-SHOULDER
		263'SB'+16	-	264'SB'+50	LT	-	336	-	-	-	-	-	8	-	-	IH 39 SB-SHOULDER
		263'SB'+27	-	264'SB'+50	RT	-	203	-	-	-	-	-	12	-	-	IH 39 SB-SHOULDER
		263'SB'+42	-	264'SB'+50	LT/RT	-	-	431	-	-	-	-	34	-	-	IH 39 SB - MAINLINE
		264'SB'+50		269'SB'+00	LT	-	627		-	-	-	180	-	-	-	IH 39 SB-SHOULDER
		264'SB'+50	-	273'SB'+50	RT	-	1150	-	-	-	-	360	15	-	-	IH 39 SB-SHOULDER
		54+50	-	62+00	LT/RT	135	-	-	-	-	410	-	-	-	-	STH 60
					STAGE 4 TOTAL:	135	3603	1170	0	0	410	674	139	0	0	
					PROJECT ID 1012-01-74 TOTAL:	850	36,020	2,200	2,030	7,680	2,540	7,780	1,090	260	750	

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ROUT AND SEAL

CATEGORY	STATION	TO	STATION	LOCATION	415.6000.S ROUT AND SEAL LF	REMARKS
0010	240''NB''+10	-	261''NB''+06	RT	2,096	NB OFF RAMP RT
	242''SB''+96	-	260''SB''+64	LT	1,768	SB ON RAMP LT
	245''NB''+25	-	261''NB''+01	LT	1,576	NB OFF RAMP LT
	245''SB''+52	-	259''SB''+68	RT	1,416	SB ON RAMP RT
	244'SN'+50	-	252'SN'+76	RT	826	SB ON RAMP GORE
	245'NX'+00	-	247'NX'+37	LT	237	NB OFF RAMP GORE
	264''SB''+48	-	276''SB''+55	RT	1,207	SB OFF RAMP RT
	264''SB''+51	-	283''SB''+00	LT	1,849	SB OFF RAMP LT
	264''NB''+87	-	280''NB''+34	LT	1,547	NB ON RAMP LT
	264''NB''+97	-	283''NB''+50	RT	1,853	NB ON RAMP RT
	273'NN'+10	-	281'NN'+30	LT	820	NB ON RAMP GORE
	274'SX'+41	-	276'SX'+80	RT	239	SB OFF RAMP GORE
	52+34	-	54+69	RT	235	STH 60 - NB RAMP ROUNDABOUT RT
	52+34	-	54+99	LT	265	STH 60 - NB RAMP ROUNDABOUT LT
	66+12	-	68+78	RT	266	STH 60 - SB RAMP ROUNDABOUT RT
	66+16	-	68+78	LT	262	STH 60 - SB RAMP ROUNDABOUT LT
				PROJECT ID 1012-01-74 TOTAL:	16,462	

CONCRETE SHOULDER RUMBLE STRIPS

CATEGORY	STATION	TO	STATION	LOCATION	416.1110 CONCRETE SHOULDER RUMBLE STRIPS LF	REMARKS
0010	233''SB''+91	-	242''SB''+96	LT EX-IH 39 SB CL	905	
	238''SB''+01	-	244''SB''+89	RT EX-IH 39 SB CL	688	
	242''SB''+96	-	245''SB''+73	LT EX-IH 39 SB CL	277	
	247''SB''+22	-	258''SB''+74	RT EX-IH 39 SB CL	1152	
	258''SB''+00	-	261''SB''+65	LT EX-IH 39 SB CL	365	
	259''SB''+80	-	261''SB''+65	RT EX-IH 39 SB CL	185	
	263''SB''+42	-	265''SB''+05	LT EX-IH 39 SB CL	163	
	263''SB''+42	-	265''SB''+91	RT EX-IH 39 SB CL	249	
	268''SB''+44	-	273''SB''+50	RT EX-IH 39 SB CL	506	
	273''SB''+50	-	283''SB''+70	RT EX-IH 39 SB CL	1020	
	282''SB''+38	-	283''SB''+00	LT EX-IH 39 SB CL	62	
	238''NB''+01	-	244''NB''+88	LT EX-IH 39 NB CL	687	
	240''NB''+10	-	240''NB''+72	RT EX-IH 39 NB CL	62	
	246''NB''+61	-	247''NB''+65	LT EX-IH 39 NB CL	104	
	256''NB''+15	-	258''NB''+60	LT EX-IH 39 NB CL	245	
	260''NB''+16	-	261''NB''+80	LT EX-IH 39 NB CL	164	
	260''NB''+16	-	261''NB''+80	RT EX-IH 39 NB CL	164	
	263''NB''+58	-	265''NB''+00	LT EX-IH 39 NB CL	142	
	263''NB''+58	-	267''NB''+00	RT EX-IH 39 NB CL	342	
	273''NB''+50	-	283''NB''+70	LT EX-IH 39 NB CL	1020	
	282''NB''+65	-	283''NB''+50	RT EX-IH 39 NB CL	85	
				PROJECT ID 1012-01-74 TOTAL:	8,587	

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ASPHALTIC PAVEMENT ITEMS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	REMARKS
0010	STAGE 1A - STH 60	54+50	-	62+00	LT/RT	-	-	-	-	250	STH 60
		62+00	-	69+00	LT/RT	37	6	58	37	250	STH 60
		69+00	-	77+99	LT/RT	1160	190	-	1160	250	STH 60
		77+99	-	90+06	LT/RT	1095	587	-	1095	-	STH 60
					STAGE 1A - STH 60 TOTAL:	2292	783	58	2292	750	
	STAGE 1B	240'NB'+10	-	245'NB'+00	RT	4	-	4	-	-	IH 39 NB
		276'SB'+80	-	281'SB'+70	LT	4	-	4	-	-	IH 39 SB
		245'NX'+00	-	261'NX'+79	RT	184	-	184	-	-	IH 39 NB OFF RAMP
		247'NX'+38	-	261'NX'+79	LT	94	-	94	-	-	IH 39 NB OFF RAMP
		264'SX'+02	-	276'SX'+80	LT	140	-	140	-	-	IH 39 SB OFF RAMP
		264'SX'+02	-	274'SX'+41	RT	68	-	68	-	-	IH 39 SB OFF RAMP
					STAGE 1B TOTAL:	494	0	494	0	0	
					STAGE 1 TOTAL:	2786	783	552	2292	750	

CONTINUED ASPHALTIC PAVEMENT ITEMS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	REMARKS
	STAGE 3A - STH 60	48+00	-	54+50	LT/RT	-	-	-	-	61	STH 60
		54+50	-	62+00	LT/RT	-	53	23	325	61	STH 60
		62+00		69+00	LT/RT	-	-	5	-	61	STH 60
					STAGE 3A TOTAL:	0	53	28	325	183	
	STAGE 3B - STH 60	48+00	-	54+50	LT/RT	-	41	24	250	61	STH 60
		54+50	-	62+00	LT/RT	-	-	3	-	61	STH 60
					STAGE 3B TOTAL:	0	41	27	250	122	
	STAGE 3C - STH 60	42+42	-	48+03	LT/RT	507	272	-	507	-	STH 60
					STAGE 3C TOTAL:	507	272	0	507	0	
	STAGE 3D - STH 60	244'SN'+50	-	260'SN'+03	LT	168	-	168	-	-	IH 39 SB ON RAMP
		252'SN'+76	-	260'SN'+03	RT	47	-	47	-	-	IH 39 SB ON RAMP
					STAGE 3D TOTAL:	215	0	215	0	0	
					STAGE 3 TOTAL:	722	366	270	1082	305	
					PROJECT ID 1012-01-74 TOTAL:	3,510	1,150	1,060	3,370	1,540	

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ASPHALTIC FLUMES

CATEGORY	STATION	LOCATION	465.0315 ASPHALTIC FLUMES SY	REMARKS
0010	54+65	RT	13	STH 60
	55+00	LT	13	STH 60
	261+75	LT	18	IH 39 NB OFF RAMP
	261+75	RT	18	IH 39 NB OFF RAMP
PROJECT ID 1012-01-74 TOTAL:			61	

ASPHALTIC SHOULDER RUMBLE STRIPS

CATEGORY	STATION	TO	STATION	LOCATION	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	465.0425 ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL LF	REMARKS
0010	42+42	-	54+91	LT	-	1,249	STH 60
	42+52	-	52+62	RT	-	1,010	STH 60
	66+12	-	90+06	RT	-	2,394	STH 60
	66+16	-	77+89	LT	-	1,173	STH 60
	79+84	-	90+06	LT	-	1,022	STH 60
	277''NB''+50	-	283''NB''+50	RT	600	-	IH 39 NB ON RAMP
	242''SB''+96	-	248''SB''+96	LT	600	-	IH 39 SB ON RAMP
	PROJECT ID 1012-01-74 TOTAL:				1,200	6,848	

ASPHALT CENTERLINE RUMBLE STRIPS

CATEGORY	STATION	TO	STATION	LOCATION	465.0475 ASPHALT CENTERLINE RUMBLE STRIPS 2-LANE RURAL LF	REMARKS
0010	42+42	-	47+78		536	
	76+97	-	90+06		1,309	
				PROJECT ID 1012-01-74 TOTAL:	1,845	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

CROSSDRAIN CULVERT PIPES

CATEGORY	STATION	LOCATION	504.0900 CONCRETE MASONRY ENDWALLS CY	* 520.8000 CONCRETE COLLARS FOR PIPE EACH	522.0118 CULVERT PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	522.0130 CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	522.0136 CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	522.0436 CULVERT PIPE REINFORCED CONCRETE CLASS IV 36-INCH LF	* 522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.2419 CULVERT PIPE REINFORCED CONCRETE CLASS HE-IV HORIZONTAL ELLIPTICAL 19X30-INCH LF	522.2429 CULVERT PIPE REINFORCED CONCRETE CLASS HE-IV HORIZONTAL ELLIPTICAL 29X45-INCH LF	522.2619 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH EACH	522.2629 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH EACH	* 633.5200 MARKERS CULVERT END EACH	INLET FT	OUTLET FT	SLOPE FT/FT	REMARKS
0010	241''NB''+77	IH 39 NB	-	1	16	-	-	-	1	-	-	-	-	-	-	1	1057.80	1057.11	0.031	
	244''NB''+77	IH 39 NB	-	1	16	-	-	-	1	-	-	-	-	-	-	1	1058.70	1058.44	0.012	
	247''NB''+77	IH 39 NB	-	1	36	-	-	-	1	-	-	-	-	-	-	1	1059.75	1059.50	0.024	
	259''NB''+76	IH 39 NB	-	1	28	-	-	-	1	-	-	-	-	-	-	1	1081.40	1080.12	0.007	
	266''NB''+78	IH 39 NB	-	1	12	-	-	-	1	-	-	-	-	-	-	1	1094.52	1094.20	0.018	
	250''SB''+54	IH 39 SB	-	1	12	-	-	-	1	-	-	-	-	-	-	1	1060.33	1059.38	0.053	
	273''SB''+15	IH 39 SB	-	1	-	44	-	-	-	1	-	-	-	-	-	1	1101.90	1101.54	0.007	
	276''SB''+77	IH 39 SB	-	1	20	-	-	-	1	-	-	-	-	-	-	1	1109.25	1109.04	0.008	
	54+74	STH 60	4.2	-	-	-	-	-	-	-	-	288	-	-	-	2	1063.58	1062.80	0.005	3 PIPES AT 96 FT EACH
	58+36	STH 60	-	-	-	-	-	-	-	-	-	112	-	2	-	2	1065.00	1063.88	0.010	
	62+42	STH 60	-	-	-	-	-	-	-	-	-	109	-	1	-	1	1068.72	1067.62	0.011	
	65+65	STH 60	-	-	-	-	-	-	-	-	-	-	140	-	2	2	1072.60	1071.20	0.010	
	254''NX''+00	IH 39 NB OFF RAMP	-	-	-	-	-	72	-	-	2	-	-	-	-	2	1059.20	1058.80	0.006	
	264''NN''+50	IH 39 NB ON RAMP	-	-	-	-	-	-	-	-	-	60	-	2	-	2	1071.65	1065.07	0.084	
	259''SN''+00	IH 39 SB ON RAMP	-	-	-	-	88	-	-	-	2	-	-	-	-	2	1062.10	1061.60	0.005	
	PROJECT ID 1012-01-74 TOTAL:		4	8	140	44	88	72	7	1	4	569	140	5	2	21				

TEMPORARY SHORING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	511.1100 TEMPORARY SHORING SF	REMARKS
0010	STAGE 1A - STH 60	59+41	-	60+93	RT	557	
		59+49	-	61+08	LT	744	
					PROJECT ID 1012-01-74 TOTAL:	1,301	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

TEMPORARY DRAINAGE

CATEGORY	STATION	TO	STATION	LOCATION	520.2024 CULVERT PIPE TEMPORARY 24-INCH LF	* 520.8000 CONCRETE COLLARS FOR PIPE EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	INLET FT	OUTLET FT	SLOPE FT/FT	REMARKS
0010	TEMP 47+25			STH 60 LT	17	1	1	1065.49	1064.81	0.040	
	TEMP_EX NB ON			EXISTING IH 39 NB ON RAMP	64	--	2	1075.18	1074.54	0.010	
				PROJECT ID 1012-01-74 TOTAL:	81	1	3				

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

STORM SEWER

CATEGORY	FROM STRUCTURE		TO STRUCTURE	LOCATION	* 520.8000 CONCRETE COLLARS FOR PIPE EACH	521.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	* 522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 15-INCH EACH	* 522.1018 18-INCH EACH	530.0118 CULVERT PIPE CORRUGATED POLYETHYLEN 18-INCH LF	608.0005 STORM SEWER ROCK EXCAVATION CY	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0318 CLASS III 18-INCH LF	608.0412 CLASS IV 12-INCH LF	608.0415 CLASS IV 15-INCH LF	611.0430 RECONSTRUCTING INLETS EACH	* 633.5200 MARKERS CULVERT END EACH	INLET FT	OUTLET FT	SLOPE FT/FT	REMARKS
0010	EX NB	-	SS-5.3	IH 39 SB	-	-	-	-	-	-	-	6	-	-	-	1	-	1110.65	1110.59	0.0100	
	SS-1.1	-		IH 39 SB	1	-	-	-	-	-	-	-	9	-	-	-	-	1055.08	1055.04	0.0224	
	SS-1.2	-	SS-1.1	IH 39 SB	-	-	-	-	-	-	-	-	100	-	-	-	-	1057.60	1056.56	0.0100	
	SS-1.3	-		IH 39 SB	1	-	-	-	-	-	-	-	9	-	-	-	-	1059.78	1059.56	0.0240	
	SS-1.4		SS-1.1	IH 39 SB					-			121	-	-	-	-	-	1058.21	1057.00	0.0100	
	EX SB MEDIAN	-	SS-2.1	IH 39 SB	1	-	-	-	-	-	-	-	5	-	-	-	-	1071.76	1071.73	0.0050	
	SS-2.1	-	OUTLET	IH 39 SB	-	-	-	-	1	-	-	-	69	-	-	-	1	1068.55	1067.80	68.5500	
	SS-3.1	-	OUTLET	IH 39 SB	-	1	-	-	-	61	-	-	-	-	-	-	1	1082.19	1067.09		
	SS-3.2	-	SS-3.1	IH 39 SB	-	-	-	-	-	-	-	74	-	-	-	-	-	1083.80	1082.69	0.0150	
	SS-3.3	-	SS-3.1	IH 39 SB	-	-	-	-	-	-	-	10	-	-	-	-	-	1082.88	1082.69	0.0200	
	SS-4.1	-	OUTLET	IH 39 NB	-	1	-	-	-	56	-	-	-	-	-	-	1	1083.02	1070.92		
	SS-4.2	-	SS-4.1	IH 39 NB	-	-	-	-	-	-	-	74	-	-	-	-	-	1085.00	1083.51	0.0200	
	SS-4.3	-	SS-4.1	IH 39 NB	-	-	-	-	-	-	-	10	-	-	-	-	-	1083.71	1083.51	0.0200	
	SS-4.5	-	SS-4.4	IH 39 NB	-	-	-	-	-	-	-	-	-	7	-	-	-	1091.31	1091.24	0.0100	
	SS-4.4	-	OUTLET	IH 39 NB	-	-	-	-	1	-	-	-	82	-	-	-	1	1090.74	1089.62	0.0130	
	SS-4.6	-	SS-4.5	IH 39 NB	-	-	-	-	-	-	-	-	-	7	-	-	-	1091.37	1091.30	0.0100	
	SS-4.7	-	SS-4.4	IH 39 NB	-	-	-	-	-	-	-	-	-	31	-	-	-	1091.40	1091.24	0.0050	
	SS-4.8	-	SS-4.7	IH 39 NB	-	-	-	-	-	-	-	-	-	10	-	-	-	1091.44	1091.40	0.0050	
	SS-5.1	-		IH 39 SB	1	-	-	-	-	-	-	-	9	-	-	-	-	1079.75	1079.49	0.0290	
	SS-5.2	-	SS-5.3	IH 39 SB	-	-	-	-	-	-	-	-	-	177	-	-	-	1111.98	1111.09	0.0068	
	EX NB MEDAIN	-	SS-5.3	IH 39 SB	-	-	-	-	-	-	-	6	-	-	-	1	-	1110.65	1110.59	0.0010	
	SS-5.3	-	EX SB MEDAIN	IH 39 SB	-	-	-	-	-	-	-	-	6	-	-	1	-	1110.59	1107.54	0.0100	
	100	-	105	STH 60	-	-	-	-	-	-	-	-	-	16	-	-	-				
	105	-	110	STH 60	-	-	-	-	-	-	-	-	-	42	-	-	-				
	110	-		STH 60	-	-	1	-	-	-	-	-	-	-	-	-	-				
	200	-	205	STH 60	-	-	-	-	-	-	-	-	-	53	-	-	-				
	205	-	210	STH 60	-	-	-	-	-	-	-	-	-	39	-	-	-				
	210	-	215	STH 60	-	-	-	-	-	-	-	-	-	10	-	-	-				
	215	-	235	STH 60	-	-	-	-	-	-	-	-	-	45	-	-	-				
	220	-	225	STH 60	-	-	-	-	-	-	-	-	-	26	-	-	-				
	225	-	235	STH 60	-	-	-	-	-	-	-	-	-	10	-	-	-				
	230	-	235	STH 60	-	-	-	-	-	-	-	-	-	106	-	-	-				
	235	-	240	STH 60	-	-	-	-	-	-	-	-	-	-	67	-	-				
	240	-		STH 60	-	-	-	1	-	-	-	-	-	-	-	-	-				
	300	-	305	STH 60	-	-	-	-	-	-	-	-	-	35	-	-	-				
	305	-	310	STH 60	-	-	-	-	-	-	-	-	-	26	-	-	-				
	310	-		STH 60	-	-	1	-	-	-	-	-	-	-	-	-	-				

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

CONTINUED STORM SEWER

CATEGORY	FROM STRUCTURE		TO STRUCTURE	LOCATION	* 520.8000 CONCRETE COLLARS FOR PIPE EACH	521.1018 APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH EACH	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 15-INCH EACH	* 522.1018 18-INCH EACH	530.0118 CULVERT PIPE CORRUGATED POLYETHYLENE 18-INCH LF	608.0005 STORM SEWER ROCK EXCAVATION CY	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0318 CLASS III 18-INCH LF	608.0412 CLASS IV 12-INCH LF	608.0415 CLASS IV 15-INCH LF	611.0430 RECONSTRUCTING INLETS EACH	* 633.5200 MARKERS CULVERT END EACH	INLET FT	OUTLET FT	SLOPE FT/FT	REMARKS
	400	-	405	STH 60	-	-	-	-	-	-	-	-	-	10	-	-	-			
	405	-	415	STH 60	-	-	-	-	-	-	-	-	-	18	-	-	-			
	410	-	415	STH 60	-	-	-	-	-	-	-	-	-	23	-	-	-			
	415	-	425	STH 60	-	-	-	-	-	-	-	-	-	-	26	-	-			
	420	-	425	STH 60	-	-	-	-	-	-	-	-	-	-	10	-	-			
	425	-	430	STH 60	-	-	-	-	-	-	-	-	-	-	31	-	-			
	430	-		STH 60	-	-	-	1	-	-	-	-	-	-	-	-	-			
	500	-	510	STH 60	-	-	-	-	-	-	35	-	-	24	-	-	-			
	505	-	510	STH 60	-	-	-	-	-	-	13	-	-	9	-	-	-			
	510	-	515	STH 60	-	-	-	-	-	-	80	-	-	74	-	-	-			
	515	-		STH 60	-	-	1	-	-	-	-	-	-	-	-	-	-			
	600	-	605	STH 60	-	-	-	-	-	-	40	-	-	33	-	-	-			
	605	-	610	STH 60	-	-	-	-	-	-	64	-	-	59	-	-	-			
	610	-	615	STH 60	-	-	-	-	-	-	20	-	-	24	-	-	-			
	615	-	625	STH 60	-	-	-	-	-	-	22	-	-	29	-	-	-			
	620	-	625	STH 60	-	-	-	-	-	-	7	-	-	9	-	-	-			
	625	-	630	STH 60	-	-	-	-	-	-	17	-	-	70	-	-	-			
	630	-		STH 60	-	-	1	-	-	-	-	-	-	-	-	-	-			
	700	-	705	STH 60	-	-	-	-	-	-	-	-	-	40	-	-	-			
	705	-		STH 60	-	-	1	-	-	-	-	-	-	-	-	-	-			
	PROJECT ID 1012-01-74 TOTAL:				4	2	5	2	2	117	300	301	289	1,062	134	3	4			

SIGNS TYPE I

CATEGORY	SIGN NUMBER	APPROXIMATE STATION	LOCATION	SIGN CODE	SIGN MESSAGE	SIGN SIZE (W X H) IN	STEEL SUPPORT HEIGHT*** INNER FT	CENTER FT	OUTER FT	531.1100 CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS CY	531.1140 STEEL REINFORCEMENT HS ANCILLARY STRUCTURES TYPE NS LB	531.2024 DRILLING SHAFT 24-INCH LF	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS LB	637.1220 SIGNS TYPE I REFLECTIVE SH SF	REMARKS
0010	11 - 1	1 MILE FROM EXIT 119 NB RAMP GORE	RT	E1-1A	LODI ARLINGTON 1 MILE	180 x 162	11.6	13.1	12.6	3.6	540	30	1205	203	SIGN SUPPORTS: 3 X W12X26
	11 - 1	-	RT	E1-5P	EXIT 119	108 x 30	-	-	-	-	-	-	-	23	MOUNT ABOVE E1-1A
	11 - 2	START OF EXIT 119 NB RAMP	RT	E4-1A	LODI ARLINGTON (ARROW)	216 x 132	12.6	14.2	15.8	3.6	540	30	1341	198	SIGN SUPPORTS: 3 X W12X26
	11 - 2	-	RT	E1-5P	EXIT 119	108 x 30	-	-	-	-	-	-	-	23	MOUNT ABOVE E4-1A
	12 - 1	1 MILE FROM EXIT 119 SB RAMP GORE	RT	E1-1A	LODI ARLINGTON 1 MILE	180 x 162	11.8	-	9.9	2.4	360	20	718	203	SIGN SUPPORTS: 2 X W12X26
	12 - 1	-	RT	E1-5P	EXIT 119	108 x 30	-	-	-	-	-	-	-	23	MOUNT ABOVE E1-1A
	12 - 2	START OF EXIT 119 SB RAMP	RT	E4-1A	LODI ARLINGTON (ARROW)	216 x 132	10.5	-	7.6	2.4	360	20	628	198	SIGN SUPPORTS: 2 X W12X26
	12 - 2	-	RT	E1-5P	EXIT 119	108 x 30	-	-	-	-	-	-	-	23	MOUNT ABOVE E4-1A
					PROJECT ID 1012-01-74 TOTAL:					12	1,800	100	3,892	891	

*** STEEL SUPPORT HEIGHTS PRESENTED ARE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY. STEEL SUPPORT HEIGHT WILL BE FIELD VERFIED BY CONTRACTOR PRIOR TO INSTALLATION.

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

CONCRETE CURB AND GUTTER

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	* 415.4100 CONCRETE PAVEMENT JOINT FILLING SY	601.0405 CONCRETE CURB & GUTTER 18-INCH TYPE A LF	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0452 CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D LF	601.0551 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A LF	601.0580 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R LF	601.0590 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT LF	601.0600 CONCRETE CURB PEDESTRIAN LF	REMARKS
0010	STAGE 1A - STH 60	54+50	-	62+00	LT/RT	57	-	190	-	13	-	-	-	
		62+00	-	69+00	LT/RT	85	-	185	-	100	-	-	-	
					STAGE 1A - STH 60 TOTAL:	142	0	375	0	113	0	0	0	
	STAGE 2 - IH 39													
		261''NB''+47		262''NB''+07	RT	-	-	-	-	-	-	60	-	
					STAGE 2 - IH39 TOTAL:	0	0	0	0	0	0	60	0	
	STAGE 2A	62+00	-	69+00	LT/RT	141	-	275	-	190	-	-	-	
					STAGE 2A TOTAL:	141	0	275	0	190	0	0	0	
	STAGE 2B	62+00	-	69+00	LT/RT	95	-	24	-	190	73	-	-	
					STAGE 2B TOTAL:	95	0	24	0	190	73	0	0	
					STAGE 2 TOTAL:	236	0	299	0	380	73	60	0	
	STAGE 3A	54+50	-	62+00	LT/RT	237	-	155	-	580	-	-	-	
		62+00	-	69+00	LT/RT	387	185	510	-	400	245	-	44	
					STAGE 3A TOTAL:	624	185	665	0	980	245	0	44	
	STAGE 3B	54+50	-	62+00	LT/RT	147	73	115	-	170	140	-	-	
					STAGE 3B TOTAL:	147	73	115	0	170	140	0	0	
	STAGE 3C	48+00	-	54+50	LT/RT	143	-	-	-	430	-	-	-	
		54+50	-	58+00	LT/RT	-	100	300	750	200	180	-	53	
		62+00	-	69+00	LT/RT	97	-	350	190	-	-	-	-	
					STAGE 3C TOTAL:	239	100	650	940	630	180	0	53	
					STAGE 3 TOTAL:	1,010	358	1,430	940	1,780	565	0	97	
	STAGE 4	58+00	-	62+00	LT/RT	452	-	500	-	205	-	-	-	
		261''SB''+31	-	261''SB''+77	LT	-	-	-	-	-	-	46	-	
					STAGE 4 TOTAL:	452	0	500	0	205	0	46	0	
					PROJECT ID 1012-01-74 TOTAL:	1,840	358	2,604	940	2,478	638	106	97	

CONCRETE SIDEWALK

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	* 405.0100 COLORING CONCRETE WISDOT RED CY	602.0410 CONCRETE SIDEWALK 5-INCH SF	REMARKS
0010	STAGE 1A - STH 60	54+50	-	62+00	LT/RT	-	-	STH 60
		62+00	-	69+00	LT/RT	-	380	STH 60
					STAGE 1A - STH 60 TOTAL:	0	380	
					STAGE 1 TOTAL:	0	380	
	STAGE 2A	62+00	-	69+00	LT/RT	-	2300	STH 60
					STAGE 2A TOTAL:	0	2300	
	STAGE 2B	62+00	-	69+00	LT/RT	-	1760	STH 60
					STAGE 2B TOTAL:	0	1760	
					STAGE 2 TOTAL:	0	4060	
	STAGE 3A	54+50	-	62+00	LT/RT	-	1260	STH 60
		62+00	-	69+00	LT/RT	68	4850	STH 60
					STAGE 3A TOTAL:	68	6110	
	STAGE 3B	54+50	-	62+00	LT/RT	-	2480	STH 60
					STAGE 3B TOTAL:	0	2480	
	STAGE 3C	48+00	-	54+50	LT/RT	34	2210	STH 60
		54+50	-	58+00	LT/RT	44	9850	STH 60
		62+00	-	69+00	LT/RT	16	2760	STH 60
					STAGE 3C TOTAL:	94	14820	
					STAGE 3 TOTAL:	162	23410	
	STAGE 4	54+50	-	62+00	LT/RT	-	4000	STH 60
					STAGE 4 TOTAL:	0	4000	
					PROJECT ID 1012-01-74 TOTAL:	162	31,850	

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CURP RAMP DETECTABLE WARNING FIELDS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	REMARKS
0010	UNSTAGED	54+50	-	62+00	LT/RT	288	CURB RAMP COMPLETION DEPENDENT
		62+00	-	69+00	LT/RT	288	CURB RAMP COMPLETION DEPENDENT
					PROJECT ID 1012-01-74 TOTAL:	576	

CONCRETE BARRIER

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	603.0105 CONCRETE BARRIER SINGLE-FACED 32-INCH LF	603.1142 CONCRETE BARRIER TYPE S42 LF	603.3213 CONCRETE BARRIER TRANSITION TYPE F32SF TO S36 EACH	603.3535 CONCRETE BARRIER TRANSITION TYPE S36 TO S42 EACH	REMARKS
0010	STAGE 2	260'NB'+16	-	261'NB'+93	LT	10	142	1	1	IH 39 NB
		263'NB'+31	-	265'NB'+00	RT	10	134	1	1	IH 39 NB
					STAGE 2 TOTAL:	20	276	2	2	
	STAGE 4	259'SB'+80	-	261'SB'+92	RT	10	176	1	1	IH 39 SB
		263'SB'+30	-	265'SB'+00	LT	10	135	1	1	IH 39 SB
					STAGE 4 TOTAL:	20	311	2	2	
					PROJECT ID 1012-01-74 TOTAL:	40	587	4	4	

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TEMPORARY CONCRETE BARRIER

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	603.8500 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST LF	SPV.0090.03 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE LF	REMARKS
0010	STAGE 1A - STH 60	STH 60 UNDISTIBUTED			LT	429	429	--	--	
		STH 60 UNDISTIBUTED			RT	390	390	--	--	
					STAGE 1A - STH 60 TOTAL:	819	819	0	0	
	STAGE 1B	238''NB''+00	-	247''NB''+18	IH 39 NB - LT	918	918	--	--	
		238''SB''+00	-	247''SB''+46	IH 39 SB - RT	946	946	--	--	
		273''NB''+50		283''NB''+70	IH 39 NB - LT	1020	1020	--	--	
		273''SB''+50		283''SB''+70	IH 39 SB - RT	1020	1020	--	--	
					STAGE 1B TOTAL:	3904	3904	0	0	
					STAGE 1 TOTAL:	4723	4723	0	0	
	WINTER SHUTDOWN 1	264'NB'+40	-	266''NB''+70	IH 39 NB - RT	230	230	--	--	
		255''SB''+58	-	261''SB''+70	IH 39 SB - LT	320	320	--	--	
					WINTER SHUTDOWN 1 TOTAL:	550	550	0	0	
	STAGE 2	37''X1''+18	-	46''X1''+22	NB CROSSOVER - LT	905	905	--	--	
		40''X1''+70	-	46''X1''+22	NB CROSSOVER - RT	576	576	--	--	
		246''SB''+22	-	273''SB''+50	IH 39 SB - LT	2728	2728	--	--	
		73''X2''+50		83''X2''+73	NB CROSSOVER - LT	1024	1024	--	--	
		STH 60 UNDISTIBUTED			RT	--	160	--	--	
					STAGE 2 TOTAL:	5233	5393	0	0	
	STAGE 3	238''NB''+00	-	246''NB''+70	IH 39 NB - LT	870	870	--	--	
		238''SB''+00	-	246''SB''+70	IH 39 SB - RT	870	870	--	--	
		278''NB''+30		283''NB''+68	IH 39 NB - LT	538	538	--	--	
		278''NB''+30		283''SB''+68	IH 39 SB - RT	538	538	--	--	
					STAGE 3 TOTAL:	2816	2816	0	0	
	STAGE 4	37''X3''+18	-	46''X3''+20	SB CROSSOVER -RT	902	902	--	--	
		246''NB''+19	-	273''NB''+60	SB TRAFFIC THRU PROJECT AREA	2741	2741	--	--	
		73''X4''+60	-	83''X4''+60	SB CROSSOVER -RT	1000	1000	--	--	
		75''X4''+05	-	79''X4''+00	SB CROSSOVER -LT	395	395	--	--	
					STAGE 4 TOTAL:	5038	5038	0	0	
	STAGE 5	238''NB''+00	-	247''NB''+18	IH 39 NB - LT	918	--	918	918	
		238''SB''+00	-	247''SB''+46	IH 39 SB - RT	946	--	946	946	
		273''NB''+50		283''NB''+70	IH 39 NB - LT	1020	--	1020	1020	
		273''NB''+50		283''SB''+70	IH 39 SB - RT	1020	--	1020	1020	
					STAGE 5 TOTAL:	3904	0	3904	3904	
					PROJECT ID 1012-01-74 TOTAL:	22,264	18,520	3,904	3,904	

SLOPE PAVING

CATEGORY	STATION	TO	STATION	LOCATION	604.0500 SLOPE PAVING CRUSHED AGGREGATE SY	REMARKS
0010	259''SB''+80		261''SB''+92	RT MEDIAN	34	
	260''NB''+16	-	261''NB''+93	LT MEDIAN	27	
	263''SB''+30	-	264''SB''+50	RT MEDIAN	16	
	263''NB''+31	-	264''NB''+50	LT MEDIAN	16	
				PROJECT ID 1012-01-74 TOTAL:	92	

TEMPORARY COVER PLATES

CATEGORY	STAGE	611.8120.S COVER PLATES TEMPORARY EACH	REMARKS
0010	STAGE 1	12	
	STAGE 2A	4	
	PROJECT ID 1012-01-74 TOTAL:	16	

INLETS, MANHOLES, MANHOLE COVERS, AND INLET COVERS

CATEGORY	STRUCTURE I.D. #	STATION	LOCATION	611.0530 MANHOLE COVERS TYPE J EACH	611.0606 INLET COVERS TYPE B EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0636 INLET COVERS TYPE HM-S EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0642 INLET COVERS TYPE MS EACH	611.0651 INLET COVERS TYPE S EACH	611.0652 INLET COVERS TYPE T EACH	611.0654 INLET COVERS TYPE V EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2X2-FT EACH	611.3225 INLETS 2X2.5-FT EACH	611.3230 INLETS 2X3-FT EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	SPV.0060.10 SPECIAL (10. WELDED INLET COVERS) EACH	RIM ELEVATION	SUMP ELEVATION	INNER STRUCTURE DEPTH	REMARKS
0010	SS-1.1	238"SB"+76	30.00' RT	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	1063.27	1054.87	6.40	8-INCH ADJUSTMENT
	SS-1.2	239"SB"+80	30.00' RT	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	1	1063.24	1057.39	4.68	4-INCH ADJUSTMENT
	SS-1.3	241"SB"+77	30.00' RT	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1	1063.57	1059.57	2.33	4-INCH ADJUSTMENT
	SS-1.4	237"SB"+55	28.70 RT	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	1	1	1063.12	1058.21	4.08	4-INCH ADJUSTMENT
	SS-2.1	253"SB"+77	29.50' LT	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	1075.18	1067.66	6.11	2-INCH ADJUSTMENT
	SS-3.1	261"SB"+47	48.27' LT	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	1	-	1089.10	1082.18	5.59	6-INCH ADJUSTMENT
	SS-3.2	261"SB"+47	26.00' RT	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	1	-	1089.55	1083.63	4.59	6-INCH ADJUSTMENT
	SS-3.3	261"SB"+57	48.27' LT	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	1	-	1089.33	1082.71	5.29	6-INCH ADJUSTMENT
	SS-4.1	261"NB"+64	48.27' RT	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	1	-	1090.52	1083.01	6.18	6-INCH ADJUSTMENT
	SS-4.2	261"NB"+64	26.00' LT	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	1	-	1090.99	1084.83	4.83	6-INCH ADJUSTMENT
	SS-4.3	261"NB"+73	48.27' RT	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	1	-	1090.71	1083.54	6.00	6-INCH ADJUSTMENT
	SS-4.4	264"NB"+38	25.00' LT	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	1	-	1095.57	1090.53	3.21	6-INCH ADJUSTMENT
	SS-4.5	264"NB"+38	30.14' LT	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	1094.45	1091.14	2.14	4-INCH ADJUSTMENT
	SS-4.6	264"NB"+38	35.28' LT	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	1	-	1094.62	1091.20	2.25	4-INCH ADJUSTMENT
	SS-4.7	264"NB"+07	25.15' LT	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	1	-	1095.15	1091.23	2.75	4-INCH ADJUSTMENT
	SS-4.8	264"NB"+07	35.14' LT	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	1	-	1094.14	1091.28	1.86	2-INCH ADJUSTMENT
	SS-5.1	276"SB"+78	30.00' RT	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	1114.53	1109.54	2.99	8-INCH ADJUSTMENT
	SS-5.2	282"SB"+00	30.00' RT	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	1115.12	1111.81	2.31	2-INCH ADJUSTMENT
	SS-5.3	283"SB"+76	30.00' RT	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	1	-	1113.88	1110.43	2.62	4-INCH ADJUSTMENT
	100	54+68.47	16.4' LT	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	1	-				
	105	54+63.97	1.5' LT	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	1	-				
	200	55+76.86	52.5' LT	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	1	-				
	205	55+98.88	7.5' LT	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-				
	210	56+34.53	11.7' RT	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-				
	215	56+41.38	19.2' RT	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	1	-				
	220	56+34.73	61.4' RT	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-	1	-				
	225	56+60.93	62.7' RT	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	1	-				
	230	57+55.14	9' LT	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	1	-				
	235	56+67.87	55.3' RT	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	1	-				
	300	56+72.90	101' LT	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	1	-				
	305	56+59.88	134.4' LT	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	1	-				
	400	58+74.14	24.6' LT	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	1	-				
	405	58+64.82	24.6' LT	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	1	-				
	410	58+42.29	1.5' LT	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	1	-				
	415	58+64.51	6.6' LT	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	1	-				
	420	58+47.38	19' RT	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	1	-				
	425	58+57.80	18.6' RT	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	1	-				
	500	63+58.81	6.9' LT	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-				
	505	63+84.19	14.6' LT	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-				
	510	63+85.63	5.4' LT	-	-	-	-	-	-	-	-	1	-	-	1	-	1	-	-	1	-				
	600	64+36.79	99.5' LT	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-				
	605	64+69.50	97.2' LT	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	1	-				
	610	65+27.91	53' LT	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	1	-				
	615	65+22.97	30' LT	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-				
	620	65+12.16	9.3' LT	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-				
	625	65+17.39	1.5' LT	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-				
	700	64+59.24	71.7' RT	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	1	-				
	710	62+48	56.30' LT	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2	1	-	1071.29	1068.50	2.79	HWY 60 MS - GRATE
	PROJECT ID 1012-01-74 TOTAL:			1	6	6	7	5	6	2	2	4	10	1	14	11	6	15	2	48	3				

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PIPE UNDERDRAIN

CATEGORY	STATION	TO	STATION	OFFSET	LOCATION	209.0300.S.01 BACKFILL COARSE AGGREGATE (SIZE) (01. NO. 1) CY	612.0406 PIPE UNDERDRAIN WRAPPED 6-INCH LF	645.0112 GEOTEXTILE TYPE DF SCHEDULE B SY	REMARKS
0010	12+53 SB A	-	13+64 SB A	2'	RT	3	110	60	
	11+34 SB B	-	12+34 SB B	2'	RT	3	100	55	
	10+13 SB D	-	10+63 SB D	2'	RT	1	50	30	
	11+58 SB D	-	12+68 SB D	4'	RT	3	110	60	
	58+06 WB	-	59+16 WB	16.5'	LT	3	110	60	
	12+12 SB G	-	12+37 SB G	2'	LT	1	25	15	
	10+99 SB G	-	11+24 SB G	2'	LT	1	25	15	
	10+28 NB A	-	11+38 NB A	2'	RT	3	110	60	
	10+48 NB B	-	10+78 NB A	2'	RT	1	25	15	
	10+70 NB C	-	10+95 NB C	2'	RT	1	25	15	
	11+31 NB C	-	12+06 NB C	2'	RT	2	75	40	
			PROJECT ID 1012-01-74 TOTAL:			22	765	425	

CONCRETE MEDIAN SLOPED NOSE

CATEGORY	STATION	LOCATION	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	REMARKS
0010	52+39	LT	70	TYPE 1
	55+91	LT	35	TYPE 2
	55+99	LT	25	TYPE 2
	56+60	RT	35	TYPE 2
	56+72	LT	35	TYPE 2
	57+54	LT	40	TYPE 2
	57+65	LT	25	TYPE 2
	63+52	LT	35	TYPE 2
	63+59	LT	25	TYPE 2
	64+40	RT	25	TYPE 2
	64+40	LT	35	TYPE 2
	65+11	LT	35	TYPE 2
	65+18	LT	25	TYPE 2
	68+73	LT	70	TYPE 2
	PROJECT ID 1012-01-74 TOTAL:		515	

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BEAM GUARD

CATEGORY	STATION	TO	STATION	LOCATION	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH	REMARKS
0010	257'NB'+92		262'NB'+09	RT	325	39	1	-	
	261'SB'+21	-	261'SB'+80	LT	50	8	-	1	
	263'NB'+43		264'NB'+39	RT	88	8	-	1	
	263'SB'+13		267'SB'+31	LT	325	39	1	-	
			PROJECT ID 1012-01-74 TOTAL:		788	95	2	2	

CRASH CUSHIONS

CATEGORY	STAGE	STATION	LOCATION	614.0805 CRASH CUSHIONS PERMANENT LOW MAINTENANCE EACH	614.0905 CRASH CUSHIONS TEMPORARY EACH	BACK WIDTH FT	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS	REMARKS
0010	STAGE 1A - STH 60	63+05.3	29.1' LT	-	1	2	OM-3R	TL-3	UNIDIRECTIONAL	RT	CONCRETE BARRIER TEMPORARY PRECAST	STH 60
			STAGE 1A - STH 60 TOTAL:	0	1							
	STAGE 1B	238''NB''+00	IH 39 NB - LT	-	1	2	OM-3C	TL-3	BIDIRECTIONAL	LT/RT	CONCRETE BARRIER TEMPORARY PRECAST	
		238''SB''+00	IH 39 SB - RT	-	1	2	OM-3C	TL-3	BIDIRECTIONAL	LT/RT	CONCRETE BARRIER TEMPORARY PRECAST	
			STAGE 1B TOTAL:	0	2							
			STAGE 1 TOTAL:	0	3							

CONTINUED CRASH CUSHIONS

CATEGORY	STAGE	STATION	LOCATION	614.0805 CRASH CUSHIONS PERMANENT LOW MAINTENANCE EACH	614.0905 CRASH CUSHIONS TEMPORARY EACH	BACK WIDTH FT	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS	REMARKS
	STAGE 2	40''X1''+70	NB CROSSOVER - RT	-	1	2	OM-3C	TL-3	UNIDIRECTIONAL	LT/RT	CONCRETE BARRIER TEMPORARY PRECAST	
			STAGE 2 TOTAL:	0	1							
	STAGE 3	238''NB''+00	IH 39 NB - LT	-	1	2	OM-3C	TL-3	BIDIRECTIONAL	LT/RT	CONCRETE BARRIER TEMPORARY PRECAST	
		238''SB''+00	IH 39 SB - RT	-	1	2	OM-3C	TL-3	BIDIRECTIONAL	LT/RT	CONCRETE BARRIER TEMPORARY PRECAST	
		57+90.9	27.3' RT	-	1	2	OM-3R	TL-3	UNIDIRECTIONAL	RT	CONCRETE BARRIER TEMPORARY PRECAST	STH 60
			STAGE 3 TOTAL:	0	3							
	STAGE 4	75''X4''+05	SB CROSSOVER -LT	-	1	2	OM-3C	TL-3	UNIDIRECTIONAL	LT/RT	CONCRETE BARRIER TEMPORARY PRECAST	
			STAGE 4 TOTAL:	0	1							
WINTER SHUTDOWN 2		238''NB''+00	LT	1	-	2	OM-3C	TL-3	BIDIRECTIONAL	LT/RT	CONCRETE BARRIER TEMPORARY PRECAST (ANCHORED) LEFT IN PLACE	
		238''SB''+00	RT	1	-	2	OM-3C	TL-3	BIDIRECTIONAL	LT/RT	CONCRETE BARRIER TEMPORARY PRECAST (ANCHORED) LEFT IN PLACE	
			WINTER SHUTDOWN 2 TOTAL:	2	0							
			PROJECT ID 1012-01-74 TOTAL:	2	8							

FENCE WOVEN WIRE (4 FEET)

CATEGORY	STATION	TO	STATION	LOCATION	616.0100.01 FENCE WOVEN WIRE (HEIGHT) (01. 4 FEET) LF	REMARKS
0010	235'SB'+43	-	245'SB'+03	LT	1,028	
	246'NX'+76	-	262'NX'+37	RT	1,590	
	262'SX'+95	-	272'SX'+44	LT	1,156	
	273'SB'+58	-	277'SB'+78	LT	421	
	69+64	-	73+41	LT	385	STH 60
			PROJECT ID 1012-01-74 TOTAL:		3,552	

RIPRAP

CATEGORY	STATION	LOCATION	OFFSET	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY	REMARKS
0010	54+74	STH 60	44' LT	37	75	3 PIPES OUTLET
	261''SB''+47	IH 39	108.35' LT	4	9	18" STORM SEWER OUTLET
	261''NB''+64	IH 39	104.69' RT	4	9	18" STORM SEWER OUTLET
		PROJECT ID 1012-01-74 TOTAL:		47	93	

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WATER

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	624.0100 WATER MGAL	REMARKS
0010	STAGE 1A - IH 39	238'SB'+00	-	244'SB'+70	RT	6	
		273'SB'+50	-	283'SB'+70	RT	9	
					STAGE 1A - IH39 SUBTOTAL:	15	
	STAGE 1A -STH 60	54+50	-	62+00	LT/RT	9	
		62+00	-	69+00	LT/RT	20	
		69+00	-	78+00	LT/RT	25	
					STAGE 1A - STH 60 SUBTOTAL:	55	
	STAGE 1B - IH 39	240'NB'+10	-	245'NB'+00	RT	6	
		243'SB'+68	-	248'SB'+60	LT	1	
		245'NX'+00	-	247'NX'+38	LT/RT	5	
		247'NX'+38	-	261'NX'+79	LT/RT	23	
		264'SX'+02	-	274'SX'+41	LT/RT	16	
		274'SX'+41	-	276'SX'+80	LT/RT	5	
		276'SB'+80	-	283'SB'+00	LT	8	
		245'NX'+00	-	261'NX'+79	RT	1	
		247'NX'+38	-	261'NX'+79	LT	0.6	
		264'SX'+02	-	276'SX'+80	LT	0.6	
		264'SX'+02	-	274'SX'+41	RT	0.4	
					STAGE 1B - IH 39 SUBTOTAL:	66	
					STAGE 1 TOTAL:	135	
	STAGE 2 - IH 39	256'NB'+25	-	260'NB'+16	RT	5	
		260'NB'+16	-	262'NB'+04	RT	3	
		260'NB'+16	-	261'NB'+95	LT	0.5	
		263'NB'+30	-	264'NB'+50	LT	0.3	
		263'NB'+43	-	264'NB'+50	RT	2	
		264'NB'+50	-	267'NB'+00	RT	2	
		264'NB'+50	-	273'NB'+50	LT	0.1	
		281'NB'+30	-	283'NB'+50	RT	3	
		264'NN'+34	-	273'NN'+11	LT/RT	14	
		273'NN'+11	-	281'NN'+30	LT/RT	16	
		264'NN'+34	-	281'NN'+30	RT	1	
		264'NN'+34	-	273'NN'+11	LT	0.3	
					STAGE 2 - IH 39 SUBTOTAL:	46	
	STAGE 2A - STH 60	54+50	-	62+00	LT/RT	3	
		62+00	-	69+00	LT/RT	3	
		69+00	-	78+00	LT/RT	7	
					STAGE 2A - STH 60 SUBTOTAL:	13	
	STAGE 2B - STH 60	62+00	-	69+00	LT/RT	3	
					STAGE 2B - STH 60 SUBTOTAL:	3	
					STAGE 2 TOTAL:	62	
	STAGE 3A - STH 60	48+00	-	54+50	LT/RT	11	
		54+50	-	62+00	LT/RT	13	
		62+00	-	69+00	LT/RT	3	
					STAGE 3A - STH 60 SUBTOTAL:	27	

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CONTINUED WATER

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	624.0100 WATER MGAL	REMARKS
	STAGE 3B - STH 60	48+00	-	54+50	LT/RT	10	
		54+50	-	62+00	LT/RT	5	
					STAGE 3B - STH 60 SUBTOTAL:	15	
	STAGE 3C - STH 60	48+00	-	54+50	LT/RT	1	
		54+50	-	58+00	LT/RT	2	
		62+00	-	69+00	LT/RT	1	
					STAGE 3C - STH 60 SUBTOTAL:	4	
	STAGE 3D - IH 39	244'SN'+50	-	252'SN'+76	LT/RT	16	
		252'SN'+76	-	260'SN'+03	LT/RT	11	
		244'SN'+50	-	260'SN'+03	LT	1	
		252'SN'+76	-	260'SN'+03	RT	0.2	
					STAGE 3D - IH 39 SUBTOTAL:	28	
					STAGE 3 TOTAL:	73	
	STAGE 4 - STH 60	58+00	-	62+00	LT/RT	4	
					STAGE 4 - STH 60 SUBTOTAL:	4	
	STAGE 4 - IH 39	242'SB'+96	-	244'SB'+50	LT	2	
		258'SB'+00	-	260'SB'+60	LT	0.3	
		259'SB'+80	-	261'SB'+77	LT	2	
		259'SB'+80	-	261'SB'+92	RT	1	
		263'SB'+16	-	264'SB'+50	LT	2	
		263'SB'+25	-	263'SB'+75	RT	0.3	
		264'SB'+50	-	269'SB'+00	LT	6	
					STAGE 4 - IH 39 SUBTOTAL:	14	
					STAGE 4 TOTAL:	18	
					PROJECT ID 1012-01-74 TOTAL:	290	

LANDSCAPE ITEMS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	REMARKS
0010	STAGE 1 - IH 39	235''NB''+83	-	245''NB''+00	IH 39 NB - RT	4510	4510	3	90	45	101	
		245'NX'+00	-	261'NX'+80	IH 39 NB OFF - RT	14690	8780	7	190	95	197	
		245'NX'+00	-	261'NX'+80	IH 39 NB OFF - LT	3450	2040	2	50	25	46	
		249''NB''+30	-	262''NB''+10	IH 39 NB - RT	6410	6410	5	-	190	144	
		254''NB''+00	-	262''NB''+50	IH 39 NB - NB OFF INFIELD	18690	18690	12	340	170	420	
		261'NX'+80	-	263'NX'+20	IH 39 NB OFF - RT	1330	1330	1	-	30	30	
		261'NX'+80	-	263'NX'+20	IH 39 NB OFF - LT	430	430	0	-	10	10	
		262'SX'+58	-	264'SX'+16	IH 39 SB OFF - LT	1080	600	0	-	15	13	
		262'SX'+80	-	264'SX'+16	IH 39 SB OFF - RT	560	470	0	-	15	11	
		264'SX'+16	-	270'SX'+75	IH 39 SB OFF - RT	5040	4030	3	80	40	91	
		264'SX'+16	-	276'SX'+80	IH 39 SB OFF - LT	10310	6150	5	130	65	138	
		276''SB''+80	-	283''SB''+00	IH 39 SB -LT	2830	2200	2	50	25	49	
					STAGE 1 - IH 39 TOTAL:	69,330	55,640	39	930	725	1,250	
					STAGE 1 TOTAL:	69330	55640	39	930	725	1250	

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CONTINUED LANDSCAPE ITEMS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	REMARKS
	STAGE 2- STH 60	60+00		78+00	STH 60 - RT	6050	6300	5	100	50	141	
		60+00		78+00	STH 60 - LT	11440	7450	5	160	80	167	
					STAGE 2- STH 60 TOTAL:	17490	13750	10	260	130	309	
	STAGE 2 - IH 39	249''NB''+30	-	262''NB''+50	IH 39 NB - RT	-	5190	4	120	60	117	
		261'NX'+80	-	263'NX'+00	IH 39 NB OFF - LT	-	100	0	2	1	2	
		261'NX'+80	-	263'NX'+00	IH 39 NB OFF - RT	-	590	0	10	5	13	
		262''NB''+90	-	272''NB''+00	IH 39 NB - RT	3650	4550	3	90	45	102	
		263'NN'+70	-	272'NN'+10	IH 39 NB ON - LT	5190	4330	3	90	45	97	
		263'NN'+70	-	273'NN'+00	IH 39 NB ON -RT	9540	6250	5	140	70	140	
		263'NN'+70	-	273'NN'+00	IH 39 NB ON -EXISTING RAMPS	7860	13960	9	250	125	314	
		281''NB''+30	-	285''NB''+00	IH 39 NB - RT	1590	1330	1	30	15	30	
					STAGE 2 - IH 39 TOTAL:	27,830	36,300	26	732	366	815	
					STAGE 2 TOTAL:	45,320	50,050	36	992	496	1,124	
	STAGE 3 - STH 60	45+60	-	60+00	STH 60 - LT	6800	4230	3	90	45	95	
					STAGE 3 - STH 60 TOTAL:	6800	4230	3	90	45	95	
	STAGE 3 - IH 39	262'SX'+58	-	264'SX'+16	IH 39 SB OFF - LT	-	550	0	10	5	12	
		262'SX'+80	-	264'SX'+16	IH 39 SB OFF - RT	-	420	0	10	5	9	
					STAGE 3 - IH 39 TOTAL:	0	970	1	20	10	22	
					STAGE 3 TOTAL:	6800	5200	4	110	55	117	
	STAGE 3C - STH 60	45+60	-	60+00	STH 60 - RT	5790	4990	4	100	50	112	
					STAGE 4 - STH 60 TOTAL:	5790	4990	4	100	50	112	
	STAGE 4 - IH 39	235''SB''+30	-	244''SB''+50	IH 39 SB - LT	6750	6750	4	120	60	152	
		244'SN'+50	-	261'SN'+80	IH 39 SB ON - LT	15910	12440	9	250	125	279	
		251'SN'+46	-	261'SN'+80	39 SB ON - LT - EXISTING RAMI	11060	16710	11	300	150	375	
		253'SN'+70	-	261'SN'+50	IH 39 SB ON - RT	4470	3720	3	70	35	84	
		253''SB''+70	-	262''SB''+50	IH 39 SB - LT	3920	4780	3	100	50	107	
		262''SB''+90	-	265''SB''+20	IH 39 SB - LT	3670	2730	2	60	30	61	
					STAGE 4 - IH 39 TOTAL:	45,780	47,130	32	900	450	1,058	
					STAGE 4 TOTAL:	51,570	52,120	35	1,000	500	1,171	
					PROJECT ID 1012-01-74 TOTAL:	173,020	163,010	113	3,032	1,776	3,661	

EROSION MAT

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	628.2004 EROSION MAT CLASS I TYPE B SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.2033 EROSION MAT CLASS III TYPE B SY	REMARKS
0010	STAGE 1 - IH 39	235''NB''+83	-	245''NB''+00	IH 39 NB - LT	5,360	-	-	
		245'NX'+00	-	263'NX'+00	IH 39 NB OFF - RT	5,490	-	-	
		245'NX'+00	-	263'NX'+40	IH 39 NB OFF - LT	2,000	-	-	
		249''NB''+30	-	262''NB''+50	IH 39 NB - RT	8,160	-	-	
		254''NB''+00	-	262''NB''+50	IH 39 NB - NB OFF INFIELD	3,370	-	-	
		262'SX'+25	-	270'SX'+75	IH 39 SB OFF - RT	4,600	-	1,600	
		262'SX'+25	-	276'SX'+80	IH 39 SB OFF - LT	6,460	-	1,850	
		276''SB''+80	-	283''SB''+00	IH 39 SB -LT	550	-	-	
					STAGE 1 - IH 39 TOTAL:	35990	0	3450	
					STAGE 1 TOTAL:	35990	0	3450	
	STAGE 2 - STH 60	60+00	-	78+00	STH 60 - RT	3330	460	-	
		60+00	-	78+00	STH 60 - LT	8,890	380	-	
					STAGE 2 - STH 60 TOTAL:	12220	840	0	
	STAGE 2 - IH 39	249''NB''+30	-	262''NB''+50	IH 39 NB - RT	6,720	-	-	
		261'NX'+80	-	263'NX'+00	IH 39 NB OFF - LT	124	-	-	
		261'NX'+80	-	263'NX'+00	IH 39 NB OFF - RT	587	-	-	
		262''NB''+90	-	272''NB''+00	IH 39 NB - RT	1,360	-	-	
		263'NN'+70	-	272'NN'+10	IH 39 NB ON - LT	690	-	1,380	
		263'NN'+70	-	273'NN'+00	IH 39 NB ON -RT	1,590	-	1,490	
		263'NN'+70	-	273'NN'+00	IH 39 NB ON -EXISTING RAMPS	880	-	-	
		281''NB''+30	-	285''NB''+00	IH 39 NB - RT	330	-	-	
					STAGE 2 - IH 39 TOTAL:	12281	0	2870	
					STAGE 2 TOTAL:	24,501	840	2,870	
	STAGE 3 - STH 60	48+00	-	60+00	STH 60 - RT	620	360	-	
		48+00	-	60+00	STH 60 - LT	2,210	370	-	
					STAGE 3 - STH 60 TOTAL:	2830	730	0	
	STAGE 3 - IH 39	262+58	-	264+16	IH 39 SB OFF - LT	550	-	-	
		262+80	-	264+16	IH 39 SB OFF - RT	415	-	-	
					STAGE 3 - IH 39 TOTAL:	965	0	0	
	STAGE 3D - IH 39	244'SN'+50	-	261'SN'+80	IH 39 SB ON - LT	8,370	-	-	
		251'SN'+46	-	261'SN'+80	I 39 SB ON - LT - EXISTING RAMI	-	-	-	
		253'SN'+70	-	261'SN'+50	IH 39 SB ON - RT	680	-	-	
					STAGE 3D - IH 39 TOTAL:	9050	0	0	
					STAGE 3 TOTAL:	12,845	730	0	
	STAGE 4 - IH 39	235''SB''+30	-	244''SB''+50	IH 39 SB - LT	3,080	-	-	
		253''SB''+70	-	262''SB''+50	IH 39 SB - LT	2,020	-	-	
		262''SB''+90	-	265''SB''+20	IH 39 SB - LT	1,360	-	-	
					STAGE 4 - IH 39 TOTAL:	6460	0	0	
					STAGE 4 TOTAL:	6460	0	0	
					PROJECT ID 1012-01-74 TOTAL:	79,796	1,570	6,320	

INLET PROTECTION

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	REMARKS
0010	STAGE 1A - STH 60			62+50	STH 60 - LT	1	-	-	
					STAGE 1A - STH 60 TOTAL:	1	0	0	
	STAGE 1 - IH 39			236''NB''+25	IH 39 NB - LT	-	2	-	
				266''NB''+77	IH 39 NB - LT	-	2	-	
				269''NB''+77	IH 39 NB - LT	-	2	-	
				273''NB''+20	IH 39 NB - LT	-	3	-	
					STAGE 1 - IH 39 TOTAL:	0	9	0	
					STAGE 1 TOTAL:	1	9	0	
	STAGE 2 - STH 60			63+58	STH 60 - LT	-	-	1	
				63+84	STH 60 - LT	-	-	1	
				65+12	STH 60 - LT	-	-	1	
					STAGE 2 - STH 60 TOTAL:	0	0	3	
	STAGE 2 - IH 39			253''NB''+77	IH 39 NB - LT	-	1	-	
				256''NB''+77	IH 39 NB - LT	-	1	-	
				259''NB''+77	IH 39 NB - LT	-	1	-	
				263'NX'+33	IH 39 NB OFF - LT	-	-	1	
				263'NN'+60	IH 39 NB ON - LT	-	-	1	
					STAGE 2 - IH 39 TOTAL:	0	3	2	
					STAGE 2 TOTAL:	0	3	5	
	STAGE 3 - STH 60			54+66	STH 60 - LT	-	-	2	
				55+78	STH 60 - LT	-	-	1	
				57+55	STH 60 - LT	-	-	1	
				58+44	STH 60 - LT	-	-	1	
				58+47	STH 60 - RT	-	-	1	
				58+70	STH 60 - LT	-	-	2	
					STAGE 3 - STH 60 TOTAL:	0	0	8	
	STAGE 3 - IH 39			261'SN'+75	IH 39 SB ON - LT	-	-	1	
				262'SX'+35	IH 39 SB OFF - RT	-	-	1	
					STAGE 3 - IH 39 TOTAL:	0	0	2	
					STAGE 3 TOTAL:	0	0	10	
	STAGE 4 - IH 39			253''SB''+77	IH 39 SB - RT	-	1	-	
				256''SB''+77	IH 39 SB - RT	-	1	-	
				259''SB''+77	IH 39 SB - RT	-	1	-	
		235''NB''+00	-	288''NB''+00		-	22	-	
					STAGE 4 - IH 39 TOTAL:	0	25	0	
					STAGE 4 TOTAL:	0	25	0	
					PROJECT ID 1012-01-74 TOTAL:	1	37	15	

EROSION CONTROL CHECKS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	SPV.0035.01 SPECIAL (01. TEMPORARY STONE DITCH CHECKS) CY	REMARKS
0010	STAGE 1	245'NX'+00	-	263'NX'+00	IH 39 NB OFF - RT	32	--	--	
		245'NX'+00	-	263'NX'+40	IH 39 NB OFF - LT	--	1	--	
		249''NB''+30	-	262''NB''+50	IH 39 NB - RT	--	--	--	
		262'SX'+25	-	270'SX'+75	IH 39 SB OFF - RT	--	--	96	
		262'SX'+25	-	276'SX'+80	IH 39 SB OFF - LT	--	1	132	
		276''SB''+80	-	283''SB''+00	IH 39 SB -LT	96	--	--	
					STH 60		4		
					STAGE 1 TOTAL:	128	6	228	
	STAGE 2	263'NN'+70	-	272'NN'+10	IH 39 NB ON - LT	80	1	72	
		263'NN'+70	-	273'NN'+00	IH 39 NB ON -RT	160	--	30	
					STAGE 2 TOTAL:	240	1	102	
	STAGE 3D	244'SN'+50	-	261'SN'+80	IH 39 SB ON - LT	--	1	--	
					STAGE 3 TOTAL:	0	1	0	
					PROJECT ID 1012-01-74 TOTAL:	368	8	330	

EROSION CONTROL ITEMS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	REMARKS
0010	STAGE 1	245'NX'+00	-	263'NX'+00	IH 39 NB OFF - RT	780	780	-	-	
		262'SX'+25	-	276'SX'+80	IH 39 SB OFF - LT	278	278	-	-	
		276''SB''+80	-	283''SB''+00	IH 39 SB -LT	214	214	-	-	
		UNDISTRIBUTED				-	-	5	5	
					STAGE 1 TOTAL:	1,272	1,272	5	5	
	STAGE 2	UNDISTRIBUTED				-	-	4	4	
					STAGE 2 TOTAL:	0	0	4	4	
	STAGE 3	244'SN'+50	-	261'SN'+80	IH 39 SB ON - LT	-	-	-	-	STAGE 3D
		251'SN'+46	-	261'SN'+80	39 SB ON - LT - EXISTING RAMI	1,140	1,140	-	-	STAGE 3D
		UNDISTRIBUTED				-	-	3	3	
					STAGE 3 TOTAL:	1,140	1,140	3	3	
	STAGE 4	235''SB''+30	-	244''SB''+50	IH 39 SB - LT	-	-	-	-	
		UNDISTRIBUTED				-	-	5	5	
					STAGE 4 TOTAL:	0	0	5	5	
					PROJECT ID 1012-01-74 TOTAL:	2,412	2,412	17	17	

DELINEATORS

CATEGORY	STATION	TO	STATION	LOCATION	633.0100 DELINEATOR POSTS STEEL EACH	633.0500 DELINEATOR REFLECTORS EACH	633.1000 DELINEATORS BARRIER WALL EACH	REMARKS
0010	204''NB''+91	-	240''NB''+47	RT	9	9	-	
	231''SB''+00	-	242''SB''+96	LT	3	3	-	
	242''SB''+96	-	244''SB''+00	LT - SB ON	1	2	-	TWO REFLECTORS PER POST
	240''NB''+47	-	244''NB''+98	RT - NB OFF	5	10	-	TWO REFLECTORS PER POST
	244''SB''+00	-	260''SB''+63	LT - SB ON	17	17	-	
	244''NB''+98	-	261''NB''+08	RT - NB OFF	16	16	-	
	249''NB''+40	-	272''NB''+09	RT	3	6	3	
	253''SB''+71	-	272''SB''+77	LT	4	6	2	
	264''NB''+51	-	281''NB''+81	RT - NB ON	17	17	-	
	264''SB''+99	-	277''SB''+19	LT - SB OFF	12	12	-	
	277''SB''+19	-	283''SB''+01	LT - SB OFF	6	12	-	TWO REFLECTORS PER POST
	281''NB''+81	-	283''NB''+50	RT - NB ON	2	4	-	TWO REFLECTORS PER POST
	283''SB''+01	-	316''SB''+80	LT	8	8	-	
	283''NB''+50	-	296''NB''+36	RT	3	3	-	
				PROJECT ID 1012-01-74 TOTAL:	106	125	5	

SIGNS TYPE II REFLECTIVE

CATEGORY	SIGN NUMBER	APPROXIMATE STATION	LOCATION	SIGN CODE	SIGN MESSAGE	SIGN SIZE (W X H) IN	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH	634.0811 POSTS TUBULAR STEEL 2x2-INCH X 11-FT EACH	634.0812 POSTS TUBULAR STEEL 2x2-INCH X 12-FT EACH	634.0814 POSTS TUBULAR STEEL 2x2-INCH X 14-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	REMARKS
0010	1 - 1	43+00	LT	W14-3	NO PASSING ZONE	48 x 36	-	-	1	-	-	-	-	-	-	6	
	1 - 2	43+00	RT	W6-1	DIVIDED HIGHWAY AHEAD SYMBOL	36 x 36	-	-	1	-	-	-	-	-	-	9	
	1 - 3	46+00	RT	J1-3	JUNCTION OR END ASSEMBLY (3HEADED PANEL)	72 x 39	-	-	2	-	-	-	-	-	20	-	
	2 - 1	48+25	LT	W6-3	TWOWAY TRAFFIC SYMBOL	36 x 36	-	-	1	-	-	-	-	-	-	9	
	2 - 2	50+20	LT	D2-2	DESTINATION/DISTANCE (TWO) WITH DIE CUT LETTERS	78 x 24	-	2	-	-	-	-	-	-	13	-	
	2 - 3	52+40	LT	R2-1	SPEED LIMIT 55 MPH	24 x 30	-	1	-	-	-	-	-	-	5	-	
	2 - 5	52+40	LT	R5-1	DO NOT ENTER	30 x 30	-	-	-	-	-	-	-	-	6	-	MOUNT OPPOSITE SIGN 2-3
	2 - 6	47+90	RT	W2-6	CIRCULAR INTERSECTION SIGN	36 x 36	-	-	-	1	-	-	-	-	-	9	
	2 - 6	47+90	RT	W13-1	ADVISORY SPEED PLATE (YELLOW BACK) 20 MPH	24 x 24	-	-	-	-	-	-	-	-	-	4	MOUNT BELOW W2-6
	2 - 7	50+00	RT	D1-62	ROUNDABOUT DESTINATION - DIRECTION SIGN	120 x 66	-	-	-	1	2	-	-	-	55	-	
	2 - 8	52+40	MEDIAN	R4-7	KEEP RIGHT	24 x 30	-	1	-	-	-	-	-	-	5	-	
	2 - 8	52+40	MEDIAN	W5-54	CLEARANCE MARKER WITH YELLOW TYPE F SHEETING	18 x 18	-	-	-	-	-	-	-	-	-	2	MOUNT BELOW R4-7; 4-FT MOUNTING HEIGHT
	3 - 1	55+10	LT	J4-1	REASSURANCE ASSEMBLY STH 60	24 x 36	-	-	1	-	-	-	-	-	6	-	
	3 - 2	55+88	MEDIAN	D1-4	ROUNDABOUT EXIT GUIDE SIGN	84 x 48	-	-	-	2	-	-	-	-	28	-	
	3 - 3	10+75 SB A	LT	R1-2	YIELD	36 x 31	-	-	-	-	-	1	-	-	4	-	REMOVABLE POST; 7'-3" MOUNTING HEIGHT TO BOTTOM OF YIELD SIGN
	3 - 4	262+35 SX	RT	R1-2	YIELD	36 x 31	-	-	-	-	-	1	-	-	4	-	REMOVABLE POST; 7'-3" MOUNTING HEIGHT TO BOTTOM OF YIELD SIGN
	3 - 5	262+85 SX	RT	R5-1	DO NOT ENTER	30 x 30	-	1	-	-	-	-	-	-	6	-	
	3 - 6	262+35 SX	RT	R6-1L	ONE WAY LEFT ARROW	36 x 12	-	-	-	-	-	-	-	-	3	-	MOUNT ON SAME POST AS SIGN 3-4
	3 - 7	57+09	LT	R3-1	NO RIGHT TURN SYMBOL	24 x 24	-	-	-	-	-	1	-	-	4	-	REMOVABLE POST
	3 - 8	11+50 SB A	LT	R1-2	YIELD	36 x 31	-	-	-	-	-	1	-	-	4	-	REMOVABLE POST; 7'-3" MOUNTING HEIGHT TO BOTTOM OF YIELD SIGN
	3 - 9	57+67	MEDIAN	R1-2	YIELD	36 x 31	-	-	-	-	-	1	-	-	4	-	REMOVABLE POST; 7'-3" MOUNTING HEIGHT TO BOTTOM OF YIELD SIGN
	3 - 10	52+93	RT	D1-3	TRIPLE DESTINATION/ARROW	72 x 36	-	-	2	-	-	-	-	-	18	-	
	3 - 11	55+94	MEDIAN	R1-2	YIELD	36 x 31	-	1	-	-	-	-	-	-	4	-	7'-3" MOUNTING HEIGHT TO BOTTOM OF YIELD SIGN
	3 - 12	13+18 SB A	RT	R1-2	YIELD	36 x 31	-	-	-	-	-	1	-	-	4	-	REMOVABLE POST; 7'-3" MOUNTING HEIGHT TO BOTTOM OF YIELD SIGN
	3 - 13	10+85 SB C	RT	R5-57	PEDESTRIANS ETC PROHIBITED	36 x 36	-	-	1	-	-	-	-	-	9	-	

CONTINUED SIGNS TYPE II REFLECTIVE

CATEGORY	SIGN NUMBER	APPROXIMATE	LOCATION	SIGN CODE	SIGN MESSAGE	SIGN SIZE (W X H) IN	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH	634.0811 POSTS TUBULAR STEEL 2x2-INCH X 11-FT EACH	634.0812 POSTS TUBULAR STEEL 2x2-INCH X 12-FT EACH	634.0814 POSTS TUBULAR STEEL 2x2-INCH X 14-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	REMARKS
	3 - 14	56+71	RT	D1-4	ROUNDABOUT EXIT GUIDE SIGN	84 X 48	-	-	-	-	-	-	-	3	28	-	REMOVABLE POSTS
	3 - 15	10+86 SB A	MEDIAN	R6-1R	ONE WAY RIGHT ARROW	36 x 12	-	-	-	-	-	-	-	-	3	-	MOUNT ABOVE R6-4B
	3 - 15	10+86 SB A	MEDIAN	R6-4B	ROUNDABOUT CHEVRON BANK	60 x 24	2	-	-	-	-	-	-	-	10	-	4 FOOT MOUNTING HEIGHT TO BOTTOM OF SIGN FROM SURFACE OF THE TRUCK APRON
	3 - 16	11+45 SB A	MEDIAN	R6-1R	ONE WAY RIGHT ARROW	36 x 12	-	-	-	-	-	-	-	-	3	-	MOUNT ABOVE R6-4B
	3 - 16	11+45 SB A	MEDIAN	R6-4B	ROUNDABOUT CHEVRON BANK	60 x 24	2	-	-	-	-	-	-	-	10	-	4 FOOT MOUNTING HEIGHT TO BOTTOM OF SIGN FROM SURFACE OF THE TRUCK APRON
	3 - 17	13+02 SB A	MEDIAN	R6-1R	ONE WAY RIGHT ARROW	36 x 12	-	-	-	-	-	-	-	-	3	-	MOUNT ABOVE R6-4B
	3 - 17	13+02 SB A	MEDIAN	R6-4B	ROUNDABOUT CHEVRON BANK	60 x 24	2	-	-	-	-	-	-	-	10	-	4 FOOT MOUNTING HEIGHT TO BOTTOM OF SIGN FROM SURFACE OF THE TRUCK APRON
	3 - 18	57+60	MEDIAN	D1-1	ROUNDABOUT EXIT GUIDE SIGN	42 x 30	-	-	-	-	-	1	-	-	9	-	REMOVABLE POST
	3 - 19	54+00	LT	W6-2	DIVIDED HIGHWAY ENDS SYMBOL	36 x 36	-	-	1	-	-	-	-	-	-	9	
	3 - 20	54+00	LT	R5-1A	WRONG WAY	36 x 24	-	-	-	-	-	-	-	-	6	-	MOUNT OPPOSITE SIGN 3-19
	4 - 1	264+70 SX	LT	R5-1A	WRONG WAY	36 x 24	-	-	-	-	-	-	-	-	6	-	MOUNT OPPOSITE SIGN 4-3
	4 - 2	264+70 SX	RT	R5-1A	WRONG WAY	36 x 24	-	1	-	-	-	-	-	-	6	-	
	4 - 3	264+70 SX	LT	D1-2	TWO DESTINATIONS (ARROWS)	72 x 30	-	1	1	-	-	-	-	-	15	-	
	4 - 4	268+00 SX	LT	D1-62	ROUNDABOUT DESTINATION - DIRECTION SIGN	102 x 78	-	-	-	-	2	-	-	-	55	-	
	4 - 5	270+00 SX	LT	W2-6	CIRCULAR INTERSECTION SIGN	36 x 36	-	-	-	1	-	-	-	-	-	9	
	4 - 5	270+00 SX	LT	W13-1	ADVISORY SPEED PLATE (YELLOW BACK)	24 x 24	-	-	-	-	-	-	-	-	-	4	MOUNT BELOW W2-6
	4 - 6	266+50 SX	LT	J2-1	ROUTE TURN ASSEMBLY (1 HEAD PANEL)	24 x 57	-	-	-	1	-	-	-	-	10	-	
	5 - 1	59+25	LT	D1-2	TWO DESTINATIONS (ARROWS)	66 x 30	-	2	-	-	-	-	-	-	14	-	
	5 - 2	61+60	LT	D1-62	ROUNDABOUT DESTINATION - DIRECTION SIGN	126 x 66	-	-	-	3	-	-	-	-	58	-	
	5 - 3	58+84	RT	D1-62	ROUNDABOUT DESTINATION - DIRECTION SIGN	126 x 66	-	-	-	3	-	-	-	-	58	-	
	5 - 4	61+50	RT	D1-2	TWO DESTINATIONS (ARROWS)	72 x 30	-	2	-	-	-	-	-	-	15	-	
	5 - 5	60+20	RT	J2-1	ROUTE TURN ASSEMBLY (1 HEAD PANEL)	24 x 57	-	-	1	-	-	-	-	-	10	-	BOX-OUT REQ'D
	6 - 1	66+00	RT	J4-2	REASSURANCE ASSEMBLY (2 HEADED ROUTE PANEL)	48 x 36	-	-	1	-	-	-	-	-	12	-	
	6 - 2	63+51	MEDIAN	D1-1	ROUNDABOUT EXIT GUIDE SIGN	42 x 30	-	1	-	-	-	-	-	-	9	-	
	6 - 3	10+48 NB A	MEDIAN	R6-1R	ONE WAY RIGHT ARROW	36 x 12	-	-	-	-	-	-	-	-	3	-	MOUNT ABOVE R6-4B
	6 - 3	10+48 NB A	MEDIAN	R6-4B	ROUNDABOUT CHEVRON BANK	60 x 24	2	-	-	-	-	-	-	-	10	-	4 FOOT MOUNTING HEIGHT TO BOTTOM OF SIGN FROM SURFACE OF THE TRUCK APRON
	6 - 4	12+20 NB A	MEDIAN	R6-1R	ONE WAY RIGHT ARROW	36 x 12	-	-	-	-	-	-	-	-	3	-	MOUNT ABOVE R6-4B
	6 - 4	12+20 NB A	MEDIAN	R6-4B	ROUNDABOUT CHEVRON BANK	60 x 24	2	-	-	-	-	-	-	-	10	-	4 FOOT MOUNTING HEIGHT TO BOTTOM OF SIGN FROM SURFACE OF THE TRUCK APRON
	6 - 5	13+29 NB A	MEDIAN	R6-1R	ONE WAY RIGHT ARROW	36 x 12	-	-	-	-	-	-	-	-	3	-	MOUNT ABOVE R6-4B
	6 - 5	13+29 NB A	MEDIAN	R6-4B	ROUNDABOUT CHEVRON BANK	60 x 24	2	-	-	-	-	-	-	-	10	-	4 FOOT MOUNTING HEIGHT TO BOTTOM OF SIGN FROM SURFACE OF THE TRUCK APRON
	6 - 6	11+70 NB A	LT	D1-4	ROUNDABOUT EXIT GUIDE SIGN	90 x 48	-	-	-	2	-	-	-	-	30	-	
	6 - 7	10+80 NB D	RT	R5-57	PEDESTRIANS ETC PROHIBITED	36 x 36	-	-	1	-	-	-	-	-	9	-	
	6 - 8	12+27 NB A	LT	R1-2	YIELD	36 x 31	-	-	-	-	-	-	1	-	4	-	REMOVABLE POST; 7'-3" MOUNTING HEIGHT TO BOTTOM OF YIELD SIGN
	6 - 9	65+22	MEDIAN	R1-2	YIELD	36 x 31	-	1	-	-	-	-	-	-	4	-	7'-3" MOUNTING HEIGHT TO BOTTOM OF YIELD SIGN
	6 - 10	63+54	MEDIAN	R1-2	YIELD	36 x 31	-	-	1	-	-	-	-	-	4	-	7'-3" MOUNTING HEIGHT TO BOTTOM OF YIELD SIGN
	6 - 11	10+63 NB A	LT	R1-2	YIELD	36 x 31	-	-	-	-	-	1	-	-	4	-	REMOVABLE POST; 7'-3" MOUNTING HEIGHT TO BOTTOM OF YIELD SIGN
	6 - 12	10+30 NB A	LT	R3-1	NO RIGHT TURN SYMBOL	24 x 24	-	1	-	-	-	-	-	-	4	-	
	6 - 13	263+35 NX	LT	R1-2	YIELD	36 x 31	-	1	-	-	-	-	-	-	4	-	7'-3" MOUNTING HEIGHT TO BOTTOM OF YIELD SIGN
	6 - 14	263+05 NX	LT	R5-1	DO NOT ENTER	30 x 30	-	1	-	-	-	-	-	-	6	-	
	6 - 15	263+35 NX	LT	R6-1L	ONE WAY LEFT ARROW	36 x 12	-	-	-	-	-	-	-	-	3	-	MOUNT ON SAME POST AS SIGN 6-13

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CONTINUED SIGNS TYPE II REFLECTIVE

CATEGORY	SIGN NUMBER	APPROXIMATE	LOCATION	SIGN CODE	SIGN MESSAGE	SIGN SIZE (W X H) IN	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH	634.0811 POSTS TUBULAR STEEL 2x2-INCH X 11-FT EACH	634.0812 POSTS TUBULAR STEEL 2x2-INCH X 12-FT EACH	634.0814 POSTS TUBULAR STEEL 2x2-INCH X 14-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	REMARKS
	6 - 16	13+18 NB A	LT	R1-2	YIELD	36 x 31	-	-	-	-	-	1	-	-	4	-	REMOVABLE POST; 7'-3" MOUNTING HEIGHT TO BOTTOM OF YIELD SIGN
	6 - 17	65+17	MEDIAN	D1-4	ROUNDABOUT EXIT GUIDE SIGN	90 x 48	-	-	-	2	-	-	-	-	30	-	
	6 - 18	67+00	RT	W6-2	DIVIDED HIGHWAY ENDS SYMBOL	36 x 36	-	-	-	1	-	-	-	-	-	9	
	6 - 19	67+00	RT	R5-1A	WRONG WAY	36 x 24	-	-	-	-	-	-	-	-	6	-	MOUNT OPPOSITE SIGN 6-18
	7 - 1	261+10 NX	RT	R5-1A	WRONG WAY	36 x 24	-	-	-	-	-	-	-	-	6	-	MOUNT OPPOSITE SIGN 7-2
	7 - 2	261+10 NX	RT	D1-2	TWO DESTINATIONS (ARROWS)	72 x 30	-	-	2	-	-	-	-	-	15	-	
	7 - 3	261+10 NX	LT	R5-1A	WRONG WAY	36 x 24	-	1	-	-	-	-	-	-	6	-	
	7 - 4	255+90 NX	RT	W2-6	CIRCULAR INTERSECTION SIGN	36 x 36	-	-	-	1	-	-	-	-	-	9	
	7 - 4	255+90 NX	RT	W13-1	ADVISORY SPEED PLATE (YELLOW BACK) 20 MPH	24 x 24	-	-	-	-	-	-	-	-	-	4	MOUNT BELOW W2-6
	7 - 5	257+90 NX	RT	D1-62	ROUNDABOUT DESTINATION - DIRECTION SIGN	102 x 78	-	-	-	-	2	-	-	-	55	-	
	7 - 6	259+50 NX	RT	J2-1	ROUTE TURN ASSEMBLY (1 HEAD PANEL)	24 x 57	-	-	-	1	-	-	-	-	10	-	
	8 - 1	68+45	LT	D1-3	TRIPLE DESTINATION/ARROW	72 x 36	-	-	2	-	-	-	-	-	18	-	
	8 - 2	71+00	LT	D1-62	ROUNDABOUT DESTINATION - DIRECTION SIGN	120 x 66	-	-	-	1	2	-	-	-	55	-	
	8 - 3	68+70	MEDIAN	R4-7	KEEP RIGHT	24 x 30	-	-	1	-	-	-	-	-	5	-	
	8 - 3	68+70	MEDIAN	W5-54	CLEARANCE MARKER WITH YELLOW TYPE F SHEETING	18 x 18	-	-	-	-	-	-	-	-	-	2	MOUNT BELOW R4-7; 4-FT MOUNTING HEIGHT
	8 - 4	68+75	RT	R2-1	SPEED LIMIT_ MPH	24 x 30	-	-	-	-	-	-	-	-	5	-	MOUNT OPPOSITE SIGN 8-5
	8 - 5	68+75	RT	R5-1	DO NOT ENTER	30 x 30	-	-	1	-	-	-	-	-	6	-	
	8 - 6	71+00	RT	D2-2	DESTINATION/DISTANCE {TWO) WITH DIE CUT LETTERS	--- x ---	-	1	1	-	-	-	-	-	-	-	MOVED FROM STA. 79+36 RT
	9 - 1	73+00	LT	W2-6	CIRCULAR INTERSECTION SIGN	36 x 36	-	-	-	1	-	-	-	-	-	9	
	9 - 1	73+00	LT	W13-1	ADVISORY SPEED PLATE (YELLOW BACK) 20 MPH	24 x 24	-	-	-	-	-	-	-	-	-	4	MOUNT BELOW W2-6
	9 - 2	76+00	RT	W6-3	TWOWAY TRAFFIC SYMBOL	36 x 36	-	-	1	-	-	-	-	-	-	9	
	9 - 3	76+00	LT	J1-3	JUNCTION OR END ASSEMBLY (3HEADED PANEL)	72 x 39	-	-	2	-	-	-	-	-	20	-	
	10 - 1	81+00	LT	W6-1	DIVIDED HIGHWAY AHEAD SYMBOL	36 x 36	-	-	1	-	-	-	-	-	-	9	
	13 - 1	238''NB''+82	LT	D10-5	ENHANCED REFERENCE MARKERS	21 x 60	-	-	1	-	-	-	-	-	9	-	
	13 - 2	238''SB''+82	LT	D10-5	ENHANCED REFERENCE MARKERS	21 x 60	-	-	-	-	-	-	-	-	9	-	MOUNT FACING OPPOSITE SIGN 13-1
	14 - 1	247'NX'+38	LT	E5-1A	EXIT NUMBER 3 DIGITS WITH ARROW	60 x 90	-	-	-	-	2	-	-	-	38	-	
	14 - 2	247'NX'+75	LT	M4-1	ALTERNATE ROUTE STANDARD SIGN	36 X 18	-	-	-	-	-	-	-	-	5	-	
	14 - 3	247'NX'+75	LT	M1-1	INTERSTATE ROUTE MARKER	36 X 36	-	-	1	-	-	-	-	-	9	-	
	15 - 1	260''NB''+16	LT	D10-5	ENHANCED REFERENCE MARKERS	21 x 60	-	-	1	-	-	-	-	-	9	-	
	15 - 2	260''SB''+16	LT	D10-5	ENHANCED REFERENCE MARKERS	21 x 60	-	-	-	-	-	-	-	-	9	-	MOUNT FACING OPPOSITE SIGN 16-1
	15 - 3	269''NB''+13	LT	D10-5	ENHANCED REFERENCE MARKERS	21 x 60	-	-	1	-	-	-	-	-	9	-	
	15 - 4	269''SB''+13	LT	D10-5	ENHANCED REFERENCE MARKERS	21 x 60	-	-	-	-	-	-	-	-	9	-	MOUNT FACING OPPOSITE SIGN 17-1
	16 - 1	274'SX'+16	RT	M4-1	ALTERNATE ROUTE STANDARD SIGN	36 X 18	-	-	-	-	-	-	-	-	5	-	
	16 - 2	274'SX'+16	RT	M1-1	INTERSTATE ROUTE MARKER	36 X 36	-	-	1	-	-	-	-	-	9	-	
	16 - 3	274'SX'+41	RT	E5-1A	EXIT NUMBER 3 DIGITS WITH ARROW	60 X 90	-	-	-	-	2	-	-	-	38	-	
	16 - 4	280''NB''+52	LT	D10-5	ENHANCED REFERENCE MARKERS	21 x 60	-	-	1	-	-	-	-	-	9	-	
	16 - 5	280''SB''+52	LT	D10-5	ENHANCED REFERENCE MARKERS	21 x 60	-	-	-	-	-	-	-	-	9	-	MOUNT FACING OPPOSITE SIGN 20-1
					PROJECT ID 1012-01-74 TOTAL:		12	19	32	21	12	9	1	3	1,072	117	

MOVING SIGNS TYPE II

CATEGORY	STAGE	LOCATION	638.2102 MOVING SIGNS TYPE II EACH	REMARKS
0010	WINTER SHUTDOWN	LT/RT	10	STH 60
		STAGE 1 TOTAL:	10	
	STAGE 2A	LT/RT	1	
		STAGE 2 TOTAL:	1	
	STAGE 3A	LT/RT	5	STH 60
		STAGE 3A TOTAL:	5	
	STAGE 3B	LT/RT	3	STH 60
		STAGE 3B TOTAL:	3	
		STAGE 3 TOTAL:	8	
	STAGE 4	RT	1	SIGN 8-6 MOVED FROM STA. 79+36
		STAGE 4 TOTAL:	1	
		PROJECT ID 1012-01-74 TOTAL:	20	

REMOVING SIGNS AND SIGN SUPPORTS

CATEGORY	SIGN NUMBER	638.2601 REMOVING SIGNS TYPE I EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS EACH	REMARKS
0010	EX1-1	-	1	2	-	
	EX1-2	-	1	2	-	
	EX1-3	-	1	2	-	
	EX2-1	-	1	1	-	
	EX2-2	-	-	-	-	
	EX2-3	-	1	2	-	
	EX2-4	-	1	1	-	
	EX2-5	-	1	2	-	
	EX2-6	-	1	2	-	
	EX3-1	-	1	2	-	
	EX3-2	-	1	2	-	
	EX3-3	-	1	2	-	
	EX3-4	-	1	1	-	
	EX3-5	-	1	1	-	
	EX3-6	-	1	1	-	
	EX3-7	-	1	1	-	
	EX3-8	-	1	1	-	
	EX3-9	-	1	1	-	
	EX3-10	-	1	1	-	
	EX3-11	-	1	2	-	
	EX3-12	-	1	1	-	
	EX6-1	-	1	1	-	
	EX6-2	-	1	2	-	
	EX6-3	-	1	1	-	
	EX6-4	-	1	1	-	

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CONTINUED REMOVING SIGNS AND SIGN SUPPORTS

CATEGORY	SIGN NUMBER	638.2601 REMOVING SIGNS TYPE I EACH		638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS EACH	REMARKS
	EX6-5	-		1	1	-	
	EX6-6	-		1	1	-	
	EX6-7	-		1	1	-	
	EX6-8	-		1	1	-	
	EX6-9	-		1	2	-	
	EX6-10	-		1	2	-	
	EX6-11	-		1	2	-	
	EX8-1	-		1	2	-	
	EX8-2	-		1	2	-	
	EX8-3	-		1	1	-	
	EX9-1	-		1	2	-	
	EX9-2	-		1	1	-	
	EX10-1	-		1	2	-	
	EX10-2	-		1	2	-	
	EX11-1	1		-	-	2	
	EX11-1	1		-	-	-	
	EX11-2	1		-	-	2	
	EX11-2	1		-	-	-	
	EX12-1	1		-	-	2	
	EX12-1	1		-	-	-	
	EX12-2	1		-	-	2	
	EX12-2	1		-	-	-	
	EX12-2	1		-	-	-	
	EX13-1	-		1	1	-	
	EX13-2	-		1	-	-	
	EX14-1	-		1	2	-	
	EX15-1	-		1	1	-	
	EX15-1	-		1	-	-	
	EX16-1	-		1	1	-	
	EX16-2	-		1	-	-	
	EX17-1	-		1	1	-	
	EX17-2	-		1	-	-	
	EX18-1	-		1	1	-	
	EX18-1	-		1	-	-	
	EX19-1	-		1	2	-	
	EX20-1	-		1	1	-	
	EX20-2	-		1	-	-	
	REMOVING SIGNS SB ON RAMP	-		10	11	-	10 SIGNS, 10 SUPPORTS
	REMOVING SIGNS SB OFF RAMP	-		22	11	-	22 SIGNS, 11 SUPPORTS
	REMOVING SIGNS NB ON RAMP	-		9	10	-	9 SIGNS, 10 SUPPORTS
	REMOVING SIGNS NB OFF RAMP	-		23	15	-	23 SIGNS, 15 SUPPORTS
PROJECT ID 1012-01-74 TOTAL:		8	0	116	114	8	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE
**FOR INFORMATIONAL PURPOSES ONLY
*** EACH TRAFFIC CONTROL COVERING SIGNS QUANTITY REFLECTS THE 1 COVERING SIGN CYCLE ON THIS PROJECT.

TRAFFIC CONTROL

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	ESTIMATED STAGE DURATION	* 643.0300 TRAFFIC CONTROL DRUMS EACH**	DAY	* 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH**	DAY	* 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH**	DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH**	DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS EACH**	DAY	* 643.0900 TRAFFIC CONTROL SIGNS EACH**	DAY	* 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II *** EACH	* 643.1050 TRAFFIC CONTROL SIGNS PCMS EACH**	DAY	643.4100.S TRAFFIC CONTROL INTERIM LANE CLOSURE EACH	REMARKS
0010	STAGE 1 - IH 39 CONCRETE REPAIR AND REPLACEMENT	246+61	-	258+75	IH 39 NB/SB	5	50	250	1	5	2	10	17	85	2	10	9	45	-	-	-	5	
		263+60	-	285+75	IH 39 NB/SB	11	100	1100	2	22	4	44	34	374	3	33	13	143	-	-	-	11	
	STAGE 1 - IH 39 CONCRETE REPAIR AND REPLACEMENT						150	1350	3	27	6	54	51	459	5	43	22	188	0	0	0	16	
	STAGE 1A	218''NB''+00	-	291''NB''+00	IH 39 NB	35	150	5250	9	315	18	630	17	595	2	70	19	665	1	1	7	-	
		233''SB''+00	-	304''SB''+00	IH 39 SB	35	110	3850	5	175	10	350	18	630	2	70	13	455	-	0	0	-	
	STAGE 1A TOTAL:						260	9100	14	490	28	980	35	1225	4	140	32	1120	1	1	7	0	
	STAGE 1A - STH 60	UNDISTRIBUTED			STH 60	65	40	2600	11	715	15	975	14	910	-	-	3	195	-	-	-	-	
	STAGE 1A - STH 60 TOTAL:						40	2600	11	715	15	975	14	910	0	0	3	195	0	0	0	0	
	STAGE 1B	218''NB''+00	-	291''NB''+00	IH 39 NB	40	109	4360	7	280	14	560	17	680	2	80	17	680	1	-	-	-	
		233''SB''+00	-	304''SB''+00	IH 39 SB	40	103	4120	4	160	8	320	27	1080	2	80	13	520	1	-	-	-	
	STAGE 1B TOTAL:						212	8480	11	440	22	880	44	1760	4	160	30	1200	2	0	0	0	
	STAGE 1 TOTAL:						662	21530	39	1672	71	2889	144	4354	13	343	87	2703	3	1	7	16	
	WINTER SHUTDOWN	218''NB''+00	-	291''NB''+00	IH 39 NB	110	-	-	3	330	6	360	3	330	-	-	-	-	-	-	-	-	
		233''SB''+00	-	304''SB''+00	IH 39 SB	110	-	-	3	330	6	360	4	440	-	-	-	-	2	-	-	-	
		UNDISTRIBUTED			STH 60	110	-	-	-	-	-	-	-	-	-	-	28	3080	-	-	-	-	
	WINTER SHUTDOWN TOTAL:						0	0	6	660	12	720	7	770	0	0	28	3080	2	0	0	0	
	STAGE 2 - IH 39	205''NB''+00	-	297''NB''+00	NB TRAFFIC THRU PROJECT AREA	85	147	12495	8	680	16	1360	78	6630	2	170	24	2040	-	-	-	-	
		236''SB''+00	-	320''SB''+00	SB TRAFFIC THRU PROJECT AREA	85	175	14875	6	510	12	1020	52	4420	2	170	22	1870	-	-	-	-	
		272'NN'+50	-	288'NN'+80		85	17	1445	-	-	-	-	-	-	-	-	3	255	1	-	-	-	
	STAGE 2 - IH 39 TOTAL:						339	28815	14	1190	28	2380	130	11050	4	340	49	4165	1	0	0	0	
	STAGE 2A	UNDISTRIBUTED			STH 60	45	145	6525	14	630	20	900	16	720	-	-	34	1530	1	-	-	-	
	STAGE 2A TOTAL:						145	6525	14	630	20	900	16	720	0	0	34	1530	1	0	0	0	
	STAGE 2B	UNDISTRIBUTED			STH 60	45	158	7110	16	720	12	540	20	900	-	-	40	1800	-	-	-	-	
	STAGE 2B TOTAL:						158	7110	16	720	12	540	20	900	0	0	40	1800	0	0	0	0	
	NIGHTLY LANE CLOSURE	UNDISTRIBUTED			STH 60	5	-	-	10	50	12	60	-	-	-	-	8	40	-	-	-	-	
	STAGE 2 TOTAL:						642	42450	54	2590	72	3880	166	12670	4	340	131	7535	2	0	0	0	
	STAGE 3 - IH 39	233''SB''+00	-	291''SB''+50	IH 39 SB	45	35	1575	4	180	8	360	-	-	4	180	-	-	1	1	45	-	
		260''SB''+22	-	283''SB''+00	IH 39 SB	45	25	1125	4	180	8	360	-	-	2	90	-	-	-	-	-	-	
	STAGE 3 - IH 39 TOTAL:						60	2700	8	360	16	720	0	0	6	270	0	0	1	1	45	0	
	STAGE 3A	UNDISTRIBUTED			STH 60	55	138	7590	12	660	24	1320	18	990	-	-	38	2090	-	-	-	-	
	STAGE 3A TOTAL:						138	7590	12	660	24	1320	18	990	0	0	38	2090	0	0	0	0	
	STAGE 3B	UNDISTRIBUTED			STH 60	40	119	4760	15	600	20	800	19	760	-	-	34	1360	-	-	-	-	
	STAGE 3B TOTAL:						119	4760	15	600	20	800	19	760	0	0	34	1360	0	0	0	0	

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CONTINUED TRAFFIC CONTROL

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	ESTIMATED STAGE DURATION	* 643.0300 TRAFFIC CONTROL DRUMS EACH**	DAY	* 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH**	DAY	* 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH**	DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH**	DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS EACH**	DAY	* 643.0900 TRAFFIC CONTROL SIGNS EACH**	DAY	* 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II *** EACH	* 643.1050 TRAFFIC CONTROL SIGNS PCMS EACH**	DAY	643.4100.S TRAFFIC CONTROL INTERIM LANE CLOSURE EACH	REMARKS
	STAGE 3C - STH 60	UNDISTRIBUTED			STH 60	55	120	6600	2	110	-	-	4	220	-	-	17	935	-	10	550	-	
					STAGE 3C - STH 60 TOTAL:		120	6600	2	110	0	0	4	220	0	0	17	935	0	10	550	0	
	STAGE 3D - IH 39	230''SB''+76	-	287''SB''+10	IH 39 SB	21	71	1491	3	63	6	126	17	357	2	42	11	231	-	-	-	1	
					STAGE 3D - IH 39 TOTAL:		71	1491	3	63	6	126	17	357	2	42	11	231	0	0	0	1	
					STAGE 3 TOTAL:		508	23141	40	1793	66	2966	58	2327	8	312	100	4616	1	11	595	1	
	STAGE 4 - STH 60	UNDISTRIBUTED			STH 60	55	120	6600	2	110	-	-	4	220	-	-	17	935	-	10	550	-	
					STAGE 4 - STH 60 TOTAL:		120	6600	2	110	0	0	4	220	0	0	17	935	0	10	550	0	
	STAGE 4 - IH 39	203''NB''+00	-	283''NB''+50	NB TRAFFIC THRU PROJECT AREA	75	164	12300	3	225	6	450	32	2400	2	150	-	-	-	-	-	-	
		231''SB''+00	-	312''SB''+50	SB TRAFFIC THRU PROJECT AREA	75	173	12975	17	1275	34	2550	43	3225	2	150	-	-	-	-	-	-	
					STAGE 4 - IH 39 TOTAL:		337	25275	20	1500	40	3000	75	5625	4	300	0	0	0	0	0	0	
	NIGHTLY LANE CLOSURE	UNDISTRIBUTED			STH 60	5	-	-	10	50	12	60	-	-	-	-	8	40	-	-	-	-	
					STAGE 4 TOTAL:		457	31875	32	1660	52	3060	79	5845	4	300	25	975	0	10	550	0	
		UNDISTRIBUTED					-	11,900	-	838	-	1,352	-	2,597	-	130	-	1,891	-	-	-	-	
					PROJECT ID 1012-01-74 TOTAL:		2,269	130,896	171	9,213	273	14,867	454	28,563	29	1,425	371	20,800	8	22	1,152	17	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE
**FOR INFORMATIONAL PURPOSES ONLY
*** EACH TRAFFIC CONTROL COVERING SIGNS QUANTITY REFLECTS THE 1 COVERING SIGN CYCLE ON THIS PROJECT.

TRAFFIC CONTROL DETOUR

CATEGORY	STAGE	LOCATION	ESTIMATED STAGE DURATION	* 643.0300 TRAFFIC CONTROL DRUMS EACH**	DAY	* 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH**	DAY	* 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH**	DAY	* 643.0900 TRAFFIC CONTROL SIGNS EACH**	DAY	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I *** EACH	* 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II *** EACH	* 643.1050 TRAFFIC CONTROL SIGNS PCMS EACH**	DAY	REMARKS
0010	STAGE 1	DETOUR ROUTE	90	52	4680	13	1170	20	1800	633	56970	7	8	4	194	
			STAGE 1 TOTAL:	52	4680	13	1170	20	1800	633	56970	7	8	4	194	
	STAGE 2	NIGHTLY LANE CLOSURE DETOUR	5	50	270	-	-	-	-	-	-	-	-	10	54	
			STAGE 2 TOTAL:	50	270	0	0	0	0	0	0	0	0	10	54	
	STAGE 3	DETOUR ROUTE	45	5	225	5	225	6	270	111	4995	-	-	1	7	
		STAGE 3D DETOUR ROUTE	90	5	450	5	450	6	540	144	12960	-	-	1	7	
			STAGE 3 TOTAL:	10	675	10	675	12	810	255	17955	0	0	2	14	
	STAGE 4	NIGHTLY LANE CLOSURE DETOUR	5	50	270	-	-	-	-	-	-	-	-	10	54	
			STAGE 4 TOTAL:	50	270	0	0	0	0	0	0	0	0	10	54	
		PROJECT ID 1012-01-74 TOTAL:		162	5895	23	1845	32	2610	888	74925	7	8	26	316	

DYNAMIC LATE MERGE SYSTEM

CATEGORY	LOCATION	STAGE	FLASHING BEACON SIGNS (FBS)***	PORTABLE TRAFFIC SENSORS (PTS)***	PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)***	DAY	REMARKS
			643.1100.S	DYNAMIC LATE MERGE SYSTEM			
0010	IH 39/90 NB	1A&B	6	9	4	75	
	IH 39/90 NB	2	6	9	4	85	
	IH 39/90 NB	4	6	9	4	75	
	IH 39/90 SB	1A&B	4	6	4	75	PLACE A PCMS 1 MILE NORTH OF IH-39 EXIT 92
	IH 39/90 SB	2	4	6	4	85	PLACE A PCMS 1 MILE NORTH OF IH-39 EXIT 92
	IH 39/90 SB	4	4	6	4	75	PLACE A PCMS 1 MILE NORTH OF IH-39 EXIT 92
					PROJECT ID 1012-01-74 TOTAL:	470	

*** These items are part of the DLMS and are paid for one complete system per roadway

GEOGRID TYPE SR

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	645.0220 GEOGRID TYPE SR SY	REMARKS
0010	STAGE 1A	238'SB'+00	-	244'SB'+70	RT	1480	
		273'SB'+50	-	283'SB'+70	RT	2300	
					STAGE 1A TOTAL:	3780	
	STAGE 1A -STH 60	54+50	-	62+00	LT/RT	1950	
		62+00	-	69+00	LT/RT	3300	
		69+00	-	78+00	LT/RT	4400	
					STAGE 1A - STH 60 TOTAL:	9650	
	STAGE 1B	240'NB'+10	-	245'NB'+00	RT	1,000	
		243'SB'+68	-	248'SB'+60	LT	200	
		245'NX'+00	-	247'NX'+38	LT/RT	858	
		247'NX'+38	-	261'NX'+79	LT/RT	4307	
		264'SX'+02	-	274'SX'+41	LT/RT	3118	
		274'SX'+41	-	276'SX'+80	LT/RT	862	
		276'SB'+80	-	283'SB'+00	LT	1289	
					STAGE 1B TOTAL:	11634	
					STAGE 1 TOTAL:	25064	
	STAGE 2 - IH 39	256'NB'+25	-	260'NB'+16	RT	529	
		260'NB'+16	-	262'NB'+04	RT	310	
		260'NB'+16	-	261'NB'+95	LT	26	
		263'NB'+30	-	264'NB'+50	LT	12	
		263'NB'+43	-	264'NB'+50	RT	224	
		264'NB'+50	-	267'NB'+00	RT	254	
		281'NB'+30	-	283'NB'+50	RT	512	
		264'NN'+34	-	273'NN'+11	LT/RT	2625	
		273'NN'+11	-	281'NN'+30	LT/RT	2872	
					STAGE 2 - IH 39 TOTAL:	7365	

CONTINUED GEOGRID TYPE SR

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	645.0220 GEOGRID TYPE SR SY	REMARKS
	STAGE 2A	69+00	-	78+00	LT/RT	1550	
					STAGE 2A TOTAL:	1550	
	STAGE 2B	62+00	-	69+00	LT/RT	780	
					STAGE 2B TOTAL:	780	
					STAGE 2 TOTAL:	9695	
	STAGE 3A	48+00	-	54+50	LT/RT	1700	
		54+50	-	62+00	LT/RT	3200	
		62+00	-	69+00	LT/RT	600	
					STAGE 3A TOTAL:	5500	
	STAGE 3B	48+00	-	54+50	LT/RT	1850	
		54+50	-	62+00	LT/RT	1350	
					STAGE 3B TOTAL:	3200	
	STAGE 3C	54+50	-	58+00	LT/RT	400	
		62+00	-	69+00	LT/RT	110	
					STAGE 3C TOTAL:	510	
	STAGE 3D	244'SN'+50	-	252'SN'+76	LT/RT	2857	
		252'SN'+76	-	260'SN'+03	LT/RT	2173	
					STAGE 3D TOTAL:	5030	
					STAGE 3 TOTAL:	14240	
	STAGE 4 - STH 60	58+00	-	62+00	LT/RT	340	
					STAGE 4 - STH 60 SUBTOTAL:	340	
	STAGE 4 - IH 39	242'SB'+96	-	244'SB'+50	LT	367	
		259'SB'+80	-	261'SB'+77	LT	239	
		259'SB'+80	-	261'SB'+92	RT	12	
		263'SB'+16	-	264'SB'+50	LT	278	
		263'SB'+25	-	263'SB'+75	RT	10	
		264'SB'+50	-	273'SB'+50	RT	834	
					STAGE 4 - IH 39 SUBTOTAL:	1740	
					STAGE 4 TOTAL:	2080	
					PROJECT ID 1012-01-74 TOTAL:	51,100	

PAVEMENT MARKING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF	646.1020 MARKING LINE EPOXY 4-INCH WHITE LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH YELLOW LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH WHITE LF	646.1545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH LF	646.3020 MARKING LINE EPOXY 8-INCH LF	646.3545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH LF	646.5420 MARKING AERIAL ENFORCEMENT BAR EPOXY EACH	646.6320 MARKING DOTTED EXTENSION EPOXY 18-INCH LF
0010	STAGE 1B	245'NX'+00	-	261'NX'+79	IH 39 NB OFF	-	-	1,400	1,720	-	-	-	-	-
		263'SX'+00	-	276'SX'+80	IH 39 SB OFF	-	-	990	1,315	-	-	-	-	-
					STAGE 1B TOTAL:	0	0	2,390	3,035	0	0	0	0	0
	STAGE 2	264'NN'+33	-	278'NN'+00	IH 39 NB ON	-	-	830	1,360	-	-	540	-	-
					STAGE 2 TOTAL:	0	0	830	1,360	0	0	540	0	0
	STAGE 3A	273'SX'+91	-	276'SX'+80	IH 39 SB OFF	-	-	-	150	-	-	290	-	-
		273''SB''+90	-	283''SB''+00	IH 39 SB	-	-	-	580	-	-	340	-	-
					STAGE 3A TOTAL:	0	0	0	730	0	0	630	0	0
	STAGE 3C	48+00	-	54+50	STH 60	3,025	-	-	2,410	-	-	-	-	-
		54+50	-	58+00	STH 60	500	400	285	280	-	210	-	-	61
		62+00	-	69+00	STH 60	1,110	321	195	760	-	205	-	-	61
		69+00	-	78+00	STH 60	5,260	72	-	3,970	-	-	-	-	-
					STAGE 3C TOTAL:	9,895	793	480	7,420	0	415	0	0	122
	STAGE 3D	244'SN'+50	-	261'SN'+12	IH 39 SB ON	-	-	680	1,550	-	-	860	-	-
					STAGE 3D TOTAL:	0	0	680	1,550	0	0	860	0	0
					STAGE 3 TOTAL:	9,895	793	1,160	9,700	0	415	1,490	0	122
	STAGE 4	205'NB'+20	-	296'NB'+40	IH 39 NB	-	-	8,980	7,770	4,350	-	1,470	6	-
		231'SB'+00	-	316'SB'+80	IH 39 SB	-	-	8,440	6,380	4,090	-	1,170	-	-
		261'SB'+86	-	263'SB'+25	B-11-166	139	209	-	-	-	-	-	-	-
		261'NB'+97	-	263'NB'+36	B-11-165	139	209	-	-	-	-	-	-	-
		245'NX'+00	-	247'NX'+38	IH 39 NB OFF	-	-	-	-	-	-	290	-	-
		272'NN'+60	-	281'NN'+80	IH 39 NB ON	-	-		330	-	-	330	-	-
					STAGE 4 TOTAL:	278	417	17,420	14,480	8,440	0	3,260	6	0
		58+00	-	62+00	STH 60	670	509	-	-	-	-	-	-	-
					UNSTAGED TOTAL:	670	509	0	0	0	0	0	0	0
					PROJECT ID 1012-01-74 TOTAL:	12,562		50,375		8,440	415	5,290	6	122

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CONTINUED PAVEMENT MARKING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	646.6464 COLD WEATHER MARKING EPOXY 4-INCH YELLOW LF	646.6464 COLD WEATHER MARKING EPOXY 4-INCH WHITE LF	646.6468 COLD WEATHER MARKING EPOXY 8-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH YELLOW LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH WHITE LF	646.7205 MARKING CHEVRON PAINT 24-INCH LF	646.7220 MARKING CHEVRON EPOXY 24-INCH LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH LF	646.8120 MARKING CURB EPOXY LF	646.8220 MARKING ISLAND NOSE EPOXY EACH	REMARKS
0010	STAGE 1B	245'NX'+00	-	261'NX'+79	IH 39 NB OFF	1,400	1,720	-	-	-	130	-	-	-	-	
		263'SX'+00	-	276'SX'+80	IH 39 SB OFF	990	1,315	-	-	-	130	-	-	-	-	
					STAGE 1B TOTAL:	2,390	3,035	0	0	0	260	0	0	0	0	
	STAGE 2	264'NN'+33	-	278'NN'+00	IH 39 NB ON	-	-	-	-	-	-	-	-	-	-	
					STAGE 2 TOTAL:	0	0	0	0	0	0	0	0	0	0	
	STAGE 3A	273'SX'+91	-	276'SX'+80	IH 39 SB OFF	-	-	-	-	-	-	130	-	-	-	
		273''SB''+90	-	283''SB''+00	IH 39 SB	-	-	-	-	-	-	-	-	-	-	
					STAGE 3A TOTAL:	0	0	0	0	0	0	130	0	0	0	
	STAGE 3C	48+00	-	54+50	STH 60	-	-	-	98	-	-	-	-	10	1	STH 60
		54+50	-	58+00	STH 60	-	-	-	-	16	-	-	145	-	-	STH 60
		62+00	-	69+00	STH 60	-	-	-	18	28	-	-	155	10	1	STH 60
		69+00	-	78+00	STH 60	-	-	-	145	-	-	-	-	-	-	STH 60
					STAGE 3C TOTAL:	0	0	0	261	44	0	0	300	20	2	
	STAGE 3D	244'SN'+50	-	261'SN'+12	IH 39 SB ON	680	1,550	860	-	-	-	-	-	-	-	
					STAGE 3D TOTAL:	680	1,550	860	0	0	0	0	0	0	0	
					STAGE 3 TOTAL:	680	1,550	860	261	44	0	130	300	20	2	
	STAGE 4	205'NB'+20	-	296'NB'+40	IH 39 NB	8,980	12,120	1,470	-	-	-	-	-	-	-	
		231'SB'+00	-	316'SB'+80	IH 39 SB	8,440	10,470	1,170	-	-	-	-	-	-	-	
		261'SB'+86	-	263'SB'+25	B-11-166	139	209	-	-	-	-	-	-	-	-	
		261'NB'+97	-	263'NB'+36	B-11-165	139	209	-	-	-	-	-	-	-	-	
		245'NX'+00	-	247'NX'+38	IH 39 NB OFF	-	-	290	-	-	-	130	-	-	-	
		272'NN'+60	-	281'NN'+80	IH 39 NB ON	-	-	330	-	-	-	-	-	-	-	
					STAGE 4 TOTAL:	17,698	23,007	3,260	0	0	0	130	0	0	0	
		58+00	-	62+00	STH 60	-	-	-	-	-	-	-	-	-	-	STH 60
					UNSTAGED TOTAL:	0	0	0	0	0	0	0	0	0	0	
					PROJECT ID 1012-01-74 TOTAL:	48,360		4,120	565		260	260	300	20	2	

TEMPORARY PAVEMENT MARKING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9010 MARKING REMOVAL LINE WATER BLASTING 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	646.9110 MARKING REMOVAL LINE WATER BLASTING 8-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH LF		649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH LF		649.0155 TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH LF		649.0220 TEMPORARY MARKING LINE EPOXY 8-INCH LF	649.0255 TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH LF	649.0820 TEMPORARY MARKING STOP LINE EPOXY 18-INCH LF	649.0850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF	REMARKS
											WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW					
0010	STAGE 1A	218''NB''+00	-	291''NB''+00	IH 39 NB -LT	210	-	146	-	-	585	-	-	-	-	840	-	-	-	-	
		233''SB''+00	-	304''SB''+00	IH 39 SB - RT	210	-	-	-	-	-	-	-	-	-	840	-	-	-	-	
					STAGE 1A TOTAL:	420	0	146	0	0	585	0	0	0	0	1,680	0	0	0	0	
STAGE 1A - STH 60		UNDISTIBUTED			STH 60	-	-	-	-	-	4,618	4,945	-	235	-	-	145	-	47	-	
					STAGE 1A - STH 60 TOTAL:	0	0	0	0	0	4,618	4,945	0	235	0	0	145	0	47	0	
	STAGE 1B	221''NB''+60	-	230''NB''+00	IH 39 NB -RT	210	-	-	-	-	-	-	-	-	840	-	-	-	-	-	
		220''NB''+60	-	229''NB''+00	IH 39 NB - LT	-	-	-	-	-	210	-	-	-	-	-	-	-	-	-	
		233''SB''+00	-	304''SB''+00	IH 39 SB - LT	210	-	70	-	70	-	-	-	-	1,340	-	-	400	-	-	
		293''SB''+00		301''SB''+40	IH 39 SB - RT	-	-	-	-	60	210	-	-	-	-	-	-	-	-	-	
					STAGE 1B TOTAL:	420	0	70	0	130	420	0	0	0	2,180	0	0	400	0	0	
					STAGE 1 TOTAL:	840	0	216	0	130	5,623	4,945	0	235	2,180	1,680	145	400	47	0	
WINTER SHUTDOWN		240''NB''+10	-	247''NB''+88	IH 39 NB	-	-	-	-	-	450	-	-	-	-	-	740	-	-	-	
		273''SB''+90	-	283''SB''+00	IH 39 SB	-	-	-	-	-	580	-	-	-	-	-	770	-	-	-	
					WINTER SHUTDOWN TOTAL:	0	0	0	0	0	1,030	0	0	0	0	0	1,510	0	0	0	
STAGE 2 - IH 39		205''NB''+00	-	297''NB''+00	NB TRAFFIC THRU PROJECT AREA	3,220	-	125	-	-	-	-	-	-	13,200	6,400	-	650	-	-	
		236''SB''+00	-	320''SB''+00	SB TRAFFIC THRU PROJECT AREA	12,000	-	866	-	130	-	-	-	-	10,500	5,510	-	760	-	-	
		272'NN'+50	-	288'NN'+80		-	-	-	-	-	-	-	-	-	600	630	-	200	-	-	
					STAGE 2 - IH 39 TOTAL:	15,220	0	991	0	130	0	0	0	0	24,300	12,540	0	1,610	0	0	
STAGE 2A		UNDISTIBUTED			STH 60	-	810	-	-	-	-	-	1,067	1,140	-	-	-	-	-	27	
					STAGE 2A TOTAL:	0	810	0	0	0	0	0	1,067	1,140	0	0	0	0	0	27	
STAGE 2B		UNDISTIBUTED			STH 60	-	-	-	-	-	-	-	1,250	1,160	-	-	-	-	-	29	
					STAGE 2B TOTAL:	0	0	0	0	0	0	0	1,250	1,160	0	0	0	0	0	29	
					STAGE 2 TOTAL:	15,220	810	991	0	130	0	0	2,317	2,300	24,300	12,540	0	1,610	0	56	
STAGE 3 - IH 39		229''NB''+00	-	296''NB''+30	IH 39 NB	-	-	-	-	-	-	-	-	-	4,532	4,680	-	450	-	-	
		233''SB''+00	-	291''SB''+50	IH 39 SB	-	-	-	-	-	-	-	-	-	8,332	5,840	-	1,480	-	-	
		260''SB''+22	-	283''SB''+00	IH 39 SB	-	-	-	-	-	-	-	-	-	1,450	-	-	720	-	-	
					STAGE 3 - IH 39 TOTAL:	0	0	0	0	0	0	0	0	0	14,314	10,520	0	2,650	0	0	
STAGE 3A		UNDISTIBUTED			STH 60	-	3,950	-	283	-	-	-	2,678	3,025	-	-	-	-	-	55	
					STAGE 3A TOTAL:	0	3,950	0	283	0	0	0	2,678	3,025	0	0	0	0	0	55	
STAGE 3B		UNDISTIBUTED			STH 60	-	240	-	240	-	-	-	2,910	2,560	-	-	-	-	-	22	
					STAGE 3B TOTAL:	0	240	0	240	0	0	0	2,910	2,560	0	0	0	0	0	22	

CONTINUED TEMPORARY PAVEMENT MARKING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE LF	646.9010 MARKING REMOVAL LINE LF	646.9100 MARKING REMOVAL LF	646.9110 MARKING REMOVAL LINE WATER LF	646.9200 MARKING REMOVAL LF	649.0120 TEMPORARY WHITE LF	649.0120 TEMPORARY YELLOW LF	649.0150 TEMPORARY WHITE LF	649.0150 TEMPORARY YELLOW LF	649.0155 TEMPORARY MARKING WHITE LF	649.0155 TEMPORARY MARKING YELLOW LF	649.0220 TEMPORARY MARKING LF	649.0255 TEMPORARY MARKING LINE REMOVABLE LF	649.0820 TEMPORARY MARKING STOP LF	649.0850 TEMPORARY MARKING STOP LF	REMARKS
	STAGE 3C	UNDISTIBUTED			STH 60	-	-	-	-	-	-	-	800	2,240	-	-	-	-	-	11	
					STAGE 3C TOTAL:	0	0	0	0	0	0	0	800	2,240	0	0	0	0	0	11	
					STAGE 3 TOTAL:	0	4,190	0	523	0	0	0	6,388	7,825	14,314	10,520	0	2,650	0	88	
	STAGE 4 - STH 60	UNDISTIBUTED			STH 60	-	-	-	-	-	-	-	770	2,240	-	-	-	-	-	11	
					STAGE 4 - STH 60 TOTAL:	0	0	0	0	0	0	0	770	2,240	0	0	0	0	0	11	
	STAGE 4 - IH 39	203''NB''+00	-	283''NB''+50	NB TRAFFIC THRU PROJECT AREA	5,340	-	-	-	130	-	-	-	-	10,350	5,150	-	450	-	-	
		231''SB''+00	-	312''SB''+50	SB TRAFFIC THRU PROJECT AREA	210	-	-	-	-	-	-	-	-	13,300	8,670	-	670	-	-	
					STAGE 4 - IH 39 TOTAL:	5,550	0	0	0	130	0	0	0	0	23,650	13,820	0	1,120	0	0	
					STAGE 4 TOTAL:	5,550	0	0	0	130	0	0	770	2,240	23,650	13,820	0	1,120	0	11	
		UNDISTRIBUTED				1,600	-	100	-	30	3,212	3,145	-	-	4,100	2,500	4,500	500	-	-	
					PROJECT ID 1012-01-74 TOTAL:	23,210	5,000	1,307	523	420	17,955		22,075		109,604		6,155	6,280	47	155	

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.8500.01 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) (01. 1012-01-74) LS	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	650.9910.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 1012-01-74) LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	REMARKS
0010	240''NB''+10	-	262''NB''+72	RT	2262	2262	-	2262	-	-	-	2262	NB OFF RAMP
	264''NB''+92	-	283''NB''+50	RT	1858	1858	-	1858	-	-	-	1858	NB ON RAMP
	242''SB''+96	-	259''SB''+63	RT	1667	1667	-	1667	-	-	-	1667	SB ON RAMP
	264''SB''+49	-	283''SB''+00	RT	1851	1851	-	1851	-	-	-	1851	SB OFF RAMP
	48+00	-	54+50	LT/RT	648	432	-	216	-	-	-	650	STH 60
	54+50	-	62+00	LT/RT	1,103	-	52	1,103	-	8	-	750	STH 60
	62+00	-	69+00	LT/RT	953	22	44	931	-	8	-	700	STH 60
	69+00	-	78+00	LT/RT	900	900	-	-	-	-	-	900	STH 60
	UNDISTRIBUTED			PROJECT 1012-01-74	-	-	-	-	1	-	1	-	
				PROJECT ID 1012-01-74 TOTAL:	11,242	8,992	96	9,888	1	16	1	10,638	

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SAWING PAVEMENT

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
0010	STAGE 1A - STH 60	UNDISTRIBUTED			LT/RT	200	-	STH 60
					STAGE 1 TOTAL:	200	0	
	STAGE 1 - IH 39			263"SB"+60	AT PATCH LOCATION	-	96	
				265"SB"+75	AT PATCH LOCATION	-	72	
				268"SB"+40	AT PATCH LOCATION	-	94	
				268"SB"+75	AT PATCH LOCATION	-	36	
				272"SB"+50	AT PATCH LOCATION	-	40	
				273"SB"+75	AT PATCH LOCATION	-	36	
				280"SB"+40	AT PATCH LOCATION	-	40	
				263"NB"+60	AT PATCH LOCATION	-	84	
				265"NB"+60	AT PATCH LOCATION	-	54	
				270"NB"+25	AT PATCH LOCATION	-	78	
				274"NB"+50	AT PATCH LOCATION	-	74	
				276"NB"+20	AT PATCH LOCATION	-	44	
				276"NB"+90	AT PATCH LOCATION	-	64	
				277"NB"+10	AT PATCH LOCATION	-	36	
				277"NB"+45	AT PATCH LOCATION	-	40	
				279"NB"+10	AT PATCH LOCATION	-	40	
				279"NB"+50	AT PATCH LOCATION	-	36	
				280"NB"+45	AT PATCH LOCATION	-	36	
				280"NB"+75	AT PATCH LOCATION	-	40	
				283"NB"+00	AT PATCH LOCATION	-	40	
				284"NB"+75	AT PATCH LOCATION	-	44	
				285"NB"+00	AT PATCH LOCATION	-	40	
				285"NB"+55	AT PATCH LOCATION	-	36	
				285"NB"+75	AT PATCH LOCATION	-	36	
		246''NB''+61	-	247''NB''+65	AT PATCH LOCATION	-	230	
		247''SB''+21	-	258''SB''+75	AT PATCH LOCATION	-	2,330	
		256''NB''+13	-	258''NB''+60	AT PATCH LOCATION	-	516	
		264''SB''+50	-	265''SB''+91	AT PATCH LOCATION	-	304	
		268''SB''+45	-	274''SB''+51	AT PATCH LOCATION	-	1,234	
					STAGE 1 - IH 39 TOTAL:	0	5,850	
	STAGE 1A	237''NB''+50	-	244''NB''+70	IH 39 MEDIAN	-	750	
		237''SB''+50	-	244''SB''+70	IH 39 MEDIAN	-	750	
		273''NB''+50	-	283''NB''+70	IH 39 MEDIAN	-	1,050	
		273''SB''+50	-	283''SB''+70	IH 39 MEDIAN	-	1,050	
					STAGE 1A TOTAL:	0	3,600	
	STAGE 1B	240''NB''+10	-	247''NB''+38	RT	-	750	NB OFF RAMP
		274''SB''+41	-	283''SB''+00	LT	-	880	SB OFF RAMP
					STAGE 1B TOTAL:	0	1,630	
					STAGE 1 TOTAL:	200	11,080	

CONTINUED SAWING PAVEMENT

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
	STAGE 2 - IH 40	256''NB''+50	-	260''NB''+16	RT	-	380	
		260''NB''+16			LT/RT	-	61	
		264''NB''+50			LT/RT	-	70	
		264''NB''+50	-	267''NB''+00	RT	-	260	EXISTING NB OFF RAMP
		264''NB''+50	-	265''NB''+50	LT-IH 39 MEDIAN	-	110	
		273''NB''+10	-	283''NB''+50	RT	-	1,060	EXISTING NB ON RAMP
					STAGE 2 - IH 39 TOTAL:	0	1,941	
	STAGE 2A	UNDISTRIBUTED			LT/RT	940	180	STH 60
					STAGE 2A TOTAL:	940	180	
	STAGE 2B	UNDISTRIBUTED			LT/RT	75	-	STH 60
					STAGE 2B TOTAL:	75	0	
					STAGE 2 TOTAL:	1,015	2,121	
	STAGE 3A	UNDISTRIBUTED			LT/RT	1,075	-	STH 60
					STAGE 3A TOTAL:	1,075	0	
	STAGE 3B	UNDISTRIBUTED			LT/RT	255	-	STH 60
					STAGE 3B TOTAL:	255	0	
	STAGE 3C	UNDISTRIBUTED			LT/RT	300	-	STH 60
					STAGE 3C TOTAL:	300	0	
	STAGE 3D	242''SB''+96	-	252''SB''+77	LT	-	1,000	EXISTING SB ON RAMP
		258''SB''+00	-	259''SB''+80	LT	-	190	EXISTING SB OFF RAMP
					STAGE 3D TOTAL:	0	1,190	
					STAGE 3 TOTAL:	1,630	1,190	
	STAGE 4 - STH 60	UNDISTRIBUTED			LT/RT	370	-	STH 60
					STAGE 4 - STH 60 TOTAL:	370	0	
	STAGE 4 - IH 39	259''SB''+80			LT/RT	-	70	
		264''SB''+50			LT/RT	-	64	
		264''SB''+50	-	269''SB''+00	LT	-	460	
		264''SB''+50	-	265''SB''+00	RT-IH 39 MEDIAN	-	60	
					STAGE 4 - IH 39 TOTAL:	0	654	
					STAGE 4 TOTAL:	370	654	
		UNDISTRIBUTED				643	36	STH 60
					PROJECT ID 1012-01-74 TOTAL:	3,858	15,081	

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CONDUIT RIGID SUMMARY

CATEGORY	LOCATION FROM	LOCATION TO	652.0210 CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0325 CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH LF	REMARKS
0010	LC-01	LPB-01	-	-	79	
	LPB-01	L-03	-	19	-	
	L-03	L-01	-	302	-	
	LPB-01	LPB-11	-	-	214	
	LPB-11	L-02	-	179	-	
	LPB-11	L-04	-	35	-	
	L-04	L-06	-	103	-	
	L-06	LPB-05	-	17	-	
	LPB-05	L-26	-	139	-	
	LPB-05	LPB-06	-	-	84	
	LPB-06	L-08	-	126	-	
	L-08	L-09	-	100	-	
	L-09	LPB-12	-	95	-	
	LPB-12	L-11	20	-	-	
	LPB-12	LPB-13	-	79	-	
	LPB-13	L-13	20	-	-	
	LPB-13	L-16	-	315	-	
	L-16	LPB-09	-	56	-	
	LPB-09	LPB-10	-	-	110	
	LPB-10	L-18	-	27	-	
	LPB-10	L-23	-	180	-	
	L-18	L-20	-	99	-	
	L-20	L-22	-	300	-	
	LC-01	LPB-02	-	-	123	
	LPB-02	L-05	-	12	-	
	L-05	LPB-03	-	43	-	
	LPB-03	L-25	-	180	-	
	LPB-03	LPB-04	-	-	134	
	LPB-04	L-07	-	42	-	
	L-07	LPB-14	-	239	-	
	LPB-14	L-10	20	-	-	
	LPB-14	LPB-15	-	80	-	
	LPB-15	L-12	20	-	-	
	LPB-15	L-14	-	123	-	
	L-14	L-15	-	151	-	
	L-15	LPB-07	-	105	-	
	LPB-07	LPB-08	-	-	100	
	LPB-08	L-19	-	84	-	
	L-19	L-21	-	207	-	
	LPB-08	L-17	-	14	-	
	LPB-08	L-24	-	161	-	
PROJECT ID 1012-01-74 TOTAL:			80	3,612	844	

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LIGHTING PULL BOXES

CATEGORY	PULL BOX NUMBER	STATION	OFFSET	653.0164 PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH	REMARKS
0010	LPB-01	55+71.35'	43.1' RT	1	
	LPB-02	56+13.64'	79.9' RT	1	
	LPB-03	261+26.00'	30' LT	1	
	LPB-04	57+07.49'	83.7' RT	1	
	LPB-05	56+47.69'	156.9' LT	1	
	LPB-06	56+90.06'	156.5' LT	1	
	LPB-07	263+08.99'	7.4' LT	1	
	LPB-08	262+96.43'	41' RT	1	
	LPB-09	64+19.48'	119.6' LT	1	
	LPB-10	64+67.99'	144.4' LT	1	
	LPB-11	55+53.03'	62.3' LT	1	
	LPB-12	59+87.14'	40.5' LT	1	
	LPB-13	60+68.26'	40.5' LT	1	
	LPB-14	59+74.76'	33.9' RT	1	
	LPB-15	60+54.47'	33.9' RT	1	
PROJECT ID 1012-01-74 TOTAL:				15	

REMOVING PULL BOXES

CATEGORY	STATION	TO	STATION	LOCATION	653.0905 REMOVING PULL BOXES EACH	REMARKS
0010	48+00	-	54+50	LT/RT	5	STH 60
	54+50	-	62+00	LT/RT	9	STH 60
	62+00	-	69+00	LT/RT	10	STH 60
	EXISTING SB OFF LOOP RAMP				5	
	EXISTING NB OFF LOOP RAMP				3	
PROJECT ID 1012-01-74 TOTAL:					32	

LIGHTING CONTROL CABINETS

CATEGORY	STATION	LOCATION	654.0230 CONCRETE CONTROL CABINET BASES TYPE L30 EACH	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) (01. STA. 11+34 SB B) LS	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH EACH	REMARKS
0010		LC-01	1	-	1	
	11+34 SB B	23' RT OFFSET	-	1	-	
PROJECT ID 1012-01-74 TOTAL:			1	1	1	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

STREET LIGHTING SUMMARY

CATEGORY	LP. NO.	STATION	OFFSET	654.0106 CONCRETE BASES TYPE 6 EACH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG STANDARD LF	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG GROUND LF	* 657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0327 POLES TYPE 6-ALUMINUM EACH	657.0705 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 10-FT EACH	659.1125 LUMINAIRES UTILITY LED C EACH	659.1215 LUMINAIRES UNDERDECK LED C EACH	REMARKS
0010	L-01	52+39.53	25.0' RT	1	98	49	1	1	1	1	-	
	L-02	53+86.92	46.0' LT	1	98	49	1	1	1	1	-	
	L-03	55+39.63	40.9' RT	1	98	49	1	1	1	1	-	
	L-04	55+72.68	75.3' LT	1	98	49	1	1	1	1	-	
	L-05	56+22.42	88.2' RT	1	98	49	1	1	1	1	-	
	L-06	56+49.60	139.8' LT	1	98	49	1	1	1	1	-	
	L-07	57+45.94	48.6' RT	1	98	49	1	1	1	1	-	
	L-08	58+01.10	55.9' LT	1	98	49	1	1	1	1	-	
	L-09	58+90.20	42.5' LT	1	98	49	1	1	1	1	-	
	L-10	59+74.27	38.0' RT	-	10	5	-	-	-	-	1	
	L-11	59+86.98	46.0' LT	-	10	5	-	-	-	-	1	
	L-12	60+53.98	38.0' RT	-	10	5	-	-	-	-	1	
	L-13	60+68.10	46.0' LT	-	10	5	-	-	-	-	1	
	L-14	61+79.37	34.5' RT	1	98	49	1	1	1	1	-	
	L-15	63+40.35	41.5' RT	1	98	49	1	1	1	1	-	
	L-16	63+51.53	87.2' LT	1	98	49	1	1	1	1	-	
	L-17	262+94.32	27.3' RT	1	98	49	1	1	1	1	-	
	L-18	64+81.23	121.1' LT	1	98	49	1	1	1	1	-	
	L-19	65+17.13	48.0' RT	1	98	49	1	1	1	1	-	
	L-20	65+78.66	52.5' LT	1	98	49	1	1	1	1	-	
	L-21	67+25.54	23.0' RT	1	98	49	1	1	1	1	-	
	L-22	68+72.35	37.2' LT	1	98	49	1	1	1	1	-	
	L-23	265+71.14	26.0' RT	1	98	49	1	1	1	1	-	
	L-24	261+33.45	26.0' RT	1	98	49	1	1	1	1	-	
	L-25	259+46.19	26.0' LT	1	98	49	1	1	1	1	-	
	L-26	264+31.65	27.0' LT	1	98	49	1	1	1	1	-	
			TOTAL:	22	2196	1098	22	22	22	22	4	
PROJECT ID 1012-01-74 TOTAL:				22	3,294		22	22	22	22	4	

ELECTRICAL WIRE LIGHTING

CATEGORY	LOCATION FROM	LOCATION TO	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	REMARKS
0010	LC-01	L-10	1039	STREET LIGHTING WIRE
	L-10	L-14	480	STREET LIGHTING WIRE
	L-14	L-17	692	STREET LIGHTING WIRE
	L-17	L-21	642	STREET LIGHTING WIRE
	LC-01	L-16	2226	STREET LIGHTING WIRE
	L-16	L-20	526	STREET LIGHTING WIRE
	L-20	L-23	644	STREET LIGHTING WIRE
	LC-01	L-12	1219	STREET LIGHTING WIRE
	L-12	L-15	602	STREET LIGHTING WIRE
	L-15	L-19	530	STREET LIGHTING WIRE
	L-19	L-24	522	STREET LIGHTING WIRE
	LC-01	L-18	2542	STREET LIGHTING WIRE
	L-18	L-22	810	STREET LIGHTING WIRE
	LC-01	L-03	156	STREET LIGHTING WIRE
	L-03	L-06	634	STREET LIGHTING WIRE
	L-06	L-09	622	STREET LIGHTING WIRE
	L-09	L-13	425	STREET LIGHTING WIRE
	LC-01	L-02	710	STREET LIGHTING WIRE
	LC-01	L-07	516	STREET LIGHTING WIRE
	L-07	L-25	630	STREET LIGHTING WIRE
	LC-01	L-04	422	STREET LIGHTING WIRE
	L-04	L-08	594	STREET LIGHTING WIRE
	L-08	L-11	447	STREET LIGHTING WIRE
	LC-01	L-05	172	STREET LIGHTING WIRE
	LC-01	L-26	590	STREET LIGHTING WIRE
	LC-01	L-01	760	STREET LIGHTING WIRE
	STREET LIGHTING WIRE SUBTOTAL		19152	
0010	LC-01	L-03	45	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-03	L-01	302	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-03	L-04	161	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-04	L-02	214	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-04	L-06	120	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-06	L-26	156	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-06	L-08	185	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-08	L-09	100	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-09	L-11	95	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-11	L-13	79	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-13	L-16	317	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-16	L-18	138	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-18	L-23	207	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-18	L-20	99	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-20	L-22	300	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	LC-01	L-05	53	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-05	L-25	223	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-05	L-07	152	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-07	L-10	239	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-10	L-12	80	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-12	L-14	123	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-14	L-15	151	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-15	L-17	169	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-17	L-24	175	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-17	L-19	98	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	L-19	L-21	207	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS
	EQUIPMENT GROUNDING AND GROUNDED CONDUCTORS SUBTOTAL:		4188	
	PROJECT ID 1012-01-74 TOTAL:		23,340	

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ITS SYSTEM QUANTITIES

CATEGORY	LOCATION	531.2036 DRILLING SHAFT 36-INCH LF	531.4050 FOUNDATION CAMERA POLE 50-FT EACH	652.0125 CONDUIT RIGID METALLIC 2-INCH LF	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH	653.0140 PULL BOXES STEEL 24X42-INCH EACH	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF	655.0535 ELECTRICAL WIRE TRAFFIC SIGNALS 2 AWG LF	670.0100 FIELD SYSTEM INTEGRATOR LS	670.0200 ITS DOCUMENTATION LS	673.0200 TRACER WIRE MARKER POSTS EACH	674.0300 REMOVE CABLE LF	675.0300 INSTALL MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY EACH	677.0150 INSTALL CAMERA POLE 50-FT EACH	677.0200 INSTALL CAMERA ASSEMBLY EACH	677.9051.S REMOVING 50-FT CAMERA POLE EACH	677.9200.S REMOVING CCTV CAMERA EACH	678.0006 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT LF	678.0300 FIBER OPTIC SPLICE EACH
0010	ITS SYSTEM	10	1	10	2,620	1	6	990	2,760	1	1	2	4,085	2	1	1	1	1	1,090	4
PROJECT ID 1012-01-74 TOTAL:		10	1	10	2,620	1	6	990	2,760	1	1	2	4,085	2	1	1	1	1	1,090	4

CONTINUED ITS SYSTEM QUANTITIES

CATEGORY	LOCATION	678.0400 FIBER OPTIC TERMINATION EACH	678.0500 COMMUNICATION SYSTEM TESTING LS	678.0600 INSTALL ETHERNET SWITCHES EACH	SPV.0060.02 SPECIAL (02. REMOVING CONTROLLER CABINET) EACH	SPV.0060.03 SPECIAL (03. REMOVING CONTROLLER CABINET BASE) EACH	SPV.0060.04 SPECIAL (04. REMOVE POLE) EACH	SPV.0060.05 SPECIAL (05. REMOVE MICROWAVE DETECTOR) EACH	SPV.0060.06 SPECIAL (06. REMOVING ON-RAMP CLOSURE GATE) EACH	SPV.0060.07 SPECIAL (07. REMOVING COMMUNICATION VAULT) EACH	SPV.0060.08 SPECIAL (08. INSTALL SPREAD SPECTRUM RADIO) EACH	SPV.0060.09 SPECIAL (09. GROUND ROD) EACH	673.1225.S INSTALL POLE MOUNTED CABINET EACH	REMARKS
0010	ITS SYSTEM	6	1	1	1	1	2	4	2	1	1	1	1	
PROJECT ID 1012-01-74 TOTAL:		6	1	1	1	1	2	4	2	1	1	1	1	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE.

ON-RAMP CLOSURE GATE

CATEGORY	ITEM I.D.	STATION	LOCATION	654.0105 CONCRETE BASES TYPE 5 EACH	* 657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	662.1024.S RAMP CLOSURE GATES 24-FT EACH	662.1032.S RAMP CLOSURE GATES 32-FT EACH	REMARKS
0010	G-11-01	261'SN'+32	28' LT	1	1	1	-	
	G-11-02	263'NN'+83	36' LT	1	1	-	1	
			PROJECT ID 1012-01-74 TOTAL:	2	2	1	1	

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VERIFY LANDMARK REFERENCE MONUMENTS

CATEGORY	STATION	LOCATION	SPV.0060.01 SPECIAL (01. VERIFY LANDMARK REFERENCE MONUMENTS) EACH	REMARKS
0010	245''NB''+11	204' LT	1	T10N R09E SEC 20
PROJECT ID 1012-01-74 TOTAL:			1	

DRAIN SLOTTED VANE

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.01 DRAIN SLOTTED VANE LONGITUDINAL LF	REMARKS
0010	238'SB'+50	-	238'SB'+74		24	
	238'SB'+78	-	239'SB'+78		100	
	239'SB'+82	-	243'SB'+60		378	
	276'SB'+80	-	281'SB'+98		518	
PROJECT ID 1012-01-74 TOTAL:					1,020	

3

CONSTRUCTION STAKING ROUNDABOUT

CATEGORY	LOCATION	SPV.0060.14 SPECIAL (14. CONSTRUCTION STAKING ROUNDABOUT TERMINAL) EACH	REMARKS
0010	STH 60	0.5	NORTHBOUND TERMINAL
	STH 60	0.5	SOUTHBOUND TERMINAL
PROJECT ID 1012-01-74 TOTAL:		1	

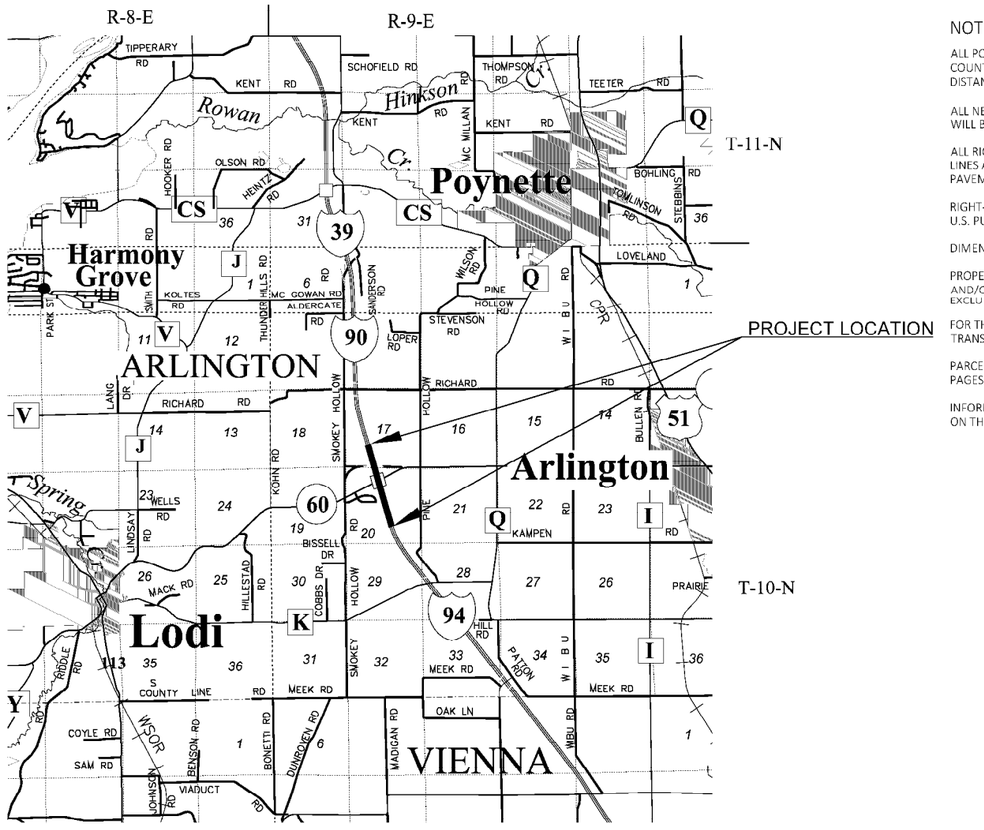
FILL AND RESTORE EXISTING CONCRETE RUMBLE STRIPES

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	SPV.0090.02 SPECIAL (FILL AND RESTORE EXISTING CONCRETE RUMBLE LF	REMARKS
0010	STAGE 2	234''NB''+49	-	241''NB''+30	LT	681	NB INSIDE SHOULDER
		239''SB''+57	-	280''SB''+58	RT	4,101	SB INSIDE SHOULDER
		278''NB''+73	-	286''NB''+52	LT	779	NB INSIDE SHOULDER
		243''SB''+39	-	291''SB''+60	LT	4,821	SB OUTSIDE SHOULDER
					STAGE 2 TOTAL:	10,382	
	STAGE 4	230''NB''+40	-	283''NB''+43	RT	5,303	NB OUTSIDE SHOULDER
		234''SB''+80	-	239''SB''+58	RT	478	SB INSIDE SHOULDER
		239''NB''+78	-	278''NB''+21	LT	3,843	NB INSIDE SHOULDER
		278''SB''+60	-	285''SB''+97	RT	737	SB INSIDE SHOULDER
					STAGE 4 TOTAL:	10,361	
					PROJECT ID 1012-01-74 TOTAL:	20,743	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET

1012-01-24
MADISON - PORTAGE
STH 60 INTERCHANGE, B-11-15 & 16
IH-39
COLUMBIA





THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1012-01-24.

NOTES:

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

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

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

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

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

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

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION IN MADISON, WI.

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

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

CONVENTIONAL SYMBOLS

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

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED)

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	□
TELEPHONE POLE	●	○
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	▼	▽

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

PARCEL NUMBER (25)
UTILITY NUMBER (40)
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA

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

CONVENTIONAL UTILITY SYMBOLS

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

LAYOUT SCALE 0 1 MI.

PROJECT NUMBER 1012-01-24 - 4.01
SHEET 2 OF 2
AMENDMENT NO:
249

TRANSPORTATION PROJECT PLAT NO: 1012-01-24 - 4.01

THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 17, AND THAT PART OF LOT 1 CERTIFIED SURVEY MAP 3398, VOLUME 23, PAGE 15, DOCUMENT NUMBER 621102, LOCATED IN THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 20, ALL IN TOWNSHIP 10 NORTH, RANGE 9 EAST, TOWN OF ARLINGTON, COLUMBIA COUNTY, WISCONSIN.

RELOCATION ORDER IH 39 MADISON TO PORTAGE, STH 60 INTERCHANGE, B-11-15 & 16 - COLUMBIA COUNTY

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

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

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES		
			NEW	EXISTING	TOTAL
1	RICHEARTH LAND, LLC	FEE	0.177	0.050	0.227
2	4 GOLDEN SPOONS, LLC	FEE	3.910	0.035	3.945

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

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
100-101	S00°03'58"W	662.07'
101-102	S00°03'58"W	554.04'
102-103	N89°05'53"W	168.31'
103-104	N89°05'53"W	910.48'
104-105	N26°28'23"W	100.06'
105-106	N63°31'37"E	293.19'
106-107	N48°50'26"E	174.22'
107-108	N22°08'46"W	181.11'
108-109	N05°51'00"E	365.82'
109-110	N08°09'23"E	196.98'
110-111	N00°33'03"W	171.03'

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
111-112	N15°48'22"W	56.99'
112-113	N15°48'22"W	43.87'
113-114	N15°48'22"W	62.63'
114-115	N11°10'20"W	432.92'
115-116	N74°11'38"E	170.02'
116-117	N74°11'38"E	119.98'
117-118	S15°48'23"E	427.06'
118-119	S58°49'45"E	195.26'
119-120	S58°49'45"E	118.19'
120-121	S58°49'45"E	84.60'
121-100	S58°49'45"E	149.84'

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
122-123	S00°03'58"W	42.69'
123-121	N89°01'37"W	128.31'
119-124	S89°01'37"E	302.00'
124-122	S00°05'43"W	59.32'

R/W PT. STATION & OFFSET TABLE		
POINT	STATION	OFFSET
100	269+62.40 "A"	493.80'
101	64+12.37 "B"	0.00'
102	257+92.66 "A"	161.20'
103	258+41.04 "A"	0.00'
104	52+06.84 "B"	0.00'
105	52+86.04 "B"	0.00'
106	55+00.00 "B"	100.06'
107	263+30.00 "A"	445.00'
108	265+10.00 "A"	465.00'
109	268+50.00 "A"	330.00'
110	270+30.00 "A"	250.00'
111	271+95.00 "A"	205.00'
112	272+51.99 "A"	205.00'
113	272+95.87 "A"	205.00'
114	273+58.50 "A"	205.00'
115	277+90.00 "A"	170.02'
116	277+90.00 "A"	0.00'
117	277+90.00 "A"	119.98'
118	273+62.94 "A"	119.98'

R/W PT. STATION & OFFSET TABLE		
POINT	STATION	OFFSET
119	272+20.19 "A"	253.20'
120	271+33.79 "A"	333.84'
121	270+71.94 "A"	391.56'
122	270+75.96 "A"	526.09'
123	270+34.90 "A"	514.41'
124	271+33.01 "A"	542.34'

SEE 1012-01-24 - SHEET 4.03

DOC # 927702
REGISTER OF DEEDS
COLUMBIA COUNTY
RECORDED ON:
06/17/2020 09:48:09
PAGES: 2
KAREN A MANSKE
REGISTER OF DEEDS
REC FEE: 325.00
Exempt #:
VOLUME: TPP-E PAGE: 37
250
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1012-01-24 4.01
SHEET 1 OF 2
AMENDMENT NO:

FOUND BERNTSEN MONUMENT
Y = 325,878.676
X = 539,537.475

FOUND ¾" IRON REBAR
Y = 320,614.004
X = 536,890.248

FOUND ALUMINUM MONUMENT
Y = 320,570.949
X = 539,528.765

FOUND 2" IRON PIPE
Y = 317,902.254
X = 539,525.683

affidavit of correction: 5248.41'
N00°05'43"E 2591.73' PT. 124 TO MON.
N00°05'43"E 5307.73' MON. TO MON.

SW-SW TOWN OF ARLINGTON SE-SW
NE-NW NW-NW

IH 39/90/94 280 A 270 A 272 A 265 A 260 A
STH 60 60 B 55 B
SIXTEENTH LINE QUARTER LINE SECTION LINE
REF. LINE FOR PROJECT NO. I-90-2(11)101
EXISTING R/W
R/L = N63°32'42"E
R/L = N15°48'22"W

LOT 2 CSM 836 V.4, P.56, DOC. NO. 436164
LOT 1 CSM 836 V.4, P.56, DOC. NO. 436164
LOT 3 CSM 4356 V. 30, P. 111, DOC. NO. 728244
LOT 2 CSM 3442 V.23, P.59, DOC. NO. 624154
LOT 1 CSM 3398 V.23, P.15, DOC. NO. 621102

DESERT FOX RD. (OLD STH 60) STA. 272+34.20 "A"
SCHUTZ RD. (OLD STH 60)
S89°03'54"E 1875.43' MON. TO PT. 113
S89°03'54"E 2638.87' MON. TO MON.
S89°03'54"E 214.07' PT. 113 TO R/L
S89°03'54"E 348.62' R/L TO PT. 120
S89°03'54"E 200.75' PT. 120 TO MON.
S00°03'58"W 75.38' PT. 123 TO PT. 100
S00°03'58"W 2668.70' MON. TO MON.
STRUCTURES B-11-15 & B-11-16
STA 262+66.77 "A" = STA 60+94.16 "B"
1-1/2" IP
3/4" IP
SEE 1012-01-24 - SHEET 4.02

GN
0 100 200
SCALE, FEET

R-8-E R-9-E T-11-N T-10-N
Poynette Emony Grove ARLINGTON Arlington Lodi VIENNA
SHEET LOCATION

NOTES:

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

ALL EXISTING IRON PINS ARE 1" UNLESS OTHERWISE NOTED.

EXISTING ACCESS CONTROL ALONG STH 60 AND IH-39/90/94 IS FROM PREVIOUS PROJECT NO. I-90-2(11)101.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON, WI.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
IH-39/90/94: PREVIOUS PROJECT NO. I-90-2(11)101, AND CSMs 836, AND 3398.
STH 60: PREVIOUS PROJECT NO. I-90-2(11)101 AND CSMs 3442, AND 3398.
DESERT FOX ROAD (OLD STH 60): PREVIOUS PROJECT NO. S 0227(1) AND CSMs 3398 AND 4356.
SCHUTZ ROAD (OLD STH 60): PREVIOUS PROJECT NO. S 0227(1) AND CSM 836.

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

FOR ADDITIONAL INFORMATION REFER TO TITLE SHEET, RECORDED AS SHEET 2 OF 2.

WISCONSIN CHRISTOPHER R. BADTKE S-3150 FAH IS A/RF WI LAND SURVEYOR

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

CHRISTOPHER R. BADTKE — 05/04/2020
REGISTRATION NUMBER: S-3150 — DATE

AYRES

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION.

CORY SCHLAGEL — 6/15/2020
DATE

1012-01-04-4.01
1 IN: 200 FT
PLOT SCALE :
PLOT NAME : Badtke, Christopher
PLOT BY :
PLOT DATE : 5/4/2020 2:22 PM
PLOT DATE :
PLOT DATE :
FILE NAME : V:\SURVEY\MD\41-0748.00 IH9_STH60 PLAT\C3D\RW\10120124_P401.DWG
AAPRAISAL PLAT DATE : 05/04/2020

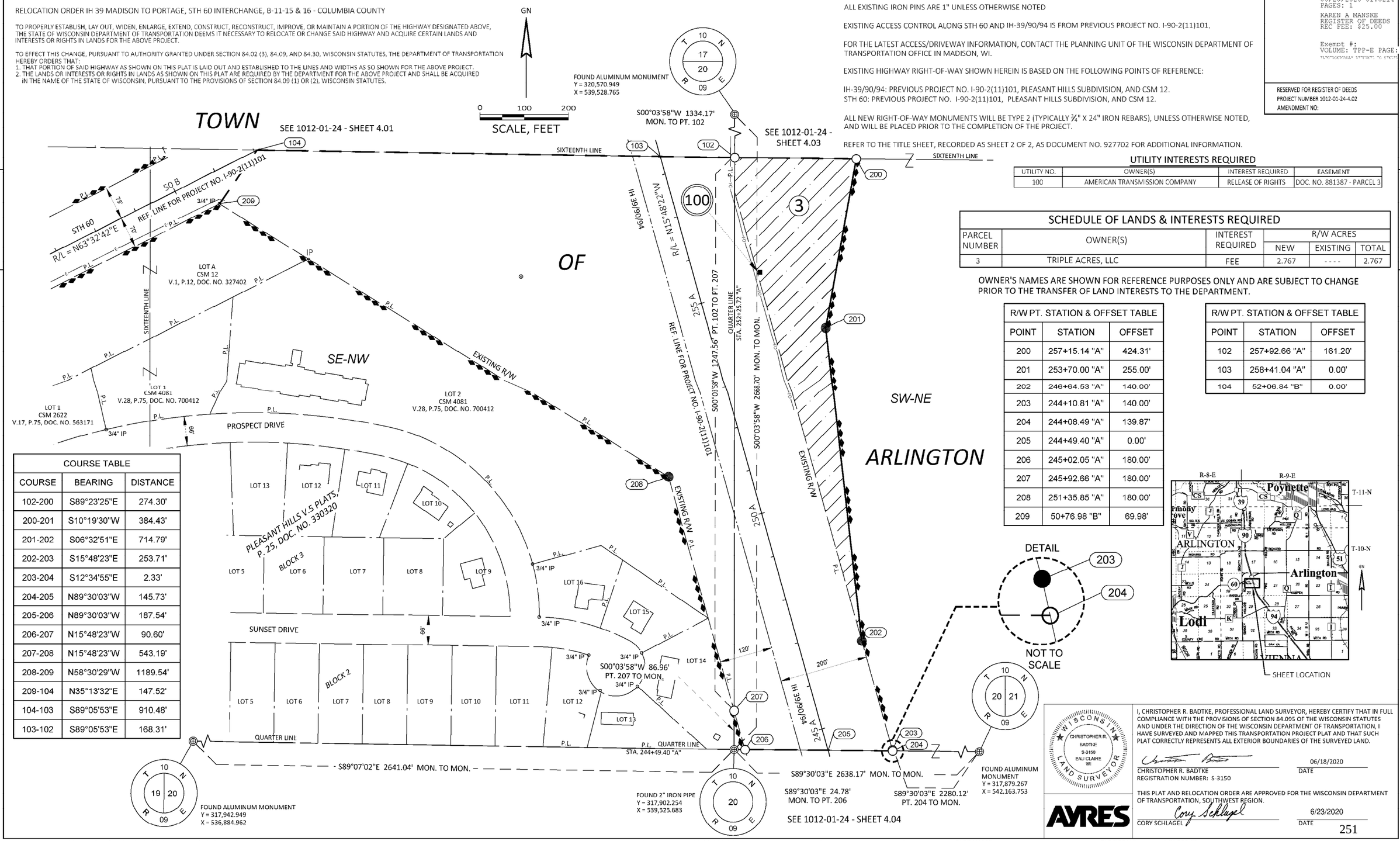
TRANSPORTATION PROJECT PLAT NO: 1012-01-24 - 4.02

THAT PART OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 20, TOWNSHIP 10 NORTH, RANGE 9 EAST, TOWN OF ARLINGTON, COLUMBIA COUNTY, WISCONSIN.

RELOCATION ORDER IH 39 MADISON TO PORTAGE, STH 60 INTERCHANGE, B-11-15 & 16 - COLUMBIA COUNTY

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

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



COURSE TABLE		
COURSE	BEARING	DISTANCE
102-200	S89°23'25"E	274.30'
200-201	S10°19'30"W	384.43'
201-202	S06°32'51"E	714.79'
202-203	S15°48'23"E	253.71'
203-204	S12°34'55"E	2.33'
204-205	N89°30'03"W	145.73'
205-206	N89°30'03"W	187.54'
206-207	N15°48'23"W	90.60'
207-208	N15°48'23"W	543.19'
208-209	N58°30'29"W	1189.54'
209-104	N35°13'32"E	147.52'
104-103	S89°05'53"E	910.48'
103-102	S89°05'53"E	168.31'

NOTES:

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

ALL EXISTING IRON PINS ARE 1" UNLESS OTHERWISE NOTED

EXISTING ACCESS CONTROL ALONG STH 60 AND IH-39/90/94 IS FROM PREVIOUS PROJECT NO. I-90-2(11)101.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON, WI.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

IH-39/90/94: PREVIOUS PROJECT NO. I-90-2(11)101, PLEASANT HILLS SUBDIVISION, AND CSM 12.
STH 60: PREVIOUS PROJECT NO. I-90-2(11)101, PLEASANT HILLS SUBDIVISION, AND CSM 12.

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

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, AS DOCUMENT NO. 927702 FOR ADDITIONAL INFORMATION.

DOC # 928059
REGISTER OF DEEDS
COLUMBIA COUNTY

RECORDED ON:
06/23/2020 01:3214
PAGES: 1

KAREN A MANSKE
REGISTER OF DEEDS
REC FEE: $25.00

Exempt #:
VOLUME: TPP-E PAGE: 38

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1012-01-24-4.02
AMENDMENT NO:

UTILITY INTERESTS REQUIRED

UTILITY NO.	OWNER(S)	INTEREST REQUIRED	EASEMENT
100	AMERICAN TRANSMISSION COMPANY	RELEASE OF RIGHTS	DOC. NO. 881387 - PARCEL 3

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES		
			NEW	EXISTING	TOTAL
3	TRIPLE ACRES, LLC	FEE	2.767	----	2.767

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

R/W PT. STATION & OFFSET TABLE		
POINT	STATION	OFFSET
200	257+15.14 "A"	424.31'
201	253+70.00 "A"	255.00'
202	246+64.53 "A"	140.00'
203	244+10.81 "A"	140.00'
204	244+08.49 "A"	139.87'
205	244+49.40 "A"	0.00'
206	245+02.05 "A"	180.00'
207	245+92.66 "A"	180.00'
208	251+35.85 "A"	180.00'
209	50+76.98 "B"	69.98'

R/W PT. STATION & OFFSET TABLE		
POINT	STATION	OFFSET
102	257+92.66 "A"	161.20'
103	258+41.04 "A"	0.00'
104	52+06.84 "B"	0.00'

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

CHRISTOPHER R. BADTKE — DATE 06/18/2020
REGISTRATION NUMBER: S-3150

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION.

CORY SCHLAGEL — DATE 6/23/2020

AYRES

FILE NAME : V:\SURVEY\MD\41-0748.00 I39_STH 60 PLAT\C3D\RW\10120124_0402.DWG
PLOT DATE : 6/18/2020 6:05 PM PLOT BY : BADTKE, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:200 FT
APPRAISAL PLAT DATE : 06/18/2020

TRANSPORTATION PROJECT PLAT NO: 1012-01-24 - 4.03

THAT PART OF CERTIFIED SURVEY MAP 28 RECORDED IN V.1, PG. 28, AS DOC NO. 331669, LOCATED IN THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 , AND A PART OF THE NORTHWEST 1/4 OF THE NORTHEAST ¼, ALL IN SECTION 20, TOWNSHIP 10 NORTH, RANGE 9 EAST, TOWN OF ARLINGTON, COLUMBIA COUNTY, WISCONSIN.

RELOCATION ORDER IH 39 MADISON TO PORTAGE, STH 60 INTERCHANGE, B-11-15 & 16 - COLUMBIA COUNTY

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

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

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

ALL EXISTING IRON PINS ARE 1" UNLESS OTHERWISE NOTED

EXISTING ACCESS CONTROL ALONG STH 60 AND IH-39/90/94 IS FROM PREVIOUS PROJECT NO. I-90-2(11)101.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON, WI.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
IH-39/90/94: PREVIOUS PROJECT NO. I-90-2(11)101, AND CSM 28.
STH 60: PREVIOUS PROJECT NOs. S 0227(1) AND I-90-2(11)101, AND CSM 28.
SCHUTZ ROAD (OLD STH 60): PREVIOUS PROJECT NO. S 0227(1) AND CSM 28.

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

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, AS DOCUMENT NO. 927702 FOR ADDITIONAL INFORMATION.

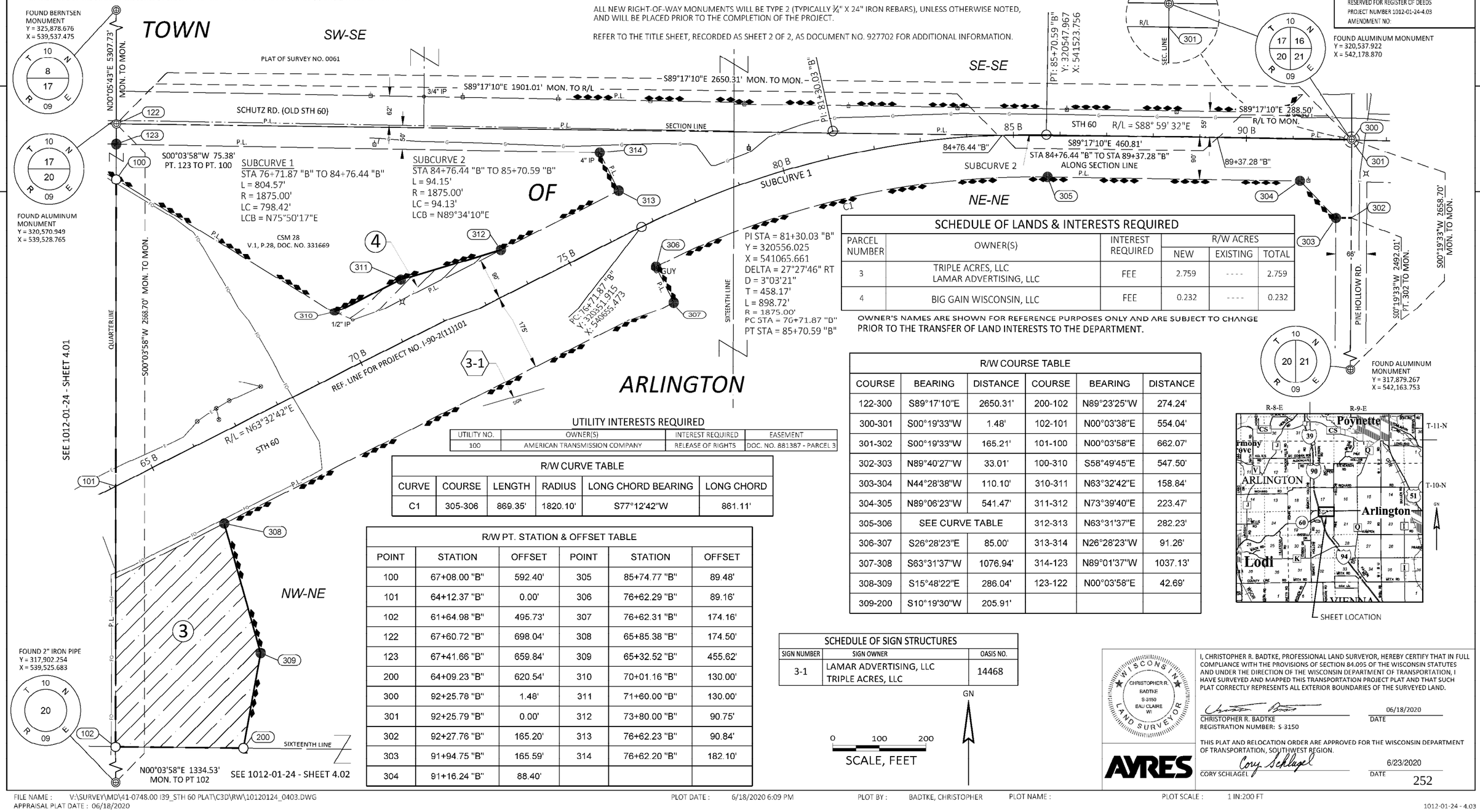
DOC # 928060
REGISTER OF DEEDS
COLUMBIA COUNTY

RECORDED ON:
06/23/2020 01:3214
PAGES: 1

KAREN A MANSKE
REGISTER OF DEEDS
REC FEE: $25.00

Exempt #:
VOLUME: TPP-E PAGE: 39

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1012-01-24-4.03
AMENDMENT NO:



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES		
			NEW	EXISTING	TOTAL
3	TRIPLE ACRES, LLC LAMAR ADVERTISING, LLC	FEE	2.759	----	2.759
4	BIG GAIN WISCONSIN, LLC	FEE	0.232	----	0.232

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

R/W COURSE TABLE

COURSE	BEARING	DISTANCE	COURSE	BEARING	DISTANCE
122-300	S89°17'10"E	2650.31'	200-102	N89°23'25"W	274.24'
300-301	S00°19'33"W	1.48'	102-101	N00°03'38"E	554.04'
301-302	S00°19'33"W	165.21'	101-100	N00°03'58"E	662.07'
302-303	N89°40'27"W	33.01'	100-310	S58°49'45"E	547.50'
303-304	N44°28'38"W	110.10'	310-311	N63°32'42"E	158.84'
304-305	N89°06'23"W	541.47'	311-312	N73°39'40"E	223.47'
305-306	SEE CURVE TABLE		312-313	N63°31'37"E	282.23'
306-307	S26°28'23"E	85.00'	313-314	N26°28'23"W	91.26'
307-308	S63°31'37"W	1076.94'	314-123	N89°01'37"W	1037.13'
308-309	S15°48'22"E	286.04'	123-122	N00°03'58"E	42.69'
309-200	S10°19'30"W	205.91'			

UTILITY INTERESTS REQUIRED

UTILITY NO.	OWNER(S)	INTEREST REQUIRED	EASEMENT
100	AMERICAN TRANSMISSION COMPANY	RELEASE OF RIGHTS	DOC. NO. 881387 - PARCEL 3

R/W CURVE TABLE

CURVE	COURSE	LENGTH	RADIUS	LONG CHORD BEARING	LONG CHORD
C1	305-306	869.35'	1820.10'	S77°12'42"W	861.11'

R/W PT. STATION & OFFSET TABLE

POINT	STATION	OFFSET	POINT	STATION	OFFSET
100	67+08.00 "B"	592.40'	305	85+74.77 "B"	89.48'
101	64+12.37 "B"	0.00'	306	76+62.29 "B"	89.16'
102	61+64.98 "B"	495.73'	307	76+62.31 "B"	174.16'
122	67+60.72 "B"	698.04'	308	65+85.38 "B"	174.50'
123	67+41.66 "B"	659.84'	309	65+32.52 "B"	455.62'
200	64+09.23 "B"	620.54'	310	70+01.16 "B"	130.00'
300	92+25.78 "B"	1.48'	311	71+60.00 "B"	130.00'
301	92+25.79 "B"	0.00'	312	73+80.00 "B"	90.75'
302	92+27.76 "B"	165.20'	313	76+62.23 "B"	90.84'
303	91+94.75 "B"	165.59'	314	76+62.20 "B"	182.10'
304	91+16.24 "B"	88.40'			

SCHEDULE OF SIGN STRUCTURES

SIGN NUMBER	SIGN OWNER	OASIS NO.
3-1	LAMAR ADVERTISING, LLC TRIPLE ACRES, LLC	14468

0 100 200
SCALE, FEET

GN

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

CHRISTOPHER R. BADTKE
REGISTRATION NUMBER: S-3150
06/18/2020
DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION.

CORY SCHLAGEL
6/23/2020
DATE

AYRES

252

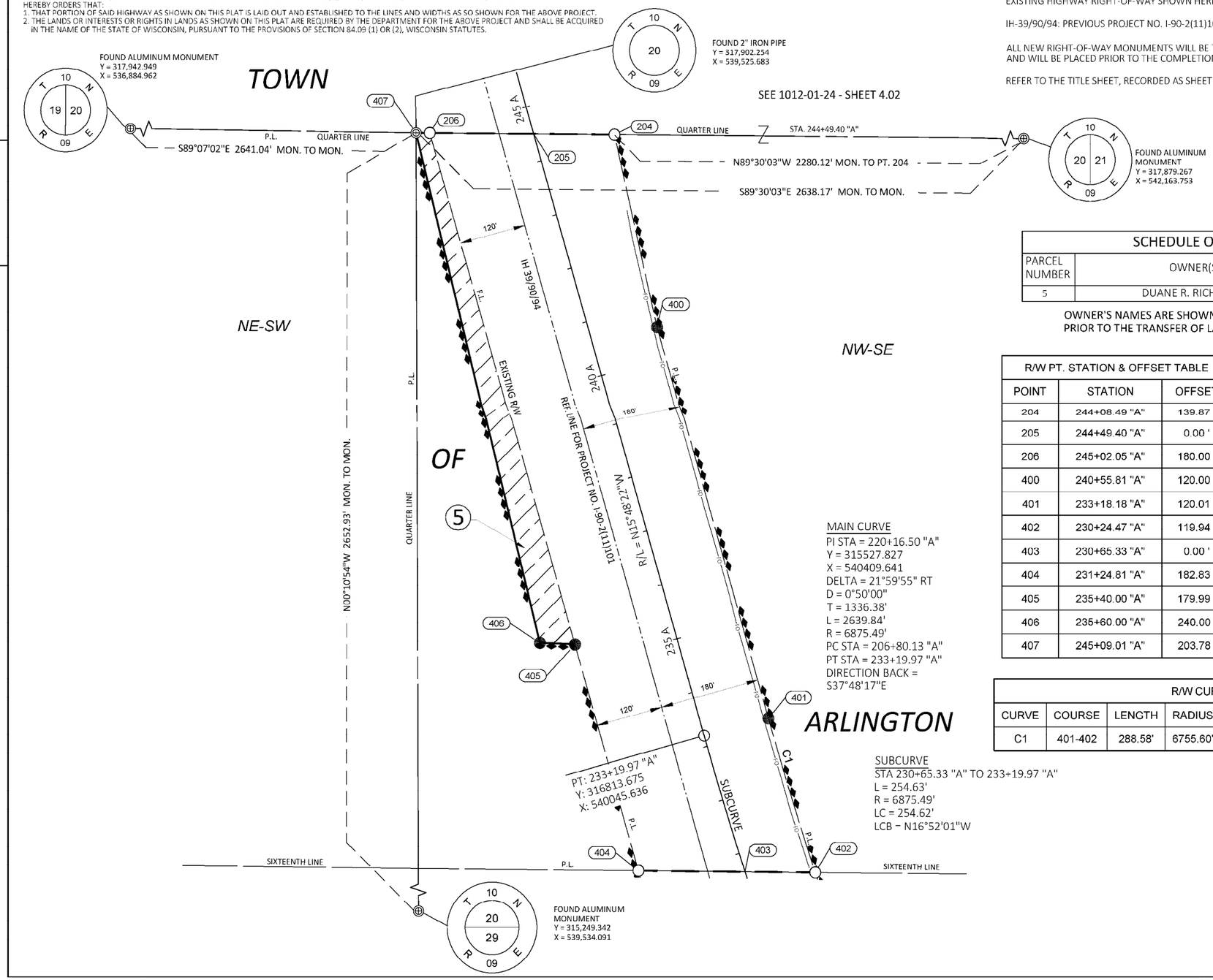
TRANSPORTATION PROJECT PLAT NO: 1012-01-24 - 4.04

THAT PART OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 20, TOWNSHIP 10 NORTH, RANGE 9 EAST, TOWN OF ARLINGTON, COLUMBIA COUNTY, WISCONSIN.

RELOCATION ORDER IH 39 MADISON TO PORTAGE, STH 60 INTERCHANGE, B-11-15 & 16 - COLUMBIA COUNTY

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

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



MAIN CURVE
PI STA = 220+16.50 "A"
Y = 315527.827
X = 540409.641
DELTA = 21°59'55" RT
D = 0°50'00"
T = 1336.38'
L = 2639.84'
R = 6875.49'
PC STA = 206+80.13 "A"
PT STA = 233+19.97 "A"
DIRECTION BACK = S37°48'17"E

SUBCURVE
STA 230+65.33 "A" TO 233+19.97 "A"
L = 254.63'
R = 6875.49'
LC = 254.62'
LCB – N16°52'01"W

NOTES:

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

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON, WI.

EXISTING ACCESS CONTROL ALONG IH-39/90/94 IS FROM PREVIOUS PROJECT NO. I-90-2(11)101.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

IH-39/90/94: PREVIOUS PROJECT NO. I-90-2(11)101.

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

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, AS DOCUMENT NO. 927702 FOR ADDITIONAL INFORMATION.

DOC # 928061
REGISTER OF DEEDS
COLUMBIA COUNTY
RECORDED ON:
06/23/2020 01:3214
PAGES: 1
KAREN A MANSKE
REGISTER OF DEEDS
REC FEE: $25.00
Exempt #:
VOLUME: TPP-E PAGE: 40

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1012-01-24-4.04
AMENDMENT NO:

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES		
			NEW	EXISTING	TOTAL
5	DUANE R. RICHARDS	FEE	0.925	----	0.925

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

R/W PT. STATION & OFFSET TABLE

POINT	STATION	OFFSET
204	244+08.49 "A"	139.87 '
205	244+49.40 "A"	0.00 '
206	245+02.05 "A"	180.00 '
400	240+55.81 "A"	120.00 '
401	233+18.18 "A"	120.01 '
402	230+24.47 "A"	119.94 '
403	230+65.33 "A"	0.00 '
404	231+24.81 "A"	182.83 '
405	235+40.00 "A"	179.99 '
406	235+60.00 "A"	240.00 '
407	245+09.01 "A"	203.78 '

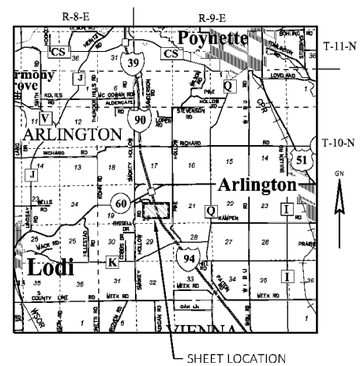
R/W COURSE TABLE

COURSE	BEARING	DISTANCE
204-400	S12°34'55"E	353.23'
400-401	S15°48'23"E	737.60'
401-402	SEE CURVE TABLE	
402-403	N89°26'15"W	126.59'
403-404	N89°26'15"W	192.51'
404-405	N15°48'23"W	420.36'
405-406	N87°22'24"W	63.25'
406-407	N13°37'14"W	949.70'
407-206	S89°30'03"E	24.78'
206-205	S89°30'03"E	187.54'
205-204	S89°30'03"E	145.73'

R/W CURVE TABLE

CURVE	COURSE	LENGTH	RADIUS	LONG CHORD	LONG CHORD BEARING
C1	401-402	288.58'	6755.60'	288.56'	S17°01'48"E

GN
0 100 200
SCALE, FEET



WISCONSIN
CHRISTOPHER R. BADTKE
S-3150
EAU CLAIRE WI
LAND SURVEYOR

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

CHRISTOPHER R. BADTKE — DATE 06/18/2020
REGISTRATION NUMBER: S-3150

AYRES

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION.

CORY SCHLAGEL — DATE 6/23/2020

253

FILE NAME : V:\SURVEY\MD\41-0748.00 I39_STH 60 PLAT\C3D\RW\10120124_0404.DWG
APPRAISAL PLAT DATE : 06/18/2020
PLOT DATE : 6/18/2020 6:10 PM
PLOT BY : BADTKE, CHRISTOPHER
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

4

DATE: 06/18/2020

TRANSPORTATION PROJECT PLAT NO: 1012-01-24 - 4.05

RELOCATION ORDER IH 39 MADISON TO PORTAGE, STH 60 INTERCHANGE, B-11-15 & 16 - COLUMBIA COUNTY

4

POINT TABLE		
POINT	Y	X
100	320452.881	539528.629
101	319790.814	539527.864
102	319236.779	539527.224
103	319239.428	539358.940
104	319253.758	538448.577
105	319343.327	538403.972
106	319474.024	538666.417
107	319588.686	538797.583
108	319756.433	538729.310
109	320120.349	538766.596
110	320315.333	538794.543
111	320486.352	538792.898
112	320541.191	538777.374
113	320583.405	538765.424
114	320643.667	538748.364
115	321068.381	538664.484
116	321114.693	538828.080
117	321147.372	538943.519
118	320736.460	539059.845
119	320635.398	539226.911
120	320574.224	539328.036
121	320530.436	539400.424
122	320570.949	539528.765
123	320528.256	539528.716
124	320630.269	539528.864

POINT TABLE		
POINT	Y	X
200	319233.859	539801.504
201	318855.652	539732.602
202	318145.529	539814.108
203	317901.409	539883.216
204	317899.134	539883.724
205	317900.404	539737.998
206	317902.038	539550.463
207	317989.215	539525.783
208	318511.864	539377.825
209	319133.253	538363.490

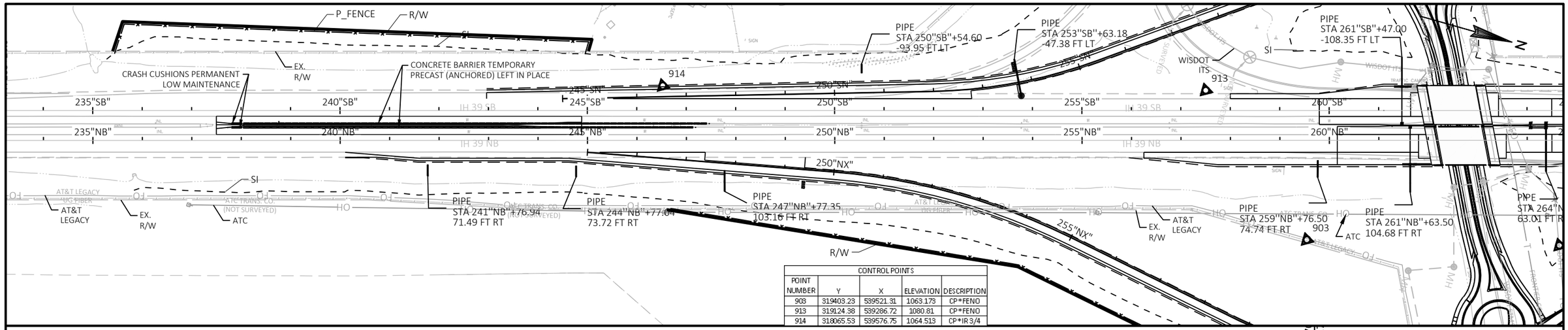
POINT TABLE		
POINT	Y	X
300	320537.922	542178.870
301	320536.443	542178.862
302	320371.237	542177.922
303	320371.424	542144.911
304	320449.986	542067.770
305	320458.429	541526.367
306	320267.821	540686.619
307	320191.734	540724.510
308	319711.658	539760.496
309	319436.432	539838.409
310	320169.503	539997.081
311	320240.267	540139.292
312	320303.134	540353.742
313	320428.947	540606.379
314	320510.642	540565.695

POINT TABLE		
POINT	Y	X
400	317554.385	539960.671
401	316844.675	540161.585
402	316568.767	540246.097
403	316570.010	540119.514
404	316571.899	539927.017
405	316976.362	539812.516
406	316979.260	539749.329
407	317902.254	539525.683

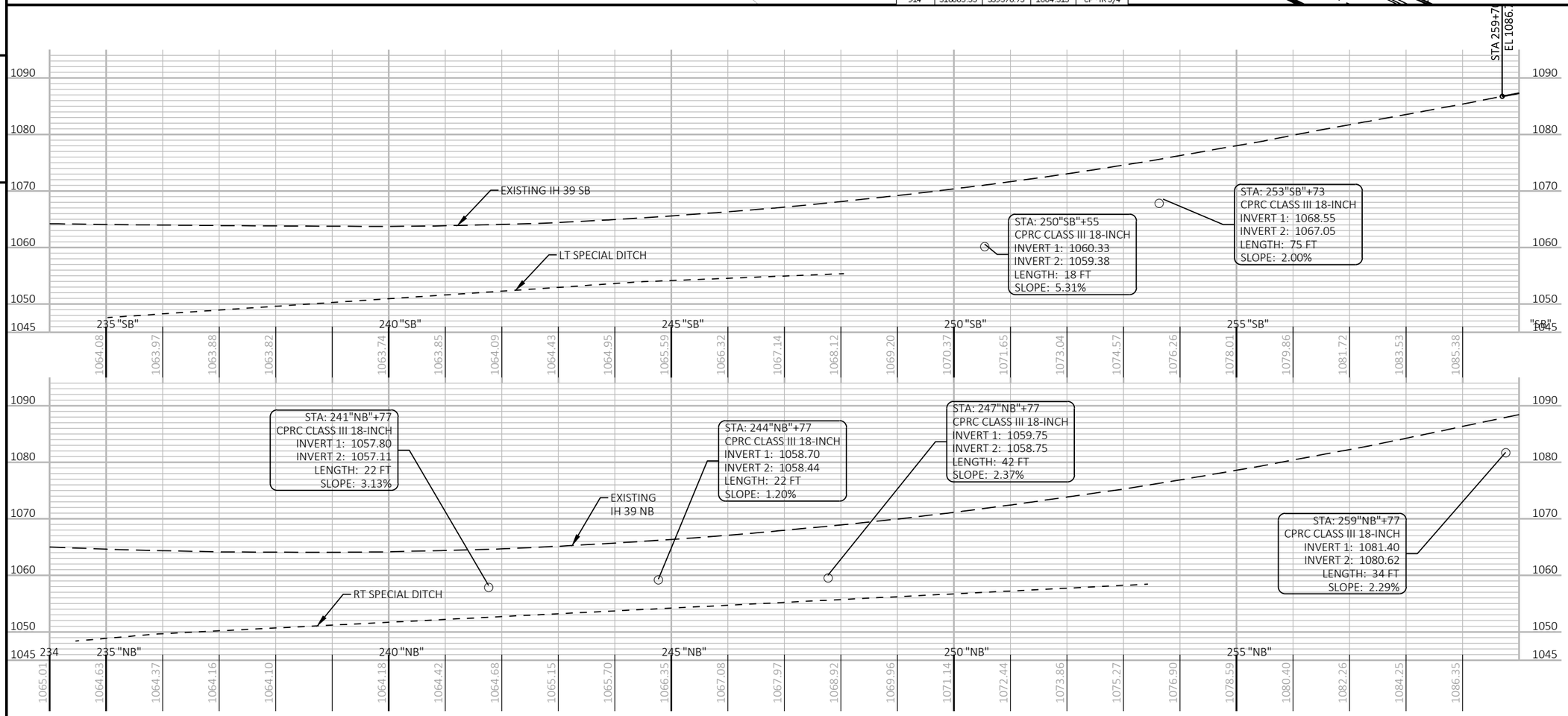
4

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

FILE NAME : V:\SURVEY\MD\41-0748.00 I39_STH 60 PLAT\C3D\RW\10120124_0405.DWG PLOT DATE : PLOT DATE : 6/18/2020 8:20 PM PLOT BY : Badtke, Christopher PLOT NAME :

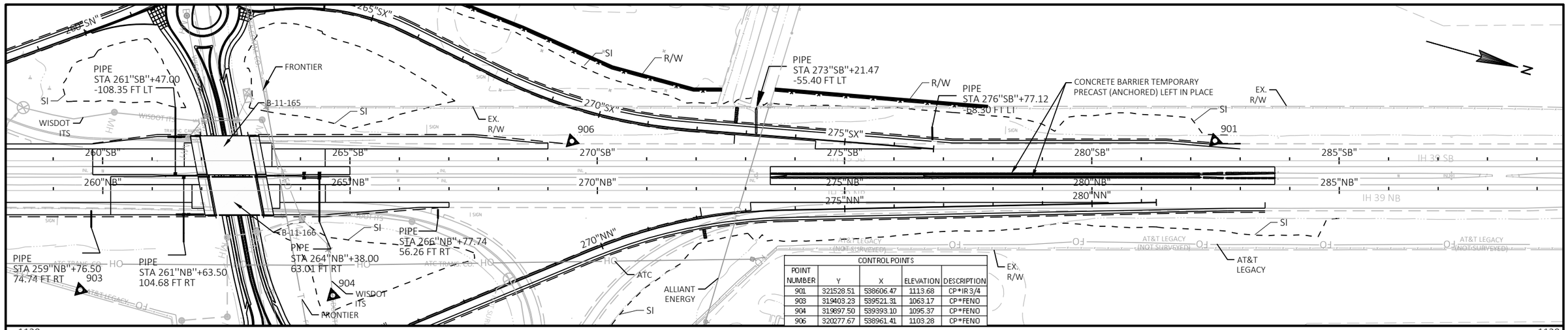


CONTROL POINTS				
POINT NUMBER	Y	X	ELEVATION	DESCRIPTION
903	319403.23	539521.31	1063.173	CP*FENO
913	319124.38	539286.72	1080.81	CP*FENO
914	318065.53	539576.75	1064.513	CP*IR 3/4

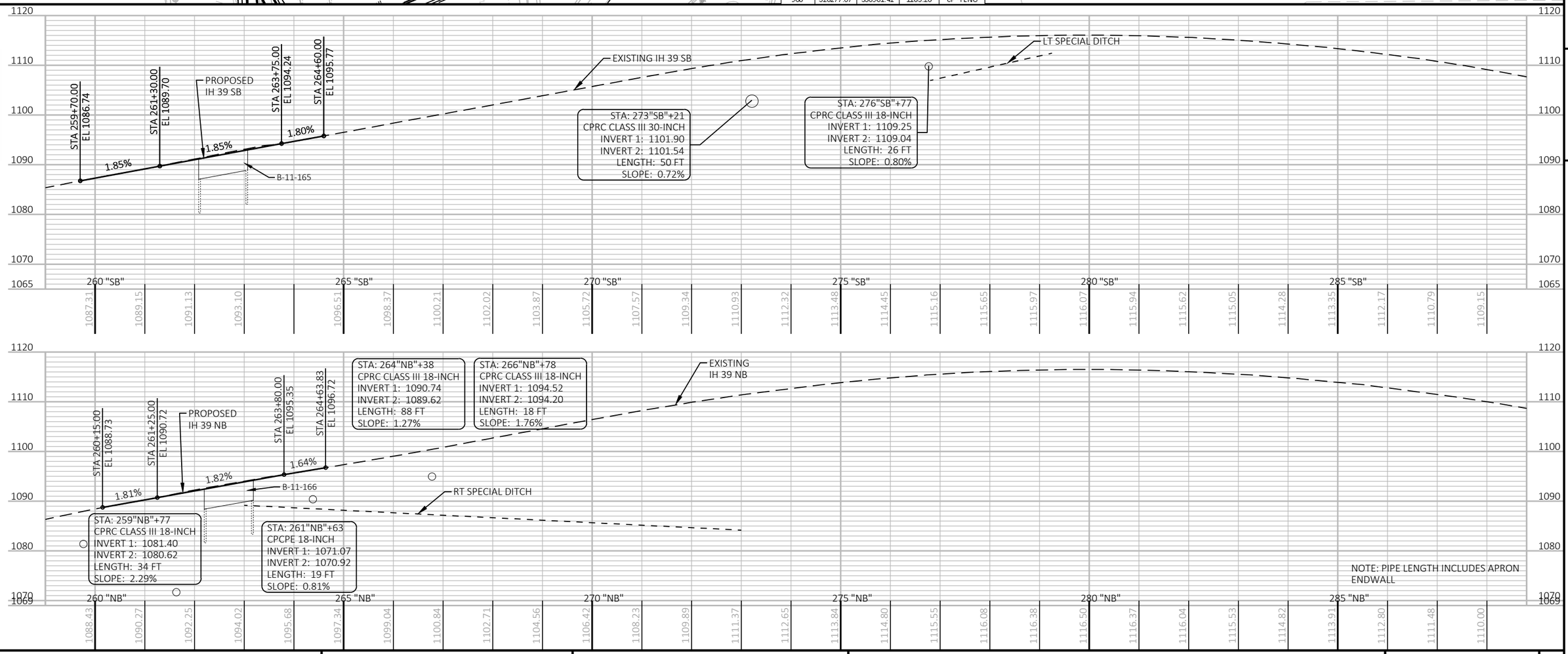


NOTE: PIPE LENGTH INCLUDES APRON ENDWALL

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN AND PROFILE: IH 39 NB AND SB	SHEET 255	E

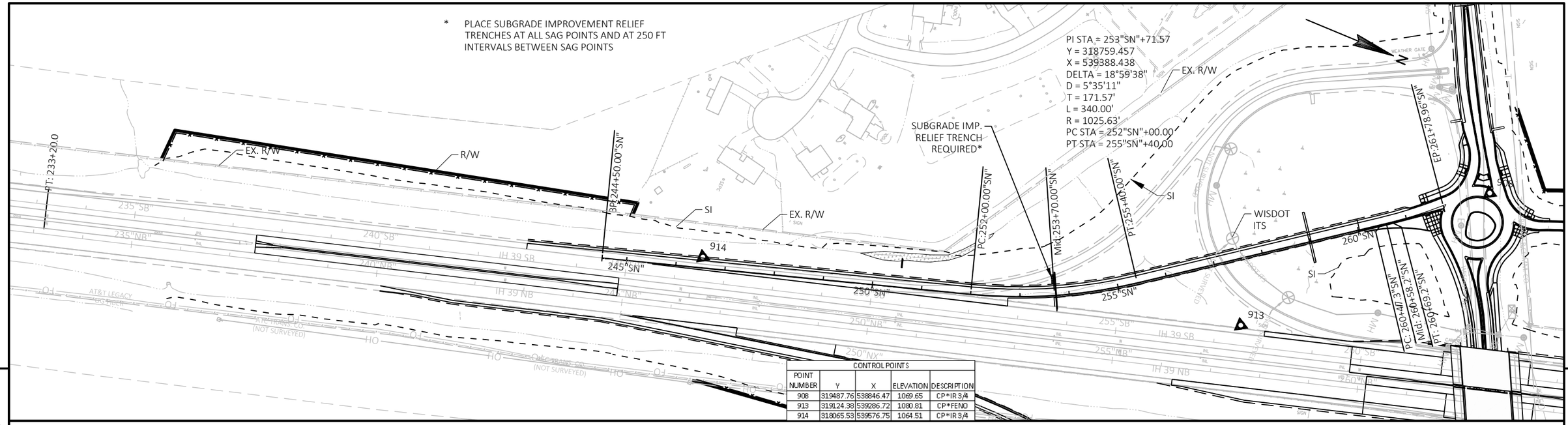


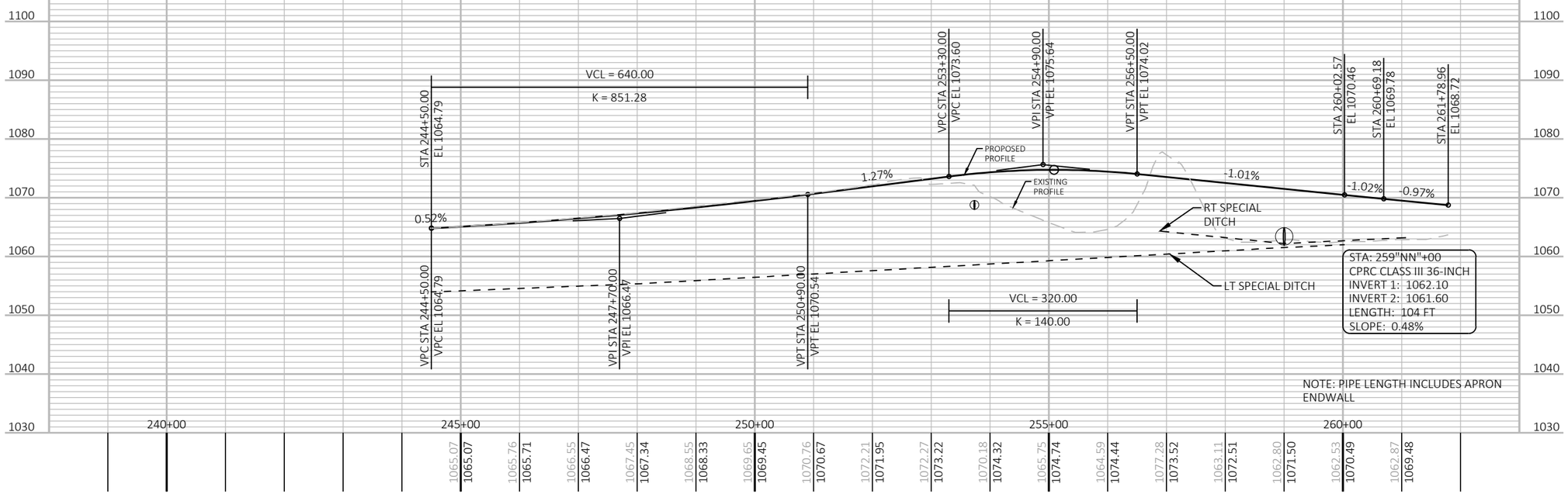
CONTROL POINTS				
POINT NUMBER	Y	X	ELEVATION	DESCRIPTION
901	321528.51	538606.47	1113.68	CP*IR 3/4
903	319403.23	539521.31	1063.17	CP*FENO
904	319897.50	539393.10	1095.37	CP*FENO
906	320277.67	538961.41	1103.28	CP*FENO



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN AND PROFILE: IH 39 NB AND SB	SHEET 256	E

* PLACE SUBGRADE IMPROVEMENT RELIEF TRENCHES AT ALL SAG POINTS AND AT 250 FT INTERVALS BETWEEN SAG POINTS



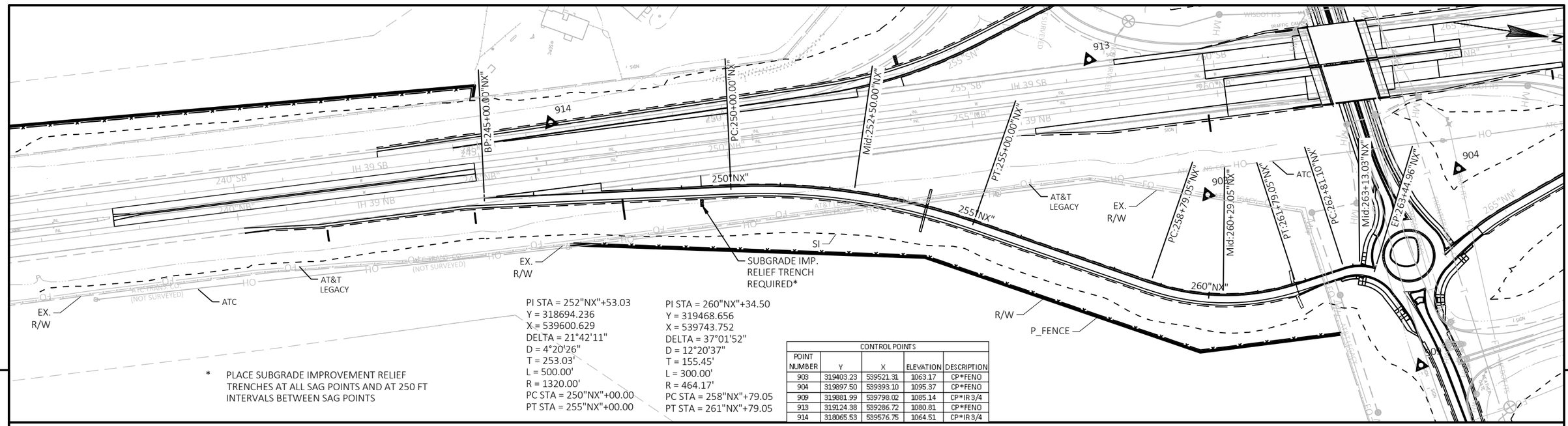


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN AND PROFILE: RAMP SN	SHEET 257	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\050103_PP SB ON.DWG
LAYOUT NAME - 050103_pp_SB ON

PLOT DATE : 1/31/2022 2:20 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44



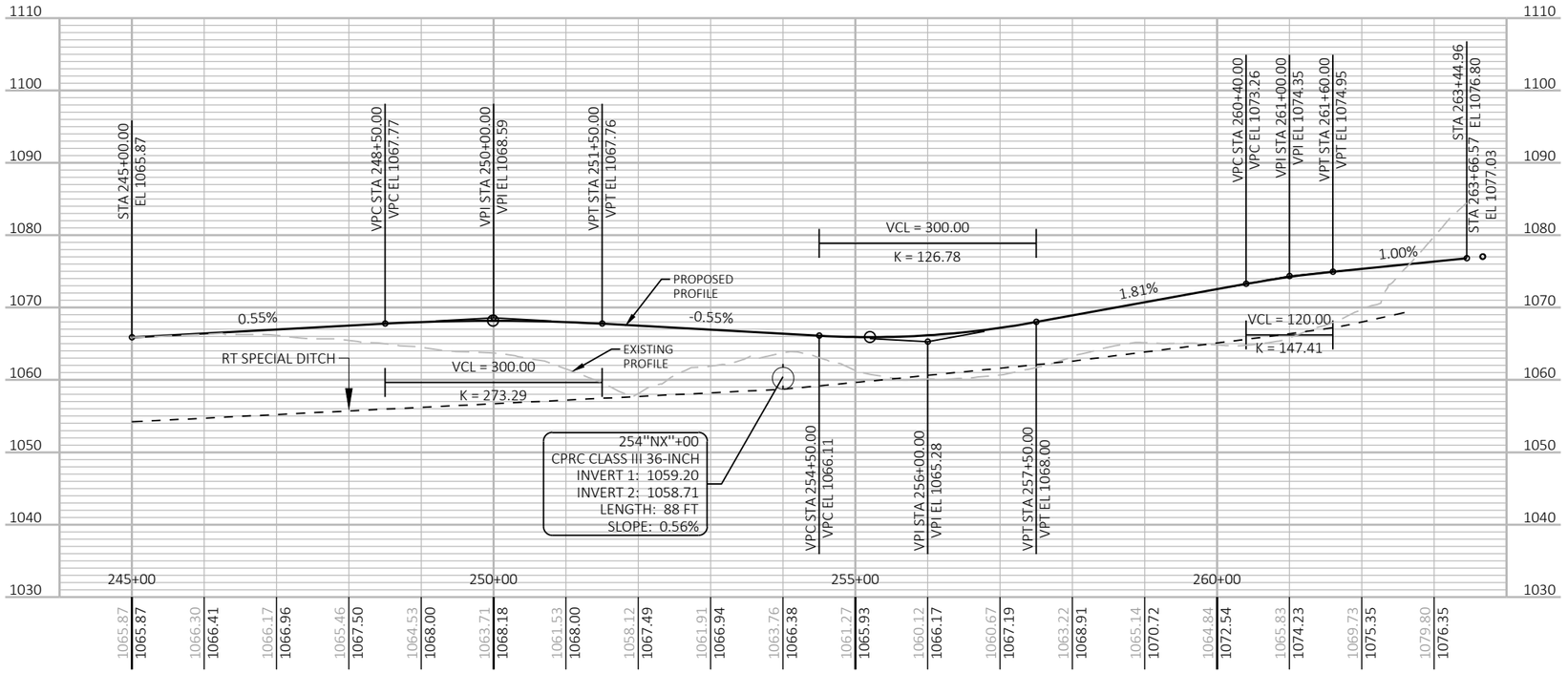
PI STA = 252"NX"+53.03
Y = 318694.236
X = 539600.629
DELTA = 21°42'11"
D = 4°20'26"
T = 253.03'
L = 500.00'
R = 1320.00'
PC STA = 250"NX"+00.00
PT STA = 255"NX"+00.00

PI STA = 260"NX"+34.50
Y = 319468.656
X = 539743.752
DELTA = 37°01'52"
D = 12°20'37"
T = 155.45'
L = 300.00'
R = 464.17'
PC STA = 258"NX"+79.05
PT STA = 261"NX"+79.05

CONTROL POINTS

POINT NUMBER	Y	X	ELEVATION	DESCRIPTION
903	319403.23	539521.31	1063.17	CP*FENO
904	319897.50	539393.10	1095.37	CP*FENO
909	319881.99	539798.02	1085.14	CP*IR 3/4
913	319124.38	539286.72	1080.81	CP*FENO
914	318065.53	539576.75	1064.51	CP*IR 3/4

* PLACE SUBGRADE IMPROVEMENT RELIEF TRENCHES AT ALL SAG POINTS AND AT 250 FT INTERVALS BETWEEN SAG POINTS



NOTE: PIPE LENGTH INCLUDES APRON ENDWALLS

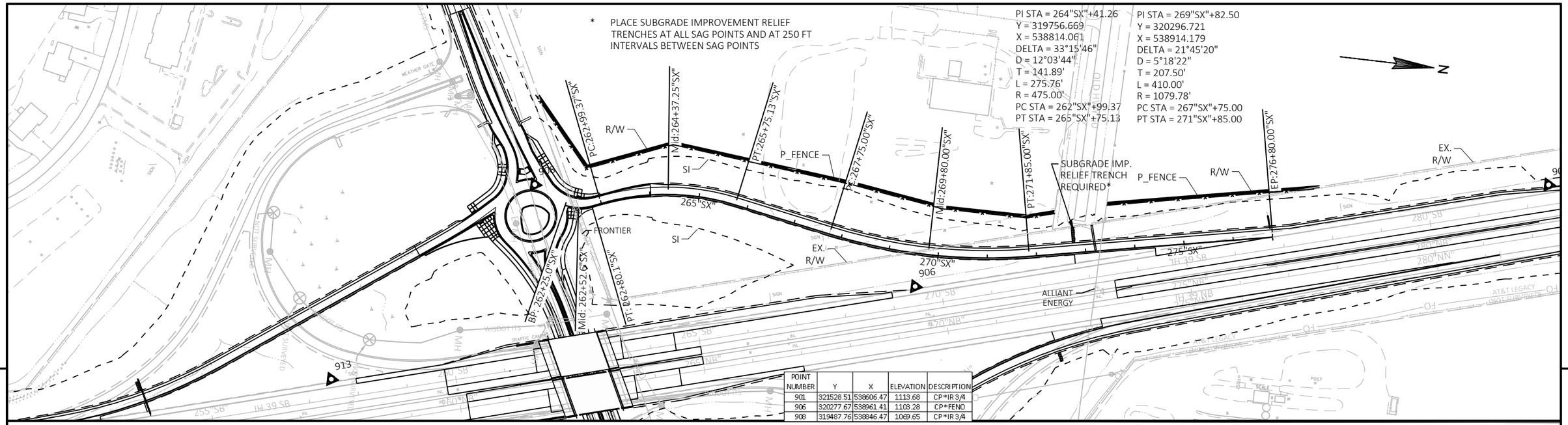
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN AND PROFILE: RAMP NX	SHEET 258	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\050104_PP NB OFF.DWG
LAYOUT NAME - 050104_pp_NB OFF
PLOT DATE : 1/31/2022 2:22 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : ##########

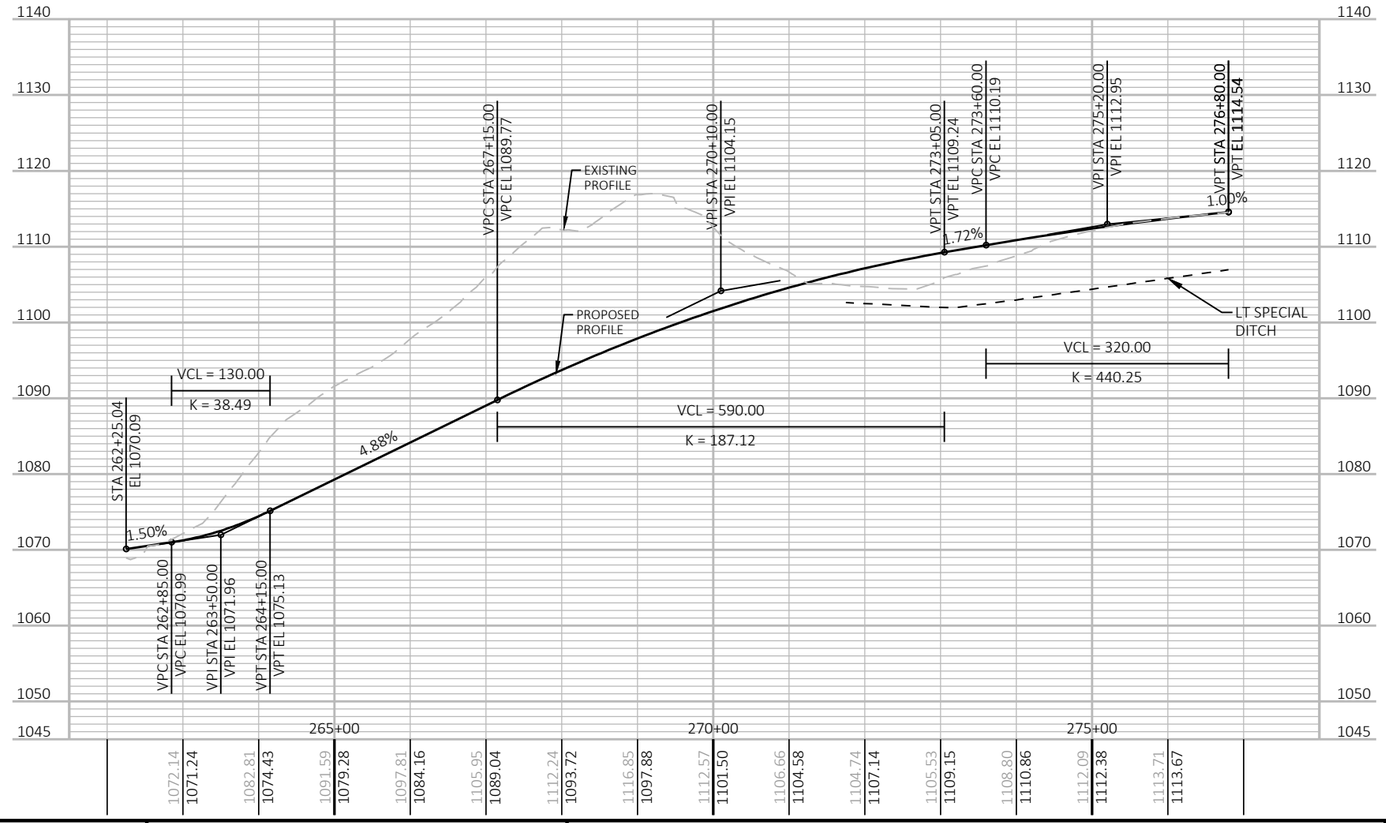
* PLACE SUBGRADE IMPROVEMENT RELIEF TRENCHES AT ALL SAG POINTS AND AT 250 FT INTERVALS BETWEEN SAG POINTS

PI STA = 264"SX"+41.26
Y = 319756.669
X = 538814.061
DELTA = 33°15'46"
D = 12°03'44"
T = 141.89'
L = 275.76'
R = 475.00'
PC STA = 262"SX"+99.37
PT STA = 265"SX"+75.13

PI STA = 269"SX"+82.50
Y = 320296.721
X = 538914.179
DELTA = 21°45'20"
D = 5°18'22"
T = 207.50'
L = 410.00'
R = 1079.78'
PC STA = 267"SX"+75.00
PT STA = 271"SX"+85.00

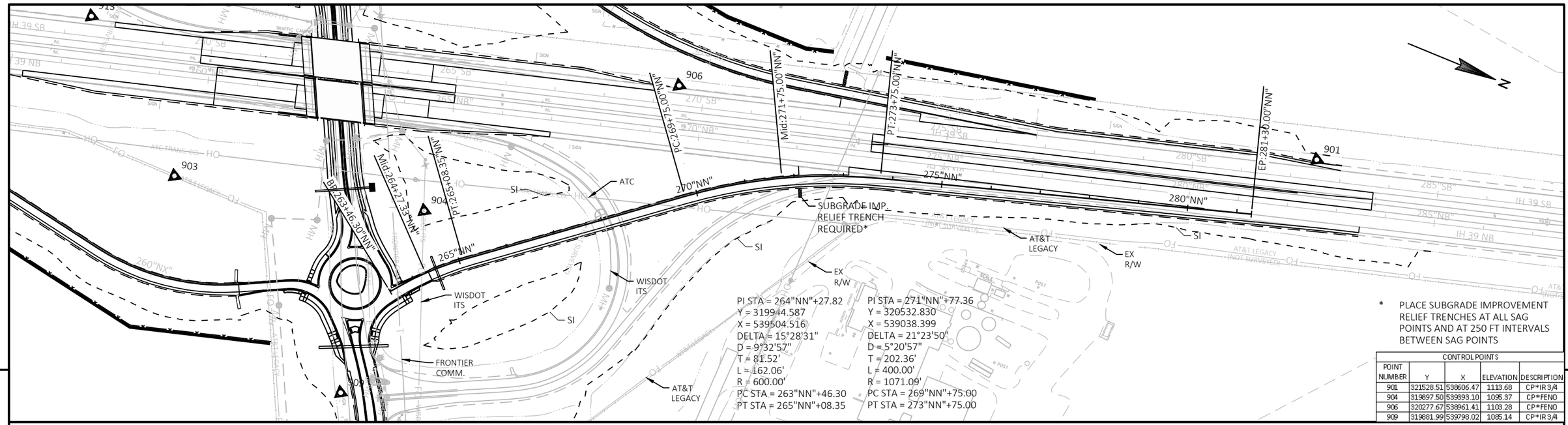


POINT NUMBER	Y	X	ELEVATION	DESCRIPTION
901	321528.51	538606.47	1113.68	CP*IR 3/4
906	320277.67	538961.41	1103.28	CP*FENO
908	319487.76	538846.47	1069.65	CP*IR 3/4



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN AND PROFILE: RAMP SX	SHEET 259	E

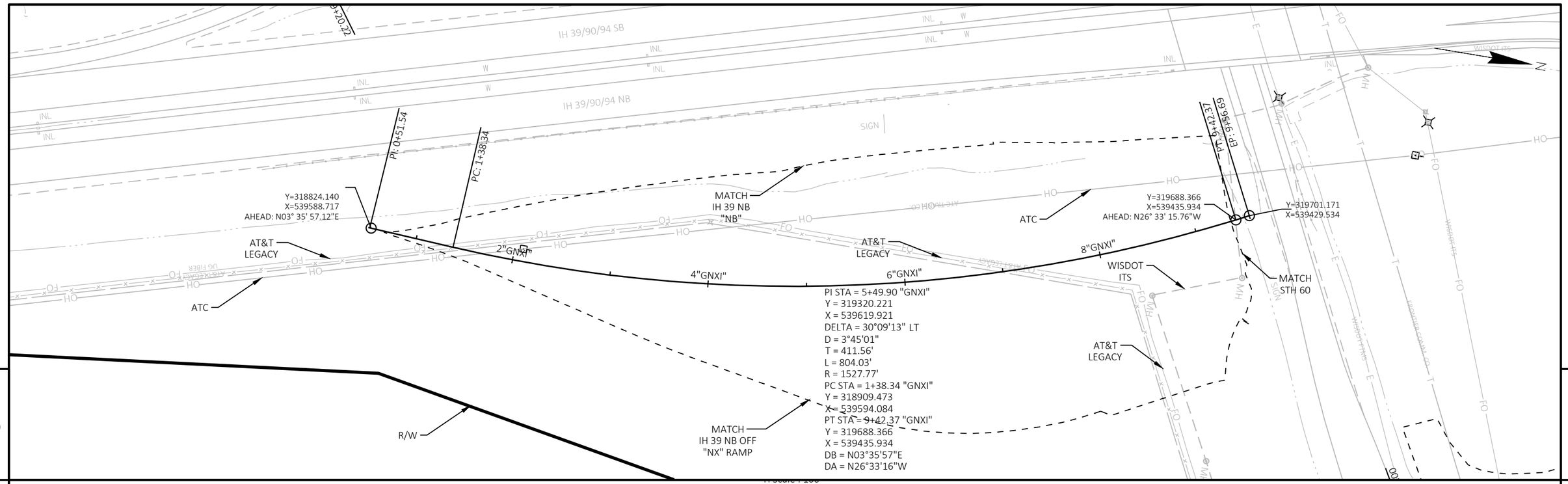
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LAYOUT NAME - 050105_pp_SB OFF
PLOT DATE : 1/31/2022 2:24 PM
PLOT BY : ANDERSON, SHAUN M
PLOT NAME :
PLOT SCALE : ##########

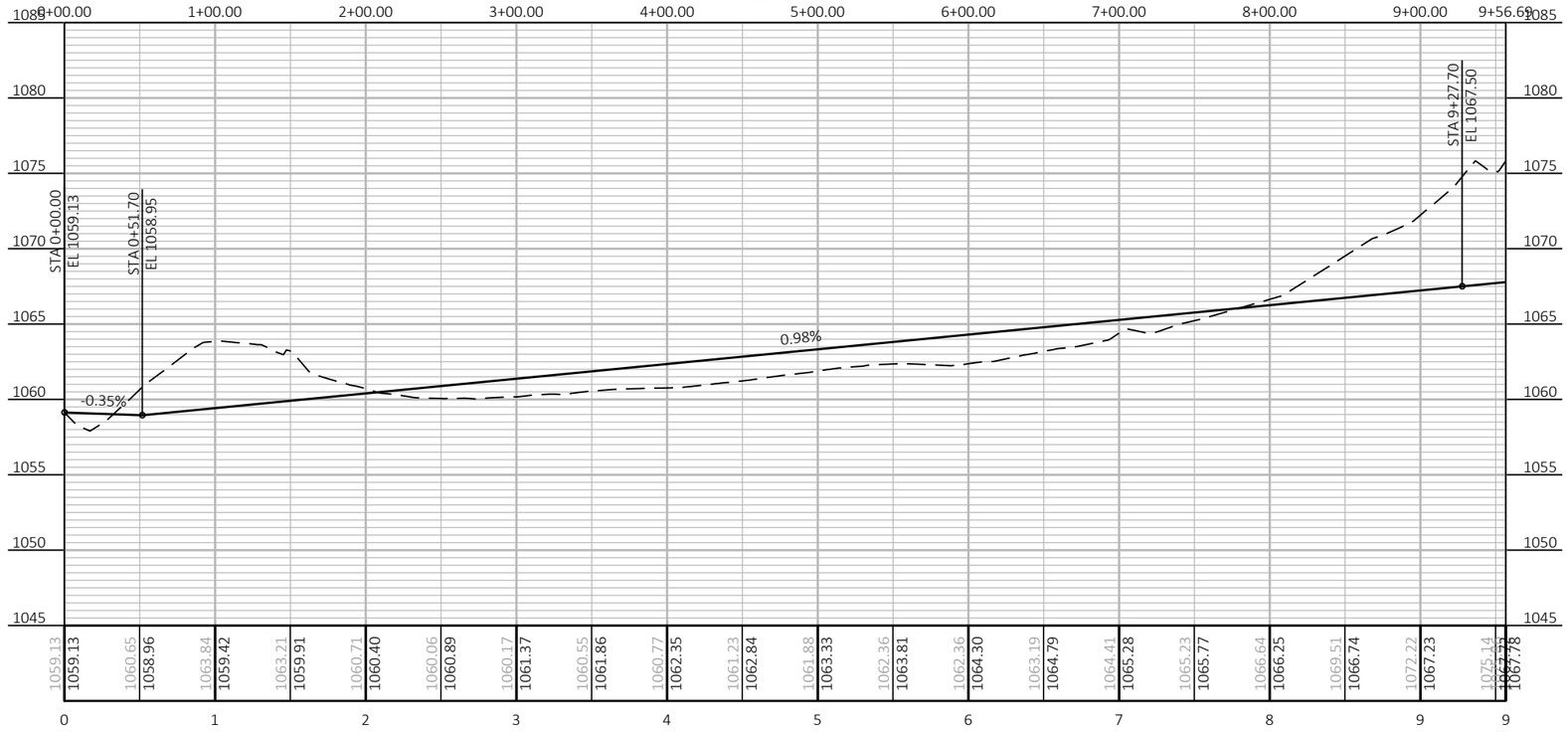


CONTROL POINTS				
POINT NUMBER	Y	X	ELEVATION	DESCRIPTION
901	321528.51	538606.47	1113.68	CP*IR 3/4
904	319897.50	539893.10	1095.37	CP*FENO
906	320277.67	538961.41	1103.28	CP*FENO
909	319881.99	539798.02	1085.14	CP*IR 3/4

NOTE: PIPE LENGTH INCLUDES APRON ENDWALLS

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN AND PROFILE: RAMP NN	SHEET 260	E



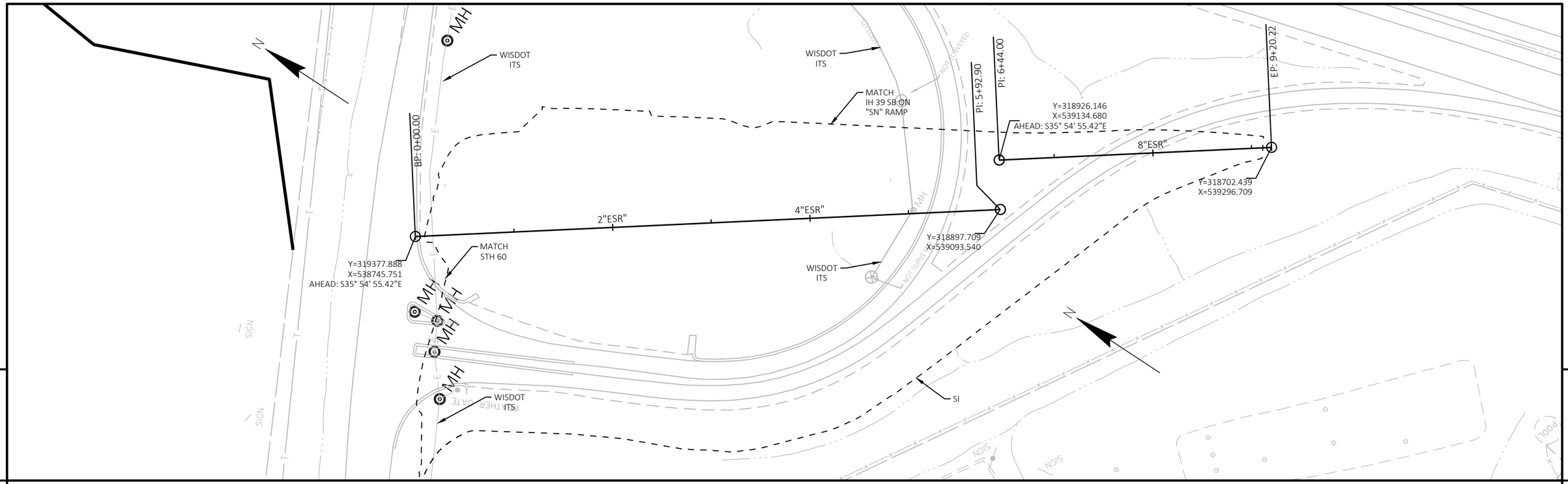


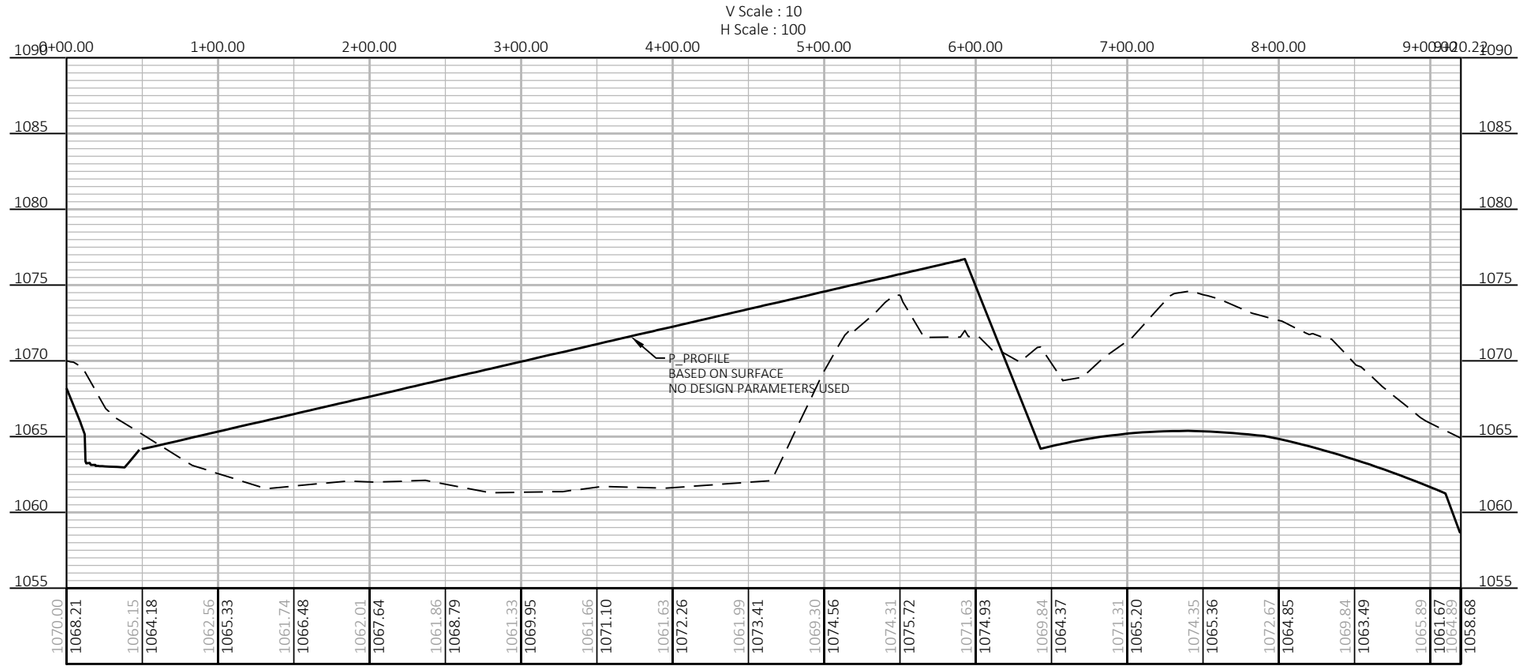
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN AND PROFILE: IH 39 NB - NB OFF INFIELD GRADING "GNXI"	SHEET 261	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\050107_PP GRADING ALI.DWG
LAYOUT NAME - GNXI

PLOT DATE : 1/25/2022 2:15 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



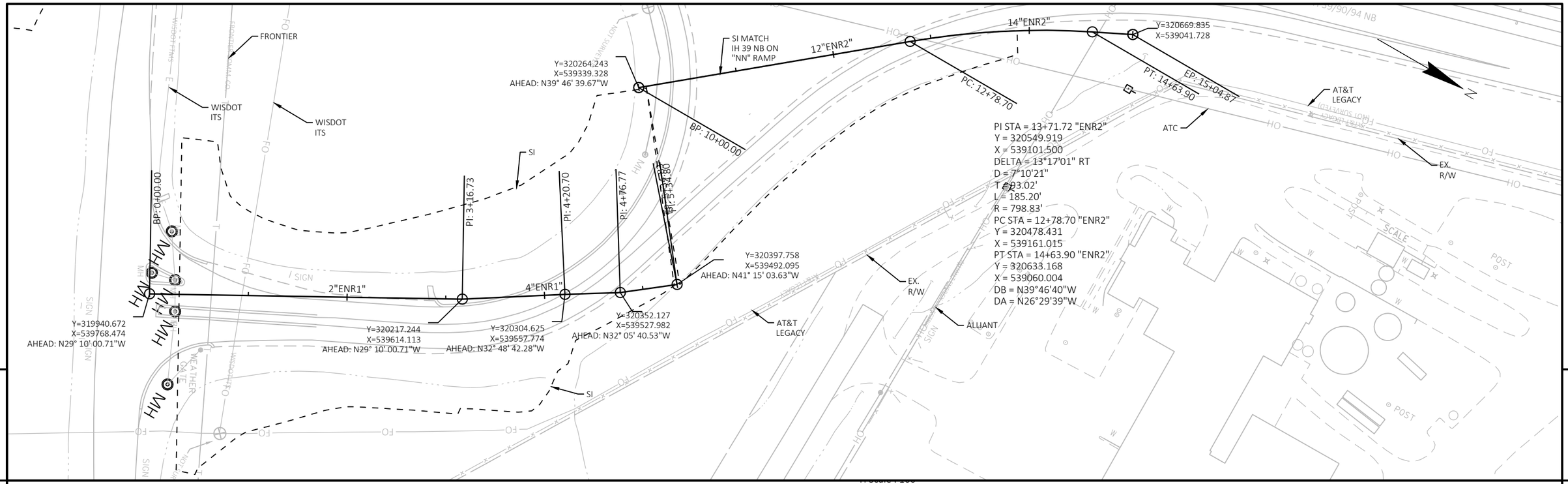


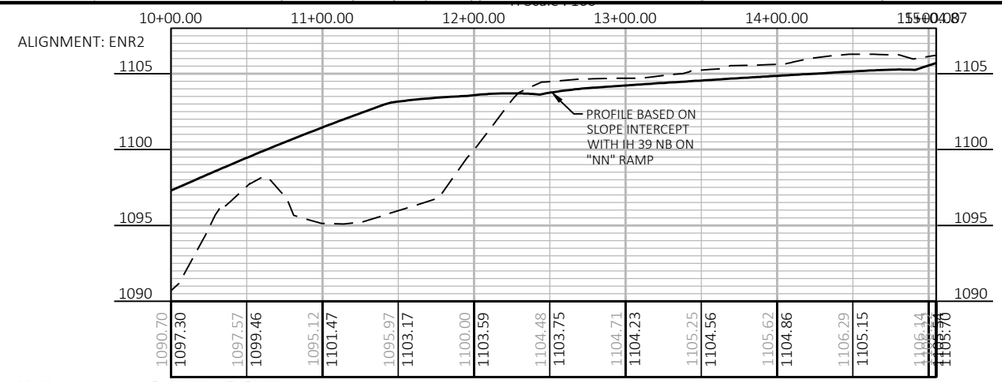
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN AND PROFILE: EXISTING SB RAMP GRADING "ESR"	SHEET 262	E

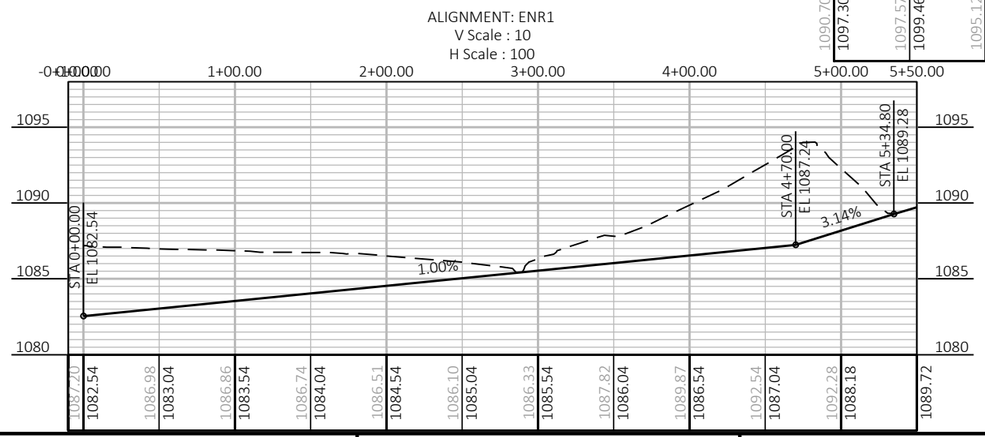
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\050107_PP GRADING ALI.DWG
LAYOUT NAME - ESR1

PLOT DATE : 1/25/2022 3:21 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



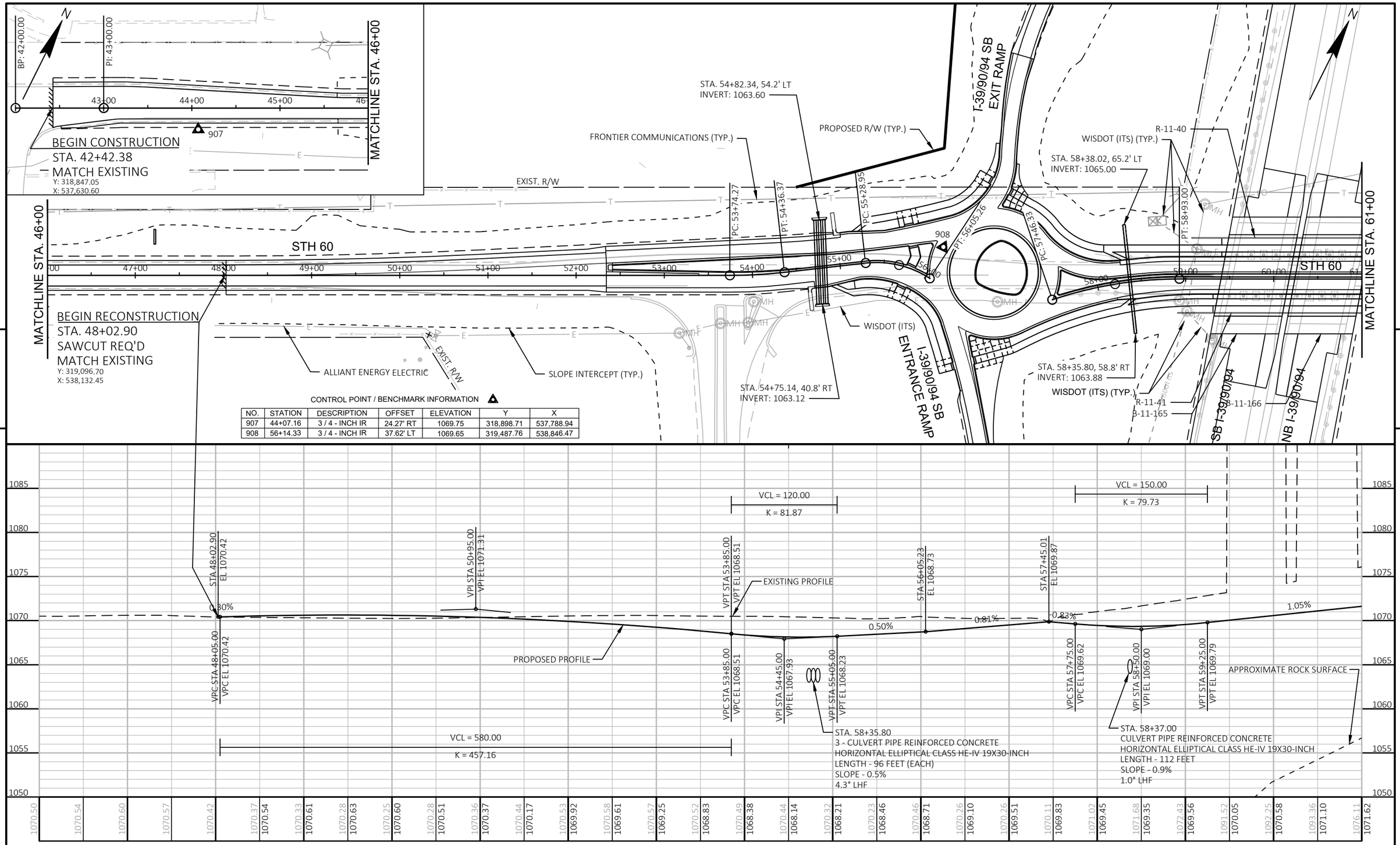




PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN AND PROFILE: EXISTING NB RAMPS GRADING "ENR1&2"	SHEET 263	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\050107_PP GRADING ALI.DWG
LAYOUT NAME - ENR1&2

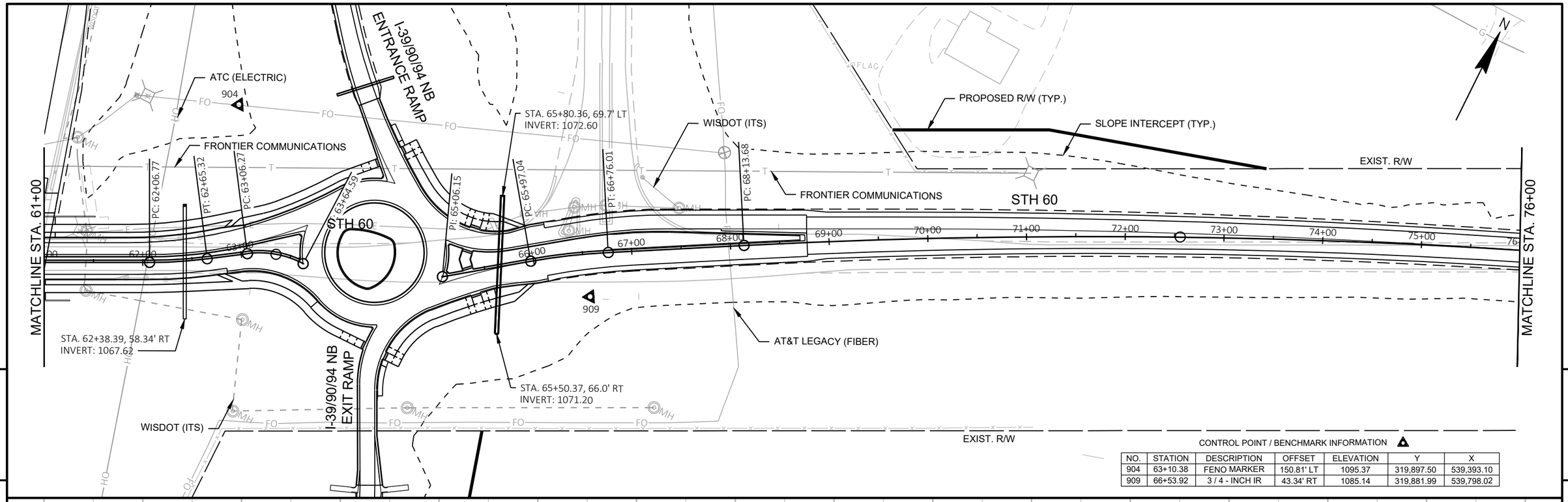
PLOT DATE : 1/25/2022 2:15 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:100 FT



NO.	STATION	DESCRIPTION	OFFSET	ELEVATION	Y	X
907	44+07.16	3 / 4 - INCH IR	24.27' RT	1069.75	318,898.71	537,788.94
908	56+14.33	3 / 4 - INCH IR	37.62' LT	1069.65	319,487.76	538,846.47

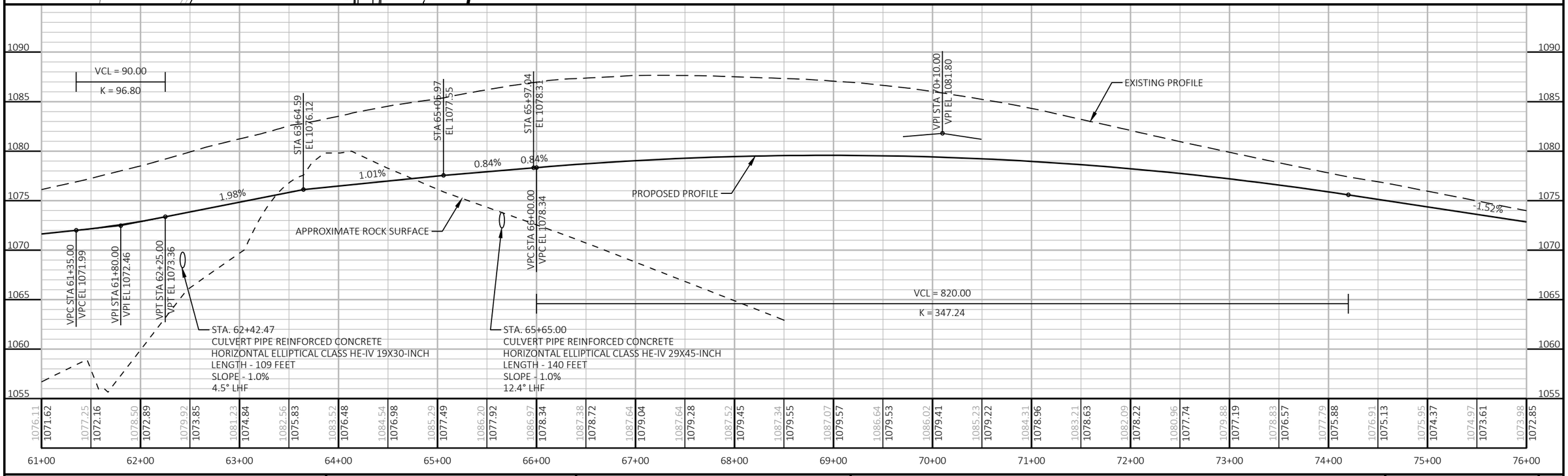
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 60	SHEET 264	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\050101_PP 100 SCALE.DWG
LAYOUT NAME - 050101_pp
PLOT DATE : 1/12/2022 7:16 PM
PLOT BY : JACK, ROBERT A.
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



CONTROL POINT / BENCHMARK INFORMATION

NO.	STATION	DESCRIPTION	OFFSET	ELEVATION	Y	X
904	63+10.38	FENO MARKER	150.81' LT	1095.37	319,897.50	539,393.10
909	66+53.92	3 / 4 - INCH IR	43.34' RT	1085.14	319,881.99	539,798.02



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 60	SHEET 265	E

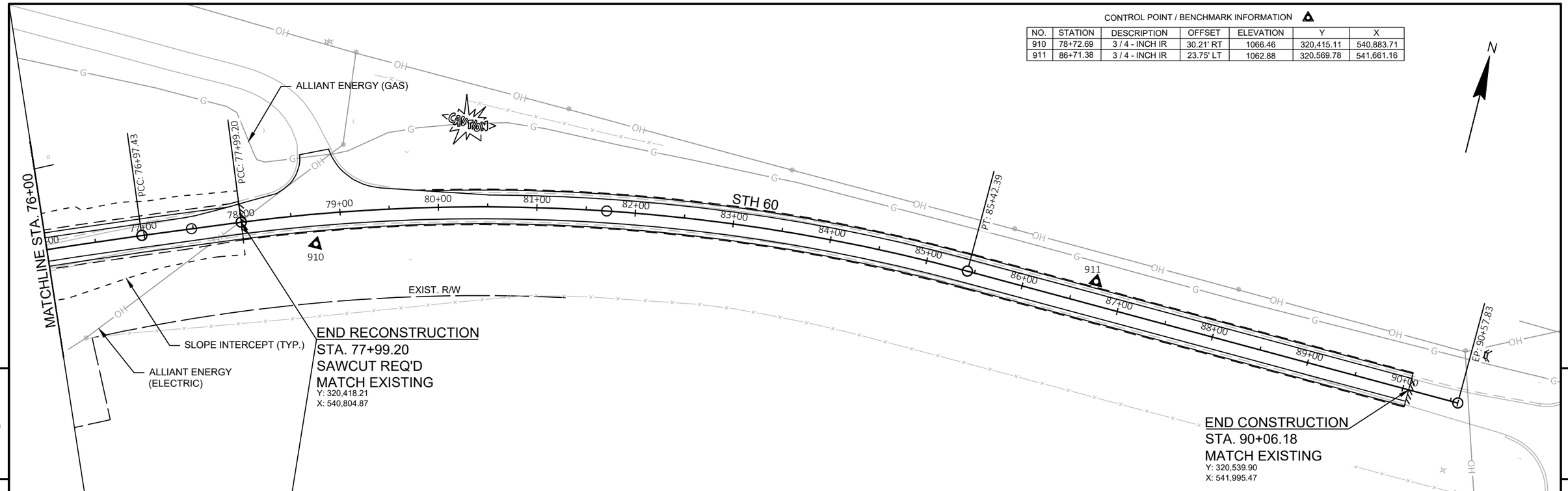
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LAYOUT NAME - 050102_pp

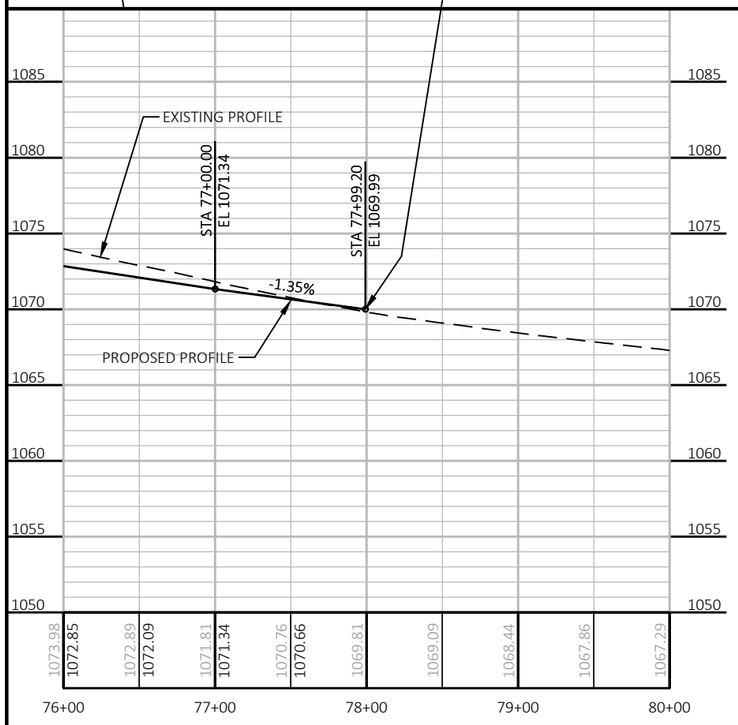
PLOT DATE : 1/12/2022 4:39 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

CONTROL POINT / BENCHMARK INFORMATION

NO.	STATION	DESCRIPTION	OFFSET	ELEVATION	Y	X
910	78+72.69	3 / 4 - INCH IR	30.21' RT	1066.46	320,415.11	540,883.71
911	86+71.38	3 / 4 - INCH IR	23.75' LT	1062.88	320,569.78	541,661.16

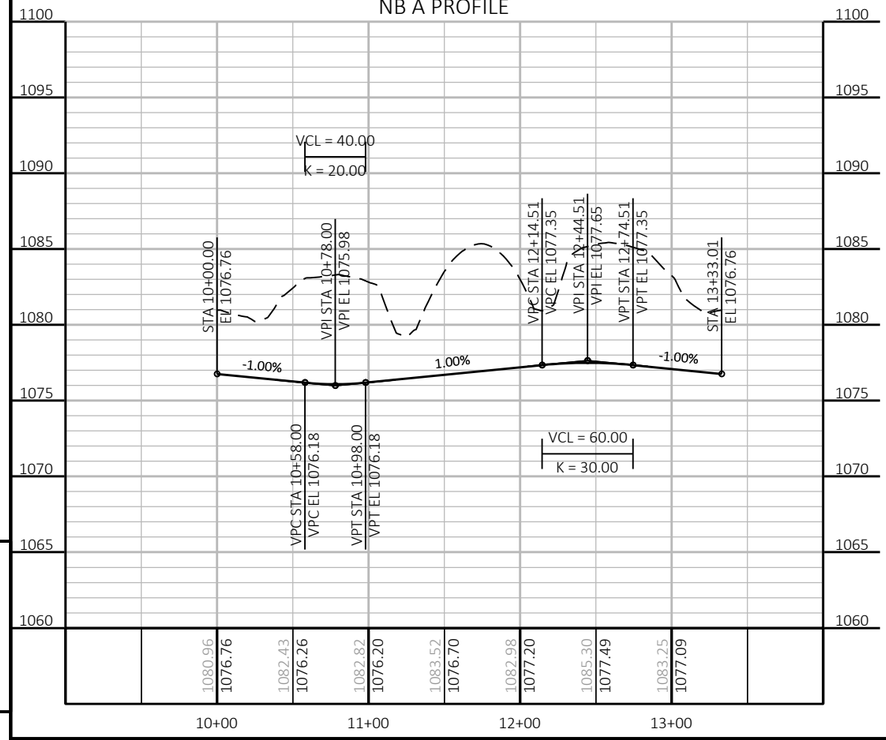




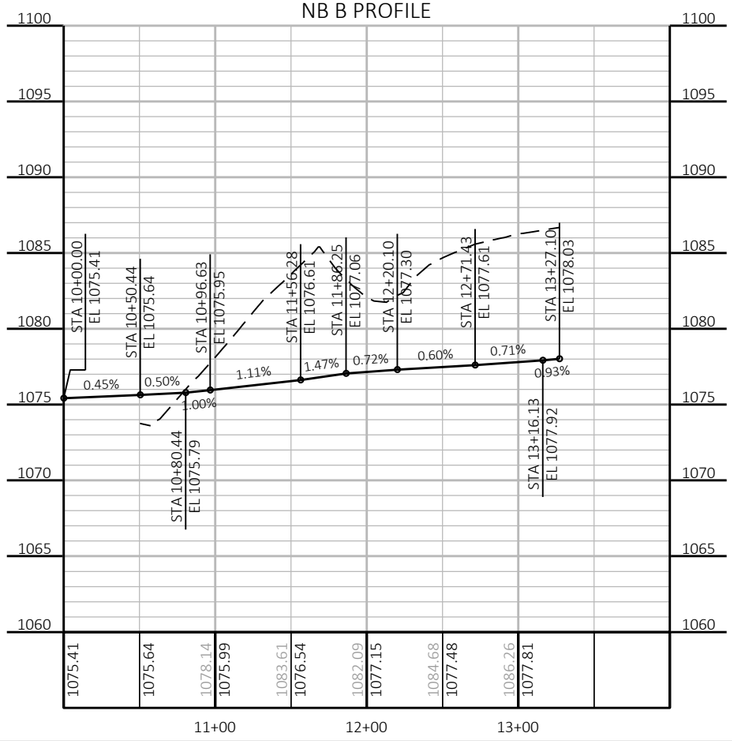
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 60	SHEET 266	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\050101_PP 100 SCALE.DWG
LAYOUT NAME - 050103_pp
PLOT DATE : 1/12/2022 4:25 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

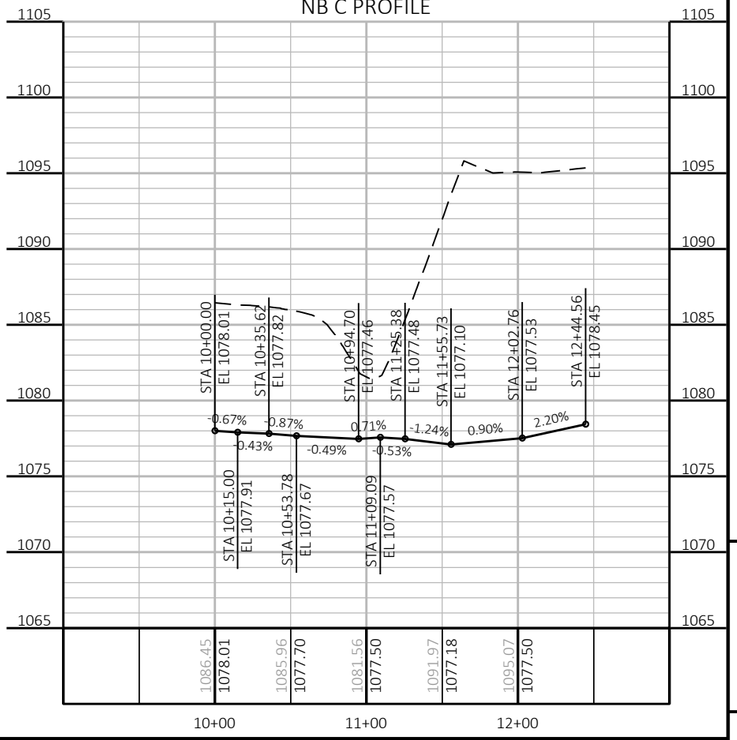
NB A PROFILE



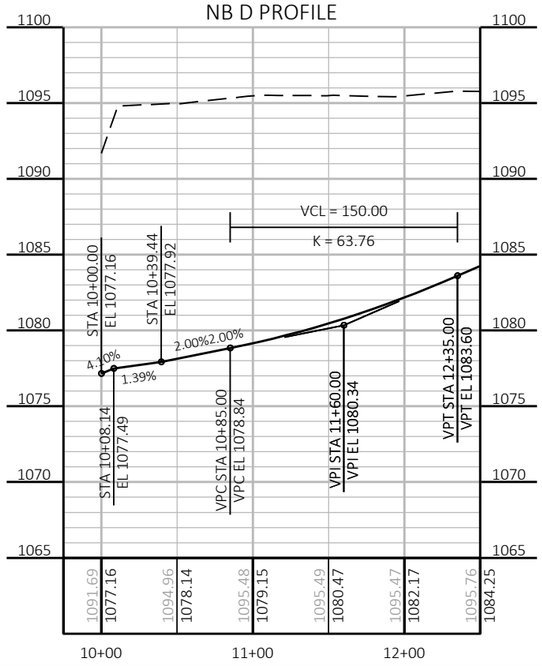
NB B PROFILE



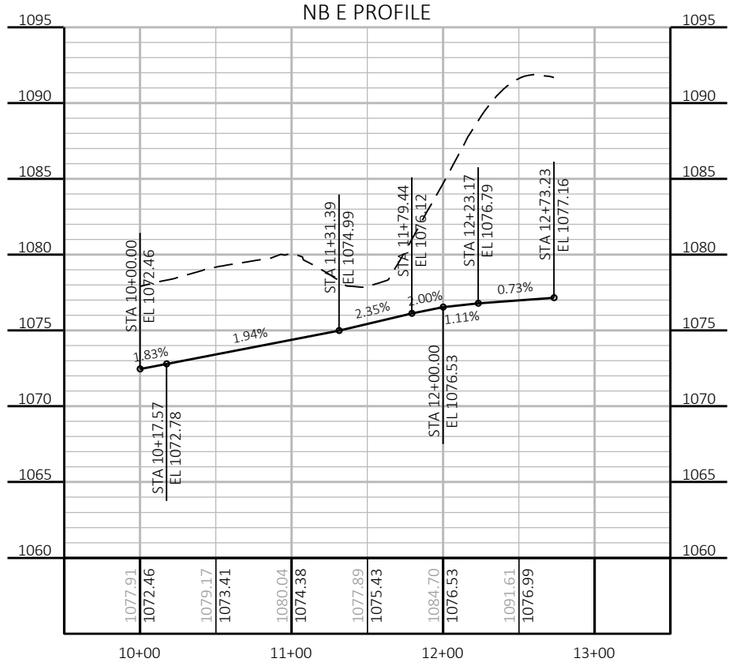
NB C PROFILE



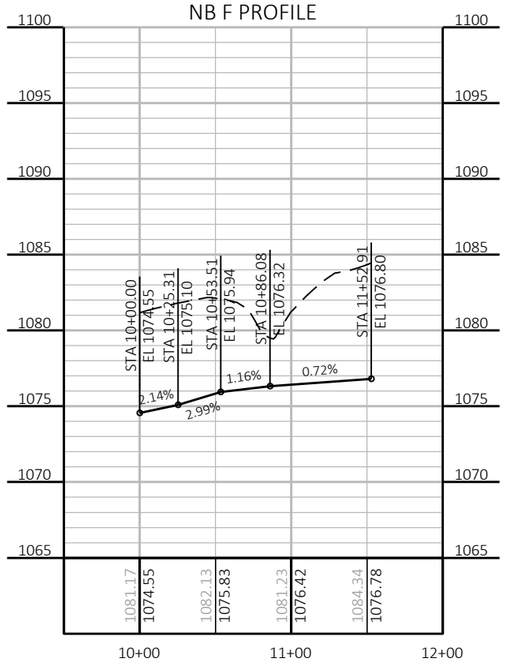
NB D PROFILE



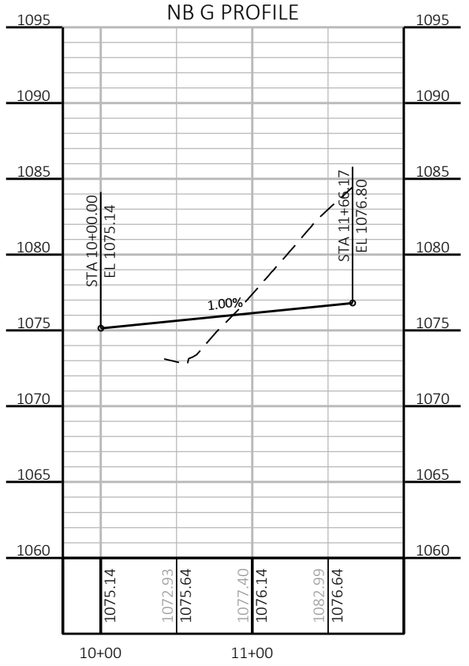
NB E PROFILE



NB F PROFILE



NB G PROFILE



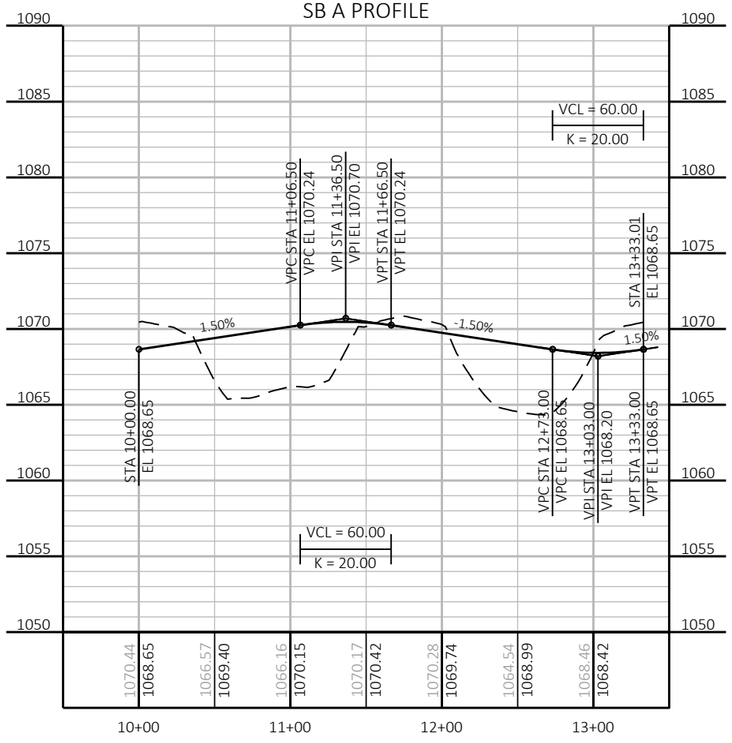
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PROFILES - ROUNDABOUT	SHEET 267	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\050201_PP.DWG
LAYOUT NAME - 050201_pp

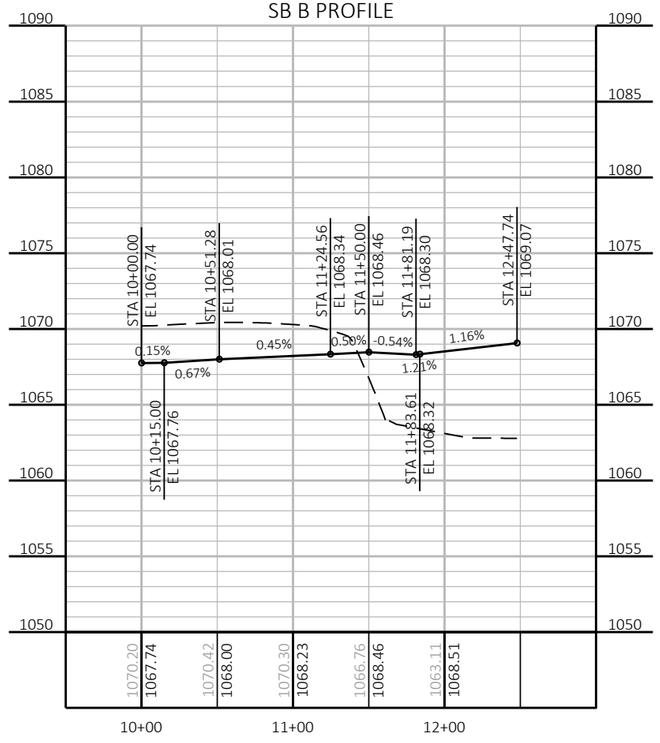
PLOT DATE : 1/10/2022 11:54 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

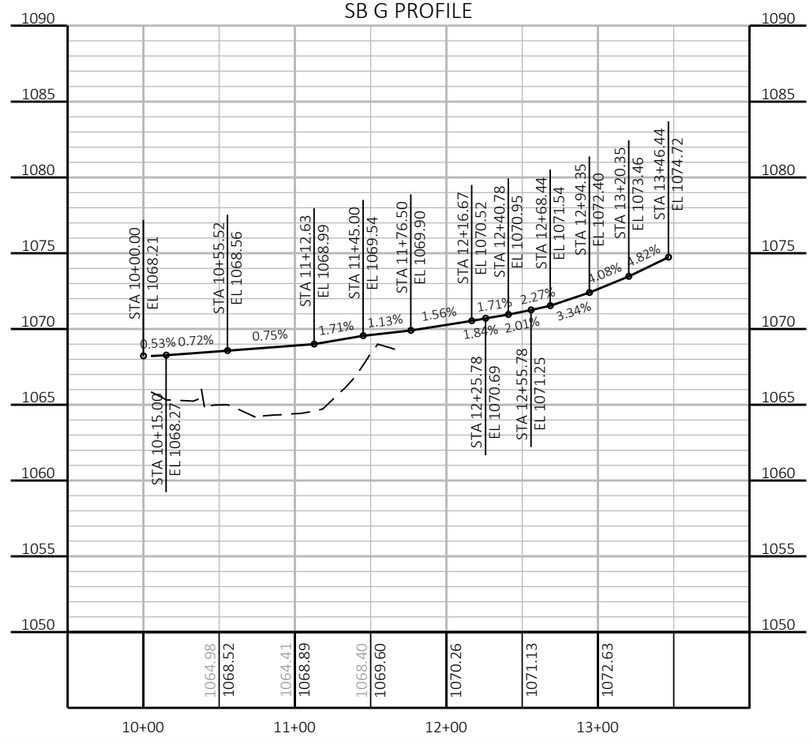
SB A PROFILE



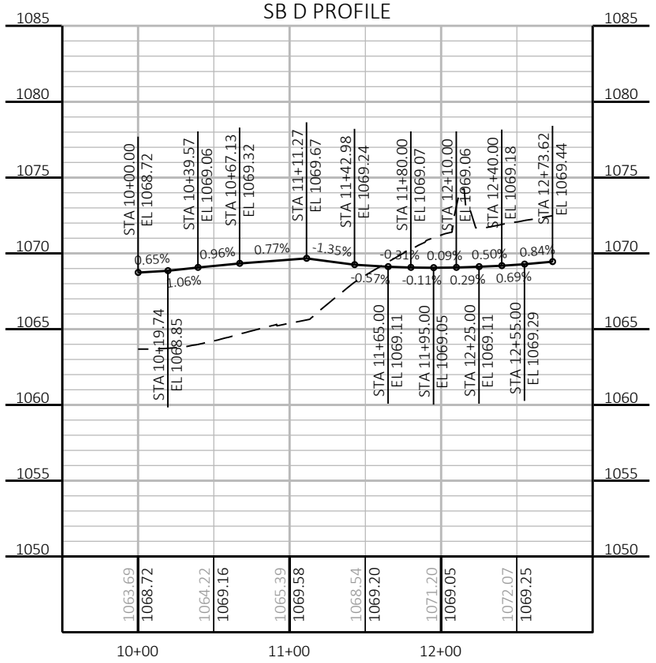
SB B PROFILE



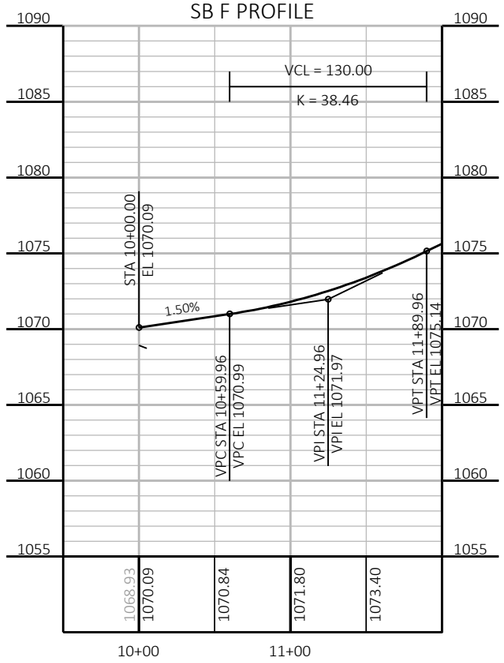
SB G PROFILE



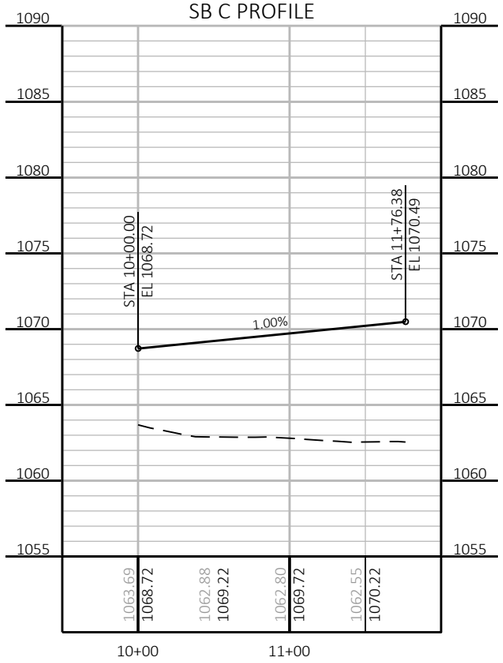
SB D PROFILE



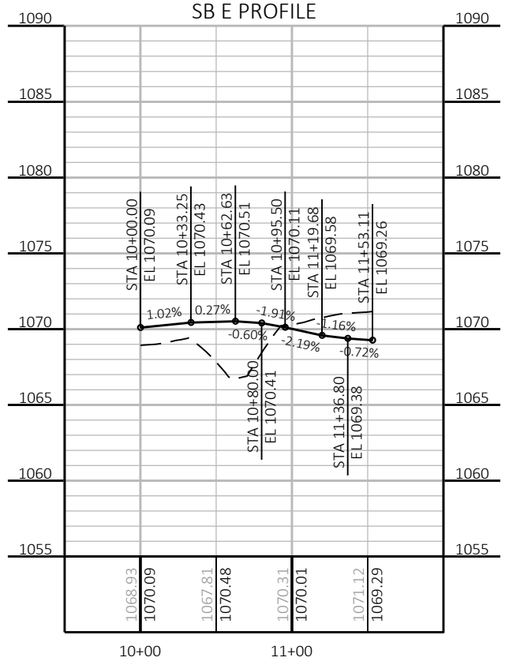
SB F PROFILE



SB C PROFILE



SB E PROFILE

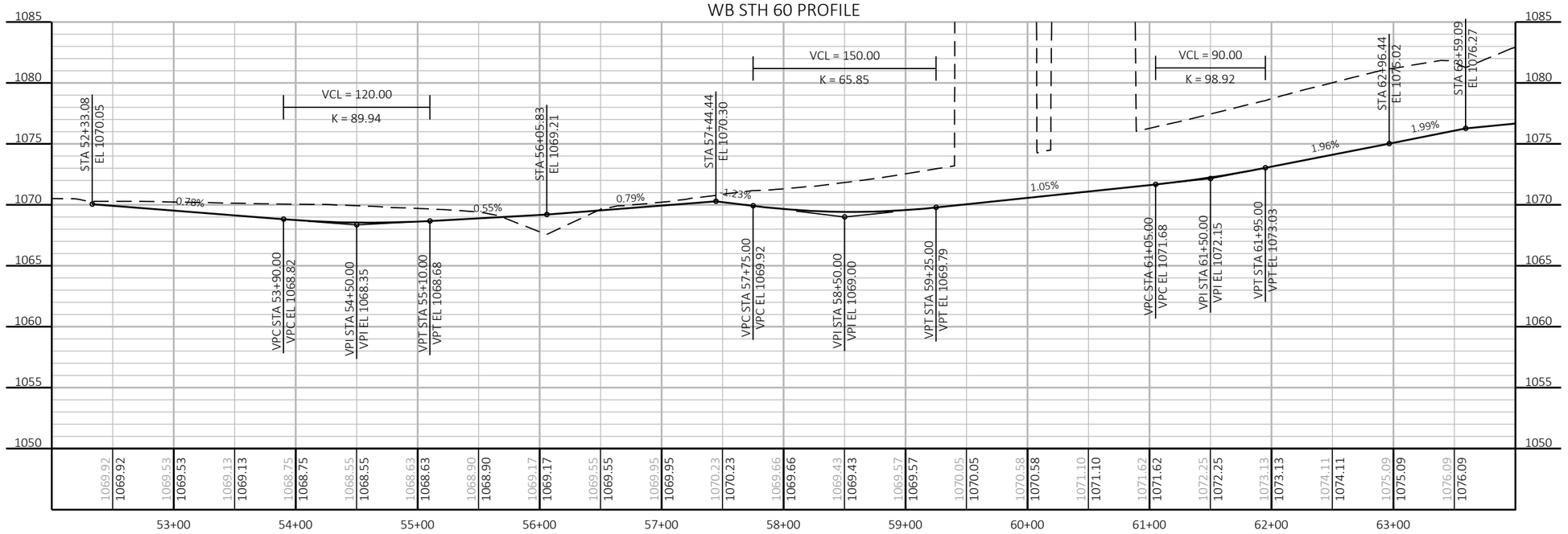


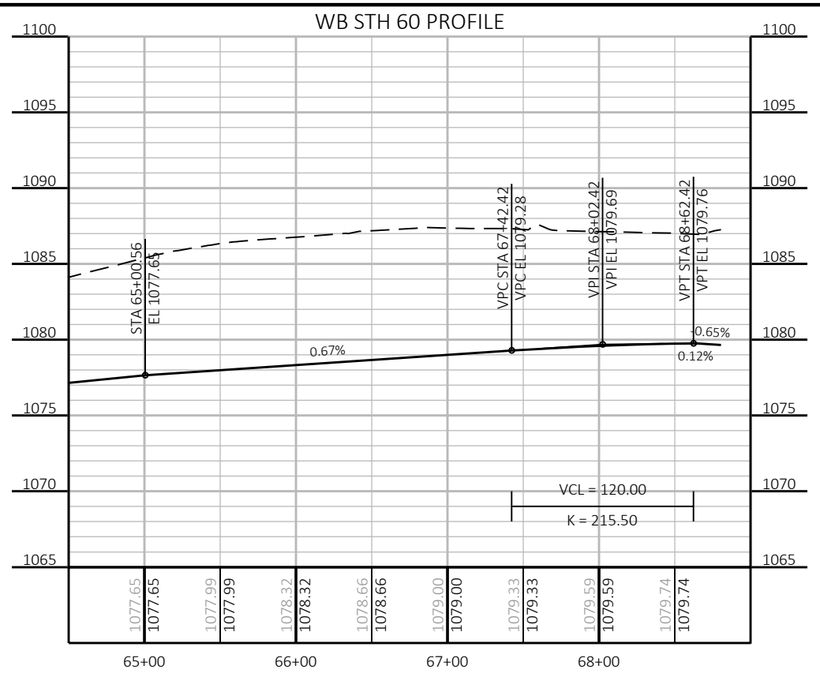
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PROFILES - ROUNDABOUT	SHEET 268	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\050201_PP.DWG
LAYOUT NAME - 050202_pp

PLOT DATE : 1/10/2022 11:54 AM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44





PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PROFILES - ROUNDABOUT	SHEET 269	E

Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D03-08A	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
08D03-08B	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
08D04-06	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
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
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F10-01	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
09B02-10	CONDUIT
09B04-11	PULL BOX
09B16-01	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C14-03	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D04-03	LIGHTING CONTROL CABINET 120/240 VOLT
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15E	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09H11-01	IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS
09H15-01	MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY INSTALLATION
09H16-01	INSTALL WIRELESS ANTENNA
11A01-06	MAINTENANCE CROSSOVER FOR FREEWAYS
11B02-02	CONCRETE MEDIAN NOSE
13A03-06	CONCRETE PAVEMENT SHOULDERS
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13B02-09B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C04-17	URBAN NON-DOWELED CONCRETE PAVEMENT
13C09-15A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C18-07E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
13C18-07F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
13C18-07G	CONCRETE PAVEMENT JOINTING ACCELERATION/DECELERATION LANE
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"

6

Standard Detail Drawing List

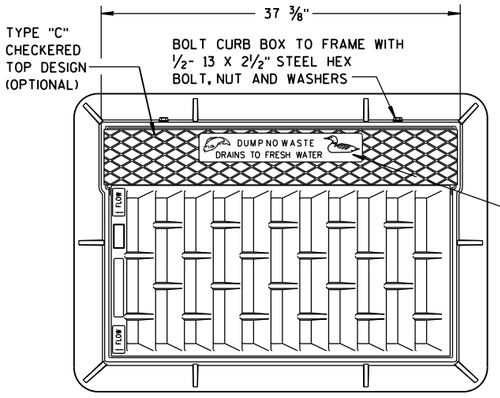
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B22-06A	CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE)
14B22-06B	CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE)
14B32-09A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-09D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-09E	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B33-02G	CONCRETE BARRIER SINGLE SLOPE 42" THRIE BEAM ANCHOR
14B33-02H	CONCRETE BARRIER SINGLE SLOPE 42" THRIE BEAM ANCHOR
14B38-02B	32-INCH DOUBLE-FACED F SHAPE CONCRETE BARRIER TO 32-INCH SSCB TRANSITION
14B38-02C	32-INCH DOUBLE-FACED F SHAPE CONCRETE BARRIER TO 36-INCH SSCB TRANSITION
14B39-02B	36-INCH SSCB TO 42-INCH SSCB HEIGHT TRANSITION
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-03A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A04-07A	FLEXIBLE DELINEATOR POST
15A04-07B	BARRIER WALL DELINEATOR WITH REFLECTIVE SHEETING
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE
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
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-08	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C14-04	AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS
15C18-05A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-05B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C31-04A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-04C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15D12-09A	TRAFFIC CONTROL, LANE CLOSURE
15D12-09C	DYNAMIC LATE MERGE SYSTEM
15D14-04	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)
15D15-05A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
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
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D35-03A	RAMP GATE HARD WIRED

6

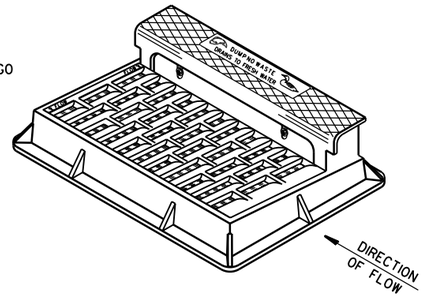
Standard Detail Drawing List

15D35-03B	RAMP GATE HARD WIRED
15D35-03C	RAMP GATE HARD WIRED
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

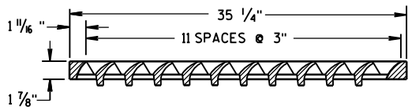
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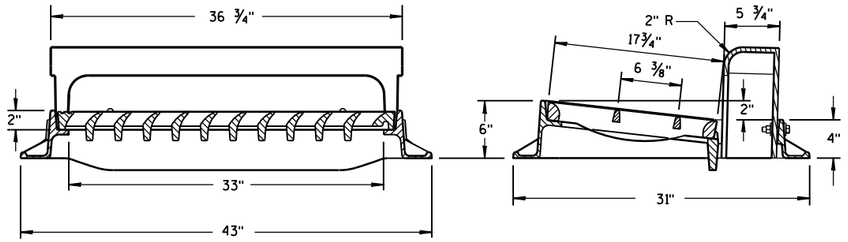


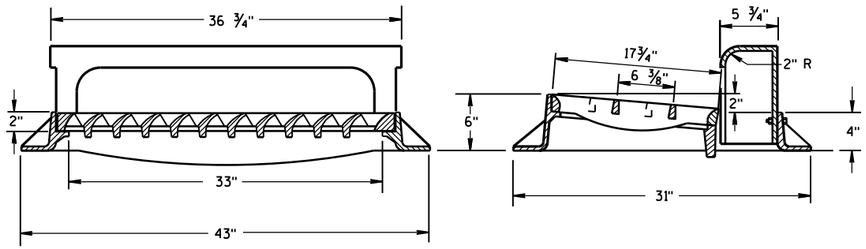
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

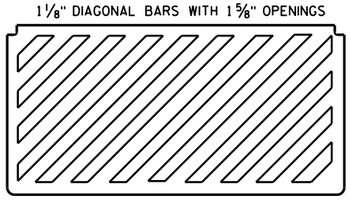






TYPE "H"

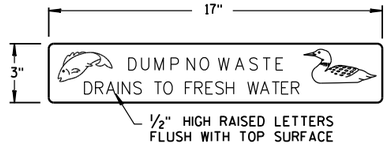
NOTE: EITHER CASTING IS ACCEPTABLE



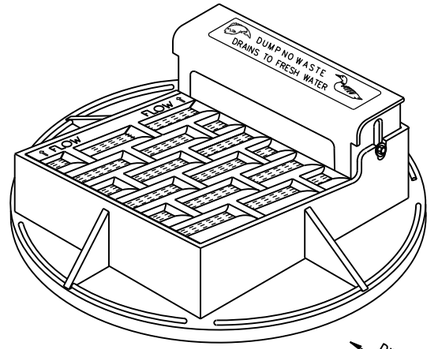
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

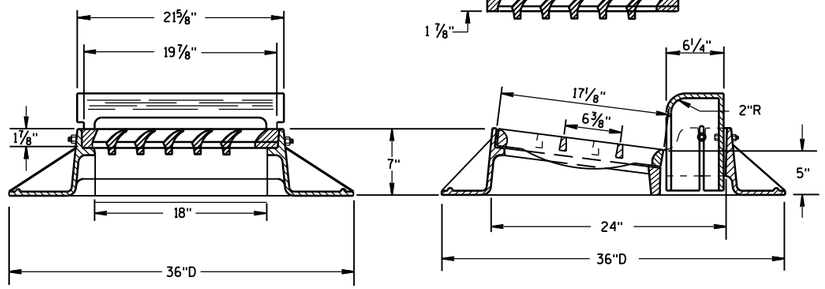


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



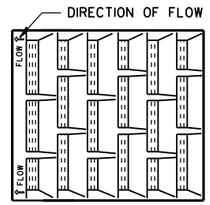
TYPE "A"

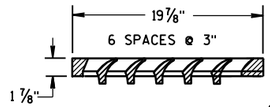
GENERAL NOTES

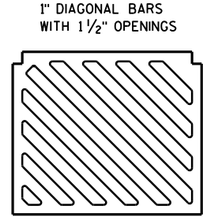
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



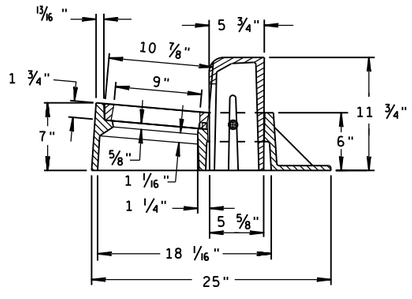


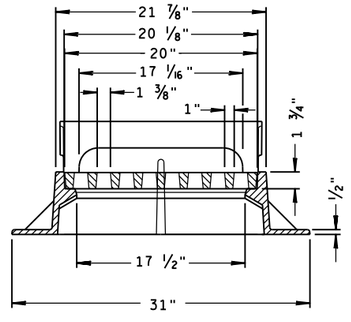


SPECIAL GRATE FOR TYPE "A" COVER

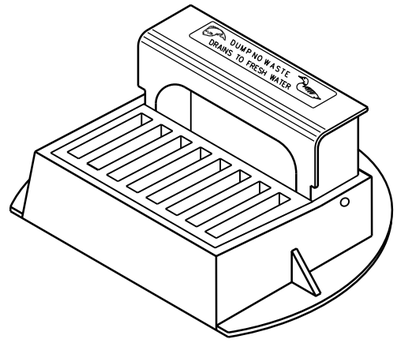
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



INLET COVERS TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

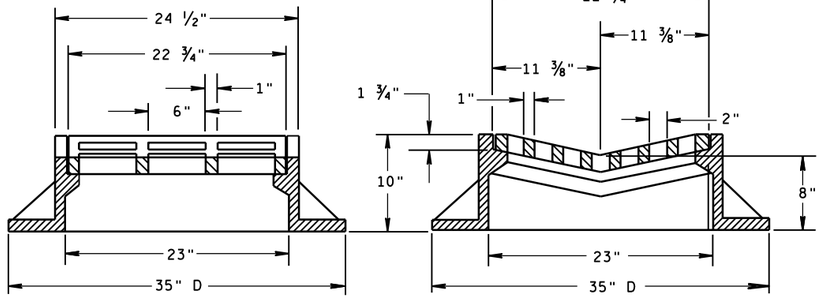
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

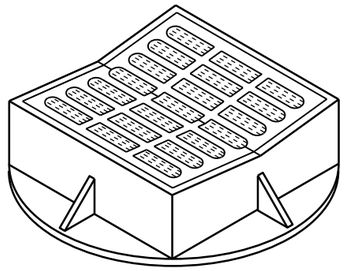
6

S.D.D. 8 A 5-19a

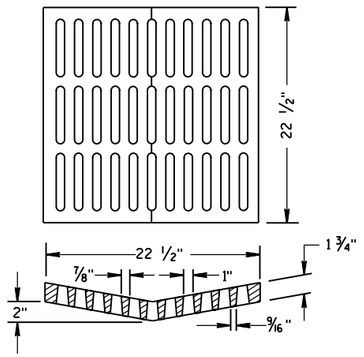
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S.D.D. 8 A 5-19a





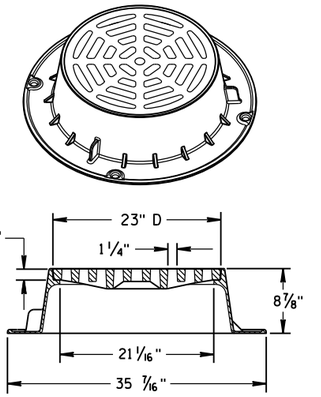
TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.

NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

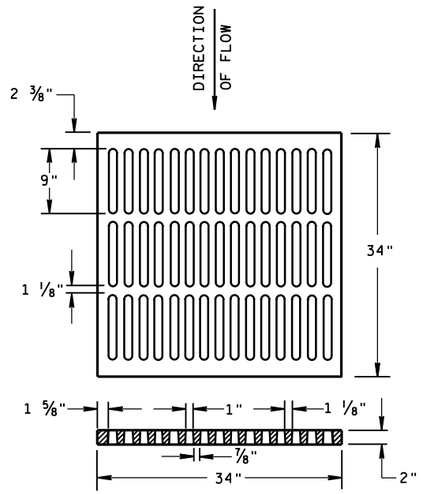
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

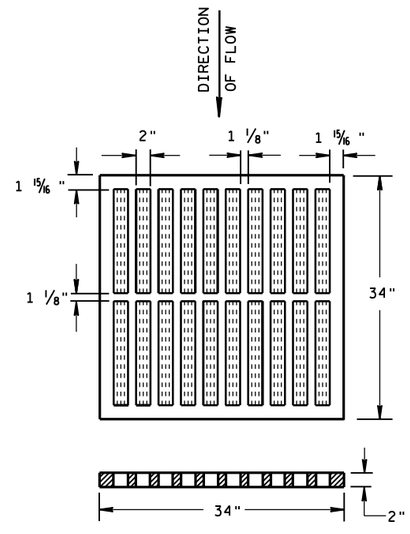
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

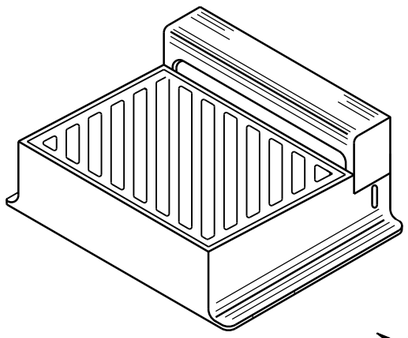
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



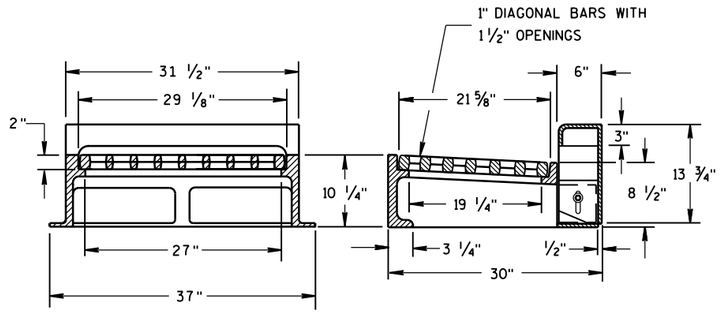
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

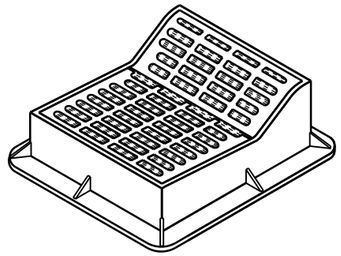
11/27/2013 — DATE

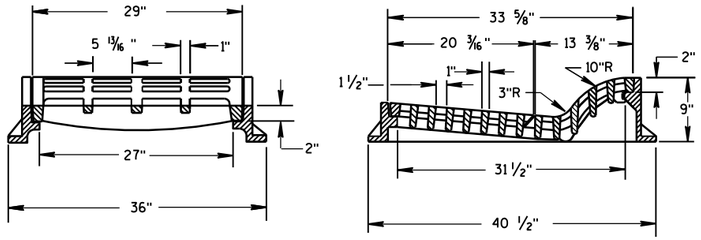
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

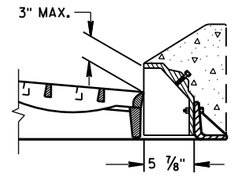
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

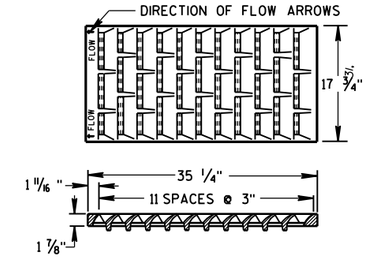
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

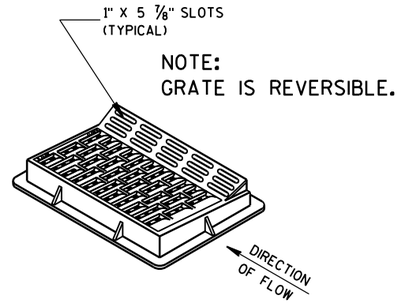
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

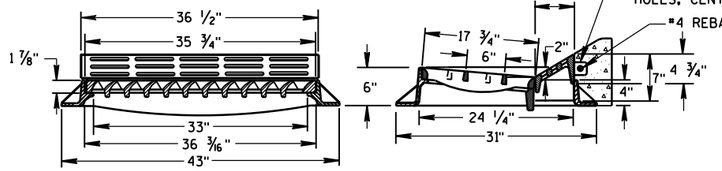
GENERAL NOTES

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

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



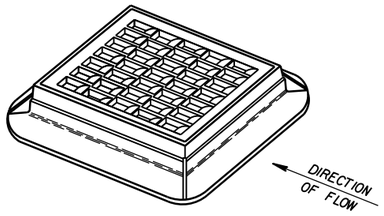


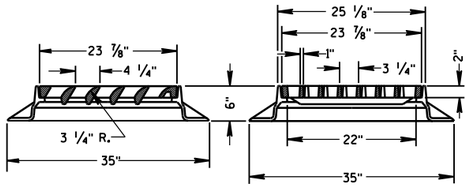


TYPE "HM"

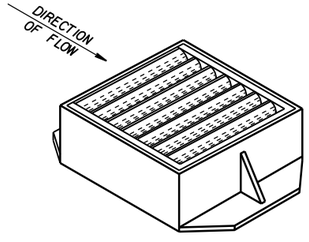
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

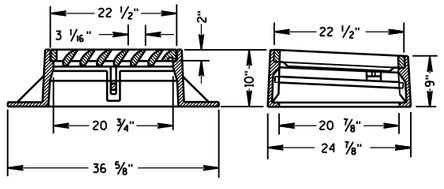
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



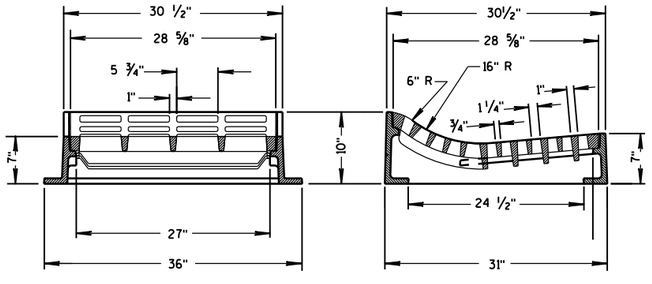


TYPE "S"



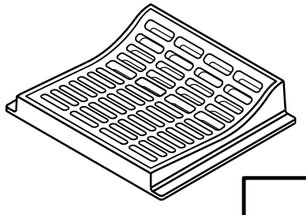


TYPE "V"



TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

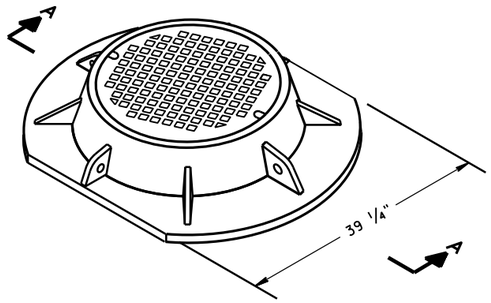
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

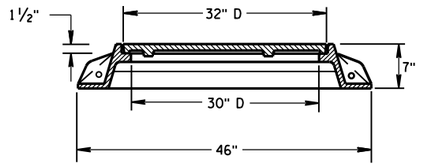
APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

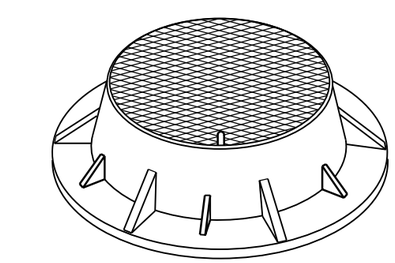
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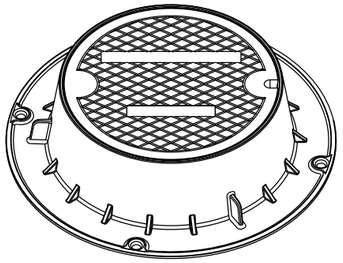
6
S.D.D. 8 A 5-19c

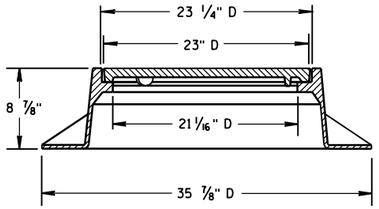


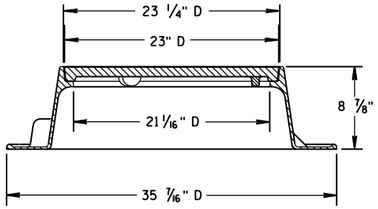


SECTION A-A
TYPE "K"









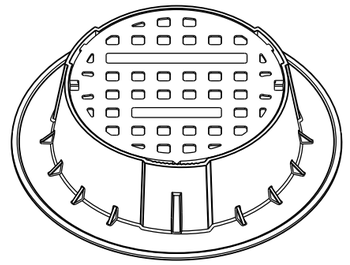
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

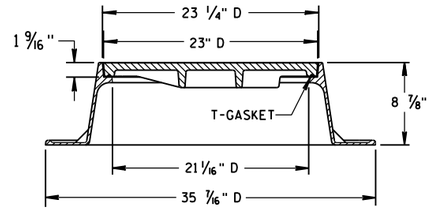
GENERAL NOTES

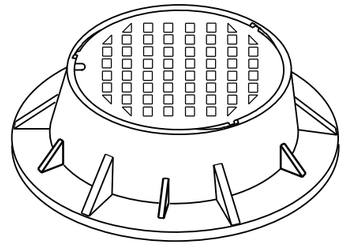
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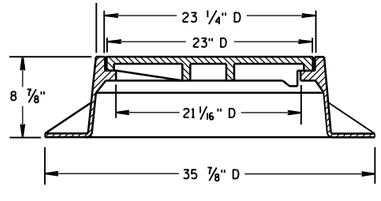
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

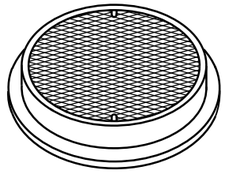


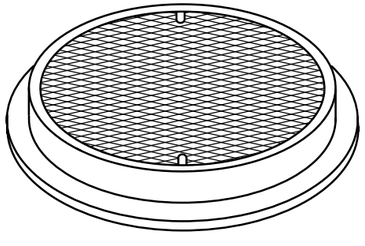


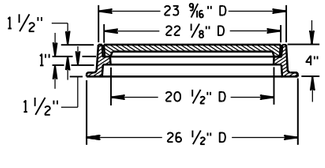




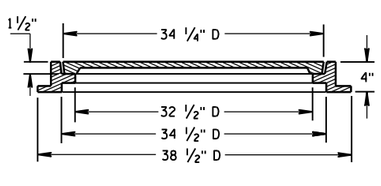
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



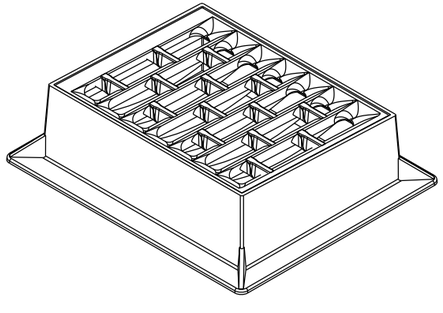


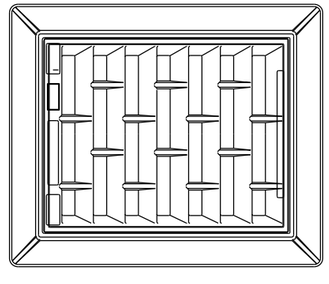


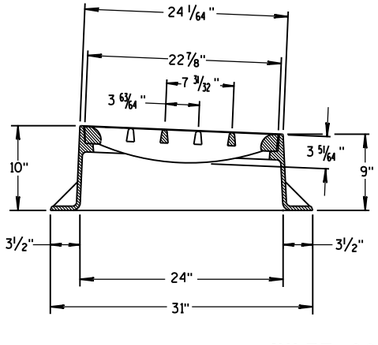
TYPE "L"

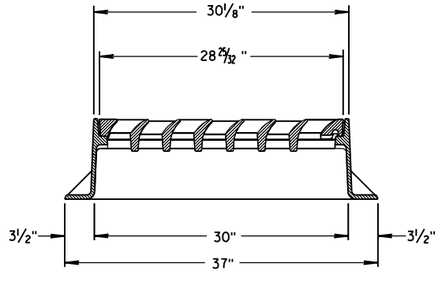


TYPE "M"









INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

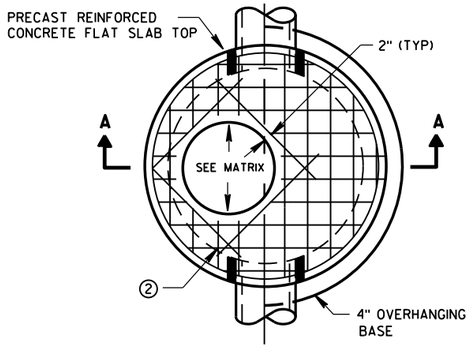
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

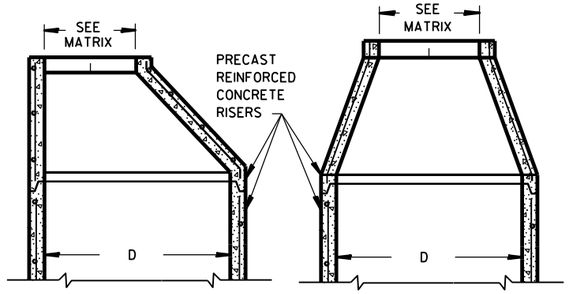
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

S.D.D. 8 A 5-19d

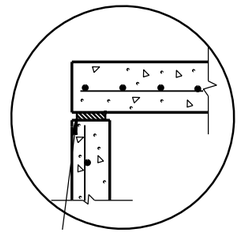


PLAN VIEW CIRCULAR OPENING

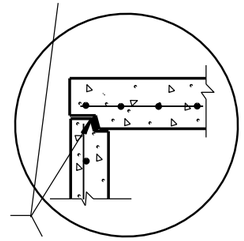


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

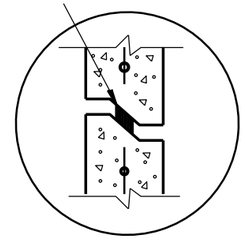


TOP WITH PLAIN END JOINT



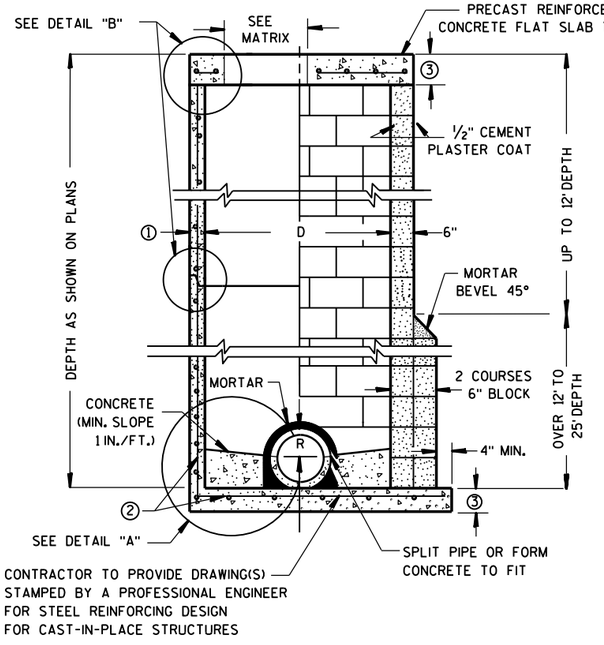
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



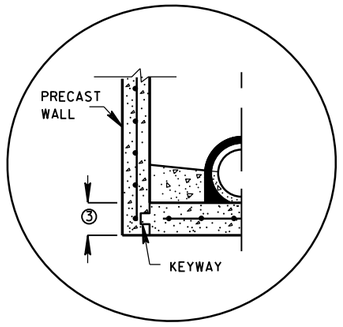
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

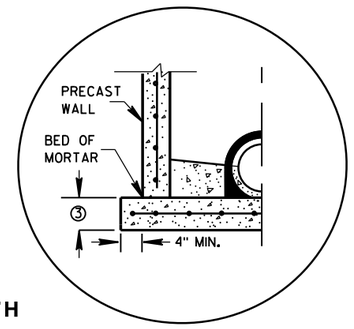


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

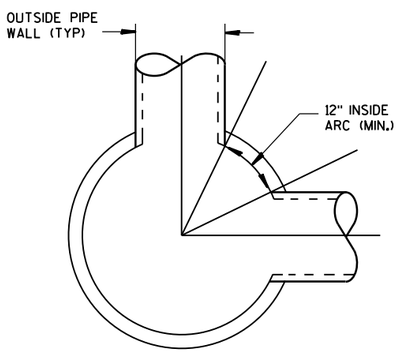


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2016
DATE

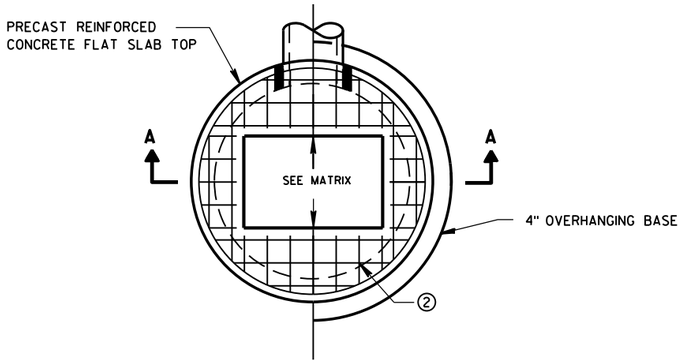
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

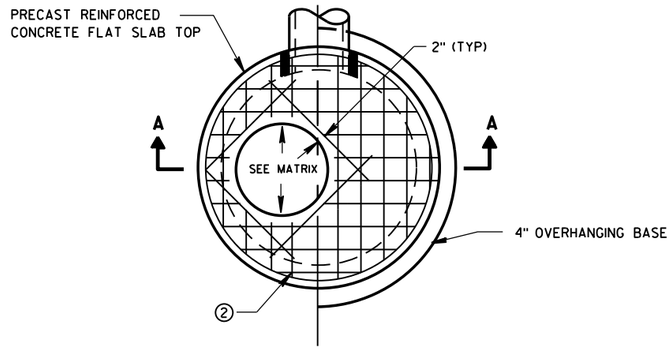
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S.D.D. 8 B 9-2

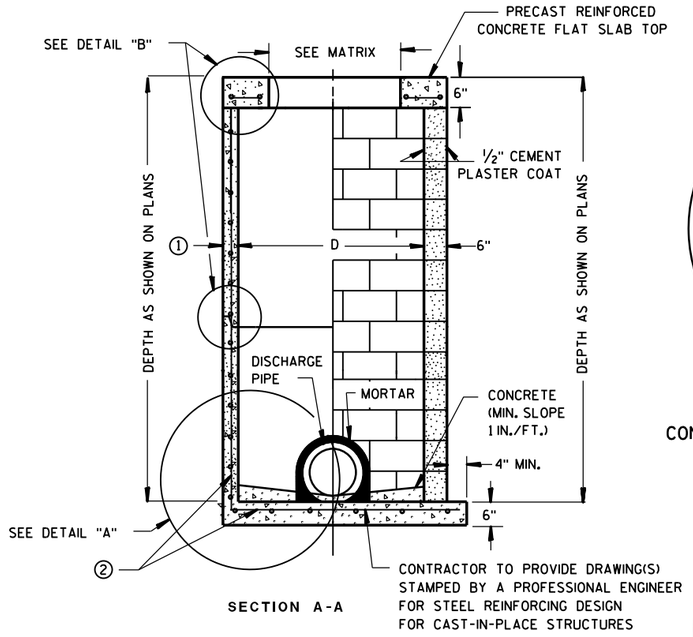
S.D.D. 8 B 9-2



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

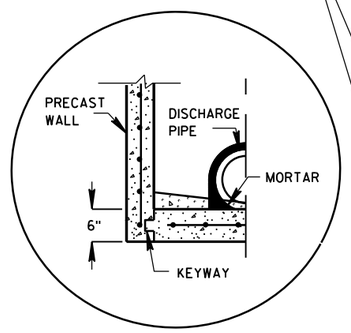


SECTION A-A

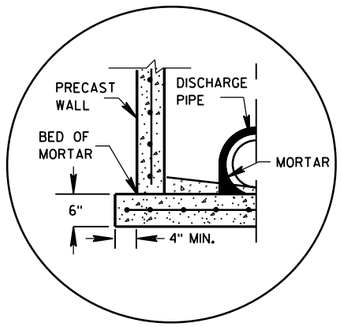
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

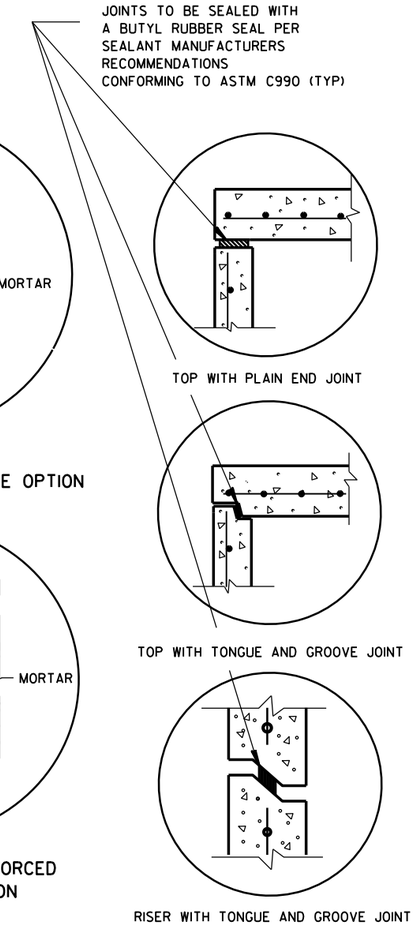


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

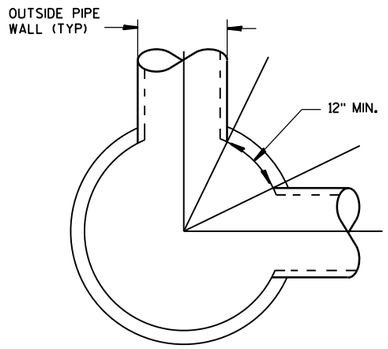
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

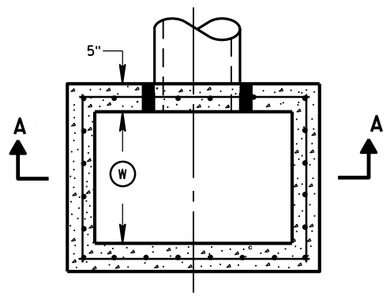
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FHWA

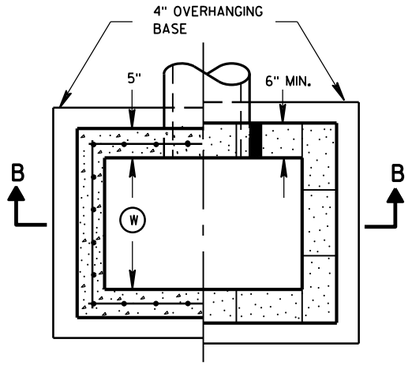
INLETS 3-FT AND 4-FT DIAMETER

6

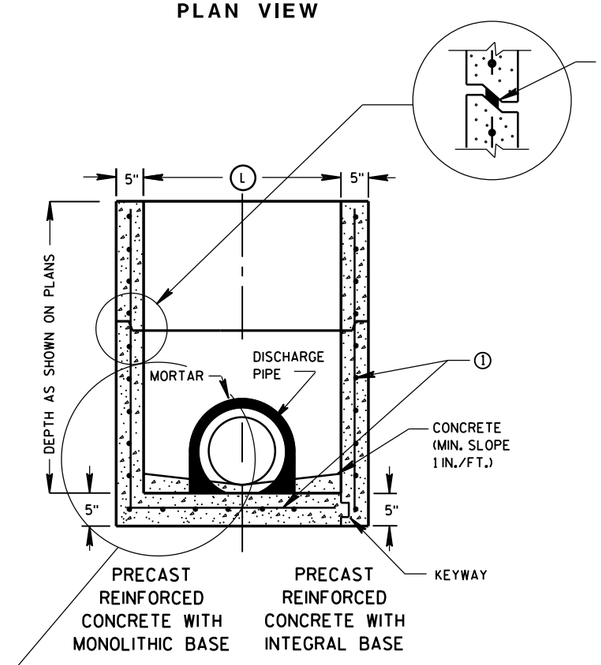
S.D.D. 8 C 6-2



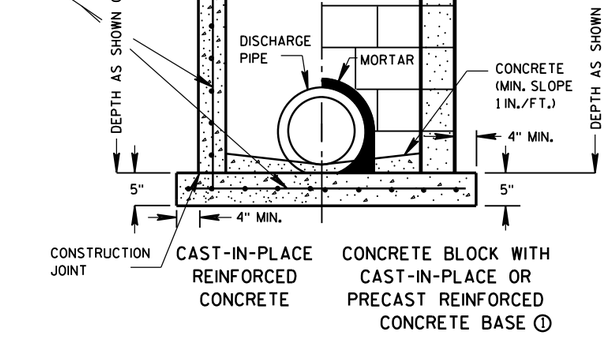
PLAN VIEW



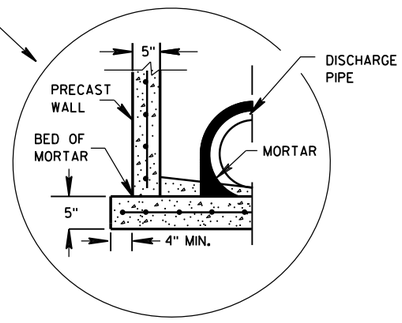
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

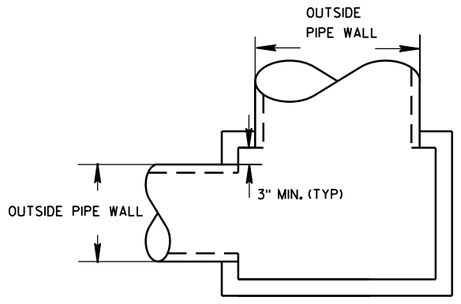
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



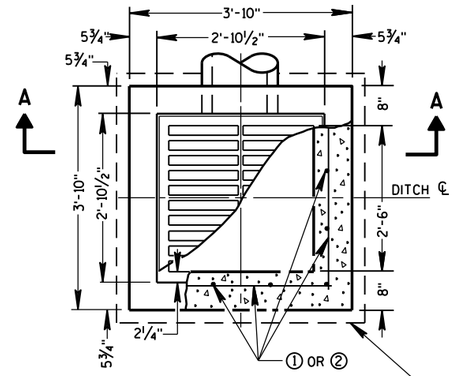
DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

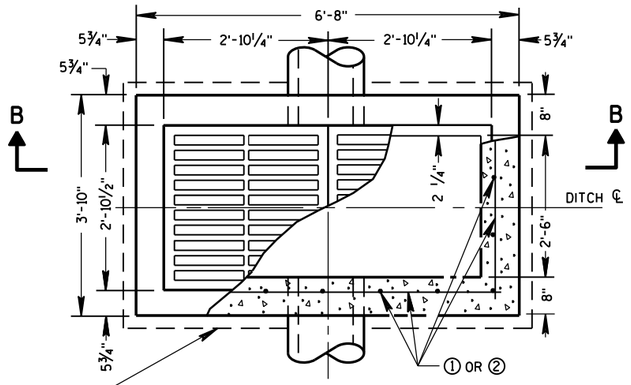
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FHWA

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

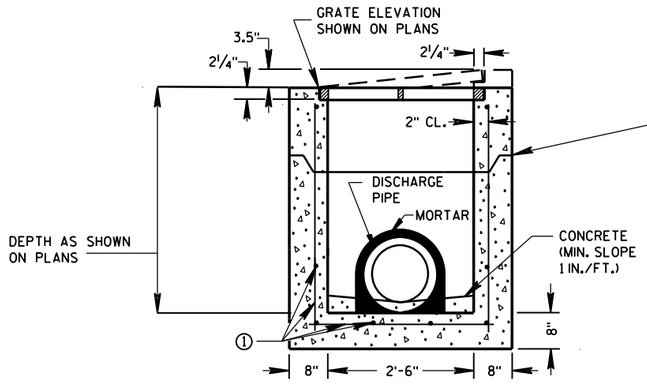


PLAN VIEW

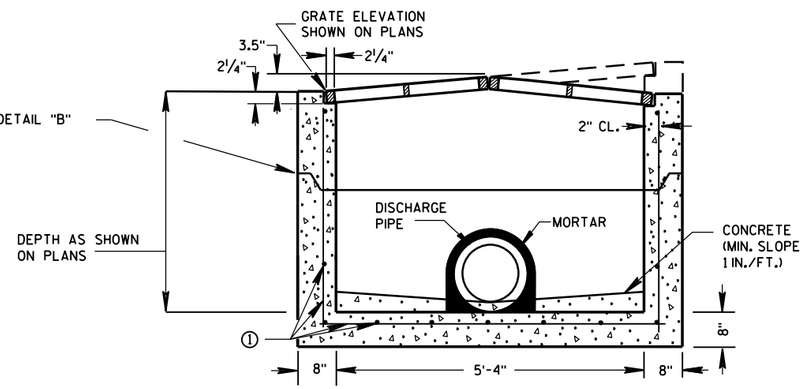


PLAN VIEW

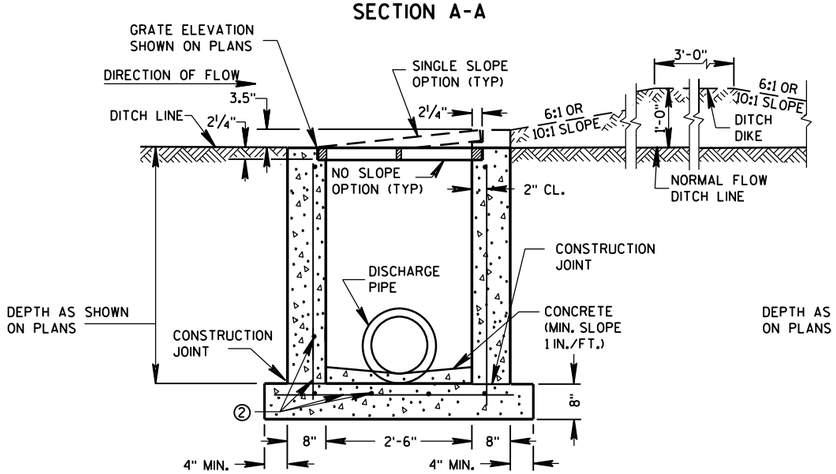
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



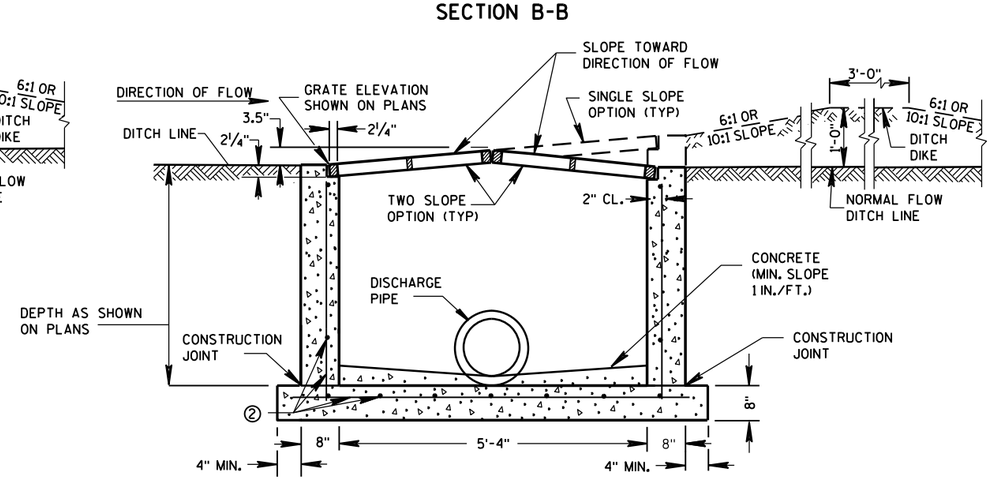
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

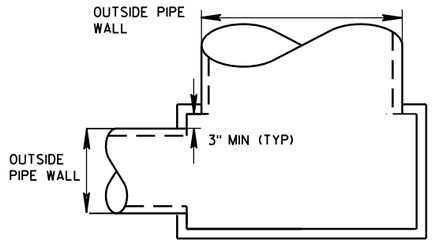
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

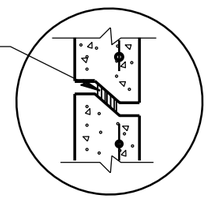
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



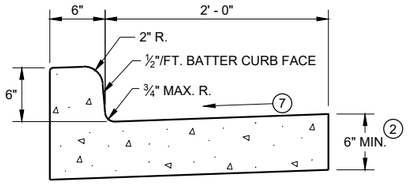
DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

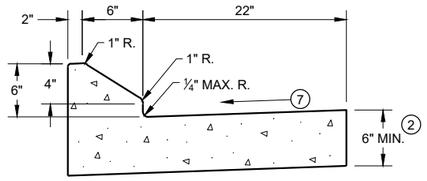
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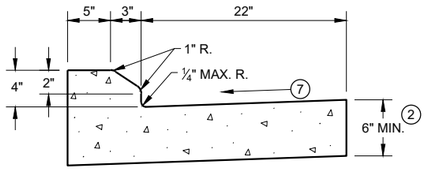
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S.D.D. 8 C 8-2



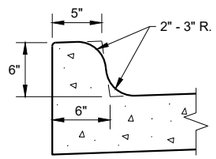
TYPES A (1) & D



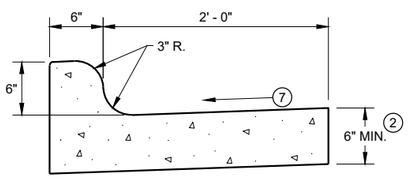
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

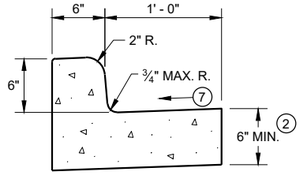


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



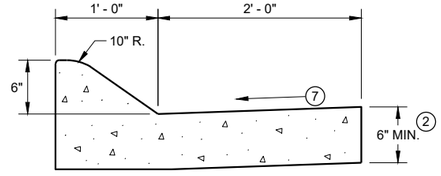
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

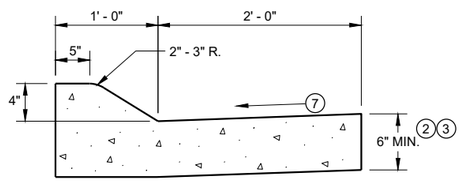


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

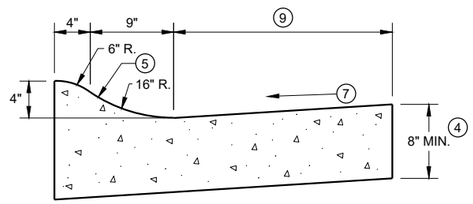


6" SLOPED CURB TYPES A (1) & D



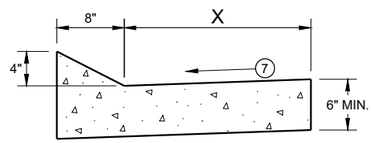
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

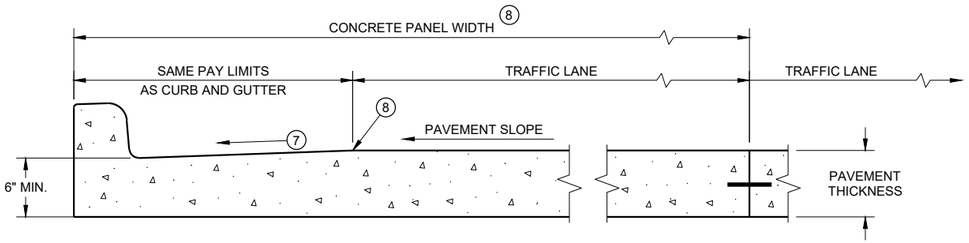


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

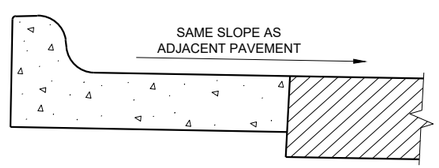
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

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

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

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

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

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

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

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

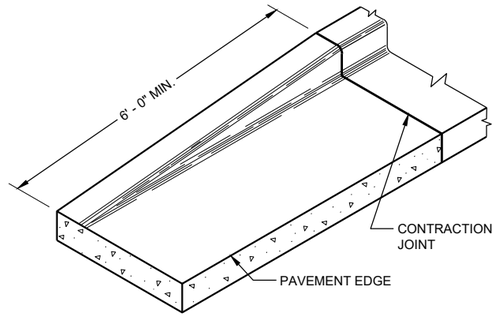
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

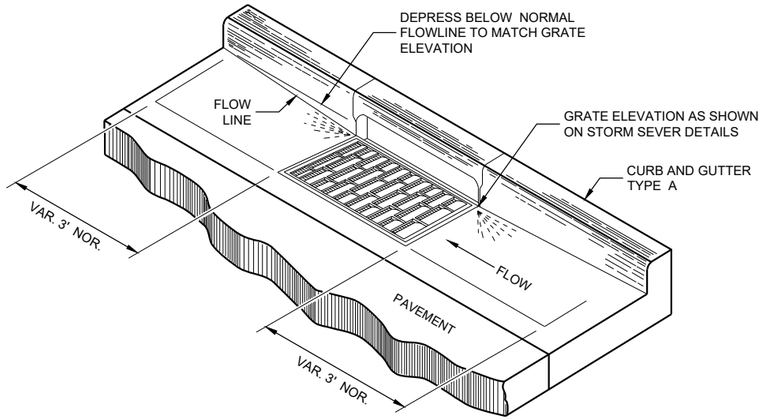
STATE OF WISCONSIN
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SDD 08D01 - 22a
SDD 08D01 - 22a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

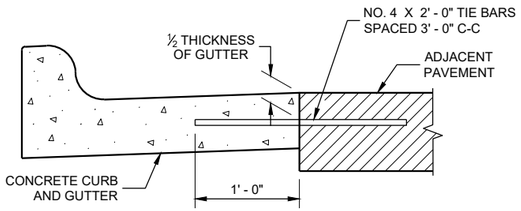
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

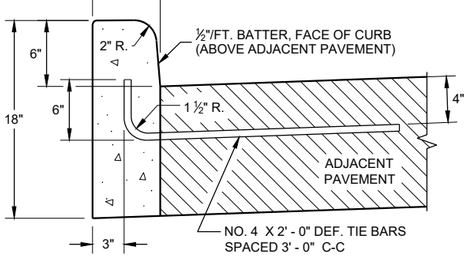
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

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

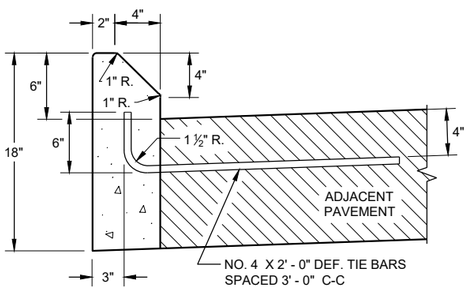
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

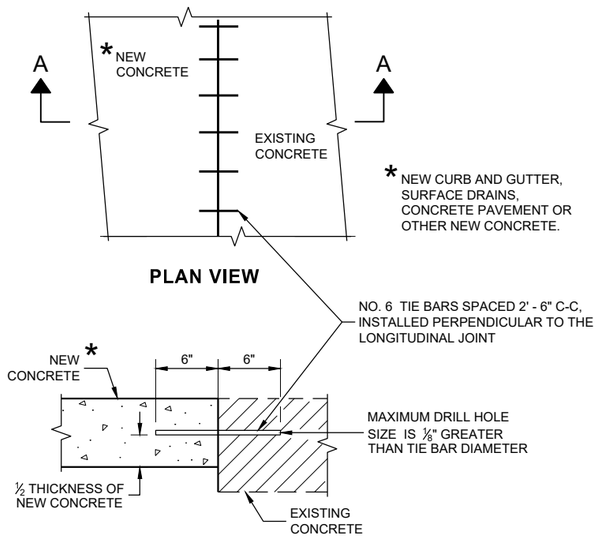


TYPES A (1) & D

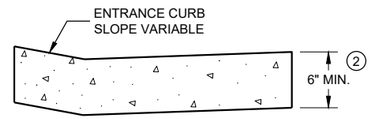


TYPES G (1) & J

CONCRETE CURB



TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

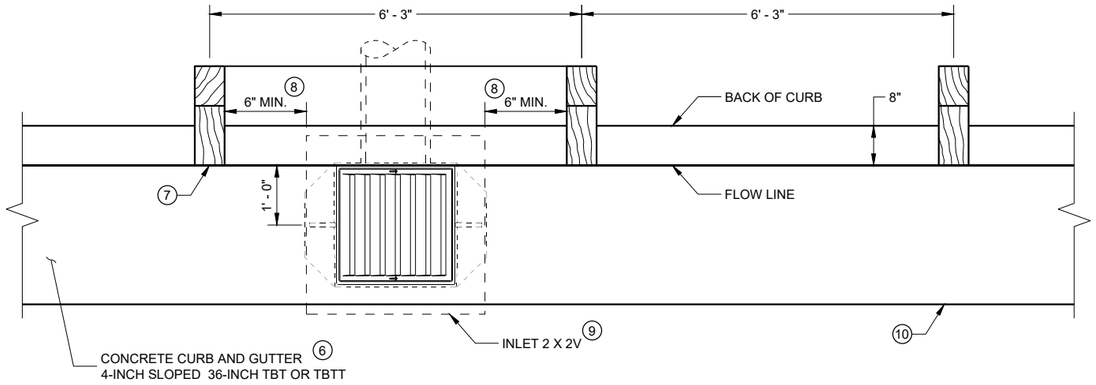
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

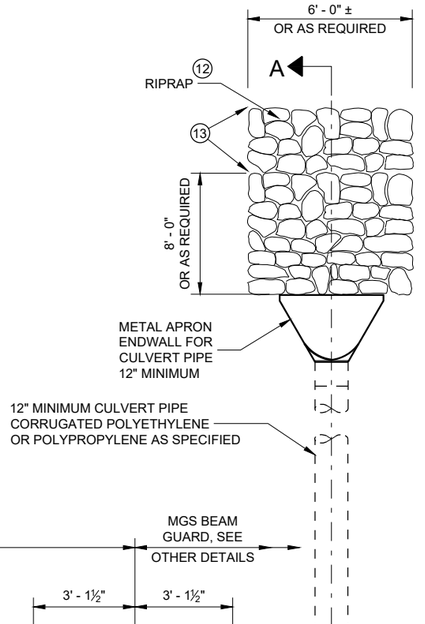
6

SDD08D01 - 22b
SDD08D01 - 22b



INLET PLAN VIEW

(NOTE: RAIL NOT SHOWN FOR CLARITY)



GENERAL NOTES

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

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

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

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

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

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

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

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

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

(8) CENTER DRAINAGE STRUCTURE BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE WALL OF DRAINAGE STRUCTURE TO POSTS.

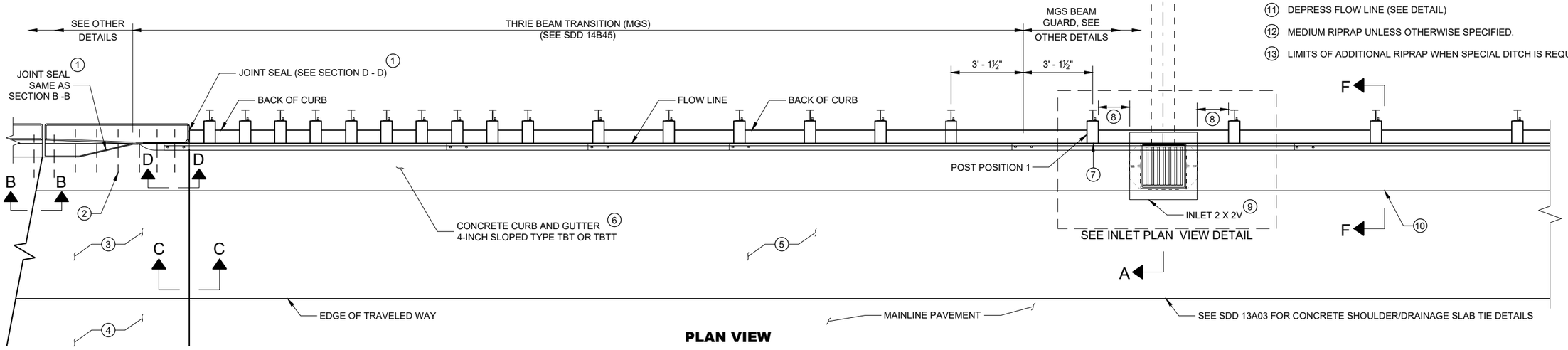
(9) SEE SDD 08A05 AND 08C07 FOR DETAILS. SEE ROADWAY PLANS FOR LOCATION.

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

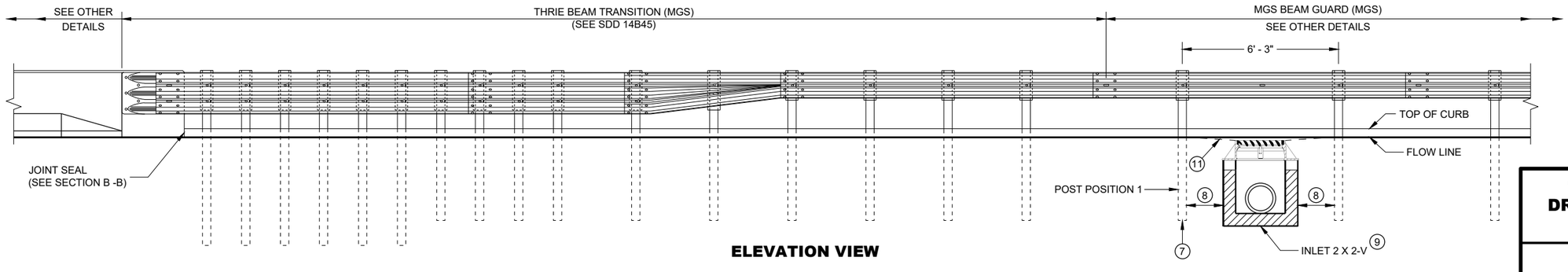
(11) DEPRESS FLOW LINE (SEE DETAIL)

(12) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

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



PLAN VIEW



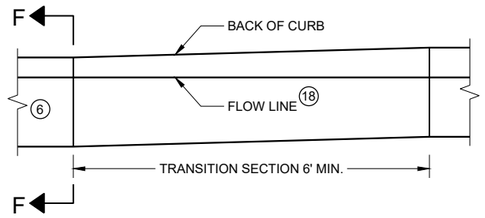
ELEVATION VIEW

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

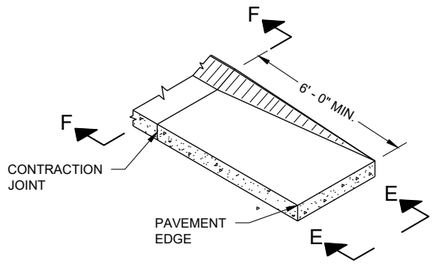
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

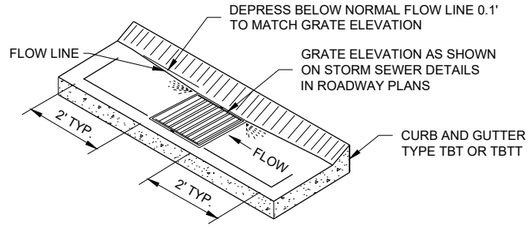
SDD08D03 - 08a



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

(8) CENTER DRAINAGE STRUCTURE BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE WALL OF DRAINAGE STRUCTURE TO POSTS.

(9) SEE SDD 08A05 AND 08C07 FOR DETAILS. SEE ROADWAY PLANS FOR LOCATION.

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

(11) DEPRESS FLOW LINE (SEE DETAIL)

(12) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

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

(14) GEOTEXTILE FABRIC TYPE HR.

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

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

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

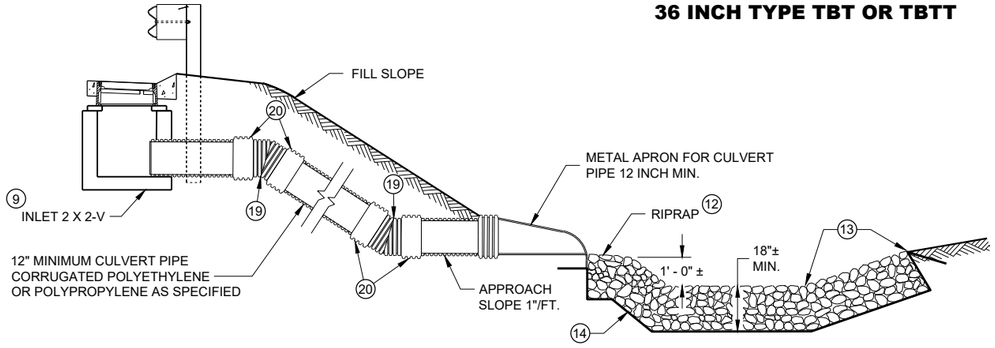
(18) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

(19) MANUFACTURER SUPPLIED BEND.

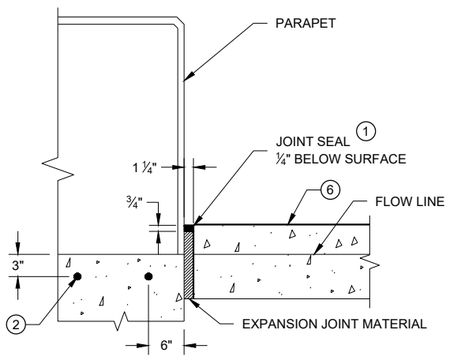
(20) MANUFACTURER SUPPLIED EXTERNAL MECHANICAL COUPLING OR A MANUFACTURER RECOMMENDED COUPLING WITH A MASTIC IMPREGNATED GEOTEXTILE WRAP AND MECHANICAL FASTENING BANDS.

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

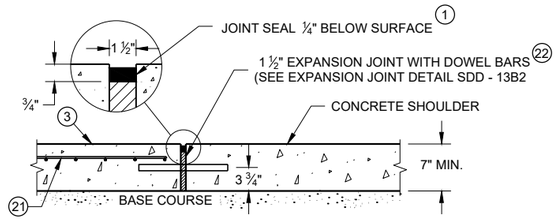
(22) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



SECTION A - A

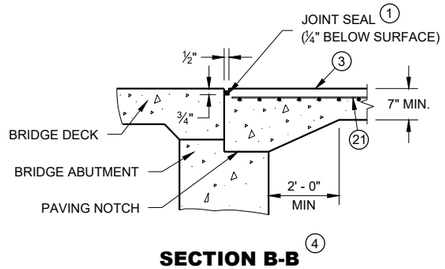


SECTION D - D

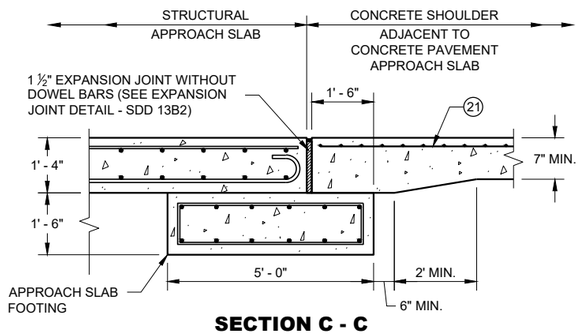


SECTION C - C

JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS

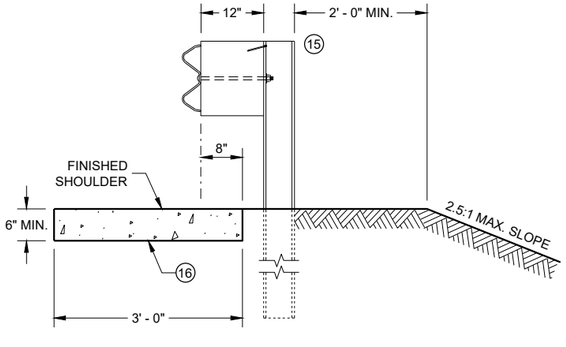


SECTION B-B 4

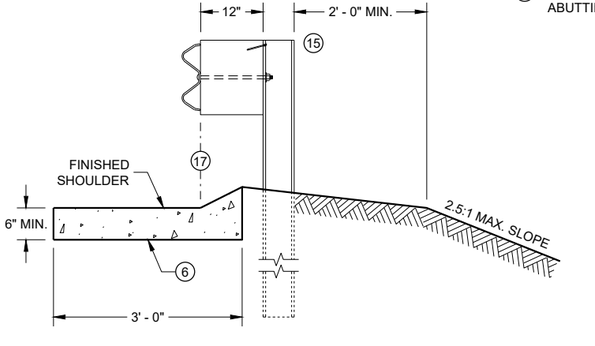


SECTION C - C

JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

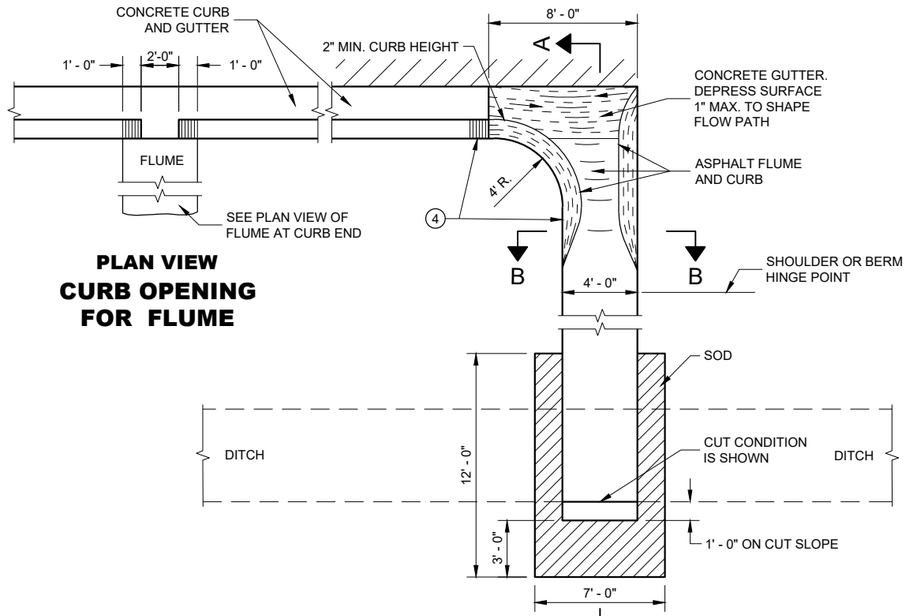
FHWA

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SDD 08D03 - 08b

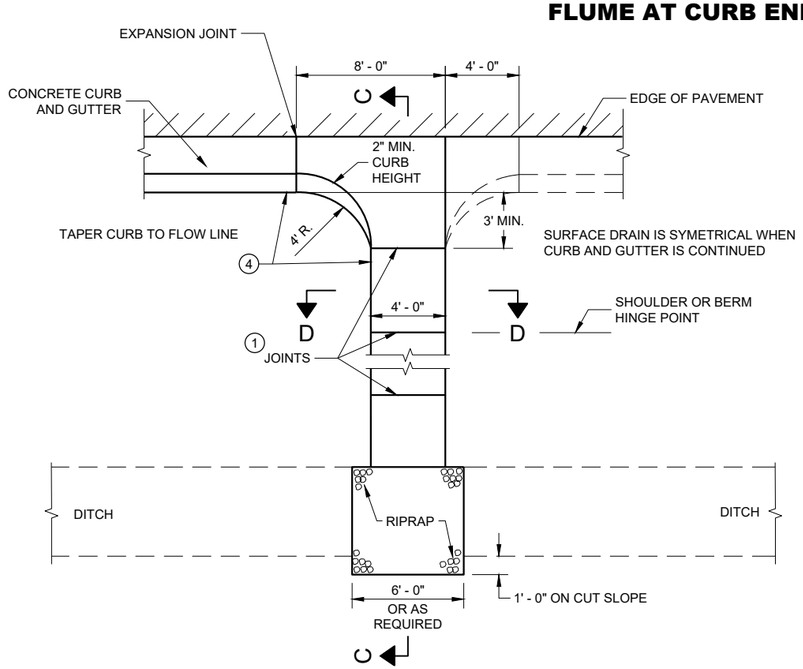
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



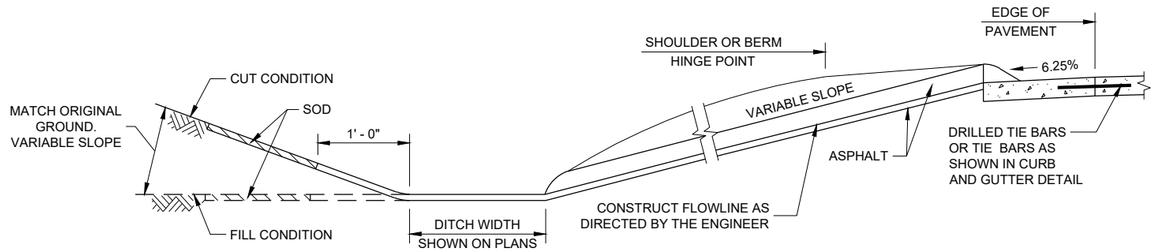
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

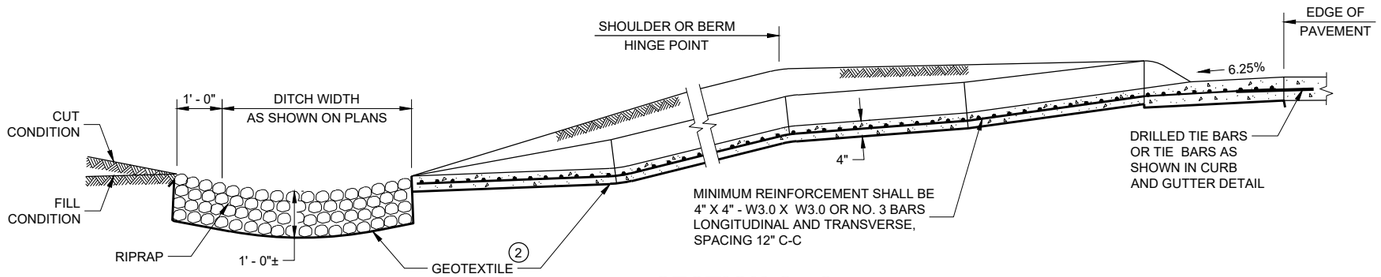
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

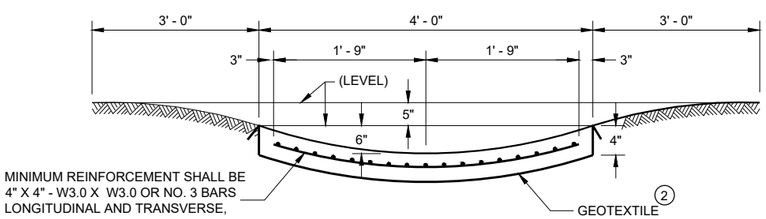


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

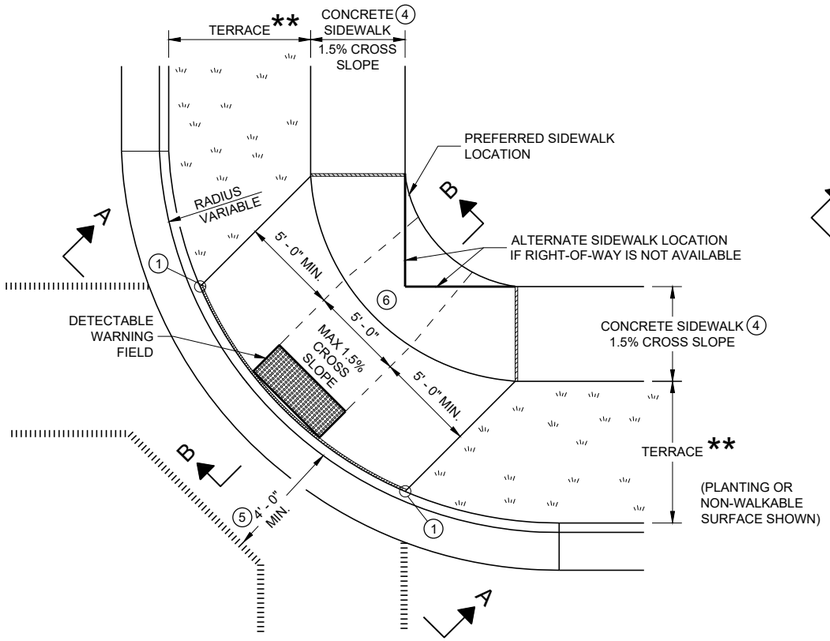
APPROVED
November 2021
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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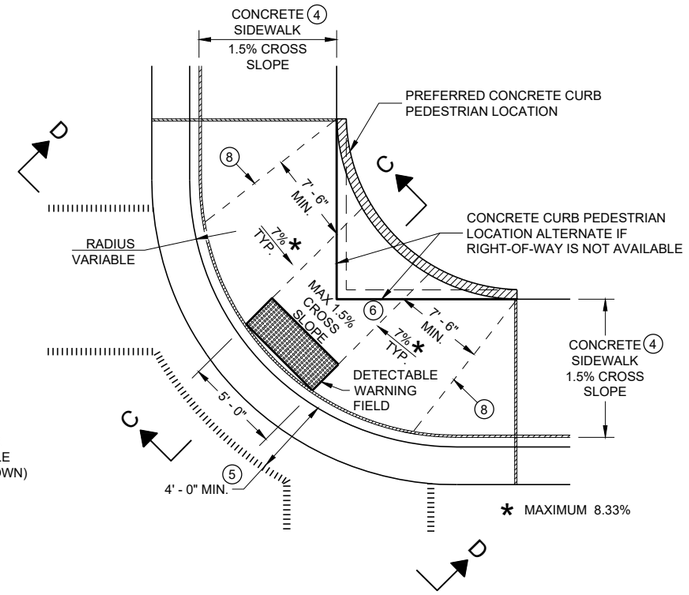
SDD 08D04 - 06



PLAN VIEW

CURB RAMP TYPE 1

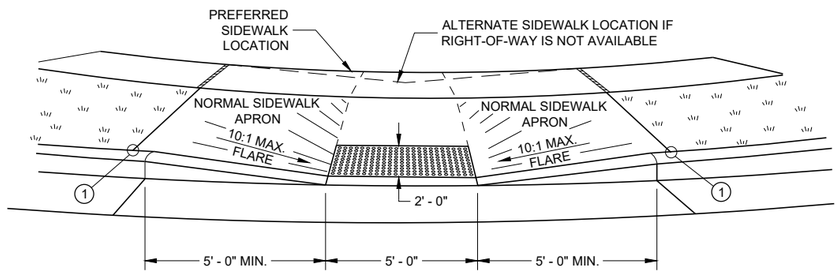
(CENTER OF CORNER RADIUS)



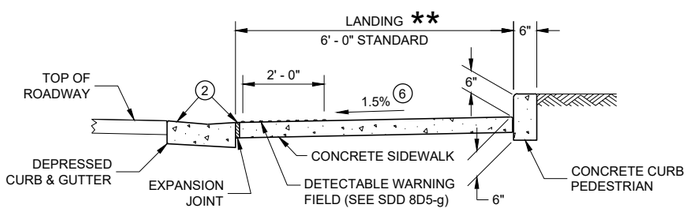
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

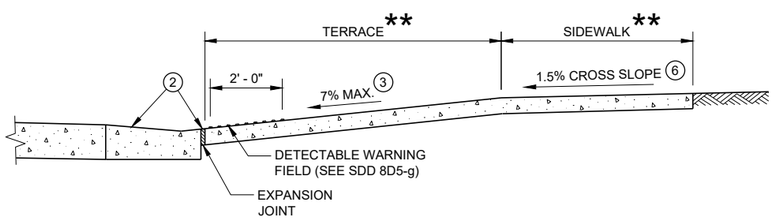


VIEW A - A FOR TYPE 1

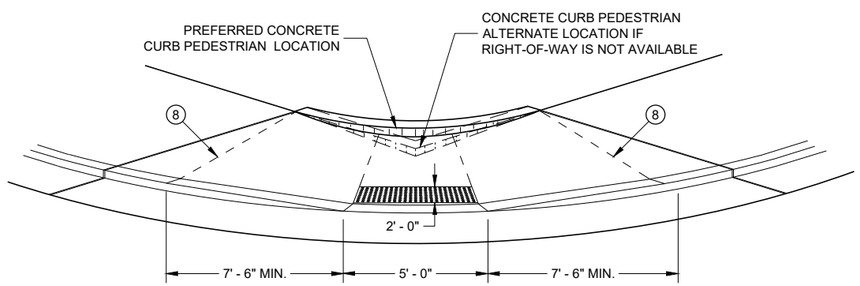


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

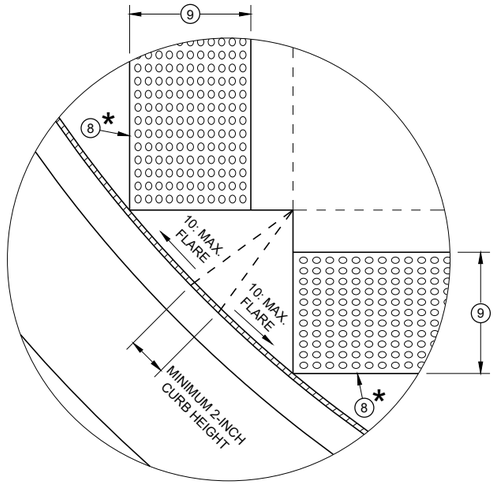
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

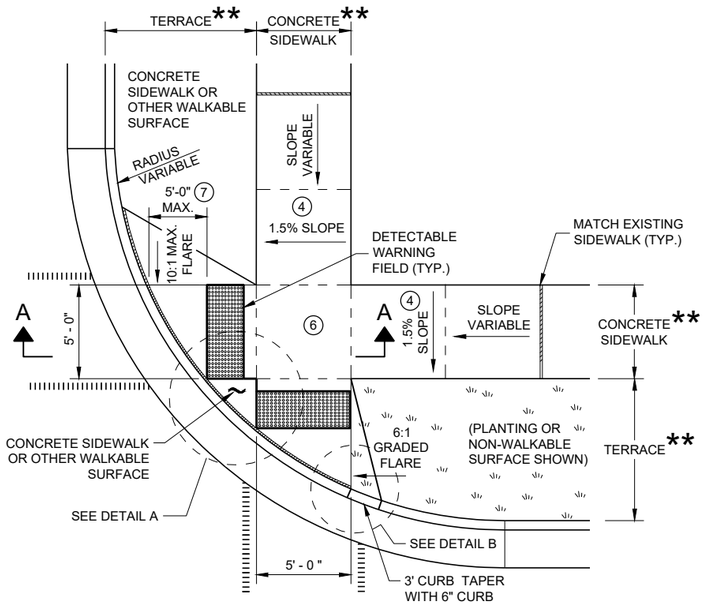
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 08D05 - 20a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

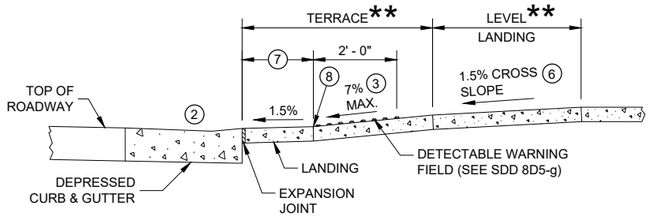
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

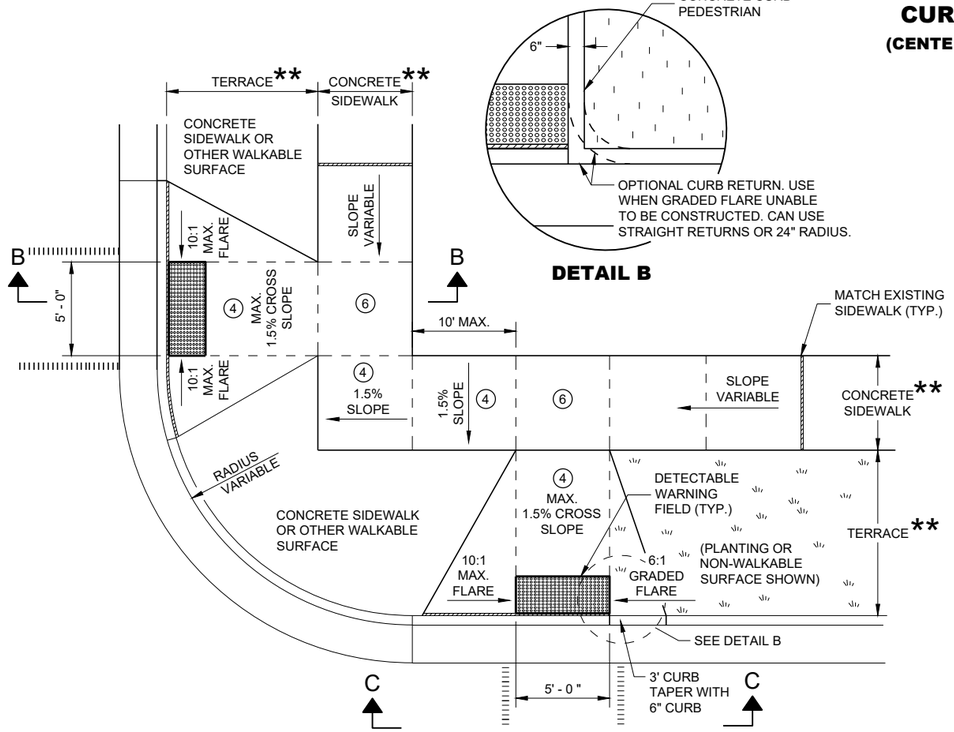
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

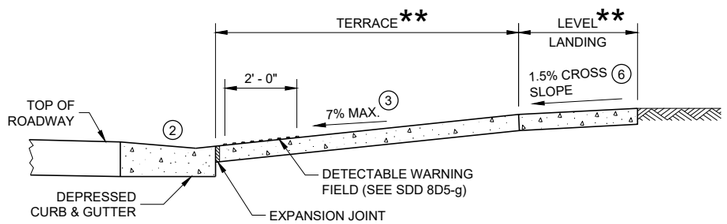
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS



DETAIL B

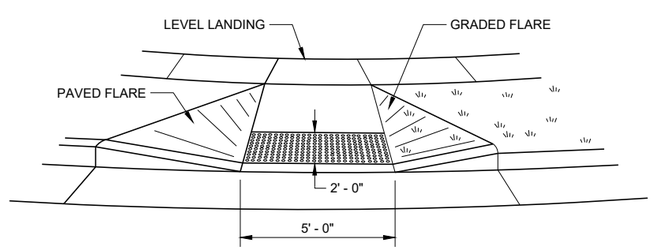
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



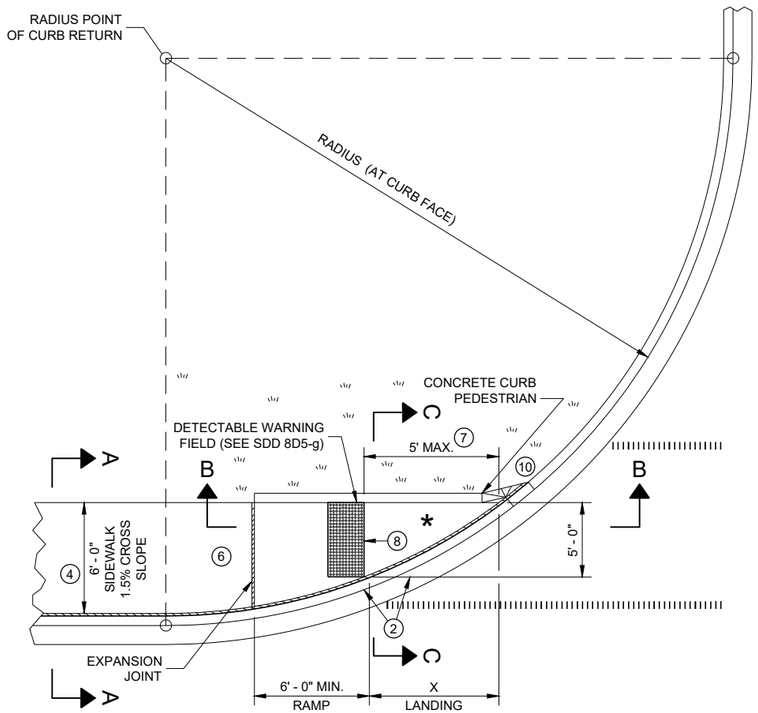
VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

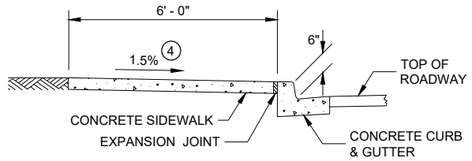


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

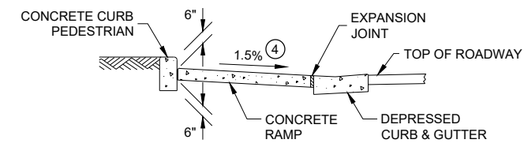
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

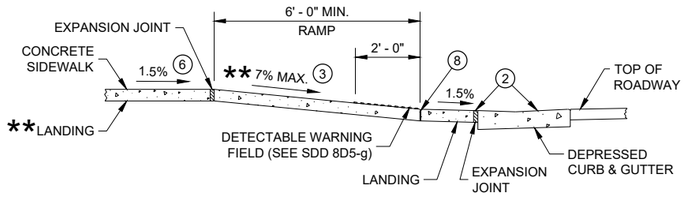
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



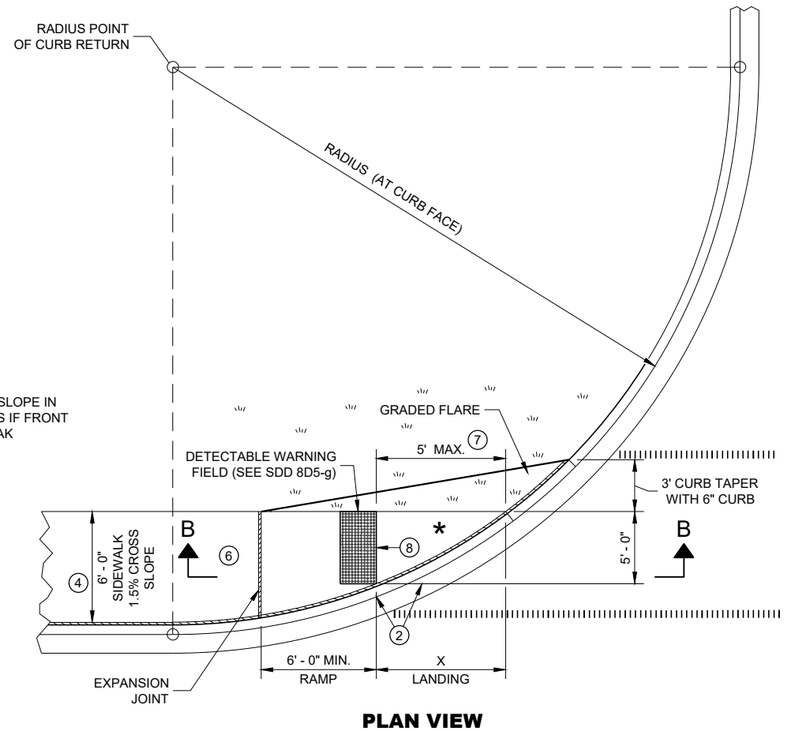
SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

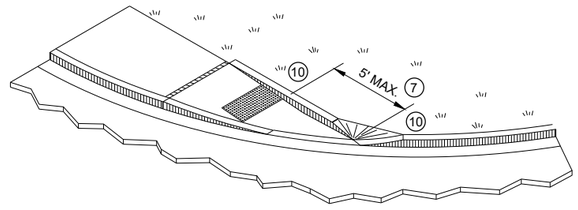
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

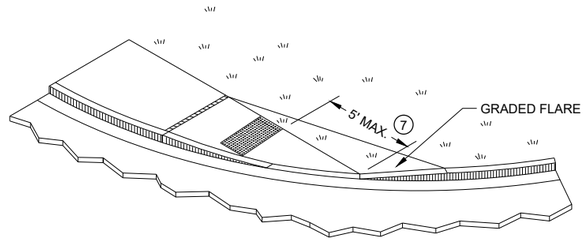


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



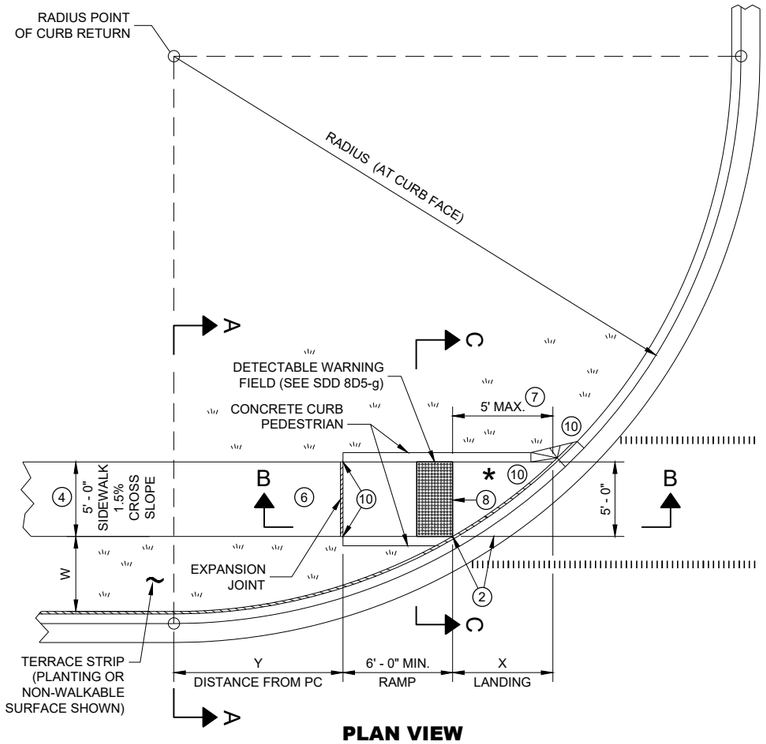
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c



PLAN VIEW

CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

SECTION C - C FOR TYPE 4B

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

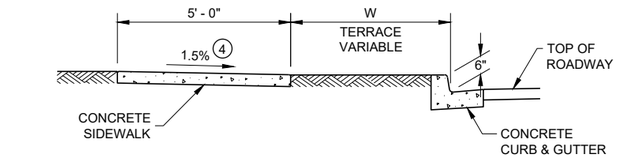
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

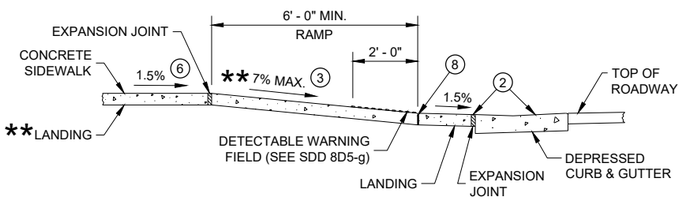
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



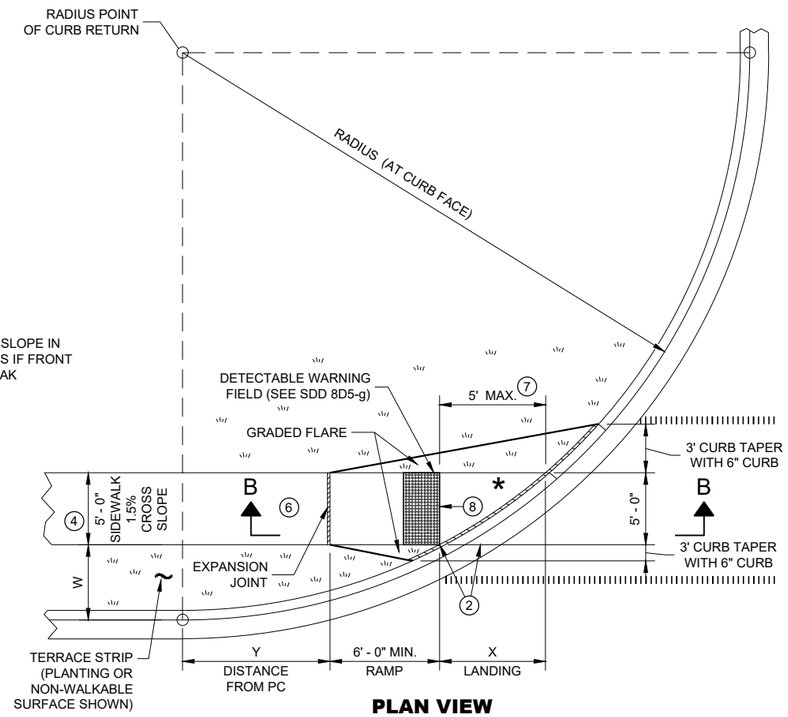
SECTION A - A FOR TYPE 4B



SECTION B - B FOR TYPE 4B AND TYPE 4B1

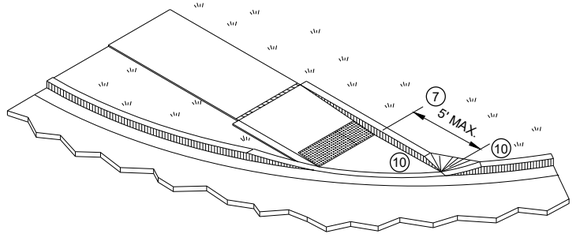
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

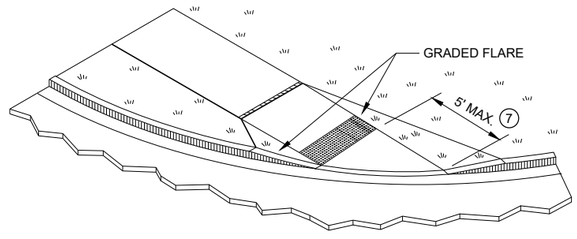


PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B

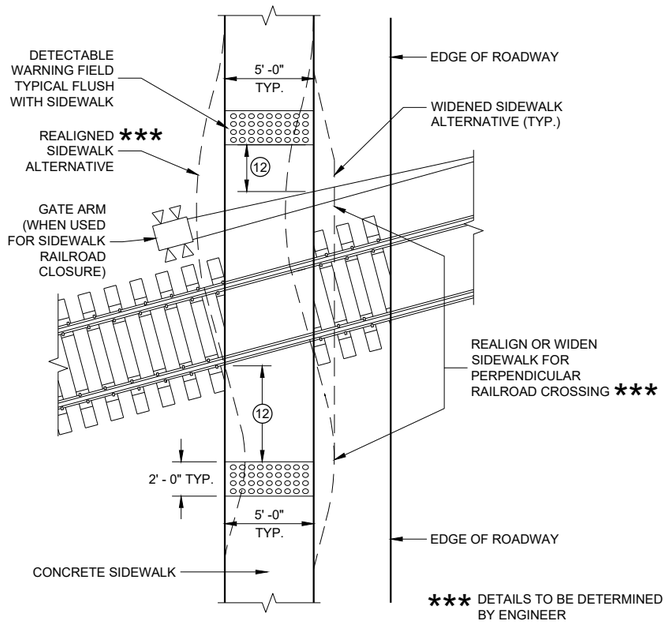


ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

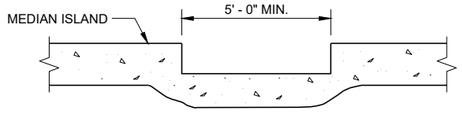
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D05 - 20d

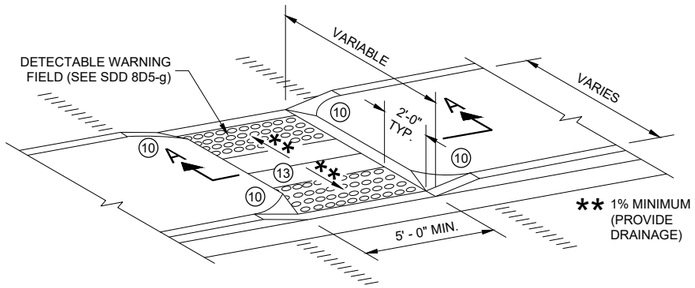


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

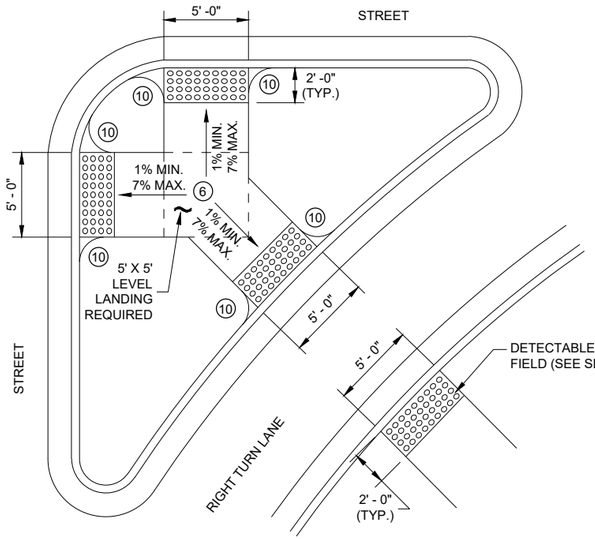
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

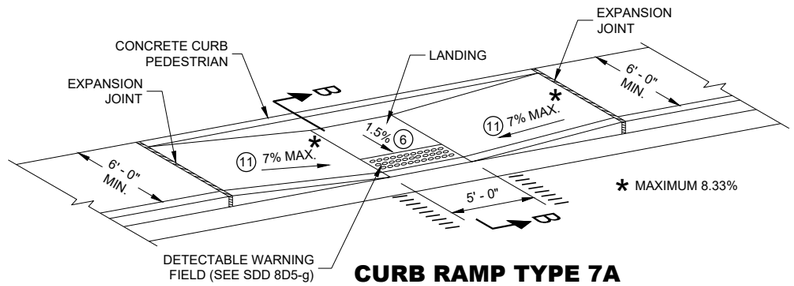
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

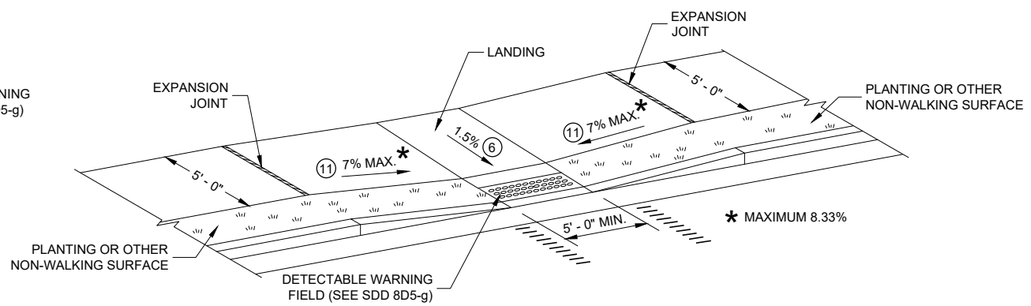
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 7A

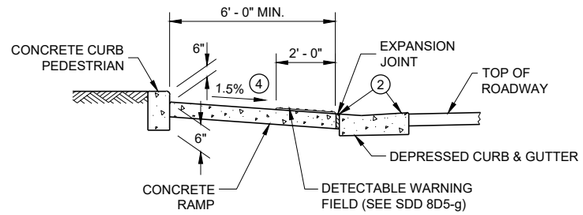
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.



SECTION B - B FOR TYPE 7A

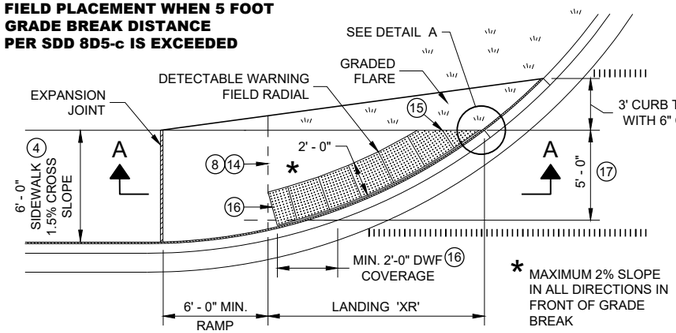
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20e

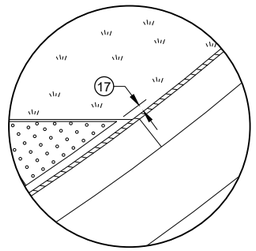
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



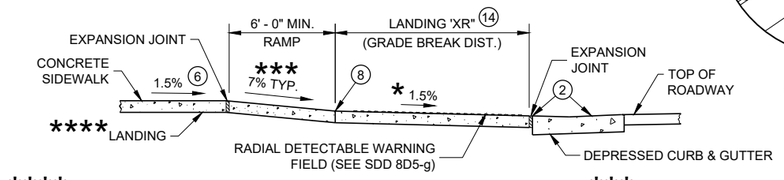
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

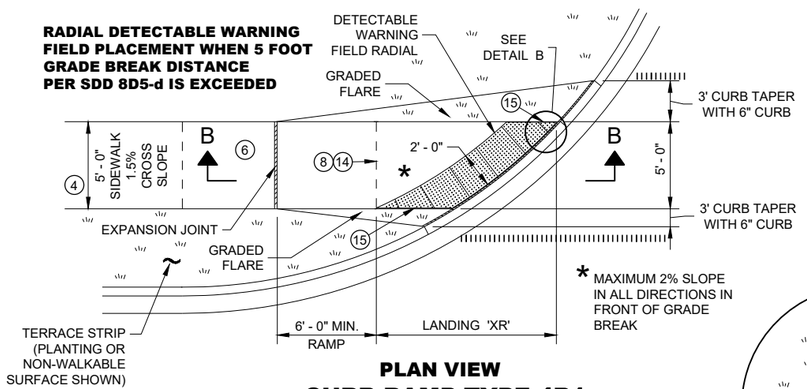


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

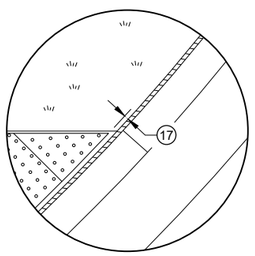
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



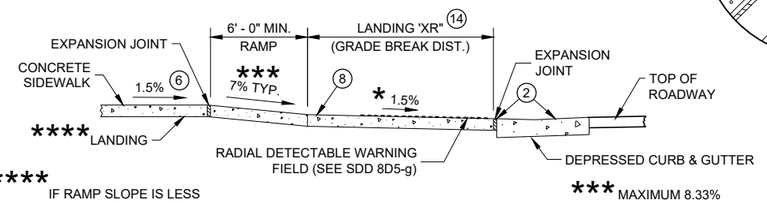
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

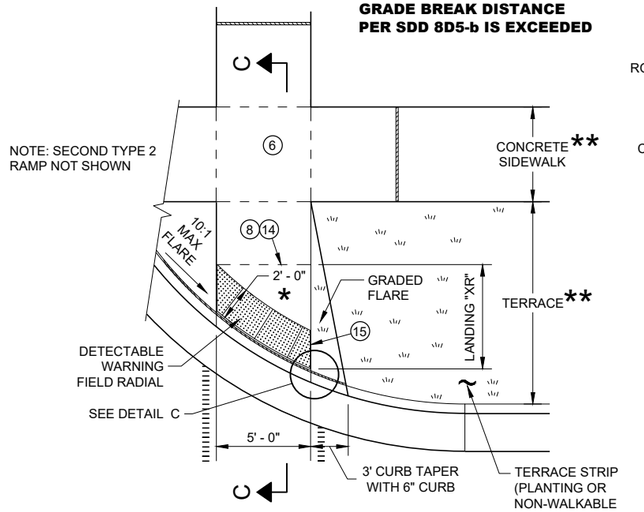
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

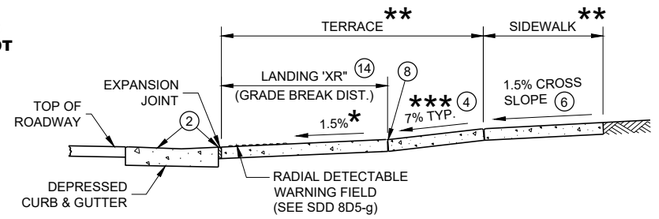


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

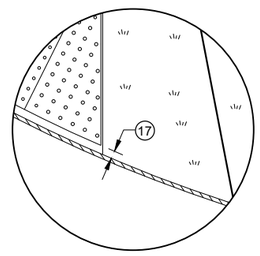


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

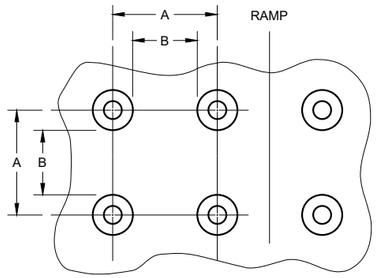
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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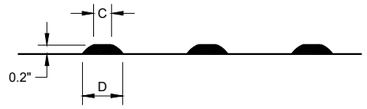
SDD 08D05 - 20f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

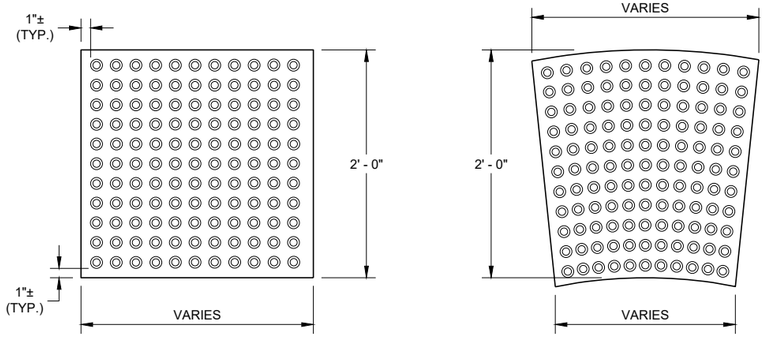


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

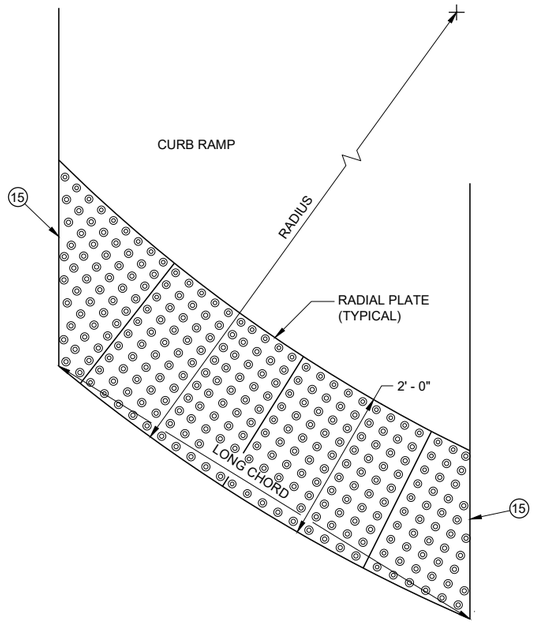
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

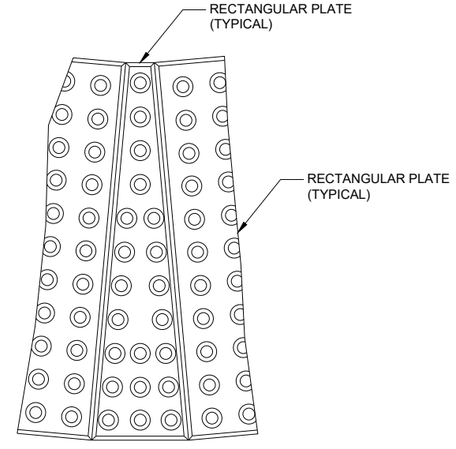
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

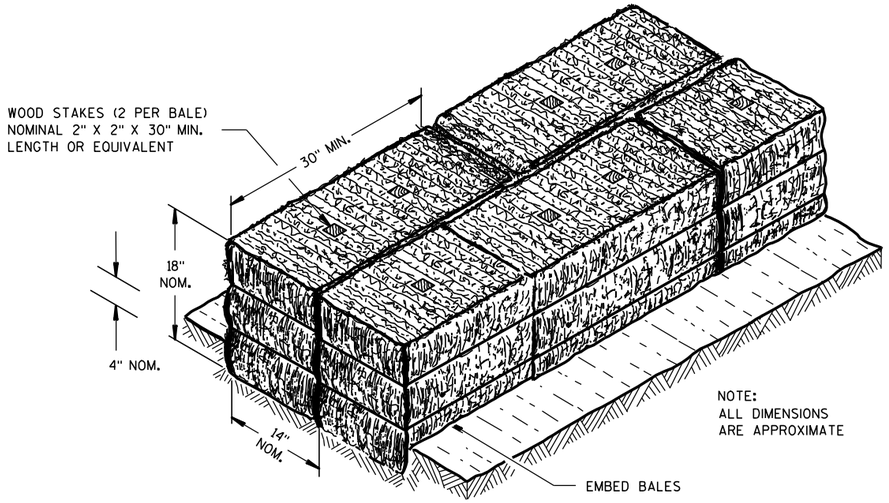
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

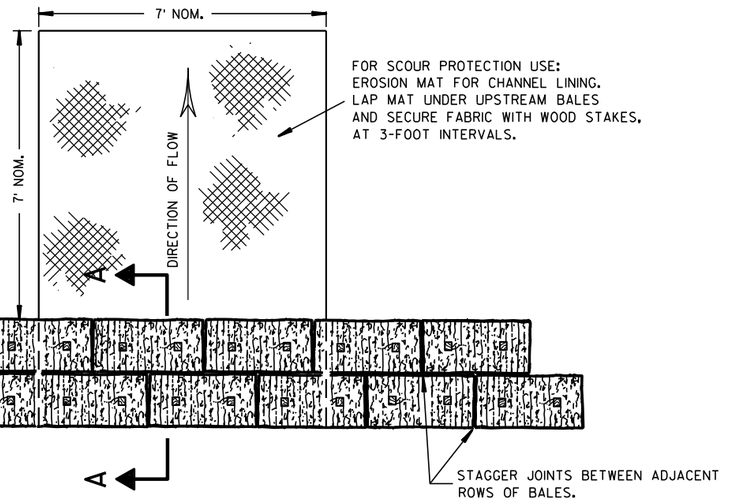
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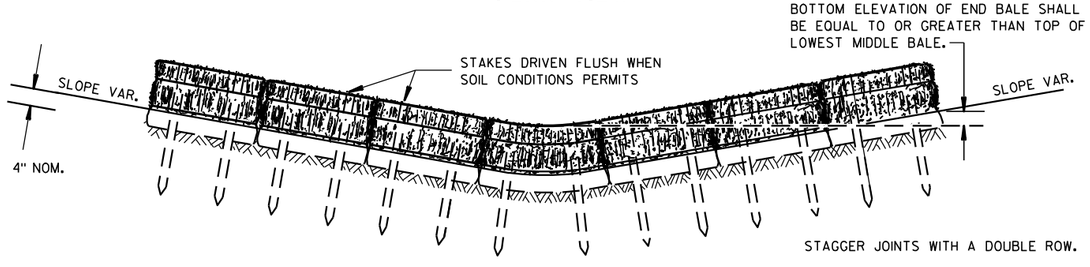
SDD 08D05 - 20g



SECTION A-A



PLAN VIEW



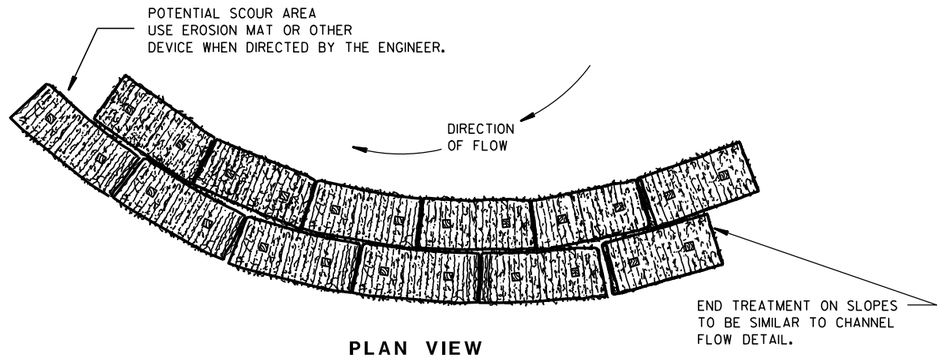
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

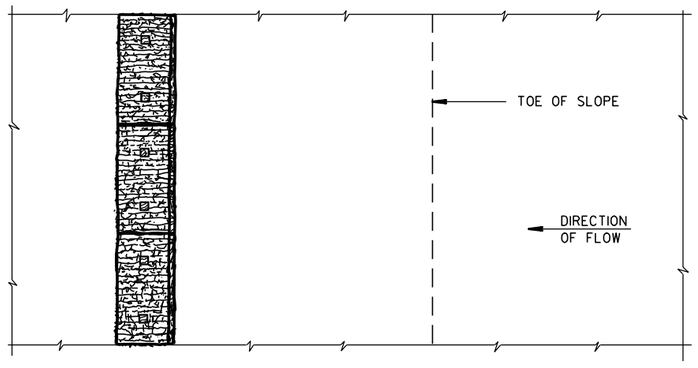
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

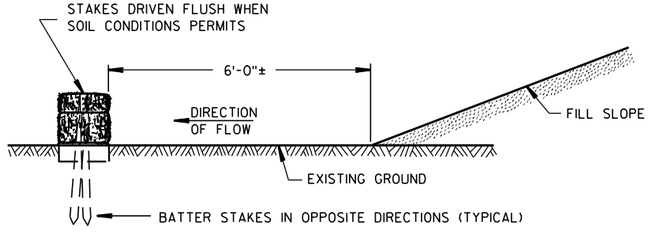


PLAN VIEW

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

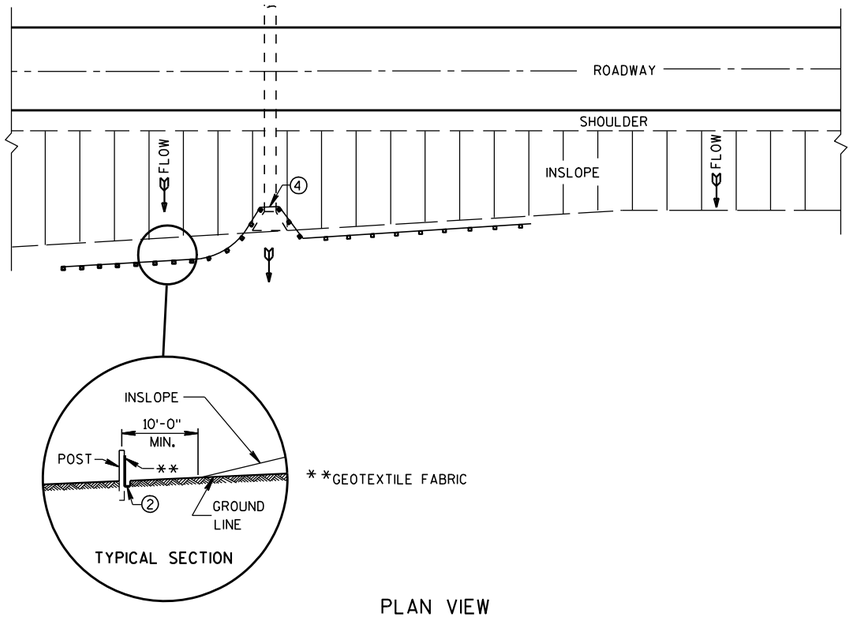
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S.D.D. 8 E 8-3

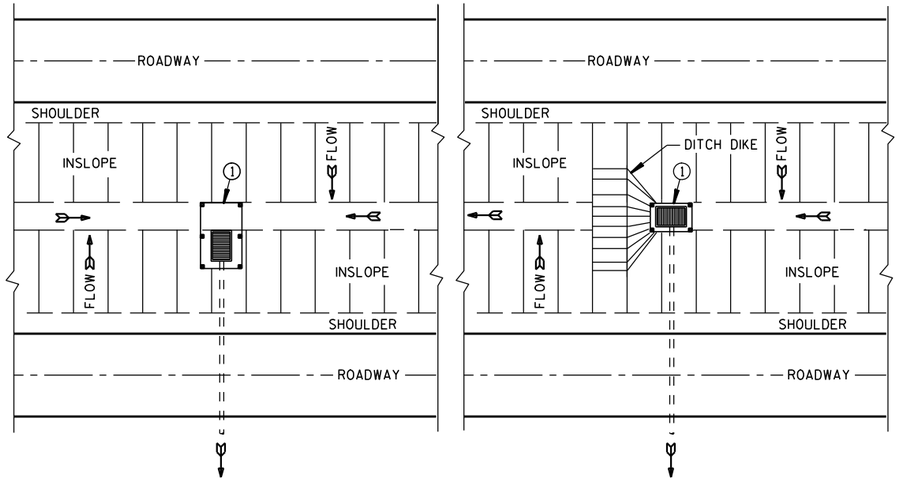
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



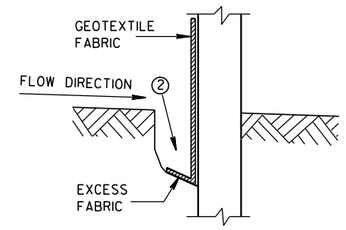
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

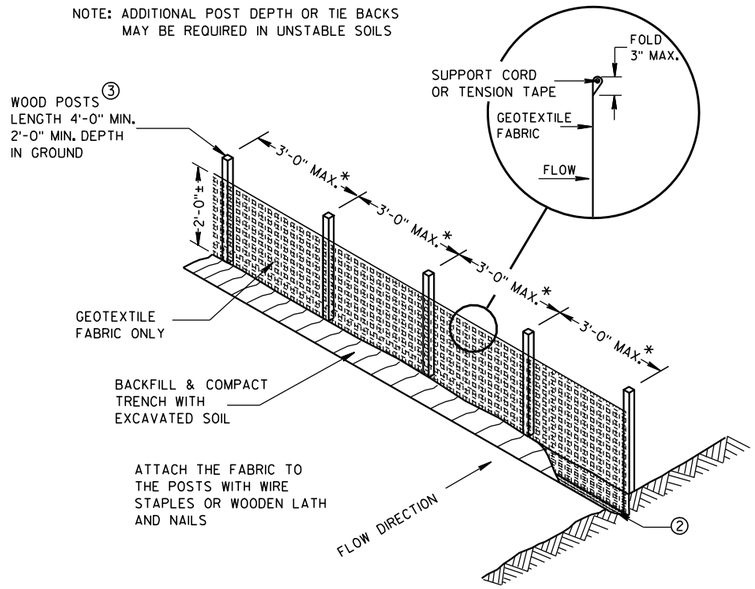
GENERAL NOTES

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

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

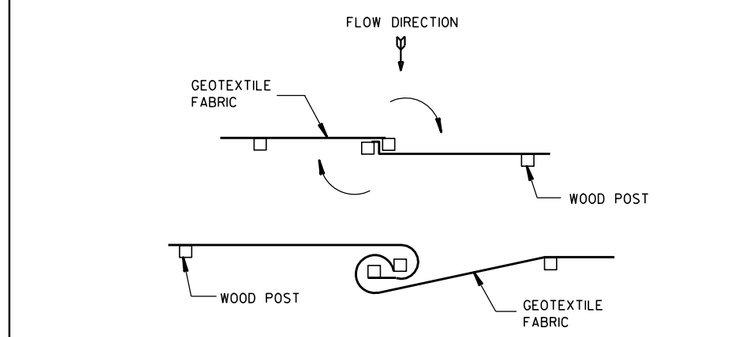


TRENCH DETAIL

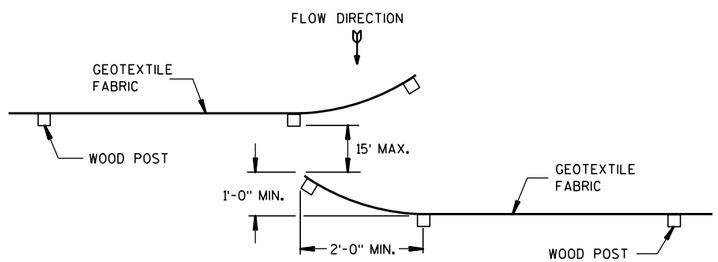


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

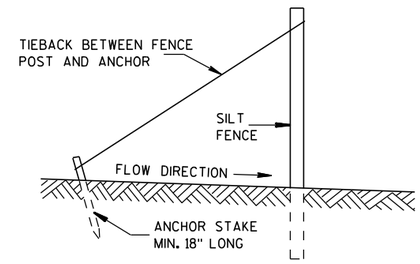


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

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DEPARTMENT OF TRANSPORTATION

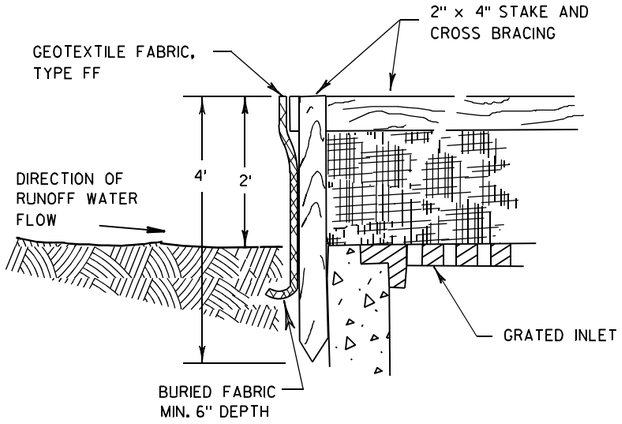
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

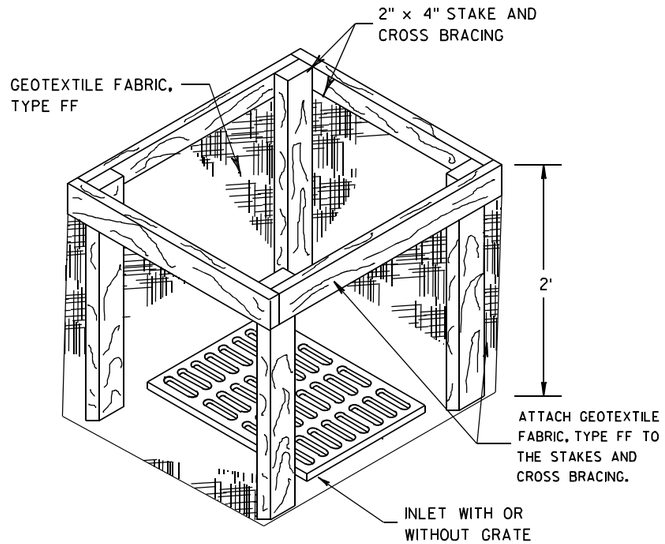
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S.D.D. 8 E 9-6

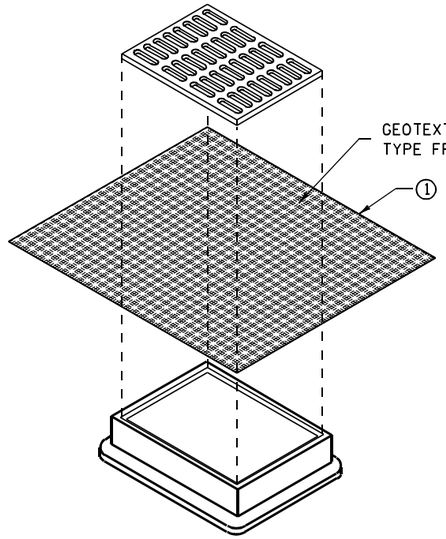
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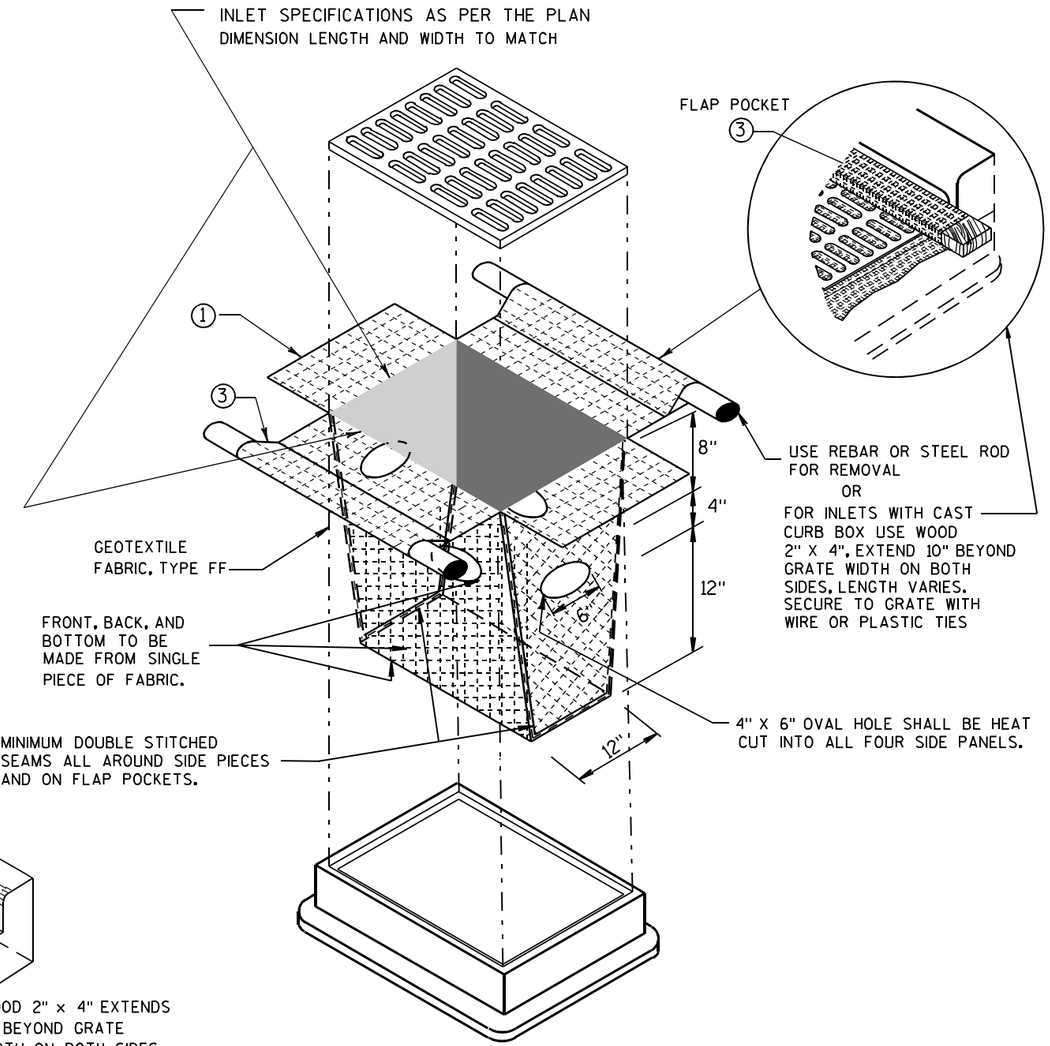


INLET PROTECTION, TYPE A



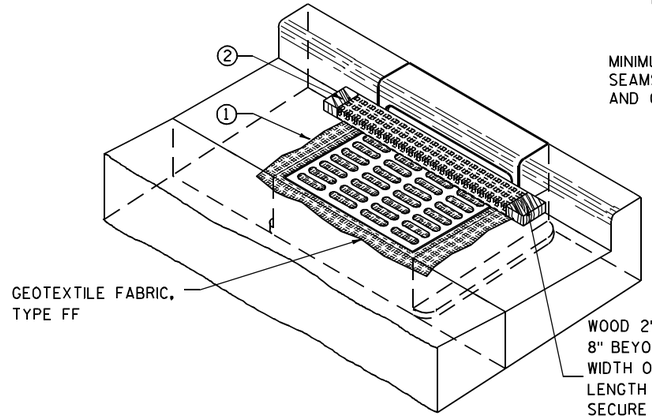
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

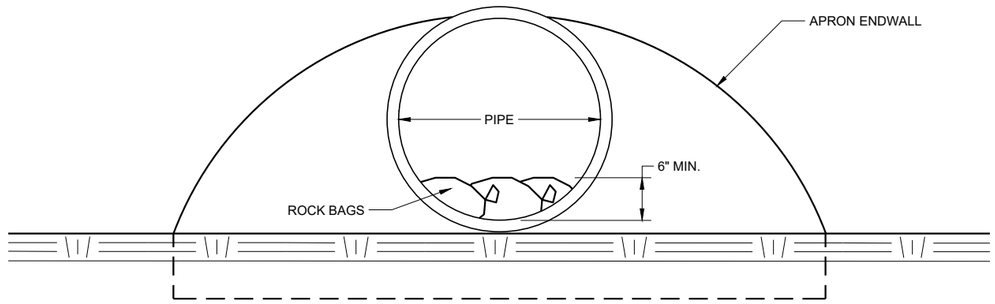
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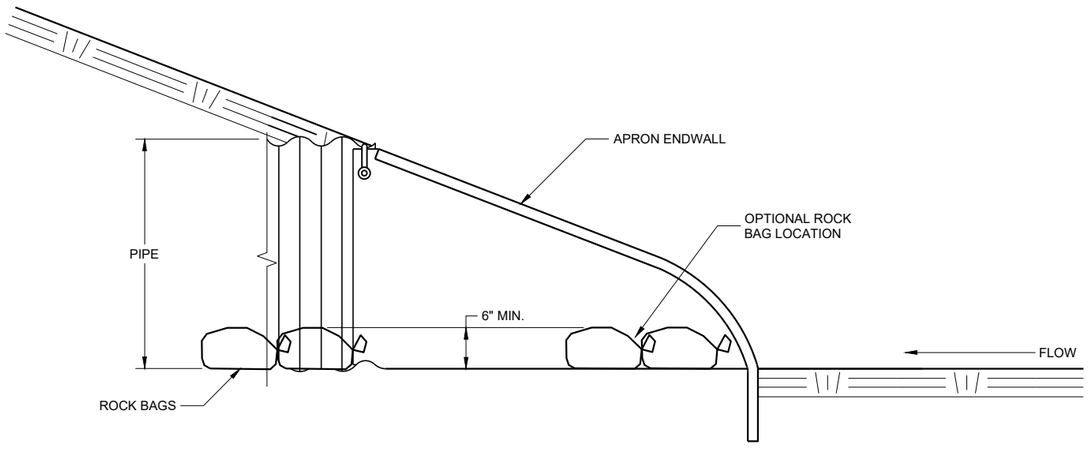
S.D.D. 8 E 10-2

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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

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

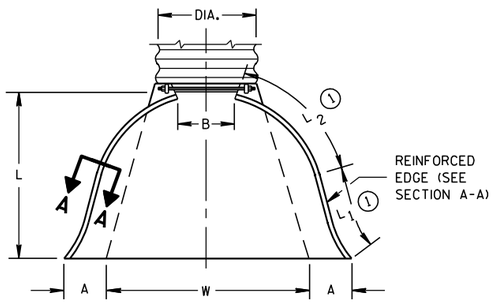
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

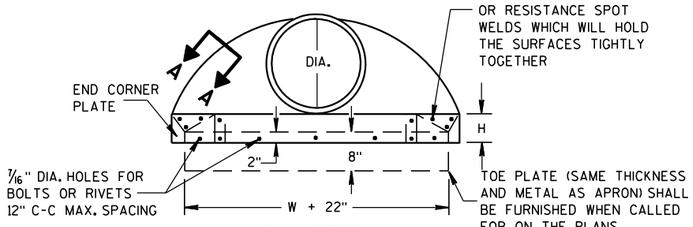
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

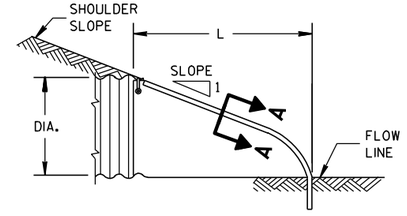
*MINIMUM
**MAXIMUM



PLAN VIEW

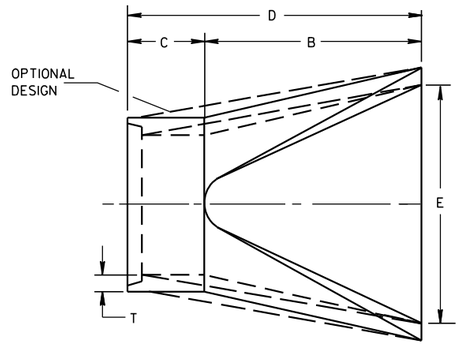


END VIEW

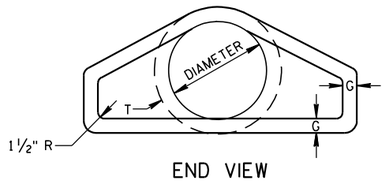


SIDE ELEVATION

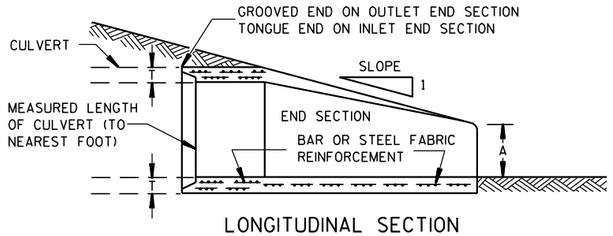
METAL ENDWALLS



PLAN

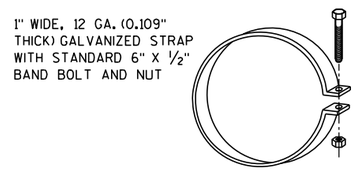


END VIEW



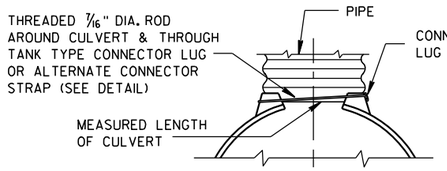
LONGITUDINAL SECTION

CONCRETE ENDWALLS

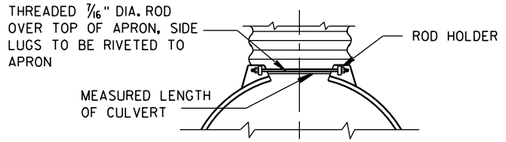


ALTERNATE FOR TYPE 1 CONNECTION

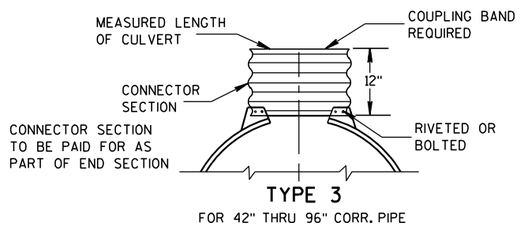
END SECTION CONNECTOR STRAP



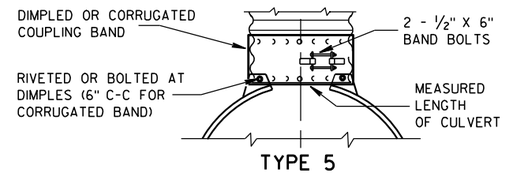
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

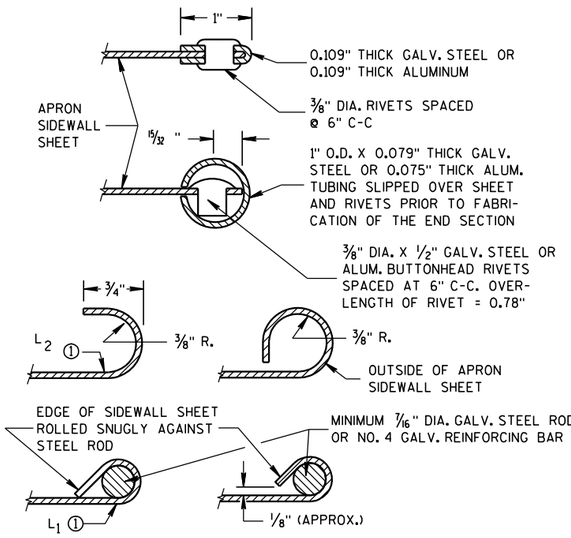
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

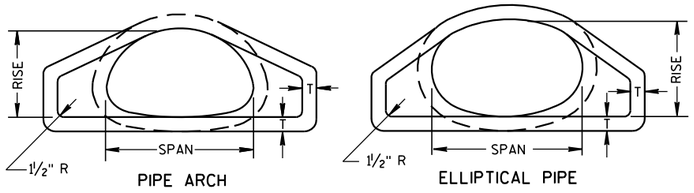
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

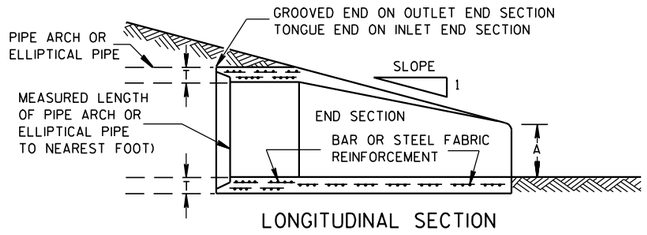
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

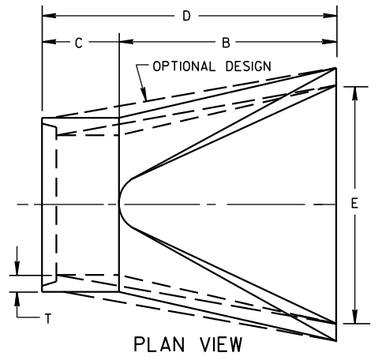
6
S.D.D. 8 F 1-11



END VIEW

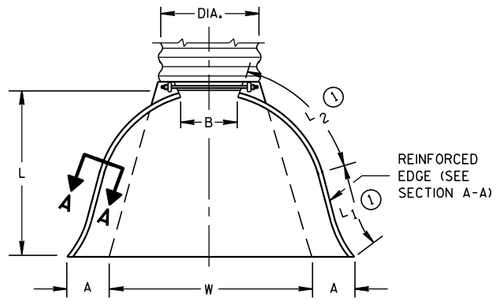


LONGITUDINAL SECTION

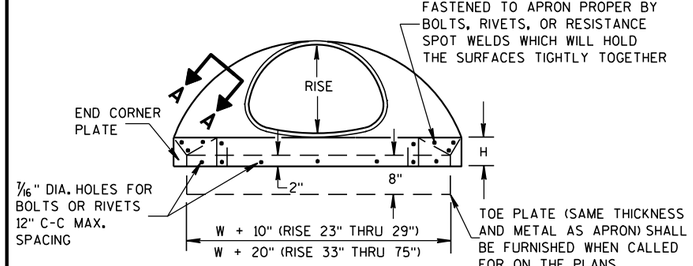


PLAN VIEW

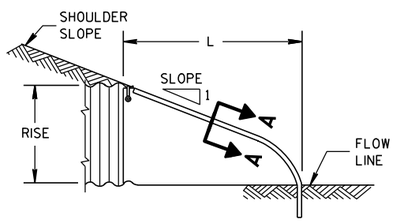
CONCRETE ENDWALLS



PLAN VIEW

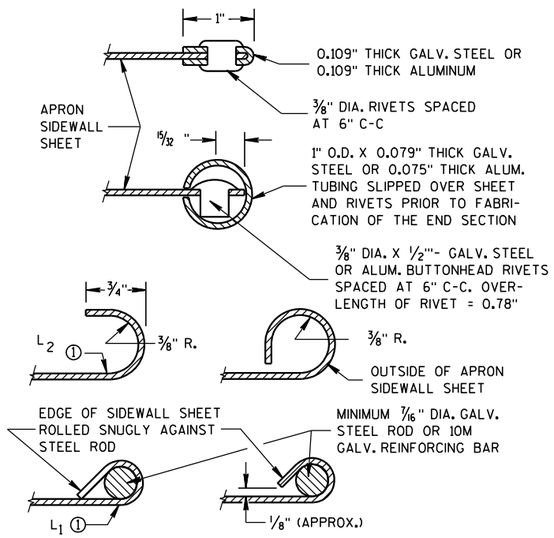


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

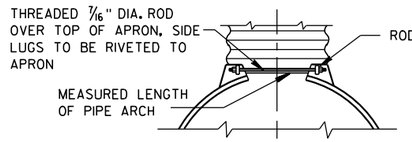
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

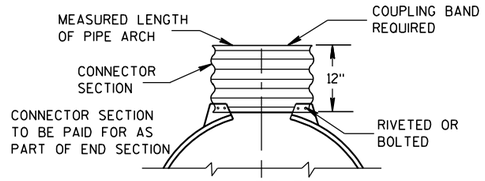
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



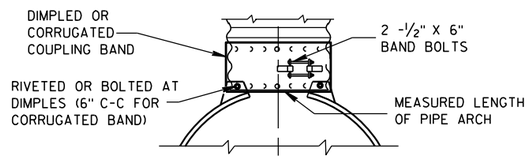
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

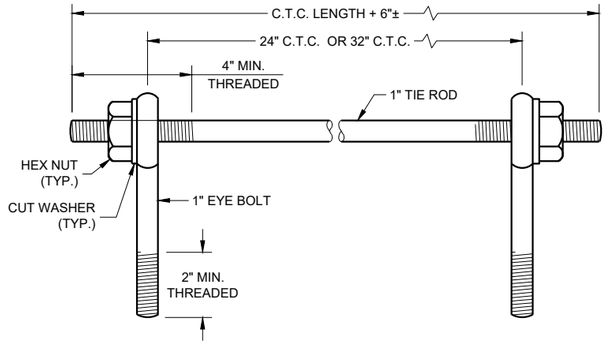
FHWA

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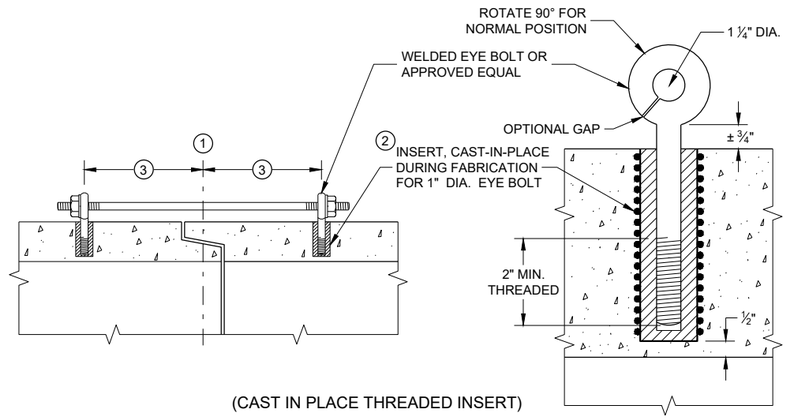
S.D.D. 8 F 2-1

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S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

(2) THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

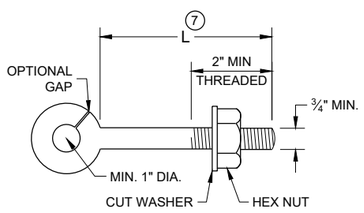
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

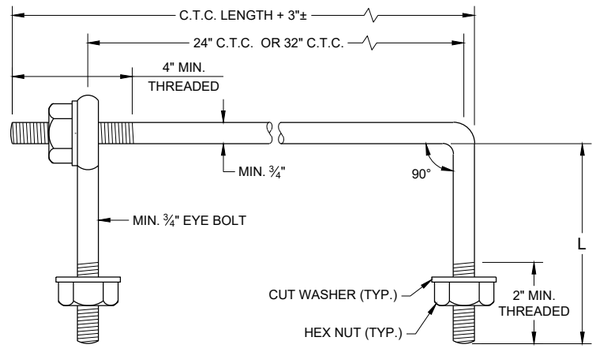
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

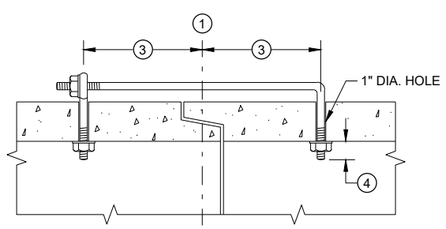


EYE BOLT (7)

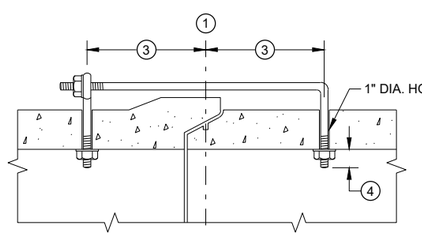
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

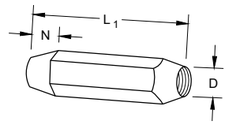
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

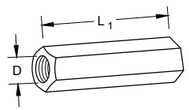
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



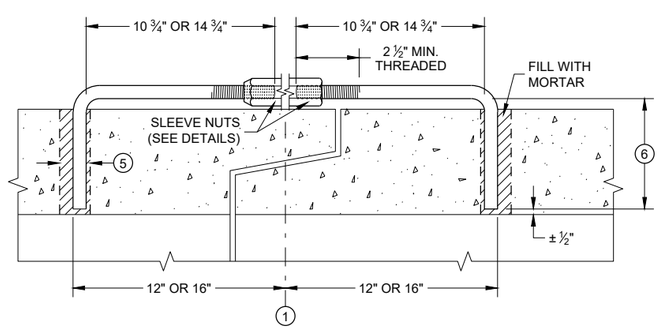
TAPERED



PLAIN

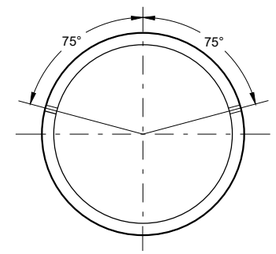
RIGHT AND LEFT THREADS

SLEEVE NUTS



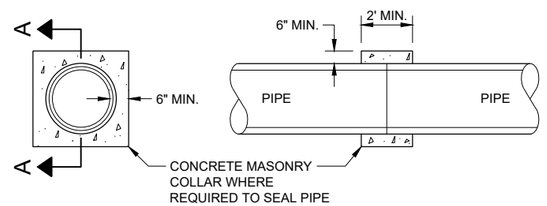
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

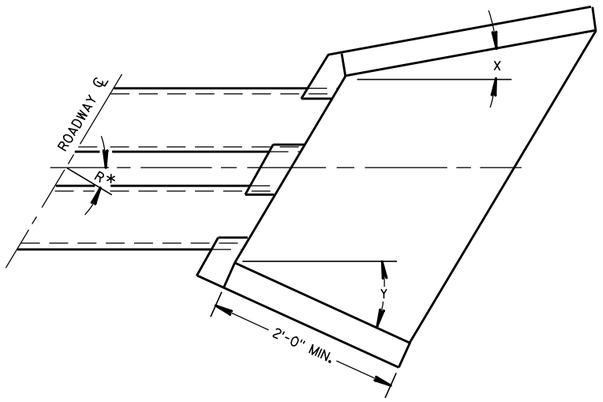
JOINT TIES FO CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

SDD 08F04 - 08

SDD 08F04 - 08



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

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.

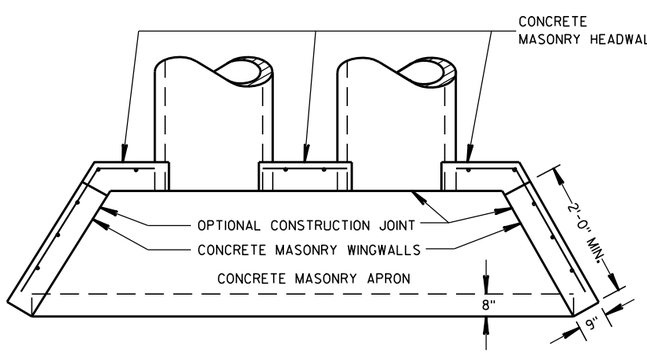
FILL SLOPES FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

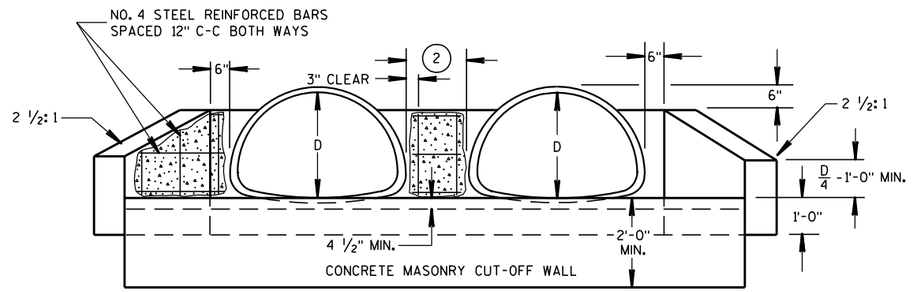
(2) THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	½ DIA. OR SPAN
OVER 72"	3'-0"



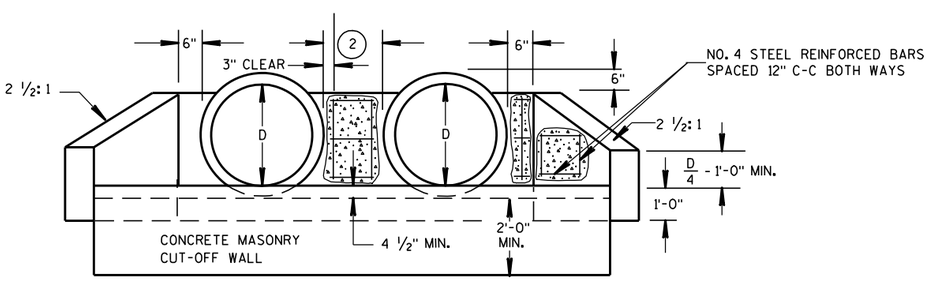
PLAN VIEW

CULVERT PIPE AND PIPE ARCH



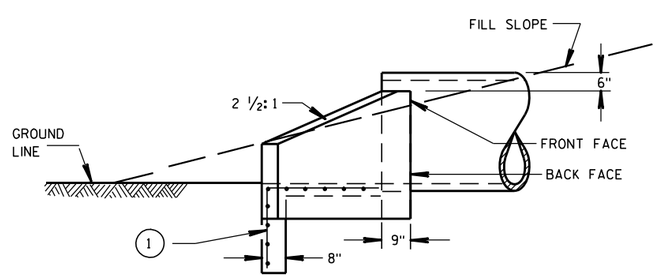
END ELEVATION

PIPE ARCH



END ELEVATION

CULVERT PIPE



SIDE ELEVATION

CULVERT PIPE AND PIPE ARCH

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/14/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

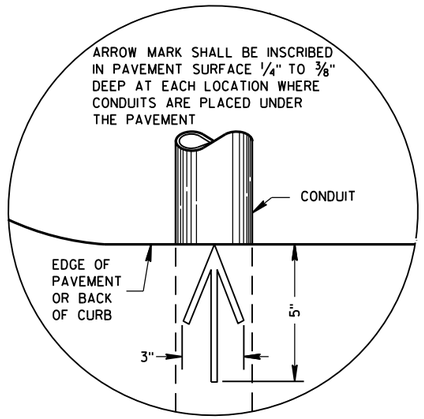
300

6

S.D.D. 8 F 10-1

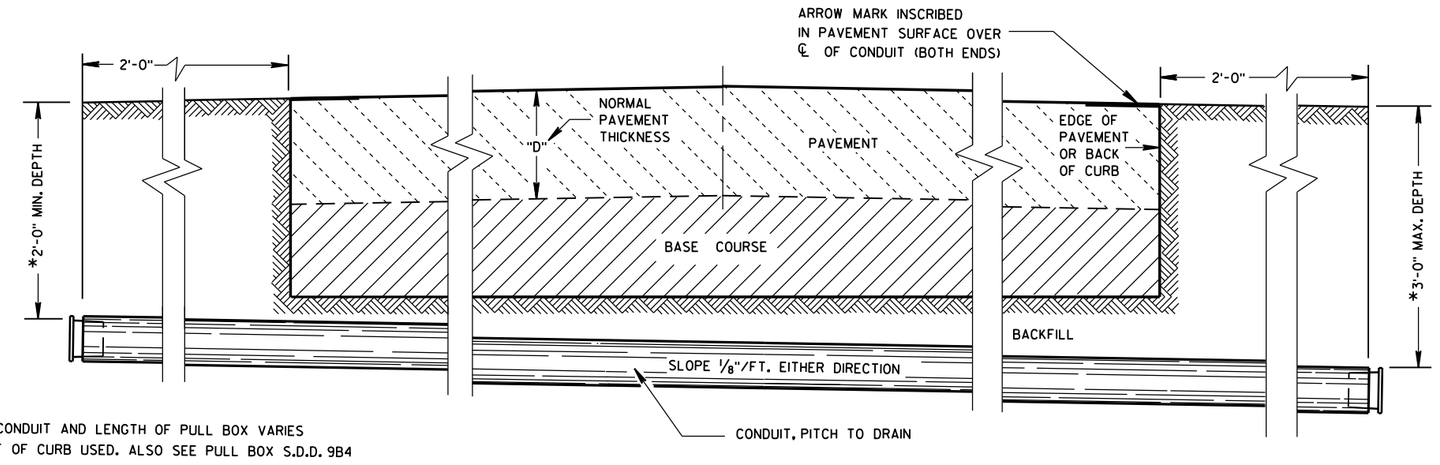
6

S.D.D. 8 F 10-1



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

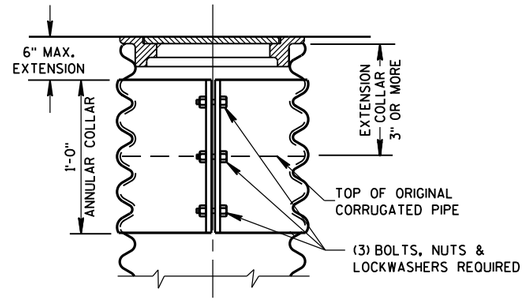
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

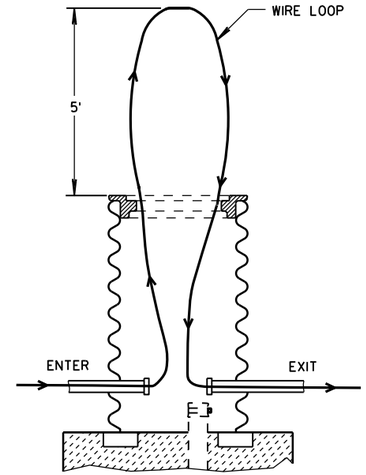
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

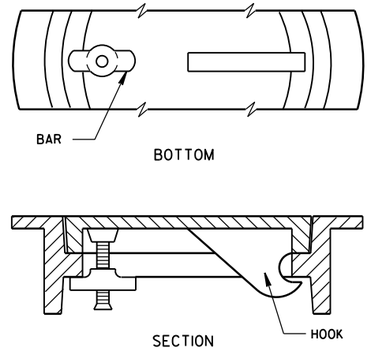
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

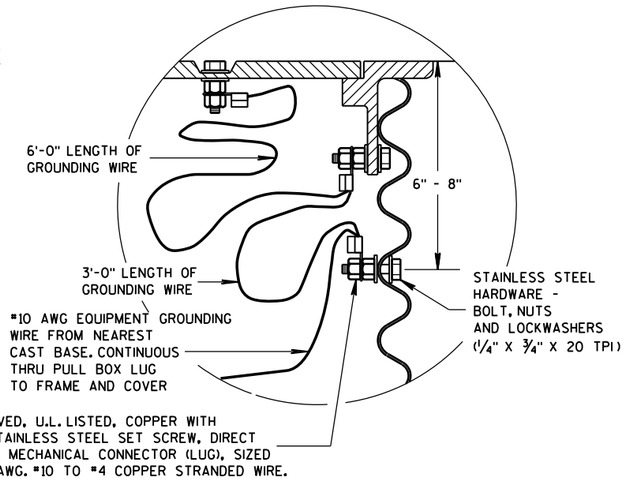


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

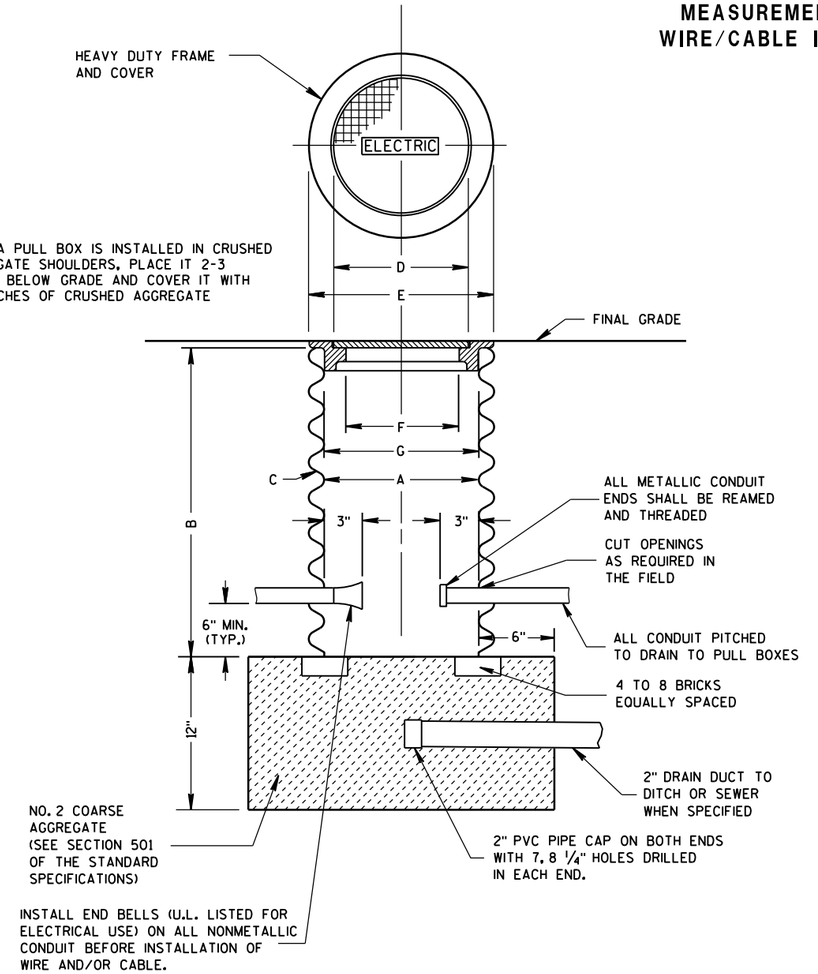


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

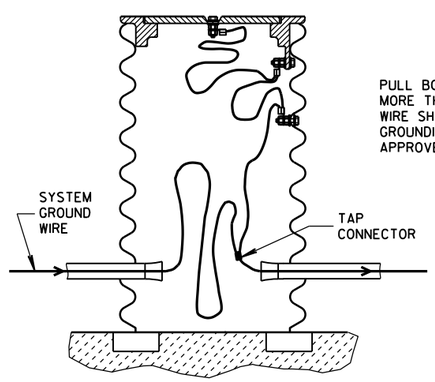
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 4-11

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		NON-CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 1/2	22 1/2
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

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

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

COVER SHALL BE MAGNETICALLY LOCATABLE.

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

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

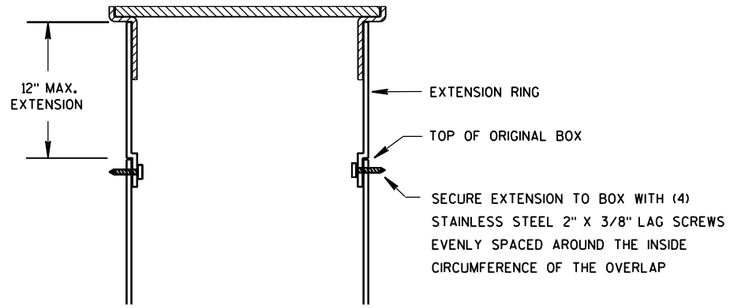
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

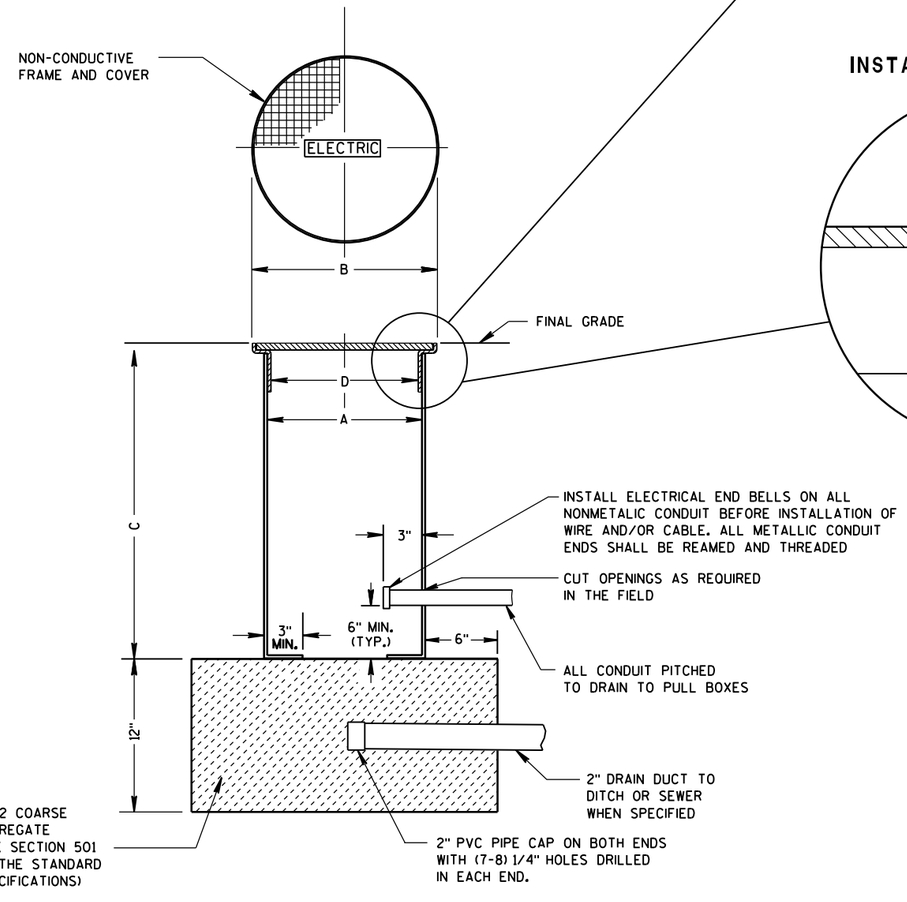
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.

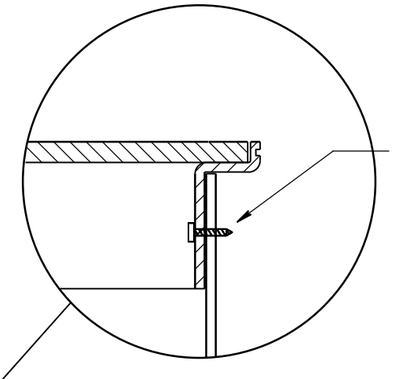


BOX EXTENSION

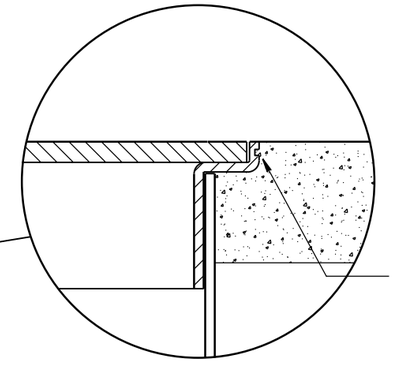


NON-CONDUCTIVE PULL BOX

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



PULL BOX NON-CONDUCTIVE

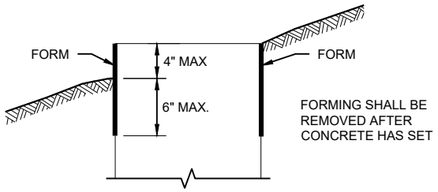
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 16-1

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

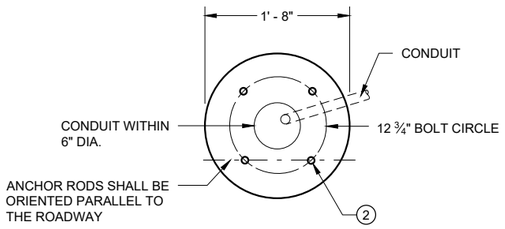
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

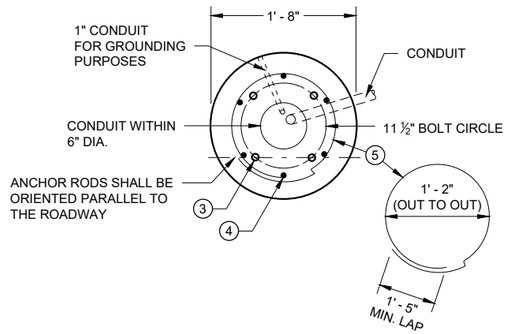
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

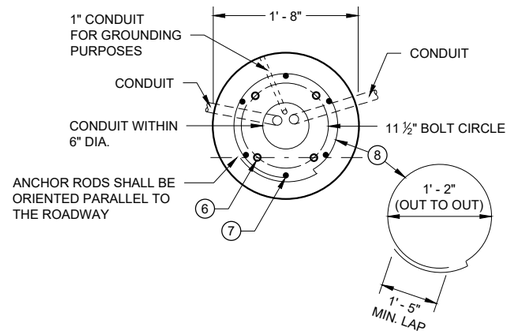
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

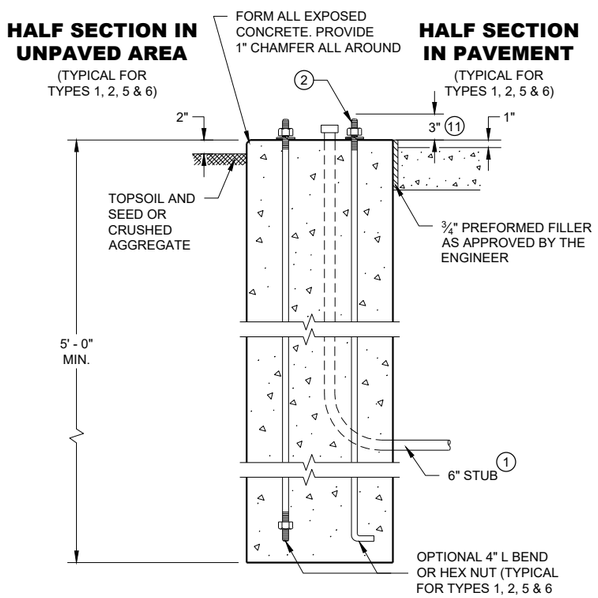
WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

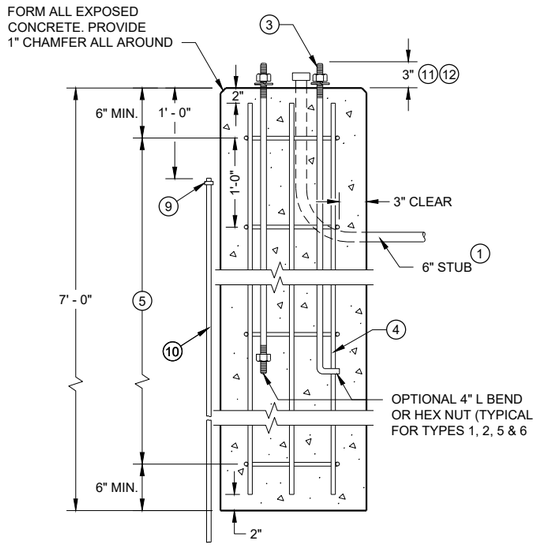




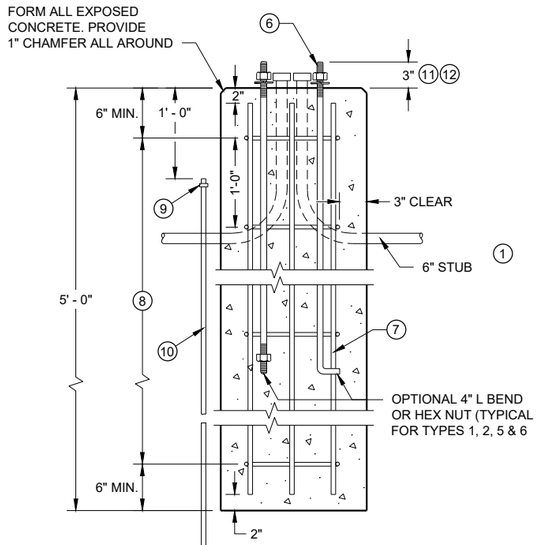




TYPE 1



TYPE 2



TYPE 5 & 6

1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 304
FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

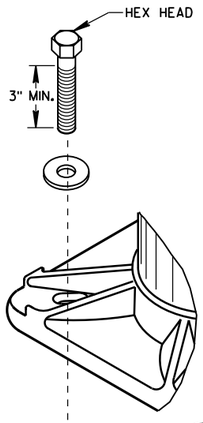
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

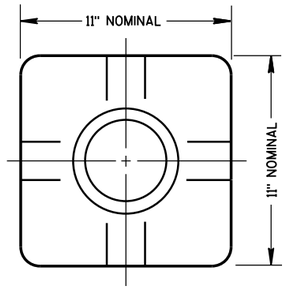
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

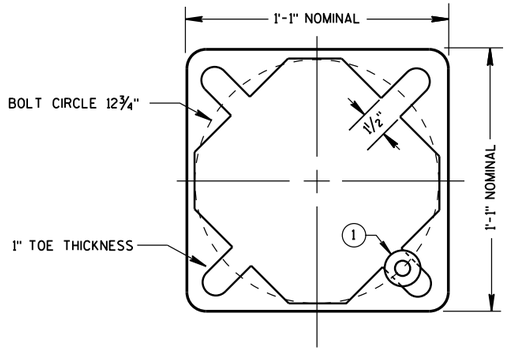
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

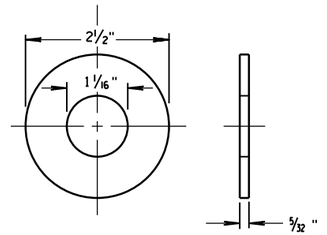




TOP VIEW
(PEDESTAL BASE)

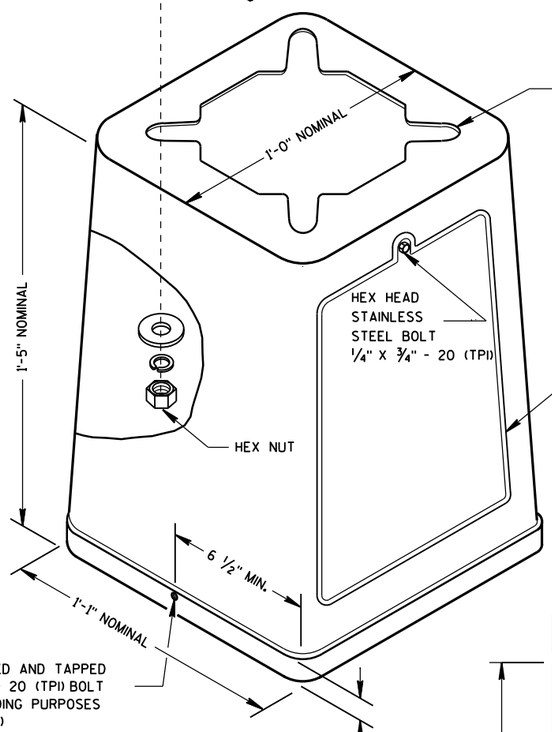


BOTTOM VIEW
(PEDESTAL BASE)

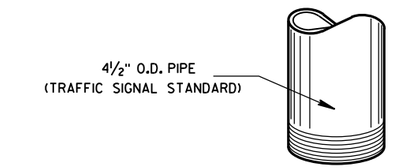


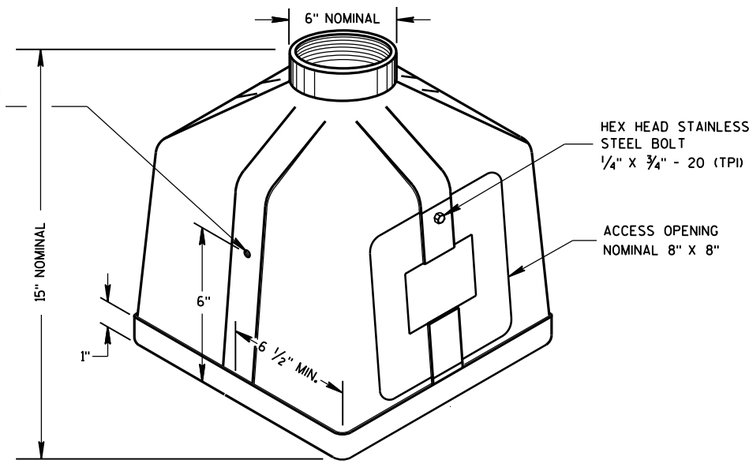
ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

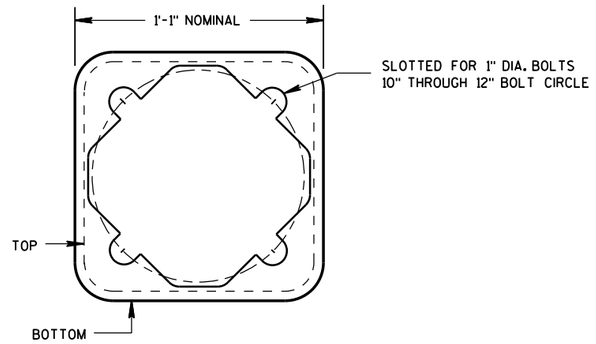


ISOMETRIC VIEW

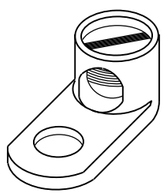




ISOMETRIC VIEW
PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

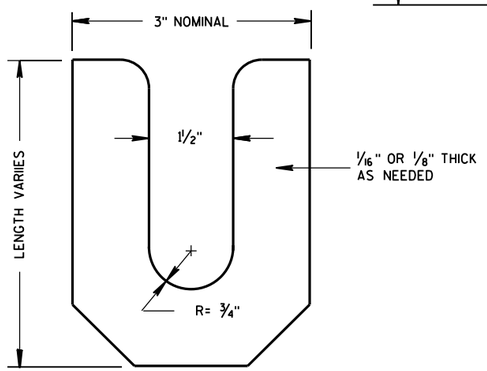


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

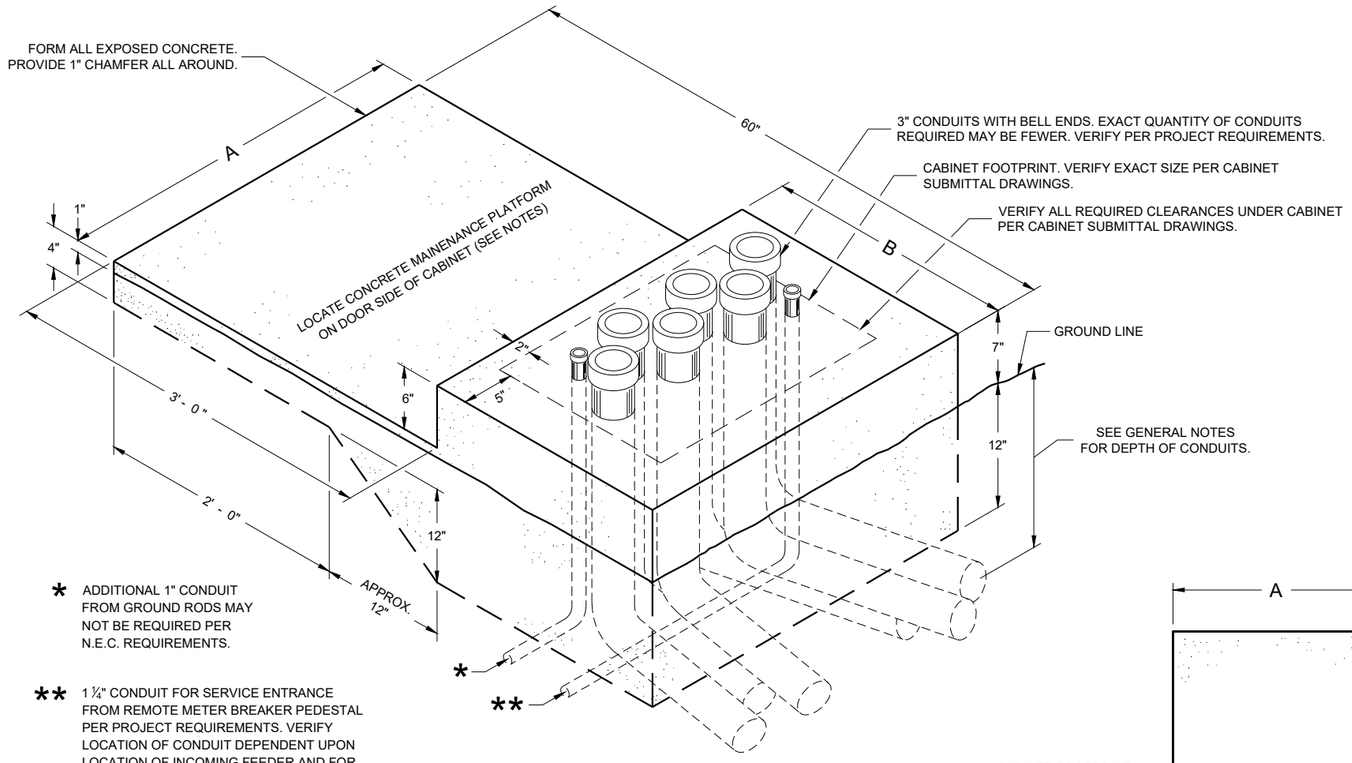
TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 3-4



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

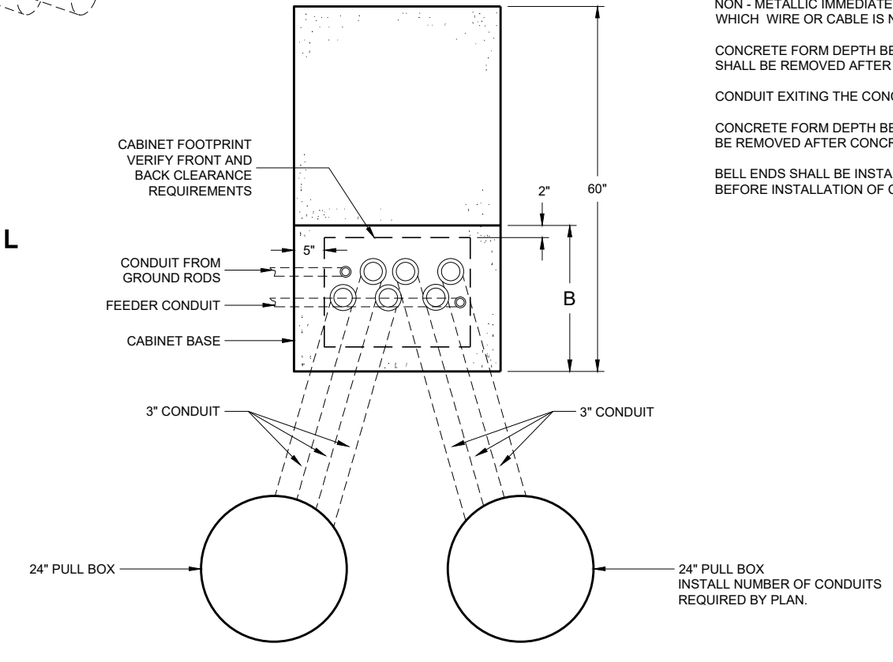
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS UNLESS DETERMINED BY THE ENGINEER IN THE FIELD.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCH MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE L

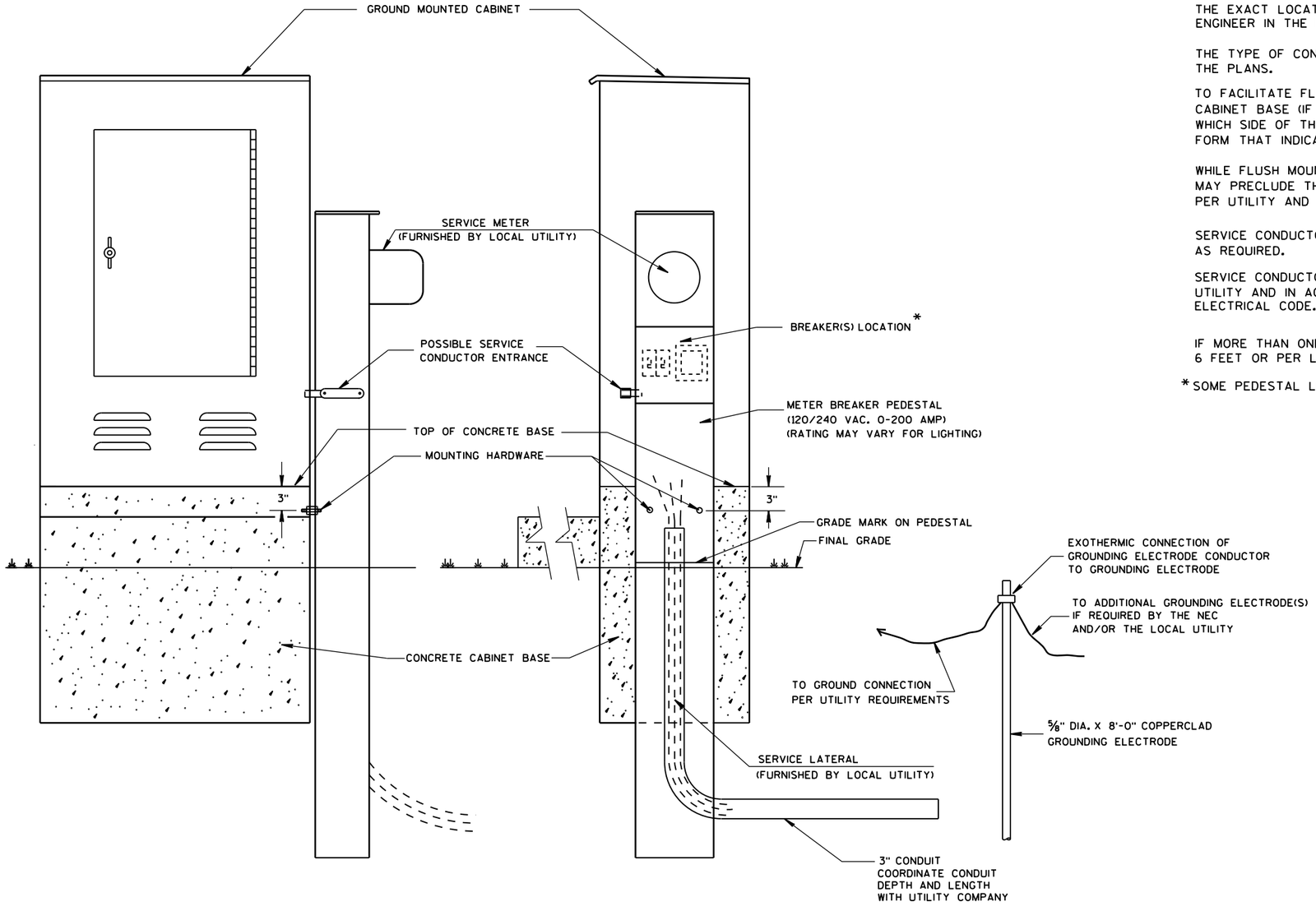
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 306

FHWA

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SDD 09C14 - 03



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

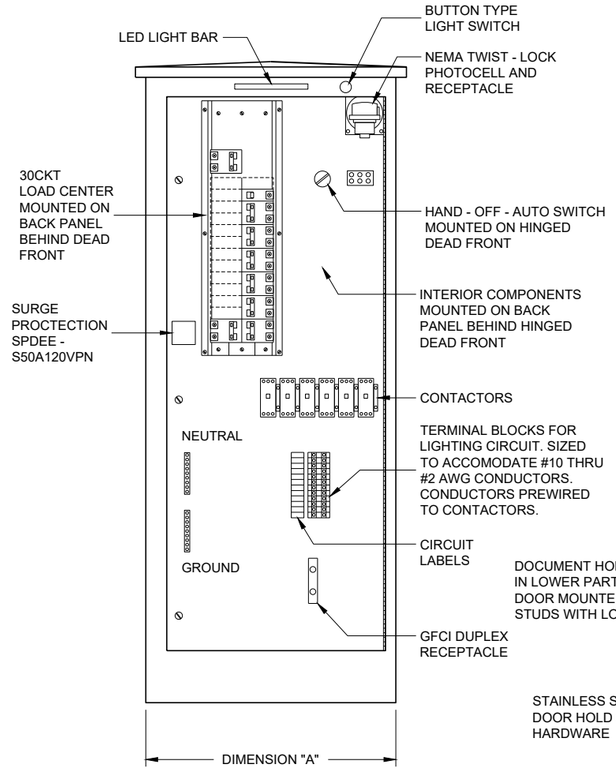
IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

*SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

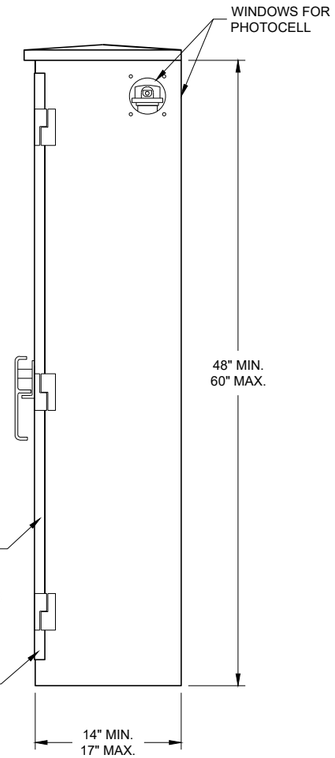
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept. 2014 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA	

6
S.D.D. 9 D 1-5

FRONT INTERIOR ELEVATION



SIDE VIEW



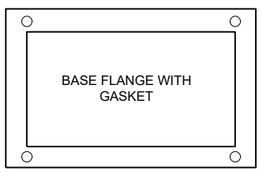
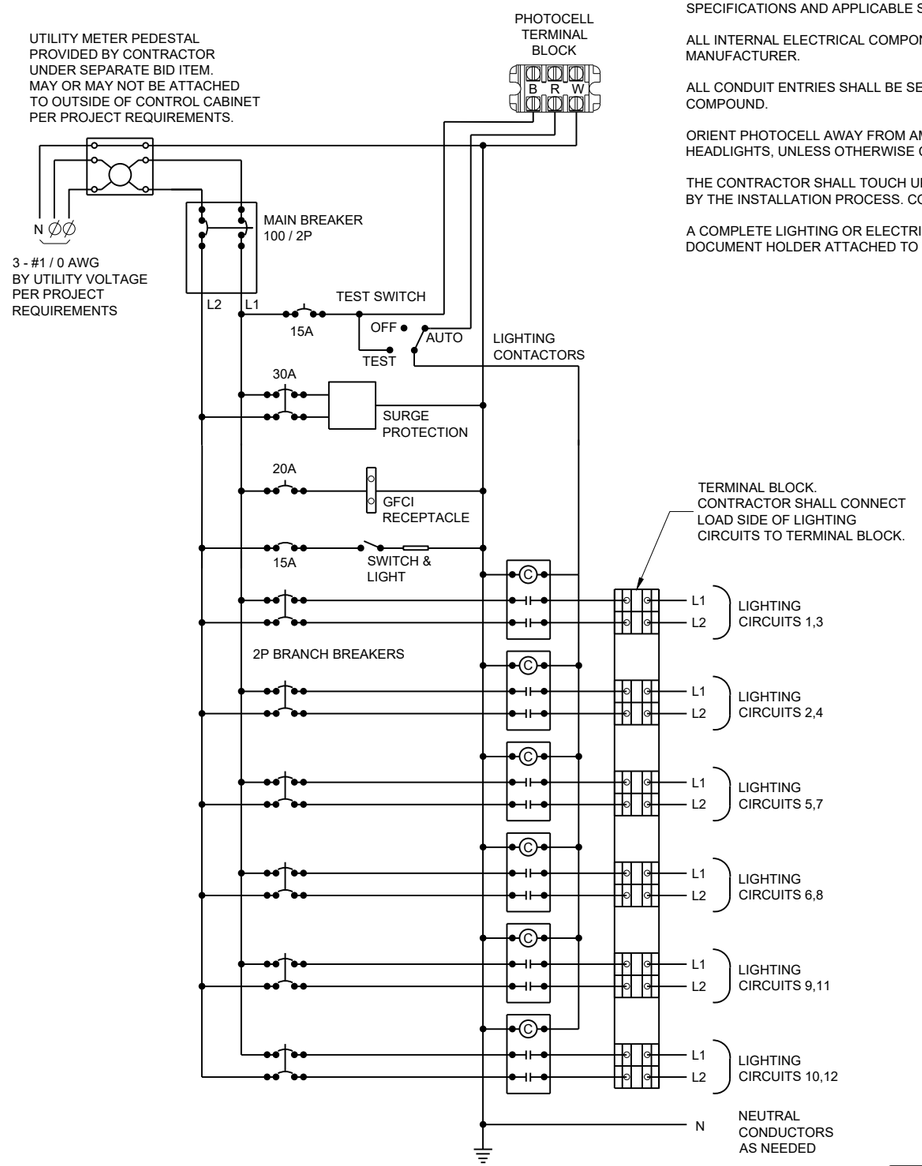


TABLE OF DIMENSIONS (INCHES)		
CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

GENERAL NOTES

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

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE - WIRED BY THE CABINENT MANUFACTURER.

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

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS, UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISION.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

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

LIGHTING CONTROL CABINET
120 / 240 VOLT

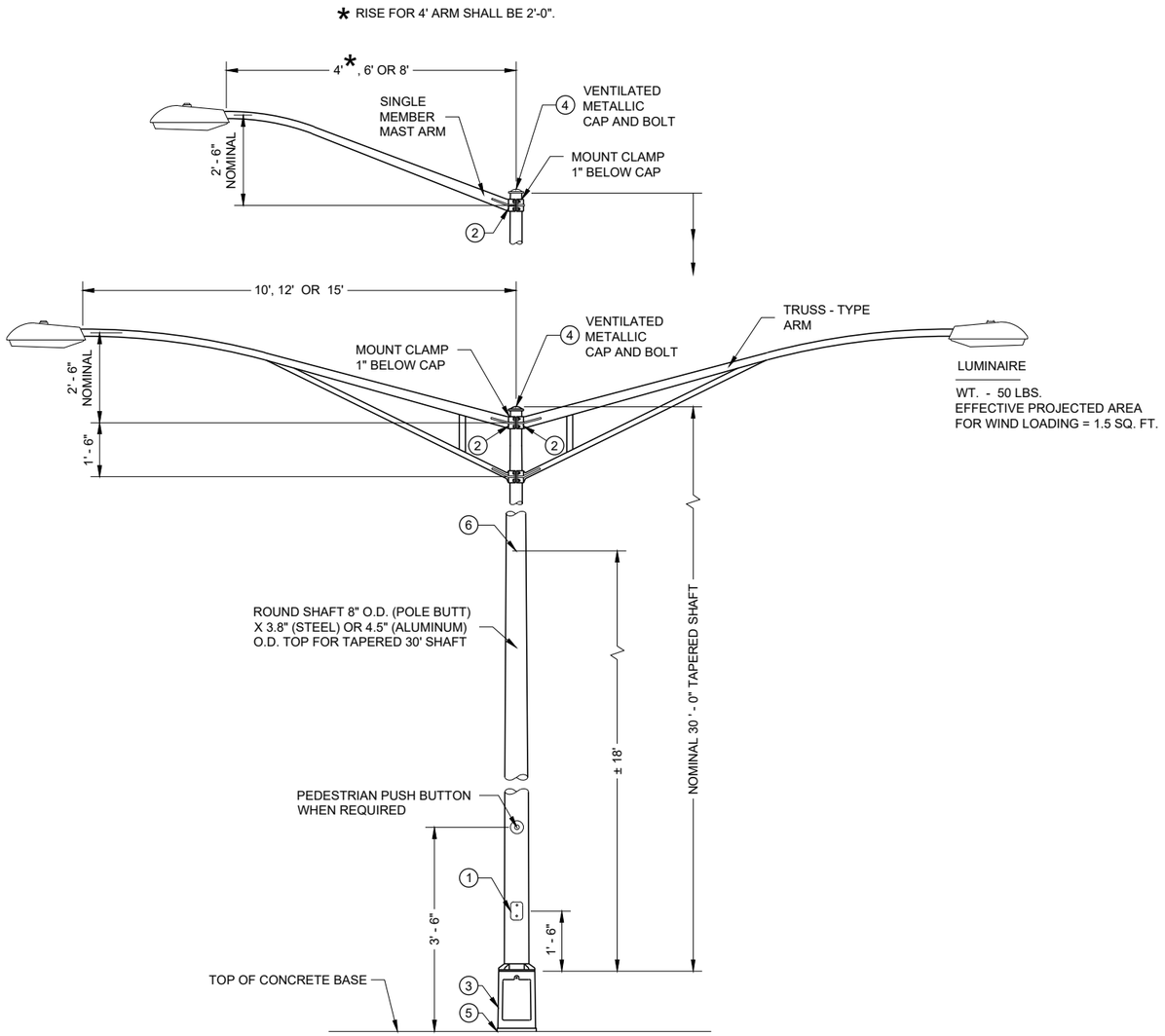
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 308

FHWA

6
SDD 09D04 - 03



TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

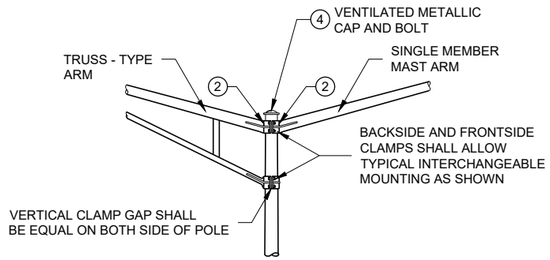
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.

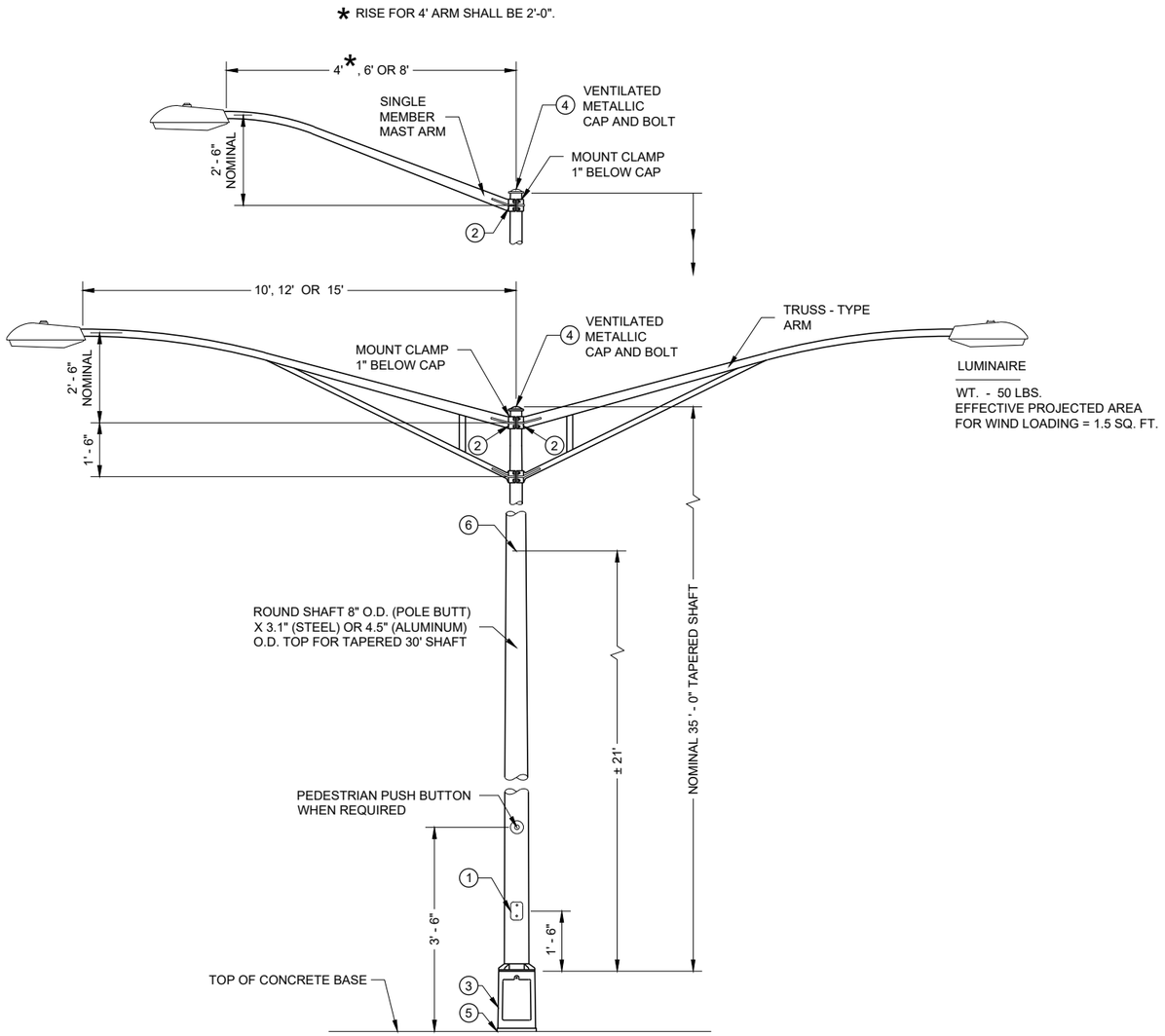


INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

6

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TYPE 6 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 6 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 6 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 6 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.219".

TYPE 6 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

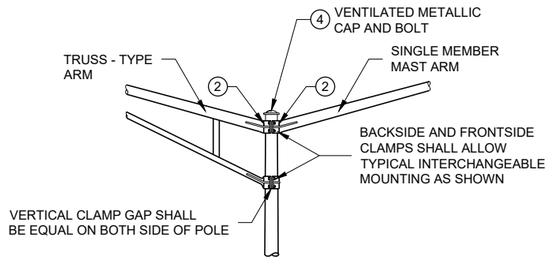
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



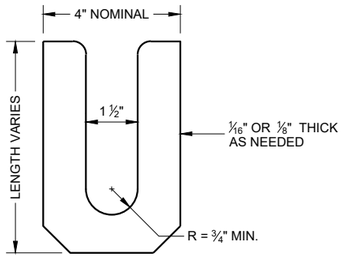
INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)

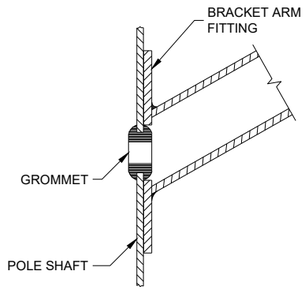
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

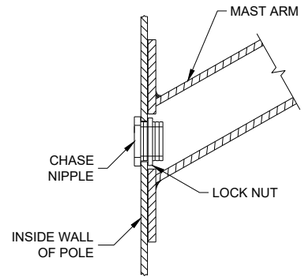
SDD 09E01 - 15e



LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

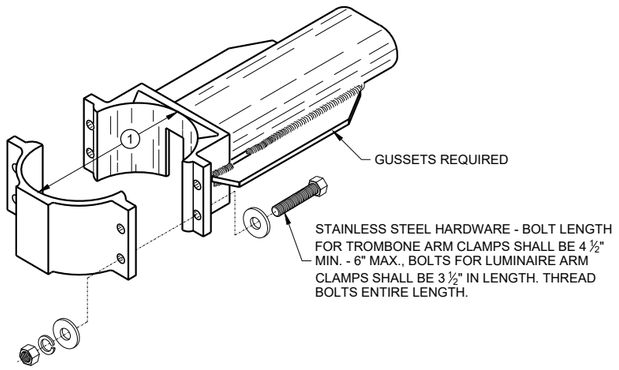
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

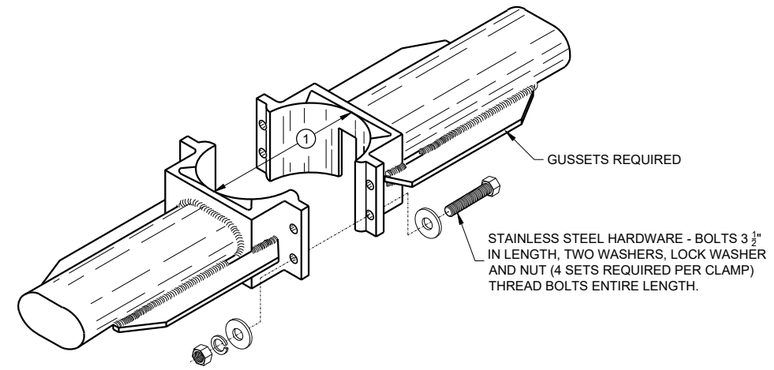
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

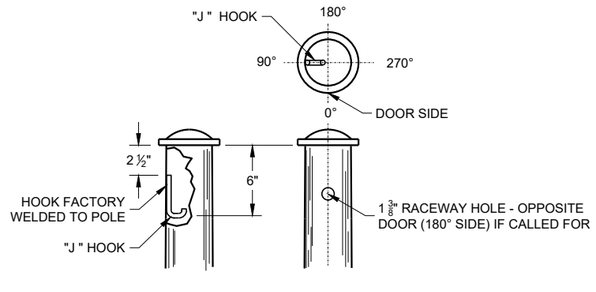
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



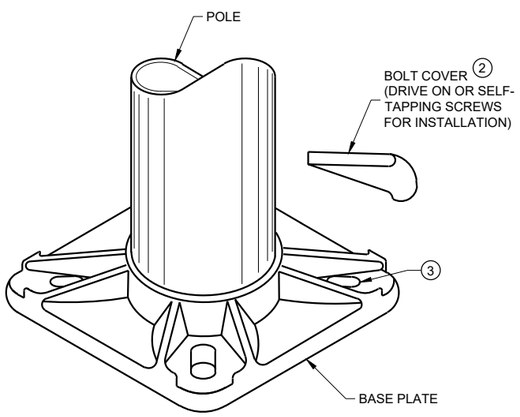
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



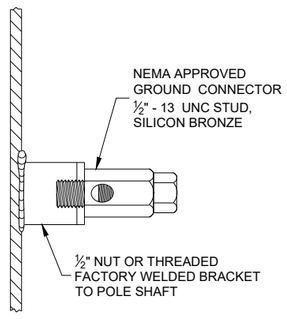
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

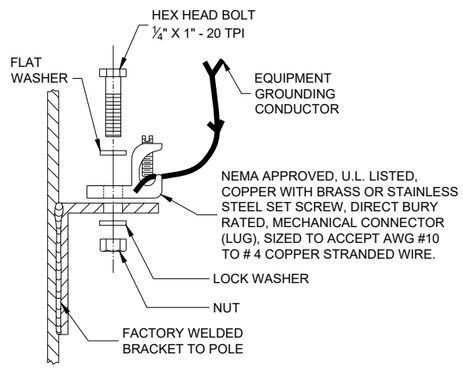


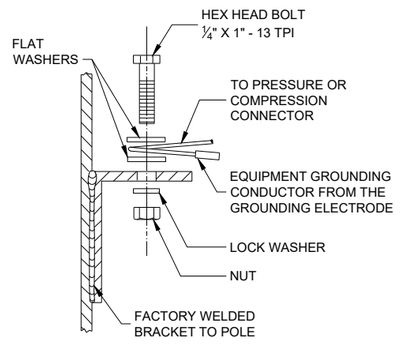
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 311

FHWA

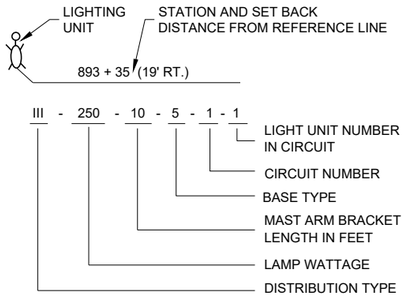
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SDD09A01 - 15g

GENERAL NOTES

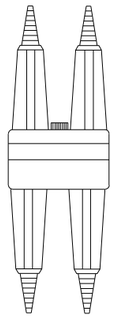
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

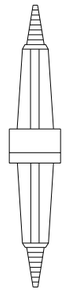
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



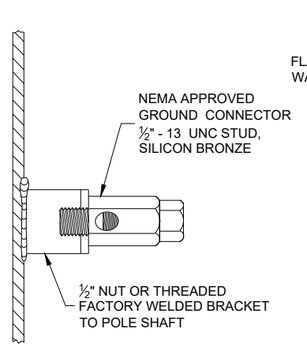
LIGHTING UNIT CODE
(TYPICAL)



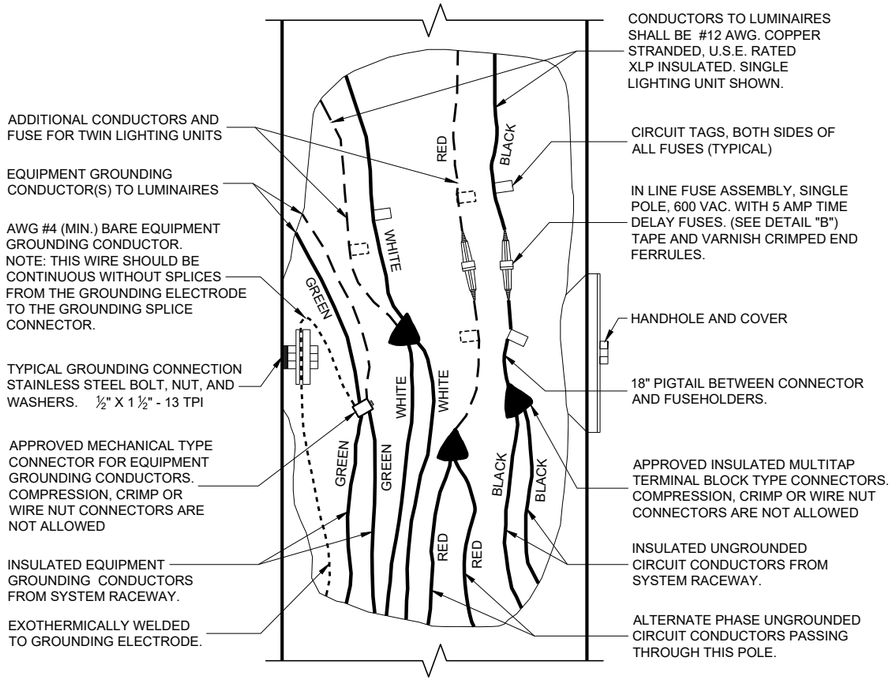
DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



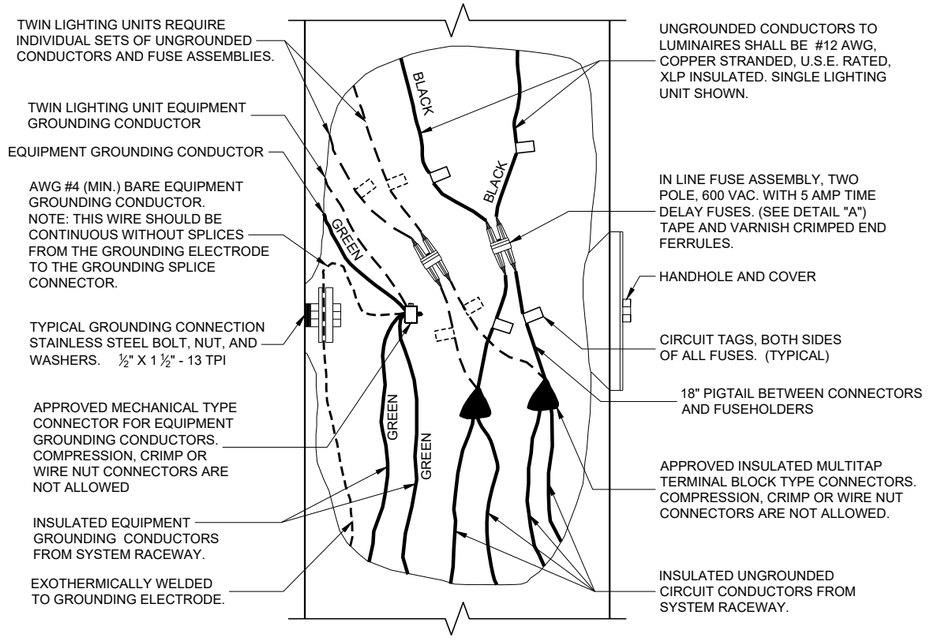
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



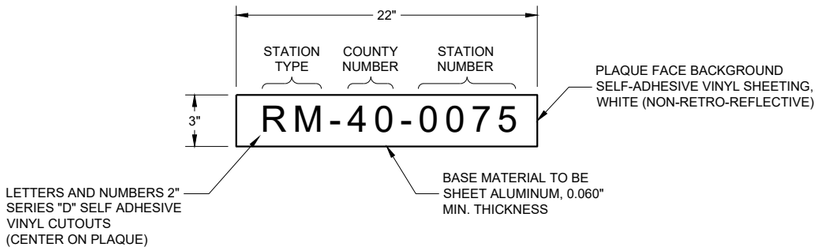
2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

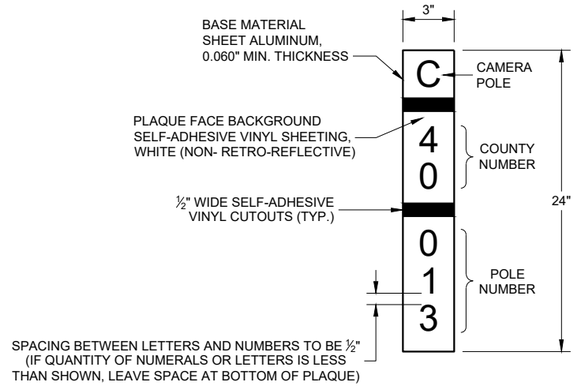
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 312

FHWA



CONTROL CABINET IDENTIFICATION PLAQUE DETAIL



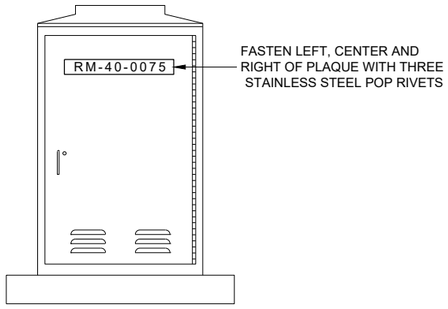
POLE IDENTIFICATION PLAQUE DETAIL

GENERAL NOTES

1. TWO PLAQUES PER CABINET REQUIRED ON CONTROL CABINET.
2. FASTEN ONE PLAQUE ON FRONT DOOR, UPPER HALF.
3. FASTEN ONE PLAQUE ON SIDE FACING LOCAL STREET. IF NO LOCAL STREET NEARBY, OR IF SUCH LOCATION COINCIDES WITH LOCATION OF PLAQUE IN NOTE 2 , FASTEN PLAQUE ON REAR OF CABINET, UPPER HALF.
4. COUNTY NUMBER NOT REQUIRED ON RAMP METER CABINETS.

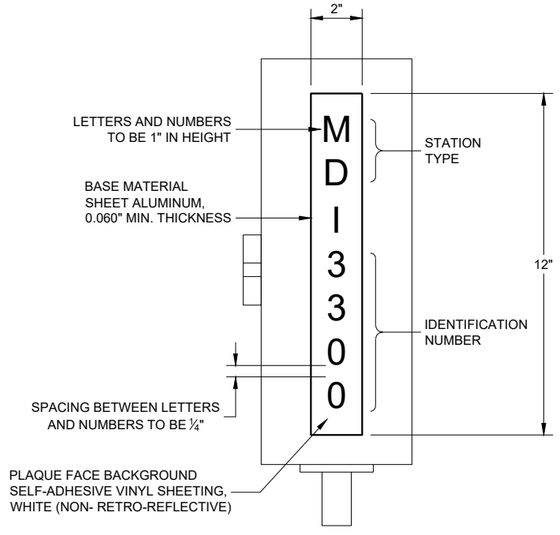
LEGEND STATION TYPE

RM - RAMP METER
CCTV - CLOSED CIRCUIT TELEVISION
ATR - AUTOMATIC TRAFFIC RECORDER
SDS - SYSTEM DETECTOR STATION
MD - MICROWAVE DETECTOR



CONTROL CABINET IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

(TYPICAL ALL CONTROL CABINETS)



MICROWAVE DETECTOR FIELD CABINET IDENTIFICATION PLAQUE DETAIL

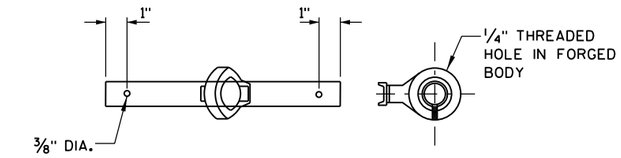
IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

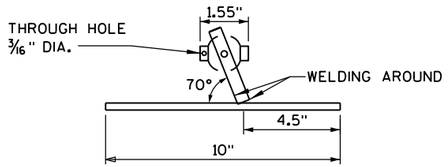
APPROVED
September 2014
DATE
/S/ Ahmet Demirbilek
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SDD 09H11 - 01

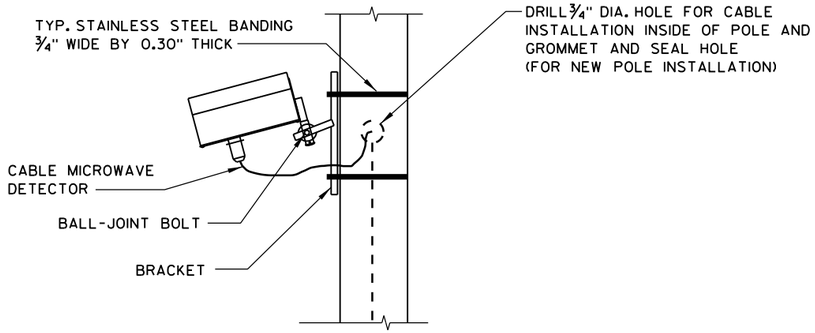


TOP VIEW

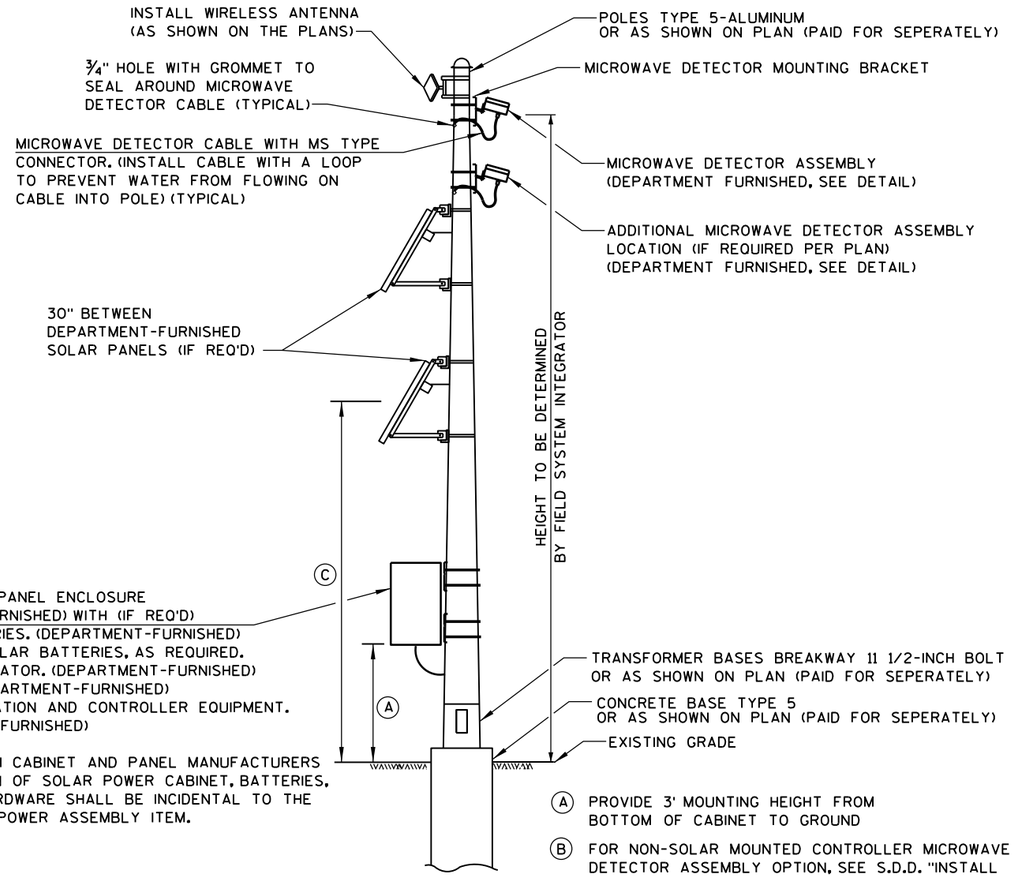


SIDE VIEW

MICROWAVE DETECTOR MOUNTING BRACKET DETAIL



TYPICAL MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY INSTALLATION DETAIL



(B) INSTALL SOLAR PANEL ENCLOSURE (DEPARTMENT-FURNISHED) WITH (IF REQ'D)
- SOLAR BATTERIES. (DEPARTMENT-FURNISHED)
- ADDITIONAL SOLAR BATTERIES, AS REQUIRED.
- CHARGE REGULATOR. (DEPARTMENT-FURNISHED)
- INVERTER. (DEPARTMENT-FURNISHED)
- ITS COMMUNICATION AND CONTROLLER EQUIPMENT. (DEPARTMENT-FURNISHED)

COORDINATE WITH CABINET AND PANEL MANUFACTURERS ON INSTALLATION OF SOLAR POWER CABINET, BATTERIES, AND PANELS. HARDWARE SHALL BE INCIDENTAL TO THE INSTALL SOLAR POWER ASSEMBLY ITEM.

(A) PROVIDE 3' MOUNTING HEIGHT FROM BOTTOM OF CABINET TO GROUND

(B) FOR NON-SOLAR MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY OPTION, SEE S.D.D. "INSTALL MOUNTED CABINET ON POLES"

(C) PROVIDE 15' MOUNTING HEIGHT (MIN.) FROM SOLAR PANEL TO GROUND

MICROWAVE DETECTOR ASSEMBLY

MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

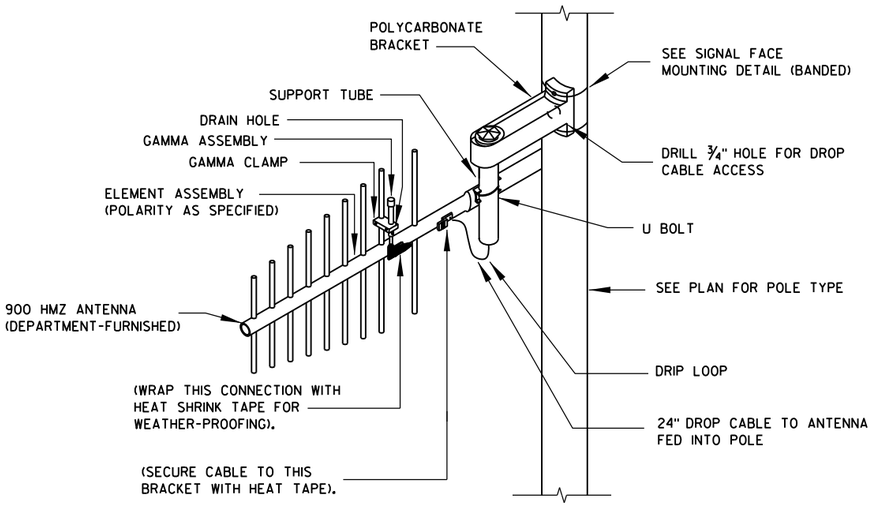
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S.D.D. 9 H 15-1

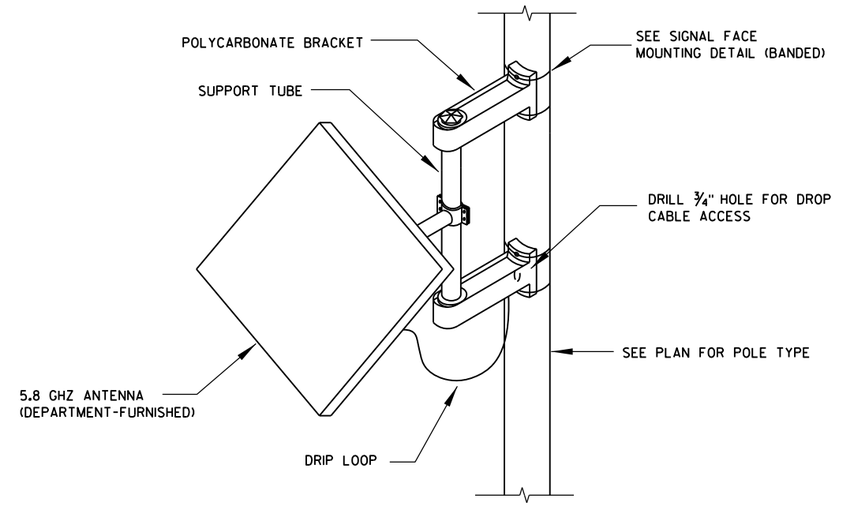
GENERAL NOTES

INSTALL DRIP LOOPS ON LOOSE CABLES TO PREVENT WATER FROM FLOWING ON CABLE AND ENTERING POLES/ENCLOSURES.

ALL MOUNTING EQUIPMENT REQUIRED IS INCIDENTIAL TO BID ITEM "INSTALL WIRELESS ANTENNA".



900 MHZ ANTENNA



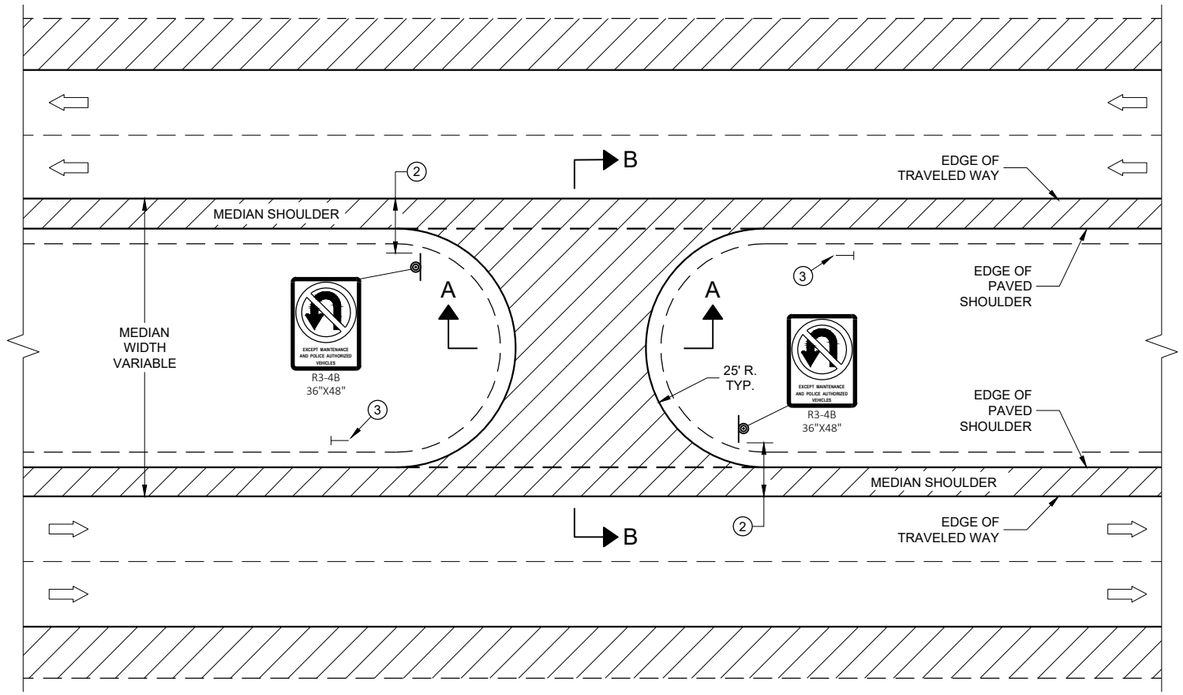
5.8 GHZ ANTENNA

INSTALL WIRELESS ANTENNA

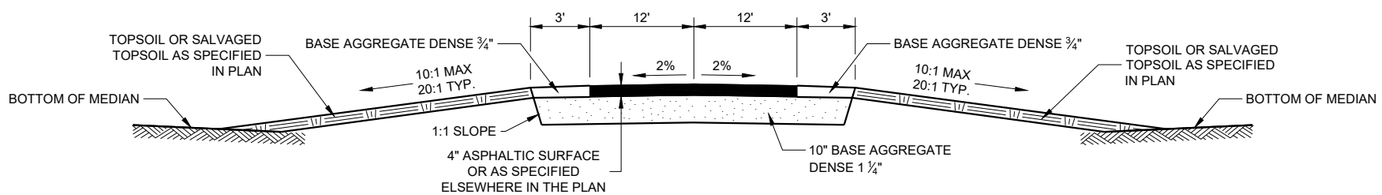
INSTALL WIRELESS ANTENNA	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
May 2017 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA	

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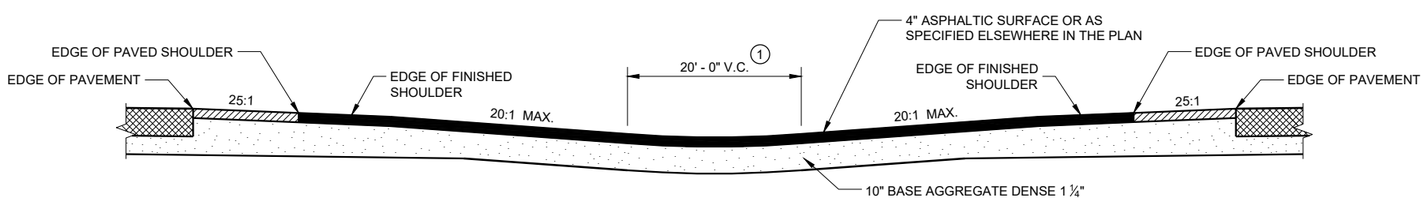
S.D.D. 9 H 16-1



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

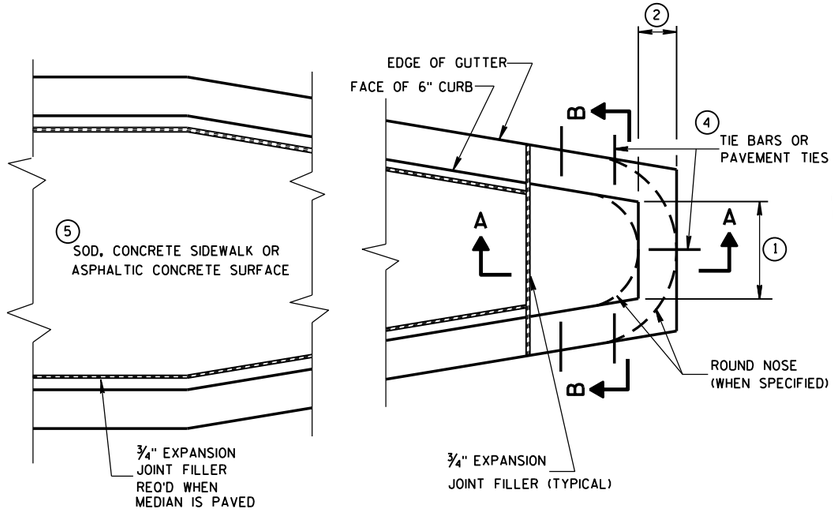
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

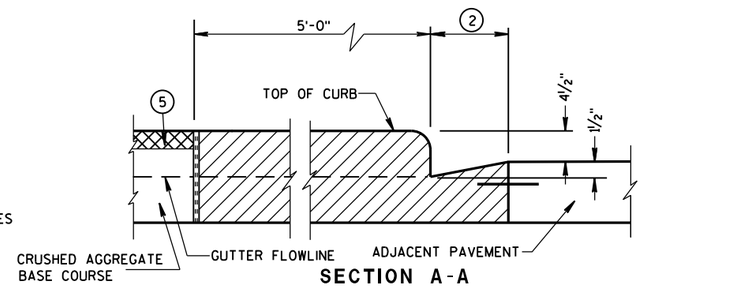
APPROVED
November 2019
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6
SDD 11A01 - 06





CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

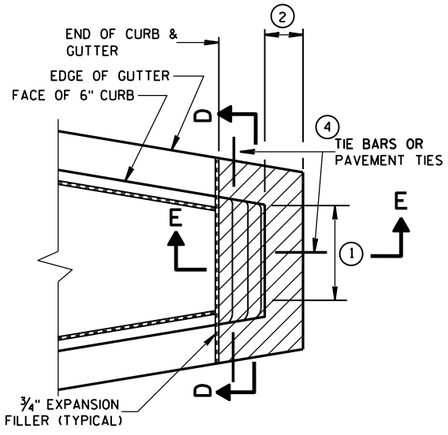
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

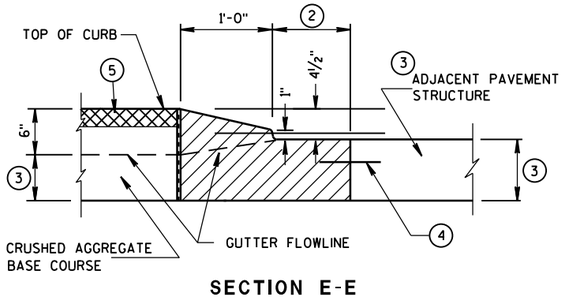
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

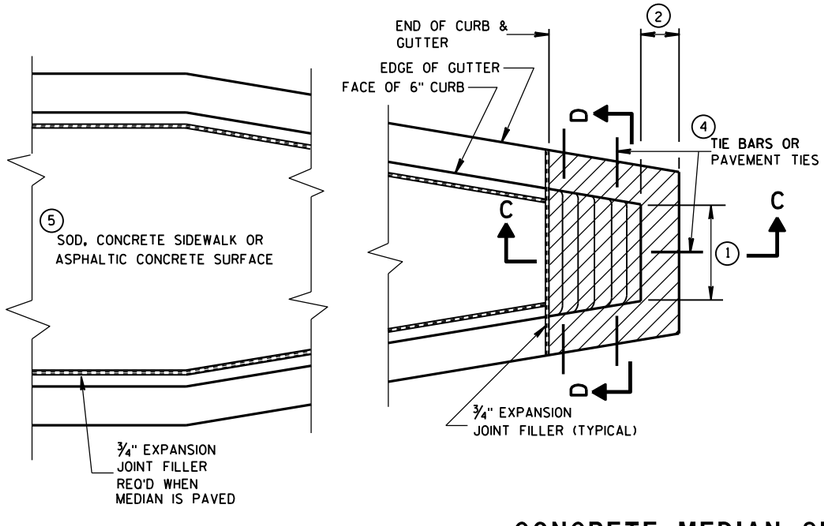
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

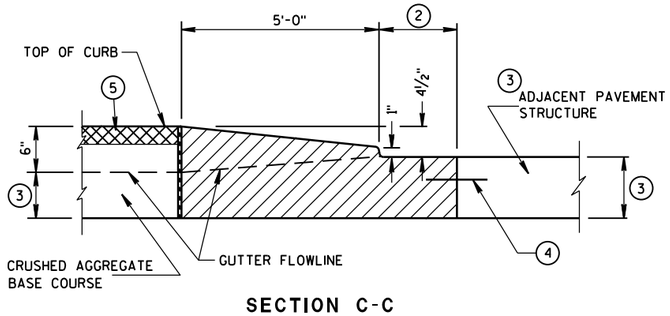




SECTION E-E

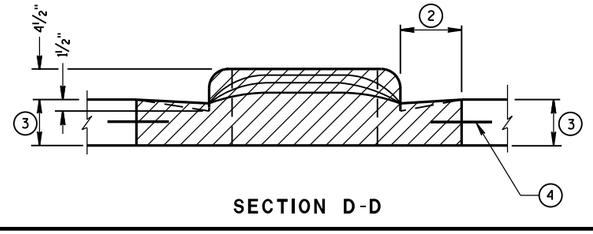
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

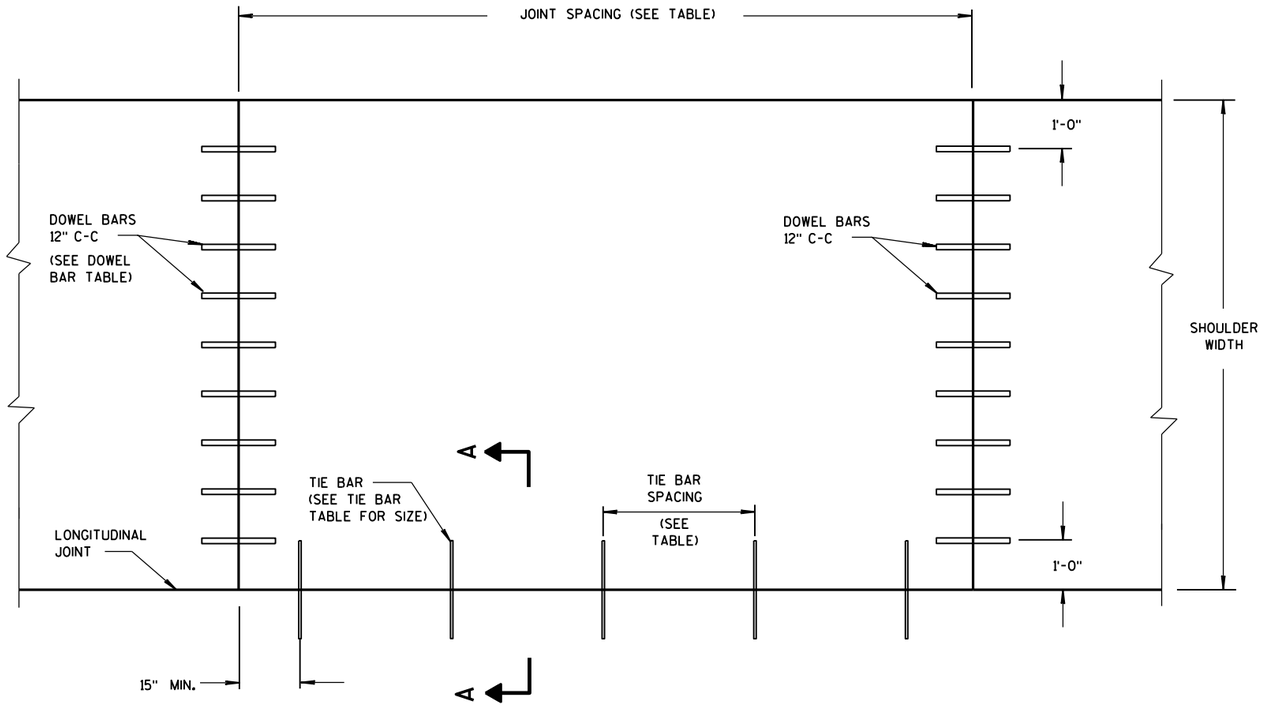
APPROVED
6/8/2006 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

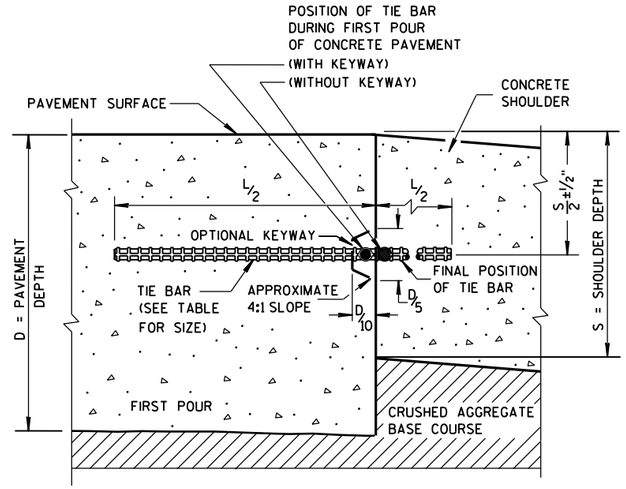
GENERAL NOTES

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.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER***	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

*** FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FOR THE AVERAGE THICKNESS OF THE CROSS SECTION.

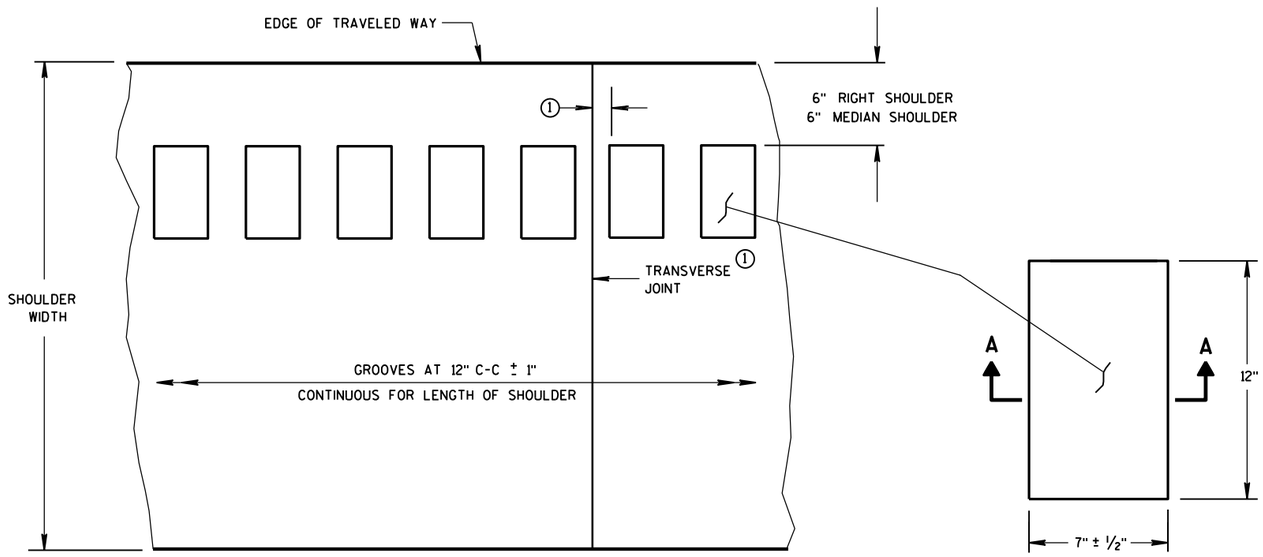
CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPERINTENDENT
FHWA

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S.D.D. 13 A 3-6



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

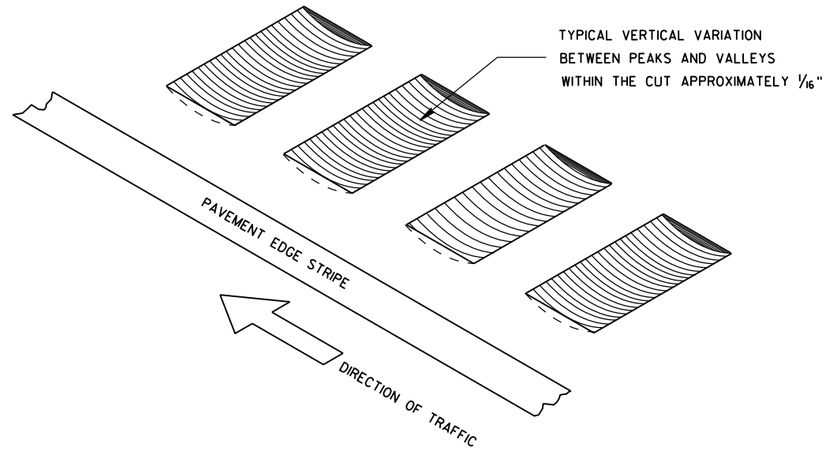
GENERAL NOTES

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

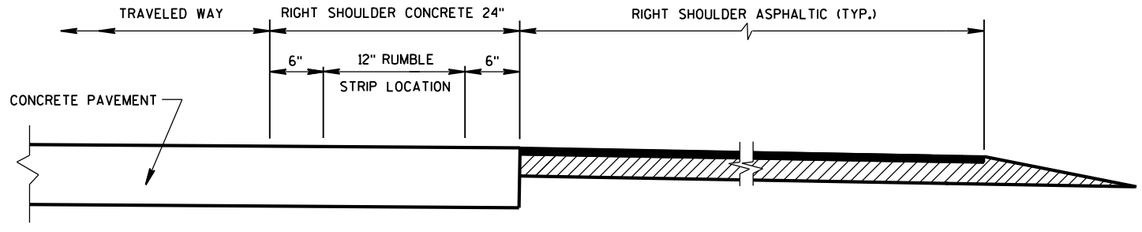
RUMBLE STRIPS ON EXPRESSWAYS

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.

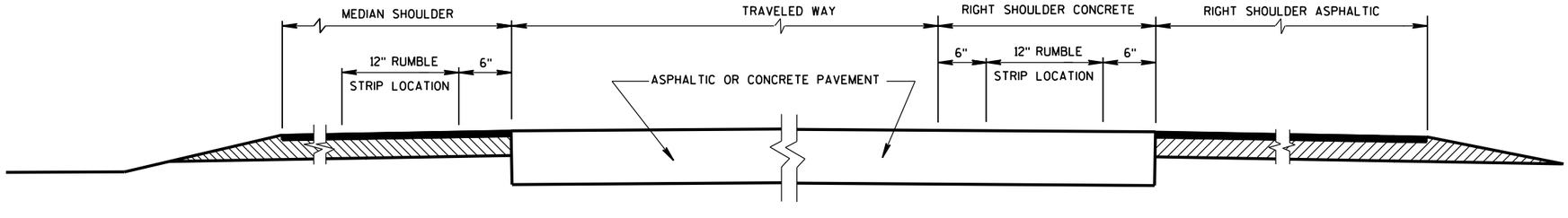
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



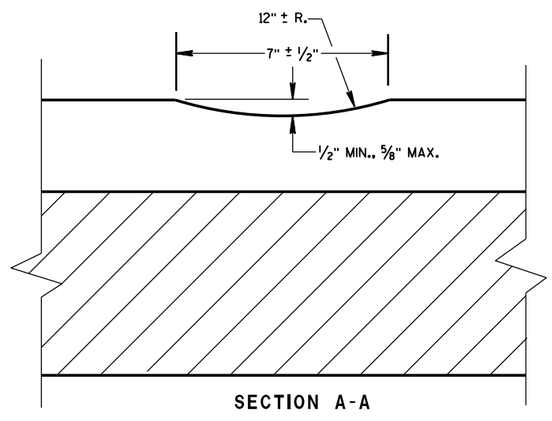
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

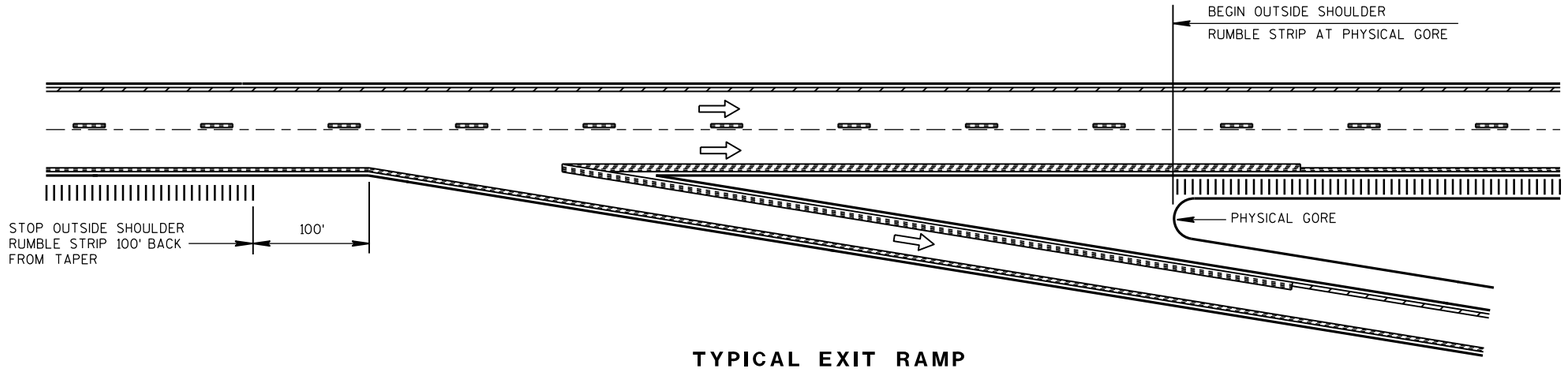
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

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



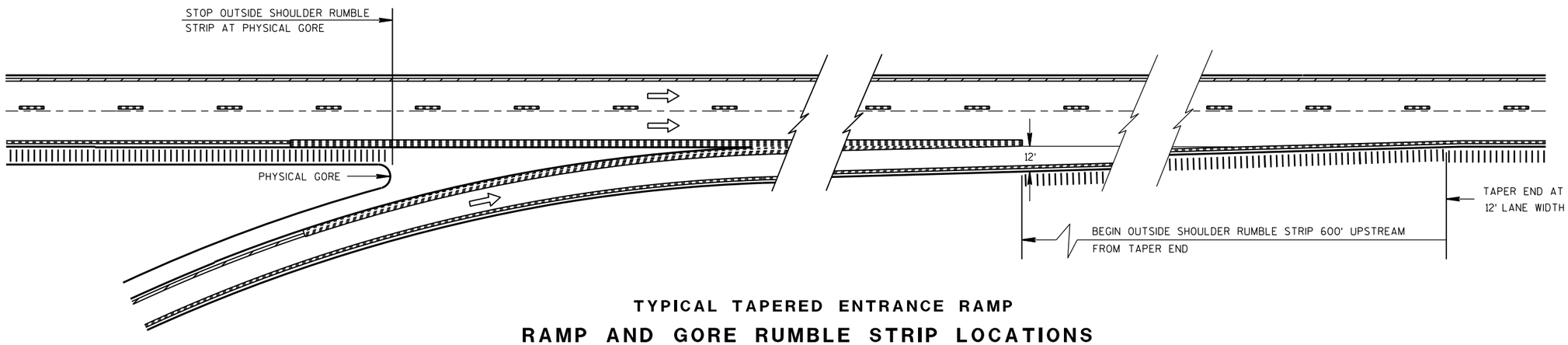
TYPICAL EXIT RAMP

NOTES:

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

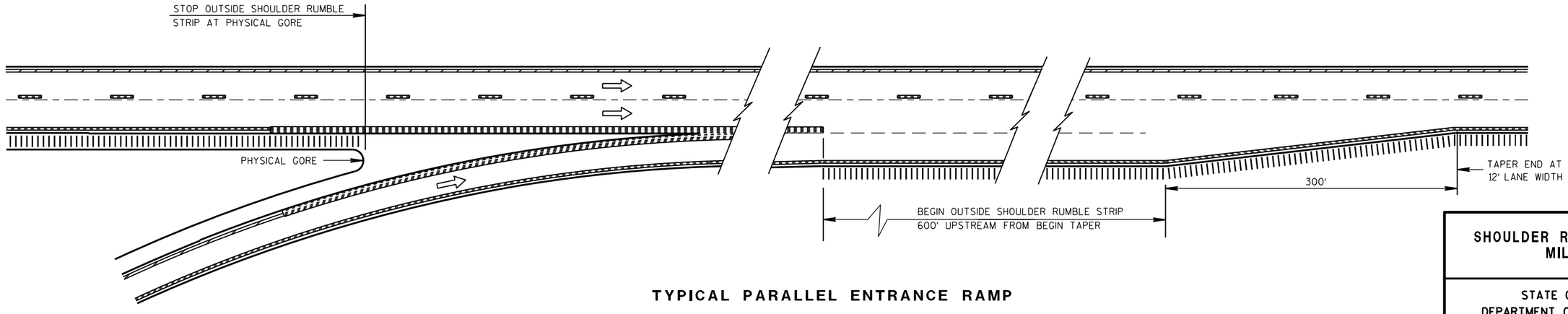
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

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

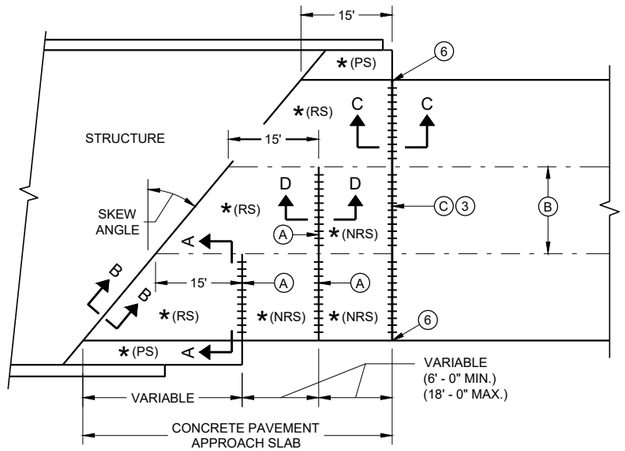
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

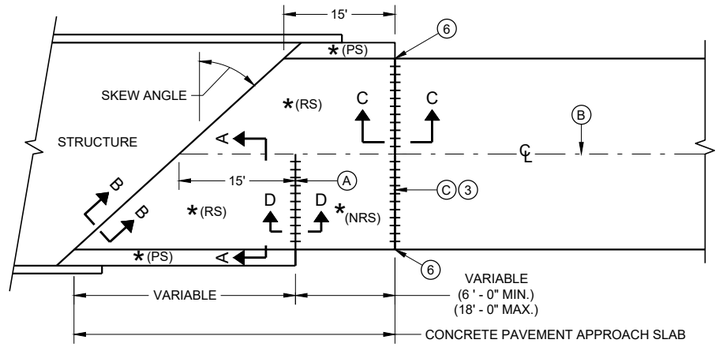
APPROVED
12/17/2012 — DATE
/S/ Jerry H. Zoga — ROADWAY STANDARDS ENGINEER
FHWA

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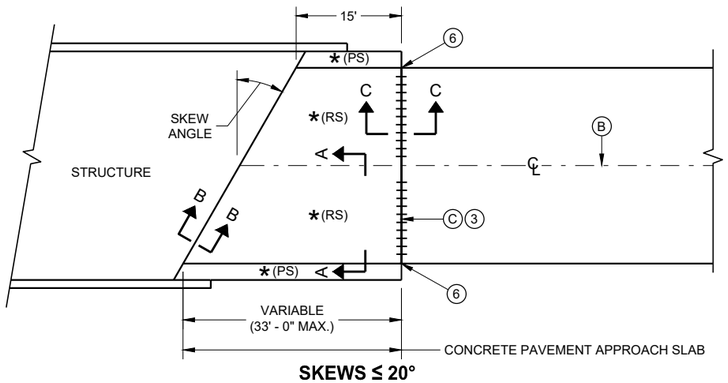
S.D.D. 13 A 5-5b



SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

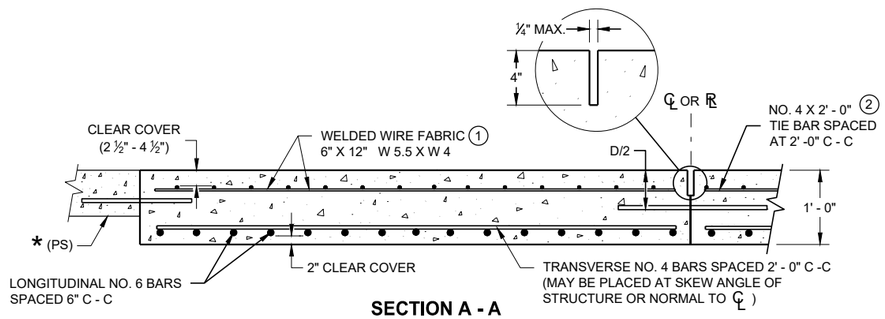
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

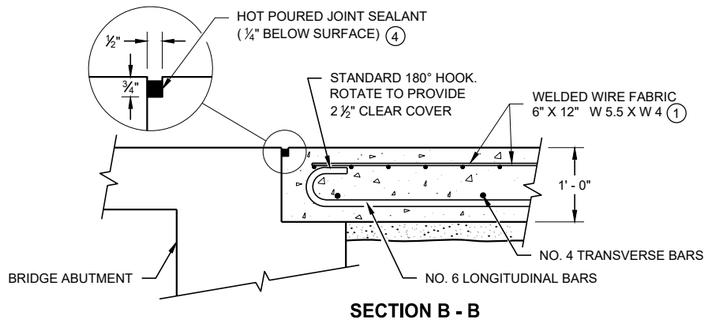
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

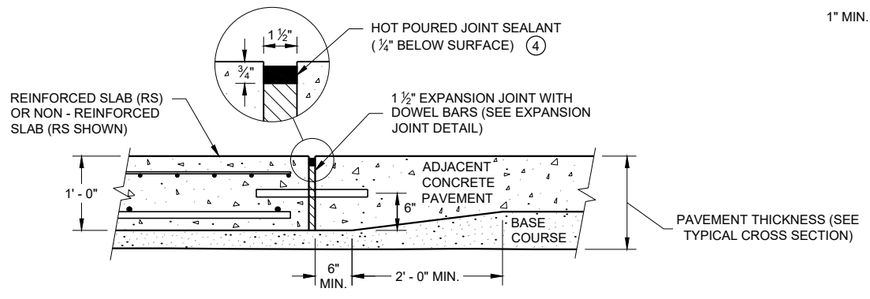
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

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

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

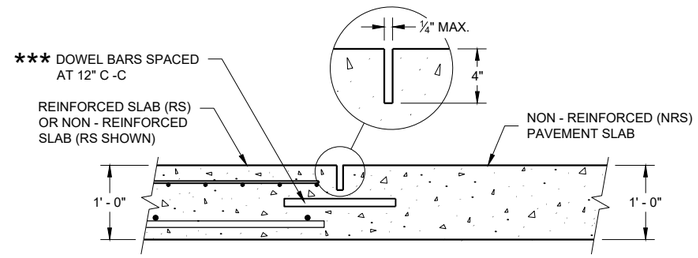
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

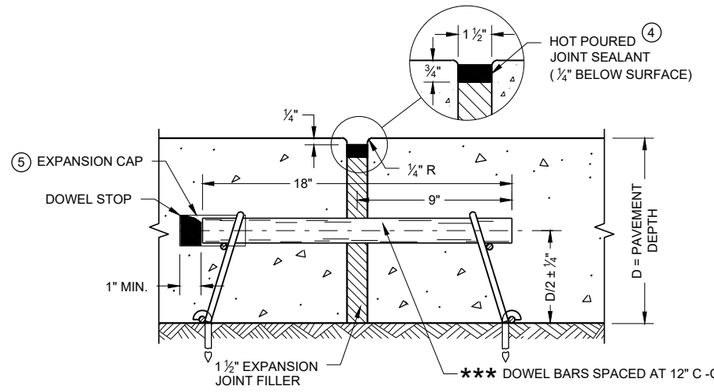
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



SECTION D - D
CONTRACTION JOINT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

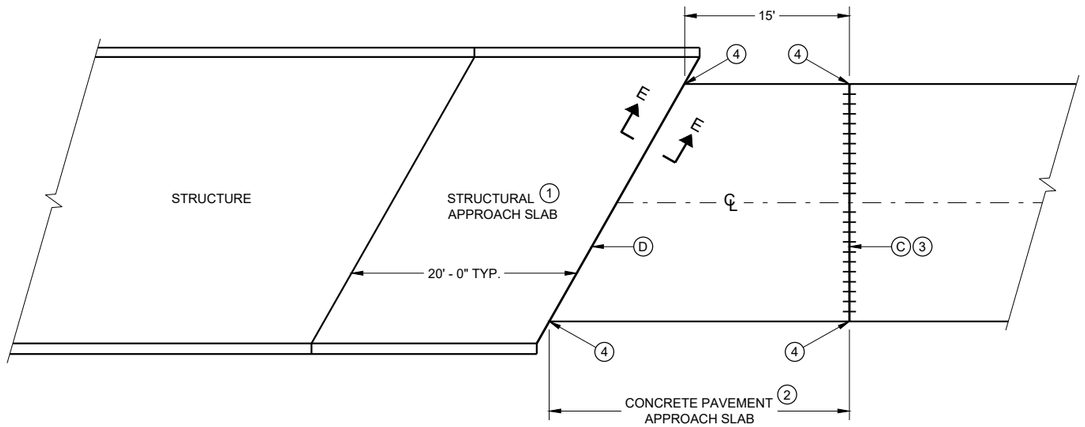
APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVIS

FHWA

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SDD 13B02 - 09a



BRIDGE APPROACHES

GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

(1) SEE BRIDGE PLAN.

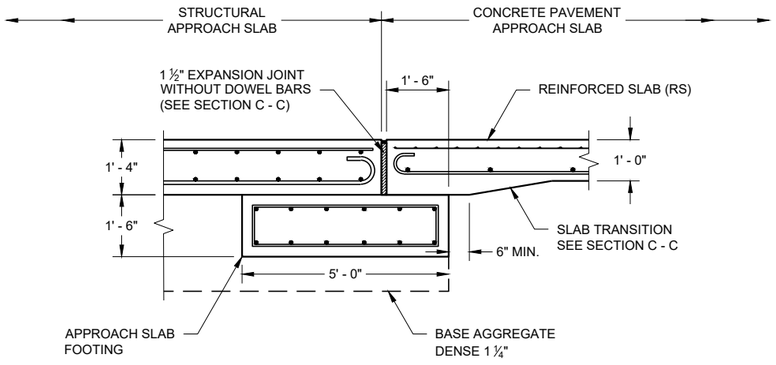
(2) CONFORM TO SDD 13B02 SHEET A FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS

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

(4) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞.

(D) 1 ½" EXPANSION JOINT (NO DOWELS)



SECTION E - E
FOOTING DETAIL
STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

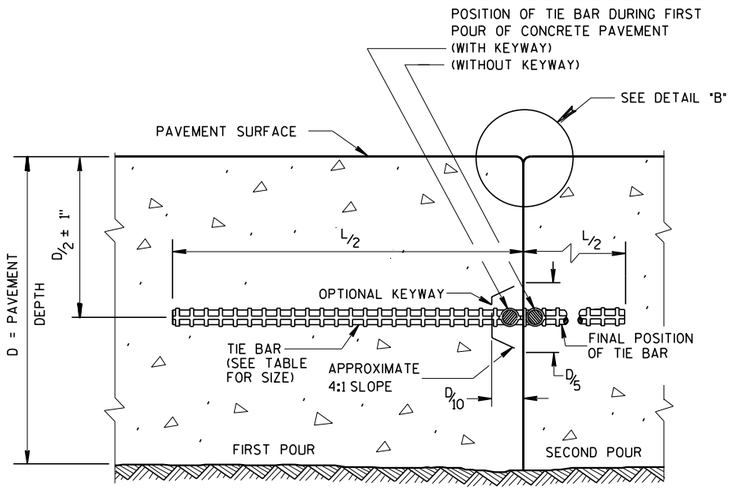
FHWA

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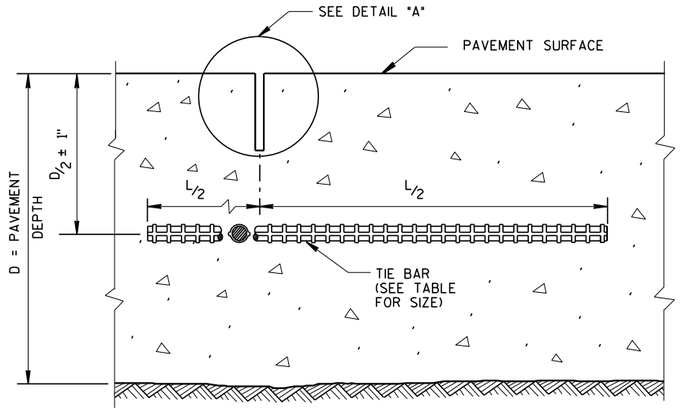
SDD 13B02 - 09b

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SDD 13B02 - 09b



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

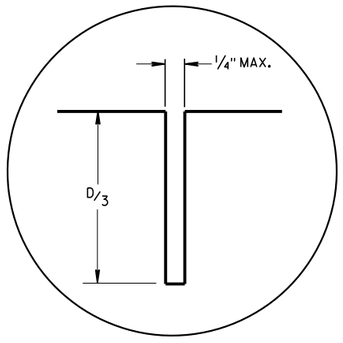
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

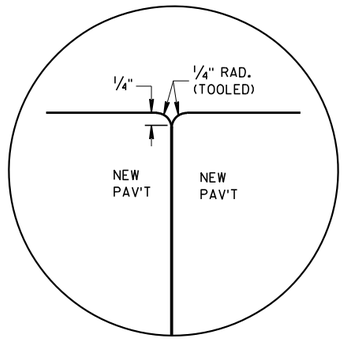
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

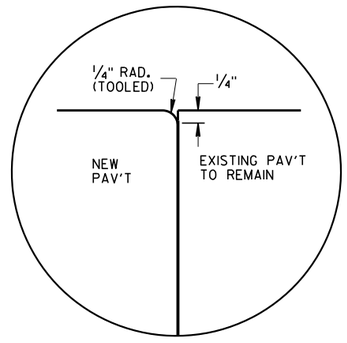
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



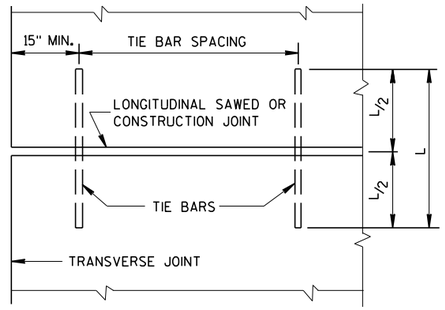
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



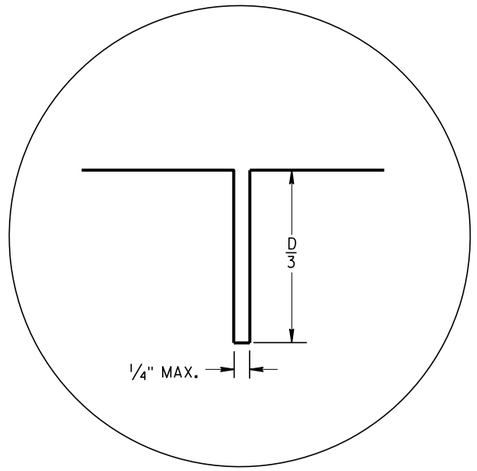
PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

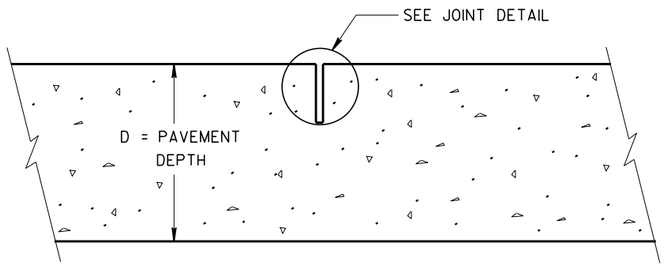
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp PE — PAVEMENT SUPE
FHWA

6
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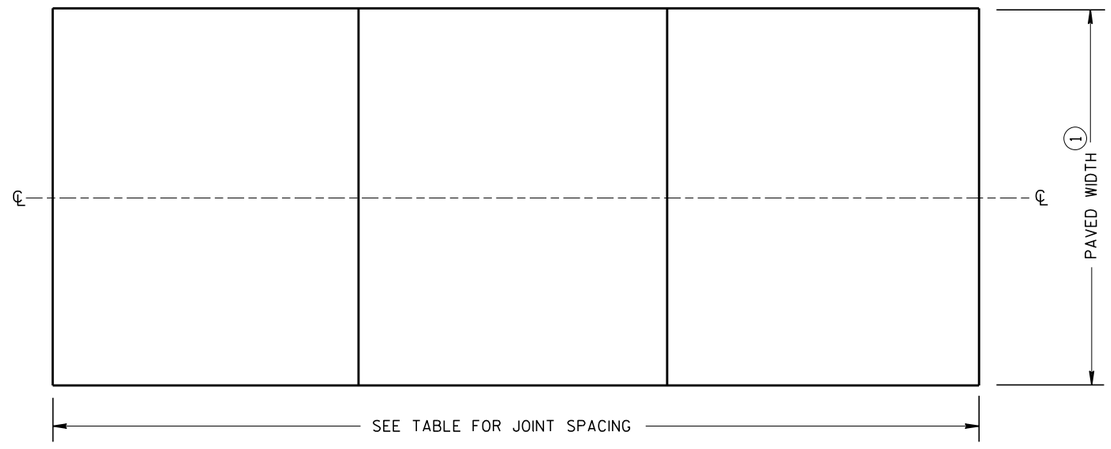
JOINT DETAIL



CONTRACTION JOINT

PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 1/2"	12'
7", 7 1/2"	14'
8" & ABOVE	15'



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE.

LOCATE AND ORIENT CONTRACTION JOINTS THROUGH INTERSECTIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

CONSTRUCTION JOINTS

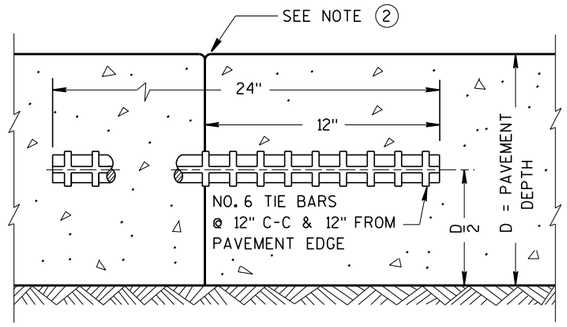
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

FORM OR SAW CONSTRUCTION JOINTS.

THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

(1) REFER TO TYPICAL CROSS SECTIONS FOR PAVED WIDTH AND LOCATION OF LONGITUDINAL JOINTS.

(2) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.



TIED TRANSVERSE CONSTRUCTION JOINT

URBAN
NON-DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
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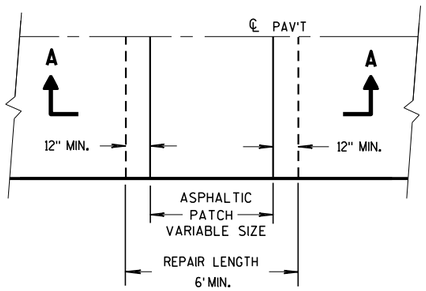
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

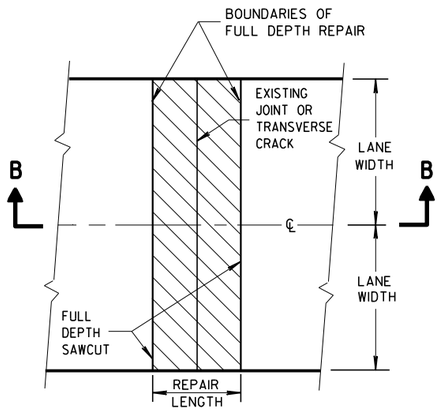
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

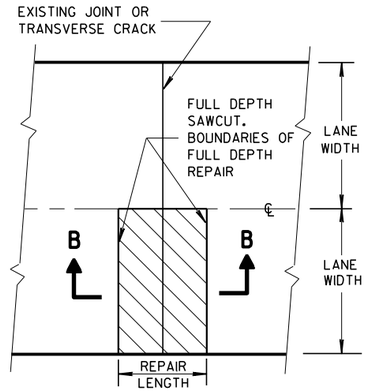
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

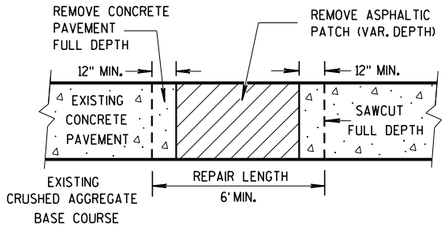


PLAN VIEW
(DOUBLE LANE REPAIR)



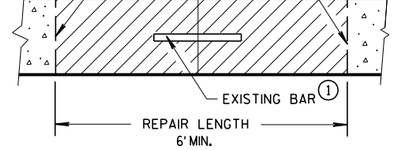
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

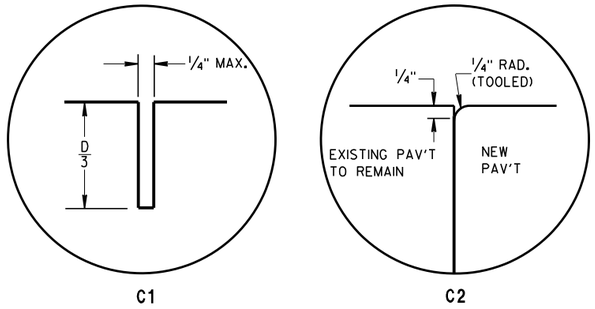
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 13 C 9-15a

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S.D.D. 13 C 9-15a



C1 C2

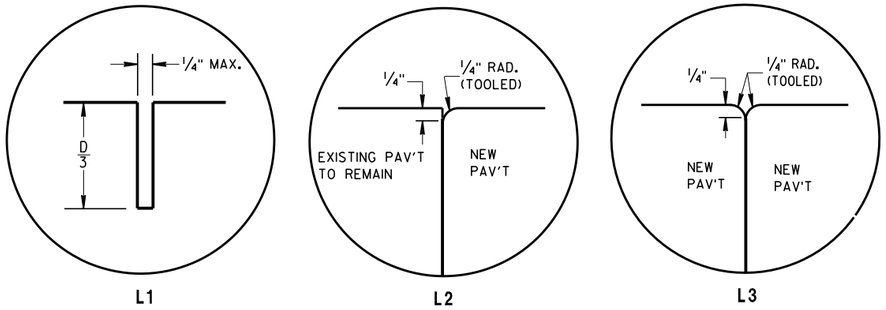
TRANSVERSE JOINTS

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

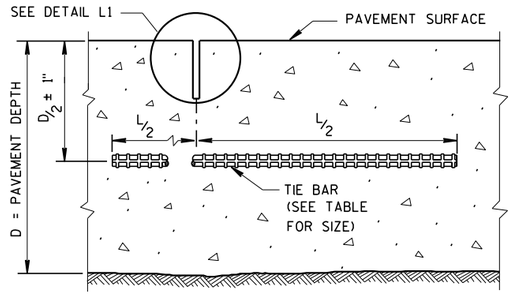
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



L1 L2 L3

LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

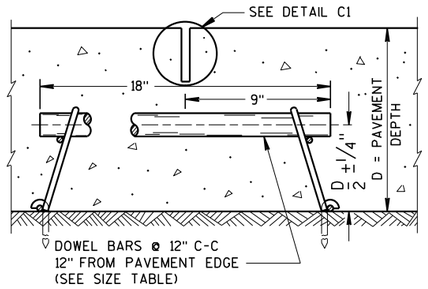
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

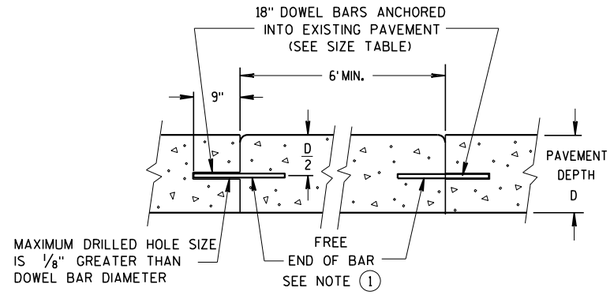
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

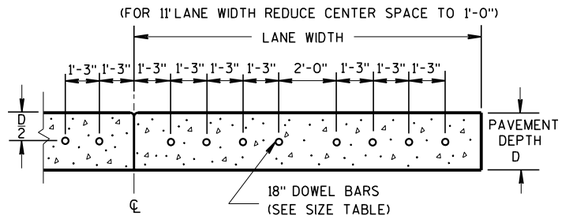


SECTION F-F

CONTRACTION JOINT



SECTION D-D

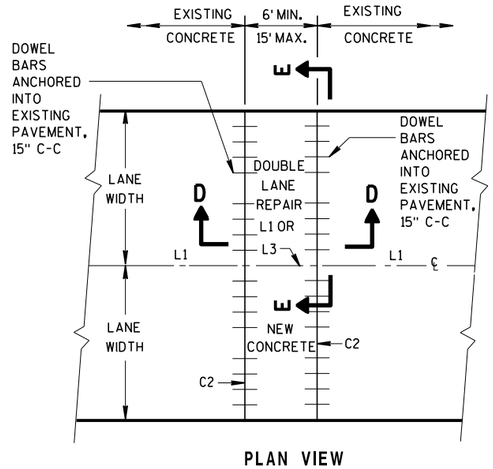


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

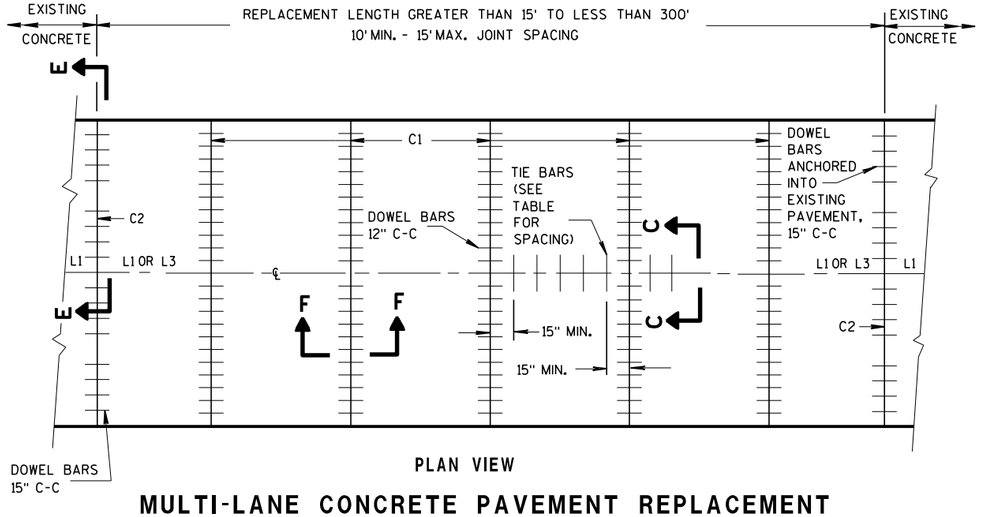
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	NONE	12'
7", 7 1/2"	1"	1"	14'
8", 8 1/2"	1 1/4"	1 1/4"	15'
9", 9 1/2"	1 1/4"	1 1/4"	15'
10" & ABOVE	1 1/2"	1 1/4"	15'



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

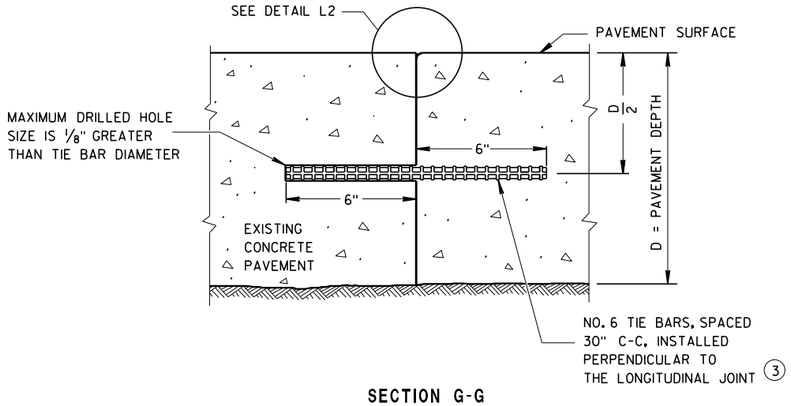
MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
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SECTION G-G

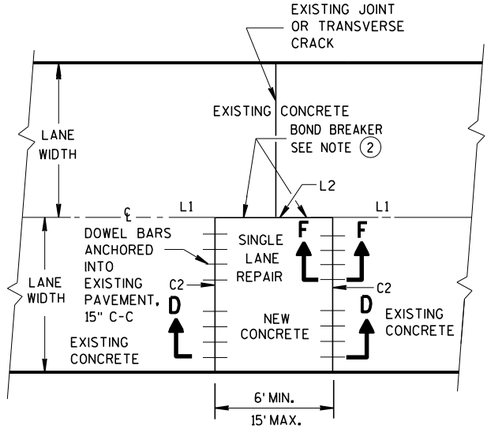
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

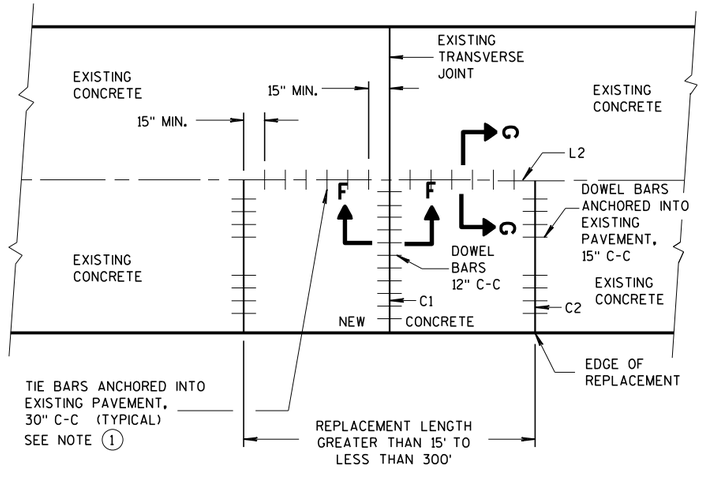
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

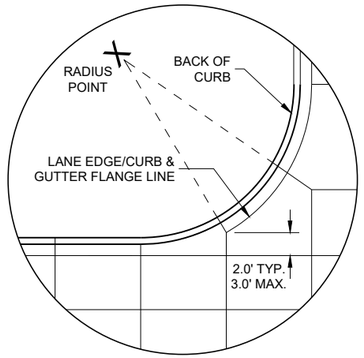
SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

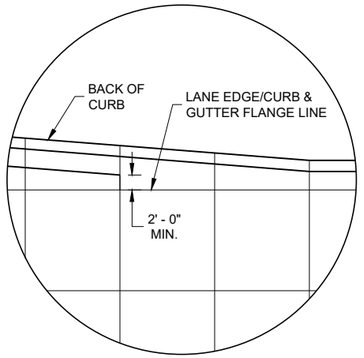
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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March 2018 — DATE
/S/ Peter Ken... — PAVEMENT SUPE...
FHWA

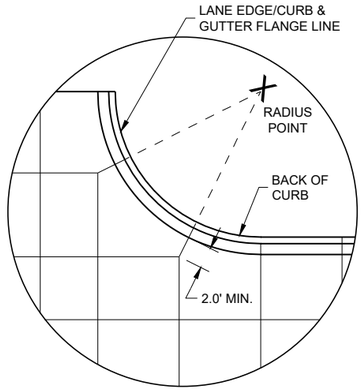
6
S.D.D. 13 C 9-15c



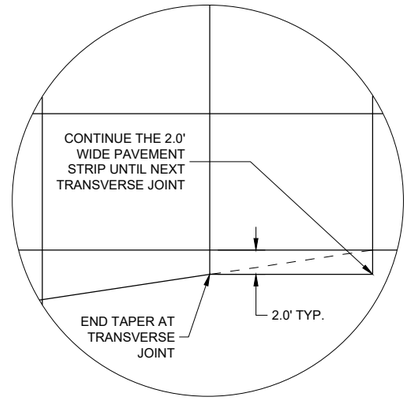
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

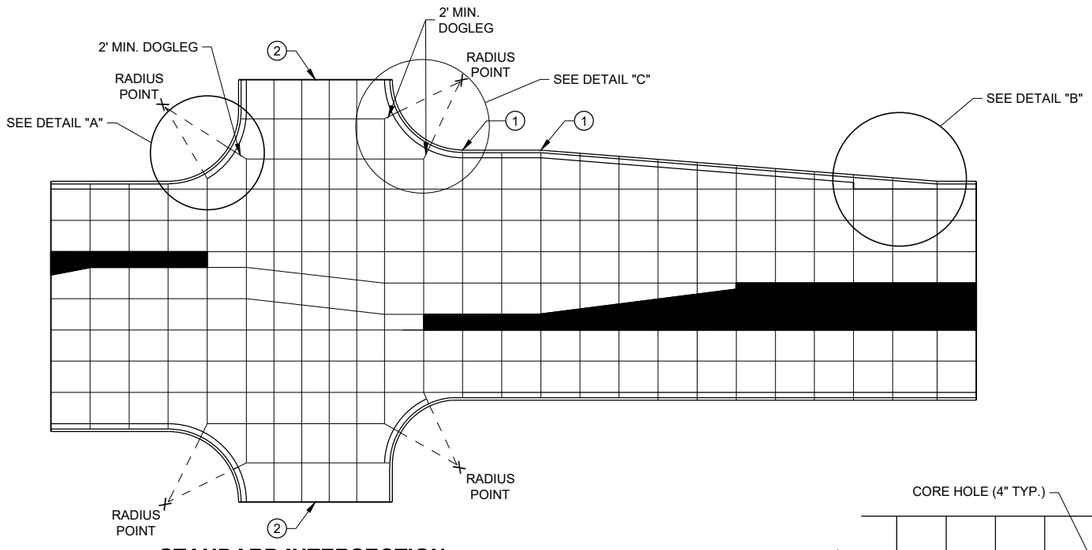
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.

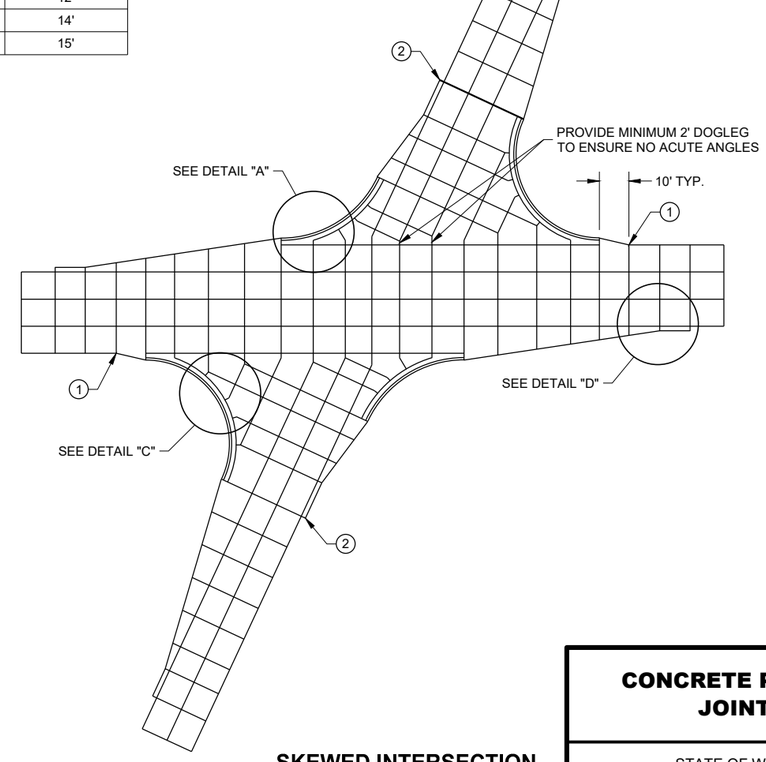
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



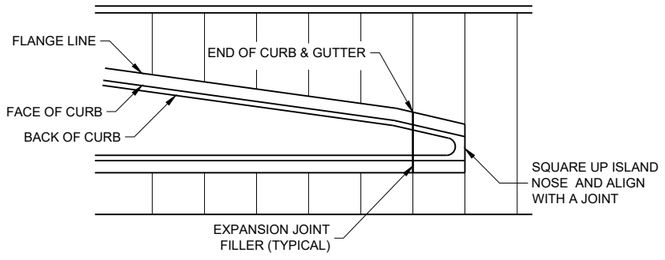
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

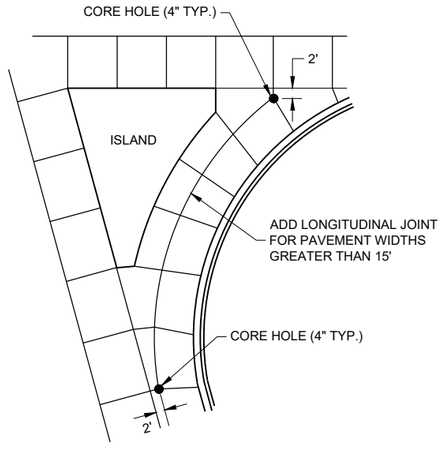
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
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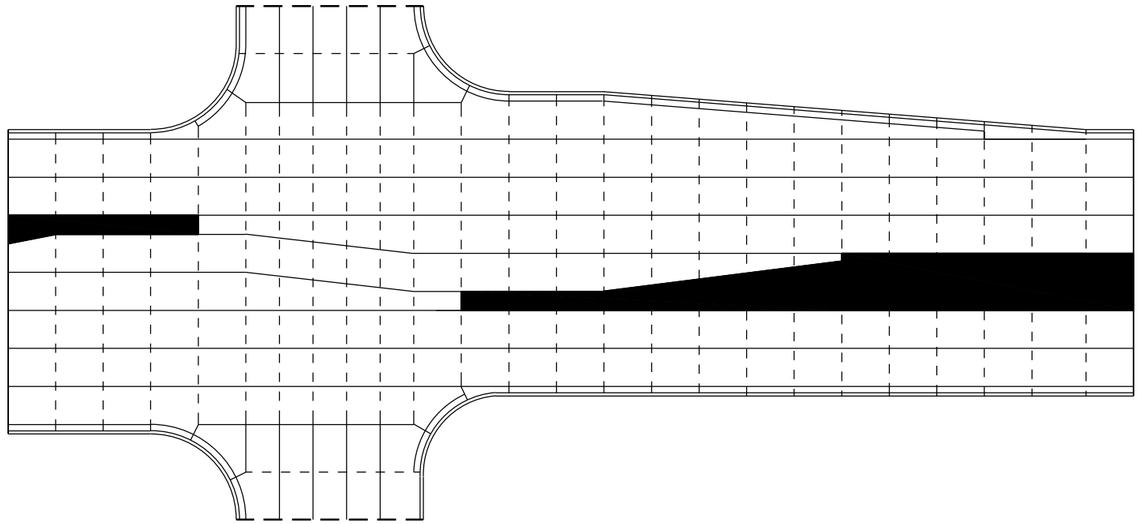
SDD 13C18 - 07a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

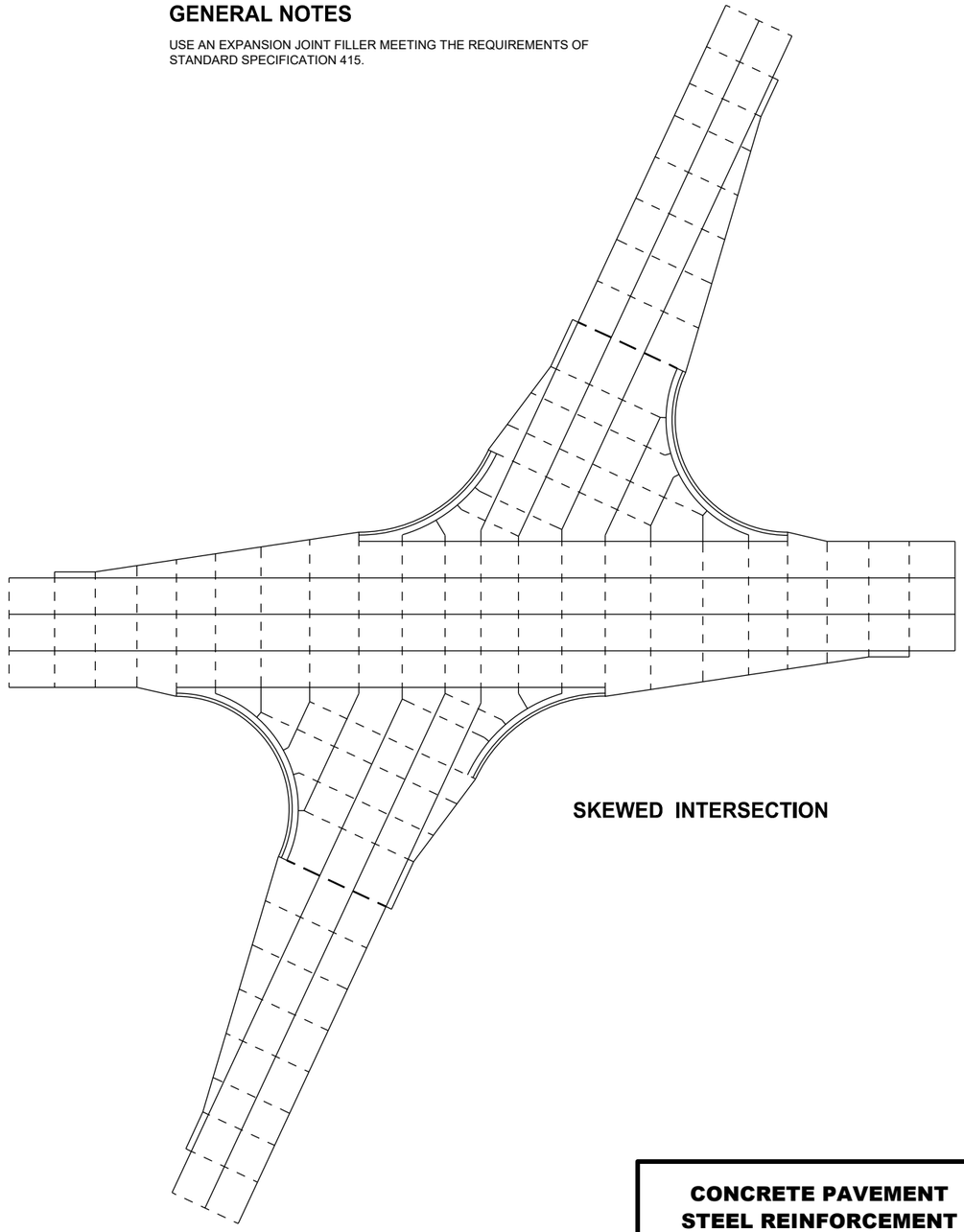
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

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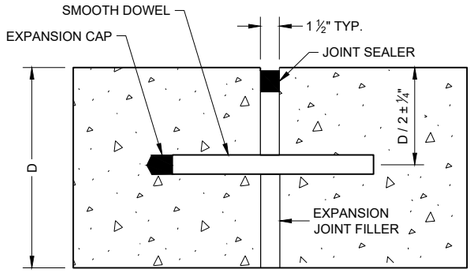
SDD 13C18 - 07b

CONCRETE PAVEMENT STEEL REINFORCEMENT

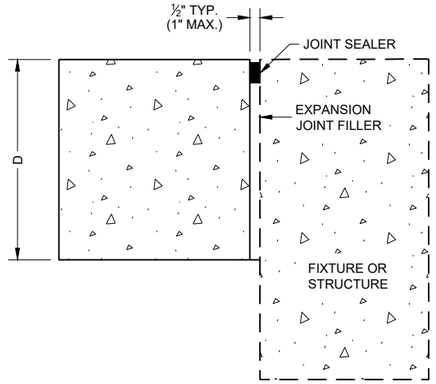
STATE OF WISCONSIN
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SDD 13C18 - 07b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

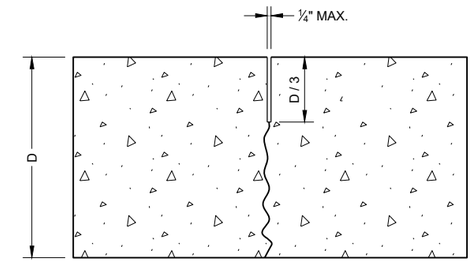
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

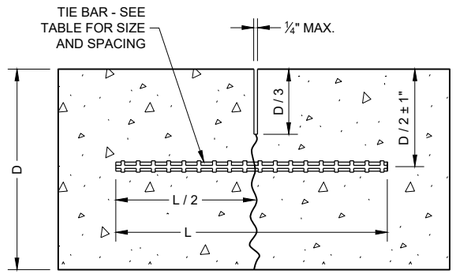
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

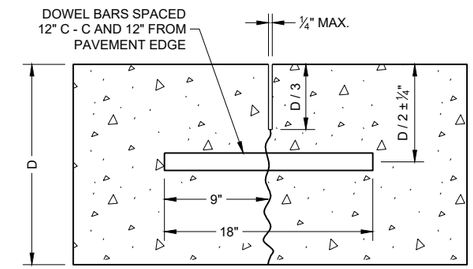
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

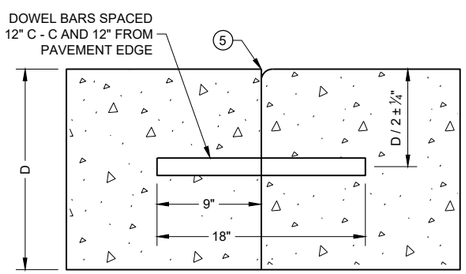


TIED LONGITUDINAL

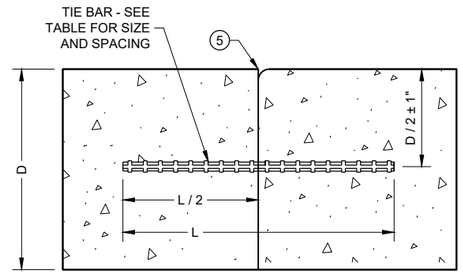


DOWELED TRANSVERSE

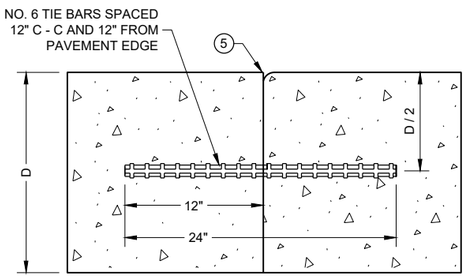
CONTRACTION JOINTS (2)



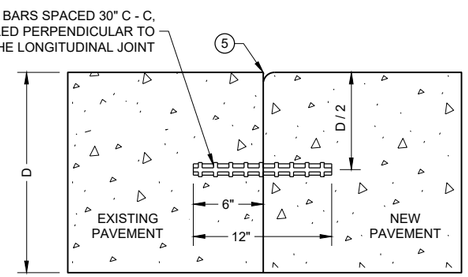
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

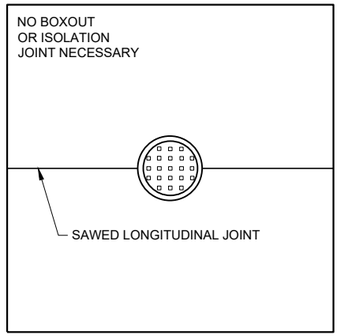
CONCRETE PAVEMENT JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

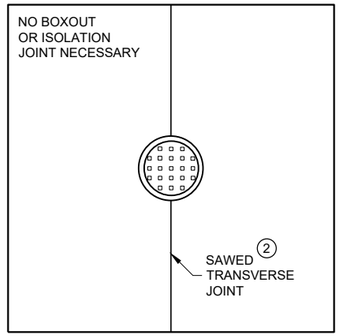
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SDD 13C18 - 07c

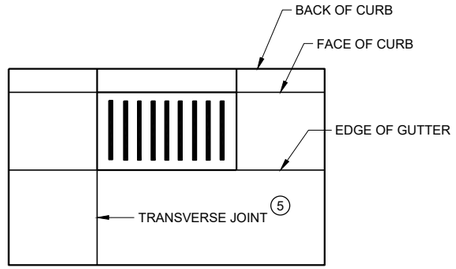
SDD 13C18 - 07c



MANHOLE WITH LONGITUDINAL JOINT



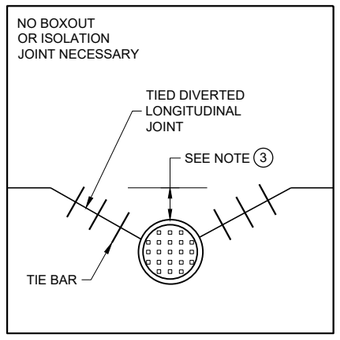
MANHOLE WITH TRANSVERSE JOINT



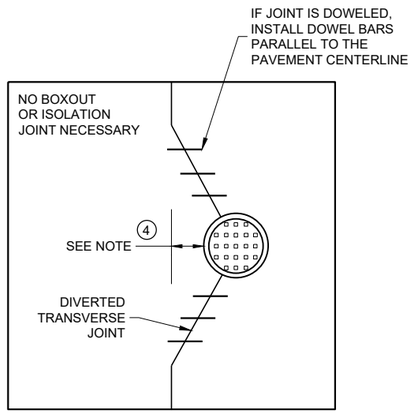
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

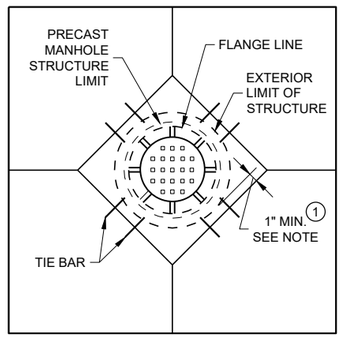
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

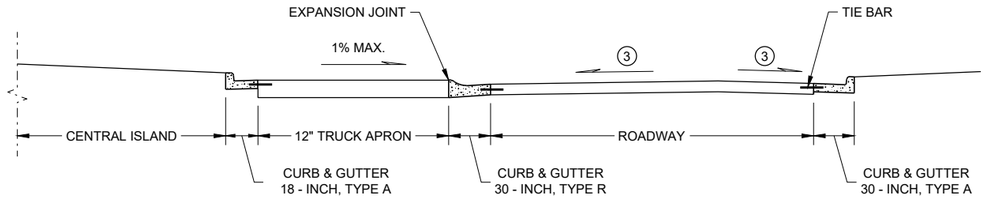
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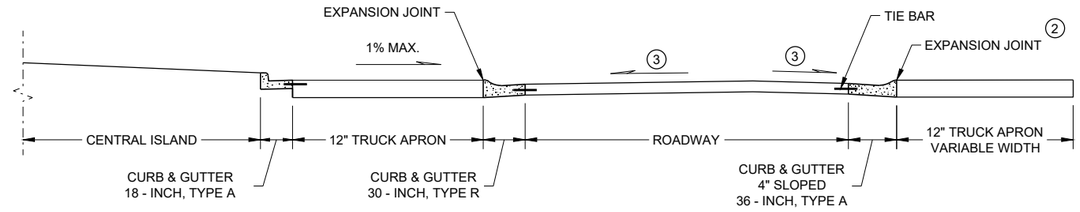
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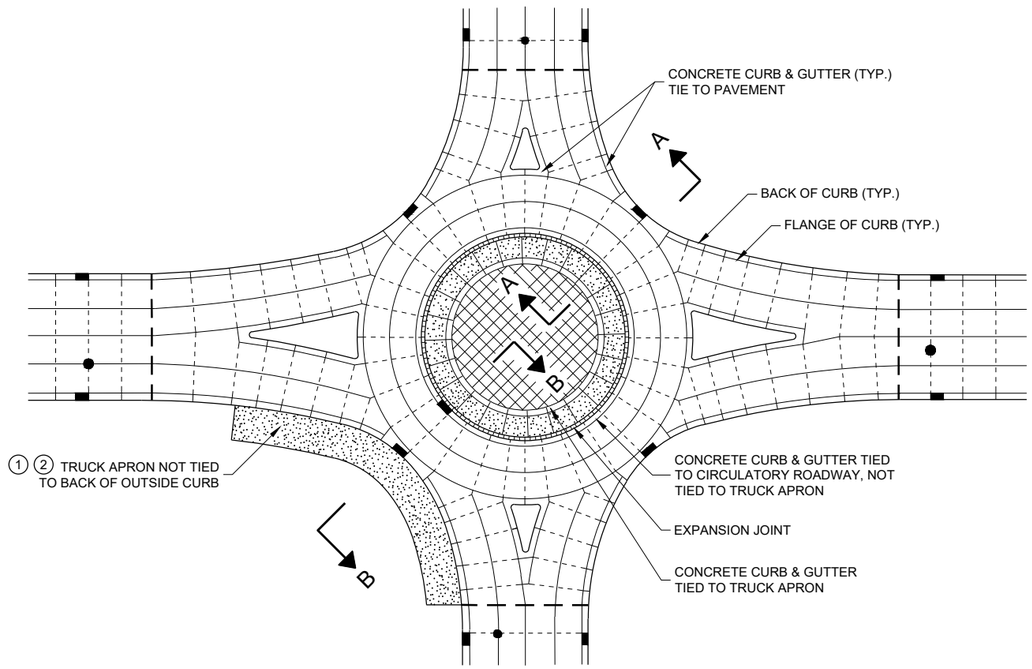
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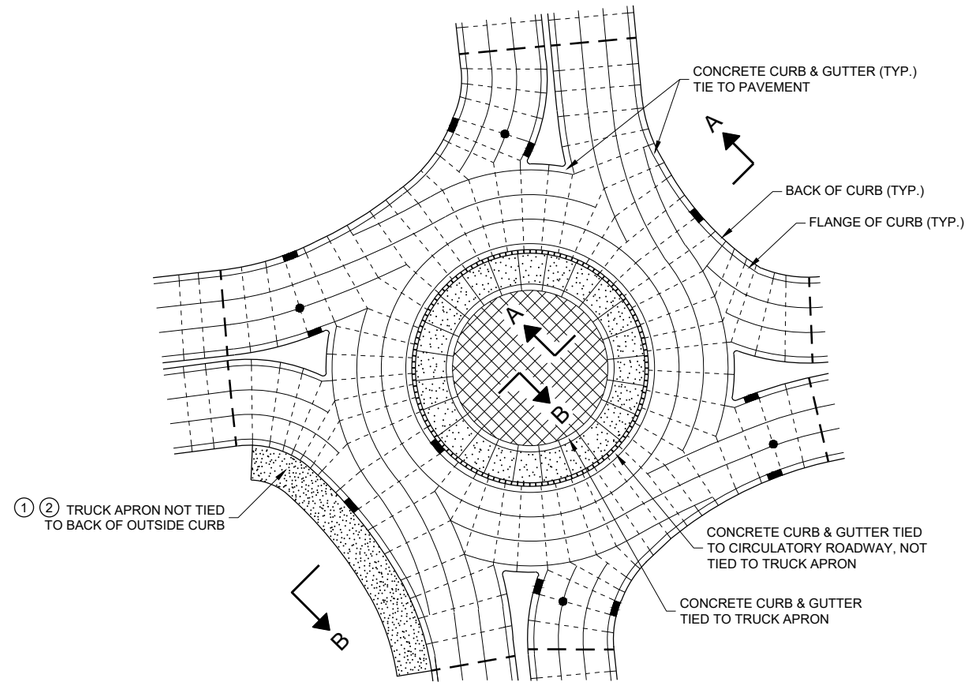
SECTION A - A



SECTION B - B



ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS



PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 - SHEET "a"

USE EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

(1) DESIGNER DETERMINES SIZE AND LOCATION(S) OF TRUCK APRON TO ACCOMODATE TRACKING OF OVERSIZE / OVERWEIGHT VEHICLES.

(2) TIE THE OUTSIDE TRUCK APRON TO THE BACK SIDE OF CURB ONLY WHEN ENTIRE TRUCK APRON IS LESS THAN 3 FEET.

(3) CONFORM TO PLAN CONSTRUCTION DETAILS FOR CIRCULATORY ROADWAY CROSS SLOPE.

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES

CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

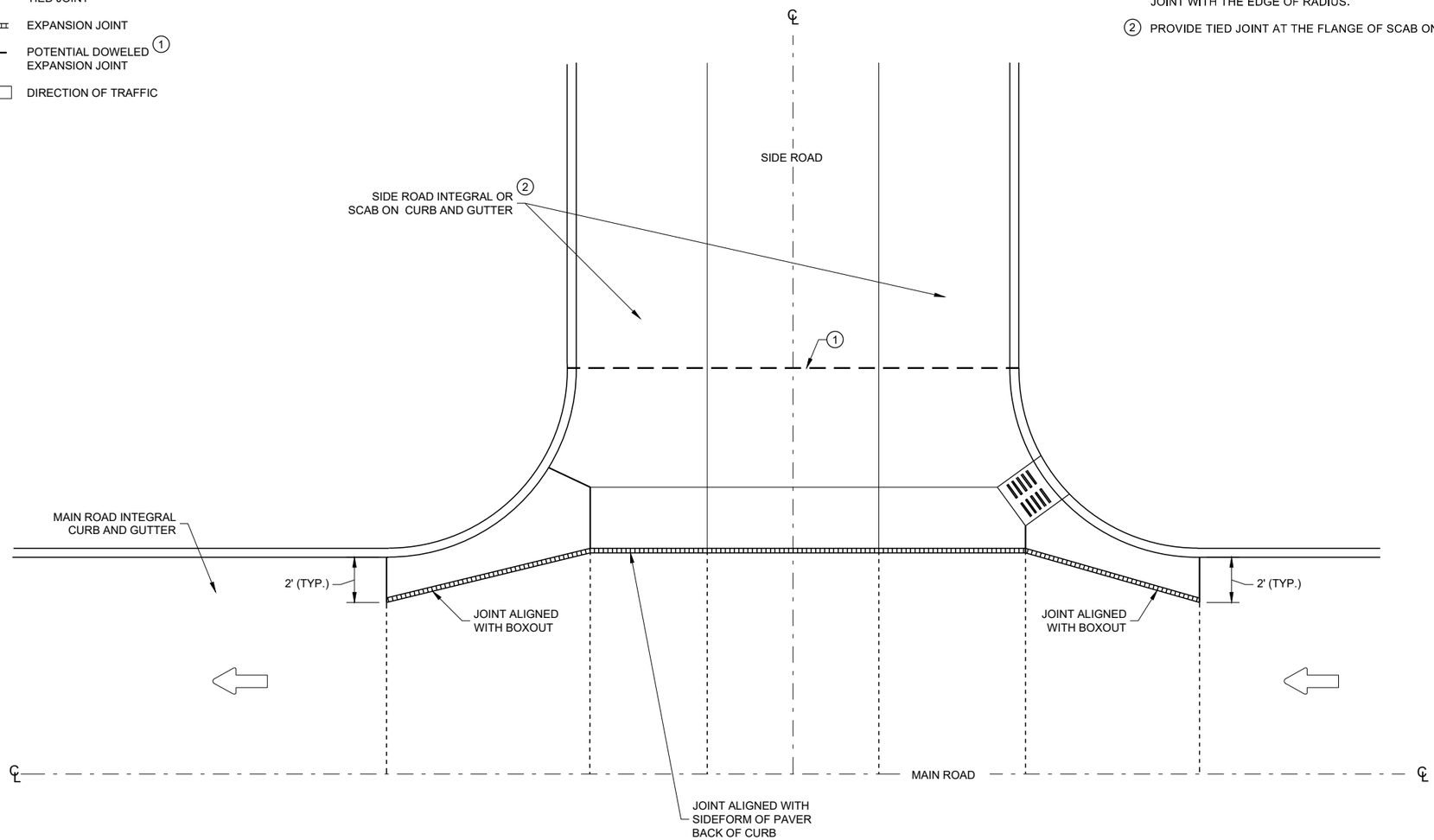
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SDD 13C18 - 07e

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
ROADWAY STANDARDS DEVE ENGINEER

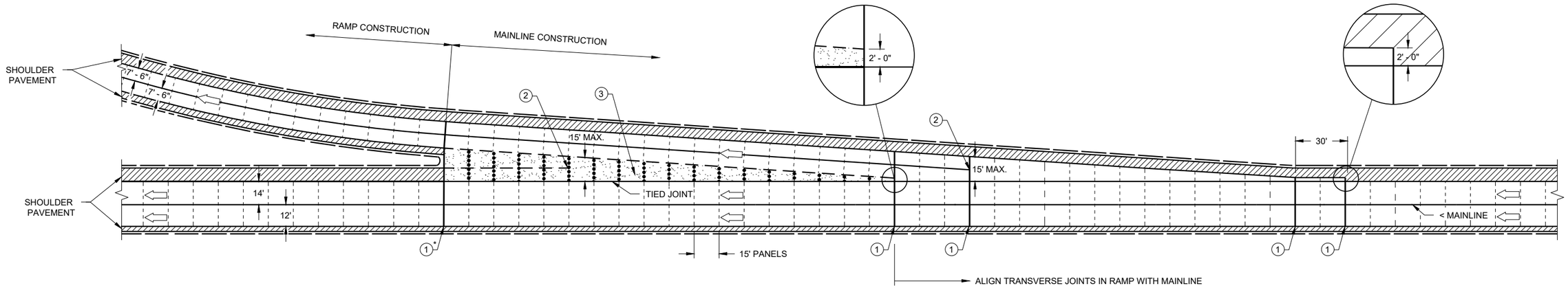
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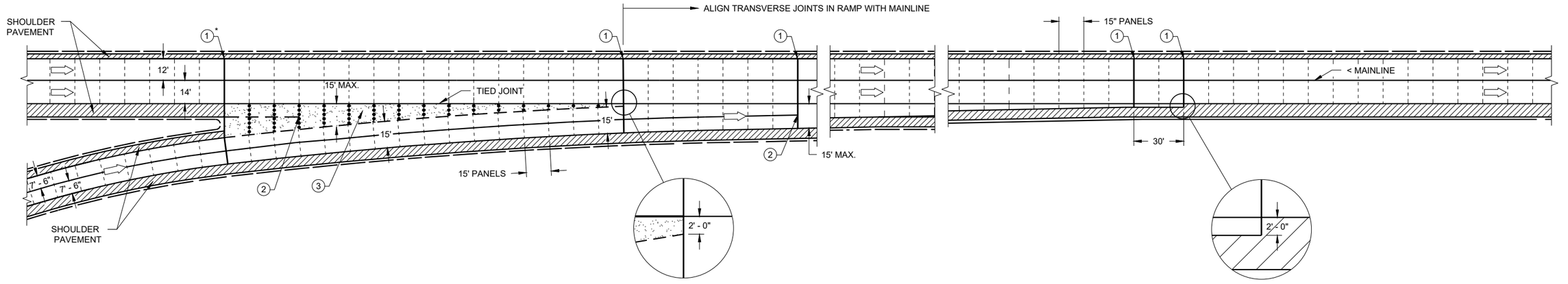
SDD 13C18 - 07f

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SDD 13C18 - 07f



DECELERATION LANE



ACCELERATION LANE

GENERAL NOTES

PAVEMENT AND BASE THICKNESS, PANEL LENGTHS, JOINTS AND REINFORCEMENT FOR THE DECELERATION AND ACCELERATION LANES, INCLUDING TAPERS, SHALL BE THE SAME AS THE MAINLINE, EXCEPT WHERE OTHERWISE NOTED.

ALL REINFORCEMENT BARS SHALL BE EPOXY COATED CONFORMING TO SUBSECTION 505.2.6 OF THE STANDARD SPECIFICATIONS.

LANE AND SHOULDER WIDTHS MAY VARY FROM SHOWN. SEE CONSTRUCTION PLANS FOR ACTUAL PROPOSED WIDTHS.

(1) CRITICAL TRANSVERSE JOINT LOCATIONS AT PAVEMENT WIDTH CHANGES. ((1)* IS NOT A CRITICAL TRANSVERSE JOINT WHEN ASPHALTIC GORE IS INSTALLED).

(2) STOP LONGITUDINAL JOINT WITH CORE HOLE (2" TYP.) WHEN IT MEETS THE FIRST TRANSVERSE JOINT LESS THAN 15' WIDE OR STOP LONGITUDINAL JOINT WHEN IT MEETS 2' AWAY FROM THE TIED JOINT OF THE MAINLINE.

(3) DISREGARD THE JOINT DETAILS IN AND AROUND THE GORE WHEN ASPHALTIC GORE IS INSTALLED.

LEGEND

- DOWELED JOINT
- UNDOWELED JOINT
- TIED JOINT
- UNTIED JOINT
- GORE
- DIRECTION OF TRAVEL

CONCRETE PAVEMENT JOINTING ACCELERATION/ DECELERATION LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
ROADWAY STANDARDS DEVE ENGINEER

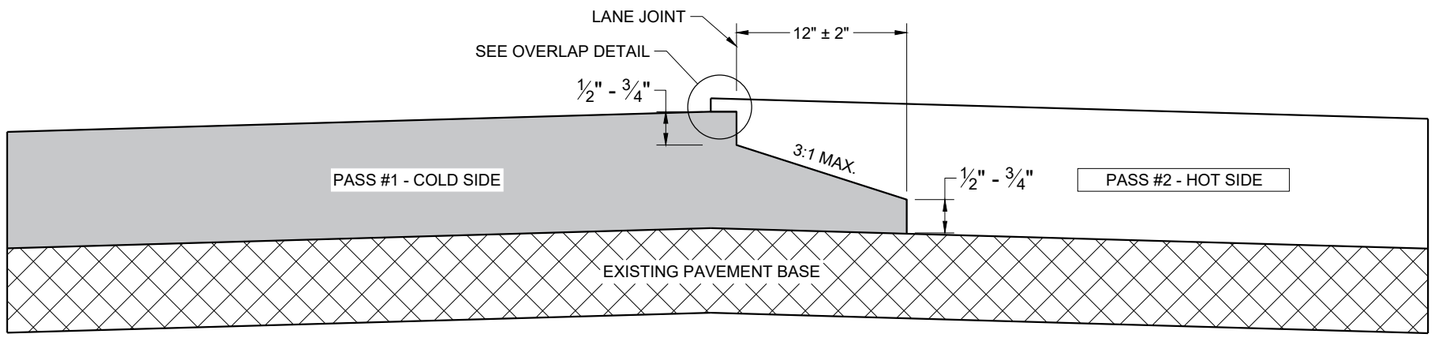
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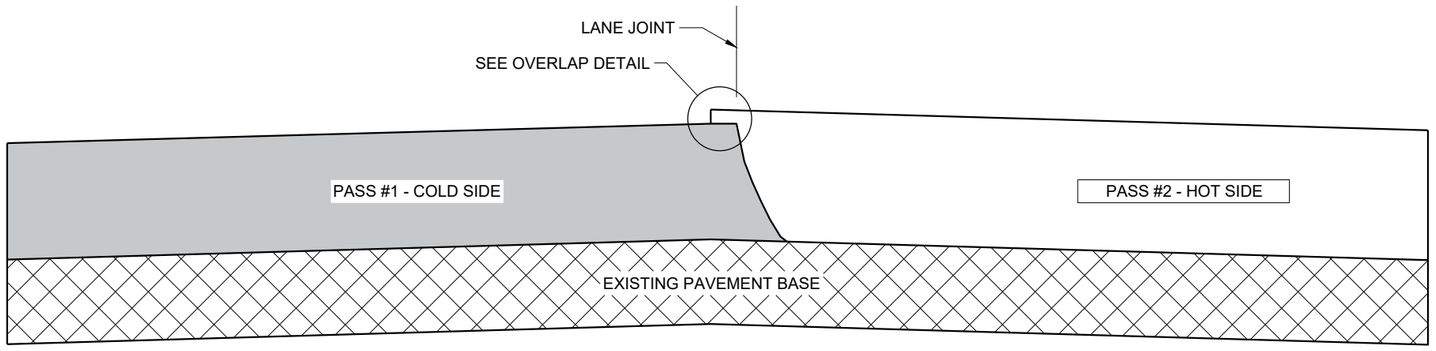
SDD13C18 - 07g

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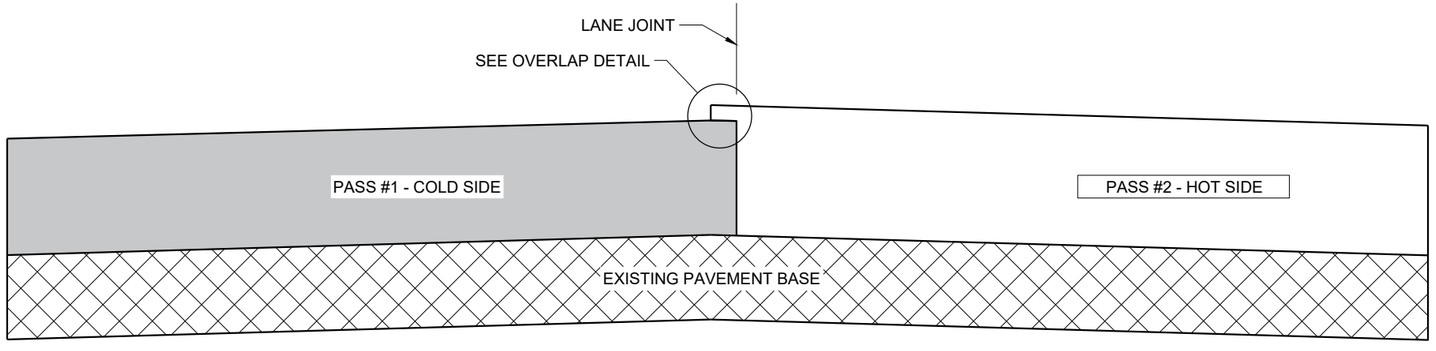
SDD13C18 - 07g



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

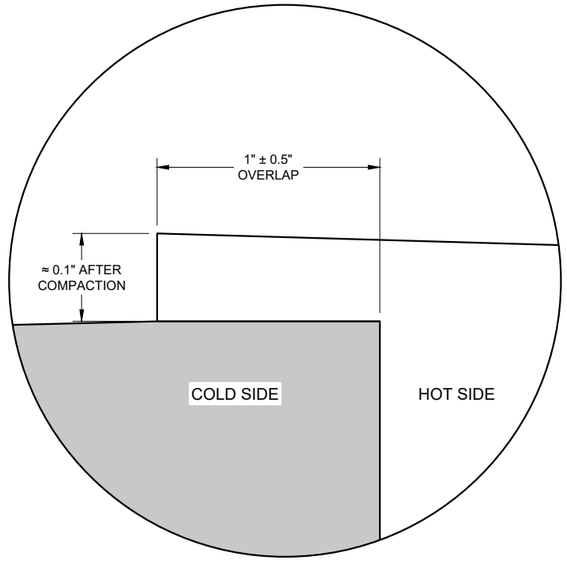
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

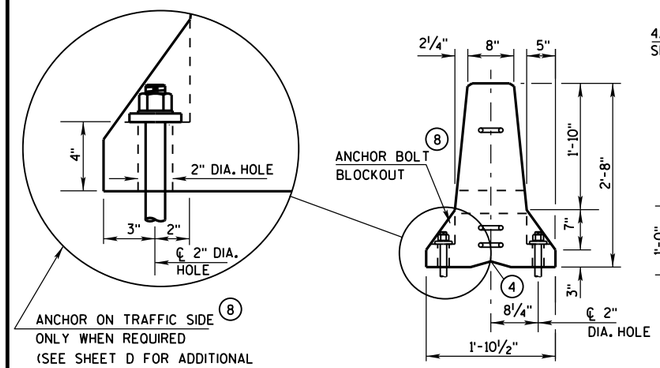
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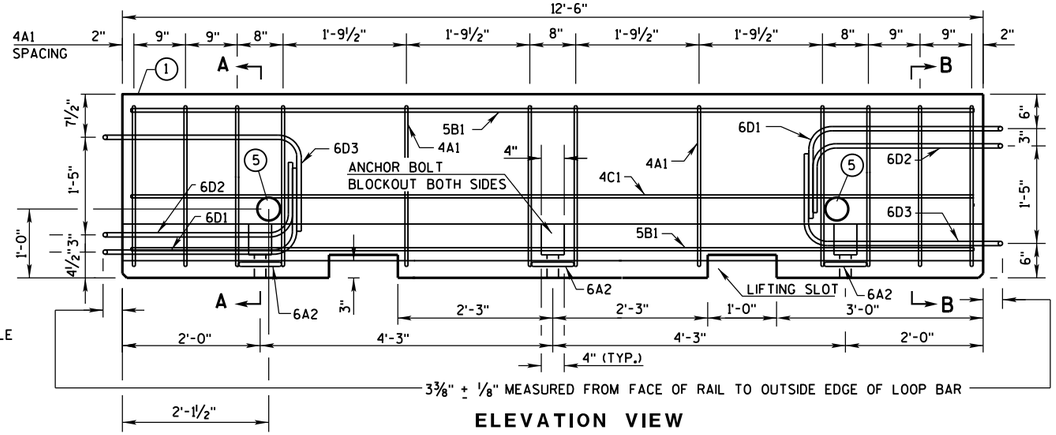
SDD 13C19 - 03

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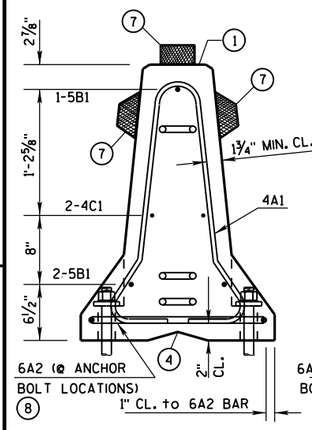
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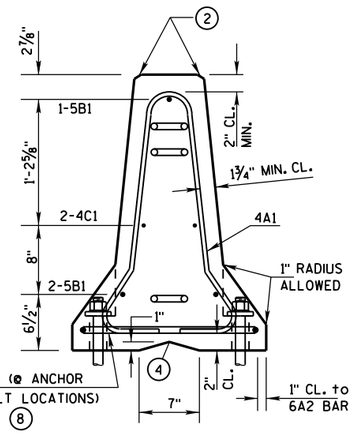
END VIEW



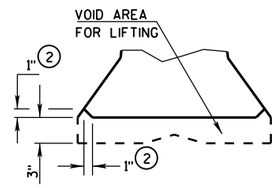
ELEVATION VIEW



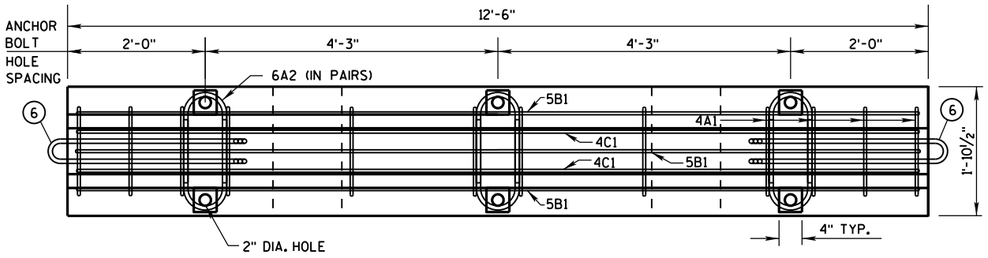
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

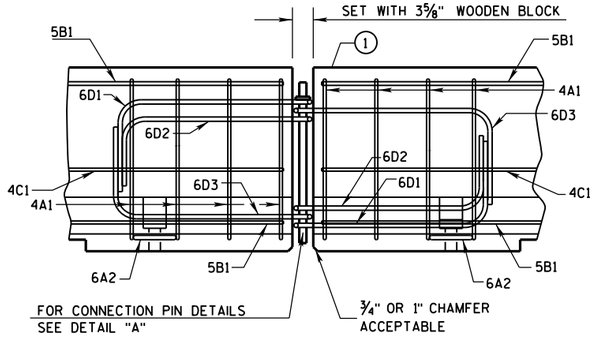


DETAIL "B"
LIFTING SLOT DETAIL

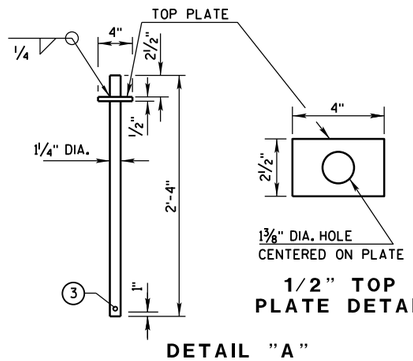


PLAN VIEW

DETAILS OF BARRIER SECTION

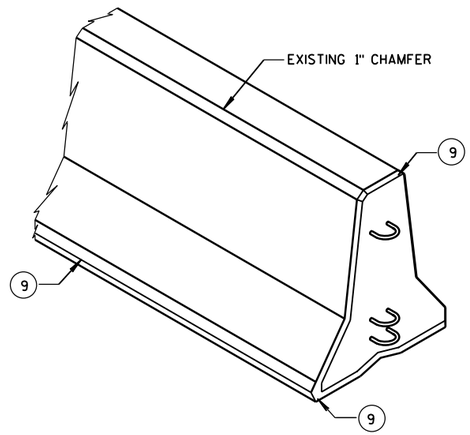


DETAILS OF BARRIER CONNECTION



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.

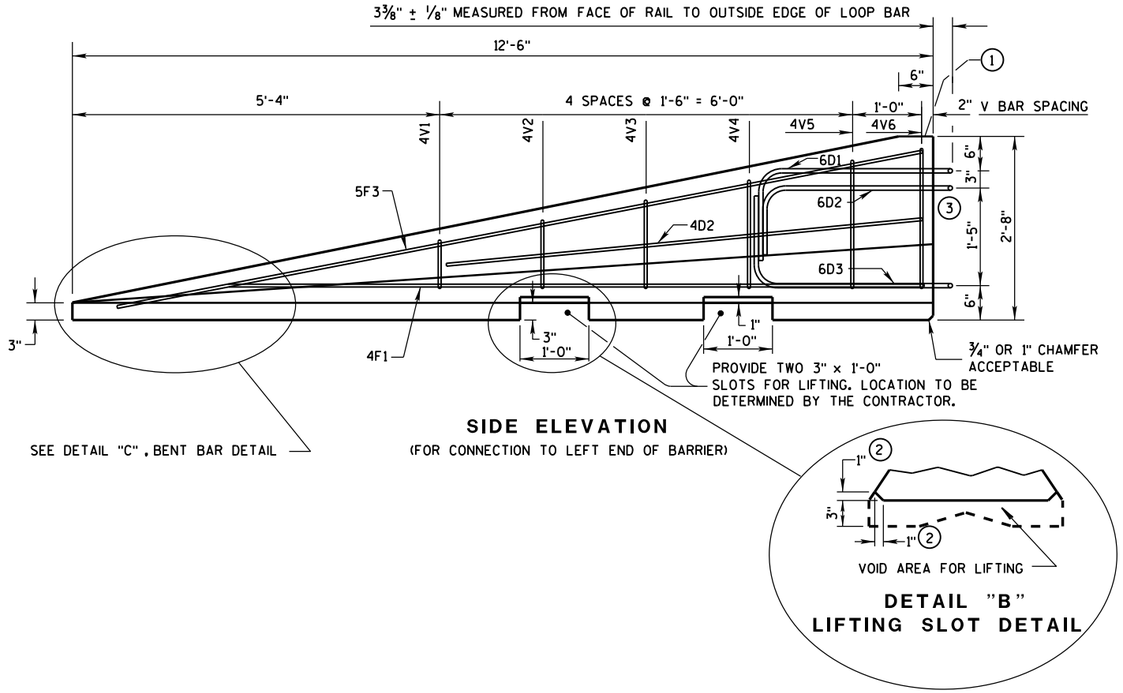
(9) 1" CHAMFER OPTIONAL.

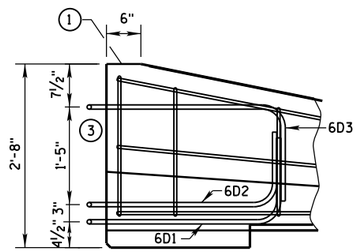
f'c = 4,000 psi

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 336

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



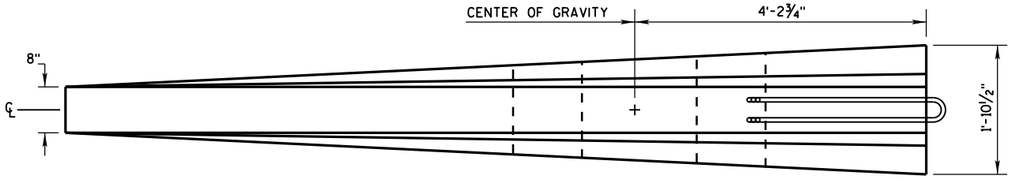


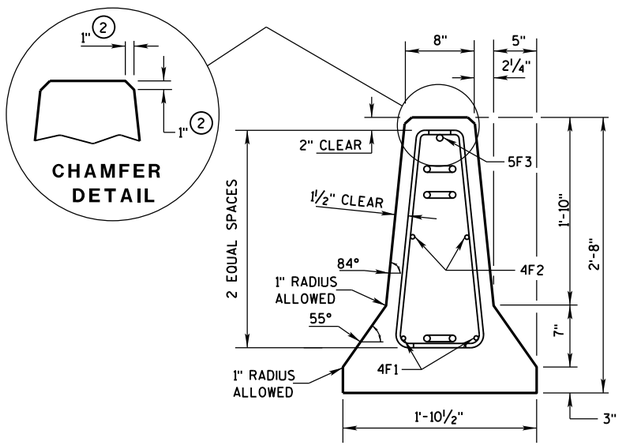
GENERAL NOTES

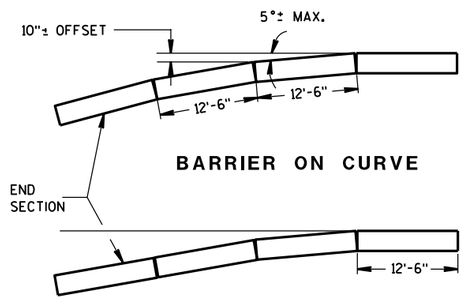
(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE WICBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

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







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

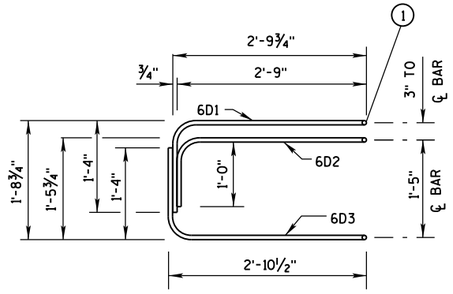
6

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

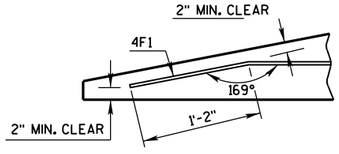
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

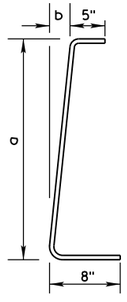
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



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

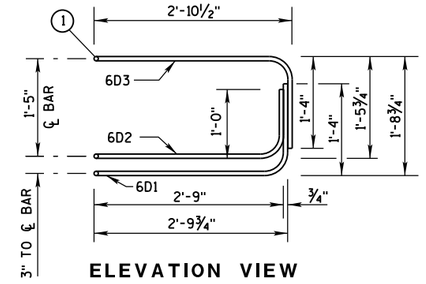
GENERAL NOTES

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

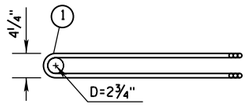
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

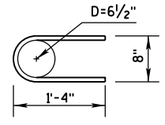
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



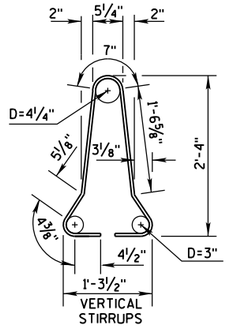
ELEVATION VIEW



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



6A2



4A1

BARRIER SECTION

6

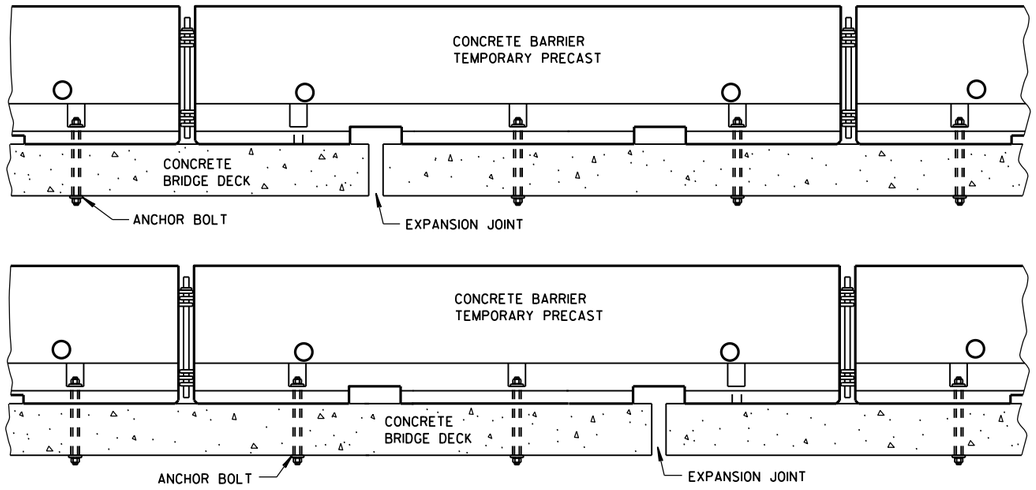
S.D.D. 14 B 7-15c

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

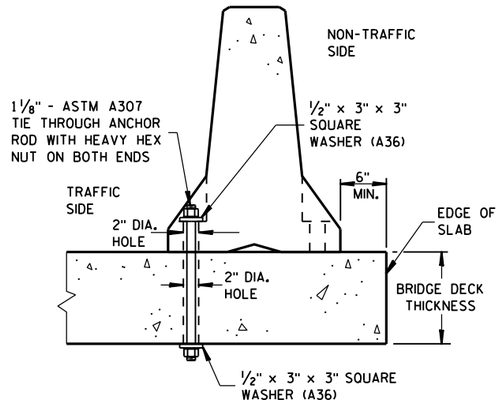
SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

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.

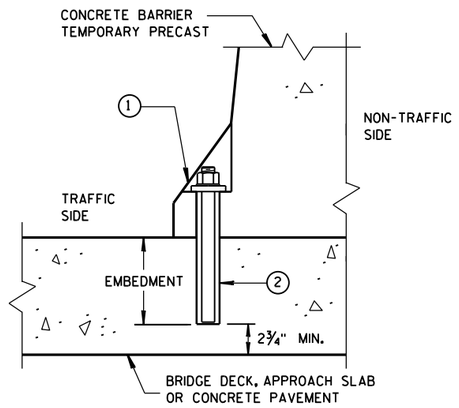
(2) ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

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



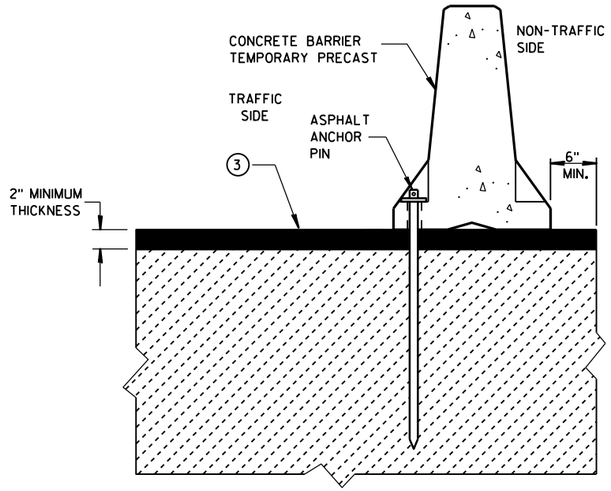
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)

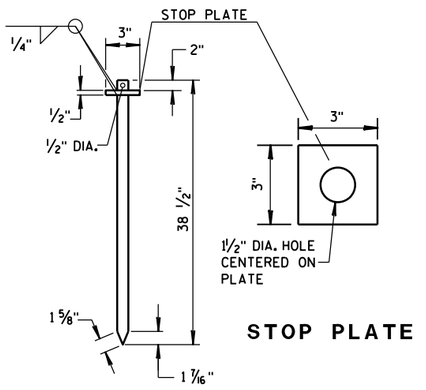


REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



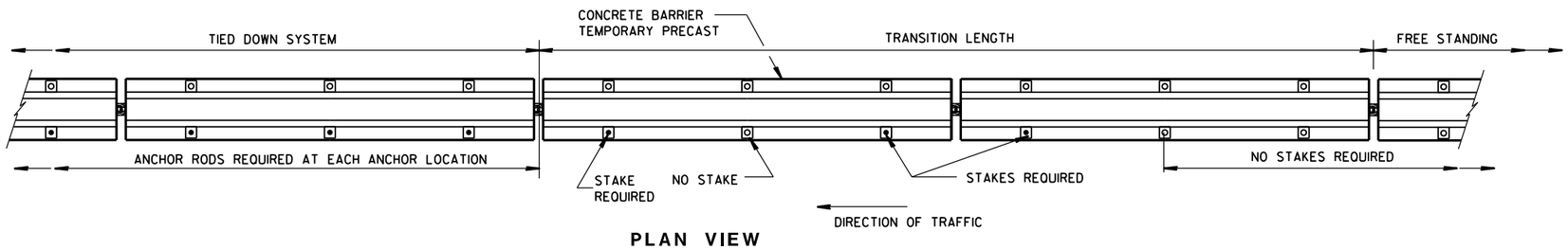
STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE



STOP PLATE

ASPHALT ANCHOR PIN

(ASTM A36 STEEL)



PLAN VIEW

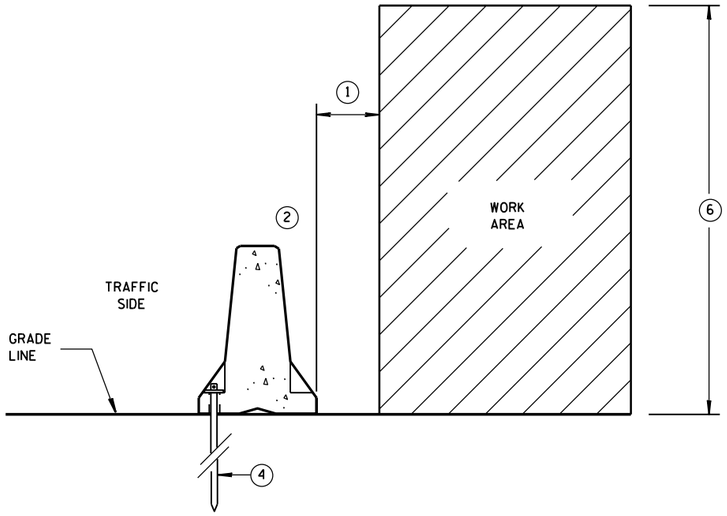
FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

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

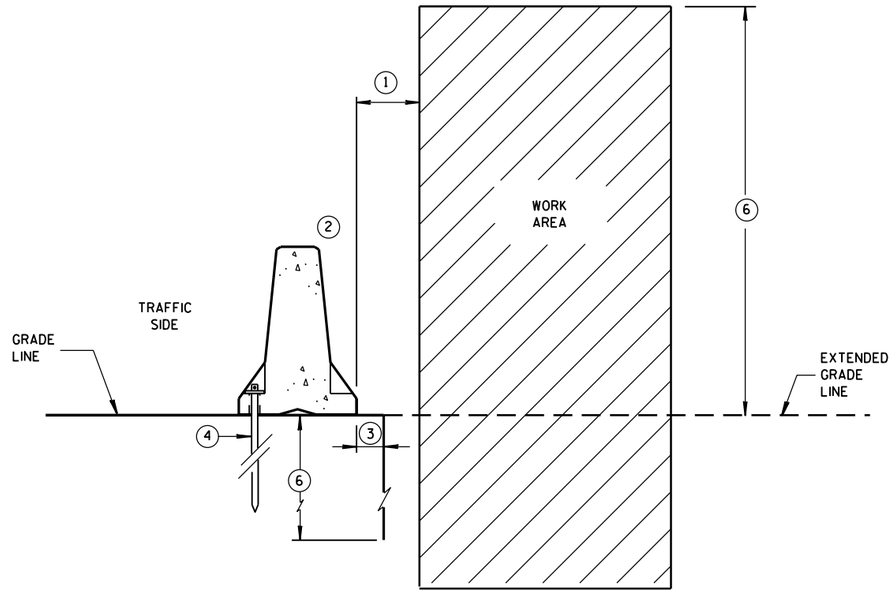
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

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

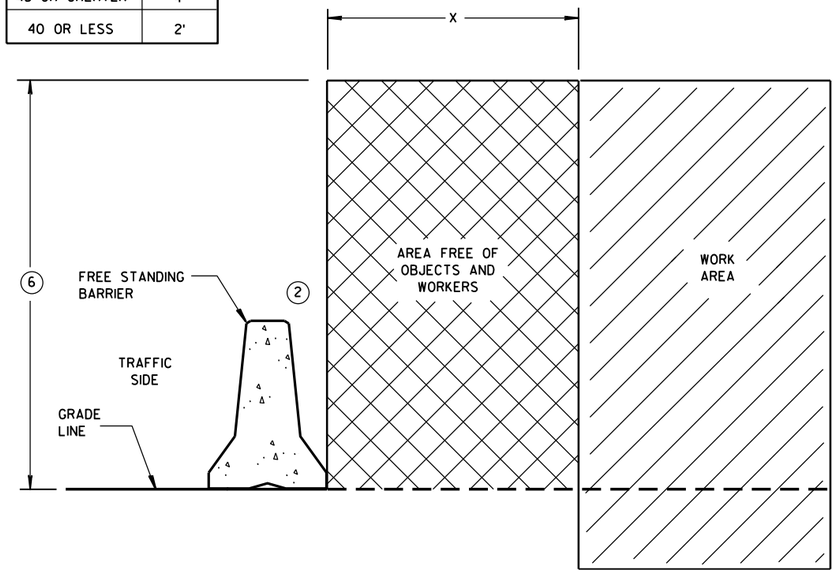


ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS

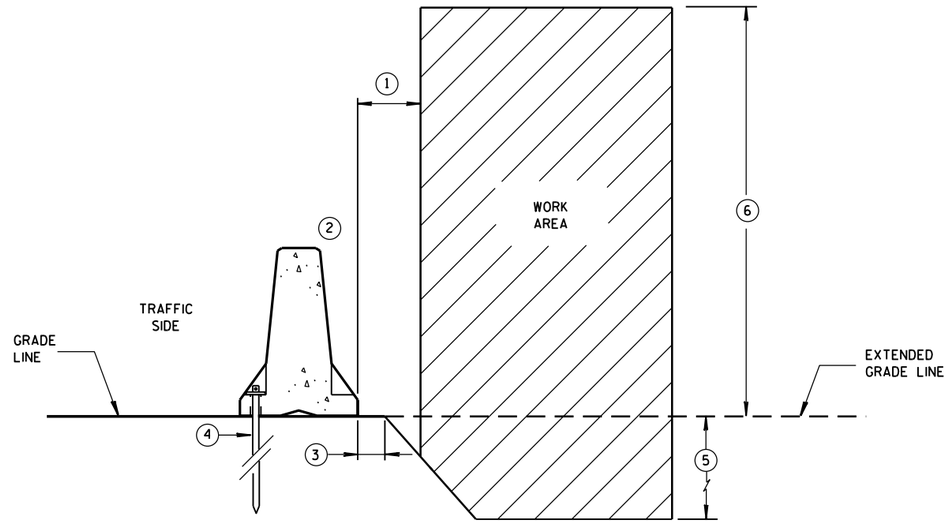
GENERAL NOTES

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



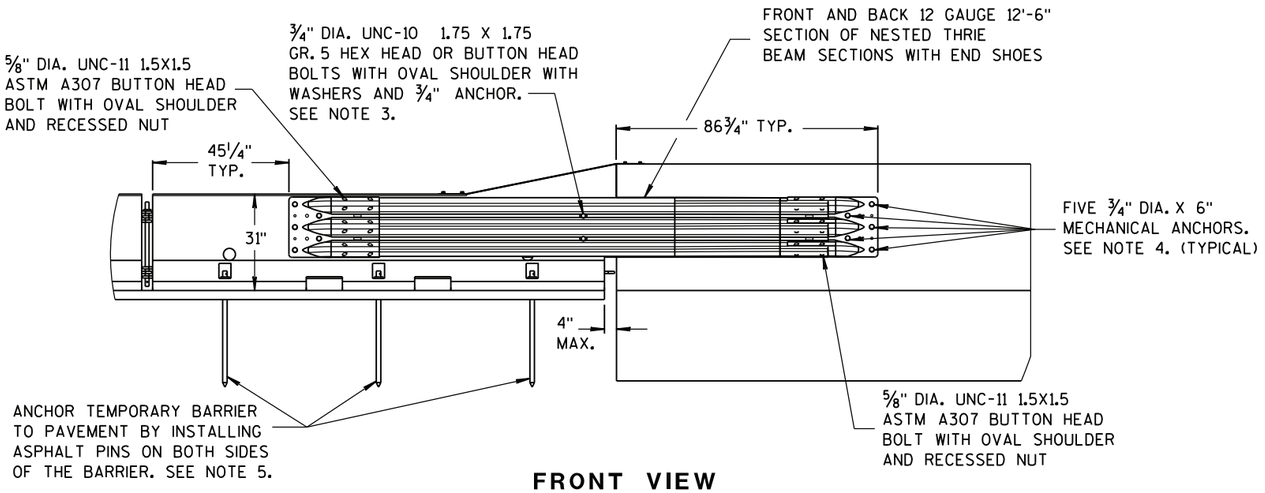
ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

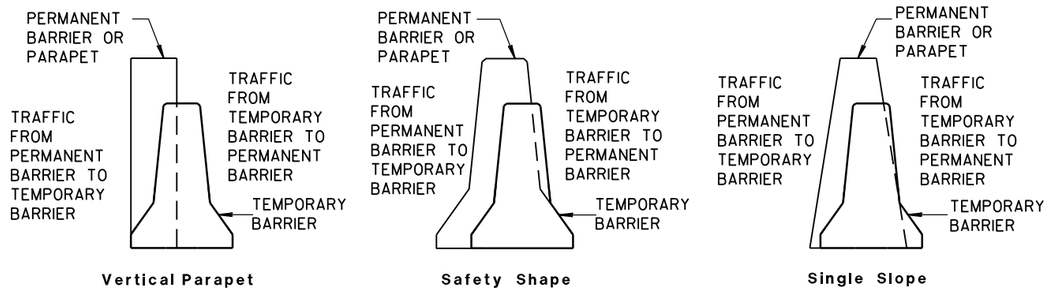
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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



FRONT VIEW

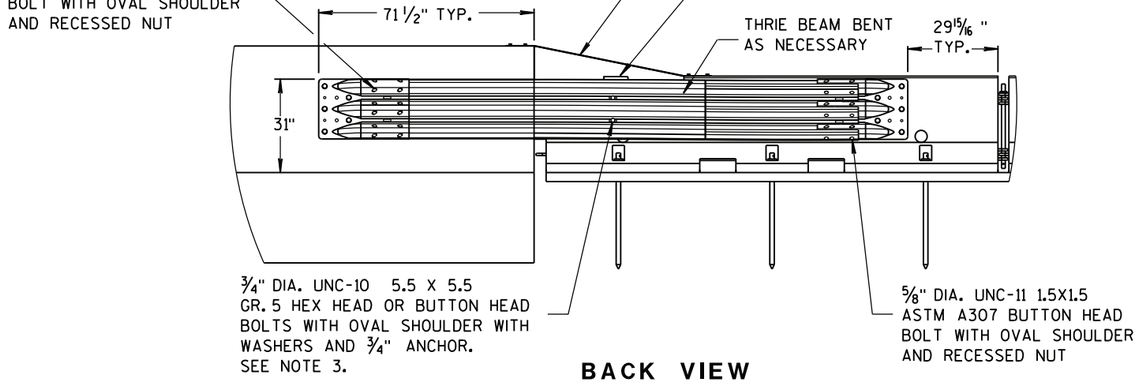


TEMPORARY BARRIER PLACEMENT FOR TRANSITION TO TIED DOWN SYSTEM

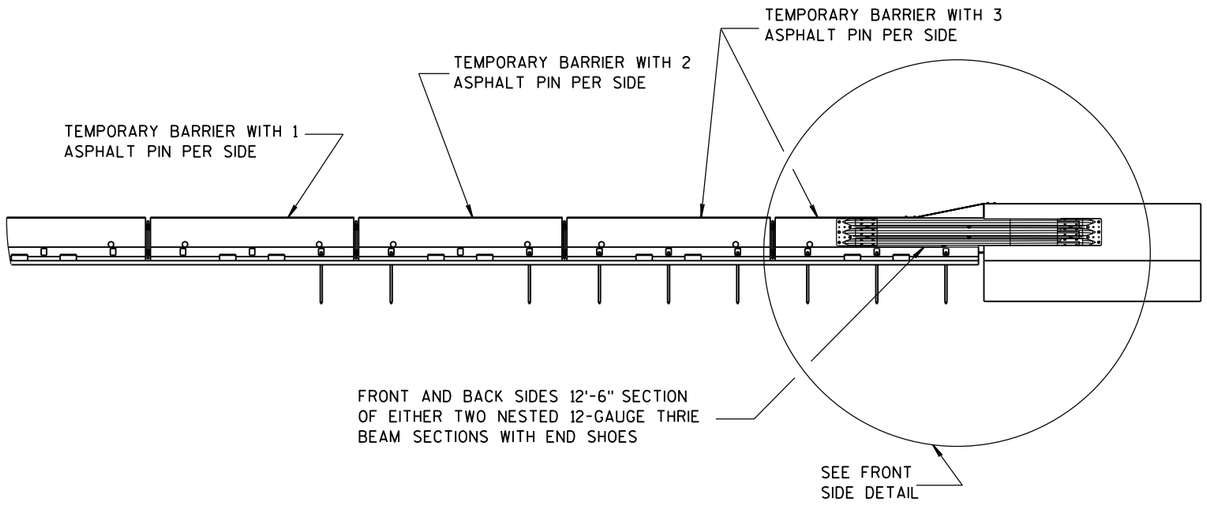
NOTES

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

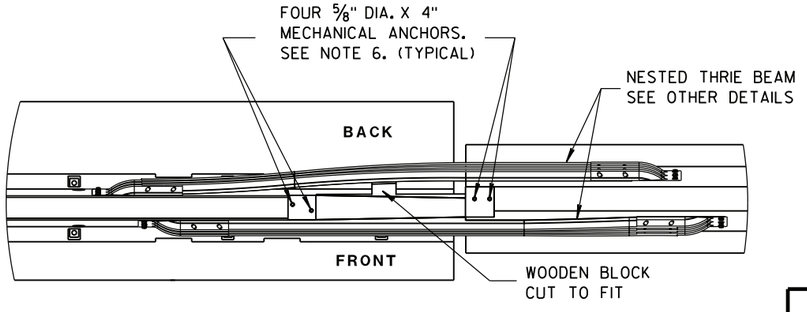
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 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.



BACK VIEW



FRONT VIEW



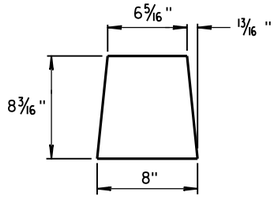
PLAN VIEW

TRANSITION TO TIED DOWN SYSTEM

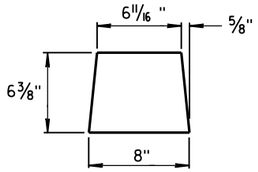
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

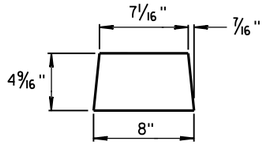
6
S.D.D. 14 B 7-15f



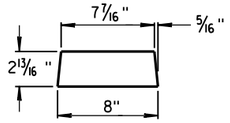
GUSSET 1



GUSSET 2

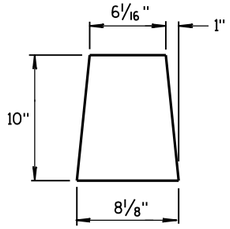


GUSSET 3

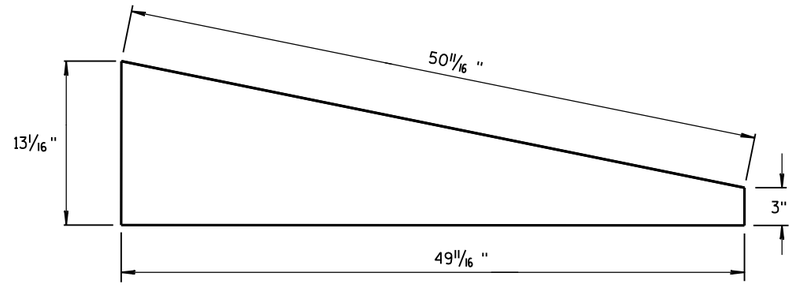


GUSSET 4

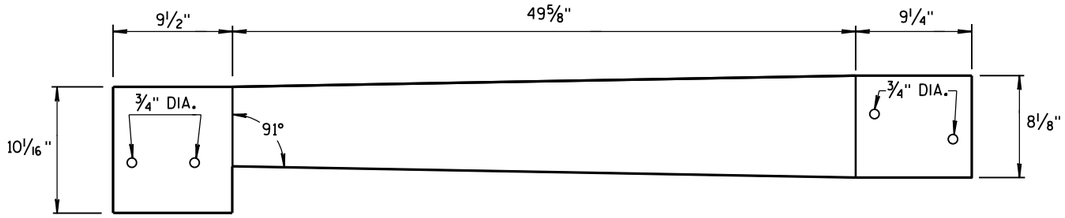
GUSSETS

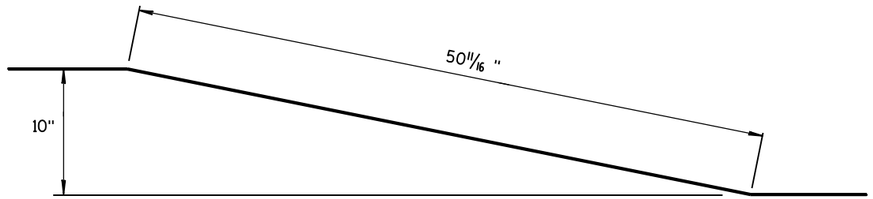


END PLATE



SIDE PLATE

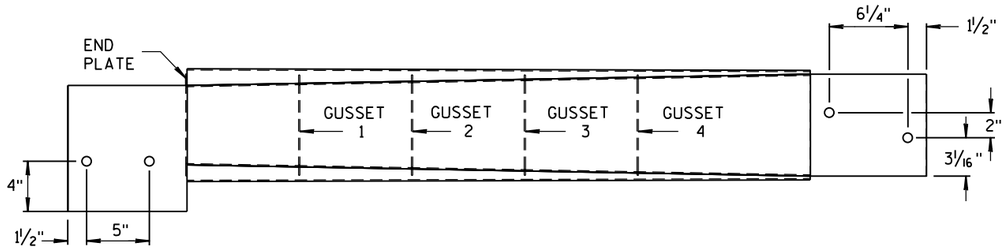


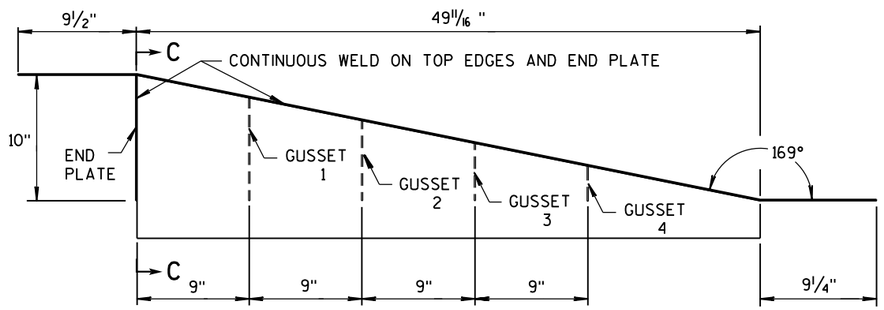


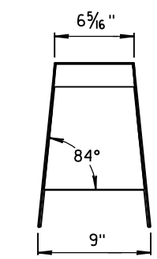
TOP PLATE

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

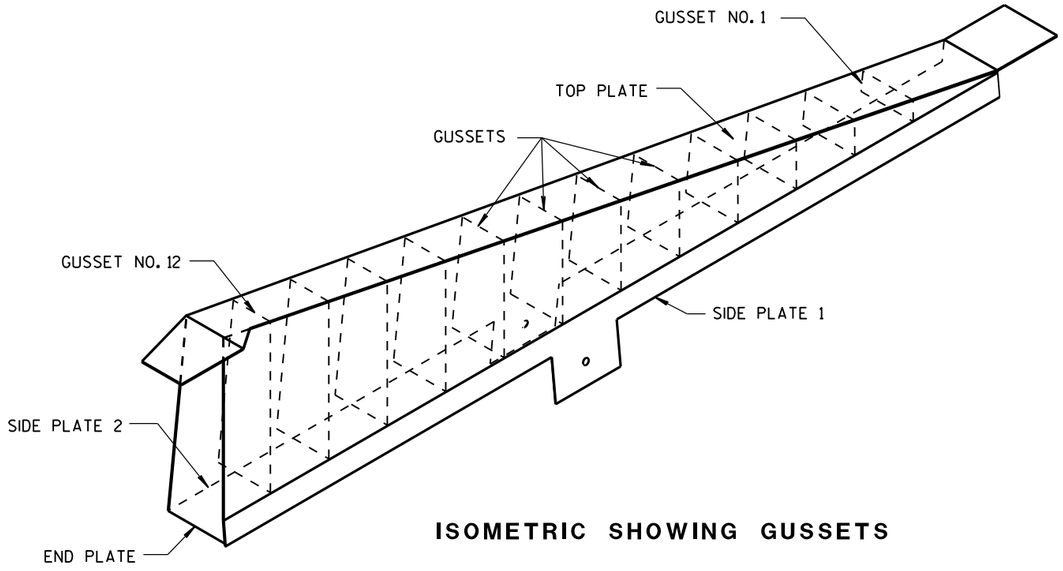
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

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

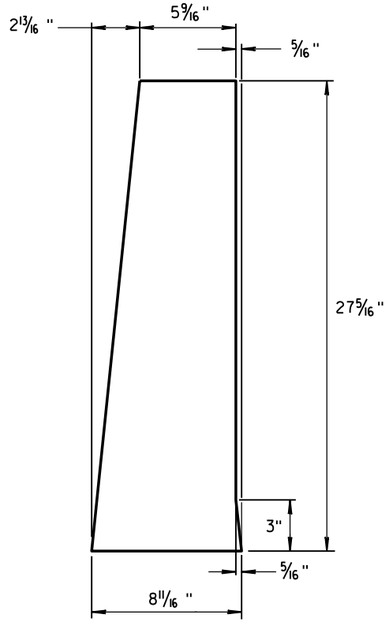
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

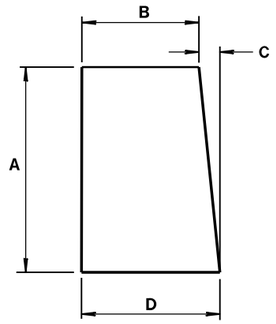


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



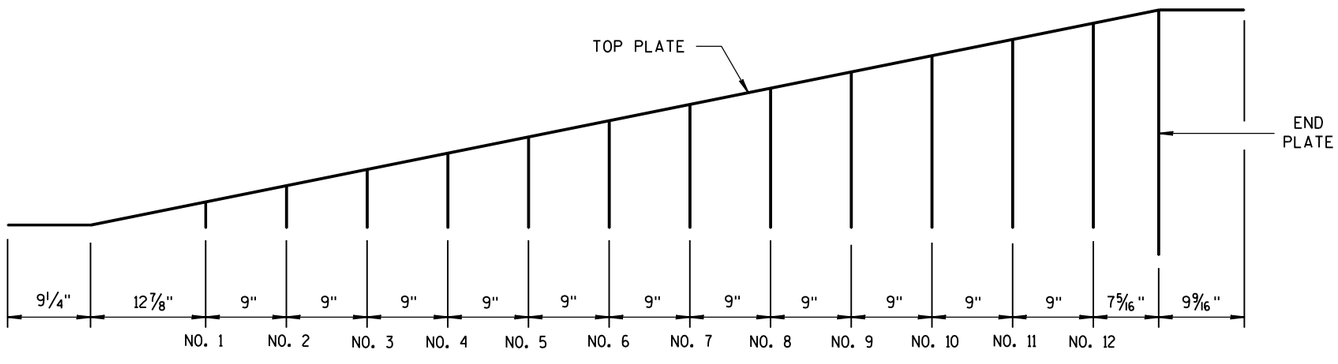
GUSSETS 1 - 12

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

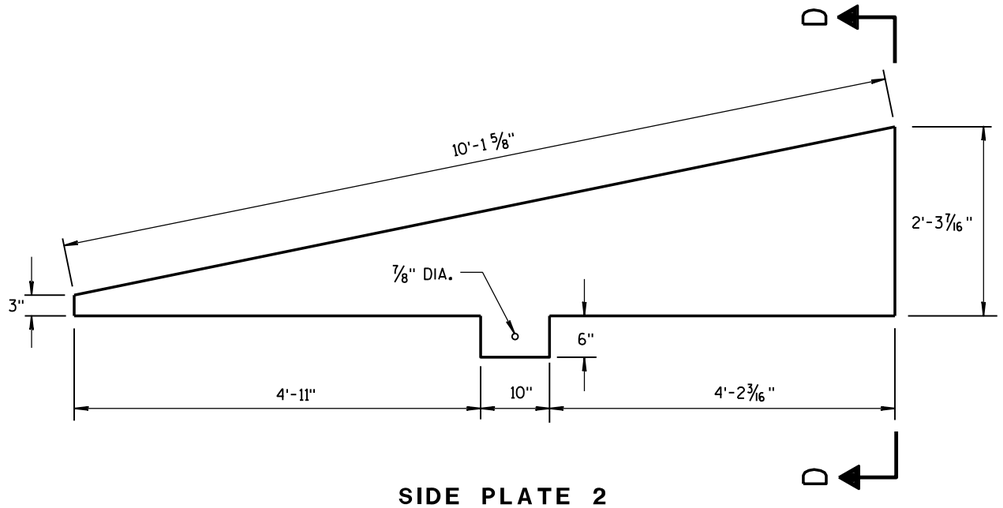
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

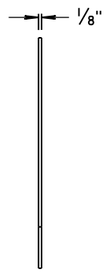
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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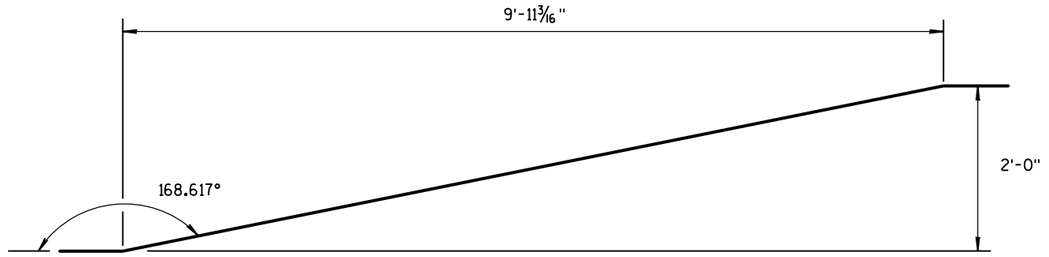
S.D.D. 14 B 7-15h



SIDE PLATE 2

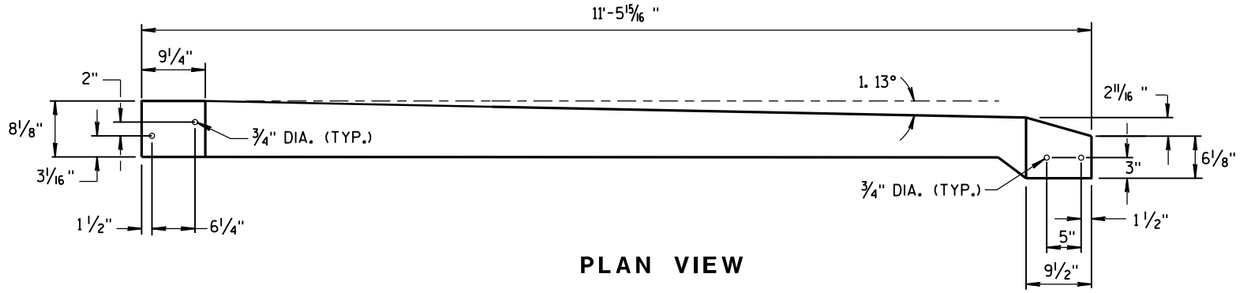


END VIEW



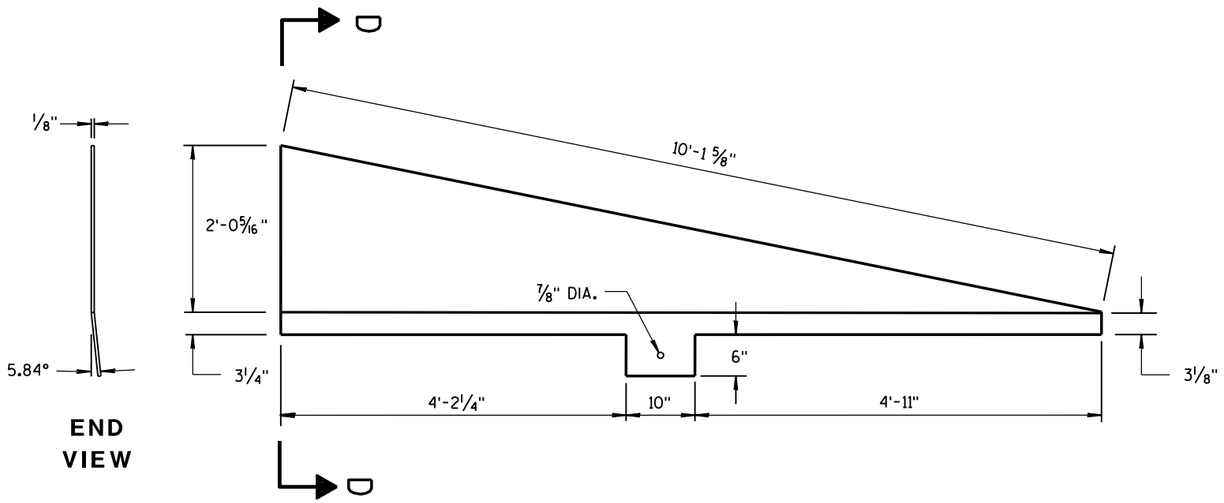
SIDE VIEW

TOP PLATE



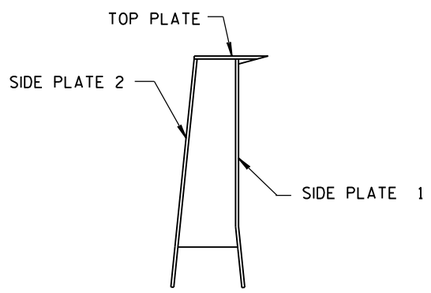
PLAN VIEW

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 DEVELOPMENT ENGINEER

FHWA

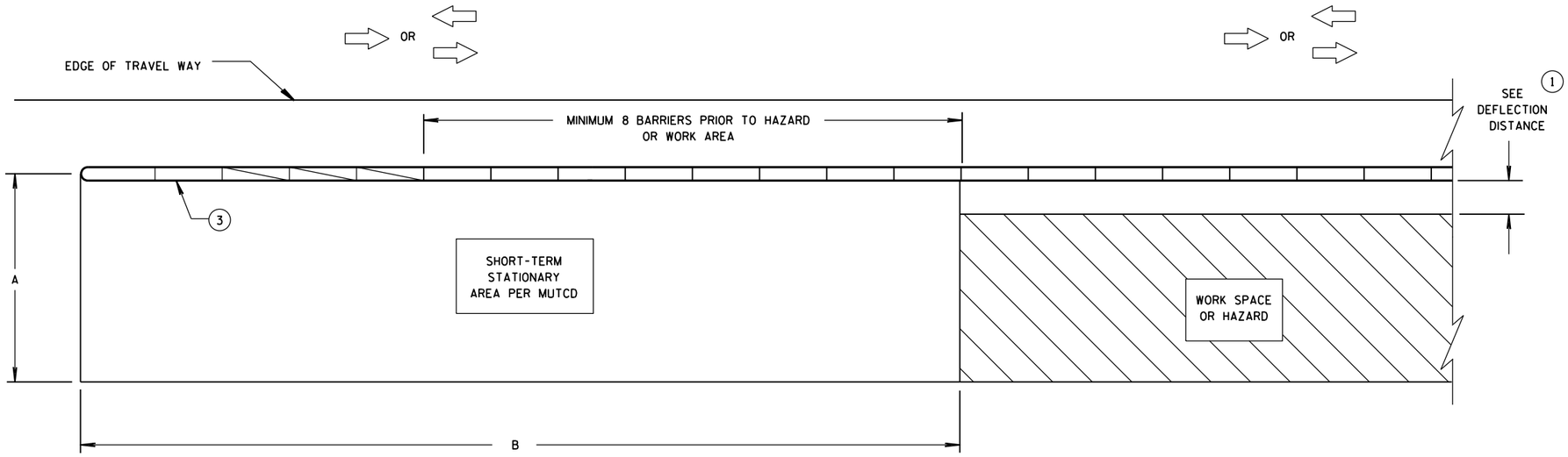
UNIT SUPERV 344 ENT

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

6

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



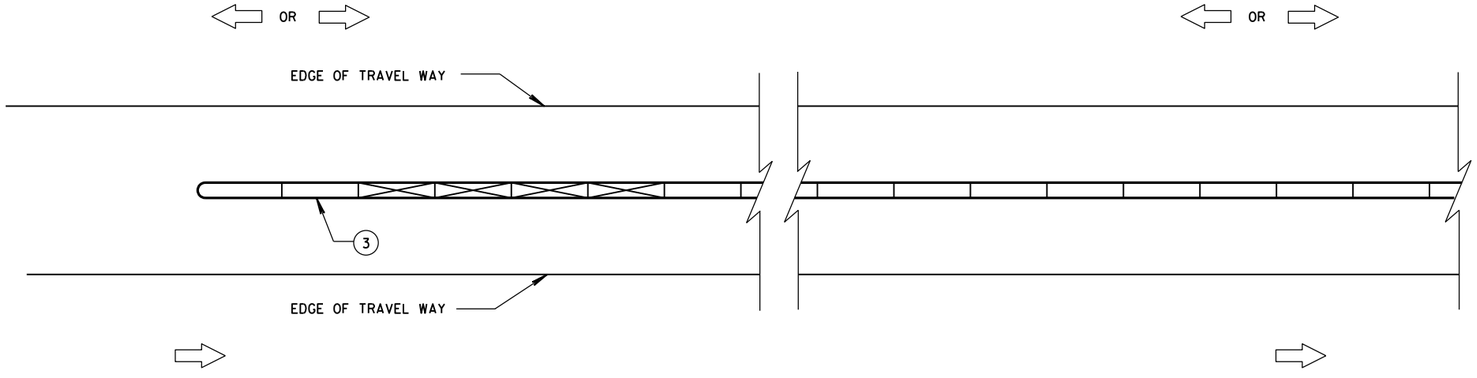
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

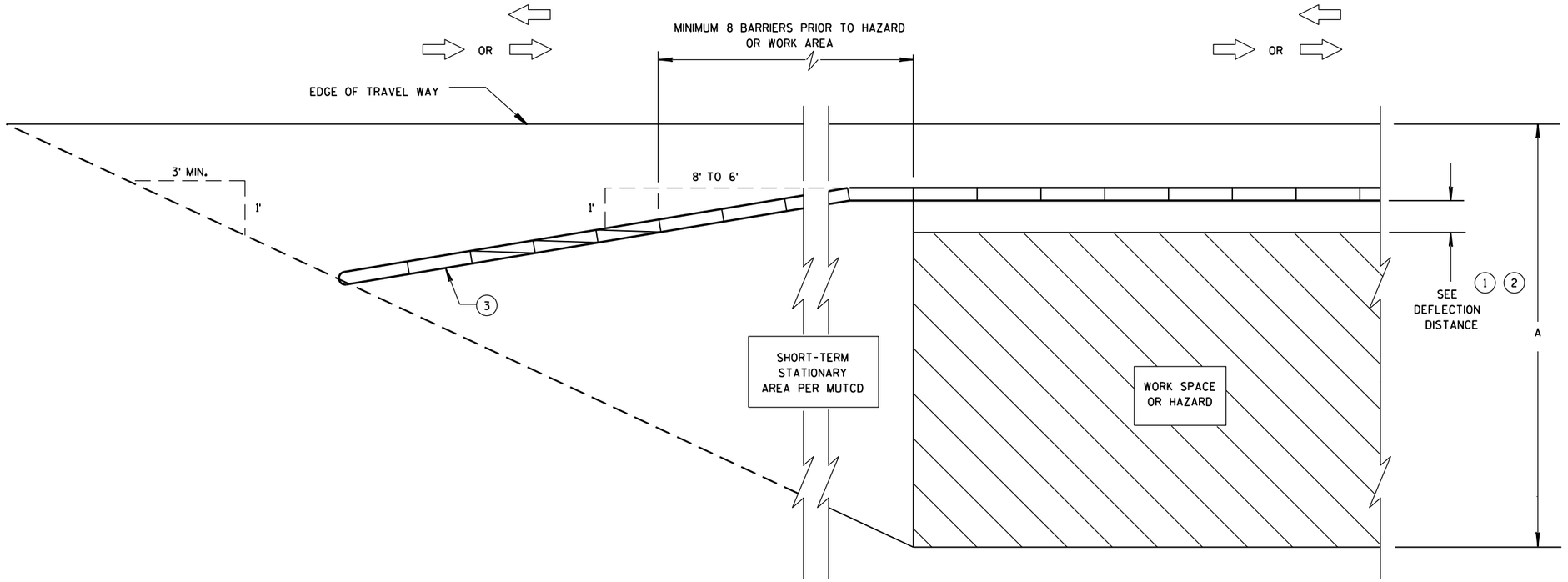
(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

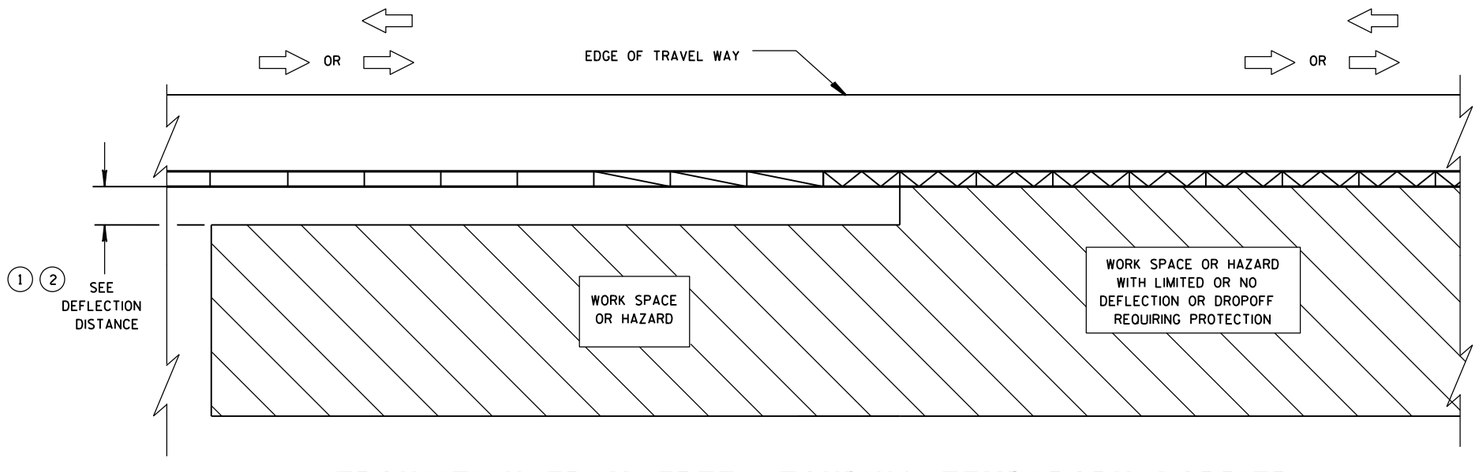
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 14 B 8-2a
S.D.D. 14 B 8-2a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

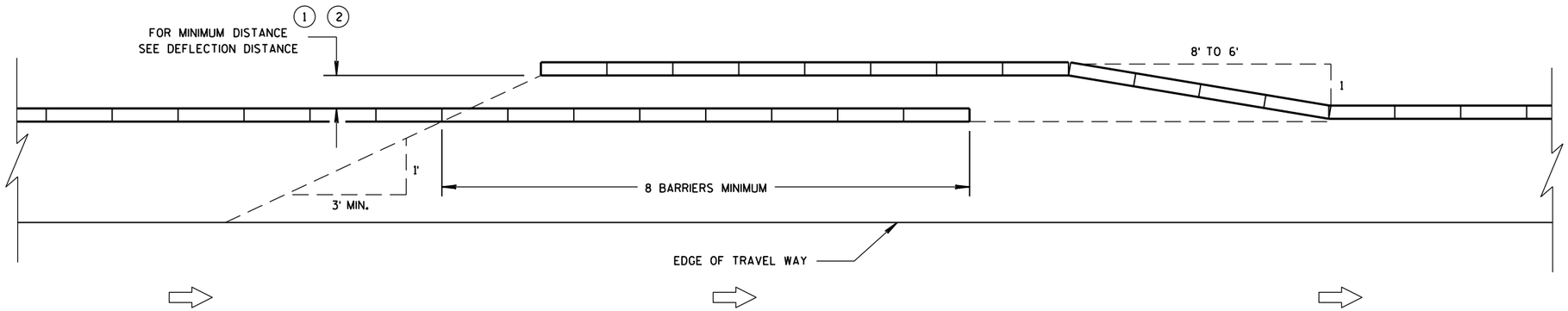
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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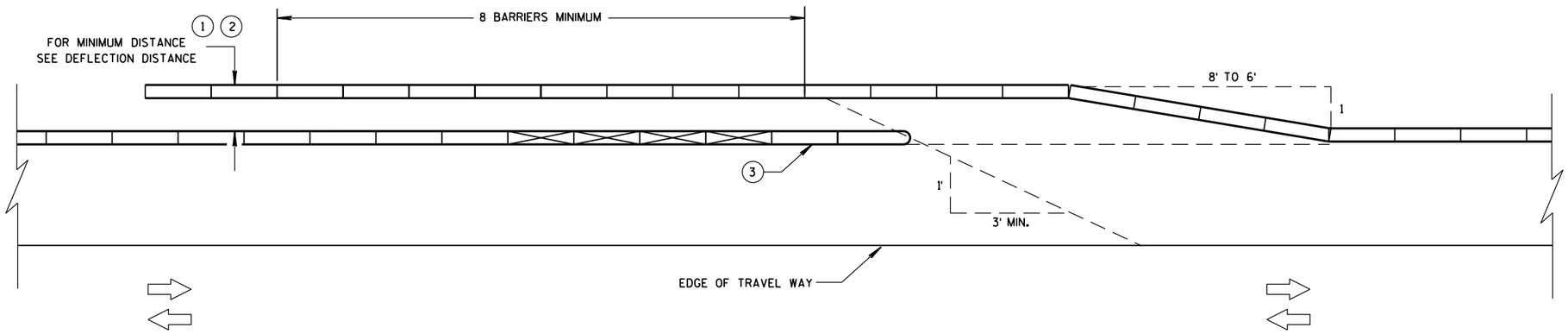
S.D.D. 14 B 8-2b

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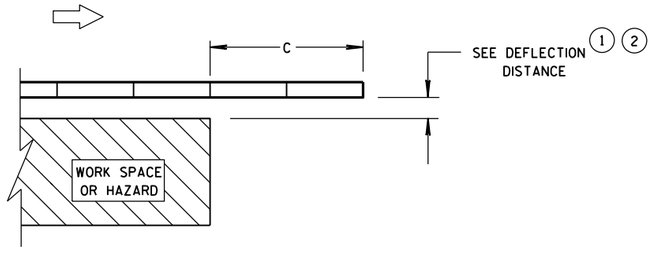
S.D.D. 14 B 8-2b



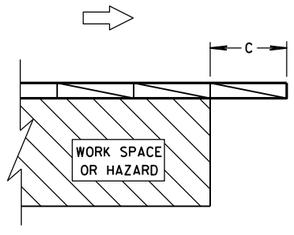
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

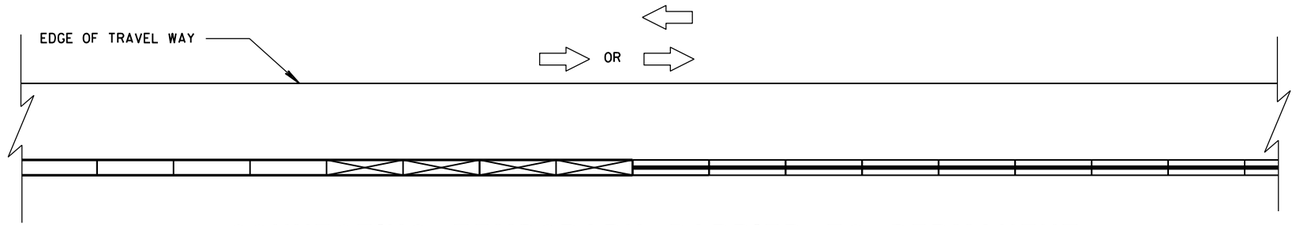
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

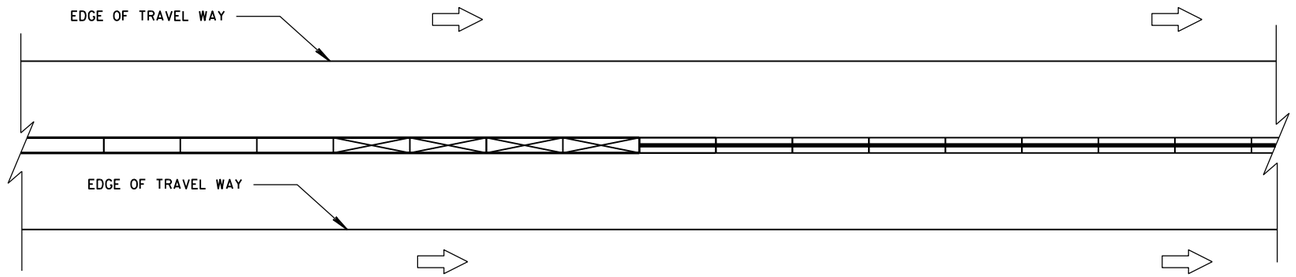
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 14 B 8-2c



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR
SAND BARREL ARRAY

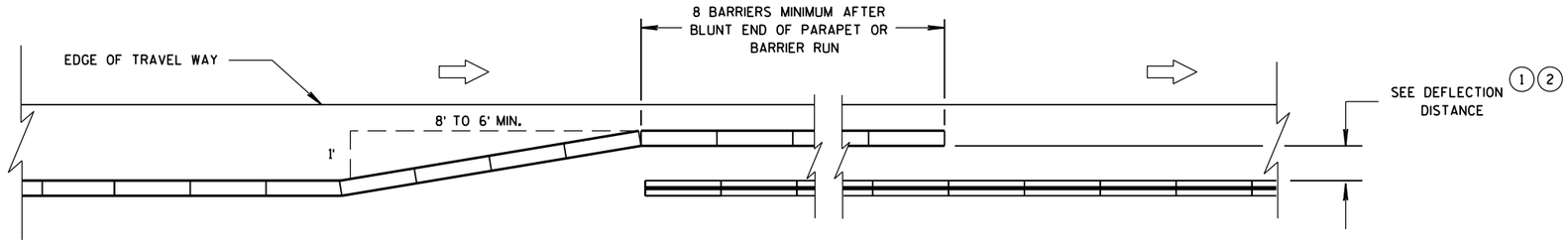
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

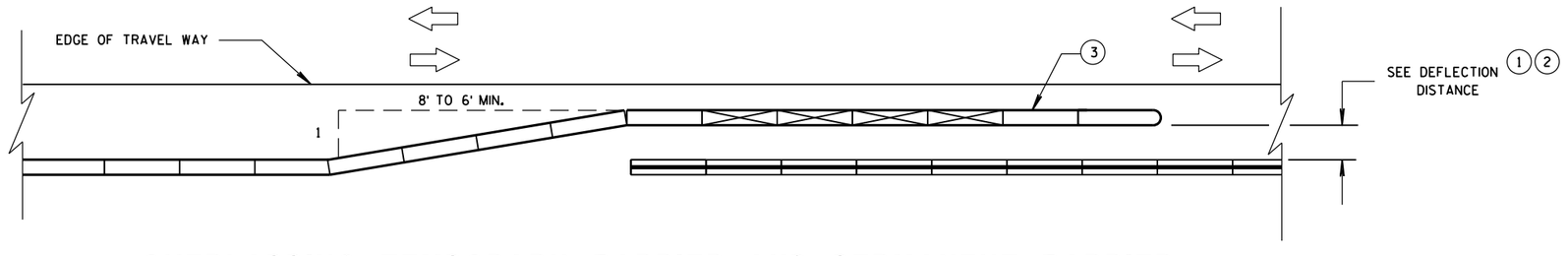
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER
OR CONCRETE PARAPET

FREE STANDING TEMPORARY
BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 8-2d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

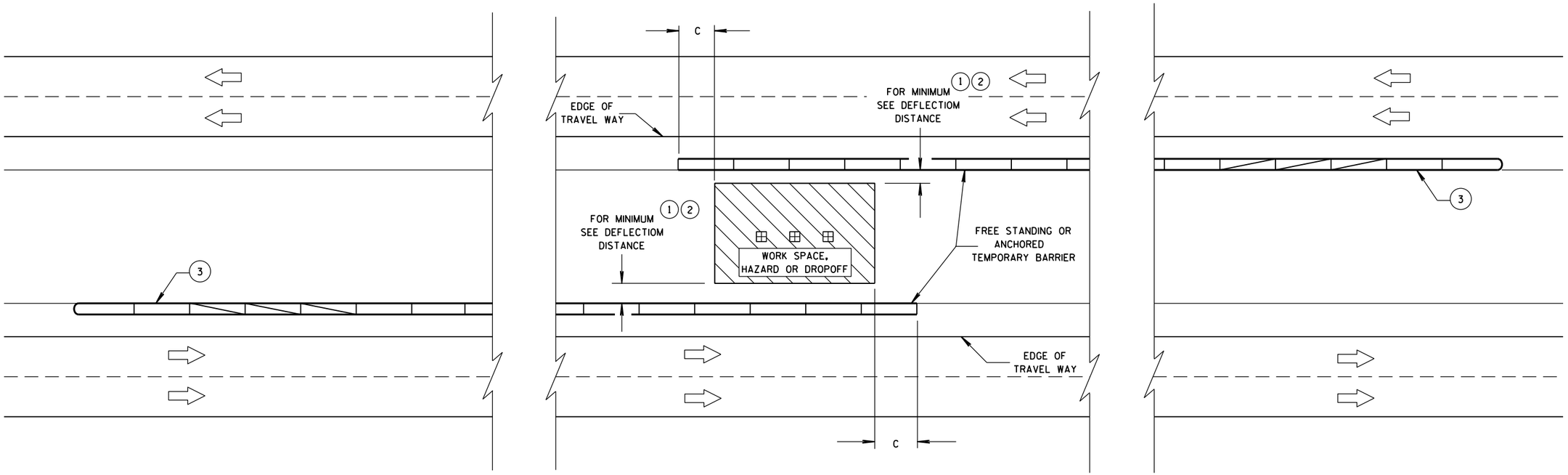
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



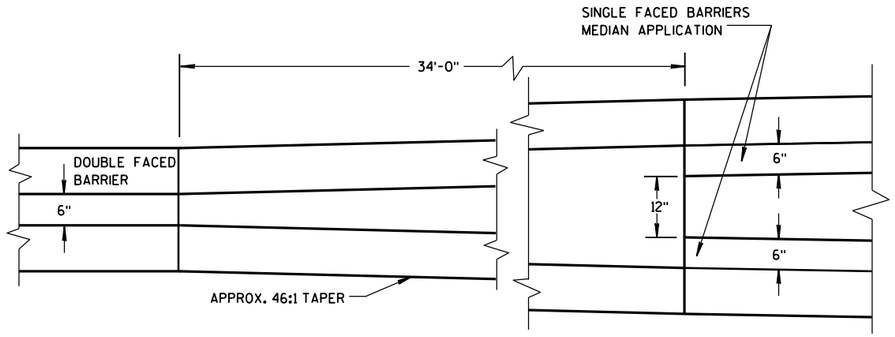
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINNER
FHWA

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S.D.D. 14 B 8-2e



PLAN VIEW

TRANSITION DETAILS OF DOUBLE FACED TO SINGLE FACED CONCRETE MEDIAN BARRIER

(FOOTINGS ARE NOT SHOWN)

GENERAL NOTES

SPLICES OF LONGITUDINAL BARS SHALL BE MADE WITH BARS LAPPED AT LEAST 18-INCHES AND FIRMLY TIED OR FASTENED TOGETHER.

ALL BAR STEEL REINFORCEMENT SHALL CONFORM TO REQUIREMENTS OF AASHTO M31, GRADE 60.

(1) BARRIER SHALL BE INSTALLED ON A CONCRETE SHOULDER INSTEAD OF THE CONCRETE FOOTING WHEN SPECIFIED OR SHOWN ELSEWHERE IN CONTRACT.

(2) OPENINGS FOR DRAINAGE SHALL BE PLACED AT LOW POINTS OF VERTICAL CURVES OR WHERE DIRECTED BY THE ENGINEER.

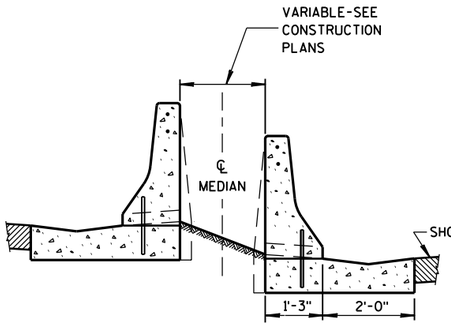
(3) 3/4-INCH BEVEL OR 1-INCH RADIUS (TYPICAL).

(4) NO. 4 BARS SHALL BE CONTINUED THROUGH CONSTRUCTION JOINTS.

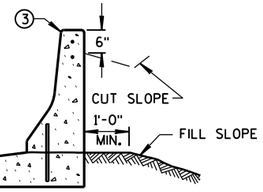
(5) EXPANSION JOINTS SHALL BE PLACED AT EXISTING EXPANSION JOINTS IN THE PAVEMENT AND AT STRUCTURES. SEE REINFORCEMENT AT BARRIER END DETAIL.

(6) SAWED CONTRACTION JOINTS SHALL BE PROVIDED ACROSS THE FULL WIDTH OF THE BARRIER FOOTING, AND IN FRONT, TOP AND BACK FACE OF THE BARRIER AT EXISTING PAVEMENT JOINTS AND AT UNIFORM INTERVALS BETWEEN WITH A MAXIMUM SPACING OF 25 FEET.

HIGH SIDE
CONCRETE BARRIER DETAIL

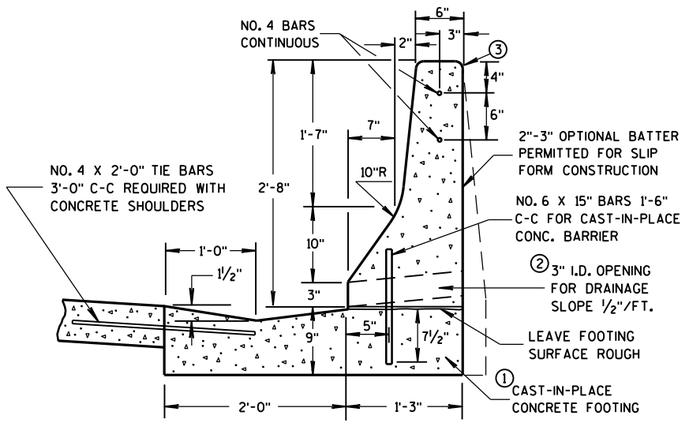


MEDIAN

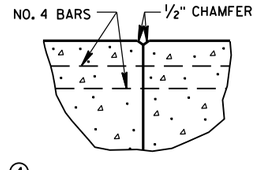


SHOULDER

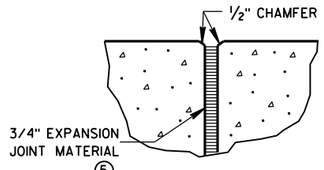
TYPICAL APPLICATIONS



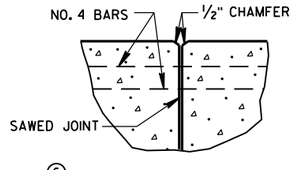
SECTION VIEW



4 CONSTRUCTION JOINT



5 EXPANSION JOINT



6 CONTRACTION JOINT

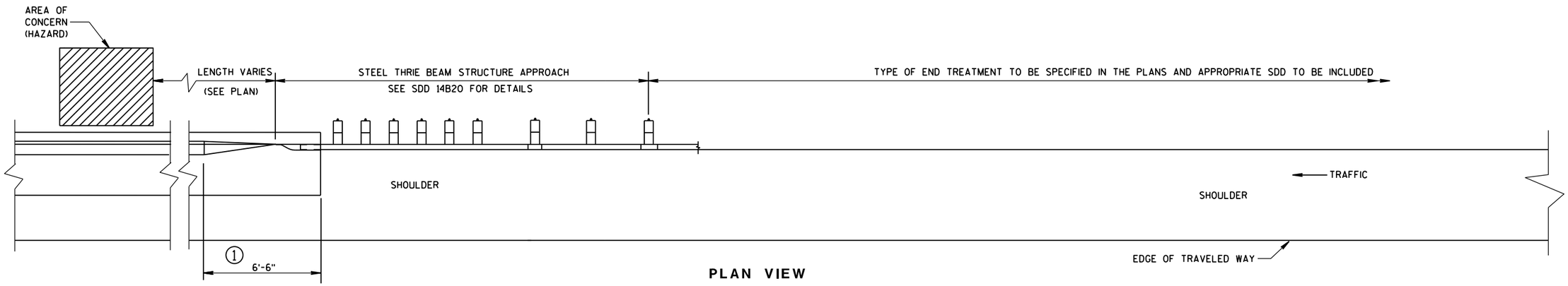
JOINT DETAILS

CONCRETE BARRIER,
SINGLE-FACED
(WITH ANCHORAGE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

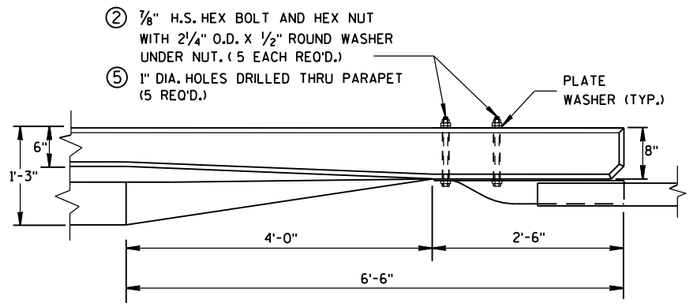
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S.D.D. 14 B 22-6a



PLAN VIEW

TRANSITION TO STEEL PLATE BEAM GUARD AND END TERMINAL



PLAN VIEW

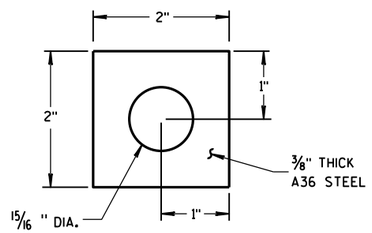
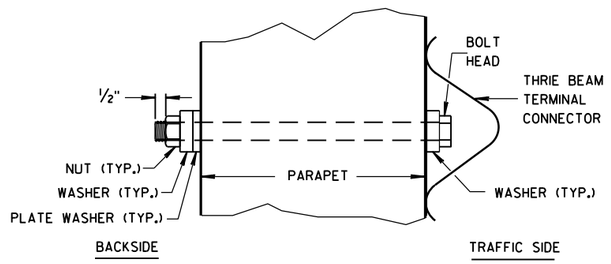


PLATE WASHER DETAIL

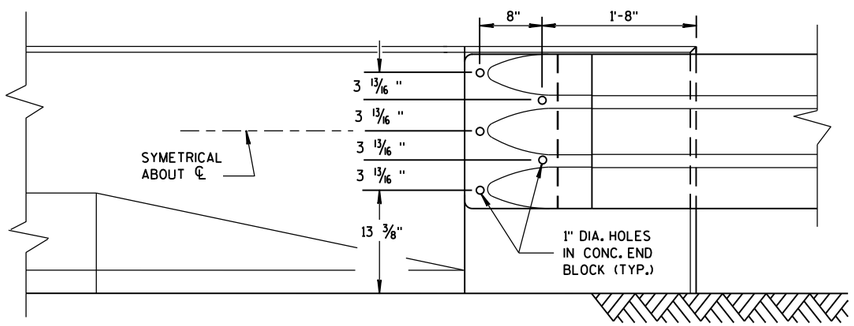


THRIE BEAM BOLT DETAIL

GENERAL NOTES

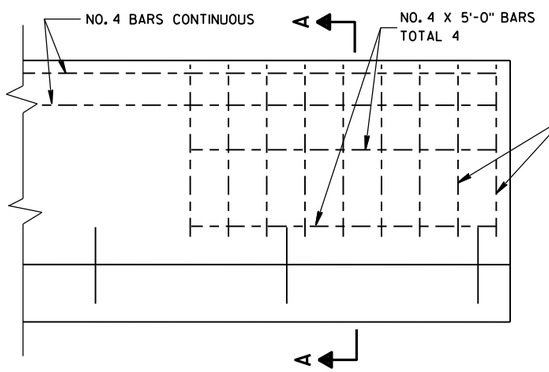
1. A SPECIAL END IS REQUIRED ON THE CONCRETE BARRIER TO TRANSITION TO A CONNECTION WITH THE STEEL THRIE BEAM STRUCTURE APPROACH. SEE THE DETAILS ON THIS SHEET.
2. BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
3. REINFORCEMENT REQUIRED AT EXPANSION JOINTS AND WHERE CONCRETE BARRIER IS TERMINATED.
4. PLACE REINFORCEMENT SUCH THAT IT WILL NOT CONFLICT WITH THE BOLT HOLES IN THE THRIE BEAM TERMINAL CONNECTOR.
5. INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

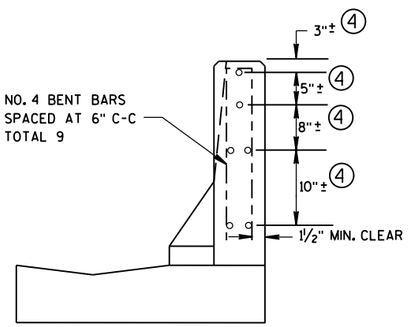


FRONT VIEW

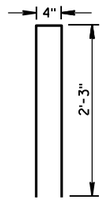
CONCRETE BARRIER TRANSITION TO THRIE BEAM



FRONT VIEW



SECTION A-A



BENT BAR DETAIL

3 REINFORCEMENT AT BARRIER END

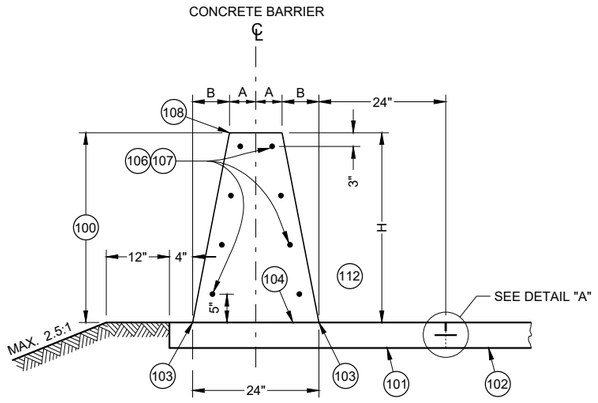
CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

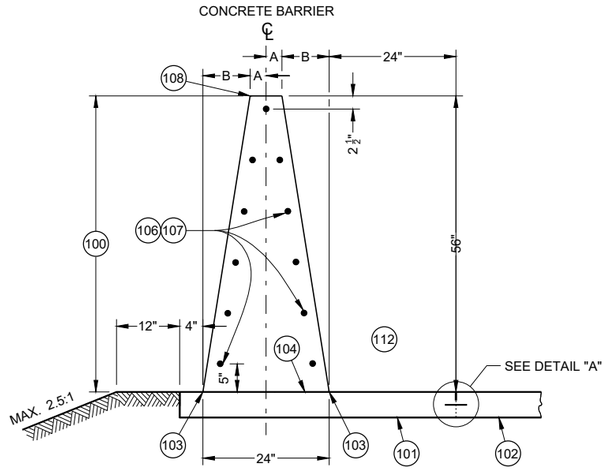
APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

S.D.D. 14 B 22-6b

S.D.D. 14 B 22-6b



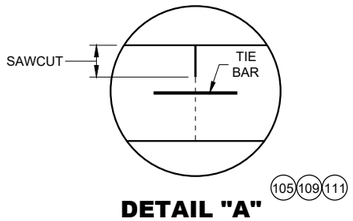
32 - INCH, 36 - INCH OR 42 - INCH SINGLE SLOPE CONCRETE BARRIER
(TYPE S32, TYPE S36, TYPE S42)



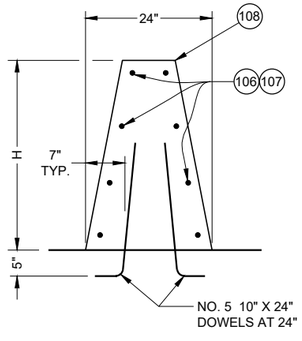
56 - INCH SINGLE SLOPE CONCRETE BARRIER
(TYPE S56)

TABLE "A"

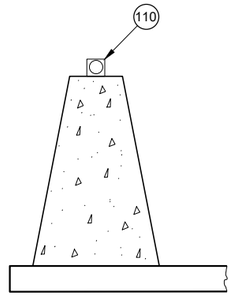
BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6 ¼	5 ¾	8
42	5 ¼	6 ¾	10
56	3	9	11



DETAIL "A"



SINGLE SLOPE CONCRETE BARRIER ON BRIDGE
(NON OUTER PARAPET APPLICATION)



DELINEATION

GENERAL NOTES

WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.

LOCATE EXPANSION JOINTS IN CONCRETE BARRIER SHALL AT ALL DECK AND PRINCIPAL WALL JOINTS. FILL EXPANSION JOINT WITH EXPANSION JOINT MATERIAL. SEAL THE EXPANSION JOINT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

2" CLEAR COVER TYPICAL

ANCHORS ARE REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN IN THIS SDD OR DETAIL SHOWN ON SDD 14B33. ANCHORS INCIDENTAL TO CBSS.

PROVIDE A 1" DEEP CONTRACTION JOINT IN BARRIER PAD AND BARRIER. JOINT IS TO MATCH ADJACENT CONCRETE JOINTS. NO DOWEL BARS ARE REQUIRED FOR BARRIER PAD. IF ADJACENT TO ASPHALT, CONTRACTION JOINT IS REQUIRED EVERY 15'.

ALL REBAR SHALL BE EPOXY COATED M31 TYPE S. SEE STANDARD SPECIFICATION 505.

CONCRETE BARRIER, UPPER CONCRETE BARRIER, LOWER CONCRETE BARRIER, CONCRETE BARRIER PAD, AND FOOTINGS ARE TERMS USED TO DESCRIBE PARTS OF SINGLE SLOPE CONCRETE BARRIER BID ITEMS. THESE PARTS ARE INCIDENTAL TO THE SINGLE SLOPE CONCRETE BARRIER BID ITEMS.

(100) CONCRETE BARRIER

(101) CONCRETE BARRIER PAD

(102) PAVEMENT

(103) WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1 ½", USE TYPE A SINGLE SLOPE BARRIER.

(104) OPTIONAL CONSTRUCTION JOINT.

(105) CONSTRUCTION JOINTS MAY BE ELIMINATED WHEN CONCRETE SHOULDER IS LESS THAT 10'.

(106) STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL IS 2' BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.

(107) NO. 5 CONTINUOUS BARS EVENLY SPACED (SEE TABLE "A").

(108) USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

(109) CONCRETE BARRIER PAD UNDER CBSS MAY BE PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED ⅓ DEPTH. CONCRETE BARRIER PAD AND SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. CONCRETE BARRIER PAD MINIMUM DEPTH IS 6", OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.

(110) SEE SDD 15A04 FOR DELINEATOR DETAILS AND SPACING.

(111) SEE SDD 13C01 FOR DETAILS TYPING CONCRETE BARRIER TO ADJACENT CONCRETE

(112) TRAFFIC SIDE

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B32 - 08a

GENERAL NOTES

(400) END ANCHOR SINGLE SLOPE CONCRETE BARRIER.

(401) PARAPET, SIGN BRIDGE BASE, LIGHT POLE BASE OR OTHER OBJECT SINGLE SLOPE CONCRETE BARRIER CANNOT TIE INTO.

(402) JOINT SEAL CONFORMING TO STANDARD SPECIFICATION 415.2.6

(403) EXPANSION JOINT MATERIAL.

(404) INLET (SEE PLAN)

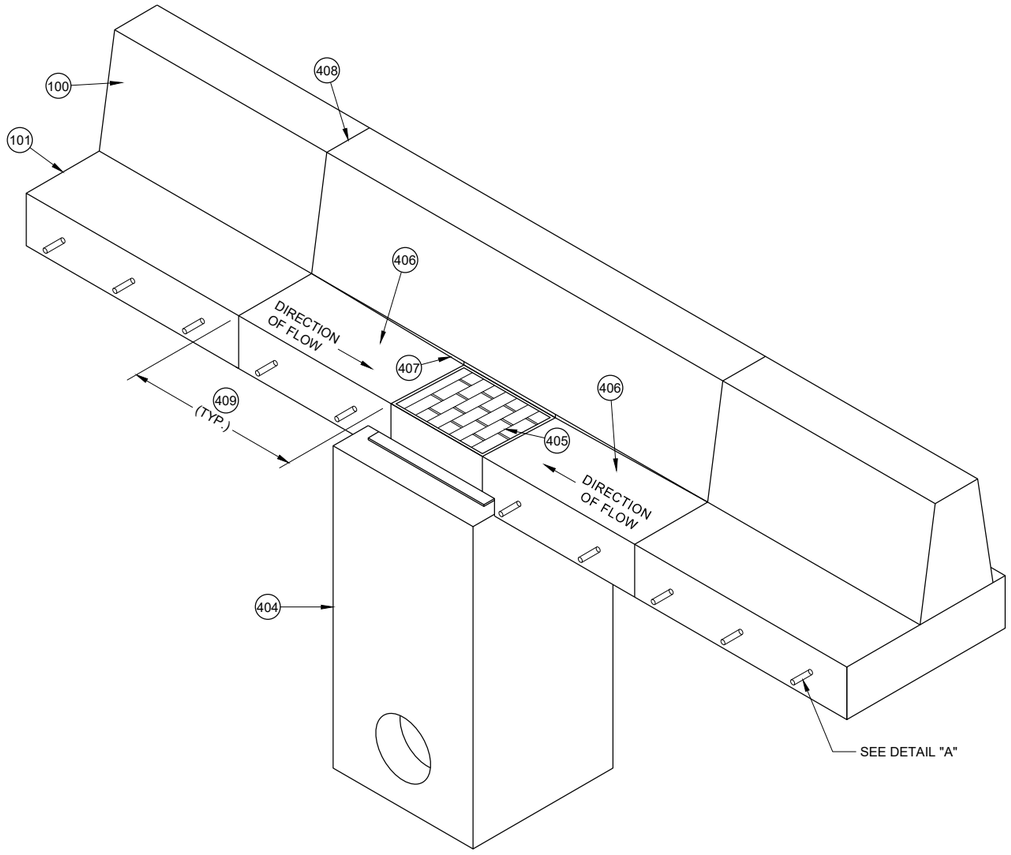
(405) INLET COVER BW (SEE PLAN)

(406) WARP PAN TO MATCH INLET COVER.

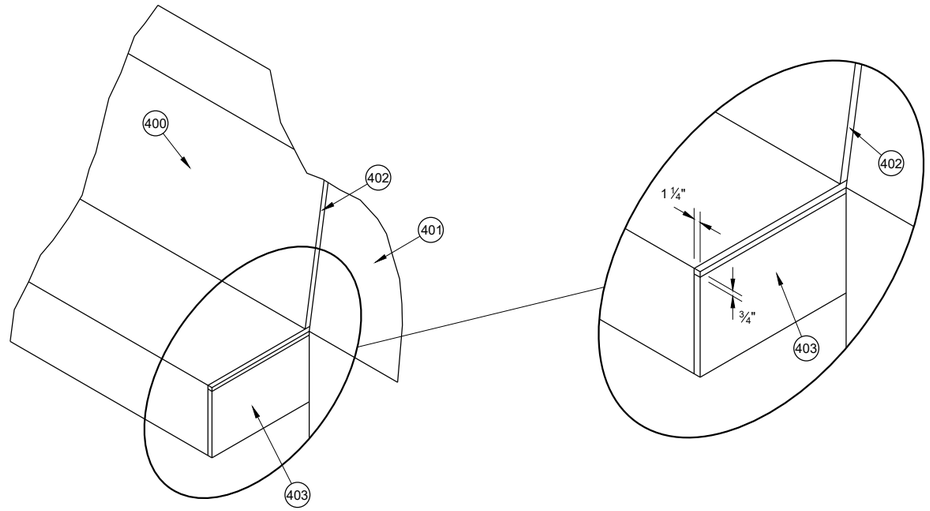
(407) EXTEND BARRIER SLOPE TO INLET. SEE PLAN FOR THE LENGTH OF EXTENSION.

(408) CONTRACTION JOINT.

(409) 3' (TYP.)



DRAINAGE DETAIL



EXPANSION JOINT DETAIL

6

6

SDD 14B32 - 09d

SDD 14B32 - 09d

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

(500) SEE TABLE "A" FOR DIMENSIONS

(501) SEE TABLE "D"

(502) MULTIPLE HEIGHT TRANSITION MAY BE USED IN SEQUENCE TO GET APPROPRIATE HEIGHT.

(503) COLD JOINT

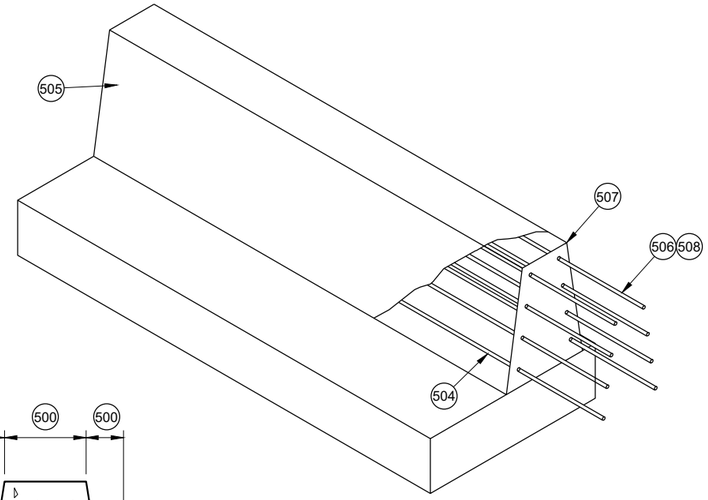
(504) BARRIER REBAR (SEE OTHER DETAILS FOR BAR SIZE, QUANTITY AND LOCATION).

(505) SINGLE SLOPE BARRIER SHOWN. SIMILAR DETAIL CAN BE USED FOR COLD JOINT IN END ANCHORS AND TRANSITIONS.

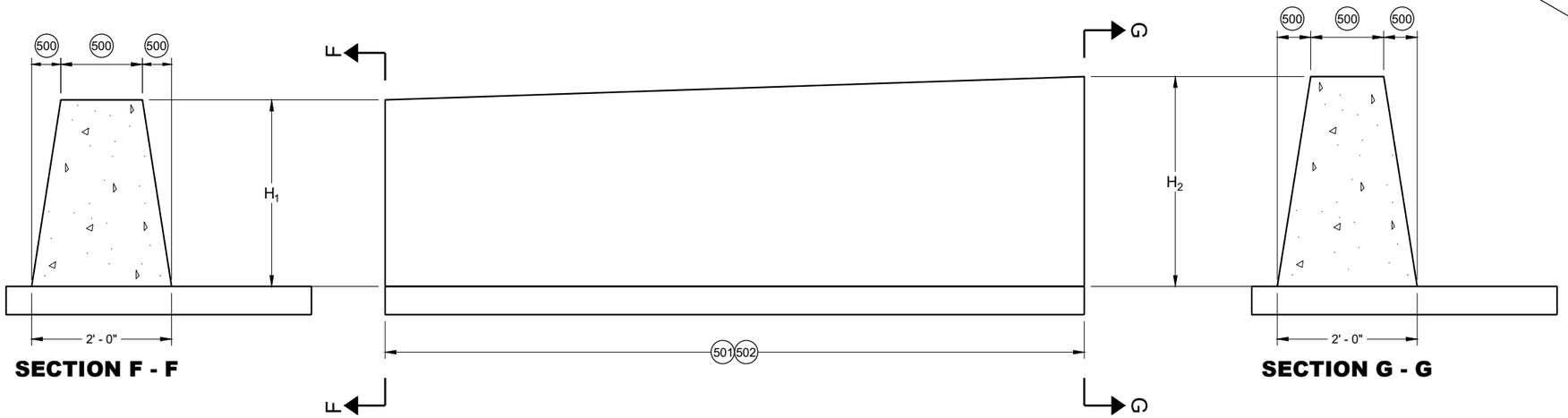
(506) NO. 5 REBAR FOR SPLICE. 3' OF SPLICE REBAR IS LAPPED AND TIED TO BARRIER REBAR. EXTEND 3' OF SPLICE REBAR BEYOND END OF POUR. ALL BARS ARE FIRMLY TIED OR CONNECTED. EVERY REBAR IN THE BARRIER SECTION REQUIRES A SPLICE BAR.

(507) END OF POUR.

(508) LAP AND TIE 3' OF NEXT POUR'S REBAR TO SPLICE REBAR.



COLD JOINT DETAIL



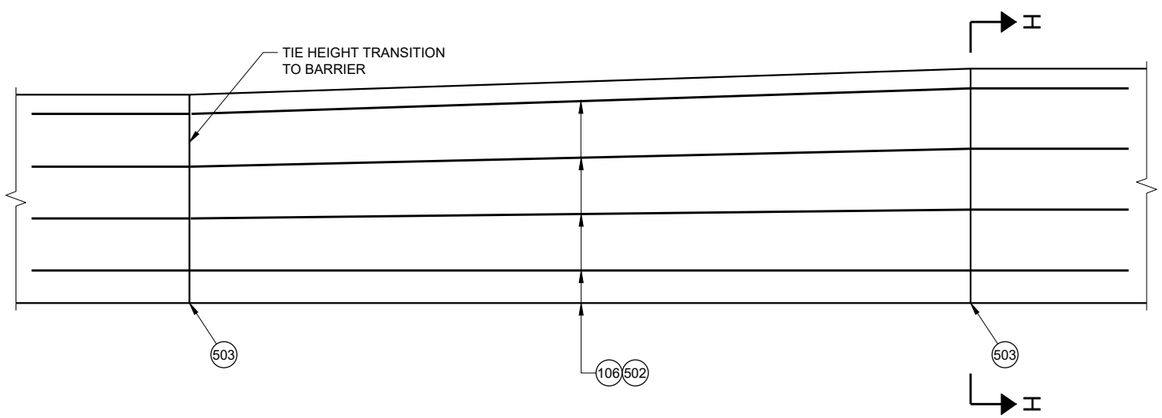
SECTION F - F

SECTION G - G

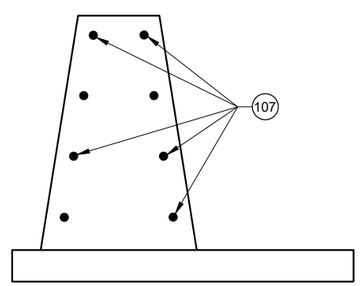
DOUBLE COLD JOINT HEIGHT TRANSITION

TABLE "D"

H_1	H_2	L	NUMBER OF NO. 5 BARS
32"	36"	10' - 0"	8
36"	42"	10' - 6"	10
42"	56"	24' - 6"	11



STEEL REINFORCEMENT DETAIL



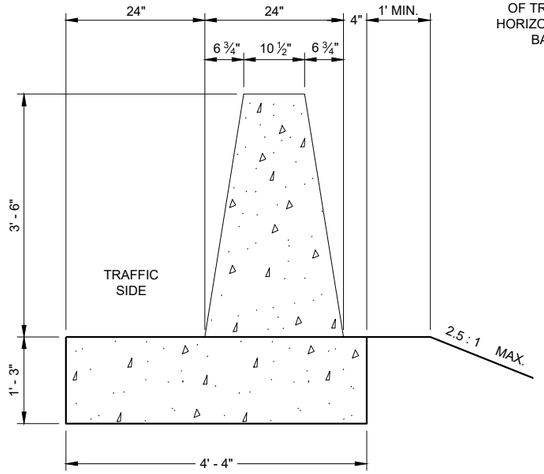
SECTION H - H

CONCRETE BARRIER SINGLE SLOPE (CBSS)

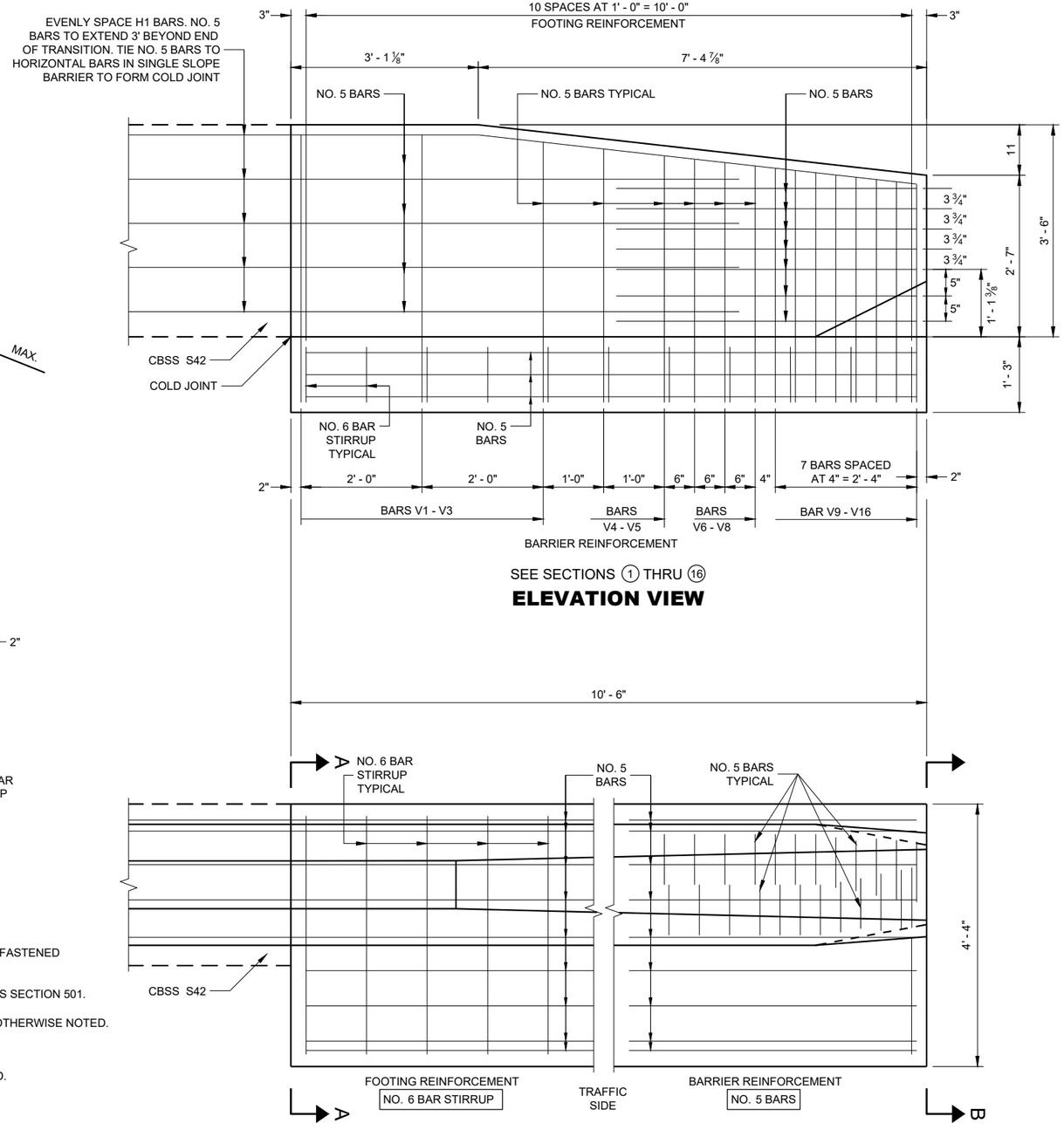
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B32 - 09e

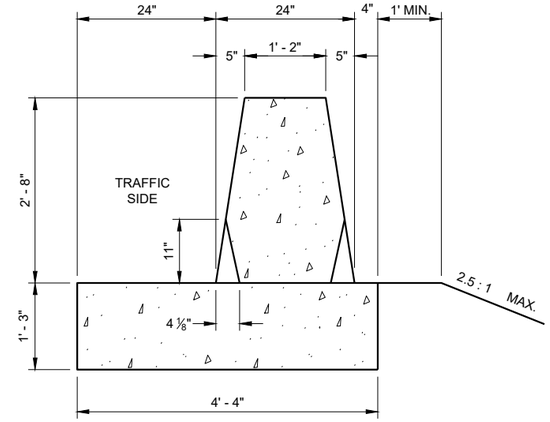
SDD 14B32 - 09e



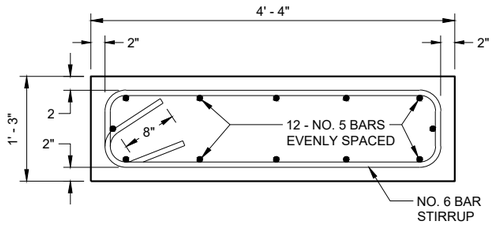
SECTION A - A



ELEVATION VIEW

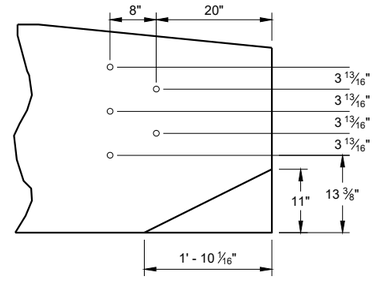


SECTION B - B



TYPICAL FOOTING

PLAN VIEW



PVC PIPE LOCATIONS

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

THRIE BEAM ANCHOR INCIDENTAL TO CONCRETE BARRIER ITEM.

INSTALL SCHEDULE 40 PVC PIPE 1" DIAMETER AT LOCATIONS INDICATED.

EXTEND PVC PIPE COMPLETELY THROUGH BARRIER.

CUT ENDS OF PVC PIPE FLUSH WITH FINISHED FACE OF BARRIER.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

CONCRETE BARRIER
SINGLE SLOPE 42"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

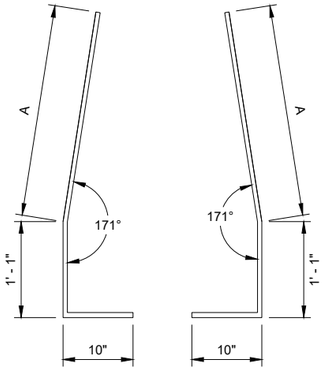
SDD 14B33 - 02g

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SDD 14B33 - 02g

BAR CHART
BAR POSITIONS
1 - 11

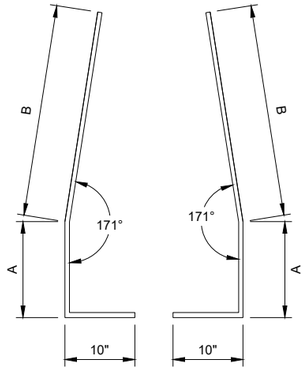
BAR	A
V1	3' - 4 ½"
V2	3' - 4 ½"
V3	3' - 2 ½"
V4	3' - 1"
V5	2' - 11 ½"
V6	2' - 11"
V7	2' - 10 ½"
V8	2' - 9 ½"
V9	2' - 9"
V10	2' - 8 ½"
V11	2' - 8"



BAR BENDING DETAIL
SECTIONS V1 - V4

BAR CHART
BAR POSITIONS
12 - 13

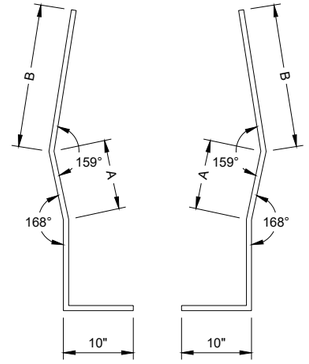
BAR	A	B
V12	1' - 3"	2' - 6"
V13	1' - 8"	2' - 1 ½"



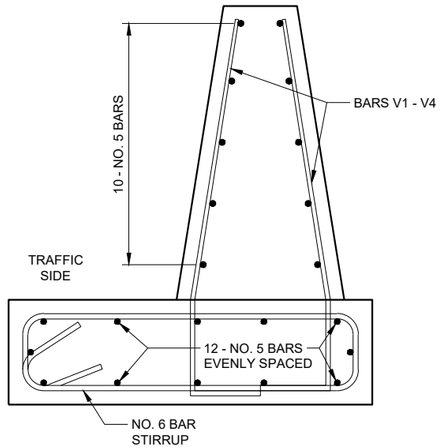
BAR BENDING DETAIL
SECTIONS V12 - V13

BAR CHART
BAR POSITIONS
14 - 16

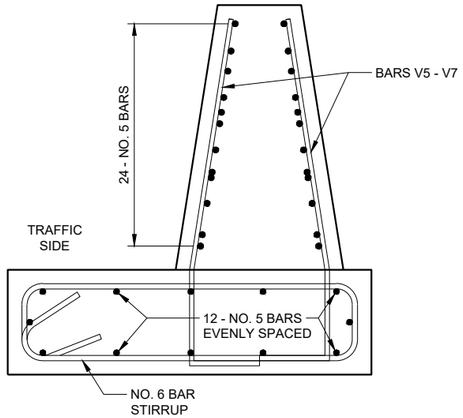
BAR	A	B
V14	6"	2' - 1"
V15	8"	1' - 11"
V16	10"	1' - 8 ½"



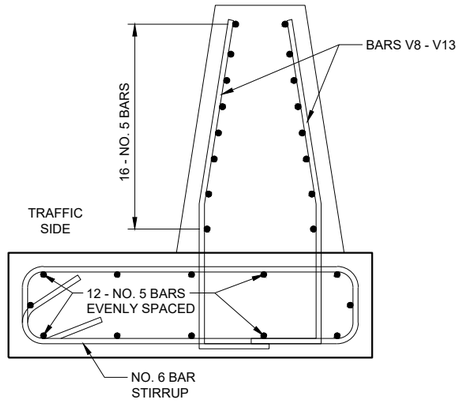
BAR BENDING DETAIL
SECTIONS V14 - V16



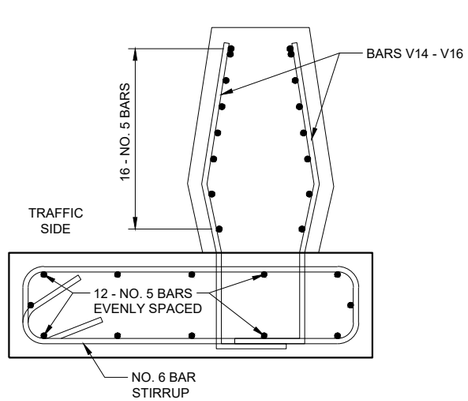
BAR DETAIL
SECTIONS 1 - 4



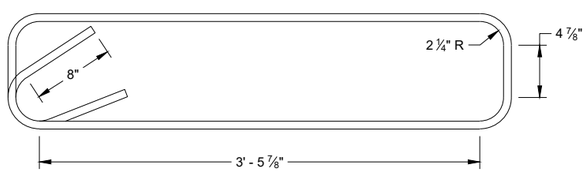
BAR DETAIL
SECTIONS 5 - 7



BAR DETAIL
SECTIONS 8 - 13



BAR DETAIL
SECTIONS 14 - 16



STIRRUP BAR
BENDING DETAIL

CONCRETE BARRIER
SINGLE SLOPE 42"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
ENGINEER

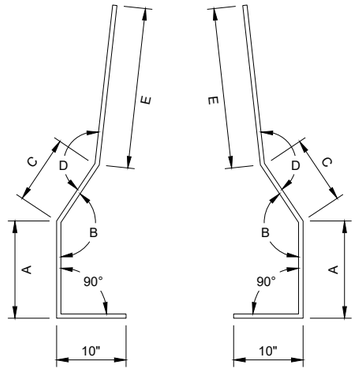
FHWA

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SDD 14B33 - 02h

BAR CHART
BAR POSITIONS
1 - 7

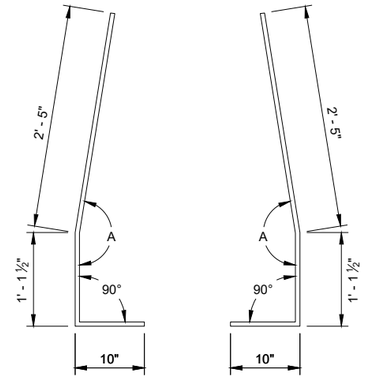
BAR	A	B	C	D	E
B1	1' - 2"	148°	10"	154°	1' - 7 ¾"
B2	1' - 2"	154°	9 ¾"	162°	1' - 7 ¾"
B3	1' - 2"	154°	9 ¾"	163°	1' - 7 ½"
B4	1' - 2"	157°	9 ¾"	165°	1' - 7 ½"
B5	1' -1 ½"	161°	10"	169°	1' - 7 ½"
B6	1' -1 ½"	163°	10"	172°	1' - 7 ½"
B7	1' -1 ½"	166°	10"	175°	1' - 7 ½"



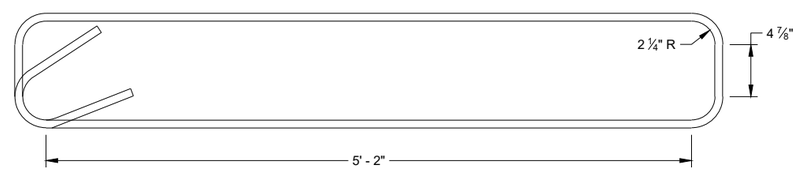
BAR BENDING DETAIL
BARS V1 - V7

BAR CHART
BAR POSITIONS
8 - 12

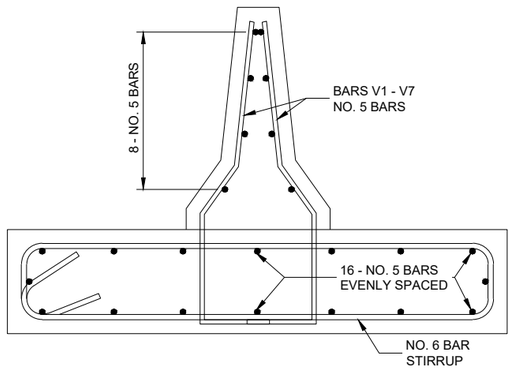
BAR	A
D8	170°
D9	170°
D10	170°
D11	171°
D12	171°



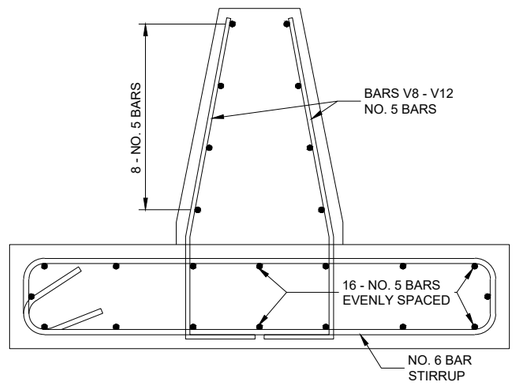
BAR BENDING DETAIL
BARS V8 - V12



STIRRUP BAR
BENDING DETAIL



BAR DETAIL
BAR POSITIONS V1 - V7



BAR DETAIL
BAR POSITIONS V8 - V12

32-INCH DOUBLE FACED F SHAPE CONCRETE BARRIER TO 32-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

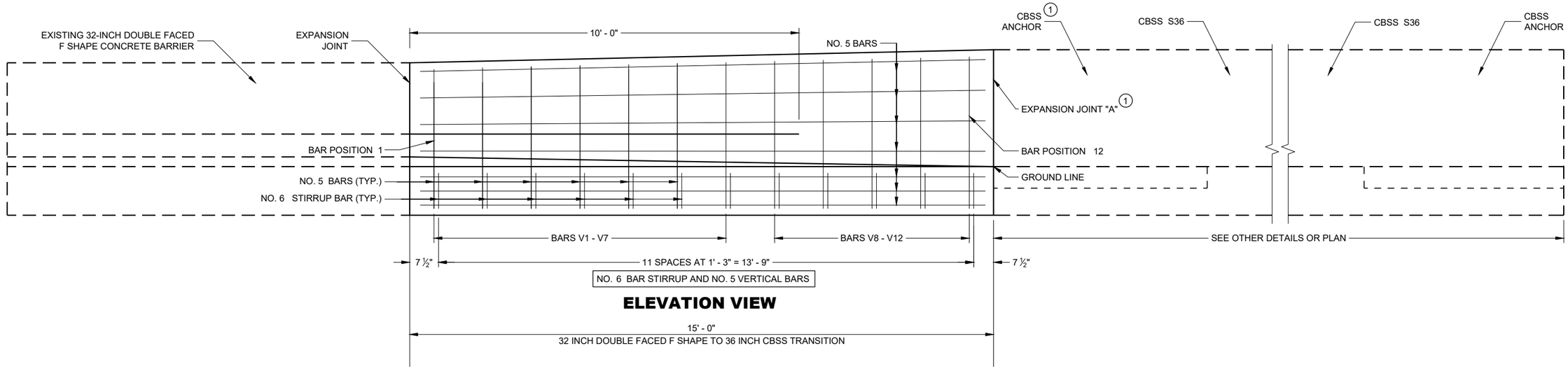
APPROVED
February 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

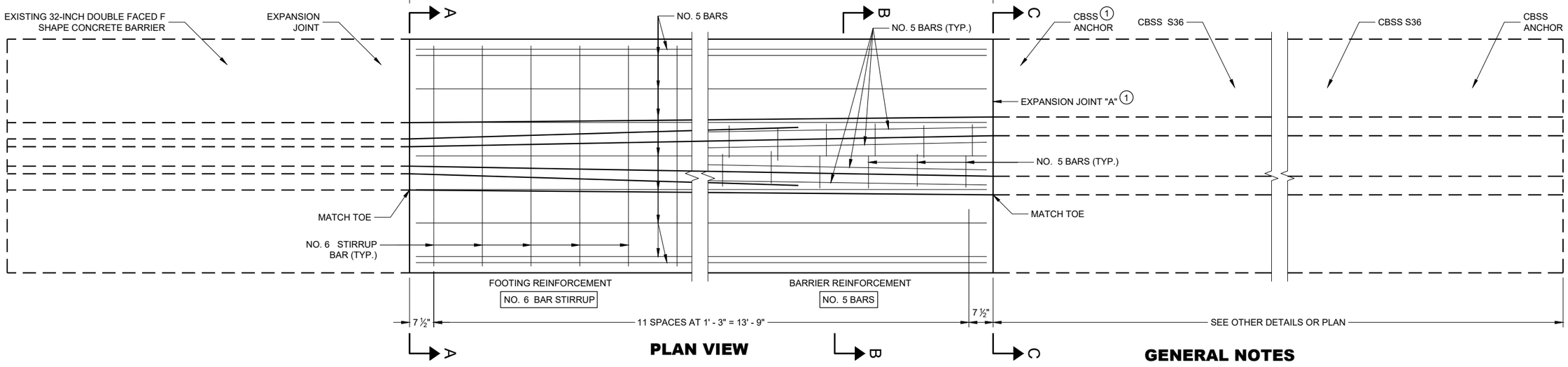
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SDD 14B38 - 02b
SDD 14B38 - 02b

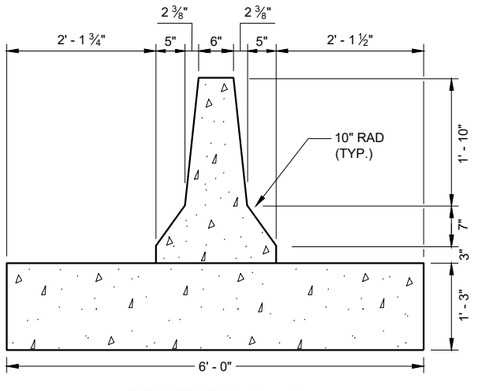


ELEVATION VIEW

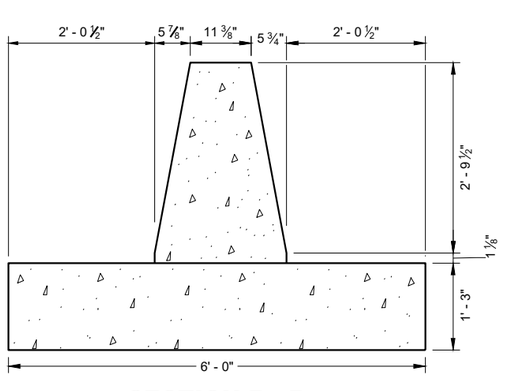
15' - 0"
32 INCH DOUBLE FACED F SHAPE TO 36 INCH CBSS TRANSITION



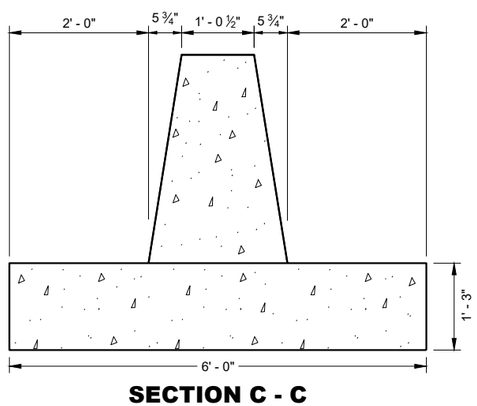
PLAN VIEW



SECTION A - A



SECTION B - B



SECTION C - C

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

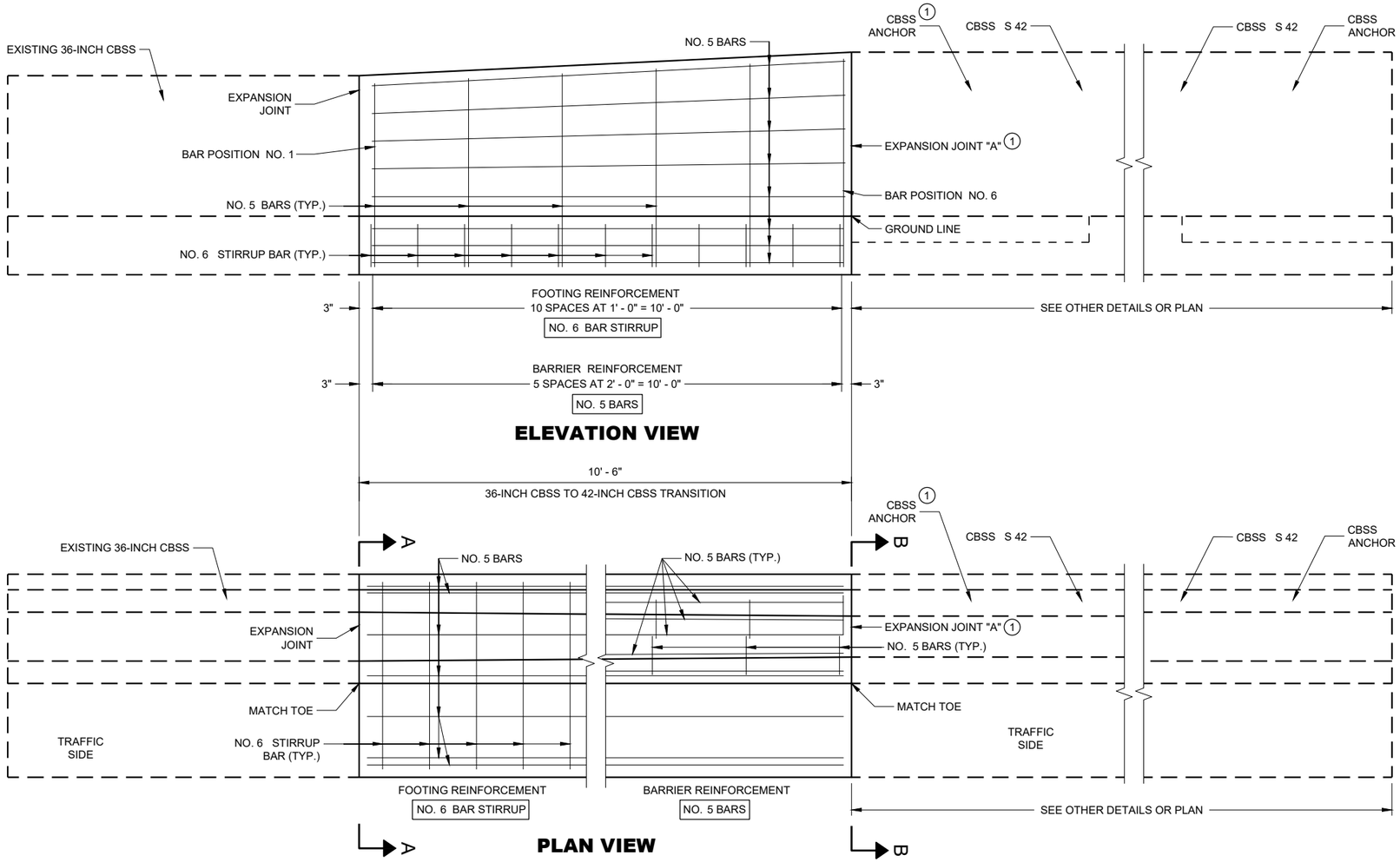
32 - INCH DOUBLE FACED F SHAPE CONCRETE BARRER TO 36 - INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B38 - 02c

SDD 14B38 - 02c



ELEVATION VIEW

PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

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THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

STIRRUP BAR BENDING DETAIL

SECTION A - A

SECTION B - B

BAR DETAIL
BAR POSITIONS V1 - V6

BAR CHART
BAR POSITIONS
V1 - V6

BAR	A	B
V1	170°	2' - 7 ½"
V2	170°	2' - 9"
V3	170°	2' - 9 ¾"
V4	170°	2' - 11 ¼"
V5	170°	3' - 0 ½"
V6	170°	3' - 2"

BENDING DETAIL
FOR BARS V1 - V6

36" SINGLE SLOPE CONCRETE BARRIER TO 42" SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 14B39 - 02b

SDD 14B39 - 02b

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

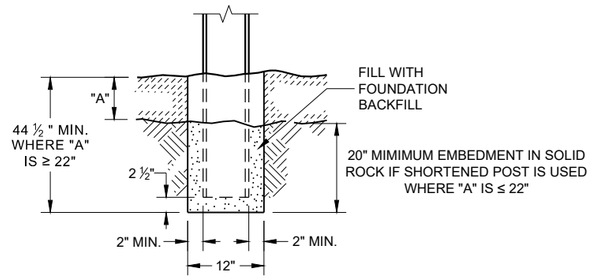
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

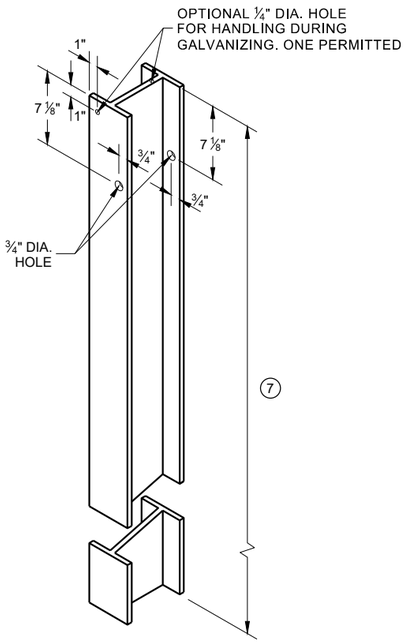
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

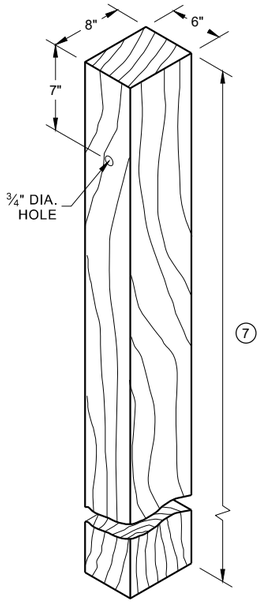
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



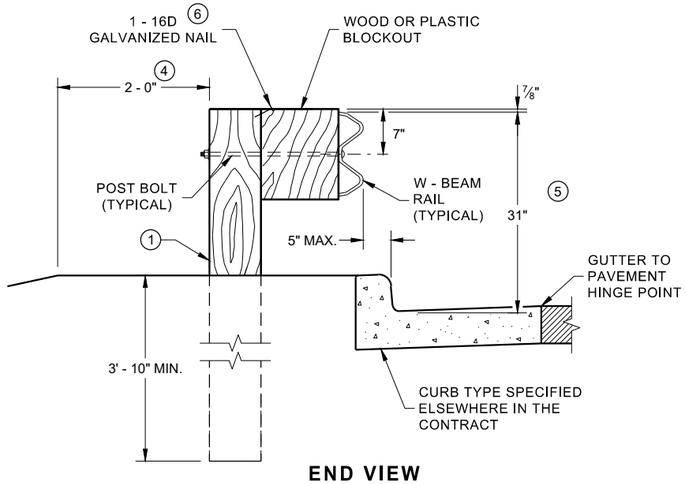
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



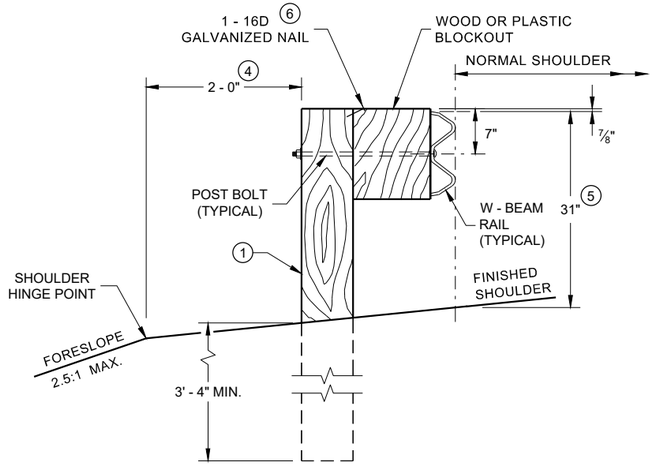
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



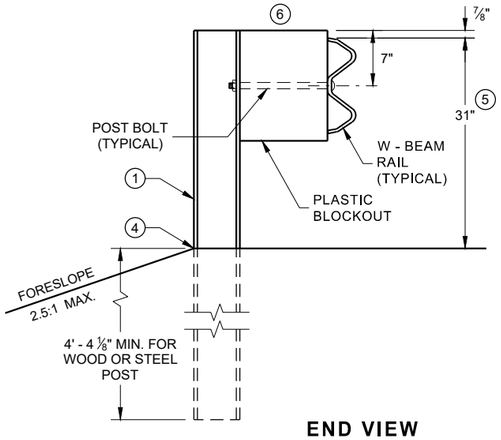
WOOD POST (6" X 8") NOMINAL (1)



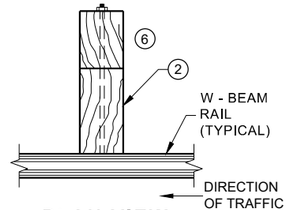
END VIEW
LOCATED ALONG A CURBED ROADWAY



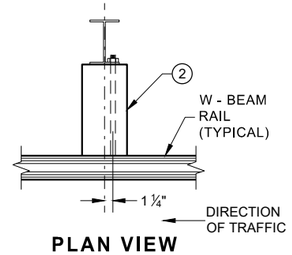
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



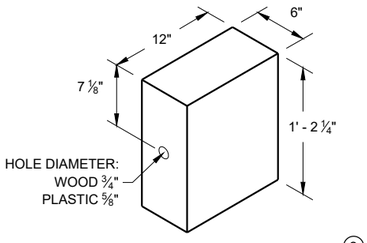
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM

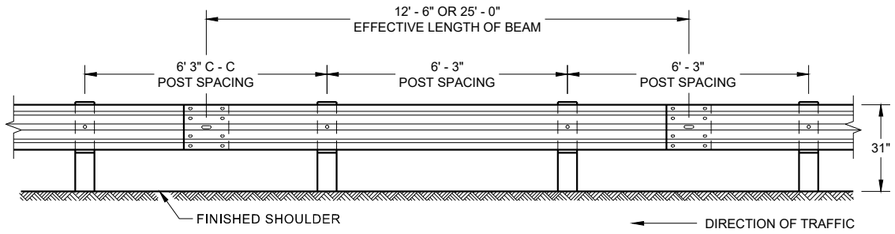


WOOD OR PLASTIC BLOCKOUT (2)

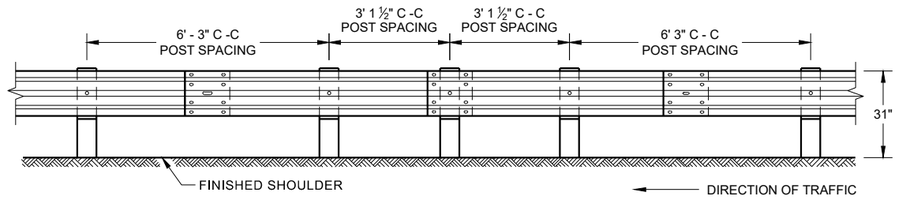
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

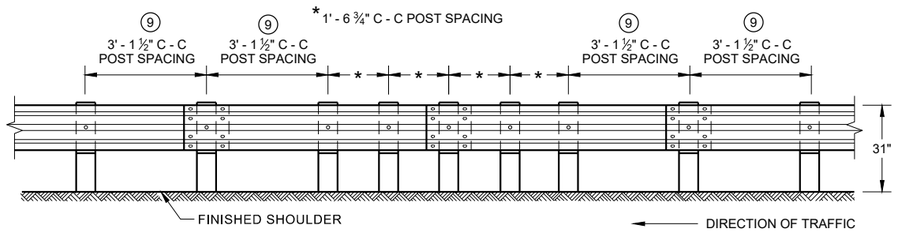
SDD 14B42 - 07a



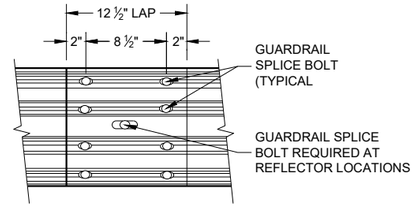
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

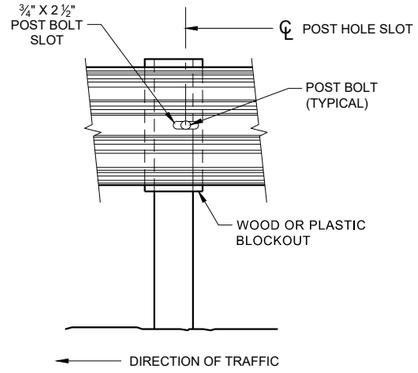
GENERAL NOTES

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

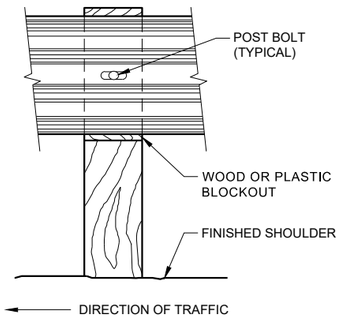
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

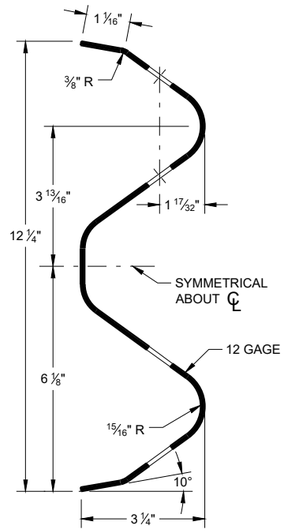
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



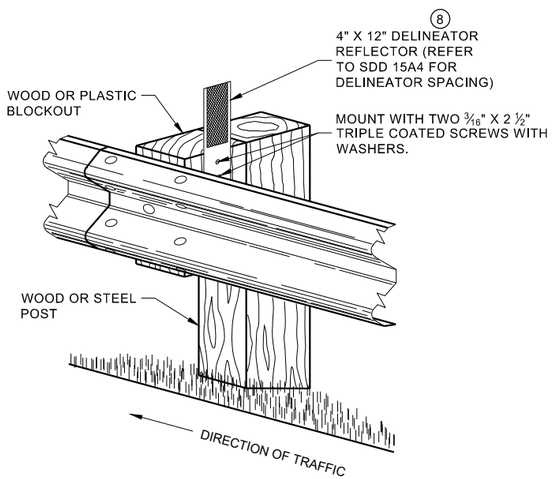
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



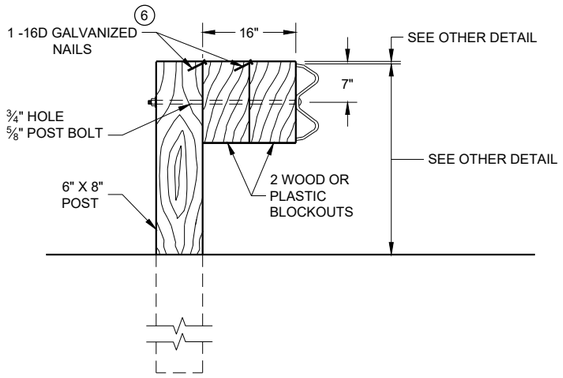
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b

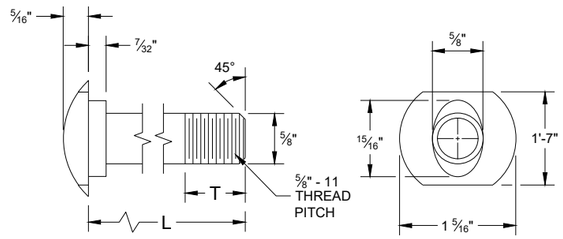


DETAIL FOR 16" BLOCKOUT DEPTH

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

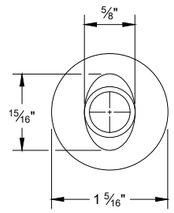
NOTE:

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

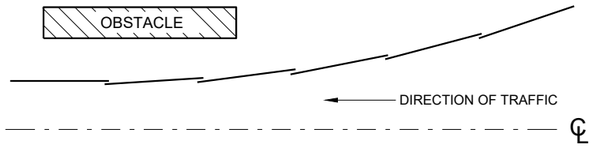


POST BOLT TABLE

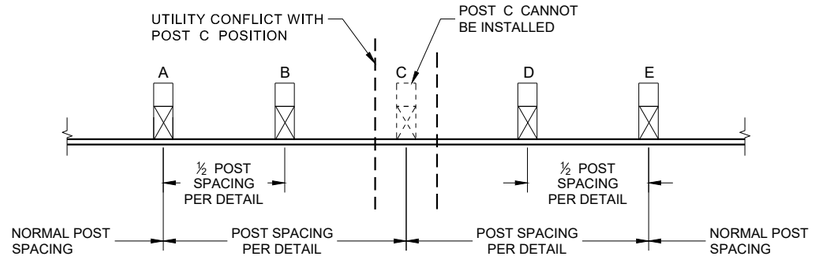
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



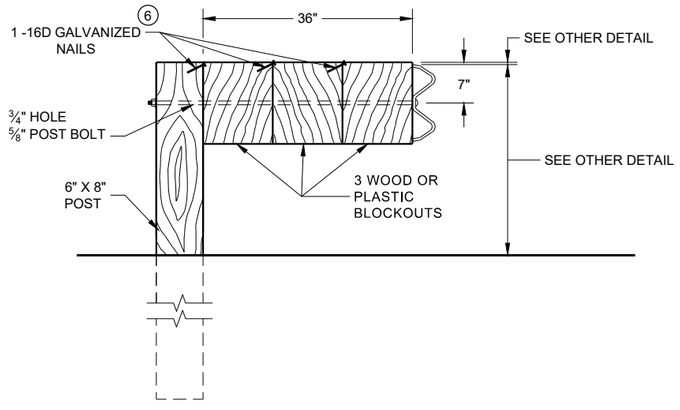
ALTERNATE BOLT HEAD



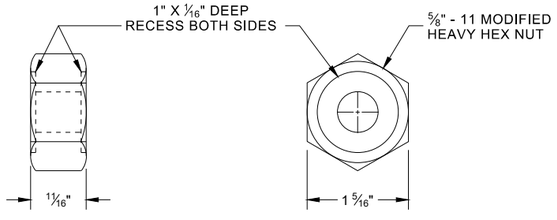
PLAN VIEW
BEAM LAPPING DETAIL



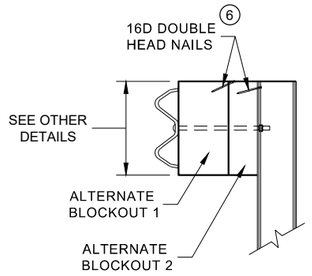
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



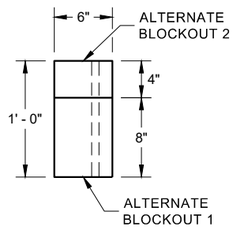
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

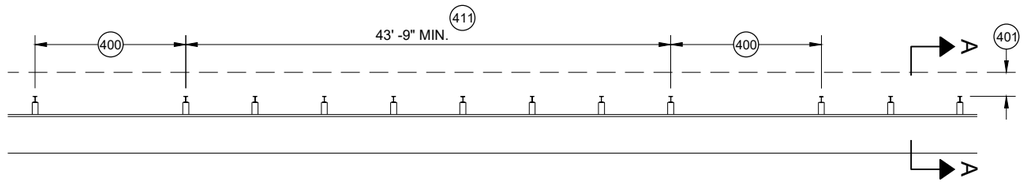
ALTERNATE WOOD BLOCKOUT DETAIL

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

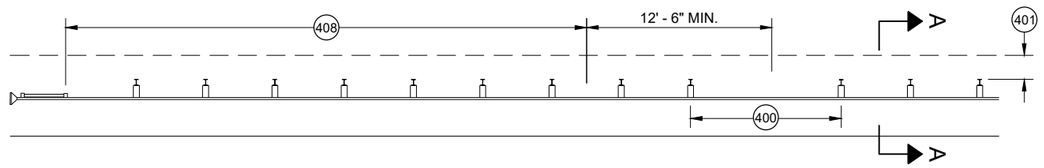
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

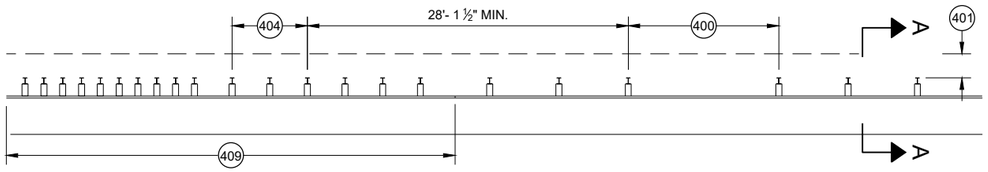
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



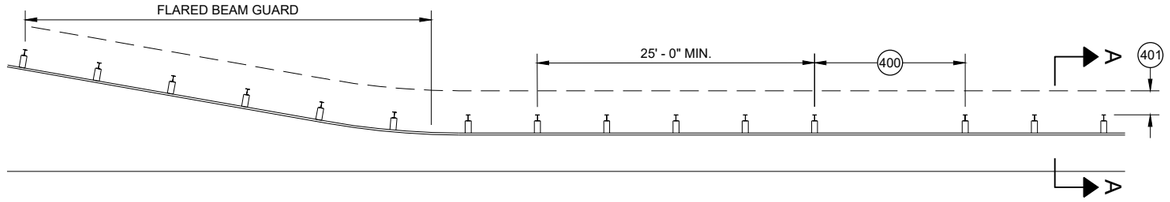
MISSING POST IN MGS GUARDRAIL



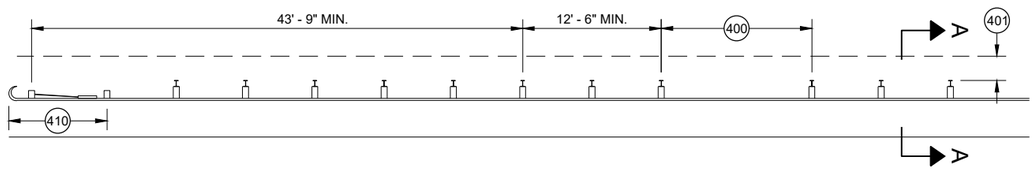
MISSING POST IN MGS GUARDRAIL NEAR EAT



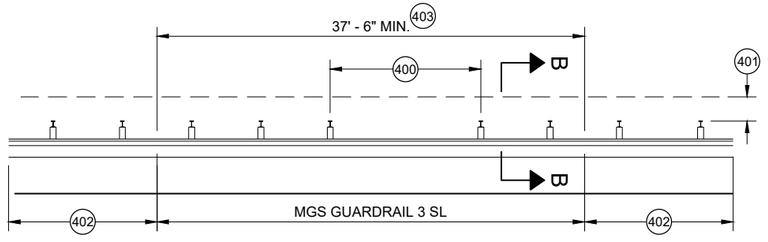
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

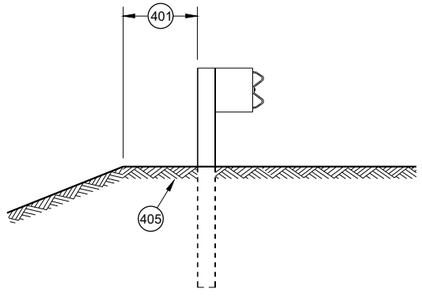


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

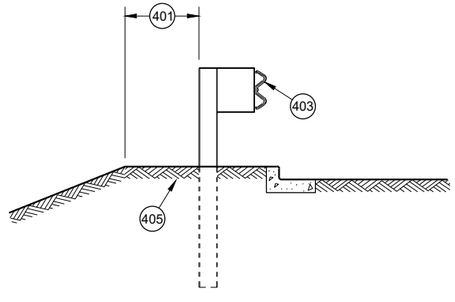


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

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



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B42 - 07d

GENERAL NOTES

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

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

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

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

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

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

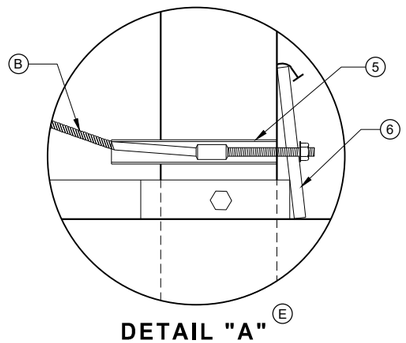
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

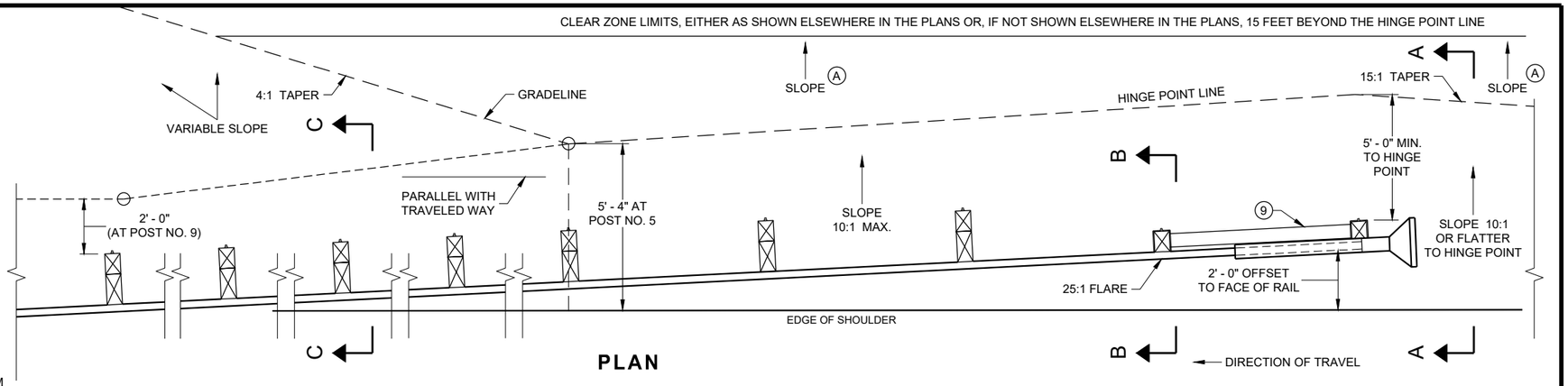
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

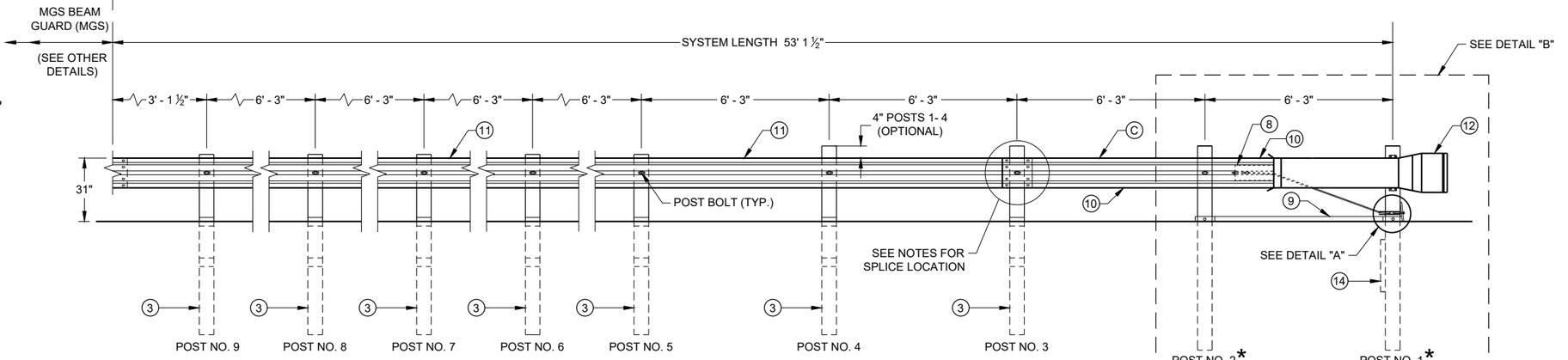
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

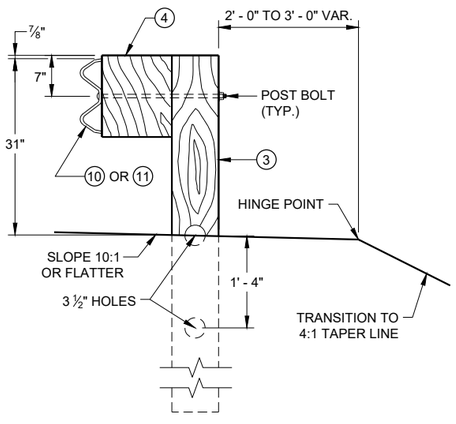
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



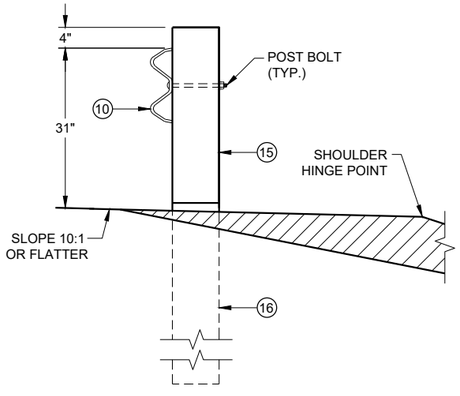
DETAIL "A" (E)



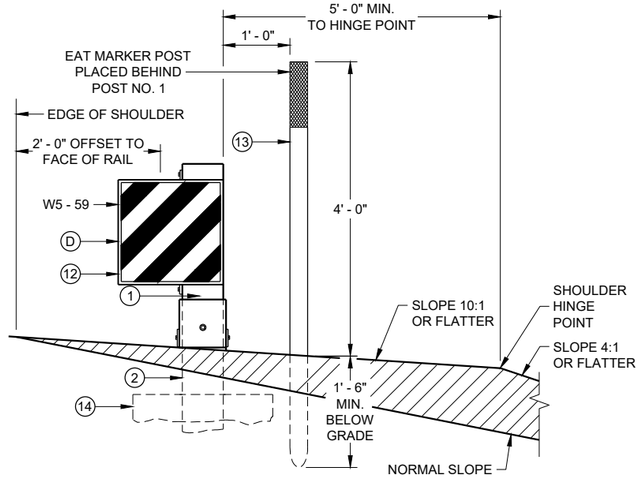




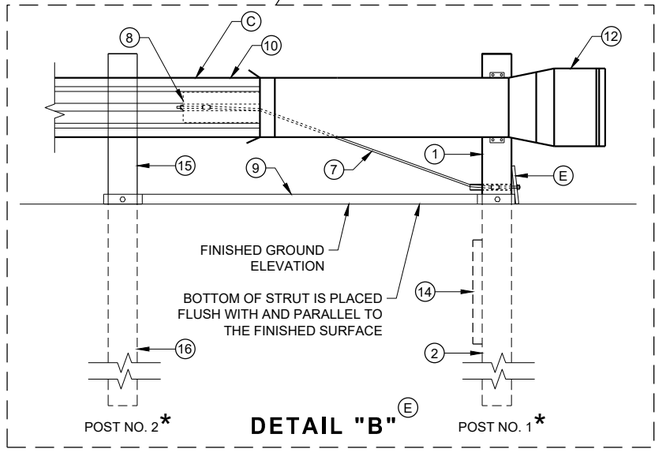
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*

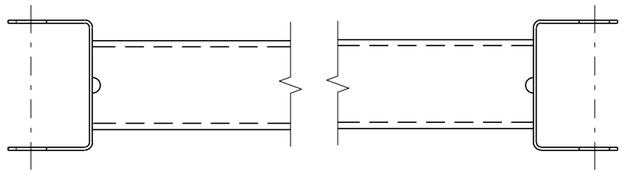


MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

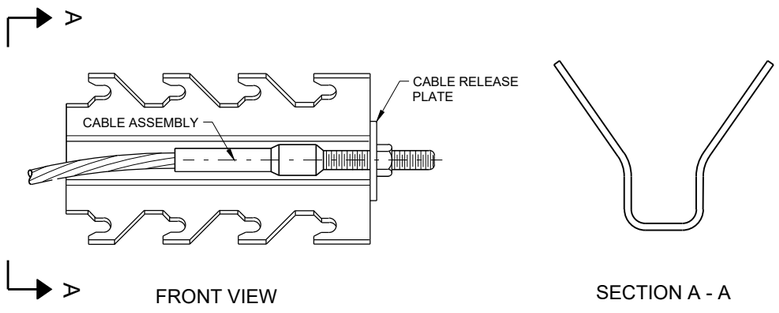
SDD 14B44 - 04a



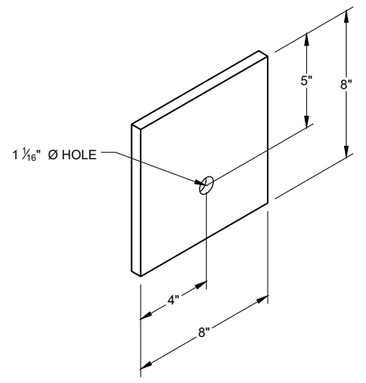
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX ⑧ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

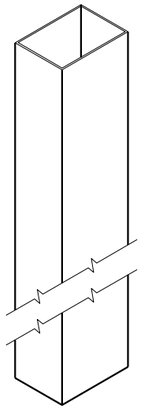
6

SDD 14B44 - 04b

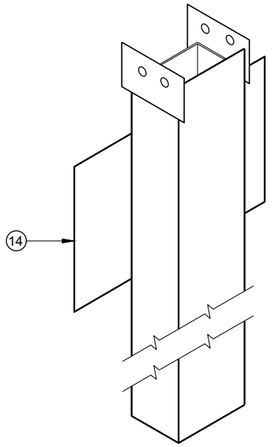
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

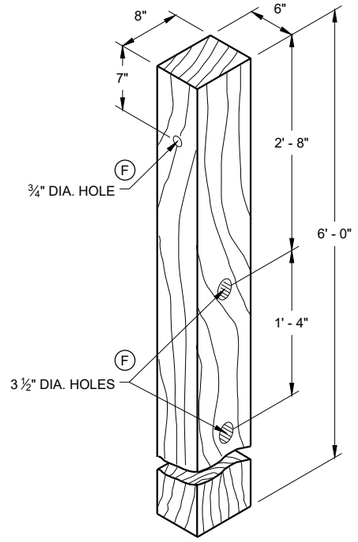
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



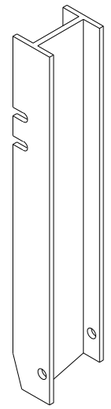
UPPER POST NO. 1 (1) (E)



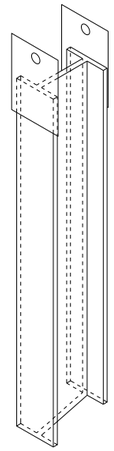
LOWER POST NO. 1 (2) (E)



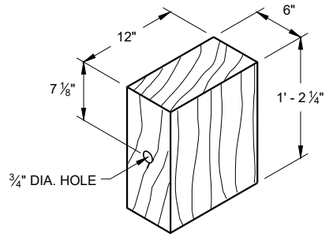
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



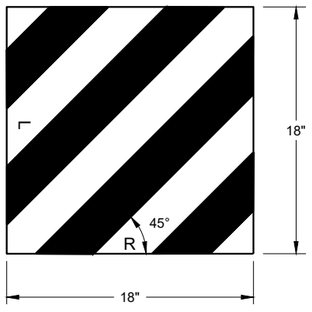
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

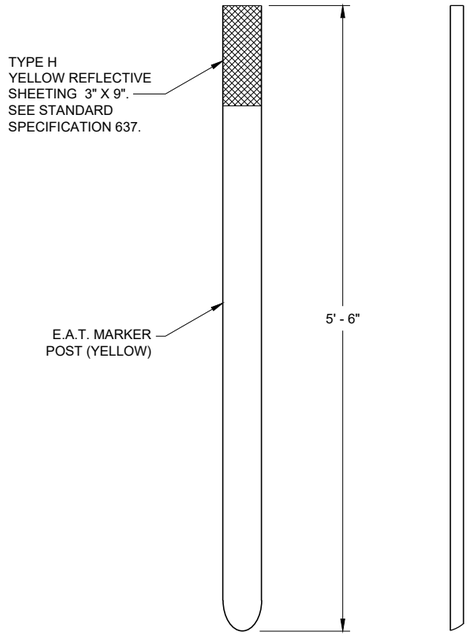


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



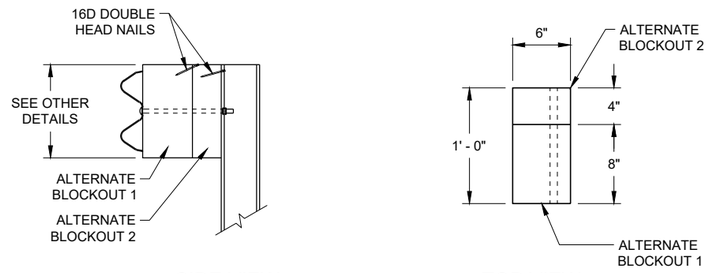
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

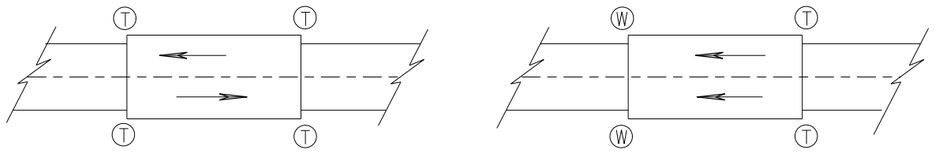
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

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

TRANSITION USES STEEL POSTS ONLY.

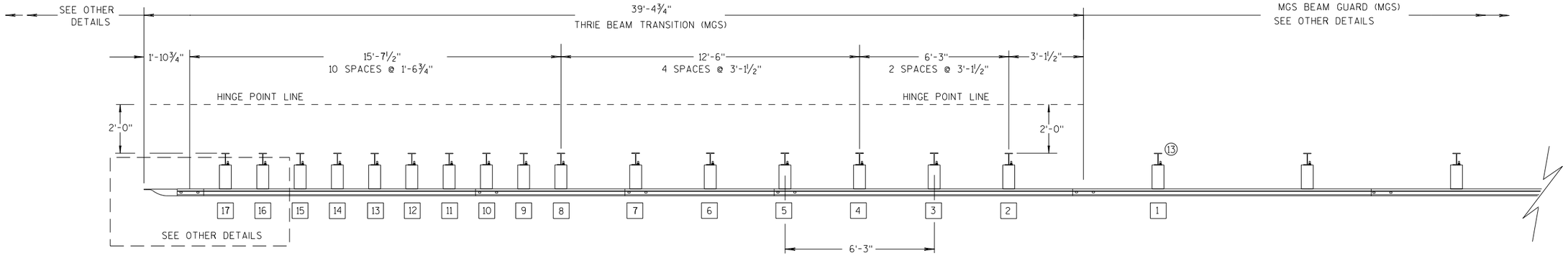
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

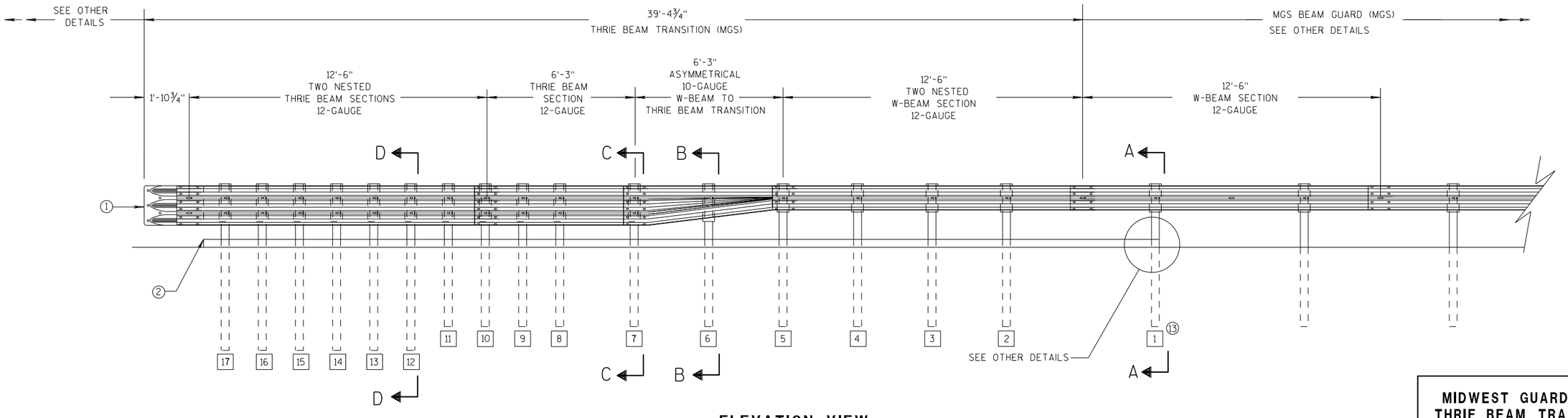
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

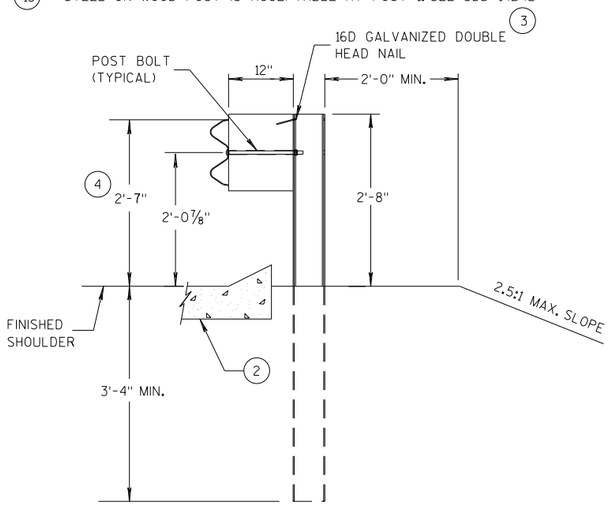
GENERAL NOTES

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

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

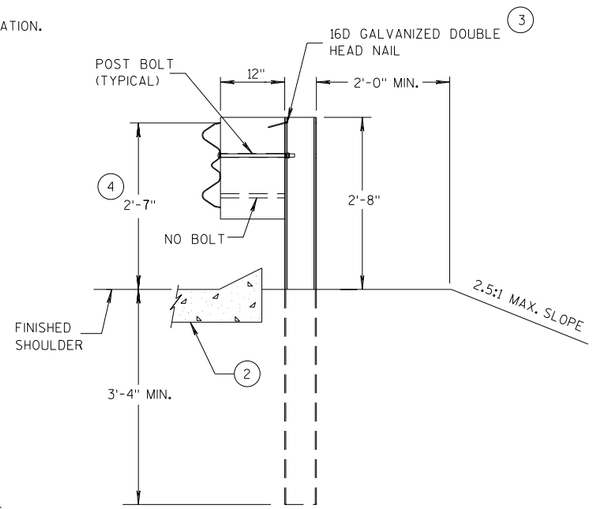
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



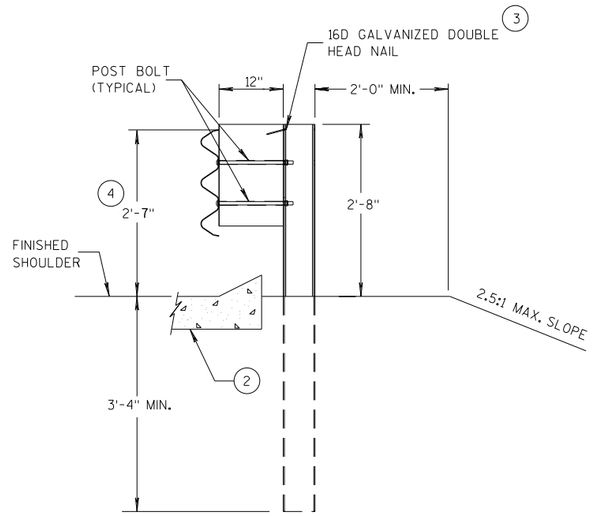
SECTION A-A (13)

POSTS 1-5



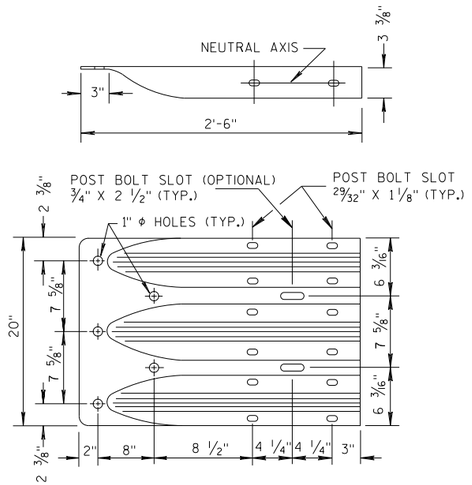
SECTION B-B

POST 6

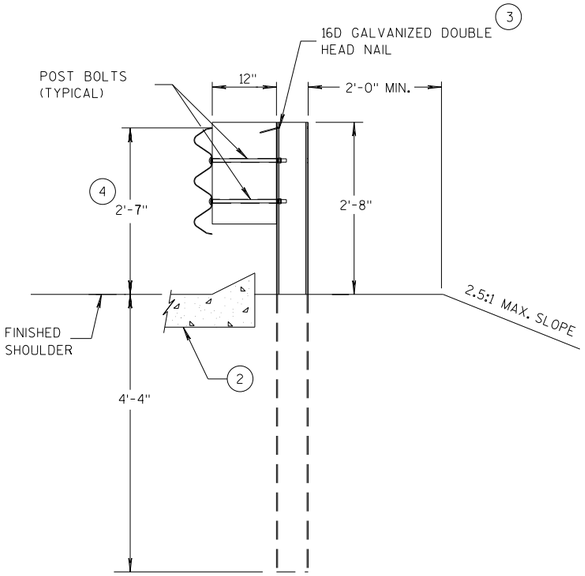


SECTION C-C

POSTS 7-11

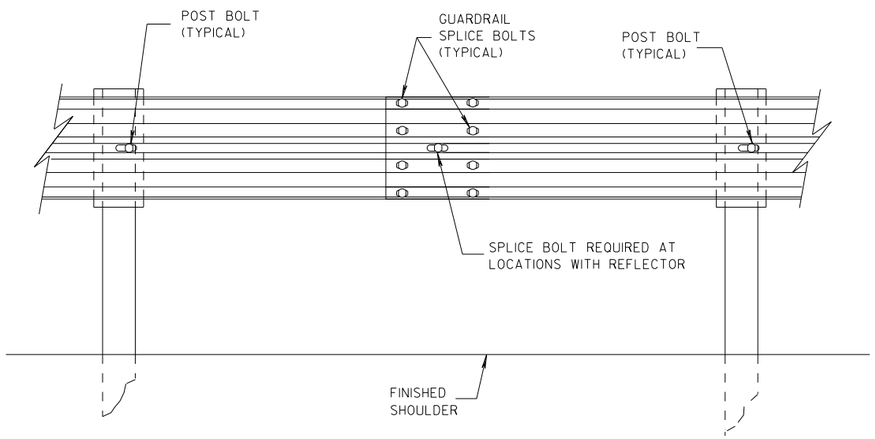


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

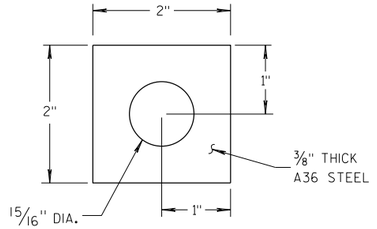
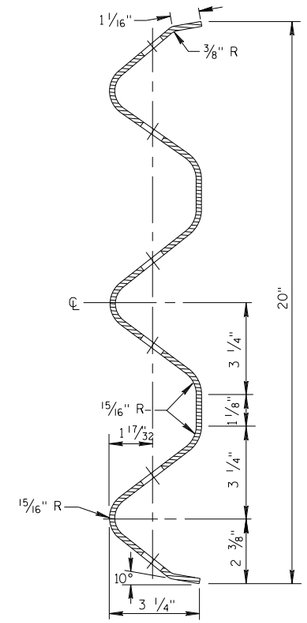


PLATE WASHER DETAIL



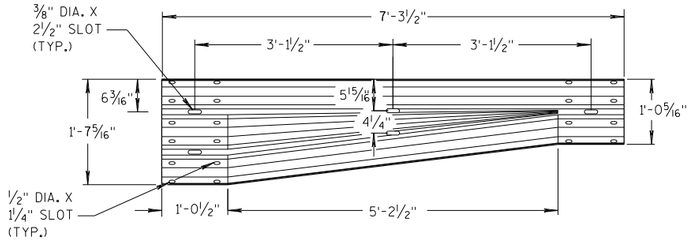
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

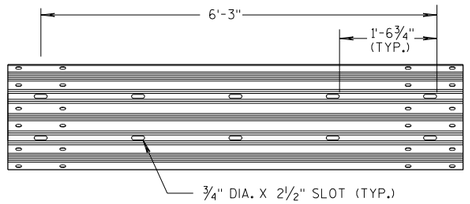
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

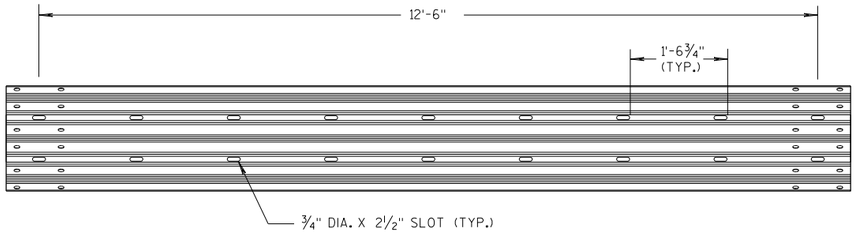
S.D.D. 14 B 45-5b



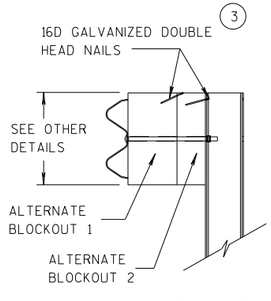
W-BEAM TO THRIE BEAM TRANSITION SECTION



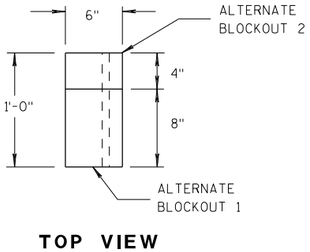
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

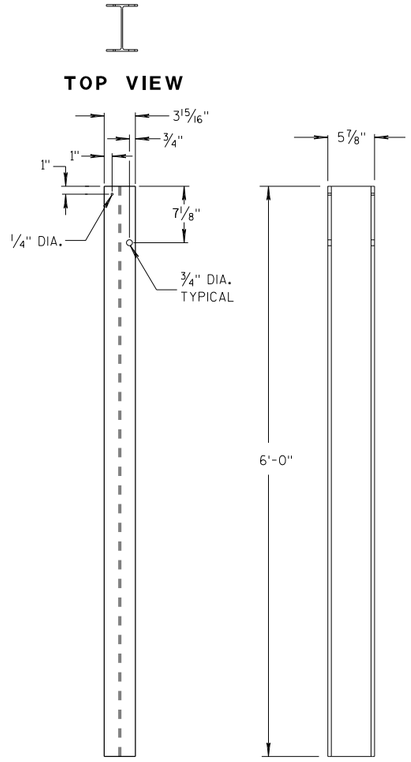


SIDE VIEW



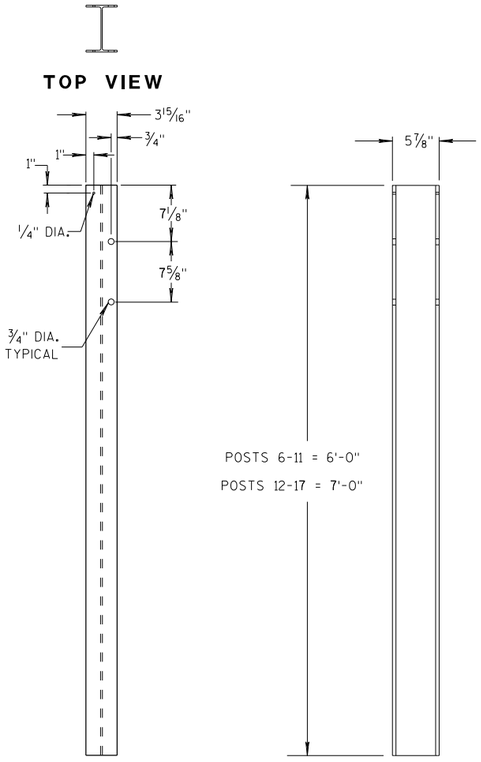
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



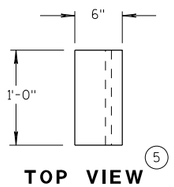
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

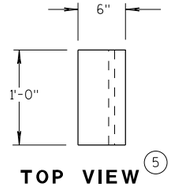


FRONT VIEW SIDE VIEW

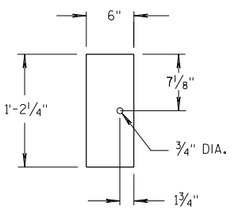
STEEL POSTS 6-17



TOP VIEW (5)

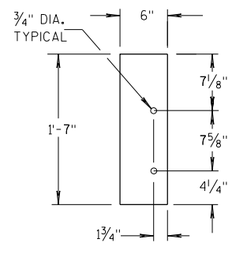


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

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

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

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

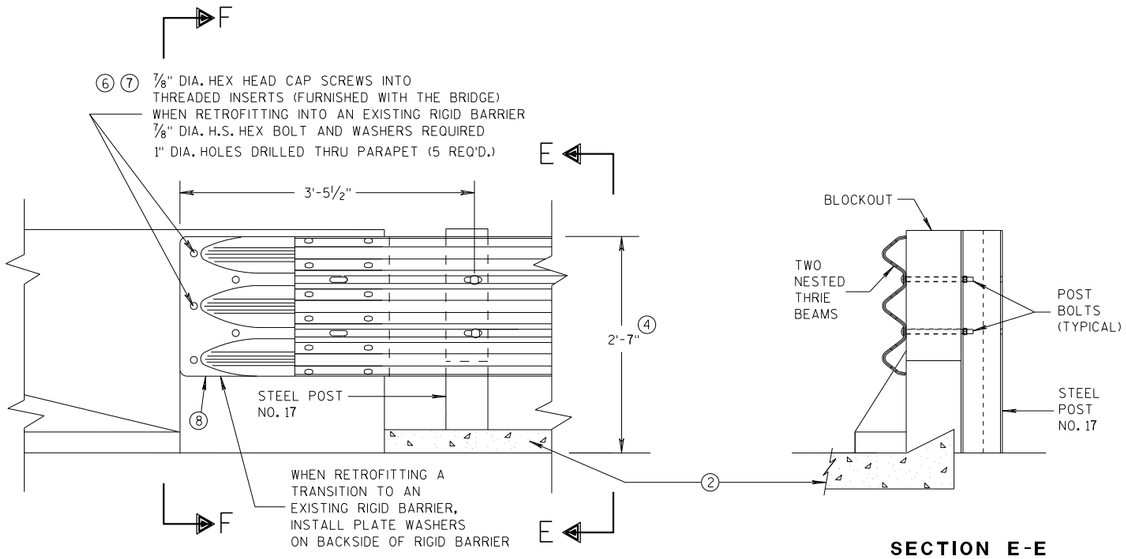
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

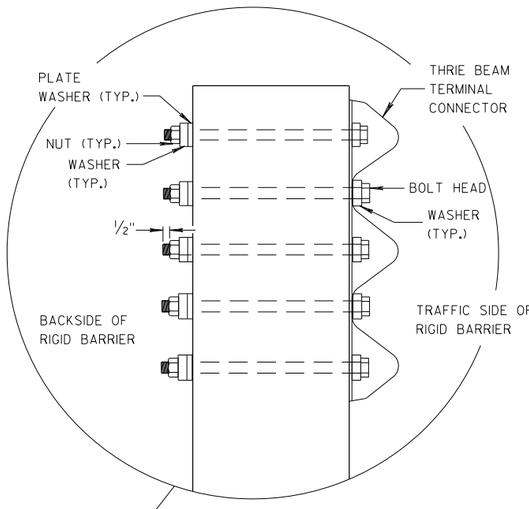
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

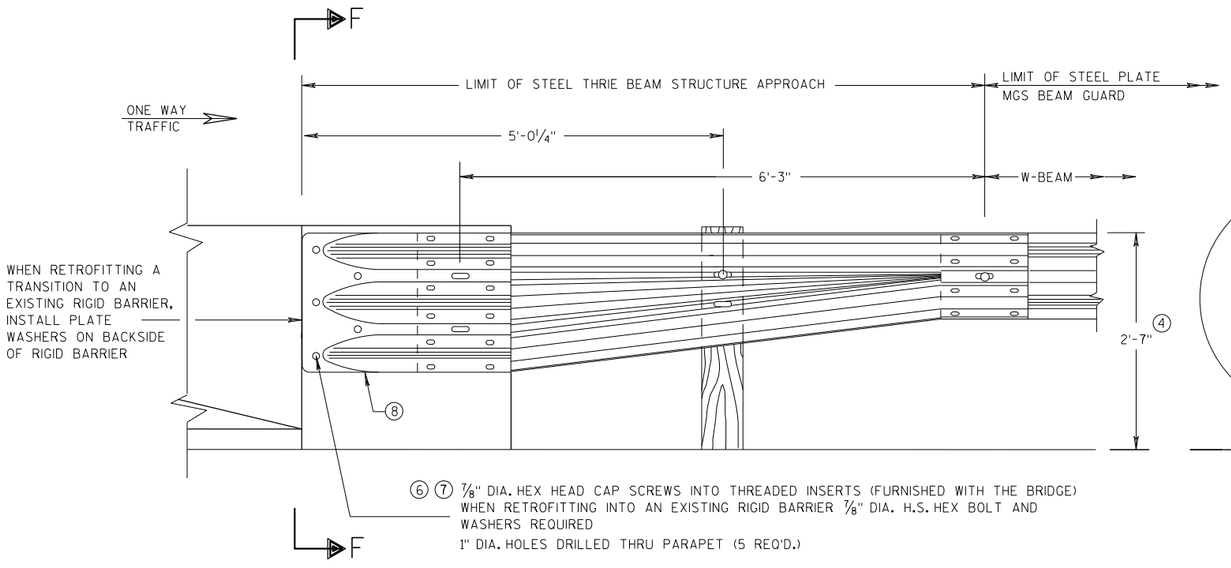
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

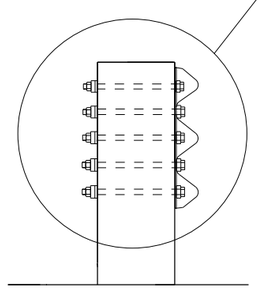
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

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

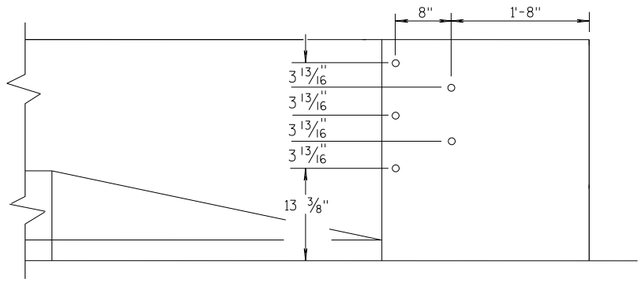




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

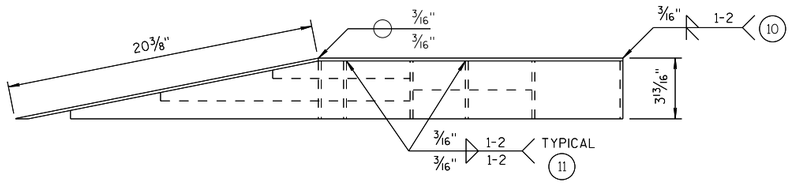
APPROVED
07/2018 DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVI
NT
FHWA

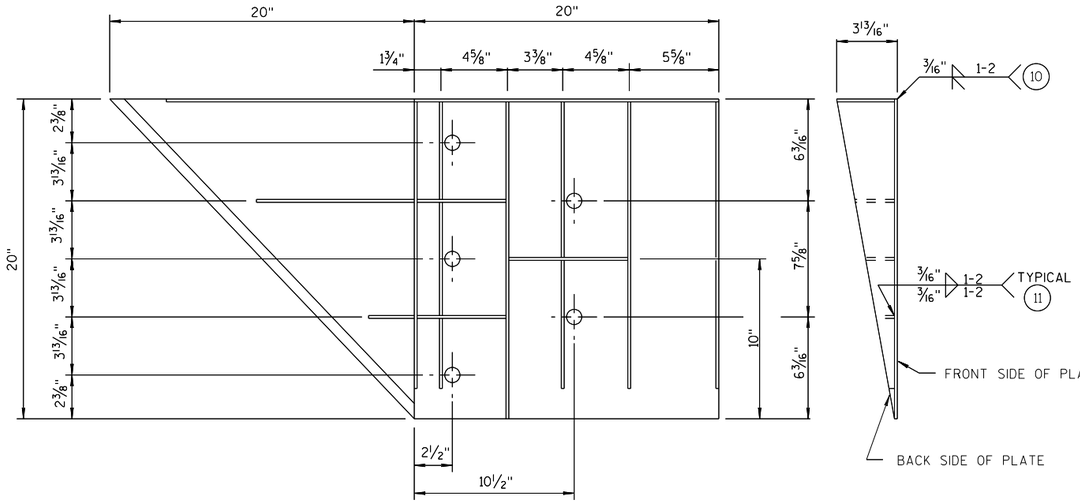
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S.D.D. 14 B 45-5d

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





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

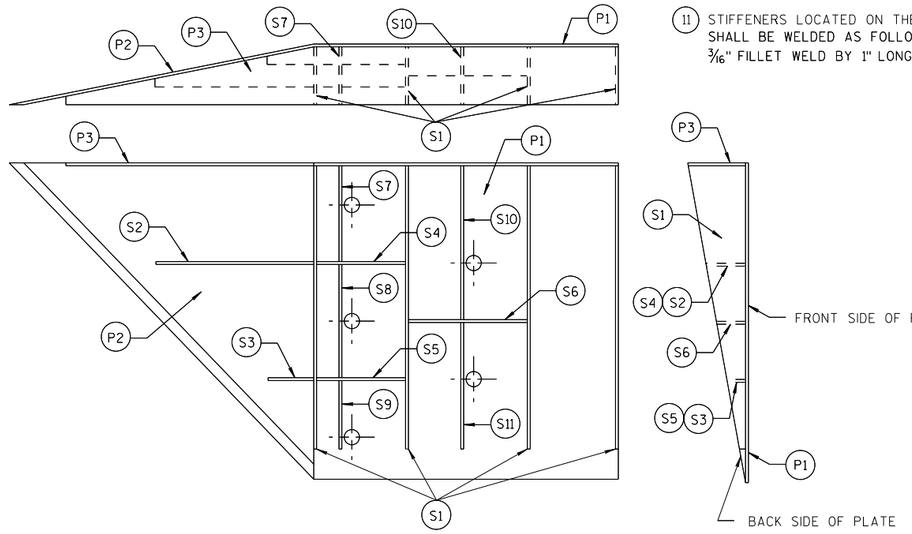


PLATE AND STIFFENER IDENTIFICATION

(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

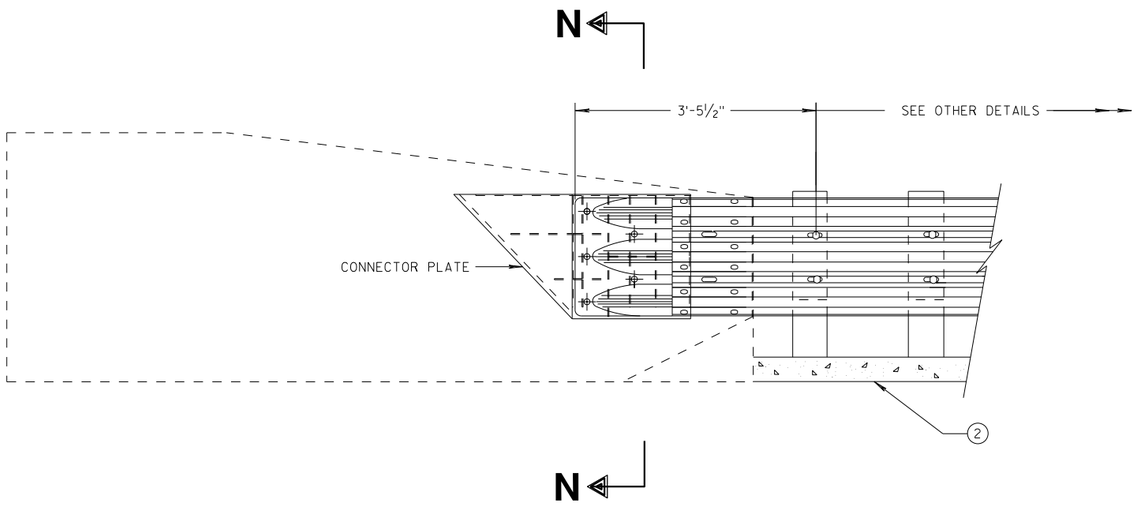
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

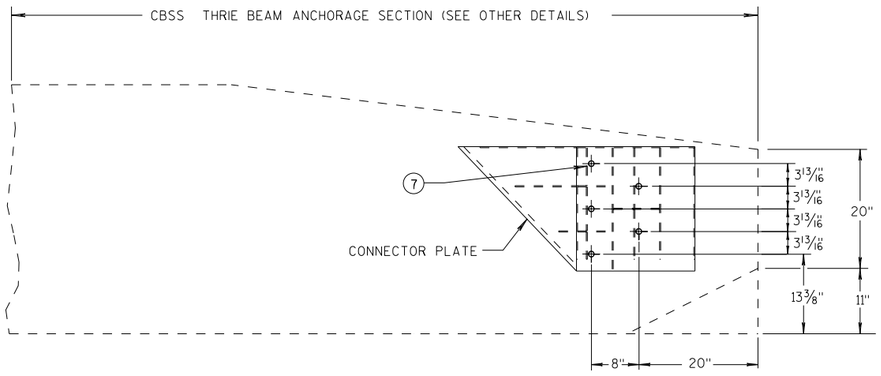
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7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS I
UNIT SUPERVI

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



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



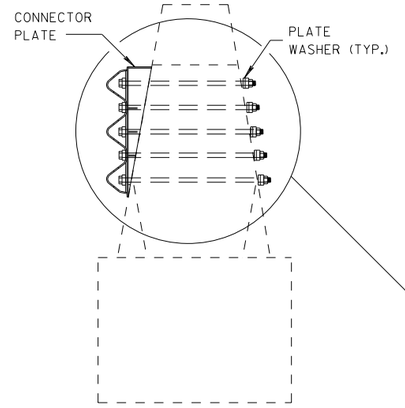
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

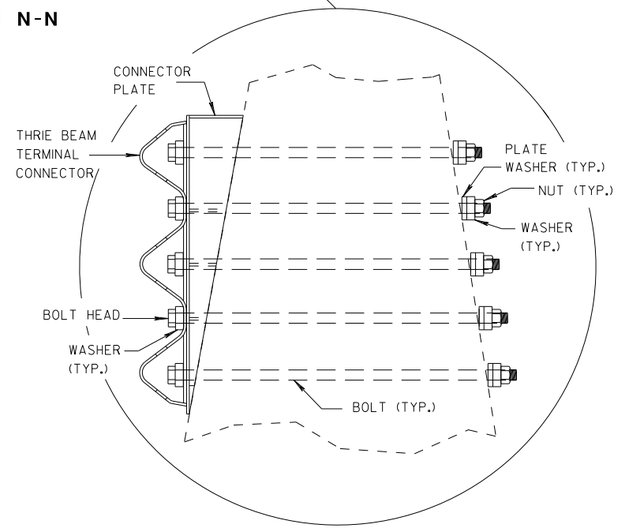
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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

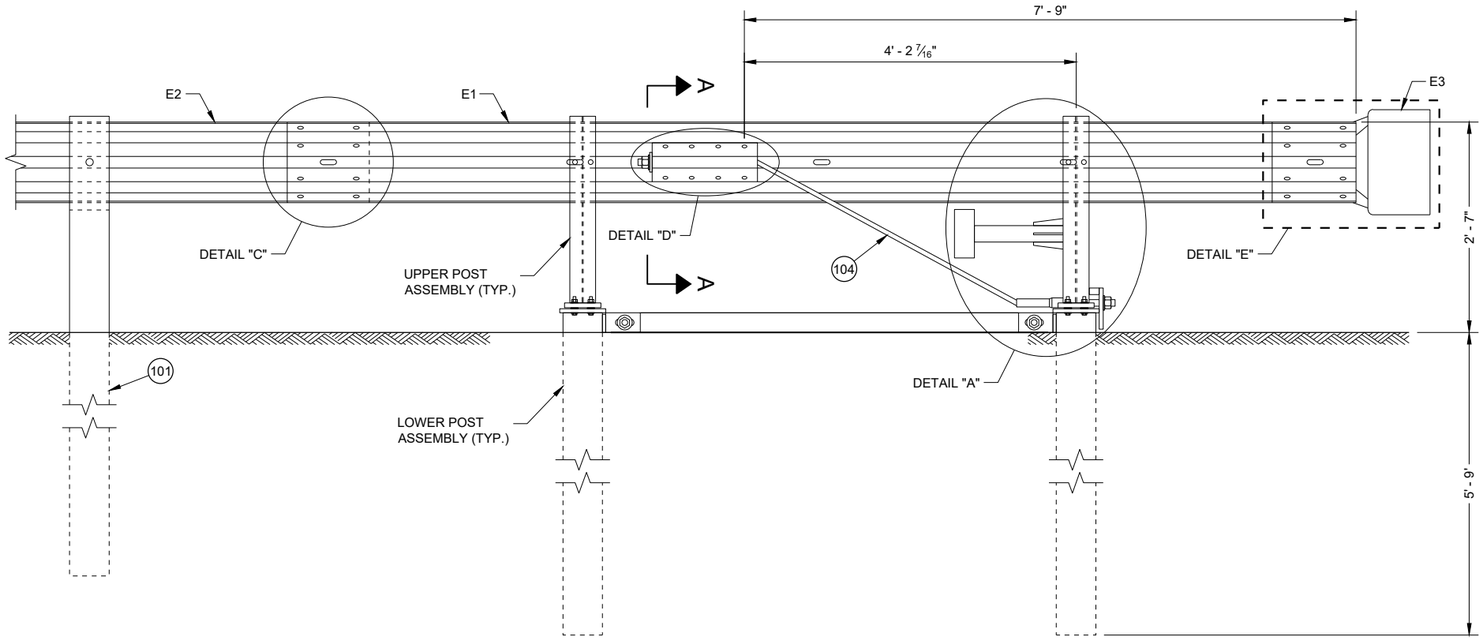
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DI UNIT SUPERVIS
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FHWA

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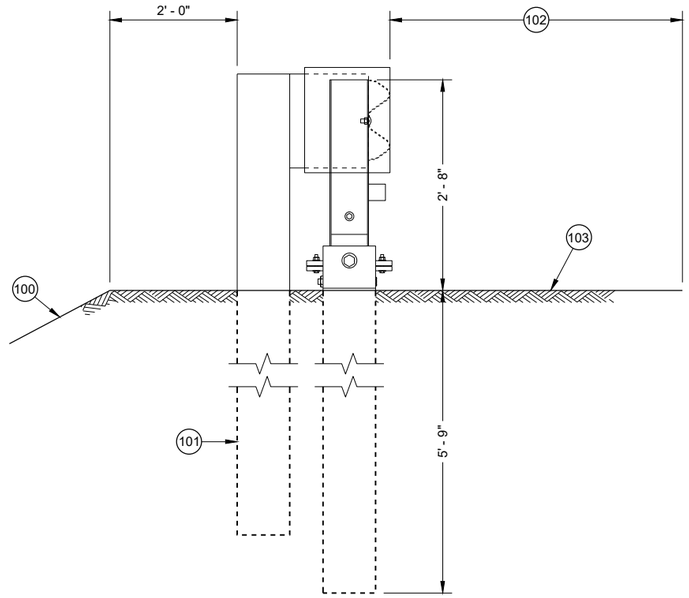
S.D.D. 14 B 45-5j

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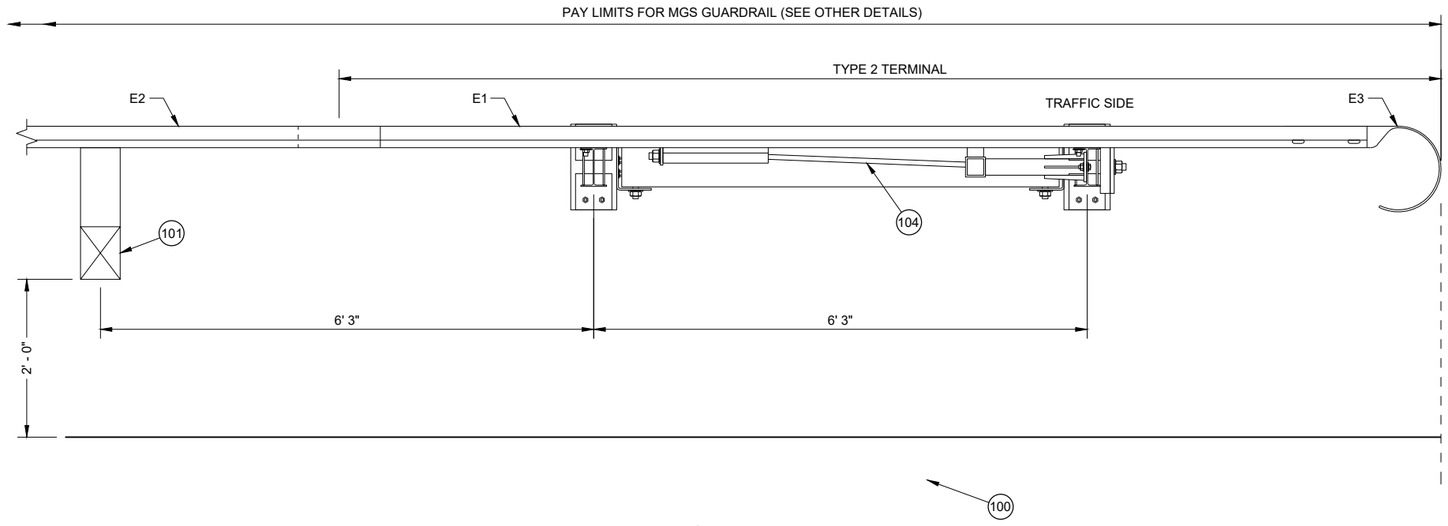
S.D.D. 14 B 45-5j



BACK VIEW
TYPE 2 TERMINAL



SIDE VIEW
TYPE 2 TERMINAL



TOP VIEW
TYPE 2 TERMINAL

GENERAL NOTES

(100) MAXIMUM SLOPE IS 2.5:1.

(101) SEE SDD 14B42 FOR MORE INFORMATION.

(102) SHOULDER

(103) MAXIMUM SLOPE IS 10:1.

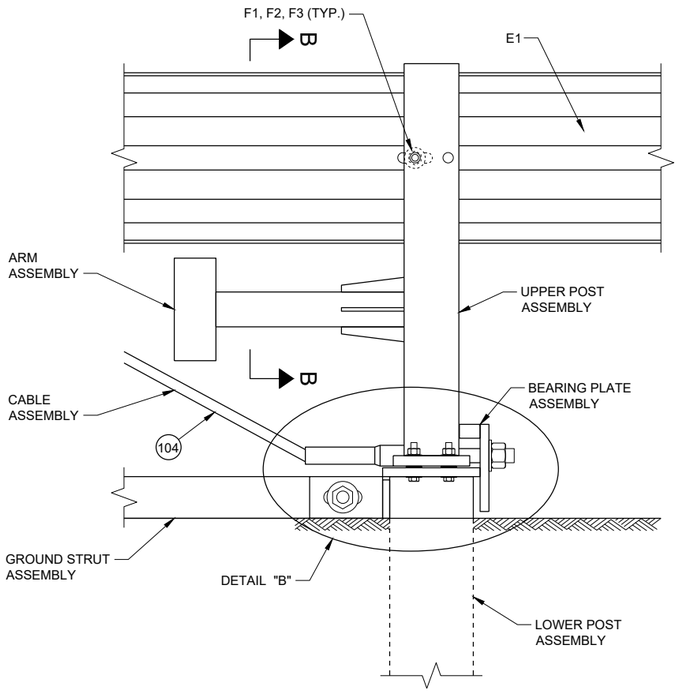
(104) AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

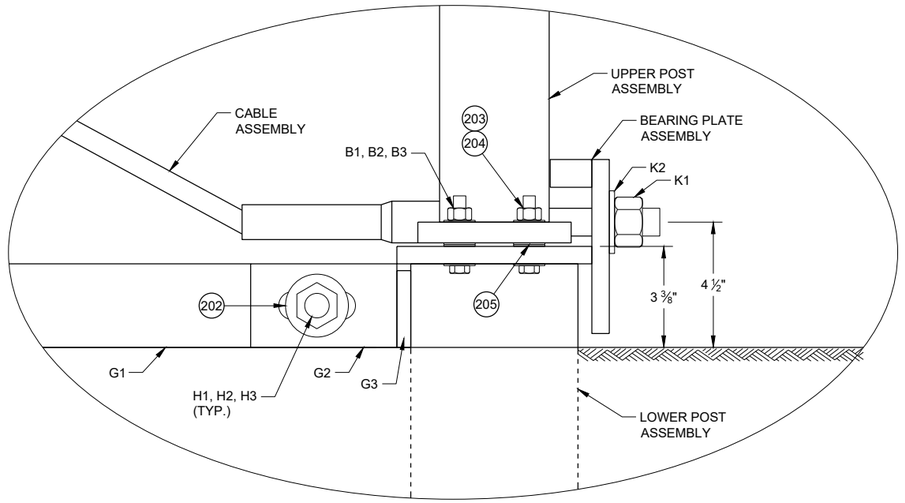
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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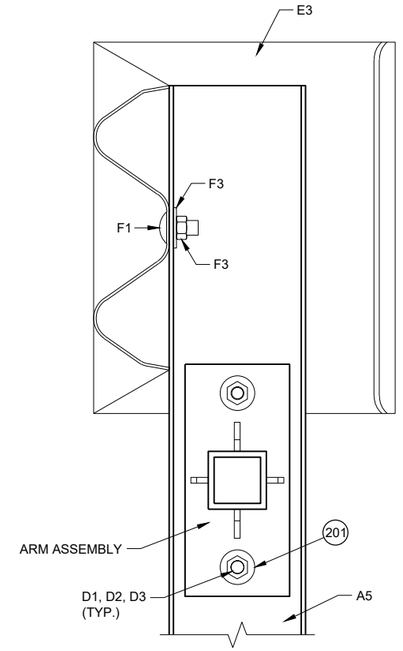
SDD 14B47 - 03a



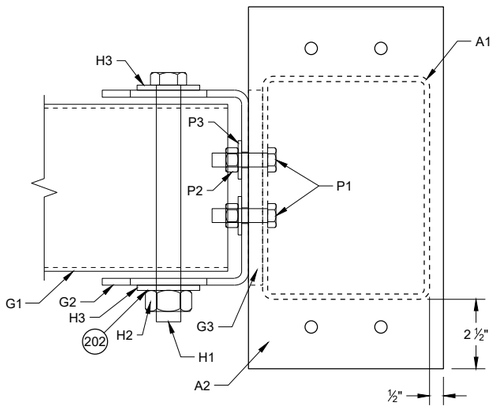
DETAIL "A"



DETAIL "B"

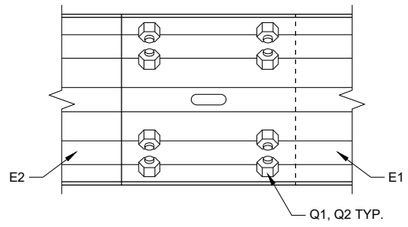


SECTION B - B

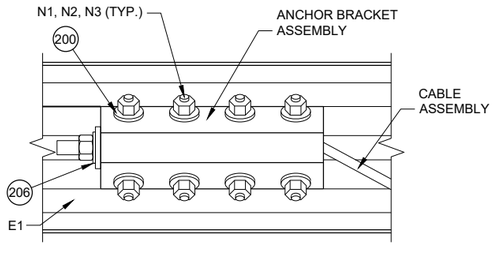


TOP VIEW

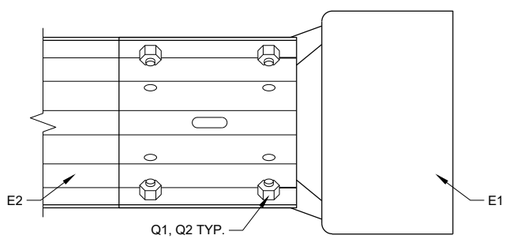
GROUND STRUT CONNECTION DETAIL



DETAIL "C"



DETAIL "D"



DETAIL "E"

GENERAL NOTES

200 INSTALL ONE WASHER UNDER BOLT HEAD AND RAIL AND ON WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

201 INSTALL ONE WASHER UNDER BOLT HEAD AND UPPER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND ARM PLATE.

202 INSTALL ONE WASHER UNDER BOLT HEAD AND GROUND STRUT CONNECTOR AND ONE WASHER BETWEEN NUT AND GROUND STRUT CONNECTOR.

203 INSTALL ONE WASHER UNDER BOLT HEAD AND LOWER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND UPPER POST ASSEMBLY.

204 TORQUE VALUE IS BETWEEN 60 - 75 FT-LB.

205 TWO WASHERS BETWEEN UPPER AND LOWER POST ASSEMBLY.

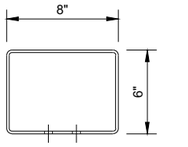
206 INSTALL ONE WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

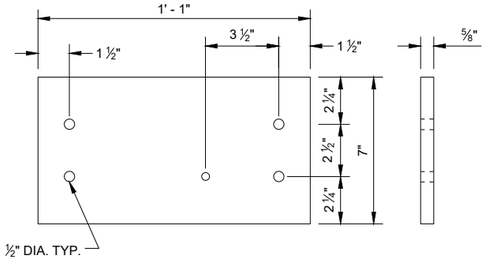
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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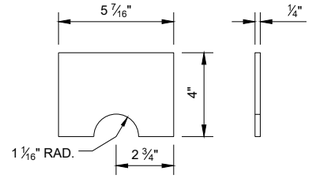
SDD 14B47 - 03b



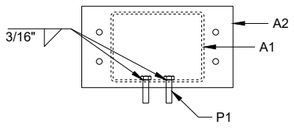
TOP VIEW



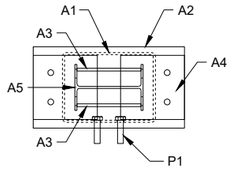
LOWER PLATE (A2)

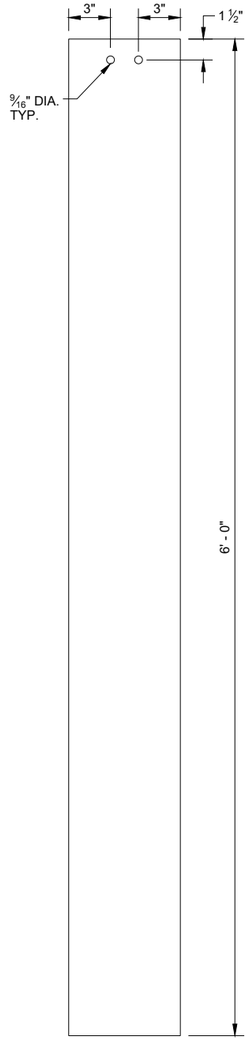


POST GUSSET (A3)



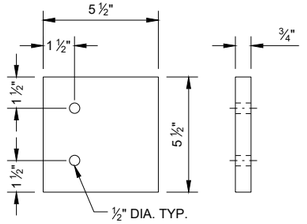
PLAN VIEW



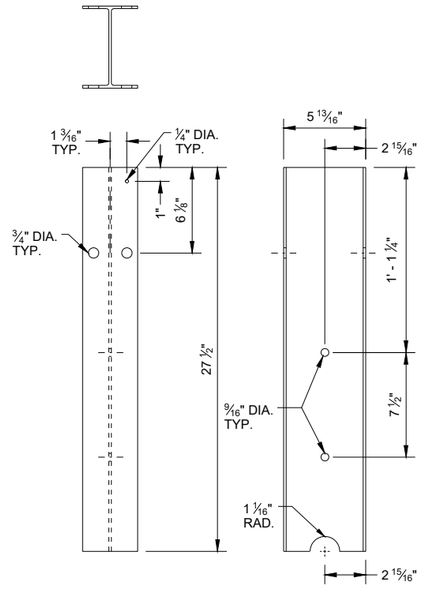


SIDE VIEW

FOUNDATION TUBE (A1)

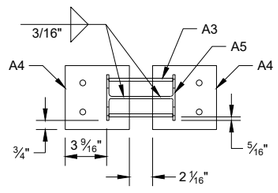


UPPER PLATE (A4)

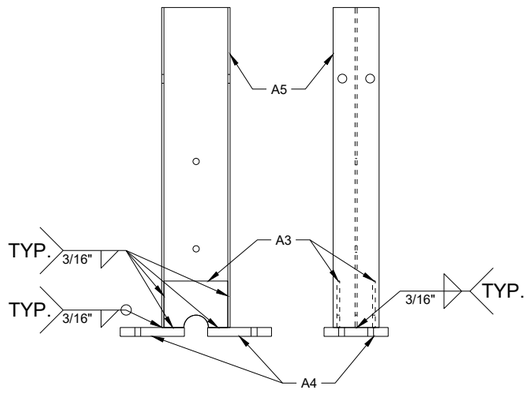


FRONT VIEW SIDE VIEW

TYPE 2 POST (A5)

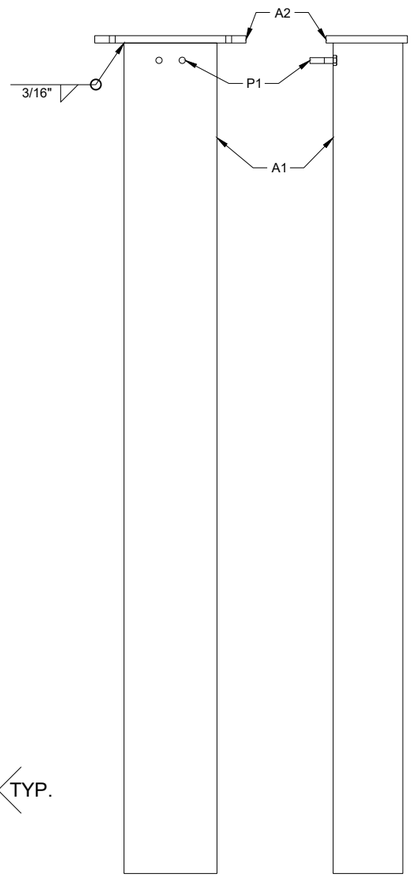


PLAN VIEW



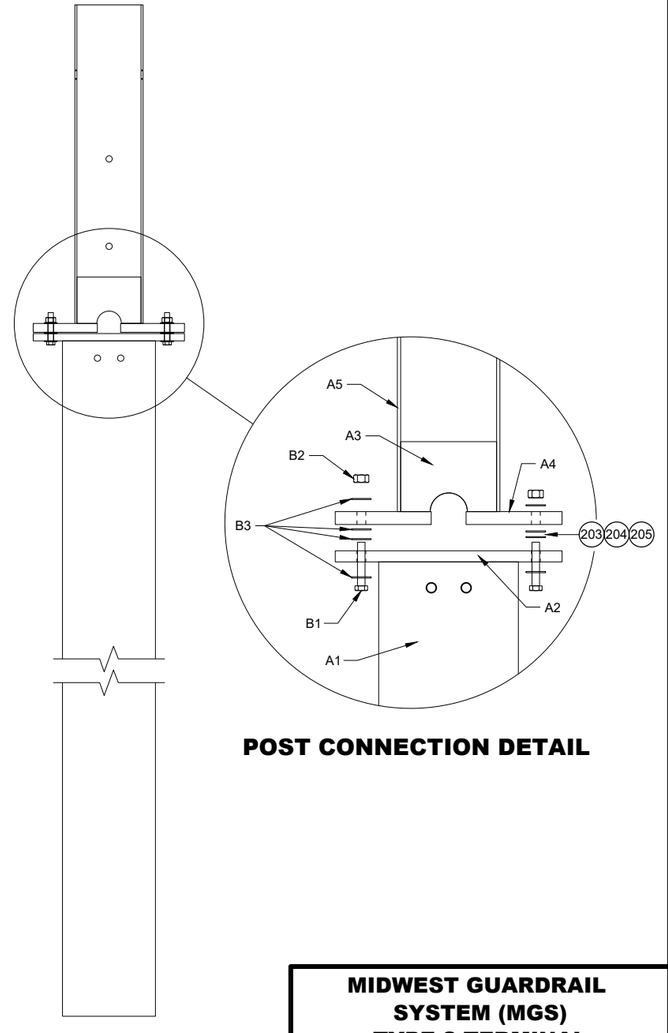
SIDE VIEW FRONT VIEW

UPPER POST ASSEMBLY



FRONT VIEW SIDE VIEW

LOWER POST ASSEMBLY



POST CONNECTION DETAIL

ASSEMBLED POST

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

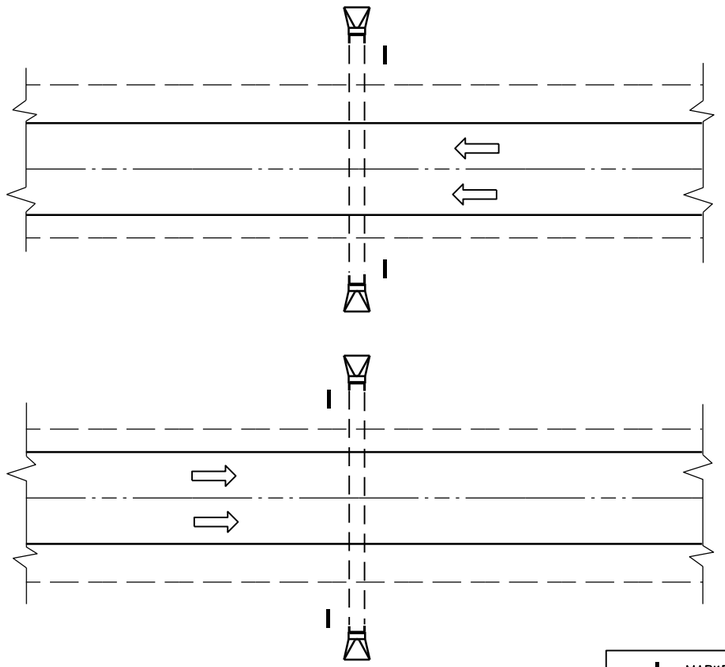
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SDD14B47 - 03c

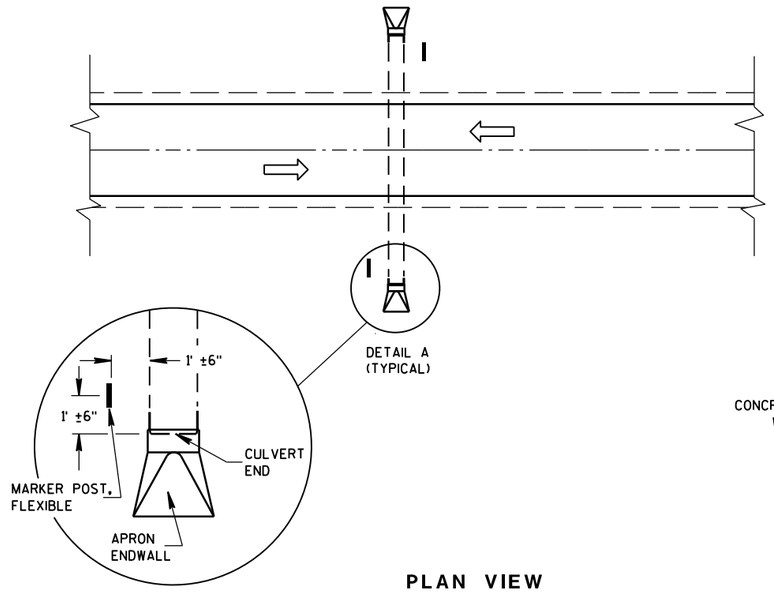
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SDD14B47 - 03c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

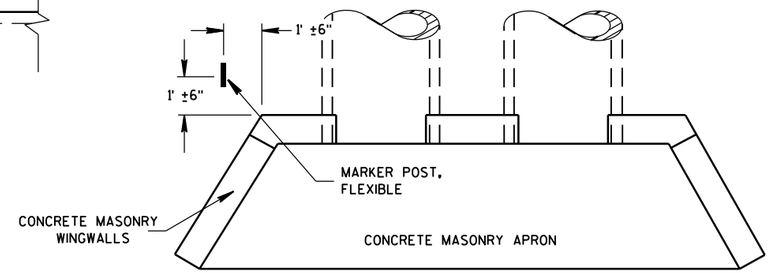
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

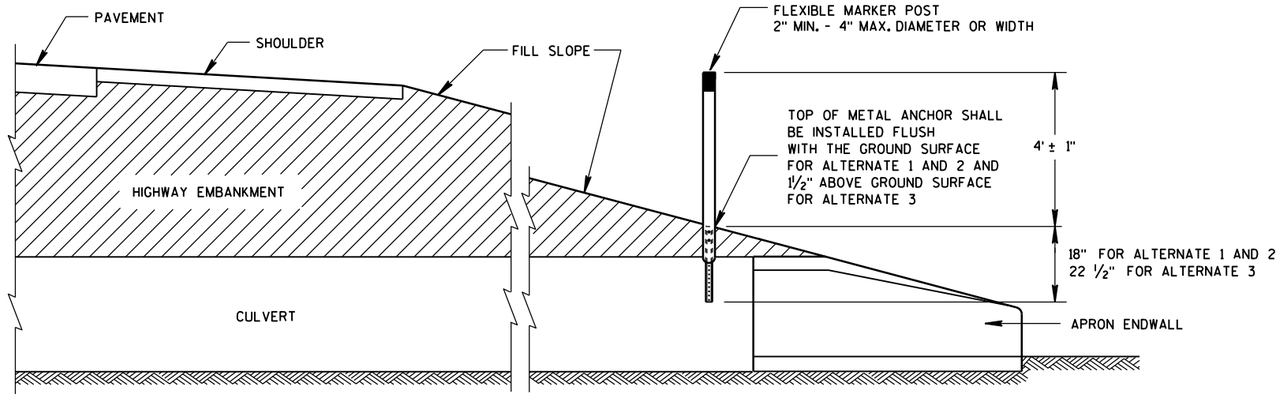
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

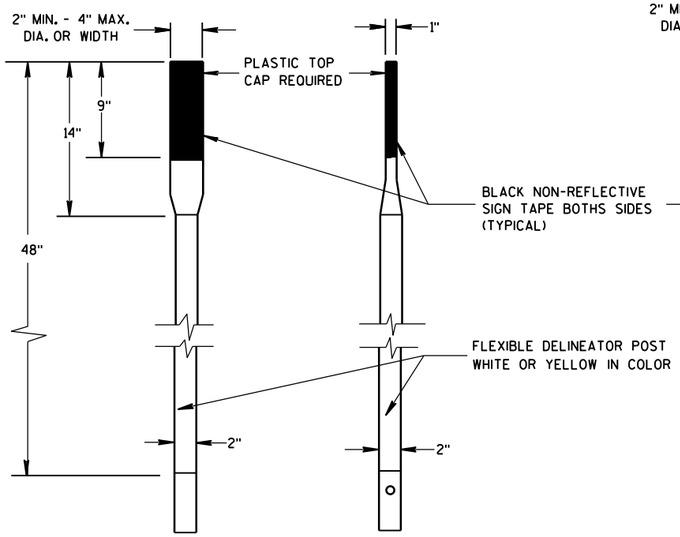
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

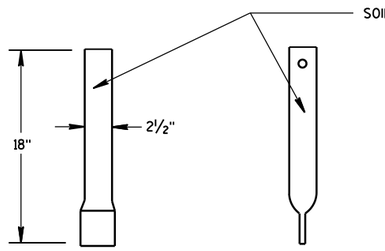
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S.D.D. 15 A 3-2a

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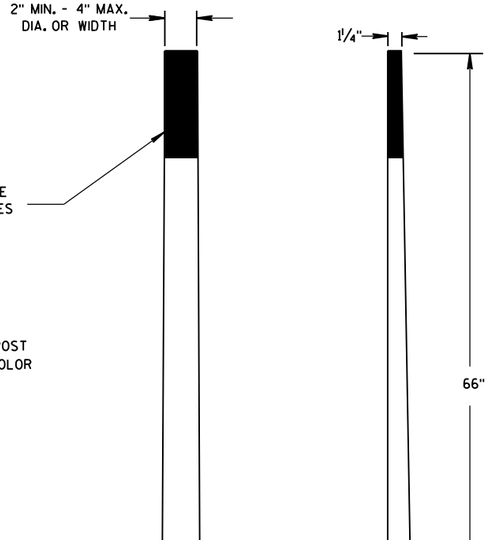
S.D.D. 15 A 3-2a





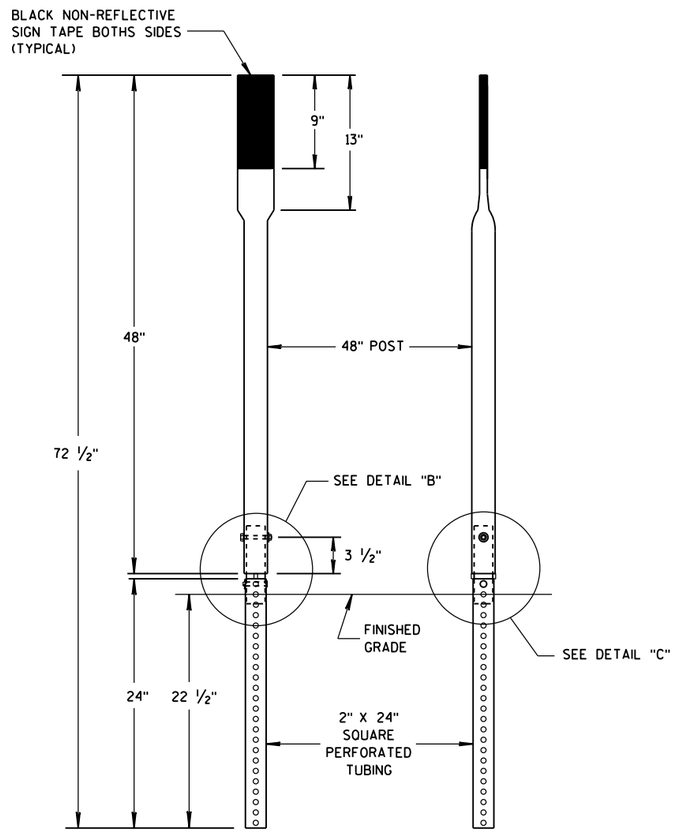
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

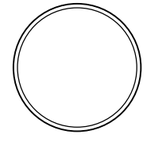
ALTERNATE 2



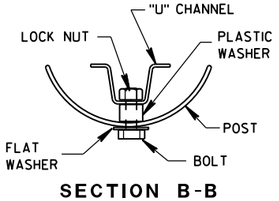
FRONT VIEW SIDE VIEW

ALTERNATE 3

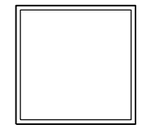
FLEXIBLE MARKER POSTS



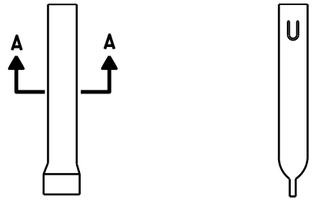
SECTION A-A



SECTION B-B

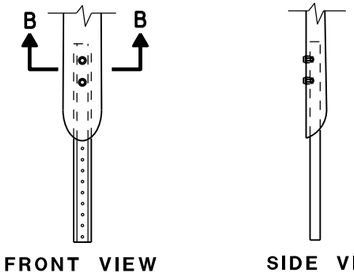


SECTION C-C



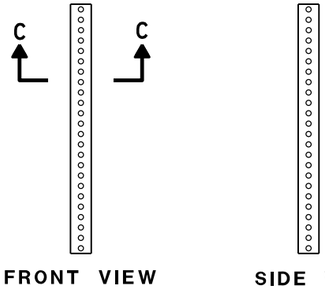
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

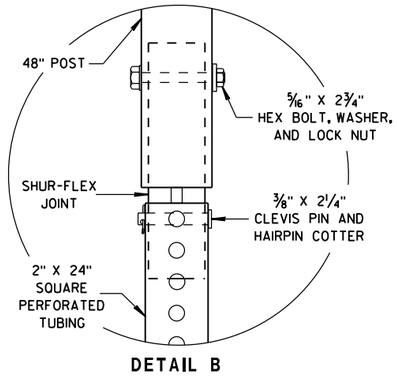
ALTERNATE 2



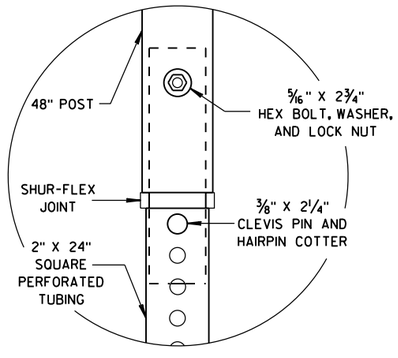
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

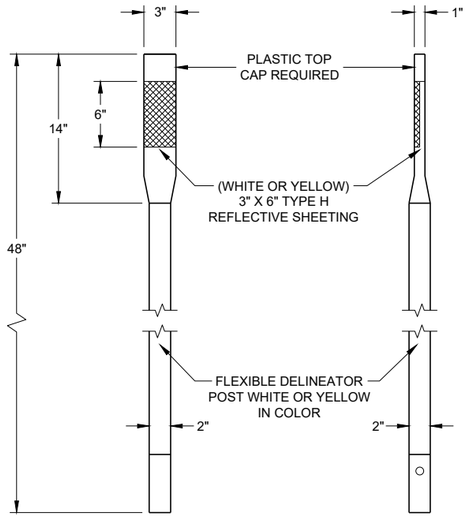
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

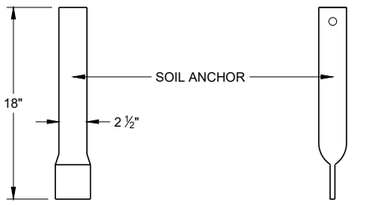
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S.D.D. 15 A 3-2b

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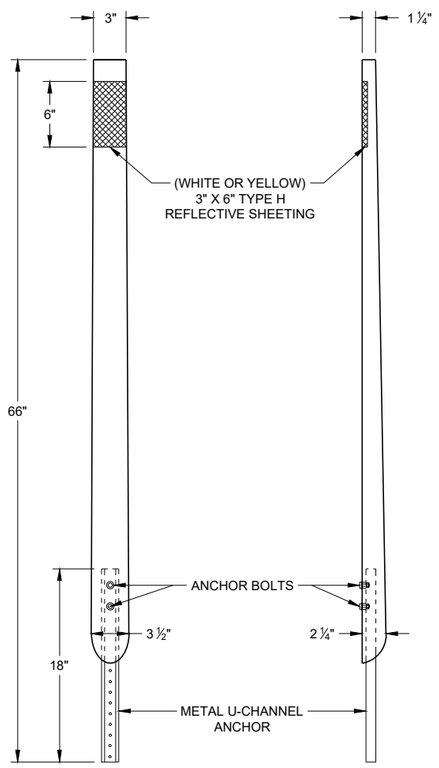
S.D.D. 15 A 3-2b





FRONT VIEW SIDE VIEW

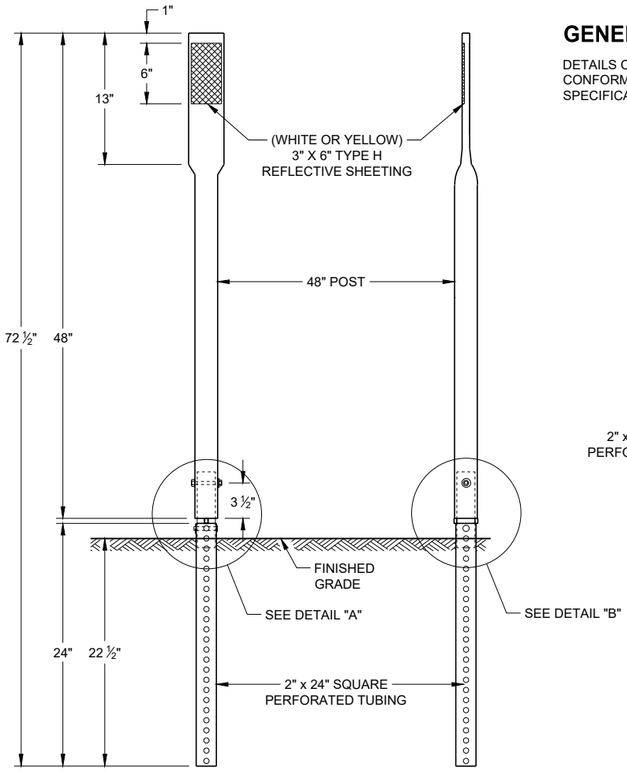
ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2

FLEXIBLE DELINEATOR POSTS

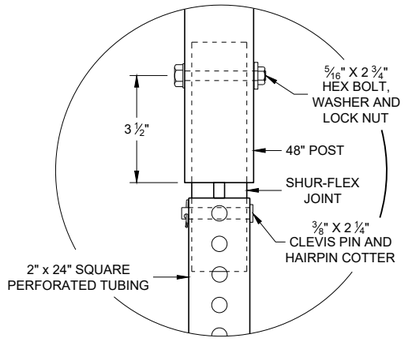


FRONT VIEW SIDE VIEW

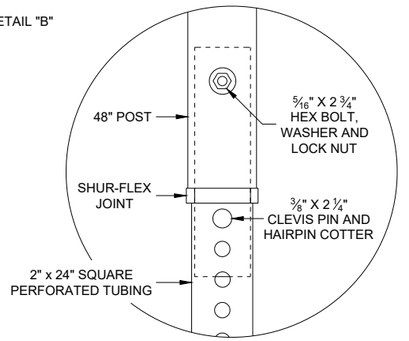
ALTERNATE 3

GENERAL NOTES

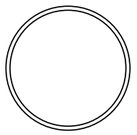
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



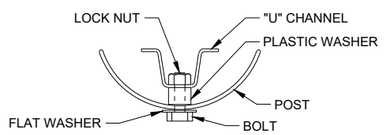
DETAIL A



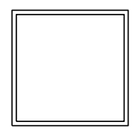
DETAIL B



SECTION A - A



SECTION B - B

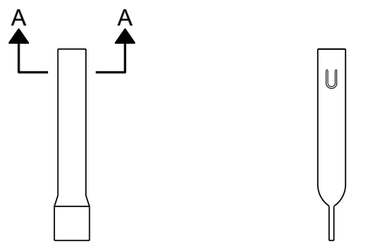


SECTION C - C

REFLECTOR SPACING TABLE

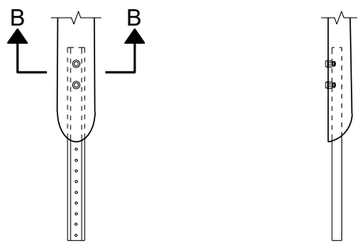
REFLECTOR SPACING	LOCATION
* 100' C-C	RAMPS
400' C-C	MAINLINE

* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER



FRONT VIEW SIDE VIEW

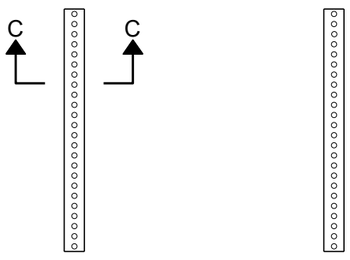
ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2

FLEXIBLE MARKER POST ANCHORS



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE DELINEATOR POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE

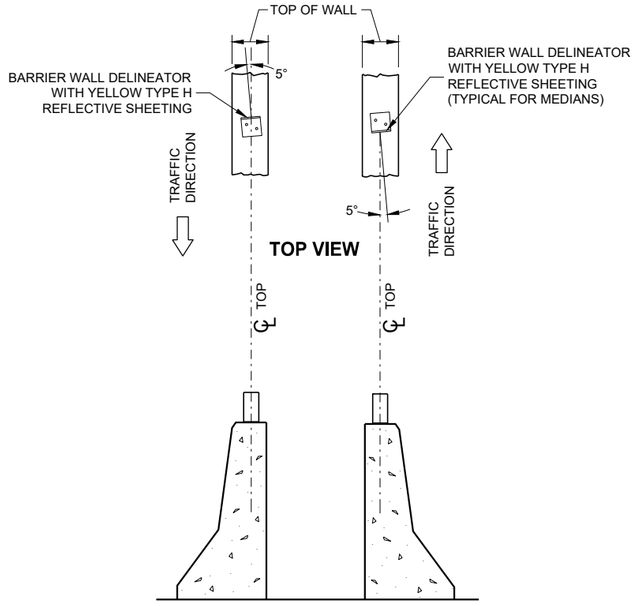
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

FHWA

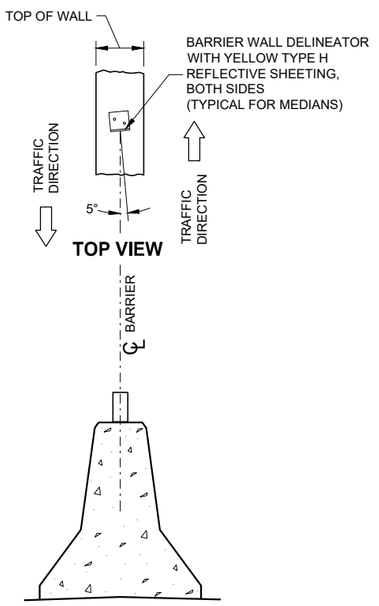
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SDD 15A04 - 07a

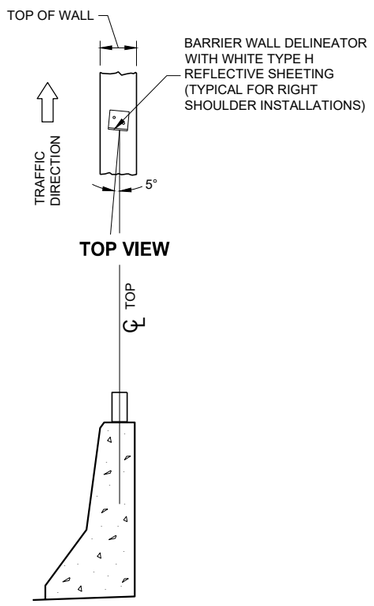
SDD 15A04 - 07a



SIDE VIEW
DOUBLE BARRIERS IN MEDIAN

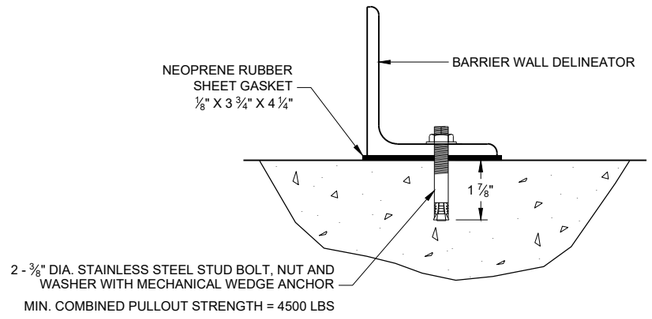


SIDE VIEW
MEDIAN BARRIER

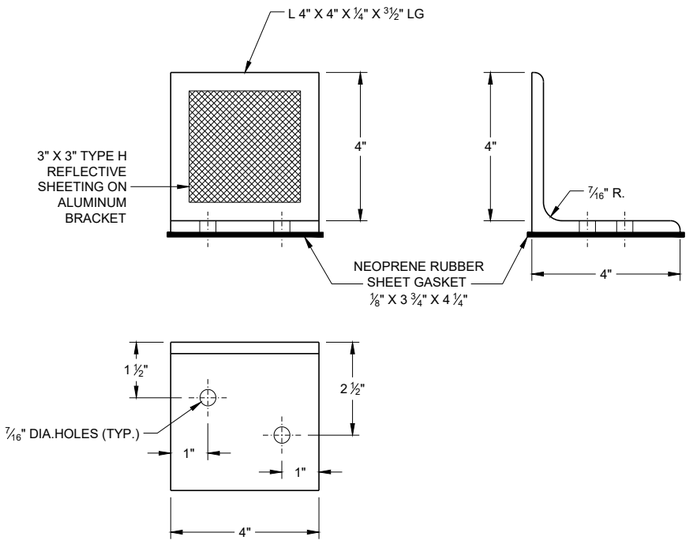


SIDE VIEW
TO RIGHT OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR BARRIER WALL DELINEATOR MOUNTED ON CONCRETE BARRIERS



BARRIER WALL DELINEATOR MOUNTING DETAIL



BARRIER WALL DELINEATOR

REFLECTOR SPACING TABLE

REFLECTOR SPACING	MINIMUM NUMBER OF REFLECTORS
100' C-C	3

BARRIER WALL DELINEATOR WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

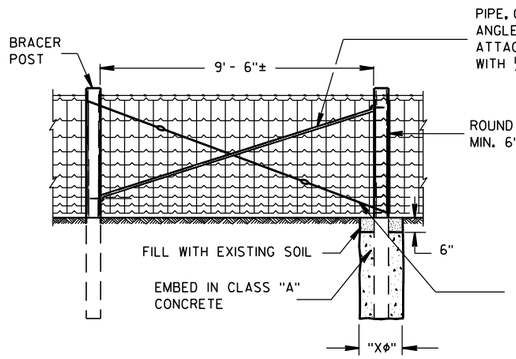
FHWA

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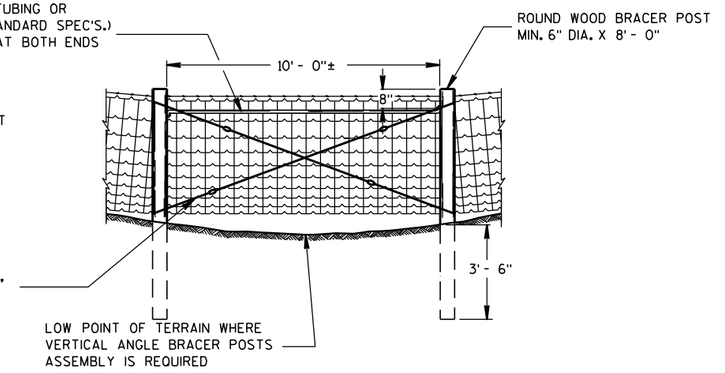
SDD 15A04 - 07b

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY



VERTICAL ANGLE BRACER POSTS ASSEMBLY

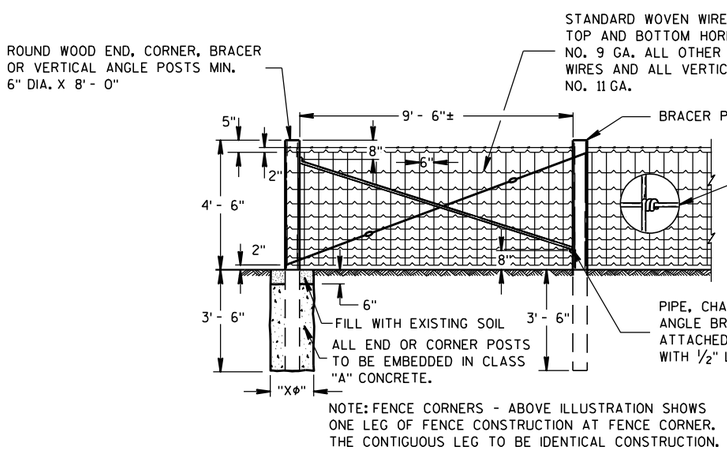
GENERAL NOTES

"XΦ" = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

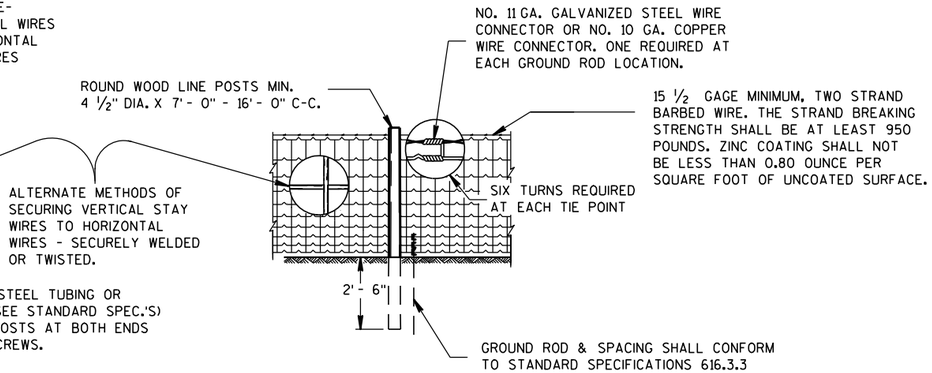
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.



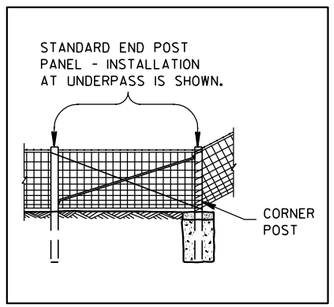
NOTE: FENCE CORNERS - ABOVE ILLUSTRATION SHOWS ONE LEG OF FENCE CONSTRUCTION AT FENCE CORNER. THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.

END OR CORNER POSTS ASSEMBLY

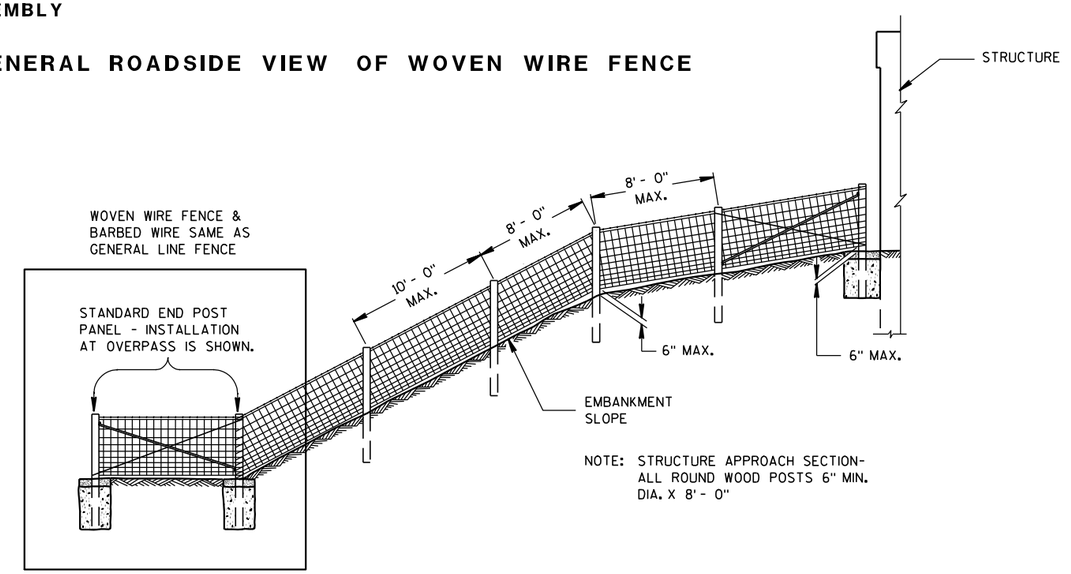


LINE FENCE CONSTRUCTION

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



ALTERNATE FENCE DESIGN AT STRUCTURE



NOTE: STRUCTURE APPROACH SECTION- ALL ROUND WOOD POSTS 6" MIN. DIA. X 8' - 0"

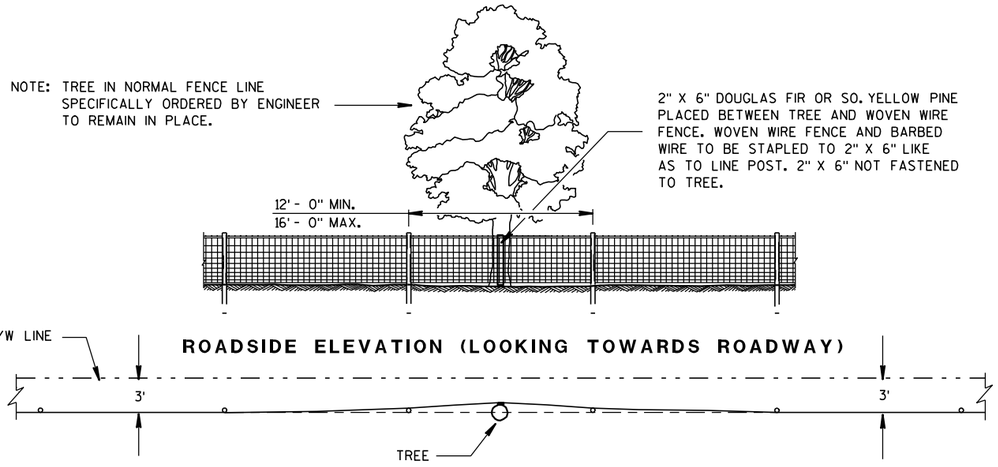
FENCE DESIGN AT STRUCTURE APPROACH

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

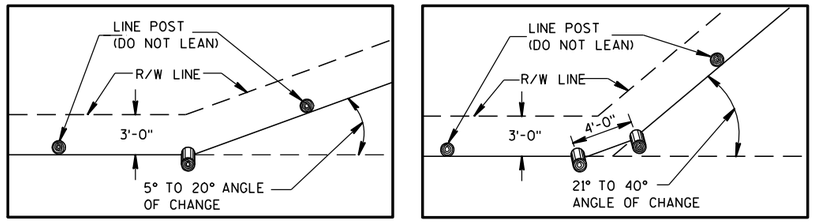
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S.D.D. 15 B 1-8a



PLAN VIEW

FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE



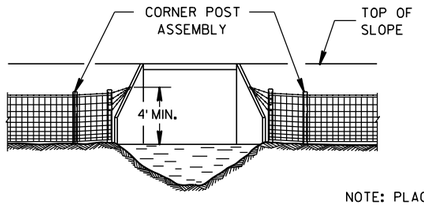
PLAN VIEW
SINGLE POST CORNER

PLAN VIEW
DOUBLE POST CORNER

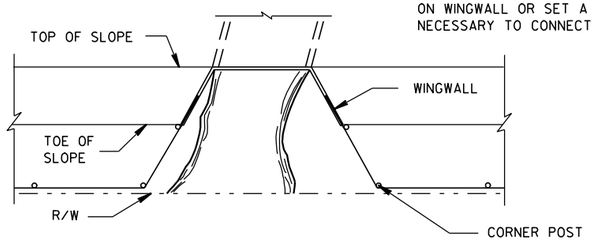
RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

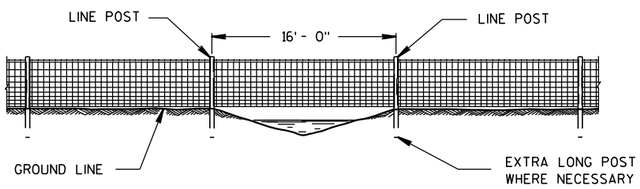
WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



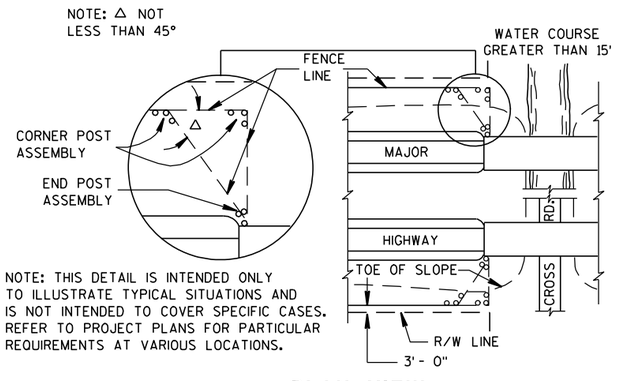
NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



FENCE INSTALLATION TO WINGWALLS

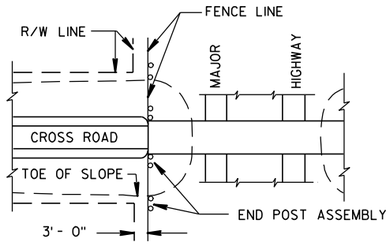


FENCE CONSTRUCTION OVER STREAM COURSES OF 15 FT. OR LESS IN WIDTH



PLAN VIEW

MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 15 FT. IN WIDTH

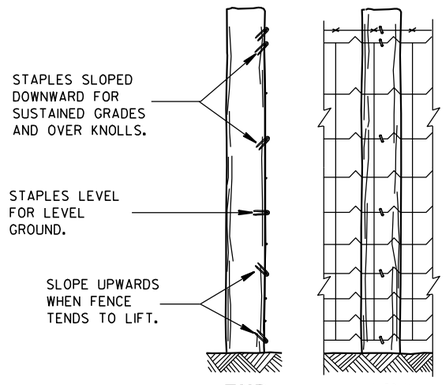


PLAN VIEW

MAJOR HIGHWAY UNDERPASS

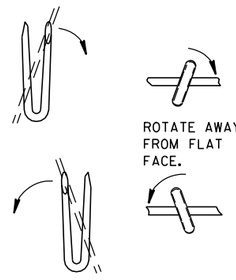
FENCE LOCATION AT STRUCTURES

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.



END ELEVATION **FARM SIDE ELEVATION**

FENCE MOUNTING DETAIL



LINE POST

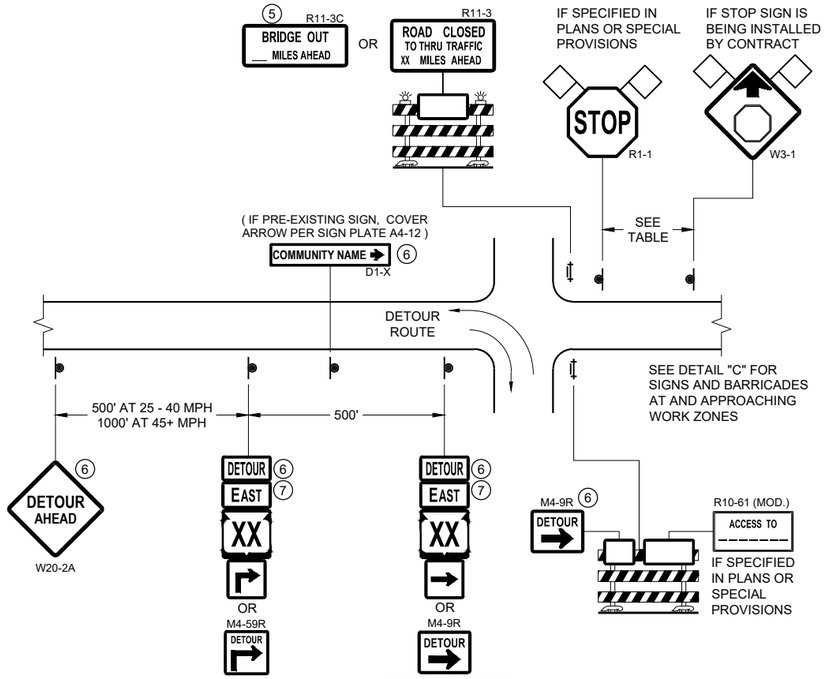
FENCE WOVEN WIRE

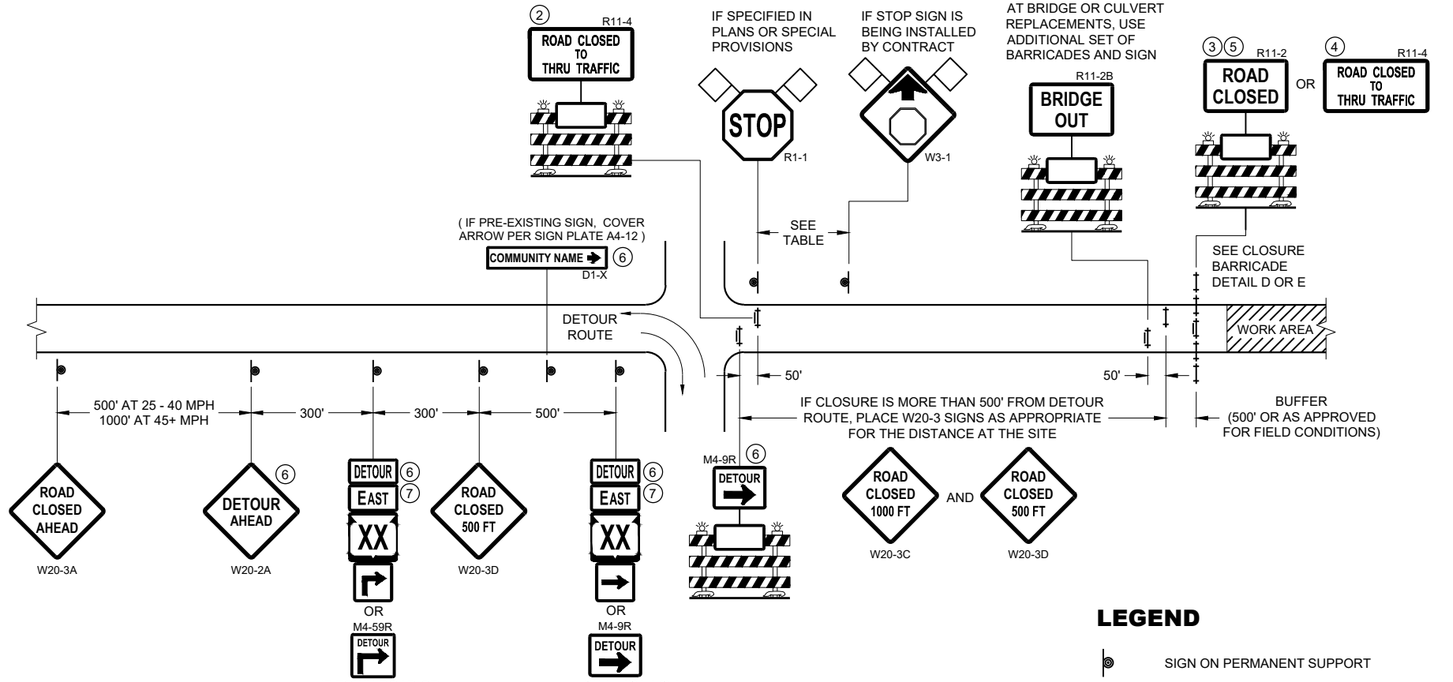
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/4/2008
DATE
/S/ Jerry H. Zinn
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 15 B 1-8b



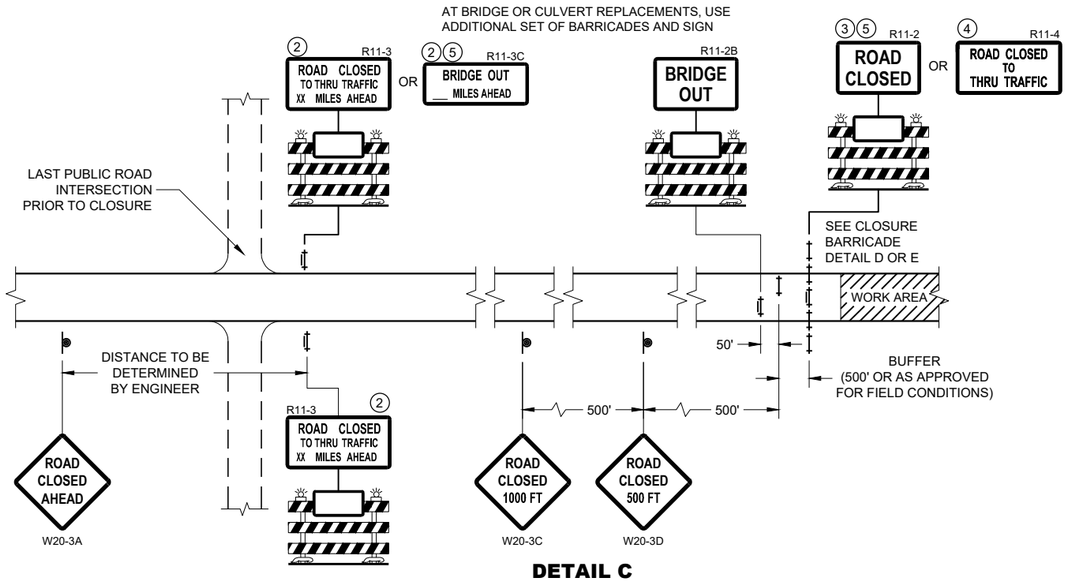


DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

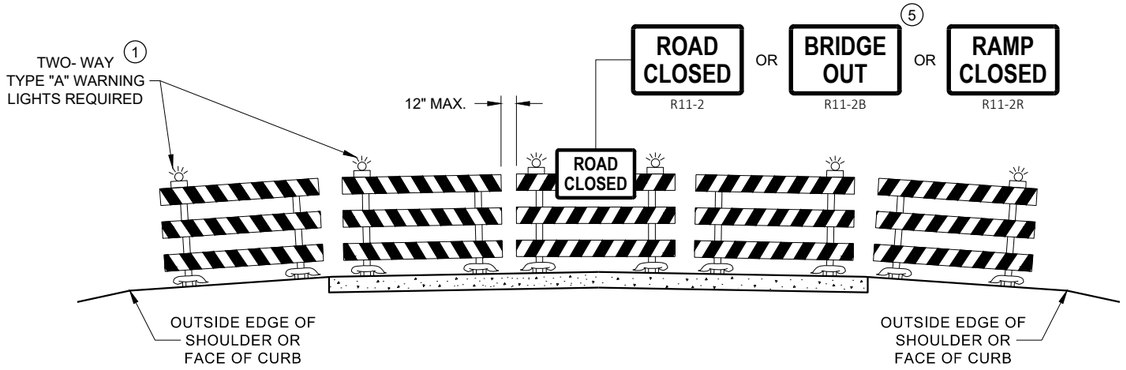
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

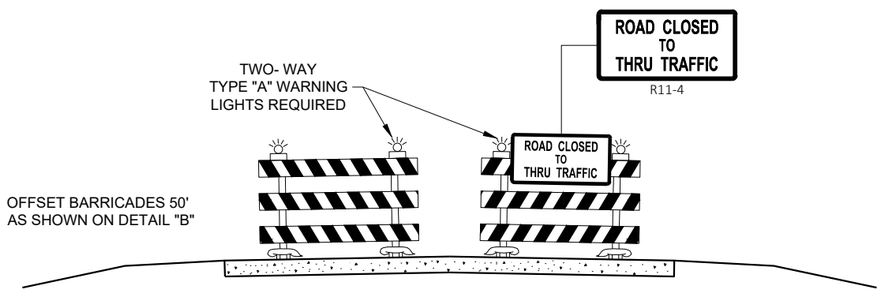
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SDD 15C02 - 08a

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

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR / EAST — M4 - 8, M3 - X
- XX — M1 - 4
- XX — M1 - 6
- COUNTY / X — M1 - 5A
- M05 - 1
- M06 - 1
- M06 - 1

GENERAL NOTES

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

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

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
M4-9 AND M4-59 SHALL BE 30" X 24"
M4-8a SHALL BE 24" X 18"
G20-51 SHALL BE 60" X 24"
W20-2A SHALL BE 48" X 48"
D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

500' AT 25-40 MPH
1000' AT 45+ MPH

500'

DETOUR EAST XX *

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M4-8a END DETOUR WEST XX *

DETOUR EAST XX / WEST XX

DETOUR ROUTE

WORK AREA

DETOUR EAST XX

WEST XX OR M4-9L DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR NEXT X MILES * G20-51

DETOUR WEST XX * OR M4-59L DETOUR ** IF TOWN ROAD OR LOCAL STREET

MATCH POINT

* M4-59L DETOUR ** OR DETOUR EAST XX * IF TOWN ROAD OR LOCAL STREET

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M4-9L DETOUR ** OR DETOUR EAST XX IF TOWN ROAD OR LOCAL STREET

500'

DETOUR WEST XX

DETOUR WEST XX OR M4-9R DETOUR ** IF TOWN ROAD OR LOCAL STREET

DETOUR WEST XX * OR M4-59R * DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR ROUTE

500' AT 25 - 40 MPH
1000' AT 45+ MPH

500'

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

DETOUR EAST XX *

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR EAST XX

500'

DETOUR EAST XX

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR EAST XX *

PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

500' AT 25 - 40 MPH
1000' AT 45+ MPH

DETOUR EAST XX *

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR 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

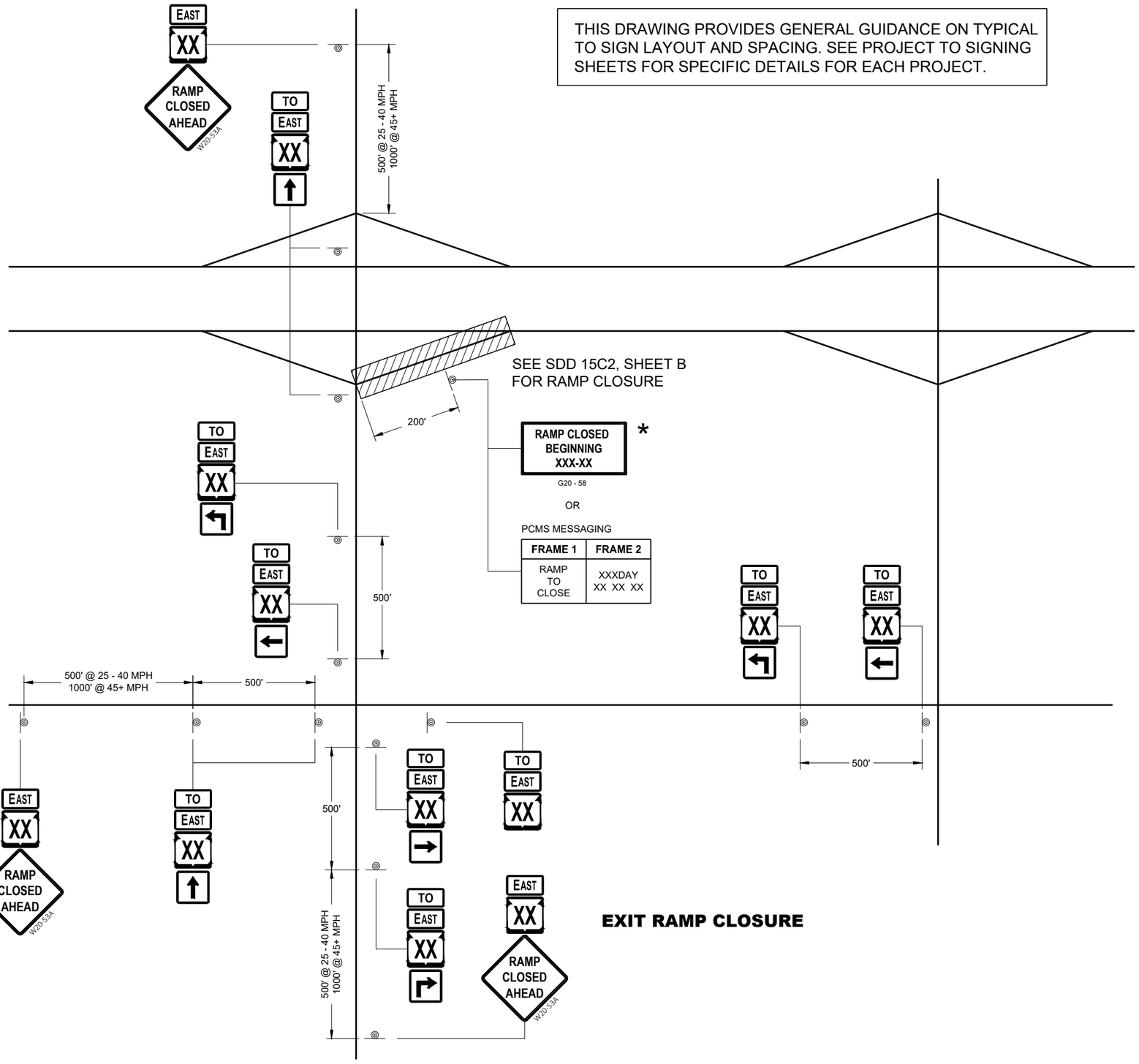
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08c

6

SDD 15C02 - 08c



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

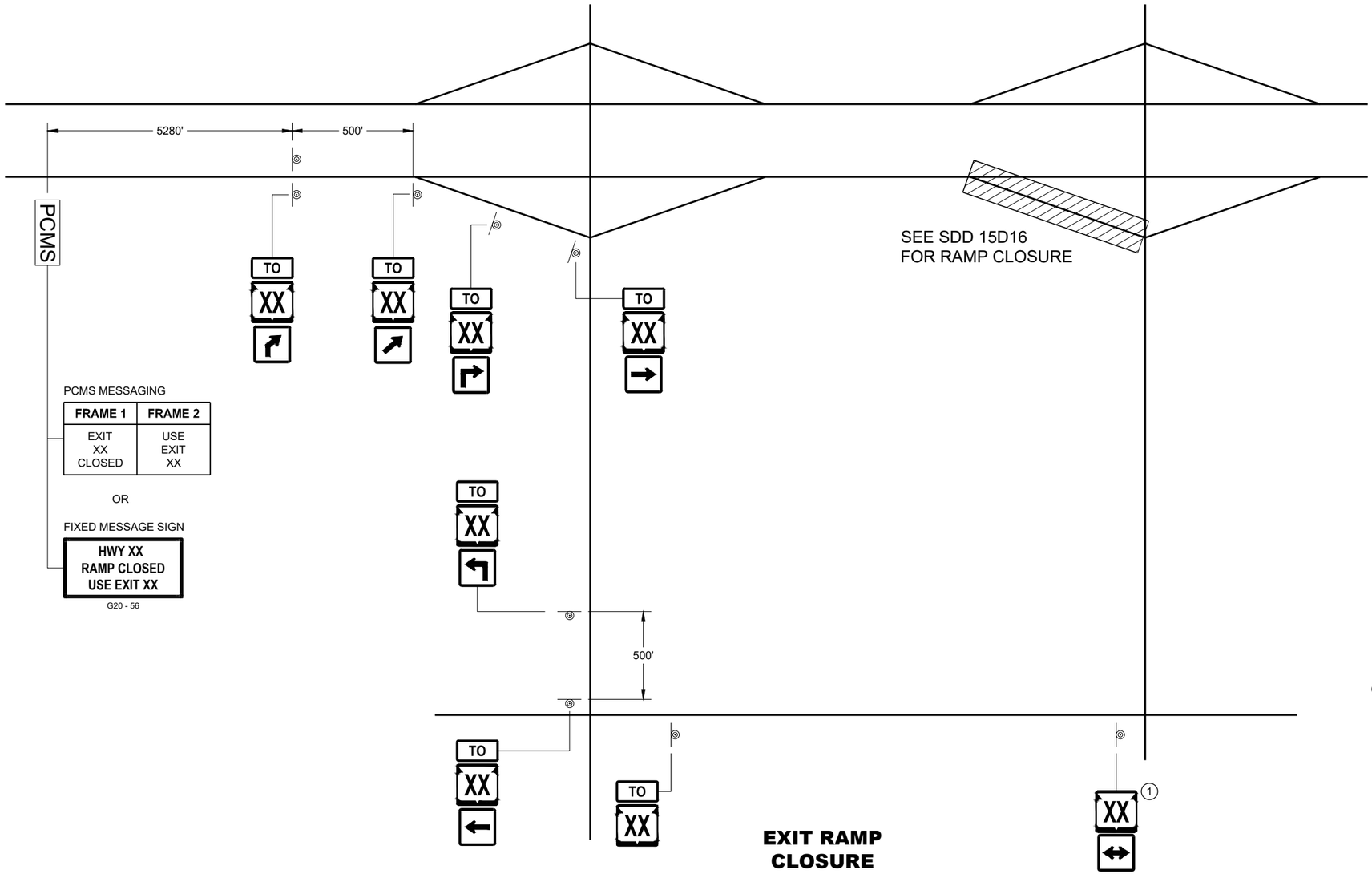
APPROVED
February 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

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 ENGINEER
FHWA

SDD 15C02 - 08e

SDD 15C02 - 08e

GENERAL NOTES

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

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

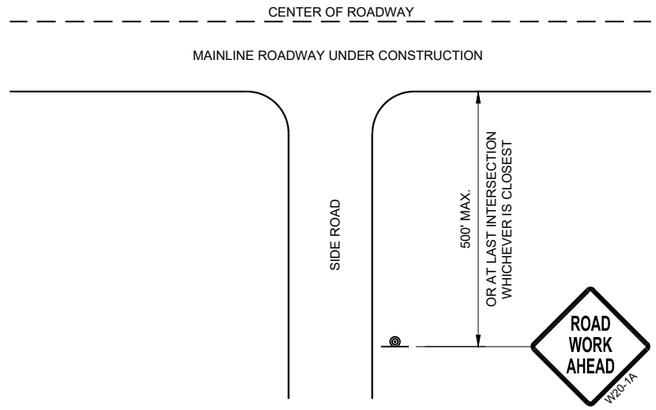
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



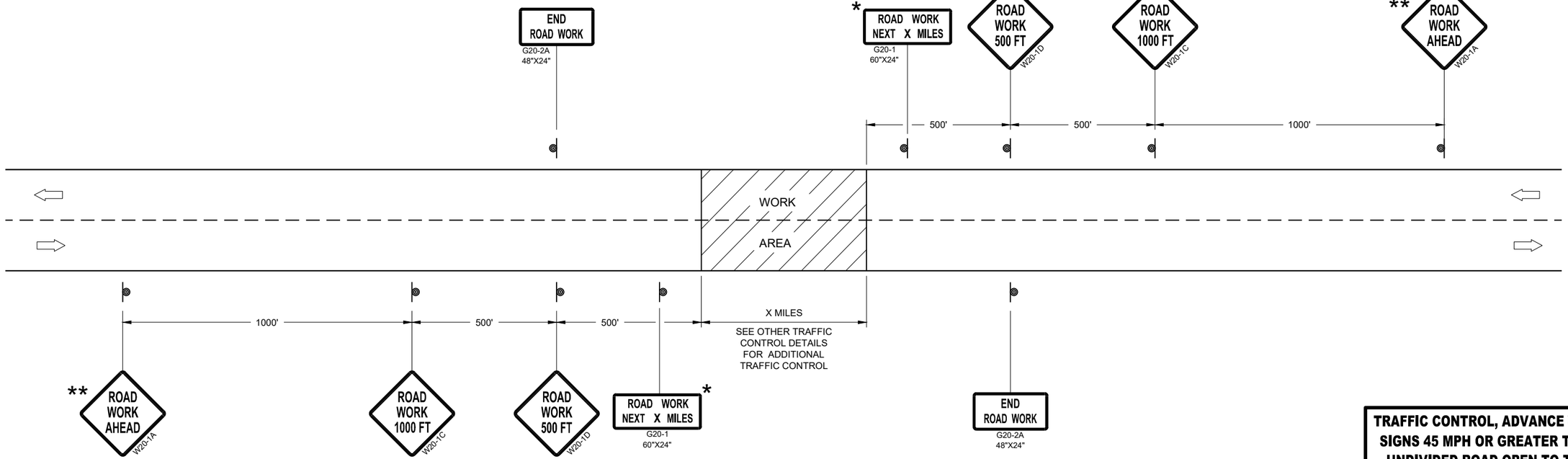
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

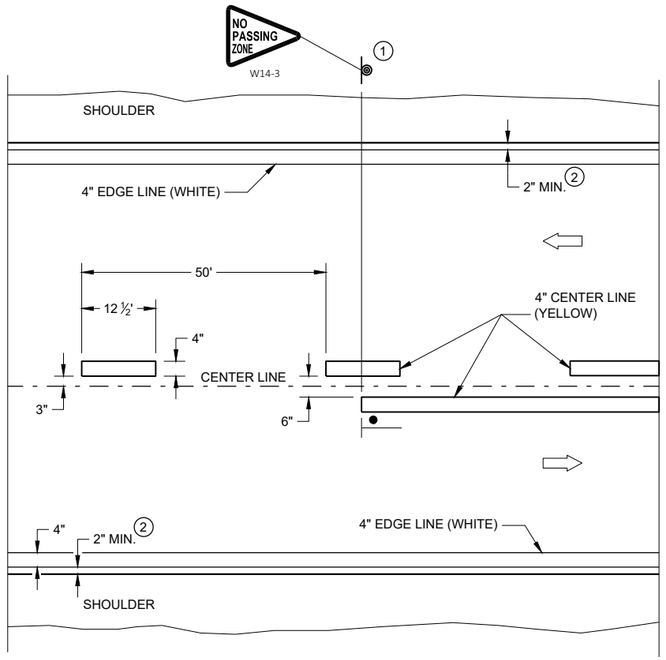
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

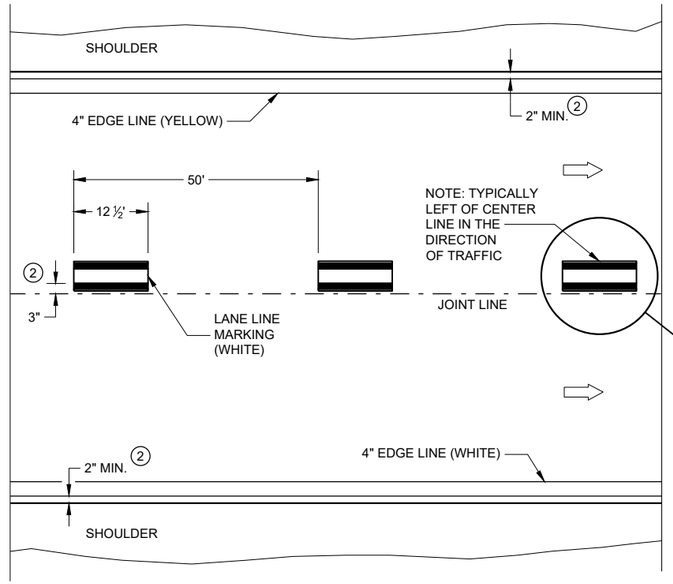
FHWA

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SDD 15C04 - 05

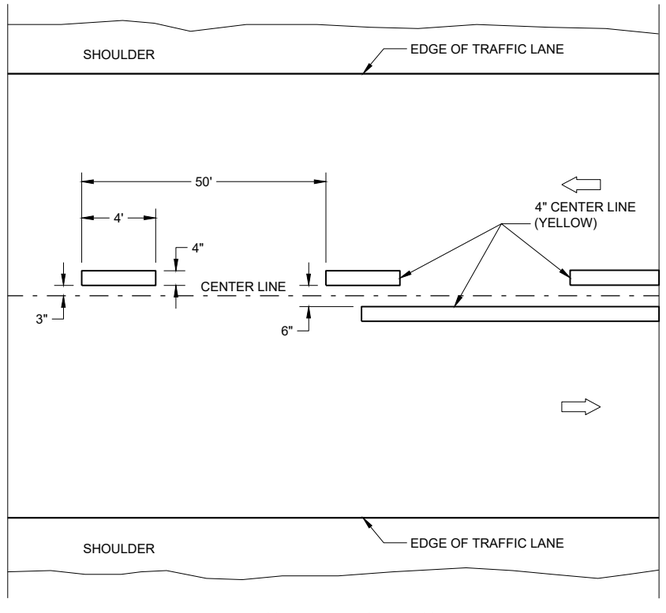


TWO WAY TRAFFIC

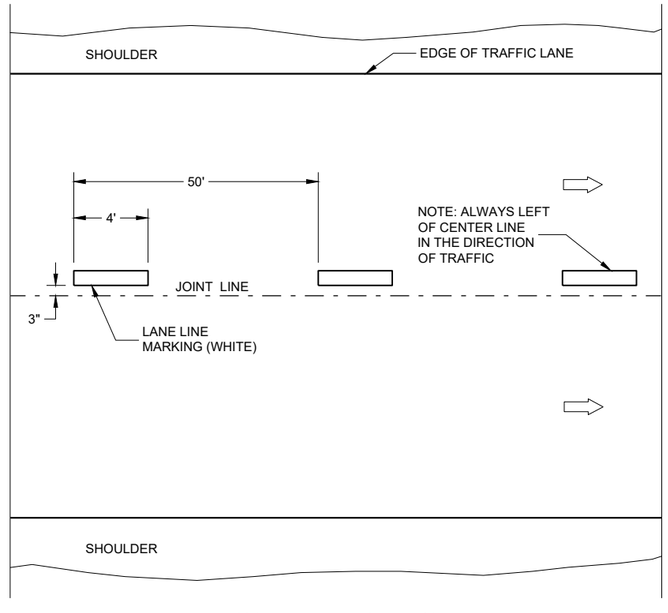


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

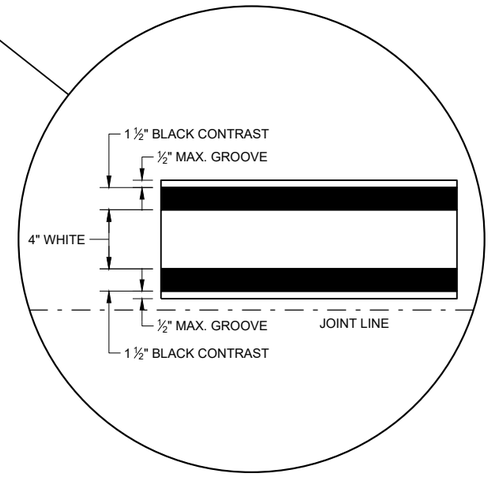
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

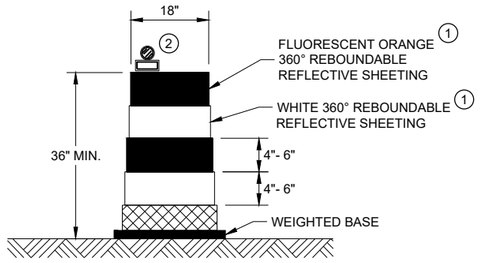
FHWA

SDD 15C08 - 20a

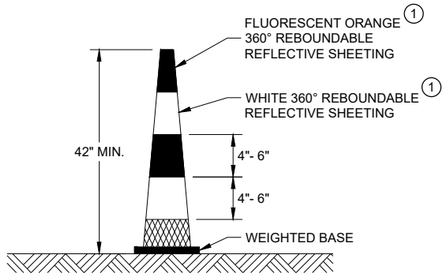
SDD 15C08 - 20a

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.

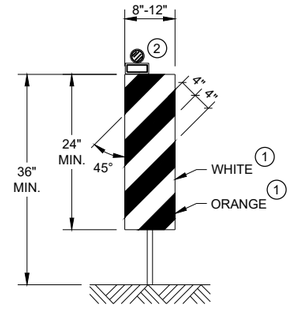


DRUM



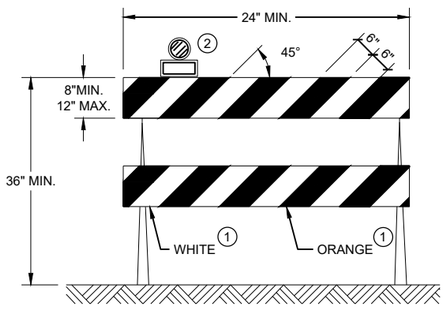
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



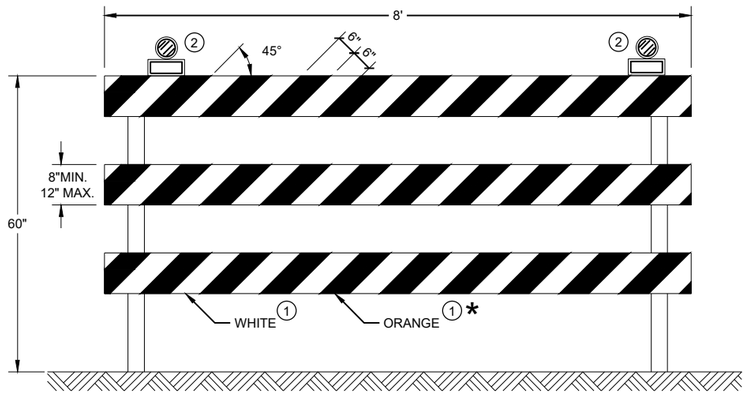
VERTICAL PANEL

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
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD15C11 - 09b

6

SDD15C11 - 09b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

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

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

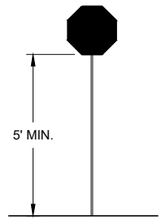
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



STOP/SLOW PADDLE ON SUPPORT STAFF

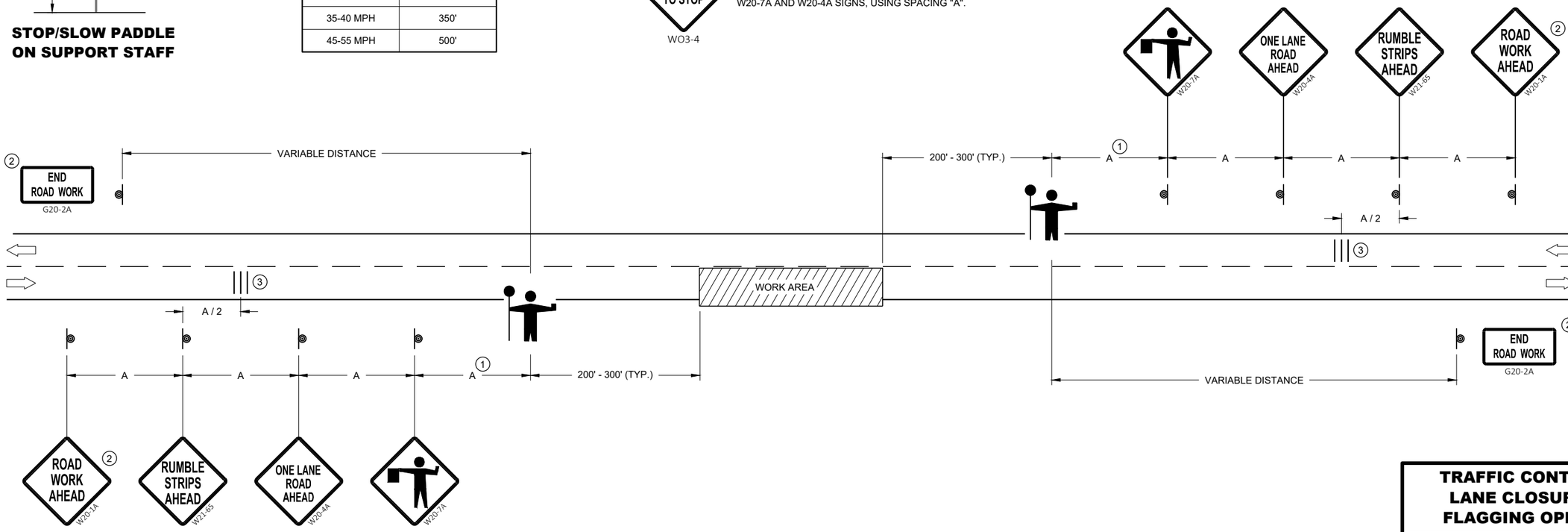
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

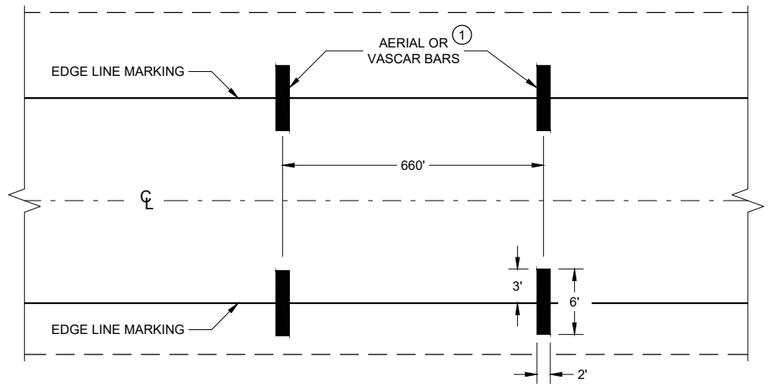
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SDD 15C12 - 08

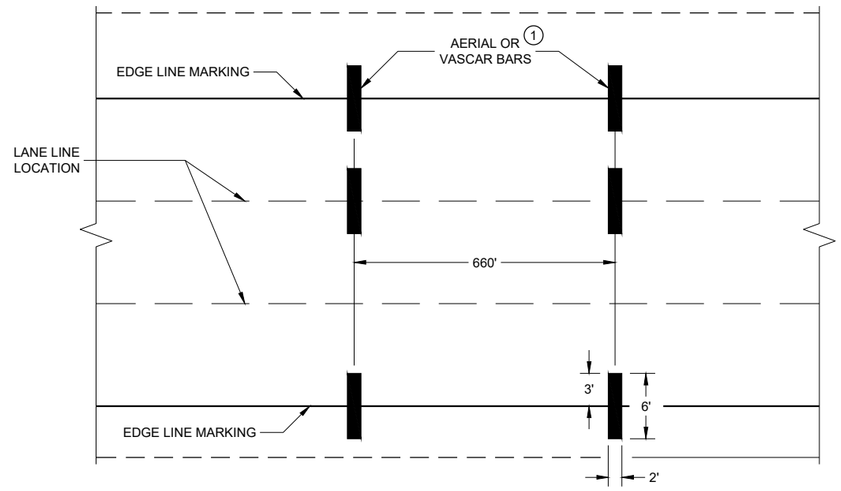
GENERAL NOTES

(1) PLACE TWO TO FIVE AERIAL OR VASCAR BARS AT 660 FOOT SPACING.

A CAR CAN BE PROVIDED BY THE WISCONSIN STATE PATROL FOR TRAFFIC CONTROL.



TYPICAL FOR TWO WAY OR ONE WAY TRAFFIC



TYPICAL FOR MULTILANE TRAFFIC

SPEED ENFORCEMENT ZONE WITH AERIAL OR VASCAR BARS

6

SDD 15C14 - 04

AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

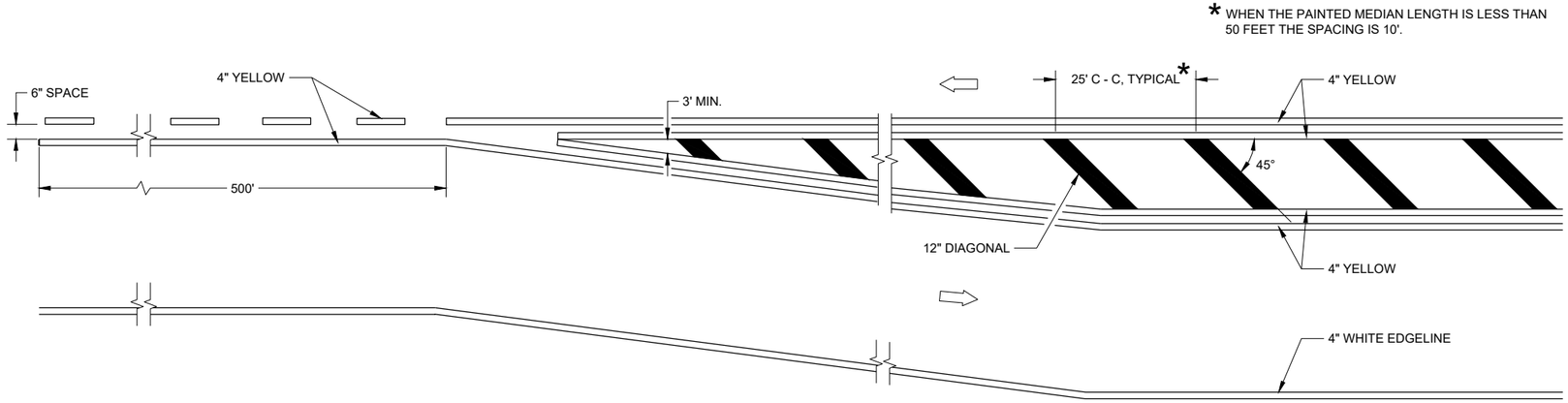
February 2021
DATE

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

FHWA

6

SDD 15C14 - 04

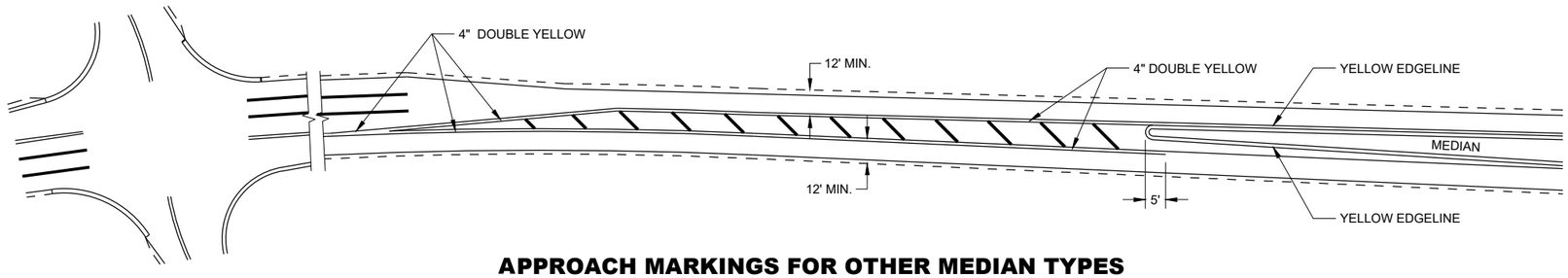


MEDIAN ISLAND DETAIL

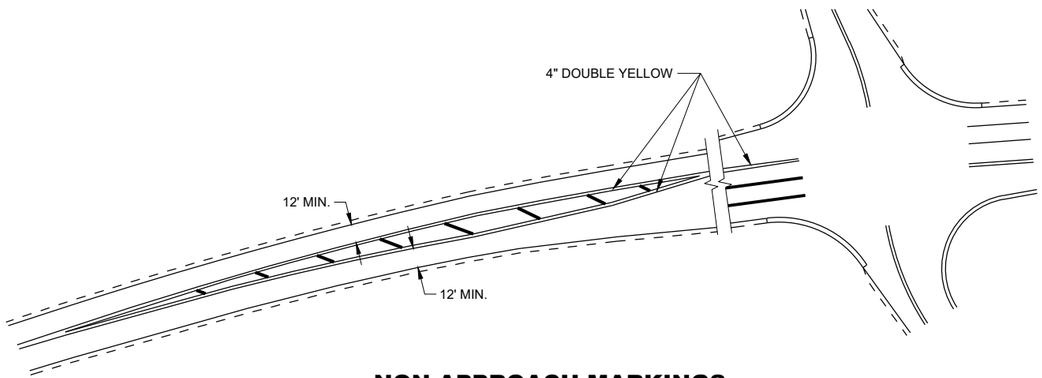
GENERAL NOTES

DIAGONALS ARE OPTIONAL WHEN PAINED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

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

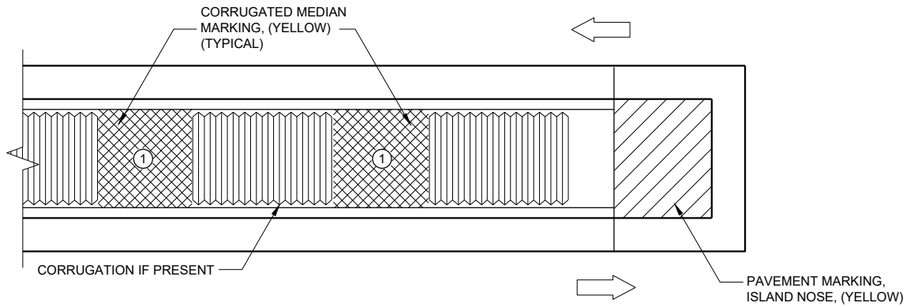
FHWA

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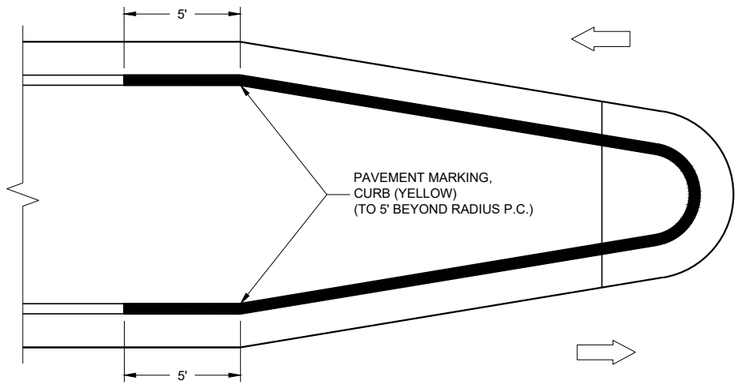
SDD 15C18 - 05a

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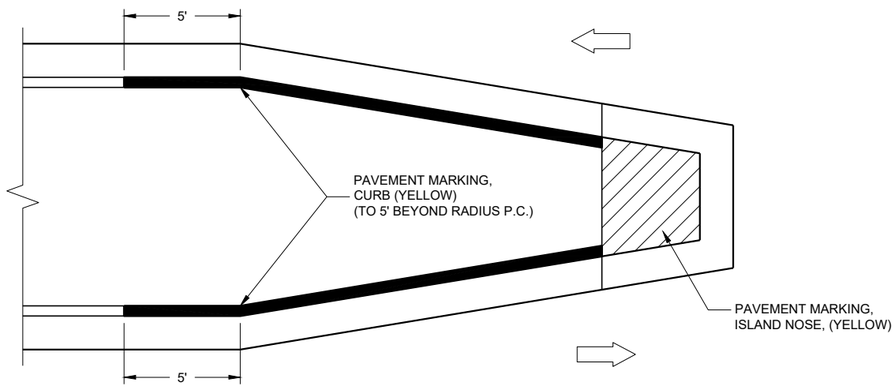
SDD 15C18 - 05a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

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

FHWA

6

SDD 15C18 - 05b

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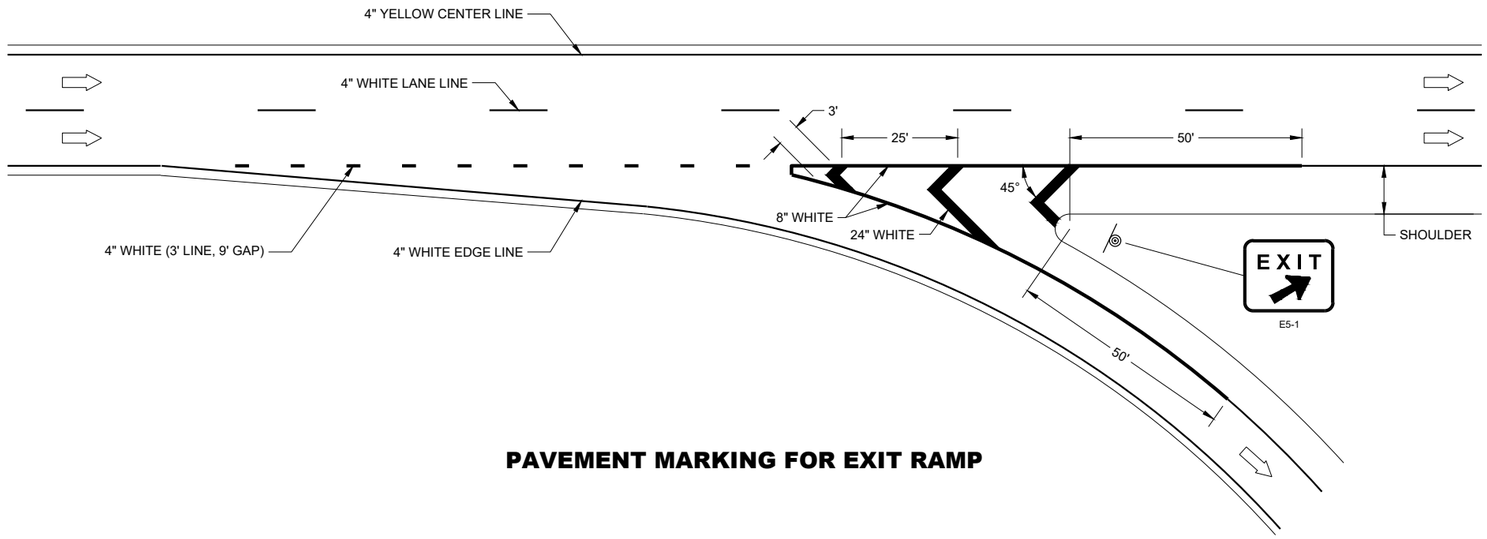
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

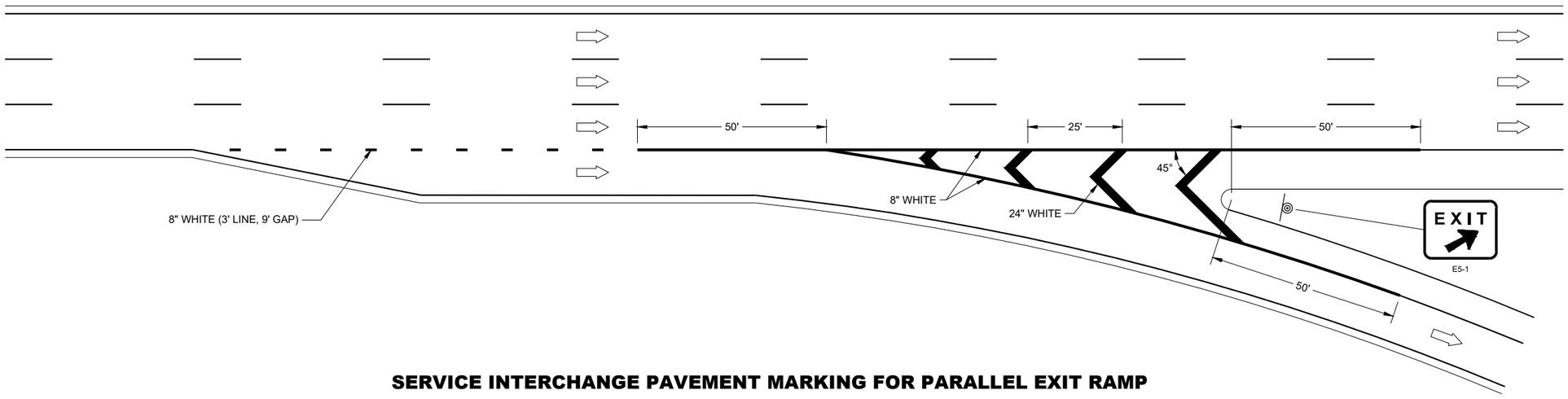
LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

6

SDD 15C31 - 04a

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SDD 15C31 - 04a

PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

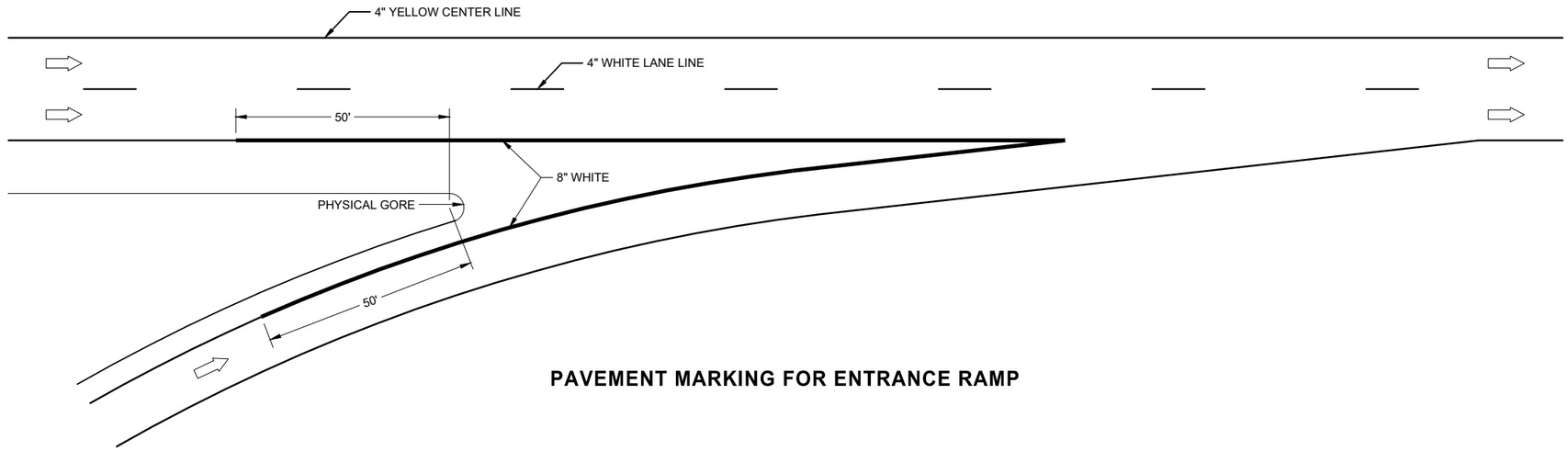
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

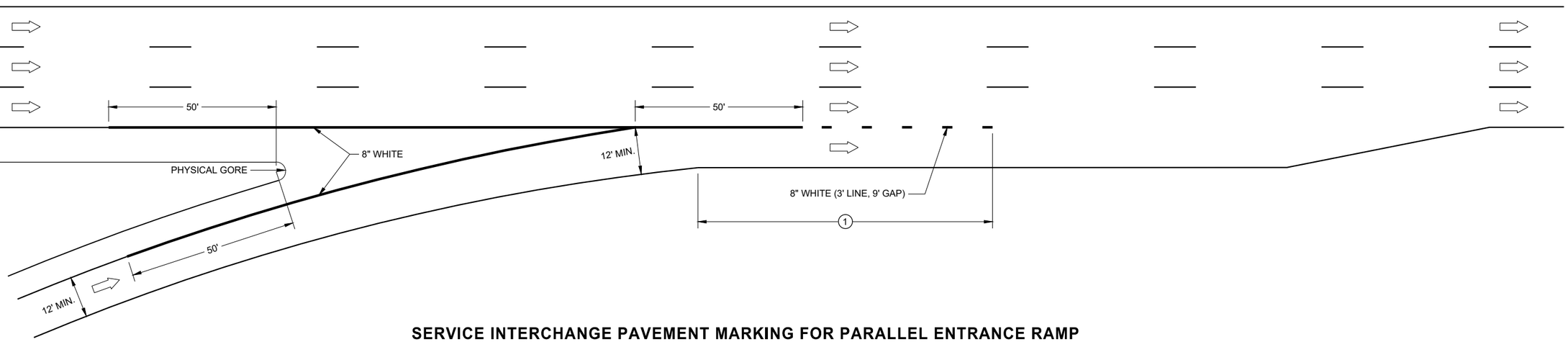
(1) ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

LEGEND

DIRECTION OF TRAVEL



PAVEMENT MARKING FOR ENTRANCE RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

6

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SDD 14C31 - 04c

SDD 14C31 - 04c

PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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

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

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

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

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

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

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

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

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

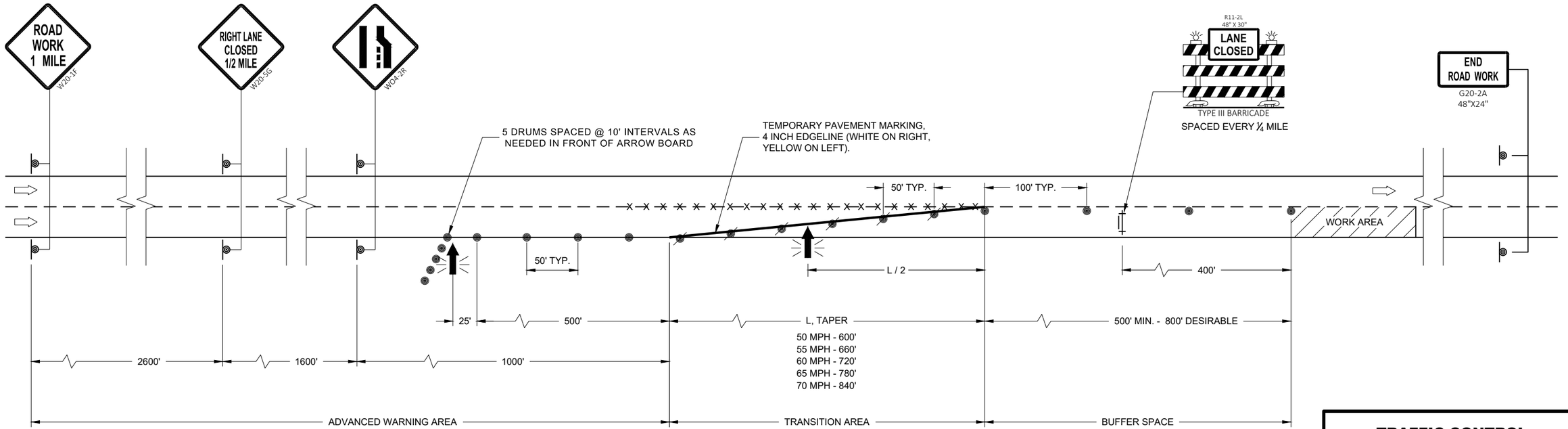
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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

LEGEND

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



6

SDD 15D12 - 09a

TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D12 - 09a

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
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- (S) — PORTABLE TRAFFIC SENSOR (PTS)
- FBS — FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
WO8-76
60x36

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.

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.

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.

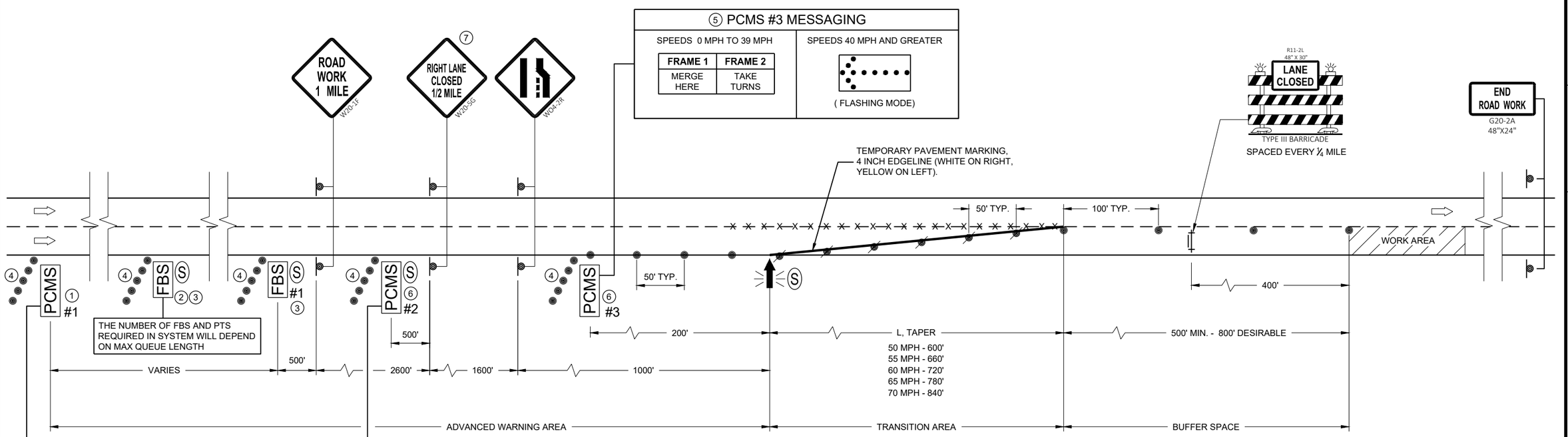
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION. ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A cROSSOVER MANEUVER.

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

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

1. PLACE PCMS #1 ONE MILE BEYOND ESTIMATED MAXIMUM QUEUE LENGTH. PLACE FLASHING BEACON SIGNS EVERY ONE MILE BETWEEN THE W20 - 1F AND PCMS #1 BEYOND ESTIMATED QUEUE.
2. PLACE FLASHING BEACON SIGNS EVERY ONE MILE BETWEEN PCMS #1 AND FBS #1. THE NUMBER OF FBS MAY BE MORE THAN SHOWN ON THIS DETAIL.
3. FOR THREE LANE CONFIGURATION, PLACE FBS ON BOTH SIDES OF ROADWAY. CHANGE PCMS #1 FRAME 2 MESSAGE TO "USE ALL LANES".
4. 5 DRUMS SPACED @ 10' INTERVALS AS NEEDED.
5. PCMS SHALL FOLLOW ARROW BOARD STANDARDS WHEN DISPLAYING FLASHING FOUR CORNER CAUTION MODE OR FLASHING ARROW MERGE MODE.
6. TO MINIMIZE OBSTRUCTION OF THE ARROW BOARD BY THE PCMS, OFFSET THE PCMS AS NEEDED FROM THE EDGE LINE
7. 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, DYNAMIC LATE MERGE SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

SDD 15D12 - 09c

SDD 15D12 - 09c

6

LEGEND

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

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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 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

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

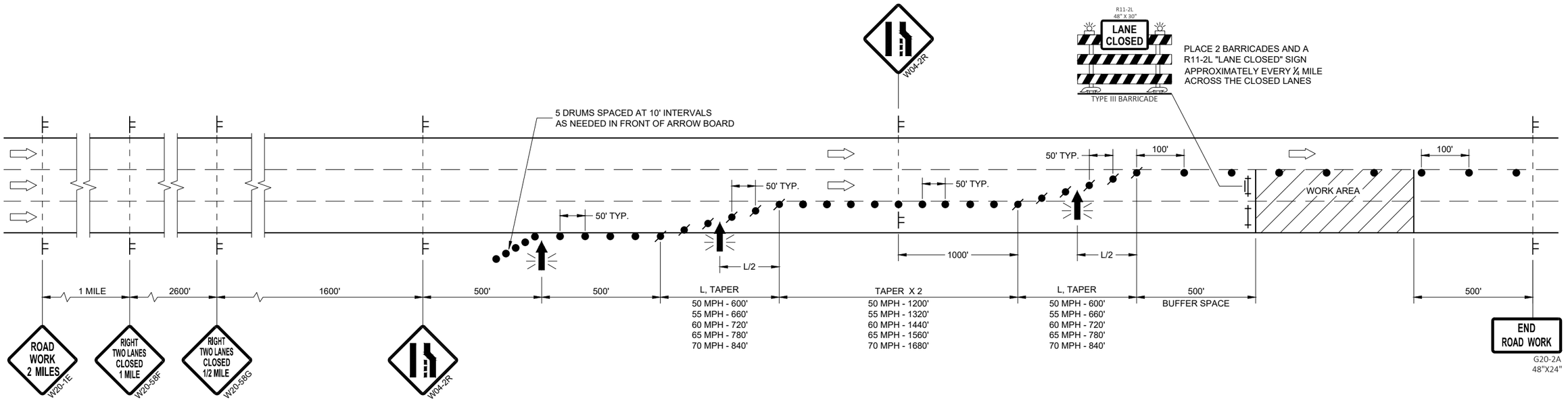
CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS.

WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

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.



TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

SDD 15D14 - 04

SDD 15D14 - 04

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. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE 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.

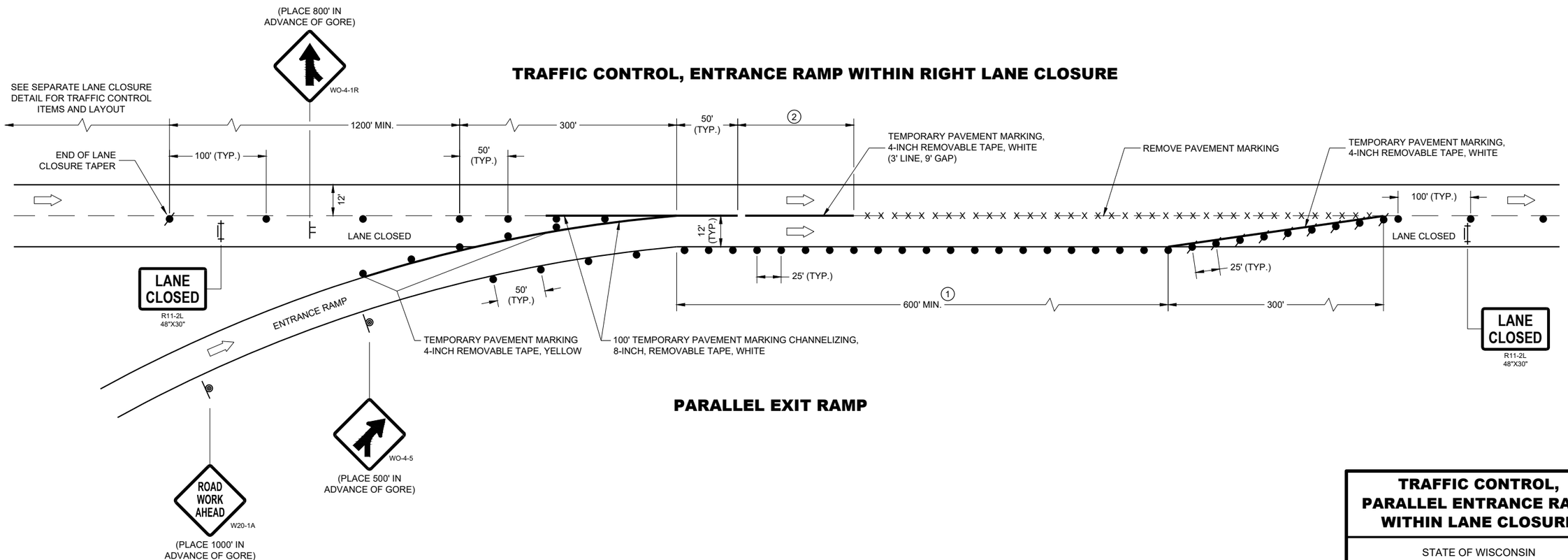
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

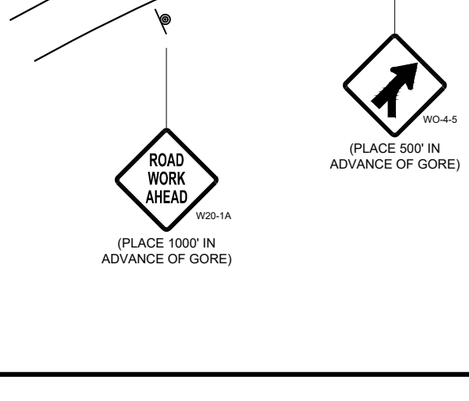
(1) EXTEND THE LENGTH OF THE MERGE ARE IF THE ENTERING (DESIGN) SPEED IS LESS THAN 50MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

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

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE



PARALLEL EXIT RAMP



TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

6

SDD 15D15 - 05a

SDD 15D15 - 05a

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.

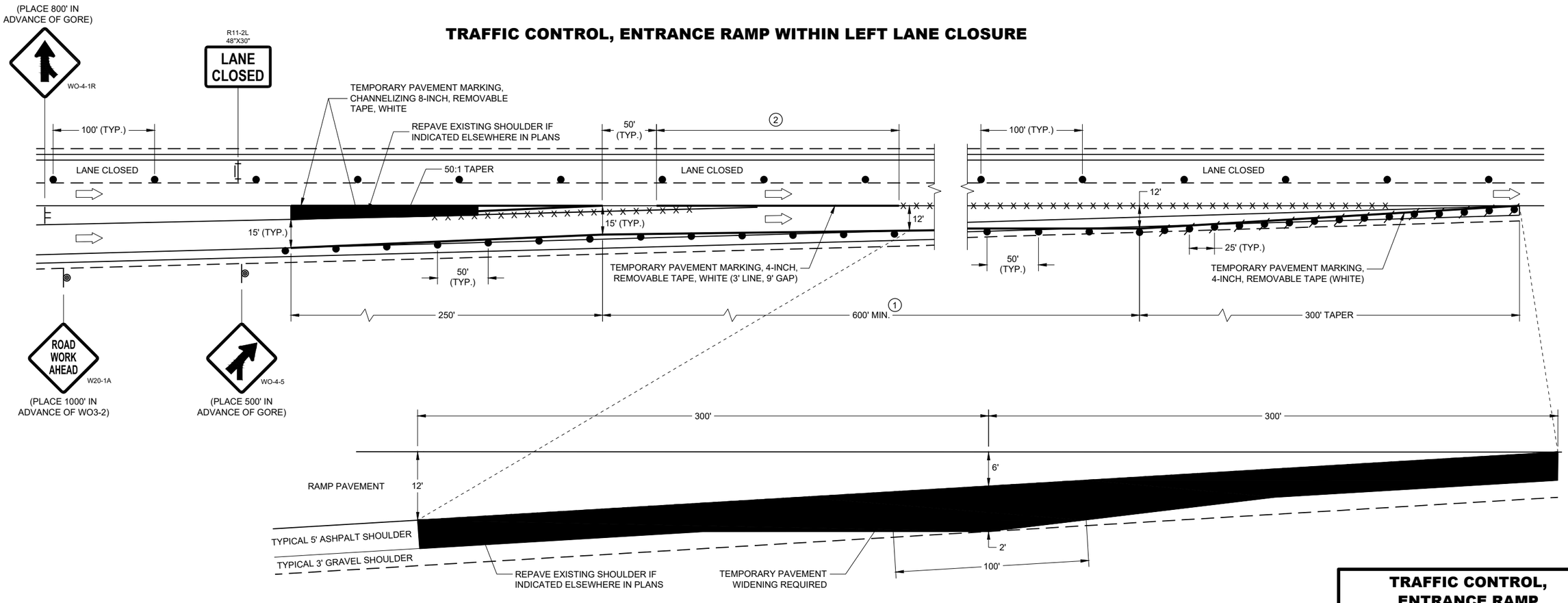
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

400

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.

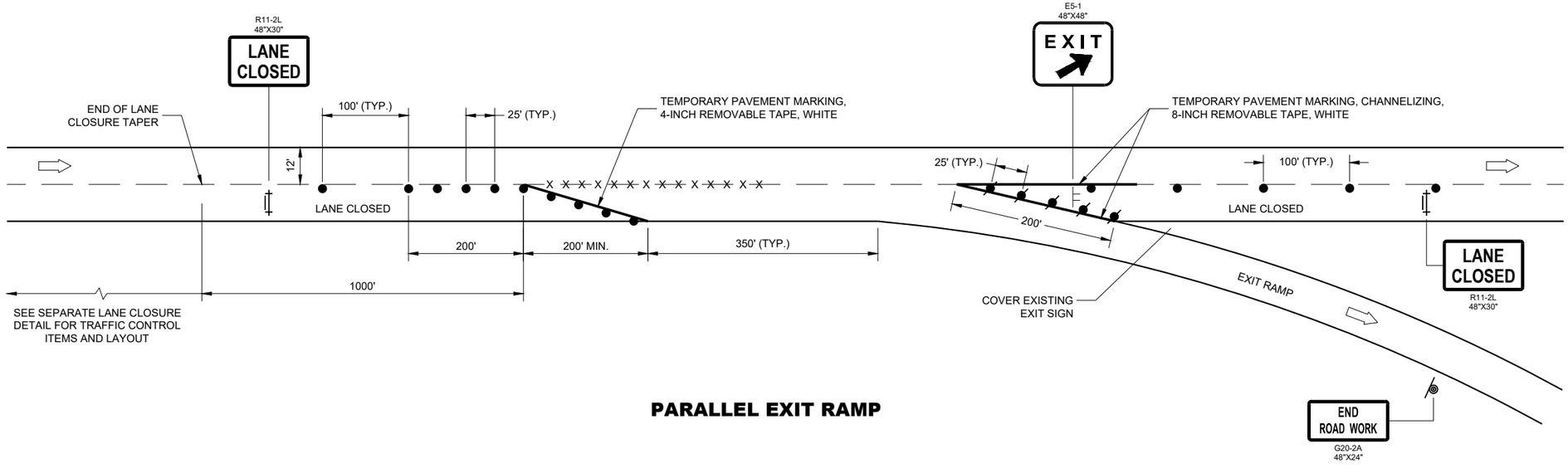
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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 ENGINEER

FHWA

6

SDD 15D15 - 05e

6

SDD 15D15 - 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.

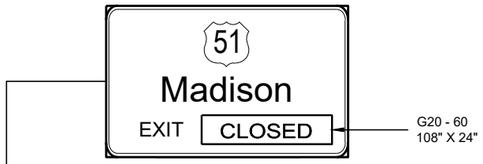
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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.

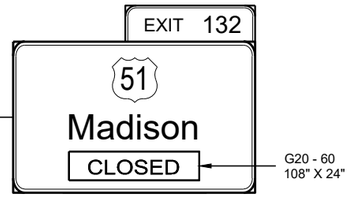
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

* 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.

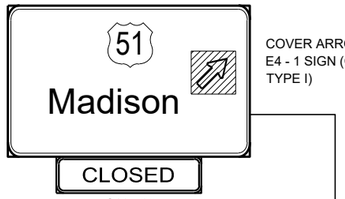
** PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



OR

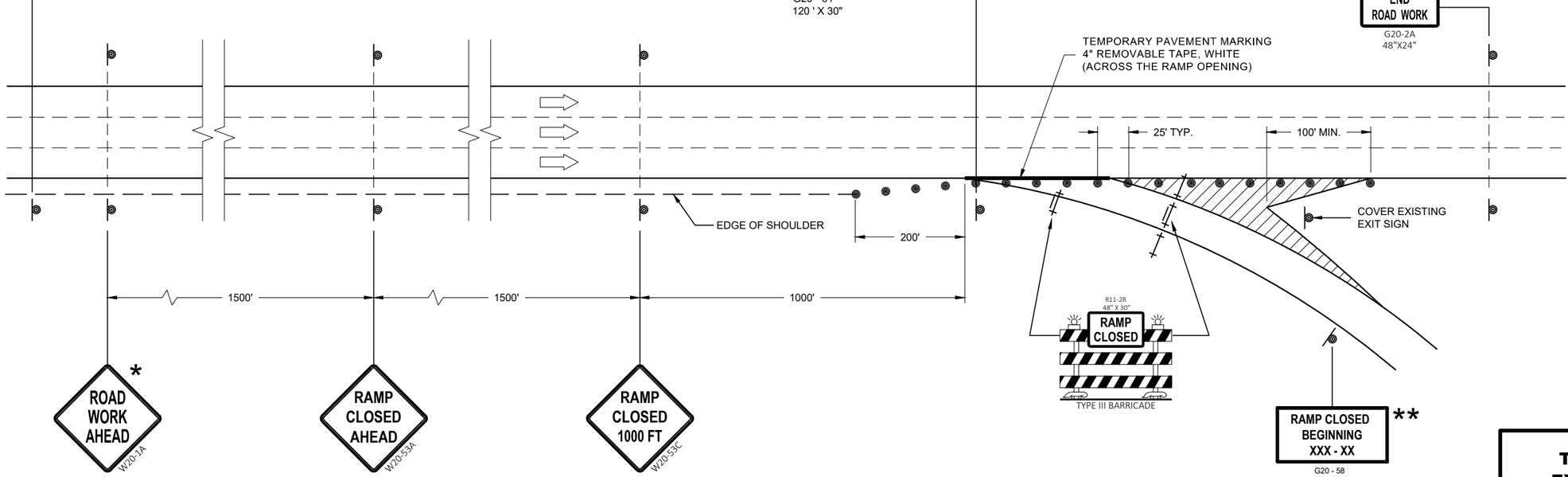


PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



G20 - 61
120 ' X 30"

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



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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.

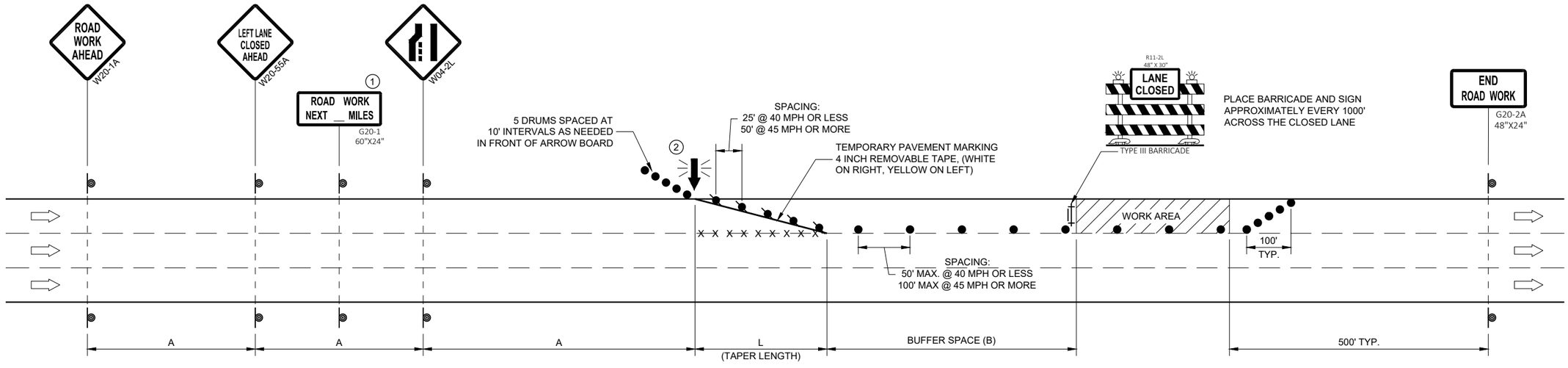
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

SDD15D20 - 05a

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

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

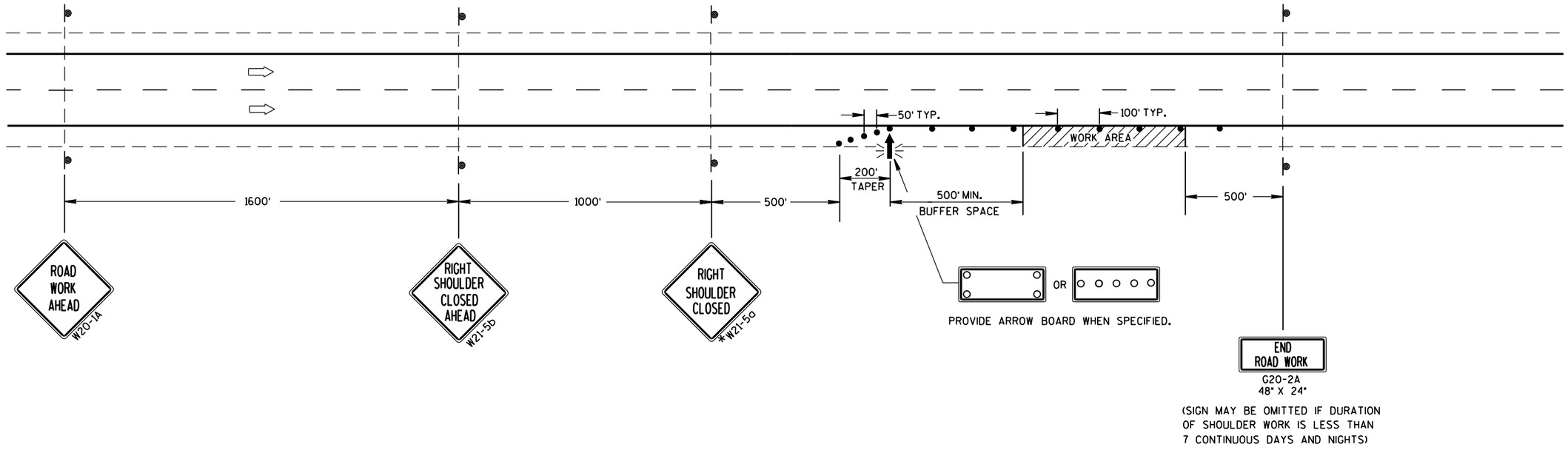
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

6

S.D.D. 15 D 27-3

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

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

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

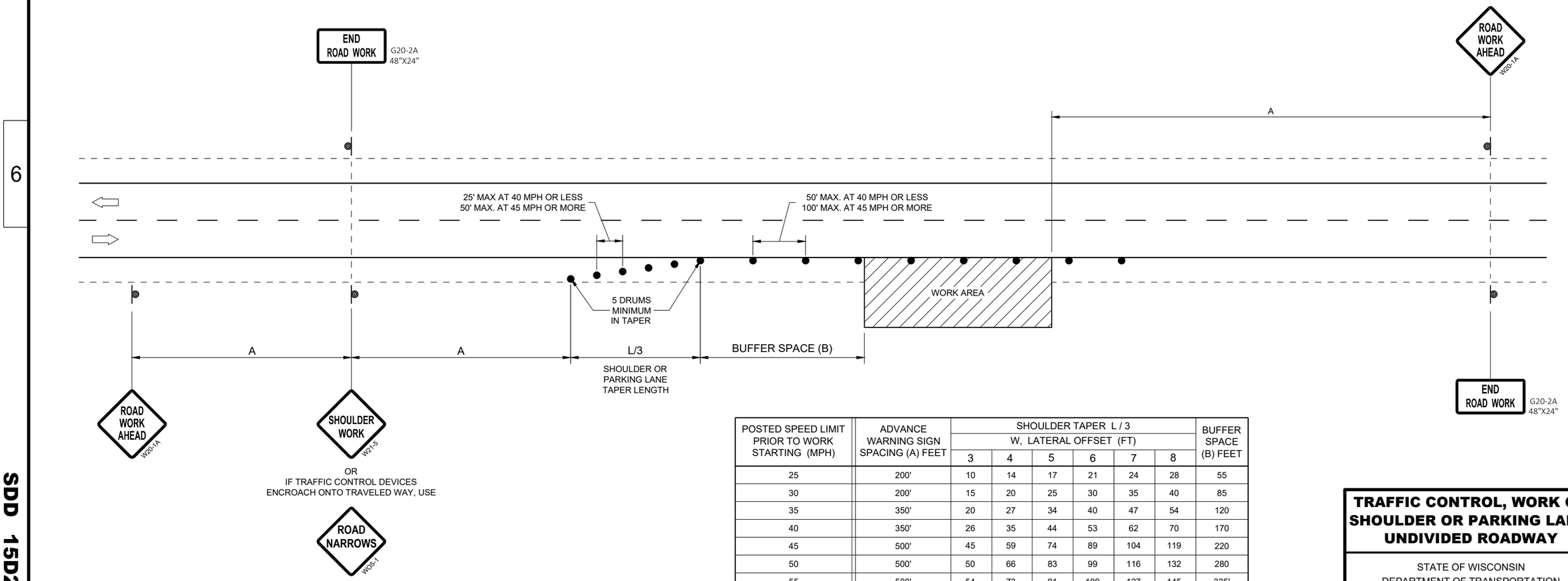
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

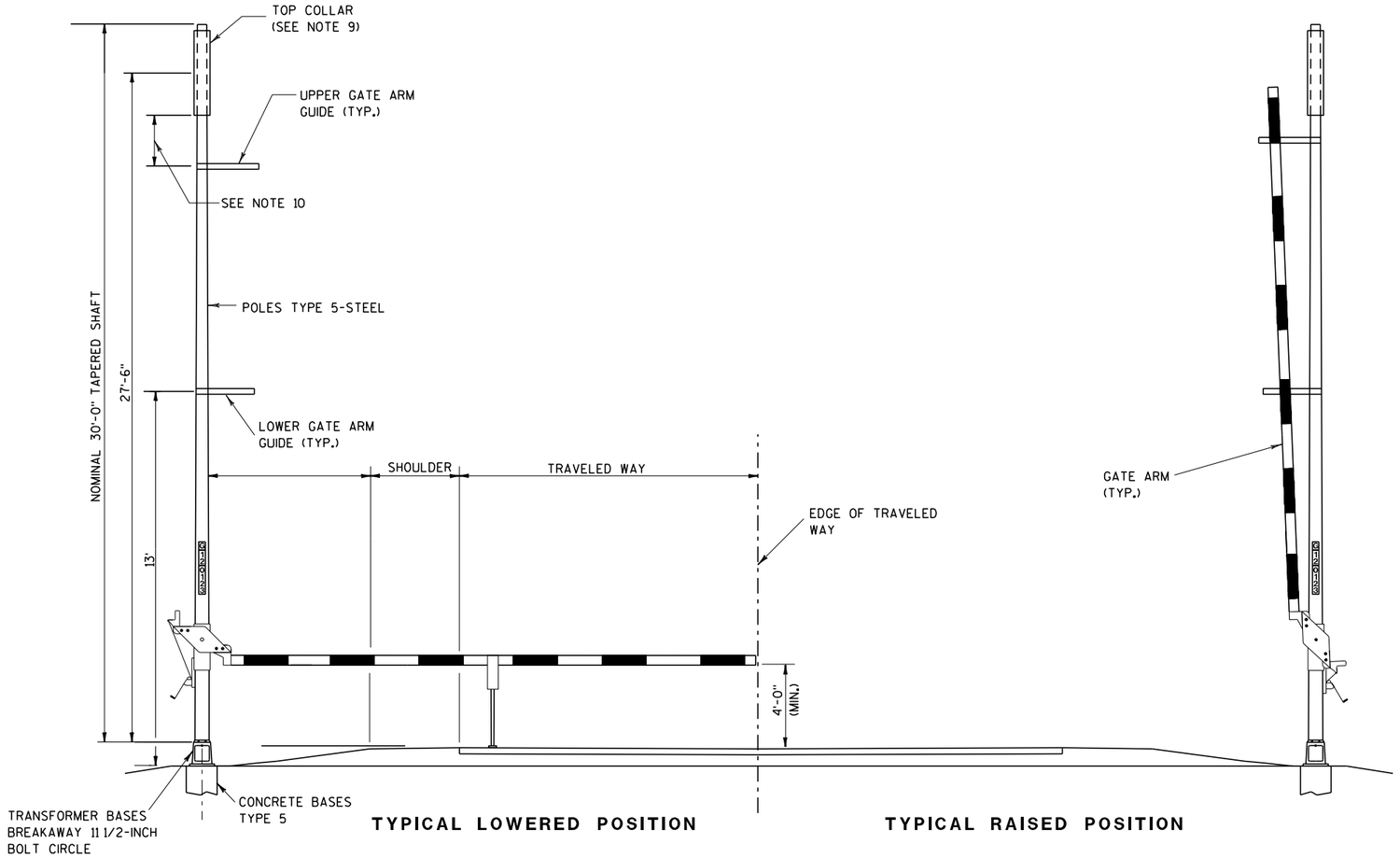
/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

405

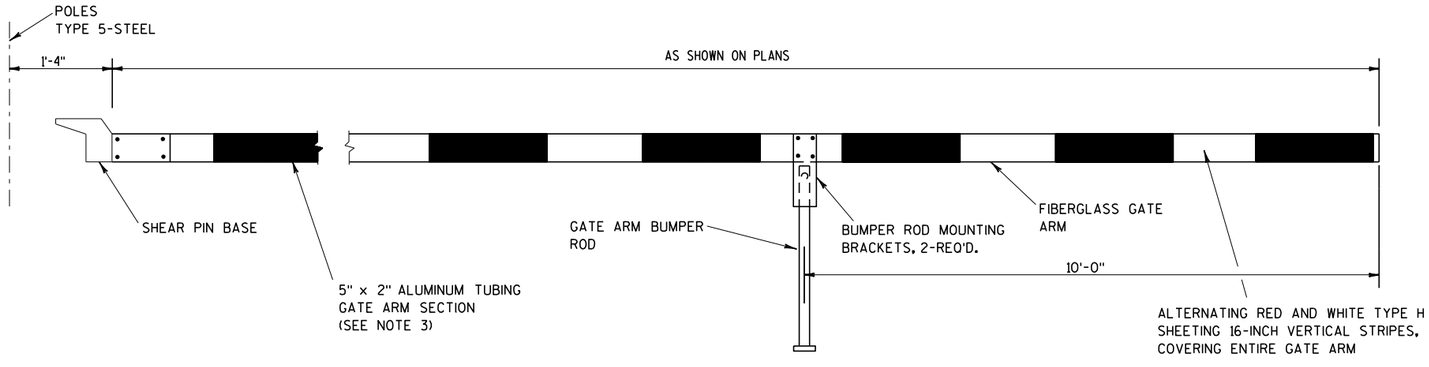
SDD 15D28 - 04

SDD 15D28 - 04



TYPICAL LOWERED POSITION

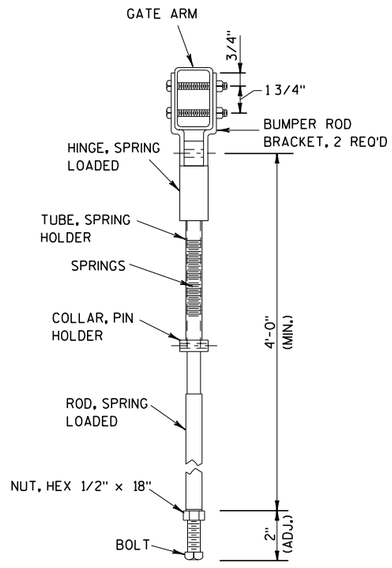
TYPICAL RAISED POSITION



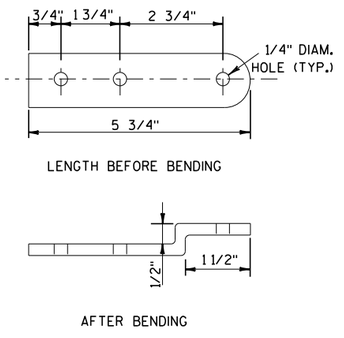
GATE DETAIL

GENERAL NOTES

1. THE LOCATION OF RAMP CLOSURE GATES AND MOUNTING HEIGHT OF GATE ARM PIVOT SHALL BE VERIFIED BY THE ENGINEER.
2. HEIGHT OF GATE ARM GUIDES MAY BE VARIED AS REQUIRED FOR WARNING LIGHT CLEARANCE.
3. FIBERGLASS/ALUMINUM GATE ARM AND SHEAR PIN BASE SHALL BE SUPPLIED BY THE SAME VENDOR.
4. GATE ARM TO BE MOUNTED ON PROPOSED POLE AS INDICATED ON THE PLANS. PROPOSED POLE SHALL BE TYPE 5 POLE.
5. LOCATION OF THE CONCRETE BASE AND LENGTH OF THE GATE ARM WILL BE VERIFIED BY THE ENGINEER TO ENSURE ADEQUATE COVERAGE OF THE TRAVELED LANE.
6. GATE PIVOTS, SUPPORTS AND GUIDES, AND ALL ASSOCIATED HARDWARE SHALL BE GALVANIZED. ALL ROUGH EDGES AND BURRS SHALL BE GROUND SMOOTH PRIOR TO GALVANIZING.
7. ALL EXPOSED BOLT THREADS SHALL BE PAINTED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
8. ANY FIELD DAMAGE TO THE GALVANIZING SHALL BE REPAIRED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
9. A STANDARD LIGHTING LUMINAIRE ARM MAY BE MOUNTED TO THE TYPE 5 POLE IN LIEU OF THE TOP COLLAR.
10. UPPER GATE ARM GUIDE IS TO BE INSTALLED 6 TO 12-INCHES BELOW THE BOTTOM OF THE TOP COLLAR.



GATE ARM BUMPER ROD DETAIL

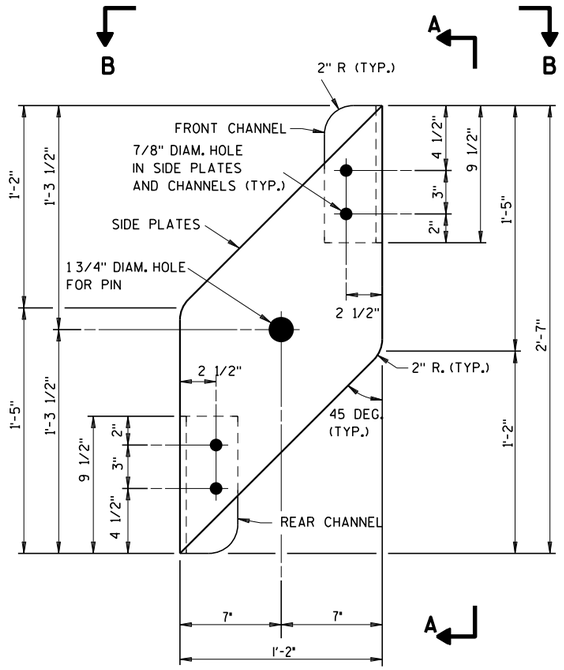


BUMPER ROD MOUNTING
BRACKET DETAIL

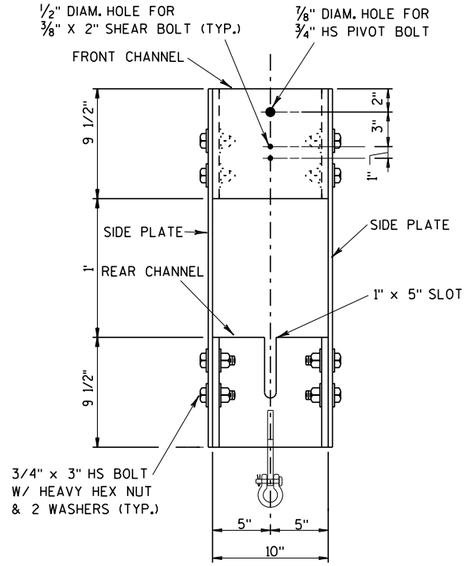
RAMP GATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

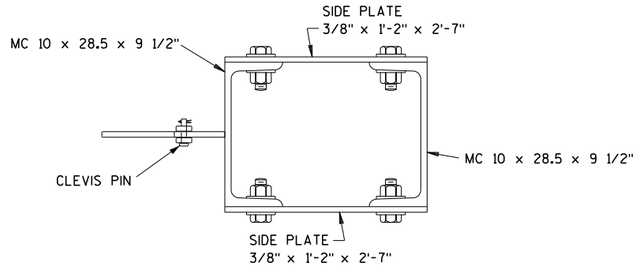
6
S.D.D. 15 D 35-3a



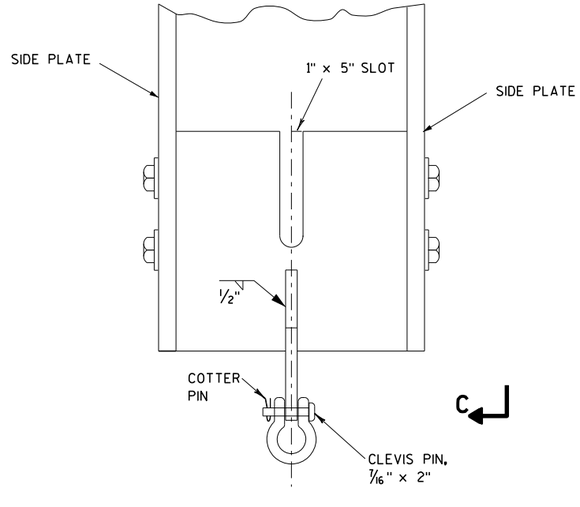
SIDE PLATE DETAIL



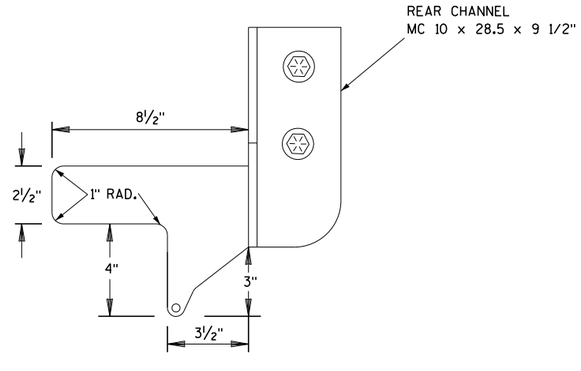
SECTION A-A



SECTION B-B



YOKE ASSEMBLY DETAIL



SECTION C-C

RAMP GATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 D 35-3b

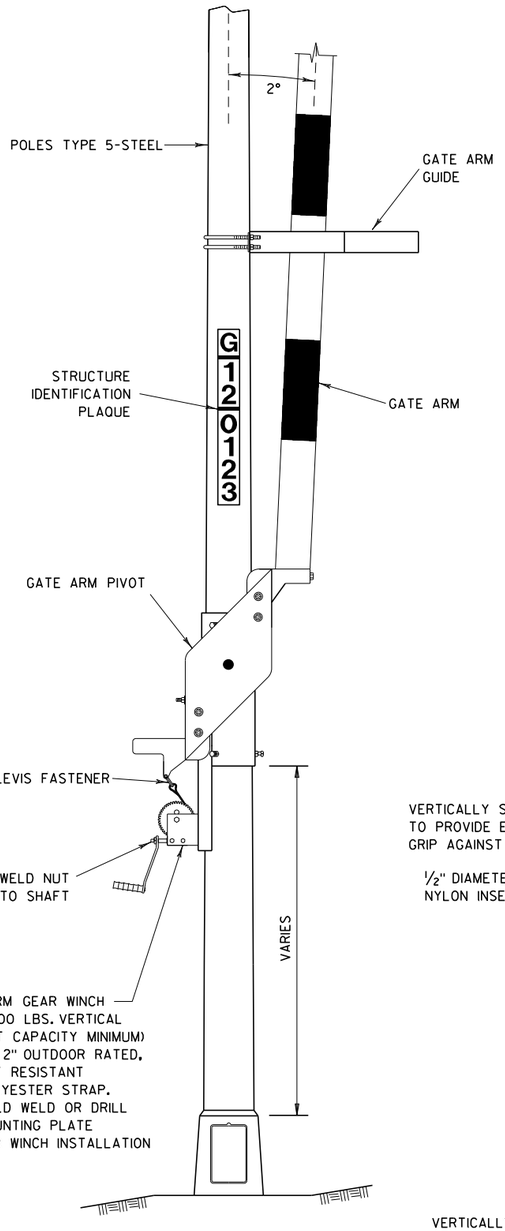
GENERAL NOTES

1. WHEN THE GATE IS FULLY RAISED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL.

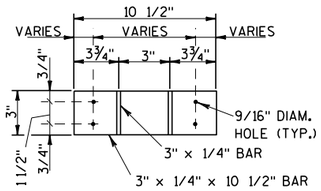
2. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL.

3. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.

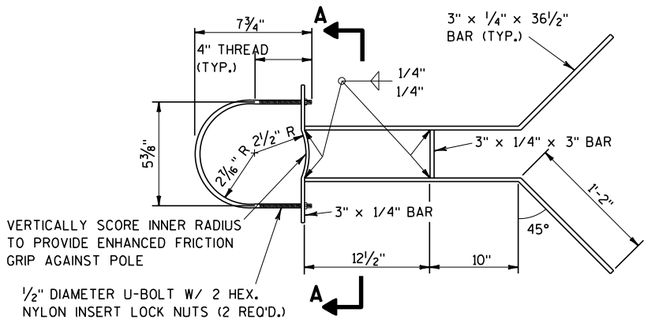
4. ALL BOLTS SHALL BE GALVANIZED AND CONFORM TO ASTM A307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A325. BOLTS OF ½" NOMINAL DIAMTER OR LESS MAY BE STAINLESS STEEL.



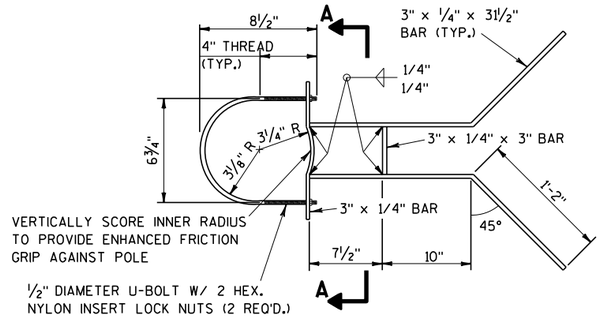
GATE PIVOT ASSEMBLY



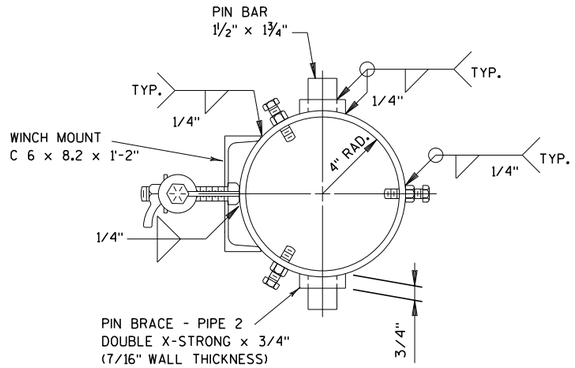
SECTION A-A
U-BOLTS NOT SHOWN



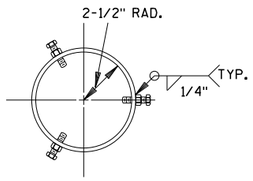
UPPER GATE ARM GUIDE DETAIL



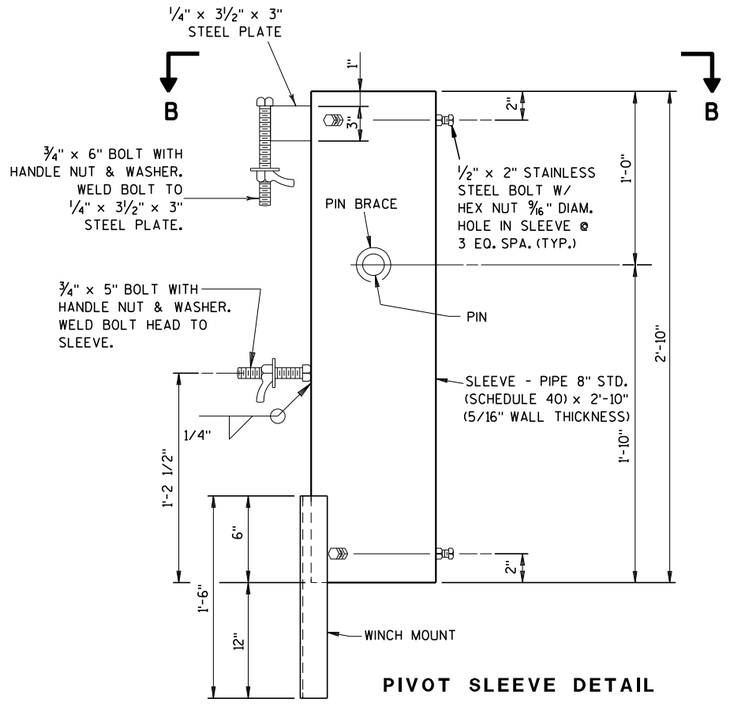
LOWER GATE ARM GUIDE DETAIL



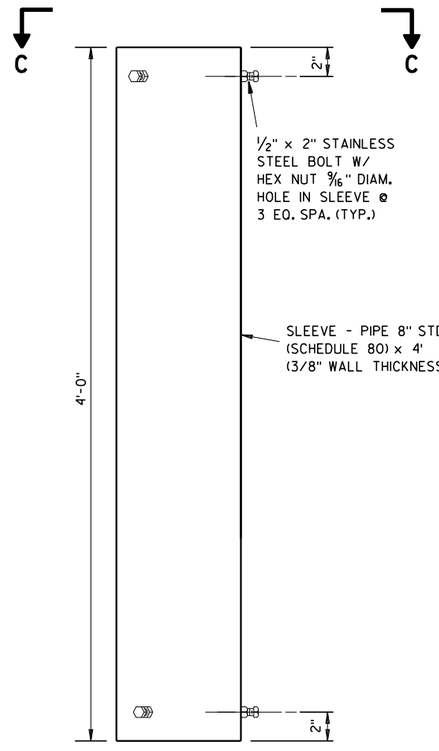
SECTION B-B



SECTION C-C



PIVOT SLEEVE DETAIL



TOP COLLAR

RAMP GATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

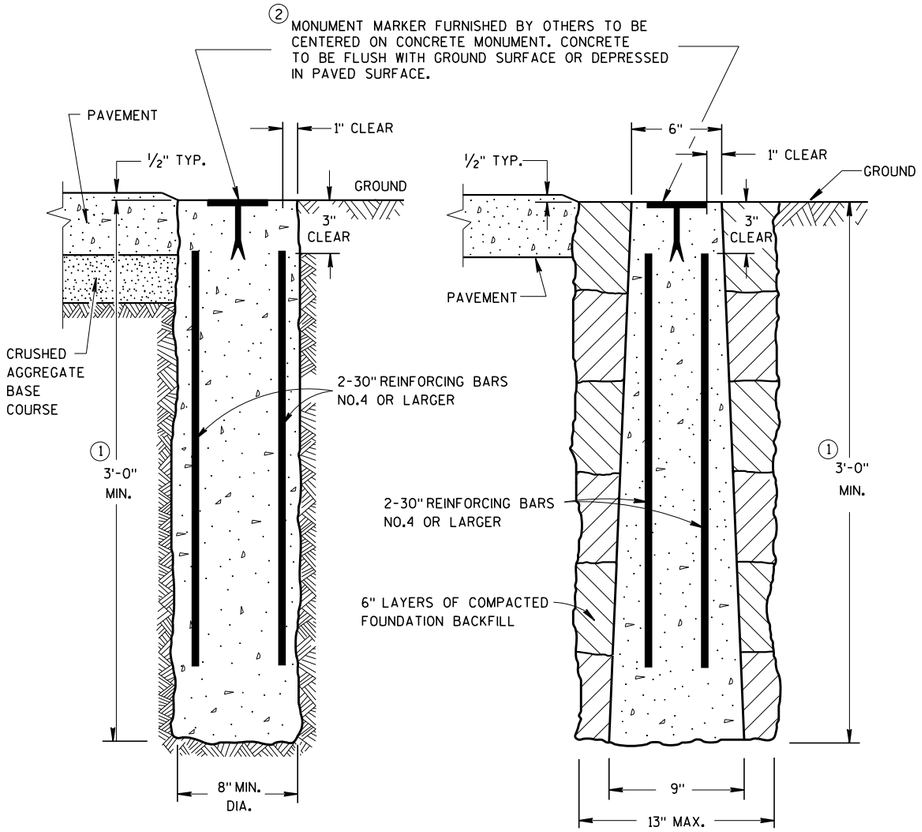
APPROVED
March 2018 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 408 ENGINEER
FHWA

6

S.D.D. 15 D 35-3c

6

S.D.D. 15 D 35-3c

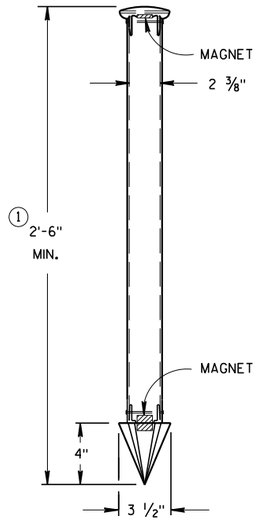


CAST-IN-PLACE

PRECAST

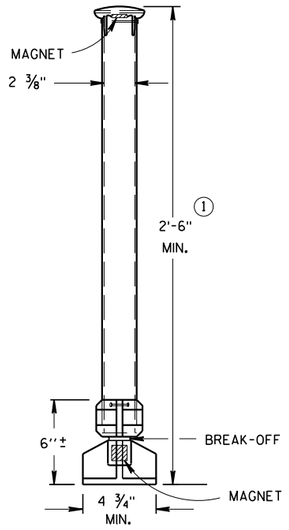
CONCRETE MONUMENTS

TYPE A



TYPE C

DRIVE-IN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

GENERAL NOTES

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

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

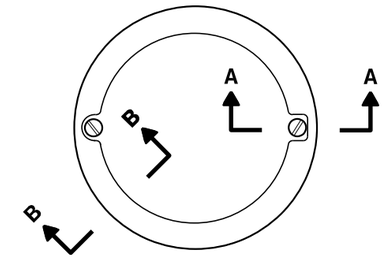
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

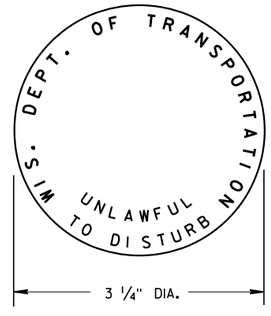
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.

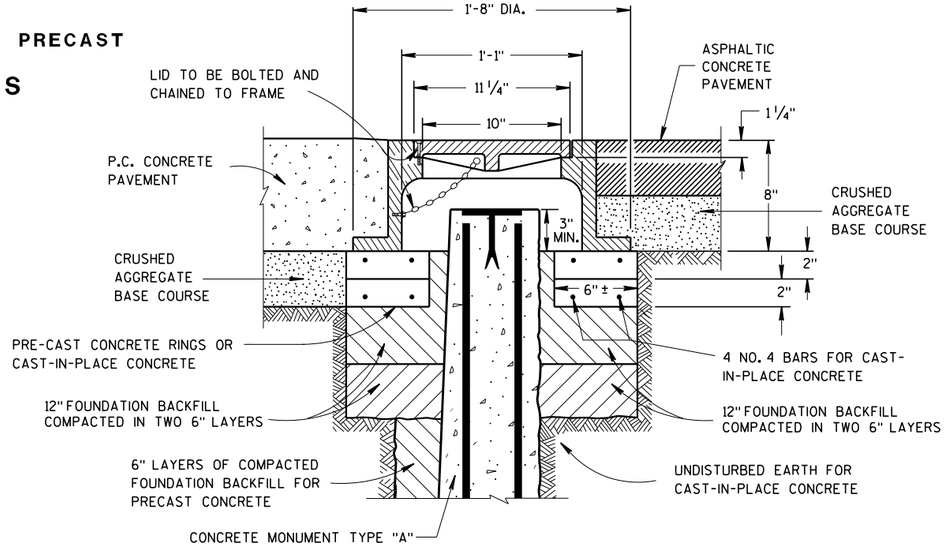


TOP VIEW



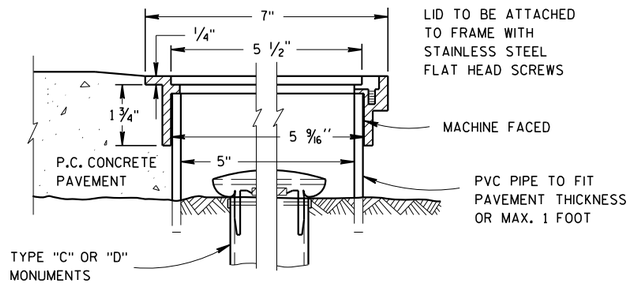
② WIS DOT MONUMENT MARKER LOGO

FOR TYPES "A", "C", & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

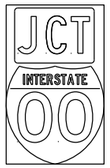
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Raymond A. Kumagai — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA

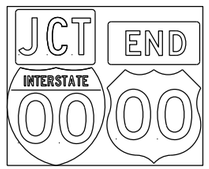
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S.D.D. 16 A 1-7

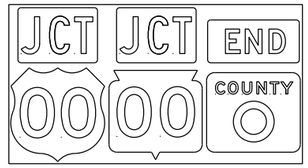
TYPICAL ASSEMBLIES



J1-1



J1-2



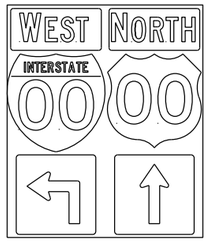
J1-3



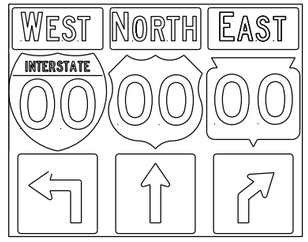
JR1-1



J2-1



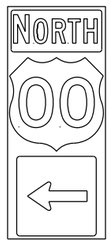
J2-2



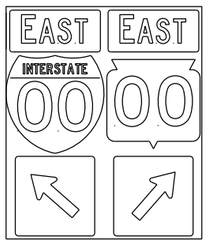
J2-3



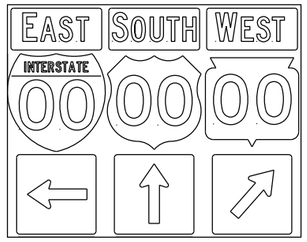
JV
(Typical Vertical J-Assembly
See Note 10 and 11)



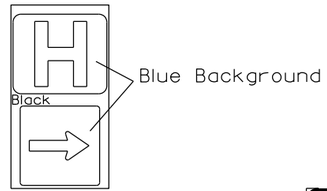
J3-1



J3-2



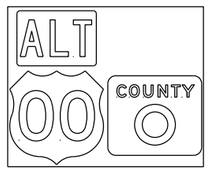
J3-3



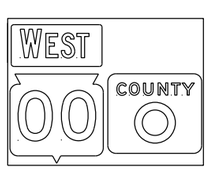
JH-1



J4-1



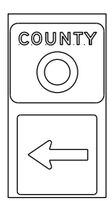
J4-2



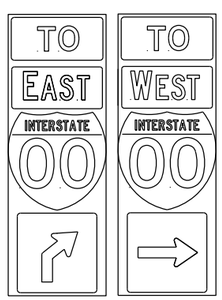
J4-2



J12-1

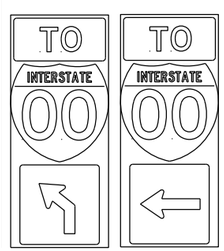


J13-1



J32-1

J33-1



J22-1

J23-1



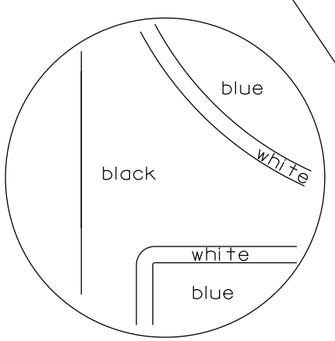
JR13-1

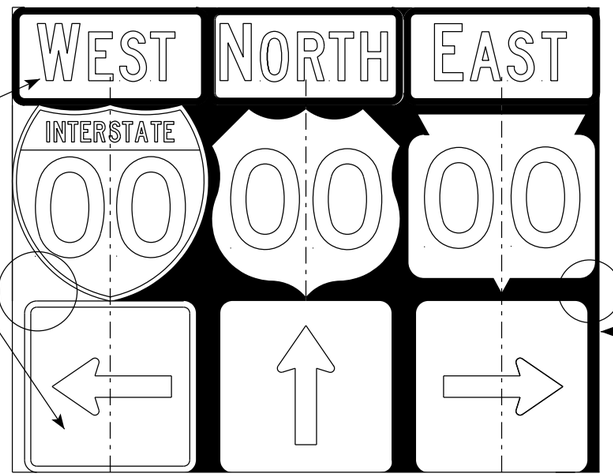


JR23-1



JR99-1





NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

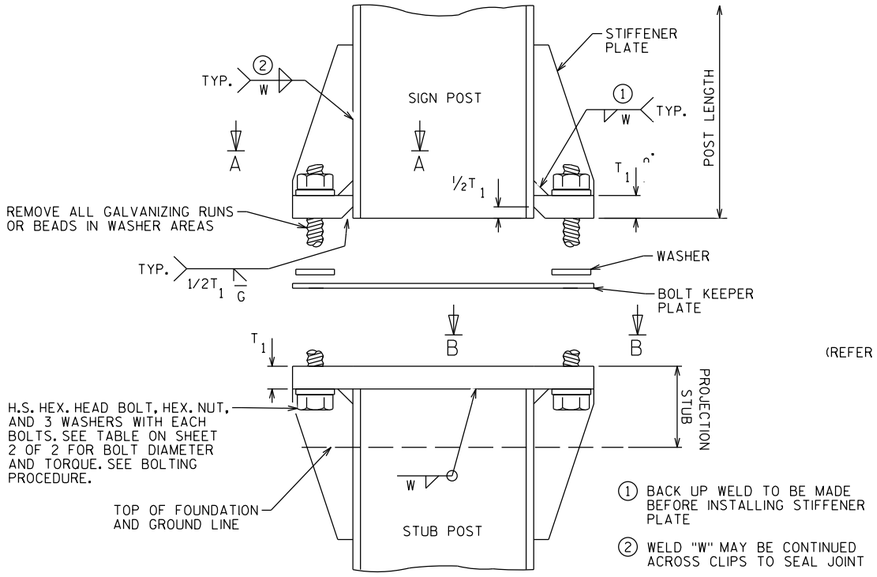
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/21 PLATE NO. A2-1S.9

PROJECT NO:

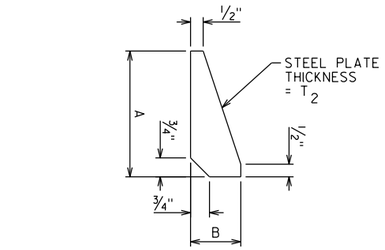
SHEET NO: 410 E



① BACK UP WELD TO BE MADE BEFORE INSTALLING STIFFENER PLATE

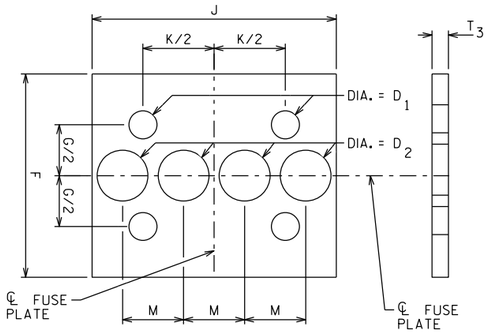
② WELD "W" MAY BE CONTINUED ACROSS CLIPS TO SEAL JOINT

SIGN POST & STUB POST ELEVATION



STIFFENER PLATE DETAIL

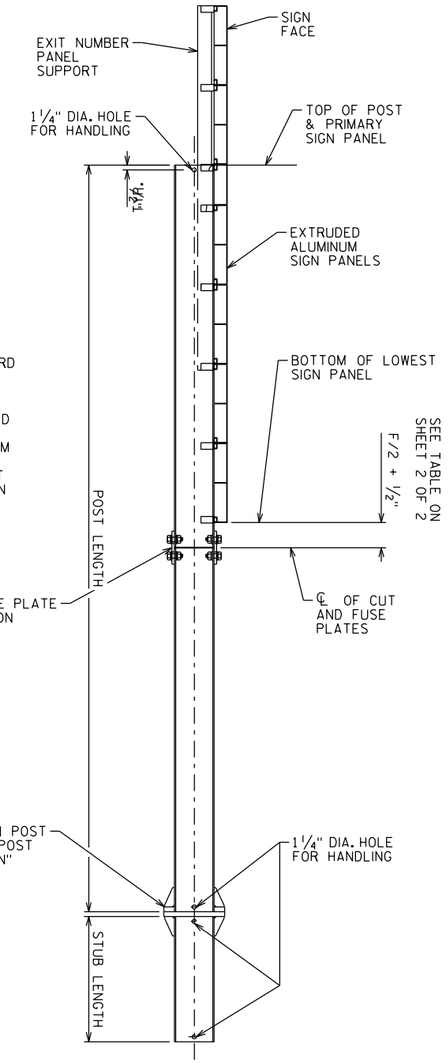
(REFER TO TABLE ON SHEET 2 OF 2 FOR DIMENSIONS)



PERFORATED FUSE PLATE DETAIL

USE H.S. HEX HEAD BOLTS, HEX HEAD NUT AND FLAT WASHER UNDER NUT. INSTALL BOLTS PER THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION SECTION 506.3.12.3.

ALL HOLES SHALL BE DRILLED, SUB-PUNCHED AND REAMED. ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS. HOWEVER, FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE PERMITTED. STEEL FUSE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36. ASTM A572 GRADE 50 OR ASTM A588 MAY BE SUBSTITUTED FOR A36 AT THE OPTION OF THE FABRICATOR. MILL TEST REPORTS SHALL BE SUBMITTED FOR FUSE PLATES. STEEL USED SHALL HAVE AN ULTIMATE TENSILE STRENGTH NOT TO EXCEED 80 KSI.



POST DETAIL

☆ WELD THICKNESS = FLANGE THICKNESS - 1/16"

SECTION A-A

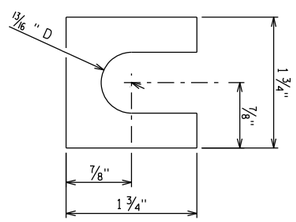
SECTION B-B

FUSE PLATE CONNECTION DETAIL

H = BOLT DIA. + 1/8"

BOLT KEEPER PLATE DETAIL

30 GA GALVANIZED SHEET STEEL



SHIM DETAIL

FURNISH TWO .012"± THICK AND TWO .032"± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM B36.

BOLTING PROCEDURE FOR BASE CONNECTION

1. ASSEMBLE SIGN POST, BOLT KEEPER PLATE, AND STUB POST WITH BOLTS AND THREE FLAT WASHERS PER BOLT AS SHOWN.
2. SHIM AS REQUIRED TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING, LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS.
5. LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PERSCRIBED TORQUE. (SEE TABLE FOR PERSCRIBED TORQUE). DO NOT OVER-TIGHTEN.
6. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY | PLANS CK'D.

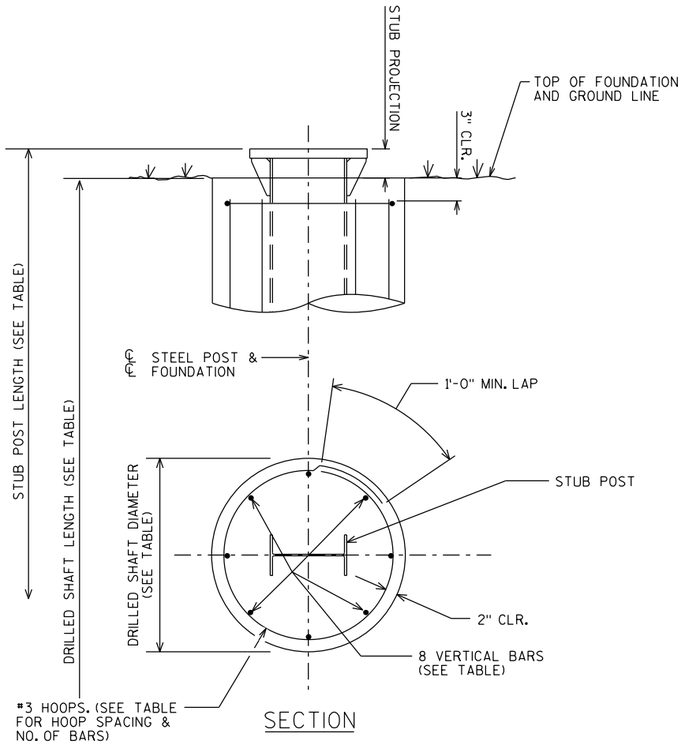
CONNECTION & FOUNDATION DETAILS 1 OF 2

SHEET A3-1.20

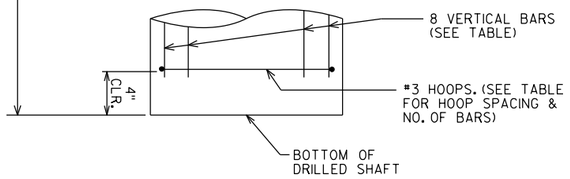
411

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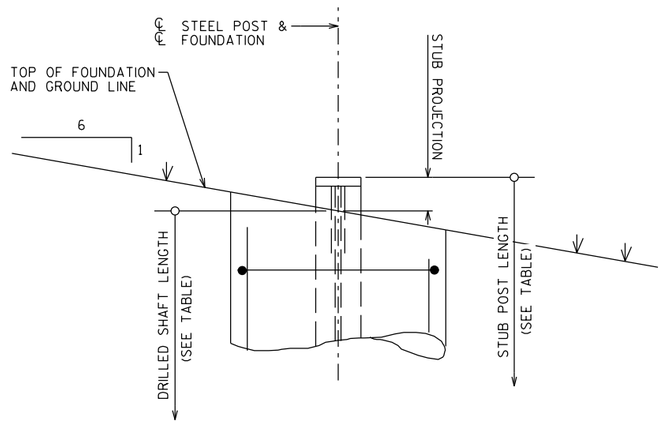
7



SECTION



FOUNDATION DETAIL



SHAFT PLACEMENT

FOUNDATION DATA TABLE

POST SHAPE	STUB LENGTH	STUB PROJECTION	DRILLED SHAFT DIAMETER	DRILLED SHAFT LENGTH	VERTICAL BARS		HOOPS		CONCRETE VOLUME ◆	TOTAL REINF. WEIGHT ◆
					SIZE	LENGTH	MAX SPA.	NO.		
W6X15	2'-6"	3"	24"	6'-6"	#5	5'-11"	10"	9	0.8 CY	71 LB
W8X18	2'-6"	3"	24"	7'-6"	#6	6'-11"	12"	8	0.9 CY	102 LB
W8X21	3'-0"	2½"	24"	8'-0"	#6	7'-5"	12"	9	1.0 CY	110 LB
W10X22	3'-0"	2½"	24"	8'-6"	#7	7'-11"	12"	9	1.0 CY	151 LB
W12X26	3'-0"	2½"	24"	10'-0"	#7	9'-5"	12"	11	1.2 CY	180 LB

◆ QUANTITIES SHOWN ARE FOR ONE DRILLED SHAFT

BASE CONNECTION & FUSE PLATE DATA TABLE

POST SHAPE	WEIGHT PER FOOT	BASE CONNECTION DATA: BOLT SIZE & TORQUE	A	B	C	D	E	T1	T2	W	R	BOLT KEEPER PLATE DATA: P	U	PERFORATED FUSE PLATE DATA: F	G	J	K	M	D1	D2	T3	BOLT DIA.	WGT. EA. LBS	BOLT LENGTH	V ◪
W6X15	15 LB	⅝" DIA. X 4" 36 TO 38 FT-LB	5"	2"	1¼"	2¾"	1⅛"	1¼"	½"	¼"	11/32"	8½"	10"	5"	2½"	6"	3½"	1½"	11/16"	1¼"	⅜"	⅝"	2.4	2	73.0 LB
W8X18	18 LB											10⅝"	12⅛"	5"	2½"	5¼"	2¾"	1¼"	11/16"	1 1/16"	⅜"	⅝"	2.0	2	83.0 LB
W8X21	21 LB	¾" DIA. X 4¾" 62 TO 63 FT-LB	6"	2¼"	1⅜"	3½"	1¼"	1½"	¾"	5/16"	13/32"	11"	12¾"	5½"	2½"	5¼"	2¾"	1¼"	13/16"	1"	½"	¾"	3.1	2¼"	124.0 LB
W10X22	22 LB											12⅞"	14⅝"	6"	3"	5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾"	3.9	2¼"	134.0 LB
W12X26	26 LB											15"	16¾"	6"	3"	6½"	3½"	1⅝"	13/16"	1 5/16"	½"	¾"	4.5	2¼"	152.0 LB

◪ TOTAL STRUCTURAL CARBON STEEL WEIGHT FOR ONE POST = V + (POST LENGTH X POST WEIGHT PER FOOT)

"V" INCLUDES STUB POST, BASE PLATES, STIFFENER PLATES, PERFORATED FUSE PLATES, BOLTS, NUTS, AND WASHERS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

MATERIALS SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506, UNLESS NOTED OTHERWISE.

FABRICATION SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506.

ALL POST, POST STUBS & ATTACHMENTS SHALL BE ASTM A709 GRADE 50, GALVANIZED IN ACCORDANCE WITH ASTM A123.

THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST, FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.

H.S. BOLTS, WASHERS, & NUTS SHALL BE A325 GALVANIZED.

FOUNDATION MATERIAL PROPERTIES

CONCRETE MASONRY	F'C = 3,500 P.S.I.
BAR STEEL REINFORCEMENT (UNCOATED), GRADE 60	FY = 60,000 P.S.I.

DESIGN DATA

DESIGN CONFORMS TO AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS 1ST EDITION 2015 (WITH 2017 & 2018 INTERIM REVISIONS).

DEAD LOADS (DL):

- STEEL POST SELF WEIGHT
- SIGN PANEL WEIGHT = 3 PSF

WIND LOADS (WL):

WIND LOADS WERE APPLIED TO THE PROJECTED AREAS OF THE SIGN PANELS AND THE STEEL SIGN POSTS.

- BASIC WIND SPEED = 76 MPH
- MEAN RECURRANCE INTERVAL (MRI) = 10 YEARS
- HEIGHT & EXPOSURE FACTOR = 1.00
- DIRECTIONALITY FACTOR = 0.85
- GUST EFFECT FACTOR = 1.14

WIND LOAD CASES:

- WL CASE 1: 1.0 X NORMAL WIND
- WL CASE 2: 1.0 X TRANSVERSE WIND
- WL CASE 3: 0.75 X NORMAL WIND + 0.75 X TRANSVERSE WIND

LOAD COMBINATIONS:

LOAD COMBINATION	TYPE	DL FACTOR	WL FACTOR
STRENGTH I	GRAVITY	1.25	-
EXTREME I	WIND	1.10	1.0
		0.9	1.0
SERVICE I	DEFLECTION	1.0	1.0

FOUNDATION DESIGN DATA

THE FOUNDATION DESIGN ASSUMED COHESIONLESS SOILS (LOOSE SAND) ABOVE THE WATER TABLE WITH THE FOLLOWING PROPERTIES:

- SOIL UNIT WEIGHT = 115 PCF
- ANGLE OF INTERNAL FRICTION = 24 DEGREES
- SOIL MODULUS PARAMETER = 25 LB/IN3

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY | PLANS CK'D.

CONNECTION & FOUNDATION DETAILS 2 OF 2

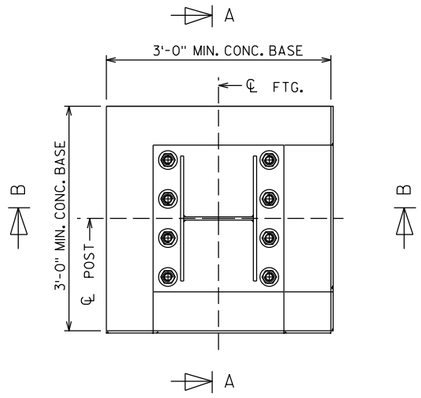
SHEET A3-1.20

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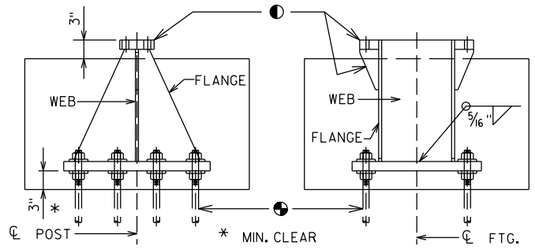
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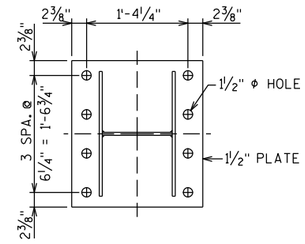
STUB AND ADHESIVE ANCHOR DETAILS



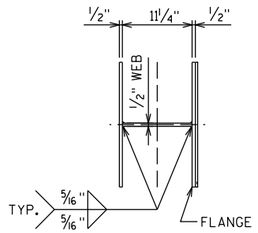
STUB SECTION



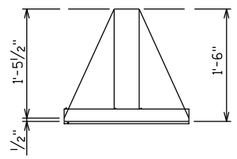
SECTION A-A SECTION B-B



BASE PLATE



STUB



FLANGE

◐ SEE BASE CONNECTION DETAILS ON "CONNECTIONS & FOUNDATION DETAILS" SHEETS.

◔ ADHESIVE ANCHORS 1¼-INCHES. ALLOWABLE PULL OUT CAPACITY = 15 KIPS. EMBED 1'-3" INTO ROCK.

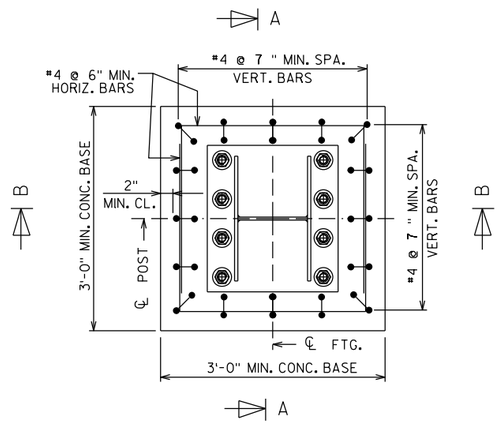
GENERAL NOTES:

QUANTITIES PER BASE:
REINFORCING STEEL = 62 LB
CONCRETE = 0.6 CY
STRUCTURAL STEEL = 335 LB

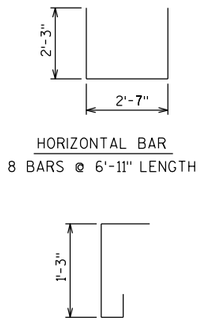
ALL MATERIALS, EXCEPT FOR ANCHOR ROD, NUTS, AND WASHERS, SHALL BE ASTM A709 GRADE 50. ALL MATERIALS TO BE GALVANIZED AFTER FABRICATION.

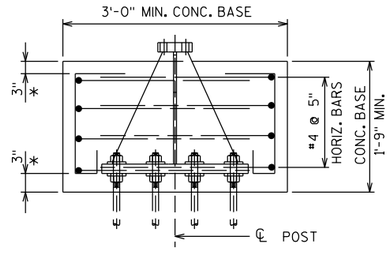
IF ROCK IS ENCOUNTERED PRIOR TO REACHING THE MINIMUM DRILLED SHAFT EMBEDMENT DEPTH DEFINED ON THE FOUNDATION DATA TABLE OF THE "CONNECTIONS & FOUNDATION DETAILS 2 OF 2" SHEET, THE CONTRACTOR SHALL INSTALL A TEST ADHESIVE ANCHOR AND DETERMINE THE PULL-OUT CAPACITY. IF THE FIELD TEST RESULTS IN A PULL-OUT CAPACITY GREATER THAN OR EQUAL TO 15 KIPS, THE CONTRACTOR MAY INSTALL THE ALTERNATE CONCRETE BASE AND BREAK-WAY STUB PER THE DETAILS ON THIS SHEET.

CONCRETE BASE DETAILS

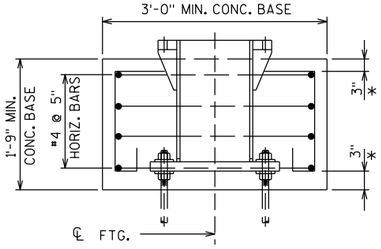


CONCRETE BASE PLAN





SECTION A-A



SECTION B-B

* MIN. CLEAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

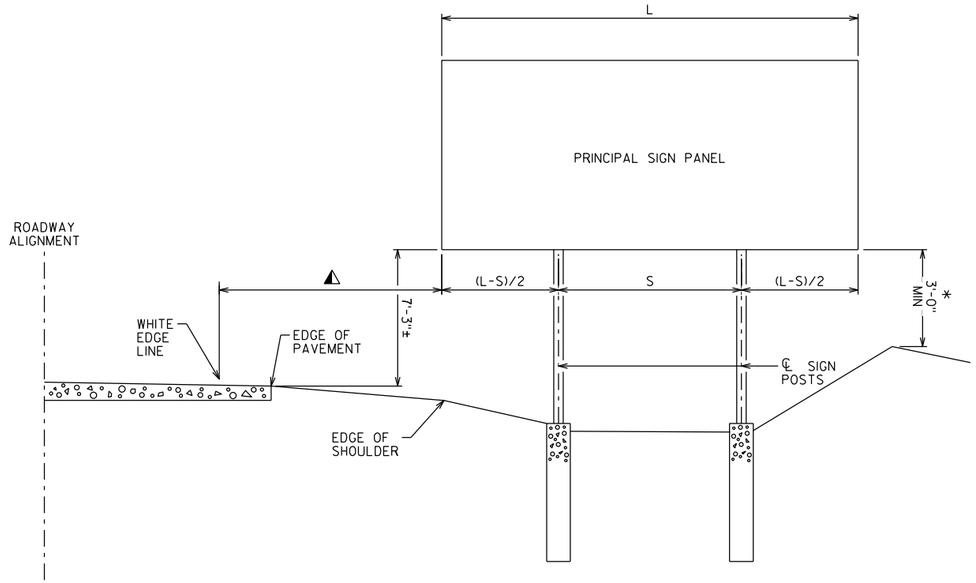
STRUCTURE BTO TYPE I SIGNS

DRAWN BY	PLANS CK'D.

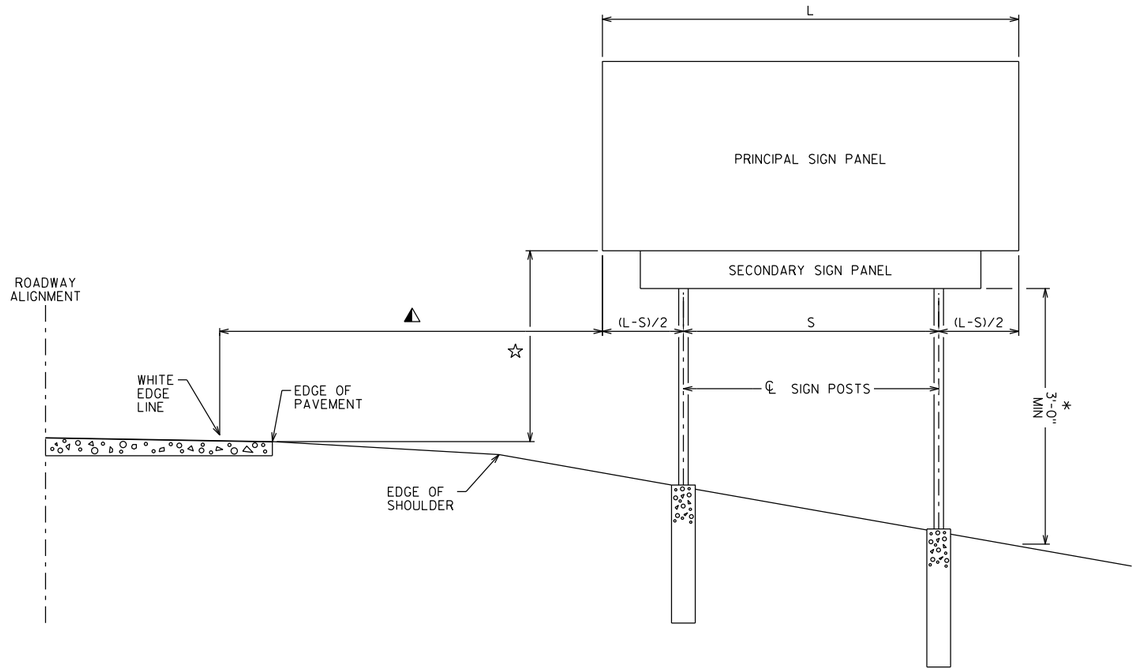
ALTERNATE BREAK-AWAY BASE ON ROCK

SHEET A3-1M.2

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INSTALLATION WITHOUT SECONDARY SIGN



INSTALLATION WITH SECONDARY SIGN

TYPE 1 SIGN INSTALLATION NOTES:

FOR A 2-POST INSTALLATION, "S" EQUALS 3L/5, BUT SHALL NOT BE LESS THAN 6'-0".

FOR A 3-POST INSTALLATION, "S" EQUALS 5L/7, BUT SHALL NOT BE LESS THAN 12'-0". THE SPACING BETWEEN ANY TWO POSTS SHALL NOT BE LESS THAN 6'-0".

⚠ UNLESS NOTED IN THE PLANS, THE SIGN OFFSET DISTANCE SHALL BE A MINIMUM OF 17'-6" FROM THE WHITE EDGE LINE, DESIRABLE 30'-0".

THE ± TOLERANCE SHOWN ON THIS SHEETS IS 3".

THE VERTICAL SIGN HEIGHT CLEARANCES SHOWN ON THIS SHEET ARE MEASURED FROM THE BOTTOM OF THE SIGN PANEL TO THE NEAR EDGE OF PAVEMENT.

☆ THE VERTICAL CLEARANCE SHALL BE 8'-3"± WHEN THE SECONDARY SIGN HEIGHT IS 3'-0" OR LESS. FOR SECONDARY SIGN HEIGHTS LARGER THAN 3'-0", THE VERTICAL CLEARANCE TO THE BOTTOM OF THE SECONDARY SIGN PANEL SHALL BE 5'-3"±.

* THE VERTICAL SIGN GROUND CLEARANCE ON RIGHT END OF SIGN SHALL BE A MINIMUM OF 3'-0"±.

POST LENGTHS SHOWN IN THE MISCELLANEOUS QUANTITIES ARE ESTIMATED LENGTHS. THE CONTRACTOR SHALL VERIFY POST LENGTHS AT THE TIME OF FINAL GRADING.

REFER TO THE TRAFFIC ENGINEERING OPERATIONS AND SAFETY MANUAL FOR FURTHER GUIDANCE ON MINIMUM VERTICAL CLEARANCE REQUIREMENTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

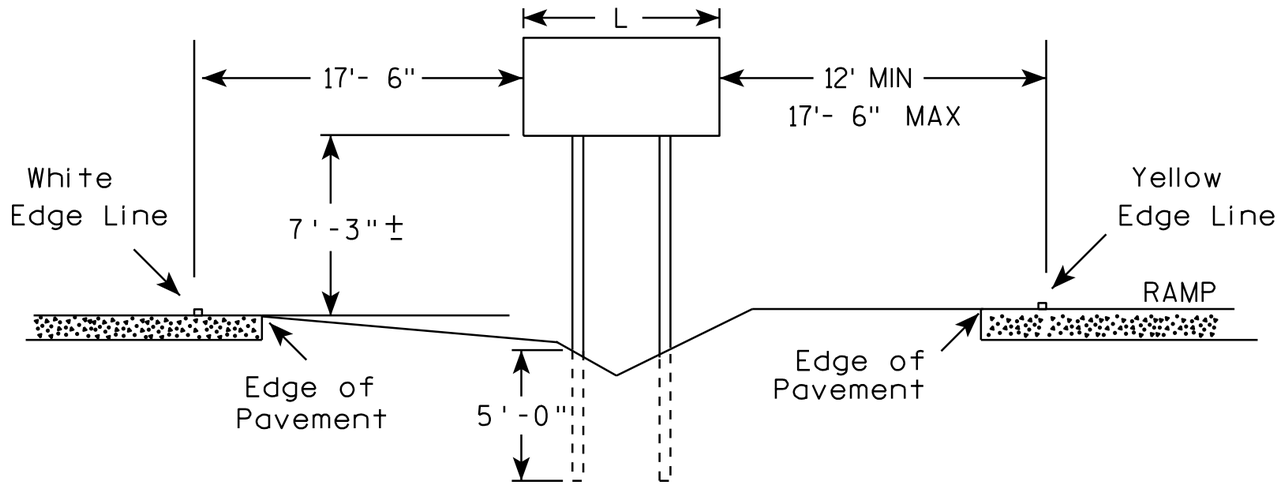
STRUCTURE BTO TYPE I SIGNS

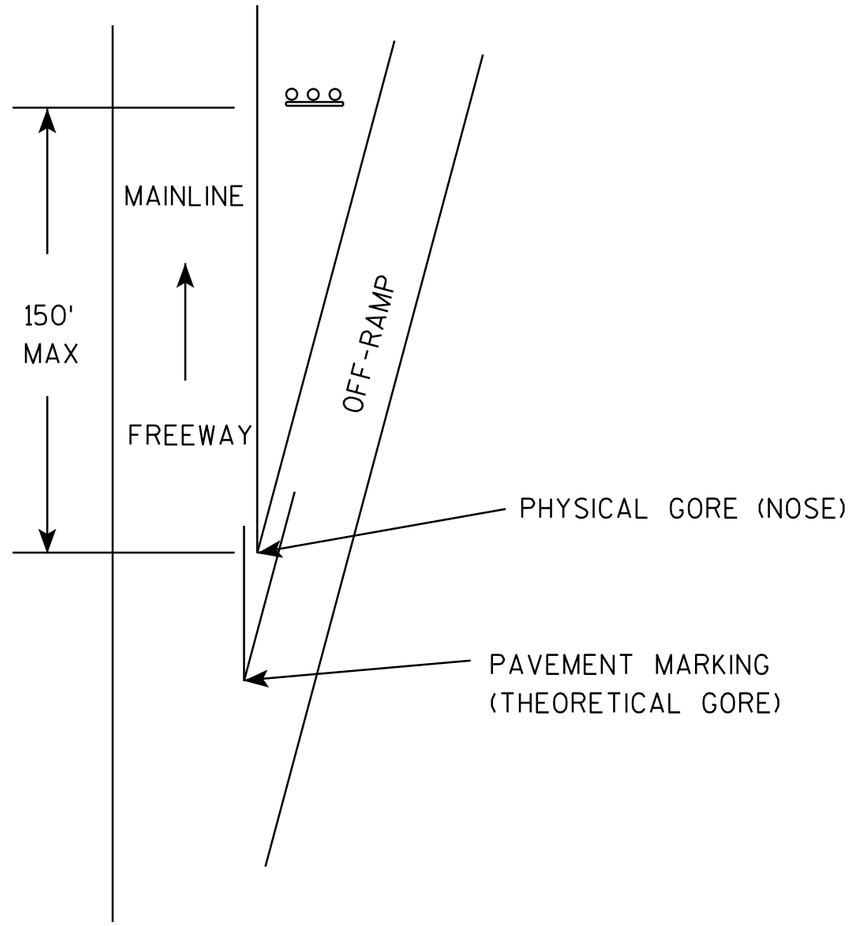
DRAWN BY | PLANS CK'D.

TYPICAL TYPE I SIGN INSTALLATION

SHEET A4-1.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 414 | E





GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 10 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

TYPICAL INSTALLATION OF TYPE II SIGNS ON WOOD POSTS IN GORE

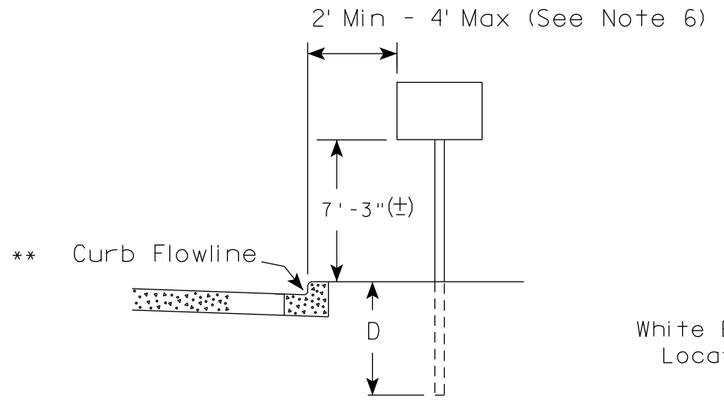
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

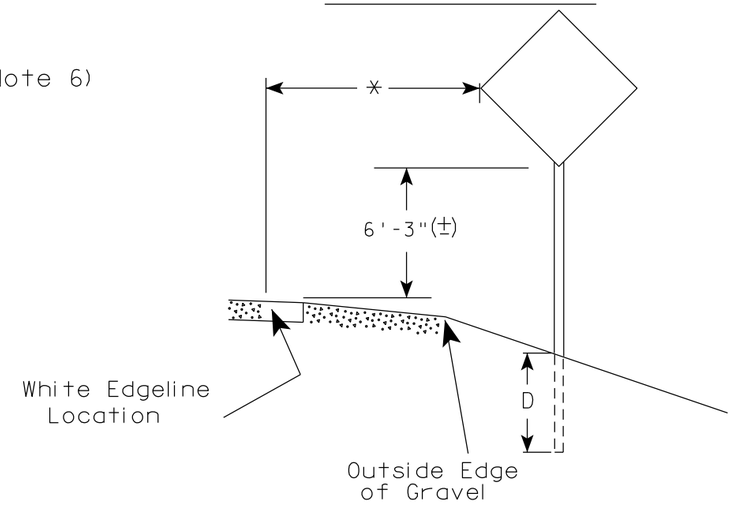
DATE 2/06/14 PLATE A4-2.3

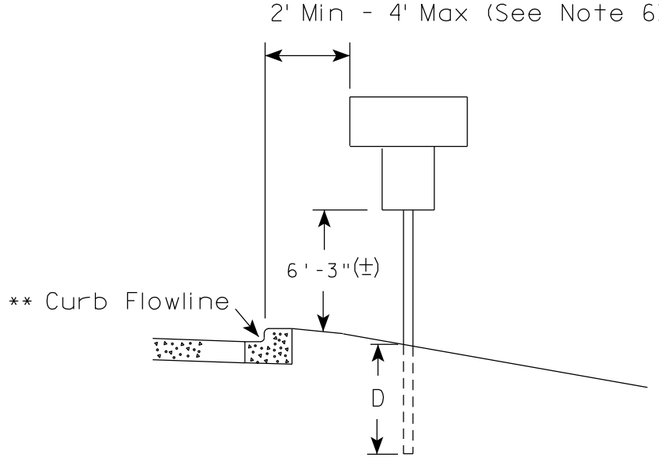
PROJECT NO: | SHEET NO: E

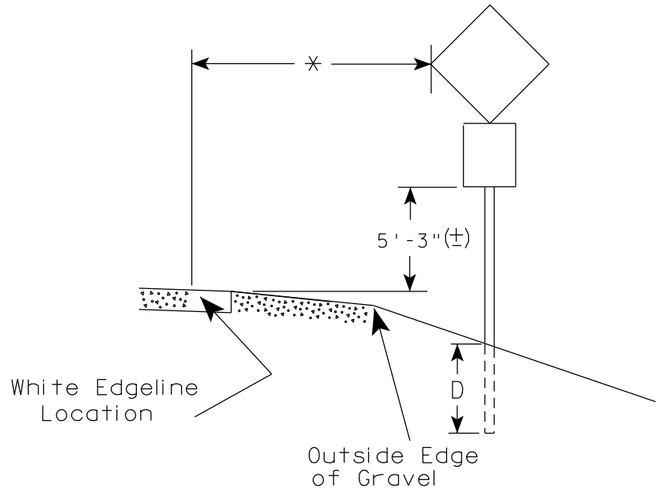
URBAN AREA



RURAL AREA (See Note 2)







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

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

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.

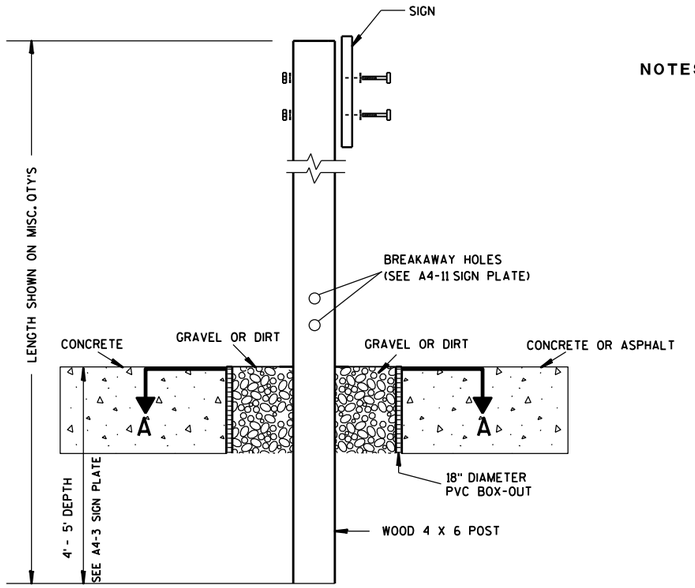
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

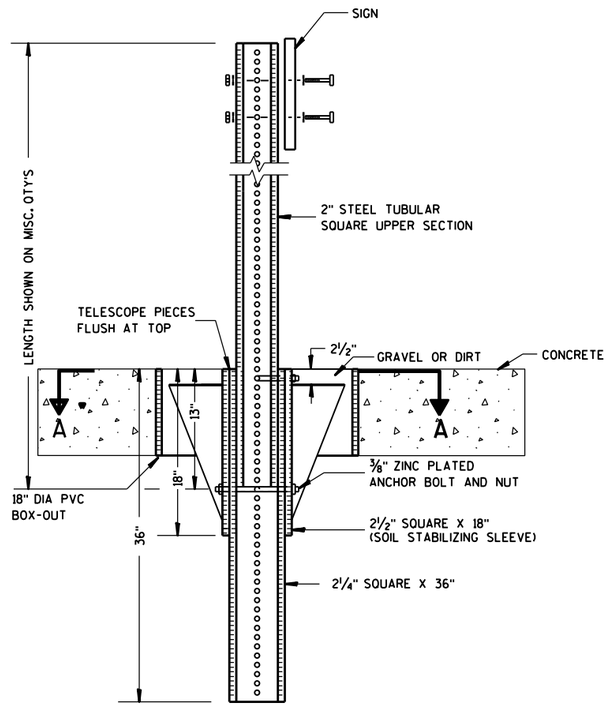
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 416	E



ELEVATION VIEW

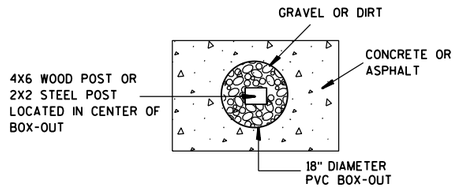
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

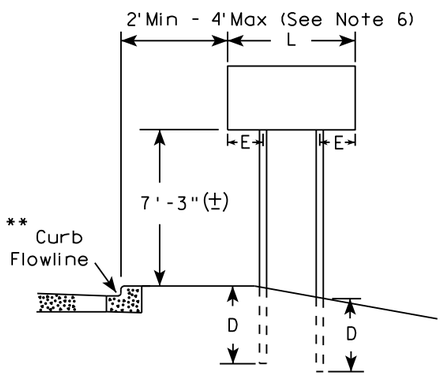
APPROVED Matthew R Rauch
for State Traffic Engineer

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

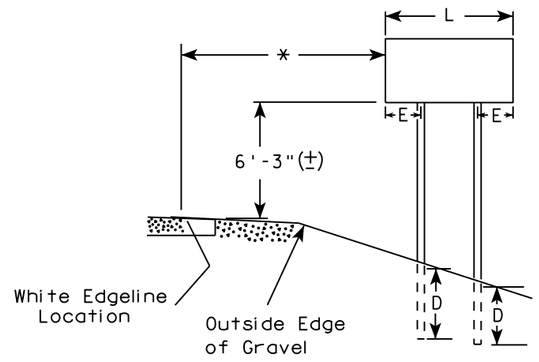
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

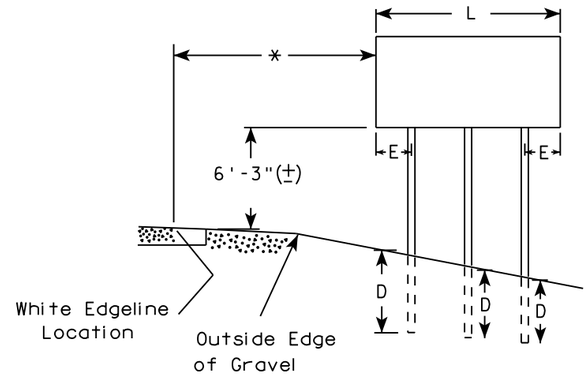
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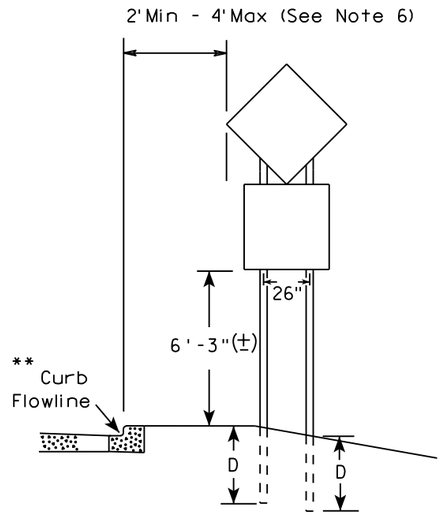
URBAN AREA



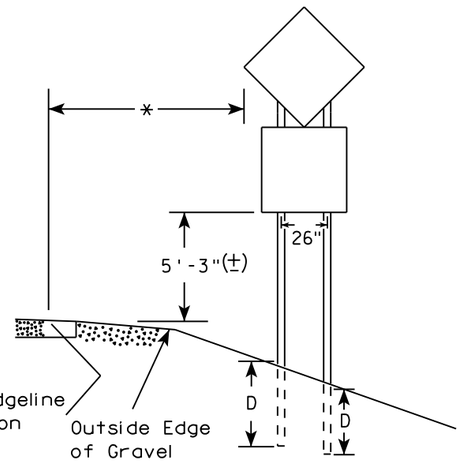
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

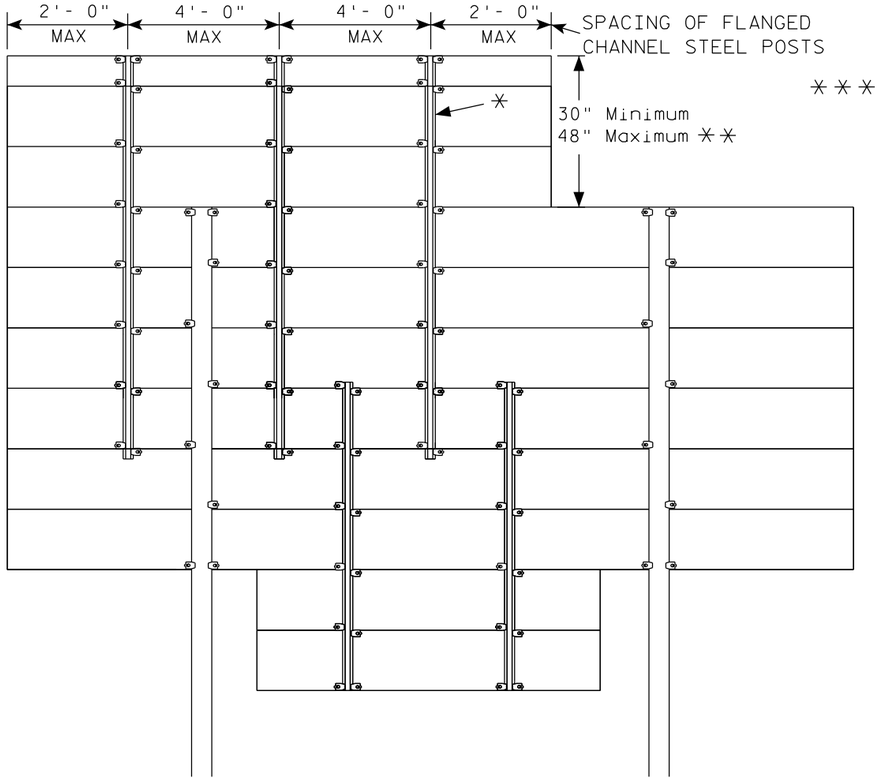
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 418	E

GROUND MOUNTED SIGN



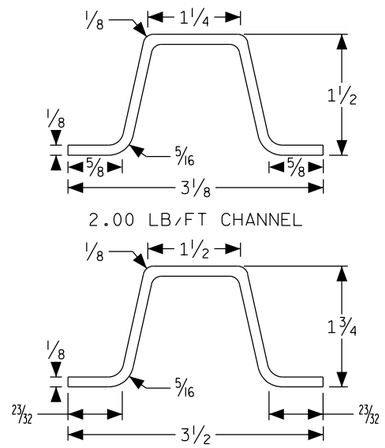
✳=2.00 lb/ft AND 4.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

✳✳=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

✳✳✳ THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 15 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 15 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAILS

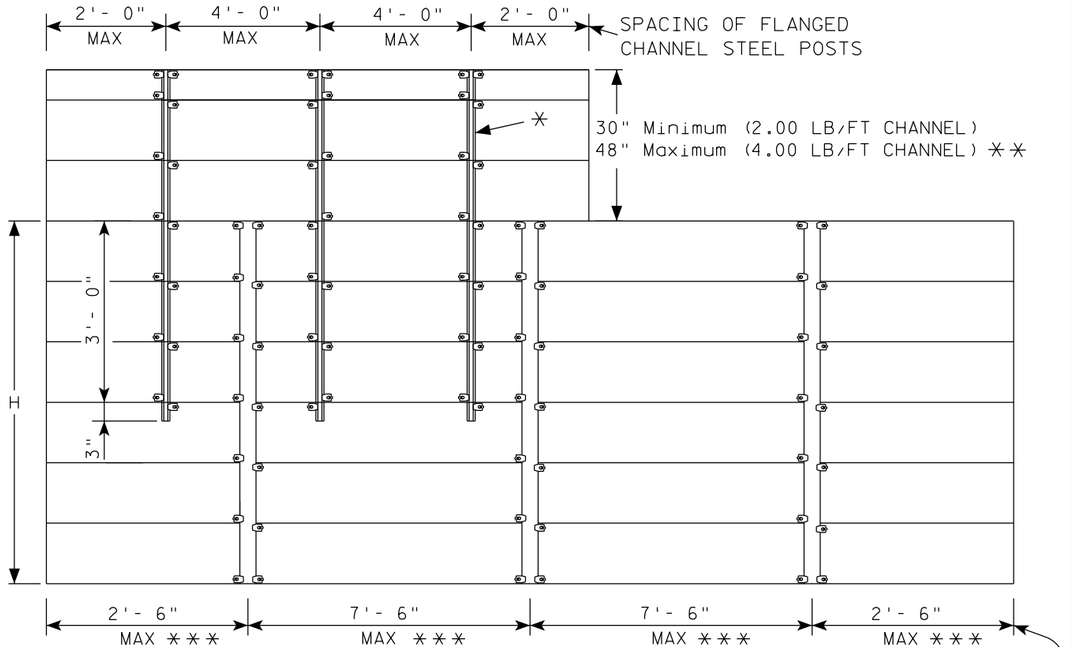
NOT TO SCALE



2.00 LB/FT CHANNEL

4.00 LB/FT CHANNEL

SIGN BRIDGE MOUNTED SIGN



SPACING OF ALUMINUM SIGN SUPPORTS
5" X 3.5" X 3.7 LBS./ft.

GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

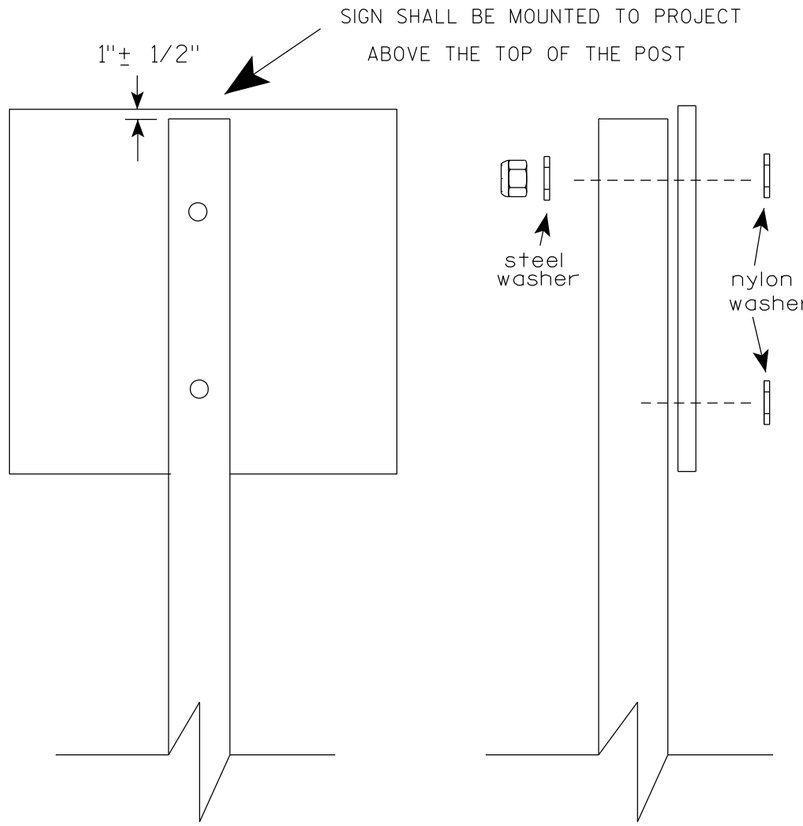
   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

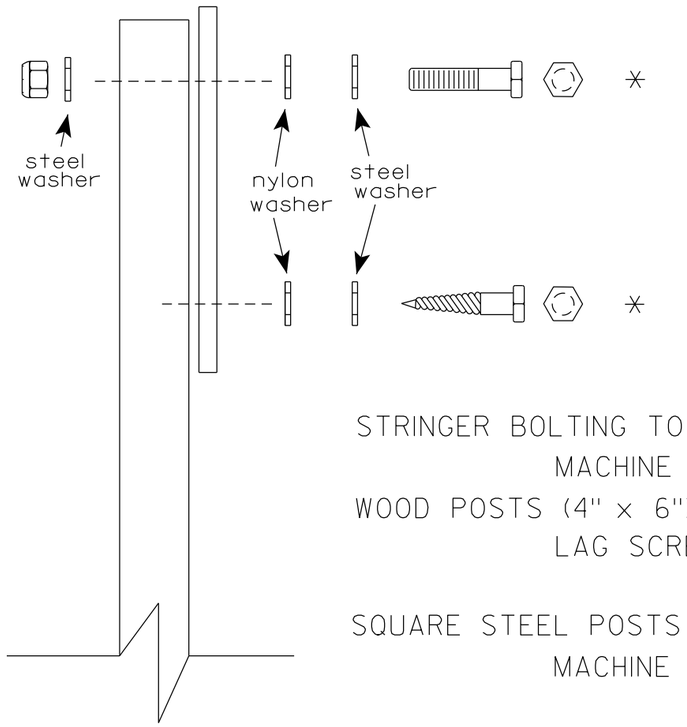
ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-6.12





Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

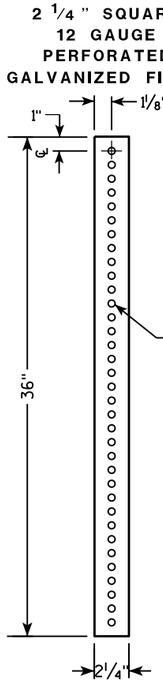
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

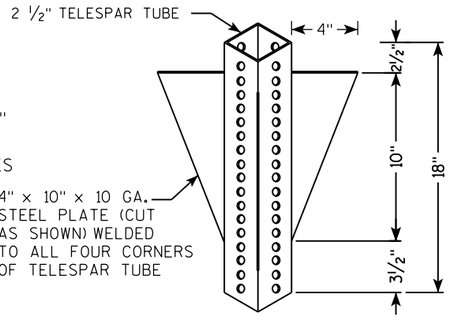
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

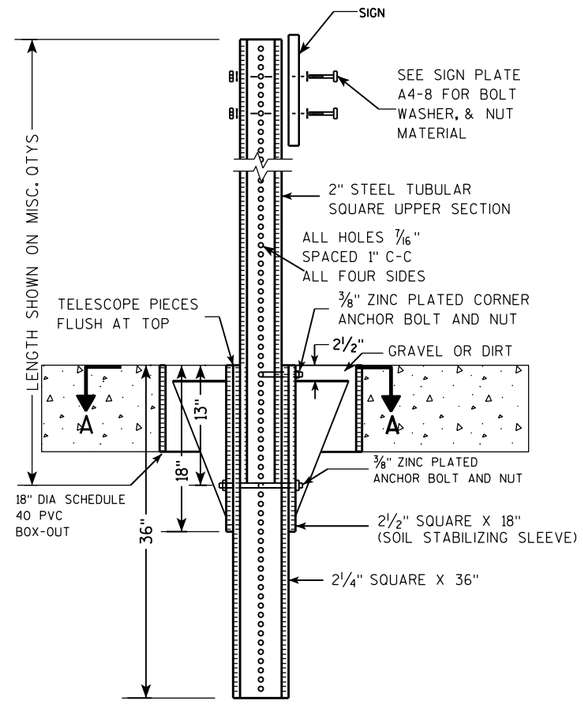
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



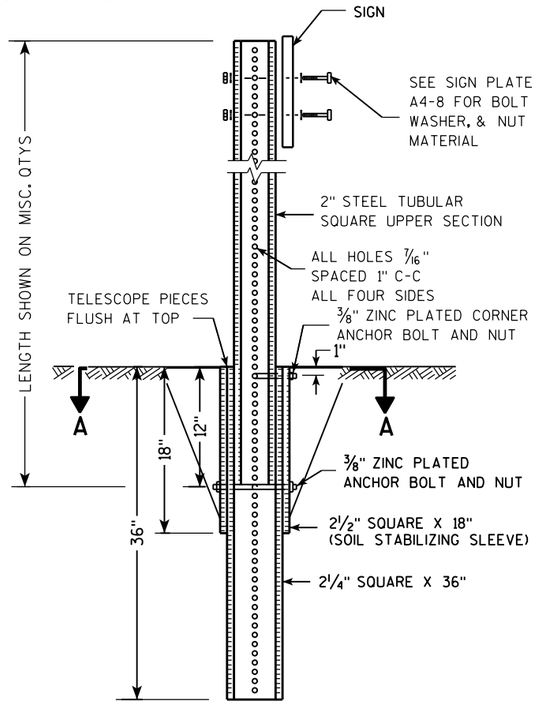
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

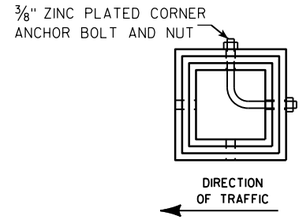


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

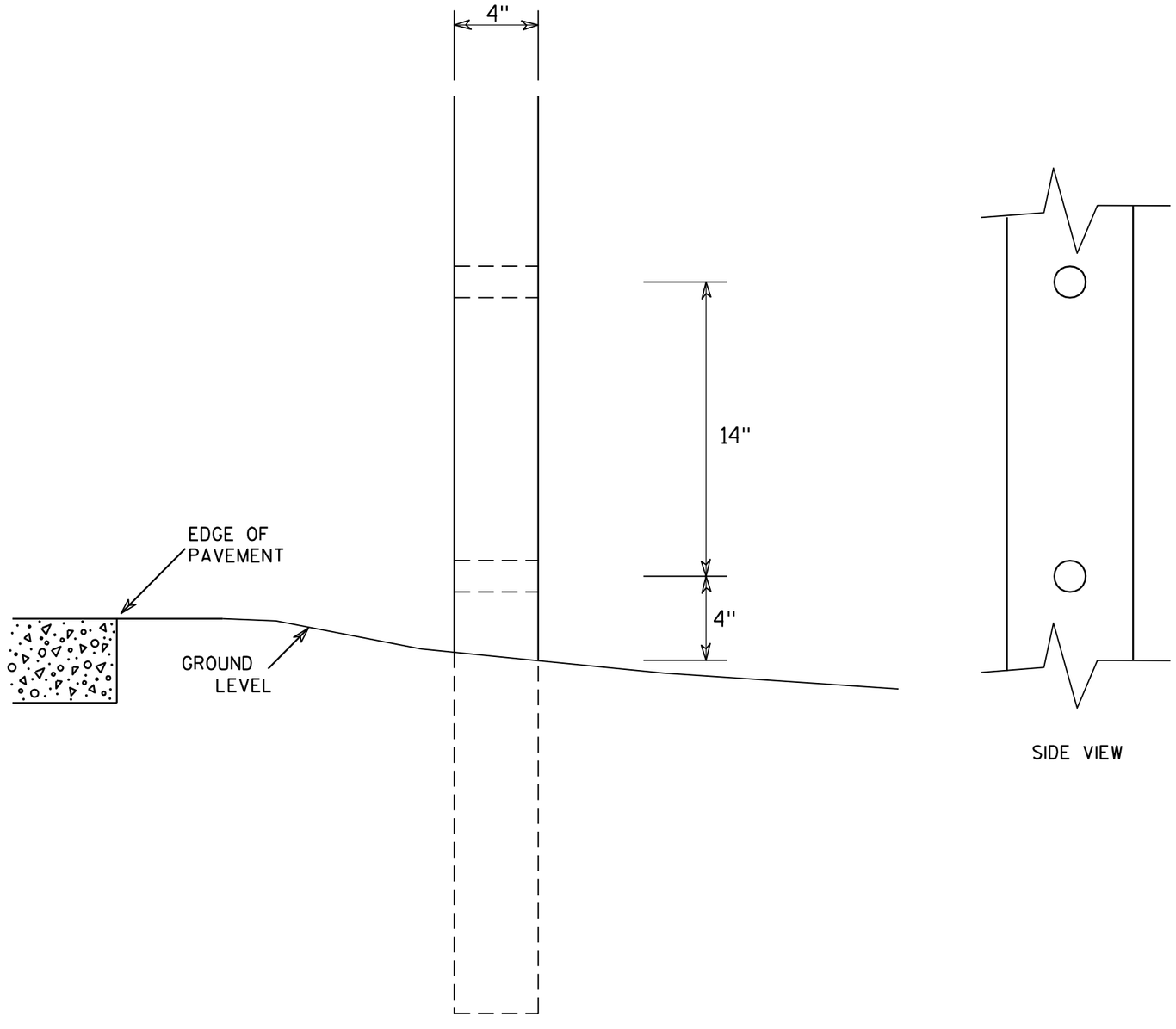
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 421 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

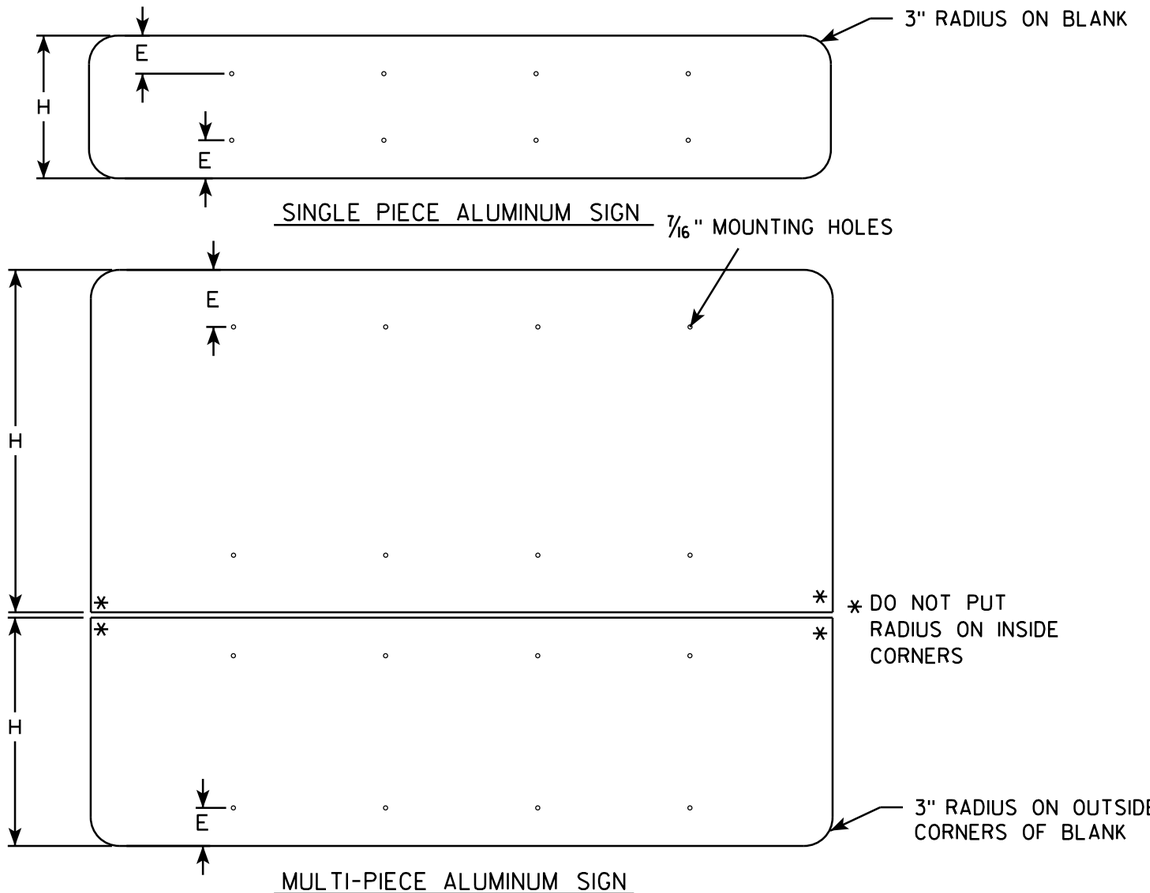
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

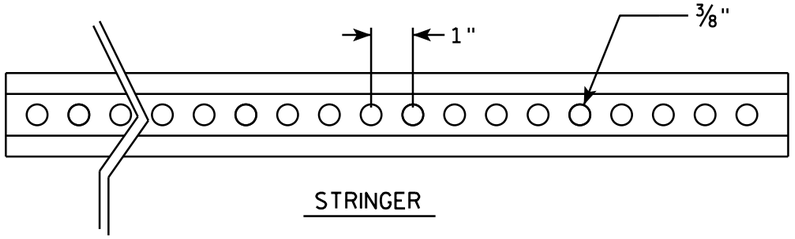
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 422	E



GENERAL NOTES

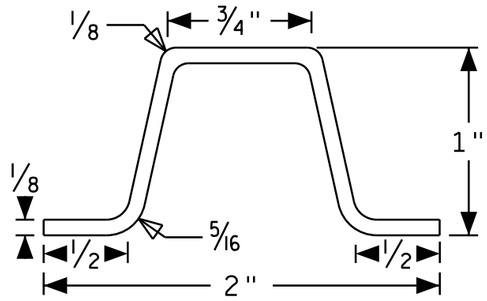
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

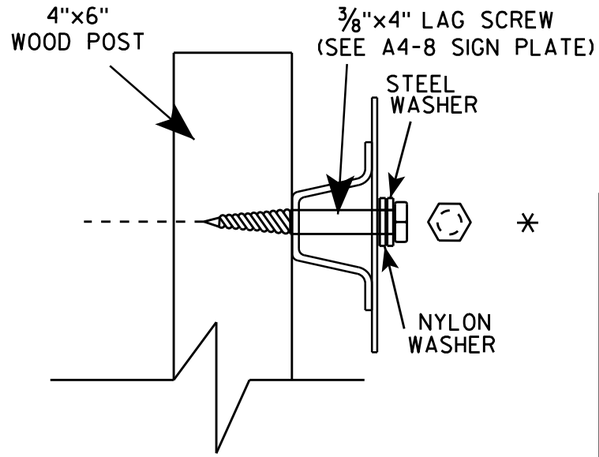


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

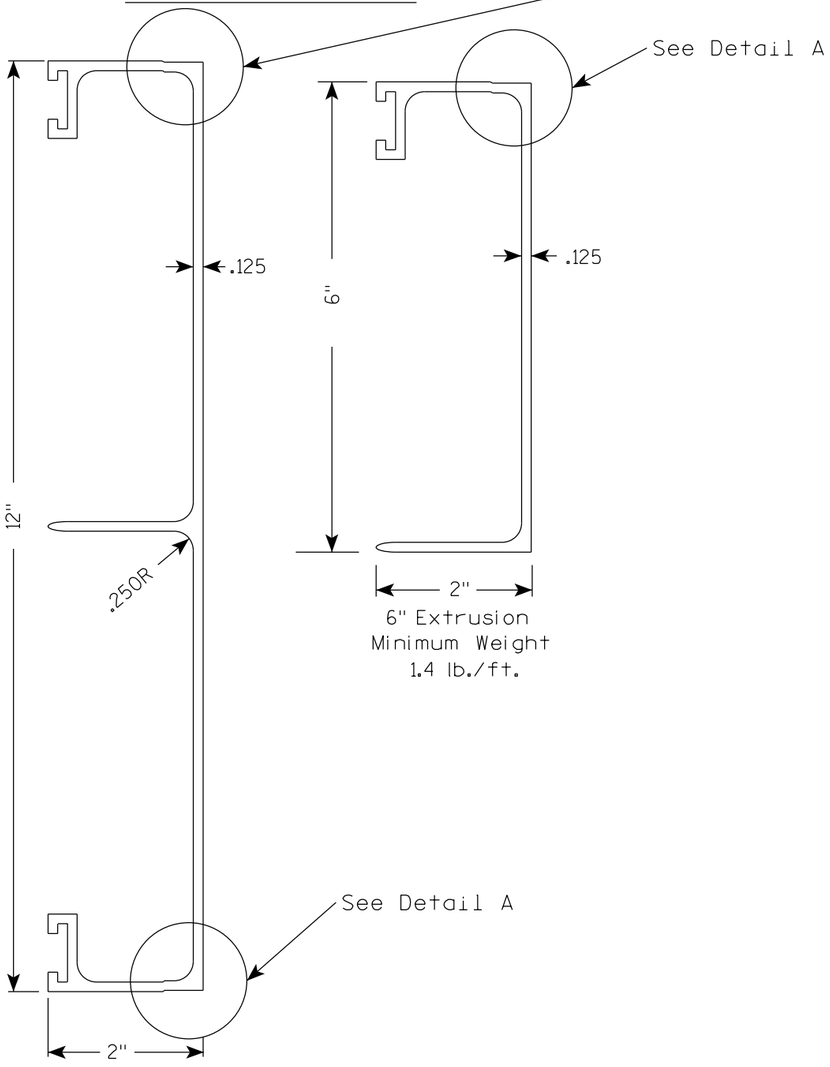
for State Traffic Engineer

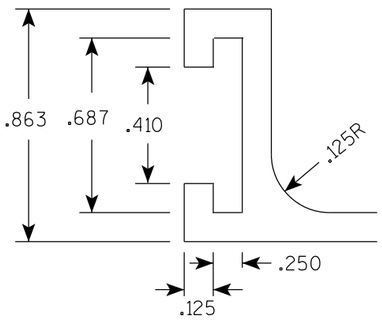
DATE 4/26/16 PLATE NO A4-18.1

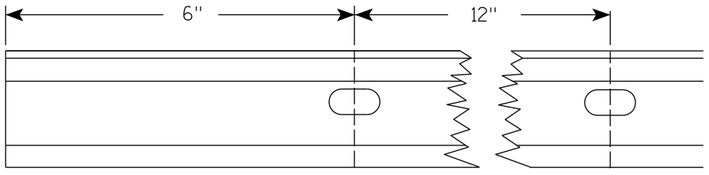
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

Extruded Shape







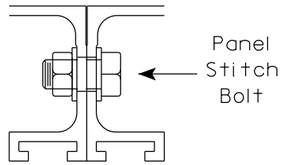
Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

Hardware

STITCH BOLT, WASHER & NUT

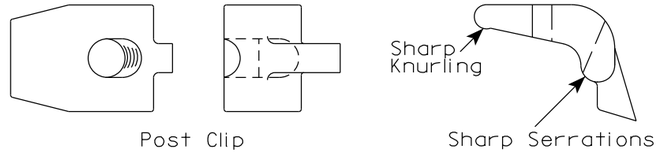
The hardware includes:

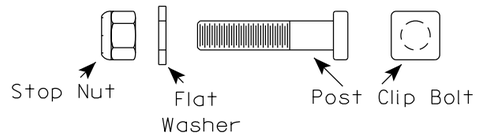
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

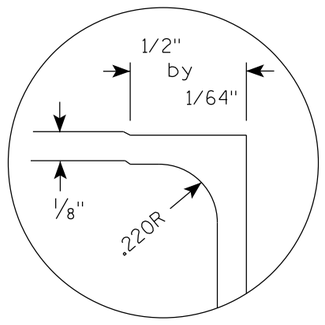
Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.



DETAIL A (EDGE WRAP JOINT)

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/07/20 PLATE NO. A5-2.10

PROJECT NO:

SHEET NO: 424 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A52.DGN PLOT DATE : 7-Jan-2020 PLOT BY : dotc4c

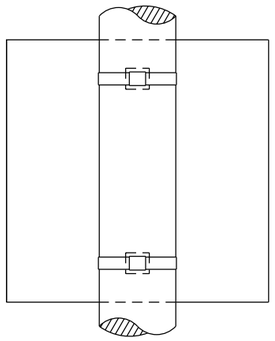
WISDOT/CADDS SHEET 42

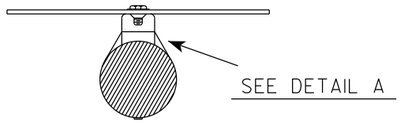
7

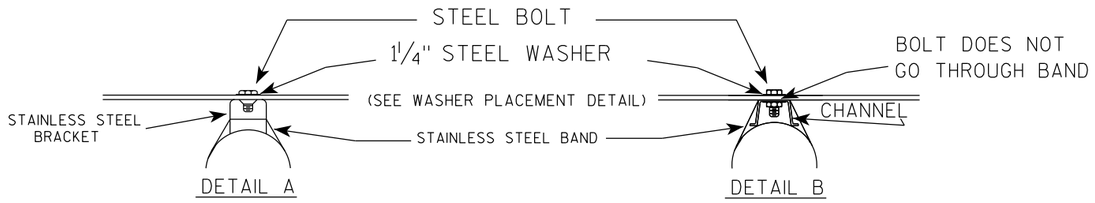
7

BANDING

SINGLE SIGN



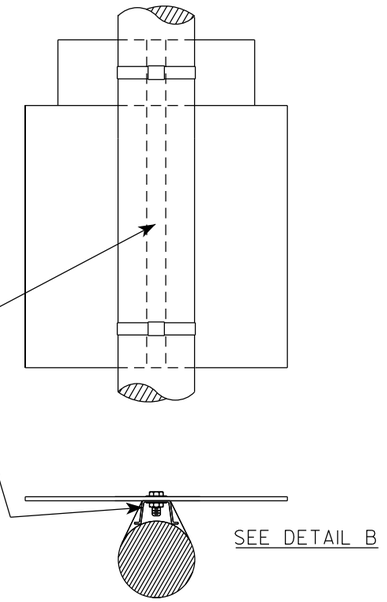




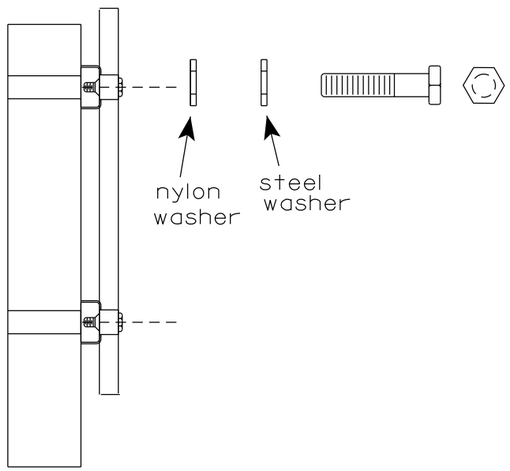
GENERAL NOTES

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

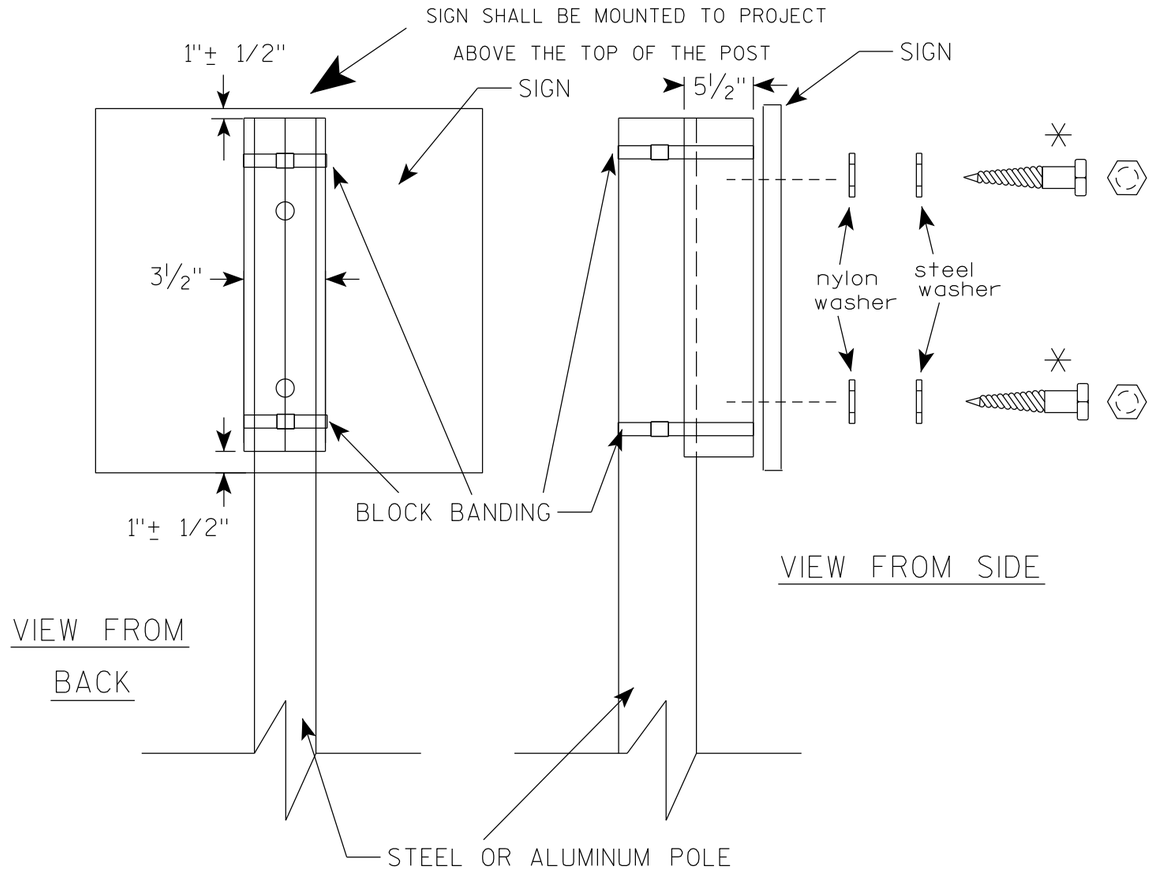
DATE 6/10/19 PLATE NO. A5-9.4

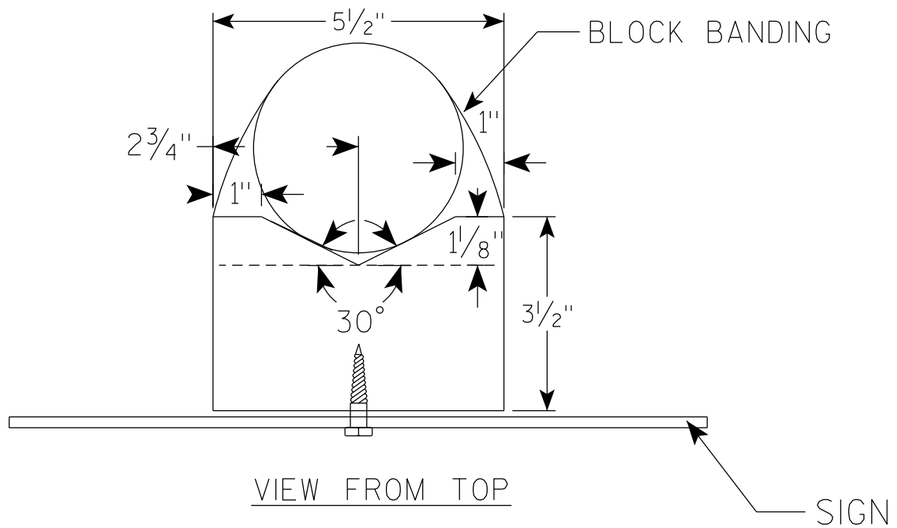
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 425	E

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"

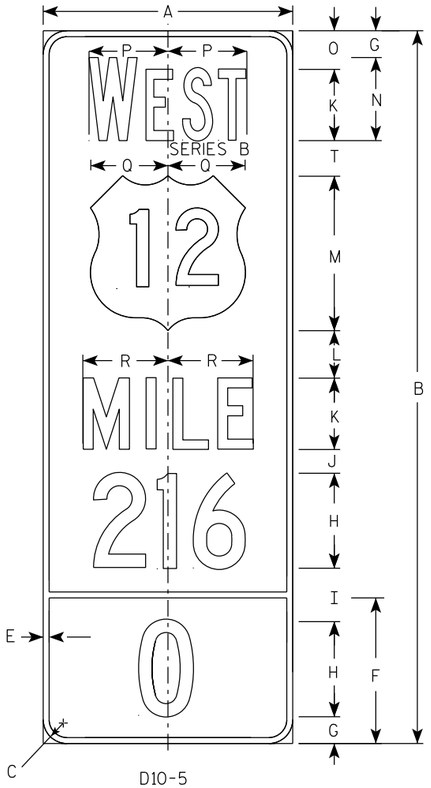
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

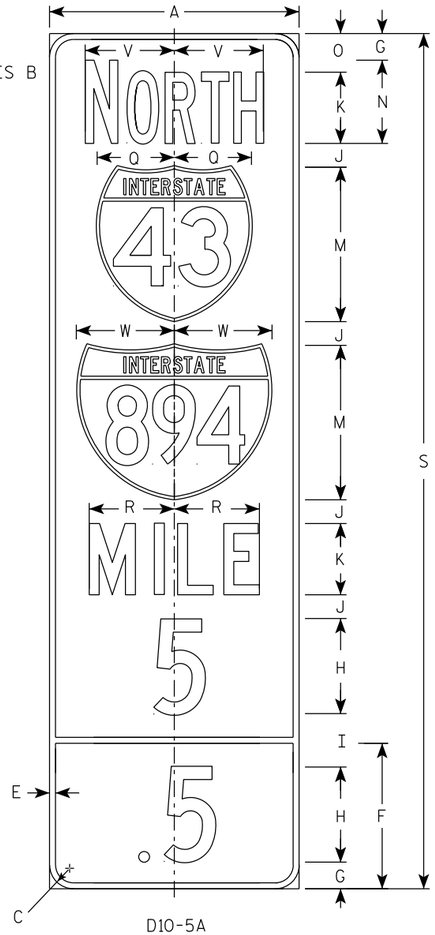
DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:				SHEET NO: 426	E

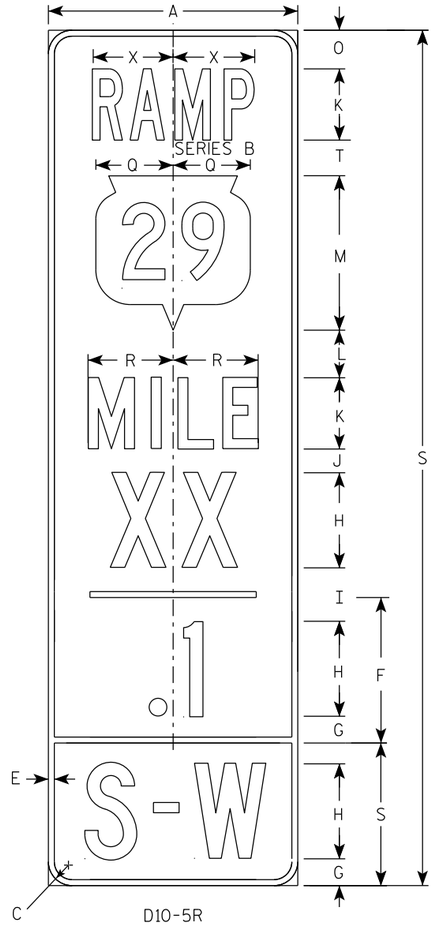


D10-5

SERIES B



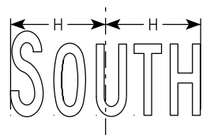
D10-5A



D10-5R



SERIES B



SERIES B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - BLUE
   Message - WHITE
3. Interstate Shield Color
   Background - Top Red
   - Bottom Blue
   Message - White
4. Message Series - C or as noted on the Sign.
5. The decimal point is required for all digits except "0".
6. Optically adjust mileage numbers about the centerline of the sign to achieve proper balance.
7. Optically adjust Ramp direction letters about the centerline of the sign to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	D10-5 Area sq. ft.	D10-5A Area sq. ft.	D10-5R Area sq. ft.
1																													
2																													
3																													
4	21	60	1 ½		½	12 ¼	2 ¼	8	4 ½	2	6	4	13	6 ⅝	3 ¼	7	6 ½	7 ⅛	72	3		7 ½	8 ¼	6 ¾			8.75	10.5	10.5
5	21	60	1 ½		½	12 ¼	2 ¼	8	4 ½	2	6	4	13	6 ⅝	3 ¼	7	6 ½	7 ⅛	72	3		7 ½	8 ¼	6 ¾			8.75	10.5	10.5

STANDARD SIGN
D10-5

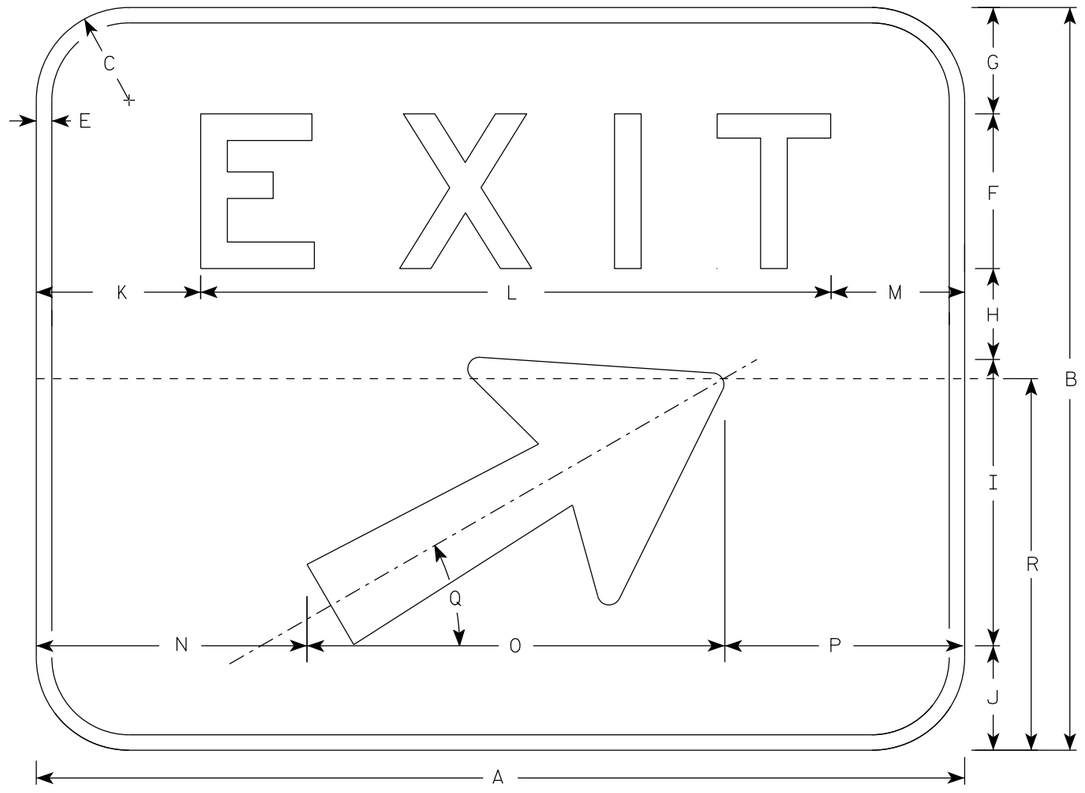
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/11/18 PLATE NO. D10-5.3

PROJECT NO:

SHEET NO: 427 E



E5-1

NOTES

1. Sign is Type II - Type H reflective
2. Color:
   Background - Green
   Message - White
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. When Base material for this sign is plywood sign shall be split into two seperate pieces for the 72 x 60 size as shown on the detail by the dashed line (----------).
6. Arrow is Type "A" from sign plate A1-1.
7. As per the Standard Spec's, this sign shall not have a vertical joint.
8. Size 3 E5-1 shall only be used in a Work Zone application with a Temporary Sign Support

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3	48	48	6		1	10	6 7/8	5 7/8	18 1/2	6 3/4	8 1/2	31 1/8	8 3/8	11 1/2	27	9 1/2	30°	30									16.0
4	60	48	6		1	10	6 7/8	5 7/8	18 1/2	6 3/4	10 5/8	40 3/4	8 5/8	17 1/2	27	15 1/2	30°	30									20.0
5	72	60	6		1	12	9 3/4	10	18 1/2	9 3/4	13 1/4	48 1/2	10 1/4	23 1/2	27	21 1/2	30°	30									30.0

STANDARD SIGN
E5-1

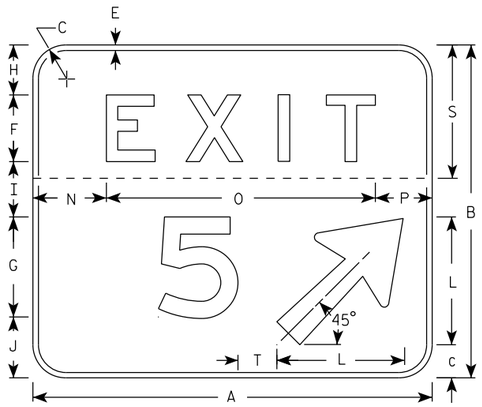
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

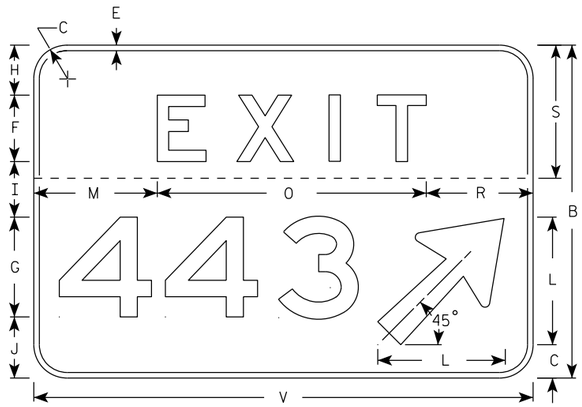
DATE 7/26/18 PLATE NO. E5-1.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 428 | E

7

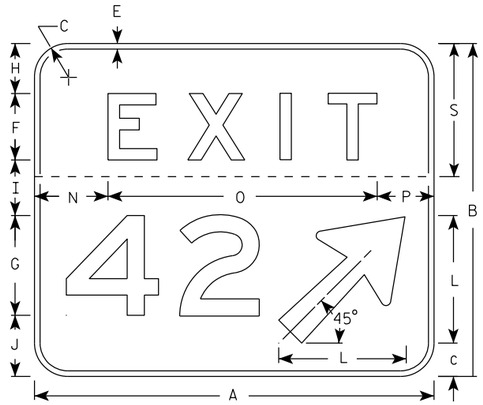


NOTE: T diminision shall be measured from the back of the number to the front of the arrow

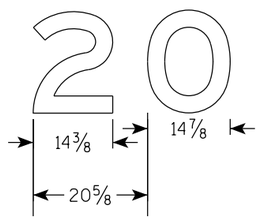


NOTES

1. Sign is Type II - Type H reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E
4. Corners may be square or rounded but the corners shall be rounded when base material is metal.
5. Sign shall be split into two seperate pieces as shown on each detail by the dashed line (_ _ _ _ _ _ _ _ _ _).
6. Arrow is Type "A" from sign plate A1-1.
7. Substitute appropriate message, space per the table and adjust placement on sign to achieve proper balance.
8. As per the Standard Spec's, these signs shall not have a vertical joint.



EXAMPLE FOR USING SPACING CHART



SPACING CHART FOR 18" NUMERALS

NUMBERS	WIDTH	0	1	2	3	4	5	6	7	8	9	A	B	C
0	14 7/8	21 5/8	21 5/8	21 1/4	20 3/8	21 1/4	21 1/4	21 5/8	19 7/8	22 1/8	21 5/8			
1	5 7/8	14	14	14	13 1/8	12 1/8	14	14	12 1/4	14	14			
2	14 3/8	20 5/8	21 1/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8	18 7/8	21 1/8	20 5/8			
3	14 3/8	20 3/4	21 1/8	20 3/4	20 1/4	19 3/4	20 3/4	20 3/4	19 3/8	21 1/8	20 3/4			
4	16 5/8	22 7/8	22	22 1/2	21 5/8	21 5/8	22 7/8	22 7/8	20 5/8	23 3/8	22 7/8			
5	14 1/4	20 5/8	20 5/8	20 1/8	18 3/4	18 3/4	20 5/8	20 5/8	18 3/8	20 5/8	20 5/8			
6	14 1/2	21 1/4	20 3/4	20 3/4	19 7/8	19 1/2	20 3/8	20 3/4	19	20 3/4	20 3/8			
7	14 3/8	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4			
8	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8			
9	14 1/2	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4			
A	18	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	21 5/8	23 7/8	23
B	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/2	22 3/8	21 1/2
C	14 1/4	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18 3/8	21	19 3/4

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
2																										
3																										
4																										
5	72	60	6		1	12	18	9	10	11	8 7/8	23	22 1/4	13 1/4	48 1/2	10 1/4		19 1/4	24	7		90		96	7 1/2	

1-2 Digit Bid Area	3 Digit Bid Area
Sq. Ft.	
30	37.5

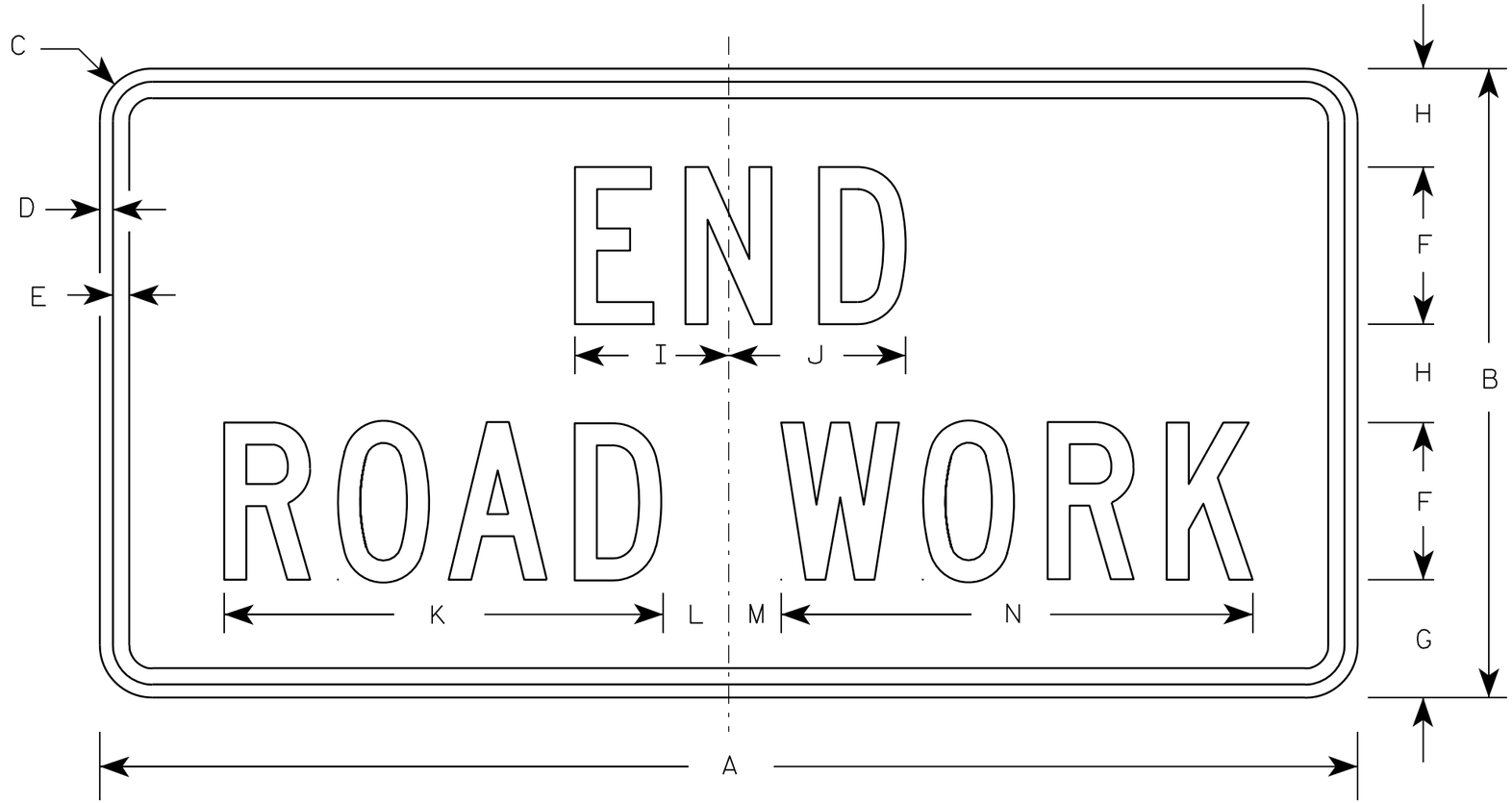
STANDARD SIGN
E5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. E5-1A.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 429	E



G20-2A

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 - 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.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

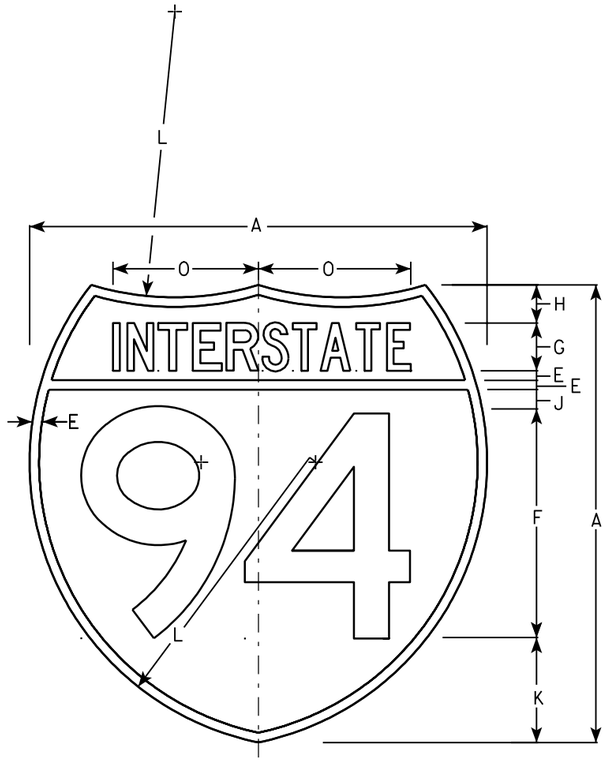
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

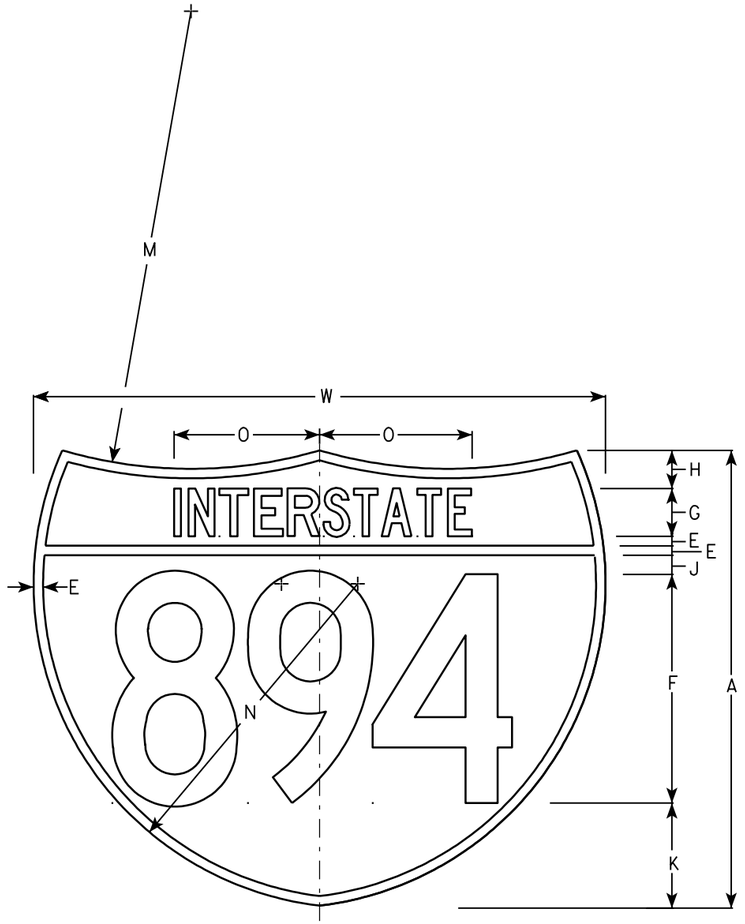
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 430	E



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

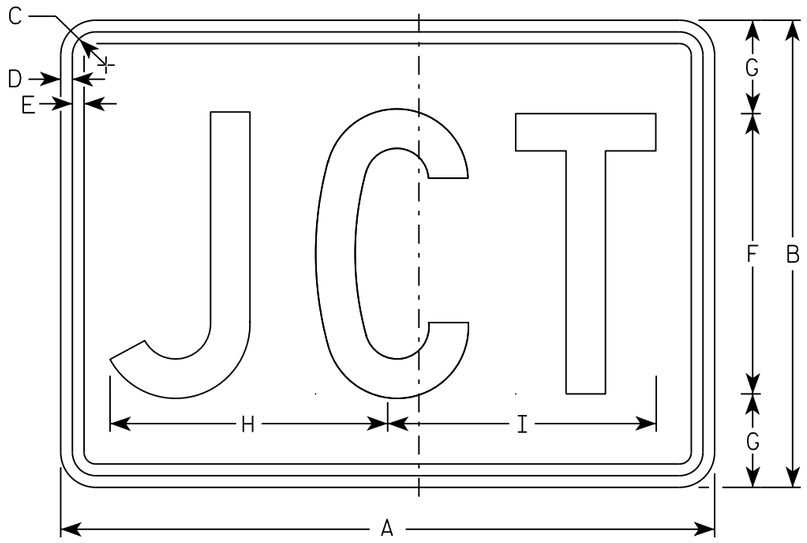
INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

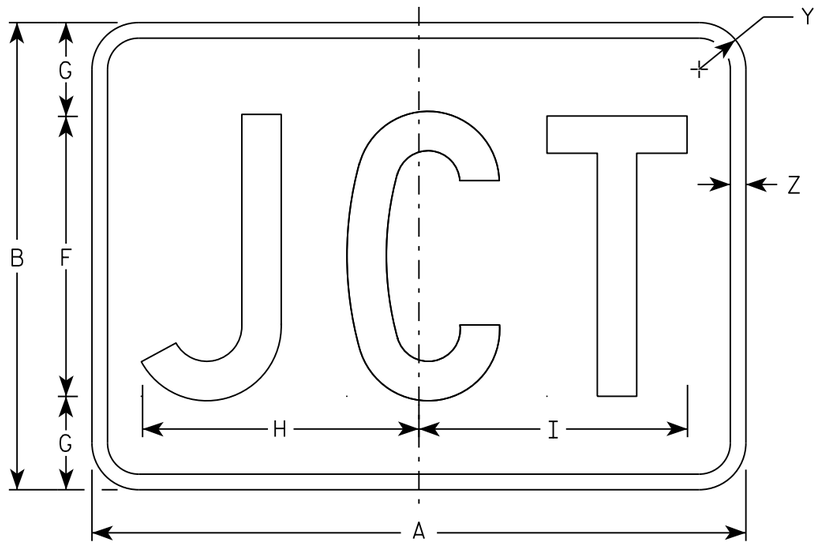
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 431	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

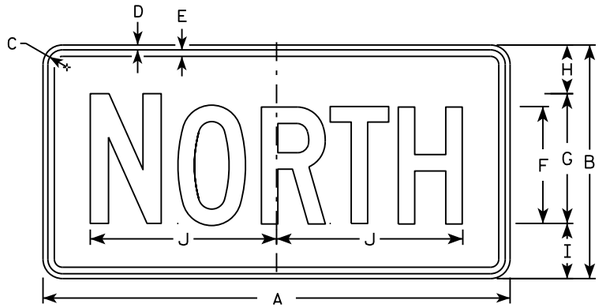
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

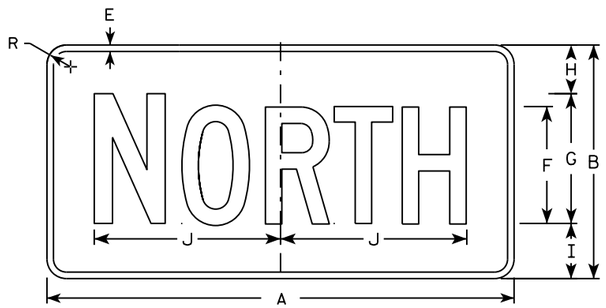
DATE 10/15/15 PLATE 432 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M3-1
MM3-1
MP3-1



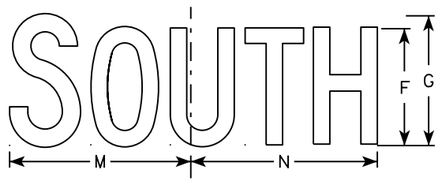
MB3-1
MK3-1
MN3-1



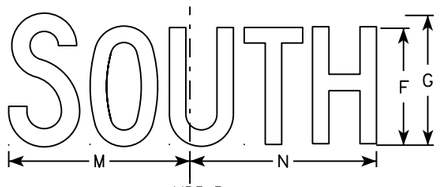
M3-2
MM3-2
MP3-2



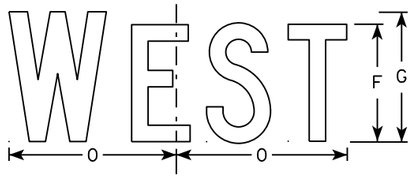
MB3-2
MK3-2
MN3-2



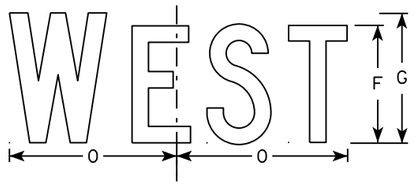
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

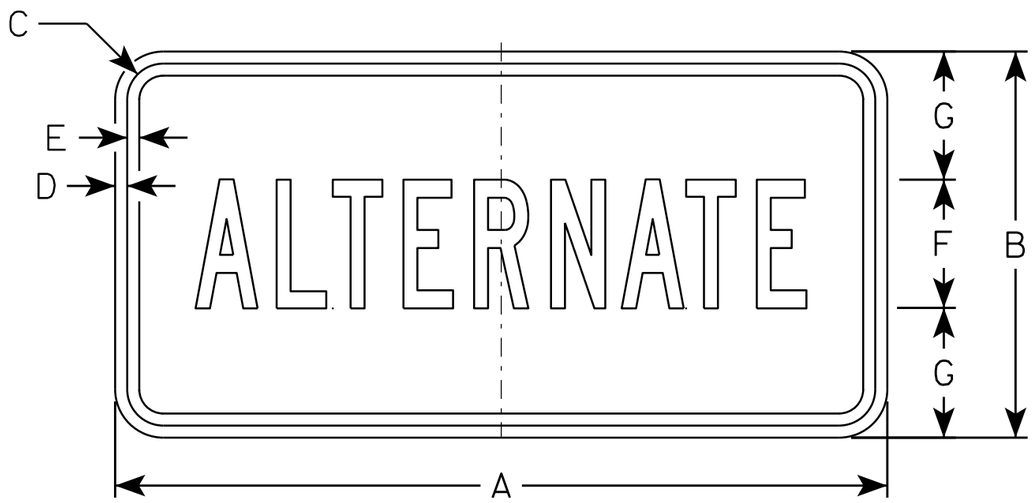
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

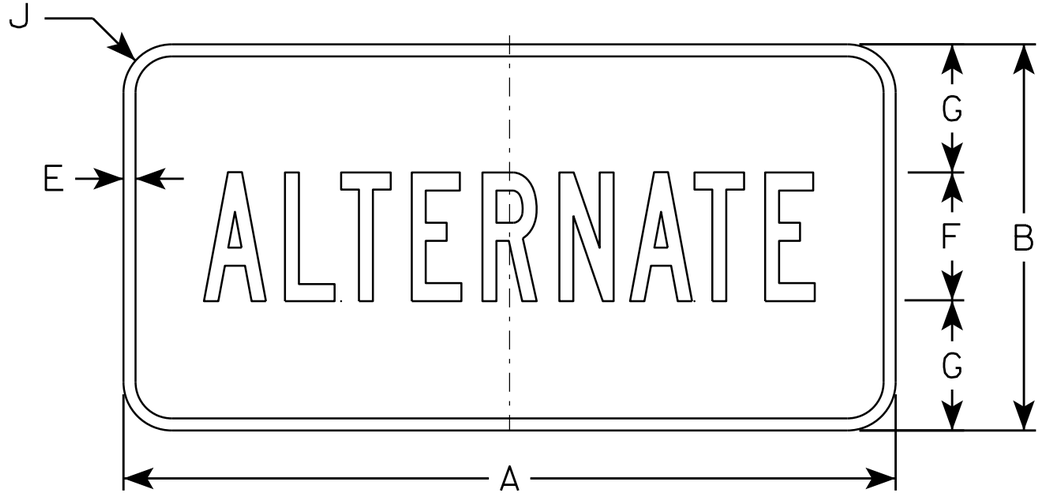
DATE 10/15/15 PLATE NO M3-1.14

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-1
MO4-1



MB4-1

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
   Background - See Note 5
   Message - See note 5
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-1 Background - White
   Message - Black

   MB4-1 Background - Blue
   Message - White

   MO4-1 Background - Orange - Type F
   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	4	4	9 3/4	9 1/2	1 1/2																	2.00
3	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
4	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
5	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5

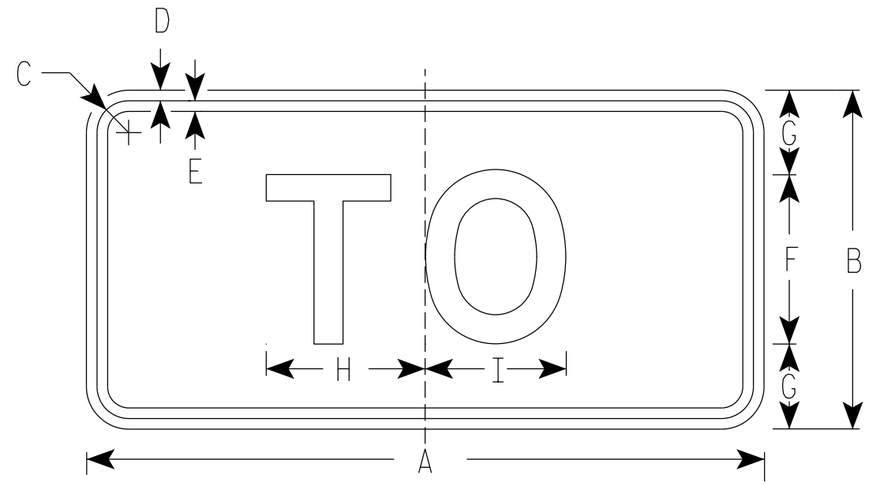
STANDARD SIGN
M4-1

WISCONSIN DEPT OF TRANSPORTATION

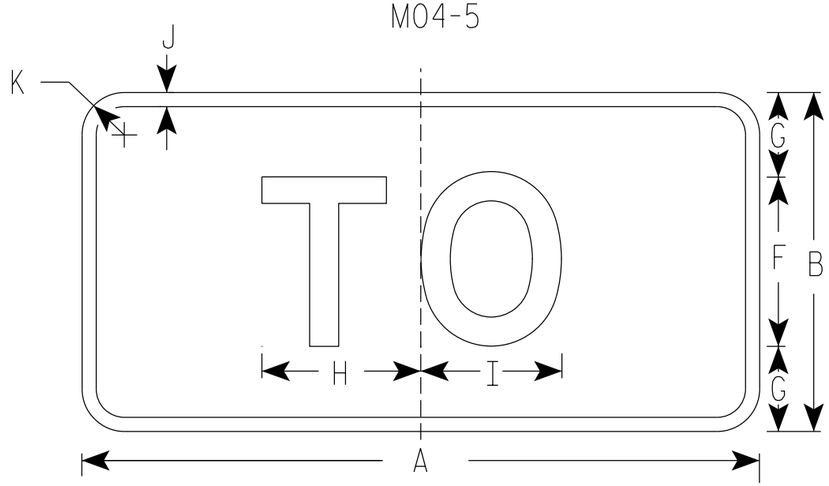
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/14 PLATE 434 14-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M4-5
MM4-5
MP4-5
M04-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   M04-5 Background - Orange Type F Reflective
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
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

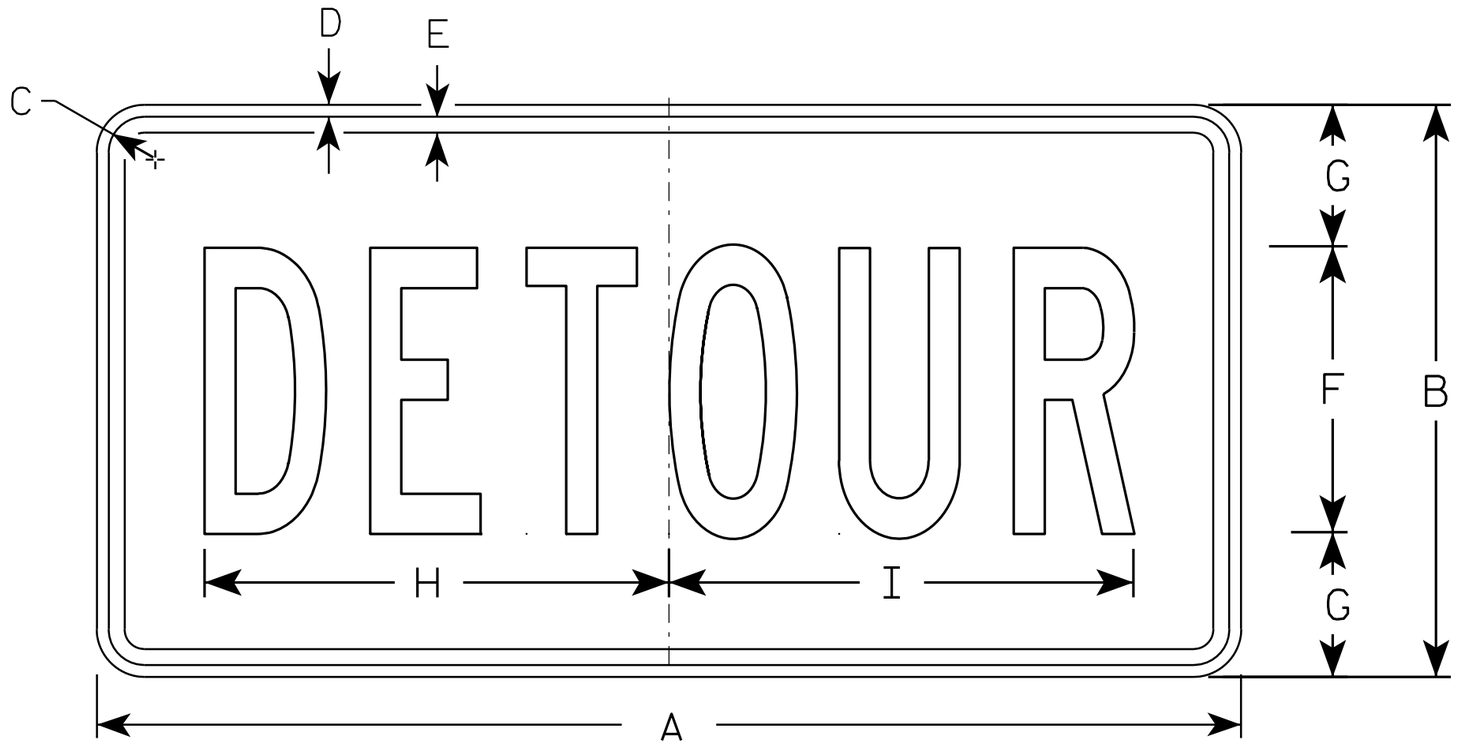
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/7/19 PLATE NO. M4-5.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 435 | E

7



M4-8

NOTES

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

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

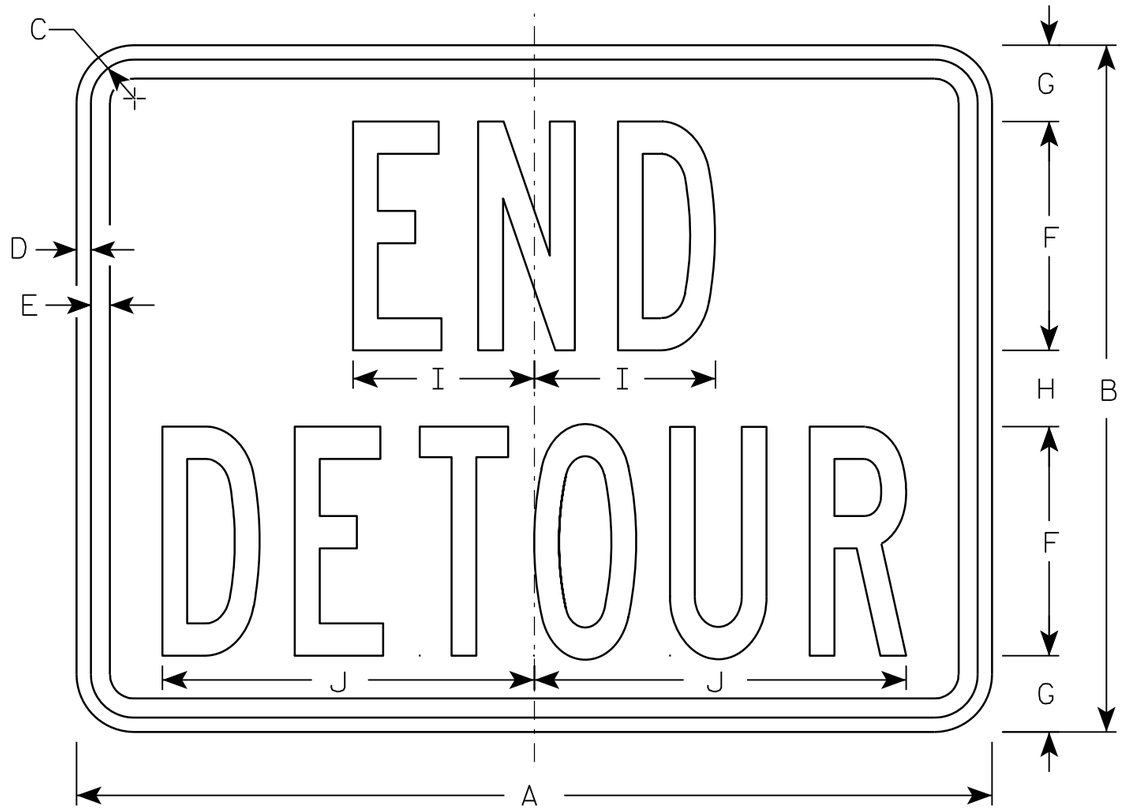
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 436	E



M4-8A

NOTES

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

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

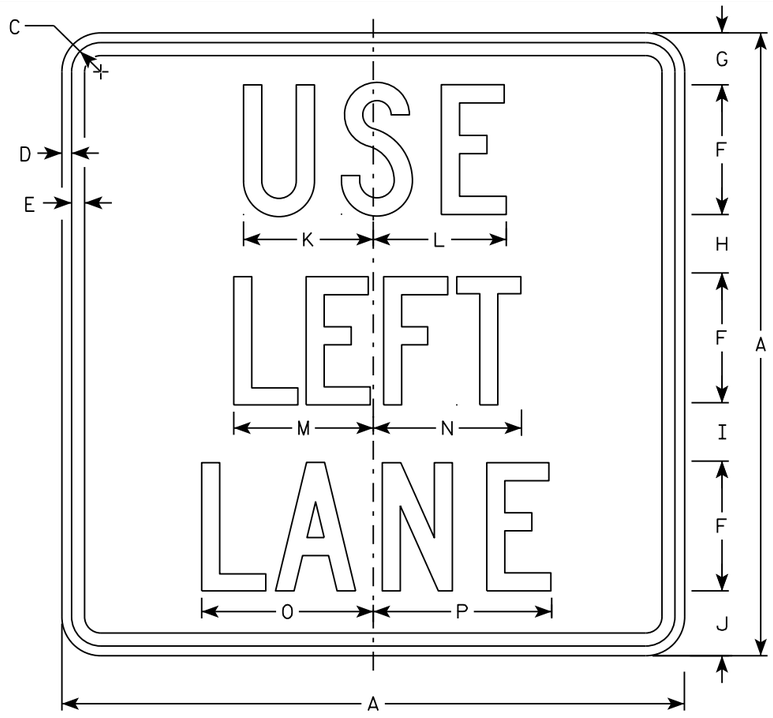
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

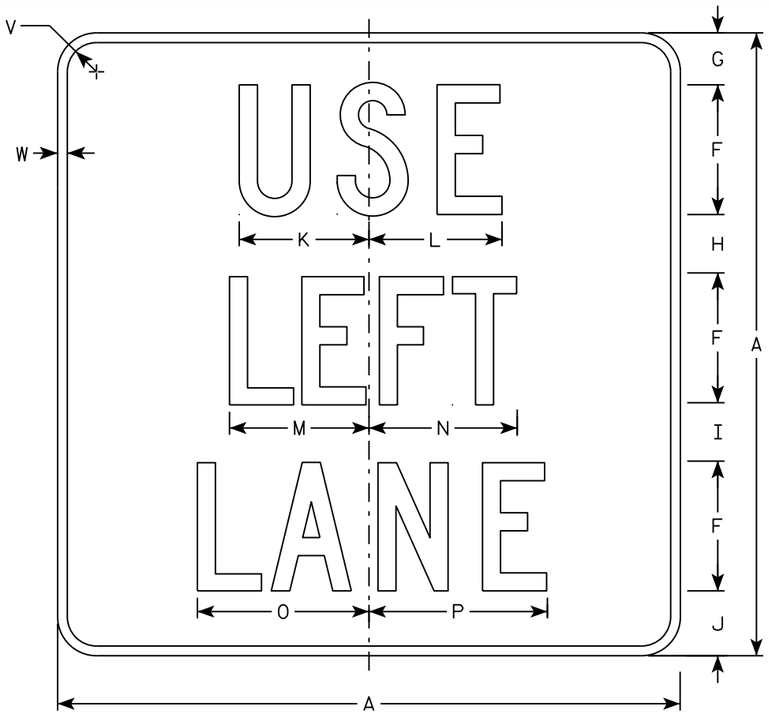
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 437	E



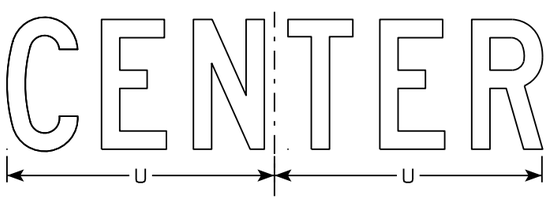
M4-20L



MB4-20L

M4-20L
MM4-20L
M04-20L
MP4-20L

MB4-20L
MK4-20L
MN4-20L
MR4-20L



M4-20C
MB4-20C
MK4-20C
MM4-20C
MN4-20C
M04-20C
MP4-20C
MR4-20C



M4-20R
MB4-20R
MK4-20R
MM4-20R
MN4-20R
M04-20R
MP4-20R
MR4-20R

NOTES

1. Sign is Type II - Type H except as Shown
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. M4-20 Background - White
   Message - Black
   MB4-20 Background - Blue
   Message - White
   MK4-20 Background - Green
   Message - White
   MM4-20 Background - White
   Message - Green
   MN4-20 Background - Brown
   Message - White
   M04-20 Background - Orange - Type F Reflective
   Message - Black
   MP4-20 Background - White
   Message - Blue
   MR4-20 Background - Brown
   Message - Yellow

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

STANDARD SIGN
M4-20

WISCONSIN DEPT OF TRANSPORTATION

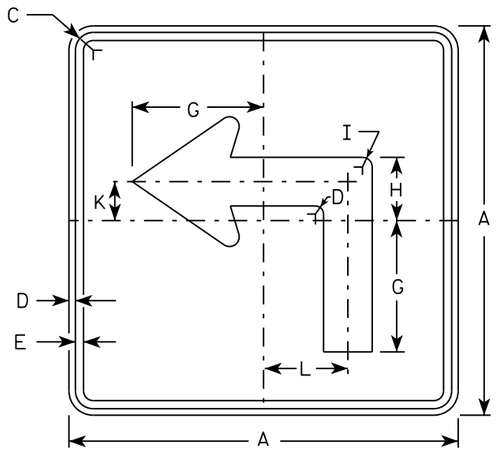
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 10/15/15 PLATE NO M4-20.5

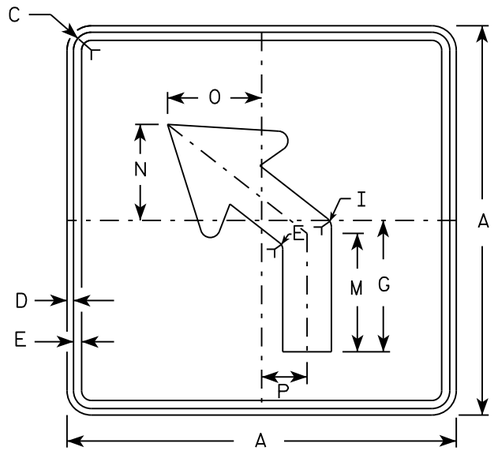
438

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

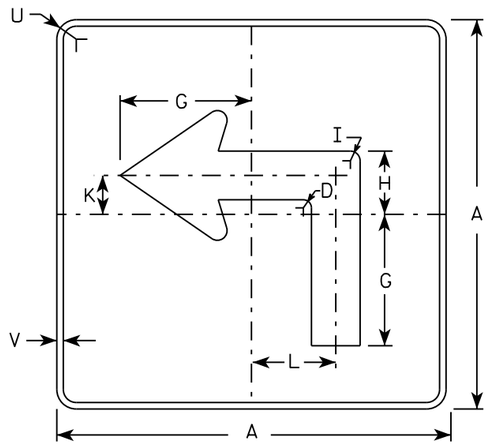
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M420.DGN PLOT DATE : 01-DEC-2015 18:03 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.837526:1.000000



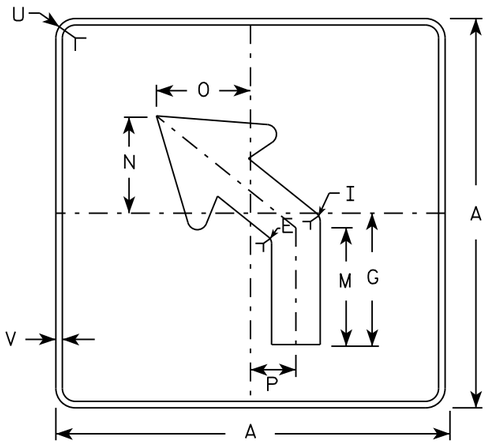
M5-1L
MM5-1L
MO5-1L
MP5-1L



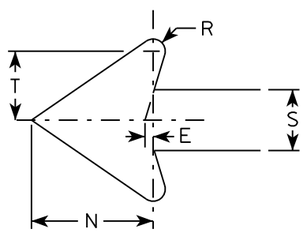
M5-2L
MM5-2L
MO5-2L
MP5-2L



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

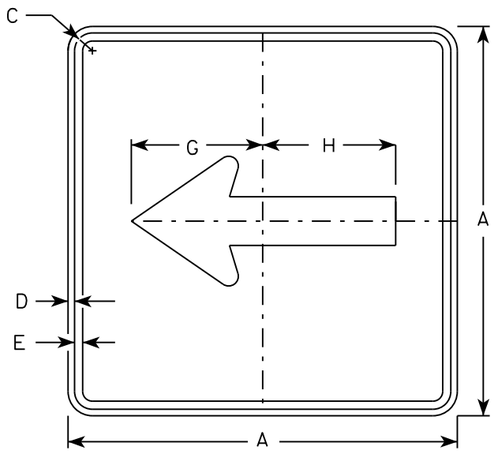
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

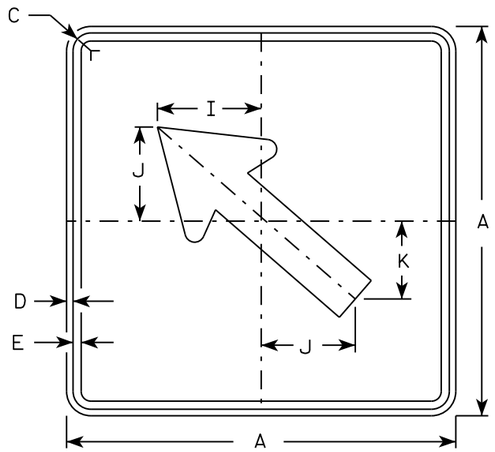
DATE 10/15/15 PLATE NO. M5-1.13

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



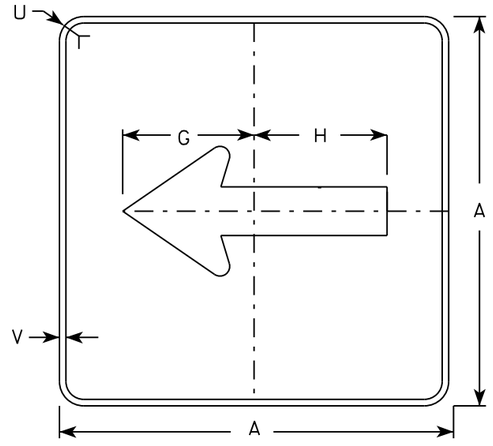
M6-1
MM6-1
MO6-1
MP6-1



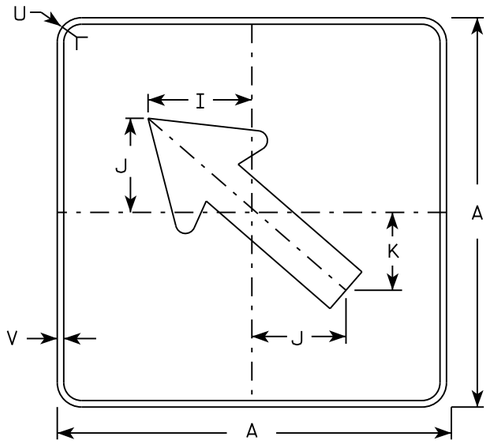
M6-2
MM6-2
MO6-2
MP6-2

NOTES

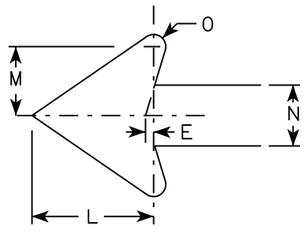
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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

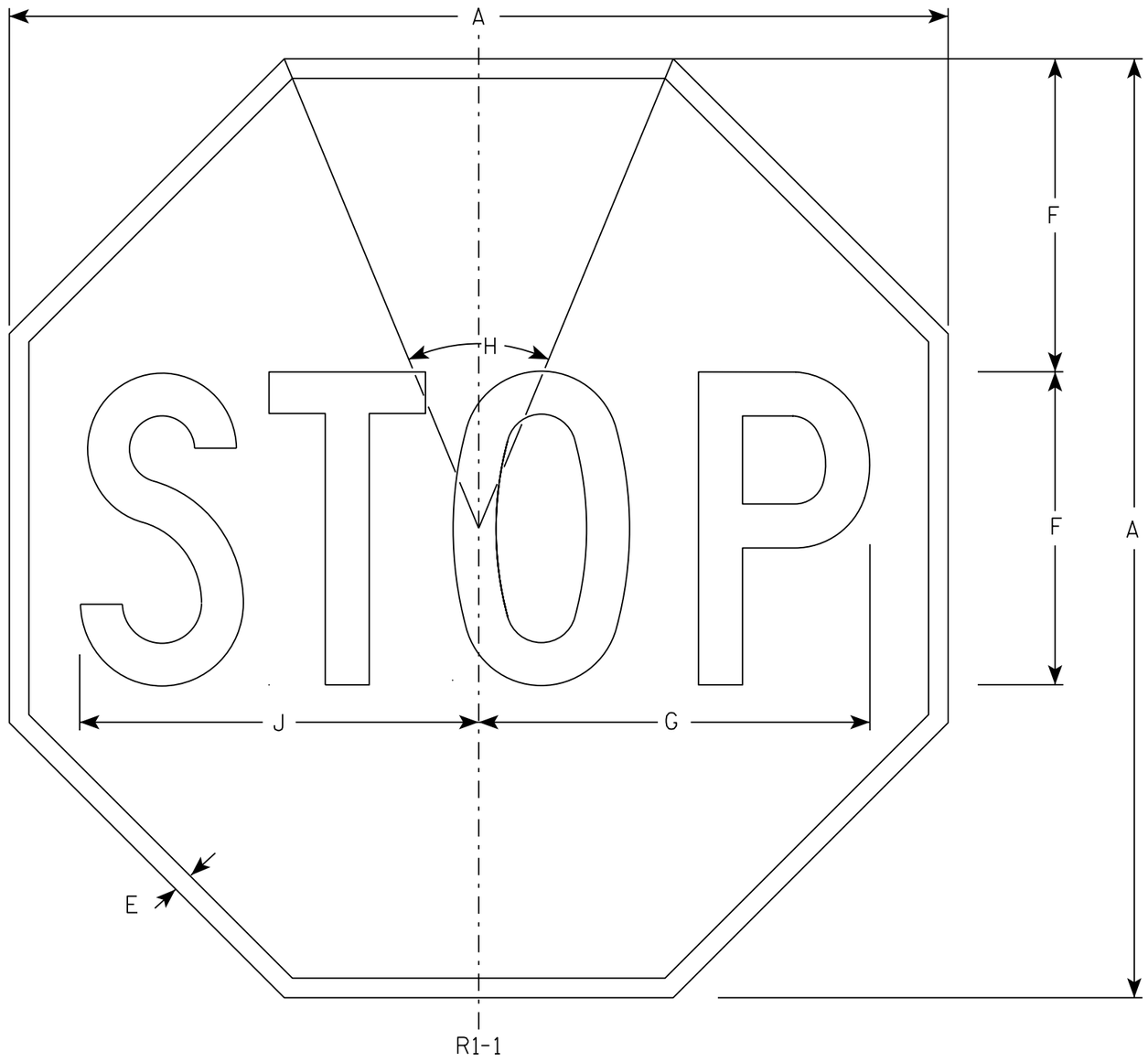
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 440 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



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

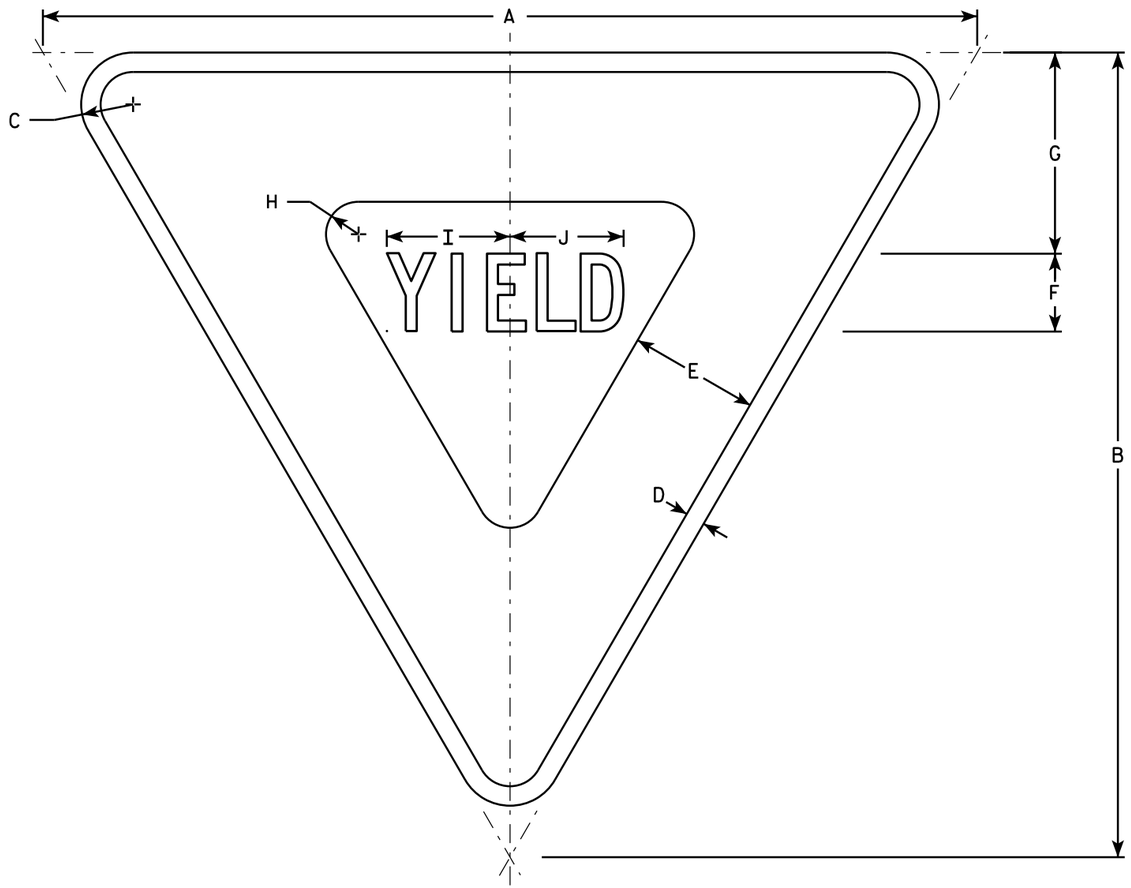
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 441	E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

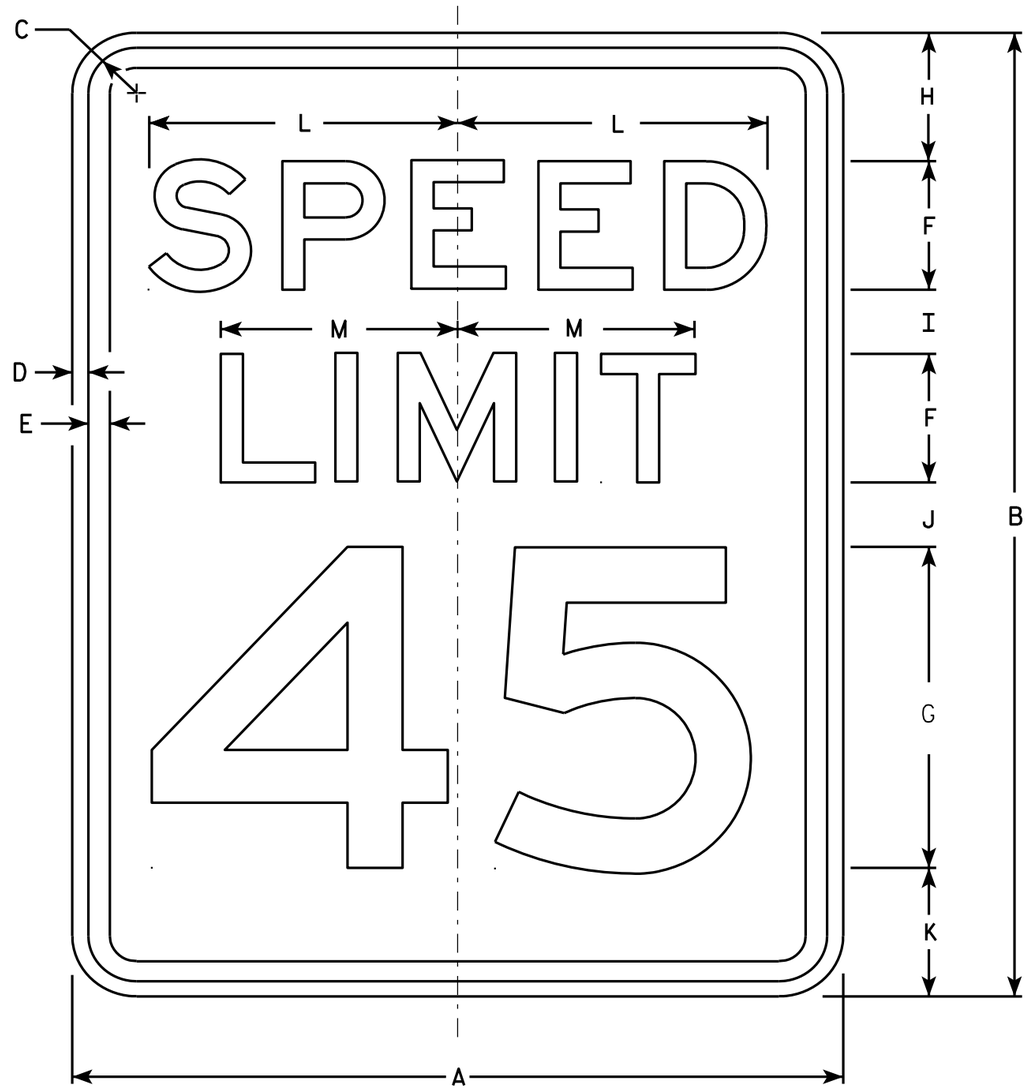
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

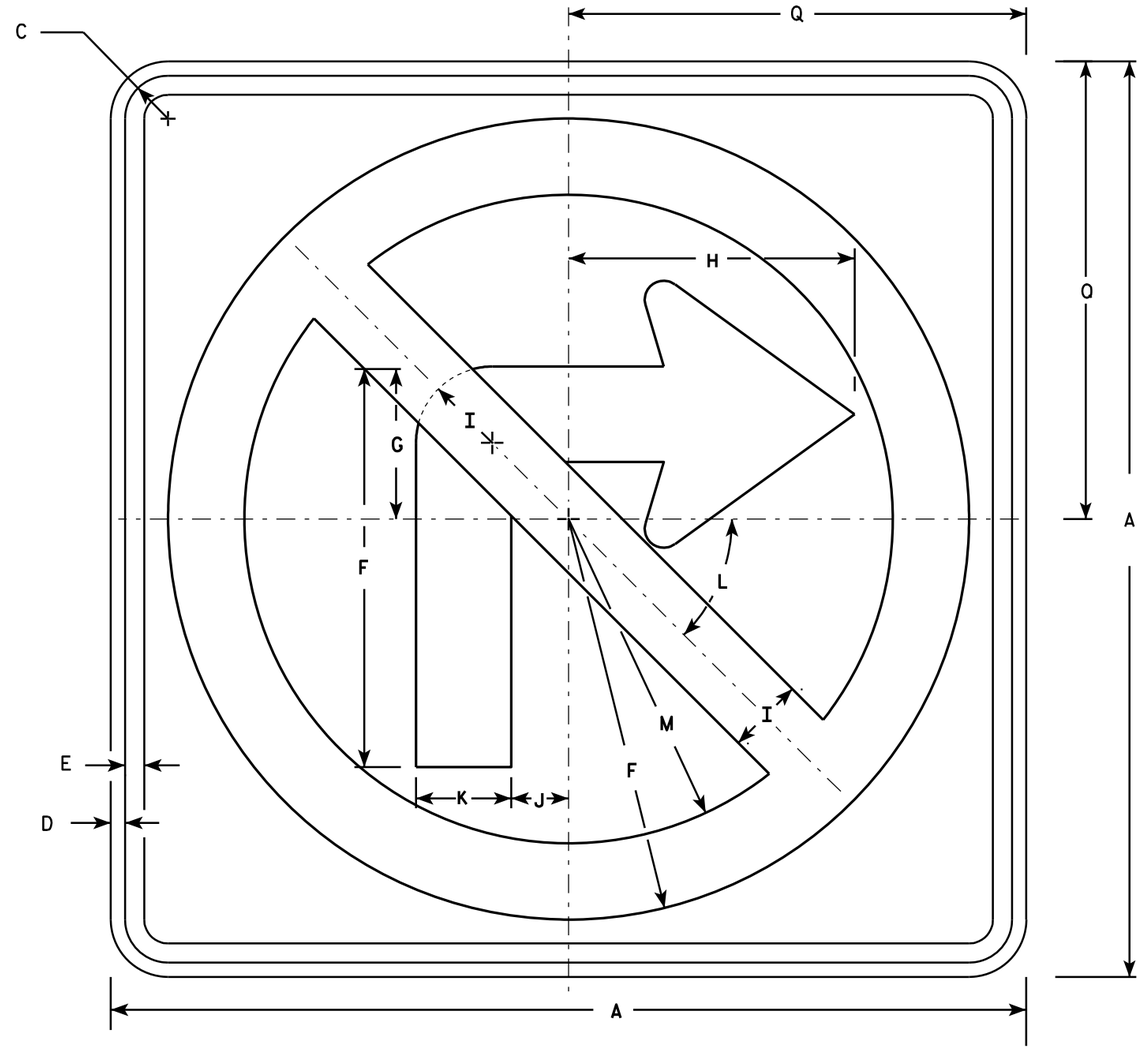
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

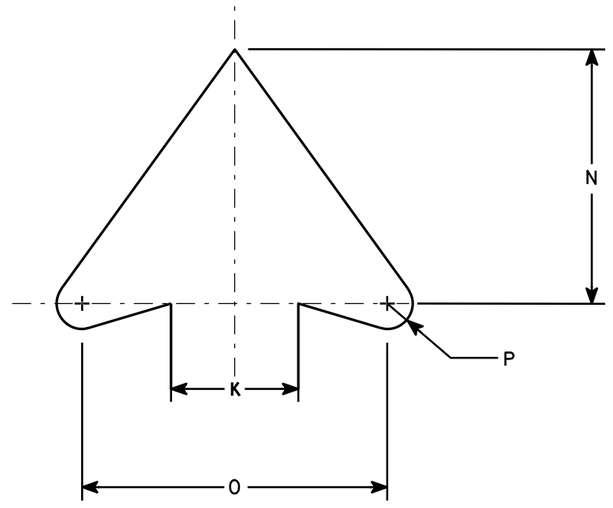
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 443 | E



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

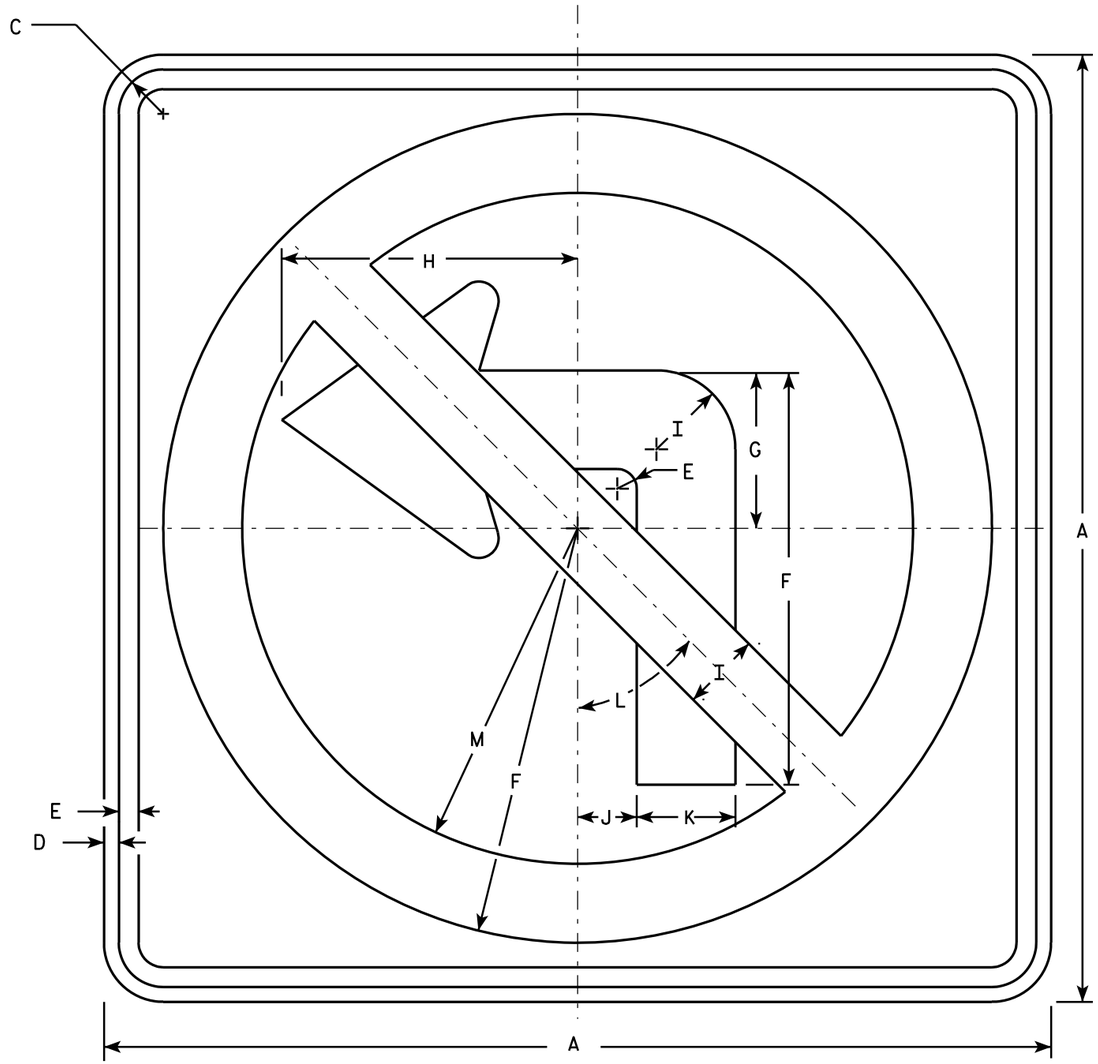
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

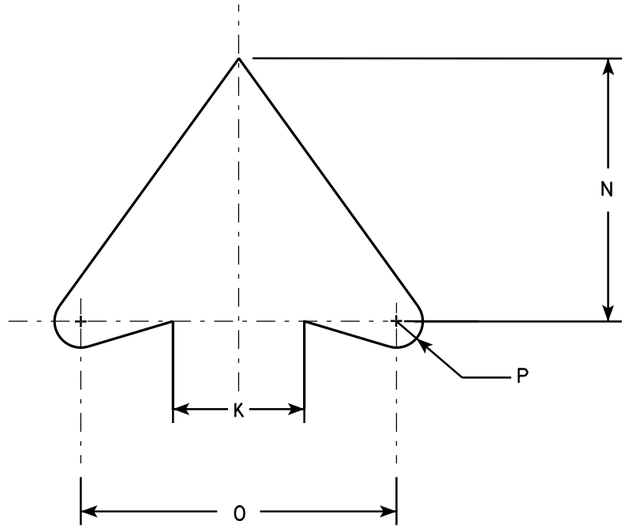
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 444	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

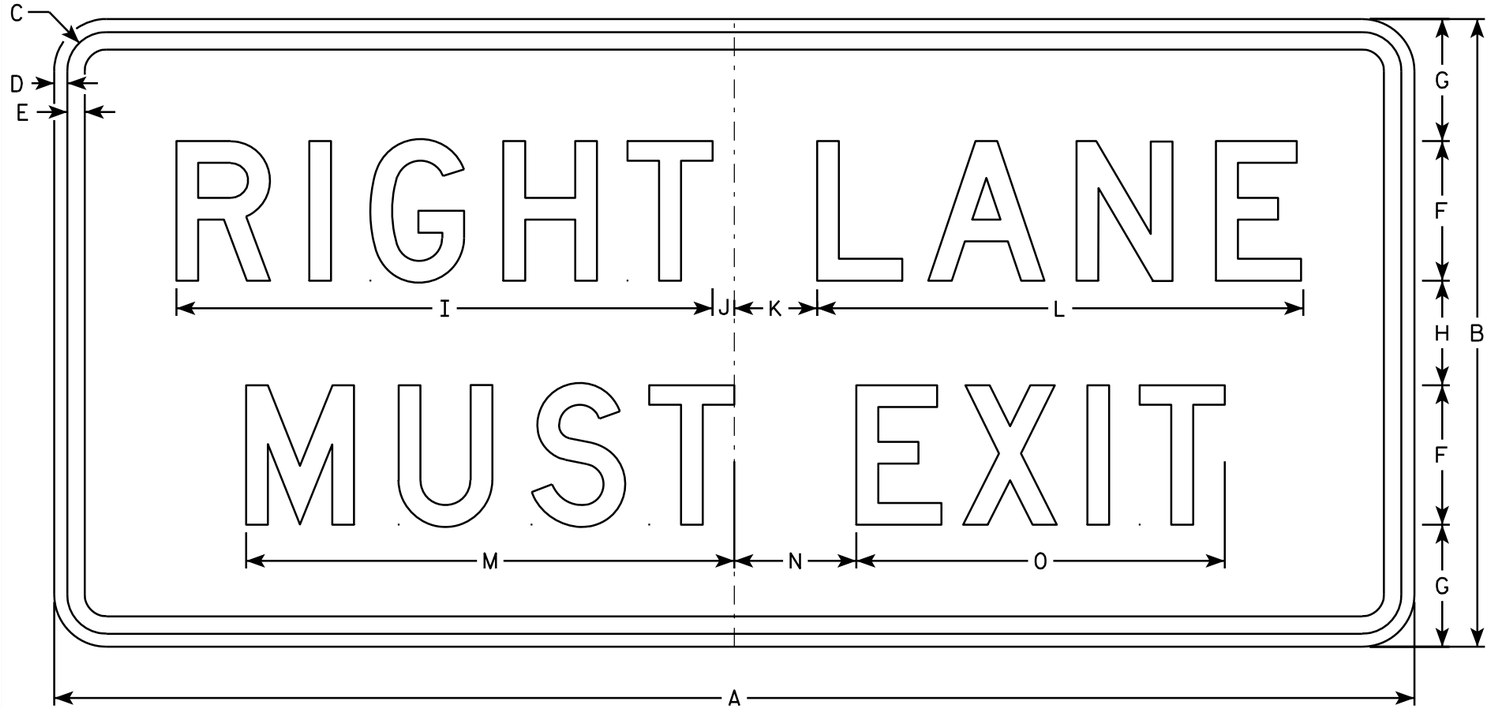
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

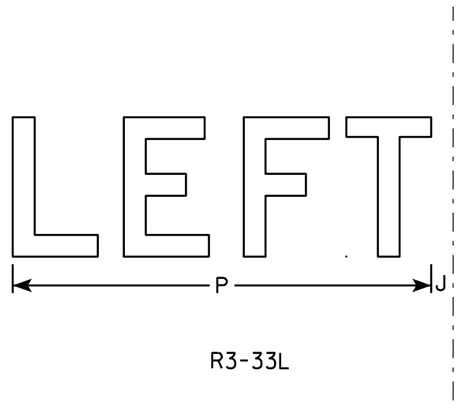
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 445	E



R3-33R



R3-33L

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3																											
4	78	36	2 1/4	3/4	1	8	7	6	30 3/4	1 1/4	4 3/4	27 7/8	28	7	21 1/8	24											19.5
5	78	36	2 1/4	3/4	1	8	7	6	30 3/4	1 1/4	4 3/4	27 7/8	28	7	21 1/8	24											19.5

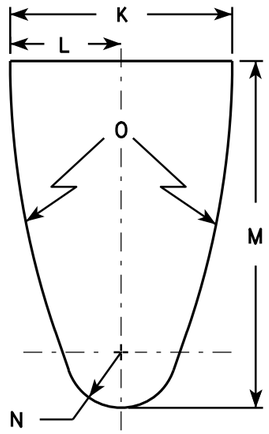
STANDARD SIGN
R3-33

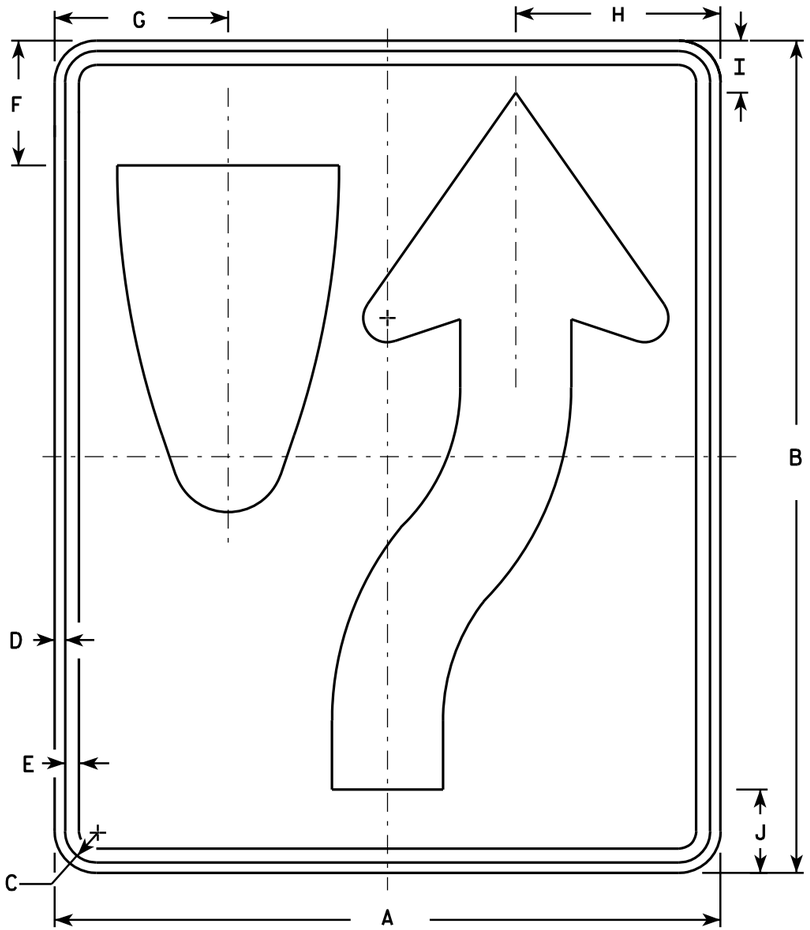
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/7/10 PLATE NO. R3-33.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 446 | E

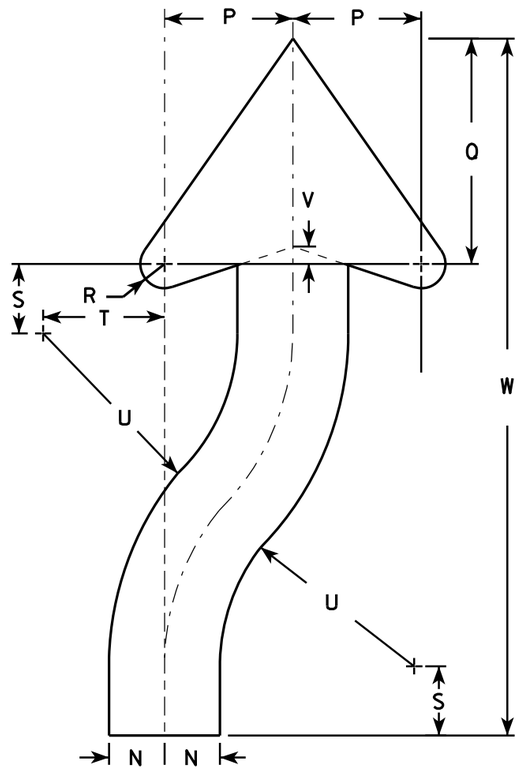




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

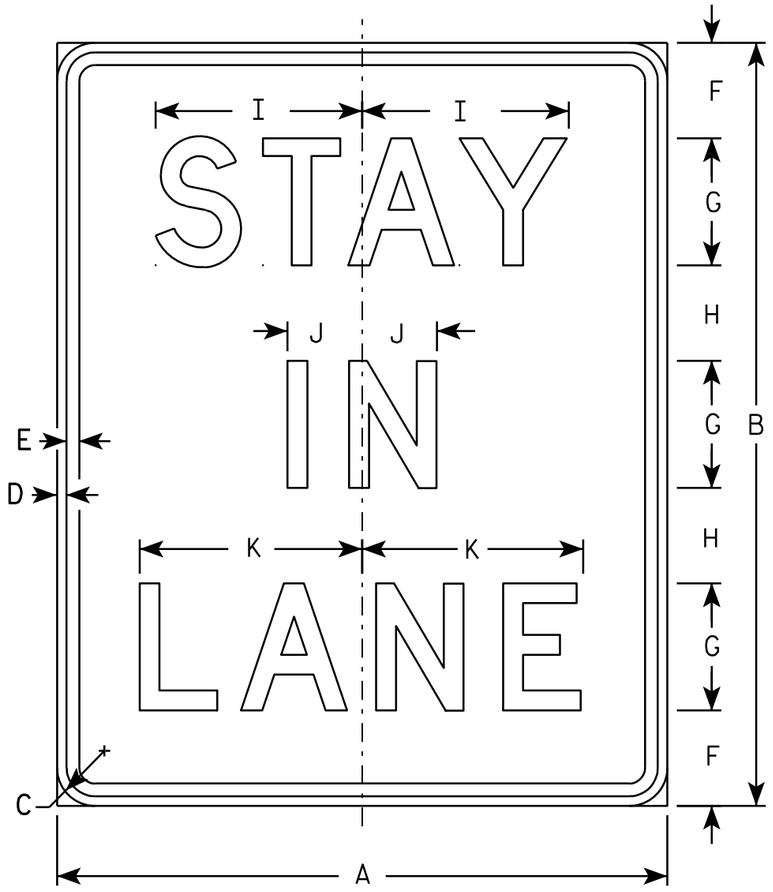
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 447	E



R4-9

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	3/8	3	4	3	6 1/2	2 3/8	7																3.0
2S	24	30	1 1/8	3/8	1/2	3 5/8	5	3 7/8	8 1/8	3	8 3/4																5.0
2M	24	30	1 1/8	3/8	1/2	3 5/8	5	3 7/8	8 1/8	3	8 3/4																5.0
3	36	48	1 3/8	1/2	5/8	8 1/4	7	5 1/4	11 3/8	4 1/8	12 1/4																12.0
4	36	48	1 3/8	1/2	5/8	8 1/4	7	5 1/4	11 3/8	4 1/8	12 1/4																12.0
5	48	60	2 1/4	3/4	1	7 1/2	10	7 1/2	16 1/4	5 7/8	17 1/2																20.0

STANDARD SIGN
R4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-9.2

PROJECT NO:

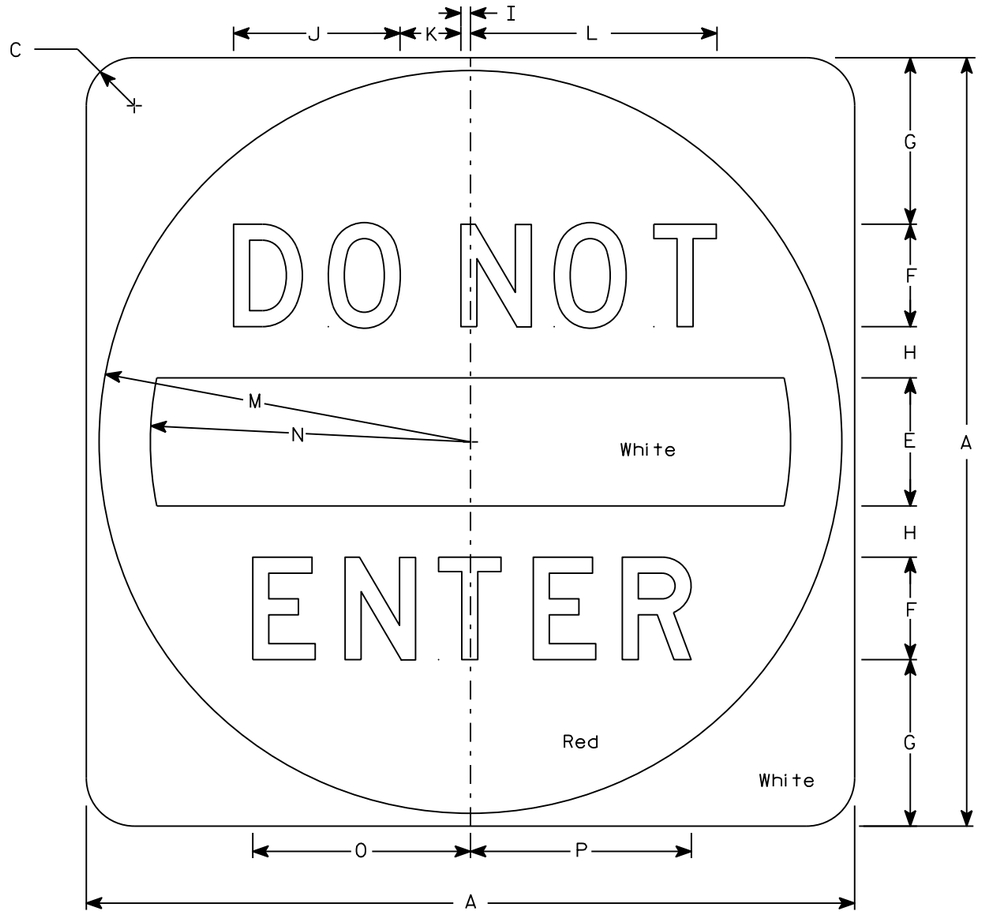
SHEET NO: 448 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R49.DGN PLOT DATE : 25-MAR-2011 14:17 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

7

7



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

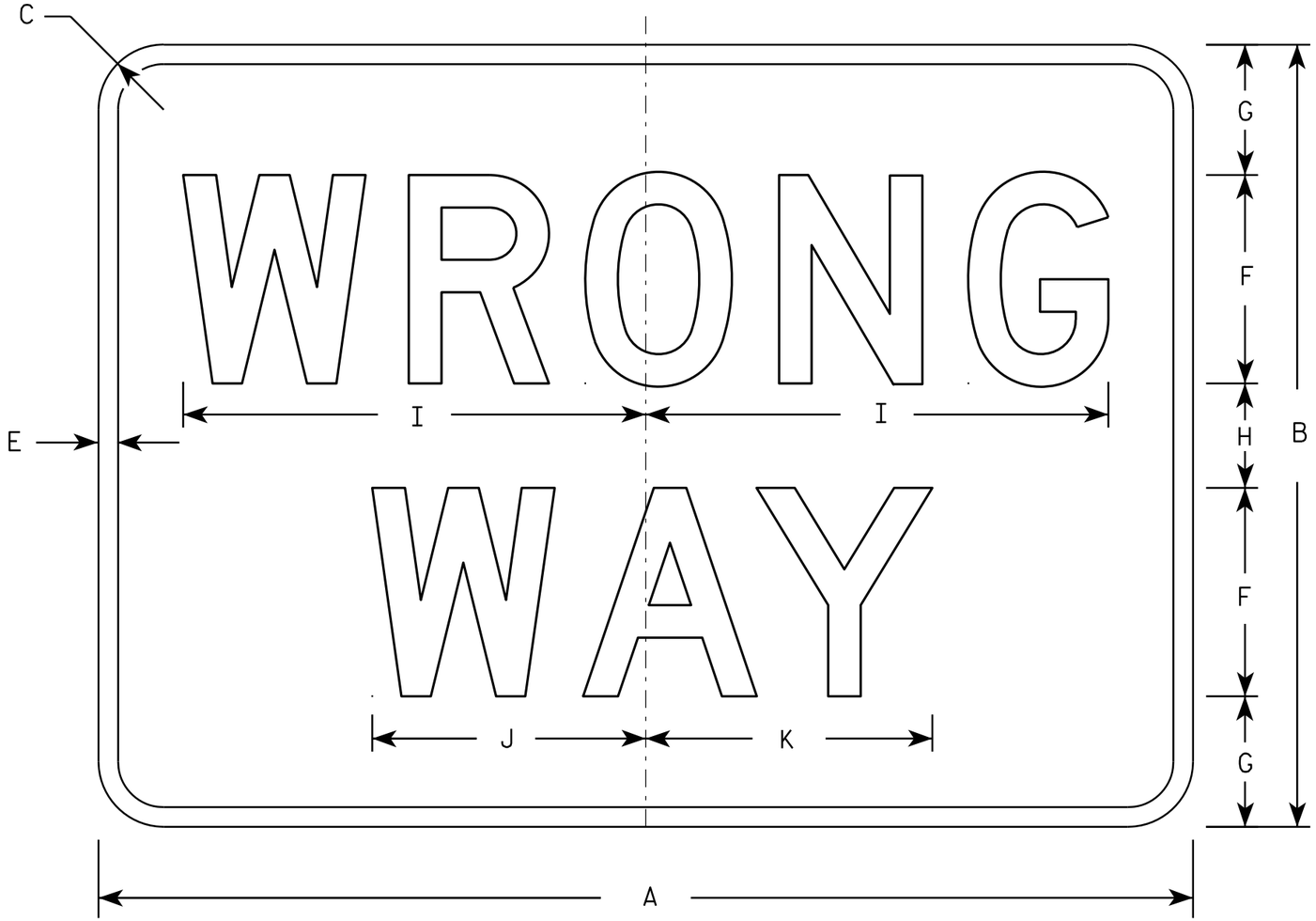
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 449 | E



R5-1A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 450	E



R5-57

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Lines 1, 2, and 5 are Series C.
   Lines 3 and 4 are Series B.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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

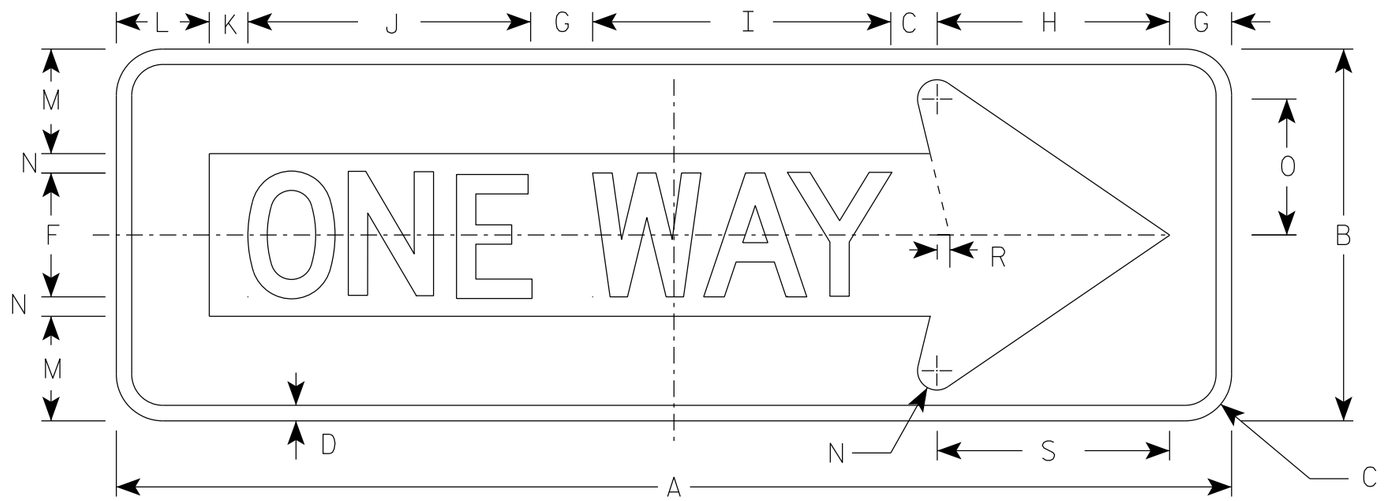
STANDARD SIGN
R5-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-57.10

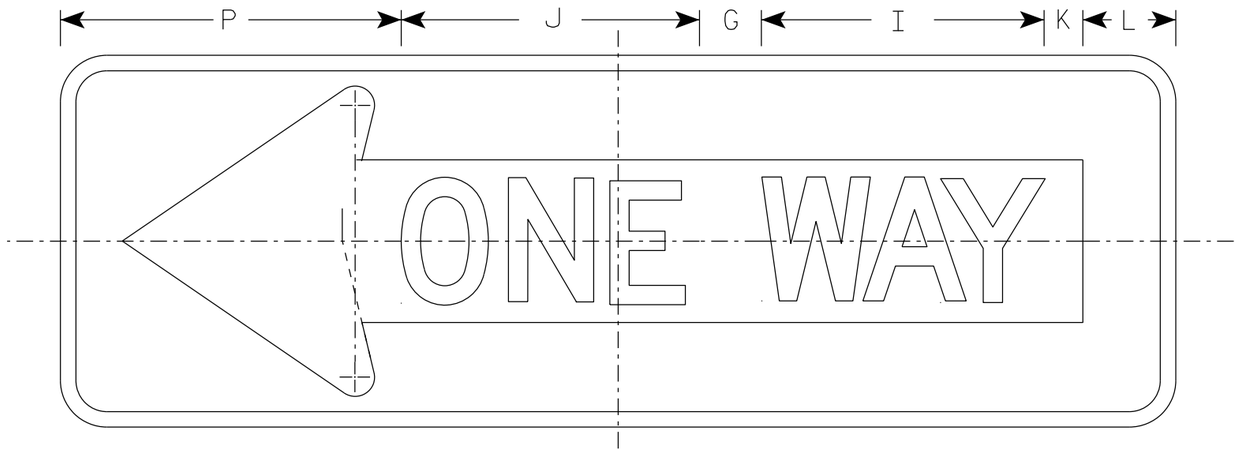
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 451	E



R6-1R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D



R6-1L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 1/2	1/2		4	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4 3/8	11		3/8	7 1/2								3.0
2M	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
3	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
4	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
5																											

STANDARD SIGN
R6-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

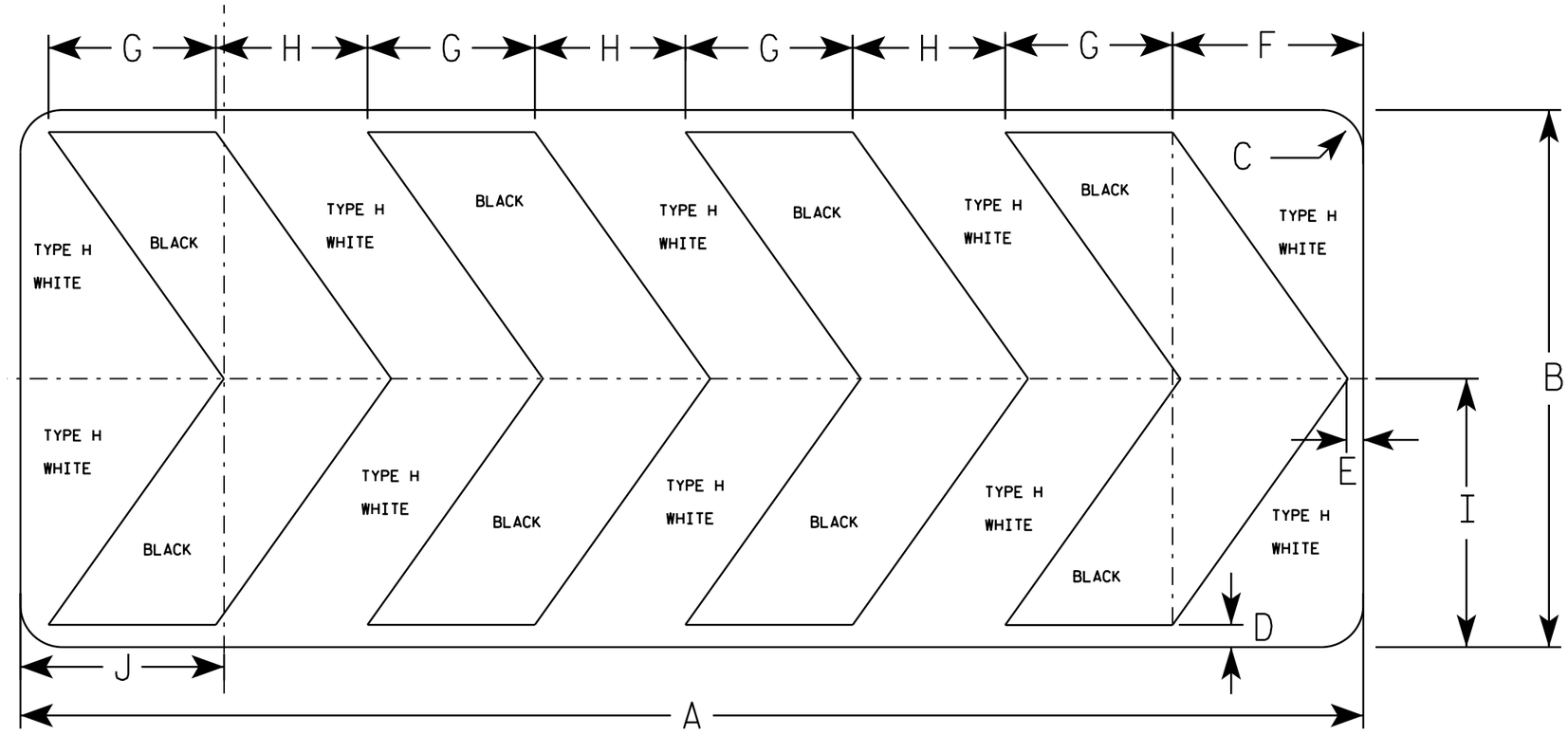
DATE 07/11/18 PLATE NO. R6-1.3

PROJECT NO:

SHEET NO: 452 E

NOTES

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



R6-4B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
R6-4B

WISCONSIN DEPT OF TRANSPORTATION

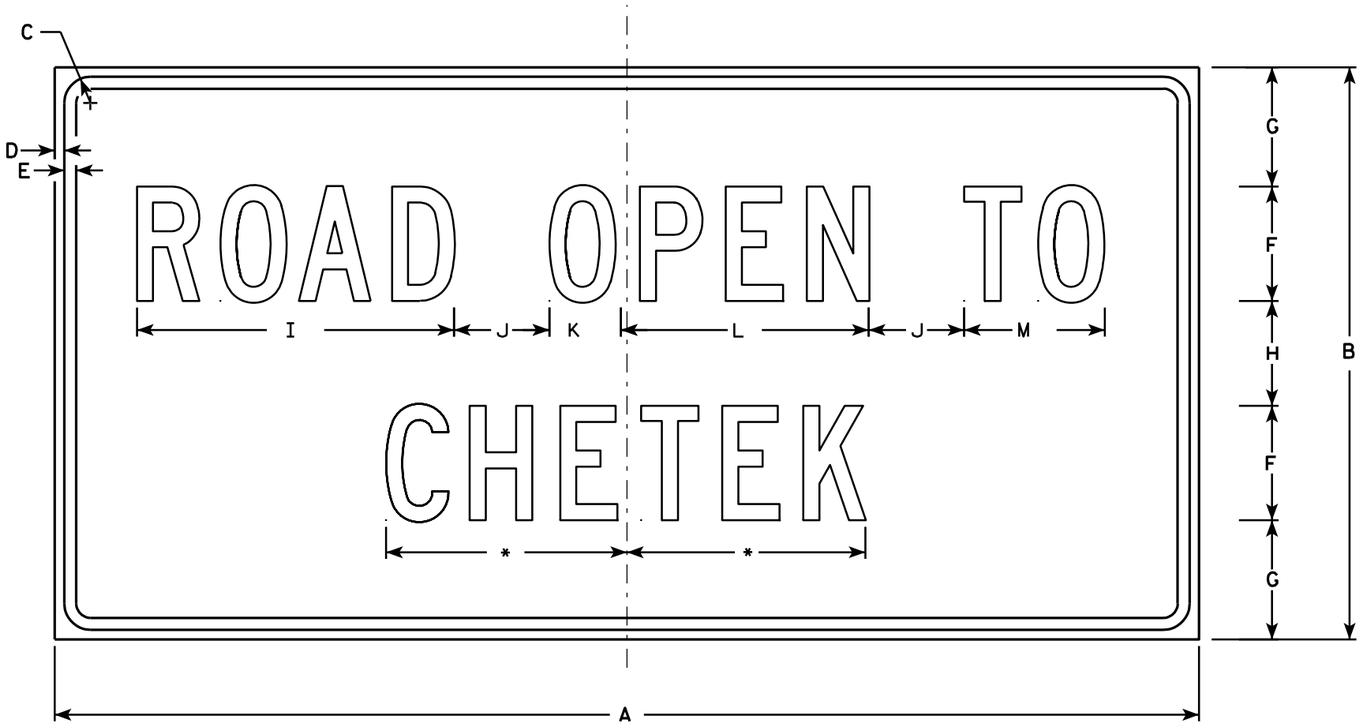
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/14 PLATE NO. R6-4.3

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R64B.DGN PLOT DATE : 21-AUG-2014 15:01 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



R10-61

NOTES

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

*See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 3/8	1/2	5/8	4	5 1/2	5	10 3/4	2	2 1/8	8 3/8	4 5/8														6.0
2S	60	30	1 3/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
2M	60	30	1 3/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
3																											
4																											
5																											

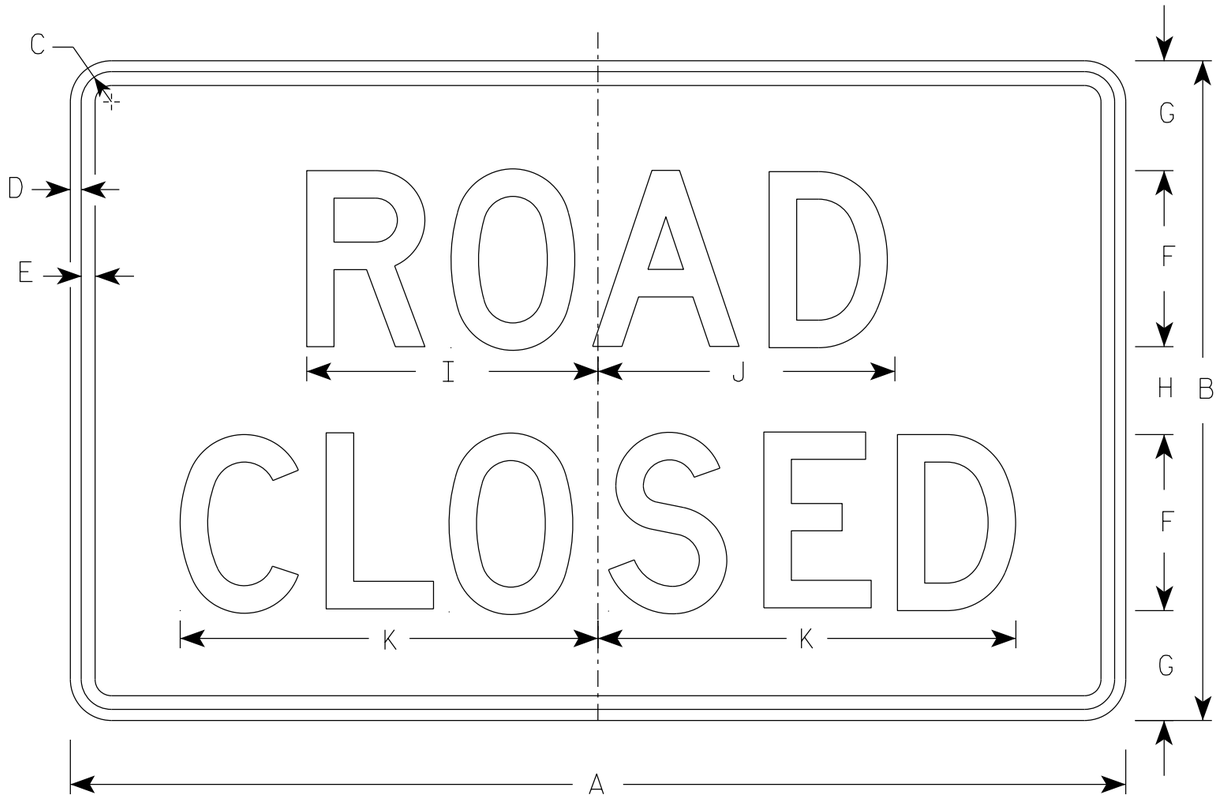
STANDARD SIGN
R10-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-61.5

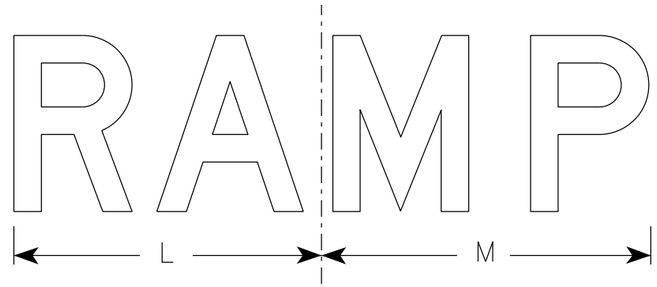
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 454	E



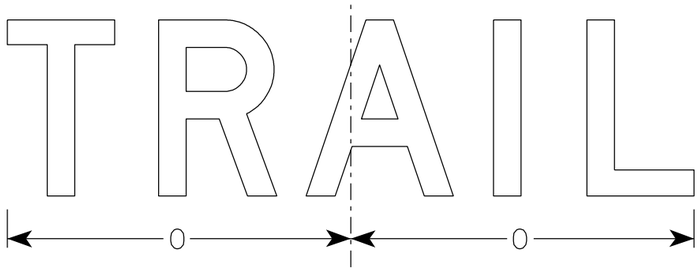
R11-2

NOTES

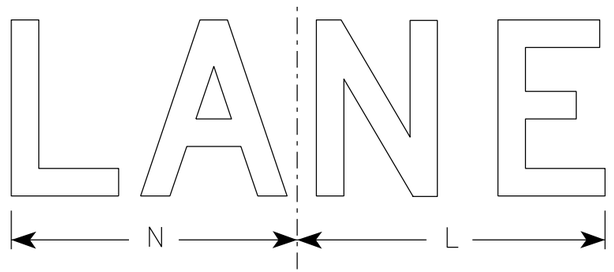
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the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



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

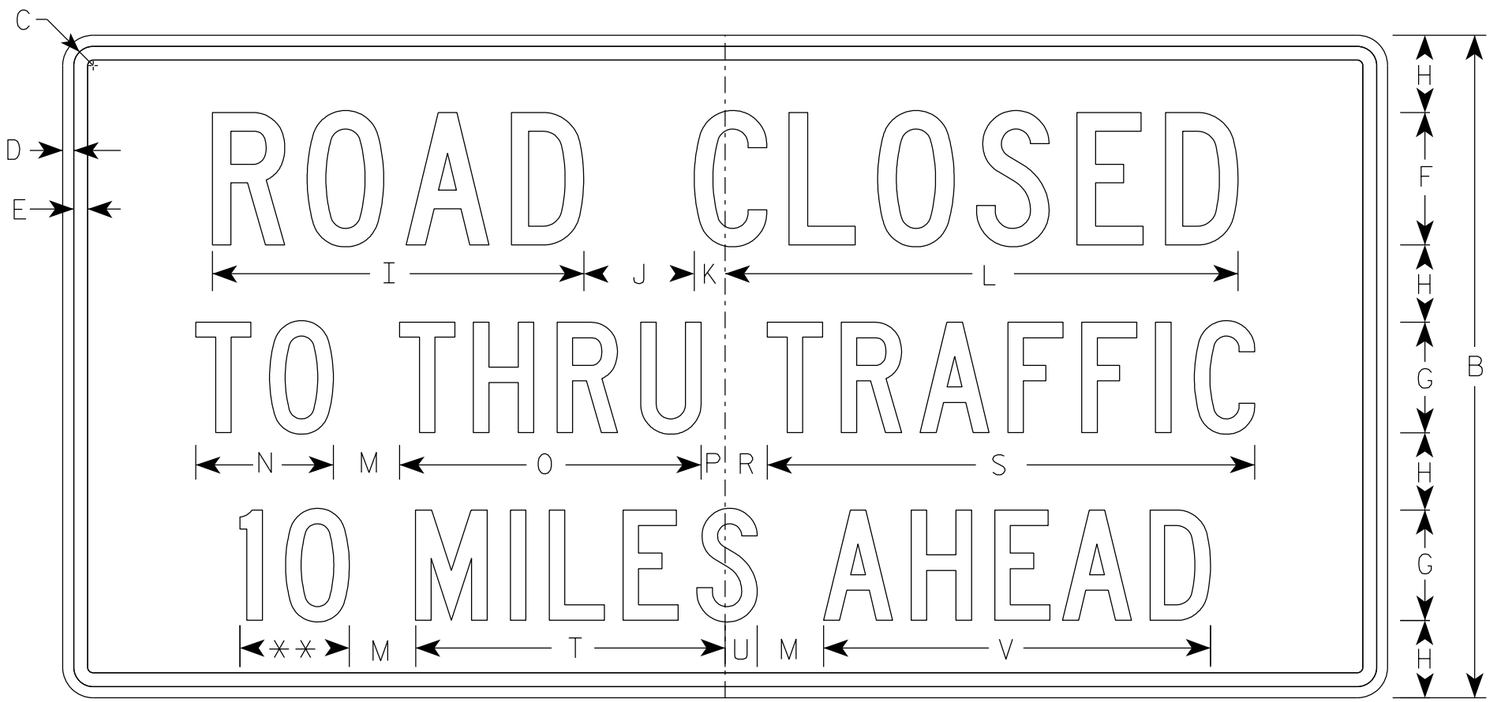
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 455 E

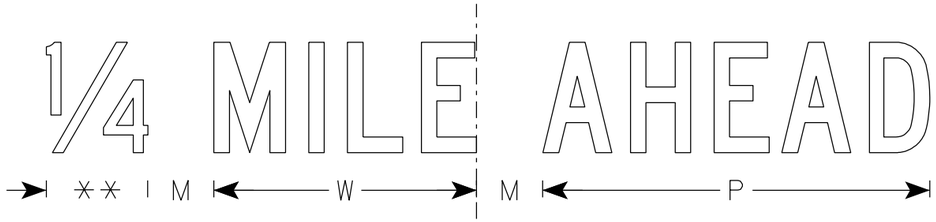
NOTES

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



R11-3

** See Note 5



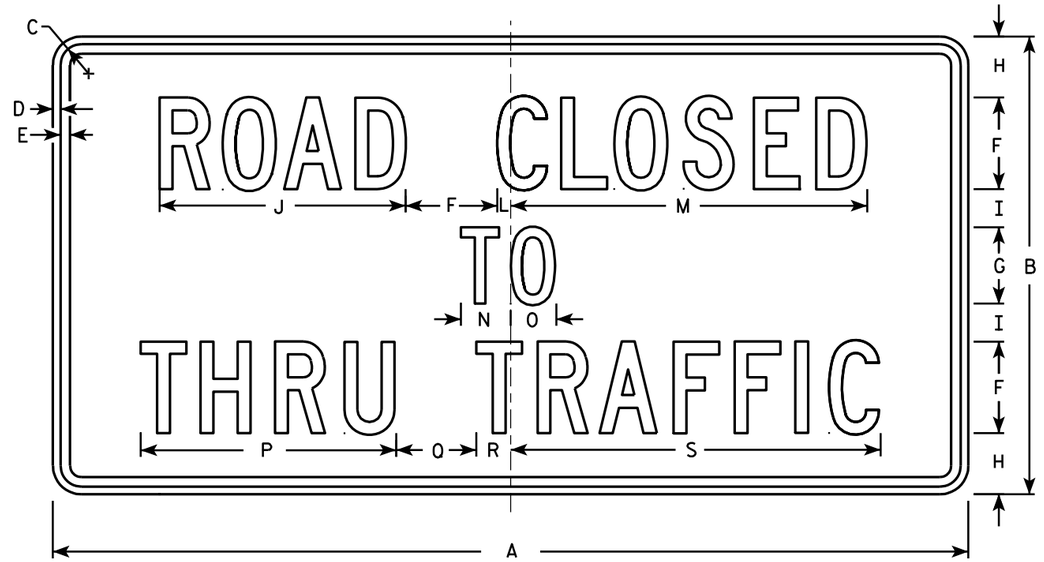
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/4	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 6/14/2021 PLATE NO. R11-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 456	E



R11-4

NOTES

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

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

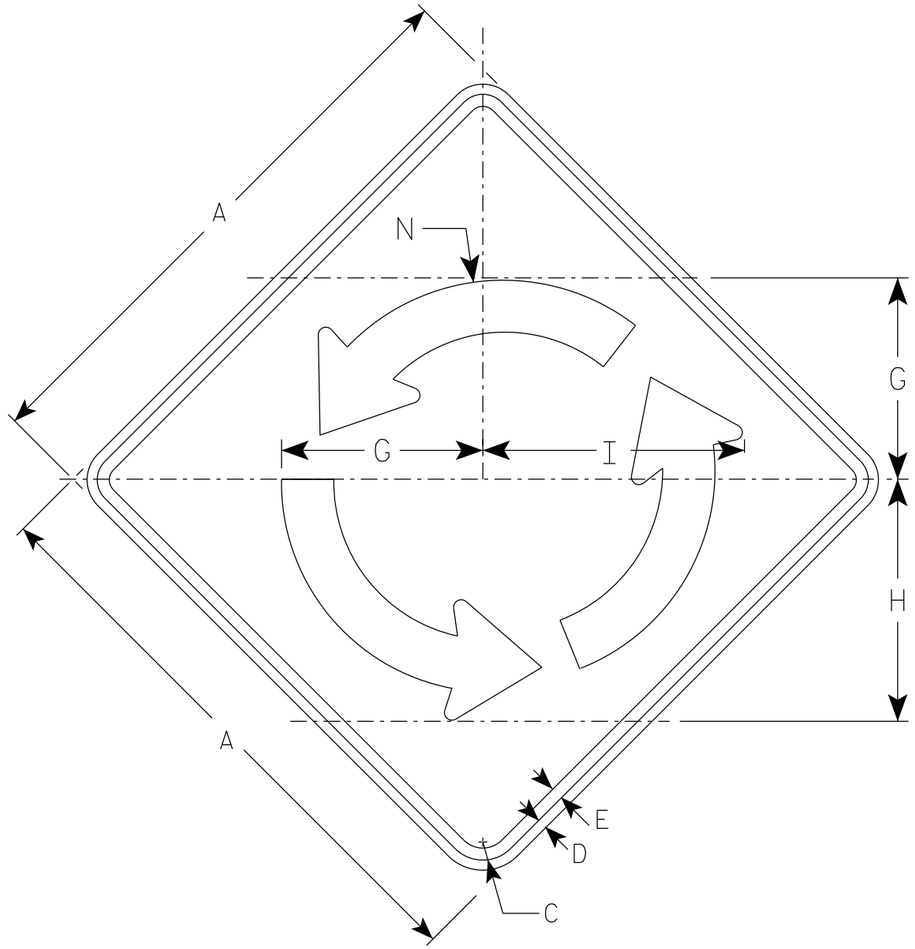
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 457 | E

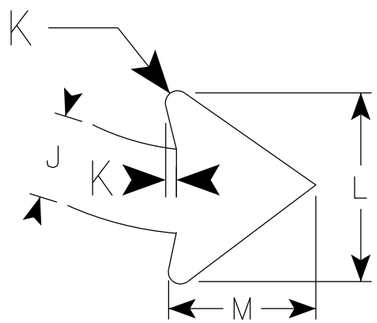


W2-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black

Arrow Detail



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Area sq. ft.
1																									
2S	30		1 3/8	1/2	5/8		10 3/8	12 1/2	13 1/2	2 3/4	3/8	6	4 3/4	11 1/8											6.25
2M	30		1 3/8	1/2	5/8		10 3/8	12 1/2	13 1/2	2 3/4	3/8	6	4 3/4	11 1/8											6.25
3	36		1 5/8	5/8	3/4		12 1/2	15	16 1/4	3 1/4	1/2	7 3/8	5 3/4	13 3/8											9.00
4	48		2 1/4	3/4	1		16 5/8	20	16 1/4	4 3/8	5/8	9 3/4	7 5/8	17 7/8											16.0
5																									

STANDARD SIGN
W2-6

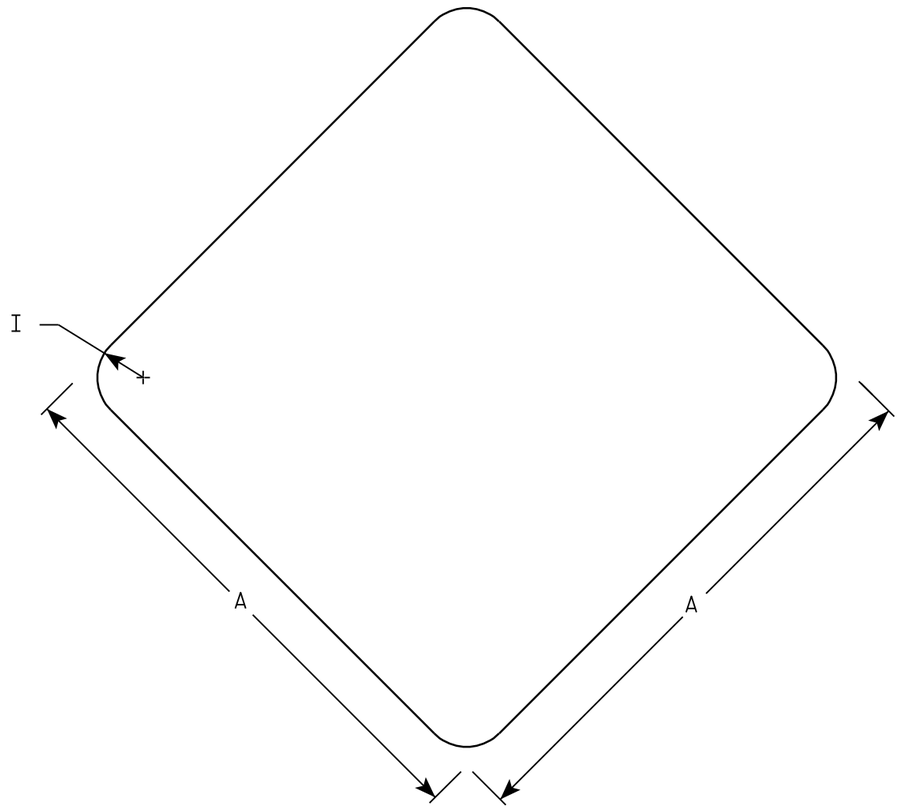
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/21 PLATE NO. W2-6.7

PROJECT NO:

SHEET NO: 458 E



W5-54

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

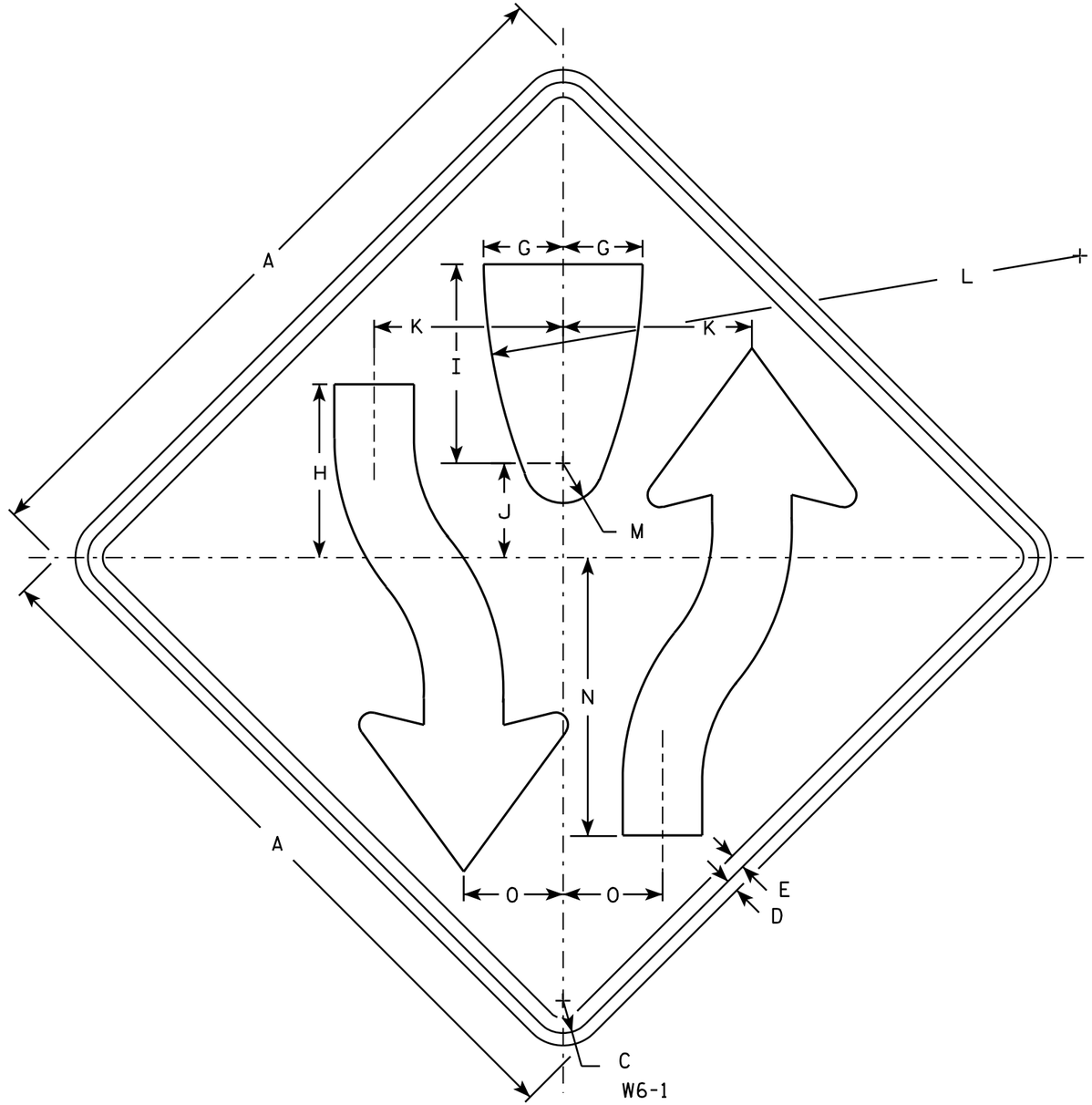
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

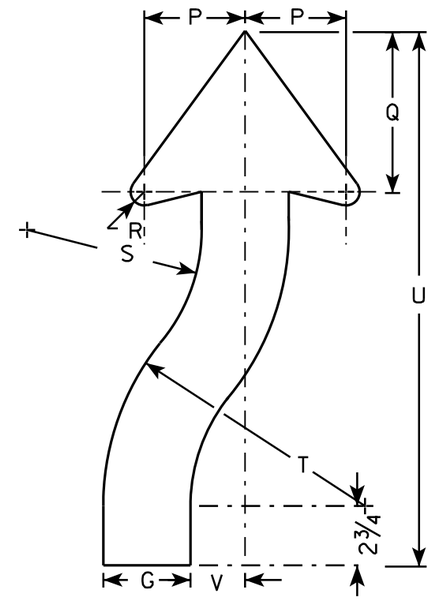
DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 459 | E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

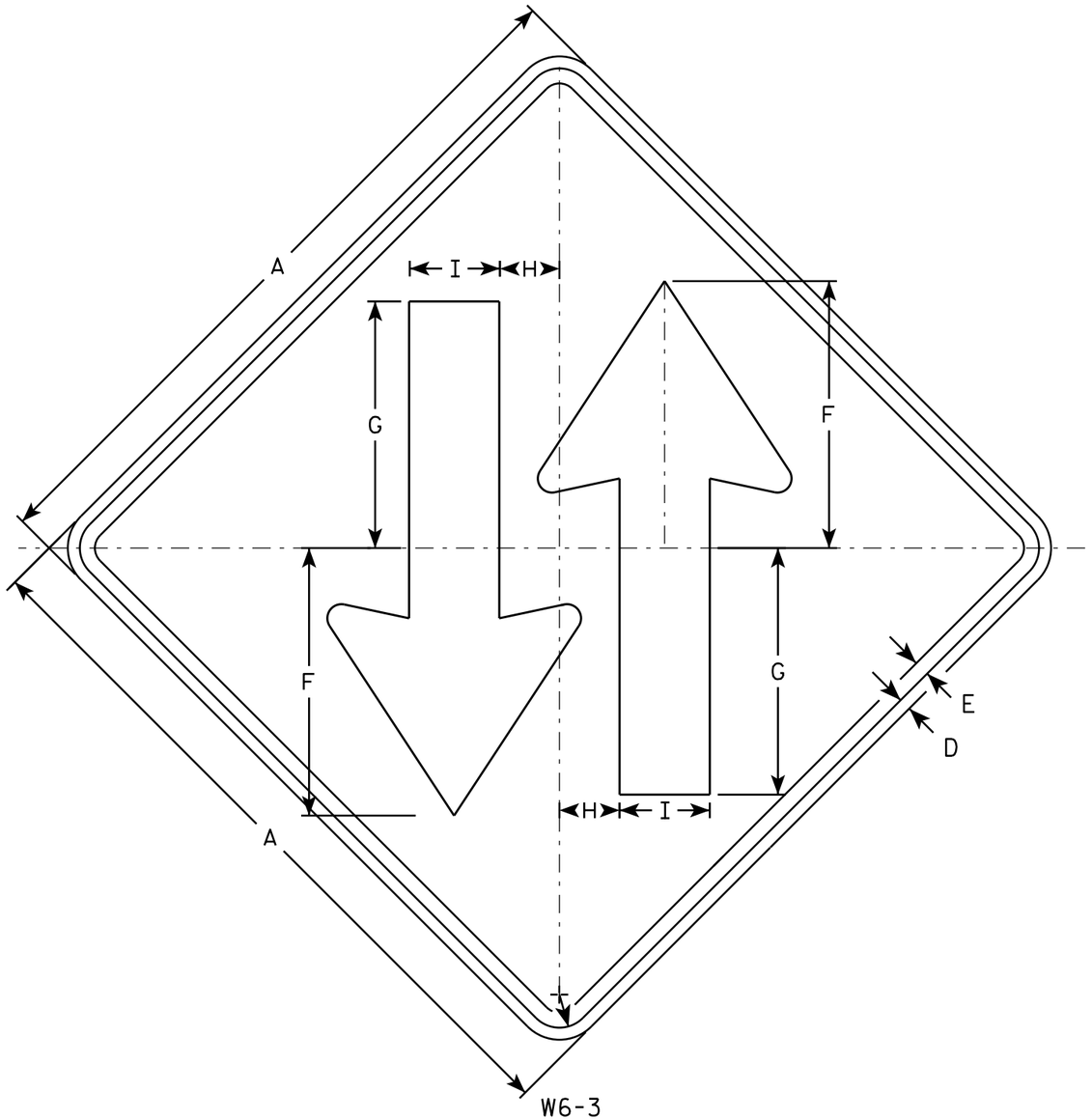
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 460	E

7

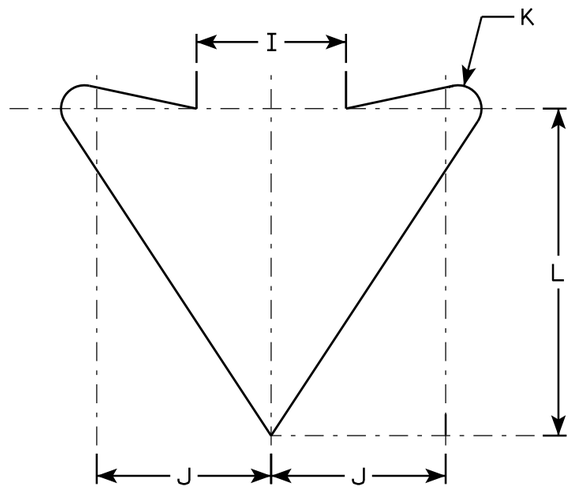
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42



W6-3

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	11 1/8	10 1/4	2 1/2	3 3/4	4 3/8	5/8	8 1/4															6.25
2S	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
2M	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
3																											
4	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0
5	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0

STANDARD SIGN
W6-3

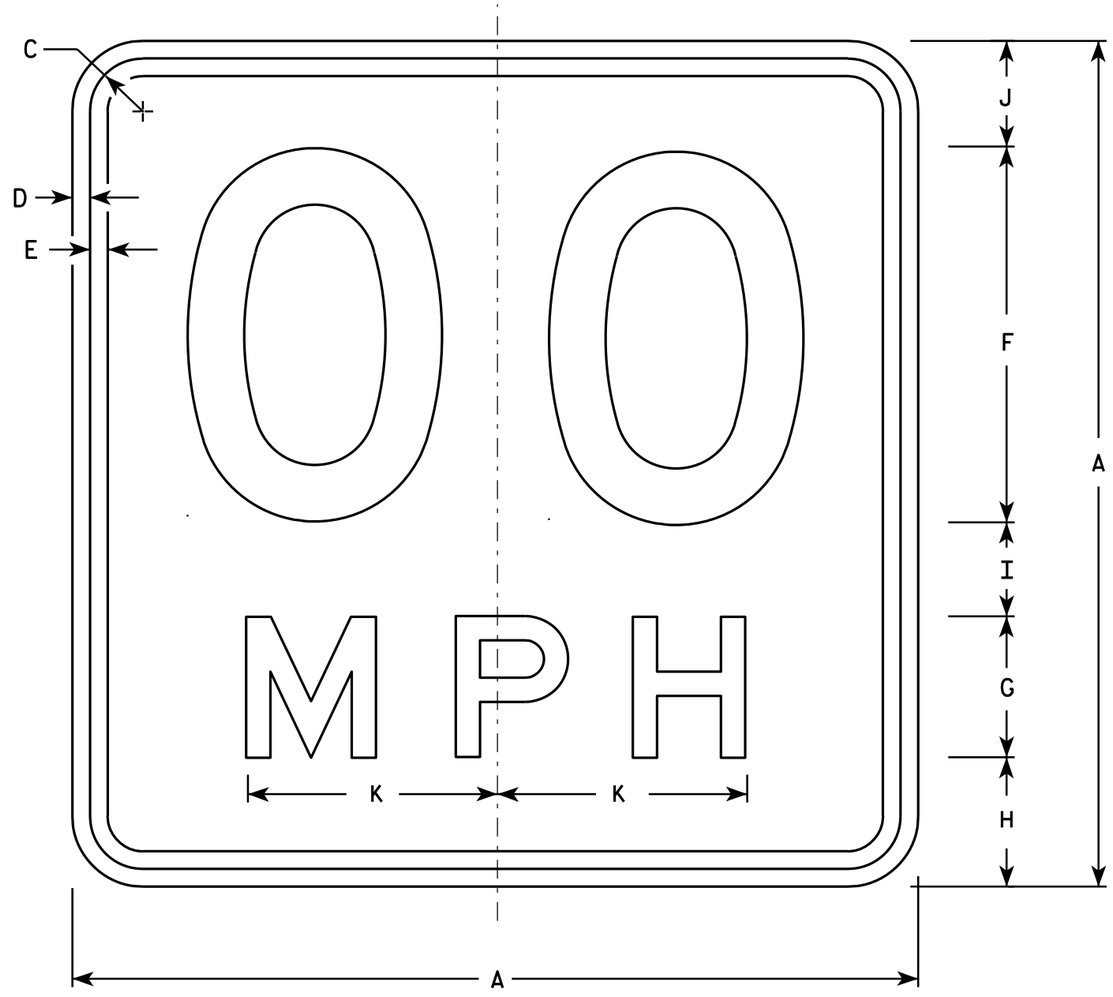
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/16 PLATE W6-3.11

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W63.DGN PLOT DATE : 10-MAR-2016 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000 WISDOT/CADDS SHEET 42



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

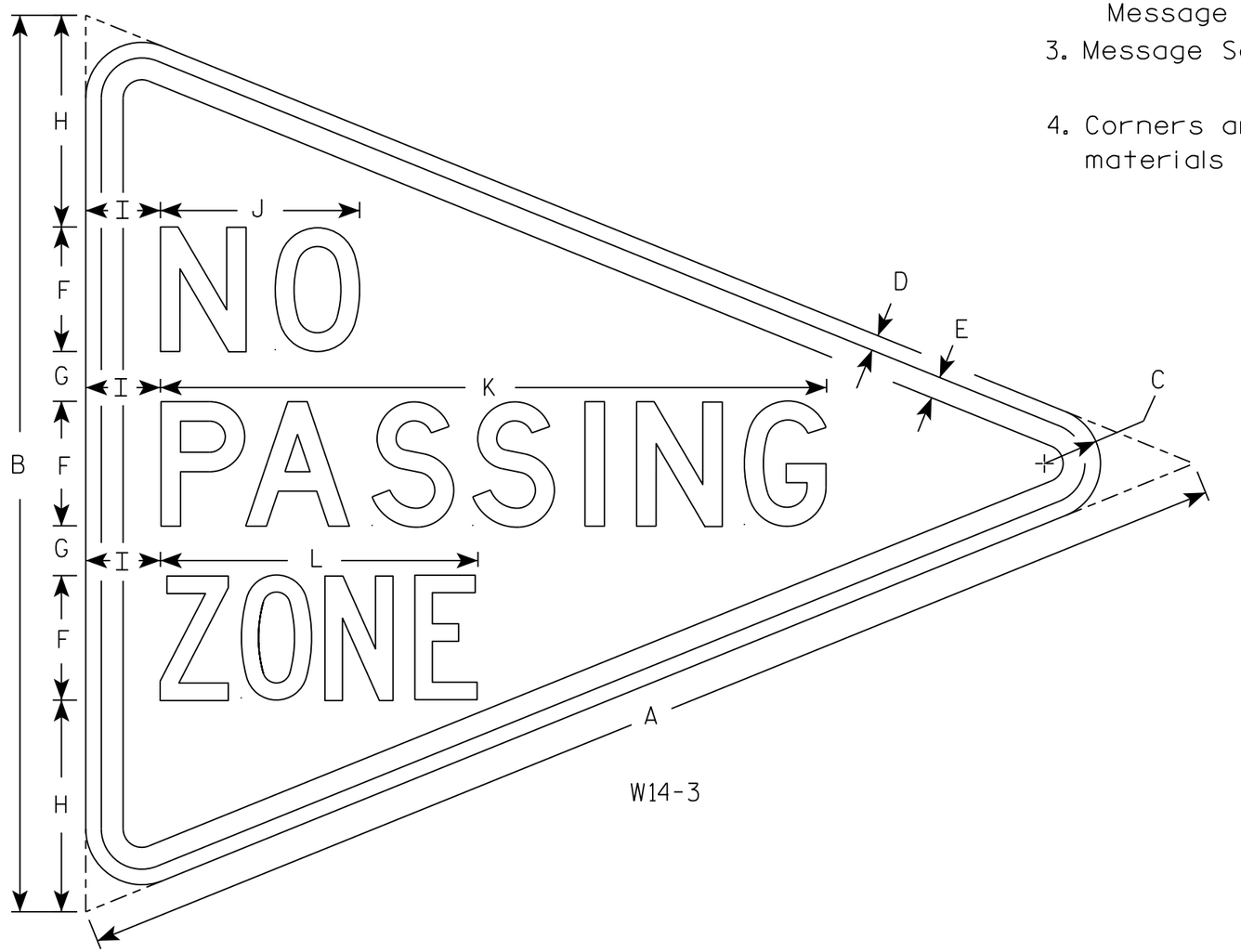
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 462 | E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 463 | E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W143.DGN PLOT DATE : 21-MAR-2017 08:48 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 5.650195:1.000000

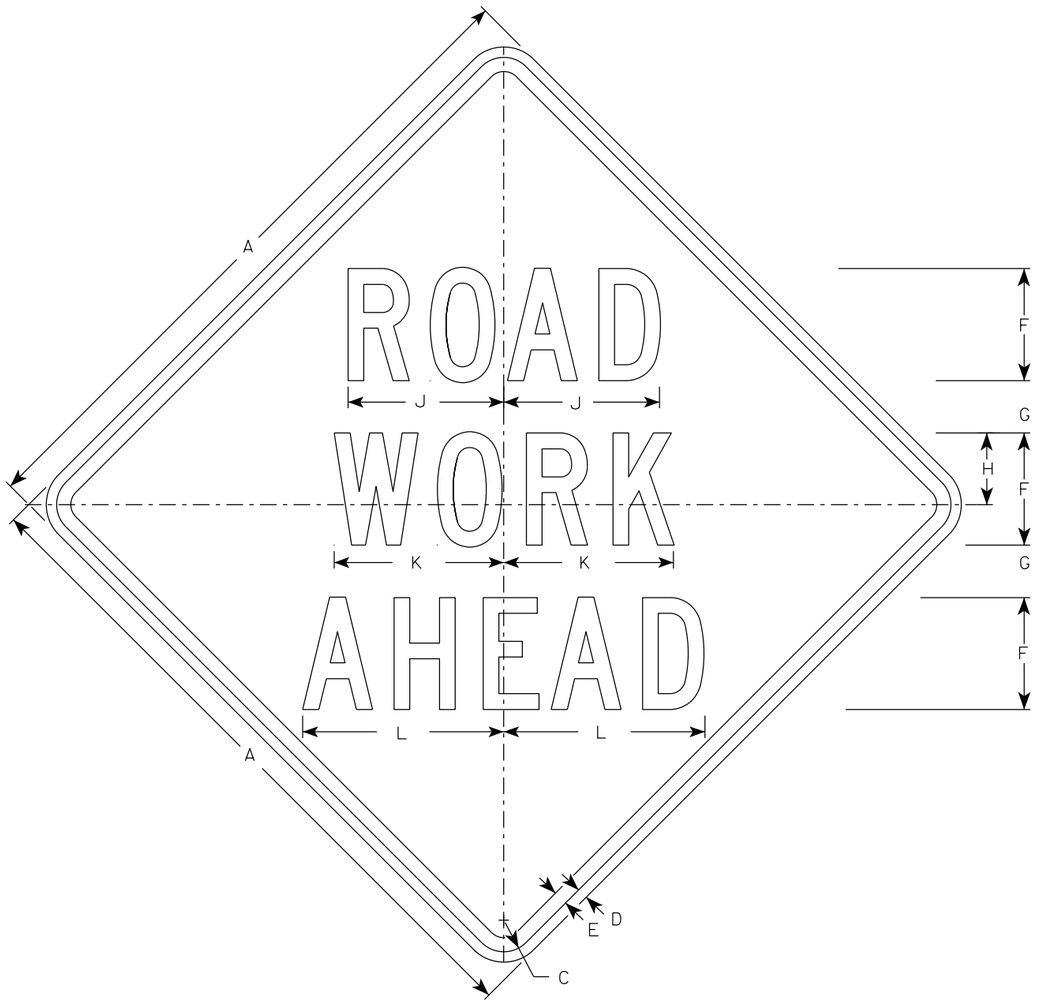
WISDOT/CADDS SHEET 42

7

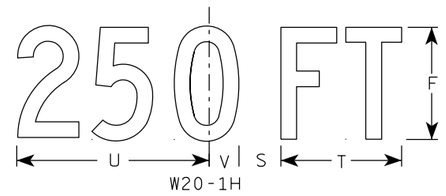
7

NOTES

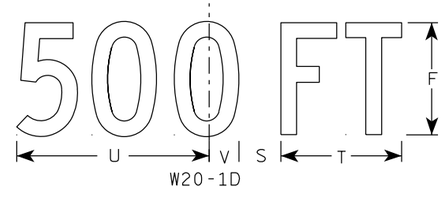
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1A



W20-1H



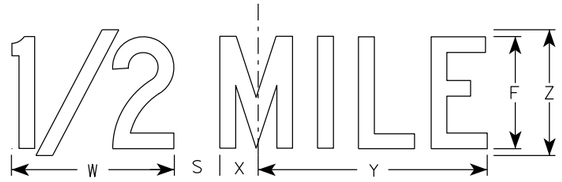
W20-1D



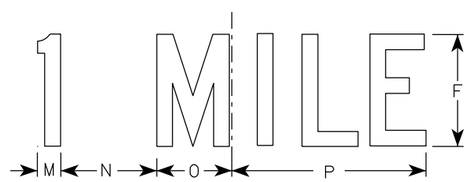
W20-1C



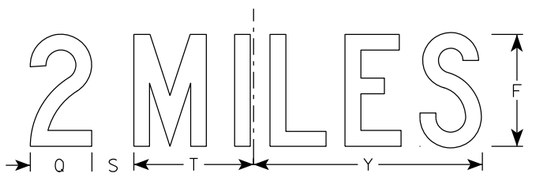
W20-1B



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

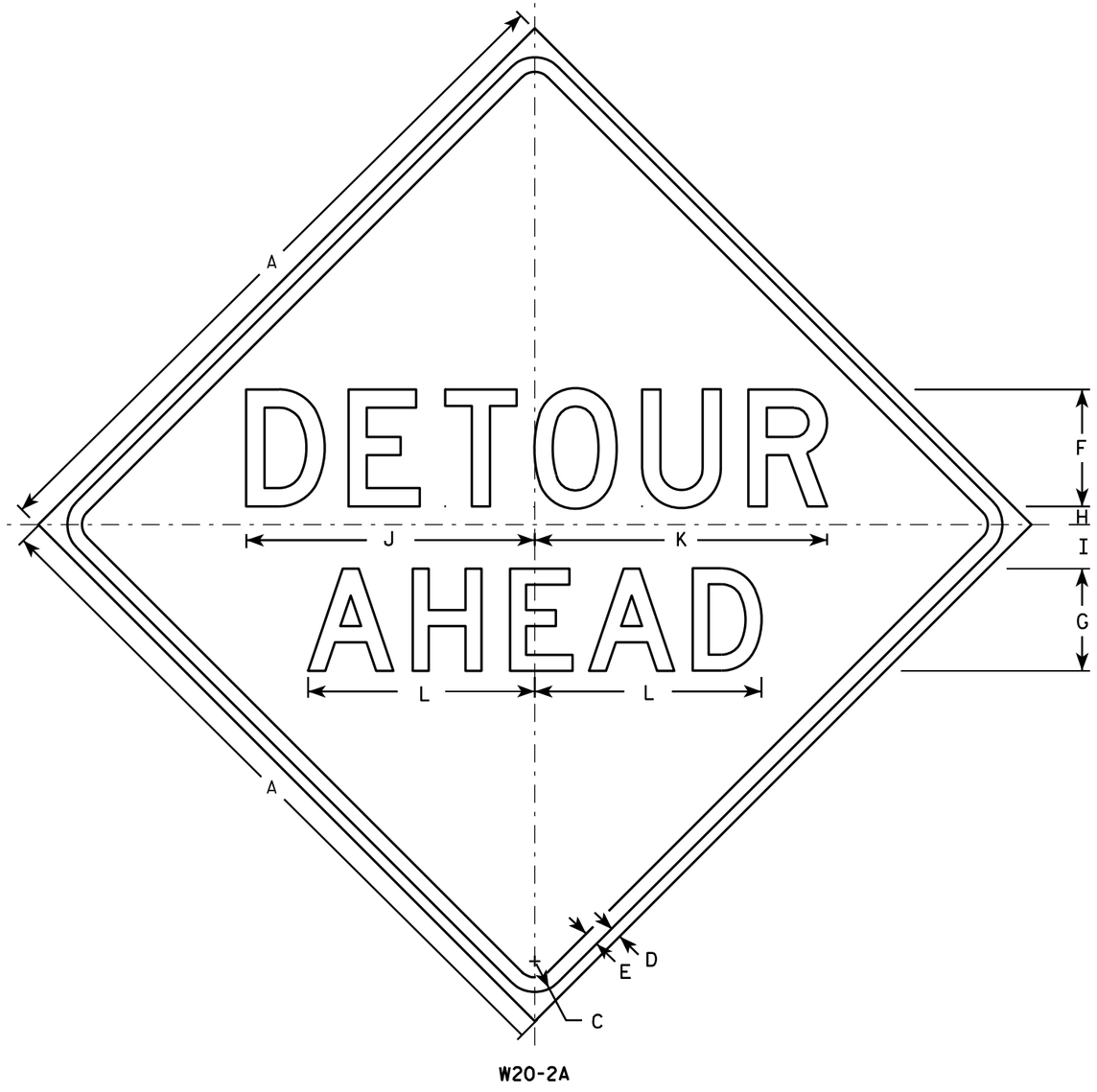
SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

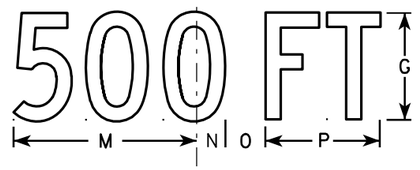
WISDOT/CADDS SHEET 42

7

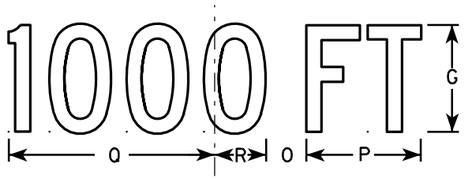
7



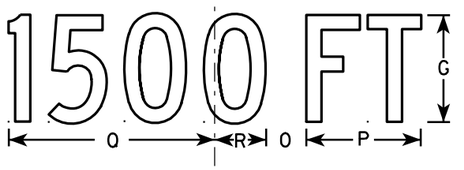
W20-2A



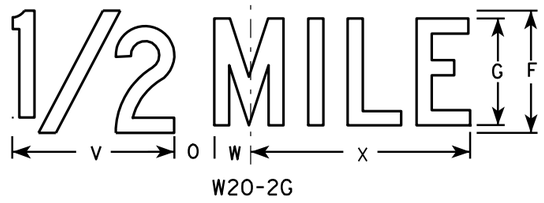
W20-2D



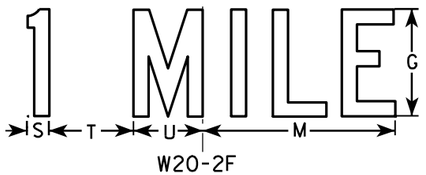
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

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

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

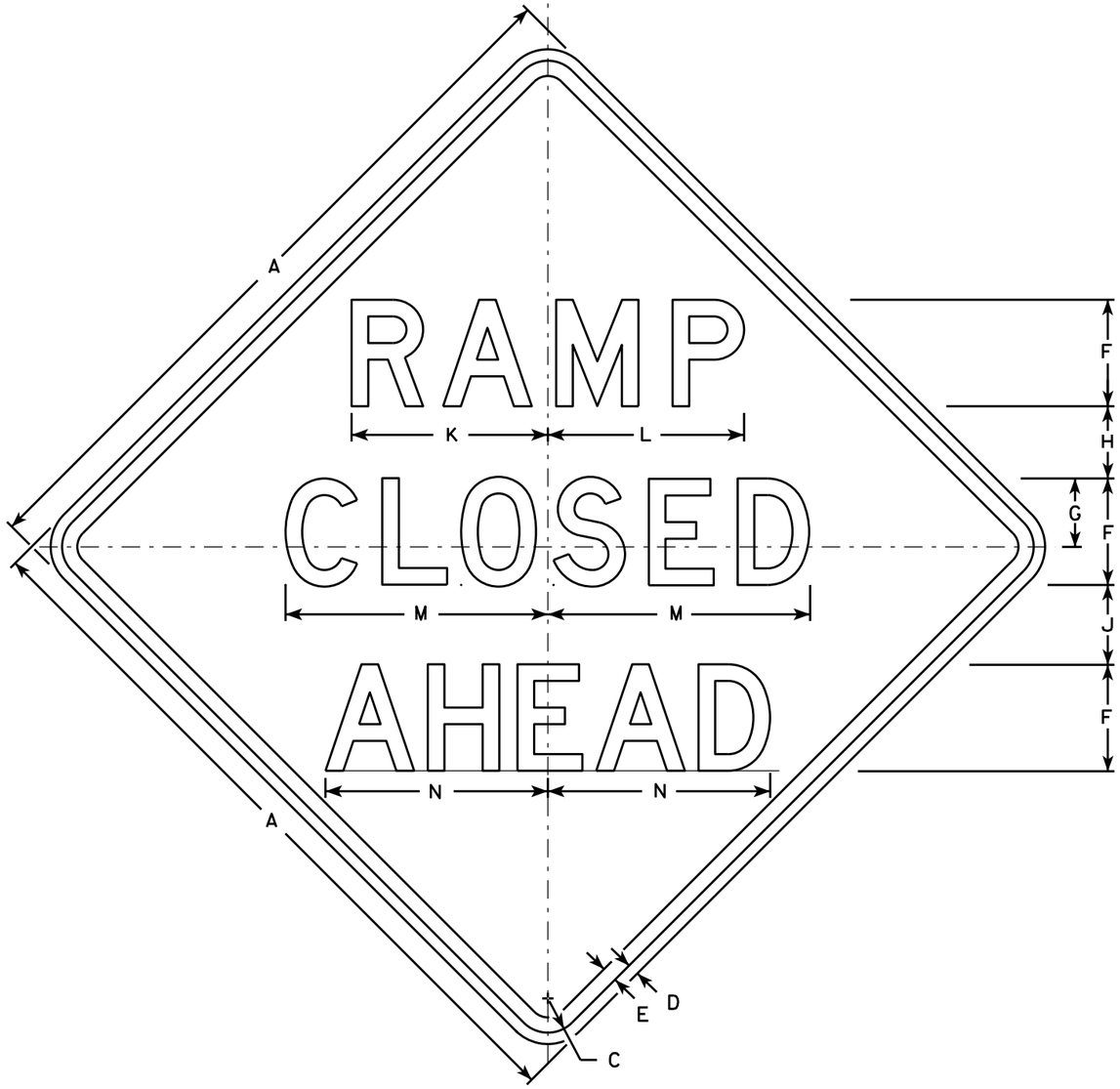
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

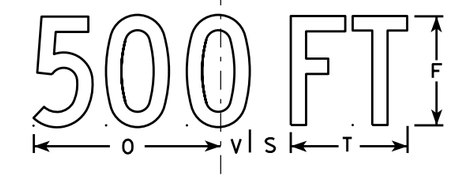
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

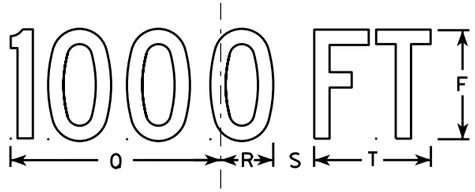
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 465	E



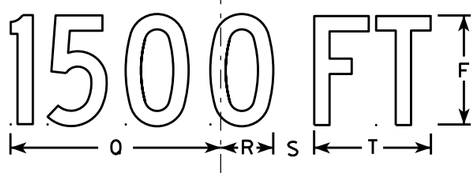
W20-53A



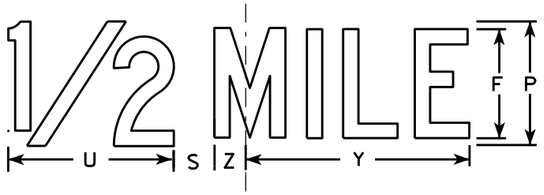
W20-53D



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

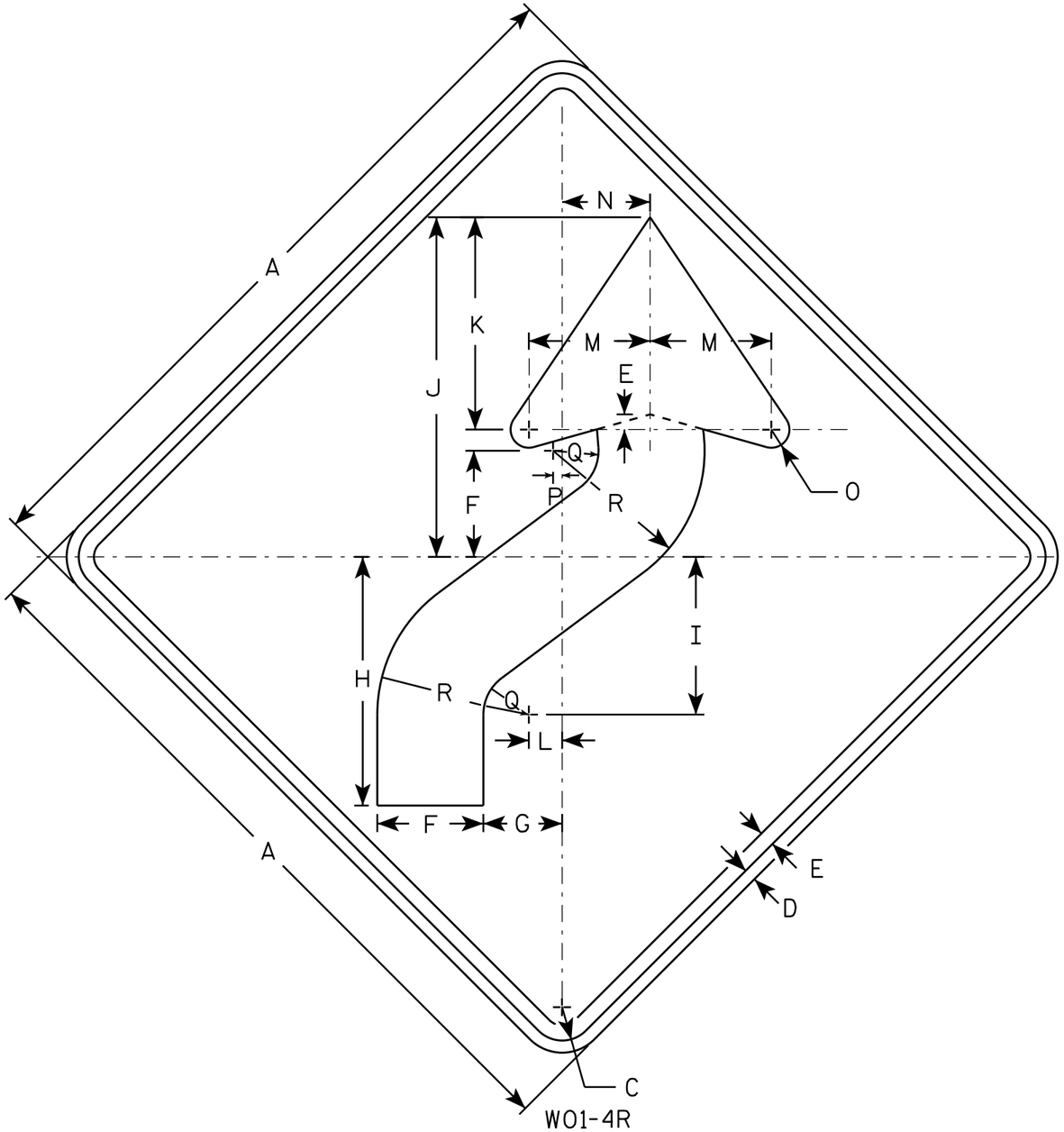
WISCONSIN DEPT OF TRANSPORTATION

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



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

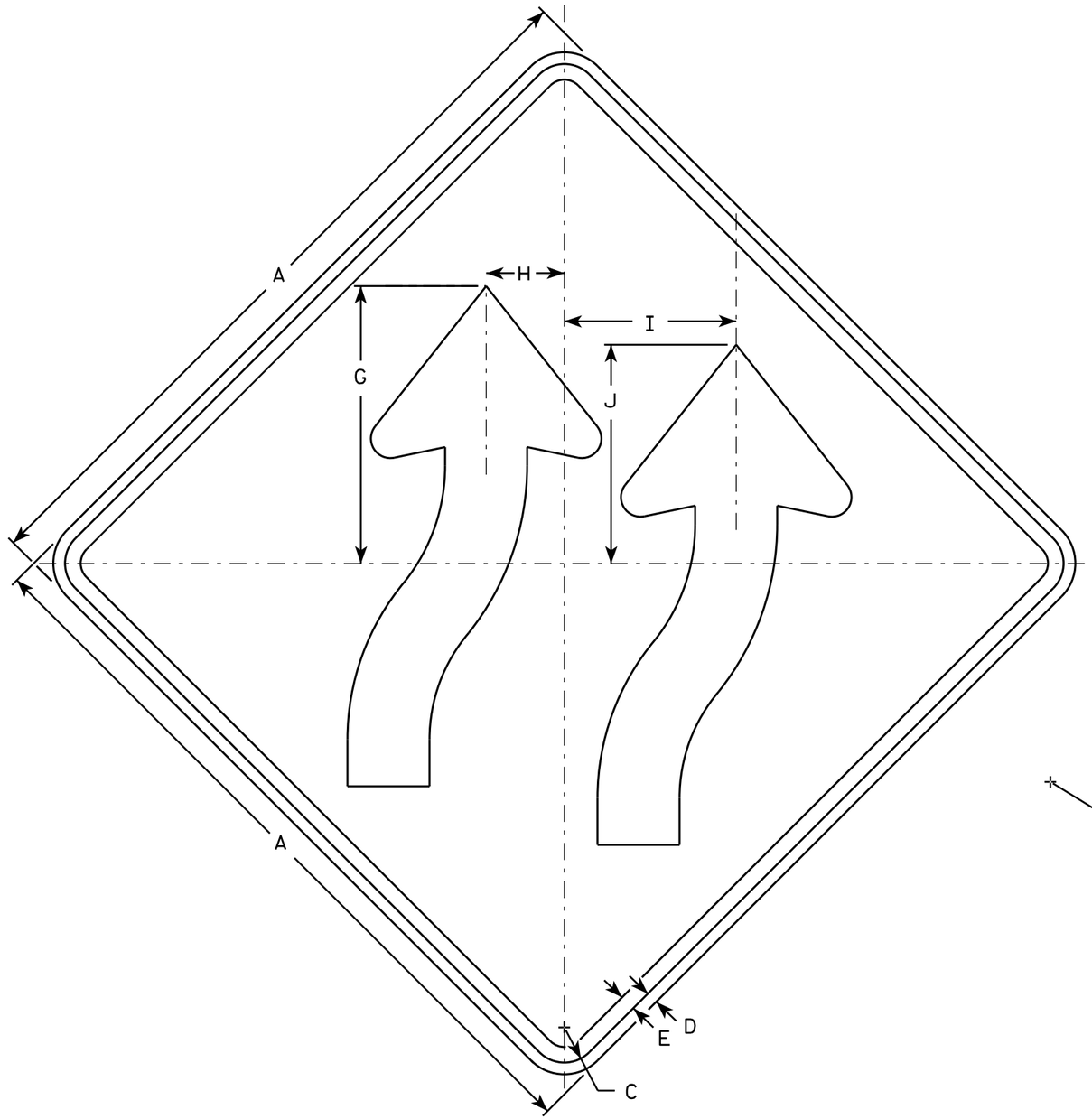
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

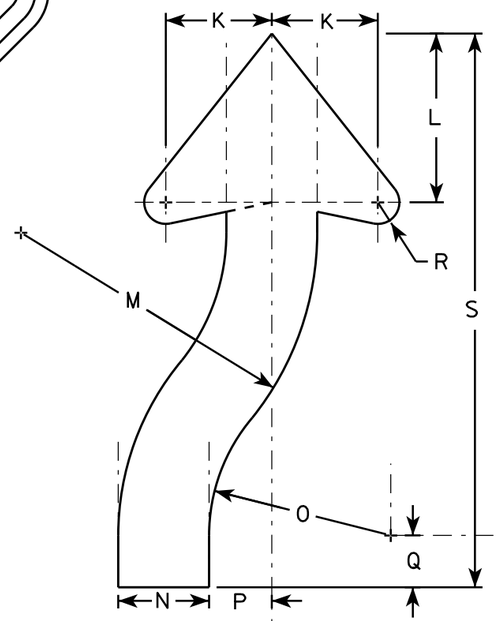
DATE 11/18/13 PLATE NO W01-4.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42



W01-4bR



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4bL is the same as W014-bR exept arrows are reversed along the vertical centerline

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		13 3/8	3 3/4	8 1/4	10 1/2	4 5/8	7 3/8	12 7/8	3 7/8	7 7/8	2 3/4	2 1/4	7/8	24								9.0
2S	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
2M	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
3	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
4	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
5	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0

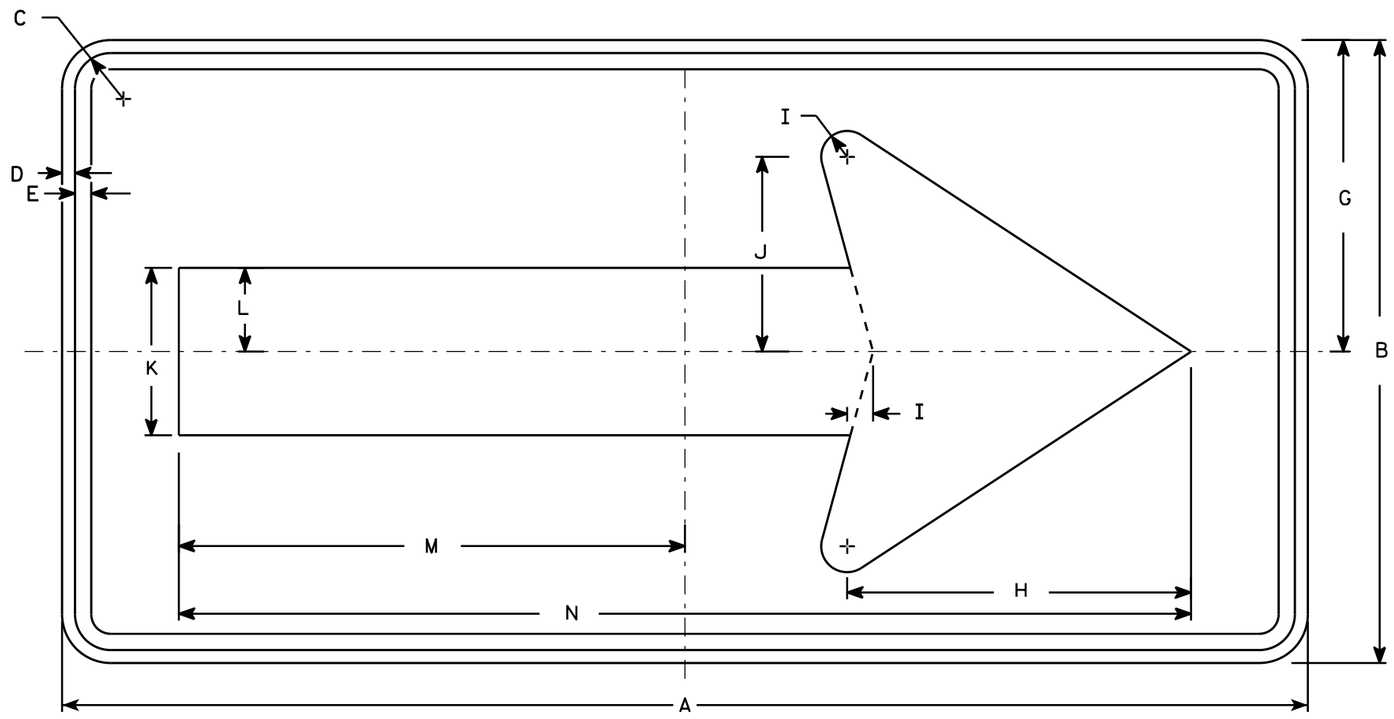
STANDARD SIGN
W01-4b

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-4b.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W01-6

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

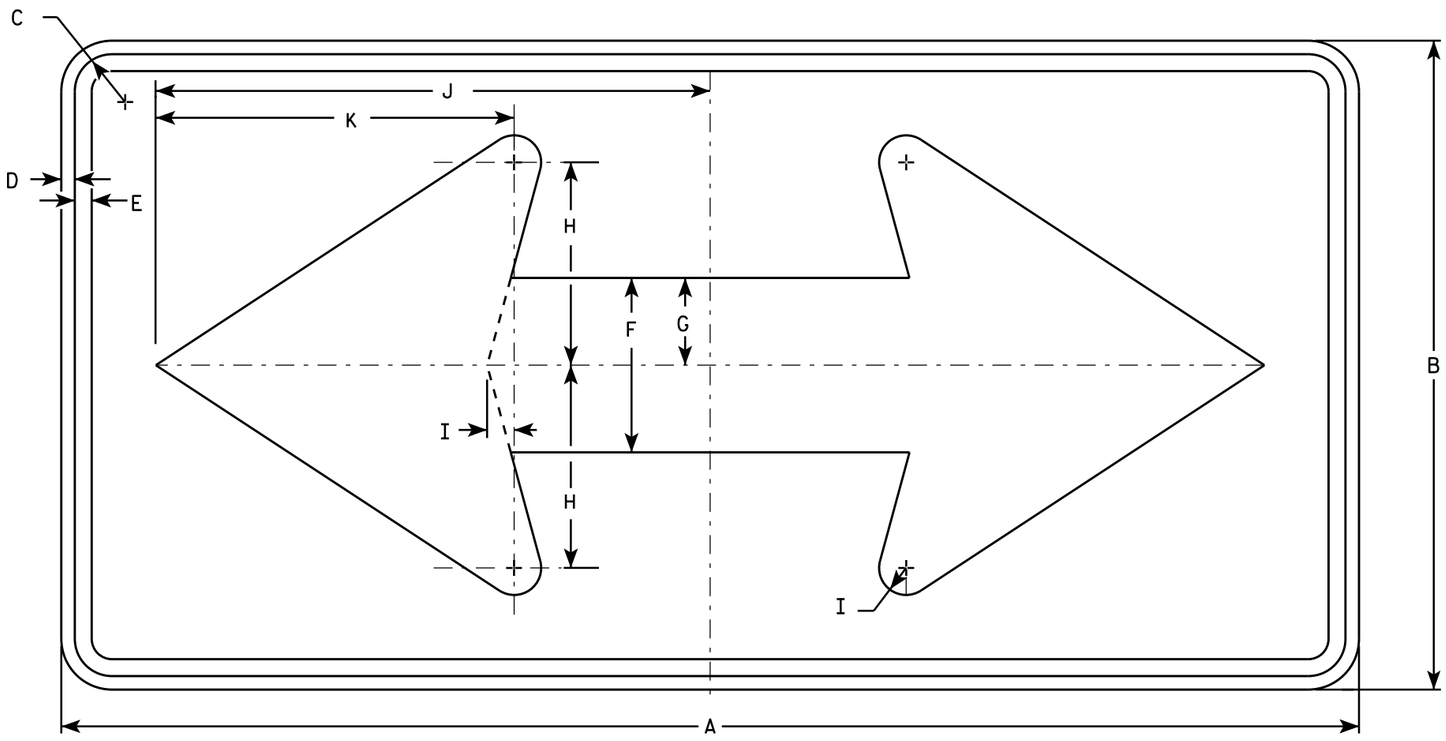
STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE W01-6.1

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



W01-7

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5

STANDARD SIGN
W01-7

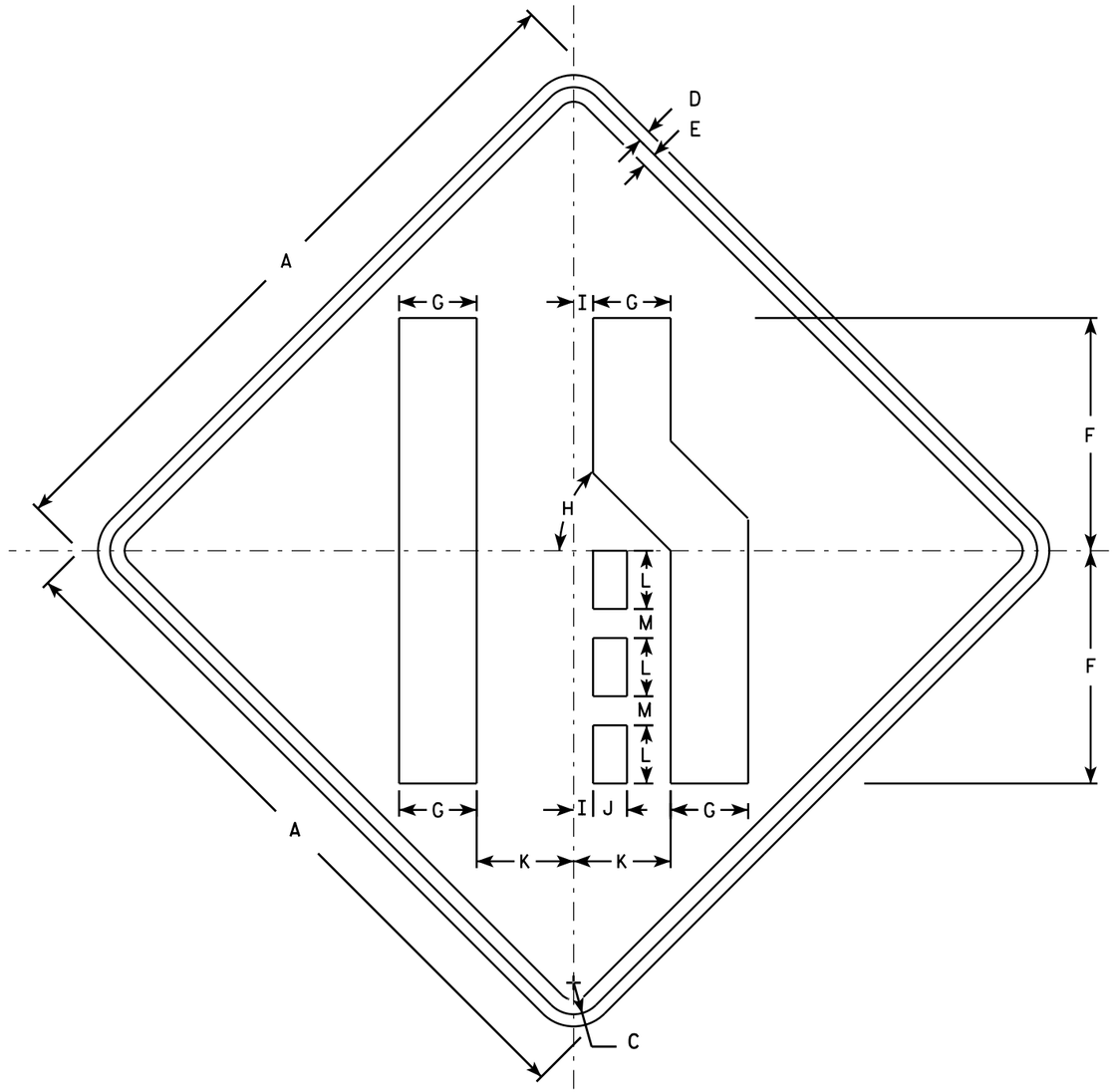
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE 1470 W01-7.1

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W017.DGN PLOT DATE : 20-NOV-2013 10:35 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.604022:1.000000
WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

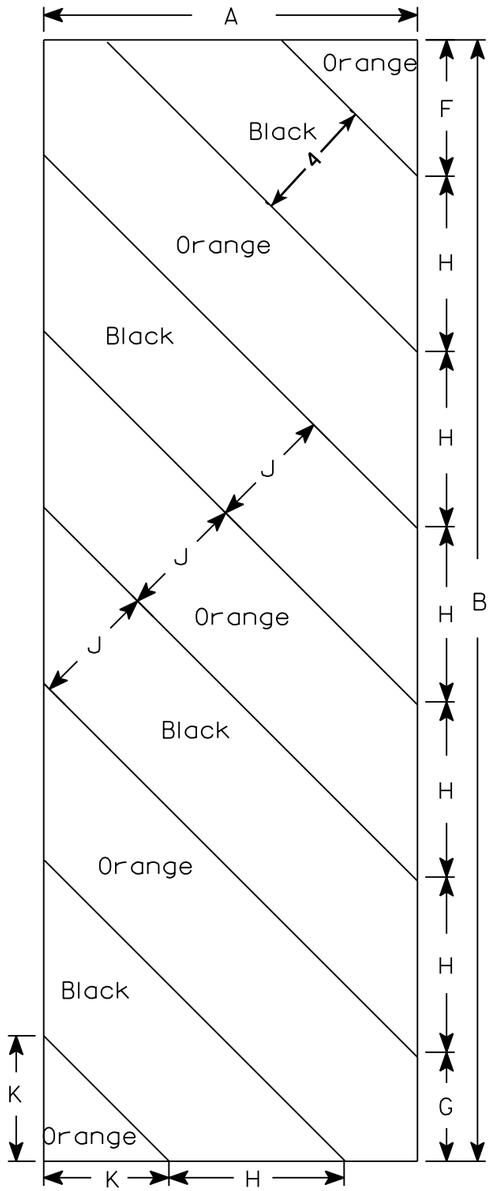
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 471 W04-2.1

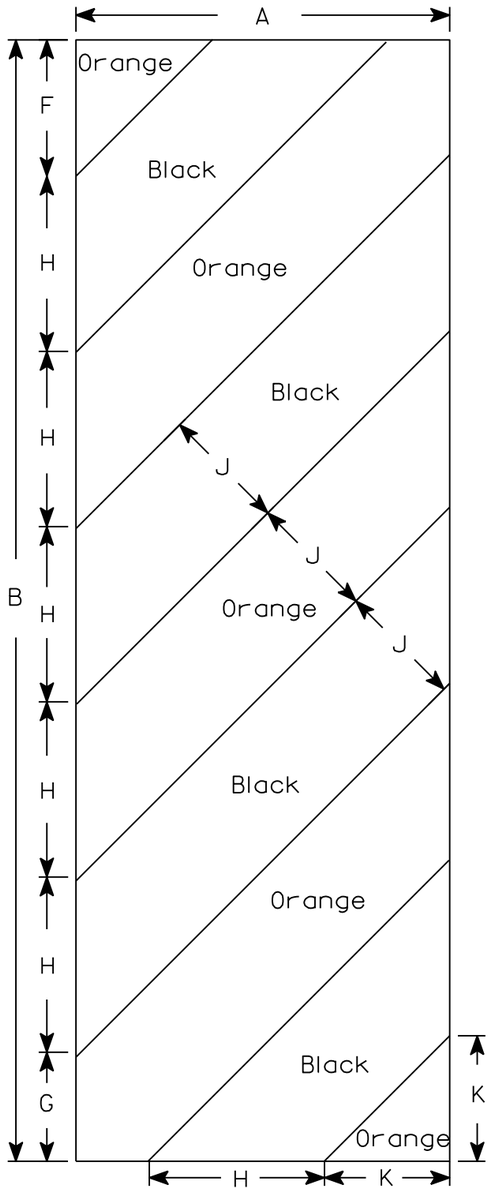
PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W042.DGN PLOT DATE : 20-NOV-2013 11:43 PLOT BY : mscsja



W05-52L



W05-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

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

STANDARD SIGN

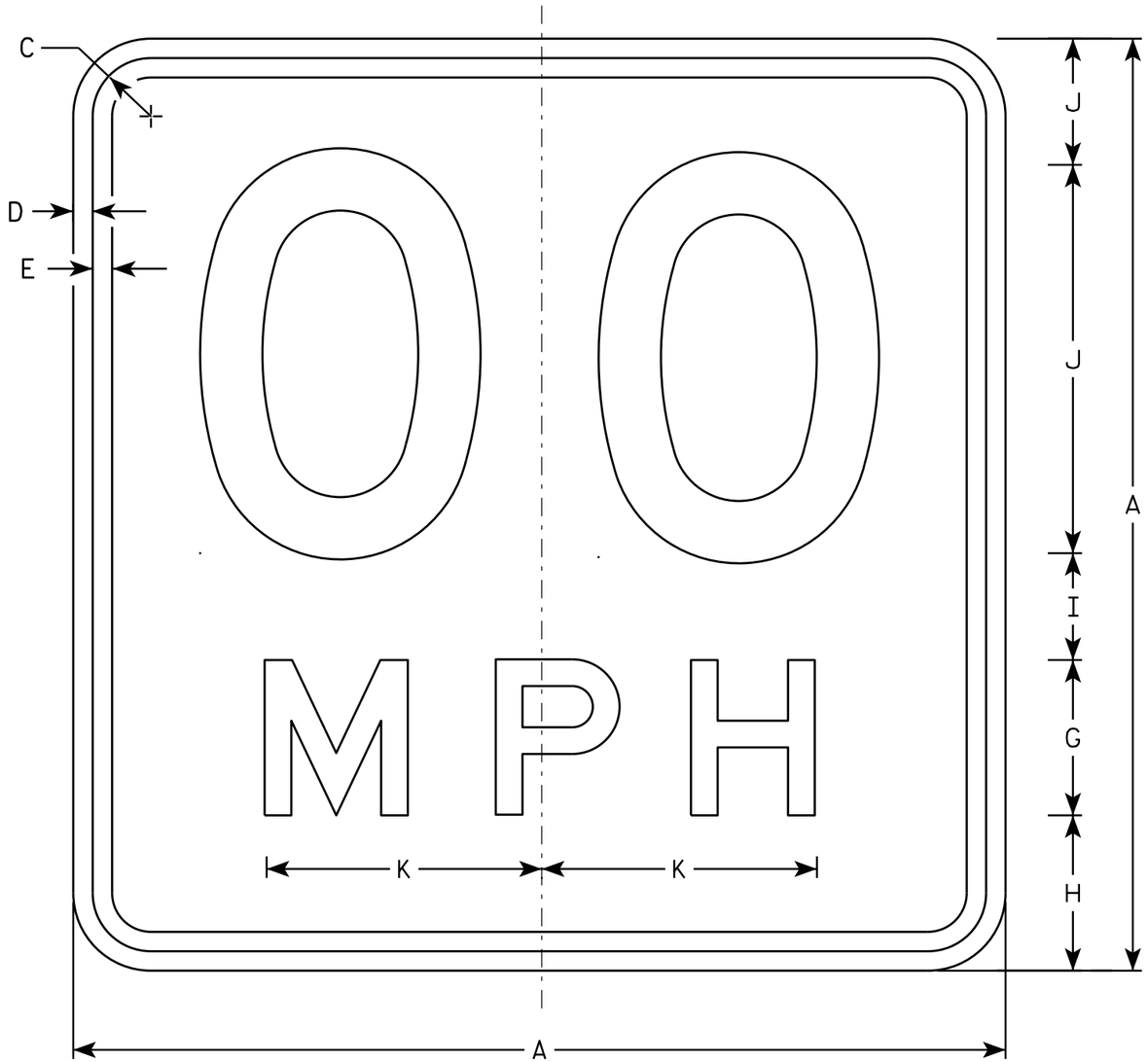
W05-52L & W05-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE No. W05-52.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W013-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W013-1

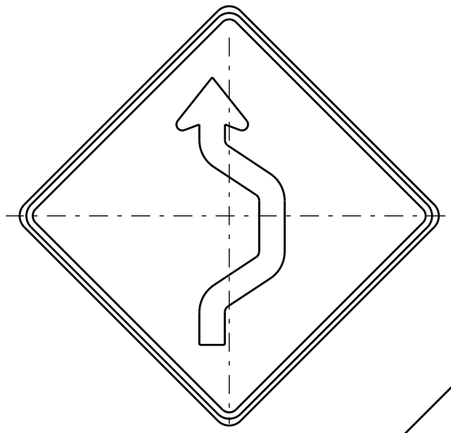
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

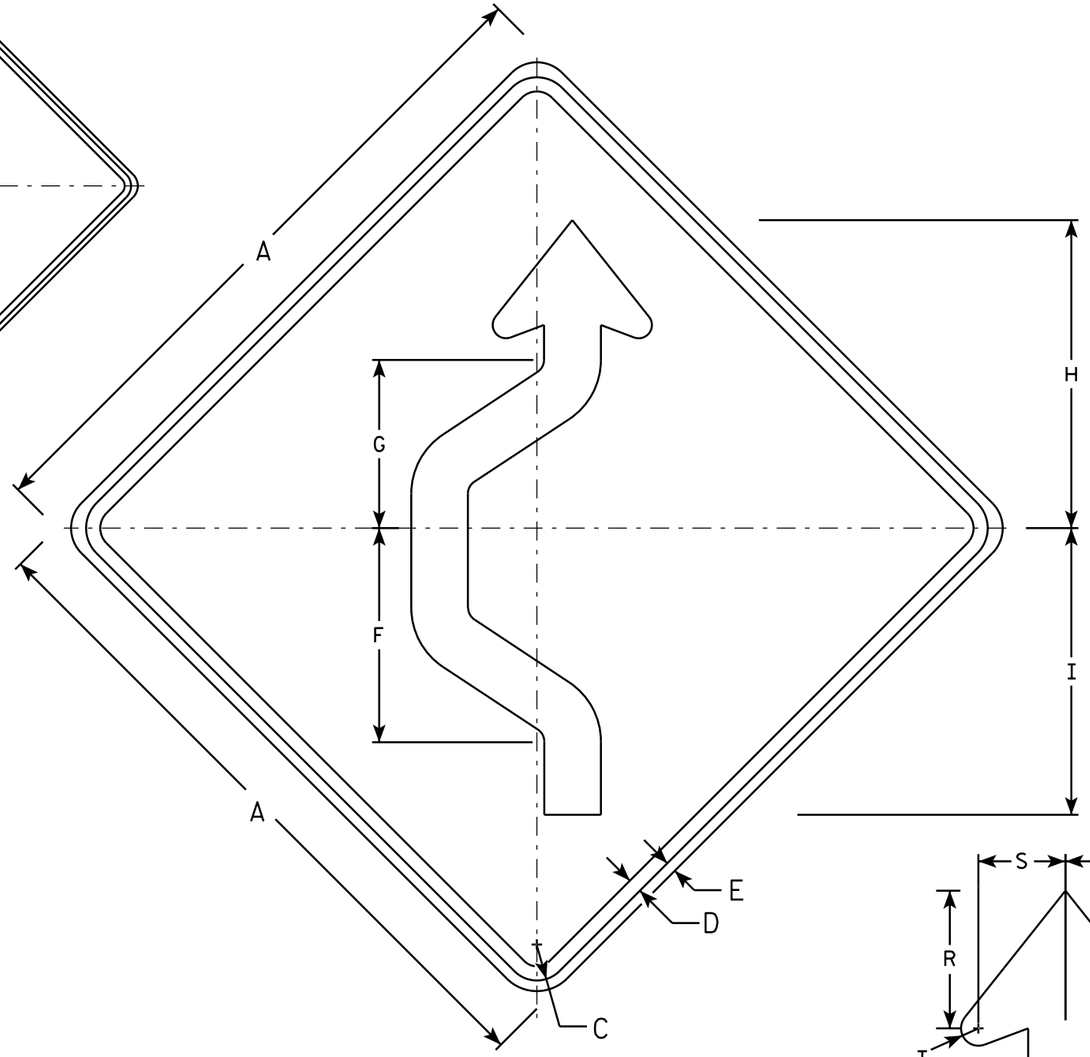
DATE 11/21/13 PLATE 473 W013-1.1

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

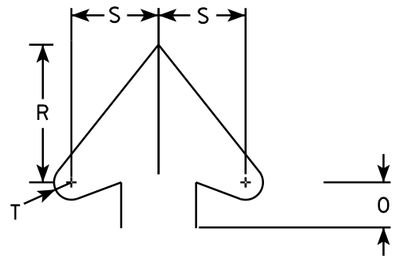
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W0131.DGN PLOT DATE : 02-DEC-2013 13:55 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.794391:1.000000
WISDOT/CADDS SHEET 42



W024-1R



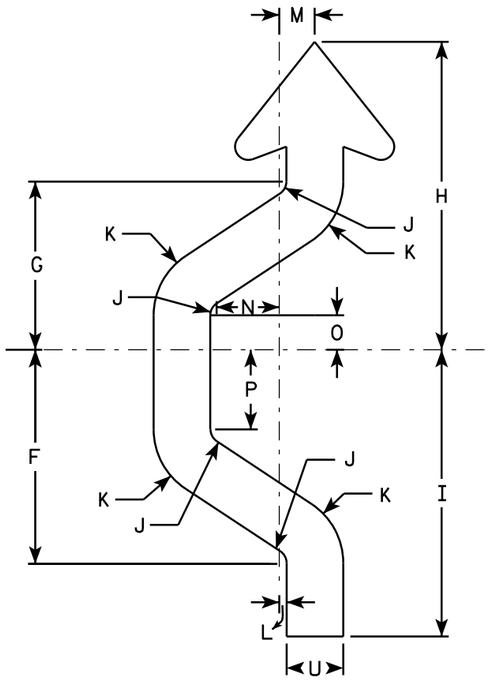
W024-1L



Arrowhead Detail

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W024-1R is the same as W024-1L except reversed along the vertical centerline.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	5/8	1/2	11 3/8	8 7/8	16 3/8	15 1/4	3/4	3 3/4	3/8	2	3 3/8	1 7/8	4 1/4		5 1/2	3 1/2	5/8	3						9
2S	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
2M	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
3	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
4	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
5	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16

STANDARD SIGN
W024-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

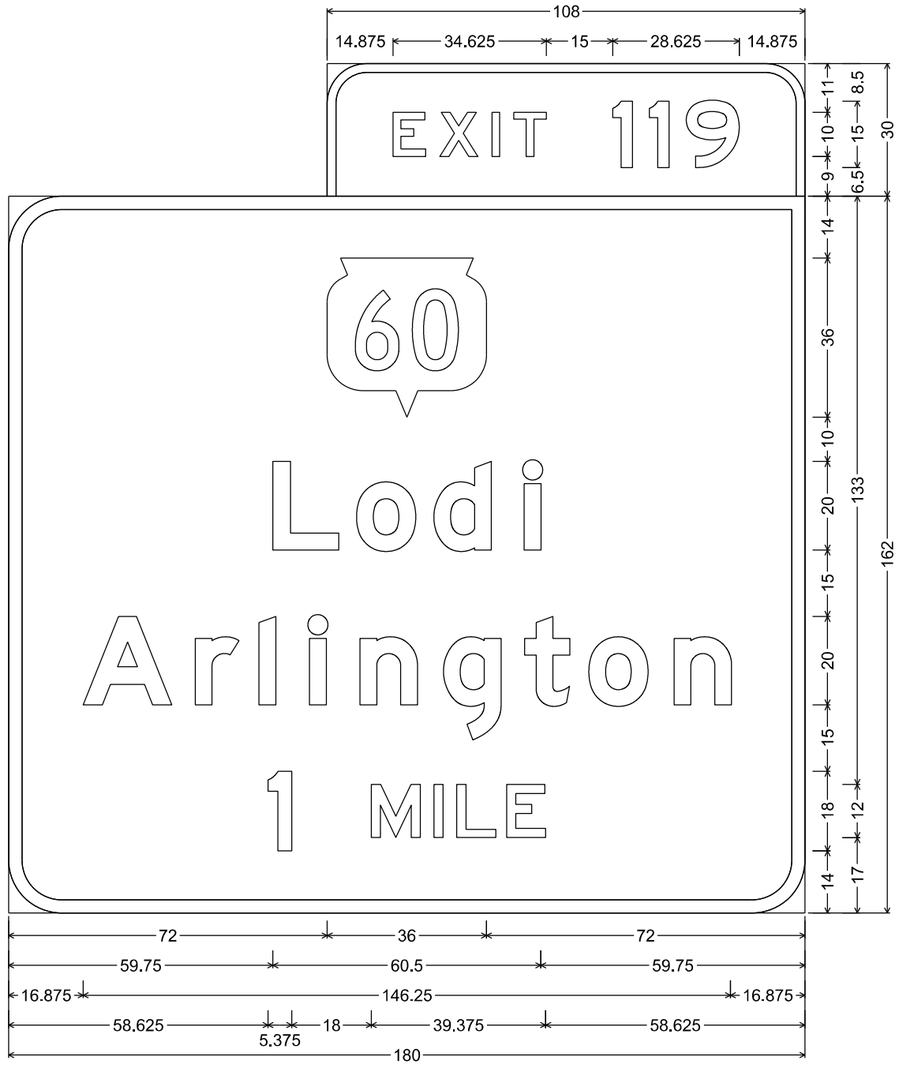
DATE 9/25/2013 PLATE W024-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

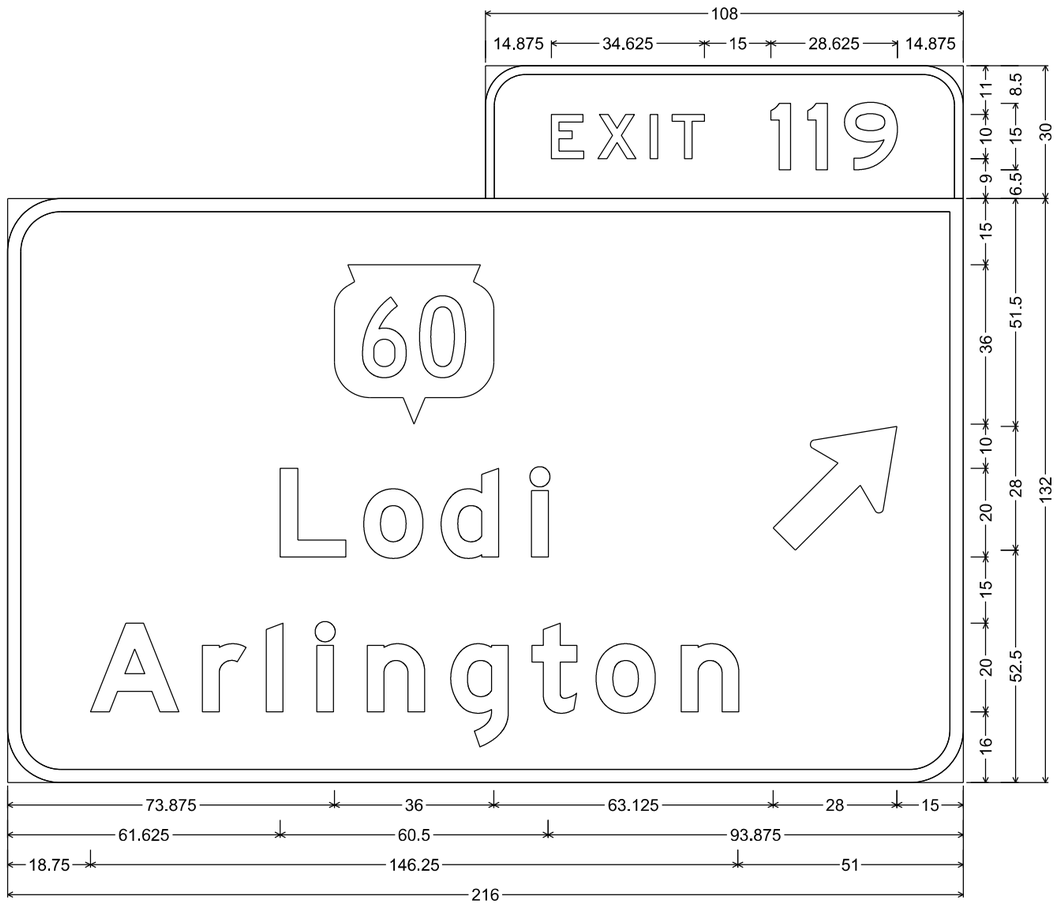
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W0241.DGN PLOT DATE : 25-SEP-2013 13:08 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 10.702132:1.000000 WISDOT/CADDS SHEET 42

NOTES

1. Signs are Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all Cap Words Series E



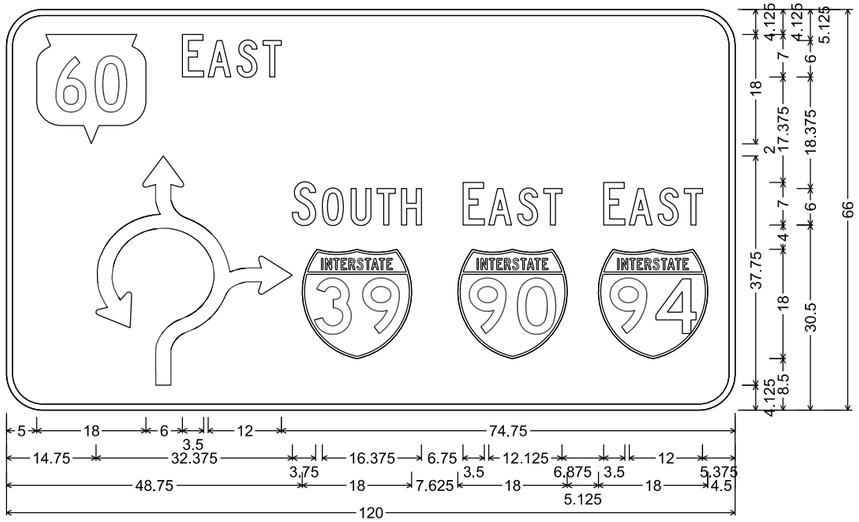
E1-5P; 9.000" Radius, 2.000" Border
E1-1A; 12.000" Radius, 3.000" Border



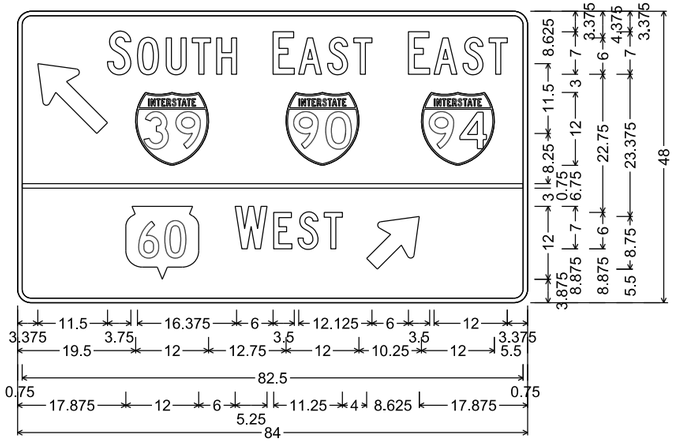
E1-5P; 9.000" Radius, 2.000" Border
E4-1A; 12.000" Radius, 3.000" Border

NOTES

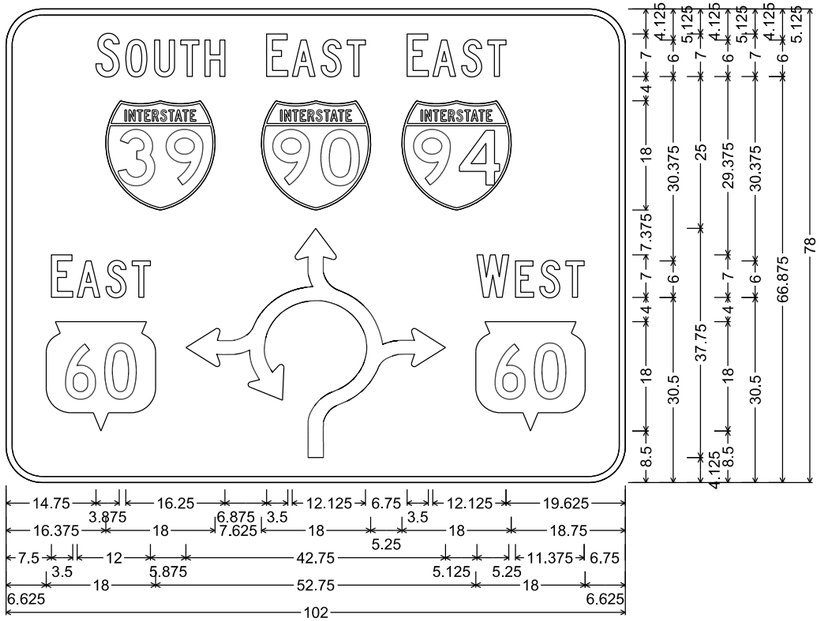
1. Signs are Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C



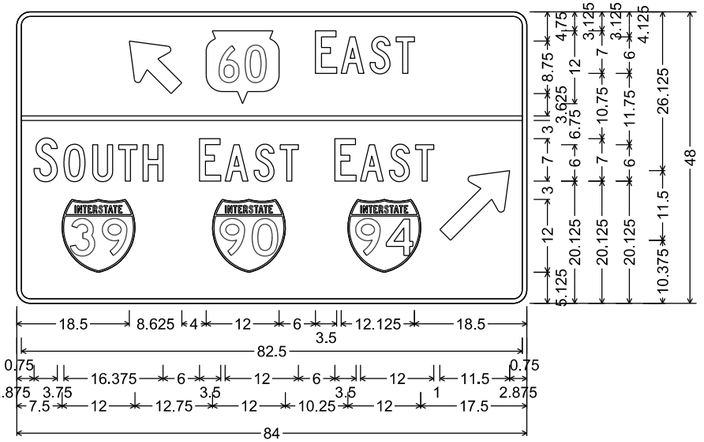
D1-62; 6.000" Radius, 1.000" Border



D1-4; 2.250" Radius, 0.750" Border



D1-62; 6.000" Radius, 1.000" Border



D1-4; 2.250" Radius, 0.750" Border

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET NO: 476	E

FILE NAME : C:\CAEfiles\Projects\tr_d1_1112a621.DGN PLOT DATE : 7-OCT 2021 6:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE :

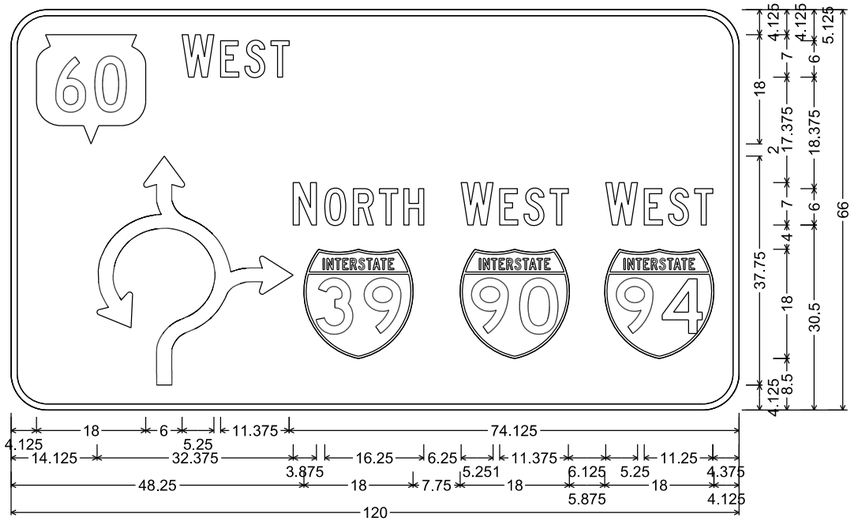
WISDOT/CADDS SHEET 42

7

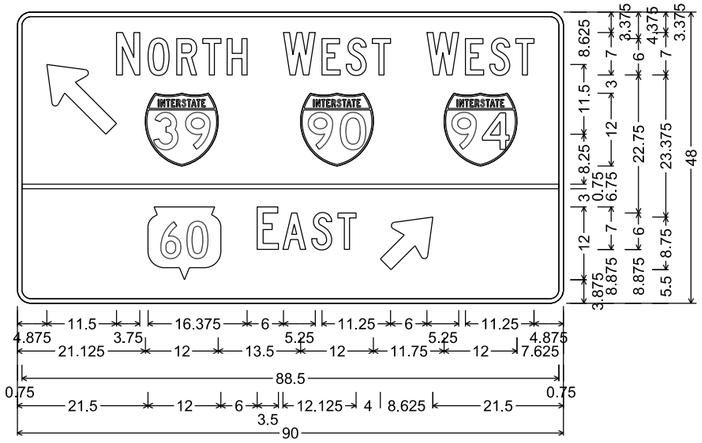
7

NOTES

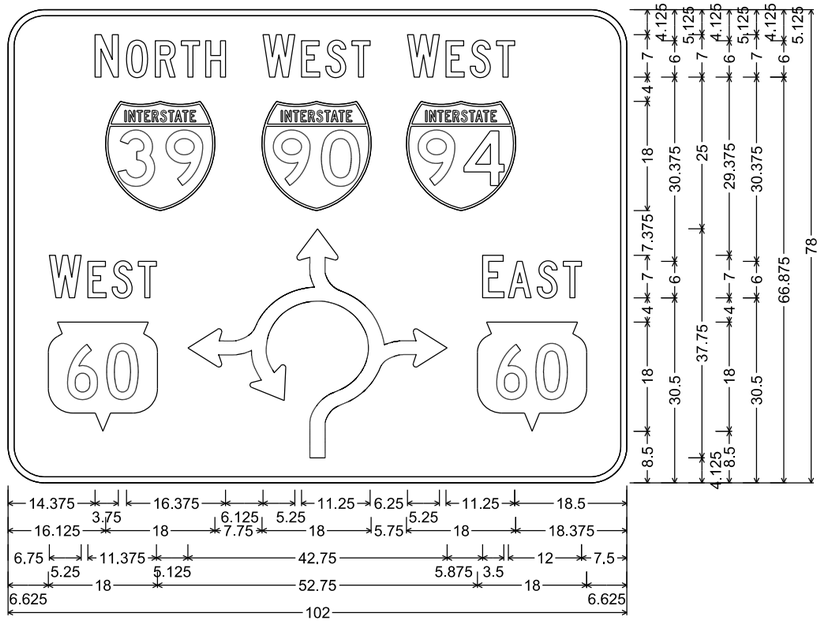
1. Signs are Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C



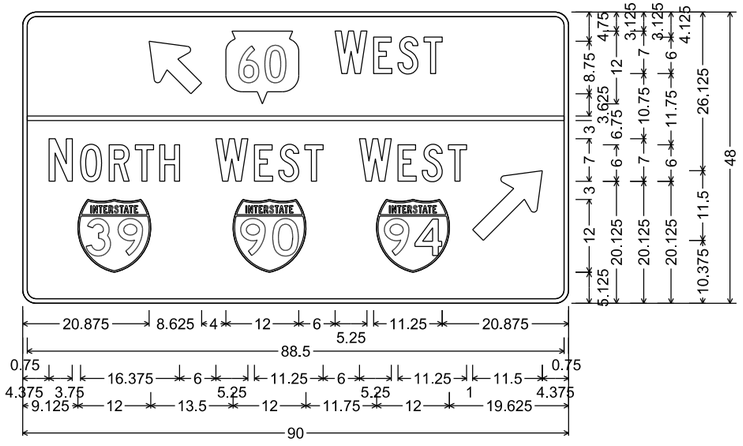
D1-62; 6.000" Radius, 1.000" Border



D1-4; 2.250" Radius, 0.750" Border



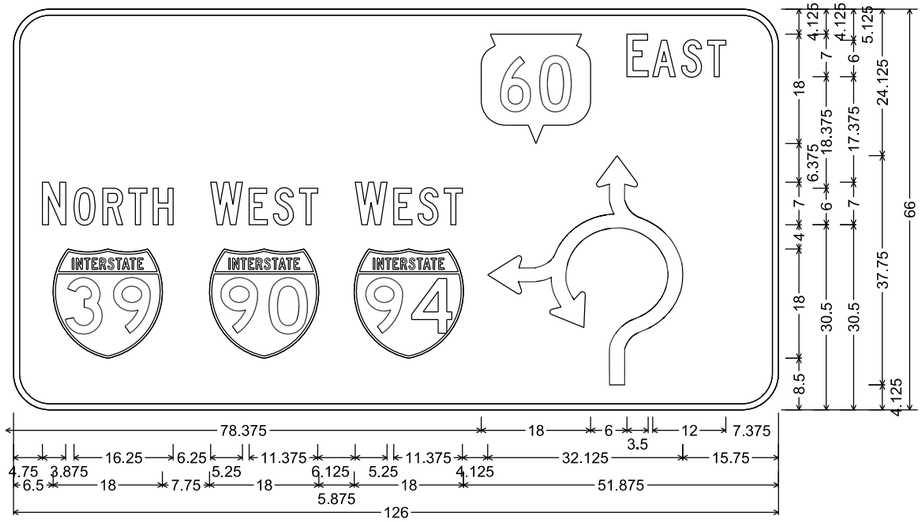
D1-62; 6.000" Radius, 1.000" Border



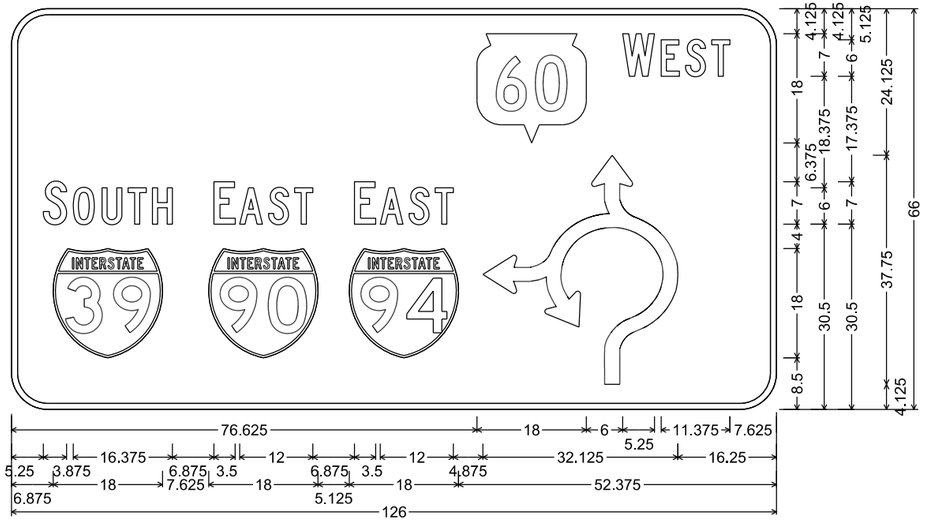
D1-4; 2.250" Radius, 0.750" Border

NOTES

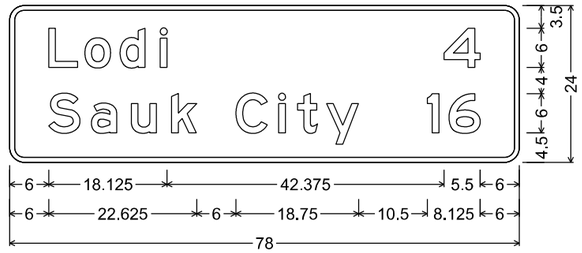
1. Signs are Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C



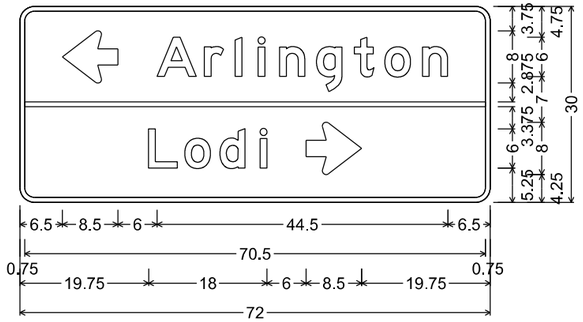
D1-62; 6.000" Radius, 1.000" Border



D1-62; 6.000" Radius, 1.000" Border



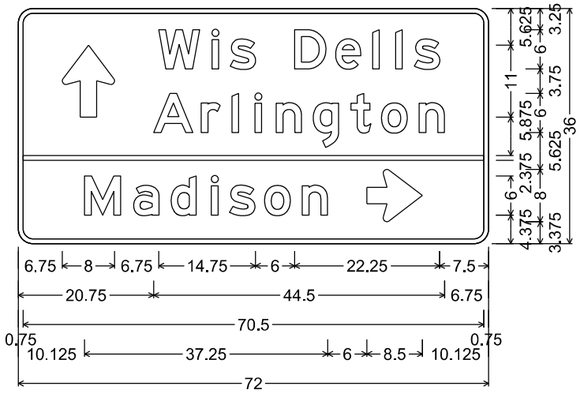
D2-2; 2.250" Radius, 0.750" Border



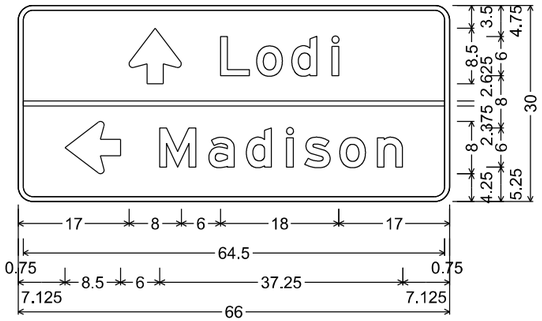
D1-2; 2.250" Radius, 0.750" Border

NOTES

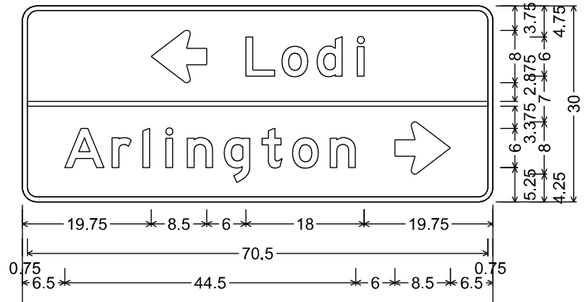
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted



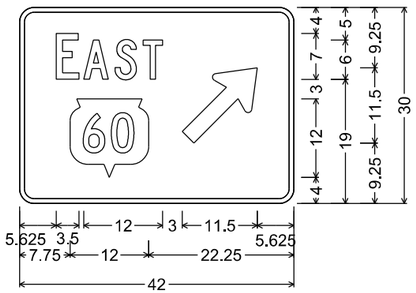
D1-3; 2.250" Radius, 0.750" Border



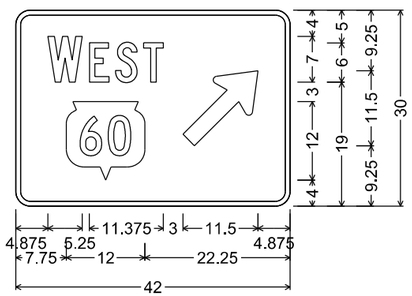
D1-2; 2.250" Radius, 0.750" Border



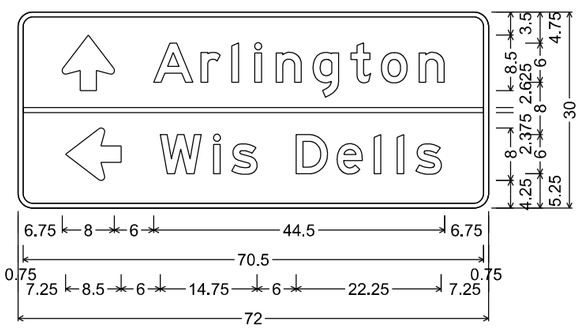
D1-2; 2.250" Radius, 0.750" Border



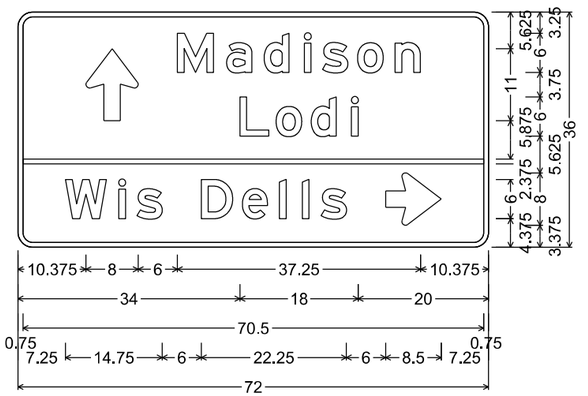
D1-1; 2.250" Radius, 0.750" Border
"EAST", C



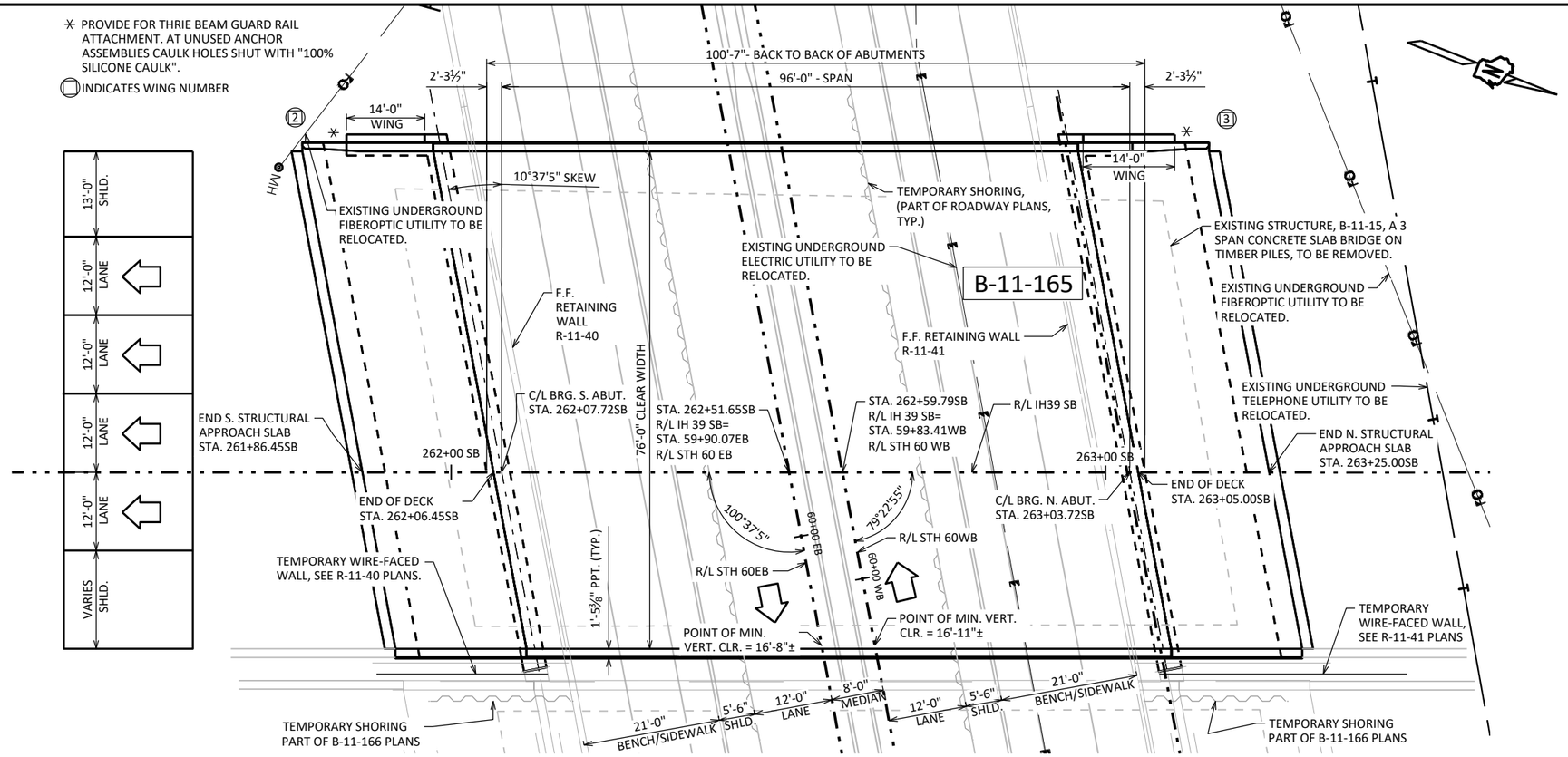
D1-1; 2.250" Radius, 0.750" Border
"WEST", C



D1-2; 2.250" Radius, 0.750" Border

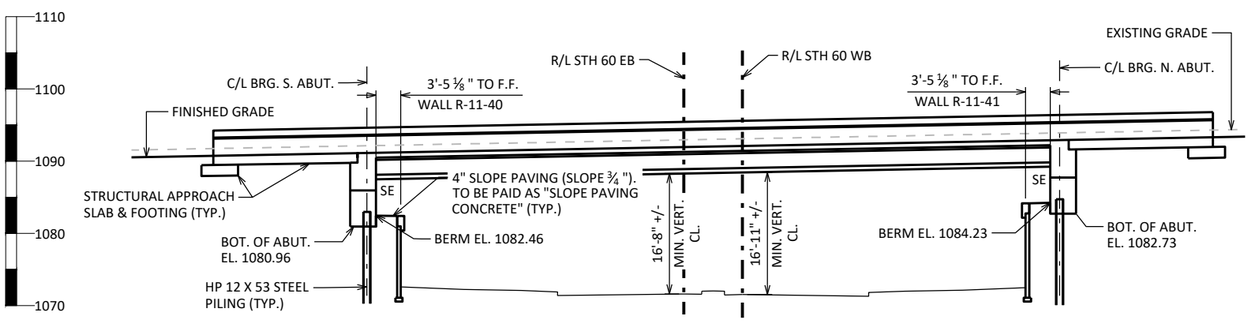


D1-3; 2.250" Radius, 0.750" Border

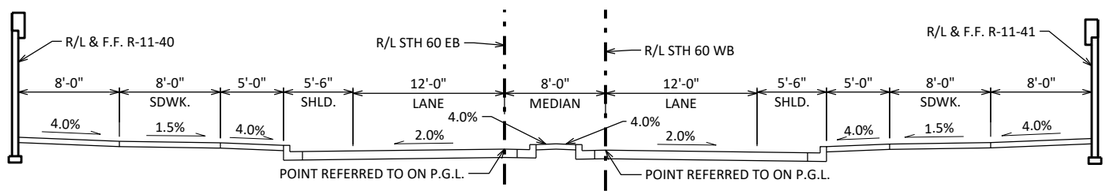


PLAN

SINGLE SPAN 36W" PRESTRESSED GIRDER

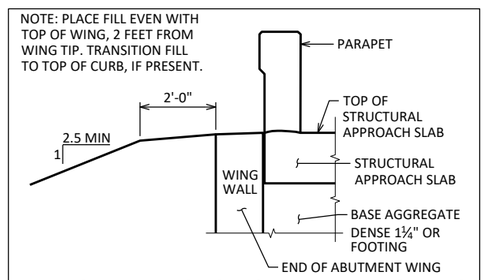


ELEVATION

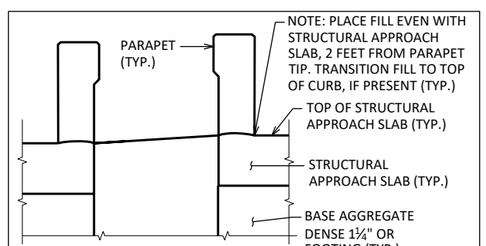


TYPICAL FINISHED SECTION THRU STH 60

NORMAL TO STH 60



TYPICAL FILL SECTION AT WING TIPS



TYPICAL FILL SECTION AT MEDIAN

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.18
OPERATING RATING: RF = 1.54
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

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

MATERIAL PROPERTIES:

CONCRETE MASONRY:
- SUPERSTRUCTURE & STRUCTURAL APPROACH SLAB — f'_c = 4,000 PSI
- ALL OTHER — f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT
- GRADE 60 — f_y = 60,000 PSI
- STAINLESS, GRADE 60 — f_y = 60,000 PSI

36-W" PRESTRESSED GIRDERS:
- CONCRETE MASONRY — f'_c = 8,000 PSI
- STRANDS: 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 60' LONG AT SOUTH ABUT.
ESTIMATED 50' LONG AT NORTH ABUT.

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

TRAFFIC DATA:

IH 39:
ADT = 72,350 (2042)
R.D.S. = 75 MPH

STH 60:
ADT = 10,750 (2042)
R.D.S. = 60 MPH

LIST OF DRAWINGS

1. GENERAL PLAN
2. GENERAL NOTES & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. 36W" PRESTRESSED GIRDER DETAILS 1
9. 36W" PRESTRESSED GIRDER DETAILS 2
10. STEEL DIAPHRAGM
11. SUPERSTRUCTURE PLAN
12. SUPERSTRUCTURE TYPICAL SECTIONS
13. SUPERSTRUCTURE DETAILS
14. STRUCTURAL APPROACH SLABS
15. SINGLE SLOPE PARAPET NW & SW CORNERS
16. SINGLE SLOPE PARAPET NE & SE CORNERS
17. ALTERNATE CONSTRUCTION JOINT

STRUCTURE DESIGN CONTACTS:
JONATHON RESHESKE (608)266-8491
LAURA SHADEWALD (608)267-9592

STATE PROJECT NUMBER

1012-01-74

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES

ACCEPTED 3/15/22
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-11-165

IH 39 SB OVER STH 60

COUNTY: COLUMBIA — TOWN: ARLINGTON

DESIGN SPEC.: AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JLR	DLM	DLM	JLR

GENERAL PLAN

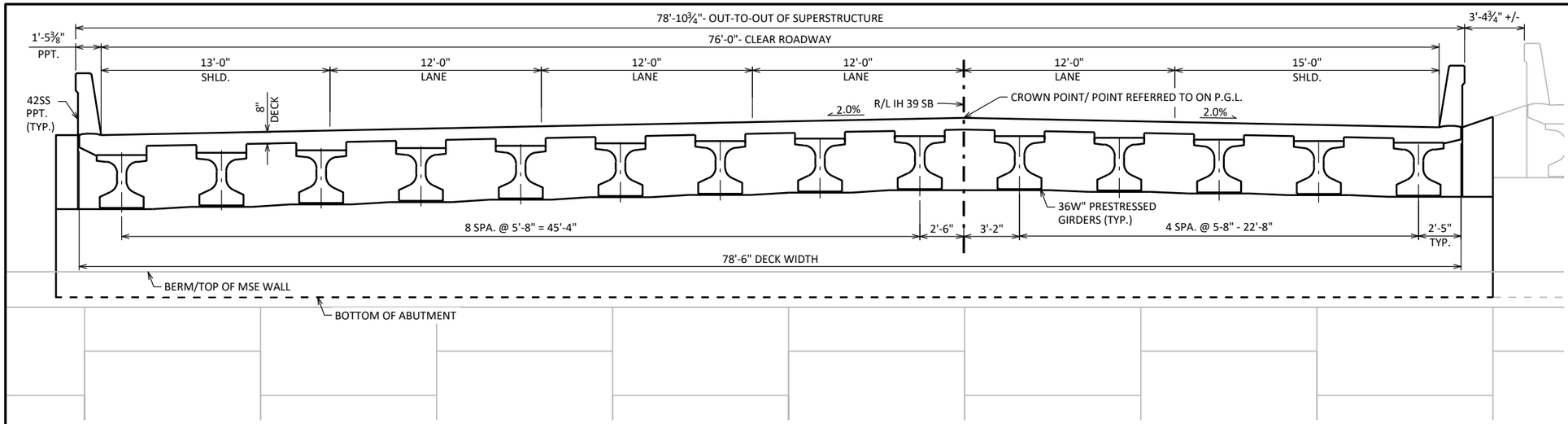
SHEET 1 OF 17
480

SCALE =

I.D. 1012-01-04A DATE: MARCH 2022

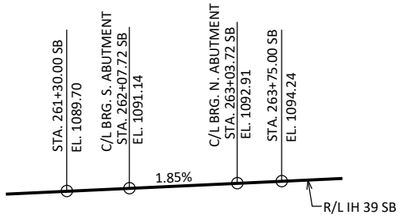
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8

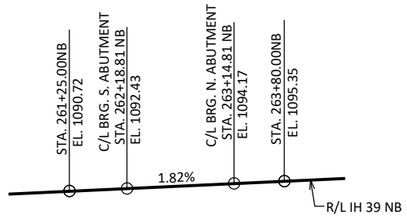


CROSS SECTION THRU ROADWAY

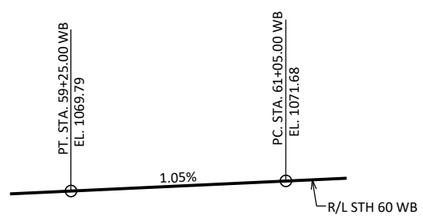
LOOKING UPSTATION (NORTH)



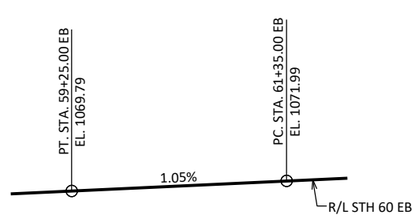
PROFILE GRADE LINE - IH 39 SB



PROFILE GRADE LINE - IH 39 NB



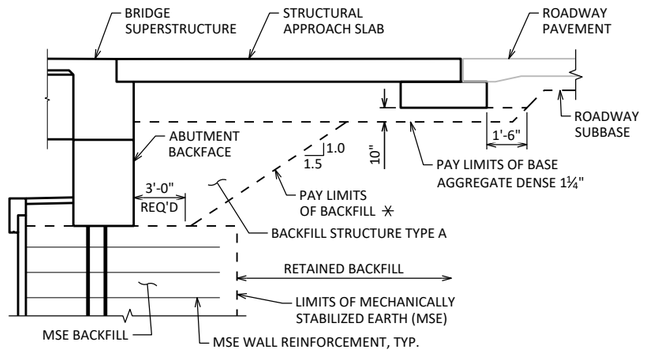
PROFILE GRADE LINE - STH 60 WB



PROFILE GRADE LINE - STH 60 EB

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	S. STRUCT. APP. SLAB	SOUTH ABUT.	NORTH ABUT.	N. STRUCT. APP. SLAB	TOTALS
203.0220	REMOVING STRUCTURE B-11-15	EACH	--	--	--	--	--	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-11-165	LS	--	--	--	--	--	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	--	--	279	280	--	559
305.0120	BASE AGGREGATE DENSE 1 1/4 -INCH	TON	--	--	248	248	--	496
502.0100	CONCRETE MASONRY BRIDGES	CY	322	106	70	70	106	674
502.3200	PROTECTIVE SURFACE TREATMENT	SY	874	169	--	--	169	1,212
502.3210	PIGMENTED SURFACE SEALER	SY	97	20	--	--	20	137
503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	1,358	--	--	--	--	1,358
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	--	--	5,370	5,380	--	10,750
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	45,670	20,270	840	850	20,270	87,900
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	2,690	--	--	--	--	2,690
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	28	--	--	--	--	28
506.4000	STEEL DIAPHRAGMS B-11-166	SF	26	--	--	--	--	26
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	--	--	17	16	--	33
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	--	--	900	750	--	1,650
604.0400	SLOPE PAVING CONCRETE	SY	--	--	27	28	--	55
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	--	2	--	--	2	4
	NON-BID ITEMS							
	FILLER	SIZE						½",¾",1 ½"



TYPICAL SECTION THRU ABUTMENT

⚹ BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

STATE PROJECT NUMBER

1012-01-74

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-11-165" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A. ALSO EXCLUDED IS THE "BASE AGGREGATE DENSE 1 1/4-INCH" AS DETAILED ON THE STRUCTURAL APPROACH SLAB SHEETS.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK AND APPROACH SLAB SURFACES AND TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT DIAPHRAGMS.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON APPROACH SLABS.

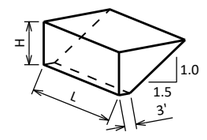
THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING CONCRETE TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "36W PRESTRESSED GIRDER DETAILS 2" SHEET.

PILES ARE EXPECTED TO TERMINATE IN BEDROCK. VARIABILITY IN DRIVEN PILE TIP ELEVATIONS IS EXPECTED DUE TO SLOPING AND UNDULATING BEDROCK SURFACES.

EXCAVATION BELOW SUBGRADE (EBS) OF SOFT SILT/CLAY BELOW RETAINING WALLS R-11-040 AND R-11-041 AND BACKFILLING WITH COMPACTED GRANULAR BACKFILL SHOULD OCCUR PRIOR TO PILE INSTALLATION. REFER TO R-11-040 AND R-11-041 PLANS FOR DETAILS.

TEMPORARY SHORING DESIGN SHOULD CONSIDER POTENTIAL EBS DEPTHS.



ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)
V_{CY} = V_{CF}(EF)/27
V_{TON} = V_{CY}(2.0)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-165

DRAWN BY DLM | PLANS CK'D JLR

GENERAL NOTES & QUANTITIES

SHEET 2
481

SCALE =

8

8

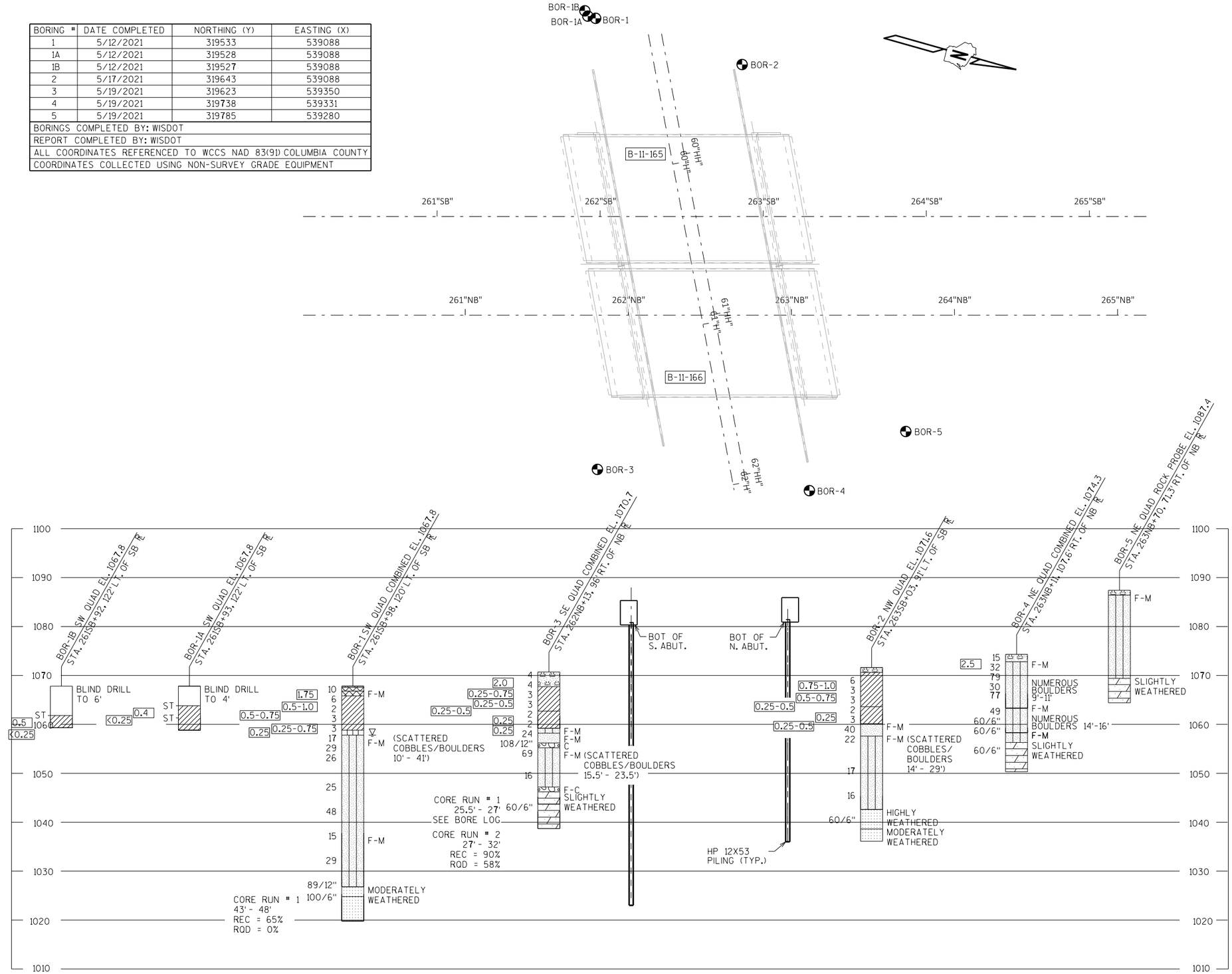
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	5/12/2021	319533	539088
1A	5/12/2021	319528	539088
1B	5/12/2021	319527	539088
2	5/17/2021	319643	539088
3	5/19/2021	319623	539350
4	5/19/2021	319738	539331
5	5/19/2021	319785	539280

BORINGS COMPLETED BY: WISDOT

REPORT COMPLETED BY: WISDOT

ALL COORDINATES REFERENCED TO WCCS NAD 83(91) COLUMBIA COUNTY

COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT



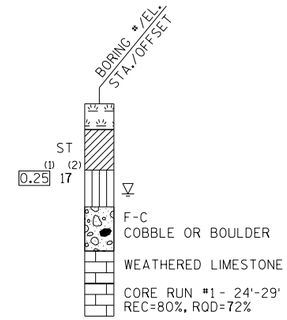
STATE PROJECT NUMBER

1012-01-74

MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

AT TIME OF DRILLING

END OF DRILLING

AFTER DRILLING

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-165

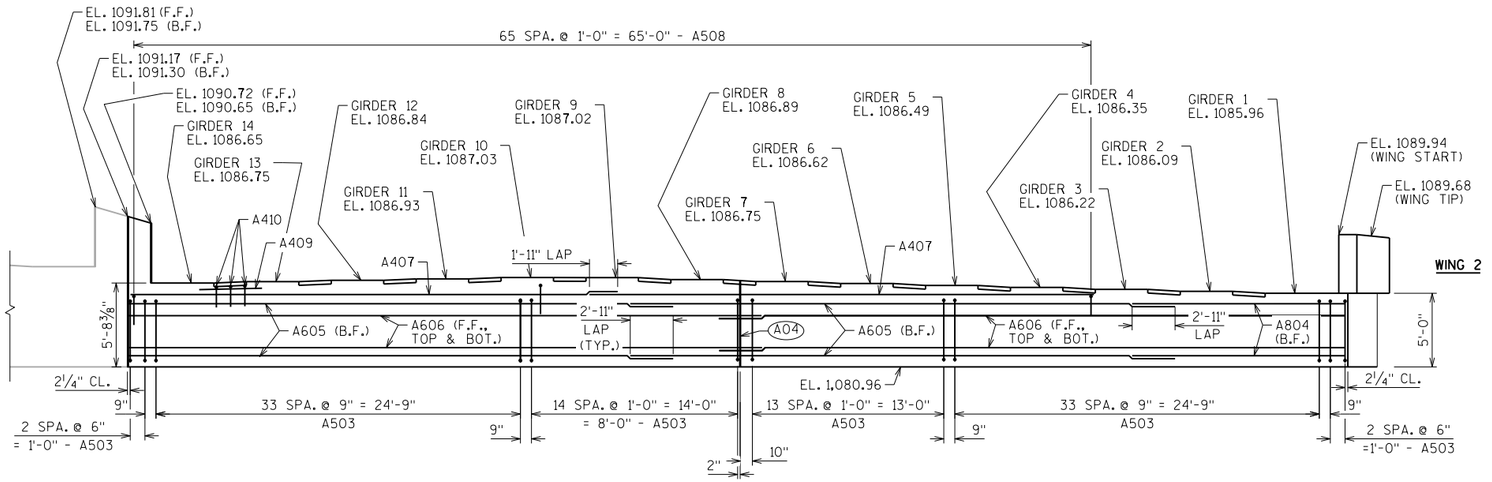
DRAWN BY TLP/DLM | PLANS CK'D. JLR

SUBSURFACE EXPLORATION

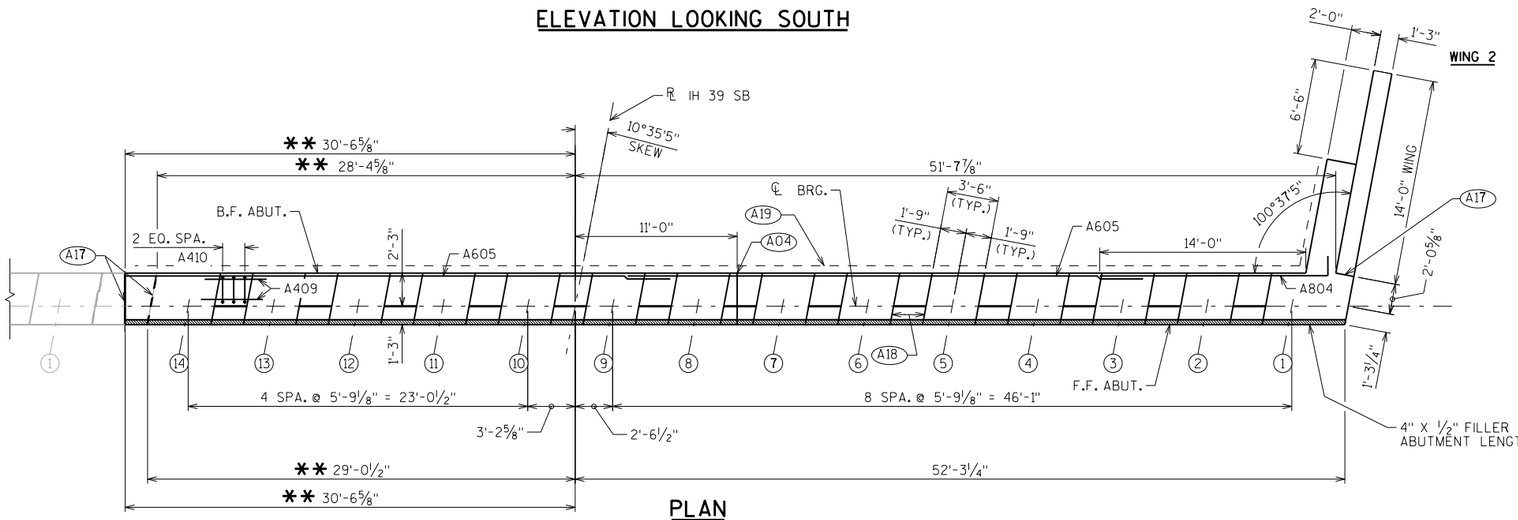
SHEET 3

482

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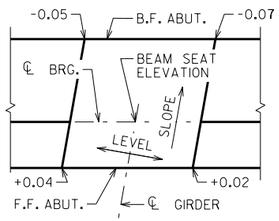


ELEVATION LOOKING SOUTH

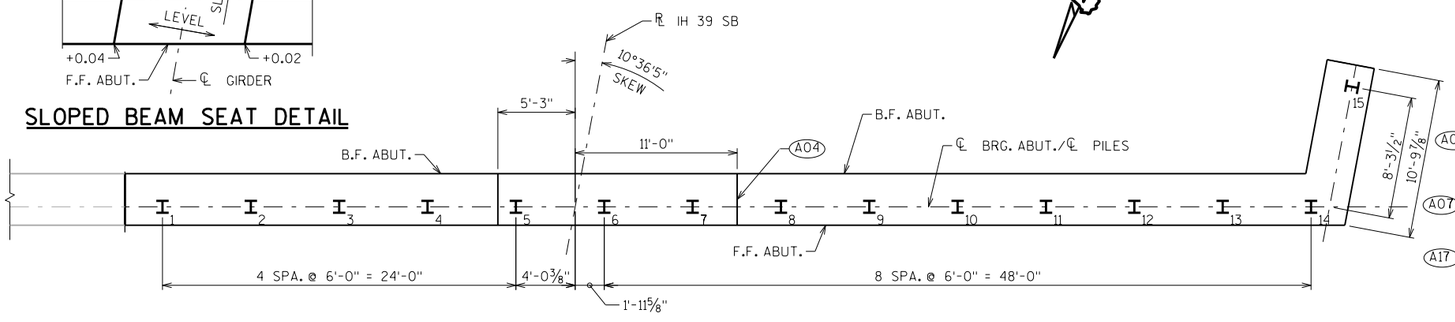


PLAN

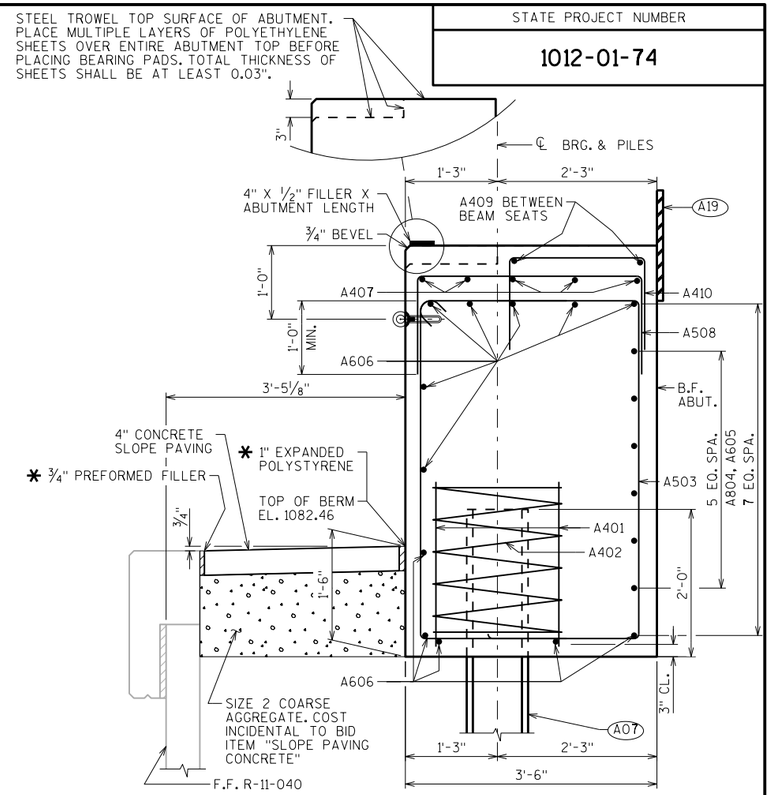
** DIMENSION DOES NOT INCLUDE 1/2" FILLER



SLOPED BEAM SEAT DETAIL

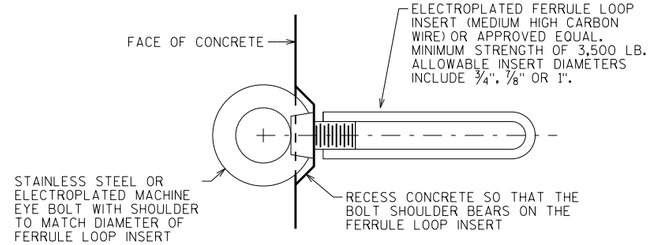


PILE PLAN



SECTION THRU BODY

* SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER AND EXPANDED POLYSTYRENE WITH NON-STAINING, GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE)



EYE BOLT DETAIL

LOCATE ONE EYE BOLT UNDER EACH GIRDER.
COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES".

(A04) VERT. CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 X 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" RMW @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A07) SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING, ESTIMATED 60'-0" LONG, WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

STATE PROJECT NUMBER

1012-01-74

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-165

DRAWN BY DLM | PLANS CK'D. JLR

SOUTH ABUTMENT

SHEET 4

483

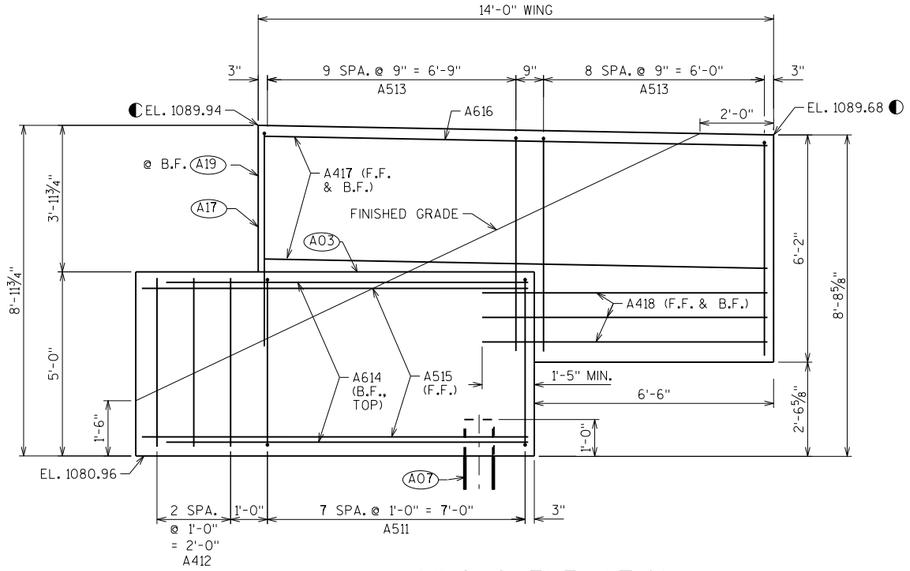
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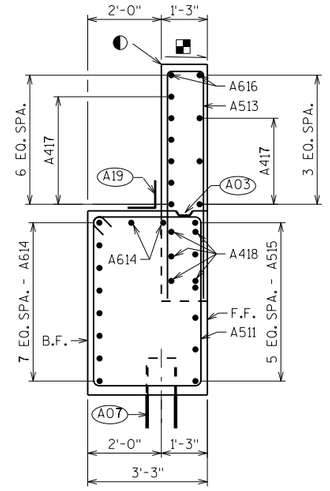
STATE PROJECT NUMBER

1012-01-74

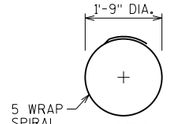


WING 2 ELEVATION

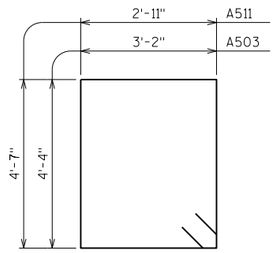
LOOKING AT FRONT FACE



WING 2 SECTION



A402



A503, A511

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A401		28	2'-3"			BODY - 2 PER BODY PILE - VERT.
A402		14	28'-0"	X		BODY - SPIRAL - 1 PER BODY PILE - VERT.
A503		103	15'-8"	X		BODY - STIRRUPS - VERT.
A804		6	16'-8"	X		BODY - HORIZ. - BACK FACE
A605		12	36'-0"			BODY - HORIZ. - BACK FACE
A606		24	43'-1"			BODY - HORIZ. - TOP, BOT., FRONT FACE
A407		10	33'-8"			BODY - HORIZ. - TOP
A508		66	7'-1"	X		BODY - VERT. - TOP
A409		26	4'-3"			BODY - HORIZ. - TOP - BTWN. BEAM SEATS
A410		39	4'-9"	X		BODY - VERT. - TOP- BTWN. BEAM SEATS
A511	X	8	15'-8"	X		WING 2 - LOWER - BODY STIRRUP
A412	X	3	4'-7"			WING 2 - LOWER - VERT. - FRONT FACE
A513	X	19	12'-4"	X		WING 2 - UPPER - VERT.
A614	X	10	9'-10"			WING 2 - LOWER - HORIZ. - B.F., TOP
A515	X	6	10'-6"			WING 2 - LOWER - HORIZ. - F.F.
A616	X	2	13'-8"			WING 2 - UPPER - HORIZ. - TOP
A417	X	9	13'-8"			WING 2- UPPER - HORIZ.
A418	X	5	7'-9"			WING 2 - UPPER - HORIZ.
A519	X	4	15'-11"	X		END WING - UPPER - VERT.
A420	X	6	1'-2"			END WING - UPPER - HORIZ. - F.F.
A421	X	6	1'-10"			END WING - UPPER - HORIZ. - B.F.
A622	X	5	1'-6"		⚠	END WING - UPPER - HORIZ. - TOP

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

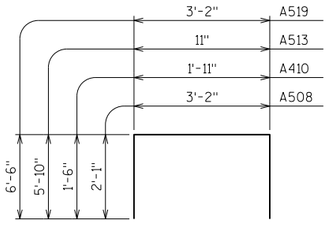
BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
A622	1 SERIES OF 5	1'-2" TO 1'-10"

BUNDLE AND TAG EACH SERIES SEPARATELY.



A804



A508, A410, A513, A519

◐ ELEVATIONS GIVEN AT THIS LOCATION. FINISH SMOOTH.

◨ DIMENSION INCLUDES ½" FILLER ON BOTH SIDES.

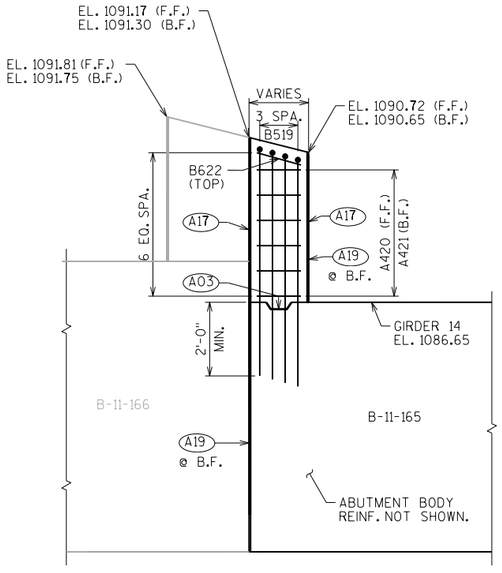
◩ SLOPE FOR DRAINAGE

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A07) SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING, ESTIMATED 60-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

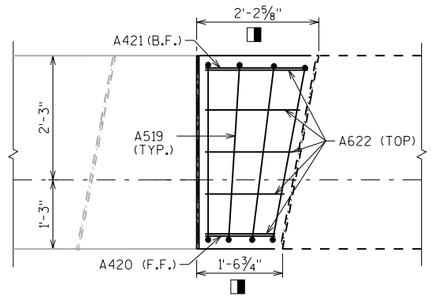
(A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

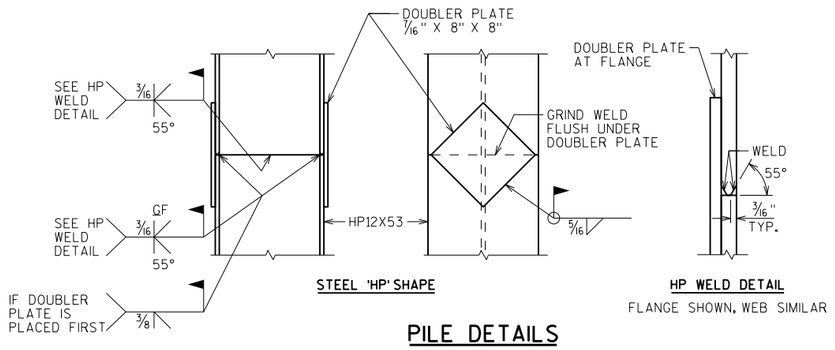


END WING ELEVATION

LOOKING AT F.F. OF ABUTMENT



END WING PLAN



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

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SOUTH ABUTMENT DETAILS

SHEET 5

484

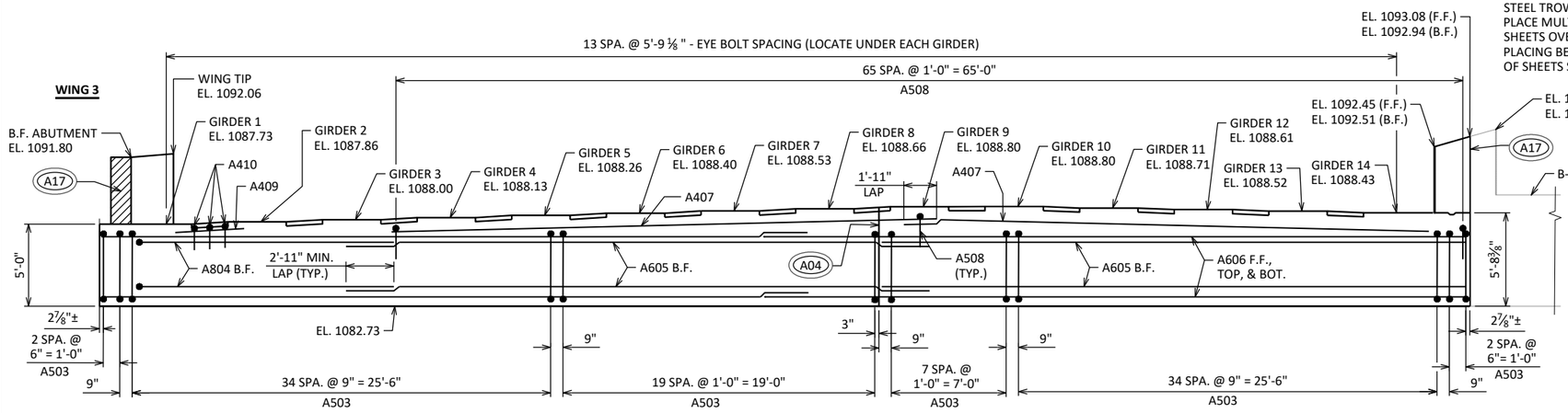
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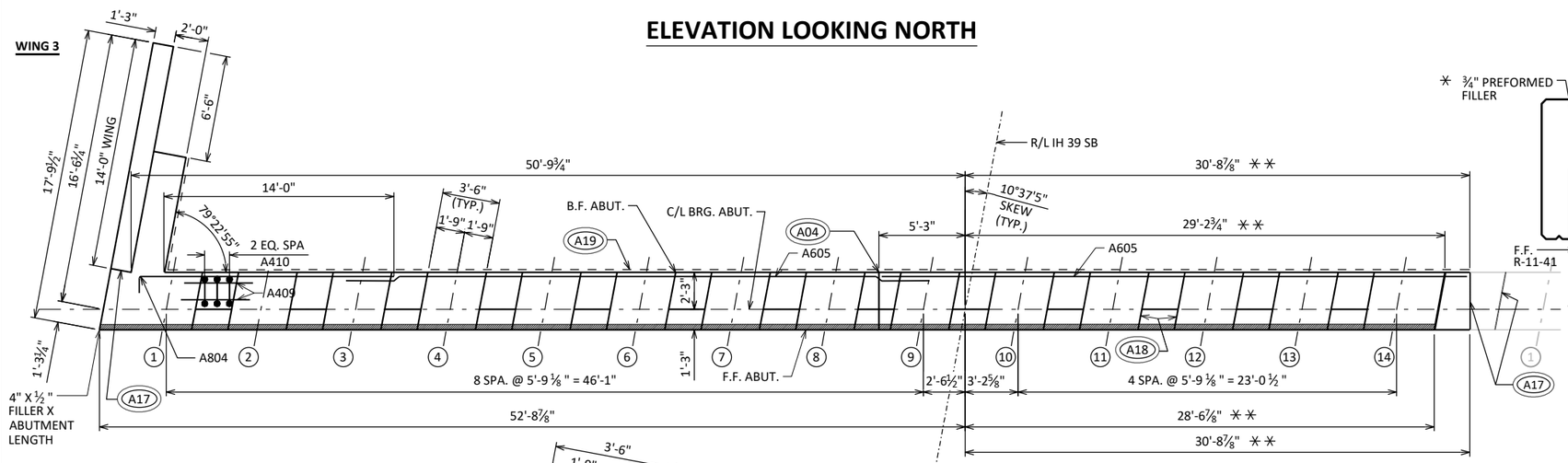
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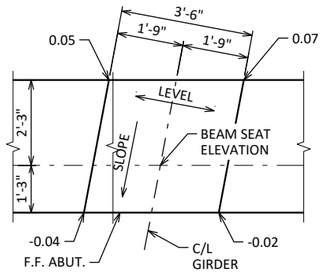
STATE PROJECT NUMBER

1012-01-74



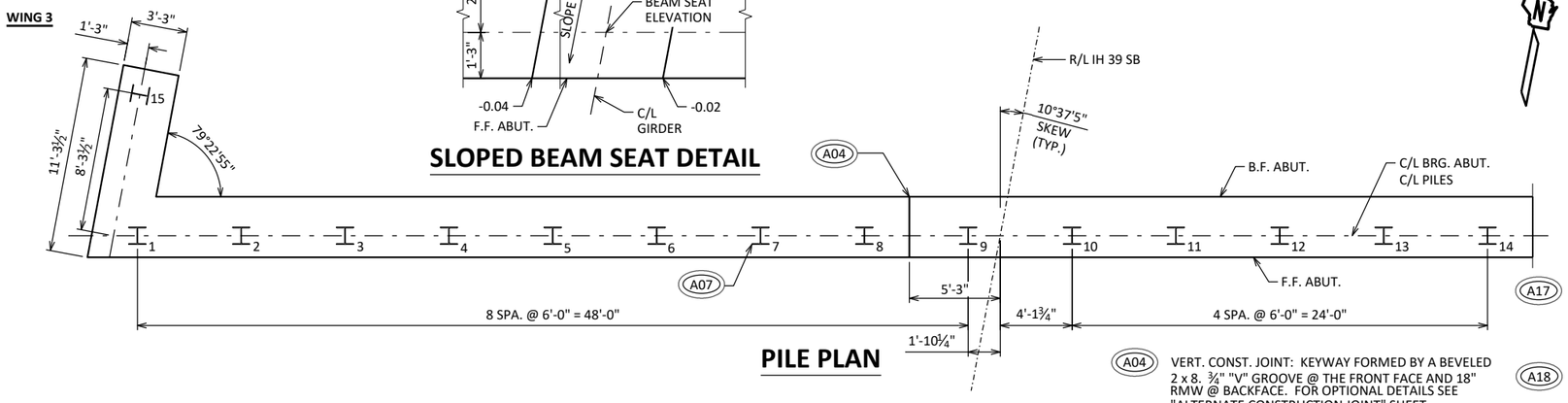
ELEVATION LOOKING NORTH





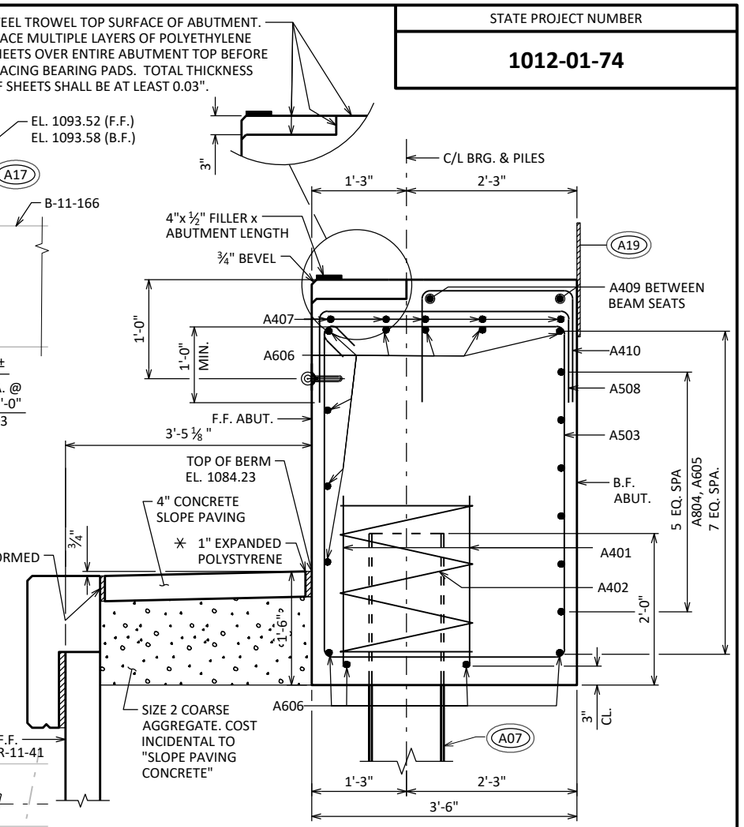
PLAN

✳✳ DIMENSION DOES NOT INCLUDE ½ " FILLER.



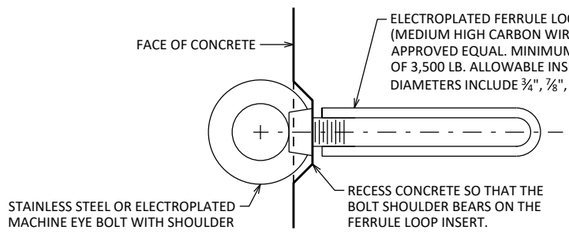
SLOPED BEAM SEAT DETAIL

PILE PLAN



SECTION THRU BODY

✳ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER AND EXPANDED POLYSTYRENE WITH NON-STAINING, GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE)



EYE BOLT DETAIL

COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES".

A17 ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

A18 ¾" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

A04 VERT. CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. ¾" "V" GROOVE @ THE FRONT FACE AND 18" RMW @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

A07 SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING, ESTIMATED 50'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

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NORTH ABUTMENT

SHEET 6
485

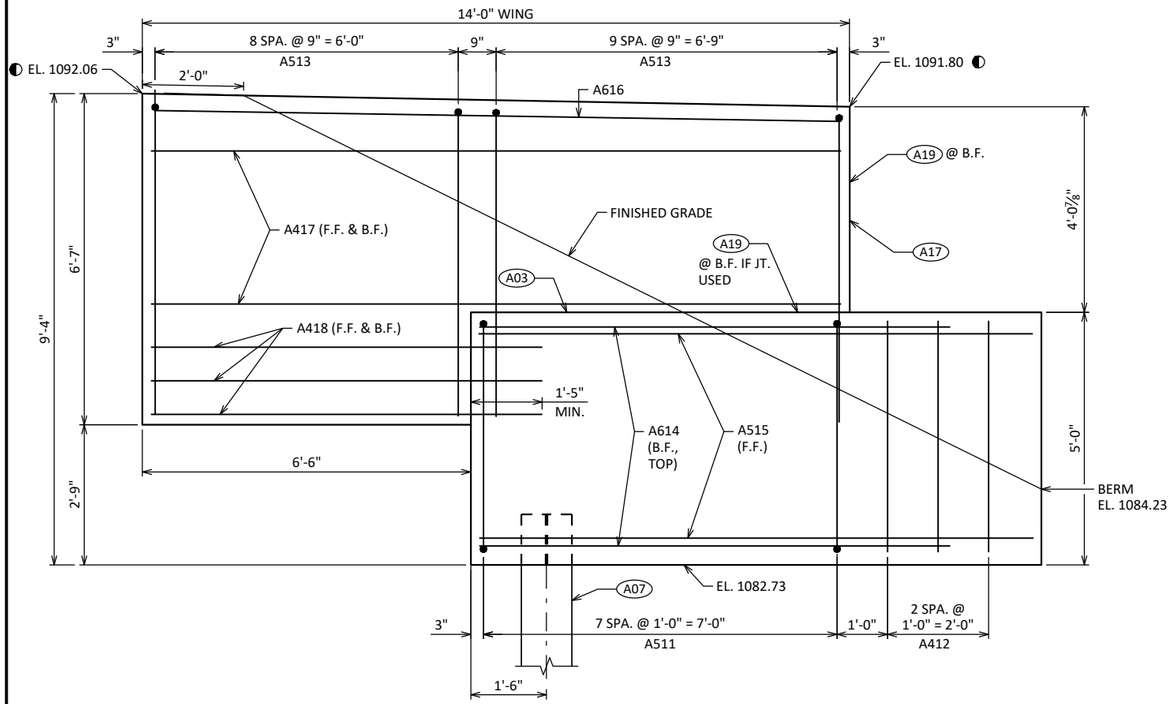
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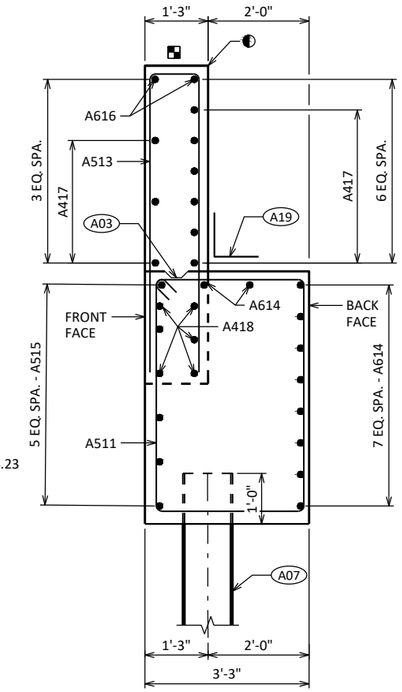
STATE PROJECT NUMBER

1012-01-74



WING 3 ELEVATION

LOOKING AT FRONT FACE



WING 3 SECTION

◐ ELEVATIONS GIVEN AT THIS LOCATION. FINISH SMOOTH.

◪ DIMENSION INCLUDES ½ " FILLER ON BOTH SIDES.

◩ SLOPE FOR DRAINAGE.

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).

(A07) SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING, ESTIMATED 50'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 210 TONS PER PILE.

(A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

BILL OF BARS

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

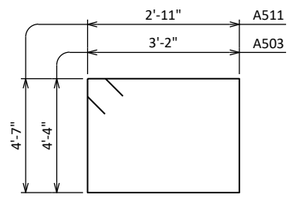
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A401		28	2'-3"			BODY - 2 PER BODY PILE - VERT.
A402		14	28'-0"	X		BODY - SPIRAL - 1 PER BODY PILE - VERT.
A503		104	15'-8"	X		BODY - STIRRUPS - VERT.
A804		6	16'-8"	X		BODY - HORIZ. - BACK FACE
A605		12	35'-8"			BODY - HORIZ. - BACK FACE
A606		24	43'-1"			BODY - HORIZ. - TOP, BOT., FRONT FACE
A407		10	33'-8"			BODY - HORIZ. -TOP
A508		66	7'-1"	X		BODY - VERT. TOP
A409		26	4'-3"			BODY - HORIZ. - TOP - BTWN. BEAM SEATS
A410		39	4'-9"	X		BODY - VERT. - TOP - BTWN. BEAM SEATS
A511	X	8	15'-8"	X		WING 3 - LOWER - BODY STIRRUP
A412	X	3	4'-7"			WING 3 - LOWER - VERT. - FRONT FACE
A513	X	19	12'-10"	X		WING 3 - UPPER - VERT.
A614	X	10	9'-6"			WING 3 - LOWER - HORIZ. - B.F., TOP
A515	X	6	10'-11"			WING 3 - LOWER - HORIZ. - F.F.
A616	X	2	13'-8"			WING 3 - UPPER - HORIZ.- TOP
A417	X	9	13'-8"			WING 3 - UPPER - HORIZ.
A418	X	5	7'-9"			WING 3 - UPPER - HORIZ.
A519	X	4	15'-11"	X		END WING - UPPER - VERT.
A420	X	7	1'-10"			END WING - UPPER - HORIZ. - F.F.
A421	X	7	1'-2"			END WING - UPPER - HORIZ. - B.F.
A622	X	5	1'-6"		✳	END WING - UPPER - HORIZ. - TOP

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

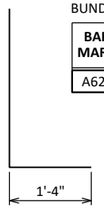
BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

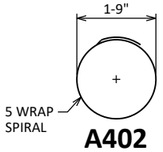
BAR MARK	NO. REQ'D.	LENGTH
A622	1 SERIES of 5	1'-2" to 1'-10"



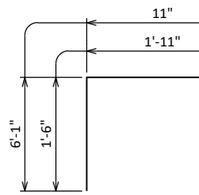
A503, A511

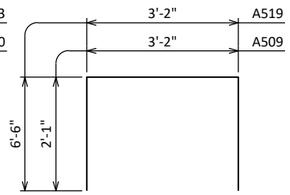


A804

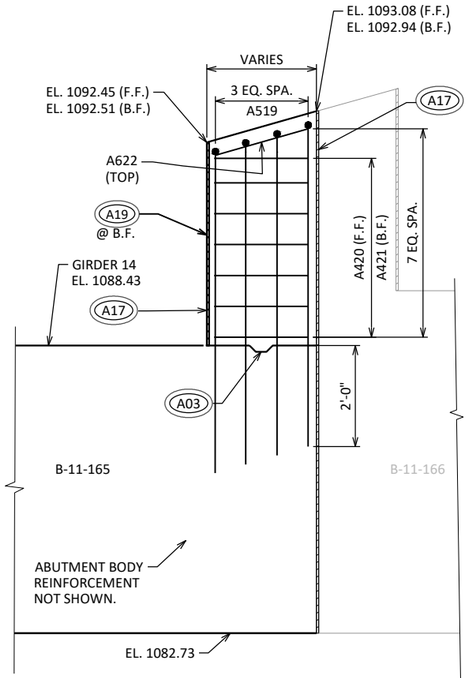


A402



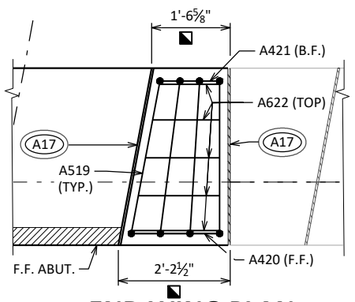


A410, A513 **A508, A519**

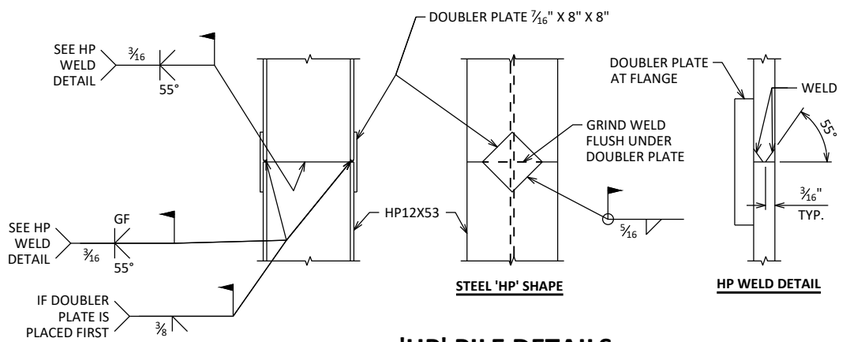


END WING ELEVATION

LOOKING AT FRONT FACE OF ABUTMENT



END WING PLAN



'HP' PILE DETAILS

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NORTH ABUTMENT DETAILS

SHEET 7
486

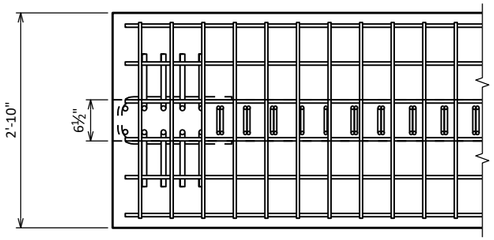
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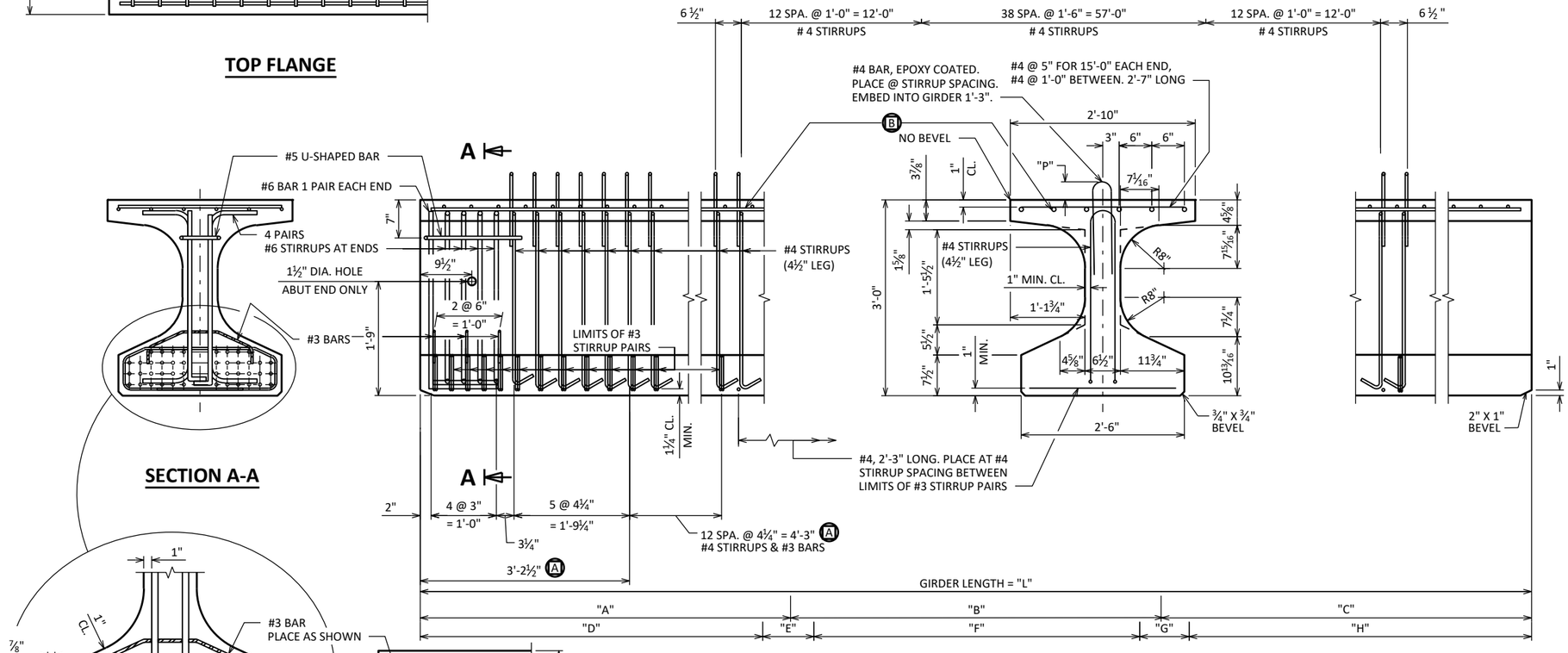
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STATE PROJECT NUMBER

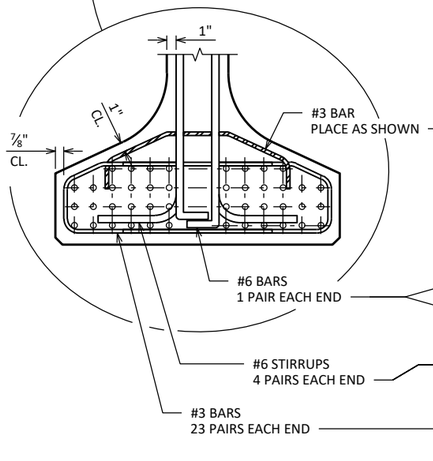
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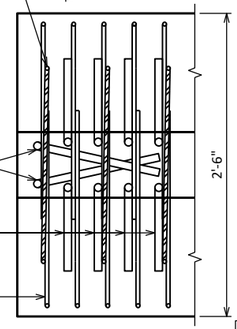


TOP FLANGE



SECTION A-A





BOTTOM FLANGE

SIDE VIEW & TYPICAL SECTION IN SPAN

A DETAIL TYP. AT EACH END

B 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"

GIRDER	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
1	32'-10 3/8 "	32'-4"	31'-9 5/8 "	-	-	-	-	-
2-13	-	-	-	31'-9 5/8 "	1'-0 3/4 "	31'-3 1/4 "	1'-0 3/4 "	31'-9 5/8 "
14	31'-9 5/8 "	32'-4"	32'-10 3/8 "	-	-	-	-	-

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.3 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

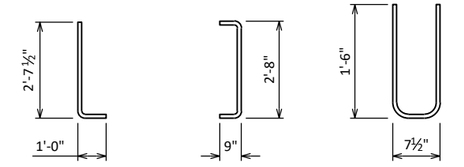
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

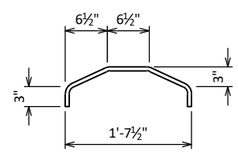
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

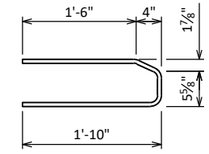
AN EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON ACCEPTANCE OF THE STRUCTURES MAINTENANCE SECTION. IF USED, WWF SUBSTITUTION DETAILS SHALL BE SUBMITTED ELECTRONICALLY TO THE WISDOT FABRICATION LIBRARY AND ACCEPTED PRIOR TO SHOP DRAWING SUBMITTAL.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.







⚹ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L" (FEET)	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CONC. STRGTH. f'c (P.S.I.)	"P" (IN.) 1ST 1/3 OF GIRDER	MID 1/3 OF GIRDER	END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ⚹	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ⚹
1	ALL	97.00	0.7	1.3	1.8	2.1	2.2	2.1	1.8	1.3	0.7	8,000	7.5	7.0	7.5	0.6	34	6,400	31.0	11.5	14.5	5.0		

NO.	DATE	REVISION	BY

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STRUCTURE B-11-165

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36W" PRESTRESSED GIRDER DETAILS 1

SHEET 8
487

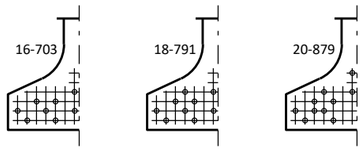
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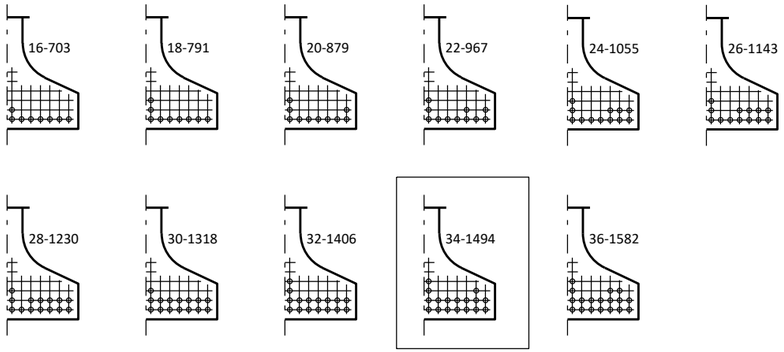
STATE PROJECT NUMBER

1012-01-74



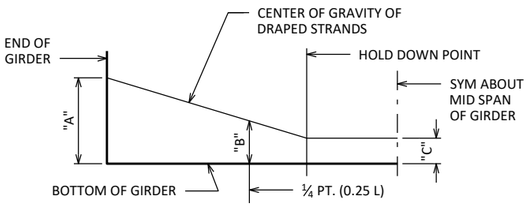
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6" DIA. STRANDS

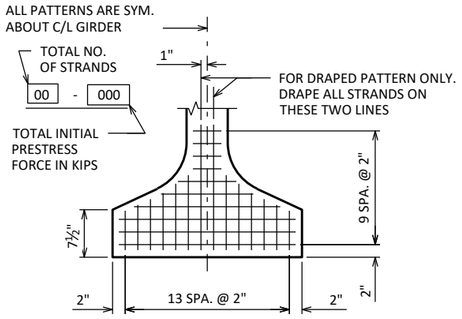


ARRANGEMENT AT C/L SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6" DIA. STRANDS



DRAPED STRAND PROFILE



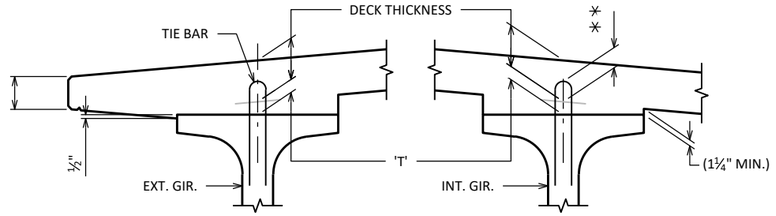
TYP. STRAND PATTERN

⚹ THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) ⚹
1	4.1

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



DECK HAUNCH DETAIL

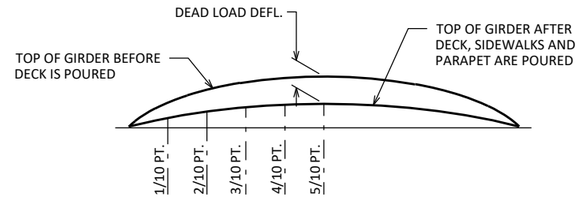
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

⚹⚹ IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT C/L OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

	TOP OF DECK ELEV. AT FINAL GRADE
-	TOP OF GIRDER ELEVATION
+	DEAD LOAD DEFLECTION
-	DECK THICKNESS
=	HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3 ¼" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DEAD LOAD DEFLECTION DIAGRAM

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-165

DRAWN BY DLM | PLANS CK'D JLR

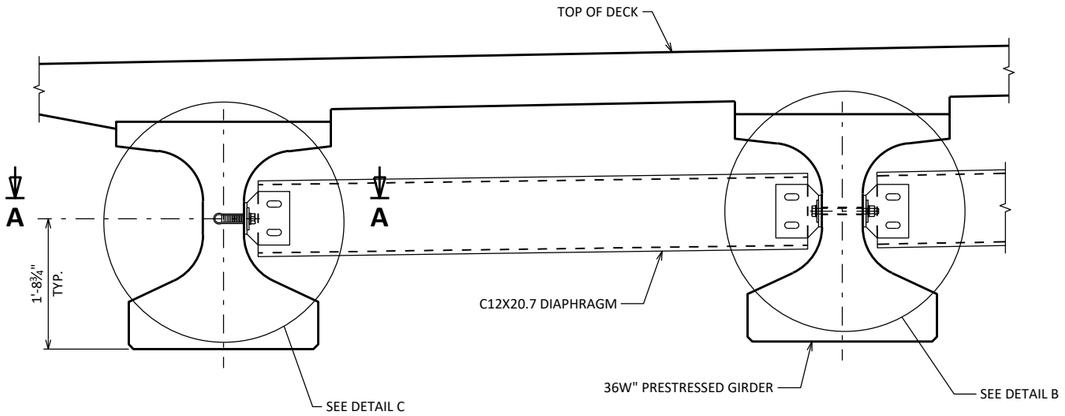
36W" PRESTRESSED GIRDER DETAILS 2

SHEET 9
488

SCALE = 2.00

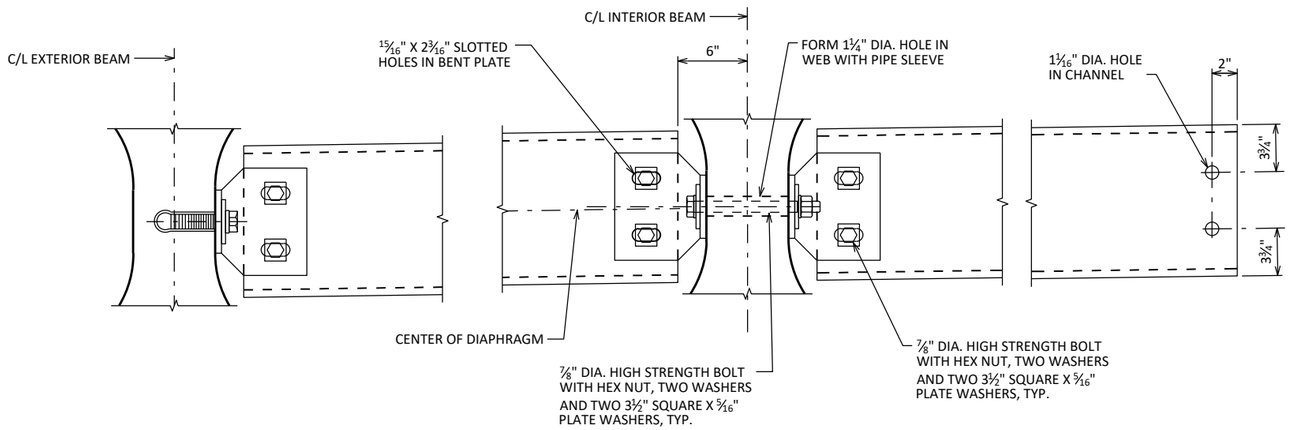
STATE PROJECT NUMBER

1012-01-74

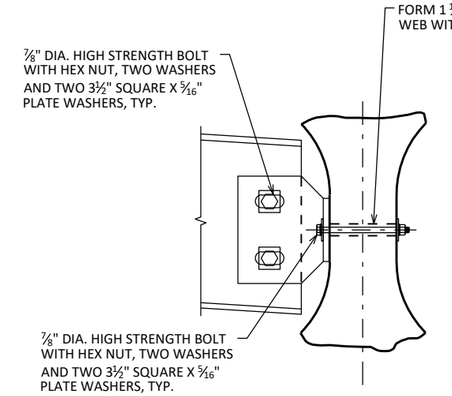


EXTERIOR GIRDER **INTERIOR GIRDER**

PART TRANSVERSE SECTION AT DIAPHRAGM



DETAIL C **DETAIL B**



SECTION AT INTERIOR GIRDERS THRU DIAPHRAGM FOR SKEW ANGLES > 10°

NOTES

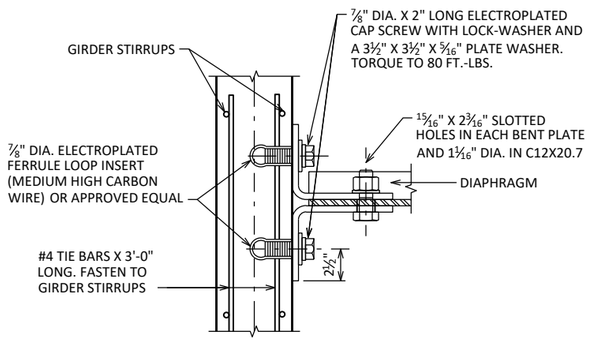
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-11-165", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

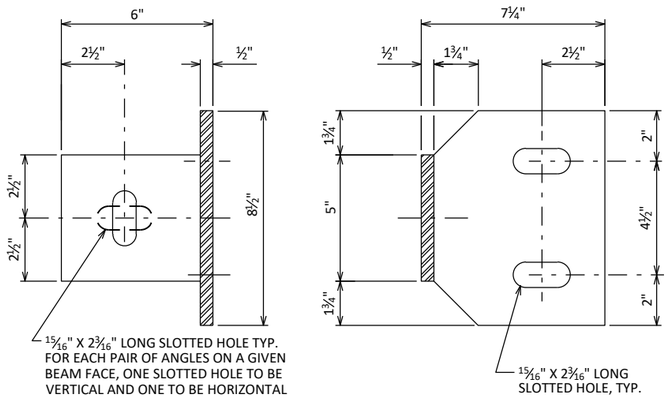
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS ¼ TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

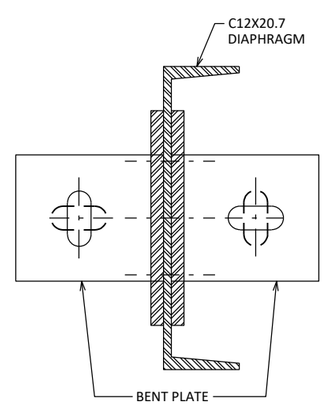


SECTION A-A
(FOR EXTERIOR ATTACHMENT)



BEAM FACE

DIAPHRAGM FACE



ATTACHMENT TO CHANNEL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-165

DRAWN BY DLM | PLANS CK'D JLR

STEEL DIAPHRAGM

SHEET 10
489

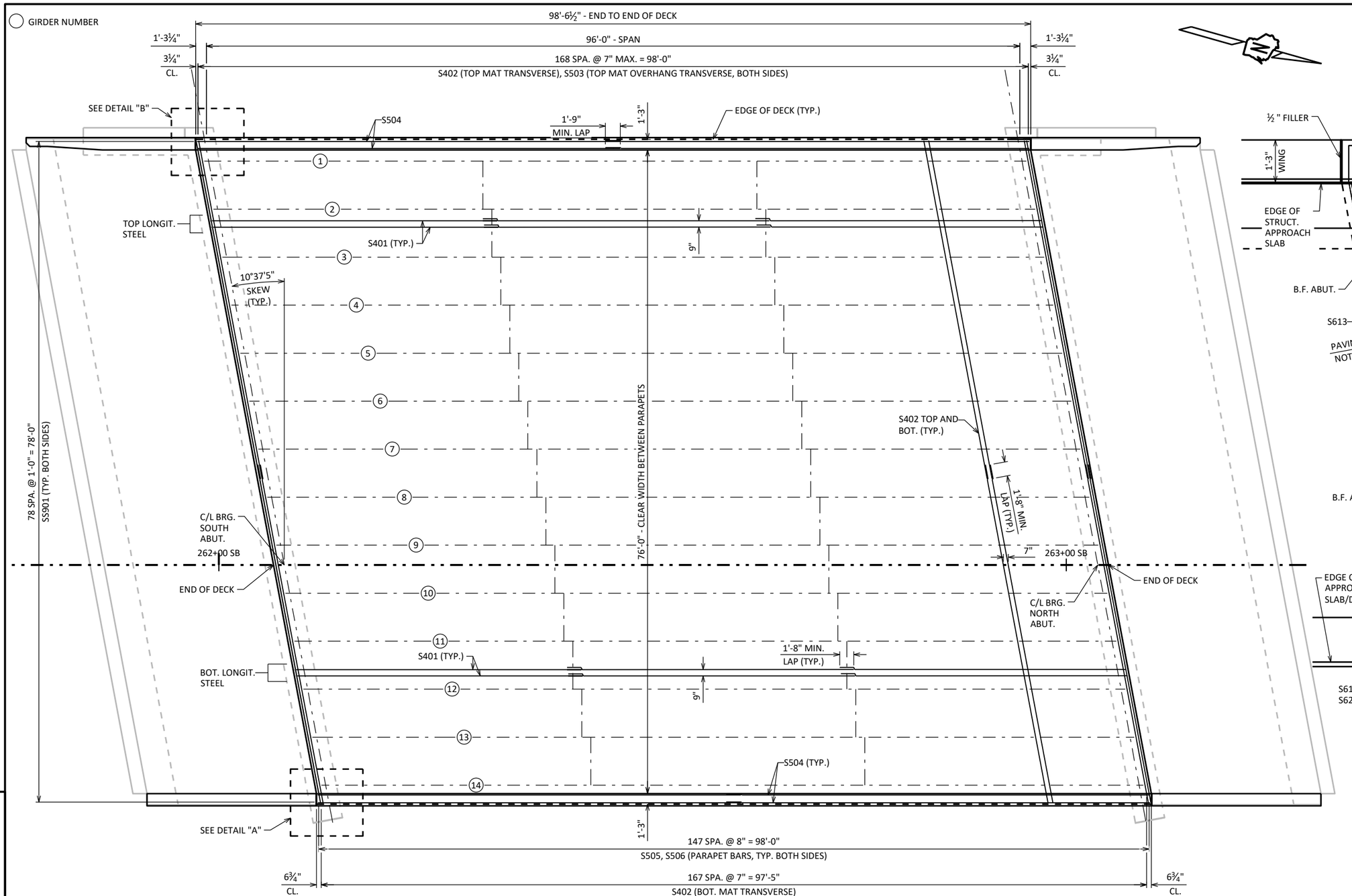
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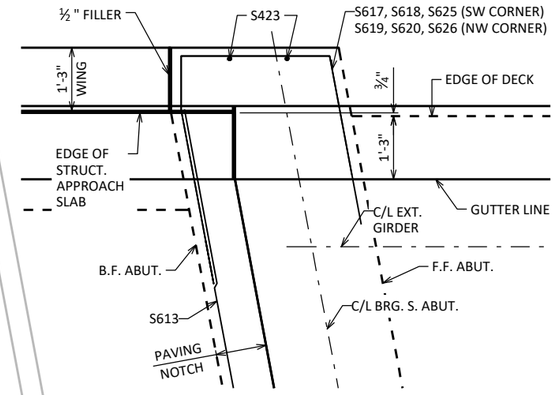
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STATE PROJECT NUMBER

1012-01-74



PLAN



DETAIL "B"

SW CORNER SHOWN,
NW CORNER SIMILAR

DETAIL "A"

SE CORNER SHOWN,
NE CORNER SIMILAR

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-165

DRAWN BY DLM | PLANS CK'D JLR

SUPERSTRUCTURE PLAN

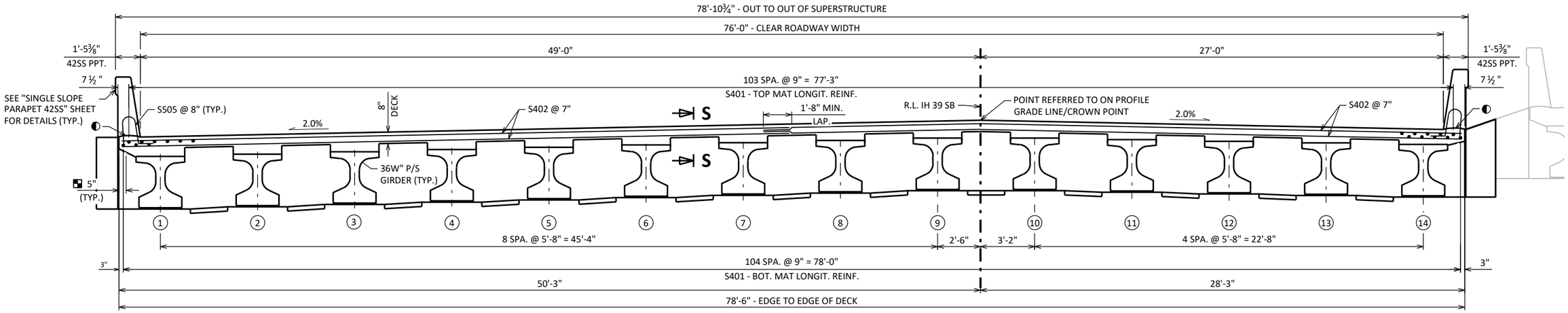
SHEET 11
490

SCALE =

GIRDER NUMBER

STATE PROJECT NUMBER

1012-01-74

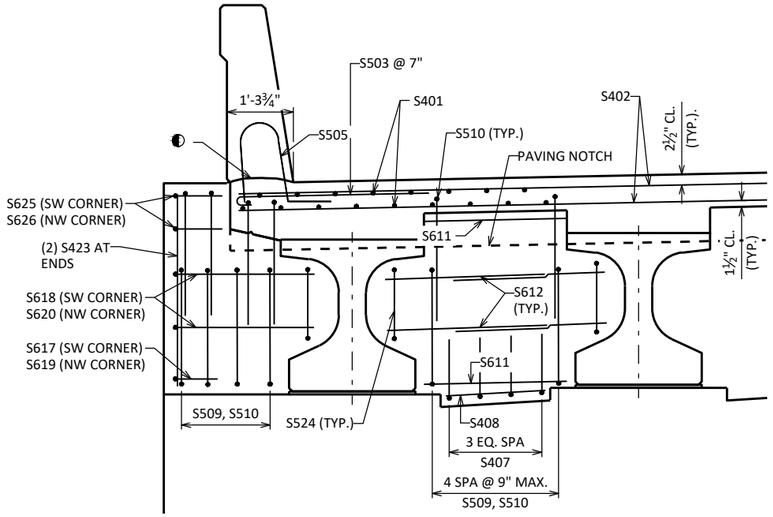


SECTION THRU BRIDGE

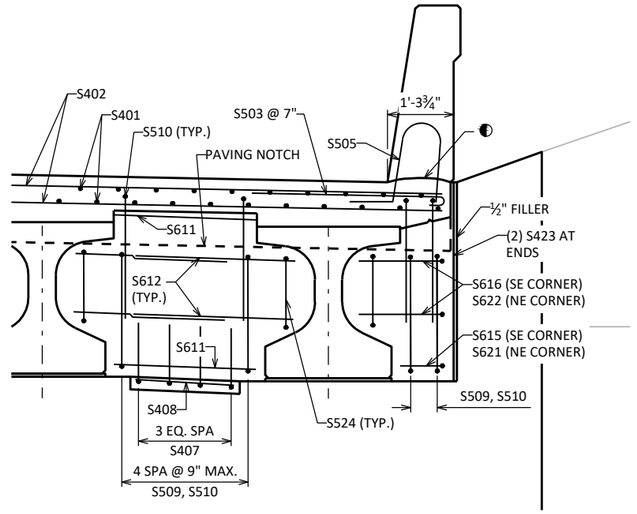
(LOOKING UPSTATION)

¾" V-GROOVE REQUIRED. EXTEND V-GROOVE TO 6" FROM F.F. OF ABUT. DIAPHRAGM.

HORIZ. CONST. JOINT. - STRIKE OFF AND LEAVE ROUGH AS SHOWN.

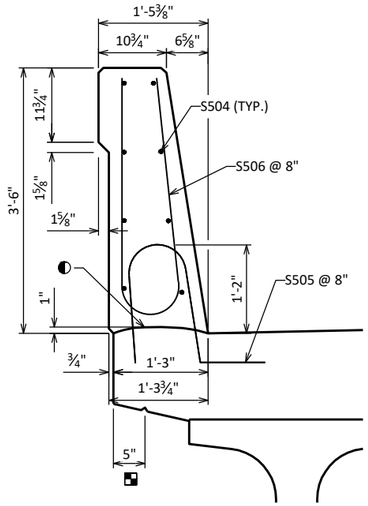


NW CORNER SHOWN, SW CORNER SIMILAR



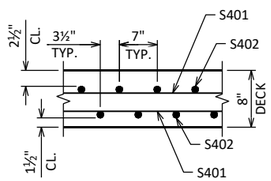
NE CORNER SHOWN, SE CORNER SIMILAR

SECTION THRU BRIDGE AT ABUTMENT DIAPHRAGMS



SECTION THRU PARAPET

LONGIT. DECK REINF. NOT SHOWN FOR CLARITY



SECTION S-S

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-165

DRAWN BY DLM | PLANS CK'D JLR

SUPERSTRUCTURE TYPICAL SECTIONS

SHEET 12
491

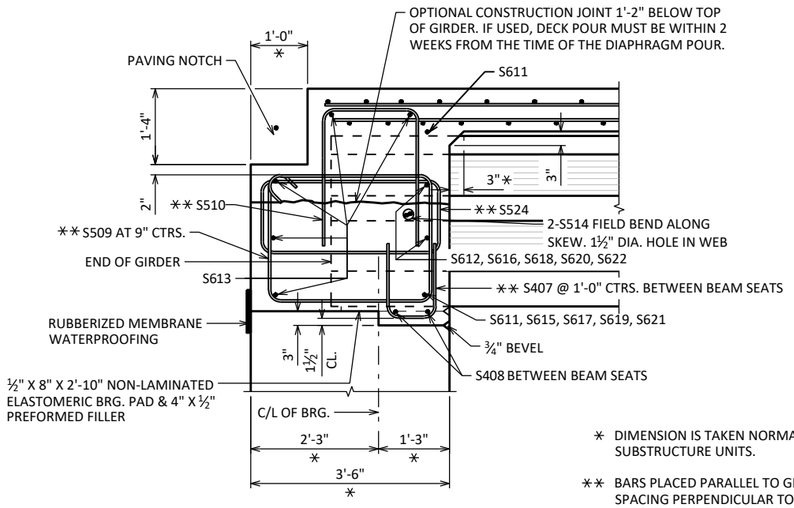
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8

STATE PROJECT NUMBER

1012-01-74

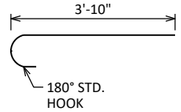


* DIMENSION IS TAKEN NORMAL TO C/L SUBSTRUCTURE UNITS.

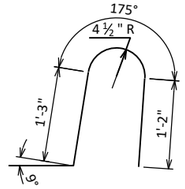
** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO C/L GIRDERS.

PART LONGIT. SECTION

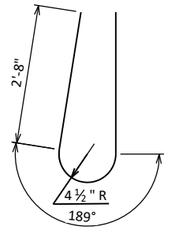
AT ABUTMENTS



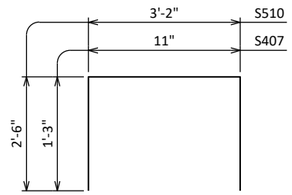
S503



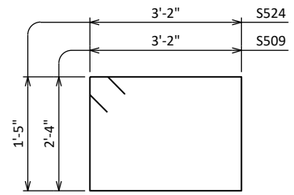
S505



S506



S407, S510



S509, S524

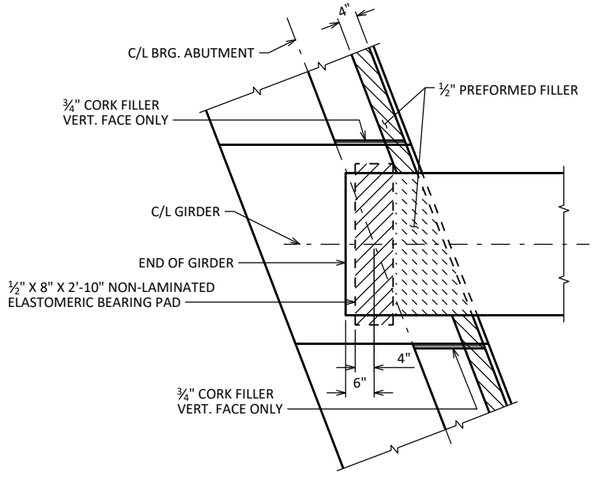
BILL OF BARS

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

	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
	S401	X	627	34'-4"			DECK - LONGIT. - TOP AND BOTTOM
	S402	X	674	40'-8"			DECK - TRANSVERSE - TOP AND BOTTOM
	S503	X	338	4'-5"	X		DECK - TRANSVERSE - TOP - OVERHANG
	S504	X	32	50'-0"			PARAPET - HORIZ.
	S505	X	296	4'-5"	X		PARAPET TO DECK - VERT.
	S506	X	296	6'-8"	X		PARAPET - VERT.
	S407	X	104	3'-3"	X		ABUT. DIAPH. - VERT. BOT. BETWEEN GIRDER
	S408	X	52	1'-11"			ABUT. DIAPH. - HORIZ. BOT. BETWEEN GIRDER
	S509	X	142	11'-8"	X		ABUT. DIAPH. - VERT. STIRRUP
	S510	X	142	7'-11"	X		ABUT. DIAPH. - VERT. U-BAR
	S611	X	52	2'-10"			ABUT. DIAPH. - HORIZ. BOT.
	S612	X	104	3'-3"			ABUT. DIAPH. - HORIZ. MIDDLE
	S613	X	20	42'-5"			ABUT. DIAPH. - HORIZ. B.F. & DECK
	S514	X	56	6'-0"			ABUT. DIPAH. - HORIZ. THRU GIRDER
	S615	X	1	8'-0"	X		ABUT. DIAPH. - SE CORNER - HORIZ. BOT.
	S616	X	2	9'-2"	X		ABUT. DIAPH. - SE CORNER - HORIZ. MIDDLE
	S617	X	1	9'-4"	X		ABUT. DIAPH. - SW CORNER - HORIZ. BOT.
	S618	X	2	10'-6"	X		ABUT. DIAPH. - SW CORNER - HORIZ. MIDDLE
	S619	X	1	9'-9"	X		ABUT. DIAPH. - NW CORNER - HORIZ. BOT.
	S620	X	2	10'-11"	X		ABUT. DIAPH. - NW CORNER - HORIZ. MIDDLE
	S621	X	1	7'-2"	X		ABUT. DIAPH. - NE CORNER - HORIZ. BOT.
	S622	X	2	8'-4"	X		ABUT. DIAPH. - NE CORNER - HORIZ. MIDDLE
	S423	X	8	3'-5"			ABUT. DIAPH. - VERT. AT ENDS
	S524	X	56	9'-10"	X		ABUT. DIAPH. - VERT. STIRRUP
	S625	X	2	4'-7"	X		ABUT. DIAPH. - SW CORNER - HORIZ. TOP
	S626	X	2	4'-7"	X		ABUT. DIAPH. - NW CORNER - HORIZ. TOP
STAINLESS	SS901		158	5'-0"	X		CONC. ABUT. DIAPH. TO APPROACH SLAB

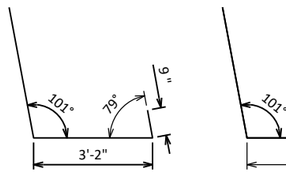
TOP OF DECK ELEVATIONS

	S.ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	N. ABUT.
W. EOD	1089.98	1090.16	1090.34	1090.52	1090.69	1090.87	1091.05	1091.23	1091.40	1091.58	1091.76
GIRDER 1	1090.02	1090.19	1090.37	1090.55	1090.73	1090.90	1091.08	1091.26	1091.44	1091.61	1091.79
GIRDER 2	1090.15	1090.33	1090.50	1090.68	1090.86	1091.04	1091.21	1091.39	1091.57	1091.75	1091.92
GIRDER 3	1090.28	1090.46	1090.64	1090.81	1090.99	1091.17	1091.35	1091.52	1091.70	1091.88	1092.06
GIRDER 4	1090.41	1090.59	1090.77	1090.95	1091.12	1091.30	1091.48	1091.66	1091.84	1092.01	1092.19
GIRDER 5	1090.55	1090.72	1090.90	1091.08	1091.26	1091.44	1091.61	1091.79	1091.97	1092.15	1092.32
GIRDER 6	1090.68	1090.86	1091.04	1091.21	1091.39	1091.57	1091.75	1091.92	1092.10	1092.28	1092.46
GIRDER 7	1090.81	1090.99	1091.17	1091.35	1091.52	1091.70	1091.88	1092.06	1092.23	1092.41	1092.59
GIRDER 8	1090.95	1091.12	1091.30	1091.48	1091.66	1091.83	1092.01	1092.19	1092.37	1092.54	1092.72
GIRDER 9	1091.08	1091.26	1091.43	1091.61	1091.79	1091.97	1092.14	1092.32	1092.50	1092.68	1092.86
CROWN PT.	1091.14	1091.32	1091.49	1091.67	1091.85	1092.03	1092.20	1092.38	1092.56	1092.74	1092.91
GIRDER 10	1091.09	1091.26	1091.44	1091.62	1091.80	1091.97	1092.15	1092.33	1092.51	1092.68	1092.86
GIRDER 11	1090.99	1091.17	1091.35	1091.52	1091.70	1091.88	1092.06	1092.24	1092.41	1092.59	1092.77
GIRDER 12	1090.90	1091.08	1091.25	1091.43	1091.61	1091.79	1091.96	1092.14	1092.32	1092.50	1092.67
GIRDER 13	1090.81	1090.98	1091.16	1091.34	1091.52	1091.69	1091.87	1092.05	1092.23	1092.40	1092.58
GIRDER 14	1090.71	1090.89	1091.07	1091.24	1091.42	1091.60	1091.78	1091.95	1092.13	1092.31	1092.49
E. EOD	1090.70	1090.87	1091.05	1091.23	1091.41	1091.58	1091.76	1091.94	1092.12	1092.29	1092.47

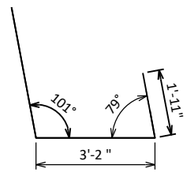


BEARING PAD DETAIL

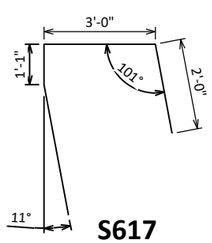
AT ABUTMENTS



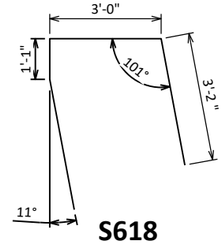
S615



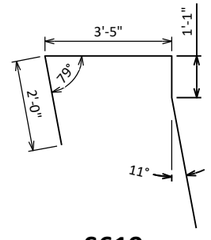
S616



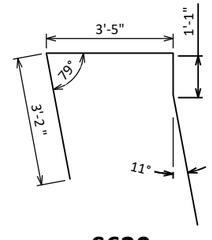
S617



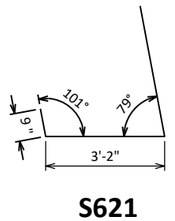
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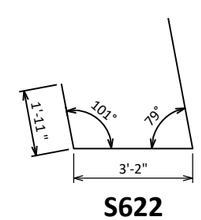
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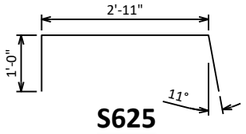
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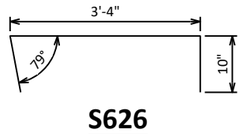
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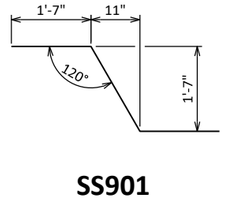
S622



S625



S626



SS901

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-165

DRAWN BY DLM | PLANS CK'D JLR

SUPERSTRUCTURE DETAILS

SHEET 13
492

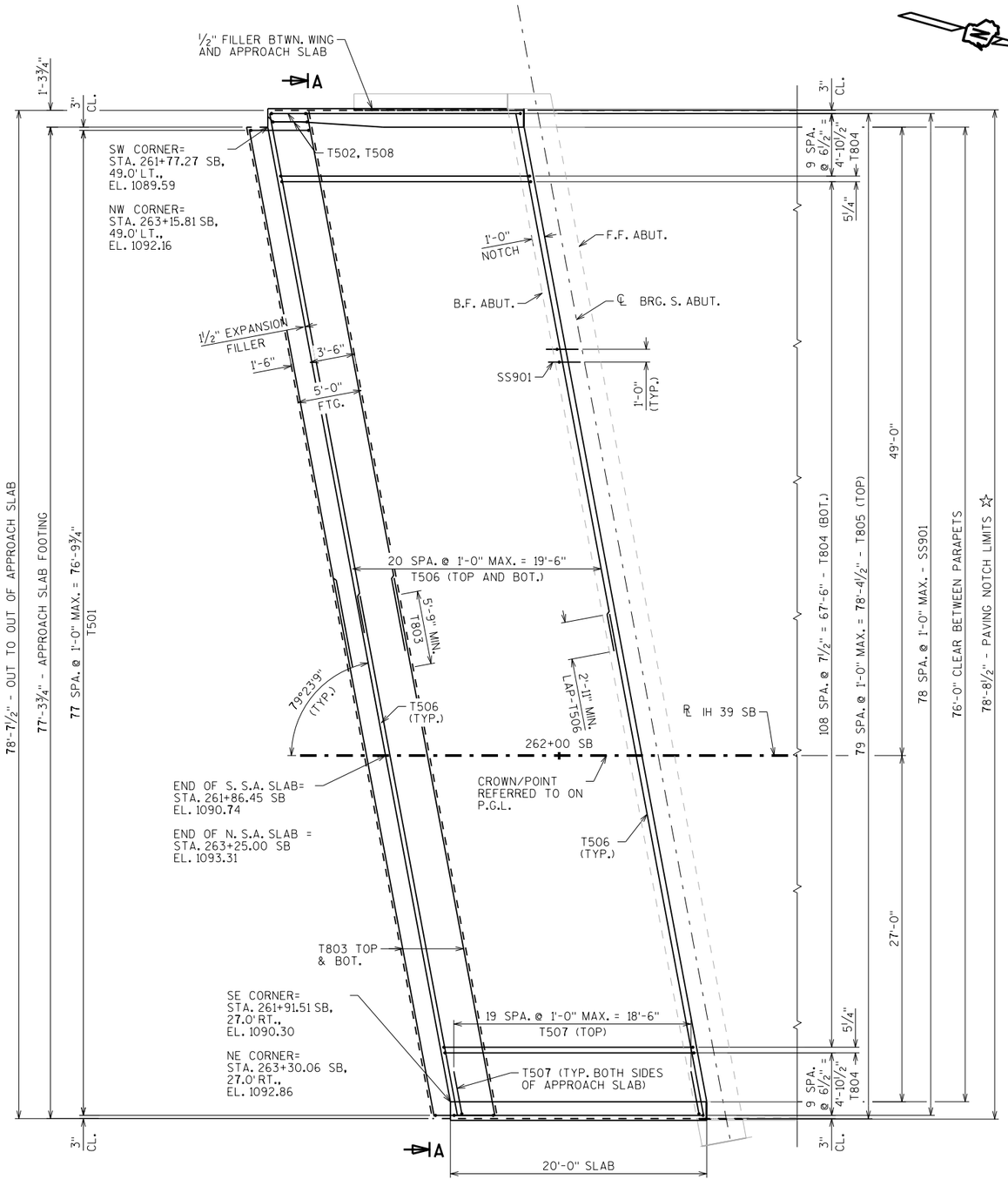
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STATE PROJECT NUMBER

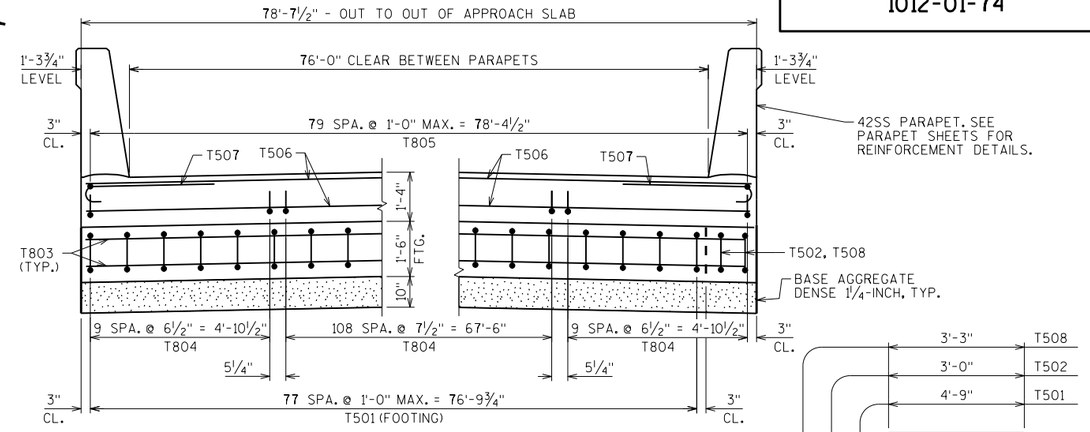
1012-01-74



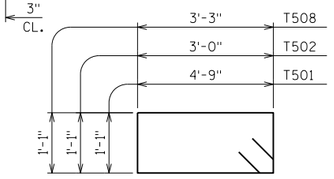
PLAN - APPROACH SLAB

SOUTH APPROACH SLAB SHOWN
NORTH APPROACH SLAB SIMILAR

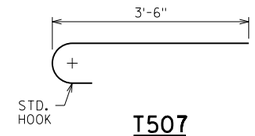
☆ DIMENSION INCLUDES 1/2" FILLER ON BOTH SIDES OF PAVING NOTCH



SECTION A-A



T501, T502, T508



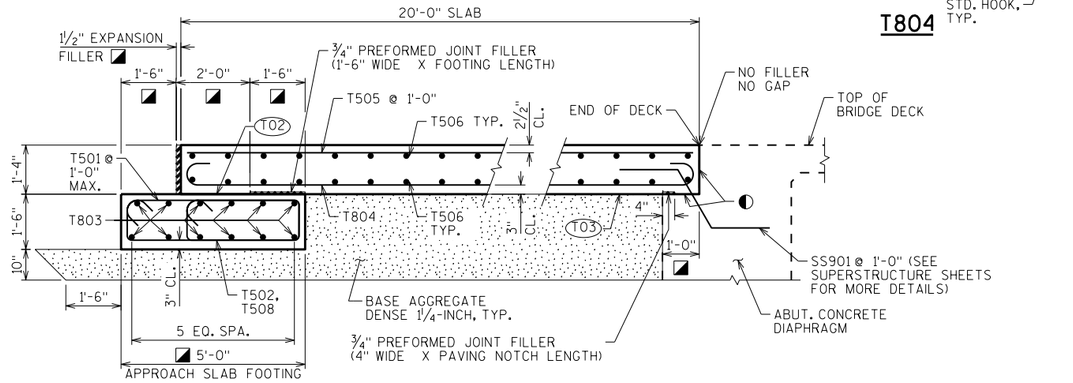
T507

T804

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	S. ABUT. NO. REQ'D.	N. ABUT. NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	78	78	12'-4"	X		APPROACH SLAB FTG. - STIRRUP
T502	X	2	--	8'-10"	X		S. APPROACH SLAB FTG. - STIRRUP AT NOTCH
T803	X	24	24	42'-9"			APPROACH SLAB FTG. - TRANS.
T804	X	129	129	21'-6"	X		APPROACH SLAB - LONGIT. - BOT.
T805	X	80	80	19'-8"			APPROACH SLAB - LONGIT. - TOP.
T506	X	84	84	41'-4"			APPROACH SLAB - TRANSVERSE - TOP & BOT.
T507	X	40	40	4'-1"	X		APPROACH SLAB - TRANSVERSE - TOP
T508	X	--	2	9'-4"	X		N. APPROACH SLAB FTG. -STIRRUP AT NOTCH



SECTION THRU APPROACH SLAB

◐ APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCTURAL APPROACH SLAB.

◪ MEASURED NORMAL TO ABUTMENT

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE SUBGRADE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-165

DRAWN BY DLM | PLANS CK'D. JLR

STRUCTURAL APPROACH SLABS

SHEET 14

493

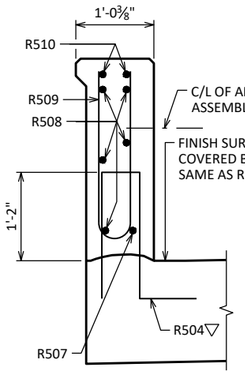
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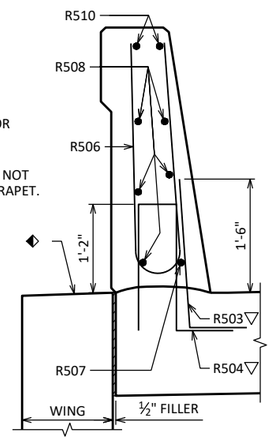
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STATE PROJECT NUMBER

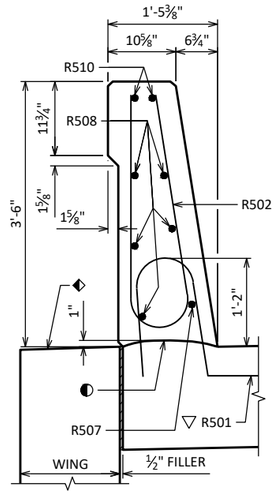
1012-01-74



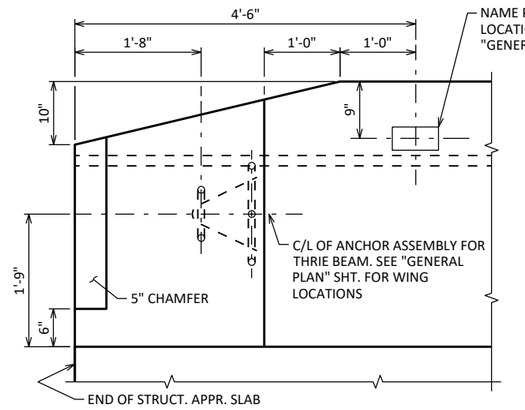
SECTION A-A



SECTION B-B



SECTION C-C



PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

BILL OF BARS

FOR STRUCTURAL APPROACH SLAB PARAPETS

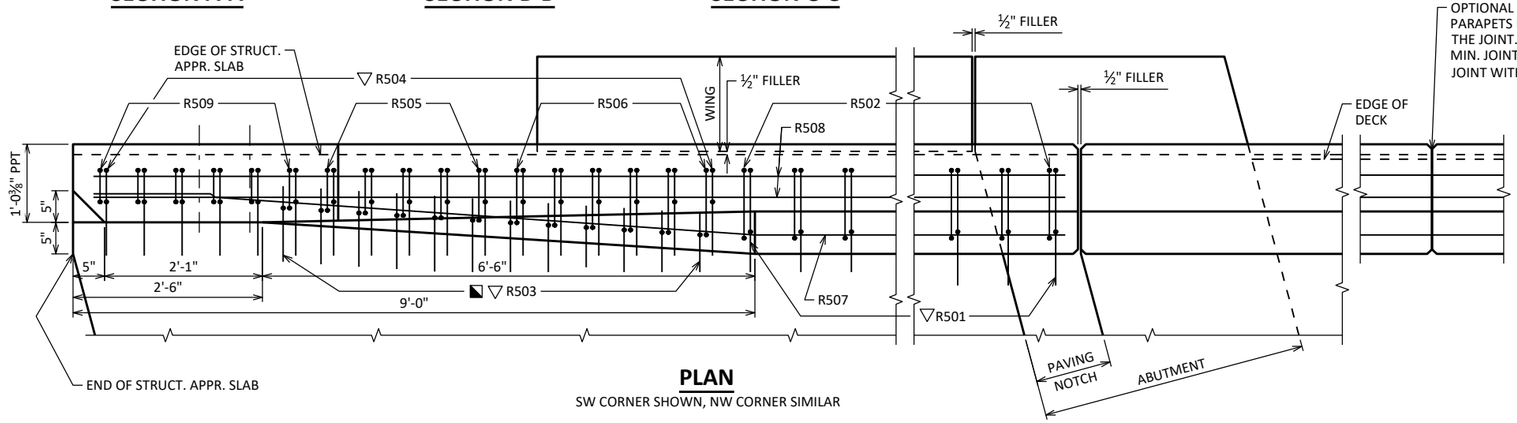
BAR MARK	COAT	SOUTH ABUT.	NORTH ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	18	18	4'-5"	X		PARAPET VERT.
R502	X	18	18	6'-8"	X		PARAPET VERT.
R503	X	12	12	2'-9"	X		PARAPET VERT.
R504	X	17	17	4'-4"	X		PARAPET VERT.
R505	X	5	5	6'-5"	X		PARAPET VERT.
R506	X	6	6	6'-6"	X		PARAPET VERT.
R507	X	1	1	19'-7"	X		PARAPET HORIZ.
R508	X	5	5	19'-7"			PARAPET HORIZ.
R509	X	6	6	5'-5"	X	⚠	PARAPET VERT.
R510	X	2	2	19'-7"	X		PARAPET HORIZ.

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

BAR SERIES TABLE

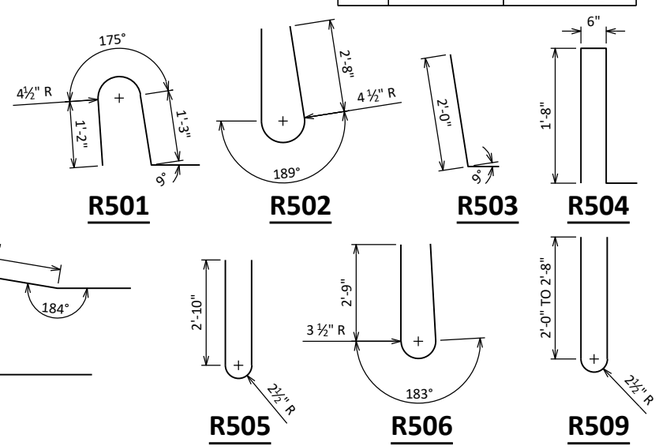
BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
R509	2 SERIES OF 6	4'-9" TO 6'-1"



PLAN

SW CORNER SHOWN, NW CORNER SIMILAR

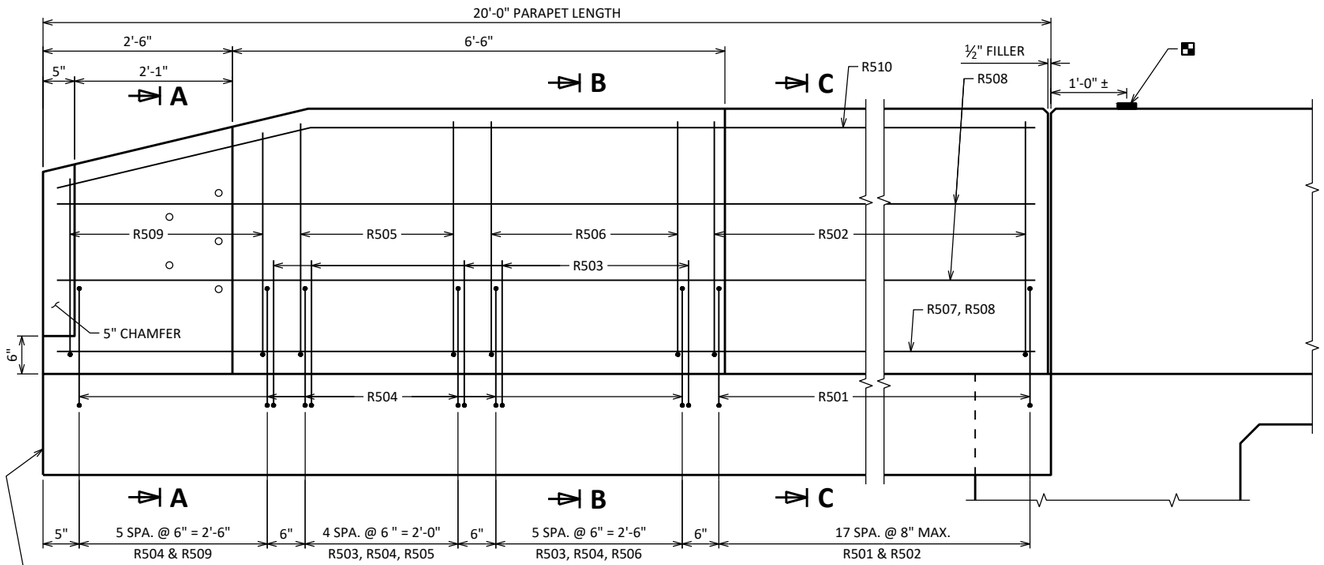


R501 **R502** **R503** **R504**

R507

R510

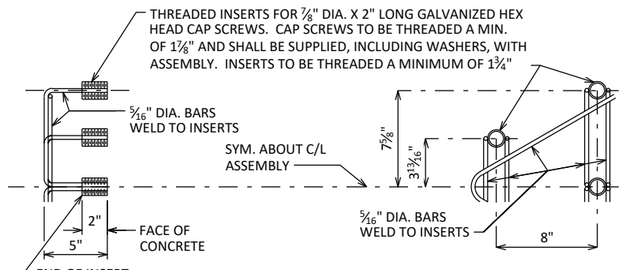
R505 **R506** **R509**



INSIDE ELEVATION

SW CORNER SHOWN, NW SIMILAR
WING & STRUCTURAL APPROACH SLAB FOOTING NOT SHOWN FOR CLARITY

BENCH MARK CAP (WHEN SUPPLIED). AVOID PLACING A BENCH MARK CAP BELOW A RAIL OR FENCE SYSTEM THAT IS ATTACHED TO THE TOP OF THE PARAPET.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

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

- CONST. JOINT - STRIKE OFF AS SHOWN
- SLOPE FOR DRAINAGE
- USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.
- ▽ R501, R503, AND R504 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-165

DRAWN BY DLM | PLANS CK'D JLR

SINGLE SLOPE PARAPET 42SS NW AND SW CORNERS

SHEET 15
494

SCALE = 2.00

8

8

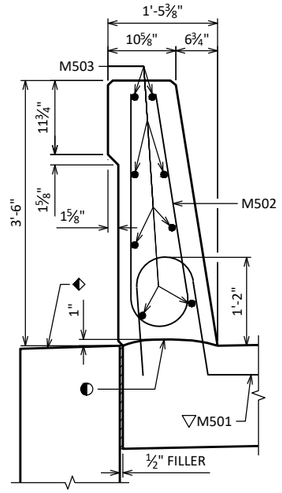
STATE PROJECT NUMBER

1012-01-74

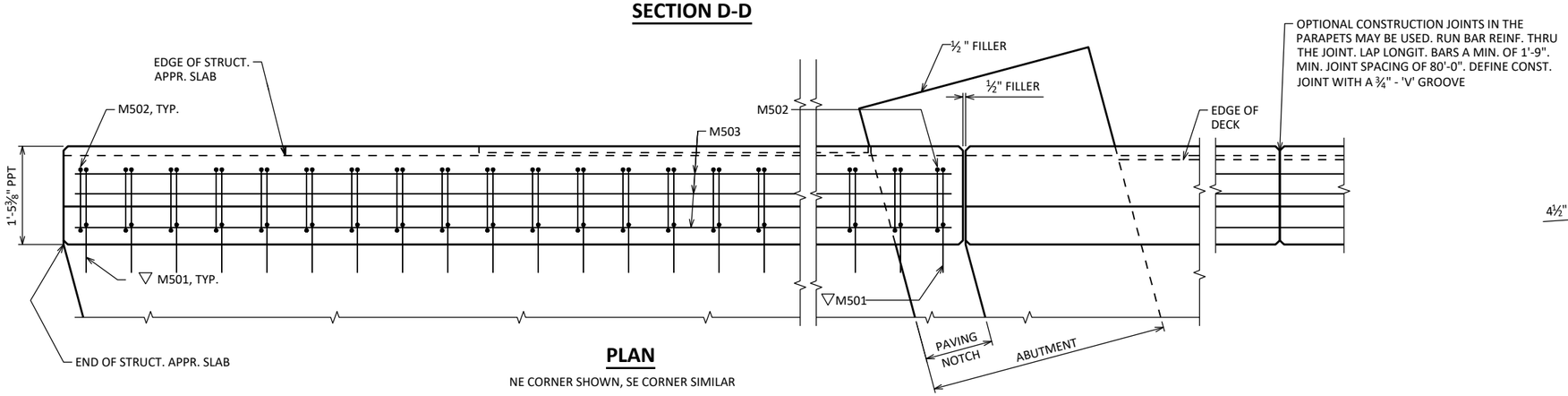
BILL OF BARS

FOR STRUCTURAL APPOACH SLAB PARAPETS

BAR MARK	COAT	SOUTH ABUT.	NORTH ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
M501	X	31	31	4'-5"	X		PARAPET VERT.
M502	X	31	31	6'-8"	X		PARAPET VERT.
M503	X	8	8	19'-7"			PARAPET HORIZ.

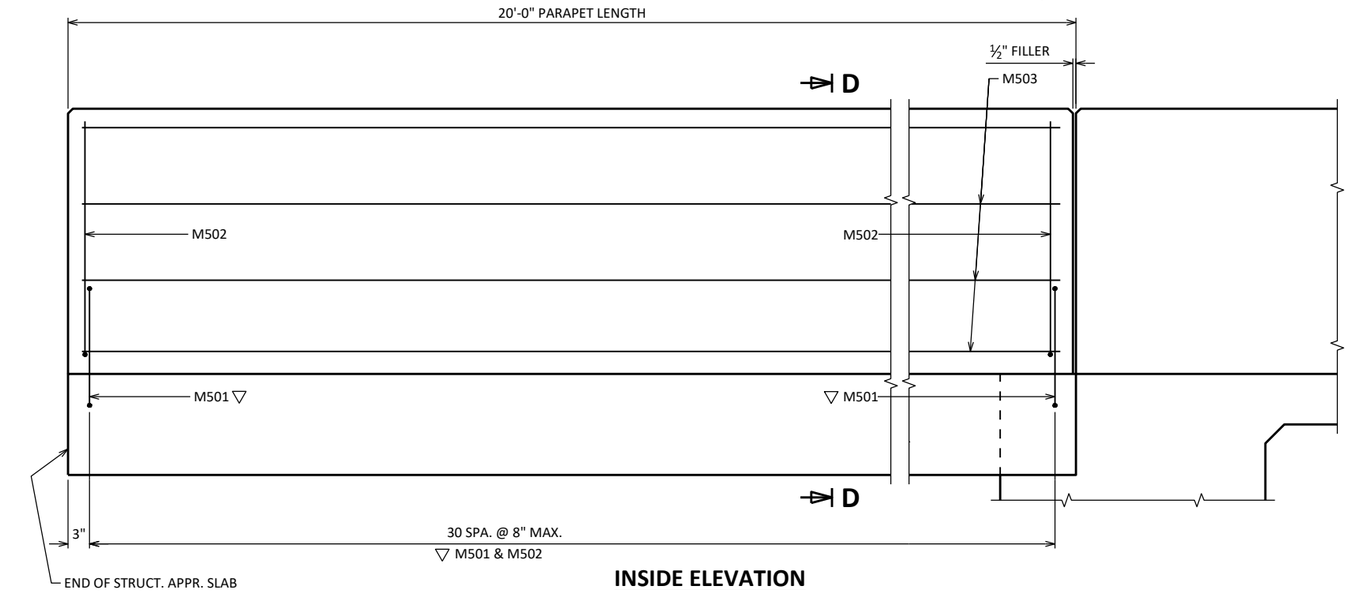


SECTION D-D



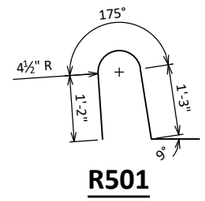
PLAN

NE CORNER SHOWN, SE CORNER SIMILAR

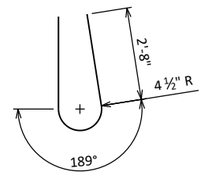


INSIDE ELEVATION

NE CORNER SHOWN, SE CORNER SIMILAR
WING & STRUCTURAL APPROACH SLAB FOOTING NOT SHOWN FOR CLARITY



R501



R502

- CONST. JOINT - STRIKE OFF AS SHOWN
- SLOPE FOR DRAINAGE
- M501 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-165

DRAWN BY DLM | PLANS CK'D JLR

SINGLE SLOPE PARAPET 42SS NE AND SE CORNERS

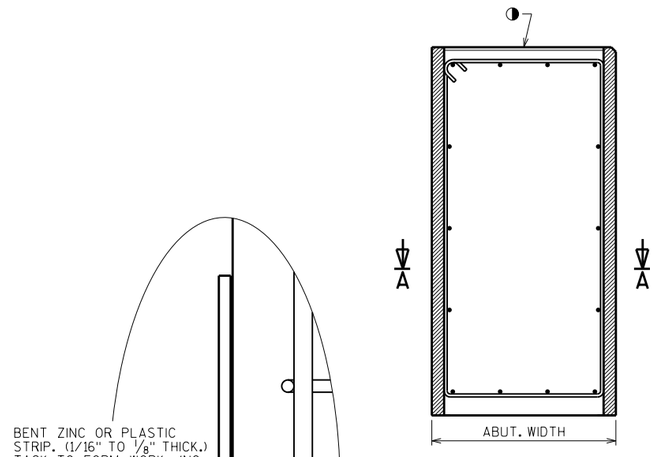
SHEET 16
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SCALE = 2.00

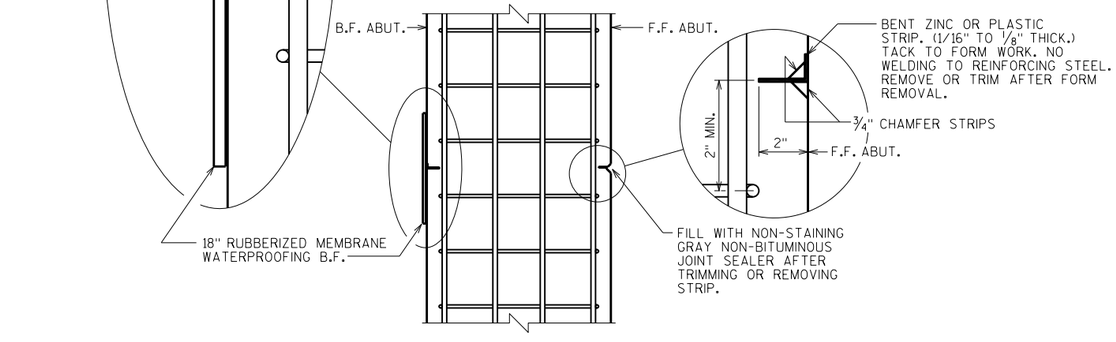
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8

STATE PROJECT NUMBER
1012-01-74



SECTION THRU ABUTMENT BODY



SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SAW CUTTING JOINT IS NOT ALLOWED.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-165

DRAWN BY	DLM	PLANS CK'D.	JLR

ALTERNATE CONSTRUCTION JOINT

SHEET 17

496

SCALE = 1.00

8

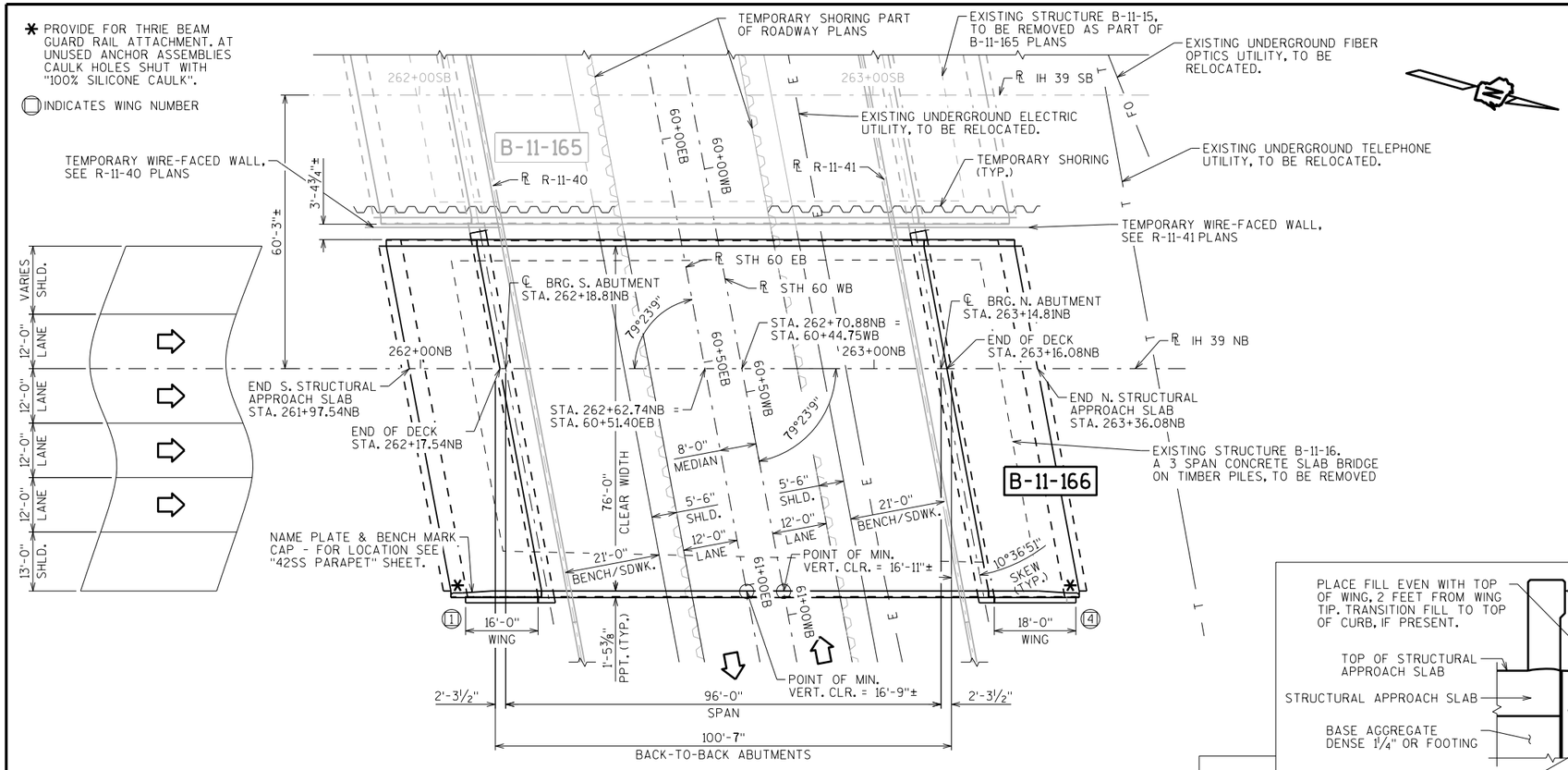
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STATE PROJECT NUMBER

1012-01-74

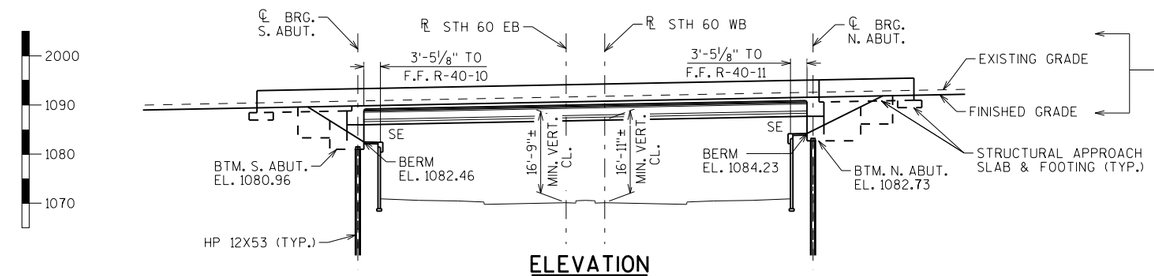
✱ PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".

(1) INDICATES WING NUMBER



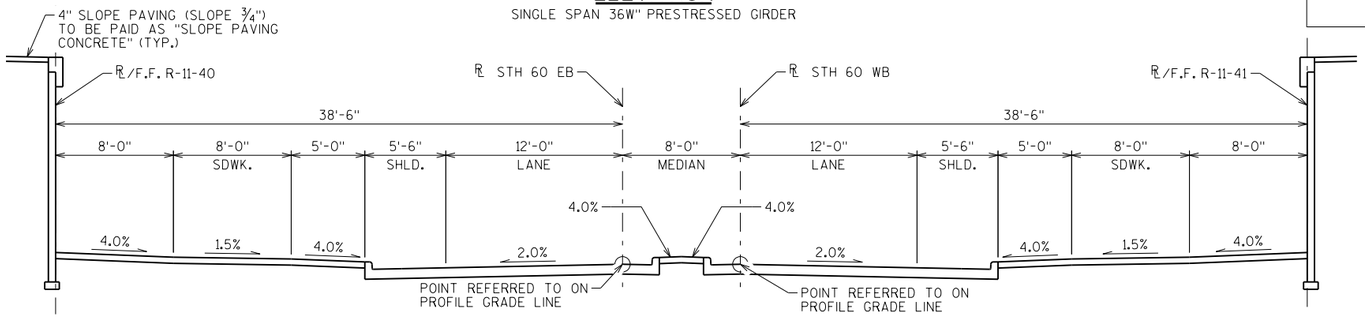
PLAN

SINGLE SPAN 36W" PRESTRESSED GIRDER



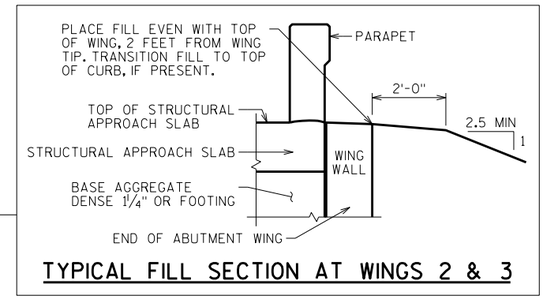
ELEVATION

SINGLE SPAN 36W" PRESTRESSED GIRDER

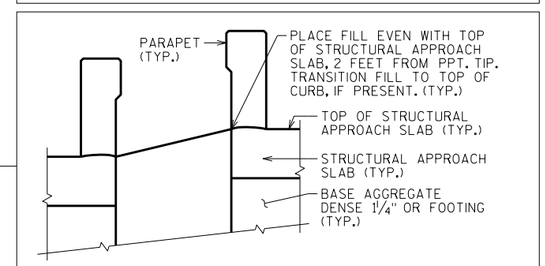


TYPICAL FINISHED SECTION THRU STH 60

NORMAL TO STH 60



TYPICAL FILL SECTION AT WINGS 2 & 3



TYPICAL FILL SECTION AT MEDIAN

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.18
OPERATING RATING FACTOR: RF = 1.54
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250(KIPS)

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

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE & STRUCTURAL APPROACH SLAB — f'c = 4,000 P.S.I.
ALL OTHER — f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT:
GRADE 60 — fy = 60,000 P.S.I.
STAINLESS, GRADE 60 — fy = 60,000 P.S.I.

36W" PRESTRESSED GIRDERS:
CONCRETE MASONRY — f'c = 8,000 P.S.I.
STRANDS: 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP12X53 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS ✱✱ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 40'LONG AT SOUTH ABUTMENT. AT NORTH ABUTMENT ESTIMATED 35'LONG AT EAST SIDE TO 40'LONG AT WEST SIDE.
PREBORING REQUIRED AT NORTH ABUTMENT.

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

TRAFFIC VOLUME

IH 39
ADT = 72,350 (2042)
R.D.S. = 75 M.P.H.

STH 60
ADT = 10,750 (2042)
R.D.S. = 60 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. GENERAL NOTES & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. 36W" PRESTRESSED GIRDER DETAILS 1
9. 36W" PRESTRESSED GIRDER DETAILS 2
10. STEEL DIAPHRAGM
11. SUPERSTRUCTURE PLAN
12. SUPERSTRUCTURE TYPICAL SECTIONS
13. SUPERSTRUCTURE DETAILS
14. STRUCTURAL APPROACH SLABS
15. SINGLE SLOPE PARAPET 42SS NE & SE CORNERS
16. SINGLE SLOPE PARAPET 42SS NW & SW CORNERS
17. ALTERNATE CONSTRUCTION JOINT

STRUCTURE DESIGN CONTACTS:
JONATHON RESHESKE (608) 266-8491
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

WISCONSIN DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURES

ACCEPTED LLS 3/15/22
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-11-166

IH 39 NB OVER STH 60

COUNTY: COLUMBIA | TOWN: ARLINGTON

DESIGN SPEC.: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
JLR	DLM	DLM	JLR

GENERAL PLAN

SHEET 1 OF 17

497

I.D. 1012-01-04B

DATE: MARCH 2022

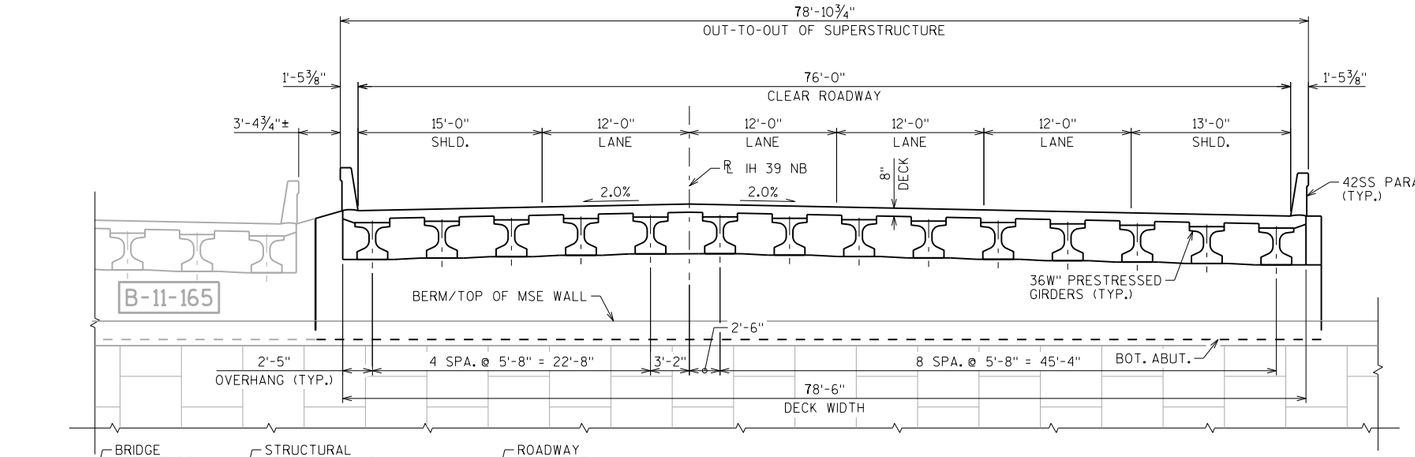
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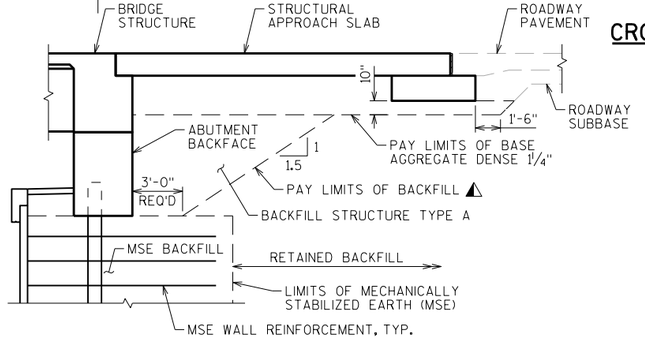
STATE PROJECT NUMBER

1012-01-74



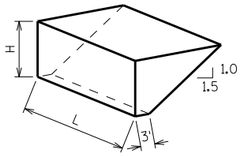
CROSS SECTION THRU ROADWAY

LOOKING UPSTATION



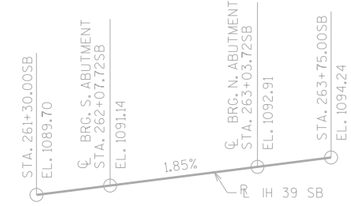
TYPICAL SECTION THRU ABUTMENT

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

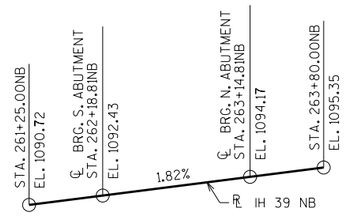


ABUTMENT BACKFILL DIAGRAM FOR WINGS PARALLEL TO ROADWAY

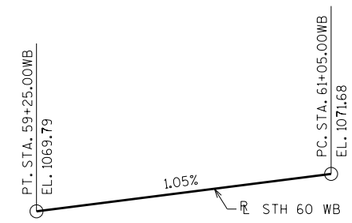
L = OUT TO OUT OF ABUTMENT, INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)
V_{CY} = V_{CF} (EF)/27
V_{TON} = V_{CY} (2.0)



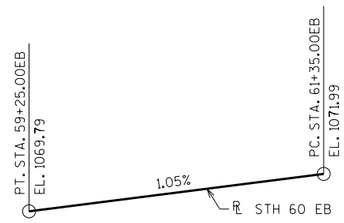
PROFILE GRADE LINE - IH 39 SB



PROFILE GRADE LINE - IH 39 NB



PROFILE GRADE LINE - STH 60 WB



PROFILE GRADE LINE - STH 60 EB

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER	S. STRUCT. APP. SLAB	SOUTH ABUT.	NORTH ABUT.	N. STRUCT. APP. SLAB	TOTALS
203.0220	REMOVING STRUCTURE B-11-16	EACH	---	---	---	---	---	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-11-166	LS	---	---	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	---	---	390	388	---	778
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	---	---	248	248	---	496
502.0100	CONCRETE MASONRY BRIDGES	CY	322	106	88	90	106	712
502.3200	PROTECTIVE SURFACE TREATMENT	SY	874	169	---	---	169	1,212
502.3210	PIGMENTED SURFACE SEALER	SY	97	20	---	---	20	137
503.0137	PRESTRESSED GIRDER TYPE I36W-INCH	LF	1,358	---	---	---	---	1,358
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	---	5,670	5,930	---	11,600
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	45,670	20,270	1,120	1,360	20,270	88,690
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	2,690	---	---	---	---	2,690
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	28	---	---	---	---	28
506.4000	STEEL DIAPHRAGMS B-11-166	EACH	26	---	---	---	---	26
511.1200	TEMPORARY SHORING B-11-166	SF	---	---	1,035	1,040	---	2,075
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	---	16	17	---	33
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	---	---	---	330	---	330
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	---	---	600	600	---	1,200
604.0400	SLOPE PAVING CONCRETE	SY	---	---	28	27	---	55
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	---	2	---	---	2	4
	NON-BID ITEMS							
	FILLER	SIZE	---	---	---	---	---	½", ¾", 1½"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES B-11-166" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A. ALSO EXCLUDED IS THE "BASE AGGREGATE DENSE 1 1/4-INCH" AS DETAILED ON THE STRUCTURAL APPROACH SLAB SHEETS.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK AND APPROACH SLAB SURFACES AND TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT DIAPHRAGMS.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON APPROACH SLABS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING CONCRETE TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "36W PRESTRESSED GIRDER DETAILS 2" SHEET.

ACTUAL PREBORING DEPTH IS EXPECTED TO VARY DUE TO SLOPING BEDROCK AND IS TO BE DETERMINED IN THE FIELD TO ACHIEVE A MINIMUM PILE EMBEDMENT OF 3 FEET INTO BEDROCK.

PILES ARE EXPECTED TO TERMINATE IN BEDROCK. VARIABILITY IN DRIVEN PILE TIP ELEVATIONS IS EXPECTED DUE TO SLOPING AND UNDULATING BEDROCK SURFACES.

EXCAVATION BELOW SUBGRADE (EBS) OF SOFT SILT/CLAY BELOW RETAINING WALLS R-11-040 AND R-11-041 AND BACKFILLING WITH COMPACTED GRANULAR BACKFILL SHOULD OCCUR PRIOR TO PILE INSTALLATION. REFER TO R-11-040 AND R-11-041 PLANS FOR DETAILS.

TEMPORARY SHORING DESIGN SHOULD CONSIDER POTENTIAL EBS DEPTHS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

DRAWN BY DLM | PLANS CK'D. JLR

GENERAL NOTES & QUANTITIES

SHEET 2

498

SCALE = 6.00

8

8

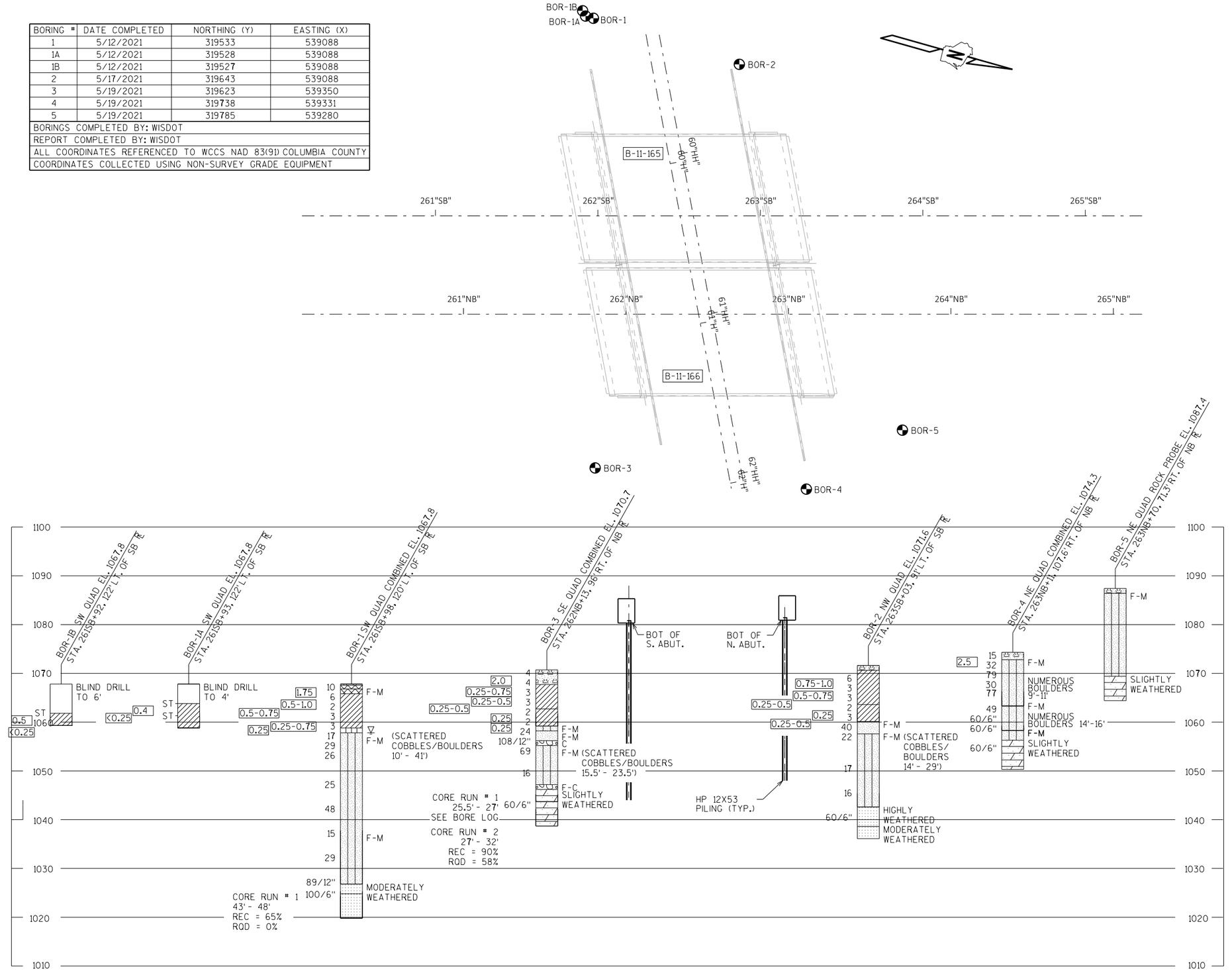
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	5/12/2021	319533	539088
1A	5/12/2021	319528	539088
1B	5/12/2021	319527	539088
2	5/17/2021	319643	539088
3	5/19/2021	319623	539350
4	5/19/2021	319738	539331
5	5/19/2021	319785	539280

BORINGS COMPLETED BY: WISDOT

REPORT COMPLETED BY: WISDOT

ALL COORDINATES REFERENCED TO WCCS NAD 83(91) COLUMBIA COUNTY

COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT



STATE PROJECT NUMBER

1012-01-74

MATERIAL SYMBOLS

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

LEGEND OF BORING

BORING #/EL.
STA./OFFSET
ST
0.25 (1) 17 (2)
F-C
COBBLE OR BOULDER
WEATHERED LIMESTONE
CORE RUN #1 - 24'-29' REC=80%, RQD=72%

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

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

GROUND WATER ELEVATION

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

DRAWN BY TLP/DLM | PLANS CK'D. JLR

SUBSURFACE EXPLORATION

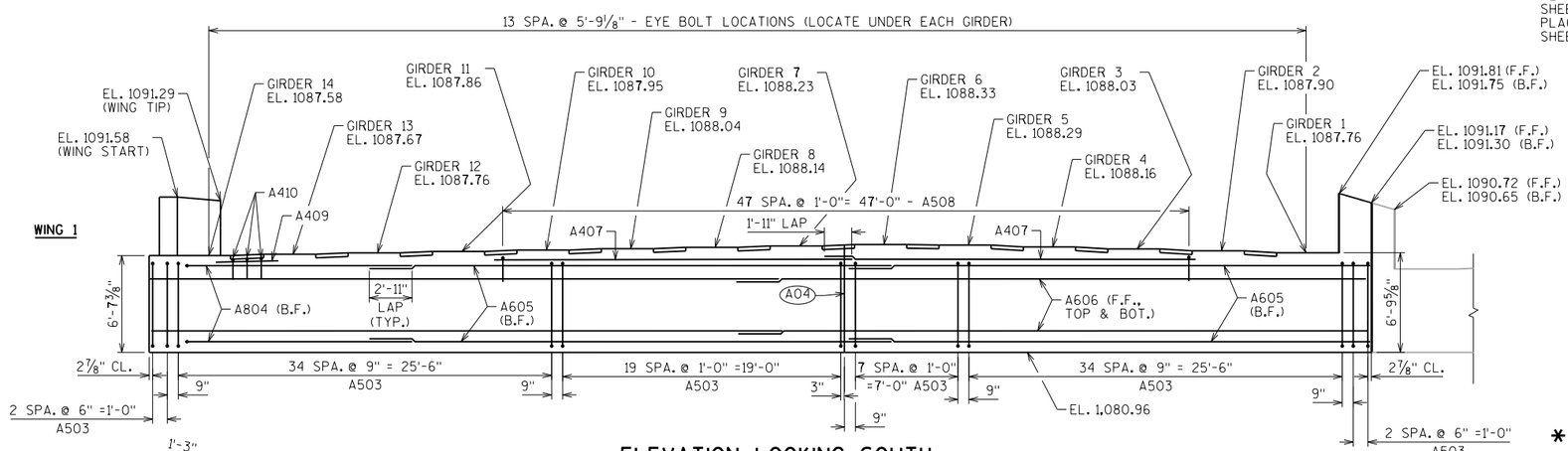
SHEET 3

499

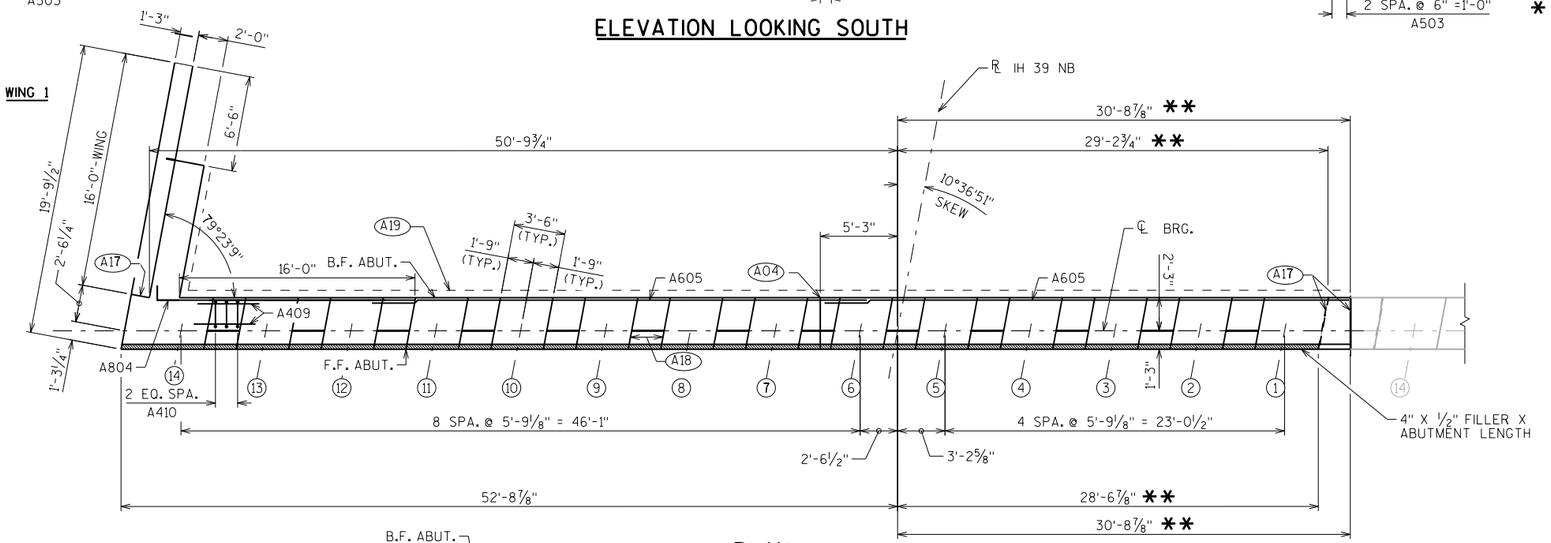
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STATE PROJECT NUMBER

1012-01-74

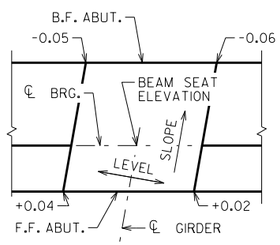


ELEVATION LOOKING SOUTH

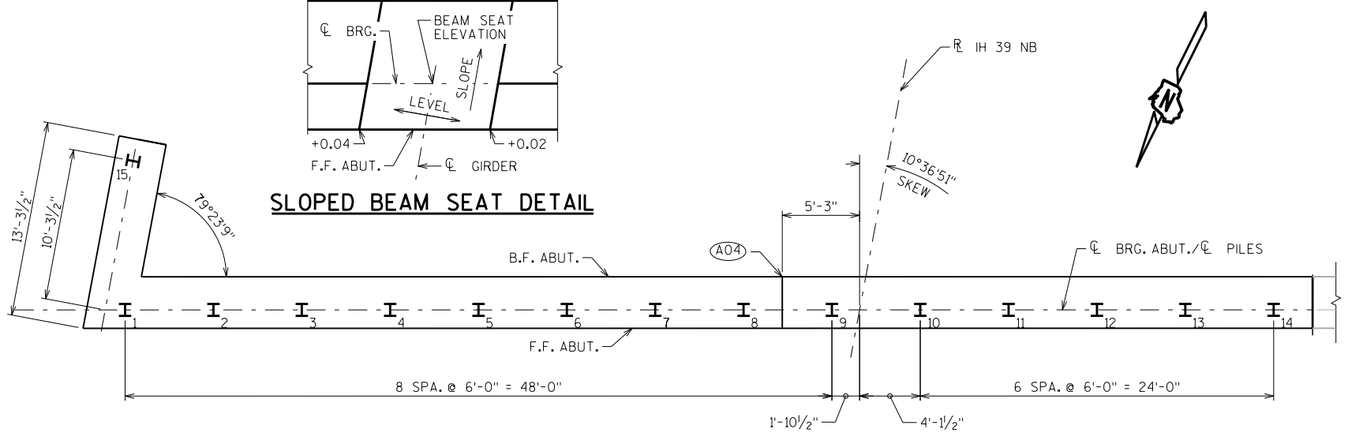


PLAN

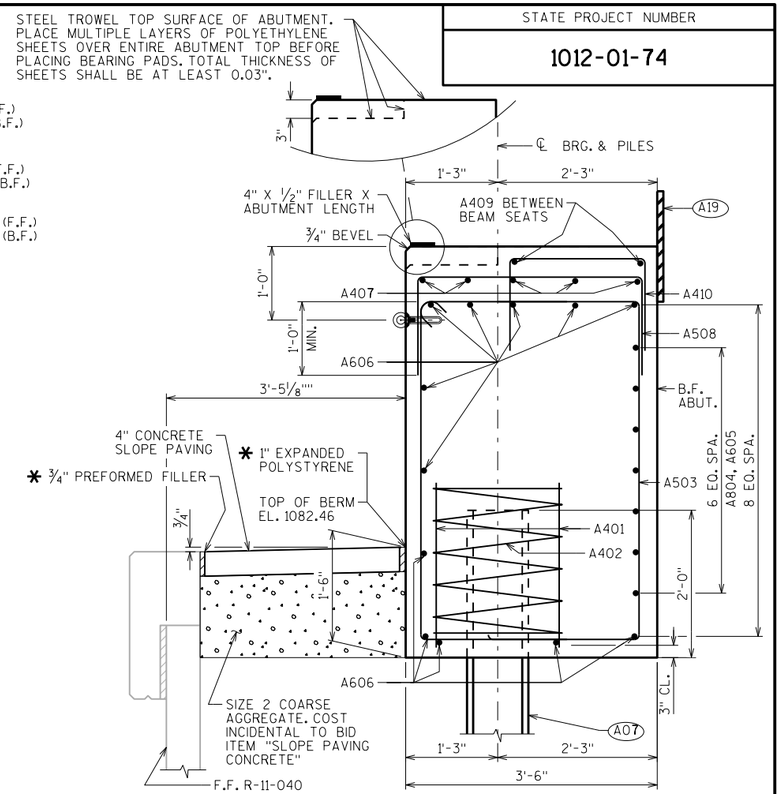
** DIMENSION DOES NOT INCLUDE 1/2" FILLER



SLOPED BEAM SEAT DETAIL

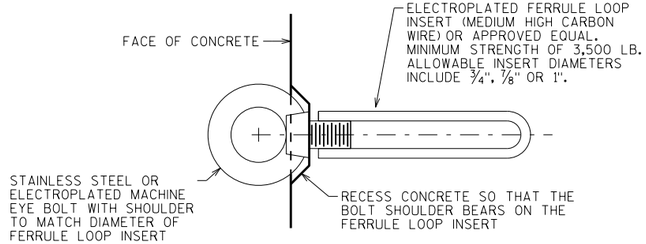


PILE PLAN



SECTION THRU BODY

* SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER AND EXPANDED POLYSTYRENE WITH NON-STAINING, GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE)



EYE BOLT DETAIL

LOCATE ONE EYE BOLT UNDER EACH GIRDER

COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES".

(A04) VERT. CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 X 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" RMW @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A07) SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING, ESTIMATED 40'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

DRAWN BY DLM | PLANS CK'D. JLR

SOUTH ABUTMENT

SHEET 4

500

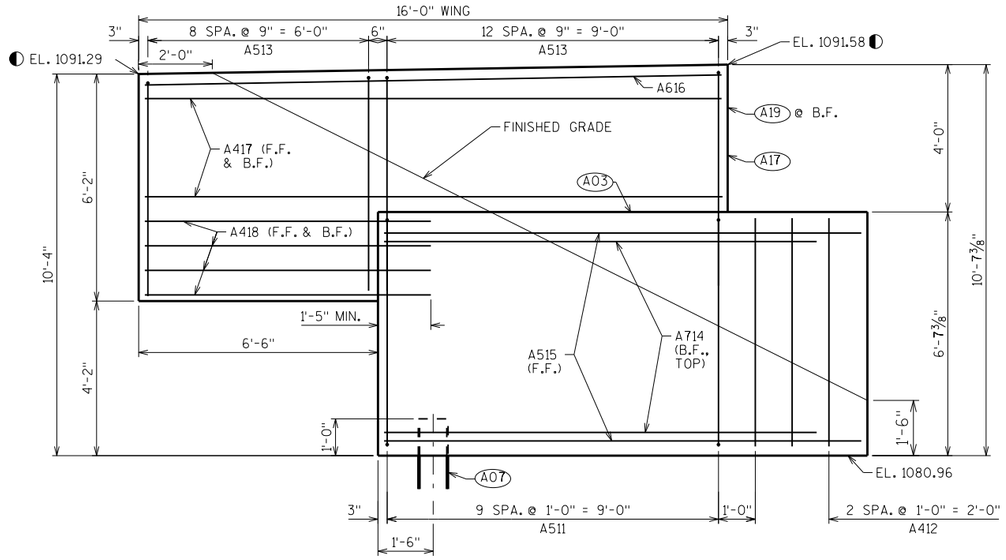
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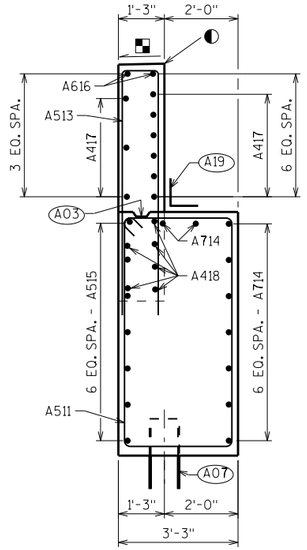
STATE PROJECT NUMBER

1012-01-74

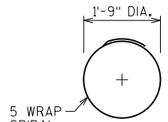


WING 1 ELEVATION

LOOKING AT FRONT FACE



WING 1 SECTION



A402

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A401		28	2'-3"			BODY - 2 PER BODY PILE - VERT.
A402		14	28'-0"	X		BODY - SPIRAL - 1 PER BODY PILE - VERT.
A503		104	18'-10"	X		BODY - STIRRUPS - VERT.
A804		7	18'-8"	X		BODY - HORIZ. - BACK FACE
A605		14	34'-8"			BODY - HORIZ. - BACK FACE
A606		24	43'-1"			BODY - HORIZ. - TOP, BOT., FRONT FACE
A407		10	24'-8"			BODY - HORIZ. - TOP
A508		48	6'-7"	X		BODY - VERT. - TOP
A409		26	4'-3"			BODY - HORIZ. - TOP - BTWN. BEAM SEATS
A410		39	4'-9"	X		BODY - VERT. - TOP- BTWN. BEAM SEATS
A511	X	10	18'-10"	X		WING 1 - LOWER - BODY STIRRUP
A412	X	3	6'-2"			WING 1 - LOWER - VERT. - FRONT FACE
A513	X	22	14'-7"	X		WING 1 - UPPER - VERT.
A714	X	9	12'-1"			WING 1 - LOWER - HORIZ. - B.F., TOP
A515	X	7	12'-11"			WING 1 - LOWER - HORIZ. - F.F.
A616	X	2	15'-8"			WING 1 - UPPER - HORIZ. - TOP
A417	X	9	15'-8"			WING 1 - UPPER - HORIZ.
A418	X	6	9'-9"			WING 1 - UPPER - HORIZ.
A519	X	4	14'-7"	X		END WING - UPPER - VERT.
A420	X	6	1'-10"			END WING - UPPER - HORIZ. - F.F.
A421	X	6	1'-2"			END WING - UPPER - HORIZ. - B.F.
A622	X	5	1'-6"		◭	END WING - UPPER - HORIZ. - TOP

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

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
A622	1 SERIES OF 5	1'-2" TO 1'-10"

BUNDLE AND TAG EACH SERIES SEPARATELY.

◐ ELEVATIONS GIVEN AT THIS LOCATION. FINISH SMOOTH

◨ DIMENSION INCLUDES ½" FILLER ON BOTH SIDES.

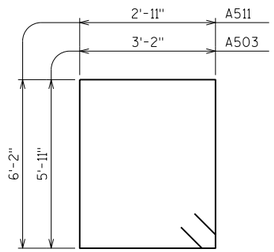
◩ SLOPE FOR DRAINAGE

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A07) SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING. ESTIMATED 40'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

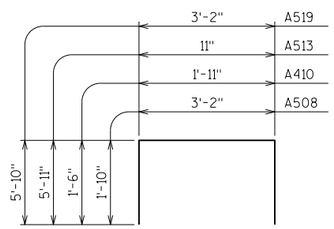
(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



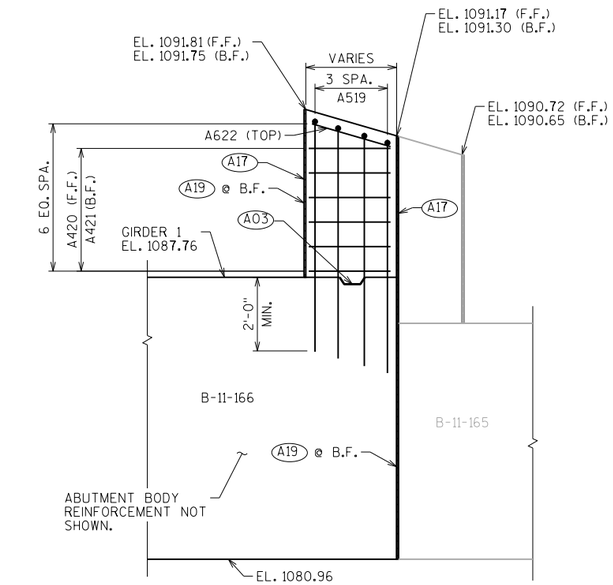
A503, A511



A804

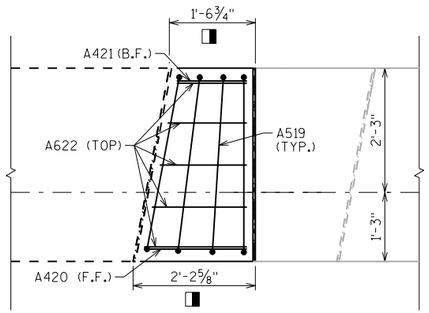


A508, A410, A513, A519

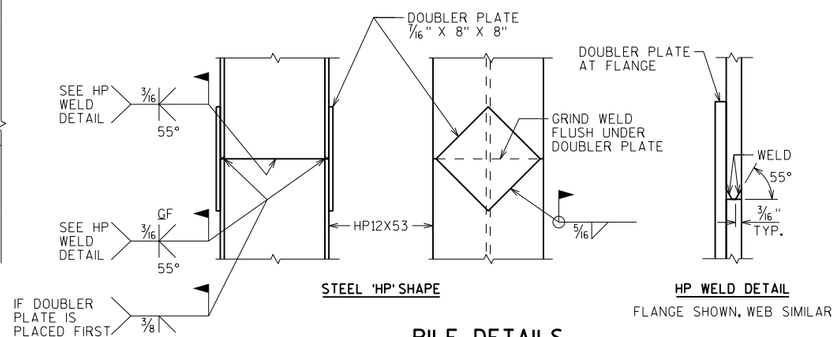


END WING ELEVATION

LOOKING AT F.F. OF ABUTMENT



END WING PLAN



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

DRAWN BY DLM | PLANS CK'D. JLR

SOUTH ABUTMENT DETAILS

SHEET 5

501

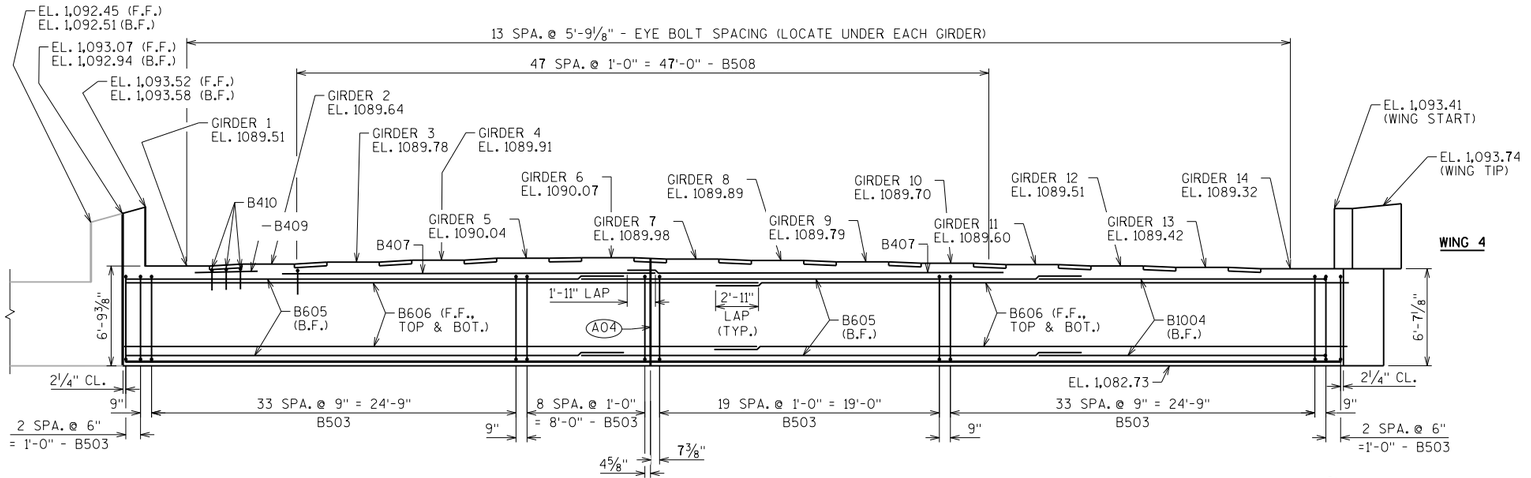
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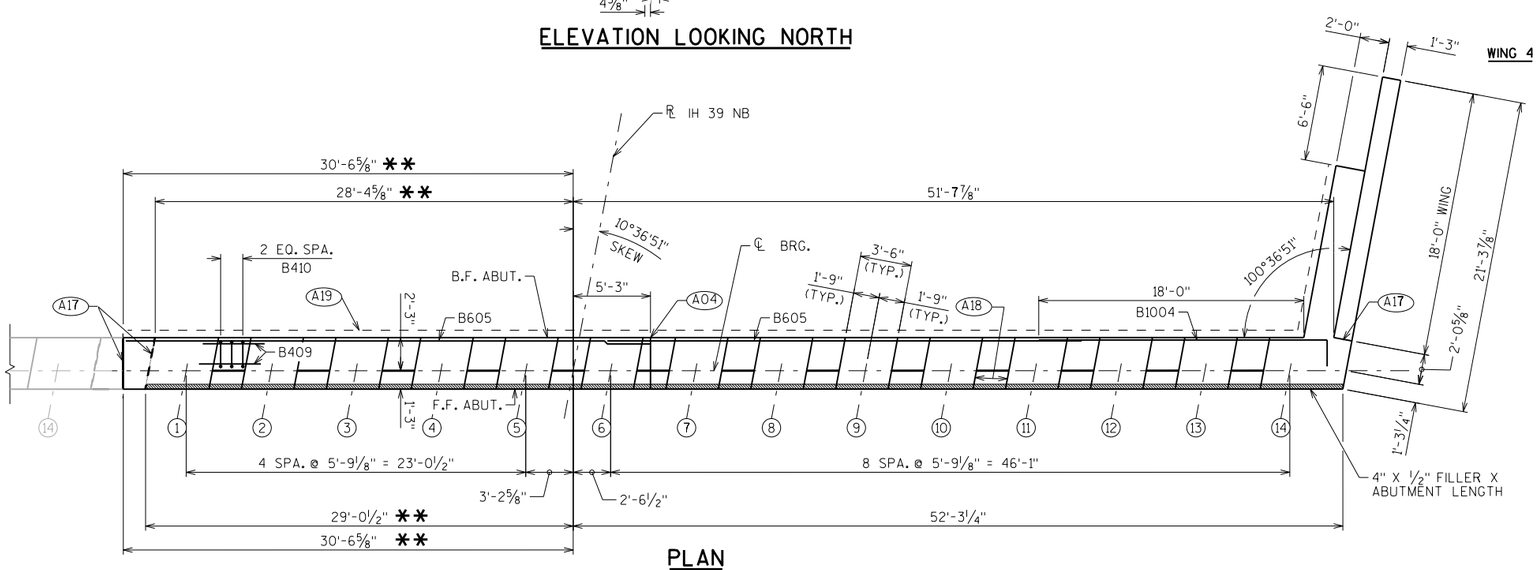
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STATE PROJECT NUMBER

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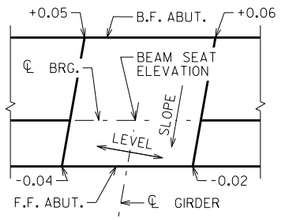


ELEVATION LOOKING NORTH

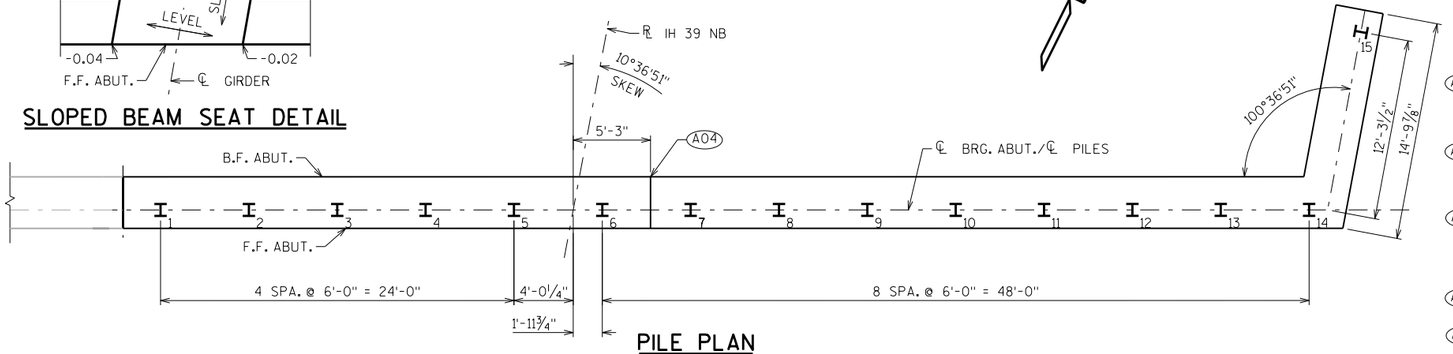


PLAN

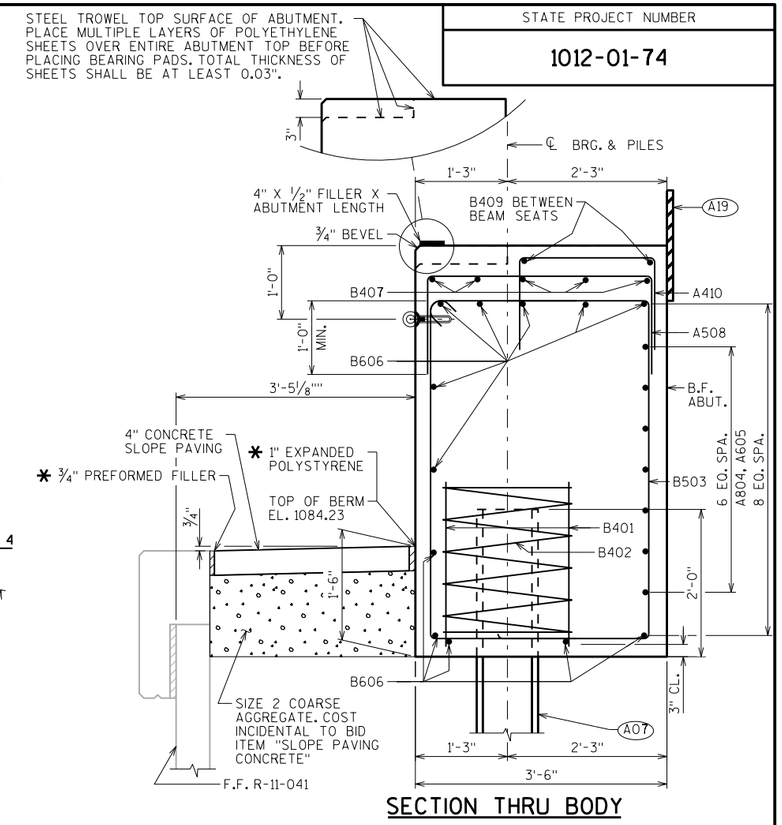
** DIMENSION DOES NOT INCLUDE 1/2" FILLER



SLOPED BEAM SEAT DETAIL

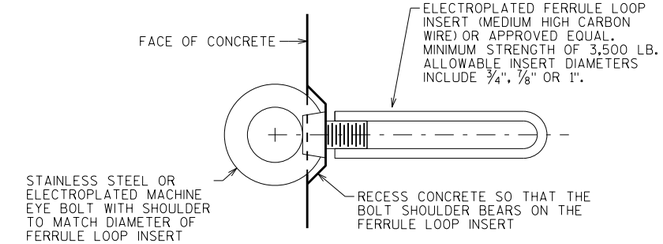


PILE PLAN



SECTION THRU BODY

* SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER AND EXPANDED POLYSTYRENE WITH NON-STAINING, GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE)



EYE BOLT DETAIL

LOCATE ONE EYE BOLT UNDER EACH GIRDER.

COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES".

(A04) VERT. CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 X 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" RMW @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A07) SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING, ESTIMATED 35'-0" TO 40'-0" LONG, MEASURED FROM EAST TO WEST, WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE. PREBORE 3' MIN. INTO BEDROCK.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

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NORTH ABUTMENT

SHEET 6

502

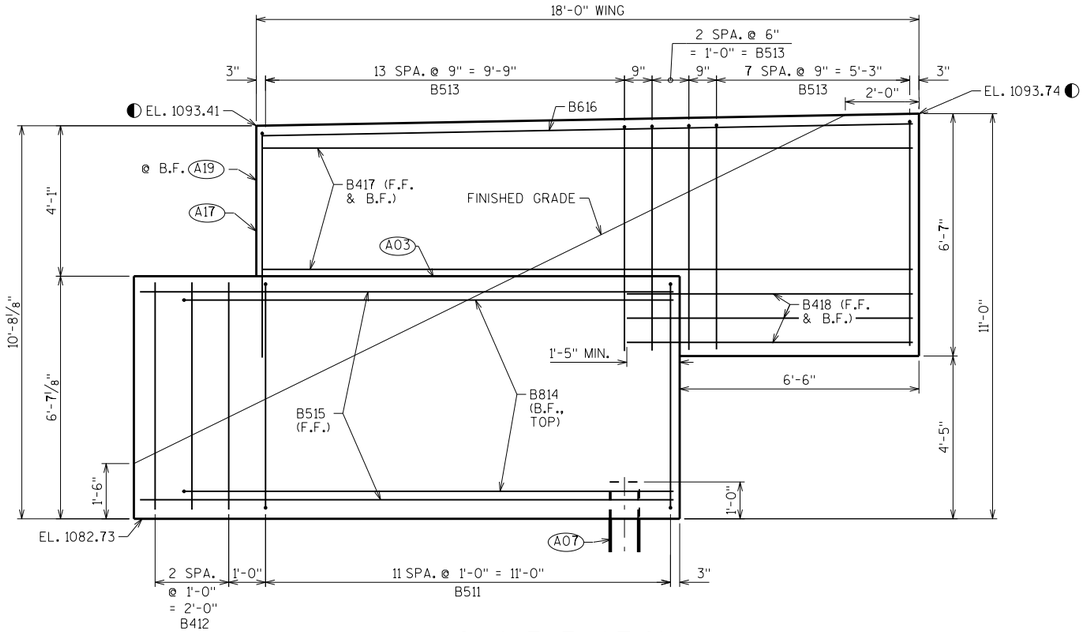
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8

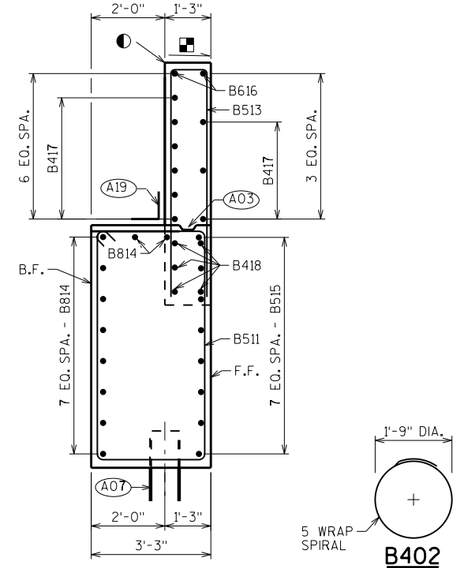
STATE PROJECT NUMBER

1012-01-74



WING 4 ELEVATION

LOOKING AT FRONT FACE



WING 4 SECTION

B402

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B401		28	2'-3"			BODY - 2 PER BODY PILE - VERT.
B402		14	28'-0"	X		BODY - SPIRAL - 1 PER BODY PILE - VERT.
B503		103	18'-10"	X		BODY - STIRRUPS - VERT.
B1004		7	21'-5"	X		BODY - HORIZ. - BACK FACE
B605		14	34'-0"			BODY - HORIZ. - BACK FACE
B606		24	43'-1"			BODY - HORIZ. - TOP, BOT., FRONT FACE
B407		10	24'-8"			BODY - HORIZ. - TOP
B508		48	6'-7"	X		BODY - VERT. - TOP
B409		26	4'-3"			BODY - HORIZ. - TOP - BTWN. BEAM SEATS
B410		39	4'-9"	X		BODY - VERT. - TOP- BTWN. BEAM SEATS
B511	X	12	18'-10"	X		WING 4 - LOWER - BODY STIRRUP
B412	X	3	6'-2"			WING 4 - LOWER - VERT. - FRONT FACE
B513	X	25	12'-10"	X		WING 4 - UPPER - VERT.
B814	X	10	14'-4"	X		WING 4 - LOWER - HORIZ. - B.F., TOP
B515	X	8	14'-6"			WING 4 - LOWER - HORIZ. - F.F.
B616	X	2	17'-8"			WING 4 - UPPER - HORIZ. - TOP
B417	X	9	17'-8"			WING 4- UPPER - HORIZ.
B418	X	5	7'-9"			WING 4 - UPPER - HORIZ.
B519	X	4	14'-7"	X		END WING - UPPER - VERT.
B420	X	6	1'-2"			END WING - UPPER - HORIZ. - F.F.
B421	X	6	1'-10"			END WING - UPPER - HORIZ. - B.F.
B622	X	5	1'-6"		◭	END WING - UPPER - HORIZ. - TOP

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

◐ ELEVATIONS GIVEN AT THIS LOCATION. FINISH SMOOTH.

◨ DIMENSION INCLUDES 1/2" FILLER ON BOTH SIDES.

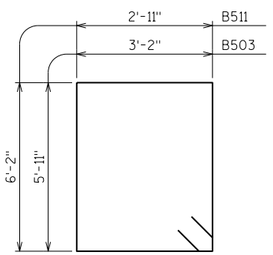
◩ SLOPE FOR DRAINAGE

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A07) SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING, ESTIMATED 35'-0" TO 40'-0" LONG, MEASURED FROM EAST TO WEST, WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE. PREBORE 3' MIN. INTO BEDROCK.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

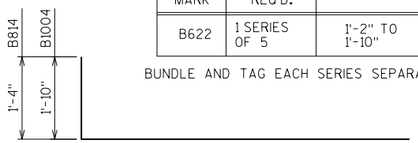


B503, B511

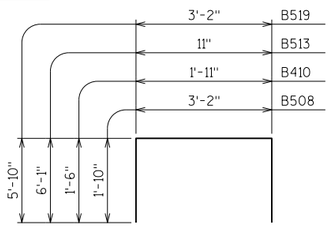
BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
B622	1 SERIES OF 5	1'-2" TO 1'-10"

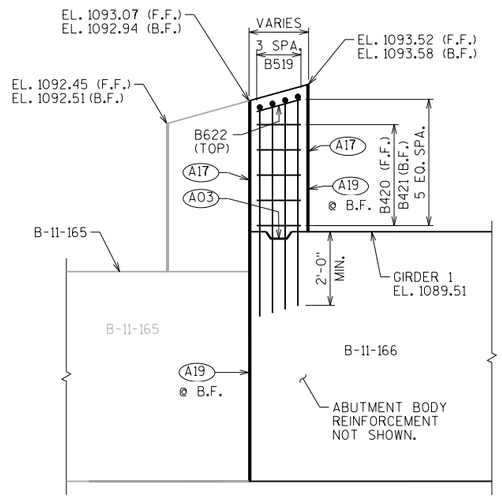
BUNDLE AND TAG EACH SERIES SEPARATELY.



B1004, B814

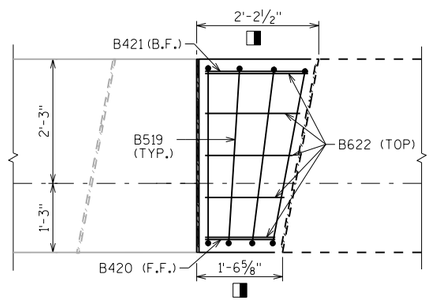


B508, B410, B513, B519

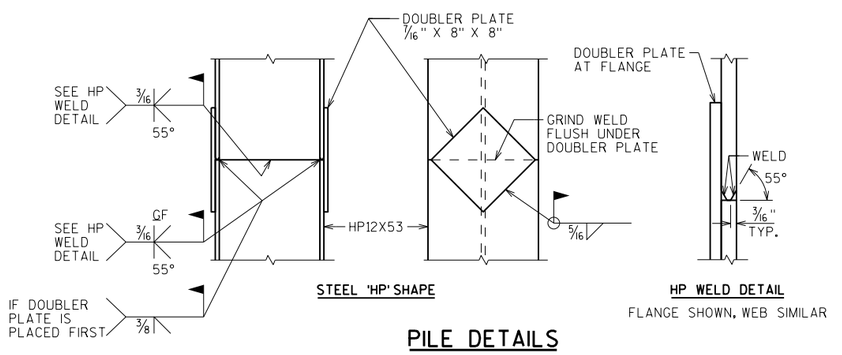


END WING ELEVATION

LOOKING AT F.F. OF ABUTMENT



END WING PLAN



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

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NORTH ABUTMENT DETAILS

SHEET 7

503

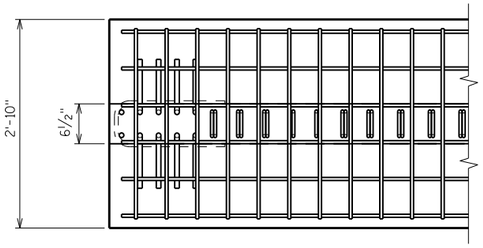
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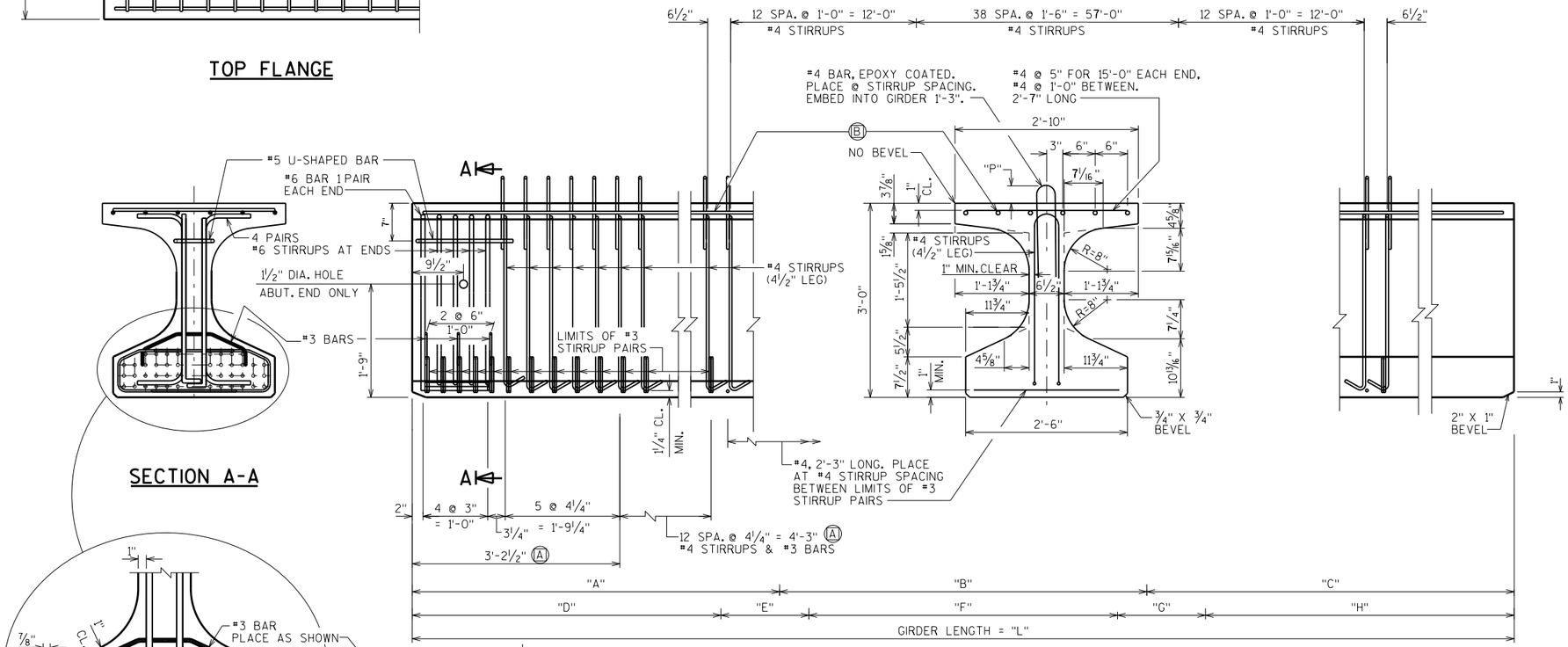
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STATE PROJECT NUMBER

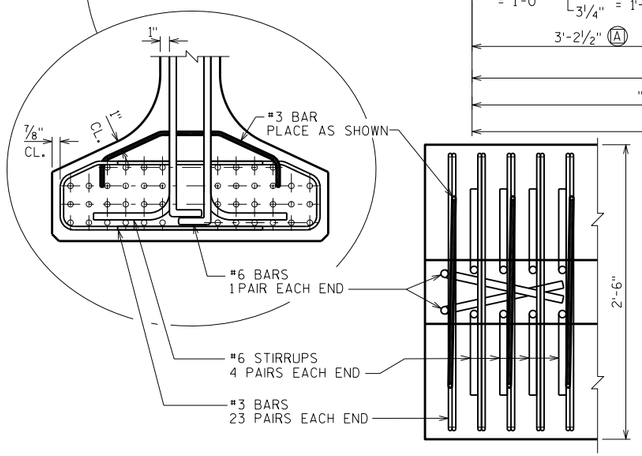
1012-01-74



TOP FLANGE



SECTION A-A



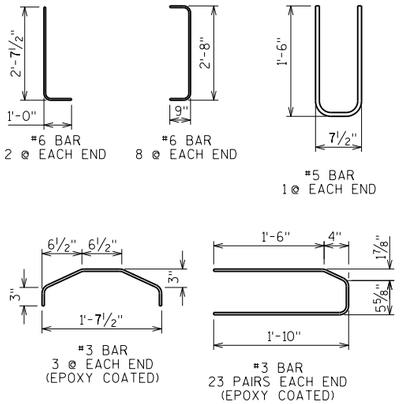
BOTTOM FLANGE

SIDE VIEW & TYPICAL SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"

GIRDER	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
1	32'-10⅜"	32'-4"	31'-9⅝"	-	-	-	-	-
2-13	-	-	-	31'-9⅝"	1'-0¾"	31'-3¼"	1'-0¾"	31'-9⅝"
14	31'-9⅝"	32'-4"	32'-10⅜"	-	-	-	-	-



NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.3 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON ACCEPTANCE OF THE STRUCTURES MAINTENANCE SECTION. IF USED, WWF SUBSTITUTION DETAILS SHALL BE SUBMITTED ELECTRONICALLY TO THE WISDOT FABRICATION LIBRARY AND ACCEPTED PRIOR TO SHOP DRAWING SUBMITTAL.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L" (FEET)	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CONC. STRGTH. f'c (P.S.I.)	"P" (IN.) 1ST 1/3 OF GIRDER	MID 1/3 OF GIRDER	END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳
1	ALL	97.0	0.7	1.3	1.8	2.1	2.2	2.1	1.8	1.3	0.7	8,000	7.5	7.0	7.5	0.6	34	6,400	31.0	11.5	14.5	5.0		

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STRUCTURE B-11-166

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36W" PRESTRESSED GIRDER DETAILS 1

SHEET 8

504

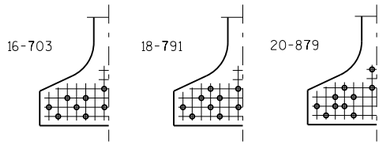
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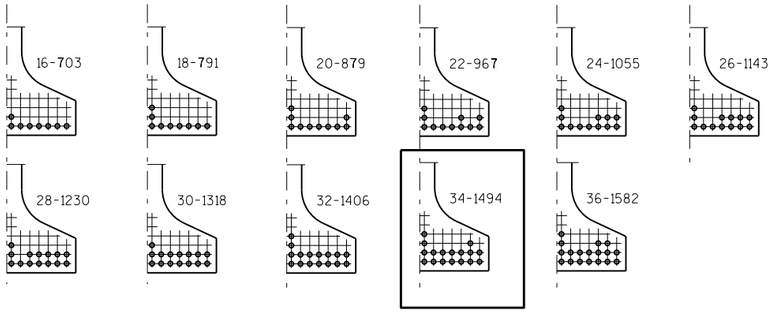
STATE PROJECT NUMBER

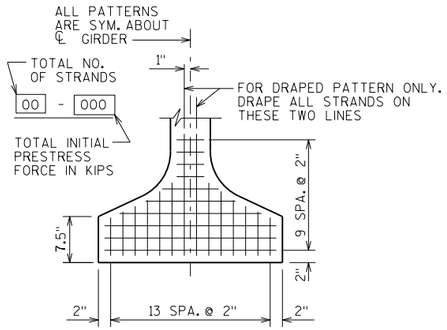
1012-01-74



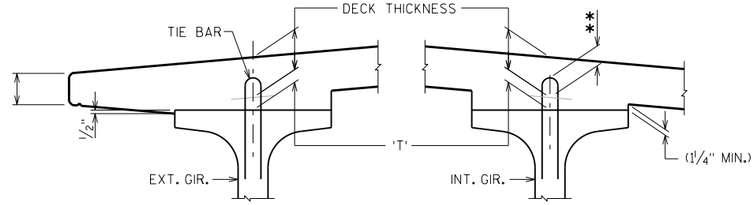
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6" DIA. STRANDS





TYP. STRAND PATTERN



DECK HAUNCH DETAIL

IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

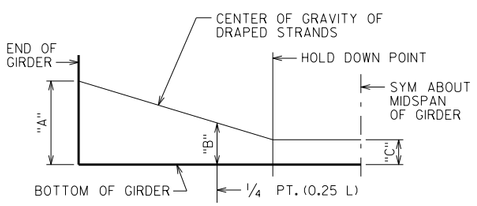
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3¼" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6" DIA. STRANDS



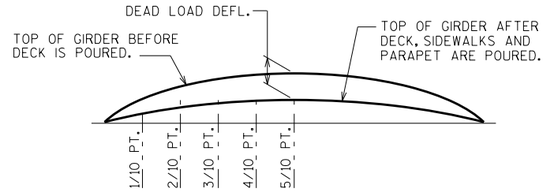
DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	4.1

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



DEAD LOAD DEFLECTION DIAGRAM

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

DRAWN BY DLM | PLANS CK'D. JLR

36W" PRESTRESSED GIRDER DETAILS 2

SHEET 9

505

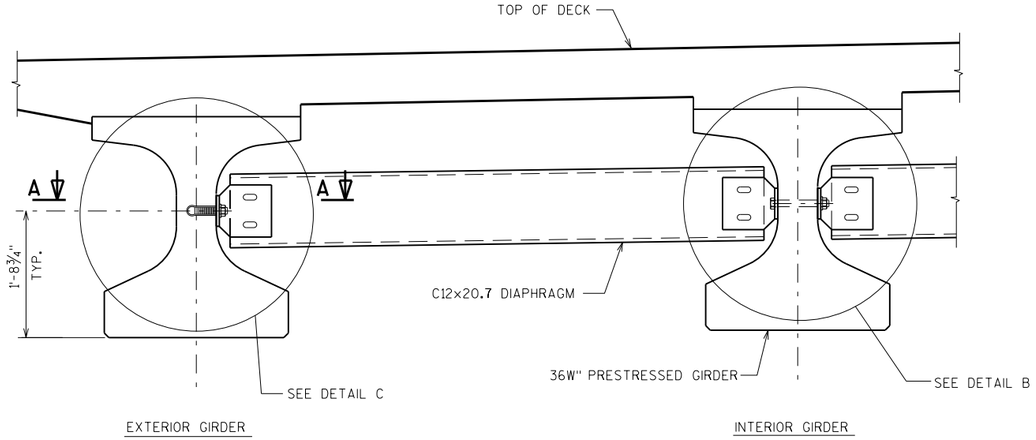
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SCALE = 1.00

STATE PROJECT NUMBER

1012-01-74



PART TRANSVERSE SECTION AT DIAPHRAGM

NOTES

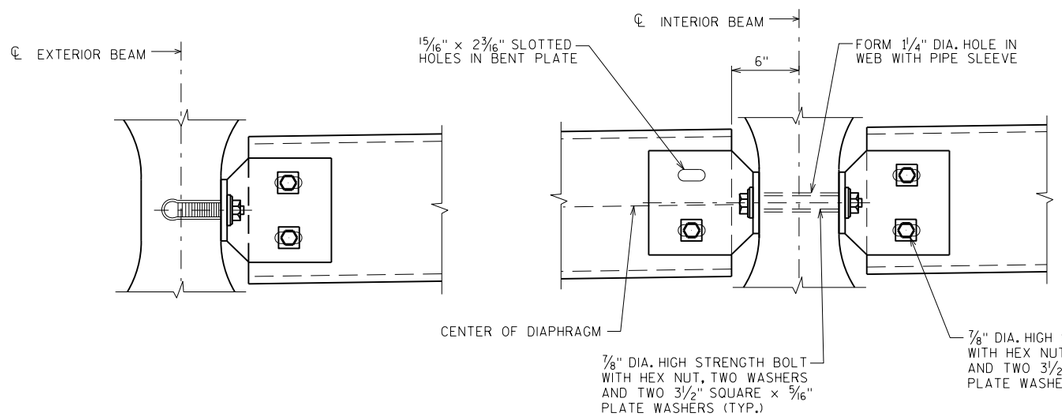
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-11-166", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

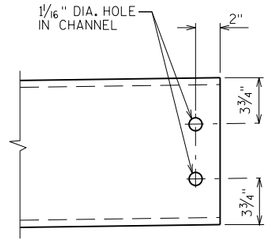
ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

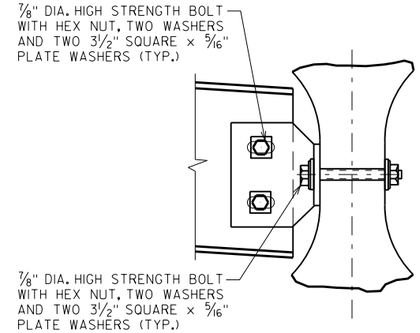
STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS ¼ TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.



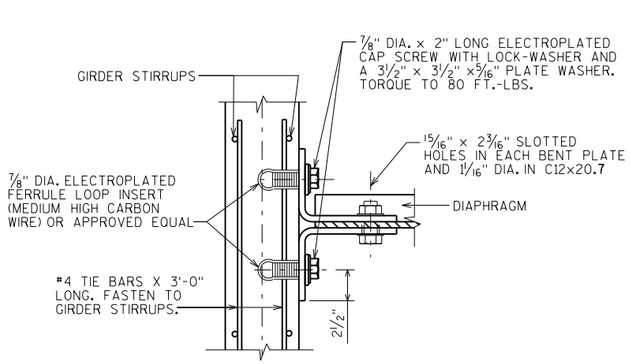
DETAIL C

DETAIL B

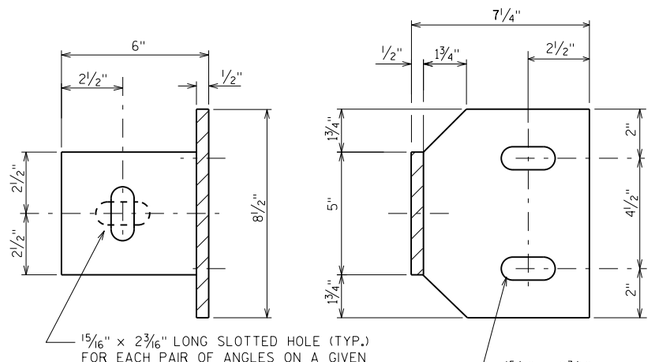




SECTION AT INTERIOR GIRDERS THRU DIAPHRAGM FOR SKEW ANGLES > 10°

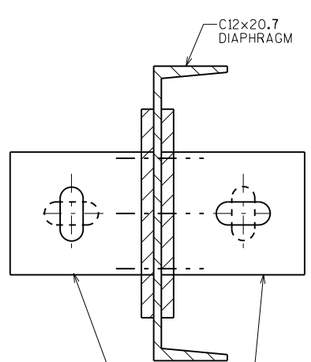


SECTION A-A
(FOR EXTERIOR ATTACHMENT)



BEAM FACE

DIAPHRAGM FACE



ATTACHMENT TO CHANNEL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

DRAWN BY DLM | PLANS CK'D. JLR

STEEL DIAPHRAGM

SHEET 10

506

SCALE = 1.00

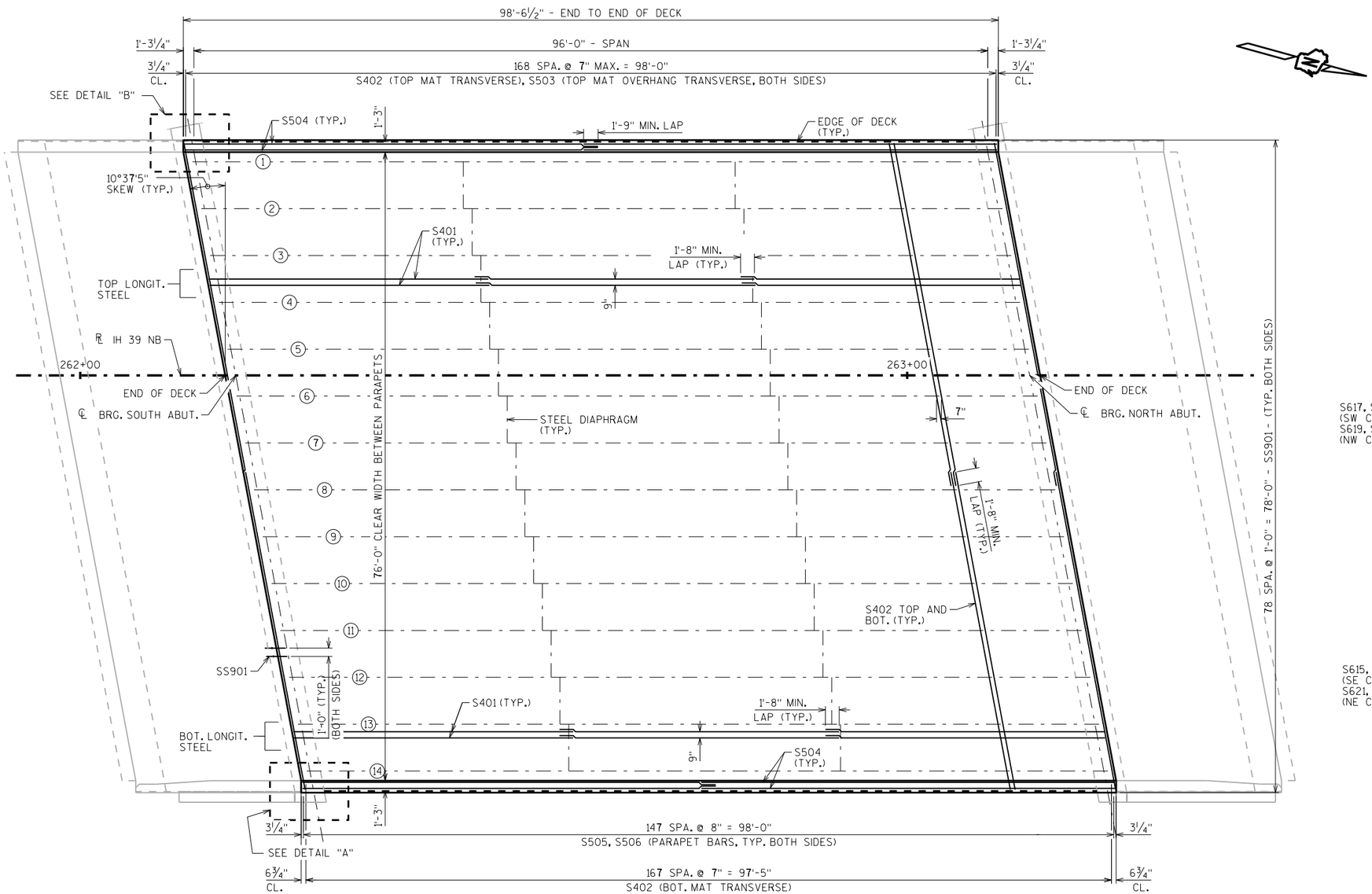
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8

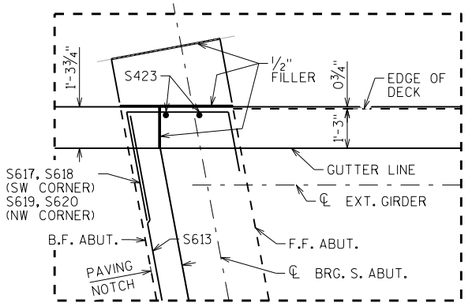
STATE PROJECT NUMBER

1012-01-74

◯ GIRDER NUMBER

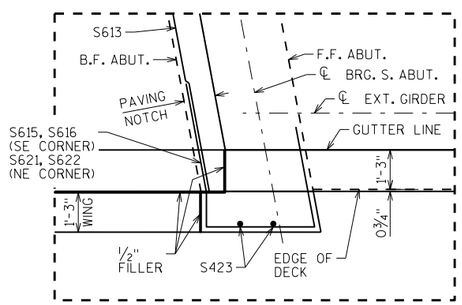


PLAN



DETAIL "B"

SW CORNER SHOWN
NW CORNER SIMILAR



DETAIL "A"

SE CORNER SHOWN
NE CORNER SIMILAR

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

DRAWN BY DLM | PLANS CK'D. JLR

SUPERSTRUCTURE PLAN

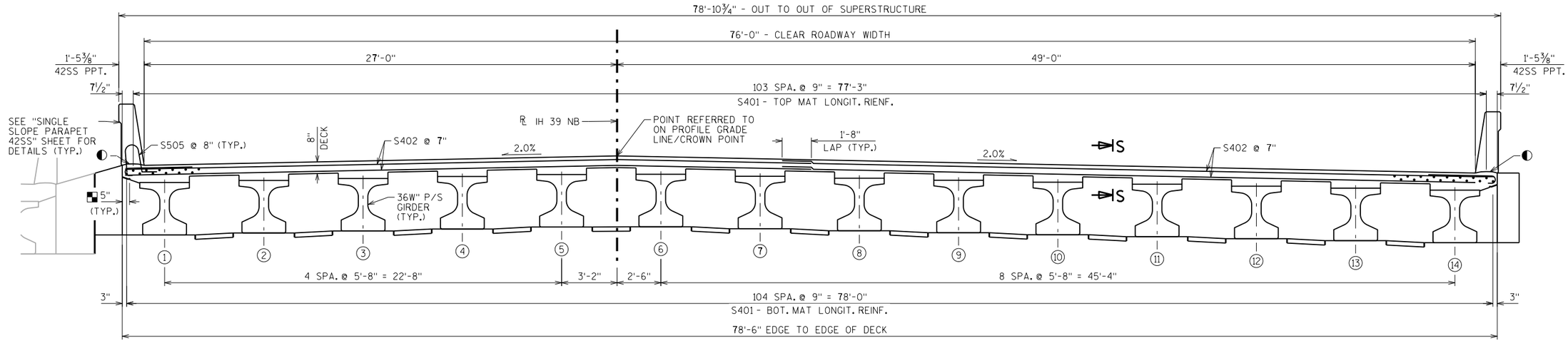
SHEET 11

507

SCALE = 7.00

STATE PROJECT NUMBER
1012-01-74

◯ GIRDER NUMBER

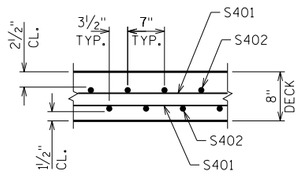


SECTION THRU BRIDGE

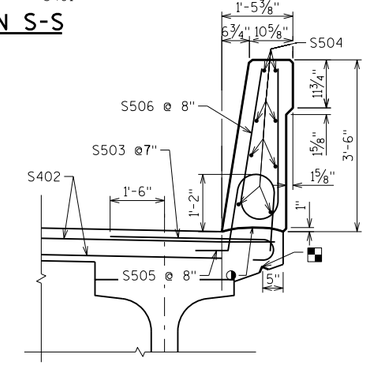
(LOOKING UPSTATION)

◐ HORIZ. CONST. JOINT - STRIKE OFF AND LEAVE ROUGH AS SHOWN.

◪ ¾" V-GROOVE REQUIRED. EXTEND V-GROOVE TO 6" FROM F.F. OF ABUTMENT DIAPHRAGM.

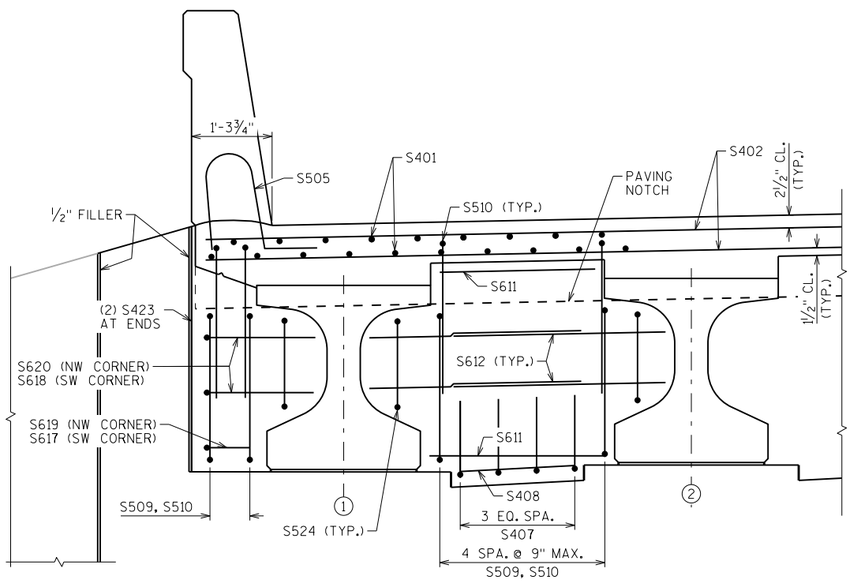


SECTION S-S



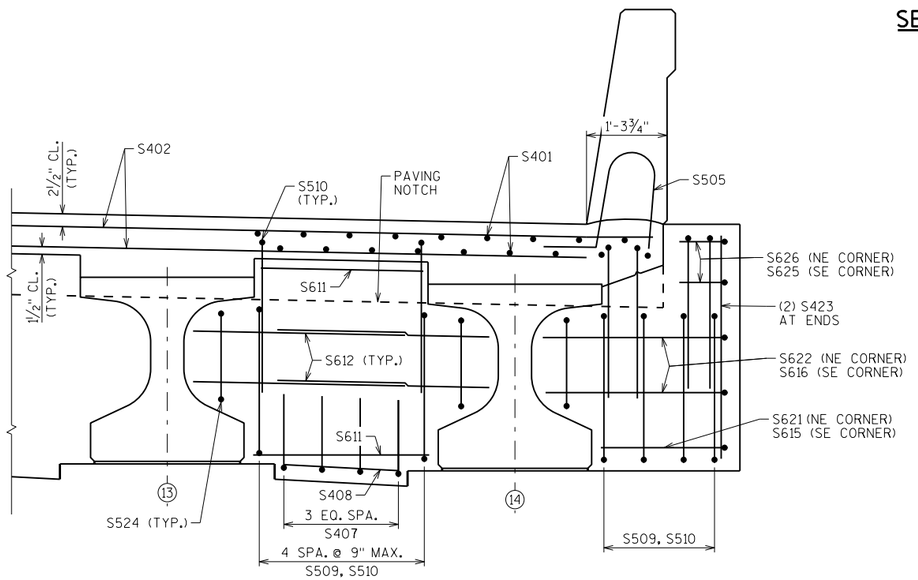
SECTION THRU PARAPET

LONGIT. DECK REINF. NOT SHOWN FOR CLARITY



NW CORNER

SW CORNER SIMILAR



NE CORNER

SE CORNER SIMILAR

SECTION THRU BRIDGE AT ABUTMENT DIAPHRAGMS

(LOOKING UPSTATION)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

DRAWN BY DLM | PLANS CK'D. JLR

SUPERSTRUCTURE TYPICAL SECTIONS

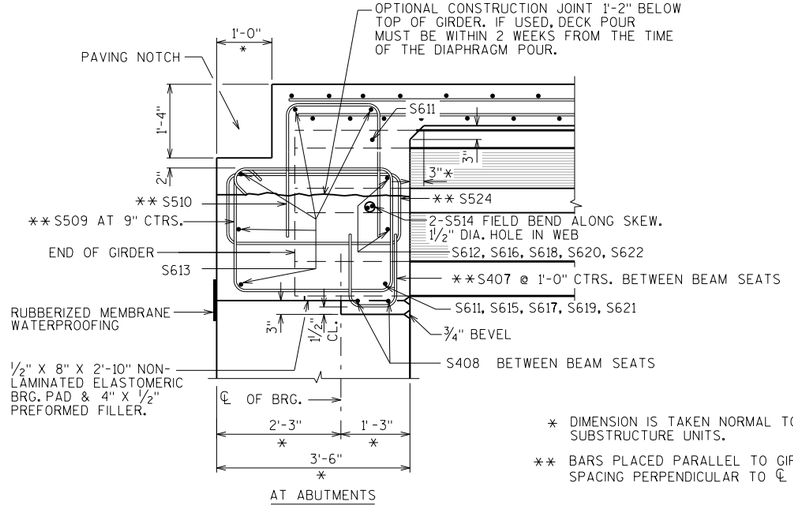
SHEET 12

508

SCALE = 3.00

STATE PROJECT NUMBER

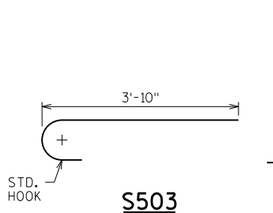
1012-01-74



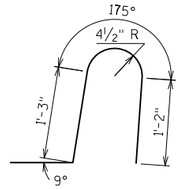
* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

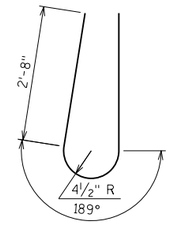
PART LONGIT. SECTION



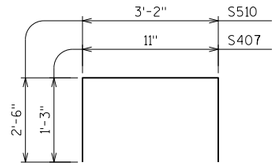
S503



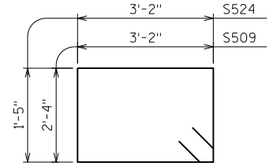
S505



S506



S407, S510

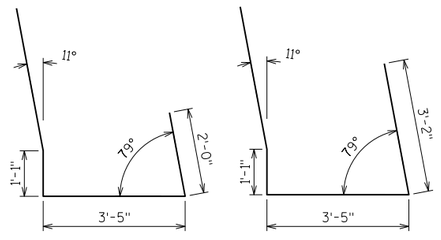


S509, S524

BILL OF BARS

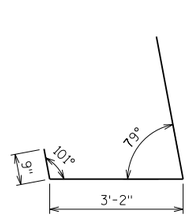
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	627	34'-4"			DECK - LONGIT. - TOP AND BOTTOM
S402	X	674	40'-8"			DECK - TRANSVERSE - TOP AND BOTTOM
S503	X	338	4'-5"	X		DECK - TRANSVERSE - TOP - OVERHANG
S504	X	32	50'-0"			PARAPET - HORIZ.
S505	X	296	4'-5"	X		PARAPET TO DECK - VERT.
S506	X	296	6'-8"	X		PARAPET - VERT.
S407	X	104	3'-3"	X		ABUT. DIAPH. - VERT. BOT. BETWEEN GIRDER
S408	X	52	1'-11"			ABUT. DIAPH. - HORIZ. BOT. BETWEEN GIRDER
S509	X	142	11'-8"	X		ABUT. DIAPH. - VERT. STIRRUP
S510	X	142	7'-11"	X		ABUT. DIAPH. - VERT. U-BAR
S611	X	52	2'-10"			ABUT. DIAPH. - HORIZ. BOT.
S612	X	104	3'-3"			ABUT. DIAPH. - HORIZ. MIDDLE
S613	X	20	42'-5"			ABUT. DIAPH. - HORIZ. B.F. & DECK
S514	X	56	6'-0"			ABUT. DIAPH. - HORIZ. THRU GIRDER
S615	X	1	9'-9"	X		ABUT. DIAPH. - SE CORNER - HORIZ. BOT.
S616	X	2	10'-11"	X		ABUT. DIAPH. - SE CORNER - HORIZ. MIDDLE
S617	X	1	7'-2"	X		ABUT. DIAPH. - SW CORNER - HORIZ. BOT.
S618	X	2	8'-4"	X		ABUT. DIAPH. - SW CORNER - HORIZ. MIDDLE
S619	X	1	8'-0"	X		ABUT. DIAPH. - NW CORNER - HORIZ. BOT.
S620	X	2	9'-2"	X		ABUT. DIAPH. - NW CORNER - HORIZ. MIDDLE
S621	X	1	9'-4"	X		ABUT. DIAPH. - NE CORNER - HORIZ. BOT.
S622	X	2	10'-6"	X		ABUT. DIAPH. - NE CORNER - HORIZ. MIDDLE
S423	X	8	3'-5"			ABUT. DIAPH. - VERT. AT ENDS
S524	X	56	9'-10"	X		ABUT. DIAPH. - VERT. STIRRUP
S625	X	2	4'-7"	X		ABUT. DIAPH. - SE CORNER - HORIZ. TOP
S626	X	2	4'-7"	X		ABUT. DIAPH. - NE CORNER - HORIZ. TOP
STAINLESS S901		158	5'-0"	X		CONC. ABUT. DIAPH. TO APPROACH SLAB

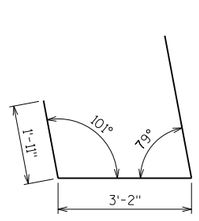


S615

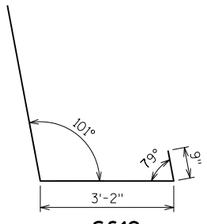
S616



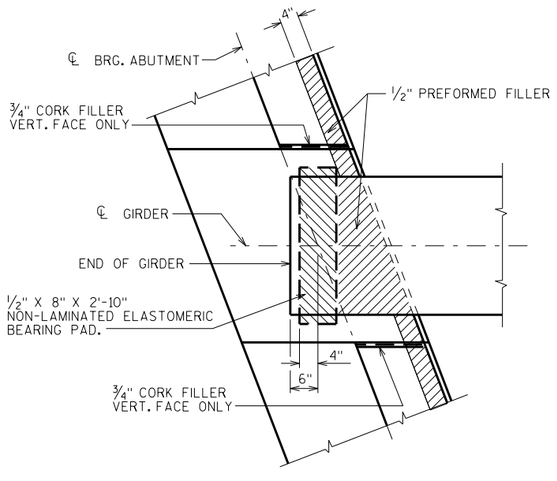
S617



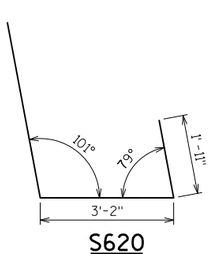
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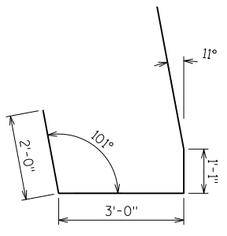
S619



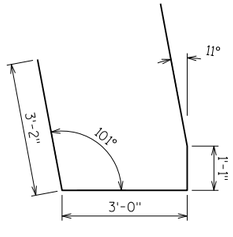
BEARING PAD DETAIL



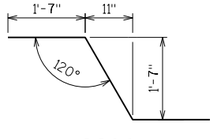
S620



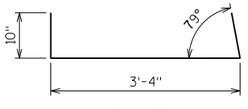
S621



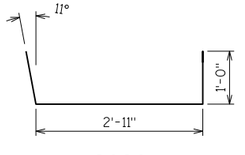
S622



SS901



S625



S626

TOP OF DECK ELEVATIONS

	S. ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	N. ABUT.
W. EOD	1091.79	1091.97	1092.14	1092.32	1092.49	1092.66	1092.84	1093.01	1093.19	1093.36	1093.54
GIRDER 1	1091.82	1092.00	1092.17	1092.35	1092.52	1092.70	1092.87	1093.05	1093.22	1093.39	1093.57
GIRDER 2	1091.96	1092.13	1092.30	1092.48	1092.65	1092.83	1093.00	1093.18	1093.35	1093.53	1093.70
GIRDER 3	1092.09	1092.26	1092.44	1092.61	1092.79	1092.96	1093.14	1093.31	1093.49	1093.66	1093.84
GIRDER 4	1092.22	1092.40	1092.57	1092.74	1092.92	1093.09	1093.27	1093.44	1093.62	1093.79	1093.97
GIRDER 5	1092.35	1092.53	1092.70	1092.88	1093.05	1093.23	1093.40	1093.58	1093.75	1093.93	1094.10
CROWN PT.	1092.43	1092.60	1092.78	1092.95	1093.13	1093.30	1093.48	1093.65	1093.83	1094.00	1094.17
GIRDER 6	1092.39	1092.56	1092.74	1092.91	1093.08	1093.26	1093.43	1093.61	1093.78	1093.96	1094.13
GIRDER 7	1092.29	1092.47	1092.64	1092.82	1092.99	1093.17	1093.34	1093.51	1093.69	1093.86	1094.04
GIRDER 8	1092.20	1092.37	1092.55	1092.72	1092.90	1093.07	1093.25	1093.42	1093.60	1093.77	1093.95
GIRDER 9	1092.10	1092.28	1092.45	1092.63	1092.80	1092.98	1093.15	1093.33	1093.50	1093.68	1093.85
GIRDER 10	1092.01	1092.18	1092.36	1092.53	1092.71	1092.88	1093.06	1093.23	1093.41	1093.58	1093.76
GIRDER 11	1091.92	1092.09	1092.27	1092.44	1092.61	1092.79	1092.96	1093.14	1093.31	1093.49	1093.66
GIRDER 12	1091.82	1092.00	1092.17	1092.35	1092.52	1092.70	1092.87	1093.04	1093.22	1093.39	1093.57
GIRDER 13	1091.73	1091.90	1092.08	1092.25	1092.43	1092.60	1092.78	1092.95	1093.13	1093.30	1093.47
GIRDER 14	1091.63	1091.81	1091.98	1092.16	1092.33	1092.51	1092.68	1092.86	1093.03	1093.21	1093.38
E. EOD	1091.62	1091.79	1091.97	1092.14	1092.32	1092.49	1092.67	1092.84	1093.02	1093.19	1093.37

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

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SUPERSTRUCTURE DETAILS

SHEET 13

509

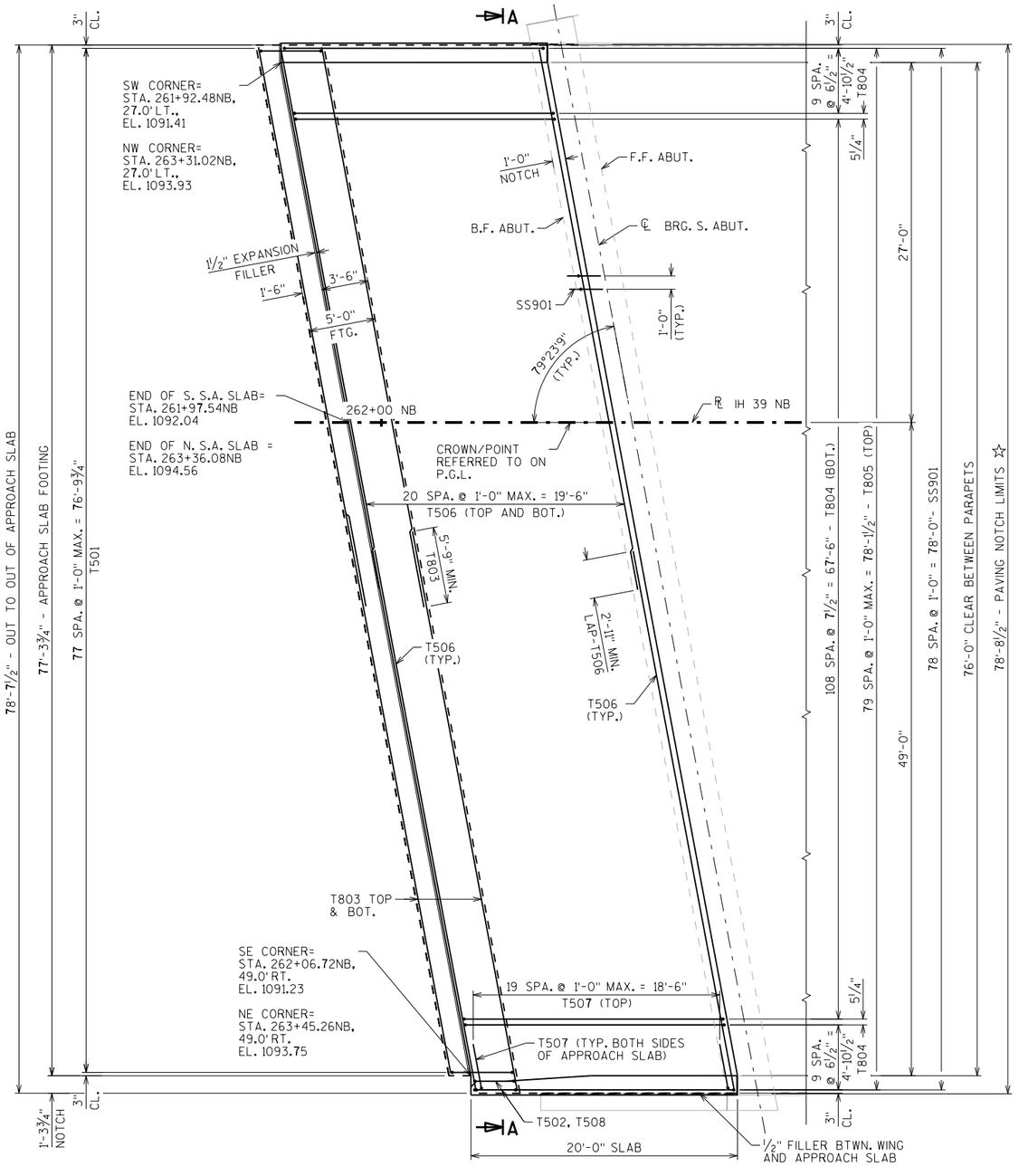
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STATE PROJECT NUMBER

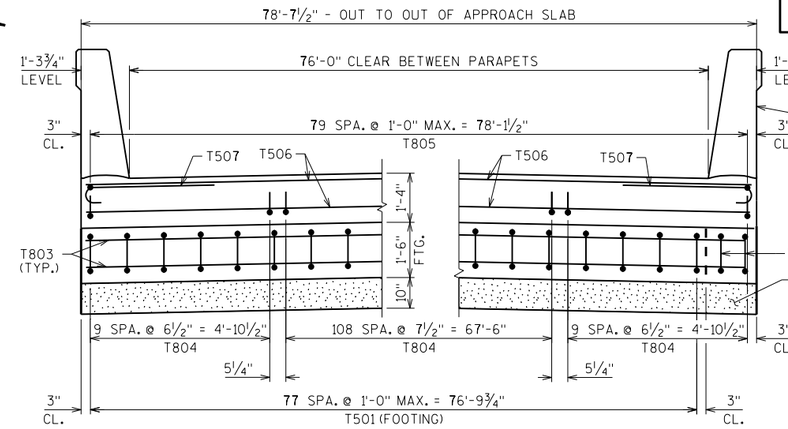
1012-01-74



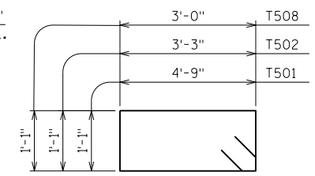
PLAN - APPROACH SLAB

SOUTH APPROACH SLAB SHOWN
NORTH APPROACH SLAB SIMILAR

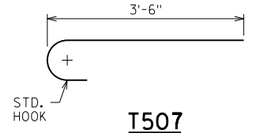
☆ DIMENSION INCLUDES ½" FILLER ON BOTH SIDES OF PAVING NOTCH



SECTION A-A



T501, T502, T508



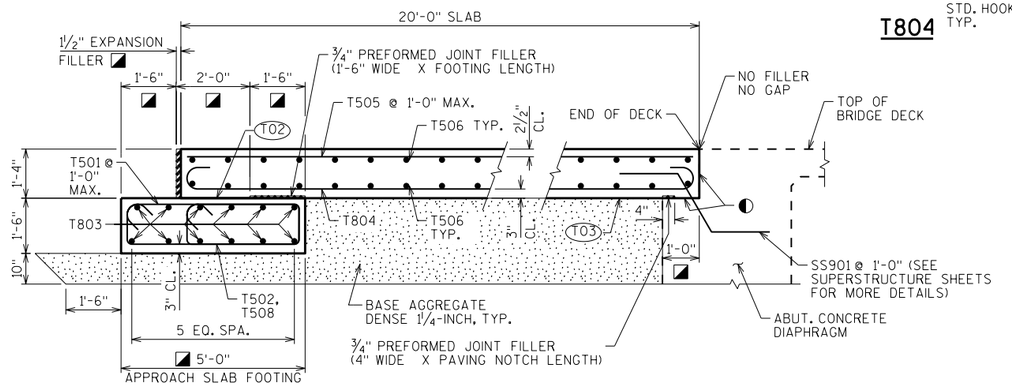
T507

T804

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	S. ABUT. NO. REQ'D.	N. ABUT. NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	78	78	12'-4"	X		APPROACH SLAB FTG. - STIRRUP
T502	X	2	-	9'-4"	X		S. APPROACH SLAB FTG. - STIRRUP AT NOTCH
T803	X	24	24	42'-9"			APPROACH SLAB FTG. - TRANS.
T804	X	129	129	21'-6"	X		APPROACH SLAB - LONGIT. - BOT.
T805	X	80	80	19'-8"			APPROACH SLAB - LONGIT. - TOP.
T506	X	84	84	41'-4"			APPROACH SLAB - TRANSVERSE - TOP & BOT.
T507	X	40	40	4'-1"	X		APPROACH SLAB - TRANSVERSE - TOP
T508	X	-	2	8'-10"	X		N. APPROACH SLAB FTG. - STIRRUP AT NOTCH



SECTION THRU APPROACH SLAB

◐ APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCTURAL APPROACH SLAB.

◪ MEASURED NORMAL TO ABUTMENT

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE SUBGRADE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

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STRUCTURAL APPROACH SLABS

SHEET 14

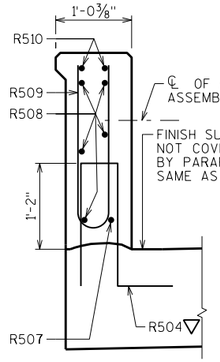
510

8

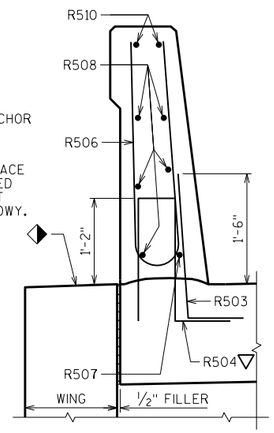
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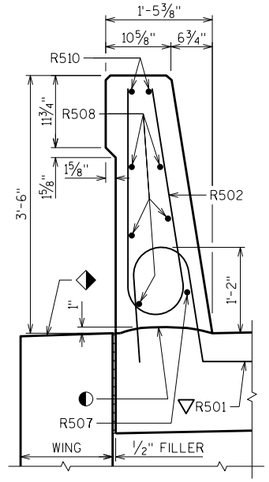
STATE PROJECT NUMBER
1012-01-74



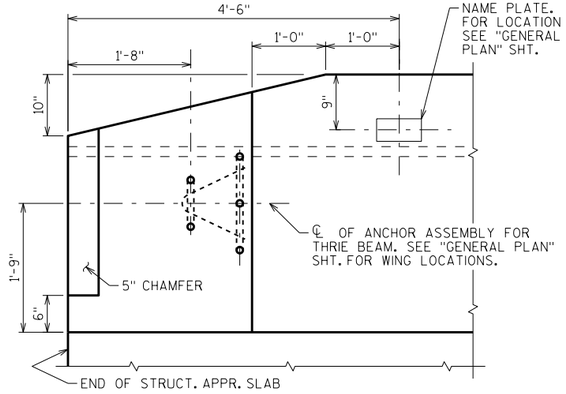
SECTION A-A



SECTION B-B



SECTION C-C



PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

BILL OF BARS

FOR STRUCTURAL APPROACH SLAB PARAPETS

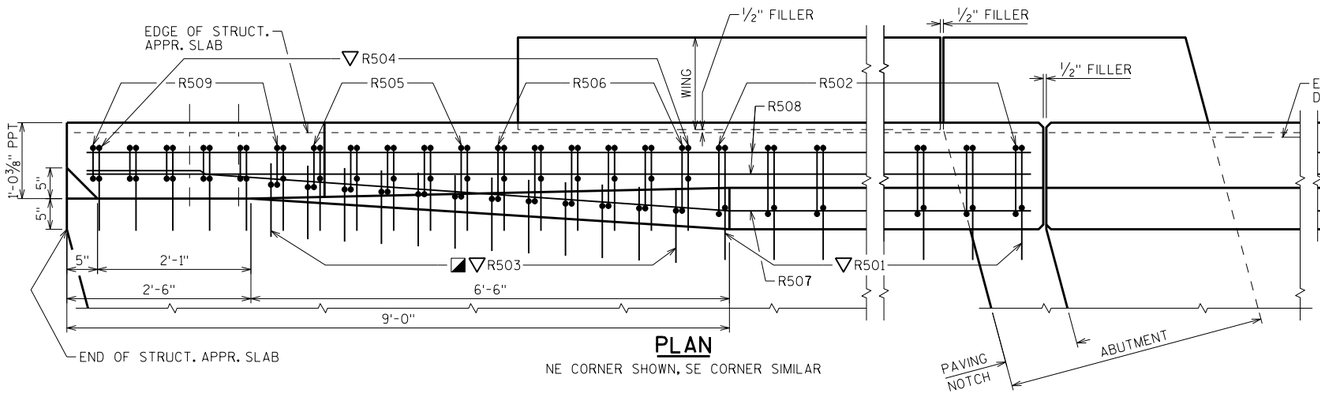
BAR MARK	COAT	S. ABUT.	N. ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	18	18	4'-5"	X		PARAPET VERT.
R502	X	18	18	6'-8"	X		PARAPET VERT.
R503	X	12	12	2'-9"	X		PARAPET VERT.
R504	X	17	17	4'-4"	X		PARAPET VERT.
R505	X	5	5	6'-5"	X		PARAPET VERT.
R506	X	6	6	6'-6"	X		PARAPET VERT.
R507	X	1	1	19'-7"	X		PARAPET HORIZ.
R508	X	5	5	19'-7"			PARAPET HORIZ.
R509	X	6	6	5'-5"	X	⚠	PARAPET VERT.
R510	X	2	2	19'-7"	X		PARAPET HORIZ.

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

BAR SERIES TABLE

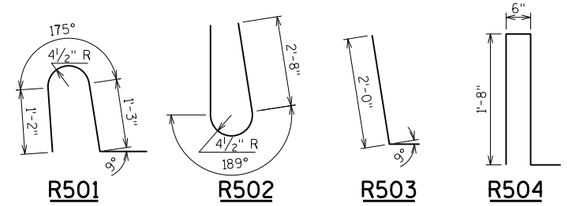
BAR MARK	NO. REQ'D	LENGTH
R509	2 SERIES OF 6	4'-9" TO 6'-1"

BUNDLE AND TAG EACH SERIES SEPARATELY.

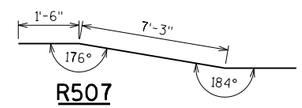


PLAN

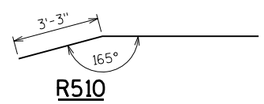
NE CORNER SHOWN, SE CORNER SIMILAR



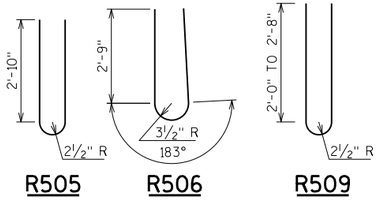
R501 R502 R503 R504



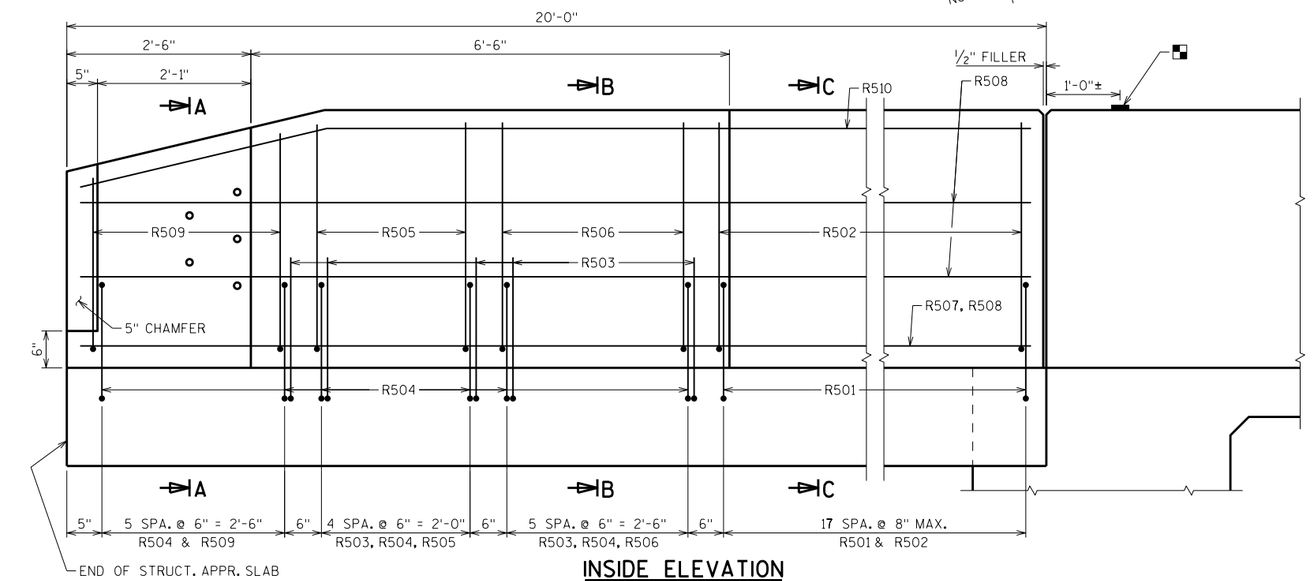
R507



R510



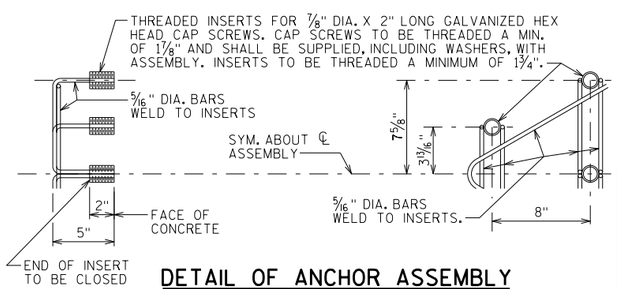
R505 R506 R509



INSIDE ELEVATION

NE CORNER SHOWN, SE SIMILAR
WING & STRUCTURAL APPROACH SLAB FOOTING NOT SHOWN FOR CLARITY

BENCH MARK CAP



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

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

- ◐ CONST. JOINT - STRIKE OFF AS SHOWN
- ◆ SLOPE FOR DRAINAGE
- ◪ USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.
- ▽ R501, R503, AND R504 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

DRAWN BY DLM | PLANS CK'D. JLR

SINGLE SLOPE PARAPET 42SS NE & SE CORNERS

SHEET 15

511

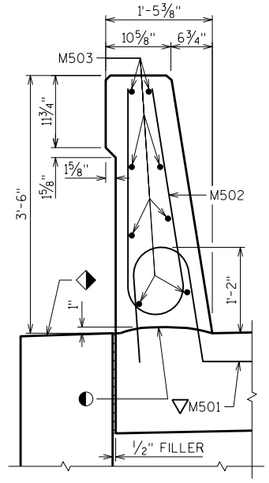
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STATE PROJECT NUMBER

1012-01-74

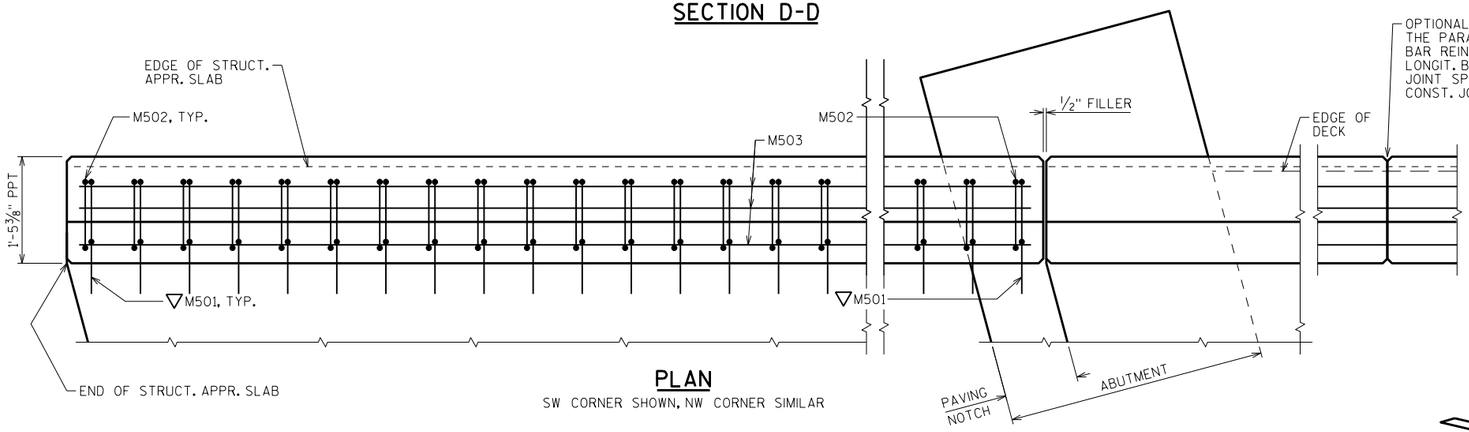


SECTION D-D

BILL OF BARS

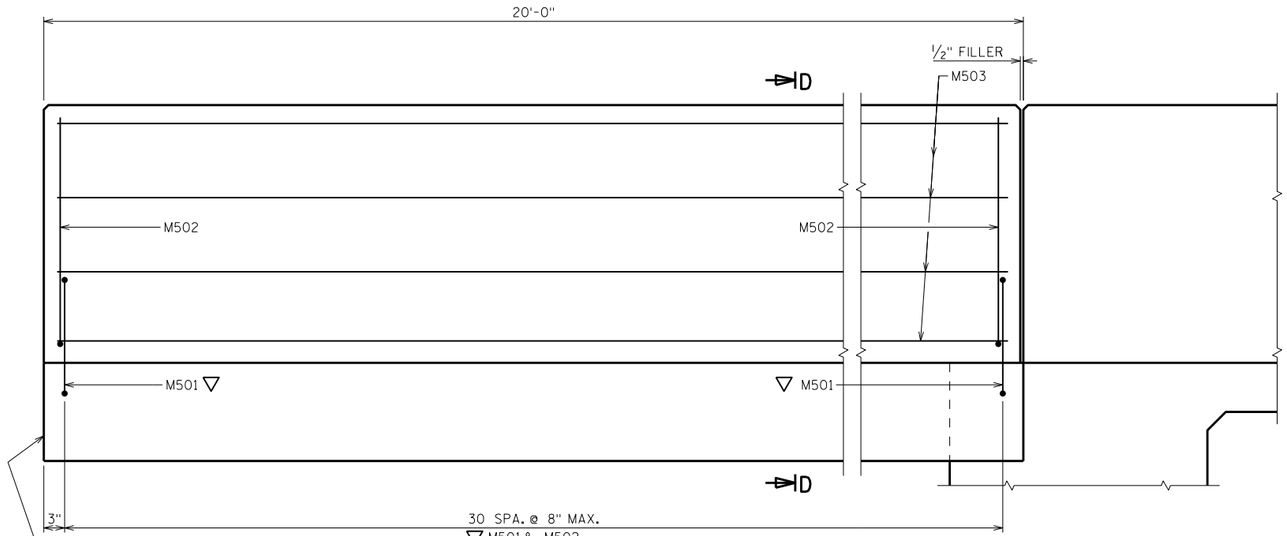
FOR STRUCTURAL APPROACH SLAB PARAPETS

BAR MARK	COAT	S. ABUT.	N. ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
M501	X	31	31	4'-5"	X		PARAPET VERT.
M502	X	31	31	6'-8"	X		PARAPET VERT.
M503	X	8	8	19'-7"			PARAPET HORIZ.



PLAN

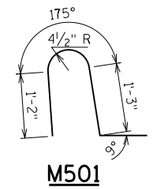
SW CORNER SHOWN, NW CORNER SIMILAR



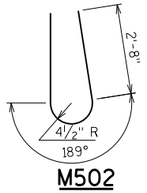
INSIDE ELEVATION

SW CORNER SHOWN, NW CORNER SIMILAR

WING & STRUCTURAL APPROACH SLAB FOOTING NOT SHOWN FOR CLARITY



M501



M502

- CONST. JOINT - STRIKE OFF AS SHOWN
- SLOPE FOR DRAINAGE
- M501 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

DRAWN BY DLM | PLANS CK'D. JLR

SINGLE SLOPE PARAPET 42SS NW & SW CORNERS

SHEET 16

512

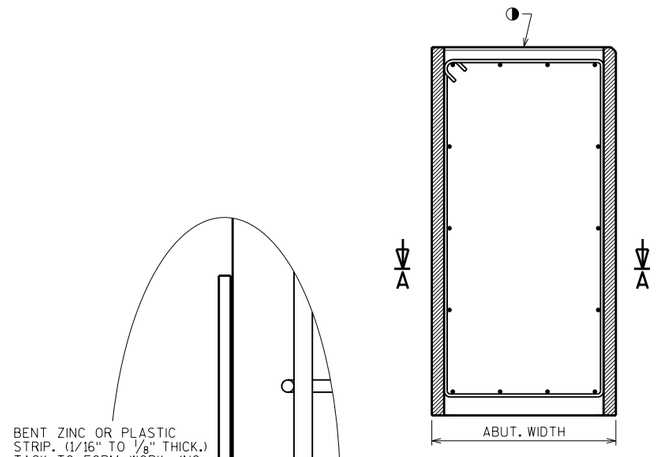
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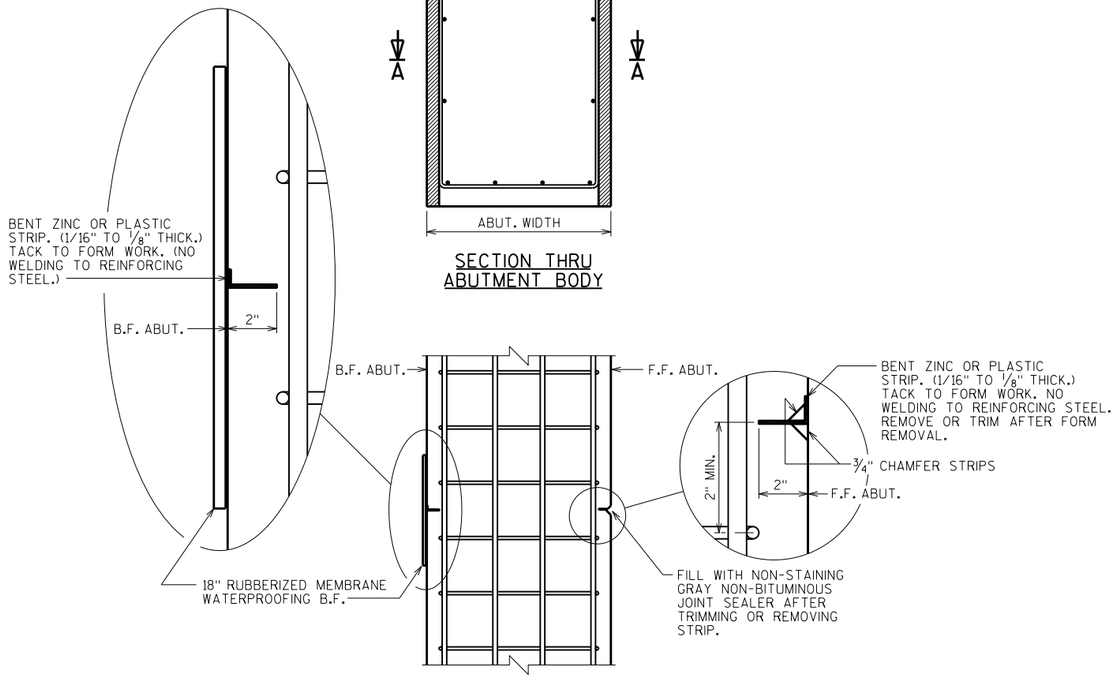
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STATE PROJECT NUMBER

1012-01-74



SECTION THRU ABUTMENT BODY



SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SAW CUTTING JOINT IS NOT ALLOWED.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-166

DRAWN BY DLM | PLANS CK'D. JLR

ALTERNATE CONSTRUCTION JOINT

SHEET 17

513

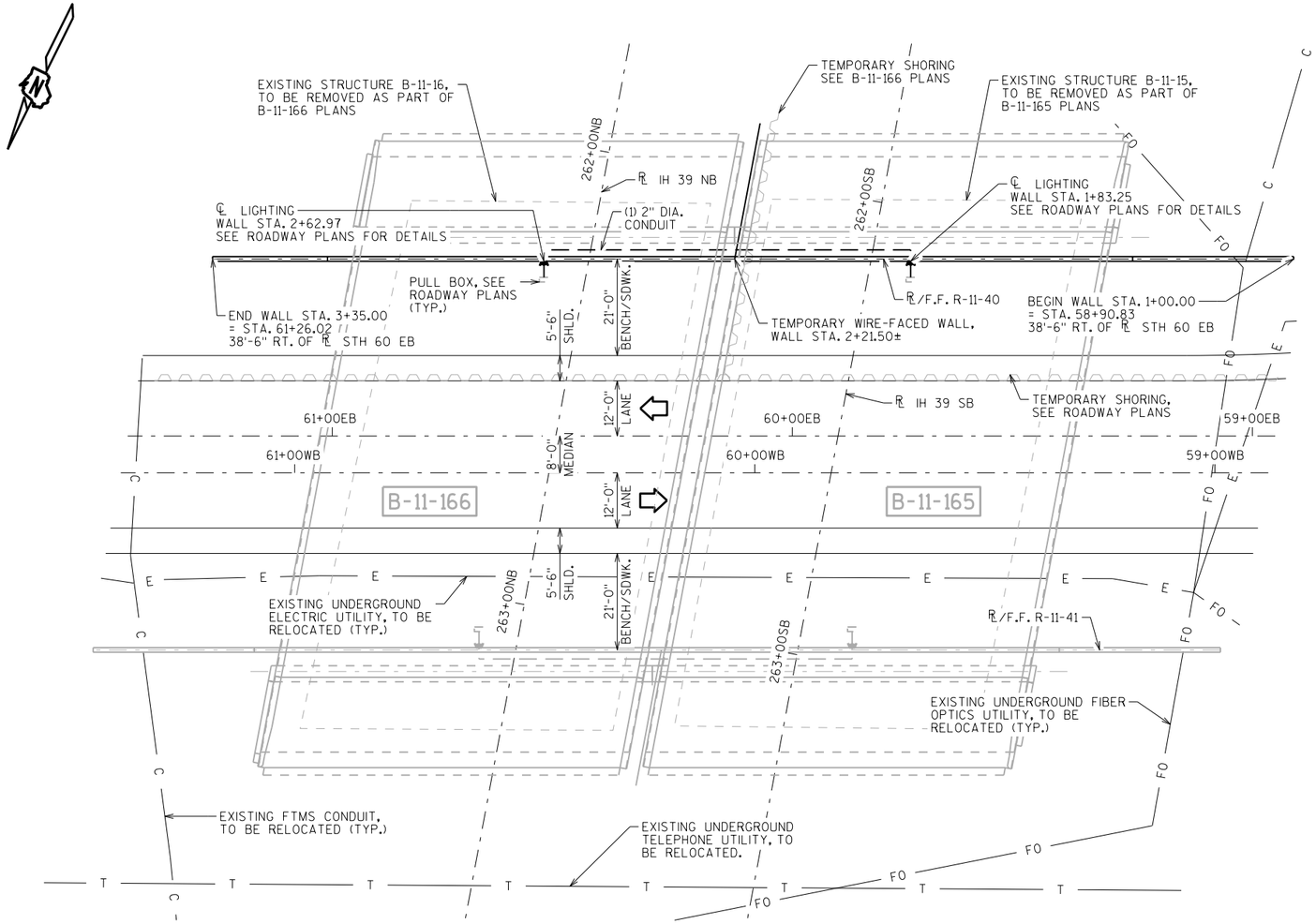
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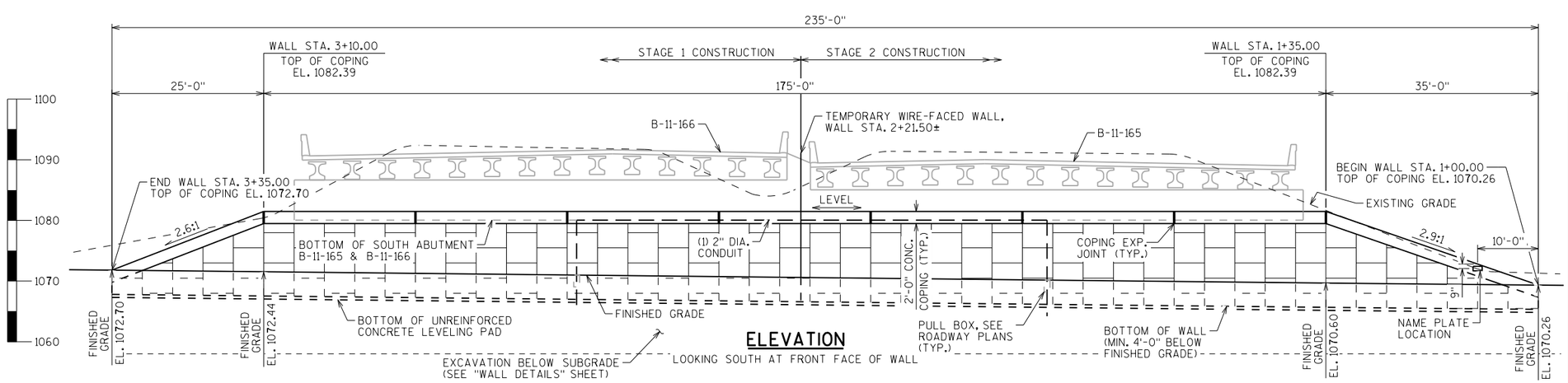
STATE PROJECT NUMBER

1012-01-74



GENERAL PLAN

R-11-40 MSE RETAINING WALL



ELEVATION

LOOKING SOUTH AT FRONT FACE OF WALL

DESIGN DATA

MATERIAL PROPERTIES:

CONCRETE MASONRY:
CONCRETE MASONRY CAST-IN-PLACE COPING ——— f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT:
GRADE 60 ——— fy = 60,000 P.S.I.

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-11-40".

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

DESIGN OF THE RETAINING WALL IN FRONT OF THE ABUTMENT SHALL INCLUDE THE HORIZONTAL EARTH LOADS AND 240 PSF LIVE LOAD SURCHARGE ACTING ON THE BACK OF THE ABUTMENT BELOW THE BEAM SEATS.

ALLOWABLE WALL SYSTEMS

WALL CONCRETE PANEL M.S.E.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

BEVEL EXPOSED EDGES OF CONCRETE $\frac{3}{4}$" UNLESS OTHERWISE NOTED.

ALL WALL STATIONING AND OFFSETS ARE GIVEN TO THE FRONT FACE OF WALL.

THE PLAN QUANTITY FOR THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-11-40" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE WALL TO A CONSTANT DEPTH OF 4'-0" BELOW FINISHED GRADE TO PROVIDE ROOM FOR POSSIBLE ROADWAY EXPANSION.

THE QUANTITY OF CONCRETE MASONRY & REINFORCING STEEL, FOR THE CAST-IN-PLACE COPING, IS PAID FOR UNDER THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-11-40".

THE BACKFILL BEHIND THE MSE WALL SHOULD BE GRANULAR AND FREE DRAINING.

THE REGION SOILS ENGINEER SHALL REVIEW THE SUBSURFACE CONDITIONS PRIOR TO CONSTRUCTION OF THE WALL.

COORDINATE THE CONSTRUCTION OF RETAINING WALL R-11-40 WITH THE CONSTRUCTION OF THE SOUTH ABUTMENTS OF BRIDGES B-11-165 & B-11-166.

TEMPORARY SHORING DESIGN AND INSTALLATION SHOULD CONSIDER POTENTIAL EBS BELOW RETAINING WALLS. SEE "WALL DETAILS" SHEET.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

LIST OF DRAWINGS

1. M.S.E. CONCRETE PANEL WALL
2. QUANTITIES, WALL DATA, & PROFILE
3. WALL DETAILS
4. TEMPORARY WIRE FACED MSE WALL
5. SUBSURFACE EXPLORATION

STRUCTURE DESIGN CONTACTS:

JONATHON RESHESKE (608) 266-8491
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

WISCONSIN DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURES

ACCEPTED LLS 3/24/22
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-11-40

M.S.E. RETAINING WALL ALONG STH 60

COUNTY	TOWN
COLUMBIA	ARLINGTON

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
JLR	DLM	JLR	DLM

M.S.E. CONCRETE PANEL WALL

SHEET 1 OF 5

514

I.D. 1012-01-04C DATE: MAR/2022

SCALE = 15.00

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SOIL PARAMETERS

SOIL DESCRIPTIONS	FRICTION ANGLE (DEGREES)	COHESION (PSF)	UNIT WEIGHT (PCF)
GRANULAR BACKFILL WITHIN THE WALL IN THE REINFORCING ZONE	30	0	120
FILL BEHIND THE REINFORCING ZONE (RETAINED SOIL) - EXISTING AND NEW EMBANKMENT FILL	30	0	125
BORING 1 SW, STA. 261+98SB (WALL STA. 1+35)			
ENGINEERED GRANULAR BACKFILL (SPECIAL COMPACTION) AFTER EBS OF SOFT CLAY BELOW BOTTOM OF WALL FACE AND REINFORCED ZONE (ELEV. 1067.0± FT - 1057.8 FT)	32	0	120
LEAN CLAY, BROWN (MOTTLED), TRACE SAND, SOFT TO STIFF AND SILT, BROWN, SOME SAND LITTLE CLAY, VERY SOFT (OUTSIDE ZONE OF EBS BELOW WALL) (ELEV. 1067.0± FT - 1057.8 FT)	0 (ST) 26 (LT)	500 (ST) 0 (LT)	115
FINE TO MEDIUM SILTY SAND, REDDISH BROWN, LITTLE TO SOME GRAVEL, SCATTERED COBBLES/BOULDERS, FIRM TO DENSE (ELEV. 1057.8 FT - 1026.8 FT)	35	0	125
SANDSTONE, YELLOWISH BROWN/REDDISH BROWN/WHITE, VERY DENSE (ELEV. 1026.8 FT - 1024.8 FT)	42	0	135
SANDSTONE, REDDISH BROWN/YELLOWISH BROWN/WHITE (ELEV. 1024.8 FT & BELOW)	0	50,000	140
BORING 3, STA. 262+13NB (WALL STA. 3+00 & 3+10)			
ENGINEERED GRANULAR BACKFILL (SPECIAL COMPACTION) AFTER EBS OF SOFT CLAY BELOW BOTTOM OF WALL FACE AND REINFORCED ZONE (ELEV. 1068.0± FT - 1060.0 FT)	32	0	120
LEAN CLAY, BROWN TO BROWN/GRAY (MOTTLED), TRACE SAND, VERY SOFT TO MEDIUM - (OUTSIDE ZONE OF EBS BELOW WALL) (ELEV. 1068.0± FT - 1059.2 FT)	0 (ST) 26 (LT)	500 (ST) 0 (LT)	115
FINE TO MEDIUM SILTY SAND, REDDISH BROWN, VERY LOOSE; FINE TO MEDIUM SAND, LIGHT BROWN, TRACE SILT, SC. SANDY SILT SEAMS, FIRM, AND COARSE GRAVEL, GRAY, LITTLE SAND, TRACE SILT, VERY DENSE (ELEV. 1059.2 FT - 1055.2 FT)	35	0	125
FINE TO MEDIUM SILTY SAND, REDDISH BROWN, SOME GRAVEL, SC. COBBLES/BOULDERS, FIRM TO VERY DENSE (ELEV. 1055.2 FT - 1046.2 FT)	36	0	125
SANDY DOLOMITE, SLIGHTLY WEATHERED, GRAY (ELEV. 1046.2 FT - 1043.7 FT)	0	50,000	145
SANDY DOLOMITE, GRAY/BROWN (ELEV. 1043.7 FT & BELOW)	0	96,000	145

GEOMETRY TABLE

WALL STATION	℄ STH 60 EB	℄ OFFSET TO F.F. WALL	TOP OF WALL ELEVATION	FINISHED GRADE ELEVATION	LOCATION
1+00.00	58+90.83	38.50' RT.	1070.26	1070.26	BEGIN WALL
1+15.00	59+06.02	38.50' RT.	1075.46	1070.39	
1+30.00	59+21.02	38.50' RT.	1080.66	1070.54	
1+35.00	59+26.02	38.50' RT.	1082.39	1070.60	BEGIN TOP WALL
1+50.00	59+41.02	38.50' RT.	1082.39	1070.76	
1+65.00	59+56.02	38.50' RT.	1082.39	1070.92	
1+80.00	59+71.02	38.50' RT.	1082.39	1071.07	
1+95.00	59+86.02	38.50' RT.	1082.39	1071.23	
2+10.00	60+01.02	38.50' RT.	1082.39	1071.39	
2+21.50	60+12.52	38.50' RT.	1082.39	1071.51	TEMPORARY WIRE-FACED WALL
2+25.00	60+16.02	38.50' RT.	1082.39	1071.55	
2+40.00	60+31.02	38.50' RT.	1082.39	1071.70	
2+55.00	60+46.02	38.50' RT.	1082.39	1071.86	
2+70.00	60+61.02	38.50' RT.	1082.39	1072.02	
2+85.00	60+76.02	38.50' RT.	1082.39	1072.18	
3+00.00	60+91.02	38.50' RT.	1082.39	1072.33	
3+10.00	61+01.02	38.50' RT.	1082.39	1072.44	END TOP WALL
3+15.00	61+06.02	38.50' RT.	1080.46	1072.49	
3+30.00	61+21.02	38.50' RT.	1074.64	1072.65	
3+35.00	61+26.02	38.50' RT.	1072.70	1072.70	END WALL

WALL EXTERNAL & OVERALL STABILITY EVALUATION

DIMENSIONS				
WALL HEIGHT (FEET) [1]	15.8	15.8	14.1	14.0
EXPOSED WALL HEIGHT (FEET)	14.3	14.3	12.6	12.5
FEATURE BEHIND WALL	ABUTMENT	SLOPE	ABUTMENT	SLOPE
LENGTH OF REINFORCEMENT (FEET) [2]	17.6	11.7	17.8	10.5
LENGTH OF REIN./WALL HEIGHT	1.11	0.74	1.26	0.75
WALL STATION	1+35	1+35	3+00	3+10
BORING USED	1	1	3	3
CAPACITY TO DEMAND RATIO (CDR) [6, 7]				
SLIDING (CDR > 1.0)	1.00	1.06	1.00	1.04
ECCENTRICITY (CDR > 1.0)	1.21	1.48	1.20	1.47
GLOBAL STABILITY (CDR > 1.0) [4]	1.04 (LT) 1.09 (ST)	--	--	--
BEARING RESISTANCE (CDR > 1.0)	1.12	1.01	1.19	1.02
FACTORED BEARING RESISTANCE (PSF)	6,000 [5]	4,700	6,000 [5]	4,300
ESTIMATED SETTLEMENT (IN)	<1.0	<1.0	<1.0	<1.0

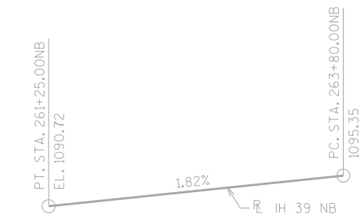
NOTES:
1. THE TOTAL WALL HEIGHT INCLUDES AN EMBEDMENT OF 1.5 FT FOR THE POTENTIAL WIDENING OF STH 60.
2. THE LENGTH OF REINFORCEMENT IS THE MINIMUM REQUIRED LENGTH.
3. REINFORCEMENT LENGTH CONTROLLED BY MINIMUM REINFORCEMENT CRITERIA OF 0.7H OR 8 FT.
4. CDR FOR GLOBAL STABILITY BASED ON RESISTANCE FACTOR (Φ) OF 0.65.
5. REQUIRED BEARING RESISTANCE WAS REDUCED FROM MAXIMUM CALCULATED FACTORED BEARING RESISTANCE.
6. EXTERNAL STABILITY CDRS AND SETTLEMENT ESTIMATES ASSUME SOFT CLAY AND SILT REMOVED BELOW BOTTOM OF WALL AND REINFORCED ZONE. (SEE EBS NOTE AND DETAIL ON "WALL DETAILS" SHEET)
7. CDR REQUIREMENTS AND LOAD AND RESISTANCE FACTORS ARE PRESENTED IN CHAPTER 14 OF THE BRIDGE MANUAL.

NOTE: LT = LONG-TERM STRENGTH PARAMETER;
ST = SHORT-TERM STRENGTH PARAMETER

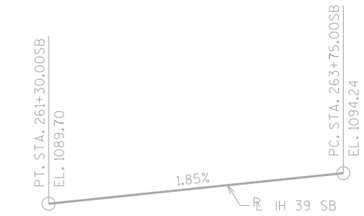
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
209.2500	BACKFILL GRANULAR GRADE 2	TON	4,672
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	2
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	245
652.0110	CONDUIT RIGID METALLIC 1-INCH	LF	5
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	155
SPV.0060	PULL BOXES NON-CONDUCTIVE 18X24-INCH	EACH	2
SPV.0165	TEMPORARY WALL WIRE FACED MECHANICALLY STABILIZED EARTH	SF	745
SPV.0165	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-11-40	SF	3,175
	NON-BID ITEMS		
	FILLER	SIZE	½"
	PREFORMED JOINT FILLER	SIZE	¾"
	EXPANDED POLYSTYRENE	SIZE	1"

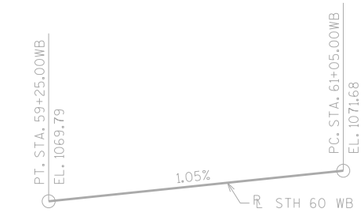
STATE PROJECT NUMBER
1012-01-74



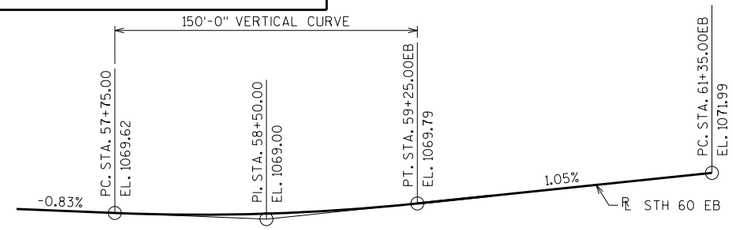
PROFILE GRADE LINE - IH 39 NB



PROFILE GRADE LINE - IH 39 SB



PROFILE GRADE LINE - STH 60 WB



PROFILE GRADE LINE - STH 60 EB

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-11-40

DRAWN BY JLR | PLANS CK'D. DLM

QUANTITIES, WALL DATA, & PROFILE

SHEET 2

515

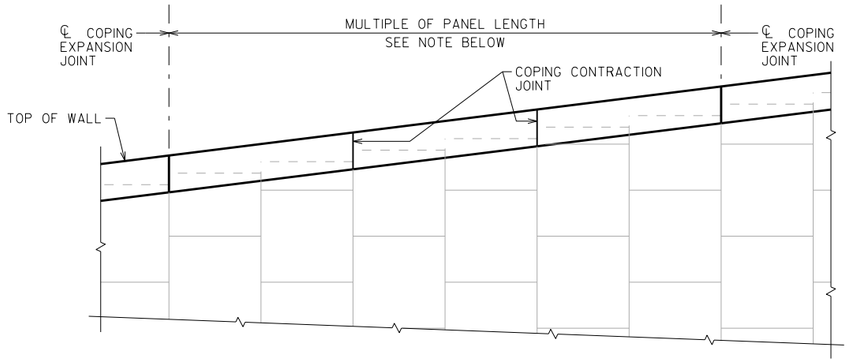
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STATE PROJECT NUMBER

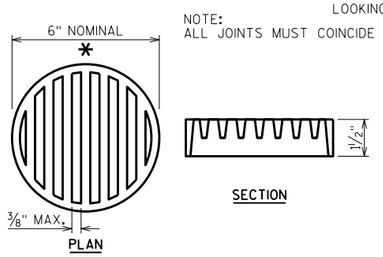
1012-01-74



CAST-IN-PLACE COPING PARTIAL ELEVATION

LOOKING AT F.F. WALL

NOTE:
ALL JOINTS MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.

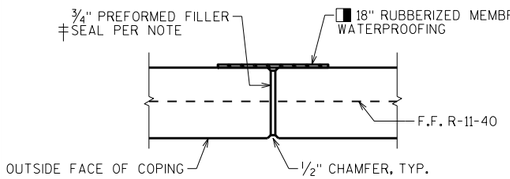


RODENT SHIELD DETAIL

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

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

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

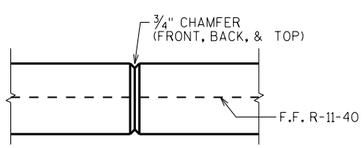


COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MIN. SPACING OF JOINT = 20'
MAX. SPACING OF JOINT = 50'

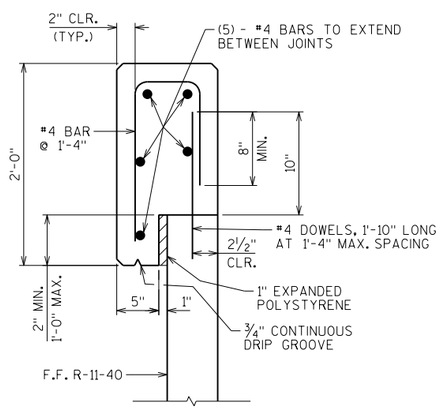
‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONC.)

◨ MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF PANELS.

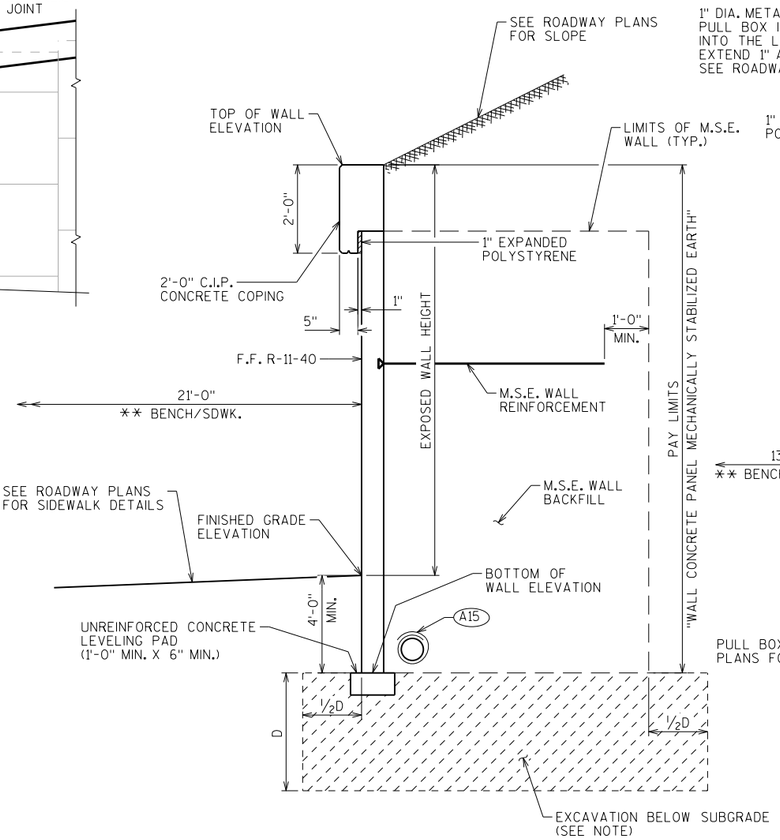


COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 12'

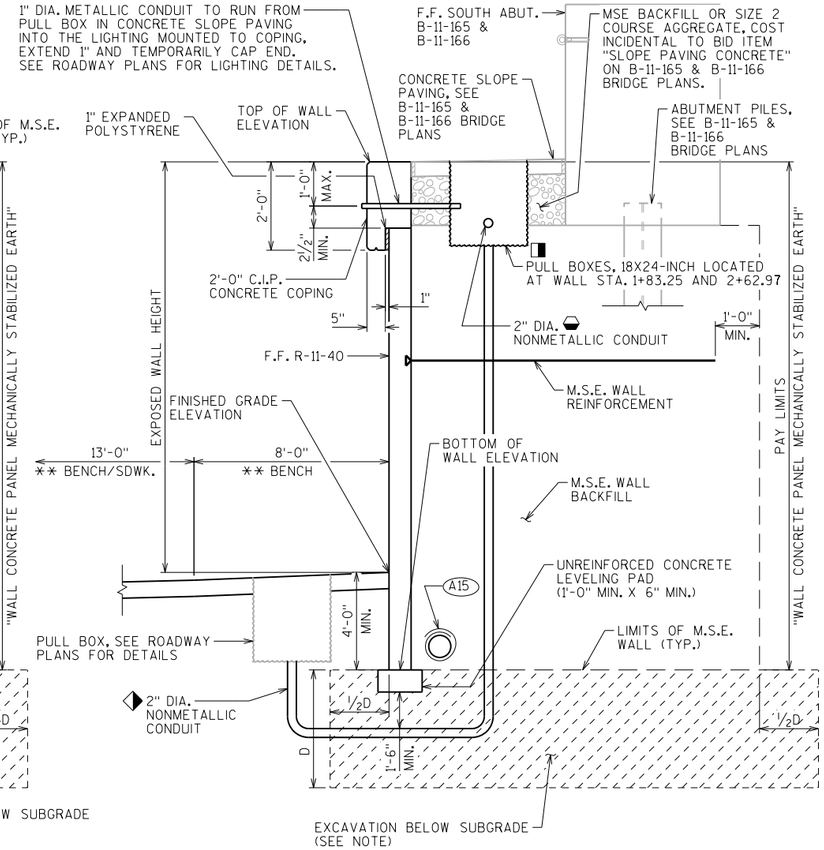


SECTION THRU COPING



TYPICAL MSE WALL SECTION WITH NO ABUTMENT

LOOKING EAST



TYPICAL MSE WALL SECTION AT ABUTMENT

LOOKING EAST

EXCAVATION BELOW SUBGRADE (EBS) NOTE:
REMOVE TOPSOIL AND SOFT TO MEDIUM SILT AND CLAY BELOW MSE WALL AND REINFORCED ZONE. EBS ESTIMATED TO EXTEND TO ELEV. 1057.8 FT TO 1059.2 FT. EBS EXCAVATION SHOULD BE OVERSIZED LATERALLY 0.5 FT BEYOND THE FRONT FACE OF THE WALL AND BACK OF THE REINFORCED ZONE FOR EACH 1 FT OF EBS DEPTH BELOW THE BOTTOM OF THE WALL. BACKFILL EBS EXCAVATION WITH GRANULAR BACKFILL, GRADE 2 USING SPECIAL COMPACTION METHODS ACCORDING TO THE STANDARD SPECIFICATIONS.

ESTIMATED EBS BASED ON SOIL BORINGS DRILLED WEST (B-1/1A/1B) AND EAST (B-3) OF THE EXISTING EMBANKMENT AND ASSUMES THE SOFT SOILS ENCOUNTERED IN THE BORINGS EXTEND BELOW THE EXISTING EMBANKMENT AND WALL ALIGNMENT. IF THE SOFT SILT/CLAY SOILS ARE NOT PRESENT BELOW THE EXISTING EMBANKMENT AND WALL ALIGNMENT AND SUITABLE SOILS ARE PRESENT, EBS WOULD NOT BE REQUIRED. THE REGIONAL SOILS ENGINEER SHOULD EVALUATE RETAINING WALL SUBGRADE CONDITIONS TO DETERMINE IF SUITABLE SOIL CONDITIONS EXIST OR IF EBS IS REQUIRED. IF EBS IS REQUIRED SEE ROADWAY PLANS FOR PAYMENT.

** SEE ROADWAY PLANS FOR DETAILS

◨ PULL BOX NON-CONDUCTIVE 18X24-INCH IN BRIDGE CONCRETE SLOPE PAVING AT EACH COPING MOUNTED LIGHTING LOCATION. PLACE ½" FILLER BETWEEN PULL BOX AND CONCRETE SLOPE PAVING.

◆ (1) - 2" DIA. NONMETALLIC CONDUIT FOR COPING MOUNTED LIGHTING TO RUN BETWEEN 18X24-INCH PULL BOX IN CONCRETE SLOPE PAVING AND ROADWAY PULL BOX IN BENCH. CONDUIT TO BE 1'-6" MIN. BELOW WALL CONCRETE LEVELING PAD. PULL BOXES SHALL BE LOCATED IN THE CONCRETE SLOPE PAVING AT LIGHTING LOCATIONS.

◒ (1) - 2" DIA. NONMETALLIC CONDUIT TO BE A MIN. 1'-6" BELOW THE CONCRETE SLOPE PAVING BETWEEN 18X24-INCH PULL BOXES IN CONCRETE SLOPE PAVING.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-11-40

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WALL DETAILS

SHEET 3

516

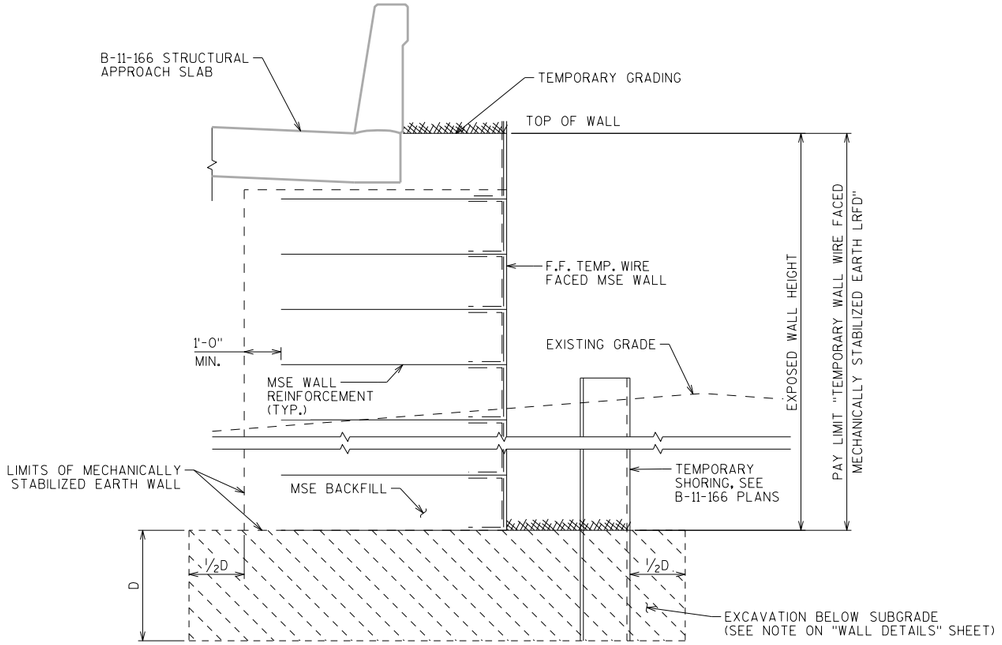
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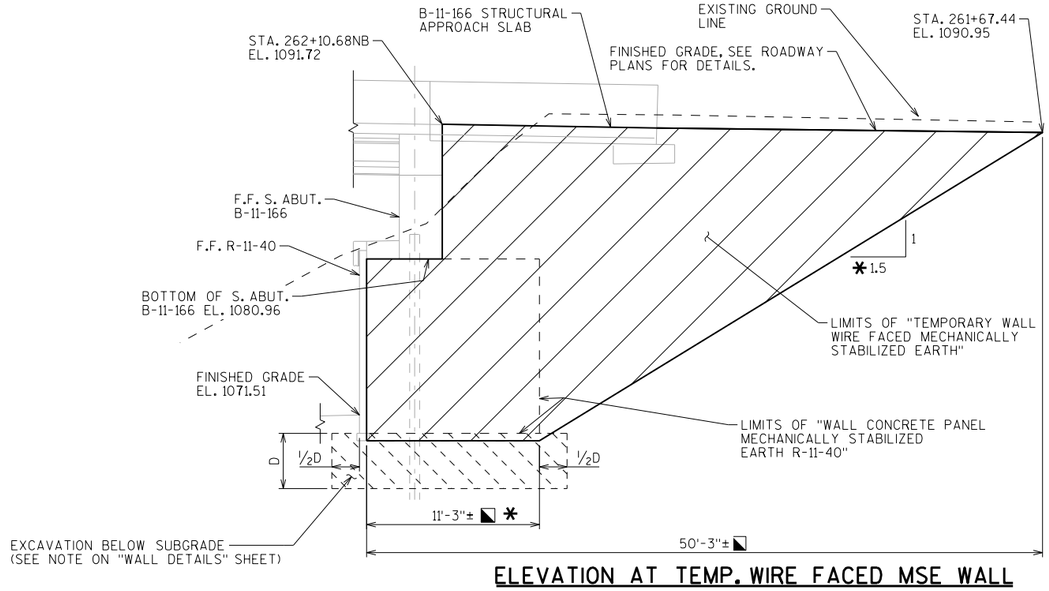
STATE PROJECT NUMBER

1012-01-74



TYPICAL SECTION - TEMP. WIRE FACED MSE WALL

LOOKING SOUTH - WALL STA. 2+21.50±



ELEVATION AT TEMP. WIRE FACED MSE WALL

LOOKING EAST (UPSTATION)

◪ DIMENSION IS BASED UPON THEORETICAL REINFORCEMENT STRAP LENGTHS OF 0.7H. ACTUAL DIMENSION WILL BE BASED ON CONTRACTOR DESIGN.

✱ MEASURED PERPENDICULAR TO B.F. ABUT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-11-40

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TEMPORARY WIRE FACED MSE WALL

SHEET 4

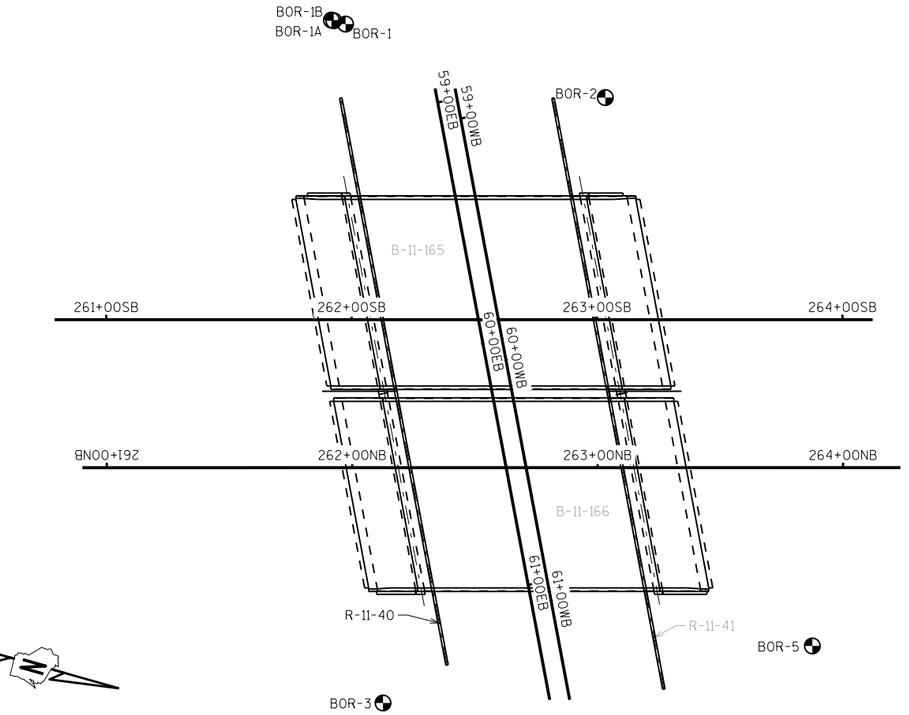
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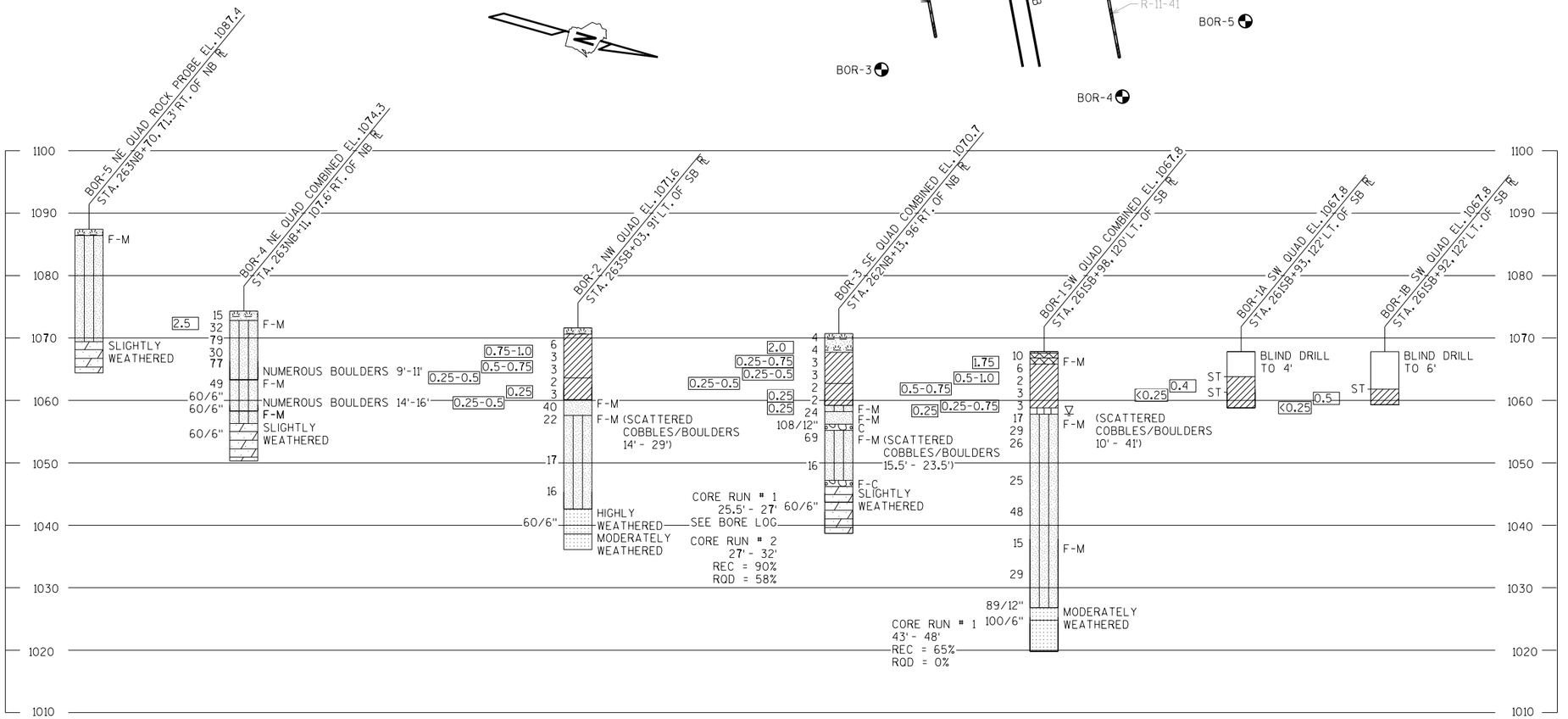
SCALE = 2.00

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8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	5/12/2021	319533	539088
1A	5/12/2021	319528	539088
1B	5/12/2021	319527	539088
2	5/17/2021	319643	539088
3	5/19/2021	319623	539350
4	5/19/2021	319738	539331
5	5/19/2021	319785	539280
BORINGS COMPLETED BY: WISDOT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) COLUMBIA COUNTY			
COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT			





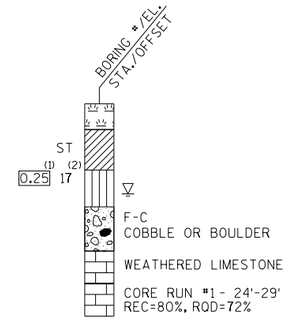
STATE PROJECT NUMBER

1012-01-74

MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

▽ AT TIME OF DRILLING

▼ END OF DRILLING

▽ AFTER DRILLING

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-11-40

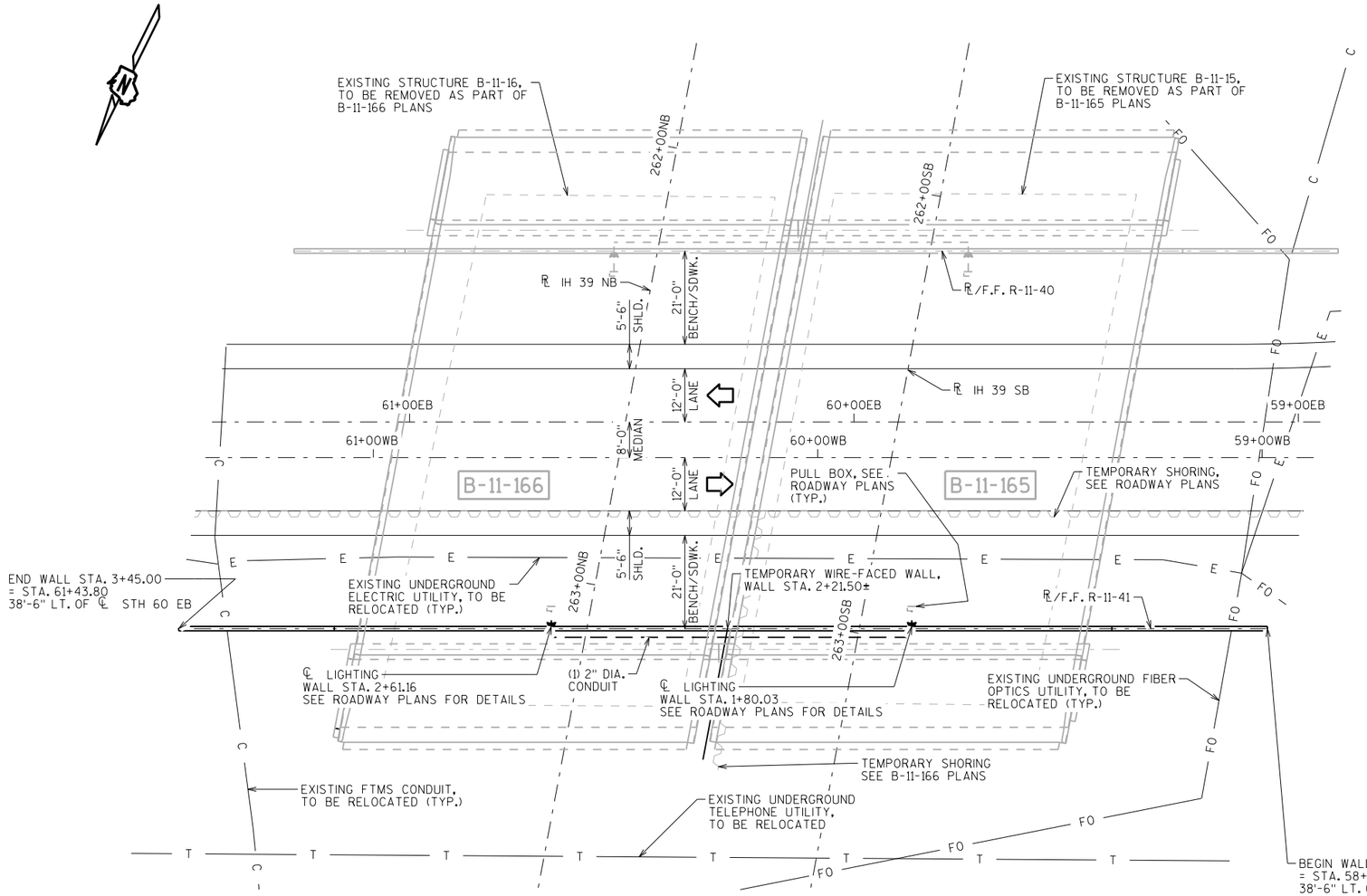
DRAWN BY TLP/JLR | PLANS CK'D. DLM

SUBSURFACE EXPLORATION

SHEET 5

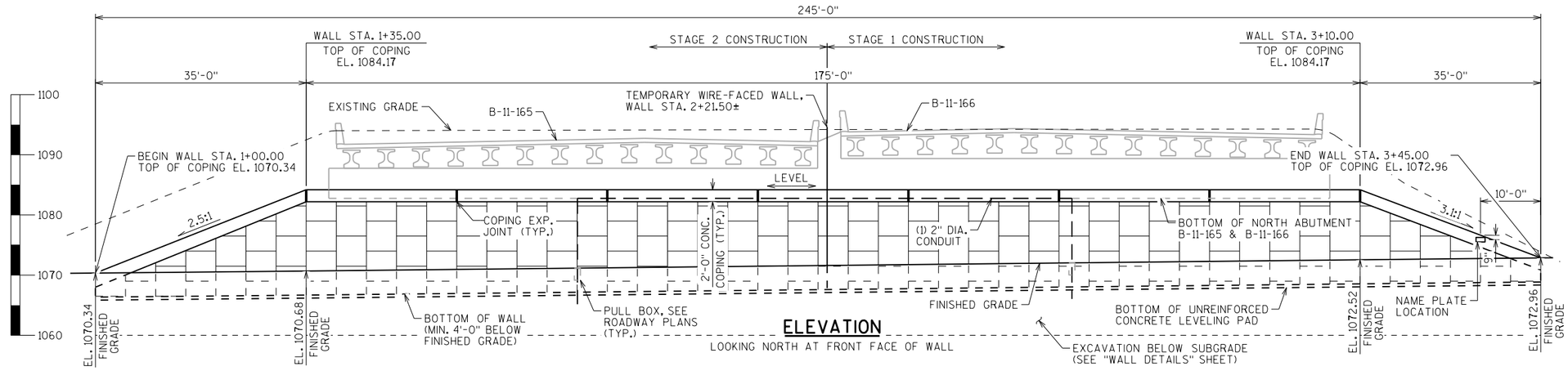
518

SCALE = 30.00



GENERAL PLAN

R-11-41 MSE RETAINING WALL



ELEVATION

LOOKING NORTH AT FRONT FACE OF WALL

DESIGN DATA

MATERIAL PROPERTIES:

CONCRETE MASONRY:
CONCRETE MASONRY CAST-IN-PLACE COPING ——— f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT:
GRADE 60 ——— fy = 60,000 P.S.I.

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-11-41".

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

DESIGN OF THE RETAINING WALL IN FRONT OF THE ABUTMENT SHALL INCLUDE THE HORIZONTAL EARTH LOADS AND 240 PSF LIVE LOAD SURCHARGE ACTING ON THE BACK OF THE ABUTMENT BELOW THE BEAM SEATS.

ALLOWABLE WALL SYSTEMS

WALL CONCRETE PANEL M.S.E.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

ALL WALL STATIONING AND OFFSETS ARE GIVEN TO THE FRONT FACE OF WALL.

THE PLAN QUANTITY FOR THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-11-41" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE WALL TO A CONSTANT DEPTH OF 4'-0" BELOW FINISHED GRADE TO PROVIDE ROOM FOR POSSIBLE ROADWAY EXPANSION.

THE QUANTITY OF CONCRETE MASONRY & REINFORCING STEEL, FOR THE CAST-IN-PLACE COPING, IS PAID FOR UNDER THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-11-41".

THE BACKFILL BEHIND THE MSE WALL SHOULD BE GRANULAR AND FREE DRAINING.

THE REGION SOILS ENGINEER SHALL REVIEW THE SUBSURFACE CONDITIONS PRIOR TO CONSTRUCTION OF THE WALL.

COORDINATE THE CONSTRUCTION OF RETAINING WALL R-11-41 WITH THE CONSTRUCTION OF THE NORTH ABUTMENTS OF BRIDGES B-11-165 & B-11-166.

TEMPORARY SHORING DESIGN AND INSTALLATION SHOULD CONSIDER POTENTIAL EBS BELOW RETAINING WALLS. SEE "WALL DETAILS" SHEET.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST RESULTS.

LIST OF DRAWINGS

1. M.S.E. CONCRETE PANEL WALL
2. QUANTITIES, WALL DATA, & PROFILE
3. WALL DETAILS
4. TEMPORARY WIRE FACED MSE WALL
5. SUBSURFACE EXPLORATION

STRUCTURE DESIGN CONTACTS:

JONATHON RESHESKE (608) 266-8491
LAURA SHADEWALD (608) 267-9592

STATE PROJECT NUMBER

1012-01-74

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES

ACCEPTED ——— LLS 3/24/22
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-11-41

M.S.E. RETAINING WALL ALONG STH 60

COUNTY	TOWN
COLUMBIA	ARLINGTON

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
JLR	DLM	JLR	DLM

M.S.E. CONCRETE PANEL WALL

SHEET 1 OF 5

519

I.D. 1012-01-04D DATE: MAR/2022

SCALE = 15.00

SOIL PARAMETERS

SOIL DESCRIPTIONS	FRICTION ANGLE (DEGREES)	COHESION (PSF)	UNIT WEIGHT (PCF)
GRANULAR BACKFILL WITHIN THE WALL IN THE REINFORCING ZONE	30	0	120
FILL BEHIND THE REINFORCING ZONE (RETAINED SOIL) - EXISTING AND NEW EMBANKMENT FILL	30	0	125
BORING 2, STA. 263+03SB (WALL STA. 1+35)			
ENGINEERED GRANULAR BACKFILL (SPECIAL COMPACTION) AFTER EBS OF SOFT CLAY BELOW BOTTOM OF WALL FACE AND REINFORCED ZONE (ELEV. 1067.0± FT - 1060.1 FT)	32	0	120
SILTY TO LEAN CLAY, BROWN, GRAY TO BROWN/GRAY (MOTTLED), TRACE SAND, SOFT TO MEDIUM (OUTSIDE ZONE OF EBS BELOW WALL) (ELEV. 1067.0± FT - 1060.1 FT)	0 (ST) 26 (LT)	500 (ST) 0 (LT)	115
FINE TO MEDIUM SAND, GRAY, LITTLE GRAVEL, TRACE SILT, DENSE (ELEV. 1060.1 FT - 1057.6 FT)	36	0	125
SILTY SAND, REDDISH BROWN, SOME GRAVEL, SCATTERED COBBLES/BOULDERS, FIRM (ELEV. 1057.6 FT - 1042.6 FT)	33	0	125
SANDSTONE, LIGHT GRAY/LIGHT REDDISH BROWN, VERY DENSE (ELEV. 1042.6 FT - 1038.6)	42	0	135
SANDSTONE, LIGHT BROWN (ELEV. 1038.1 FT & BELOW)	0	50,000	140
BORING 4, STA. 263+11NB (WALL STA. 3+10)			
FINE TO MEDIUM GRAVELLY SAND, BROWN, FEW TO LITTLE SILT, FIRM TO VERY DENSE (ELEV. 1068.0± FT - 1063.3 FT)	38	0	130
FINE TO MEDIUM SILTY SAND, BROWN, SOME GRAVEL, SCATTERED TO NUMEROUS COBBLES/BOULDERS, DENSE TO VERY DENSE (ELEV. 1063.3 FT - 1056.3 FT)	40	0	135
SANDY DOLOMITE, BROWN/LIGHT GRAY (ELEV. 1056.3 FT & BELOW)	0	96,000	145

NOTE: LT = LONG-TERM STRENGTH PARAMETER; ST = SHORT-TERM STRENGTH PARAMETER

WALL EXTERNAL & OVERALL STABILITY EVALUATION

DIMENSIONS				
WALL HEIGHT (FEET) [1]	17.5	17.5	15.7	15.7
EXPOSED WALL HEIGHT (FEET)	16.0	16.0	14.2	14.2
FEATURE BEHIND WALL	ABUTMENT	SLOPE	ABUTMENT	SLOPE
LENGTH OF REINFORCEMENT (FEET) [2]	18.3	12.5	18.5	11.0
LENGTH OF REIN./WALL HEIGHT	1.05	0.71	1.18	0.70 [3]
WALL STATION	1+35	1+35	3+10	3+10
BORING USED	2	2	4	4
CAPACITY TO DEMAND RATIO (CDR) [6, 7]				
SLIDING (CDR > 1.0)	1.00	1.00	1.00	1.08
ECCENTRICITY (CDR > 1.0)	1.20	1.32	1.18	1.50
GLOBAL STABILITY (CDR > 1.0) [4]	1.02 (LT) 1.08 (ST)	--	--	--
BEARING RESISTANCE (CDR > 1.0)	1.09	1.02	1.16	1.26
FACTORED BEARING RESISTANCE (PSF)	6,500 [5]	6,500 [5]	6,500 [5]	6,500 [5]
ESTIMATED SETTLEMENT (IN)	<1.0	<1.0	<1.0	<1.0

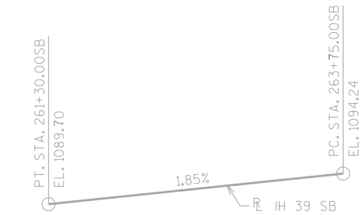
NOTES:
1. THE TOTAL WALL HEIGHT INCLUDES AN EMBEDMENT OF 1.5 FT FOR THE POTENTIAL WIDENING OF STH 60.
2. THE LENGTH OF REINFORCEMENT IS THE MINIMUM REQUIRED LENGTH.
3. REINFORCEMENT LENGTH CONTROLLED BY MINIMUM REINFORCEMENT CRITERIA OF 0.7H OR 8 FT.
4. CDR FOR GLOBAL STABILITY BASED ON RESISTANCE FACTOR (Φ) OF 0.65.
5. REQUIRED BEARING RESISTANCE WAS REDUCED FROM MAXIMUM CALCULATED FACTORED BEARING RESISTANCE.
6. EXTERNAL STABILITY CDRS AND SETTLEMENT ESTIMATES ASSUME SOFT CLAY AND SILT REMOVED BELOW BOTTOM OF WALL AND REINFORCED ZONE. (SEE EBS NOTE AND DETAIL ON "WALL DETAILS" SHEET)
7. CDR REQUIREMENTS AND LOAD AND RESISTANCE FACTORS ARE PRESENTED IN CHAPTER 14 OF THE BRIDGE MANUAL.

STATE PROJECT NUMBER

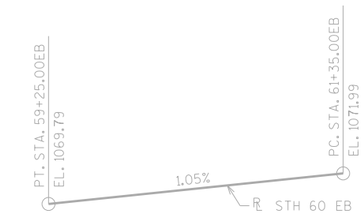
1012-01-74



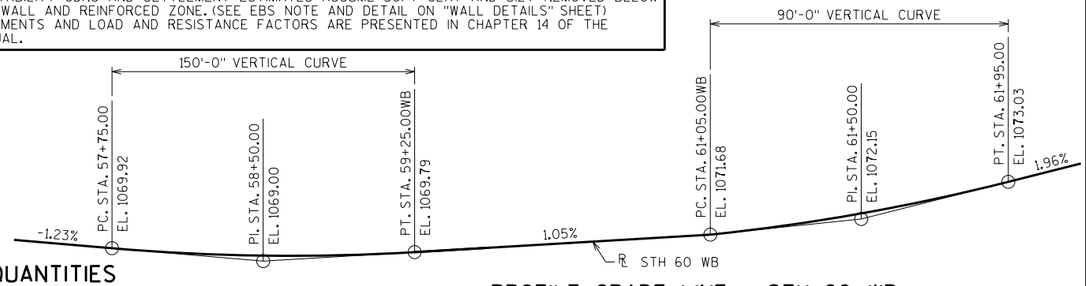
PROFILE GRADE LINE - IH 39 NB



PROFILE GRADE LINE - IH 39 SB



PROFILE GRADE LINE - STH 60 EB



PROFILE GRADE LINE - STH 60 WB

GEOMETRY TABLE

WALL STATION	℄ STH 60 WB	℄ OFFSET TO F.F. WALL	TOP OF WALL ELEVATION	FINISHED GRADE ELEVATION	LOCATION
1+00.00	58+98.80	38.50' LT.	1070.34	1070.34	BEGIN WALL
1+15.00	59+13.80	38.50' LT.	1076.27	1070.48	
1+30.00	59+28.80	38.50' LT.	1082.19	1070.63	
1+35.00	59+33.80	38.50' LT.	1084.17	1070.68	BEGIN TOP WALL
1+45.00	59+43.80	38.50' LT.	1084.17	1070.79	
1+60.00	59+58.80	38.50' LT.	1084.17	1070.94	
1+75.00	59+73.80	38.50' LT.	1084.17	1071.10	
1+90.00	59+88.80	38.50' LT.	1084.17	1071.26	
2+05.00	60+03.80	38.50' LT.	1084.17	1071.42	
2+20.00	60+18.80	38.50' LT.	1084.17	1071.57	
2+21.50	60+20.30	38.50' LT.	1084.17	1071.59	TEMPORARY WIRE-FACED WALL
2+35.00	60+33.80	38.50' LT.	1084.17	1071.73	
2+50.00	60+48.80	38.50' LT.	1084.17	1071.89	
2+65.00	60+63.80	38.50' LT.	1084.17	1072.05	
2+80.00	60+78.80	38.50' LT.	1084.17	1072.20	
2+95.00	60+93.80	38.50' LT.	1084.17	1072.36	
3+10.00	61+08.80	38.50' LT.	1084.17	1072.52	END TOP WALL
3+25.00	61+23.80	38.50' LT.	1079.37	1072.70	
3+40.00	61+38.80	38.50' LT.	1074.56	1072.89	
3+45.00	61+43.80	38.50' LT.	1072.96	1072.96	END WALL

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
209.2500	BACKFILL GRANULAR GRADE 2	TON	4,234
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	2
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	255
652.0110	CONDUIT RIGID METALLIC 1-INCH	LF	5
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	145
SPV.0060	PULL BOXES NON-CONDUCTIVE 18X24-INCH	EACH	2
SPV.0165	TEMPORARY WALL WIRE FACED MECHANICALLY STABILIZED EARTH	SF	912
SPV.0165	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-11-40	SF	3,620
	NON-BID ITEMS		
	FILLER	SIZE	½"
	PREFORMED JOINT FILLER	SIZE	¾"
	EXPANDED POLYSTYRENE	SIZE	1"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-11-41

DRAWN BY JLR | PLANS CK'D. DLM

QUANTITIES, WALL DATA, & PROFILE

SHEET 2

520

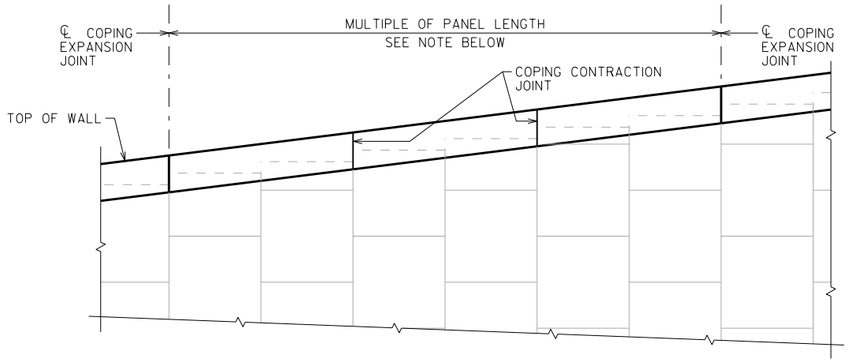
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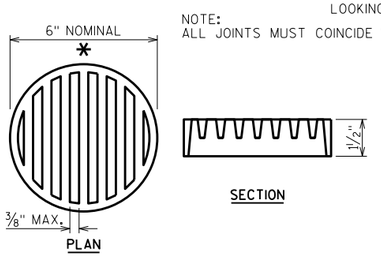
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STATE PROJECT NUMBER

1012-01-74



CAST-IN-PLACE COPING PARTIAL ELEVATION

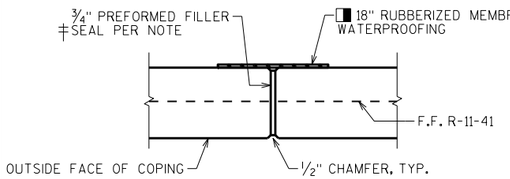


RODENT SHIELD DETAIL

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

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

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

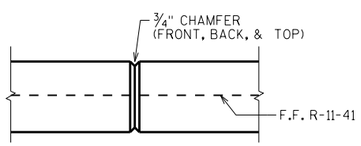


COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MIN. SPACING OF JOINT = 20'
MAX. SPACING OF JOINT = 50'

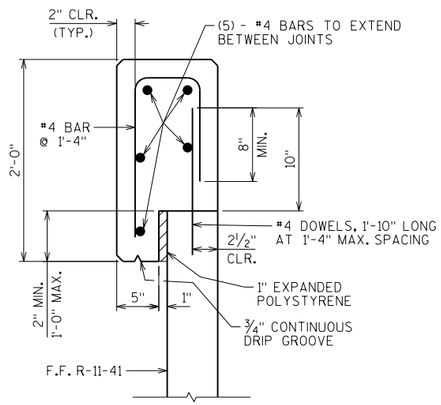
‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONC.)

◨ MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF PANELS.

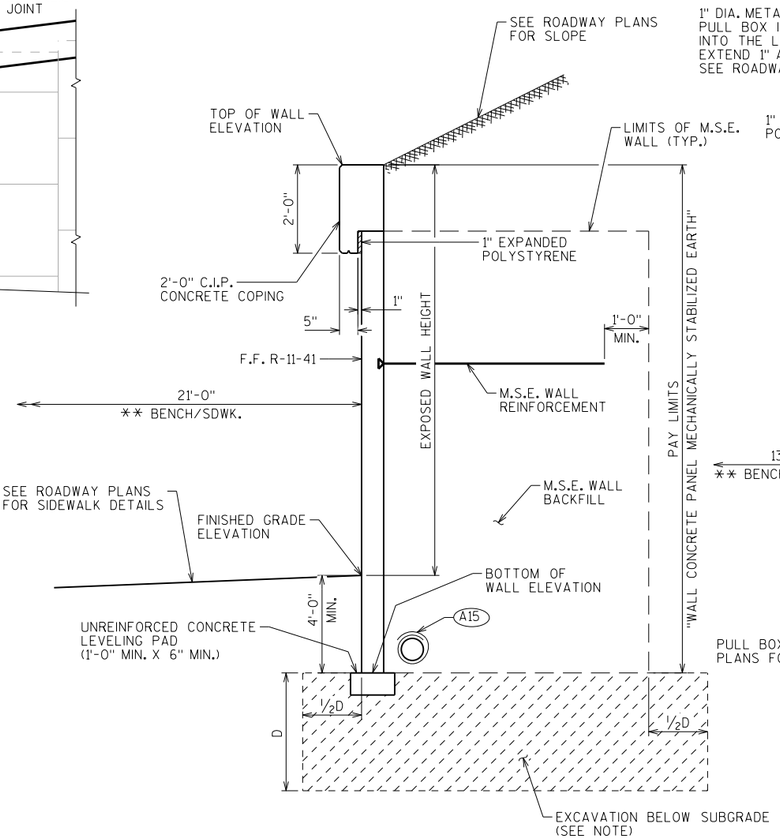


COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 12'

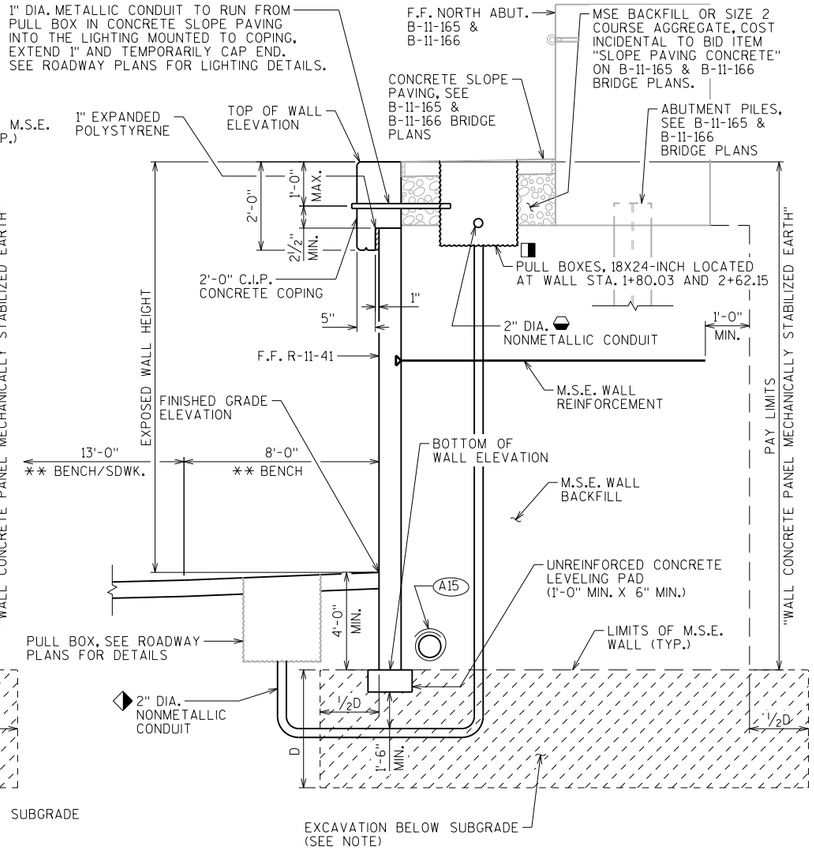


SECTION THRU COPING



TYPICAL MSE WALL SECTION WITH NO ABUTMENT

LOOKING WEST



TYPICAL MSE WALL SECTION AT ABUTMENT

LOOKING WEST

EXCAVATION BELOW SUBGRADE (EBS) NOTE:
REMOVE TOPSOIL AND SOFT TO MEDIUM SILT AND CLAY BELOW MSE WALL AND REINFORCED ZONE. EBS ESTIMATED TO EXTEND TO ELEV. 1060.1 FT. EBS EXCAVATION SHOULD BE OVERSIZED LATERALLY 0.5 FT BEYOND THE FRONT FACE OF THE WALL AND BACK OF THE REINFORCED ZONE FOR EACH 1 FT OF EBS DEPTH BELOW THE BOTTOM OF THE WALL. BACKFILL EBS EXCAVATION WITH GRANULAR BACKFILL, GRADE 2 USING SPECIAL COMPACTION METHODS ACCORDING TO STANDARD SPECIFICATIONS.

ESTIMATED EBS BASED ON SOIL BORINGS (B-2) DRILLED WEST OF THE EXISTING EMBANKMENT AND ASSUMES THE SOFT SOILS ENCOUNTERED IN THE BORINGS EXTEND BELOW THE EXISTING EMBANKMENT AND WALL ALIGNMENT. IF THE SOFT SILT/CLAY SOILS ARE NOT PRESENT BELOW THE EXISTING EMBANKMENT AND WALL ALIGNMENT AND SUITABLE SOILS ARE PRESENT, EBS WOULD NOT BE REQUIRED. BORING EAST OF EXISTING EMBANKMENT (B-4) DID NOT ENCOUNTER SOFT SILT/CLAY. THE REGIONAL SOILS ENGINEER SHOULD EVALUATE RETAINING WALL SUBGRADE CONDITIONS TO DETERMINE IF SUITABLE SOIL CONDITIONS EXIST OR IF EBS IS REQUIRED. IF EBS IS REQUIRED SEE ROADWAY PLANS FOR PAYMENT.

BASED ON THE CONDITIONS ENCOUNTERED IN B-4, DRILLED NEAR THE EAST END OF THE WALL ALIGNMENT NEAR THE WALL FACE, AND B-5, WHICH WAS DRILLED NORTH OF THE ABUTMENT AND WALL ALIGNMENT, IT APPEARS BEDROCK SLOPES UP FROM THE SOUTH TO NORTH, AND THERE IS THE POTENTIAL FOR BEDROCK TO BE ENCOUNTERED DURING EXCAVATION FOR THE RETAINING WALL. IF BEDROCK IS ENCOUNTERED AT OR ABOVE THE BOTTOM OF WALL GRADE, THE BEDROCK SHOULD BE REMOVED AT LEAST 6 INCHES BELOW THE BOTTOM OF THE WALL, AND GRADE SHOULD BE RESTORED WITH WELL-COMPACTED GRANULAR OR COARSE AGGREGATE BACKFILL.

** SEE ROADWAY PLANS FOR DETAILS

◨ PULL BOX NON-CONDUCTIVE 18X24-INCH IN BRIDGE CONCRETE SLOPE PAVING AT EACH COPING MOUNTED LIGHTING LOCATION. PLACE ½" FILLER BETWEEN PULL BOX AND CONCRETE SLOPE PAVING.

◨ (1) - 2" DIA. NONMETALLIC CONDUIT FOR COPING MOUNTED LIGHTING TO RUN BETWEEN 18X24-INCH PULL BOX IN CONCRETE SLOPE PAVING AND ROADWAY PULL BOX IN BENCH. CONDUIT TO BE 1'-6" MIN. BELOW WALL CONCRETE LEVELING PAD. PULL BOXES SHALL BE LOCATED IN THE CONCRETE SLOPE PAVING AT LIGHTING LOCATIONS.

◨ (1) - 2" DIA. NONMETALLIC CONDUIT TO BE A MIN. 1'-6" BELOW THE CONCRETE SLOPE PAVING BETWEEN 18X24-INCH PULL BOXES IN CONCRETE SLOPE PAVING.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-11-41

DRAWN BY JLR | PLANS CK'D. DLM

WALL DETAILS

SHEET 3

521

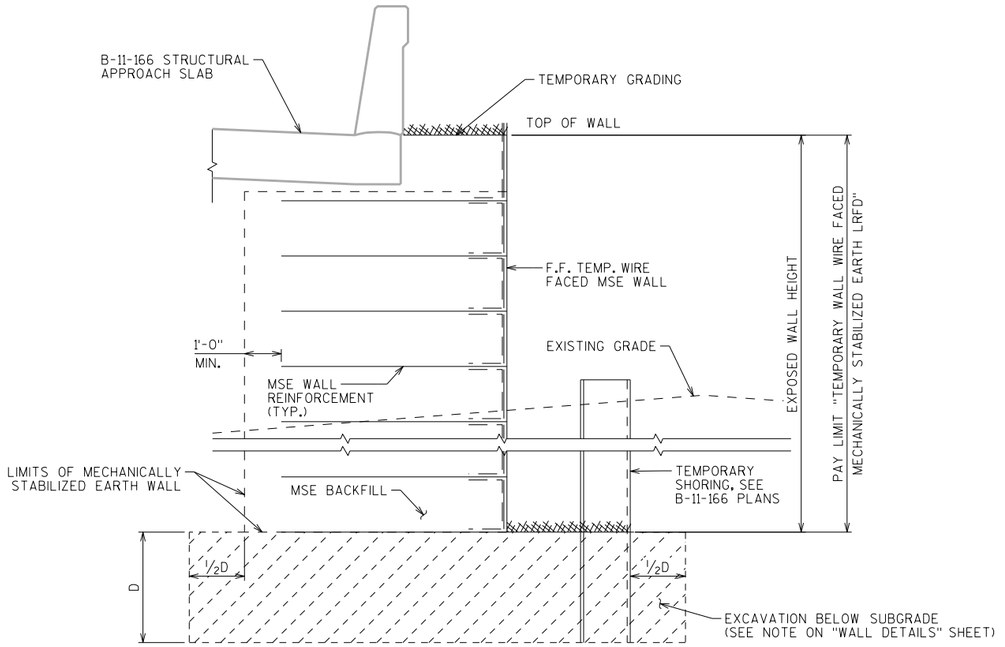
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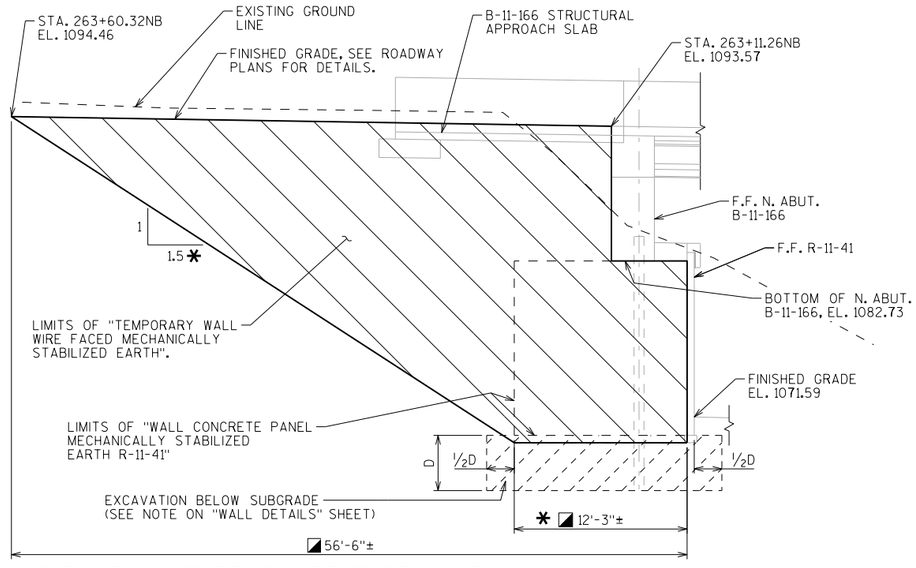
STATE PROJECT NUMBER

1012-01-74



TYPICAL SECTION - TEMP. WIRE FACED MSE WALL

LOOKING SOUTH - WALL STA. 2+21.50±



ELEVATION AT TEMP. WIRE FACED MSE WALL

LOOKING EAST (UPSTATION)

◪ DIMENSION IS BASED UPON THEORETICAL REINFORCEMENT STRAP LENGTHS OF 0.7H. ACTUAL DIMENSION WILL BE BASED ON CONTRACTOR DESIGN.

* MEASURED PERPENDICULAR TO B.F. ABUT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-11-41

DRAWN BY JLR | PLANS CK'D. DLM

TEMPORARY WIRE FACED MSE WALL

SHEET 4

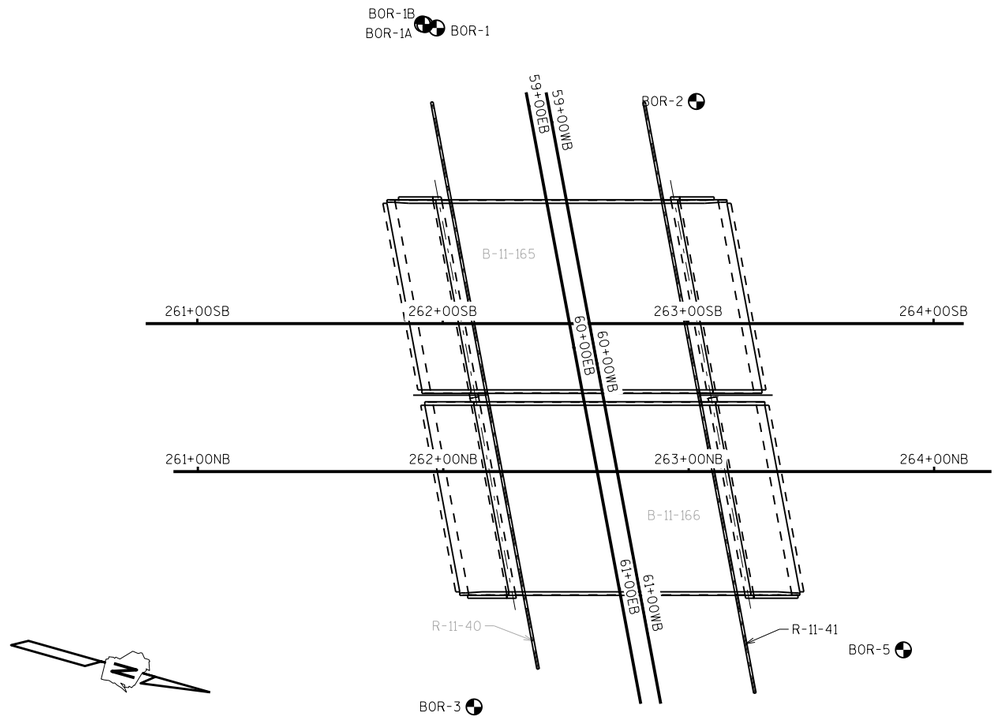
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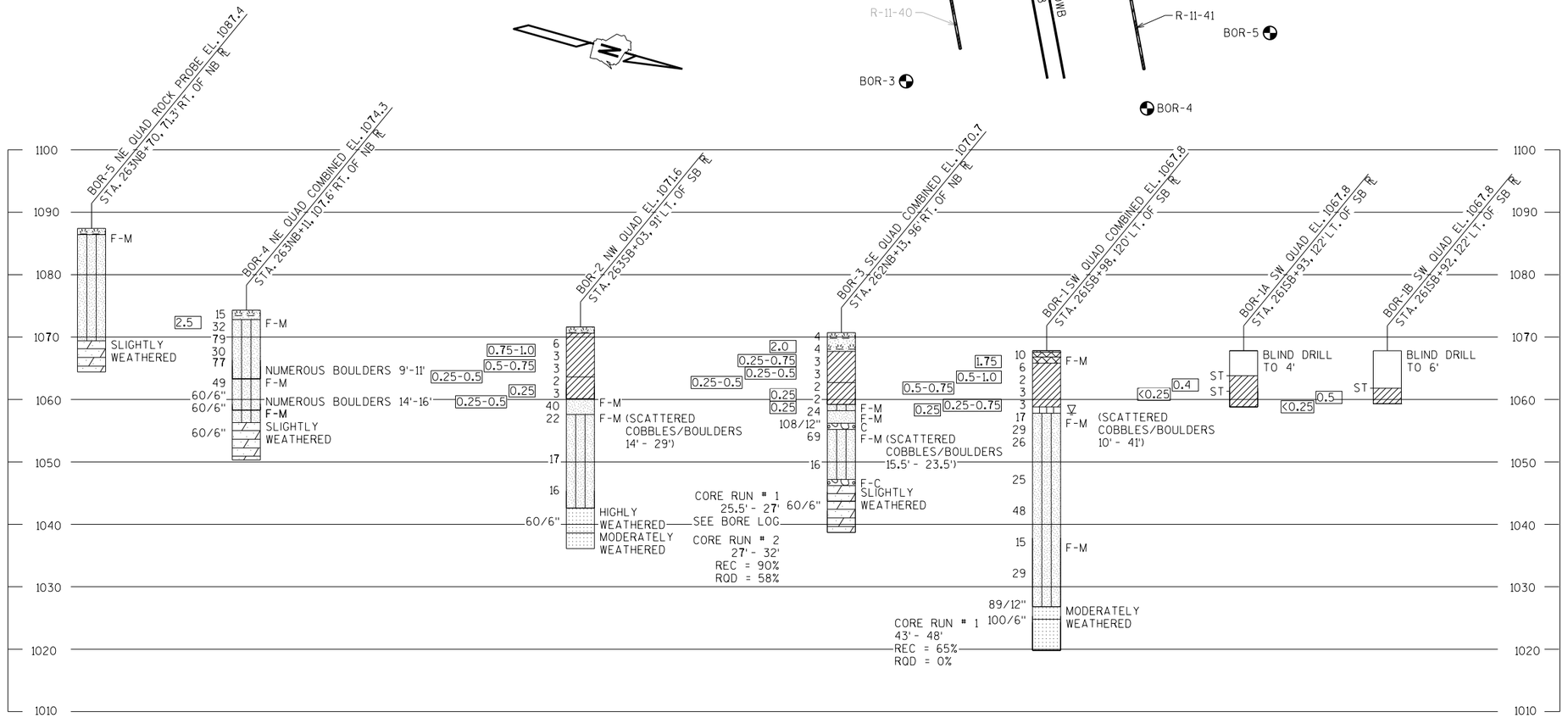
SCALE = 2.00

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8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	5/12/2021	319533	539088
1A	5/12/2021	319528	539088
1B	5/12/2021	319527	539088
2	5/17/2021	319643	539088
3	5/19/2021	319623	539350
4	5/19/2021	319738	539331
5	5/19/2021	319785	539280
BORINGS COMPLETED BY: WISDOT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) COLUMBIA COUNTY			
COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT			





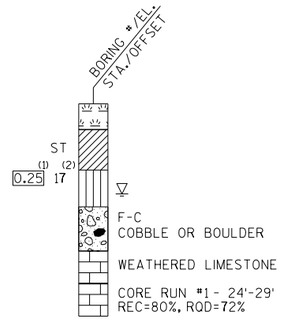
STATE PROJECT NUMBER

1012-01-74

MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-11-41

DRAWN BY TLP/JLR | PLANS CK'D. DLM

SUBSURFACE EXPLORATION

SHEET 5

523

SCALE = 30.00

D1A - IH 39 SB - Cross Overs

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT 1.00	EXPANDED FILL 1.25	EXPANDED ROCK 1.10	MASS ORDINATE
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
238"SB"+09	47	0	0	0	0	0	0	0	0	0
239"SB"+00	50	0	0	163	0	0	163	0	0	163
240"SB"+00	50	0	0	186	0	0	349	0	0	349
241"SB"+00	53	0	0	191	0	0	540	0	0	540
242"SB"+00	53	0	0	197	0	0	737	0	0	737
243"SB"+00	53	0	0	196	0	0	933	0	0	933
244"SB"+00	45	0	0	182	0	0	1115	0	0	1115
244"SB"+90	27	0	0	120	0	0	1235	0	0	1235
273"SB"+50	42	0	0	0	0	0	0	0	0	1235
274"SB"+00	43	0	0	79	0	0	79	0	0	1314
275"SB"+00	46	0	0	166	0	0	245	0	0	1480
276"SB"+00	50	0	0	179	0	0	424	0	0	1659
277"SB"+00	54	0	0	193	0	0	617	0	0	1852
278"SB"+00	54	0	0	200	0	0	817	0	0	2052
279"SB"+00	53	0	0	199	0	0	1016	0	0	2251
280"SB"+00	54	0	0	199	0	0	1215	0	0	2450
281"SB"+00	54	0	0	200	0	0	1415	0	0	2650
282"SB"+00	55	0	0	202	0	0	1617	0	0	2852
283"SB"+00	52	0	0	198	0	0	1815	0	0	3050
283"SB"+70	51	0	0	133	0	0	1948	0	0	3183

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D1B - IH 39 NB (NB OFF)

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT 1.00	EXPANDED FILL 1.25	EXPANDED ROCK 1.10	MASS ORDINATE
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
235"NB"+83	22	32	0	0	0	0	0	0	0	0
236"NB"+00	11	7	0	10	12	0	10	15	0	-5
237"NB"+00	32	0	0	79	14	0	89	33	0	57
238"NB"+00	50	0	0	151	0	0	240	33	0	208
239"NB"+00	44	0	0	173	0	0	413	33	0	381
240"NB"+00	43	0	0	160	0	0	573	33	0	541
240"NB"+09	47	0	0	15	0	0	588	33	0	556
240"NB"+15	85	0	0	15	0	0	603	33	0	571
241"NB"+00	70	27	0	245	42	0	848	85	0	763
242"NB"+00	63	86	0	246	209	0	1094	346	0	748
243"NB"+00	60	84	0	227	315	0	1321	740	0	581
244"NB"+00	54	80	0	211	304	0	1532	1120	0	412
244"NB"+90	52	102	0	176	305	0	1708	1501	0	207

Notes:

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2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D1B - IH 39 NB (NB OFF INFIELD)

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT 1.00	EXPANDED FILL 1.25	EXPANDED ROCK 1.10	MASS ORDINATE
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
249"NB"+36	0	0	0	0	0	0	0	0	0	0
250"NB"+00	0	9	0	0	11	0	0	14	0	-14
251"NB"+00	0	27	0	0	67	0	0	98	0	-98
252"NB"+00	0	71	0	0	181	0	0	324	0	-324
253"NB"+00	0	151	0	0	411	0	0	838	0	-838
254"NB"+00	10	202	0	19	654	0	19	1655	0	-1636
255"NB"+00	0	253	0	19	843	0	38	2709	0	-2671
256"NB"+00	0	346	0	0	1110	0	38	4096	0	-4058
257"NB"+00	0	358	0	0	1303	0	38	5725	0	-5687
258"NB"+00	0	425	0	0	1450	0	38	7538	0	-7500
259"NB"+00	0	342	0	0	1420	0	38	9313	0	-9275
260"NB"+00	0	379	0	0	1335	0	38	10981	0	-10943
261"NB"+00	0	347	0	0	1345	0	38	12663	0	-12625
261"NB"+92	0	295	0	0	1100	0	38	14038	0	-14000

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D1B - TEMPORARY PAVEMENT SB ON RAMP

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT 1.00	EXPANDED FILL 1.25	EXPANDED ROCK 1.00	MASS ORDINATE
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
243"SB"+76	9	1	0	0	0	0	0	0	0	0
244"SB"+00	11	6	0	9	3	0	9	4	0	5
245"SB"+00	12	19	0	43	46	0	52	61	0	-9
246"SB"+00	13	17	0	47	67	0	99	145	0	-46
247"SB"+00	14	13	0	50	56	0	149	215	0	-66
248"SB"+00	14	6	0	52	36	0	201	260	0	-59
248"SB"+56	9	0	0	24	7	0	225	269	0	-44

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D1B - IH 39 NB (NB OFF INFIELD)

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT 1.00	EXPANDED FILL 1.25	EXPANDED ROCK 1.10	MASS ORDINATE
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
00"GNXI"+70	5	0	0	0	0	0	0	0	0	0
01"GNXI"+00	63	0	0	38	0	0	38	0	0	38
02"GNXI"+00	8	119	0	131	220	0	169	275	0	-106
03"GNXI"+00	0	498	0	15	1142	0	184	1703	0	-1519
04"GNXI"+00	0	850	0	0	2496	0	184	4823	0	-4639
05"GNXI"+00	0	1074	0	0	3564	0	184	9278	0	-9094
06"GNXI"+00	0	1374	0	0	4533	0	184	14944	0	-14760
07"GNXI"+00	0	1365	0	0	5072	0	184	21284	0	-21100
08"GNXI"+00	17	502	0	32	3458	0	216	25606	0	-25390
09"GNXI"+00	1001	5	0	1886	940	0	2102	26781	0	-24679
09"GNXI"+35	1139	0	1387	1387	3	0	3489	26785	0	-23296

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D1B - IH 39 SB (SB OFF)

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT 1.00	EXPANDED FILL 1.25	EXPANDED ROCK 1.10	MASS ORDINATE
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
277"SB"+18	40	75	0	0	0	0	0	0	0	0
278"SB"+00	42	73	0	124	224	0	124	280	0	-156
279"SB"+00	41	33	0	154	196	0	278	525	0	-247
280"SB"+00	107	9	0	274	78	0	552	623	0	-71
281"SB"+00	132	13	0	441	42	0	993	675	0	318
282"SB"+00	78	8	0	388	40	0	1381	725	0	656
282"SB"+75	32	1	0	153	13	0	1534	741	0	793

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D1B - IH 39 NB OFF "NX" RAMP

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT	EXPANDED FILL	EXPANDED ROCK	MASS ORDINATE
							1.00	1.25	1.10	
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
245"NX"+00	52	0	0	0	0	0	0	0	0	0
246"NX"+00	51	198	0	191	367	0	191	459	0	-268
247"NX"+00	54	238	0	194	808	0	385	1469	0	-1084
248"NX"+00	65	242	0	219	888	0	604	2579	0	-1975
249"NX"+00	127	267	0	355	942	0	959	3756	0	-2797
249"NX"+40	160	281	0	213	406	0	1172	4264	0	-3092
249"NX"+50	143	301	0	56	108	0	1228	4399	0	-3171
250"NX"+00	171	276	0	290	534	0	1518	5066	0	-3548
251"NX"+00	163	248	0	617	970	0	2135	6279	0	-4144
252"NX"+00	136	235	0	553	894	0	2688	7396	0	-4708
253"NX"+00	95	207	0	426	819	0	3114	8420	0	-5306
254"NX"+00	163	21	0	478	423	0	3592	8949	0	-5357
255"NX"+00	19	146	0	337	309	0	3929	9335	0	-5406
256"NX"+00	0	299	0	34	823	0	3963	10364	0	-6401
257"NX"+00	0	304	0	0	1118	0	3963	11761	0	-7798
258"NX"+00	12	216	0	22	965	0	3985	12968	0	-8983
259"NX"+00	38	230	0	92	827	0	4077	14001	0	-9924
260"NX"+00	1	408	0	72	1183	0	4149	15480	0	-11331
261"NX"+00	1	494	0	3	1670	0	4152	17568	0	-13416
261"NX"+70	23	348	0	30	1085	0	4182	18924	0	-14742

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D1B - IH 39 SB OFF ("SX") RAMP

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT	EXPANDED FILL	EXPANDED ROCK	MASS ORDINATE
							1.00	1.25	1.10	
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
264"SX"+02	974	0	0	0	0	0	0	0	0	0
264"SX"+37	1258	0	0	1467	0	0	1467	0	0	1467
265"SX"+00	1421	0	0	3113	0	0	4580	0	0	4580
265"SX"+75	1464	0	0	4014	0	0	8594	0	0	8594
266"SX"+00	1582	0	0	1403	0	0	9997	0	0	9997
267"SX"+00	2128	0	0	6870	0	0	16867	0	0	16867
267"SX"+75	2637	0	0	6618	0	0	23485	0	0	23485
268"SX"+00	2599	0	0	2424	0	0	25909	0	0	25909
269"SX"+00	2030	0	0	8571	0	0	34480	0	0	34480
269"SX"+80	1311	0	0	4950	0	0	39430	0	0	39430
270"SX"+00	1134	0	0	906	0	0	40336	0	0	40336
271"SX"+00	419	0	0	2876	0	0	43212	0	0	43212
271"SX"+85	48	8	0	734	13	0	43946	16	0	43930
272"SX"+00	27	19	0	21	8	0	43967	26	0	43941
273"SX"+00	56	165	0	154	342	0	44121	454	0	43667
274"SX"+00	31	182	0	162	643	0	44283	1258	0	43026
275"SX"+00	52	178	0	154	668	0	44437	2093	0	42345
276"SX"+00	46	146	0	182	600	0	44619	2843	0	41777
276"SX"+80	43	94	0	132	355	0	44751	3286	0	41465

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D2 - IH 39 NB (NB OFF INFIELD)

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT 1.00	EXPANDED FILL 1.25	EXPANDED ROCK 1.00	MASS ORDINATE
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
249"NB"+33	0	0	0	0	0	0	0	0	0	0
250"NB"+00	8	0	0	10	0	0	10	0	0	10
251"NB"+00	9	0	0	33	0	0	43	0	0	43
252"NB"+00	9	0	0	33	0	0	76	0	0	76
253"NB"+00	10	0	0	34	0	0	110	0	0	110
254"NB"+00	9	0	0	35	0	0	145	0	0	145
255"NB"+00	11	0	0	36	0	0	181	0	0	181
256"NB"+00	19	0	0	56	0	0	237	0	0	237
256"NB"+25	26	0	0	21	0	0	258	0	0	258
257"NB"+00	40	0	0	91	0	0	349	0	0	349
258"NB"+00	54	0	0	174	0	0	523	0	0	523
259"NB"+00	47	0	0	187	0	0	710	0	0	710
260"NB"+00	46	0	0	172	0	0	882	0	0	882
260"NB"+16	150	0	0	58	0	0	940	0	0	940
261"NB"+00	153	0	0	470	0	0	1410	0	0	1410
261"NB"+92	155	0	0	527	0	0	1937	0	0	1937

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D2 - IH 39 NB (NB ON INFIELD)

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT 1.00	EXPANDED FILL 1.25	EXPANDED ROCK 1.00	MASS ORDINATE
				NOTE 1	NOTE 3		NOTE 1			NOTE 8
263"NB"+45	141	86	0	0	0	0	0	0	0	0
264"NB"+00	147	10	0	292	98	0	292	123	0	170
264"NB"+50	212	0	0	332	9	0	624	134	0	490
264"NB"+50	143	0	0	1	0	0	625	134	0	491
265"NB"+00	202	0	0	318	0	0	943	134	0	809
266"NB"+00	246	0	0	829	0	0	1772	134	0	1638
267"NB"+00	424	0	0	1240	0	0	3012	134	0	2878
267"NB"+50	569	0	0	919	0	0	3931	134	0	3797
267"NB"+55	543	0	0	100	0	0	4031	134	0	3897
268"NB"+00	493	0	0	866	0	0	4897	134	0	4763
269"NB"+00	181	1	0	1246	1	0	6143	135	0	6008
270"NB"+00	34	3	0	396	6	0	6539	143	0	6397
271"NB"+00	1	6	0	65	16	0	6604	163	0	6442
271"NB"+80	1	1	0	3	10	0	6607	175	0	6432

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D2 - IH 39 NB (N OF IH 39 NB ON RAMP)

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT 1.00	EXPANDED FILL 1.25	EXPANDED ROCK 1.00	MASS ORDINATE
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
281"NB"+30	65	4	0	0	0	0	0	0	0	0
282"NB"+00	66	4	0	169	10	0	169	13	0	157
283"NB"+00	70	1	0	251	9	0	420	24	0	396
284"NB"+00	24	6	0	173	13	0	593	40	0	553
285"NB"+00	0	2	0	44	15	0	637	59	0	578

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D2 - IH 39 NB ON ("NN") RAMP

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT 1.00	EXPANDED FILL 1.25	EXPANDED ROCK 1.10	MASS ORDINATE
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
264''NN''+34	2499	0	87	0	0	0	0	0	0	0
265''NN''+00	2349	0	0	5947	0	107	5947	-147	118	6094
265''NN''+08	2296	0	0	719	0	0	6666	-147	118	6813
266''NN''+00	1791	0	0	6936	0	0	13602	-147	118	13749
267''NN''+00	1250	0	0	5631	0	0	19233	-147	118	19380
268''NN''+00	776	45	0	3752	83	0	22985	-43	118	23028
269''NN''+00	181	110	0	1774	287	0	24759	315	118	24444
269''NN''+75	38	185	0	304	410	0	25063	828	118	24235
270''NN''+00	21	131	0	27	146	0	25090	1010	118	24080
271''NN''+00	107	54	0	237	342	0	25327	1438	118	23889
272''NN''+00	120	9	0	420	116	0	25747	1583	118	24164
272''NN''+10	158	0	0	52	2	0	25799	1585	118	24214
273''NN''+00	121	0	0	463	0	0	26262	1585	118	24677
273''NN''+11	144	0	0	53	0	0	26315	1585	118	24730
273''NN''+75	117	38	0	311	46	0	26626	1643	118	24983
274''NN''+00	109	57	0	104	44	0	26730	1698	118	25032
275''NN''+00	93	0	0	374	105	0	27104	1829	118	25275
276''NN''+00	81	0	0	323	0	0	27427	1829	118	25598
277''NN''+00	72	0	0	285	0	0	27712	1829	118	25883
278''NN''+00	68	0	0	260	0	0	27972	1829	118	26143
279''NN''+00	63	0	0	243	0	0	28215	1829	118	26386
280''NN''+00	66	0	0	239	0	0	28454	1829	118	26625
281''NN''+00	66	5	0	244	9	0	28698	1840	118	26858
281''NN''+30	63	4	0	72	5	0	28770	1847	118	26923

Notes:

1 - CUT:	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL:	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL:	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - MASS ORDINATE:	MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D2 - EX NB ON/OFF RAMP GRADING

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT 1.00	EXPANDED FILL 1.25	EXPANDED ROCK 1.10	MASS ORDINATE
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
00''ENR1''+80	199	372	0	0	0	0	0	0	0	0
01''ENR1''+00	178	318	0	140	256	0	140	320	0	-180
02''ENR1''+00	100	249	0	515	1050	0	655	1633	0	-978
03''ENR1''+00	103	340	0	378	1091	0	1033	2996	0	-1963
04''ENR1''+00	233	325	0	623	1231	0	1656	4535	0	-2879
04''ENR1''+77	361	519	0	844	1200	0	2500	6035	0	-3535
05''ENR1''+00	335	465	0	299	423	0	2799	6564	0	-3765
05''ENR1''+32	295	268	0	373	434	0	3172	7106	0	-3934
10''ENR2''+08	292	267	0	0	0	0	0	0	0	0
11''ENR2''+00	195	273	0	834	925	0	834	1156	0	-322
12''ENR2''+00	82	27	0	514	556	0	1348	1851	0	-503
13''ENR2''+00	20	2	0	190	54	0	1538	1919	0	-381
13''ENR2''+88	1	0	0	34	4	0	1572	1924	0	-352

Notes:

1 - CUT:	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL:	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL:	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - MASS ORDINATE:	MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D4 - IH 39 SB NORTH OF SB ON ("SN") RAMP

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT	EXPANDED FILL	EXPANDED ROCK	MASS ORDINATE
							1.00	1.25	1.10	
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
235"SB"+28	0	12	0	0	0	0	0	0	0	0
236"SB"+00	143	6	0	191	24	0	191	30	0	161
237"SB"+00	259	0	0	743	12	0	934	45	0	889
238"SB"+00	242	0	0	928	0	0	1862	45	0	1817
239"SB"+00	231	0	0	876	1	0	2738	46	0	2692
240"SB"+00	198	0	0	794	1	0	3532	48	0	3485
241"SB"+00	175	0	0	691	0	0	4223	48	0	4176
242"SB"+00	177	0	0	652	0	0	4875	48	0	4828
242"SB"+88	149	0	0	533	0	0	5408	48	0	5361
243"SB"+00	193	4	0	73	1	0	5481	49	0	5432
244"SB"+00	164	6	0	661	19	0	6142	73	0	6070
244"SB"+50	131	5	0	273	10	0	6415	85	0	6330

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D4 - IH 39 SB (SB ON INFIELD)

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT	EXPANDED FILL	EXPANDED ROCK	MASS ORDINATE
							1.00	1.25	1.10	
				NOTE 1	NOTE 3		NOTE 1			NOTE 4
253"SB"+70	3	0	0	0	0	0	0	0	0	0
254"SB"+00	2	1	0	3	1	0	3	1	0	2
255"SB"+00	2	47	0	7	89	0	10	113	0	-103
256"SB"+00	2	58	0	7	194	0	17	355	0	-338
257"SB"+00	218	6	0	407	118	0	424	503	0	-79
257"SB"+99	359	0	0	1057	11	0	1481	516	0	965
258"SB"+00	386	0	0	14	0	0	1495	516	0	979
259"SB"+00	233	0	0	1146	0	0	2641	516	0	2125
259"SB"+80	163	33	0	587	49	0	3228	578	0	2651
260"SB"+00	154	68	0	117	38	0	3345	625	0	2720
261"SB"+00	148	205	0	558	506	0	3903	1258	0	2646
261"SB"+77	151	192	0	427	568	0	4330	1968	0	2363

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D4 - IH 39 SB (SB OFF INFIELD)

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT NOTE 1	FILL NOTE 3	ROCK EXC	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	EXPANDED ROCK 1.10	MASS ORDINATE NOTE 4
263"SB"+30	128	228	0	0	0	0	0	0	0	0
264"SB"+00	137	136	0	343	471	0	343	589	0	-246
264"SB"+50	127	72	0	244	192	0	587	829	0	-242
264"SB"+69	44	56	0	58	44	0	645	884	0	-239
265"SB"+00	46	23	0	52	46	0	697	941	0	-244
265"SB"+05	46	21	0	8	4	0	705	946	0	-241
266"SB"+00	101	2	0	259	40	0	964	996	0	-32
267"SB"+00	257	0	0	663	4	0	1627	1001	0	626
267"SB"+26	340	0	0	285	0	0	1912	1001	0	911
268"SB"+00	256	0	0	819	0	0	2731	1001	0	1730
269"SB"+00	76	4	0	615	8	0	3346	1011	0	2335
270"SB"+00	16	0	0	171	8	0	3517	1021	0	2496
271"SB"+00	9	0	0	45	1	0	3562	1023	0	2540

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D4 - EX SB ON/OFF RAMP GRADING

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT NOTE 1	FILL NOTE 3	ROCK EXC	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	EXPANDED ROCK 1.10	MASS ORDINATE NOTE 4
00"ESR"+50	419	197	0	0	0	0	0	0	0	0
01"ESR"+00	384	540	0	743	682	0	743	853	0	-110
02"ESR"+00	420	819	0	1488	2518	0	2231	4000	0	-1769
03"ESR"+00	457	1187	0	1623	3716	0	3854	8645	0	-4791
04"ESR"+00	458	1366	0	1695	4728	0	5549	14555	0	-9006
05"ESR"+00	658	321	0	2067	3124	0	7616	18460	0	-10844
05"ESR"+93	533	101	0	2050	726	0	9666	19368	0	-9702
07"ESR"+00	398	9	0	1847	217	0	11513	19639	0	-8126
08"ESR"+00	353	13	0	1390	40	0	12903	19689	0	-6786
09"ESR"+00	108	1	0	854	26	0	13757	19721	0	-5964

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

D4 - IH 39 SB ON ("SN") RAMP

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT NOTE 1	FILL NOTE 3	ROCK EXC	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	EXPANDED ROCK 1.10	MASS ORDINATE NOTE 4
244"SN"+50	132	4	0	0	0	0	0	0	0	0
245"SN"+00	120	18	0	232	20	0	232	25	0	207
246"SN"+00	89	44	0	385	114	0	617	168	0	450
247"SN"+00	84	54	0	320	181	0	937	394	0	543
248"SN"+00	75	61	0	294	212	0	1231	659	0	572
249"SN"+00	85	63	0	296	229	0	1527	945	0	582
250"SN"+00	103	73	0	349	253	0	1876	1261	0	615
251"SN"+00	107	78	0	389	281	0	2265	1613	0	653
252"SN"+00	176	0	0	525	145	0	2790	1794	0	996
252"SN"+76	360	0	0	751	0	0	3541	1794	0	1747
252"SN"+77	335	0	0	11	0	0	3552	1794	0	1758
253"SN"+00	374	0	0	309	0	0	3861	1794	0	2067
253"SN"+69	541	5	0	1169	6	0	5030	1801	0	3229
253"SN"+70	426	5	0	18	0	0	5048	1801	0	3247
254"SN"+00	423	55	0	472	33	0	5520	1843	0	3678
255"SN"+00	310	412	0	1358	865	0	6878	2924	0	3954
255"SN"+40	194	573	0	373	730	0	7251	3836	0	3415
256"SN"+00	80	562	0	305	1262	0	7556	5414	0	2142
257"SN"+00	1090	0	0	2168	1041	0	9724	6715	0	3009
258"SN"+00	306	590	0	2585	1093	0	12309	8081	0	4228
259"SN"+00	21	527	0	605	2069	0	12914	10668	0	2247
260"SN"+00	1	445	0	41	1800	0	12955	12918	0	38

Notes:

1 - CUT: CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL

2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL: THIS DOES NOT SHOW UP IN CROSS SECTIONS

3 - FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

4 - MASS ORDINATE: MASS ORDINATE = (CUT-SALVAGED PAVEMENT MATERIAL) - (FILL*FILL FACTOR)

Stage 1 STH 60

STATION	AREA (SF) CUT	AREA (SF) FILL	AREA (SF) ROCK EXCAVATION	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	INCREMENTAL VOL (CY) (UNADJUSTED) ROCK EXCAVATION	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
58+50.00	158	0	0	0	0	0	0	0	0
59+00.00	177	0	0	310	0	0	310	0	310
59+50.00	207	0	0	355	0	0	665	0	665
60+00.00	196	0	0	373	0	0	1,038	0	1,038
60+50.00	208	0	0	374	0	0	1,412	0	1,412
61+00.00	249	0	0	423	0	0	1,835	0	1,835
61+50.00	282	0	0	491	0	0	2,326	0	2,326
62+00.00	286	0	0	526	0	0	2,852	0	2,852
62+50.00	329	0	0	569	0	0	3,421	0	3,421
63+00.00	475	0	30	744	0	28	4,165	-38	4,203
		COLUMN TOTALS		4,165	0	28			

NOTES:
1) CUT: CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) SALVAGED PAVEMENT MATERIAL: THIS IS NOT SHOWN IN THE CROSS SECTIONS
3) FILL: FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) MASS ORDINATE: MASS ORDINATE = (CUT - SALVAGED PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

S2A TEMP PAVEMENT

STATION	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
46+00.00 EX 60	24	1	0	0	0	0	0
46+50.00 EX 60	23	1	44	3	44	3	40
47+00.00 EX 60	23	21	42	21	86	29	57
47+50.00 EX 60	24	32	43	49	129	90	38
48+00.00 EX 60	24	26	44	54	173	158	15
48+50.00 EX 60	24	25	45	47	217	216	1
49+00.00 EX 60	21	29	42	50	259	278	-19
49+50.00 EX 60	18	27	35	51	294	342	-48
50+00.00 EX 60	14	29	30	51	324	406	-82
50+50.00 EX 60	12	30	25	54	349	474	-125
51+00.00 EX 60	11	28	21	53	370	541	-170
51+50.00 EX 60	13	20	22	44	392	596	-204
52+00.00 EX 60	13	8	24	26	415	629	-213
52+50.00 EX 60	22	2	32	10	448	641	-193
55+00.00 EX 60	12	93	0	0	448	641	-193
55+50.00 EX 60	0	168	11	241	458	942	-484
56+00.00 EX 60	0	183	0	325	458	1,349	-890
56+50.00 EX 60	0	160	0	318	458	1,746	-1,287
57+00.00 EX 60	8	115	7	255	466	2,064	-1,598
57+50.00 EX 60	24	69	29	171	495	2,277	-1,783
		COLUMN TOTALS	495	1,822			

NOTES:
1) CUT: CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) SALVAGED PAVEMENT MATERIAL: THIS IS NOT SHOWN IN THE CROSS SECTIONS
3) FILL: FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) MASS ORDINATE: MASS ORDINATE = (CUT - SALVAGED PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

TEMPORARY NB ON RAMP CONNECTION

STATION	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
10+50.00 EX NB RAMP	1,009	0	0	0	0	0	0
11+00.00 EX NB RAMP	737	0	1,616	0	1,616	0	1,616
11+50.00 EX NB RAMP	458	0	1,106	0	2,723	0	2,723
12+00.00 EX NB RAMP	301	0	703	0	3,426	0	3,426
12+50.00 EX NB RAMP	181	0	447	0	3,872	0	3,872
13+00.00 EX NB RAMP	106	0	266	0	4,138	0	4,138
		COLUMN TOTALS	4,138	0			

NOTES:
1) CUT: CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) SALVAGED PAVEMENT MATERIAL: THIS IS NOT SHOWN IN THE CROSS SECTIONS
3) FILL: FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) MASS ORDINATE: MASS ORDINATE = (CUT - SALVAGED PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

S3A Widening STH 60

STATION	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
46+00.00	25	0	0	0	0	0	0
46+50.00	17	0	39	0	39	0	39
47+00.00	18	26	32	24	71	30	41
47+50.00	21	34	35	55	106	99	8
48+00.00	16	25	34	55	141	167	-26
48+50.00	8	28	23	50	164	229	-65
49+00.00	5	34	13	57	176	300	-124
49+50.00	4	34	9	63	185	379	-195
50+00.00	2	33	5	62	190	457	-267
50+50.00	3	30	4	58	194	530	-336
51+00.00	3	28	5	54	200	598	-399
51+50.00	2	25	4	50	204	660	-456
52+00.00	1	20	3	42	207	713	-506
		COLUMN TOTALS	207	570			

NOTES:
1) CUT: CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) SALVAGED PAVEMENT MATERIAL: THIS IS NOT SHOWN IN THE CROSS SECTIONS
3) FILL: FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) MASS ORDINATE: MASS ORDINATE = (CUT - SALVAGED PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

STH 60									
	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
STATION	CUT	FILL	Rock Exc	CUT NOTE 1	FILL NOTE 3	Rock Exc	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
48+03.00	171	0	0	0	0	0	0	0	0
48+50.00	162	0	0	290	0	0	290	0	290
49+00.00	164	0	0	302	0	0	592	0	592
49+50.00	156	0	0	296	0	0	888	0	888
50+00.00	154	0	0	287	0	0	1,175	0	1,175
50+50.00	166	0	0	296	0	0	1,472	0	1,472
51+00.00	178	0	0	318	0	0	1,790	0	1,790
51+50.00	187	1	0	338	1	0	2,127	2	2,126
52+00.00	199	5	0	358	6	0	2,485	9	2,476
52+50.00	208	20	0	377	23	0	2,863	38	2,825
53+00.00	257	21	0	431	39	0	3,294	86	3,207
53+50.00	275	19	0	492	37	0	3,786	133	3,653
54+00.00	353	16	0	581	32	0	4,367	174	4,193
54+50.00	388	21	0	686	35	0	5,053	217	4,836
55+00.00	245	36	0	585	53	0	5,638	283	5,355
55+50.00	200	0	0	411	33	0	6,050	325	5,724
56+00.00	172	0	0	344	0	0	6,394	325	6,068
56+05.00	172	0	0	32	0	0	6,425	325	6,100
57+46.33	52	95	0	0	0	0	6,425	325	6,100
57+50.00	52	95	0	7	13	0	6,432	341	6,091
58+00.00	119	21	0	158	107	0	6,591	476	6,115
58+50.00	341	24	0	426	41	0	7,017	527	6,490
59+00.00	500	0	0	779	22	0	7,796	555	7,241
59+50.00	546	0	0	968	0	0	8,764	555	8,209
60+00.00	596	1	0	1,057	1	0	9,821	557	9,264
60+50.00	629	1	0	1,135	2	0	10,956	559	10,397
61+00.00	561	0	0	1,102	1	0	12,058	561	11,497
61+50.00	429	1	0	917	1	0	12,975	563	12,412
62+00.00	711	0	0	1,055	1	0	14,030	564	13,466
62+50.00	1,090	0	11	1,667	0	10	15,697	550	15,147
63+00.00	436	0	15	1,413	0	24	17,110	517	16,593
63+50.00	690	0	126	1,043	0	131	18,152	337	17,815
63+64.59	567	0	105	340	0	63	18,492	251	18,241
65+06.15	774	0	5	0	0	0	18,492	251	18,241
65+50.00	1,154	0	0	1,566	0	4	20,057	246	19,812
66+00.00	1,769	0	0	2,706	0	0	22,764	246	22,518
66+50.00	1,329	0	0	2,868	0	0	25,632	246	25,386
67+00.00	1,248	0	0	2,386	0	0	28,018	246	27,772
67+50.00	1,118	0	0	2,191	0	0	30,209	246	29,963
68+00.00	1,031	0	0	1,990	0	0	32,199	246	31,953
68+50.00	1,051	0	0	1,928	0	0	34,127	246	33,881
69+00.00	1,099	0	0	1,991	0	0	36,117	246	35,872
69+50.00	1,075	0	0	2,013	0	0	38,130	246	37,885
70+00.00	1,037	0	0	1,955	0	0	40,086	246	39,840
70+50.00	980	0	0	1,867	0	0	41,953	246	41,707
71+00.00	912	0	0	1,752	0	0	43,705	246	43,459
71+50.00	826	0	0	1,610	0	0	45,315	246	45,069
72+00.00	720	0	0	1,432	0	0	46,747	246	46,501
72+50.00	590	0	0	1,213	0	0	47,960	246	47,714
73+00.00	466	0	0	978	0	0	48,938	246	48,692
73+50.00	378	0	0	782	0	0	49,720	246	49,474
74+00.00	307	1	0	634	1	0	50,354	248	50,107
74+50.00	272	7	0	536	8	0	50,890	257	50,633
75+00.00	254	12	0	486	18	0	51,377	279	51,098
75+50.00	235	0	0	453	11	0	51,829	293	51,536
76+00.00	225	0	0	427	0	0	52,256	293	51,963
76+50.00	185	0	0	380	0	0	52,637	293	52,343
77+00.00	147	0	0	307	0	0	52,944	293	52,651
77+50.00	127	0	0	253	0	0	53,197	293	52,904
77+99.00	115	0	0	219	0	0	53,417	293	53,123
		COLUMN TOTALS		53,417	489	232			

NOTES:
1) CUT: CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) SALVAGED PAVEMENT MATERIAL: THIS IS NOT SHOWN IN THE CROSS SECTIONS
3) FILL: FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) MASS ORDINATE: MASS ORDINATE = (CUT - SALVAGED PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

STH 60 (WB)									
	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
STATION	CUT	FILL	Rock Exc	CUT NOTE 1	FILL NOTE 3	Rock Exc	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
55+00.00	88	75	0	0	0	0	0	0	0
55+50.00	81	115	0	156	176	0	156	220	-64
56+00.00	50	53	0	121	155	0	277	414	-137
56+05.83	50	53	0	11	11	0	288	428	-140
57+44.44	123	21	0	0	0	0	288	428	-140
57+50.00	123	21	0	25	4	0	313	433	-120
58+00.00	203	11	0	302	30	0	615	470	145
62+50.00	817	0	22	0	0	0	615	470	145
63+00.00	1,047	0	191	1,726	0	197	2,340	199	2,142
63+50.00	1,178	0	243	2,060	0	402	4,401	-355	4,755
63+59.09	1,178	0	243	397	0	82	4,797	-467	5,264
65+00.55	1,309	0	169	0	0	0	4,797	-467	5,264
65+50.00	1,544	0	81	2,613	0	229	7,410	-781	8,192
		COLUMN TOTALS		7,410	376	910			

NOTES:
1) CUT: CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) SALVAGED PAVEMENT MATERIAL: THIS IS NOT SHOWN IN THE CROSS SECTIONS
3) FILL: FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) MASS ORDINATE: MASS ORDINATE = (CUT - SALVAGED PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

9

9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	EARTHWORK DATA	SHEET 532	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090101_EW.DWG
LAYOUT NAME - 02
PLOT DATE : 1/10/2022 3:13 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1:1
WISDOT/CADDS SHEET 49

NB A CHAIN

STATION	AREA (SF) CUT	AREA (SF) FILL	AREA (SF) Rock Exc	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	INCREMENTAL VOL (CY) (UNADJUSTED) Rock Exc	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
10+00.00 NB A	501	0	40	0	0	0	0	0	0
10+25.00 NB A	816	0	85	610	0	58	610	-80	689
10+50.00 NB A	1,037	0	247	858	0	153	1,467	-291	1,758
10+75.00 NB A	776	0	238	839	0	224	2,307	-599	2,906
11+00.00 NB A	746	0	237	705	0	220	3,011	-901	3,912
11+25.00 NB A	617	0	216	631	0	209	3,642	-1,189	4,831
11+50.00 NB A	1,746	0	299	1,094	0	238	4,736	-1,517	6,253
11+75.00 NB A	885	0	269	1,218	0	263	5,954	-1,878	7,832
12+00.00 NB A	823	0	275	791	0	252	6,745	-2,225	8,970
12+25.00 NB A	708	0	200	709	0	220	7,454	-2,528	9,981
12+50.00 NB A	820	0	139	707	0	157	8,161	-2,743	10,904
12+75.00 NB A	732	0	104	718	0	112	8,879	-2,898	11,777
13+00.00 NB A	1,484	0	83	1,026	0	87	9,905	-3,017	12,922
13+25.00 NB A	664	0	56	994	0	64	10,899	-3,105	14,005
13+33.01 NB A	501	0	40	173	0	14	11,072	-3,125	14,197
		COLUMN TOTALS		11,072	0	2,273			

NOTES:
1) CUT: CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) SALVAGED PAVEMENT MATERIAL: THIS IS NOT SHOWN IN THE CROSS SECTIONS
3) FILL: FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) MASS ORDINATE: MASS ORDINATE = (CUT - SALVAGED PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

SB A CHAIN

STATION	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
10+00.00 SB A	215	11	0	0	0	0	0
10+25.00 SB A	181	14	183	12	183	14	169
10+50.00 SB A	62	95	113	51	296	78	218
10+75.00 SB A	46	74	50	78	346	176	170
11+00.00 SB A	12	91	27	76	373	271	101
11+25.00 SB A	46	98	27	88	400	381	19
11+50.00 SB A	70	47	54	67	454	465	-11
11+75.00 SB A	125	35	90	38	544	513	31
12+00.00 SB A	85	32	97	31	642	552	90
12+25.00 SB A	40	234	58	123	700	706	-7
12+50.00 SB A	49	181	41	192	741	946	-206
12+75.00 SB A	75	68	57	115	798	1,090	-292
13+00.00 SB A	136	165	98	108	896	1,225	-329
13+25.00 SB A	280	10	193	81	1,088	1,326	-238
13+33.01 SB A	215	11	73	3	1,162	1,330	-168
		COLUMN TOTALS	1,162	1,064			

NOTES:
1) CUT: CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) SALVAGED PAVEMENT MATERIAL: THIS IS NOT SHOWN IN THE CROSS SECTIONS
3) FILL: FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) MASS ORDINATE: MASS ORDINATE = (CUT - SALVAGED PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

NB D CHAIN

STATION	AREA (SF) CUT	AREA (SF) FILL	AREA (SF) ROCK EXCAVATION	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	INCREMENTAL VOL (CY) (UNADJUSTED) ROCK EXCAVATION	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
10+00.00	2,329	0	326	0	0	0	0	0	0
10+50.00	2,418	0	197	4,395	0	486	4,395	-668	5,063
10+81.85	2,131	0	109	2,683	0	181	7,078	-917	7,995
		COLUMN TOTALS		7,078	0	667			

NOTES:
1) CUT: CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) SALVAGED PAVEMENT MATERIAL: THIS IS NOT SHOWN IN THE CROSS SECTIONS
3) FILL: FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) MASS ORDINATE: MASS ORDINATE = (CUT - SALVAGED PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

SB C CHAIN

STATION	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
10+00.00	0	188	0	0	0	0	0
10+50.00	0	396	0	541	0	677	-677
11+00.00	1	352	1	692	1	1,542	-1,541
11+50.00	0	394	1	690	2	2,405	-2,403
11+76.38	0	387	0	382	2	2,882	-2,880
		COLUMN TOTALS	2	2,306			

NOTES:
1) CUT: CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) SALVAGED PAVEMENT MATERIAL: THIS IS NOT SHOWN IN THE CROSS SECTIONS
3) FILL: FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) MASS ORDINATE: MASS ORDINATE = (CUT - SALVAGED PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

NB G CHAIN

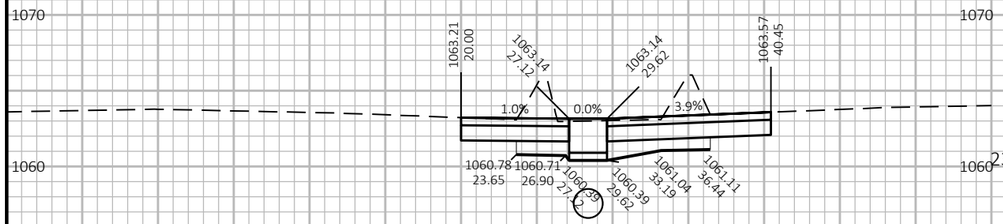
STATION	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
10+00.00	0	316	0	0	0	0	0
10+50.00	26	133	24	415	24	519	-495
11+00.00	468	0	457	123	481	673	-192
11+50.00	811	0	1,164	0	1,665	673	992
11+88.16	863	0	501	0	2,166	673	1,493
		COLUMN TOTALS	2,166	539			

NOTES:
1) CUT: CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) SALVAGED PAVEMENT MATERIAL: THIS IS NOT SHOWN IN THE CROSS SECTIONS
3) FILL: FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) MASS ORDINATE: MASS ORDINATE = (CUT - SALVAGED PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

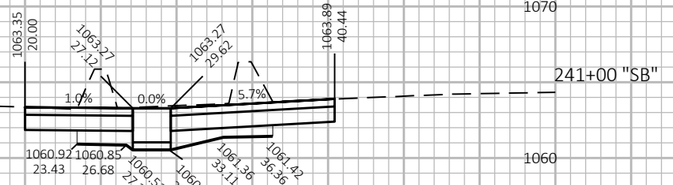
SB F CHAIN

STATION	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
10+00.00	91	3	0	0	0	0	0
10+50.00	177	1	248	3	248	4	245
11+00.00	238	0	384	1	633	4	628
11+50.00	623	0	797	0	1,430	4	1,425
11+75.00	837	0	676	0	2,106	4	2,101
		COLUMN TOTALS	2,106	4			

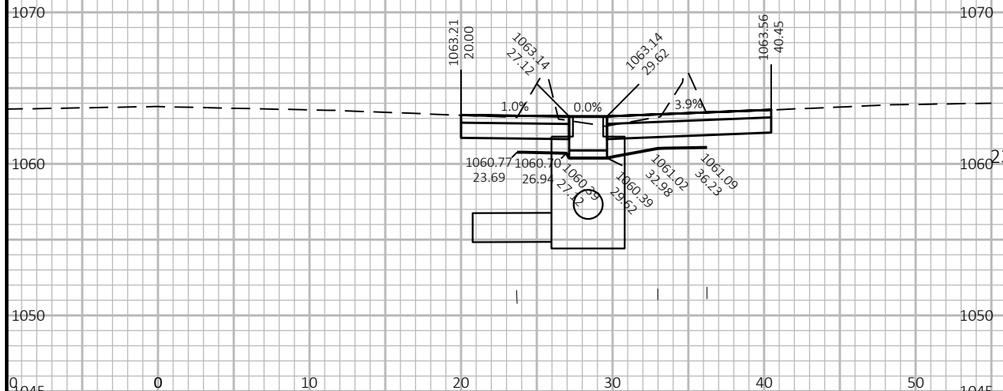
NOTES:
1) CUT: CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) SALVAGED PAVEMENT MATERIAL: THIS IS NOT SHOWN IN THE CROSS SECTIONS
3) FILL: FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) MASS ORDINATE: MASS ORDINATE = (CUT - SALVAGED PAVEMENT MATERIAL) - (FILL * FILL FACTOR)



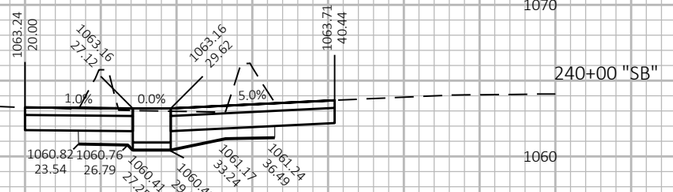
239+00 "SB"



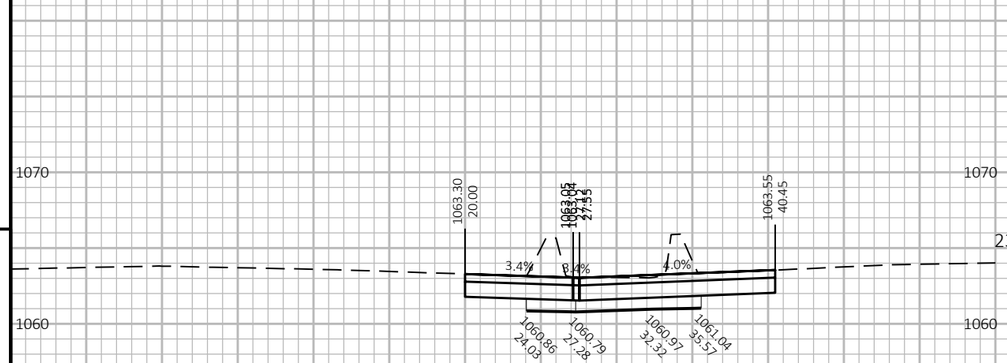
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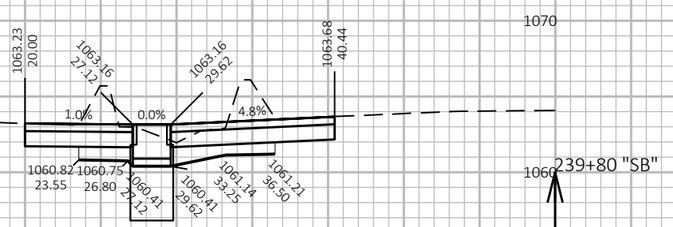
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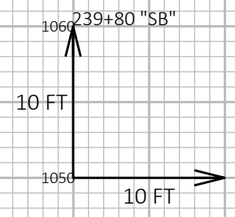


240+00 "SB"



238+09 "SB"





9

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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SOUTH CROSSOVER XO	SHEET 534	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS CROSSOVERS.DWG
LAYOUT NAME - 1- SOUTH XO

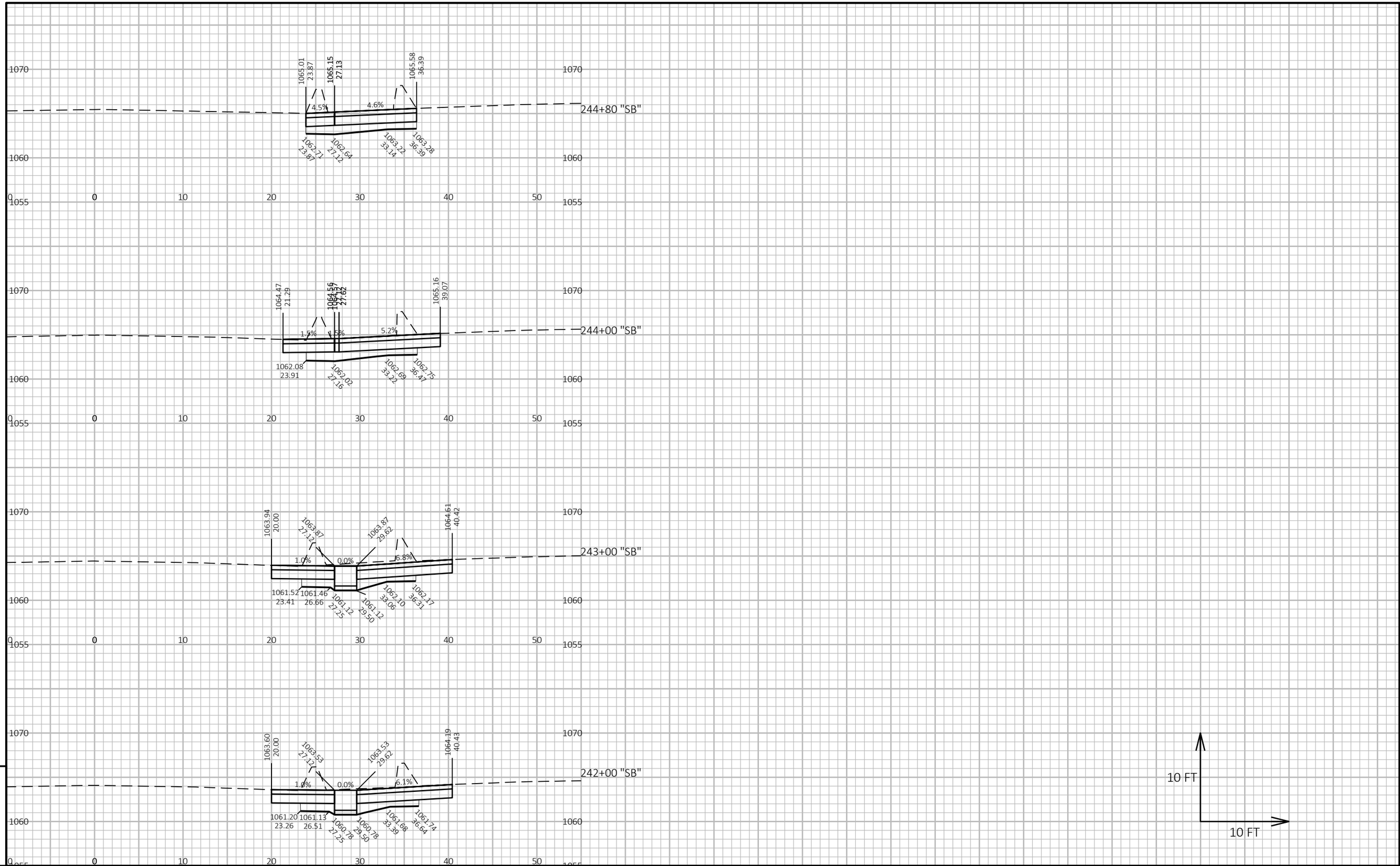
PLOT DATE : 1/24/2022 12:18 PM

PLOT BY : ANDERSON, SHAUN M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

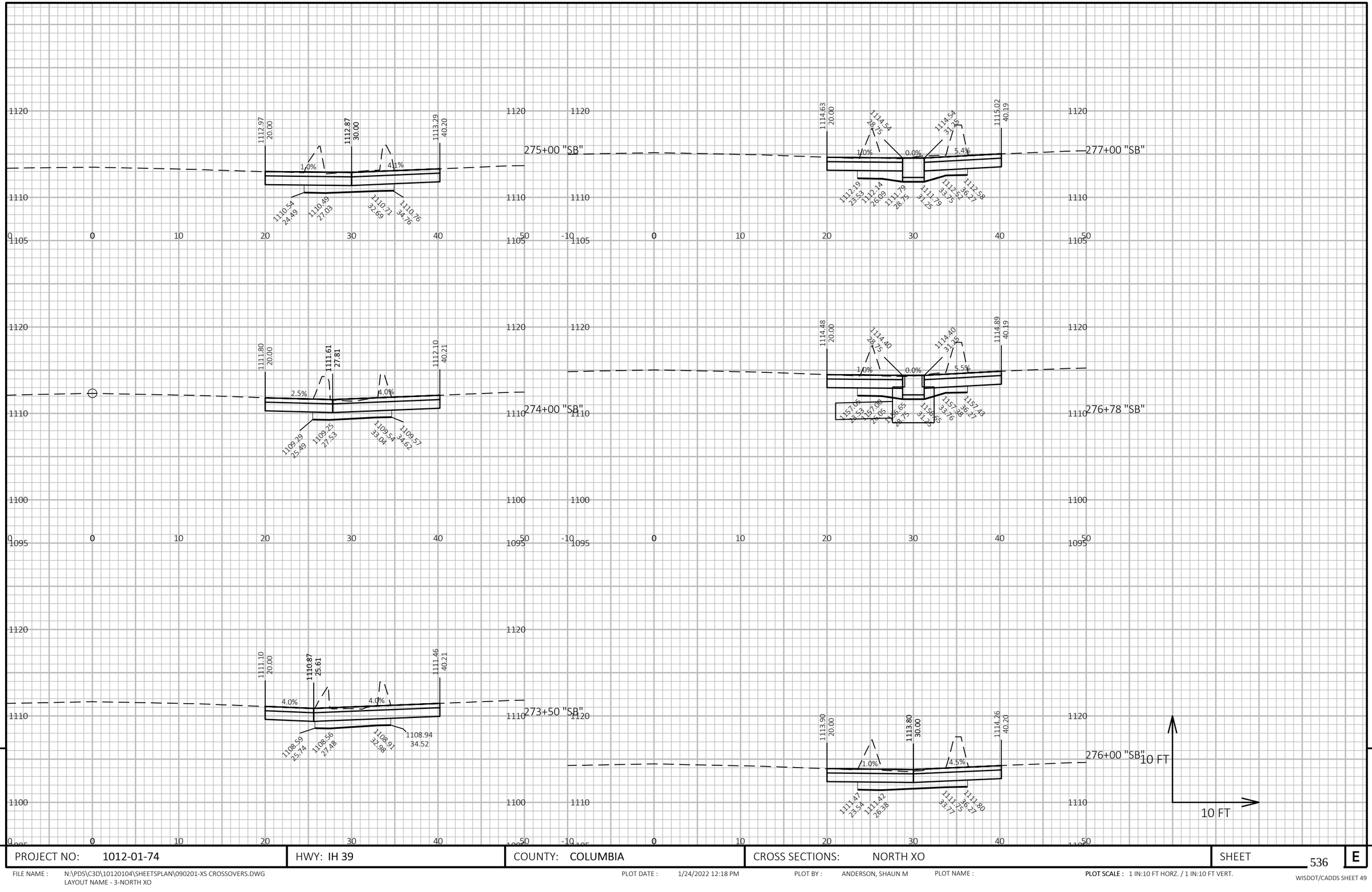
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SOUTH CROSSOVER XO	SHEET 535	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS CROSSOVERS.DWG
LAYOUT NAME - 2- SOUTH XO

PLOT DATE : 1/24/2022 12:18 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

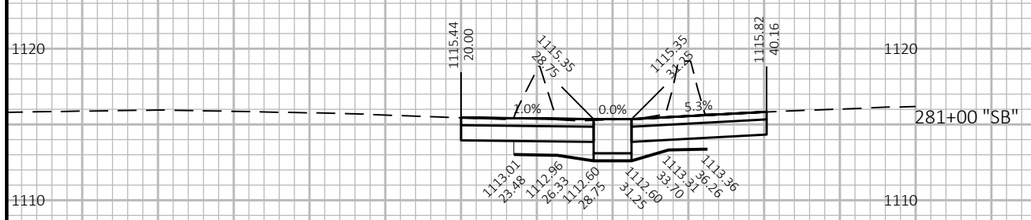


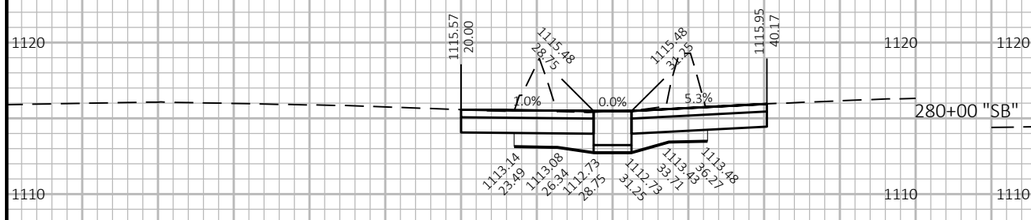
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NORTH XO	SHEET 536 E

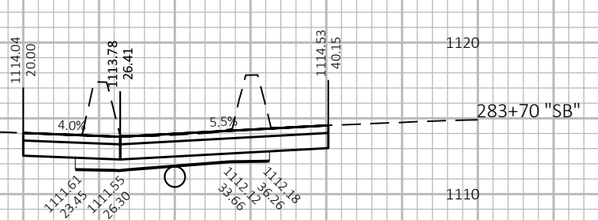
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LAYOUT NAME - 3-NORTH XO

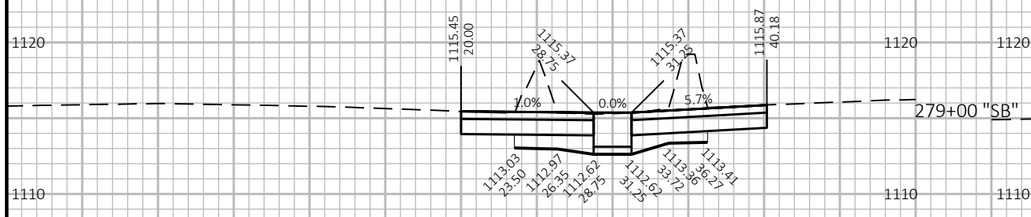
PLOT DATE : 1/24/2022 12:18 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

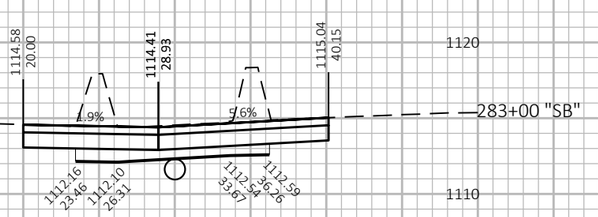
WISDOT/CADDS SHEET 49

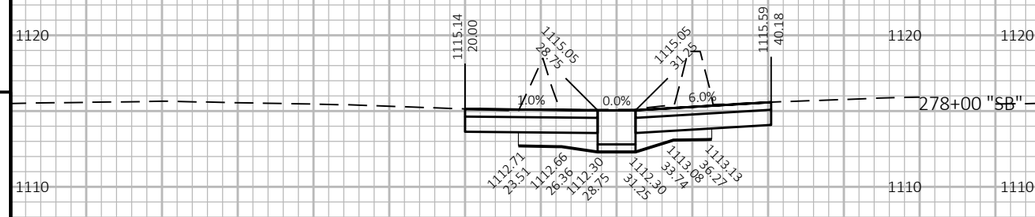


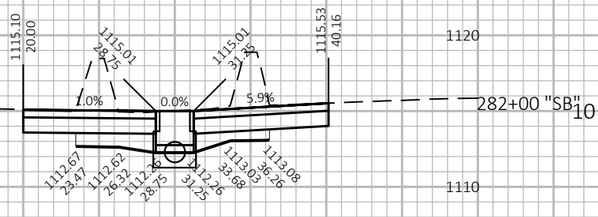


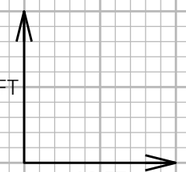












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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NORTH XO	SHEET 537	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS CROSSOVERS.DWG
LAYOUT NAME - 4-NORTH XO

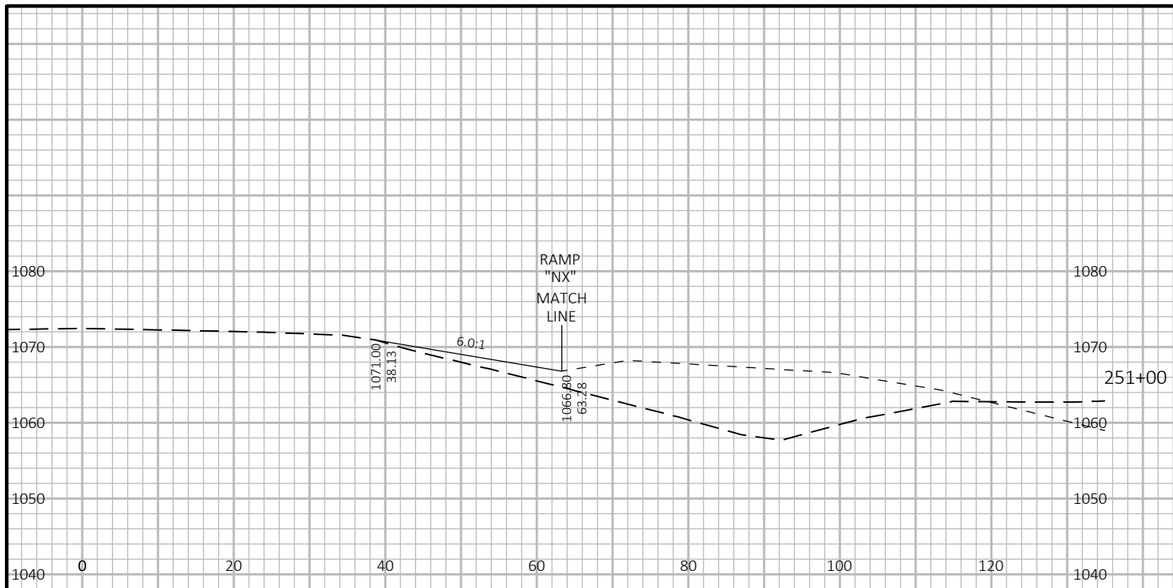
PLOT DATE : 1/24/2022 12:18 PM

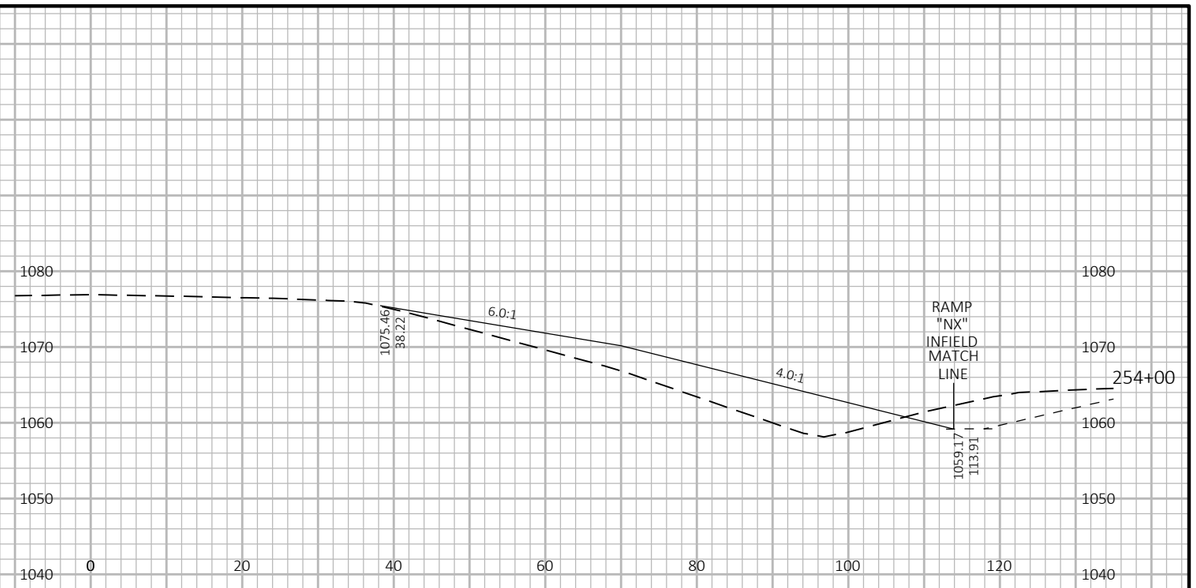
PLOT BY : ANDERSON, SHAUN M

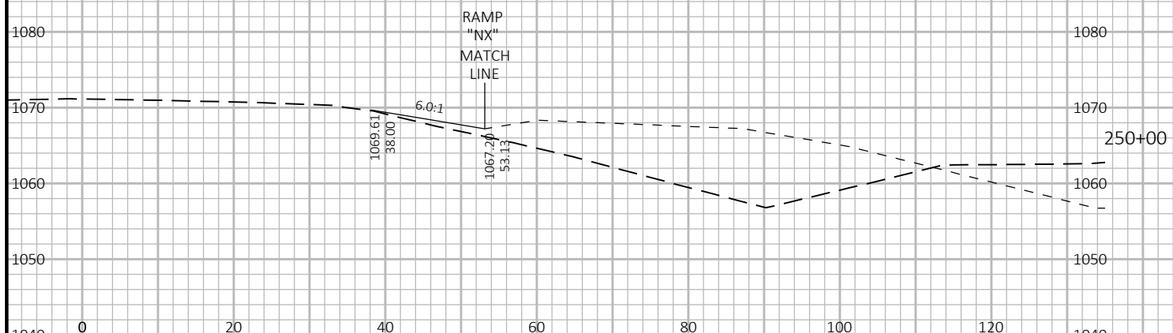
PLOT NAME :

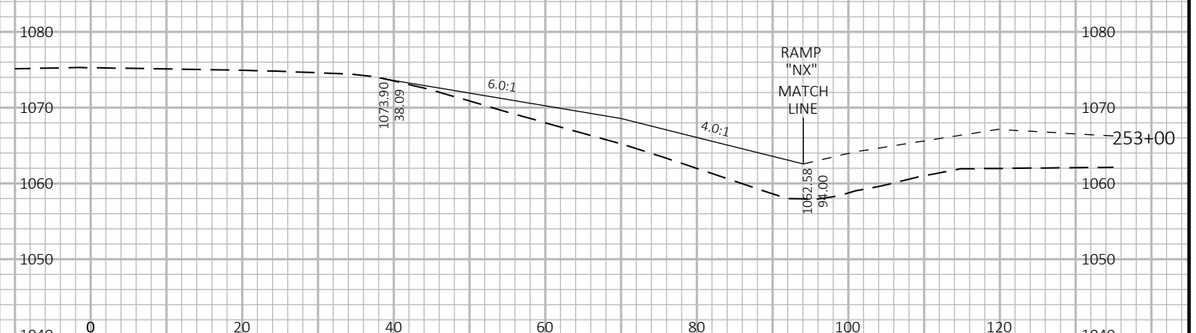
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

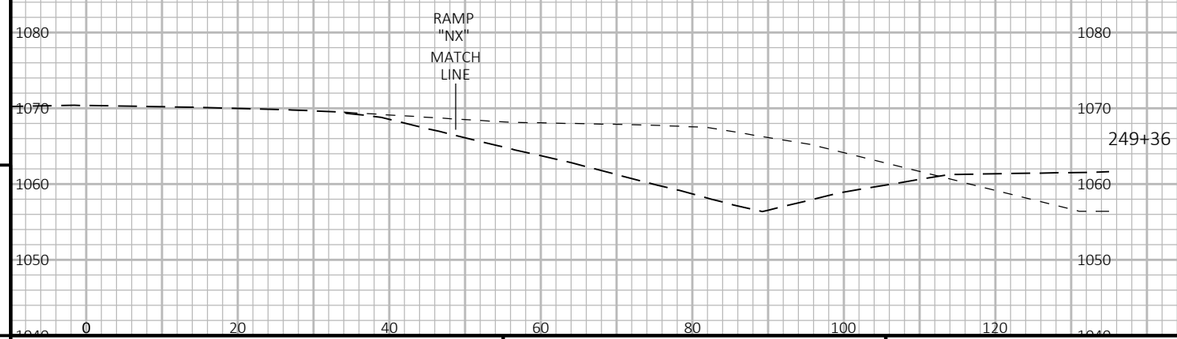
WISDOT/CADDS SHEET 49

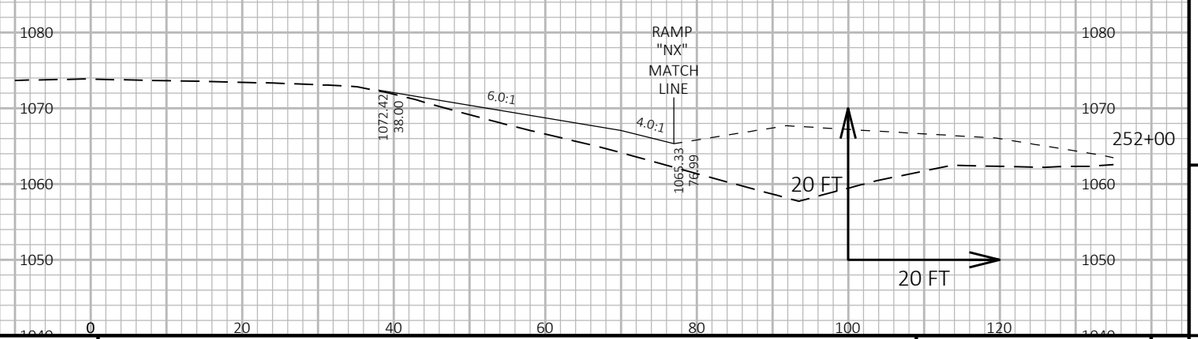












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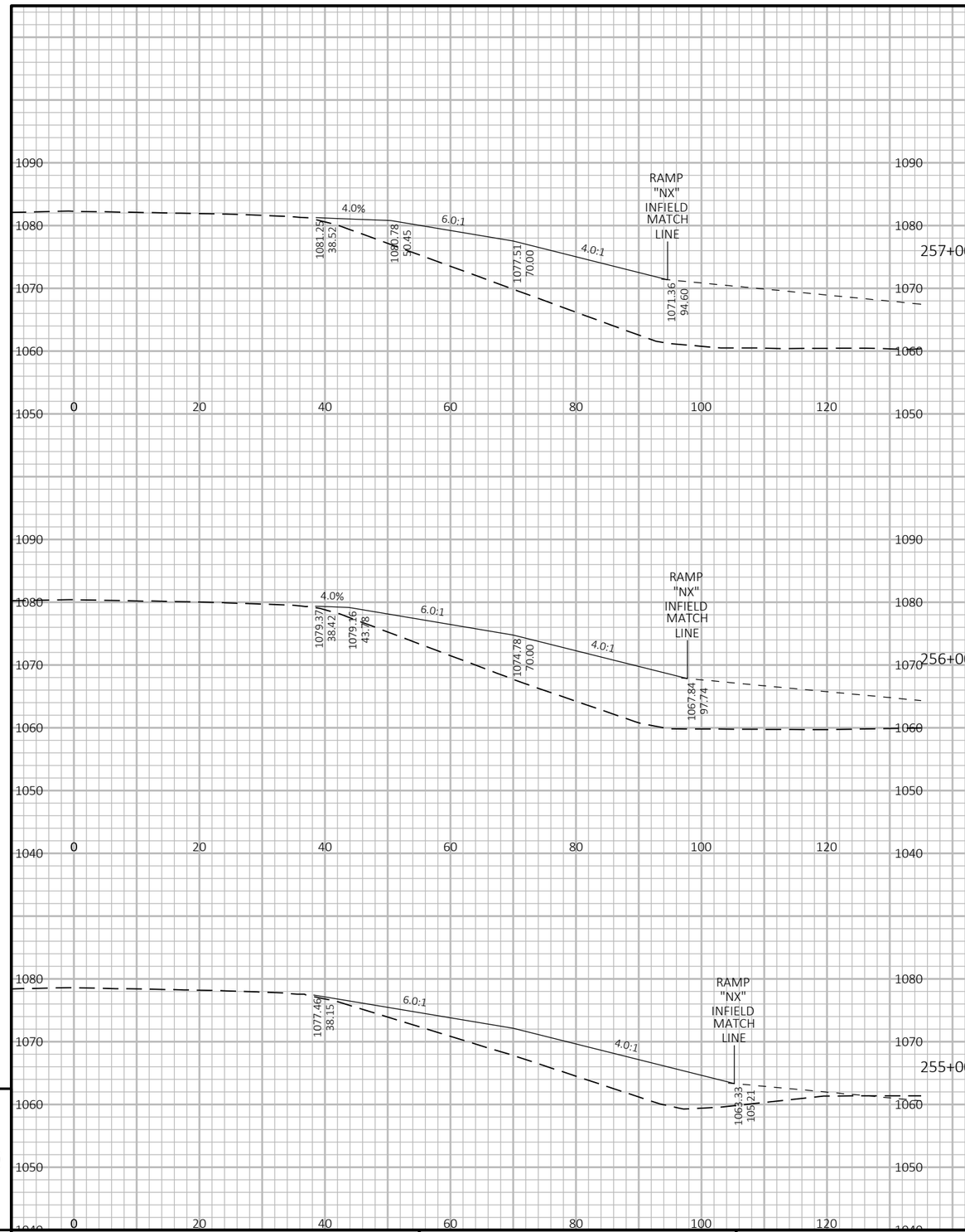
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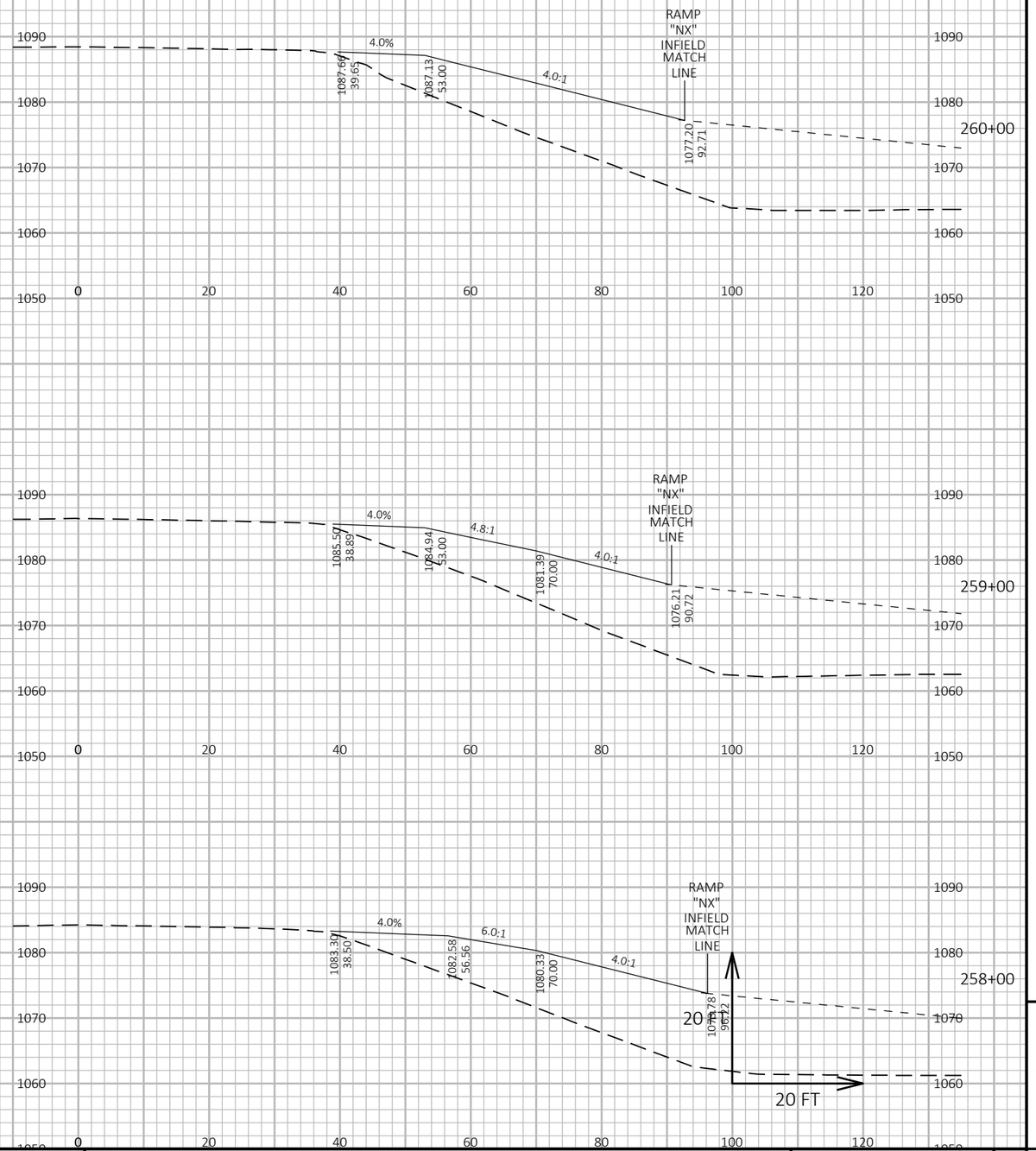
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: S1_IH 39 NB_ NX INFIELD_TEMP GRADING	SHEET 538	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_S1_IH 39 NB_SE QUAD.DWG
LAYOUT NAME - 01

PLOT DATE : 1/24/2022 12:19 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





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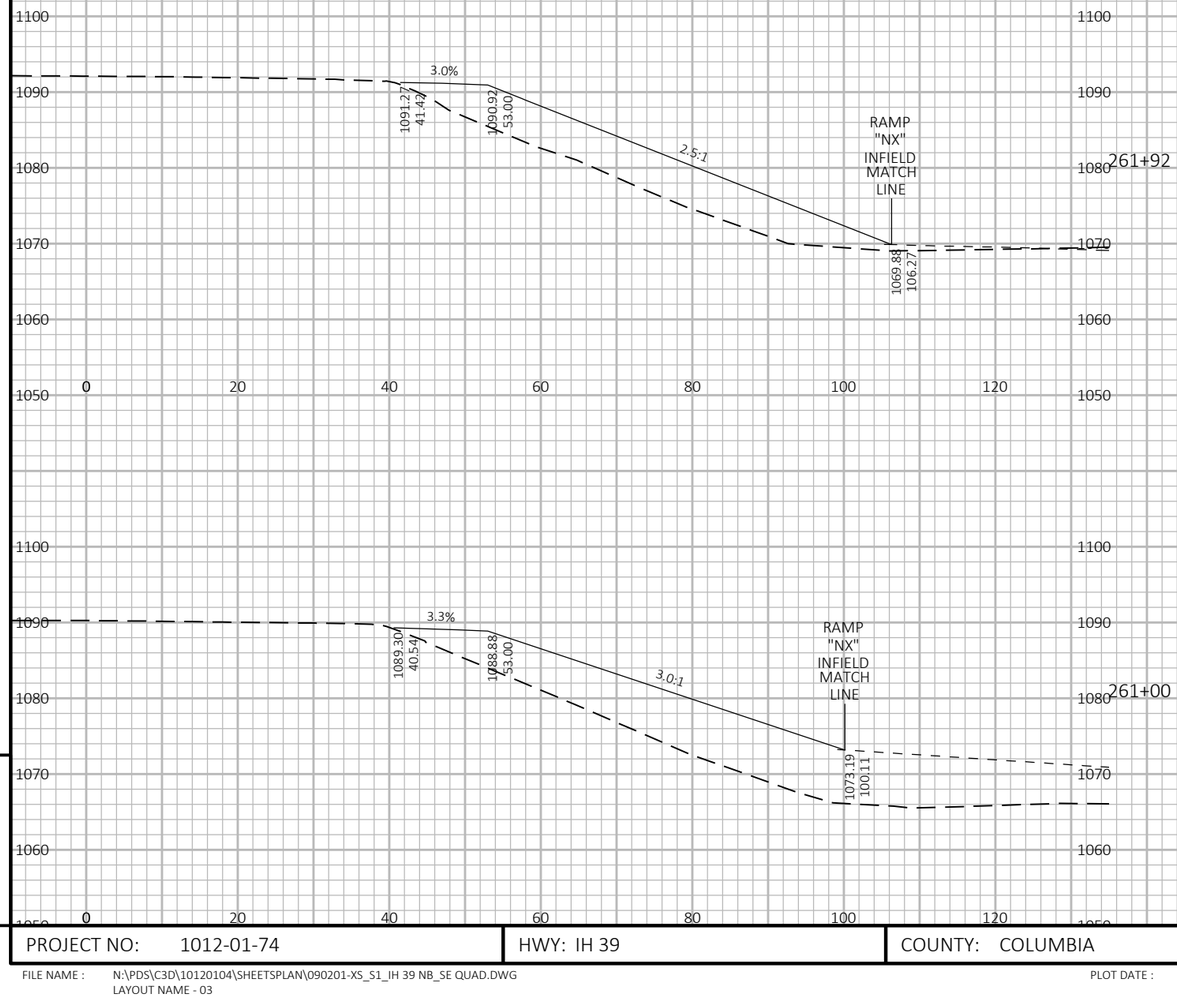
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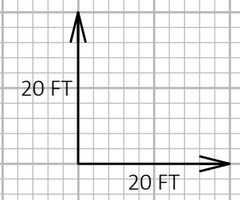
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: S1_IH 39 NB_ NX INFIELD_TEMP GRADING	SHEET 539	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_S1_IH 39 NB_SE QUAD.DWG
LAYOUT NAME - 02

PLOT DATE : 1/24/2022 12:19 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





9

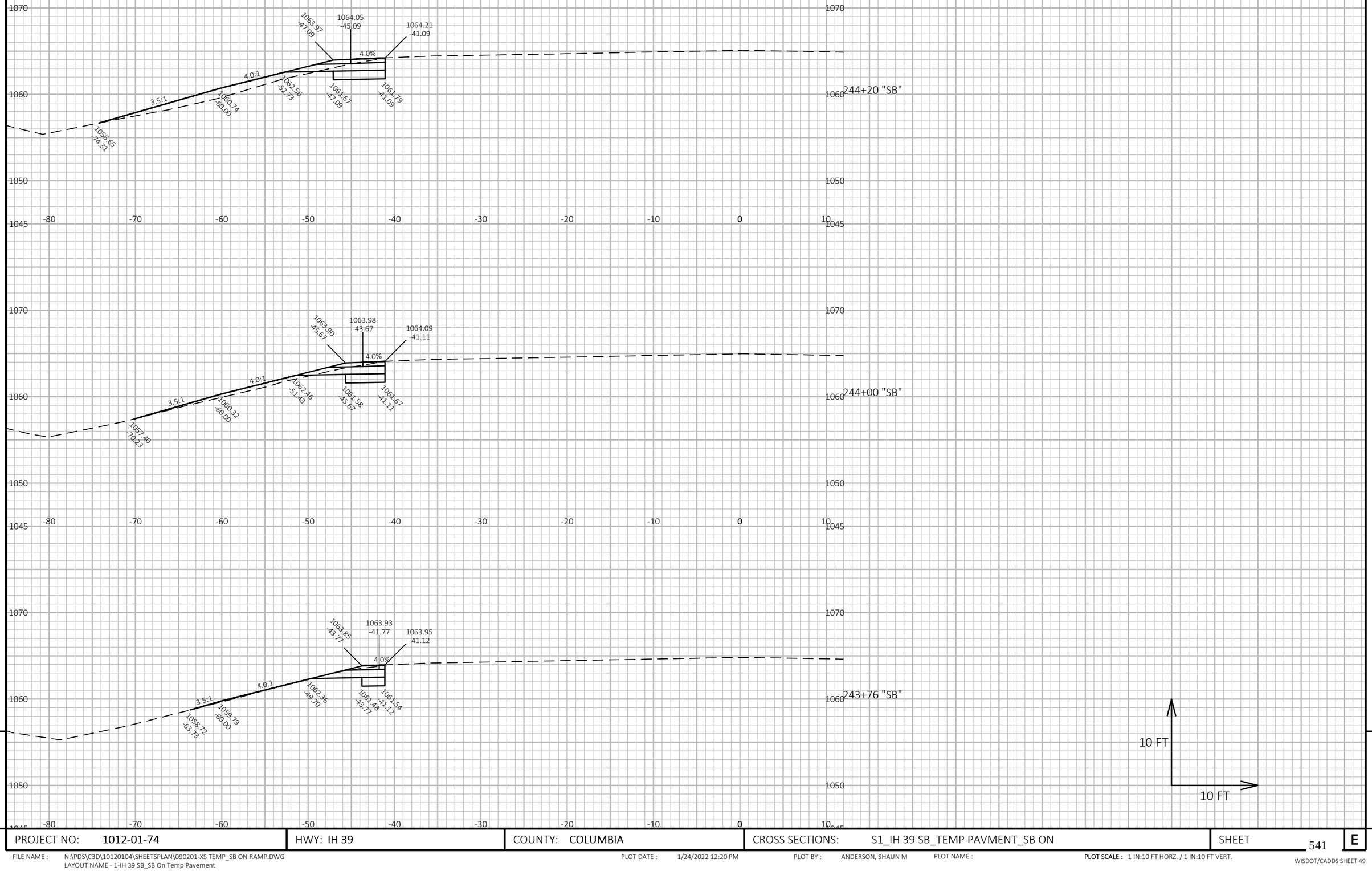
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: S1_IH 39 NB_ NX INFIELD_TEMP GRADING	SHEET 540	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_S1_IH 39 NB_SE QUAD.DWG
LAYOUT NAME - 03

PLOT DATE : 1/24/2022 12:19 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



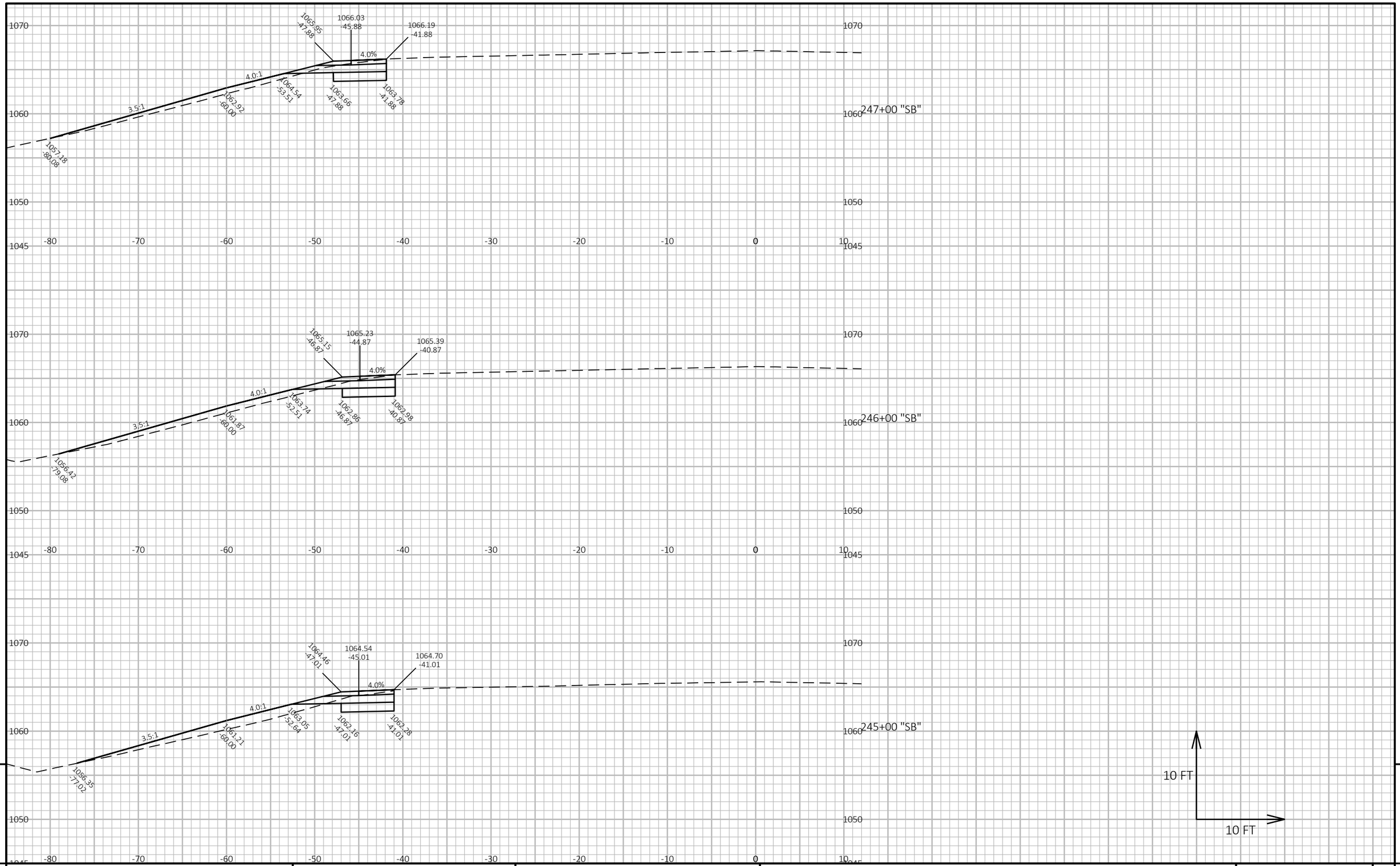
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: S1_IH 39 SB_TEMP PAVMENT_SB ON	SHEET 541	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS TEMP_SB ON RAMP.DWG
LAYOUT NAME - 1-IH 39 SB_SB On Temp Pavement

PLOT DATE : 1/24/2022 12:20 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



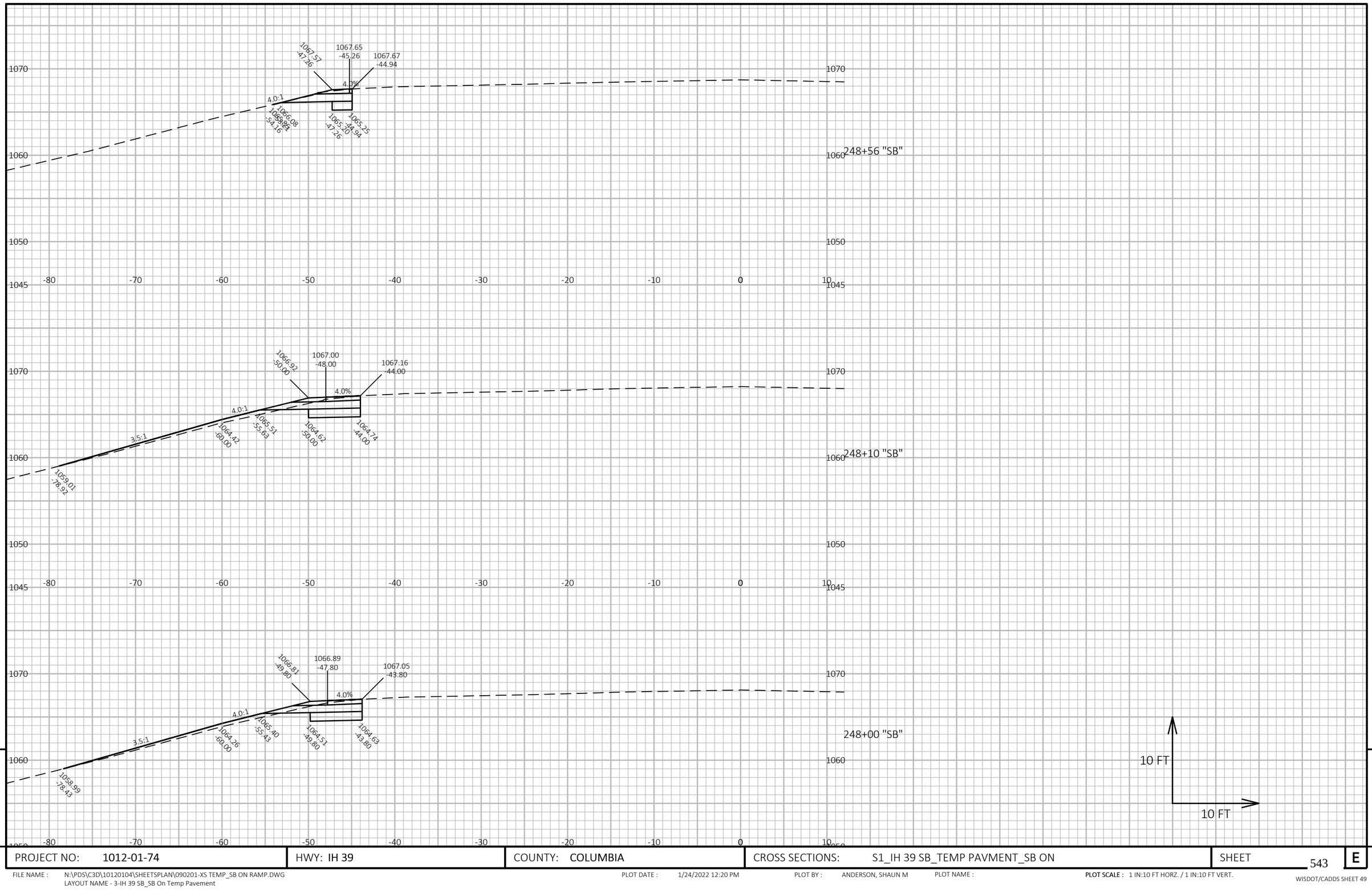
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: S1_IH 39 SB_TEMP PAVMENT_SB ON	SHEET 542	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS TEMP_SB ON RAMP.DWG
LAYOUT NAME - 2-IH 39 SB_SB On Temp Pavement

PLOT DATE : 1/24/2022 12:20 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



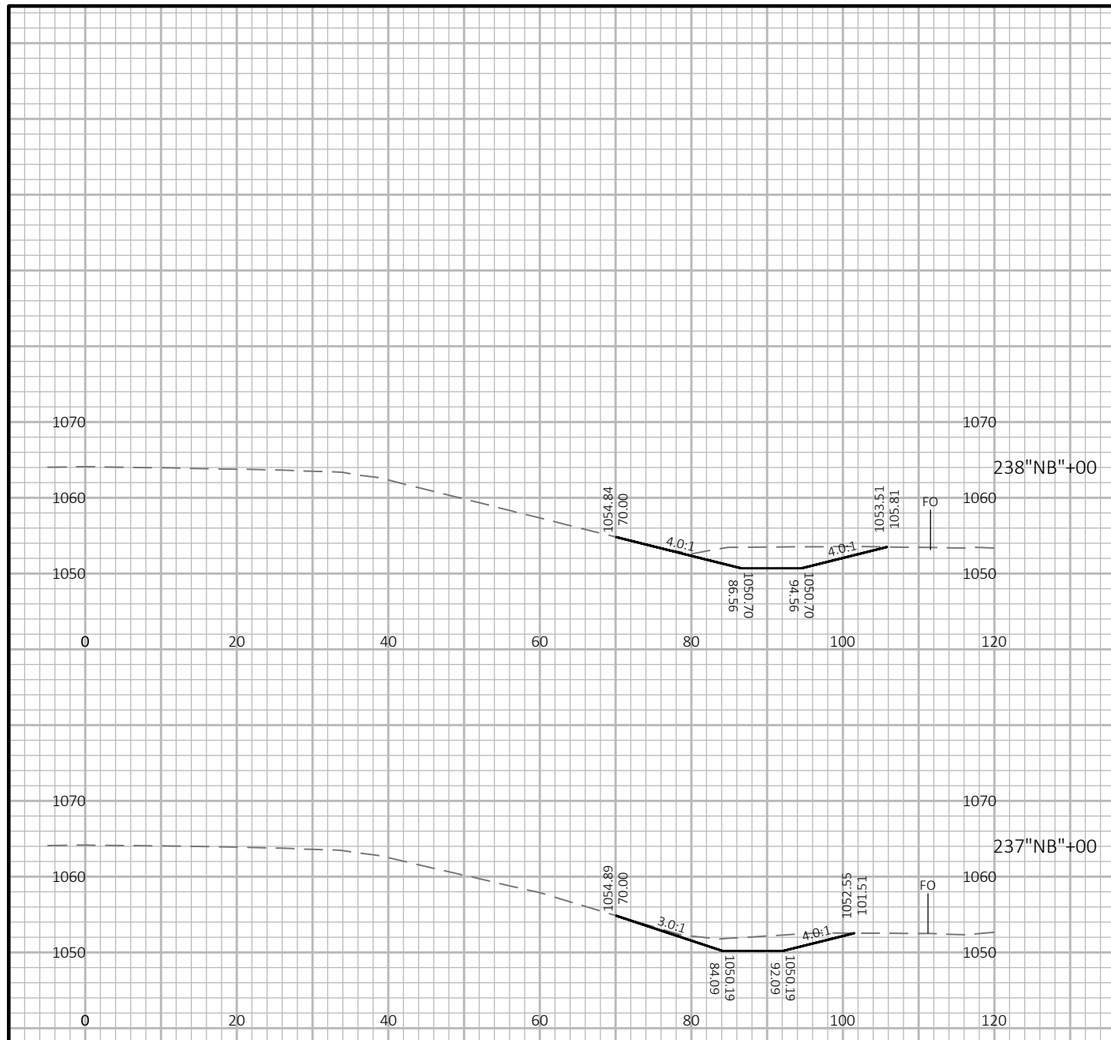
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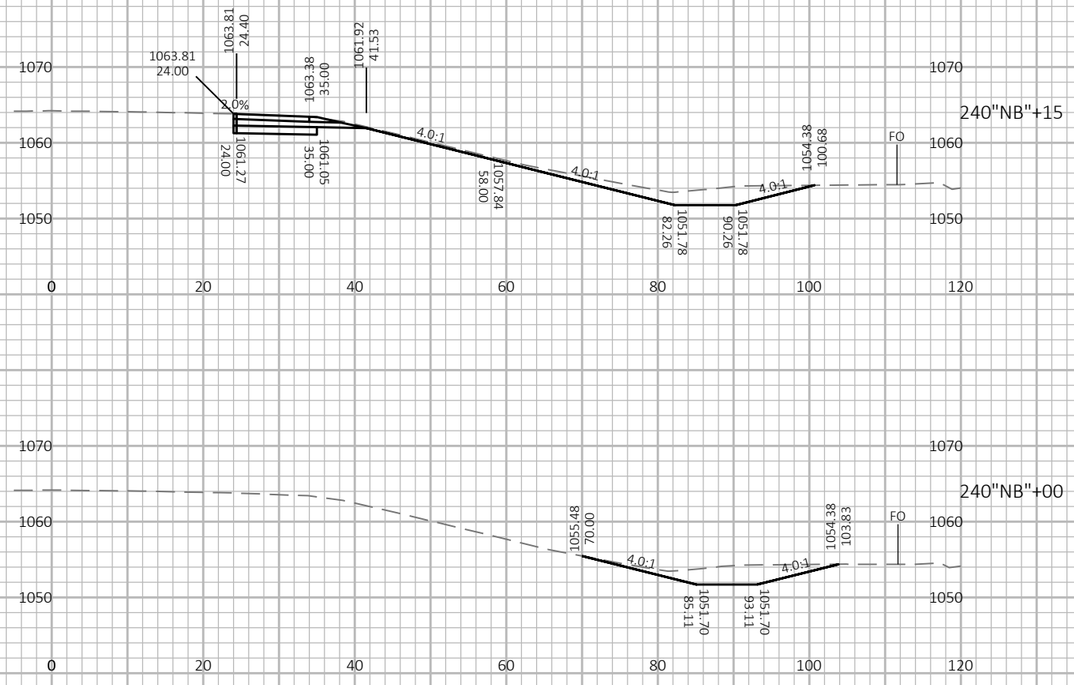
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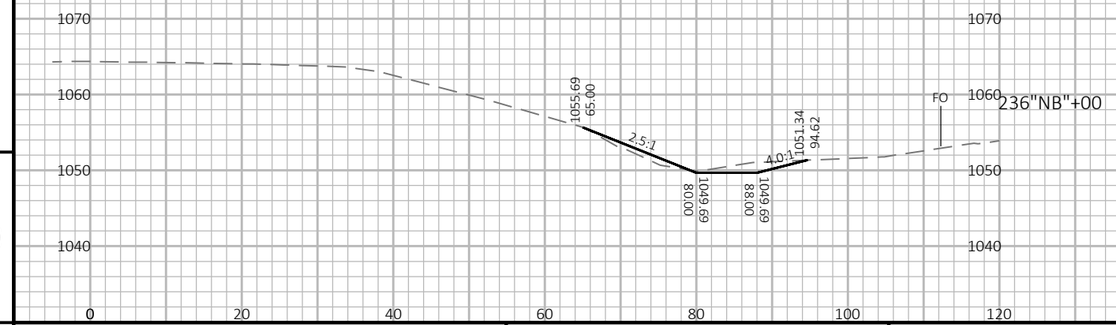
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: S1_IH 39 SB_TEMP PAVMENT_SB ON	SHEET 543	E

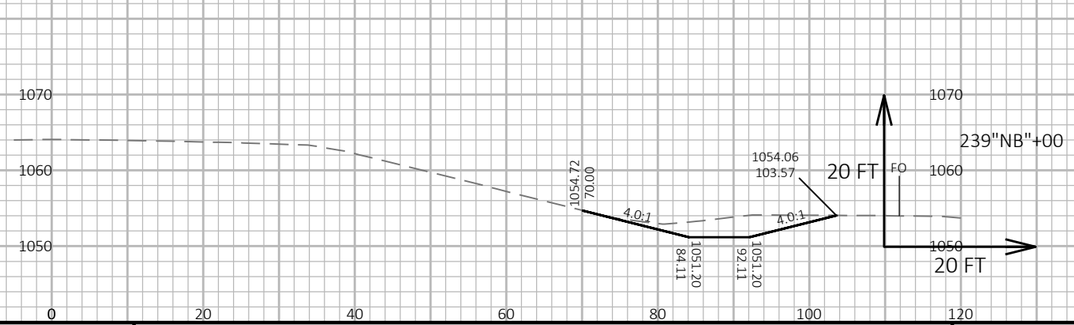
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS TEMP_SB ON RAMP.DWG
LAYOUT NAME - 3-IH 39 SB_SB On Temp Pavement

PLOT DATE : 1/24/2022 12:20 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.









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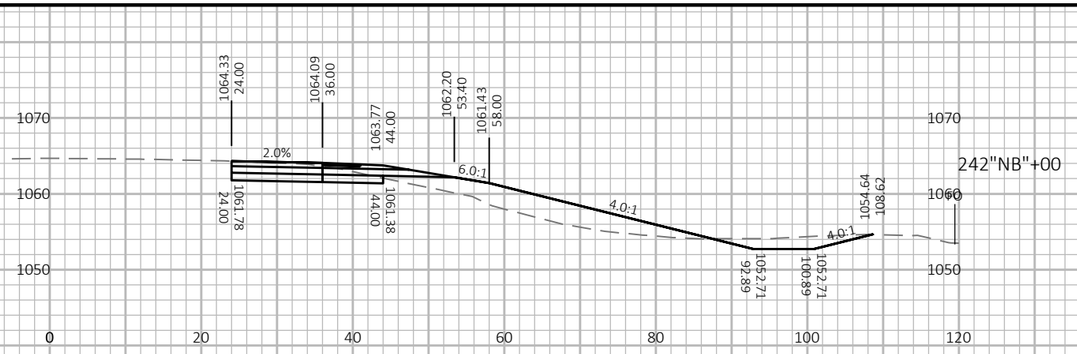
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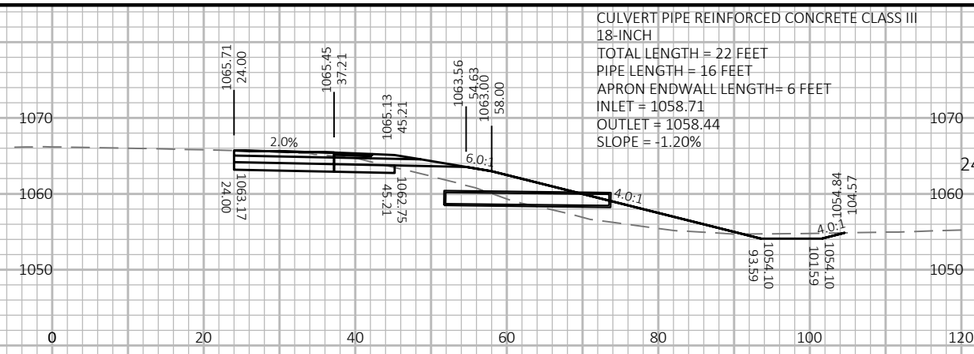
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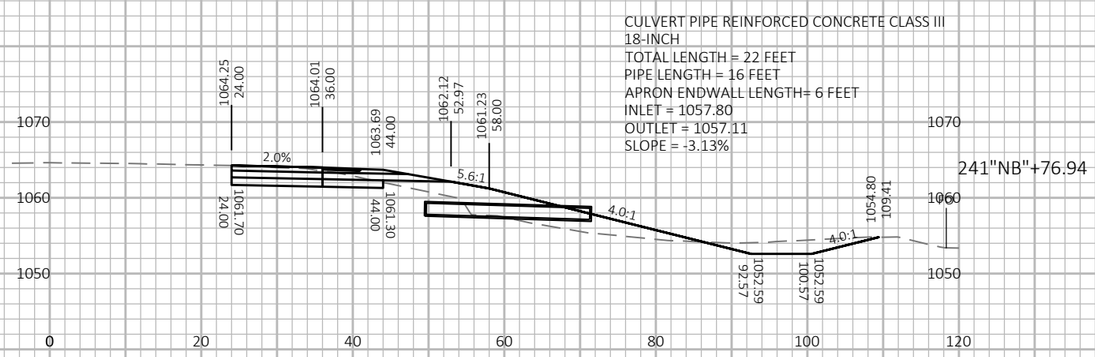
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LAYOUT NAME - 1-IH 39 NB_S of NB OFF

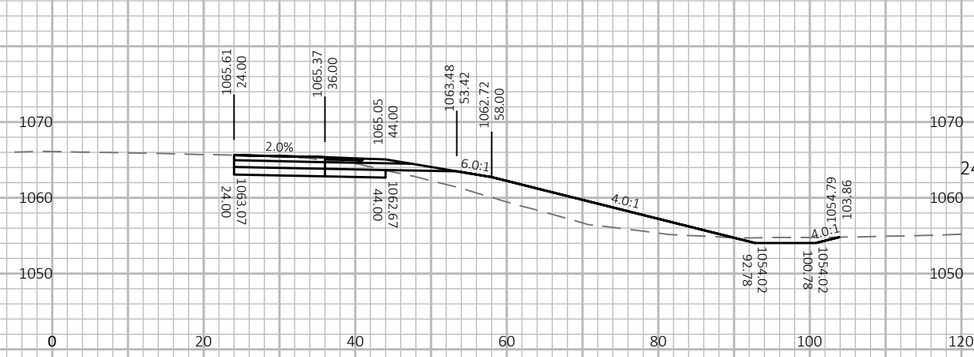
PLOT DATE : 1/24/2022 12:20 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

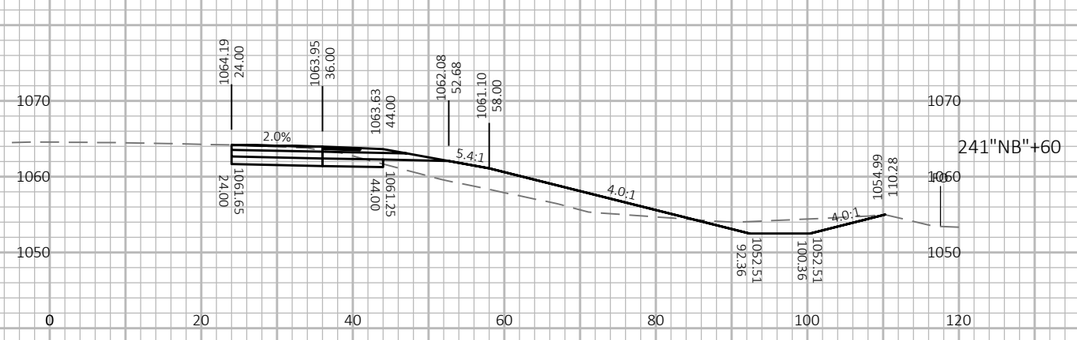
WISDOT/CADDS SHEET 49

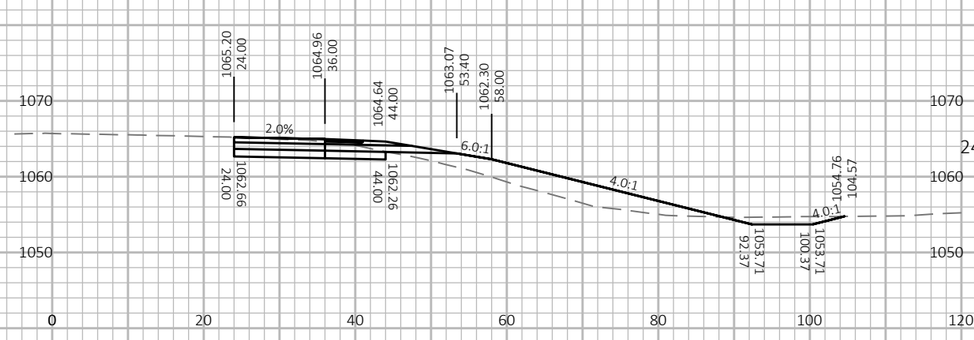


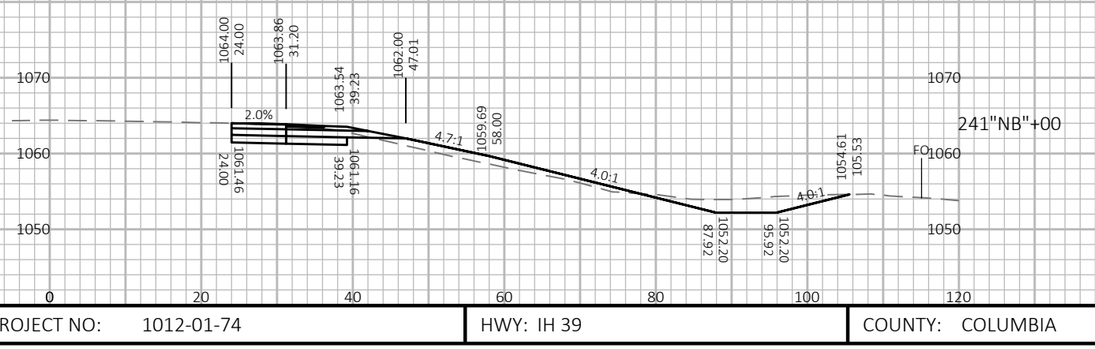


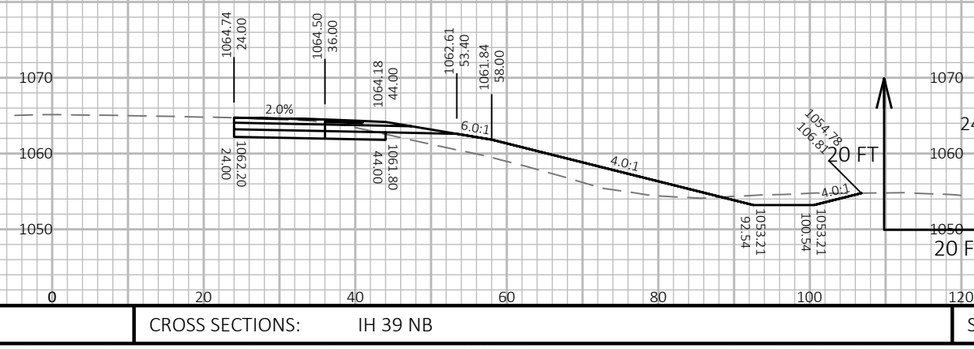












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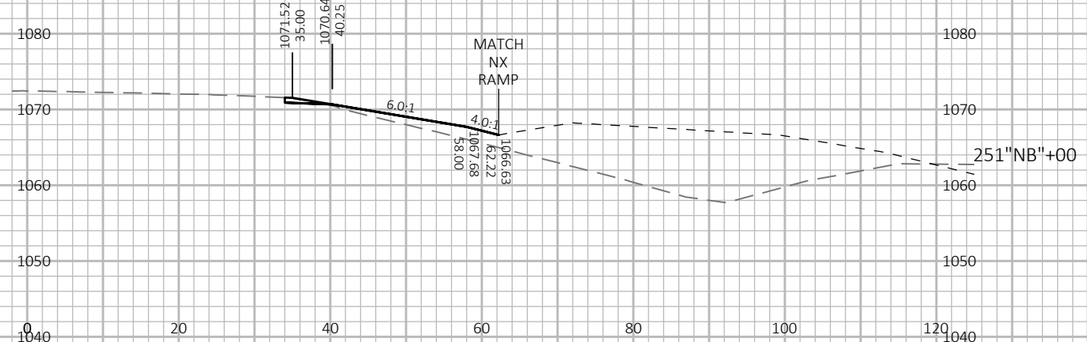
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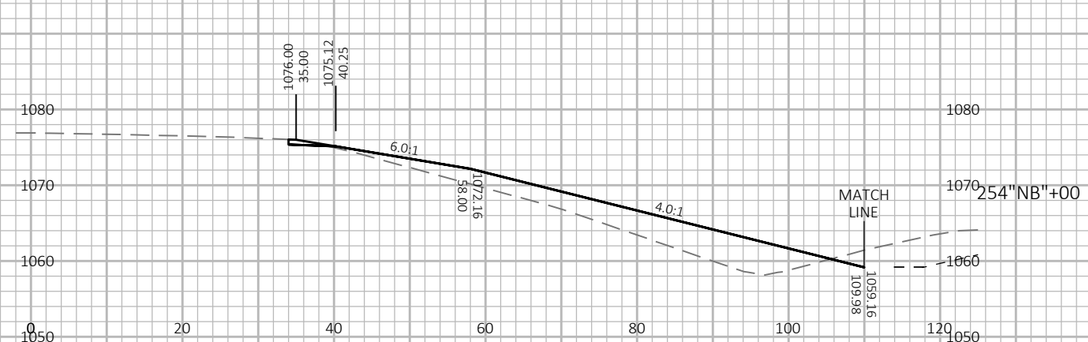
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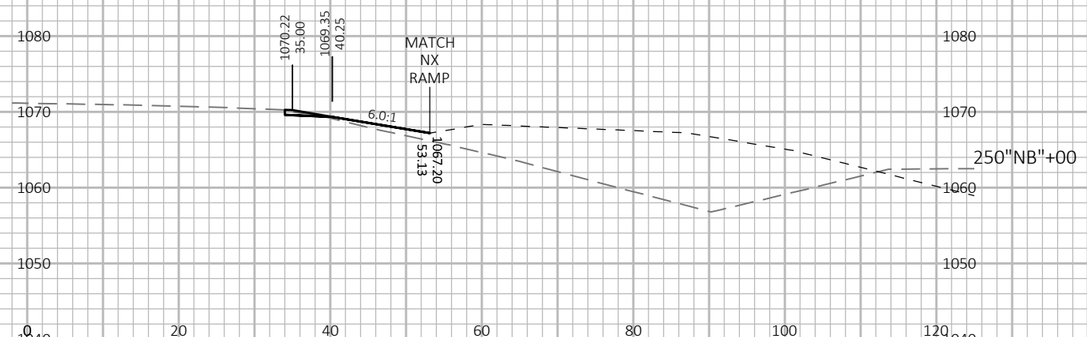
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LAYOUT NAME - 2-IH 39 NB_S of NB OFF

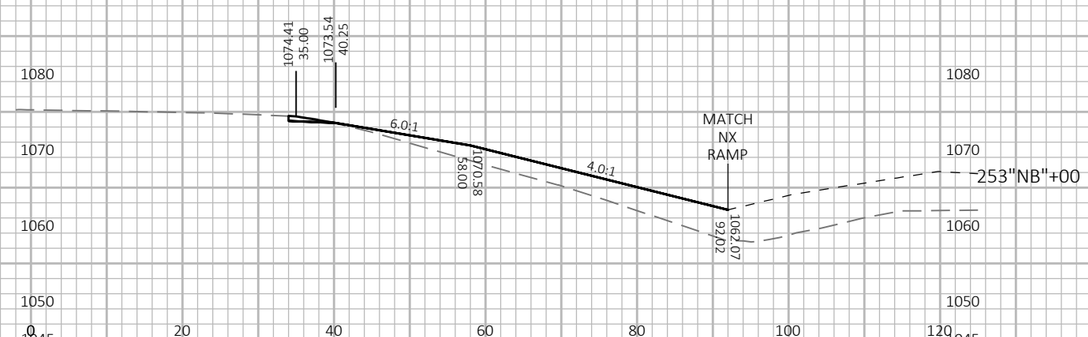
PLOT DATE : 1/24/2022 12:20 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

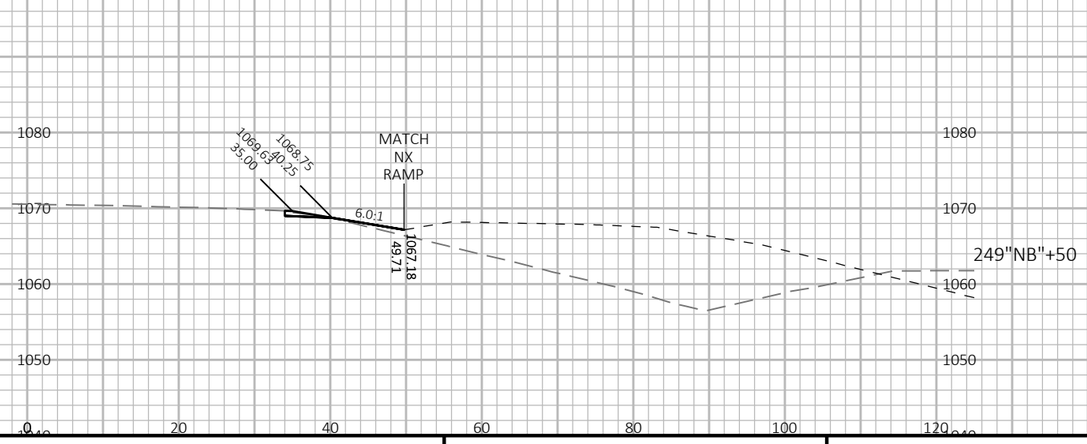
WISDOT/CADDS SHEET 49

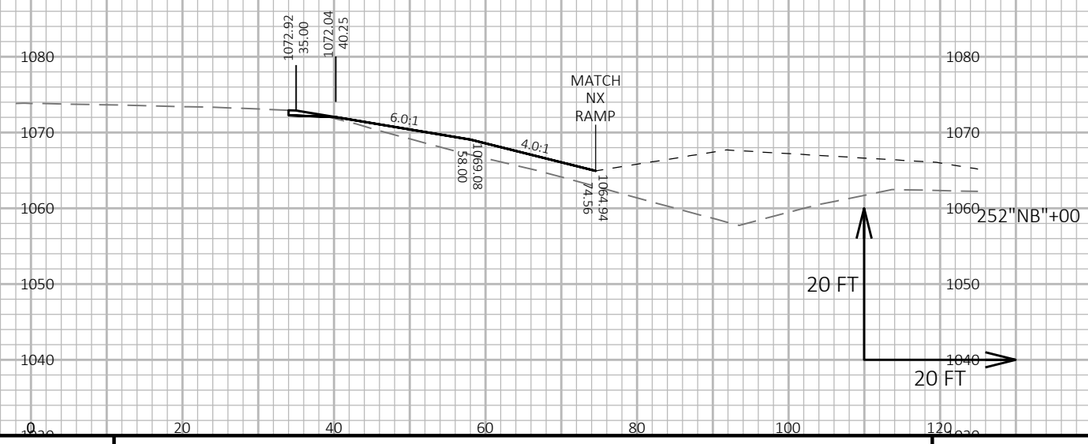












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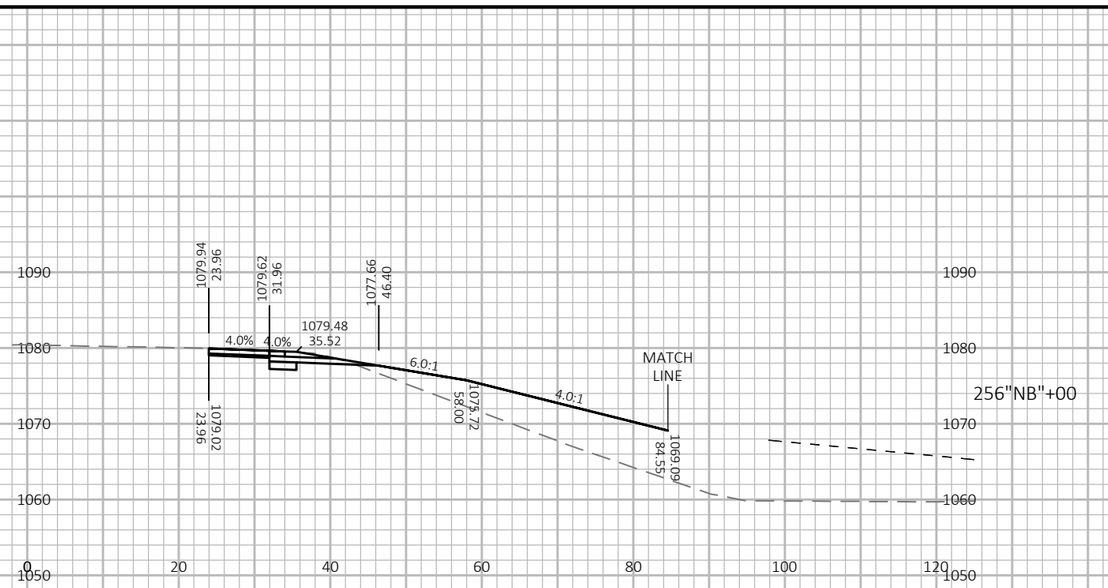
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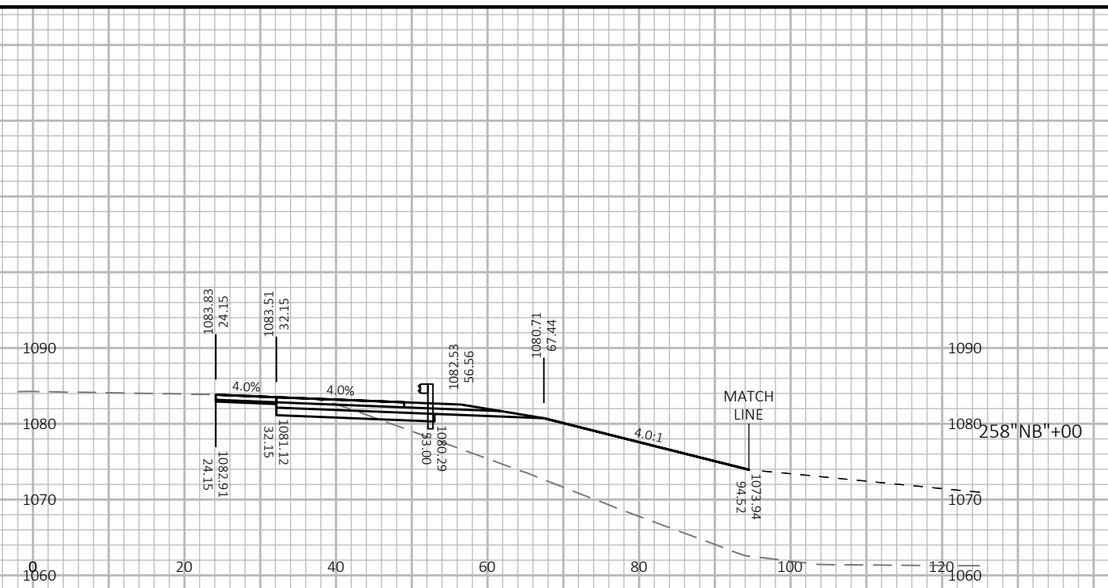
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 NB	SHEET 546	E

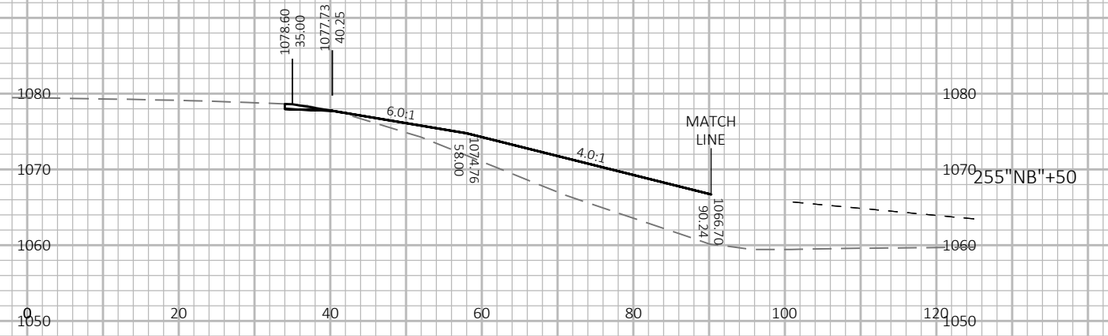
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LAYOUT NAME - 3-IH 39 NB_Infield NB OFF

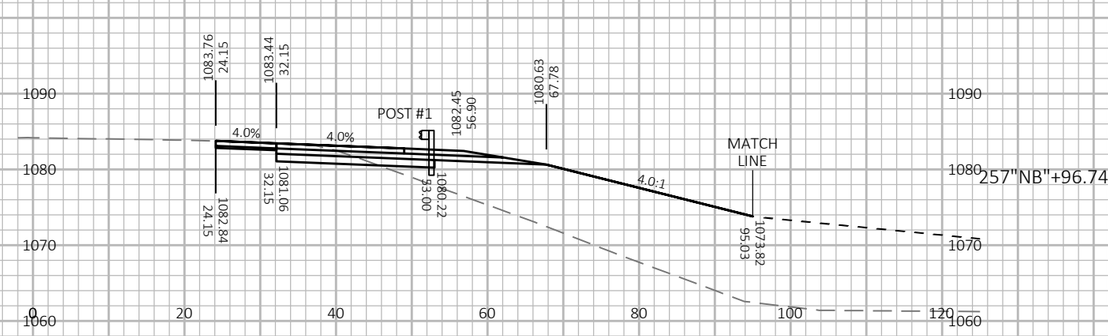
PLOT DATE : 2/9/2022 1:35 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

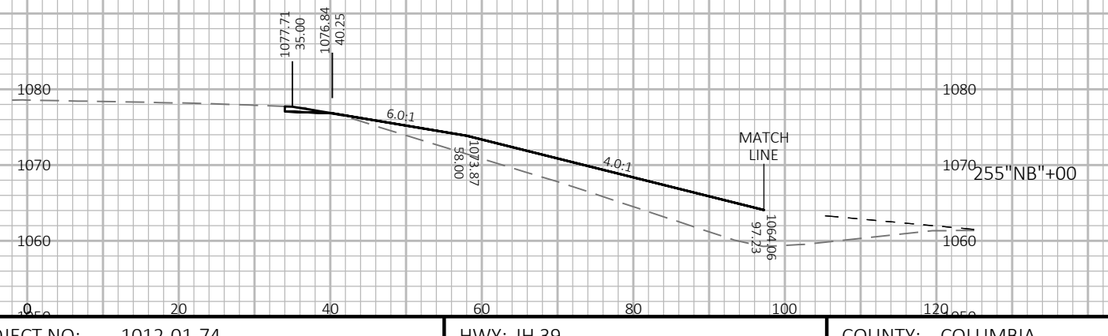
WISDOT/CADDS SHEET 49

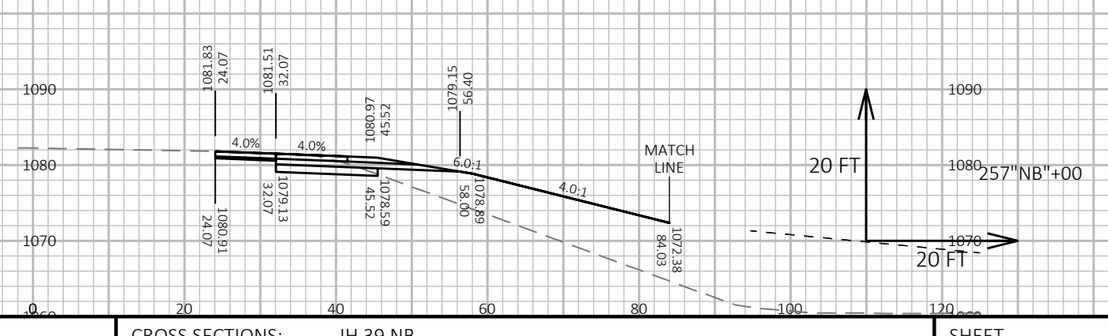












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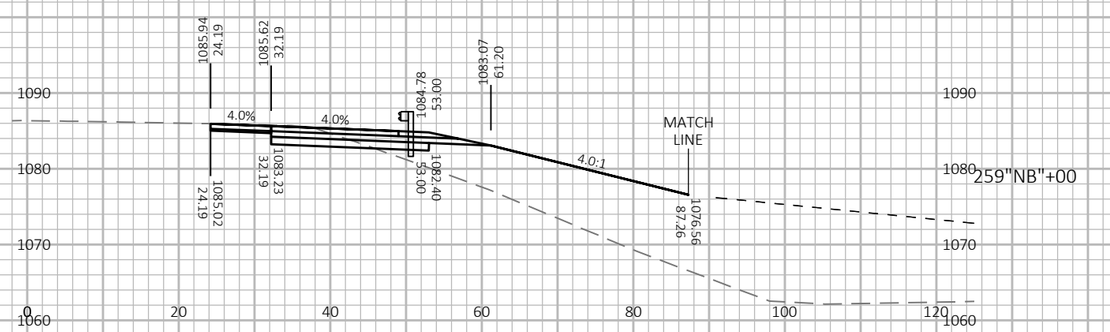
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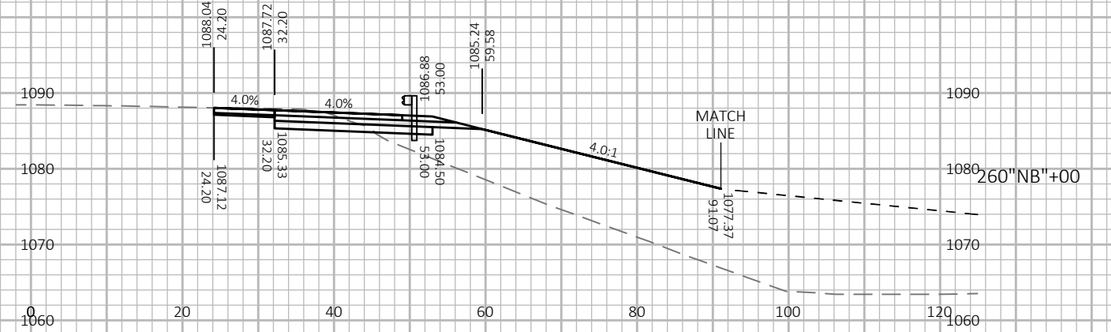
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 NB	SHEET 547	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 NB OFF_INFIELD.DWG
LAYOUT NAME - 4-IH 39 NB_Infield NB OFF

PLOT DATE : 2/9/2022 1:35 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

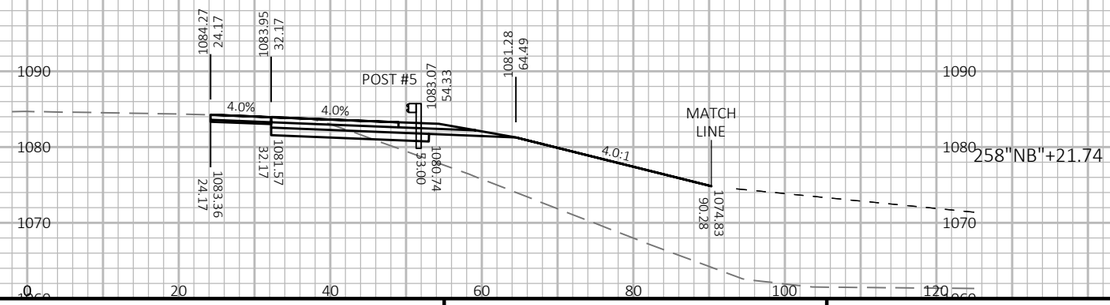
WISDOT/CADDS SHEET 49

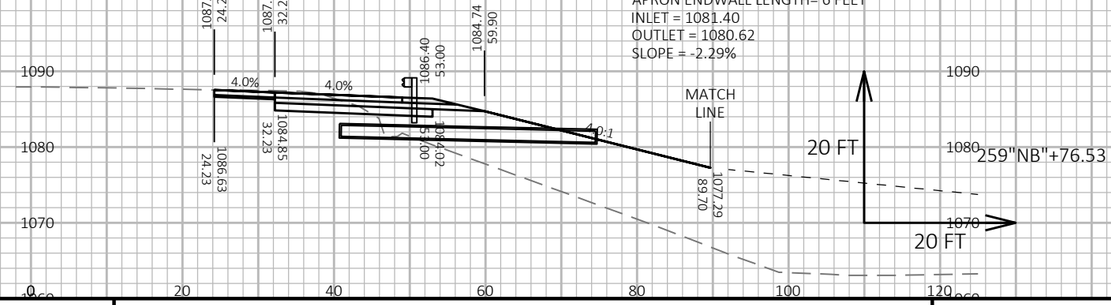












CULVERT PIPE REINFORCED CONCRETE CLASS III
18-INCH
TOTAL LENGTH = 32 FEET
PIPE LENGTH = 26 FEET
APRON ENDWALL LENGTH= 6 FEET
INLET = 1081.40
OUTLET = 1080.62
SLOPE = -2.29%

9

9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 NB	SHEET 548	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 NB OFF_INFIELD.DWG
LAYOUT NAME - 5-IH 39 NB_Infield NB OFF

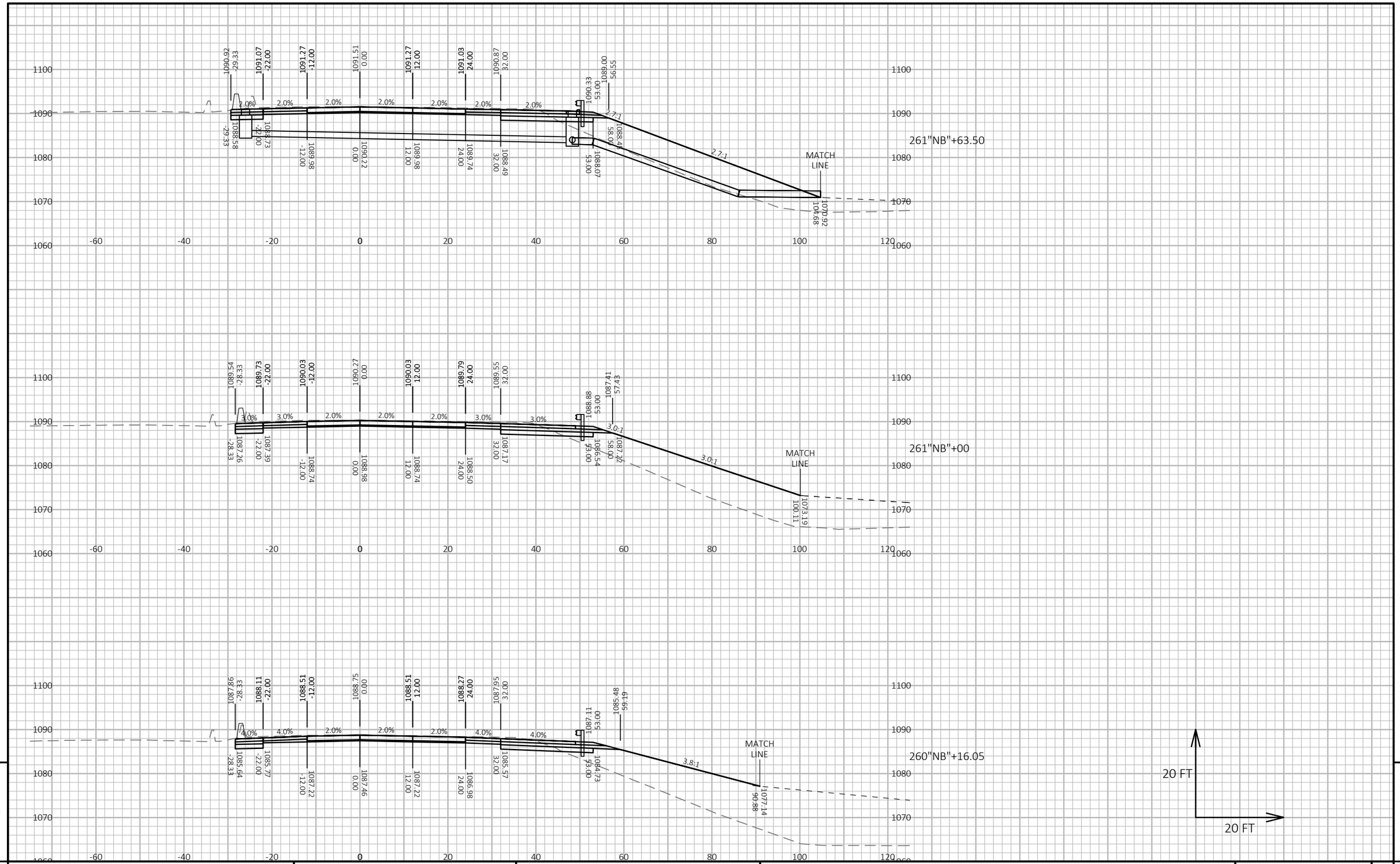
PLOT DATE : 2/9/2022 1:35 PM

PLOT BY : ANDERSON, SHAUN M

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



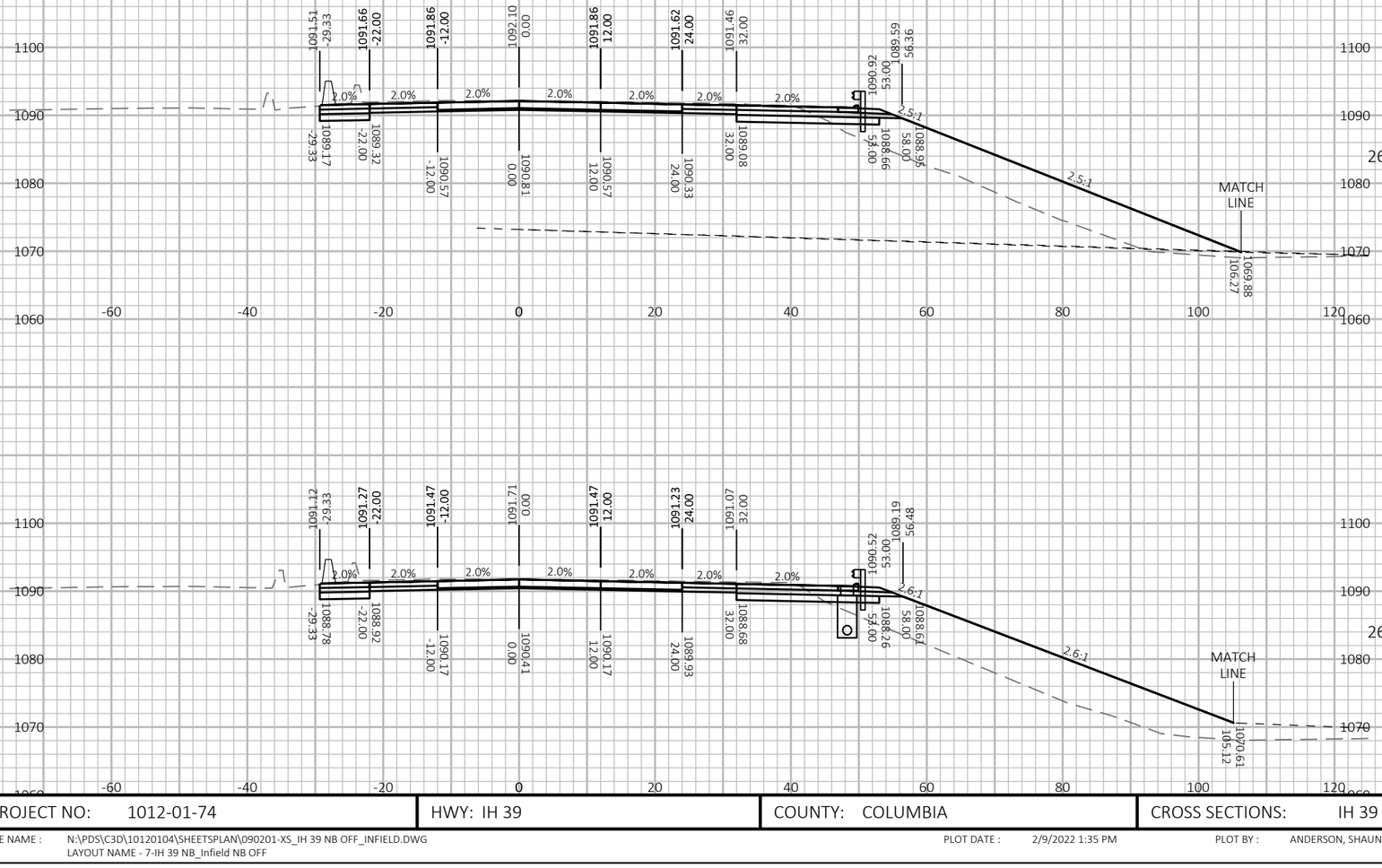
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 NB	SHEET 549	E

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LAYOUT NAME - 6-IH 39 NB_Infield NB OFF

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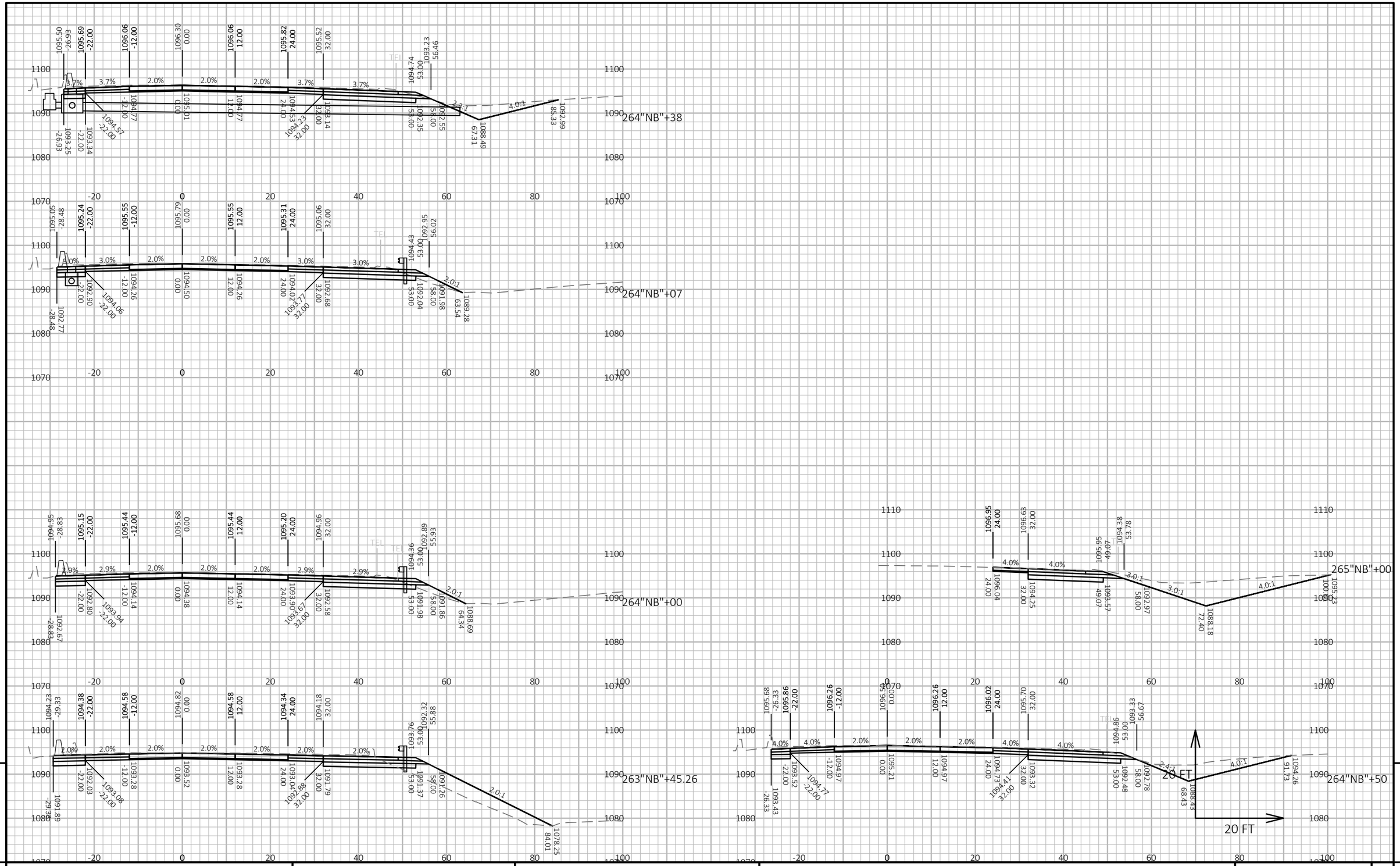
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 NB	SHEET 550	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 NB OFF_INFIELD.DWG
LAYOUT NAME - 7-IH 39 NB_Infield NB OFF

PLOT DATE : 2/9/2022 1:35 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 NB	SHEET 551	E

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LAYOUT NAME - 8-IH 39 NB_Infield NB ON

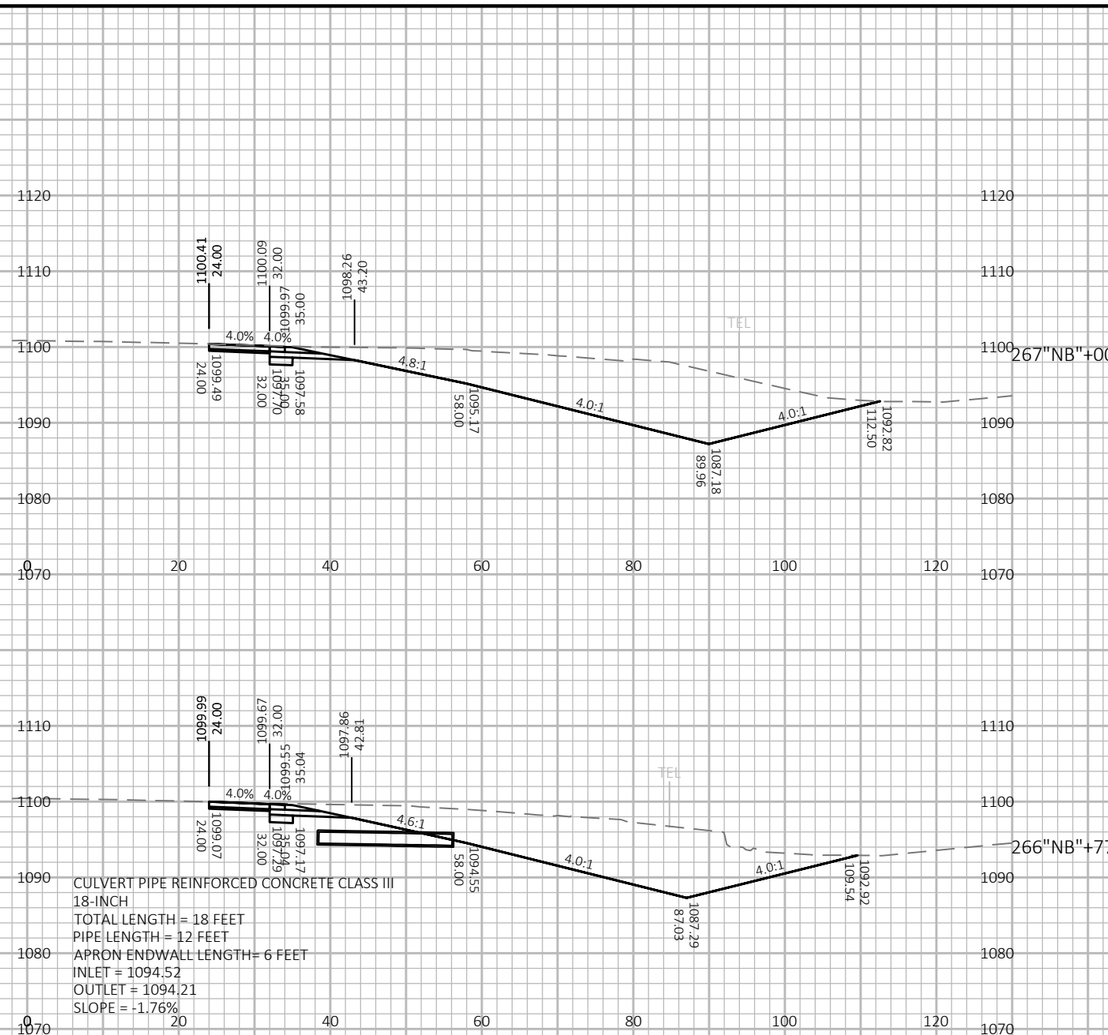
PLOT DATE : 2/8/2022 4:27 PM

PLOT BY : ANDERSON, SHAUN M

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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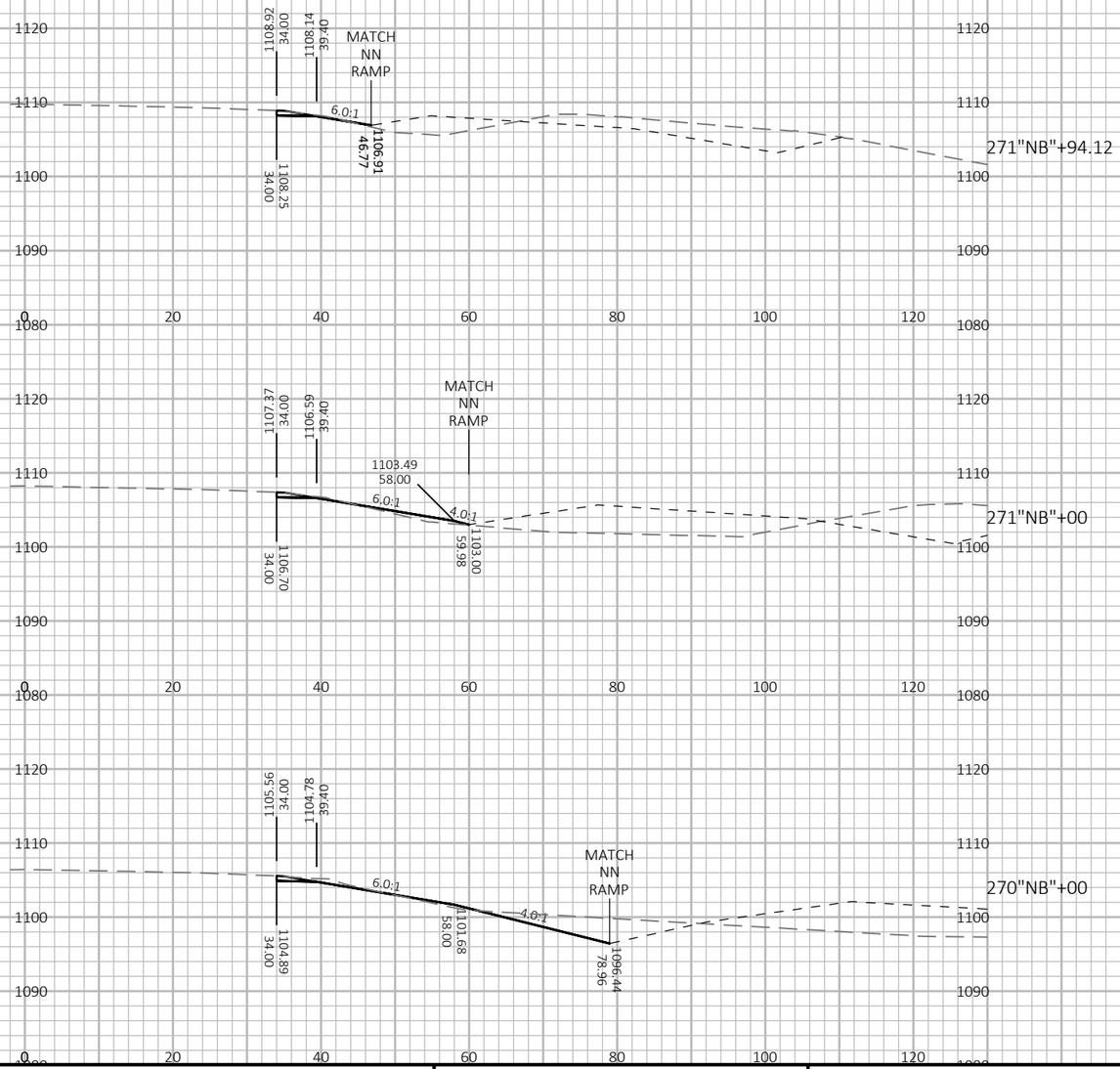
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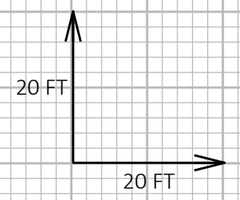
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 NB	SHEET 552	E

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LAYOUT NAME - 9-IH 39 NB_Infield NB ON

PLOT DATE : 2/8/2022 4:27 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





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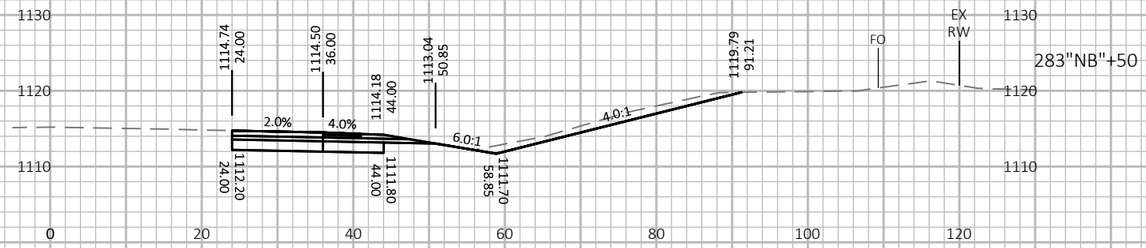
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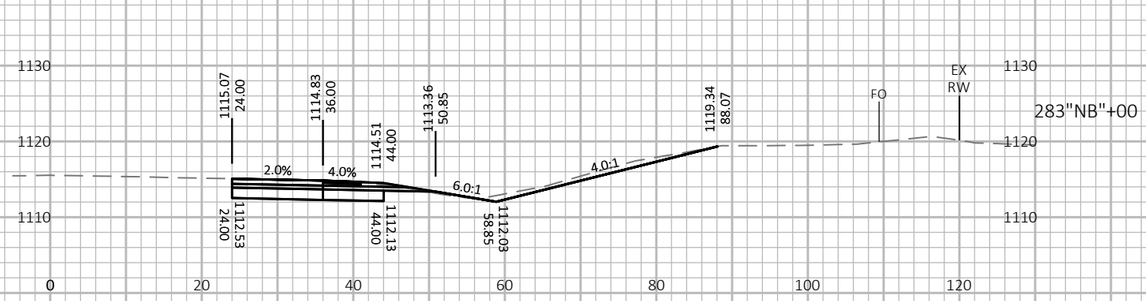
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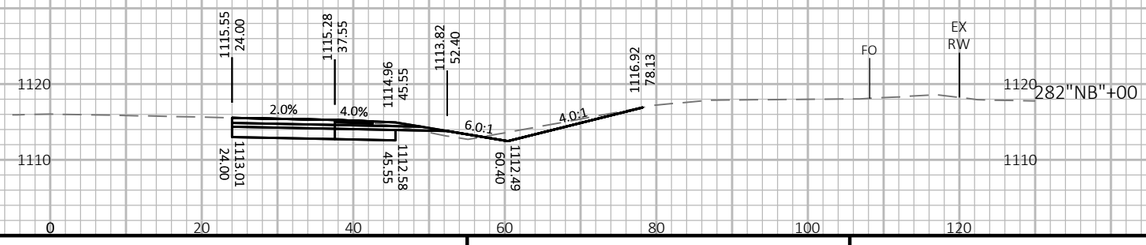
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LAYOUT NAME - 10-IH 39 NB_Infield NB ON

PLOT DATE : 2/8/2022 4:27 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49









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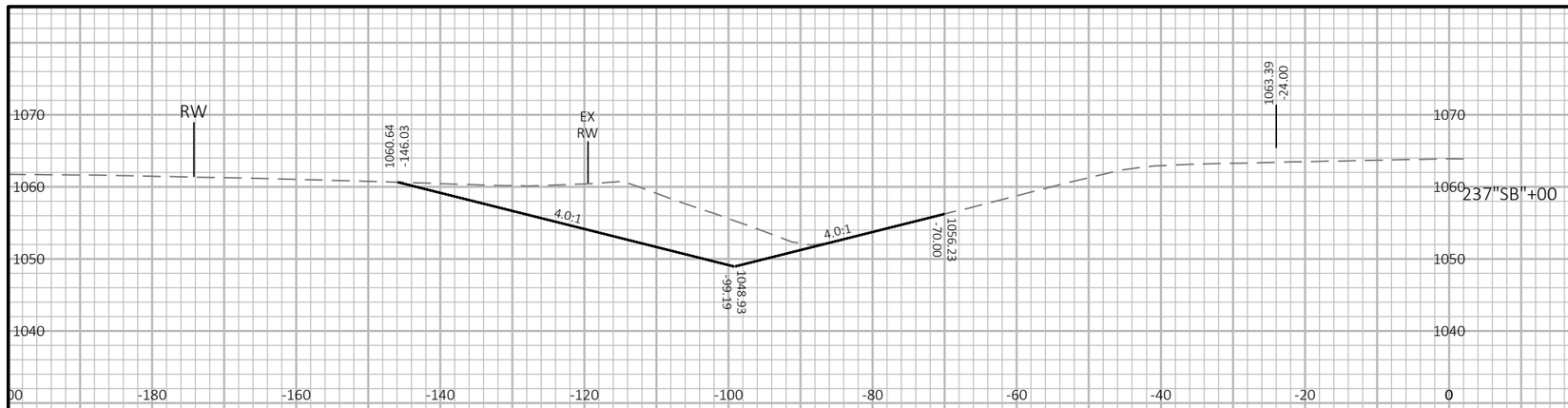
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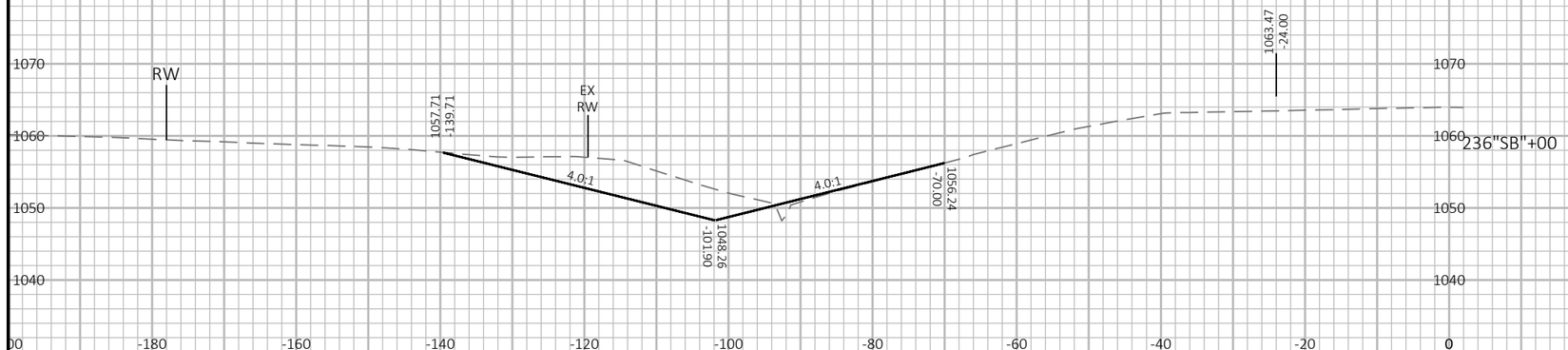
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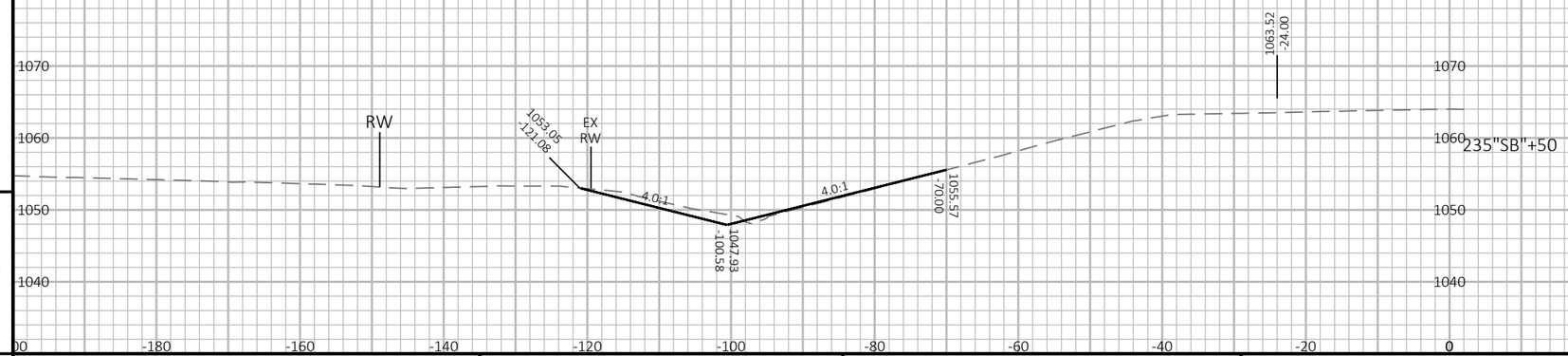
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LAYOUT NAME - 8-IH 39 NB_N of NB ON

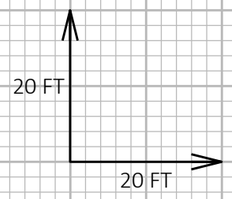
PLOT DATE : 1/24/2022 12:23 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49









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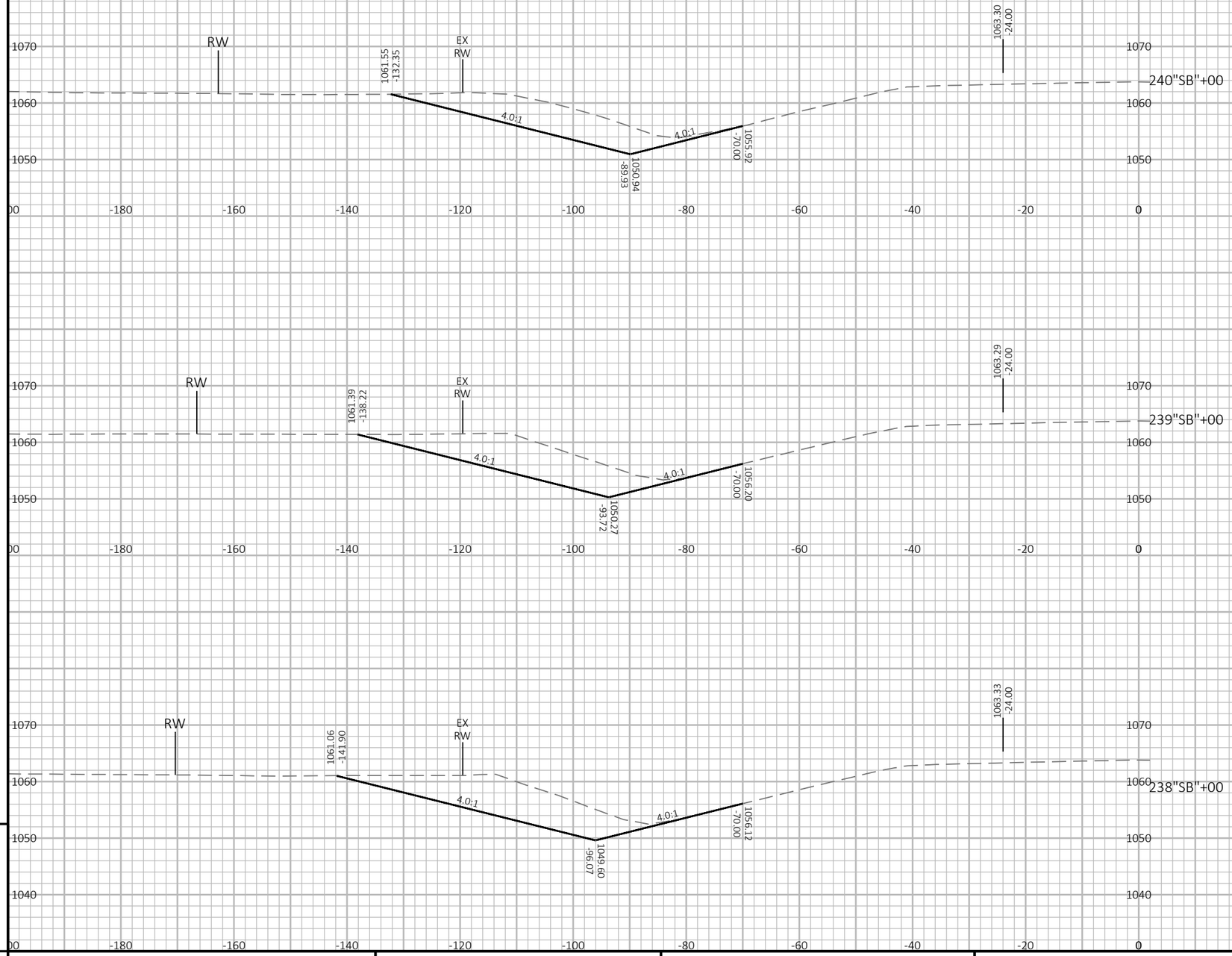
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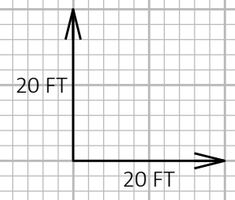
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FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 SB_S OF SB ON.DWG
LAYOUT NAME - 1-IH 39 - S of SB ON

PLOT DATE : 1/24/2022 12:23 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





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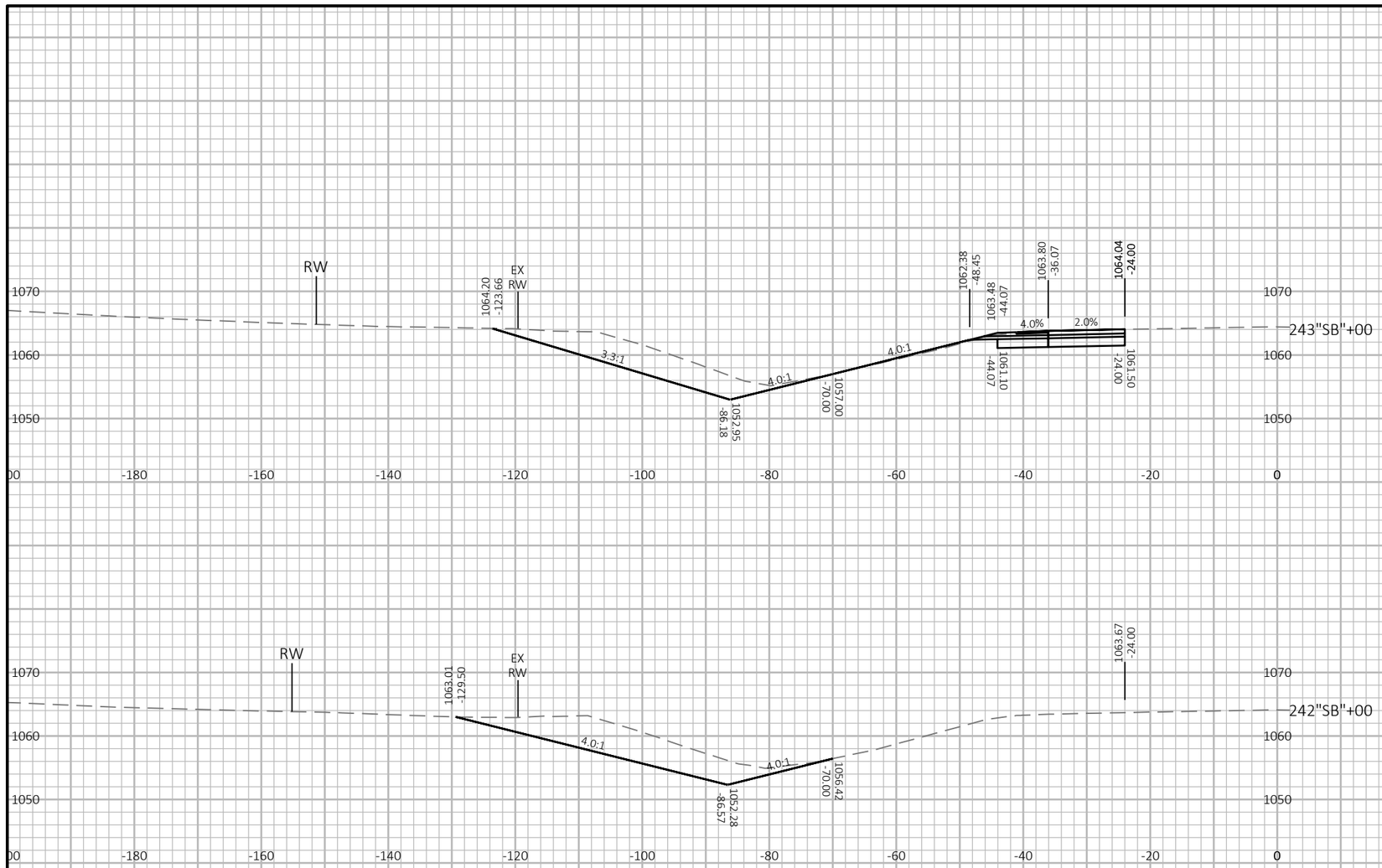
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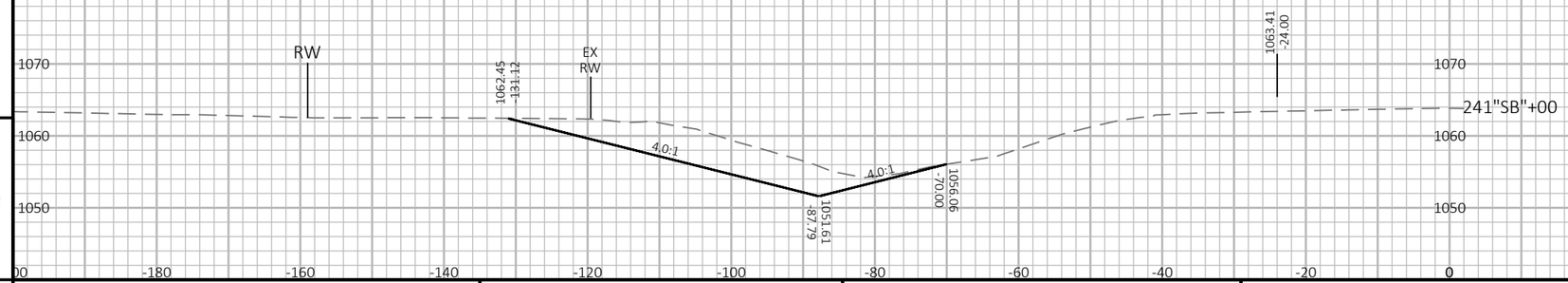
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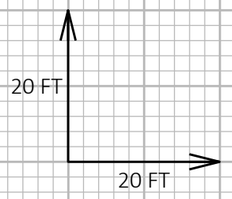
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 SB_S OF SB ON.DWG
LAYOUT NAME - 2-IH 39 - S of SB ON

PLOT DATE : 1/24/2022 12:23 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49







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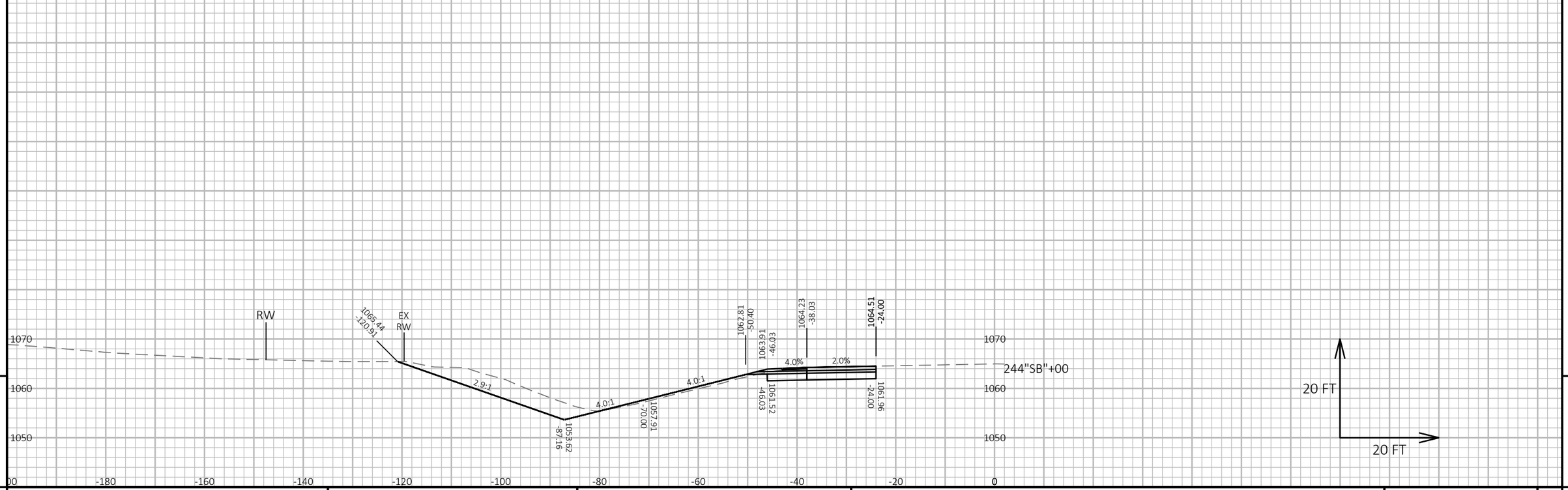
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 SB	SHEET 557	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 SB_S OF SB ON.DWG
LAYOUT NAME - 3-IH 39 - S of SB ON

PLOT DATE : 1/24/2022 12:23 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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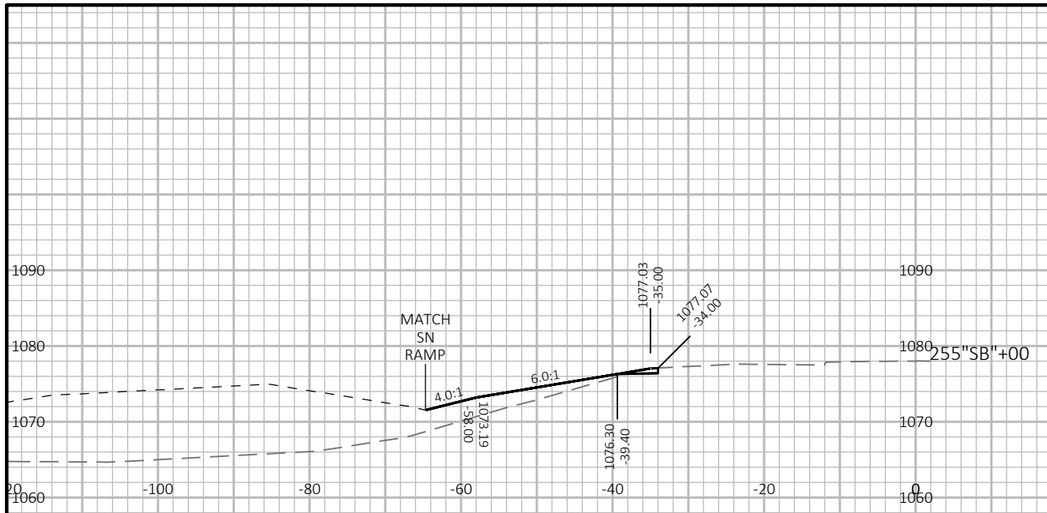
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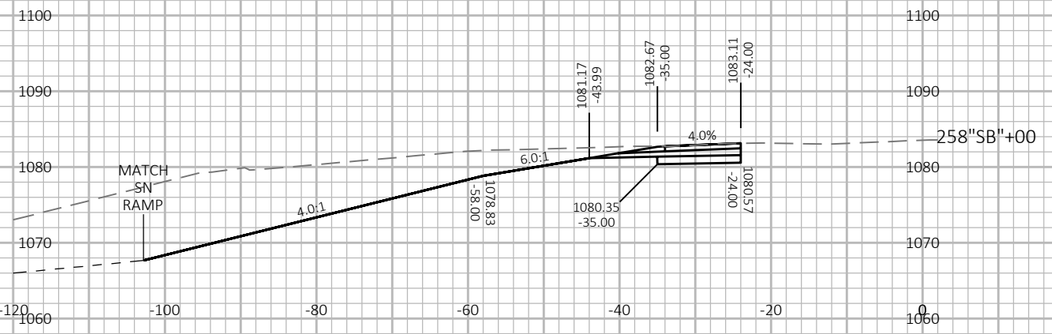
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 SB	SHEET 558	E

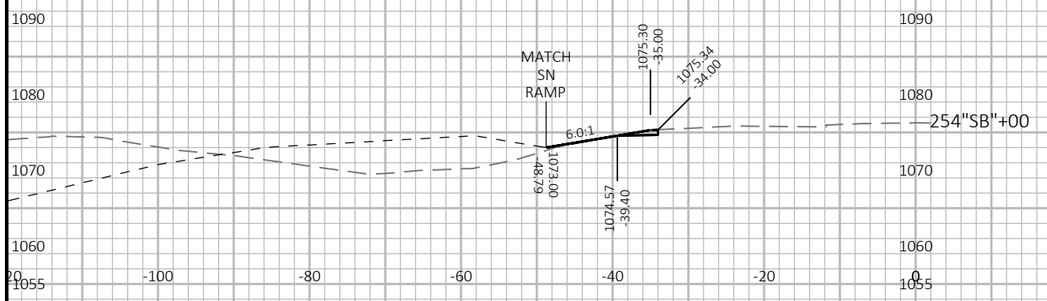
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 SB_S OF SB ON.DWG
LAYOUT NAME - 4-IH 39 - S of SB ON

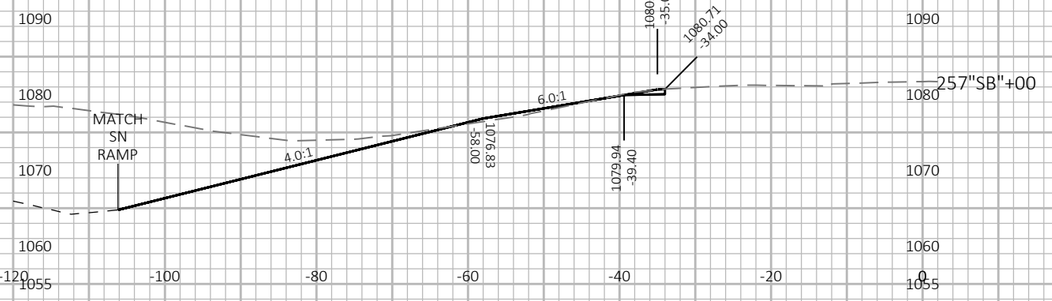
PLOT DATE : 1/24/2022 12:23 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

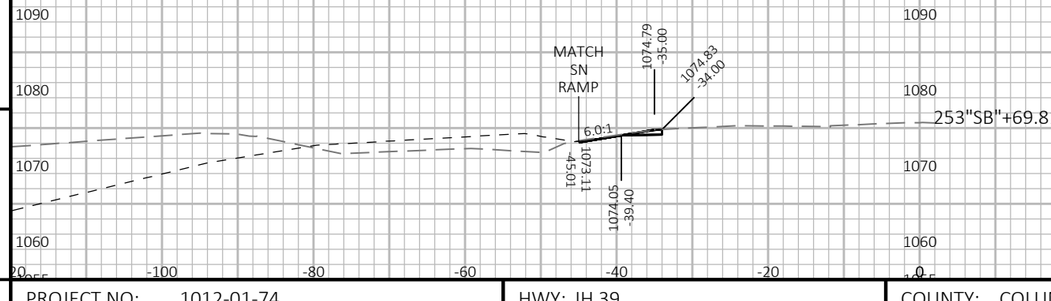
WISDOT/CADDS SHEET 49

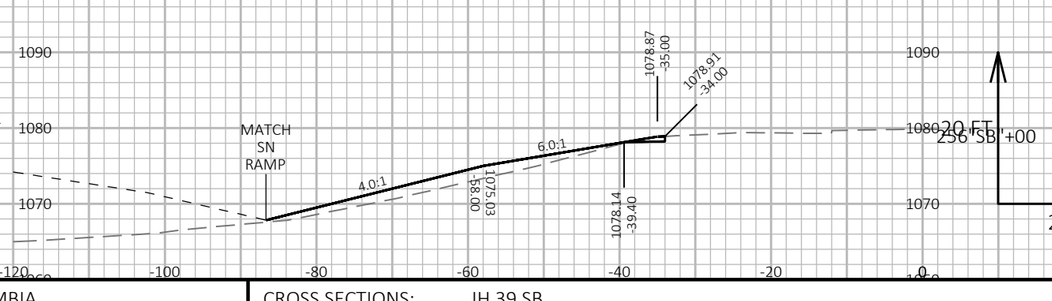












9

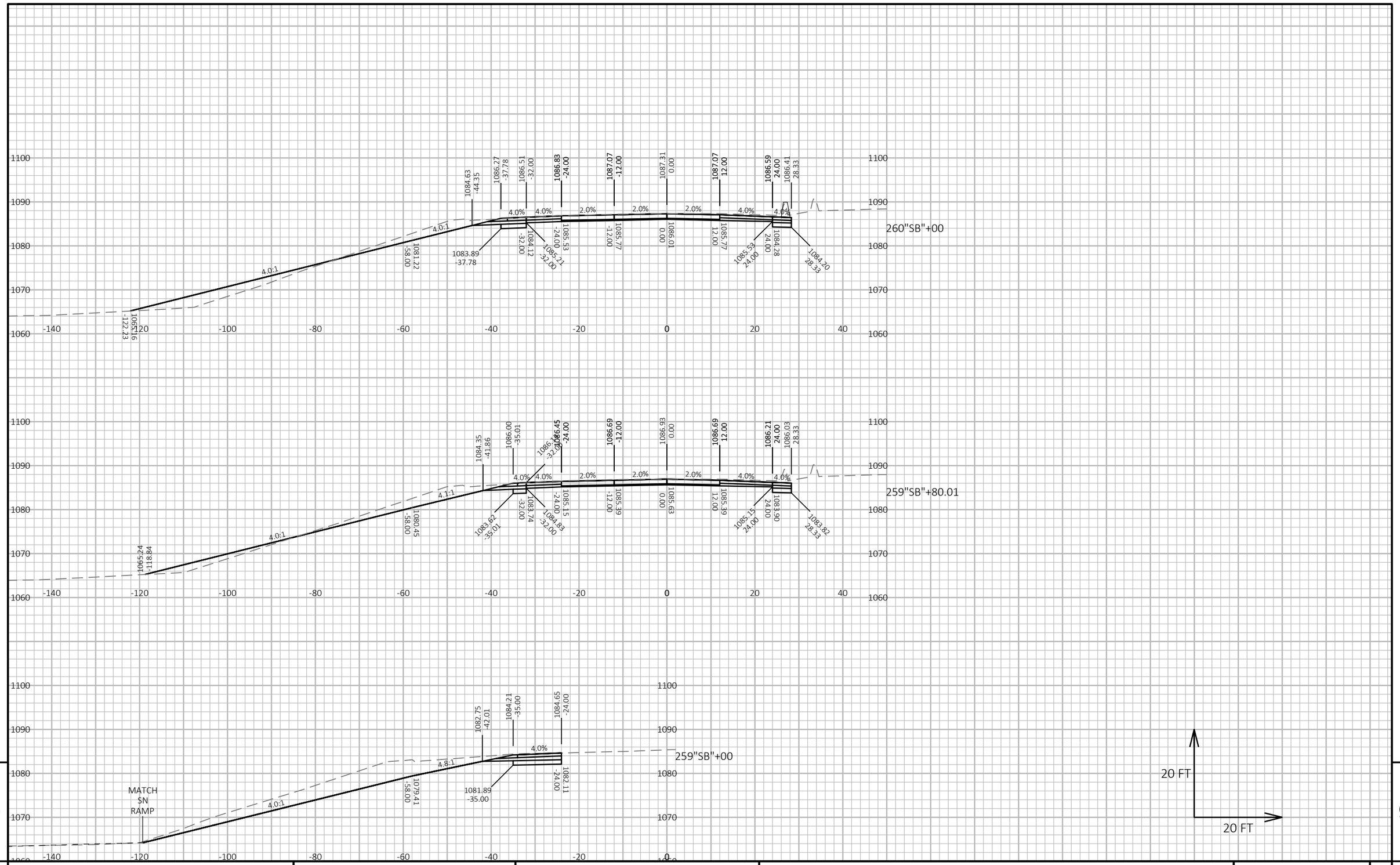
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 SB	SHEET 559	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 SB_SB ON_INFIELD.DWG
LAYOUT NAME - 1-IH 39 SB_Infield SB ON

PLOT DATE : 2/9/2022 1:28 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

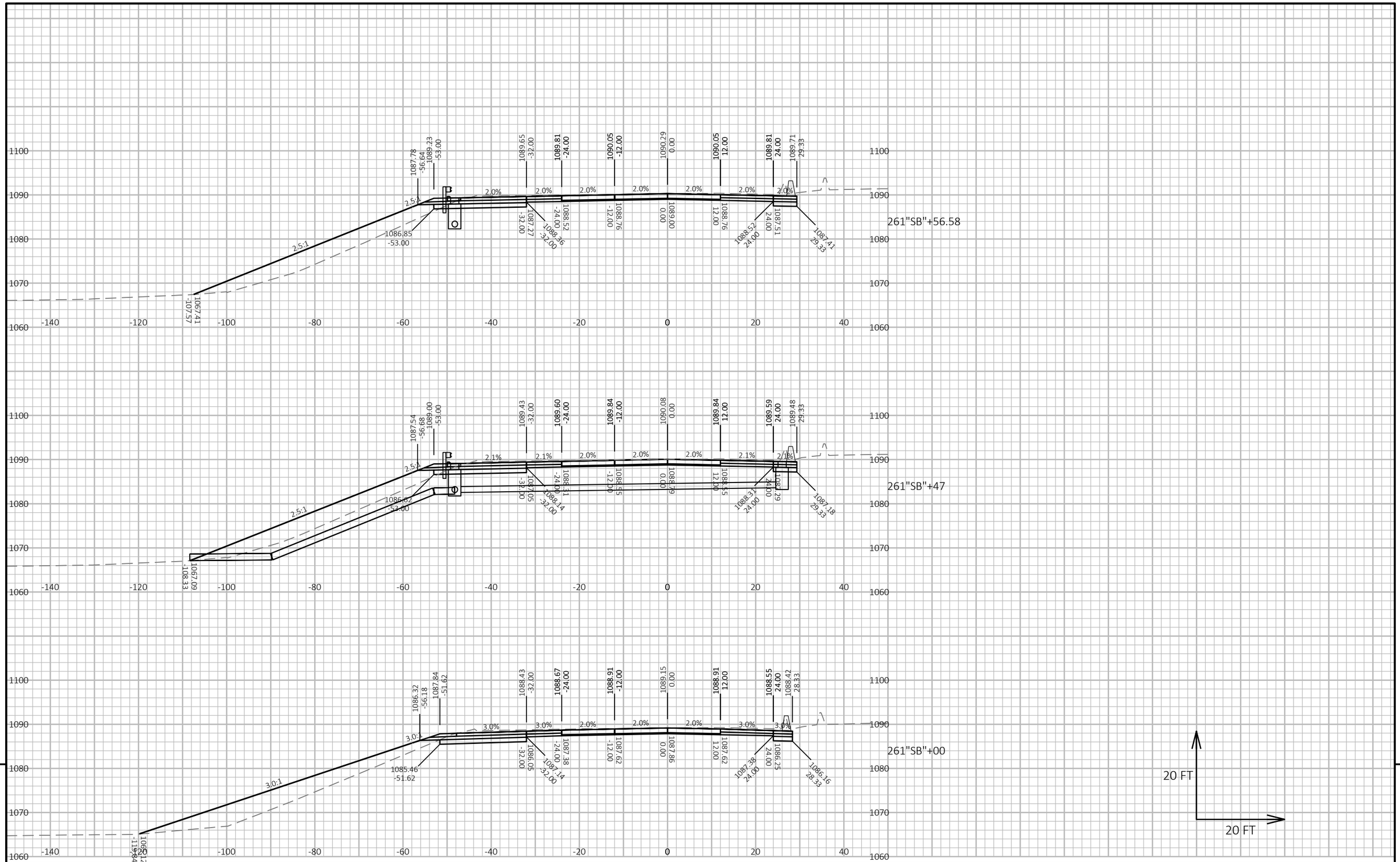
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 SB	SHEET 560	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 SB_SB ON_INFIELD.DWG
LAYOUT NAME - 2-IH 39 SB_Infield SB ON

PLOT DATE : 2/9/2022 1:28 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

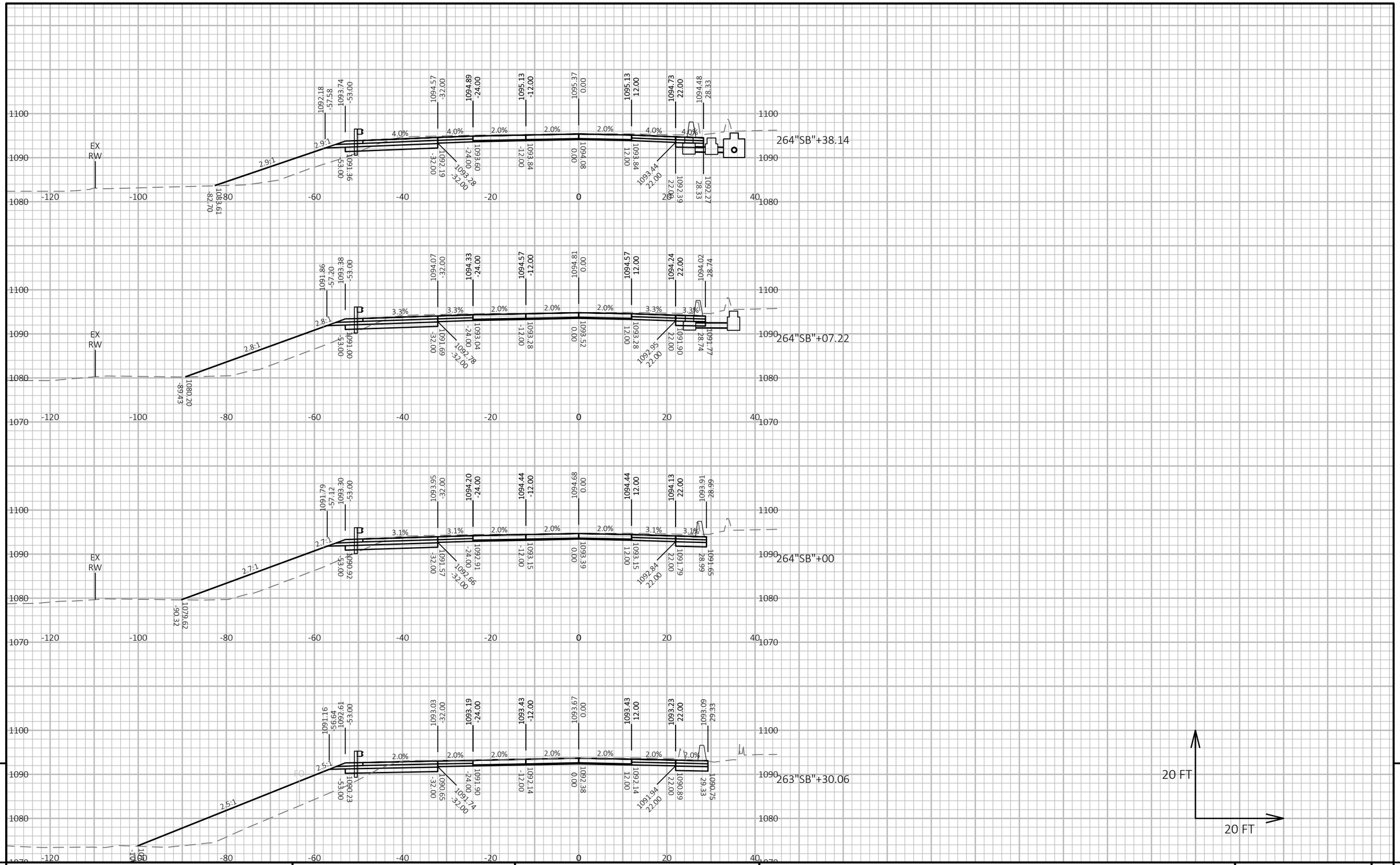
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 SB	SHEET 561	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 SB_SB ON_INFIELD.DWG
LAYOUT NAME - 3-IH 39 SB_Infield SB ON

PLOT DATE : 2/9/2022 1:28 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

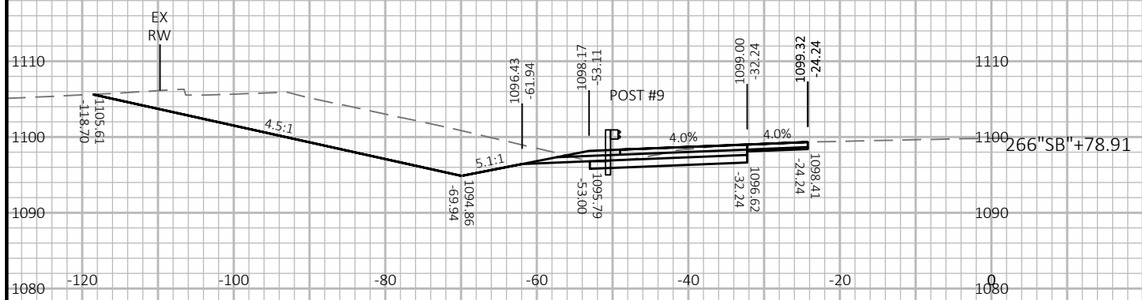
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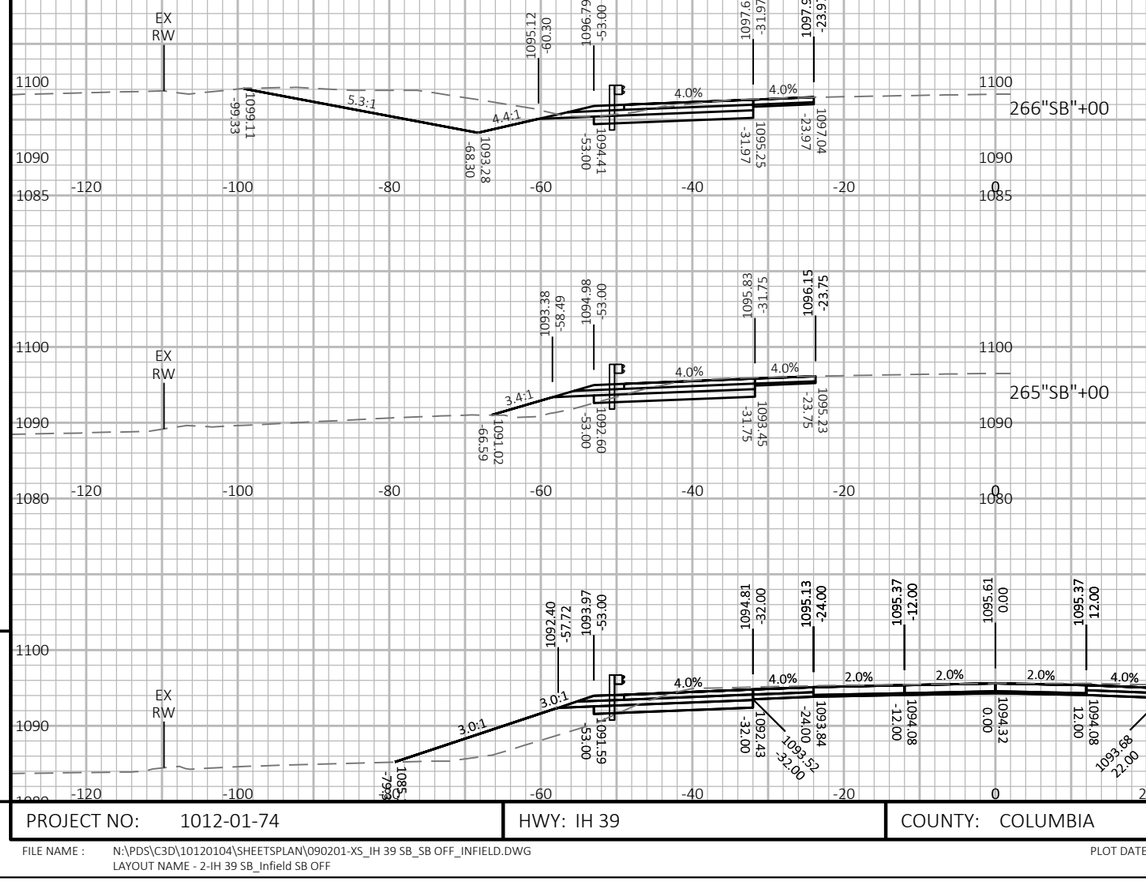
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 SB	SHEET 562	E

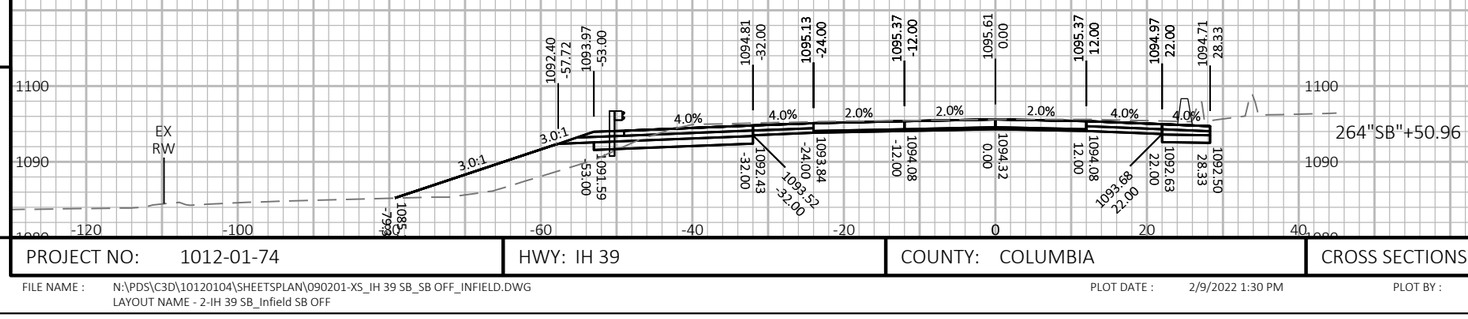
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 SB_SB OFF_INFIELD.DWG
LAYOUT NAME - 1-IH 39 SB_Infield SB OFF

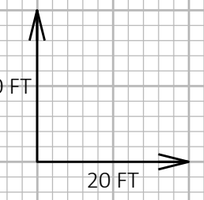
PLOT DATE : 2/9/2022 1:30 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49









9

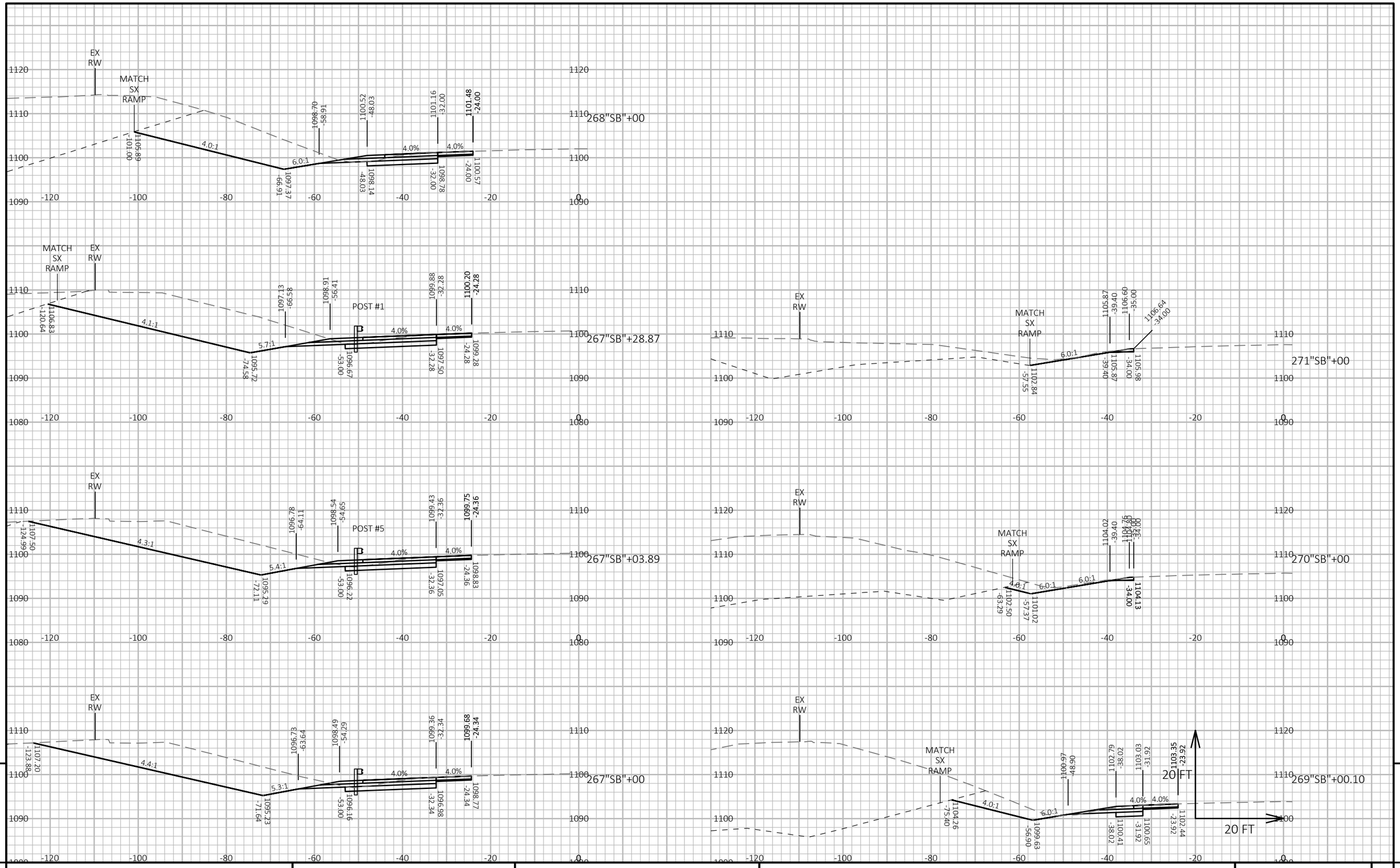
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 SB	SHEET 563	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 SB_SB OFF_INFIELD.DWG
LAYOUT NAME - 2-IH 39 SB_Infield SB OFF

PLOT DATE : 2/9/2022 1:30 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

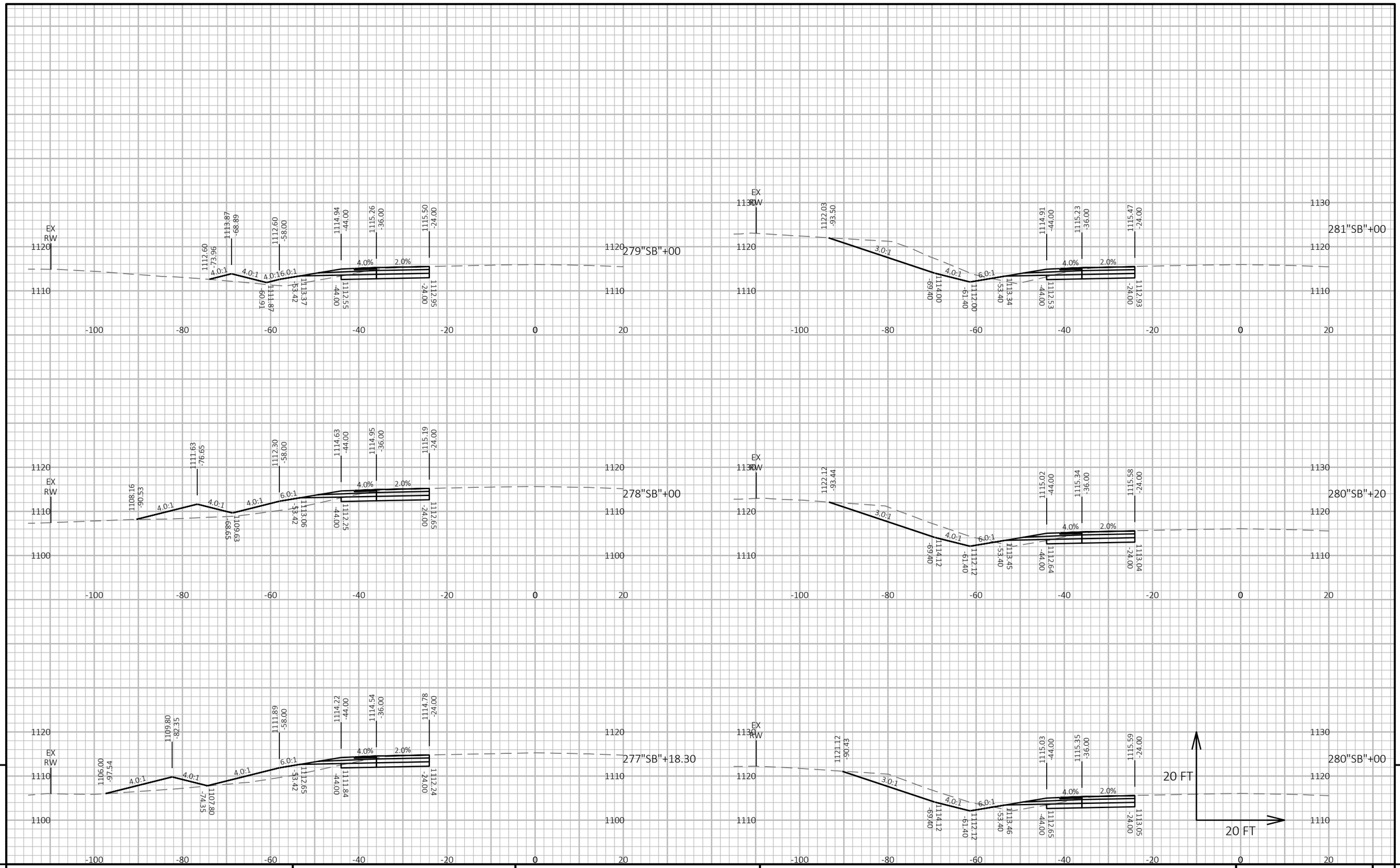
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 SB	SHEET 564	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 SB_SB OFF_INFIELD.DWG
LAYOUT NAME - 3-IH 39 SB_Infield SB OFF

PLOT DATE : 2/9/2022 1:30 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

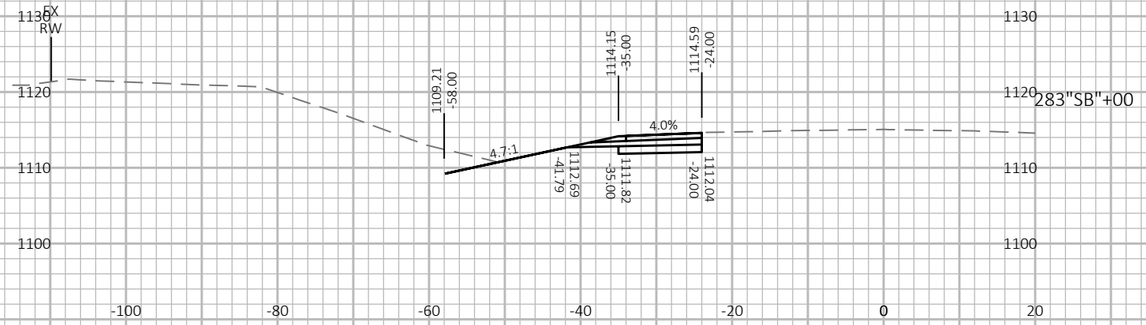
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 SB	SHEET 565	E

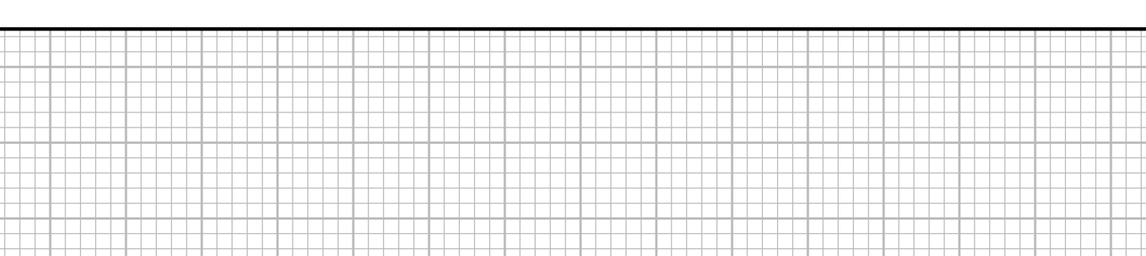
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 SB_N OF SB OFF.DWG
LAYOUT NAME - 1-IH 39 SB_N of SB OFF

PLOT DATE : 1/24/2022 12:25 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

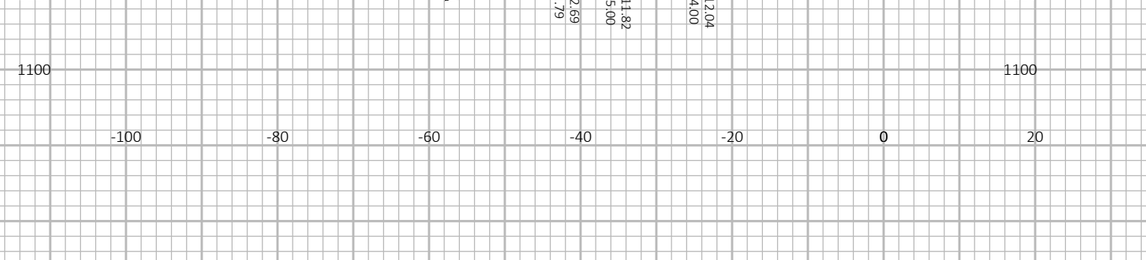
WISDOT/CADDS SHEET 49



283"SB"+00



282"SB"+00



281"SB"+50



9

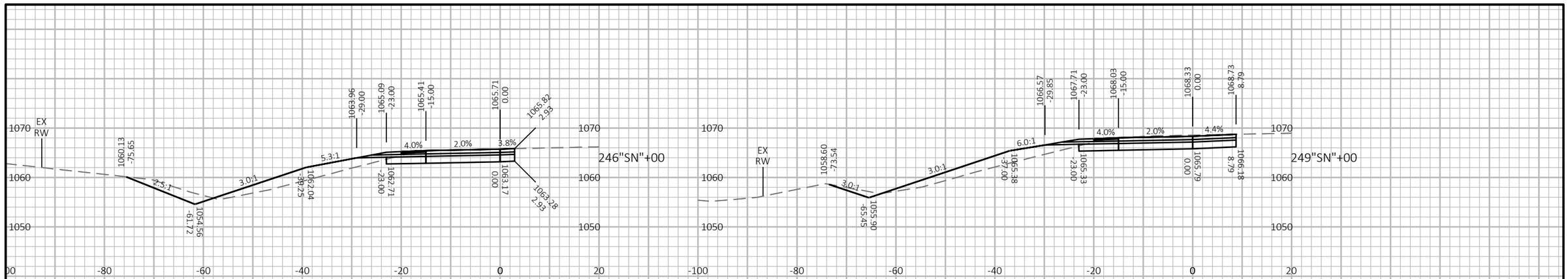
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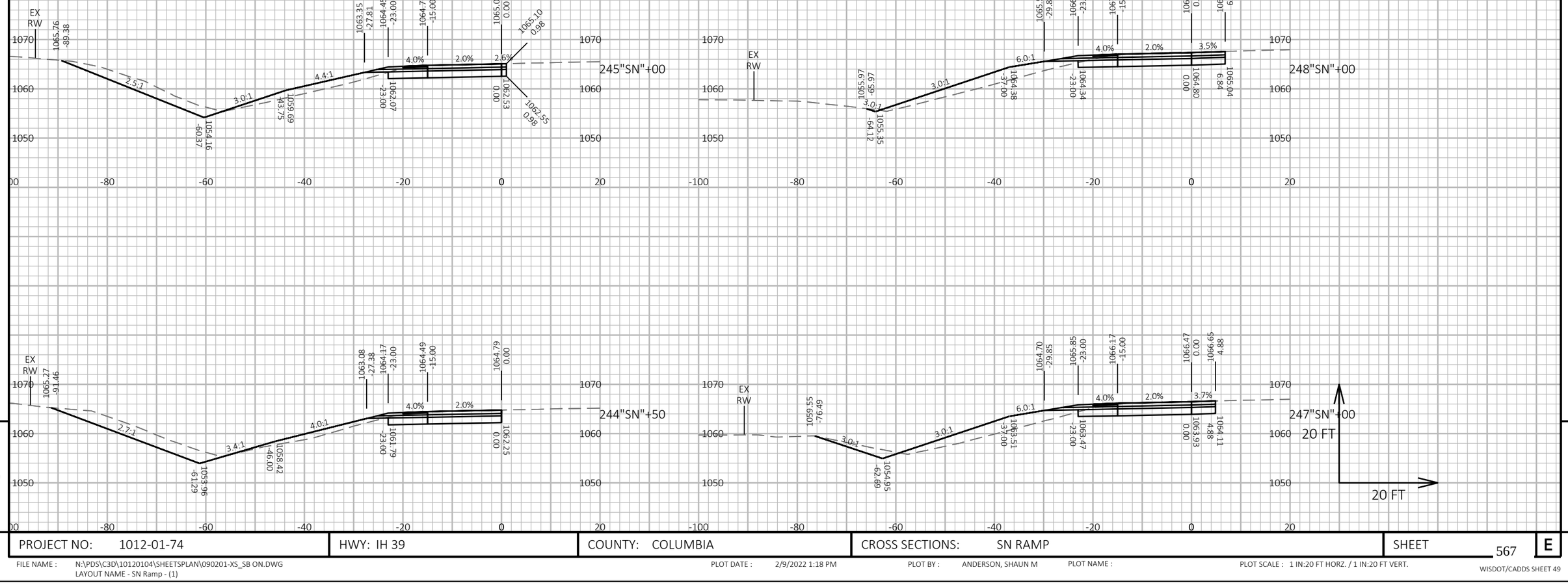
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 SB	SHEET 566	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 SB_N OF SB OFF.DWG
LAYOUT NAME - 2-IH 39 SB_N of SB OFF

PLOT DATE : 1/24/2022 12:25 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





9

9

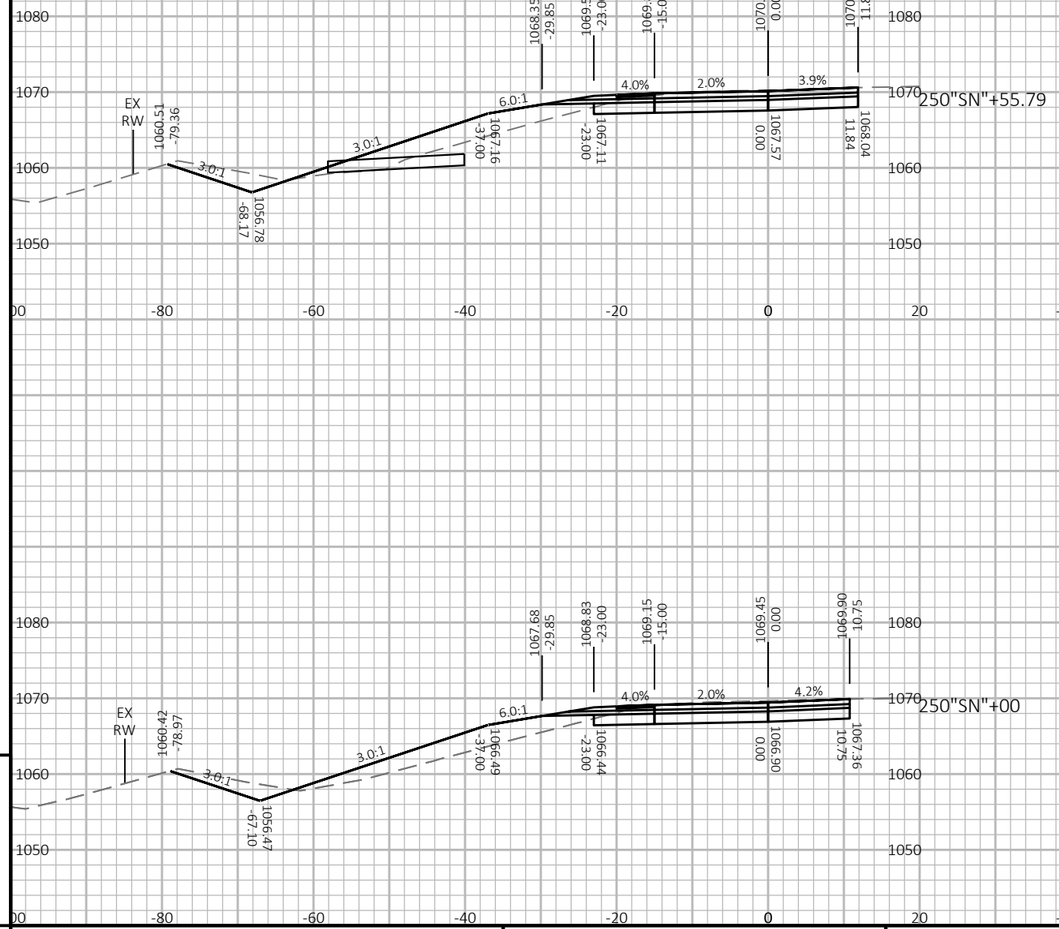
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SN RAMP	SHEET 567	E

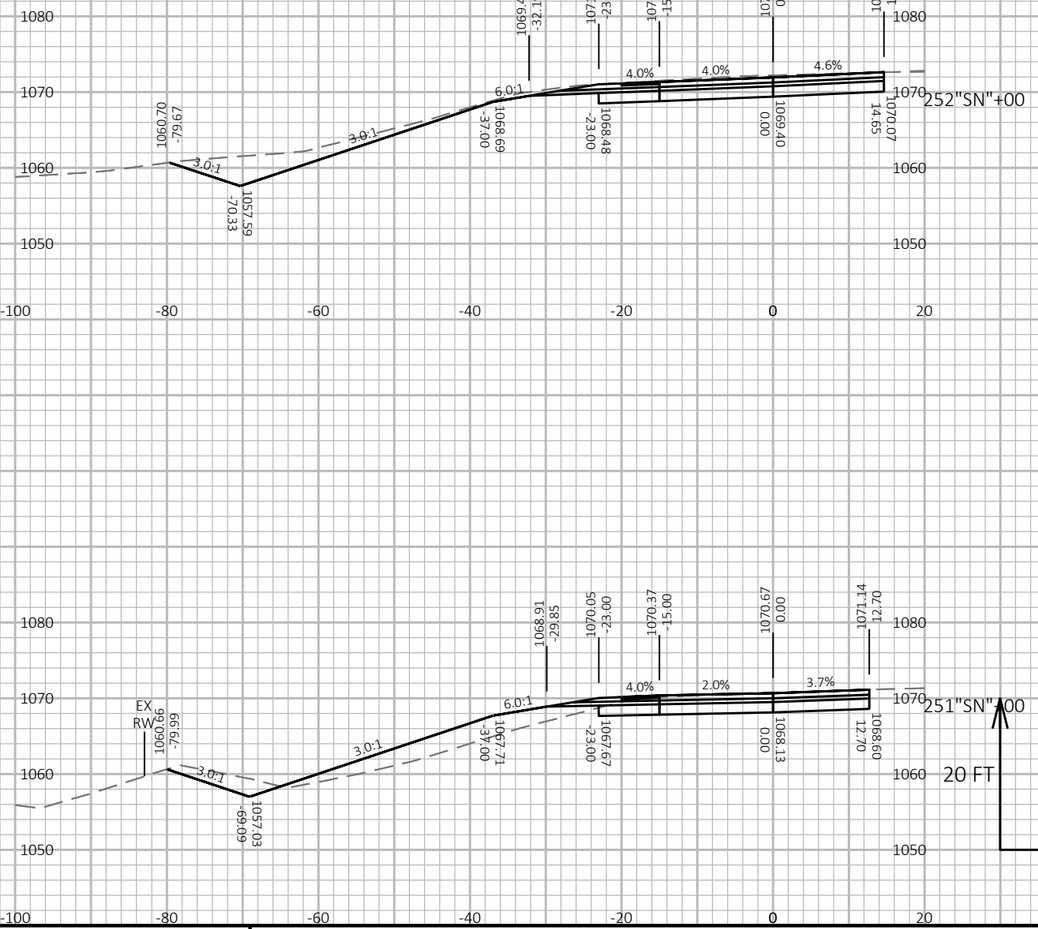
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_SB ON.DWG
LAYOUT NAME - SN Ramp - (1)

PLOT DATE : 2/9/2022 1:18 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

CULVERT PIPE REINFORCED
CONCRETE CLASS III 18-INCH
TOTAL LENGTH = 18 FEET
PIPE LENGTH = 12 FEET
APRON ENDWALL LENGTH= 6 FEET
INLET = 1060.33
OUTLET = 1059.38
SLOPE = 5.3%





9

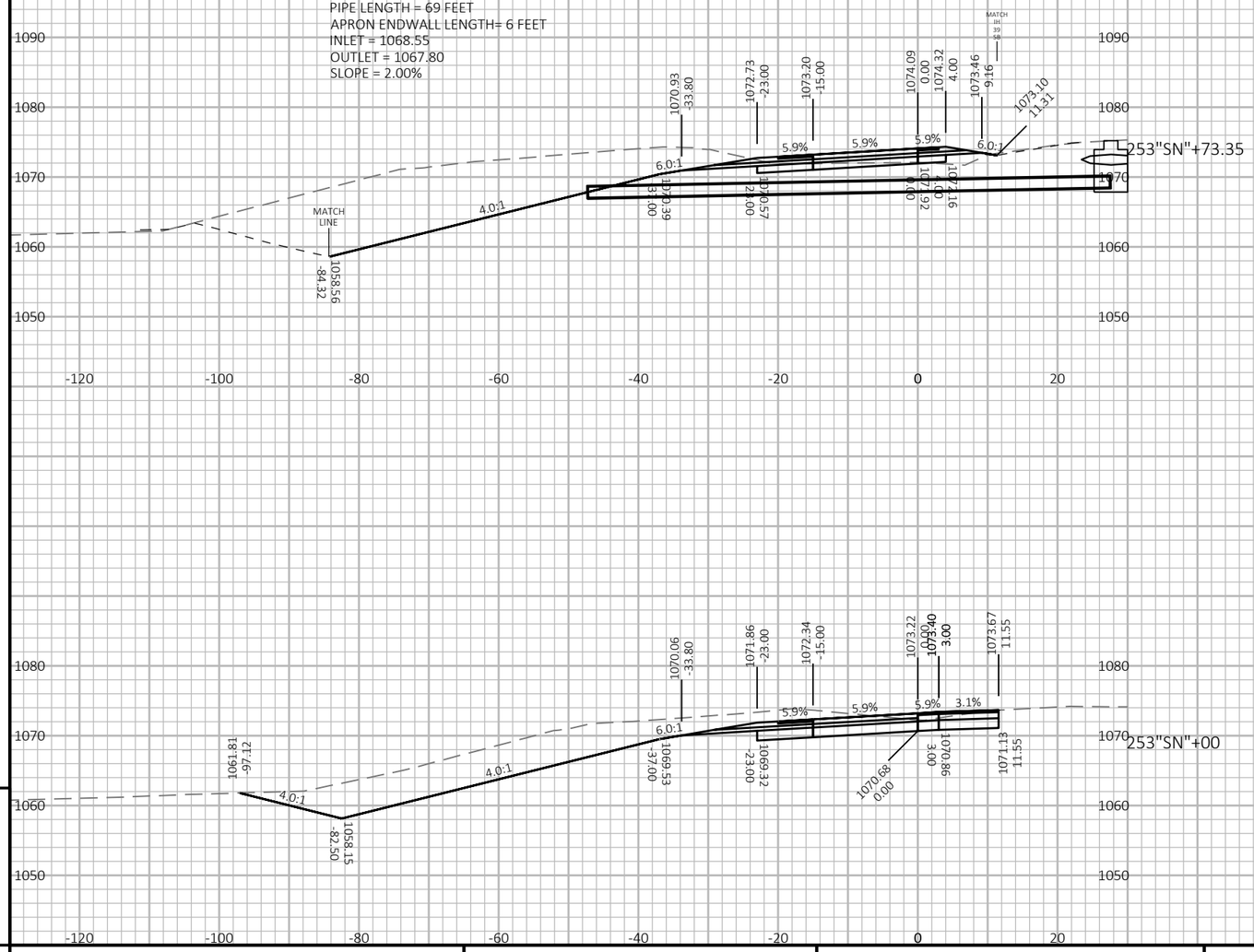
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SN RAMP	SHEET 568	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_SB ON.DWG
LAYOUT NAME - SN Ramp - (2)

PLOT DATE : 2/9/2022 1:18 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

CULVERT PIPE REINFORCED CONCRETE CLASS III
18-INCH
TOTAL LENGTH = 75 FEET
PIPE LENGTH = 69 FEET
APRON ENDWALL LENGTH= 6 FEET
INLET = 1068.55
OUTLET = 1067.80
SLOPE = 2.00%



9

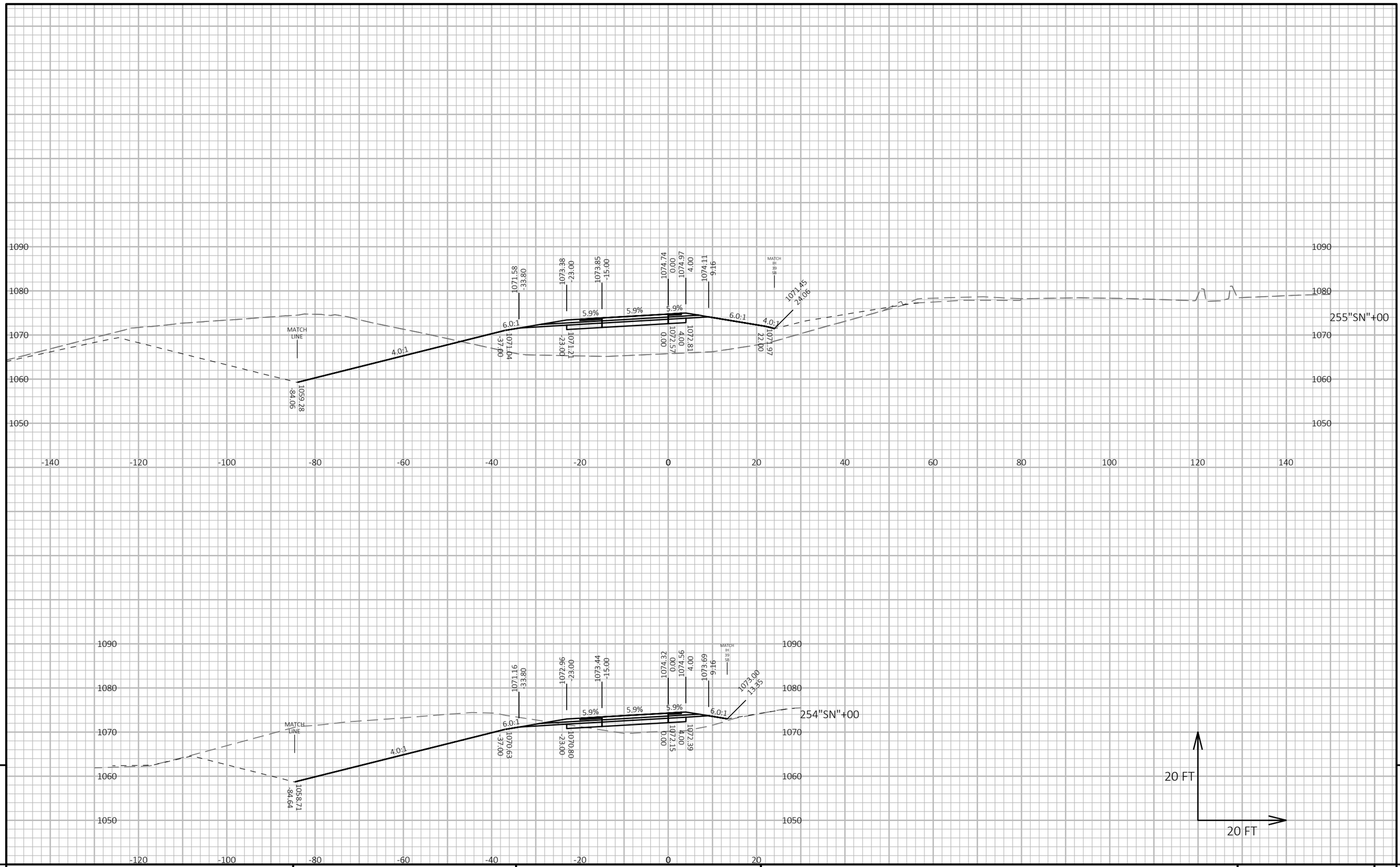
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SN RAMP	SHEET 569	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_SB ON.DWG
LAYOUT NAME - SN Ramp - (3)

PLOT DATE : 2/9/2022 1:18 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SN RAMP	SHEET 570	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_SB ON.DWG
LAYOUT NAME - SN Ramp - (4)

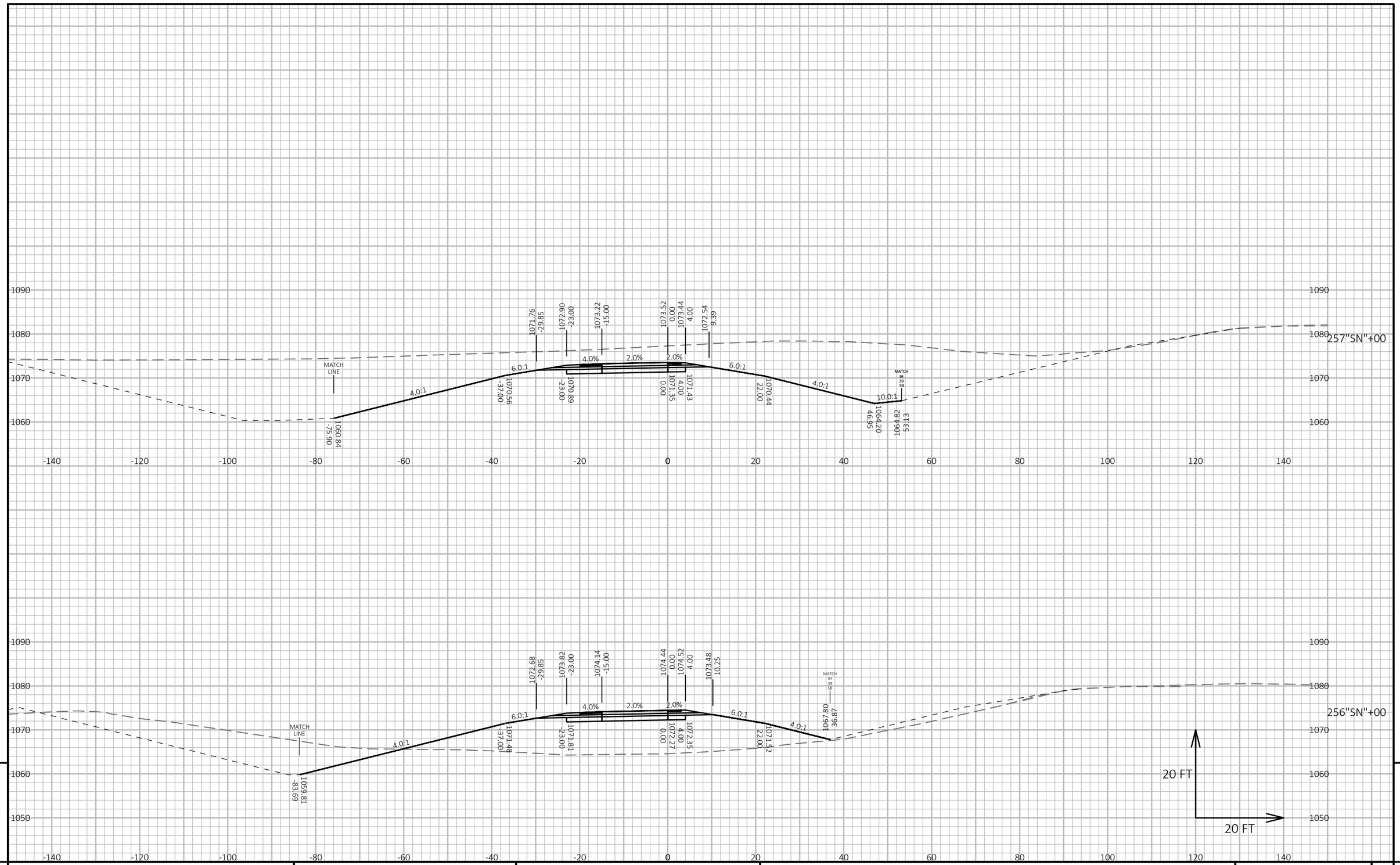
PLOT DATE : 2/9/2022 1:18 PM

PLOT BY : ANDERSON, SHAUN M

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SN RAMP	SHEET 571	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_SB ON.DWG
LAYOUT NAME - SN Ramp - (5)

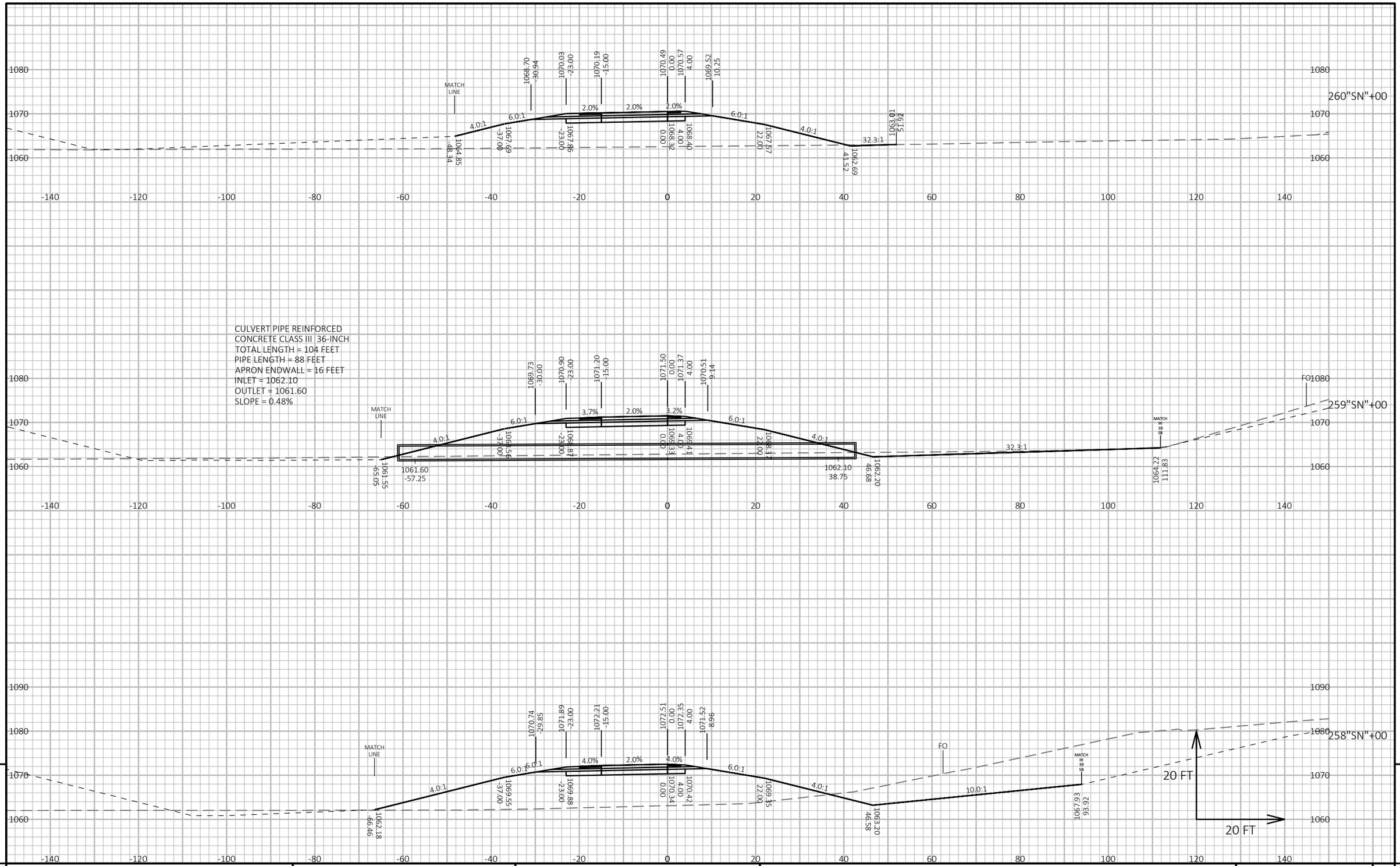
PLOT DATE : 2/9/2022 1:18 PM

PLOT BY : ANDERSON, SHAUN M

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SN RAMP	SHEET 572	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_SB ON.DWG
LAYOUT NAME - 6 - SN Ramp - (6)

PLOT DATE : 2/9/2022 1:19 PM

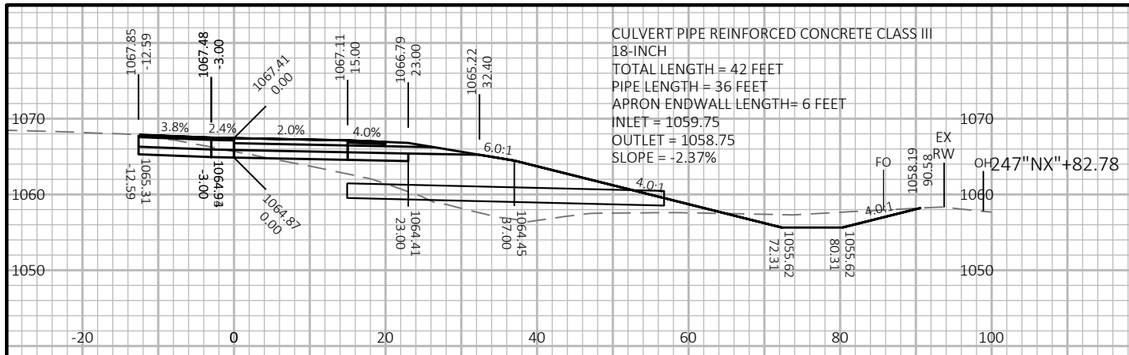
PLOT BY : ANDERSON, SHAUN M

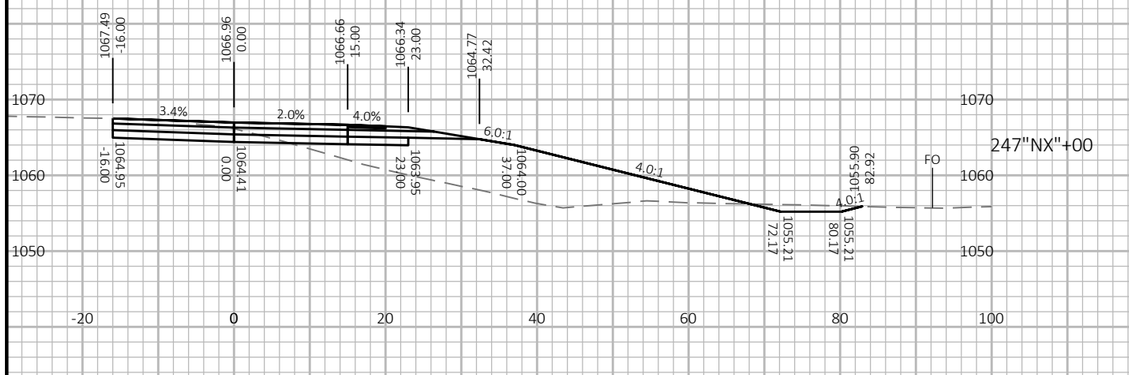
PLOT NAME :

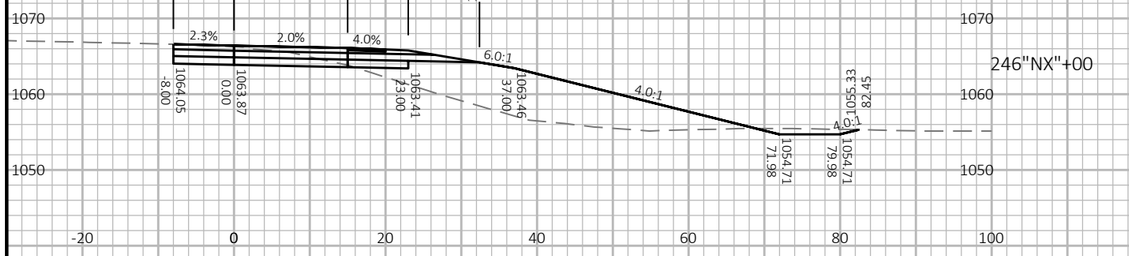
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

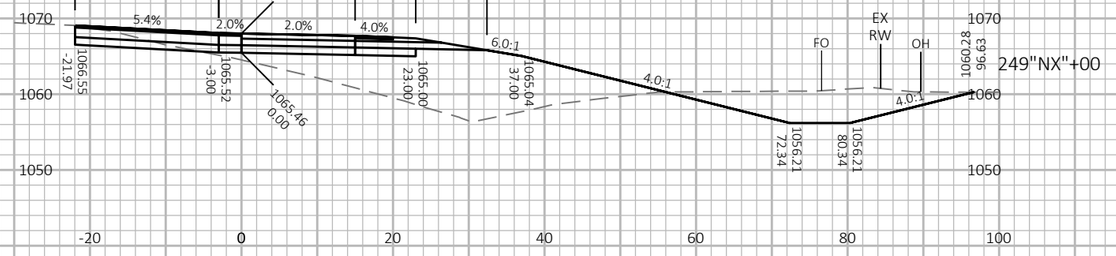
WISDOT/CADDS SHEET 49

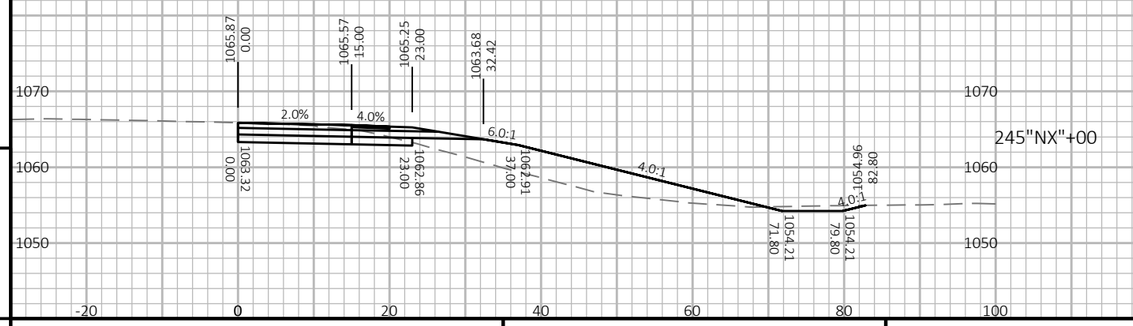
CULVERT PIPE REINFORCED CONCRETE CLASS III
18-INCH
TOTAL LENGTH = 42 FEET
PIPE LENGTH = 36 FEET
APRON ENDWALL LENGTH= 6 FEET
INLET = 1059.75
OUTLET = 1058.75
SLOPE = -2.37%

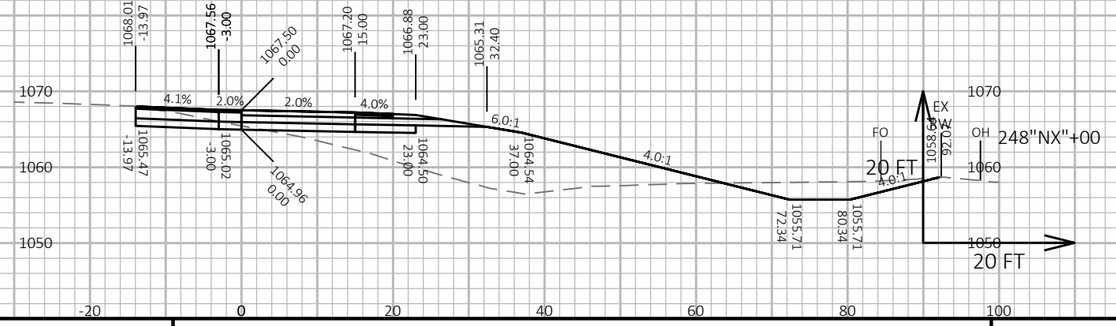












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9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NX RAMP	SHEET 573	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_NB OFF.DWG
LAYOUT NAME - 1-NX RAMP

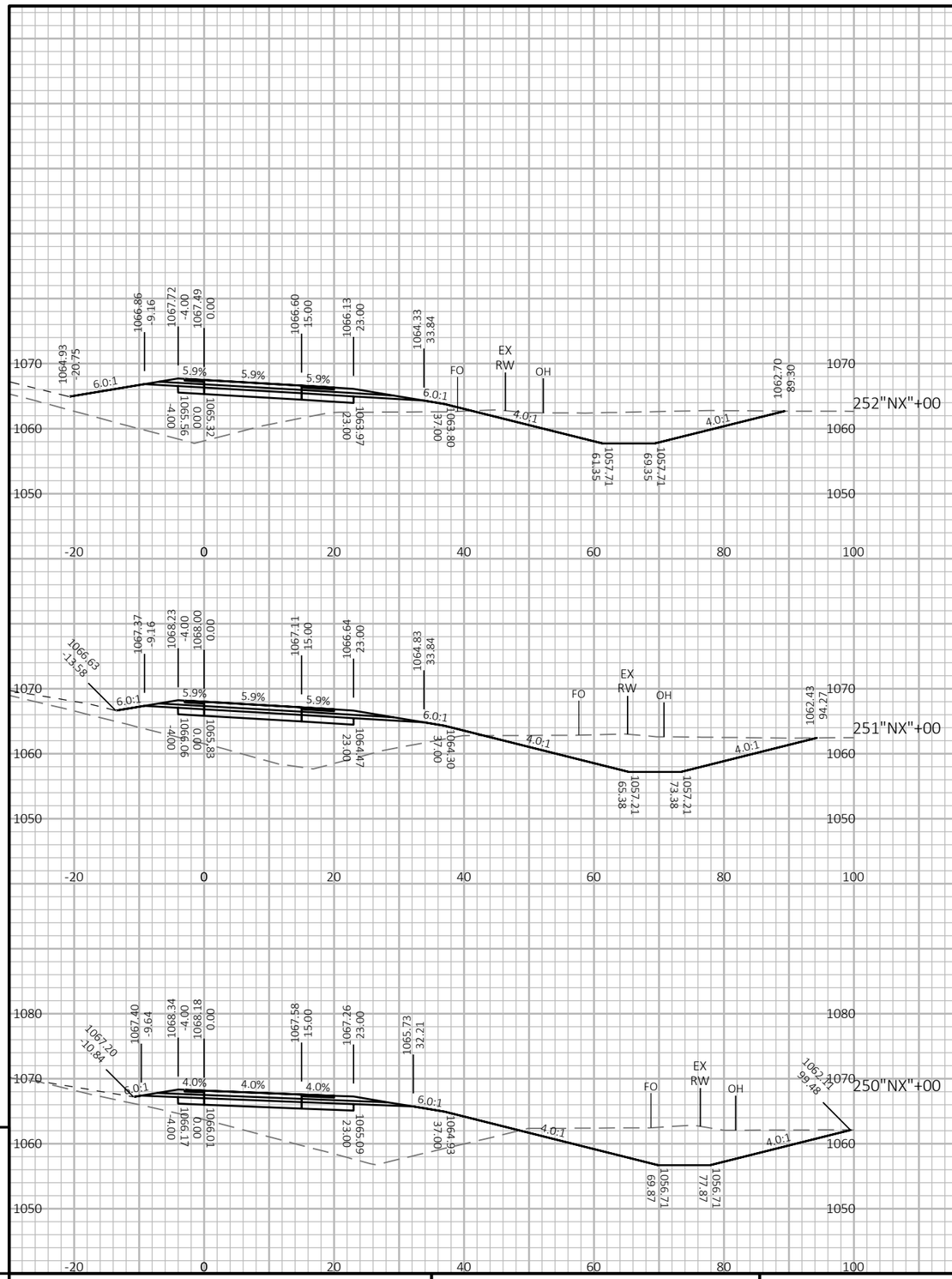
PLOT DATE : 2/9/2022 2:10 PM

PLOT BY : ANDERSON, SHAUN M

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

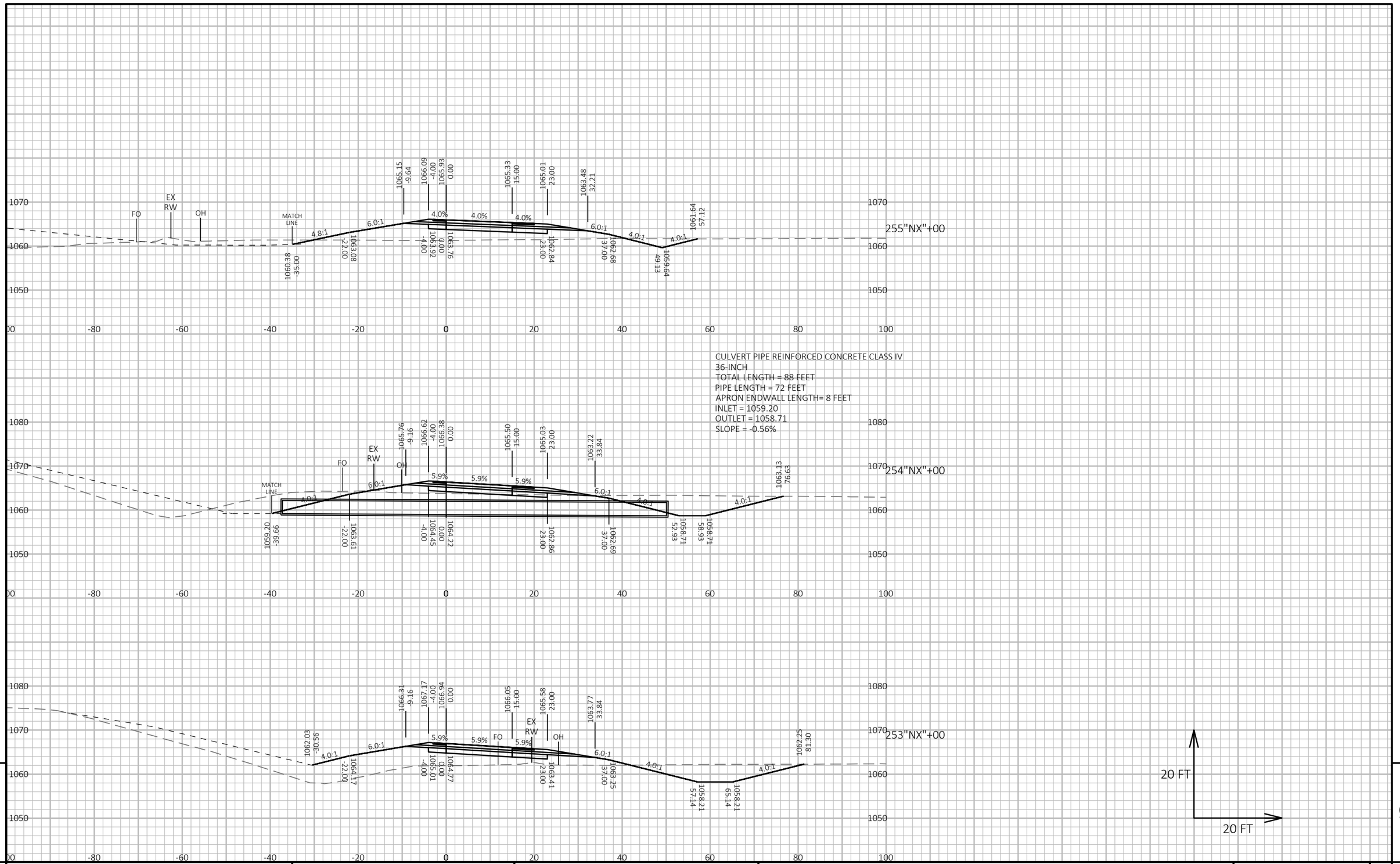
9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NX RAMP	SHEET 574	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_NB OFF.DWG
LAYOUT NAME - 2-NX RAMP

PLOT DATE : 2/9/2022 2:10 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



CULVERT PIPE REINFORCED CONCRETE CLASS IV
36-INCH
TOTAL LENGTH = 88 FEET
PIPE LENGTH = 72 FEET
APRON ENDWALL LENGTH= 8 FEET
INLET = 1059.20
OUTLET = 1058.71
SLOPE = -0.56%

9

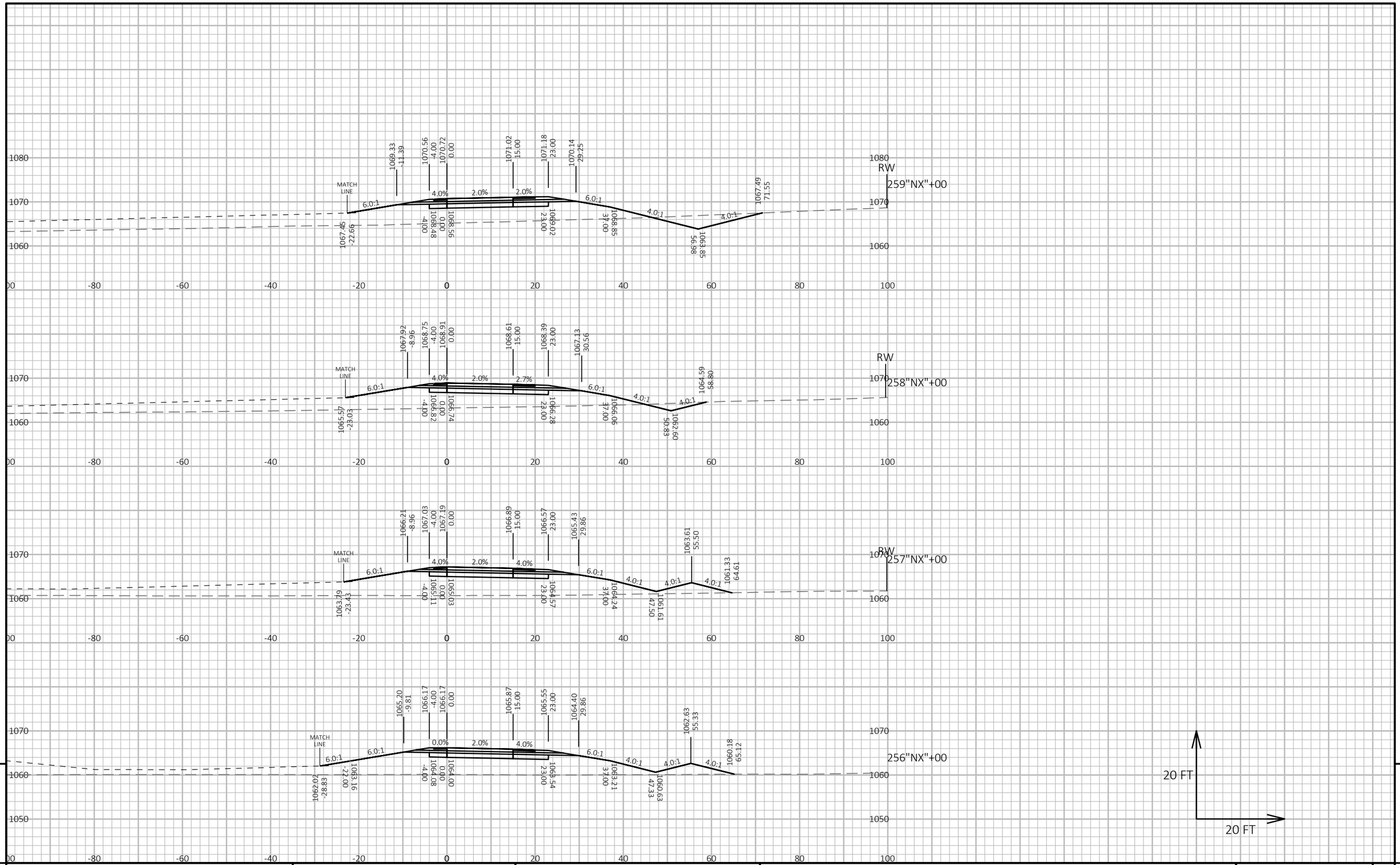
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NX RAMP	SHEET 575	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_NB OFF.DWG
LAYOUT NAME - 3-NX RAMP

PLOT DATE : 2/9/2022 2:10 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

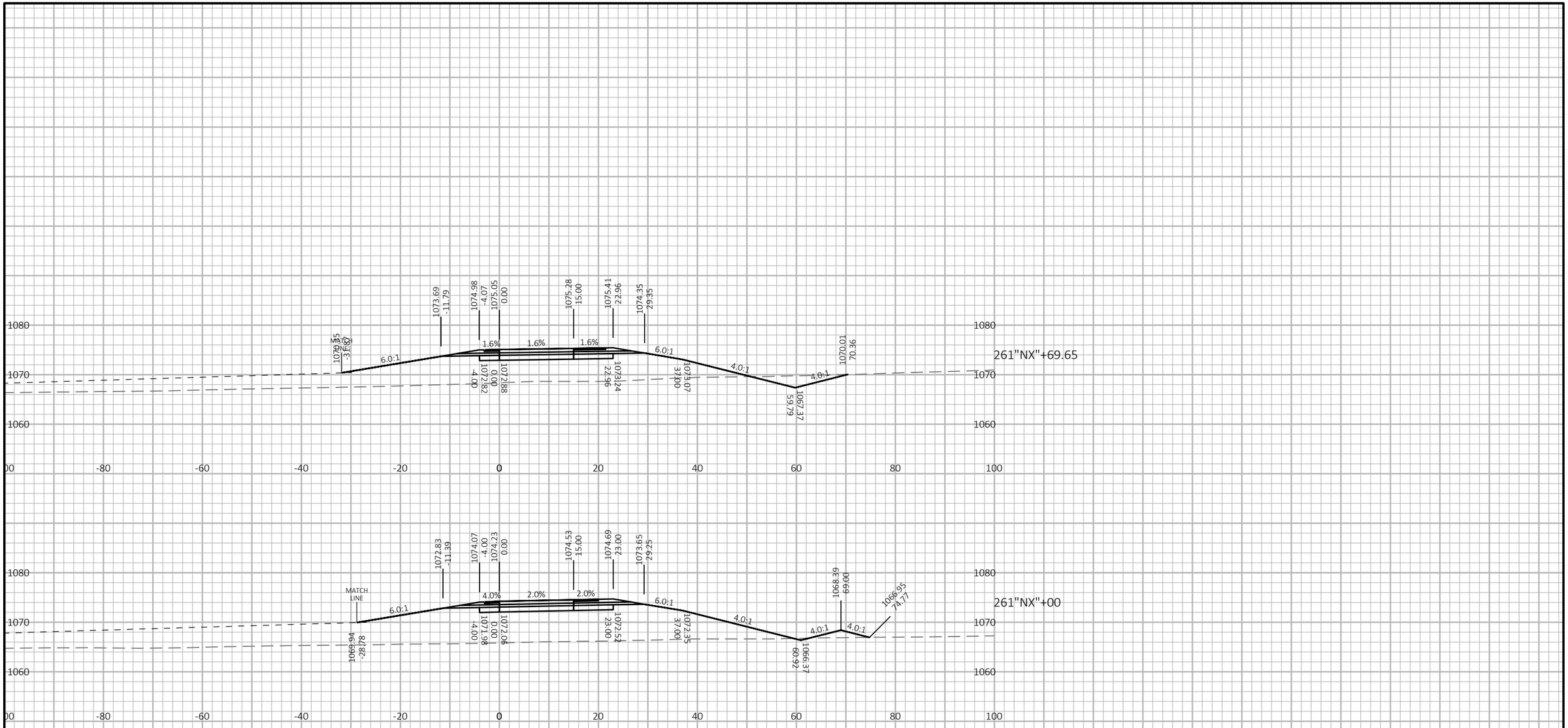
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NX RAMP	SHEET 576	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_NB OFF.DWG
LAYOUT NAME - 4-NX RAMP

PLOT DATE : 2/9/2022 2:10 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NX RAMP	SHEET 577	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_NB OFF.DWG
LAYOUT NAME - 5-NX RAMP

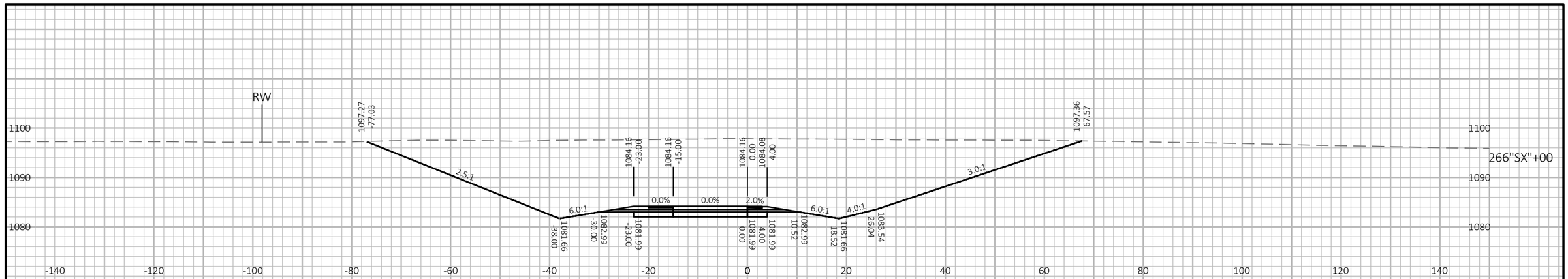
PLOT DATE : 2/9/2022 2:10 PM

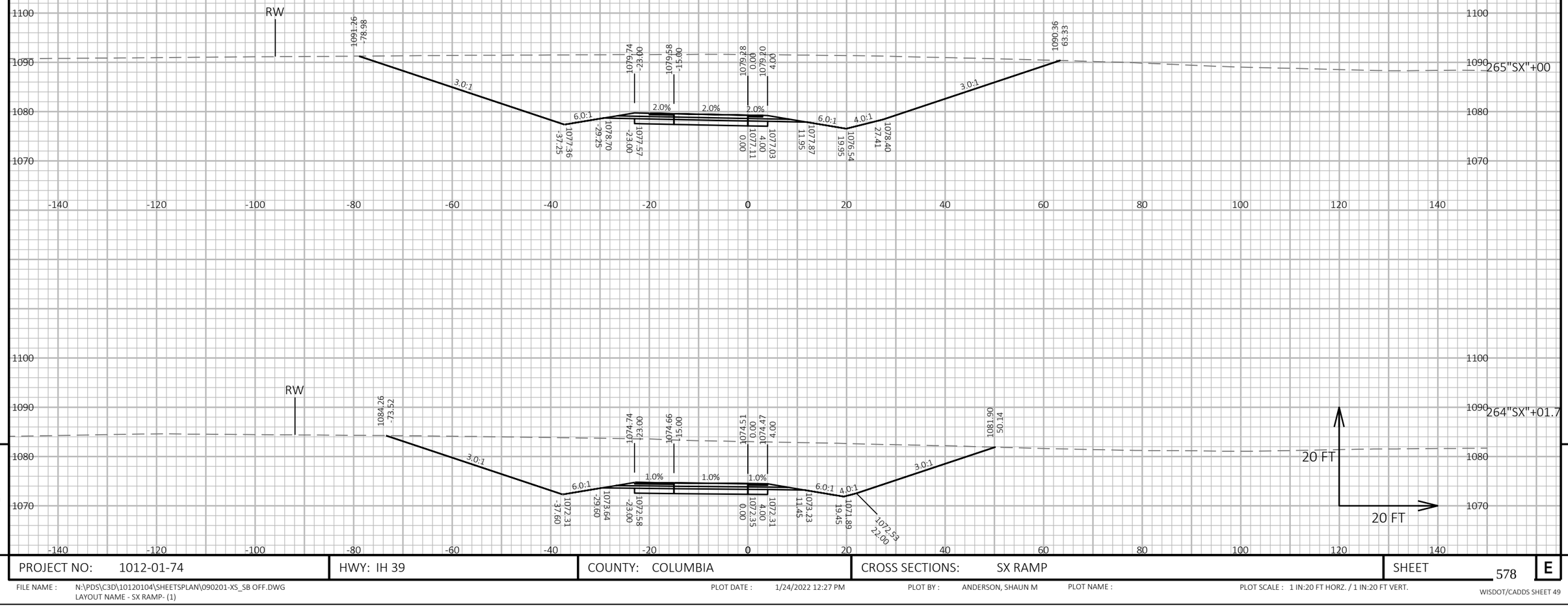
PLOT BY : ANDERSON, SHAUN M

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





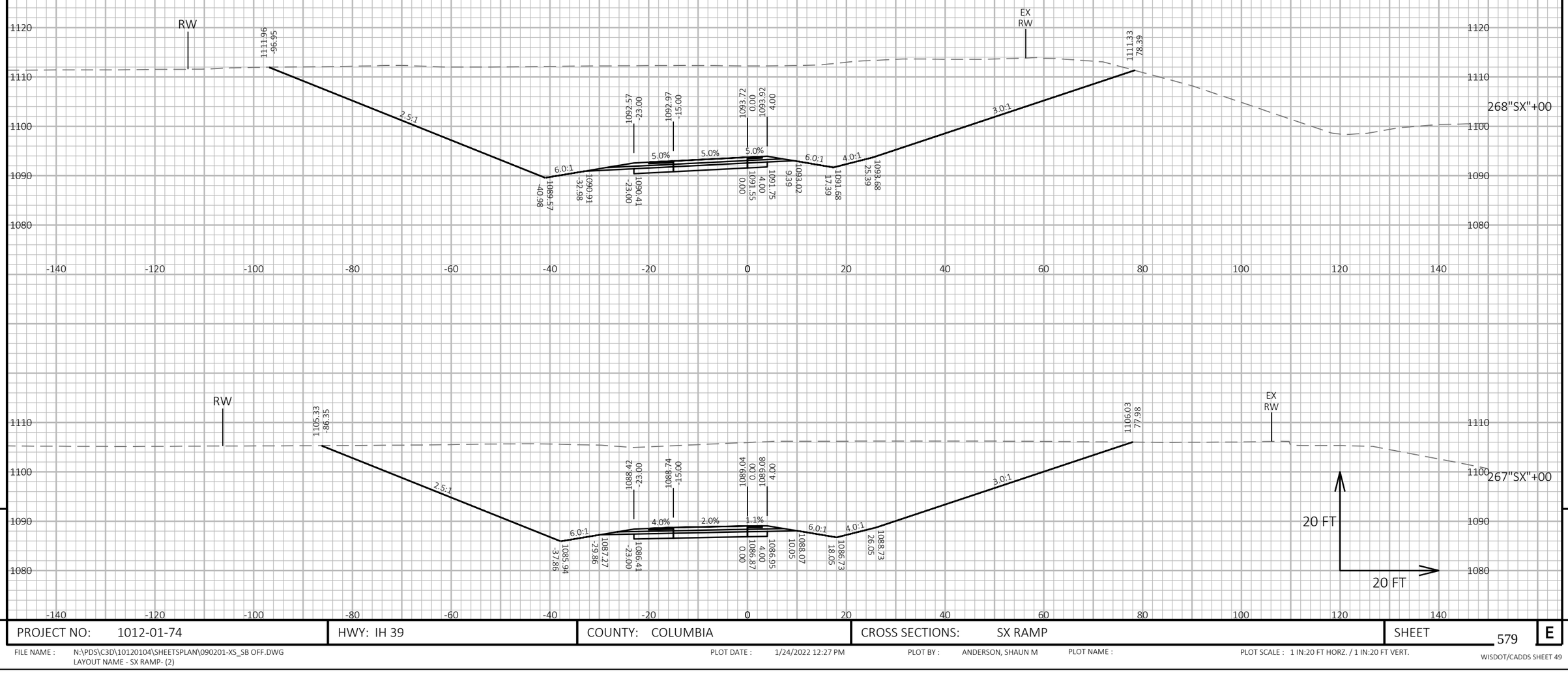
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9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SX RAMP	SHEET 578	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_SB OFF.DWG
LAYOUT NAME - SX RAMP- (1)

PLOT DATE : 1/24/2022 12:27 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

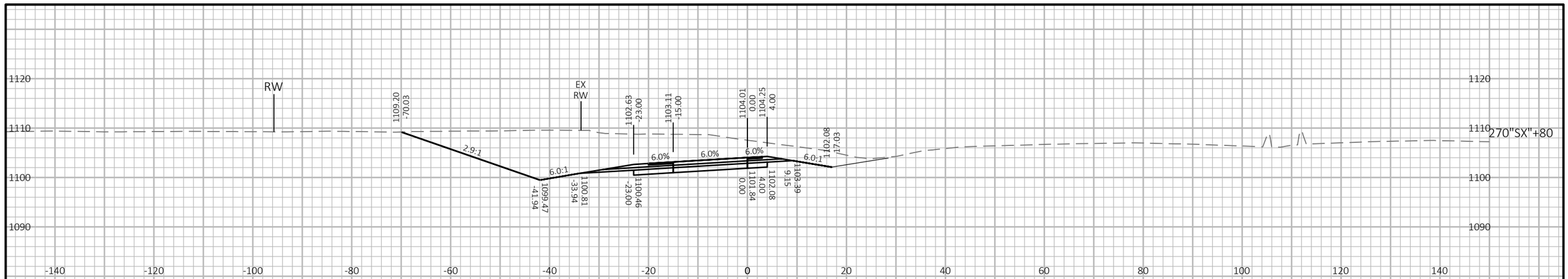
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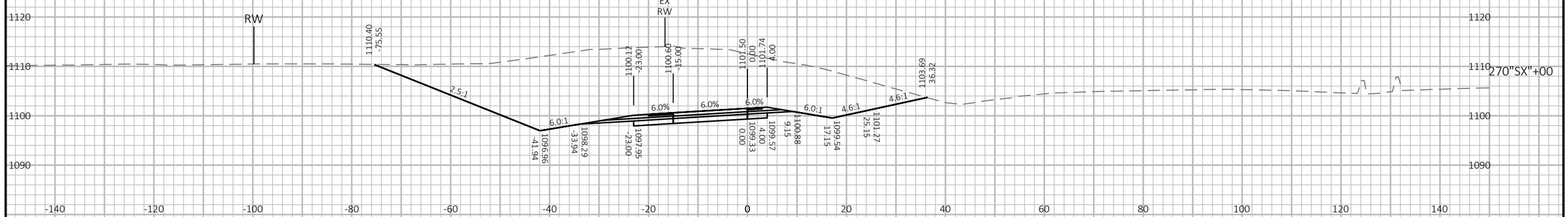
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SX RAMP	SHEET 579	E

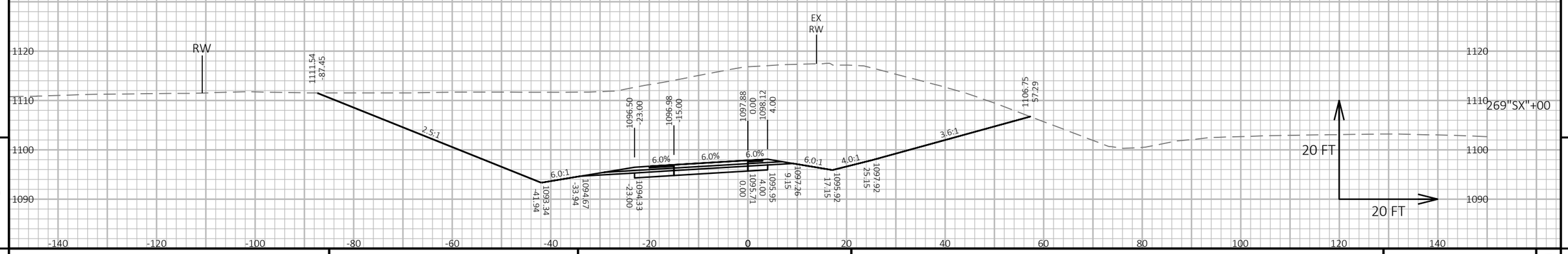
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_SB OFF.DWG
LAYOUT NAME - SX RAMP- (2)

PLOT DATE : 1/24/2022 12:27 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49







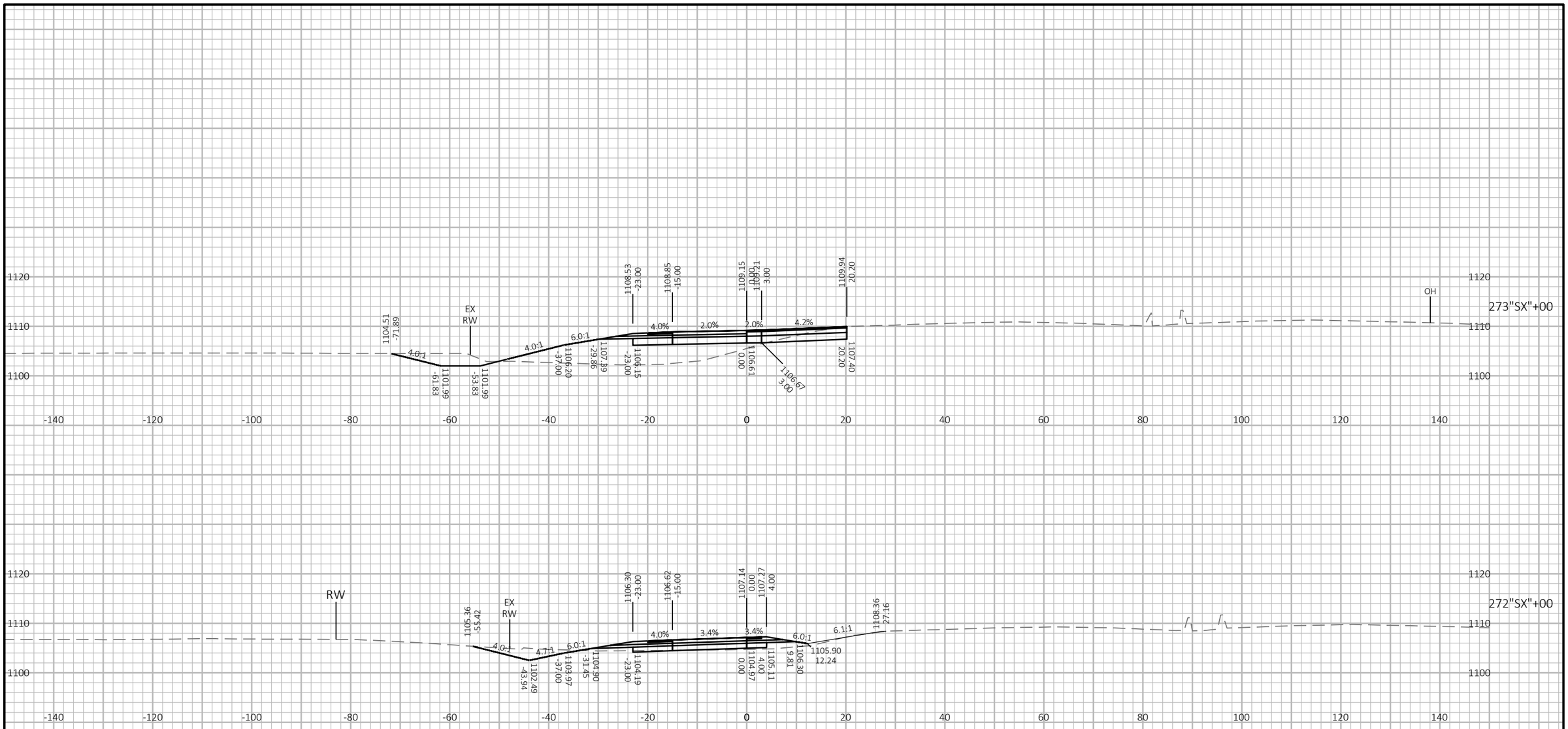
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SX RAMP	SHEET 580	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_SB OFF.DWG
LAYOUT NAME - SX RAMP- (3)

PLOT DATE : 1/24/2022 12:27 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



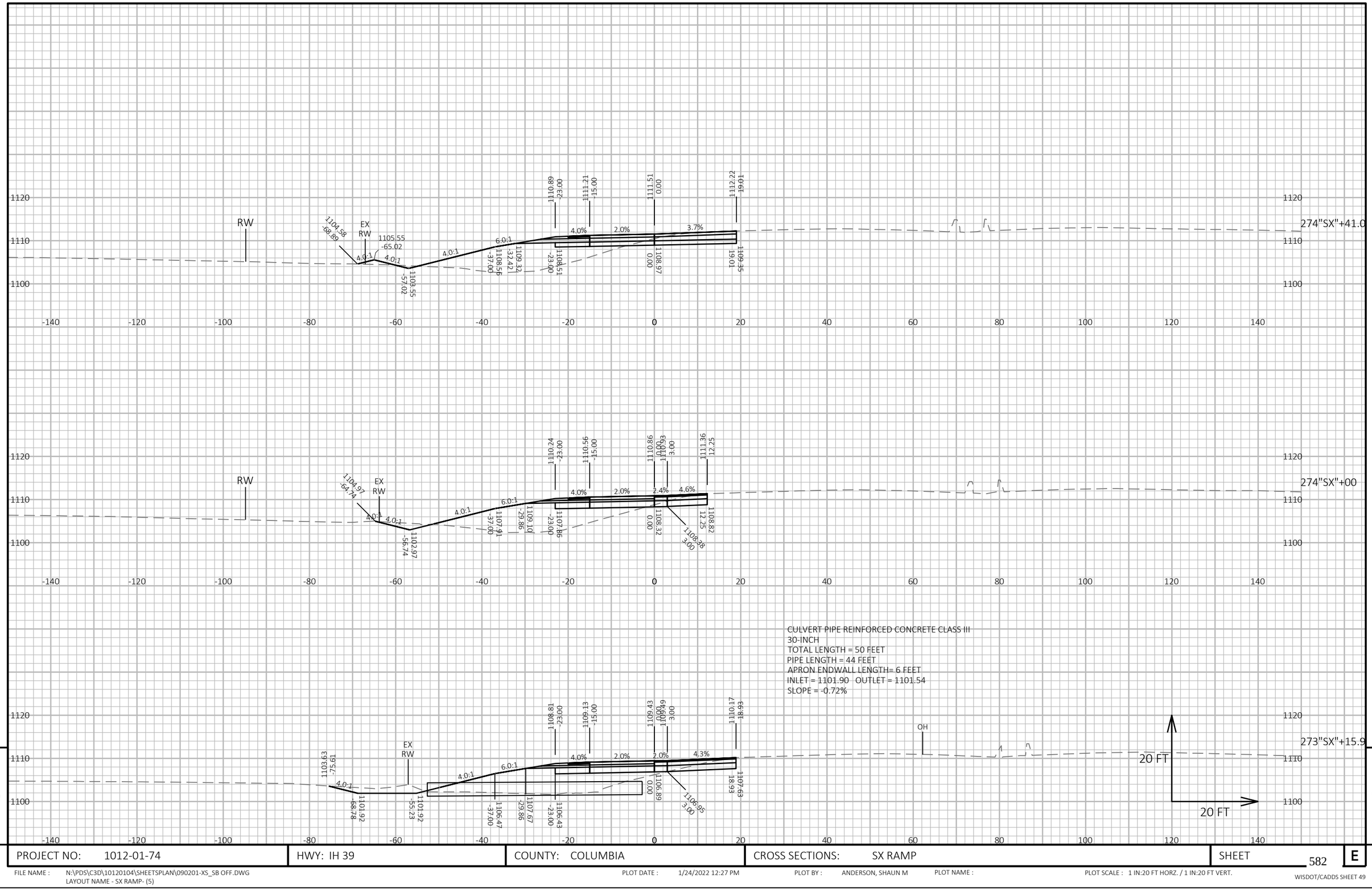
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SX RAMP	SHEET 581	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_SB OFF.DWG
LAYOUT NAME - SX RAMP- (4)

PLOT DATE : 1/24/2022 12:27 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



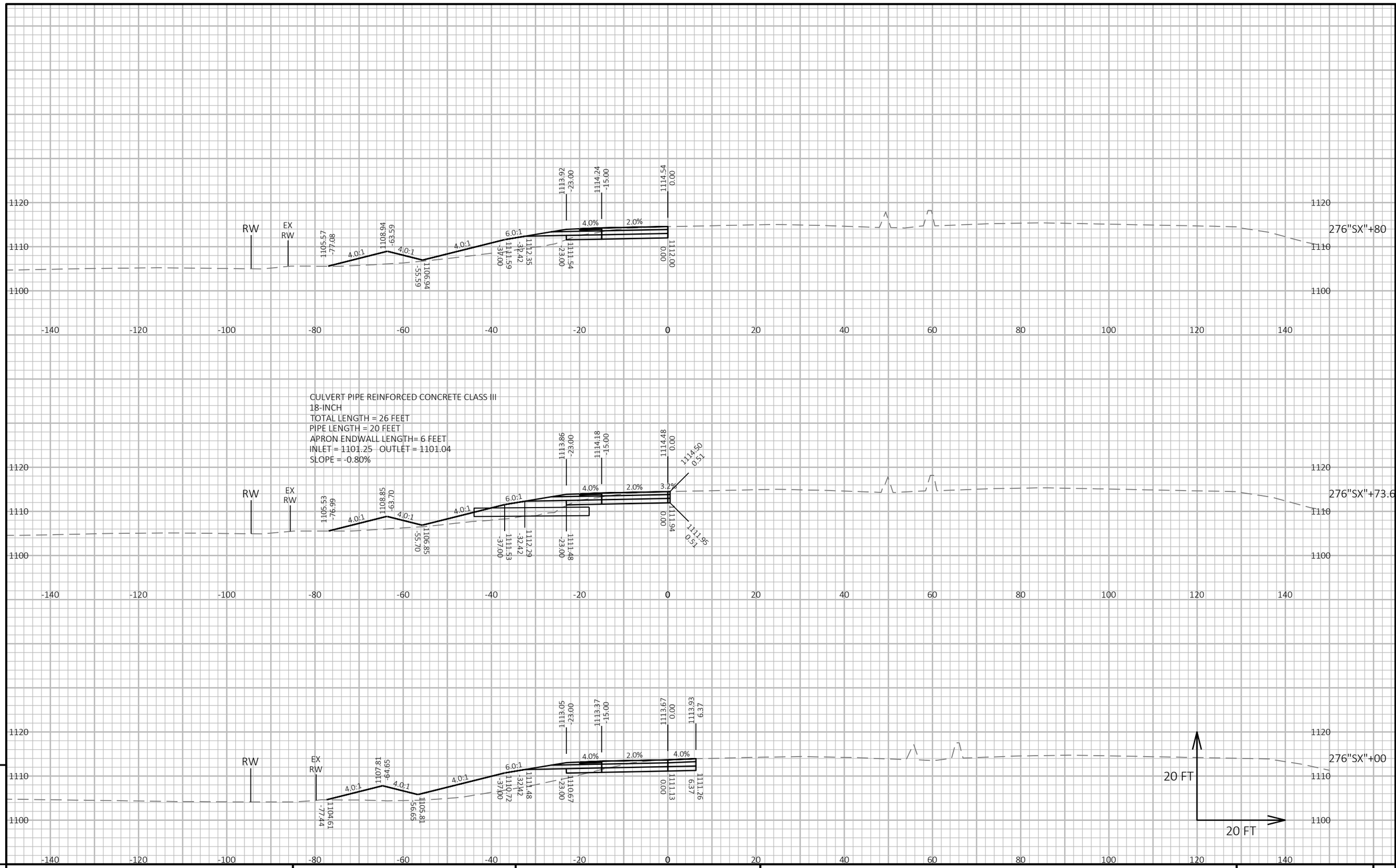
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9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SX RAMP	SHEET 582	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_SB OFF.DWG
LAYOUT NAME - SX RAMP- (5)

PLOT DATE : 1/24/2022 12:27 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



CULVERT PIPE REINFORCED CONCRETE CLASS III
18-INCH
TOTAL LENGTH = 26 FEET
PIPE LENGTH = 20 FEET
APRON ENDWALL LENGTH= 6 FEET
INLET = 1101.25 OUTLET = 1101.04
SLOPE = -0.80%

9

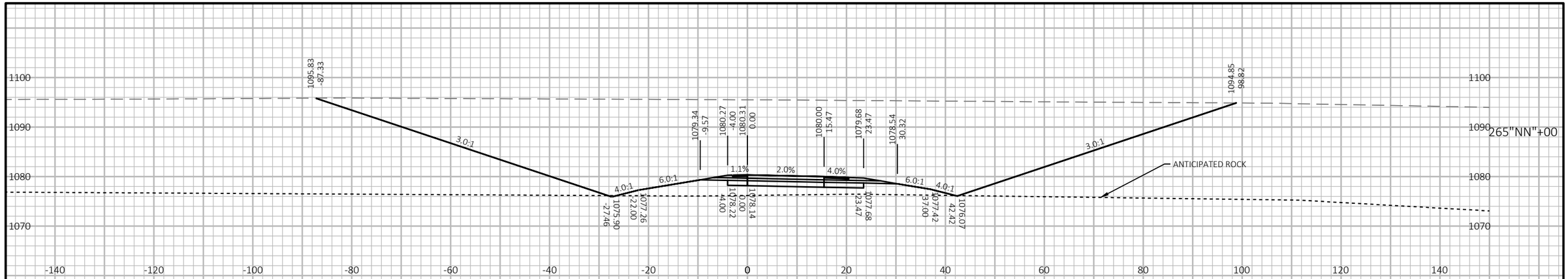
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SX RAMP	SHEET 583	E

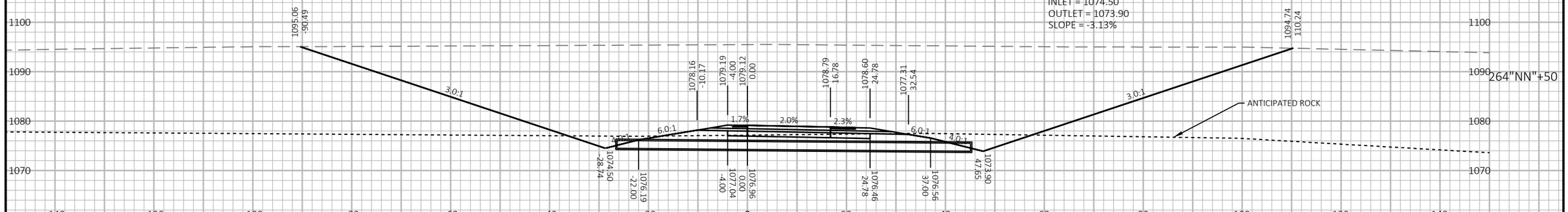
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_SB OFF.DWG
LAYOUT NAME - SX RAMP- (6)

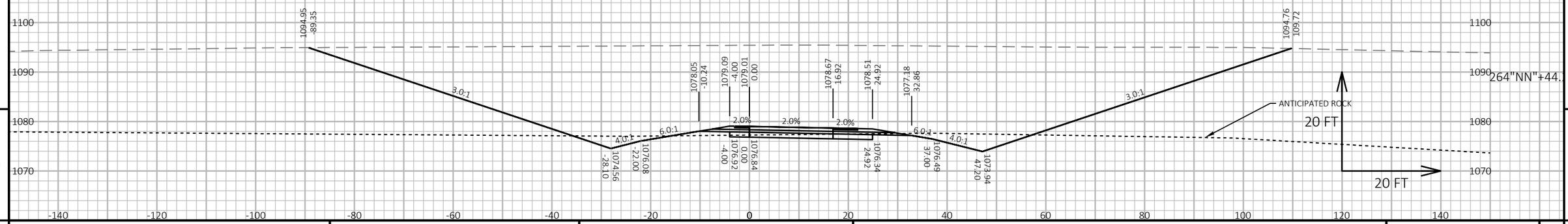
PLOT DATE : 1/24/2022 12:27 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



CULVERT PIPE REINFORCED CONCRETE
HORIZONTAL ELLIPTICAL CLASS IV 19X30-INCH
TOTAL LENGTH = 72 FEET
PIPE LENGTH = 60 FEET
APRON ENDWALL LENGTH= 6 FEET
INLET = 1074.50
OUTLET = 1073.90
SLOPE = -3.13%





9

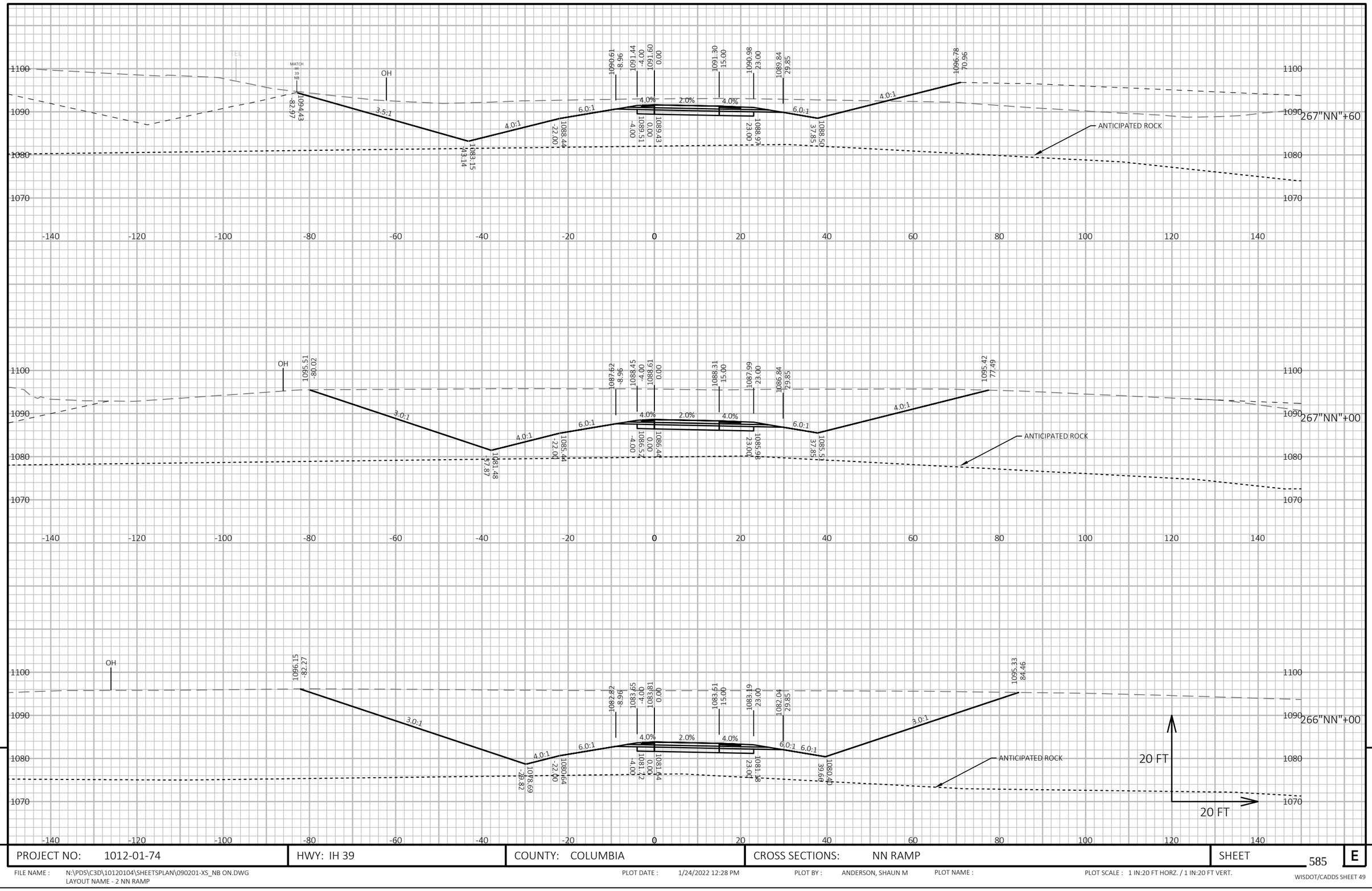
9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NN RAMP	SHEET 584	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_NB ON.DWG
LAYOUT NAME - 1 NN RAMP

PLOT DATE : 1/24/2022 12:28 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

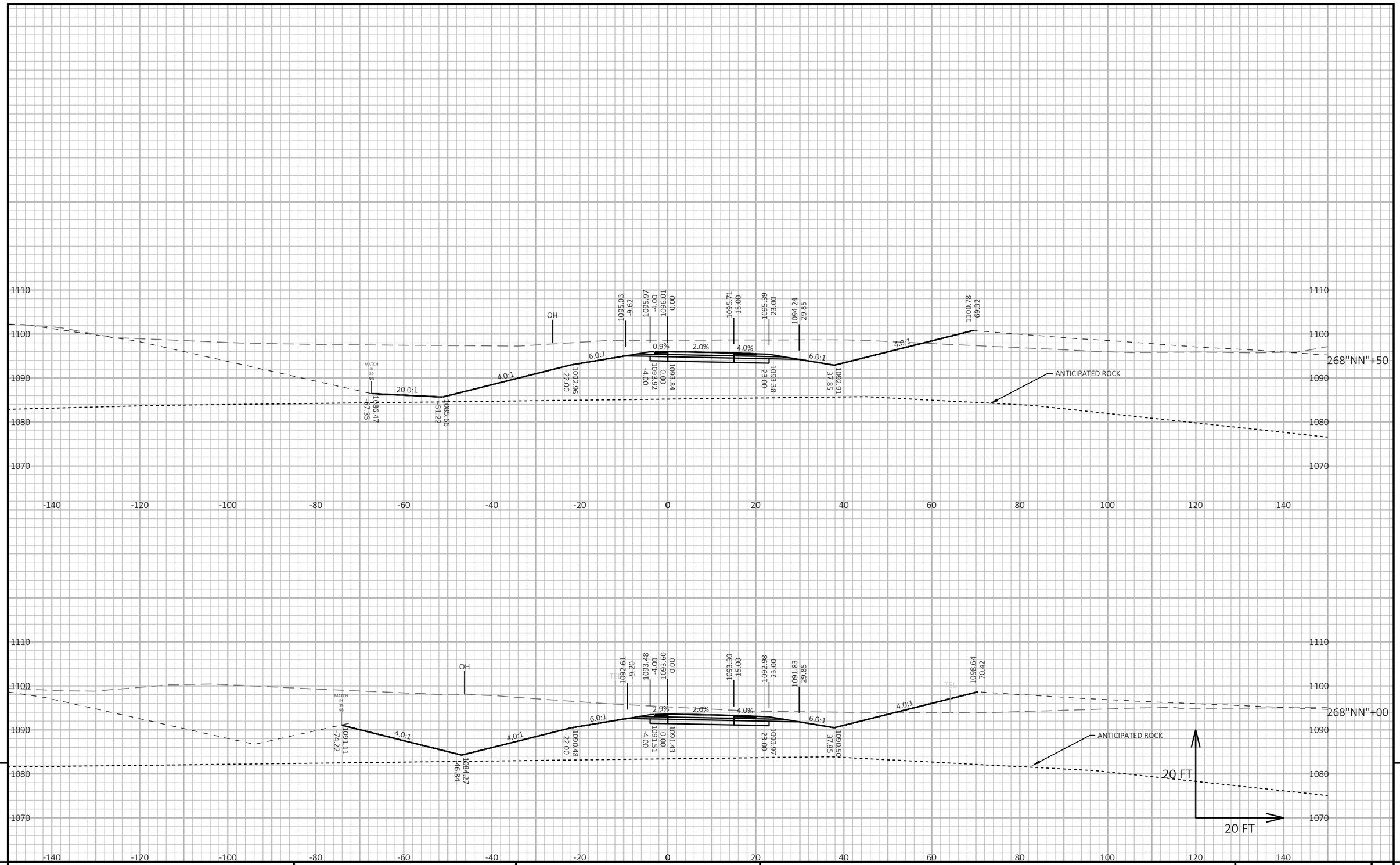
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NN RAMP	SHEET 585	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_NB ON.DWG
LAYOUT NAME - 2 NN RAMP

PLOT DATE : 1/24/2022 12:28 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



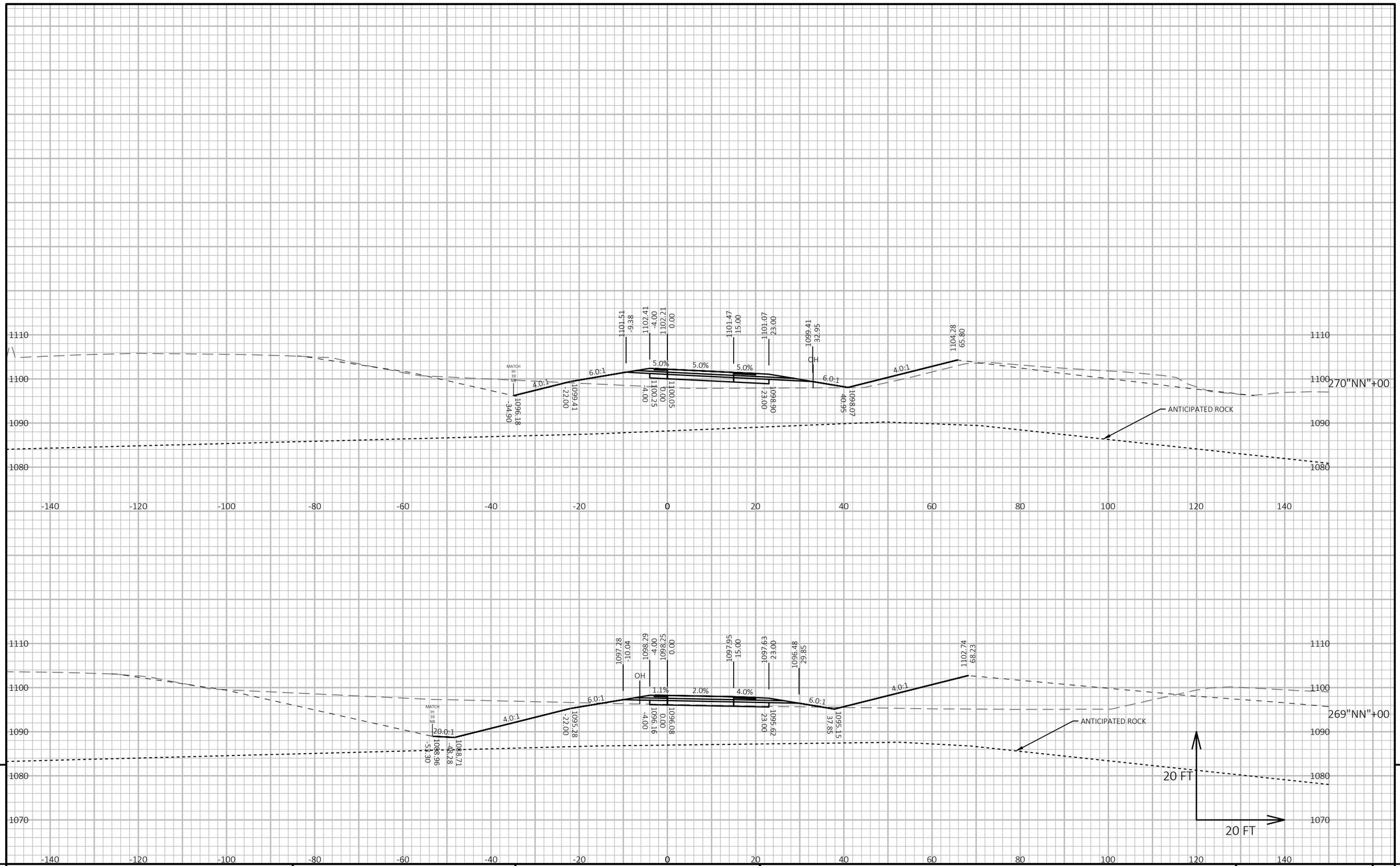
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NN RAMP	SHEET 586	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_NB ON.DWG
LAYOUT NAME - 3 NN RAMP

PLOT DATE : 1/24/2022 12:28 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

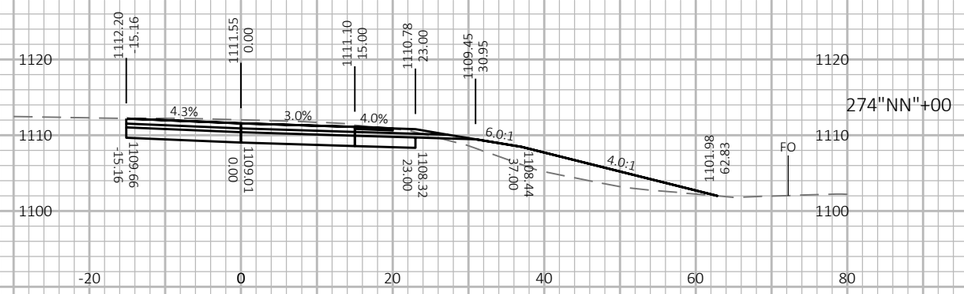


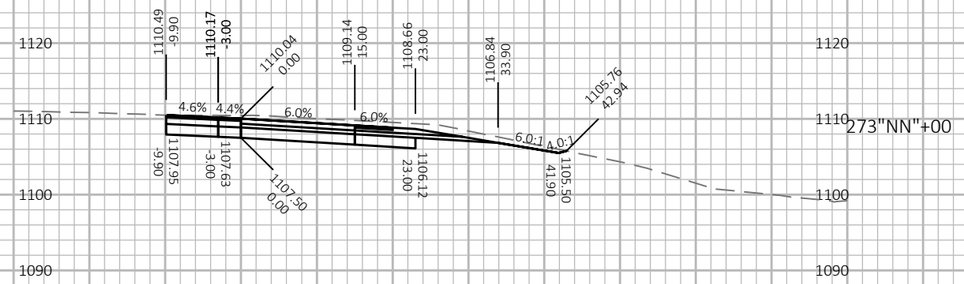
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NN RAMP	SHEET 587	E

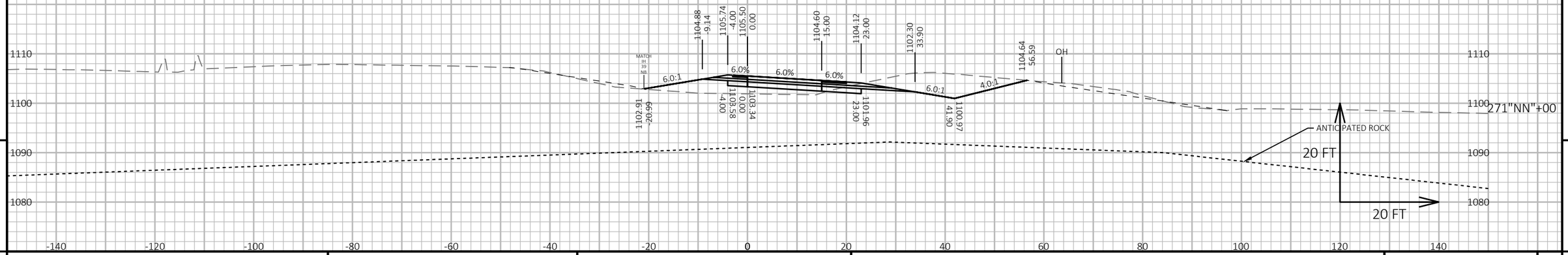
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_NB ON.DWG
LAYOUT NAME - 4 NN RAMP

PLOT DATE : 1/24/2022 12:28 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49







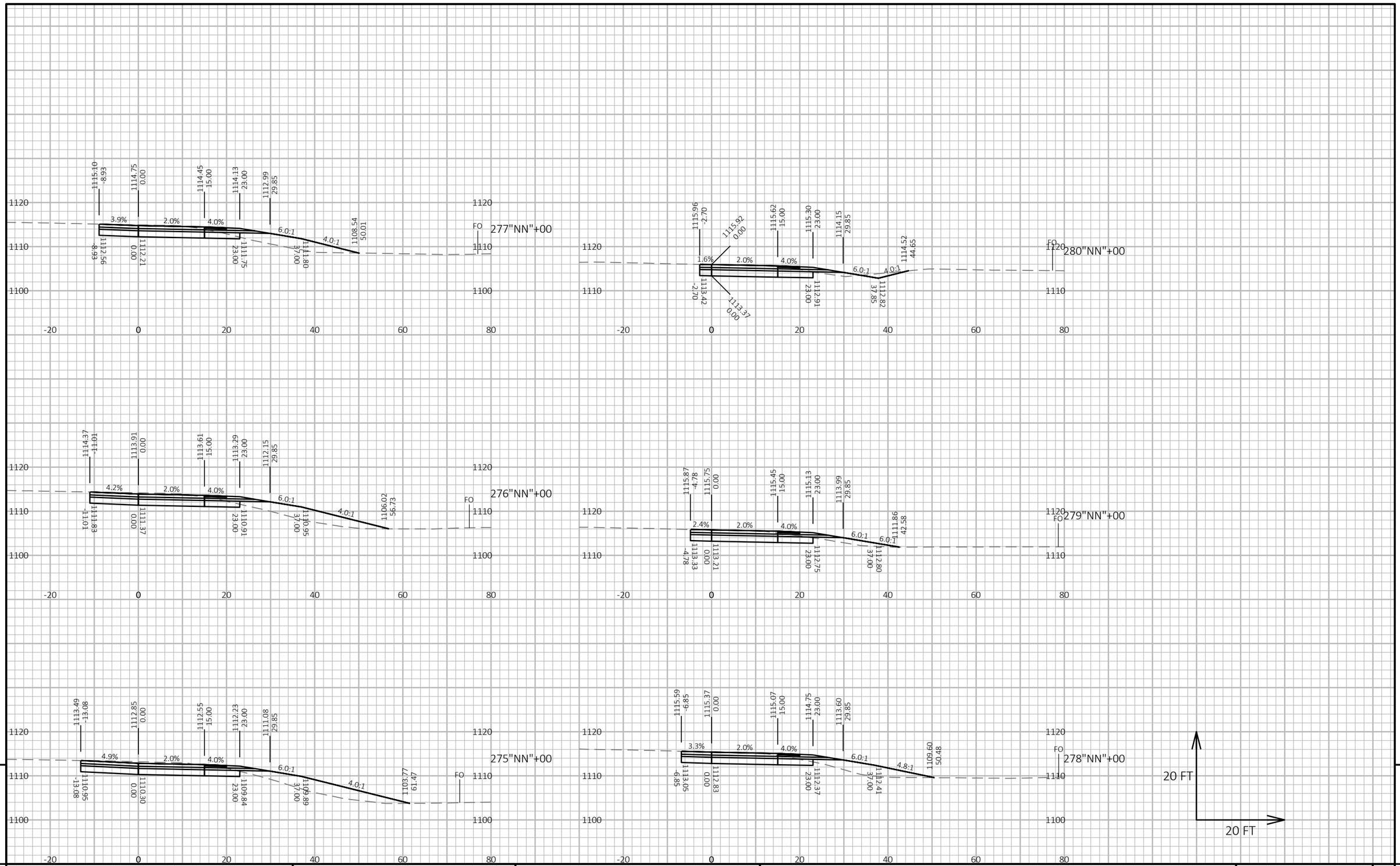
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9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NN RAMP	SHEET 588	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_NB ON.DWG
LAYOUT NAME - 5 NN RAMP

PLOT DATE : 1/24/2022 12:28 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NN RAMP	SHEET 589	E

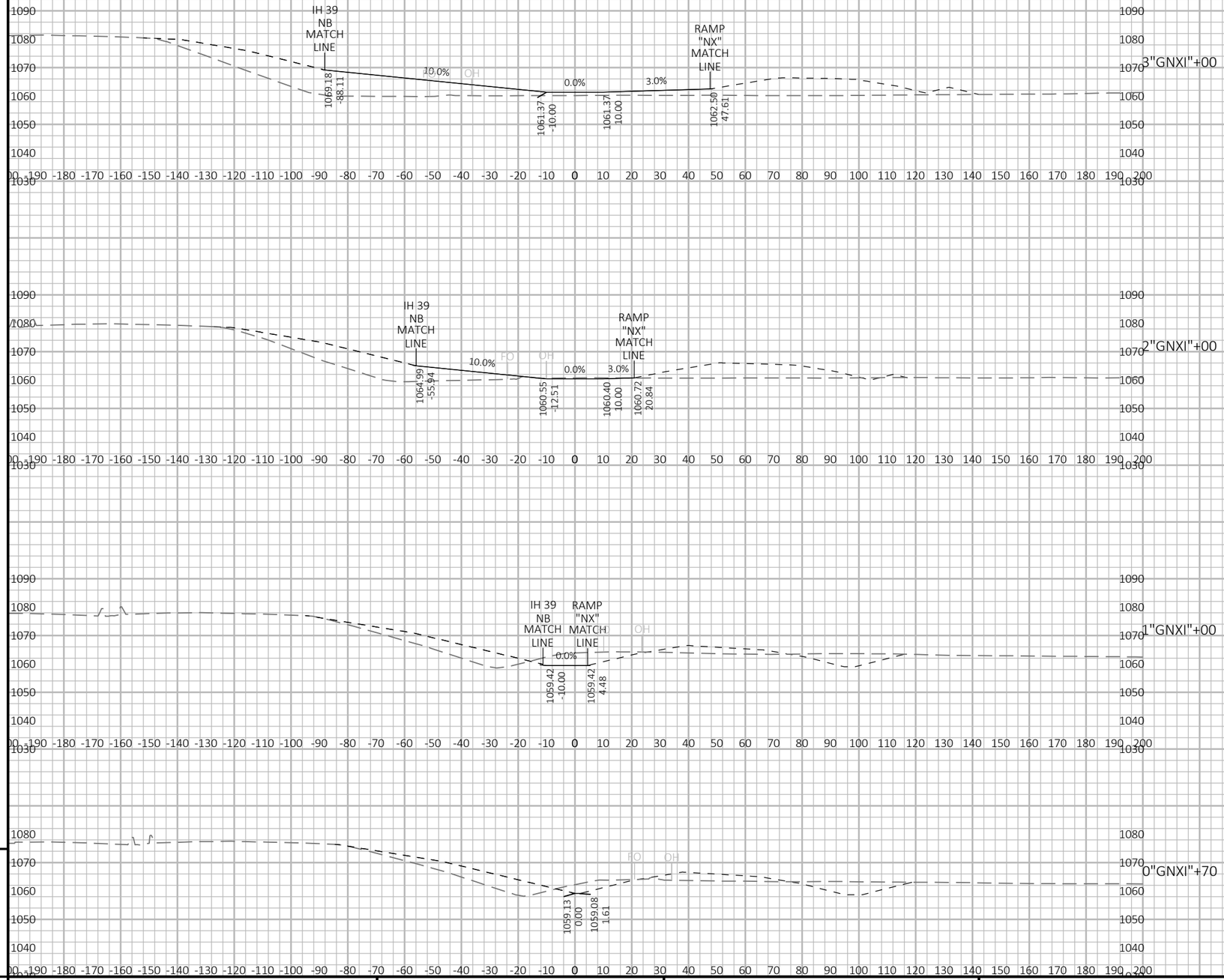
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_NB ON.DWG
LAYOUT NAME - 6 NN RAMP

PLOT DATE : 1/24/2022 12:28 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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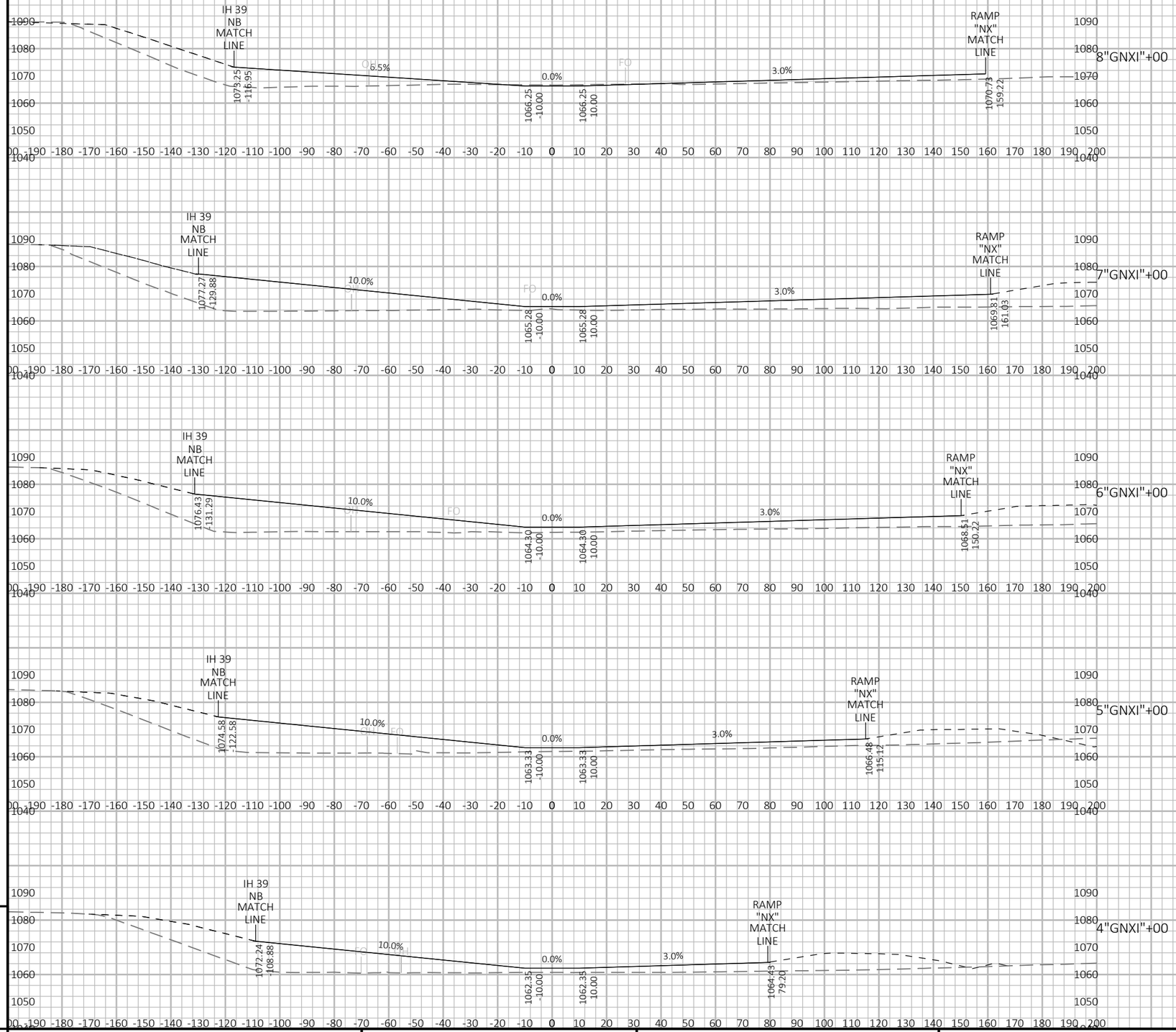
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9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH 39 NB AND NB OFF INFIELD	SHEET 590	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 NB_NB OFF_INFIELD.DWG
LAYOUT NAME - 01

PLOT DATE : 1/24/2022 12:29 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:40 FT HORZ. / 1 IN:40 FT VERT.



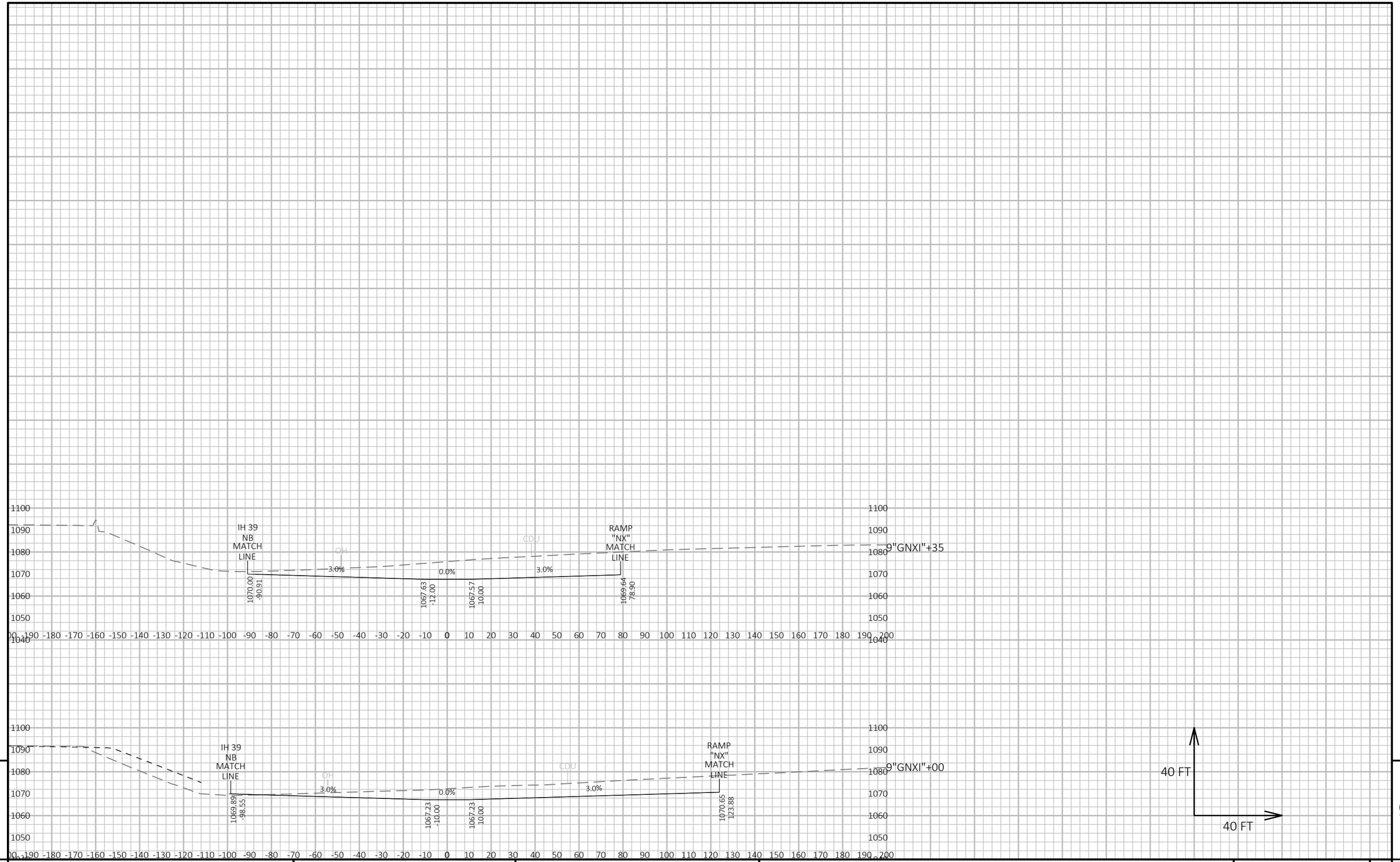
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH NB AND NB OFF INFIELD	SHEET 591	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 NB_NB OFF_INFIELD.DWG
LAYOUT NAME - 02

PLOT DATE : 1/24/2022 12:29 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:40 FT HORZ. / 1 IN:40 FT VERT.

WISDOT/CADDS SHEET 49



9

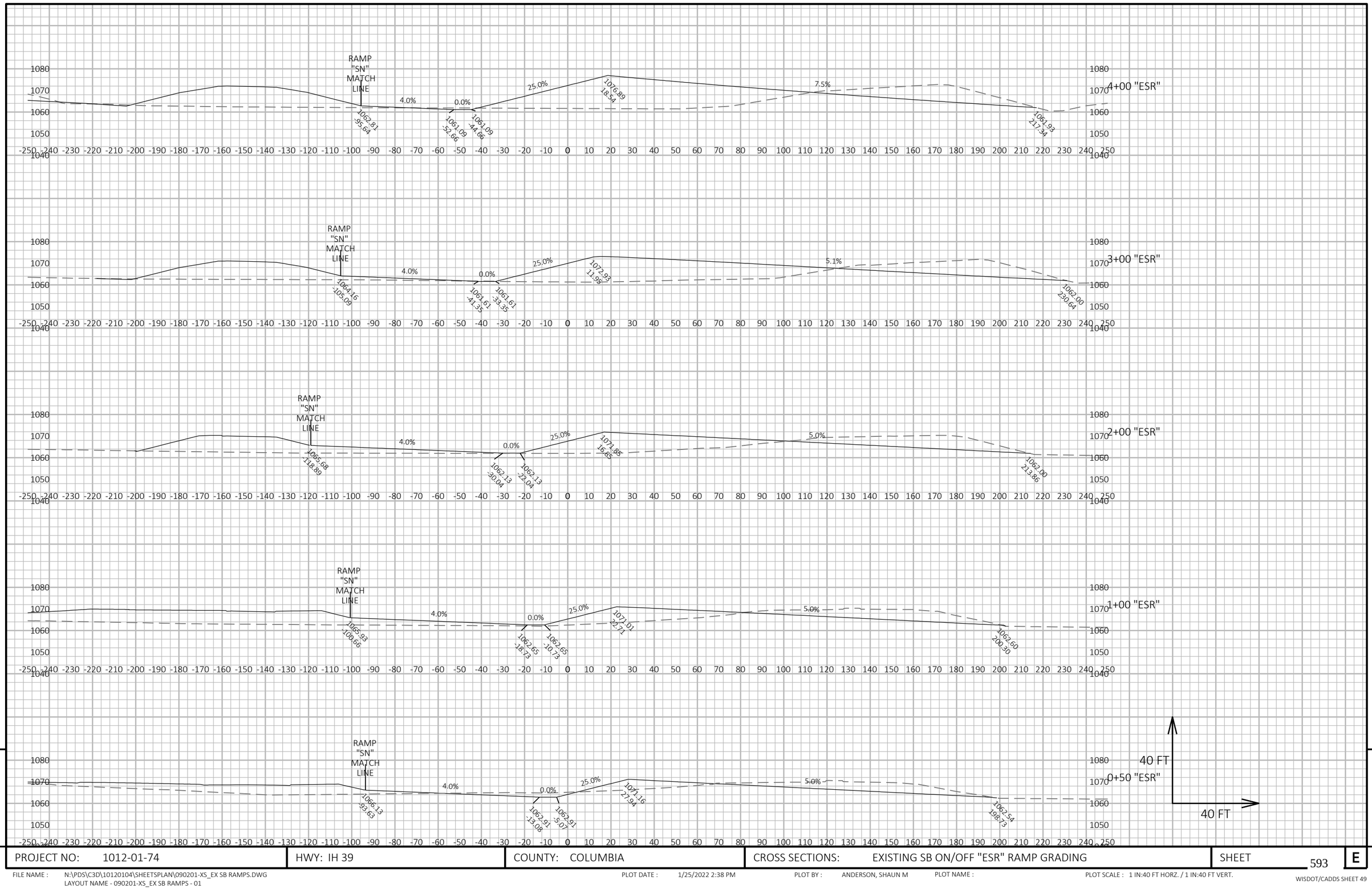
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: IH NB AND NB OFF INFIELD	SHEET 592	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_IH 39 NB_NB OFF_INFIELD.DWG
LAYOUT NAME - 03

PLOT DATE : 1/24/2022 12:29 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:40 FT HORZ. / 1 IN:40 FT VERT.

WISDOT/CADDS SHEET 49

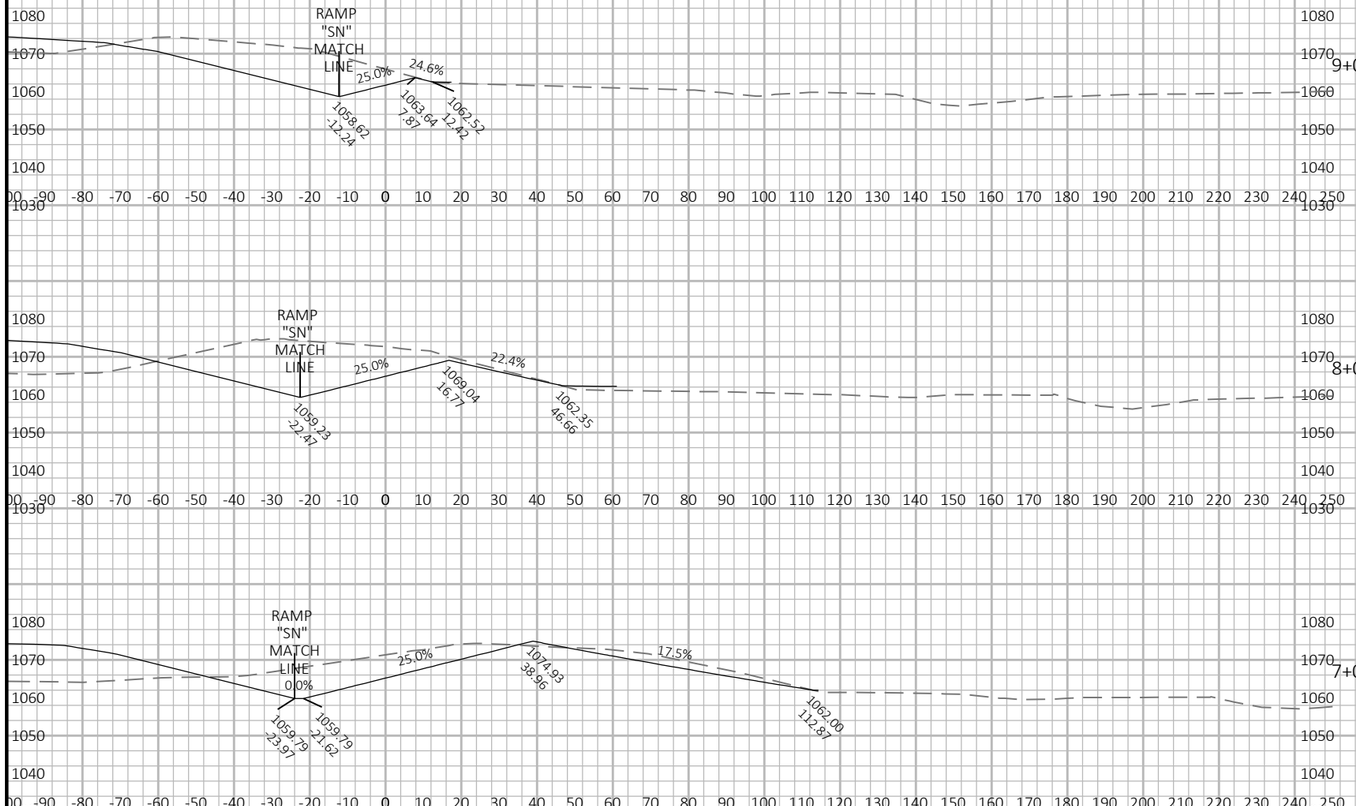


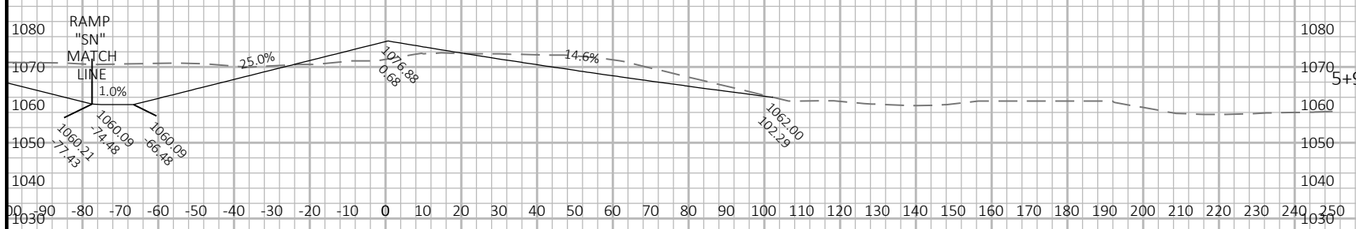
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: EXISTING SB ON/OFF "ESR" RAMP GRADING	SHEET 593	E

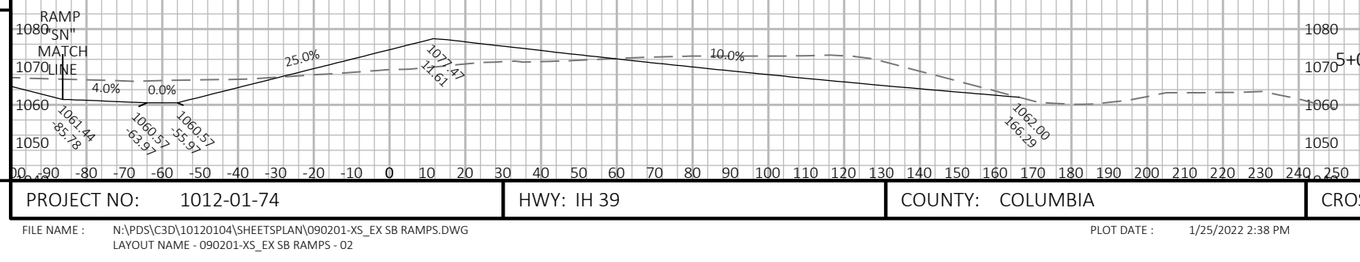
FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_EX SB RAMPS.DWG
LAYOUT NAME - 090201-XS_EX SB RAMPS - 01

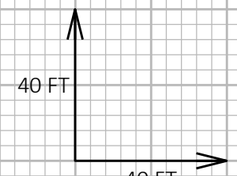
PLOT DATE : 1/25/2022 2:38 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:40 FT HORZ. / 1 IN:40 FT VERT.

WISDOT/CADDS SHEET 49









9

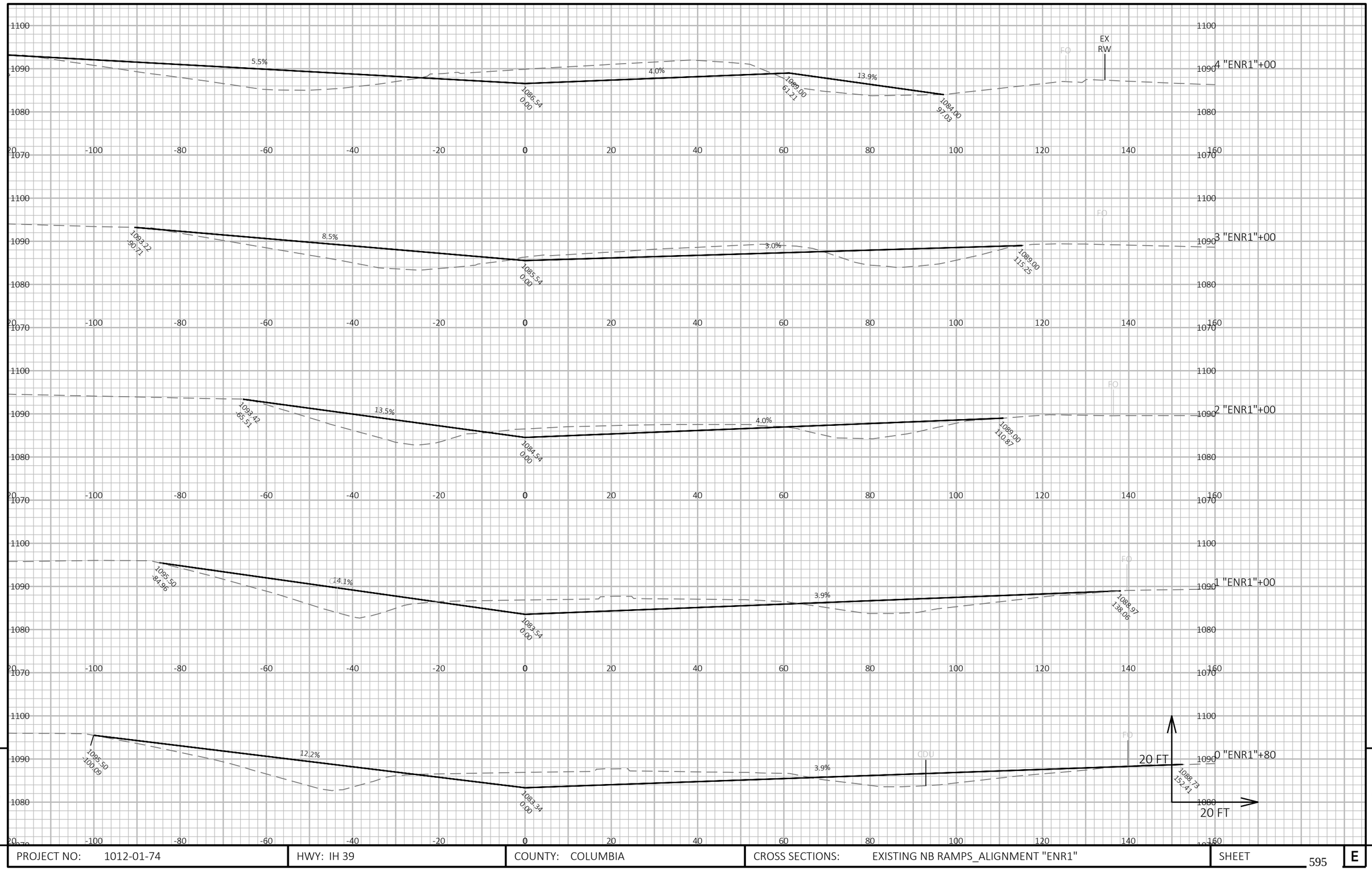
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: EXISTING SB ON/OFF "ESR" RAMP GRADING	SHEET 594	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_EX SB RAMPS.DWG
LAYOUT NAME - 090201-XS_EX SB RAMPS - 02

PLOT DATE : 1/25/2022 2:38 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:40 FT HORZ. / 1 IN:40 FT VERT.

WISDOT/CADDS SHEET 49

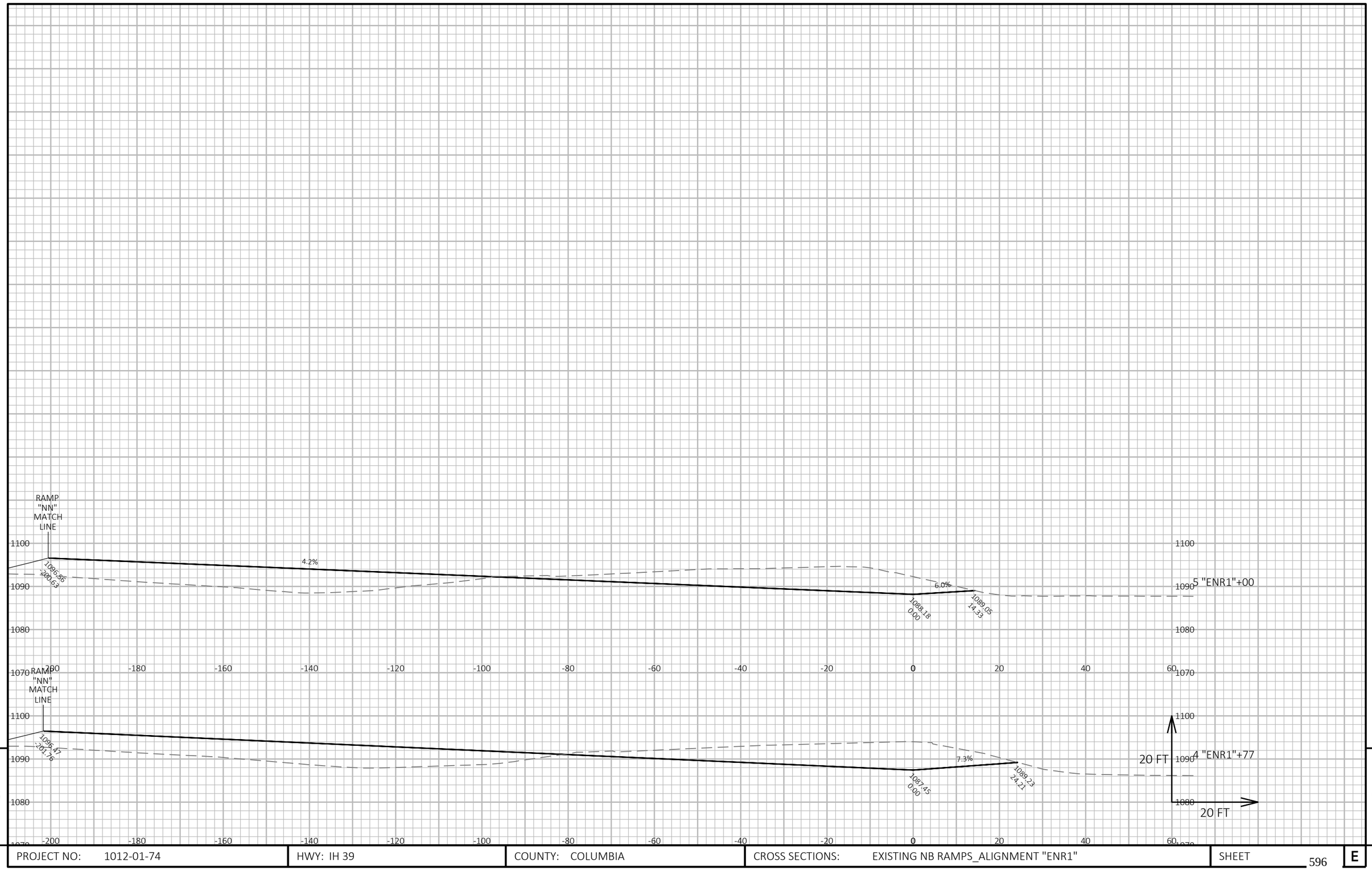


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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: EXISTING NB RAMPS_ALIGNMENT "ENR1"	SHEET 595	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_EX NB RAMPS.DWG
LAYOUT NAME - 01
PLOT DATE : 1/25/2022 2:42 PM
PLOT BY : ANDERSON, SHAUN M
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

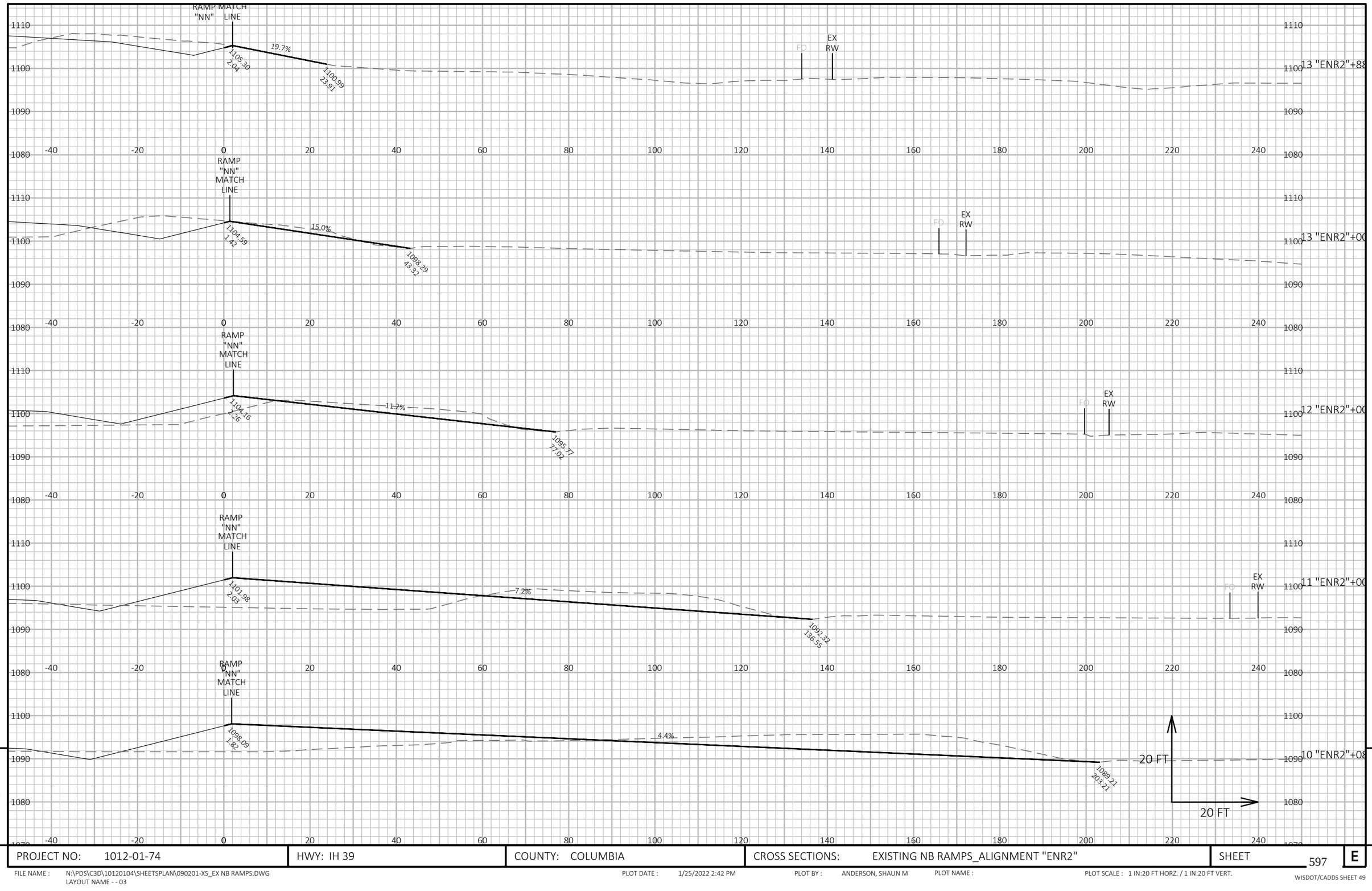


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: EXISTING NB RAMPS_ALIGNMENT "ENR1"	SHEET 596	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_EX NB RAMPS.DWG
LAYOUT NAME - 02

PLOT DATE : 1/25/2022 2:42 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

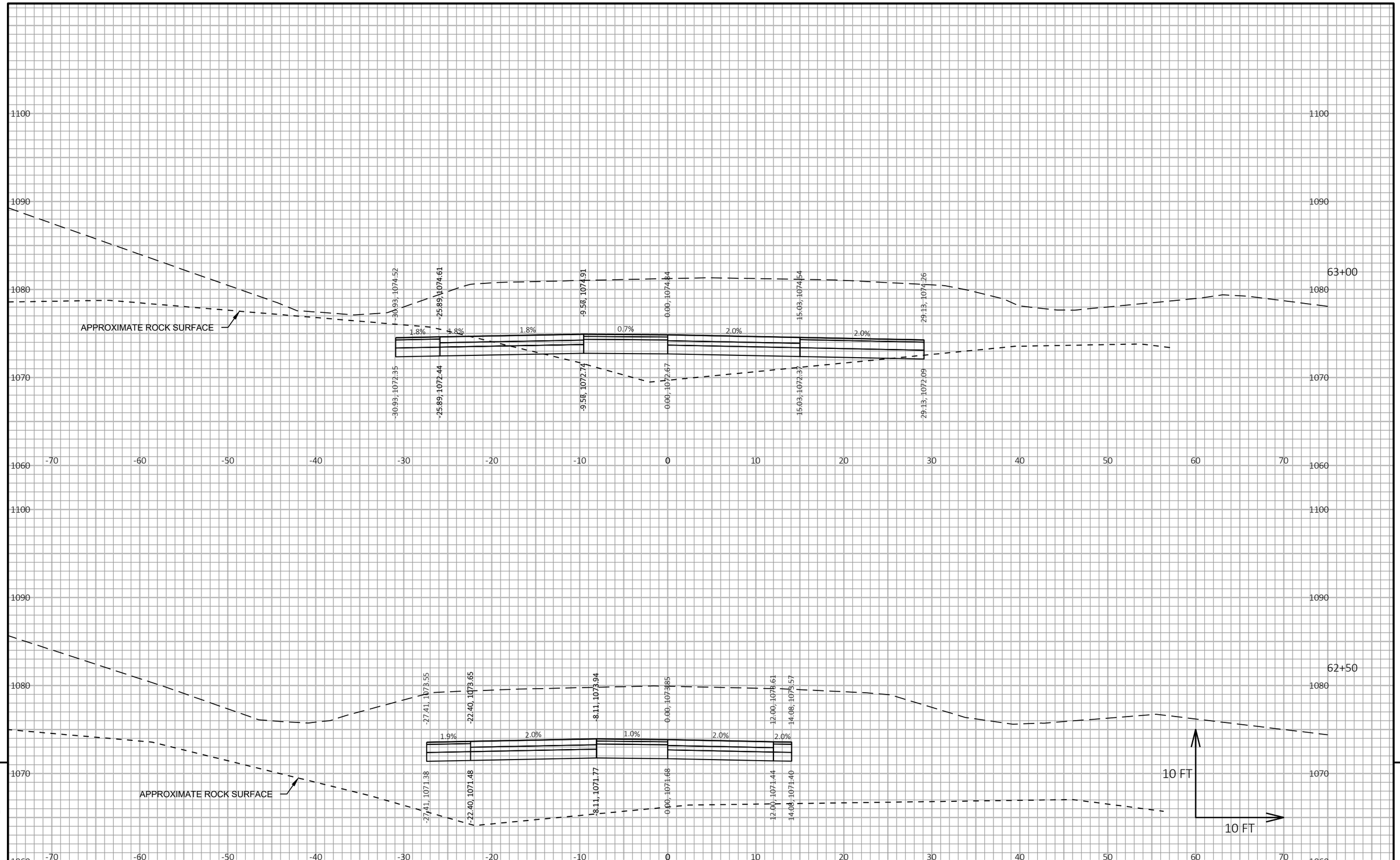


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: EXISTING NB RAMPS_ALIGNMENT "ENR2"	SHEET 597	E

FILE NAME : N:\PDS\C3D\10120104\SHEETSPLAN\090201-XS_EX NB RAMPS.DWG
LAYOUT NAME - - 03

PLOT DATE : 1/25/2022 2:42 PM PLOT BY : ANDERSON, SHAUN M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STAGE 1 (STH 60)	SHEET 598	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS_S1_60.DWG
LAYOUT NAME - 05

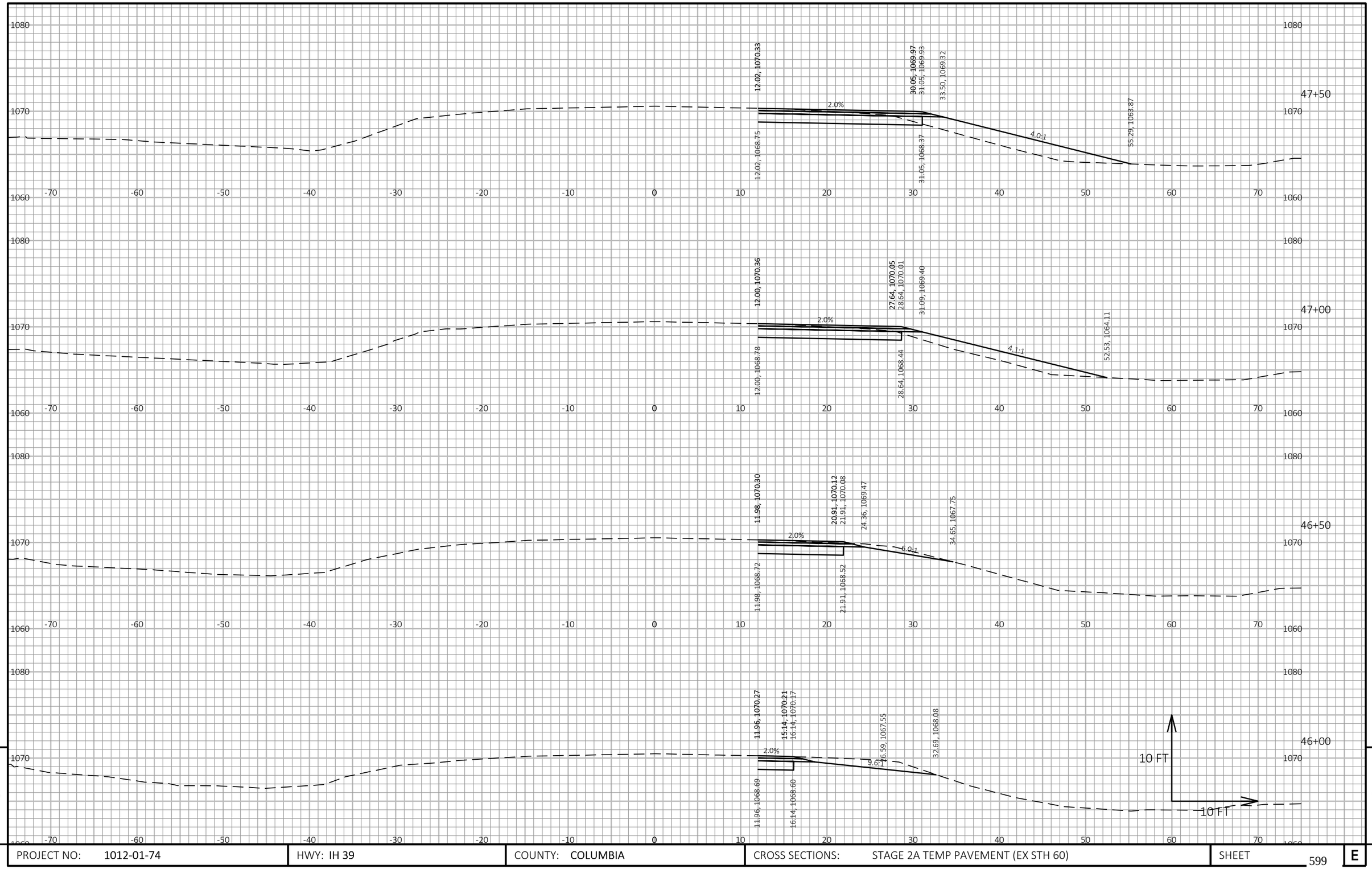
PLOT DATE : 1/17/2022 6:46 AM

PLOT BY : JACK, ROBERT A.

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STAGE 2A TEMP PAVEMENT (EX STH 60)	SHEET 599	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS_STAGE 2A.DWG
LAYOUT NAME - 01

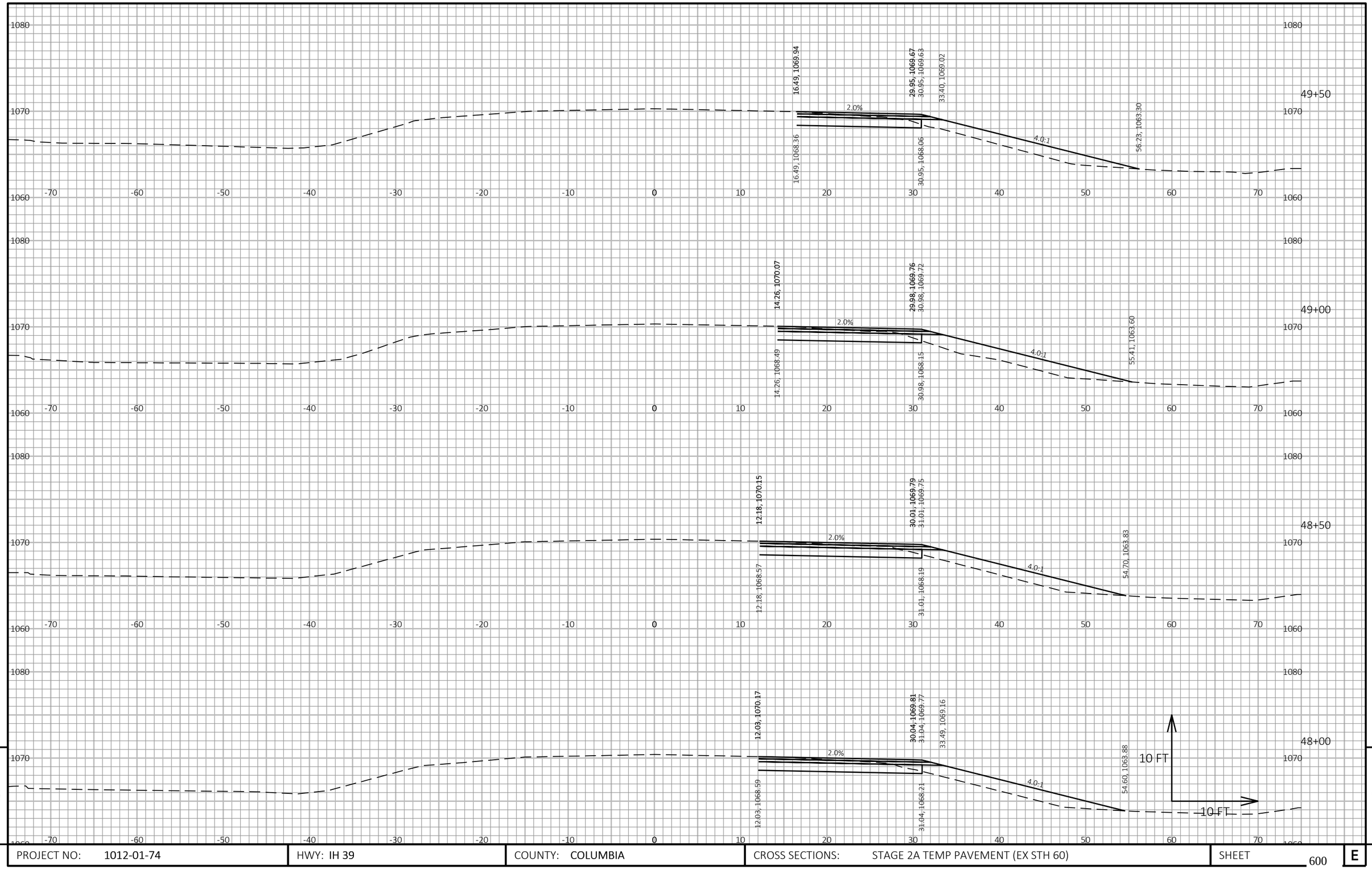
PLOT DATE : 1/11/2022 1:39 PM

PLOT BY : JACK, ROBERT A.

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STAGE 2A TEMP PAVEMENT (EX STH 60)	SHEET 600	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS_STAGE 2A.DWG
LAYOUT NAME - 02

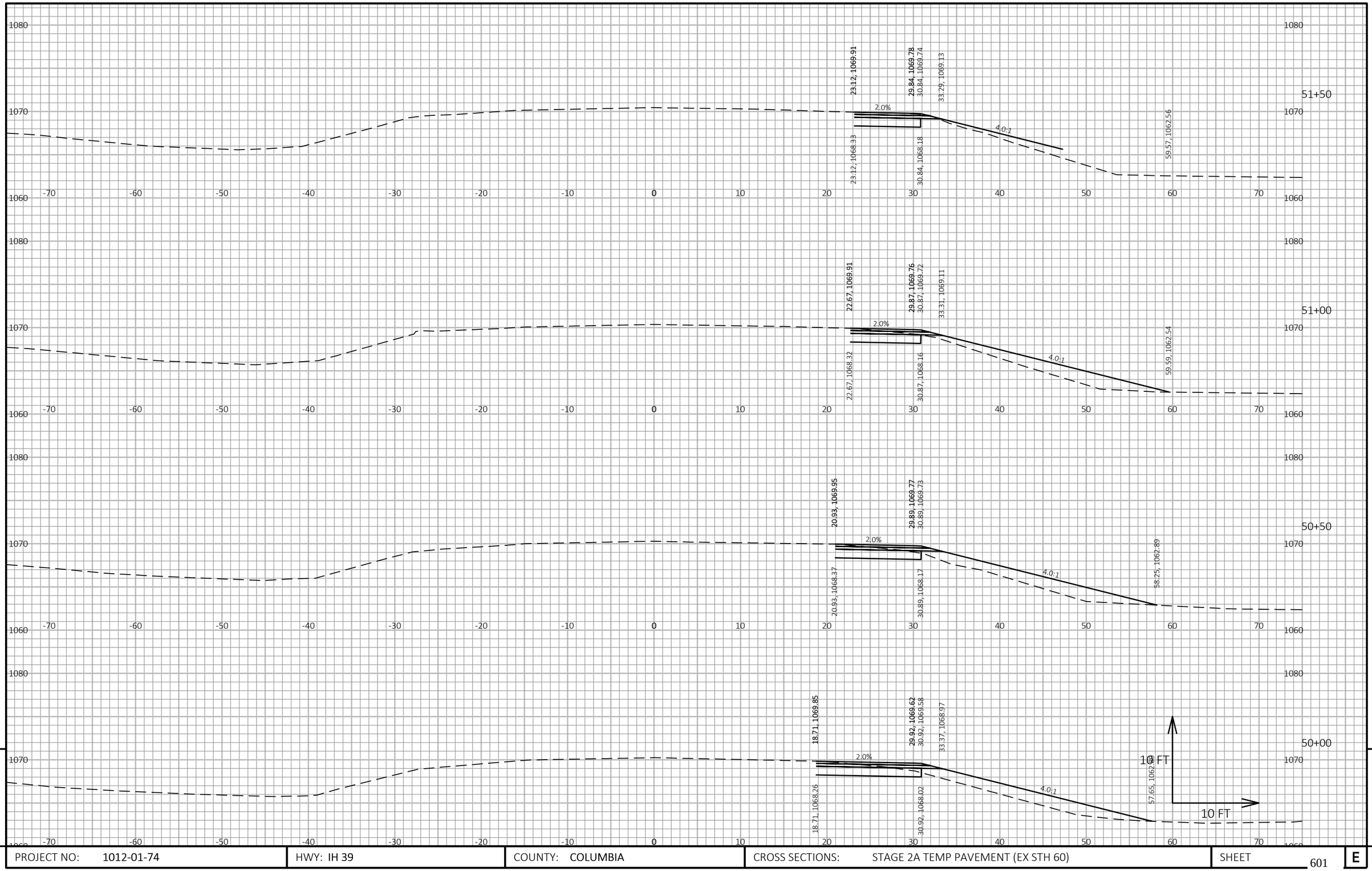
PLOT DATE : 1/11/2022 1:39 PM

PLOT BY : JACK, ROBERT A.

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

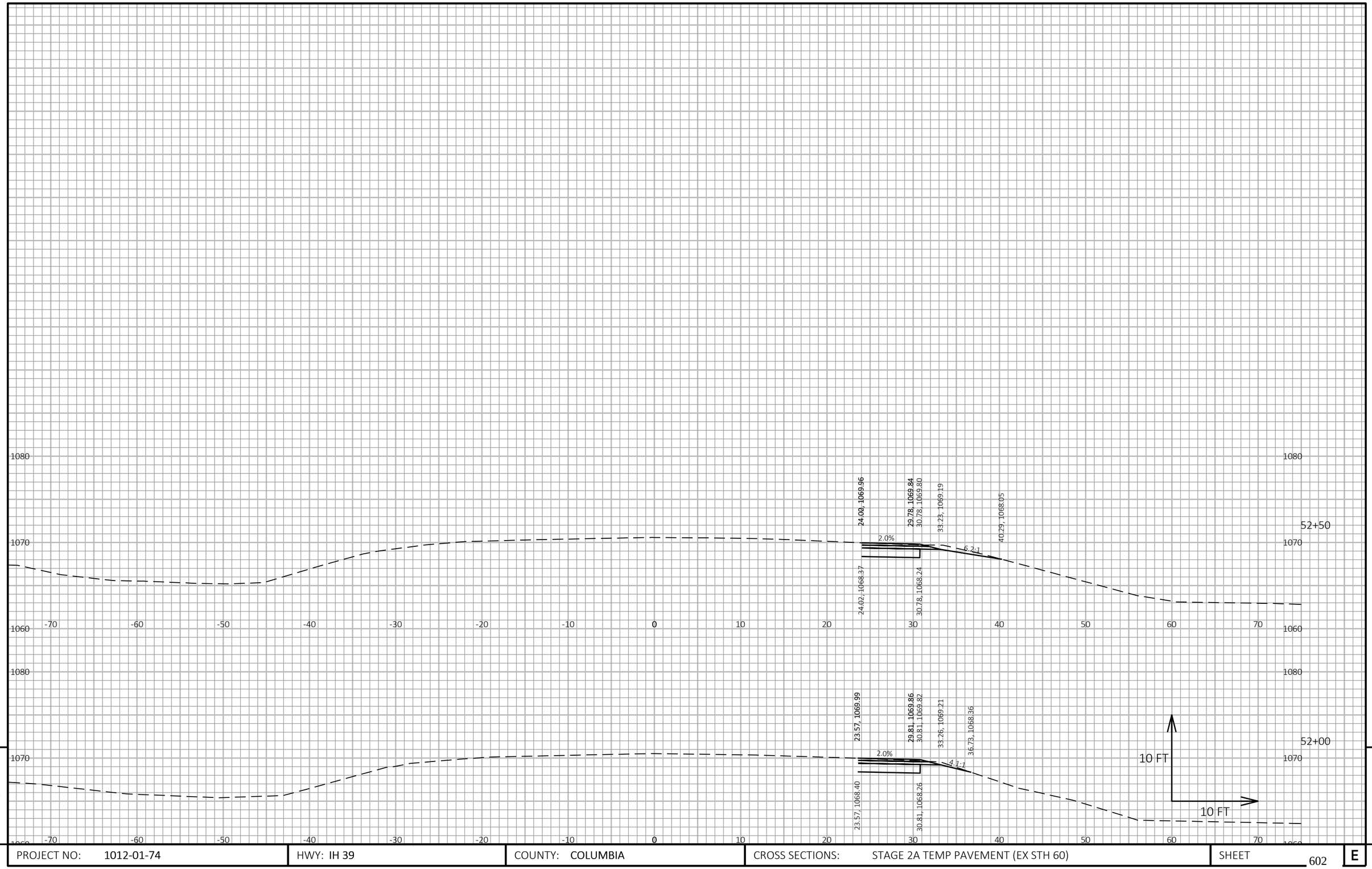


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STAGE 2A TEMP PAVEMENT (EX STH 60)	SHEET 601	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS_STAGE 2A.DWG
LAYOUT NAME - 03

PLOT DATE : 1/11/2022 1:39 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

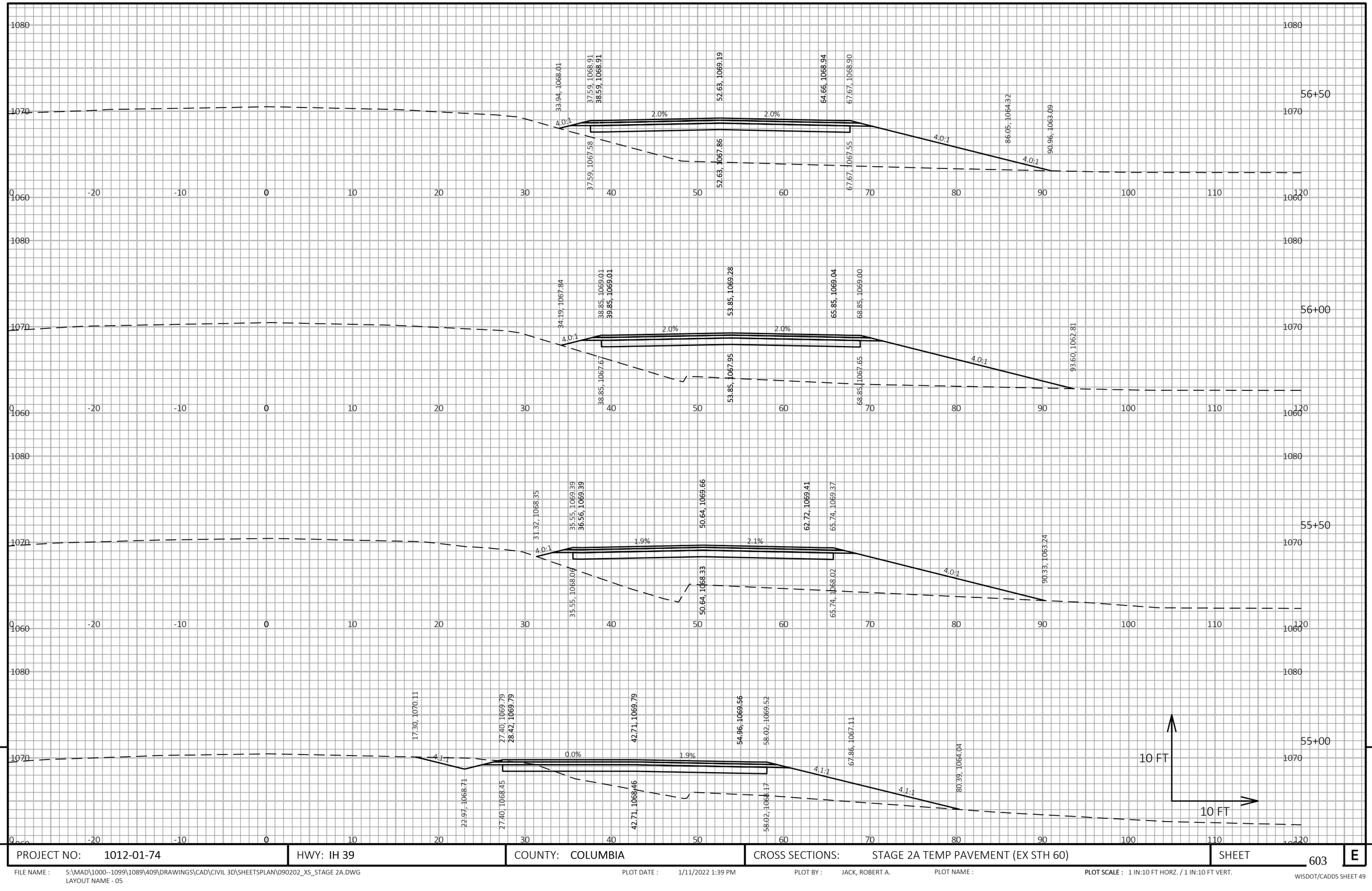
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STAGE 2A TEMP PAVEMENT (EX STH 60)	SHEET 602	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS_STAGE 2A.DWG
LAYOUT NAME - 04

PLOT DATE : 1/11/2022 1:39 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

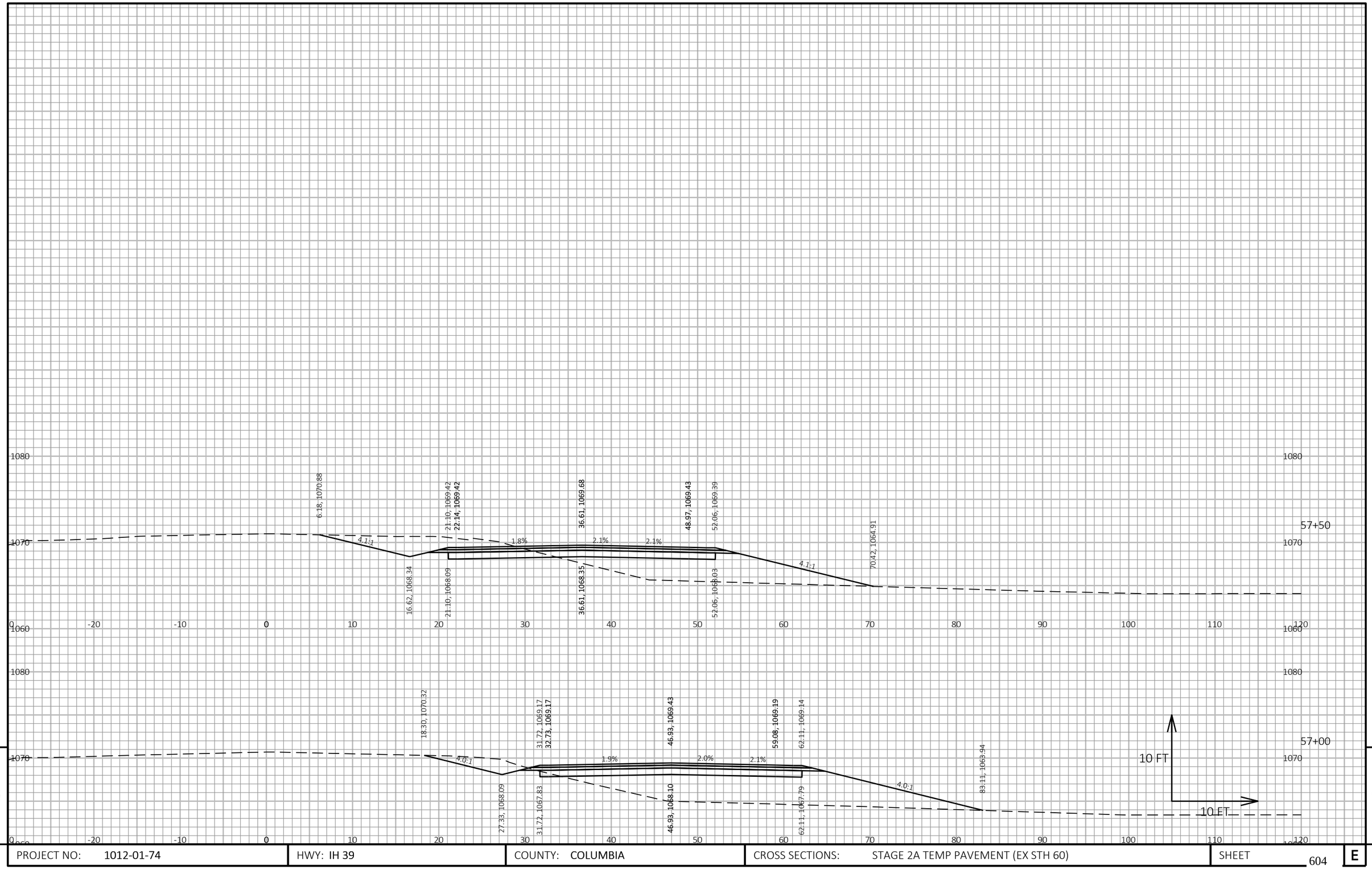
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STAGE 2A TEMP PAVEMENT (EX STH 60)	SHEET 603	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS_STAGE 2A.DWG
LAYOUT NAME - 05

PLOT DATE : 1/11/2022 1:39 PM PLOT BY : JACK, ROBERT A. PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

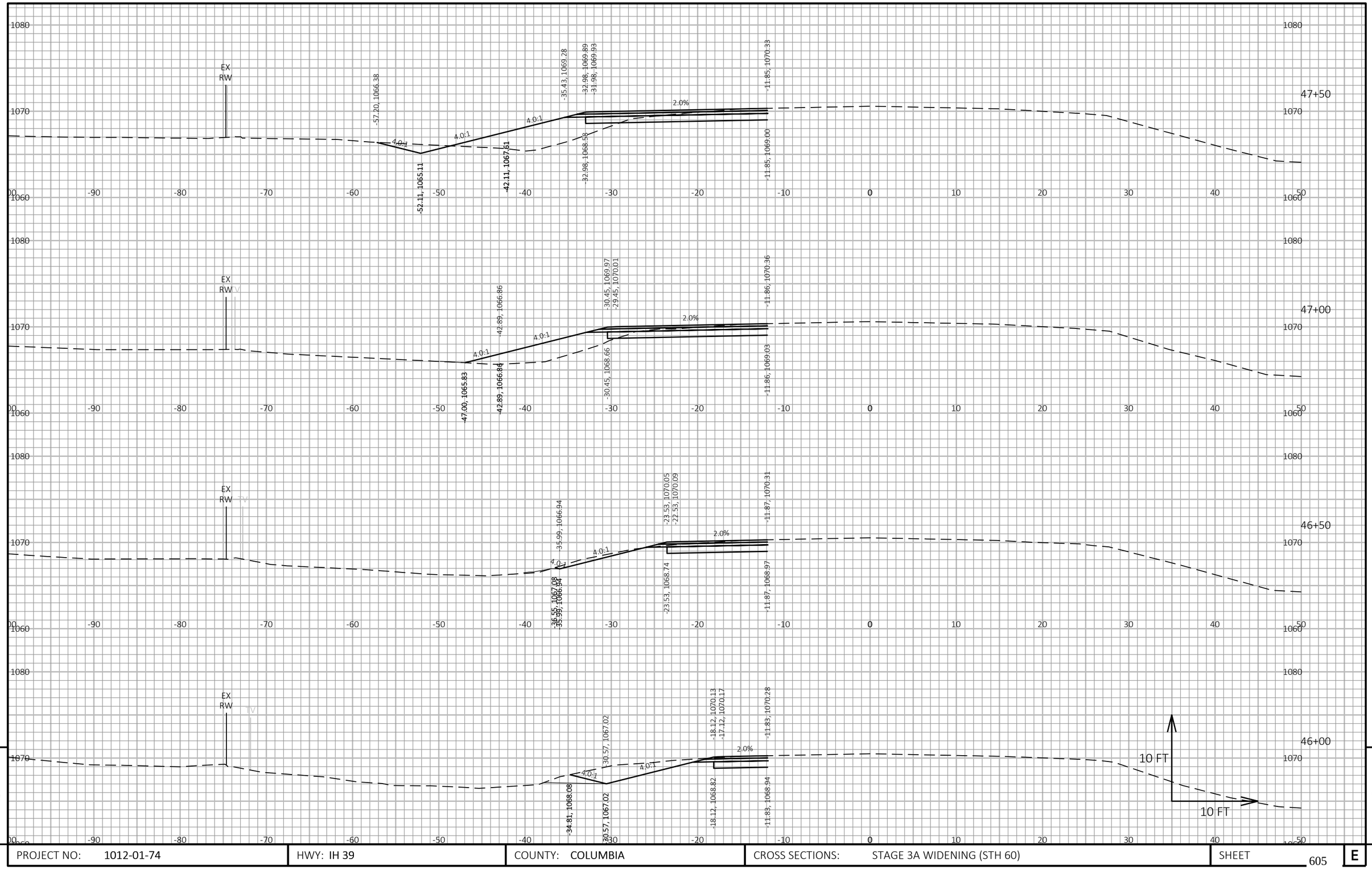
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STAGE 2A TEMP PAVEMENT (EX STH 60)	SHEET 604	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090202_XS_STAGE 2A.DWG
LAYOUT NAME - 06

PLOT DATE : 1/11/2022 1:40 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

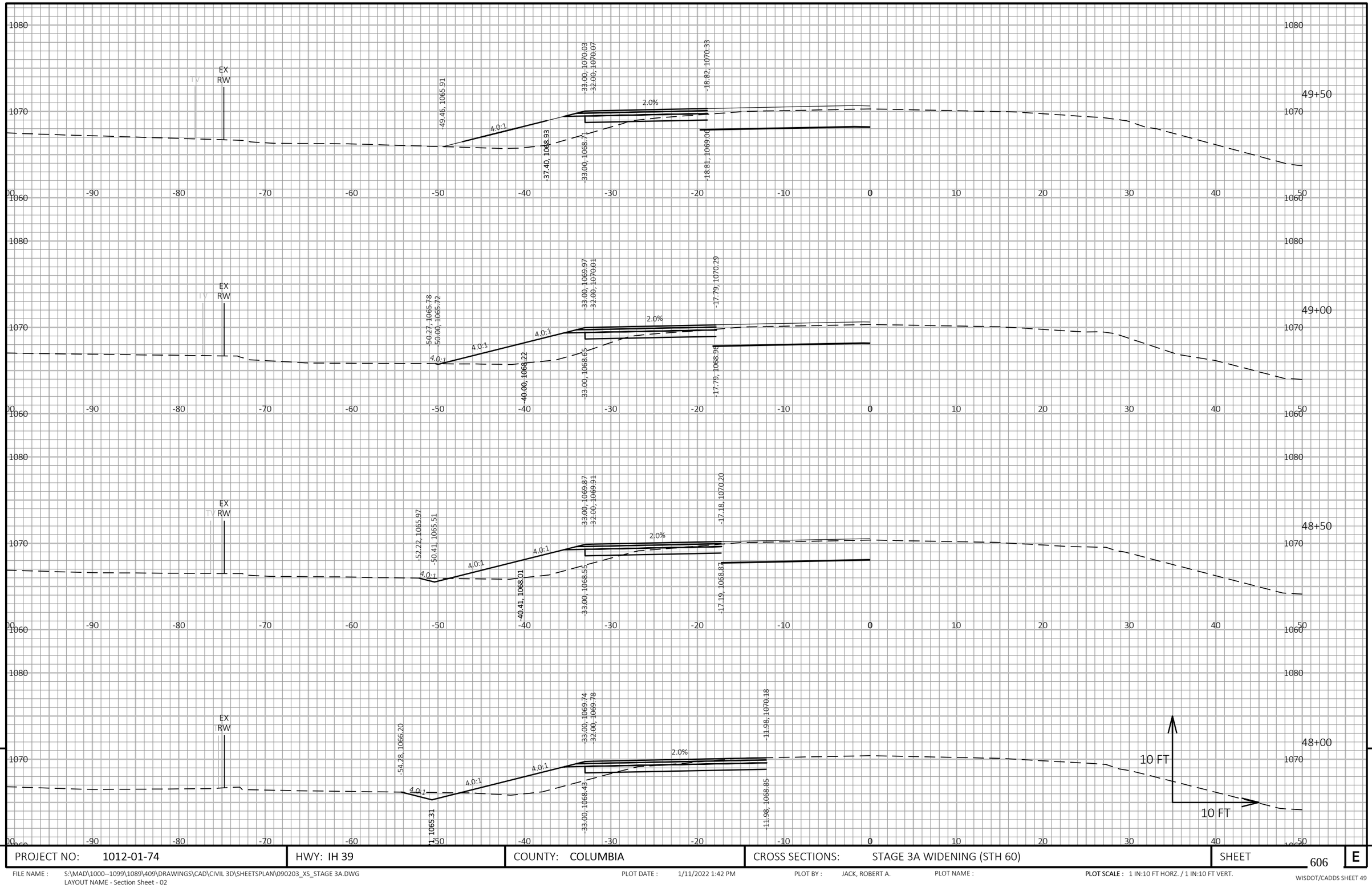
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STAGE 3A WIDENING (STH 60)	SHEET 605	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS_STAGE 3A.DWG
LAYOUT NAME - Section Sheet - 01

PLOT DATE : 1/11/2022 1:42 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

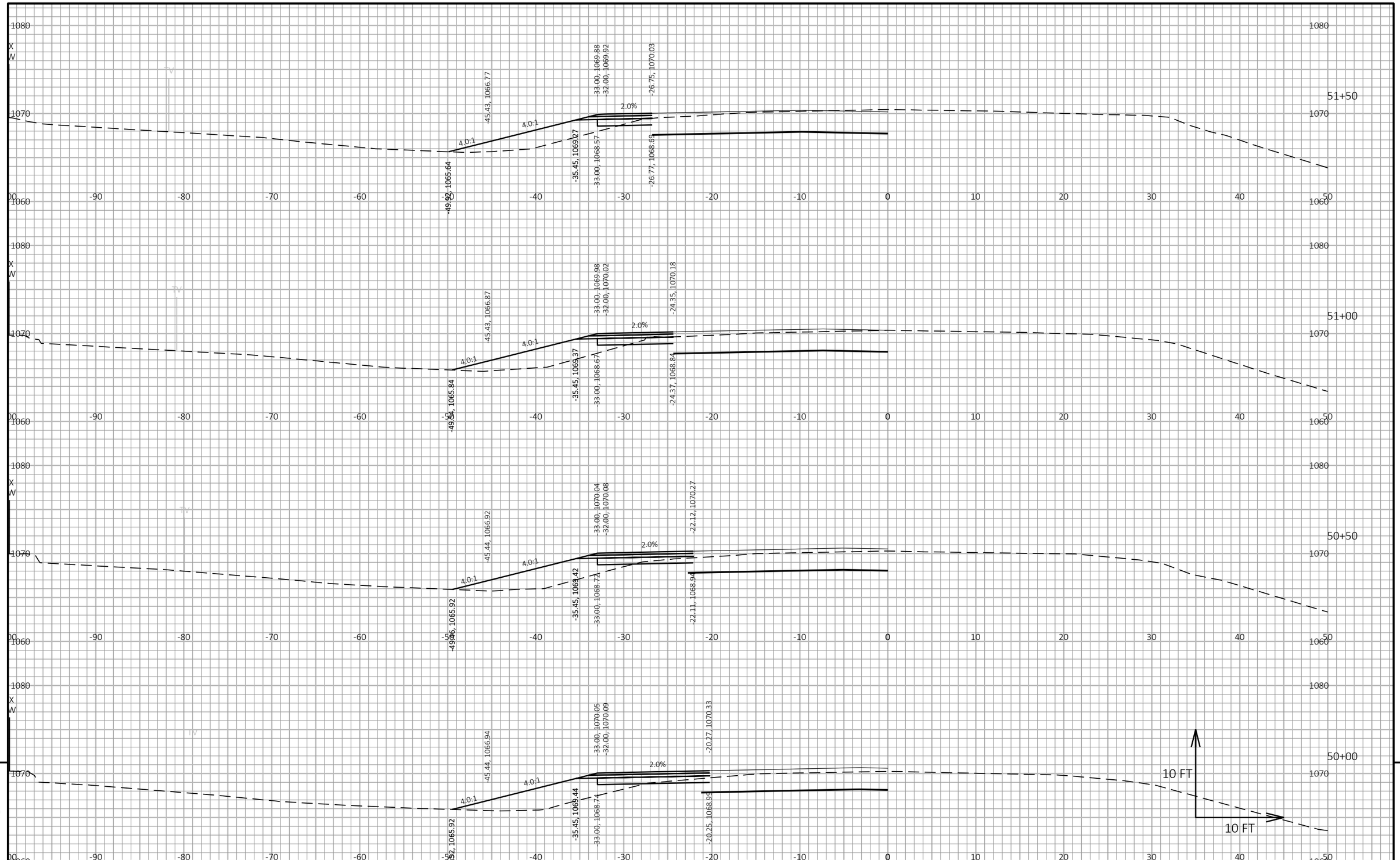
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STAGE 3A WIDENING (STH 60)	SHEET 606	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS_STAGE 3A.DWG
LAYOUT NAME - Section Sheet - 02

PLOT DATE : 1/11/2022 1:42 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



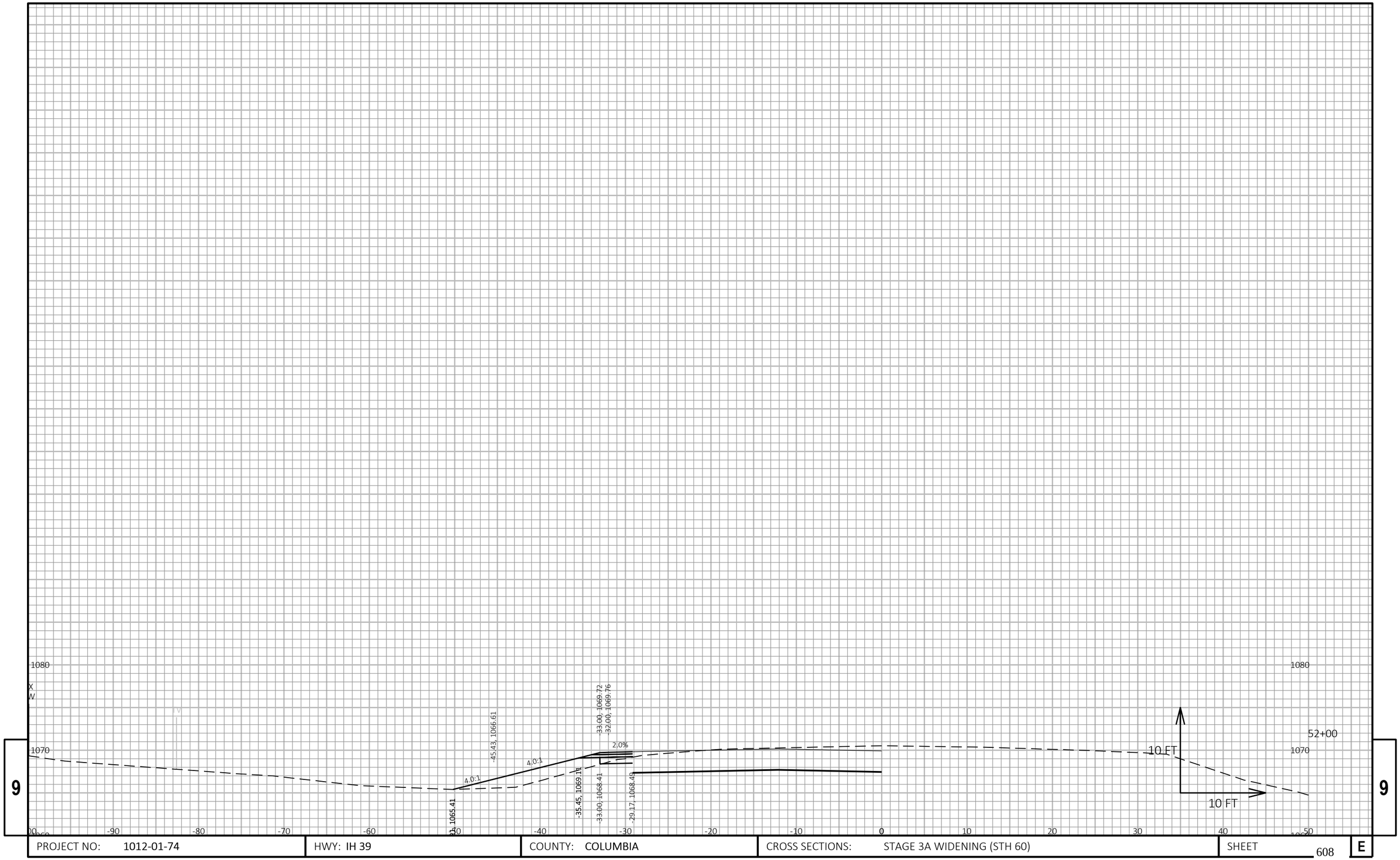
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STAGE 3A WIDENING (STH 60)	SHEET 607	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS_STAGE 3A.DWG
LAYOUT NAME - Section Sheet - 03

PLOT DATE : 1/11/2022 1:42 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

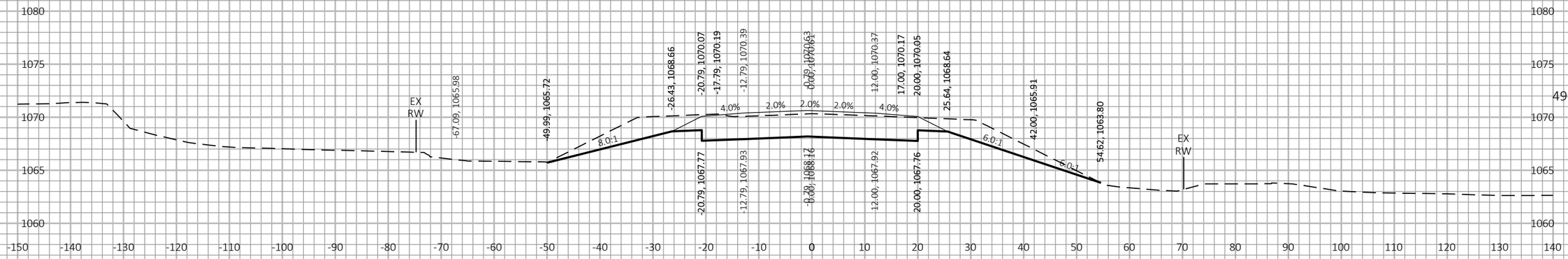
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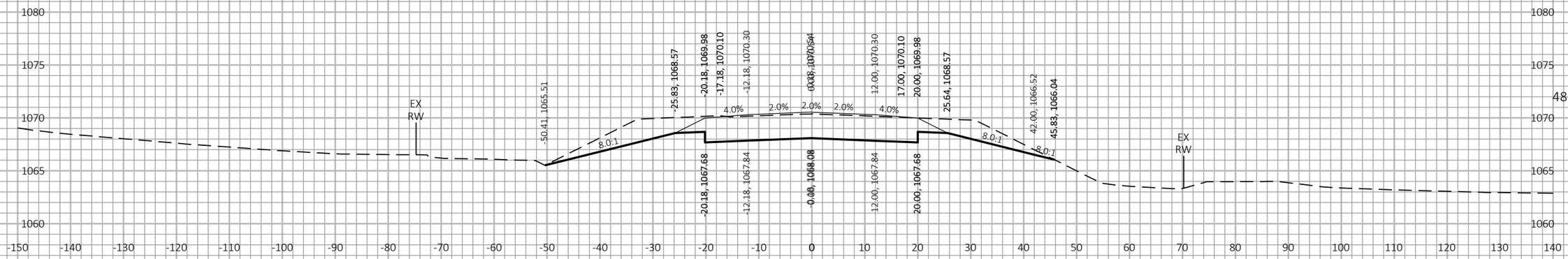
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STAGE 3A WIDENING (STH 60)	SHEET 608	E

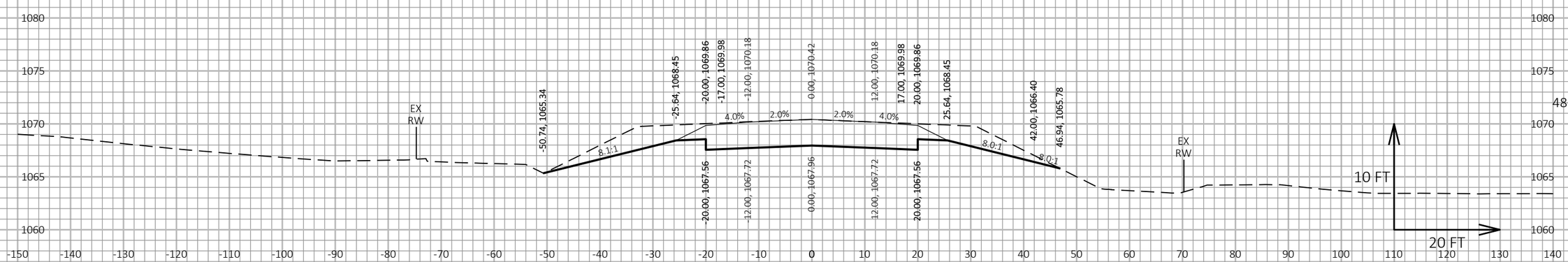
FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090203_XS_STAGE 3A.DWG
LAYOUT NAME - Section Sheet - 04

PLOT DATE : 1/11/2022 1:42 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

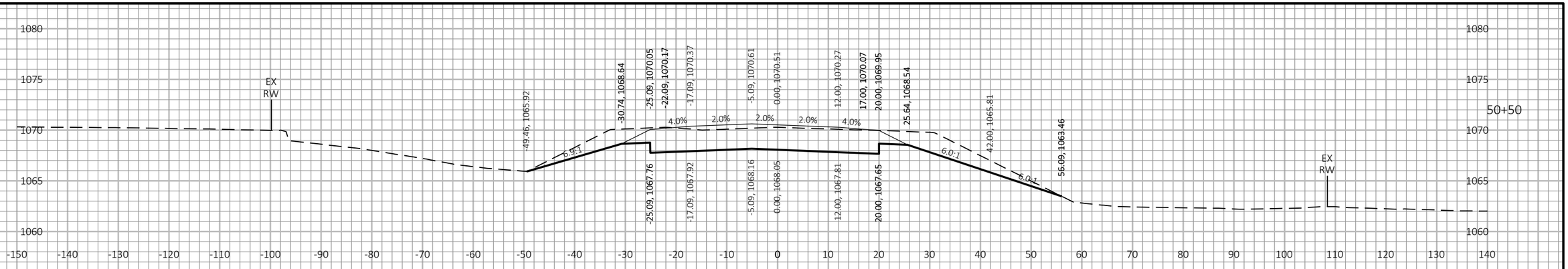
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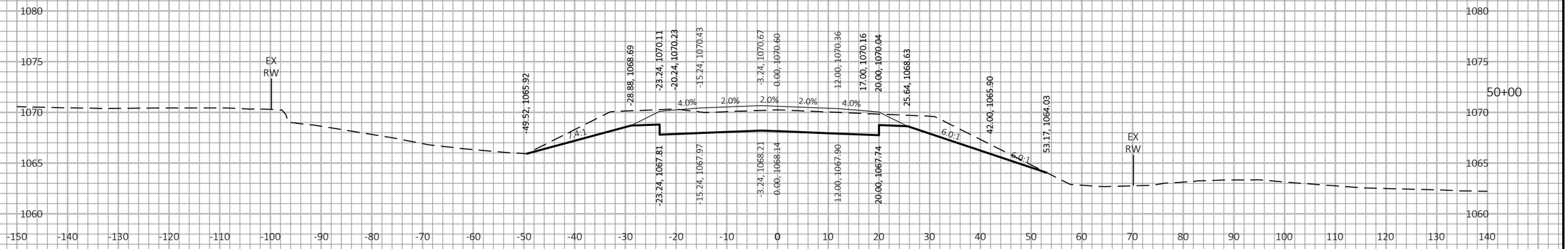
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 609	E

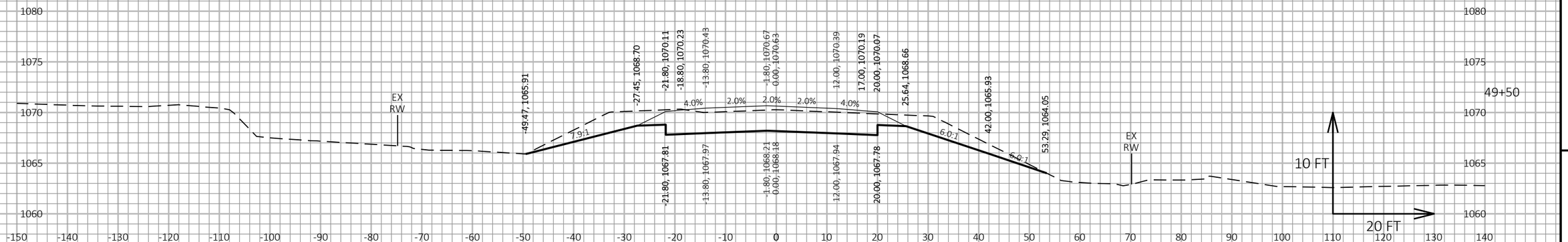
FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_xs

PLOT DATE : 1/11/2022 1:44 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

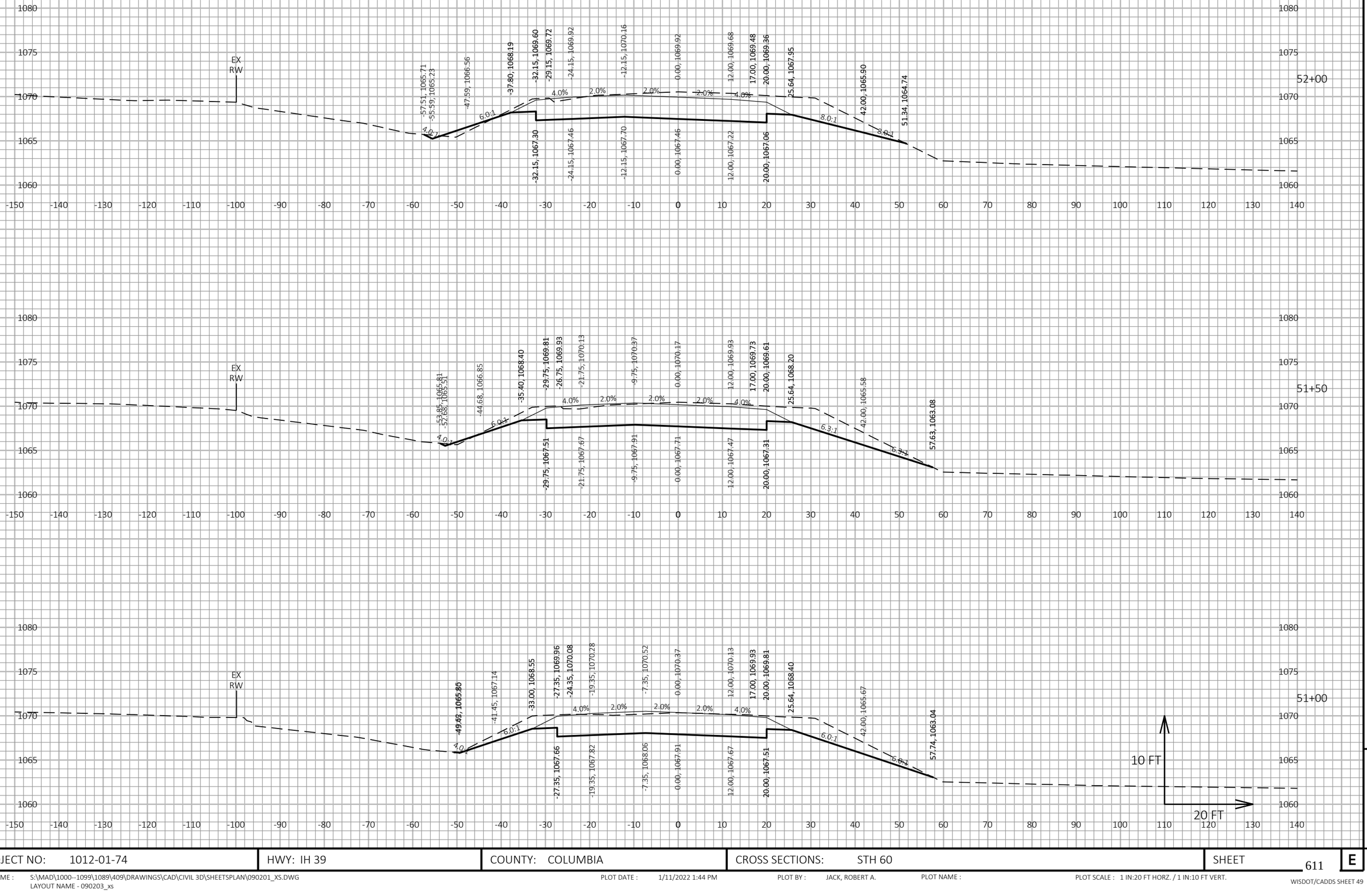
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 610	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090202_xs

PLOT DATE : 1/11/2022 1:44 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

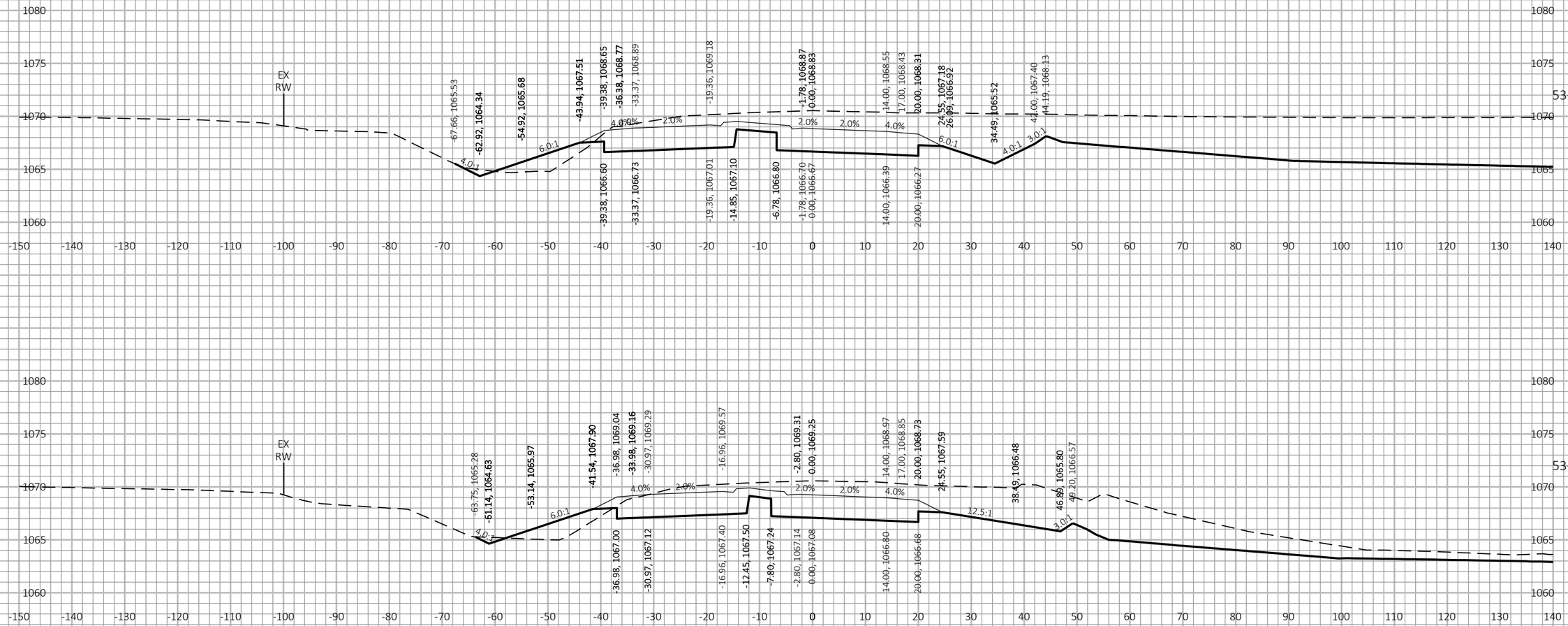
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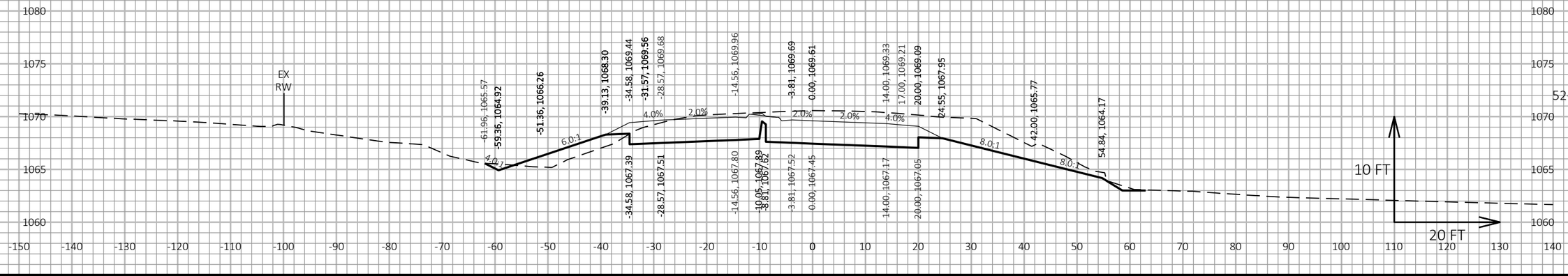
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 611	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090203_xs

PLOT DATE : 1/11/2022 1:44 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 612	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090204_xs

PLOT DATE : 1/11/2022 1:44 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

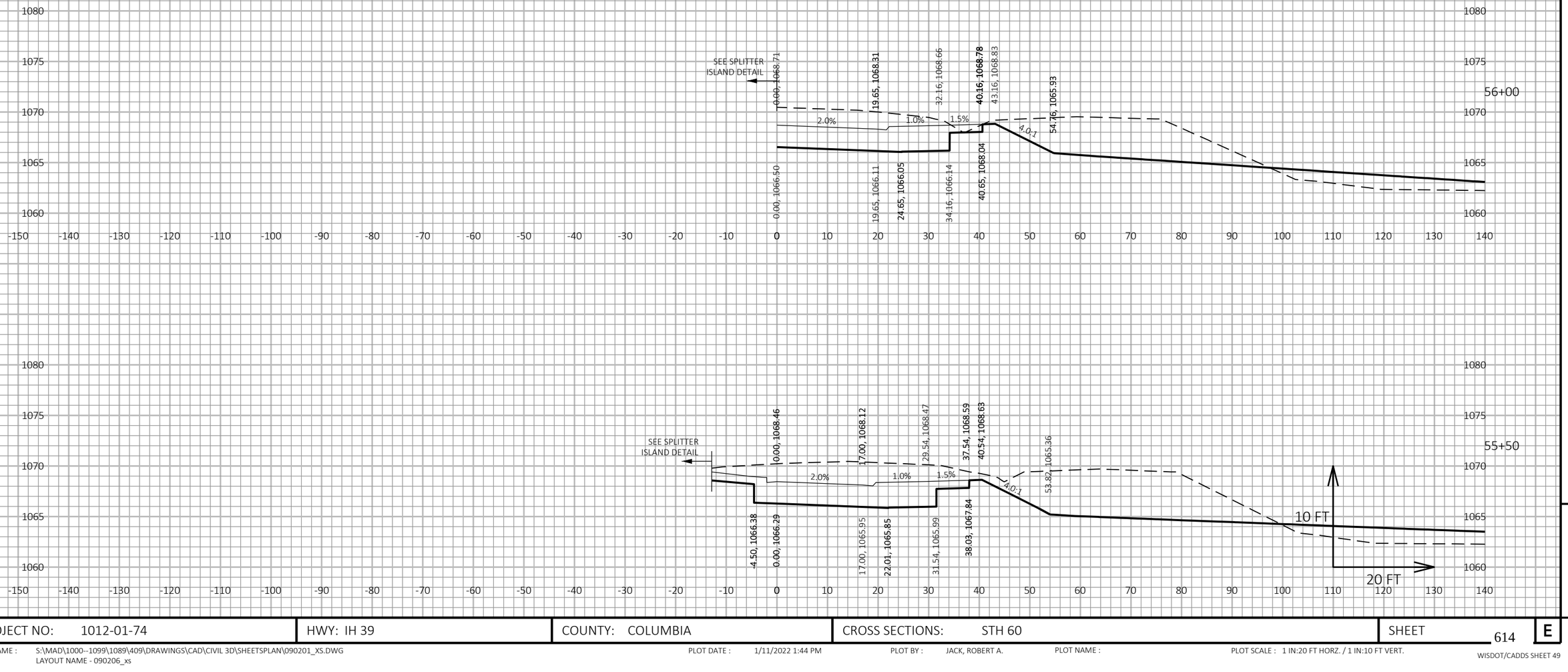
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 613 E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090205_xs

PLOT DATE : 1/11/2022 1:44 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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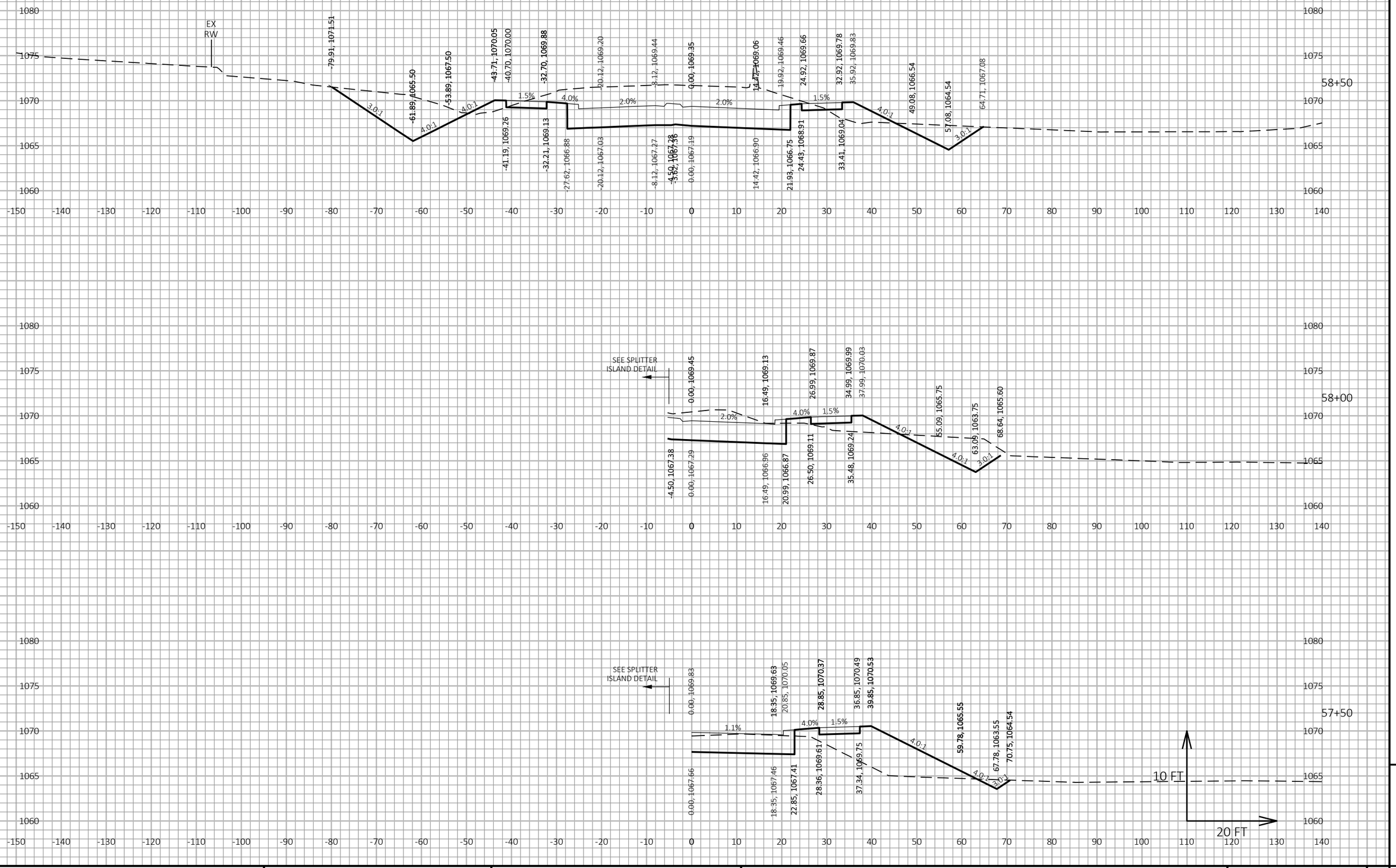
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 614	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090206_xs

PLOT DATE : 1/11/2022 1:44 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

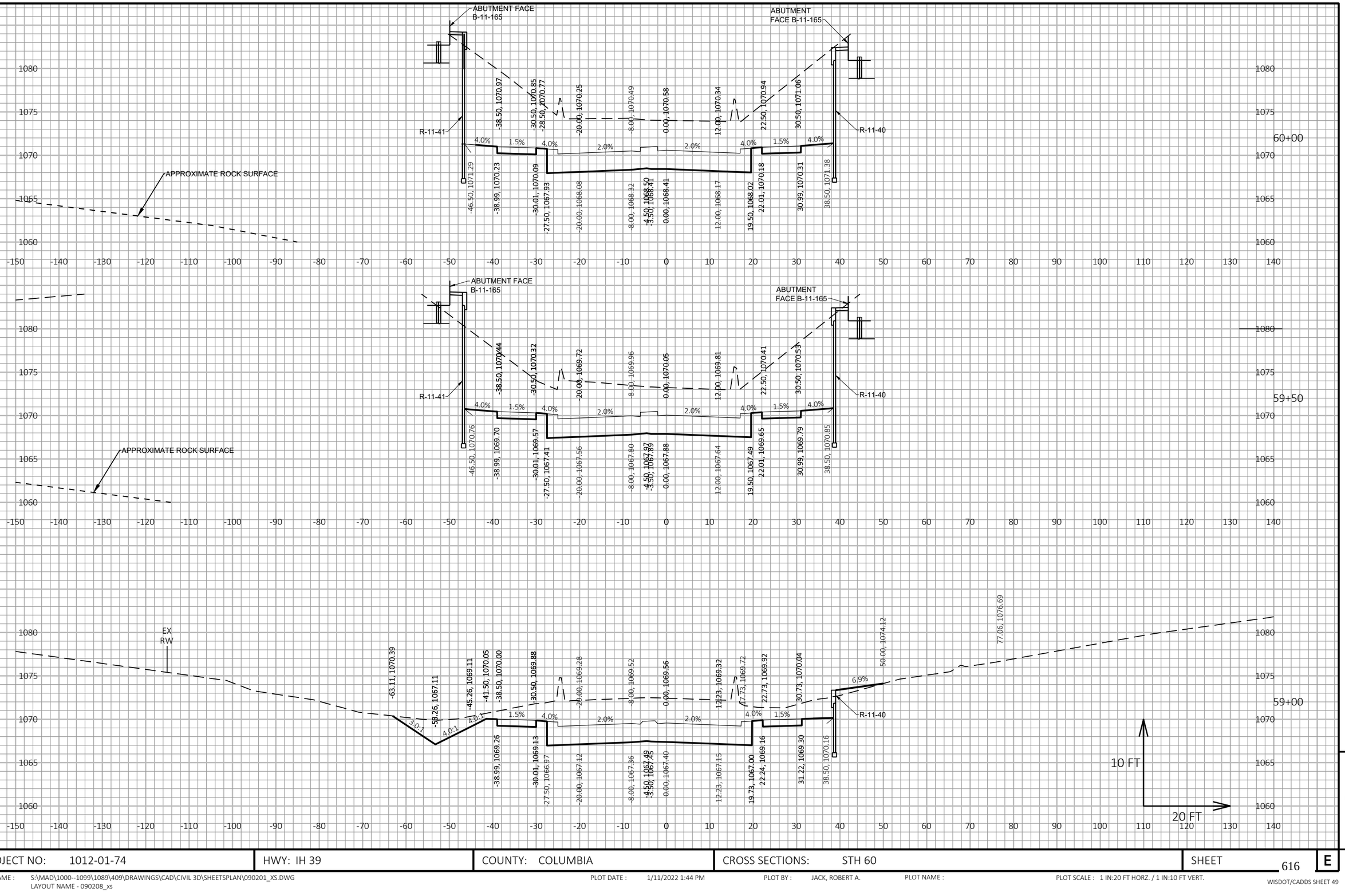


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 615	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090207_xs

PLOT DATE : 1/11/2022 1:44 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

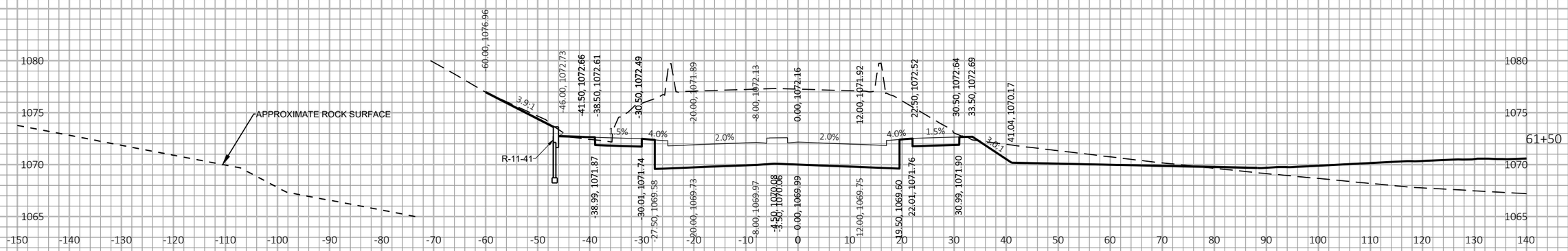


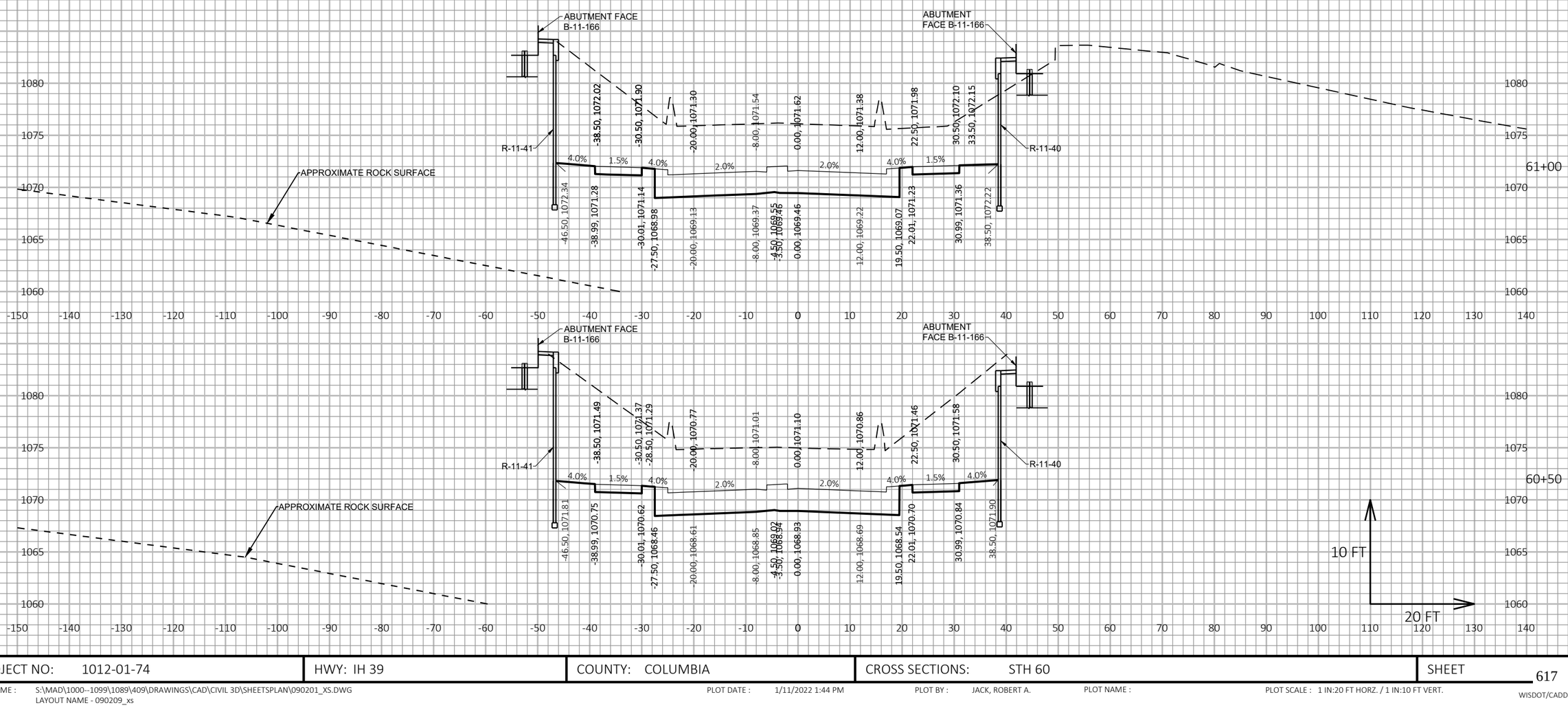
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 616 E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090208_xs

PLOT DATE : 1/11/2022 1:44 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



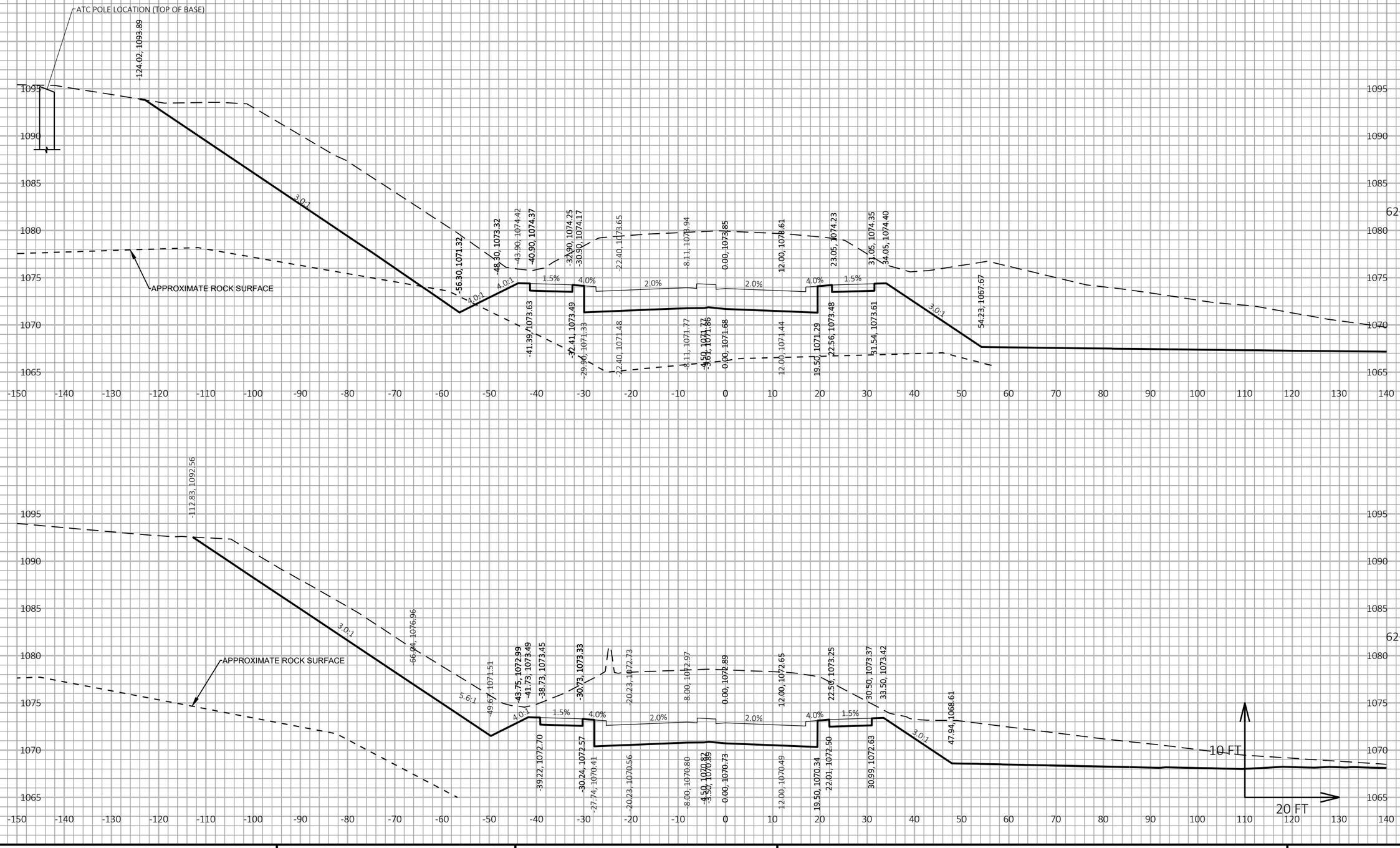


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 617	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090209_xs

PLOT DATE : 1/11/2022 1:44 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 618	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090210_xs

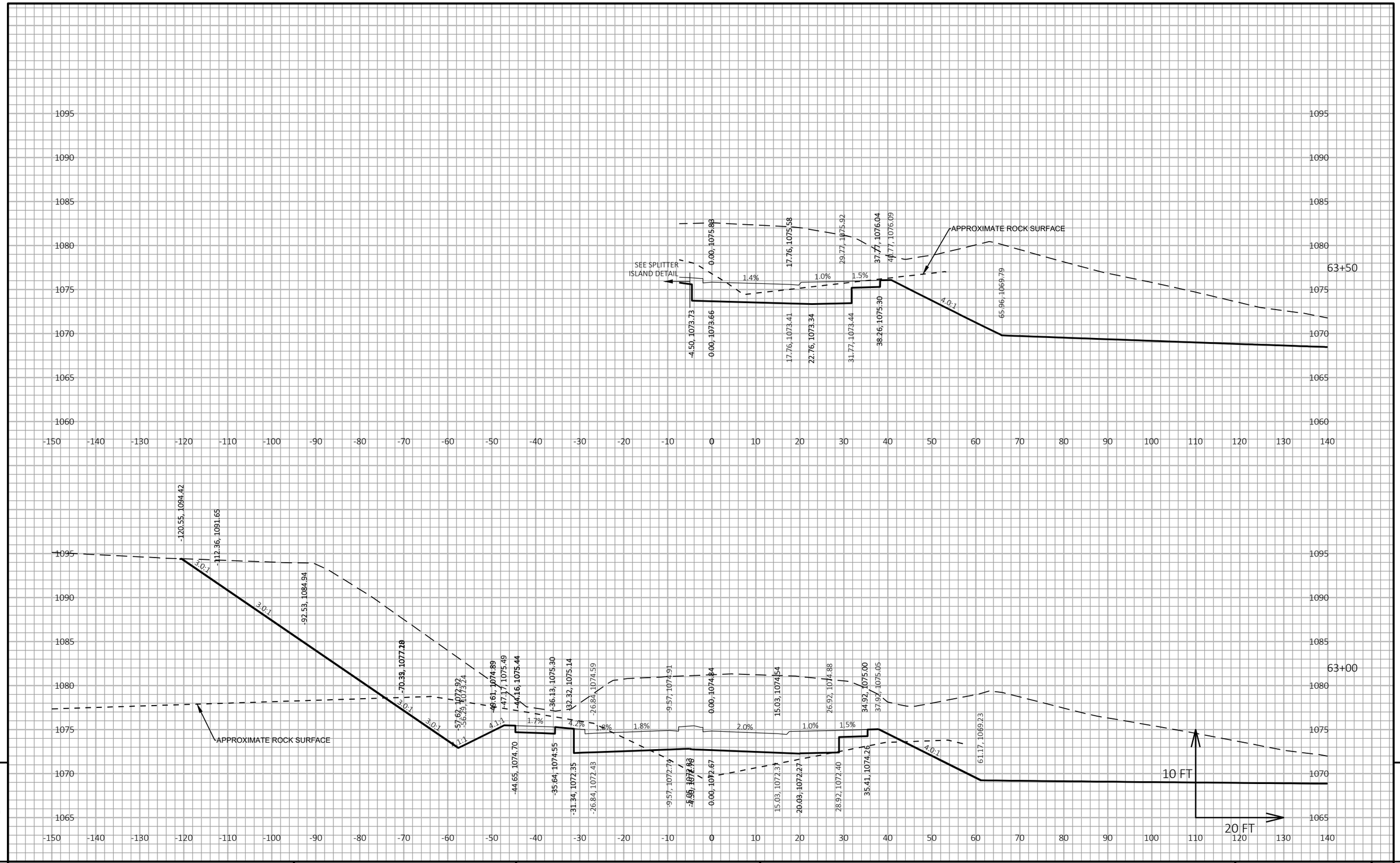
PLOT DATE : 1/11/2022 1:44 PM

PLOT BY : JACK, ROBERT A.

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

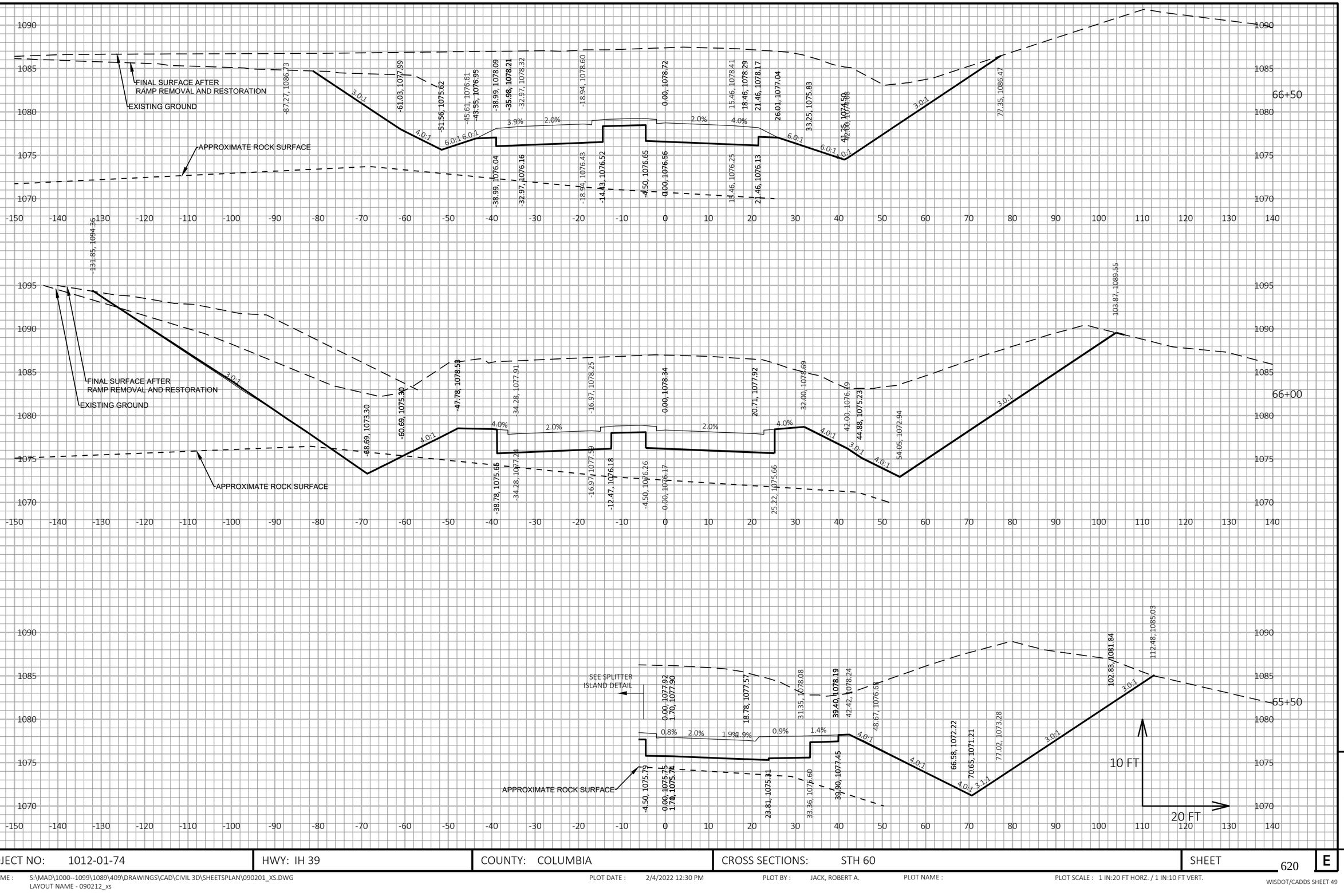


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 619	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090211_xs

PLOT DATE : 1/11/2022 1:45 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

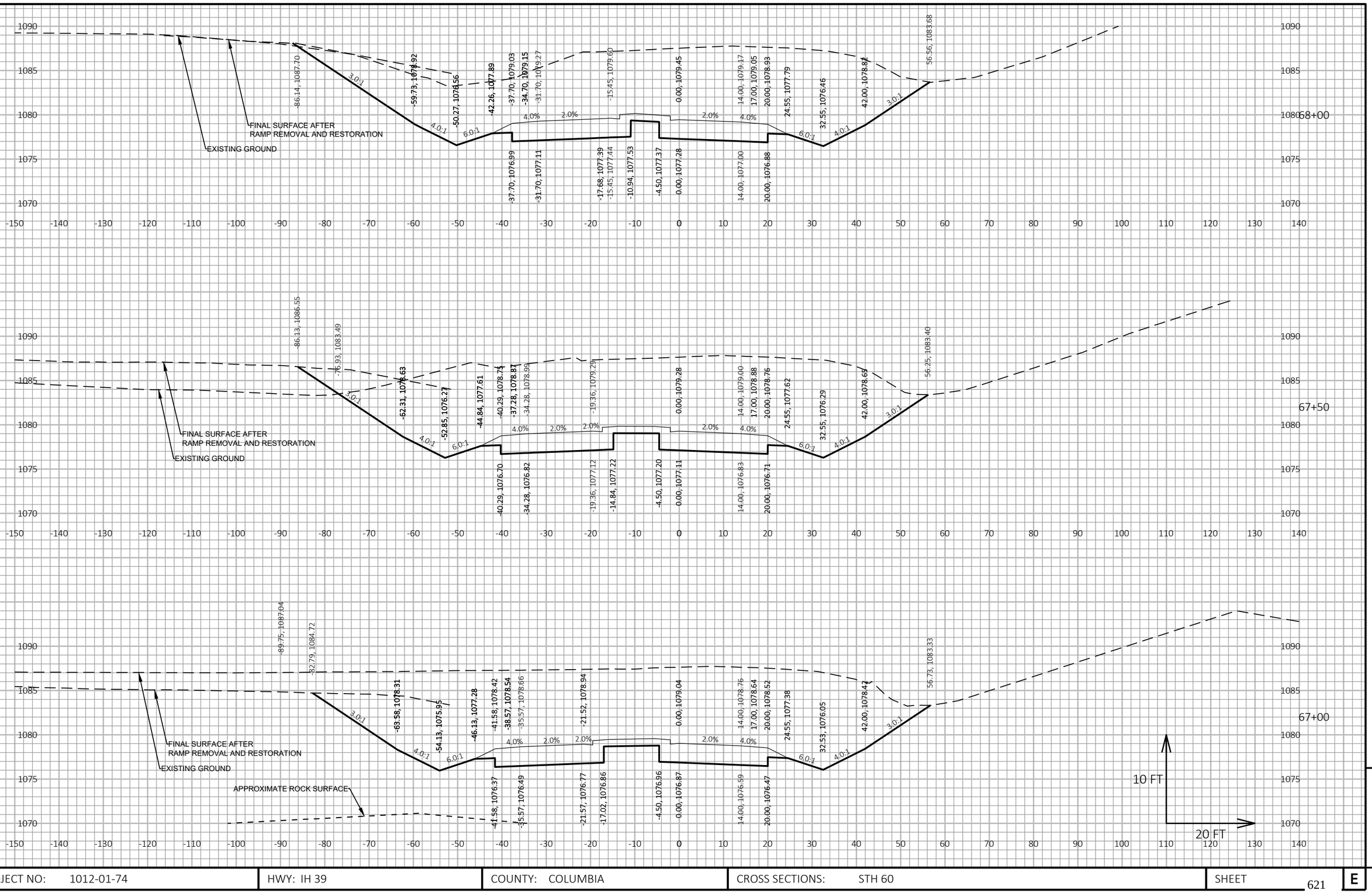
WISDOT/CADDS SHEET 49



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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 620	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090212_xs
PLOT DATE : 2/4/2022 12:30 PM
PLOT BY : JACK, ROBERT A.
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

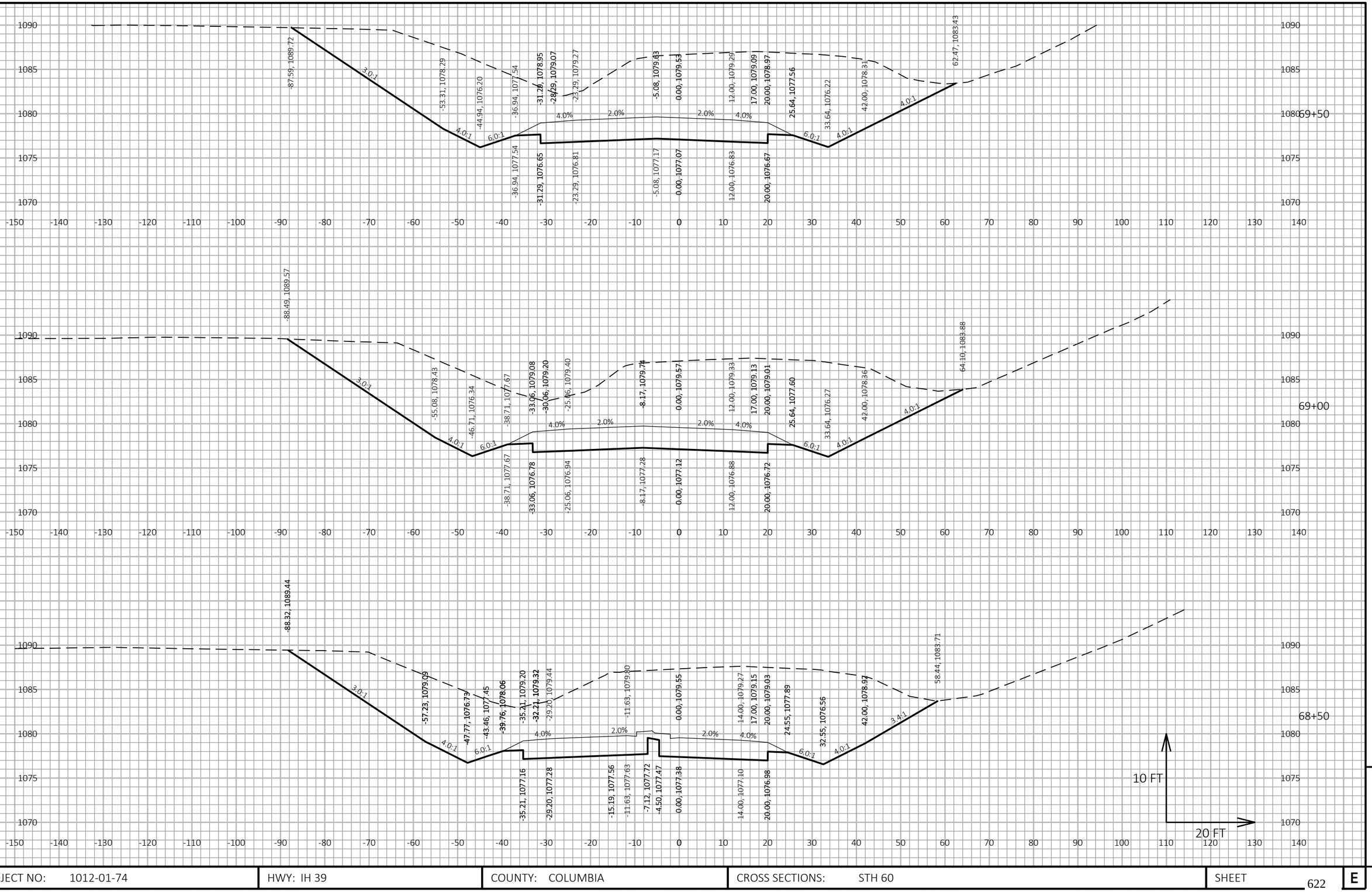
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 621	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090213_xs

PLOT DATE : 2/4/2022 12:32 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

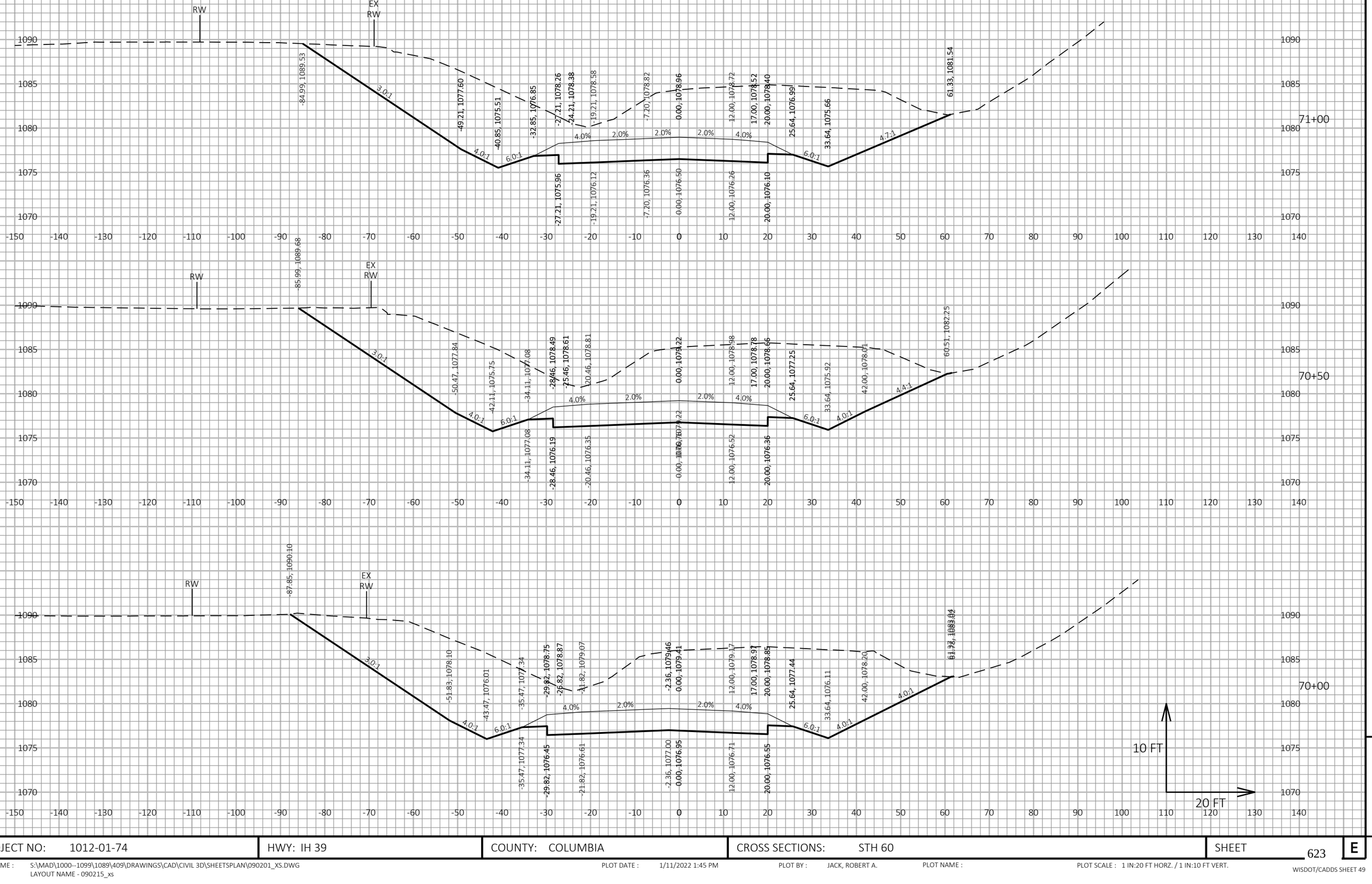


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 622	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090214_xs

PLOT DATE : 1/11/2022 5:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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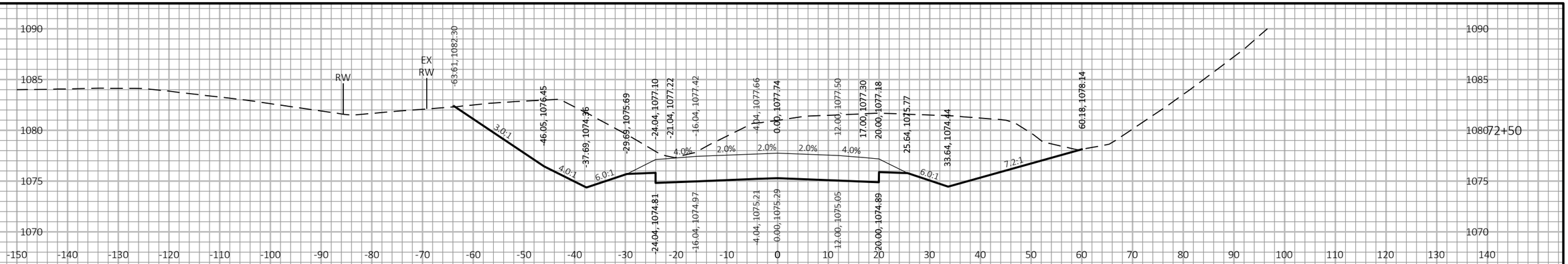
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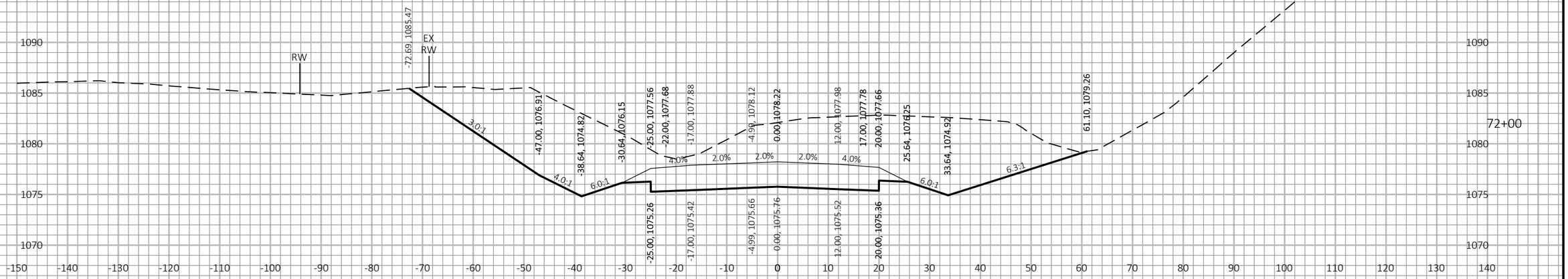
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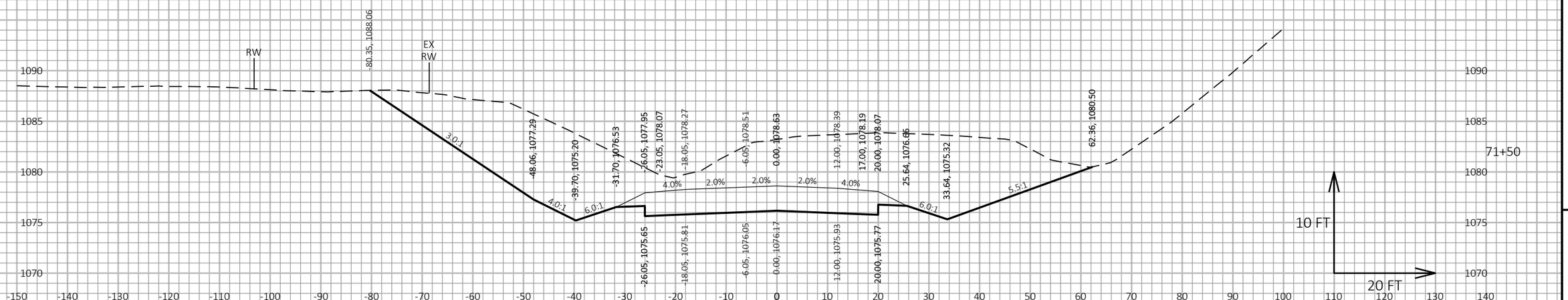
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LAYOUT NAME - 090215_xs

PLOT DATE : 1/11/2022 1:45 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







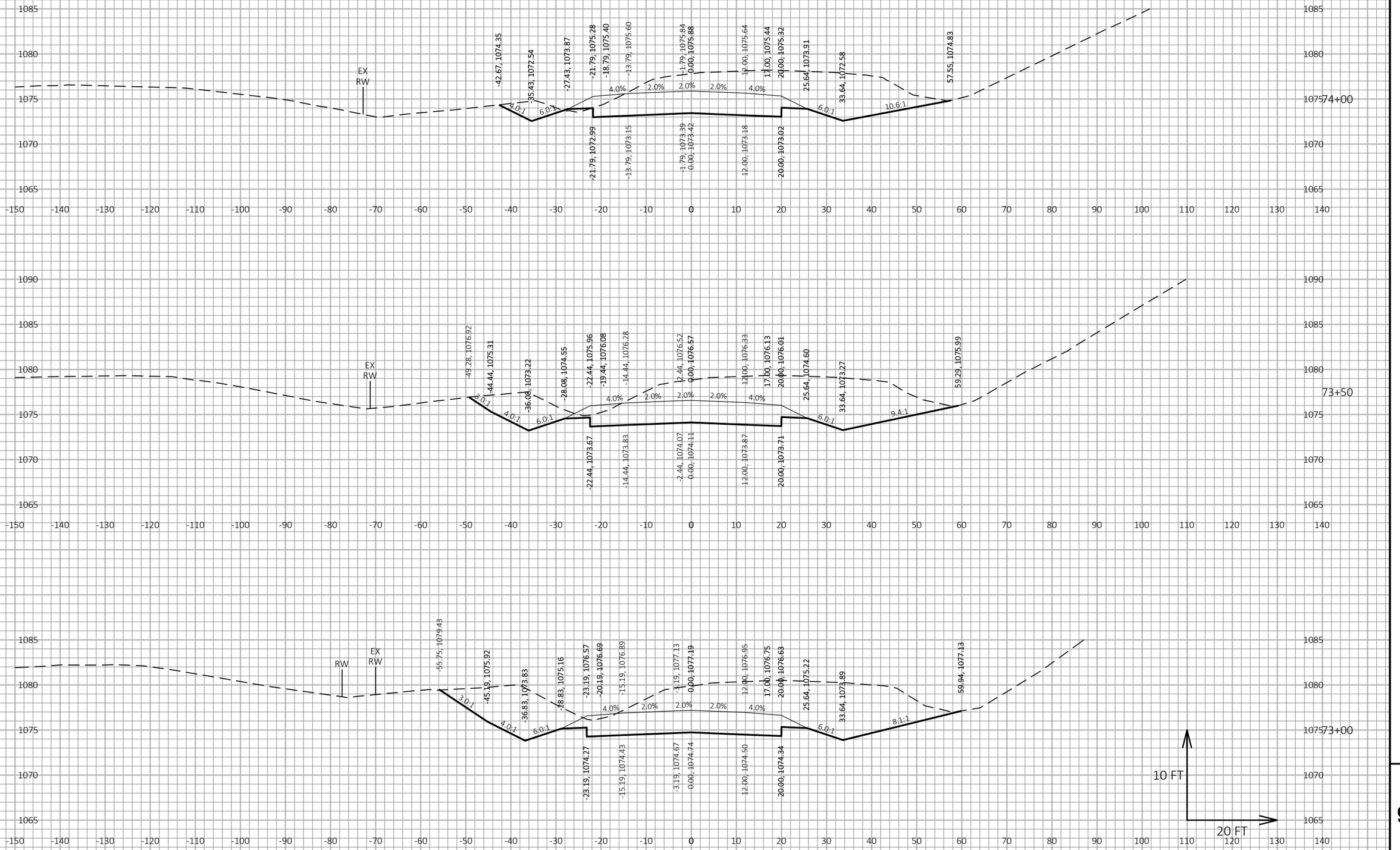
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 624	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090216_xs

PLOT DATE : 1/11/2022 1:45 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



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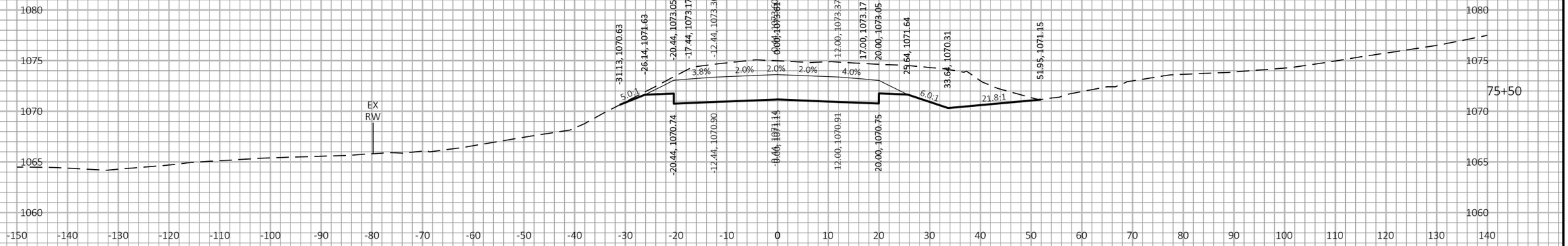
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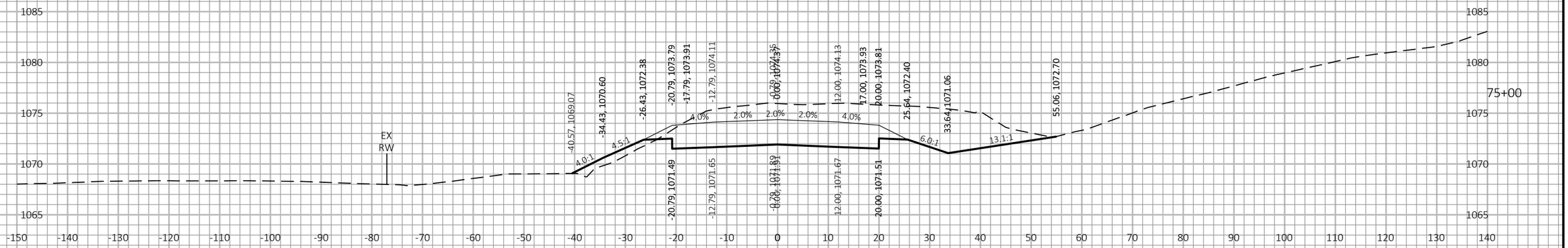
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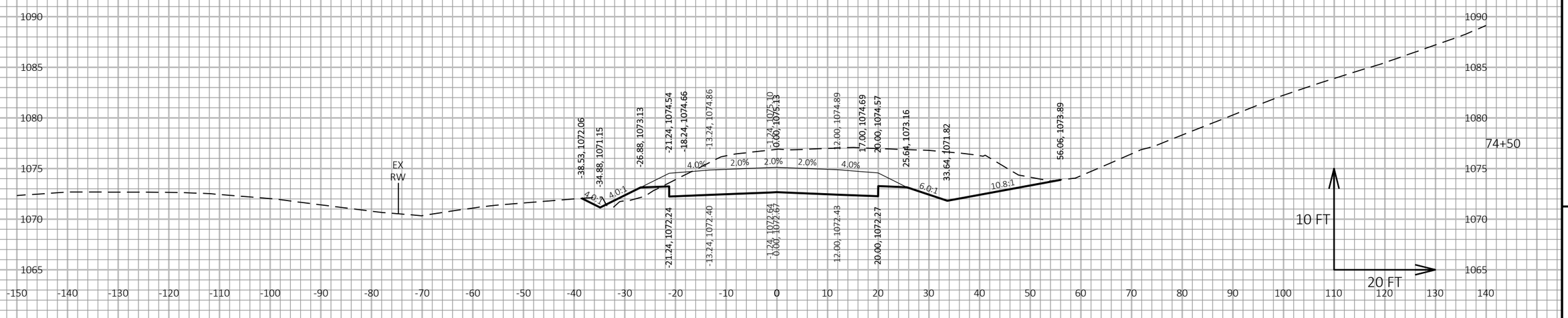
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LAYOUT NAME - 090217_xs

PLOT DATE : 1/11/2022 1:45 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







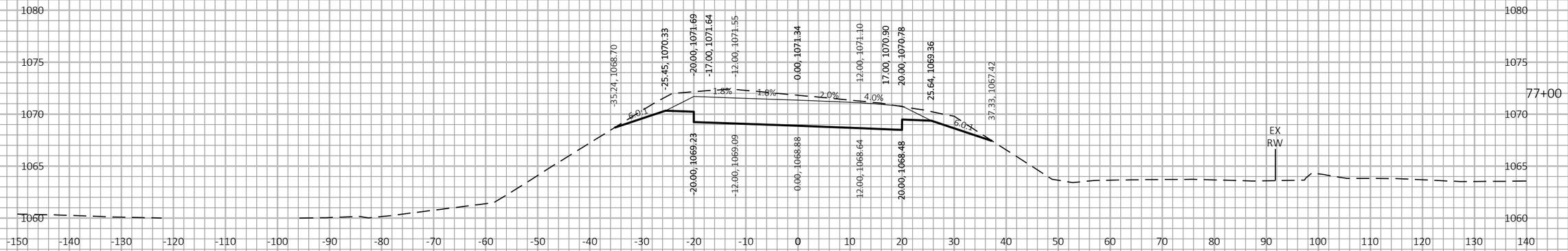
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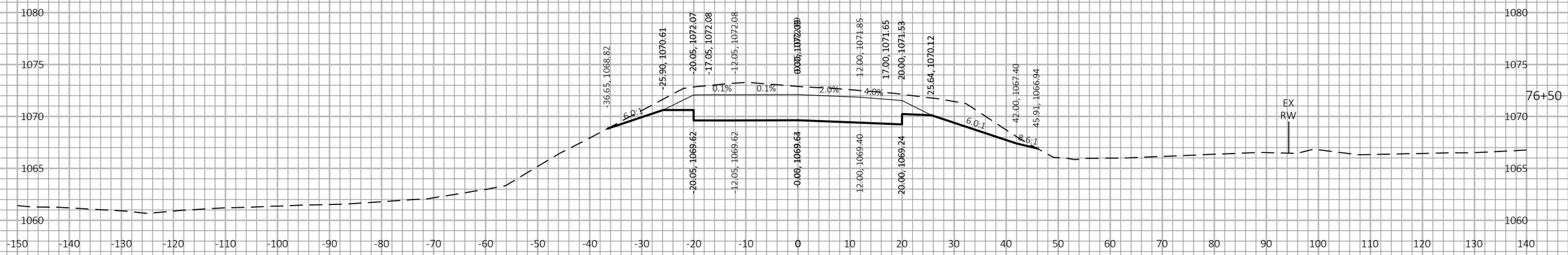
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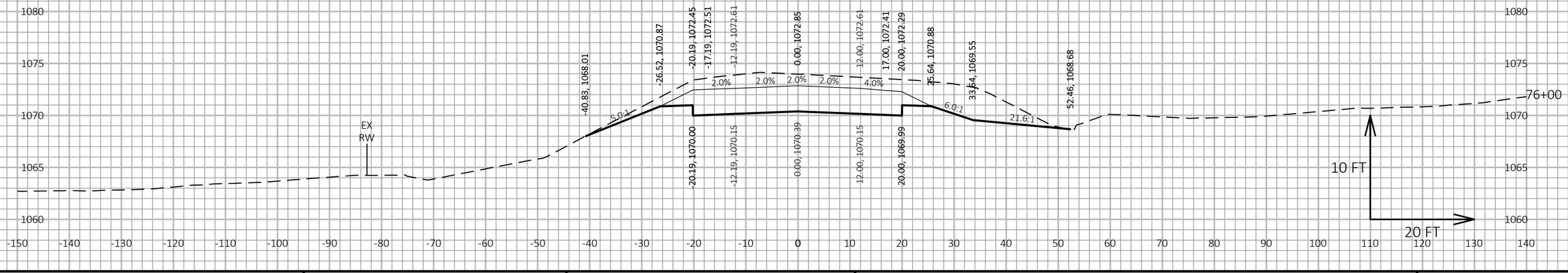
PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 626	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090218_xs

PLOT DATE : 1/11/2022 1:45 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.







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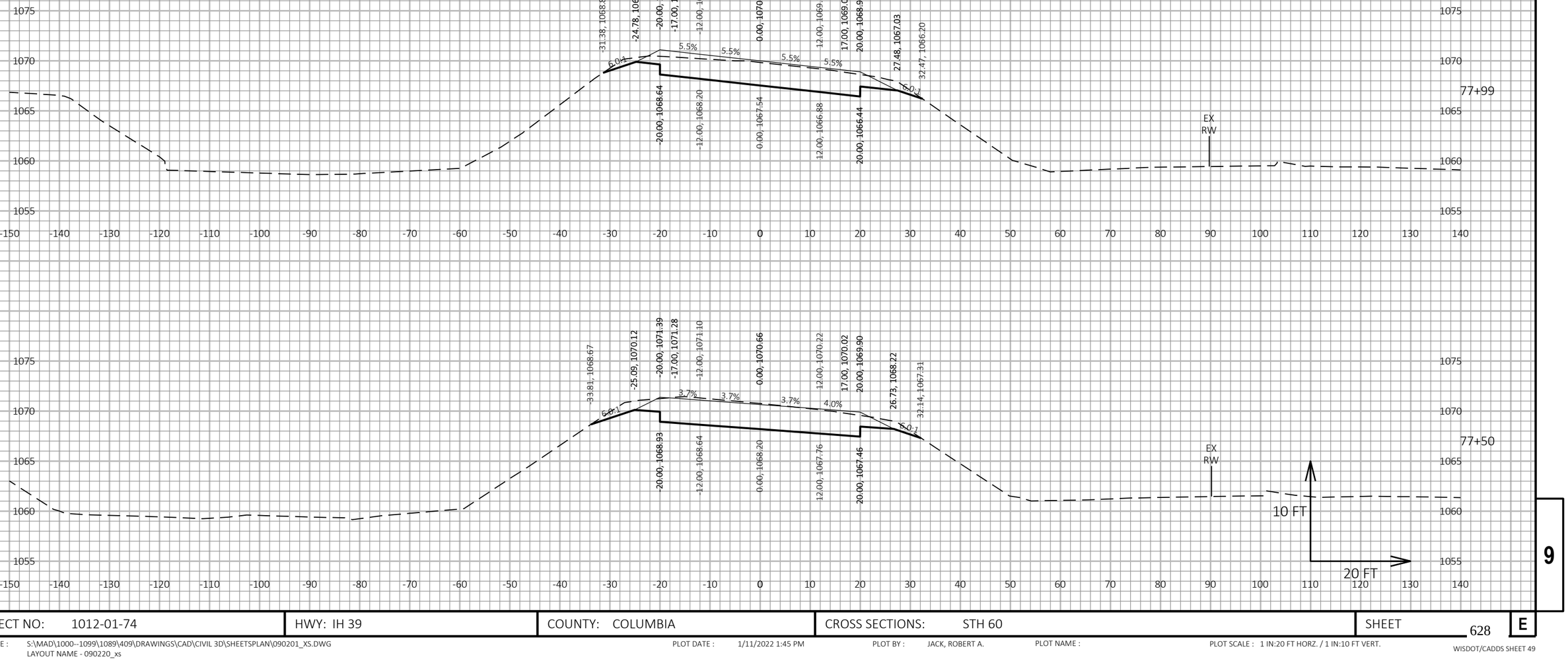
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 627	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090219_xs

PLOT DATE : 1/11/2022 1:45 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



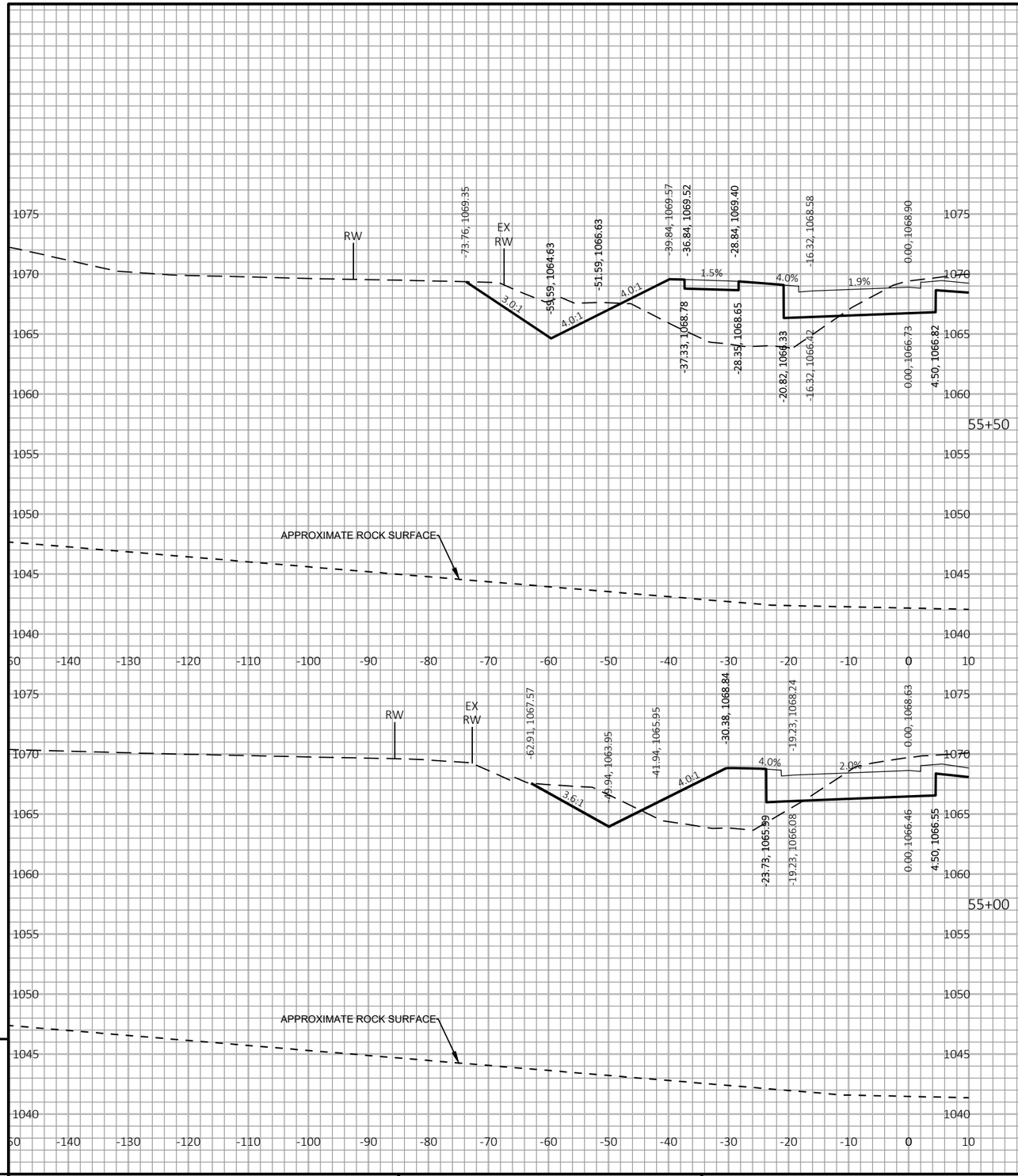
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60	SHEET 628	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090220_xs

PLOT DATE : 1/11/2022 1:45 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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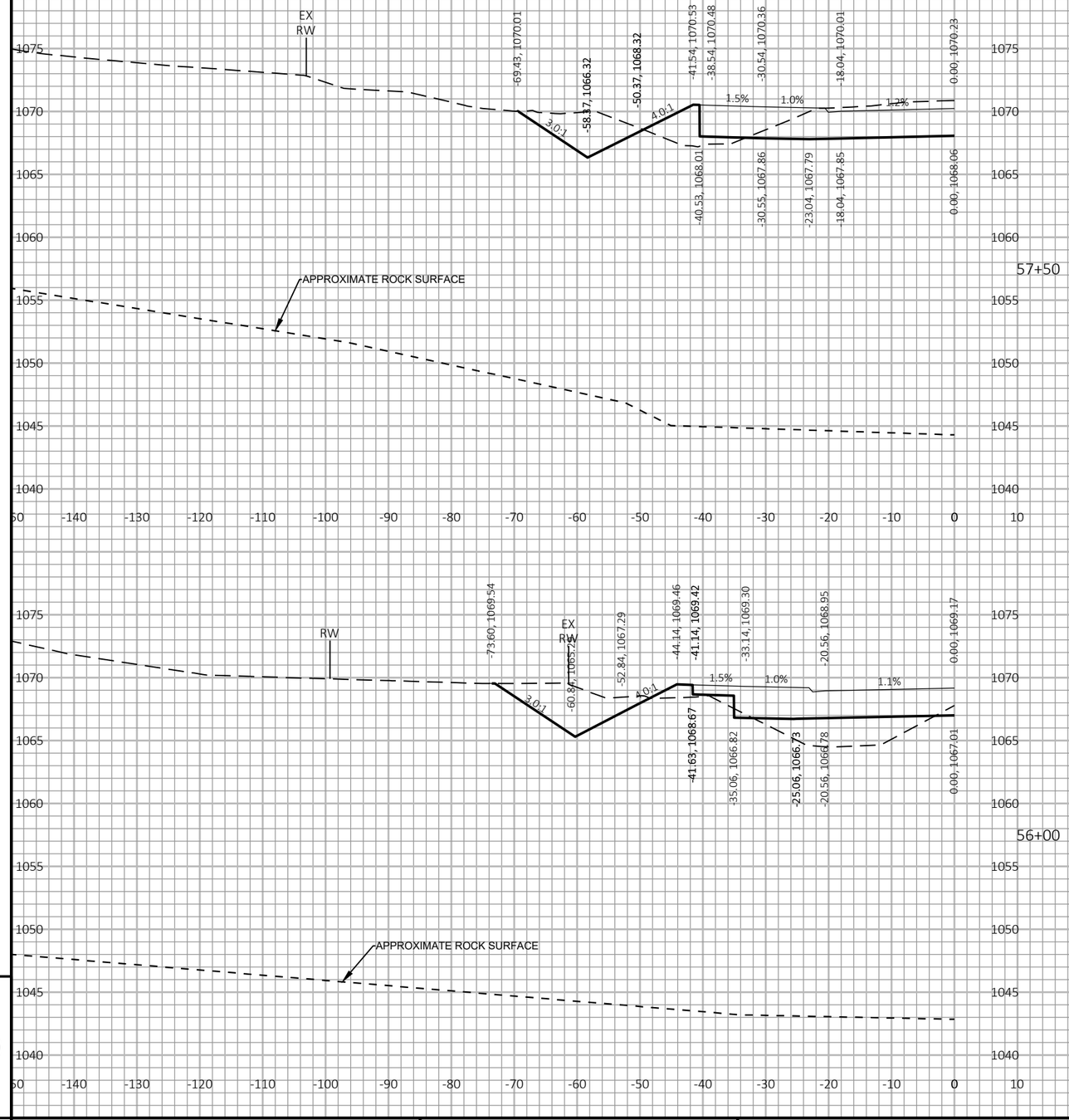
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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: WB STH 60	SHEET 629	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090221_xs

PLOT DATE : 1/11/2022 1:45 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: WB STH 60	SHEET 630	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
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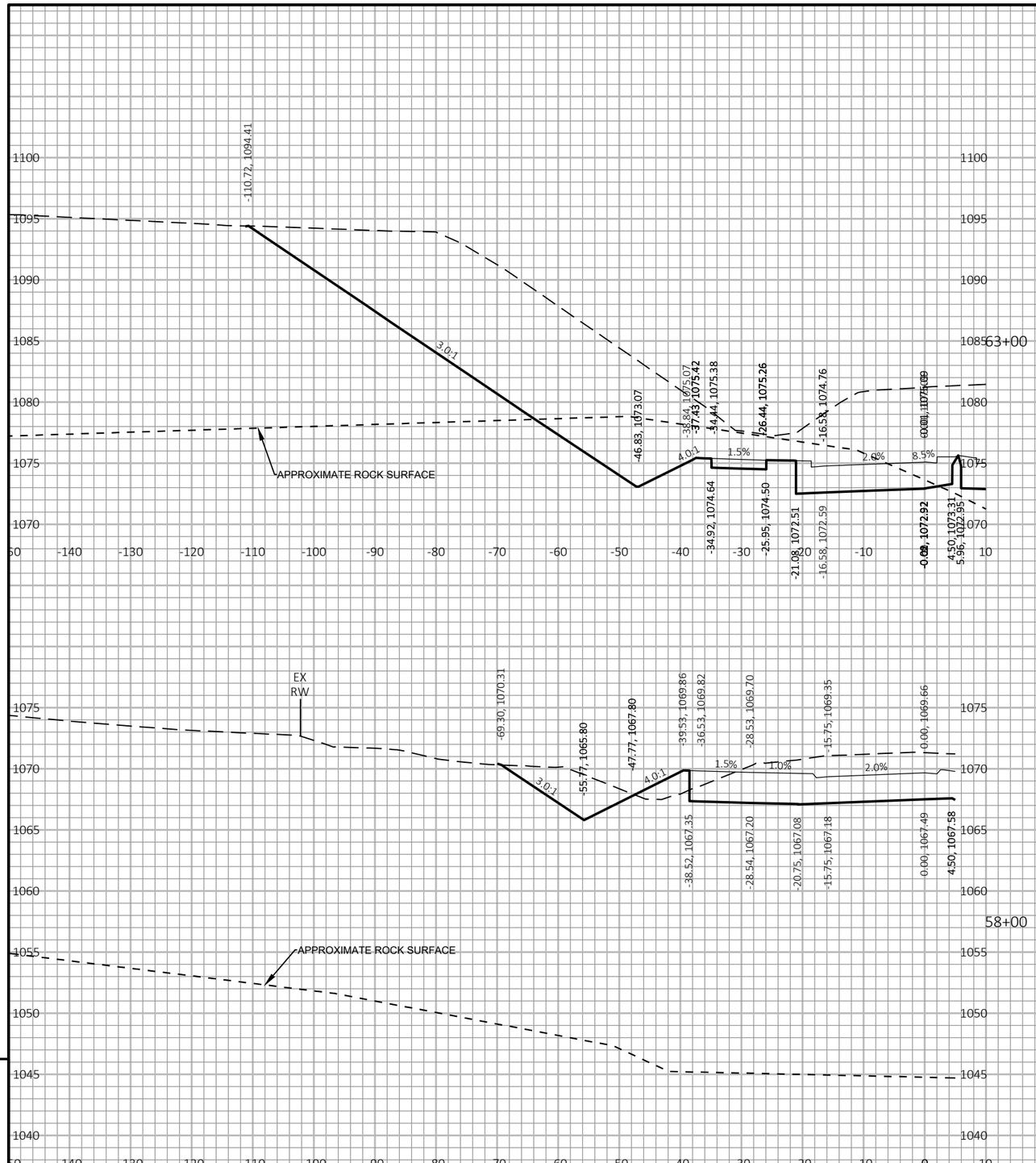
PLOT DATE : 1/11/2022 1:45 PM

PLOT BY : JACK, ROBERT A.

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

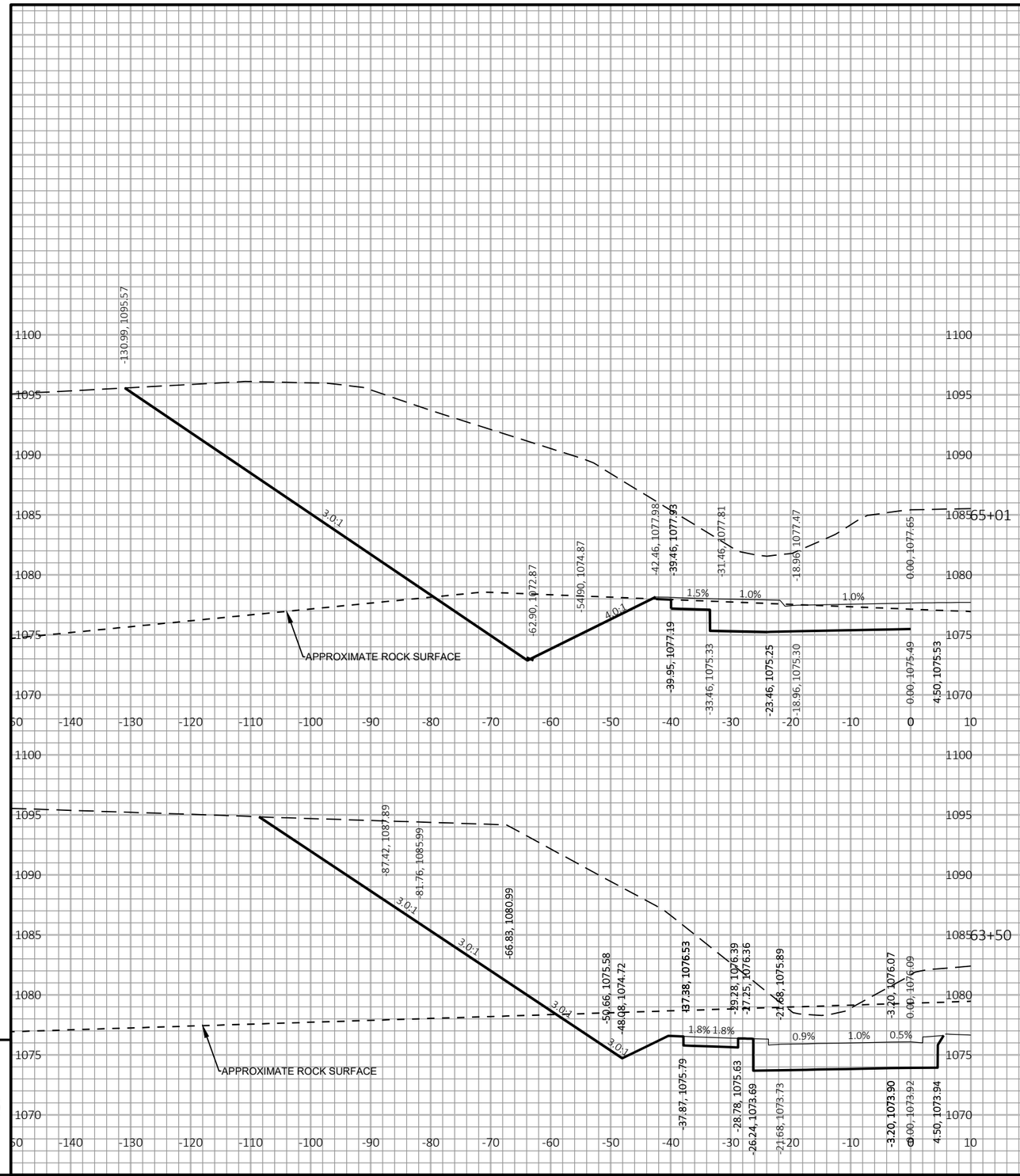


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: WB STH 60	SHEET 631	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090223_xs

PLOT DATE : 1/11/2022 1:46 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: WB STH 60	SHEET 632	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090224_xs

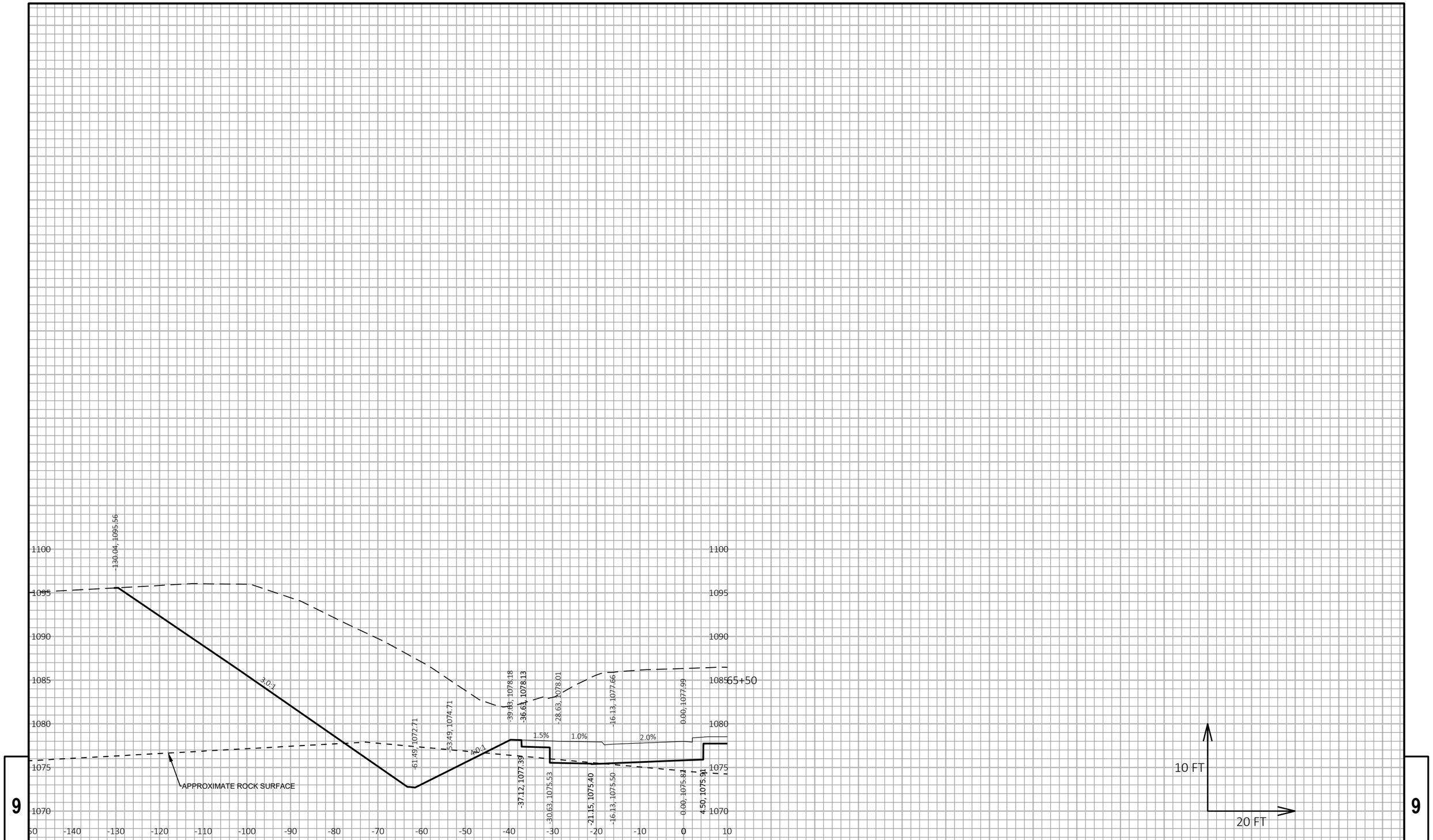
PLOT DATE : 1/11/2022 1:46 PM

PLOT BY : JACK, ROBERT A.

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: WB STH 60	SHEET 633	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090225_xs

PLOT DATE : 1/11/2022 1:46 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

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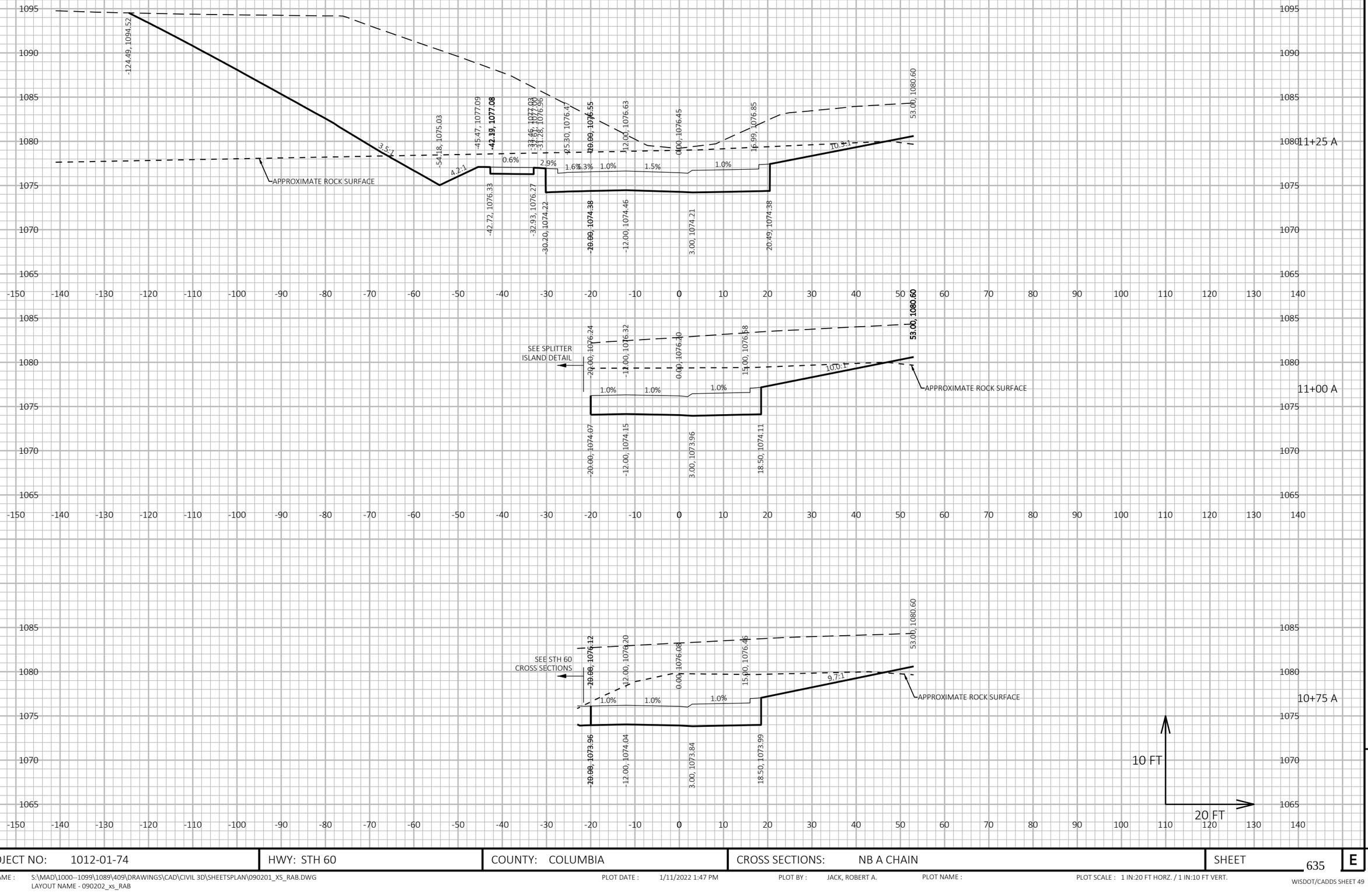
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PROJECT NO: 1012-01-74	HWY: STH 60	COUNTY: COLUMBIA	CROSS SECTIONS: NB A CHAIN	SHEET 634	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS_RAB.DWG
LAYOUT NAME - 090201_xs_RAB

PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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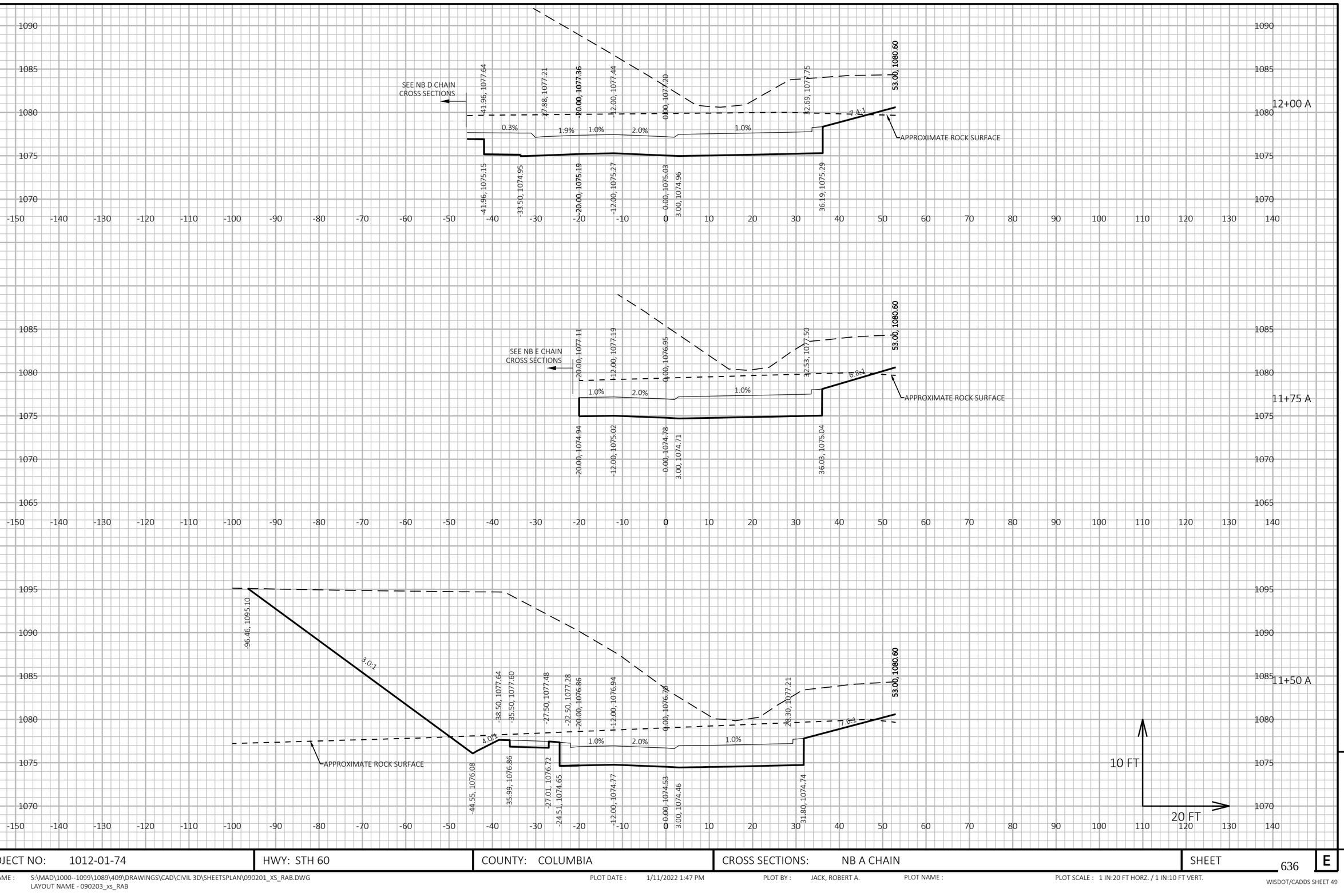
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PROJECT NO: 1012-01-74	HWY: STH 60	COUNTY: COLUMBIA	CROSS SECTIONS: NB A CHAIN	SHEET 635	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS_RAB.DWG
LAYOUT NAME - 090202_xs_RAB

PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

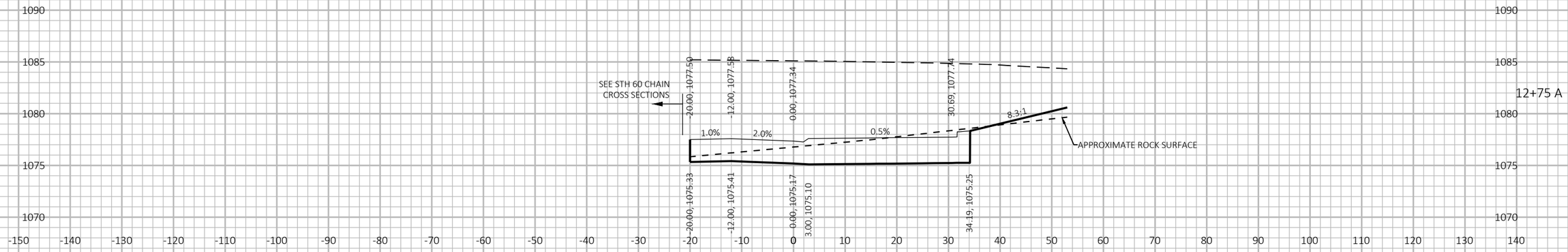


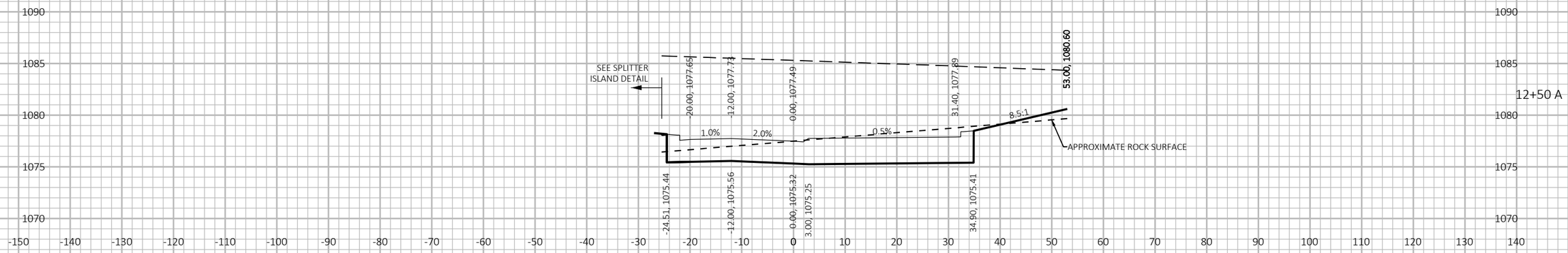
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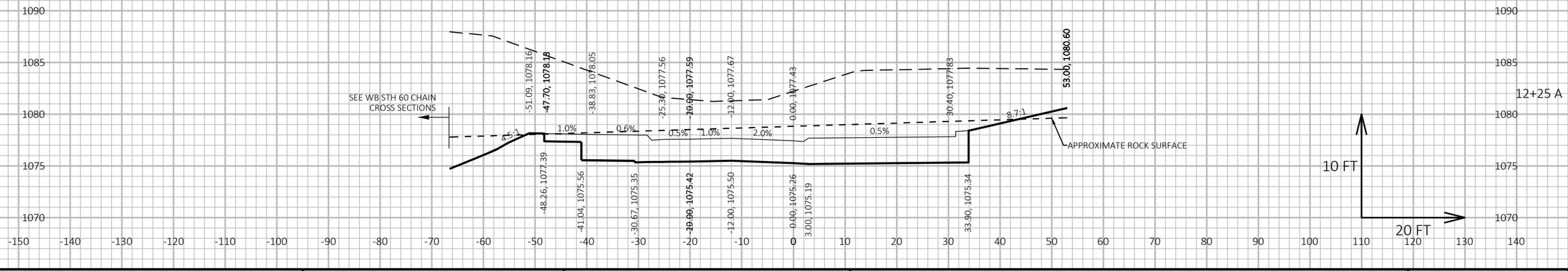
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LAYOUT NAME - 090203_xs_RAB

PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







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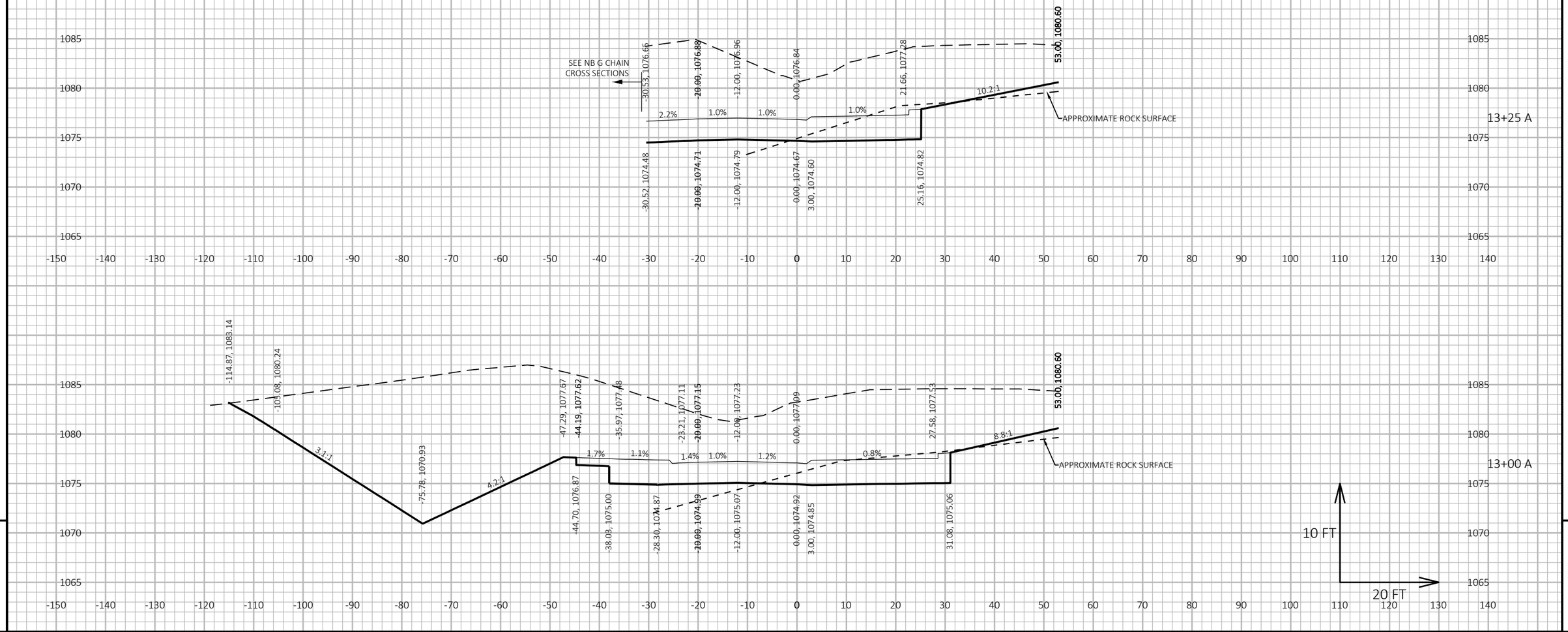
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PROJECT NO: 1012-01-74	HWY: STH 60	COUNTY: COLUMBIA	CROSS SECTIONS: NB A CHAIN	SHEET 637	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS_RAB.DWG
LAYOUT NAME - 090204_xs_RAB

PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

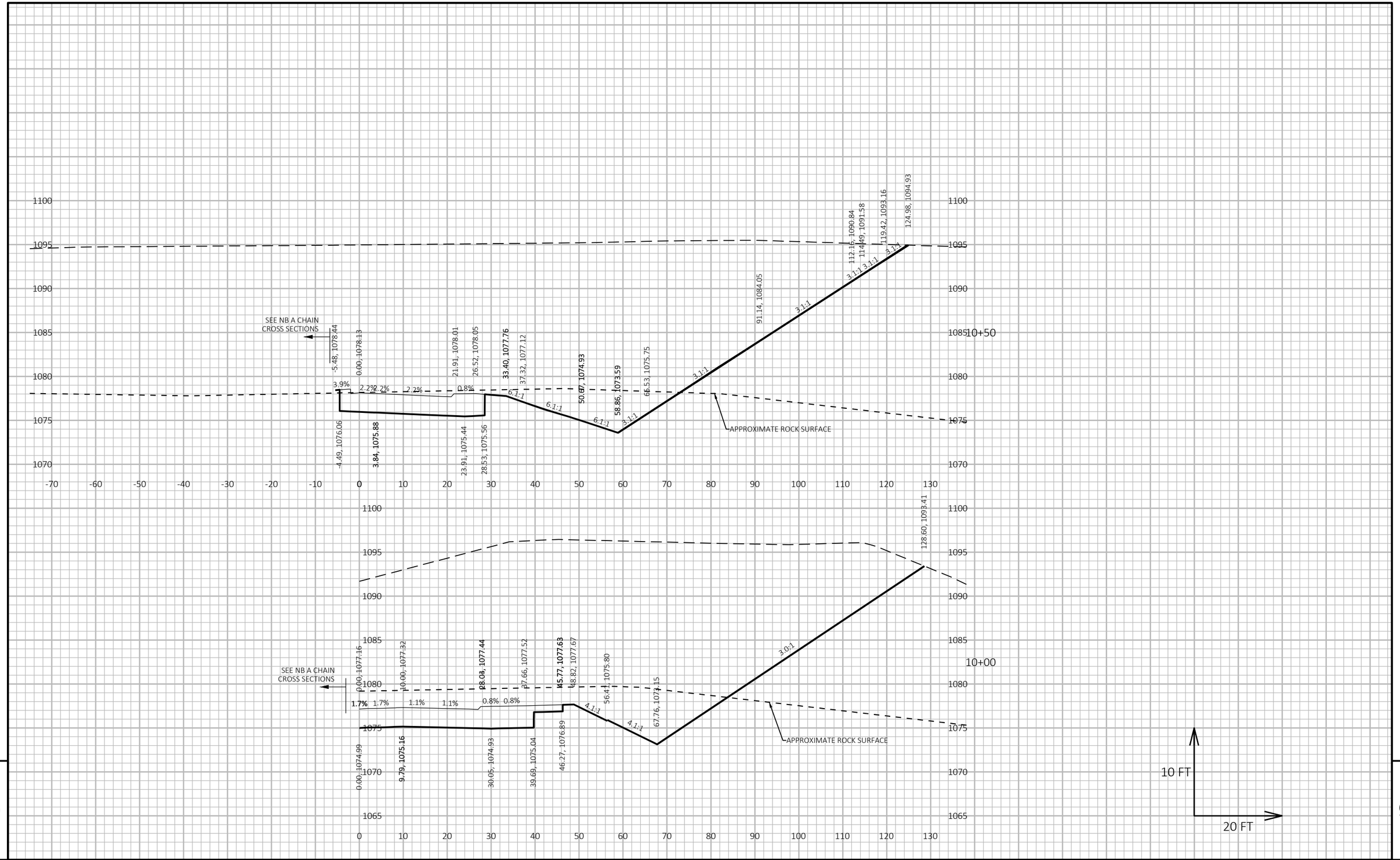


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PROJECT NO: 1012-01-74	HWY: STH 60	COUNTY: COLUMBIA	CROSS SECTIONS: NB A CHAIN	SHEET 638	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS_RAB.DWG
LAYOUT NAME - 090205_xs_RAB
PLOT DATE : 1/11/2022 1:47 PM
PLOT BY : JACK, ROBERT A.
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

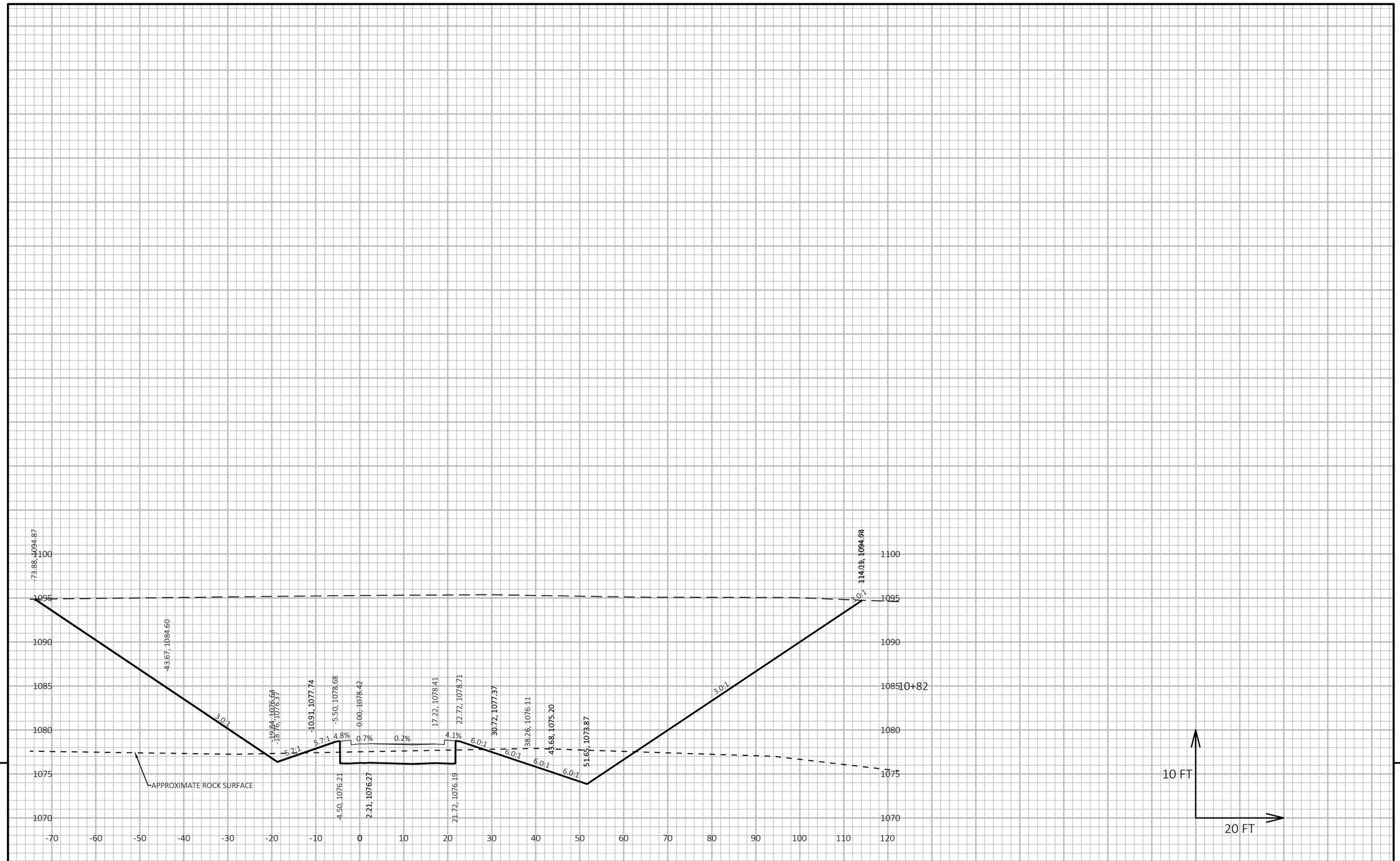


PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NB D CHAIN	SHEET 639	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS_RAB.DWG
LAYOUT NAME - 090206_xs_RAB

PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

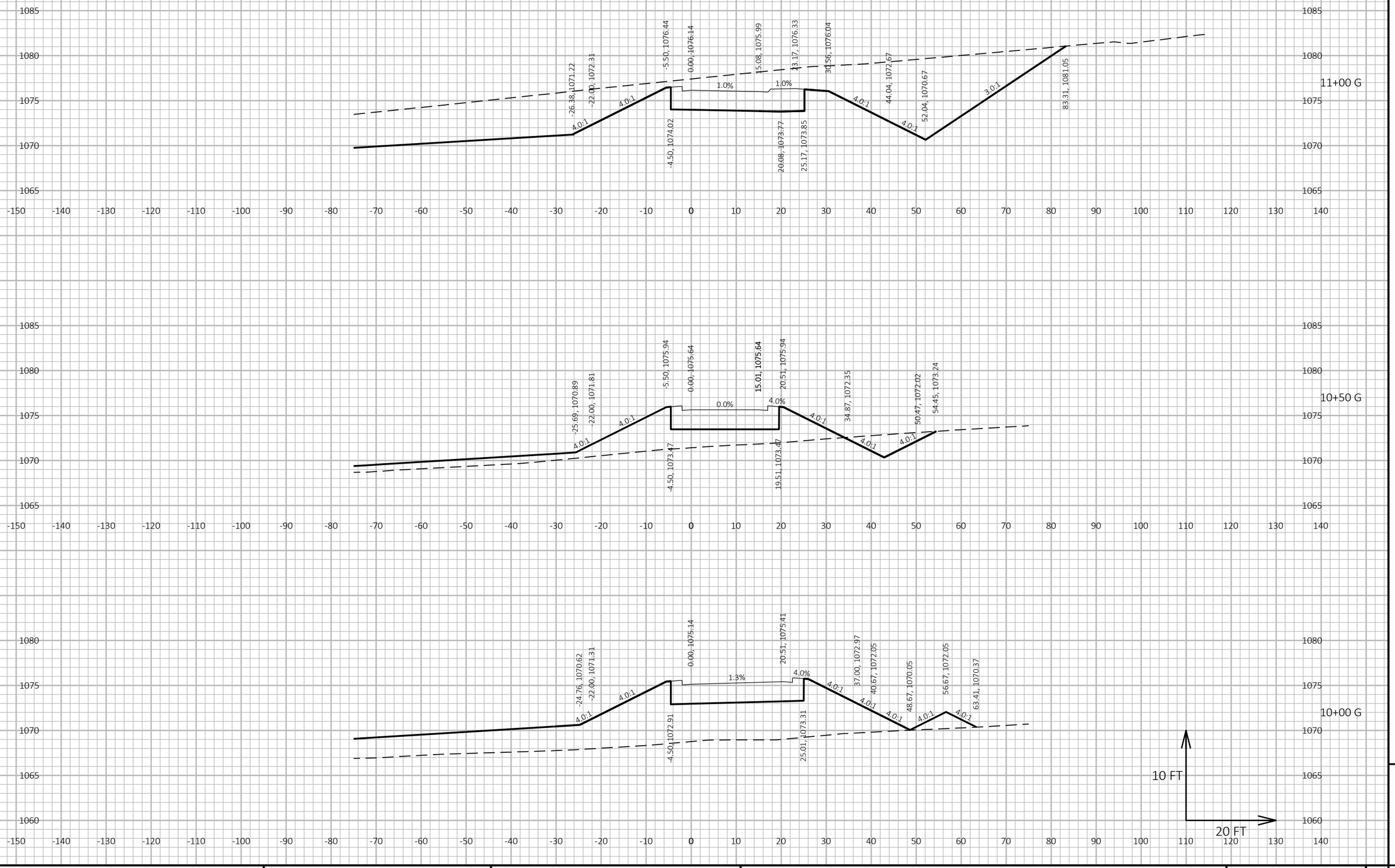


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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: NB D CHAIN	SHEET 640	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS_RAB.DWG
LAYOUT NAME - 090207_xs_RAB

PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



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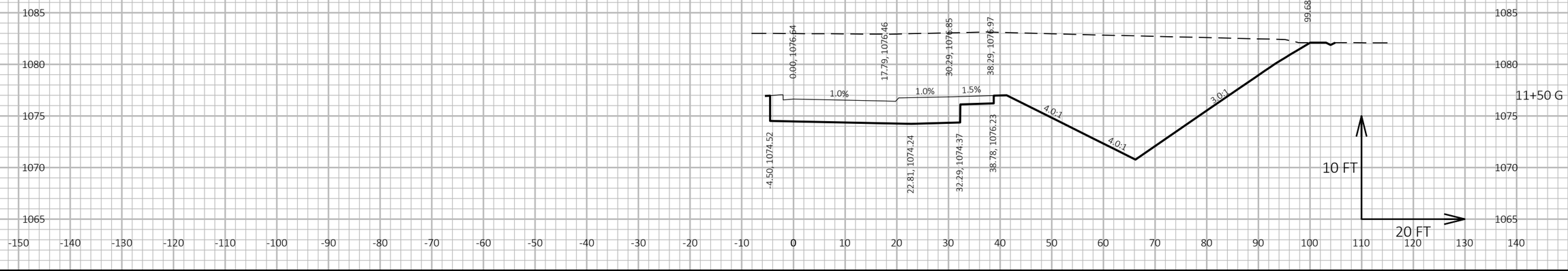
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PROJECT NO: 1012-01-74	HWY: STH 60	COUNTY: COLUMBIA	CROSS SECTIONS: NB G CHAIN	SHEET 641	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS_RAB.DWG
LAYOUT NAME - 090208_xs_RAB

PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

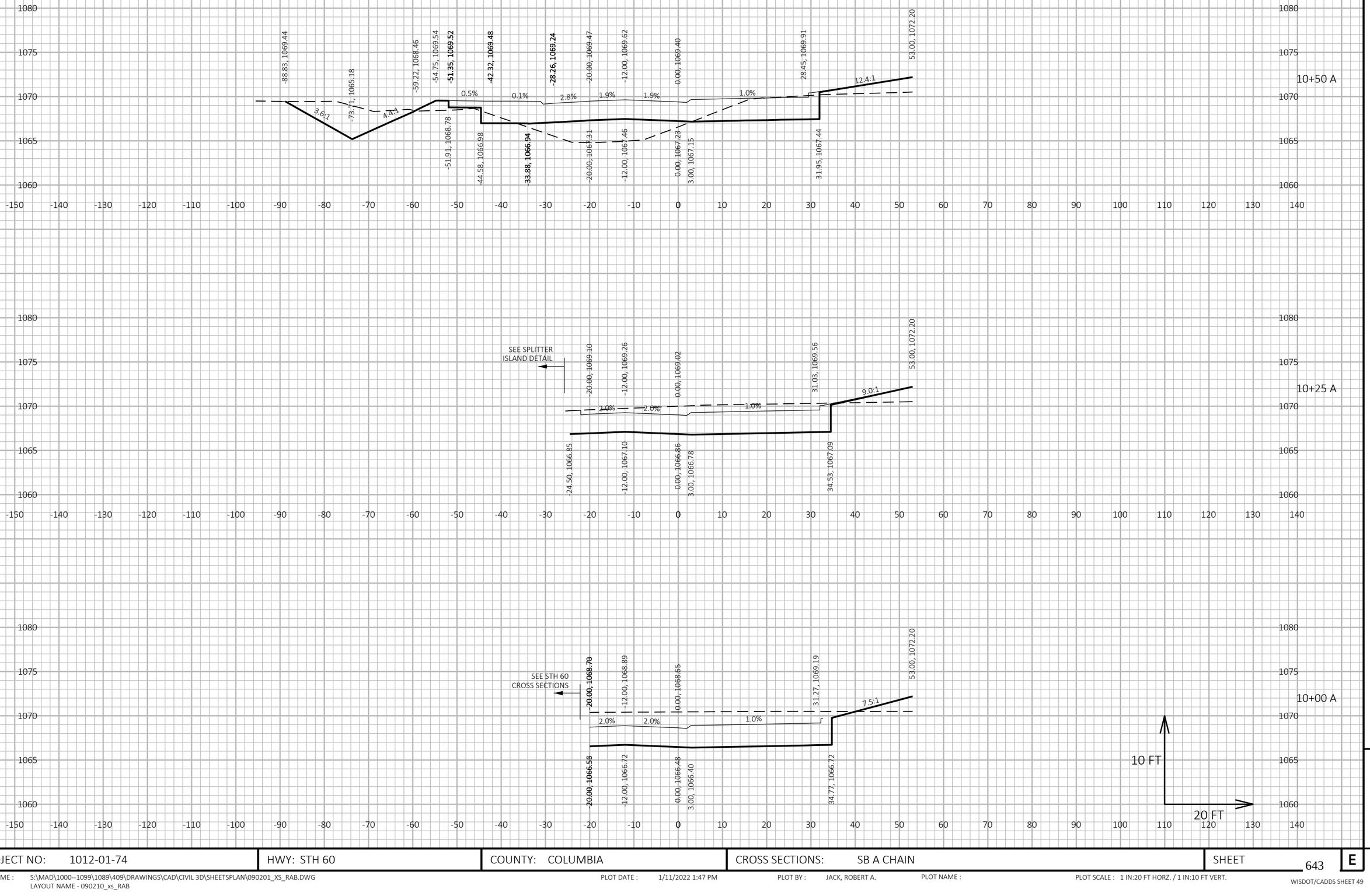


PROJECT NO: 1012-01-74	HWY: STH 60	COUNTY: COLUMBIA	CROSS SECTIONS: NB G CHAIN	SHEET 642	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS_RAB.DWG
LAYOUT NAME - 090209_xs_RAB

PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

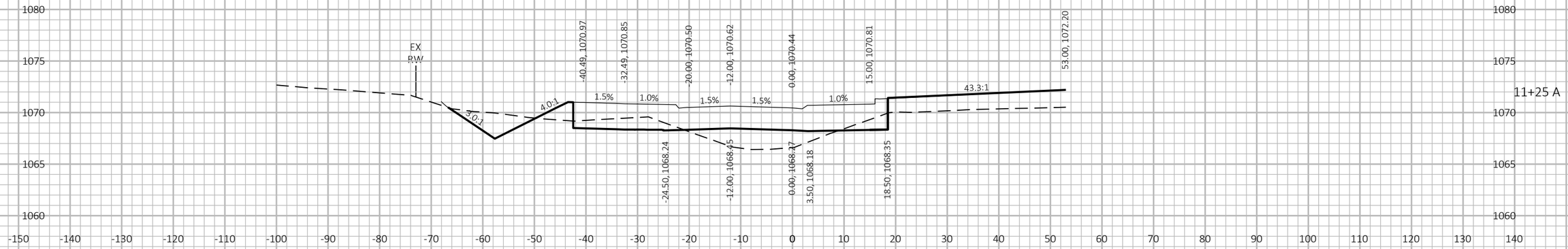
WISDOT/CADDS SHEET 49

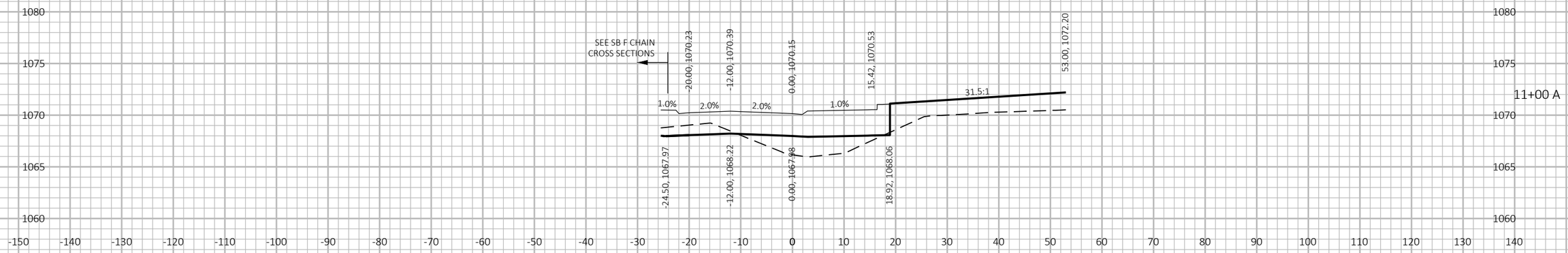


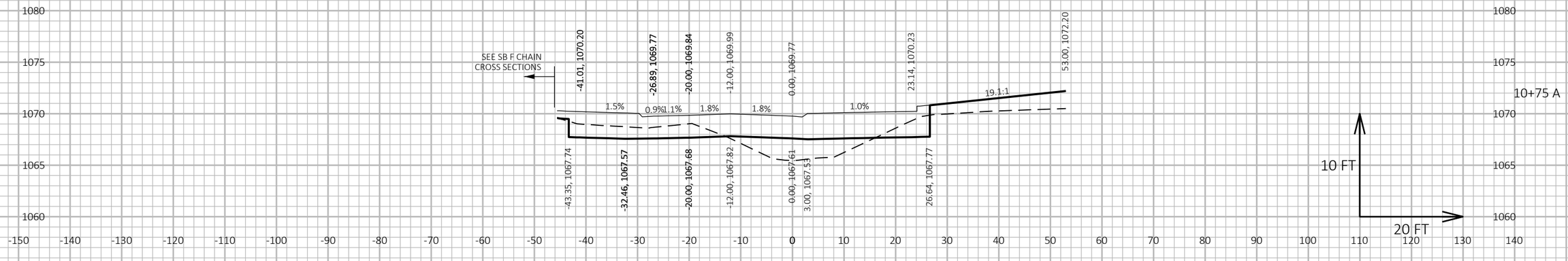
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PROJECT NO: 1012-01-74	HWY: STH 60	COUNTY: COLUMBIA	CROSS SECTIONS: SB A CHAIN	SHEET 643	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS_RAB.DWG
LAYOUT NAME - 090210_xs_RAB
PLOT DATE : 1/11/2022 1:47 PM
PLOT BY : JACK, ROBERT A.
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49







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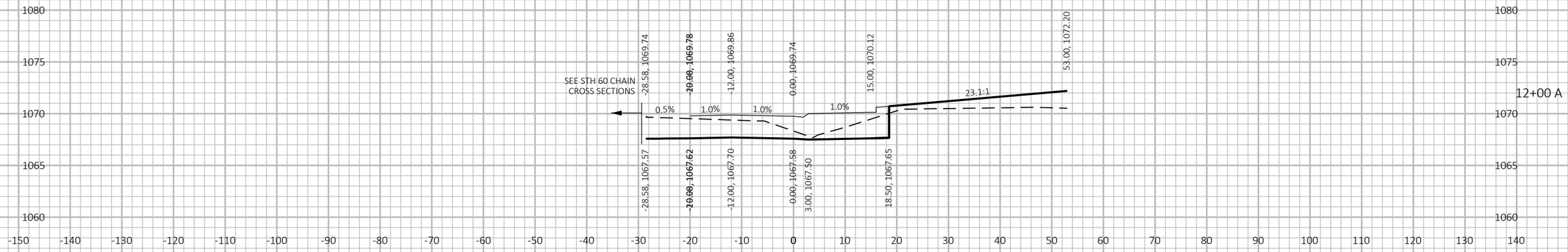
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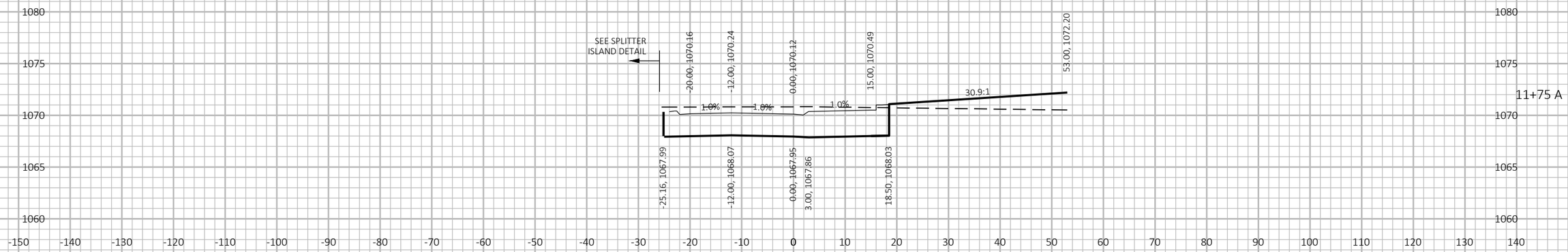
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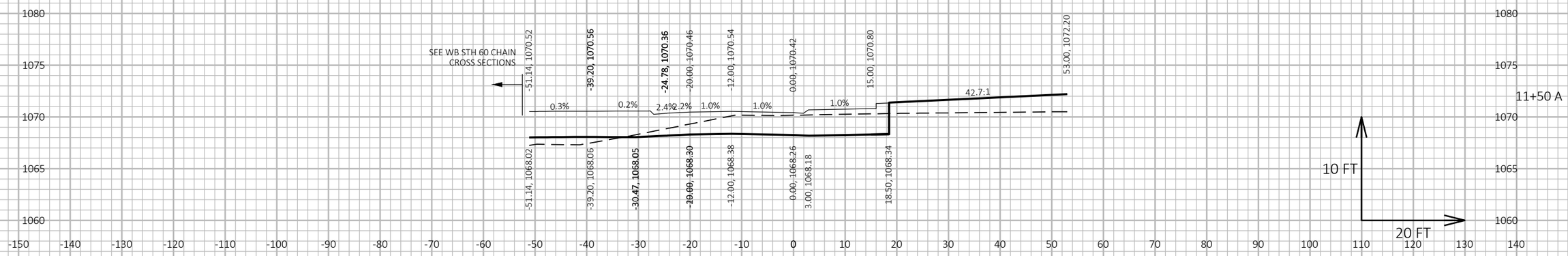
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LAYOUT NAME - 090211_xs_RAB

PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







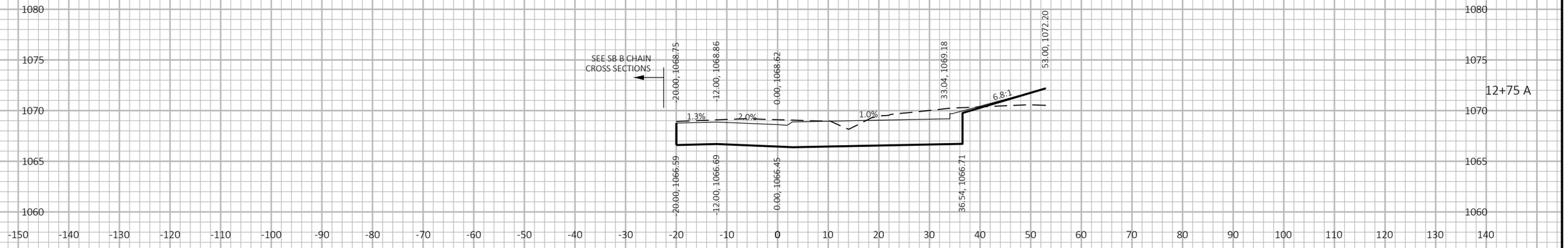
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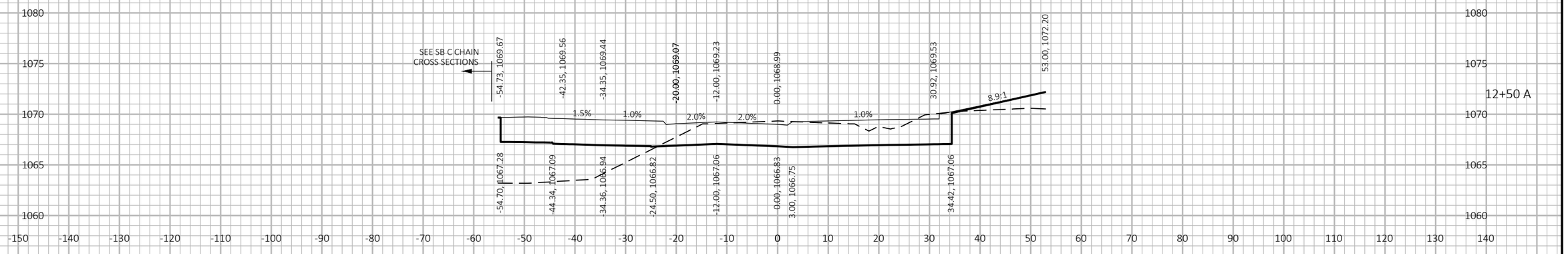
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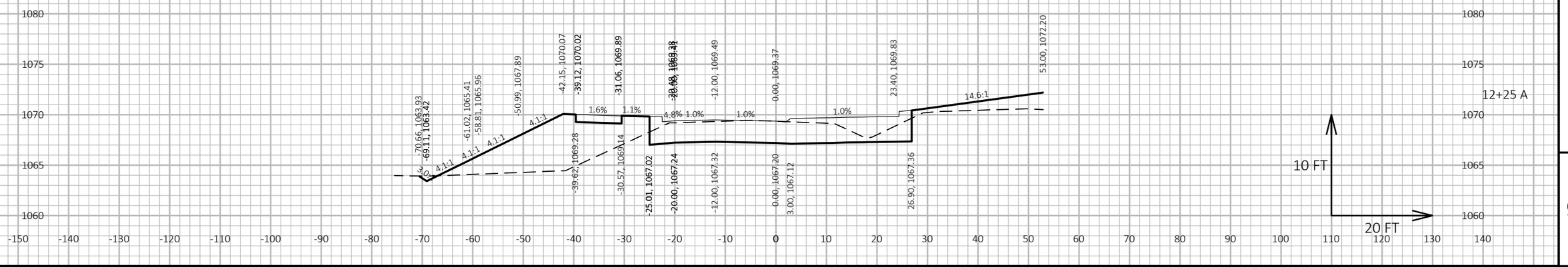
PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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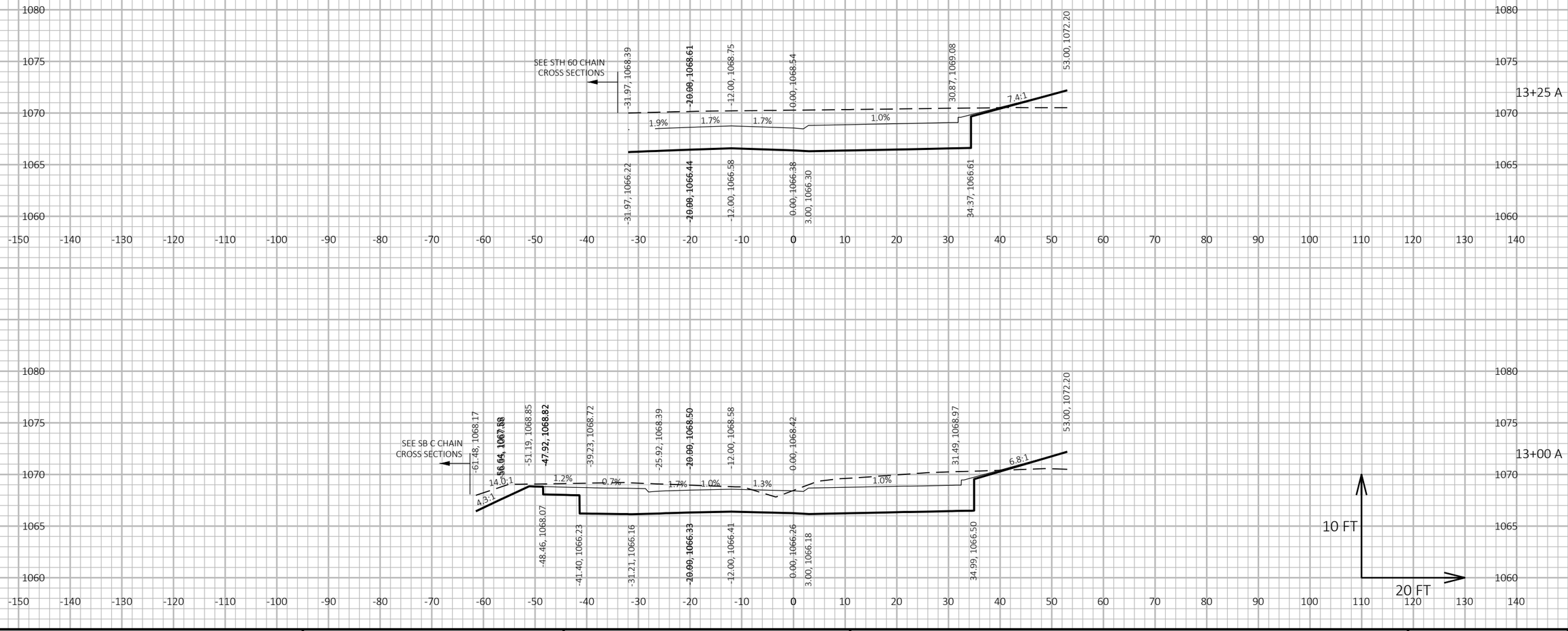


PROJECT NO: 1012-01-74	HWY: STH 60	COUNTY: COLUMBIA	CROSS SECTIONS: SB A CHAIN	SHEET 646	E

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LAYOUT NAME - 090213_xs_RAB

PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



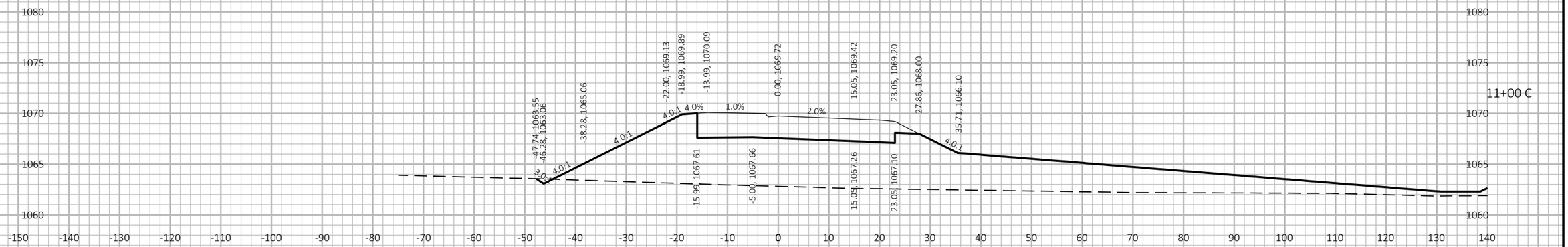
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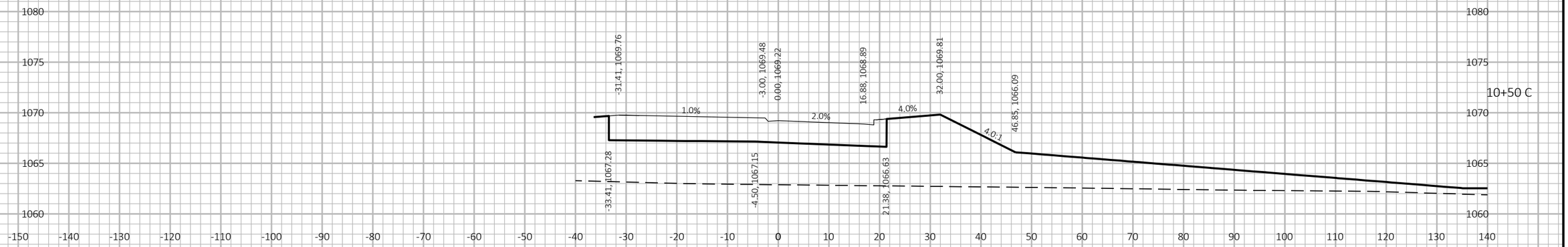
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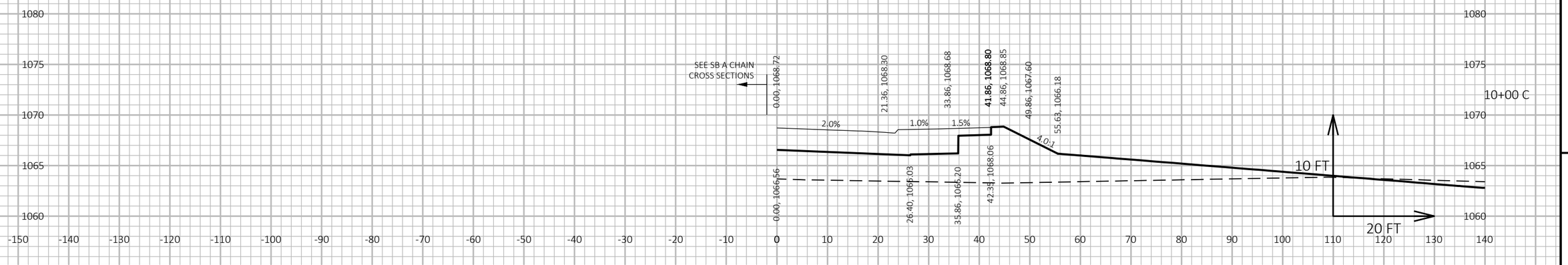
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LAYOUT NAME - 090214_xs_RAB

PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







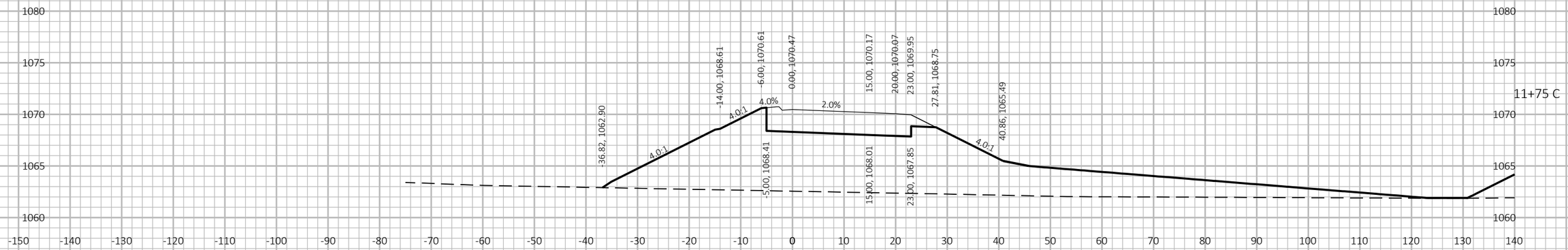
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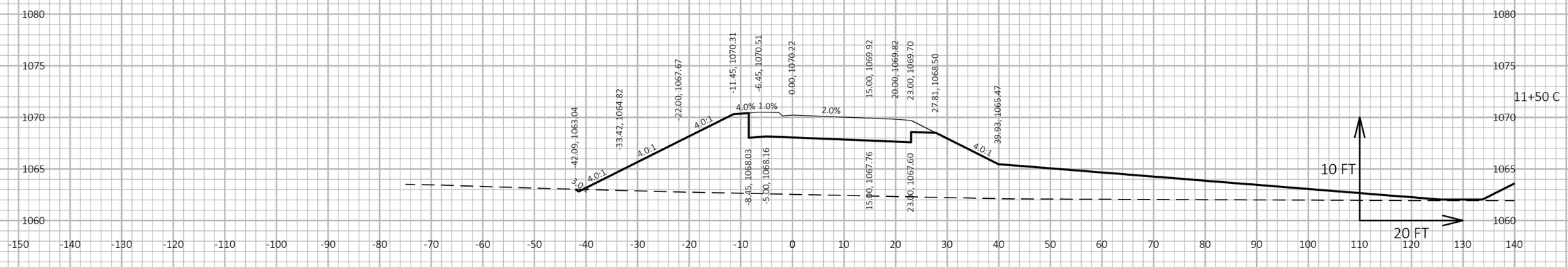
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PROJECT NO: 1012-01-74	HWY: STH 60	COUNTY: COLUMBIA	CROSS SECTIONS: SB C CHAIN	SHEET 648	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS_RAB.DWG
LAYOUT NAME - 090215_xs_RAB

PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.





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PROJECT NO: 1012-01-74	HWY: STH 60	COUNTY: COLUMBIA	CROSS SECTIONS: SB C CHAIN	SHEET 649	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS_RAB.DWG
LAYOUT NAME - 090216_xs_RAB

PLOT DATE : 1/11/2022 1:47 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1012-01-74	HWY: IH 39	COUNTY: COLUMBIA	CROSS SECTIONS: SB F CHAIN	SHEET 650	E

FILE NAME : S:\MAD\1000--1099\1089\409\DRAWINGS\CAD\CIVIL 3D\SHEETSPLAN\090201_XS_RAB.DWG
LAYOUT NAME - 090217_xs_RAB

PLOT DATE : 1/11/2022 1:48 PM PLOT BY : JACK, ROBERT A. PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
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