AS-BUILT PLAN

MAD NOV 09

PROJECT ID: 1010-04-72

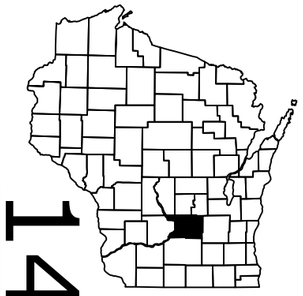
WITH:

COUNTY: COLUMBIA

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 = 434



14

N

DESIGN DESIGNATION

A.A.D.T. (2006)	=	67,400
A.A.D.T. (2030)	=	91,200
D.H.V.	=	9.1
D.D.	=	58/42
T.	=	20.3%
DESIGN SPEED	=	70 MPH
ESALS	=	41,610,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MADISON - PORTAGE ROAD

(STH 60 - CTH CS)

IH 39

COLUMBIA COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1010-04-72	WISC 2009966	1

STATE PROJECT NUMBER
1010-04-72

BEGIN PROJECT
STA. 1345+00
X =535,688.18
Y =341,658.15

END PROJECT
STA. 1558+00



LAYOUT
SCALE 0 .5 MI.

TOTAL NET LENGTH OF CENTERLINE = 4.03 MI.

-"COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), 'COLUMBIA' COUNTY."

AS-BUILT PLAN

SUPERVISOR: William Oliva

CONTRACTOR: Trierweiler Construction

DATE STARTED: 02-11-2010

DATE COMPLETED: 11-16-2010

CONSTRUCTION STAFF

PROJECT MANAGER: Bob Lex

PROJECT LEADER: Warren Mohar (MSA-PS)

ORIGINAL PLANS PREPARED BY

PEOPLE WHO CARE, CREATING QUALITY TRANSPORTATION TODAY AND TOMORROW

WISDOT SOUTHWEST REGION - MADISON OFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	JOHN MORAN
Designer	DAN TYLER
Project Manager	TADD OWENS
Regional Examiner	
Regional Supervisor	WILLIAM OLIVA
C.O. Examiner	JANE ENGLEBRETSEN

APPROVED FOR THE DEPARTMENT
DATE: 8-20-2009 Bill Oliva (Signature)

E

GENERAL NOTES

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

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE TOPSOILED, FERTILIZED AND SEEDED AS DIRECTED BY THE ENGINEER.

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.

ALL CONCRETE PIPE SHALL HAVE THE APRON ENDWALLS AND THE LAST THREE PIPE JOINTS TIED.

EXISTING CULVERT PIPE WITHIN THE CONSTRUCTION LIMITS THAT ARE TO BE REMOVED SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD. ALL CULVERT PIPE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

EROSION CONTROL FEATURES, AS SHOWN IN THE PLANS, ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

CROSS DRAIN PIPE ELEVATIONS, LENGTHS AND LOCATIONS AS SHOWN ON THE PLANS, SHALL BE ADJUSTED TO FIT THE EXISTING FIELD CONDITIONS, AS DIRECTED BY THE ENGINEER.

NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES, AS SHOWN IN THE PLANS, SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

WHERE EVER SLOPE PAVING CRUSHED AGGREGATE IS SHOWN AS REQUIRED, IT SHALL BE CONSTRUCTED WITH A 3-INCH THICKNESS.

ALL ACCESS ONTO AND OFF OF THE PROJECT LIMITS IS THE RESPONSIBILITY OF THE CONTRACTOR AND WILL BE AT THE CONTRACTOR'S EXPENSE. GRADING AND BASE COURSE WILL BE NECESSARY TO PROVIDE SUITABLE ACCESS AND IS INCIDENTAL TO THE CONTRACT. THE DEPARTMENT WILL CONSIDER PROPOSALS TO SHORTEN THE TAPER LENGTH OF THE TEMPORARY CONCRETE BARRIER WITH THE USE OF A CRASH CUSHION TO PROVIDE ACCESS OFF THE ENDS OF THE PROJECT, BUT ANY ADDITIONAL COST INCURRED FROM SUCH DEVIATION FROM PLAN WILL BE THE CONTRACTOR'S RESPONSIBILTY.

UTILITY/MUNICIPALITY	CONTACT / ADDRESS	UTILITY TYPE
* CHARTER COMMUNICATIONS	TONY KLATT W 7185 STATE ROAD 49 WAUPUN, WI 53963 (920) 263-0062 (Mobile) tony.klatt@charter.com	COMMUNICATION
* ALLIANT ENERGY CORPORATION	JASON HOGAN 4902 N BILTMORE LANE PO BOX 77007 MADISON WI 53707-1007 (608)-458-5768 (Office) (608)-575-5831 (Mobile) jasonhogan@alliantenergy.com	ELECTRIC & GAS
* VERIZON COMMUNICATIONS	DENNY BATES 100 COMMUNICATIONS DR PO BOX 49 SUN PRAIRIE, WI 53590-0049 (608) 837-1405 (Office) (608) 346-0667 (Mobile) denny.bates@verizon.com	COMMUNICATION
AT&T(TOUCH AMERICA) NOT AFFECTED BY PROJECT	MR CARL DONAHUE 866 ROCK CREEK RD PLANO IL 60545 (630) 552-9785 (Office) (847) 420-9115 (Mobile) cdonahue@att.com	COMMUNICATIONS
AMERICAN TRANSMISSION CO NOT AFFECTED BY PROJECT	MIKE OLSEN 80 O'KEEFE RD PO BOX 6113 DE PETE, WI 54115-6113 (920) 338-6482 (Office) (920) 660-2390 (Mobile) molsen@atclls.com	TRANSMISSION
WE ENERGIES	DAN SANDE 333 W EVERETT ST., A279 MILWAUKEE, WI 53203 (414) 221-4578 (Office) (414) 550-4993 (Mobile) dan.sande@we-energies.com	ELECTRICITY

* DENOTES DIGGERS HOTLINE MEMBER

DIGGERS HOTLINE

Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

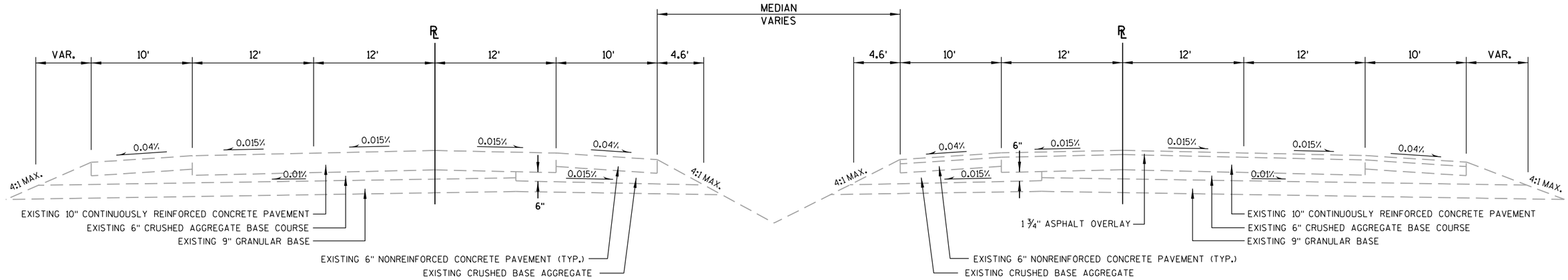
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PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PROJECT OVERVIEW	SHEET	E

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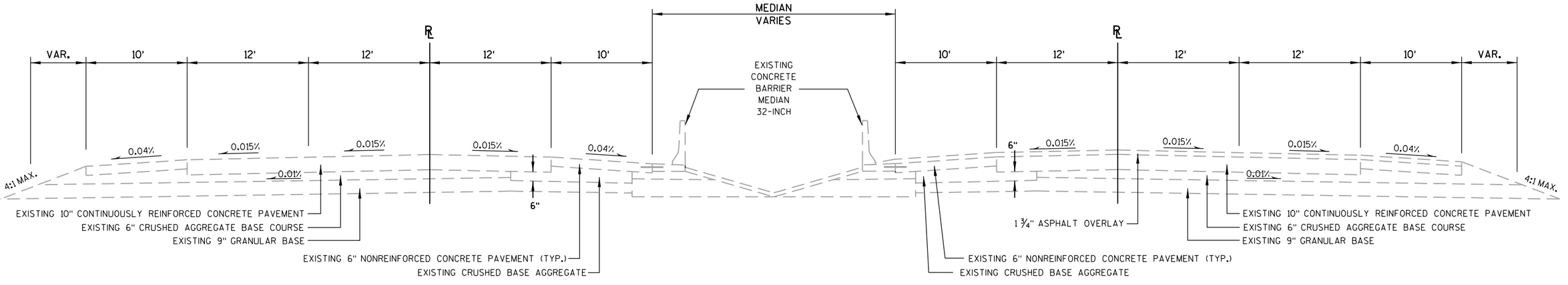
WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION

WESTBOUND	EASTBOUND
STA. 1345+00 - 1354+44 WB	STA. 1345+00 - 1353+96 EB
STA. 1360+98 - 1418+98 WB	STA. 1359+94 - 1407+98 EB*
STA. 1431+49 - 1445+89 WB	STA. 1431+47 - 1445+98 EB
STA. 1498+20 - 1558+00 WB	STA. 1498+19 - 1558+00 EB

*CTH CS RAMP MERGES WITH IH 39 EB
STA. 1369+38 - 1380+58



EXISTING TYPICAL SECTION

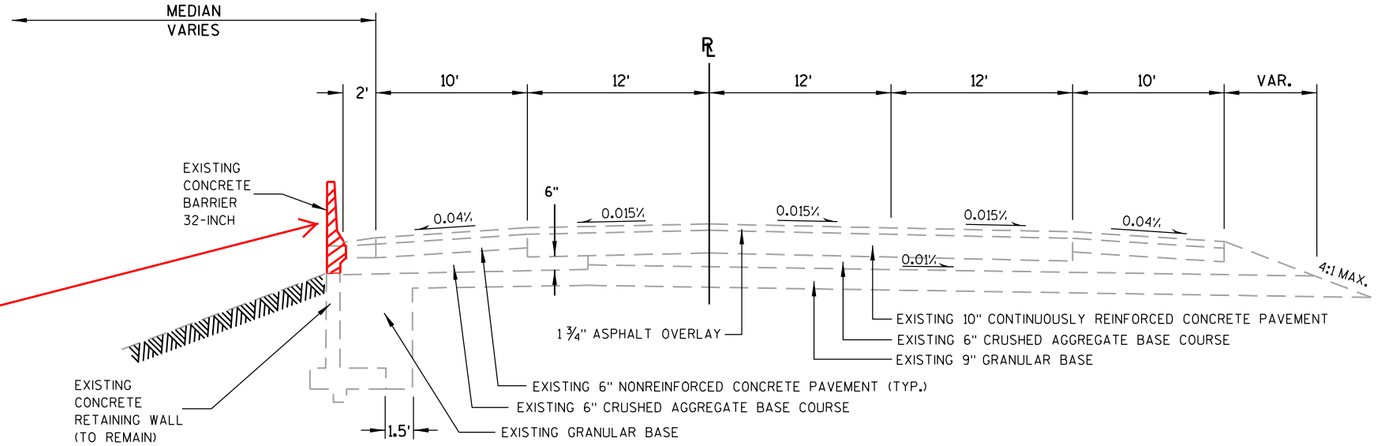
WESTBOUND	EASTBOUND
STA. 1354+44 - 1360+98 WB	STA. 1353+96 - 1359+94 EB
STA. 1418+98 - 1431+49 WB	STA. 1407+98 - 1414+95 EB
STA. 1445+89 - 1498+20 WB	STA. 1416+34 - 1431+47 EB**
	STA. 1445+98 - 1498+19 EB

** STA. 1414+95 - STA. 1416+34 EB: SMOKY HOLLOW BRIDGE.

PROJECT NO: 1010-04-72	HWY: IH 39/90/94	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET	E

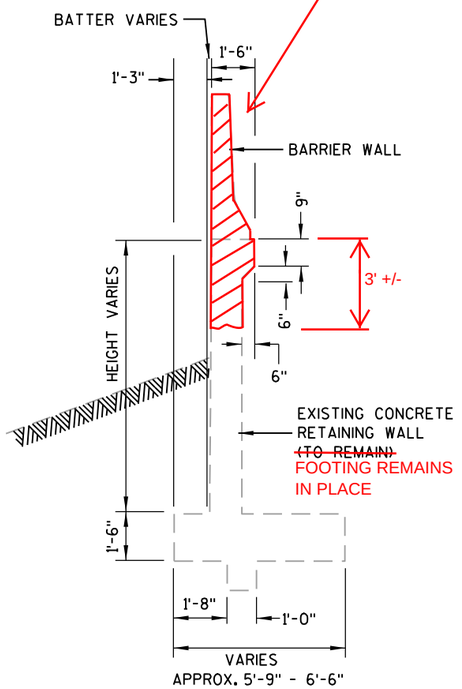
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WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION - EASTBOUND LANES

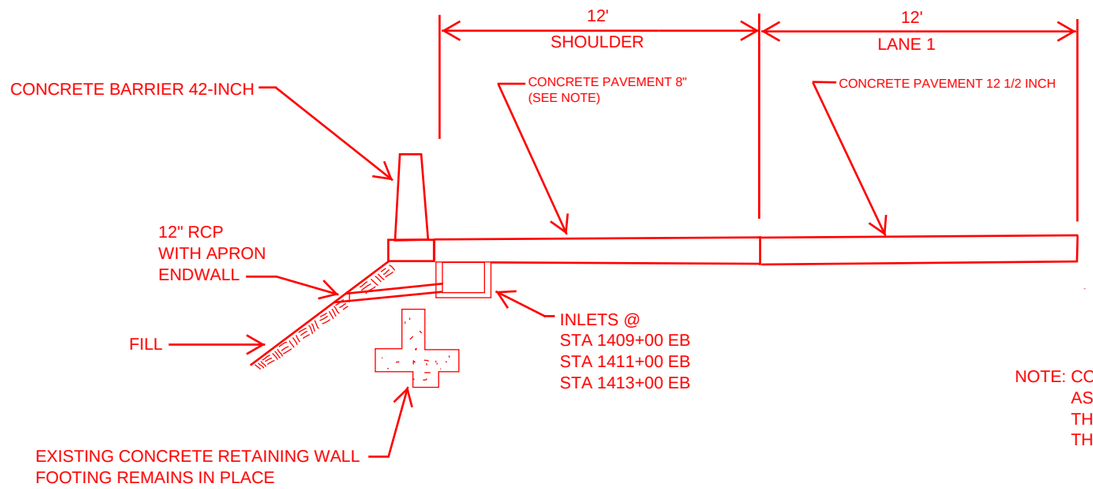
STA. 1408+00 EB - STA. 1420+50 EB
NORTH AND SOUTH OF SMOKY HOLLOW ROAD



FOR INFORMATION ONLY
CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS.

EXISTING RETAINING WALL DETAIL

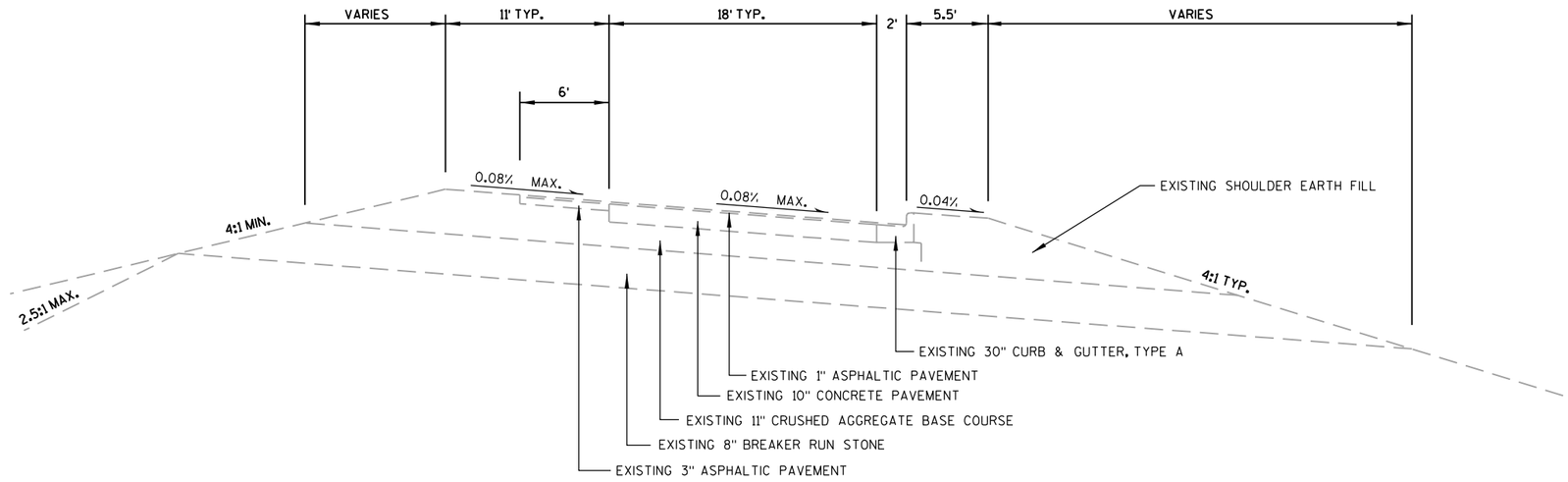
RW-11-3
APPROX. STA.1408+00 EB - STA.1420+50 EB
MEDIAN SIDE OF SOUTHBOUND LANES



NOTE: CONCRETE SHOULDER WAS INSTALLED AS A TRAPEZPIDAL SECTION 12.5-INCHES THICK @THE EDGE OF LANE 1 AND 8-INCHES THICK ON THE OUTSIDE OF THE SHOULDER.

TYPICAL FINISHED SECTION - EASTBOUND LANES
STA 1408+00 EB - STA 1420+50 EB

2

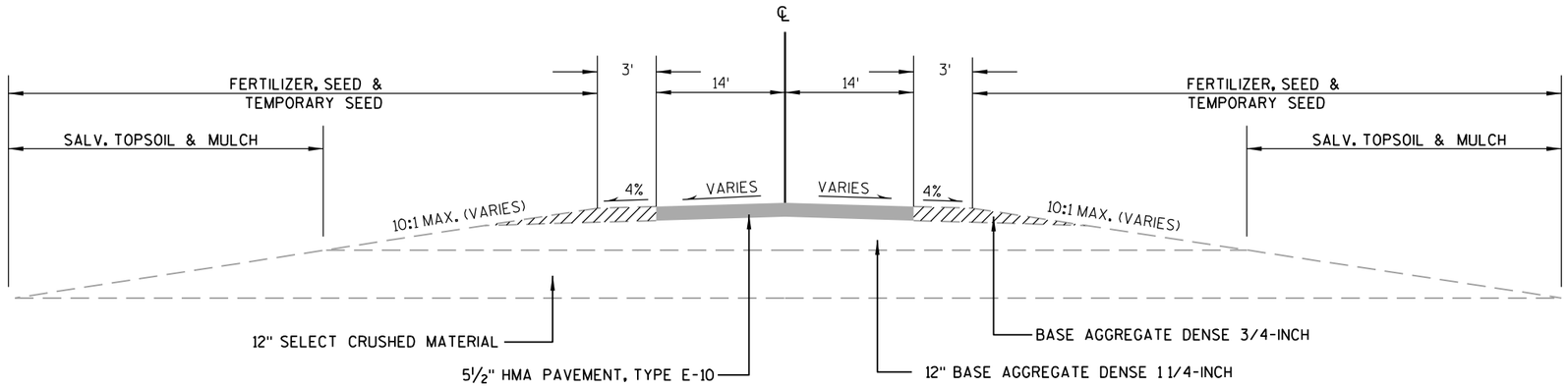


TYPICAL EXISTING RAMP SECTION WITH CURB

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET	E

FILE NAME : r:\Support\CADDS\Projects\d1_10100472\020301_ts.dgn PLOT DATE : 01-SEP-2009 14:52 PLOT BY : dotbbg PLOT NAME : PLOT SCALE : 200.000000:1.000000
WISDOT/CADDS SHEET 42

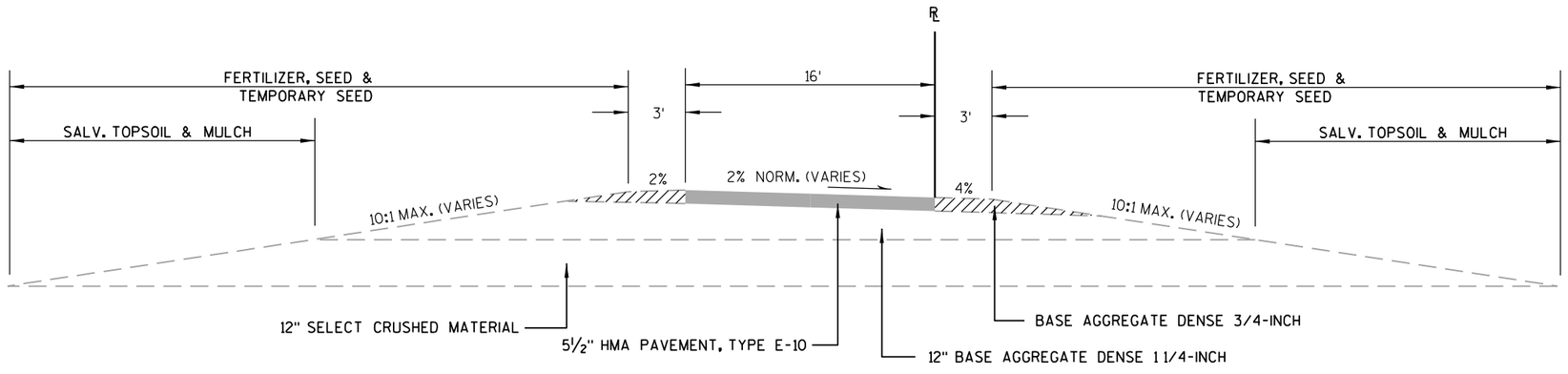
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TYPICAL EXISTING SECTION

MEDIAN CROSSOVER

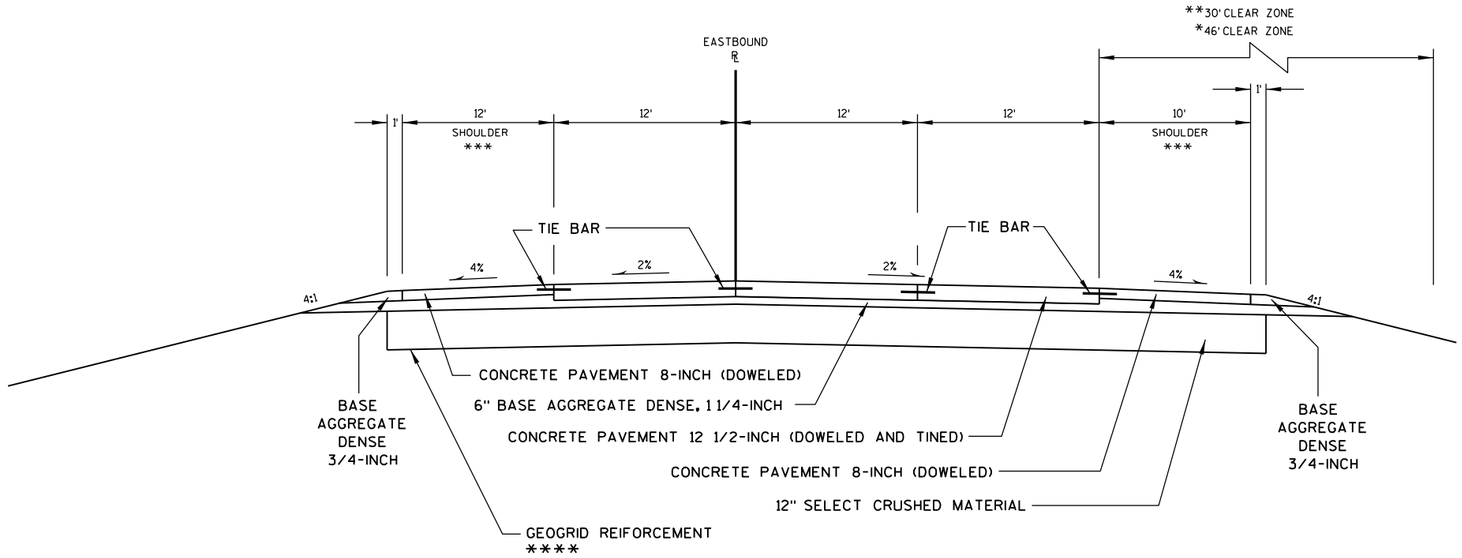
STA. 1341+50 - STA. 1354+00 (CROSSOVER "A")
STA. 1545+20 - STA. 1555+52 (CROSSOVER "C")



TYPICAL EXISTING SECTION

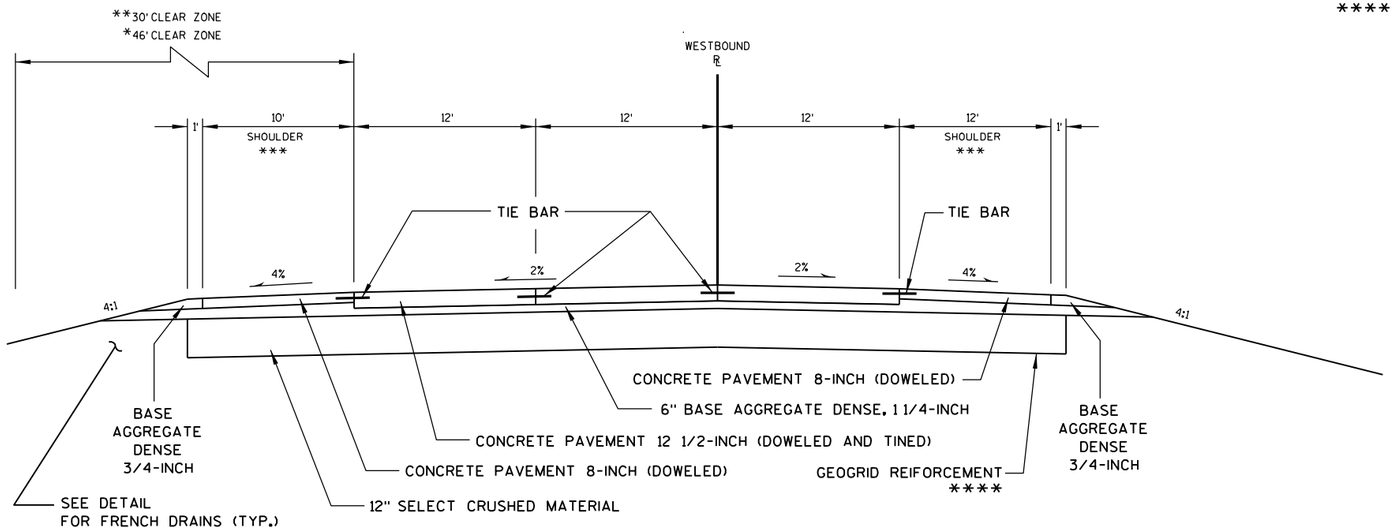
RAMP CROSSOVER

STA. 1360+75 - STA. 1368+00 (CROSSOVER "B")



TYPICAL FINISHED SECTION

EASTBOUND - WIDE MEDIAN SECTION
STA. 1360+00 - 1430+00



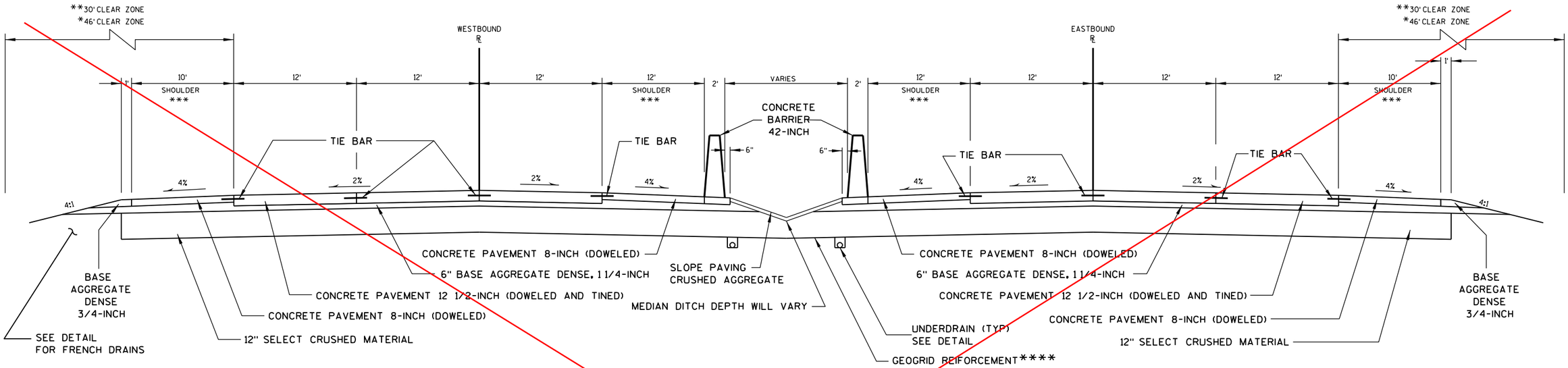
TYPICAL FINISHED SECTION

WESTBOUND - WIDE MEDIAN SECTION
STA. 1360+00 - 1421+00

* CLEAR ZONE SHOWN FOR TREE REMOVAL.
** CLEAR ZONE SHOWN FOR PIPE GRATE INSTALLATION.
*** SEE OPTIONAL SHOULDER PAVING DETAIL
**** PLACE GEOGRID REINFORCEMENT BELOW SELECT CRUSHED MATERIAL

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET	E

FILE NAME : r:\Support\CADDS\Projects\d1_10100472\020302_ts.dgn PLOT DATE : 01-SEP-2009 14:53 PLOT BY : dotbbg PLOT NAME : PLOT SCALE : 200.000000:1.000000
WISDOT/CADDS SHEET 42



WESTBOUND

STA. 1350+00 - STA. 1360+00
STA. 1421+00 - STA. 1433+00
STA. 1497+00 - STA. 1510+00
STA. 1540+00 - STA. 1558+00

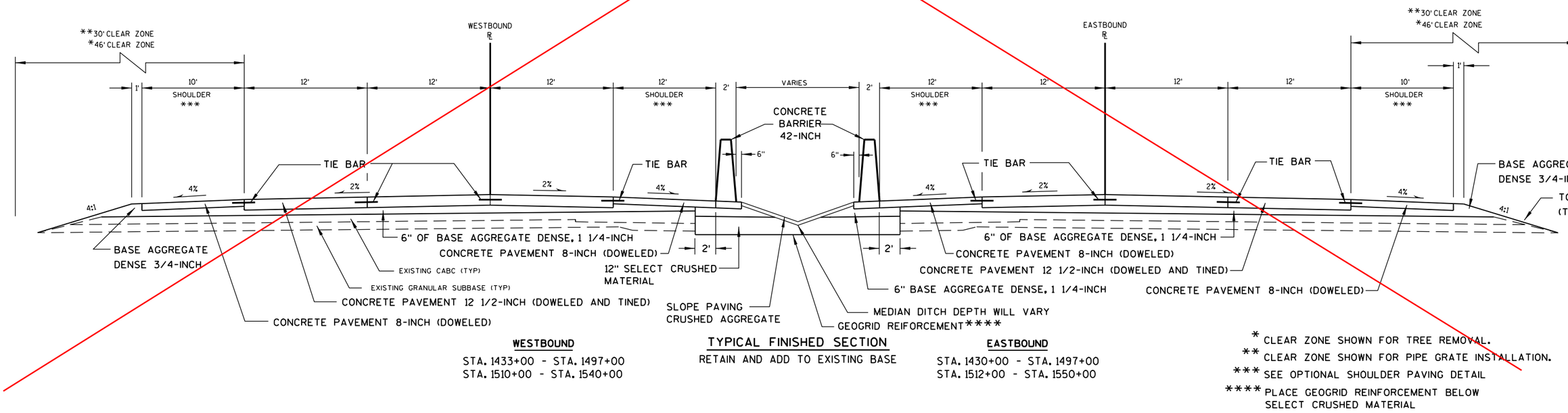
TYPICAL FINISHED SECTION

FULL-DEPTH BASE REPLACEMENT

EASTBOUND

STA. 1350+00 - STA. 1360+00
STA. 1498+00 - STA. 1512+00
STA. 1550+00 - STA. 1558+00

* CLEAR ZONE SHOWN FOR TREE REMOVAL.
** CLEAR ZONE SHOWN FOR PIPE GRATE INSTALLATION.
*** SEE OPTIONAL SHOULDER PAVING DETAIL
**** PLACE GEOGRID REINFORCEMENT BELOW SELECT CRUSHED MATERIAL



WESTBOUND

STA. 1433+00 - STA. 1497+00
STA. 1510+00 - STA. 1540+00

TYPICAL FINISHED SECTION

RETAIN AND ADD TO EXISTING BASE

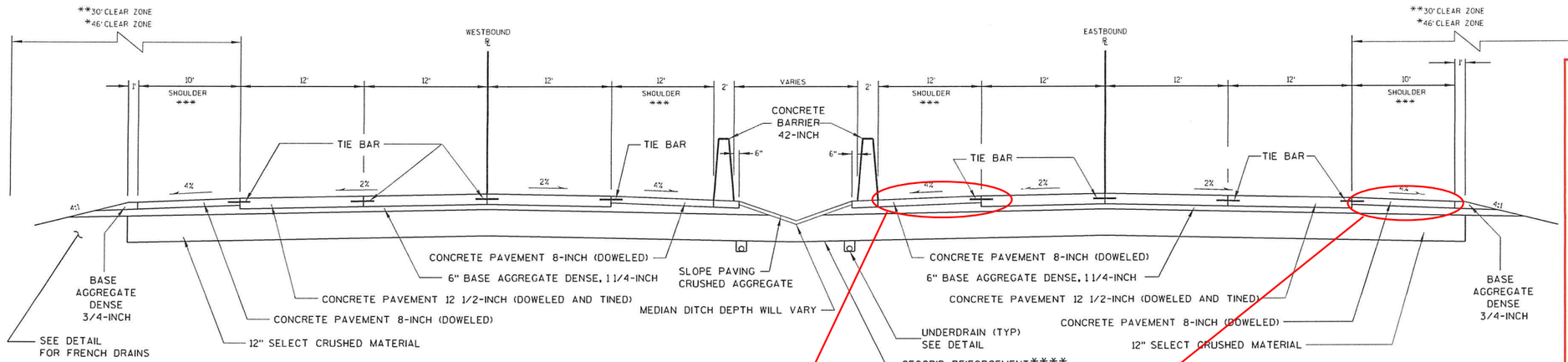
EASTBOUND

STA. 1430+00 - STA. 1497+00
STA. 1512+00 - STA. 1550+00

* CLEAR ZONE SHOWN FOR TREE REMOVAL.
** CLEAR ZONE SHOWN FOR PIPE GRATE INSTALLATION.
*** SEE OPTIONAL SHOULDER PAVING DETAIL
**** PLACE GEOGRID REINFORCEMENT BELOW SELECT CRUSHED MATERIAL

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET	E

FILE NAME : r:\Support\CADDS\Projects\d1_10100472\020302_ts.dgn PLOT DATE : 01-SEP-2009 14:53 PLOT BY : dotbbg PLOT NAME : PLOT SCALE : 200.000000:1.000000



WESTBOUND

STA. 1350+00 - STA. 1360+00
STA. 1421+00 - STA. 1433+00
STA. 1497+00 - STA. 1510+00
STA. 1540+00 - STA. 1558+00

TYPICAL FINISHED SECTION

FULL-DEPTH BASE REPLACEMENT

EASTBOUND

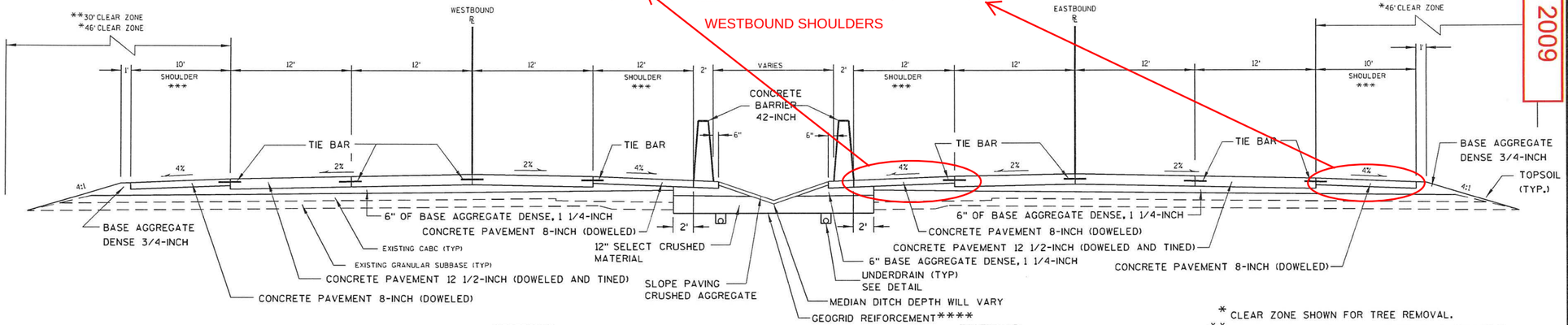
STA. 1350+00 - STA. 1360+00
STA. 1498+00 - STA. 1512+00
STA. 1550+00 - STA. 1558+00

* CLEAR ZONE SHOWN FOR TREE REMOVAL.
** CLEAR ZONE SHOWN FOR PIPE GRATE INSTALLATION.
*** SEE OPTIONAL SHOULDER PAVING DETAIL
**** PLACE GEOGRID REINFORCEMENT BELOW SELECT CRUSHED MATERIAL

NOTE: WESTBOUND SHOULDERS WERE PAVED AS TRAPEZOIDAL SECTIONS, 8 " AT OUTSIDE AND 12 1/2" THICK ADJACENT TO THE LANE



WESTBOUND SHOULDERS



WESTBOUND

STA. 1433+00 - STA. 1497+00
STA. 1510+00 - STA. 1540+00

TYPICAL FINISHED SECTION

RETAIN AND ADD TO EXISTING BASE

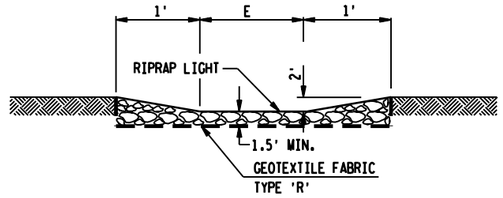
EASTBOUND

STA. 1430+00 - STA. 1497+00
STA. 1512+00 - STA. 1550+00

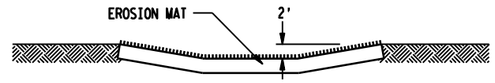
* CLEAR ZONE SHOWN FOR TREE REMOVAL.
** CLEAR ZONE SHOWN FOR PIPE GRATE INSTALLATION.
*** SEE OPTIONAL SHOULDER PAVING DETAIL
**** PLACE GEOGRID REINFORCEMENT BELOW SELECT CRUSHED MATERIAL

Addendum #2 Revised Sheet 9 November 5, 2009

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TYPICAL SECTIONS	SHEET 9A	E

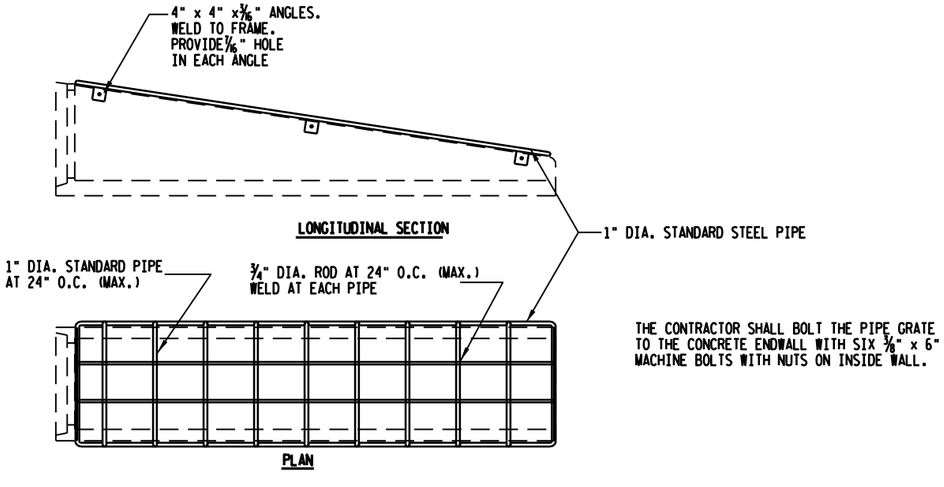


OUTLET SECTION A-A

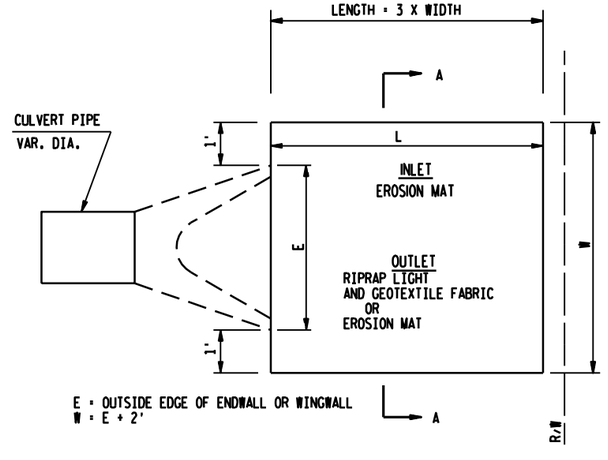


INLET AND OUTLET SECTION A-A

EROSION MAT

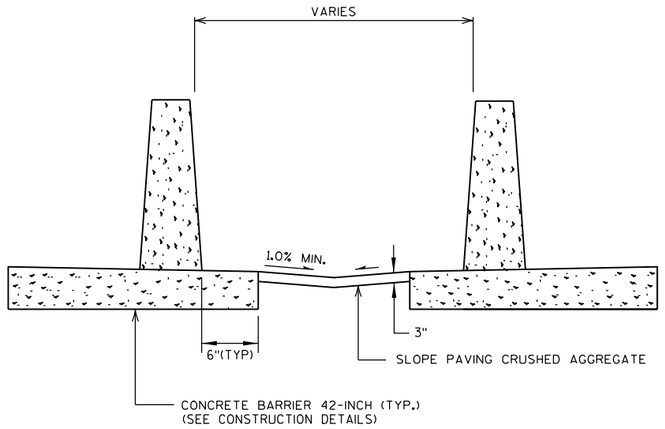


PIPE GRATES

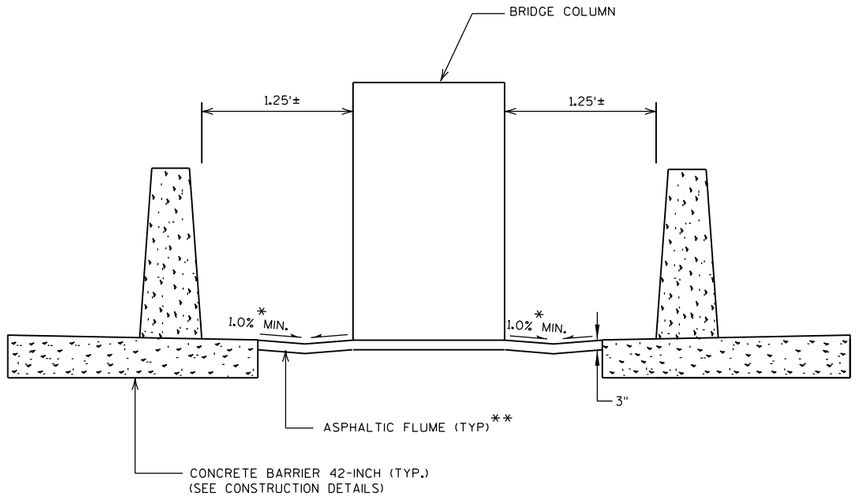


DETAIL FOR EROSION CONTROL AT CULVERT PIPE ENDS

SEE EROSION CONTROL PLAN SHEETS FOR LOCATIONS



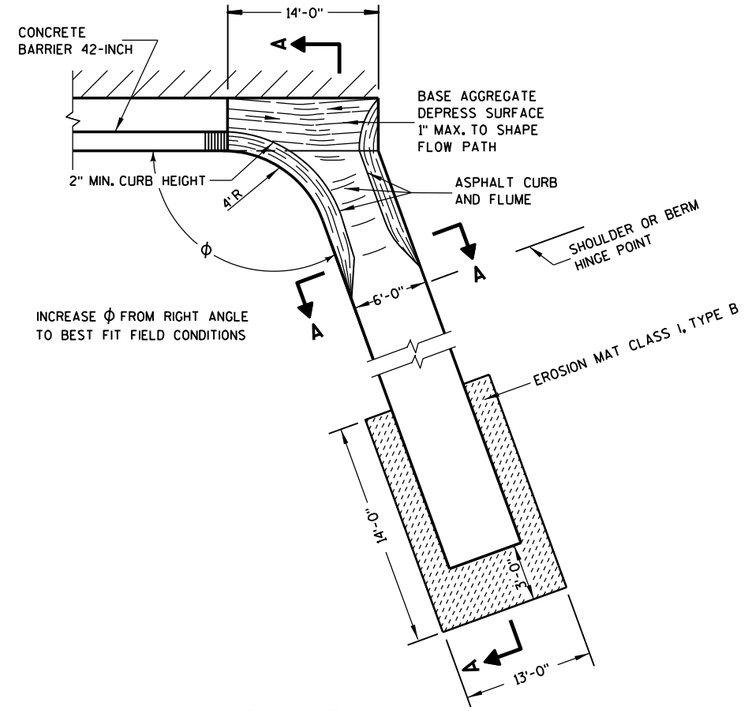
TREATMENT BETWEEN CONCRETE BARRIER 42-INCH



* SHAPE ASPHALT TO DRAIN BETWEEN BARRIERS AND COLUMNS

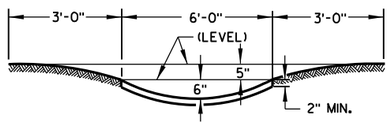
** SLOPE ASPHALTIC FLUMES TO DRAIN TO NEAREST INLETS

TREATMENT BETWEEN CONCRETE BARRIER 42-INCH AT BRIDGE COLUMNS



PLAN VIEW

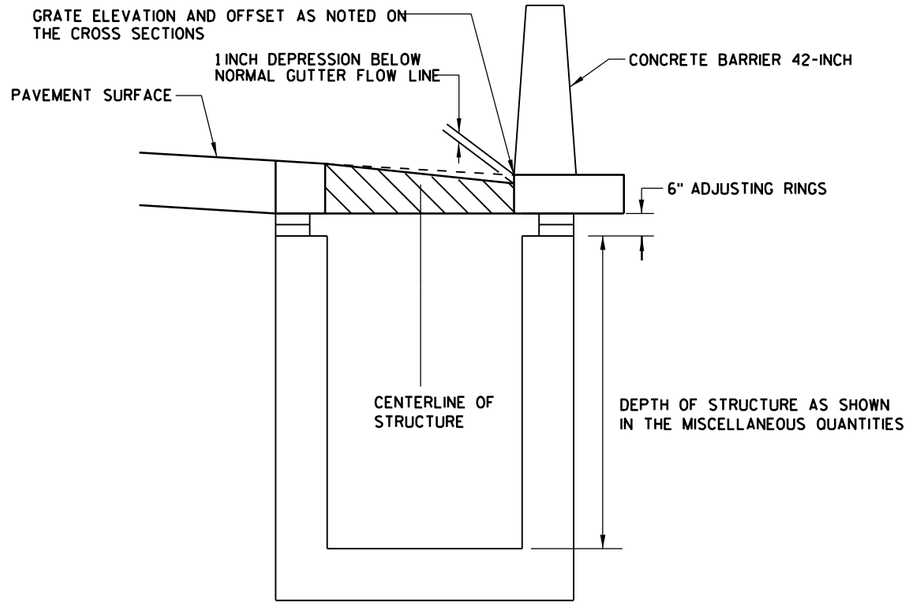
FLUME AT BRIDGE END



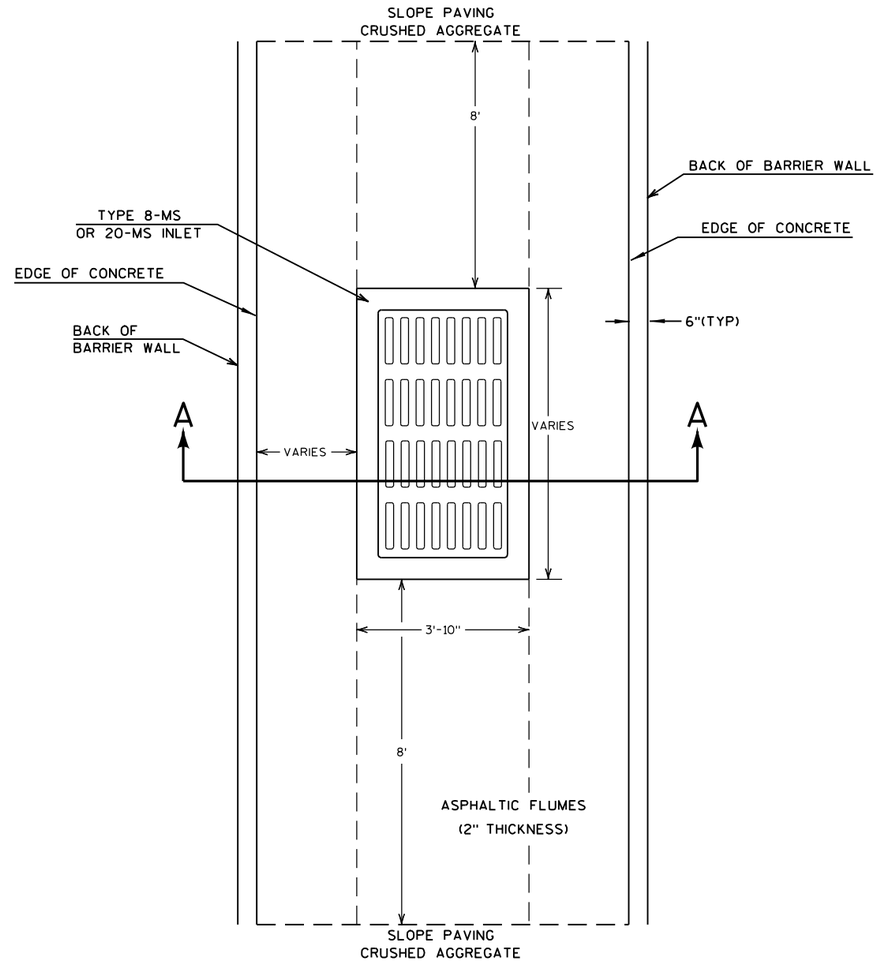
SECTION A-A

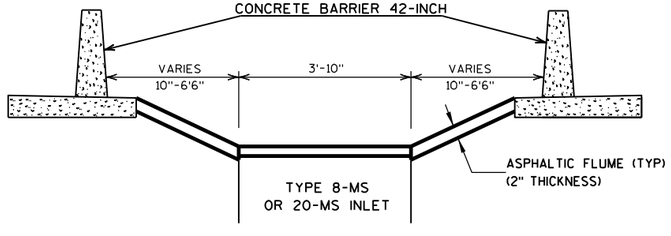
ASPHALTIC FLUME

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS	SHEET	E



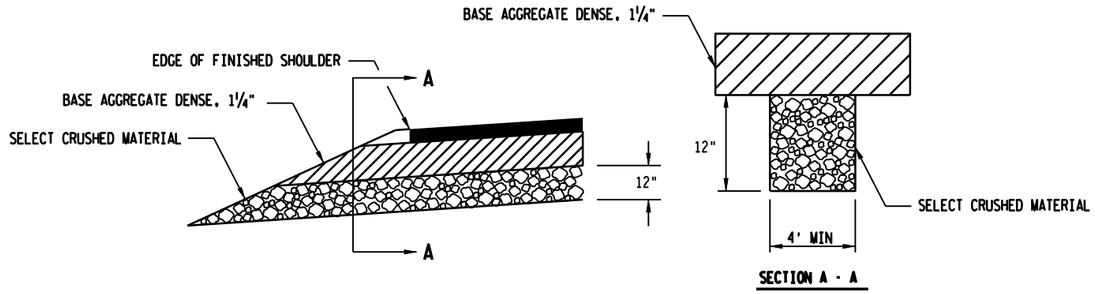
TYPICAL FLOW LINE DEPRESSION FOR TYPE V INLET COVERS





SECTION A-A

DETAIL OF ASPHALTIC FLUME AT TYPE MS MEDIAN INLETS

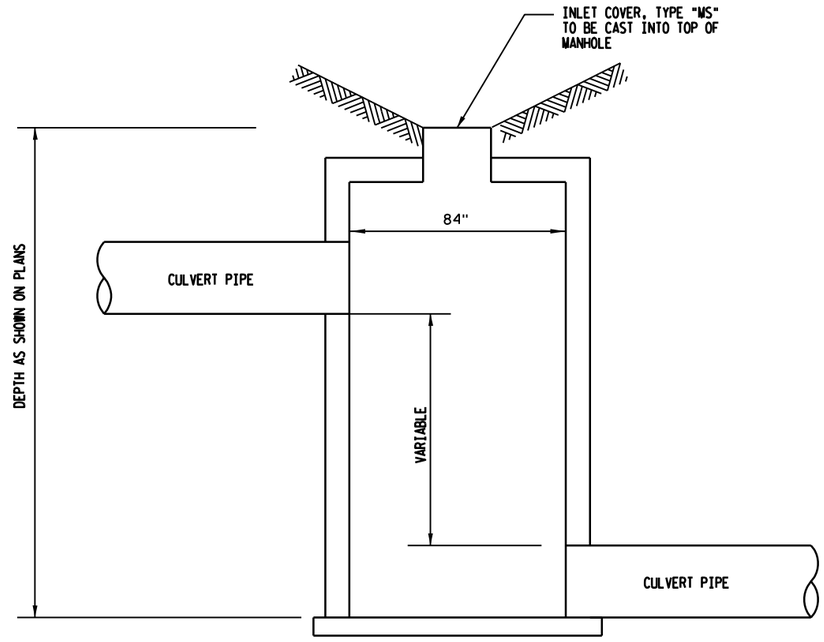


SECTION A - A

DETAIL FOR FRENCH DRAINS

TO BE PLACED IN SAG LOCATIONS OF VERTICAL CURVES AND DETERMINED IN THE FIELD BY THE ENGINEER.

EXCAVATION REQUIRED TO CONSTRUCT FRENCH DRAINS SHALL BE PAID FOR AS "COMMON EXCAVATION".



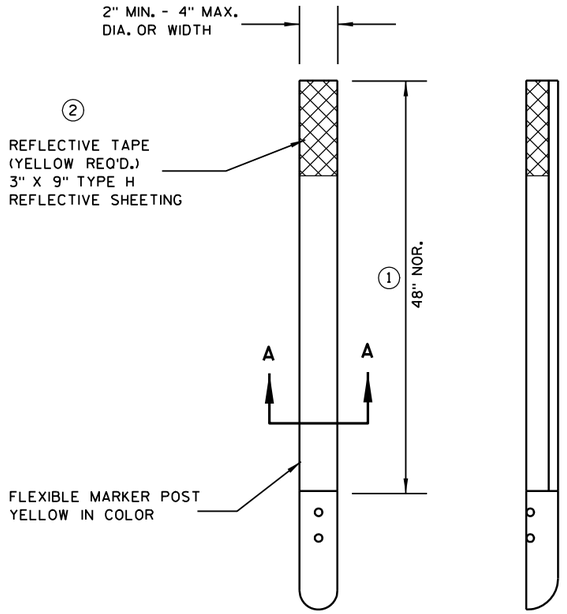
ELEVATION VIEW

SEE S.D.D. "MANHOLE TYPE 3" FOR DETAILS NOT SHOWN.

INLETS TYPE 3 SPECIAL

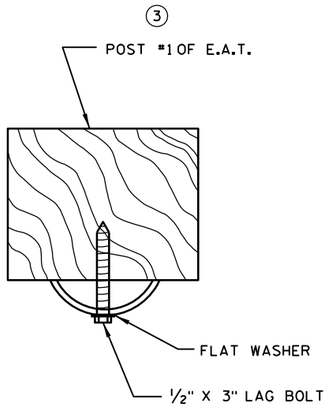
STA.1442+21.5, 30.3' LT.

2



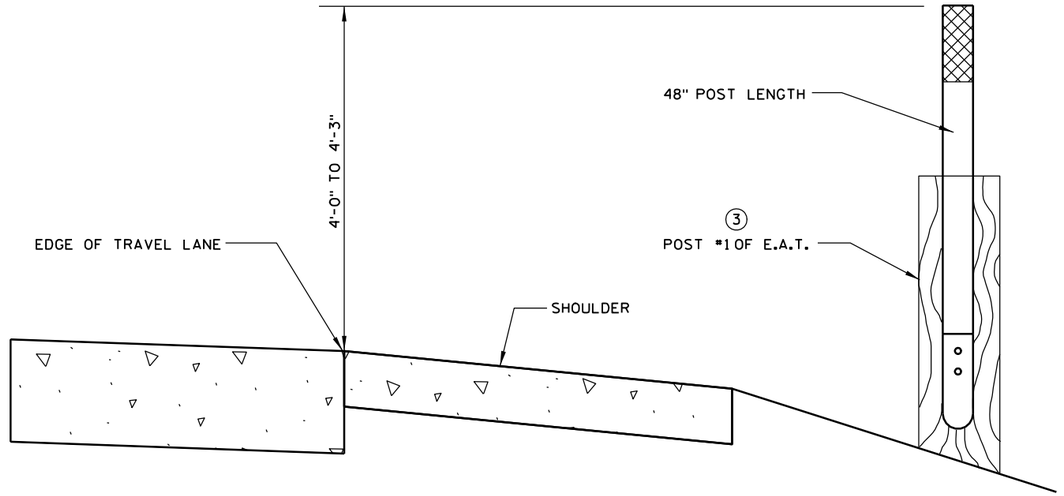
FRONT VIEW

SIDE VIEW



SECTION A-A

FLEXIBLE MARKER POST



TYPICAL INSTALLATION OF FLEXIBLE MARKER POST

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.

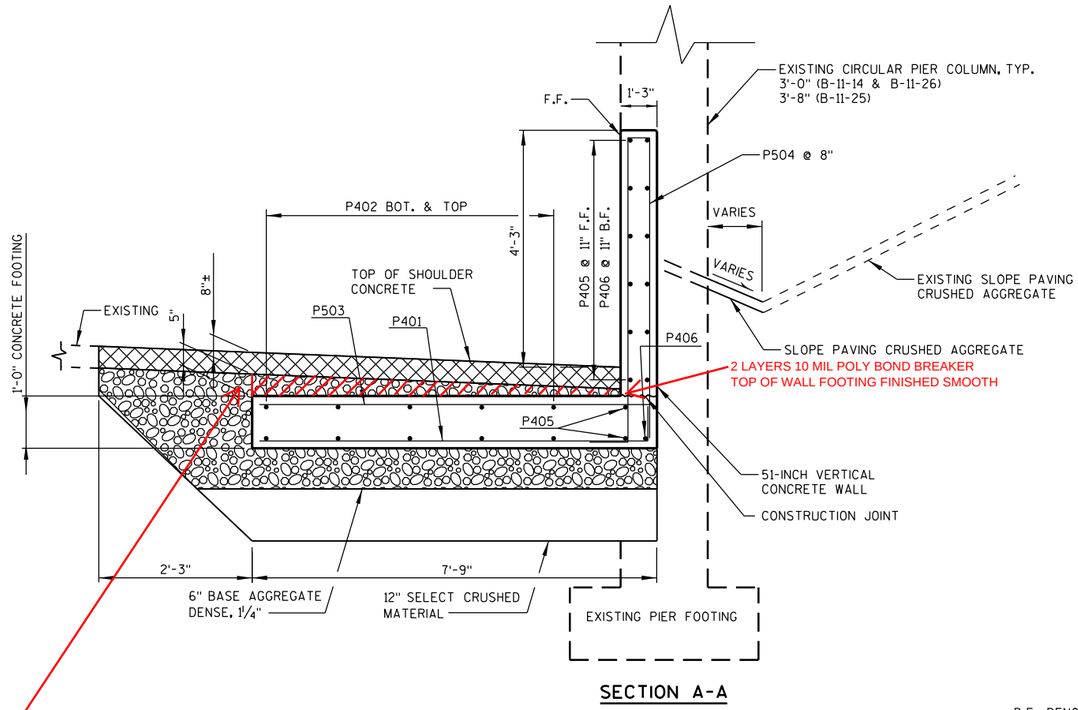
① 48" MAX.

② AS PER SECTION 637.2.2.2. OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

③ E.A.T. = ENERGY ABSORBING TERMINAL

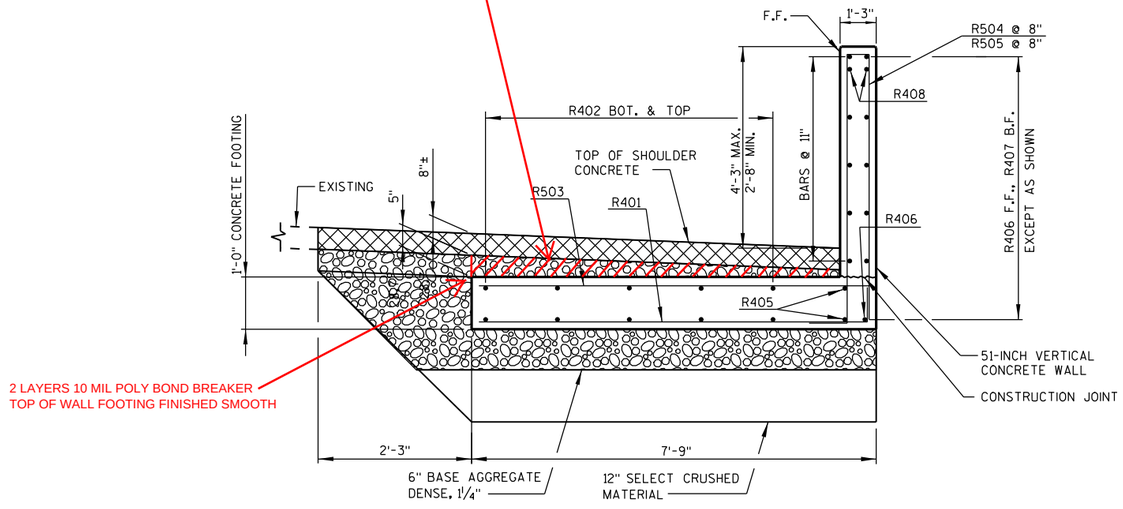
MARKER POST FLEXIBLE FOR GUARD RAIL TERMINAL

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS	SHEET	E



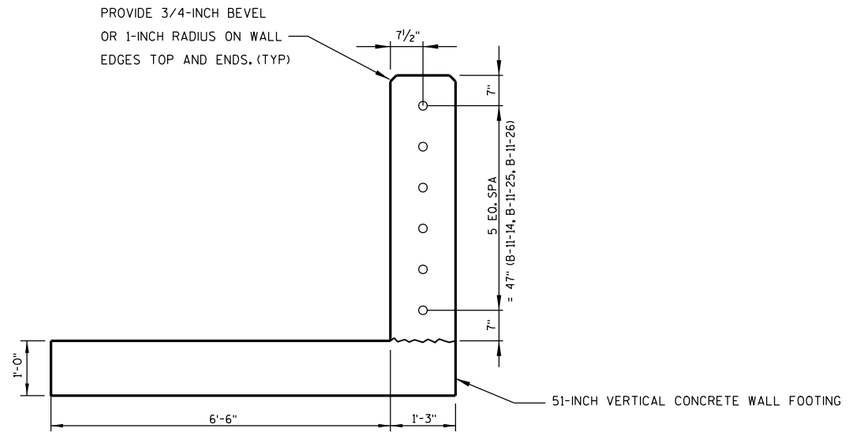
SECTION A-A

CONCRETE SHOULDER WAS POURED DIRECTLY ON TOP OF CONCRETE WALL FOOTING WITH NO BASE AGGREGATE BETWEEN THE TOP OF FOOTING AND BOTTOM OF CONCRETE SHOULDER.



SECTION B-B

B.F. DENOTES BACK FACE
F.F. DENOTES FRONT FACE



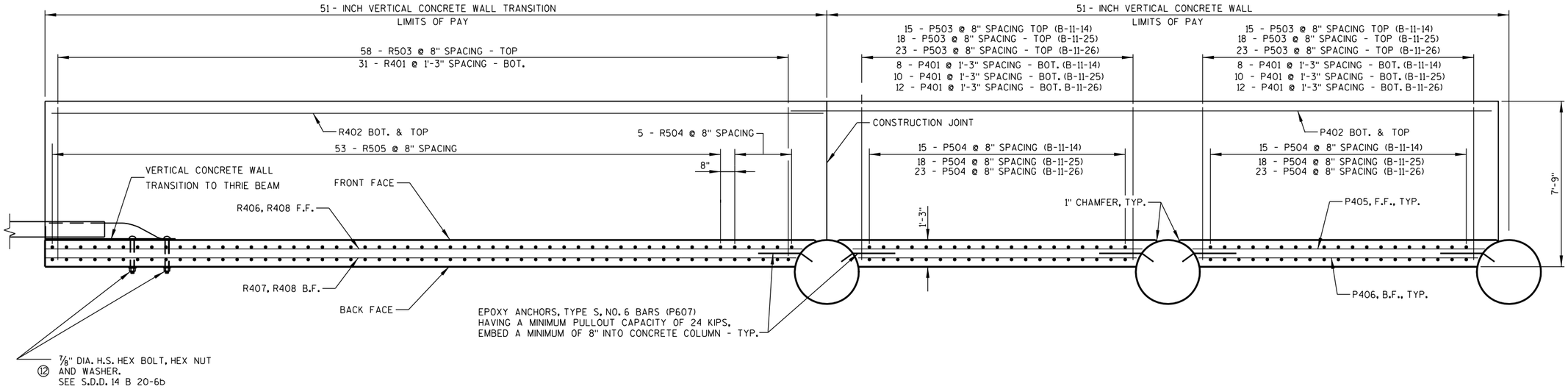
EPOXY ANCHOR LAYOUT

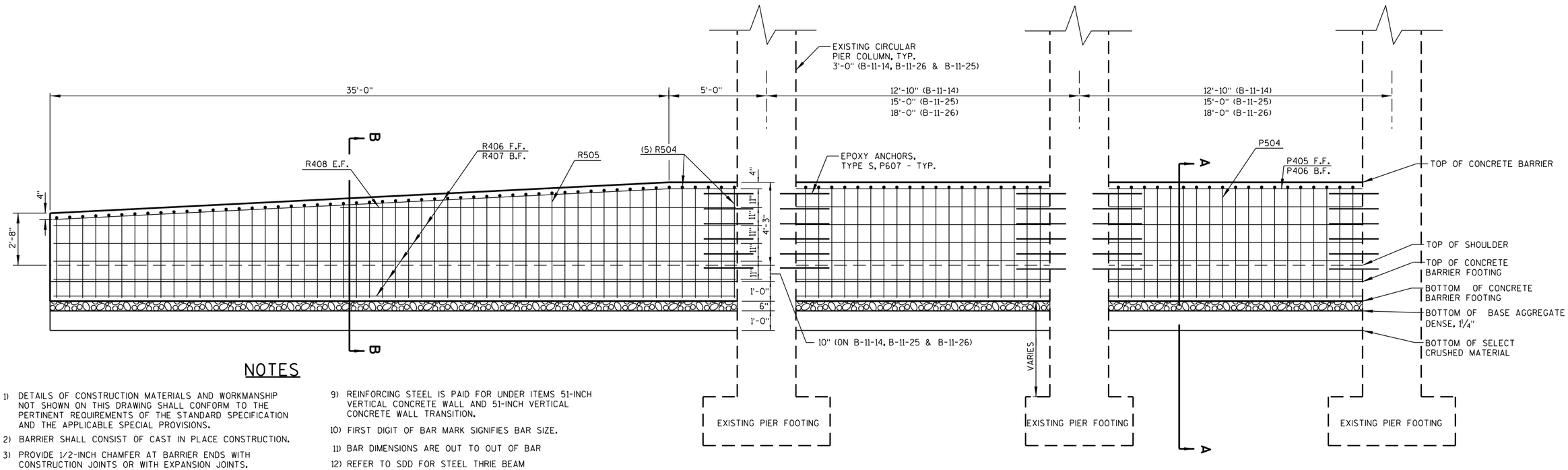
DESIGN DATA

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY _____ f'c = 4,000 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) __ f'c = 60,000 p.s.i.

51-INCH VERTICAL CONCRETE WALL





NOTES

1) DETAILS OF CONSTRUCTION MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATION AND THE APPLICABLE SPECIAL PROVISIONS.
2) BARRIER SHALL CONSIST OF CAST IN PLACE CONSTRUCTION.
3) PROVIDE 1/2-INCH CHAMFER AT BARRIER ENDS WITH CONSTRUCTION JOINTS OR WITH EXPANSION JOINTS. PROVIDE 3/4-INCH EXPANSION JOINT MATERIAL AT EXPANSION JOINTS. EXPANSION JOINTS SHALL BE PLACED AT EXPANSION JOINTS IN CONCRETE PAVEMENT.
4) SEE FOLLOWING SHEETS FOR DETAILS AND BILL OF BARS.
5) EPOXY ANCHORS, TYPE S PAID FOR UNDER CONCRETE BARRIER VERTICAL FACED 51".
6) USE 2" MIN. BAR CLEARANCE.
7) DO NOT CUT OR DRILL INTO EXISTING COLUMN BAR STEEL.
8) LAP NO. 4 BARS 2'-3" MIN. (INCLUDED IN BILL OF BARS)
9) REINFORCING STEEL IS PAID FOR UNDER ITEMS 51-INCH VERTICAL CONCRETE WALL AND 51-INCH VERTICAL CONCRETE WALL TRANSITION.
10) FIRST DIGIT OF BAR MARK SIGNIFIES BAR SIZE.
11) BAR DIMENSIONS ARE OUT TO OUT OF BAR
12) REFER TO SDD FOR STEEL THRIE BEAM STRUCTURE APPROACH AND CONNECTION REQUIREMENTS
13) PLACE REINFORCEMENT SUCH THAT IT WILL NOT CONFLICT WITH THE BOLT HOLES IN THE THRIE BEAM TERMINAL CONNECTOR.
14) PROVIDE 3/4-INCH BEVEL OR 1-INCH RADIUS ON WALL EDGES TOP AND ENDS.
15) PROVIDE 3-INCH COVER FROM BOTTOM ON VERTICAL BARS.
16) TIE BARS ARE NOT REQUIRED BETWEEN 51" VERTICLE CONCRETE WALL FOOTING AND CONCRETE PAVEMENT 8-INCH.

PLAN VIEW AND ELEVATION 51-INCH VERTICAL CONCRETE WALL AND TRANSITION

STA 1505+20 TO 1505+85 (B-11-14, NORTHBOUND SIDE)
STA 1412+72 TO 1413+52 (B-11-25, NORTHBOUND SIDE)
STA 1358+58 TO 1359+34 (B-11-26, NORTHBOUND SIDE)

B.F. DENOTES BACK FACE
F.F. DENOTES FRONT FACE
E.F. DENOTES EACH FACE

BILL OF BARS (B-11-14)

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	LOCATION
R401	X	31	7-11	X			FTG. BOT. BARRIER TRANS. WALL
R402	X	10	39-8				FTG. BOT. & TOP BARRIER TRANS. WALL
R503	X	58	7-5				FTG. TOP BARRIER TRANS. WALL
R504	X	5	15-0	X			FTG. BARRIER TRANS. WALL VERT.
R505	X	53	VAR	X		⊗	FTG. BARRIER TRANS. WALL VERT.
R405	X	2	38-4				BARRIER TRANS. WALL HORIZ. B.F.
R406	X	5	39-4				BARRIER TRANS. WALL HORIZ. F.F.
R407	X	5	38-4				BARRIER TRANS. WALL HORIZ. B.F.
R408	X	2	21-0				BARRIER TRANS. WALL HORIZ. E.F.
P401	X	16	7-11	X			FTG. BOT. BARRIER WALL
P402	X	10	26-3				FTG. BOT. & TOP BARRIER WALL
P503	X	30	7-5				FTG. TOP BARRIER WALL
P504	X	30	15-0	X			FTG. BARRIER WALL VERT.
P405	X	16	10-7				BARRIER WALL HORIZ. F.F.
P406	X	14	9-7				BARRIER WALL HORIZ. B.F.
P607	X	30	3-2	X			COLUMNS DOWEL BARS

BAR SERIES TABLE

BAR MARK	NO REQ'D.	LENGTH
R505	1 SERIES OF 53	11'-6" TO 15'-0"

BUNDLE AND TAG EACH SERIES SEPARATELY.

BILL OF BARS (B-11-25)

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	LOCATION
R401	X	31	7-11	X			FTG. BOT. BARRIER TRANS. WALL
R402	X	10	39-8				FTG. BOT. & TOP BARRIER TRANS. WALL
R503	X	58	7-5				FTG. TOP BARRIER TRANS. WALL
R504	X	5	15-0	X			FTG. BARRIER TRANS. WALL VERT.
R505	X	53	VAR	X		⊗	FTG. BARRIER TRANS. WALL VERT.
R405	X	2	38-4				BARRIER TRANS. WALL HORIZ. B.F.
R406	X	5	39-4				BARRIER TRANS. WALL HORIZ. F.F.
R407	X	5	38-4				BARRIER TRANS. WALL HORIZ. B.F.
R408	X	2	21-0				BARRIER TRANS. WALL HORIZ. E.F.
P401	X	20	7-11	X			FTG. BOT. BARRIER WALL
P402	X	10	42-3				FTG. BOT. & TOP BARRIER WALL
P503	X	36	7-5				FTG. TOP BARRIER WALL
P504	X	36	15-0	X			FTG. BARRIER WALL VERT.
P405	X	16	17-9				BARRIER WALL HORIZ. F.F.
P406	X	14	16-9				BARRIER WALL HORIZ. B.F.
P607	X	30	3-2	X			COLUMNS DOWEL BARS

BAR SERIES TABLE

BAR MARK	NO REQ'D.	LENGTH
R505	1 SERIES OF 53	11'-6" TO 15'-0"

BUNDLE AND TAG EACH SERIES SEPARATELY.

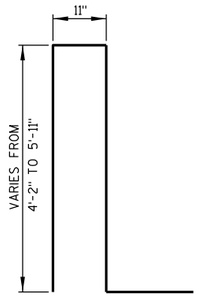
BILL OF BARS (B-11-26)

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	LOCATION
R401	X	31	7-11	X			FTG. BOT. BARRIER TRANS. WALL
R402	X	10	39-8				FTG. BOT. & TOP BARRIER TRANS. WALL
R503	X	58	7-5				FTG. TOP BARRIER TRANS. WALL
R504	X	5	15-0	X			FTG. BARRIER TRANS. WALL VERT.
R505	X	53	VAR	X		⊗	FTG. BARRIER TRANS. WALL VERT.
R405	X	2	38-4				BARRIER TRANS. WALL HORIZ. B.F.
R406	X	5	39-4				BARRIER TRANS. WALL HORIZ. F.F.
R407	X	5	38-4				BARRIER TRANS. WALL HORIZ. B.F.
R408	X	2	21-0				BARRIER TRANS. WALL HORIZ. E.F.
P401	X	24	7-11	X			FTG. BOT. BARRIER WALL
P402	X	10	38-3				FTG. BOT. & TOP BARRIER WALL
P503	X	46	7-5				FTG. TOP BARRIER WALL
P504	X	46	15-0	X			FTG. BARRIER WALL VERT.
P405	X	16	15-9				BARRIER WALL HORIZ. F.F.
P406	X	14	14-9				BARRIER WALL HORIZ. B.F.
P607	X	30	3-2	X			COLUMNS DOWEL BARS

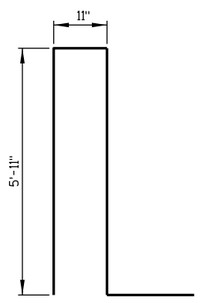
BAR SERIES TABLE

BAR MARK	NO REQ'D.	LENGTH
R505	1 SERIES OF 53	11'-6" TO 15'-0"

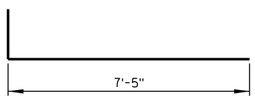
BUNDLE AND TAG EACH SERIES SEPARATELY.



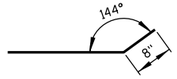
R505



P504 & R504



P401 & R401



P607

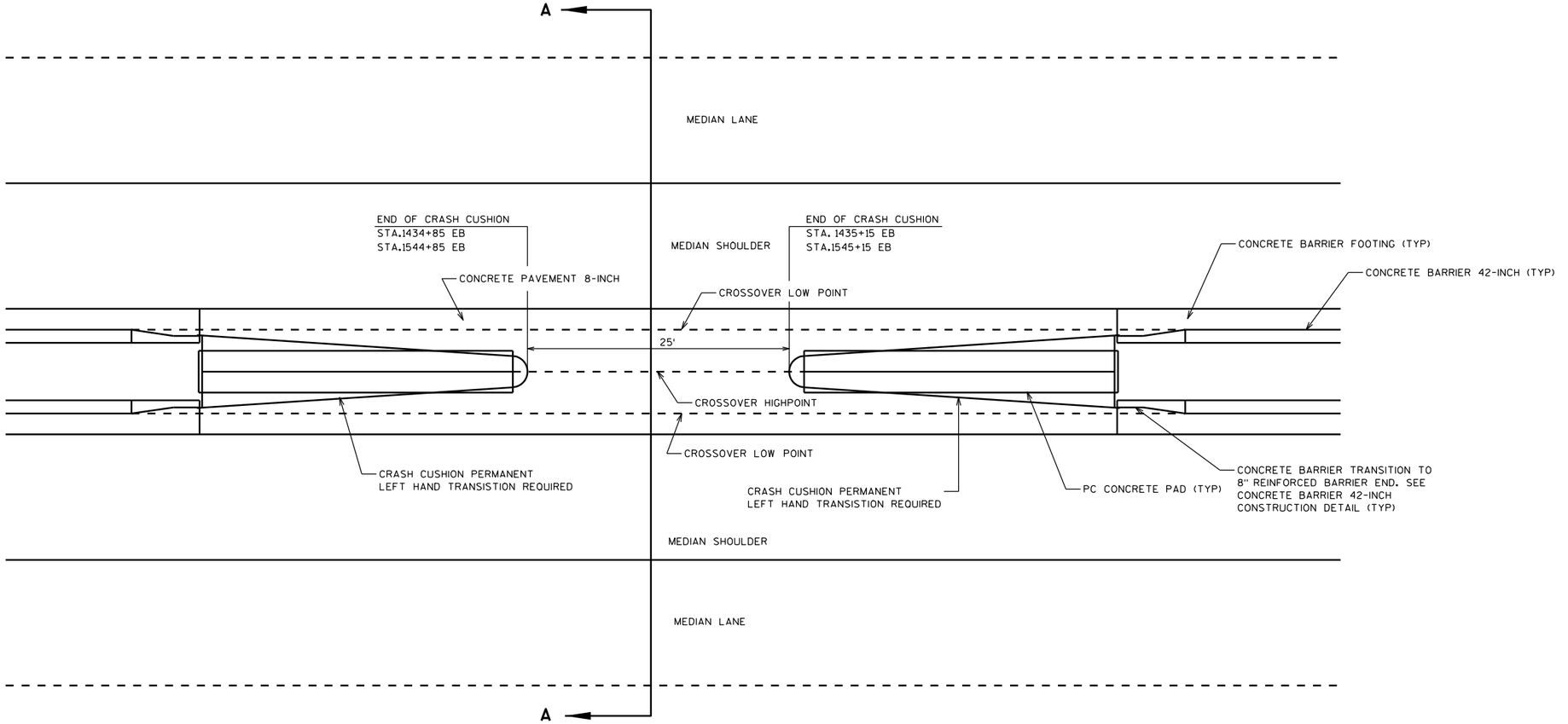
BAR BENDING DIAGRAMS FOR B-11-14, B-11-25 & B-11-26

NOTES

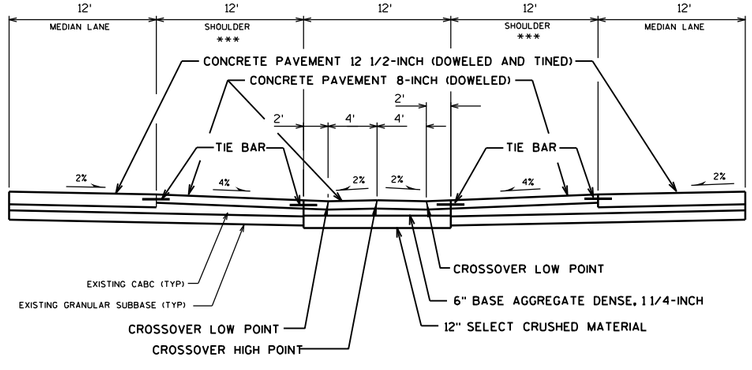
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

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

B.F. DENOTES BACK FACE
F.F. DENOTES FRONT FACE
E.F. DENOTES EACH FACE



PLAN VIEW



SECTION A-A

NOTE:

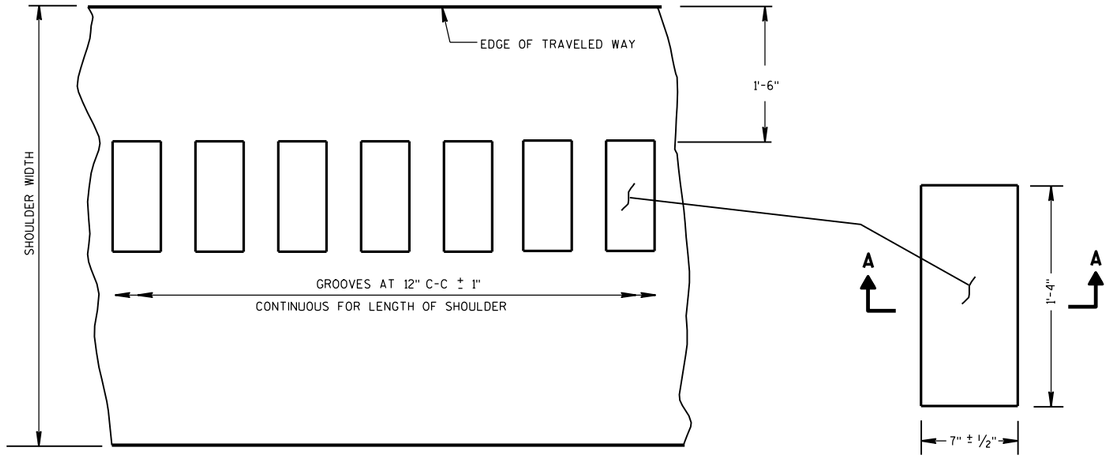
TAPER BARRIER WALL ENDS AT A RATE OF 46:1 TO MEET CRASH CUSHION MANUFACTURER'S WIDTH REQUIREMENTS.

*** SEE OPTIONAL SHOULDER PAVING DETAIL

MAINTENANCE CROSSOVER DETAIL

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS	SHEET	E

2



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

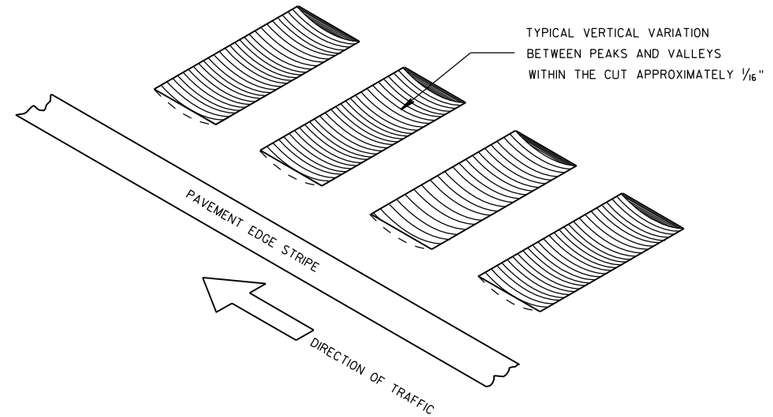
PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

GENERAL NOTES

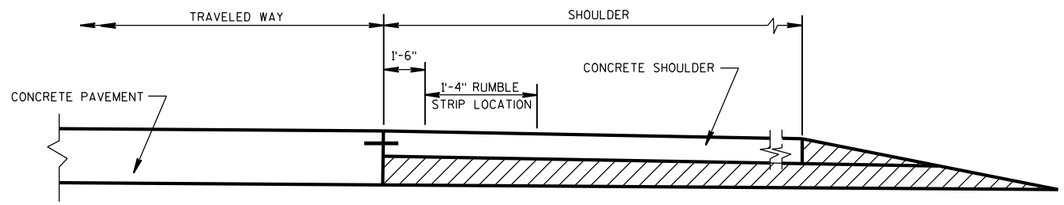
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

FOR LOCATION OF RUMBLE STRIPS AT INTERCHANGE AREAS, SEE SDD
FOR ASPHALTIC SHLDR RUMBLE STRIP, MILLING.

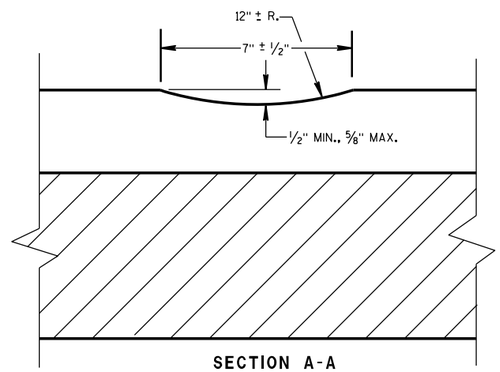
MILLED RUMBLE STRIP SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



SECTION VIEW

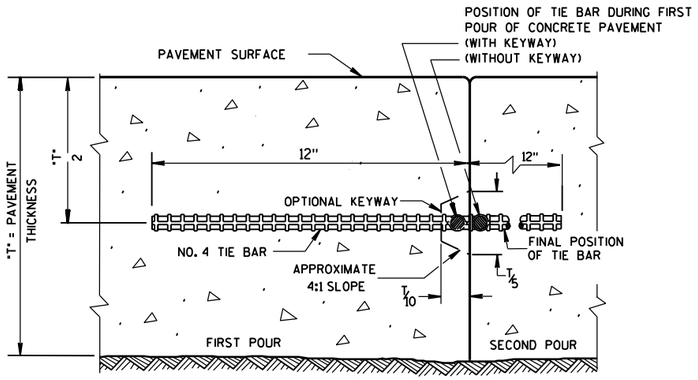


SECTION A-A

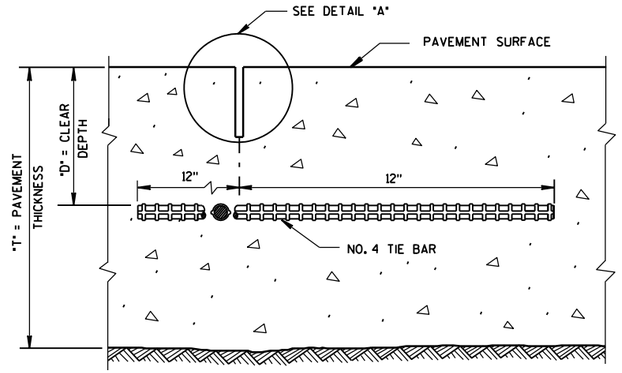
CONCRETE SHOULDER RUMBLE STRIP

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS	SHEET	E

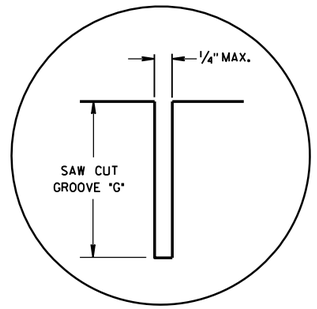
FILE NAME : r:\Support\CADDS\Projects\d1_10100472\021001_cd.dgn PLOT DATE : 01-SEP-2009 14:54 PLOT BY : dotbbg PLOT NAME : PLOT SCALE : 200.000000:1.000000
WISDOT/CADDS SHEET 42



CONSTRUCTION JOINT



SAWED JOINT

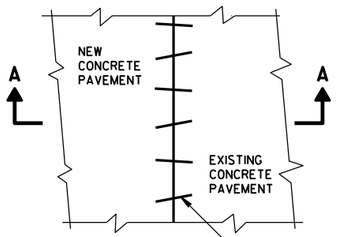


DETAIL "A"

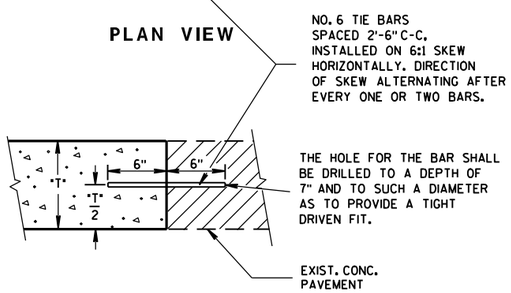
GENERAL NOTES

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

PAVEMENT THICKNESS "T"	CLEAR DEPTH "D"	SAW CUT GROOVE "G"	MAXIMUM TIE BAR SPACING "S"
10"	4 3/4"±1"	3 1/4"	24"
12 1/2"	5 3/4"±1"	4	24"

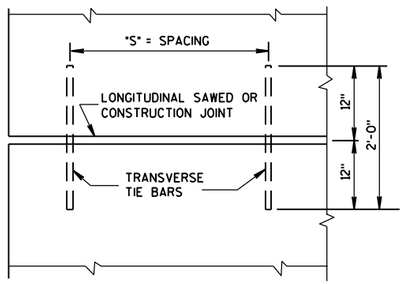


PLAN VIEW



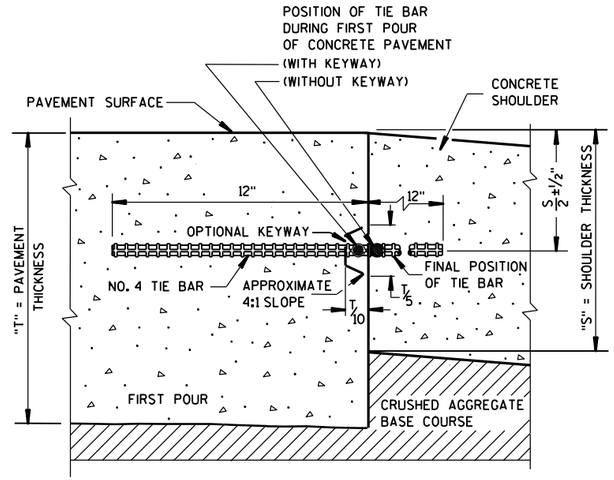
SECTION A-A

PAVEMENT TIES



PLAN VIEW

SHOWING LOCATION OF TIE BARS



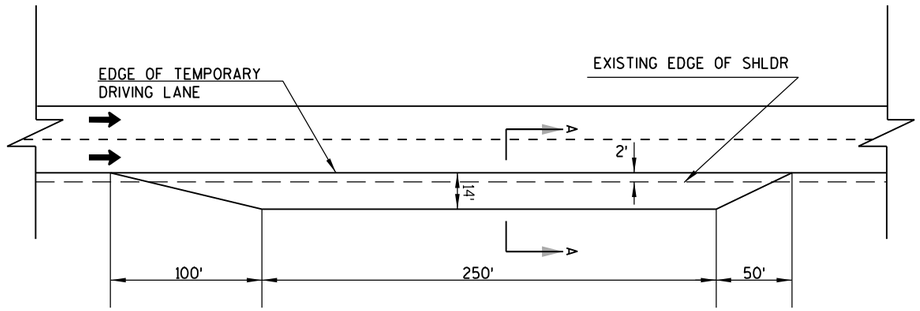
SECTION C-C

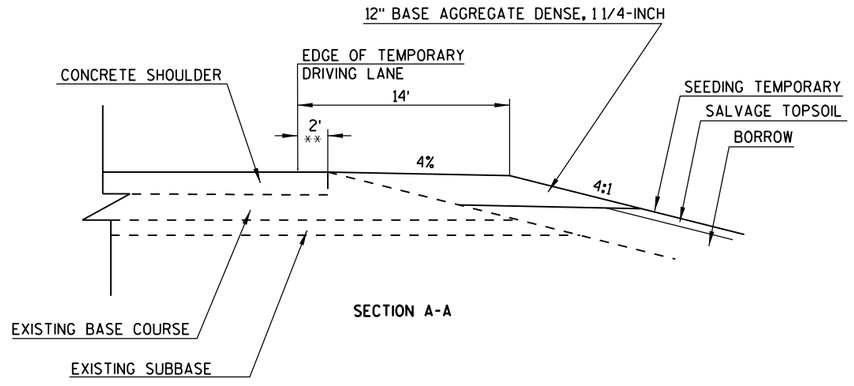
LONGITUDINAL JOINT FOR CONCRETE SHOULDER

MAXIMUM TIE BAR SPACING = 24"

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES

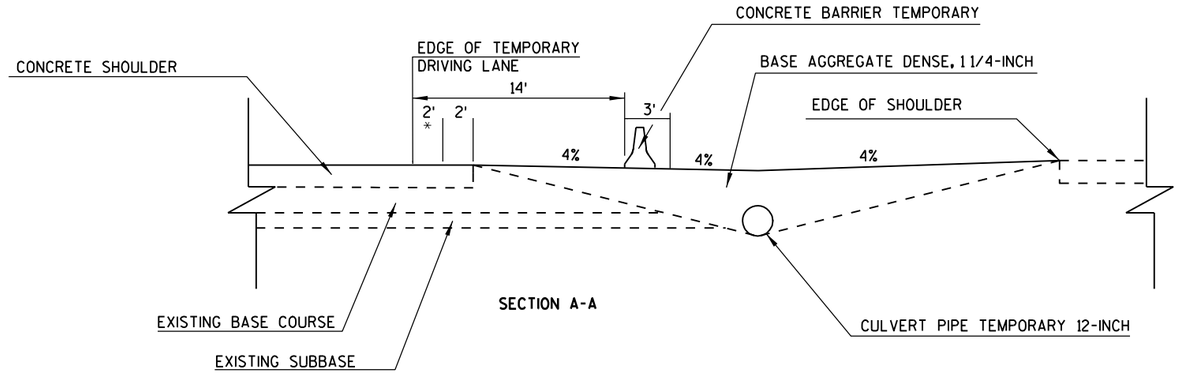
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS	SHEET	E



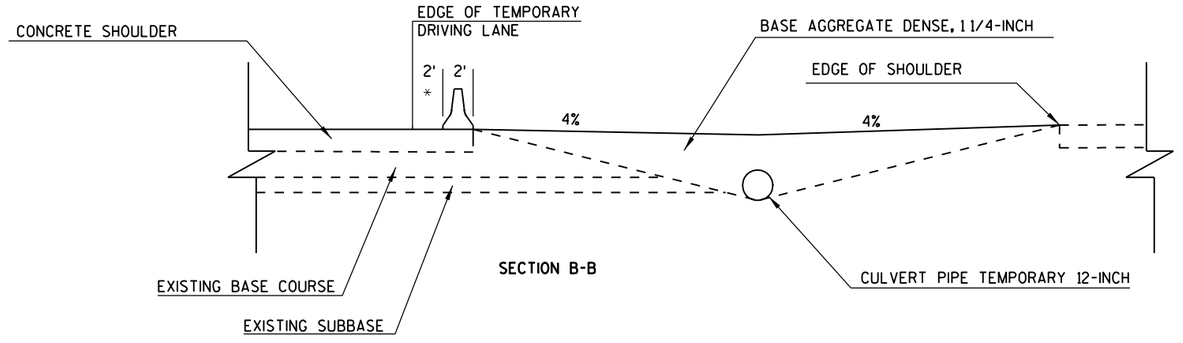


** DISTANCE FROM EDGE OF TEMPORARY DRIVING LANE TO EDGE OF SHOULDER SHALL BE 3' WHEN OUTSIDE TEMPORARY PULLOUTS ARE ON WESTBOUND ROADWAY.

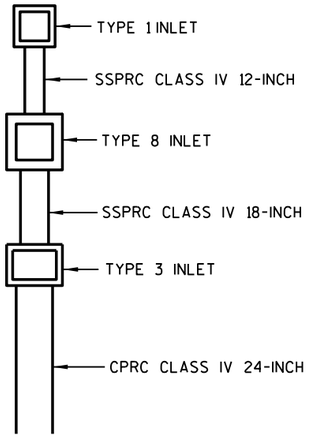
OUTSIDE TEMPORARY EMERGENCY PULLOUTS



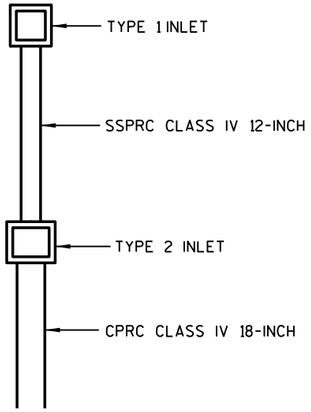
* DISTANCE FROM EDGE OF TEMPORARY DRIVING LANE TO CONCRETE BARRIER TEMPORARY SHALL BE 3' WHEN MEDIAN SIDE TEMPORARY PULLOUTS ARE ON WESTBOUND ROADWAY.



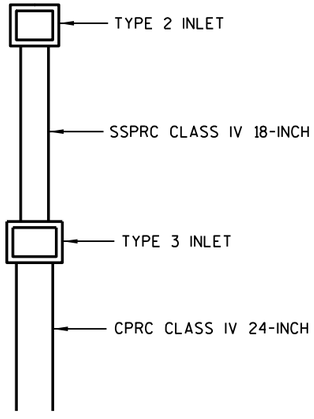
MEDIAN SIDE TEMPORARY EMERGENCY PULLOUTS



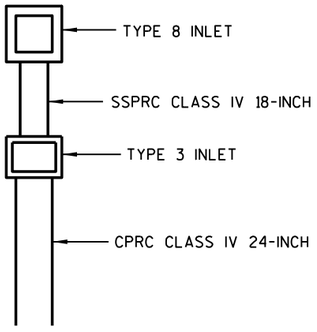
STA.1433+00 EB
STA.1456+50 EB
STA.1468+00 EB
STA.1474+00 EB
STA.1480+00 EB
STA.1490+00 EB
STA.1527+00 EB
STA.1545+00 EB



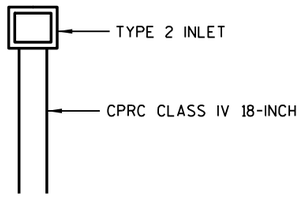
STA.1436+00 EB
STA.1439+00 EB
STA.1454+00 EB
STA.1460+00 EB
STA.1465+00 EB
STA.1471+00 EB
STA.1477+00 EB
STA.1483+00 EB
STA.1504+00 EB
STA.1549+00 EB
STA.1556+00 EB



STA.1446+00 EB
STA.1486+00 EB
STA.1495+00 EB
STA.1536+00 EB
STA.1541+00 EB



STA.1507+00 EB
STA.1513+00 EB
STA.1521+00 EB

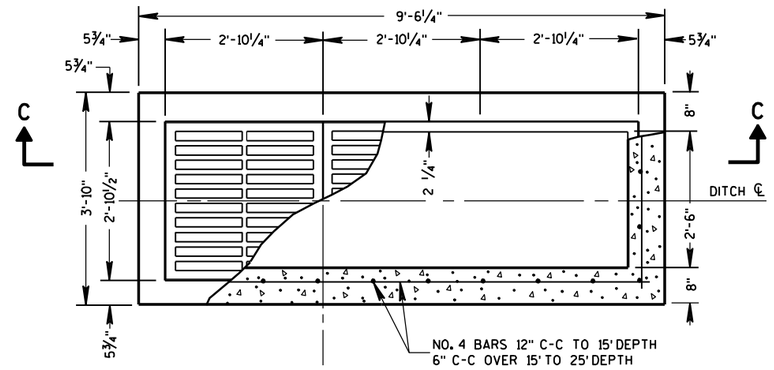


STA.1509+00 EB
STA.1511+00 EB
STA.1515+50 EB
STA.1523+00 EB

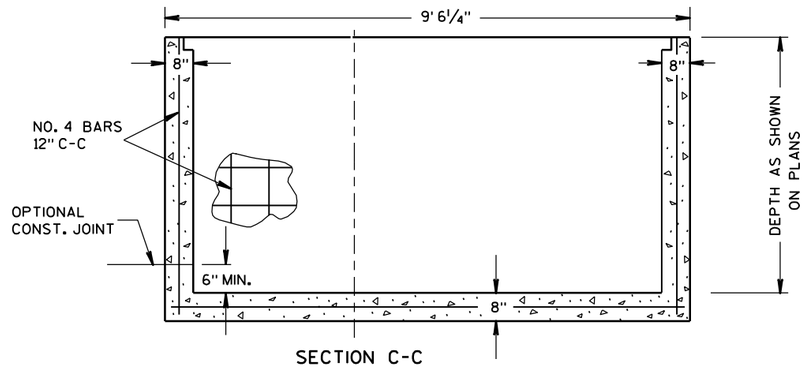
NOTES:

SSPRC = STORM SEWER PIPE REINFORCED CONCRETE

CPRC = CULVERT PIPE REINFORCED CONCRETE



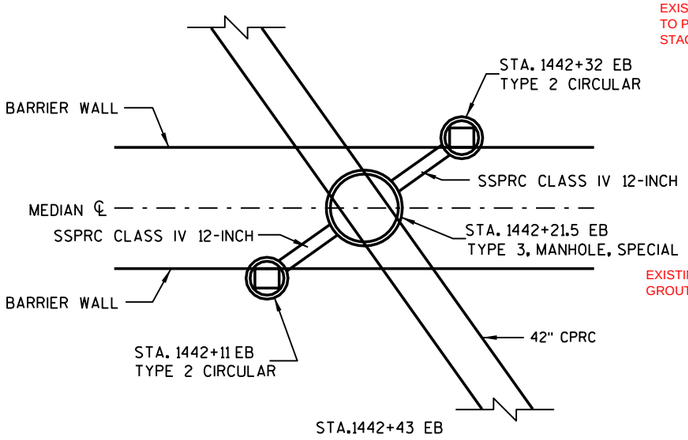
PLAN VIEW

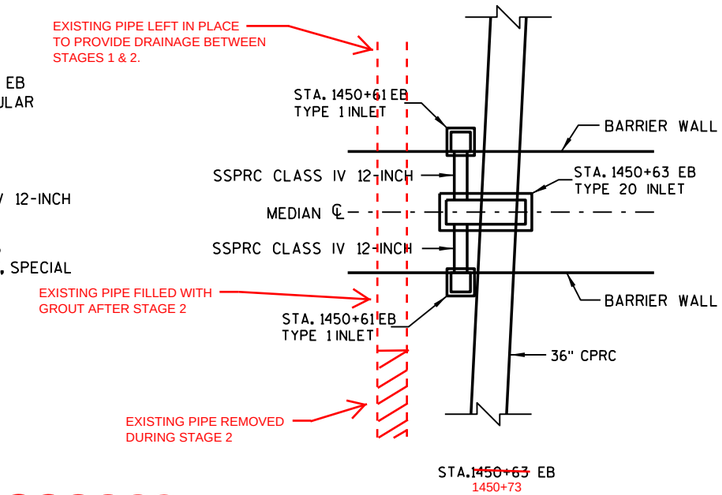


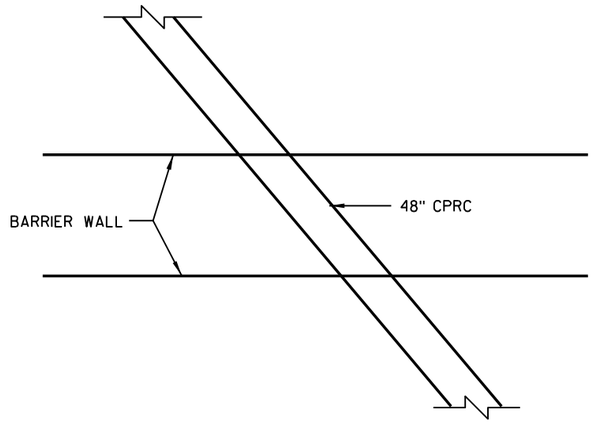
SECTION C-C
REINFORCED
CONCRETE

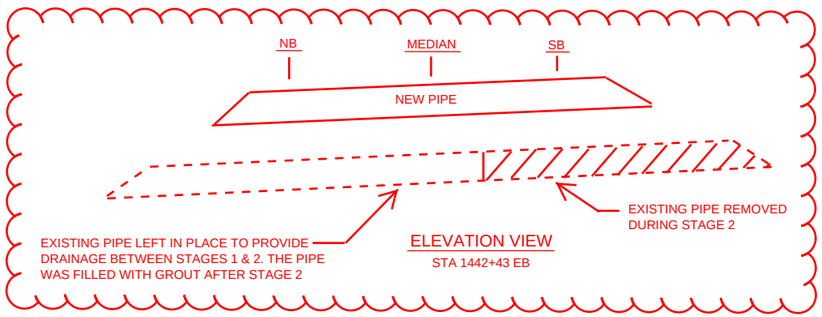
INLETS TYPE 20 SPECIAL

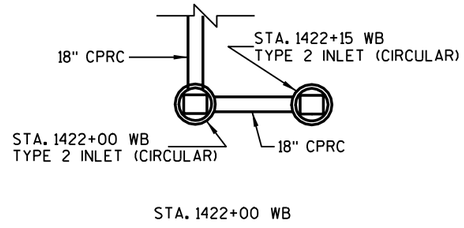
STA.1450+63 EB
STA.1462+69 EB
STA.1500+27 EB
STA.1518+23 EB
STA.1532+03 EB







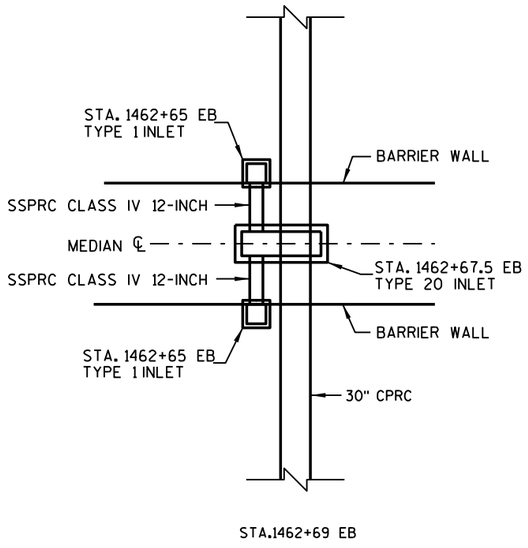


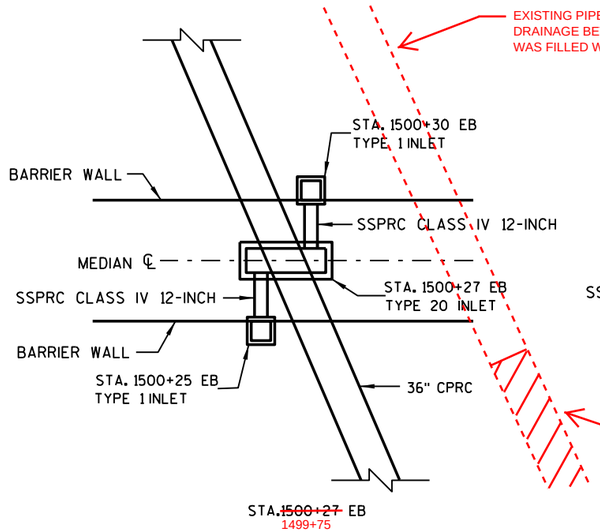


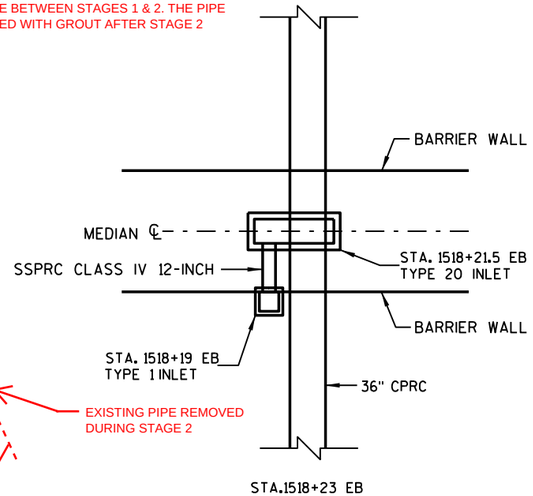
NOTES:

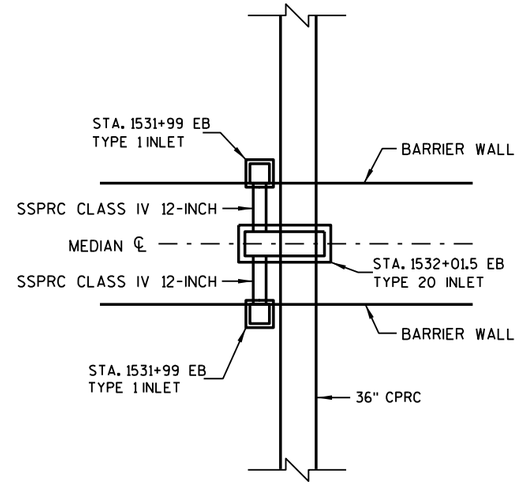
SSPRC = STORM SEWER PIPE REINFORCED CONCRETE

CPRC = CULVERT PIPE REINFORCED CONCRETE

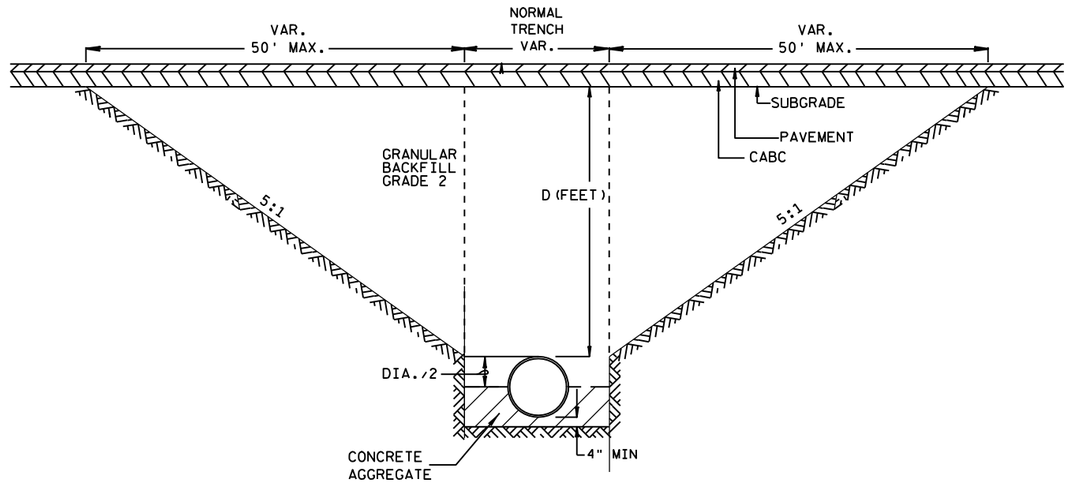








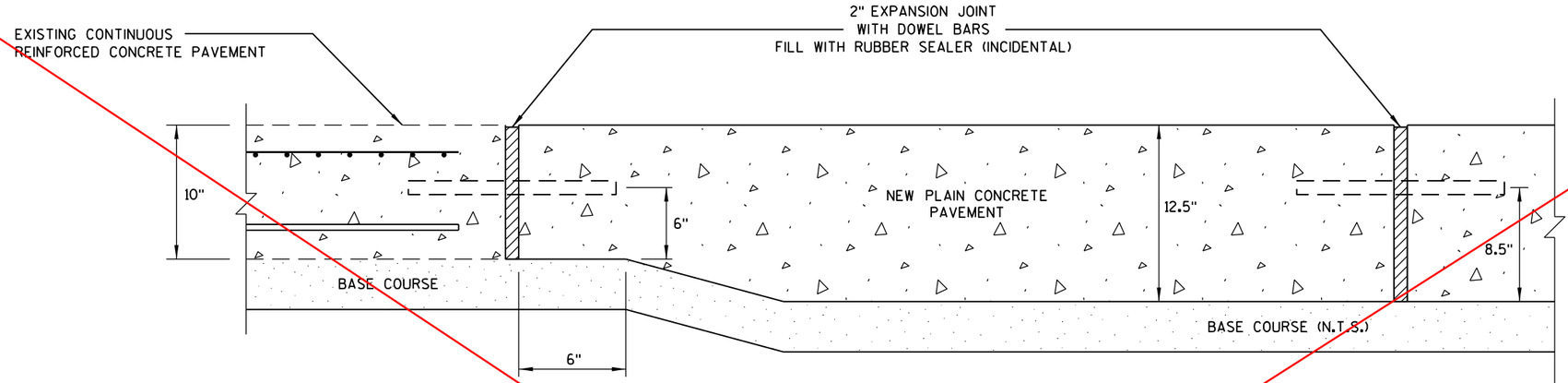
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CULVERT PIPE INSTALLATION DETAIL

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS	SHEET	E

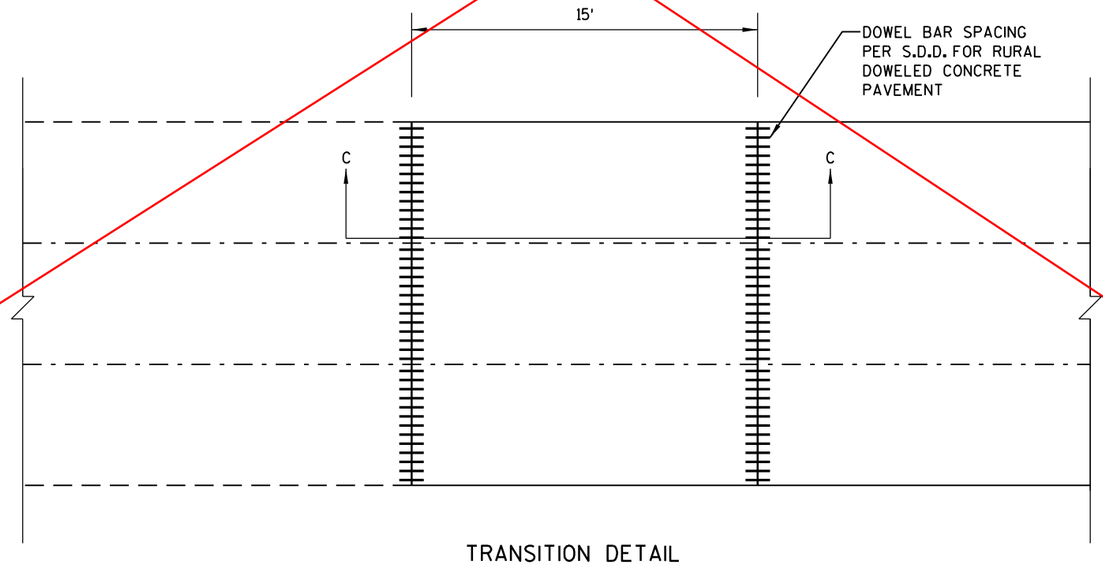
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WISDOT/CADDS SHEET 42



SECTION C-C

TRANSITION DETAIL

TEMPORARY EXPANSION JOINT DETAIL
(PAID AS CONCRETE PAVEMENT 12.5")
STA. 1350+00 WB



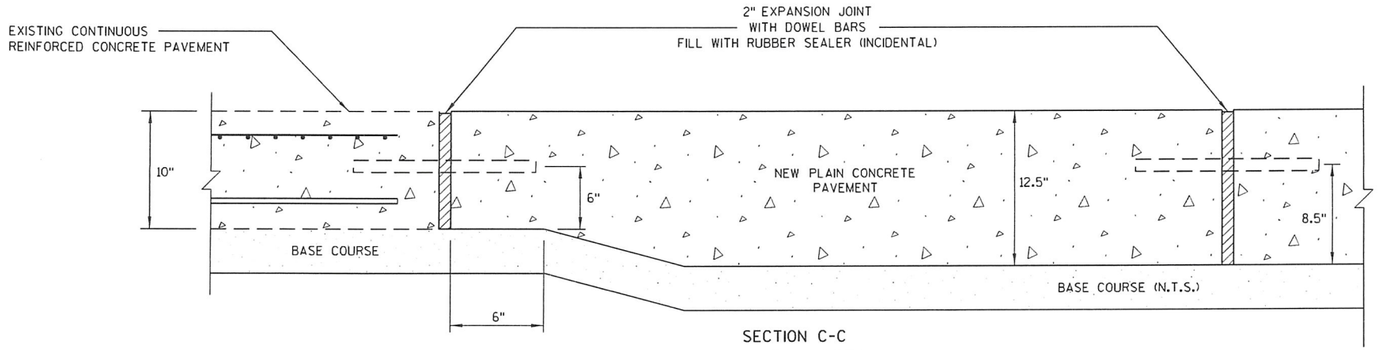
TRANSITION DETAIL

TEMPORARY EXPANSION JOINT DETAIL

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS	SHEET	E

2

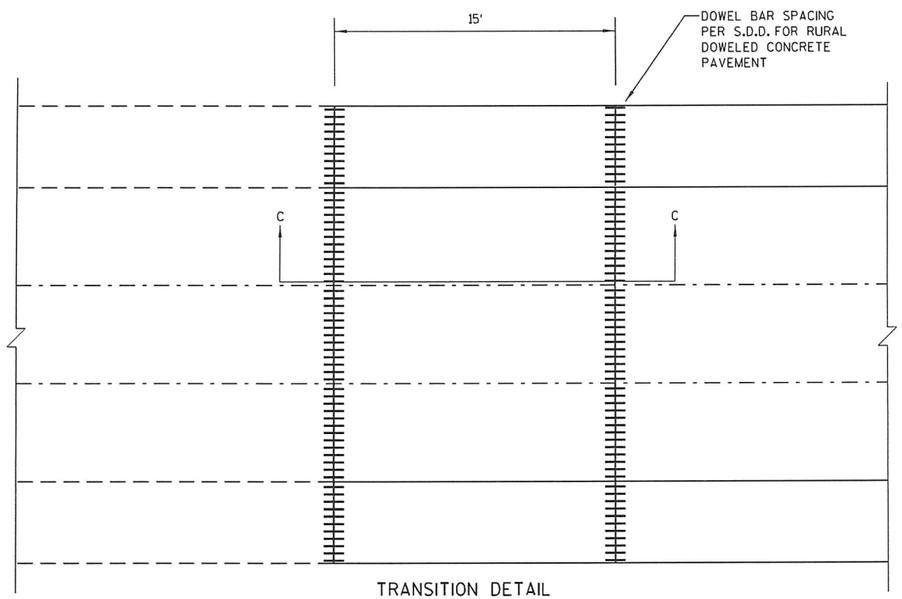
Addendum #1
Revised Sheet 25
October 19, 2009



SECTION C-C

TRANSITION DETAIL

TEMPORARY EXPANSION JOINT DETAIL
(PAID AS CONCRETE PAVEMENT 12.5")
STA. 1350+00 WB

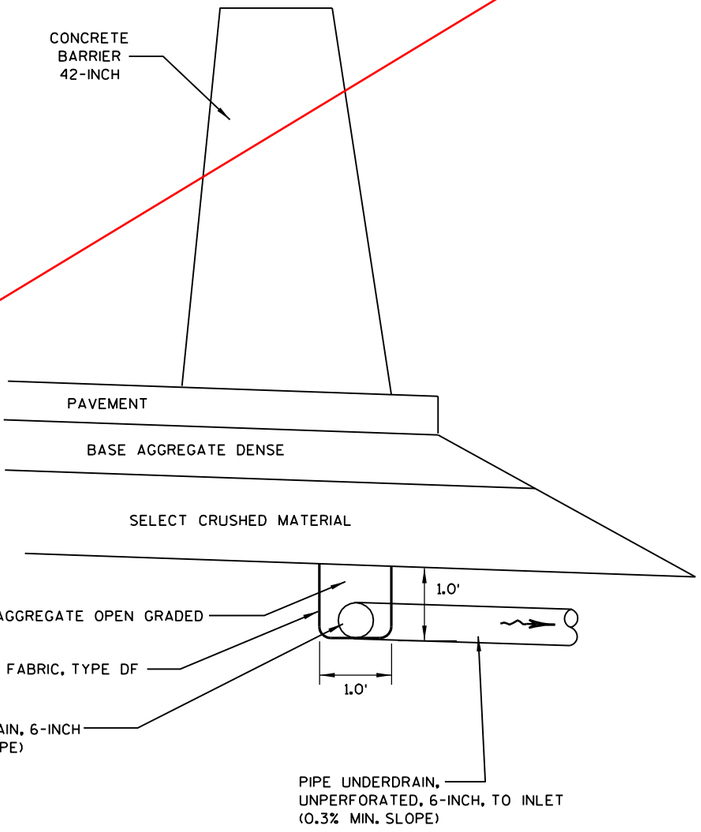


TRANSITION DETAIL

TEMPORARY EXPANSION JOINT DETAIL

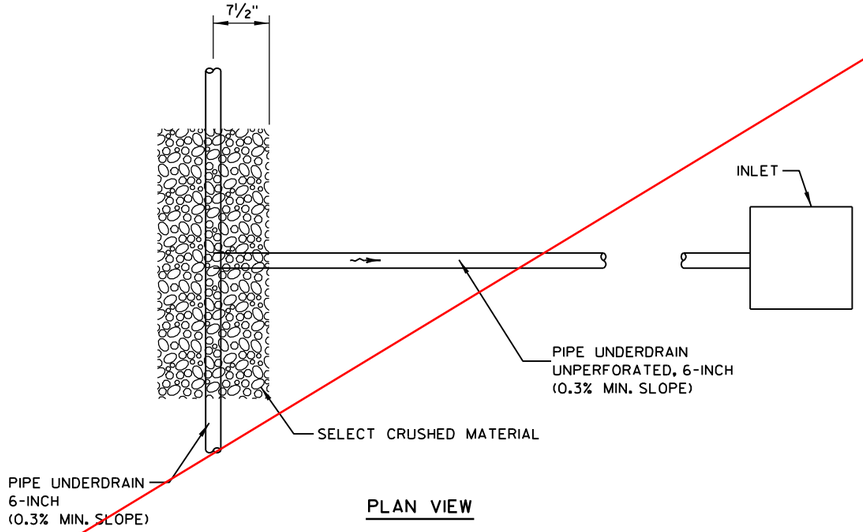
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WISDOT/CADDS SHEET 42

2



UNDERDRAIN DETAIL

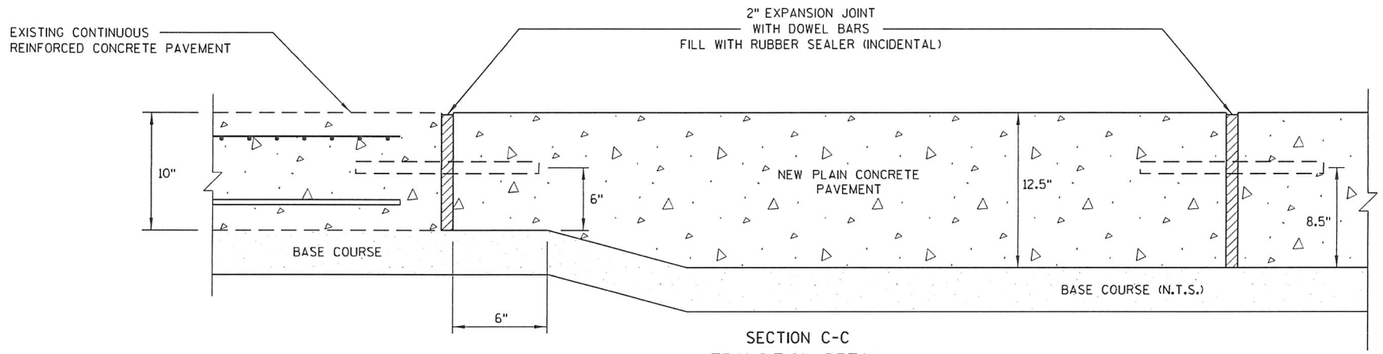
UNDERDRAIN TO BE DISCHARGED
INTO STORM SEWER INLETS



PLAN VIEW

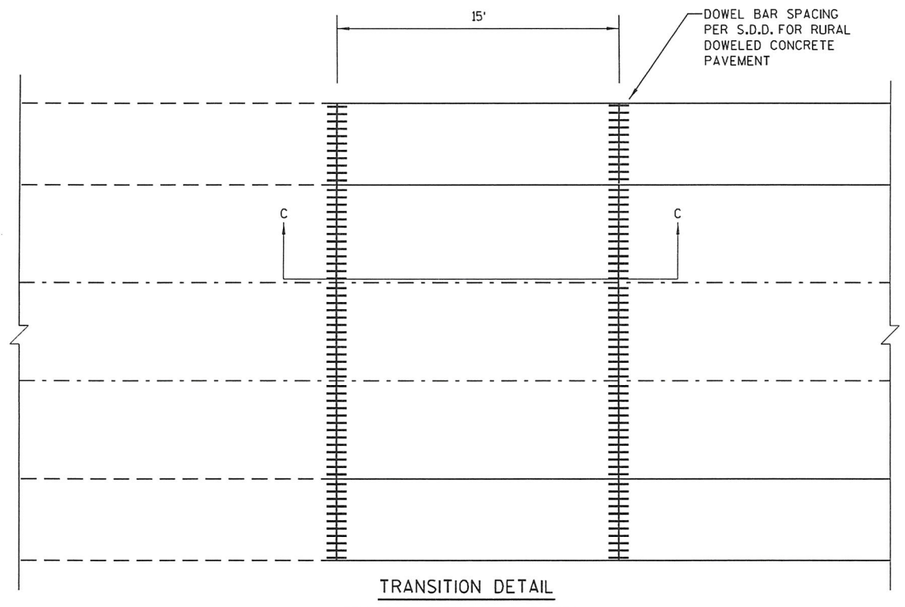
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Addendum #1
Revised Sheet 25
October 19, 2009



SECTION C-C
TRANSITION DETAIL

TEMPORARY EXPANSION JOINT DETAIL
(PAID AS CONCRETE PAVEMENT 12.5")
STA. 1350+00 WB



TRANSITION DETAIL

TEMPORARY EXPANSION JOINT DETAIL

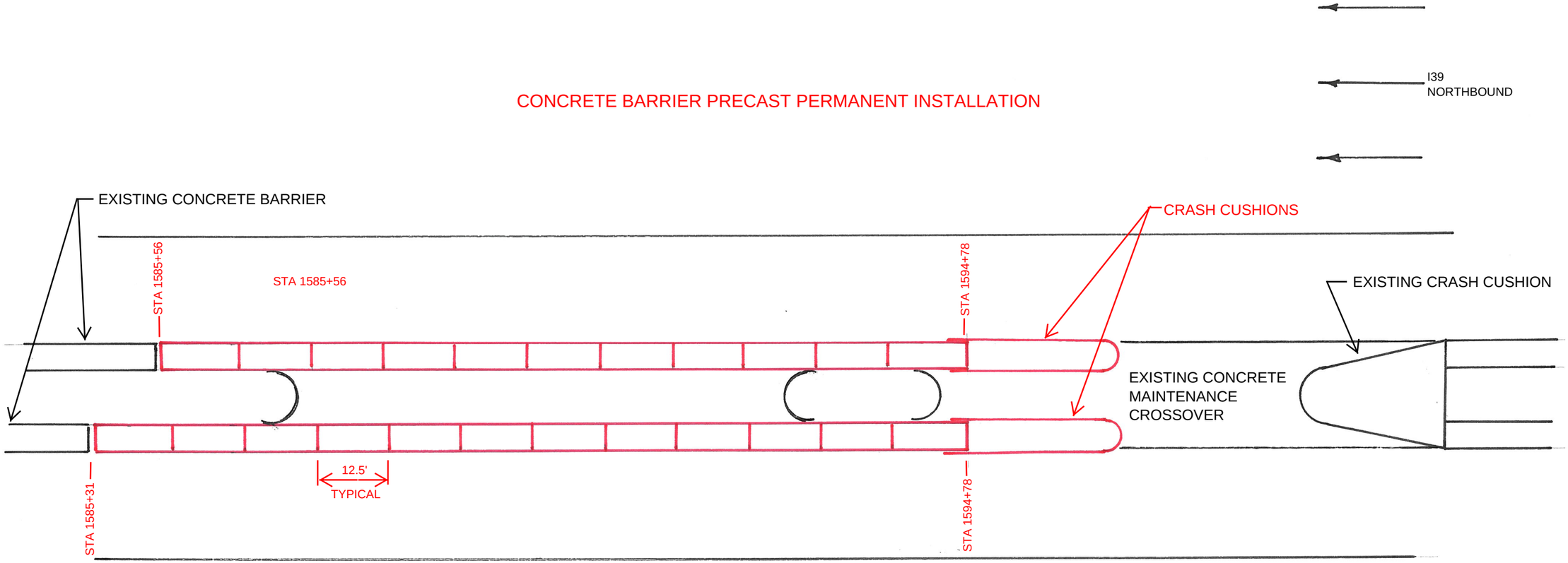
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS	SHEET 26 A	E

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WISDOT/CADDS SHEET 42

2

2

CONCRETE BARRIER PRECAST PERMANENT INSTALLATION

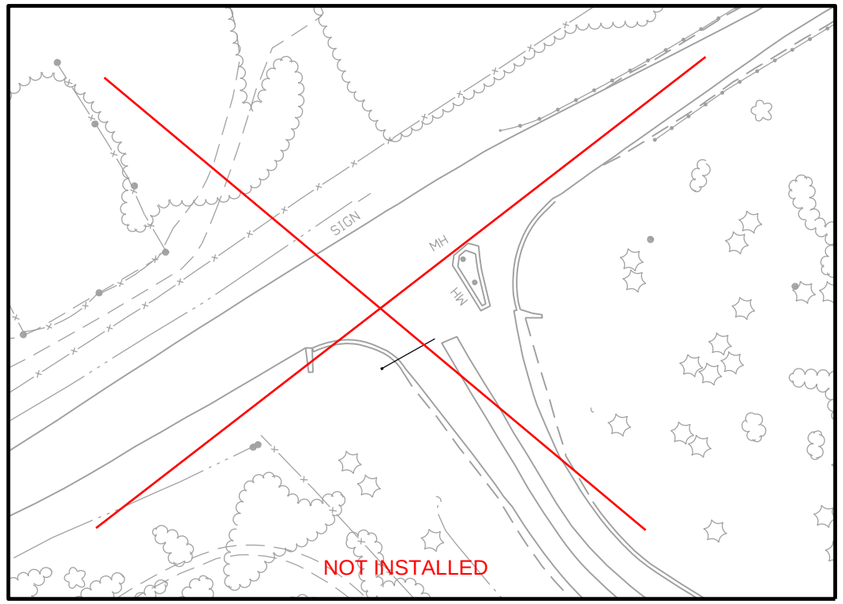


NOTE: PRECAST CONCRETE BARRIER IS PINNED TO THE CONCRETE CROSSOVER, CONCRETE FOOTING OF CONCRETE MAINTENANCE CROSSOVER

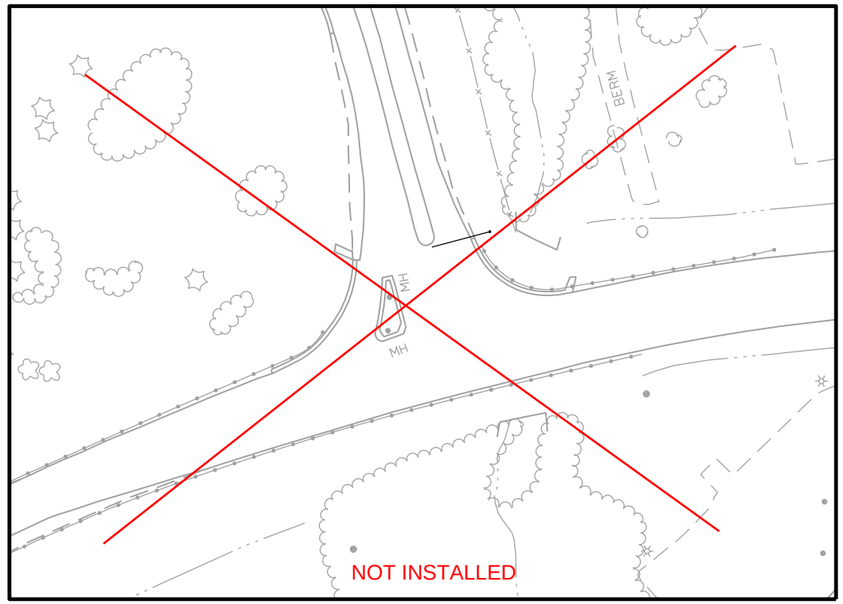
PROTECTION OF EXISTING CONCRETE MAINLINE CROSSOVER

NO SCALE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAIL	SHEET 26 B



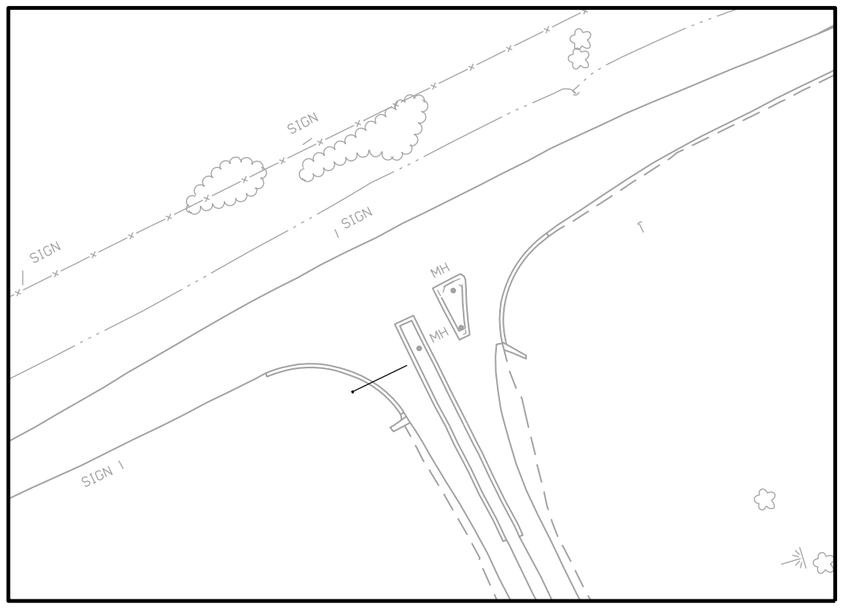
CTH "CS" ONTO IH-39 SOUTH BOUND
STA. 1362+96.5 EB, 589.8' RT.



CTH "CS" ONTO IH-39 NORTH BOUND
STA. 1355+55.5 WB, 581.9' LT.

RAMP GATE NOTES

TO LOCATE PERMANENT RAMP GATES IN THE FIELD THE ENGINEER SHALL CONTACT SOUTHWEST REGION MADISON OFFICE TRAFFIC SECTION, ANGELA ADAMS AT (608) 246-3274 AT LEAST FIVE WORKING DAYS PRIOR TO BEGINNING INSTALLATION.

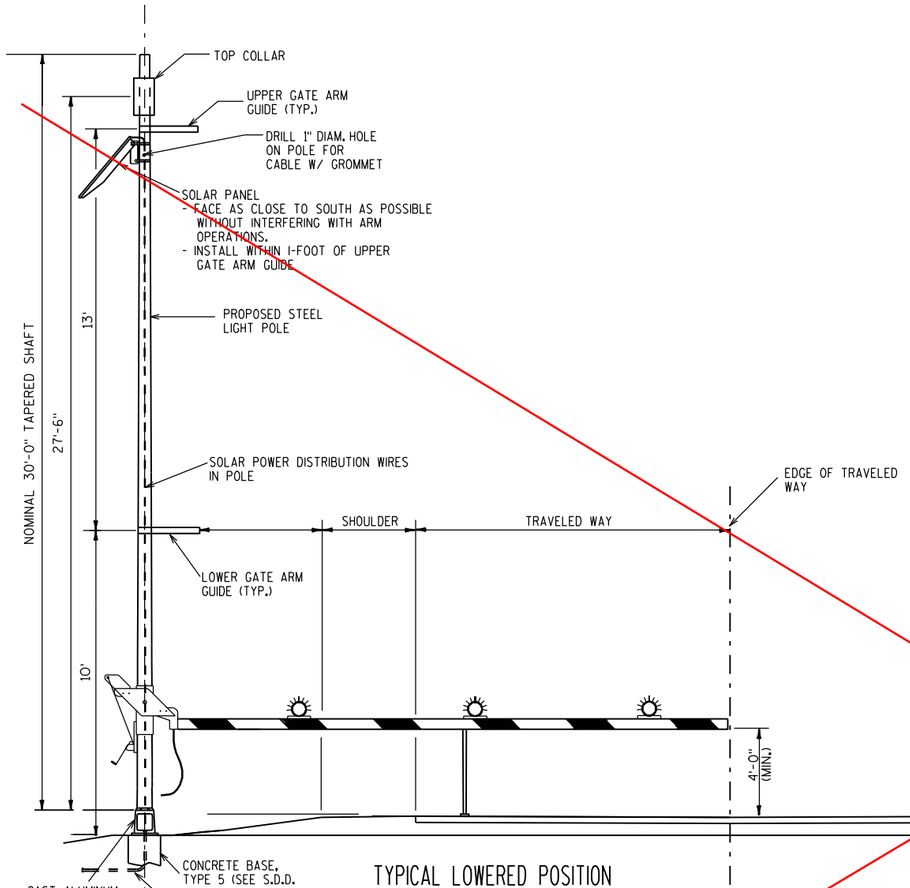


STH 60 ONTO IH-39 SOUTH BOUND
STA. 1572+00.7 EB, 647.2' RT.

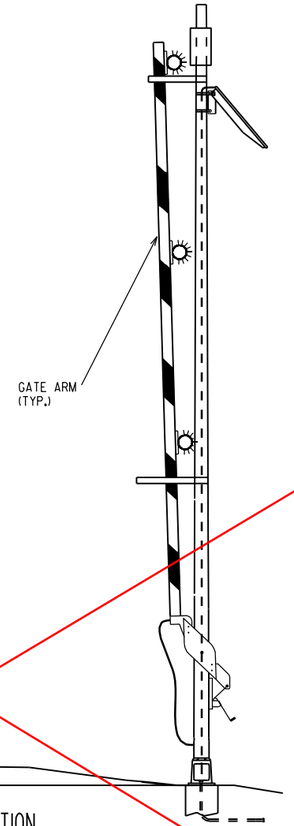


STH 60 ONTO IH-39 NORTH BOUND
STA. 1568+32.3 WB, 645.4' LT.

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - RAMP GATE DETAILS	SHEET	E



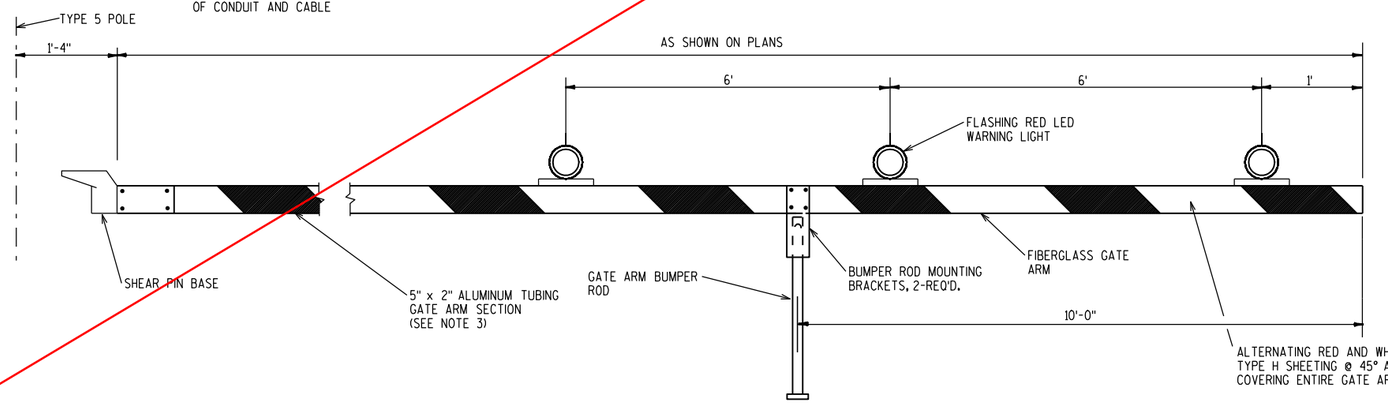
TYPICAL LOWERED POSITION
NOT TO SCALE



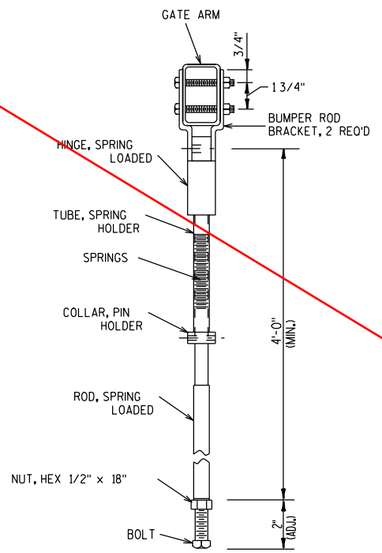
TYPICAL RAISED POSITION
NOT TO SCALE

GENERAL NOTES

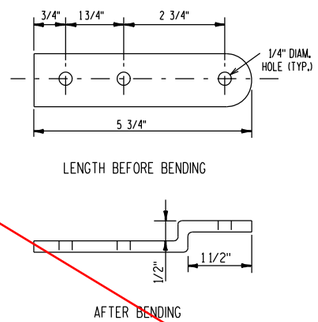
1. THE LOCATION OF RAMP CLOSURE GATES AND MOUNTING HEIGHT OF GATE ARM PIVOT SHALL BE VERIFIED BY THE ENGINEER.
2. HEIGHT OF GATE ARM GUIDES MAY BE VARIED AS REQUIRED FOR WARNING LIGHT CLEARANCE.
3. FIBERGLASS/ALUMINUM GATE ARM AND SHEAR PIN BASE SHALL BE SUPPLIED BY THE SAME VENDOR.
4. GATE ARM TO BE 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. PAYMENT FOR RAMP CLOSURE GATES (EACH) INCLUDES: GATES, SUPPORT POLES, GATE ARM ASSEMBLIES. GATE ARMS, SOLAR POWER SYSTEM, AND GATE FLASHERS.



GATE DETAIL
(SOLAR POWER OPTION)

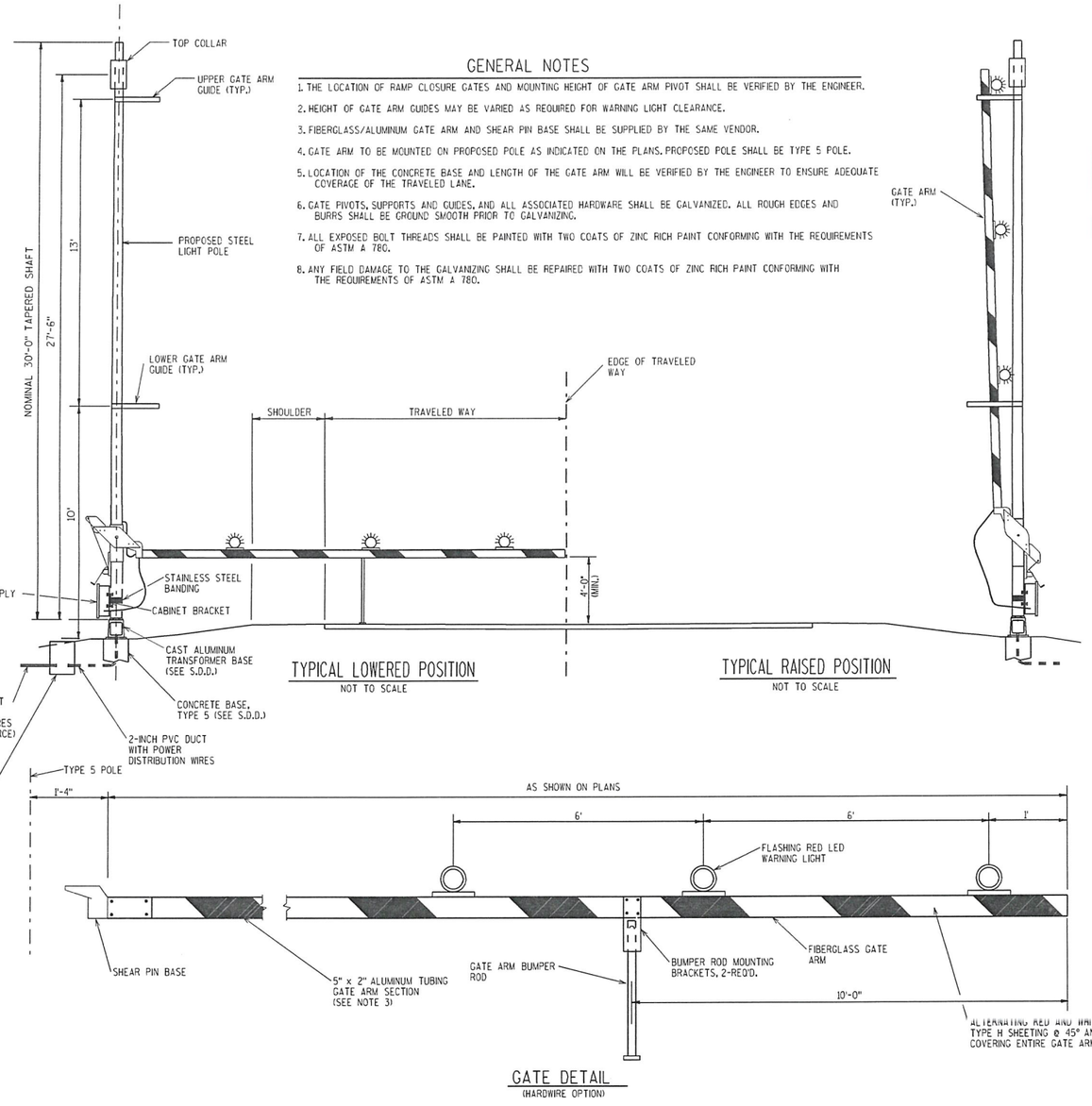


GATE ARM BUMPER ROD DETAIL



BUMPER ROD MOUNTING BRACKET DETAIL

2



GENERAL NOTES

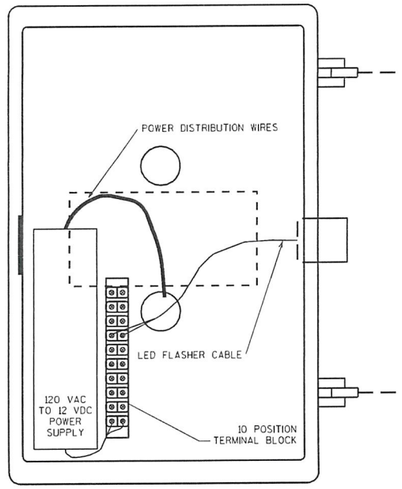
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5. LOCATION OF THE CONCRETE BASE AND LENGTH OF THE GATE ARM WILL BE VERIFIED BY THE ENGINEER TO ENSURE ADEQUATE COVERAGE OF THE TRAVELED LANE.
6. GATE PIVOTS, SUPPORTS AND GUIDES, AND ALL ASSOCIATED HARDWARE SHALL BE GALVANIZED. ALL ROUGH EDGES AND 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.

TYPICAL LOWERED POSITION
NOT TO SCALE

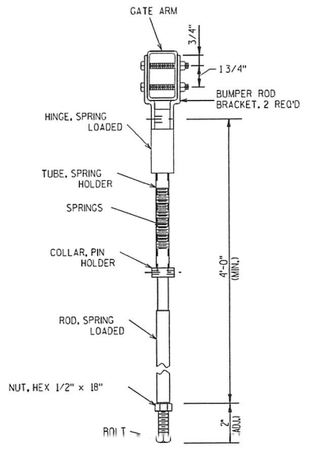
TYPICAL RAISED POSITION
NOT TO SCALE

GATE DETAIL
(HARDWIRE OPTION)

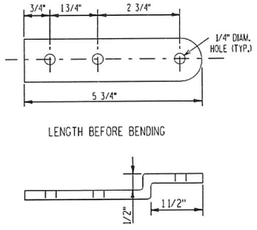
Addendum #1
Revised Sheet 28
October 19, 2009



POWER SUPPLY CABINET



GATE ARM BUMPER ROD DETAIL



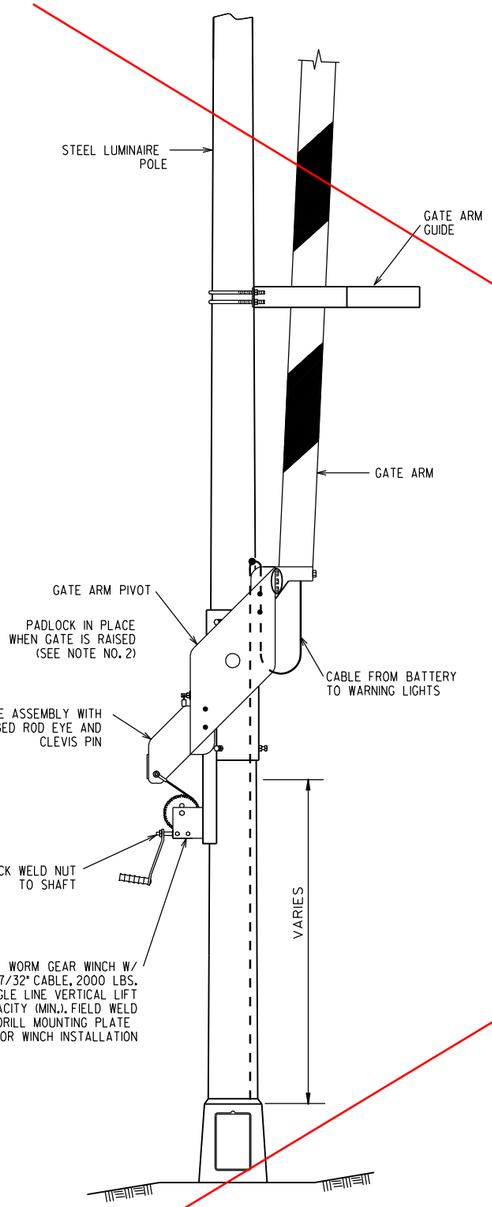
BUMPER ROD MOUNTING BRACKET DETAIL

PROJECT NO: 1010-04-72	HWY: IH-39	COUNTY: COLUMBIA	RAMP GATE WITH COMMERCIAL POWER	SHEET 28 A	E

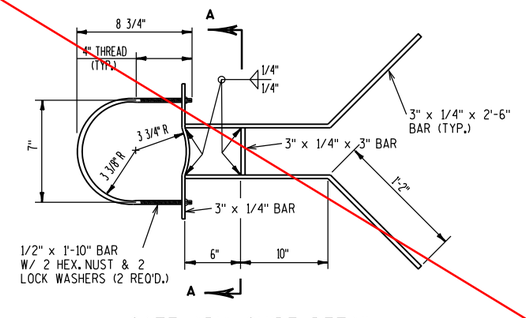
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WISDOT/CADDS SHEET 42

GENERAL NOTES

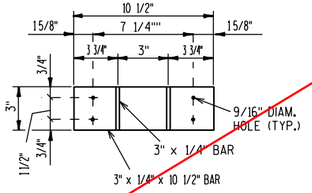
1. WHEN THE GATE IS FULLY RAISED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL AND PADLOCKED IN PLACE.
2. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL AND PADLOCKED INTO PLACE.
3. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.
4. ALL BOLTS SHALL CONFORM TO ASTM A 307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A 325.



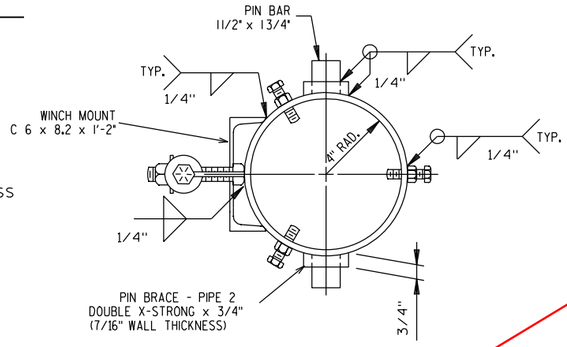
GATE PIVOT ASSEMBLY



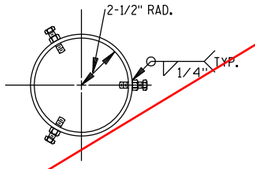
GATE ARM GUIDE DETAIL



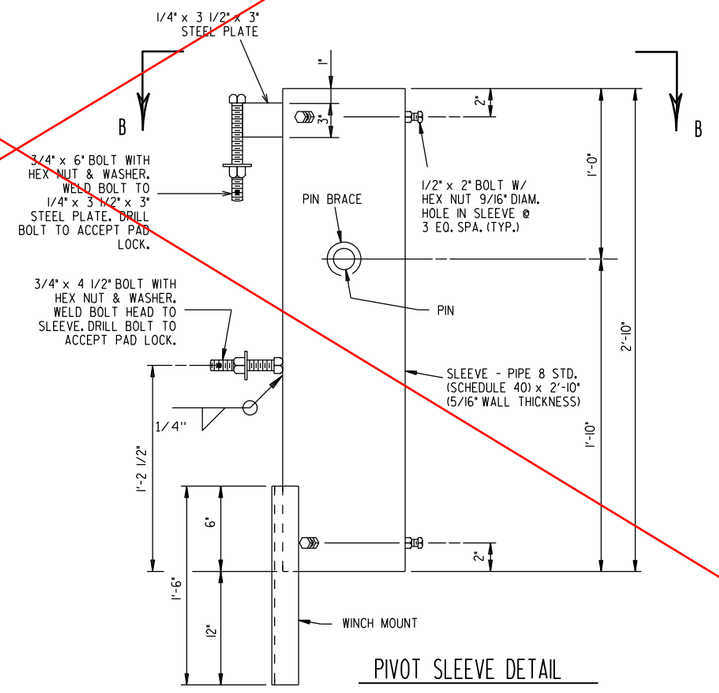
SECTION A-A
U-BOLTS NOT SHOWN



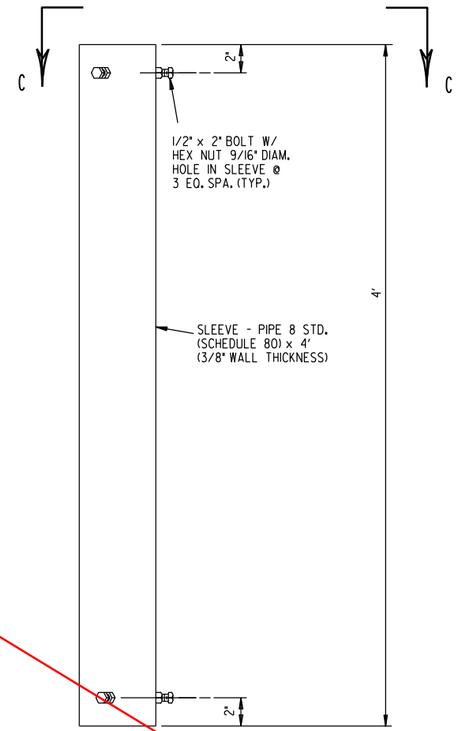
SECTION B-B



SECTION C-C



PIVOT SLEEVE DETAIL



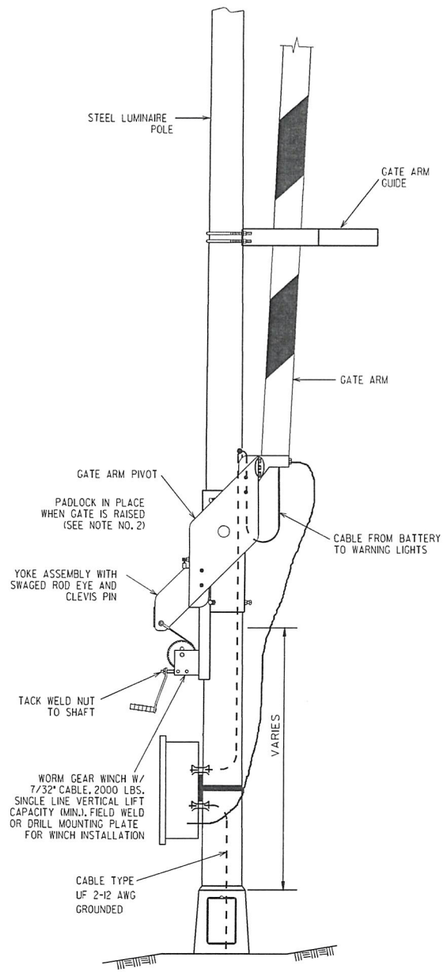
TOP COLLAR

CLOGATE20.DGN

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - RAMP GATE DETAILS	SHEET	E

2

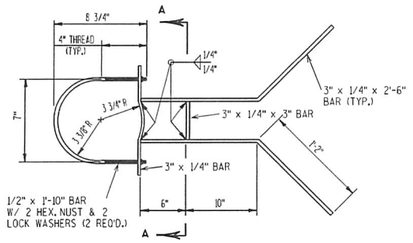
Addendum #1
Revised Sheet 29
October 19, 2009



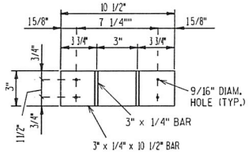
GATE PIVOT ASSEMBLY

GENERAL NOTES

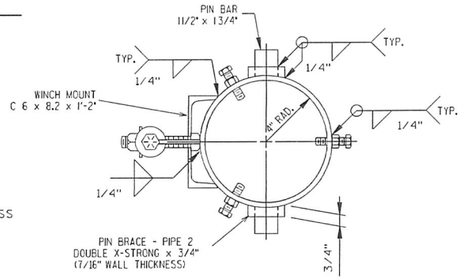
1. WORM GEAR WINCH AND CABLE SHALL BE AS SUPPLIED BY VENDOR
2. WHEN THE GATE IS FULLY RAISED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL AND PADLOCKED IN PLACE. THE FABRICATOR SHALL SUPPLY ONE HEAVY WEATHER-PROOF PADLOCK WITH 30 NUMBERED KEYS FOR EACH GATE ARM.
3. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL AND PADLOCKED INTO PLACE.
4. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.
5. ALL BOLTS SHALL CONFORM TO ASTM A 307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A 325.



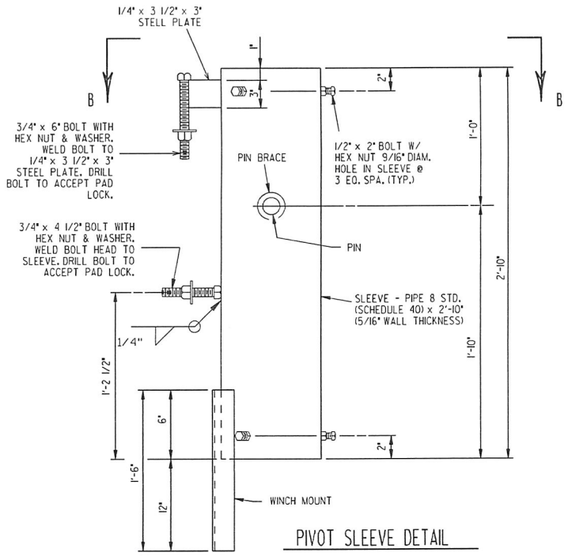
GATE ARM GUIDE DETAIL



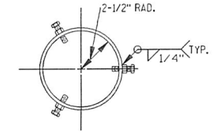
SECTION A-A
U-BOLTS NOT SHOWN



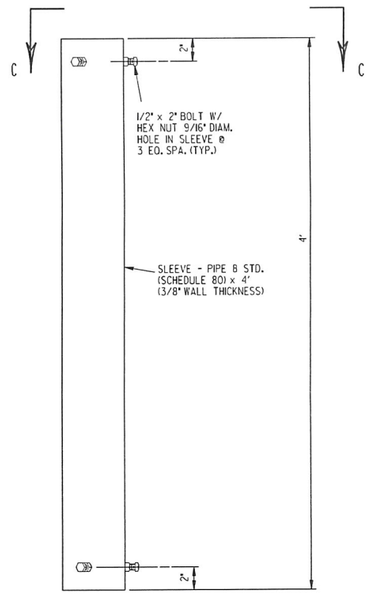
SECTION B-B



PIVOT SLEEVE DETAIL



SECTION C-C

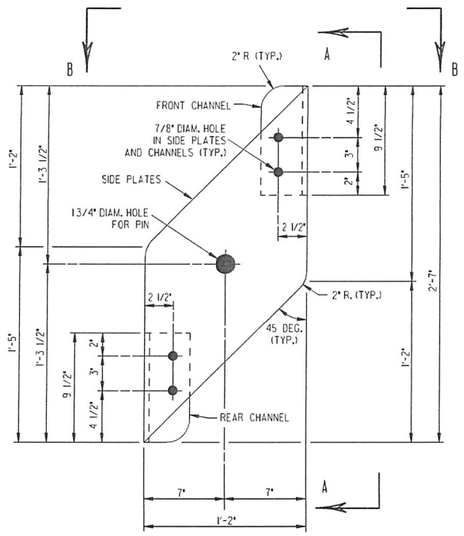


TOP COLLAR

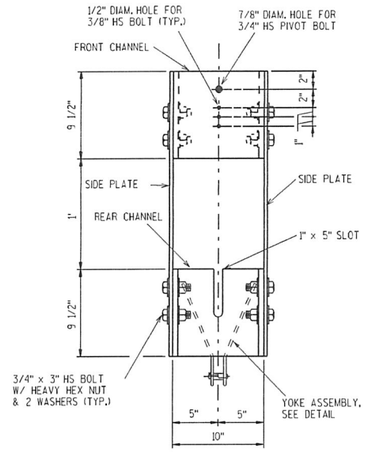
CLOGATE20.DGN

PROJECT NO: 1010-04-72	HWY: IH-39	COUNTY: COLUMBIA	RAMP GATE WITH COMMERCIAL POWER	SHEET 29 A	E

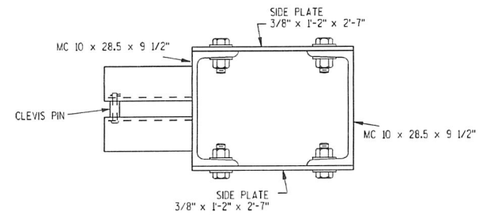
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PLOT NAME :
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WISDOT/CADDS SHEET 42



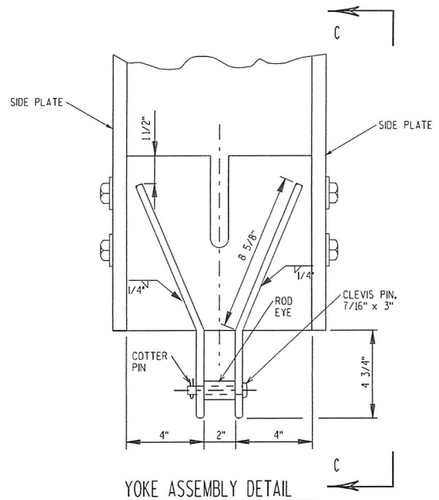
SIDE PLATE DETAIL



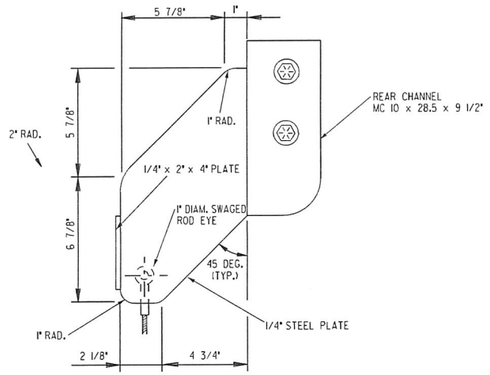
SECTION A-A



SECTION B-B



YOKE ASSEMBLY DETAIL

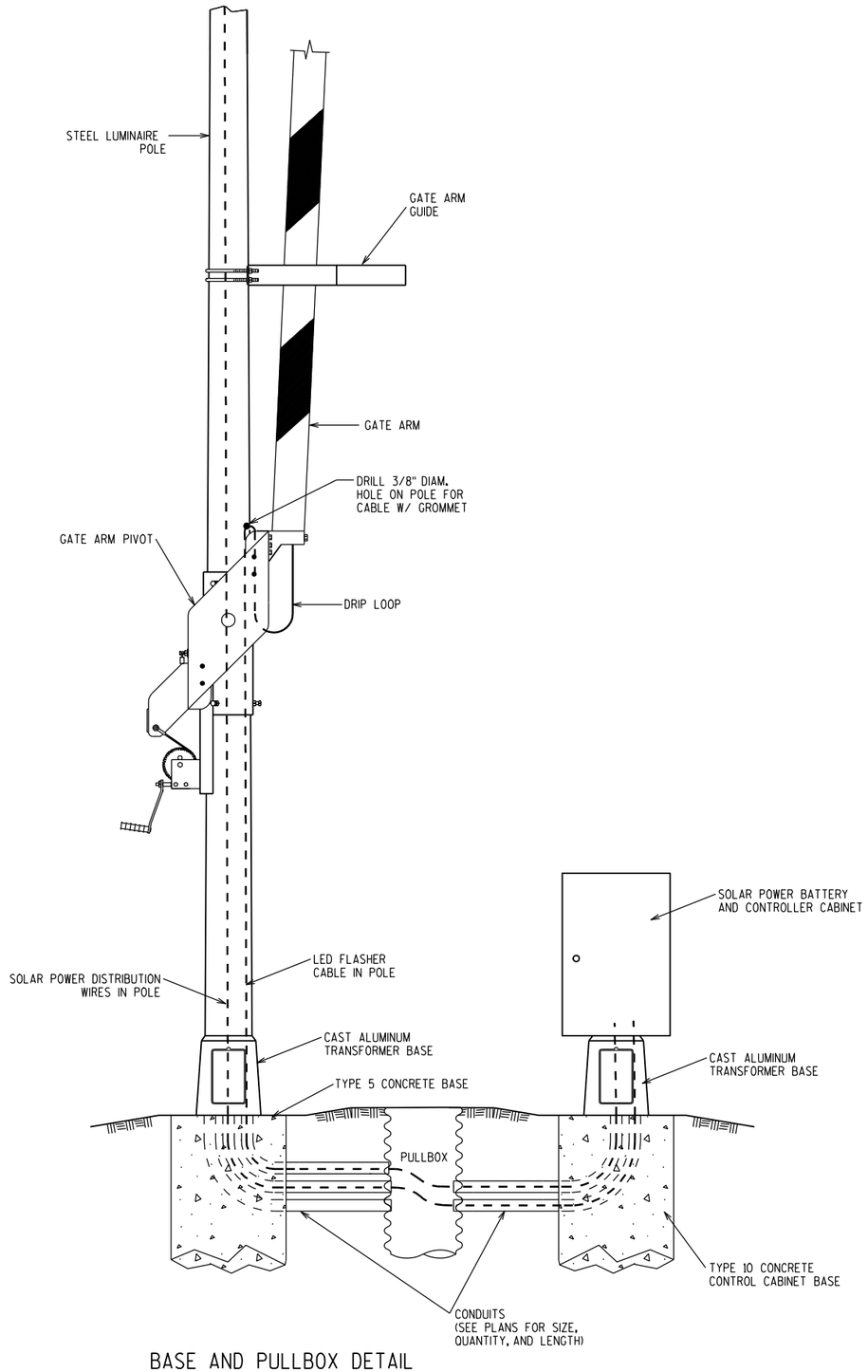


SECTION C-C

Addendum #1
Revised Sheet 30
October 19, 2009

PROJECT NO: 1010-04-72	HWY: IH-39	COUNTY: COLUMBIA	RAMP GATE WITH COMMERCIAL POWER	SHEET 29 B	E

2

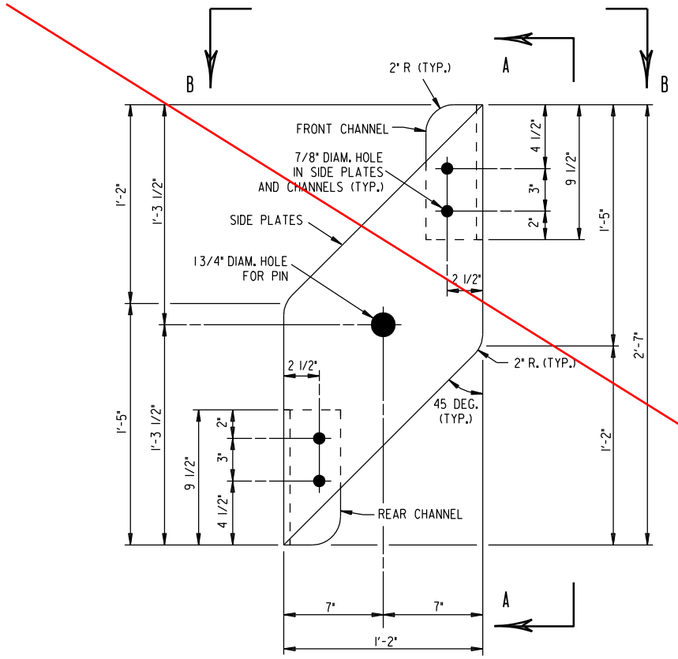


BASE AND PULLBOX DETAIL

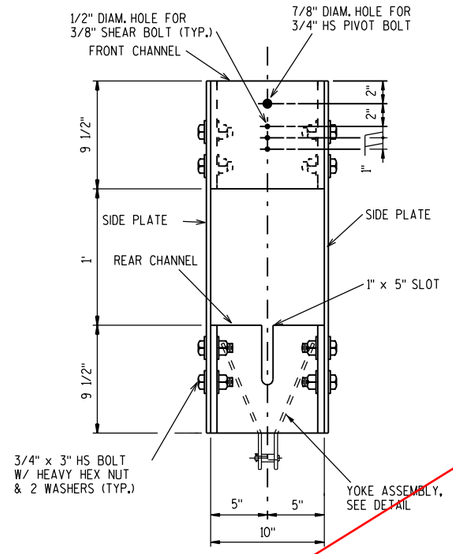
(SOLAR POWER OPTION)

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - RAMP GATE DETAILS	SHEET	E

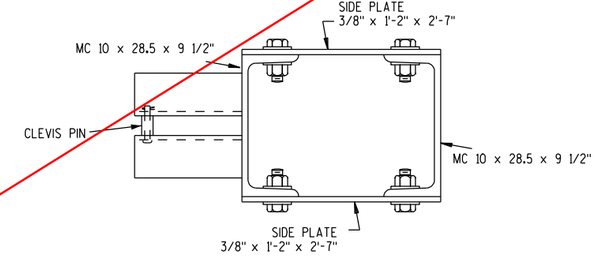
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WISDOT/CADDS SHEET 42



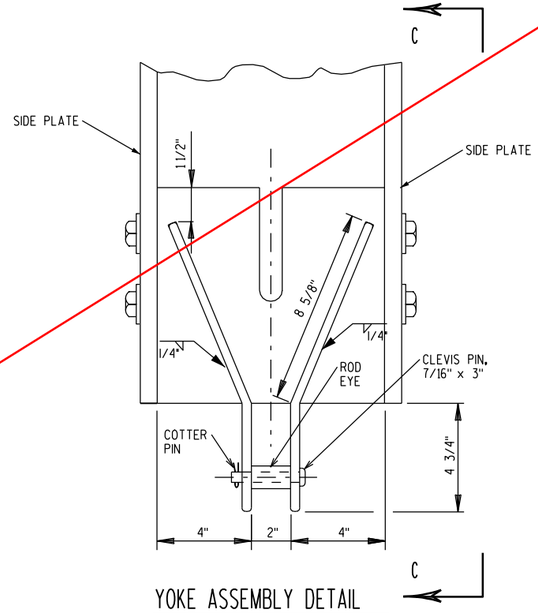
SIDE PLATE DETAIL



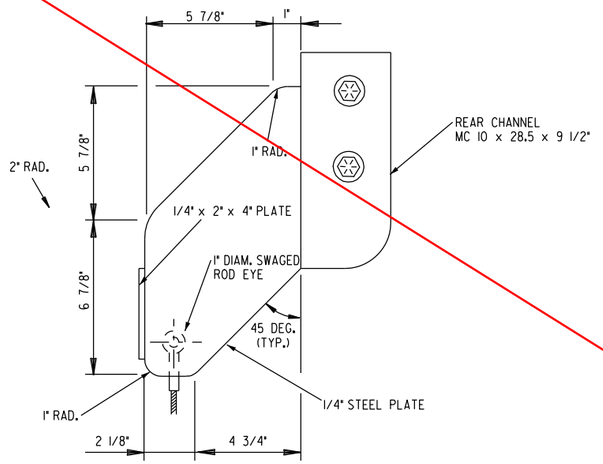
SECTION A-A



SECTION B-B



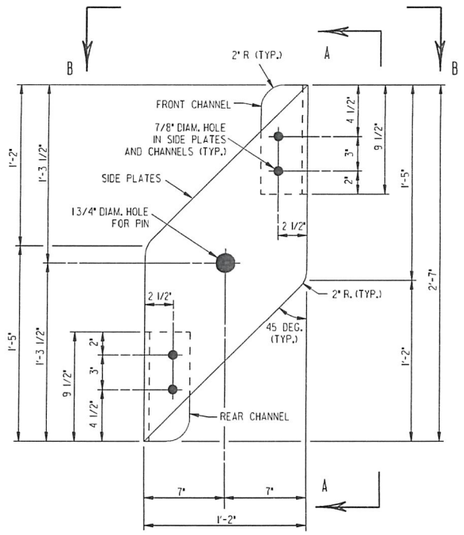
YOKE ASSEMBLY DETAIL



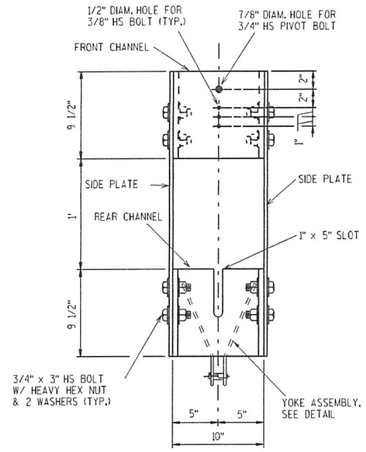
SECTION C-C

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - RAMP GATE DETAILS	SHEET	E

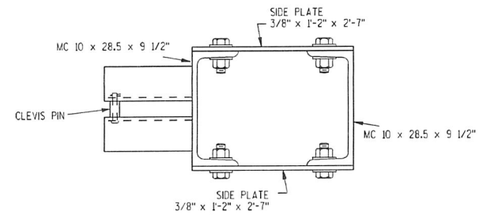
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WISDOT/CADDS SHEET 42



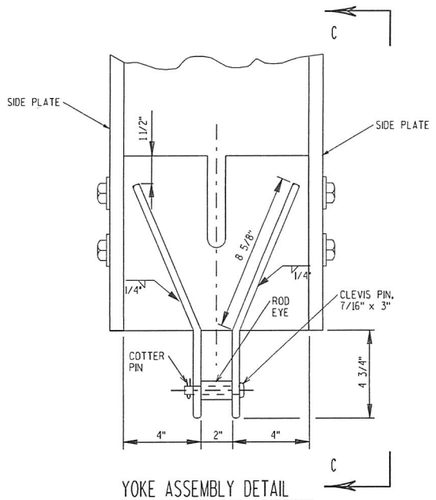
SIDE PLATE DETAIL



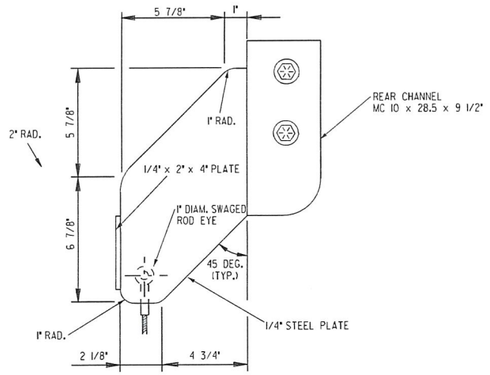
SECTION A-A



SECTION B-B



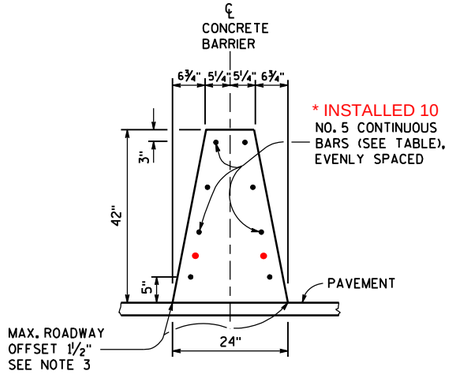
YOKE ASSEMBLY DETAIL



SECTION C-C

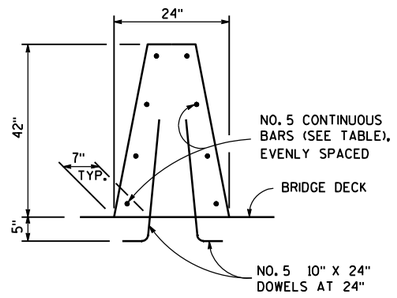
Addendum #1
Revised Sheet 30
October 19, 2009

PROJECT NO: 1010-04-72	HWY: IH-39	COUNTY: COLUMBIA	RAMP GATE WITH COMMERCIAL POWER	SHEET 31 A	E



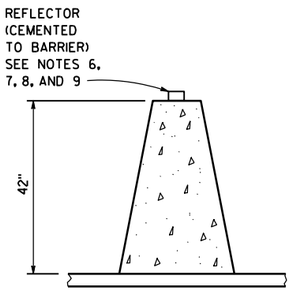
CONCRETE BARRIER 42-INCH

* !0 - CONTINUOUS BARS INSTALLED



CONCRETE BARRIER 42-INCH

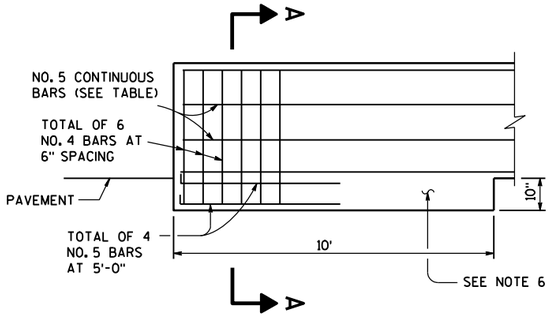
NON OUTER PARAPET APPLICATION



DELINEATION

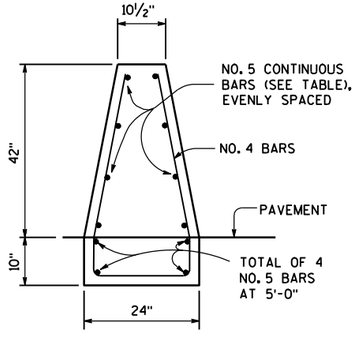
GENERAL NOTES

1. WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.
2. EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK, PAVEMENT AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OR ½" MINIMUM.
3. WHERE ROADWAY OFFSET IS GREATER THAN 1½", USE SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL.
4. BARRIER PLACE PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.
5. REINFORCING STIRRUP NOT REQUIRED FOR ROADWAY OFFSETS LESS THAN 1'-0".
6. FOOTING MONOLITHIC OR DOWELED WITH 2-#8 x 8" @ 2'-0". THE FOOTING IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER.
7. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
8. SEE STANDARD SPECIFICATIONS SECTION 633 FOR DELINEATOR REQUIRMENTS.
9. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
10. STAGGER LAPPING OF LONGITUDINAL STEEL MINIMUM OVERLAP OF STEEL 2 FEET BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.
11. ALL STEEL EPOXY COATED GRADE 60.
12. WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PLACE OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUNDIAL STEEL IS REQUIRED. LAPS TO BE FIRMLY TIED.
13. USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.



END ANCHORAGE
CONCRETE BARRIER 42-INCH

AT CONSTRUCTION JOINT



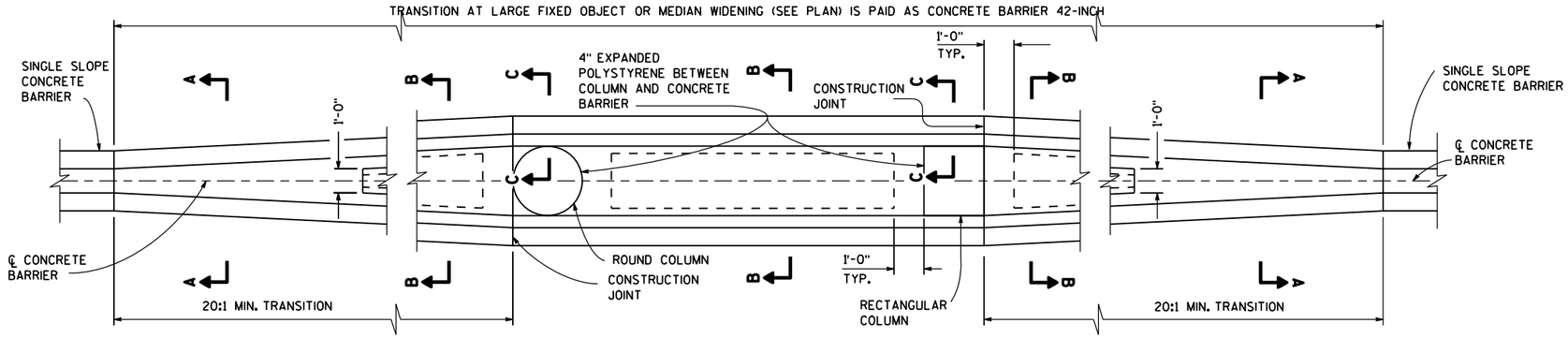
SECTION A-A

REFLECTOR SPACING

	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2	3

CONCRETE BARRIER 42-INCH

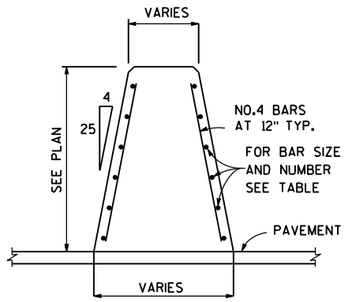
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - BARRIER WALL	SHEET	E



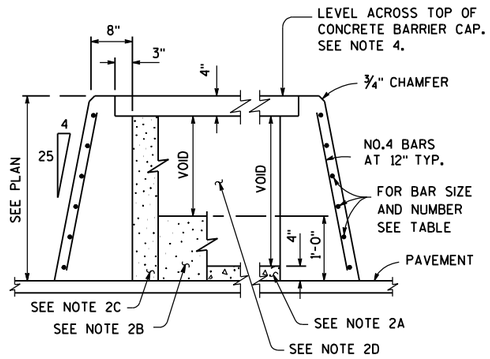
TRANSITION AT LARGE FIXED OBJECTS OR MEDIAN WIDENING
CONCRETE BARRIER 42-INCH

GENERAL NOTES

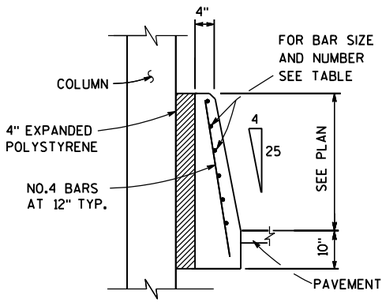
1. INSTALL 1" DIAMETER DRAIN PIPE EVERY 20' OF CROSS SECTION B-B. MINIMUM 1 DRAIN PER CAVITY.
2. CONTRACTOR OPTIONS FOR FILL BETWEEN CONCRETE BARRIER WALLS:
   A. PLACE 4" PCC AT BASE BETWEEN CONCRETE BARRIER WALLS.
   B. PLACE 1'-0" OF BACKFILL GRAINULAR GRADE 2 AT BASE BETWEEN WALLS.
   C. PLACE BACKFILL GRAINULAR GRADE 2 FROM BASE TO BOTTOM OF 4" CAP.
   D. MONOLITHIC CONCRETE WITH FOAM BLOCKOUTS IS NOT PERMITTED.
3. REINFORCING STEEL SHALL EXTEND CONTINUOUS THROUGH CONSTRUCTION JOINTS.
4. ADJUST HEIGHT OF CONCRETE BARRIER WALL ON LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS TO PROVIDE LEVEL GRADE ACROSS TOP OF CONCRETE CAP.



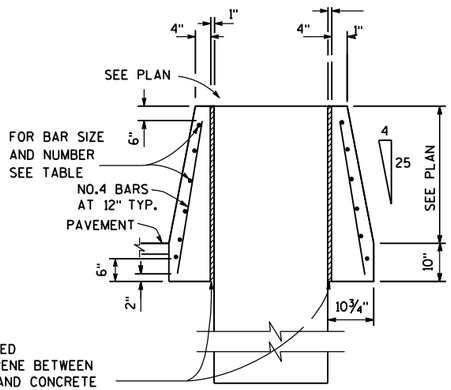
SECTION A-A



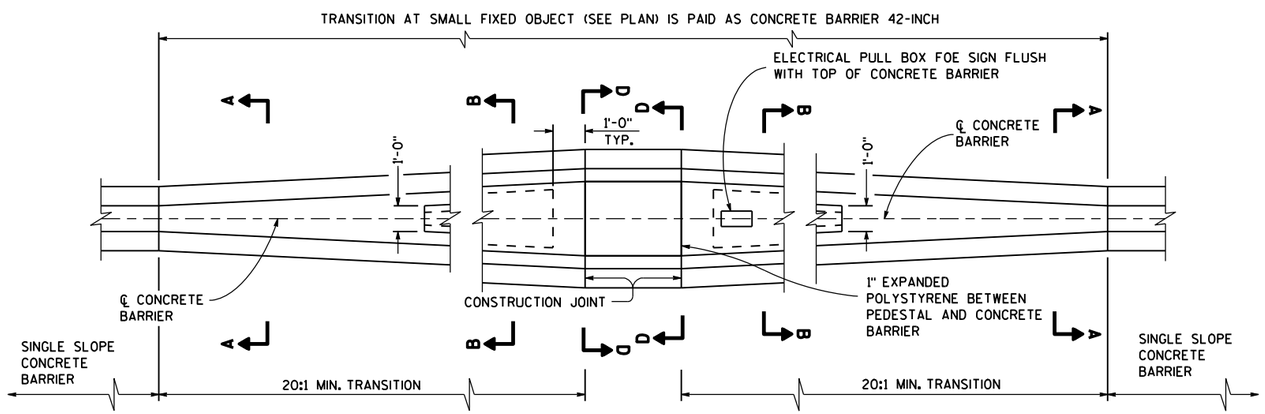
SECTION B-B



SECTION C-C



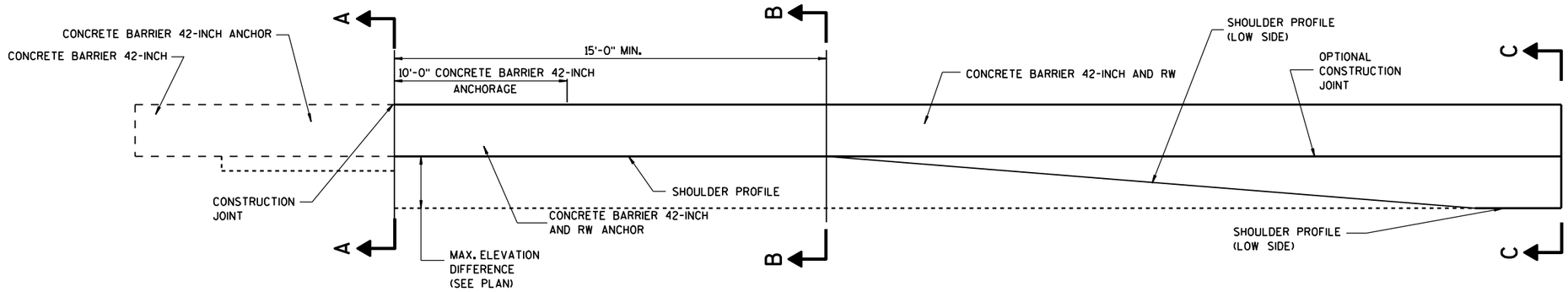
SECTION D-D



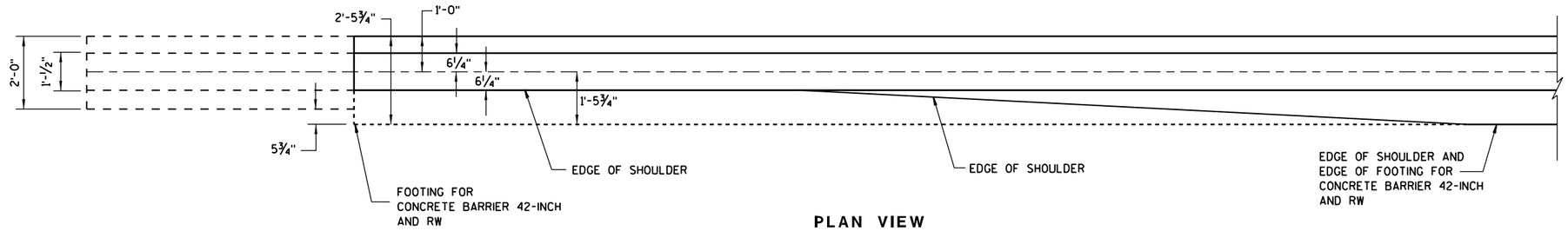
TRANSITION AT SMALL FIXED OBJECTS
CONCRETE BARRIER 42-INCH

BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF NO. 5 BARS EACH
42	5	~~6~~ 10

2

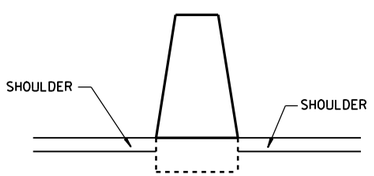


ELEVATION VIEW FROM LOW SIDE OF BARRIER

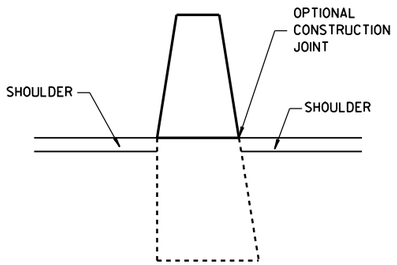


PLAN VIEW

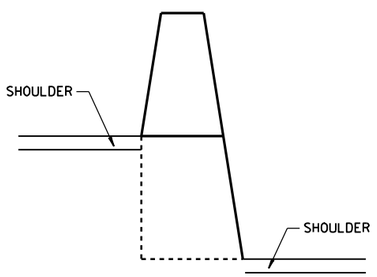
TRANSITION TO MEDIAN CONCRETE BARRIER 42-INCH AND RETAINING WALL



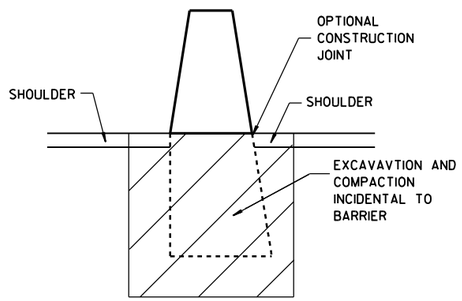
SECTION A-A



SECTION B-B

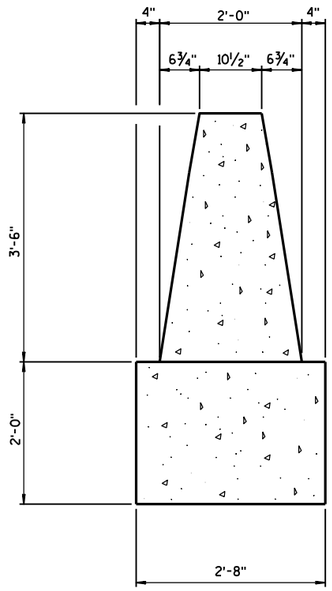


SECTION C-C

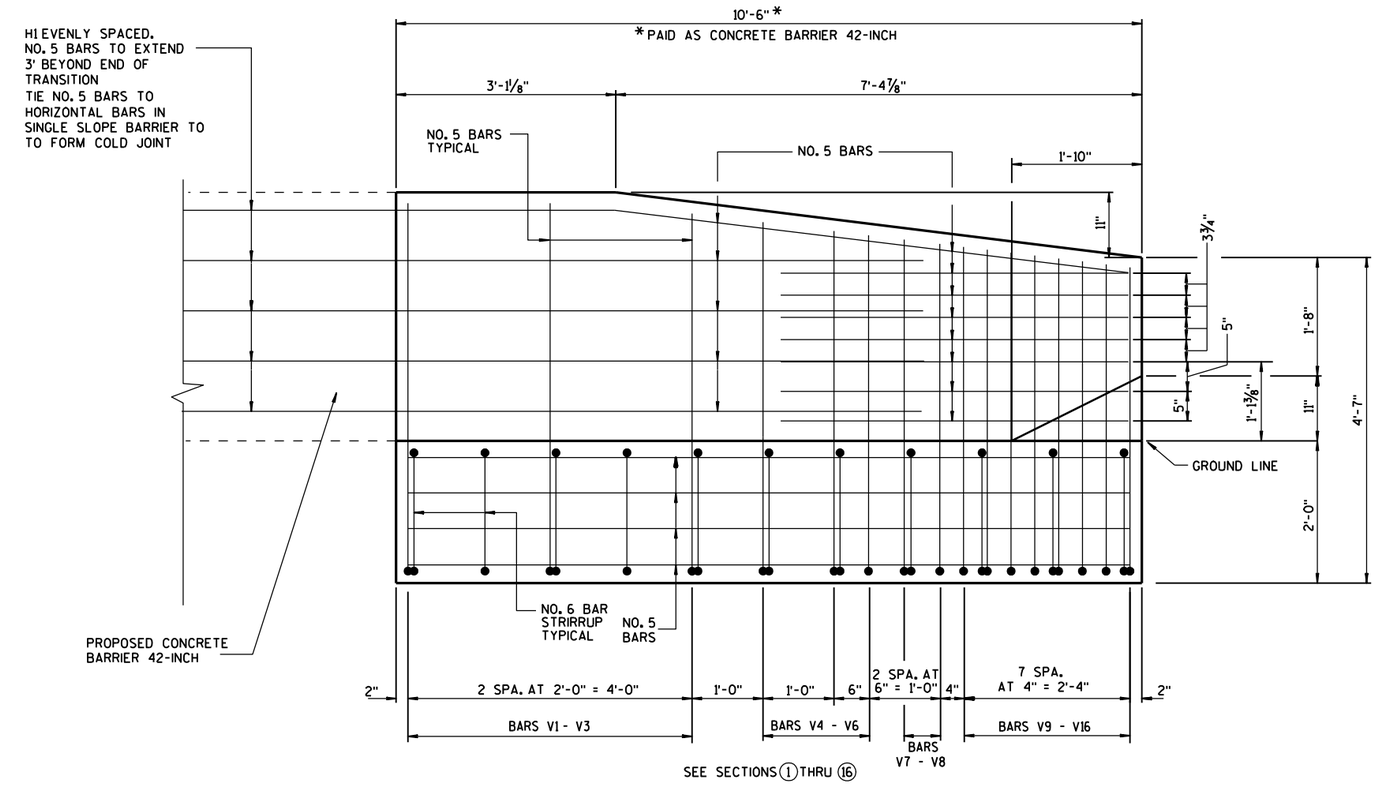


PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - BARRIER WALL	SHEET	E

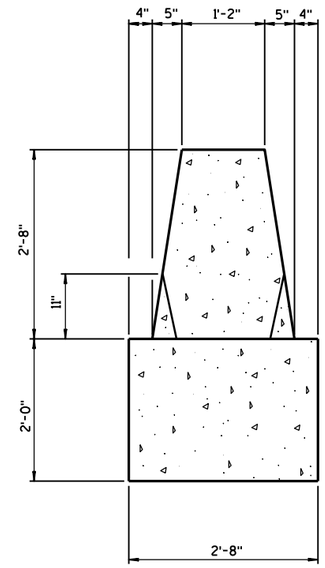
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WISDOT/CADDS SHEET 42



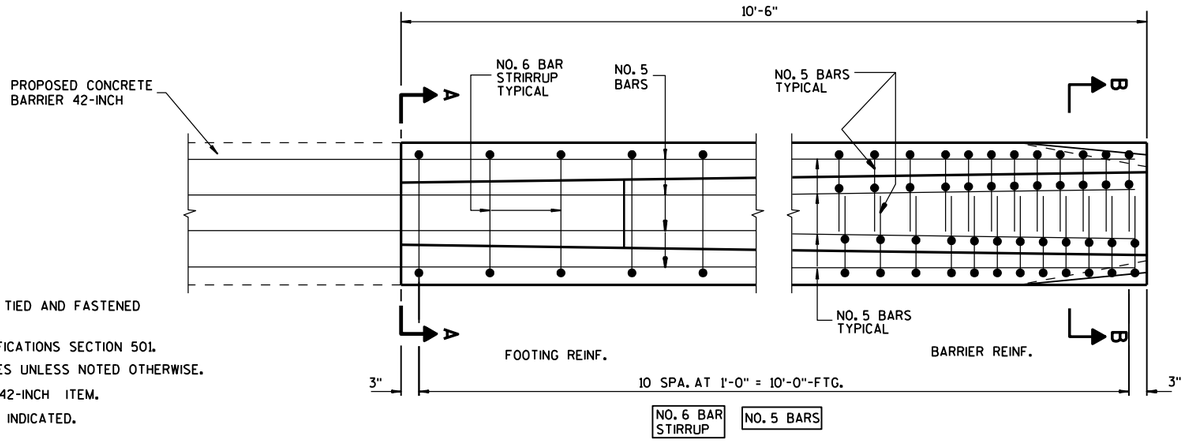
SECTION A-A



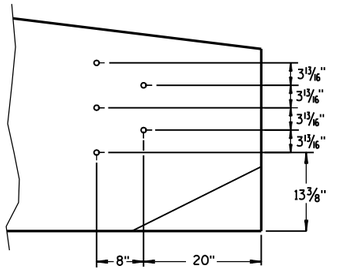
ELEVATION VIEW



SECTION B-B



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 NOTED OTHERWISE.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARPE EDGES UNLESS NOTED OTHERWISE.

THRIE BEAM ANCHORAGE INCIDENTAL TO CONCRETE BARRIER 42-INCH 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.

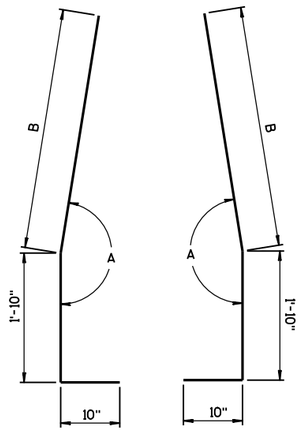
CONCRETE BARRIER 42-INCH
THRIE BEAM ANCHORAGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - BARRIER WALL	SHEET	E

2

BAR CHART
SECTIONS V1 - V11

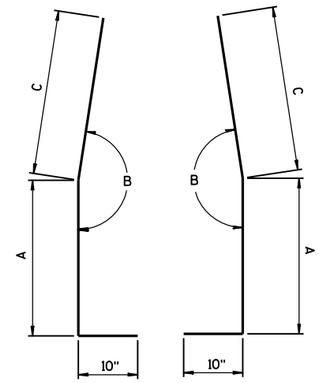
BAR	A	B
V1	170°-50'	3'-4½"
V2	171°-20'	3'-4½"
V3	171°-30'	3'-2½"
V4	171°-25'	3'-1½"
V5	171°-15'	3'-0"
V6	171°-15'	2'-11"
V7	171°-20'	2'-10½"
V8	171°-10'	2'-9½"
V9	171°-10'	2'-9"
V10	171°-05'	2'-8½"
V11	171°-10'	2'-8"



BAR BENDING DETAIL
FOR BARS V1 - V11

BAR CHART
SECTIONS V12 - V13

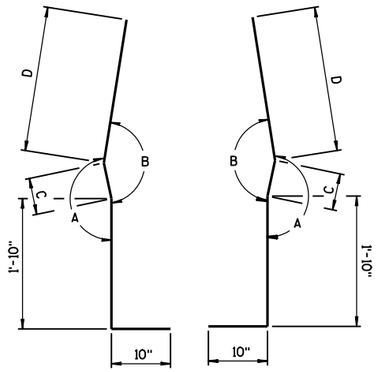
BAR	A	B	C
V12	2'-2"	171°-15'	2'-3½"
V13	2'-7"	171°-05'	1'-10"



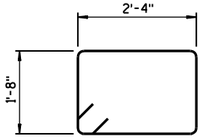
BAR BENDING DETAIL
FOR BARS V12 - V13

BAR CHART
SECTIONS V14 - V16

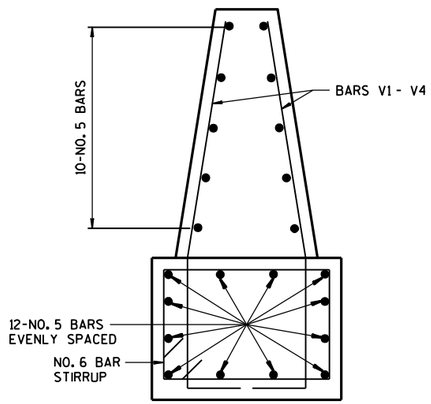
BAR	A	B	C	D
V14	168°-15'	159°-15'	6"	2'-0"
V15	169°-20'	161°-00'	8"	1'-10"
V16	168°-40'	160°-10'	10"	1'-8"



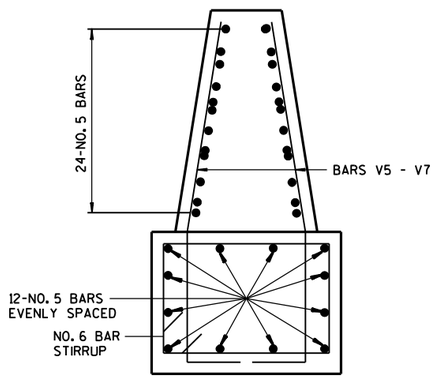
BAR BENDING DETAIL
FOR BARS V14 - V16



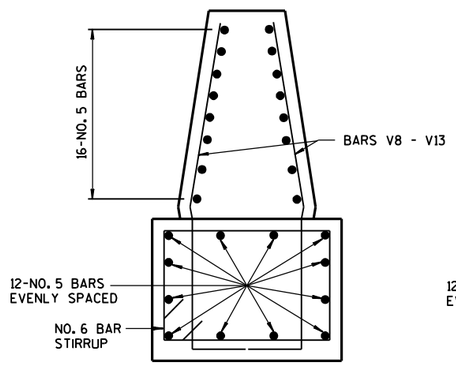
STIRRUP BAR
BENDING DETAIL



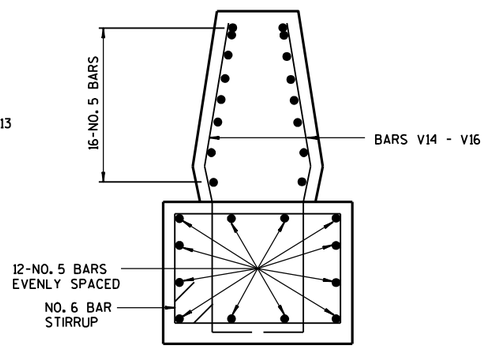
BAR DETAIL
SECTIONS V1 - V4



BAR DETAIL
SECTIONS V5 - V7



BAR DETAIL
SECTIONS V8 - V13

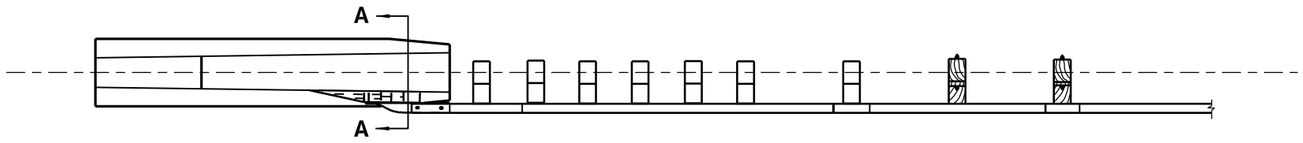


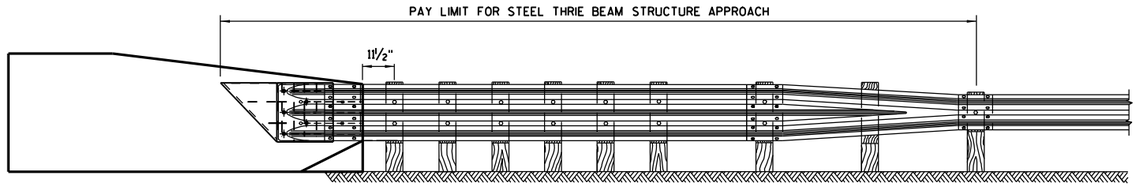
BAR DETAIL
SECTIONS V14 - V16

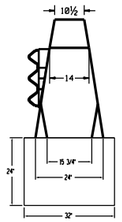
CONCRETE BARRIER 42-INCH
THRIE BEAM ANCHORAGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - BARRIER WALL	SHEET	E

2

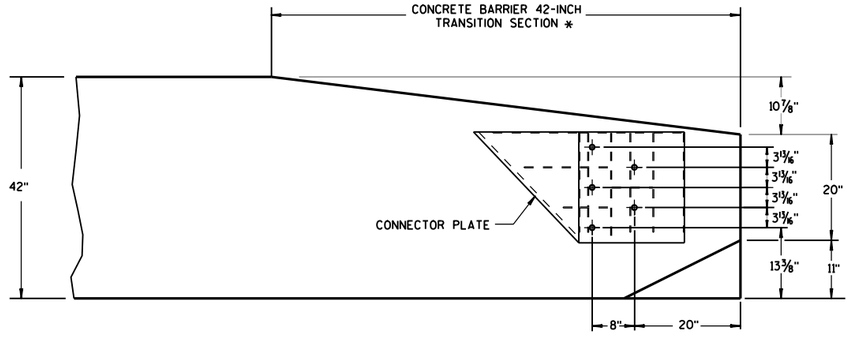






SECTION A-A

* PAID AS CONCRETE BARRIER 42-INCH



CONNECTOR PLATE LOCATION

NOTES:

SEE SDD FOR STEEL THRIE BEAM FOR ADDITIONAL DETAILS

CONSTRUCT PER STD. SPEC. 614

CONNECTOR PLATE INCIDENTAL TO
STEEL THRIE BEAM STRUCTURE APPROACH

BRIDGE ANCHOR SECTION
SAFETY BARRIER CURB ON BRIDGE
CONNECTOR PLATE DETAIL
SINGLE SLOPE BARRIERS

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - BARRIER WALL	SHEET	E

FILE NAME : r:\Support\CADDS\Projects\d1_10100472\021002_cd.dgn PLOT DATE : 01-SEP-2009 14:56 PLOT BY : dotbbg PLOT NAME : PLOT SCALE : 2.235341:1.000000
WISDOT/CADDS SHEET 42

2

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

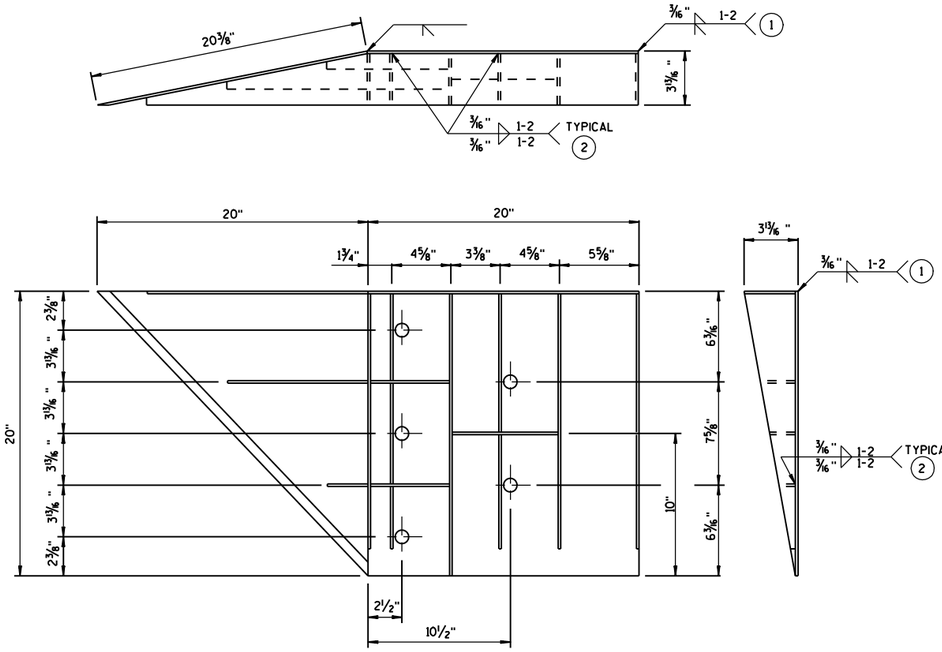
CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

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

ALL HOLE DIAMETERS SHALL BE 1".

(1) 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.

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



WELDING INSTRUCTION

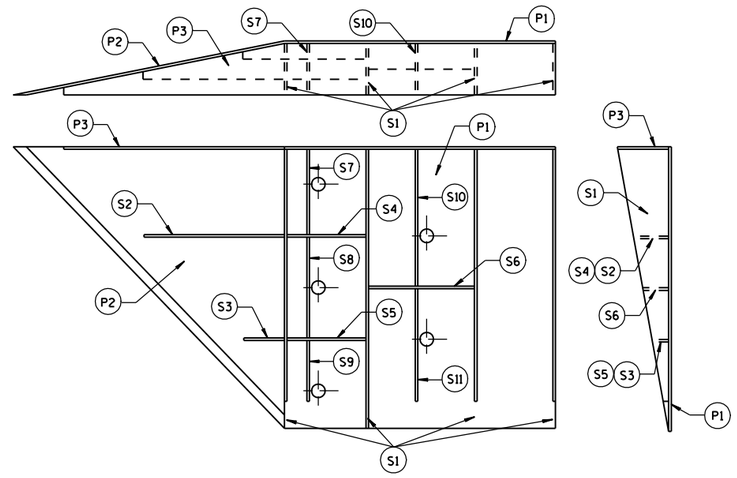


PLATE AND STIFFENER IDENTIFICATION

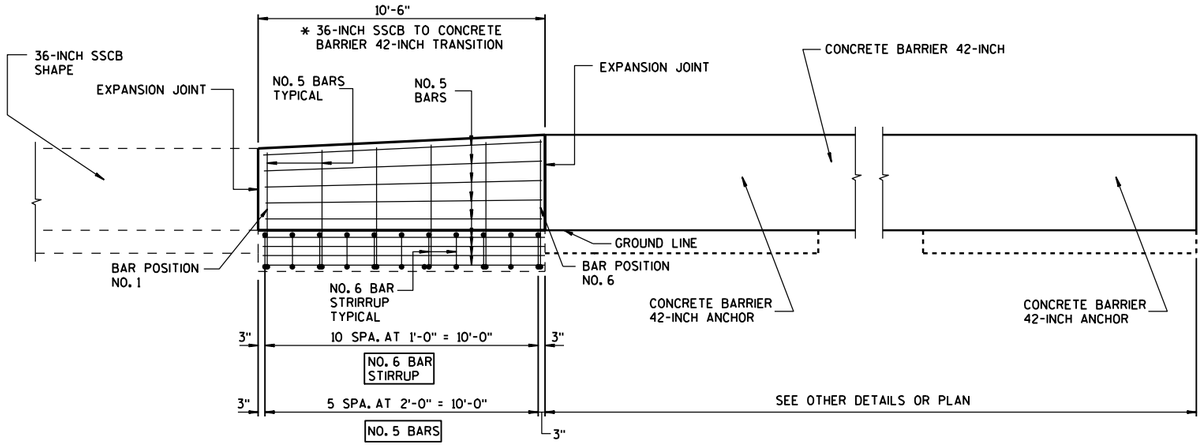
BRIDGE ANCHOR SECTION
SAFETY BARRIER CURB ON BRIDGE
CONNECTOR PLATE DETAIL
CONCRETE BARRIER 42-INCH

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

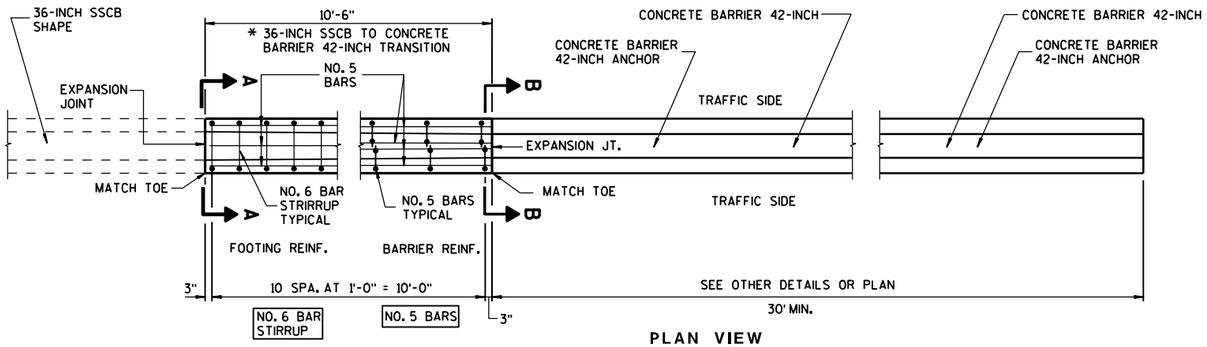
PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 3/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
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"

2

* PAID AS CONCRETE BARRIER 42-INCH



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 NOTED OTHERWISE.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

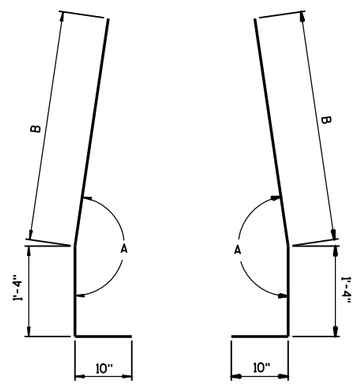
USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

TO TRANSITION FROM CONCRETE BARRIER 42-INCH TO CONCRETE BARRIER SINGLE-FACED 32-INCH, CONSTRUCT HEIGHT TRANSITION TYPE SSCB 36-INCH TO CONCRETE BARRIER 42-INCH DIRECTLY ADJACENT TO CONCRETE BARRIER SINGLE-FACED 32-INCH TRANSITION TO 36-INCH SSCB SHAPE. TRANSITION IS PAID AS CONCRETE BARRIER 42-INCH.

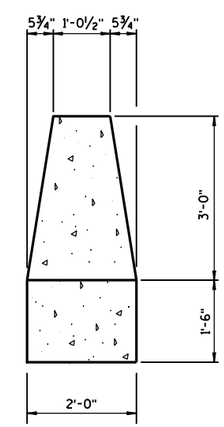
BAR DETAIL
BAR POSTIONS NO. 1 - NO. 6



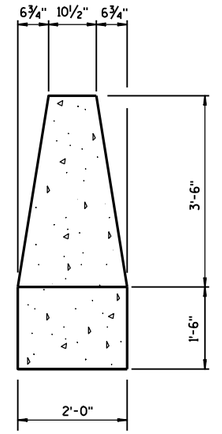
BAR BENDING DETAIL
FOR BARS V1 - V6

BAR CHART
SECTIONS V1 - V6

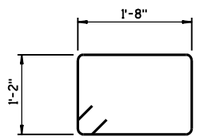
BAR	A	B
V1	170°-55'	2'-10½"
V2	171°-05'	3'-0"
V3	171°-20'	3'-1"
V4	171°-20'	3'-2"
V5	171°-35'	3'-3"
V6	171°-40'	3'-4½"



SECTION A-A



SECTION B-B

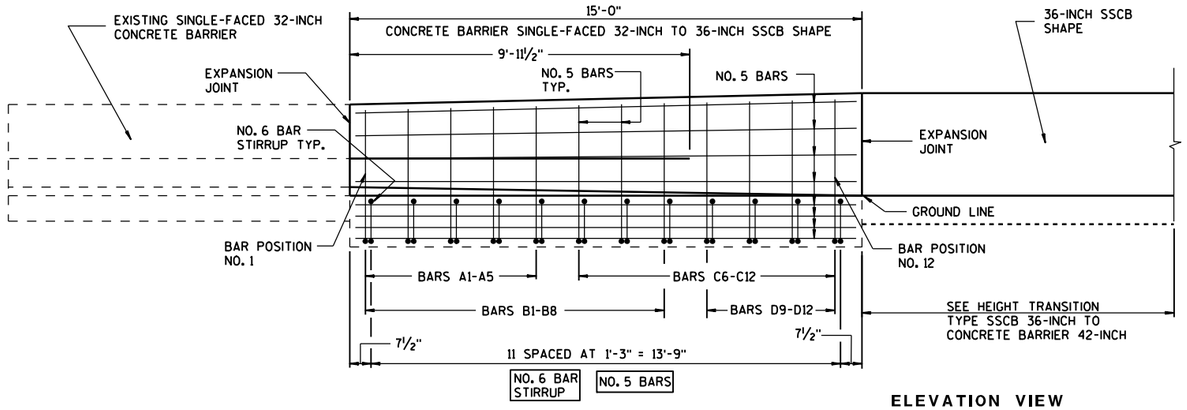


STIRRUP BAR
BENDING DETAIL

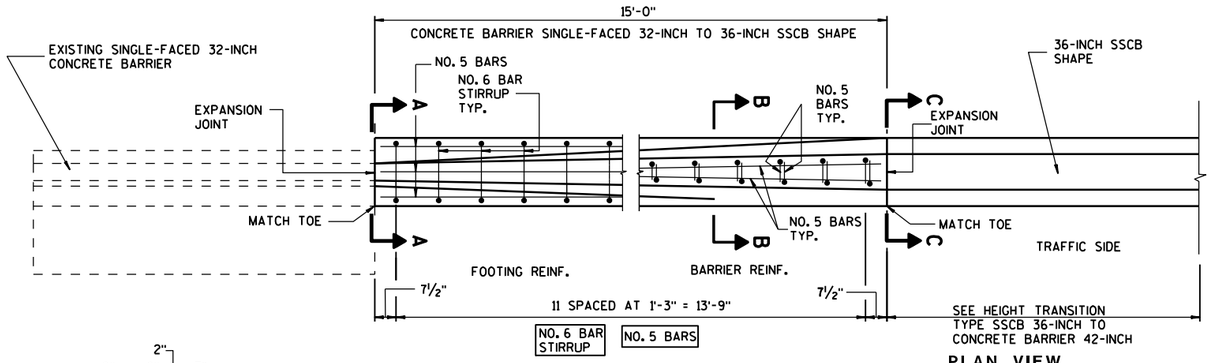
HEIGHT TRANSITION TYPE
SSCB 36-INCH TO CONCRETE BARRIER 42-INCH

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - BARRIER WALL	SHEET	E

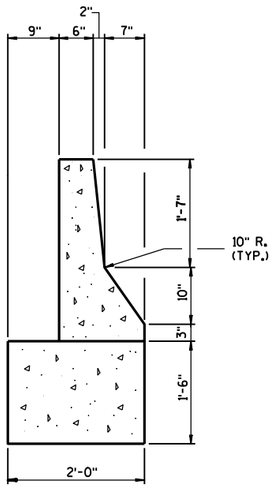
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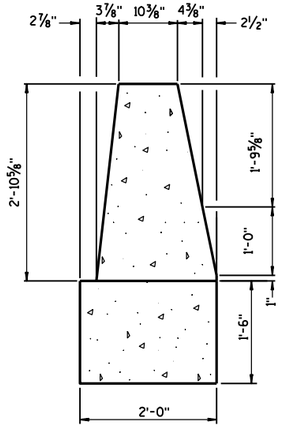
ELEVATION VIEW



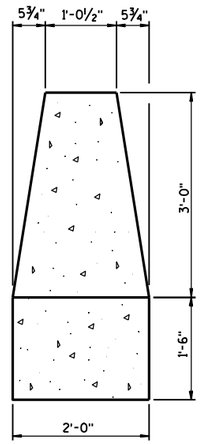
PLAN VIEW



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 NOTED OTHERWISE.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

TRANSITION SECTION TO BE PAID AS CONCRETE BARRIER 42-INCH

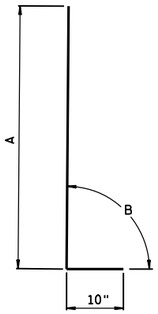
CONCRETE BARRIER SINGLE-FACED 32-INCH TRANSITION TO 36-INCH SSCB

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - BARRIER WALL	SHEET	E

2

"A" BAR CHART
BAR POSITIONS NO.1 - NO.5

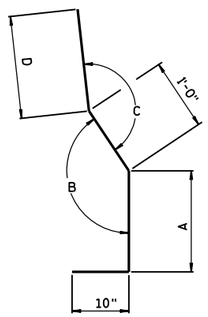
BAR	A	B
A1	3'-10"	89°-35'
A2	3'-10"	88°-40'
A3	3'-11"	87°-50'
A4	3'-11"	87°-10'
A5	3'-11½"	86°-15'



"A" BAR
BENDING DETAIL

"B" BAR CHART
BAR POSITIONS NO.1 - NO. 8

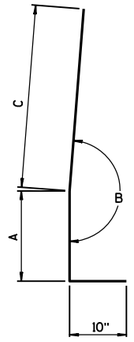
BAR	A	B	C	D
B1	1'-6"	146°-20'	152°-40'	1'-6"
B2	1'-6"	149°-25'	156°-45'	1'-6"
B3	1'-6"	152°-40'	160°-55'	1'-6½"
B4	1'-6"	155°-40'	164°-30'	1'-7"
B5	1'-5½"	158°-30'	167°-55'	1'-7"
B6	1'-5"	161°-45'	172°	1'-7½
B7	1'-5"	164°-25'	175°-05'	1'-8"
B8	1'-5"	167°-30'	179°	1'-8"



"B" BAR
BENDING DETAIL

"C" BAR CHART
BAR POSITIONS NO. 6 - NO. 12

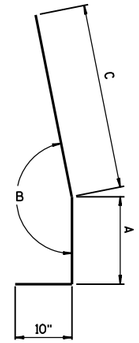
BAR	A	B	C
C6	1'-4"	175°-35'	2'-8"
C7	1'-4"	174°-45'	2'-8"
C8	1'-4"	174°	2'-8½"
C9	1'-4"	173°-15'	2'-9"
C10	1'-4"	172°-45'	2'-9½"
C11	1'-3½"	172°	2'-9½"
C12	1'-3½"	171°-15'	2'-10"



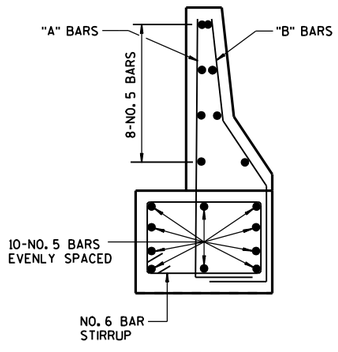
"C" BAR
BENDING DETAIL

"D" BAR CHART
BAR POSITIONS NO. 9 - NO. 12

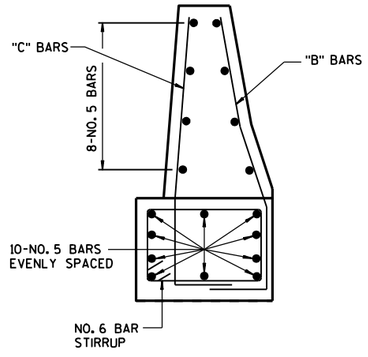
BAR	A	B	C
D9	1'-5"	168°-45'	2'-8½"
D10	1'-4½"	169°-30'	2'-9"
D11	1'-4"	170°-15'	2'-9½"
D12	1'-4"	170°-40'	2'-10"



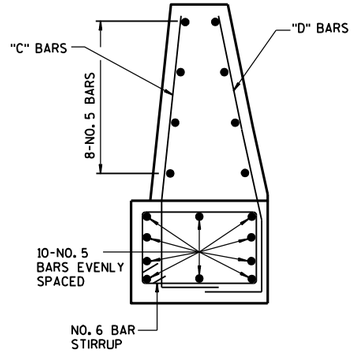
"D" BAR
BENDING DETAIL



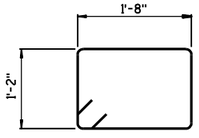
BAR DETAIL
BAR POSITIONS NO. 1 - NO. 5



BAR DETAIL
BAR POSITION NO. 6 - NO. 8



BAR DETAIL
BAR POSITIONS NO. 9 - NO. 12



STIRRUP BAR
BENDING DETAIL

CONCRETE BARRIER SINGLE-FACED 32-INCH
TRANSITION TO 36-INCH SSCB SHAPE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - BARRIER WALL	SHEET	E

FILE NAME : r:\Support\CADDS\Projects\d1_10100472\021002_cd.dgn PLOT DATE : 01-SEP-2009 14:57 PLOT BY : dotbbg PLOT NAME : PLOT SCALE : 53.240000:1.000000
WISDOT/CADDS SHEET 42

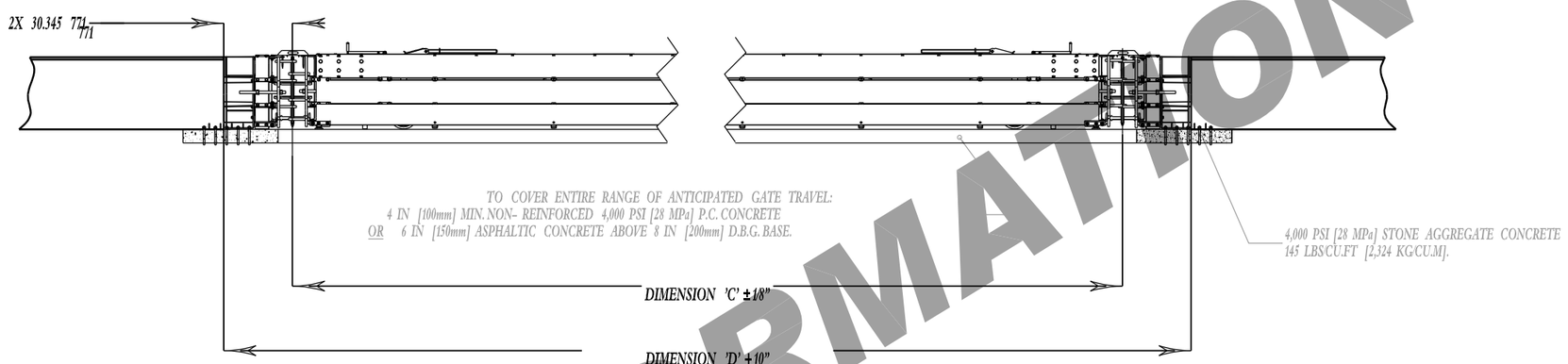
NOTES: UNLESS OTHERWISE SPECIFIED

1. SYSTEM TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS.

2. ANCHORS ARE TO BE CORROSION RESISTANT 3/4in [20mm] DIA. WITH A MINIMUM OF 6in [150mm] EMBEDMENT IN P.C. CONCRETE, ADHESIVE CAPACITY SHOULD MEET A TENSILE STRENGTH OF 2,000 PSI [13.8 MPa] AND COMPRESSIVE STRENGTH OF 10,000 PSI [68.9 MPa]. ANCHORING COMPOUND SHOULD PROVIDE A PULL OUT STRENGTH OF 20,000 LB [9071 KG] IN 4,000 PSI CONCRETE [28 MPa].

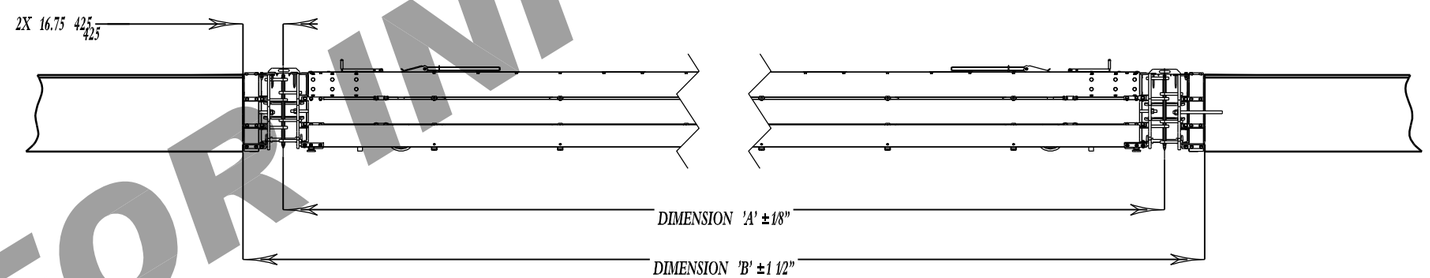
3. ALL DIMENSIONS ARE IN INCHES AND MILLIMETER UNLESS OTHERWISE NOTED.

CUT- OUT DIMENSIONS FOR CONCRETE BARRIER USING TRANSITION HOUSING



REFER TO MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION INSTRUCTIONS.

CUT- OUT DIMENSIONS FOR CONCRETE BARRIER WITH OUT TRANSITION HOUSING



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REV.	CHANGES	DATE	BY	REQ'D	NEXT ASSY.	ITEM
0	METRIC DIMENSIONS ROUNDED TO NEAREST 10TH MM	6/19/09	AEM			

SCALE: 1:60

	DATE	INIT.
DRAWN BY	5/15/08	AEM
APPR'D BY		GAD

Standard Tolerance
Angular ± 1/2
Fractional ± 1/16"
Dec .XXX= ± .010
Dec .XX= ± .030

BARRIER SYSTEMS
180 RIVER RD, RIO VISTA, CA 94571
TEL: 707- 374- 6800 FAX: 707- 374- 6801

TITLE: ARMORGUARD GATE, LINK SERIES
REFERENCE BARRIER CUT- OUT DIMENSIONS

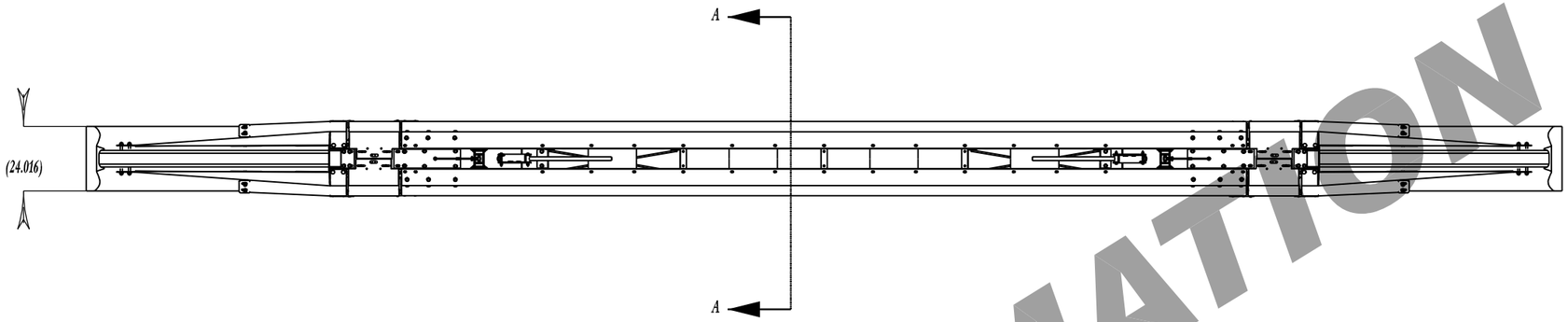
SHEET	DRAWING NUMBER	REV
1 OF 1	AP080502	1

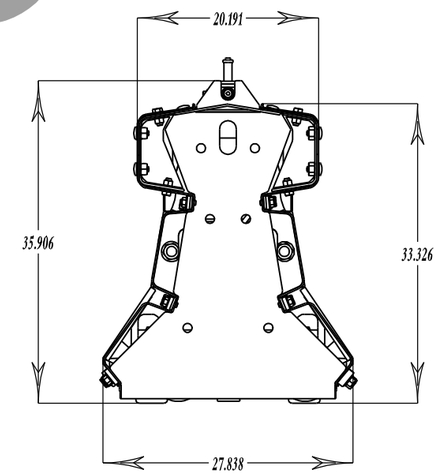
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - ARMORGUARD GATE	SHEET E

NOTES: UNLESS OTHERWISE SPECIFIED

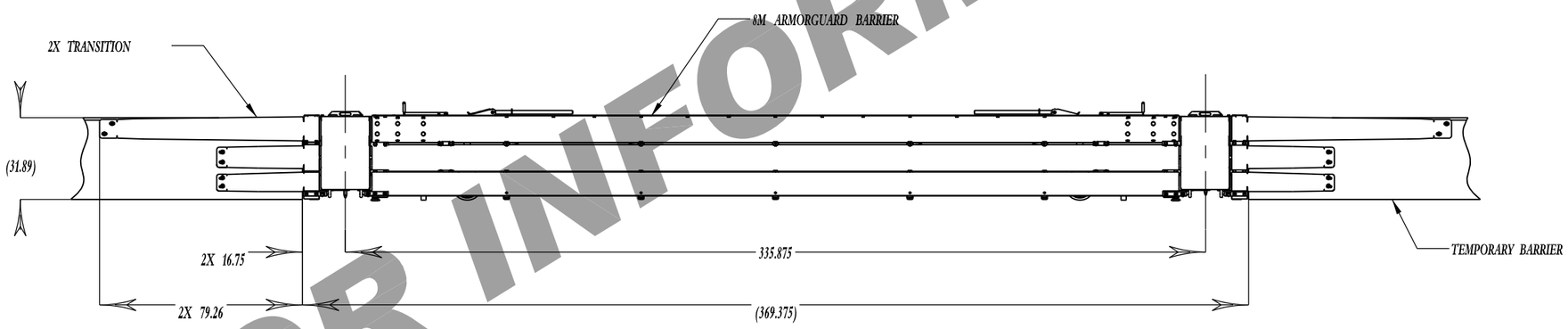
1. ARMORGUARD BARRIER TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
2. SEE ASSEMBLY AND INSTALLATION MANUAL FOR ADDITIONAL DETAILS.
3. DIMENSIONS SHOWN ARE INCHES DIMENSIONS IN PARENTHESIS ARE REFERENCE.

REFER TO MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION INSTRUCTIONS.





SECTION A- A
SCALE 1 : 16



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REV.	CHANGES	DATE	BY	REQ'D	NEXT ASSY.	ITEM
0	NEW DRAWING	8/12/09	AEM			

SCALE: 1:50

	DATE	INIT.
DRAWN BY	8/12/09	AEM
APPR'D BY		GAD

Standard Tolerance
Angular ± ½
Fractional ± 1/16"
Dec .XXX= ± .010
Dec .XX= ± .030

BARRIER SYSTEMS
A LINDSAY TRANSPORTATION SOLUTIONS COMPANY

TITLE: ARMORGUARD BARRIER, 8M SEGMENT

SHEET	DRAWING NUMBER	REV
1 OF 1	AP090803	0

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - ARMORGUARD GATE	SHEET E

FILE NAME : r:\Support\CADDS\Projects\d1_10100472\021003_cd.dgn PLOT DATE : 01-SEP-2009 14:57 PLOT BY : dotbbg PLOT NAME : PLOT SCALE : 52.689892:1.000000

FTMS STANDARD ABBREVIATIONS

CCTV	CLOSED CIRCUIT TELEVISION SITE
CB	CONTROLLER CABINET
PB	PULL BOX
V	COMMUNICATIONS VAULT
MD	MICROWAVE DETECTOR

LEGEND

	EXISTING	PROPOSED
CCTV CAMERA AND POLE		
FTMS CONTROL CABINET AND BASE		
POLE MOUNTED CABINET		
METER BREAKER PEDESTAL		
24"X36" STEEL PULL BOX		
ANTENNA POLE		
COMMUNICATIONS VAULT		
MICROWAVE DETECTOR		
ITS CONDUIT		

FTMS CONTACTS

WISCONSIN DOT
SOUTHWEST REGION
MR. GRAHAM HEITZ
2101 WRIGHT ST.
MADISON, WI 53704
608-246-5362

WISCONSIN DOT
STATEWIDE TRAFFIC OPERATIONS CENTER
MR. DON SCHELL
433 W. ST. PAUL AVE., SUITE 300
MILWAUKEE, WI 53203
414-227-2154

FTMS GENERAL NOTES

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.

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. YOU ARE FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES.

BE AWARE THAT NO TEST BORINGS WERE MADE WHERE CONDUITS, PULLBOXES, POLES, CABINET FOUNDATIONS, OR OTHER EQUIPMENT IS TO BE INSTALLED. YOU ARE FULLY RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.

NO TREES (AND/OR SHRUBS) ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

AREAS WITHIN THE RIGHT-OF-WAY DISTURBED SPECIFICALLY FOR FTMS CONSTRUCTION ARE TO BE RESTORED TO THE ORIGINAL CONDITION WITH TOPSOIL, FERTILIZER AND SEED, AND MULCH. RESTORATION FOR AREAS DISTURBED FOR OTHER CONSTRUCTION OPERATIONS BUT ALSO CONTAINING FTMS CONSTRUCTION WILL BE DONE ACCORDING TO REQUIREMENTS AND PAYMENT PROVISIONS FOR THE OTHER CONSTRUCTION OPERATIONS. NO PAYMENT WILL BE MADE FOR RESTORING AREAS DISTURBED FOR FTMS CONSTRUCTION OPERATIONS.

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.

BE ADVISED THAT DUE TO RAMP, LANE, AND SHOULDER CLOSURE RESTRICTIONS, AND WORK UNDER OTHER CONTRACTS, SOME WORK MAY BE REQUIRED TO BE PERFORMED AT NIGHT.

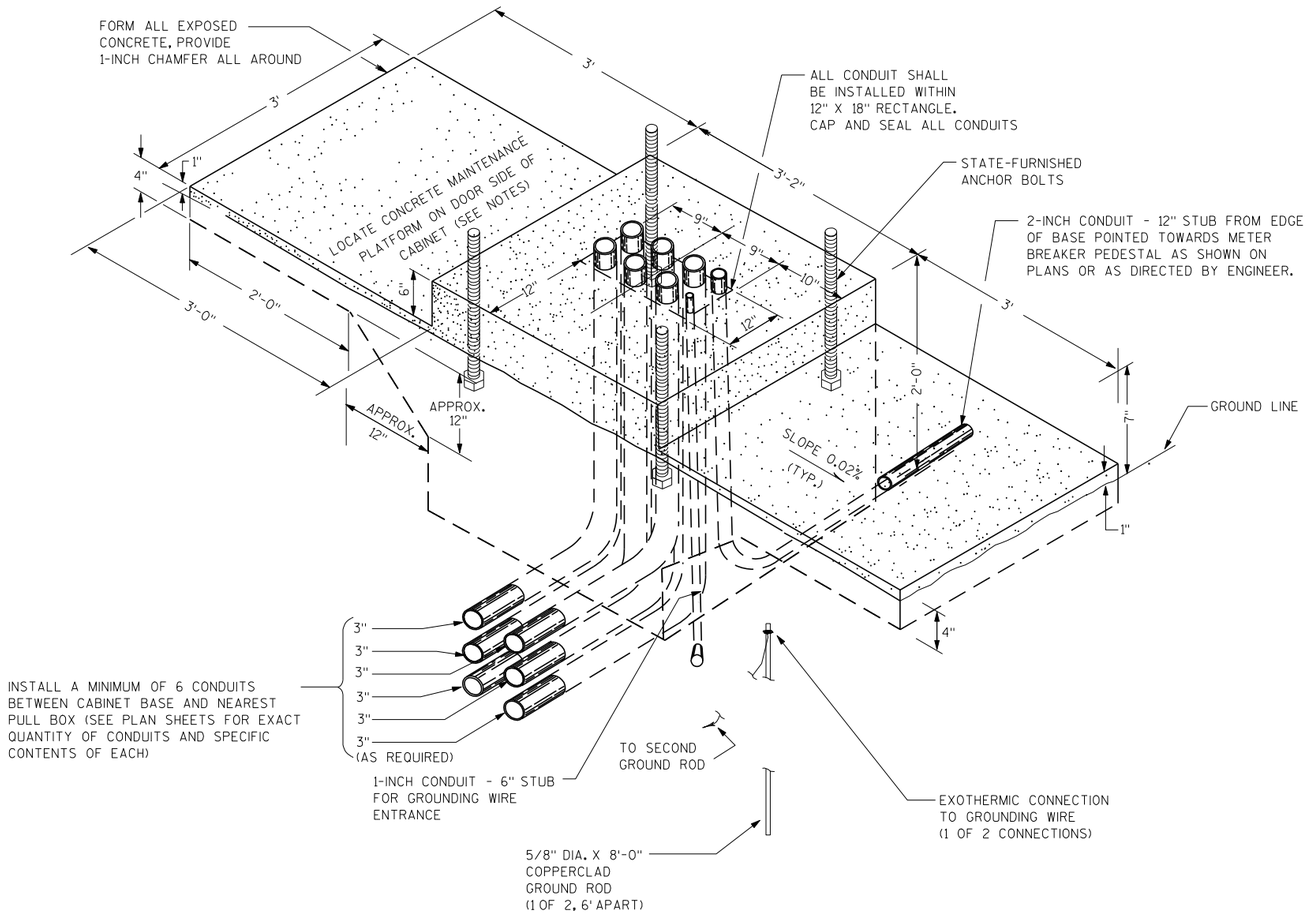
YOU ARE RESPONSIBLE FOR COORDINATING RAMP, LANE, SHOULDER, AND ROADWAY CLOSURES WITH OTHER CONTRACTS IN THE AREA.

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.

ALL LOOP DETECTORS STATIONED TO CENTER OF LEADING EDGE AS APPROACHED BY NORMAL VEHICLE PATH.

HAND DIG TRENCHES CROSSING EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE.

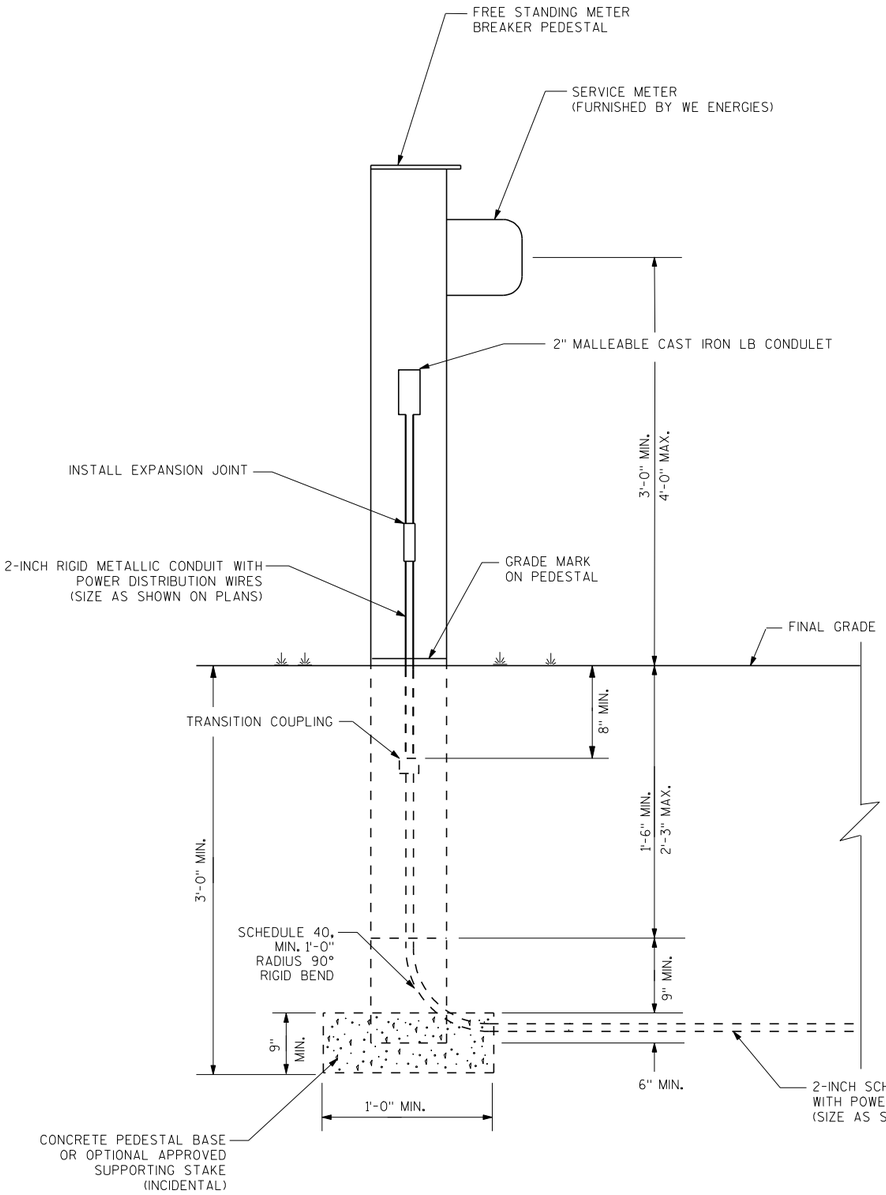
VISUALLY VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE OR SPECIAL METHOD.

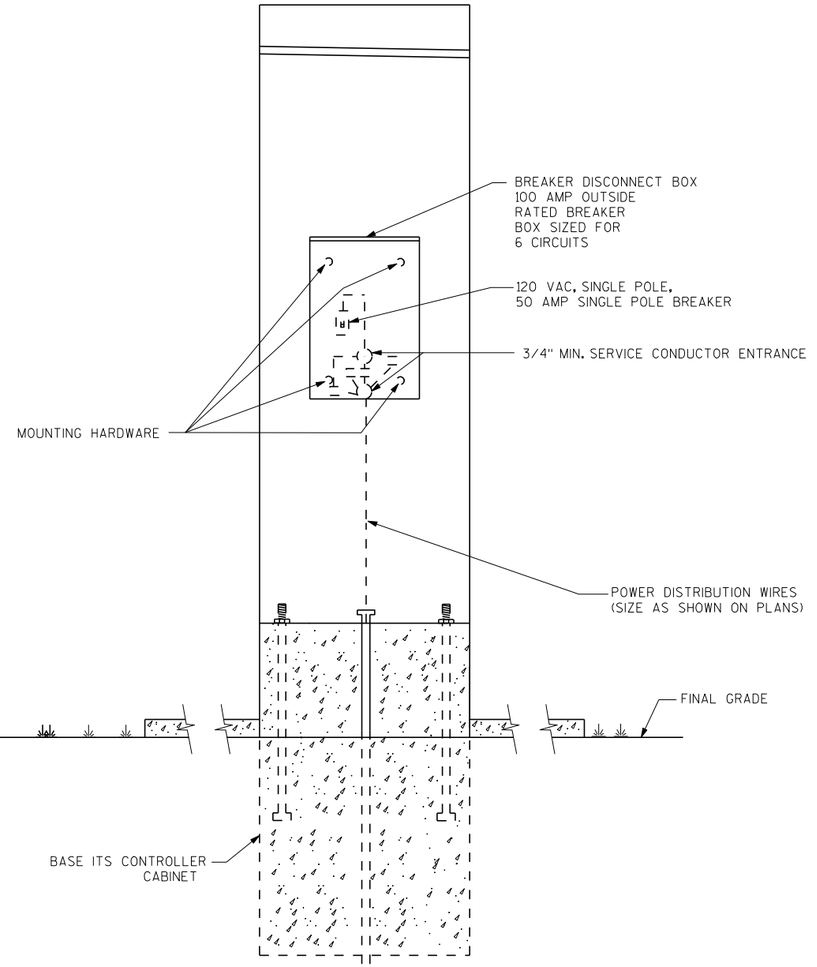


BASE ITS CONTROLLER CABINET

NOTES

1) DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
2) WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.
3) CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 3-INCHES.
4) DEPTH OF CONDUIT SHALL BE 24-INCHES MINIMUM AND 36-INCHES MAXIMUM.
5) ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.
6) CONTROLLER CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL, PRIOR TO CABINET INSTALLATION. LEVELING OF TOP SURFACES AFTER CONCRETE BASE HAS CURED SHALL ONLY BE ACCOMPLISHED BY GRINDING.
7) MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.
8) MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.
9) ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.
10) CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
11) PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
12) ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC, IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS PLACED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.
13) CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6-INCH MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.
14) ALL METALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE BUSHINGS IF WIRE IS INSTALLED.
15) ALL NONMETALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE END BELLS IF WIRE IS INSTALLED.
16) CONFIRM BOLT PATTERN OF CABINET PRIOR TO CONSTRUCTION OF CONCRETE BASE.



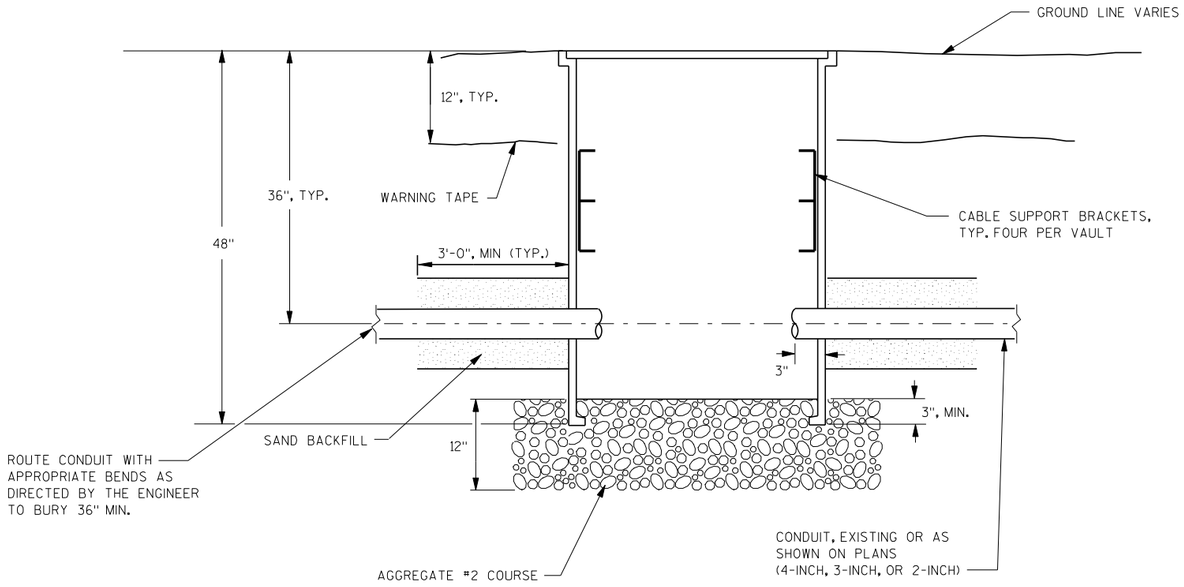


NOTES

1) MINIMUM REQUIREMENT SHOWN. ADDITIONAL BREAKERS MAY BE REQUIRED.

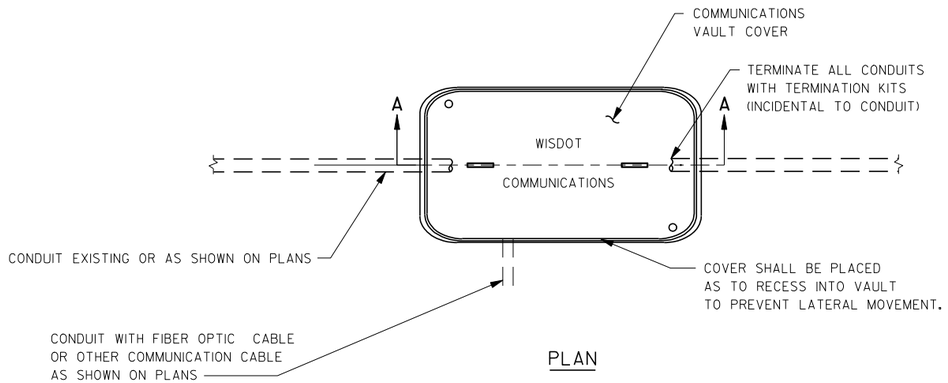
2) UP TO THREE BREAKERS WILL BE CONSIDERED INCIDENTAL TO THE ITEM BREAKER DISCONNECT BOX.

2 CIRCUIT ELECTRICAL SERVICE METER BREAKER PEDESTAL AND BREAKER DISCONNECT BOX



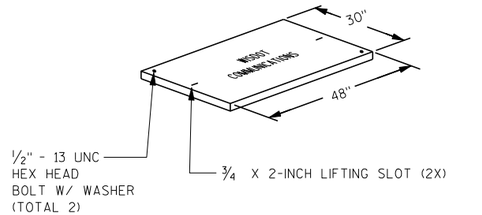
SECTION A-A

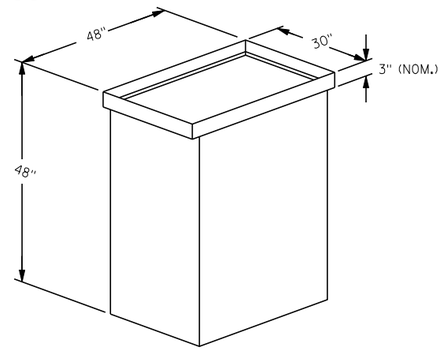




PLAN

EXISTING COMMUNICATIONS VAULT





ISOMETRIC

NOTES

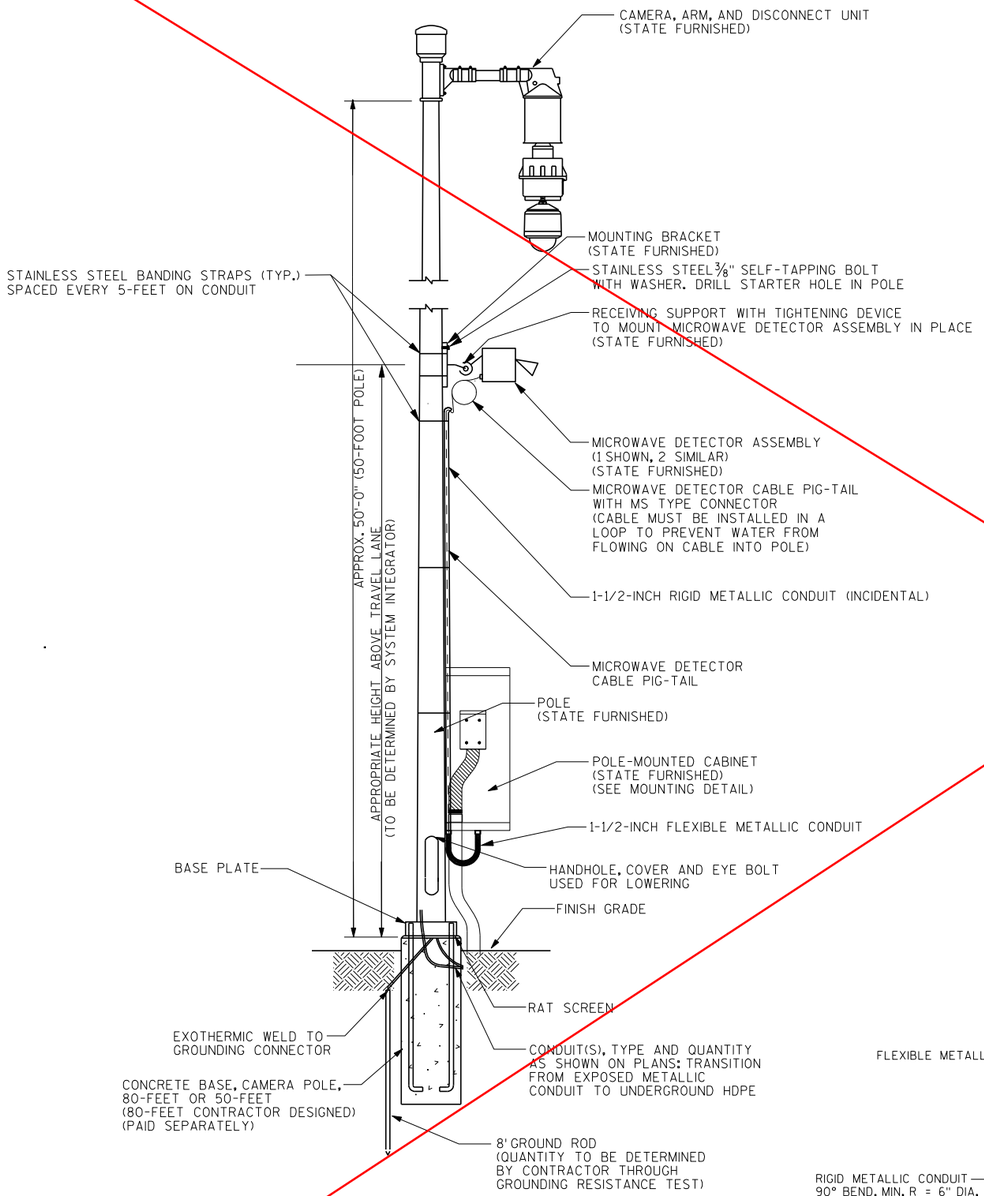
1) BOX SHALL HAVE AN OPEN BASE.

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

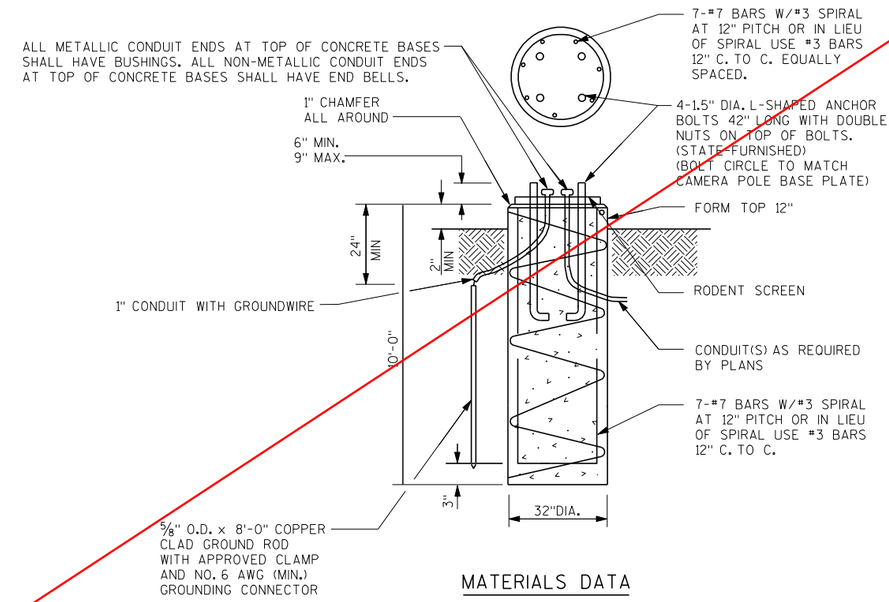
3) ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.

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

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



CAMERA POLE WITH CAMERA LOWERING HARDWARE

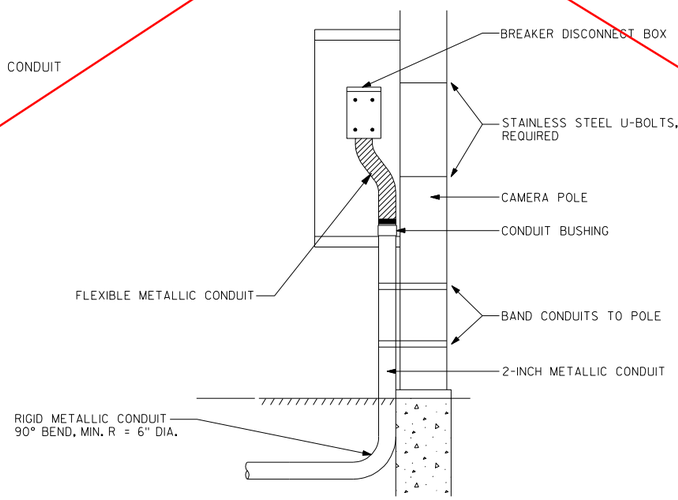


MATERIALS DATA

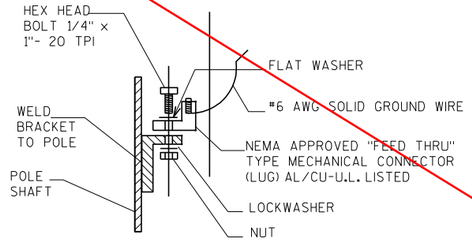
CONCRETE	f'c=3,500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 psi

CONCRETE BASE, 50' CAMERA POLE

NOT TO SCALE



POLE-MOUNTED CABINET MOUNTING DETAIL

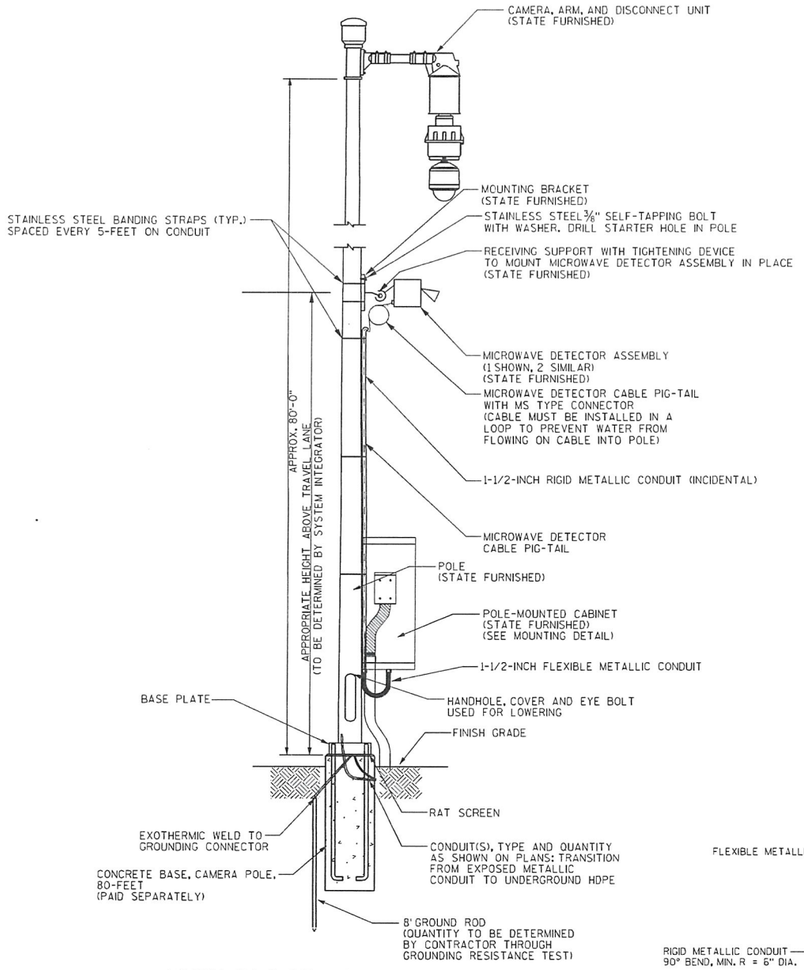


FIELD INSTALLED GROUNDING LUG

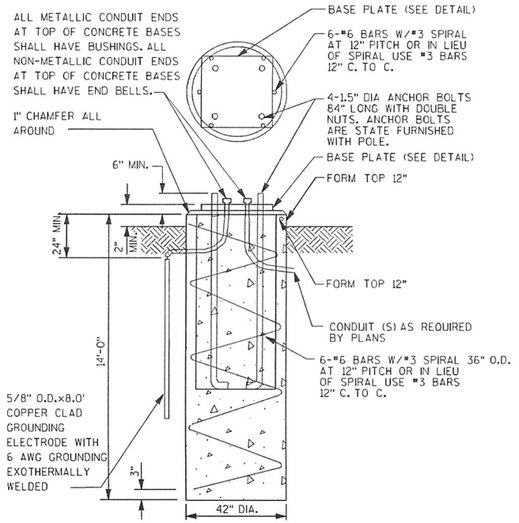
NOTES

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

Addendum #1
Revised Sheet 48
October 19, 2009



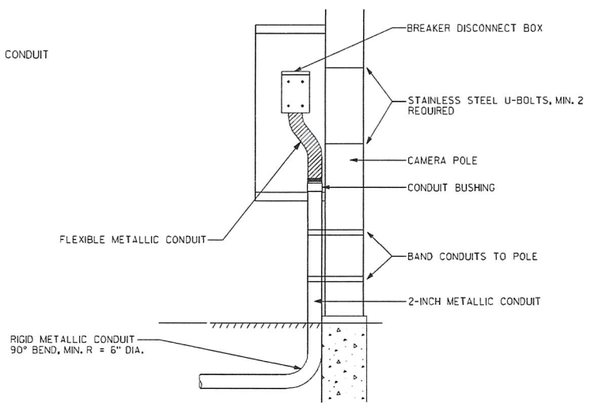
CAMERA POLE WITH CAMERA LOWERING HARDWARE



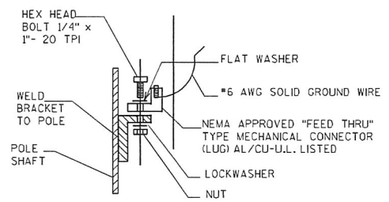
MATERIALS DATA

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

CONCRETE BASE, 80' CAMERA POLE
NOT TO SCALE



POLE-MOUNTED CABINET MOUNTING DETAIL

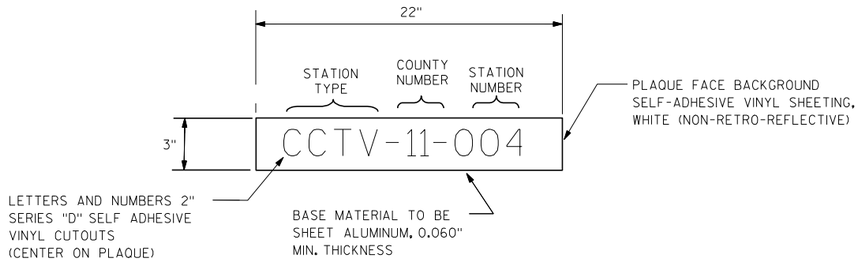


FIELD INSTALLED GROUNDING LUG

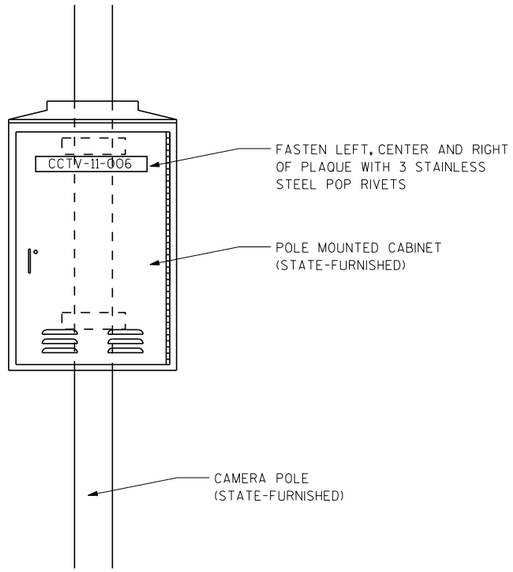
NOTES

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

PROJECT NO: 1010-04-72	HWY: IH 39/90/94	COUNTY: COLUMBIA	FTMS DETAILS	SHEET 48 A	E

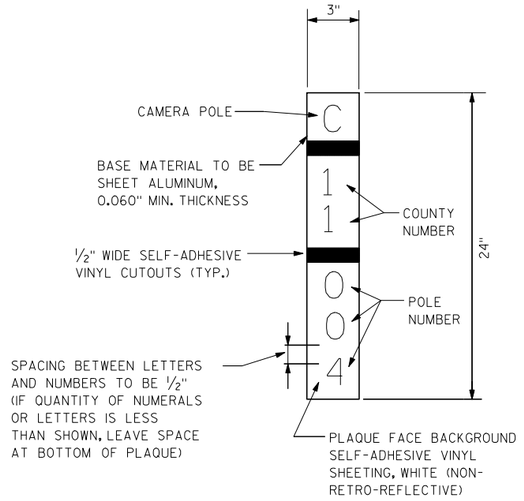


CONTROL CABINET IDENTIFICATION PLAQUE DETAIL



CONTROL CABINET IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

(TYPICAL ALL CONTROL CABINETS)



POLE IDENTIFICATION PLAQUE DETAIL

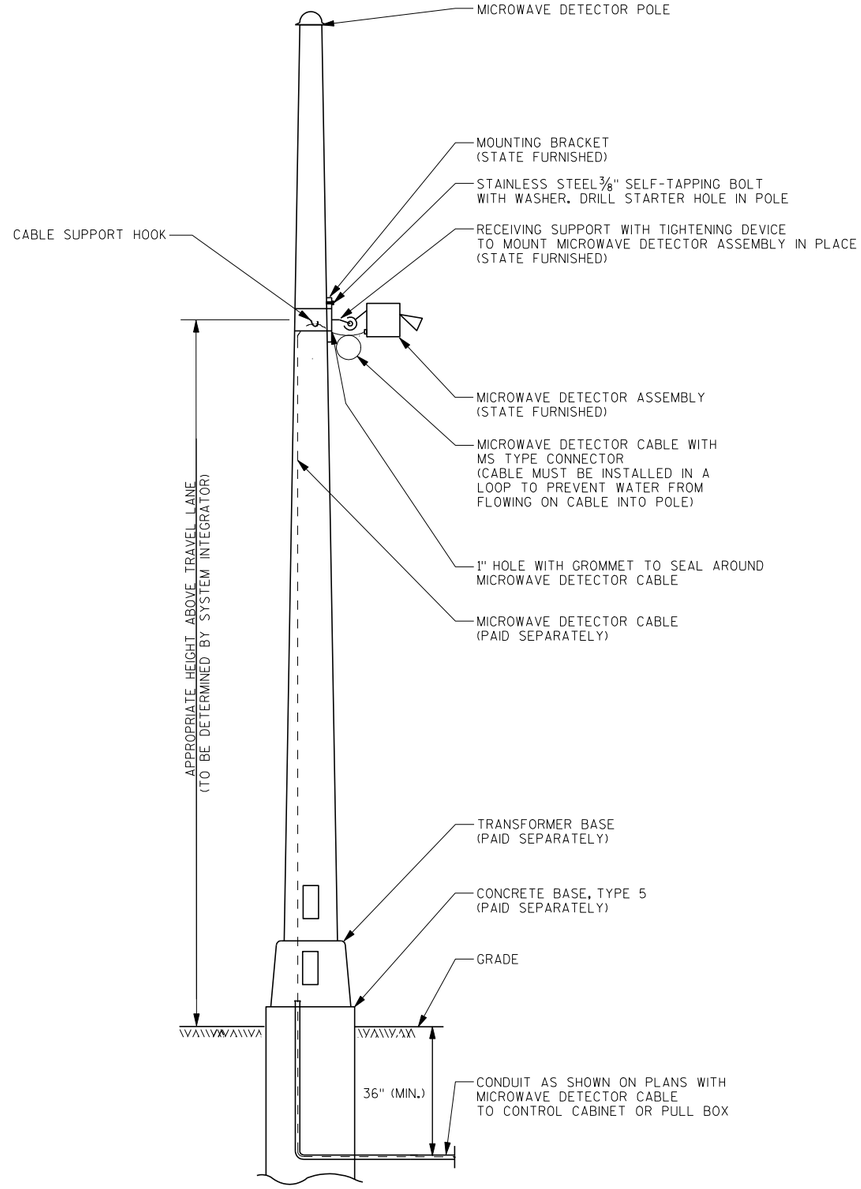
LEGEND STATION TYPE

RM - RAMP METER
CCTV - CLOSED CIRCUIT TELEVISION
ATR - AUTOMATIC TRAFFIC RECORDER
SDS - SYSTEM DETECTOR STATION
MD - MICROWAVE DETECTOR

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.

2



MICROWAVE DETECTOR INSTALLATION
ON MICROWAVE DETECTOR POLE

2

INSTALL IN EXISTING CONDUIT
(1) MICROWAVE DETECTOR CABLE
(1) 6-COUNT FOC (COILED IN EXV01)

INSTALL IN EXISTING CONDUIT
(1) MICROWAVE DETECTOR CABLE

INSTALL 1-2" HDPE CONDUIT WITH
(3) NO. 4 AWG WIRES

INSTALL PROPOSED CONDUIT
INTO EXISTING ITEM

INSTALL IN EXISTING CONDUIT
(3) MICROWAVE DETECTOR CABLES
CAMERA CABLES (INCIDENTAL)
ANTENNA CABLES (INCIDENTAL)

INSTALL ON EXISTING CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(1) MICROWAVE DETECTOR ASSEMBLY (STATE-FURNISHED)

INSTALL ON EXISTING CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(1) MICROWAVE DETECTOR
ASSEMBLY (STATE-FURNISHED)

INSTALL PROPOSED CONDUIT
INTO EXISTING ITEM

EXISTING VAULT WITH COILED FOC
EXTEND FOC TO CABINET CB01 / CCTV-11-04

EXISTING CONDUIT WITH
EXISTING 6-COUNT FOC

INSTALL 2-2" HDPE CONDUITS
(1) WITH 6-COUNT FOC (COILED IN EXV01)
(1) FOR FUTURE USE

INSTALL ON EXISTING CONCRETE CABINET BASE
(1) ITS CABINET (STATE-FURNISHED)
(1) BREAKER DISCONNECT BOX
(1) VIDEO CODEC (STATE-FURNISHED)
(1) ETHERNET SWITCH (STATE-FURNISHED)
(1) 12-COUNT FIBER OPTIC TERMINATION
PANEL (STATE-FURNISHED)
(1) SPREAD SPECTRUM RADIO ASSEMBLY
(STATE-FURNISHED)

INSTALL IN EXISTING CONDUITS
(1) 6-COUNT FOC (STATE-FURNISHED)
(4) MICROWAVE DETECTOR CABLES
(1) CAMERA CABLES (INCIDENTAL)
(1) ANTENNA CABLE (INCIDENTAL)
(3) NO. 4 AWG WIRES

INSTALL IN EXISTING CONDUITS
(3) MICROWAVE DETECTOR CABLES
(1) CAMERA CABLES (INCIDENTAL)
(1) ANTENNA CABLE (INCIDENTAL)

INSTALL ON EXISTING CONCRETE CAMERA POLE BASE
(1) 50' CAMERA POLE WITH LOWERING DEVICE(STATE-FURNISHED)
(1) CAMERA ASSEMBLY (STATE-FURNISHED)
(2) MICROWAVE DETECTOR ASSEMBLIES (STATE-FURNISHED)
(1) YAGI ANTENNA (STATE-FURNISHED)

MB01
EXPB09
EXPB08
CB01 / CCTV-11-04
EXPB07
MD02/03
EXPB06
EXPB05
MD06
EXPB01
EXPB02
EXPB03
EXPB04
EXPB10
EXV01
EXPB11
EXPB12
EXPB13
MD04

1565 EB
1565 WB
1570
1570
1570

N

PROJECT NO: 1010-04-72	HWY: IH 39/90/94	COUNTY: COLUMBIA	FTMS PLAN - IH 39/90/94 STH 60 INTERCHANGE	SHEET 51	E

2

N

PROPOSED NONMETALLIC CONDUIT SCHEDULE 40, 2-INCH UNLESS OTHERWISE NOTED

EXISTING CONDUIT

PROPOSED PULL BOX, STEEL, 24X36-INCH

EXISTING PULL BOX

SIGN

SIGN

SIGN

SIGN

I 39/90/94 EB

I 39/90/94 WB

EXPB12

EXPB13

MD04

INSTALL IN EXISTING CONDUIT
(1) MICROWAVE DETECTOR CABLE

EXPB11

INSTALL ON EXISTING CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(1) MICROWAVE DETECTOR ASSEMBLY (STATE-FURNISHED)

EXISTING VAULT WITH COILED FOC
EXTEND FOC TO CABINET CB01 / CCTV-11-04

EXISTING CONDUIT WITH EXISTING 6-COUNT FOC

3 - INCH CONDUIT (BORED)

EXPB10

EXV01

EXPB09

CB01
CCTV-11-04

INSTALL 2-2" HDPE CONDUITS
(1) WITH 6-COUNT FOC (COILED IN EXV01)
(1) FOR FUTURE USE

INSTALL 1-2" NONMETALLIC CONDUIT WITH
(3) NO. 10 AWG WIRE

G 11-02
RAMP CLOSURE GATE
HARDWIRED 30-FEET

EXPB17

EXPB18

EXPB01

PB 13

3"

EXPB16

PB13

PB14

STH 60

STH 60

PB11

PB 12

EXPB07

PB12

MD02/03

EXPB06

SEE AS-BUILT
PROJECT 1010-04-71

NEW PULLBOXES
(EXISTING PULLBOXES SHOWN COULD NOT BE LOCATED)

EXPB05

2

RAMP CLOSURE GATE
139/90/94 & STH 60

(T) ARLINGTON — COLUMBIA COUNTY

GATE NO. G11-02 — SCALE 0 5' 10' 20'

DIST. CONTACT: — PAGE OF

PROJECT NO: 1010-04-72	HWY: IH 39/90/94	COUNTY: COLUMBIA	FTMS/RAMP GATES - STH 60 INTERCHANGE	SHEET 51 A	E

FILE NAME : W:\SPO\Operations\Traffic\d1_traffic\Ramp Gates\STH 60 & CTH CS\G1101260.dgn

PLOT DATE : 16-APR-2010 07:41 PLOT BY : dotdgd PLOT NAME : PLOT SCALE : 100.000000:1.000000

WISDOT/CADDS SHEET 42

2

N

INSTALL IN EXISTING CONDUIT
(1) MICROWAVE DETECTOR CABLE
(1) 6-COUNT FOC (COILED IN EXVOI)

INSTALL 1-2" NONMETALLIC
CONDUIT WITH
(3) NO. 4 AWG WIRES
(3) NO. 10 AWG WIRE

INSTALL 1-2" NONMETALLIC
CONDUIT WITH
(3) NO. 4 AWG WIRES

INSTALL 1-2" NONMETALLIC
CONDUIT WITH
(3) NO. 10 AWG WIRE

STH 60

MB01

EXPB14

EXPB15

G 11-01
RAMP CLOSURE GATE
HARDWIRED 30-FEET

ADDED PULLBOX

NEW PULLBOX
(EXISTING PULLBOX SHOWN
COULD NOT BE LOCATED)

PB11

PB12

PB13

EXPB07

EXPB08

EXPB09

EXPB10

CB01
CCTV-11-04

MD02/03

EXPB05

INSTALL IN EXISTING CONDUIT
(3) MICROWAVE DETECTOR CABLES
CAMERA CABLES (INCIDENTAL)
ANTENNA CABLES (INCIDENTAL)

INSTALL IN EXISTING CONDUITS
(3) MICROWAVE DETECTOR CABLES
(1) CAMERA CABLES (INCIDENTAL)
(1) ANTENNA CABLE (INCIDENTAL)

3 - INCH CONDUIT
(BORED)

INSTALL ON EXISTING CONCRETE CABINET BASE
(1) ITS CABINET (STATE-FURNISHED)
(1) BREAKER DISCONNECT BOX
(1) VIDEO CODEC (STATE-FURNISHED)
(1) ETHERNET SWITCH (STATE-FURNISHED)
(1) 12-COUNT FIBER OPTIC TERMINATION
PANEL (STATE-FURNISHED)
(1) SPREAD SPECTRUM RADIO ASSEMBLY
(STATE-FURNISHED)

INSTALL IN EXISTING CONDUITS
(1) 6-COUNT FOC (STATE-FURNISHED)
(4) MICROWAVE DETECTOR CABLES
(1) CAMERA CABLES (INCIDENTAL)
(1) ANTENNA CABLE (INCIDENTAL)

INSTALL ON EXISTING CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(1) MICROWAVE DETECTOR ASSEMBLY
(STATE-FURNISHED)

INSTALL IN EXISTING CONDUIT
(1) MICROWAVE DETECTOR CABLE

INSTALL ON EXISTING CONCRETE CAMERA POLE BASE
(1) 50' CAMERA POLE WITH LOWERING DEVICE(STATE-FURNISHED)
(1) CAMERA ASSEMBLY (STATE-FURNISHED)
(2) MICROWAVE DETECTOR ASSEMBLIES (STATE-FURNISHED)
(1) YAGI ANTENNA (STATE-FURNISHED)

EXPB04

MD01

EXPB01

EXPB02

EXPB03

I 39/90/94 EB

I 39/90/94 WB

N015

N015

PROPOSED NONMETALLIC CONDUIT SCHEDULE
40, 2-INCH UNLESS OTHERWISE NOTED

EXISTING CONDUIT

PROPOSED PULL BOX, STEEL, 24X36-INCH

EXISTING PULL BOX

PEDESTAL

RAMP CLOSURE GATE
I39/90/94 & STH 60

(T) ARLINGTON — COLUMBIA COUNTY

GATE NO. G11-01 — SCALE 0 5' 10' 20'

DIST. CONTACT: — PAGE OF

PROJECT NO: 1010-04-72	HWY: IH 39/90/94	COUNTY: COLUMBIA	FTMS/RAMP GATES - STH 60 INTERCHANGE	SHEET 51 B	E

FILE NAME : W:\SPO\Operations\Traffic\d1_traffic\Ramp Gates\STH 60 & CTH CS\G1101260.dgn

PLOT DATE : 16-APR-2010 07:42 PLOT BY : dotdgd PLOT NAME : PLOT SCALE : 100.000000:1.000000

WISDOT/CADDS SHEET 42

2

2

N

INSTALL ON EXISTING CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(1) WIRELESS MICROWAVE DETECTOR ASSEMBLY (STATE-FURNISHED)
(1) SOLAR POWER SYSTEM (STATE-FURNISHED)
(1) YAGI ANTENNA (STATE-FURNISHED)

NO EXISTING BASE
AT THIS LOCATION
INSTALLED NEW
BASE & PULLBOX

MD05

1460 EB

1465 EB

1470 EB

1460 WB

1465 WB

1470 WB

I 39/90/94

I 39/90/94

RIPRAP

PROJECT NO: 1010-04-72	HWY: IH 39/90/94	COUNTY: COLUMBIA	FTMS PLAN - IH 39/90/94 NORTH OF STH 60 INTERCHANGE	SHEET	E

FILE NAME : \\milw00\ingrproj\48097\39_60\cds\3960_FM_03.dgn PLOT DATE : 20-JUL-2009 10:58 PLOT BY : pkutz PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

INSTALL ON TYPE 5 CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(1) MICROWAVE DETECTOR ASSEMBLY (STATE-FURNISHED)

MD06

PB01

INSTALL 2-2" HDPE CONDUITS
(1) WITH MICROWAVE DETECTOR CABLE
(1) FOR FUTURE USE

INSTALL 3-3" HDPE CONDUITS
(1) WITH (4) MICROWAVE DETECTOR CABLES
(1) WITH 6-COUNT FOC
(1) FOR FUTURE USE

INSTALL 1-2" HDPE CONDUIT WITH
(3) NO. 4 AWG WIRES

INSTALL ON BASE CAMERA POLE 50-FT
(1) 50' CAMERA POLE WITH LOWERING SYSTEM (STATE-FURNISHED)
(1) CCTV POLE-MOUNTED CABINET (STATE-FURNISHED)
(1) BREAKER DISCONNECT BOX
(1) VIDEO CODEC (STATE-FURNISHED)
(1) ETHERNET SWITCH (STATE-FURNISHED)
(1) 12-COUNT FIBER OPTIC TERMINATION PANEL (STATE-FURNISHED)

PB02

MB02

PB05

PB03

PB04

CB02 / CCTV-11-06

INSTALL 2-2" HDPE CONDUITS
(1) WITH (2) MICROWAVE
DETECTOR CABLES

MD07/08

INSTALL ON TYPE 5 CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(2) MICROWAVE DETECTOR
ASSEMBLIES (STATE-FURNISHED)

INSTALL 3-3" HDPE CONDUITS, DIRECTIONAL BORE
(1) WITH MICROWAVE DETECTOR CABLE
(1) WITH 6-COUNT FOC
(1) FOR FUTURE USE

EXV02

PB06

PB07

PB08

SPLICE NEW 6-COUNT FOC TO
EXISTING FOC IN ATT. WISDOT
VAULT

INSTALL PROPOSED CONDUIT
INTO EXISTING VAULT

INSTALL 1-2" HDPE CONDUIT WITH
6-COUNT FOC

INSTALL 3-2" HDPE CONDUITS, DIRECTIONAL BORE
(1) WITH MICROWAVE DETECTOR CABLE

INSTALL 2-2" HDPE CONDUITS
(1) WITH MICROWAVE
DETECTOR CABLE

PB09

INSTALL ON TYPE 5 CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(1) MICROWAVE DETECTOR ASSEMBLY
(STATE-FURNISHED)

PB10

MD09

1365

1365 EB

1360

1360 EB

1355 EB

1365 WB

1360 WB

1355 WB

1355

1350

SIGN

PROJECT NO: 1010-04-72	HWY: IH 39/90/94	COUNTY: COLUMBIA	FTMS PLAN - IH 39/90/94 CTH CS INTERCHANGE	SHEET 53	E

Addendum #1
Revised Sheet 53
October 19, 2009

INSTALL ON TYPE 5 CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(1) MICROWAVE DETECTOR ASSEMBLY (STATE-FURNISHED)

MD06

PB01

INSTALL 2-2" HDPE CONDUITS
(1) WITH MICROWAVE DETECTOR CABLE
(1) FOR FUTURE USE

INSTALL 2-3" HDPE CONDUITS
(1) WITH (4) MICROWAVE DETECTOR CABLES AND (1) 6-COUNT FOC
(1) FOR FUTURE USE

INSTALL 1-2" HDPE CONDUIT WITH (3) NO. 4 AWG WIRES

INSTALL ON BASE CAMERA POLE 80-FT
(1) 80' CAMERA POLE WITH LOWERING SYSTEM (STATE-FURNISHED)
(1) CCTV POLE-MOUNTED CABINET (STATE-FURNISHED)
(1) BREAKER DISCONNECT BOX
(1) VIDEO CODEC (STATE-FURNISHED)
(1) ETHERNET SWITCH (STATE-FURNISHED)
(1) 12-COUNT FIBER OPTIC TERMINATION PANEL (STATE-FURNISHED)

INSTALL 2-2" HDPE CONDUITS
(1) WITH (2) MICROWAVE DETECTOR CABLES
(1) FOR FUTURE USE

INSTALL ON TYPE 5 CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(2) MICROWAVE DETECTOR ASSEMBLIES (STATE-FURNISHED)

PB02

PB03

PB04

MB02

CB02 / CCTV-11-06

MD07/08

1365

1360

1355

INSTALL 3-3" HDPE CONDUITS, DIRECTIONAL BORE
(1) WITH MICROWAVE DETECTOR CABLE
(1) WITH 6-COUNT FOC
(1) FOR FUTURE USE

EXV02

PB06

PB07

PB08

PB09

PB10

MD09

SPLICE NEW 6-COUNT FOC TO EXISTING FOC IN ATT/WISDOT VAULT

INSTALL PROPOSED CONDUIT INTO EXISTING VAULT

INSTALL 1-2" HDPE CONDUIT WITH 6-COUNT FOC

INSTALL 3-2" HDPE CONDUITS, DIRECTIONAL BORE
(1) WITH MICROWAVE DETECTOR CABLE

~~INSTALL 2-2" HDPE CONDUITS
(1) WITH MICROWAVE DETECTOR CABLE~~

INSTALL ON TYPE 5 CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(1) MICROWAVE DETECTOR ASSEMBLY (STATE-FURNISHED)

1350

PROJECT NO: 1010-04-72	HWY: IH 39/90/94	COUNTY: COLUMBIA	FTMS PLAN - IH 39/90/94 CTH CS INTERCHANGE	SHEET 53 A	E

FILE NAME : \\milw00\ingrproj\48097\39_60\cds\3960_FM_02.dgn PLOT DATE : 13-OCT-2009 15:08 PLOT BY : PKutz PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

2

MB02

NEW PULLBOX

INSTALL 1-2" HDPE CONDUIT WITH
(3) NO. 4 AWG WIRES

NEW PULLBOX

INSTALL 3-3" HDPE CONDUITS
(1) WITH 6-COUNT FOC
(2) FOR FUTURE USE

INSTALL ON BASE CAMERA POLE 80-FT
(1) 80' CAMERA POLE WITH LOWERING SYSTEM (STATE-FURNISHED)
(1) CCTV POLE-MOUNTED CABINET (STATE-FURNISHED)
(1) BREAKER DISCONNECT BOX
(1) VIDEO CODEC (STATE-FURNISHED)
(1) ETHERNET SWITCH (STATE-FURNISHED)
(1) 12-COUNT FIBER OPTIC TERMINATION PANEL (STATE-FURNISHED)
(2) MICROWAVE DETECTOR ASSEMBLIES (STATE-FURNISHED)

CB02 / CCTV-11-06
MD07-08

PB05

PB04

PB06

EXV02

INSTALL 1-2" HDPE CONDUIT WITH
6-COUNT FOC

SPLICE NEW 6-COUNT FOC TO
EXISTING FOC IN ATT/WISDOT
VAULT

INSTALL PROPOSED CONDUIT
INTO EXISTING VAULT

INSTALL 3-3" HDPE CONDUITS, DIRECTIONAL BORE
(1) WITH 6-COUNT FOC
(2) FOR FUTURE USE

N

SIGN

NOIS

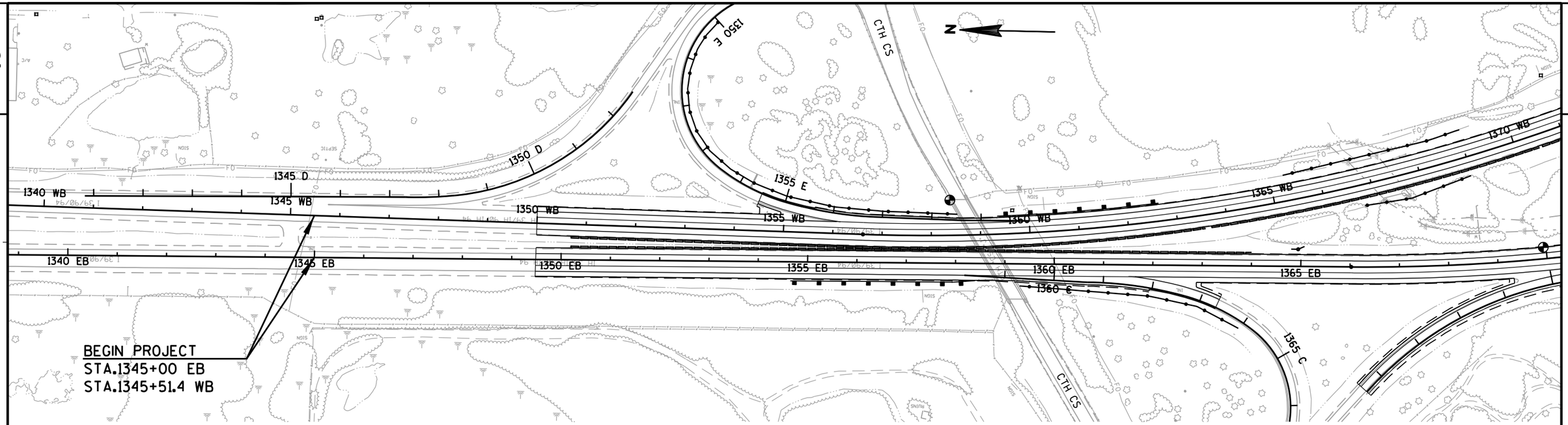
I 39/90/94

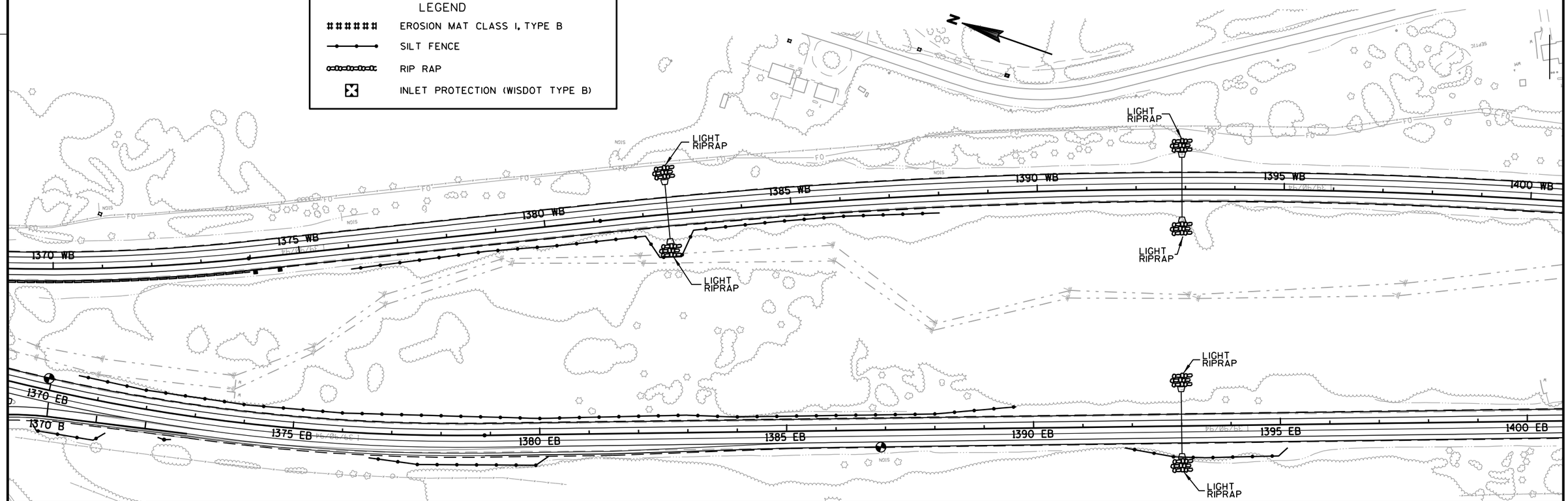
PROJECT NO: 1010-04-72	HWY: IH 39/90/94	COUNTY: COLUMBIA	FTMS - CTH CS INTERCHANGE	SHEET 53 B	E

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2

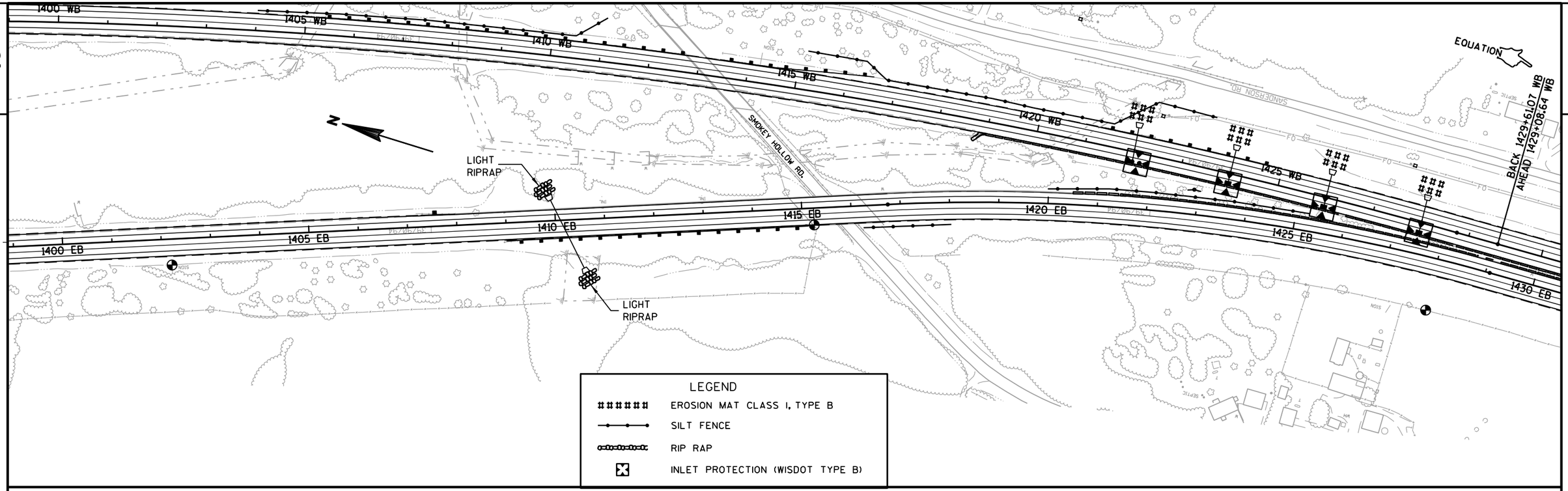
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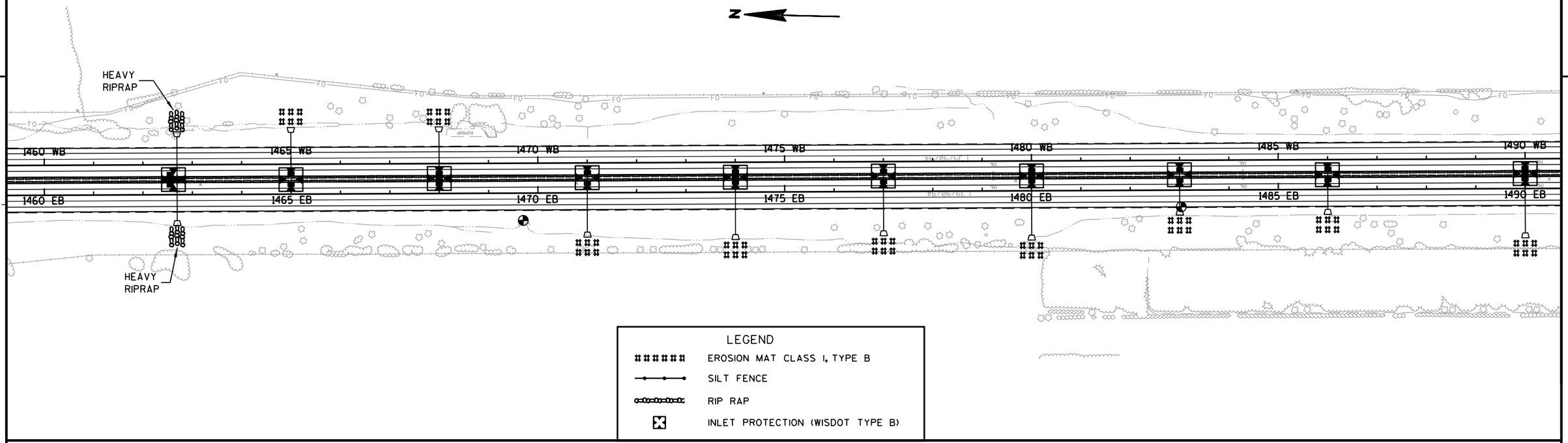


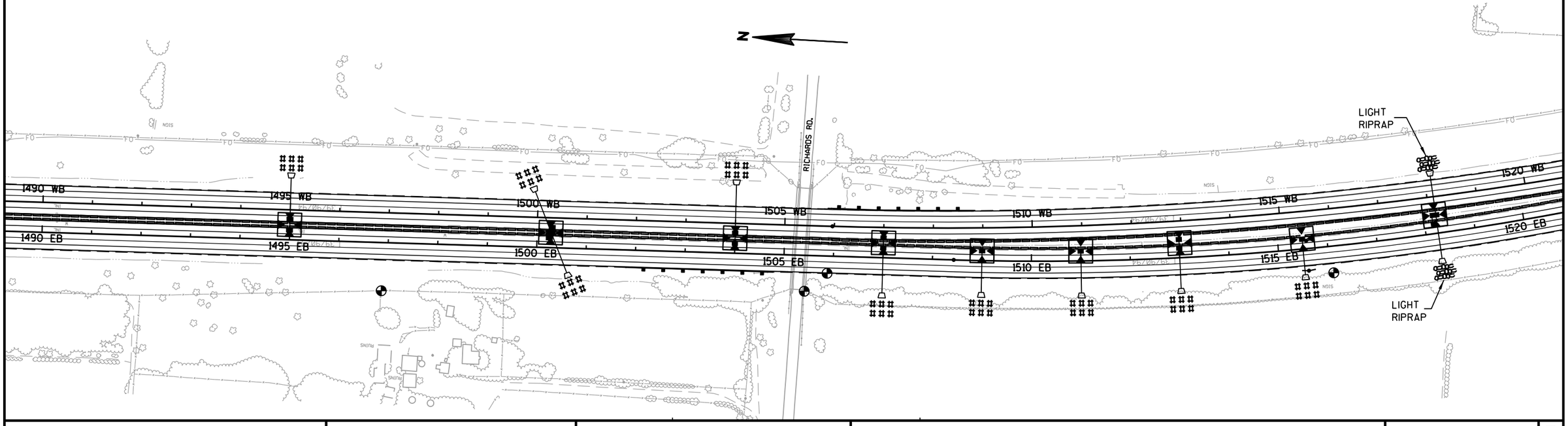
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	EROSION CONTROL	SHEET	E

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PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	EROSION CONTROL	SHEET	E

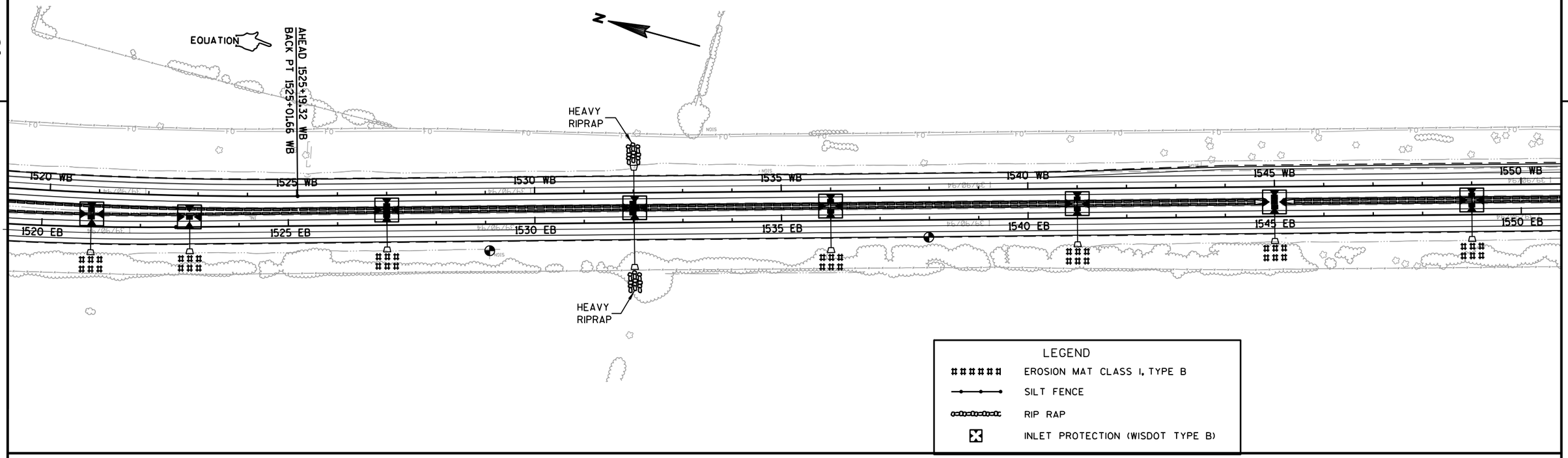


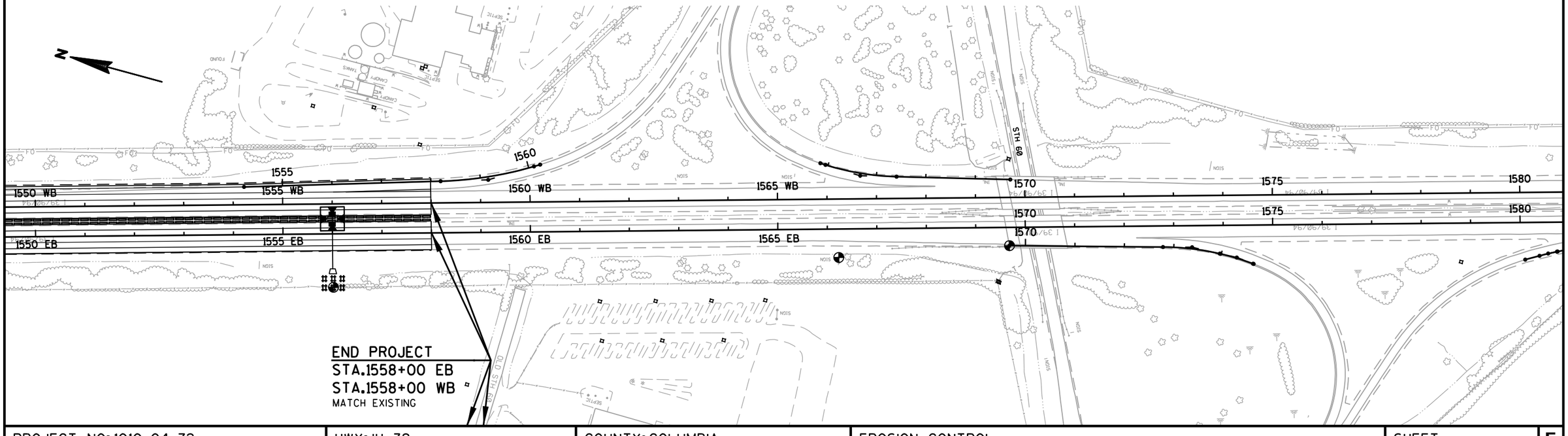


2

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	EROSION CONTROL	SHEET	E

2





PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	EROSION CONTROL	SHEET	E

FILE NAME : r:\Support\CADDS\Projects\d1_10100472\022004_ec.dgn PLOT DATE : 01-SEP-2009 14:58 PLOT BY : dotbbg PLOT NAME : PLOT SCALE : 200.000000:1.000000

2

LEGEND

NEW SIGN		POST MOUNTED SIGN (NEW)	
EXISTING SIGN		POST MOUNTED SIGN (EXISTING)	
SIGN ON DOUBLE STEEL SUPPORT (NEW)		DOUBLE POST MOUNTED SIGN (EXISTING)	
SIGN ON DOUBLE STEEL SUPPORT (EXISTING)		DOUBLE POST MOUNTED SIGN (NEW)	

1 2 R3-4B 36" X 48"
EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES

3 W4-1 48" X 48"

4 EXIT 115 E5-1A 90" X 60"

EXIT 115

1345 1350 1355

5 E1-5 120" X 30"
* EXIT 115
CS POYNETTE LAKE WISCONSIN 1 MILE
E1-1A 276" X 156"

EXIT 115
CS POYNETTE LAKE WISCONSIN 1 MILE

6 E1-5 120" X 30"
* EXIT 115
CS POYNETTE LAKE WISCONSIN
E4-1A 300" X 126"

EXIT 115
CS POYNETTE LAKE WISCONSIN

7 EXIT 25 M.P.H. W13-2 24" X 30"

NOTE:

STATIONING OF THE EXISTING MILE MARKERS IS APPROXIMATE. THE ENGINEER SHALL DOCUMENT THE LOCATIONS OF ALL EXISTING MILE POST MARKERS PRIOR TO BEING REMOVED BY CONSTRUCTION OPERATIONS.

TO LOCATE PERMANENT SIGNING IN THE FIELD THE ENGINEER SHALL CONTACT SOUTHWEST REGION MADISON OFFICE TRAFFIC SECTION, DENNIS OLSON AT (608)-246-3254 AT LEAST 5 WORKING DAYS PRIOR TO BEGINNING PERMANENT SIGN INSTALLATION.

* NEW SIGN TO BE PLACED ON EXISTING SIGN POSTS

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

LEGEND

NEW SIGN		POST MOUNTED SIGN (NEW)	
EXISTING SIGN		POST MOUNTED SIGN (EXISTING)	
SIGN ON DOUBLE STEEL SUPPORT (NEW)		DOUBLE POST MOUNTED SIGN (EXISTING)	
SIGN ON DOUBLE STEEL SUPPORT (EXISTING)		DOUBLE POST MOUNTED SIGN (NEW)	

E1-5
120" X 30"
* EXIT 115
CS
POYNETTE
LAKE WISCONSIN

9

E4-1A
300" X 126"
EXIT 115
CS
POYNETTE
LAKE WISCONSIN

8
EXIT
25
M.P.H.
W13-2
24" X 30"

EXIT
25
M.P.H.

MILE
1
1
6
TO BE
REMOVED

WEST
MILE
116
.0
D10-5
21" X 60"
EXISTING TO REMAIN

EAST
MILE
116
.0
D10-5
21" X 60"
EXISTING TO REMAIN

10
EXIT
115
E5-1A
90" X 60"

EXIT
115

11
W4-1
48" X 48"

MILE
1
1
6
TO BE
REMOVED

* NEW SIGN TO BE PLACED
ON EXISTING SIGN POSTS

NOTE:

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PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 59	E

2

2

FOOD-EXIT 115

GAS-EXIT 115

EXISTING TO REMAIN

CAMPING-EXIT 115

EXISTING TO REMAIN

FO

NOIS

1375 1380 1385 1390

WEST I-90 MILE 116 .2
D10-5
21" X 60"
EXISTING TO REMAIN

* NEW SIGN TO BE PLACED ON EXISTING SIGN POSTS

EAST I-90 MILE 116 .2
D10-5
21" X 60"
EXISTING TO REMAIN

SLOWER TRAFFIC KEEP RIGHT
(12)
R4-3
48" X 60"

SLOWER TRAFFIC KEEP RIGHT

SOUTH EAST EAST
(13)
INTERSTATE 39 INTERSTATE 90 INTERSTATE 94
J4-3
108" X 57"

SOUTH EAST EAST
INTERSTATE 39 INTERSTATE 90 INTERSTATE 94

LEGEND

NEW SIGN	POST MOUNTED SIGN (NEW)
EXISTING SIGN	POST MOUNTED SIGN (EXISTING)
SIGN ON DOUBLE STEEL SUPPORT (NEW)	DOUBLE POST MOUNTED SIGN (EXISTING)
SIGN ON DOUBLE STEEL SUPPORT (EXISTING)	DOUBLE POST MOUNTED SIGN (NEW)

NOTE:

STATIONING OF THE EXISTING MILE MARKERS IS APPROXIMATE. THE ENGINEER SHALL DOCUMENT THE LOCATIONS OF ALL EXISTING MILE POST MARKERS PRIOR TO BEING REMOVED BY CONSTRUCTION OPERATIONS.

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PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 60	E

2

2

1390 1395 1400 1405

WEST 94 MILE 116 .4
D10-5
21" X 60"
EXISTING TO REMAIN

WEST 94 MILE 116 .6
D10-5
21" X 60"
EXISTING TO REMAIN

* NEW SIGN TO BE PLACED
ON EXISTING SIGN POSTS

SPEED LIMIT 65
(14)
R2-1
48" X 60"

SPEED LIMIT 65

LEGEND

94	NEW SIGN		POST MOUNTED SIGN (NEW)
94	EXISTING SIGN		POST MOUNTED SIGN (EXISTING)
	SIGN ON DOUBLE STEEL SUPPORT (NEW)		DOUBLE POST MOUNTED SIGN (EXISTING)
	SIGN ON DOUBLE STEEL SUPPORT (EXISTING)		DOUBLE POST MOUNTED SIGN (NEW)

EAST 94 MILE 116 .6
D10-5
21" X 60"
EXISTING TO REMAIN

1390 1395 1400 1405

EAST 94 MILE 116 .4
D10-5
21" X 60"
EXISTING TO REMAIN

NOTE:

STATIONING OF THE EXISTING MILE MARKERS IS APPROXIMATE. THE ENGINEER SHALL DOCUMENT THE LOCATIONS OF ALL EXISTING MILE POST MARKERS PRIOR TO BEING REMOVED BY CONSTRUCTION OPERATIONS.

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* (15)

Hwy 60 3
Madison 26
Milwaukee 93

D2-3
192" X 84"

Hwy 60 3
Madison 26
Milwaukee 93

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 42

2

* MacKenzie Environmental Education Center
EXIT 115

16

E3-1
180" X 132"

MacKenzie Environmental Education Center
EXIT 115

* EXIT 115

E1-5
120" X 30"

17

CS
POYNETTE
LAKE WISCONSIN
1 MILE

E1-1A
276" X 156"

EXIT 115

CS
POYNETTE
LAKE WISCONSIN
1 MILE

1405 1410 1415 1420

WEST 90 MILE 116 .8
D10-5
21" X 60"
EXISTING TO REMAIN

EAST 90 MILE 116 .8
D10-5
21" X 60"
EXISTING TO REMAIN

* NEW SIGN TO BE PLACED ON EXISTING SIGN POSTS

NOTE:
STATIONING OF THE EXISTING MILE MARKERS IS APPROXIMATE. THE ENGINEER SHALL DOCUMENT THE LOCATIONS OF ALL EXISTING MILE POST MARKERS PRIOR TO BEING REMOVED BY CONSTRUCTION OPERATIONS.

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LEGEND

CHETEK 94	NEW SIGN		POST MOUNTED SIGN (NEW)
CHETEK 94	EXISTING SIGN		POST MOUNTED SIGN (EXISTING)
	SIGN ON DOUBLE STEEL SUPPORT (NEW)		DOUBLE POST MOUNTED SIGN (EXISTING)
	SIGN ON DOUBLE STEEL SUPPORT (EXISTING)		DOUBLE POST MOUNTED SIGN (NEW)

2

N

WEST 94 MILE 117 .0
D10-5
21" X 60"
EXISTING TO REMAIN

MILE 117
TO BE REMOVED

1420 1425 1430

* NEW SIGN TO BE PLACED ON EXISTING SIGN POSTS

EAST 94 MILE 117 .0
D10-5
21" X 60"
EXISTING TO REMAIN

MILE 117
TO BE REMOVED

NOTE:

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LEGEND

CHEYENNE 94	NEW SIGN		POST MOUNTED SIGN (NEW)
CHEYENNE 94	EXISTING SIGN		POST MOUNTED SIGN (EXISTING)
	SIGN ON DOUBLE STEEL SUPPORT (NEW)		DOUBLE POST MOUNTED SIGN (EXISTING)
	SIGN ON DOUBLE STEEL SUPPORT (EXISTING)		DOUBLE POST MOUNTED SIGN (NEW)

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

18
19

R3-4B
36" X 48"

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES

FO

1435 1440 1445 1450

EAST 90 MILE 117 .4
D10-5
21" X 60"
EXISTING TO REMAIN

EAST 90 MILE 117 .2
D10-5
21" X 60"
EXISTING TO REMAIN

* NEW SIGN TO BE PLACED
ON EXISTING SIGN POSTS

2

1450 1455 1460 1465

EAST 90 MILE 117 .6
D10-5
21" X 60"
EXISTING TO REMAIN

LEGEND

NEW SIGN	POST MOUNTED SIGN (NEW)
EXISTING SIGN	POST MOUNTED SIGN (EXISTING)
SIGN ON DOUBLE STEEL SUPPORT (NEW)	DOUBLE POST MOUNTED SIGN (EXISTING)
SIGN ON DOUBLE STEEL SUPPORT (EXISTING)	DOUBLE POST MOUNTED SIGN (NEW)

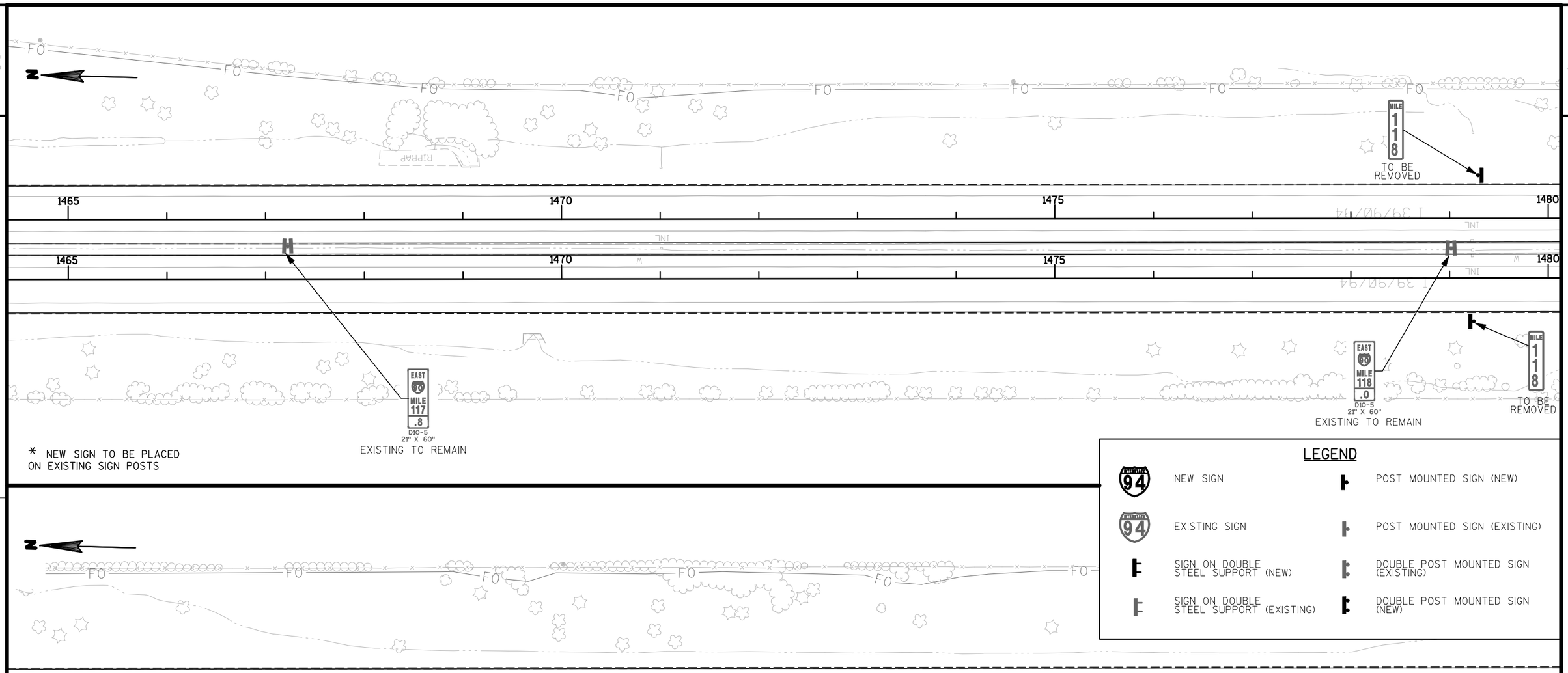
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PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET	E

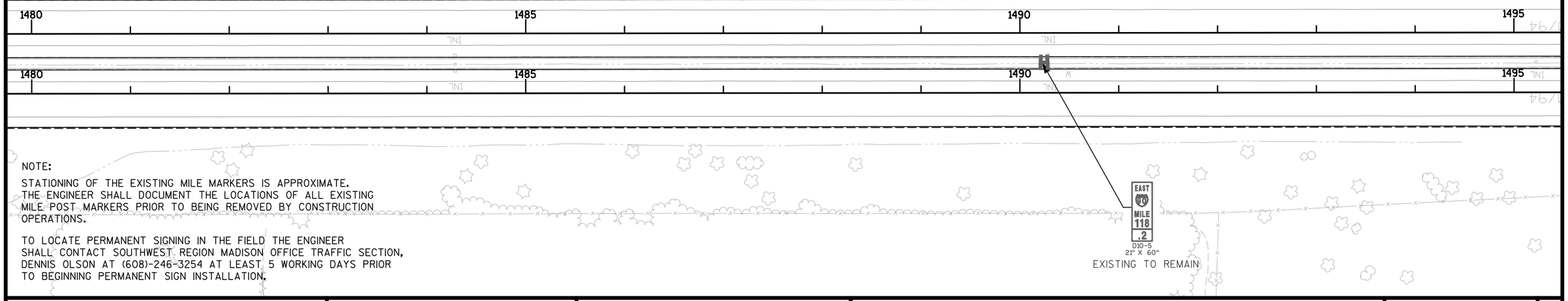
FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 42



* NEW SIGN TO BE PLACED ON EXISTING SIGN POSTS

LEGEND

NEW SIGN	POST MOUNTED SIGN (NEW)
EXISTING SIGN	POST MOUNTED SIGN (EXISTING)
SIGN ON DOUBLE STEEL SUPPORT (NEW)	DOUBLE POST MOUNTED SIGN (EXISTING)
SIGN ON DOUBLE STEEL SUPPORT (EXISTING)	DOUBLE POST MOUNTED SIGN (NEW)



NOTE:

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PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 65	E

2

2

EAST 90 MILE 118 .4
D10-5
21" X 60"
EXISTING TO REMAIN

1495 1500 1505 1510

RICHARDS RD

* NEW SIGN TO BE PLACED
ON EXISTING SIGN POSTS

LEGEND

94	NEW SIGN		POST MOUNTED SIGN (NEW)
94	EXISTING SIGN		POST MOUNTED SIGN (EXISTING)
	SIGN ON DOUBLE STEEL SUPPORT (NEW)		DOUBLE POST MOUNTED SIGN (EXISTING)
	SIGN ON DOUBLE STEEL SUPPORT (EXISTING)		DOUBLE POST MOUNTED SIGN (NEW)

* 20

HWY CS 3
Portage 15
Wis Dells 33

D2-3
180" X 84"

HWY CS 3
Portage 15
Wis Dells 33

1510 1515 1520 1525

EAST 90 MILE 118 .6
D10-5
21" X 60"
EXISTING TO REMAIN

EXIT 119
60
LODI
ARLINGTON
1 MILE
EXISTING TO REMAIN

EAST 90 MILE 118 .8
D10-5
21" X 60"
EXISTING TO REMAIN

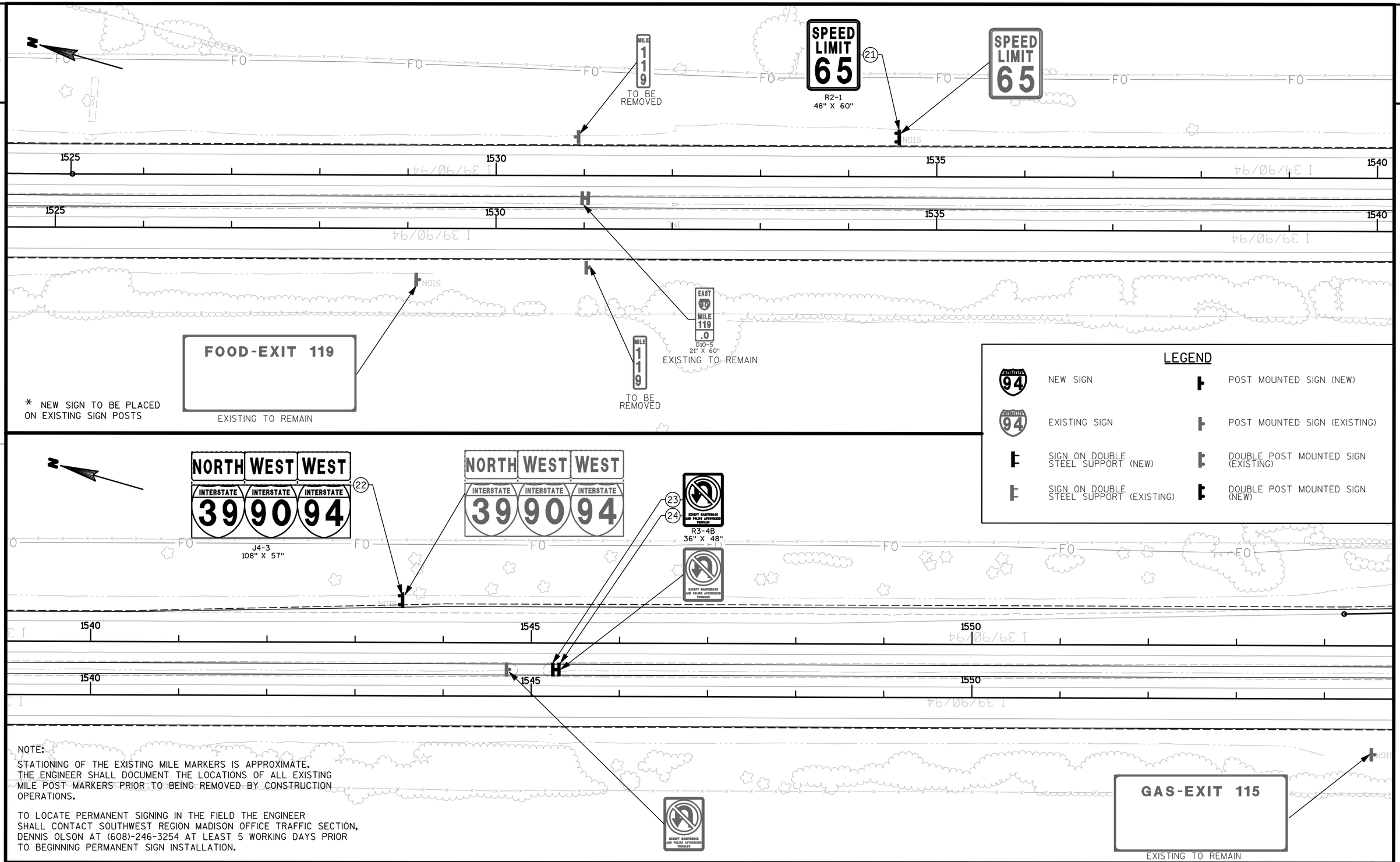
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PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 66	E

2



LEGEND

- NEW SIGN
- EXISTING SIGN
- SIGN ON DOUBLE STEEL SUPPORT (NEW)
- SIGN ON DOUBLE STEEL SUPPORT (EXISTING)
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- DOUBLE POST MOUNTED SIGN (EXISTING)
- DOUBLE POST MOUNTED SIGN (NEW)

NOTE:

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PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 67 E

LEGEND

- NEW SIGN
- EXISTING SIGN
- SIGN ON DOUBLE STEEL SUPPORT (NEW)
- SIGN ON DOUBLE STEEL SUPPORT (EXISTING)
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- DOUBLE POST MOUNTED SIGN (EXISTING)
- DOUBLE POST MOUNTED SIGN (NEW)

* NEW SIGN TO BE PLACED ON EXISTING SIGN POSTS

** EXISTING SIGN TO BE PLACED ON NEW SIGN POSTS

NOT INSTALLED

88 RAMP CLOSED USE ALT ROUTE — R11-54F 48" X 30"

GATE CLOSURE SEE DETAIL

NORTH WEST WEST 39 90 94 — J3-3 72" X 57" — 36

33 PEDESTRIANS BICYCLES (NOT MOTORIZED TRAFFIC) MOTOR BICYCLES PROHIBITED — R5-57 36" X 36"

32 WRONG WAY — R5-1A 36" X 24"

35 R4-7 24" X 30"

37 W12-1D 24" X 24"

38 STOP STOP — R1-1 36" X 36"

** 39 NORTH WEST WEST 39 90 94 — J3-3 72" X 57"

** 40 ← POYNETTE LAKE WIS →

** 41 COUNTY CS — M1-5A 24" X 24"

42 M6-4 21" X 21"

43 DO NOT ENTER DO NOT ENTER — R5-1 30" X 30"

** 44 ← WIS DELLS

NOT INSTALLED

ADVANCE FLASHER FOR GATE CLOSURE SEE DETAIL

81 RAMP CLOSED WHEN FLASHING USE ALT ROUTE — R11-53 54" X 36"

46 W2-1 30" X 30"

47 W5-52L 12" X 36"

48 W5-52R 12" X 36"

STOP STOP 34 — R1-1 36" X 36"

31 ← MacKenzie Center — D1-1 114" X 15"

← MacKenzie Center

CAMPING SIGN TO REMAIN

30 R4-7 24" X 30"

28 29 DO NOT ENTER DO NOT ENTER — R5-1 30" X 30"

SOUTH EAST EAST 39 90 94 — ** 45 — J2-3 72" X 57"

WRONG WAY WRONG WAY 26 27 — R5-1A 36" X 24"

25 W3-1 36" X 36"

52 JCT JCT JCT JCT 39 90 94 COUNTY J — J1-4 96" X 39"

SOUTH EAST EAST 39 90 94 COUNTY CS — ** 51 — J2-4 96" X 57"

ADVANCE FLASHER FOR GATE CLOSURE SEE DETAIL

80 RAMP CLOSED WHEN FLASHING USE ALT ROUTE — R11-53 54" X 36"

** 50 ↑ MADISON WIS DELLS →

** 49 NORTH WEST WEST 39 90 94 — J2-3 72" X 57"

1350 1355 1360

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PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 68	E

NOTE:

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LEGEND

94	NEW SIGN		POST MOUNTED SIGN (NEW)
94	EXISTING SIGN		POST MOUNTED SIGN (EXISTING)
	SIGN ON DOUBLE STEEL SUPPORT (NEW)		DOUBLE POST MOUNTED SIGN (EXISTING)
	SIGN ON DOUBLE STEEL SUPPORT (EXISTING)		DOUBLE POST MOUNTED SIGN (NEW)

* NEW SIGN TO BE PLACED ON EXISTING SIGN POSTS

** EXISTING SIGN TO BE PLACED ON NEW SIGN POSTS

74 W5-52L 12" X 36"

75 W5-52R 12" X 36"

ADVANCE FLASHER FOR GATE CLOSURE SEE DETAIL

NOT INSTALLED

82 RAMP CLOSED WHEN FLASHING USE ALT ROUTE R11-53 54" X 36"

** 72 ← MADISON

** 73 NORTH WEST WEST 39 90 94 J2-3 72" X 57"

53 W3-1 36" X 36"

WRONG WAY 54 55 R5-1A 36" X 24"

GAS EXISTING TO REMAIN

56 57 DO NOT ENTER R5-1 30" X 30"

MacKenzie Center 59 D1-1 114" X 15"

MacKenzie Center

71 DO NOT ENTER R5-1 30" X 30"

WRONG WAY 61 R5-1A 36" X 24"

58 R4-7 24" X 30"

62 R4-7 24" X 30"

60 PEDESTRIANS BICYCLES MOTOR BICYCLES PROHIBITED R5-57 36" X 36"

89 RAMP CLOSED USE ALT ROUTE R11-54F 48" X 30" NOT INSTALLED

GATE CLOSURE SEE DETAIL

STOP 69 70 R1-1 36" X 36"

M1-5A 24" X 24" COUNTY CS 68

M6-4 21" X 21" 67

** 66 ← LAKE WIS POYNETTE

** 65 SOUTH EAST EAST 39 90 94 J3-3 72" X 57"

64 W12-1D 24" X 24"

** 63 SOUTH EAST EAST 39 90 94 J3-3 72" X 57"

** 76 NORTH WEST WEST COUNTY 39 90 94 CS J2-4 96" X 57"

** 78 ↑ WIS DELLS MADISON →

** 77 SOUTH EAST EAST 39 90 94 J2-3 72" X 57"

NOT INSTALLED

ADVANCE FLASHER FOR GATE CLOSURE SEE DETAIL

83 RAMP CLOSED WHEN FLASHING USE ALT ROUTE R11-53 54" X 36"

** 79 JCT JCT JCT 39 90 94 J1-3 72" X 39"

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 69	E

2

ADVANCE FLASHER
FOR GATE CLOSURE
SEE DETAIL

RAMP CLOSED
WHEN FLASHING
USE
ALT ROUTE
(84)

R11-53
54" X 36"

500'

RAMP CLOSED
USE
ALT ROUTE
(90)

R11-54F
48" X 30"

GATE CLOSURE
SEE DETAIL

SCHULT RD

FO

SIGN

T

HW

MH

STH 60

1565

1570

ADVANCE FLASHER
FOR GATE CLOSURE
SEE DETAIL

RAMP CLOSED
WHEN FLASHING
USE
ALT ROUTE
(85)

R11-53
54" X 36"

1570

1575

ADVANCE FLASHER
FOR GATE CLOSURE
SEE DETAIL

RAMP CLOSED
WHEN FLASHING
USE
ALT ROUTE
(86)

R11-53
54" X 36"

GATE CLOSURE
SEE DETAIL

RAMP CLOSED
USE
ALT ROUTE
(91)

R11-54F
48" X 30"

R11-53
54" X 36"

RAMP CLOSED
WHEN FLASHING
USE
ALT ROUTE
(87)

500'

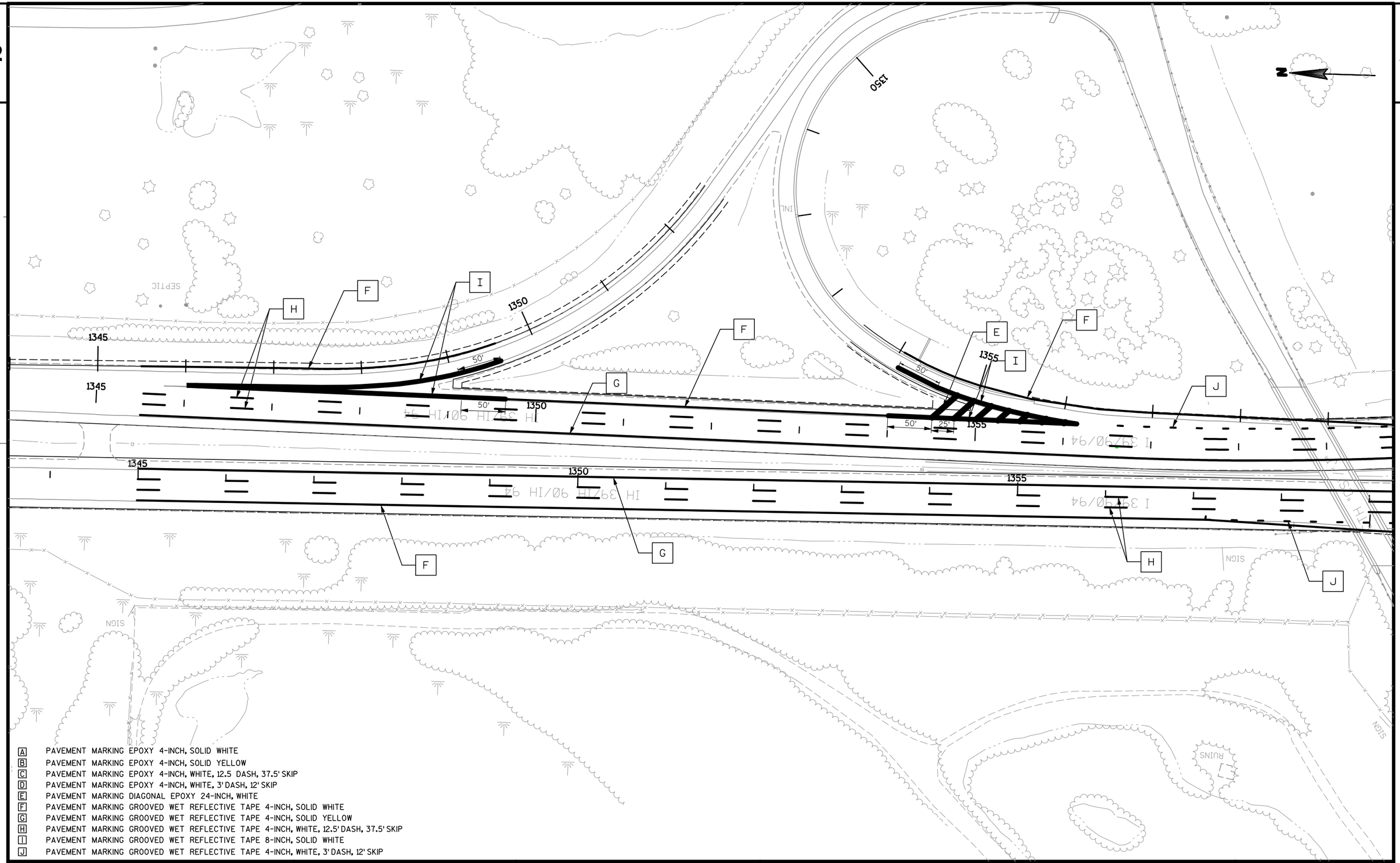
ADVANCE FLASHER
FOR GATE CLOSURE
SEE DETAIL

2

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 70	E

2

2



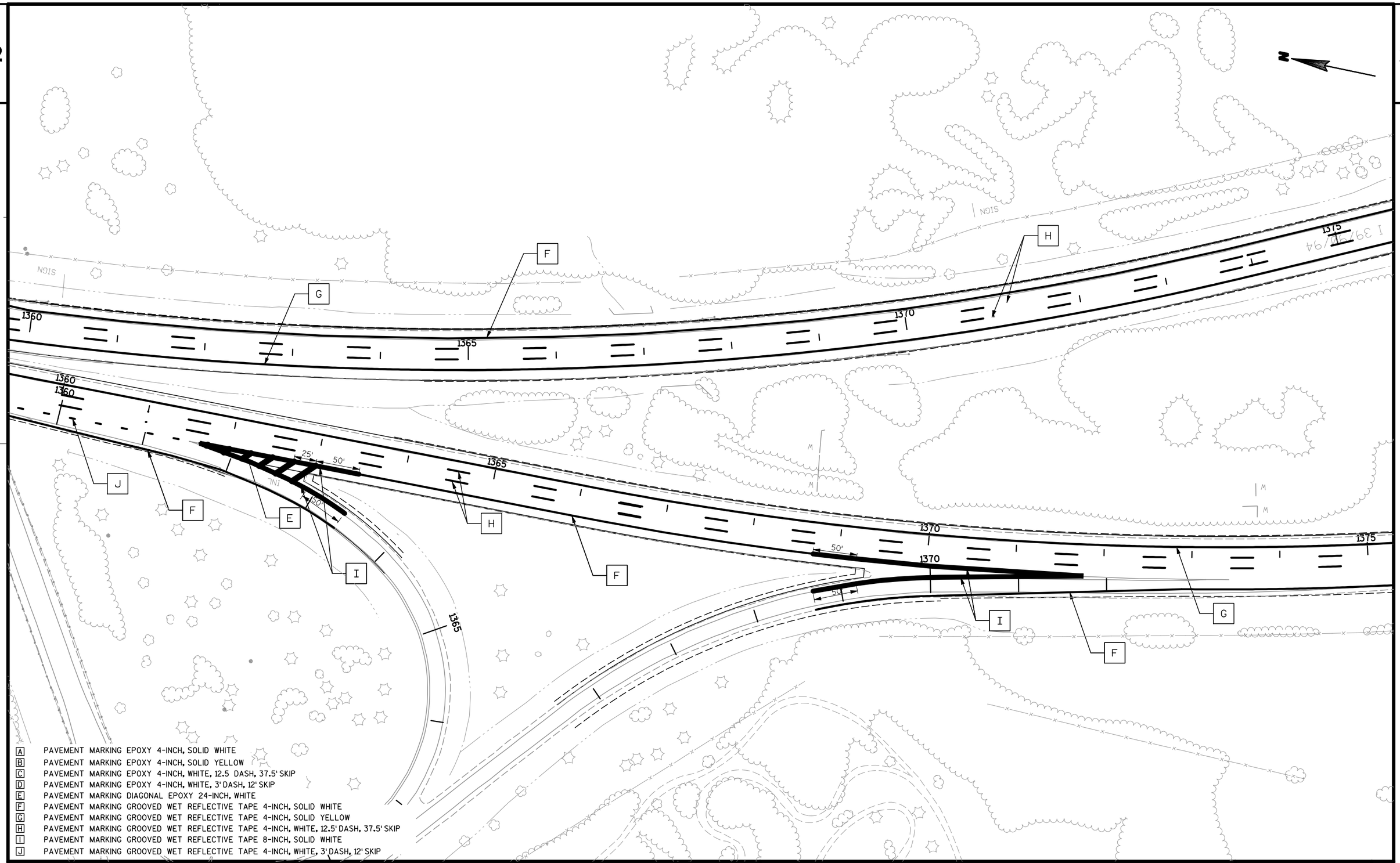
A	PAVEMENT MARKING EPOXY 4-INCH, SOLID WHITE
B	PAVEMENT MARKING EPOXY 4-INCH, SOLID YELLOW
C	PAVEMENT MARKING EPOXY 4-INCH, WHITE, 12.5 DASH, 37.5' SKIP
D	PAVEMENT MARKING EPOXY 4-INCH, WHITE, 3' DASH, 12' SKIP
E	PAVEMENT MARKING DIAGONAL EPOXY 24-INCH, WHITE
F	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, SOLID WHITE
G	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, SOLID YELLOW
H	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, WHITE, 12.5' DASH, 37.5' SKIP
I	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, SOLID WHITE
J	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, WHITE, 3' DASH, 12' SKIP

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET E

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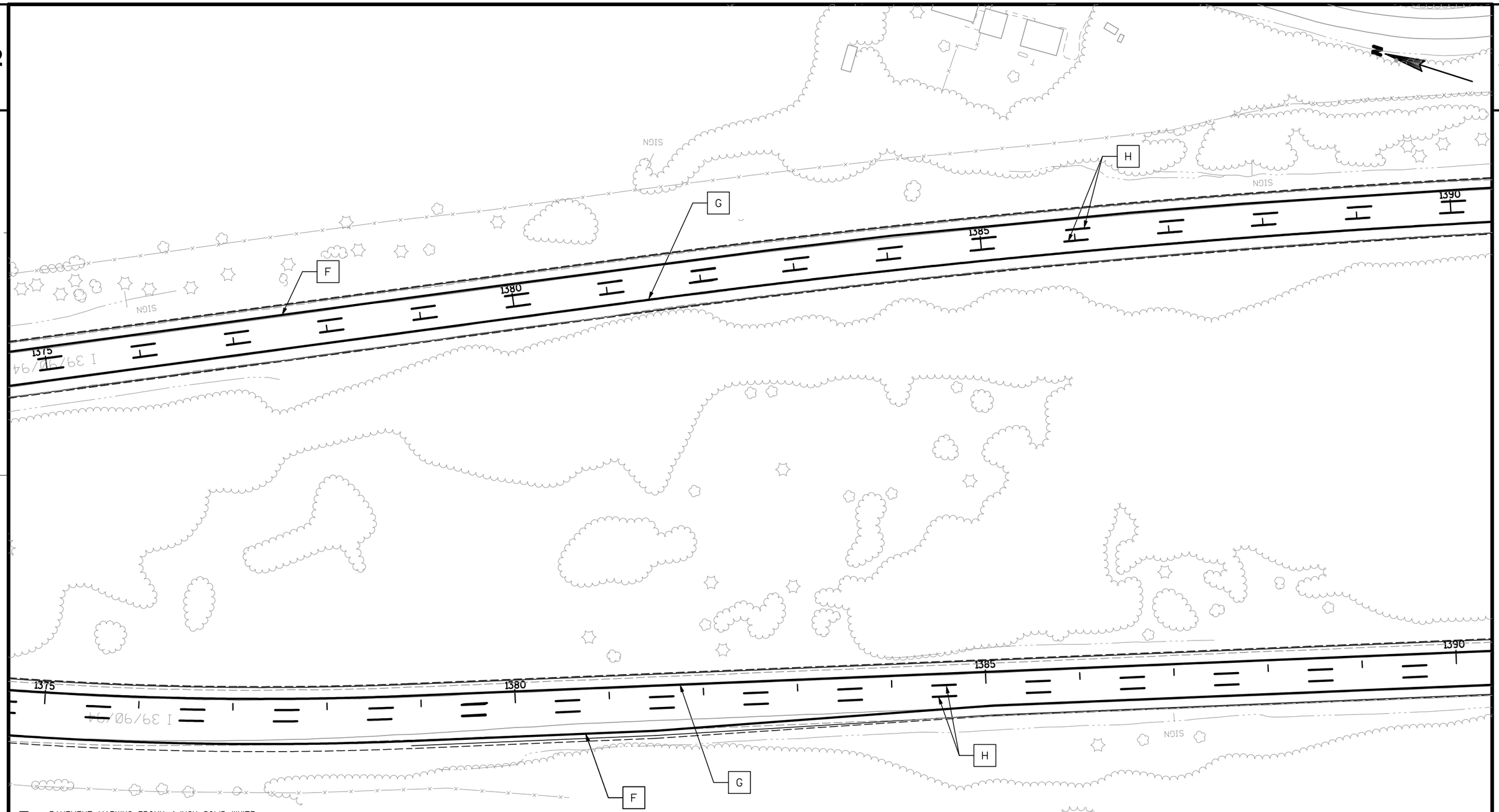
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A PAVEMENT MARKING EPOXY 4-INCH, SOLID WHITE
B PAVEMENT MARKING EPOXY 4-INCH, SOLID YELLOW
C PAVEMENT MARKING EPOXY 4-INCH, WHITE, 12.5 DASH, 37.5' SKIP
D PAVEMENT MARKING EPOXY 4-INCH, WHITE, 3' DASH, 12' SKIP
E PAVEMENT MARKING DIAGONAL EPOXY 24-INCH, WHITE
F PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, SOLID WHITE
G PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, SOLID YELLOW
H PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, WHITE, 12.5' DASH, 37.5' SKIP
I PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, SOLID WHITE
J PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, WHITE, 3' DASH, 12' SKIP

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 72	E

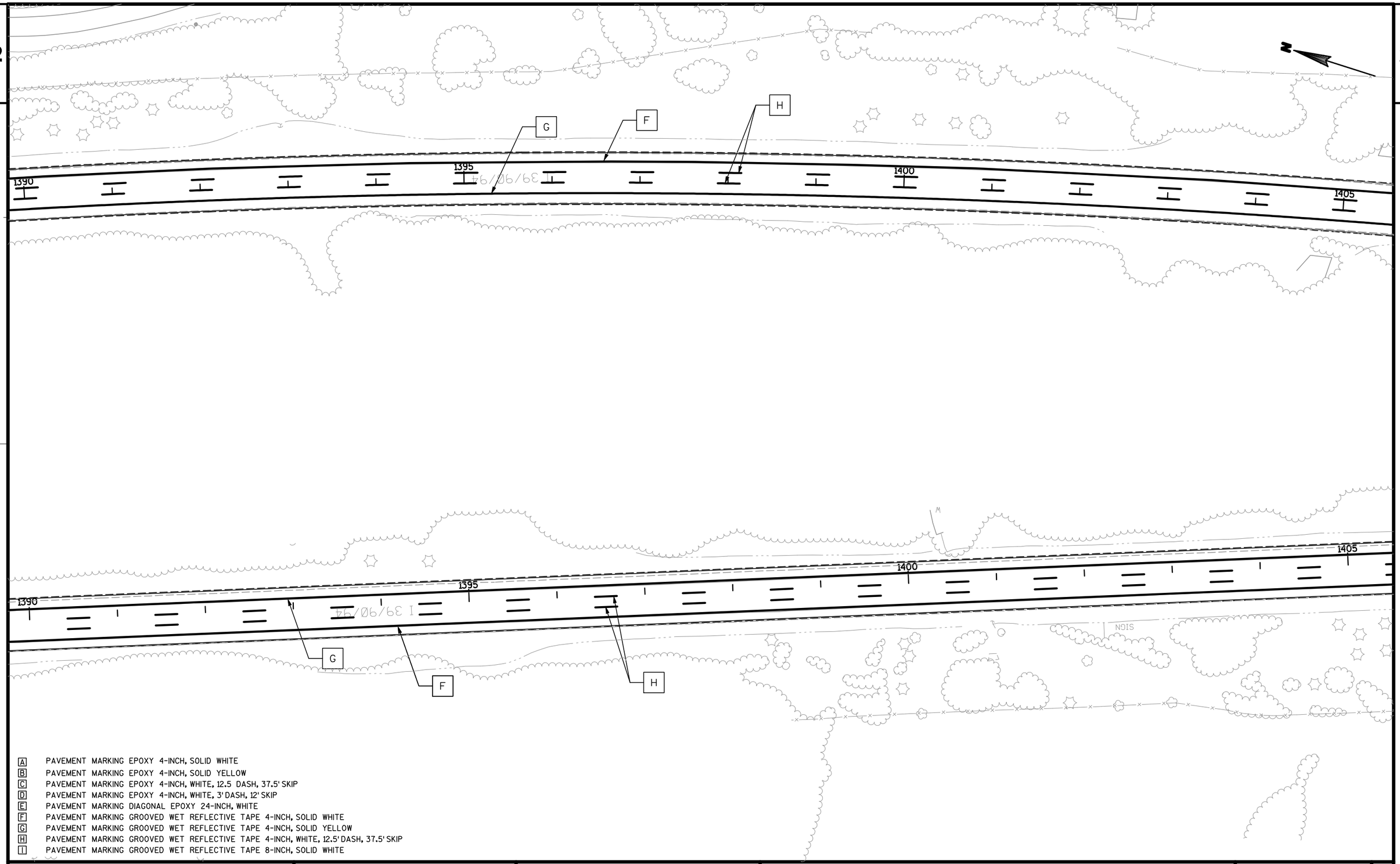
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2

- [A] PAVEMENT MARKING EPOXY 4-INCH, SOLID WHITE
- [B] PAVEMENT MARKING EPOXY 4-INCH, SOLID YELLOW
- [C] PAVEMENT MARKING EPOXY 4-INCH, WHITE, 12.5 DASH, 37.5' SKIP
- [D] PAVEMENT MARKING EPOXY 4-INCH, WHITE, 3' DASH, 12' SKIP
- [E] PAVEMENT MARKING DIAGONAL EPOXY 24-INCH, WHITE
- [F] PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, SOLID WHITE
- [G] PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, SOLID YELLOW
- [H] PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, WHITE, 12.5' DASH, 37.5' SKIP
- [I] PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, SOLID WHITE

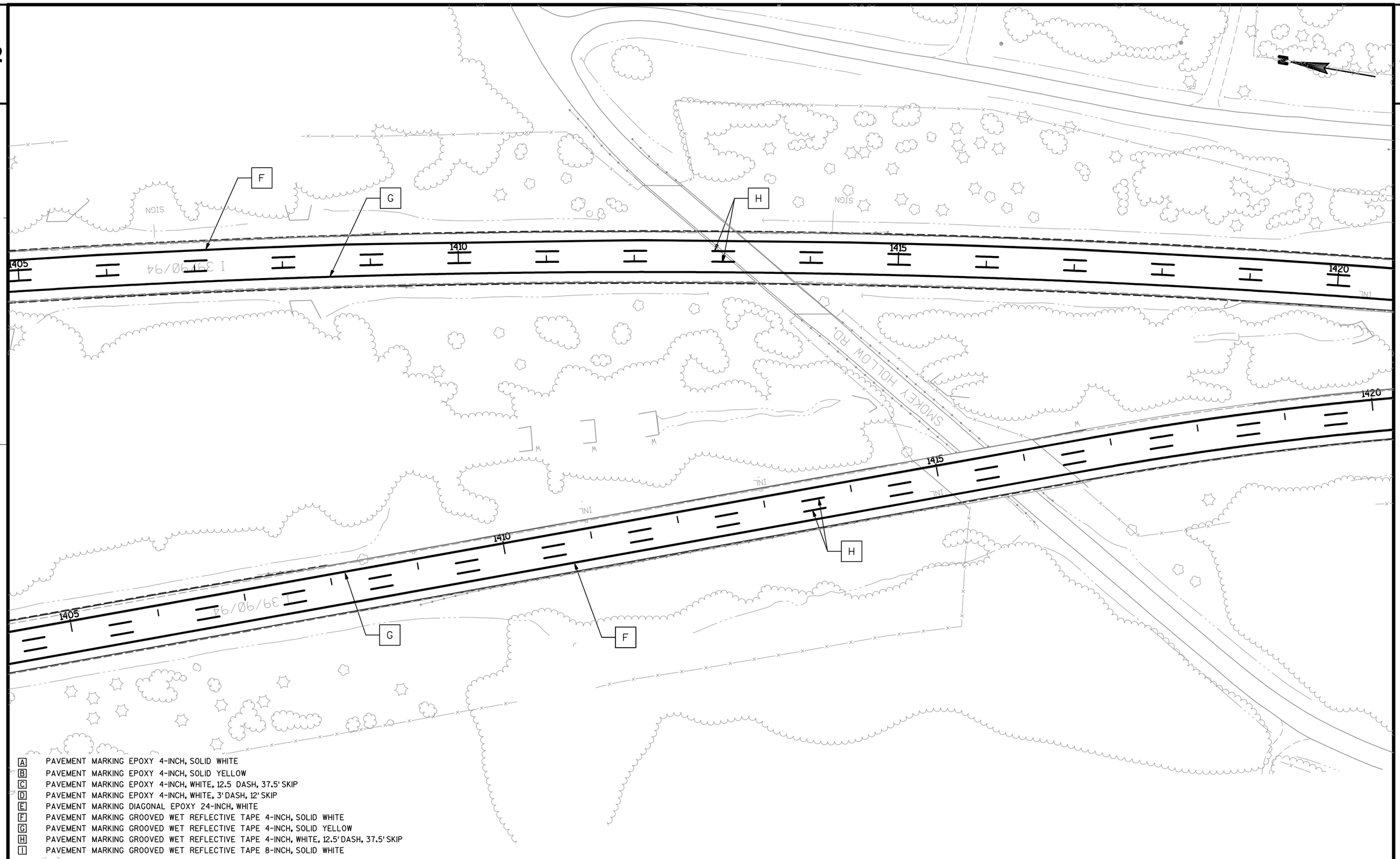
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 73	E



A PAVEMENT MARKING EPOXY 4-INCH, SOLID WHITE
B PAVEMENT MARKING EPOXY 4-INCH, SOLID YELLOW
C PAVEMENT MARKING EPOXY 4-INCH, WHITE, 12.5 DASH, 37.5' SKIP
D PAVEMENT MARKING EPOXY 4-INCH, WHITE, 3' DASH, 12' SKIP
E PAVEMENT MARKING DIAGONAL EPOXY 24-INCH, WHITE
F PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, SOLID WHITE
G PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, SOLID YELLOW
H PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, WHITE, 12.5' DASH, 37.5' SKIP
I PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, SOLID WHITE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 74	E

2



A PAVEMENT MARKING EPOXY 4-INCH, SOLID WHITE
B PAVEMENT MARKING EPOXY 4-INCH, SOLID YELLOW
C PAVEMENT MARKING EPOXY 4-INCH, WHITE, 12.5 DASH, 37.5' SKIP
D PAVEMENT MARKING EPOXY 4-INCH, WHITE, 3' DASH, 12' SKIP
E PAVEMENT MARKING DIAGONAL EPOXY 24-INCH, WHITE
F PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, SOLID WHITE
G PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, SOLID YELLOW
H PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, WHITE, 12.5' DASH, 37.5' SKIP
I PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, SOLID WHITE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 75	E

2

2

N

SANDERSON RD.

SEPTIC

T

F

G

H

1420

1425

1430

139/90/94

INL

SIGN

WM

- A PAVEMENT MARKING EPOXY 4-INCH, SOLID WHITE
- B PAVEMENT MARKING EPOXY 4-INCH, SOLID YELLOW
- C PAVEMENT MARKING EPOXY 4-INCH, WHITE, 12.5 DASH, 37.5' SKIP
- D PAVEMENT MARKING EPOXY 4-INCH, WHITE, 3' DASH, 12' SKIP
- E PAVEMENT MARKING DIAGONAL EPOXY 24-INCH, WHITE
- F PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, SOLID WHITE
- G PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, SOLID YELLOW
- H PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, WHITE, 12.5' DASH, 37.5' SKIP
- I PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, SOLID WHITE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 76	E

2

SANDERSON RD.

SIGN

F

G

H

1435

1440

1445

INL

M

I 39/90/94

G

H

F

A PAVEMENT MARKING EPOXY 4-INCH, SOLID WHITE
B PAVEMENT MARKING EPOXY 4-INCH, SOLID YELLOW
C PAVEMENT MARKING EPOXY 4-INCH, WHITE, 12.5 DASH, 37.5' SKIP
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I PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, SOLID WHITE

SIGN

SEPTIC

H

F

G

1450

1455

1460

F

H

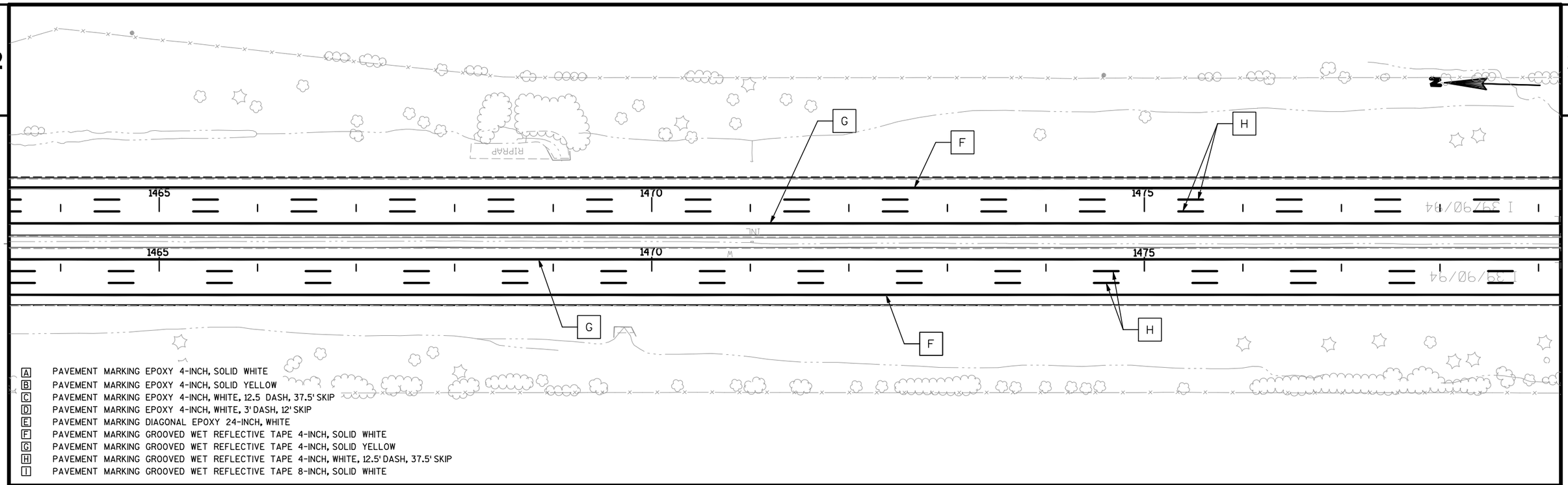
G

A PAVEMENT MARKING EPOXY 4-INCH, SOLID WHITE
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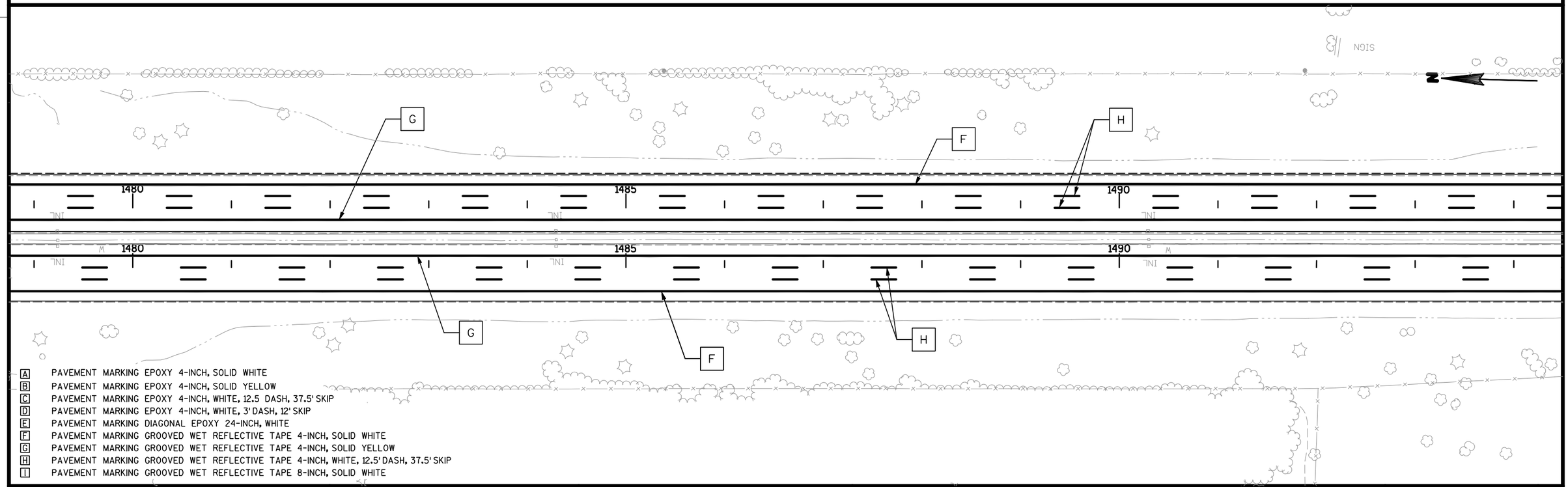
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 77	E

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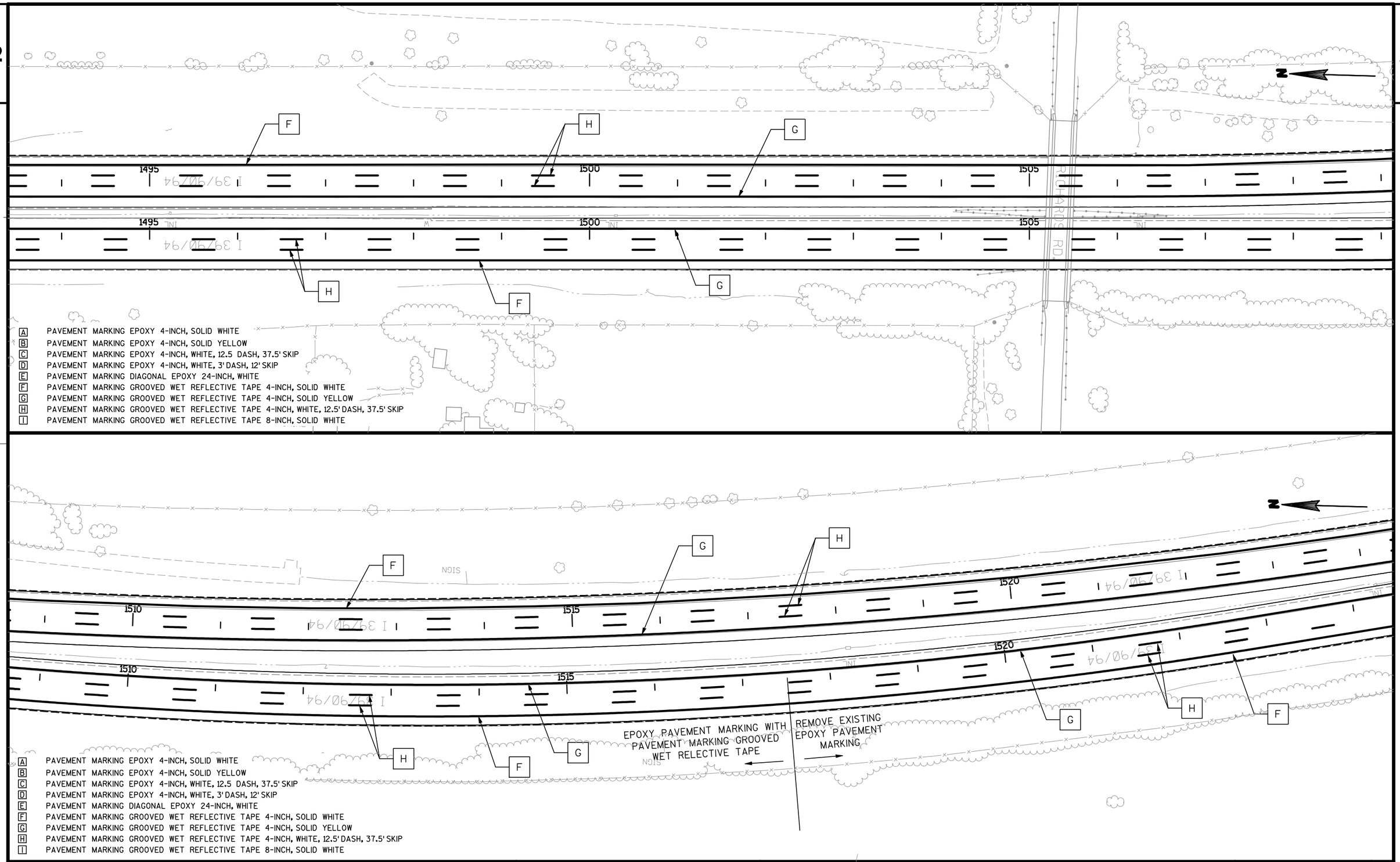


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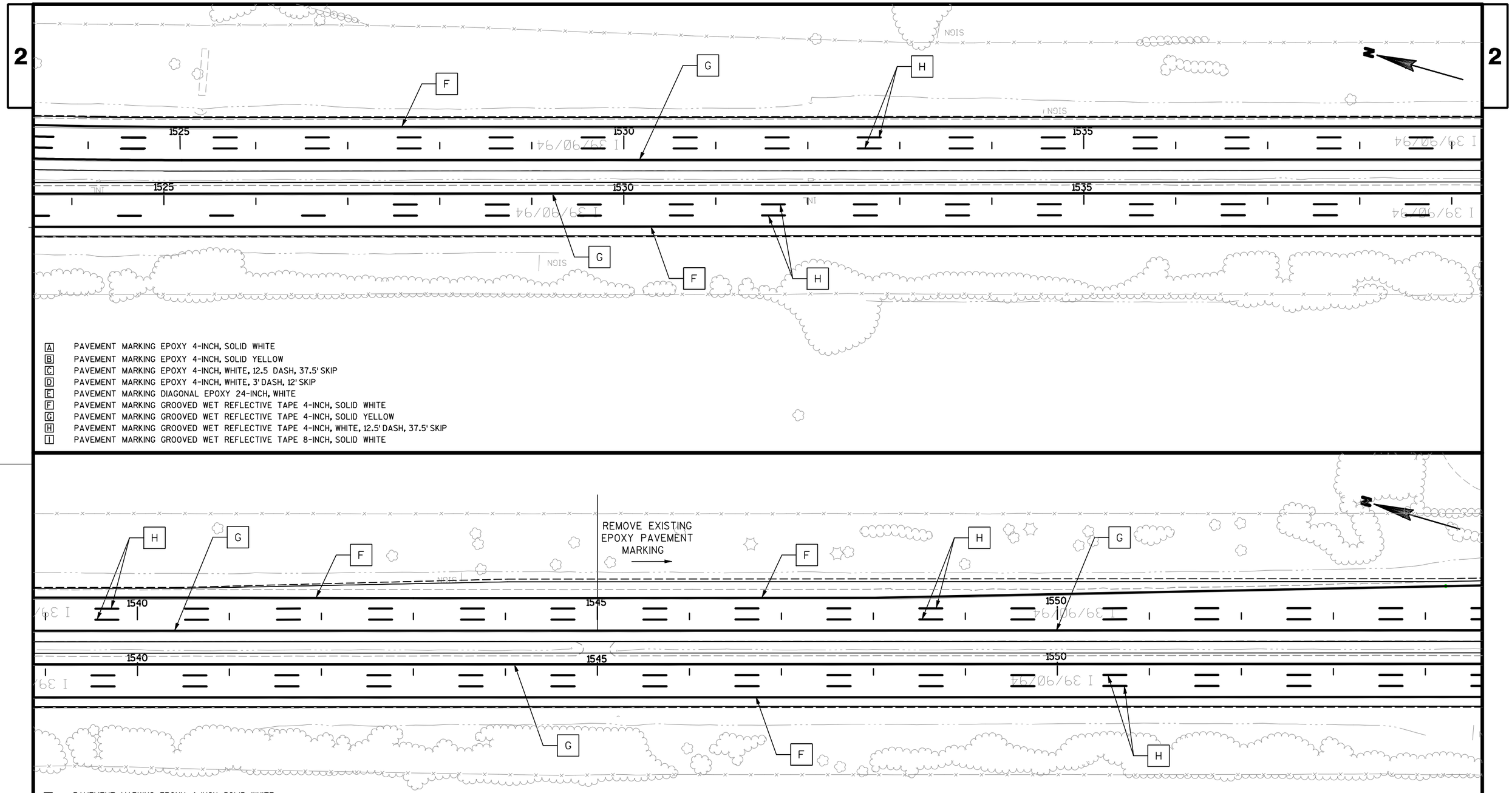


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PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 78	E



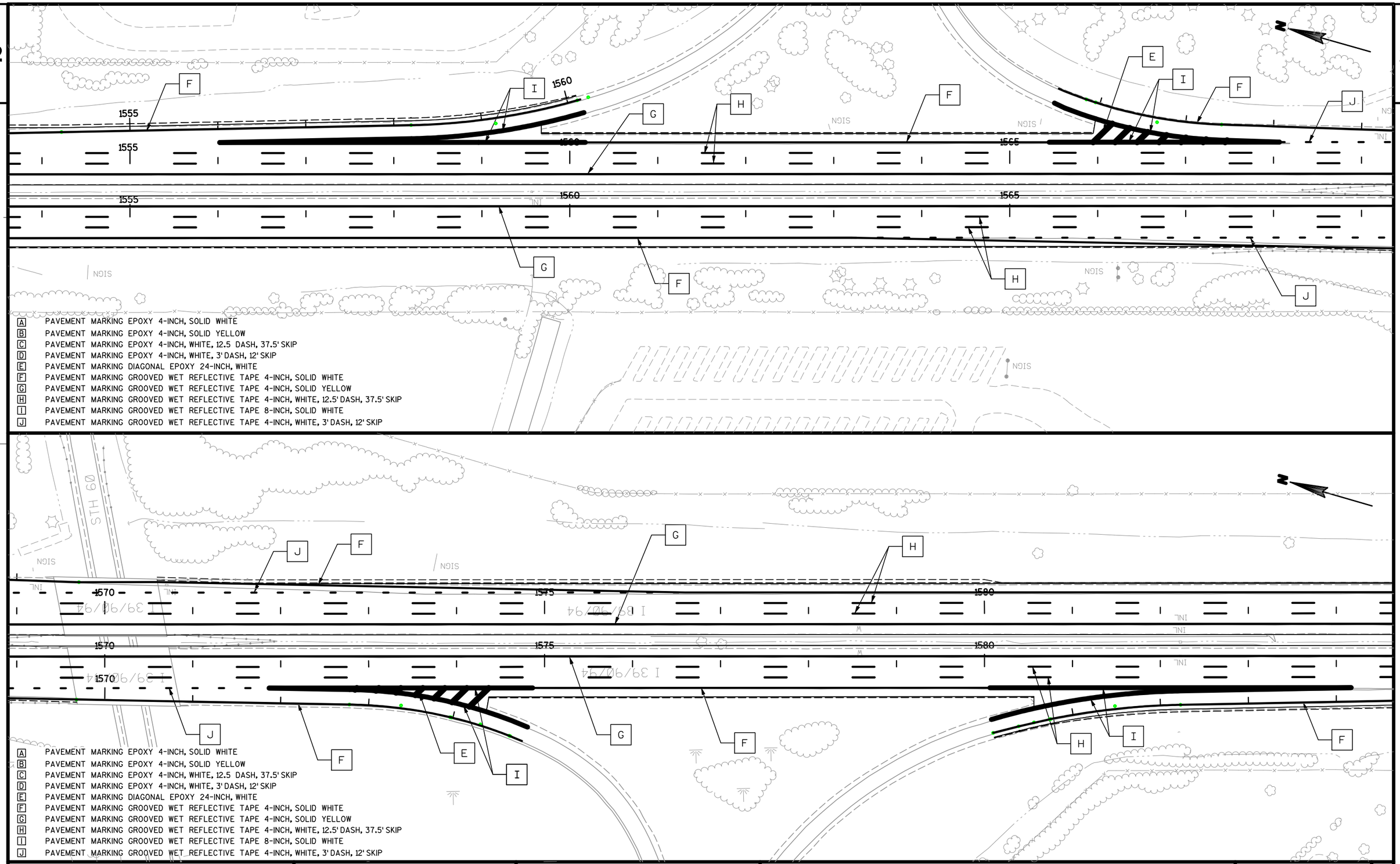
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 79	E



A PAVEMENT MARKING EPOXY 4-INCH, SOLID WHITE
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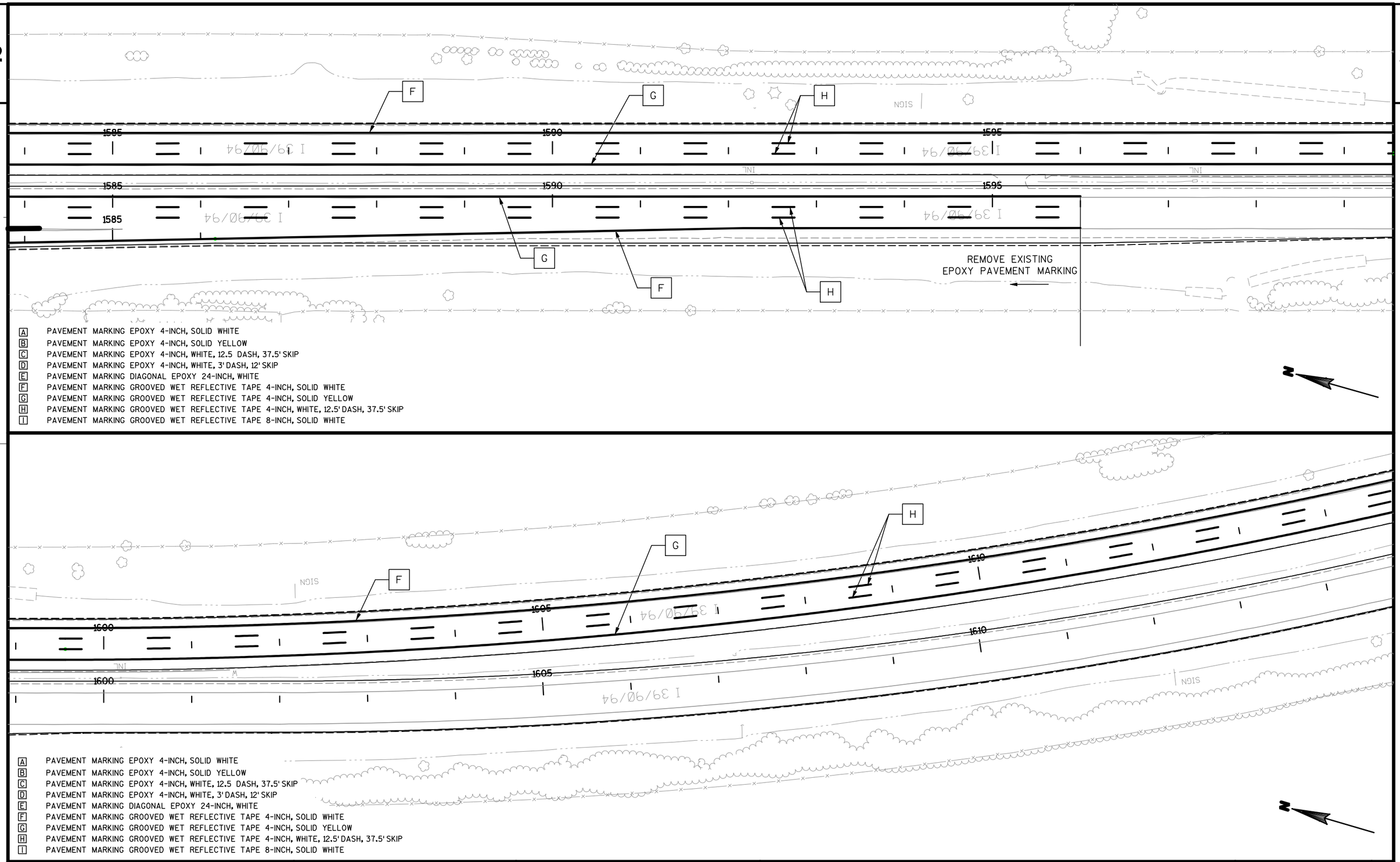
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I PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, SOLID WHITE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 80	E



PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 81	E

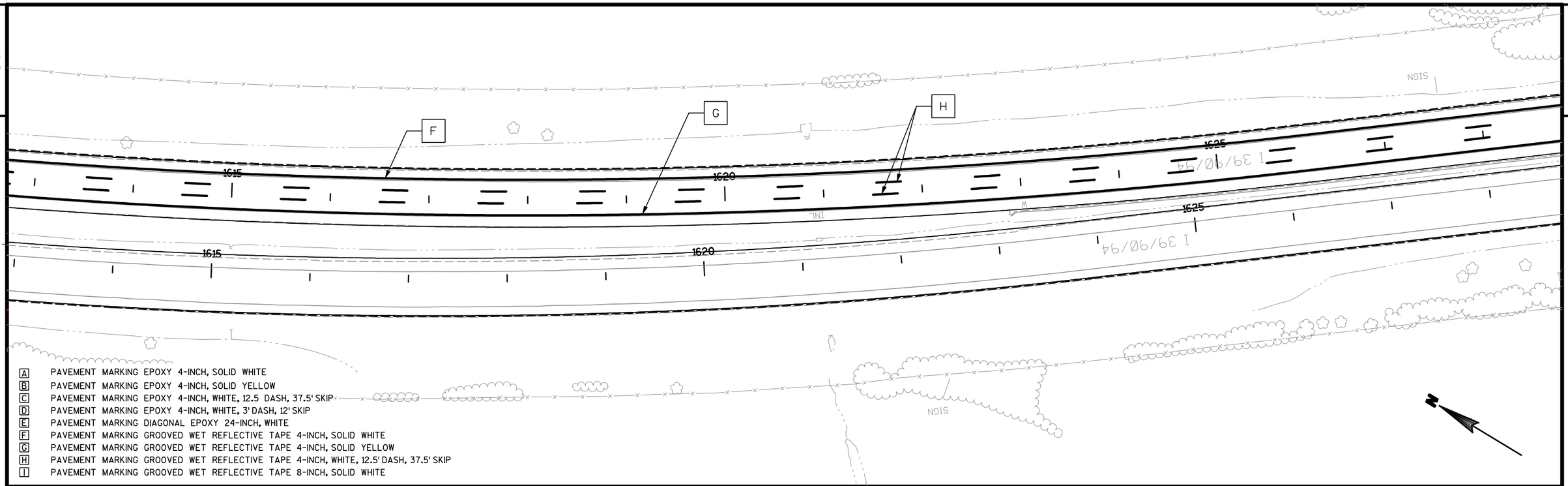
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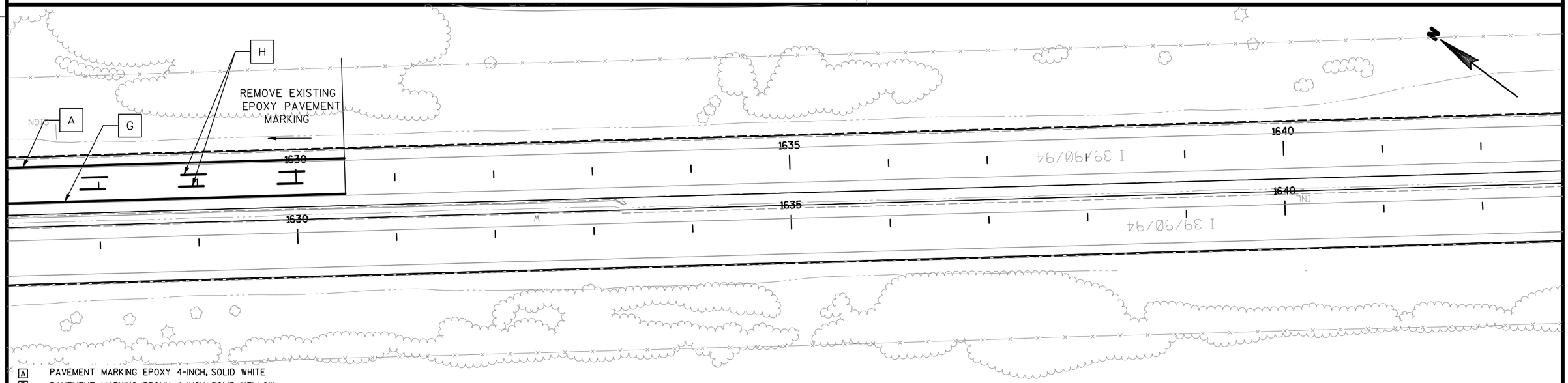
A PAVEMENT MARKING EPOXY 4-INCH, SOLID WHITE
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I PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, SOLID WHITE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 82	E

2



A PAVEMENT MARKING EPOXY 4-INCH, SOLID WHITE
B PAVEMENT MARKING EPOXY 4-INCH, SOLID YELLOW
C PAVEMENT MARKING EPOXY 4-INCH, WHITE, 12.5 DASH, 37.5' SKIP
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E PAVEMENT MARKING DIAGONAL EPOXY 24-INCH, WHITE
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G PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, SOLID YELLOW
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I PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, SOLID WHITE

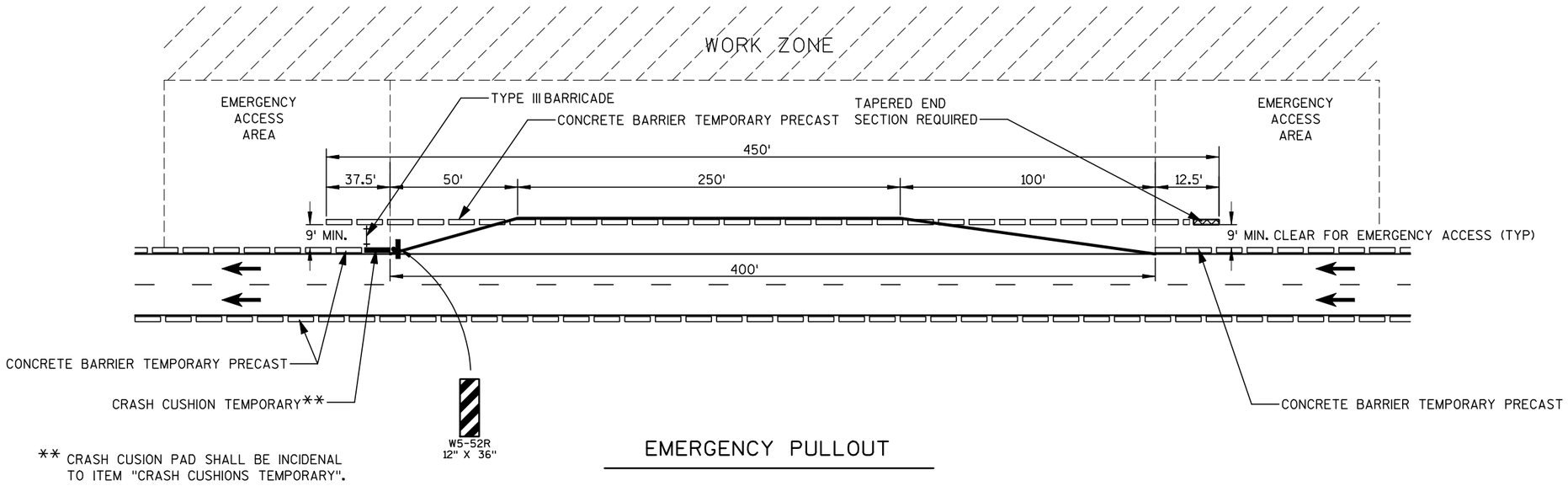


A PAVEMENT MARKING EPOXY 4-INCH, SOLID WHITE
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I PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, SOLID WHITE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 83	E

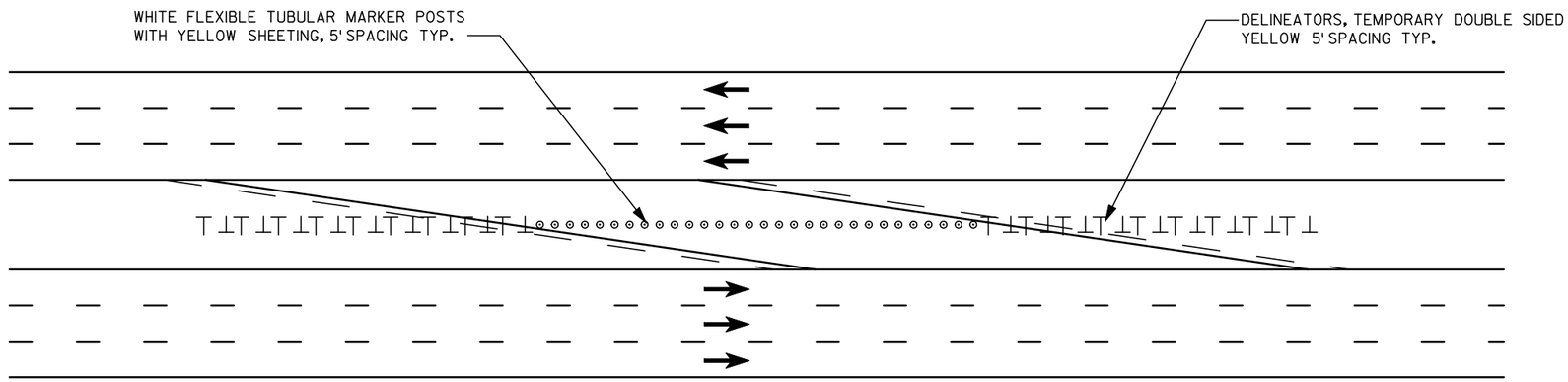
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NOTE: THIS DETAIL ONLY APPLIES TO EMERGENCY PULLOUTS ADJACENT TO THE WORK ZONE.



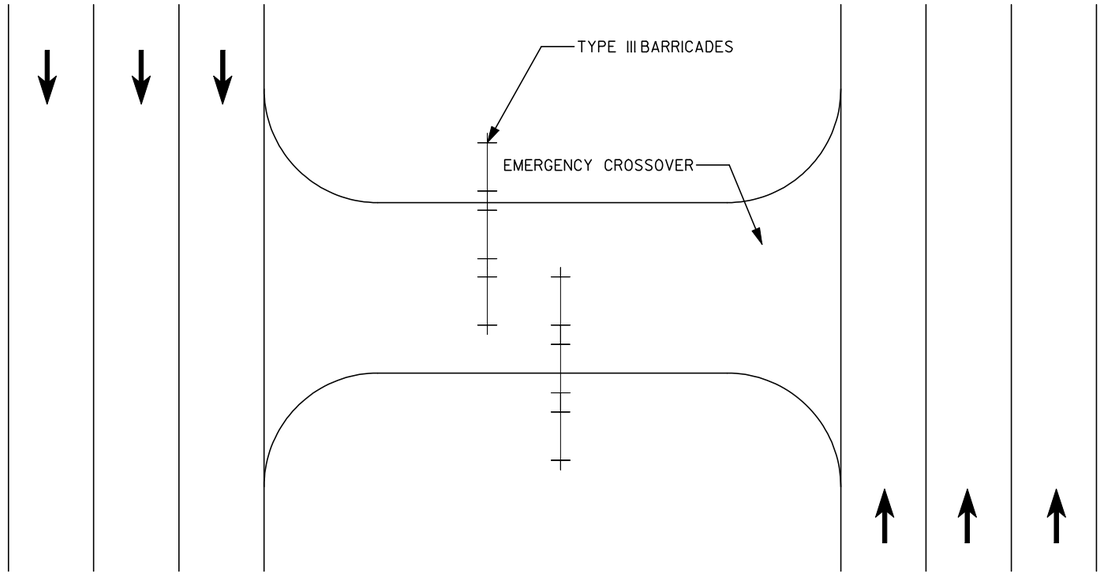
** CRASH CUSION PAD SHALL BE INCIDENAL TO ITEM "CRASH CUSHIONS TEMPORARY".

EMERGENCY PULLOUT



PROTECTION OF CROSSOVER NOT IN USE

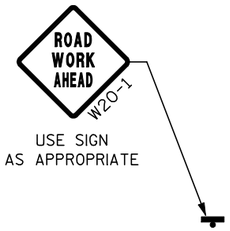
(WHEN CONSTRUCTION IS NOT TAKING PLACE)



EMERGENCY CROSSOVER CLOSURE DETAIL

TO BE CONSTRUCTED AT 7 CROSSOVERS NORTH OF THE PROJECT LIMITS AND 3 CROSSOVERS SOUTH OF THE PROJECT LIMITS OR OR AS DIRECTED BY THE ENGINEER

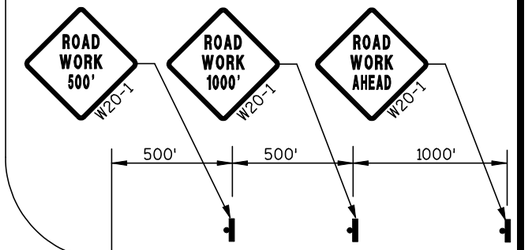
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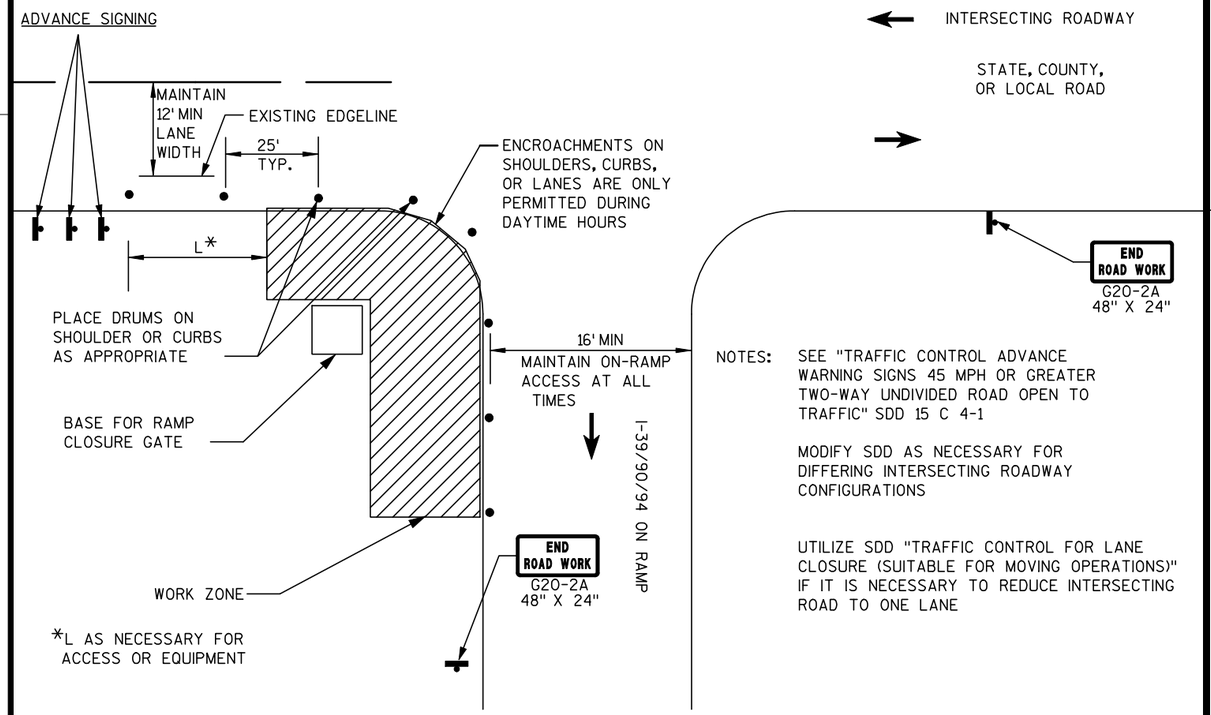
USE SIGN AS APPROPRIATE

LOCATIONS
CTH CS
STH 60

ADVANCE SIGNING



ADVANCE SIGNING



NOTES:

SEE "TRAFFIC CONTROL ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" SDD 15 C 4-1

MODIFY SDD AS NECESSARY FOR DIFFERING INTERSECTING ROADWAY CONFIGURATIONS

UTILIZE SDD "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)" IF IT IS NECESSARY TO REDUCE INTERSECTING ROAD TO ONE LANE

TRAFFIC CONTROL FOR INSTALLATION OF RAMP CLOSURE GATES

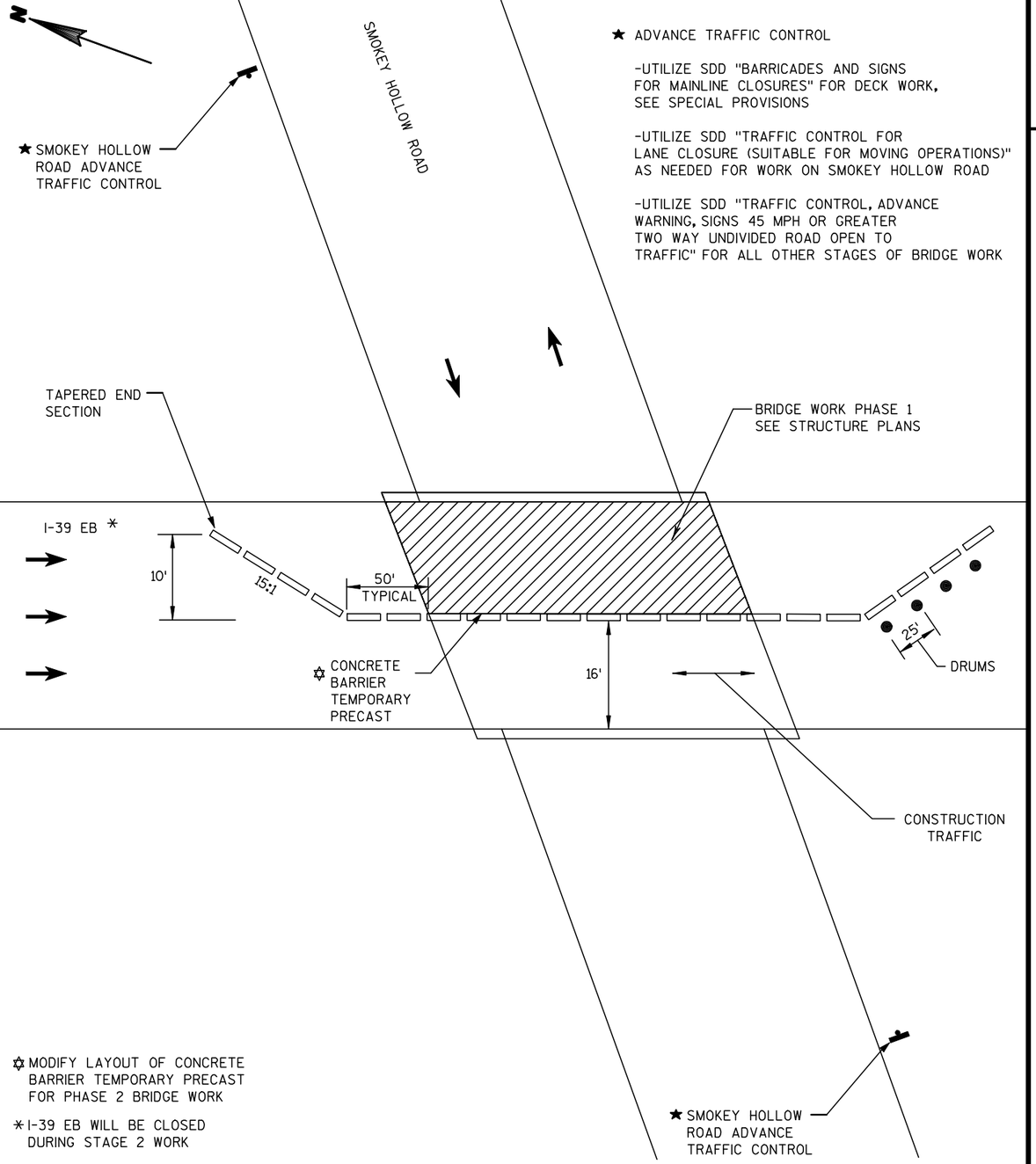
2

★ ADVANCE TRAFFIC CONTROL

-UTILIZE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR DECK WORK, SEE SPECIAL PROVISIONS

-UTILIZE SDD "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)" AS NEEDED FOR WORK ON SMOKEY HOLLOW ROAD

-UTILIZE SDD "TRAFFIC CONTROL, ADVANCE WARNING, SIGNS 45 MPH OR GREATER TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ALL OTHER STAGES OF BRIDGE WORK

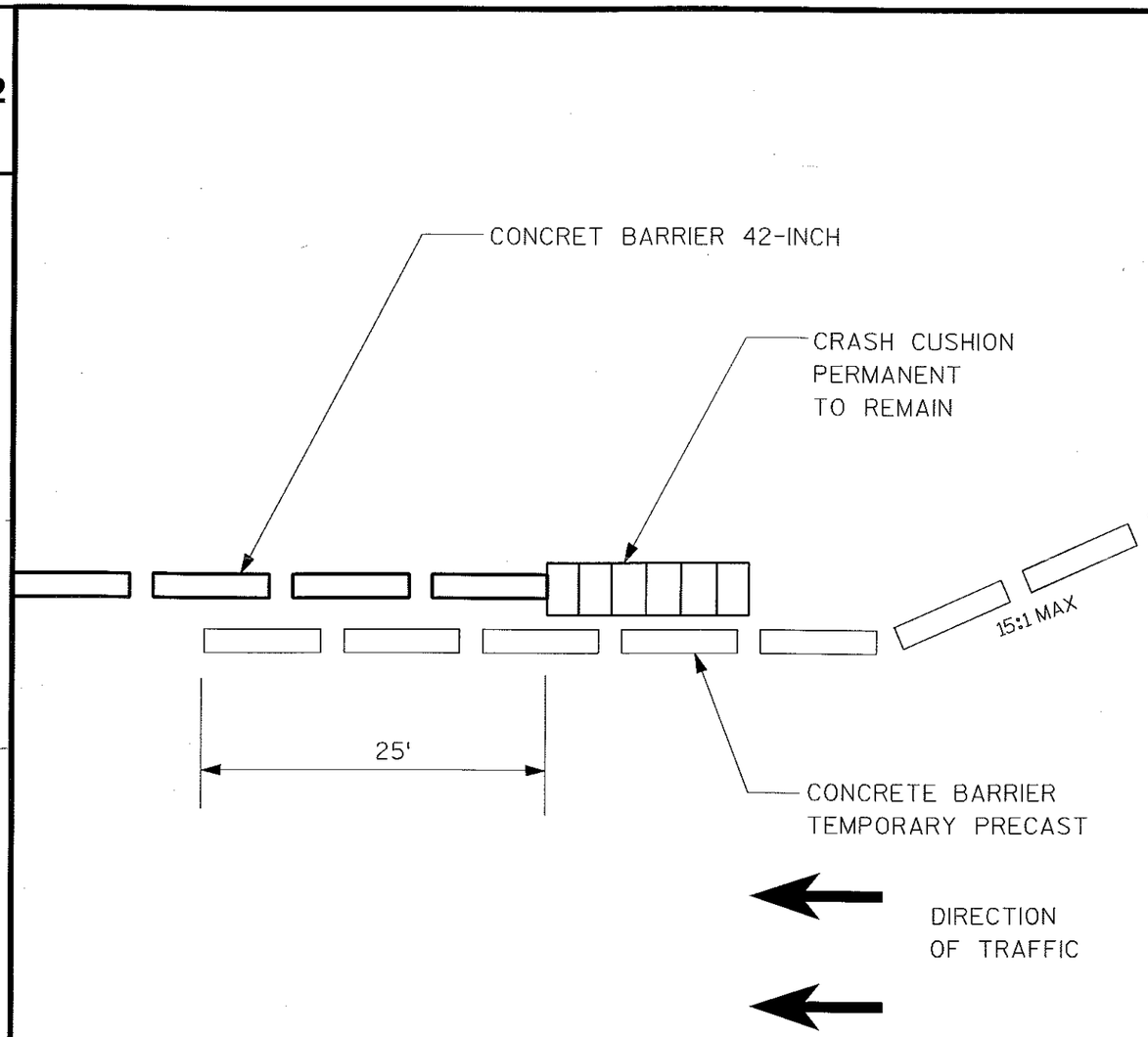


✡ MODIFY LAYOUT OF CONCRETE BARRIER TEMPORARY PRECAST FOR PHASE 2 BRIDGE WORK

* I-39 EB WILL BE CLOSED DURING STAGE 2 WORK

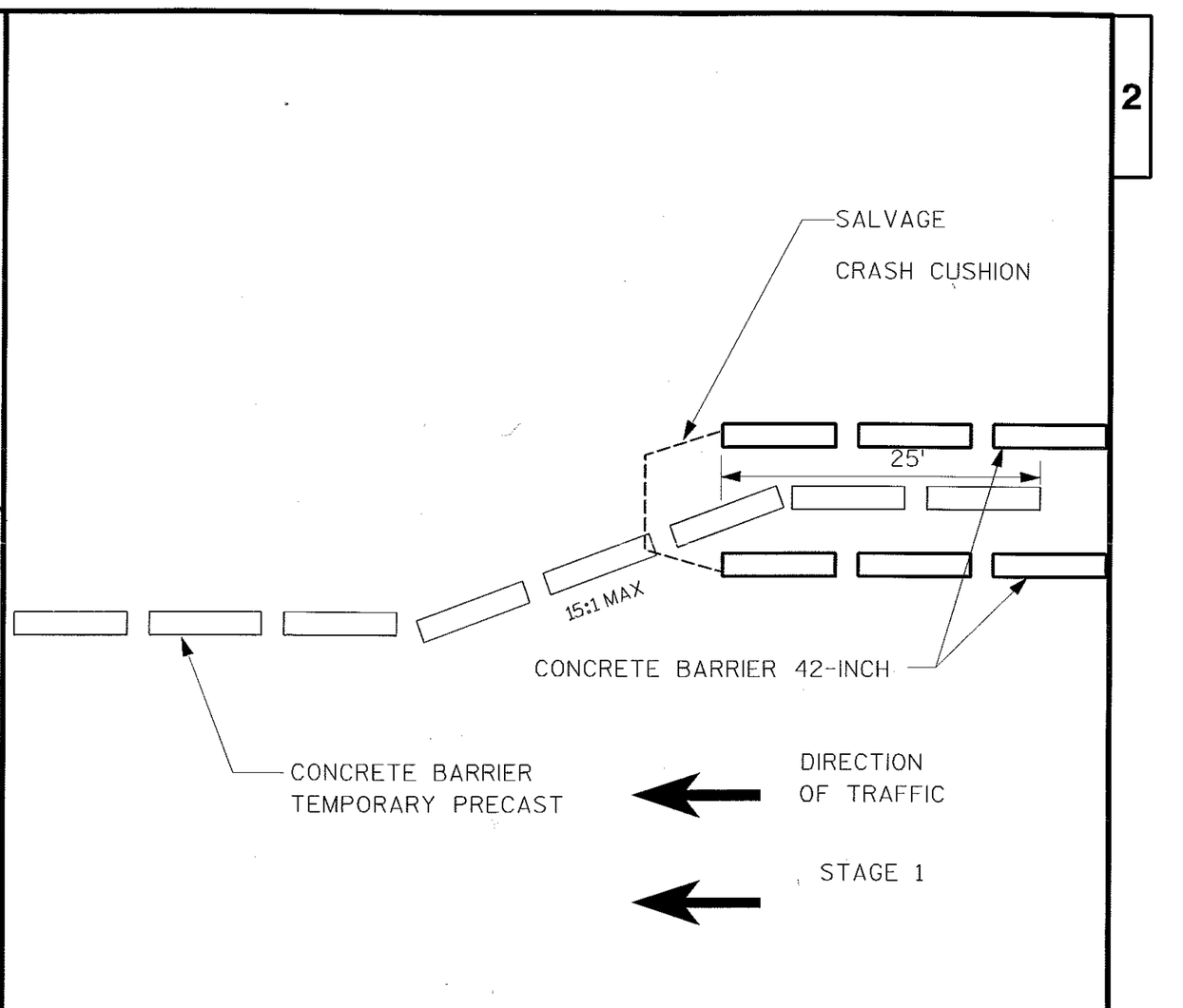
STAGE 2-SMOKEY HOLLOW ROAD BRIDGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL DETAILS	SHEET 86	E



TRANSITION-CONCRETE BARRIER TEMPORARY PRECAST TO
CONCRETE BARRIER 42-INCH

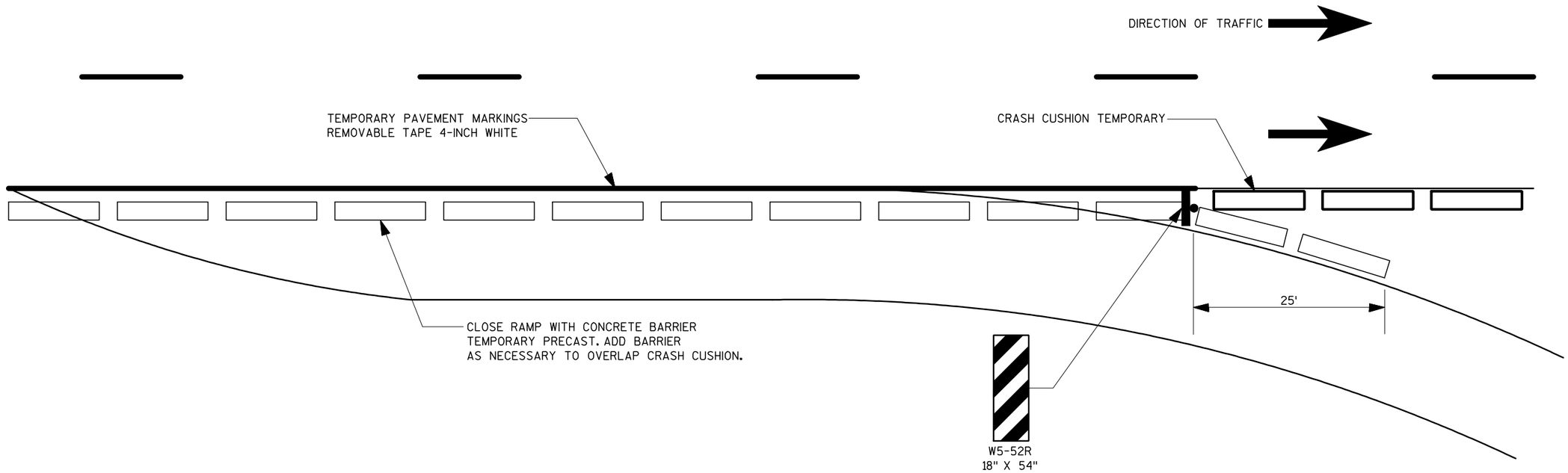
1582+23 - STAGE 1
1557+85 - STAGE 2



TRANSITION-CONCRETE BARRIER 42-INCH TO
CONCRETE BARRIER TEMPORARY PRECAST STATION 1557+85

1557+85 - STAGE 1

2

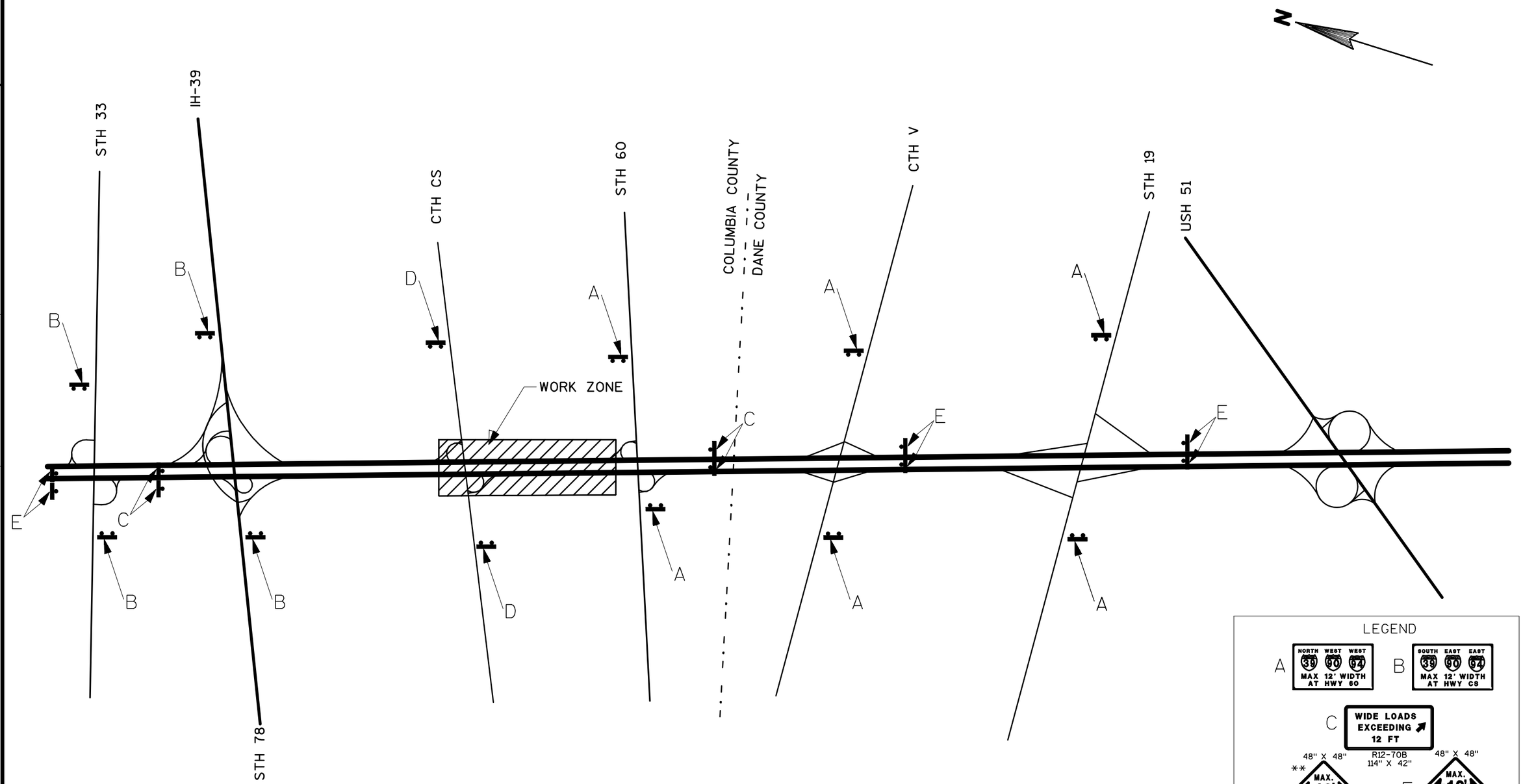


STAGE 2-R2

EXIT RAMP CLOSED

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL DETAILS	SHEET 88	E

2



** NOTE: TWO POSTS REQUIRED FOR SIGN ASSEMBLY D

LEGEND

A — NORTH WEST WEST 39 90 94 MAX 12' WIDTH AT HWY 60

B — SOUTH EAST EAST 39 90 94 MAX 12' WIDTH AT HWY CS

C — WIDE LOADS EXCEEDING 12 FT (48" X 48", R12-70B 114" X 42", 48" X 48")

D — ** MAX. 12' WIDTH W12-52 (M1-1 24" X 24" 39, M1-1 24" X 24" 90)

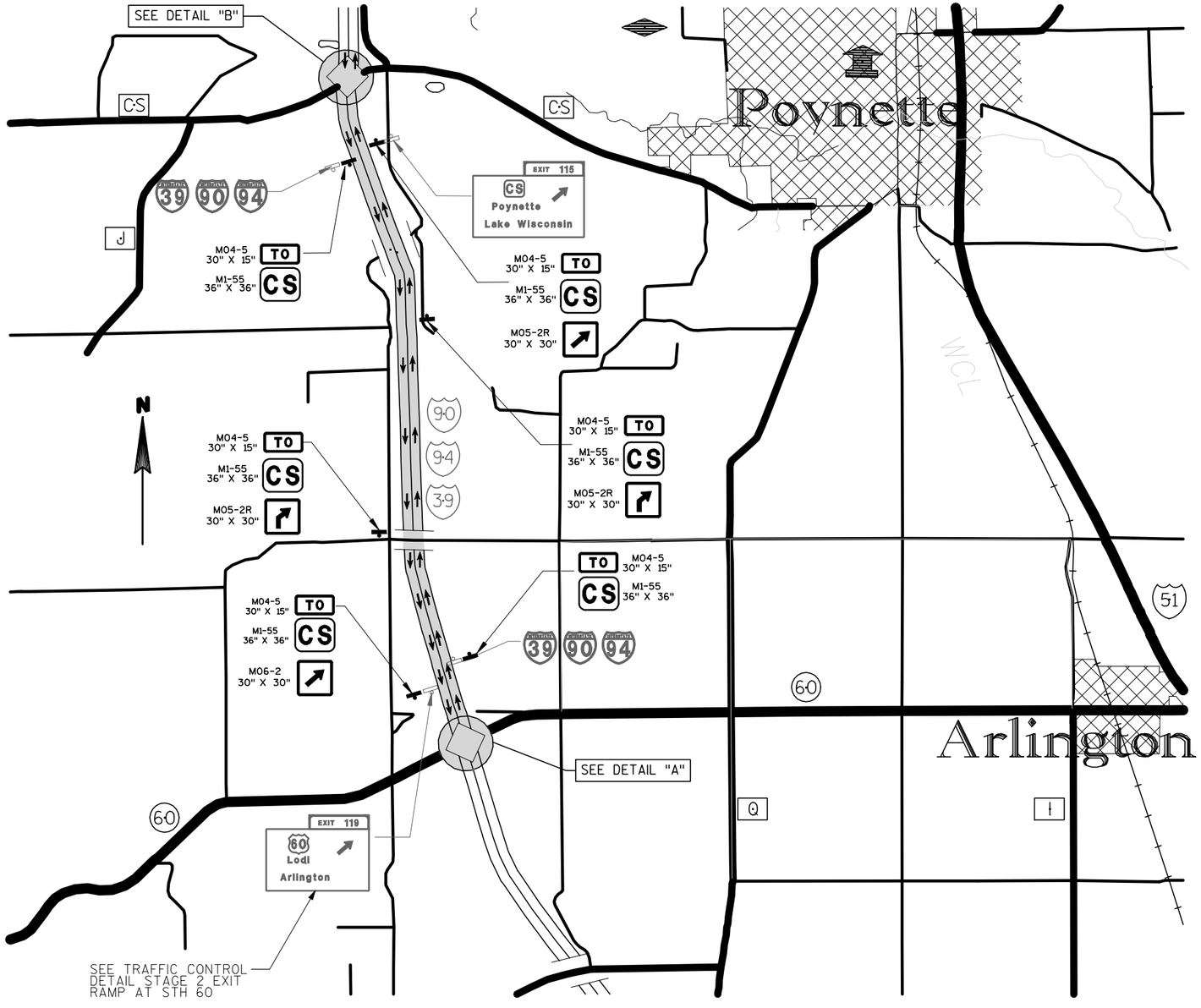
E — MAX. 12' WIDTH W12-52, XX MILES AHEAD, W057-52 48" X 36"

POST MOUNTED SIGN

DOUBLE POST MOUNTED SIGN

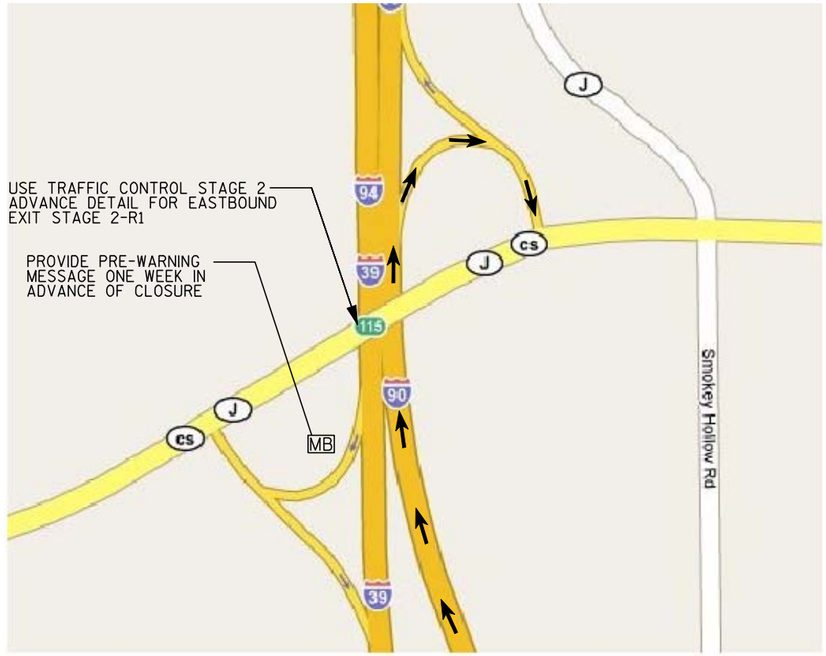
WIDE LOAD ADVANCE WARNING SIGNAGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL DETAILS	SHEET 89	E



LEGEND

- DETOUR ROUTE SIGN
- EXISTING SIGN
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- DETOUR ROUTE
- POST MOUNTED DETOUR ROUTE SIGN
- POST MOUNTED SIGN (EXISTING)
- TRAFFIC CONTROL DRUM
- DOUBLE POST MOUNTED DETOUR ROUTE SIGN
- DOUBLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH ATTACHED SIGN



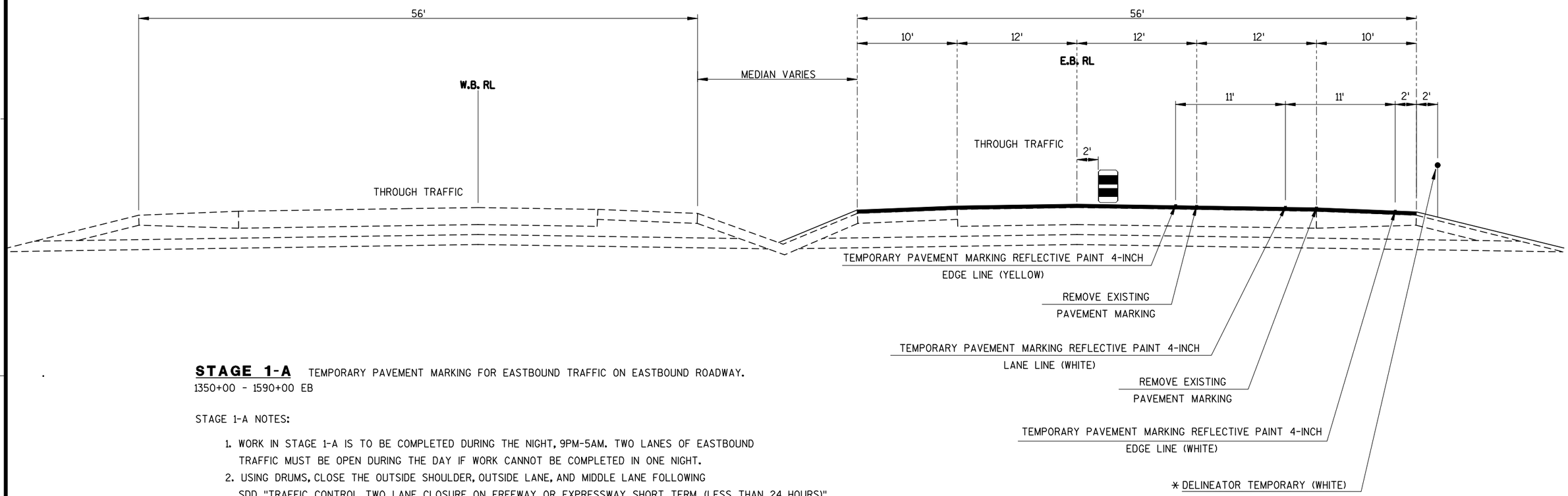
DETAIL B



DETAIL A

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	EASTBOUND OFF-RAMP CTH CS CLOSURE/DETOUR ROUTE STAGE 2-R2	SHEET 90	E

2



STAGE 1-A TEMPORARY PAVEMENT MARKING FOR EASTBOUND TRAFFIC ON EASTBOUND ROADWAY.
1350+00 - 1590+00 EB

STAGE 1-A NOTES:

1. WORK IN STAGE 1-A IS TO BE COMPLETED DURING THE NIGHT, 9PM-5AM. TWO LANES OF EASTBOUND TRAFFIC MUST BE OPEN DURING THE DAY IF WORK CANNOT BE COMPLETED IN ONE NIGHT.
2. USING DRUMS, CLOSE THE OUTSIDE SHOULDER, OUTSIDE LANE, AND MIDDLE LANE FOLLOWING SDD "TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)"
3. REMOVE EXISTING PAVEMENT MARKINGS (LANE LINES AND EDGELINES) FOR OUTSIDE LANE AND SHOULDER. SEE STAGE 1 PLANS FOR PAVEMENT MARKING REMOVAL LIMITS.
4. PLACE TEMPORARY PAVEMENT MARKING (LANE LINES AND EDGELINES) FOR EASTBOUND TRAFFIC.
5. INSTALL TEMPORARY DELINEATORS ALONG OUTSIDE EDGE OF EASTBOUND ROADWAY.

STAGE 1-A (NIGHTTIME)

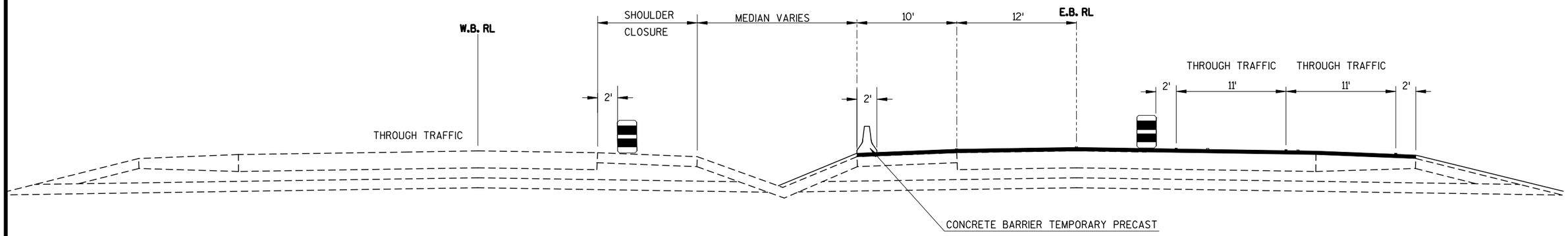
1350+00 - 1590+00 EB

*TEMPORARY DELINEATOR SPACING 400' NORMAL, 200' SPACING REQUIRED

EXTRA DELINEATORS

WB 1440 - 1447 (OUTSIDE)
EB 1410 - 1421 (OUTSIDE)
WB 1380 - 1395 (INSIDE)
WB 1418 - 1422 (INSIDE)

2



STAGE 1-B PLACE BARRIER WALL FOR COUNTER DIRECTIONAL TRAFFIC ON EASTBOUND LANES.

STAGE 1-B NOTE:

1. START TEMPORARY BARRIER WALL PLACEMENT WITH THE COUNTER DIRECTIONAL TEMPORARY BARRIER WALL AND TAPER.

STAGE 1-B DAYTIME NOTES:

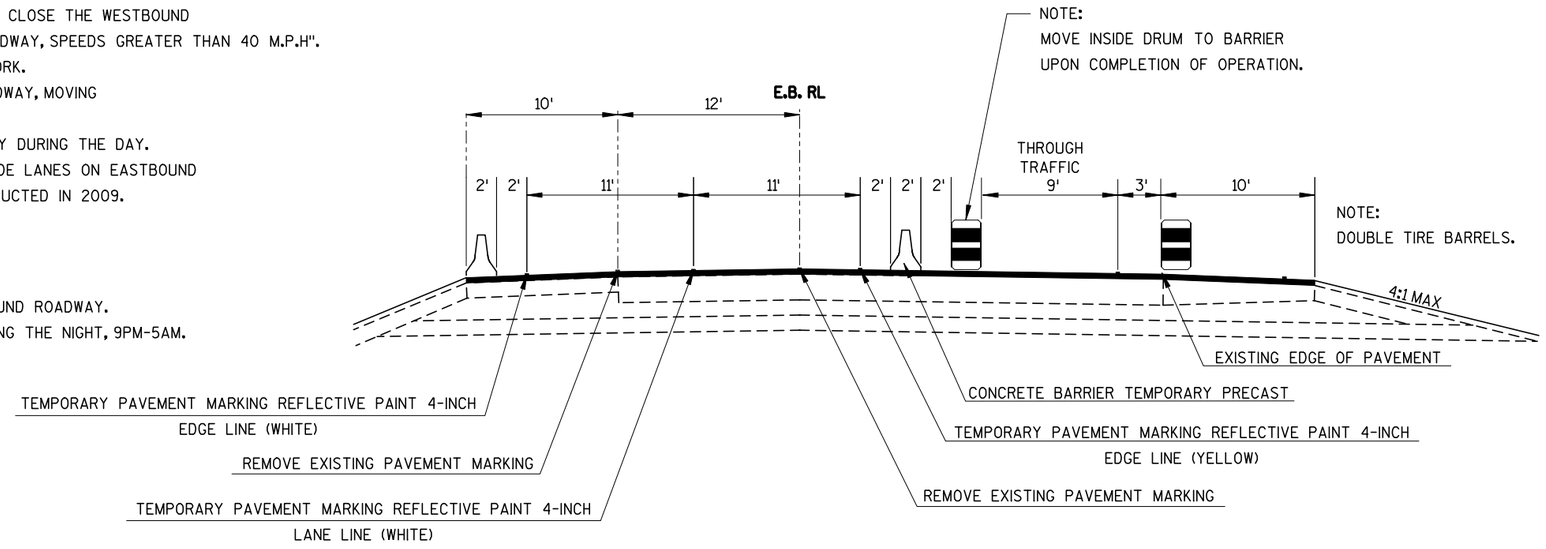
1. CLOSE THE LEFT LANES OF THE EASTBOUND ROADWAY USING SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." MODIFIED AS NECESSARY FOR A 3 LANE ROADWAY. CLOSE THE WESTBOUND MEDIAN SHOULDER USING SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H".
2. "TRUCKS USE LEFT LANE" SIGNS ARE TO BE ERECTED DURING STAGE 1-B DAYTIME WORK.
3. TEMPORARILY PLACE DRUMS TO CLOSE OFF THE LEFT SIDE OF THE EASTBOUND ROADWAY, MOVING TRAFFIC TO THE TWO TEMPORARY LANES PAINTED IN STAGE 1-A.
4. PLACE TEMPORARY BARRIER WALL ON THE MEDIAN EDGE OF THE EASTBOUND ROADWAY DURING THE DAY.
5. PLACE TEMPORARY PAVEMENT MARKING (EDGELINES & LANE LINES) FOR THE TWO INSIDE LANES ON EASTBOUND ROADWAY AND AT CROSSOVERS FOR WESTBOUND TRAFFIC. CROSSOVERS WERE CONSTRUCTED IN 2009.
6. PLACE DRUMS, DELINEATORS, AND BARRICADES FOR CROSSOVERS.

STAGE 1-B NIGHTTIME NOTES:

1. PLACE DRUMS TO SHIFT TRAFFIC TO THE OUTSIDE TEMPORARY LANE OF THE EASTBOUND ROADWAY.
2. PLACE TEMPORARY BARRIER WALL IN THE MIDDLE ON THE EASTBOUND ROADWAY DURING THE NIGHT, 9PM-5AM.
3. PULL BACK DRUMS TO ALLOW FOR STAGE 1-B DAYTIME CONFIGURATION.

STAGE 1-B (DAYTIME)

1350+00 - 1590+00 EB

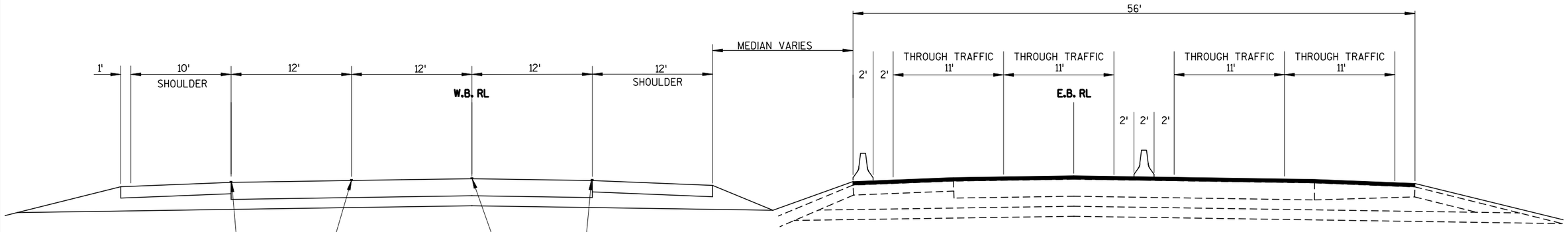


STAGE 1-B (NIGHTTIME)

1350+00 - 1590+00 EB

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1-B	SHEET 92	E

2



TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH
LANE LINE (WHITE)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH
EDGE LINE (YELLOW)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH
EDGE LINE (WHITE)

RECONSTRUCTED WESTBOUND LANES

STAGE 1-C

1350+00 - 1590+00 WB

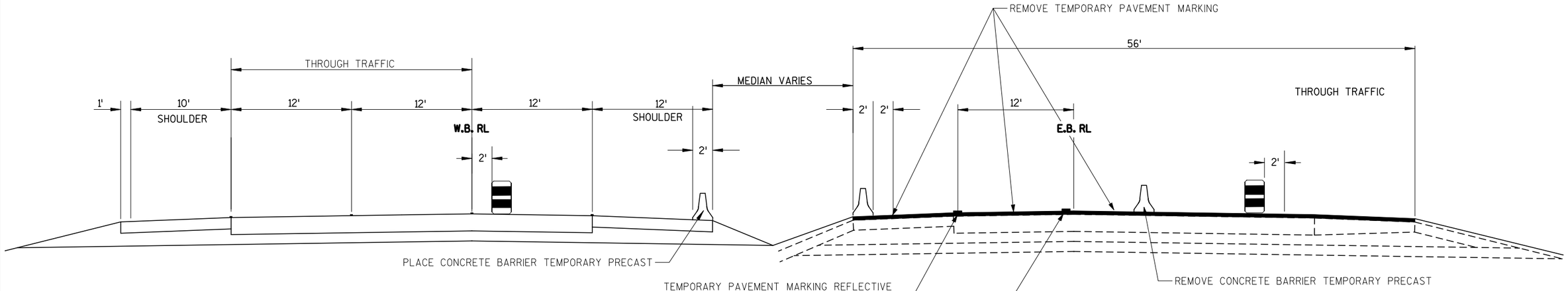
STAGE 1-C SHIFT WESTBOUND TRAFFIC OVER TO INSIDE LANES OF THE EASTBOUND ROADWAY AND RECONSTRUCT WESTBOUND ROADWAY.

STAGE 1-C NOTES:

1. SHIFT WESTBOUND TRAFFIC OVER TO THE INSIDE LANES OF THE EASTBOUND ROADWAY.
2. RECONSTRUCT WESTBOUND ROADWAY.

3. CONSTRUCT EMERGENCY PULLOUTS FOR OUTSIDE SHOULDER AND MEDIAN OF WESTBOUND ROADWAY.
4. PLACE TEMPORARY PAVEMENT MARKING ON WESTBOUND ROADWAY.

2



RECONSTRUCTED WESTBOUND LANES

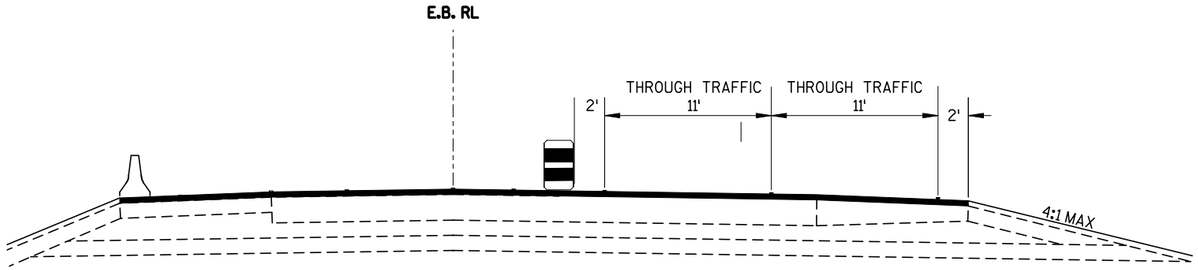
STAGE 1-D (NIGHTTIME)

1350+00 - 1590+00 EB

STAGE 1-D REMOVE BARRIER WALL FROM CENTER OF EASTBOUND ROADWAY

STAGE 1-D NOTES:

1. WORK IN STAGE 1D IS TO BE COMPLETED DURING THE NIGHT, 9PM-5AM. TWO LANES OF EASTBOUND TRAFFIC MUST BE OPEN DURING THE DAY IF WORK CANNOT BE COMPLETED IN ONE NIGHT.
2. SHIFT WESTBOUND TRAFFIC OVER TO THE OUTSIDE LANES OF THE WESTBOUND ROADWAY.
3. REMOVE BARRIER WALL FROM CENTER EASTBOUND ROADWAY.
4. PLACE TEMPORARY BARRIER AND TEMPORARY CRASH CUSHIONS ON MEDIAN SHOULDER OF WESTBOUND ROADWAY.
5. PLACE TEMPORARY PAVEMENT MARKING FOR MEDIAN LANE OF EASTBOUND ROADWAY.

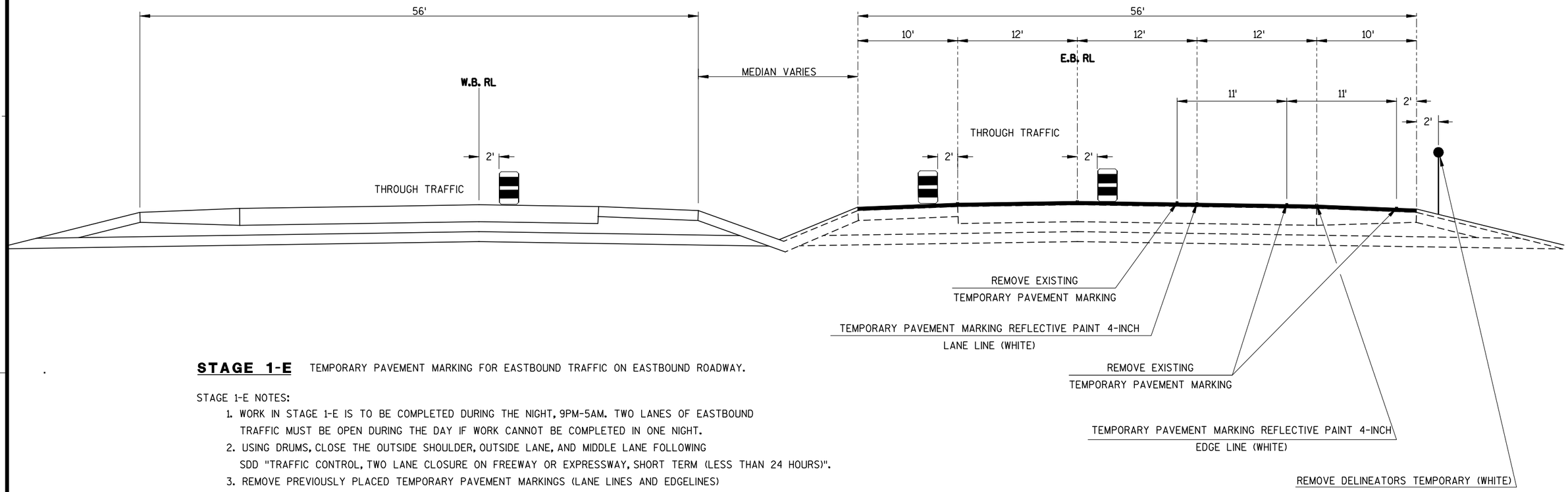


STAGE 1-D (DAYTIME)

1350+00 - 1590+00 EB

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1-D	SHEET 94	E

2



STAGE 1-E (NIGHTTIME)

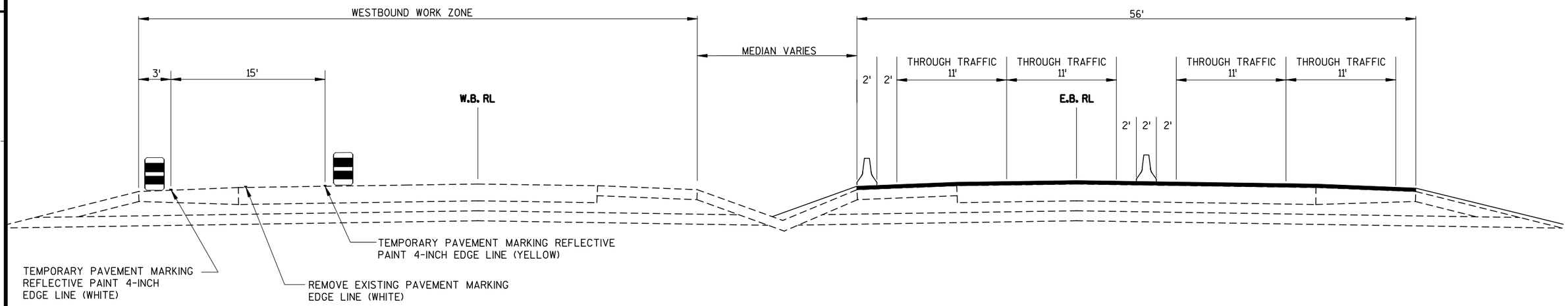
1350+00 - 1590+00 EB

STAGE 1-E TEMPORARY PAVEMENT MARKING FOR EASTBOUND TRAFFIC ON EASTBOUND ROADWAY.

STAGE 1-E NOTES:

1. WORK IN STAGE 1-E IS TO BE COMPLETED DURING THE NIGHT, 9PM-5AM. TWO LANES OF EASTBOUND TRAFFIC MUST BE OPEN DURING THE DAY IF WORK CANNOT BE COMPLETED IN ONE NIGHT.
2. USING DRUMS, CLOSE THE OUTSIDE SHOULDER, OUTSIDE LANE, AND MIDDLE LANE FOLLOWING SDD "TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)".
3. REMOVE PREVIOUSLY PLACED TEMPORARY PAVEMENT MARKINGS (LANE LINES AND EDGELINES) FOR OUTSIDE LANE AND SHOULDER. SEE STAGE 1 PLANS FOR PAVEMENT MARKING REMOVAL LIMITS.
4. PLACE TEMPORARY PAVEMENT MARKING (LANE LINES AND EDGELINES) FOR EASTBOUND TRAFFIC IN NORMAL 6-LANE CONFIGURATION.
5. REMOVE TEMPORARY DELINEATORS ALONG OUTSIDE EDGE OF EASTBOUND ROADWAY.
6. OPEN EASTBOUND AND WESTBOUND ROADWAYS TO UNRESTRICTED TRAFFIC UNTIL THE START OF STAGE 2 WORK.

2

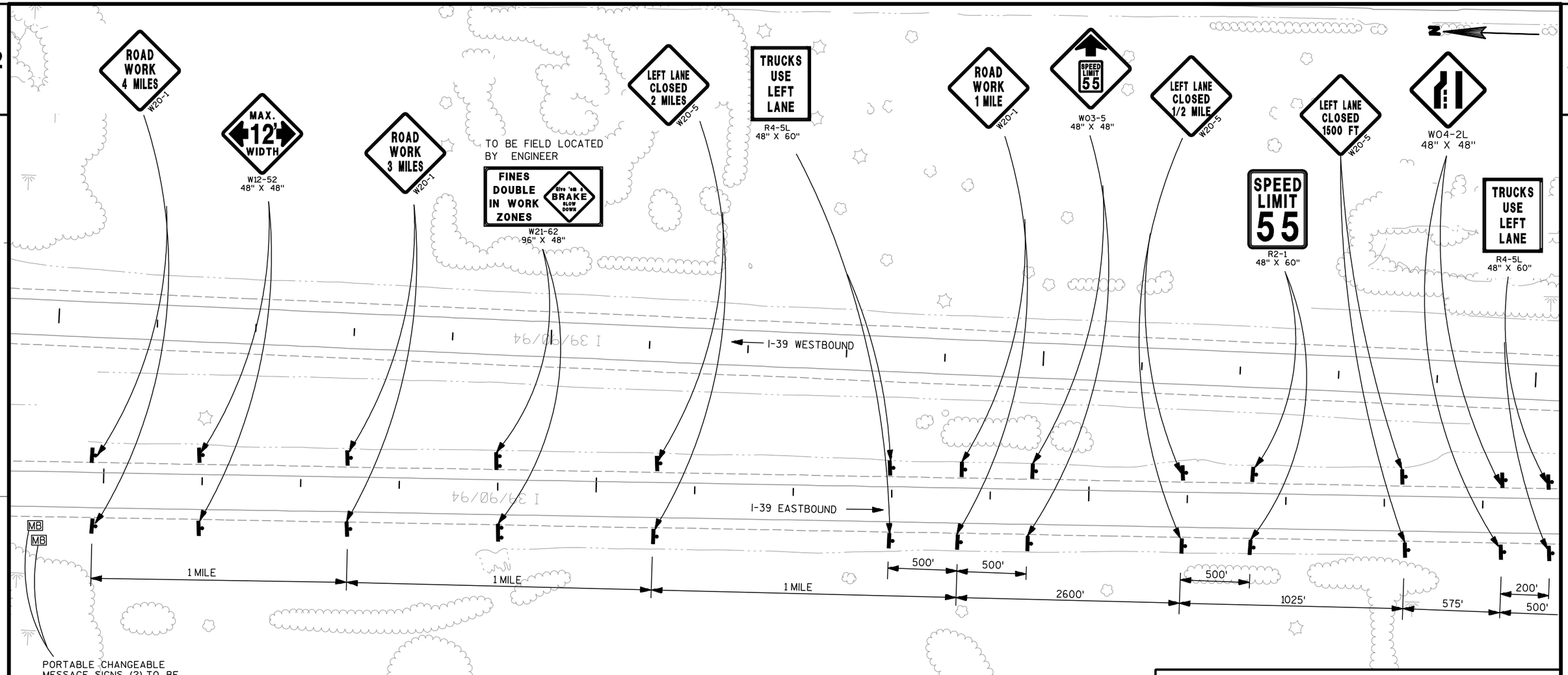


STAGE 1-R1

1350+00 - 1590+00 WB

STAGE 1-C

1350+00 - 1590+00 EB



PORTABLE CHANGEABLE MESSAGE SIGNS (2) TO BE FIELD LOCATED BY THE WDOT TRAFFIC UNIT.

NOTE:
SEE LANE CLOSURE SIGNING SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER"

NOTE:
THIS DRAWING IS NOT TO SCALE

TRAFFIC CONTROL NOTES

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

ANY EXISTING SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER. ALL STOP, WARNING AND REGULATORY SIGNS ON THE SIDEROADS SHALL NOT BE DISTURBED, EXCEPT WHEN NECESSARY TO COMPLETE THE WORK. THE SIGNS MUST THEN BE IMMEDIATELY RE-ESTABLISHED.

ALL "W" AND "WO" SIGNS SHALL BE 48"X48" UNLESS OTHERWISE NOTED

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

ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK ORANGE PANEL.

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1	SHEET 97	E

2

W04-2L
48" X 48"

END
ROAD WORK
G20-2A
48" X 24"

W04-3R
48" X 48"

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4-INCH
(SOLID WHITE LINE) WITH
TEMPORARY RAISED PAVEMENT
MARKINGS

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4-INCH
(WHITE EDGELINE) WITH
TEMPORARY RAISED PAVEMENT
MARKINGS

MAINTAIN 12' MINIMUM
LANE WIDTH FOR ON
RAMP TRAFFIC

REMOVE EXISTING PAVEMENT
MARKINGS, LANE LINES, AND
YELLOW EDGELINES

BOP STA = 1341+58.08

PC STA = 1342+08.08

500'

500'

12'
12'
12'

TEMPORARY PAVEMENT MARKING REFLECTIVE
PAINT 4-INCH (EDGE LINE YELLOW) WITH
TEMPORARY RAISED PAVEMENT MARKINGS

50'
TYPICAL

END OF CONCRETE BARRIER
TEMPORARY PRECAST

100'
TYPICAL

DRUMS SPACED @ 10 FOOT
INTERVALS AS NEEDED
IN FRONT OF ARROW BOARD

50'
TYPICAL

REMOVE EXISTING
PAVEMENT MARKING
LANE LINE

LANE
CLOSED
R11-2 (MOD)
48" X 30"

10'
12'
12'
12'
10'

XXXXXXXXXXXXXXXXXXXXXXXX

50'
TYPICAL

11'
11'

300'

DELINEATORS, TEMPORARY
400' TYP. SPACING
THROUGHOUT PROJECT

P.I. 1341+06.53

PC 1341+84.26

400'

1344+50

500'

475'

900' TAPER

450' BUFFER

600' TAPER

800' BUFFER

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4-INCH
(SOLID WHITE LINE)

REMOVE EXISTING
LANE LINES AND
WHITE EDGELINE

TRUCKS
USE
LEFT
LANE
R4-5L
48" X 60"

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4-INCH
(WHITE EDGELINE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4-INCH
(LANE LINE WHITE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4-INCH
(EDGE LINE YELLOW)

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

NOTE:
SEE LANE CLOSURE SIGNING
SDD "TRAFFIC CONTROL, LANE CLOSURE,
SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER"

NOTE:
THIS DRAWING IS NOT TO SCALE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1	SHEET 98	E

2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

NOTE: INSTALL TEMPORARY RAISED MARKERS ON EDGELINES AND CENTERLINE THROUGH CROSSOVER

ROAD WORK AHEAD W20-1

MAX. 12' WIDTH W12-52

END ROAD WORK G20-2A 48" X 24"

NO CONTRACTOR ACCESS OR PARKING

SEE RAMP STAGING DETAILS STAGE 1-R

W1-4B

SEE RAMP STAGING DETAIL STAGE 1-R1

CTH CS

BOP STA = 1355+95.99

EC STA = 1358+23.53

CONCRETE BARRIER TEMPORARY PRECAST

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE EDGELINE) WITH TEMPORARY RAISED PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGE LINE YELLOW)

END CONCRETE BARRIER TEMPORARY PRECAST 1348+00

R11-2 48" X 30" ROAD CLOSED

TYPE III BARRICADE

PROJECT LIMIT

1350 1345 1355 1385

290' 200' 200' 1000'

50' TYPICAL

14' 14' 11' 11' 11' 11' 12'

15:1 TAPER

800' BUFFER 1344+50

REMOVE ALL EXISTING PAVEMENT MARKING FROM END OF BUFFER THROUGH WORK ZONE, SOUTHBOUND

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (SOLID WHITE LINE) WITH TEMPORARY RAISED PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGE LINE YELLOW) WITH TEMPORARY RAISED PAVEMENT MARKINGS

W01-6 48" X 24"

W5-52L 18" X 54"

END MEDIAN CONCRETE BARRIER TEMPORARY PRECAST 1351+00

MOVE SIGN

WEST MILE 115 .6 D10-5 21" X 60"

EAST MILE 115 .6 D10-5 21" X 60"

CROSSOVER PC 1354+19.25

CONCRETE BARRIER TEMPORARY PRECAST (TYP.)

400' AT BEAMGUARD TERMINAL

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE YELLOW)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE WHITE)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (LANE LINE WHITE)

REMOVE EXISTING PAVEMENT MARKINGS THROUGHOUT WORKZONE EASTBOUND (TYPICAL)

SIGN RUINS

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1	SHEET 99	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

SEE SDD "TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER"

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

SEE RAMP STAGING DETAILS STAGE 1-R1

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGE LINE YELLOW) WITH TEMPORARY RAISED PAVEMENT MARKINGS

W1-8L
18" X 24"

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGE LINE WHITE) WITH TEMPORARY RAISED PAVEMENT MARKINGS

STA = 1361+48.45

STA = 1362+18.22

1360

1365

1370

1375

END CONCRETE BARRIER TEMPORARY PRECAST

CRASH CUSHIONS TEMPORARY

TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)

100'

STA = 1368+05.70

MOVE SIGN

WEST 90 MILE 116 .0
D10-5
21" X 60"

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (LANE LINE WHITE)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE WHITE)

MOVE SIGN

EAST 90 MILE 116 .0
D10-5
21" X 60"

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE YELLOW)

CONCRETE BARRIER TEMPORARY PRECAST (TYP.)

MOVE SIGN

EAST 90 MILE 115 .8
D10-5
21" X 60"

MOVE SIGN

WEST 90 MILE 115 .8
D10-5
21" X 60"

STA = 1363+97.42

W5-52L
18" X 54"

STA = 1366+05.70

EXIT
E5-1
60" X 48"

W01-6
48" X 24"
TYPE III BARRICADE

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

YIELD AHEAD
W03-2

500'

END ROAD WORK
G20-2A
48" X 24"

MAX. 12' WIDTH
W12-52

ROAD WORK AHEAD
W20-1

R1-2
36" X 31"

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

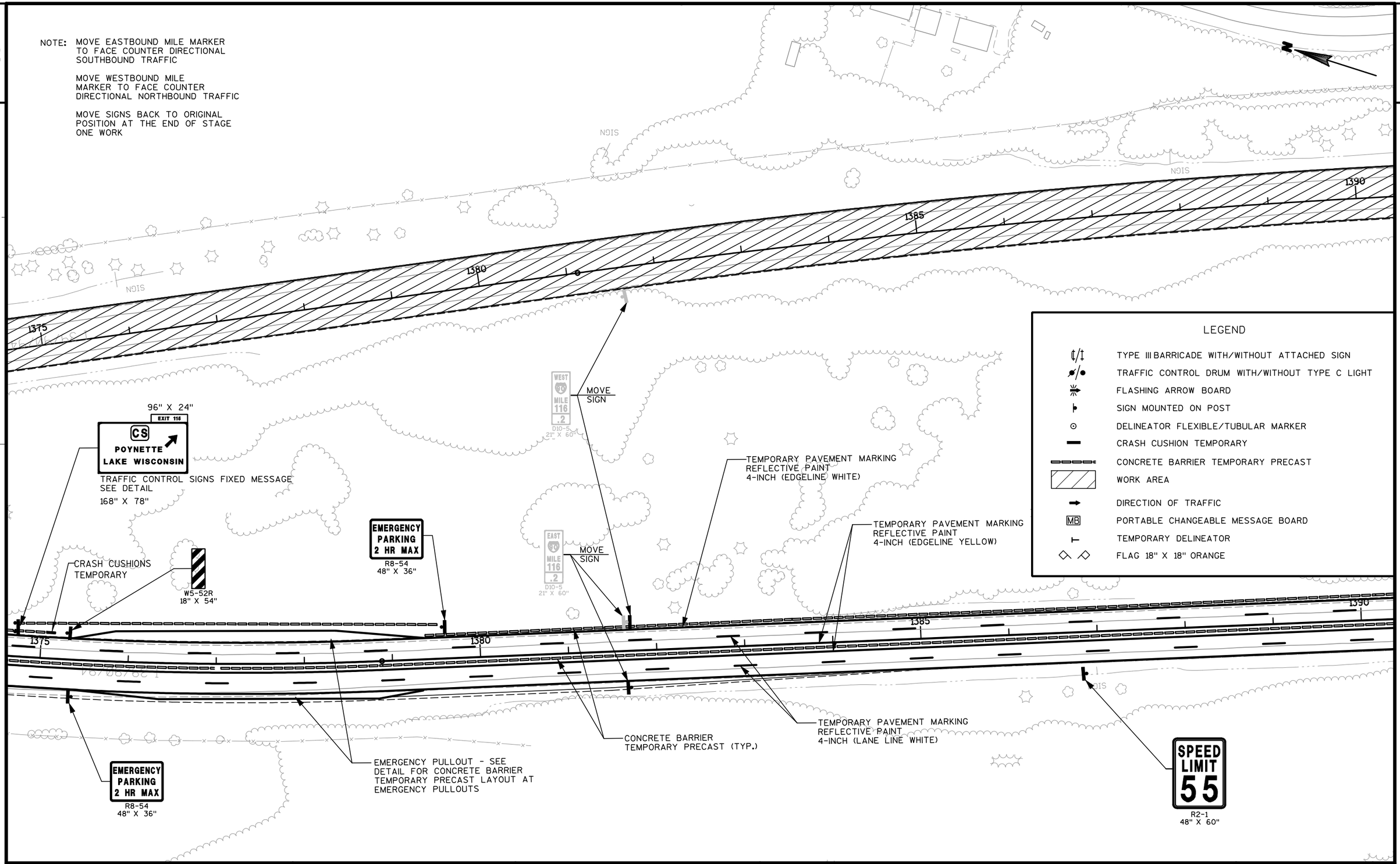
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1	SHEET 100	E

2

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1	SHEET 101	E

2

2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

1390 1395 1400 1405

MOVE SIGN — WEST MILE 116 .4 — D10-5 21" X 60"

MOVE SIGN — WEST MILE 116 .6 — D10-5 21" X 60"

EMERGENCY PULLOUT - SEE DETAIL FOR CONCRETE BARRIER TEMPORARY PRECAST LAYOUT AT EMERGENCY PULLOUTS

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE WHITE)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (LANE LINE WHITE)

CONCRETE BARRIER TEMPORARY PRECAST (TYP.)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE YELLOW)

CRASH CUSHION TEMPORARY

W5-52R 18" X 54"

EMERGENCY PARKING 1/4 MILE R8-53 48" X 36"

MOVE SIGN — EAST MILE 116 .4 — D10-5 21" X 60"

EMERGENCY PARKING 1/4 MILE R8-53 48" X 36"

MOVE SIGN — EAST MILE 116 .6 — D10-5 21" X 60"

EMERGENCY PARKING 2 HR MAX R8-54 48" X 36"

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1	SHEET 102	E

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

1405 1410 1415 1420

MOVE SIGN

96" X 24"
EXIT 116
CS
POYNETTE
LAKE WISCONSIN
1 MILE

TRAFFIC CONTROL SIGNS FIXED MESSAGE
SEE DETAIL
150" X 96"

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (LANE LINE WHITE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE YELLOW)

EMERGENCY PARKING
2 HR MAX
R8-54
48" X 36"

1408+23

CONCRETE BARRIER
TEMPORARY PRECAST (TYP.)

100'
TYPICAL

400'

ENDCONCRETE BARRIER
TEMPORARY PRECAST

EXISTING CONCRETE
BARRIER 42-INCH
TO REMAIN

MacKenzie
Environmental
Education
Center
EXIT 115

TRAFFIC CONTROL SIGNS FIXED MESSAGE
SEE DETAIL
144" X 108"

EMERGENCY PULLOUT - SEE
DETAIL FOR CONCRETE BARRIER
TEMPORARY PRECAST LAYOUT AT
EMERGENCY PULLOUTS

MOVE SIGN

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE WHITE)

EMERGENCY PARKING
1/4 MILE
R8-53
48" X 36"

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1	SHEET 103	E

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

MOVE SIGN

WEST MILE 117 .0 D10-5 21" X 60"

SANDERSON RD.

EMERGENCY PULLOUT - SEE DETAIL FOR CONCRETE BARRIER TEMPORARY PRECAST LAYOUT AT EMERGENCY PULLOUTS

1420 1425 1430

1420+56

CONCRETE BARRIER TEMPORARY PRECAST (TYP.)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE YELLOW)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE WHITE)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (LANE LINE WHITE)

EMERGENCY PARKING 2 HR MAX R8-54 48" X 36"

MOVE SIGN

EAST MILE 117 .0 D10-5 21" X 60"

EXISTING CONCRETE BARRIER 42-INCH TO REMAIN

SEPTIC

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1	SHEET 104 E

2

2

MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

CRASH CUSHIONS TEMPORARY

W5-52R
18" X 54"

MOVE SIGN

EAST 90 MILE 117 .2
D10-5
21" X 60"

EMERGENCY PARKING 2 HR MAX
R8-54
48" X 36"

1435 1440 1445

EMERGENCY PULLOUT - SEE DETAIL FOR CONCRETE BARRIER TEMPORARY PRECAST LAYOUT AT EMERGENCY PULLOUTS

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

MOVE SIGN

EAST 90 MILE 117 .4
D10-5
21" X 60"

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

1450 1455 1460

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE YELLOW)

CONCRETE BARRIER TEMPORARY PRECAST (TYP.)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE WHITE)

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

EMERGENCY PARKING 2 HR MAX
R8-54
48" X 36"

MOVE SIGN

EAST 90 MILE 117 .6
D10-5
21" X 60"

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (LANE LINE WHITE)

EMERGENCY PULLOUT - SEE DETAIL FOR CONCRETE BARRIER TEMPORARY PRECAST LAYOUT AT EMERGENCY PULLOUTS

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1	SHEET 105	E

2

2

MOVE EASTBOUND MILE MARKER
TO FACE COUNTER DIRECTIONAL
SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE
MARKER TO FACE COUNTER
DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL
POSITION AT THE END OF STAGE
ONE WORK

1465 1470 1475

1465 1470 1475

RIPRAP

MOVE SIGN

EAST MILE 117 .8
D10-5
21" X 60"

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE YELLOW)

1480 1485 1490

1480 1485 1490

MOVE SIGN

EAST MILE 118 .0
D10-5
21" X 60"

EMERGENCY PARKING 2 HR MAX
R8-54
48" X 36"

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

CONCRETE BARRIER
TEMPORARY PRECAST (TYP.)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE WHITE)

MOVE SIGN

EAST MILE 118 .2
D10-5
21" X 60"

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (LANE LINE WHITE)

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1	SHEET E

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WISDOT/CADDS SHEET 42

2

2

MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

MOVE SIGN

EAST 170 MILE 118 .4
D10-5
21" X 60"

CRASH CUSHIONS TEMPORARY

W5-52R
18" X 54"

1495 1500 1505

400' AT BEAM GUARD TERMINAL

DRUMS @ 50' SPACING

EMERGENCY PULLOUT - SEE DETAIL FOR CONCRETE BARRIER TEMPORARY PRECAST LAYOUT AT EMERGENCY PULLOUTS

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

EMERGENCY PARKING 2 HR MAX
R8-54
48" X 36"

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

1510 1515 1520

EMERGENCY PULLOUT - SEE DETAIL FOR CONCRETE BARRIER TEMPORARY PRECAST LAYOUT AT EMERGENCY PULLOUTS

MOVE SIGN

EAST 170 MILE 118 .6
D10-5
21" X 60"

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE YELLOW)

CONCRETE BARRIER TEMPORARY PRECAST (TYP.)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE WHITE)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (LANE LINE WHITE)

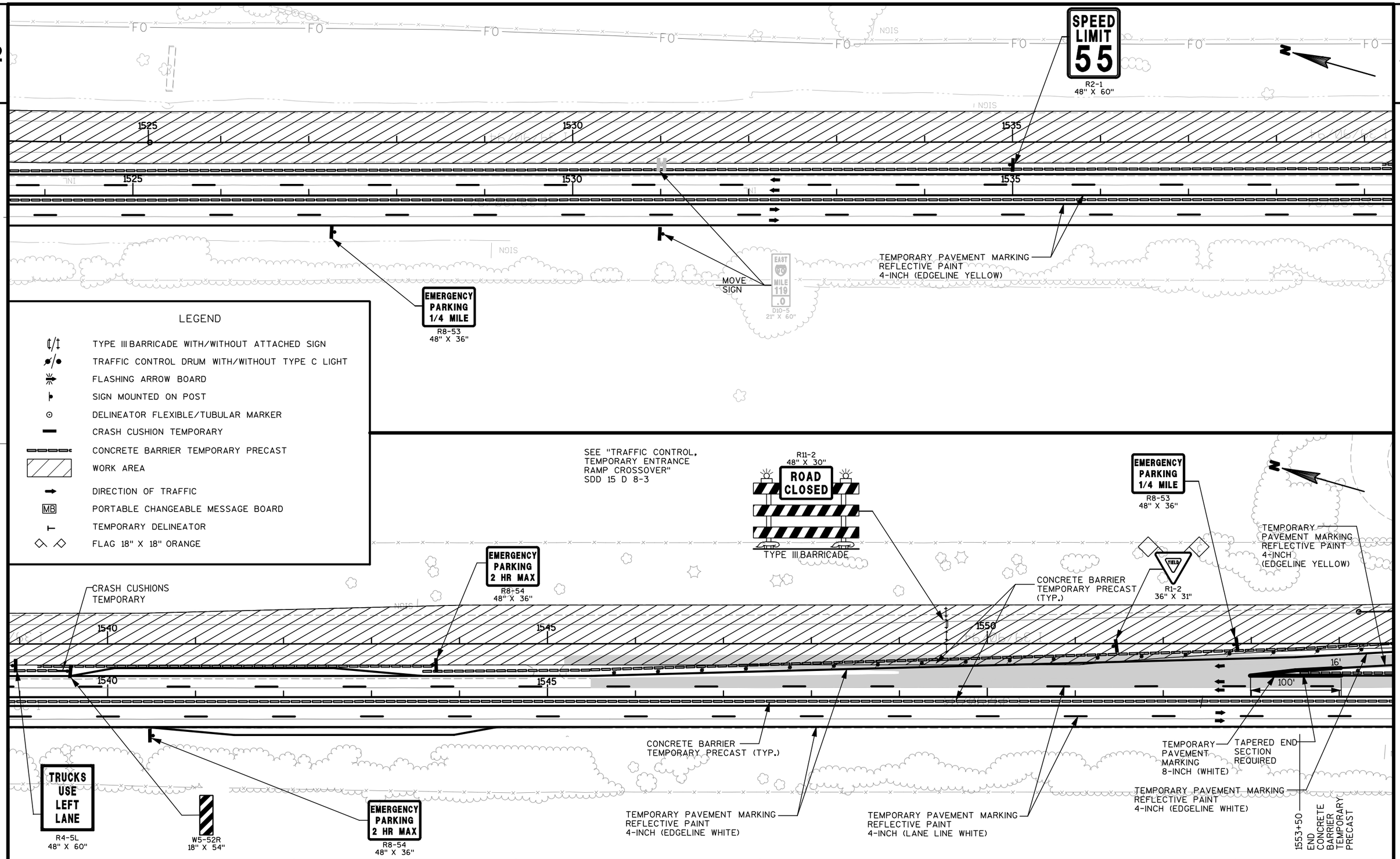
MOVE SIGN

EAST 170 MILE 118 .8
D10-5
21" X 60"

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 42

2



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL STAGE 1	SHEET 108	E

STAGE 1-R1
TRAFFIC CONTROL FOR STH 60
NORTHBOUND ON RAMP SHOWN.

SEE DETAILS FOR OTHER RAMP STAGES

ROAD WORK AHEAD
W20-1

MAX. 12' WIDTH
W12-52

500'

END ROAD WORK
G20-2A
48" X 24"

TEMPORARY ON-RAMP STAGE 1-R1

YIELD AHEAD
W03-2

W01-4L

45 M.P.H.
W013-1
24" X 24"

TEMPORARY OFF-RAMP STAGE 1-R1

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

R1-2
36" X 31"

1556+01.36
CONSTRUCTION LIMITS

1557+85
CONCRETE BARRIER 42-INCH

500'

1560

CRASH CUSHIONS TEMPORARY 1557+50

1555

1560

1565

PI Sta = 1554+51.62

EOP Sta = 1553+01.62

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH YELLOW

TRANSITION PERMANENT MEDIAN BARRIER TO TEMPORARY BARRIER WALL STATION 1557+85. SEE DETAIL

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH WHITE

CONCRETE BARRIER 42-INCH

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH YELLOW

W04-1
36" X 36"

OLD STH 60

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL STAGE 1	SHEET 109	E

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

NOTE:
THIS DRAWING IS NOT TO SCALE

NOTE:
SEE LANE CLOSURE SIGNING
SDD 15 D 3-1

TEMPORARY PAVEMENT MARKING, 4-INCH REMOVABLE TAPE (YELLOW)

UTILIZE EXISTING LANE 3 EDGELINE, LANE LINE, AND RAMP TAPER LINE FOR OFF RAMP STAGE 1 R1

TEMPORARY OFF RAMP STAGE 1 R1

TRANSITION TEMPORARY BARRIER WALL TO PERMANENT MEDIAN BARRIER WALL, STATION 1582+23. SEE DETAIL

1582+23
CONCRETE BARRIER
42-INCH-MEDIAN

1583+75
TAPER-CONCRETE
BARRIER TEMPORARY
PRECAST

TRUCKS USE LEFT LANE
R4-5L
48" X 60"

1570 1575 1580

50' TYP.

100'

EXIT
EXISTING TO REMAIN

TEMPORARY PAVEMENT MARKING 8-INCH

END ROAD WORK
G20-2A
48" X 24"

YIELD AHEAD
W03-2

R1-2
36" X 31"

W5-52R
18" X 54"

MAX. 12' WIDTH
W12-52

ROAD WORK AHEAD
W20-1

SEE SDD "TRAFFIC CONTROL TEMPORARY EXIT RAMP CROSSOVER" FOR ENTRANCE RAMP SIGNING

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL STAGE 1	SHEET 110	E

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

NOTE: INSTALL TEMPORARY RAISED MARKERS ON EDGELINES AND CENTERLINES THROUGH CROSSOVER

NOTE: THIS DRAWING IS NOT TO SCALE

W01-6 48" X 24" TYPE III BARRICADE

START CROSSOVER SEE CROSSOVER SIGNING SDD 15D 11-3

REMOVE ALL PAVEMENT MARKINGS FROM START OF TAPER THROUGH CROSSOVER (WESTBOUND)

2000' BUFFER FROM CROSSOVER P.C.

TAPER 900' | 1000'

300' | 300' | 500'

DRUMS SPACED @ 10 FOOT INTERVALS AS NEEDED IN FRONT OF ARROW BOARD

W01-4L 48" X 48"

CONCRETE BARRIER TEMPORARY PRECAST

ROAD CLOSED R11-2 48" X 30"

REMOVE EXISTING PAVEMENT MARKING EDGE LINE

REMOVE EXISTING PAVEMENT MARKING LANE LINE

500' TAPER | 500' | 200' | 400' | 300' | 250'

50' TYPICAL

10'

12' | 11'

1585 | 1590

RI STA = 1589+55.93

BC STA = 1590+54.98

PT STA = 1595+48.99

EOP STA = 1596+02.19

TAPER TWO 12-FOOT LANES TO TWO 11-FOOT LANES 400'

REMOVE ALL PAVEMENT MARKINGS FROM END OF TAPER THROUGH WORK ZONE (WESTBOUND) 600' TAPER

END BARRIER WALL

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGE LINE YELLOW) WITH TEMPORARY RAISED PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING REFELECTIVE PAINT 4-INCH (SOLID LINE WHITE) WITH TEMPORARY RAISED PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGE LINE WHITE) WITH TEMPORARY RAISED PAVEMENT MARKINGS

W01-6 48" X 24"

W1-4R

END ROAD WORK G20-2A 48" X 24"

LANE CLOSED R11-2 48" X 30"

TRUCKS USE LEFT LANE R4-5L 48" X 60"

ADVANCE DETAIL FOR WESTBOUND EXIT STAGE 1-R1

200' | 400' | 300' | 250' | 850' | 350' | 500' | 900' TAPER

TEMPORARY PAVMENT MARKING REFLECTIVE PAINT 4-INCH (EDGE LINE WHITE) WITH TEMPORARY RAISED PAVEMENT MARKINGS

DELINEATORS @ 50' | DELINEATORS @ 25'

OFF RAMP TRAFFIC

THROUGH TRAFFIC

CROSSOVER

12' | 25' | 20' | 12.5:1 | 12.5:1

100'

3' DASH / 12' SKIP

TEMPORARY PAVEMENT MARKING 8-INCH WITH TEMPORARY RAISED PAVEMENT MARKERS @ 12.5' SPACING

PC OF CROSSOVER STA. 1590+54.98

CONCRETE BARRIER TEMPORARY PRECAST

OM-3C 18" X 54"

CRASH CUSHIONS TEMPORARY

W12-1D 24" X 24"

EXIT E5-1 72" X 60"

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGE LINE YELLOW) WITH TEMPORARY RAISED PAVEMENT MARKINGS

96" X 24"

EXIT 119

60 LODI ARLINGTON

144" X 84"

TRAFFIC CONTROL SIGNS FIXED MESSAGE SEE DETAIL

EXIT 25 M.P.H. W13-2 24" X 30"

MB

MESSAGE BOARD "NO REENTRY NORTHBOUND" DURING ON-RAMP STAGE 1-R2 ONLY

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL STAGE 1	SHEET 111	E

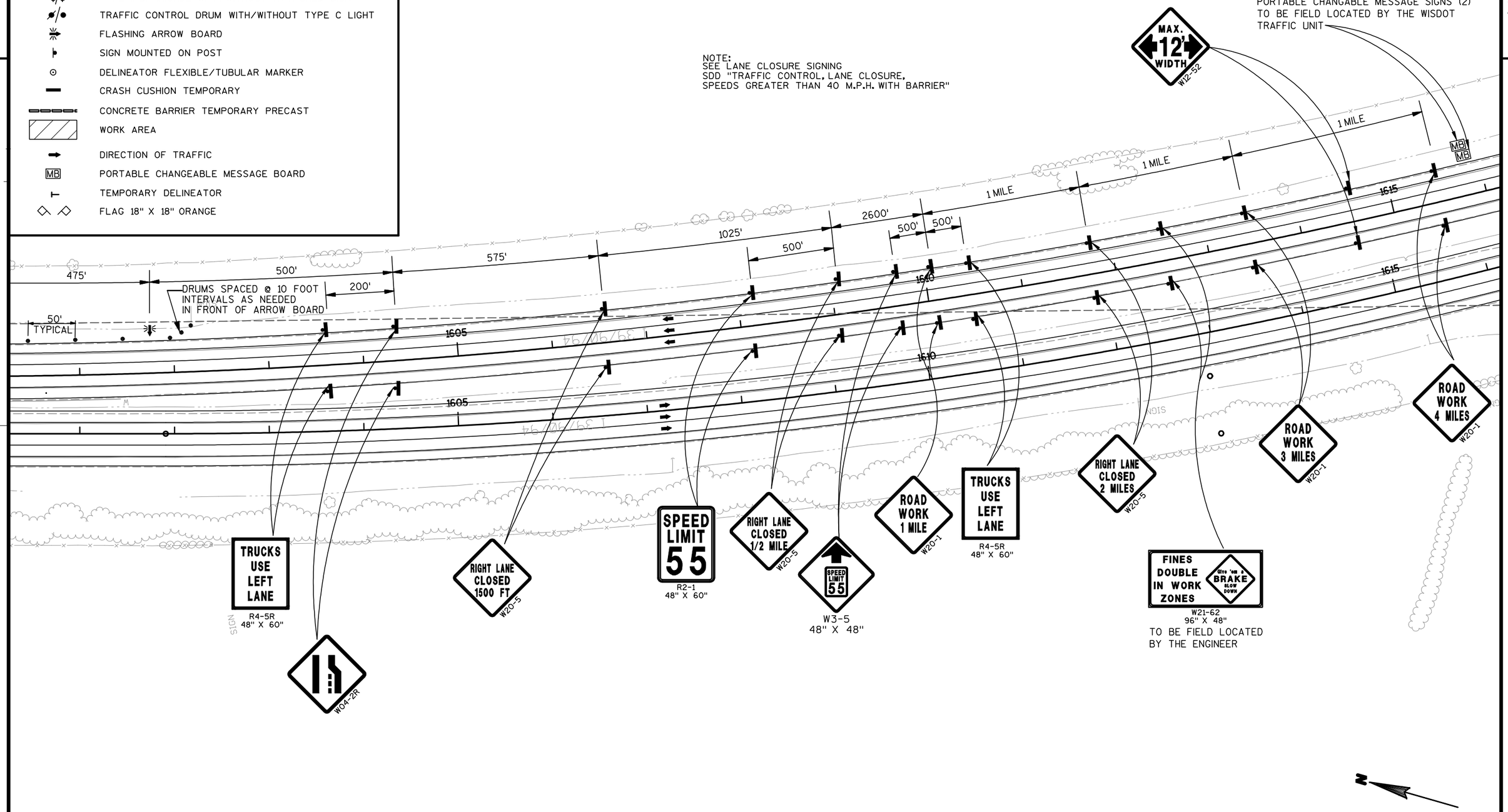
LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

NOTE:
THIS DRAWING IS NOT TO SCALE

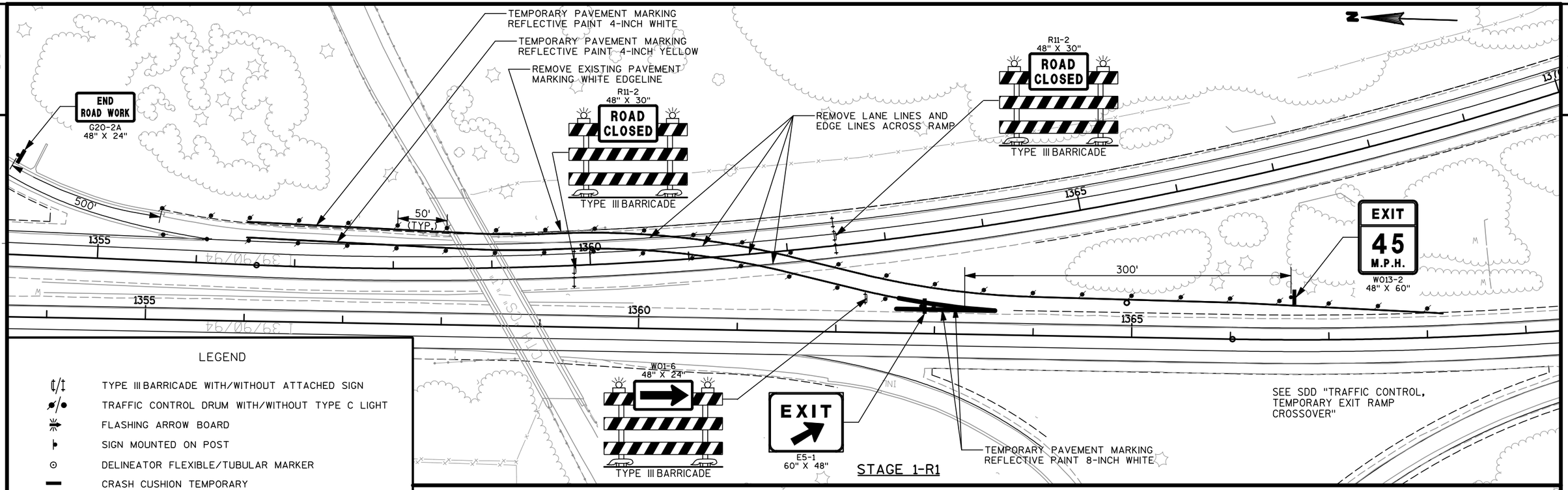
NOTE:
SEE LANE CLOSURE SIGNING
SDD "TRAFFIC CONTROL, LANE CLOSURE,
SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER"

NOTE:
PORTABLE CHANGABLE MESSAGE SIGNS (2)
TO BE FIELD LOCATED BY THE WISDOT
TRAFFIC UNIT



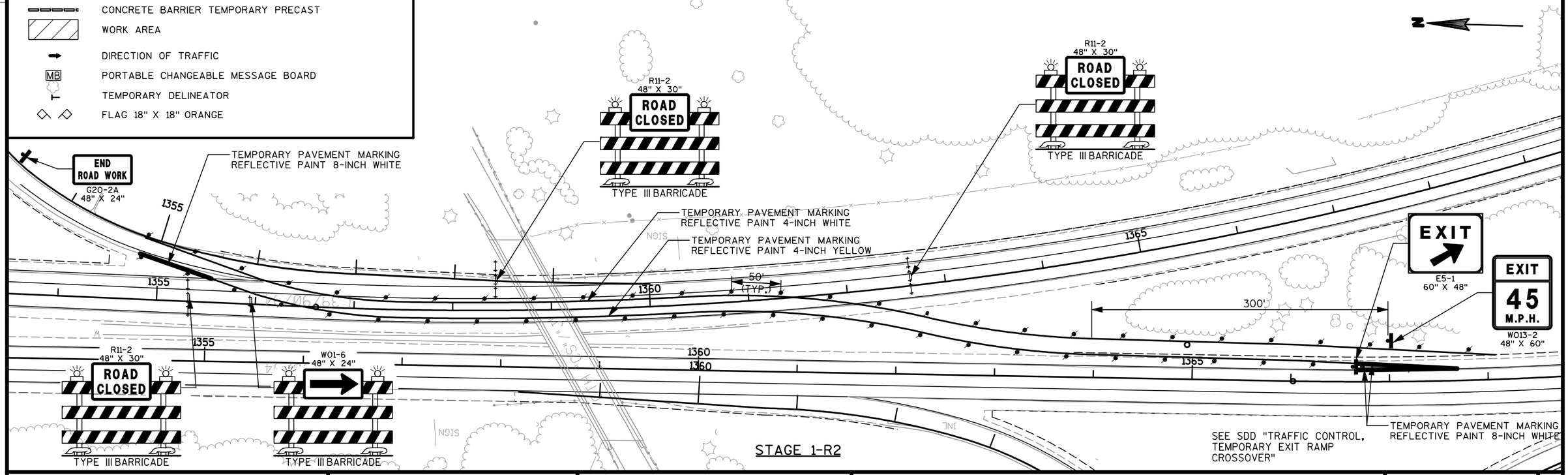
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL STAGE 1	SHEET	E

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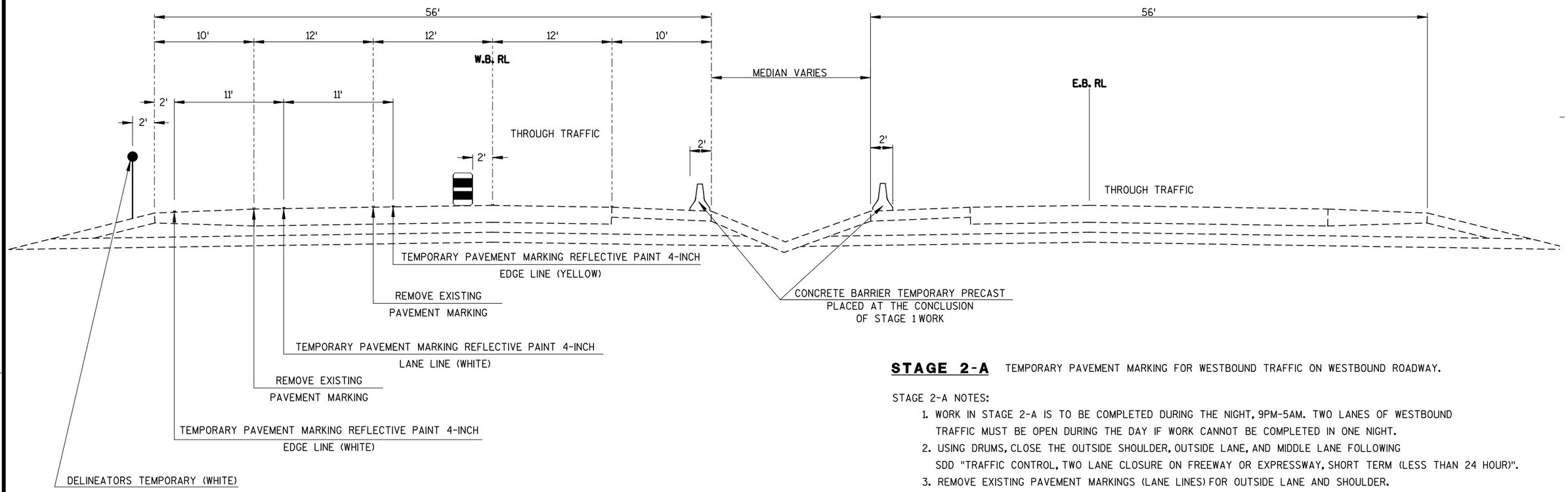


LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE



PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1-R1 AND STAGE 1-R2	SHEET 113	E



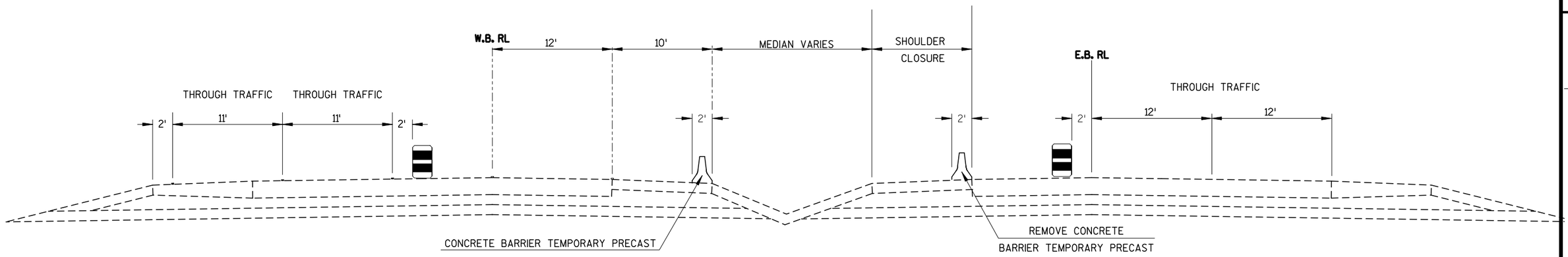
STAGE 2-A (NIGHTTIME)

1350+00 - 1590+00 WB

STAGE 2-A TEMPORARY PAVEMENT MARKING FOR WESTBOUND TRAFFIC ON WESTBOUND ROADWAY.

STAGE 2-A NOTES:

1. WORK IN STAGE 2-A IS TO BE COMPLETED DURING THE NIGHT, 9PM-5AM. TWO LANES OF WESTBOUND TRAFFIC MUST BE OPEN DURING THE DAY IF WORK CANNOT BE COMPLETED IN ONE NIGHT.
2. USING DRUMS, CLOSE THE OUTSIDE SHOULDER, OUTSIDE LANE, AND MIDDLE LANE FOLLOWING SDD "TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOUR)".
3. REMOVE EXISTING PAVEMENT MARKINGS (LANE LINES) FOR OUTSIDE LANE AND SHOULDER. SEE STAGE 2 PLANS FOR PAVEMENT MARKING REMOVAL LIMITS.
4. PLACE TEMPORARY PAVEMENT MARKING (LANE LINES) FOR WESTBOUND TRAFFIC.
5. INSTALL TEMPORARY DELINEATORS ALONG OUTSIDE EDGE OF WESTBOUND ROADWAY.



STAGE 2-B (DAYTIME)

1350+00 - 1590+00 WB

STAGE 2-B PLACE BARRIER WALL FOR COUNTER DIRECTIONAL TRAFFIC ON WESTBOUND LANES.

STAGE 2-B NOTE:

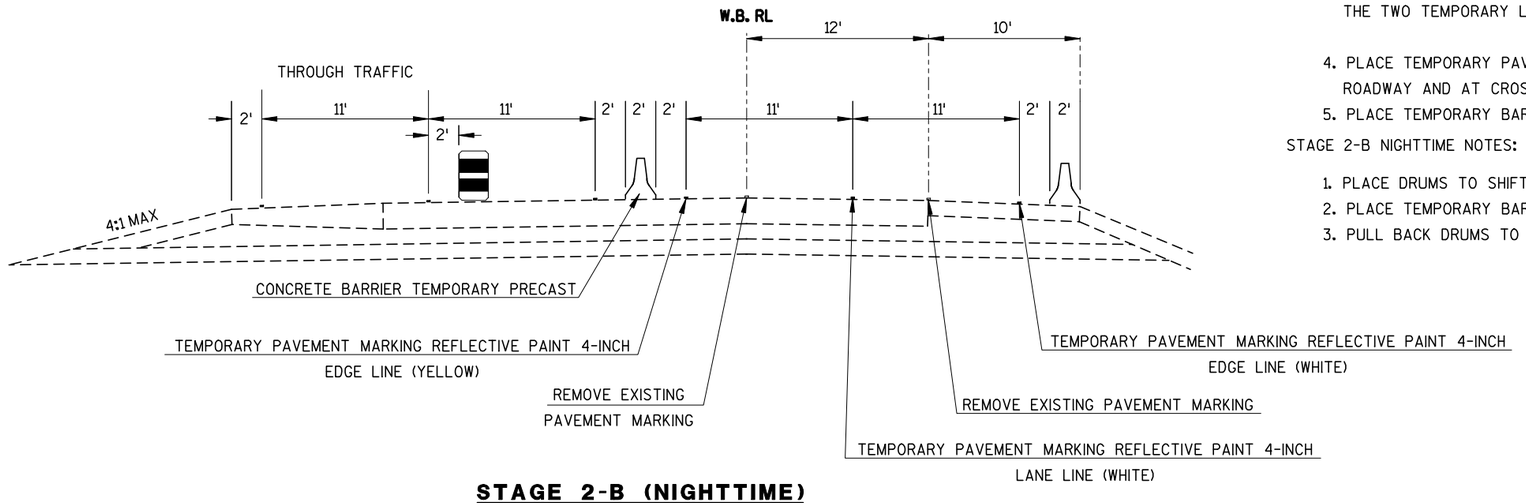
1. START TEMPORARY BARRIER WALL PLACEMENT WITH THE COUNTER DIRECTIONAL TEMPORARY BARRIER WALL AND TAPER.

STAGE 2-B DAYTIME NOTES:

1. CLOSE THE LEFT LANES OF THE WESTBOUND ROADWAY USING SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." MODIFIED AS NECCESARY FOR A 3 LANE ROADWAY. CLOSE THE EASTBOUND MEDIAN LANE USING SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H."
2. "TRUCKS USE LEFT LANE" SIGNS ARE TO BE ERECTED DURING STAGE 2-B DAYTIME WORK.
3. TEMPORARILY PLACE DRUMS TO CLOSE OFF THE LEFT SIDE OF THE WESTBOUND ROADWAY, MOVING TRAFFIC TO THE TWO TEMPORARY LANES PAINTED IN STAGE 2-A. COMPLETE NOTE 2 IMMEDIATELY AFTER THE TWO TEMPORARY LANES IN STAGE 2-A ARE PAINTED.
4. PLACE TEMPORARY PAVEMENT MARKING (EDGELINES & LANE LINES) FOR THE TWO INSIDE LANES ON WESTBOUND ROADWAY AND AT CROSSOVERS FOR EASTBOUND TRAFFIC. CROSSOVERS WERE CONSTRUCTED IN 2009.
5. PLACE TEMPORARY BARRIER WALL, DRUMS, DELINEATORS, AND BARRICADES FOR CROSSOVERS.

STAGE 2-B NIGHTTIME NOTES:

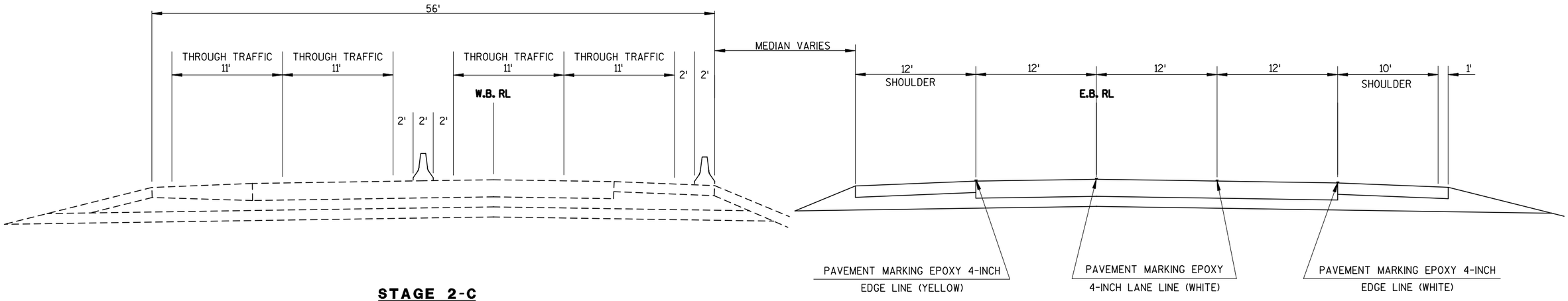
1. PLACE DRUMS TO SHIFT TRAFFIC TO THE OUTSIDE TEMPORARY LANE OF THE WESTBOUND ROADWAY.
2. PLACE TEMPORARY BARRIER WALL IN THE MIDDLE ON THE WESTBOUND ROADWAY DURING THE NIGHT, 9PM-5AM.
3. PULL BACK DRUMS TO ALLOW FOR STAGE 2-B DAYTIME CONFIGURATION.



STAGE 2-B (NIGHTTIME)

1350+00 - 1590+00 WB

2



STAGE 2-C

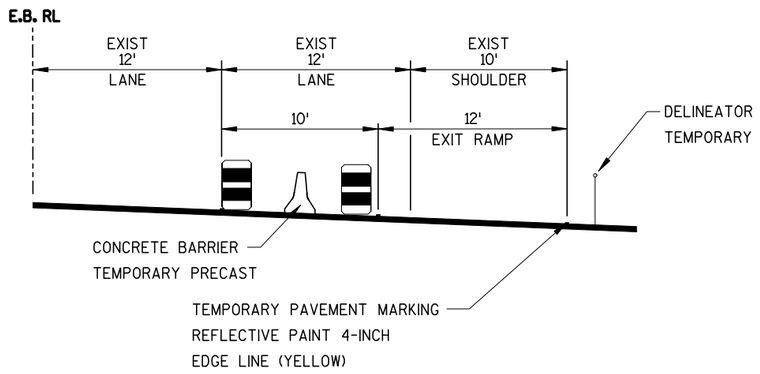
1350+00 - 1590+00 WB

RECONSTRUCTED EASTBOUND LANES

STAGE 2-C SHIFT EASTBOUND TRAFFIC OVER TO INSIDE LANES OF THE WESTBOUND ROADWAY AND RECONSTRUCT EASTBOUND ROADWAY.

STAGE 2-C NOTES:

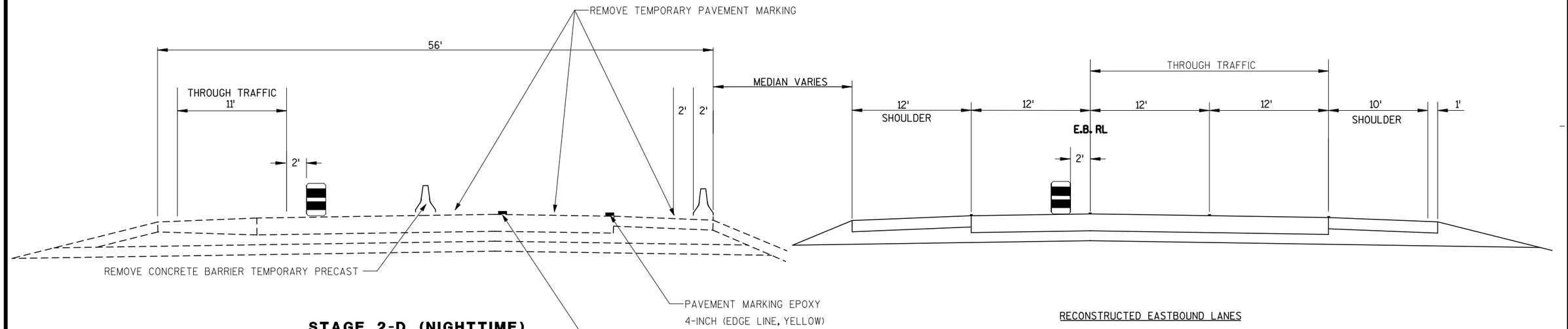
1. SHIFT EASTBOUND TRAFFIC OVER TO THE INSIDE LANES OF THE WESTBOUND ROADWAY.
2. RECONSTRUCT EASTBOUND ROADWAY.
3. PLACE PERMANENT PAVEMENT MARKING ON EASTBOUND ROADWAY.



STAGE 2-R1

1539+49 - 1574+00 EB

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STAGE 2-D (NIGHTTIME)

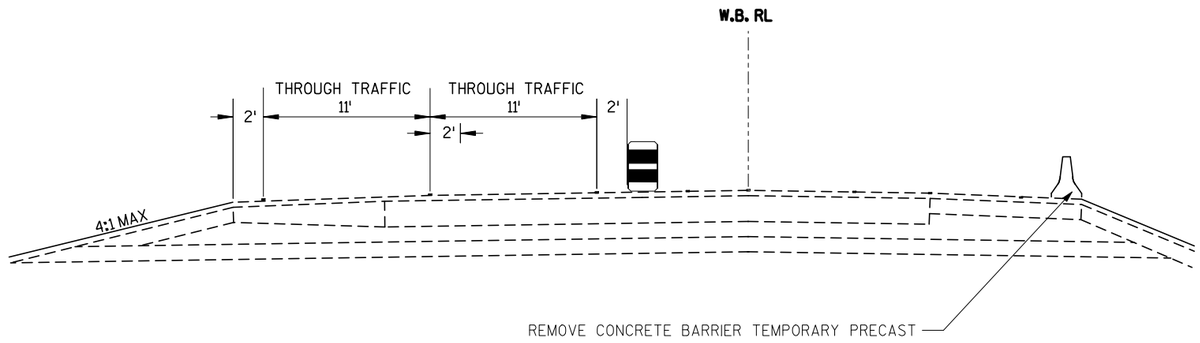
1350+00 - 1590+00 WB

RECONSTRUCTED EASTBOUND LANES

STAGE 2-D REMOVE BARRIER WALL FROM WESTBOUND ROADWAY

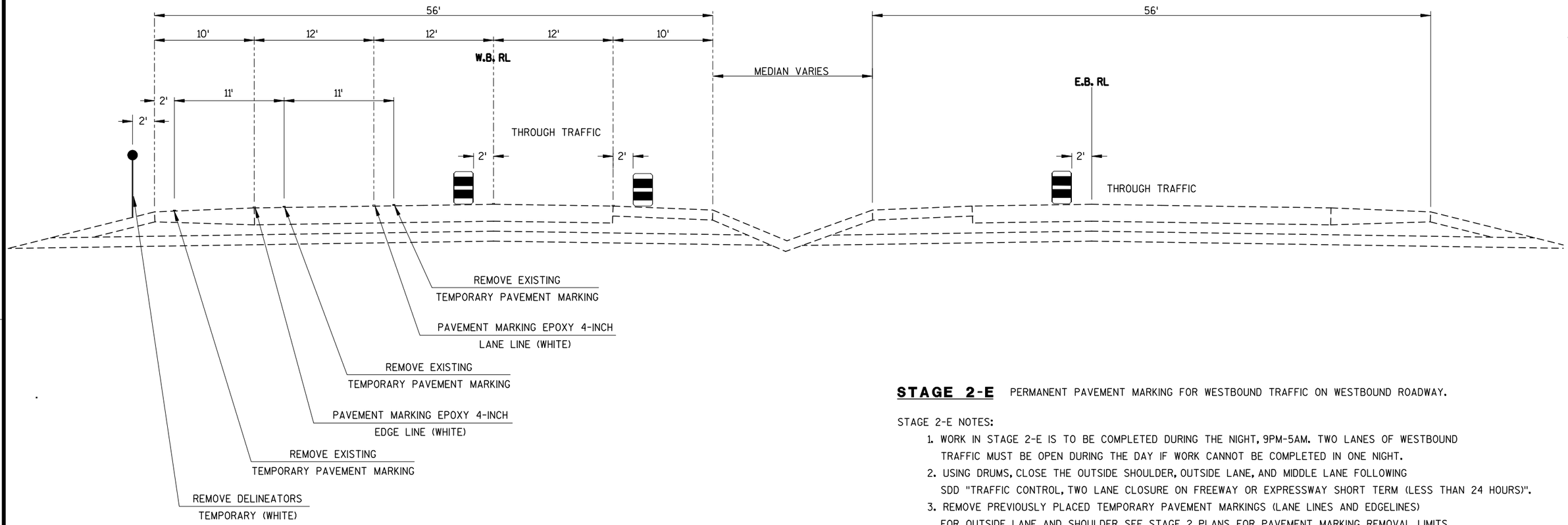
STAGE 2-D NOTES:

1. WORK IN STAGE 2D IS TO BE COMPLETED DURING THE NIGHT, 9PM-5AM. TWO LANES OF EASTBOUND TRAFFIC MUST BE OPEN DURING THE DAY IF WORK CANNOT BE COMPLTED IN ONE NIGHT.
2. SHIFT WESTBOUND TRAFFIC OVER TO THE OUTSIDE LANES OF THE WESTBOUND ROADWAY.
3. REMOVE BARRIER WALL FROM EASTBOUND ROADWAY.
4. PLACE PERMANENT PAVEMENT MARKING FOR MEDIAN LANE OF WESTBOUND ROADWAY.



STAGE 2-D (DAYTIME)

1350+00 - 1590+00 WB



STAGE 2-E (NIGHTTIME)

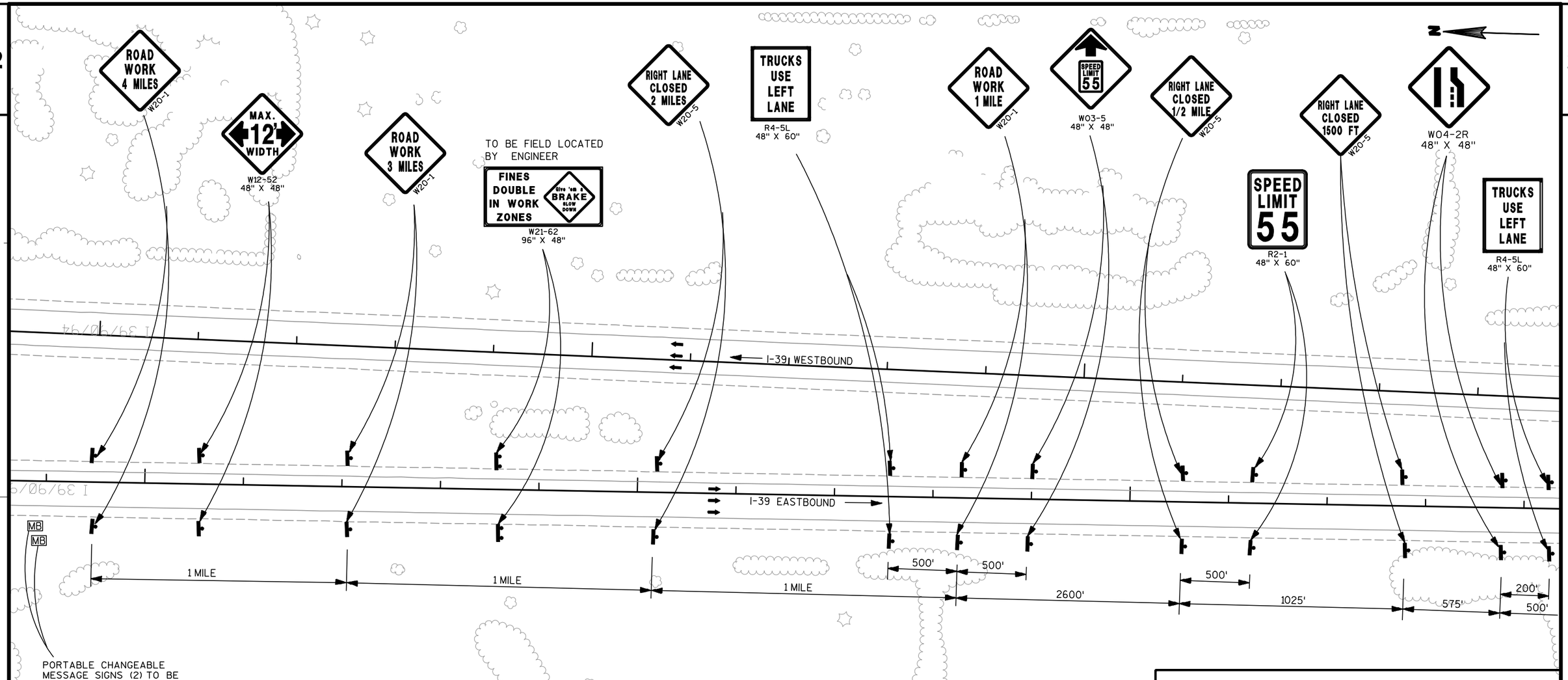
1350+00 - 1590+00 WB

STAGE 2-E PERMANENT PAVEMENT MARKING FOR WESTBOUND TRAFFIC ON WESTBOUND ROADWAY.

STAGE 2-E NOTES:

1. WORK IN STAGE 2-E IS TO BE COMPLETED DURING THE NIGHT, 9PM-5AM. TWO LANES OF WESTBOUND TRAFFIC MUST BE OPEN DURING THE DAY IF WORK CANNOT BE COMPLETED IN ONE NIGHT.
2. USING DRUMS, CLOSE THE OUTSIDE SHOULDER, OUTSIDE LANE, AND MIDDLE LANE FOLLOWING SDD "TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY SHORT TERM (LESS THAN 24 HOURS)".
3. REMOVE PREVIOUSLY PLACED TEMPORARY PAVEMENT MARKINGS (LANE LINES AND EDGELINES) FOR OUTSIDE LANE AND SHOULDER. SEE STAGE 2 PLANS FOR PAVEMENT MARKING REMOVAL LIMITS.
4. PLACE PAVEMENT MARKING EPOXY (LANE LINES AND EDGELINES) FOR WESTBOUND TRAFFIC IN NORMAL 6-LANE CONFIGURATION.
5. REMOVE TEMPORARY DELINEATORS ALONG OUTSIDE EDGE OF EASTBOUND ROADWAY.
6. OPEN EASTBOUND AND WESTBOUND ROADWAYS TO 2 LANES OF TRAFFIC.
7. CONTINUE WITH STAGE 3 WORK.

2



PORTABLE CHANGEABLE MESSAGE SIGNS (2) TO BE FIELD LOCATED BY THE WDOT TRAFFIC UNIT.

NOTE:
SEE LANE CLOSURE SIGNING SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER"

NOTE:
THIS DRAWING IS NOT TO SCALE

TRAFFIC CONTROL NOTES

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

ANY EXISTING SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER. ALL STOP, WARNING AND REGULATORY SIGNS ON THE SIDEROADS SHALL NOT BE DISTURBED, EXCEPT WHEN NECESSARY TO COMPLETE THE WORK. THE SIGNS MUST THEN BE IMMEDIATELY RE-ESTABLISHED.

ALL "W" AND "WO" SIGNS SHALL BE 48"X48" UNLESS OTHERWISE NOTED

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

ALL EXSITING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK ORANGE PANEL.

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END STAGE TWO WORK

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET 119	E

2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

NOTE:
THIS DRAWING IS NOT TO SCALE

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

12' 12' 6' 8'

LANE CLOSED
R11-2
48" X 30"

W1-4B

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGE LINE WHITE) WITH TEMPORARY RAISED PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING REFELECTIVE PAINT 4-INCH (SOLID LINE WHITE) WITH TEMPORARY RAISED PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGE LINE YELLOW) WITH TEMPORARY RAISED PAVEMENT MARKINGS

END BARRIER WALL 1345+20

REMOVE ALL PAVEMENT MARKINGS FROM END OF TAPER THROUGH WORK ZONE (WESTBOUND)

TAPER TWO 12-FOOT LANES TO TWO 11-FOOT LANES 50:1

1345 1350

600' TAPER 400'

BOP STA 1341+06.53

PC STA = 1341+84.26

CRASH CUSHION TEMPORARY

50' TYPICAL

12' 12' 11' 11'

DRUMS SPACED @ 10 FOOT INTERVALS AS NEEDED IN FRONT OF ARROW BOARD

850' 250' 200' 100' 400' 200'

REMOVE PAVEMENT MARKINGS LANE LINE

REMOVE PAVEMENT MARKINGS EDGELINE

CONCRETE BARRIER TEMPORARY PRECAST

PT STA = 1346+09.52

PC STA = 1348+17.11

ROAD CLOSED
R11-2
48" X 30"

NOTE: INSTALL TEMPORARY RAISED MARKERS ON EDGELINES AND CENTERLINES THROUGH CROSSOVER

REMOVE ALL PAVEMENT MARKINGS FROM START OF TAPER THROUGH CROSSOVER (EASTBOUND)

START CROSSOVER
SEE CROSSOVER SIGNING SDD "TRAFFIC CONTROL, SINGLE LANE CROSSOVER"

500' 300' 1000' 900' TAPER 2000' BUFFER FROM CROSSOVER P.C.

ADVANCE DETAIL FOR EASTBOUND EXIT STAGE 2-R1

MESSAGE BOARD "NO REENTRY EASTBOUND" DURING STAGE 2

NOTES FOR STAGE 2-R2 - RAMP CLOSURE
1. REMOVE SIGNS ✳
2. PLACE TEMPORARY PAVEMENT MARKING REMOVEABLE TAPE 4-INCH ▲
3. PLACE DRUMS @ 50' SPACING ◆
4. PLACE TYPE III BARRICADE WITH "LANE CLOSED" SIGN ★
5. PLACE SIGN ONLY DURING STAGE 2-R2 ✸
6. PROVIDE PREWARNING MESSAGE ONE WEEK IN ADVANCE OF RAMP CLOSURE ⊠
7. COVER 2 ADVANCE SIGNS FOR EXIT 115 ⊗

EXIT 25 M.P.H.
W13-2
48" X 60"

EXIT 115
CS
POYNETTE
LAKE WISCONSIN

TO CS
J22-1
36" X 81"

3' DASH/12' SKIP

W12-1D
24" X 24"

TEMPORARY PAVEMENT MARKING 8-INCH

2' 2' 2' 2' 8'

100' 12.5:1 20'

EXIT
E5-1
72" X 60"

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGE LINE YELLOW) WITH TEMPORARY RAISED PAVEMENT MARKINGS

CRASH CUSHION TEMPORARY

OM-3C
12" X 36"

P.C. CROSSOVER

CONCRETE BARRIER TEMPORARY PRECAST

CROSSOVER THROUGH TRAFFIC

OFF RAMP TRAFFIC

50' 25' 8' 12'

900' TAPER 500' 350' 850' 250' (12.5:1) 550' DELINEATORS @ 25' 300' DELINEATORS @ 50' 400' 600' 200' P.C. CROSSOVER

TEMPORARY PAVMENT MARKING REFLECTIVE PAINT 4-INCH (EDGE LINE WHITE) WITH TEMPORARY RAISED PAVEMENT MARKINGS

MB

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET 120 E

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

ROAD WORK AHEAD W20-1

YIELD AHEAD W03-2

MAX. 12' WIDTH W12-52

R1-2 36" X 31"

END ROAD WORK G20-2A 48" X 24"

1345+20 END BARRIER

TEMPORARY PAVEMENT MARKING 8-INCH

CONCRETE BARRIER TEMPORARY PRECAST (TYP.)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE YELLOW)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE WHITE)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (LANE LINE WHITE)

PI STA = 1346+09.52

PI STA = 1348+17.11

PI STA = 1353+68.04

EP STA = 1354+18.04

BP STA = 1355+95.99

EP STA = 1358+23.53

50' TYP.

12'

400' AT BEAMGUARD TERMINAL

DRUMS @ 50' SPACING

TEMPORARY OFF RAMP STAGE 2-R1

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE WHITE)

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE (EDGELINE YELLOW)

R11-2 48" X 30" ROAD CLOSED

TYPE III BARRICADE

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END STAGE TWO WORK

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET 121 E

2

EAST US 10 MILE 115 .8 D10-5 21" X 60"

MOVE SIGN

WEST US 10 MILE 115 .8 D10-5 21" X 60"

MOVE SIGN

EMERGENCY PARKING 1/4 MILE R8-53 48" X 36"

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE WHITE)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (LANE LINE WHITE)

WEST US 10 MILE 116 .0 D10-5 21" X 60"

MOVE SIGN

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE YELLOW)

CONCRETE BARRIER TEMPORARY PRECAST (TYP.)

TRUCKS USE LEFT LANE R4-5L 48" X 60"

EAST US 10 MILE 116 .0 D10-5 21" X 60"

MOVE SIGN

1360 1365 1370 1375

50' TYP.

TEMPORARY OFF RAMP STAGE 2-R1

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE (EDGELINE YELLOW)

EXIT E5-1 60" X 48"

200'

R11-2 48" X 30" ROAD CLOSED TYPE III BARRICADE

RAMP CLOSED

NOTE: EASTBOUND ON-RAMP WILL REMAIN CLOSED THROUGH THE DURATION OF STAGE 2 CLOSURE

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

END ROAD WORK G20-2A 48" X 24"

PROVIDE PRE-WARNING ONE WEEK IN ADVANCE OF RAMP CLOSURE

MB

DO NOT ENTER R5-1 36" X 36"

50' TYP.

R11-2 48" X 30" ROAD CLOSED TYPE III BARRICADE

CS

HW

10'

RAMP CLOSED R11-2(MOD) 48" X 30"

NOTS

N

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET	E

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2

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (LANE LINE WHITE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE YELLOW)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE WHITE)

CONCRETE BARRIER
TEMPORARY PRECAST (TYP.)

EMERGENCY
PARKING
2 HR MAX
R8-54
48" X 36"

WEST
MILE
116
.2
D10-5
21" X 60"

MOVE
SIGN

EMERGENCY
PARKING
1/4 MILE
R8-53
48" X 36"

EMERGENCY PULLOUT - SEE
DETAIL FOR CONCRETE BARRIER
TEMPORARY PRECAST LAYOUT AT
EMERGENCY PULLOUTS

EMERGENCY
PARKING
2 HR MAX
R8-54
48" X 36"

EAST
MILE
116
.2
D10-5
21" X 60"

MOVE
SIGN

1375 1380 1385 1390

SIGN

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET 123	E

2

2

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

MOVE SIGN

WEST 90 MILE 116 .4
D10-5
21" X 60"

CONCRETE BARRIER
TEMPORARY PRECAST (TYP.)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE WHITE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (LANE LINE WHITE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE YELLOW)

EMERGENCY PARKING 2 HR MAX
R8-54
48" X 36"

MOVE SIGN

WEST 90 MILE 116 .6
D10-5
21" X 60"

1390 1395 1400 1405

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

EMERGENCY PULLOUT - SEE
DETAIL FOR CONCRETE BARRIER
TEMPORARY PRECAST LAYOUT AT
EMERGENCY PULLOUTS

MOVE SIGN

EAST 90 MILE 116 .4
D10-5
21" X 60"

MOVE SIGN

EAST 90 MILE 116 .6
D10-5
21" X 60"

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

1390 1395 1400 1405

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE WHITE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (LANE LINE WHITE)

CONCRETE BARRIER
TEMPORARY PRECAST (TYP.)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE YELLOW)

MOVE SIGN

WEST 90 MILE 116 .8
D10-5
21" X 60"

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

MOVE SIGN

EAST 90 MILE 116 .8
D10-5
21" X 60"

1405 1410 1415 1420

SMOKEY HOLLOW ROAD BRIDGE RECONSTRUCTION

SEE STAGE 2-SH TRAFFIC CONTROL DETAILS

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET 125	E

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE WHITE)

CONCRETE BARRIER
TEMPORARY PRECAST (TYP.)

MOVE SIGN

WEST
MILE 117 .0
D10-5
21" X 60"

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (LANE LINE WHITE)

EMERGENCY PARKING
2 HR MAX
R8-54
48" X 36"

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE YELLOW)

EMERGENCY PARKING
1/4 MILE
R8-53
48" X 36"

EMERGENCY PULLOUT - SEE DETAIL FOR CONCRETE BARRIER TEMPORARY PRECAST LAYOUT AT EMERGENCY PULLOUTS

MOVE SIGN

EAST
MILE 117 .0
D10-5
21" X 60"

1420 1425 1430

SANDERSON RD.

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET 126	E

2

2

EMERGENCY PARKING 2 HR MAX
R8-54
48" X 36"

MOVE SIGN

EAST 90 MILE 117 .2
D10-5
21" X 60"

CONCRETE BARRIER TEMPORARY PRECAST (TYP.)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE WHITE)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (LANE LINE WHITE)

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE YELLOW)

1435 1440 1445

CRASH CUSHION TEMPORARY

W5-52R
18" X 54"

EMERGENCY PULLOUT - SEE DETAIL FOR CONCRETE BARRIER TEMPORARY PRECAST LAYOUT AT EMERGENCY PULLOUTS

MOVE SIGN

EAST 90 MILE 117 .4
D10-5
21" X 60"

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

EMERGENCY PULLOUT - SEE DETAIL FOR CONCRETE BARRIER TEMPORARY PRECAST LAYOUT AT EMERGENCY PULLOUTS

EMERGENCY PARKING 2 HR MAX
R8-54
48" X 36"

1450 1455 1460

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

MOVE SIGN

EAST 90 MILE 117 .6
D10-5
21" X 60"

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

1465 1470 1475

MOVE SIGN

EAST 90 MILE 117 .8
D10-5
21" X 60"

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

EMERGENCY PARKING 2 HR MAX
R8-54
48" X 36"

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (LANE LINE WHITE)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE YELLOW)

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (EDGELINE WHITE)

CONCRETE BARRIER TEMPORARY PRECAST (TYP.)

1480 1485 1490

EMERGENCY PULLOUT - SEE DETAIL FOR CONCRETE BARRIER TEMPORARY PRECAST LAYOUT AT EMERGENCY PULLOUTS

MOVE SIGN

EAST 90 MILE 118 .0
D10-5
21" X 60"

EAST 90 MILE 118 .2
D10-5
21" X 60"

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 42

2

2

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (LANE LINE WHITE)

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE WHITE)

MOVE SIGN

EAST 90 MILE 118 .4
D10-5
21" X 60"

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE YELLOW)

CONCRETE BARRIER
TEMPORARY PRECAST (TYP.)

1495 1500 1505

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

EMERGENCY PARKING 2 HR MAX
R8-54
48" X 36"

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

W5-52R
18" X 54"

1510 1515 1520

TEMPORARY CRASH CUSHION

MOVE SIGN

EAST 90 MILE 118 .6
D10-5
21" X 60"

EMERGENCY PULLOUT - SEE DETAIL FOR CONCRETE BARRIER TEMPORARY PRECAST LAYOUT AT EMERGENCY PULLOUTS

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

MOVE SIGN

EAST 90 MILE 118 .8
D10-5
21" X 60"

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET 129	E

2

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE YELLOW)

CONCRETE BARRIER
TEMPORARY PRECAST (TYP.)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (EDGELINE WHITE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT
4-INCH (LANE LINE WHITE)

SPEED LIMIT 55
R2-1
48" X 60"

EMERGENCY PARKING 2 HR MAX
R8-54
48" X 36"

1525 1530 1535

MOVE SIGN

EAST 90 MILE 119 .0
D10-5
21" X 60"

TO 60
J22-1
36" X 81"

EMERGENCY PULLOUT - SEE DETAIL FOR CONCRETE BARRIER TEMPORARY PRECAST LAYOUT AT EMERGENCY PULLOUTS

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

EXIT 119 96" X 24"

60 LODI ARLINGTON

TRAFFIC CONTROL SIGNS FIXED MESSAGE
SEE DETAIL
144" X 84"

OM3-C
12" X 36"

EXIT
E5-1
72" X 60"

CRASH CUSHIONS TEMPORARY

CRASH CUSHIONS TEMPORARY

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 8-INCH (WHITE)

1540 1545 1550

BOP Sta = 1544+65.00

PC Sta = 1545+19.23

300'
BARRIER WALL TAPER

TO 60
J22-1
36" X 81"

EXIT 25 M.P.H.
W13-2
48" X 60"

EMERGENCY PARKING 1/4 MILE
R8-53
48" X 36"

200'

TEMPORARY OFF
RAMP STAGE 2-R1

PT Sta = 1550+03.23

PC Sta = 1550+63.83

400'

TEMPORARY PAVEMENT
MARKING REFLECTIVE PAINT
4-INCH

TEMPORARY PAVEMENT
MARKING REMOVABLE TAPE
4-INCH (YELLOW)

12"

W5-52R
18" X 54"

WEST 90 MILE 119 .2
D10-5
21" X 60"

MOVE SIGN

SEE SDD "TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER"

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET 130	E

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

SEE SDD "TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER" FOR ENTRANCE RAMP SIGNING

ROAD WORK AHEAD W20-1

MAX. 12' WIDTH W12-52

YIELD AHEAD W03-2

YIELD R1-2 36" X 31"

END ROAD WORK G20-2A 48" X 24"

TRANSITION TEMPORARY BARRIER WALL TO PERMANENT MEDIAN BARRIER WALL, STATION 1557+85, SEE DETAIL

W5-52L 18" X 54"

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH

1555 1560 1565

100' 100'

12'

50' TYP.

100' TYP.

PT Sta = 1555+51.83(36)

EOP Sta = 1556+01.83(36)

1557+00 END CONCRETE BARRIER TEMPORARY PRECAST

1557+85 END CONCRETE BARRIER 42-INCH

EXISTING CONCRETE BARRIER 42-INCH AND CRASH CUSHION TO REMAIN

WEST 90 MILE 119 .6 D10-5 21" X 60"

MOVE SIGN

TEMPORARY OFF RAMP STAGE 2-R1

UTILIZE EXISTING LANE 1 EDGELINE AND LANE LINE FOR OFF RAMP STAGE 2-R1

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)

ROAD CLOSED R11-2 48" X 30"

OLD STH 60

SEPTIC

SIGN

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET 131	E

2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK

NOTE: SEE LANE CLOSURE SIGNING SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER"

NOTE: THIS DRAWING IS NOT TO SCALE

W01-6 48" X 24"

TYPE III BARRICADE

STH 60

1582+23 END CONCRETE BARRIER 42-INCH

1570 1575 1580

50' TYP.

12'

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)

TEMPORARY OFF RAMP STAGE 2-R1

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)

ROAD CLOSED R11-2 48" X 30"

BOP STA = 1583+00.00

PC STA = 1583+92.00

EXISTING CONCRETE BARRIER 42-INCH AND CRASH CUSHION

UTILIZE EXISTING ON-RAMP EDGELINE, LANE 3 EDGELINE AND LANE LINE

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)

ROAD CLOSED R11-2 48" X 30"

ROAD WORK AHEAD W20-1

SIGN

I 39/90/94

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

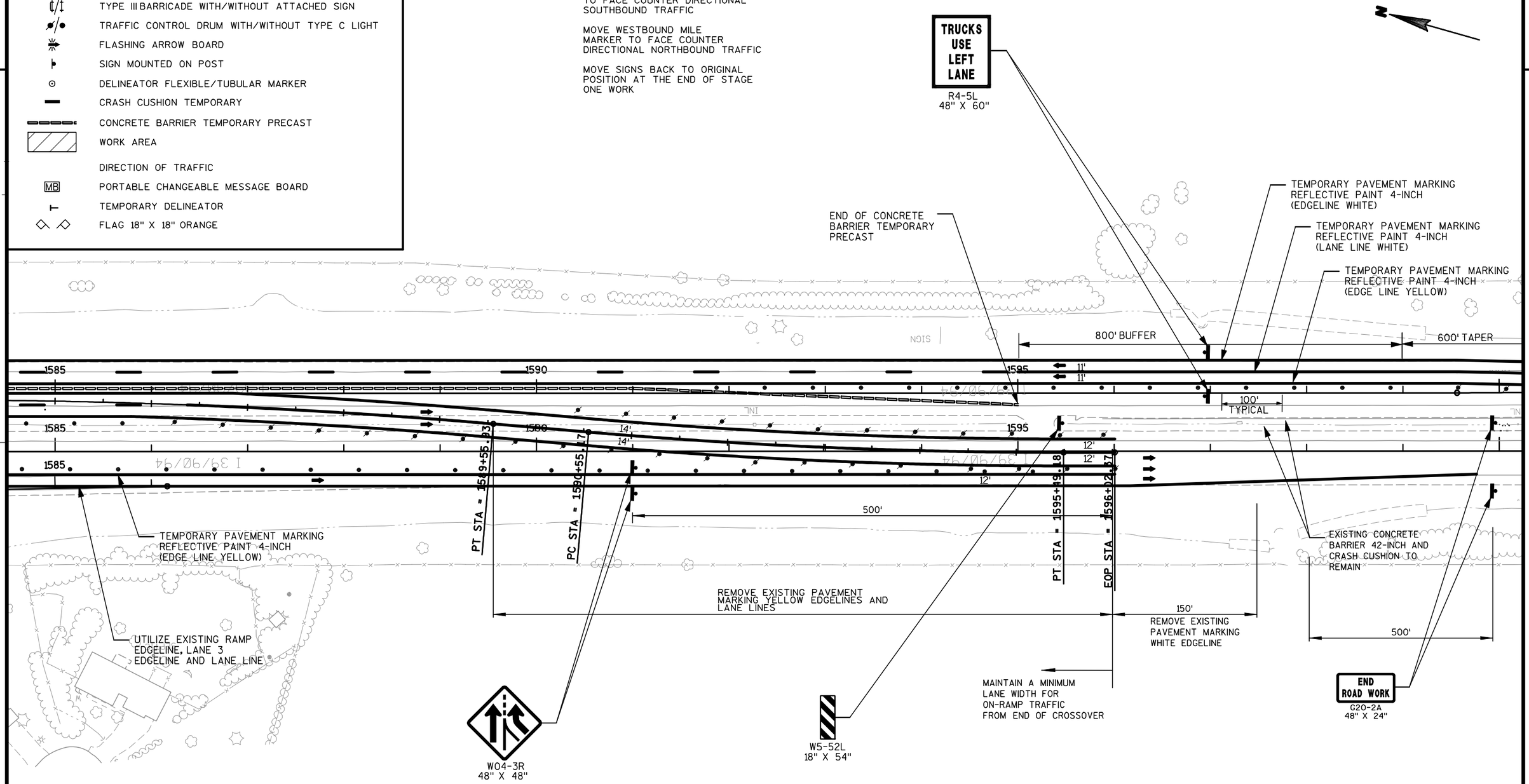
LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK



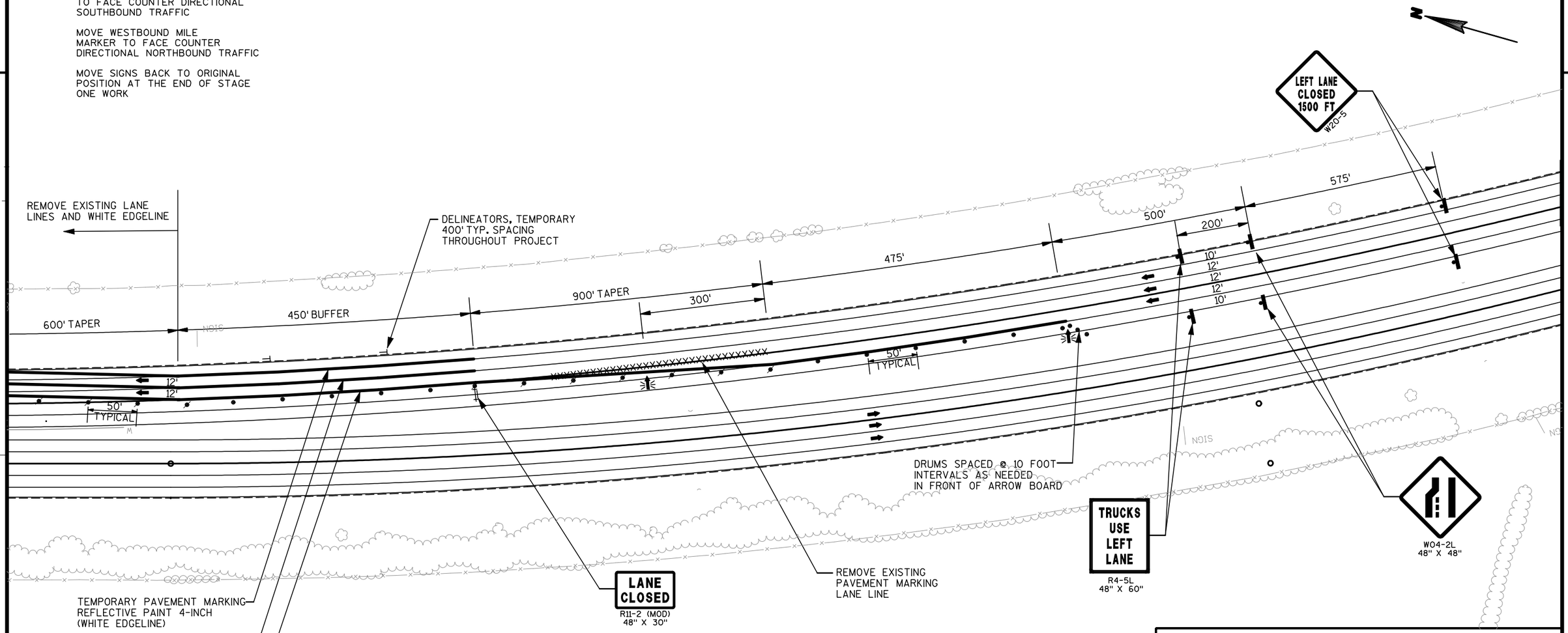
NOTE:
THIS DRAWING NOT TO SCALE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET 133	E

NOTE: MOVE EASTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL SOUTHBOUND TRAFFIC

MOVE WESTBOUND MILE MARKER TO FACE COUNTER DIRECTIONAL NORTHBOUND TRAFFIC

MOVE SIGNS BACK TO ORIGINAL POSITION AT THE END OF STAGE ONE WORK



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

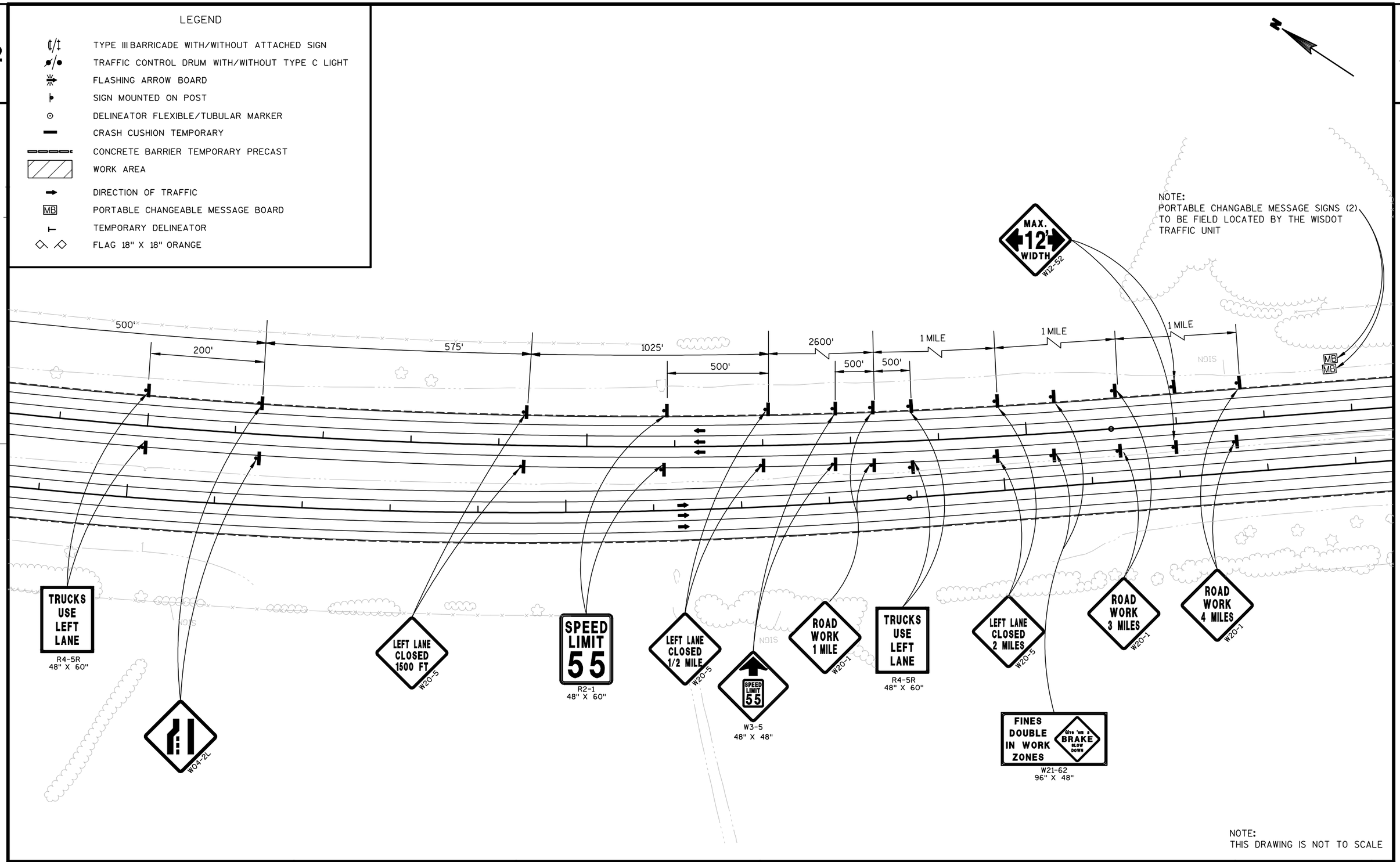
NOTE:
THIS DRAWING NOT TO SCALE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET 134	E

2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

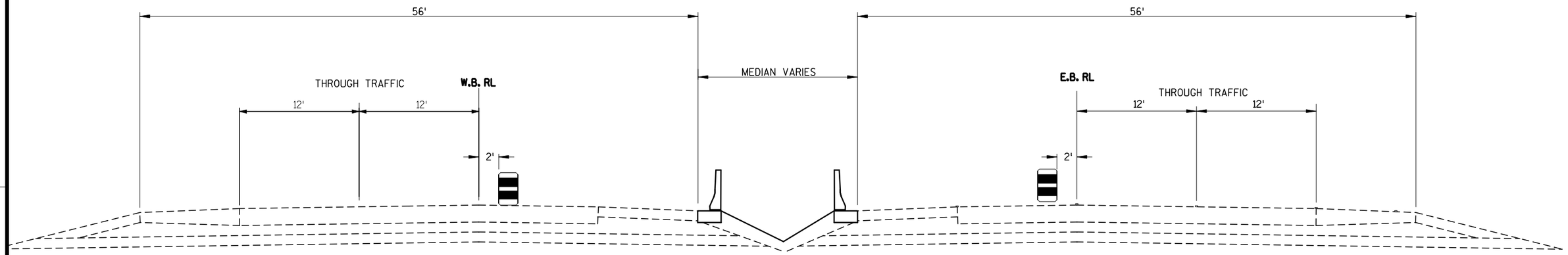


NOTE:
THIS DRAWING IS NOT TO SCALE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2	SHEET 135	E

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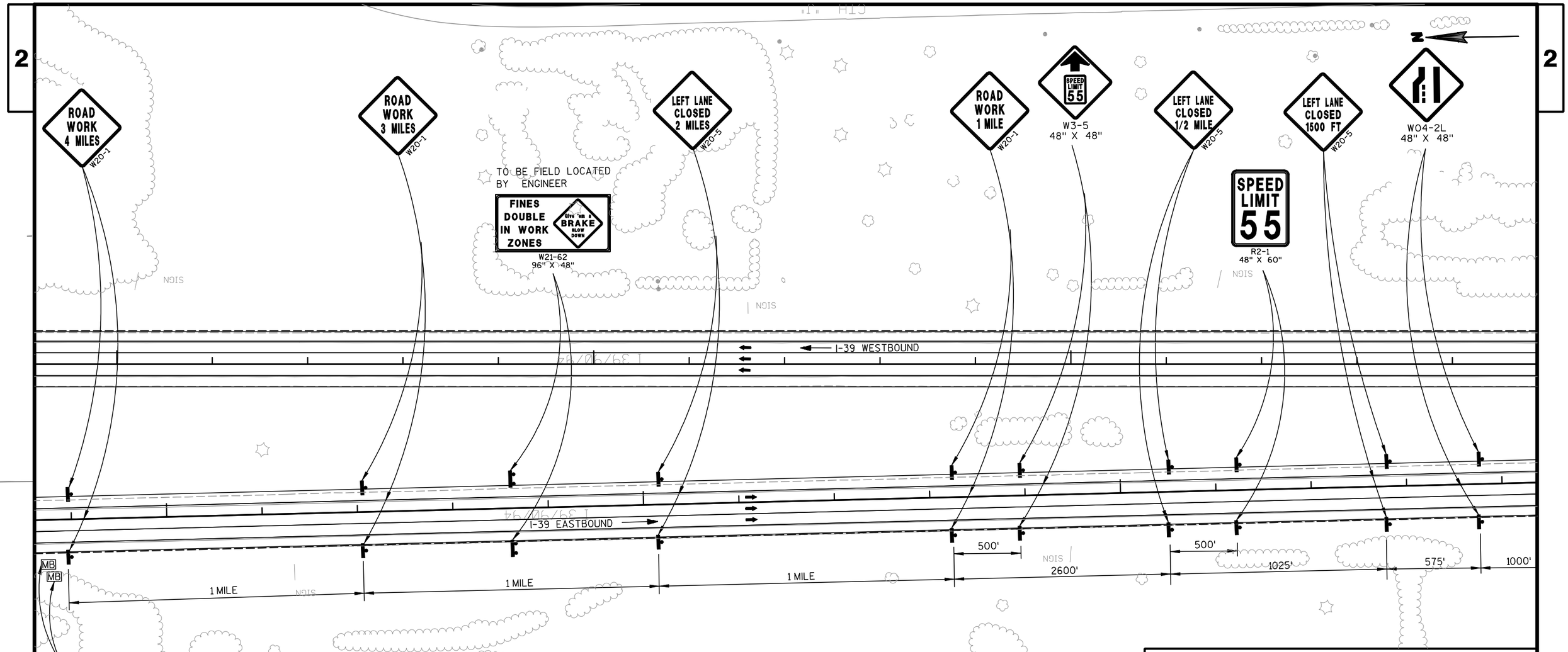


STAGE 3 MEDIAN WORK

1350+00 - 1590+00 WB & EB

STAGE 3 NOTES:

1. PLACE DRUMS TO CLOSE MEDIAN LANES AND SHOULDERS IN BOTH DIRECTIONS.
2. REMOVE CROSS OVERS.
3. CONSTRUCT INLETS.
4. CONSTRUCT CONCRETE BARRIER WALL SINGLE FACED 42-INCH.



PORTABLE CHANGEABLE MESSAGE SIGNS (2) TO BE FIELD LOCATED BY THE WISDOT TRAFFIC UNIT.

NOTE:
SEE LANE CLOSURE SIGNING SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H."

NOTE:
THIS DRAWING IS NOT TO SCALE

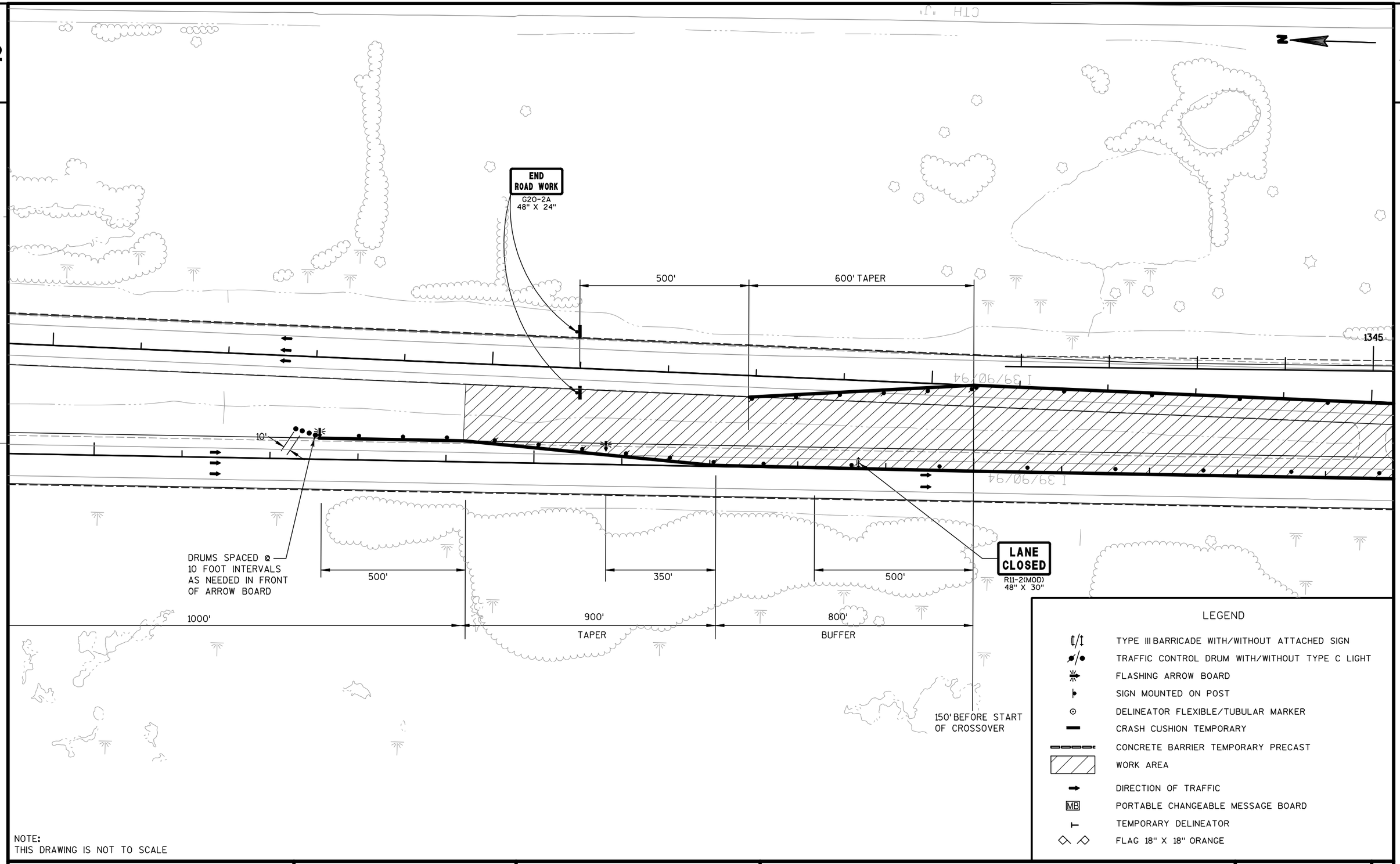
LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 42

2



NOTE:
THIS DRAWING IS NOT TO SCALE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

ROAD WORK AHEAD
W20-1

LANE CLOSED
R11-2(MOD)
48" X 30"

END ROAD WORK
G20-2A
48" X 24"

LANE CLOSED
R11-2(MOD)
48" X 30"

1345 1350 1355 100'

BEGIN PROJECT

SIGN SIGN RUINS

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET 139	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

2

N

1360

1365

1370

1375

1360

1360

1365

1370

1370

1375

1365

NO CONSTRUCTION ACTIVITY OF ANY KIND ALLOWED BETWEEN SLOPE INTERCEPTS FROM STATION 1364+00 TO 1423+00 EB

100'

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1

SPEED LIMIT 55
R2-1
48" X 60"

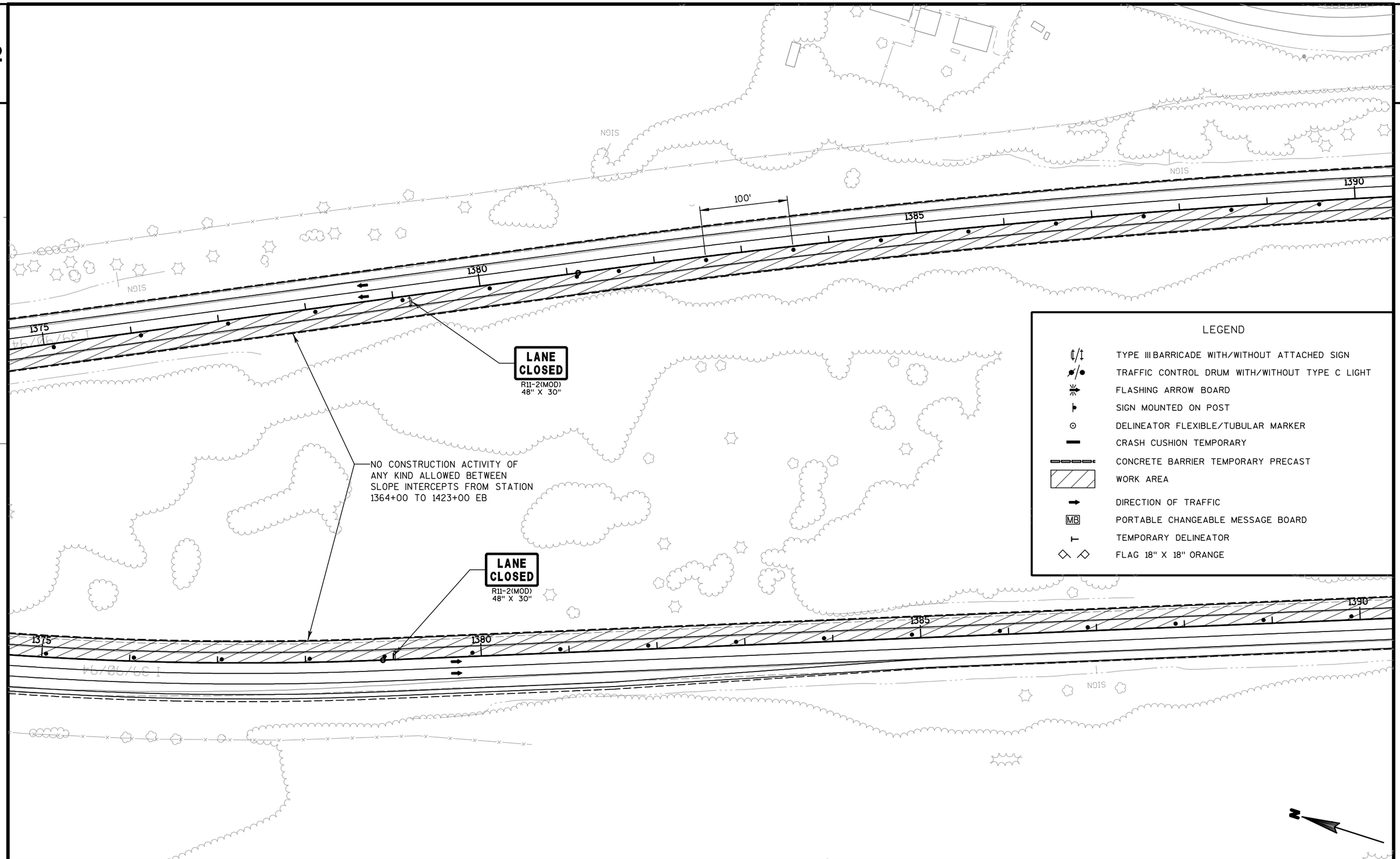
LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET 140	E

2

2



PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET 141	E

2

2

100'

1390

1395

1400

1405

LANE CLOSED
R11-2(MOD)
48" X 30"

NO CONSTRUCTION ACTIVITY OF
ANY KIND ALLOWED BETWEEN
SLOPE INTERCEPTS FROM STATION
1364+00 TO 1423+00 EB

LANE CLOSED
R11-2(MOD)
48" X 30"

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET 142	E

2

100'

1405

1410

1415

1420

NO CONSTRUCTION ACTIVITY OF
ANY KIND ALLOWED BETWEEN
SLOPE INTERCEPTS FROM STATION
1364+00 TO 1423+00 EB

SMOKEY HOLLOW RD.

SIGN

INL

M

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL	SHEET 143	E

2

2

SANDERSON RD.

SEPTIC

SIGN

100'

1420

1425

1430

LANE CLOSED
R11-2(MOD)
48" X 30"

NO CONSTRUCTION ACTIVITY OF ANY KIND ALLOWED BETWEEN SLOPE INTERCEPTS FROM STATION 1364+00 TO 1423+00 EB

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET 144	E

2

2

SANDERSON RD.

SIGN

100'

1435 1440 1445

1435 1440 1445

SPEED LIMIT 55
R2-1
48" X 60"

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

LANE CLOSED
R11-2(MOD)
48" X 30"

100'

1450 1455 1460

1450 1455 1460

LANE CLOSED
R11-2(MOD)
48" X 30"

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

2

RIPRAP

100'

1465 1470 1475

1465 1470 1475

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

100'

1480 1485 1490

1480 1485 1490

LANE CLOSED
R11-2(MOD)
48" X 30"

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

2

LANE CLOSED
R11-2(MOD)
48" X 30"

100'

1495

1500

1505

LANE CLOSED
R11-2(MOD)
48" X 30"

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

100'

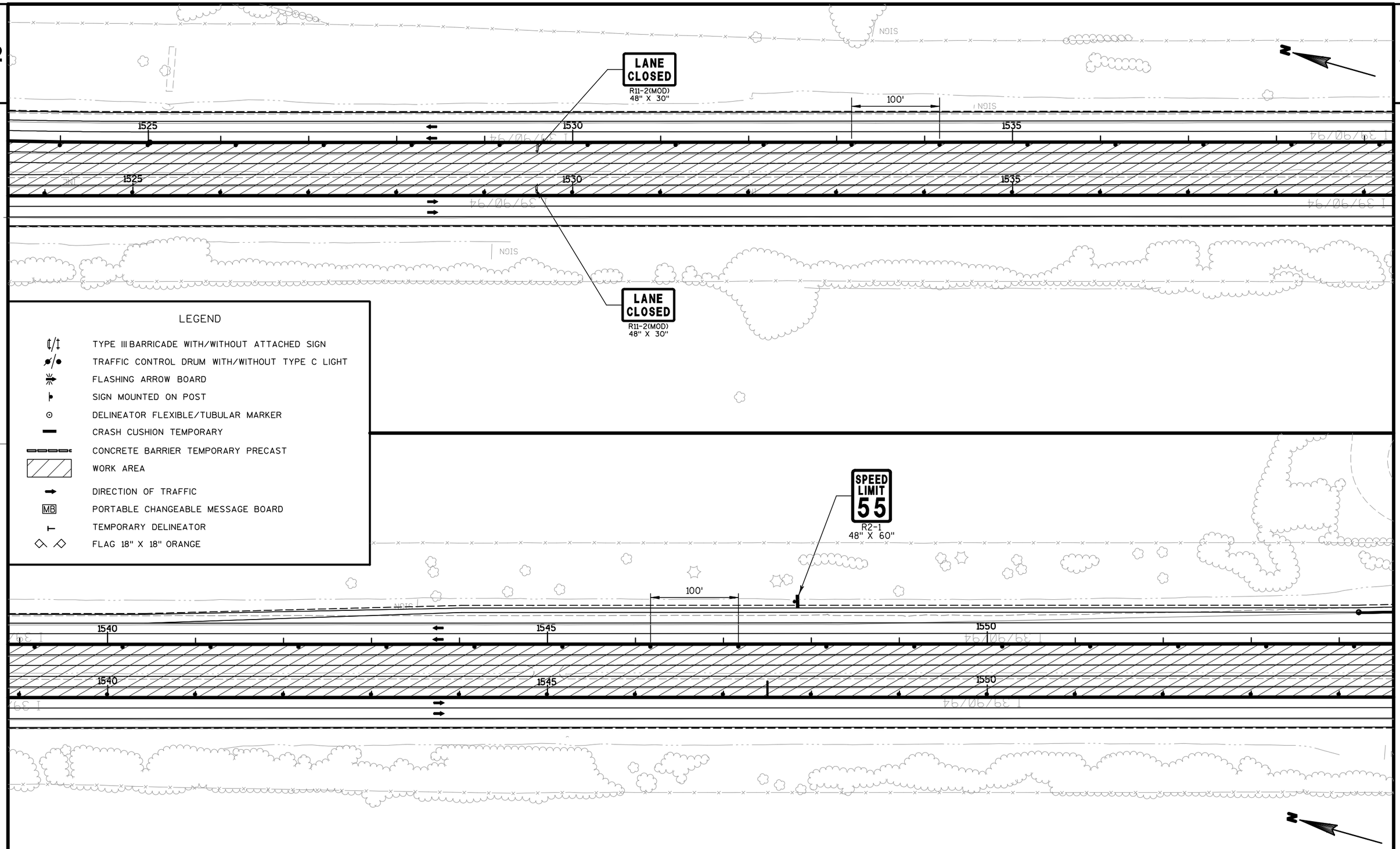
1510

1515

1520

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET	E

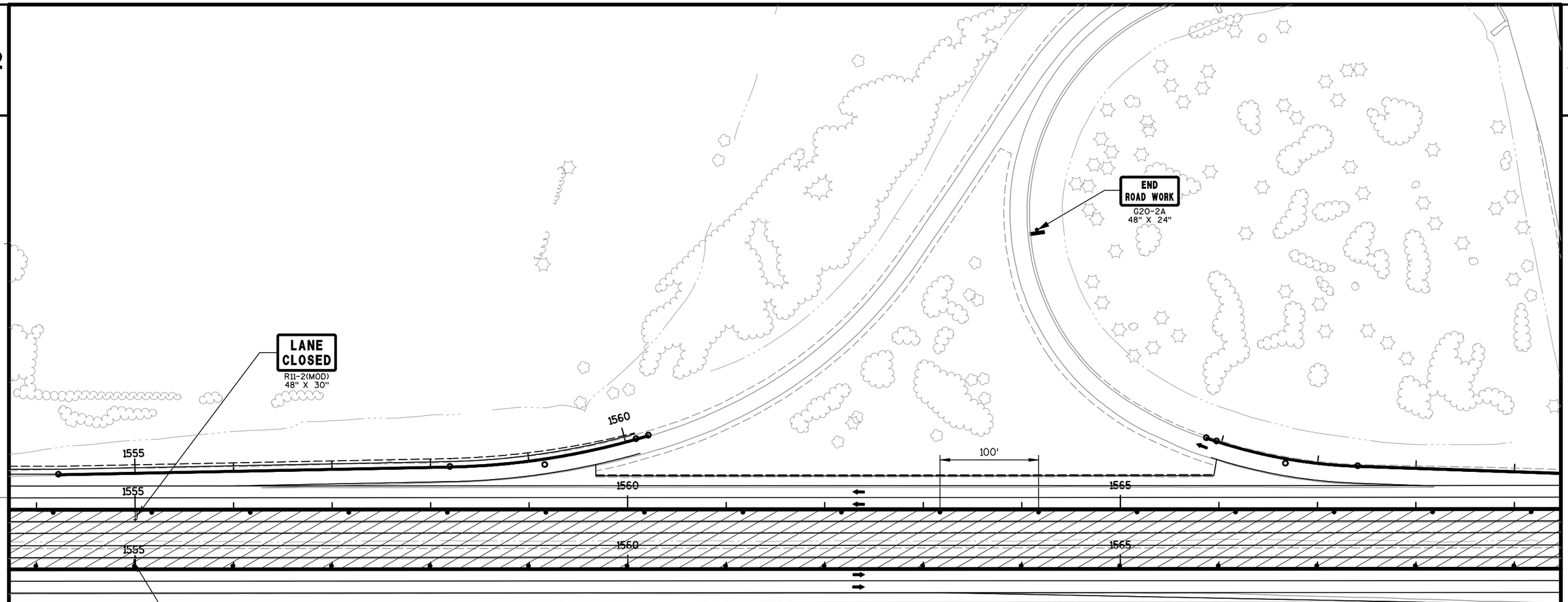
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PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET 148	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET 149	E

2

2

STH 60

SIGN

INL

100'

1570 1575 1580

1570 1575 1580

1570

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

100'

1585 1590 1595

1585 1590 1595

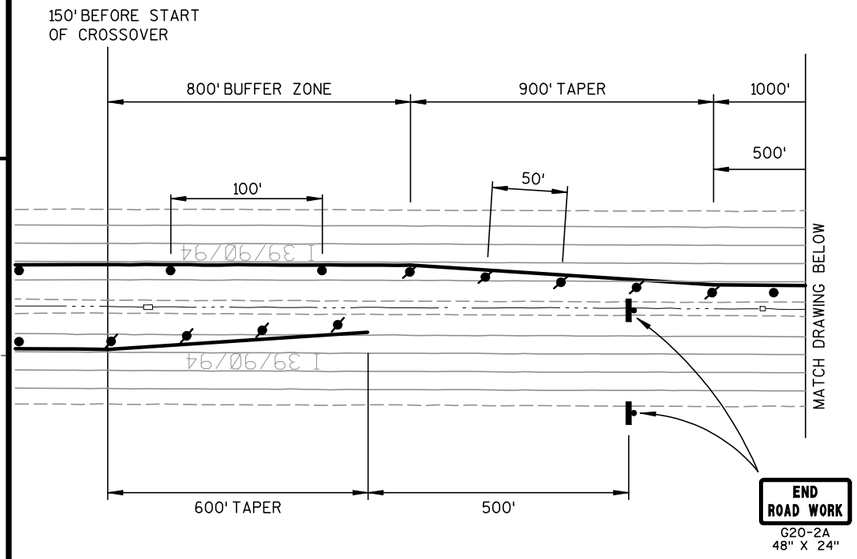
1585

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET 150	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2



2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN MOUNTED ON POST
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY DELINEATOR
- FLAG 18" X 18" ORANGE

NOTE:
SEE LANE CLOSURE SIGNING SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H."

NOTE:
PORTABLE CHANGABLE MESSAGE SIGNS (2) TO BE FIELD LOCATED BY ENGINEER

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3	SHEET 151	E

P.I. = 1340+82.07 D
Y 342,126.19
X 535,802.96

P.I. = 1347+82.45 D
Y 341,425.93
X 535,814.27
Δ. = 7°32'19" LT.
D. = 7°32'20"
T. = 50.07'
L. = 100'
R. = 760'
P.C. = 1347+32.38 D
P.T. = 1348+32.37
S.E. =

P.I. = 1350+62.31 D
Y 341,147.90
X 535,847.56
Δ. = 49°23'37" LT.
D. = 11°27'33"
T. = 229.94'
L. = 431.04'
R. = 500'
P.C. = 1348+32.37 D
P.T. = 1352+63.41 D
S.E. =

P.I. = 1353+14.12 E
Y 341,170.08
X 536,132.78
Δ. = 128°09'03" LT.
D. = 28°38'52"
T. = 411.43'
L. = 447.33'
R. = 200'
P.C. = 1349+02.69 E
P.T. = 1353+50.02 E
S.E. =

P.I. = 1354+25.88 E
Y 340,779.35
X 535,841.61
Δ. = 21°28'39" LT.
D. = 14°19'26"
T. = 75.86'
L. = 149.94'
R. = 400'
P.C. = 1353+25.02 E
P.T. = 1354+99.96 E
S.E. =

P.I. = 1356+00.53 E
Y 340,609.10
X 535,795.31
Δ. = 15°04'34" LT.
D. = 7°32'20"
T. = 100.57'
L. = 199.98'
R. = 760'
P.C. = 1354+99.96 E
P.T. = 1356+99.94 E
S.E. =

P.I. = 1358+62.22 E
Y 340,346.27
X 535,792.18

P.I. = 1359+97.79 E
Y 340,210.72
X 535,794.10

P.I. = 1364+44.35 WB
Y 339,664.33
X 535,748.41
Δ. = 26°01'57" LT.
D. = 1°30'00"
T. = 883.00'
L. = 1,735.50'
R. = 3,819.72'
P.C. = 1356+61.35 WB
P.T. = 1373+96.86 WB
S.E. =

P.I. = 1372+51.29 EB
Y 338,907.08
X 535,723.20
Δ. = 19°17'15" LT.
D. = 1°30'00"
T. = 649.06'
L. = 1,285.84'
R. = 3,819.72'
P.C. = 1366+02.23 EB
P.T. = 1378+88.07 EB
S.E. =

P.I. = 1358+18.00 C
Y 340,339.96
X 535,680.96

P.I. = 1361+68.87 C
Y 339,989.25
X 535,673.42
Δ. = 15°07'18" RT.
D. = 7°32'20"
T. = 100.88'
L. = 200.58'
R. = 760'
P.C. = 1360+67.99 C
P.T. = 1362+68.57 C
S.E. =

P.I. = 1363+44.46 C
Y 339,818.02
X 535,629.54
Δ. = 21°29'09" RT.
D. = 14°19'26"
T. = 75.89'
L. = 150'
R. = 400'
P.C. = 1362+68.57 C
P.T. = 1364+18.57 C
S.E. =

P.I. = 1367+20.72 C
Y 339,510.56
X 535,409.59
Δ. = 112°59'45" RT.
D. = 28°38'52"
T. = 302.14'
L. = 394.43'
R. = 200'
P.C. = 1364+18.57 C
P.T. = 1368+13.00 C
S.E. =

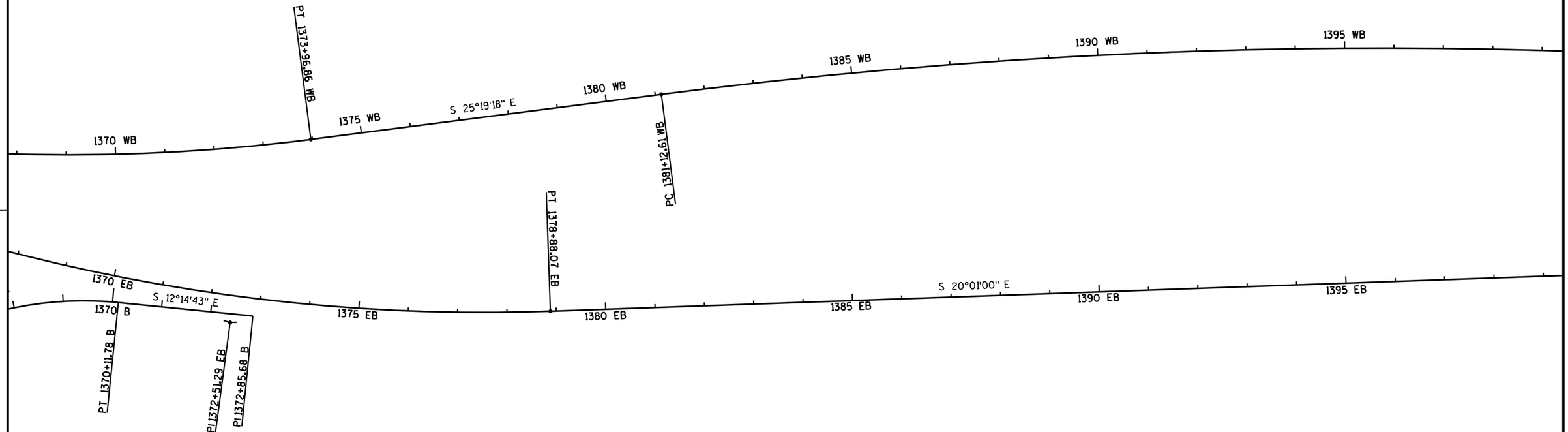
P.I. = 1367+92.64 B
Y 339,365.46
X 535,641.68
Δ. = 37°14'32" RT.
D. = 8°11'06"
T. = 235.86'
L. = 455'
R. = 700'
P.C. = 1365+56.78 B
P.T. = 1370+11.78 B
S.E. =

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT LAYOUT DETAILS	SHEET	E

FILE NAME : r:\Support\CADDS\Projects\d1_10100472\027201_ad.dgn PLOT DATE : 01-SEP-2009 14:58 PLOT BY : dotbbg PLOT NAME : PLOT SCALE : 200.000000:1.000000

P.I. = 1365+44.35 WB
Y 339,664.33
X 535,748.41
Δ. = 26°01'57" LT.
D. = 1°30'00"
T. = 883.00'
L. = 1,735.50'
R. = 3,819.72'
P.C. = 1356+61.35 WB
P.T. = 1373+96.86 WB
S.E. =

P.I. = 1405+28.60 WB
Y 336,035.33
X 537,465.52
Δ. = 23°48'40" RT.
D. = 0°30'00"
T. = 2,415.99'
L. = 4,762.24'
R. = 11,459.16'
P.C. = 1381+12.61 WB
P.T. = 1428+74.84 WB
S.E. =



P.I. = 1372+85.68 B
Y 338,867.29
X 535,749.80

P.I. = 1372+51.29 EB
Y 338,907.08
X 535,723.20
Δ. = 19°17'15" LT.
D. = 1°30'00"
T. = 649.06'
L. = 1,285.84'
R. = 3,819.72'
P.C. = 1366+02.23 EB
P.T. = 1378+88.07 EB
S.E. =

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT LAYOUT DETAILS	SHEET	E

2

P.I. = 1405+28.60 WB
Y 336,035.33
X 537,465.52
Δ. = 23°48'40" RT.
D. = 0°30'00"
T. = 2,415.99'
L. = 4,762.24'
R. = 11,459.16'
P.C. = 1381+12.61 WB
P.T. = 1428+72.84 WB
S.E. =

N

PI 1405+28.60 WB

1400 WB
1405 WB
1410 WB
1415 WB
1420 WB
1425 WB
1430 WB

PI 1422+97.18 EB

EQUATION
AHEAD 1429+08.64 WB
BACK 1429+61.07 WB
PT 1428+74.84 WB
S 1°30'38" E

1400 EB
1405 EB
1410 EB
1415 EB
1420 EB
1425 EB
1430 EB

S 20°01'00" E

PC 1416+74.89 EB

PT 1429+08.64 EB

P.I. = 1422+97.18 EB
Y 334,154.47
X 537,454.59
Δ. = 18°30'23" RT.
D. = 1°30'00"
T. = 622.30'
L. = 1,233.75'
R. = 3,819.72'
P.C. = 1416+74.89 EB
P.T. = 1429+08.64 EB
S.E. =

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT LAYOUT DETAILS	SHEET	E

FILE NAME : r:\Support\CADDS\Projects\d1_10100472\027203_ad.dgn PLOT DATE : 01-SEP-2009 14:58 PLOT BY : dotbbg PLOT NAME : PLOT SCALE : 200.000000:1.000000

2

P.I. = 1515+53.87 WB
Y 324,891.75
X 537,759.37
Δ. = 14°17'29" LT.
D. = 0°45'00"
T. = 957.73'
L. = 1,905.52'
R. = 7,639.44'
P.C. = 1505+96.14 WB
P.T. = 1525+01.66 WB
S.E. =

N

EQUATION

AHEAD 1525+19.32 WB
BACK PT 1525+01.66 WB

PC 1505+96.14 WB

P.I. 1515+53.87 WB

S 1°30'38" E

1505 WB

1510 WB

1515 WB

1520 WB

1525 WB

S 15°48'07" E

1530 WB

S 1°30'38" E

1505 EB

1510 EB

1515 EB

1520 EB

1525 EB

S 15°48'07" E

1530 EB

PC 1508+43.16 EB

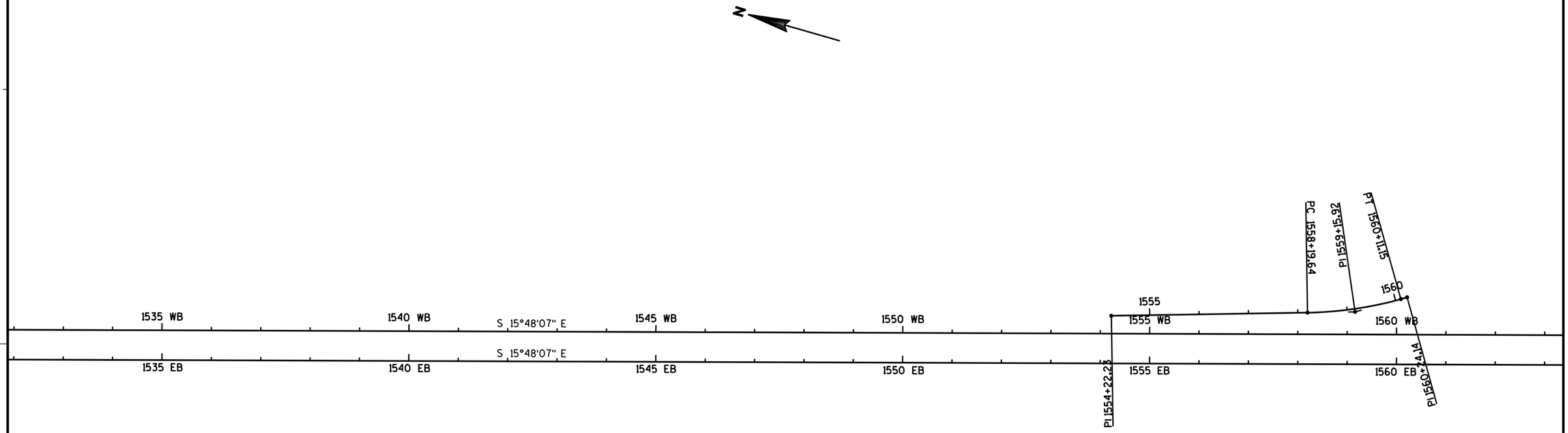
P.I. 1515+61.46 EB

PT 1522+72.30 EB

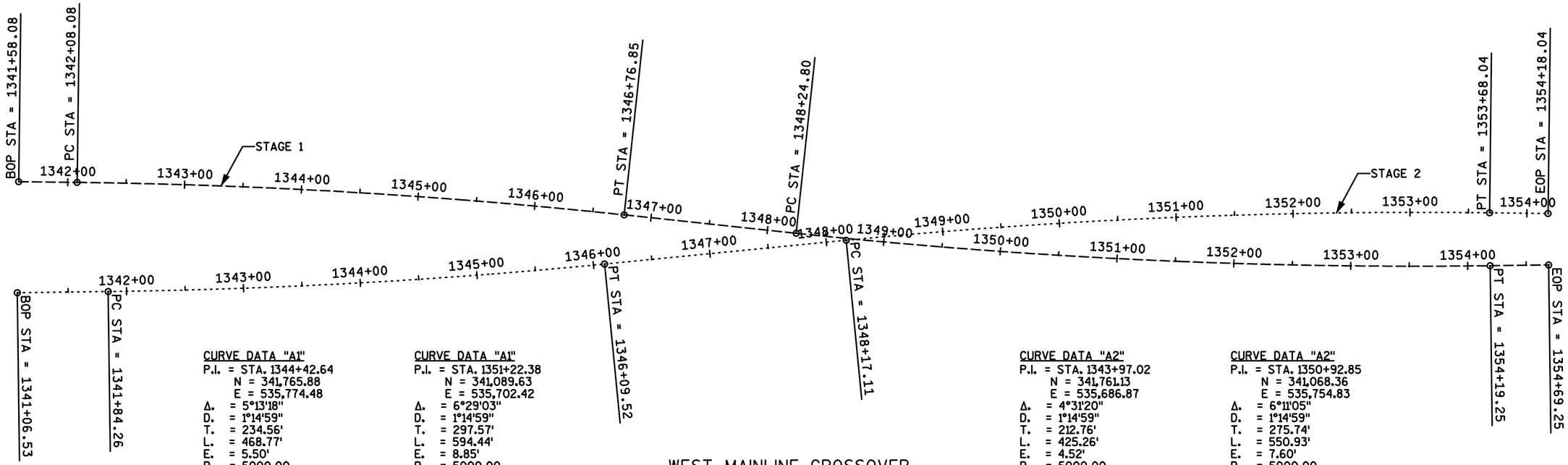
P.I. = 1515+61.46 EB
Y 324,882.58
X 537,699.09
Δ. = 14°17'29" LT.
D. = 1°00'00"
T. = 718.30'
L. = 1,429.14'
R. = 5,729.58'
P.C. = 1508+43.16 EB
P.T. = 1522+72.30 EB
S.E. =

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT LAYOUT DETAILS	SHEET	E

2



PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	ALIGNMENT LAYOUT DETAILS	SHEET	E



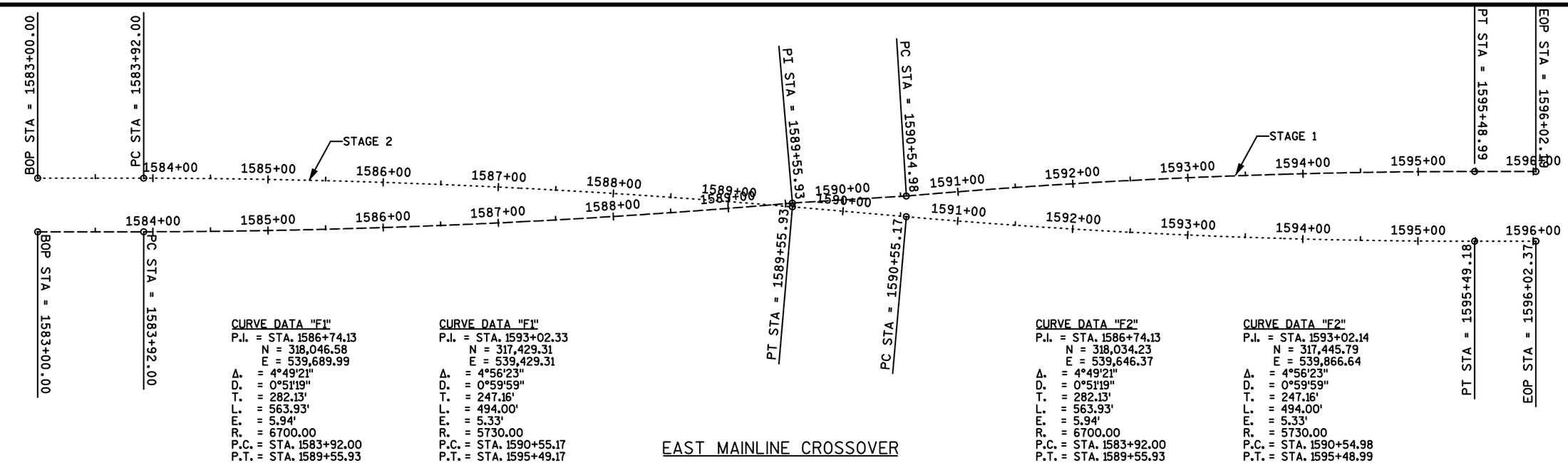
CURVE DATA "A1"
P.I. = STA. 1344+42.64
N = 341,765.88
E = 535,774.48
Δ. = 5°13'18"
D. = 1°14'59"
T. = 234.56'
L. = 468.77'
E. = 5.50'
R. = 5000.00
P.C. = STA. 1342+08.08
P.T. = STA. 1346+76.85

CURVE DATA "A1"
P.I. = STA. 1351+22.38
N = 341,089.63
E = 535,702.42
Δ. = 6°29'03"
D. = 1°14'59"
T. = 297.57'
L. = 594.44'
E. = 8.85'
R. = 5000.00
P.C. = STA. 1348+24.80
P.T. = STA. 1354+19.25

CURVE DATA "A2"
P.I. = STA. 1343+97.02
N = 341,761.13
E = 535,686.87
Δ. = 4°31'20"
D. = 1°14'59"
T. = 212.76'
L. = 425.26'
E. = 4.52'
R. = 5000.00
P.C. = STA. 1341+84.26
P.T. = STA. 1346+09.52

CURVE DATA "A2"
P.I. = STA. 1350+92.85
N = 341,068.36
E = 535,754.83
Δ. = 6°11'05"
D. = 1°14'59"
T. = 275.74'
L. = 550.93'
E. = 7.60'
R. = 5000.00
P.C. = STA. 1348+17.11
P.T. = STA. 1353+68.04

WEST MAINLINE CROSSOVER



CURVE DATA "F1"
P.I. = STA. 1586+74.13
N = 318,046.58
E = 539,689.99
Δ. = 4°49'21"
D. = 0°51'19"
T. = 282.13'
L. = 563.93'
E. = 5.94'
R. = 6700.00
P.C. = STA. 1583+92.00
P.T. = STA. 1589+55.93

CURVE DATA "F1"
P.I. = STA. 1593+02.33
N = 317,429.31
E = 539,429.31
Δ. = 4°56'23"
D. = 0°59'59"
T. = 247.16'
L. = 494.00'
E. = 5.33'
R. = 5730.00
P.C. = STA. 1590+55.17
P.T. = STA. 1595+49.17

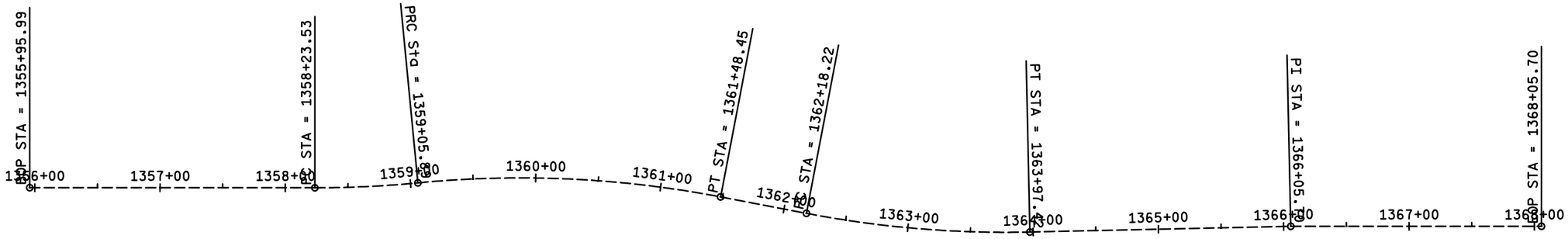
CURVE DATA "F2"
P.I. = STA. 1586+74.13
N = 318,034.23
E = 539,646.37
Δ. = 4°49'21"
D. = 0°51'19"
T. = 282.13'
L. = 563.93'
E. = 5.94'
R. = 6700.00
P.C. = STA. 1583+92.00
P.T. = STA. 1589+55.93

CURVE DATA "F2"
P.I. = STA. 1593+02.14
N = 317,445.79
E = 539,866.64
Δ. = 4°56'23"
D. = 0°59'59"
T. = 247.16'
L. = 494.00'
E. = 5.33'
R. = 5730.00
P.C. = STA. 1590+54.98
P.T. = STA. 1595+48.99

EAST MAINLINE CROSSOVER

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - CROSSOVER ALIGNMENT DIAGRAM	SHEET 157	E

2

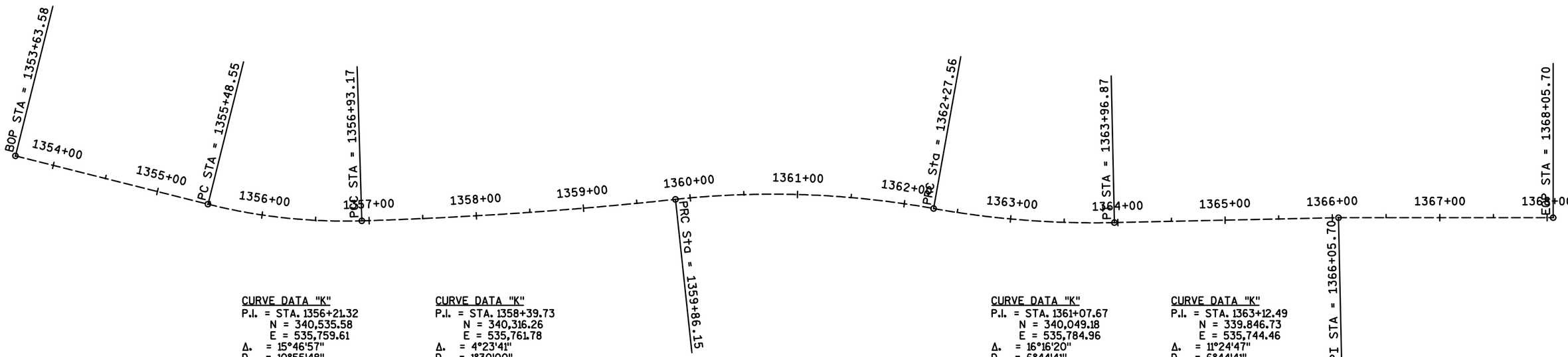


CURVE DATA "B"
P.I. = STA. 1358+64.74
N = 340,289.71
E = 535,790.49
Δ. = 5°32'58"
D. = 6°73'91"
T. = 41.23'
L. = 82.39'
E. = 0.99'
R. = 850.00
P.C. = STA. 1358+23.53
P.T. = STA. 1359+05.89

CURVE DATA "B"
P.I. = STA. 1359+27.99
N = 340,126.85
E = 535,802.94
Δ. = 16°20'57"
D. = 6°74'39"
T. = 122.11'
L. = 242.57'
E. = 8.73'
R. = 850.00
P.C. = STA. 1359+05.88
P.T. = STA. 1361+48.45

CURVE DATA "B"
P.I. = STA. 1363+08.16
N = 339,851.17
E = 535,744.46
Δ. = 12°04'32"
D. = 6°74'26"
T. = 89.93'
L. = 179.20'
E. = 4.74'
R. = 850.00
P.C. = STA. 1362+18.22
P.T. = STA. 1363+97.42

WESTBOUND CS OFF RAMP
STAGE 1-R1



CURVE DATA "K"
P.I. = STA. 1356+21.32
N = 340,535.58
E = 535,759.61
Δ. = 15°46'57"
D. = 10°55'48"
T. = 72.77
L. = 144.62'
E. = 5.02'
R. = 525.00
P.C. = STA. 1355+48.55
P.T. = STA. 1356+93.17

CURVE DATA "K"
P.I. = STA. 1358+39.73
N = 340,316.26
E = 535,761.78
Δ. = 4°23'41"
D. = 1°30'00"
T. = 146.56'
L. = 292.98'
E. = 2.81'
R. = 3819.73
P.C. = STA. 1356+93.17
P.T. = STA. 1359+86.15

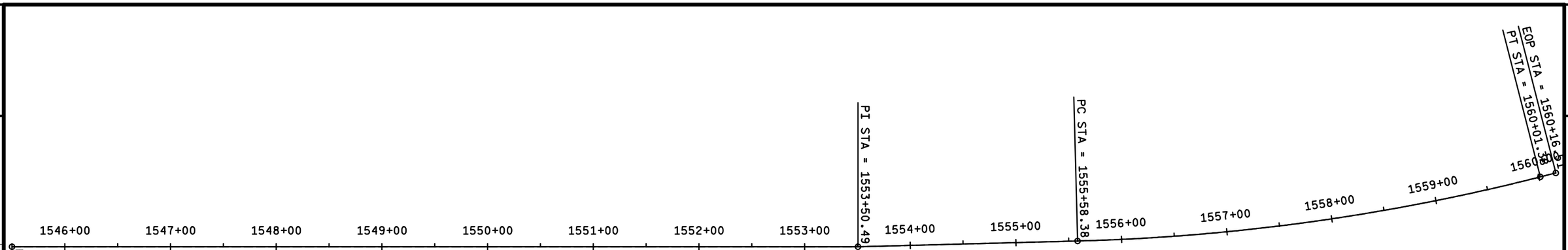
CURVE DATA "K"
P.I. = STA. 1361+07.67
N = 340,049.18
E = 535,784.96
Δ. = 16°16'20"
D. = 6°44'41"
T. = 121.52'
L. = 241.40'
E. = 8.64'
R. = 850.00
P.C. = STA. 1359+86.15
P.T. = STA. 1362+27.56

CURVE DATA "K"
P.I. = STA. 1363+12.49
N = 339,846.73
E = 535,744.46
Δ. = 11°24'47"
D. = 6°44'41"
T. = 84.94'
L. = 169.31'
E. = 4.23'
R. = 850.00
P.C. = STA. 1362+27.56
P.T. = STA. 1363+96.87

WESTBOUND CS OFF RAMP
STAGE 1-R2

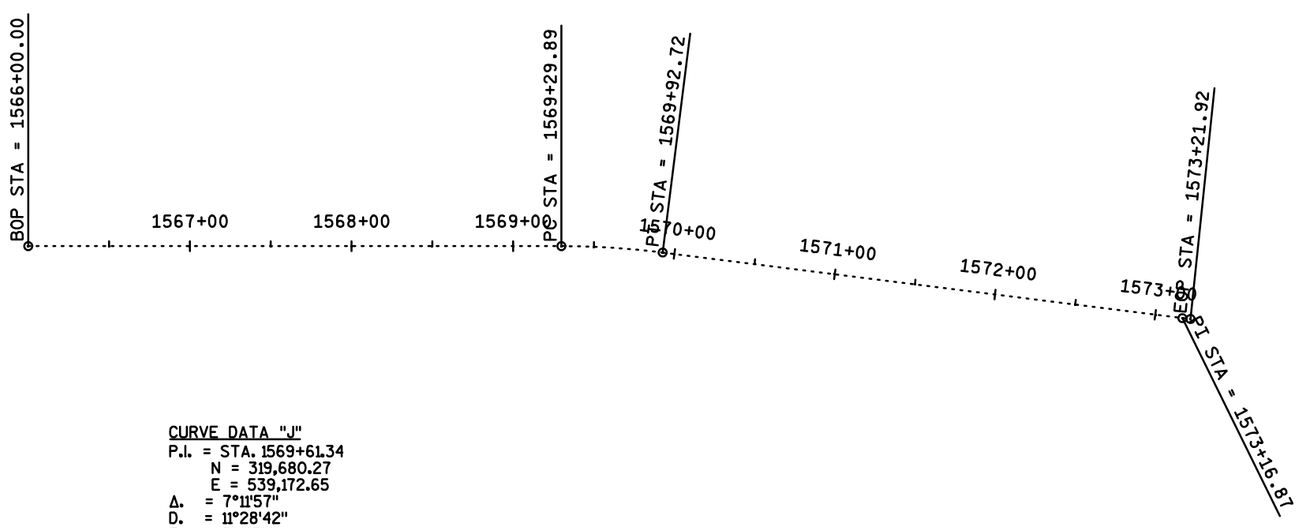
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - CROSSOVER ALIGNMENT DIAGRAM	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 42



CURVE DATA "H"
P.I. = STA. 1557+80.98
N = 320,835.46
E = 538,916.04
Δ. = 12°47'13"
D. = 2°53'12"
T. = 222.43
L. = 443.00'
E. = 12.42
R. = 1985.00
P.C. = STA. 1555+58.55
P.T. = STA. 1360+01.55

WESTBOUND STH 60 ON RAMP
STAGE 1



CURVE DATA "J"
P.I. = STA. 1569+61.34
N = 319,680.27
E = 539,172.65
Δ. = 7°11'57"
D. = 11°28'42"
T. = 31.45'
L. = 62.82'
E. = 0.98'
R. = 500.00
P.C. = STA. 1569+29.89
P.T. = STA. 1569+92.72

EASTBOUND STH 60 OFF RAMP
STAGE 2

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL - CROSSOVER ALIGNMENT DIAGRAM	SHEET 159	E

DATE 08SEP09 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1010-04-72 QUANTITY
0010	108.3100.S	INCENTIVE/DISINCENTIVE FOR INTERIM COMPLETION OF WORK	CD	5.000	5.000
0020	201.0105	CLEARING	STA	281.000	281.000
0030	201.0205	GRUBBING	STA	281.000	281.000
0040	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	22.000	22.000
0050	203.0200	REMOVING OLD STRUCTURE (STATION) 01. 1415+65.00	LS	1.000	1.000
0060	204.0100	REMOVING PAVEMENT	SY	264,850.000	264,850.000
0070	204.0110	REMOVING ASPHALTIC SURFACE	SY	11,950.000	11,950.000
0080	204.0130	REMOVING CURB	LF	252.000	252.000
0090	204.0165	REMOVING GUARDRAIL	LF	3,748.000	3,748.000
0100	204.0180	REMOVING DELINEATORS AND MARKERS	EACH	33.000	33.000
0110	204.0220	REMOVING INLETS	EACH	25.000	25.000
0120	204.9090.S	REMOVING (ITEM DESCRIPTION) 01. 32 INCH CONCRETE BARRIER	LF	14,105.000	14,105.000
0130	205.0100	EXCAVATION COMMON	CY	139,161.000	139,161.000
0140	205.3000.S	TEMPORARY EMERGENCY PULLOUTS	EACH	23.000	23.000
0150	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-11-24	LS	1.000	1.000
0160	206.6000.S	TEMPORARY SHORING	SF	2,500.000	2,500.000
0170	210.0100	BACKFILL STRUCTURE	CY	164.000	164.000
0180	213.0100	FINISHING ROADWAY (PROJECT) 01. 1010-04-72	EACH	1.000	1.000
0190	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	4,130.000	4,130.000
0200	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	123,037.000	123,037.000
0210	310.0110	BASE AGGREGATE OPEN GRADED	TON	470.000	470.000
0220	312.0110	SELECT CRUSHED MATERIAL	TON	111,441.000	111,441.000
0230	415.0080	CONCRETE PAVEMENT 8-INCH	SY	115,302.000	115,302.000
0240	465.0315	ASPHALTIC FLUMES	SY	96.000	96.000
0250	502.0100	CONCRETE MASONRY BRIDGES	CY	329.000	329.000
0260	502.0400.S	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	3,290.000	3,290.000
0270	502.3100	EXPANSION DEVICE (STRUCTURE) 01. B-11-24	LS	1.000	1.000
0280	502.5002	MASONRY ANCHORS TYPE L NO. 4 BARS	EACH	71.000	71.000
0290	502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	324.000	324.000
0300	502.6102	MASONRY ANCHORS TYPE S 1/2-INCH	EACH	44.000	44.000
0310	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	89,160.000	89,160.000
0320	506.2610	BEARING PADS ELASTOMERIC LAMINATED	EACH	14.000	14.000
0330	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 01. B-11-24	EACH	20.000	20.000
0340	506.7050.S	REMOVING BEARINGS (STRUCTURE) 01. B-11-24	EACH	14.000	14.000
0350	509.1500	CONCRETE SURFACE REPAIR	SF	400.000	400.000
0360	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	20.000	20.000
0370	520.4012	CULVERT PIPE TEMPORARY 12-INCH	LF	9,200.000	9,200.000
0380	522.0318	CULVERT PIPE REINFORCED CONCRETE CLASS IV 18-INCH	LF	1,463.000	1,463.000
0390	522.0324	CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH	LF	1,090.000	1,090.000
0400	522.0330	CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH	LF	301.000	301.000
0410	522.0336	CULVERT PIPE REINFORCED CONCRETE CLASS IV 36-INCH	LF	794.000	794.000
0420	522.0342	CULVERT PIPE REINFORCED CONCRETE CLASS IV 42-INCH	LF	380.000	380.000
0430	522.0348	CULVERT PIPE REINFORCED CONCRETE CLASS IV 48-INCH	LF	339.000	339.000

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DATE 08SEP09 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1010-04-72 QUANTITY
0440	522.1018	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	EACH	20.000	20.000
0450	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	16.000	16.000
0460	522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	4.000	4.000
0470	522.1036	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	EACH	10.000	10.000
0480	522.1042	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 42-INCH	EACH	4.000	4.000
0490	522.1048	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH	EACH	4.000	4.000
0500	601.0105	CONCRETE CURB TYPE A	LF	252.000	252.000
0510	603.0500	CONCRETE BARRIER TEMPORARY PRECAST CONTRACTOR FURNISHED & DELIVERED	LF	86,859.000	86,859.000
0520	603.0801	CONCRETE BARRIER TEMPORARY PRECAST CONTRACTOR INSTALLED	LF	86,859.000	86,859.000
0530	604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	12,670.000	12,670.000
0540	606.0100	RIPRAP LIGHT	CY	185.000	185.000
0550	606.0300	RIPRAP HEAVY	CY	77.000	77.000
0560	608.0412	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH	LF	317.000	317.000
0570	608.0418	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH	LF	178.000	178.000
0580	611.0301	INLETS TYPE 1	EACH	28.000	28.000
0590	611.0302	INLETS TYPE 2	EACH	28.000	28.000
0600	611.0303	INLETS TYPE 3	EACH	16.000	16.000
0610	611.0305	INLETS TYPE 8	EACH	11.000	11.000
0620	611.0642	INLET COVERS TYPE MS	EACH	27.000	27.000
0630	611.0654	INLET COVERS TYPE V	EACH	72.000	72.000
0640	611.8115	ADJUSTING INLET COVERS	EACH	10.000	10.000
0650	611.9800.S	PIPE GRATES	EACH	41.000	41.000
0660	612.0106	PIPE UNDERDRAIN 6-INCH	LF	7,300.000	7,300.000
0670	612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	48.000	48.000
0680	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	1.000	1.000
0690	614.0200	STEEL THRIE BEAM STRUCTURE APPROACH	LF	231.000	231.000
0700	614.0305	STEEL PLATE BEAM GUARD CLASS A	LF	2,855.000	2,855.000
0710	614.0370	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL	EACH	11.000	11.000
0720	614.0805	CRASH CUSHIONS PERMANENT LOW MAINTENANCE	EACH	8.000	8.000
0730	614.0905	CRASH CUSHIONS TEMPORARY	EACH	11.000	11.000
0740	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1010-04-72	EACH	1.000	1.000
0750	619.1000	MOBILIZATION	EACH	1.000	1.000
0760	624.0100	WATER	MGAL	2,120.000	2,120.000
0770	625.0500	SALVAGED TOPSOIL	SY	110,840.000	110,840.000
0780	627.0200	MULCHING	SY	110,840.000	110,840.000
0790	628.1504	SILT FENCE	LF	10,238.000	10,238.000
0800	628.1520	SILT FENCE MAINTENANCE	LF	10,238.000	10,238.000
0810	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	1.000	1.000
0820	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	2.000	2.000
0830	628.2004	EROSION MAT CLASS I TYPE B	SY	184.100	184.100
0840	628.7020	INLET PROTECTION TYPE D	EACH	89.000	89.000
0850	629.0210	FERTILIZER TYPE B	CWT	71.000	71.000

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DATE 08SEP09 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1010-04-72 QUANTITY
0860	630.0110	SEEDING MIXTURE NO. 10	LB	1,498.000	1,498.000
0870	630.0200	SEEDING TEMPORARY	LB	1,498.000	1,498.000
0880	633.0100	DELINEATOR POSTS STEEL	EACH	935.000	935.000
0890	633.0500	DELINEATOR REFLECTORS	EACH	863.000	863.000
0900	633.1000	DELINEATOR BRACKETS	EACH	72.000	72.000
0910	633.1100	DELINEATORS TEMPORARY	EACH	214.000	214.000
0920	633.5200	MARKERS CULVERT END	EACH	45.000	45.000
0930	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	35.000	35.000
0940	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	105.000	105.000
0950	634.0620	POSTS WOOD 4X6-INCH X 20-FT	EACH	29.000	29.000
0960	634.0622	POSTS WOOD 4X6-INCH X 22-FT	EACH	4.000	4.000
0970	637.0101	SIGNS TYPE I	SF	1,512.000	1,512.000
0980	637.0202	SIGNS REFLECTIVE TYPE II	SF	1,419.060	1,419.060
0990	638.2102	MOVING SIGNS TYPE II	EACH	26.000	26.000
1000	638.2601	REMOVING SIGNS TYPE I	EACH	7.000	7.000
1010	638.2602	REMOVING SIGNS TYPE II	EACH	70.000	70.000
1020	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	97.000	97.000
1030	638.3620	ERECTING STATE OWNED SIGNS TYPE II	EACH	17.000	17.000
1040	642.5401	FIELD OFFICE TYPE D	EACH	1.000	1.000
1050	643.0200	TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 01. 1010-04-72	DAYS	128.000	128.000
1060	643.0300	TRAFFIC CONTROL DRUMS	DAYS	60,098.000	60,098.000
1070	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAYS	9,554.000	9,554.000
1080	643.0500	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	EACH	400.000	400.000
1090	643.0600	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	EACH	400.000	400.000
1100	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAYS	13,594.000	13,594.000
1110	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAYS	24,970.000	24,970.000
1120	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAYS	574.000	574.000
1130	643.0900	TRAFFIC CONTROL SIGNS	DAYS	29,470.000	29,470.000
1140	643.1000	TRAFFIC CONTROL SIGNS FIXED MESSAGE	SF	999.000	999.000
1150	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 1010-04-72	EACH	1.000	1.000
1160	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAYS	1,406.000	1,406.000
1170	645.0112	GEOTEXTILE FABRIC TYPE DF SCHEDULE B	SY	2,440.000	2,440.000
1180	645.0130	GEOTEXTILE FABRIC TYPE R	SY	527.000	527.000
1190	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	11,000.000	11,000.000
1200	646.0600	REMOVING PAVEMENT MARKINGS	LF	83,800.000	83,800.000
1210	646.0881.S	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH	LF	138,900.000	138,900.000
1220	646.0883.S	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH	LF	4,100.000	4,100.000
1230	647.0746	PAVEMENT MARKING DIAGONAL EPOXY 24-INCH	LF	400.000	400.000
1240	647.0803	PAVEMENT MARKING AERIAL ENFORCEMENT BARS EPOXY 24-INCH	LF	480.000	480.000
1250	649.0200	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	LF	262,548.000	262,548.000
1260	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	7,997.000	7,997.000
1270	649.0701	TEMPORARY PAVEMENT MARKING 8-INCH	LF	2,050.000	2,050.000
1280	649.0801	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH	LF	600.000	600.000
1290	649.2100	TEMPORARY RAISED PAVEMENT MARKERS	EACH	742.000	742.000
1300	650.4000	CONSTRUCTION STAKING STORM SEWER SYSTEM	EACH	89.000	89.000

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DATE 08SEP09 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1010-04-72 QUANTITY
1310	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	42,400.000	42,400.000
1320	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	252.000	252.000
1330	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	77.000	77.000
1340	650.7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	42,400.000	42,400.000
1350	650.7500	CONSTRUCTION STAKING CONCRETE BARRIER	LF	31,211.000	31,211.000
1360	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 1010-04-72	LS	1.000	1.000
1370	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1010-04-72	LS	1.000	1.000
1380	652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	10.000	10.000
1390	653.0135	PULL BOXES STEEL 24X36-INCH	EACH	14.000	14.000
1400	654.0105	CONCRETE BASES TYPE 5	EACH	7.000	7.000
1410	654.0220	CONCRETE CONTROL CABINET BASES TYPE 10	EACH	4.000	4.000
1420	655.0625	ELECTRICAL WIRE LIGHTING 6 AWG	LF	615.000	615.000
1430	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. STH 60	LS	1.000	1.000
1440	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 02. CTH CS	LS	1.000	1.000
1450	656.0500	ELECTRICAL SERVICE BREAKER DISCONNECT BOX (LOCATION) 01. STH 60	LS	1.000	1.000
1460	656.0500	ELECTRICAL SERVICE BREAKER DISCONNECT BOX (LOCATION) 02. CTH CS	LS	1.000	1.000
1470	657.0255	TRANSFORMER BASES STANDARD 11 1/2-INCH BOLT CIRCLE	EACH	14.000	14.000
1480	657.0320	POLES TYPE 5	EACH	6.000	6.000
1490	659.0802	PLAQUES SEQUENCE IDENTIFICATION	EACH	4.000	4.000
1500	670.0100	FIELD SYSTEM INTEGRATOR	LS	1.000	1.000
1510	670.0200	ITS DOCUMENTATION	LS	1.000	1.000
1520	672.0250	BASE CAMERA POLE 50-FT	EACH	1.000	1.000
1530	674.0200	CABLE MICROWAVE DETECTOR	LF	4,170.000	4,170.000
1540	675.0300	INSTALL MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY	EACH	9.000	9.000
1550	677.0100	INSTALL CAMERA POLE	EACH	2.000	2.000
1560	677.0200	INSTALL CAMERA ASSEMBLY	EACH	2.000	2.000
1570	678.0006	INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT	LF	765.000	765.000
1580	678.0200	FIBER OPTIC SPLICE ENCLOSURE	EACH	1.000	1.000
1590	678.0300	FIBER OPTIC SPLICE	EACH	6.000	6.000
1600	678.0400	FIBER OPTIC TERMINATION	EACH	12.000	12.000
1610	678.0500	COMMUNICATION SYSTEM TESTING	LS	1.000	1.000
1620	690.0250	SAWING CONCRETE	LF	290.000	290.000
1630	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5. 00/HR	HRS	900.000	900.000
1640	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	1,600.000	1,600.000
1650	SPV.0045	SPECIAL 01. PORTABLE CHANGEABLE MESSAGE SIGN	DAY	816.000	816.000
1660	SPV.0055	SPECIAL 01. CONCRETE PAVEMENT PERFORMANCE-RELATED SPECIFICATION	DOL	484,064.000	484,064.000
1670	SPV.0060	SPECIAL 01. MARKER POST FOR GUARDRAIL TERMINAL	EACH	9.000	9.000
1680	SPV.0060	SPECIAL 02. INLETS TYPE 3 SPECIAL	EACH	1.000	1.000
1690	SPV.0060	SPECIAL 03. CLEANING AND PAINTING BEARINGS	EACH	32.000	32.000
1700	SPV.0060	SPECIAL 04. INSTALL CONDUIT INTO EXISTING ITEM	EACH	3.000	3.000

3

DATE 08SEP09 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1010-04-72 QUANTITY
1710	SPV.0060	SPECIAL 05. INSTALL CCTV POLE MOUNTED CABINET	EACH	1.000	1.000
1720	SPV.0060	SPECIAL 06. INSTALL ITS FIELD CABINET	EACH	1.000	1.000
1730	SPV.0060	SPECIAL 07. INSTALL ETHERNET SWITCH	EACH	2.000	2.000
1740	SPV.0060	SPECIAL 08. INSTALL ETHERNET VIDEO CODEC	EACH	2.000	2.000
1750	SPV.0060	SPECIAL 09. INSTALL SPREAD SPECTRUM RADIO	EACH	2.000	2.000
1760	SPV.0060	SPECIAL 10. INSTALL FIBER OPTIC TERMINATION PANEL, 12-COUNT	EACH	2.000	2.000
1770	SPV.0060	SPECIAL 11. INSTALL YAGI ANTENNA	EACH	2.000	2.000
1780	SPV.0060	SPECIAL 12. INSTALL SOLAR POWER SYSTEM	EACH	1.000	1.000
1790	SPV.0060	SPECIAL 13. GROUND ROD	EACH	8.000	8.000
1800	SPV.0060	SPECIAL 14. RAMP CLOSURE GATES SOLAR POWERED 40-FT	EACH	4.000	4.000
1810	SPV.0060	SPECIAL 15. ARMORGUARD GATES	EACH	2.000	2.000
1820	SPV.0060	SPECIAL 16. INLETS TYPE 20 SPECIAL	EACH	5.000	5.000
1830	SPV.0060	SPECIAL 17. SALVAGE CRASH CUSHION	EACH	1.000	1.000
1840	SPV.0090	SPECIAL 01. 51-INCH VERTICAL CONCRETE WALL	LF	92.000	92.000
1850	SPV.0090	SPECIAL 02. 51-INCH VERTICAL CONCRETE WALL TRANSITION	LF	120.000	120.000
1860	SPV.0090	SPECIAL 03. CONCRETE SHOULDER RUMBLE STRIP	LF	83,200.000	83,200.000
1870	SPV.0090	SPECIAL 04. EMERGENCY CONCRETE BARRIER TEMPORARY PRECAST, CONTRACTOR FURNISHED	LF	200.000	200.000
1880	SPV.0090	SPECIAL 05. EMERGENCY CONCRETE BARRIER TEMPORARY PRECAST CONTRACTOR INSTALLED	LF	200.000	200.000
1890	SPV.0090	SPECIAL 06. CONDUIT HDPE 1 DUCT 2-INCH	LF	2,190.000	2,190.000
1900	SPV.0090	SPECIAL 07. CONDUIT HDPE 2 DUCT 2-INCH	LF	1,500.000	1,500.000
1910	SPV.0090	SPECIAL 08. CONDUIT HDPE DIRECTIONAL BORE 3 DUCT 2-INCH	LF	180.000	180.000
1920	SPV.0090	SPECIAL 09. CONDUIT HDPE 3 DUCT 3-INCH	LF	50.000	50.000
1930	SPV.0090	SPECIAL 10. CONDUIT HDPE DIRECTIONAL BORE 3 DUCT 3-INCH	LF	200.000	200.000
1940	SPV.0090	SPECIAL 11. CONCRETE BARRIER 42-INCH	LF	30,999.000	30,999.000
1950	SPV.0105	SPECIAL 01. STANDBY TIME FOR LABOR & EQUIP TO INSTALL EMERG CONC BARR TEMP PRECAST	LS	1.000	1.000
1960	SPV.0180	SPECIAL 01. CONCRETE PAVEMENT 12.5-INCH	SY	166,143.000	166,143.000
1970	SPV.0180	SPECIAL 02. CONCRETE PAVEMENT HES 12. 5-INCH	SY	1,800.000	1,800.000
1980	SPV.0180	SPECIAL 03. GEOGRID REINFORCEMENT	SY	171,150.000	171,150.000
1990	SPV.0180	SPECIAL 04. REMOVING CRUSHED AGGREGATE SLOPE PAVING	SY	550.000	550.000

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CLEARING AND GRUBBING

CATEGORY	STATION	LOCATION	(201.0105) CLEARING (STA)	(201.0205) GRUBBING (STA)	REMARKS
050	1345+00 - 1360+00		15	15	
	1360+00 - 1429+00 EB		69	69	
	1360+00 - 1429+00 WB		69	69	
	1430+00 - 1558+00		128	128	
		TOTAL	281	281	

REMOVING SMALL PIPE CULVERTS

GROUP CODE	STATION	LOCATION	(203.0100) REMOVING SMALL PIPE CULVERTS (EACH)	(204.0180) REMOVING DELINEATORS AND MARKERS (EACH)	REMARKS
020	1382+50	WB	1	2	30" CMCP CROSS PIPE
	1392+93	WB	1	2	36" CMCP CROSS PIPE
	1393+00	EB	1	2	48" CMCP CROSS PIPE
	1409+92	EB	1	2	42" CMCP CROSS PIPE
	1430+30	LT	1	1	18" CMCP
	1442+00	LT & RT	1	2	42" CMCP CROSS PIPE
	1443+50	RT	1	1	
	1450+50	LT & RT	1	2	36" CMCP CROSS PIPE
	1450+85	RT	1	1	
	1457+50	LT & RT	1	2	48" CMCP CROSS PIPE
	1462+70	LT & RT	1	2	24" CMCP CROSS PIPE
	1471+00	LT	1	1	18" CMCP
	1479+00	LT	1	1	18" CMCP
	1495+30	LT	1	1	18" CMCP
	1500+00	LT & RT	1	2	36" CMCP CROSS PIPE
	1506+50	LT	1	1	18" CMCP
	1510+25	RT	1	1	18" CMCP
	1517+00	LT & RT	1	2	36" CMCP CROSS PIPE
	1524+00	RT	1	1	18" CMCP
	1532+00	LT & RT	1	2	36" CMCP CROSS PIPE
	1537+00	RT	1	1	18" CMCP
	1545+50	RT	1	1	18" CMCP
		TOTAL	22	33	

PAVEMENT REMOVALS

CATEGORY	STATION	LOCATION	(204.0100) REMOVING PAVEMENT (SY)	(204.0110) REMOVING ASPHALTIC SURFACE (SY)	REMARKS
020	1350+00 - 1558+00 EB	MAINLINE	83,200		LANES
	1350+00 - 1558+00 EB	MAINLINE	46,200		SHOULDERS
	1350+00 - 1558+00 WB	MAINLINE	83,200		LANES
	1350+00 - 1558+00 WB	MAINLINE	46,200		SHOULDERS
	1354+54 - 1359+98 WB	RAMP	770		WB OFF TO CS
	1359+48 - 1363+38 EB	RAMP	490		EB OFF TO CS
	1368+04 - 1374+39 EB	RAMP	700		EB ON FROM CS
	1548+50 - 1558+00 WB	RAMP	990		WB ON FROM 60
	1375+25 - 1379+75	SB OUTER		325	REM. E-PULLOUT
	1403+25 - 1407+75	SB OUTER		325	REM. E-PULLOUT
	1431+25 - 1435+75	SB OUTER		325	REM. E-PULLOUT
	1481+75 - 1486+25	SB OUTER		325	REM. E-PULLOUT
	1499+25 - 1503+75	SB OUTER		325	REM. E-PULLOUT
	1540+25 - 1544+75	SB OUTER		325	REM. E-PULLOUT
	1375+25 - 1379+75	SB INNER MED.		325	REM. E-PULLOUT
	1402+25 - 1406+75	SB INNER MED.		325	REM. E-PULLOUT
	1433+25 - 1437+75	SB INNER MED.		325	REM. E-PULLOUT
	1507+25 - 1511+75	SB INNER MED.		325	REM. E-PULLOUT
	1537+25 - 1543+75	SB INNER MED.		325	REM. E-PULLOUT
	1374+75 - 1379+25	NB OUTER		325	REM. E-PULLOUT
	1396+75 - 1401+25	NB OUTER		325	REM. E-PULLOUT
	1426+75 - 1451+25	NB OUTER		325	REM. E-PULLOUT
	1453+25 - 1457+25	NB OUTER		325	REM. E-PULLOUT
	1483+25 - 1487+75	NB OUTER		325	REM. E-PULLOUT
	1507+75 - 1512+25	NB OUTER		325	REM. E-PULLOUT
	1533+75 - 1538+25	NB OUTER		325	REM. E-PULLOUT
	1374+75 - 1379+25	NB INNER MED.		325	REM. E-PULLOUT
	1396+75 - 1401+25	NB INNER MED.		325	REM. E-PULLOUT
	1433+25 - 1437+75	NB INNER MED.		325	REM. E-PULLOUT
	1507+25 - 1511+75	NB INNER MED.		325	REM. E-PULLOUT
	1341+06 - 1354+69	MEDIAN		3,100	W. MAINLINE CROSSOVER
	1583+00 - 1596+02	MEDIAN	3,100		E. MAINLINE CROSSOVER
	1355+95 - 1368+05	MEDIAN		1,700	WB CS OFF RAMP CROSSOVER
	PROJECT TOTAL		264,850	11,950	

REMOVALS

CATEGORY	STATION	LOCATION	(204.0130) REMOVING CURB (LF)	(204.0165) REMOVING GUARDRAIL (LF)	(204.9090.S) REMOVING 32-INCH BARRIER WALL (LF)	REMARKS
020	1357+93 - 1359+58 EB	EB		165		CTH "CS"
	1353+94 - 1359+94 EB	LT			600	
	1354+44 - 1360+98 WB	RT			655	
	1366+35 - 1367+84 WB	LT		150		
	1366+82 - 1370+00 WB	RT		320		
	1358+26 - 1360+17 WB	LT		190		CTH "CS"
	1421+26 - 1422+36 WB	LT		110		
	1412+53 - 1414+88 WB	LT		235		
	1412+94 - 1414+76 WB	RT		185		
	1405+01 - 1409+18 WB	LT		451		
	1402+46 - 1409+49 WB	RT		700		
	1408+94 - 1415+12 EB	RT		620		
	1407+18 - 1408+00 EB	LT		82		
	1420+50 - 1431+49 EB	LT			1100	1408 - 1420+50 TO REMAIN
	1418+98 - 1431+49 WB	RT			1250	
	1445+89 - 1498+20 EB	MEDIAN			10,500	TWO BARRIERS
	1505+01 - 1506+23 WB	LT		120		
	1504+41 - 1506+11 EB	RT		170		
	1504+12 - 1506+56 EB	MEDIAN		250		
	1354+50 "E" - 1355+62 "E"	LT	112			CTH CS
	1361+95 "C" - 1363+35 "C"	RT	140			CTH CS
		TOTAL	252	3,748	14,105	

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REMOVING INLETS

CATEGORY	STATION	LOCATION	(204.0220) REMOVING INLETS (EACH)	REMARKS
020	1430+00	MEDIAN	1	8 MS
	1435+00	MEDIAN	2	9 MS
	1443+50	MEDIAN	1	8 MS
	1451+00	MEDIAN	2	
	1457+00	MEDIAN	2	
	1462+50	MEDIAN	2	
	1471+00	MEDIAN	1	
	1479+25	MEDIAN	2	
	1484+25	MEDIAN	2	
	1490+20	MEDIAN	2	
	1495+00	MEDIAN	1	8 MS
	1500+25	MEDIAN	1	9 MS
	1506+00	MEDIAN	1	9 MS
	1518+00	MEDIAN	1	9 MS
	1524+00	MEDIAN	1	8 MS
	1532+00	MEDIAN	1	9 MS
	1537+00	MEDIAN	1	8 MS
	1545+50	MEDIAN	1	8 MS
		TOTAL	25	

TEMPORARY SHORING

CATEGORY	STATION	LOCATION	(206.6000.S) TEMPORARY SHORING (SF)	REMARKS
020	1433+00	MEDIAN	100	
	1442+21	MEDIAN	100	
	1450+63	MEDIAN	100	
	1456+50	MEDIAN	100	
	1462+69	MEDIAN	100	
	1468+00	MEDIAN	100	
	1474+00	MEDIAN	100	
	1480+00	MEDIAN	100	
	1490+00	MEDIAN	100	
	1500+27	MEDIAN	100	
	1507+00	MEDIAN	100	
	1513+00	MEDIAN	100	
	1518+23	MEDIAN	100	
	1521+00	MEDIAN	100	
	1527+00	MEDIAN	100	
	1532+03	MEDIAN	100	
	1545+00	MEDIAN	100	
	UNDISTRIBUTED	-	800	
		TOTAL	2,500	

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EXCAVATION COMMON

CATEGORY	STATION	LOCATION	(205.0100) EXCAVATION COMMON (CY)	REMARKS
020	1350+00 - 1558+00	WB	76,702	SEE EARTHWORK QUANTITY DETAILS
	1350+00 - 1558+00	WB	3,835	EBS EXCAVATION
	1350+00 - 1558+00	EB	55,594	
	1350+00 - 1558+00	EB	2,780	EBS EXCAVATION
	FRENCH DRAINS-UNDISTR.	EB & WB	250	25 LOCATIONS AS DIRECTED BY ENGINEER
		TOTAL	139,161	

TEMPORARY EMERGENCY PULLOUTS

CATEGORY	STATION	LOCATION	TC STAGE	(205.3000.S) TEMPORARY EMERGENCY PULLOUTS (EACH)	(520.4012) CULVERT PIPE TEMPORARY 12-INCH (LF)
020	1377+50	EASTBOUND	1	1	400
	1405+50	EASTBOUND	1	1	400
	1433+50	EASTBOUND	1	1	400
	1459+50	EASTBOUND	1	1	400
	1484+00	EASTBOUND	1	1	400
	1501+50	EASTBOUND	1	1	400
	1542+50	EASTBOUND	1	1	400
	1377+50	WESTBOUND	1	1	400
	1404+50	WESTBOUND	1	1	400
	1435+50	WESTBOUND	1	1	400
	1509+50	WESTBOUND	1	1	400
	1541+50	WESTBOUND	1	1	400
	SUBTOTAL - STAGE 1			12	4800
	1377+00	WESTBOUND	2	1	400
	1399+00	WESTBOUND	2	1	400
	1429+00	WESTBOUND	2	1	400
	1455+50	WESTBOUND	2	1	400
	1485+50	WESTBOUND	2	1	400
	1510+00	WESTBOUND	2	1	400
	1536+00	WESTBOUND	2	1	400
	1377+00	EASTBOUND	2	1	400
	1399+00	EASTBOUND	2	1	400
	1435+50	EASTBOUND	2	1	400
	1509+50	EASTBOUND	2	1	400
	SUBTOTAL - STAGE 2			11	4400
	PROJECT TOTAL			23	9200

** NB MEDIAN PULLOUTS WILL BE RE-USED FROM EXISTING SB MEDIAN PULLOUTS, INSTALLED UNDER SEPARATE CONTRACT

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FINISHING ROADWAY

CATEGORY	STATION-STATION	LOCATION	(213.0100) FINISHING ROADWAY (PROJECT) (EACH)	REMARKS
020	1350+00 - 1558+00	EB & WB	1	
		TOTAL	1	

BASE COURSE ITEMS

CATEGORY	STATION	LOCATION	(305.0110) BASE AGGREGATE DENSE 3/4-INCH (TON)	(305.0120) BASE AGGREGATE DENSE 1 1/4-INCH (TON)	(312.0110) SELECT CRUSHED MATERIAL (TON)	(SPV 0180.03) GEOGRID REINFORCEMENT (SY)	REMARKS
020	1350+00 - 1433+00	WB	820	22,000	37,700	65,000	Full-Depth
	1350+00 - 1430+00	EB	800	20,700	36,300	62,000	Full-Depth
	1433+00 - 1498+00	WB	640	21,100	4,200		Build-Up
	1430+00 - 1498+00	EB	670	22,000	4,400		Build-Up
	1498+00 - 1510+00	WB	120	3,100	5,400	9,300	Full-Depth
	1498+00 - 1513+00	EB	150	3,900	6,800	11,700	Full-Depth
	1510+00 - 1540+00	WB	300	9,700	2,000		Build-Up
	1513+00 - 1550+00	EB	370	13,600	2,400		Build-Up
	1540+00 - 1558+00	WB	180	4,700	8,200	14,000	Full-Depth
	1550+00 - 1558+00	EB	80	2,100	3,600	6,200	Full-Depth
	1354+54 - 1359+98 WB	RAMP		36	50	770	
	1359+48 - 1363+38 EB	RAMP		23	32	490	
	1368+04 - 1374+39 EB	RAMP		32	45	700	
	1548+50 - 1558+00 WB	RAMP		46	64	990	
	FRENCH DRAINS	Undistributed			250		25ea each dir. or as directed
		TOTAL	4,130	123,037	111,441	171,150	

CONCRETE PAVEMENT

CATEGORY	STATION	LOCATION	(415.0108) CONCRETE PAVEMENT 8-INCH (SY)	(SPV.0180.01) CONCRETE PAVEMENT 12.5-INCH (SY)	(SPV.0180.02) CONCRETE PAVEMENT HES 12.5-INCH (SY)	(SPV.0055.01) CONCRETE PAVEMENT PERFORMANCE-RELATED SPECIFICATION (DOL)	REMARKS
020	1350+00 - 1558+00	WB		83,200		166,400	3 LANES
	1350+00 - 1558+00	WB	27,800			34,750	INSIDE SHLDR
	1350+00 - 1558+00	WB	23,100			28,875	OUTSIDE SHLDR
	1349+50 - 1558+00	EB		83,200		166,400	3 LANES
	1349+50 - 1558+00	EB	27,800			34,750	INSIDE SHLDR
	1349+50 - 1558+00	EB	23,100			28,875	OUTSIDE SHLDR
	1540+42 - 1558+00 WB	WB	800	390		1,780	60 ON-RAMP
	1354+50"E"-1357+00 WB	WB	92	93		301	CS OFF-RAMP
	1360+00EB - 1363+35"C"	EB	120	360		870	CS OFF-RAMP
	1540+42 - 1558+00 WB	WB		(600)	600	1,350	60 ON-RAMP
	1354+50"E"-1357+00 WB	WB		(600)	600	1,350	CS OFF-RAMP
	1360+00EB - 1363+35"C"	EB		(600)	600	1,350	CS OFF-RAMP
	SUBTOTAL - CATEGORY 020		**102,812**	**165,443**	**1,800**	**467,051**	
010	1350+00 - 1558+00	EB & WB	11,600			14,500	BARRIER PAD
	SUBTOTAL - CATEGORY 010		**11,600**	**0**	**0**	**14,500**	
050	1369+00 - 1385+07 EB	EB	890	700		2,513	BARRIER PAD
	SUBTOTAL - CATEGORY 050		**890**	**700**	**0**	**2,513**	

RUMBLE STRIPS

CATEGORY	STATION	LOCATION	(SPV.0090.03) CONCRETE SHOULDER RUMBLE STRIP (LF)	REMARKS
020	1350+00 - 1558+00	EB & WB	83,200	INSIDE AND OUTSIDE SHOULDERS
	TOTAL		83,200	

			CONCRETE CULVERT PIPE CULVERT PIPE REINFORCED CONCRETE						APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE							
CAT.	STATION	LOCATION	(522.0318) CULVERT PIPE REINFORCED CONCRETE CLASS IV (18-INCH) (LF)	(522.0324) CULVERT PIPE REINFORCED CONCRETE CLASS IV (24-INCH) (LF)	(522.0330) CULVERT PIPE REINFORCED CONCRETE CLASS IV (30-INCH) (LF)	(522.0336) CULVERT PIPE REINFORCED CONCRETE CLASS IV (36-INCH) (LF)	(522.0342) CULVERT PIPE REINFORCED CONCRETE CLASS IV (42-INCH) (LF)	(522.0348) CULVERT PIPE REINFORCED CONCRETE CLASS IV (48-INCH) (LF)	(521.1018) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE (18-INCH) (EACH)	(521.1024) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE (24-INCH) (EACH)	(521.1030) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE (30-INCH) (EACH)	(521.1036) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE (36-INCH) (EACH)	(521.1042) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE (42-INCH) (EACH)	(521.1048) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE (48-INCH) (EACH)	(611.9800.S) PIPE GRATES (EACH)	(633.5200) MARKERS CULVERT END (EACH)
020	1382+50 WB				117						2					2
	1392+93 WB					102						2				2
	1393+00 EB							115						2		2
	1409+92 EB						154						2			2
	1422+00		70						1						1	1
	1424+00		79						1						1	1
	1426+00		87						1							1
	1428+00		82						1							1
	1430+00		66						1						1	1
	1433+00			62						1					1	1
	1436+00		64						1						1	1
	1439+00		66						1						1	1
	1442+22	LT					116						1		1	1
	1442+22	RT					110						1			1
	1446+00			69						1					1	1
	1450+63	RT				84						1			1	1
	1450+63	LT				78						1			1	1
	1454+00		68						1						1	1
	1456+50			68						1					1	1
	1457+42	RT						108						1	1	1
	1457+42	LT						116						1	1	1
	1460+00		69						1						1	1
	1462+69	RT			86						1				1	1
	1462+69	LT			98						1					1
	1465+00		68						1						1	1
	1468+00			68						1					1	1
	1471+00		71						1						1	1
	1474+00			68						1					1	1
	1477+00		68						1						1	1
	1480+00			67						1					1	1
	1483+00		62						1						1	1
	1486+00			62						1					1	1
	1490+00			61						1					1	1
	1495+00			77						1					1	1
	1500+27	RT				92						1			1	1
	1500+27	LT				102						1				1
	1504+00		111						1							1
	1507+00			68						1					1	1
	1509+00		79						1							1
	1511+00		78						1						1	1
	1513+00			77						1						1
	1515+50		76						1						1	1
	1518+23	RT				98						1				1
	1518+23	LT				78						1			1	1
	1521+00			79						1					1	1
	1523+00		66						1						1	1
	1527+00			62						1					1	1
	1532+03	RT				84						1			1	1
	1532+03	LT				76						1			1	1
	1536+00			69						1					1	1
	1541+00			69						1					1	1
	1545+50			64						1					1	1
	1549+00		64						1						1	1
	1556+00		69						1						1	1
			1463	1090	301	794	380	339	20	16	4	10	4	4	41	45

* NON-BID ITEM

** TO MAINTAIN DRAINAGE DURING CONSTRUCTION, 38"X60" REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III PIPE (AND RESPECTIVE APRON ENDWALL) MAY BE USED IN PLACE OF BID ITEMS.

CONCRETE CURB

CATEGORY	STATION	LOCATION	(601.0105) CONCRETE CURB TYPE A (LF)	(650.5500) CONSTRUCTION STAKING CURB & GUTTER (LF)	REMARKS
020	1354+50 "E" - 1355+62 "E"	LT	112	112	WB OFF RAMP TO CS
	1361+95 "C" - 1363+35 "C"	RT	140	140	EB OFF RAMP TO CS
		TOTAL	252	252	

CONCRETE BARRIER - TEMPORARY EMERGENCY

CATEGORY	STATION	LOCATION	(SPV.0090.04) EMERGENCY CONCRETE BARRIER TEMP. PRECAST CONTRACTOR FURNISHED (LF)	(SPV.0090.05) EMERGENCY CONCRETE BARRIER TEMP. PRECAST CONTRACTOR INSTALLED (LF)	(SPV.0105.01) STANDBY TIME FOR LABOR & EQUIPMENT EMERGENCY CONCRETE BARRIER (LS)	REMARKS
020	UNDISTRIBUTED		200	200	1	
		TOTAL	200	200	1	

CONCRETE BARRIER - PERMANENT

CATEGORY	STATION	LOCATION	(SPV. 0090.11) CONCRETE BARRIER 42-INCH (LF)	(SPV.0090.01) 51-INCH VERTICAL CONCRETE WALL (LF)	(SPV.0090.02) 51-INCH VERTICAL CONCRETE WALL TRANSITION (LF)	(650.7500) CONSTRUCTION STAKING CONCRETE BARRIER (LF)	REMARKS
010	1350+20 - 1364+00 EB	EB	1,380			1,380	
	1350+71 - 1374+00 WB	WB	2,329			2329	
	1420+50 - 1434+55 EB	EB	1405			1405	
	1419+00 -1434+55 WB	WB	1555			1555	
	1435+45 - 1544+55 EB	EB	10910			10910	
	1435+45 - 1544+55 WB	WB	10910			10910	
	1545+45 - 1558+00 EB	EB	1255			1255	
	1545+45 - 1558+00 WB	WB	1255			1255	
010	1505+20 - 1505+85	NB Side		25.7	40	65.7	B-11-14
	1412+72 - 1413+42	NB Side		30	40	70	B-11-25
	1358+58 - 1359+34	NB Side		36	40	76	B-11-26
		TOTAL	30,999	92	120	31,211	

SLOPE PAVING

CATEGORY	STATION	LOCATION	(604.0500) SLOPE PAVING CRUSHED AGGREGATE (SY)	REMARKS
010	1350+00 - 1361+00	Median	950	
	1425+00 - 1558+00	Median	11,100	
	TOTAL		12,050	

CONCRETE BARRIER - TEMPORARY

CATEGORY	TC STAGE	STATION	LOCATION	(603.0500) CONCRETE BARRIER TEMPORARY PRECAST CONTRACTOR FURNISHED & DELIVERED (LF)	(603.0801) CONCRETE BARRIER TEMPORARY PRECAST CONTRACTOR INSTALLED (LF)	REMARKS
020	1	1344+50-1587+84	RT	24,334	24,334	
	1	1348+00-1363+13	LT	1,513	1,513	
	1	1362+00-1408+23	LT	4,623	4,623	
	1	1420+56-1557+50	LT	13694	13,694	
	1	1553+50-1557+85	LT	435	435	
	1	1348+00-1350+00	LT	200	200	On-ramp westbound
	1	-	LT	250	250	Additional footage from overlap on 5 emergency pullouts
	SUBTOTAL - STAGE 1			45,049	45,049	
	2	1345+20-1595+00	LT	24,980	24,980	
	2	1341+15-1364+00	RT	2,285	2,285	
	2	1422+60-1557+00	RT	13,440	13,440	
	2	1550+80-1557+85	RT	705	705	
	2	-	RT	100	100	Additional footage from overlap on 2 emergency pullouts
	2	-	-	300	300	Additional footage for bridge construction over Sleepy Hollow
	SUBTOTAL - STAGE 2			41,810	41,810	
	PROJECT TOTALS			86,859	86,859	

RIPRAP

CATEGORY	STATION	LOCATION	(606.0100) RIPRAP LIGHT (CY)	(606.0300) RIPRAP HEAVY (CY)	(645.0130) GEOTEXTILE FABRIC TYPE R (SY)	REMARKS
020	1382+50	WB	19		38	
	1392+93	WB	26		52	
	1393+00	EB	32		64	
	1409+92	EB	28		58	
	1441+36	EB, LT	14		29	
	1442+88	EB, RT	14		29	
	1450+63	EB, LT & RT	26		52	
	1456+66	EB, LT		16	32	
	1458+13	EB, RT		16	32	
	1462+69	EB, LT & RT		19	38	
	1518+23	EB, LT & RT	26		52	
	1532+03	EB, LT & RT		26	52	
		TOTAL	185	77	527	

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STORM SEWER PIPE REINFORCED CONCRETE CLASS IV

CATEGORY	STATION	TO STATION	LOCATION	(608.0412) STORM SEWER PIPE REINFORCED CONCRETE CLASS IV (12-INCH) (LF)	(608.0418) STORM SEWER PIPE REINFORCED CONCRETE CLASS IV (18-INCH) (LF)	REMARKS
020	1422+00	1422+15	23.376' RT		15	
	1433+00.			7		
	1433+00.				7	
	1436+00.			15		
	1439+00.			15		
	1442+22.		LT	13		
	1442+22.		RT	13		
	1446+00.				15	
	1450+63.		RT	7		
	1450+63.		LT	7		
	1454+00.			15		
	1456+50.			7		
	1456+50.				7	
	1457+42.		RT			
	1457+42.		LT			
	1460+00.			15		
	1462+69.		RT	7		
	1462+69.		LT	7		
	1465+00.			15		
	1468+00.			7		
	1468+00.				7	
	1471+00.			15		
	1474+00.			7		
	1474+00.				7	
	1477+00.			15		
	1480+00.			7		
	1480+00.				7	
	1483+00.			15		
	1486+00.				15	
	1490+00.			7		
	1490+00.				7	
	1495+00.				15	
	1500+27.		RT	7		
	1500+27.		LT	7		
	1504+00.			15		
	1507+00.				7	
	1513+00.				14	
	1518+23.		RT	14		
	1521+00.				11	
	1527+00.			7		
	1527+00.				7	
	1532+03.		RT	7		
	1532+03.		LT	7		
	1536+00.				15	
	1541+00.				15	
	1545+50.			7		
	1545+50.				7	
	1549+00.			15		
	1556+00.			15		
			TOTAL	317	178	

INLETS AND INLET COVERS

CATEGORY	NO.	STATION	LOCATION	(611.0301) INLETS TYPE 1 (EACH)	(611.0302) INLETS TYPE 2 (EACH)	(611.0303) INLETS TYPE 3 (EACH)	(611.0305) INLETS TYPE 8 (EACH)	(SPV.0060.02) INLETS TYPE 3 SPECIAL (EACH)	(SPV.0060.16) INLETS TYPE 20 SPECIAL (EACH)	(611.0642) INLET COVERS TYPE MS (EACH)	(611.0654) INLET COVERS TYPE V (EACH)	(611.8115) ADJUSTING INLET COVERS (EACH)	(465.0315) ASPHALTIC FLUMES (SY)	(650.4000) CONSTRUCTION STAKING STORM SEWER SYSTEM (EA)	GRATE ELEVATION	BOTTOM ELEVATION	DEPTH (FT)	REMARKS
010	5.1	1422+00 WB	23.376' RT		1						1			1	899.64	894.542	5.1	CIRCULAR
	5.2	1422+15 WB	23.376' RT		1						1			1	900.07	894.5612	5.5	CIRCULAR
	5.3	1424+00 WB	23.376' RT		1						1			1	905.39	899.9075	5.5	
	5.4	1426+00 WB	23.376' RT		1						1			1	911.14	903.9955	7.1	
	5.5	1428+00 WB	23.376' RT		1						1			1	916.89	912.786	4.1	
	6.1	1430+00 EB	37.5' LT		1						1			1	923.49	918.84	4.7	
	6.2	1433+00 EB	23' LT	1							1			1	930.97	927.08	3.9	
	6.3	1433+00 EB	30.25' LT				1			1			6	1	929.10	926.23	2.9	
	6.4	1433+00 EB	37.5' LT			1					1			1	929.92	925.89	4.0	
	6.5	1436+00 EB	23' LT	1							1			1	934.87	931.06	3.8	
	6.6	1436+00 EB	37.5' LT		1						1			1	934.48	930.44	4.0	
	6.7	1439+00 EB	23' LT	1							1			1	938.56	933.85	4.7	
	6.8	1439+00 EB	37.5' LT		1						1			1	937.58	933.24	4.3	
	6.9	1442+11 EB	23' LT		1						1			1	942.33	931.32	11.0	CIRCULAR
	6.10	1442+21.5 EB	30.25' LT					1		1			6	1	939.83	931.72	8.1	
	6.11	1442+32 EB	37.5' LT		1						1			1	940.80	931.32	9.5	CIRCULAR
	6.12	1446+00 EB	23' LT		1						1			1	946.75	939.55	7.2	
	6.13	1446+00 EB	37.5' LT			1					1			1	944.58	938.94	5.6	
	6.14	1450+61 EB	37.5' LT	1							1			1	948.88	944.50	4.4	
	6.15	1450+61 EB	23' LT	1							1			1	945.13	951.61	-6.5	
	6.16	1450+63 EB	30.25' LT						1	3			6	1	947.86	942.04	5.8	
	6.17	1454+00 EB	23' LT	1							1			1	953.92	946.85	7.1	
	6.18	1454+00 EB	37.5' LT		1						1			1	951.13	946.23	4.9	
	6.19	1456+50 EB	23' LT	1							1			1	955.01	947.92	7.1	
	6.20	1456+50 EB	30.25' LT				1			1			6	1	951.26	947.07	4.2	
	6.21	1456+50 EB	37.5' LT			1					1			1	952.29	946.73	5.6	
	6.22	1460+00 EB	23' LT	1							1			1	956.43	949.04	7.4	
	6.23	1460+00 EB	37.5' LT		1						1			1	953.49	948.43	5.1	
	7.1	1462+65 EB	37.5' LT	1							1			1	954.40	950.02	4.4	
	7.2	1462+65 EB	23' LT	1							1			1	957.52	951.07	6.5	
	7.3	1462+67.5 EB	30.25' LT						1	3			6	1	953.77	945.87	7.9	
	7.4	1465+00 EB	23' LT	1							1			1	958.46	950.89	7.6	
	7.5	1465+00 EB	37.5' LT		1						1			1	955.18	950.27	4.9	
	7.6	1468+00 EB	23' LT	1							1			1	959.68	952.73	6.9	
	7.7	1468+00 EB	37.5' LT			1					1			1	955.93	951.53	4.4	
	7.8	1468+00 EB	30.25' LT				1			1			6	1	957.02	951.88	5.1	
	7.9	1471+00 EB	37.5' LT	1							1			1	960.52	956.05	4.5	
	7.10	1471+00 EB	23' LT		1						1			1	961.00	955.44	5.6	
	7.11	1474+00 EB	37.5' LT	1							1			1	965.58	959.11	6.5	
	7.12	1474+00 EB	23' LT			1					1			1	963.46	957.90	5.6	
	7.13	1474+00 EB	30.25' LT				1			1			6	1	962.71	958.25	4.5	
	7.14	1477+00 EB	37.5' LT	1							1			1	971.01	962.94	8.1	
	7.15	1477+00 EB	23' LT		1						1			1	967.28	962.32	5.0	
	7.16	1480+00 EB	37.5' LT	1							1			1	976.43	968.39	8.0	
	7.17	1480+00 EB	23' LT			1					1			1	972.47	967.18	5.3	
	7.18	1480+00 EB	30.25' LT				1			1			6	1	971.72	967.53	4.2	
	7.19	1483+00 EB	37.5' LT	1							1			1	981.86	975.48	6.4	
	7.20	1483+00 EB	23' LT		1						1			1	978.25	974.86	3.4	
	7.21	1486+00 EB	37.5' LT		1						1			1	987.29	980.75	6.5	
	7.22	1486+00 EB	23' LT			1					1			1	984.04	980.13	3.9	
	7.23	1490+00 EB	37.5' LT	1							1			1	994.53	988.93	5.6	
	7.24	1490+00 EB	23' LT			1					1			1	991.76	987.72	4.0	
	7.25	1490+00 EB	30.25' LT				1			1			6	1	991.01	988.07	2.9	
	8.1	1495+00 EB	23' LT		1						1			1	1001.37	996.34	5.0	
	8.2	1495+00 EB	37.5' LT			1					1			1	1003.58	995.72	7.9	
	8.3	1500+27 EB	37.5' LT	1							1			1	1013.06	1006.81	6.2	
	8.4	1500+27 EB	23' LT	1							1			1	1011.16	1006.81	4.3	
	8.5	1500+27 EB	30.25' LT						1	3			6	1	1010.41	1002.45	8.0	
	8.6	1504+00 EB	23' LT	1							1			1	1018.21	1013.96	4.2	
	8.7	1504+00 EB	37.5' LT		1						1			1	1019.36	1011.85	7.5	
	8.8	1507+00 EB	23' LT			1					1			1	1024.67	1019.75	4.9	
	8.9	1507+00 EB	30.25' LT				1			1			6	1	1023.92	1020.10	3.8	
	8.10	1509+00 EB	23' LT		1						1			1	1029.31	1019.90	9.4	
	8.11	1511+00 EB	23' LT		1						1			1	1034.01	1029.11	4.9	

CONTINUED

INLETS AND INLET COVERS, CONTINUED

CATEGORY	NO.	STATION	LOCATION	(611.0301) INLETS TYPE 1 (EACH)	(611.0302) INLETS TYPE 2 (EACH)	(611.0303) INLETS TYPE 3 (EACH)	(611.0305) INLETS TYPE 8 (EACH)	(SPV.0060.02) INLETS TYPE 3 SPECIAL (EACH)	(SPV.0060.16) INLETS TYPE 20 SPECIAL (EACH)	(611.0642) INLET COVERS TYPE MS (EACH)	(611.0654) INLET COVERS TYPE V (EACH)	(611.8115) ADJUSTING INLET COVERS (EACH)	(465.0315) ASPHALTIC FLUMES (SY)	(650.4000) CONSTRUCTION STAKING STORM SEWER SYSTEM (EA)	GRATE ELEVATION	BOTTOM ELEVATION	DEPTH (FT)	REMARKS
010	8.12	1513+00 EB	23' LT			1					1			1	1038.60	1032.89	5.7	
	8.13	1513+00 EB	37.07' LT				1			1			6	1	1036.49	1033.24	3.2	
	8.14	1515+50 EB	23' LT		1						1			1	1044.21	1039.65	4.6	
	8.15	1518+23 EB	23' LT	1							1			1	1050.31	1045.51	4.8	
	8.16	1518+23 EB	37.02' LT						1	3			6	1	1048.21	1043.72	4.5	
	9.1	1521+00 EB	23' LT			1					1			1	1056.49	1050.84	5.6	
	9.2	1521+00 EB	34.15' LT				1			1				1	1054.95	1051.19	3.8	
	9.3	1523+00 EB	23' LT		1						1			1	1061.23	1057.98	3.3	
	9.4	1527+00 EB	37.5' LT	1							1			1	1070.66	1066.95	3.7	
	9.5	1527+00 EB	23' LT			1					1			1	1069.80	1065.73	4.1	
	9.6	1527+00 EB	30.25' LT				1			1			6	1	1069.05	1066.08	3.0	
	9.7	1532+03 EB	37.5' LT	1							1			1	1081.67	1077.21	4.5	
	9.8	1532+03 EB	23' LT	1							1			1	1080.89	1076.44	4.5	
	9.9	1532+03 EB	30.25' LT						1	3			6	1	1080.14	1073.50	6.6	
	9.10	1536+00 EB	37.5' LT		1						1			1	1090.55	1084.59	6.0	
	9.11	1536+00 EB	23' LT			1					1			1	1089.64	1083.97	5.7	
	9.12	1541+00 EB	37.5' LT		1						1			1	1101.73	1095.76	6.0	
	9.13	1541+00 EB	23' LT			1					1			1	1100.65	1095.15	5.5	
	9.14	1545+50 EB	37.5' LT	1							1			1	1109.62	1105.55	4.1	
	9.15	1545+50 EB	23' LT			1					1			1	1108.80	1104.34	4.5	
	9.16	1545+50 EB	30.25' LT				1			1			6	1	1108.05	1104.68	3.4	
	9.17	1549+00 EB	37.5' LT	1							1			1	1114.32	1110.47	3.8	
	9.18	1549+00 EB	23' LT		1						1			1	1113.78	1109.83	3.9	
	10.1	1556+00 EB	37.5' LT	1							1			1	1114.67	1109.92	4.7	
	10.2	1556+00 EB	23' LT		1						1			1	1114.29	1109.30	5.0	
		UNDISTRIBTUED										10						
			TOTAL	28	28	16	11	1	5	27	72	10	96	89				

(SPV.0060.01)

UNDERDRAIN

CATEGORY	STATION	LOCATION	(612.0106) PIPE UNDERDRAIN 6-INCH (LF)	(612.0206) PIPE UNDERDRAIN UNPERFORMATED 6-INCH (LF)	(645.0112) GEOTEXTILE FABRIC TYPE DF SCHEDULE B (SY)	(310.0110) BASE AGGREGATE OPEN GRADED (TON)	REMARKS
020	1350+00 - 1360+00	EB & WB	2,000	12	670	75	
	1498+00 - 1510+00 WB	WB	1,200	6	400	90	
	1498+00 - 1513+00 EB	EB & WB	1,500	12	500	110	
	1540+00 - 1558+00 WB	WB	1,800	12	600	135	
	1550+00 - 1558+00 EB	EB	800	6	270	60	
	TOTAL		7,300	48	2,440	470	

BEAM GUARDS

CATEGORY	STATION	LOCATION	(614.0200) STEEL THRIE BEAM STRUCTURE APPROACH (LF)	(614.0305) STEEL PLATE BEAM GUARD CLASS A (LF)	(614.0370) STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL (EACH)	(614.0805) CRASH CUSHIONS PERMANENT LOW MAINTENANCE (EACH)	(SPV.0060.05) MARKER POST FOR GUARDRAIL TERMINAL (EACH)	REMARKS
050	1349+49.6 - 1349+99.6 EB	MEDIAN			1		1	END OF PROJECT
	1349+99.6 - 1350+20.2 EB	MEDIAN	21					
	1350+00 - 1350+50 WB	MEDIAN			1		1	
	1350+50 - 1350+70.6 WB	MEDIAN	21					
	1359+34 - 1362+66 WB	LT	21	261	1		1	CTH CS
	1354+65 - 1358+39.6 EB	RT	21	304	1		1	CTH CS
	1374+00 - 1374+70.6 WB	RT	21		1		1	WB END OF 42"
	1407+27 - 1407+98 EB	LT	21		1		1	CONNECT TO EXIST. BARRIER
	1405+25 - 1412+72 WB	LT		747				CONNECT TO 51" WALL
	1413+42 - 1416+55 WB	LT	21	242	1		1	SMOKY HOLLOW RD.
	1409+00 - 1415+12 EB	RT	21	541	1		1	SMOKY HOLLOW RD.
	1421+25 - 1425+00 WB	LT	21	300	1		1	
	1434+55 - 1434+85 EB	MEDIAN				1		MAINT. CROSSOVER
	1435+15 - 1435+45	MEDIAN				1		
	1505+85 - 1508+85 WB	LT	21	230	1	1		RICHARD ROAD
	1501+80 - 1504+79.5 EB	RT	21	230	1	1		RICHARD ROAD
	1434+55 - 1434+85 EB	MEDIAN				1		MAINT. CROSSOVER
	1435+15 - 1435+45	MEDIAN				1		
	1544+55 - 1544+85 EB	MEDIAN				1		MAINT. CROSSOVER
	1545+10 - 1545+40 EB	MEDIAN				1		
	TOTAL		231	2855	11	8	9	

INLETS AND INLET COVERS, CONTINUED

CATEGORY	NO.	STATION	LOCATION	(611.0301) INLETS TYPE 1 (EACH)	(611.0302) INLETS TYPE 2 (EACH)	(611.0303) INLETS TYPE 3 (EACH)	(611.0305) INLETS TYPE 8 (EACH)	(SPV.0060.02) INLETS TYPE 3 SPECIAL (EACH)	(SPV.0060.16) INLETS TYPE 20 SPECIAL (EACH)	(611.0642) INLET COVERS TYPE MS (EACH)	(611.0654) INLET COVERS TYPE V (EACH)	(611.8115) ADJUSTING INLET COVERS (EACH)	(465.0315) ASPHALTIC FLUMES (SY)	(650.4000) CONSTRUCTION STAKING STORM SEWER SYSTEM (EA)	GRATE ELEVATION	BOTTOM ELEVATION	DEPTH (FT)	REMARKS
010	8.12	1513+00 EB	23' LT			1					1			1	1038.60	1032.89	5.7	
	8.13	1513+00 EB	37.07' LT				1			1			6	1	1036.49	1033.24	3.2	
	8.14	1515+50 EB	23' LT		1						1			1	1044.21	1039.65	4.6	
	8.15	1518+23 EB	23' LT	1							1			1	1050.31	1045.51	4.8	
	8.16	1518+23 EB	37.02' LT						1	3			6	1	1048.21	1043.72	4.5	
	9.1	1521+00 EB	23' LT			1					1			1	1056.49	1050.84	5.6	
	9.2	1521+00 EB	34.15' LT				1			1				1	1054.95	1051.19	3.8	
	9.3	1523+00 EB	23' LT		1						1			1	1061.23	1057.98	3.3	
	9.4	1527+00 EB	37.5' LT	1							1			1	1070.66	1066.95	3.7	
	9.5	1527+00 EB	23' LT			1					1			1	1069.80	1065.73	4.1	
	9.6	1527+00 EB	30.25' LT				1			1			6	1	1069.05	1066.08	3.0	
	9.7	1532+03 EB	37.5' LT	1							1			1	1081.67	1077.21	4.5	
	9.8	1532+03 EB	23' LT	1							1			1	1080.89	1076.44	4.5	
	9.9	1532+03 EB	30.25' LT						1	3			6	1	1080.14	1073.50	6.6	
	9.10	1536+00 EB	37.5' LT		1						1			1	1090.55	1084.59	6.0	
	9.11	1536+00 EB	23' LT			1					1			1	1089.64	1083.97	5.7	
	9.12	1541+00 EB	37.5' LT		1						1			1	1101.73	1095.76	6.0	
	9.13	1541+00 EB	23' LT			1					1			1	1100.65	1095.15	5.5	
	9.14	1545+50 EB	37.5' LT	1							1			1	1109.62	1105.55	4.1	
	9.15	1545+50 EB	23' LT			1					1			1	1108.80	1104.34	4.5	
	9.16	1545+50 EB	30.25' LT				1			1			6	1	1108.05	1104.68	3.4	
	9.17	1549+00 EB	37.5' LT	1							1			1	1114.32	1110.47	3.8	
	9.18	1549+00 EB	23' LT		1						1			1	1113.78	1109.83	3.9	
	10.1	1556+00 EB	37.5' LT	1							1			1	1114.67	1109.92	4.7	
	10.2	1556+00 EB	23' LT		1						1			1	1114.29	1109.30	5.0	
		UNDISTRIBTUED										10						
			TOTAL	28	28	16	11	1	5	27	72	10	96	89				

UNDERDRAIN

CATEGORY	STATION	LOCATION	(612.0106) PIPE UNDERDRAIN 6-INCH (LF)	(612.0206) PIPE UNDERDRAIN UNPERFORMATED 6-INCH (LF)	(645.0112) GEOTEXTILE FABRIC TYPE DF SCHEDULE B (SY)	(310.0110) BASE AGGREGATE OPEN GRADED (TON)	REMARKS
020	1350+00 - 1360+00	EB & WB	2,000	12	670	75	
	1498+00 - 1510+00 WB	WB	1,200	6	400	90	
	1498+00 - 1513+00 EB	EB & WB	1,500	12	500	110	
	1540+00 - 1558+00 WB	WB	1,800	12	600	135	
	1550+00 - 1558+00 EB	EB	800	6	270	60	
	1433+00 - 1497+00 WB	WB	6,400	32	2,100	475	
	1510+00 - 1540+00 WB	WB	3,000	15	1,000	220	
	1430+00 - 1497+00 EB	EB	6,700	34	2,200	500	
	1512+00 - 1550+00 EB	EB	3,800	19	1,300	285	
	TOTAL		7,300	148	9,040	1,950	

SEE SHEET 173 FOR 6" UNDERDRAIN LOCATIONS

BEAM GUARDS

CATEGORY	STATION	LOCATION	(614.0200) STEEL THRIE BEAM STRUCTURE APPROACH (LF)	(614.0305) STEEL PLATE BEAM GUARD CLASS A (LF)	(614.0370) STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL (EACH)	(614.0805) CRASH CUSHIONS PERMANENT LOW MAINTENANCE (EACH)	(SPV.0060.05) MARKER POST FOR GUARDRAIL TERMINAL (EACH)	REMARKS
050	1349+49.6 - 1349+99.6 EB	MEDIAN			1		1	END OF PROJECT
	1349+99.6 - 1350+20.2 EB	MEDIAN	21					
	1350+00 - 1350+50 WB	MEDIAN			1		1	
	1350+50 - 1350+70.6 WB	MEDIAN	21					
	1359+34 - 1362+66 WB	LT	21	261	1		1	CTH CS
	1354+65 - 1358+39.6 EB	RT	21	304	1		1	CTH CS
	1374+00 - 1374+70.6 WB	RT	21		1		1	WB END OF 42"
	1407+27 - 1407+98 EB	LT	21		1		1	CONNECT TO EXIST. BARRIER
	1405+25 - 1412+72 WB	LT		747				CONNECT TO 51" WALL
	1413+42 - 1416+55 WB	LT	21	242	1		1	SMOKY HOLLOW RD.
	1409+00 - 1415+12 EB	RT	21	541	1		1	SMOKY HOLLOW RD.
	1421+25 - 1425+00 WB	LT	21	300	1		1	
	1434+55 - 1434+85 EB	MEDIAN				1		MAINT. CROSSOVER
	1435+15 - 1435+45	MEDIAN				1		
	1505+85 - 1508+85 WB	LT	21	230	1	1		RICHARD ROAD
	1501+80 - 1504+79.5 EB	RT	21	230	1	1		RICHARD ROAD
	1434+55 - 1434+85 EB	MEDIAN				1		MAINT. CROSSOVER
	1435+15 - 1435+45	MEDIAN				1		
	1544+55 - 1544+85 EB	MEDIAN				1		MAINT. CROSSOVER
	1545+10 - 1545+40 EB	MEDIAN				1		
	TOTAL		231	2855	11	8	9	

Addendum #2 Revised Sheet 172 November 5, 2009

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	MISCELLANEOUS QUANTITIES	SHEET 172 A	E

WATER

CATEGORY	STATION	LOCATION	(624.0100) WATER (MGAL)	REMARKS
020	1350+00 - 1360+00	EB & WB	14	
	1360+00 - 1430+00	EB	55	
	1360+00 - 1430+00	WB	51	
	1430+00 - 1558+00	EB & WB	200	
	1350+00 - 1558+00	PROJECT	800	WATER FOR COMPACTION
	UNDISTRIBUTED	PROJECT	1000	
		TOTAL	2,120	

PIPE UNDERDRAIN 6-INCH
Stage 1 Westbound Lane

APPOX. LOCATION	LENGTH
1546+34 - 1545+50	84.5
1545+48 - 1541+01	447
1540+98 - 1536+00	403
1536+00 - 1532+00	404
1525+80 - 1526+20	47
1505+13 - 1500+14	499
1499+87 - 1486+29	1358
1485+89 - 1484+29	160
1482+99 - 1480+01	298
1479+79 - 1474+00	579
1473+90 - 1471+02	288
1470+99 - 1468+01	298
1467+98 - 1465+01	297
1464+98 - 1462+71	227
1462+68 - 1460+02	266
1459+99 - 1456+55	344
1456+52 - 1454+01	251
1453+98 - 1451+02	296
1450+99 - 1446+01	498
1445+98 - 1442+27	371
1436+27 - 1436+00	27
1436+00 - 1433+02	298
1432+99 - 1430+01	298
1429+91 - 1428+02	189
1427+90 - 1426+02	188
1425+84 - 1424+01	183
1423+91 - 1422+16	175
1354+81 - 1352+01	280
1351+98 - 1350+03	195
1413+00 - 1414+21	122

PIPE UNDERDRAIN 6-INCH
Stage 2 Eastbound Lane

APPOX. LOCATION	LENGTH
1350+11 - 1351+98	187
1352+01 - 1354+98	297
1355+01 - 1360+49	548
1360+52 - 1363+84	332
1483+02 - 1484+29	126
1505+13 - 1506+94	181
1507+02 - 1508+96	194
1509+01 - 1510+89	188
1511+02 - 1512+88	186
1513+02 - 1515+40	238
1515+52 - 1517+99	247
1518+23 - 1520+84	261
1521+02 - 1522+81	179
1523+02 - 1526+83	381
1527+02 - 1531+77	475
1545+52 - 1548+91	339
1549+02 - 1555+98	696
1556+01 - 1558+07	206

TOPSOIL, MULCHING, FERTILIZER, SEEDING

CATEGORY	STATION	LOCATION	(625.0500) SALVAGED TOPSOIL (SY)	(627.0200) MULCHING (SY)	(629.0210) FERTILIZER TYPE B (CWT)	(630.0110) SEEDING MIXTURE NO.10 (LBS)	(630.0200) SEEDING TEMPORARY (LBS)
020	1350+00 - 1360+00	LT	940	940	1	13	13
	1350+00 - 1360+00	RT	1,100	1,100	1	15	15
	1360+00 - 1430+00 EB	LT	5,200	5,200	3	70	70
	1360+00 - 1430+00 EB	RT	13,600	13,600	9	180	180
	1360+00 - 1430+00 WB	LT	13,300	13,300	8	180	180
	1360+00 - 1430+00 WB	RT	10,600	10,600	7	140	140
	1430+00 - 1558+00	LT	37,500	37,500	24	510	510
	1430+00 - 1558+00	RT	28,600	28,600	18	390	390
		TOTAL	110,840	110,840	71	1,498	1,498

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SILT FENCE

CATEGORY	STATION	-	STATION	LOCATION	(628.1504) SILT FENCE (LF)	(628.1520) MAINTENANCE (LF)
020	1350+00 (E)	-	1358+20 (E)	LT	820	820
	1359+40 (C)	-	1364+00 (C)	RT	460	460
	1365+30 WB	-	1369+00 WB	LT	370	370
	1366+75 WB	-	1369+00 WB	RT	225	225
	1369+75 EB	-	1371+35 EB	RT	160	160
	1370+50 EB	-	1389+60 EB	LT	1,910	1,910
	1376+30 EB	-	1380+00 EB	RT	370	370
	1375+50 WB	-	1388+00 WB	RT	1,250	1,250
	1392+00 EB	-	1395+40 EB	RT	340	340
	1404+00 WB	-	1411+00 WB	LT	700	700
	1415+00 WB	-	1423+70 WB	LT	870	870
	1416+20 EB	-	1418+00 EB	RT	180	180
	1420+00 EB	-	1425+35 EB	LT	535	535
			UNDISTRIBUTED		2,048	2,048
				TOTAL	10,238	10,238

MOBILIZATIONS EROSION CONTROL

CATEGORY	STATION	(628.1905) MOBILIZATIONS EROSION CONTROL (EACH)	(628.1910) MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)
020	PROJECT	1	2
	TOTAL	1	2

EROSION MAT

CATEGORY	STATION	-	STATION	LOCATION	(628.2004) CLASS 1 TYPE B (SY)
0020	1422+00 WB			LT	4.1
	1424+00 WB			LT	4.1
	1426+00 WB			LT	4.1
	1428+00 WB			LT	4.1
	1430+00			LT	4.1
	1433+00			LT	5.3
	1436+00			LT	4.1
	1439+00			LT	4.1
	1446+00			LT	5.3
	1454+00			LT	4.1
	1456+50			LT	5.3
	1460+00			LT	4.1
	1465+00			LT	4.1
	1468+00			LT	5.3
	1471+00			RT	4.1
	1474+00			RT	5.3
	1477+00			RT	4.1
	1480+00			RT	5.3
	1483+00			RT	4.1
	1486+00			RT	5.3
	1490+00			RT	5.3
	1495+00			RT	5.3
	1499+74			LT	8.3
	1500+65			LT	8.3
	1504+00			LT	4.1
	1507+00			RT	5.3
	1509+00			RT	4.1
	1511+00			RT	4.1
	1513+00			RT	5.3
	1515+50			RT	4.1
	1521+00			RT	5.3
	1523+00			RT	4.1
	1527+00			RT	5.3
	1536+00			RT	5.3
	1541+00			RT	5.3
	1545+50			RT	5.3
	1549+00			RT	4.1
	1556+00			RT	4.1
				TOTAL	184.1

*ALL STATIONS FROM EB REFERENCE LINE, UNLESS OTHERWISE NOTED.

INLET PROTECTION

CATEGORY	STATION	LOCATION	(628.7020) INLET PROTECTION TYPE D (EACH)
020	1422+00 WB	23.376' RT	1
	1422+15 WB	23.376' RT	1
	1424+00 WB	23.376' RT	1
	1426+00 WB	23.376' RT	1
	1428+00 WB	23.376' RT	1
	1430+00 EB	37.5' LT	1
	1433+00 EB	23' LT	1
	1433+00 EB	30.25' LT	1
	1433+00 EB	37.5' LT	1
	1436+00 EB	23' LT	1
	1436+00 EB	37.5' LT	1
	1439+00 EB	23' LT	1
	1439+00 EB	37.5' LT	1
	1442+11 EB	23' LT	1
	1442+21.5 EB	30.25' LT	1
	1442+32 EB	37.5' LT	1
	1446+00 EB	23' LT	1
	1446+00 EB	37.5' LT	1
	1450+61 EB	37.5' LT	1
	1450+61 EB	23' LT	1
	1450+63 EB	30.25' LT	1
	1454+00 EB	23' LT	1
	1454+00 EB	37.5' LT	1
	1456+50 EB	23' LT	1
	1456+50 EB	30.25' LT	1
	1456+50 EB	37.5' LT	1
	1460+00 EB	23' LT	1
	1460+00 EB	37.5' LT	1
	1462+65 EB	37.5' LT	1
	1462+65 EB	23' LT	1
	1462+67.5 EB	30.25' LT	1
	1465+00 EB	23' LT	1
	1465+00 EB	37.5' LT	1
	1468+00 EB	23' LT	1
	1468+00 EB	37.5' LT	1
	1468+00 EB	30.25' LT	1
	1471+00 EB	37.5' LT	1
	1471+00 EB	23' LT	1
	1474+00 EB	37.5' LT	1
	1474+00 EB	23' LT	1
	1474+00 EB	30.25' LT	1
	1477+00 EB	37.5' LT	1
	1477+00 EB	23' LT	1
	1480+00 EB	37.5' LT	1
	1480+00 EB	23' LT	1
	1480+00 EB	30.25' LT	1
	1483+00 EB	37.5' LT	1
	1483+00 EB	23' LT	1
	1486+00 EB	37.5' LT	1
	1486+00 EB	23' LT	1
	1490+00 EB	37.5' LT	1
	1490+00 EB	23' LT	1
	1490+00 EB	30.25' LT	1
	1495+00 EB	23' LT	1
	1495+00 EB	37.5' LT	1
	1500+27 EB	37.5' LT	1
	1500+27 EB	23' LT	1
	1500+27 EB	30.25' LT	1
	1504+00 EB	23' LT	1
	1504+00 EB	37.5' LT	1

CONTINUED

INLET PROTECTION, CONTINUED

CATEGORY	STATION	LOCATION	(628.7020) INLET PROTECTION TYPE D (EACH)
020	1507+00 EB	23' LT	1
	1507+00 EB	30.25' LT	1
	1509+00 EB	23' LT	1
	1511+00 EB	23' LT	1
	1513+00 EB	23' LT	1
	1513+00 EB	37.07' LT	1
	1515+50 EB	23' LT	1
	1518+23 EB	23' LT	1
	1518+23 EB	37.02' LT	1
	1521+00 EB	23' LT	1
	1521+00 EB	34.15' LT	1
	1523+00 EB	23' LT	1
	1527+00 EB	37.5' LT	1
	1527+00 EB	23' LT	1
	1527+00 EB	30.25' LT	1
	1532+03 EB	37.5' LT	1
	1532+03 EB	23' LT	1
	1532+03 EB	30.25' LT	1
	1536+00 EB	37.5' LT	1
	1536+00 EB	23' LT	1
	1541+00 EB	37.5' LT	1
	1541+00 EB	23' LT	1
	1545+50 EB	37.5' LT	1
	1545+50 EB	23' LT	1
	1545+50 EB	30.25' LT	1
	1549+00 EB	37.5' LT	1
	1549+00 EB	23' LT	1
	1556+00 EB	37.5' LT	1
	1556+00 EB	23' LT	1
	TOTAL		**89**

PERMANENT DELINEATORS

CATEGORY	STATION	LOCATION	(633.0100) DELINEATOR POSTS STEEL (EACH)	(633.0500) DELINEATOR REFLECTORS (EACH)	(633.1000) DELINEATOR BRACKETS (EACH)
050	1350+00 - 1570+00	EB OUTSIDE	390	390	-
	1350+00 - 1570+00	WB OUTSIDE	390	390	-
	1428+00 - 1570+00	WB MEDIAN	36	-	36
	1429+00 - 1570+00	EB MEDIAN	36	-	36
	HWY 60 NB ON RAMP		3	3	-
	CS SB OFF		35	35	-
	CS NB OFF		35	35	-
	CS SB ON		5	5	-
	CS NB ON		5	5	-
		PROJECT TOTALS	935	863	72

PERMANENT SIGNING

CATEGORY	NO	STATION	LOCATION	CODE	SIZE IN X IN	(637.0101) SIGNS TYPE I (SF)	(637.0202) SIGNS REFLECTIVE TYPE II (SF)	(634.0616) POSTS WOOD 4 X 6 - INCH X 16 FT (EACH)	(634.0618) POSTS WOOD 4 X 6 - INCH X 18 FT EACH	(634.0620) POSTS WOOD 4 X 6 - INCH X 20 FT EACH	(634.0622) POSTS WOOD 4 X 6 - INCH X 22 FT EACH	NOTES
050	1	1344+72 EB MAINLINE	45.98' LT	R3-4B	36X48	-	12.00	-	1	-	-	
	2	1344+72 EB MAINLINE	45.98' LT	R3-4B	36X48	-	12.00	-	-	-	-	
	3	1351+63 EB MAINLINE	117.19' LT	W4-1	48X48	-	16.00	-	1	-	-	
	4	1353+71 EB MAINLINE	111.18' LT	E5-1A	90X60	-	37.50	-	-	1	1	
	5	1343+59 EB MAINLINE	44.91' RT	E-MODIFIED	276X156	299.00	-	-	-	-	-	NEW SIGN ON EXISTING POST
	6	1357+35 EB MAINLINE	62.79' RT	E-MODIFIED	300X126	262.50	-	-	-	-	-	NEW SIGN ON EXISTING POST
	7	1358+03 EB MAINLINE	47.29' RT	W13-2	24X30	-	5.00	1	-	-	-	
	8	1359+20 EB MAINLINE	108.79' LT	W13-2	24X30	-	5.00	1	-	-	-	
	9	1359+75 EB MAINLINE	129.81' LT	E-MODIFIED	300X126	262.50	-	-	-	-	-	NEW SIGN ON EXISTING POST
	10	1363+05 EB MAINLINE	45.85' RT	E5-1A	90X60	-	37.50	-	-	1	1	
	11	1365+99 EB MAINLINE	45.24' RT	W4-1	48X48	-	16.00	-	1	-	-	
	12	1383+02 EB MAINLINE	48.59' RT	R4-3	48X60	-	20.00	-	-	2	-	
	13	1387+00 EB MAINLINE	45.32' RT	J4-1	108X57	-	42.75	-	-	1	1	
	14	1393+04 EB MAINLINE	45.94' RT	R2-1	48X60	-	20.00	-	-	2	-	
	15	1402+23 EB MAINLINE	60.95' RT	E-MODIFIED	192X84	112.00	-	-	-	-	-	NEW SIGN ON EXISTING POST
	16	1406+75 EB MAINLINE	433.09' LT	E3-1	180X132	165.00	-	-	-	-	-	NEW SIGN ON EXISTING POST
	17	1414+31 EB MAINLINE	306.83' LT	E-MODIFIED	276X156	299.00	-	-	-	-	-	NEW SIGN ON EXISTING POST
	18	1435+31 EB MAINLINE	30.88' LT	R3-4B	36X48	-	12.00	-	1	-	-	
	19	1435+31 EB MAINLINE	30.88' LT	R3-4B	36X48	-	12.00	-	-	-	-	
	20	1513+85 EB MAINLINE	139.99' LT	E-MODIFIED	180X84	112.00	-	-	-	-	-	NEW SIGN ON EXISTING POST
	21	1534+53 EB MAINLINE	103.59' LT	R2-1	48X60	-	20.00	-	-	2	-	
	22	1543+54 EB MAINLINE	106.22' LT	J4-3	108X57	-	42.75	-	-	1	1	
	23	1545+28 EB MAINLINE	30.31' LT	R3-4B	36X48	-	12.00	-	1	-	-	
	24	1545+28 EB MAINLINE	30.31' LT	R3-4B	36X48	-	12.00	-	-	-	-	
	25	1352+18 CS WB OFF RAMP	34.30' RT	W3-1	36X36	-	9.00	-	1	-	-	
	26	1352+18 CS WB OFF RAMP	34.30' RT	R5-1A	36X24	-	6.00	-	-	-	-	
	27	1352+22 CS WB OFF RAMP	17.25' LT	R5-1A	36X24	-	6.00	1	-	-	-	
	28	1351+60 CS WB OFF RAMP	11.14' LT	R5-1	30X30	-	6.25	1	-	-	-	
	29	1351+60 CS WB OFF RAMP	35.88' RT	R5-1	30X30	-	6.25	1	-	-	-	
	30	1351+21 CS WB OFF RAMP	35.90' RT	R4-7	24X30	-	5.00	1	-	-	-	
	31	CS WB OFF RAMP	LT	D1-1	114X15	-	11.88	2	-	-	-	
	32	CS WB OFF RAMP	LT	R5-1A	36X24	-	6.00	1	-	-	-	
	33	CS WB ON RAMP	RT	R5-57	36X36	-	9.00	-	1	-	-	
	34	CS WB OFF RAMP	LT	R1-1	36X36	-	9.00	-	1	-	-	
	35	CS WB OFF RAMP	RT	R4-7	24X30	-	5.00	1	-	-	-	
	36	CS EAST OF IH 39	LT	J3-2	72X57	-	-	-	-	2	-	EXISTING SIGN ON NEW POST
	37	CS EAST OF IH 39	LT	W12-1D	24X24	-	4.00	1	-	-	-	
	38	CS EAST OF IH 39	LT	R1-1	36X36	-	9.00	-	1	-	-	
	39	CS EAST OF IH 39	RT	J3-2	72X57	-	-	-	-	2	-	EXISTING SIGN ON NEW POST
	40	CS EAST OF IH 39	RT	D1-1	66X30	-	-	1	1	-	-	EXISTING SIGN ON NEW POST
	41	CS EAST OF IH 39	RT	M1-5A	24X24	-	-	-	1	-	-	EXISTING SIGN ON NEW POST
	42	CS EAST OF IH 39	RT	M6-4	21X21	-	-	-	-	-	-	EXISTING SIGN ON NEW POST
	43	CS EAST OF IH 39	LT	R5-1	30X30	-	6.25	1	-	-	-	
	44	CS EAST OF IH 39	RT	D1-1	72X15	-	-	2	-	-	-	EXISTING SIGN ON NEW POST
	45	CS EAST OF IH 39	LT	J2-3	72X57	-	-	-	-	2	-	EXISTING SIGN ON NEW POST
	46	CS EAST OF IH 39	RT	W2-1	30X30	-	6.25	1	-	-	-	
	47	CS EAST OF IH 39	RT	W5-52L	12X36	-	3.00	1	-	-	-	
	48	CS EAST OF IH 39	LT	W5-52R	12X36	-	3.00	1	-	-	-	
	49	CS EAST OF IH 39	LT	J2-3	72X57	-	-	-	-	2	-	EXISTING SIGN ON NEW POST
	50	CS EAST OF IH 39	LT	D1-1	66X30	-	-	-	2	-	-	EXISTING SIGN ON NEW POST
	51	CS EAST OF IH 39	LT	J2-4	96X57	-	-	-	2	-	-	EXISTING SIGN ON NEW POST
	52	CS EAST OF IH 39	LT	J1-4	96X39	-	-	-	1	1	-	EXISTING SIGN ON NEW POST
	53	1364+55 CS EB OFF RAMP	35.75 LT	W3-1	36X36	-	9.00	-	1	-	-	
	54	1364+55 CS EB OFF RAMP	35.75 LT	R5-1A	36X24	-	6.00	1	-	-	-	
	55	1364+62 CS EB OFF RAMP	9.13' RT	R5-1A	36X24	-	6.00	1	-	-	-	
	56	1365+33 CS EB OFF RAMP	14.00' RT	R5-1	30X30	-	6.25	1	-	-	-	
	57	1365+26 CS EB OFF RAMP	30.64' LT	R5-1	30X30	-	6.25	1	-	-	-	
	58	1366+74 CS EB OFF RAMP	29.23' LT	R4-7	24X30	-	5.00	1	-	-	-	
	59	1367+59 CS EB OFF RAMP	15.07' RT	D1-1	114X15	-	11.88	2	-	-	-	
	60	CS WEST OF IH 39	RT	R5-57	36X36	-	9.00	-	1	-	-	
	61	1367+59 CS EB OFF RAMP	15.07' RT	R5-1A	36X24	-	6.00	1	-	-	-	
	62	CS WEST OF IH 39	RT	R4-7	24X30	-	5.00	1	-	-	-	
	63	CS WEST OF IH 39	RT	J3-2	72X57	-	-	-	-	2	-	EXISTING SIGN ON NEW POST
	64	CS WEST OF IH 39	RT	W12-1D	24X24	-	4.00	1	-	-	-	
	65	CS WEST OF IH 39	LT	J3-2	72X57	-	-	-	-	2	-	EXISTING SIGN ON NEW POST
	66	CS WEST OF IH 39	LT	D1-1	66X30	-	-	1	1	-	-	EXISTING SIGN ON NEW POST
	67	CS WEST OF IH 39	LT	M1-5A	24X24	-	4.00	-	1	-	-	
	68	CS WEST OF IH 39	LT	M6-4	21X21	-	3.06	-	-	-	-	
	69	CS WEST OF IH 39	RT	R1-1	36X36	-	9.00	-	1	-	-	
	70	CS WEST OF IH 39	RT	R1-1	36X36	-	9.00	-	1	-	-	

CONTINUED

PERMANENT SIGNING, CONTINUED

CATEGORY	NO	STATION	LOCATION	CODE	SIZE IN X IN	(637.0101) SIGNS TYPE I (SF)	(637.0202) SIGNS REFLECTIVE TYPE II (SF)	(634.0616) POSTS WOOD 4 X 6 - INCH X 16 FT (EACH)	(634.0618) POSTS WOOD 4 X 6 - INCH X 18 FT EACH	(634.0620) POSTS WOOD 4 X 6 - INCH X 20 FT EACH	(634.0622) POSTS WOOD 4 X 6 - INCH X 22 FT EACH	NOTES
050	71	CS WEST OF IH 39	RT	R5-1	30X30	-	6.25	1	-	-	-	
	72	CS WEST OF IH 39	LT	D1-1	66X15	-	-	2	-	-	-	EXISTING SIGN ON NEW POST
	73	CS WEST OF IH 39	RT	J2-3	72X57	-	-	-	-	2	-	EXISTING SIGN ON NEW POST
	74	CS WEST OF IH 39	LT	W5-52L	12X36	-	3.00	1	-	-	-	
	75	CS WEST OF IH 39	RT	W5-52R	12X36	-	3.00	1	-	-	-	
	76	CS WEST OF IH 39	RT	J2-4	96X57	-	-	-	-	2	-	EXISTING SIGN ON NEW POST
	77	CS WEST OF IH 39	RT	J2-3	72X57	-	-	-	-	2	-	EXISTING SIGN ON NEW POST
	78	CS WEST OF IH 39	RT	D1-1	66X30	-	-	1	1	-	-	EXISTING SIGN ON NEW POST
	79	CS WEST OF IH 39	RT	J1-3	72X39	-	-	-	2	-	-	EXISTING SIGN ON NEW POST
	80	CS EAST OF IH 39	LT	R11-53	54X36	-	13.50	-	-	-	-	ON ADVANCE FLASHER FOR RAMP GATE
	81	CS EAST OF IH 39	RT	R11-53	54X36	-	13.50	-	-	-	-	ON ADVANCE FLASHER FOR RAMP GATE
	82	CS WEST OF IH 39	LT	R11-53	54X36	-	13.50	-	-	-	-	ON ADVANCE FLASHER FOR RAMP GATE
	83	CS WEST OF IH 39	RT	R11-53	54X36	-	13.50	-	-	-	-	ON ADVANCE FLASHER FOR RAMP GATE
	84	HWY 60 EAST OF IH 39	LT	R11-53	54X36	-	13.50	-	-	-	-	ON ADVANCE FLASHER FOR RAMP GATE
	85	HWY 60 EAST OF IH 39	RT	R11-53	54X36	-	13.50	-	-	-	-	ON ADVANCE FLASHER FOR RAMP GATE
	86	HWY 60 WEST OF IH 39	LT	R11-53	54X36	-	13.50	-	-	-	-	ON ADVANCE FLASHER FOR RAMP GATE
	87	HWY 60 WEST OF IH 39	RT	R11-53	54X36	-	13.50	-	-	-	-	ON ADVANCE FLASHER FOR RAMP GATE
	88	CS EAST OF IH 39	LT	R11-54F	48X30	-	13.50	-	-	-	-	ON RAMP GATE
	89	CS WEST OF IH 39	RT	R11-54F	48X30	-	13.50	-	-	-	-	ON RAMP GATE
	90	HWY 60 EAST OF IH 39	LT	R11-54F	48X31	-	13.50	-	-	-	-	ON RAMP GATE
	91	HWY 60 WEST OF IH 39	RT	R11-54F	48X32	-	13.50	-	-	-	-	ON RAMP GATE
		MP 115 - MP 107		D10-5	21X60	-	700.00		80			0.2-MILE SPACING
PROJECT TOTAL						1512.00	1419.06	35	105	29	4	

REMOVING SIGNS

CATEGORY		STATION	LOCATION	CODE	SIZE IN X IN	(638.2601) TYPE I (EACH)	(638.2602) TYPE II (EACH)	(638.3000) SMALL SIGN SUPPORTS (EACH)
020	1344+72	EB MAINLINE	45.98' LT	R3-4B	36X48	-	1	1
	1344+72	EB MAINLINE	45.98' LT	R3-4B	36X48	-	1	-
	1351+63	EB MAINLINE	117.19' LT	W4-1	36X36	-	1	1
	1353+71	EB MAINLINE	111.18' LT	E5-1A	90X60	-	1	2
	1343+59	EB MAINLINE	44.91' RT	E-MODIFIED	276X156	1	1	-
	1357+35	EB MAINLINE	62.79' RT	E-MODIFIED	300X126	1	1	-
	1358+03	EB MAINLINE	47.29' RT	W13-2	24X30	-	1	1
	1359+20	EB MAINLINE	108.79' LT	W13-2	24X30	-	1	1
	1359+75	EB MAINLINE	129.81' LT	E-MODIFIED	300X126	1	1	-
	1363+05	EB MAINLINE	45.85' RT	E5-1A	90X60	-	1	2
	1365+99	EB MAINLINE	45.24' RT	W4-1	36X36	-	1	1
	1370+36	EB MAINLINE	306.90' LT	D10-3	12X48	-	1	1
	1371+18	EB MAINLINE	59.09' RT	D10-3	12X48	-	1	1
	1383+02	EB MAINLINE	48.59' RT	R4-3	24X30	-	1	1
	1387+00	EB MAINLINE	45.32' RT	J1-3	72X39	-	1	2
	1393+04	EB MAINLINE	45.94' RT	R2-1	24X30	-	1	1
	1402+23	EB MAINLINE	60.95' RT	E-MODIFIED	192X84	1	1	-
	1406+75	EB MAINLINE	433.09' LT	E3-1	180X132	1	1	-
	1414+31	EB MAINLINE	306.83' LT	E-MODIFIED	276X156	1	1	-
	1424+64	EB MAINLINE	119.03' LT	D10-3	12X48	-	1	1
	1425+02	EB MAINLINE	52.54' RT	D10-3	12X48	-	1	1
	1435+31	EB MAINLINE	30.88' LT	R3-4B	36X48	-	1	1
	1435+31	EB MAINLINE	30.88' LT	R3-4B	36X48	-	1	-
	1479+24	EB MAINLINE	43.87' RT	D10-3	12X48	-	1	1
	1479+29	EB MAINLINE	104.26' LT	D10-3	12X48	-	1	1
	1513+85	EB MAINLINE	139.99' LT	E-MODIFIED	180X84	1	1	-
	1530+89	EB MAINLINE	104.46' LT	D10-3	12X48	-	1	1
	1531+06	EB MAINLINE	43.89' RT	D10-3	12X48	-	1	1
	1534+53	EB MAINLINE	103.59' LT	R2-1	24X30	-	1	1
	1543+54	EB MAINLINE	106.22' LT	J1-3	72X39	-	1	2
	1545+28	EB MAINLINE	30.31' LT	R3-48	36X48	-	1	1
	1545+28	EB MAINLINE	30.31' LT	R3-48	36X48	-	1	-
	1352+18	CS WB OFF RAMP	34.30' RT	W3-1	36X36	-	1	1
	1352+18	CS WB OFF RAMP	34.30' RT	R5-1A	36X24	-	1	-
	1352+22	CS WB OFF RAMP	17.25' LT	R5-1A	30X30	-	1	1
	1351+60	CS WB OFF RAMP	11.14' LT	R5-1	30X30	-	1	1
	1351+60	CS WB OFF RAMP	35.88' RT	R5-1	30X30	-	1	1
	1351+21	CS WB OFF RAMP	35.90' RT	R4-7	24X30	-	1	1
		CS WB OFF RAMP	LT	D1-1	114X15	-	1	2
		CS WB OFF RAMP	LT	R5-1A	36X24	-	1	1

CONTINUED

REMOVING SIGNS, CONTINUED

CATEGORY	STATION	LOCATION	CODE	SIZE IN X IN	(638.2601) TYPE I (EACH)	(638.2602) TYPE II (EACH)	(638.3000) SMALL SIGN SUPPORTS (EACH)
020	CS WB ON RAMP	RT	R5-57	36X36	-	1	1
	CS WB OFF RAMP	LT	R1-1	30X30	-	1	1
	CS WB OFF RAMP	RT	R4-7	24X30	-	1	1
	CS EAST OF IH 39	LT	J2-3	72X57	-	-	2
	CS EAST OF IH 39	LT	W12-1D	24X24	-	1	1
	CS EAST OF IH 39	LT	R1-1	30X30	-	1	1
	CS EAST OF IH 39	RT	J2-3	72X57	-	-	2
	CS EAST OF IH 39	RT	D1-1	66X30	-	-	2
	CS EAST OF IH 39	RT	M1-5A	24X24	-	-	1
	CS EAST OF IH 39	RT	M6-4	21X21	-	-	-
	CS EAST OF IH 39	LT	R5-1	30X30	-	1	1
	CS EAST OF IH 39	RT	D1-1	72X15	-	-	2
	CS EAST OF IH 39	LT	J2-3	72X57	-	1	2
	CS EAST OF IH 39	RT	W2-1	30X30	-	1	1
	CS EAST OF IH 39	RT	W5-52L	12X36	-	1	1
	CS EAST OF IH 39	LT	W5-52R	12X36	-	1	1
	CS EAST OF IH 39	LT	J2-3	72X57	-	-	2
	CS EAST OF IH 39	LT	D1-1	66X30	-	-	2
	CS EAST OF IH 39	LT	J2-4	96X57	-	-	2
	CS EAST OF IH 39	LT	J1-4	96X39	-	-	2
1364+55	CS EB OFF RAMP	35.75 LT	W3-1	36X36	-	1	1
1364+55	CS EB OFF RAMP	35.75 LT	R5-1A	36X24	-	1	-
1364+62	CS EB OFF RAMP	9.13' RT	R5-1A	36X24	-	1	1
1365+33	CS EB OFF RAMP	14.00' RT	R5-1	30X30	-	1	1
1365+26	CS EB OFF RAMP	30.64' LT	R5-1	30X30	-	1	1
1366+74	CS EB OFF RAMP	29.23' LT	R4-7	24X30	-	1	1
1367+59	CS EB OFF RAMP	15.07' RT	D1-1	114X15	-	1	2
	CS WEST OF IH 39	RT	R5-57	36X36	-	1	1
1367+59	CS EB OFF RAMP	15.07' RT	R5-1A	36X24	-	1	1
	CS WEST OF IH 39	RT	R4-7	24X30	-	1	1
	CS WEST OF IH 39	RT	J2-3	72X57	-	-	2
	CS WEST OF IH 39	RT	W12-1D	24X24	-	1	1
	CS WEST OF IH 39	LT	J2-3	72X57	-	-	2
	CS WEST OF IH 39	LT	D1-1	66X30	-	-	2
	CS WEST OF IH 39	LT	M1-5A	24X24	-	1	1
	CS WEST OF IH 39	LT	M6-4	21X21	-	1	-
	CS WEST OF IH 39	RT	R1-1	30X30	-	1	1
	CS WEST OF IH 39	RT	R1-1	30X30	-	1	1
	CS WEST OF IH 39	RT	R5-1	30X30	-	1	1
	CS WEST OF IH 39	LT	D1-1	66X15	-	1	2
	CS WEST OF IH 39	RT	J2-3	72X57	-	1	2
	CS WEST OF IH 39	LT	W5-52L	12X36	-	1	1
	CS WEST OF IH 39	RT	W5-52R	12X36	-	1	1
	CS WEST OF IH 39	RT	J2-4	96X57	-	-	2
	CS WEST OF IH 39	RT	J2-3	72X57	-	-	2
	CS WEST OF IH 39	RT	D1-1	66X30	-	-	2
	CS WEST OF IH 39	RT	J1-3	72X39	-	-	2
PROJECT TOTAL					7.0	70	97

MOVING SIGNS (TC Mile Marker Signs)

CATEGORY	SIGN	CODE	SIZE	ORIGINAL STATION	ORIGINAL LOCATION	NEW LOCATION STATION	NEW LOCATION LOCATION	(638.2102) MOVING SIGNS TYPE II (EACH)
020	115.6 WB	D10-5	21X60	1351+35	48' LT	1351+34	29' LT	1
	115.6 EB	D10-5	21X60	1351+29	29' LT	1351+31	42' RT	1
	115.8 WB	D10-5	21X60	1361+19	49' LT	1361+13	31' LT	1
	115.8 EB	D10-5	21X60	1361+05	31' LT	1361+01	50' RT	1
	116.0 WB	D10-5	21X60	1371+76	257' LT	1371+98	33' LT	1
	116.0 EB	D10-5	21X60	1371+91	33' LT	1371+99	51' RT	1
	116.2 WB	D10-5	21X60	1381+81	402' LT	1381+71	33' LT	1
	116.2 EB	D10-5	21X60	1381+64	33' LT	1381+66	42'RT	1
	116.4 WB	D10-5	21X60	1392+21	447' LT	1392+13	33' LT	1
	116.4 EB	D10-5	21X60	1392+06	33' LT	1392+08	41' RT	1
	116.6 WB	D10-5	21X60	1402+64	396' LT	1402+14	34' LT	1
	116.6 EB	D10-5	21X60	1402+08	34' LT	1402+11	40' RT	1
	116.8 WB	D10-5	21X60	1413+96	233' LT	1413+29	30' LT	1
	116.8 EB	D10-5	21X60	1413+22	30' LT	1413+26	43' RT	1
	117.0 WB	D10-6	21X60	1424+49	126' LT	1424+77	37' LT	1
	117.0 EB	D10-5	21X60	1424+70	36' LT	1424+78	43' RT	1
	117.2 EB	D10-5	21X60	1435+30	32' LT	1435+31	52' RT	1
	117.4 EB	D10-5	21X60	1445+99	33' LT	1446+01	42' RT	1
	117.6 EB	D10-5	21X60	1457+51	31' LT	1457+60	42' RT	1
	117.8 EB	D10-5	21X60	1467+19	34' LT	1467+23	41' RT	1
	118.0 EB	D10-5	21X60	1479+38	31' LT	1479+43	43' RT	1
	118.2 EB	D10-5	21X60	1490+12	31' LT	1490+16	60' RT	1
	118.4 EB	D10-5	21X60	1500+72	36' LT	1500+78	43' RT	1
	118.6 EB	D10-5	21X60	1511+14	35' LT	1511+18	41'RT	1
	118.8 EB	D10-5	21X60	1522+00	35' LT	1522+03	42' RT	1
	119.0 EB	D10-5	21X60	1530+97	35' LT	1530+98	44' RT	1
PROJECT TOTAL								26

(ALL LOCATIONS ARE REFERENCED FROM EB ALIGNMENT)

ERECTING STATE OWNED SIGNS

CATEGORY	NO	STATION	LOCATION	CODE	SIZE IN X IN	(638.3620) TYPE II (EACH)
050	36	CS EAST OF IH 39	LT	J2-3	72X57	1
	39	CS EAST OF IH 39	RT	J2-3	72X57	1
	40	CS EAST OF IH 39	RT	D1-1	66X30	1
	41	CS EAST OF IH 39	RT	M1-5A	24X24	1
	42	CS EAST OF IH 39	RT	M6-4	21X21	1
	44	CS EAST OF IH 39	RT	D1-1	72X15	1
	49	CS EAST OF IH 39	LT	J2-3	72X57	1
	50	CS EAST OF IH 39	LT	D1-1	66X30	1
	51	CS EAST OF IH 39	LT	J2-4	96X57	1
	52	CS EAST OF IH 39	LT	J1-4	96X39	1
	63	CS WEST OF IH 39	RT	J2-3	72X57	1
	65	CS WEST OF IH 39	LT	J2-3	72X57	1
	66	CS WEST OF IH 39	LT	D1-1	66X30	1
	76	CS WEST OF IH 39	RT	J2-4	96X57	1
	77	CS WEST OF IH 39	RT	J2-3	72X57	1
	78	CS WEST OF IH 39	RT	D1-1	66X30	1
	79	CS WEST OF IH 39	RT	J1-3	72X39	1
PROJECT TOTAL						17

TRAFFIC CONTROL

CATEGORY	STAGE	(614.0905) CRASH CUSHION TEMPORARY (EACH)	(633.1100) DELINEATORS TEMPORARY (EACH)	(643.0300) DRUMS (DAYS)	(643.0420) BARRICADES TYPE III (DAYS)	(643.0705) WARNING LIGHTS TYPE A (DAYS)	(643.0715) WARNING LIGHTS TYPE C (DAYS)	(643.0800) ARROW BOARDS (DAYS)	(643.0900) SIGNS (DAYS)	(643.3000) DETOUR SIGNS (DAYS)	(SPV.0045.01) PORTABLE CHANGEABLE MESSAGE BOARD (DAYS)
020	STAGE 1	6	115	27,750	5,328	7,326	14,726	296	14,726	1,406	444
	STAGE 2	5	99	21,224	3,920	5,656	9,128	224	10,192	-	336
	STAGE 3	-	-	11,124	306	612	1,116	54	1,296	-	36
	WIDE LOAD SIGNAGE	-	-	-	-	-	-	-	3,256	-	-
	PROJECT TOTAL	11	214	60,098	9,554	13,594	24,970	574	29,470	1,406	816

TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE

CATEGORY	LOCATION	(643.0200) TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (DAYS)
020	PROJECT	128
	TOTAL	128

TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER

CATEGORY	STAGE	(643.0500) POSTS (EACH)	(643.0600) BASES (EACH)
020	CROSSOVER A	200	200
	CROSSOVER F	200	200
	PROJECT TOTAL	400	400

TRAFFIC CONTROL SIGNS FIXED MESSAGE

CATEGORY	STATION	LOCATION	STAGE	SIZE	(643.1000) (SF)	MESSAGE
020	1374+72	33.18' LT EB MAINLINE	1	168 X 78	91	POYNETTE/LAKE WISCONSIN EXIT SIGN
	1374+72	33.18' LT EB MAINLINE	1	96 X 24	16	EXIT 115
	1411+28	34.15' LT EB MAINLINE	1	144 X 108	108	MACKENZIE ENVIRONMENTAL EDUCATION CENTER
	1417+99	27.89' LT EB MAINLINE	1	150 X 96	100	POYNETTE/LAKE WISCONSIN 1 MILE ADVANCE EXIT SIGN
	1417+99	27.89' LT EB MAINLINE	1	96 X 24	16	EXIT 115
	1608+50	76.00' LT EB MAINLINE	1	144 X 84	84	LODI/ARLINGTON EXIT SIGN
	1608+50	76.00' LT EB MAINLINE	1	96 X 24	16	EXIT 119
	SUBTOTALS STAGE 1				431	
020	1548+50	12.00' LT EB MAINLINE	2	144 X 84	84	LODI/ARLINGTON EXIT SIGN
	1548+50	12.00' LT EB MAINLINE	2	96 X 24	16	EXIT 119
	SUBTOTALS STAGE 2				100	
020	STH 33	EAST & WESTBOUND	1 & 2	102 X 66	93.5	MAX 12' WIDTH AT HWY CS
	STH 78	NORTHBOUND	1 & 2	102 X 66	46.75	MAX 12' WIDTH AT HWY CS
	IH 39	SOUTHBOUND	1 & 2	102 X 66	46.75	MAX 12' WIDTH AT HWY CS
	STH 60	EAST & WESTBOUND	1 & 2	102 X 66	93.5	MAX 12' WIDTH AT HWY 60
	CTH V	EAST & WESTBOUND	1 & 2	102 X 66	93.5	MAX 12' WIDTH AT HWY 60
	STH 19	EAST & WESTBOUND	1 & 2	102 X 66	93.5	MAX 12' WIDTH AT HWY 60
	SUBTOTALS WIDE LOAD SIGNAGE				468	
	PROJECT TOTALS				999	

PAVEMENT MARKING

CATEGORY	STATION		LOCATION	(646.0106) EPOXY 4-INCH (LF)	(646.0881.S) EPOXY WITH GROOVED WET REFLECTIVE TAPE 4-INCH (LF)	(646.0883.S) EPOXY WITH GROOVED WET REFLECTIVE TAPE 8-INCH (LF)	(647.0746) DIAGONAL EPOXY 24-INCH (LF)
050	1311+00	1345+00	LT & RT	11,000	-	-	-
	1345+00 -	1365+00	LT & RT	-	7,500	800	200
	1365+00 -	1395+00	LT & RT	-	15,200	600	-
	1395+00 -	1430+00	LT & RT	-	17,700	-	-
	1430+00 -	1505+00	LT & RT	-	37,500	-	-
	1505+00 -	1565+00	LT & RT	-	36,600	800	-
	1565+00 -	1596+00	LT & RT	-	15,800	1,900	200
	1596+00 -	1630+50	LT	-	8,600	-	-
	PROJECT TOTALS			11,000	138,900	4,100	400

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TRAFFIC CONTROL

CATEGORY	STAGE	(614.0905) CRASH CUSHION TEMPORARY (EACH)	(633.1100) DELINEATORS TEMPORARY (EACH)	(643.0300) DRUMS (DAYS)	(643.0420) BARRICADES TYPE III (DAYS)	(643.0705) WARNING LIGHTS TYPE A (DAYS)	(643.0715) WARNING LIGHTS TYPE C (DAYS)	(643.0800) ARROW BOARDS (DAYS)	(643.0900) SIGNS (DAYS)	(643.3000) DETOUR SIGNS (DAYS)	(SPV.0045.01) PORTABLE CHANGEABLE MESSAGE BOARD (DAYS)
020	STAGE 1	6	115	27,750	5,328	7,326	14,726	296	14,726	1,406	444
	STAGE 2	5	99	21,224	3,920	5,656	9,128	224	10,192	-	336
	STAGE 3	-	-	11,124	306	612	1,116	54	1,296	-	36
	WIDE LOAD SIGNAGE	-	-	-	-	-	-	-	3,256	-	-
PROJECT TOTAL		11	214	60,098	9,554	13,594	24,970	574	29,470	1,406	816

TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE

CATEGORY	LOCATION	(643.0200) TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (DAYS)
020	PROJECT	128
	TOTAL	128

TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER

CATEGORY	STAGE	(643.0500) POSTS (EACH)	(643.0600) BASES (EACH)
020	CROSSOVER A	200	200
	CROSSOVER F	200	200
PROJECT TOTAL		400	400

TRAFFIC CONTROL SIGNS FIXED MESSAGE

CATEGORY	STATION	LOCATION		STAGE	SIZE	(643.1000) (SF)	MESSAGE
020	1374+72	33.18' LT	EB MAINLINE	1	168 X 78	91	POYNETTE/LAKE WISCONSIN EXIT SIGN
	1374+72	33.18' LT	EB MAINLINE	1	96 X 24	16	EXIT 115
	1411+28	34.15' LT	EB MAINLINE	1	144 X 108	108	MACKENZIE ENVIRONMENTAL EDUCATION CENTER
	1417+99	27.89' LT	EB MAINLINE	1	150 X 96	100	POYNETTE/LAKE WISCONSIN 1 MILE ADVANCE EXIT SIGN
	1417+99	27.89' LT	EB MAINLINE	1	96 X 24	16	EXIT 115
	1608+50	76.00' LT	EB MAINLINE	1	144 X 84	84	LODI/ARLINGTON EXIT SIGN
	1608+50	76.00' LT	EB MAINLINE	1	96 X 24	16	EXIT 119
SUBTOTALS STAGE 1						431	
020	1548+50	12.00' LT	EB MAINLINE	2	144 X 84	84	LODI/ARLINGTON EXIT SIGN
	1548+50	12.00' LT	EB MAINLINE	2	96 X 24	16	EXIT 119
SUBTOTALS STAGE 2						100	
020	STH 33	EAST & WESTBOUND		1 & 2	102 X 66	93.5	MAX 12' WIDTH AT HWY CS
	STH 78	NORTHBOUND		1 & 2	102 X 66	46.75	MAX 12' WIDTH AT HWY CS
	IH 39	SOUTHBOUND		1 & 2	102 X 66	46.75	MAX 12' WIDTH AT HWY CS
	STH 60	EAST & WESTBOUND		1 & 2	102 X 66	93.5	MAX 12' WIDTH AT HWY 60
	CTH V	EAST & WESTBOUND		1 & 2	102 X 66	93.5	MAX 12' WIDTH AT HWY 60
	STH 19	EAST & WESTBOUND		1 & 2	102 X 66	93.5	MAX 12' WIDTH AT HWY 60
SUBTOTALS WIDE LOAD SIGNAGE						468	
PROJECT TOTALS						999	

PAVEMENT MARKING

CATEGORY	STATION		LOCATION	(646.0106) EPOXY 4-INCH (LF)	(646.0841.S) GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (LF)	(646.0843.S) GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (LF)	(646.0881.S) GROOVED WET REFLECTIVE TAPE 4-INCH (LF)	(646.0883.S) GROOVED WET REFLECTIVE TAPE 8-INCH (LF)	(647.0746) DIAGONAL EPOXY 24-INCH (LF)
050	1311+00	1345+00	LT & RT	11,000	-	-	-	-	-
	1345+00 -	1365+00	LT & RT	-	1,500	200	5,900	800	200
	1365+00 -	1395+00	LT & RT	-	3,100	-	12,100	600	-
	1395+00 -	1430+00	LT & RT	-	3,600	-	14,100	-	-
	1430+00 -	1505+00	LT & RT	-	7,500	-	30,000	-	-
	1505+00 -	1565+00	LT & RT	-	6,200	-	30,300	800	-
	1565+00 -	1596+00	LT & RT	-	3,100	300	12,400	1,900	200
	1596+00 -	1630+50	LT	-	1,700	-	6,900	-	-
PROJECT TOTALS				11,000	26,700	500	111,700	4,100	400

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	MISCELLANEOUS QUANTITIES	SHEET 179 A	E

REMOVING PAVEMENT MARKINGS

CATEGORY	STATION		LOCATION	(646.0600) (LF)	REMARKS
020	1350+00	1517+50	EASTBOUND	43,000	PRIOR TO STAGE 1
	1517+50	1596+00	EASTBOUND	17,800	
	1545+00	1630+50	WESTBOUND	23,000	
PROJECT TOTAL				83,800	

AERIAL ENFORCEMENT BARS

CATEGORY	STATION		LOCATION	(647.0803) PAVEMENT MARKING AERIAL ENFORCEMENT BARS EPOXY 24-INCH (LF)	REMARKS
050	1350+00	1630+50	UNDISTRIBUTED	480	3 EA X 112 FT
PROJECT TOTAL				480	

TEMPORARY PAVEMENT MARKING

CATEGORY	STATION		STAGE	(649.0200) REFLECTIVE PAINT 4-INCH WHITE (LF)	(649.0200) REFLECTIVE PAINT 4-INCH YELLOW (LF)	(649.0400) REMOVABLE TAPE 4-INCH (LF)	(649.0701) 8-INCH (LF)	(649.0801) REMOVABLE TAPE 8-INCH (LF)	(649.2100) TEMPORARY RAISED PAVEMENT MARKERS (LF)
020	BOP	1345+00	1	5,250	4,500	-	-	-	30
	1345+00	1359+00	1	4,668	3,509	-	-	-	41
	1359+00	1375+00	1	4,724	3,300	-	650	-	25
	1375+00	1390+00	1	3,850	3,080	-	-	-	-
	1390+00	1405+00	1	3,750	3,000	-	-	-	-
	1405+00	1420+00	1	3,750	3,000	-	-	-	-
	1420+00	1434+00	1	3,500	2,800	-	-	-	-
	1434+00	1464+00	1	7,500	6,000	-	-	-	-
	1464+00	1494+00	1	7,500	6,000	-	-	-	-
	1494+00	1524+00	1	7,500	6,000	-	-	-	-
	1524+00	1554+00	1	7,512	6,000	-	200	-	-
	1554+00	1569+00	1	4,370	3,000	704	-	-	14
	1569+00	1584+00	1	5,550	3,000	1,500	400	-	30
	1584+00	EOP	1	7,188	5,015	-	200	-	229
SUBTOTALS STAGE 1				76,612	58,204	2,204	1,450	0	369
020	BOP	1345+00	2	4,263	3,700	-	200	-	232
	1345+00	1359+00	2	4,020	4,150	1,500	400	-	55
	1359+00	1375+00	2	3,506	3,260	230	-	-	5
	1375+00	1390+00	2	3,188	3,000	-	-	-	-
	1390+00	1405+00	2	3,188	3,000	-	-	-	-
	1405+00	1420+00	2	3,188	3,000	-	-	-	-
	1420+00	1434+00	2	2,975	2,800	-	-	-	-
	1434+00	1464+00	2	6,375	6,000	-	-	-	-
	1464+00	1494+00	2	6,375	6,000	-	-	-	-
	1494+00	1524+00	2	6,375	6,000	-	-	-	-
	1524+00	1554+00	2	6,690	6,313	438	-	200	9
	1554+00	1569+00	2	4,688	4,500	1,500	-	400	30
	1569+00	1584+00	2	4,163	3,975	965	-	-	19
	1584+00	EOP	2	6,318	6,725	1,160	-	-	23
SUBTOTALS STAGE 2				65,309	62,423	5,793	600	600	373
PROJECT TOTALS				141,921	120,627	7,997	2,050	600	742
			REFLECTIVE PAINT 4-INCH TOTAL		262,548				

CONSTRUCTION STAKING

CATEGORY	STATION	LOCATION	(650.4500) CONSTRUCTION STAKING SUBGRADE (LF)	(650.7000) CONSTRUCTION STAKING CONCRETE PAVEMENT (LF)	(650.8500) CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (LS)
020	1345+00 - 1360+00	EB &WB	3000	3000	
	1360+00 - 1429+00 EB	EB	6900	6900	
	1360+00 - 1429+00 WB	WB	6900	6900	
	1430+00 - 1558+00	EB &WB	25600	25600	
	PROJECT				1
		TOTAL	42400	42400	1

SAWING CONCRETE

CATEGORY	STATION	LOCATION	(690.0250) SAWING CONCRETE (LF)	REMARKS
020	1350+00 WB	EB & WB	112	NORTH PROJ. LIMIT
	1354+50 "E"	WB	24	CS RAMP
	1363+35 "C"	EB	24	CS RAMP
	1558+00	EB & WB	130	SOUTH PROJ. LIMIT
		TOTAL	290	

PULLBOXES

CATEGORY	STATION	ITEM ID	(653.0135) PULL BOXES STEEL 24 X 36 - INCH EA	(SPV.0060.04) INSTALL CONDUIT INTO EXISTING ITEM EA
040	1367+00, RT	PB01	1	–
	1364+50, RT	PB02	1	–
	1362+00, RT	PB03	1	–
	1359+80, RT	PB04	1	–
	1359+60, RT	PB05	1	–
	1359+xx, LT	PB06	1	–
	1358+00, LT	PB07	1	–
	1355+50, LT	PB08	1	–
	1353+00, LT	PB09	1	–
	1350+75, LT	PB10	1	–
	1569 + 90 EB, 45' RT	EXPB08	–	1
	1568 + 65 WB, 20' LT	EXPB10	–	1
	1568 + 60 WB, 55' LT	EXV01	–	1
	TOTALS		10	3

REMOVING PAVEMENT MARKINGS

CATEGORY	STATION		LOCATION	(646.0600) (LF)	REMARKS
020	1350+00	1517+50	EASTBOUND	43,000	PRIOR TO STAGE 1
	1517+50	1596+00	EASTBOUND	17,800	
	1545+00	1630+50	WESTBOUND	23,000	
PROJECT TOTAL				83,800	

AERIAL ENFORCEMENT BARS

CATEGORY	STATION		LOCATION	(647.0803) PAVEMENT MARKING AERIAL ENFORCEMENT BARS EPOXY 24-INCH (LF)	REMARKS
050	1350+00	1630+50	UNDISTRIBUTED	480	3 EA X 112 FT
PROJECT TOTAL				480	

TEMPORARY PAVEMENT MARKING

CATEGORY	STATION		STAGE	(649.0200) REFLECTIVE PAINT 4-INCH WHITE (LF)	(649.0200) REFLECTIVE PAINT 4-INCH YELLOW (LF)	(649.0400) REMOVABLE TAPE 4-INCH (LF)	(649.0701) 8-INCH (LF)	(649.0801) REMOVABLE TAPE 8-INCH (LF)	(649.2100) TEMPORARY RAISED PAVEMENT MARKERS (LF)
020	BOP	1345+00	1	5,250	4,500	-	-	-	30
	1345+00	1359+00	1	4,668	3,509	-	-	-	41
	1359+00	1375+00	1	4,724	3,300	-	650	-	25
	1375+00	1390+00	1	3,850	3,080	-	-	-	-
	1390+00	1405+00	1	3,750	3,000	-	-	-	-
	1405+00	1420+00	1	3,750	3,000	-	-	-	-
	1420+00	1434+00	1	3,500	2,800	-	-	-	-
	1434+00	1464+00	1	7,500	6,000	-	-	-	-
	1464+00	1494+00	1	7,500	6,000	-	-	-	-
	1494+00	1524+00	1	7,500	6,000	-	-	-	-
	1524+00	1554+00	1	7,512	6,000	-	200	-	-
	1554+00	1569+00	1	4,370	3,000	704	-	-	14
	1569+00	1584+00	1	5,550	3,000	1,500	400	-	30
	1584+00	EOP	1	7,188	5,015	-	200	-	229
SUBTOTALS STAGE 1				76,612	58,204	2,204	1,450	0	369
020	BOP	1345+00	2	4,263	3,700	-	200	-	232
	1345+00	1359+00	2	4,020	4,150	1,500	400	-	55
	1359+00	1375+00	2	3,506	3,260	230	-	-	5
	1375+00	1390+00	2	3,188	3,000	-	-	-	-
	1390+00	1405+00	2	3,188	3,000	-	-	-	-
	1405+00	1420+00	2	3,188	3,000	-	-	-	-
	1420+00	1434+00	2	2,975	2,800	-	-	-	-
	1434+00	1464+00	2	6,375	6,000	-	-	-	-
	1464+00	1494+00	2	6,375	6,000	-	-	-	-
	1494+00	1524+00	2	6,375	6,000	-	-	-	-
	1524+00	1554+00	2	6,690	6,313	438	-	200	9
	1554+00	1569+00	2	4,688	4,500	1,500	-	400	30
	1569+00	1584+00	2	4,163	3,975	965	-	-	19
	1584+00	EOP	2	6,318	6,725	1,160	-	-	23
SUBTOTALS STAGE 2				65,309	62,423	5,793	600	600	373
PROJECT TOTALS				141,921	120,627	7,997	2,050	600	742
			REFLECTIVE PAINT 4-INCH TOTAL		262,548				

CONSTRUCTION STAKING

CATEGORY	STATION	LOCATION	(650.4500) CONSTRUCTION STAKING SUBGRADE (LF)	(650.7000) CONSTRUCTION STAKING CONCRETE PAVEMENT (LF)	(650.8500) CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (LS)
020	1345+00 - 1360+00	EB &WB	3000	3000	
	1360+00 - 1429+00 EB	EB	6900	6900	
	1360+00 - 1429+00 WB	WB	6900	6900	
	1430+00 - 1558+00	EB &WB	25600	25600	
	PROJECT				1
		TOTAL	42400	42400	1

SAWING CONCRETE

CATEGORY	STATION	LOCATION	(690.0250) SAWING CONCRETE (LF)	REMARKS
020	1350+00 WB	EB & WB	112	NORTH PROJ. LIMIT
	1354+50 "E"	WB	24	CS RAMP
	1363+35 "C"	EB	24	CS RAMP
	1558+00	EB & WB	130	SOUTH PROJ. LIMIT
		TOTAL	290	

PULLBOXES

CATEGORY	STATION	ITEM ID	(653.0135) PULL BOXES STEEL 24 X 36 - INCH EA	(SPV.0060.04) INSTALL CONDUIT INTO EXISTING ITEM EA
040	1367+00, RT	PB01	1	–
	1364+50, RT	PB02	1	–
	1362+00, RT	PB03	1	–
	1360+25, RT	PB04	1	–
	1359+65, LT	PB06	1	–
	1357+40, LT	PB07	1	–
	1355+50, LT	PB08	1	–
	1353+00, LT	PB09	1	–
	1350+75, LT	PB10	1	–
	1569 + 90 EB, 45' RT	EXPB08	--	1
	1568 + 65 WB, 20' LT	EXPB10	--	1
	1568 + 60 WB, 55' LT	EXV01	--	1
	1360 + 00 WB, 45' LT	EXV02	--	1
	TOTALS		9	4

Addendum #1
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FILE NAME : \\mad31zp1\Projects\state\IH_039\1010-04-01,71,72\PSE\1010-04-72\Addendum 01, 10-16-2009\030201_MQ.DGN PLOT DATE : 16-OCT-2009 07:21 PLOT BY : dotbbg PLOT NAME : PLOT SCALE : 200.000000:1.000000
WISDOT/CADDS SHEET 43

FIELD CABINET ITEMS

CATEGORY	ITEM I.D.	STATION	(659.0802) PLAQUES SEQUENCE IDENTIFICATION EA	(678.0400) FIBER OPTIC TERMINATION EA	(SPV.0060.05) INSTALL CCTV POLE MOUNTED CABINET EA	(SPV.0060.06) INSTALL ITS FIELD CABINET EA	(SPV.0060.07) INSTALL EHTERNET SWITCH EA	(SPV.0060.08) INSTALL ETHERNET VIDEO CODEC EA	(SPV.0060.09) INSTALL SPREAD SPECTRUM RADIO EA	(SPV.0060.10) INSTALL FIBER OPTIC TERMINATION PANEL, 12-COUNT EA
040	CB01\CCTV-11-0004	1569+85, 70' RT	2	6	–	1	1	1	1	1
	CB02\CCTV-11-0006	1359+60, 45' RT	2	6	1	–	1	1	1	1
		TOTALS	4	12	1	1	2	2	2	2

POWER

CATEGORY	STATION	MB I.D.	ITEM I.D.	NUMBER OF WIRES	WIRE LINEAR DISTANCE FROM CABINET TO METER BREAKER	(655.0625) ELECTRICAL WIRE LIGHTING 6 AWG L.F.	(656.0200.01) ELECTRICAL SERVICE METER BREAKER PEDESTAL STH 60 LS	(656.0200.02) ELECTRICAL SERVICE METER BREAKER PEDESTAL CTH CS LS	(656.0500.01) ELECTRICAL SERVICE BREAKER DISCONNECT BOX STH 60 LS	(656.0500.02) ELECTRICAL SERVICE BREAKER DISCONNECT BOX CTH CS LS
040	1569+50, 110' RT	MB01	CB01/CCTV-11-0004	3	55	225	1	–	1	–
	1360+50, 95' RT	MB02	CB02/CCTV-11-0006	3	110	390	–	1	--	1
	TOTALS					615	1	1	1	1

MICROWAVE DETECTORS

CATEGORY	ITEM I.D.	STATION	(654.0105) CONCRETE BASE TYPE 5 EA.	(657.0255) TRANSFORMER BASES STANDARD 11 1/2-INCH BOLT CIRCLE EA.	(657.0320) POLES TYPE 5 EA.	(675.0300) INSTALL MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY EA.	(SPV.0060.11) INSTALL YAGI ANTENNA EA.	(SPV.0060.12) INSTALL SOLAR POWER SYSTEM EA.	(SPV.0060.13)* GROUND ROD EA.
040	MD01	SB OFF RAMP TO STH 60	–	1	1	1	--	–	1
	MD02/03	1571+00, 10' RT	–	--	--	2	1	–	–
	MD04	NB OFF RAMP TO STH 60	–	1	1	1	--	–	1
	MD05	1464+00 EB, 60' RT	–	1	1	1	1	1	1
	MD06	1367+05, RT	1	1	1	1	--	–	1
	MD07/08	1359+80, RT	1	1	1	2	--	–	1
	MD09	1350+70, LT	1	1	1	1	--	–	1
	TOTALS		3	6	6	9	2	1	6

*QUANTITIES LISTED ELSEWHERE

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	MISCELLANEOUS QUANTITIES	SHEET	E

FIELD CABINET ITEMS

CATEGORY	ITEM I.D.	STATION	(659.0802) PLAQUES SEQUENCE IDENTIFICATION EA	(678.0400) FIBER OPTIC TERMINATION EA	(SPV.0060.05) INSTALL CCTV POLE MOUNTED CABINET EA	(SPV.0060.06) INSTALL ITS FIELD CABINET EA	(SPV.0060.07) INSTALL EHTERNET SWITCH EA	(SPV.0060.08) INSTALL ETHERNET VIDEO CODEC EA	(SPV.0060.09) INSTALL SPREAD SPECTRUM RADIO EA	(SPV.0060.10) INSTALL FIBER OPTIC TERMINATION PANEL, 12-COUNT EA
040	CB01\CCTV-11-0004	1569+85, 70' RT	2	6	–	1	1	1	1	1
	CB02\CCTV-11-0006	1360+20, 40' RT	2	6	1	–	1	1	1	1
	TOTALS		4	12	1	1	2	2	2	2

POWER

CATEGORY	STATION	MB I.D.	ITEM I.D.	NUMBER OF WIRES	WIRE LINEAR DISTANCE FROM CABINET TO METER BREAKER	(655.0625) ELECTRICAL WIRE LIGHTING 6 AWG L.F.	(656.0200.01) ELECTRICAL SERVICE METER BREAKER PEDESTAL STH 60 LS	(656.0200.02) ELECTRICAL SERVICE METER BREAKER PEDESTAL CTH CS LS	(656.0500.01) ELECTRICAL SERVICE BREAKER DISCONNECT BOX STH 60 LS	(656.0500.02) ELECTRICAL SERVICE BREAKER DISCONNECT BOX CTH CS LS
040	1569+50, 110' RT	MB01	CB01/CCTV-11-0004	3	55	225	1	--	1	--
	1360+85, 100' RT	MB02	CB02/CCTV-11-0006	3	90	330	--	1	--	1
	TOTALS					555	1	1	1	1

MICROWAVE DETECTORS

CATEGORY	ITEM I.D.	STATION	(654.0105) CONCRETE BASE TYPE 5 EA.	(657.0255) TRANSFORMER BASES STANDARD 11 1/2-INCH BOLT CIRCLE EA.	(657.0320) POLES TYPE 5 EA.	(675.0300) INSTALL MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY EA.	(SPV.0060.11) INSTALL YAGI ANTENNA EA.	(SPV.0060.12) INSTALL SOLAR POWER SYSTEM EA.	(SPV.0060.13)* GROUND ROD EA.
040	MD01	SB OFF RAMP TO STH 60	–	1	1	1	–	–	1
	MD02/03	1571+00, 10' RT	–	–	--	2	1	–	–
	MD04	NB OFF RAMP TO STH 60	–	1	1	1	–	–	1
	MD05	1464+00 EB, 60' RT	–	1	1	1	1	1	1
	MD06	1367+05, RT	1	1	1	1	–	–	1
	MD07/08	1360+15, RT	1	1	1	2	–	–	1
	MD09	1350+70, LT	1	1	1	1	–	–	1
	TOTALS		3	6	6	9	2	1	6

*QUANTITIES LISTED ELSEWHERE

Addendum #1
Revised Sheet 181
October 19, 2009

CCTV

CATEGORY	ITEM I.D.	STATION	(672.0250) BASE CAMERA POLE 50-FT EA.	(677.0100) INSTALL CAMERA POLE EA.	(677.0200) INSTALL CAMERA ASSEMBLY EA.	(SPV.0060.13)* GROUND ROD EA.
040	CCTV-11-0004	1569+85, 70' RT	–	1	1	1
	CCTV-11-0006	1359+60, 45' RT	1	1	1	1
	TOTAL		1	2	2	2

*QUANTITIES LISTED ELSEWHERE

CONDUIT

CATEGORY	FROM	TO	(652.0125) CONDUIT RIGID METALLIC 2 INCH L.F.	(SPV.0090.06) CONDUIT HDPE 1 DUCT 2 INCH L.F.	(SPV.0090.07) CONDUIT HDPE 2 DUCT 2 INCH L.F.	(SPV.0090.08) CONDUIT HDPE DIRECTIONAL BORE 3 DUCT 2 INCH L.F.	(SPV.0090.09) CONDUIT HDPE 3 DUCT 3 INCH L.F.	(SPV.0090.10) CONDUIT HDPE DIRECTIONAL BORE 3 DUCT 3 INCH L.F.
040	MB01	EXPB08	–	50	–	–	–	--
	EXPB10	EXV01	–	–	35	–	–	--
	MD06	PB01	–	–	5	–	–	--
	PB01	PB02	–	–	250	–	–	--
	PB02	PB03	–	–	250	–	–	--
	PB03	PB04	–	–	220	–	–	--
	PB04	PB05	–	–	–	–	40	--
	PB05	MB02	–	100	–	–	–	--
	PB05	CB02	10	–	–	–	10	--
	PB04	MD07/08	–	–	10	–	–	--
	PB04	PB06	–	–	–	–	–	200
	PB06	EXV02	–	40	–	–	–	--
	PB06	PB07	–	–	–	180	–	--
	PB07	PB08	–	–	250	–	–	--
	PB08	PB09	–	–	250	–	–	--
	PB09	PB10	–	–	225	–	–	--
	PB10	MD09	–	–	5	–	–	--
	TOTALS		10	190	1500	180	50	200

FIBER OPTIC ITEMS & CABLE

CATEGORY	FROM	TO	LINEAR DISTANCE	FIBER SLACK	(674.0200) CABLE MICROWAVE DETECTOR (LF)	(678.0006) INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-COUNT (LF)	(678.0200) FIBER OPTIC SPLICE ENCLOSURE (EA)	(678.0300) FIBER OPTIC SPLICE (EA)
040	MD01	EXPB01	10	–	40	–	–	--
	EXPB01	EXPB02	75	–	75	–	–	--
	EXPB02	EXPB03	120	–	120	–	–	--
	EXPB03	EXPB04	160	–	160	–	–	--
	EXPB04	EXPB05	200	–	200	–	–	--
	EXPB05	EXPB07	180	–	180	–	–	--
	EXPB07	EXPB06	50	–	100	–	–	--
	EXPB06	CCTV-11-0004	10	–	80	–	–	--
	EXPB07	EXPB08	80	–	240	–	–	--
	EXPB08	CB01	5	–	60	15	–	--
	EXPB08	EXPB09	50	25	50	75	–	--
	EXPB09	EXPB10	210	–	210	210	–	--
	EXPB10	EXV01	35	50	35	85	–	--
	EXPB10	EXPB11	220	–	220	–	–	--
	EXPB11	EXPB12	230	–	230	–	–	--
	EXPB12	EXPB13	140	–	140	–	–	--
	EXPB13	MD04	10	–	40	–	–	--
	MD06	PB01	5	–	35	–	–	--
	PB01	PB02	250	–	250	–	–	--
	PB02	PB03	250	–	250	–	–	--
	PB03	PB04	220	–	220	–	–	--
	PB04	PB05	40	25	40	65	–	--
	PB05	CB02	10	–	15	25	–	--
	PB04	MD07/08	10	–	40	–	–	--
	PB04	PB06	200	–	200	200	–	--
	PB06	EXV02	40	50		90	1	6
	PB06	PB07	180	–	180	–	–	--
	PB07	PB08	250	–	250	–	–	--
	PB08	PB09	250	–	250	–	–	--
	PB09	PB10	225	–	225	–	–	--
	PB10	MD09	5	–	35	–	–	--
	TOTALS				4170	765	1	6

ITS INTEGRATION AND TESTING

CATEGORY	LOCATION	(670.0100) FIELD SYSTEM INTEGRATOR (LS)	(678.0500) COMMUNICATION SYSTEM TESTING (LS)
040	PROJECT	1	1
	TOTAL	1	1

3

CCTV

CATEGORY	ITEM I.D.	STATION	(672.0280) BASE CAMERA POLE 80-FT EA.	(677.0100) INSTALL CAMERA POLE EA.	(677.0200) INSTALL CAMERA ASSEMBLY EA.	(SPV.0060.13)* GROUND ROD EA.
040	CCTV-11-0004	1569+85, 70' RT	–	1	1	1
	CCTV-11-0006	1360+20, 40' RT	1	1	1	1
	TOTAL		1	2	2	2

*QUANTITIES LISTED ELSEWHERE

CONDUIT

CATEGORY	FROM	TO	(652.0125) CONDUIT RIGID METALLIC 2 INCH L.F.	(SPV.0090.06) CONDUIT HDPE 1 DUCT 2 INCH L.F.	(SPV.0090.07) CONDUIT HDPE 2 DUCT 2 INCH L.F.	(SPV.0090.08) CONDUIT HDPE DIRECTIONAL BORE 3 DUCT 2 INCH L.F.	(SPV.0090.09) CONDUIT HDPE 3 DUCT 3 INCH L.F.	(SPV.0090.10) CONDUIT HDPE DIRECTIONAL BORE 3 DUCT 3 INCH L.F.
040	MB01	EXPB08	--	50	–	–	–	–
	EXPB10	EXV01	--	--	35	–	–	–
	MD06	PB01	--	--	5	–	–	–
	PB01	PB02	--	--	250	–	–	–
	PB02	PB03	--	--	250	–	–	–
	PB03	PB04	--	--	180	–	–	–
	PB04	CB02	--	--	–	–	20	–
	PB02	MB02	5	90	–	–	–	–
	PB04	MD07/08	--	--	10	–	–	–
	PB04	PB06	--	--	–	–	–	200
	PB06	EXV02	--	25	–	–	–	–
	PB06	PB07	--	--	–	235	–	–
	PB07	PB08	--	--	180	–	–	–
	PB08	PB09	--	--	250	–	–	–
	PB09	PB10	--	--	225	–	–	–
	PB10	MD09	--	--	5	–	–	–
	TOTALS		5	165	1390	235	20	200

FIBER OPTIC ITEMS & CABLE

CATEGORY	FROM	TO	LINEAR DISTANCE	FIBER SLACK	(674.0200) CABLE MICROWAVE DETECTOR (LF)	(678.0006) INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-COUNT (LF)	(678.0200) FIBER OPTIC SPLICE ENCLOSURE (EA)	(678.0300) FIBER OPTIC SPLICE (EA)
040	MD01	EXPB01	10	–	40	–	–	--
	EXPB01	EXPB02	75	–	75	–	–	--
	EXPB02	EXPB03	120	–	120	–	–	--
	EXPB03	EXPB04	160	–	160	–	–	--
	EXPB04	EXPB05	200	–	200	–	–	--
	EXPB05	EXPB07	180	–	180	–	–	--
	EXPB07	EXPB06	50	–	100	–	–	--
	EXPB06	CCTV-11-0004	10	–	80	–	–	--
	EXPB07	EXPB08	80	–	240	–	–	--
	EXPB08	CB01	5	–	60	15	–	--
	EXPB08	EXPB09	50	25	50	75	–	--
	EXPB09	EXPB10	210	–	210	210	–	--
	EXPB10	EXV01	35	50	35	85	–	--
	EXPB10	EXPB11	220	–	220	–	–	--
	EXPB11	EXPB12	230	–	230	–	–	--
	EXPB12	EXPB13	140	–	140	–	–	--
	EXPB13	MD04	10	–	40	–	–	--
	MD06	PB01	5	–	35	–	–	--
	PB01	PB02	250	–	250	–	–	--
	PB02	PB03	250	–	250	–	–	--
	PB03	PB04	180	–	180	–	–	--
	PB04	CB02	20	25	120	45	–	--
	PB04	MD07/08	10	–	40	–	–	--
	PB04	PB06	200	–	200	200	–	--
	PB06	EXV02	25	50		75	1	6
	PB06	PB07	235	–	235	–	–	--
	PB07	PB08	180	–	180	–	–	--
	PB08	PB09	250	–	250	–	–	--
	PB09	PB10	225	–	225	–	–	--
	PB10	MD09	5	–	35	–	–	--
	TOTALS				4180	705	1	6

ITS INTEGRATION AND TESTING

CATEGORY	LOCATION	(670.0100) FIELD SYSTEM INTEGRATOR (LS)	(678.0500) COMMUNICATION SYSTEM TESTING (LS)
040	PROJECT	1	1
	TOTAL	1	1

Addendum #1
Revised Sheet 182
October 19, 2009

RAMP CLOSURE GATES

CATEGORY	LOCATION	(SPV.0060.14) RAMP CLOSURE GATES SOLAR POWERED 40-FT (EACH)	(653.0135) PULL BOX STEEL 24X36-INCH (EACH)	(654.0105) * CONCRETE BASES TYPE 5 (EACH)	(654.0220) CONCRETE CONTROL CABINET BASES TYPE 10 (EACH)	(657.0255) * TRANSFORMER BASES STANDARD 11 1/2-INCH BOLT CIRCLE (EACH)	(SPV.0090.06) * CONDUIT ONE-DUCT 2-INCH (LF)	REMARKS
640	1572+01 EB, 647' RT	1	1	1	1	2	500	STH 60 on ramp to EB
	1568+32 WB, 645' LT	1	1	1	1	2	500	STH 60 on ramp to WB
	1362+97 EB, 590' RT	1	1	1	1	2	500	CTS CS on ramp to EB
	1355+56 WB, 582' LT	1	1	1	1	2	500	CTS CS on ramp to WB
	PROJECT TOTALS	4	4	4	4	8	2000	

* ADDITIONAL QUANTITY SHOWN ELSEWHERE

ARMORGUARD GATES

CATEGORY	LOCATION	(SPV.0060.15) ARMORGUARD GATES (EACH)	REMARKS
020	1460+00	1	STAGE 1 AND 2
	1530+00	1	STAGE 1 AND 2
	PROJECT TOTALS	2	

RAMP CLOSURE GATES

CATEGORY	LOCATION	(SPV.0060.14) RAMP CLOSURE GATES 40-FT (EACH)	(653.0135) PULL BOX STEEL 24X36-INCH (EACH)	(654.0105) * CONCRETE BASES TYPE 5 (EACH)	(655.0305) CABLE TYPE UF 2-12 AWG GROUNDED (LF)	(657.0255) * TRANSFORMER BASES STANDARD 11 1/2-INCH BOLT CIRCLE (EACH)	(652.0225) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (LF)	REMARKS
040	1572+01 EB, 647' RT	1	1	1	1500	2	500	STH 60 on ramp to EB
	1568+32 WB, 645' LT	1	1	1	1500	2	500	STH 60 on ramp to WB
	1362+97 EB, 590' RT	1	1	1	1500	2	500	CTS CS on ramp to EB
	1355+56 WB, 582' LT	1	1	1	1500	2	500	CTS CS on ramp to WB
	PROJECT TOTALS	4	4	4	6000	8	2000	

* ADDITIONAL QUANTITY SHOWN ELSEWHERE

ARMORGUARD GATES

CATEGORY	LOCATION	(SPV.0060.15) ARMORGUARD GATES (EACH)	REMARKS
020	1460+00	1	STAGE 1 AND 2
	1530+00	1	STAGE 1 AND 2
	PROJECT TOTALS	2	

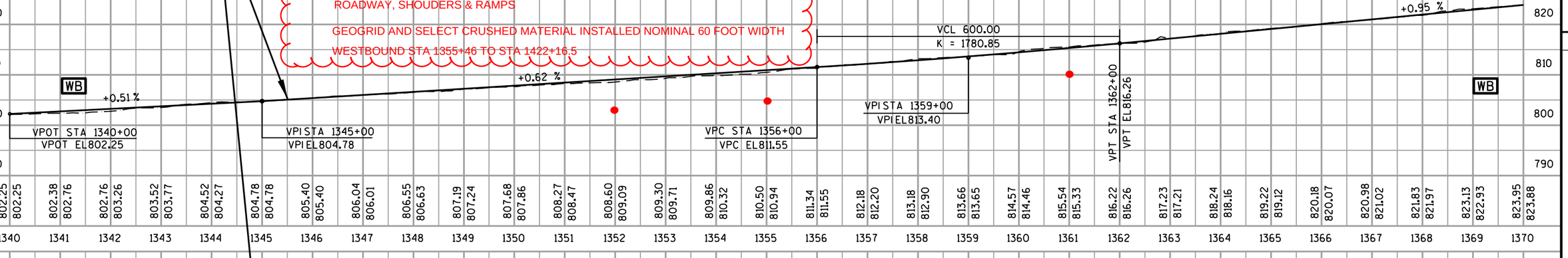
Addendum #1
Revised Sheet 183
October 19, 2009

PLACED 24" X 71 LF CPRC + AEW
STA 1352+00 44.39' LT
TYPE 3V INLET
1.3
EXISTING MEDIAN CROSSOVER IS LEFT IN PLACE
-PLACED 18" SSPRC X 9 LF
-PLACED 12" X 9 LF SSPRC
-PLACED 12" X 3.5 LF SSPRC
BEGIN RAMP CONSTRUCTION
STA.1354+50 E
MATCH EXISTING
SAW CUT REQ'D
STA1352+00 35.69' LT
8 MS INLET
1.2
STA 1352+00 23' LT
1 V INLET
1.1
1350 D
1345 D
1340 WB
1345 WB
1350 WB
1340 EB
1345 EB
1350 EB
CRASH CUSHIONS
STA.1350+20.2 EB
STA.1350+70.6 WB
BEGIN CONCRETE BARRIER
42-INCH
STA.1349+49.6 EB
STA.1350+00 WB
BEGIN CONCRETE PAVEMENT
SAW CUT REQ'D
BEGIN PROJECT
STA.1345+00 EB
STA.1345+51.4 WB
N 1350 E
CTH CS
PLACED18" X 91 LF CPRC + AEW
STA.1354+50 E - STA.1355+62 E
REMOVE CURB AND INSTALL NEW
CONCRETE CURB TYPE A
1.5
STA 1355+00 36.94 LT
2V INLET
PLACED 12" SSPRC X 9 LF
1355 E
1355 WB
1355 EB
BM 26
NOT CONSTRUCTED
51-INCH VERTICAL
CONCRETE WALL REQ'D
(SEE CONSTRUCTION DETAILS)
1.7
STA 1361+00 35' LT
8MS INLET
PLACED 18" X 81 LF CPRC + AEW
1360 WB
1360 EB
1360 C
STA 1361+00 47' LT
1V INLET
1.6
PLACED 12" X 13 LF SSPRC
STA.1359+34 WB - STA.1362+66 WB, LT.
STEEL PLATE BEAM GUARD
CLASS A REQ'D.
BEAM GUARD & EAT
STA 1366+50 TO STA 1370+75 WB LT.
1365 WB
1370 WB
BM 400
STA.1364+00 EB, LT.
END CONCRETE BARRIER 42-INCH
1365 EB
1370
1365 C
END RAMP CONSTRUCTION
STA.1363+35 C
MATCH EXISTING
SAW CUT REQ'D
PLACED 174 LF X 48" CPRC + 2 AEW
STA 1355+00 23' LT
1V INLET
1.4
PLACED 12" SSPRC X 5LF
STA.1354+65 EB - STA.1358+39.6 EB, RT.
STEEL PLATE BEAM GUARD
CLASS A REQ'D.
CTH CS
STA.1361+95 C - STA.1363+35 C
REMOVE CURB AND INSTALL NEW
CONCRETE CURB TYPE A

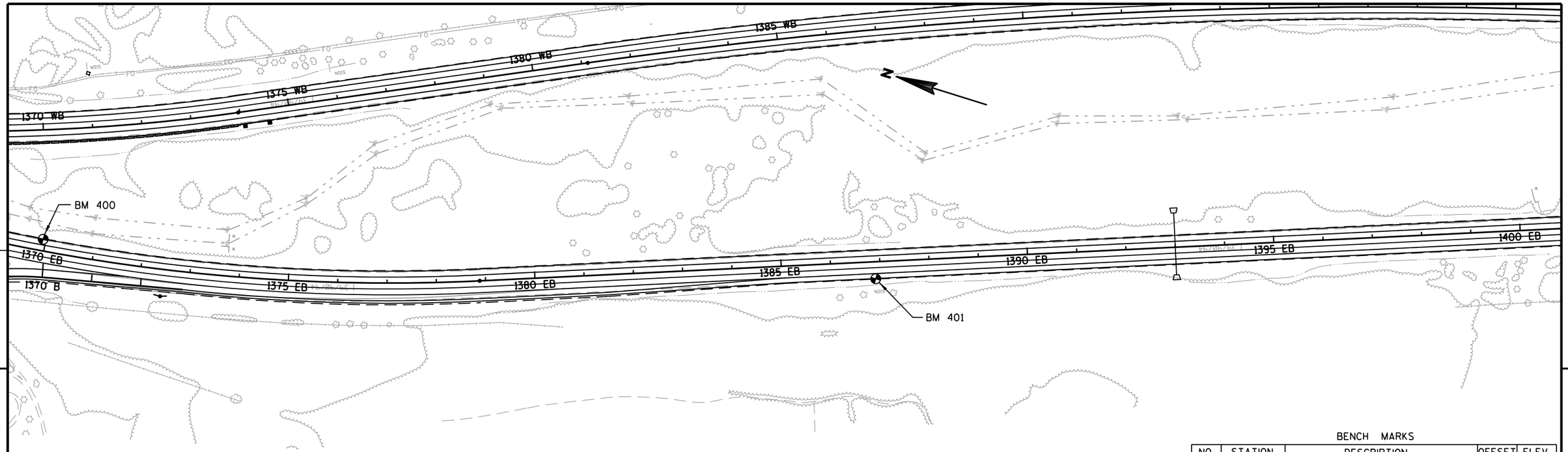
BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
26	1358+40± WB	DISC NE CORNER OF STRUCTURE	70'± LT.	834.56
400	1369+95± EB	CHIS SQUARE CONCRETE MEDIAN SHLDR	30'± LT.	825.06

NOTE: GEOGRID AND SELECT CRUSHED MATERIAL INSTALLED NOMINAL 13 FOOT WIDTH
EASTBOUND STA 1350+70 TO ATA 1354+00 UNDER LANE 1.
WIDTH VARIES STA 1354+00 TO STA 1363+95, INSTALLED FULL WIDTH OF
ROADWAY, SHOUDERS & RAMPS
GEOGRID AND SELECT CRUSHED MATERIAL INSTALLED NOMINAL 60 FOOT WIDTH
WESTBOUND STA 1355+46 TO STA 1422+16.5



PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PLAN & PROFILE - EB/WB	SHEET	E

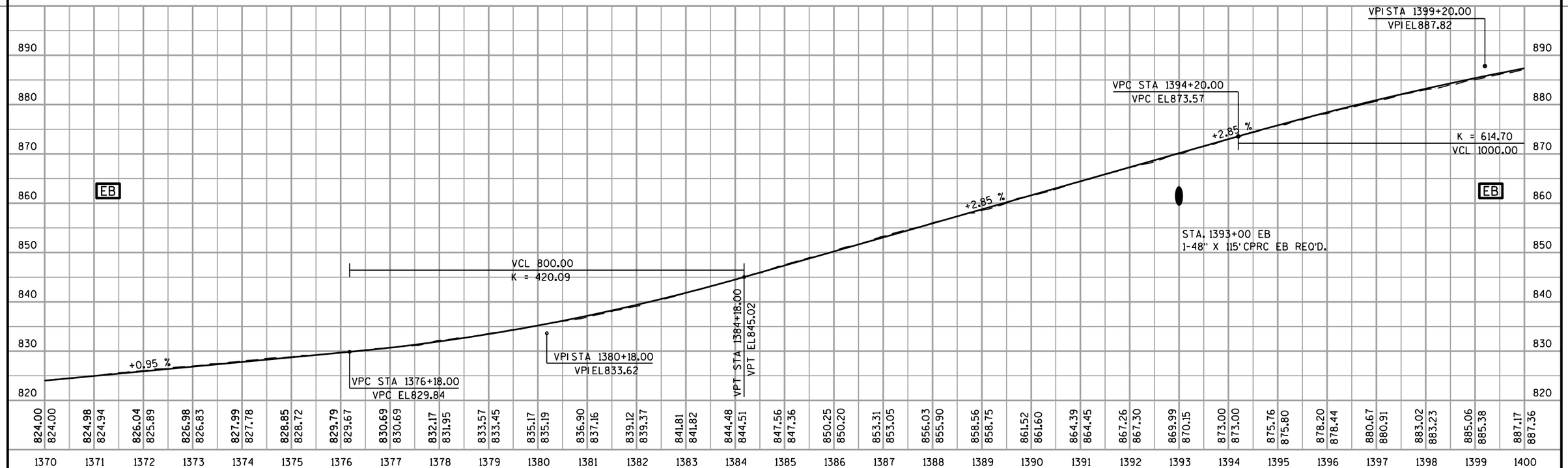


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5

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
400	1369+95± EB	CHIS SQUARE CONCRETE MEDIAN SHLDR	30'± LT.	825.06
401	1386+90± EB	CHIS SQUARE CONCRETE OUTSIDE SHLDR	35'± RT.	852.27

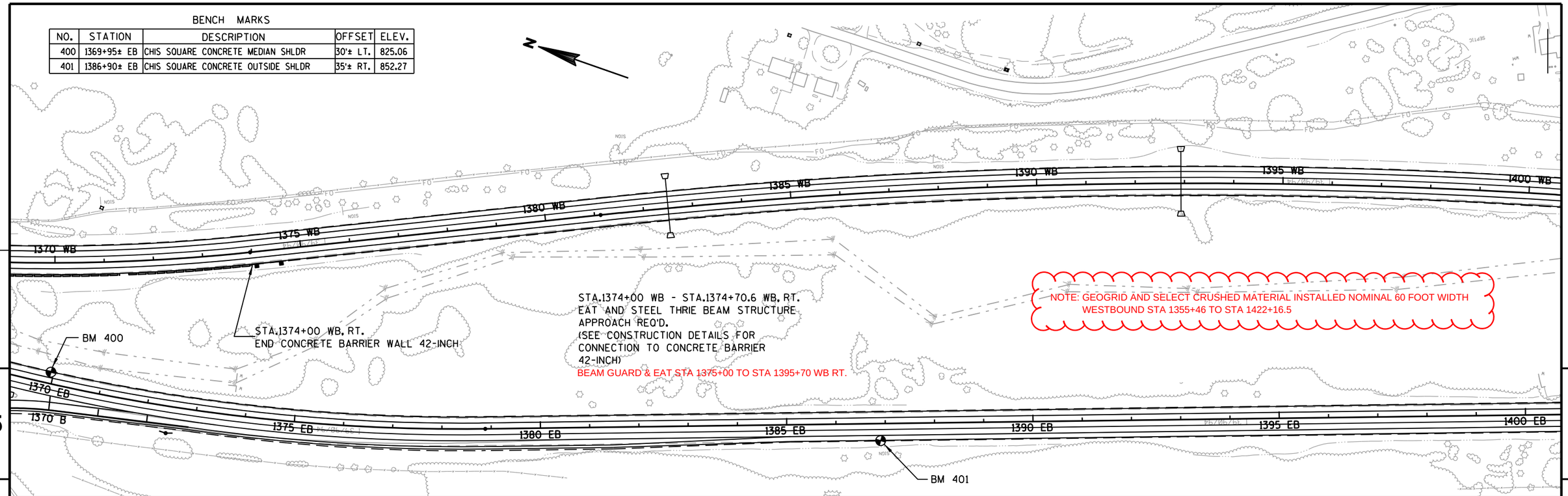


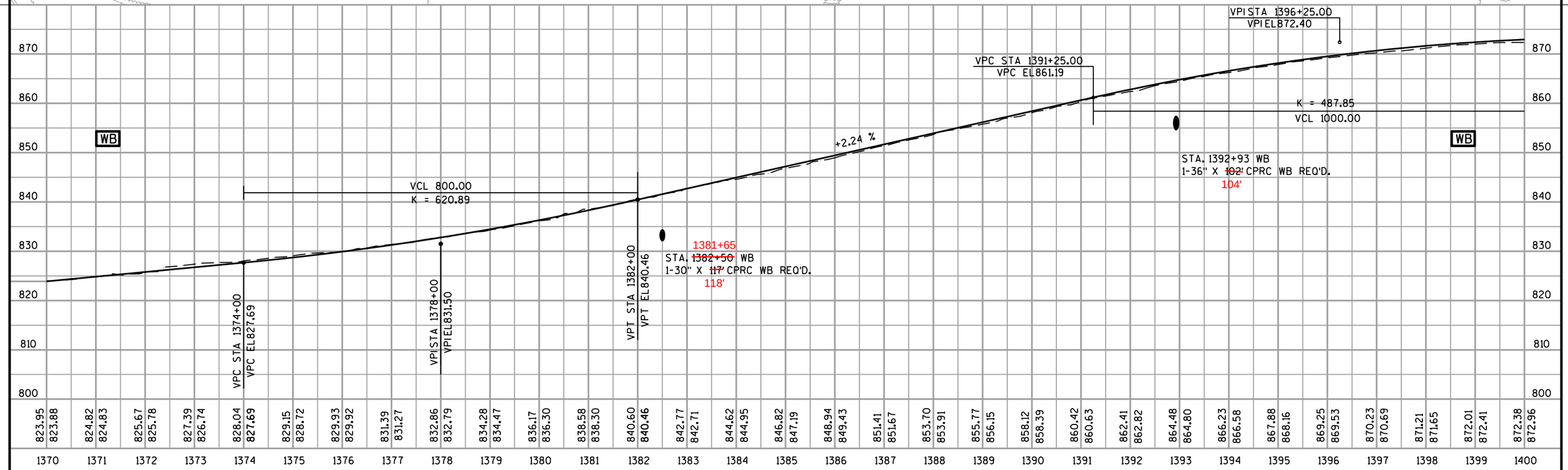
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PLAN & PROFILE - EB	SHEET E

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WISDOT/CADDS SHEET 40

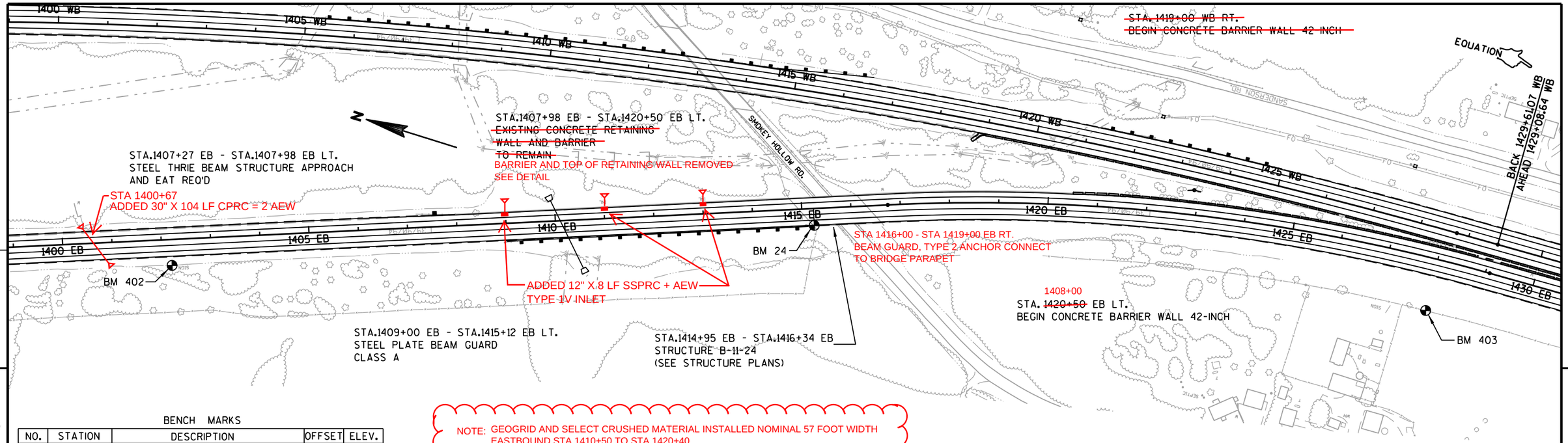
BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
400	1369+95± EB	CHIS SQUARE CONCRETE MEDIAN SHLDR	30'± LT.	825.06
401	1386+90± EB	CHIS SQUARE CONCRETE OUTSIDE SHLDR	35'± RT.	852.27





PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PLAN & PROFILE - WB	SHEET	E



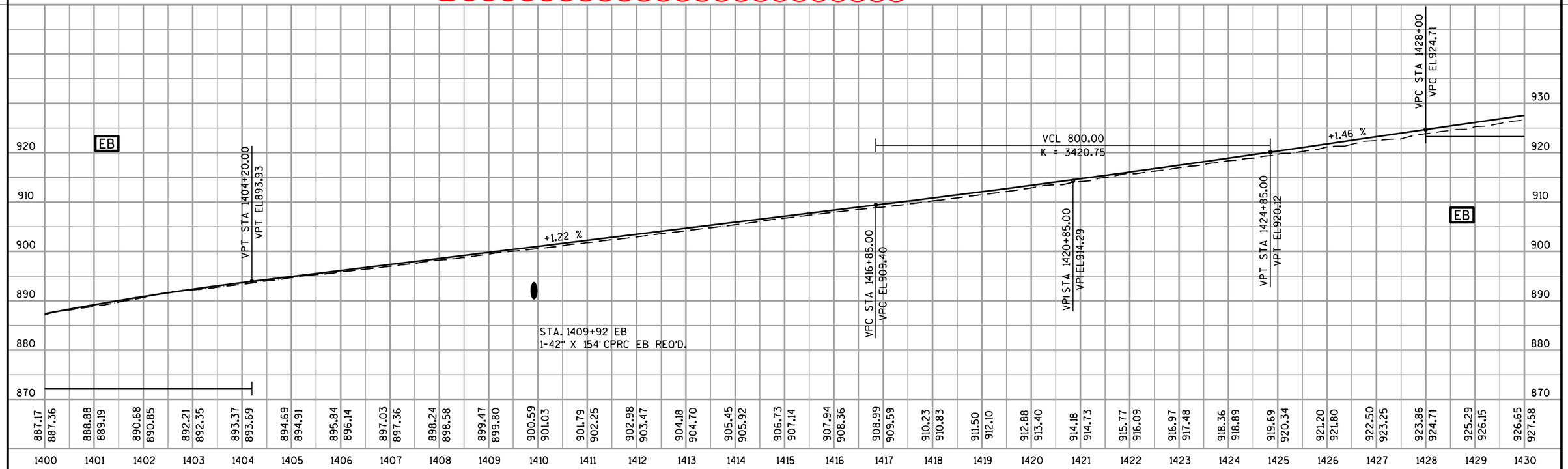
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BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
402	1402+20± EB	ORANGE PAINT ON BOLT/NUT OF SIGN BASE	50'± RT.	889.16
24	1415+25± EB	DISC IN WINGWALL OF B-24-60	35'± RT.	906.54
403	1428+00± EB	RR SPIKE IN BRACE POST	105'± RT	921.67

NOTE: GEOGRID AND SELECT CRUSHED MATERIAL INSTALLED NOMINAL 57 FOOT WIDTH EASTBOUND STA 1410+50 TO STA 1420+40

GEOGRID AND SELECT CRUSHED MATERIAL INSTALLED NOMINAL 60 FOOT WIDTH WESTBOUND STA 1355+46 TO STA 1422+16.5, STA 1430+08 TO STA 1432+97.



PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PLAN & PROFILE - EB	SHEET E

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
402	1402+20± EB	ORANGE PAINT ON BOLT/NUT OF SIGN BASE	50'± RT.	889.16
24	1415+25± EB	DISC IN WINGWALL OF B-24-60	35'± RT.	906.54
403	1428+00± EB	RR SPIKE IN BRACE POST	105'± RT	921.67

BEAM GUARD & EAT, TYPE 2 ANCHOR
STA 1402+50 - STA 1411+50 WB RT.

STA.1405+25 WB - STA.1412+72 WB LT.
STEEL PLATE BEAM GUARD
CLASS A REQ'D.

BEAM GUARD & EAT
STA 1414+21 - STA 1416+95 WB RT.
THRIE RAIL CONNECT TO 51-INCH WALL

STA.1413+42 WB - STA.1416+55 WB LT.
STEEL PLATE BEAM GUARD
CLASS A REQ'D.
CONNECT TO 51-INCH WALL

1420+00 1426+25
STA.~~1421+25~~ WB - STA.~~1425+00~~ WB LT.
STEEL PLATE BEAM GUARD
CLASS A REQ'D.

51-INCH VERTICAL CONCRETE WALL REQ'D
(SEE CONSTRUCTION DETAILS)

STA.1422+00 WB, 23.376' RT.
2V INLET (CIRCULAR)
5.1

STA.1424+00 WB, 23.376' RT.
2V INLET
5.3

STA.1428+00 WB, 23.376' RT.
2V INLET
5.5

EQUATION
BACK 1429+61.07 WB
AHEAD 1429+08.64 WB

1400 WB
1405 WB
1410 WB
1415 WB
1420 WB
1425 WB

SMOKEY HOLLOW RD.

STA.1405+00± WB
EXISTING BOX CULVERT
TO REMAIN

STA.1408+25± WB
EXISTING BOX CULVERT
TO REMAIN

1400 EB
1405 EB
1410 EB
1415 EB
1420 EB
1425 EB

STA.1422+15 WB, 23.376' RT.
2V INLET (CIRCULAR)
5.2

STA.1426+00 WB, 23.376' RT.
2V INLET
5.4

BM 24
BM 402
BM 403

STA.1419+00 WB RT.
BEGIN CONCRETE BARRIER 42-INCH

EQUATION
AHEAD 1429+08.64
BACK 1429+61.07

VPC STA 1428+51.47
VPC EL918.86
+2.87 %

STA. 1428+00 WB
1-18" X ~~82'~~ CPRC WB REQ'D.
78'

STA. 1426+00 WB
1-18" X ~~87'~~ CPRC WB REQ'D.
84.5'

STA. 1424+00 WB
1-18" X ~~79'~~ CPRC WB REQ'D.
72'

STA. 1422+00 WB
1-18" X 70' CPRC WB REQ'D.

VCL 1000.00
K = 372.71

VPT STA 1401+25.00
VPT EL873.36
+0.19 %

VPC STA 1408+50.00
VPC EL874.74

VPI STA 1413+50.00
VPI EL875.70

VPT STA 1418+50.00
VPT EL890.07

WB

930 920 910 900 890 880 870 860

| | | |

STA.1434+55 EB, LT. AND STA.1435+15 EB, LT.
2- CRASH CUSHION PERMANENT
LOW-MAINTENANCE REQ'D.

BEAM GUARD & EAT, TYPE 2 ANCHOR
STA 1441+00 - STA 1442+85 WB LT.

BEAM GUARD & EAT, TYPE 2 ANCHOR
STA 1459+75 - STA 1474+00 WB LT.

STA. 1430+00 EB, 37.5' LT.
2V INLET 6.1

STA. 1436+00 EB, 37.5' LT.
2V INLET 6.6

STA. 1433+00 EB, 37.5' LT.
3V INLET 6.4

STA. 1439+00 EB, 37.5' LT.
2V INLET 6.8

STA. 1446+00 EB, 37.5' LT.
3V INLET 6.13

STA. 1442+32 EB, 37.5' LT.
2V INLET (CIRCULAR) 6.11

1450+75
STA. ~~1450+63~~ EB, 30.25' LT.
20MS INLET, SPECIAL 6.16

1450+73
STA. ~~1450+61~~ EB, 37.5' LT.
1V INLET 6.14

STA. 1456+50 EB, 37.5' LT.
3V INLET 6.21

STA. 1454+00 EB, 37.5' LT.
2V INLET 6.18

STA. 1460+00 EB, 37.5' LT.
2V INLET 6.23

1430 WB | 1435 WB | 1440 WB | 1445 WB | 1450 WB | 1455 WB | 1460 WB

1430 EB | 1435 EB | 1440 EB | 1445 EB | 1450 EB | 1455 EB | 1460 EB

STA. 1433+00 EB, 23' LT.
1V INLET 6.2

1436+00
STA. ~~1433+00~~ EB, 30.25' LT.
8MS INLET 6.3

STA. 1436+00 EB, 23' LT.
1V INLET 6.5

STA. 1439+00 EB, 23' LT.
1V INLET 6.7

STA. 1442+11 EB, 23' LT.
2V INLET (CIRCULAR) 6.9

BM 404

STA. 1442+21.5 EB, 30.25' LT.
MANHOLE, TYPE 3 SPECIAL 6.10

STA. 1446+00 EB, 23' LT.
2V INLET 6.12

1450+73
STA. ~~1450+61~~ EB, 23' LT.
1V INLET 6.15

BM 405

STA. 1454+00 EB, 23' LT.
1V INLET 6.17

STA. 1456+50 EB, 23' LT.
1V INLET 6.19

STA. 1456+50 EB, 30.25' LT.
8MS INLET 6.20

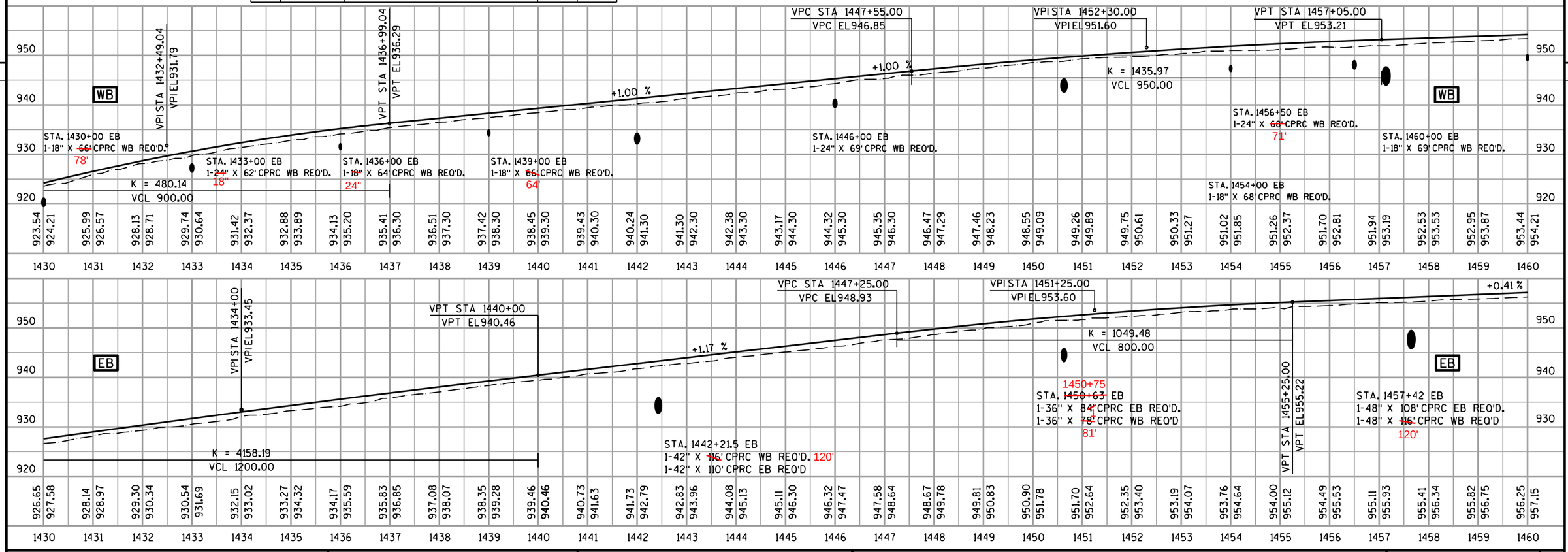
STA. 1460+00 EB, 23' LT.
1V INLET 6.22

NOTE: GEOGRID AND SELECT CRUSHED MATERIAL INSTALLED NOMINAL 60 FOOT WIDTH WESTBOUND STA 1430+08 TO STA 1432+97.

STA.1434+85 EB - STA.1435+15 EB, LT.
EXISTING MAINTENANCE TURNAROUND
TO BE REBUILT IN SAME LOCATION

BENCH MARKS

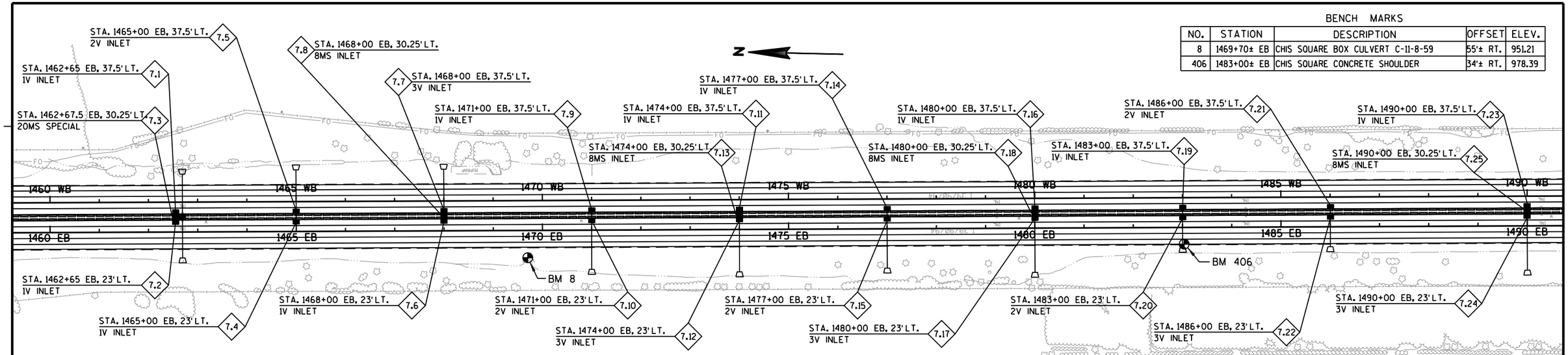
NO.	STATION	DESCRIPTION	OFFSET	ELEV.
404	1442+90± EB	SAW "X" ON 48"± CMCP	60'± RT.	934.61
405	1450+60± EB	SAW "X" ON CMCP	60'± RT.	945.95



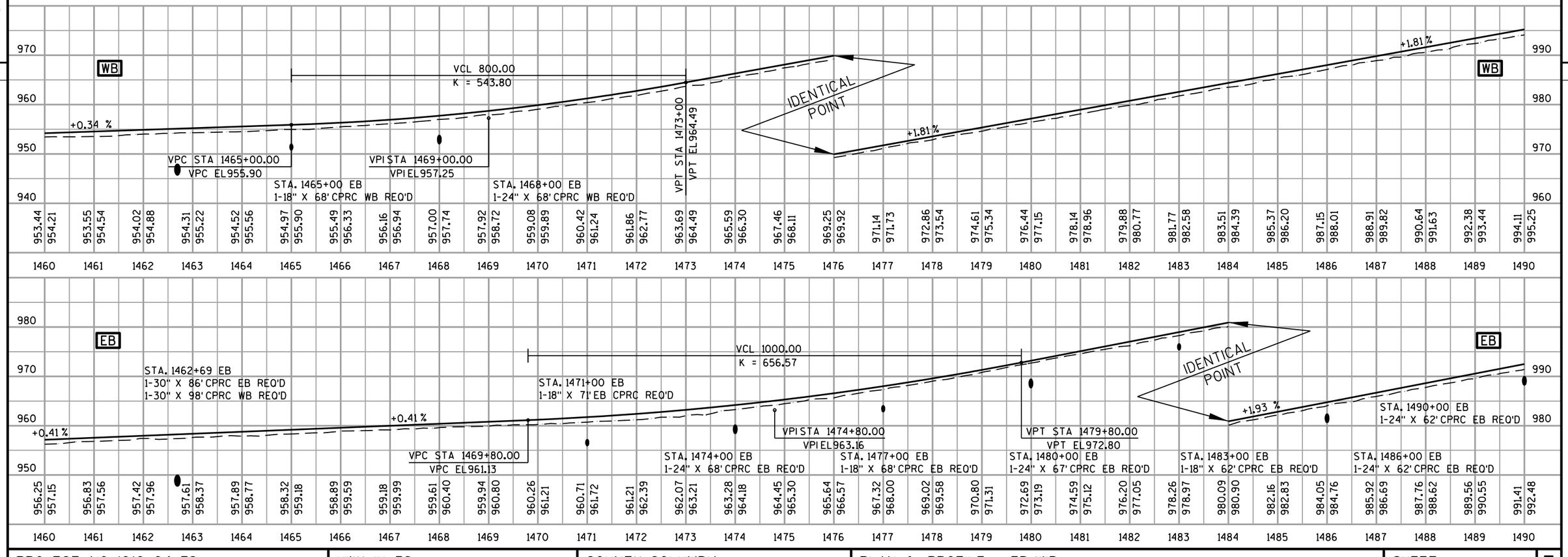
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PLAN & PROFILE - EB/WB	SHEET	E

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
8	1469+70± EB	CHIS SQUARE BOX CULVERT C-11-8-59	55'± RT.	951.21
406	1483+00± EB	CHIS SQUARE CONCRETE SHOULDER	34'± RT.	978.39



BEAM GUARD & EAT, TYPE 2 ANCHOR
STA 1466+70 - STA 1470+45 EB RT.



PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PLAN & PROFILE - EB/WB	SHEET	E

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
407	1496+90± EB	RR SPIKE IN FENCE BRACE POST	100'± RT	1001.77
14	1505+40± EB	CHIS SQUARE B-11-14-59 (NO DISC)	70'± RT	1041.64
408	1505+90± EB	RR SPIKE BEAM GUARD POST	35'± RT	1023.54
409	1516+05± EB	ORANGE PAINT ON BOLT/NUT FOR SIGN BASE	55'± RT	1042.19

NOTE: GEOGRID AND SELECT CRUSHED MATERIAL INSTALLED NOMINAL 60 FOOT WIDTH WESTBOUND STA 1497+03 TO STA 1509+87.

NOTE: GEOGRID AND SELECT CRUSHED MATERIAL INSTALLED NOMINAL 60 FOOT WIDTH EASTBOUND STA 1497+95 TO STA 1511+95.

STA.1505+85 WB - STA.1508+85 WB, LT.
STEEL PLATE BEAM GUARD
CLASS A REQ'D.
(ATTACH TO 51-INCH VERTICAL CONCRETE WALL)

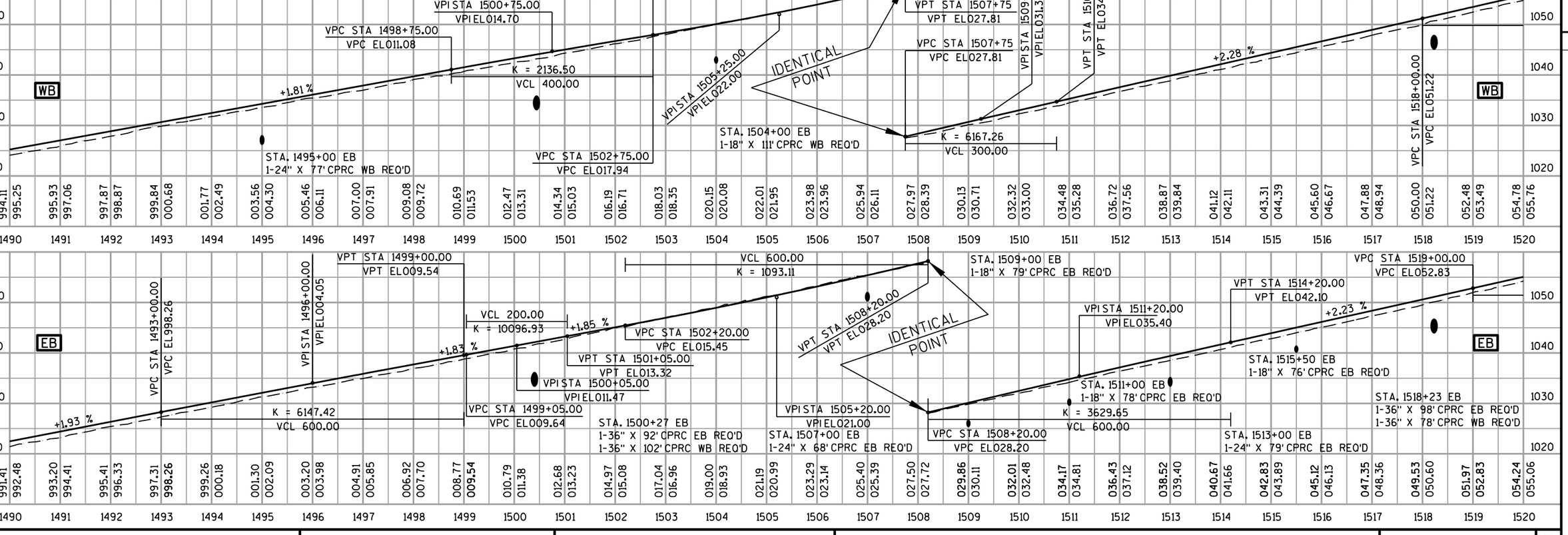
STA.1501+80 EB - STA.1504+79.5 EB RT.
STEEL PLATE BEAM GUARD
CLASS A REQ'D.
(ATTACH TO 51-INCH VERTICAL CONCRETE WALL)

STA. 1495+00 EB, 37.5' LT. 3V INLET 8.2
STA. 1500+30 EB, 37.5' LT. 1V INLET 8.3
STA. 1504+00 EB, 37.5' LT. 2V INLET 8.7
STA. 1507+00 EB, 30.25' LT. 8MS INLET 8.9
STA. 1513+00 EB, 37.07' LT. 8MS INLET 8.13
STA. 1518+21.5 EB, 37.02' LT. 20MS SPECIAL 8.16
STA. 1500+27 EB, 30.25' LT. 20MS SPECIAL 8.5
STA. 1513+00 EB, 23' LT. 3V INLET 8.12
STA. 1495+00 EB, 23' LT. 2V INLET 8.1
STA. 1500+25 EB, 23' LT. 1V INLET 8.4
STA. 1504+00 EB, 23' LT. 1V INLET 8.6
STA. 1507+00 EB, 23' LT. 3V INLET 8.8
STA. 1509+00 EB, 23' LT. 2V INLET 8.10
STA. 1511+00 EB, 23' LT. 2V INLET 8.11
STA. 1515+50 EB, 23' LT. 2V INLET 8.14
STA. 1518+19 EB, 23' LT. 1V INLET 8.15

BM 407 BM 14 BM 408 BM 409

RICHARDS RD.

1490 WB 1495 WB 1500 WB 1505 WB 1510 WB 1515 WB 1520 WB
1490 EB 1495 EB 1500 EB 1505 EB 1510 EB 1515 EB 1520 EB



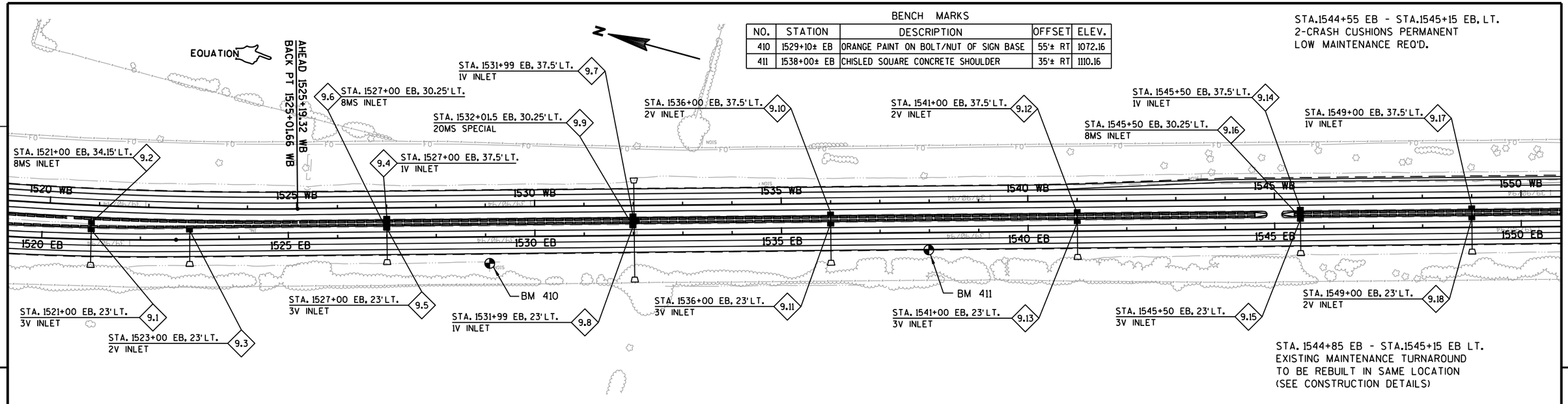
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PLAN & PROFILE - EB/WB	SHEET	E

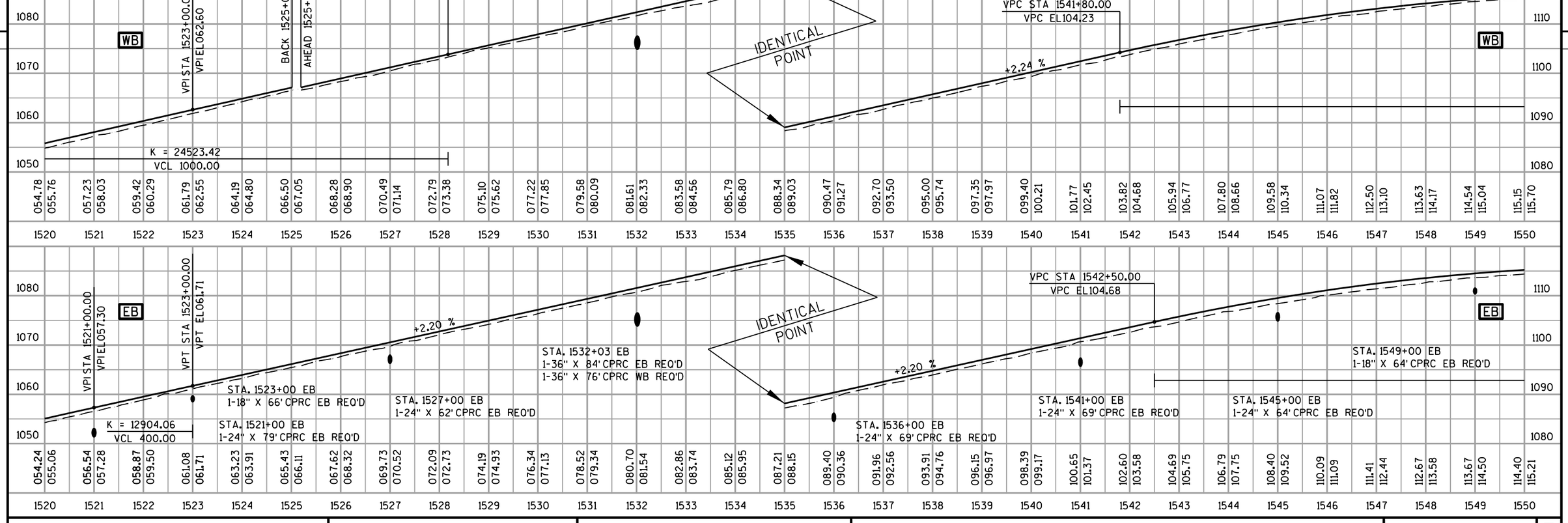
BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
410	1529+10± EB	ORANGE PAINT ON BOLT/NUT OF SIGN BASE	55'± RT	1072.16
411	1538+00± EB	CHISLED SQUARE CONCRETE SHOULDER	35'± RT	1110.16

STA.1544+55 EB - STA.1545+15 EB, LT.
2-CRASH CUSHIONS PERMANENT
LOW MAINTENANCE REQ'D.

STA. 1544+85 EB - STA.1545+15 EB LT.
EXISTING MAINTENANCE TURNAROUND
TO BE REBUILT IN SAME LOCATION
(SEE CONSTRUCTION DETAILS)





PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PLAN & PROFILE - EB/WB	SHEET	E

N

STA. 1556+00 EB, 37.5' LT.
1V INLET
10.1

STA. 1556+00 EB, 23' LT.
2V INLET
10.2

BM 412

BM 413

BM 15

STH 69

NOTE: GEOGRID AND SELECT CRUSHED MATERIAL INSTALLED NOMINAL 75.5 FOOT WIDTH WESTBOUND STA 1540+04 TO STA 1558+01.

NOTE: GEOGRID AND SELECT CRUSHED MATERIAL INSTALLED NOMINAL 60 FOOT WIDTH EASTBOUND STA 1550+00 TO STA 1558+00.

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
412	1556+00± EB	RR SPIKE IN FENCE BRACE POST	110'± RT	1105.70
413	1566+20± EB	ORANGE PAINT ON BOLT/NUT OF SIGN BASE	60'± RT	1098.00
15	1569+70± EB	DISC TOP OF PARAPET B-11-015	37'± RT	1095.21

STA.1558+00 EB/WB
TRANSITION FROM CONCRETE BARRIER SINGLE-FACED 32-INCH TO CONCRETE BARRIER 42-INCH.
(SEE DETAILS)

END PROJECT
STA.1558+00 EB
STA.1558+00 WB
MATCH EXISTING

1550 WB 1555 WB 1560 WB 1565 WB 1570 1575 1580
1550 EB 1555 EB 1560 EB 1565 EB 1570 1575 1580

WB

VPI STA 1551+80.00
VPI EL126.59

VPT STA 1561+80.00
VPT EL108.11

1552+74.91
116.47

-1.85 %

VCL 400.00
K = 1716.89

VPC STA 1565+00.00
VPC EL102.20

VPI STA 1567+00
VPI EL098.50

VPT STA 1569+00
VPT EL095.27

-1.627%

VPI STA 1569+26.00
VPI EL094.85

VPI STA 1569+50.00
VPI EL094.44

K = 489.76
VCL 2000.00

1120	1110	1100	1090

115.15	115.70	115.71	116.16	115.95	116.42	115.94	116.47	115.71	116.31	115.32	115.96	115.37	115.39	114.49	114.63	113.52	113.66	112.40	112.48	111.15	111.11	109.70	109.52	107.82	107.74	106.06	105.89	104.29	104.04	102.40	102.20	100.57	100.38	098.75	098.62	096.78	096.91	095.16	095.27	075.26	093.58	091.60	091.84	089.53	089.94	087.73	087.97	085.84	085.85
1550	1551	1552	1553	1554	1555	1556	1557	1558	1559	1560	1561	1562	1563	1564	1565	1566	1567	1568	1569	1570	1571	1572	1573	1574	1575	1576	1577	1578	1579	1580

EB

VPI STA 1552+00.00
VPI EL125.61

VPT STA 1561+50.00
VPT EL108.08

1552+83.94
116.07

STA. 1556+00 EB
1-18" X 69' CPRC EB REQ'D

K = 469.18
VCL 1900.00

1130	1120	1110	1100

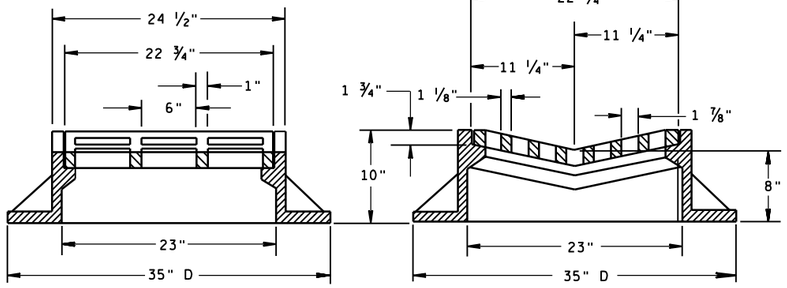
114.40	115.21	115.06	115.71	115.32	116.00	115.37	116.07	115.31	115.93	115.03	115.57	114.75	115.01	114.14	114.23	113.27	113.23	112.08	112.03	110.76	110.61	109.36	108.97	107.66	107.16	105.63	105.31	103.72	103.46	101.80	101.62	099.76	099.77
1550	1551	1552	1553	1554	1555	1556	1557	1558	1559	1560	1561	1562	1563	1564	1565	1566	1567	1568	1569	1570	1571	1572	1573	1574	1575	1576	1577	1578	1579	1580

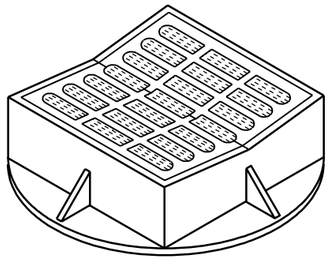
PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	PLAN & PROFILE - EB/WB	SHEET	E

Standard Detail Drawing List

08A5-16B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A5-17C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08B7-4	MANHOLES TYPE 2 & 3
08C1-5	INLETS TYPE 1, 2, 3 & 4
08C5-2	INLETS TYPE 8, 9, 10, AND 11
08D1-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08E9-6	SILT FENCE
08E10-2	INLET PROTECTION TYPE A, B, C AND D
08F1-11	APRON ENDWALLS FOR CULVERT PIPE
08F4-6	JOINT TIES FOR CONCRETE PIPE
09B2-7	CONDUIT
09B4-9	PULL BOX
09C2-4	CONCRETE BASES, TYPES 1, 2 & 5
09C3-2	TRANSFORMER/PEDESTAL BASES
09E1-6D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E1-4G	HARDWARE DETAILS FOR POLE MOUNTINGS
09F12-3	LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT
11A1-3	MAINTENANCE CROSSOVER FOR FREEWAYS
12A3-9	NAME PLATE (STRUCTURES)
13A5-3B	ASPHALTIC SHOULDER RUMBLE STRIP, MILLING
13C11-9A	RURAL DOWELED CONCRETE PAVEMENT
13C11-9B	RURAL DOWELED CONCRETE PAVEMENT
14B7-11A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B7-11B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B7-11C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B7-11D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B20-6A	STEEL THRIE BEAM STRUCTURE APPROACH
14B20-6B	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END AND VERTICAL FACED PARAPETS
14B20-6C	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SLOPED END PARAPETS
14B24-5A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-5B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-5C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
15A2-6	DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR
15A3-1	MARKER POSTS, FLEXIBLE, FOR CULVERT END
15A6-2	DELINEATOR LAYOUT
15C2-4A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C2-4B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C2-4C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C4-1	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C8-11A	PAVEMENT MARKING (MAINLINE)
15C8-10F	PAVEMENT MARKING (RAMPS & GORES)
15C11-5	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C12-3	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C14-1	AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS
15D3-1	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER
15D5-2	TRAFFIC CONTROL, SINGLE LANE CROSSOVER ENTRANCE WITH BARRIER
15D7-3	TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER
15D8-3	TRAFFIC CONTROL, TEMPORARY ENTRANCE RAMP CROSSOVER
15D9-2	TRAFFIC CONTROL, SINGLE LANE CROSSOVER EXIT
15D10-2	TRAFFIC CONTROL, SINGLE LANE CROSSOVER EXIT WITH BARRIER
15D11-3	TRAFFIC CONTROL, SINGLE LANE CROSSOVER
15D12-2	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
15D14-1	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)
15D15-1	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-1	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D27-1	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

6

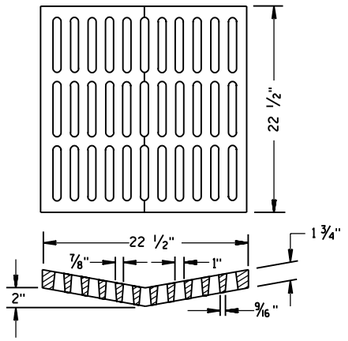




TYPE "B"

(APPROXIMATE WEIGHT 395 LBS.)

FRAME..... 285 LBS.
GRATE..... 110 LBS.

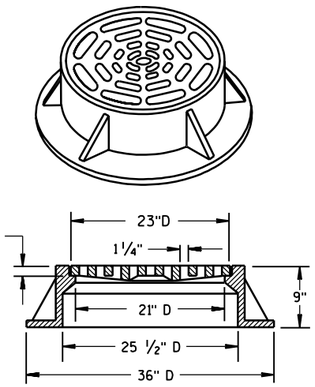


ALTERNATIVE GRATE FOR TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 125 LBS.)
GRATE.....125 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.

NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

(APPROXIMATE WEIGHT 340 LBS.)

FRAME..... 235 LBS.
GRATE..... 105 LBS.

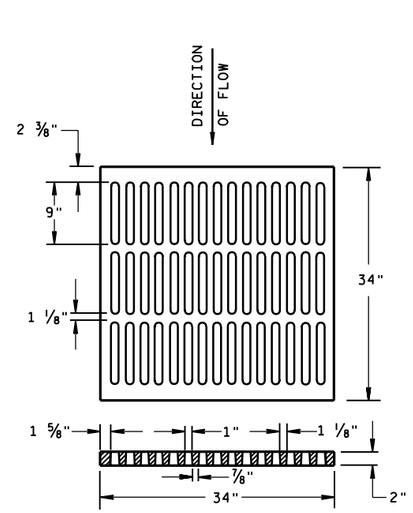
GENERAL NOTES

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

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.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

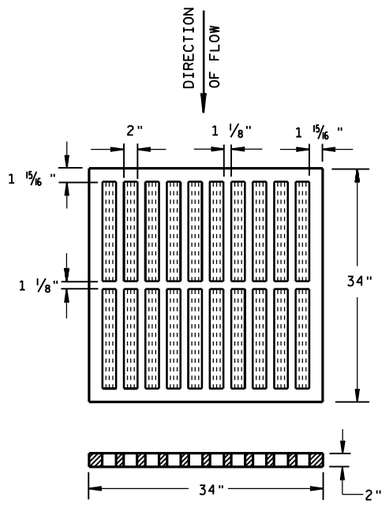


ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 365 LBS.)
GRATE.....365 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

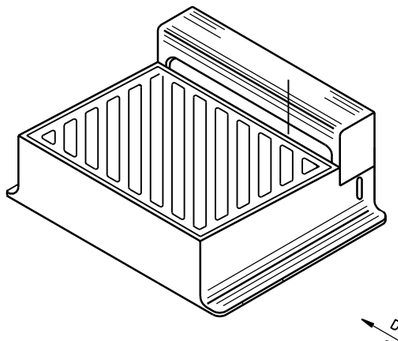


TYPE "MS"

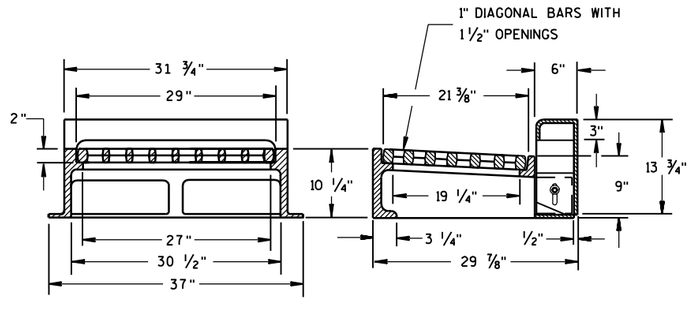
(APPROXIMATE GRATE WEIGHT 270 LBS.)
GRATE.....270 LBS.

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"

(APPROXIMATE WEIGHT 670 LBS.)

FRAME..... 360 LBS.
GRATE..... 160 LBS.
CURB BOX..... 150 LBS.

INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

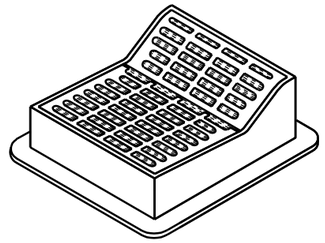
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

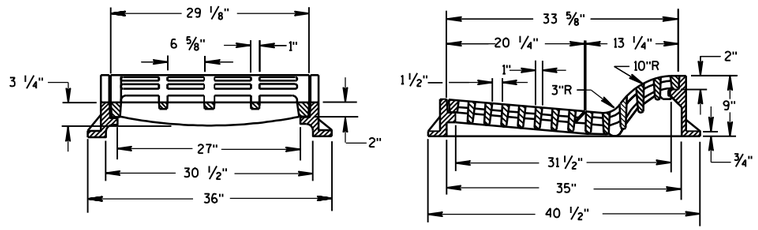
APPROVED
10/4/99
DATE
FHWA

CHIEF ROADWAY DEVELOPMENT ENGINEER

S.D.D. 8 A 5-16b

6
S.D.D. 8 A 5-16b



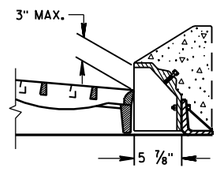


TYPE "F"

(APPROXIMATE WEIGHT 645 LBS.)

FRAME.....300 LBS.
GRATE.....165 LBS.
GRATE.....180 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

(APPROXIMATE WEIGHT 79 LBS.)
CURB BOX.....79 LBS.

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

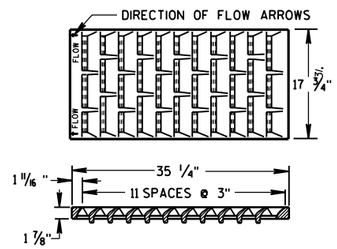
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

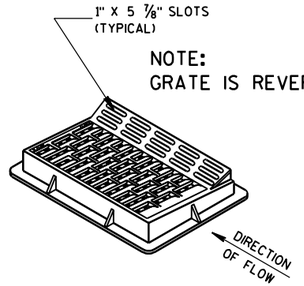
GENERAL NOTES

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.

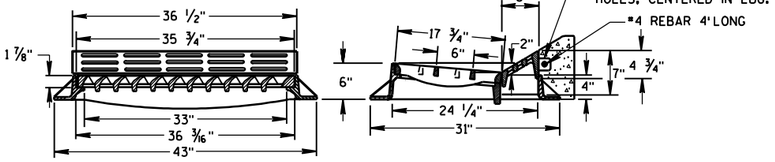
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.





NOTE:
GRATE IS REVERSIBLE.

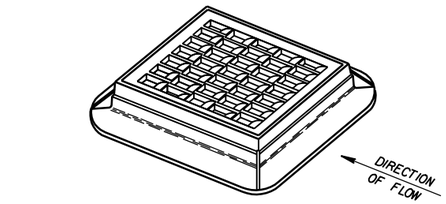


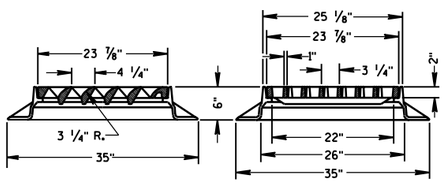
TYPE "HM"

(APPROXIMATE WEIGHT 375 LBS.)
FRAME.....175 LBS.
GRATE.....138 LBS.
CURB BOX..... 62 LBS.

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

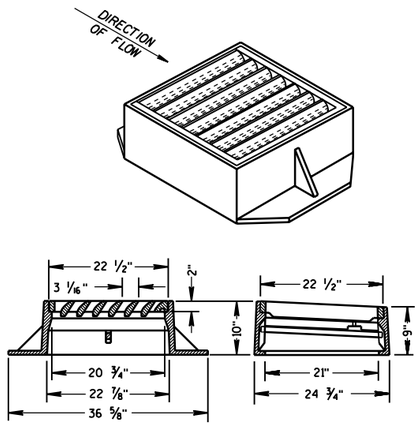




TYPE "S"

(APPROXIMATE WEIGHT 334 LBS.)

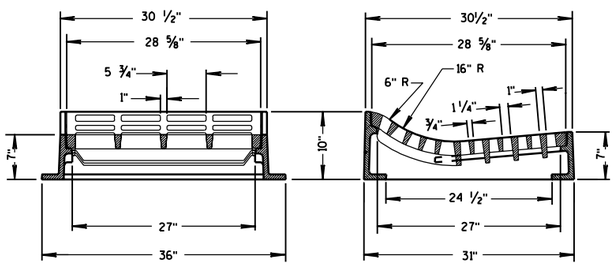
FRAME.....165 LBS.
GRATE.....169 LBS.

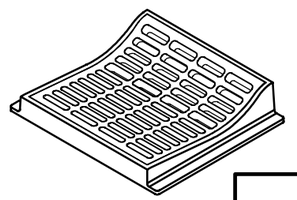


TYPE "V"

(APPROXIMATE WEIGHT 405 LBS.)

FRAME.....270 LBS.
GRATE.....130 LBS.
SAFETY BAR..... 5 LBS.





TYPE "T"

(APPROXIMATE WEIGHT 530 LBS.)
FRAME.....270 LBS.
GRATE.....260 LBS.

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 30 INCH.

INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

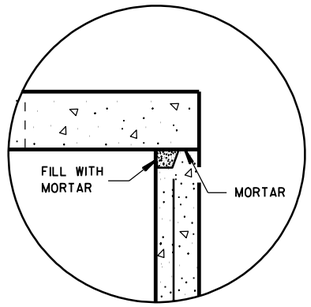
APPROVED
12/17/07
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

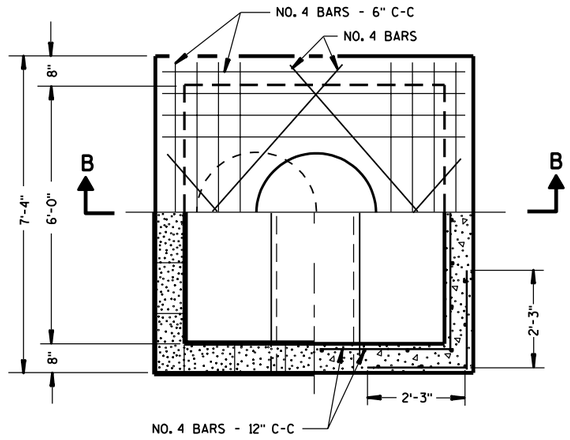
S.D.D. 8 A 5-17c

6

S.D.D. 8 A 5-17c



DETAIL "A"



HALF 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.

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 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

STEPS CONFORMING TO AASHTO M 199 SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT.

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

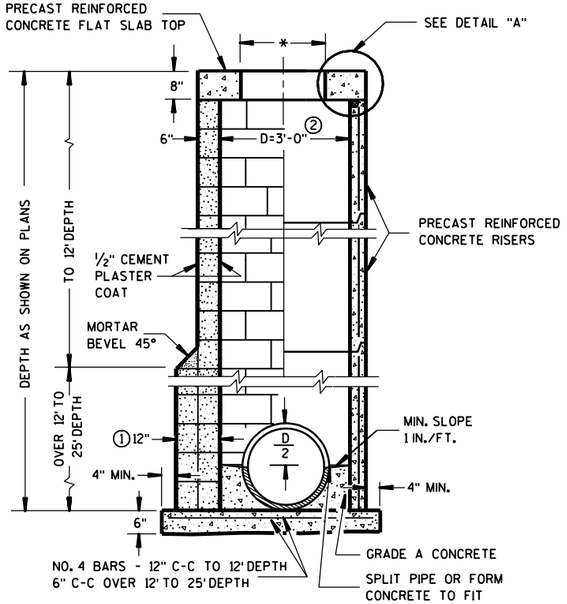
PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS AND MANHOLES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

* USE 2'-0" DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 3'-0" DIAMETER WITH TYPE "K" AND "M" COVERS.

① 2 COURSES 6" BLOCK.

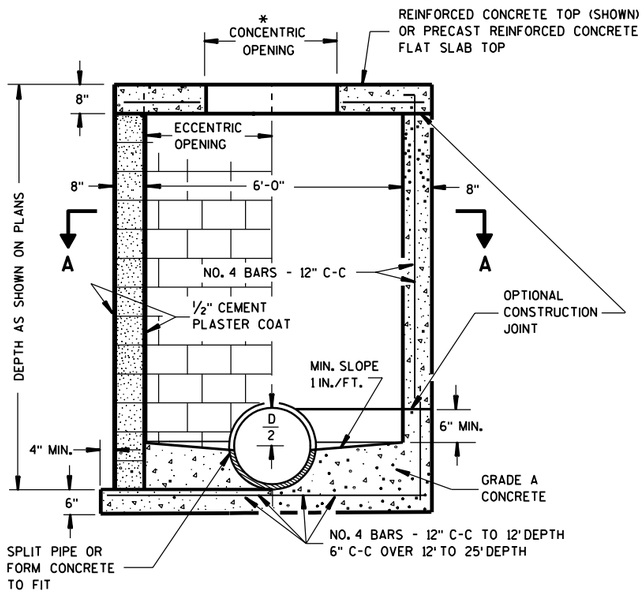
② WHEN CONNECTING PIPES ARE 24" OR LARGER THE PRECAST MANHOLES MAY BE INCREASED TO 42" DIAMETER.



CONCRETE BLOCK

② PRECAST REINFORCED CONCRETE

MANHOLES TYPE 2

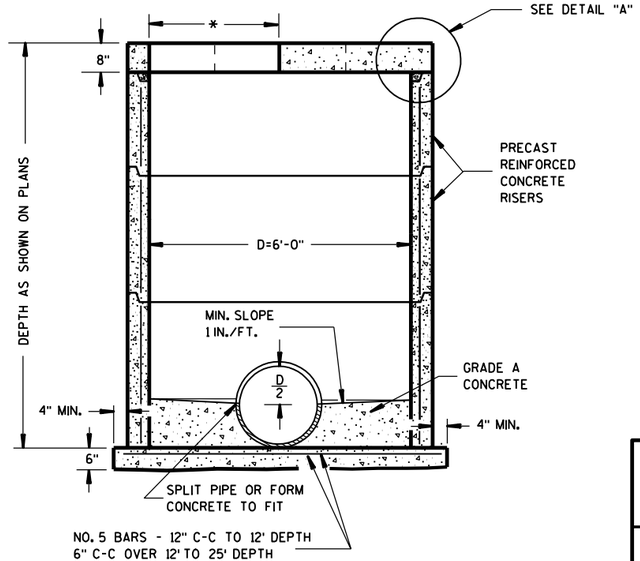


SECTION B-B

CONCRETE BLOCK

REINFORCED CONCRETE

MANHOLES TYPE 3



PRECAST REINFORCED CONCRETE

MANHOLES TYPE 2 & 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/9/05
DATE
FHWA

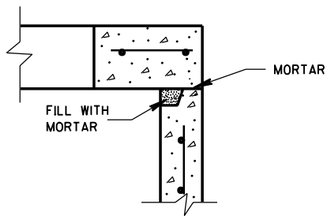
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

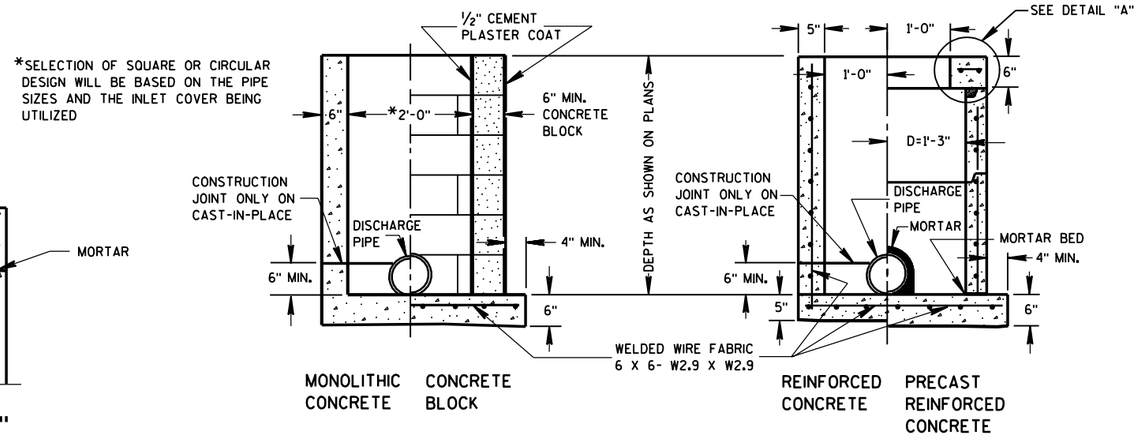
S.D.D. 8 B 7-4

6

S.D.D. 8 B 7-4



DETAIL "A"



INLETS TYPE 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.

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 AASHTO DESIGNATION M 199.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

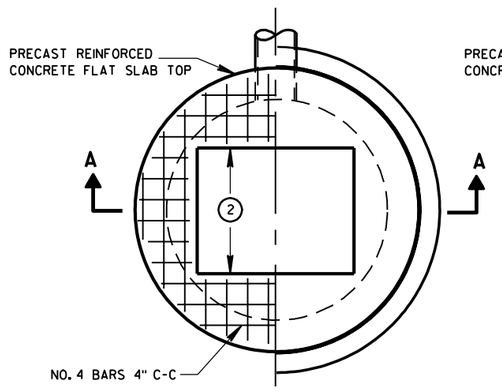
PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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

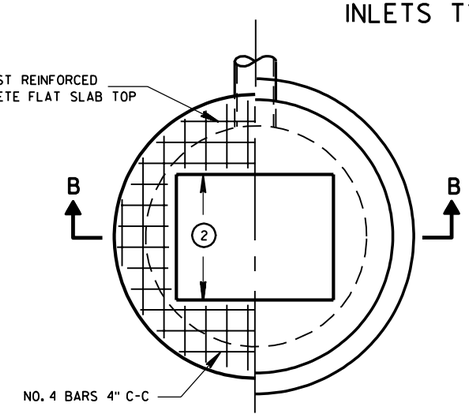
PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.

(1) USE 2'-6" OPENING FOR TYPE 2 INLETS, 3'-0" OPENING FOR TYPE 3 INLETS, AND 2'-11" FOR TYPE 4 INLETS.

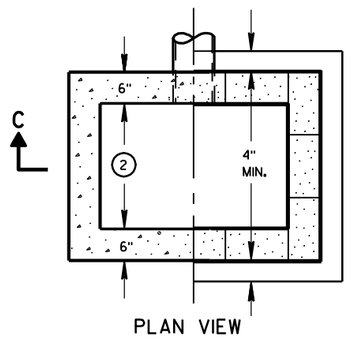
(2) USE 2'-0" OPENING FOR TYPE 1, 2 & 3 INLETS, 2'-6½" OPENING FOR TYPE 4 INLETS.



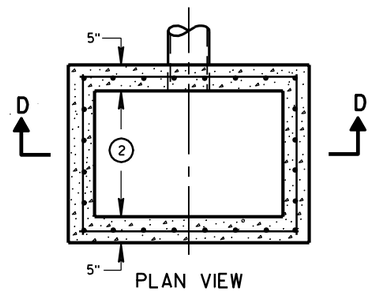
PLAN VIEW



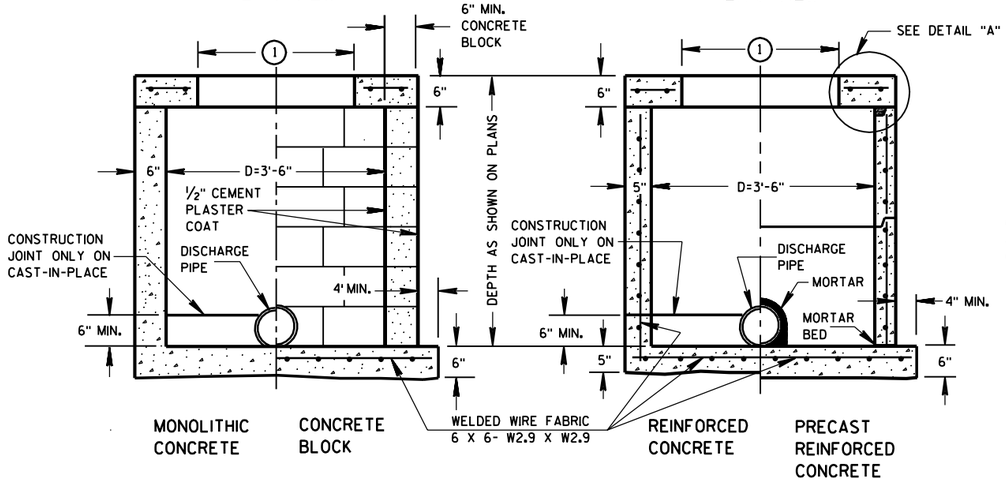
PLAN VIEW



PLAN VIEW

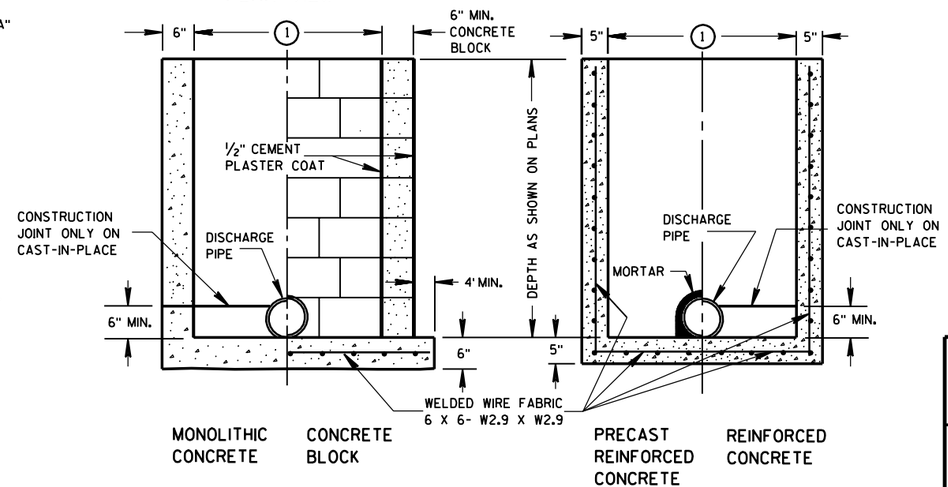


PLAN VIEW



SECTION A-A

SECTION B-B



SECTION C-C

SECTION D-D

INLETS TYPE 2, 3 & 4

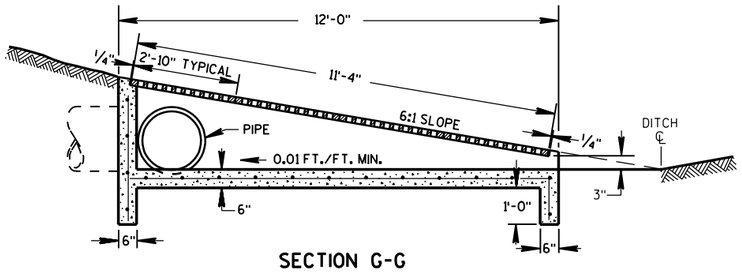
INLETS TYPE 1, 2, 3 & 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

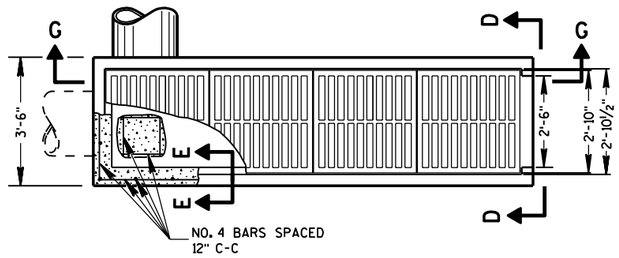
APPROVED
8/26/94
DATE
FHWA

CHIEF ROADWAY DEVELOPMENT ENGINEER

S.D.D. 8 C 1-5

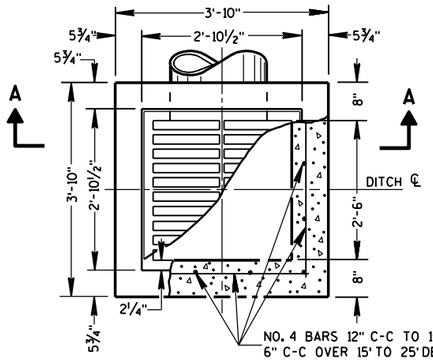


SECTION G-G

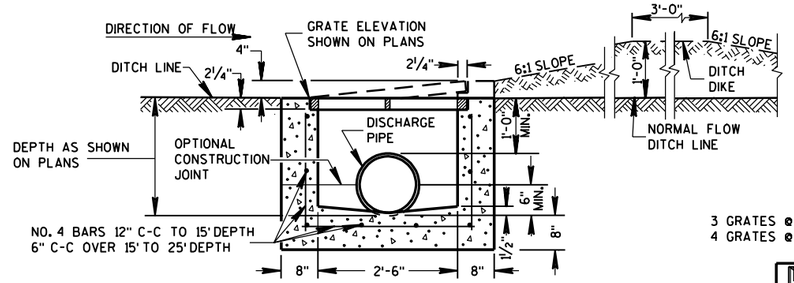


PLAN VIEW

REINFORCED CONCRETE INLET TYPE 11

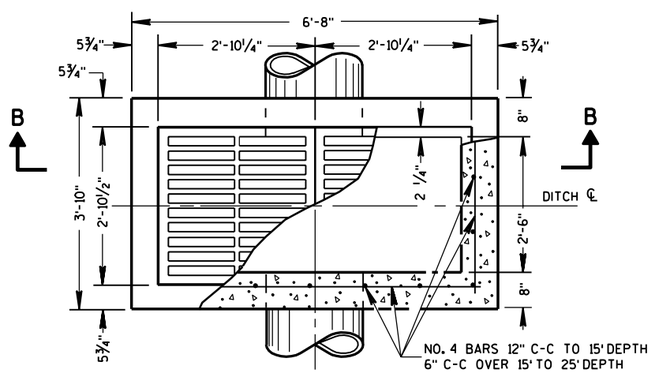


PLAN VIEW

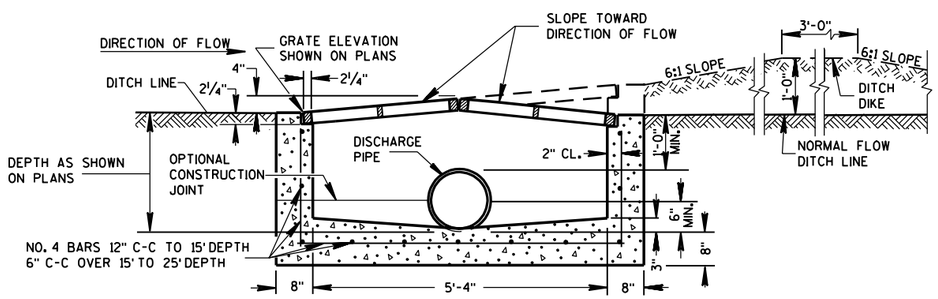


SECTION A-A

REINFORCED CONCRETE INLET TYPE 8



PLAN VIEW



SECTION B-B

REINFORCED CONCRETE INLET TYPE 9

GENERAL NOTES

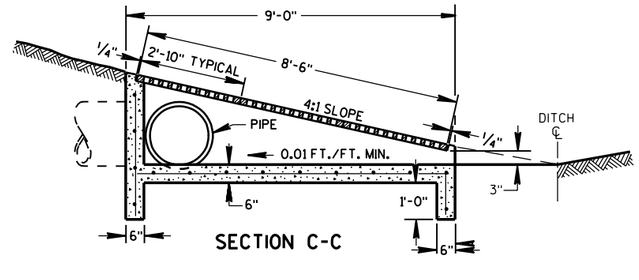
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS 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.

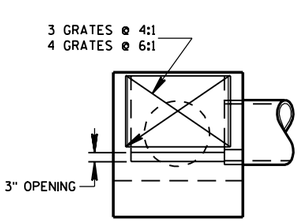
PRECAST REINFORCED CONCRETE INLET UNITS, IF USED, SHALL CONFORM TO THE REQUIREMENTS OF THE CATCH BASINS, MANHOLES AND INLETS SECTION OF THE STANDARD SPECIFICATIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A CORRECTED LIST OF SIZES IS FURNISHED BY THE ENGINEER.

ALL INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 8-MS", ETC. THIS DESIGNATION IS INTERPRETED TO MEAN THAT THE NUMBER, OR FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER OR IRON CASTING TO BE USED THEREWITH TO COMPRISE THE COMPLETE UNIT.

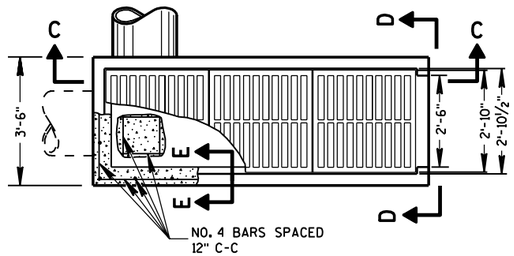
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.



SECTION C-C

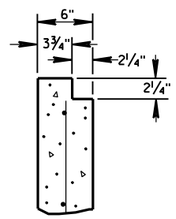


SECTION D-D



PLAN VIEW

REINFORCED CONCRETE INLET TYPE 10



SECTION E-E

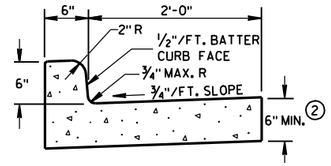
INLETS TYPE 8, 9, 10 AND 11

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

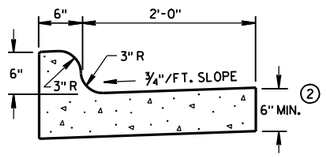
APPROVED
8/10/94
DATE

CHIEF ROADWAY DEVELOPMENT ENGINEER

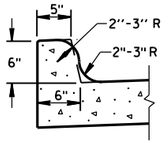
FHWA



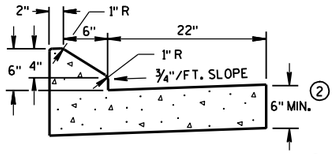
TYPES A & D ①



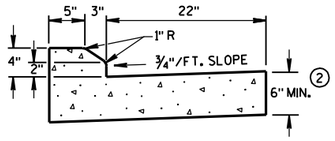
TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

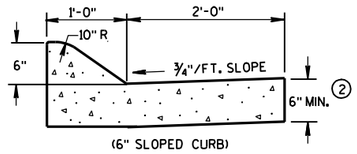


6" SLOPED CURB TYPES G & J ①

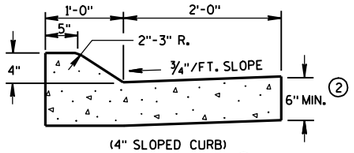


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

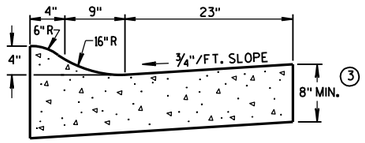


(6" SLOPED CURB)



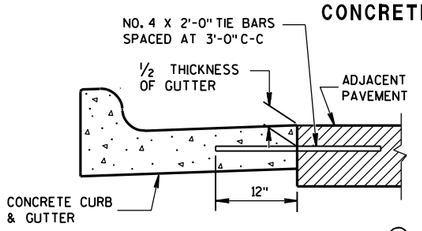
(4" SLOPED CURB)

TYPES A & D ①

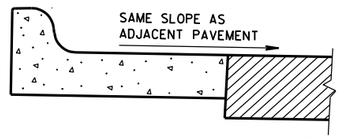


4" SLOPED CURB TYPES R & T ①④

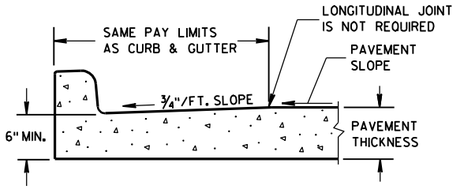
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①



REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS 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 & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

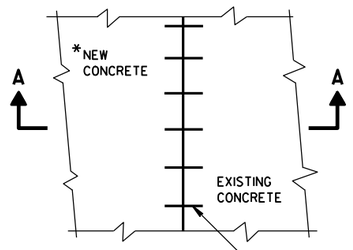
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

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 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.

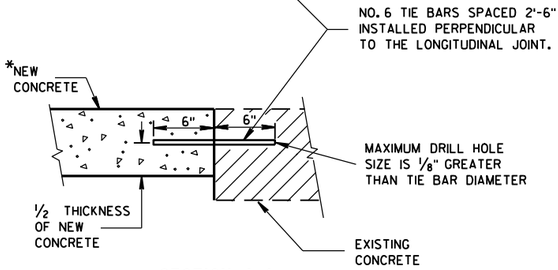
④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



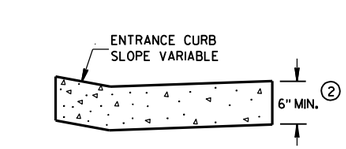
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

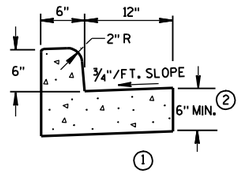


SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT

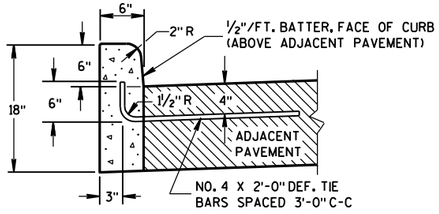


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

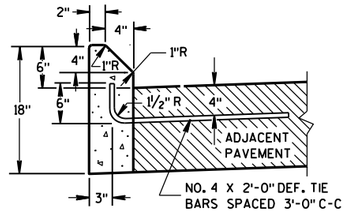


① TYPES A & D

CONCRETE CURB & GUTTER 18"

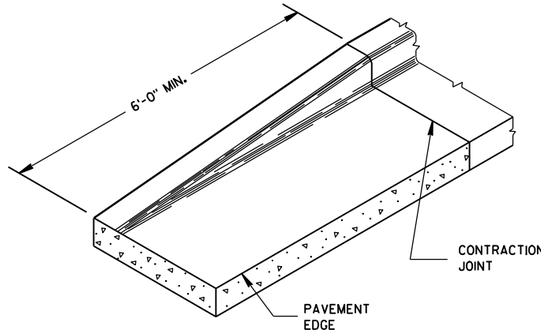


① TYPES A & D



① TYPES G & J

CONCRETE CURB

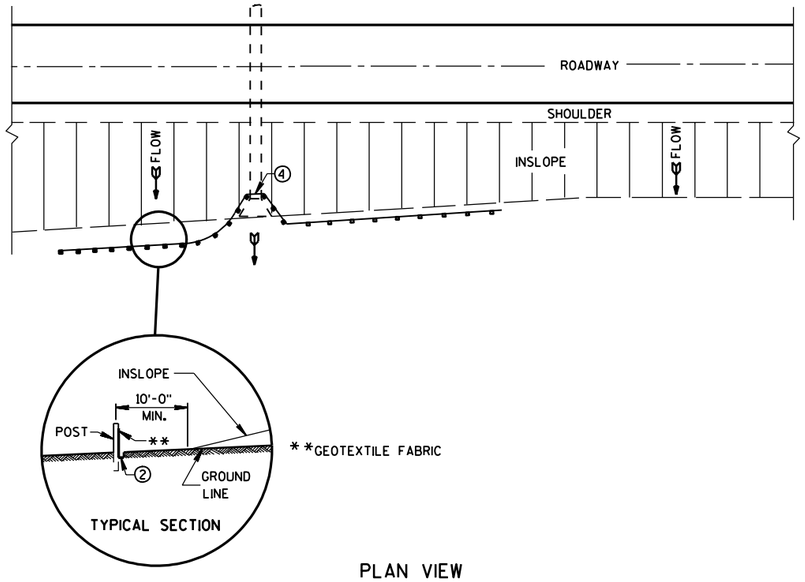


END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
9/4/08 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

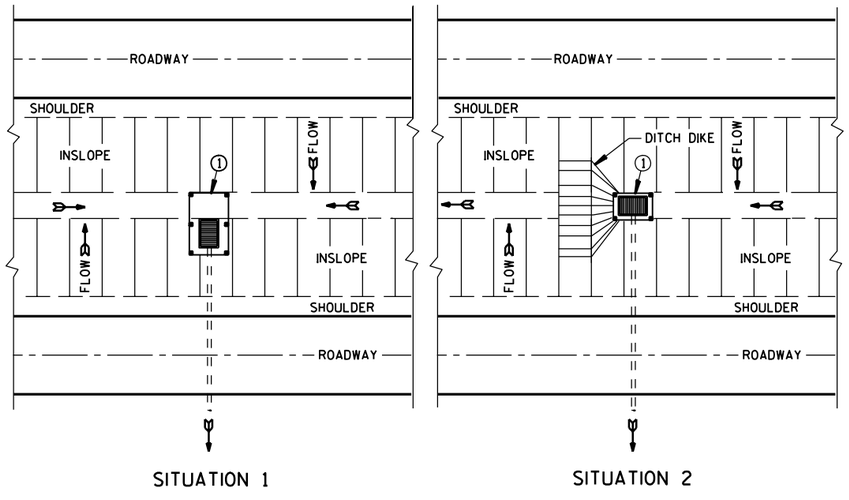
6

S.D.D. 8 D 1-17



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



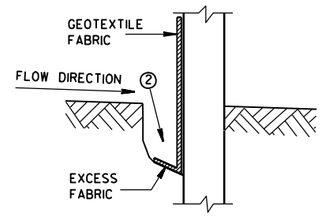
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

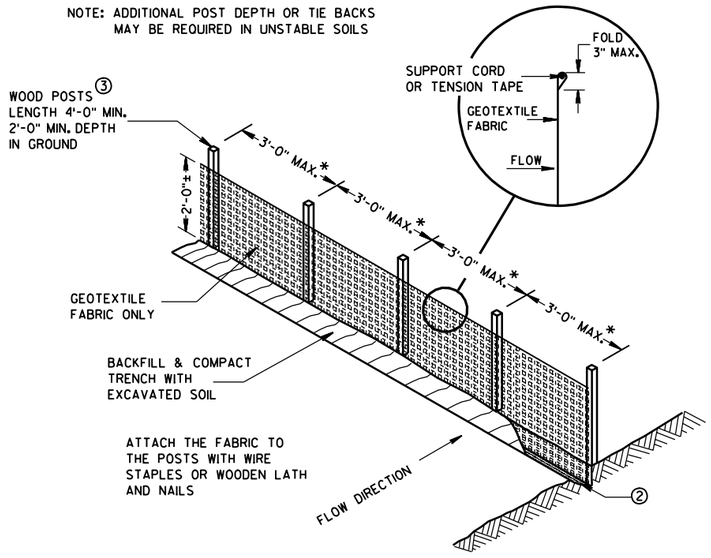
GENERAL NOTES

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.

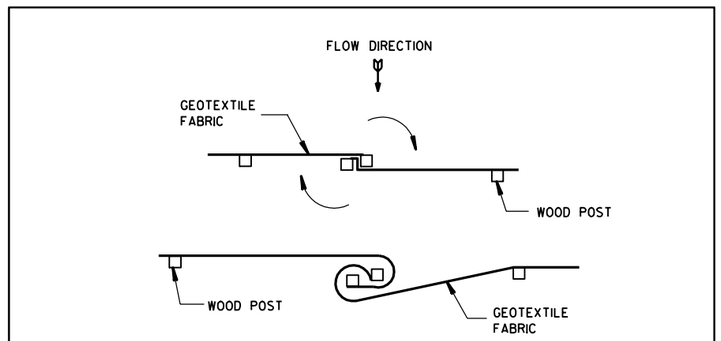


TRENCH DETAIL

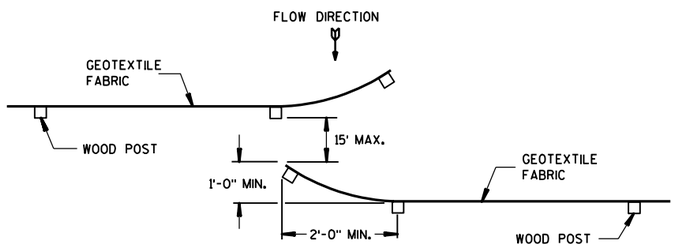


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

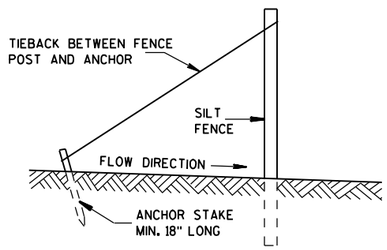


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

6

SILT FENCE

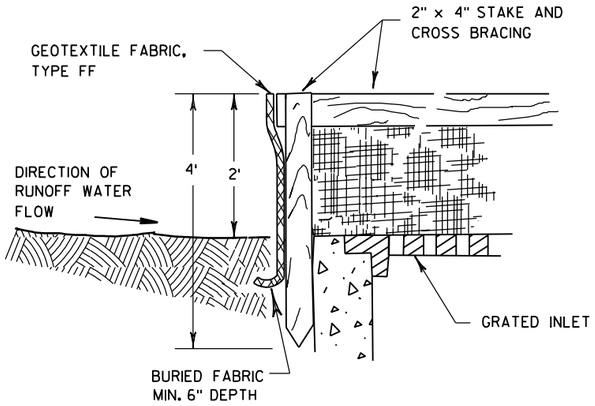
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

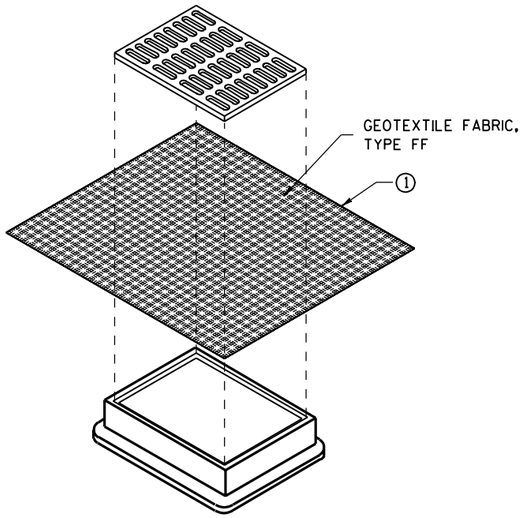
APPROVED
4-29-05
DATE
FHWA

CHIEF ROADWAY DEVELOPMENT ENGINEER

S.D.D. 8 E 9-6

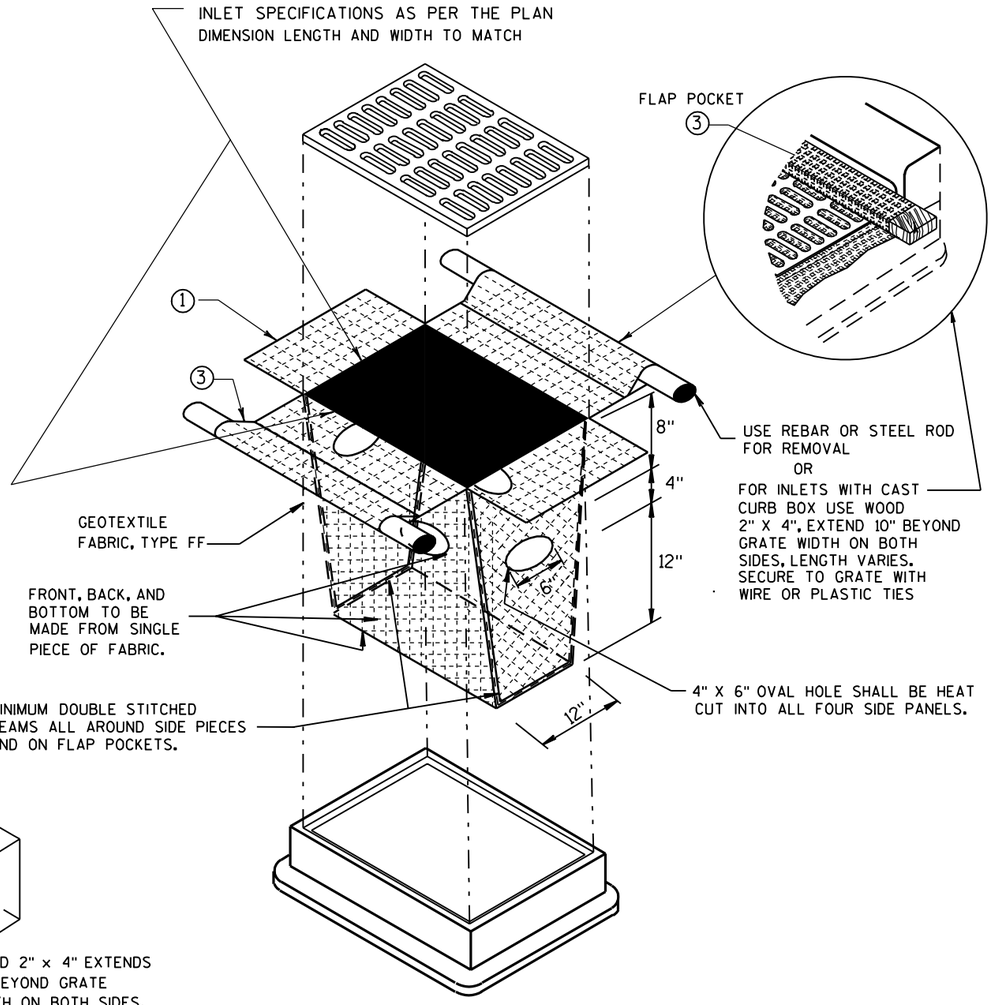
S.D.D. 8 E 9-6





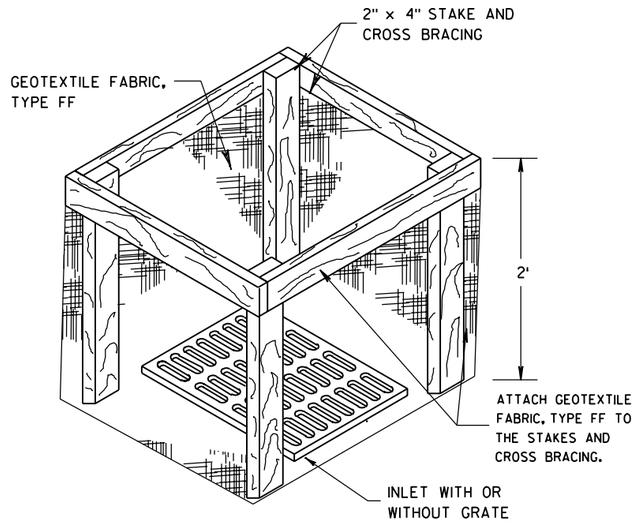
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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

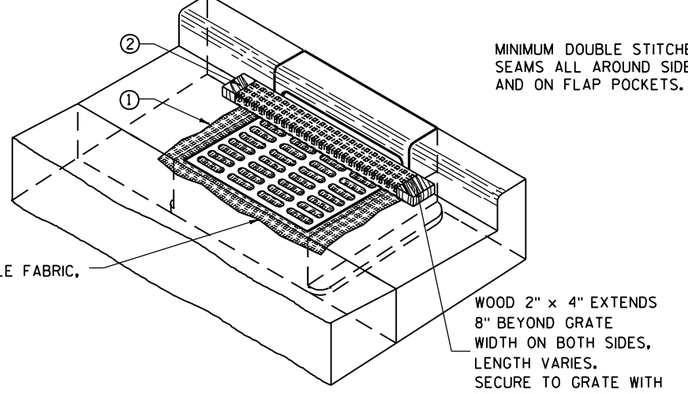


INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE A



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
FHWA

CHIEF ROADWAY DEVELOPMENT ENGINEER

6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2

METAL APRON ENDWALLS

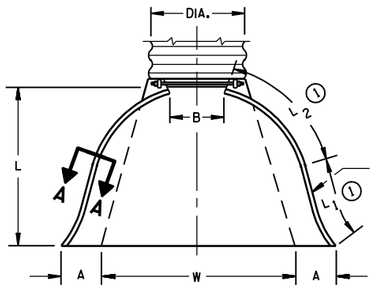
PIPE DIA. (IN.)	MIN. THICK. (inches) STEEL	MIN. THICK. (inches) ALUM.	DIMENSIONS (inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

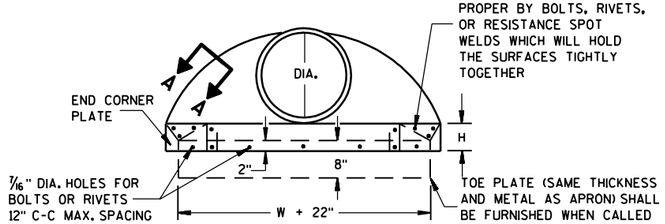
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 7/8	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

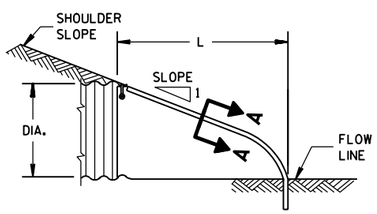
*MINIMUM
**MAXIMUM



PLAN VIEW

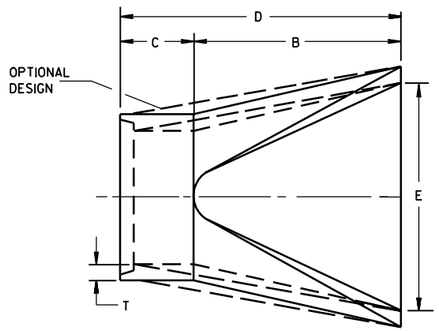


END VIEW

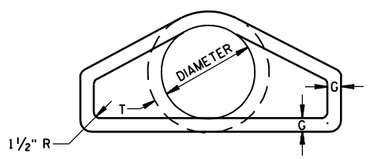


SIDE ELEVATION

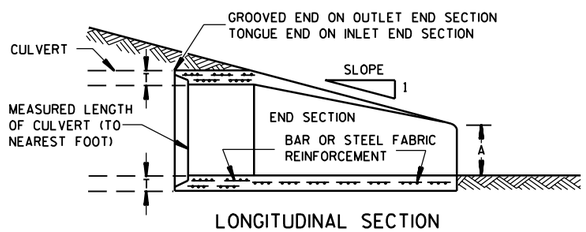
METAL ENDWALLS



PLAN

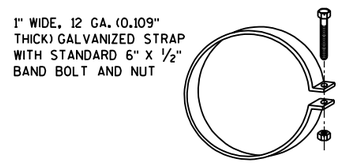


END VIEW



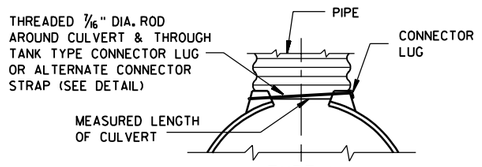
LONGITUDINAL SECTION

CONCRETE ENDWALLS

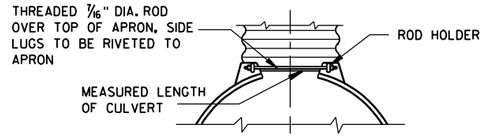


ALTERNATE FOR TYPE 1 CONNECTION

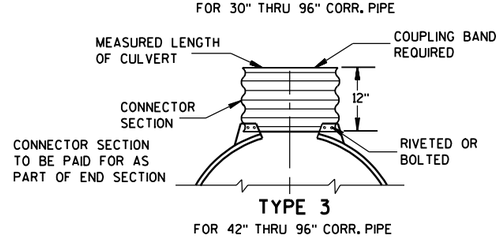
END SECTION CONNECTOR STRAP



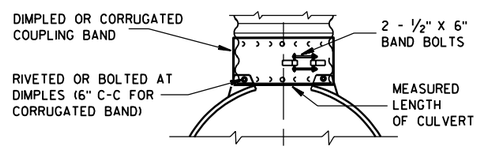
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

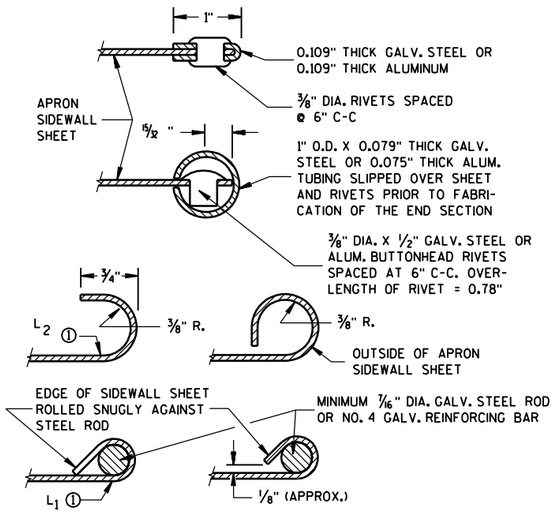
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

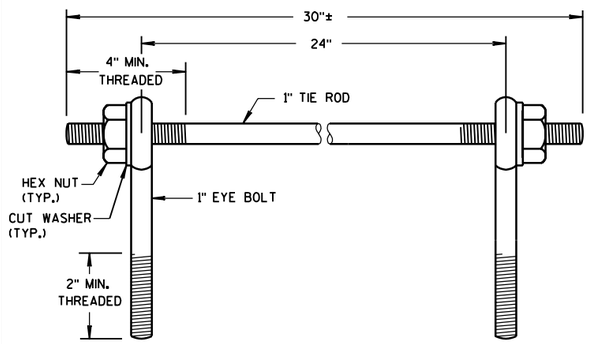
APPROVED
11/30/94
DATE

CHIEF ROADWAY DEVELOPMENT ENGINEER

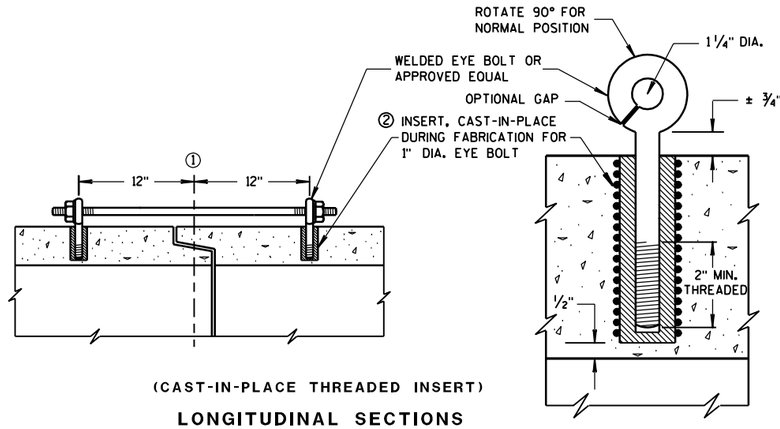
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6

S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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 PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED ON 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 CULVERT PIPE AS INDICTED ON THE PLANS AND BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO CILVERT PIPE, REINFORCED CONCRETE CULVERT PIPE, OR REINFORCED CONCRETE PIPE CATTLE PASS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

① ℄ 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.

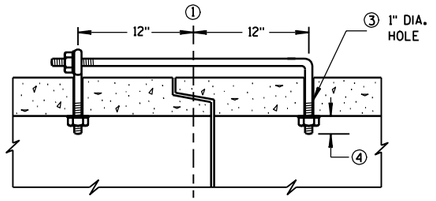
③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

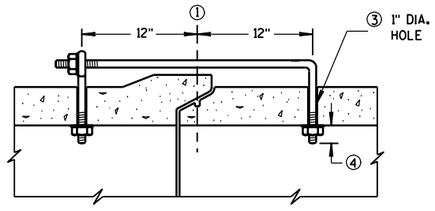
⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



(TONGUE & GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

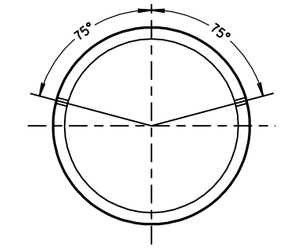
EYE BOLT DIMENSION TABLE

PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	

ADJUSTABLE TIE ROD TABLE

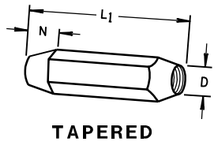
PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES

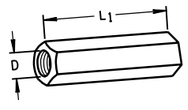


PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



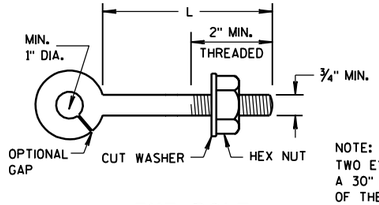
TAPERED



PLAIN

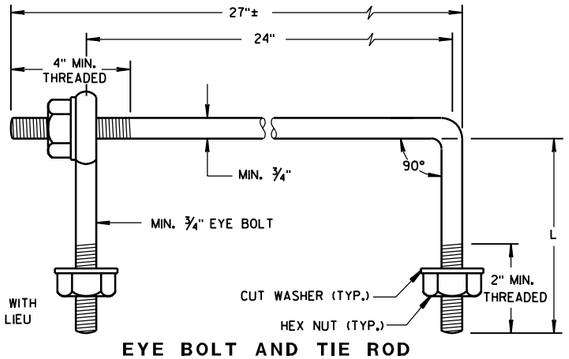
RIGHT AND LEFT THREADS

SLEEVE NUTS



EYE BOLT

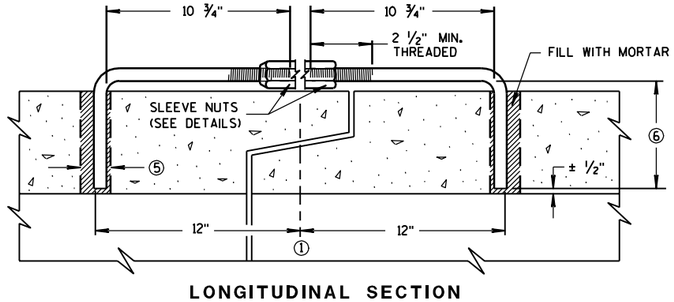
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)



LONGITUDINAL SECTION

(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)

JOINT TIES FOR CONCRETE PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

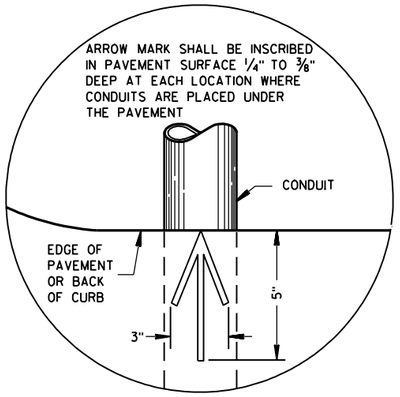
APPROVED
12/17/07 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 F 4-6

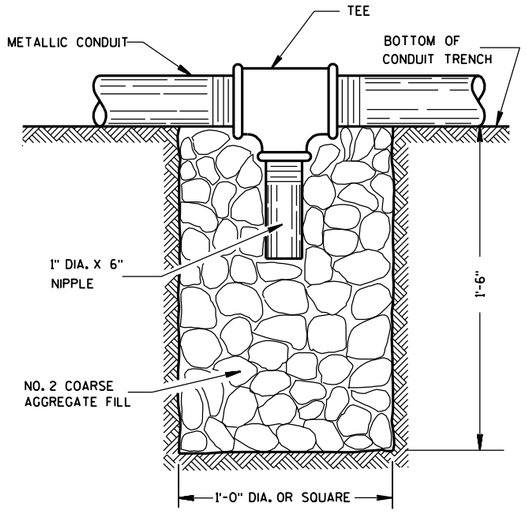
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S.D.D. 8 F 4-6



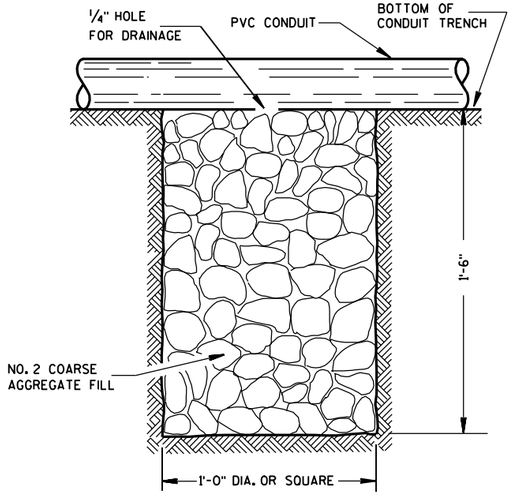
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

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.

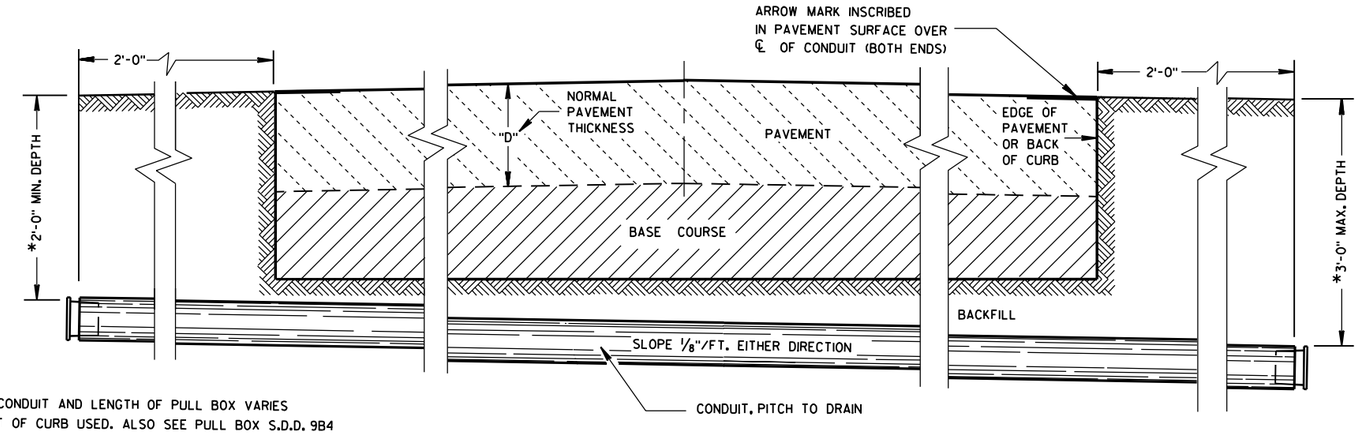
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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.).

POLY ROPE OR A PULL 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.



*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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/23/03
DATE
FHWA

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

6

S.D.D. 9 B 2-7

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.

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. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

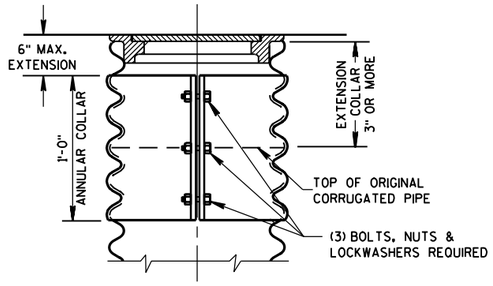
GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

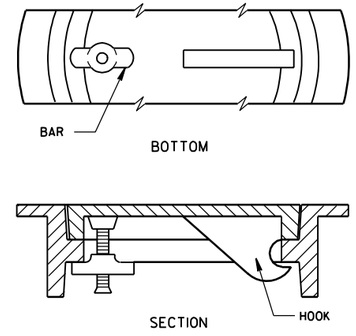
S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

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.

IF PULL BOX EQUIPMENT GROUNDING IS REQUIRED USING AN EQUIPMENT GROUNDING ELECTRODE IN EACH PULL BOX, THE EQUIPMENT GROUNDING ELECTRODE SHALL BE 5/8" X 8'-0", COPPERCLAD AND BE EXOTHERMICALLY WELDED TO A #4 AWG. COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 4 FEET IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.

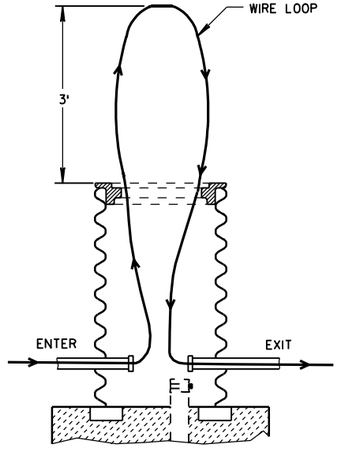


CORRUGATED PIPE EXTENDER

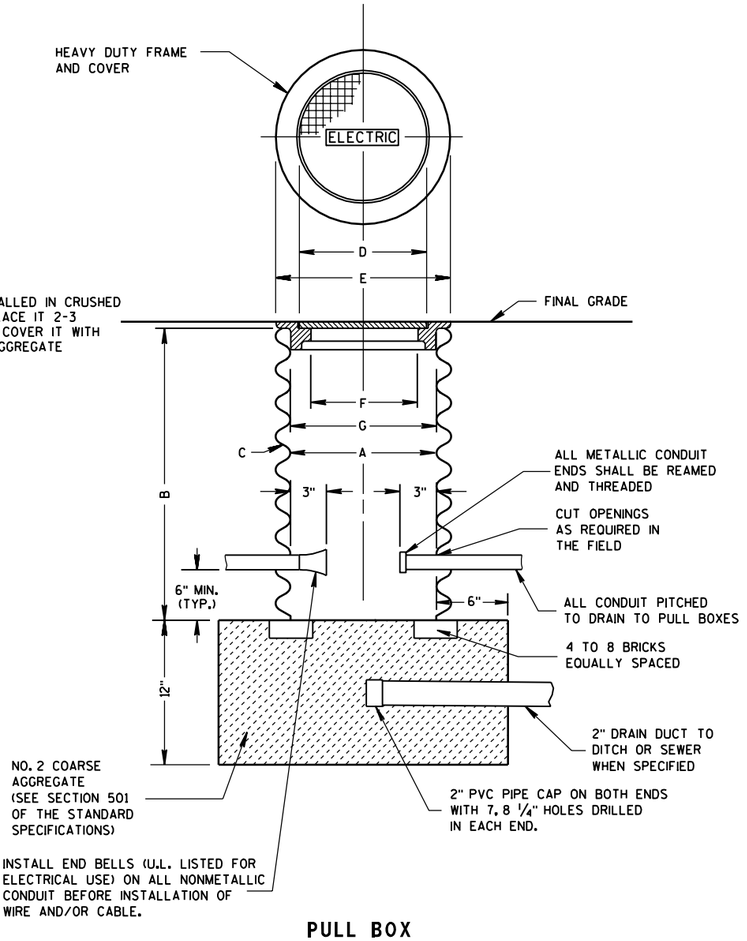


ALTERNATE COVER (LOCKING)

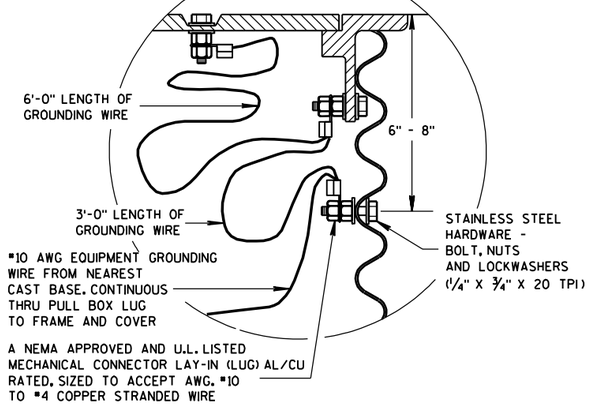
TIGHTENING BAR TYPE



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

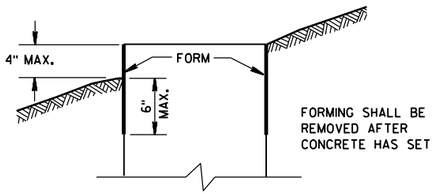
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/27/06 DATE
/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

6

S.D.D. 9 B 4-9



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
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 DRAWING SHALL 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 AS 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 AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X 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 NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC 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 AND TYPE 5 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES 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 AND 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL PER SECTION 5.17.6.3, AASHTO 2001 4TH EDITION STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

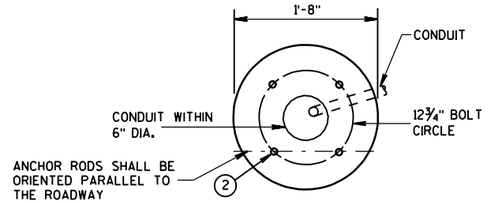
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

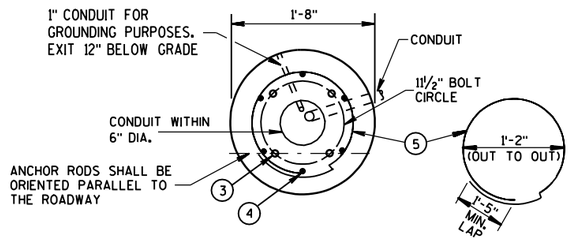
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

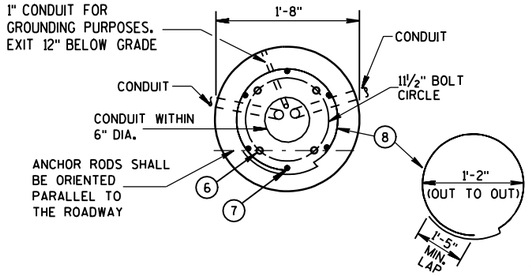
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

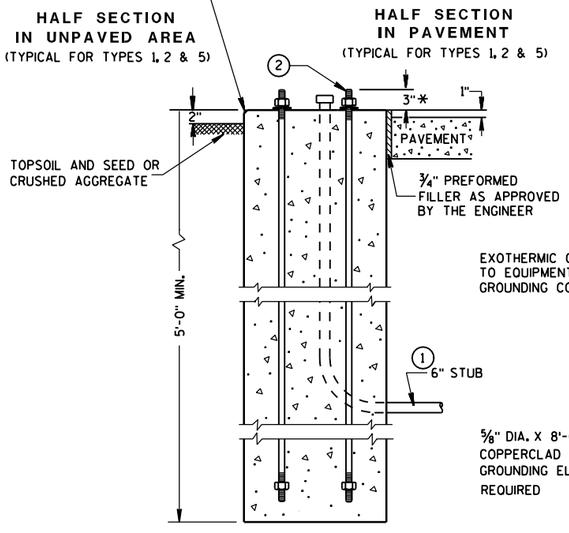




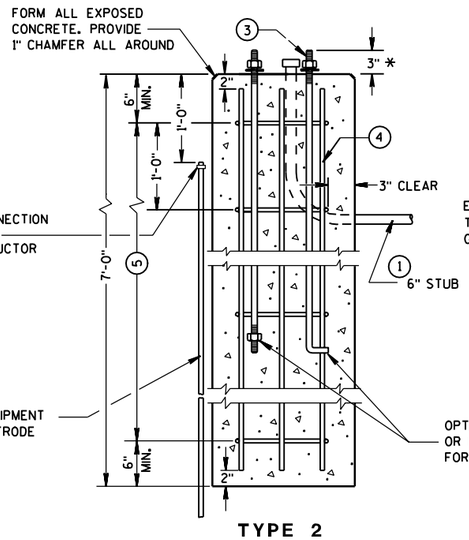


HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2 & 5)

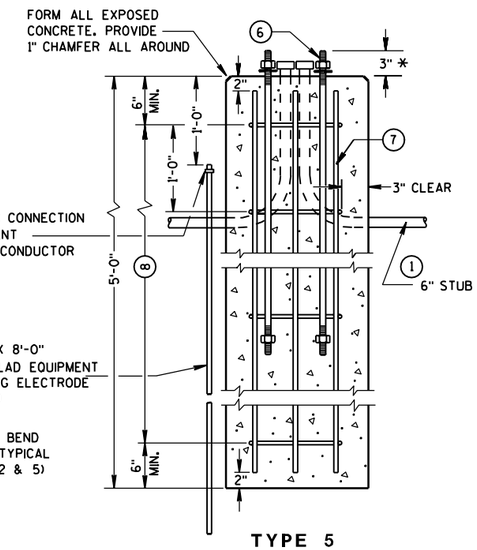
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2 & 5)



TYPE 1



TYPE 2



TYPE 5

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

CONCRETE BASES, TYPES 1, 2 & 5

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1/12/05
DATE
FHWA

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

S.D.D. 9 C 2-4

6

S.D.D. 9 C 2-4

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 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-325, (92,000 YIELD) HEAVY HEX NUT AND BE GALVANIZED IN ACCORDANCE WITH ASTM A-153, CLASS C.

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 AND U.L. LISTED MECHANICAL CONNECTOR (LUG) AL/CU RATED AND SIZED TO ACCEPT #10 AWG STRANDED WIRE, SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

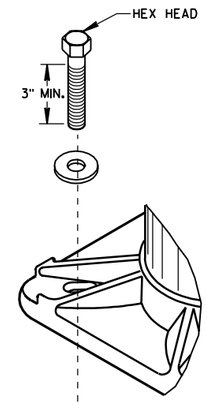
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

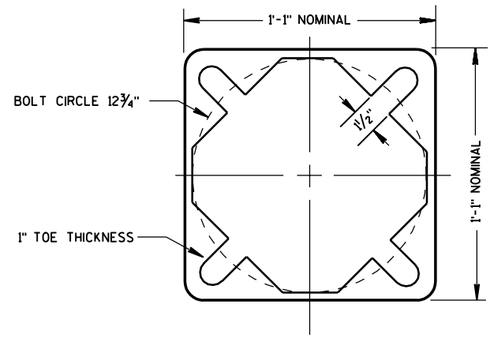
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

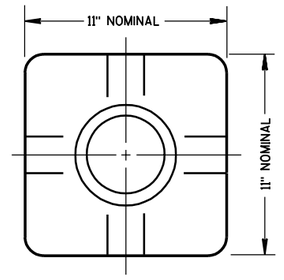
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1½", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

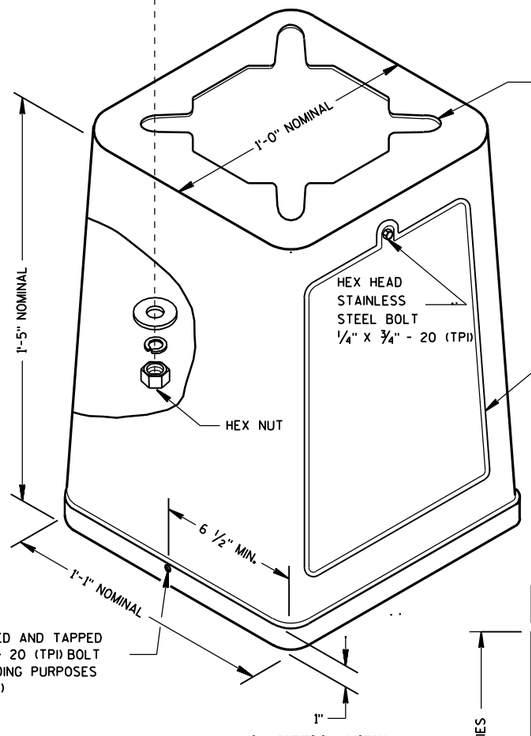




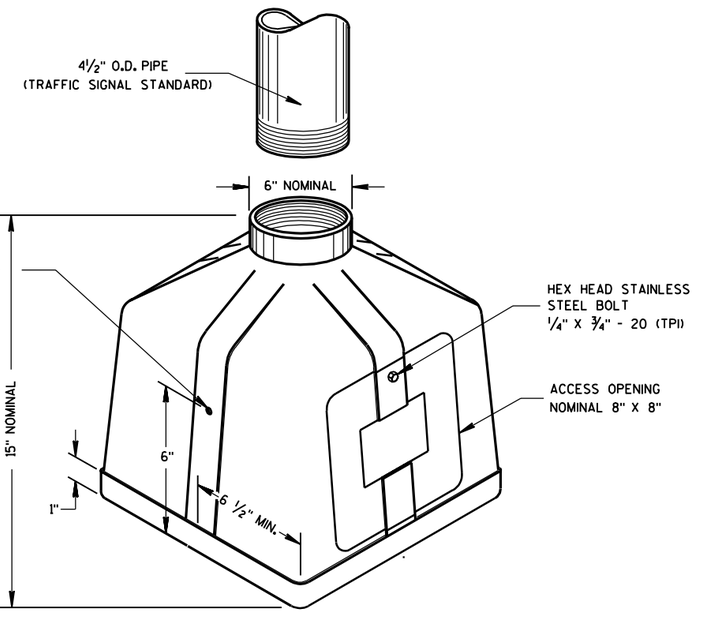
BOTTOM VIEW
(PEDESTAL BASE)



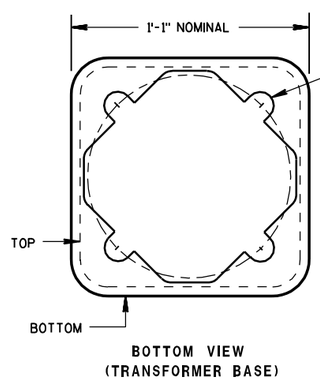
TOP VIEW
(PEDESTAL BASE)



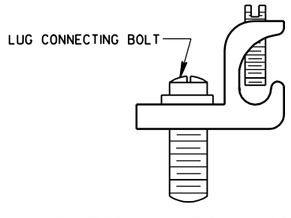
ISOMETRIC VIEW



ISOMETRIC VIEW
PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

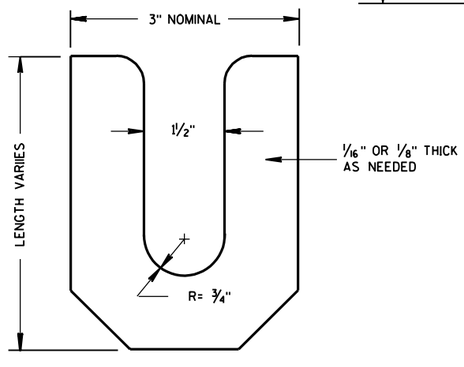


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

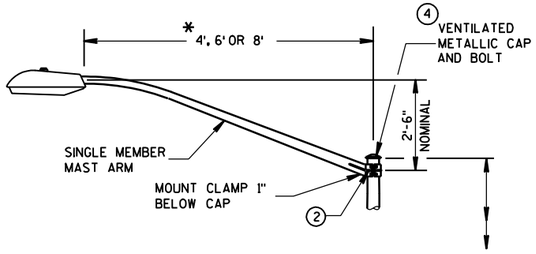
TRANSFORMER/PEDESTAL BASES

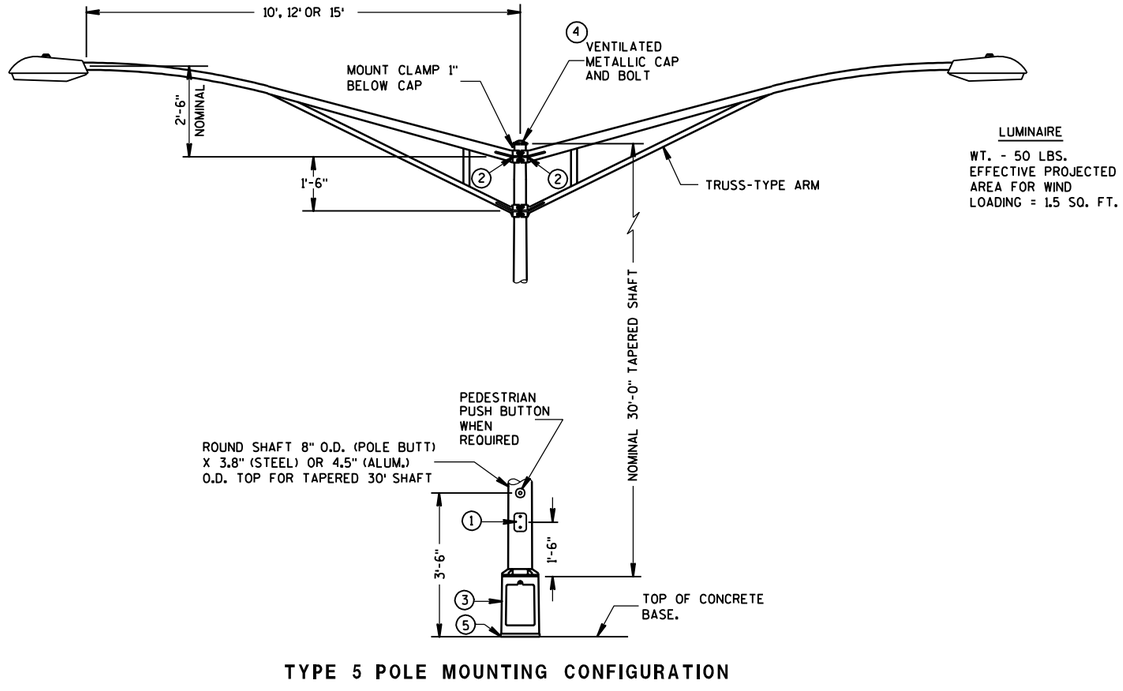
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/21/96
DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

S.D.D. 9 C 3-2

*RISE FOR 4' ARM SHALL BE 2'-0".

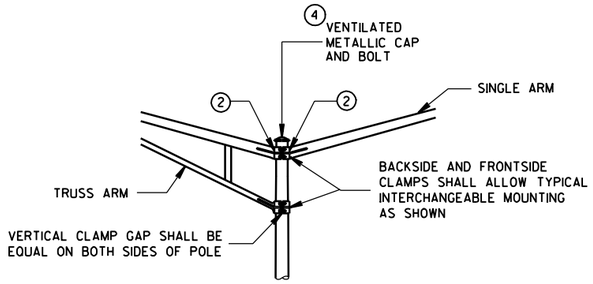




LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.

TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

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

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.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

1. 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
2. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" 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 THE TRANSFORMER BASE.

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

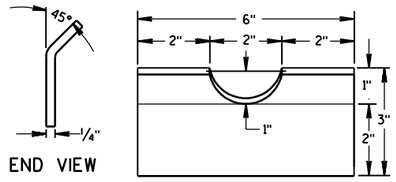
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 9 E 1-6d

6

S.D.D. 9 E 1-6d

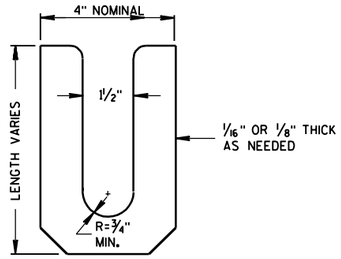


END VIEW

FRONT VIEW

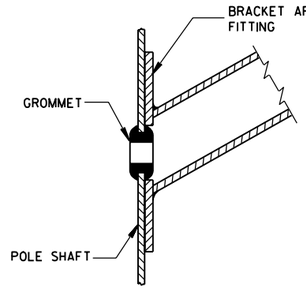
RECTANGULAR CLAMP SHIM

(4 TO A SET)

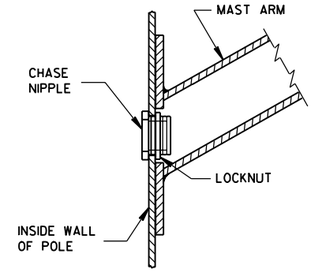


LEVELING SHIM (15)

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.

(10.) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11.) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

(12.) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13.) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14.) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

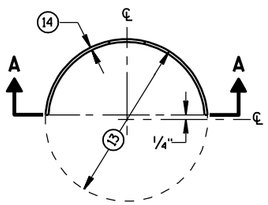
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

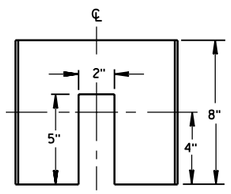
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(15.) 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.



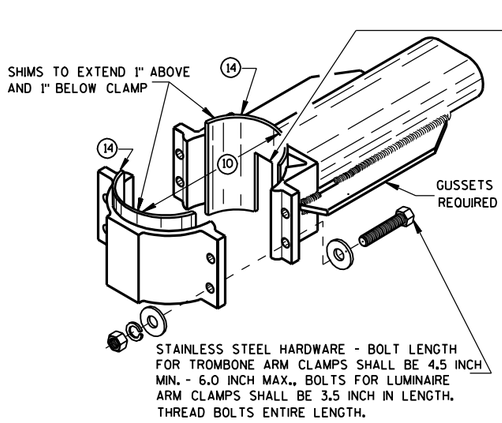
PLAN VIEW



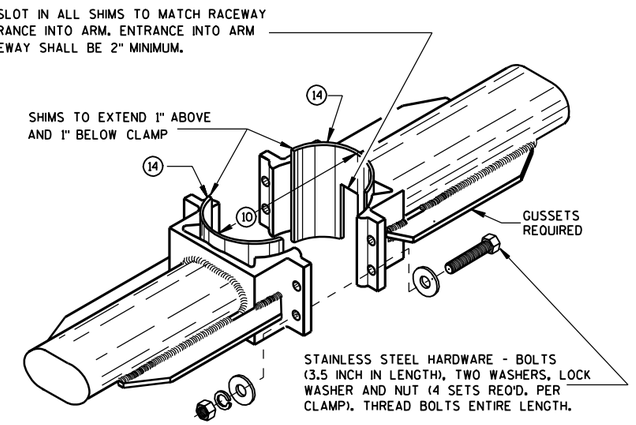
SECTION A-A

CIRCULAR CLAMP SHIM

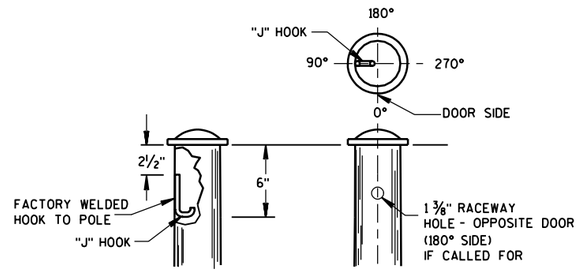
(2 TO A SET)



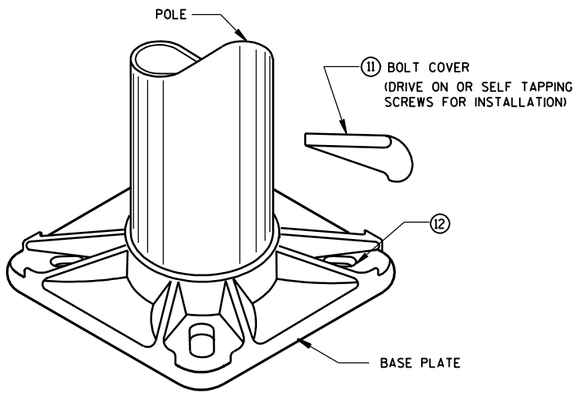
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



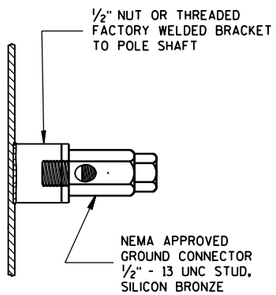
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

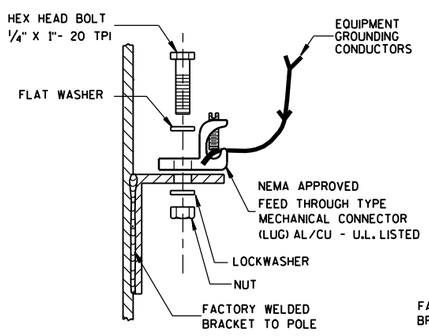


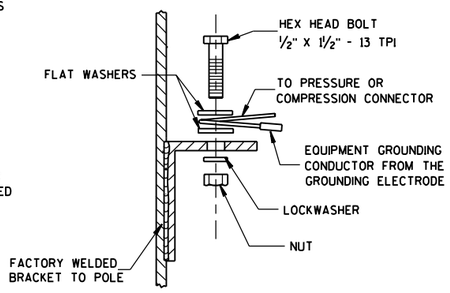
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

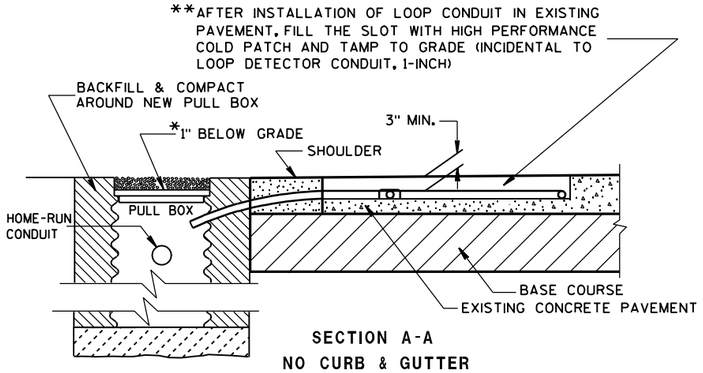
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/5/01
DATE
FHWA

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

6

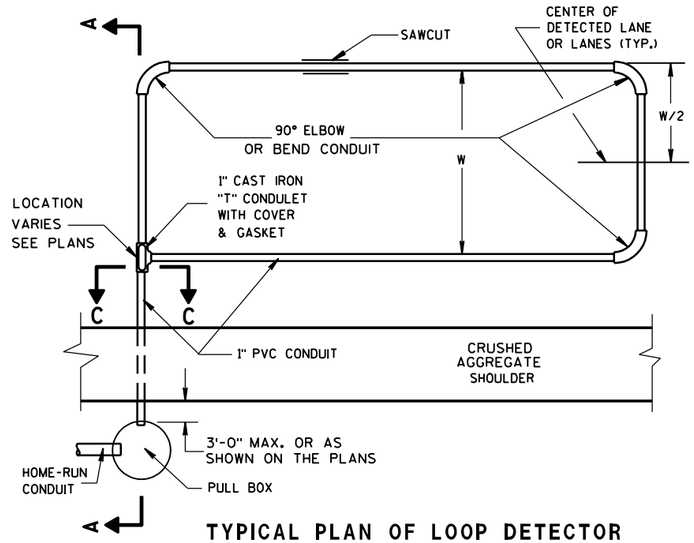
S.D.D. 9 E 1-4g



SECTION A-A
NO CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF LOOP DETECTOR

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISITANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

BEFORE PLACING THE 1 INCH CONDUIT IN THE CLEANED OUT SLOT, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY ½ INCH.

ONCE THE 2" LOOP SLOT HAS BEEN CHIPPED OUT, THE LOOP INSTALLATION SHALL BE COMPLETED PRIOR TO OPENING THE LANE(S) TO TRAFFIC.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

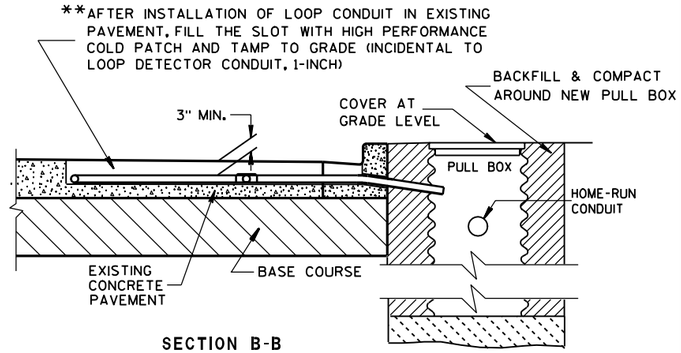
THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP CONDUIT BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

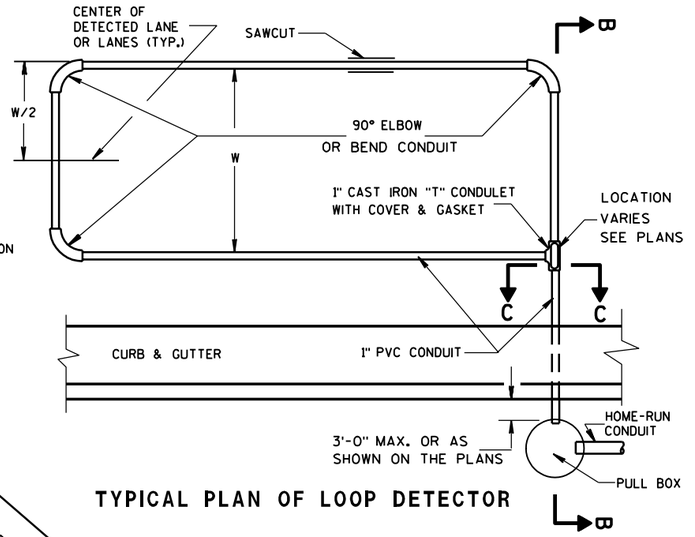
** AFTER THE HIGH PERFORMANCE COLD PATCH HAS BEEN TAMPED, SEAL THE SLOT/HIGH PERFORMANCE COLD PATCH/ PAVEMENT OPENING WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

IN THE EVENT HIGH PERFORMANCE COLD PATCH IS NOT AVAILABLE, AND FLEXIBLE TYPE EPOXY IS USED AS A LOOP SLOT FILLER, THE 2 INCH SLOT SHALL BE TOTALLY CLEAN AND DRY BEFORE ITS INSTALLATION. EPOXY USE SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER AND THE FURNISHED EPOXY SHALL BE INSTALLED AFTER WRITTEN APPROVAL BY THE PROJECT ENGINEER.

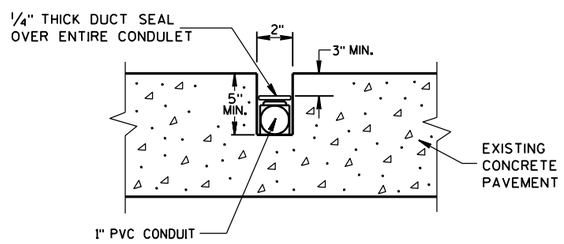


SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL

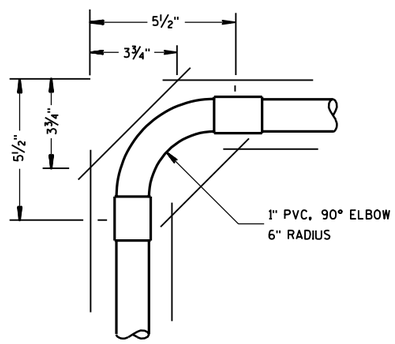


TYPICAL PLAN OF LOOP DETECTOR



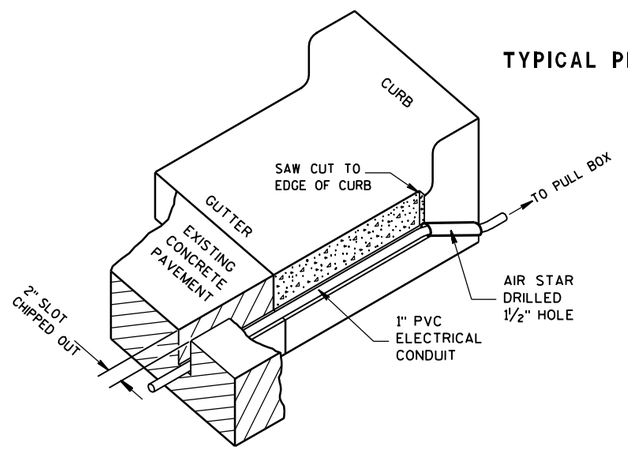
SIDE VIEW
SECTION C-C

LOOP DETECTOR SLOT DETAIL



TOP VIEW

CORNER SAW SLOT DETAIL



ISOMETRIC VIEW

TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT

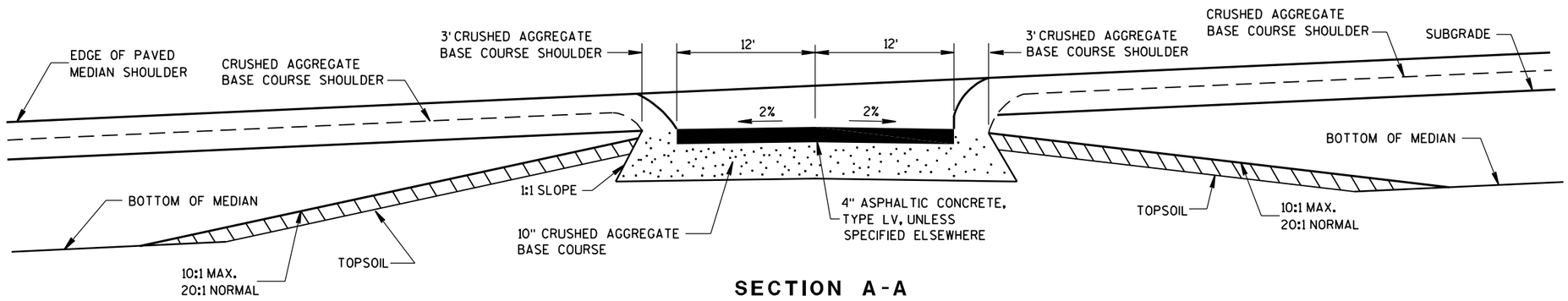
LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

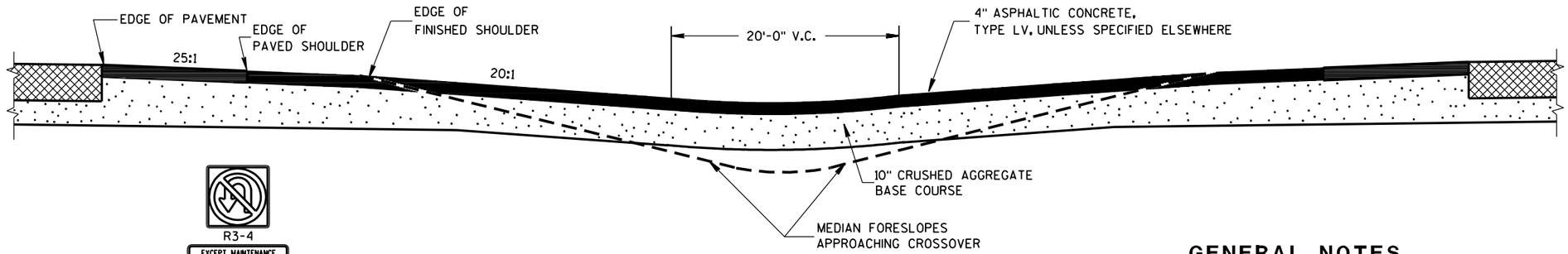
APPROVED
6/7/06 — DATE
/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

6

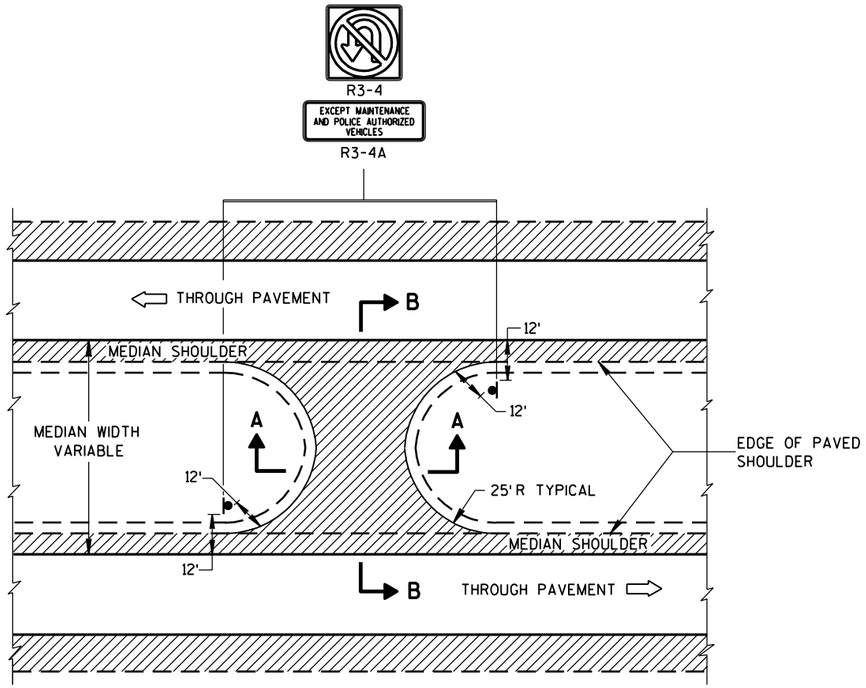
S.D.D. 9 F 12-3



SECTION A-A



SECTION B-B



PLAN VIEW

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.

INSTALL SIGNS R3-4 AND R3-4A IN LOCATION SHOWN.

SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

MAINTENANCE CROSSOVER FOR FREEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1/6/98
DATE
FHWA

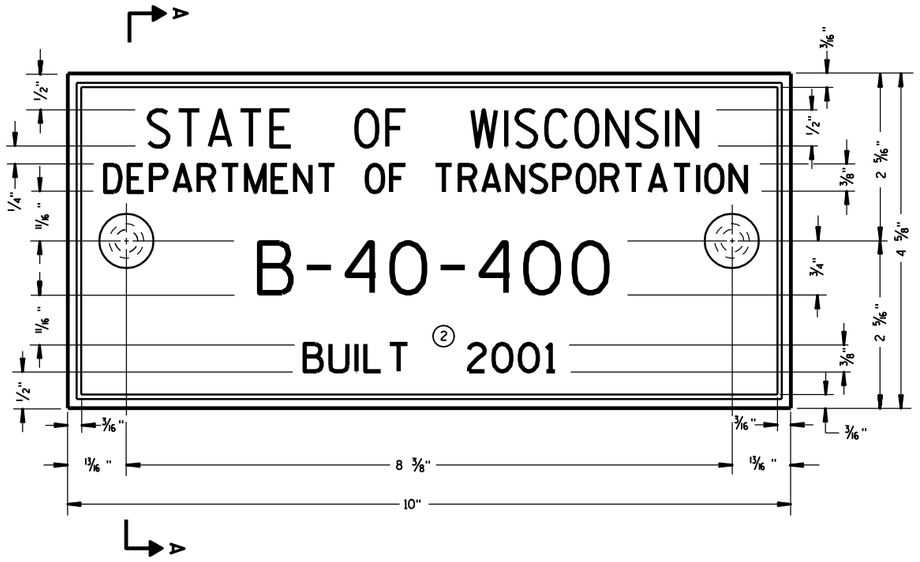
CHIEF ROADWAY DEVELOPMENT ENGINEER

6

S.D.D. 11 A 1-3

6

S.D.D. 11 A 1-3



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

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

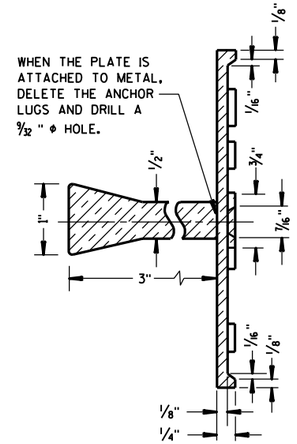
GENERAL NOTES

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

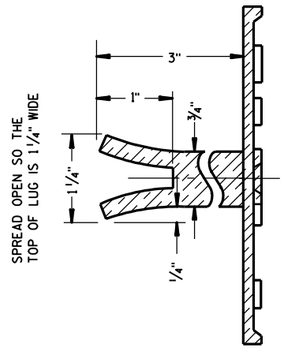
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

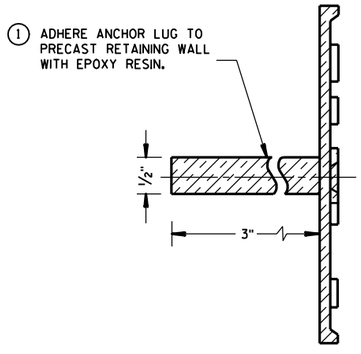
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE
(STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/26/07
DATE

/S/ Scot Becker
CHIEF STRUCTURAL DEVELOPMENT ENGINEER

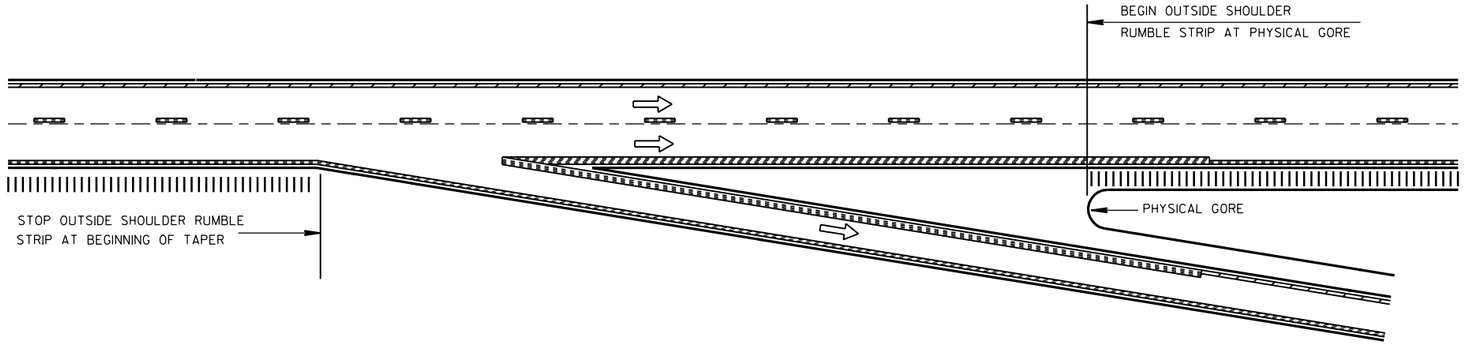
FHWA

6

S.D.D. 12 A 3-9

6

S.D.D. 12 A 3-9



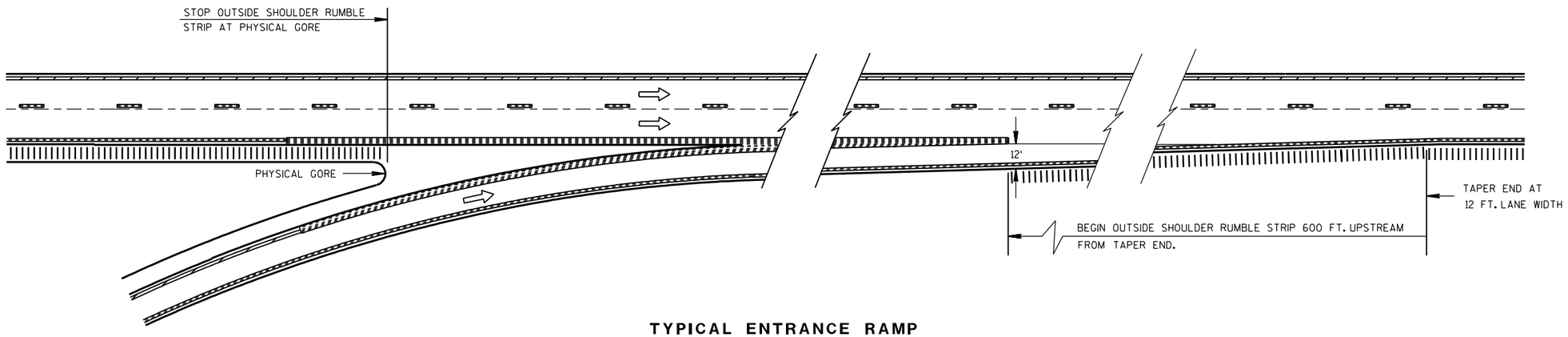
TYPICAL EXIT RAMP

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AS SHOWN.

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



TYPICAL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

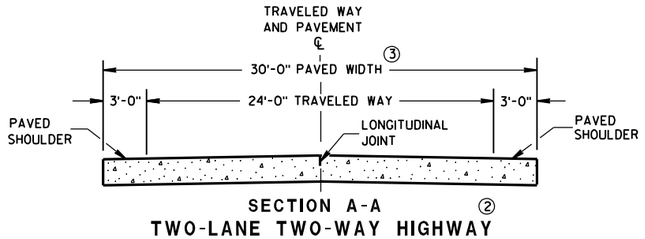
ASPHALTIC SHOULDER
RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/99
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

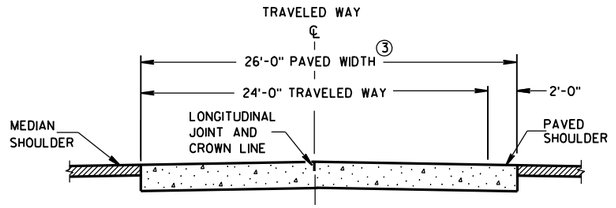
6

S.D.D. 13 A 5-3b

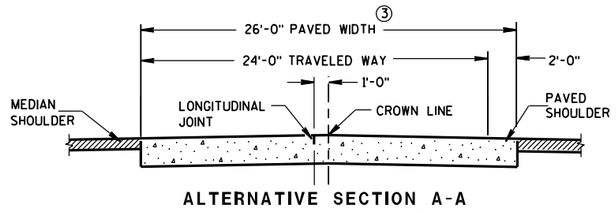


SECTION A-A

TWO-LANE TWO-WAY HIGHWAY ②



SECTION A-A



ALTERNATIVE SECTION A-A

② DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

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

DO NOT SEAL OR FILL CONTRACTION JOINTS.

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

LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 14 INCHES FROM THE EDGE OF PAVEMENT OR LONGITUDINAL JOINT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

① THE ENGINEER MAY APPROVE THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. THE CONTRACTOR MAY USE MECHANICAL DOWEL BAR INSERTERS INSTEAD OF DOWEL ASSEMBLIES.

② REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

③ MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

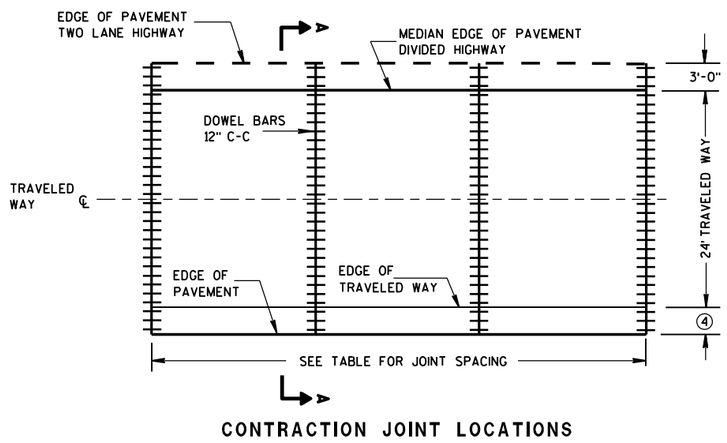
④ 2'-0" DIVIDED HIGHWAYS
3'-0" TWO-LANE TWO-WAY HIGHWAYS
SEE SECTION A-A

⑤ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

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

⑦ SPACE DOWEL BARS INSTALLED BY DRILLING 1'-3" ON CENTER. CENTER THE GROUPING OF DOWEL BARS INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.



CONTRACTION JOINT LOCATIONS

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"	1¼"	15'
9",9 ½"	1¼"	15'
10" & ABOVE	1½"	15'

RURAL DOWELED
CONCRETE PAVEMENT

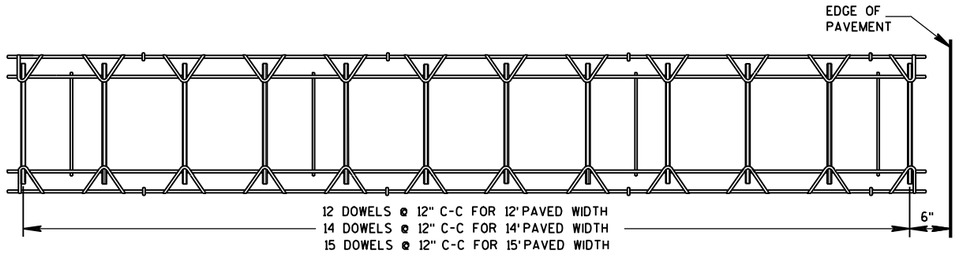
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

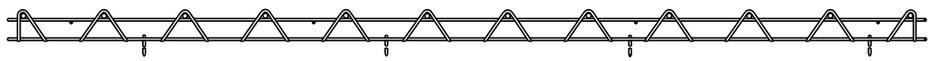
S.D.D. 13 C 11-90

6

S.D.D. 13 C 11-90



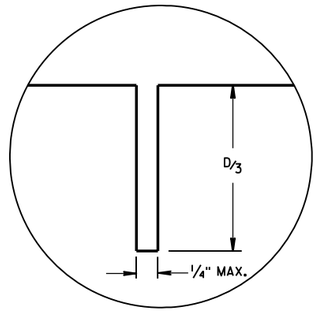
PLAN VIEW



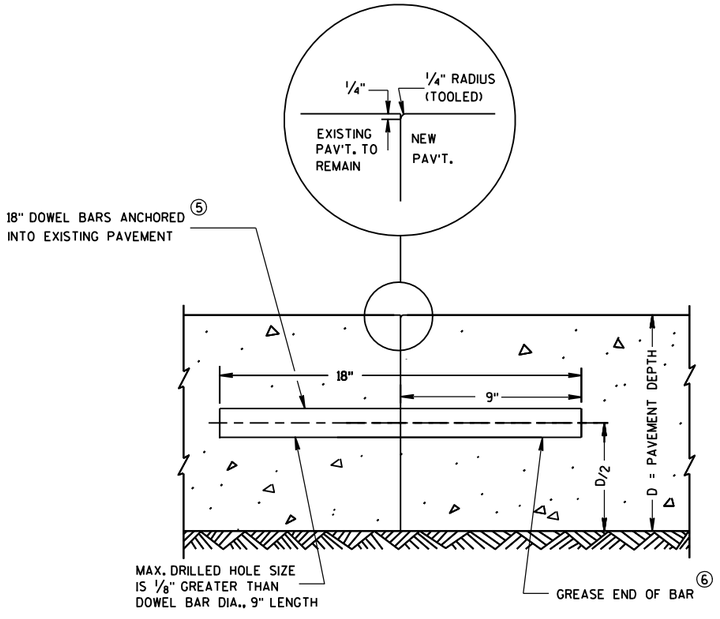
SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①

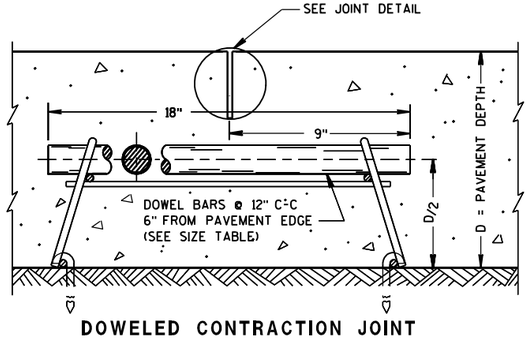


JOINT DETAIL

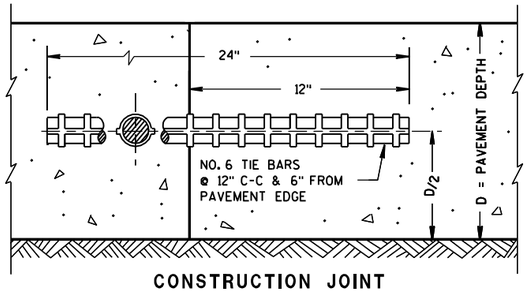


TRANSVERSE CONTRACTION JOINTS ABUTTING EXISTING PAVEMENT

⑦ DOWEL BAR DETAIL



DOWELED CONTRACTION JOINT



CONSTRUCTION JOINT

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/30/08 — DATE

/S/ Debra Bischoff — PAVEMENT POLICY & DESIGN ENGINEER

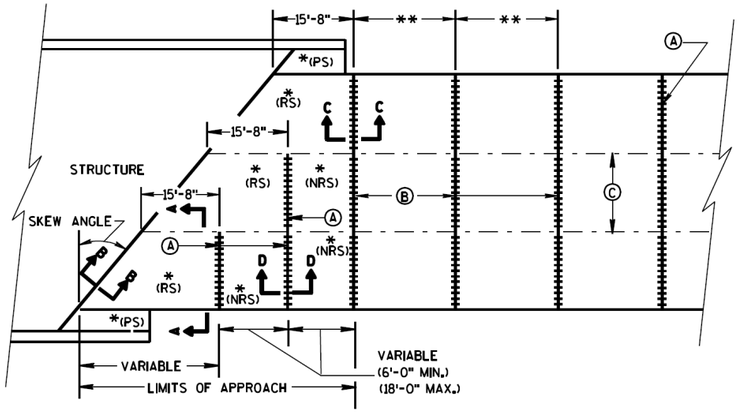
FHWA

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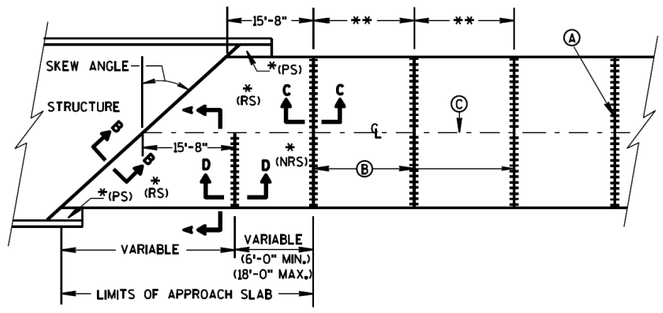
S.D.D. 13 C 11-9b

6

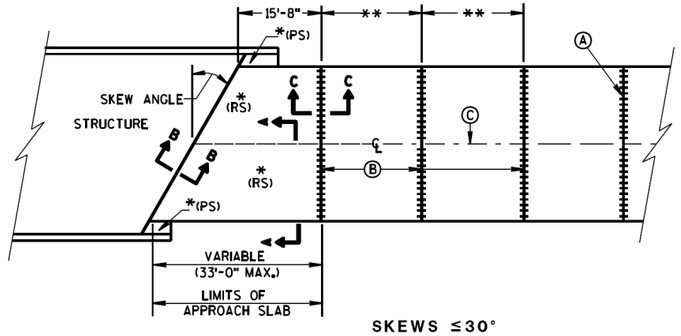
S.D.D. 13 C 11-9b



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >30°
(PAVEMENT WIDTH ≤30')



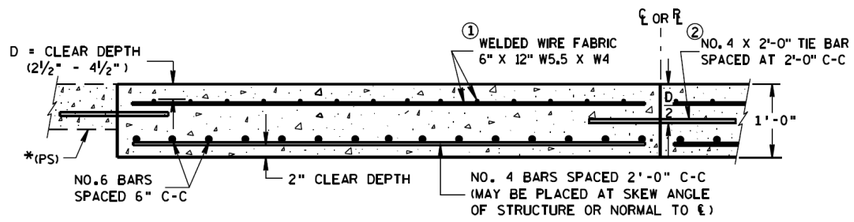
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

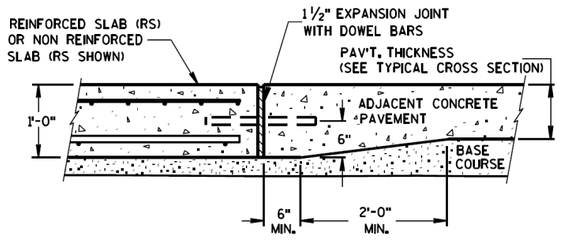
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING
(SEE SDD 13C4, SDD 13C11, & SDD 13C13)

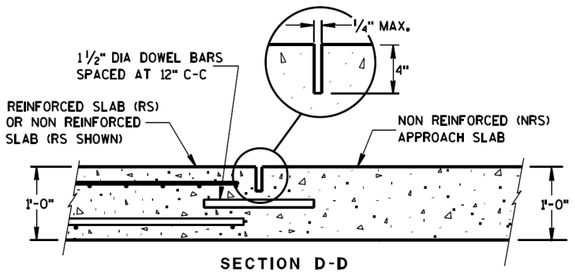
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
Ⓑ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄
Ⓒ STANDARD LONGITUDINAL JOINT AND TIE BARS.



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

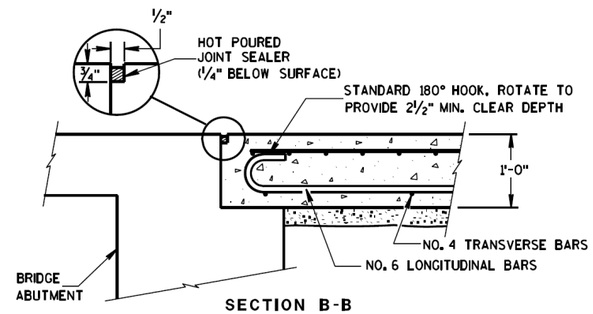
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

DOWEL BARS ARE NOT REQUIRED WHEN THE APPROACH SLAB ABUTS AN ASPHALT PAVEMENT OVER BASE COURSE.

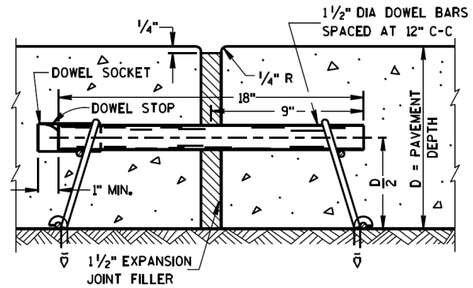
SPLICING OF NO. 6 BARS IN THE APPROACH SLAB IS PERMITTED FOR SKEWED STRUCTURES ONLY. SPLICES SHALL BE STAGGERED, WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP SHALL BE 20 INCHS.

① NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS MAY BE USED FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② TIE BARS BETWEEN REINFORCED SLABS MAY BE OMITTED WHERE SLAB REINFORCEMENT EXTEND ACCROSS THE CENTERLINE OR REFERENCE LINE.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT

Addendum #01
New Sheet 214A
October 19, 2009

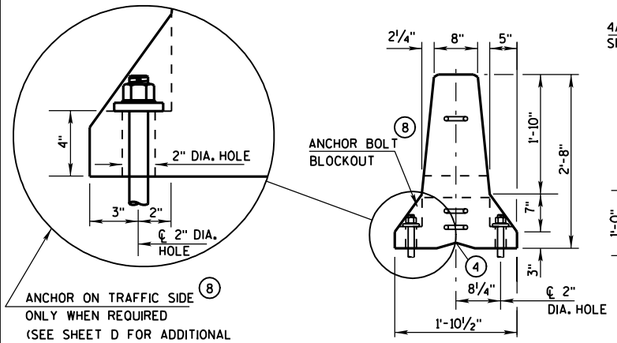
CONCRETE PAVEMENT
APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

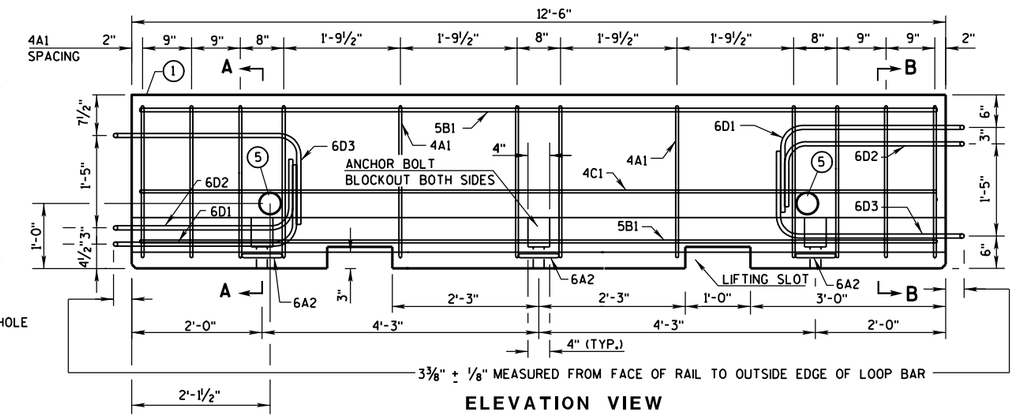
APPROVED
3/21/07 — DATE
/S/ Steven W. Krebs — CHIEF MATERIALS MANAGEMENT ENGINEER
FHWA

6

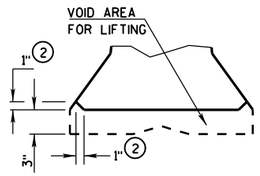
S.D.D. 13 B 2-5



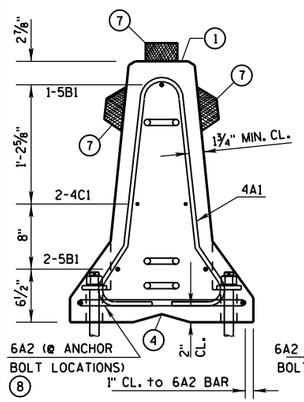
END VIEW



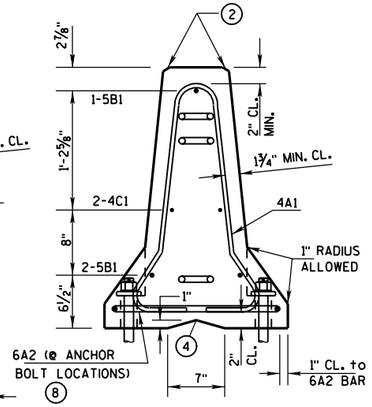
ELEVATION VIEW



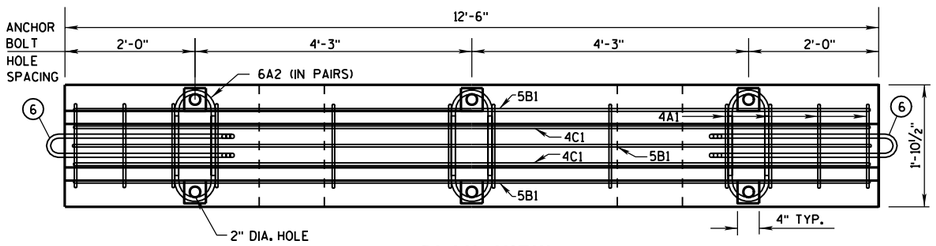
DETAIL "B"
LIFTING SLOT DETAIL



SECTION A-A
(STIRRUP PLACEMENT)

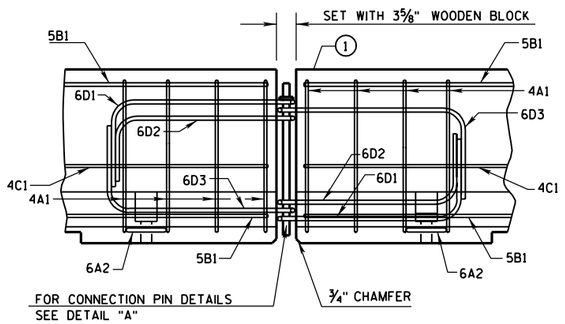


SECTION B-B
(STIRRUP PLACEMENT)

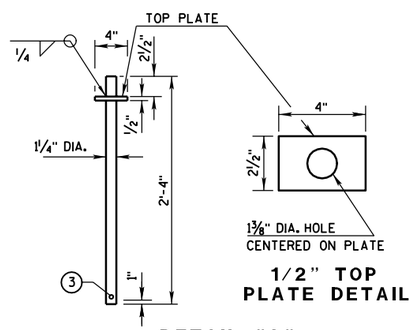


PLAN VIEW

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 14B7-11(a) THRU 14B7-11(d).

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.

THIS STANDARD DETAIL DRAWING CONSISTS OF 6 SHEETS, 14B7-11(a) THRU 14B7-11(f).

DETAILS AND REQUIREMENTS FOR THE FABRICATION AND INSTALLATION OF CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" (CBTP12.5) ARE SHOWN ON 4 SHEETS, 14B7-11(a) THRU 14B7-11(d)

DETAILS AND REQUIREMENTS FOR CONCRETE BARRIER TEMPORARY PRECAST, 10'-0" (CBTP10.0) ARE SHOWN ON 2 SHEETS, 14B7-11(e) THRU 14B7-11(f). CONCRETE BARRIER TEMPORARY PRECAST, 10'-0" (CBTP10.0) MAY BE USED UNTIL MAY 31, 2013, BUT ONLY IF ALL THE FOLLOWING CONDITIONS ARE MET:

- THE CBTP10.0 WAS MANUFACTURED BEFORE JUNE 1, 2003.
- THE CBTP10.0 MEETS ALL THE REQUIREMENTS OF STANDARD DETAIL DRAWINGS 14B7-11(e) AND 14B7-11(f).
- THE CBTP10.0 IS IN GOOD CONDITION.

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH CONCRETE BARRIER TEMPORARY PRECAST, 10'-0" (CBTP10.0) IN ANY SINGLE RUN OR INSTALLATION.

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.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY STAMPING OR FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE 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 ANCHORING CRITERIA.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

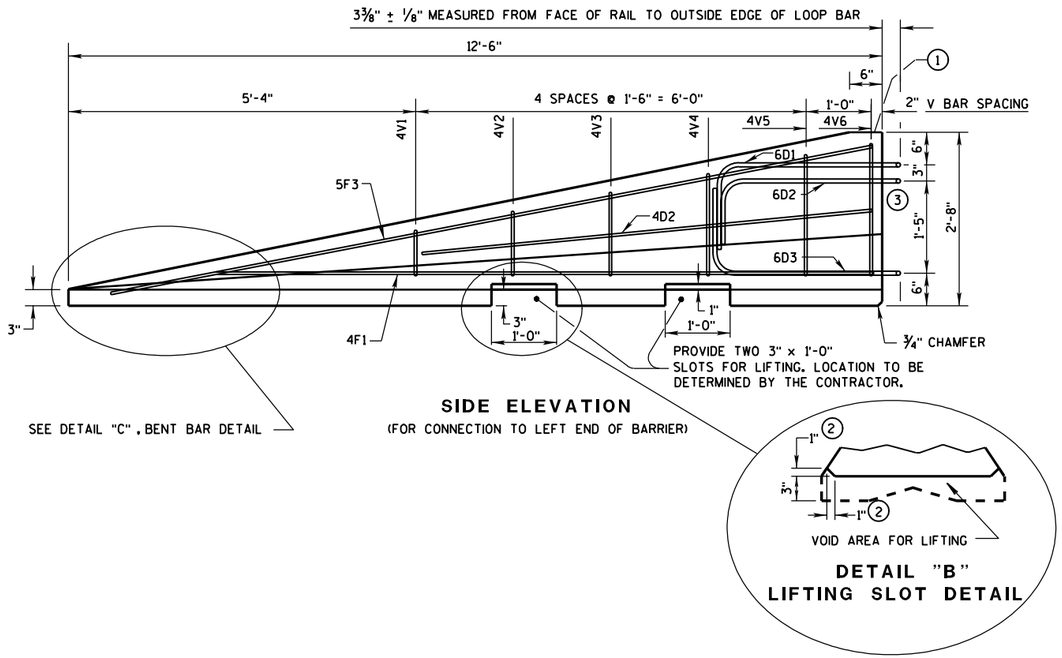
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

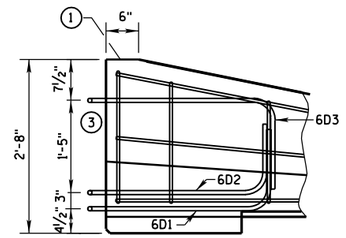
6

S.D.D. 14 B 7-11a

6

S.D.D. 14 B 7-11a





SIDE ELEVATION

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

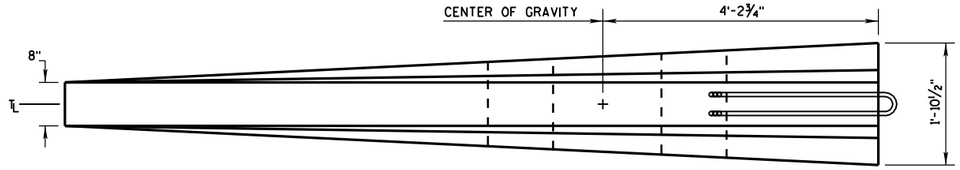
GENERAL NOTES

THE GENERAL NOTES ON SHEET 14B7-11(a) APPLY TO THIS SHEET.

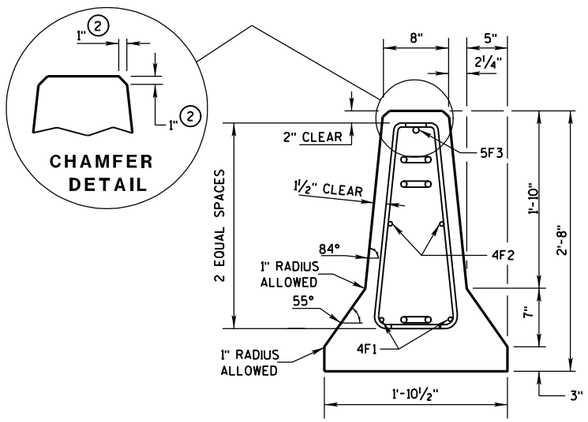
(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY STAMPING OR FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

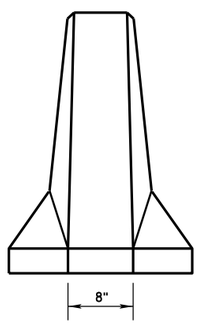
(3) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



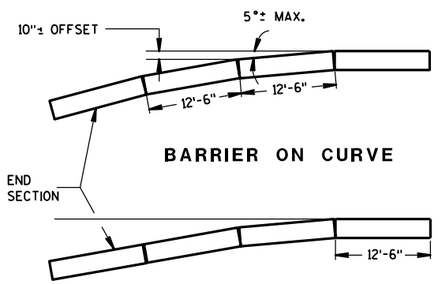
PLAN VIEW



END SECTION



FRONT ELEVATION



FLARE AT BARRIER END

POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	10:1
45 OR GREATER	15:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 7-11b

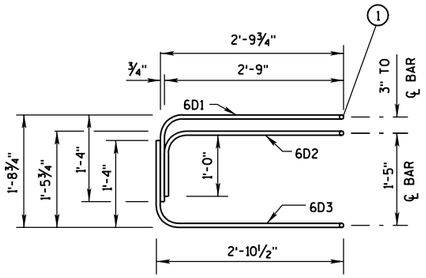
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S.D.D. 14 B 7-11b

BARRIER TAPER SECTION BILL OF MATERIALS

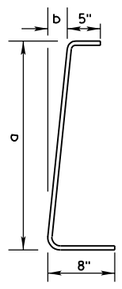
(PER 12'-6" BARRIER TAPER SECTION)

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

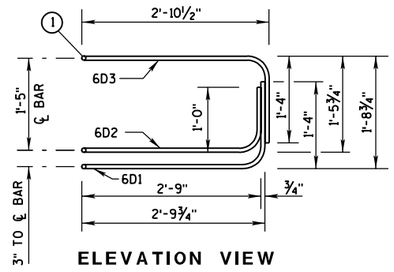
THE GENERAL NOTES ON SHEET 14B7-11(a) APPLY TO THIS SHEET.

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

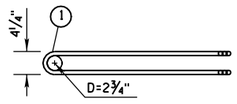
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

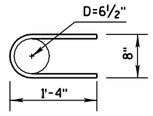
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



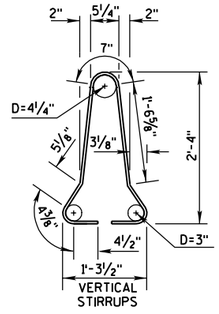
ELEVATION VIEW



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



6A2



4A1

BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

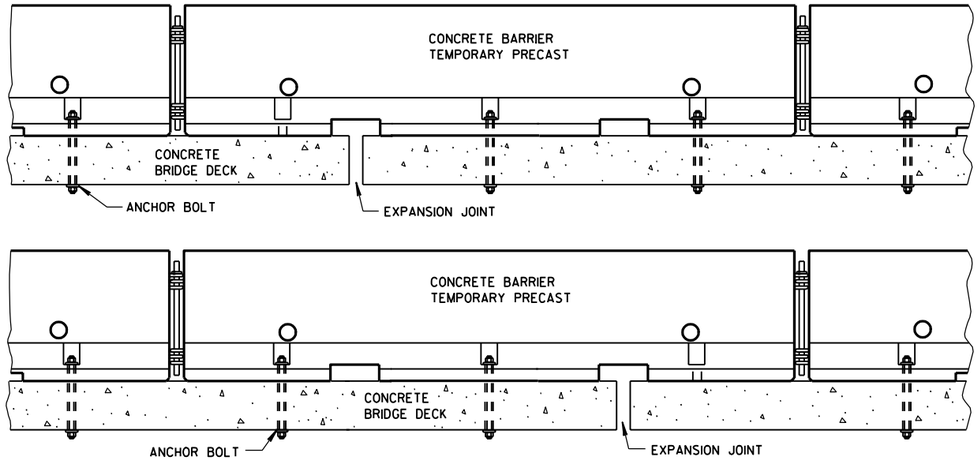
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 7-11c

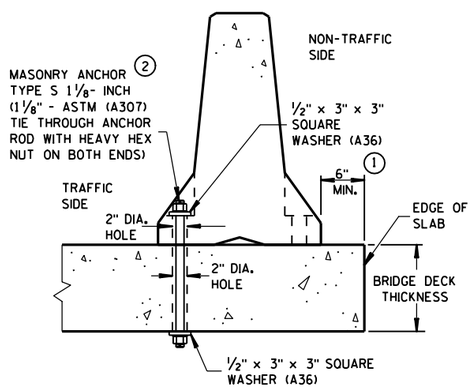
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S.D.D. 14 B 7-11c



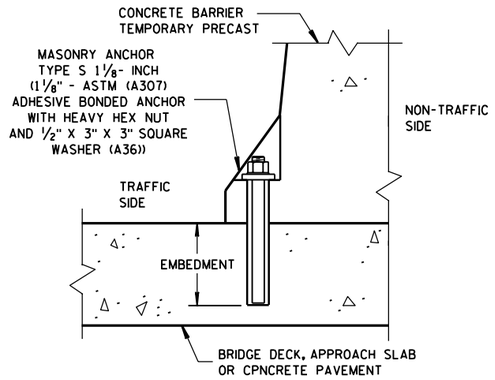
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(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.)



THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE BONDED ANCHOR (2) INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

THE GENERAL NOTES ON SHEET 14B7-11(a) APPLY TO THIS SHEET.

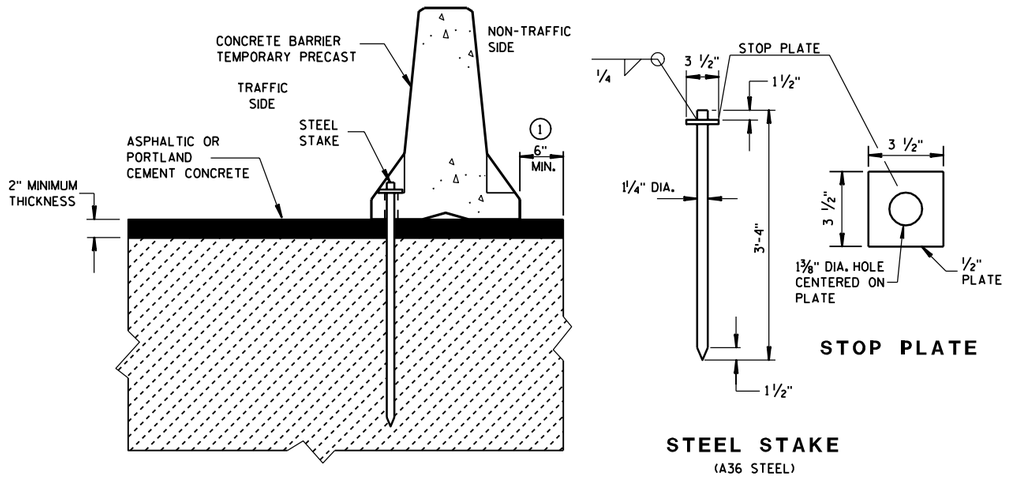
(1) CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

(2) ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALLANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR EPOXY MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.

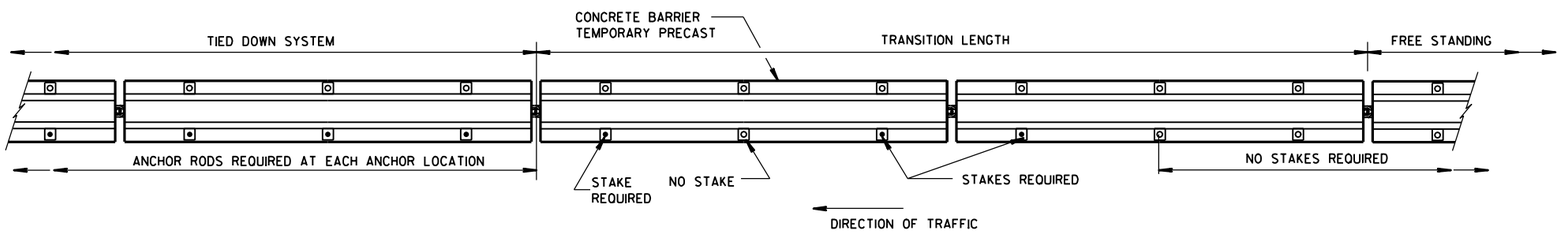


STEEL STAKE

(A36 STEEL)

STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



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 TRANSPORTATION

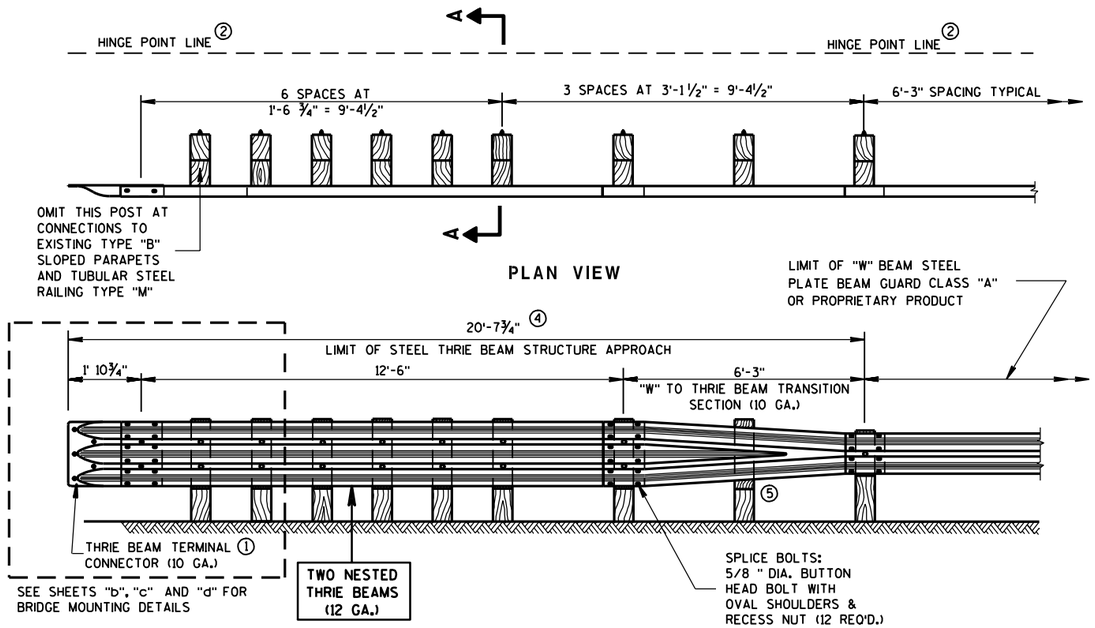
APPROVED
10-24-06 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARD DEVELOPMENT ENGINEER
FHWA

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S.D.D. 14 B 7-11d

6

S.D.D. 14 B 7-11d



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.

FURNISH AND CONSTRUCT THRIE BEAM STRUCTURAL APPROACH ACCORDING TO THE REQUIREMENTS OF SECTION 614 OF THE STANDARD SPECIFICATIONS. THRIE BEAM SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M180, CLASS "A", TYPE 2.

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

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.

IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY. (SEE SDD 14 B 15-4a).

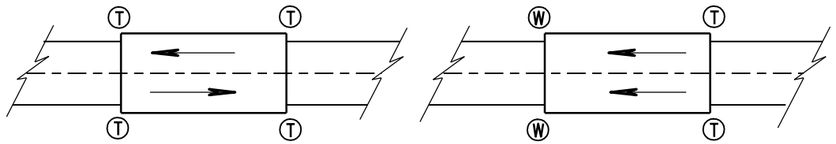
① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② MINIMUM EMBEDMENT SHALL BE 4'-0". WHERE EXISTING CONDITIONS DO NOT PERMIT THE APPROPRIATE EARTHWORK SHOWN ON THE PLAN TYPICAL SECTIONS OR DETAILS, THE ENGINEER MAY ALLOW THE REDUCTION OR ELIMINATION OF THE 2 FOOT DISTANCE TO THE HINGE POINT. OTHERWISE BUILD AS THE PLAN SHOWS OR AS THE ENGINEER DIRECTS. IF THE 2 FOOT DISTANCE TO THE HINGE POINT IS REDUCED OR ELIMINATED, INCREASE THE POST EMBEDMENT DEPTH TO 4'-6" OR MORE.

③ BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F-1554, GRADE 55. NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-563 DH.

④ ALL WOOD POSTS MUST BE 6" X 8" AND AT LEAST 7'-0" LONG.

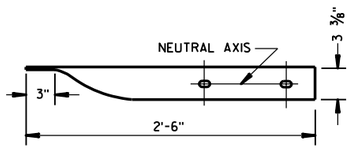
⑤ DO NOT ATTACH POST IN "W" TO THRIE BEAM TRANSITION SECTION.

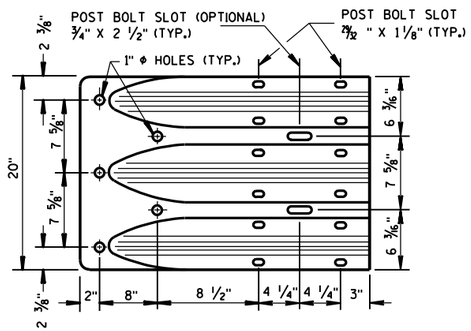


Ⓣ THRIE BEAM CONNECTION

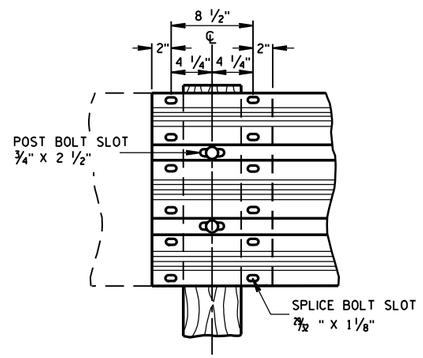
Ⓦ W-BEAM CONNECTION WHEN REQUIRED

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

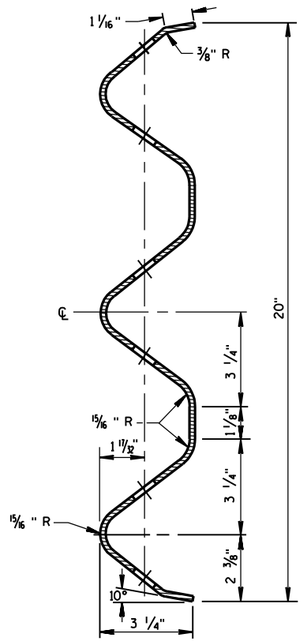




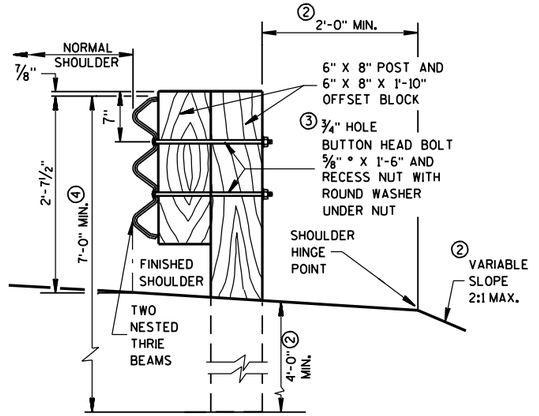
THRIE BEAM TERMINAL CONNECTOR



THRIE BEAM SPLICE



SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION A-A

STEEL THRIE BEAM STRUCTURE APPROACH

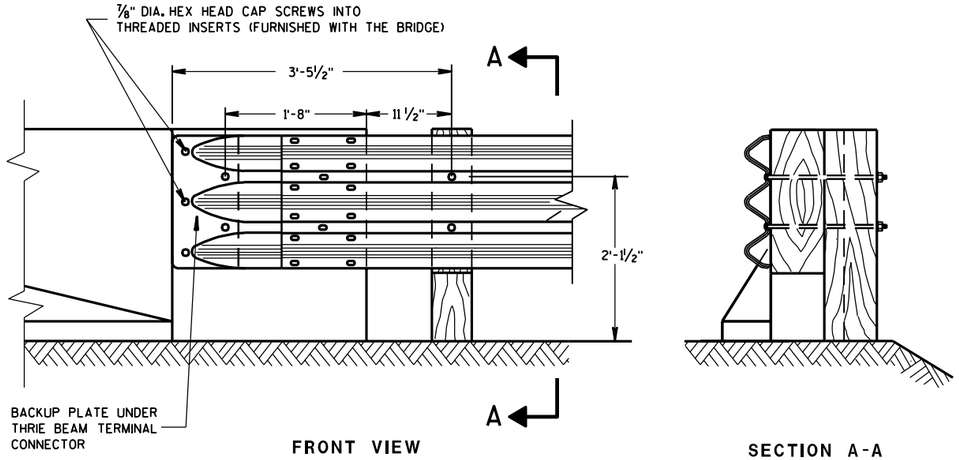
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 20-6a

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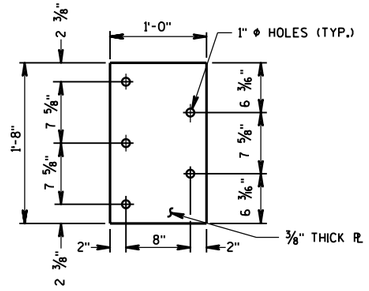
S.D.D. 14 B 20-6a



FRONT VIEW

SECTION A-A

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



② BACKUP PLATE DETAIL

(USE ONLY AT BRIDGE PARAPET CONNECTIONS)

GENERAL NOTES

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

BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

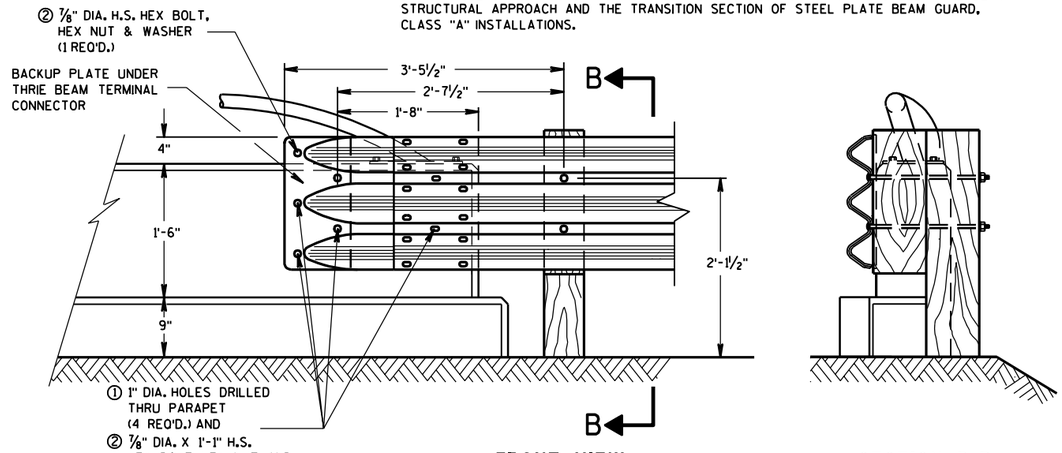
① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND THE BACKUP PLATE AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

② EACH BOLT AT THE BACK FACE OF THE PARAPET REQUIRES A HARDENED ROUND STEEL WASHER WITH A 2 1/4" O.D. X 5/32 " THICK.

③ 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".

④ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

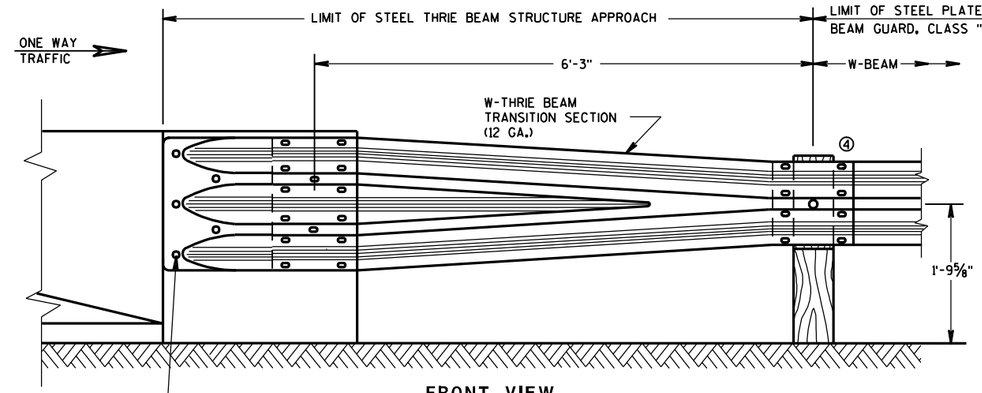
DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.



FRONT VIEW

SECTION B-B

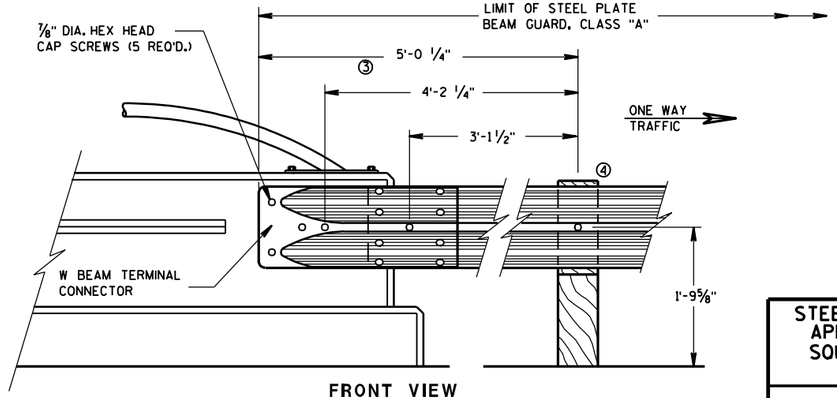
THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END AND VERTICAL FACED PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-12-04
DATE

CHIEF ROADWAY DEVELOPMENT ENGINEER

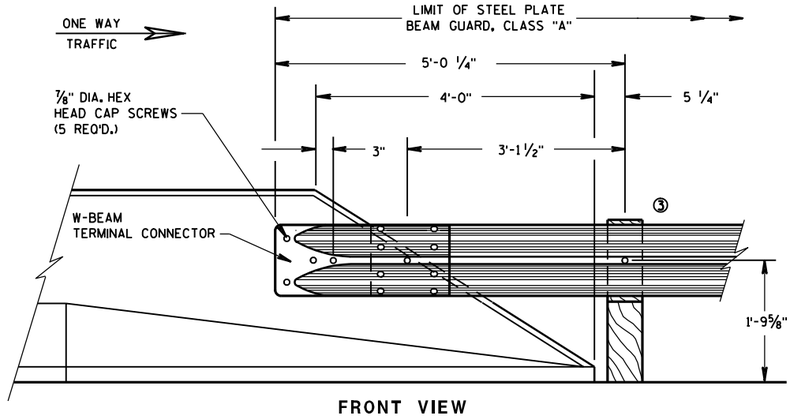
FHWA

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S.D.D. 14 B 20-6b

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S.D.D. 14 B 20-6b



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

GENERAL NOTES

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

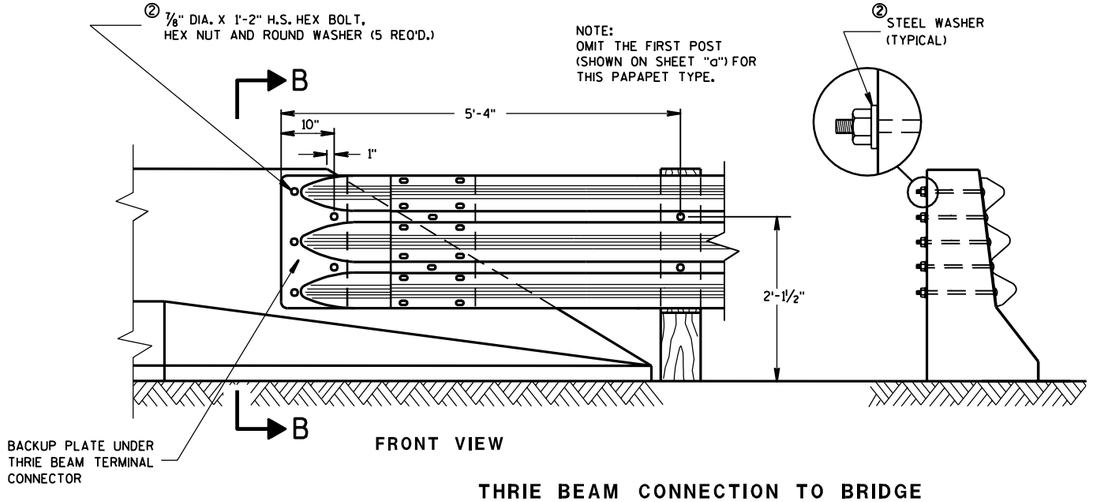
BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND THE BACKUP PLATE AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

② EACH BOLT AT THE BACK FACE OF THE PARAPET REQUIRES A HARDENED ROUND STEEL WASHER WITH A 2 1/4" O.D. X 5/32 " THICK.

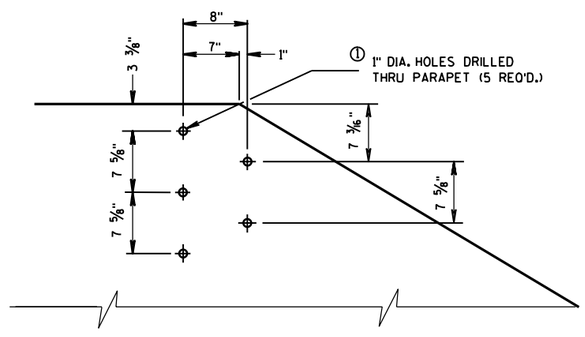
③ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

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

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS



DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SLOPED END PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-12-04
DATE

CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 14 B 20-6c

6

S.D.D. 14 B 20-6c

BILL OF MATERIALS

NOTE NO.	QTY.	DESCRIPTION
①	4	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
②	4	STEEL TUBE: TS 8" X 6" X 0.188", 4'-6" LONG
③	4	SOIL PLATE: 2'-0" X 1'-6" X ¼"
④	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	1	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
⑦	1	BEARING PLATE
⑧	1	BCT CABLE ASSEMBLY
⑨	1	CABLE ANCHOR BOX
⑩	1	STRUT & YOKE
⑪	1	STEEL PLATE BEAM, END PANEL 12 GA. 13'-6½" LONG FOR SKT-350, ET-2000 AND ET-2000 PLUS
⑫	3	STEEL PLATE BEAM: 12 GA. 13'-6½"
⑬	1	ET-2000/ET-2000 PLUS GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
⑭	1	REFLECTIVE SHEETING: 18" X 18"

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS. IF NONE ARE AVAILABLE, INSTALL ⅝" ø X 1'-6" BUTTON HEAD BOLTS AT ALL POSTS EXCEPT FOR POST 1.

(A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), 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) THE 13 SLOT FIRST RAIL PANEL MAY BE USED IN LIEU OF THE 3 SLOT RAIL PANEL ON SKT-350 ONLY.

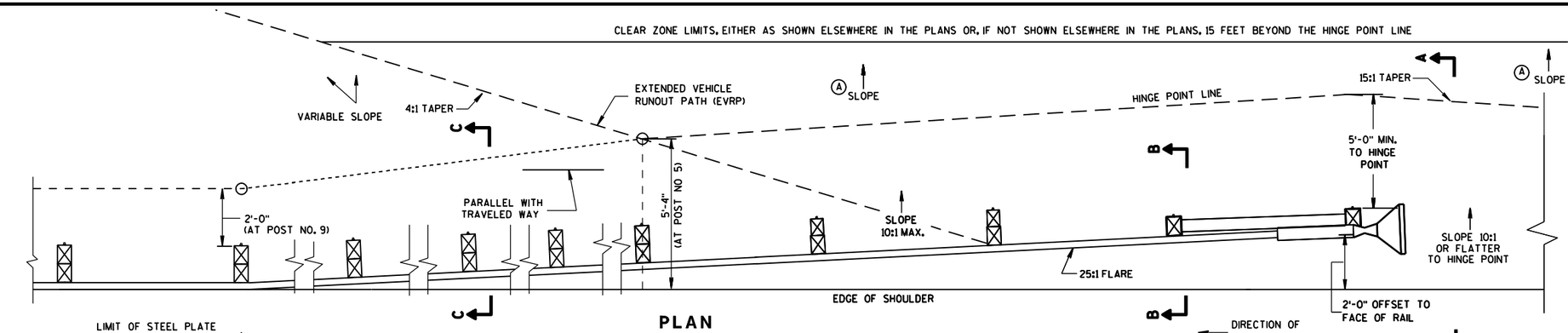
(D) THE TOP OF THE STEEL TUBE ON POSTS 1 THROUGH 4 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

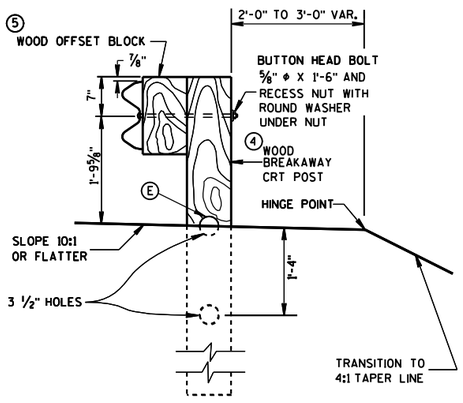
(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 5 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

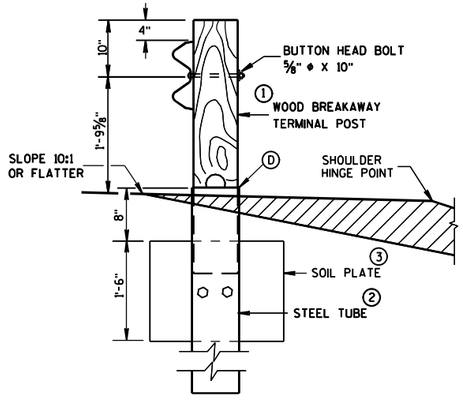
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.



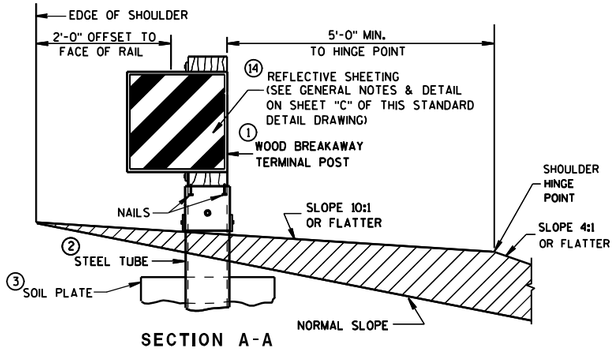


SECTION C-C
TYPICAL AT POST NOS. 6, 8

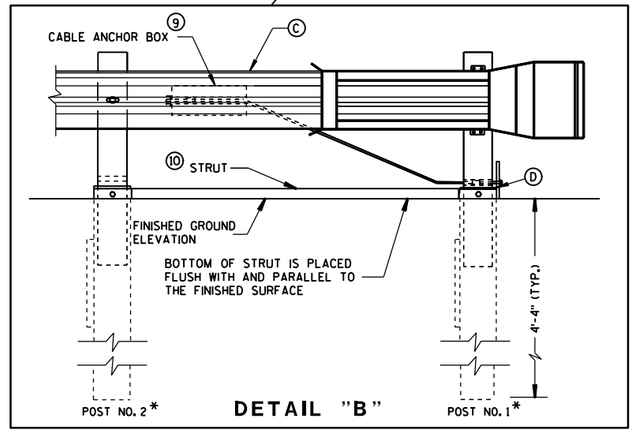


SECTION B-B
TYPICAL AT POST NO. 2*

DETAIL "A"



SECTION A-A
TYPICAL AT POST NO. 1*

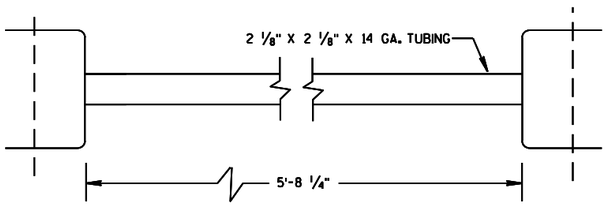


DETAIL "B"

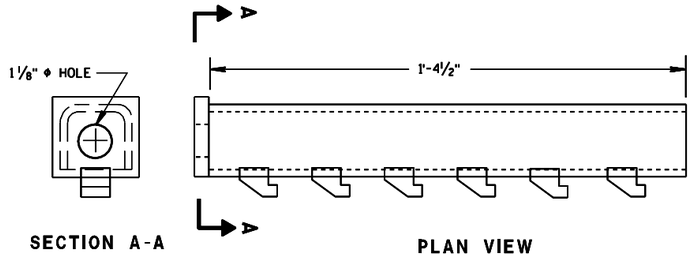
STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

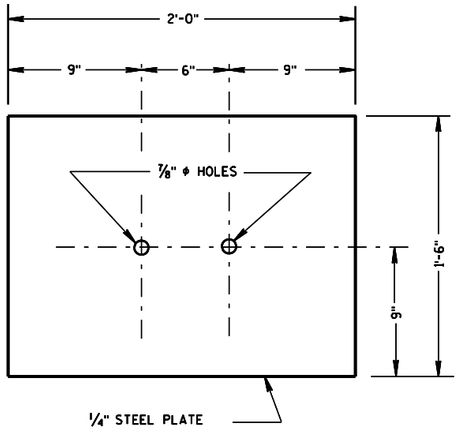
S.D.D. 14 B 24-5a



STRUT DETAIL (SKT-350)

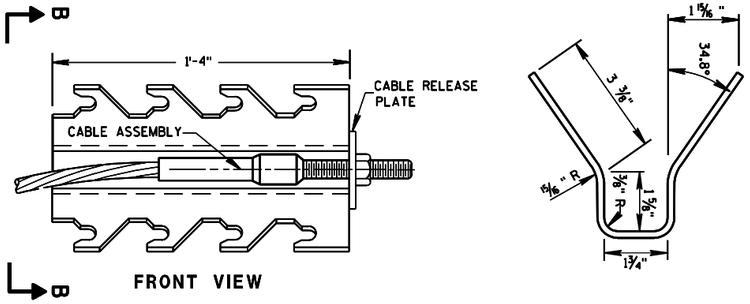


CABLE ANCHOR BOX (ET-2000/ET-2000 PLUS)



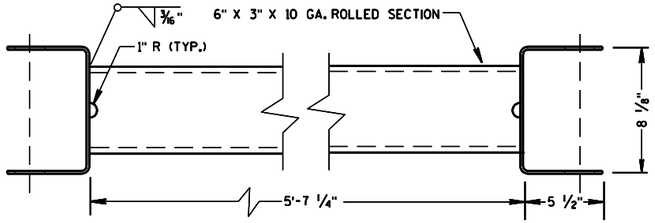
SOIL PLATE

(SKT-350, ET-2000/ET-2000 PLUS)



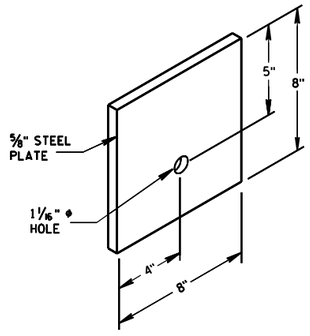
CABLE ANCHOR BOX (SKT-350)

(SKT-350)



STRUT DETAIL (ET-2000/ET-2000 PLUS)

(ET-2000/ET-2000 PLUS)



STEEL BEARING PLATE

(SKT-350, ET-2000/ET-2000 PLUS)

6

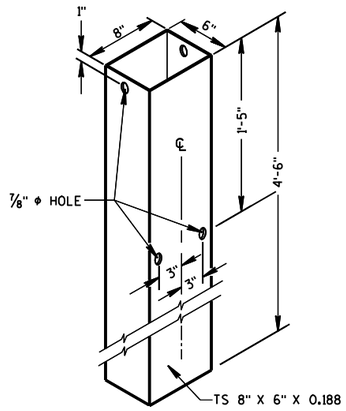
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S.D.D. 14 B 24-5b

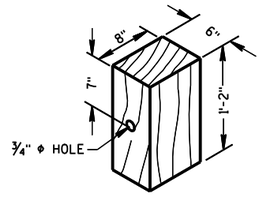
S.D.D. 14 B 24-5b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

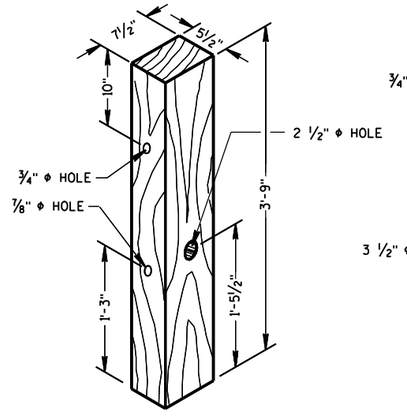
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



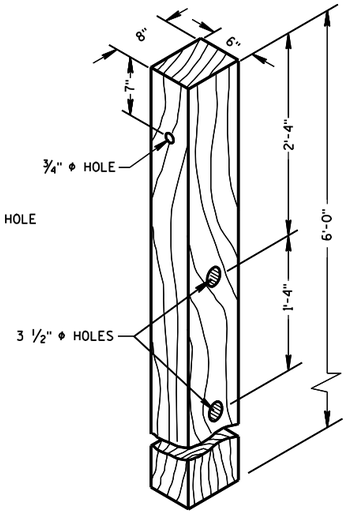
STEEL TUBE
(POSTS NO. 1-4
THE STEEL TUBE SHALL CONFORM
TO REQUIREMENTS OF ASTM A500



WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2

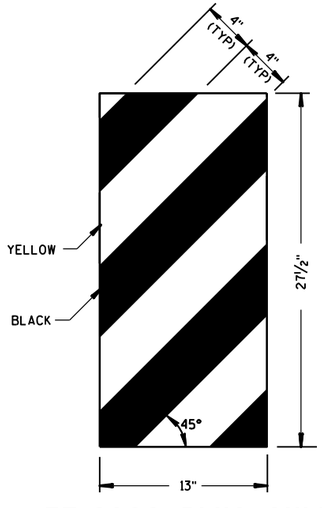


TERMINAL POST
(POSTS NO. 1-4

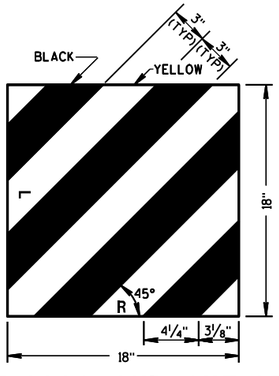


CRT POST
(POSTS NO'S 5-8

WOOD BREAKAWAY POSTS



ET-2000 PLUS ONLY



ET-2000 AND SKT-350

REFLECTIVE SHEETING DETAILS

GENERAL NOTES

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

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL SHALL BE EITHER THE EXTRUDER TERMINAL (ET-2000), OR THE SEQUENTIAL KINKING TERMINAL (SKT-350). THE CONTRACTOR SHALL NOT INTERMIX PROPRIATERY PRODUCT MATERIALS.

STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, WHICH SHALL INCLUDE HARDWARE, STEEL PLATE BEAM GUARD, POSTS, REFLECTIVE SHEETING AND INSTALLATION AS SHOWN.

REFLECTIVE SHEETING - SHALL CONFORM TO ASTM SPECIFICATION D4956-94, REFLECTIVE SHEETING TYPE III, BACKING CLASS 4, PERFORMANCE REQUIREMENT TYPE III. THE MESSAGE AND LINES SHALL BE APPLIED TO THE SIGNS BY THE SILK SCREEN STENCIL PROCESS USING A BLACK OR DARK STENCIL PASTE AS A TYPE APPROVED BY THE MANUFACTURER OF THE FACE MATERIAL TO WHICH IT IS TO BE APPLIED. MESSAGE UNITS CUT FROM NONREFLECTIVE SHEETING AND APPLIED TO THE SIGN FACE ARE NOT ACCEPTABLE. AFTER THE APPROACH END OF THE STEEL PLATE BEAM GUARD INSTALLATION IS COMPLETE, CLEAN THE AREA WHERE THE REFLECTIVE SHEETING WILL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATION. ONCE CLEAN, APPLY REFLECTIVE SHEETING DIRECTLY TO THE STEEL PLATE BEAM GUARD AS SHOWN. THE CONTRACTOR SHALL TURN OVER THE MANUFACTURERS WARRANTY FOR THE REFLECTIVE SHEETING TO THE DEPARTMENT FOR POTENTIAL DEALING WITH THE MANUFACTURER. PAYMENT OF REFLECTIVE SHEETING IS INCIDENTAL TO STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL.

WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11-14-08
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

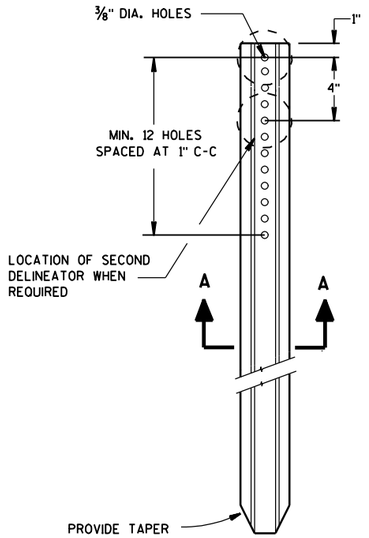
FHWA

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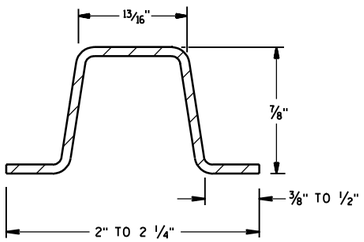
S.D.D. 14 B 24-5c

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S.D.D. 14 B 24-5c

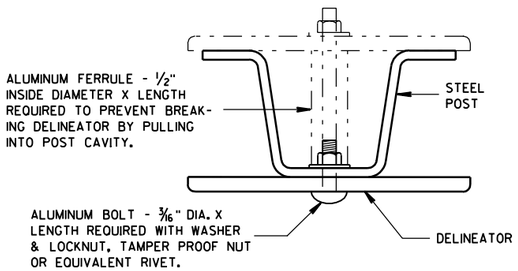


DELINEATOR POST

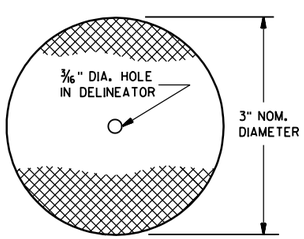


SECTION A-A

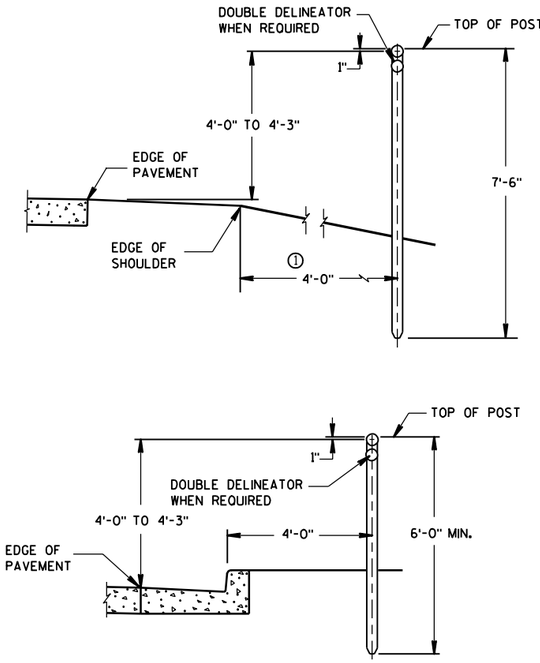
WEIGHT 1.12 LBS PER FT. ± 0.1 LB.



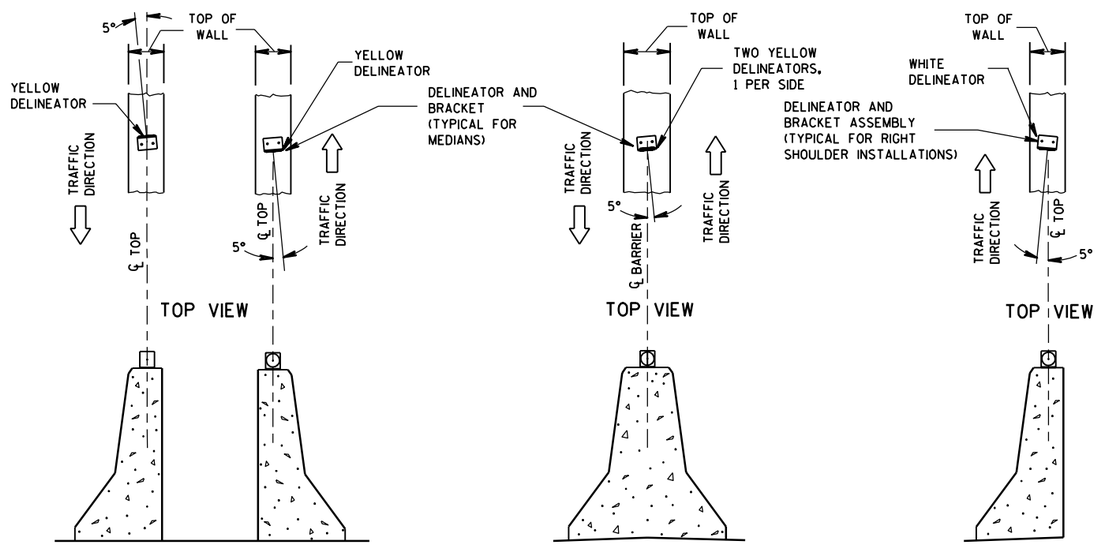
MOUNTING DETAIL FOR DELINEATOR



DELINEATOR



TYPICAL INSTALLATIONS OF DELINEATOR POSTS



DOUBLE BARRIERS IN MEDIAN

MEDIAN BARRIER

BARRIER LOCATED TO RT. OF TRAFFIC FLOW

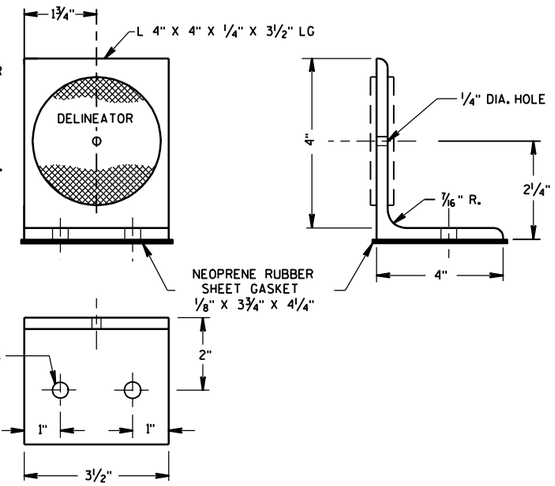
LOCATION AND AIMING DETAILS FOR DELINEATORS MOUNTED ON CONCRETE BARRIERS

GENERAL NOTES

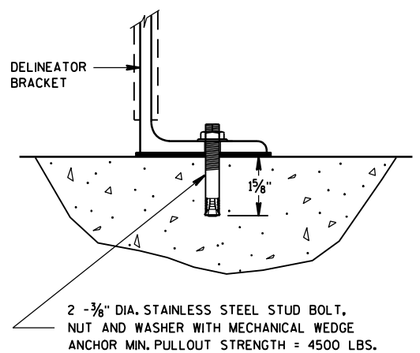
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.

NOTE:
FASTEN DELINEATOR TO BRACKET WITH BOLTS 3/16" DIA. X LENGTH REQ'D. WITH WASHER AND LOCKNUT OR EQUIVALENT RIVETS.



DELINEATOR BRACKET



DELINEATOR BRACKET MOUNTING DETAIL

DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

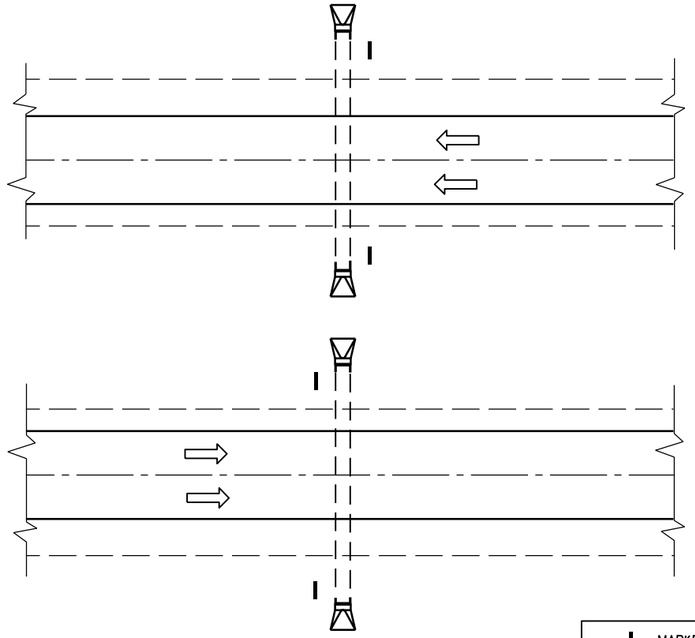
APPROVED
2/19/04
DATE
Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN
FHWA

6

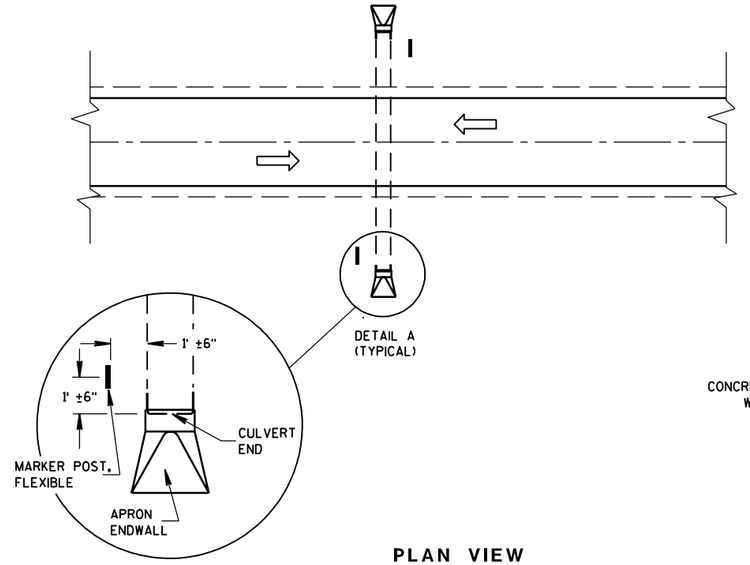
S.D.D. 15 A 2-6

6

S.D.D. 15 A 2-6



PLAN VIEW
DIVIDED HIGHWAY



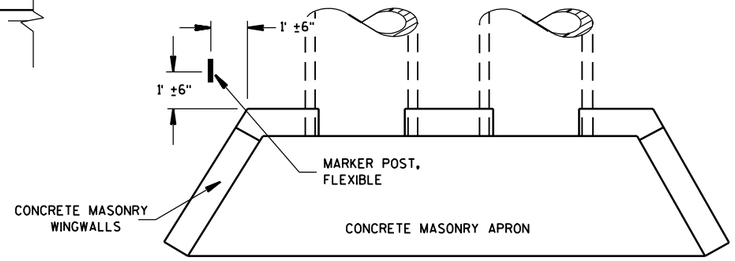
PLAN VIEW
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE
DIRECTION OF TRAFFIC FLOW

FLEXIBLE MARKER POST LOCATION

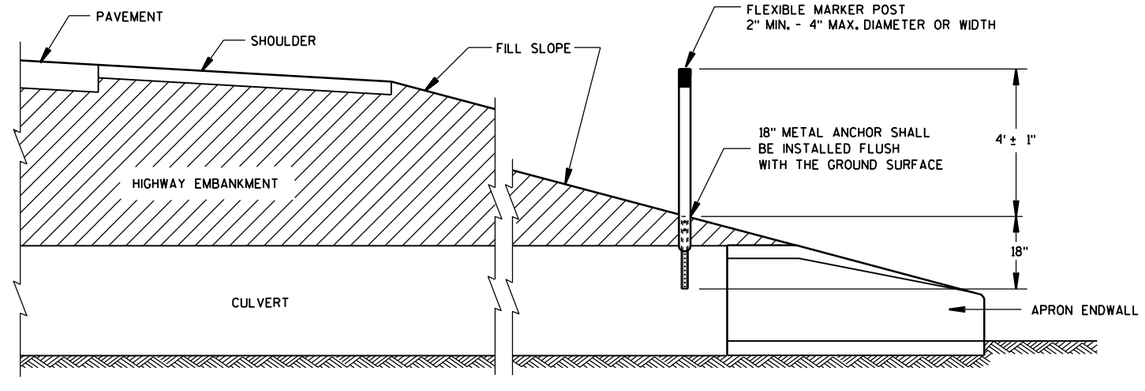
GENERAL NOTES

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.

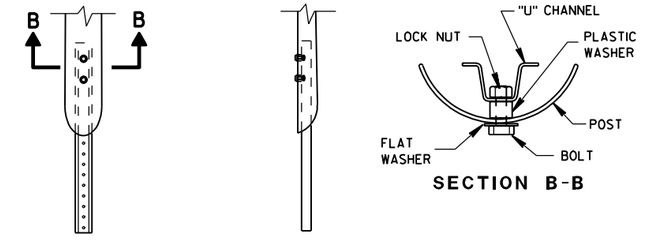


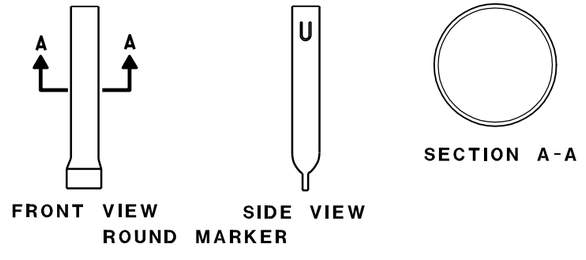
PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

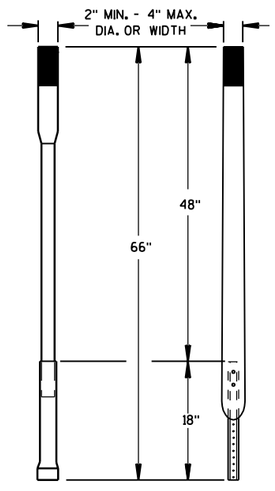


CROSS SECTION
FLEXIBLE MARKER POST





FLEXIBLE MARKER POST ANCHORS



ALTERNATE 1 ALTERNATE 2

FLEXIBLE MARKER POST

MARKER POST, FLEXIBLE, FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/98
DATE

Roy L. Amundson
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

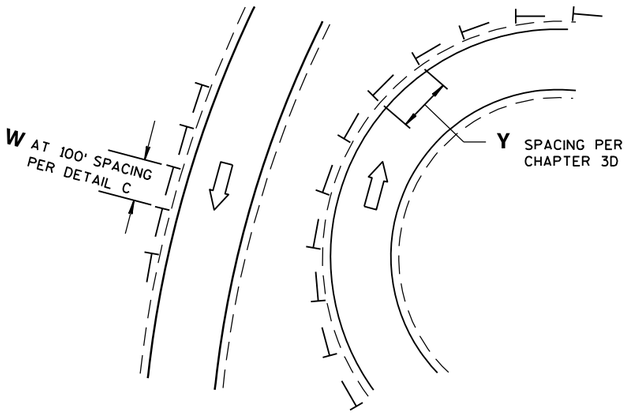
S.D.D. 15 A 3-1

6

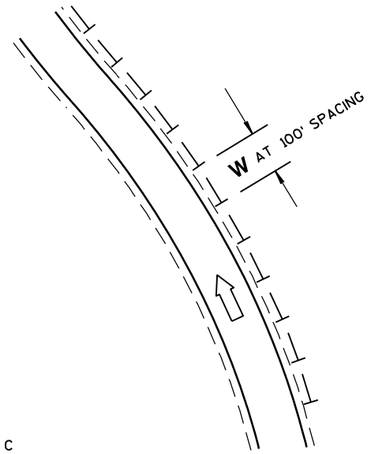
S.D.D. 15 A 3-1

GENERAL NOTES

* USE DOUBLE DELINEATOR ALONG ACCELERATION-DECELERATION LANES AND TAPERS. USE SINGLE DELINEATOR WHEN RAMP PAVEMENT IS FULL WIDTH.



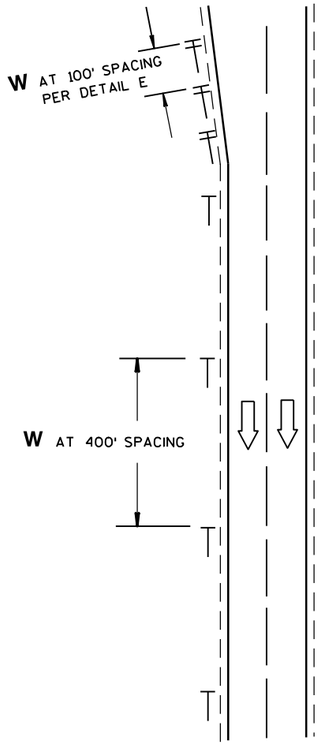
DETAIL A
DELINEATOR LAYOUT AT CURVED RAMP



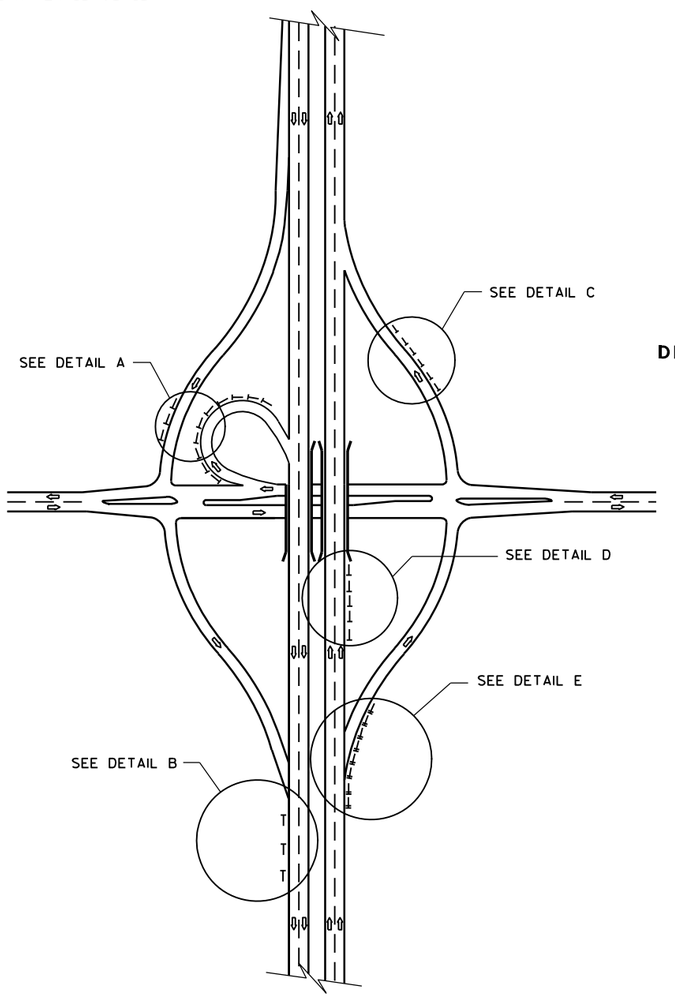
DETAIL C
DELINEATOR LAYOUT ALONG RAMP

LEGEND

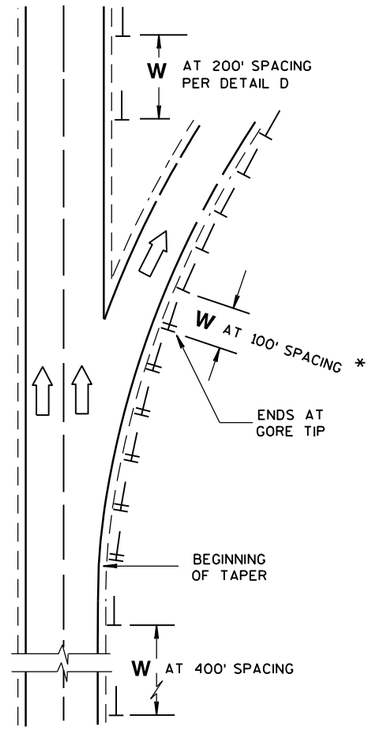
- DIRECTION OF TRAFFIC FLOW
- SINGLE DELINEATOR
- DOUBLE DELINEATOR
- W — WHITE
- Y — YELLOW



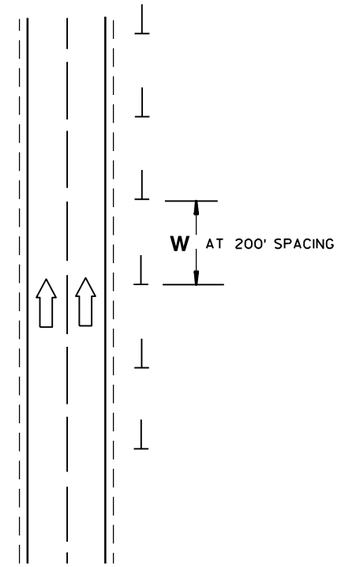
DETAIL B
DELINEATOR LAYOUT ALONG MAINLINE



DELINEATOR LAYOUT



DETAIL E
DELINEATOR LAYOUT FOR ACCELERATION - DECELERATION LANES AND TAPERS AT RAMPS



DETAIL D
DELINEATOR LAYOUT BETWEEN INTERCHANGE RAMPS

DELINEATOR LAYOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

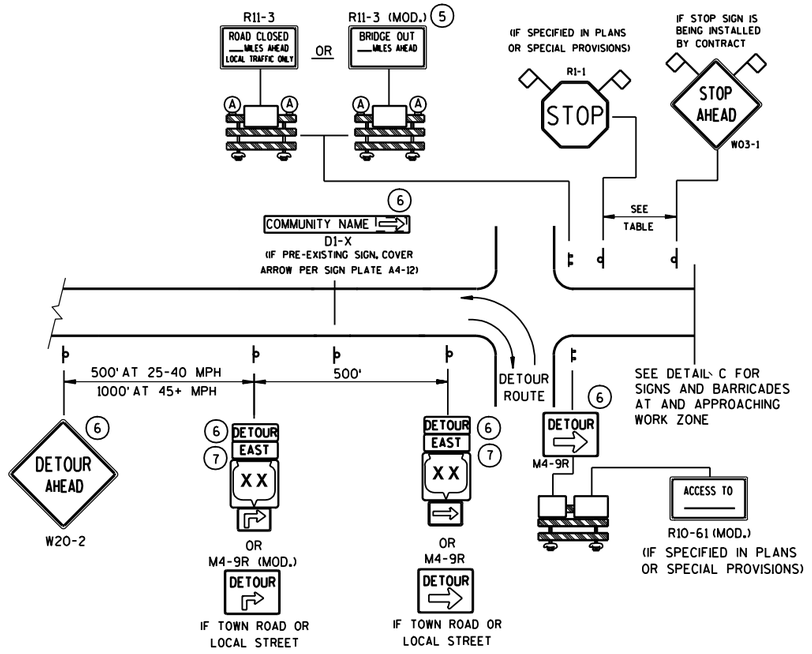
APPROVED
2/5/09 DATE
/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN
FHWA

6

S.D.D. 15 A 6-2

6

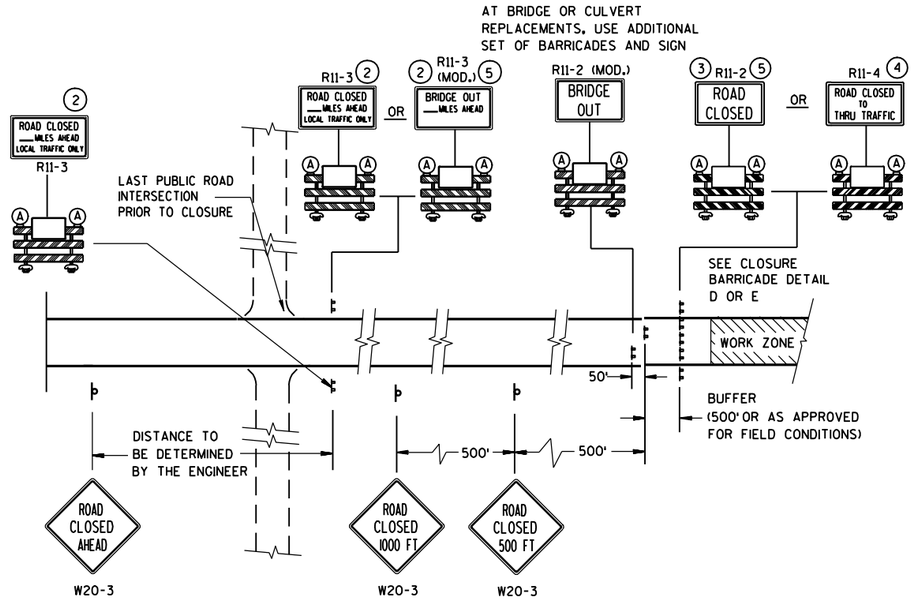
S.D.D. 15 A 6-2



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

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

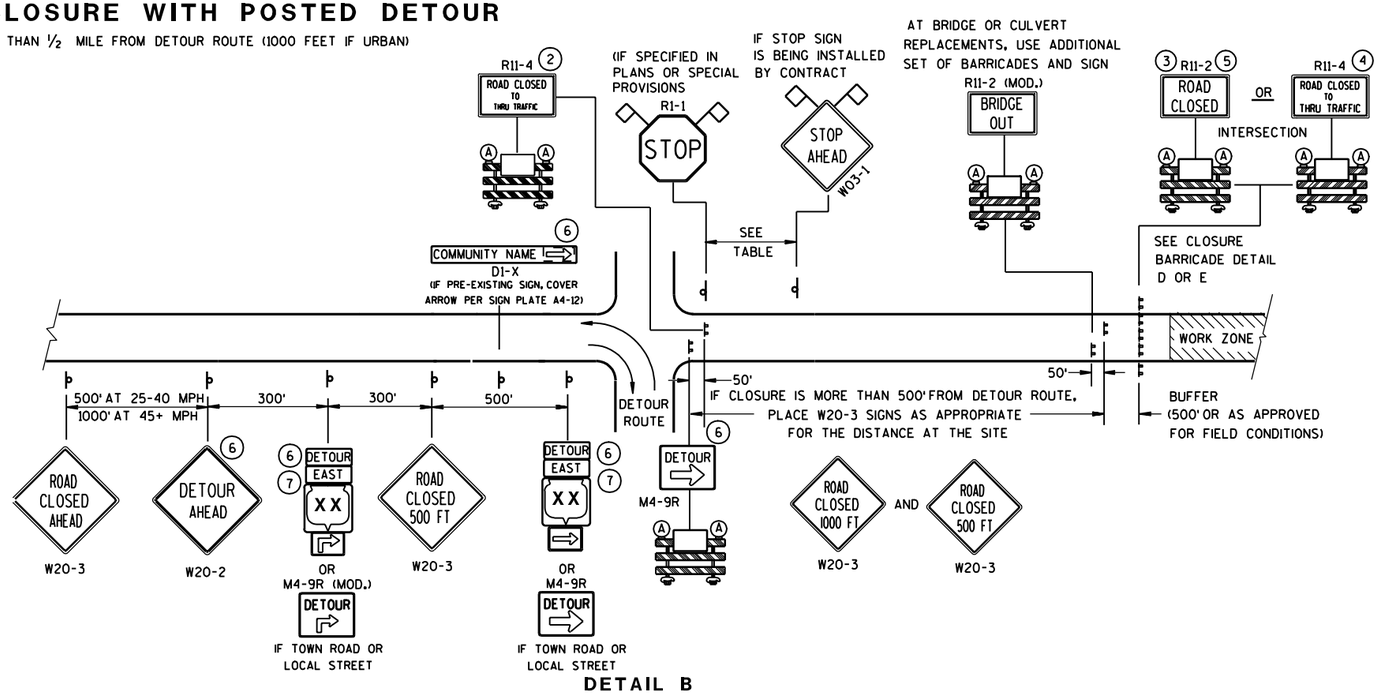


DETAIL C

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 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

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

LEGEND

- POST MOUNTED SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

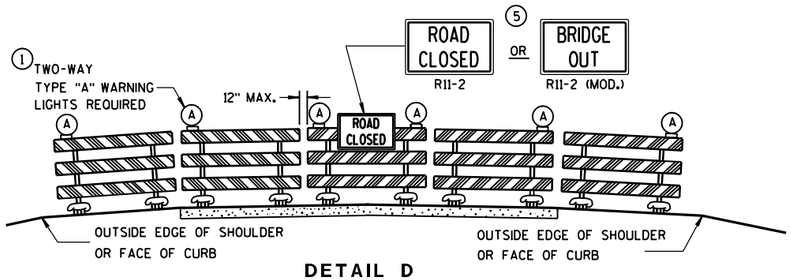
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 C 2-4a

6

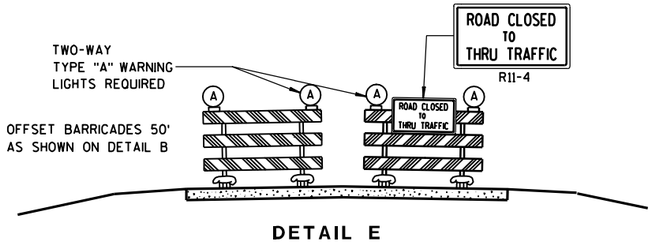
S.D.D. 15 C 2-4a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-4a 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 BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

"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, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" 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.)
- 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 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 LANE 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.

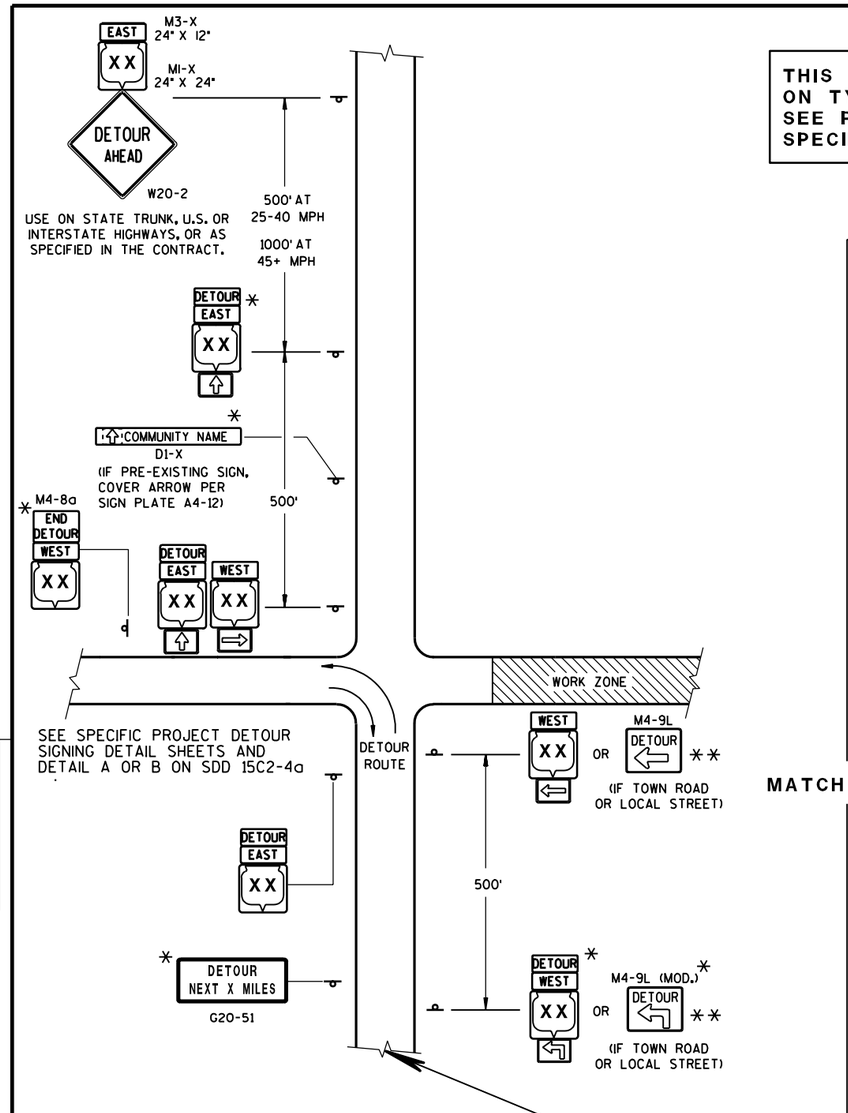
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

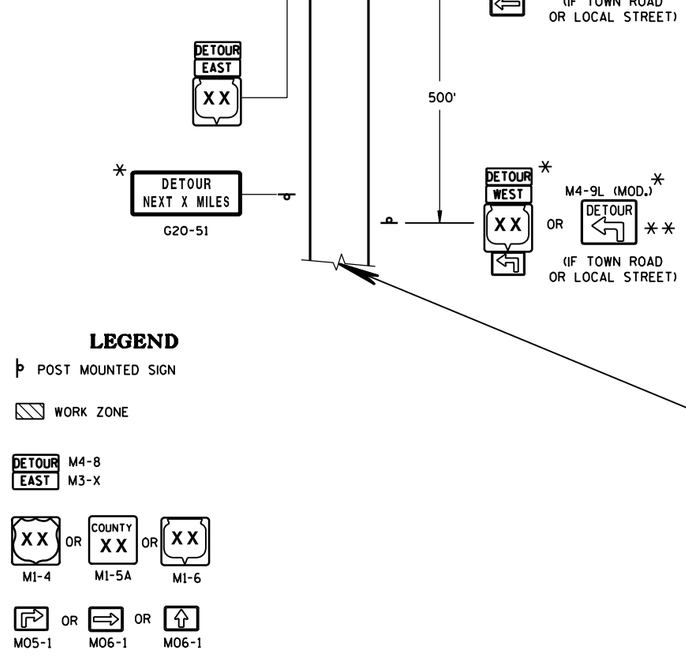
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

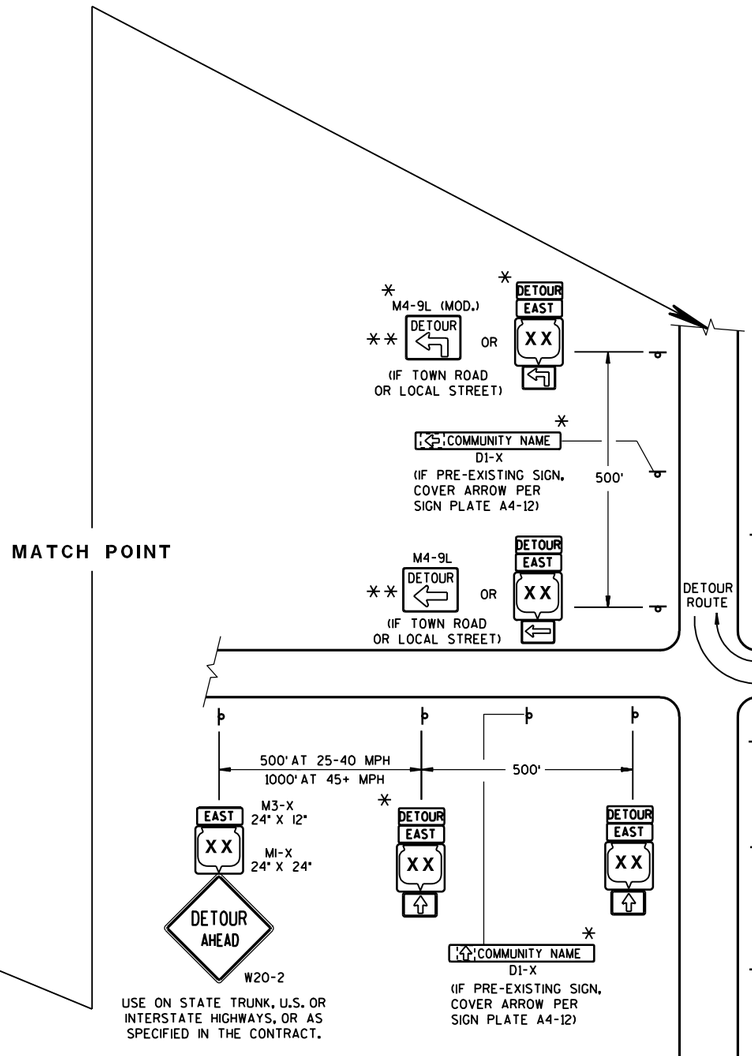
APPROVED
9/16/03
DATE
Thomas N. Nottbohm for
CHIEF SIGNS AND MARKING ENGINEER
FHWA

6
S.D.D. 15 C 2-4b

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

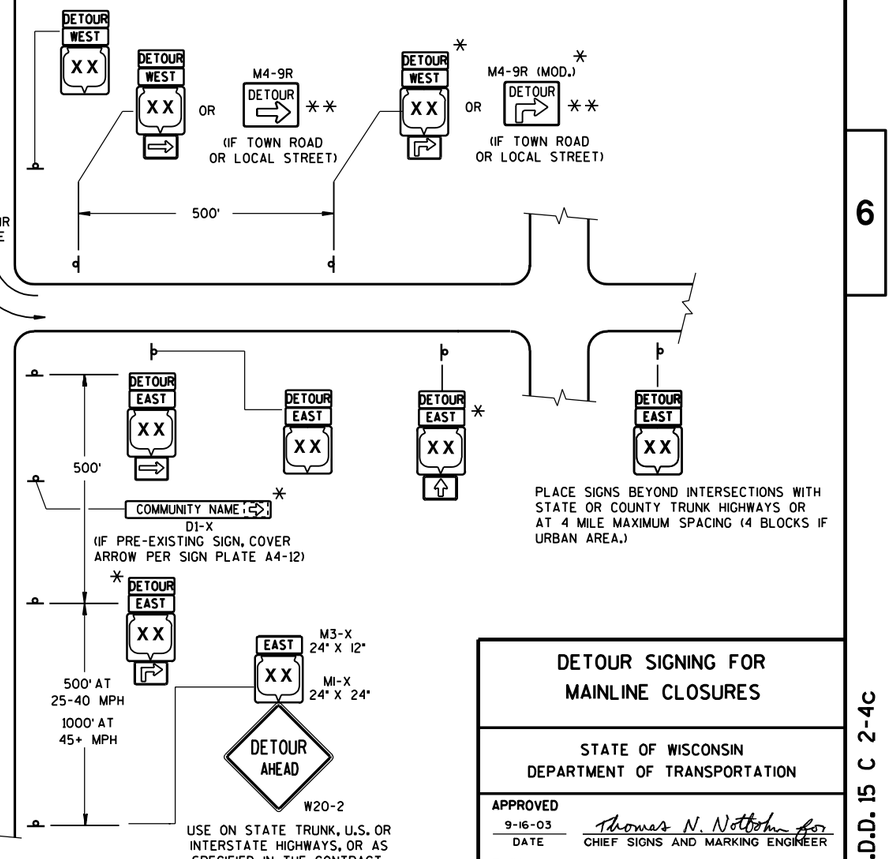






DETAIL F

DETOUR SIGNING



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 AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
MI-4, MI-5A, AND MI-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.)
M4-9 SHALL BE 30" X 24".
M4-8a SHALL BE 24" X 18".
G20-51 SHALL BE 60" X 24".
W20-2 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.

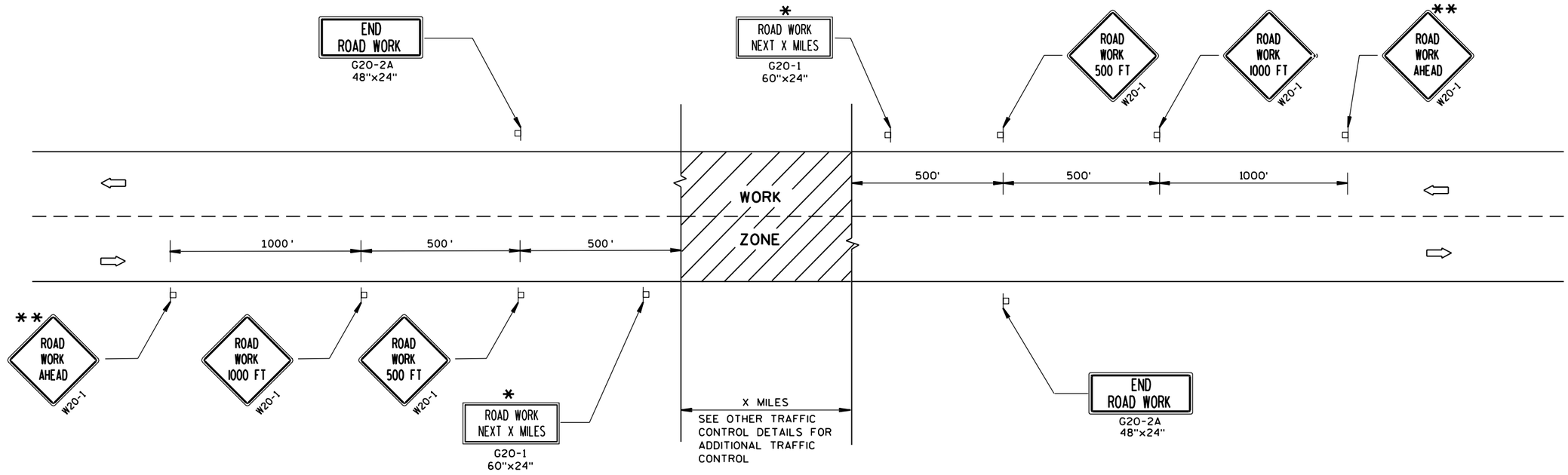
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-16-03
DATE

Thomas N. Nottbohm for
CHIEF SIGNS AND MARKING ENGINEER

FHWA



6

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"x48" UNLESS OTHERWISE NOTED.

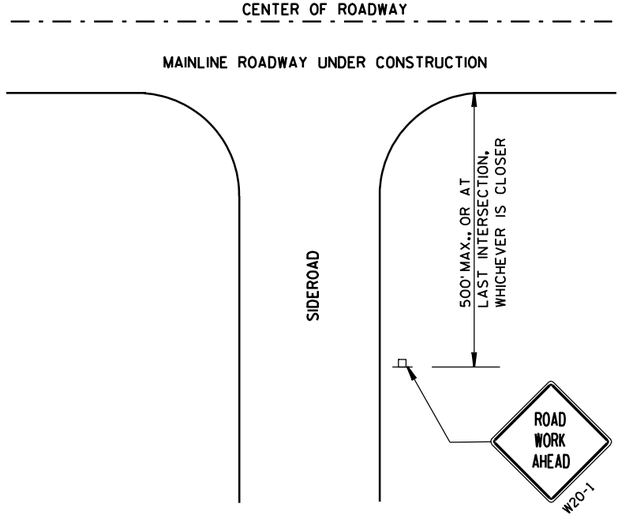
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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 RE-ESTABLISHED.

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

** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA OR SIGNING.

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



LEGEND

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL.
ADVANCE WARNING SIGNS
45 M.P.H. OR GREATER
TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

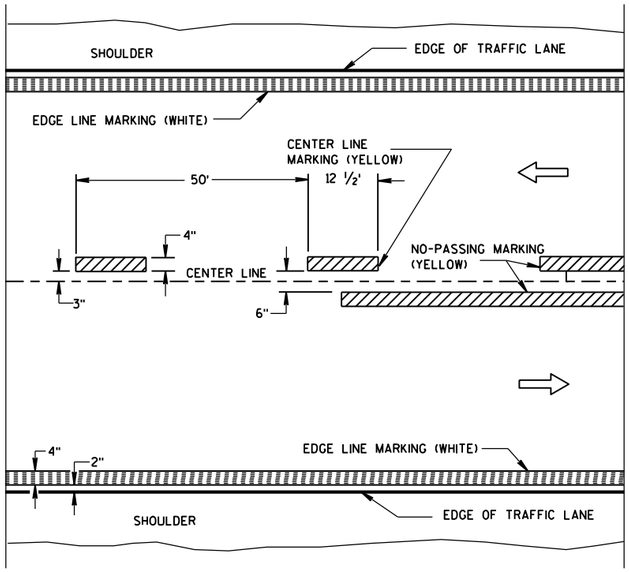
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00
DATE
Chester J. Sparr
CHIEF SIGNS AND MARKING ENGINEER
FHWA

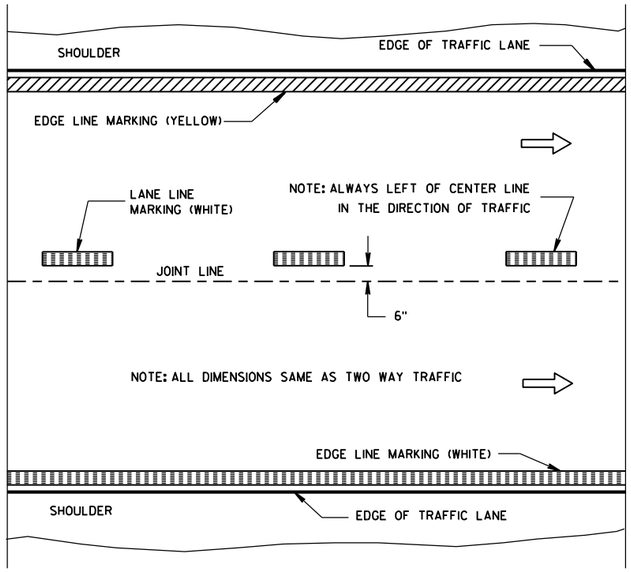
S.D.D. 15 C 4-1

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S.D.D. 15 C 4-1



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

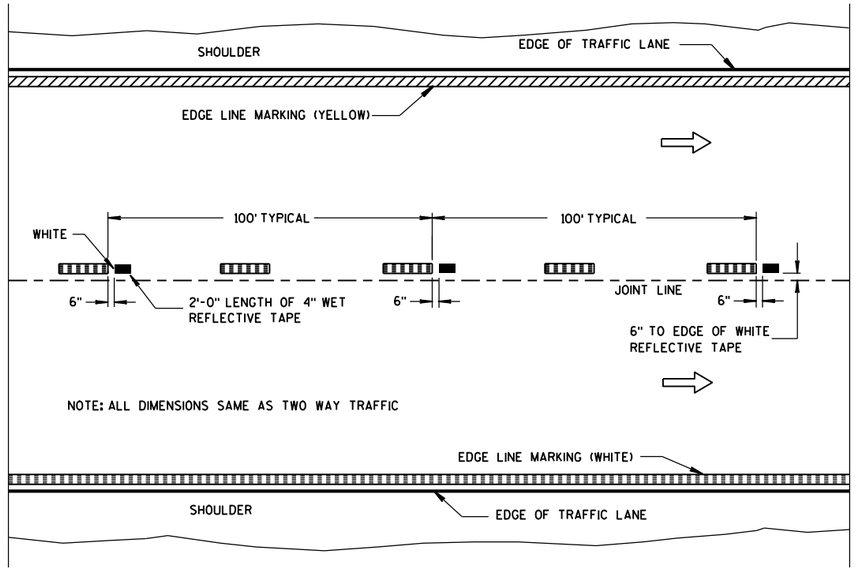
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.

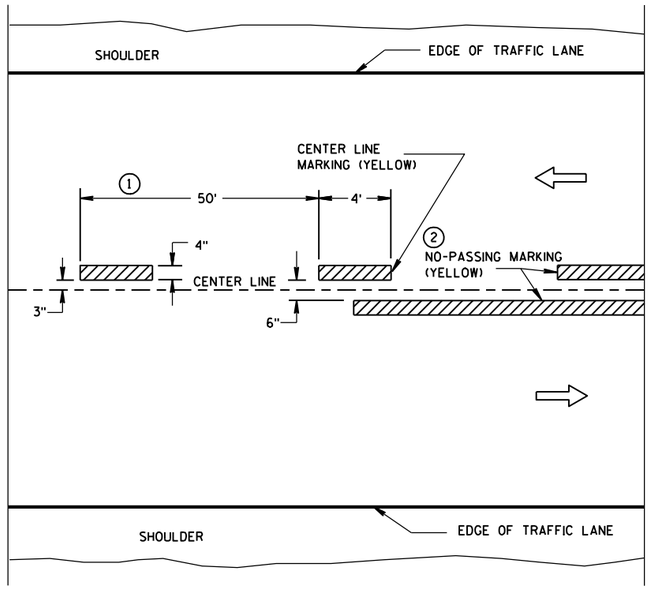
(2) NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.

NOTE

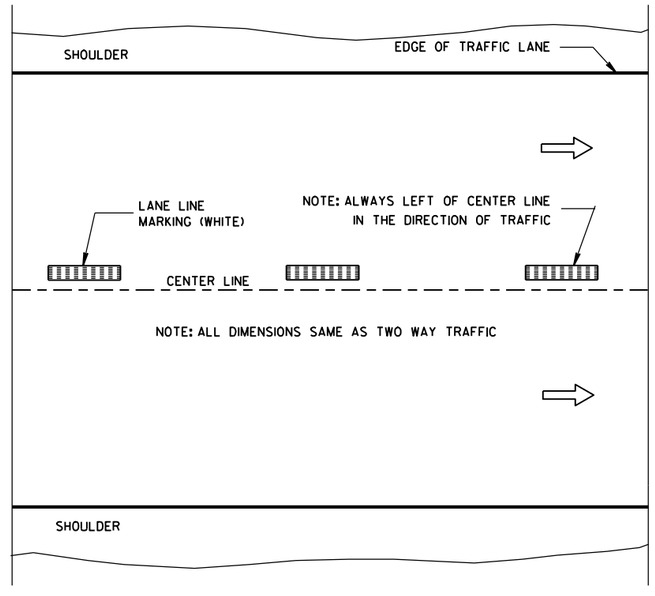
ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

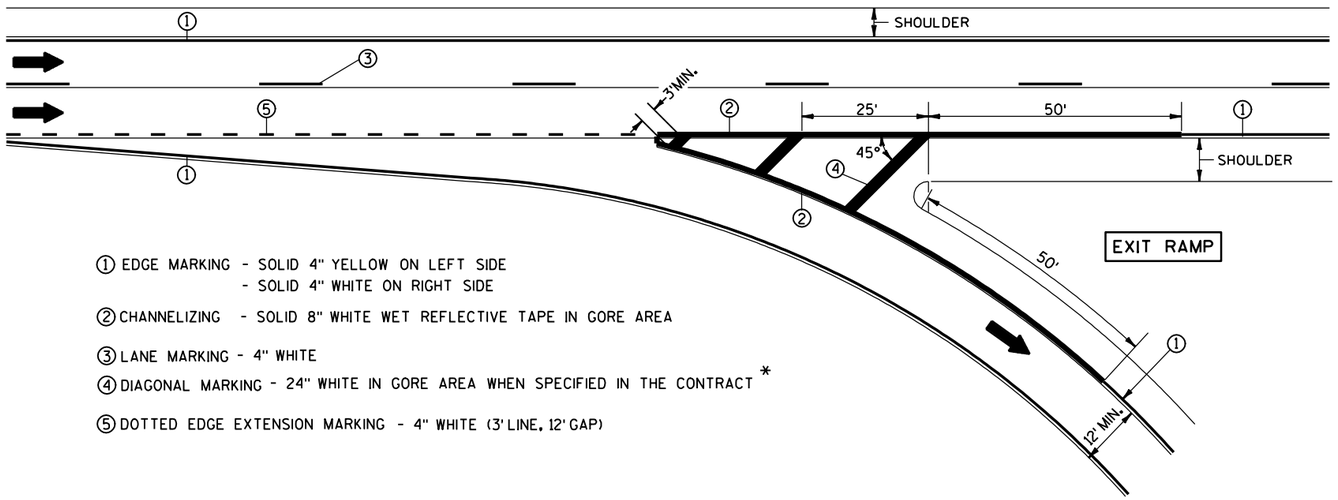
APPROVED
2-5-09 DATE
/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN
FHWA

6

S.D.D. 15 C 8-11a

6

S.D.D. 15 C 8-11a



① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE

② CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE IN GORE AREA

③ LANE MARKING - 4" WHITE

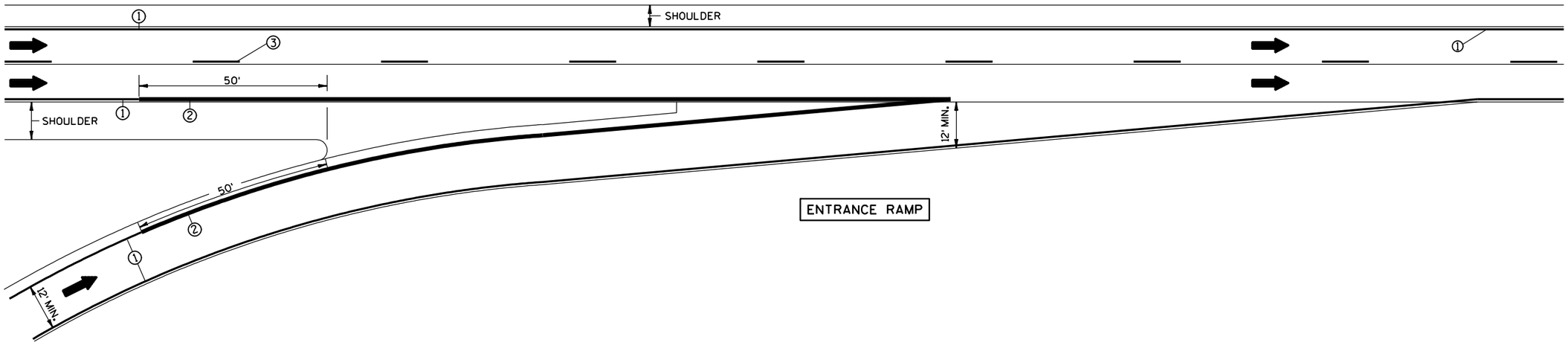
④ DIAGONAL MARKING - 24" WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT *

⑤ DOTTED EDGE EXTENSION MARKING - 4" WHITE (3' LINE, 12' GAP)

NOTES:

1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.

*REFER TO DESIGN NOTES.



6

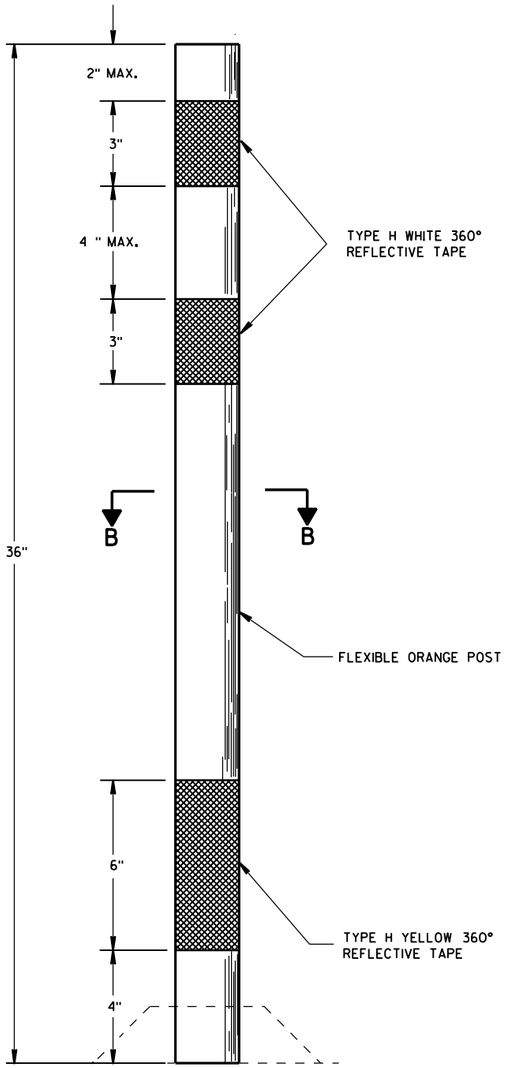
6

S.D.D. 15 C 8-10f

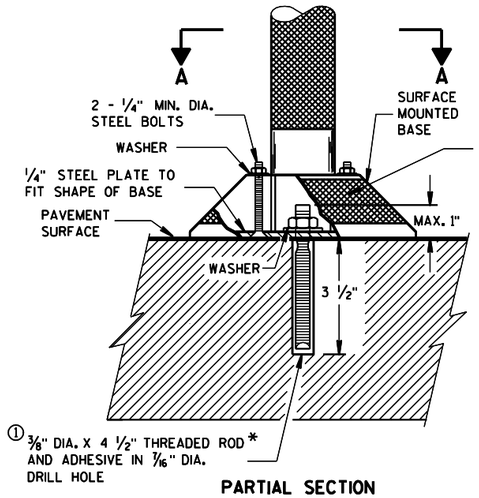
S.D.D. 15 C 8-10f

PAVEMENT MARKING
(RAMPS AND GORES)

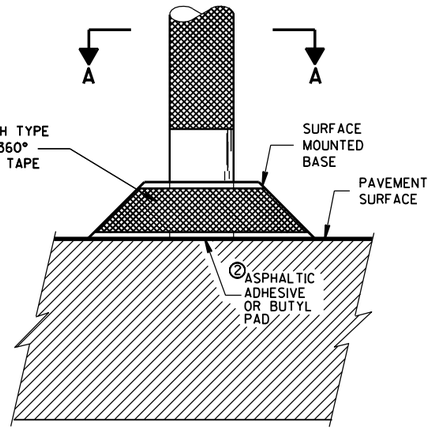
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



FLEXIBLE TUBULAR MARKER POST



PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT

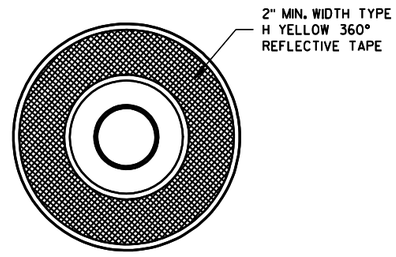
GENERAL NOTES

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

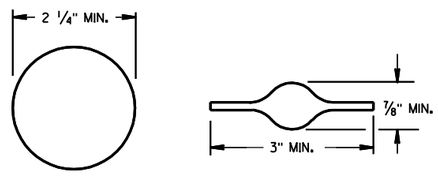
SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

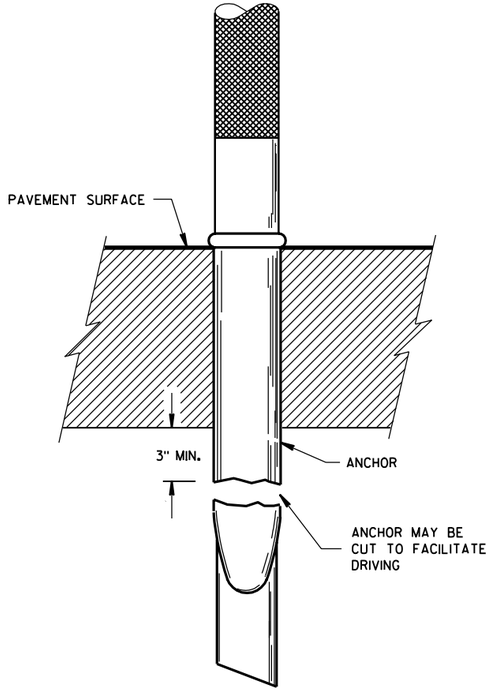
② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

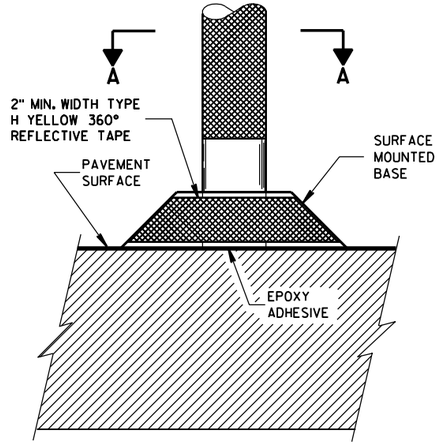


SECTION A-A
SURFACE MOUNTED BASE



SECTION B-B
ALTERNATIVE SHAPES





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2/17/94 DATE FHWA	STATE TRAFFIC ENGINEER FOR HWYS

TWO-LANE ROADWAY

SYMBOLS

WORK AREA

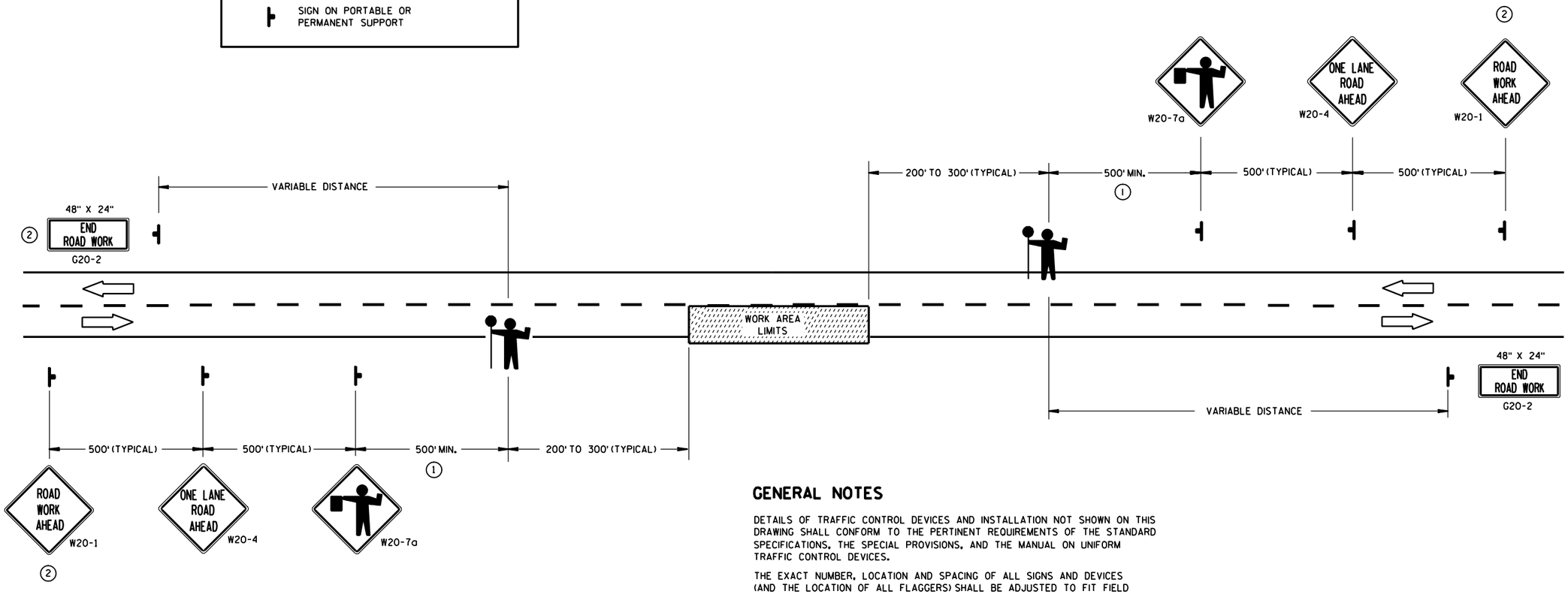
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN ON PORTABLE OR PERMANENT SUPPORT



W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT 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.

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.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE 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.

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, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/5/06 — DATE
/S/ Thomas N. Notbohm — STATE TRAFFIC ENGINEER OF DESIGN
FHWA

6

S.D.D. 15 C 12-3

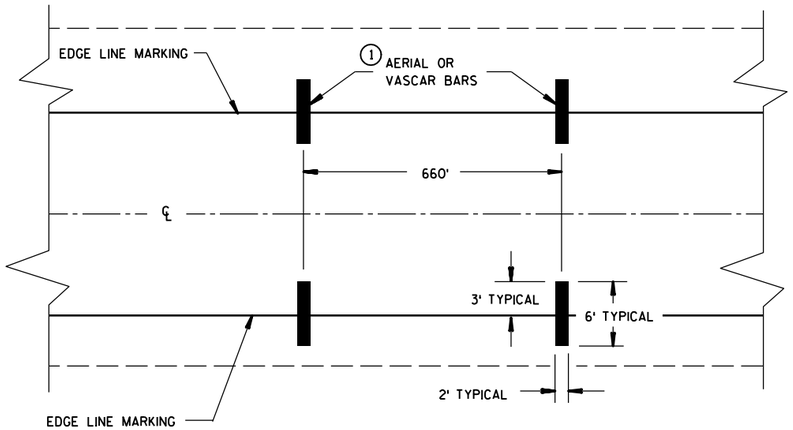
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S.D.D. 15 C 12-3

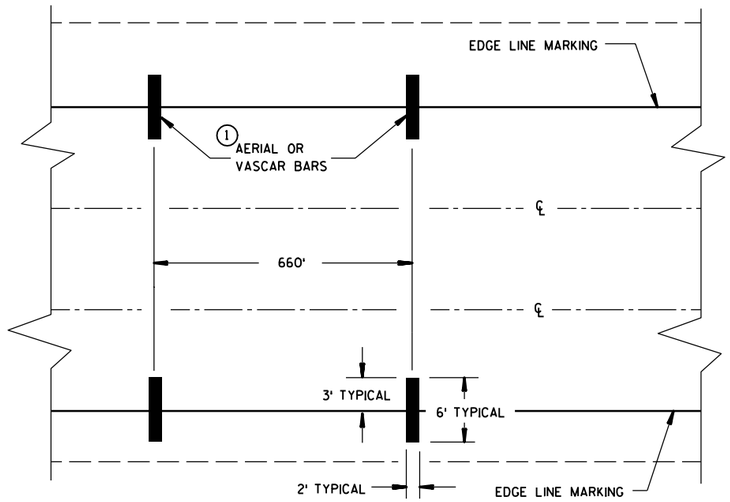
GENERAL NOTES

(1) NUMBER OF VASCAR OR AERIAL BARS SHALL BE A MINIMUM OF 2 OR A MAXIMUM OF 5 AT 660' 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

AERIAL ENFORCEMENT BARS
PAVEMENT MARKING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/23/01
DATE
Chester J. Sprague
CHIEF SIGNS AND MARKING ENGINEER
FHWA

S.D.D. 15 C 14-1

6

S.D.D. 15 C 14-1

LEGEND

- POST WITH ATTACHED SIGN
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- ARROW BOARD
- REMOVING PAVEMENT MARKING
- TEMPORARY PRECAST CONCRETE BARRIER
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES :

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

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"x48" UNLESS OTHERWISE NOTED.

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

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

(1) 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 MINIMUM 1500 FEET IN FRONT OF DRUMS.

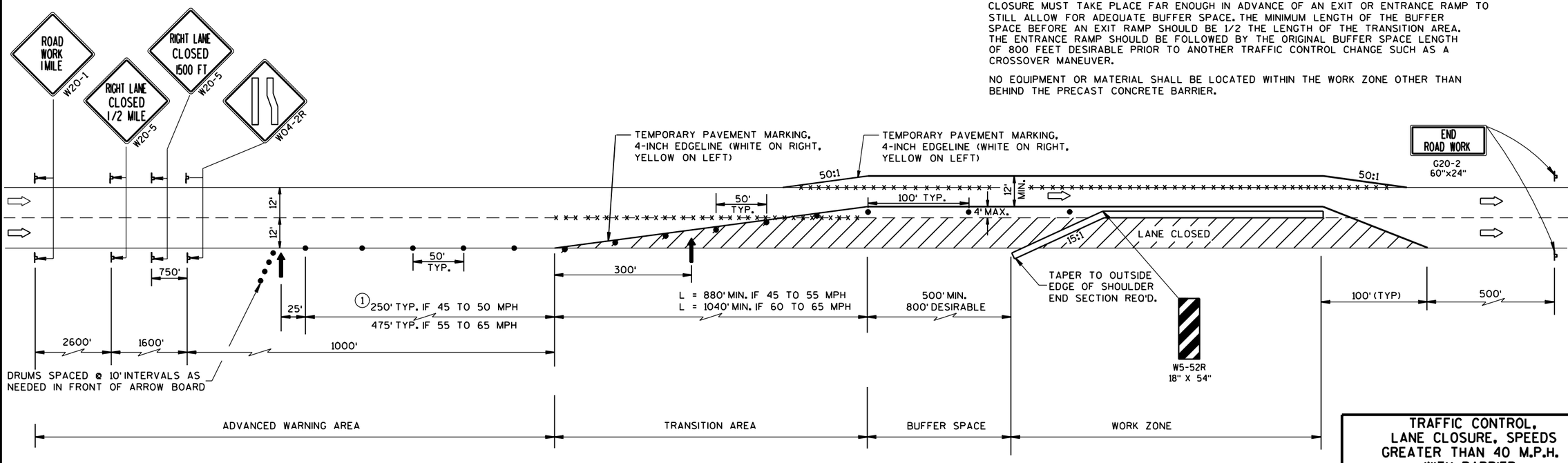
FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 7 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.

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 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

NO EQUIPMENT OR MATERIAL SHALL BE LOCATED WITHIN THE WORK ZONE OTHER THAN BEHIND THE PRECAST CONCRETE BARRIER.



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER

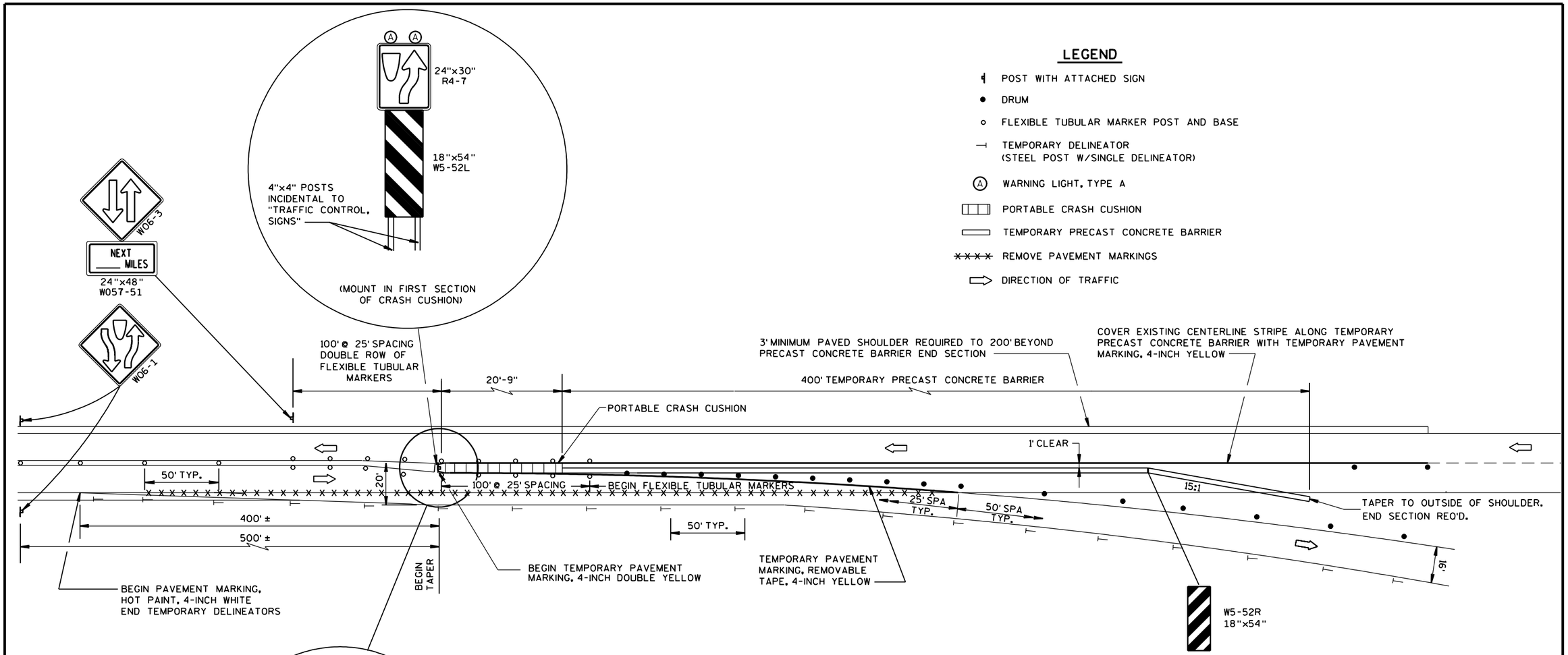
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7-14-94
DATE
Charles J. Spang
for DIRECTOR, OFFICE OF TRAFFIC
FHWA

S.D.D. 15 D 3-1

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S.D.D. 15 D 3-1



LEGEND

- POST WITH ATTACHED SIGN
- DRUM
- FLEXIBLE TUBULAR MARKER POST AND BASE
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR)
- (A) WARNING LIGHT, TYPE A
- PORTABLE CRASH CUSHION
- TEMPORARY PRECAST CONCRETE BARRIER
- ~~~~ REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC

GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

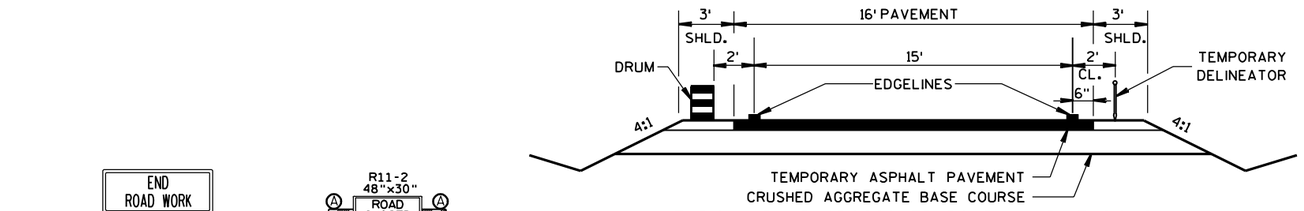
THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

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

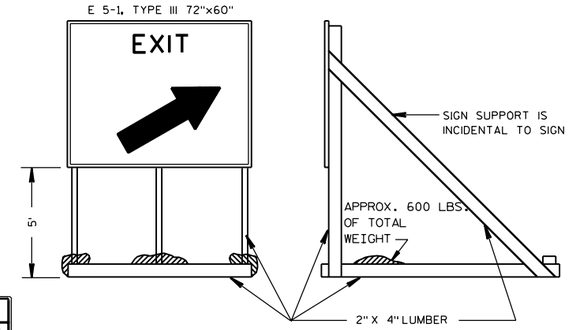
TRAFFIC CONTROL, SINGLE LANE CROSSOVER ENTRANCE WITH BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

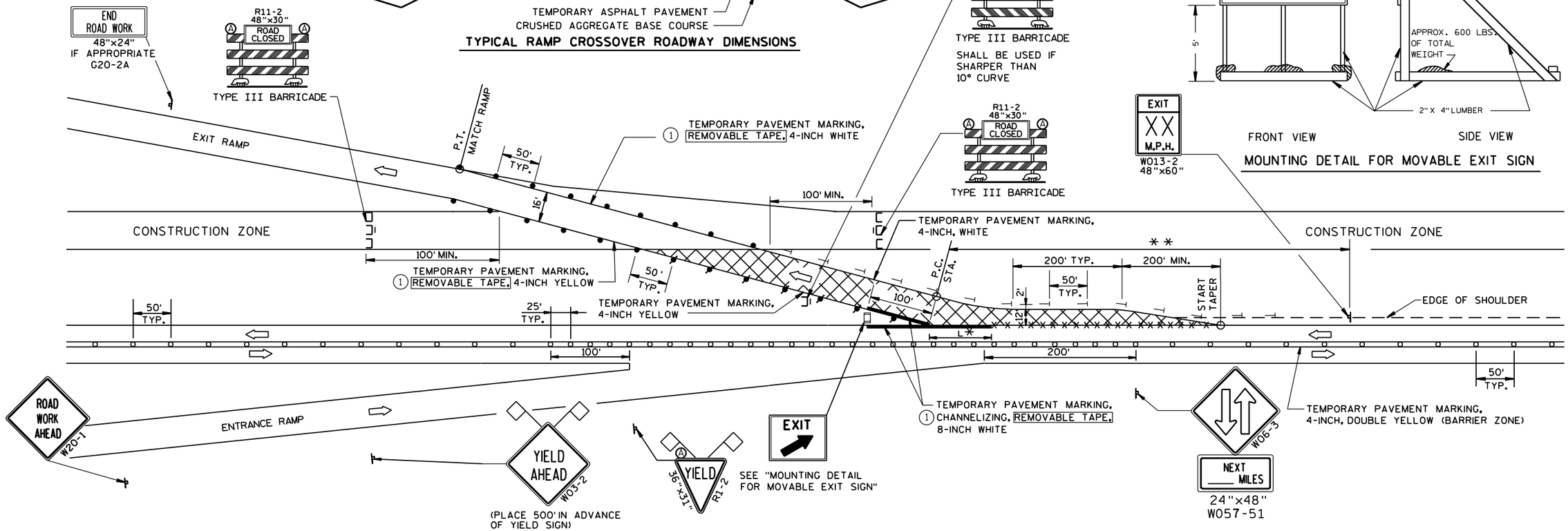
APPROVED
8-7-95
DATE
Charles J. Spang
for DIRECTOR, OFFICE OF TRAFFIC
FHWA



TYPICAL RAMP CROSSOVER ROADWAY DIMENSIONS



MOUNTING DETAIL FOR MOVABLE EXIT SIGN



LEGEND

- ⊏/I⊏ 8' TYPE III BARRICADE WITHOUT/WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- TEMPORARY DELINEATOR - WHITE (STEEL POST W/SINGLE DELINEATOR)
- Ⓐ WARNING LIGHT, TYPE A
- TEMPORARY CROSSOVER ASPHALTIC PAVEMENT
- ×××× REMOVING PAVEMENT MARKINGS
- FLEXIBLE TUBULAR MARKER POST AND BASE
- FLAGS, 12" X 12", RED
- DIRECTION OF TRAFFIC

GENERAL NOTES :

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

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

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

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

* LENGTH L SHALL BE REQUIRED WHEN TANGENT LENGTH OF EXIT RAMP PARALLEL TO MAINLINE EXCEEDS 300'. LENGTH SHALL BE EQUAL TO THE EXIT RAMP TANGENT LENGTH MINUS 300' OR AS APPROVED BY THE ENGINEER AND SHALL CHANGE TO ACCOMODATE PAVING GAPS.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH 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.

** TABLE FOR ADVANCE WARNING SIGN PLACEMENT DISTANCE

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

TRAFFIC CONTROL
TEMPORARY EXIT
RAMP CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

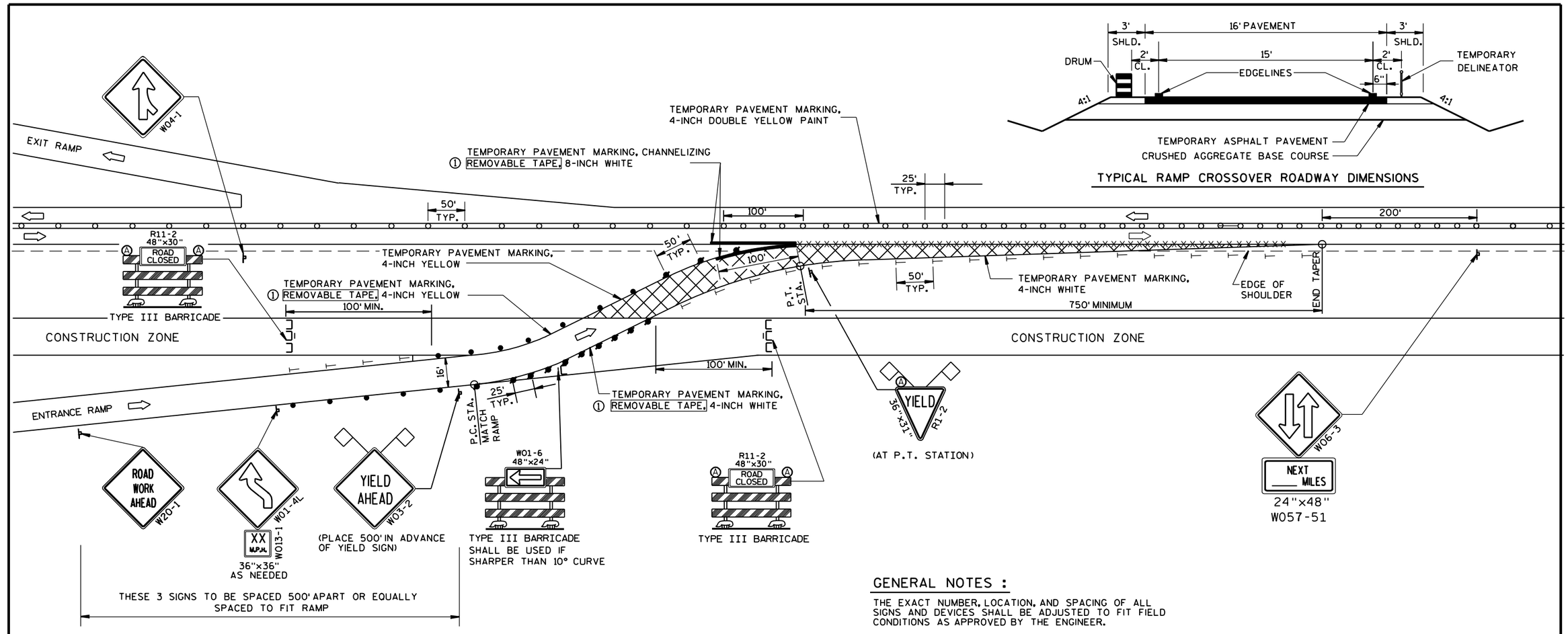
APPROVED
12-4-95
DATE

Charles J. Spang
for DIRECTOR, OFFICE OF TRAFFIC

FHWA

6

S.D.D. 15 D 7-3



TYPICAL RAMP CROSSOVER ROADWAY DIMENSIONS

LEGEND

- 8' TYPE III BARRICADE WITHOUT/WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- Ⓐ WARNING LIGHT, TYPE A (SAME COLOR AS SIGN IT SUPPLEMENTS)
- TEMPORARY CROSSOVER ASPHALTIC PAVEMENT
- REMOVING PAVEMENT MARKINGS
- FLEXIBLE TUBULAR MARKER POST AND BASE
- FLAGS, 12" X 12", RED
- DIRECTION OF TRAFFIC

GENERAL NOTES :

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

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

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH 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.

TRAFFIC CONTROL, TEMPORARY ENTRANCE RAMP CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12-4-95
DATE
Charles J. Spang
for DIRECTOR, OFFICE OF TRAFFIC
FHWA

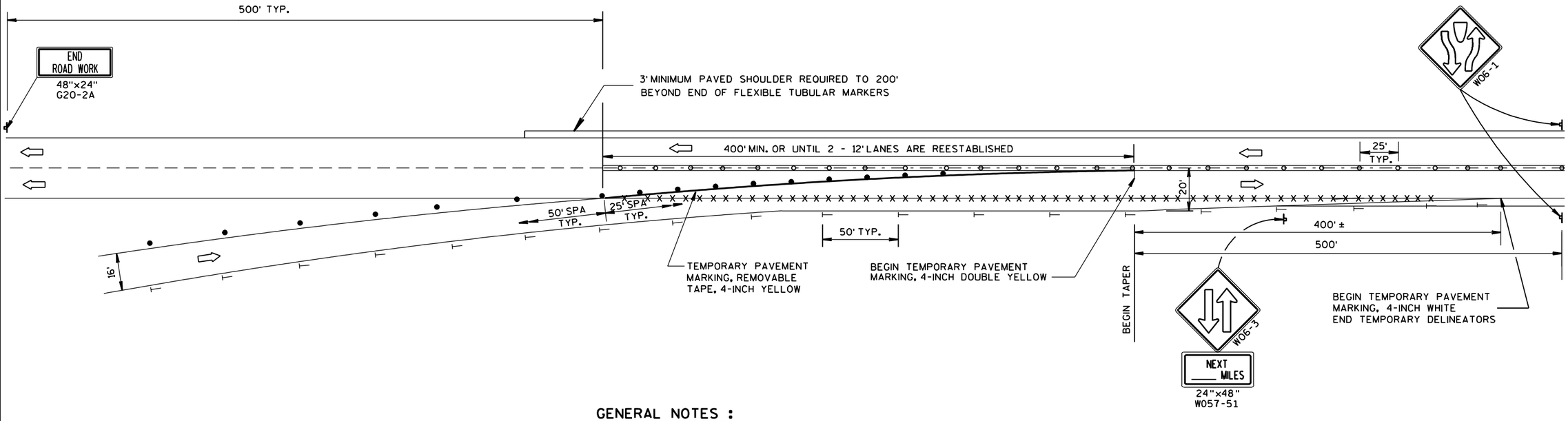
S.D.D. 15 D 8-3

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S.D.D. 15 D 8-3

LEGEND

- POST WITH ATTACHED SIGN
- DRUM
- FLEXIBLE TUBULAR MARKER POST AND BASE
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- ~~XXXX~~ REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC



GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

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

TRAFFIC CONTROL, SINGLE LANE CROSSOVER EXIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

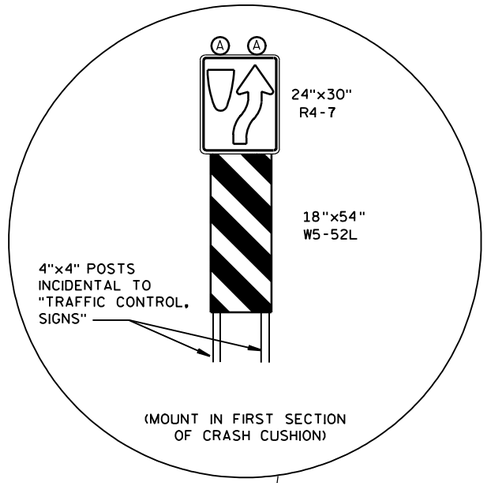
APPROVED
8-7-95
DATE
FHWA

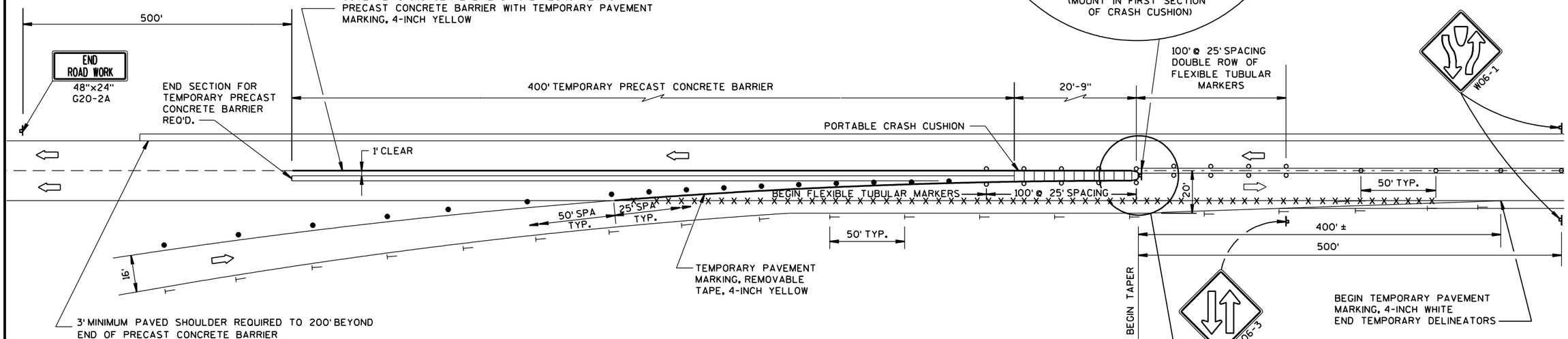
Charles J. Spacy
For DIRECTOR, OFFICE OF TRAFFIC

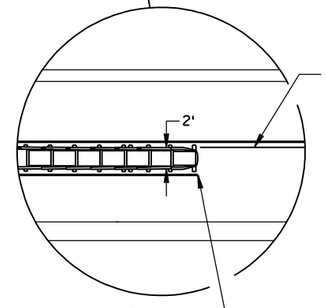
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S.D.D. 15 D 9-2

LEGEND

- POST WITH ATTACHED SIGN
- DRUM
- FLEXIBLE TUBULAR MARKER POST AND BASE
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- (A) WARNING LIGHT, TYPE A
- PORTABLE CRASH CUSHION
- TEMPORARY PRECAST CONCRETE BARRIER
- ~~~~ REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC







GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

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

TRAFFIC CONTROL, SINGLE LANE CROSSOVER EXIT WITH BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

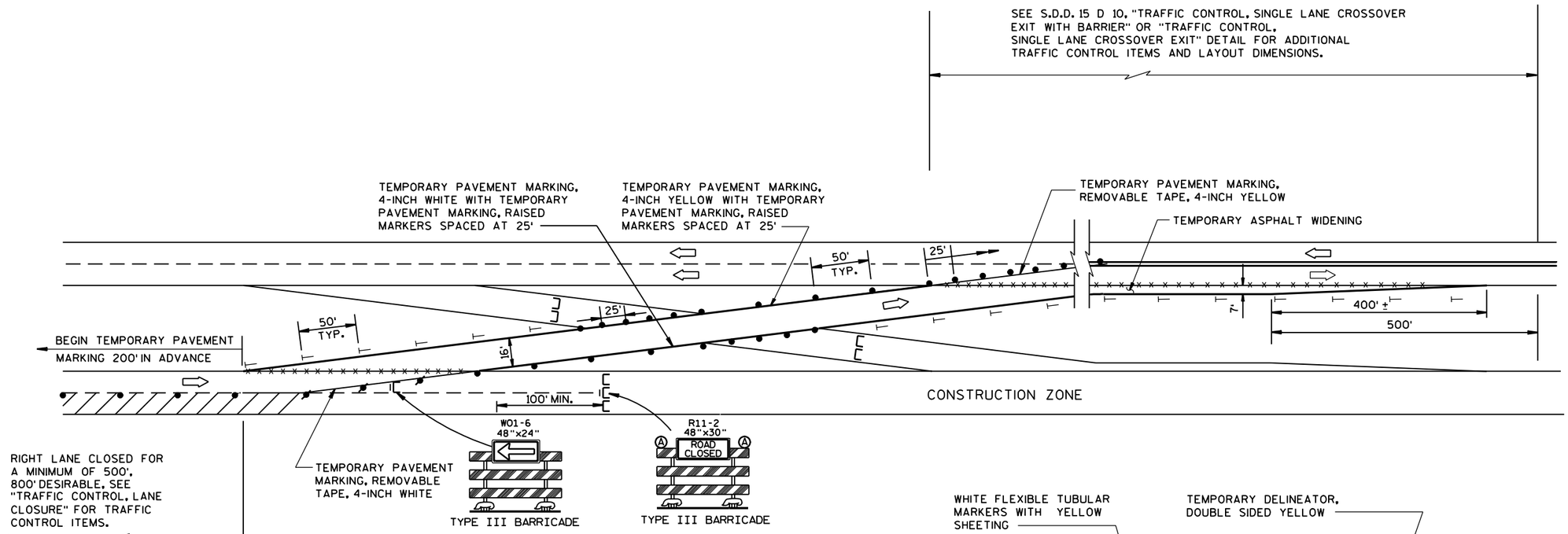
APPROVED
8-7-95
DATE
Charles J. Spang
for DIRECTOR, OFFICE OF TRAFFIC
FHWA

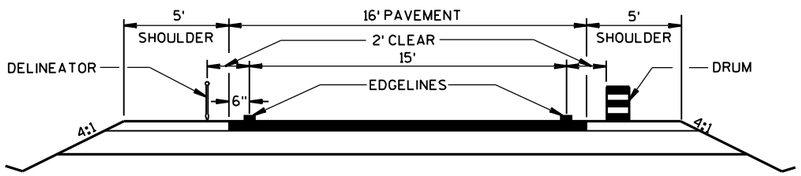
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S.D.D. 15 D 10-2





TYPICAL CROSSOVER ROADWAY DIMENSIONS

LEGEND

- ⊏/⊏ 8' TYPE III BARRICADE WITHOUT/WITH ATTACHED SIGN
- DRUM WITH WARNING LIGHTS, TYPE C
- DRUM
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE PAINT
- Ⓐ WARNING LIGHT, TYPE A
- REMOVING PAVEMENT MARKINGS
- TEMPORARY DELINEATOR (DOUBLE SIDED)
- FLEXIBLE TUBULAR MARKER AND BASE
- DIRECTION OF TRAFFIC

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

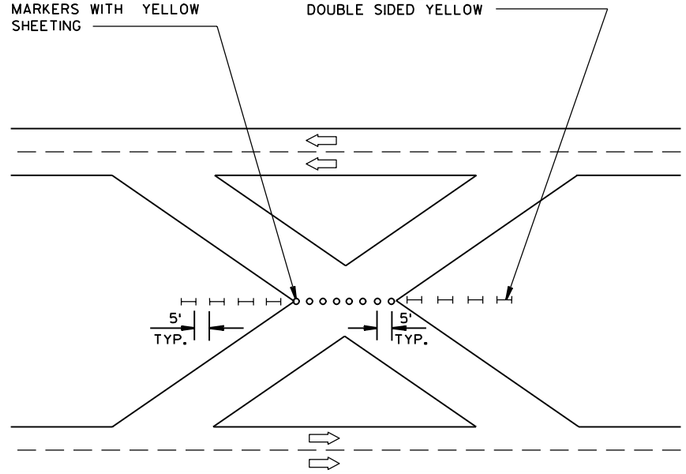
TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USE OF CROSSOVER AND TEMPORARY PAVEMENT MARKING WHERE USED.

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

"WO" IS THE SAME AS "W" 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.

REVERSE DEVICES WHEN OTHER LEG OF CROSSOVER IS IN USE.



PROTECTION OF CROSSOVER NOT IN USE
WHEN CONSTRUCTION IS NOT TAKING PLACE

TRAFFIC CONTROL,
SINGLE LANE CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-22-96
DATE
Charles J. Spang
for DIRECTOR, OFFICE OF TRAFFIC
FHWA

S.D.D. 15 D 11-3

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S.D.D. 15 D 11-3

LEGEND

- POST WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN IN DRUM
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- ARROW BOARD
- 8' TYPE III BARRICADE
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

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 DESIREABLE) DISTANCE TO EXISTING SIGNS.

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

① CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

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

GENERAL NOTES CONTINUED:

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 7 CONTINUOUS DAYS AND NIGHTS.

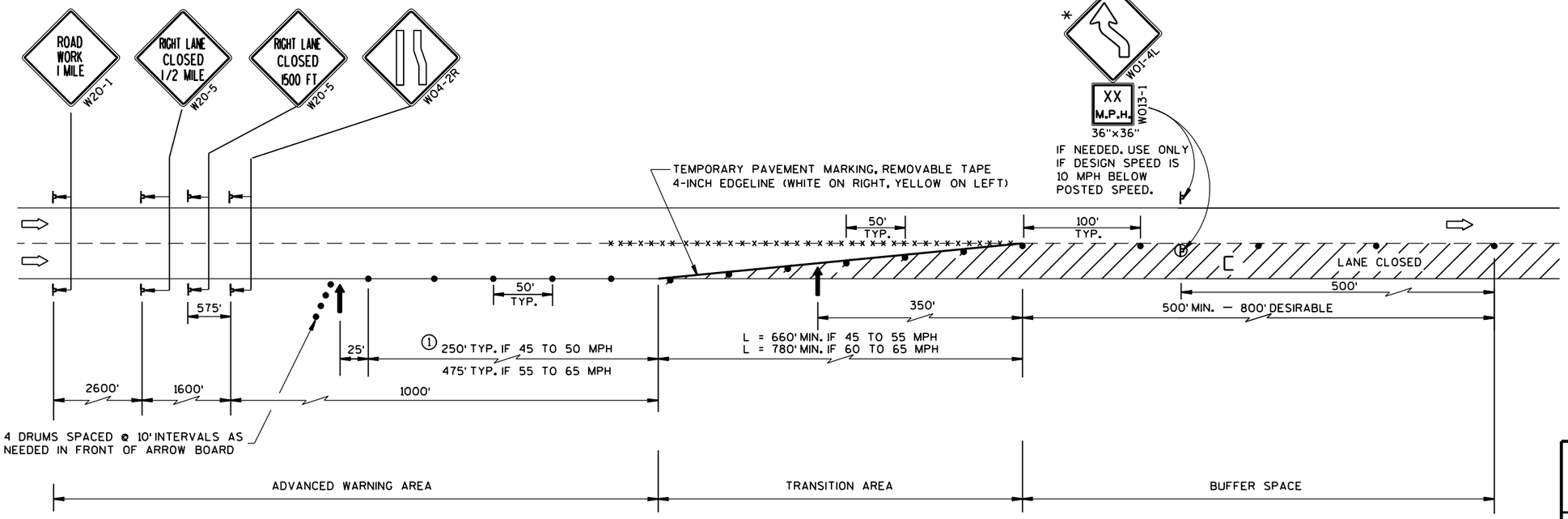
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1/4 MILE ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-7-95
DATE

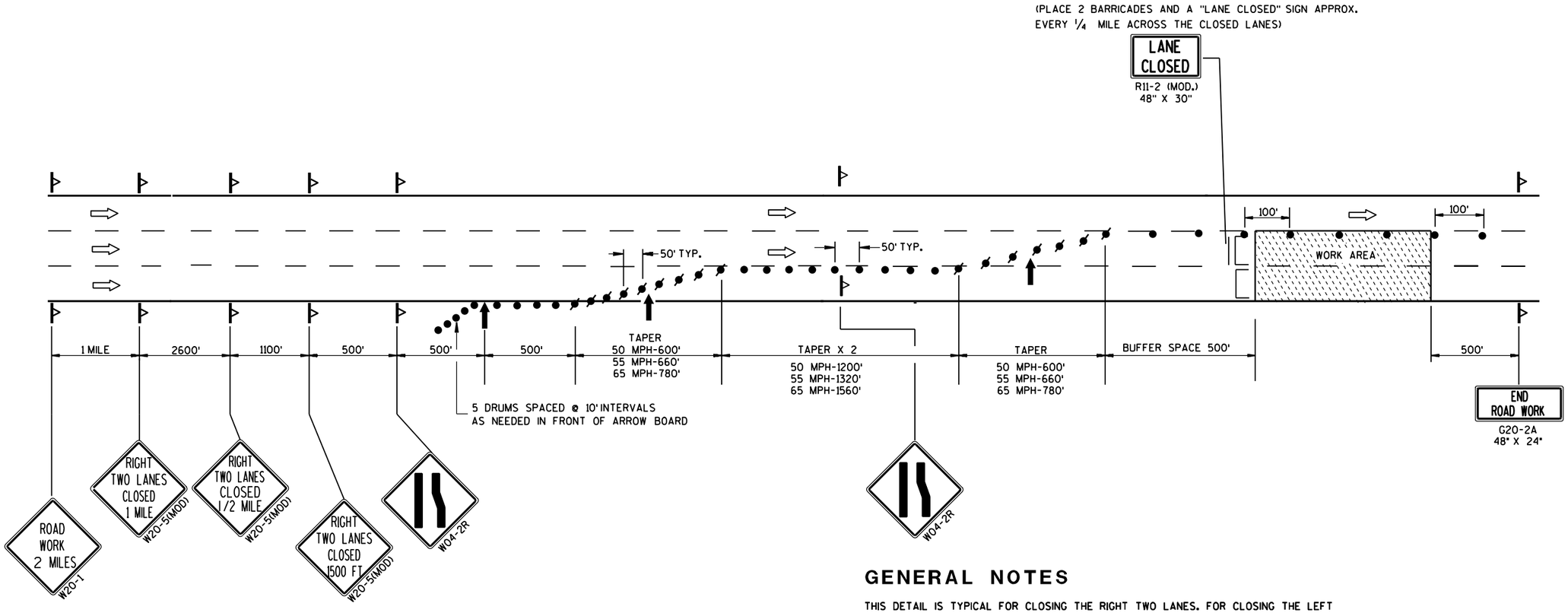
Charles J. Spang
for DIRECTOR, OFFICE OF TRAFFIC

FHWA

S.D.D. 15 D 12-2

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S.D.D. 15 D 12-2



LEGEND

- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (8' EQUIVALENT) WITH/WITHOUT SIGN
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

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

"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 AND AS APPROVED BY THE ENGINEER.

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

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

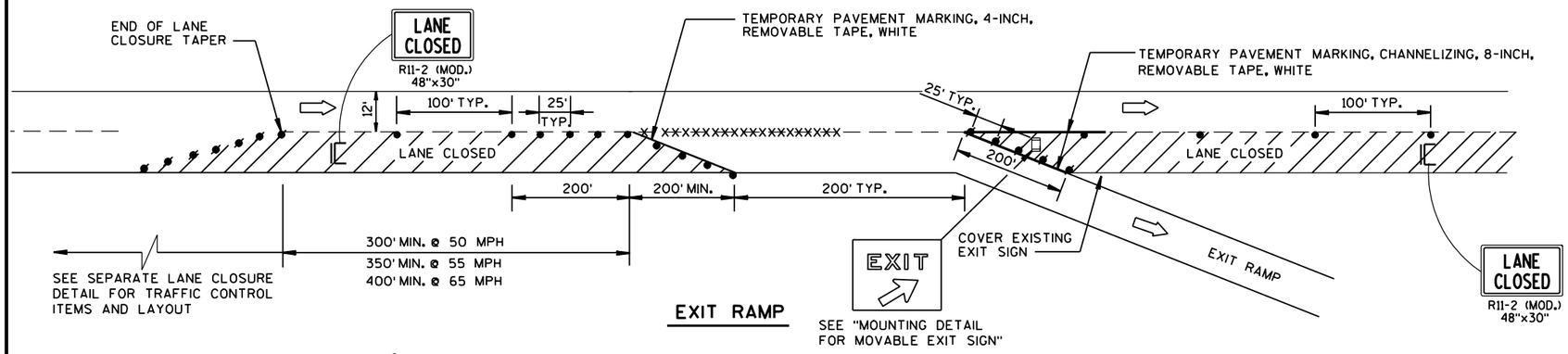
TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

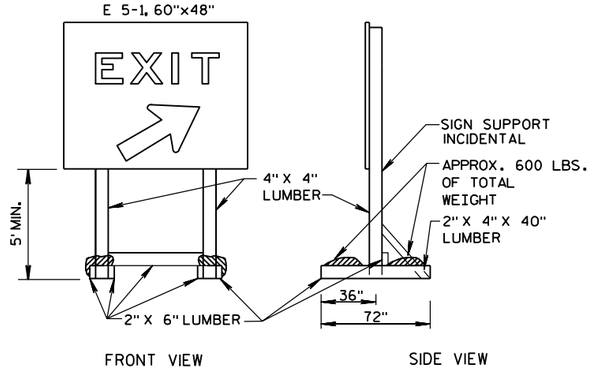
APPROVED
5/23/00
DATE

Chester J. Seas
CHIEF SIGNS AND MARKING ENGINEER

FHWA

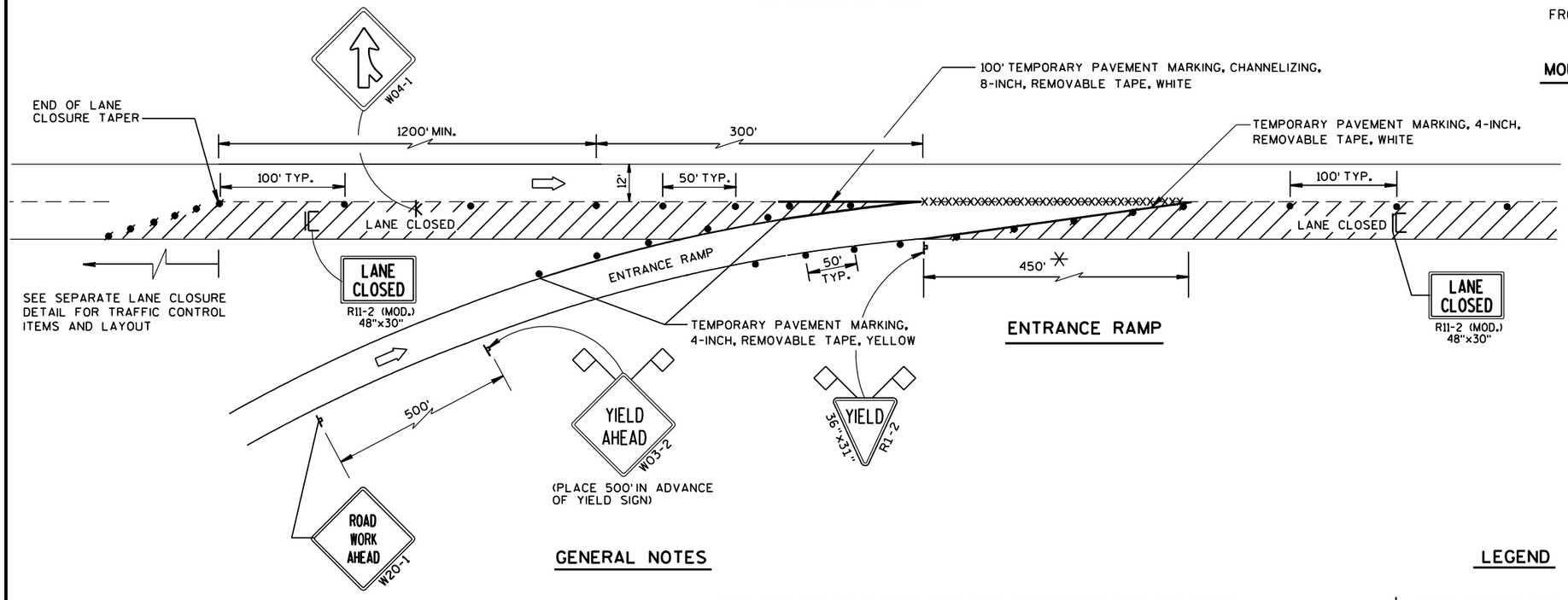


EXIT RAMP



NOTE: ALL LUMBER DIMENSIONS ARE NOMINAL

MOUNTING DETAIL FOR MOVABLE EXIT SIGN



ENTRANCE RAMP

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"x48" 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 R11-2 (MOD.) "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 CONTINUOUS 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 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 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

✳ LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

LEGEND

- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT
- TRAFFIC CONTROL, DRUM
- TRAFFIC CONTROL, DRUM WITH WARNING LIGHT, TYPE C (STEADY-BURN)
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE (8' EQUIVALENT) WITH SIGN
- FLAGS, 16"x16" MIN., ORANGE
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00
DATE
Clinton J. Sparg
CHIEF SIGNS AND MARKING ENGINEER
FHWA

S.D.D. 15 D 15-1

SYMBOLS

IC/C	TYPE III BARRICADE (8' EQUIVALENT) WITH/WITHOUT SIGN
•	DRUM
	POST MOUNTED SIGN
(A)	WARNING LIGHT, TYPE A (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.

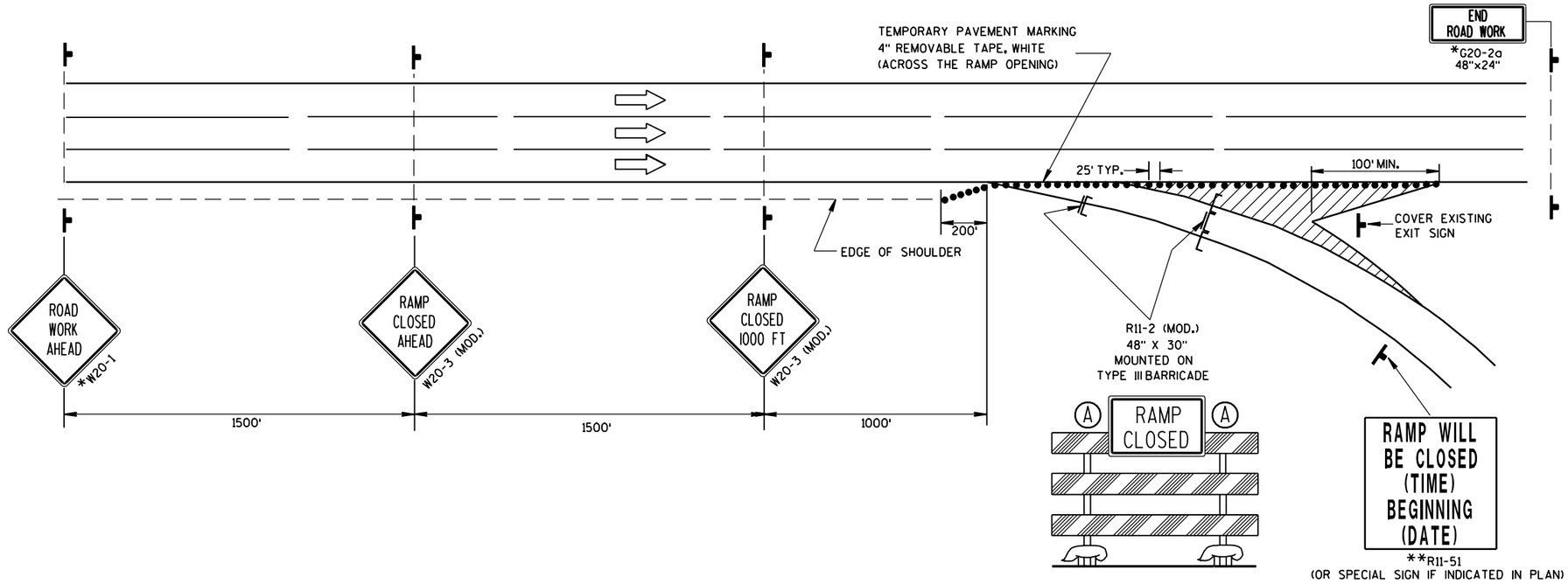
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROPOFF 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 THE 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.

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

**USE THE "RAMP WILL BE CLOSED" SIGN IF INDICATED IN MISCELLANEOUS QUANTITIES. PLACE 10 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00
DATE

Chester J. Sipsas
CHIEF SIGNS AND MARKING ENGINEER

FHWA

6

S.D.D. 15 D 16-1

SYMBOLS

- TRAFFIC CONTROL DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW
- ARROW BOARD IN CAUTION MODE

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.

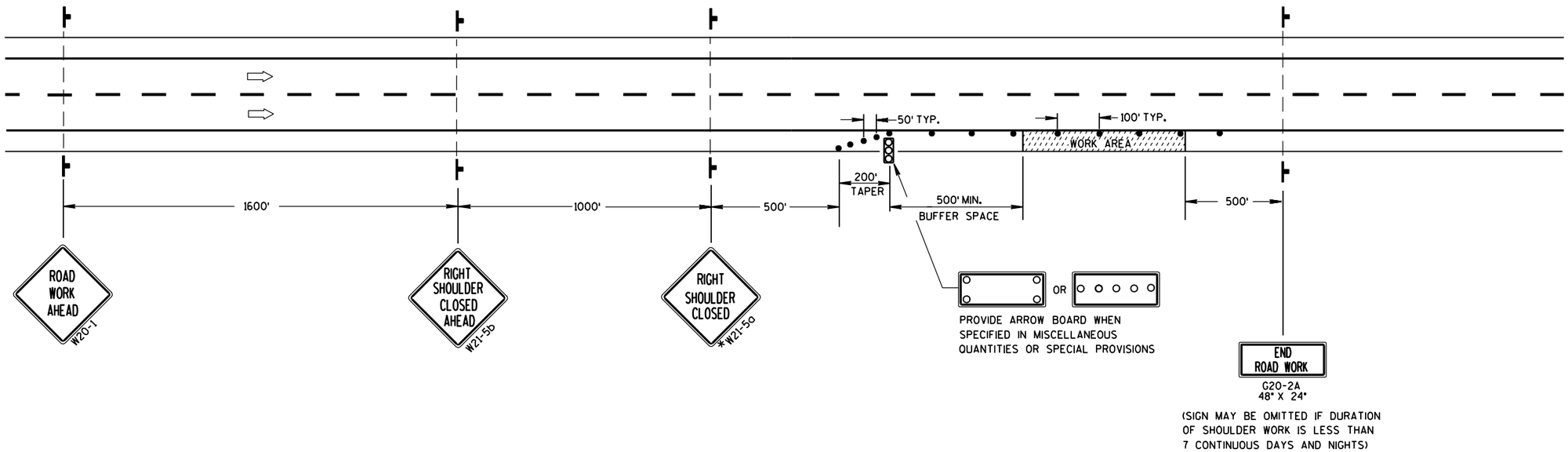
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

5/23/00 DATE

/S/ Chester J. Spang
CHIEF SIGNS AND MARKING ENGINEER

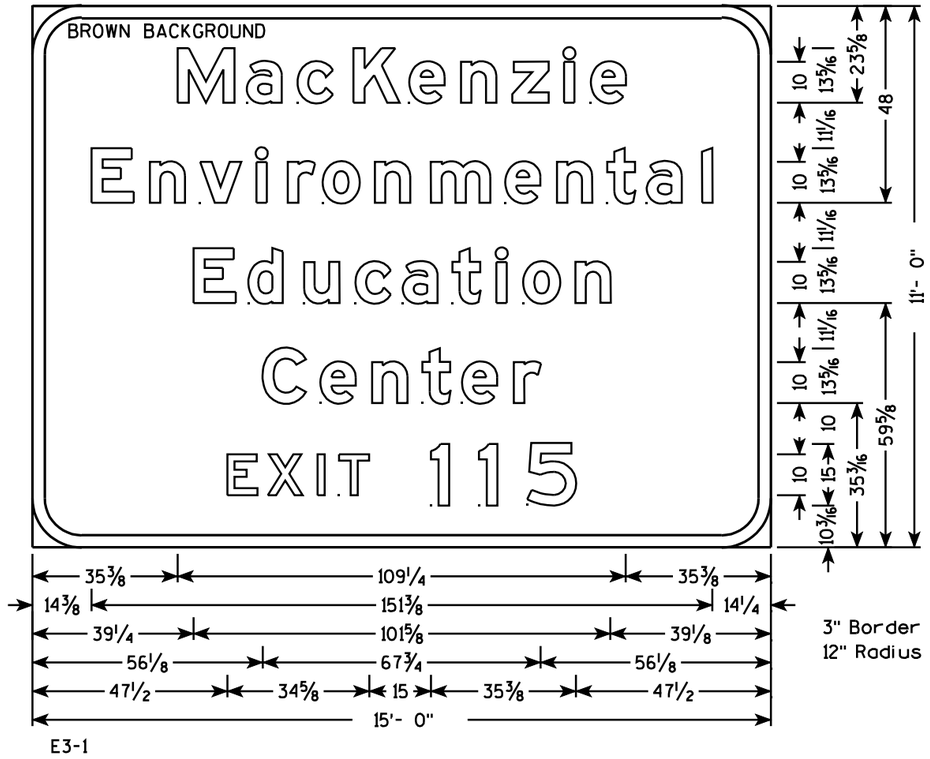
FHWA

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S.D.D. 15 D 27-1

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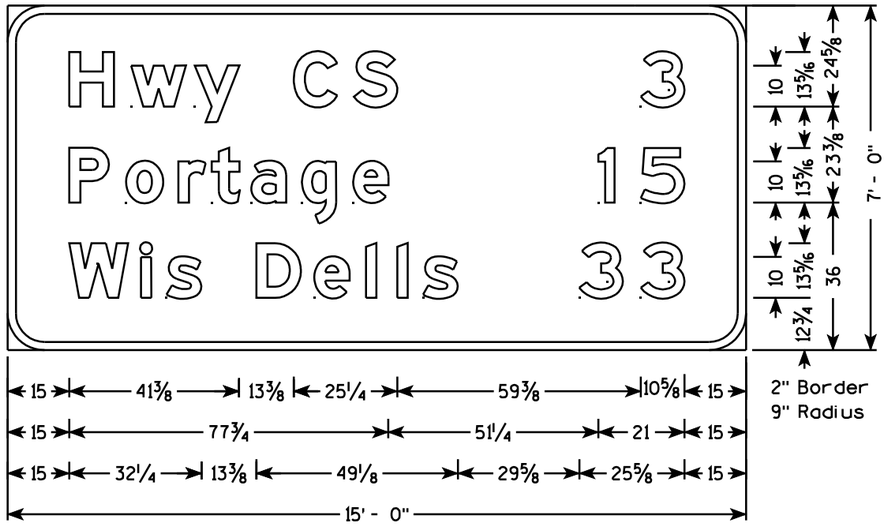
S.D.D. 15 D 27-1



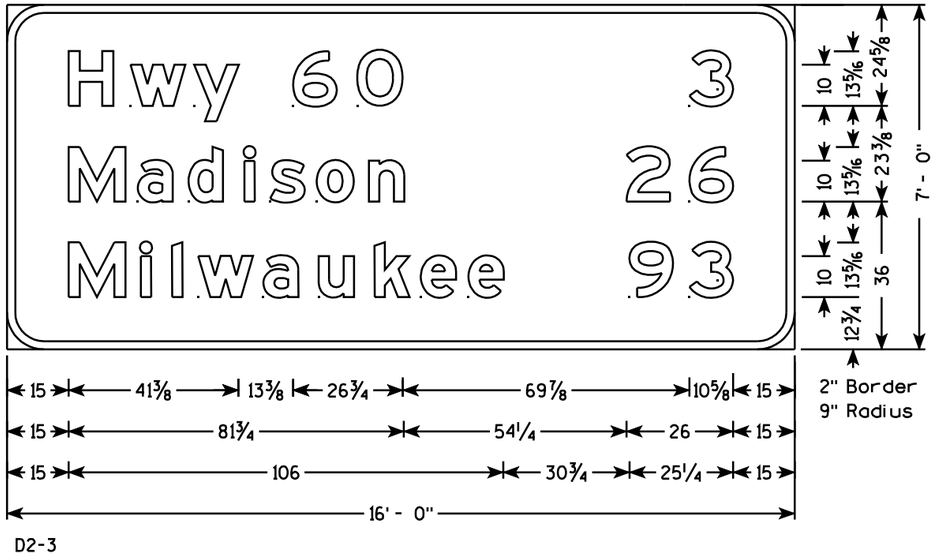
E3-1

NOTES

1. Sign is Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN except as noted
   Message - WHITE
3. Message Series - E Modified



D2-3

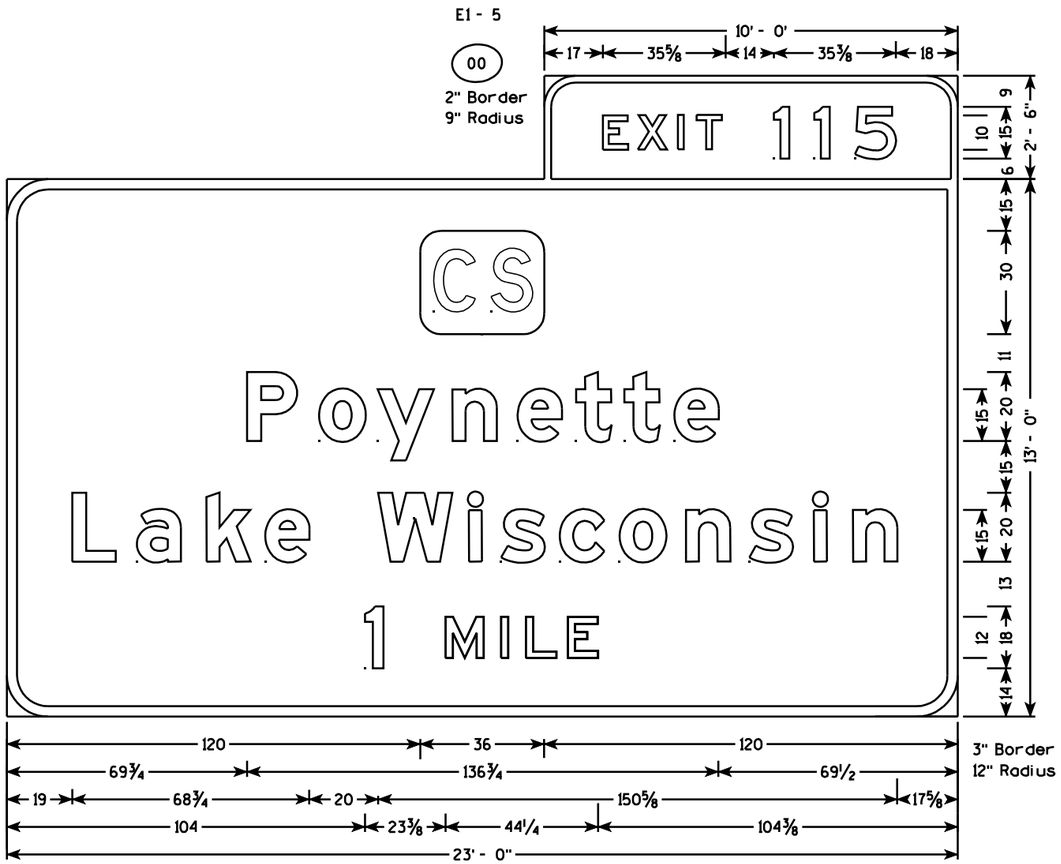


D2-3

7

7

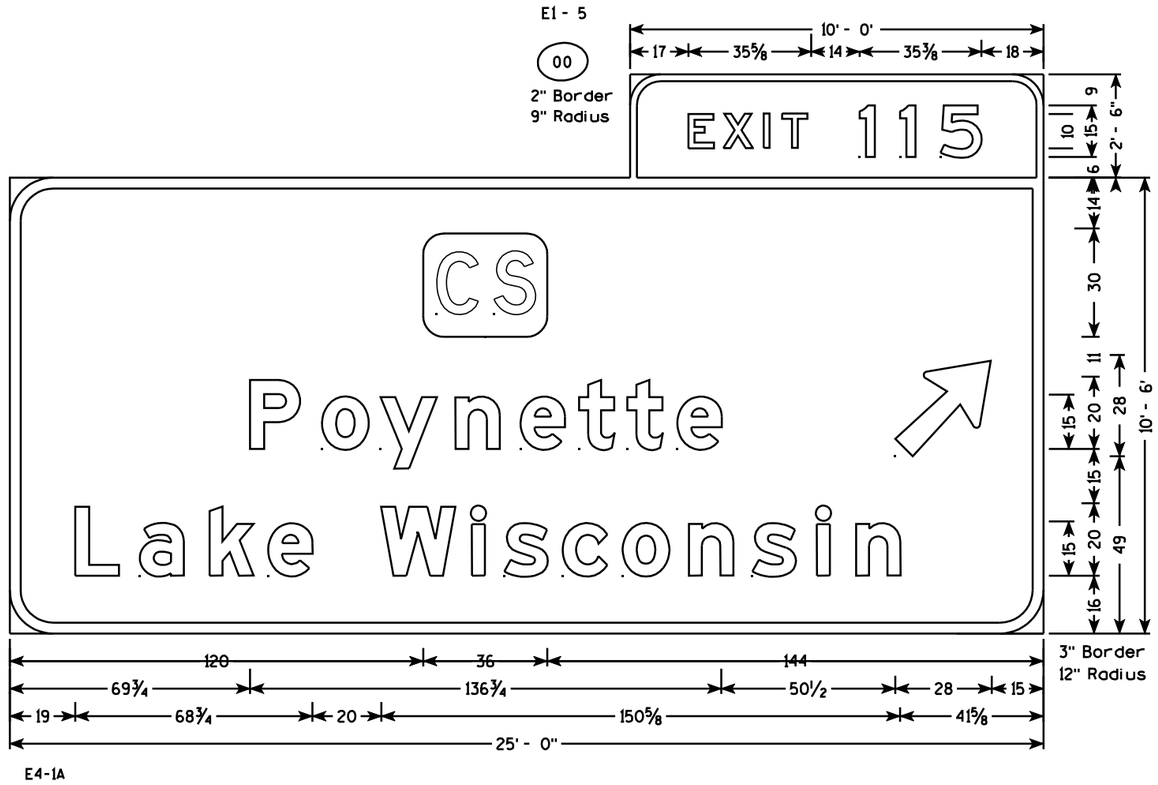
PROJECT NO: 1010-04-72	HWY: 139	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET NO: 251	E



E1-1A

NOTES

1. All Signs are Type I - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White - Type H Reflective
3. Message Series - E Modified



E4-1A

7

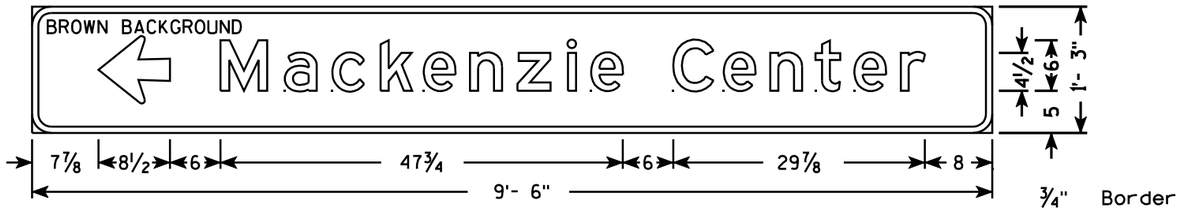
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PROJECT NO: 1010-04-72	HWY: 139	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET NO: 252	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

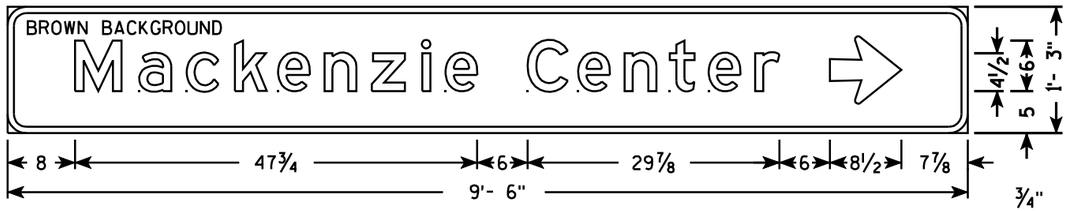
NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - BROWN
   Message - WHITE
3. Message Series - E



D1-1

¾" Border
2 ¼" Radius



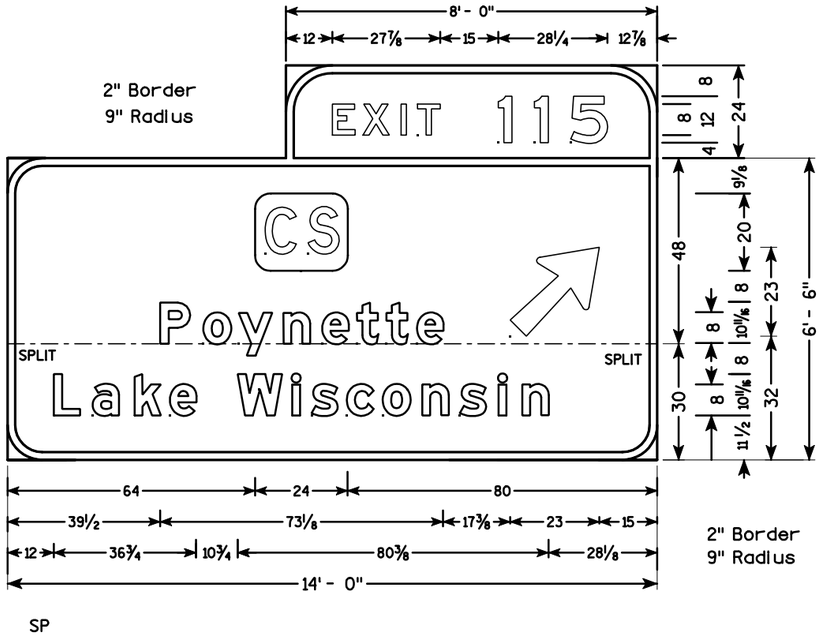
D1-1

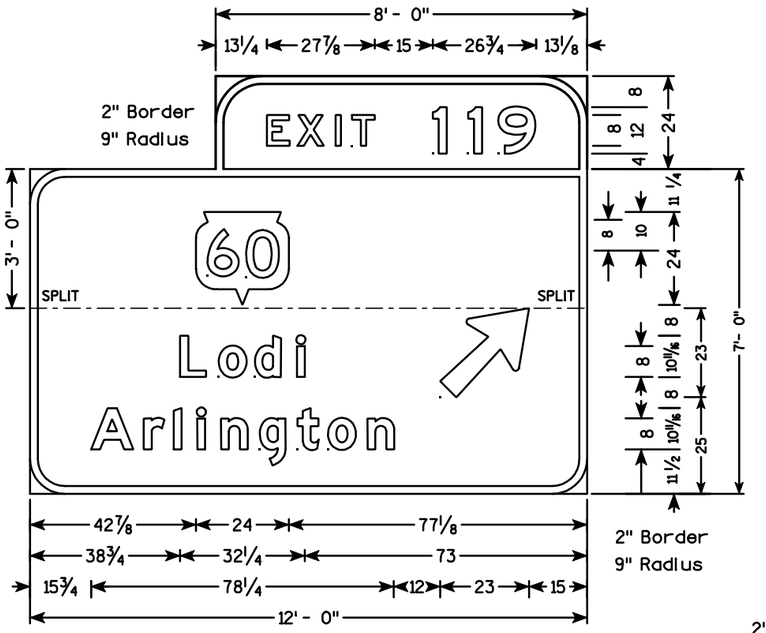
¾" Border
2 ¼" Radius

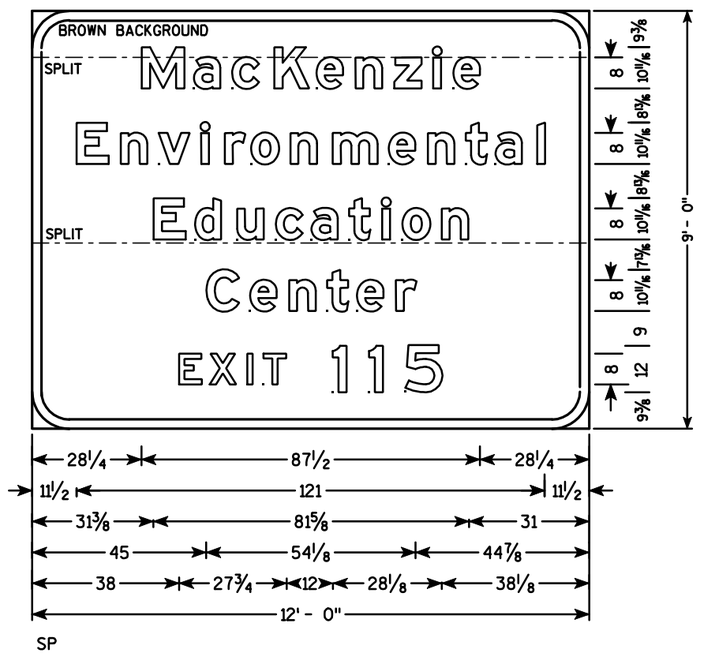
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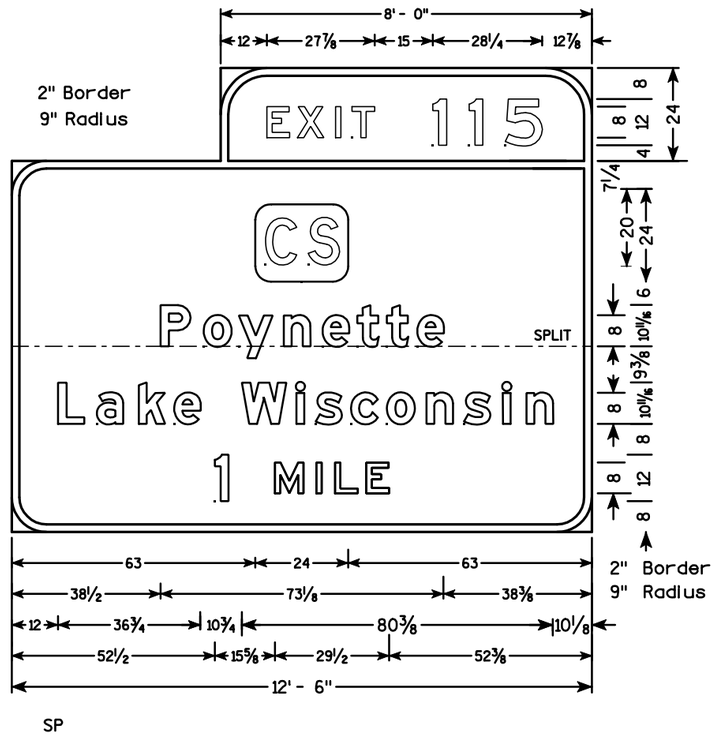
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PROJECT NO: 1010-04-72	HWY: 139	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET NO: 253	E









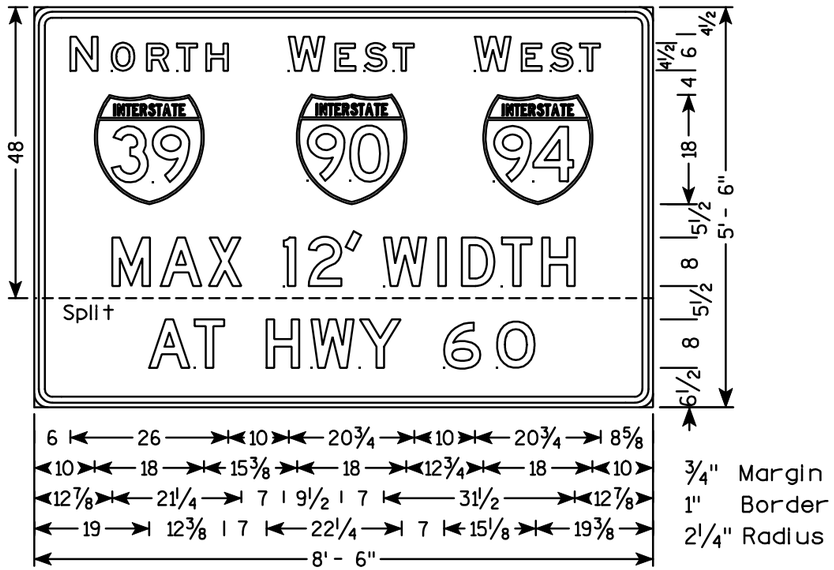
NOTES

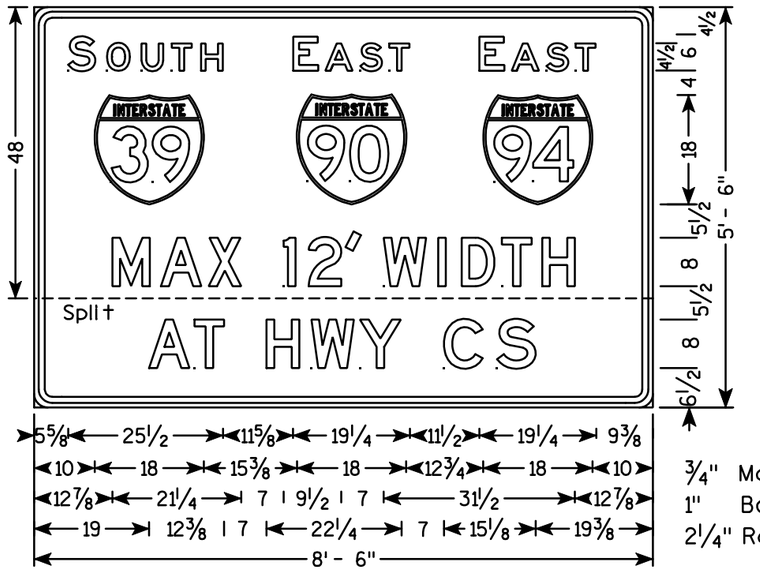
1. Sign is Type III - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E Modified

7

7

PROJECT NO: 1010-04-72	HWY: 139	COUNTY: COLUMBIA	TRAFFIC CONTROL SIGNS FIXED MESSAGE	SHEET NO: 254	E





7

7

NOTES

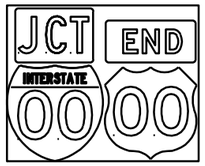
1. All Signs Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange except as noted
   Message - Black
3. Message Series - D

PROJECT NO: 1010-04-72	HWY: IH 39	COUNTY: COLUMBIA	TRAFFIC CONTROL SIGNS FIXED MESSAGE	SHEET NO: 255	E

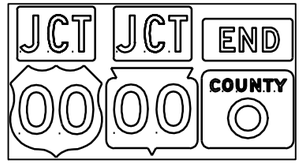
TYPICAL ASSEMBLIES



J1-1



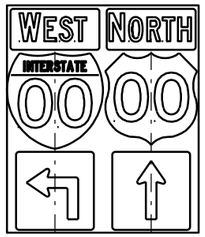
J1-2



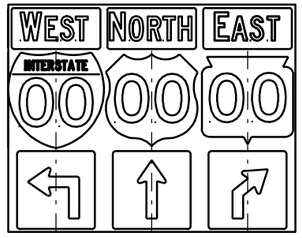
J1-3



J2-1



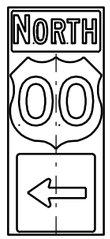
J2-2



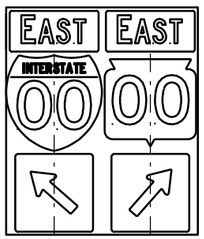
J2-3



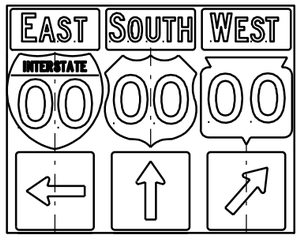
JV



J3-1



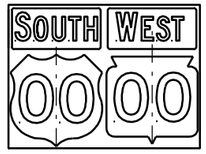
J3-2



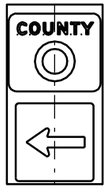
J3-3



J4-1



J4-2



J13-1



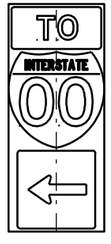
J12-1



J32-1



J33-1



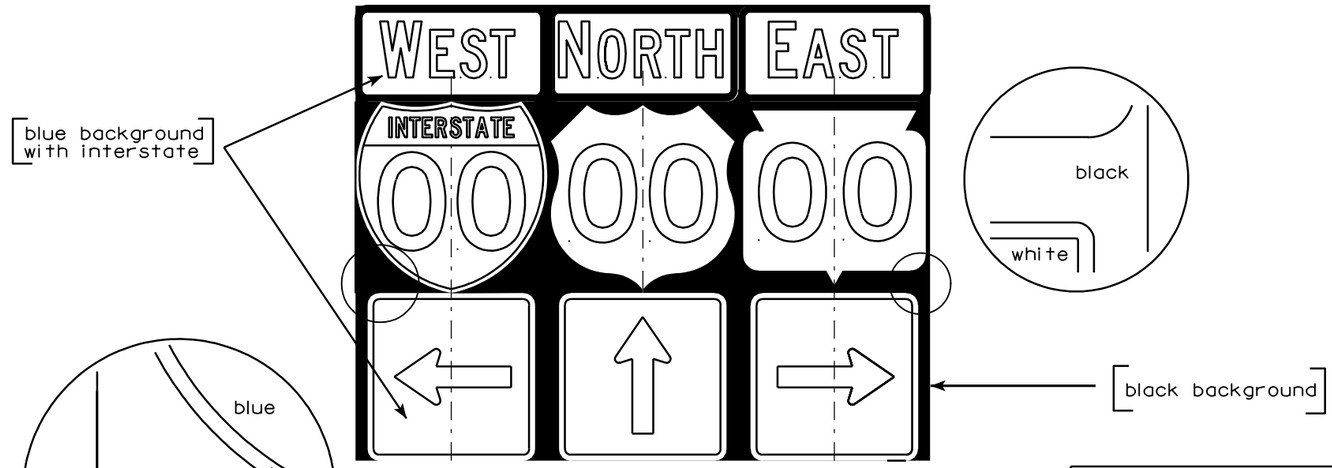
J23-1



J22-1

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square since base material is plywood.
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 heads that are same size. If the route marker heads are different size use multiple piece component.

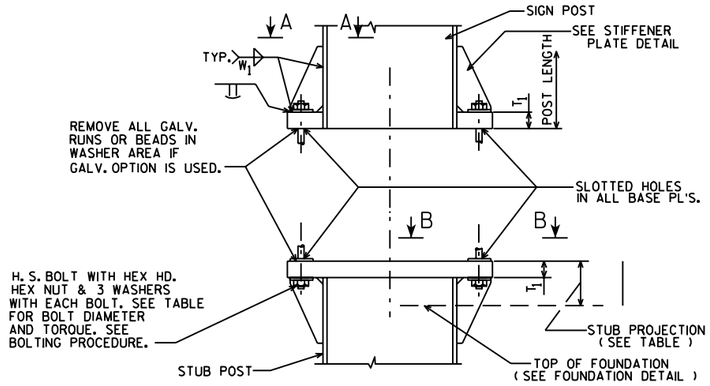


ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

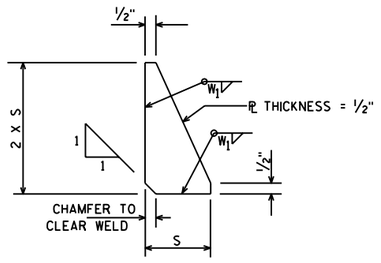
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/26/05 PLATE NO. A21S.4

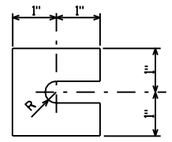


SIGN POST AND STUB POST ELEVATION



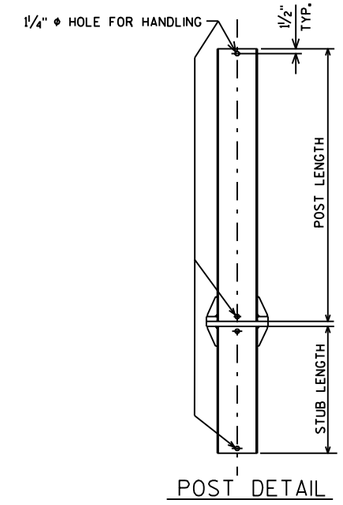
STIFFENER PLATE DETAIL

(SEE TABLE FOR DIMENSIONS)



FURNISH 2 @ .012" ± THICK AND 2 @ .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M.- B36.

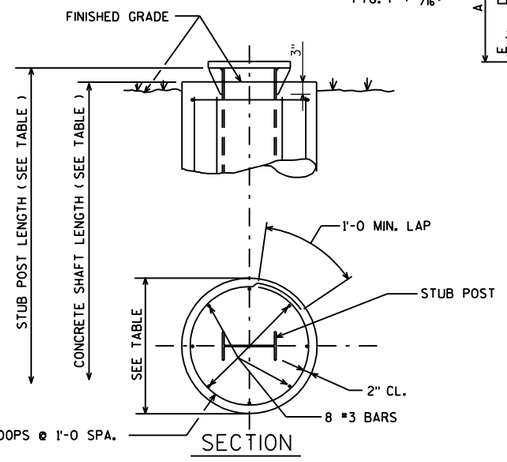
SHIM DETAIL



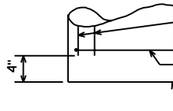
POST DETAIL

QUANTITIES FOR 1 FOOTING		
	CONC. MASONRY C.Y.	REINF. STEEL LBS.
A	0.6	34
B	0.8	49
C	0.9	50
D	0.9	56
⑦ E	1.0	62

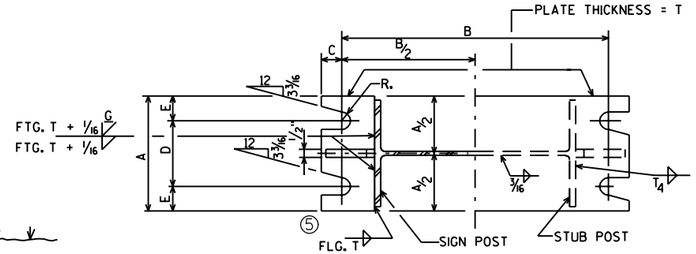
	TYPE	#3	#4
⑦ REINF.	A	8 @ 4'-5	5 @ 6'-3
	B	8 @ 6'-5	7 @ 6'-3
	C	8 @ 6'-11	7 @ 6'-3
	D	8 @ 7'-5	8 @ 6'-3
	E	8 @ 7'-11	9 @ 6'-3



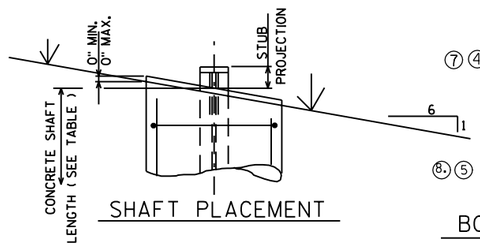
SECTION



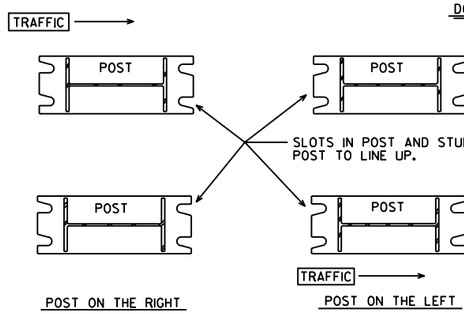
FOUNDATION DETAIL



SECTION A-A SECTION B-B



SHAFT PLACEMENT



POST SLOT ORIENTATION ⑦

DESIGN DATA

WIND PRESSURE = 75 M.P.H.
WIND COMPONENTS - NORMAL = 1.0 TRANSVERSE = 0.0
ICE LOAD = 3 P.S.F.

GROUP LOADS	PERCENT OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD & WIND	140
3. DEAD, ICE & ½ WIND△	140 △25 P.S.F. MIN.

ALLOWABLE SOIL PRESSURE = 1½T / SQ. FT.
WIND LOAD WAS APPLIED TO THE AREA OF THE SIGN AND TO THE SUPPORTING MEMBERS.
ICE LOAD WAS APPLIED TO ONE FACE OF THE SIGN AND AROUND THE SURFACE OF THE SUPPORTING MEMBERS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DESIGN CONFORMS WITH A.A.S.H.T.O. SPECIFICATIONS 1985.
ALL POSTS, POST STUBS & ATTACHMENTS SHALL BE A.S.T.M. A709 GRADE 50, EXCEPT WHERE CONTRACT REQUIRES A.S.T.M. A709 GRADE 50 W.
IF A709 GRADE 50 MATERIAL IS USED, 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 WHEN POSTS, POST STUBS AND ATTACHMENTS ARE A709 GRADE 50 AND GALVANIZED.
H. S. BOLTS, WASHERS & NUTS SHALL BE A325 TYPE 3 NOT GALVANIZED WHEN CONTRACT REQUIRES A709 GRADE 50 W POSTS, POSTS STUBS AND ATTACHMENTS.

BOLTING PROCEDURE - BASE CONNECTION

1. ASSEMBLE SIGN POST TO STUB POST WITH BOLTS AND ONE OF THE FLAT WASHERS ON EACH BOLT BETW. PLATES.
2. SHIM AS REQ'D. TO PLUMB POST.
3. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. (SEE TABLE)
4. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NOTE:
TIGHTEN THE HIGH STRENGTH BOLTS TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.

	TYPE	DIMENSION / POST SIZE	BOLT SIZE & TORQUE	A	B	C	D	E	T_1	T_4	W_1	R	S	FOUNDATION DATA: STUB LENGTH	STUB PROJECTION	SHAFT DIAMETER	SHAFT LENGTH	② K
④	A	W10"X12.0 #/FT.	¾" ϕ @ 75"-FT.	5¼"	1'-0⅜"	⅞"	3½"	⅞"	1"	⅜"	5/16"	13/32 "	2⅛"	3'-6	3"	2'-0 ϕ	5'-0	76.0# ④
④	B	W12"X16.0 #/FT.	⅞" ϕ @ 85"-FT.	5½"	1'-4¼	1"	3½"	1"	1¼"	¼"	5/16"	15/32 "	3"	5'-6	3"	2'-0 ϕ	7'-0	146.5# ④
	C	W12"X19.0 #/FT.	⅞" ϕ @ 85"-FT.	5½"	1'-4¼	1"	3½"	1"	1½"	5/16"	5/16"	15/32 "	3"	6'-0	3"	2'-0 ϕ	7'-6	182.1#
	D	W12"X22.0 #/FT.	⅞" ϕ @ 85"-FT.	5½"	1'-4¼	1"	3½"	1"	1½"	⅜"	5/16"	15/32 "	3"	6'-6	3"	2'-0 ϕ	8'-0	210.5#
③	E	W12"X26.0 #/FT.	1" ϕ @ 90"-FT.	7"	1'-4¼	1¼"	4"	1½"	1½"	⅜"	5/16"	11/32 "	3"	7'-0	3"	2'-0 ϕ	8'-6	293.0# ③

① ⑥ ①

STRUCTURAL CARBON STEEL PAY WTS. (1 POST) = K+ (POST LENGTH X POST WT.)
" K " INCLUDES STUB, BASE PLATES, STIFFS., BOLTS, AND WASHERS.

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chesta J Spey for State Traffic Engineer

DATE 8/26/97 PLATE NO. A3-1.12

NO.	DATE	REVISION
⑧	10-30-96	NOT GALVANIZED/GALVANIZED
⑦	10-30-92	QUANT., A588 EXCEPT., ADD SLOT VIEW
⑥	8-24-87	BASE CONN. WELD
⑤	10-13-81	BASE CONN. WELD & FUSE PL WASHERS
④	10-19-79	POST A & B, A572 GR. 50, & K
②	11-28-78	"K" ③ 4-23-79 TYPE "E"
①	5-4-78	T_1 , T_2 & W_1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

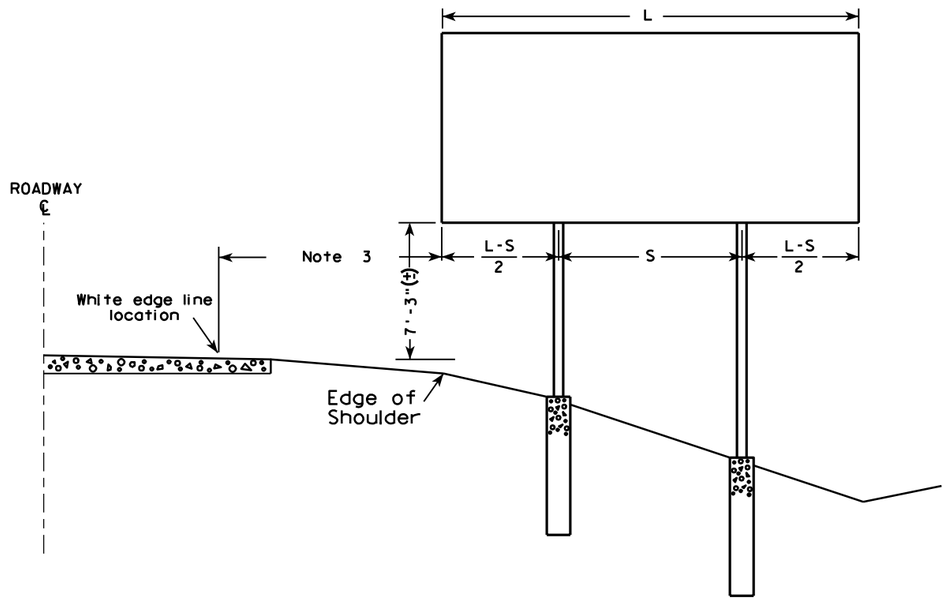
TYPE A, B, C, D, & E

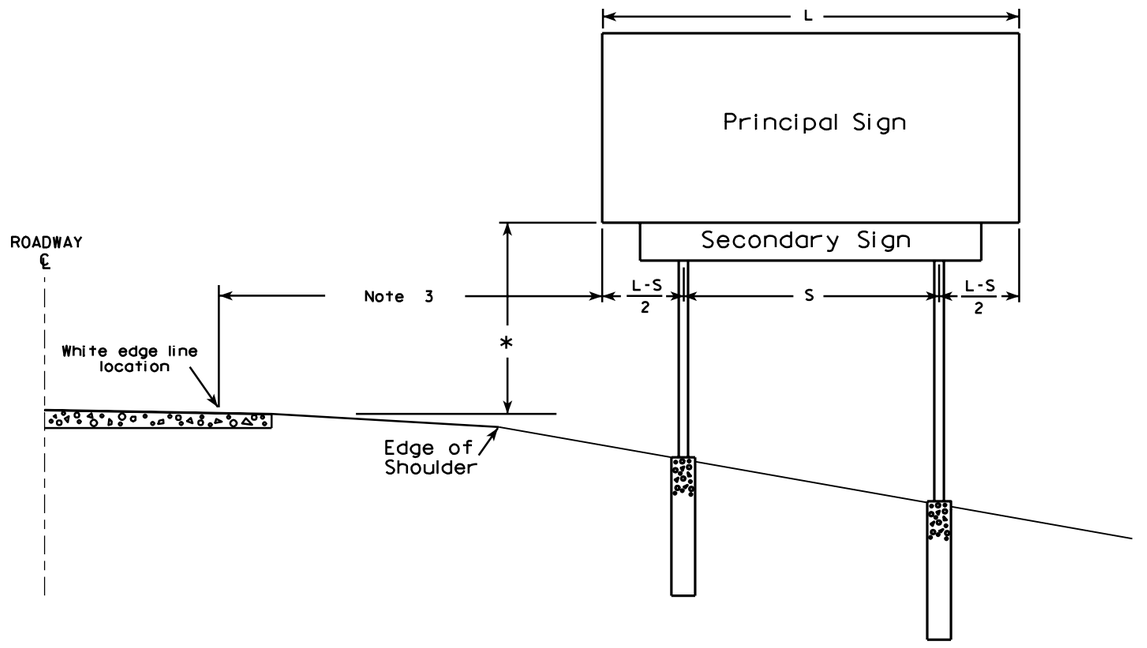
CONST. SPEC. 1989 | DRAWN BY LOY | PLANS CK'D.

FTG. & SIGN SUPPORT DETAILS GROUND MOUNT BREAK-AWAY SIGNS

SHEET

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 257 | E





GENERAL NOTES

1. For a 2 post installation, S equals 3L/5, but shall not be less than 9 ft.
2. For a 3 post installation, S equals 5L/7, but shall not be less than 18 ft., and the space between any two posts shall not be less than 9 ft.
3. Unless noted in the plan, the sign offset distance shall be a minimum of 17'-6", desirable 30'-0".
4. The (±) tolerance shown on this sheet is 3 in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Post lengths shown in the miscellaneous quantities are estimated lengths. The contractor shall verify post lengths at the time of final grading.
7. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.

* Clearance is 8'-3"(±) when the secondary sign is 3 ft. or less in height. For secondary signs larger than 3 ft., the clearance to the bottom of the secondary sign shall be 5'-3"(±).

7

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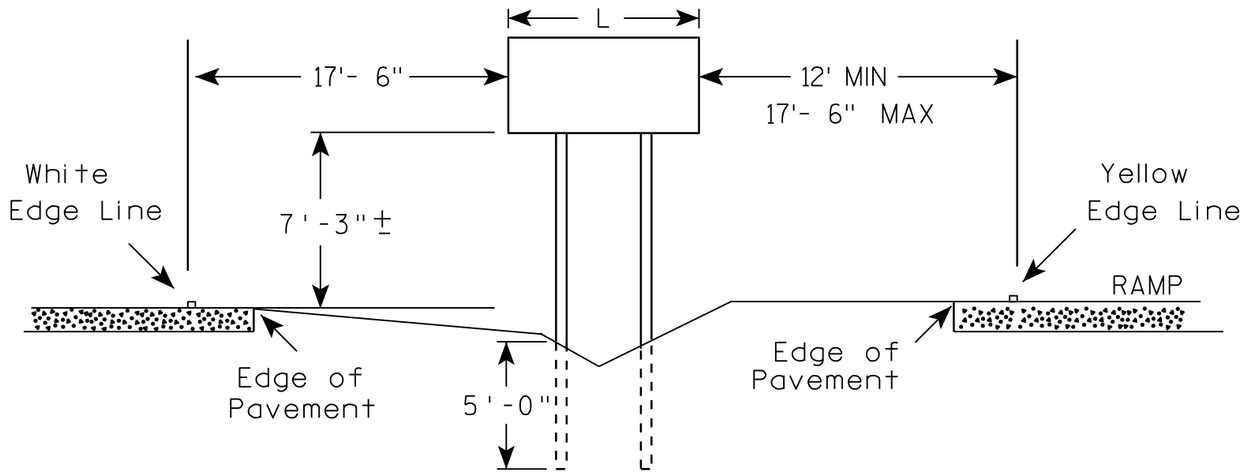
TYPICAL INSTALLATION
OF TYPE I SIGNS

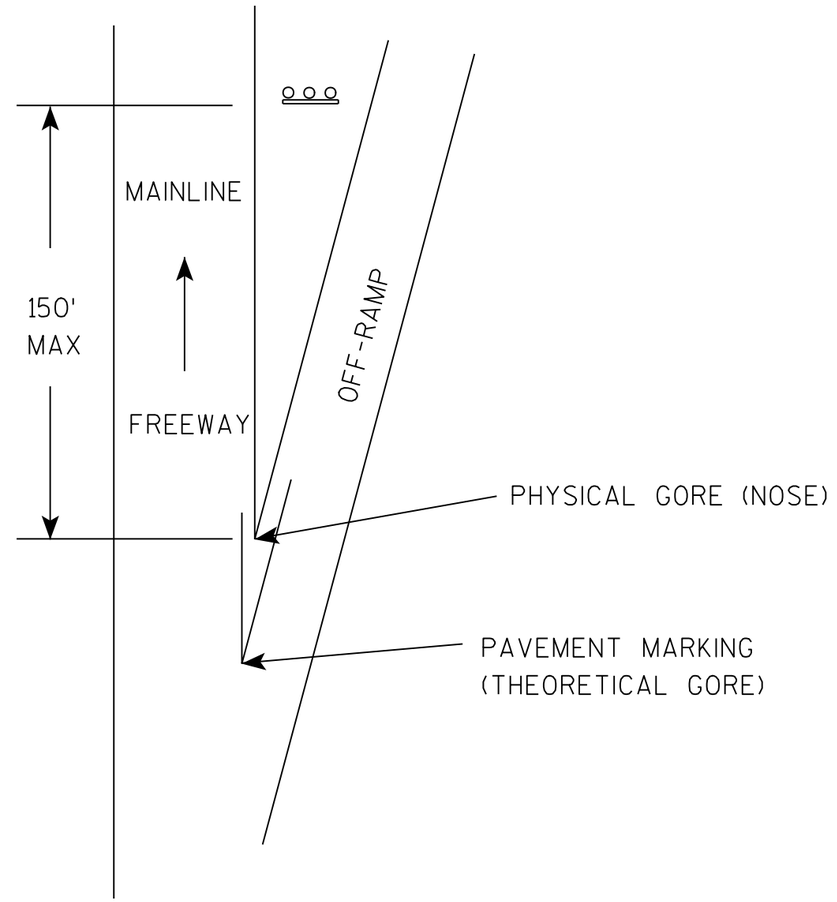
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/02/08 PLATE NO. A4-1.9

PROJECT NO:				SHEET NO: 258	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 9 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

7

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TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

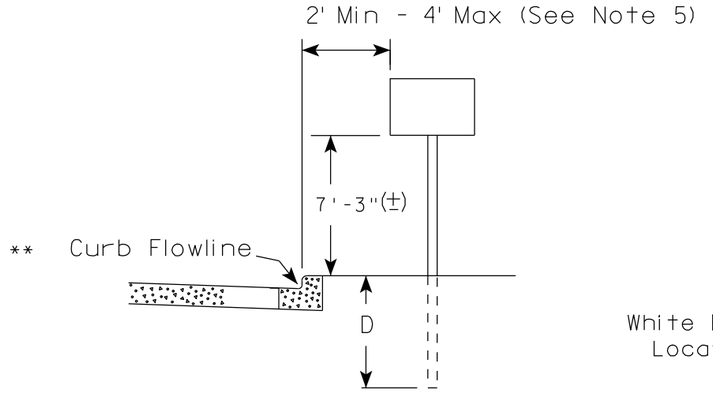
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

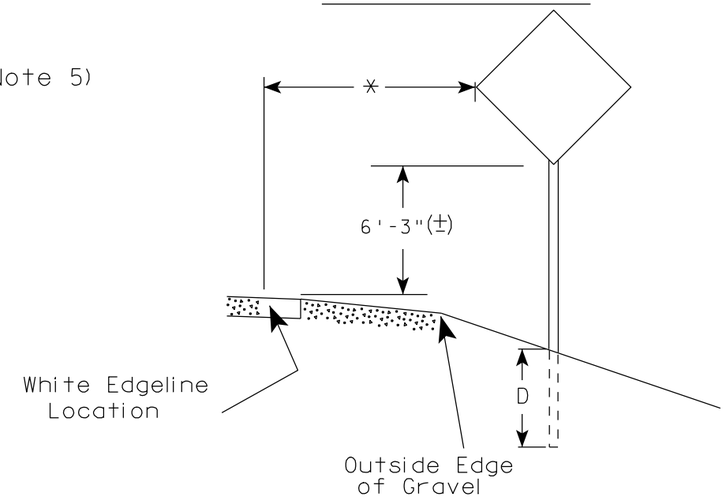
DATE 4/4/00 PLATE NO. A4-2.2

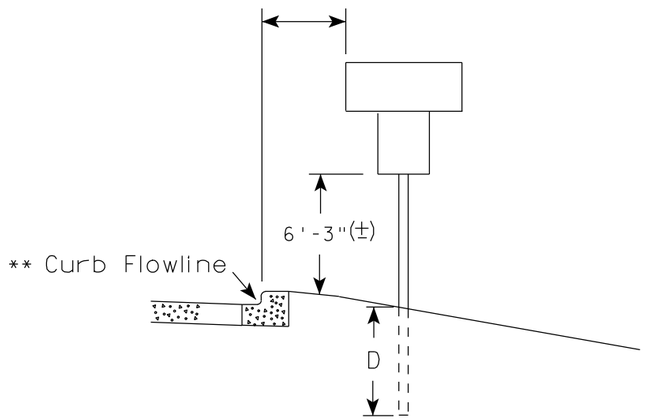
PROJECT NO:				SHEET NO: 259	E

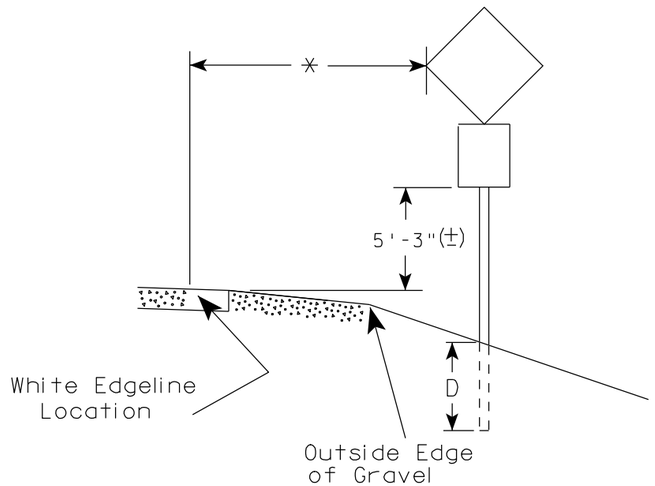
URBAN AREA



RURAL AREA (See Note 2)







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

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

GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
3. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
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 stop signs (R1-1F) 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 (W1-8A), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

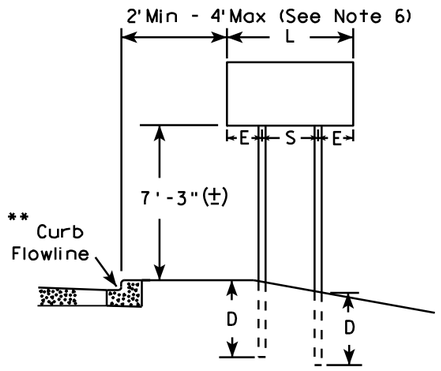
DATE 4/10/09 PLATE NO. A4-3.15

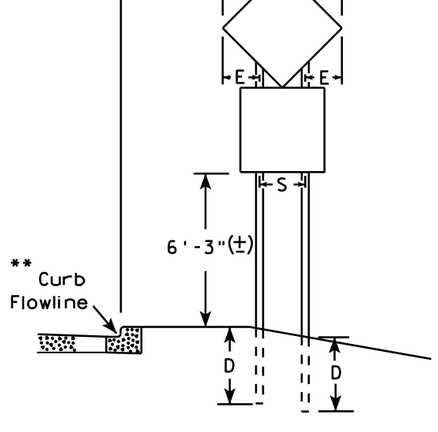
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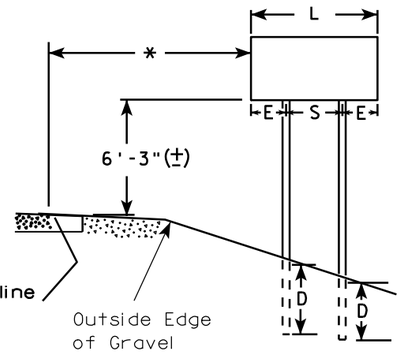
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 260	E

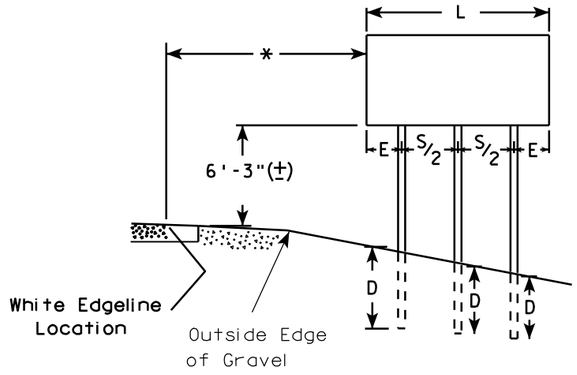
URBAN AREA

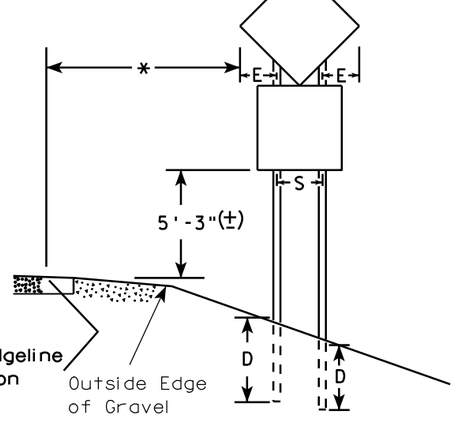




RURAL AREA (See Note 3)







DIAMOND SHAPED SIGNS		
L	S	E
Less than 60"	20"	L/2 - 10
60"--72"	32"	L/2 - 16
Greater than 72"	3 L/5	L/5

SIGN SHAPE OTHER THAN DIAMOND (Two Post Installations)		
L	S	E
Less than 60"	L-24"	12"
60" or more	3 L/5	L/5

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. For 3 post installations, spacing is S/2 and S must be greater than 7'-0".
2. For 4 post installations, spacing is S/3 and S must be greater than 10'-6".
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. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) 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 (W1-8A), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) 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.

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

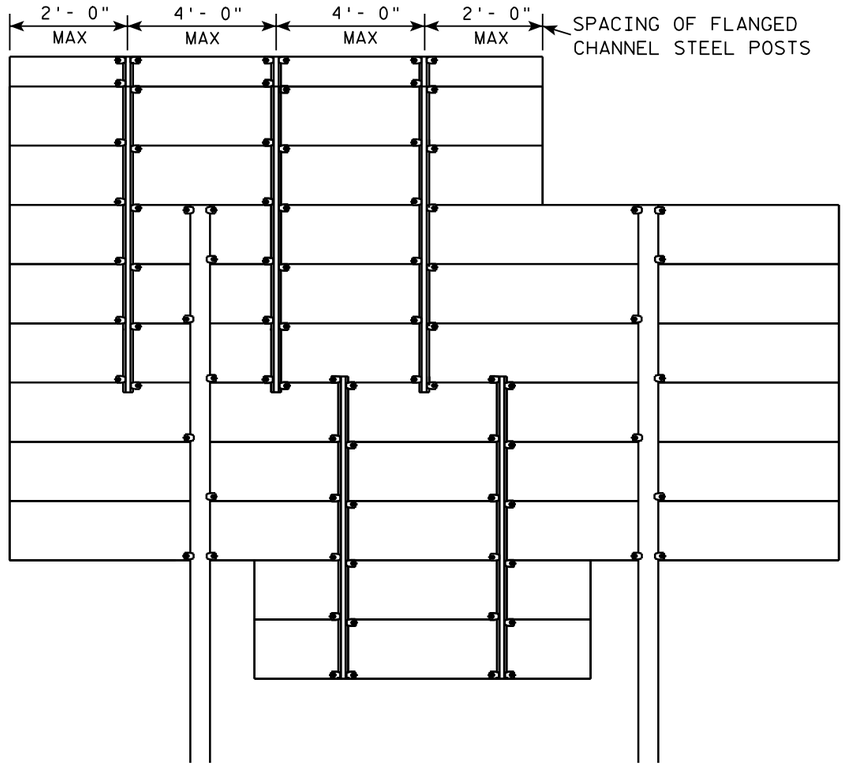
DATE 4/10/09 PLATE NO. A4-4.10

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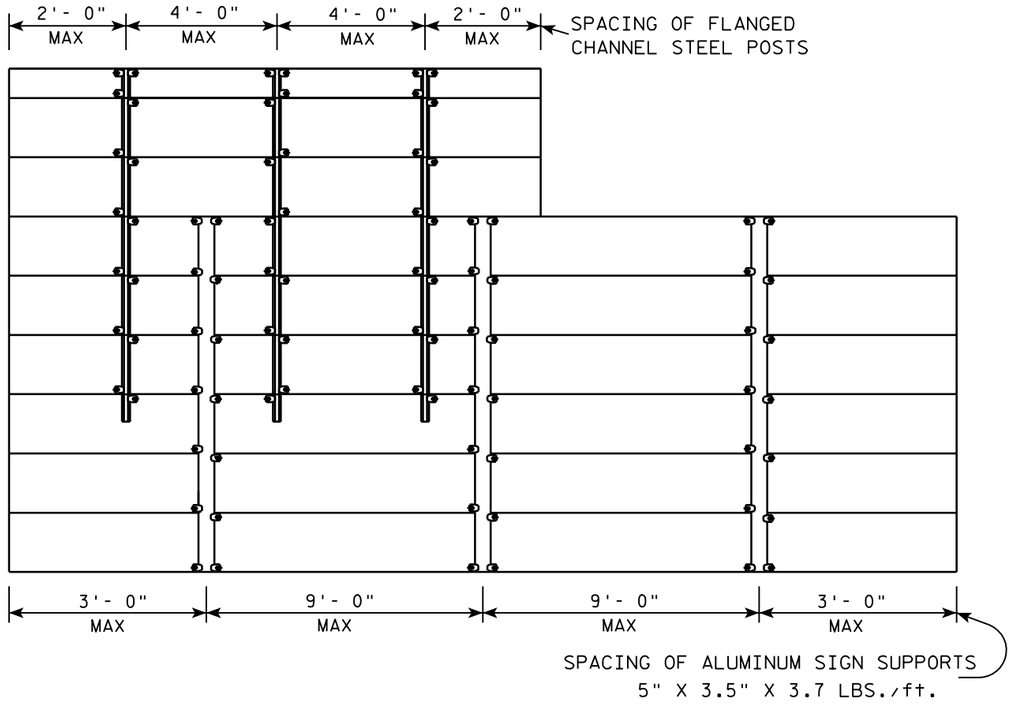
7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 261 | E

GROUND MOUNTED SIGN



SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to section 633 of STANDARD SPECIFICATIONS 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)

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

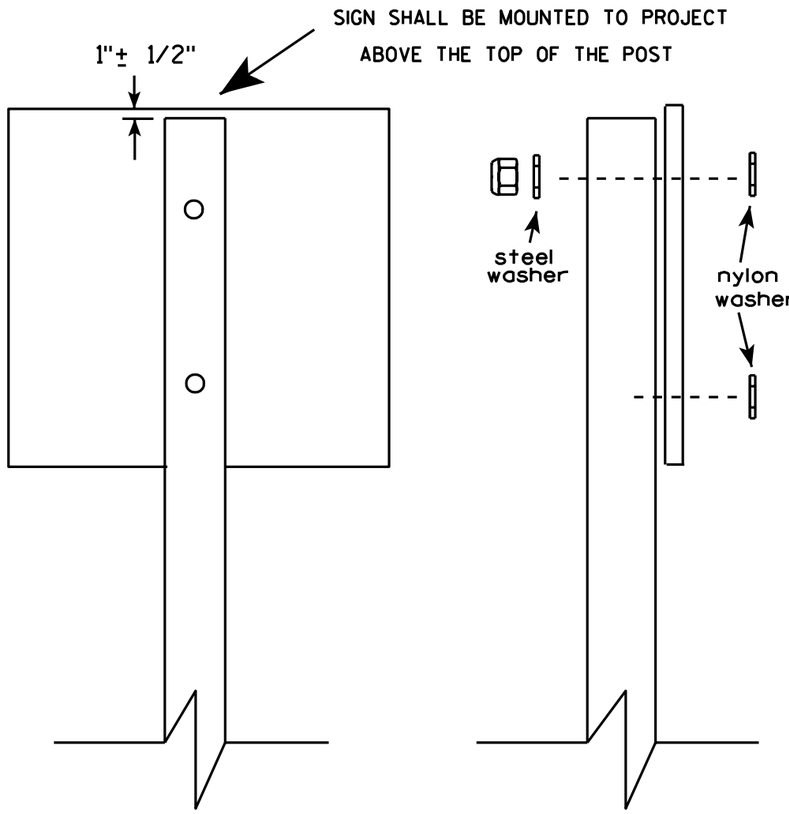
WISCONSIN DEPT OF TRANSPORTATION

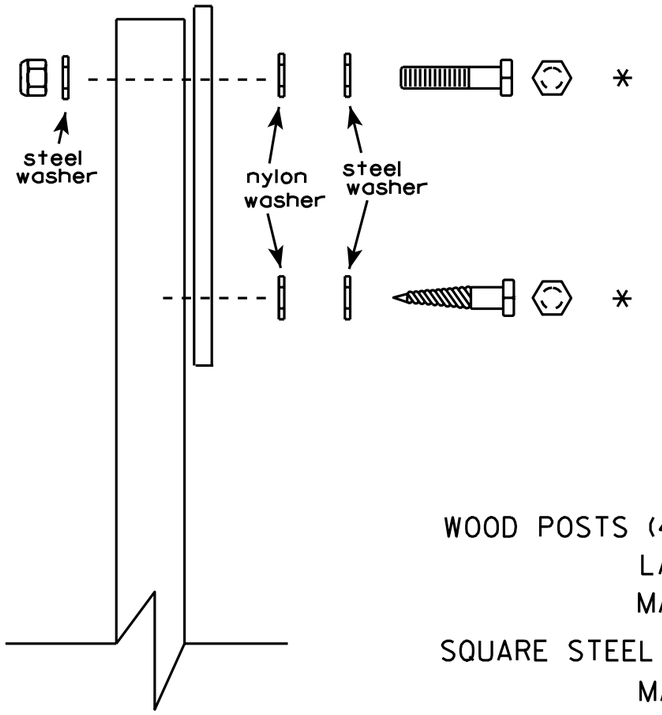
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/04 PLATE NO. A4-6.10

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Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

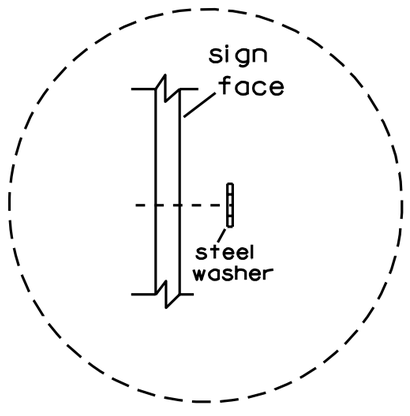
a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts

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 for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* 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

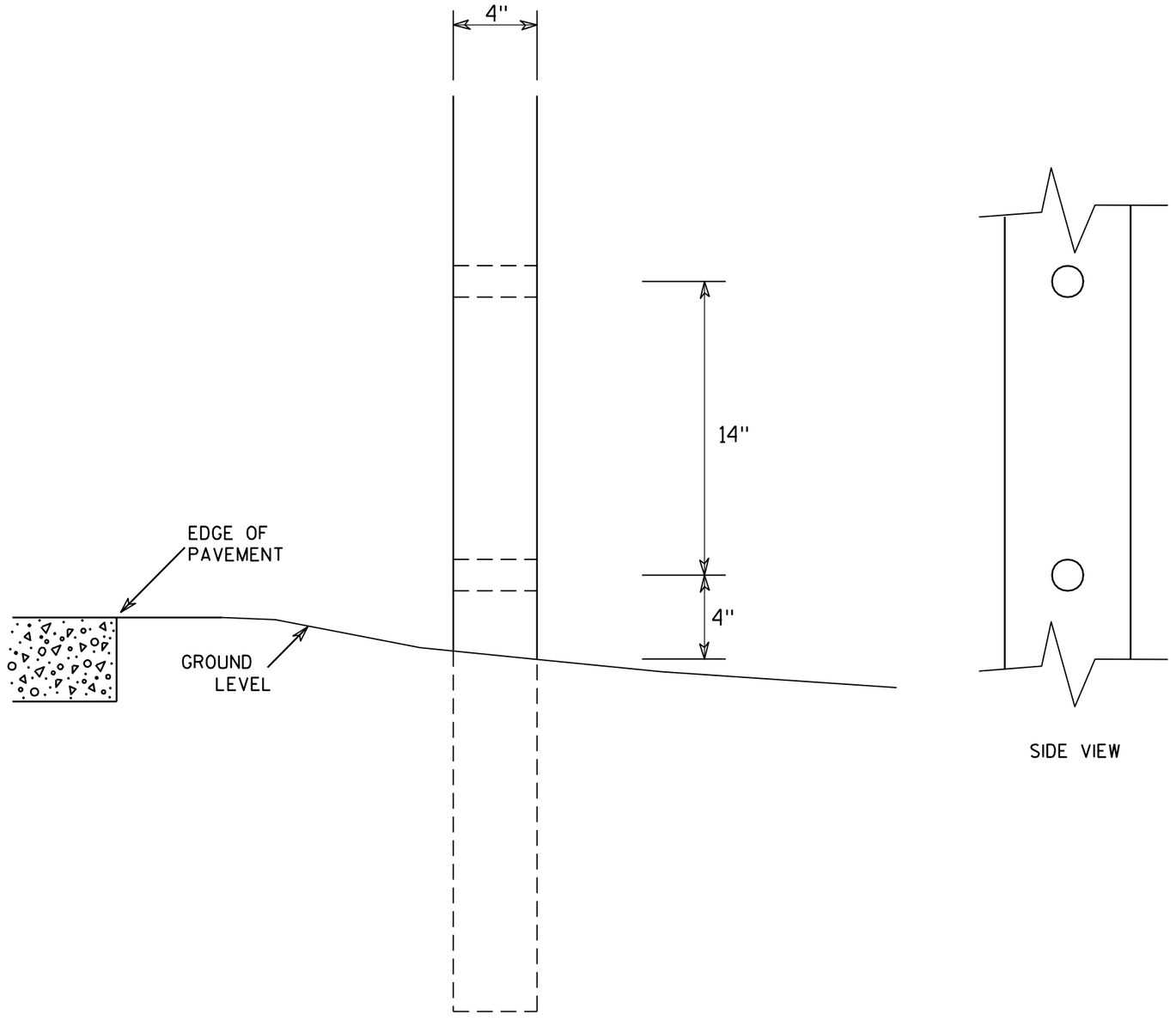
DATE 8/30/06 PLATE NO. A4-8.6

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PROJECT NO:

SHEET NO: 263 E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

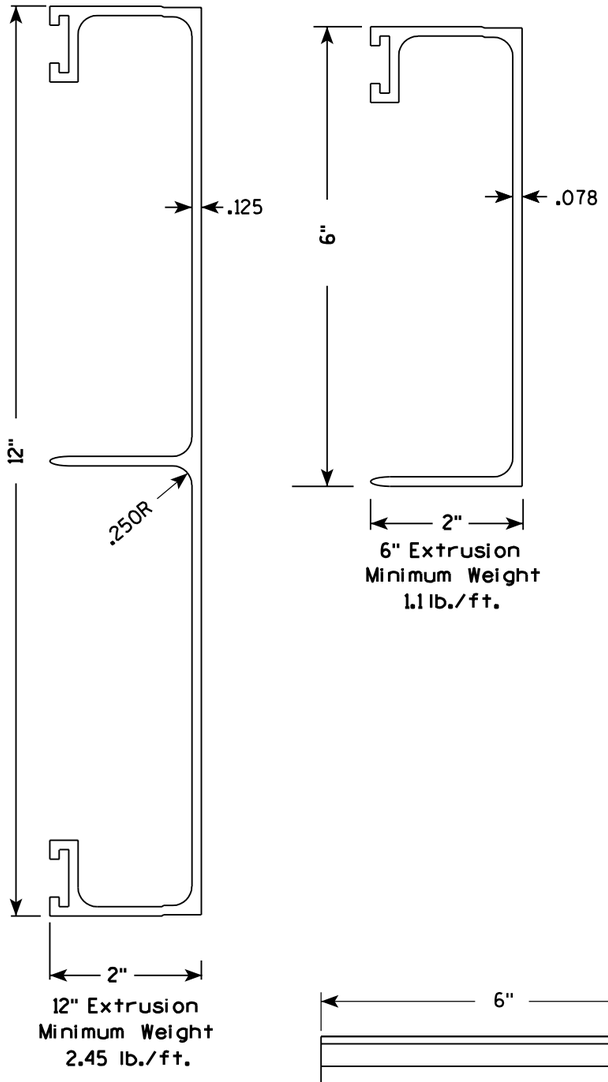
WISCONSIN DEPT OF TRANSPORTATION

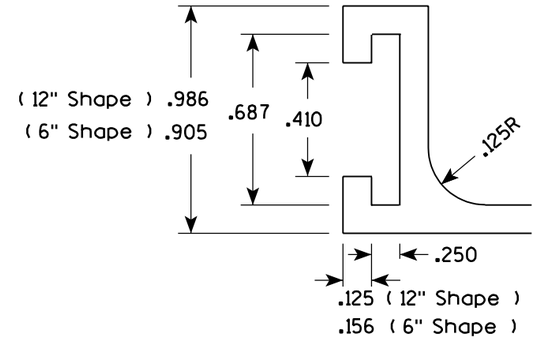
APPROVED Chester J Spang for State Traffic Engineer

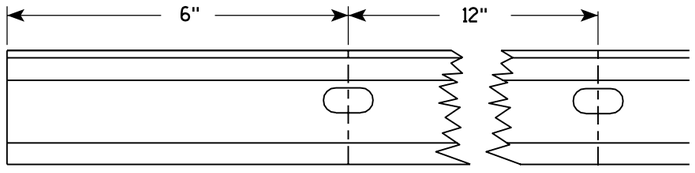
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 264	E

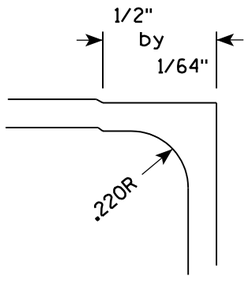
Extruded Shape







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.

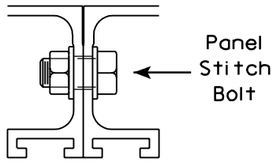


Hardware

STITCH BOLT, WASHER & NUT

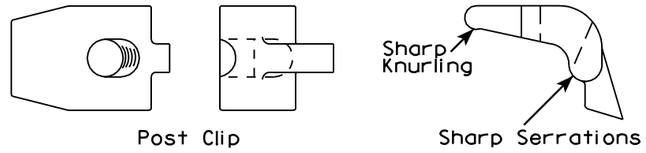
The hardware includes:

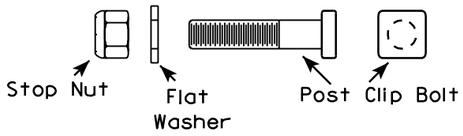
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



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.

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 11/18/99 PLATE NO. A5-2.9

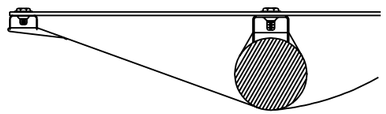
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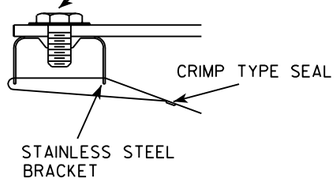
PROJECT NO:

SHEET NO: 265 E

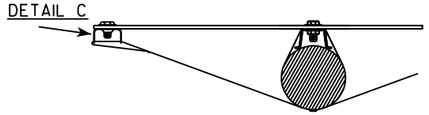
BRACE BANDING

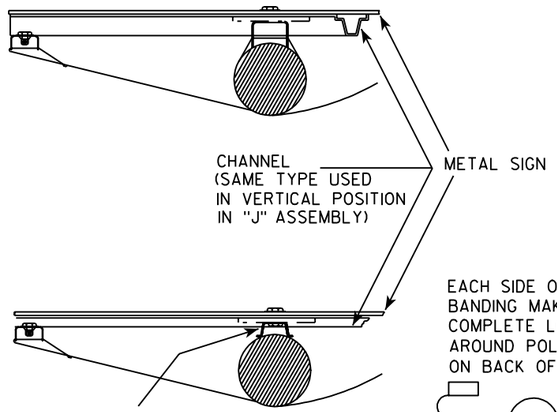


DETAIL C
CADMIUM PLATED STEEL BOLT
THROUGH BLACK BORDER

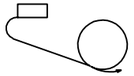


DETAIL C



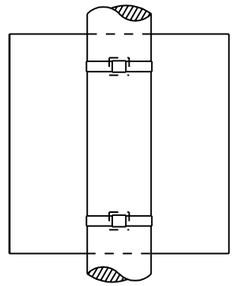


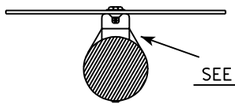
EACH SIDE OF BRACE
BANDING MAKES ONE
COMPLETE LOOP
AROUND POLE-SEAL
ON BACK OF POLE



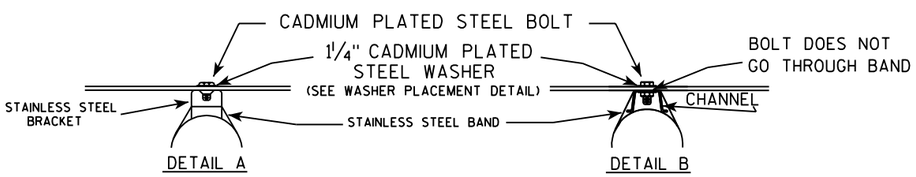
BRACKET BANDING

SINGLE SIGN





SEE DETAIL A

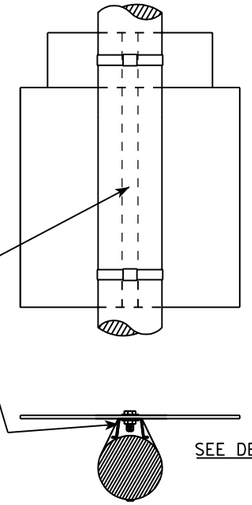


DETAIL A

DETAIL B

"J" ASSEMBLY

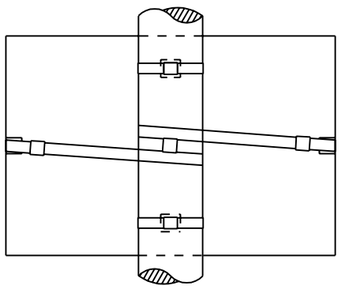
CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



SEE DETAIL B

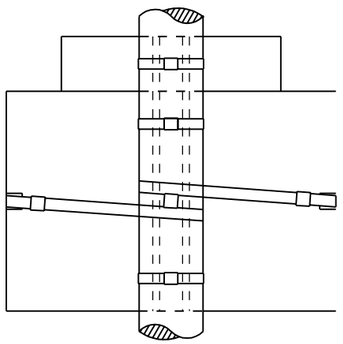
GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' 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.

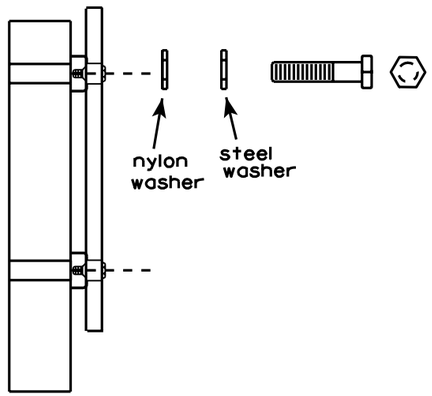


BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY BUT NOT SO TIGHT AS TO APPRECIABLY CURVE FACE OF SIGN.



WASHER PLACEMENT



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
FOR ALL TYPE H SIGNS

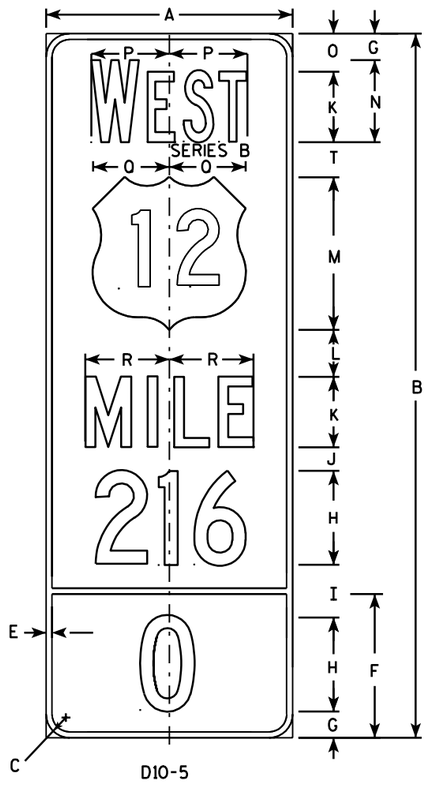
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

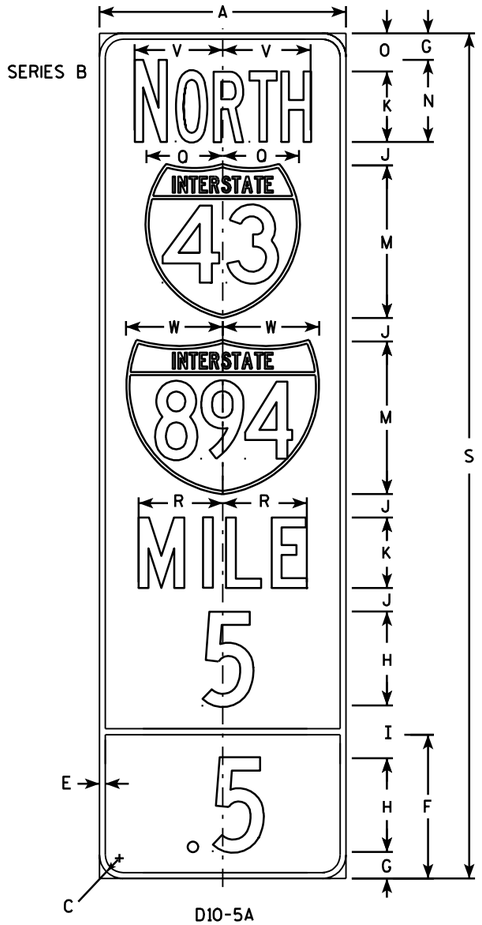
APPROVED *Matthew R Rauch*
for State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 266	E



D10-5



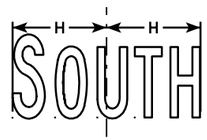
D10-5A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - BLUE
   Message - WHITE
3. Interstate Shield Color
   Background - Top Red
   - Bottom Blue
   Message - White
4. Message Series - C or as noted on the Sign.
5. 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.
6. The decimal point is required for all digits except "0".
7. Optically adjust mileage numbers about the centerline of the sign to achieve proper balance.



SERIES B



SERIES B

Metric equivalent for this sign is:		Metric equivalent for this sign is:	
SIZE	D10-5	SIZE	D10-5A
1		1	
2		2	
3		3	
4	525 mm X 1500 mm	4	525 mm X 1950 mm
5	525 mm X 1500 mm	5	525 mm X 1950 mm

																										D10-5		D10-5A	
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2	Area sq. ft.	Area m2
1																														
2																														
3																														
4	21	60	1 ½		½	12 ¼	2 ¼	8	4 ½	2	6	4	13	7	3 ¼	6 ⅝	6 ½	7 ⅛	72	3		7 ½	8 ¼				8.75	0.79	10.5	1.03
5	21	60	1 ½		½	12 ¼	2 ¼	8	4 ½	2	6	4	13	7	3 ¼	6 ⅝	6 ½	7 ⅛	72	3		7 ½	8 ¼				8.75	0.79	10.5	1.03

STANDARD SIGN
D10-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/09/05 PLATE NO. D10-5.1

PROJECT NO:

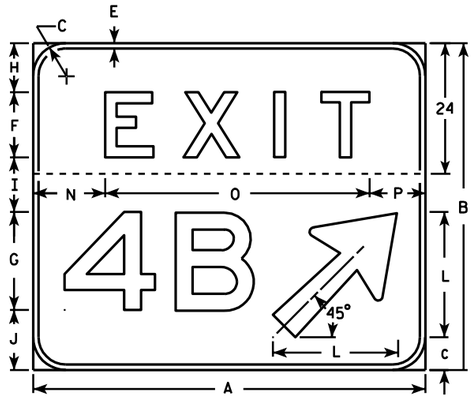
SHEET NO: 267 E

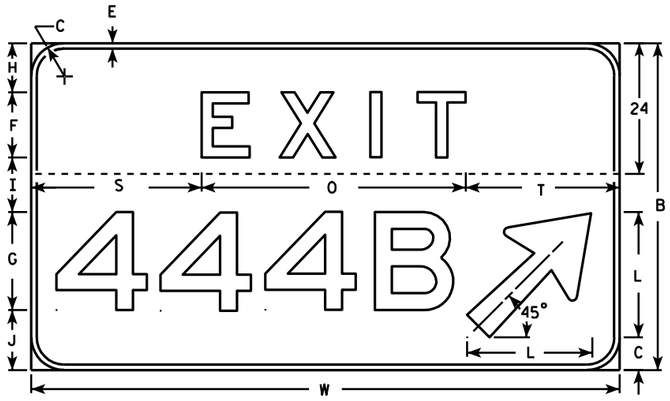
FILE NAME : C:\Users\Projects\tr_stdplate\D105.DGN PLOT DATE : 09-MAR-2005 08:35 PLOT BY : DOTSJA

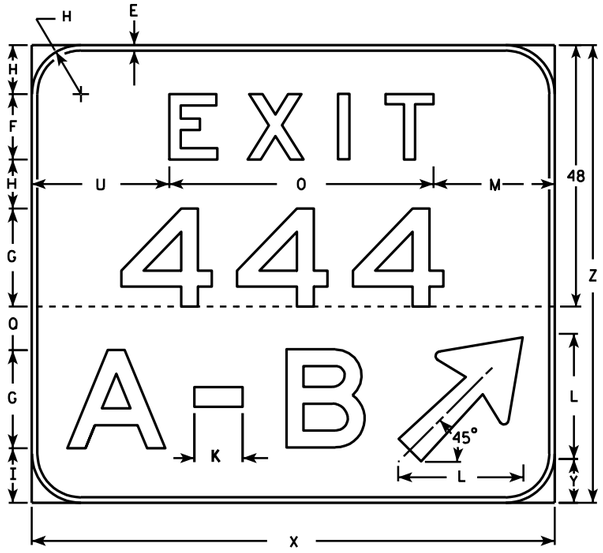
WISDOT/CADDS SHEET 42

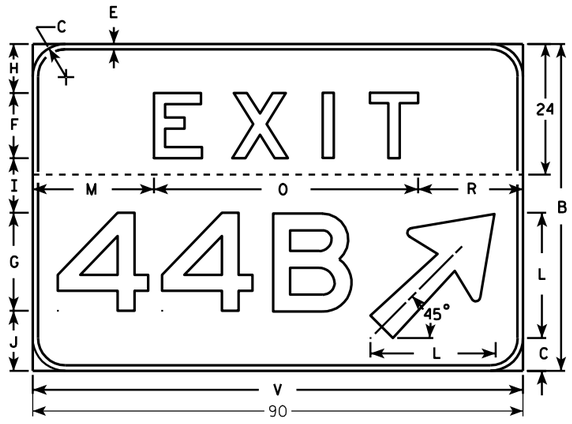
7

7









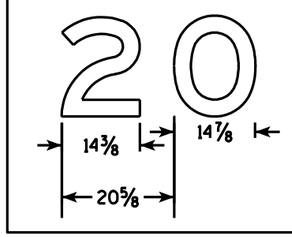
NOTES

1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White (Type H reflective)
3. Message Series - E
4. Corners may be square or rounded but the border shall be rounded as shown.
5. Base material for this sign shall be plywood and 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. When two letters are hyphenated, the distance between them should be equal to two letter heights and the hyphen is spaced optically between them.
9. As per the Standard Spec's, these signs shall not have a vertical joint.

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	19 7/8	22 1/8	22 1/8
1	5 7/8	14	14	14	13 1/8	12 1/8	14	14	12 1/4	14	14	9 7/8	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	20 1/4	21 1/8	21 1/8
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	20 1/4	21 1/8	21 1/8
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	22 1/2	23 3/8	23 3/8
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	19 1/4	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	18	20 3/4	20 3/4
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	20 1/4	20 5/8	20 5/8
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	19 1/4	21 1/2	21 1/2
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	18	21 3/4	21 3/4
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

EXAMPLE FOR USING SPACING CHART



Metric equivalent for this sign is:

PHY. SIZE		
72 X 60	1800 mm X 1500 mm	1-2 Digit
90 X 60	2250 mm X 1500 mm	3 Digit
108 X 60	2700 mm X 1500 mm	4 Digit
96 X 84	2400 mm X 2100 mm	5 Digit

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	8	19 1/4	31 1/4	28 1/4	25 1/4	90	108	96	7 1/2	84

1-2 Digit Bid Area	3 Digit Bid Area	4 Digit Bid Area	5 Digit Bid Area
Sq. Ft.			
30	37.5	45	56
m2			
2.70	3.38	4.05	5.04

STANDARD SIGN
E5-1A

WISCONSIN DEPT OF TRANSPORTATION

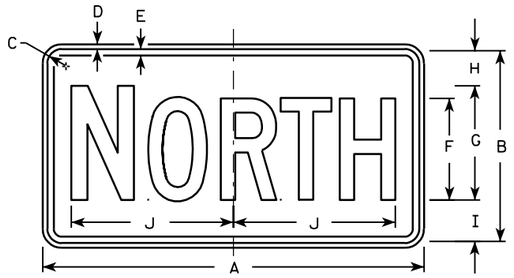
APPROVED Chester J Spay for State Traffic Engineer

DATE 3/16/01 PLATE NO. E5-1A.11

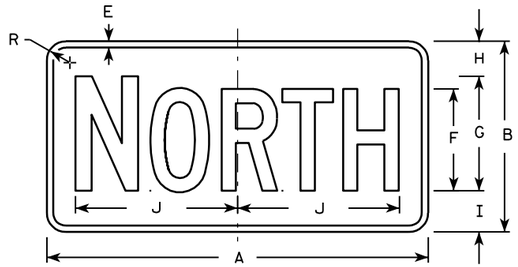
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 268 | E

7

FILE NAME : C:\Users\Projects\tr_stdplate\E51A.DGN PLOT DATE : 13-OCT-2005 10:50 PLOT BY : DITJPH PLOT NAME : PLOT SCALE : 27.817221:1.000000 WISDOT/CADDS SHEET 42



M3-1
MK3-1
MO3-1



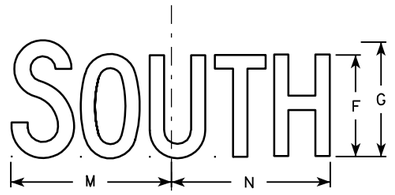
MB3-1
MG3-1
MM3-1*
MN3-1



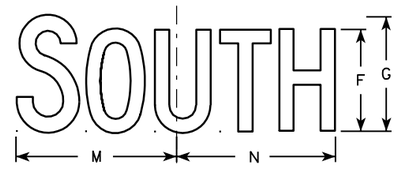
M3-2
MK3-2
MO3-2



MB3-2
MG3-2
MM3-2*
MN3-2



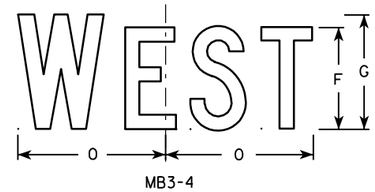
M3-3
MK3-3
MO3-3



MB3-3
MG3-3
MM3-3*
MN3-3



M3-4
MK3-4
MO3-4



MB3-4
MG3-4
MM3-4*
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective
   (Detour or temporary signs - Reflective)
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary signs - Reflective)
   MG3-1 thru MG3-4 Background - Green
   Message - White - Type H Reflective
   MK3-1 thru MK3-4 Background - Green
   Message - White - Type H Reflective
   MM3-1 thru MM3-4 Background - White - Type H Reflective
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White - Type H Reflective
   MO3-1 thru MO3-4 Background - Orange - Reflective
   Message - Black
6. Border shall be omitted on MM series.
7. Note the first letter of each direction is larger than the remainder of the message.

* See Note 6

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 300 mm
3	750 mm X 375 mm
4	750 mm X 375 mm
5	750 mm X 375 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																												
2	24	12	1 1/8	3/8	1/2	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	0.18
3	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13	0.28
4	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13	0.28
5	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13	0.28

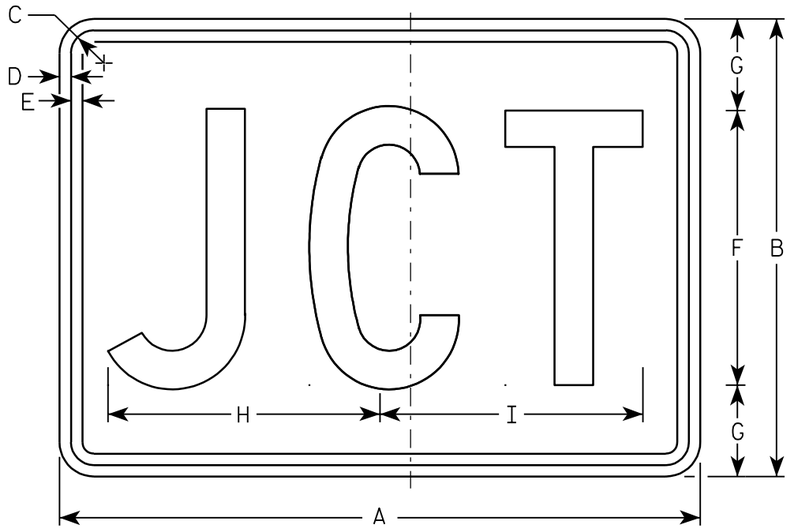
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

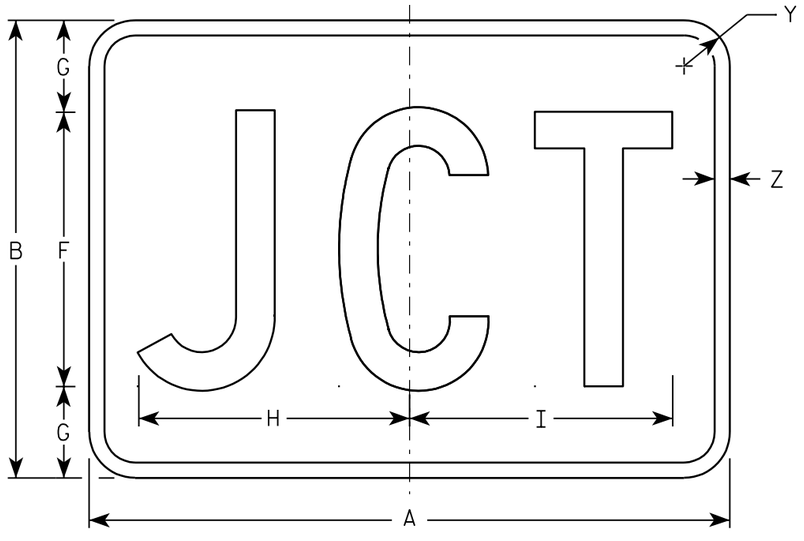
DATE 3/20/02 PLATE NO. M3-1.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 269	E



M2-1
MK2-1
MM2-1*
MR2-1

*See Note 6



MB2-1
MG2-1
MN2-1

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective
   (Detour or temporary Signs - Reflective)
   Message - Black
   MB2-1 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   MG2-1 Background - Green
   Message - White - Type H Reflective
   MK2-1 Background - Green
   Message - White - Type H Reflective
   MM2-1 Background - White - Type H Reflective
   Message - Green
   MN2-1 Background - Brown
   Message - White - Type H Reflective
   MR2-1 Background - Brown
   Message - Yellow - Type H Reflective
6. Border shall be omitted on MM2-1.

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 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																												
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	0.20
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	0.20
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	0.20
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	0.20

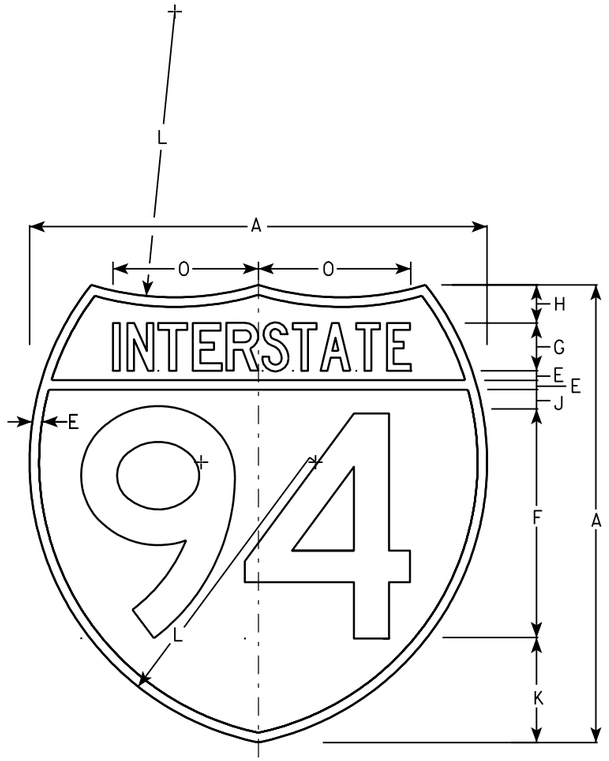
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

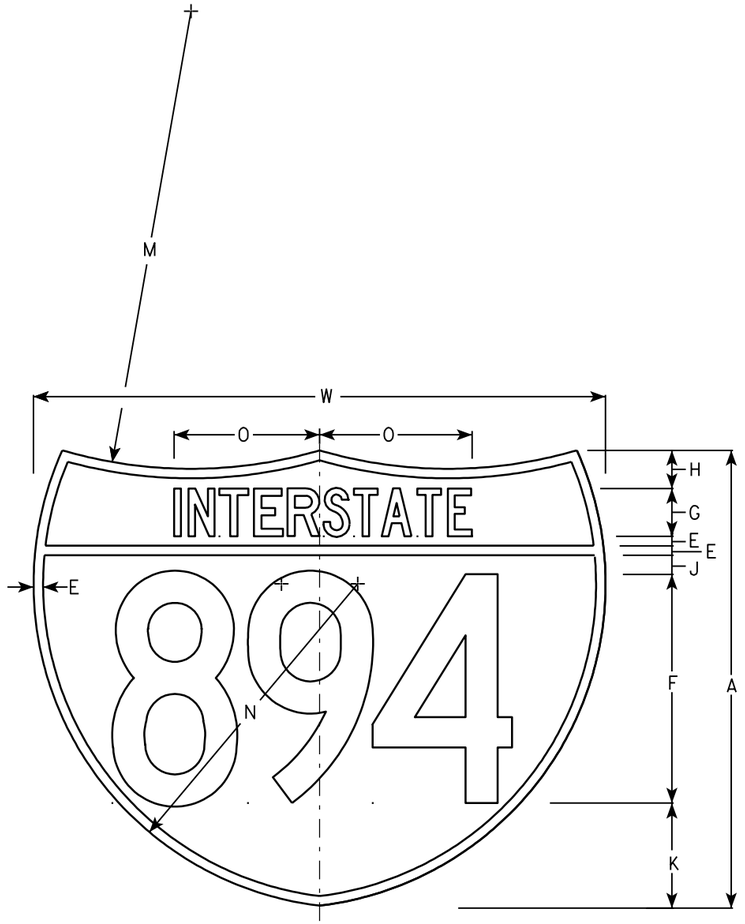
APPROVED Chester J Spang
for State Traffic Engineer

DATE 3/20/02 PLATE NO. M2-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 270	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

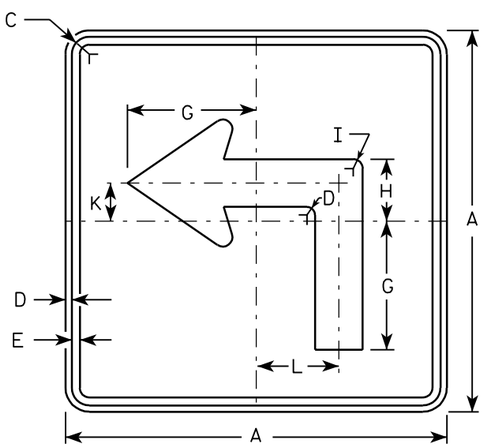
INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

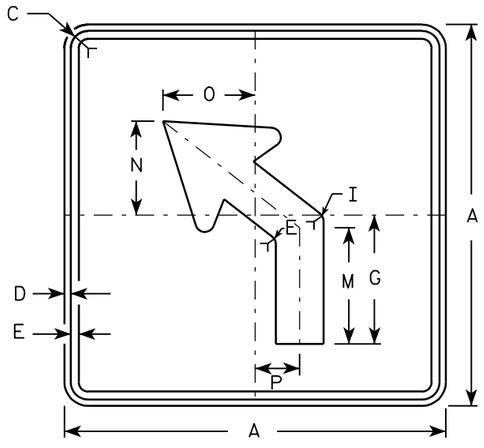
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

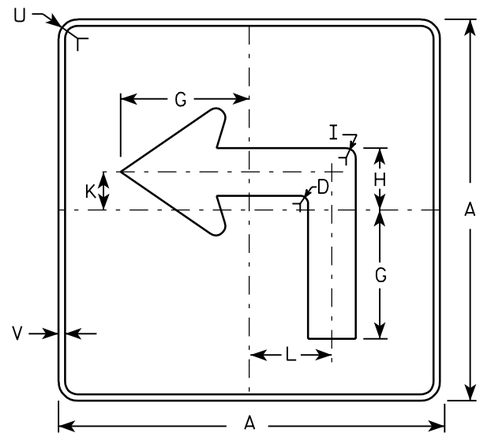
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 271	E



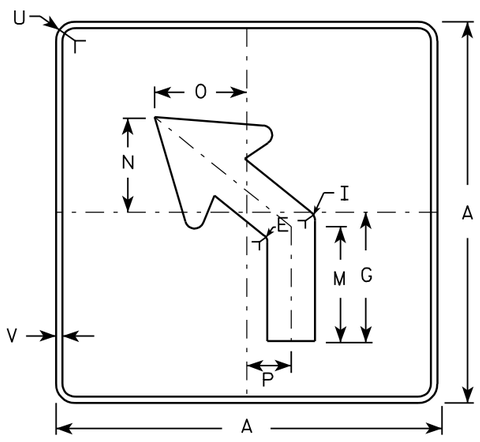
M5-1L
MK5-1L
MM5-1L (See Note 7)
MO5-1L
MR5-1L



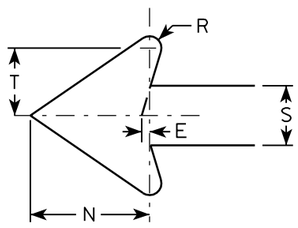
M5-2L
MK5-2L
MM5-2L (See Note 7)
MO5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
   MB5-1 and MB5-2 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG5-1 and MG5-2 Background - Green Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective Message - Green
   MN5-1 and MN5-2 Background - Brown Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Reflective Message - Black
   MR5-1 and MR5-2 Background - Brown Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.
7. Border shall be omitted on MM series.

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 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																												
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	0.28
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	0.56
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	0.56
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	0.56

STANDARD SIGN
M5-1 & M5-2

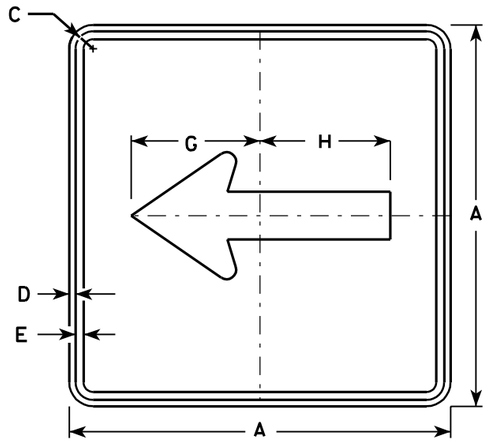
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

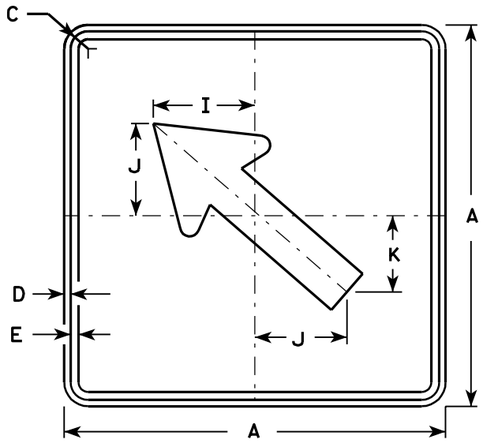
DATE 2/03/03 PLATE NO. M5-1.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 272	E

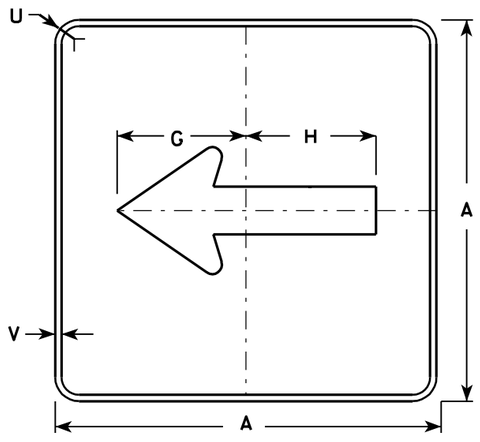
7



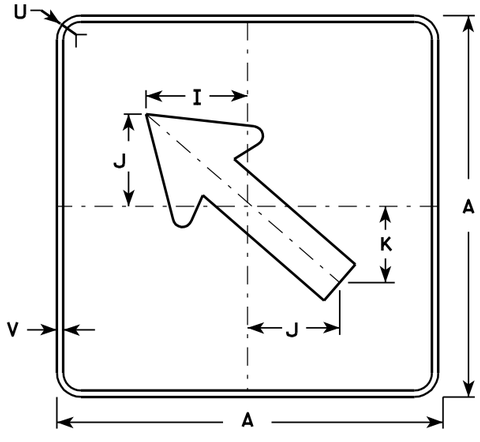
M6-1
MK6-1
MM6-1 (See Note 5)
MO6-1
MR6-1



M6-2
MK6-2
MM6-2 (See Note 5)
MO6-2
MR6-2



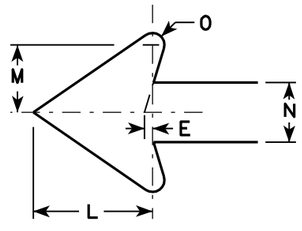
MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
   MB6-1 and MB6-2 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG6-1 and MG6-2 Background - Green Message - White - Type H Reflective
   MK6-1 and MK6-2 Background - Green Message - White - Type H Reflective
   MM6-1 and MM6-2 Background - White - Type H Reflective Message - Green
   MN6-1 and MN6-2 Background - Brown Message - White - Type H Reflective
   MO6-1 and MO6-2 Background - Orange - Reflective Message - Black
   MR6-1 and MR6-2 Background - Brown Message - Yellow - Type H Reflective
5. Border shall be omitted on MM series.



Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 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																												
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	0.28
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	0.56
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	0.56
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	0.56

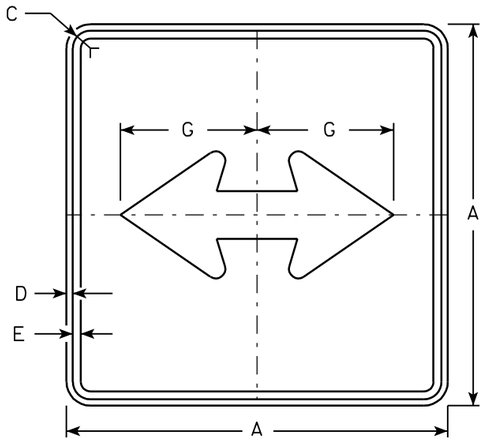
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

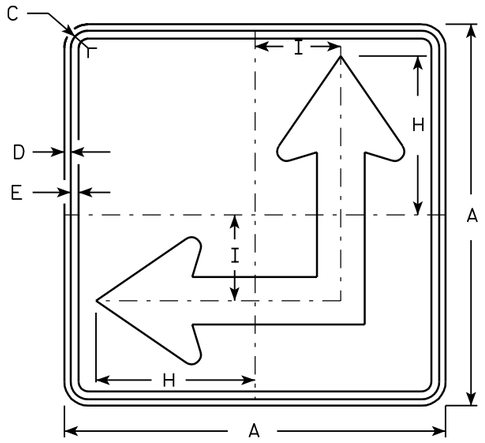
APPROVED Chester J Spong for State Traffic Engineer

DATE 3/20/02 PLATE NO. M6-1.11

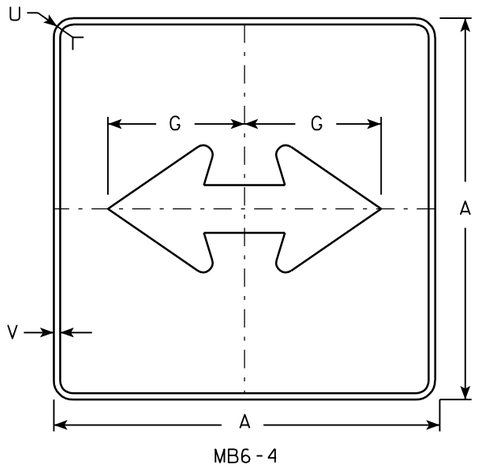
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 273	E



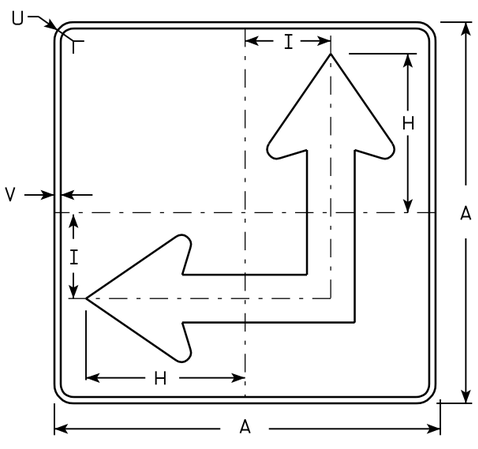
M6-4
MK6-4
MM6-4 (See Note 5)
MO6-4
MR6-4



M6-6
MK6-6
MM6-6 (See Note 5)
MO6-6
MR6-6



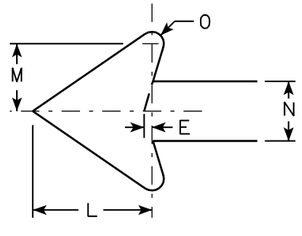
MB6-4
MG6-4
MN6-4



MB6-6
MG6-6
MN6-6

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White - Type H Reflective (Detour or temporary Signs - Reflective)
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG6-4 and MG6-6 Background - Green
   Message - White - Type H Reflective
   MK6-4 and MK6-6 Background - Green
   Message - White - Type H Reflective
   MM6-4 and MM6-6 Background - White - Type H Reflective
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White - Type H Reflective
   MO6-4 and MO6-6 Background - Orange - Reflective
   Message - Black
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow - Type H Reflective
5. M6-6R same as M6-6L except arrow points ahead and right.
6. Border shall be omitted on MM series.



Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 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																												
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

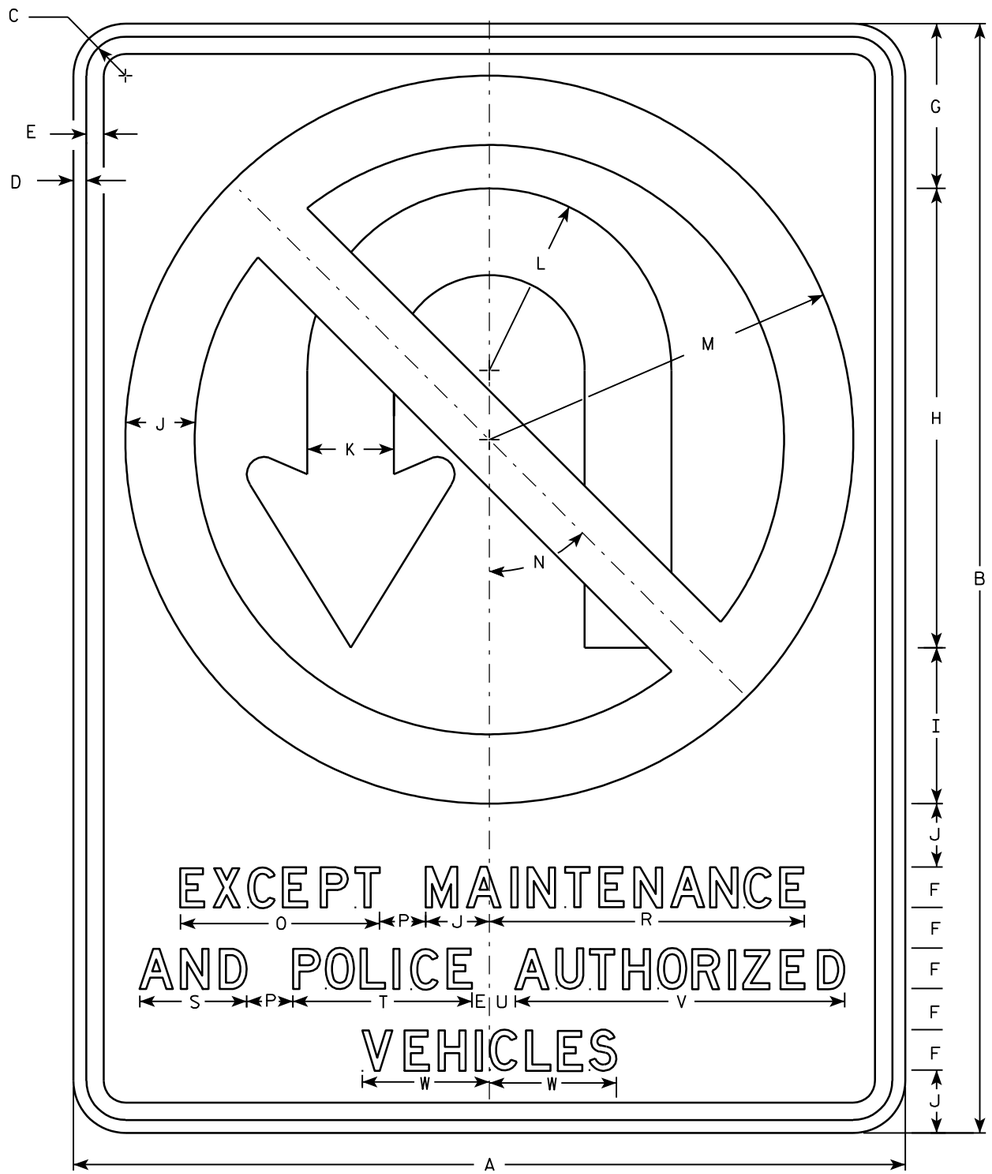
STANDARD SIGN M6-4 & M6-6 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M6-4.6

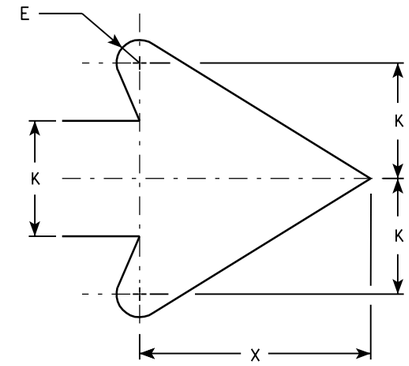
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 274	E



R3-4B

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

Metric equivalent for this sign is:

SIZE	
1	
2	
3	
4	900 mm X 1200 mm
5	900 mm X 1200 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 2																												
3																												
4	36	48	1 5/8	5/8	3/4	1 3/4	7 1/8	19 7/8	6 3/4	2 3/4	3 3/4	7 7/8	15 3/4	45°	8 5/8	2		13 5/8	4 5/8	7 3/4	1 1/8	14 1/4	5 1/2	7 5/8			12.0	1.08
5	36	48	1 5/8	5/8	3/4	1 3/4	7 1/8	19 7/8	6 3/4	2 3/4	3 3/4	7 7/8	15 3/4	45°	8 5/8	2		13 5/8	4 5/8	7 3/4	1 1/8	14 1/4	5 1/2	7 5/8			12.0	1.08

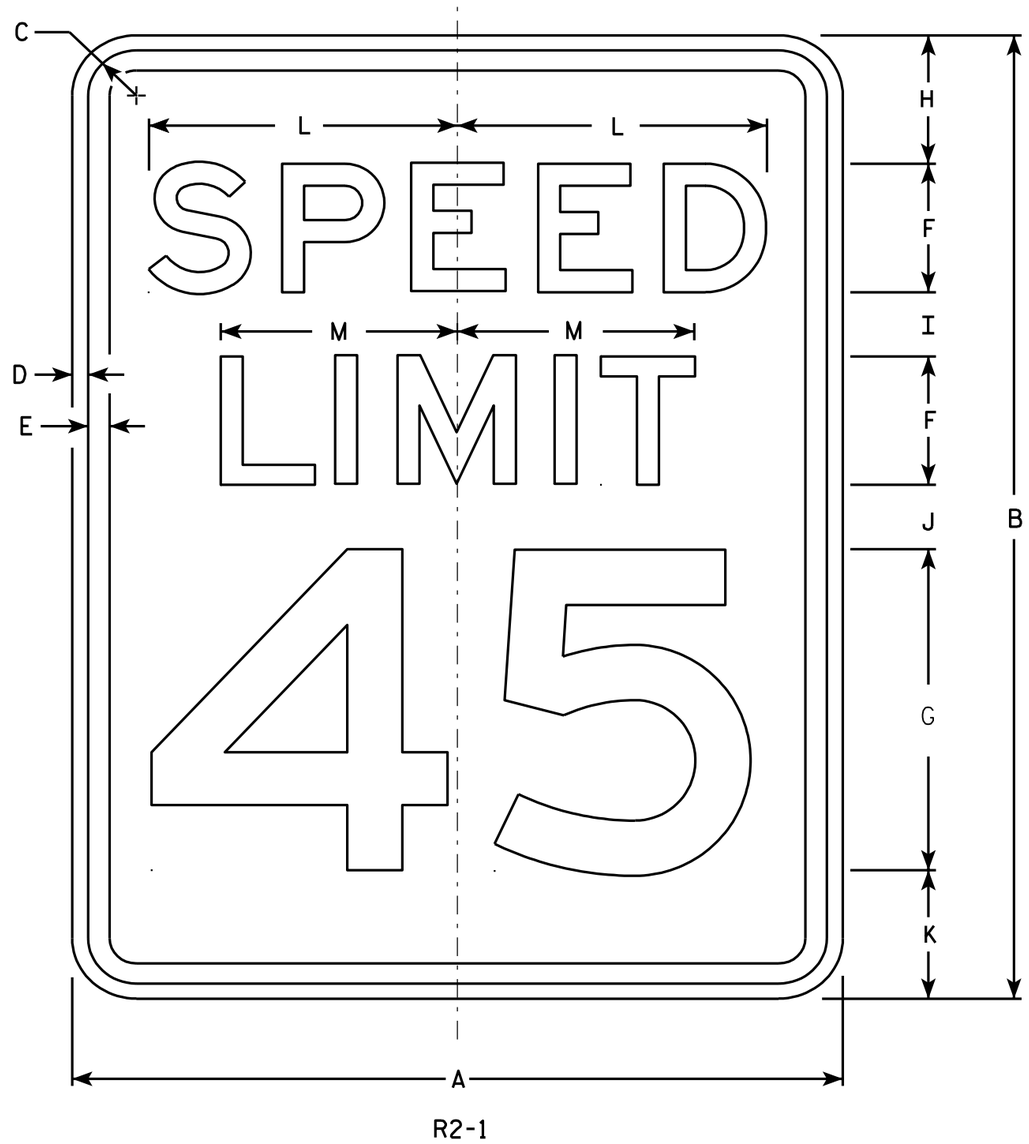
STANDARD SIGN
R3-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/13/02 PLATE NO. R3-4B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 275	E



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.

Metric equivalent for this sign is:

SIZE	
1	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	1200 mm X 1500 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	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0	.28
2	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	.46
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0	1.11
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0	1.11
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	1.86

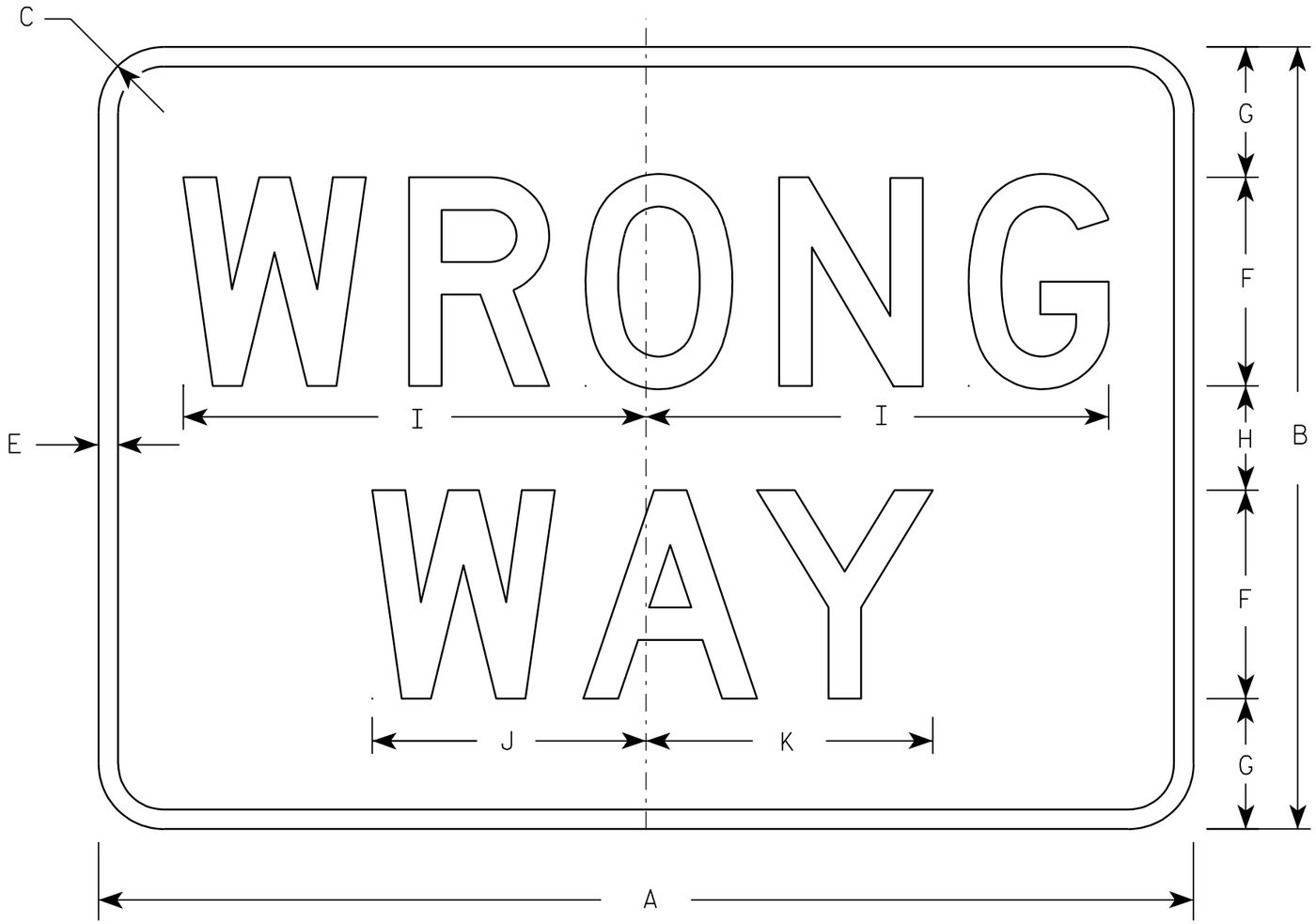
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/05/05 PLATE NO. R2-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 276 | 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.

Metric equivalent for this sign is:

SIZE	
1	750 mm X 450 mm
2	900 mm X 600 mm
3	1050 mm X 750 mm
4	1050 mm X 750 mm
5	1050 mm X 750 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	30	18	1 ½		½	5	3	2	11	6 ½	6 ⅞																3.75	0.34
2	36	24	2		⅝	6	4 ½	3	13 ¼	7 ⅞	8 ¼																6.00	0.54
3	42	30	2 ½		¾	8	5	4	17 ¾	10 ½	11																8.75	0.79
4	42	30	2 ½		¾	8	5	4	17 ¾	10 ½	11																8.75	0.79
5	42	30	2 ½		¾	8	5	4	17 ¾	10 ½	11																8.75	0.79

STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

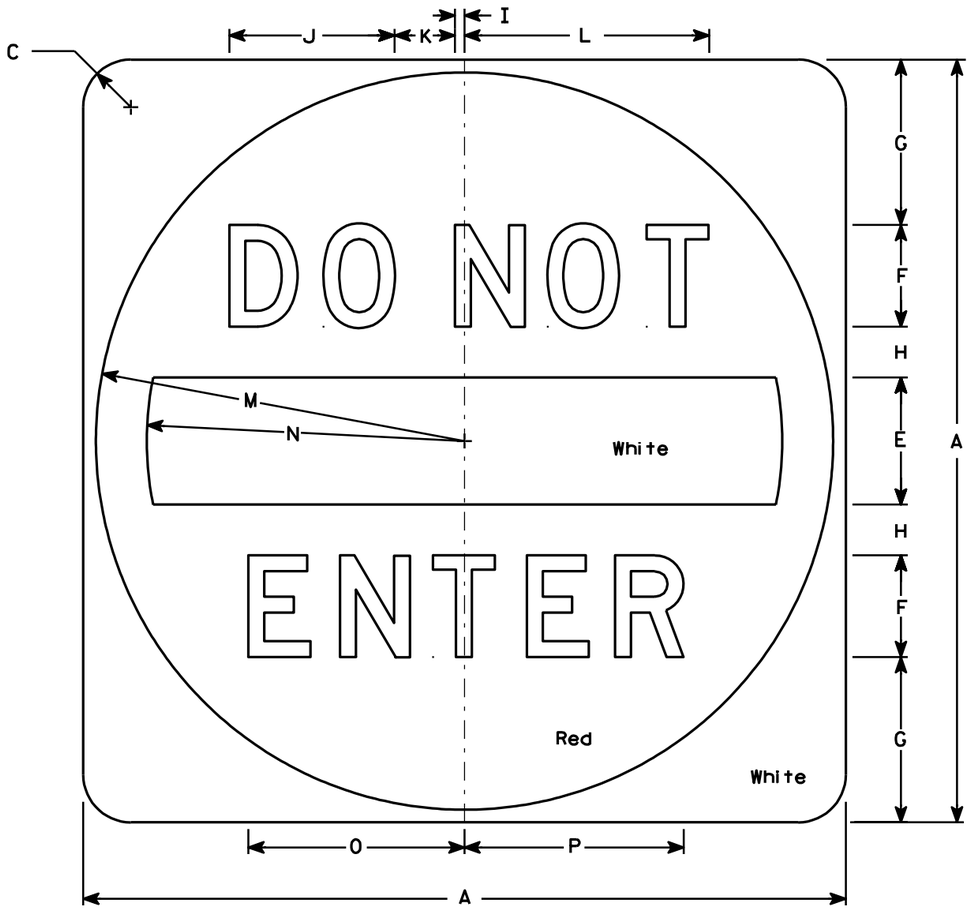
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/24/02 PLATE NO. R5-1A.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 277	E

FILE NAME : C:\Users\Projects\tr_stdplate\R51A.DGN PLOT DATE : 04-OCT-2005 08:55 PLOT BY : DITJPH PLOT NAME : PLOT SCALE : 5.464098:1.000000

7



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	
2	750 mm X 750 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	1200 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	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											6.26	0.56
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	0.81
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	0.81
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	1.44

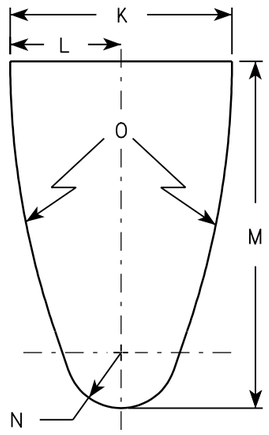
STANDARD SIGN
R5-1

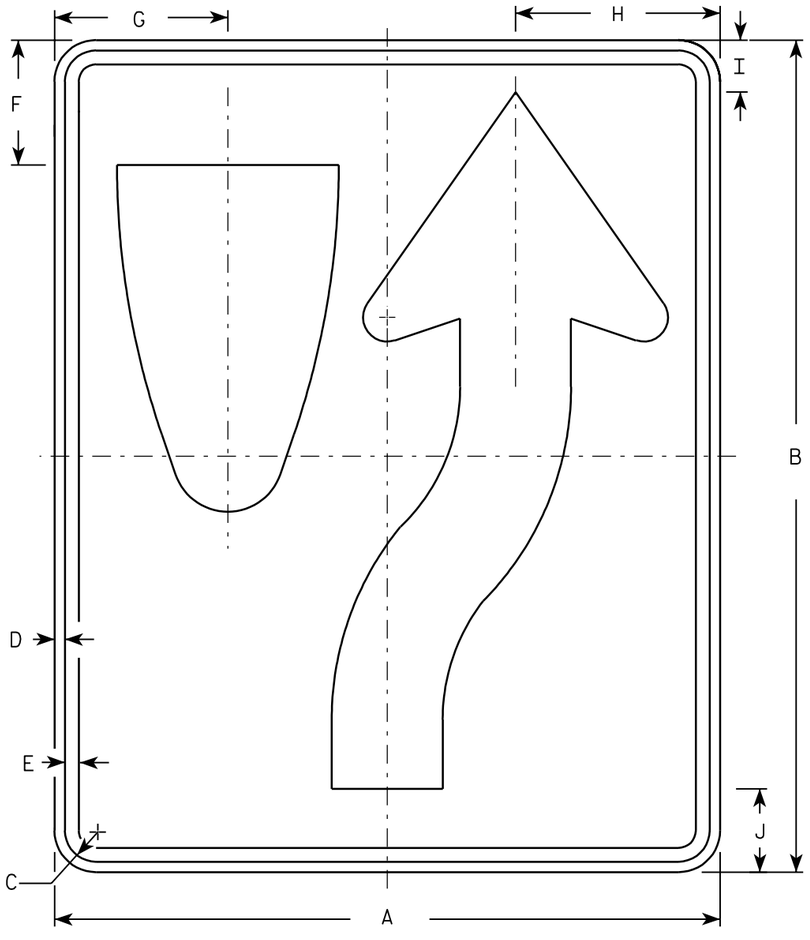
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/05/05 PLATE NO. R5-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 278 | E

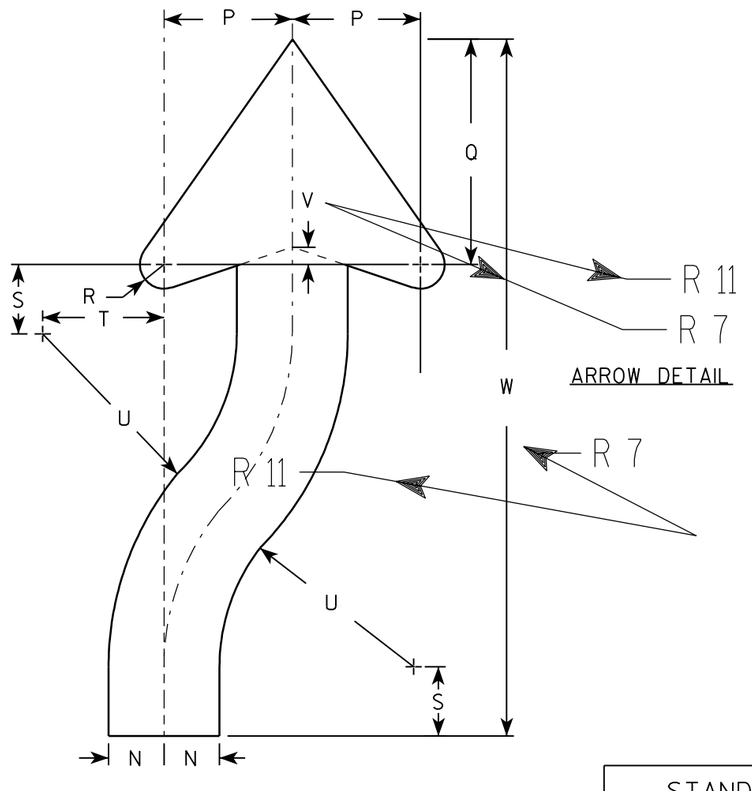




R4-7

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

Metric equivalent for this sign is:

SIZE	
1	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	900 mm X 1200 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	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	.27
2	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	.45
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	1.08
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	1.08
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	1.08

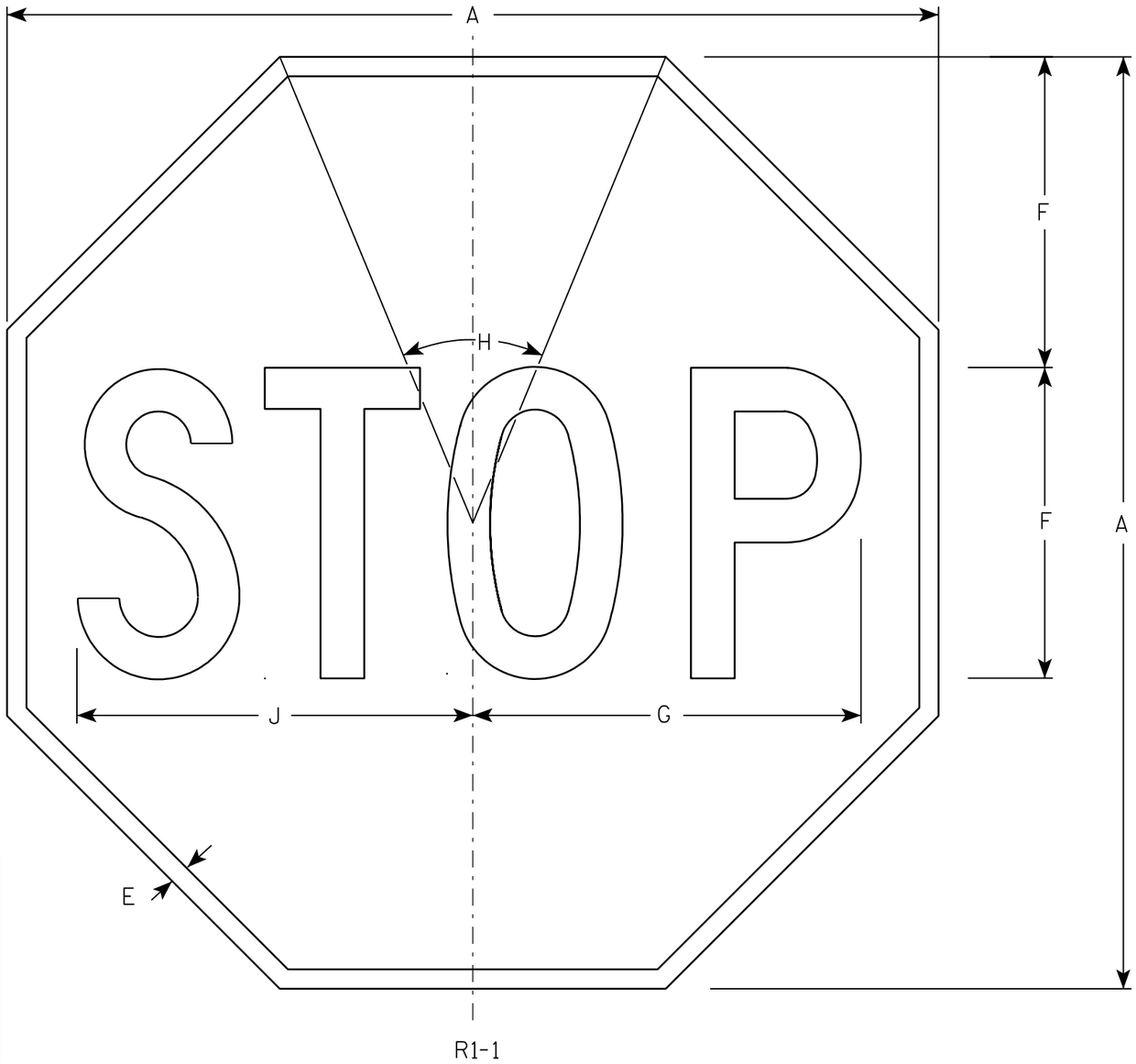
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 2/6/02 PLATE NO. R4-7.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 279	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	750 mm X 750 mm
3	900 mm X 900 mm
4	1200 mm X 1200 mm
5	1200 mm X 1200 mm
6	450 mm X 450 mm
7	300 mm X 300 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	24				3/8	8	10	45°		10 1/4																	3.31	0.31
2	30				5/8	10	12 1/2	45°		12 3/4																	5.18	0.48
3	36				3/4	12	15	45°		15 3/8																	7.46	0.69
4	48				1	16	20	45°		20 1/2																	13.25	1.23
5	48				1	16	20	45°		20 1/2																	13.25	1.23
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86	0.17
7	12				1/4	4	5	45°		5 1/8																	0.78	0.07

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spagy for State Traffic Engineer

DATE 10/15/98 PLATE NO. R1-1.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 280	E

FILE NAME : C:\Users\Projects\tr_stdplate\R11.DGN PLOT DATE : 03-OCT-2005 14:15 PLOT BY : DITJPH PLOT NAME : PLOT SCALE : 4.470624:1.000000

WISDOT/CADDS SHEET 42

7

7



R5-57

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Lines 1, 2, and 5 are Series C.
   Lines 3 and 4 are Series B.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	
2	
3	
4	900 mm X 900 mm
5	900 mm X 900 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																												
2																												
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	.81
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	.81

STANDARD SIGN
R5-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
for State Traffic Engineer

DATE 05/24/05 PLATE NO. R5-57.9

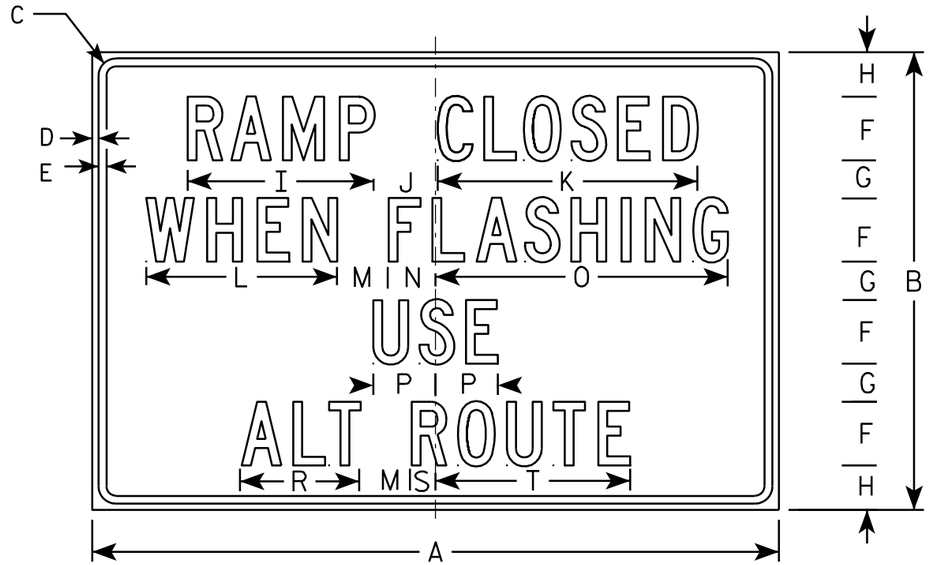
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 281	E

FILE NAME : C:\Users\Projects\tr_stdplate\R557.DGN PLOT DATE : 04-OCT-2005 09:03 PLOT BY : DITJPH PLOT NAME : PLOT SCALE : 5.960833:1.000000

WISDOT/CADDS SHEET 42

7

7



R11-53

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.

7

7

Metric equivalent for this sign is:

SIZE	
1	
2	1350 mm X 900 mm
3	
4	
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.	Area m2
1																												
2	54	36	1 3/8	1/2	5/8	5	3	3 1/2	14 5/8	5	20 3/8	15	4	3 3/4	23	4 7/8		9 3/8	2	15 1/4							13.5	1.22
3																												
4																												
5																												

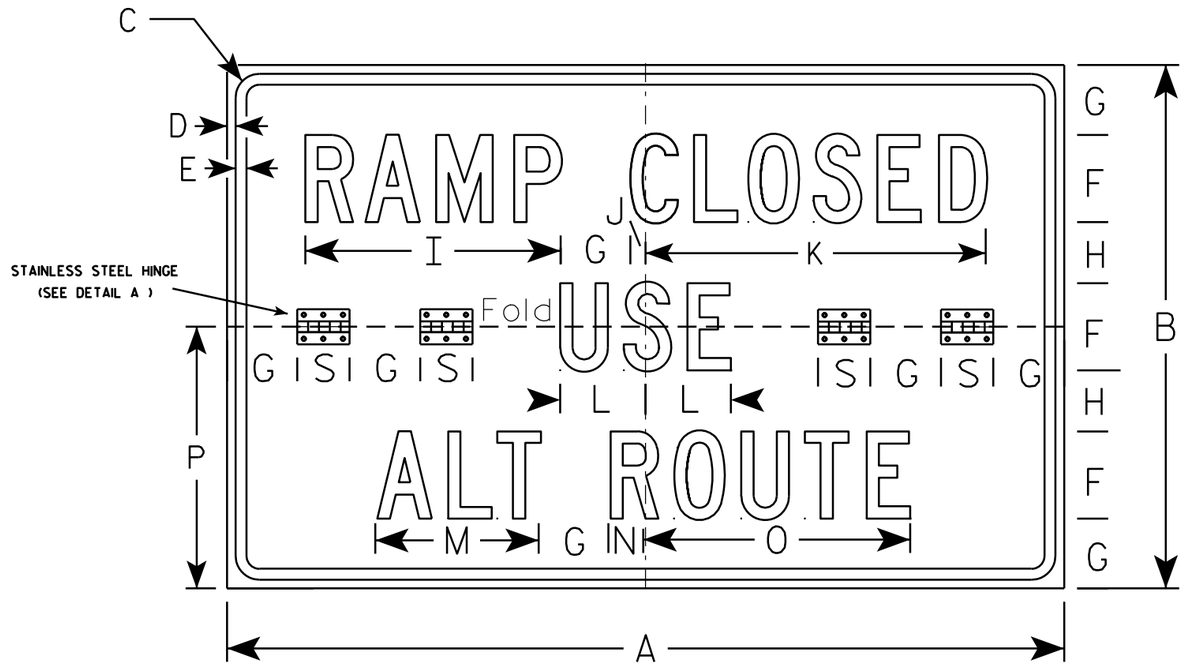
STANDARD SIGN
R11-53

WISCONSIN DEPT OF TRANSPORTATION

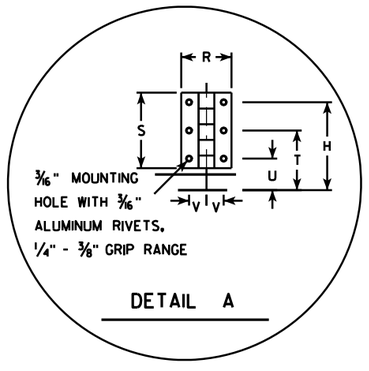
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/4/09 PLATE NO. R11-53.1

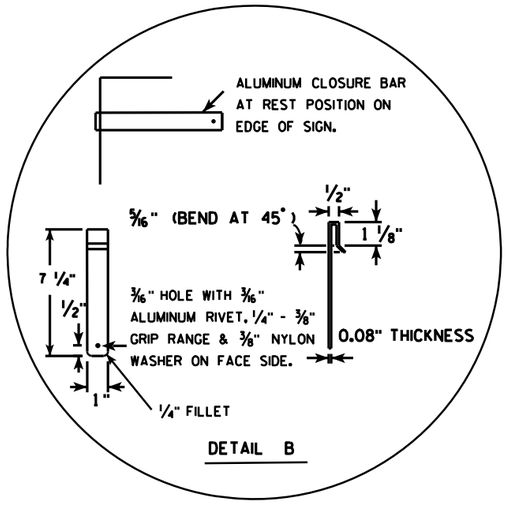
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 282	E



R11-54F



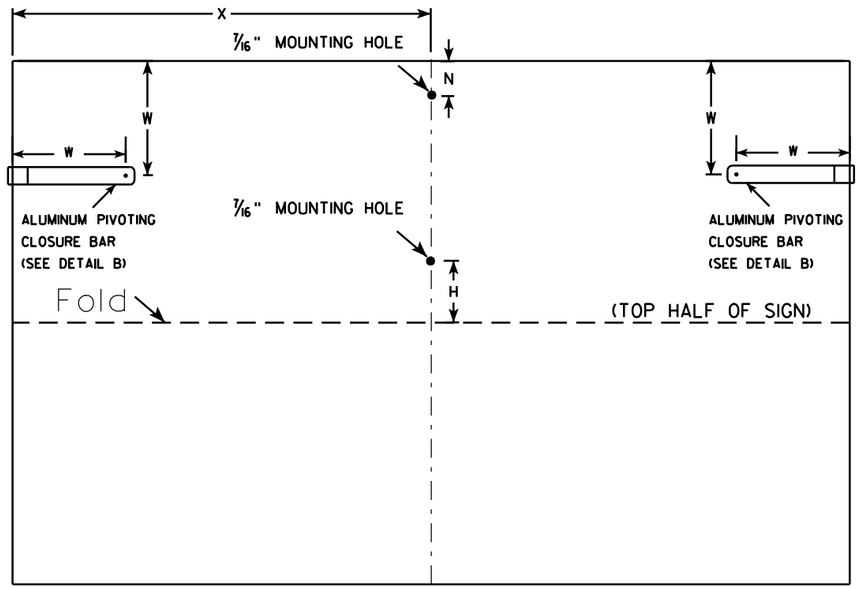
DETAIL A



DETAIL B

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. All hardware used on the folding sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



(BACK VIEW)

Metric equivalent for this sign is:

SIZE	
1	
2	1200 mm X 750 mm
3	
4	
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.	Area m2
1																												
2	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0	0.90
3																												
4																												
5																												

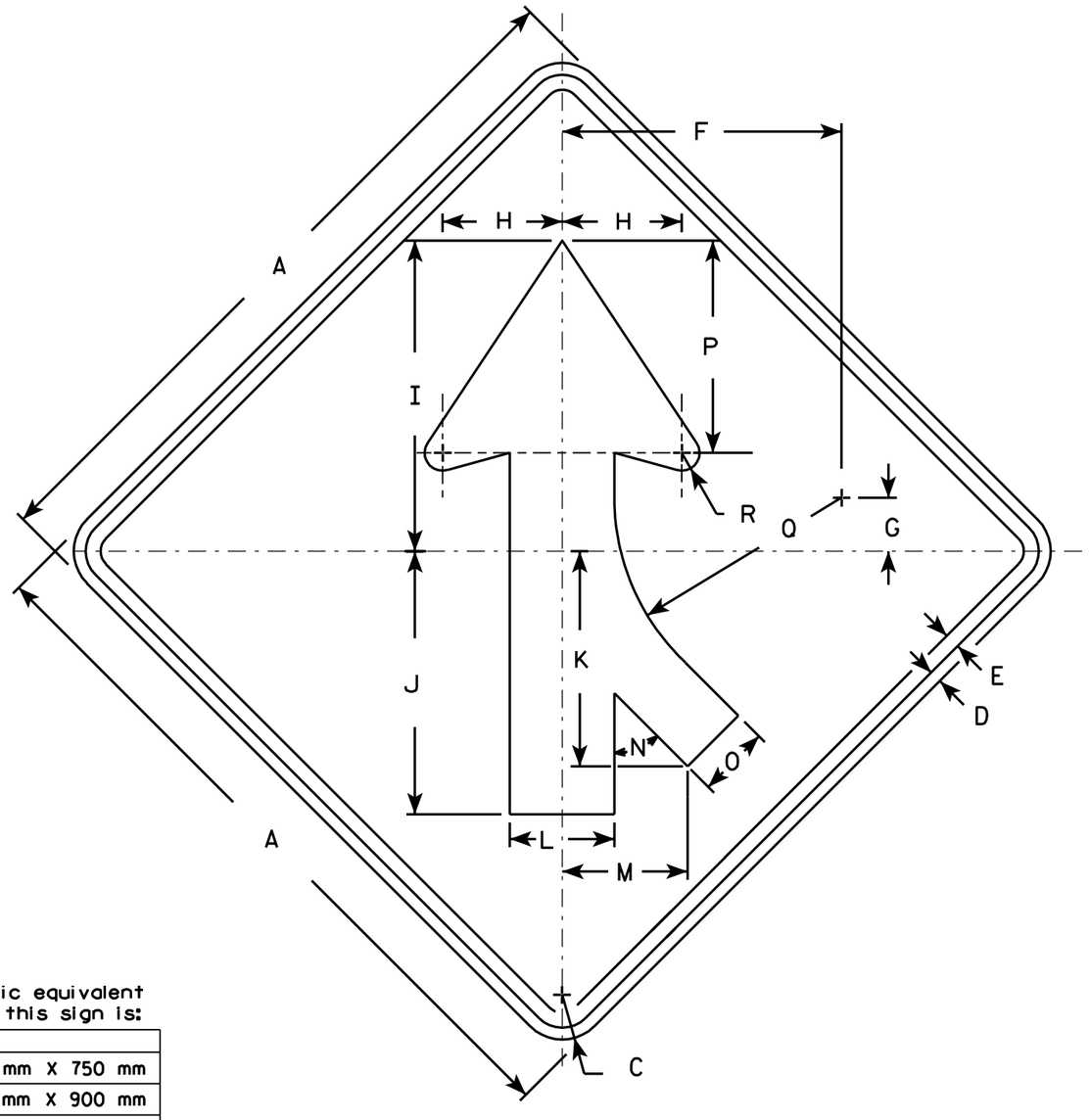
STANDARD SIGN
R11-54F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/4/09 PLATE NO. R11-54F.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 283	E



W4-1R

NOTES

1. Sign is Type II - Type H 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. W4-1L is the same as W4-1R except the arrow is reversed along the vertical centerline.

Metric equivalent for this sign is:

SIZE	
1	750 mm X 750 mm
2	900 mm X 900 mm
3	900 mm X 900 mm
4	1200 mm X 1200 mm
5	1200 mm X 1200 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	30		1 3/8	1/2	5/8	11 5/8	2 1/2	5	13	11	9	4 3/8	5 1/4	45°	3	8 7/8	9 1/2	3/4									6.25	0.56
2	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0	0.81
3	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0	0.81
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0	1.44
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0	1.44

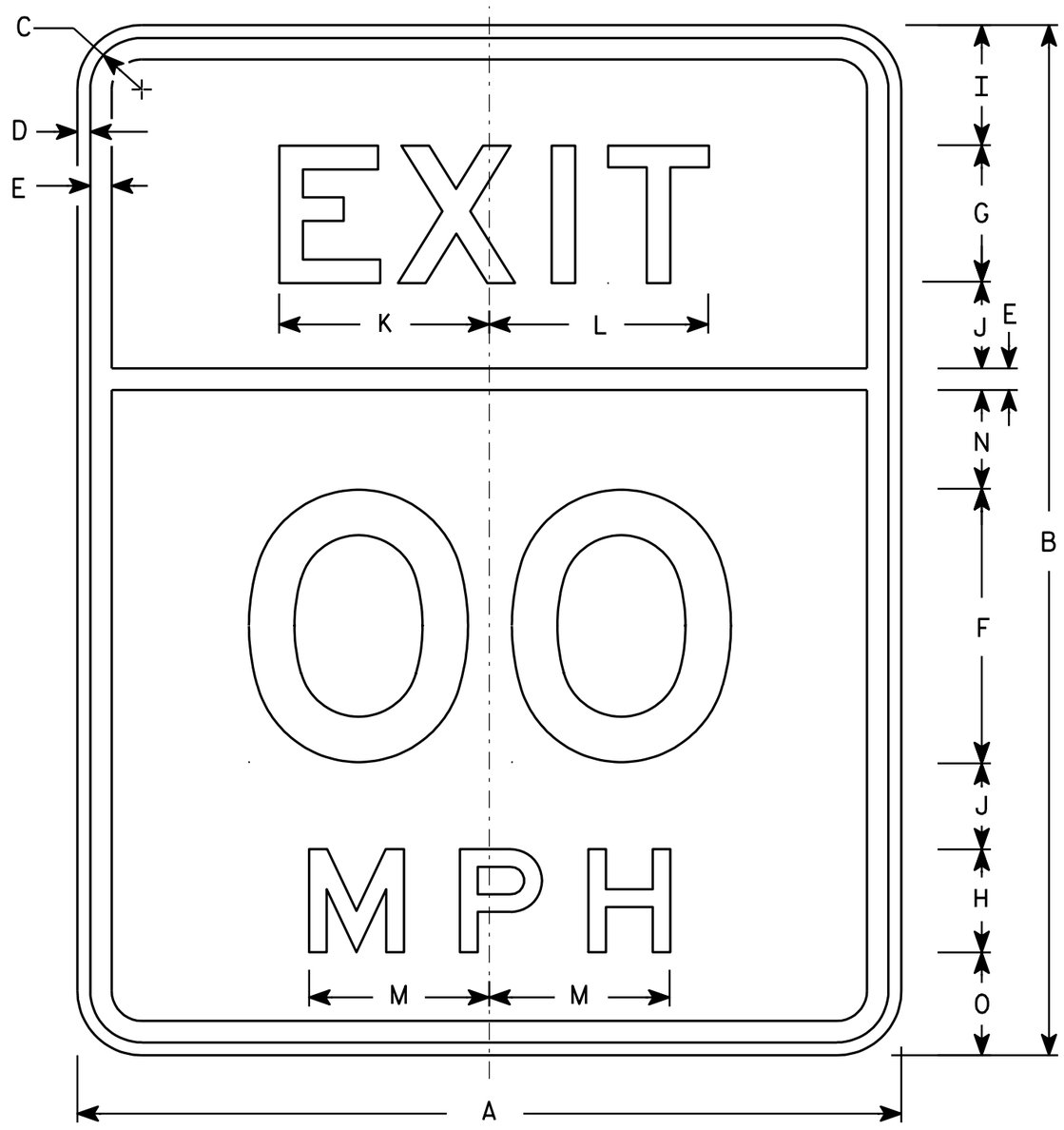
STANDARD SIGN
W4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/29/05 PLATE NO. W4-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 284	E



W13-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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 space about centerline to achieve proper balance.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	1200 mm X 1500 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																												
2	24	30	1 1/2	3/8	5/8	8	4	3	3 1/2	2 1/2	6 1/8	6 3/8	5 1/4	2 7/8	3												5.0	0.45
3	36	48	2 1/4	5/8	7/8	12	6	4	6	4	9 1/4	9 1/2	7 1/8	5 1/8	6												12.0	1.08
4	36	48	2 1/4	5/8	7/8	12	6	4	6	4	9 1/4	9 1/2	7 1/8	5 1/8	6												12.0	1.08
5	48	60	2 1/4	3/4	1	16	8	6	7	5	12 1/4	12 3/4	10 5/8	5 3/4	6												20.0	1.80

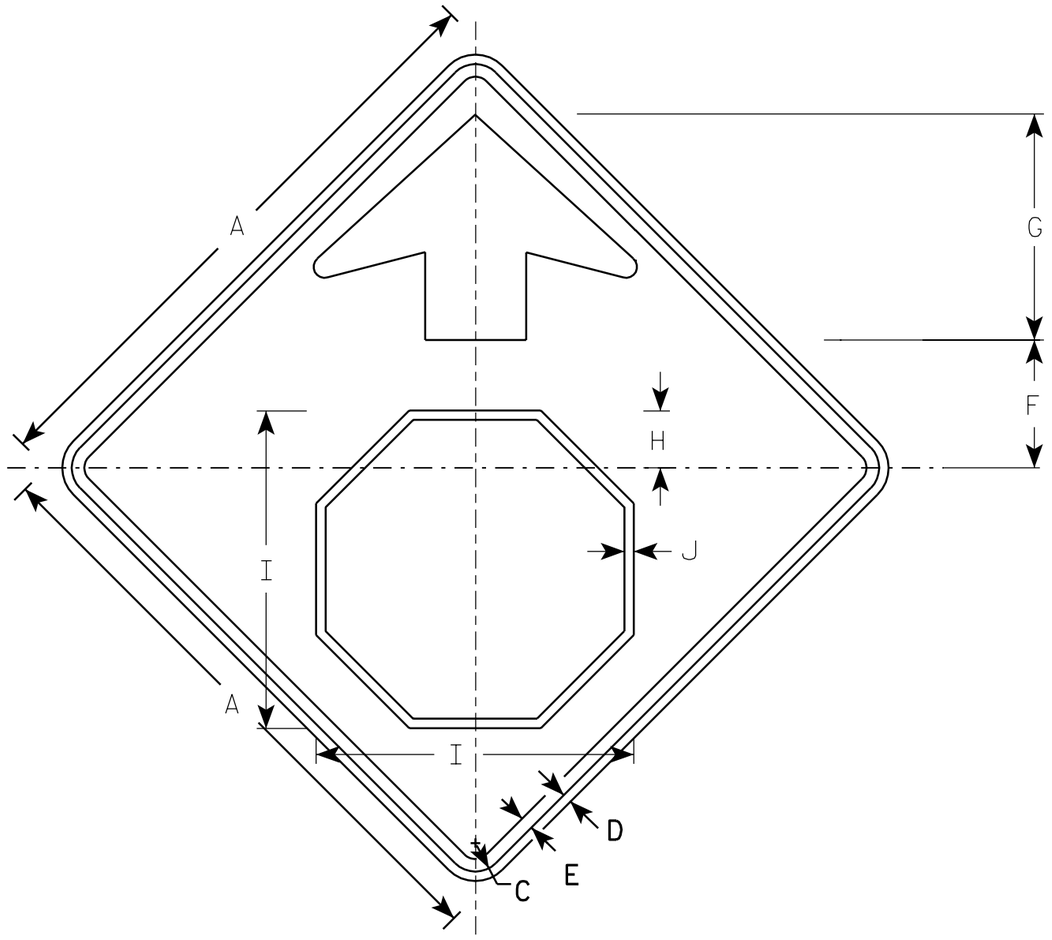
STANDARD SIGN
W13-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 04/05/06 PLATE NO. W13-2.7

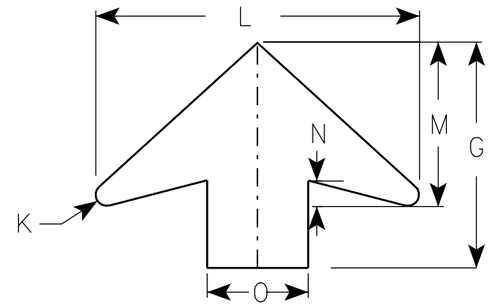
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 285	E



W3-1

NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

Metric equivalent for this sign is:

SIZE	
1	750 mm X 750 mm
2	900 mm X 900 mm
3	900 mm X 900 mm
4	1200 mm X 1200 mm
5	1200 mm X 1200 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	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25	0.56
2	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0	0.81
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0	0.81
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0	1.44
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0	1.44

STANDARD SIGN
W3-1

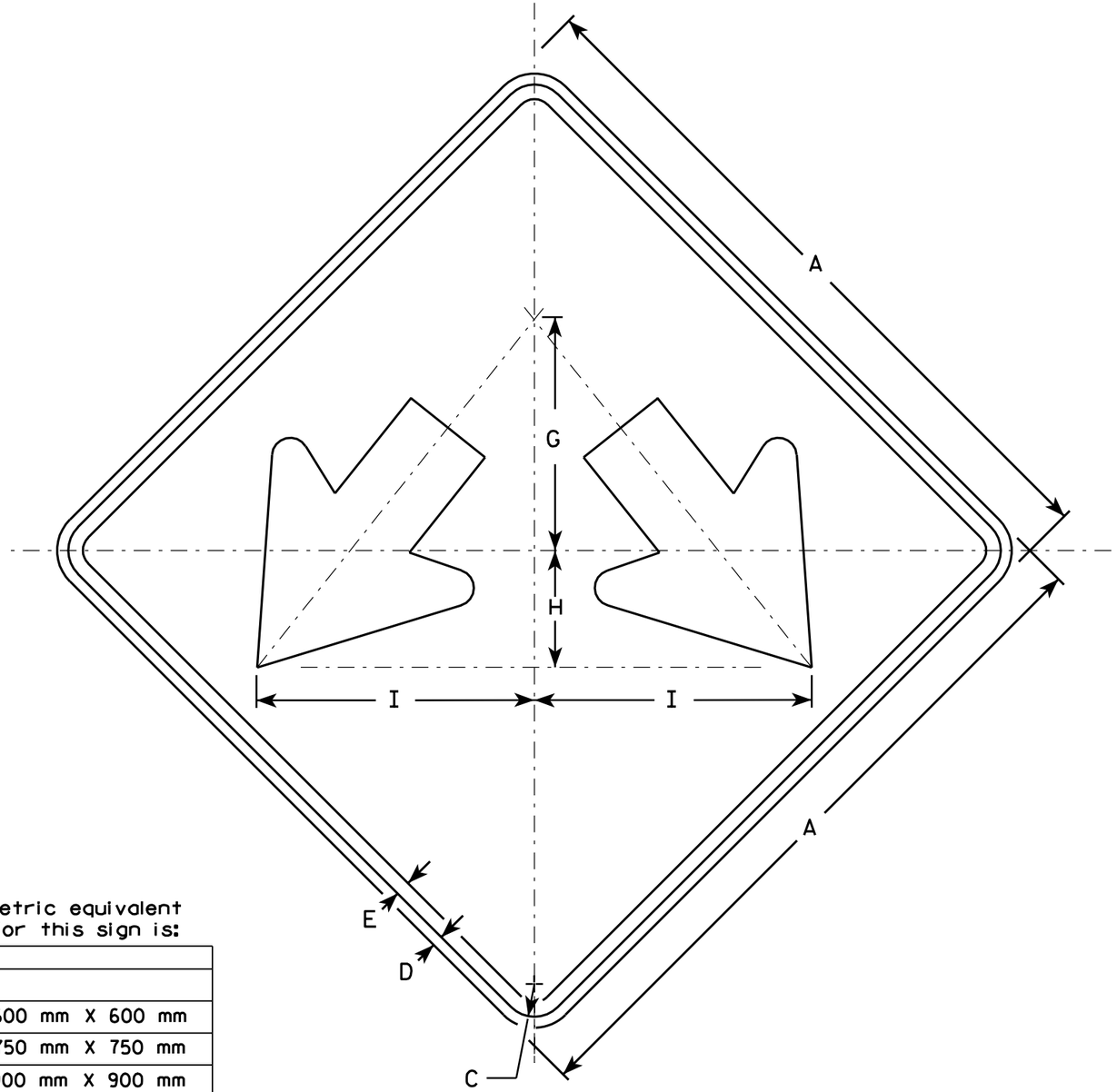
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/05 PLATE NO. W3/1.11

PROJECT NO:

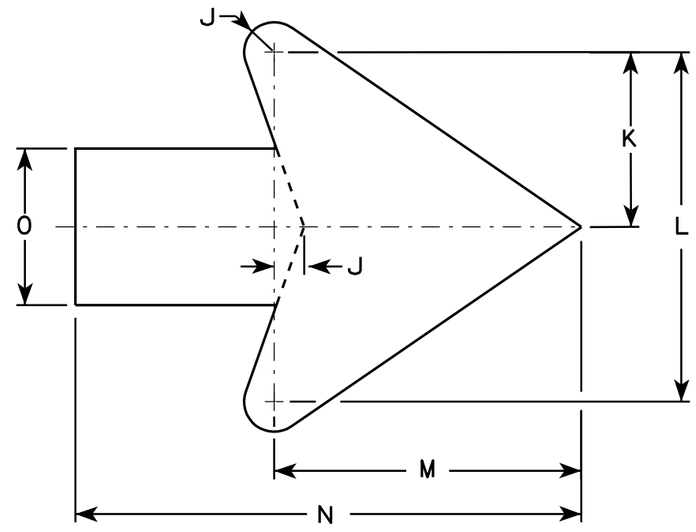
SHEET NO: 286 E



W12-1D

NOTES

1. Sign is Type II - Type H 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

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	750 mm X 750 mm
4	900 mm X 900 mm
5	1200 mm X 1200 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																												
2	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0	0.36
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25	0.56
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0	0.81
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0	1.44

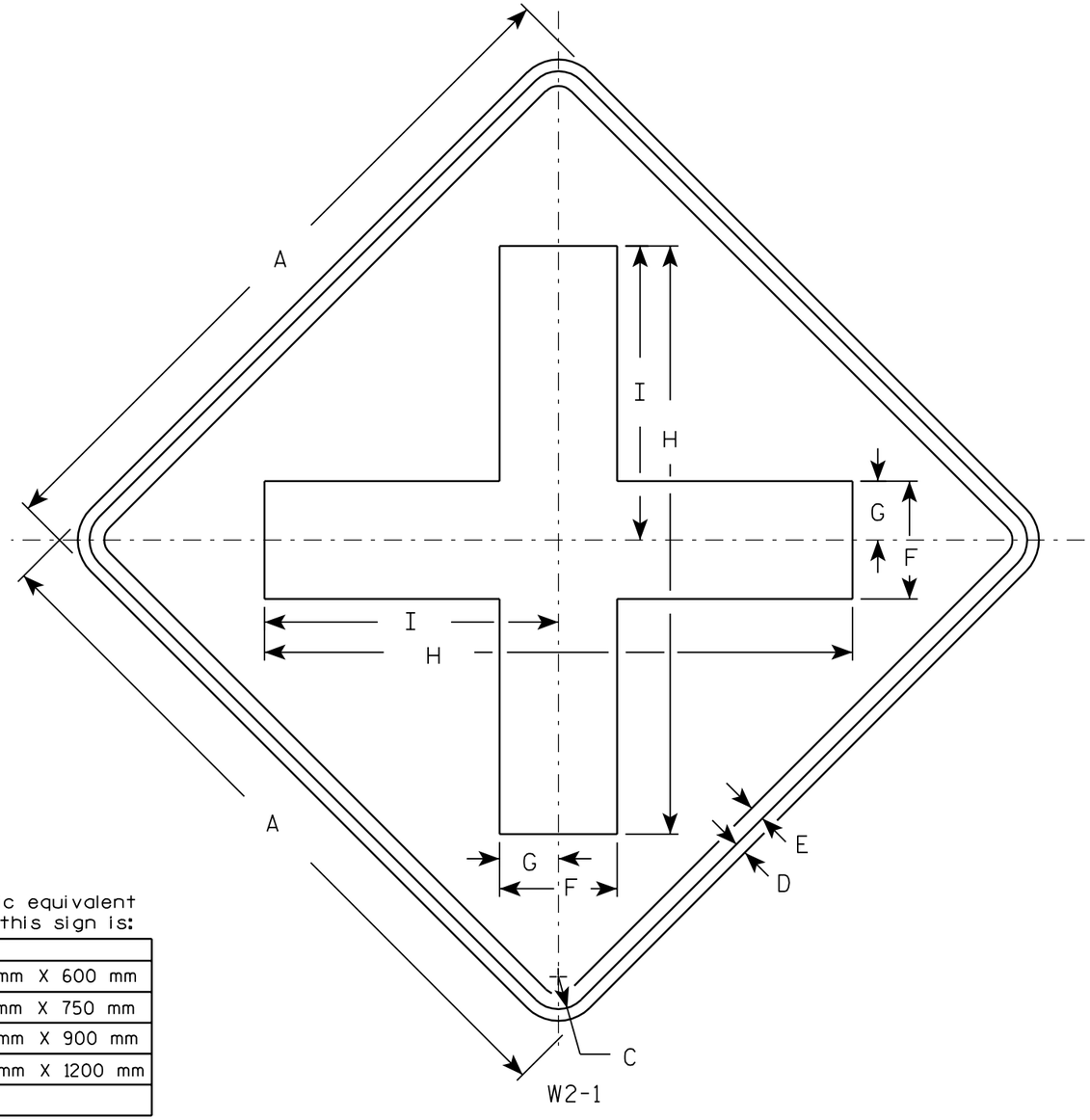
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/14/06 PLATE NO. W12-1D.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 287	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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.

Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	750 mm X 750 mm
3	900 mm X 900 mm
4	1200 mm X 1200 mm
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.	Area m2
1	24		1 1/8	3/8	1/2	4	2	20	10																		4.0	0.36
2	30		1 3/8	1/2	5/8	5	2 1/2	25	12 1/2																		6.25	0.56
3	36		1 5/8	5/8	3/4	6	3	30	15																		9.0	0.81
4	48		2 1/4	3/4	1	8	4	40	20																		16.0	1.44
5																												

STANDARD SIGN
W2-1

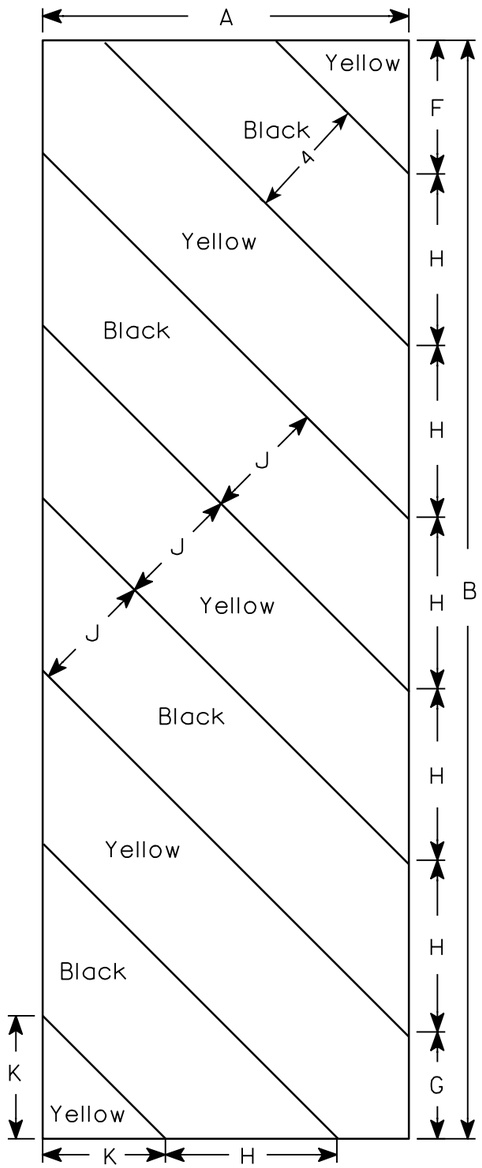
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

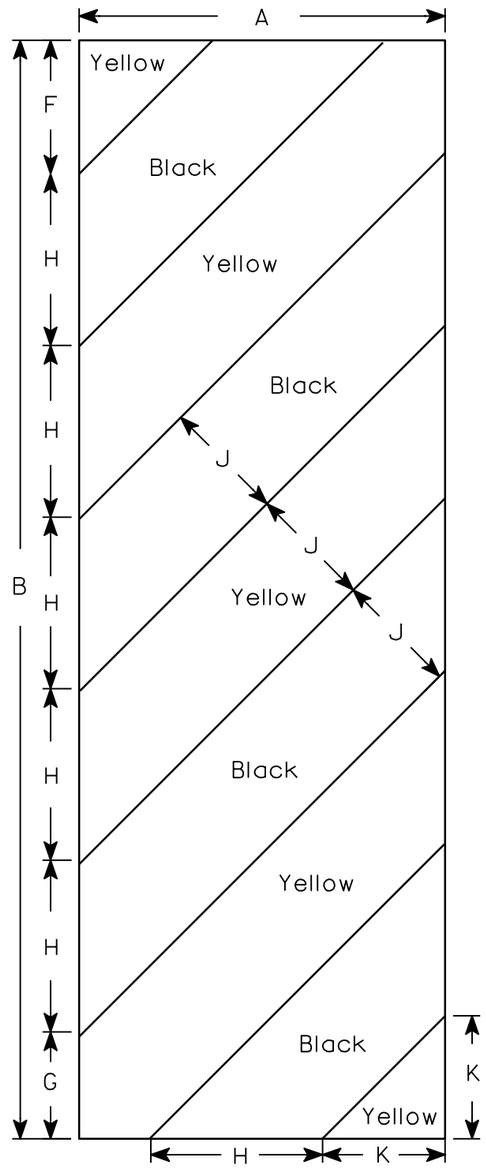
DATE 01/14/02 PLATE NO. W2-1.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 288	E

FILE NAME : C:\Users\Projects\tr_stdplate\W21.DGN PLOT DATE : 05-OCT-2005 11:51 PLOT BY : DITJPH PLOT NAME : PLOT SCALE : 6.209203:1.000000



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type H 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. Alternate colors of stripes as shown.

Metric equivalent for this sign is:

SIZE	
1	
2	300 mm X 900 mm
3	450 mm X 1350 mm
4	
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.	Area m2
1																												
2	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0	0.27
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75	0.61
4																												
5																												

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 8/13/97 PLATE NO. W5-52.7

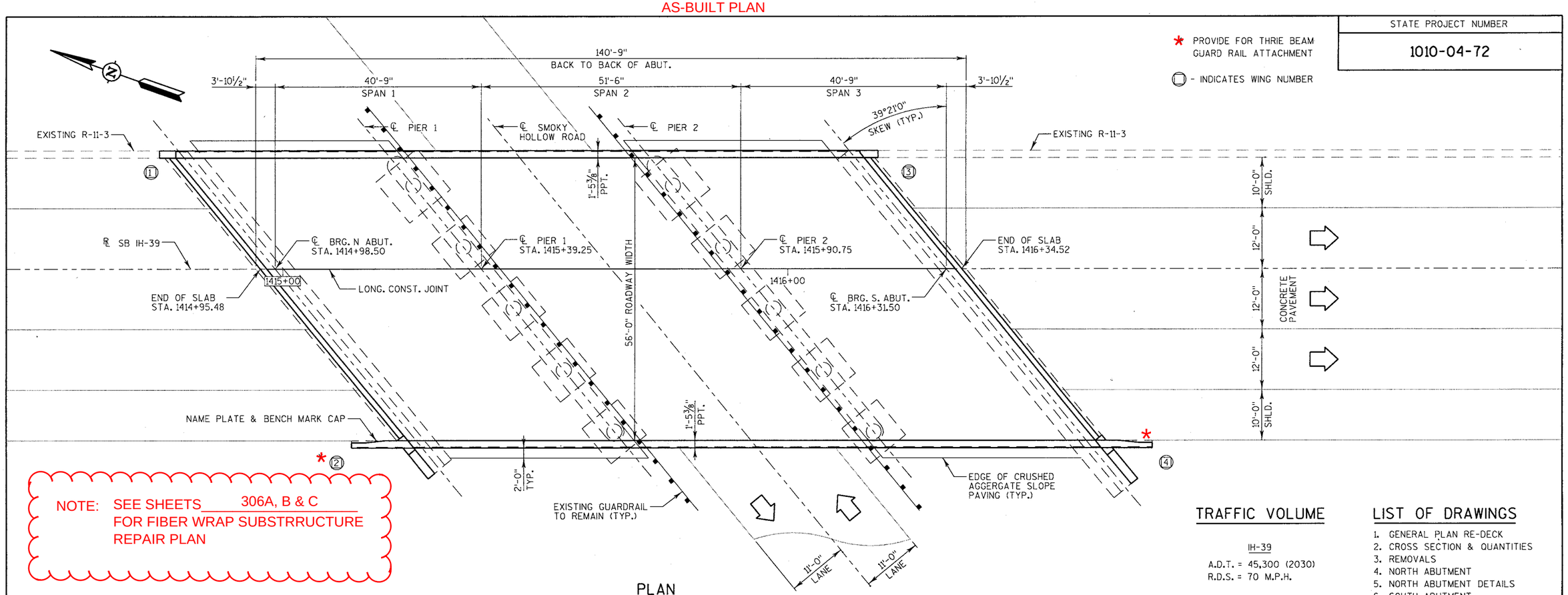
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 289	E

AS-BUILT PLAN

STATE PROJECT NUMBER
1010-04-72

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT

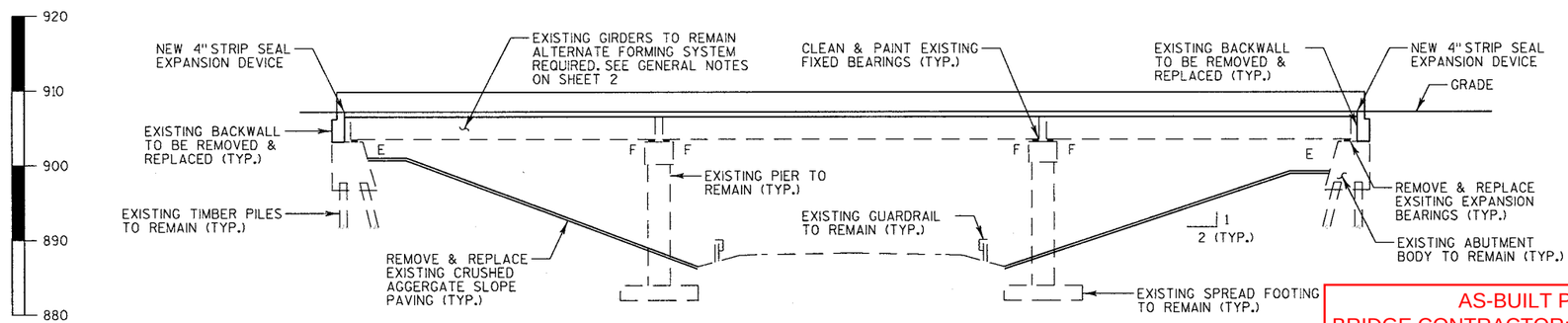
(1) - INDICATES WING NUMBER



NOTE: SEE SHEETS 306A, B & C FOR FIBER WRAP SUBSTRRUCTURE REPAIR PLAN

PLAN

(3 SPAN NON-CONTINUOS 36" PRESTRESSED GIRDER)



ELEVATION

TRAFFIC VOLUME

IH-39

A.D.T. = 45,300 (2030)
R.D.S. = 70 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN RE-DECK
2. CROSS SECTION & QUANTITIES
3. REMOVALS
4. NORTH ABUTMENT
5. NORTH ABUTMENT DETAILS
6. SOUTH ABUTMENT
7. SOUTH ABUTMENT DETAILS
8. STEEL DIAPHRAGM
9. SUPERSTRUCTURE PLAN
10. SUPERSTRUCTURE CROSS SECTION
11. SUPERSTRUCTURE DETAILS
11 A. HAUNCH TABLE
12. LAMINATED ELASTOMERIC BRG.
13. EXPANSION DEVICE
14. COVER PLATE DETAILS
15. SLOPED FACE PARAPET LF
16. PPT TRANSITION WING 1
17. PPT TRANSITION WING 3

DESIGN DATA

LIVE LOAD:

INVENTORY RATING; HS-20
OPERATIONAL RATING; HS-33
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 210 Kips.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SUPERSTRUCTURE 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.

BENCH MARK

NO.	DESCRIPTION	ELEVATION
#24	DISK IN WING WALL OF B-11-24 EB IH-90/94 OVER SMOKY HOLLOW RD	906.54

PHILIP G CIHA E-32578 OSHKOSH WIS PROFESSIONAL ENGINEER WISCONSIN
7/6/09

AS-BUILT PLAN
BRIDGE CONTRACTOR: ZENITH TECH
DATE STARTED: SEPTEMBER 13, 2010
DATE COMPLETED: OCTOBER 25, 2010

DESIGN CONTACT: PHIL CIHA, P.E. (262)-317-3320
BRIDGE OFFICE CONTACT: WILLIAM DREHER, P.E. (608)-266-8489

ORIGINAL PLANS PREPARED BY
R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

NO.	DATE	REVISION	BY

Plans Prepared For WISDOT
BUREAU OF STRUCTURES

APPROVED William C. Dreher SDR 8-25-09
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-11-24

IH-39 OVER SMOKY HOLLOW ROAD

COUNTY COLUMBIA		TOWN/~~CITY/VILLAGE~~ ARLINGTON	
DESIGN SPEC. AASHTO STD. SPEC. 2003		LOAD HS-20	CONST. SPEC. 2009
DESIGNED BY KMA	DESIGN CK'D. PGC	DRAWN BY MJB	PLANS CK'D. PGC

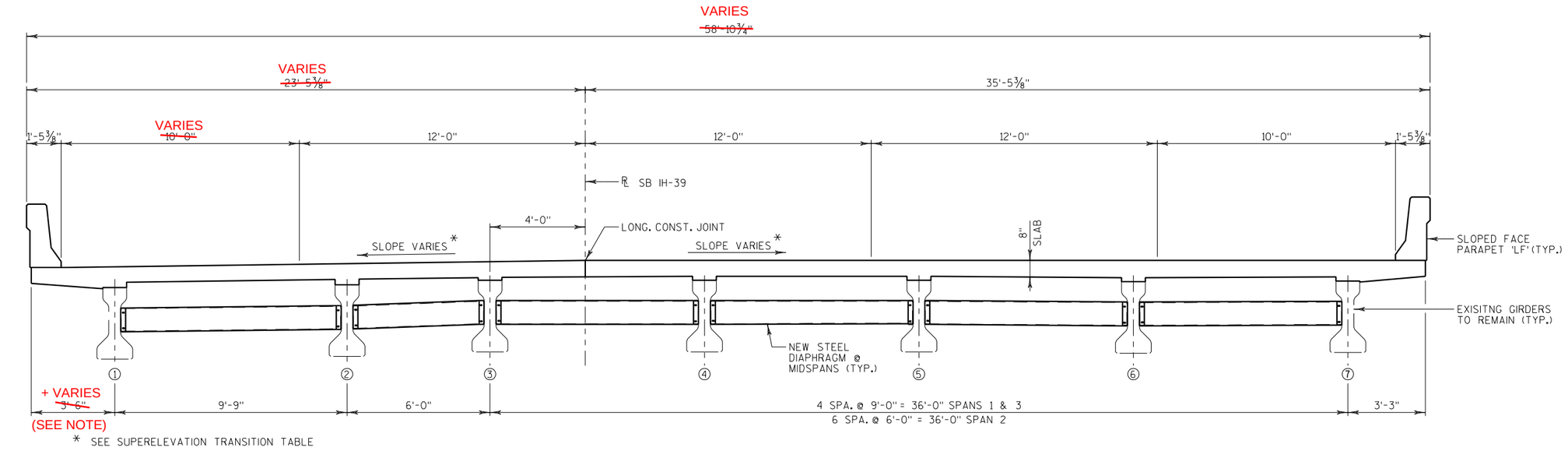
GENERAL PLAN RE-DECK

SHEET 1 OF 17
290

I.D. 1010-04-72 DATE:

8 8

STATE PROJECT NUMBER
1010-04-72



* SEE SUPERELEVATION TRANSITION TABLE

\+ NORTH ABUTMENT = 3' - 3 1/2"
SOUTH ABUTMENT 3' - 10 3/8"

SECTION THRU STH IH-39

(LOOKING SOUTH, SPANS 1 & 3)

NOTE: THE EXISTING GIRDER ALIGNMENT DID NOT FOLLOW THE ALIGNMENT OF THE REFERENCE LINE. THE OVERHANG DIMENSIONS HAD TO BE MODIFIED TO FIT THE EXISTING ALIGNMENT OF THE ADJOINING CONCRET BARRIER WALL THAT WAS LEFT IN PLACE.

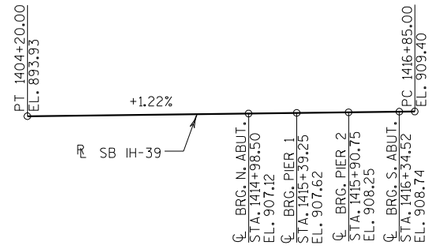
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	NORTH ABUT.	PIER 1	PIER 2	SOUTH ABUT.	TOTALS
203.0200	REMOVING OLD SRUCTURE (STA. 1415+65.00)	L.S.	———	———	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES (B-11-24)	L.S.	———	———	———	———	———	1
210.0100	BACKFILL STRUCTURE	C.Y.	———	78	———	———	86	164
502.0100	CONCRETE MASONRY BRIDGES	C.Y.	281	23	———	———	25	329
502.3100	EXPANSION DEVICE (B-11-24)	L.S.	———	———	———	———	———	1
502.5002	MASONRY ANCHORS TYPE L NO. 4 BARS	EACH	———	38	———	———	33	71
502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	———	160	———	———	164	324
502.6102	MASONRY ANCHORS TYPE S 1/2-INCH	EACH	———	22	———	———	22	44
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB.	83,440	2,850	———	———	2,870	89,160
506.4000	STEEL DIAPHRAGM (B-11-24)	EACH	20	———	———	———	———	20
506.2610	BEARING PADS ELASTOMERIC LAMINATED	EACH	———	7	———	———	7	14
509.1500	CONCRETE SURFACE REPAIR	S.F.	*	*	*	*	*	400
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	S.Y.	———	10	———	———	10	20
604.0500	SLOPE PAVING CRUSHED AGGREGATE	S.Y.	———	310	———	———	310	620
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	1	———	———	———	———	1
502.0400.S	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	2810	230	———	———	250	3290
506.7050.S	REMOVING BEARINGS	EACH	———	7	———	———	7	14
SPV.0180.XX	REMOVING CRUSHED AGGERGATE SLOPE PAVING	S.Y.	———	275	———	———	275	550
SPV.0060.XX	CLEANING AND PAINTING BEARINGS	EACH	———	———	16	16	———	32
	NON-BID ITEMS							
	FILLER	SIZE						1/2" & 3/4"

* UNDISTRUBTED, AS DIRECTED BY THE ENGINEER @ ABUTMENTS, PIERS & GIRDERS ENDS

GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
3. DIMENSIONS SHOWN ARE BASED ON ORIGINAL STRUCTURE PLANS. CONTRACTOR SHALL VERIFY DIMENSIONS IN THE FIELD.
4. ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.
5. ALL REINFORCEMENT BARS ARE ENGLISH AND THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
6. ALL CONCRETE REMOVAL NOT COVERED WITH A CONCRETE OVERLAY SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT.
7. THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF THE EXCAVATION FOR STRUCTURES.
8. THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.
9. AT BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.
10. PRESTRESSED GIRDER BRIDGES - THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET, WHICH IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID.
11. EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE SHALL BE PAID FOR IN LUMP SUM PRICE BID AS "EXPANSION DEVICE (B-11-24)".
12. VARIATIONS TO THE NEW GRADE LINE OVER 1/4" MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.
13. THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR, 1961.
14. THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARDS SPECIFICATIONS FOR GRADE 1 MATERIAL.
15. EXISTING STRUCTURE B-11-24 IS A 3 SPAN NON-CONTINUOUS PRESTRESSED GIRDER STRUCTURE REMOVAL SHALL INCLUDE ITEMS DETAILED ON REMOVAL SHEET 3.
16. EXISTING OVERLAY TO BE REMOVED INCLUDE CONCRETE OVERLAY IN 1984, AN ASPHALTIC CONCRETE OVERLAY WITH WATERPROOFING MEMBRANE IN 2002 AND AN ASPHALTIC CONCRETE OVERLAY IN 2008.
17. ALTERNATE FORMING SYSTEM REQUIRED FOR SPAN 1 BETWEEN GIRDERS 1 & 2 AND GIRDERS 6 & 7, SPAN 2 BETWEEN GIRDERS 1 & 2. SEE SUPERSTRUCTURE PLAN SHEET 9 FOR SLAB HAUNCH DETAILS. SEE SUPERSTUCTURE DETAIL SHEET 11 FOR LOCATIONS IN HAUNCH TABLE.



PROFILE GRADE LINE SB IH-39

STATION	EAST SIDE OF DECK	WEST SIDE OF DECK
1415+23.29	-0.02	-0.02
1415+83.29	0	-0.02
1416+43.29	0.02	-0.02
1417+03.29	0.04	-0.04

* SUPERELEVATION TRANSITION TABLE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

CONST. SPEC. 2009	DRAWN BY MJB	PLANS CK'D. PGC

CROSS SECTION & QUANTITIES

SHEET 2 OF 17

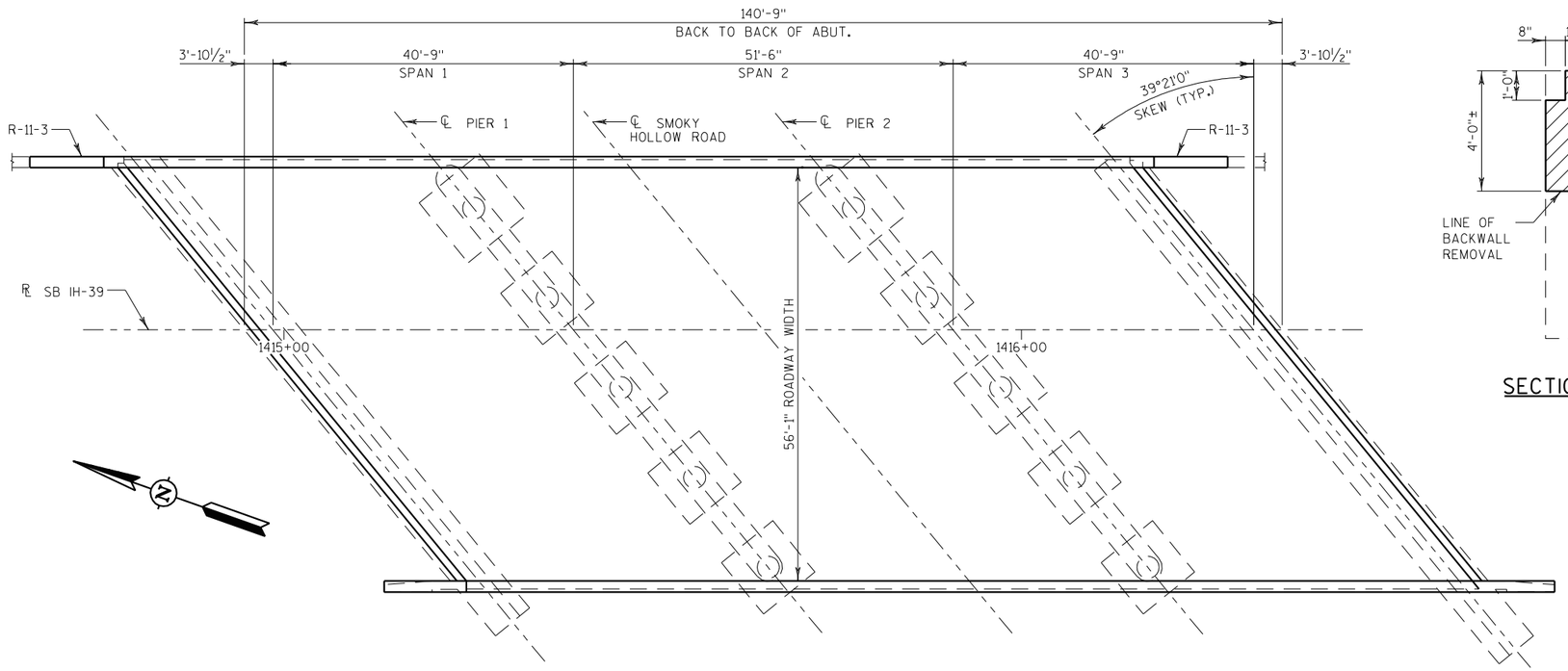
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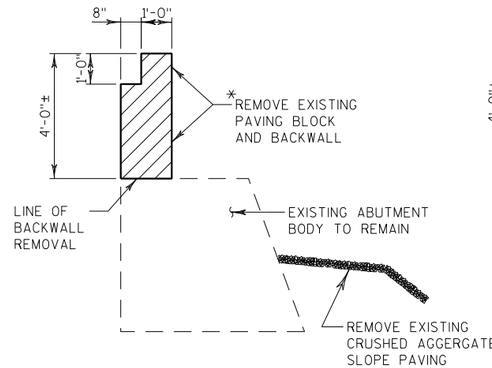
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STATE PROJECT NUMBER
1010-04-72

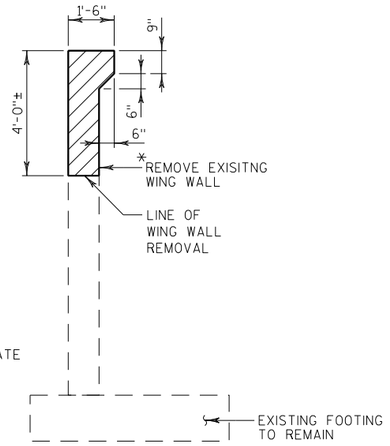
* DEFINE REMOVAL WITH 1" DEEP SAW CUT



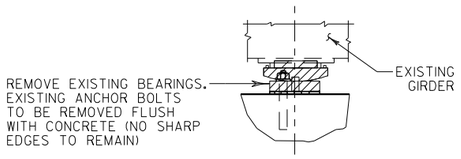
EXISTING PLAN
(3 SPAN NON-CONTINUOUS PRESTRESSED GIRDER)



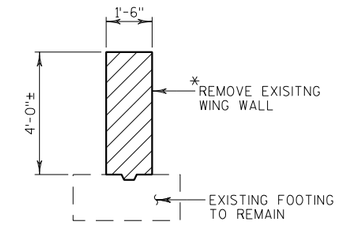
SECTION THRU EXISTING ABUTMENT



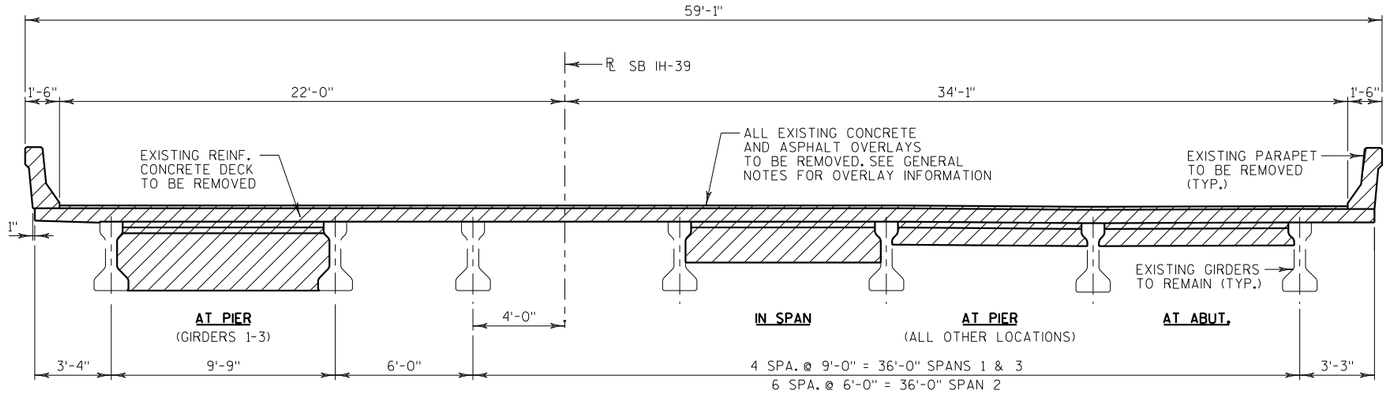
SECTION THRU EXISTING WING WALLS 1 & 3



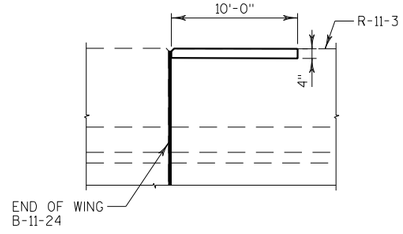
BEARING REMOVAL
(AT ABUTMENT)



SECTION THRU EXISTING WING WALLS 2 & 4



SECTION THRU IH-39
(LOOKING SOUTH AT SPAN 1 & 3)



WALL BARRIER REMOVAL
(FRONT FACE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

CONST. SPEC. 2009	DRAWN BY MJB	PLANS CK'D. PGC

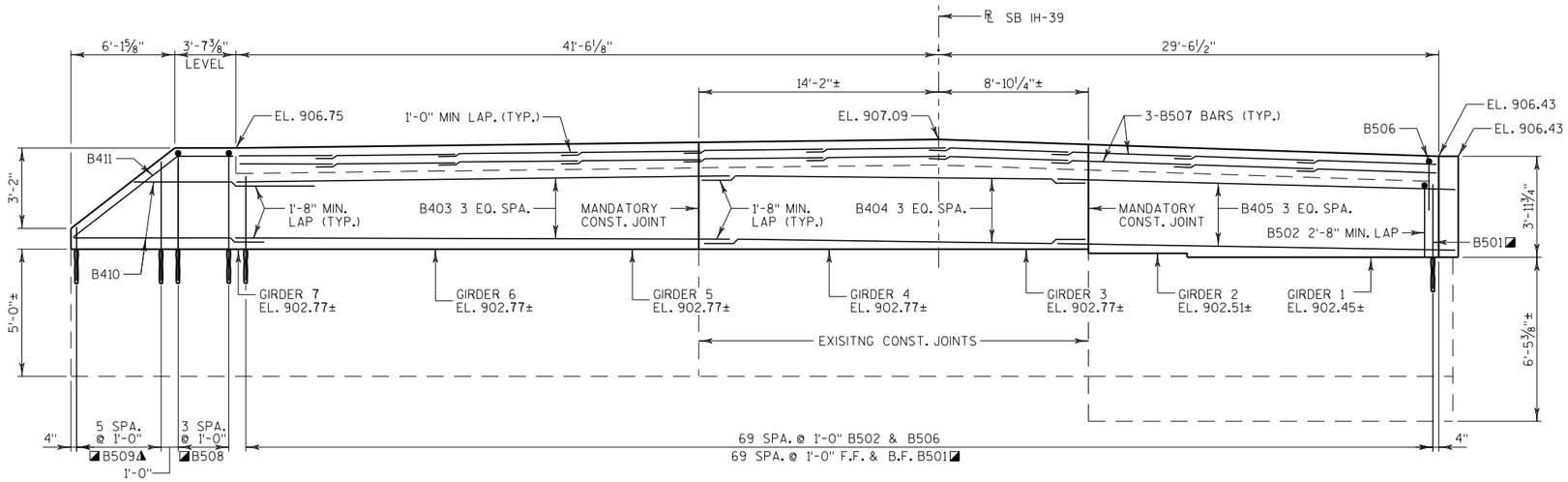
REMOVALS

SHEET 3 OF 17
292

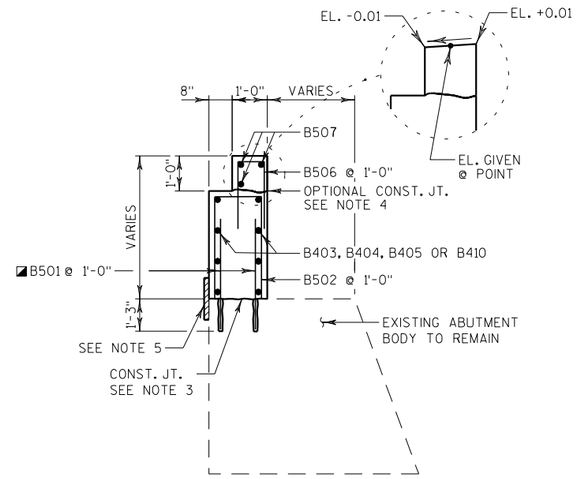
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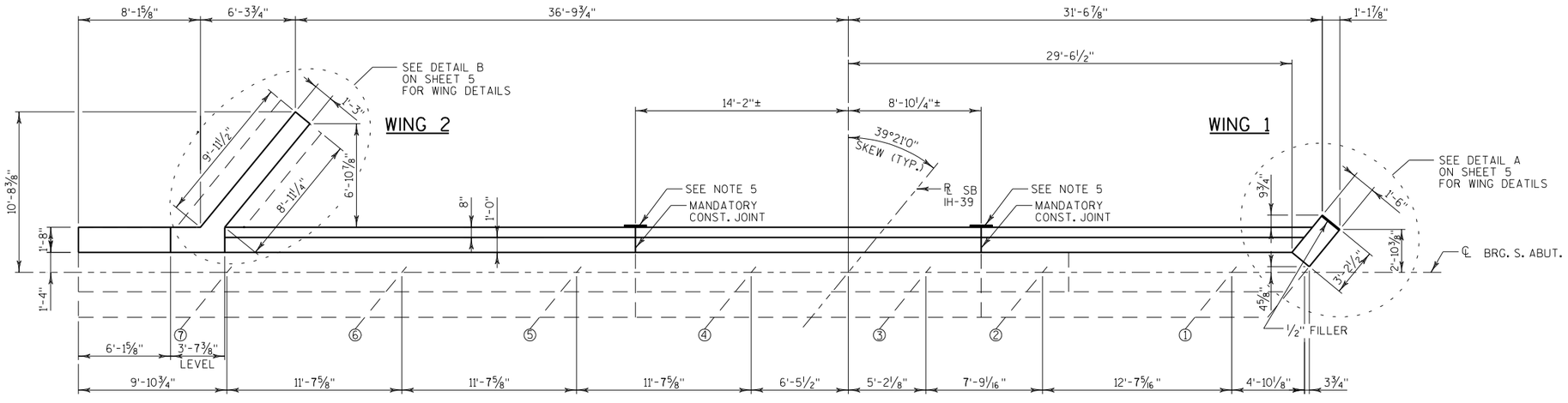
STATE PROJECT NUMBER
1010-04-72



ELEVATION
(LOOKING NORTH)



SECTION THRU BODY



PLAN

NOTES

1. ◓ CONCRETE MASONRY ANCHORS TYPE L NO. 4 BAR EMBEDED 1'-0" INTO EXISTING ABUTMENT BODY. HAVING A MINIMUM PULLOUT CAPACITY OF 12 KIPS.
2. ◪ CONCRETE MASONRY ANCHORS TYPE L NO. 5 BAR EMBEDED 1'-3" INTO EXISTING ABUTMENT BODY. HAVING A MINIMUM PULLOUT CAPACITY OF 19 KIPS.
3. LINE OF BACKWALL REMOVAL. ROUGHEN SURFACE OF CONCRETE ¼" DEEP MIN. ALL AREAS OF NEW TO EXISTING CONCRETE CONTACT.
4. POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE, STRIKE OFF AND LEAVE ROUGH.
5. 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

CONST. SPEC. 2009	DRAWN BY MJB	PLANS CK'D. PGC

NORTH ABUTMENT

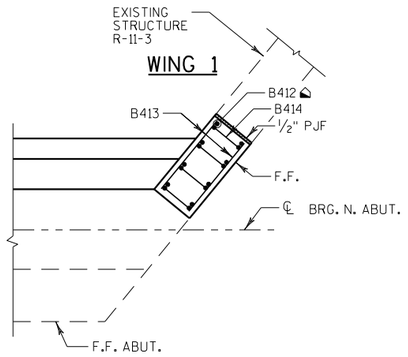
SHEET 4 OF 17
293

8

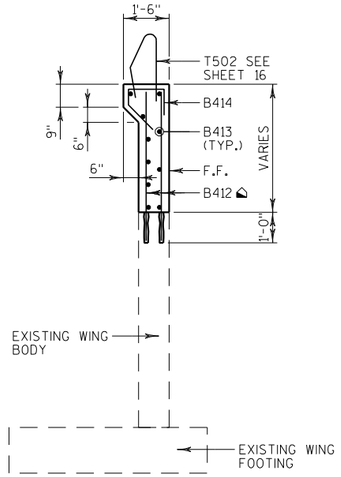
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STATE PROJECT NUMBER

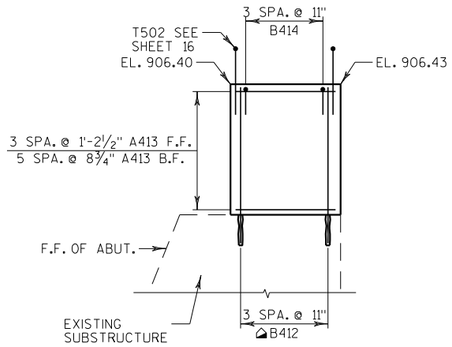
1010-04-72



DETAIL A



SECTION THRU WING 1



ELEVATION WING 1
(LOOKING @ FRONT FACE)

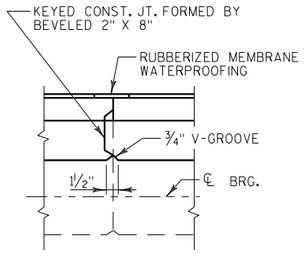
BILL OF BARS

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

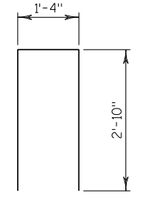
	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	
◪	B501	X	140	4-0			ABUT. BACKWALL F.F. & B.F.	DOWEL
	B502	X	70	6-9	X		ABUT. BACKWALL	STIRRUP
	B403	X	8	28-11			ABUT. BACKWALL F.F. & B.F.	LONG.
	B404	X	8	22-8			ABUT. BACKWALL F.F. & B.F.	LONG.
	B405	X	8	23-8			ABUT. BACKWALL F.F. & B.F.	LONG.
	B506	X	70	4-5	X		ABUT. BACKWALL	STIRRUP
	B507	X	30	8-1			ABUT. BACKWALL	LONG.
◪	B508	X	8	5-9	X		ABUT. BACKWALL F.F. & B.F.	DOWEL
◪	B509	X	12	3-5		◭	ABUT. BACKWALL F.F. & B.F.	DOWEL
	B410	X	8	11-6			ABUT. BACKWALL F.F. & B.F.	LONG.
	B411	X	2	9-9	X		ABUT. BACKWALL	LONG.
◮	B412	X	8	4-9			WING 1 F.F. & B.F.	DOWEL
	B413	X	10	2-10			WING 1 F.F. & B.F.	HORIZ.
	B414	X	4	3-8	X		WING 1	STIRRUP
◮	B415	X	30	5-2	X		WING 2	DOWEL
	B416	X	10	10-9			WING 2 F.F. & B.F.	HORIZ.

◮ CONCRETE MASONRY ANCHORS TYPE L. NO. 4 BAR EMBEDED 1'-0" MIN. EDGE DIST. = 4"

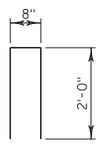
◪ CONCRETE MASONRY ANCHORS TYPE L. NO. 5 BAR EMBEDED 1'-3" MIN. EDGE DIST. = 4"



VERT. CONST. JOINT



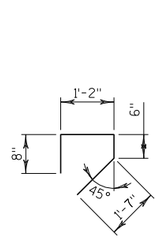
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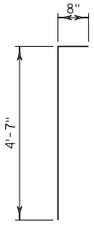
B506



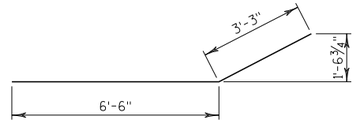
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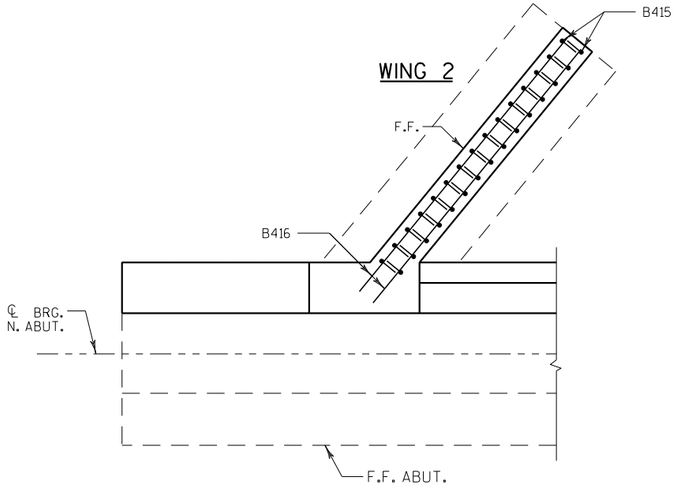
B414



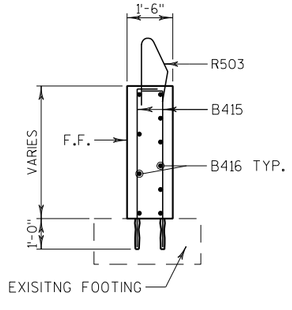
B415



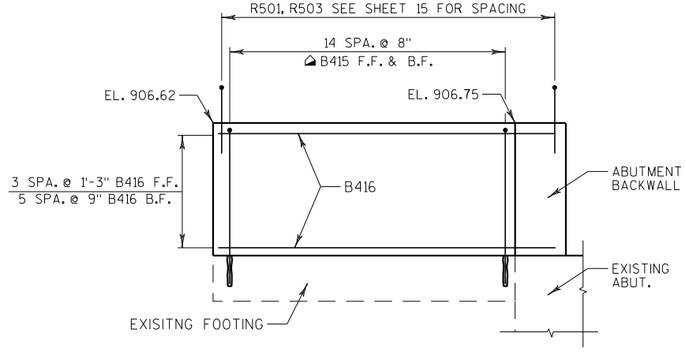
B411



DETAIL B



SECTION THRU WING 2



ELEVATION WING 2
(LOOKING @ FRONT FACE)

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH	
B509	2 SERIES OF 6	2-1 4-8	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

CONST. SPEC. 2009 | DRAWN BY MJB | PLANS CK'D. PGC

NORTH ABUTMENT DETAILS

SHEET 5 OF 17

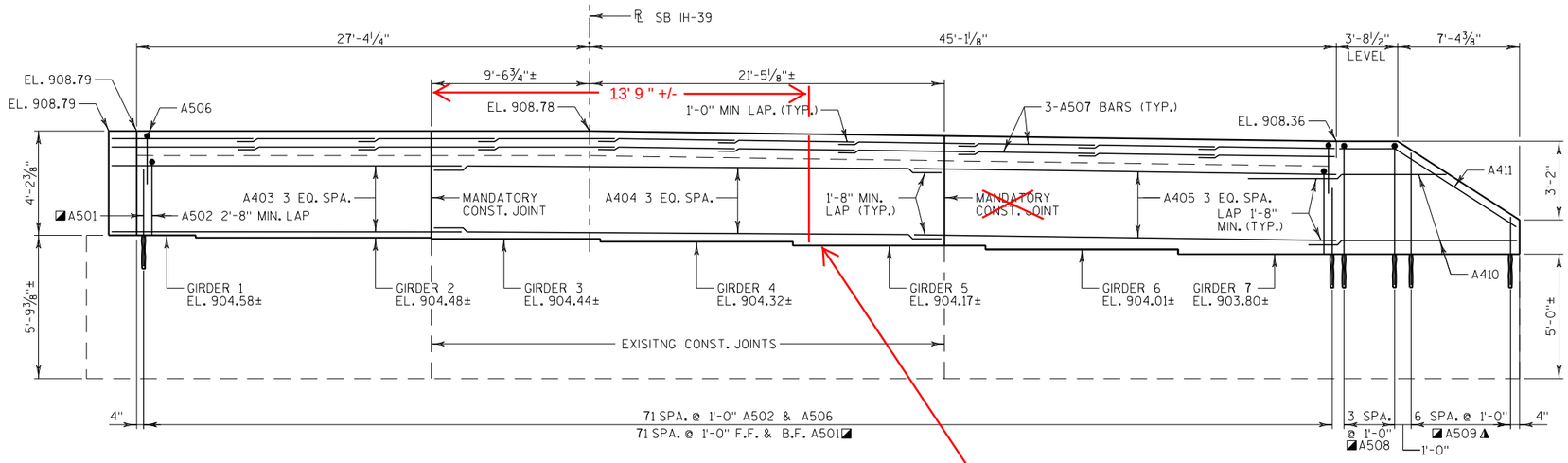
294

8

8

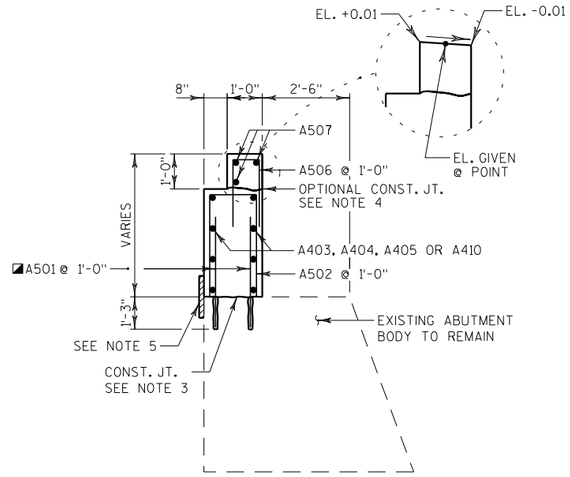
STATE PROJECT NUMBER

1010-04-72

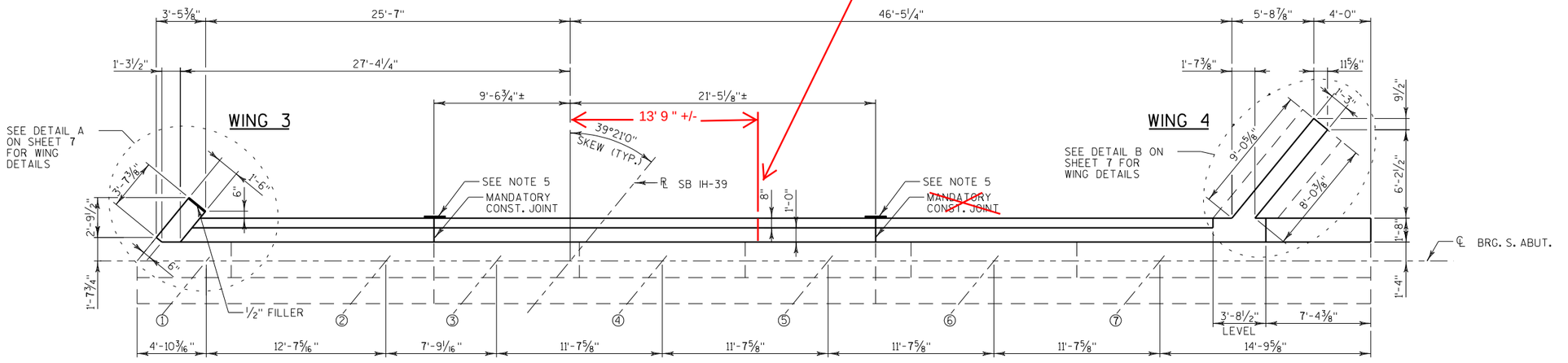


ELEVATION
(LOOKING SOUTH)

CONSTRUCTION JOINT



SECTION THRU BODY



PLAN

NOTES

1. ◓ CONCRETE MASONRY ANCHORS TYPE L NO. 4 BAR EMBEDED 1'-0" INTO EXISTING ABUTMENT BODY. HAVING A MINIMUM PULLOUT CAPACITY OF 12 KIPS.
2. ◪ CONCRETE MASONRY ANCHORS TYPE L NO. 5 BAR EMBEDED 1'-3" INTO EXISTING ABUTMENT BODY. HAVING A MINIMUM PULLOUT CAPACITY OF 19 KIPS.
3. LINE OF BACKWALL REMOVAL. ROUGHEN SURFACE OF CONCRETE ¼" DEEP MIN. ALL AREAS OF NEW TO EXISTING CONCRETE CONTACT.
4. POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE, STRIKE OFF AND LEAVE ROUGH.
5. 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

CONST. SPEC. 2009	DRAWN BY MJB	PLANS CK'D. PGC

SOUTH ABUTMENT

SHEET 6 OF 17

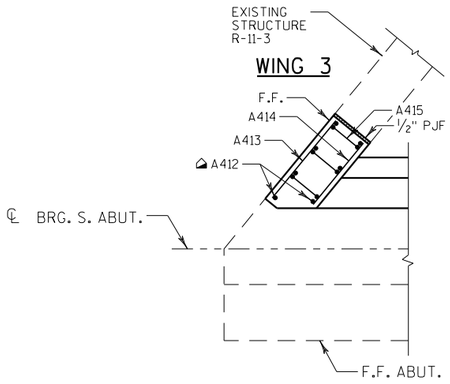
295

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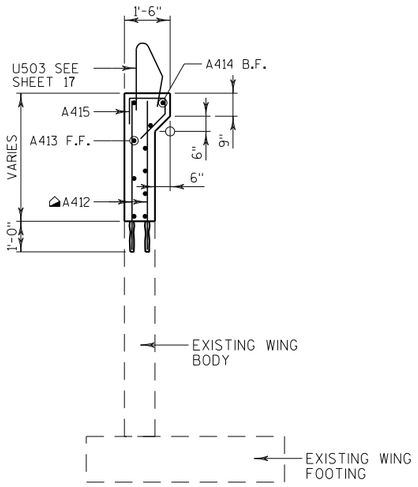
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STATE PROJECT NUMBER

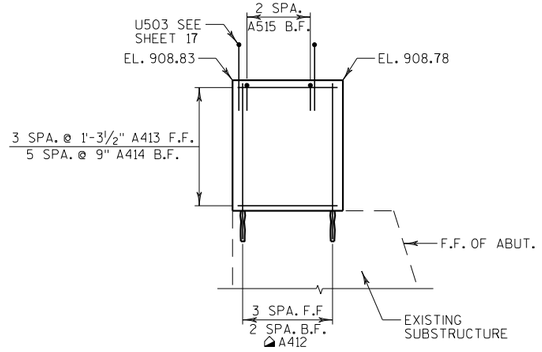
1010-04-72



DETAIL A



SECTION THRU WING 3



ELEVATION WING 3

(LOOKING @ FRONT FACE)

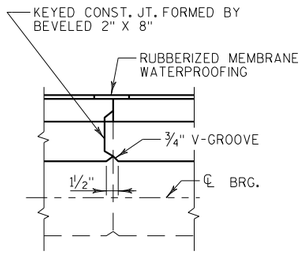
BILL OF BARS

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

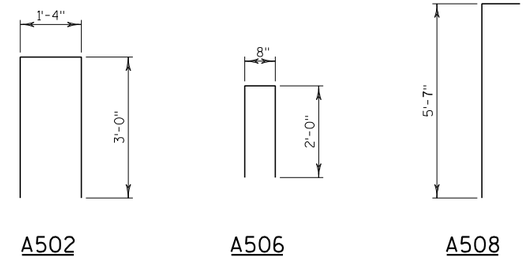
	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	
◪	A501	X	144	4-3			ABUT. BACKWALL	DOWEL
	A502	X	72	7-1	X		ABUT. BACKWALL	STIRRUP
	A403	X	8	21-4			ABUT. BACKWALL	LONG.
	A404	X	8	31-5			ABUT. BACKWALL	LONG.
	A405	X	8	25-6			ABUT. BACKWALL	LONG.
	A506	X	72	4-5	X		ABUT. BACKWALL	STIRRUP
	A507	X	30	8-3			ABUT. BACKWALL	LONG.
◪	A508	X	8	6-4	X		ABUT. BACKWALL	DOWEL
◪	A509	X	14	3-9		◭	ABUT. BACKWALL	DOWEL
	A410	X	8	12-7			ABUT. BACKWALL	LONG.
	A411	X	2	11-0	X		ABUT. BACKWALL	LONG.
◮	A412	X	7	5-0			WING 3 F.F. & B.F.	DOWEL
	A413	X	4	3-3			WING 3 F.F.	HORIZ.
	A414	X	6	2-5			WING 3 B.F.	HORIZ.
	A415	X	3	3-8	X		WING 3	STIRRUP
◮	A416	X	26	5-9	X		WING 4 F.F. & B.F.	DOWEL VERT.
	A417	X	11	9-11			WING 4 F.F. & B.F.	HORIZ.

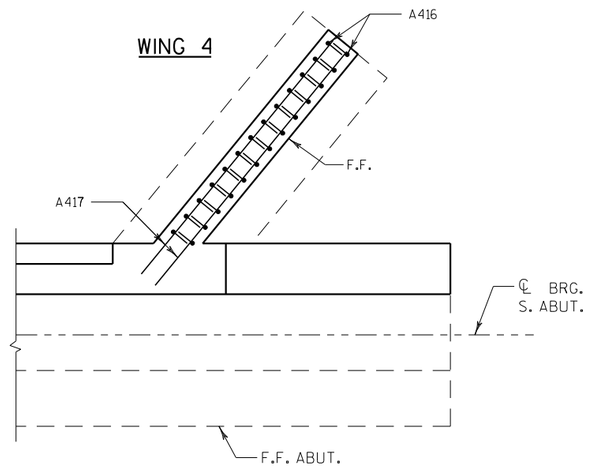
◮ CONCRETE MASONRY ANCHORS TYPE L. NO. 4 BAR EMBEDED 1'-0" MIN. EDGE DIST. = 4"

◪ CONCRETE MASONRY ANCHORS TYPE L. NO. 5 BAR EMBEDED 1'-3" MIN. EDGE DIST. = 4"

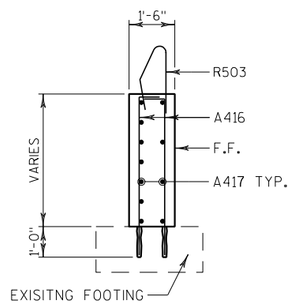


VERT. CONST. JOINT

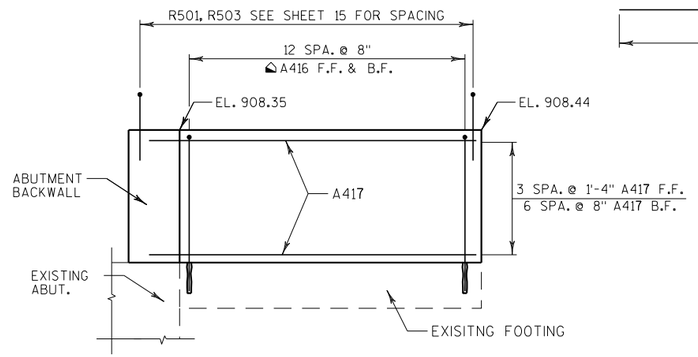




DETAIL B

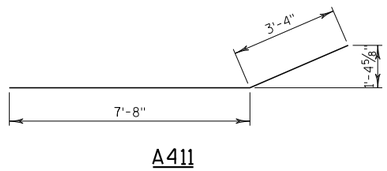


SECTION THRU WING 4



ELEVATION WING 4

(LOOKING @ FRONT FACE)



BAR SERIES TABLE

MARK	NO. REQD.	LENGTH	
A509	2 SERIES OF 7	2-5 5-1	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

CONST. SPEC. 2009 | DRAWN BY MJB | PLANS CK'D. PGC

SOUTH ABUTMENT DETAILS

SHEET 7 OF 17

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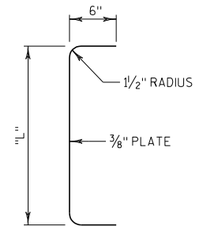
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STATE PROJECT NUMBER

1010-04-72

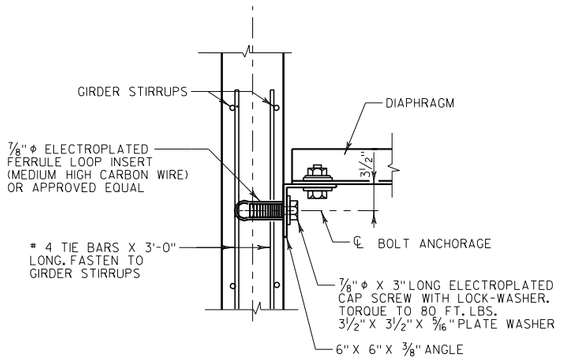
TABLE

GIRDER HEIGHT	DIM. "A"	DIM. "B"	DIM. "L"	* DIM. "X"
28"	1'-0 7/8"	5 7/8"	9 1/2"	2 1/4"
36"	1'-2 7/8"	9 7/8"	1'-1 1/2"	3 1/4"
45"	1'-5 3/8"	1'-1 7/8"	1'-5 1/2"	2 1/4"
54"	1'-7 7/8"	1'-5 7/8"	1'-9 1/2"	4 1/4"
54W"	1'-9 1/8"	1'-5 7/8"	1'-9 1/2"	4 1/4"



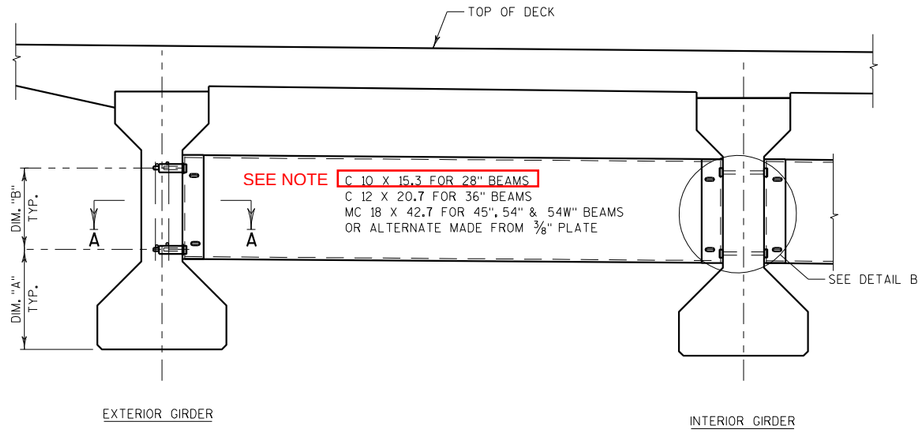
SECTION THRU ALTERNATE DIAPHRAGM

*DIM "X" = 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM

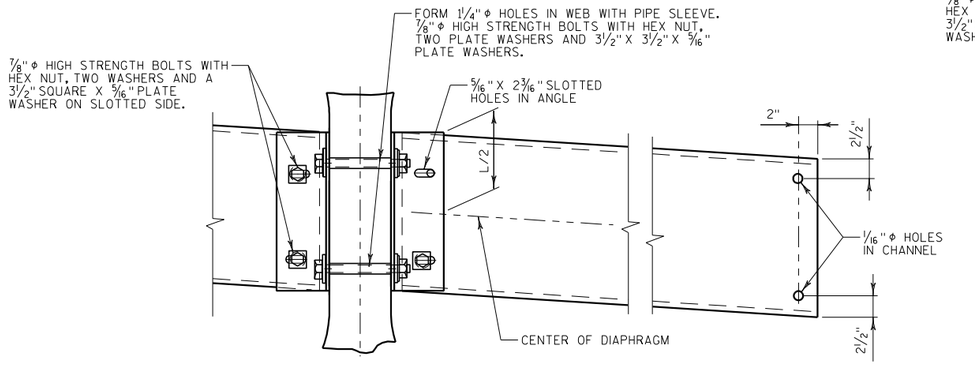


SECT. A-A

(FOR EXTERIOR ATTACHMENT)

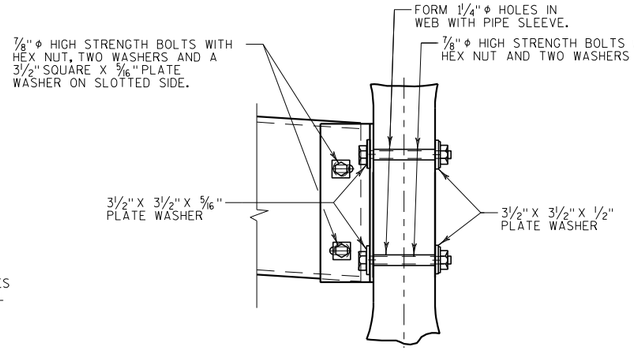


PART TRANSVERSE SECTION AT DIAPHRAGM



DETAIL B

(FOR CONTINUOUS LINE OF DIAPHRAGMS)



SECTION AT INTERIOR GIRDERS THRU DIAPHRAGM FOR SKEW ANGLES > 10°

NOTES

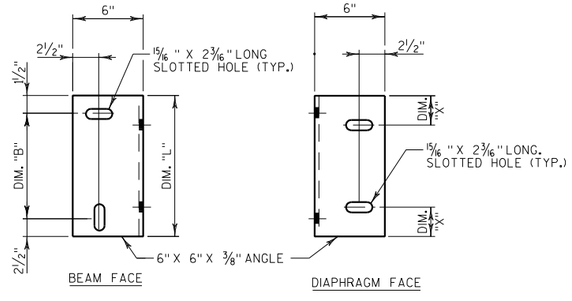
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-11-24", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

NOTE: THE CONTRACTOR INSTALLED THE INCORRECT SIZE CHANNEL (C10 X 15.3) FOR THE DIAPHRAMS. AFTER A DISCUSSION WITH CENTRAL OFFICE BRIDGE SECTION (BILL DREHER), THE SMALL SIZED CHANNELS WERE ALLOWED TO REMAIN IN PLACE. THE CONTRACTOR WAS REQUIRED TO PROVIDE ADDITIONAL BRACING DURING THE DECK POUR.



DIAPHRAGM SUPPORT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

CONST. SPEC. 2009 | DRAWN BY KMA | PLANS CK'D. PGC

STEEL DIAPHRAGM

SHEET 8 OF 17

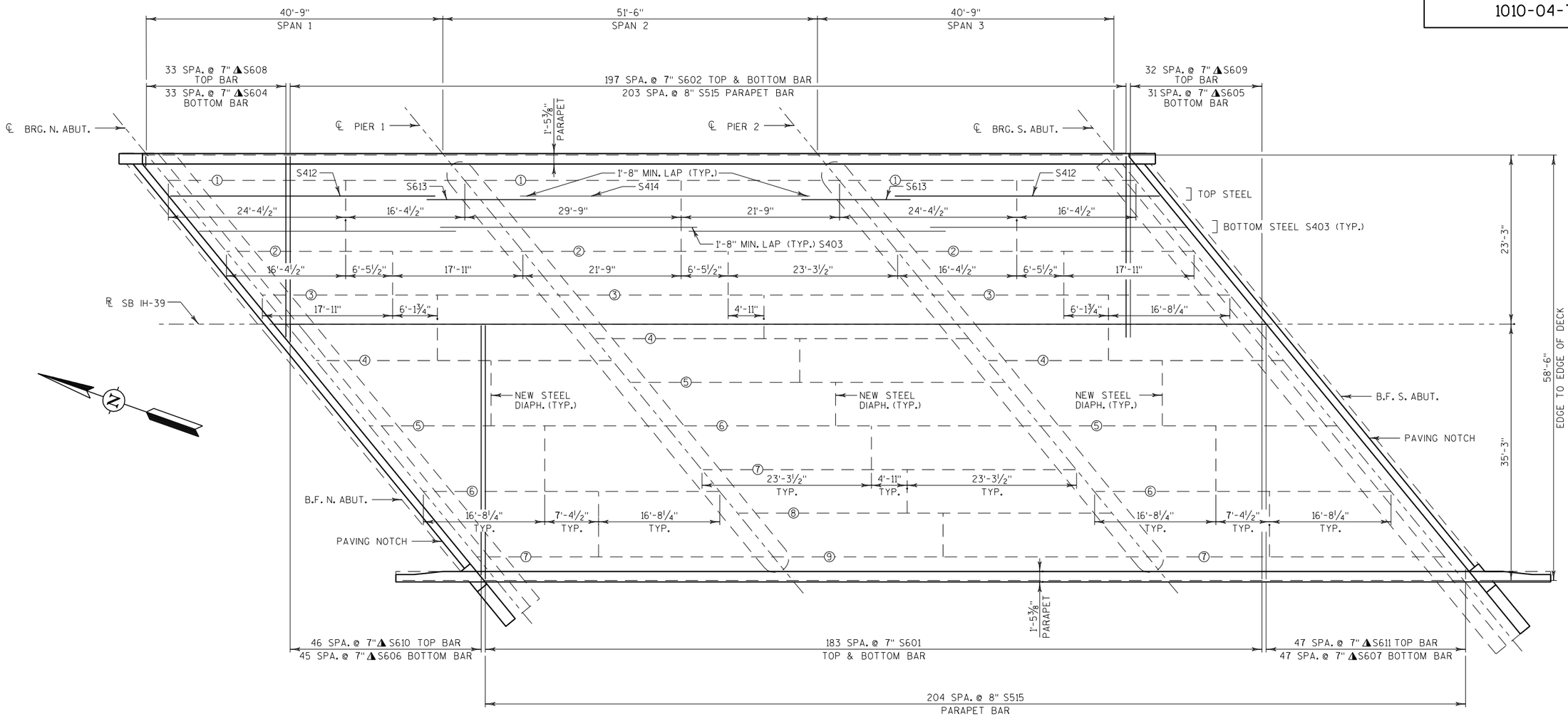
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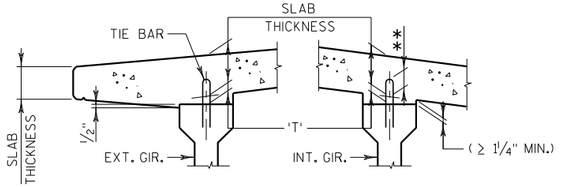
8

STATE PROJECT NUMBER

1010-04-72



PLAN

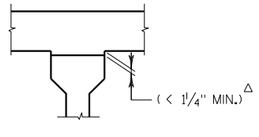


SLAB HAUNCH DETAIL

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED HAT BARS ARE REQUIRED. SEE HAUNCH TABLE, SHEET 11, FOR LOCATIONS. SEE BILL OF BARS FOR HAT BAR PAYMENT, BAR S430.

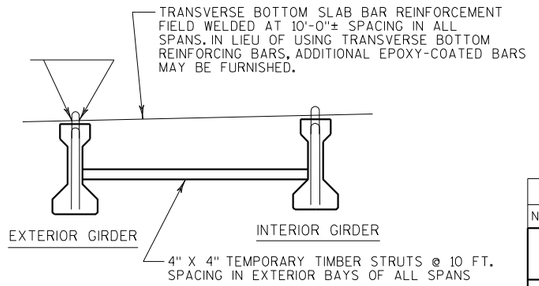
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS
= HAUNCH HEIGHT 'T'



SLAB HAUNCH DETAIL

△ SEE HAUNCH TABLE ON SHEET 11, SUPERSTRUCUTRE DETAILS FOR LOCATIONS. AN ALTERNATE FORMING SYSTEM CAPABLE OF IMBEDDING THE CONCRETE GIRDER INTO THE DECK (WHERE REQUIRED) SHALL BE USED TO SUPPORT DECK FALSEWORK. COST FOR ALTERNATE FORMING SYSTEM IS INCIDENTAL TO BID ITEM, "CONCRETE MASONRY BRIDGES".



TEMPORARY BRACING DETAIL

REQ'D. IN THOSE AREAS WHERE SLAB OVERHANG FROM ℄ EXTERIOR GIRDER EXCEEDS 2'-0".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

CONST. SPEC. 2009	DRAWN BY	MJB	PLANS CK'D.	PGC

SUPERSTRUCTURE PLAN

SHEET 9 OF 17

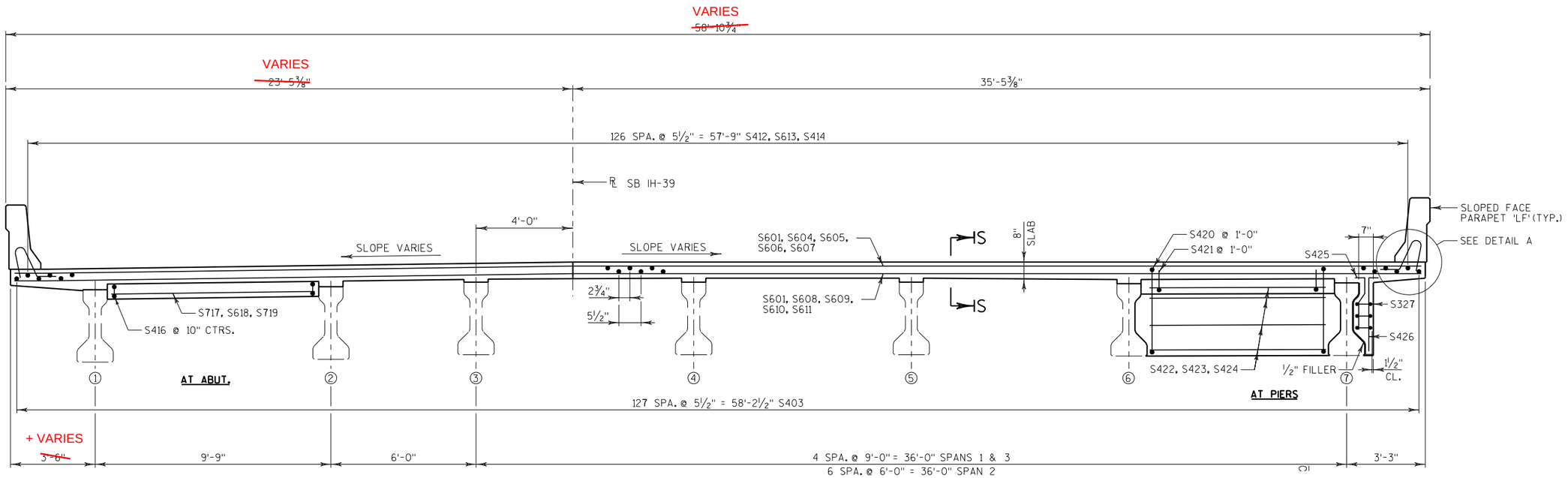
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STATE PROJECT NUMBER

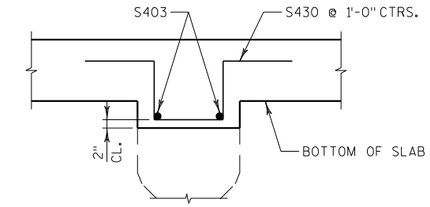
1010-04-72



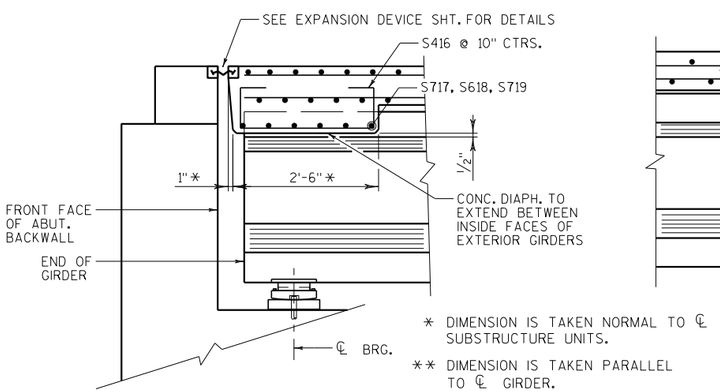
+ NORTH ABUTMENT = 3' - 3 1/2"
SOUTH ABUTMENT 3' - 10 3/8"

CROSS SECTION THRU ROADWAY

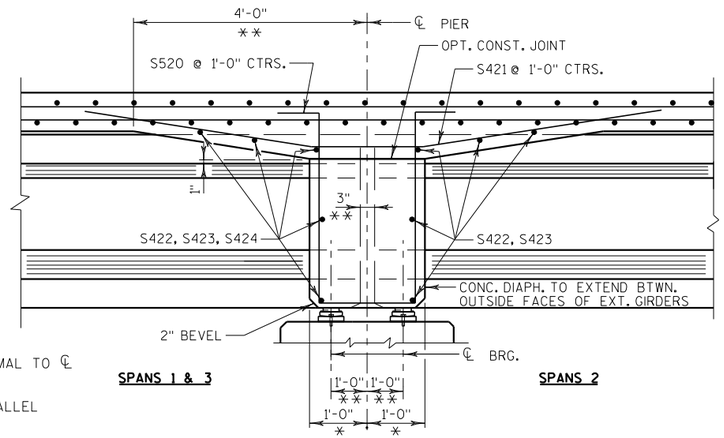
(LOOKING SOUTH SPANS 1 & 3)



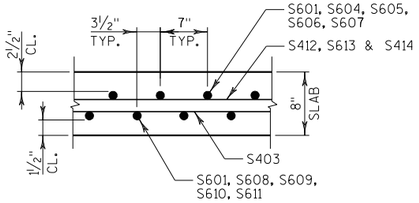
HAT BAR DETAIL



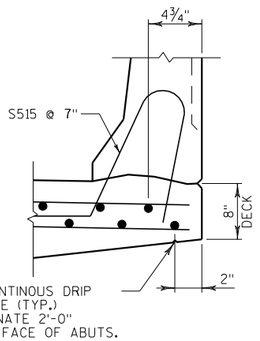
SECTION THRU ABUTMENT DIAPHRAGM



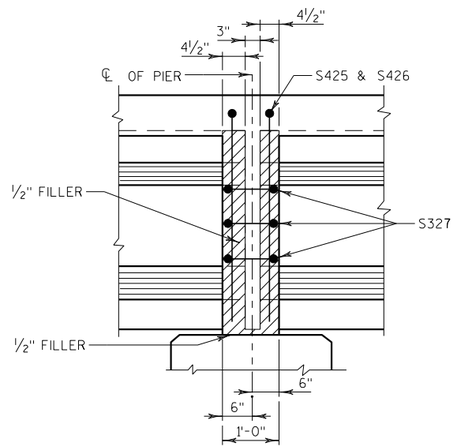
SECTION THRU PIER DIAPHRAGM



SECTION S-S



DETAIL A



PILASTER DETAIL AT PIERS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

CONST. SPEC. 2009	DRAWN BY MJB	PLANS CK'D. PGC

SUPERSTRUCTURE CROSS SECTION

SHEET 10 OF 17

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TOP OF DECK ELEVATIONS

	N. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER	PIER	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 2	PIER 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	S. ABUT.
E. END OF DECK	906.46	906.51	906.56	906.61	906.66	906.71	906.76	906.81	906.86	906.91	906.96	906.96	907.04	907.14	907.24	907.34	907.44	907.54	907.65	907.75	907.85	907.95	907.95	908.03	908.11	908.19	908.27	908.34	908.43	908.51	908.58	908.67	908.75
GIRDER 1	906.52	906.57	906.62	906.67	906.72	906.77	906.82	906.87	906.92	906.97	907.02	907.02	907.12	907.22	907.31	907.41	907.51	907.60	907.70	907.80	907.89	907.99	907.99	908.07	908.14	908.22	908.30	908.37	908.45	908.53	908.60	908.68	908.76
GIRDER 2	906.82	906.87	906.92	906.97	907.02	907.07	907.12	907.17	907.22	907.28	907.34	907.34	907.42	907.50	907.58	907.66	907.74	907.82	907.90	907.98	908.06	908.14	908.14	908.21	908.27	908.33	908.40	908.46	908.52	908.59	908.65	908.71	908.78
GIRDER 3	907.00	907.05	907.10	907.15	907.20	907.25	907.30	907.35	907.40	907.46	907.51	907.51	907.58	907.65	907.72	907.79	907.86	907.93	908.00	908.07	908.14	908.21	908.21	908.27	908.32	908.38	908.43	908.49	908.54	908.60	908.65	908.71	908.76
℄ SB IH-39	907.12	907.17	907.22	907.27	907.32	907.37	907.42	907.47	907.52	907.57	907.62	907.62	907.68	907.74	907.81	907.87	907.93	907.99	908.06	908.12	908.18	908.25	908.25	908.30	908.35	908.40	908.45	908.50	908.54	908.59	908.64	908.69	908.74
GIRDER 4	907.07	907.12	907.17	907.22	907.27	907.32	907.37	907.42	907.47	907.52	907.57	907.60	907.66	907.72	907.79	907.85	907.91	907.97	908.04	908.10	908.16	908.23	908.20	908.25	908.30	908.35	908.40	908.45	908.49	908.54	908.59	908.64	908.69
GIRDER 5	906.98	907.03	907.08	907.13	907.18	907.23	907.28	907.33	907.38	907.43	907.48	907.54	907.60	907.66	907.73	907.79	907.85	907.91	907.98	908.04	908.10	908.17	908.11	908.16	908.21	908.26	908.31	908.36	908.41	908.46	908.50	908.55	908.60
GIRDER 6	906.89	906.94	906.99	907.04	907.09	907.14	907.19	907.24	907.29	907.34	907.39	907.48	907.54	907.60	907.67	907.73	907.79	907.85	907.92	907.98	908.04	908.11	908.02	908.07	908.12	908.17	908.22	908.27	908.32	908.37	908.42	908.46	908.49
GIRDER 7	906.80	906.85	906.90	906.95	907.00	907.05	907.10	907.15	907.20	907.25	907.30	907.42	907.48	907.54	907.61	907.67	907.73	907.79	907.86	907.92	907.98	908.05	907.93	907.98	908.03	908.08	908.13	908.18	908.23	908.27	908.30	908.33	908.37
GIRDER 8	——	——	——	——	——	——	——	——	——	——	——	907.36	907.42	907.48	907.55	907.61	907.67	907.73	907.80	907.86	907.92	907.99	——	——	——	——	——	——	——	——	——	——	——
GIRDER 9	——	——	——	——	——	——	——	——	——	——	——	907.30	907.36	907.42	907.49	907.55	907.61	907.67	907.74	907.80	907.86	907.93	——	——	——	——	——	——	——	——	——	——	——
W. END OF DECK	906.82	906.87	906.92	906.97	907.02	907.07	907.12	907.17	907.22	907.27	907.32	907.28	907.34	907.40	907.47	907.53	907.59	907.65	907.72	907.78	907.84	907.91	907.91	907.96	908.01	908.06	908.11	908.16	908.21	908.24	908.27	908.30	908.34

TOP OF GIRDER ELEVATIONS

SEE SHEET 300-A FOR SHOT GIRDER ELEVATIONS

	N. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER	PIER	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 2	PIER 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	S. ABUT.
GIRDER 1	905.75										906.31	906.31										907.12	907.12										907.88
GIRDER 2	905.91										906.43	906.43										907.16	907.16										907.78
GIRDER 3	906.07										906.62	906.62										907.24	907.24										907.74
GIRDER 4	906.07										906.62	906.62										907.16	907.16										907.62
GIRDER 5	906.07										906.62	906.62										907.16	907.09										907.47
GIRDER 6	906.07										906.56	906.62										907.09	906.95										907.31
GIRDER 7	906.07										906.53	906.56										906.95	906.85										907.12
GIRDER 8	——	——	——	——	——	——	——	——	——	——	——	906.56										906.95	——	——	——	——	——	——	——	——	——	——	——
GIRDER 9	——	——	——	——	——	——	——	——	——	——	——	906.53										906.85	——	——	——	——	——	——	——	——	——	——	——

HAUNCH TABLE

SEE SHEET 300-A FOR SHOT GIRDER ELEVATIONS

	N. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER	PIER	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 2	PIER 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	S. ABUT.
GIRDER 1	0.11	▲0.10	▲0.08	△0.07	▲0.05	▲0.04	▲0.04	▲0.04	▲0.05	▲0.05	▲0.05	▲0.05	▲0.06	▲0.07	▲0.08	▲0.09	▲0.09	0.12	0.14	0.16	0.18	0.21	0.21	0.20	0.19	0.18	0.18	0.17	0.18	0.19	0.20	0.20	0.21
GIRDER 2	0.24	0.23	0.22	0.21	0.20	0.19	0.20	0.20	0.21	0.23	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.26	0.28	0.29	0.31	0.32	0.32	0.31	0.31	0.30	0.29	0.28	0.29	0.30	0.31	0.32	✱0.33
GIRDER 3	0.26	0.25	0.24	0.22	0.21	0.20	0.20	0.20	0.21	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.24	0.25	0.26	0.28	0.29	0.31	0.31	0.30	0.30	0.30	0.30	0.29	0.31	0.32	✱0.33	✱0.35	✱0.36
GIRDER 4	0.33	0.32	0.31	0.29	0.28	0.27	0.27	0.27	0.28	0.28	0.28	0.31	0.31	0.32	0.32	0.32	0.32	✱0.34	✱0.36	✱0.37	✱0.39	✱0.40	✱0.37	✱0.37	✱0.36	✱0.36	✱0.35	✱0.35	✱0.36	✱0.37	✱0.39	✱0.40	✱0.41
GIRDER 5	0.24	0.23	0.22	0.20	0.19	0.18	0.18	0.18	0.19	0.19	0.19	0.25	0.26	0.26	0.26	0.26	0.26	0.28	0.30	0.31	✱0.33	✱0.34	✱0.35	✱0.36	✱0.36	✱0.36	✱0.37	✱0.37	✱0.39	✱0.41	✱0.43	✱0.45	✱0.47
GIRDER 6	0.15	0.15	0.14	0.13	0.12	0.12	0.13	0.14	0.14	0.15	0.16	0.19	0.20	0.21	0.22	0.23	0.24	0.26	0.28	0.31	✱0.33	✱0.35	✱0.40	✱0.41	✱0.41	✱0.42	✱0.42	✱0.43	✱0.45	✱0.47	✱0.50	✱0.51	✱0.52
GIRDER 7	▲0.07	▲0.06	▲0.06	▲0.05	△0.05	▲0.04	▲0.05	▲0.07	▲0.08	▲0.09	▲0.10	0.19	0.21	0.23	0.25	0.26	0.28	0.31	✱0.34	✱0.37	✱0.40	✱0.43	✱0.41	✱0.43	✱0.44	✱0.46	✱0.47	✱0.49	✱0.52	✱0.54	✱0.55	✱0.57	✱0.58
GIRDER 8	——	——	——	——	——	——	——	——	——	——	——	0.13	0.15	0.17	0.19	0.20	0.22	0.25	0.28	0.31	✱0.34	✱0.37	——	——	——	——	——	——	——	——	——	——	——
GIRDER 9	——	——	——	——	——	——	——	——	——	——	——	0.10	0.13	0.15	0.18	0.20	0.22	0.26	0.30	✱0.34	✱0.38	✱0.41	——	——	——	——	——	——	——	——	——	——	——

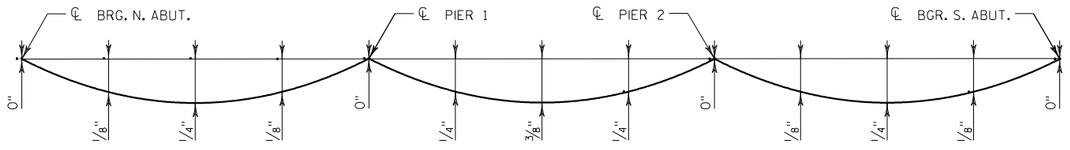
BILL OF BARS

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

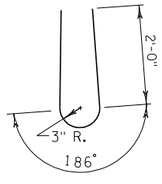
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	LOCATION
S601	X	368	34-11			SLAB TOP & BOTTOM	TRANS.
S602	X	396	24-11			SLAB TOP & BOTTOM	TRANS.
S403	X	536	35-4			SLAB BOTTOM	LONG.
S604	X	34	13-2		▲	SLAB BOTTOM	TRANS.
S605	X	32	13-4		▲	SLAB BOTTOM	TRANS.
S606	X	46	18-4		▲	SLAB BOTTOM	TRANS.
S607	X	48	18-2		▲	SLAB BOTTOM	TRANS.
S608	X	34	12-10		▲	SLAB TOP	TRANS.
S609	X	33	13-4		▲	SLAB TOP	TRANS.
S610	X	47	18-4		▲	SLAB TOP	TRANS.
S611	X	48	17-10		▲	SLAB TOP	TRANS.
S412	X	254	36-5			SLAB TOP SPAN 1 & 3	LONG.
S613	X	254	15-0			SLAB TOP PIER	LONG.
S614	X	127	39-10			SLAB TOP SPAN 2	LONG.
S515	X	409	4-2	X		PARAPET	STIRRUP
S416	X	148	4-10	X		ABUT. DIAPH.	STIRRUP
S717	X	12	10-3			ABUT. DIAPH. BETWEEN G1-G2	HORIZ.
S618	X	12	5-4			ABUT. DIAPH. BETWEEN G2-G3	HORIZ.
S719	X	48	9-3			ABUT. DIAPH. BETWEEN G3-G7	HORIZ.
S520	X	46	9-6	X		PIER DIAPH.	STIRRUP
S521	X	46	12-5	X		PIER DIAPH.	HORIZ.
S422	X	14	10-3			PIER DIAPH. G1-G2 ALL SPANS, EXP. JT.	HORIZ.
S423	X	44	5-4			PIER DIAPH. G2-G9 SPAN 2, G2-G3 SPAN 1 & 3, EXP. JT.	HORIZ.
S424	X	56	9-3			PIER DIAPH. G3-G7 SPANS 1 & 3, EXP JT.	HORIZ.
S425	X	8	3-2	X		PIER PILASTER	VERT.
S426	X	8	3-9	X		PIER PILASTER	VERT.
S327	X	12	2-7	X		PIER PILASTER	HORIZ.
S528	X	409	4-10	X		PARAPET	VERT.
S529	X	40	36-1			PARAPET	HORIZ.
S430	X	300	3-0	X		SLAB BOTTOM	HAT BAR

✱ HAT BARS (S430) REQUIRED @ 1'-0" CTRS.

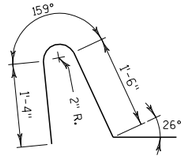
▲ ALTERNATE FORMING SYETEM REQUIRED



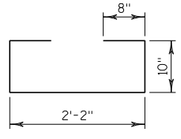
DEAD LOAD DEFLECTION



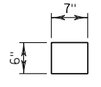
S528



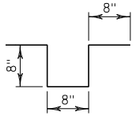
S515



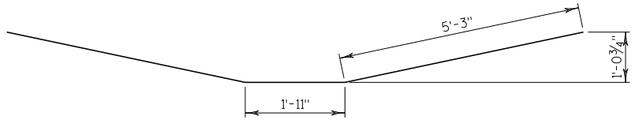
S416



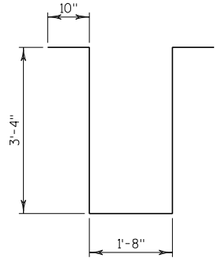
S327



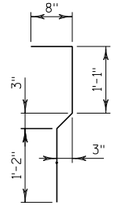
S430



S521



S520



S425



S426

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
S604	1 SERIES OF 34	1-5 TO 24-10
S605	1 SERIES OF 32	2-4 TO 24-4
S606	1 SERIES OF 46	2-4 TO 34-4
S607	1 SERIES OF 48	1-5 TO 34-10
S608	1 SERIES OF 34	1-1 TO 24-6
S609	1 SERIES OF 33	1-11 TO 24-9
S610	1 SERIES OF 47	2-0 TO 34-8
S611	1 SERIES OF 48	1-1 TO 34-6

BUNDLE AND TAG EACH SERIES SEPARATELY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

CONST. SPEC. 2009	DRAWN BY	MJB	PLANS CK'D.	PGC

SUPERSTRUCTURE DETAILS

SHEET 11 OF 17

300

8

8

TOP OF DECK ELEVATIONS

	N. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 1	PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 2	PIER 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	S. ABUT.
E. END OF DECK	906.46	906.51	906.56	906.61	906.66	906.71	906.76	906.81	906.86	906.91	906.96	906.96	907.04	907.14	907.24	907.34	907.44	907.54	907.65	907.75	907.85	907.95	907.95	908.03	908.11	908.19	908.27	908.34	908.43	908.51	908.58	908.67	908.75
GIRDER 1	906.52	906.57	906.62	906.67	906.72	906.77	906.82	906.87	906.92	906.97	907.02	907.02	907.12	907.22	907.31	907.41	907.51	907.60	907.70	907.80	907.89	907.99	907.99	908.07	908.14	908.22	908.30	908.37	908.45	908.53	908.60	908.68	908.76
GIRDER 2	906.82	908.87	906.92	906.97	907.02	907.07	907.12	907.17	907.22	907.28	907.34	907.34	907.42	907.50	907.58	907.66	907.74	907.82	907.90	907.98	908.06	908.14	908.14	908.21	908.27	908.33	908.40	908.46	908.52	908.59	908.65	908.71	908.78
GIRDER 3	907.00	907.05	907.10	907.15	907.20	907.25	907.30	907.35	907.40	907.46	907.51	907.51	907.58	907.65	907.72	907.79	907.86	907.93	908.00	908.07	908.14	908.21	908.21	908.27	908.32	908.38	908.43	908.49	908.54	908.60	908.65	908.71	908.76
RL SB IH-39	907.12	907.17	907.22	907.27	907.32	907.37	907.42	907.47	907.52	907.57	907.62	907.62	907.68	907.74	907.81	907.87	907.93	907.99	908.06	908.12	908.18	908.25	908.25	908.30	908.35	908.40	908.45	908.50	908.54	908.59	908.64	908.69	908.74
GIRDER 4	907.07	907.12	907.17	907.22	907.27	907.32	907.37	907.42	907.47	907.52	907.57	907.60	907.66	907.72	907.79	907.85	907.91	907.97	908.04	908.10	908.16	908.23	908.20	908.25	908.30	908.35	908.40	908.45	908.49	908.54	908.59	908.64	908.69
GIRDER 5	906.98	907.03	907.08	907.13	907.18	907.23	907.28	907.33	907.38	907.43	907.48	907.54	907.60	907.66	907.73	907.79	907.85	907.91	907.98	908.04	908.10	908.17	908.11	908.16	908.21	908.26	908.31	908.36	908.41	908.46	908.50	908.55	908.60
GIRDER 6	906.89	906.94	906.99	907.04	907.09	907.14	907.19	907.24	907.29	907.34	907.39	907.48	907.54	907.60	907.67	907.73	907.79	907.85	907.92	907.98	908.04	908.11	908.02	908.07	908.12	908.17	908.22	908.27	908.32	908.37	908.42	908.46	908.49
GIRDER 7	906.80	906.85	906.90	906.95	907.00	907.05	907.10	907.15	907.20	907.25	907.30	907.42	907.48	907.54	907.61	907.67	907.73	907.79	907.96	907.92	907.98	908.05	907.93	907.98	908.03	908.08	908.13	908.18	908.23	908.27	908.30	908.33	908.37
GIRDER 8												907.36	907.42	907.48	907.55	907.61	907.67	907.73	907.80	907.86	907.92	907.99											
GIRDER 9												907.30	907.36	907.42	907.49	907.55	907.61	907.67	907.74	907.80	907.86	907.93											
W. END OF DECK	906.82	906.87	906.92	906.97	907.02	907.07	907.12	907.17	907.22	907.27	907.32	907.28	907.34	907.40	907.47	907.53	907.59	907.65	907.72	907.78	907.84	907.91	907.91	907.96	908.01	908.06	908.11	908.16	908.21	908.24	908.27	908.30	908.34

TOP OF GIRDER ELEVATIONS

	N. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 1	PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 2	PIER 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	S. ABUT.
GIRDER 1	905.55		905.69		905.79		905.89		906.07		906.05	906.1		906.33		906.54		906.72		906.83		906.92	906.88		907.08		907.21		907.36		907.49		907.62
GIRDER 2	905.72		905.84		905.95		906.06		906.13		906.2	906.27		906.44		906.66		906.78		906.89		906.93	906.95		907.05		907.18		907.33		907.37		907.49
GIRDER 3	905.88		906.09		906.22		906.34		906.4		906.47	906.43		906.67		906.83		906.98		907.03		907.02	907.07		907.16		907.29		907.35		907.42		907.45
GIRDER 4	905.88		906.07		906.21		906.33		906.42		906.49	906.48		906.66		906.81		906.94		907.02		907.04	907.03		907.14		907.23		907.3		907.34		907.4
GIRDER 5	905.96		906.12		906.26		906.41		906.48		906.54	906.53		906.69		906.82		906.95		906.99		907.01	906.98		907.09		907.14		907.2		907.22		907.22
GIRDER 6	905.93		906.09		906.23		906.32		906.45		906.51	906.5		906.68		906.83		906.94		906.98		906.97	906.88		906.96		907.03		907.08		907.08		90.07
GIRDER 7	905.91		906.07		906.2		906.32		906.4		906.41	906.53		906.67		906.81		906.89		906.93		906.95	906.75		906.85		906.9		906.95		906.92		906.89
GIRDER 8												906.5		906.58		906.78		906.83		906.86		906.9											
GIRDER 9												906.43		906.6		906.73		906.81		906.81		906.83											

HAUNCH TABLE

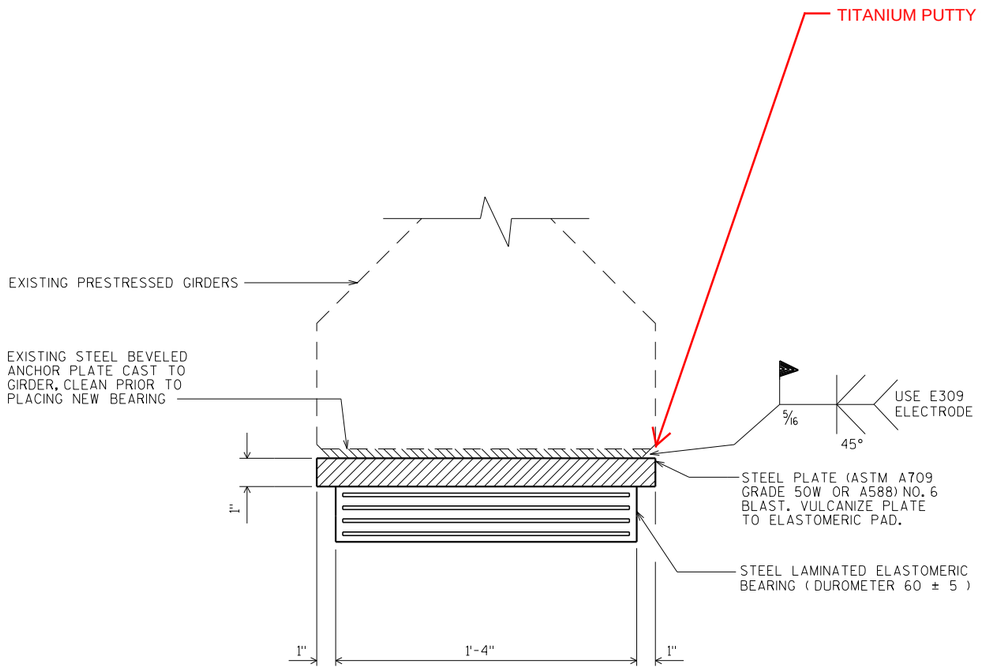
	N. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 1	PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 2	PIER 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	S. ABUT.
GIRDER 1	0.30		0.27		0.28		0.28		0.19		0.30	0.25		0.24		0.23		0.24		0.32		0.40	0.44		0.40		0.44		0.44		0.45		0.47
GIRDER 2	0.43		0.42		0.42		0.41		0.43		0.47	0.40		0.41		0.36		0.40		0.44		0.54	0.52		0.56		0.57		0.54		0.62		0.62
GIRDER 3	0.45		0.35		0.33		0.31		0.34		0.37	0.41		0.33		0.32		0.31		0.39		0.52	0.47		0.50		0.49		0.54		0.57		0.64
GIRDER 4	0.52		0.44		0.41		0.39		0.39		0.41	0.45		0.41		0.40		0.39		0.43		0.52	0.50		0.50		0.52		0.54		0.59		0.62
GIRDER 5	0.35		0.30		0.27		0.22		0.24		0.27	0.34		0.32		0.33		0.32		0.40		0.49	0.46		0.46		0.52		0.56		0.62		0.71
GIRDER 6	0.29		0.24		0.21		0.22		0.18		0.21	0.31		0.27		0.26		0.27		0.35		0.47	0.47		0.50		0.54		0.59		0.68		0.75
GIRDER 7	0.22		0.17		0.15		0.13		0.14		0.22	0.22		0.22		0.22		0.26		0.34		0.43	0.51		0.52		0.58		0.63		0.72		0.81
GIRDER 8												0.19		0.25		0.19		0.26		0.35		0.42											
GIRDER 9												0.20		0.17		0.18		0.22		0.34		0.43											

= HAT BARS REQUIRED

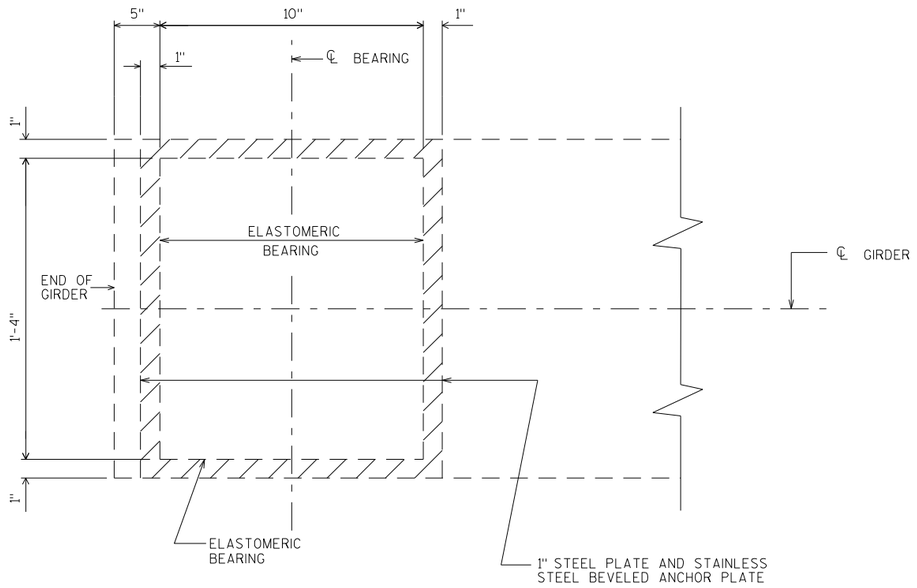
= LENGTHEN HAT BARS FROM 8" TO 10"

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1010-04-72



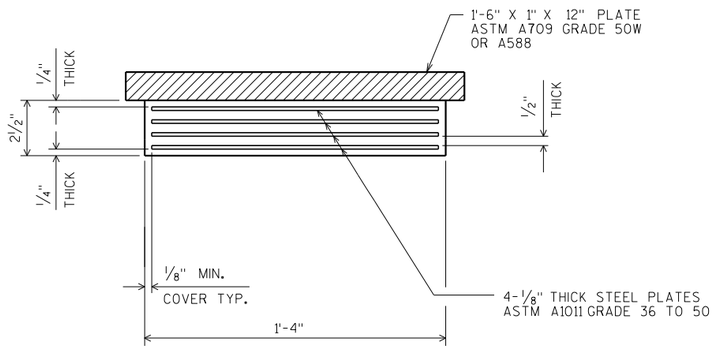
END VIEW



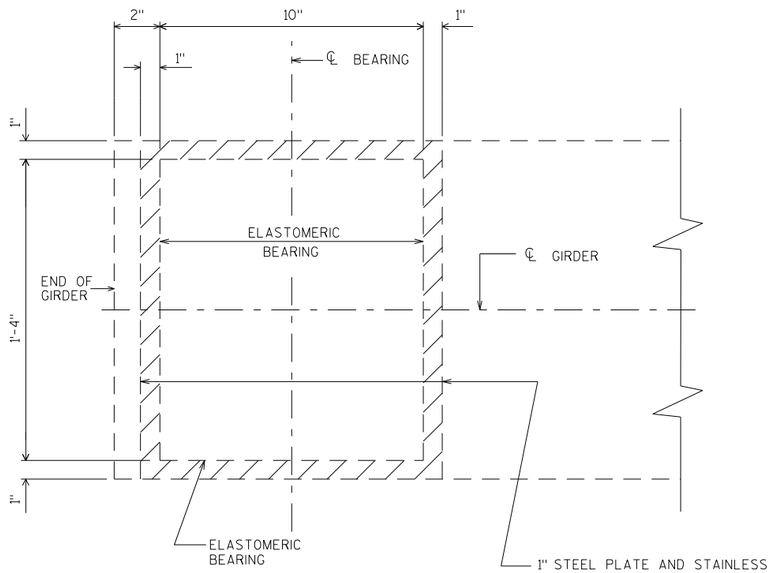
PLAN VIEW

GIRDERS 3-7

Note: THE EXISTING STEEL ANCHOR PLATES WERE EXCESSIVELY WORN AND DID NOT SIT FLUSH ON THE NEW STEEL BEARING PLATES, THE GAP BETWEEN THE ANCHOR PLATE AND THE BEARING WAS FILLED WITH TITANIUM PUTTY TO INCREASE THE SURFACE AREA.



SECTION THRU ELASTOMERIC BEARING



PLAN VIEW

GIRDERS 1&2

BEARING NOTES

BEARINGS SHALL NOT BE PLACED AT A TEMPERATURE GREATER THAN 85° F.

ALL MATERIAL USED FOR BEARINGS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING PADS ELASTOMERIC LAMINATED", EACH.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

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LAMINATED ELASTOMERIC BRG.

SHEET 12 OF 17

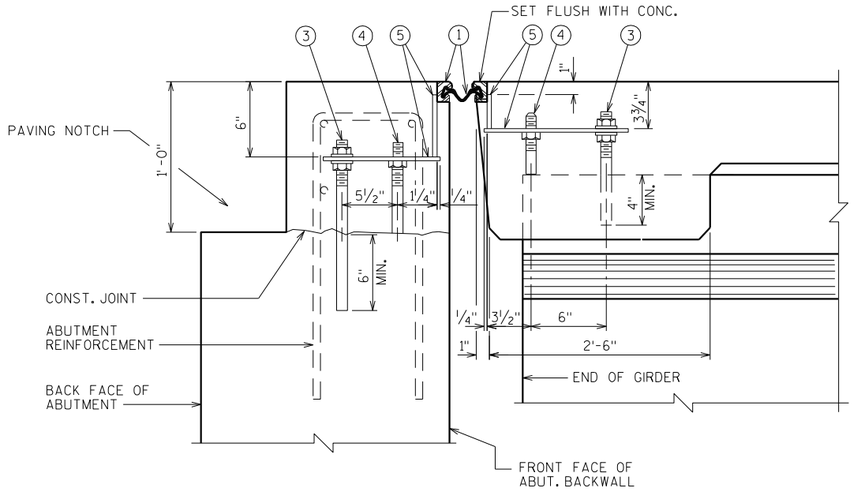
301

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SECTION THRU JOINT AT ABUTMENT

NORMAL TO ℄ SUBSTRUCTURE

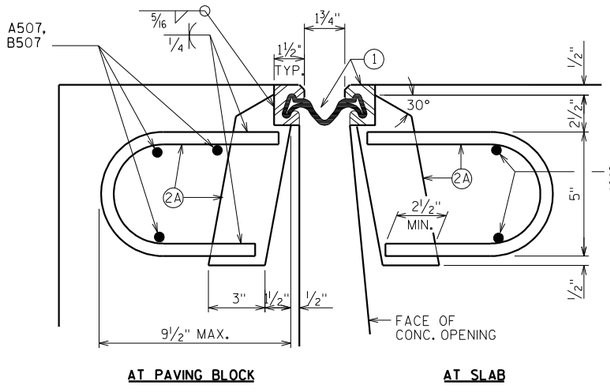
LEGEND

1. NEOPRENE STRIP SEAL (4 - INCH) & STEEL EXTRUSIONS.
2. STUDS 5/8"Φ X 6 3/8" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS & BEND AS SHOWN AFTER WELDING.
2A. 1/2" THICK ANCHOR PLATE WITH 5/8"Φ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO #1 AT 1'-6" CENTERS BETWEEN GIRDERS.
3. 3/4" Φ THREADED ROD WITH 2 NUTS AND WASHERS. FIELD SET ON ℄ OF GIRDER. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
4. 3/4"Φ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 3" X 1/2" BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. FIELD OR SHOP WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1 1/2" Φ HOLE FOR NO. 3 & 1" Φ HOLE FOR NO. 4.
6. GALVANIZED PLATE 3/8" X LIMITS SHOWN WITH HOLES FOR #7. BEND AS SHOWN.
7. 3/4"Φ X 1 1/2" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. RECESS 1/16" BELOW PLATE SURFACE.
8. 3/4"Φ X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
9. 3/4"Φ X 2 1/4" GALVANIZED THREADED COUPLING.
10. 1" X 5" SLOTTED CSK. HOLE FOR #7. SLOT PARALLEL TO DIRECTION OF MOVEMENT.

SECTION THRU JOINT

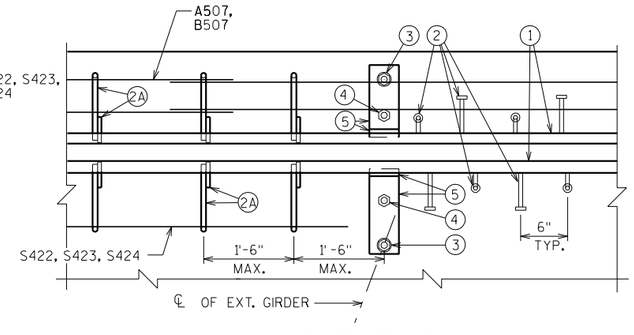
EXTERIOR GIRDER TO EDGE OF SLAB & AT PARAPETS, MEDIANS & SIDEWALKS

ALTERNATE STRIP SEAL ANCHOR



SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS.



PART PLAN

GENERAL NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES & EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING THE PLATES & EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

ANCHOR SYSTEM #8 & #9 SHALL CONFORM TO ASTM A307 & SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C & D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS & HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-11-24".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

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EXPANSION DEVICE

SHEET 13 OF 17

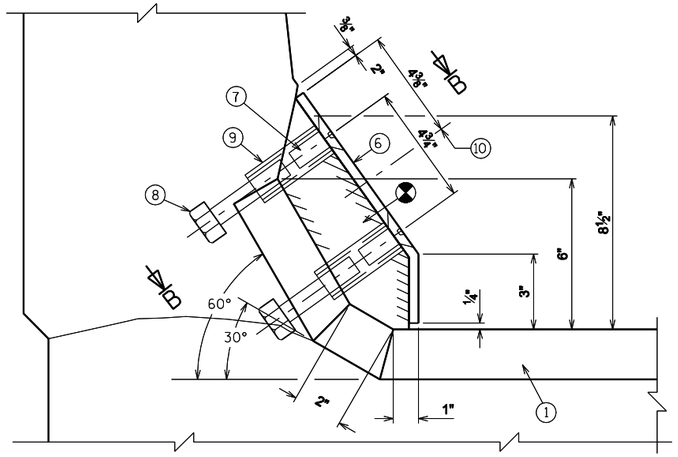
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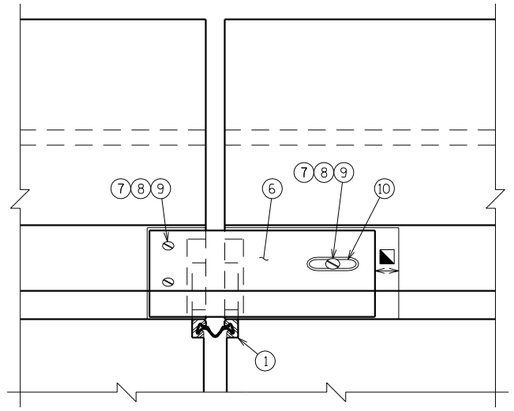
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STATE PROJECT NUMBER

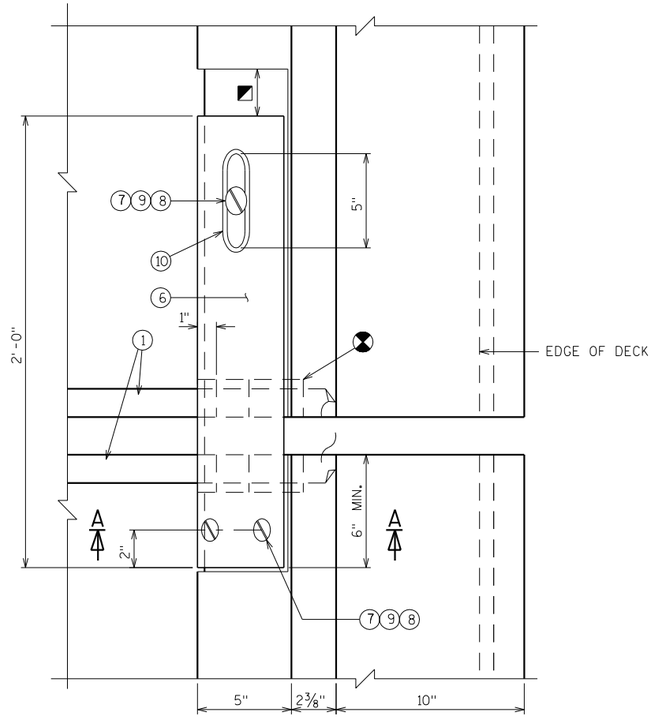
1010-04-72



SECTION A-A

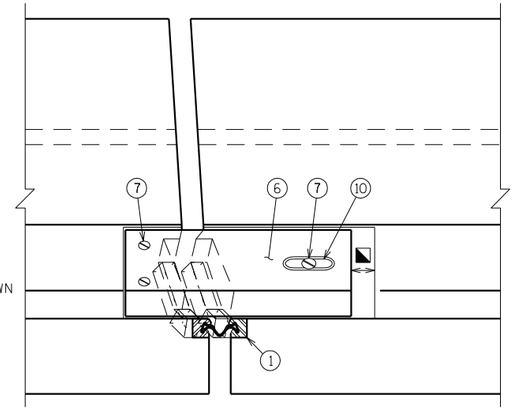


VIEW OF PARAPET PLATE FROM ROADWAY
(WING 1)

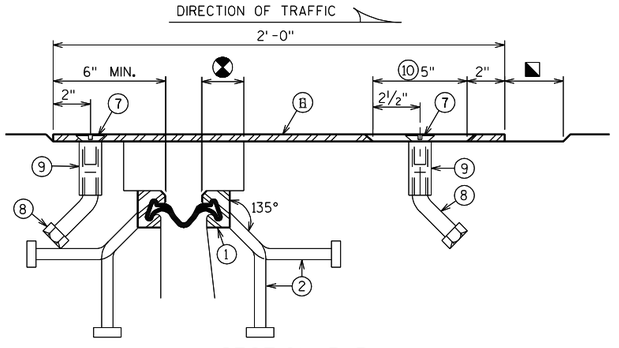


PLAN
(WING 1)

PLAN
(WINGS 2, 3 & 4)



VIEW OF PARAPET PLATE FROM ROADWAY
(WINGS 2, 3 & 4)



SECTION B-B

⊗ BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

◪ JOINT OPENING DIM. ALONG SKEW PLUS ½".

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STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

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COVER PLATE DETAILS

SHEET 14 OF 17

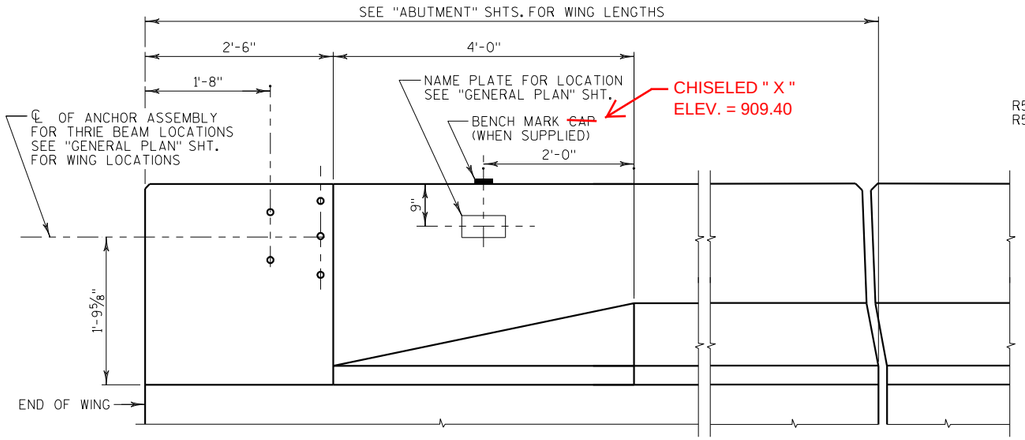
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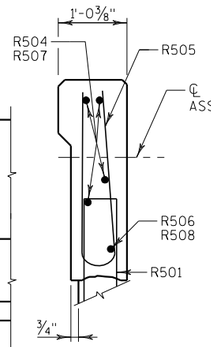
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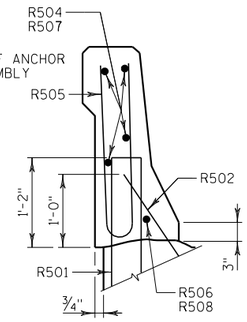
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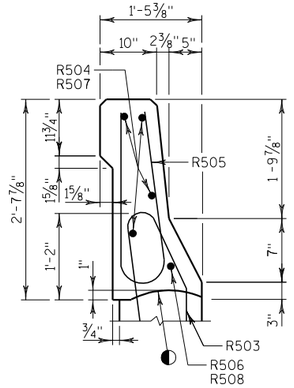
INSIDE ELEVATION



SECTION A



SECTION B

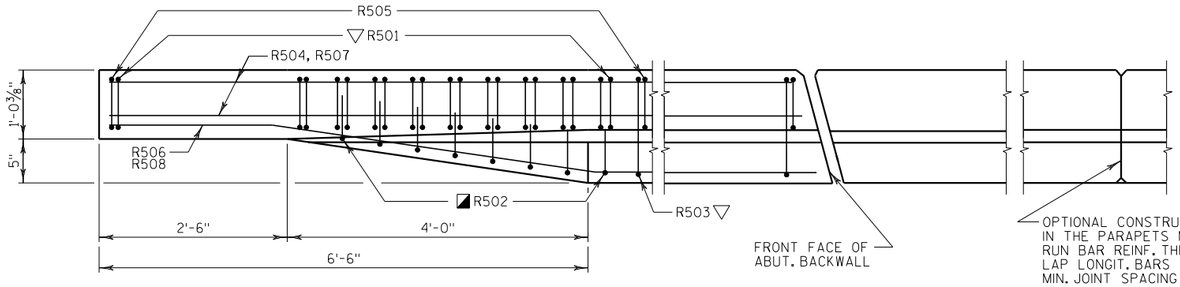


SECTION C

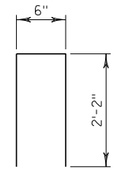
BILL OF BARS

FOR ABUTMENT PARAPETS

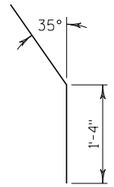
BAR MARK	COAT	S. ABUT.	N. ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	14	14	4-7	X		PARAPET VERT.
R502	X	8	8	2-4	X		PARAPET VERT.
R503	X	7	8	4-7	X		PARAPET VERT.
R504	X	-	4	11-3			PARAPET HORIZ.
R505	X	21	22	4-10	X		PARAPET VERT.
R506	X	-	1	10-11	X		PARAPET HORIZ.
R507	X	4	-	10-0			PARAPET HORIZ.
R508	X	1	-	10-9	X		PARAPET HORIZ.



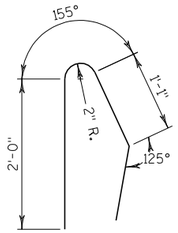
PLAN



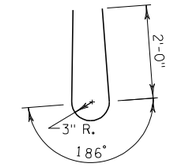
R501



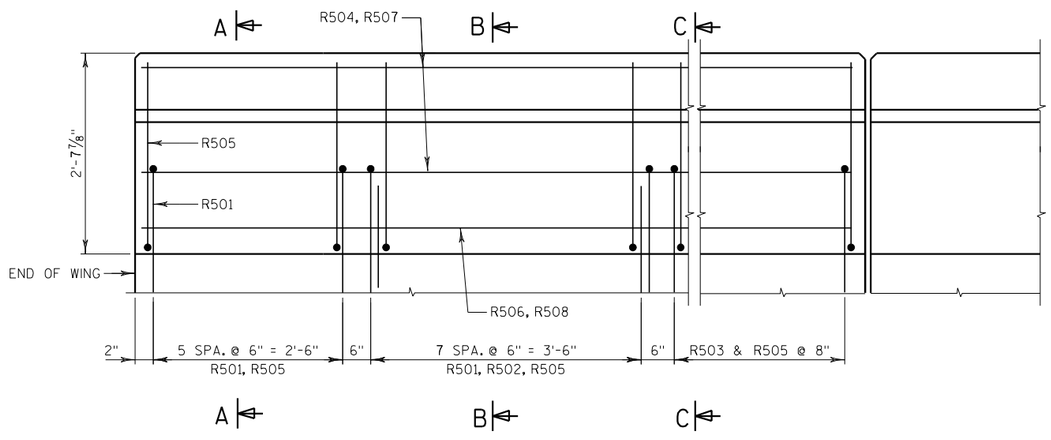
R502



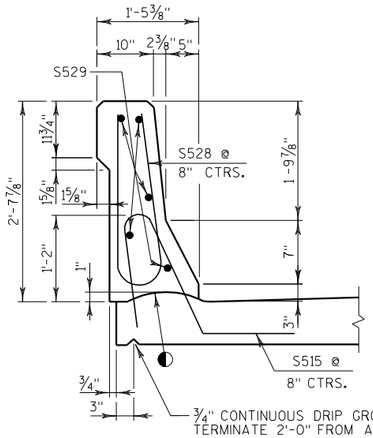
R503



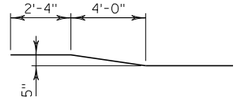
R505



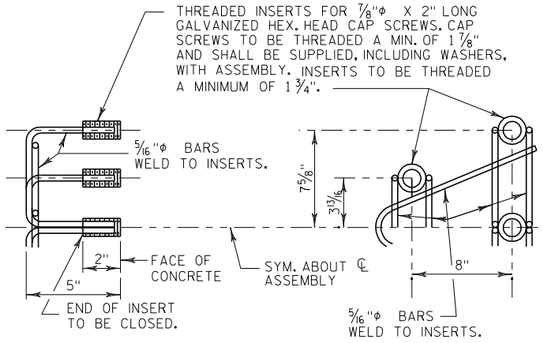
OUTSIDE ELEVATION



SECTION THRU PARAPET ON BRIDGE



R506, R508



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX. HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◪ R502 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R502 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 AND R503 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

CONST. SPEC. 2009 | DRAWN BY MJB | PLANS CK'D. PGC

SLOPE FACE PARAPET LF

SHEET 15 OF 17

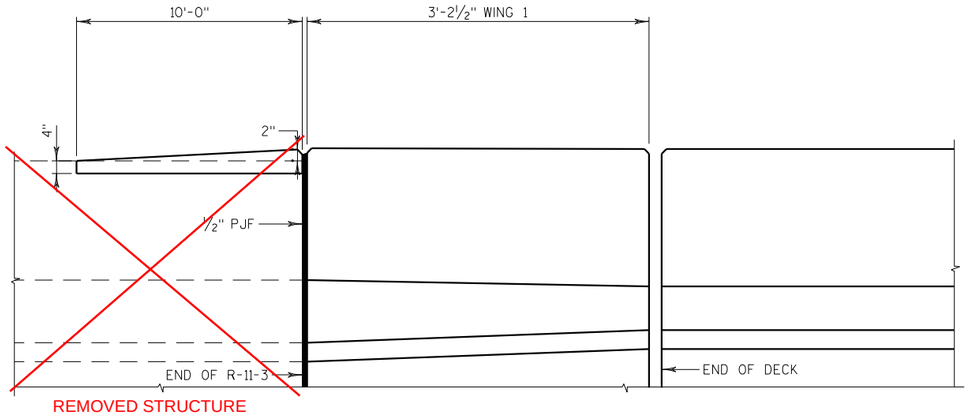
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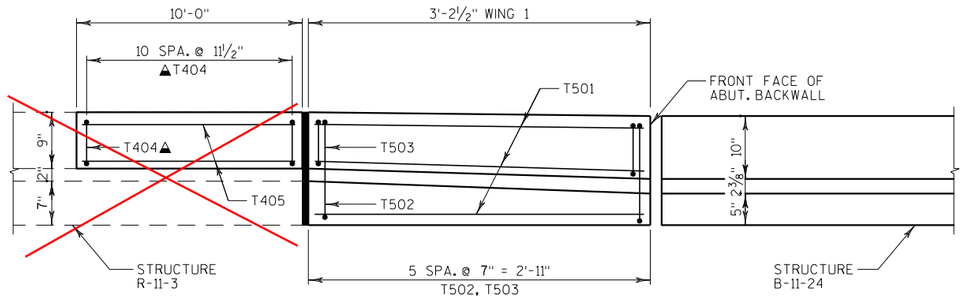
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STATE PROJECT NUMBER

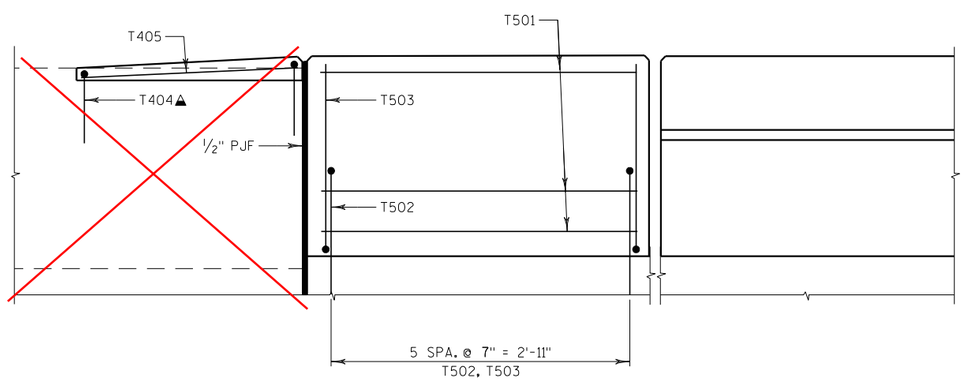
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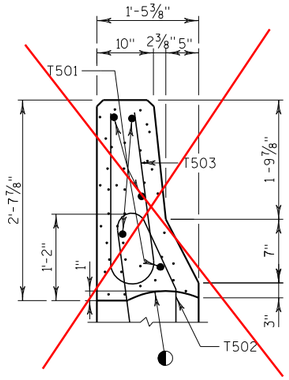
INSIDE ELEVATION



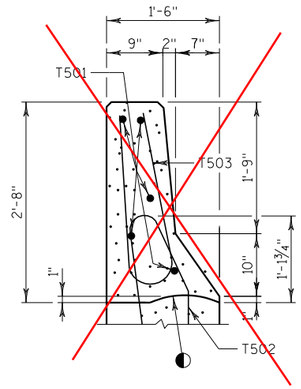
PLAN



OUTSIDE ELEVATION



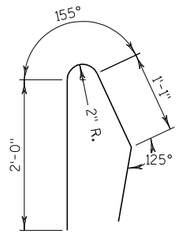
SECTION A



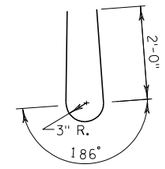
SECTION B

BILL OF BARS

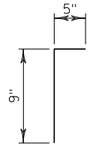
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	5	2-10			PARAPET HORIZ.
T502	X	6	4-7	X		PARAPET VERT.
T503	X	6	4-10	X		PARAPET VERT.
▲T404	X	22	1-1	X		PARAPET VERT.
T405	X	2	9-8			PARAPET HORIZ.



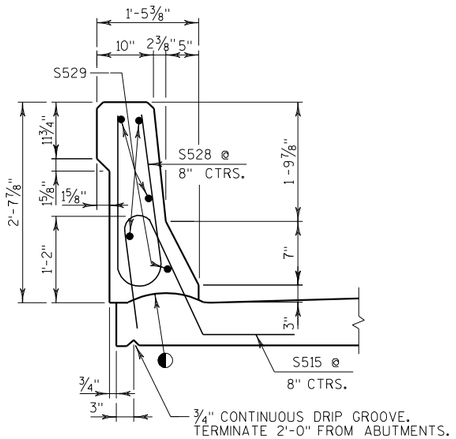
T502



T503



T404



USED FOR SECTION A + B

SECTION THRU PARAPET ON BRIDGE

▲ CONCRETE MASONRY ANCHORS TYPE S 1/2-INCH BAR EMBEDED 5" MIN. INTO EXISTING PARAPET. HAVING A MINIMUM PULLOUT CAPACITY OF 12 KIPS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

CONST. SPEC. 2009	DRAWN BY KMA	PLANS CK'D. PGC

PPT TRANSITION
WING 1

SHEET 16 OF 17

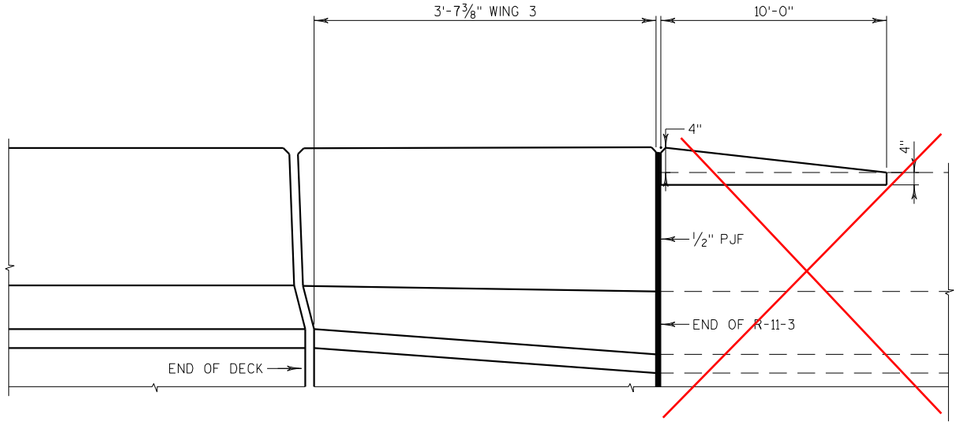
305

8

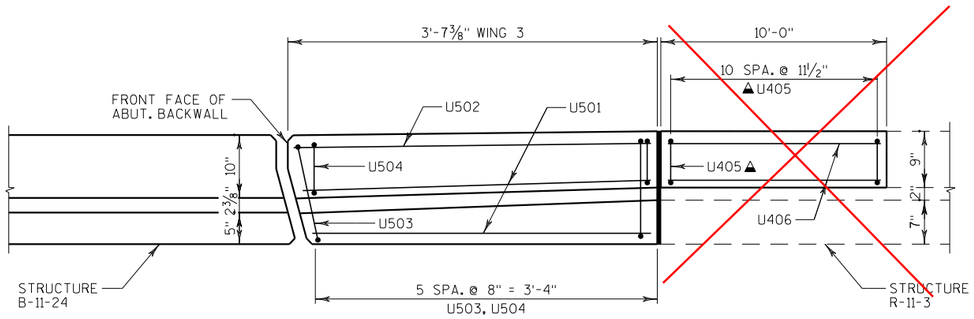
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STATE PROJECT NUMBER

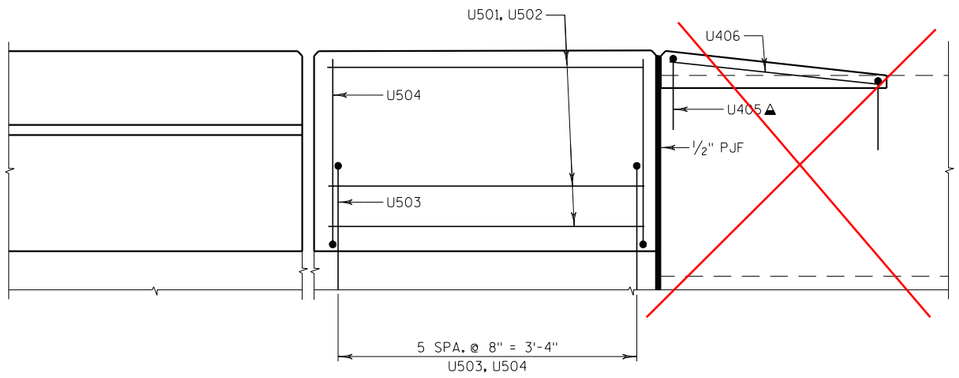
1010-04-72



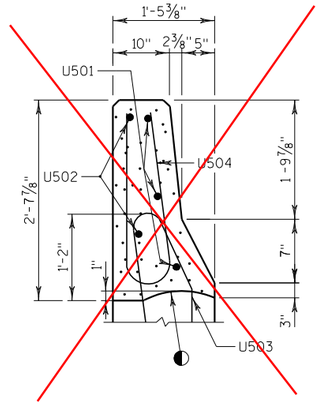
INSIDE ELEVATION



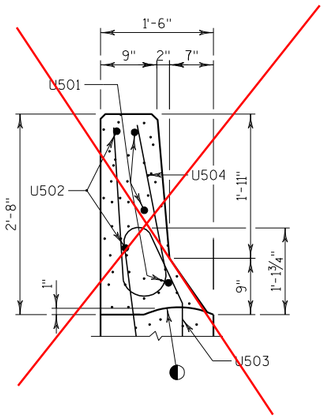
PLAN



OUTSIDE ELEVATION



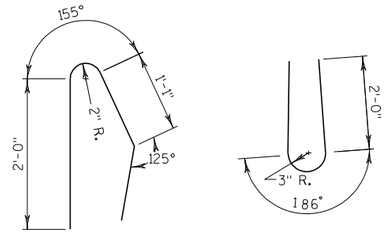
SECTION A



SECTION B

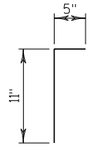
BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
U501	X	3	3-3			PARAPET HORIZ.
U502	X	2	2-5			PARAPET HORIZ.
U503	X	6	4-7	X		PARAPET VERT.
U504	X	6	4-10	X		PARAPET VERT.
▲U405	X	22	1-3	X		PARAPET VERT.
U406	X	2	9-8			PARAPET HORIZ.

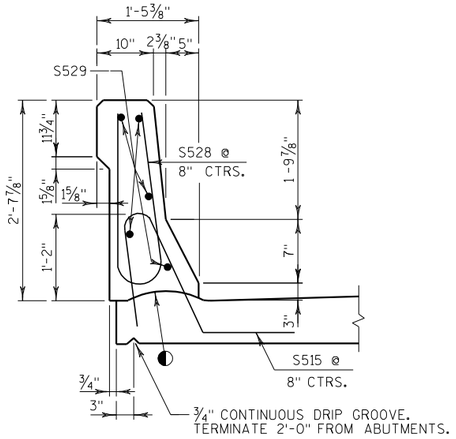


U503

U504



U405



USED FOR SECTION A + B

SECTION THRU PARAPET ON BRIDGE

▲ CONCRETE MASONRY ANCHORS TYPE S 1/2-INCH BAR EMBEDED 5" MIN. INTO EXISTING PARAPET. HAVING A MINIMUM PULLOUT CAPACITY OF 12 KIPS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-24

CONST. SPEC. 2009	DRAWN BY KMA	PLANS CK'D. PGC

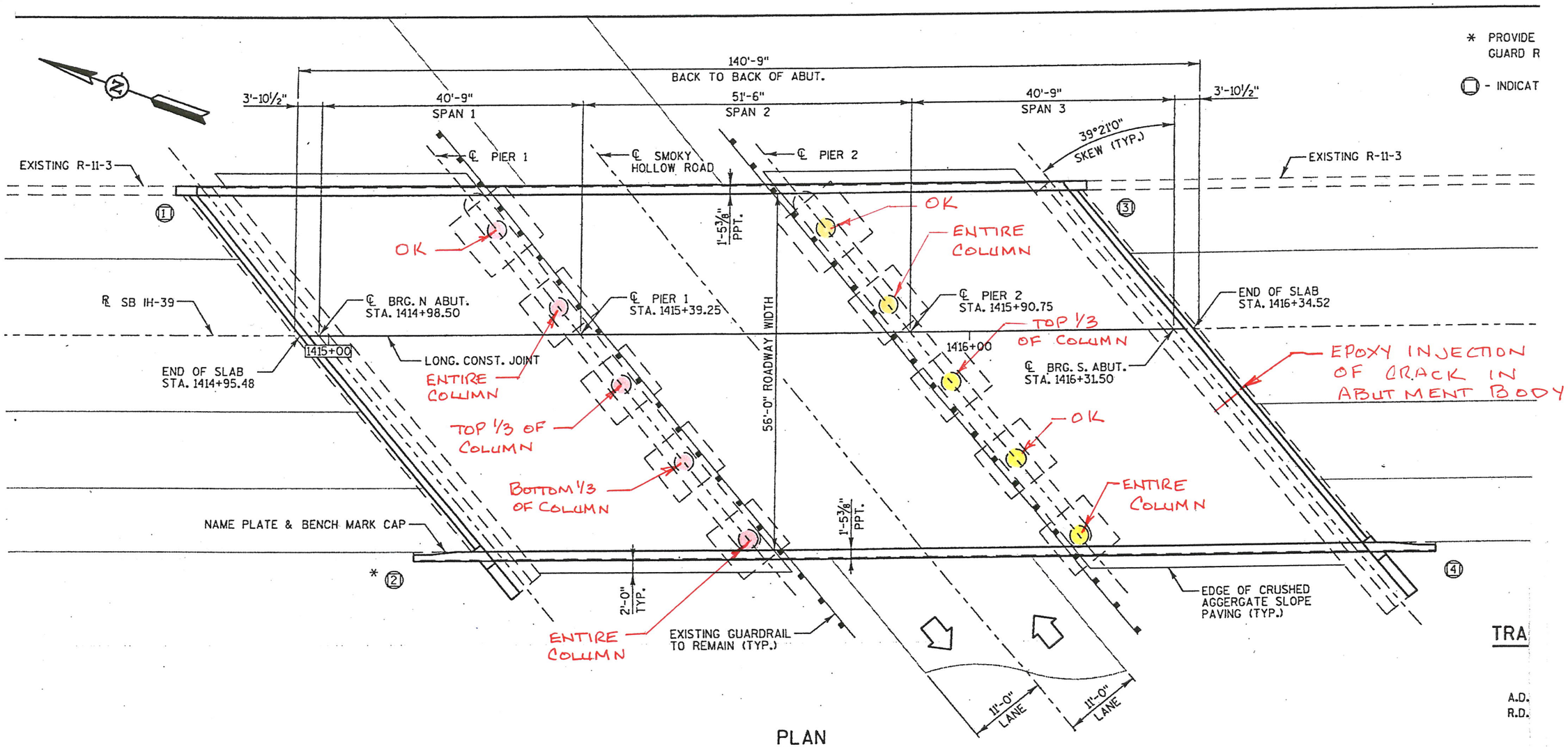
PPT TRANSITION
WING 3

SHEET 17 OF 17

306

8

8



PLAN

(3 SPAN NON-CONTINUOS 36" PRESTRESSED GIRDER)

SMOKEY HOLLOW BRIDGE
B-11-24
COLUMN & ABUTMENT
FIBERWRAP REPAIR
3-24-11 WPM

SHEET 1 OF 3

1010-04-72

WRAP BOTTOM FLANGE
G3 PIER 2
G4 PIER 2

40'-9" SPAN 1
40'-9" SPAN 3

33 SPA. @ 7" △S608 TOP BAR
33 SPA. @ 7" △S604 BOTTOM BAR
32 SPA. @ 7" △S609 TOP BAR
31 SPA. @ 7" △S605 BOTTOM BAR

℄ BRG. N. ABUT.
℄ PIER 1
℄ PIER 2
℄ BRG. S. ABUT.
1'-5⅜" PARAPET

WRAP GIRDER END
G2 SOUTH ABUT

S412
S613
S414
1'-8" MIN. LAP (TYP.)
TOP STEEL
BOTTOM STEEL S403 (TYP.)
1'-8" MIN. LAP (TYP.) S403

24'-4½" 16'-4½" 29'-9" 21'-9" 24'-4½" 16'-4½"
16'-4½" 6'-5½" 17'-11" 21'-9" 6'-5½" 23'-3½" 16'-4½" 6'-5½" 17'-11"
17'-11" 6'-1¾" 4'-11" 6'-1¾" 16'-8¼"

WRAP GIRDER END
G2 NORTH ABUT
℄ SB IH-39
G3 NORTH ABUT

23'-3"
58'-6" EDGE TO EDGE OF DECK
35'-3"

N

NEW STEEL DIAPH. (TYP.)
NEW STEEL DIAPH. (TYP.)
NEW STEEL DIAPH. (TYP.)
B.F. S. ABUT.
PAVING NOTCH

WRAP GIRDER END
G6 NORTH ABUT
G7 NORTH ABUT

B.F. N. ABUT.
PAVING NOTCH

16'-8¼" TYP. 7'-4½" TYP. 16'-8¼" TYP.
23'-3½" TYP. 4'-11" TYP. 23'-3½" TYP.
16'-8¼" TYP. 7'-4½" TYP. 16'-8¼" TYP.

WRAP GIRDER END
G7 SOUTH ABUT

1'-5⅜" PARAPET

46 SPA. @ 7" △S610 TOP BAR
45 SPA. @ 7" △S606 BOTTOM BAR
183 SPA. @ 7" S601 TOP & BOTTOM BAR
47 SPA. @ 7" △S611 TOP BAR
47 SPA. @ 7" △S607 BOTTOM BAR

WRAP GIRDER END
G7 PIER 2

204 SPA. @ 8" S515 PARAPET BAR

PLAN

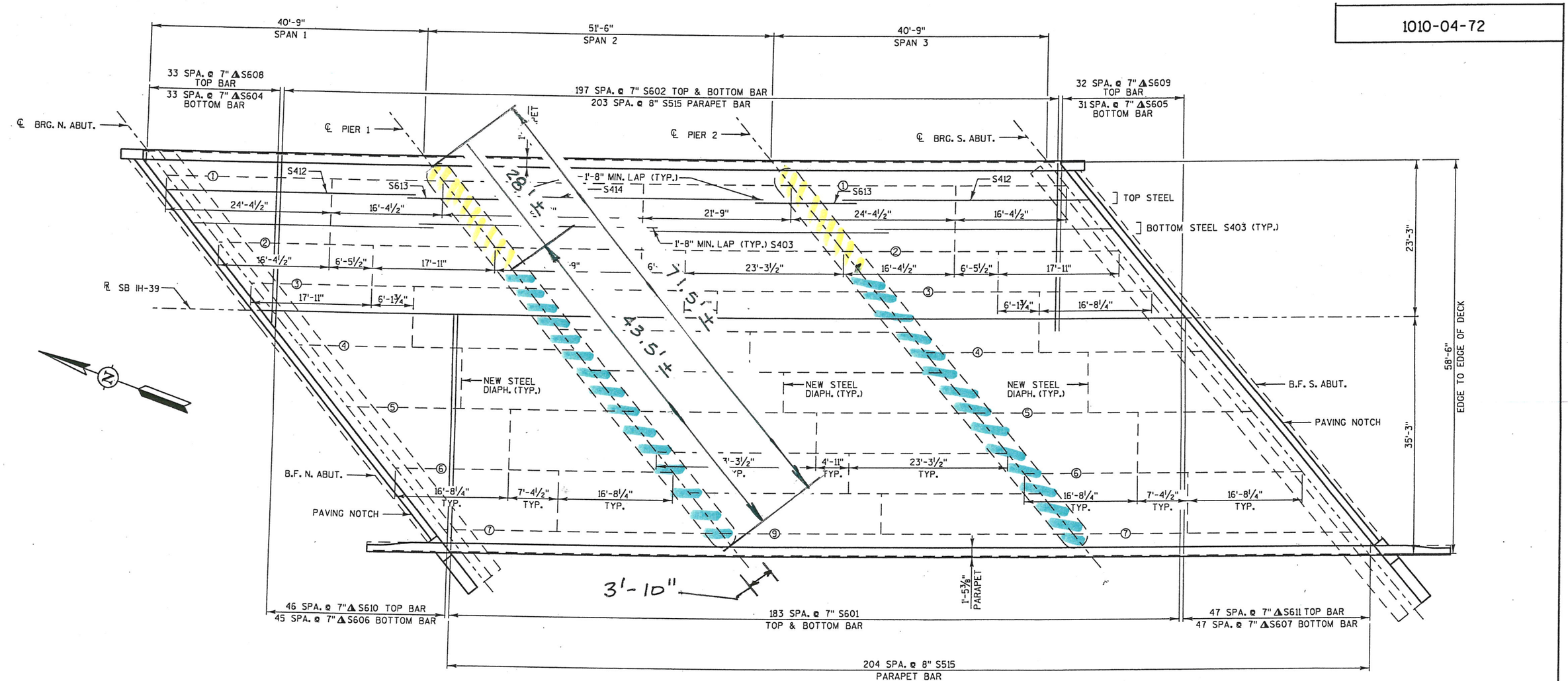
NOTE
CLEAN & PAINT ENDS OF GIRDERS & EXPOSED STRANDS AT ALL GIRDERS WITH RUST INHIBITOR (EPOXY PAINT)

SMOKEY HOLLOW BRIDGE
B-11-24
GIRDER FIBERWRAP REPAIR
3-24-11 WPM

SHEET 2 OF 3

SHEET 306 B

1010-04-72



PIER CAP REPAIR - ALL EXPOSED SURFACES

PIER CAP REPAIR - ADD ON #1
ALL EXPOSED SURFACES

PLAN

SMOKEY HOLLOW BRIDGE
B-11-24
PIER CAP FIBER WRAP REPAIR
3-24-11 WPM

SHEET 3 OF 3

Division	From/To Station	Location	Common Excavation (1)	EBS Excavation (3)	Salvaged/ Unusable Pavement Material (4)	Available Material (5)	Reduced EBS In Fill (6)	Expanded EBS Backfill (7)	Unexpanded Fill	Expanded Fill (8)	Mass Ordinate +/- (9)	Waste	Borrow	Comment:
			Cut (2)	(item # 205.0100)			Factor 0.80	Factor 1.30		Factor 1.25			(item #208.0100)	
1	1350+00 - 1558+00 WB	MAINLINE	76702	0	28367	48335	0	0	17847	22309	26026			Stage 1: Build WB
	1350+00 - 1558+00 WB	UNDISTR.	0	3835	0	0	3068	4986	0	-3835	3835			Undistributed EBS, 5%
Div. 1 Subtotal - WB			76702	3835	28367	48335	3068	4986	17847	18473	29861	0	0	
2	1350+00 - 1558+00 EB	MAINLINE	55594	0	34795	20799	0	0	10872	13590	7209			Stage 2: Build EB
	1350+00 - 1558+00 EB	UNDISTR.	0	2780	0	0	2224	3614	0	-2780	2780			Undistributed EBS, 5%
Div. 2 Subtotal - EB			55594	2780	34795	20799	2224	3614	10872	10810	9989	0	0	
Grand Total			**132296**	**6615**	**63162**	**69134**	**5292**	**8599**	**28719**	**29284**	**39850**	**39850**	**0**	
			Total Common Exc	138911										

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100. Common includes pavement removal.
2) Salvaged/Unusable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Select Borrow material.
4) Salvaged/Unusable Pavement Material - Including removed roadway, shoulders, overlay, ramps, etc.
5) Available Material = Cut - Salvaged/Unusable Pavement Material
6) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
7) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.3. Item number 208.11
8) Expanded Fill Factor = 1.25 Expanded Fill = (Unexpanded Fill - Reduced EBS) * Fill Factor
9) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

Stage 1 - WB

STATION	Dist.	CUT	Salvaged/Unusable Pavement Material	FILL	CUT	Salvaged/Unusable Pavement Material (Note 2)	FILL	1.00 CUT	1.25 Available Material	1.25 Expanded Fill	Mass Ordinate
1350+00.00		151	37	5							
1351+00.00	100	145	37	4	548	137	16	548	411	20	391.11
1352+00.00	100	145	37	3	537	137	14	1,086	812	37	774.40
1353+00.00	100	149	37	1	544	137	7	1,629	1,218	46	1,171.87
1354+00.00	100	134	37	0	523	137	2	2,152	1,604	48	1,556.07
1354+75.00	75	183	37	0	440	103	0	2,593	1,942	48	1,893.76
1355+00.00	25	176	37	0	166	34	0	2,759	2,074	48	2,025.78
1355+50.00	50	163	37	0	314	69	0	3,073	2,319	48	2,270.68
1356+00.00	50	168	37	0	306	69	0	3,379	2,557	48	2,508.13
1357+00.00	100	177	37	0	638	137	0	4,016	3,057	48	3,008.63
1358+00.00	100	167	37	0	635	137	0	4,652	3,555	48	3,507.03
1359+00.00	100	167	37	0	619	137	0	5,270	4,037	48	3,988.53
1360+00.00	100	171	37	0	626	137	0	5,897	4,526	48	4,477.73
1361+00.00(1)	100	188	37	0	665	137	0	6,561	5,054	48	5,005.58
1362+00.00(1)	100	164	37	0	652	137	0	7,213	5,569	48	5,520.48
1363+00.00(1)	100	164	37	0	606	137	0	7,820	6,038	48	5,989.91
1364+00.00(1)	100	169	37	0	616	137	0	8,436	6,517	48	6,468.78
1365+00.00(1)	100	163	37	0	615	137	0	9,051	6,995	48	6,946.58
1366+00.00(1)	100	163	37	0	605	137	0	9,655	7,463	48	7,414.26
1367+00.00(1)	100	170	37	0	617	137	0	10,272	7,942	48	7,893.95
1368+00.00(1)	100	160	37	0	610	137	0	10,882	8,415	48	8,367.02
1369+00.00(1)	100	178	37	0	625	137	0	11,507	8,903	48	8,855.04
1370+00.00(1)	100	175	37	0	654	137	0	12,161	9,420	48	9,371.63
1371+00.00(1)	100	163	37	0	626	137	0	12,786	9,909	48	9,860.24
1372+00.00(1)	100	151	37	0	580	137	0	13,366	10,352	48	10,303.10
1373+00.00(1)	100	162	37	0	579	137	0	13,945	10,793	48	10,745.00
1374+00.00(1)	100	172	37	0	619	137	0	14,564	11,276	48	11,227.13
1375+00.00(1)	100	163	37	0	622	137	0	15,186	11,760	48	11,711.74
1376+00.00(1)	100	176	37	0	628	137	0	15,814	12,251	48	12,202.26
1377+00.00(1)	100	166	37	1	632	137	2	16,446	12,746	51	12,694.44
1378+00.00(1)	100	165	37	0	612	137	2	17,058	13,221	54	13,166.82
1379+00.00(1)	100	162	37	2	605	137	4	17,663	13,689	60	13,629.46
1380+00.00(1)	100	183	37	53	639	137	102	18,302	14,191	187	14,004.41
1381+00.00(1)	100	159	37	29	633	137	151	18,936	14,688	375	14,312.50
1382+00.00(1)	100	151	37	32	574	137	112	19,510	15,125	515	14,609.31
1383+00.00(1)	100	143	37	132	545	137	303	20,054	15,532	894	14,638.37
1384+00.00(1)	100	122	37	116	490	137	459	20,544	15,885	1,468	14,417.55
1385+00.00(1)	100	128	37	195	463	137	577	21,008	16,211	2,189	14,022.24
1386+00.00(1)	100	122	37	181	464	137	697	21,472	16,538	3,060	13,476.43
1387+00.00(1)	100	129	37	172	465	137	653	21,937	16,867	3,877	12,989.93
1388+00.00(1)	100	132	37	142	484	137	582	22,421	17,214	4,605	12,609.14
1389+00.00(1)	100	130	37	136	486	137	516	22,907	17,562	5,250	12,312.77
1390+00.00(1)	100	127	37	93	477	137	425	23,384	17,902	5,781	12,121.26
1391+00.00(1)	100	135	37	83	486	137	326	23,870	18,251	6,188	12,062.66
1392+00.00(1)	100	128	37	163	488	137	454	24,357	18,602	6,757	11,845.13
1393+00.00(1)	100	132	37	48	482	137	391	24,839	18,946	7,245	11,701.52
1394+00.00(1)	100	130	37	20	484	137	127	25,323	19,294	7,404	11,889.71
1395+00.00(1)	100	135	37	21	491	137	76	25,814	19,647	7,499	12,147.84
1396+00.00(1)	100	137	37	26	505	137	86	26,319	20,015	7,607	12,407.81
1397+00.00(1)	100	125	37	26	485	137	95	26,804	20,363	7,726	12,637.14
1398+00.00(1)	100	127	37	23	467	137	90	27,270	20,693	7,839	12,853.72
1399+00.00(1)	100	126	37	15	469	137	70	27,740	21,025	7,927	13,098.20
1400+00.00(1)	100	118	37	18	452	137	61	28,192	21,340	8,002	13,337.85
1401+00.00(1)	100	144	37	7	486	137	47	28,678	21,689	8,061	13,626.40
1402+00.00(1)	100	168	37	0	578	137	14	29,257	22,131	8,078	14,052.78
1403+00.00(1)	100	167	37	0	622	137	0	29,878	22,615	8,078	14,537.15
1404+00.00(1)	100	172	37	0	629	137	0	30,507	23,107	8,078	15,029.23
1405+00.00(1)	100	173	37	17	639	137	31	31,147	23,609	8,117	15,491.97
1406+00.00(1)	100	189	37	2	670	137	34	31,816	24,142	8,160	15,981.98
1407+00.00(1)	100	162	37	0	651	137	3	32,468	24,657	8,164	16,492.09
1408+00.00(1)	100	199	37	0	670	137	1	33,137	25,189	8,165	17,023.85
1409+00.00(1)	100	204	37	1	747	137	2	33,884	25,799	8,168	17,631.06
1410+00.00(1)	100	180	37	0	712	137	1	34,596	26,374	8,170	18,204.40
1411+00.00(1)	100	161	37	0	632	137	0	35,228	26,869	8,170	18,698.94
1412+00.00(1)	100	161	37	0	595	137	0	35,823	27,327	8,170	19,156.90
1413+00.00(1)	100	161	37	0	595	137	0	36,418	27,785	8,170	19,614.90
1414+00.00(1)	100	162	37	0	597	137	0	37,015	28,245	8,170	20,075.01
1415+00.00(1)	100	164	37	0	604	137	1	37,619	28,711	8,171	20,540.85
1416+00.00(1)	100	174	37	0	626	137	1	38,245	29,200	8,171	21,028.80
1417+00.00(1)	100	161	37	0	619	137	0	38,864	29,683	8,172	21,511.02
1418+00.00(1)	100	161	37	0	595	137	0	39,459	30,140	8,172	21,968.91
1419+00.00(1)	100	188	37	0	646	137	0	40,105	30,649	8,172	22,477.97
1420+00.00(1)	100	175	37	0	673	137	0	40,778	31,186	8,172	23,013.57
1421+00.00(1)	100	175	37	0	649	137	1	41,427	31,698	8,174	23,524.05
1422+00.00(1)	100	171	37	2	642	137	4	42,069	32,203	8,179	24,023.57
1423+00.00(1)	100	161	37	103	616	137	194	42,685	32,681	8,421	24,259.90
1424+00.00(1)	100	158	37	167	591	137	499	43,276	33,135	9,045	24,090.17
1425+00.00(1)	100	148	37	156	566	137	597	43,842	33,564	9,791	23,773.54
1426+00.00(1)	100	144	37	33	539	137	350	44,382	33,967	10,228	23,738.65
1427+00.00(1)	100	133	37	28	513	137	113	44,894	34,342	10,370	23,972.51
1428+00.00(1)	100	122	37	27	472	137	101	45,366	34,677	10,497	24,180.41
1429+00.00(1)	100	115	37	21	439	137	88	45,805	34,979	10,607	24,371.60
1430+00.00		69	37	4	0	0	0	45,805	34,979	10,607	24,371.60
1431+00.00	100	64	37	1	244	137	8	46,049	35,086	10,618	24,468.60
1432+00.00	100	54	37	4	217	137	8	46,266	35,166	10,628	24,537.81
1433+00.00	100	46	37	7	183	137	19	46,449	35,212	10,652	24,559.80
1434+00.00	100	46	37	8	169	137	28	46,618	35,244	10,687	24,556.56
1435+00.00	100	37	37	4	153	137	21	46,770	35,259	10,714	24,545.68
1436+00.00	100	24	37	7	112	137	19	46,883	35,234	10,737	24,497.53
1437+00.00	100	37	37	8	111	137	27	46,994	35,208	10,770	24,438.04
1438+00.00	100	36	37	7	133	137	28	47,127	35,205	10,805	24,399.61
1439+00.00	100	35	37	7	131	137	26	47,258	35,198	10,838	24,360.73
1440+00.00	100	40	37	12	138	137	34	47,395	35,199	10,880	24,318.83
1441+00.00	100	35	37	88	138	137	184	47,533	35,200	11,111	24,089.43
1442+00.00	100	31	37	111	122	137	368	47,656	35,185	11,570	23,615.12
1442+43.00	43	31	37	116	49	59	180	47,705	35,175	11,796	23,379.72
1443+00.00	57	28	37	105	61	78	233	47,766	35,158	12,087	23,071.89
1444+00.00	100	29	37	43	104	137	272	47,870	35,125	12,427	22,698.28

Stage 1 - WB

STATION	Dist.	CUT	Salvaged/Unusable Pavement Material	FILL	CUT	Salvaged/Unusable Pavement Material (Note 2)	FILL	1.00 CUT	1.25 Available Material	1.25 Expanded Fill	Mass Ordinate
1445+00.00	100	23	37	37	95	137	147	47,965	35,083	12,611	22,472.59
1446+00.00	100	26	37	31	90	137	126	48,055	35,036	12,768	22,267.96
1447+00.00	100	44	37	18	129	137	90	48,183	35,028	12,881	22,147.35
1448+00.00	100	45	37	4	165	137	39	48,348	35,056	12,929	22,126.52
1449+00.00	100	51	37	4	177	137	14	48,525	35,095	12,947	22,148.98
1450+00.00	100	54	37	5	193	137	16	48,718	35,151	12,966	22,184.85
1450+63.00	63	47	37	54	117	86	68	48,834	35,181	13,051	22,129.88
1451+00.00	37	47	37	66	64	51	82	48,898	35,194	13,154	22,040.54
1452+00.00	100	43	37	66	165	137	244	49,063	35,222	13,458	21,763.92
1453+00.00	100	47	37	50	166	137	215	49,229	35,251	13,727	21,524.11
1454+00.00	100	44	37	17	169	137	123	49,397	35,282	13,881	21,401.66
1455+00.00	100	28	37	9	133	137	46	49,530	35,279	13,939	21,340.08
1456+00.00	100	28	37	9	103	137	32	49,633	35,244	13,979	21,265.31
1457+00.00	100	31	37	16	107	137	46	49,741	35,215	14,037	21,177.81
1457+65.00	65	38	37	9	82	89	30	49,823	35,208	14,075	21,133.58
1458+00.00	35	41	37	25	51	48	22	49,874	35,211	14,102	21,108.95
1459+00.00	100	49	37	19	165	137	81	50,039	35,239	14,203	21,036.03
1460+00.00	100	51	37	87	183	137	195	50,222	35,285	14,447	20,838.11
1461+00.00	100	43	37	90	173	137	327	50,395	35,321	14,856	20,465.66
1462+00.00	100	45	37	55	162	137	268	50,557	35,346	15,190	20,156.17
1462+69.00	69	42	37	54	111	95	139	50,668	35,362	15,363	19,998.84
1463+00.00	31	46	37	51	50	42	60	50,718	35,370	15,438	19,931.60
1464+00.00	100	39	37	50	156	137	186	50,874	35,388	15,671	19,717.48
1465+00.00	100	42	37	45	149	137	175	51,023	35,401	15,890	19,510.77
1466+00.00	100	49	37	43	169	137	163	51,191	35,432	16,093	19,338.55
1467+00.00	100	50	37	45	183	137	162	51,375	35,478	16,296	19,182.30
1468+00.00	100	49	37	60	182	137	193	51,557	35,524	16,537	18,986.93
1469+00.00	100	44	37	131	171	137	353	51,728	35,558	16,978	18,580.22
1469+49.00	49	43	37	90	78	67	200	51,807	35,569	17,228	18,341.45
1470+00.00	51	43	37	87	81	70	167	51,888	35,580	17,436	18,143.95
1471+00.00	100	39	37	61	152	137	273	52,039	35,595	17,778	17,817.33
1472+00.00	100	34	37	37	134	137	180	52,174	35,592	18,002	17,590.01
1473+00.00	100	31	37	30	119	137	123	52,292	35,574	18,156	17,417.56
1474+00.00	100	52	37	25	152	137	102	52,444	35,588	18,283	17,305.06
1475+00.00	100	56	37	17	199	137	77	52,643	35,650	18,379	17,271.03
1476+00.00	100	58	37	11	211	137	50	52,854	35,725	18,442	17,282.60
1477+00.00	100	63	37	10	223	137	37	53,077	35,811	18,488	17,322.42
1478+00.00	100	68	37	18	241	137	50	53,318	35,914	18,551	17,363.62
1479+00.00	100	69	37	17	253	137	63	53,571	36,030	18,629	17,400.66
1480+00.00	100	67	37	16	252	137	59	53,823	36,145	18,704	17,441.40
1481+00.00	100	62	37	6	239	137	39	54,062	36,247	18,752	17,494.64
1482+00.00	100	55	37	2	217	137	14	54,278	36,326	18,770	17,556.91
1483+00.00	100	54	37	4	202	137	10	54,480	36,391	18,782	17,608.99
1484+00.00	100	53	37	3	198	137	12	54,678	36,452	18,797	17,655.06
1485+00.00	100	55	37	2	199	137	8	54,877	36,514	18,808	17,706.68
1486+00.00	100	54	37	3	201	137	8	55,078	36,578	18,818	17,760.15
1487+00.00	100	51	37	3	194	137	10	55,272	36,635	18,831	17,803.90
1488+00.00	100	46	37	3	179	137	9	55,450	36,676	18,842	17,833.99
1489+00.00	100	45	37	3	168	137	9	55,618	36,707	18,854	17,852.98
1490+00.00	100	37	37	3	151	137	10	55,769	36,721	18,867	17,854.13
1491+00.00	100	34	37	2	131	137	8	55,900	36,715	18,877	17,838.16
1492+00.00	100	39	37	2	135	137	6	56,036	36,713	18,884	17,828.36
1493+00.00	100	44	37	2	154	137	6	56,189	36,730	18,892	17,837.93
1494+00.00	100	48	37	5	170	137	12	56,360	36,763	18,907	17,856.22
1495+00.00	100	50	37	13	181	137	32	56,540	36,807	18,948	17,859.23
1496+00.00	100	48	37	13	181	137	48	56,721	36,850	19,008	17,842.56
1497+00.00	100	45	37	19	171	137	58	56,892	36,885	19,081	17,803.90
1498+00.00	100	108	37	9	281	137	50	57,174	37,029	19,143	17,885.85
1499+00.00	100	107	37	2	396	137	19	57,570	37,288	19,168	18,120.80
1500+00.00	100	110	37	6	401	137	15	57,971	37,552	19,186	18,366.17
1500+40.00	40	116	37	6	167	55	9	58,138	37,665	19,197	18,468.11
1501+00.00	60	126	37	5	268	82	11	58,407	37,851	19,211	18,640.34
1502+00.00	100	141	37	4	493	137	16	58,899	38,207	19,230	18,976.22
1503+00.00	100	158	37	2	552	137	10	59,451	38,621	19,243	19,378.30
1504+00.00	100	162	37	0	592	137	3	60,043	39,076	19,247	19,829.46
1505+00.00	100	163	37	0	602	137	0	60,645	39,541	19,247	20,294.27
1506+00.00	100	168	37	0	613	137	0	61,258	40,017	19,247	20,770.20
1507+00.00	100	157	37	1	601	137	1	61,858	40,481	19,248	21,232.93
1508+00.00	100	144	37	12	556	137	22	62,415	40,900	19,276	21,624.60
1509+00.00	100	126	37	21	500	137	60	62,915	41,263	19,351	21,912.33
1510+00.00	100	56	37	25	336	137	85	63,251	41,462	19,457	22,004.92
1511+00.00	100	49	37	27	193	137	96	63,444	41,518	19,578	21,940.10
1512+00.00	100	44	37	25	170	137	96	63,614	41,551	19,698	21,853.07
1513+00.00	100	37	37	34	149	137	109	63,763	41,563	19,835	21,728.53
1514+00.00	100	31	37	34	126	137	126	63,889	41,552	19,992	21,560.01
1515+00.00	100	27	37	27	106	137	113	63,995	41,521	20,133	21,388.25
1516+00.00	100	26	37	26	96	137	97	64,092	41,481	20,255	21,225.98
1517+00.00	100	24	37	33	91	137	108	64,183	41,434	20,390	21,044.27
1518+00.00	100	20	37	36	80	137	128	64,262	41,377	20,550	20,827.14
1518+23.00	23	26	37	46	19	32	35	64,282	41,365	20,593	20,771.35
1519+00.00	77	30	37	30	80	106	108	64,361	41,339	20,729	20,610.22
1520+00.00	100	35	37	34	120	137	118	64,482	41,323	20,876	20,446.56
1521+00.00	100	38	37	22	135	137	103	64,617	41,321	21,004	20,316.23
1522+00.00	100	44	37	15	151	137	68	64,768	41,335	21,089	20,245.63
1523+00.00	100	49	37	9	171	137	44	64,939	41,369	21,143	20,225.49
1524+00.00	100	60	37	4	201	137	24	65,140	41,433	21,173	20,259.29
1525+00.00	100	58	37	3	218	137	13	65,358	41,513	21,190	20,323.64
1526+00.00	100	61	37	3	220	137	10	65,578	41,597	21,202	20,394.24
1527+00.00	100	56	37	4	217	137	11	65,795	41,676	21,216	20,459.98
1528+00.00	100	61	37	4	217	137	14	66,011	41,756	21,234	20,522.25
1529+00.00	100	60	37	4	224	137	15	66,235	41,843	21,252	20,590.77
1530+00.00	100	58	37	5	219	137	17	66,454	41,924	21,273	20,651.42
1531+00.00	100	59	37	6	216	137	19	66,670	42,003	21,297	20,705.82
1532+00.00	100	49	37	11	199	137	30	66,869	42,065	21,334	20,730.82
1532+03.00	3	49	37	15	5	4	1	66,874	42,066	21,336	20,730.41
1533+00.00	97	43	37	17	164	133	57	67,039	42,098	21,407	20,691.12
1534+00.00	100	44	37	18	159	137	65	67,198	42,120	21,488	20,632.32

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PROJECT NO: 1010-04-72 | HWY: IH 39 | COUNTY: COLUMBIA | EARTHWORK | SHEET E

FILE NAME : r:\Support\CADDS\Projects\d1_10100472\090101_ew.dgn PLOT DATE : 01-SEP-2009 15:02 PLOT BY : dotbbg PLOT NAME : PLOT SCALE : 200.000000:1.000000

WISDOT/CADDS SHEET 49

Stage 1 - WB

STATION	Dist.	CUT	Salvaged/Unusable Pavement Material	FILL	CUT	Salvaged/Unusable Pavement Material (Note 2)	FILL	1.00 CUT	Available Material	1.25 Expanded Fill	Mass Ordinate
1535+00.00	100	43	37	7	160	137	46	67,358	42,143	21,546	20,597.60
1536+00.00	100	46	37	6	165	137	24	67,523	42,171	21,576	20,595.29
1537+00.00	100	55	37	6	187	137	22	67,710	42,221	21,604	20,617.51
1538+00.00	100	52	37	6	198	137	22	67,908	42,282	21,631	20,650.84
1539+00.00	100	52	37	7	192	137	24	68,100	42,337	21,661	20,675.38
1540+00.00	100	110	37	6	299	137	23	68,399	42,499	21,690	20,808.48
1541+00.00	100	110	37	6	407	137	20	68,806	42,769	21,716	21,053.39
1542+00.00	100	108	37	6	403	137	21	69,209	43,035	21,742	21,292.51
1543+00.00	100	105	37	10	393	137	29	69,602	43,290	21,778	21,512.19
1544+00.00	100	106	37	12	390	137	39	69,991	43,543	21,827	21,716.35
1545+00.00	100	106	37	12	393	137	43	70,384	43,799	21,880	21,918.67
1546+00.00	100	107	37	15	394	137	49	70,778	44,056	21,941	22,114.73
1547+00.00	100	110	37	15	401	137	55	71,179	44,320	22,010	22,310.33
1548+00.00	100	117	37	12	419	137	49	71,599	44,602	22,071	22,531.40
1549+00.00	100	119	37	9	436	137	38	72,035	44,902	22,119	22,783.02
1550+00.00	100	123	37	8	446	137	31	72,481	45,211	22,157	23,054.08
1551+00.00	100	130	37	7	467	137	28	72,948	45,540	22,191	23,348.99
1552+00.00	100	131	37	4	482	137	20	73,430	45,886	22,217	23,668.90
1552+84.00	84	131	37	4	407	115	12	73,837	46,177	22,232	23,945.01
1553+00.00	16	131	37	5	77	22	3	73,915	46,233	22,236	23,997.42
1554+00.00	100	132	37	6	486	137	19	74,401	46,582	22,260	24,322.19
1555+00.00	100	134	37	4	491	137	19	74,891	46,936	22,283	24,652.74
1556+00.00	100	163	37	2	548	137	11	75,440	47,347	22,297	25,049.96
1557+00.00	100	171	37	1	618	137	6	76,057	47,827	22,304	25,523.57
1558+00.00	100	177	37	1	644	137	4	76,702	48,335	22,309	26,026.35
TOTALS					76,702	28,367	17,847				

Stage 2- EB

STATION	Dist.	CUT	Salvaged/Unusable Pavement Material	FILL	CUT	Salvaged/Unusable Pavement Material (Note 2)	FILL	CUT	Available Material	1.25 Expanded Fill	Mass Ordinate
1350+00.00		151	45	5							
1351+00.00	100	145	45	4	548	167	16	548	381	20	360.86
1352+00.00	100	145	45	3	537	167	14	1,086	751	37	713.91
1353+00.00	100	149	45	1	544	167	7	1,629	1,127	46	1,081.13
1354+00.00	100	134	45	0	523	167	2	2,152	1,483	48	1,435.09
1354+75.00	75	183	45	0	440	125	0	2,593	1,798	48	1,750.11
1355+00.00	25	176	45	0	166	42	0	2,759	1,923	48	1,874.54
1355+50.00	50	163	45	0	314	84	0	3,073	2,153	48	2,104.32
1356+00.00	50	168	45	0	306	84	0	3,379	2,375	48	2,326.65
1357+00.00	100	177	45	0	638	167	0	4,016	2,845	48	2,796.90
1358+00.00	100	167	45	0	635	167	0	4,652	3,314	48	3,265.06
1359+00.00	100	167	45	0	619	167	0	5,270	3,765	48	3,716.31
1360+00.00	100	87	45	0	472	167	0	5,742	4,069	49	4,020.39
1361+00.00	100	108	45	0	362	167	0	6,104	4,264	49	4,214.46
1362+00.00	100	119	45	0	419	167	0	6,523	4,516	49	4,466.63
1363+00.00	100	81	45	0	370	167	0	6,893	4,718	49	4,669.08
1364+00.00	100	96	45	0	328	167	1	7,221	4,879	51	4,828.93
1365+00.00	100	83	45	0	332	167	1	7,554	5,044	52	4,992.67
1366+00.00	100	82	45	15	306	167	27	7,860	5,183	86	5,097.79
1367+00.00	100	80	45	16	301	167	57	8,161	5,317	156	5,160.74
1368+00.00	100	81	45	4	299	167	37	8,460	5,449	202	5,246.45
1369+00.00	100	81	45	0	301	167	7	8,761	5,582	212	5,370.98
1370+00.00	100	77	45	48	293	167	89	9,054	5,709	323	5,385.37
1371+00.00	100	85	45	20	300	167	126	9,354	5,841	481	5,360.78
1372+00.00	100	95	45	0	333	167	37	9,687	6,007	526	5,480.35
1373+00.00	100	98	45	0	356	167	0	10,043	6,195	526	5,668.83
1374+00.00	100	90	45	0	347	167	0	10,390	6,375	526	5,848.92
1375+00.00	100	90	45	0	333	167	0	10,723	6,541	526	6,014.72
1376+00.00	100	87	45	0	328	167	0	11,051	6,701	526	6,174.96
1377+00.00	100	85	45	11	318	167	20	11,369	6,852	551	6,300.68
1378+00.00	100	79	45	24	304	167	64	11,672	6,988	632	6,356.78
1379+00.00	100	84	45	19	303	167	80	11,975	7,124	732	6,392.43
1379+50.00	50	85	45	8	157	84	25	12,132	7,197	763	6,433.78
1380+00.00	50	85	45	11	157	84	18	12,289	7,271	785	6,485.55
1381+00.00	100	76	45	2	298	167	24	12,587	7,401	815	6,586.26
1382+00.00	100	74	45	2	277	167	8	12,864	7,511	825	6,685.61
1383+00.00	100	81	45	2	287	167	7	13,151	7,630	834	6,795.88
1384+00.00	100	82	45	0	303	167	3	13,454	7,766	838	6,927.88
1385+00.00	100	81	45	0	302	167	0	13,756	7,901	838	7,062.87
1386+00.00	100	80	45	0	298	167	0	14,054	8,031	838	7,193.24
1387+00.00	100	80	45	0	297	167	0	14,350	8,161	838	7,322.55
1388+00.00	100	80	45	1	296	167	1	14,646	8,289	840	7,449.89
1389+00.00	100	66	45	18	270	167	34	14,916	8,392	882	7,510.10
1390+00.00	100	75	45	1	261	167	35	15,178	8,486	926	7,559.99
1391+00.00	100	78	45	1	283	167	5	15,461	8,602	932	7,669.76
1392+00.00	100	78	45	5	289	167	12	15,749	8,723	948	7,775.84
1393+00.00	100	77	45	32	287	167	69	16,037	8,843	1,033	7,809.94
1394+00.00	100	81	45	41	292	167	135	16,329	8,968	1,202	7,766.26
1395+00.00	100	79	45	35	295	167	142	16,624	9,096	1,379	7,717.17
1396+00.00	100	74	45	2	282	167	69	16,906	9,211	1,464	7,746.36
1397+00.00	100	73	45	3	271	167	8	17,177	9,314	1,474	7,839.95
1398+00.00	100	71	45	3	265	167	11	17,442	9,412	1,488	7,924.34
1399+00.00	100	73	45	1	267	167	7	17,709	9,512	1,497	8,014.80
1400+00.00	100	74	45	0	273	167	1	17,982	9,618	1,498	8,119.33
1401+00.00	100	72	45	4	271	167	7	18,253	9,721	1,507	8,213.95
1402+00.00	100	74	45	1	270	167	9	18,523	9,824	1,519	8,304.97
1403+00.00	100	75	45	1	276	167	4	18,799	9,933	1,524	8,409.45
1404+00.00	100	71	45	2	271	167	4	19,070	10,036	1,528	8,507.85
1405+00.00	100	71	45	1	263	167	5	19,332	10,132	1,535	8,596.92
1406+00.00	100	71	45	2	262	167	7	19,594	10,227	1,543	8,683.73
1407+00.00	100	71	45	1	262	167	6	19,856	10,321	1,551	8,770.54
1408+00.00	100	65	45	1	252	167	4	20,108	10,406	1,556	8,849.99
1409+00.00	100	65	45	2	242	167	6	20,350	10,480	1,564	8,916.37
1410+00.00	100	61	45	21	234	167	42	20,584	10,547	1,616	8,930.47
1411+00.00	100	61	45	0	226	167	38	20,810	10,606	1,664	8,941.68
1412+00.00	100	58	45	0	220	167	0	21,030	10,659	1,664	8,994.81
1413+00.00	100	57	45	0	212	167	0	21,243	10,704	1,664	9,039.89
1414+00.00	100	62	45	0	220	167	0	21,463	10,757	1,664	9,092.89
1414+95.00	95	0	45	0	110	159	0	21,573	10,708	1,664	9,043.79
1415+00.00	5	0	45	0	0	8	0	21,573	10,699	1,664	9,035.42
1416+00.00	100	0	45	0	0	167	0	21,573	10,532	1,664	8,868.14
1416+35.00	35	0	45	0	0	59	0	21,573	10,474	1,664	8,809.59
1417+00.00	65	57	45	0	69	109	0	21,642	10,434	1,664	8,769.62
1418+00.00	100	52	45	32	202	167	60	21,844	10,469	1,738	8,730.09
1419+00.00	100	60	45	0	208	167	60	22,052	10,509	1,813	8,696.08
1420+00.00	100	64	45	7	230	167	13	22,281	10,572	1,829	8,742.45
1421+00.00	100	71	45	1	250	167	14	22,531	10,654	1,846	8,807.69
1422+00.00	100	74	45	0	268	167	1	22,800	10,755	1,848	8,906.98
1423+00.00	100	72	45	0	271	167	1	23,070	10,859	1,849	9,009.13
1424+00.00	100	70	45	1	264	167	2	23,335	10,956	1,852	9,103.75
1425+00.00	100	67	45	1	254	167	4	23,589	11,042	1,856	9,185.88
1426+00.00	100	65	45	1	245	167	4	23,833	11,120	1,861	9,258.30
1427+00.00	100	59	45	2	231	167	5	24,065	11,184	1,867	9,316.66
1428+00.00	100	56	45	1	214	167	5	24,279	11,231	1,873	9,357.29
1429+00.00	100	51	45	1	198	167	4	24,477	11,261	1,878	9,383.07
1430+00.00	100	69	45	4	221	167	8	24,698	11,315	1,889	9,426.17
1431+00.00	100	64	45	1	244	167	8	24,942	11,392	1,899	9,492.92
1432+00.00	100	54	45	4	217	167	8	25,159	11,441	1,910	9,531.88
1433+00.00	100	46	45	7	183	167	19	25,342	11,457	1,934	9,523.63
1434+00.00	100	46	45	8	169	167	28	25,511	11,459	1,969	9,490.14
1435+00.00	100	37	45	4	153	167	21	25,663	11,444	1,995	9,449.01
1436+00.00	100	24	45	7	112	167	19	25,775	11,389	2,018	9,370.62
1437+00.00	100	37	45	8	111	167	27	25,886	11,333	2,052	9,280.88
1438+00.00	100	36	45	7	133	167	28	26,020	11,299	2,087	9,212.21

Stage 2- EB

STATION	Dist.	CUT	Salvaged/Unusable Pavement Material	FILL	CUT	Salvaged/Unusable Pavement Material (Note 2)	FILL	CUT	Available Material	1.25 Expanded Fill	Mass Ordinate
1439+00.00	100	35	45	7	131	167	26	26,150	11,262	2,119	9,143.07
1440+00.00	100	40	45	12	138	167	34	26,288	11,233	2,162	9,070.92
1441+00.00	100	35	45	88	136	167	184	26,426	11,203	2,392	8,811.28
1442+00.00	100	31	45	111	122	167	368	26,549	11,158	2,852	8,306.73
1442+43.00	43	31	45	116	49	72	180	26,597	11,135	3,077	8,058.32
1443+00.00	57	28	45	105	61	95	233	26,659	11,101	3,368	7,733.25
1444+00.00	100	29	45	43	104	167	272	26,762	11,038	3,708	7,329.39
1445+00.00	100	23	45	37	95	167	147	26,858	10,966	3,892	7,073.45
1446+00.00	100	26	45	31	90	167	126	26,948	10,898	4,050	6,838.57
1447+00.00	100	44	45	18	129	167	90	27,076	10,850	4,162	6,687.72
1448+00.00	100	45	45	4	165	167	39	27,241	10,847	4,211	6,636.64
1449+00.00	100	51	45	4	177	167	14	27,418	10,857	4,228	6,628.85
1450+00.00	100	54	45	5	193	167	16	27,611	10,882	4,248	6,634.48
1450+63.00	63	47	45	54	117	105	68	27,727	10,893	4,333	6,560.45
1451+00.00	37	47	45	66	64	62	82	27,791	10,895	4,435	6,459.93
1452+00.00	100	43	45	66	165	167	244	27,956	10,893	4,740	6,153.06
1453+00.00	100	47	45	50	166	167	215	28,122	10,891	5,008	5,883.00
1454+00.00	100	44	45	17	169	167	123	28,290	10,892	5,162	5,730.30
1455+00.00	100	28	45	9	133	167	46	28,423	10,859	5,220	5,638.48
1456+00.00	100	28	45	9	103	167	32	28,526	10,794	5,261	5,533.46
1457+00.00	100	31	45	16	107	167	46	28,634	10,734	5,318	5,415.71
1457+65.00	65	38	45	9	82	109	30	28,716	10,708	5,356	5,351.82
1458+00.00	35	41	45	25	51	59	22	28,767	10,700	5,384	5,316.60
1459+00.00	100	49	45	19	165	167	81	28,932	10,698	5,484	5,213.44
1460+00.00	100	51	45	87	183	167	195	29,115	10,714	5,729	4,985.27
1461+00.00	100	43	45	90	173	167	327	29,288	10,720	6,137	4,582.57
1462+00.00	100	45	45	55	162	167	268	29,450	10,714	6,472	4,242.84
1462+69.00	69	42	45	54	111	115	139	29,561	10,710	6,645	4,064.64
1463+00.00	31	46	45	51	50	52	60	29,611	10,708	6,720	3,988.02
1464+00.00	100	39	45	50	156	167	186	29,767	10,696	6,952	3,743.66
1465+00.00	100	42	45	45	149	167	175	29,916	10,678	7,171	3,506.70
1466+00.00	100	49	45	43	169	167	163	30,084	10,679	7,375	3,304.23
1467+00.00	100	50	45	45	183	167	162	30,267	10,695	7,577	3,117.73
1468+00.00	100	49	45	60	182	167	193	30,450	10,710	7,818	2,892.11
1469+00.00	100	44	45	131	171	167	353	30,621	10,714	8,259	2,455.15
1469+49.00	49	43	45	90	78	82	200	30,700	10,711	8,509	2,201.57
1470+00.00	51	43	45	87	81	85	167	30,780	10,706	8,718	1,988.64
1471+00.00	100	39	45	61	152	167	273	30,932	10,691	9,059	1,631.77
1472+00.00	100	34	45	37	134	167	180	31,067	10,658	9,284	1,374.21
1473+00.00	100	31	45	30	119	167	123	31,185	10,609	9,438	1,171.51
1474+00.00	100	52	45	25	152	167	102	31,337	10,594	9,565	1,028.76
1475+00.00	100	56	45	17	199	167	77	31,536	10,625	9,661	964.49
1476+00.00	100	58	45	11	211	167	50	31,747	10,669	9,723	945.81
1477+00.00	100	63	45	10	223	167	37	31,970	10,725	9,770	955.38
1478+00.00	100	68	45	18	241	167	50	32,211	10,799	9,832	966.34
1479+00.00	100	69	45	17	253	167	63	32,464	10,884	9,911	973.13
1480+00.00	100	67	45	16	252	167	59	32,716	10,969	9,985	983.62
1481+00.00	100	62	45	6	239	167	39	32,954	11,040	10,034	1,006.62
1482+00.00	100	55	45	2	217	167	14	33,171	11,090	10,051	1,038.64
1483+00.00	100	54	45	4	202	167	10	33,373	11,124	10,064	1,060.47
1484+00.00	100	53	45	3	198	167	12	33,571	11,155	10,079	1,076.29
1485+00.00	100	55	45	2	199	167	8	33,770	11,187	10,089	1,097.67
1486+00.00	100	54	45	3	201	167	8	33,971	11,221	10,100	1,120.89
1487+00.00	100	51	45	3	194	167	10	34,165	11,247	10,112	1,134.39
1488+00.00	100	46	45	3	179	167	9	34,343	11,258	10,124	1,134.24
1489+00.00	100	45	45	3	168	167	9	34,511	11,258	10,136	1,122.97
1490+00.00	100	37	45	3	151	167	10	34,662	11,242	10,148	1,093.88
1491+00.00	100	34	45	2	131	167	8	34,793	11,206	10,159	1,047.67
1492+00.00	100	39	45	2	135	167	6	34,929	11,174	10,166	1,008.62
1493+00.00	100	44	45	2	154	167	6	35,082	11,161	10,174	986.94
1494+00.00	100	48	45	5	170	167	12	35,253	11,164	10,189	974.98
1495+00.00	100	50	45	13	181	167	32	35,433	11,177	10,229	947.74
1496+00.00	100	48	45	13	181	167	48	35,614	11,190	10,289	900.83
1497+00.00	100	45	45	19	171	167	58	35,785	11,194	10,362	831.92
1498+00.00	100	108	45	9	281	167	50	36,067	11,308	10,425	883.62
1499+00.00	100	107	45	2	396	167	19	36,463	11,537	10,449	1,088.33
1500+00.00	100	110	45	6	401	167	15	36,864	11,771	10,468	1,303.45
1500+40.00	40	116	45	6	167	67	9	37,031	11,872	10,478	1,393.30
1501+00.00	60	126	45	5	268	100	11	37,299	12,040	10,492	1,547.37
1502+00.00	100	141	45	4	493	167	16	37,792	12,365	10,512	1,853.00
1503+00.00	100	158	45	2	552	167	10	38,344	12,749	10,525	2,224.84
1504+00.00	100	162	45	0	592	167	3	38,936	13,174	10,528	2,645.75
1505+00.00	100	163	45	0	602	167	0	39,537	13,608	10,528	3,080.32
1506+00.00	100	168	45	0	613	167	0	40,150	14,054	10,528	3,526.00
1507+00.00	100	157	45	1	601	167	1	40,751	14,488	10,529	3,958.48
1508+00.00	100	144	45	12	556	167	22	41,308	14,877	10,557	4,319.90
1509+00.00	100	126	45	21	500	167	60	41,808	15,210	10,632	4,577.39
1510+00.00	100	56	45	25	336	167	85	42,144	15,378	10,739	4,639.73
1511+00.00	100	49	45	27	193	167	96	42,337	15,404	10,859	4,544.67
1512+00.00	100	44	45	25	170	167	96	42,507	15,407	10,979	4,427.39
1513+00.00	100	37	45	34	149	167	109	42,656	15,389	11,116	4,272.60
1514+00.00	100	31	45	34	126	167	126	42,782	15,347	11,273	4,073.84
1515+00.00	100	27	45	27	106	167	113	42,888	15,287	11,415	3,871.83
1516+00.00	100	26	45	26	96	167	97	42,985	15,216	11,536	3,679.32
1517+00.00	100	24	45	33	91	167	108	43,075	15,139	11,672	3,467.36
1518+00.00	100	20	45	36	80	167	128	43,155	15,051	11,831	3,219.98
1518+23.00	23	26	45	46	19	38	35	43,174	15,032	11,875	3,157.23
1519+00.00	77	30	45	30	80	129	108	43,254	14,983	12,010	2,972.81
1520+00.00	100	35	45	34	120	167	118	43,375	14,936	12,157	2,778.90
1521+00.00	100	38	45	22	135	167	103	43,510	14,904	12,286	2,618.33
1522+00.00	100	44	45	15	151	167	68	43,661	14,888	12,370	2,517.48
1523+00.00	100	49	45	9	171	167	44	43,832	14,892	12,425	2,467.10
1524+00.00	100	60	45	4	201	167	24	44,033	14,926	12,455	2,470.65
1525+00.00	100	58	45	3	218	167	13	44,251	14,976	12,471	2,504.75

Stage 2- EB

STATION	Dist.	CUT	Salvaged/Unusable Pavement Material	FILL	CUT	Salvaged/Unusable Pavement Material (Note 2)	FILL	CUT	Available Material	1.25 Expanded Fill	Mass Ordinate
1526+00.00	100	61	45	3	220	167	10	44,471	15,029	12,484	2,545.11
1527+00.00	100	56	45	4	217	167	11	44,688	15,078	12,498	2,580.60
1528+00.00	100	61	45	4	217	167	14	44,904	15,128	12,515	2,612.62
1529+00.00	100	60	45	4	224	167	15	45,128	15,185	12,534	2,650.89
1530+00.00	100	58	45	5	219	167	17	45,347	15,236	12,554	2,681.30
1531+00.00	100	59	45	6	216	167	19	45,563	15,284	12,579	2,705.45
1532+00.00	100	49	45	11	199	167	30	45,762	15,316	12,616	2,700.20
1532+03.00	3	49	45	15	5	5	1	45,767	15,316	12,618	2,698.89
1533+00.00	97	43	45	17	164	162	57	45,931	15,319	12,688	2,630.26
1534+00.00	100	44	45	18	159	167	65	46,091	15,310	12,769	2,541.21
1535+00.00	100	43	45	7	160	167	46	46,251	15,303	12,827	2,476.24
1536+00.00	100	46	45	6	165	167	24	46,416	15,301	12,857	2,443.68
1537+00.00	100	55	45	6	187	167	22	46,603	15,321	12,885	2,435.66
1538+00.00	100	52	45	6	198	167	22	46,801	15,352	12,913	2,438.74
1539+00.00	100	52	45	7	192	167	24	46,993	15,376	12,943	2,433.03
1540+00.00	100	110	45	6	299	167	23	47,292	15,508	12,972	2,535.89
1541+00.00	100	110	45	6	407	167	20	47,699	15,748	12,997	2,750.55
1542+00.00	100	108	45	6	403	167	21	48,102	15,983	13,024	2,959.42
1543+00.00	100	105	45	10	393	167	29	48,494	16,209	13,060	3,148.85
1544+00.00	100	106	45	12	390	167	39	48,884	16,431	13,108	3,322.77
1545+00.00	100	106	45	12	393	167	43	49,277	16,656	13,162	3,494.84
1546+00.00	100	107	45	15	394	167	49	49,671	16,884	13,223	3,660.66
1547+00.00	100	110	45	15	401	167	55	50,072	17,117	13,291	3,826.01
1548+00.00	100	117	45	12	419	167	49	50,492	17,369	13,353	4,016.83
1549+00.00	100	119	45	9	436	167	38	50,928	17,638	13,400	4,238.20
1550+00.00	100	123	45	8	446	167	31	51,374	17,917	13,438	4,479.02
1551+00.00	100	130	45	7	467	167	28	51,841	18,217	13,473	4,743.68
1552+00.00	100	131	45	4	482	167	20	52,323	18,532	13,498	5,033.34
1552+84.00	84	131	45	4	407	141	12	52,730	18,798	13,514	5,284.05
1553+00.00	16	131	45	5	77	27	3	52,807	18,849	13,517	5,331.61
1554+00.00	100	132	45	6	486	167	19	53,294	19,168	13,541	5,626.14
1555+00.00	100	134	45	4	491	167	19	53,784	19,491	13,565	5,926.44
1556+00.00	100	163	45	2	548	167	11	54,332	19,872	13,578	6,293.42
1557+00.00	100	171	45	1	618	167	6	54,950	20,322	13,585	6,736.78
1558+00.00	100	177	45	1	644	167	4	55,594	20,799	13,590	7,209.31
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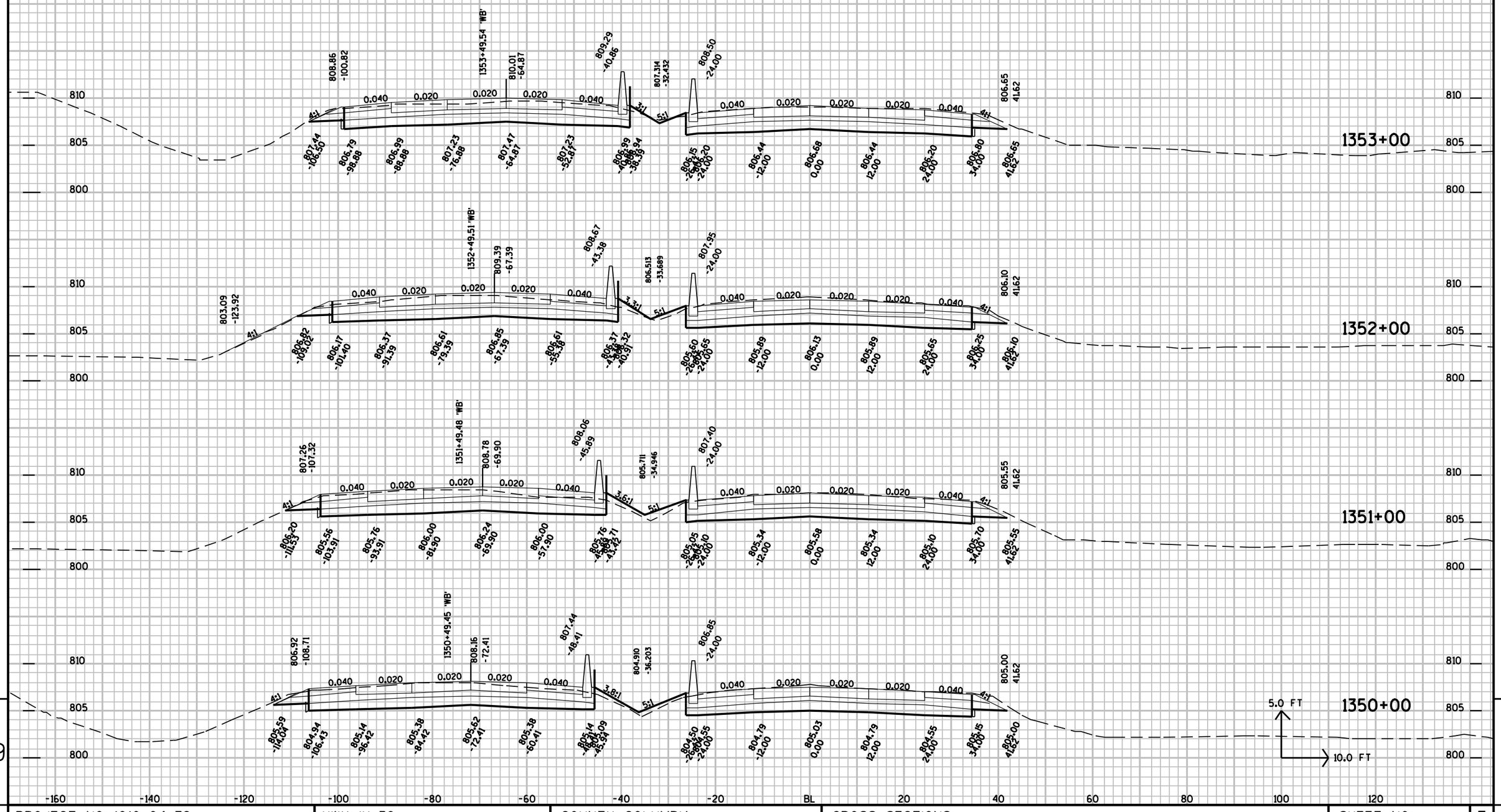
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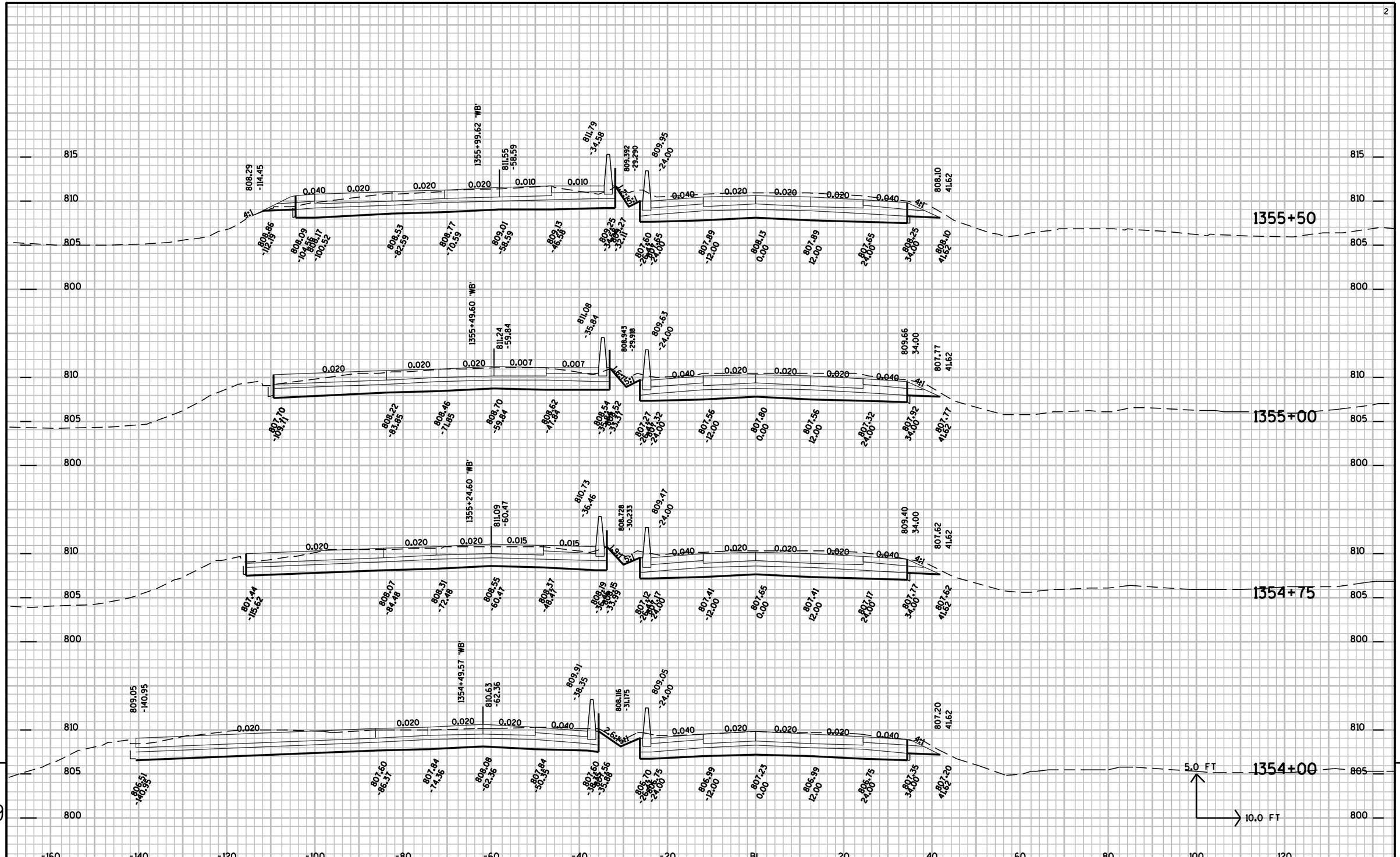
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WISDOT/CADDS SHEET 49



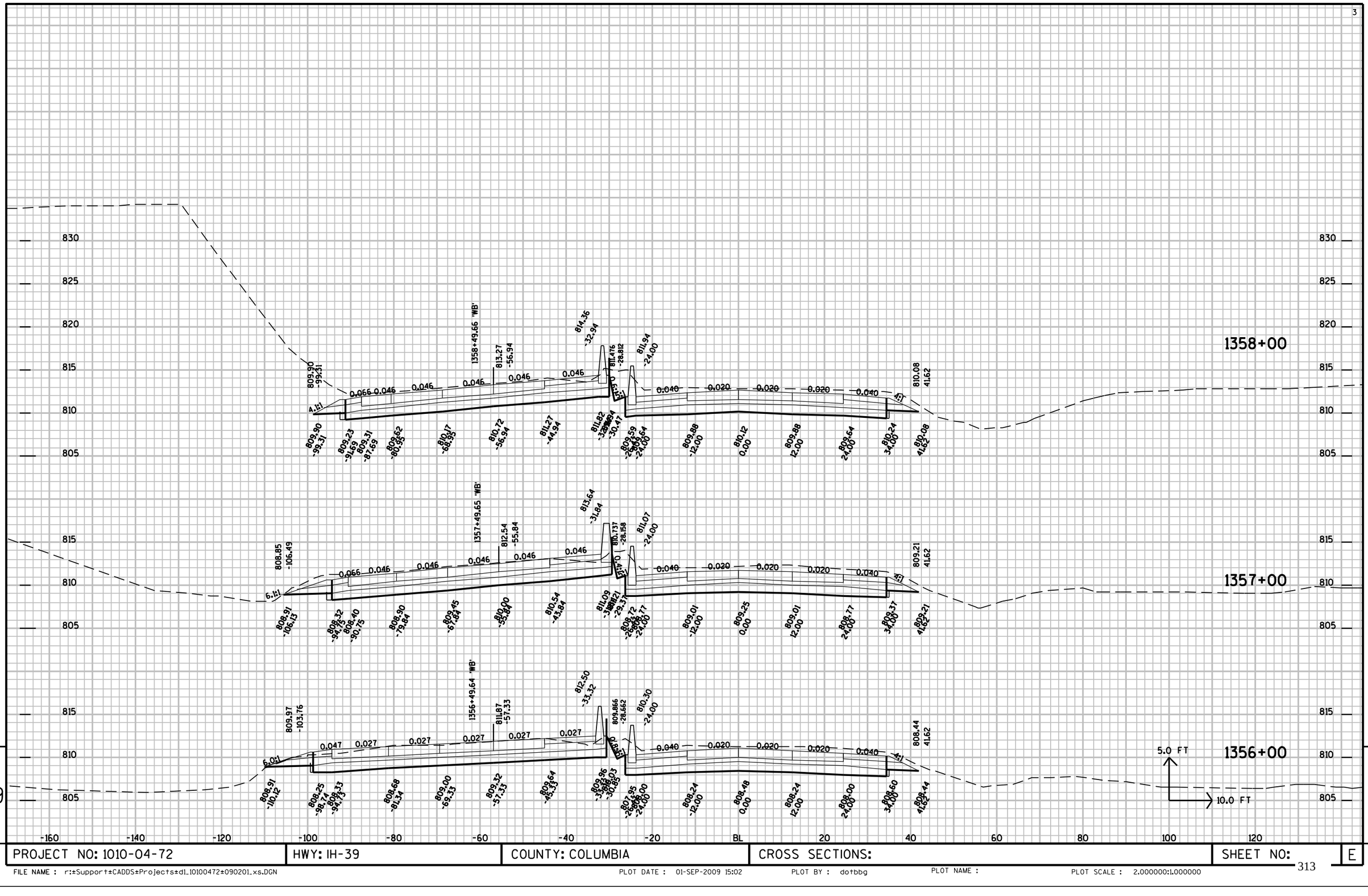
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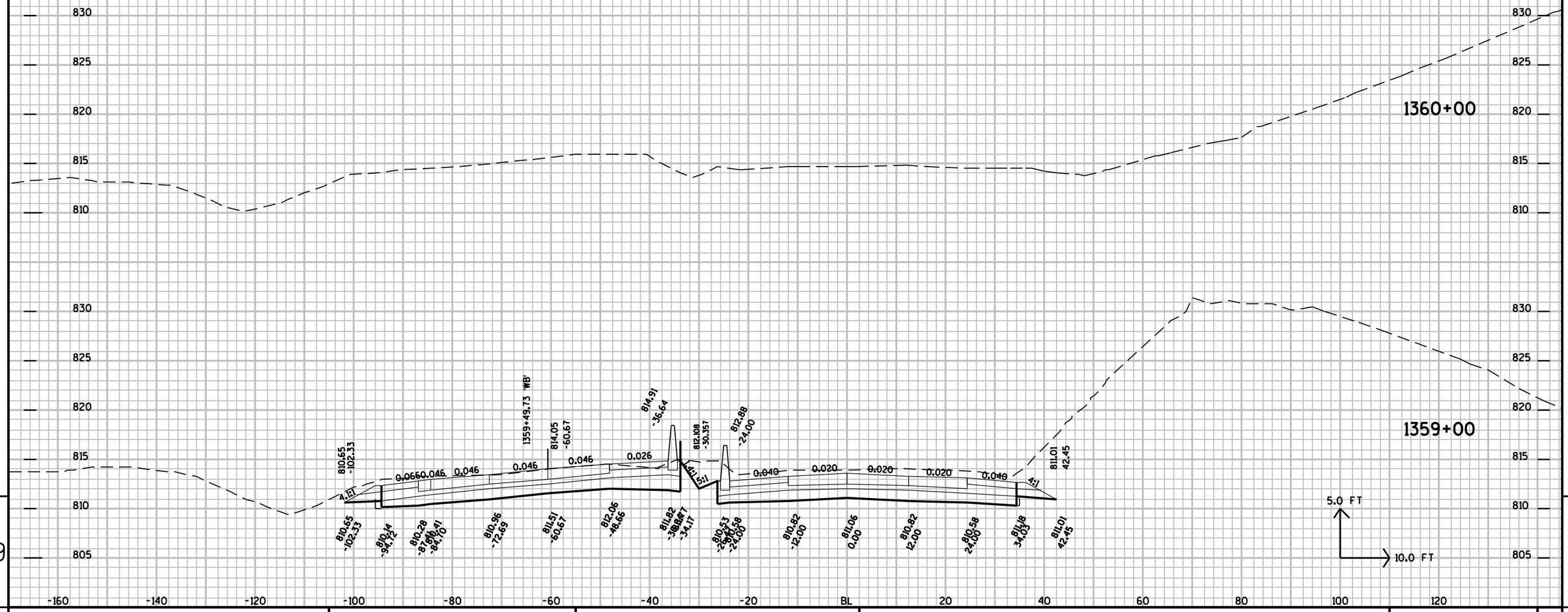
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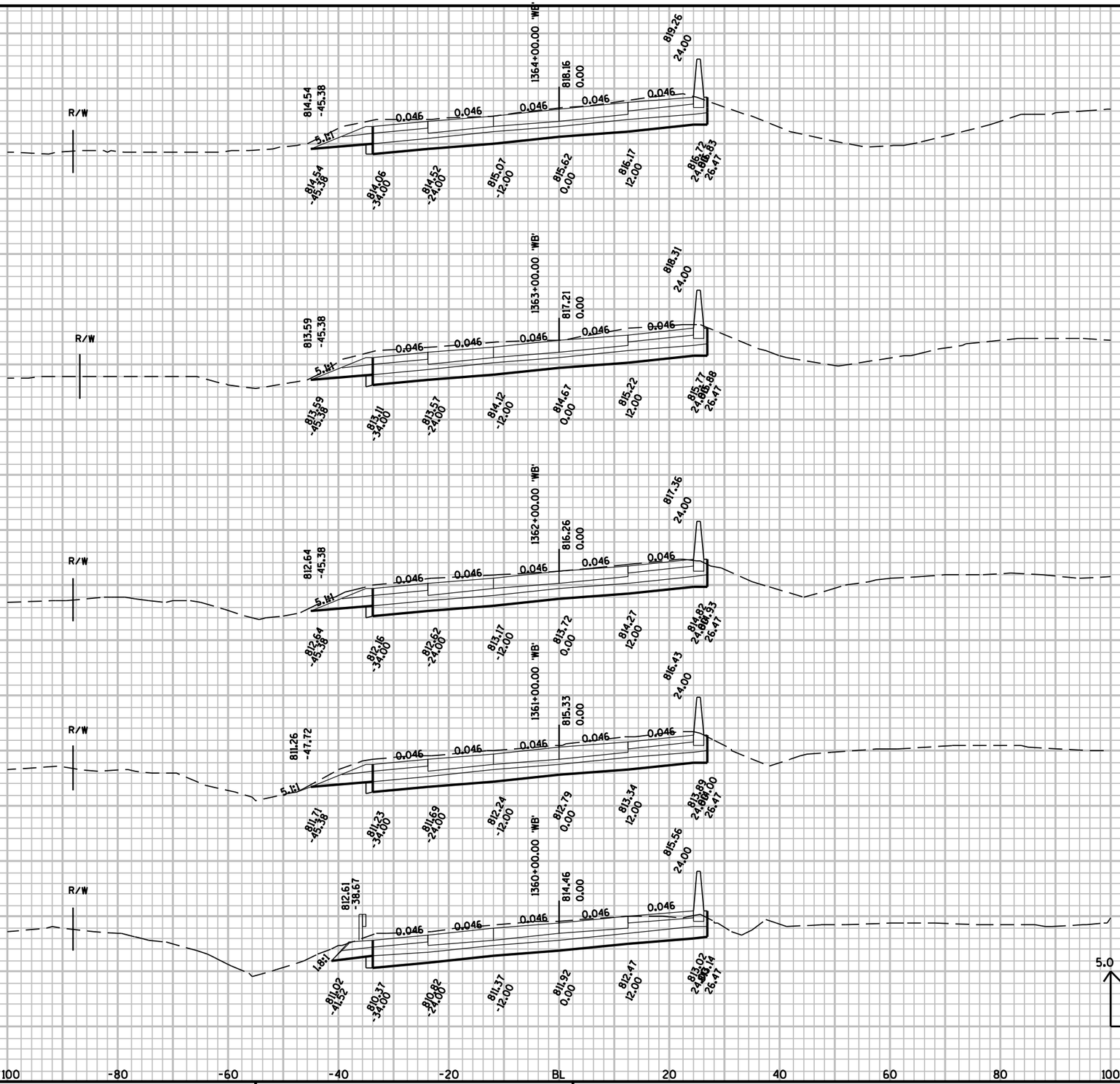


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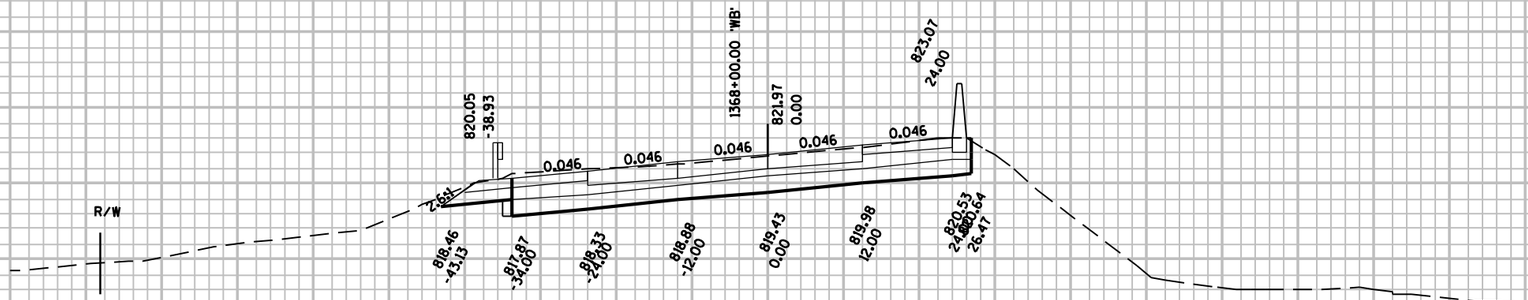
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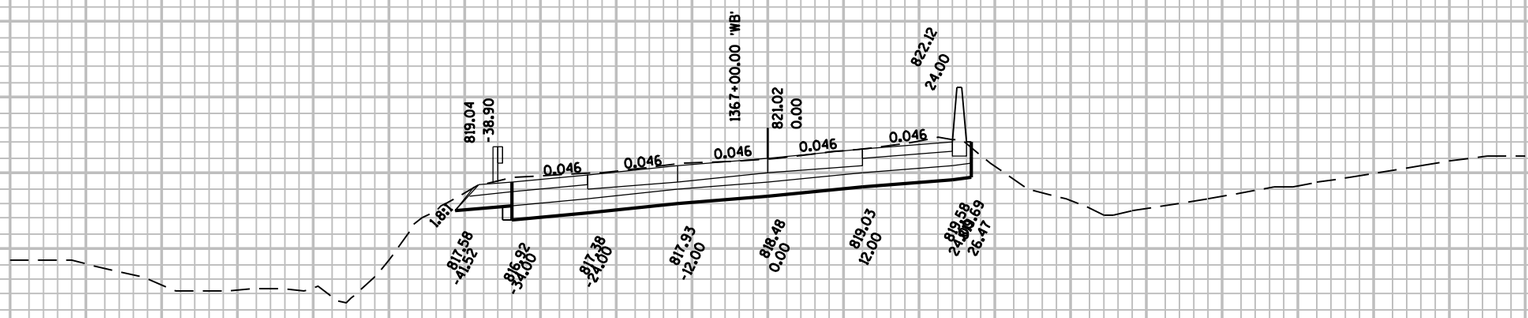
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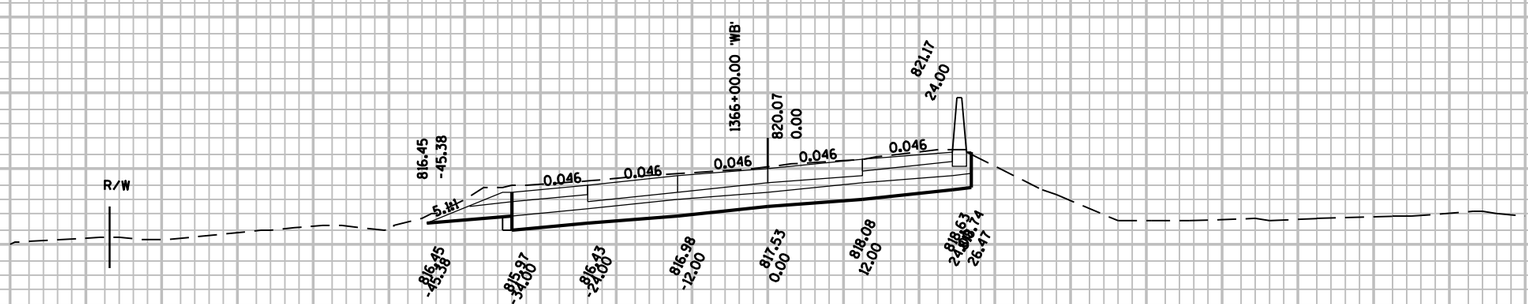


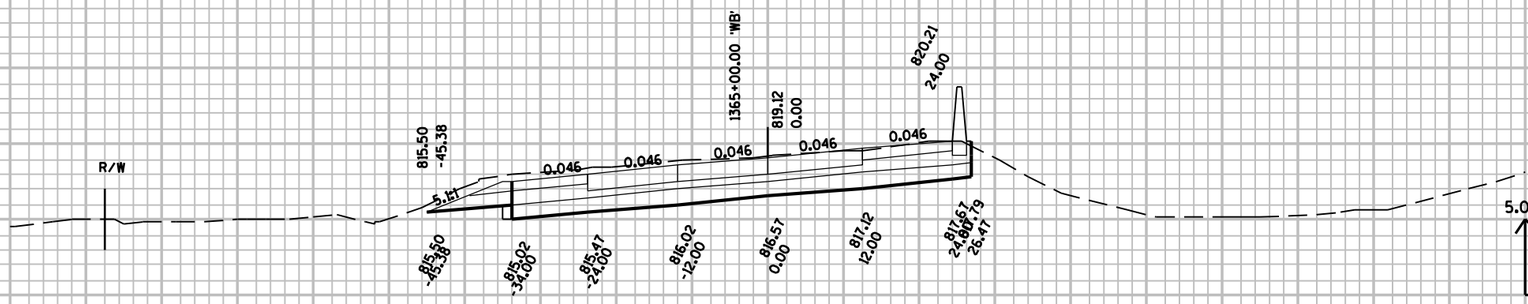
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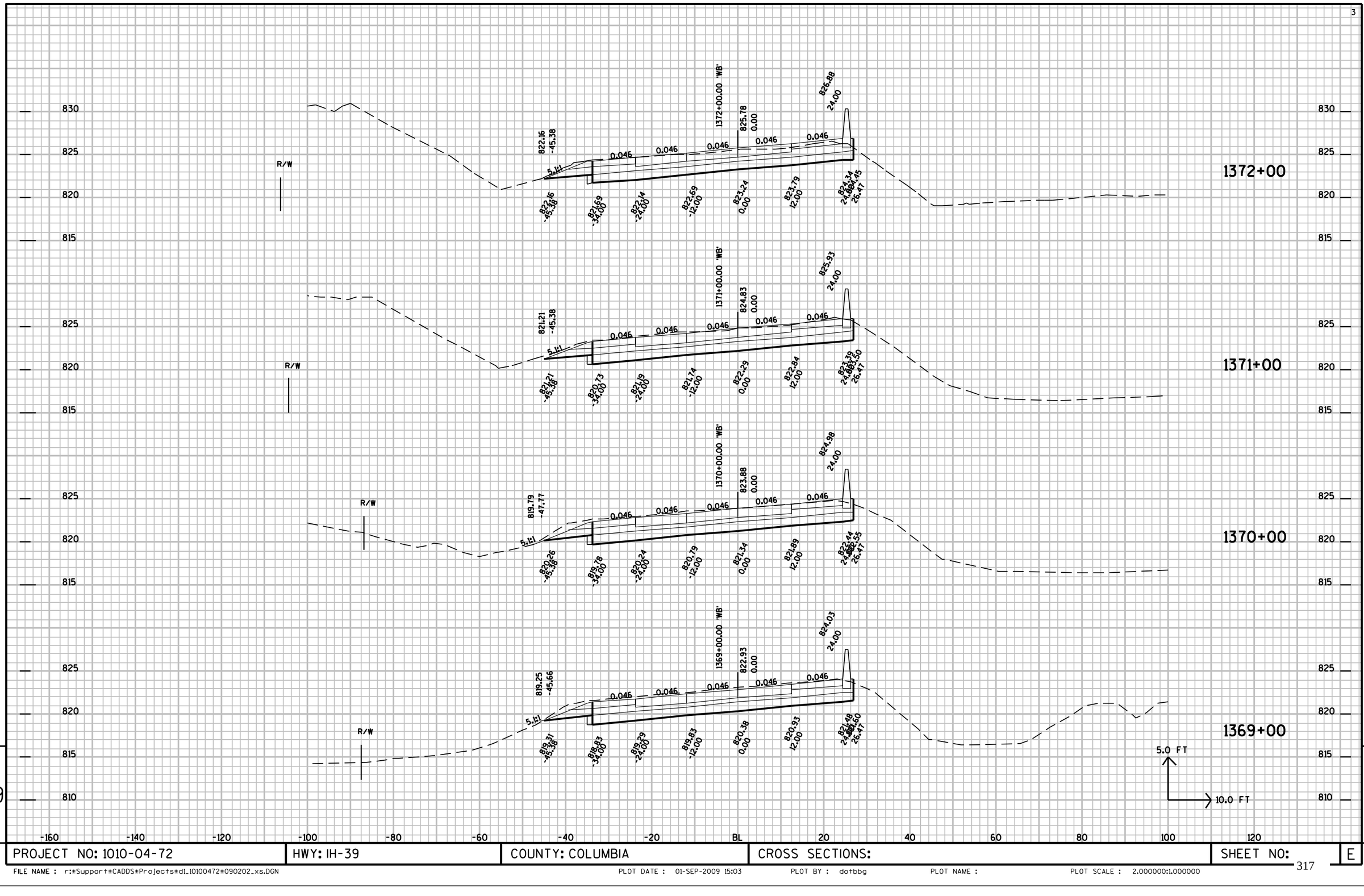






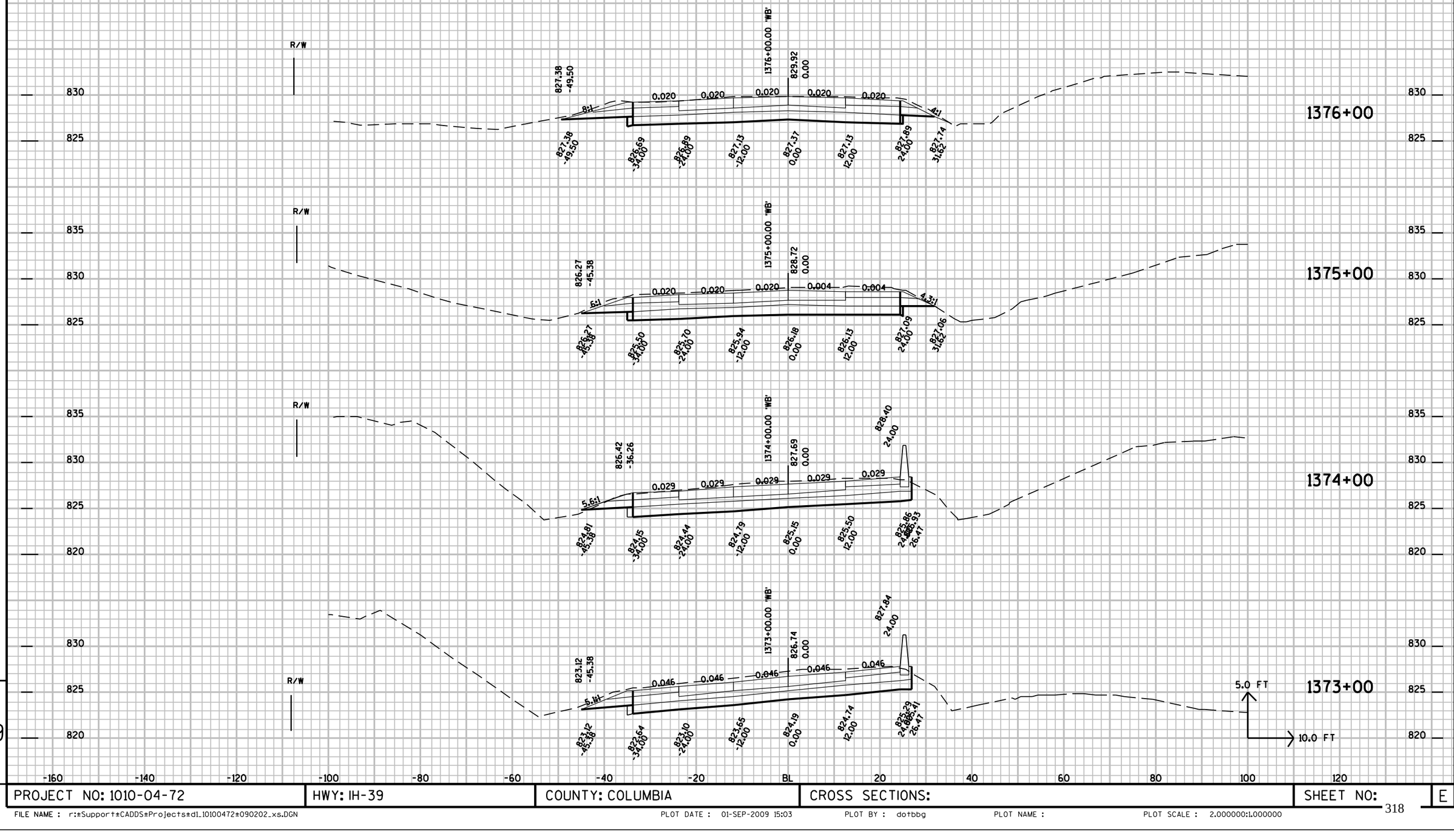
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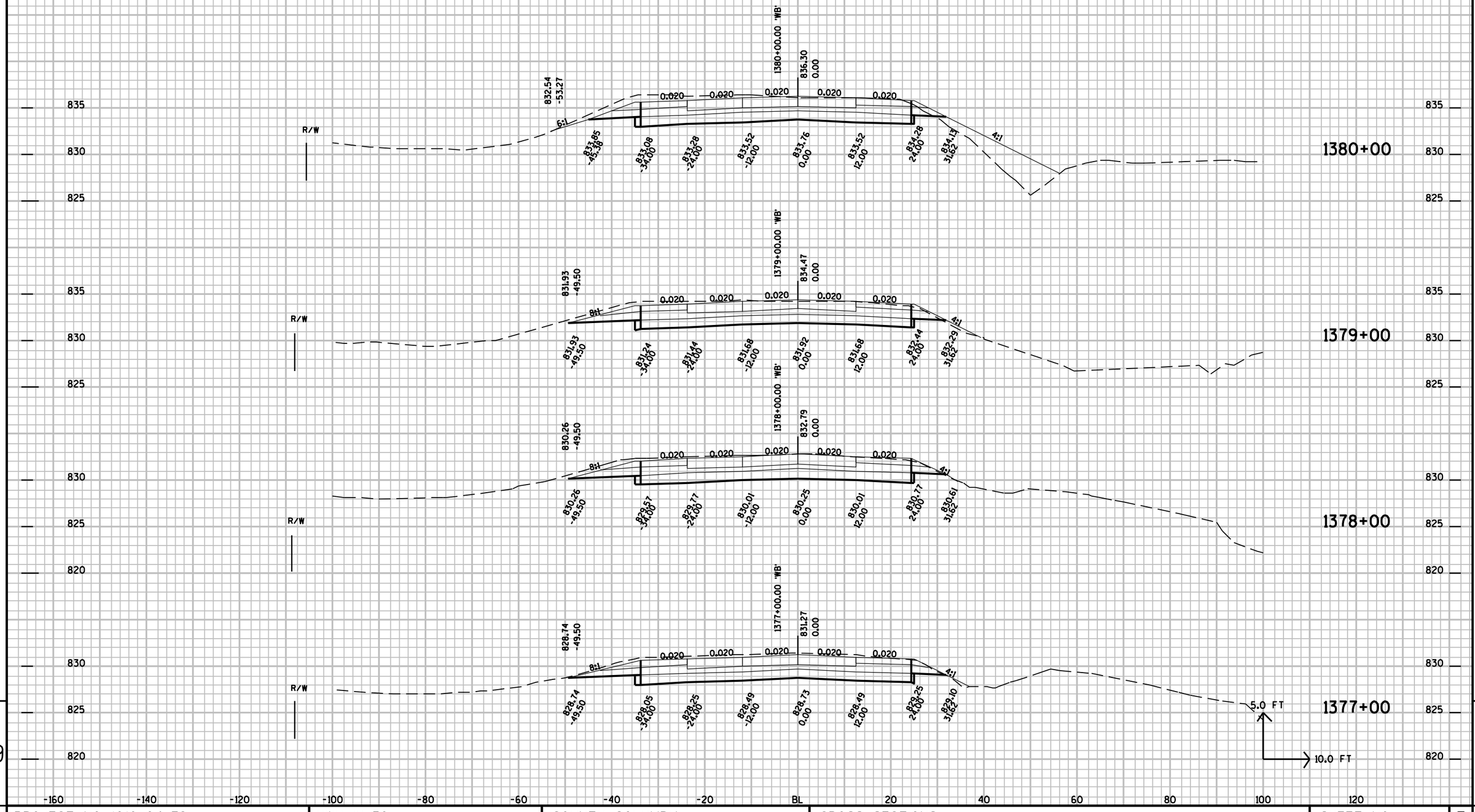
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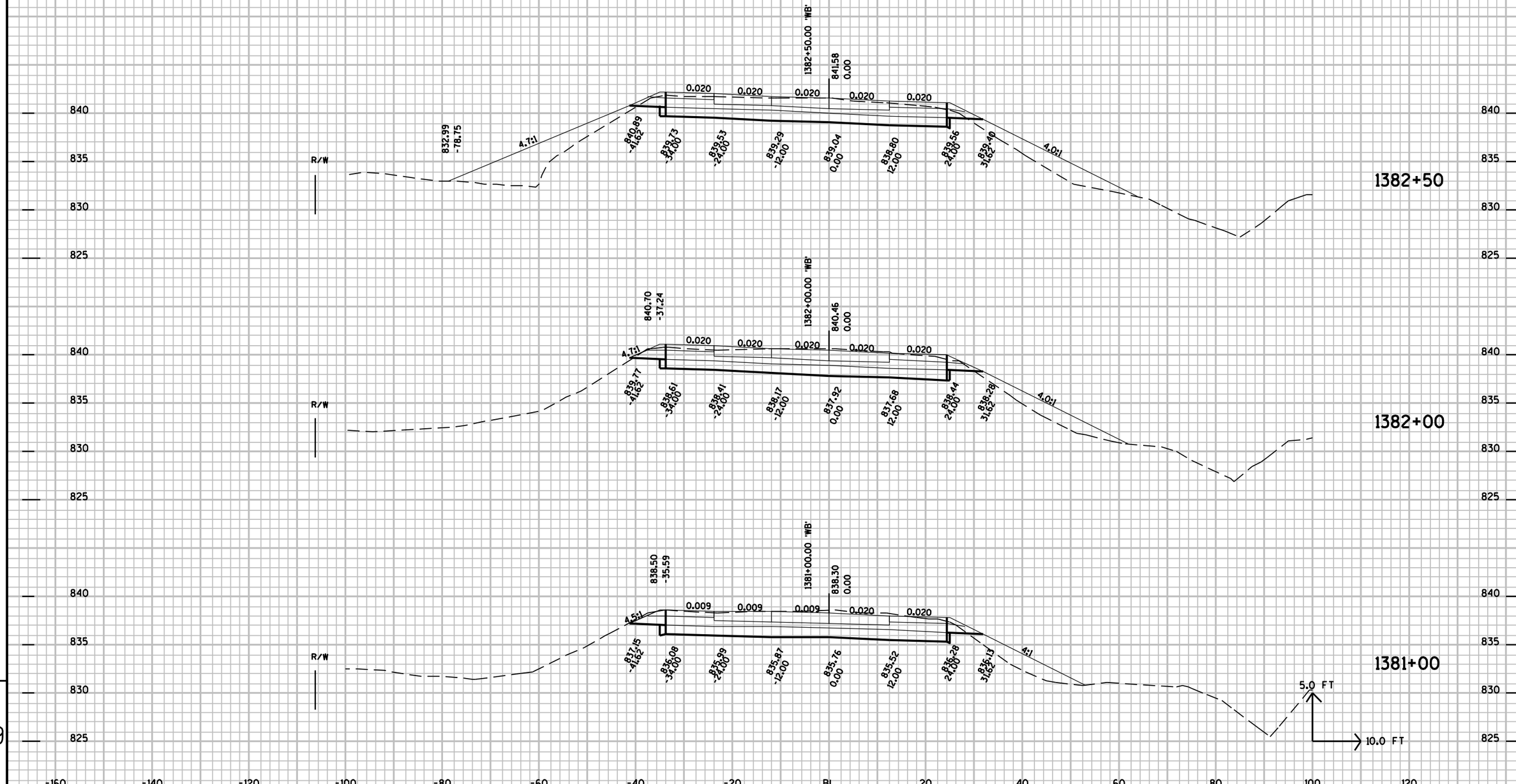
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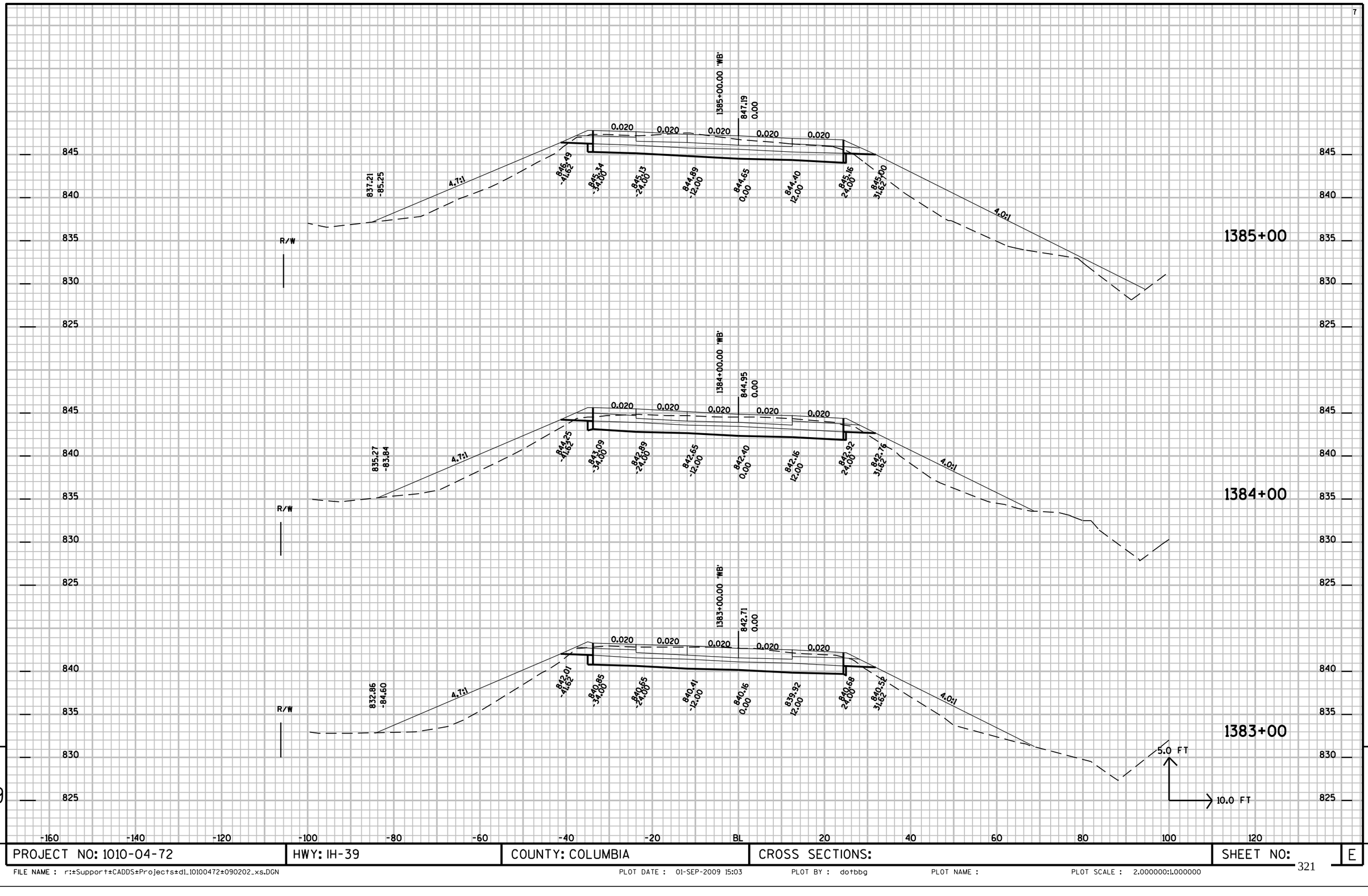
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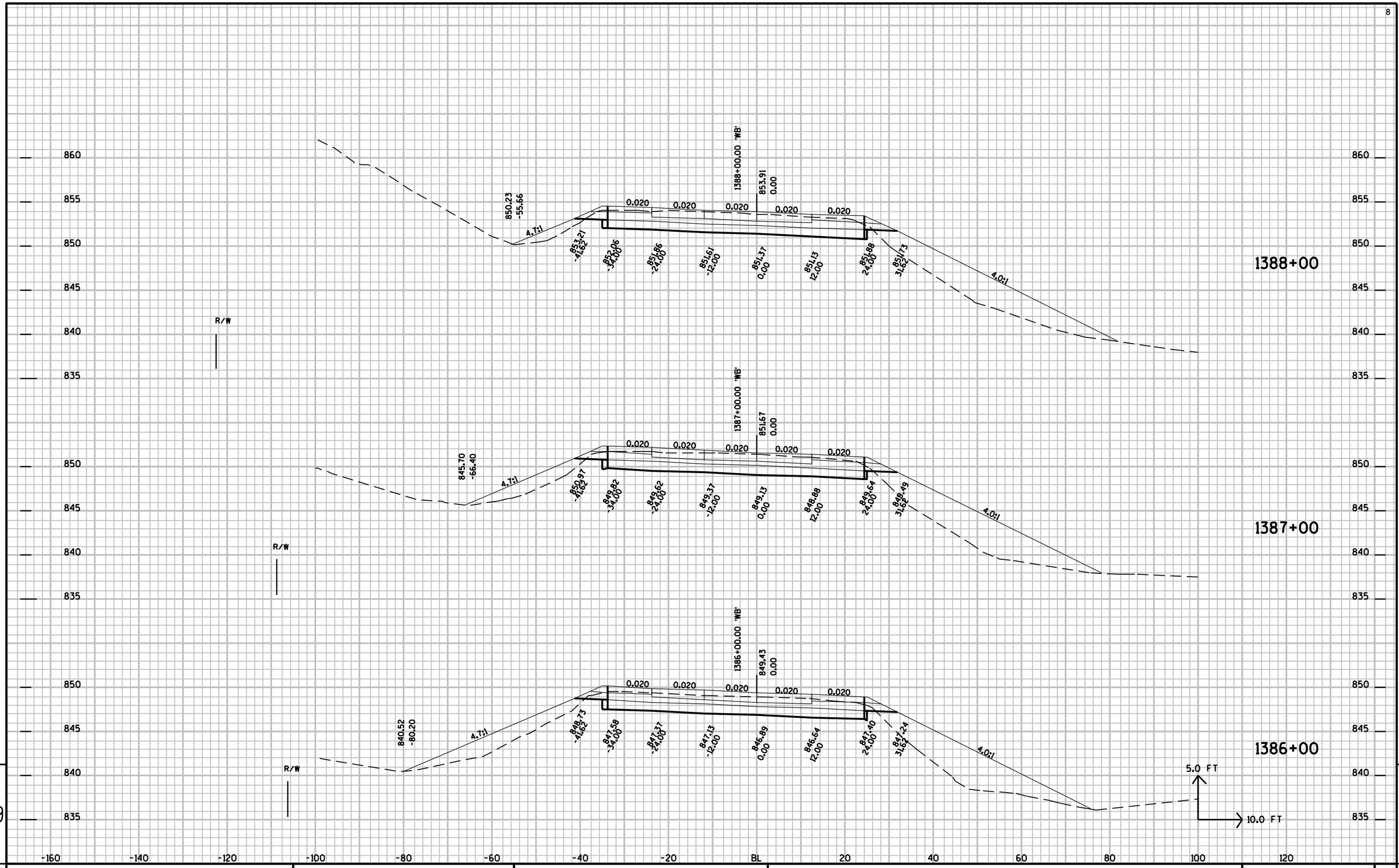
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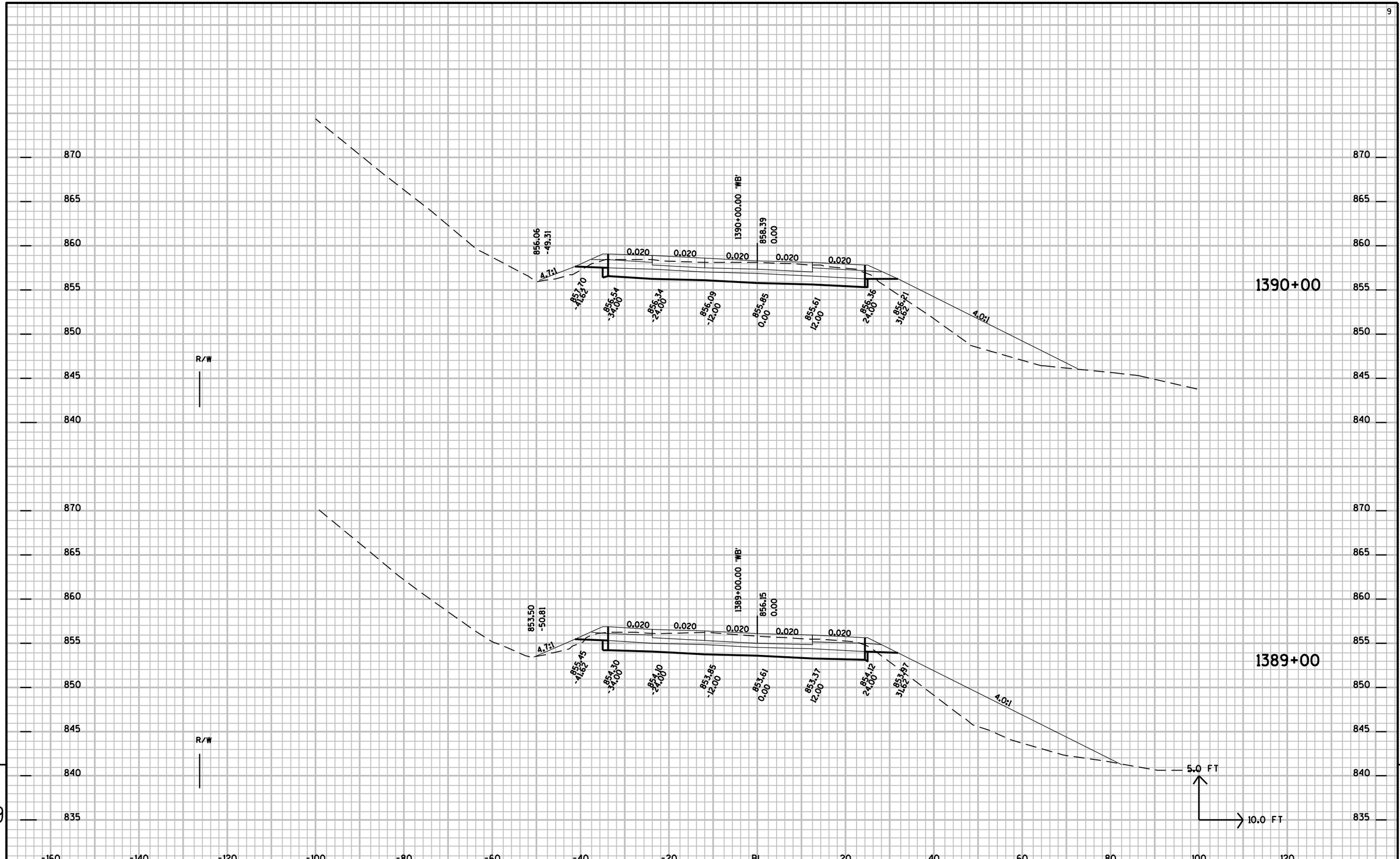
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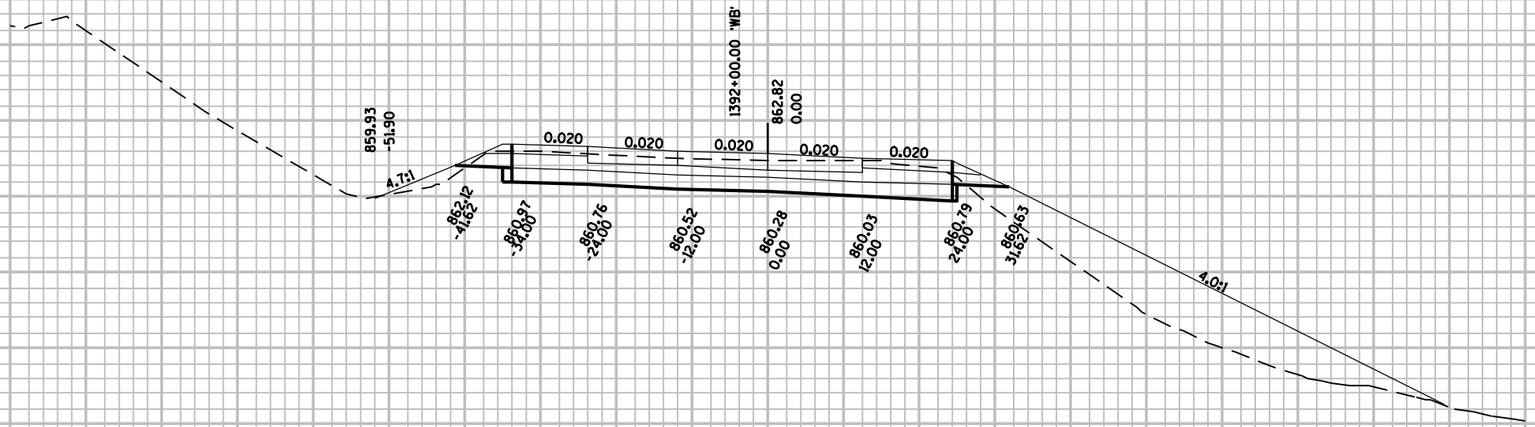
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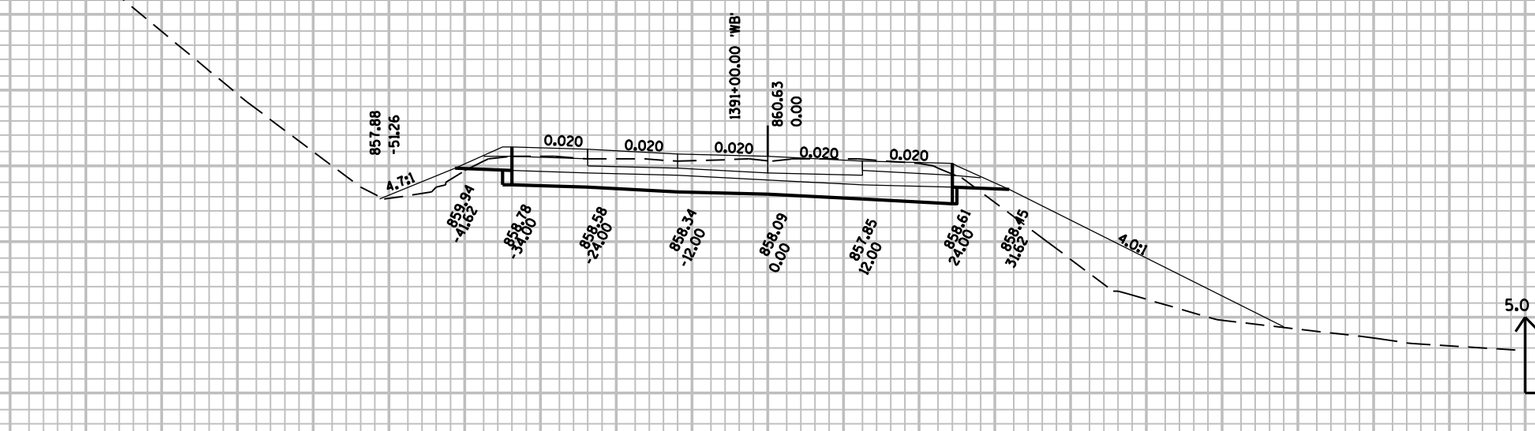
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R/W



1391+00

R/W

5.0 FT

10.0 FT

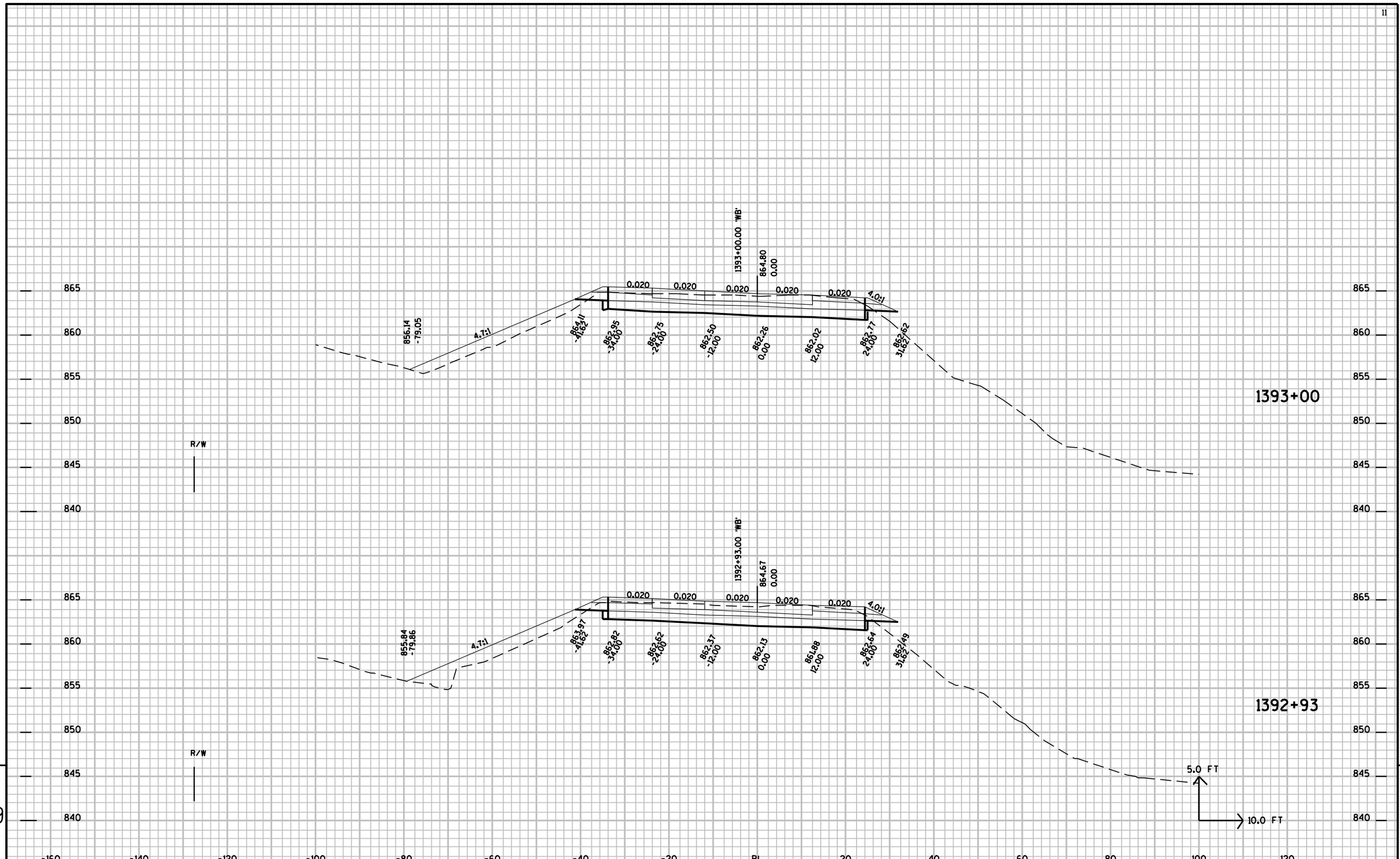
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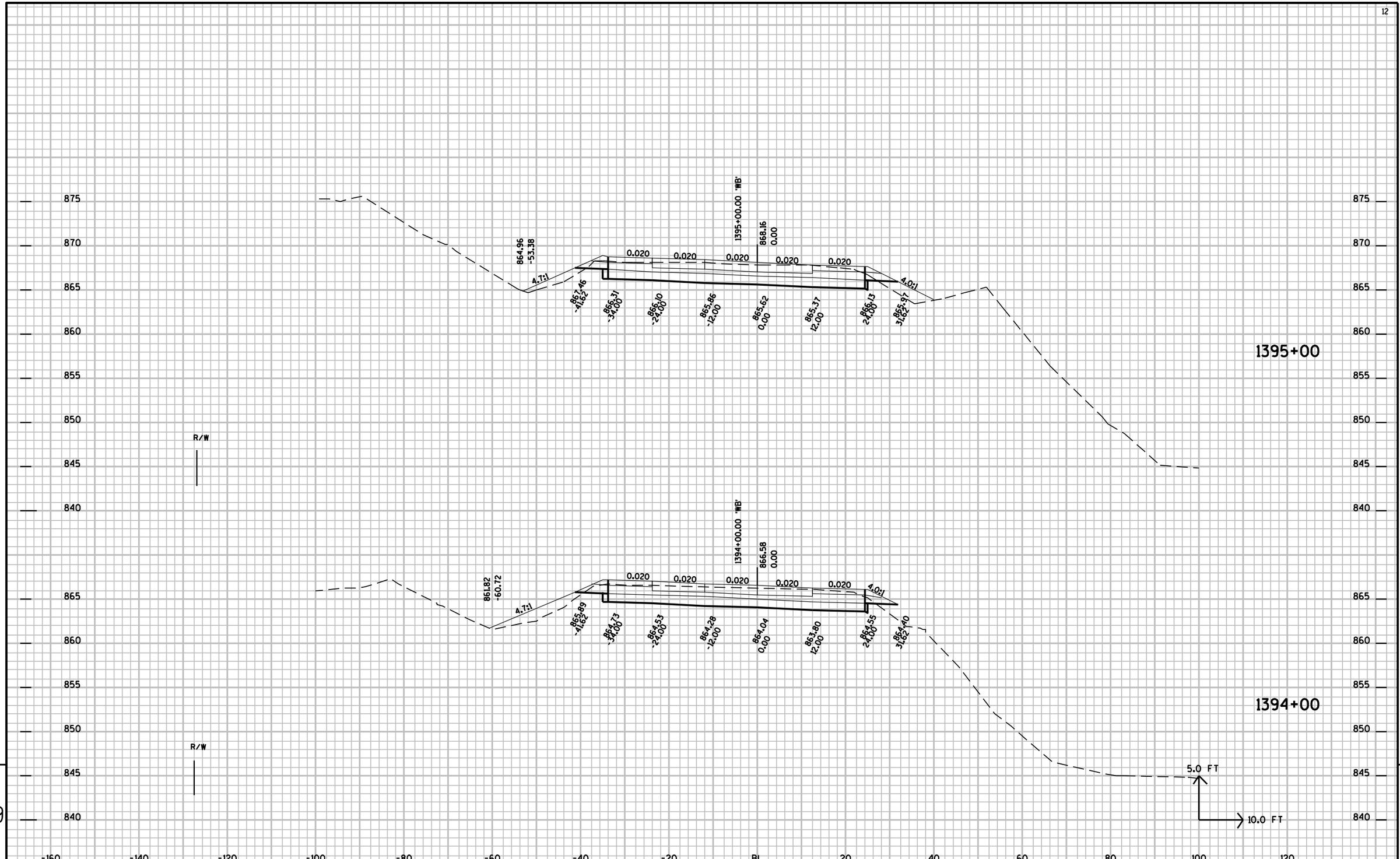
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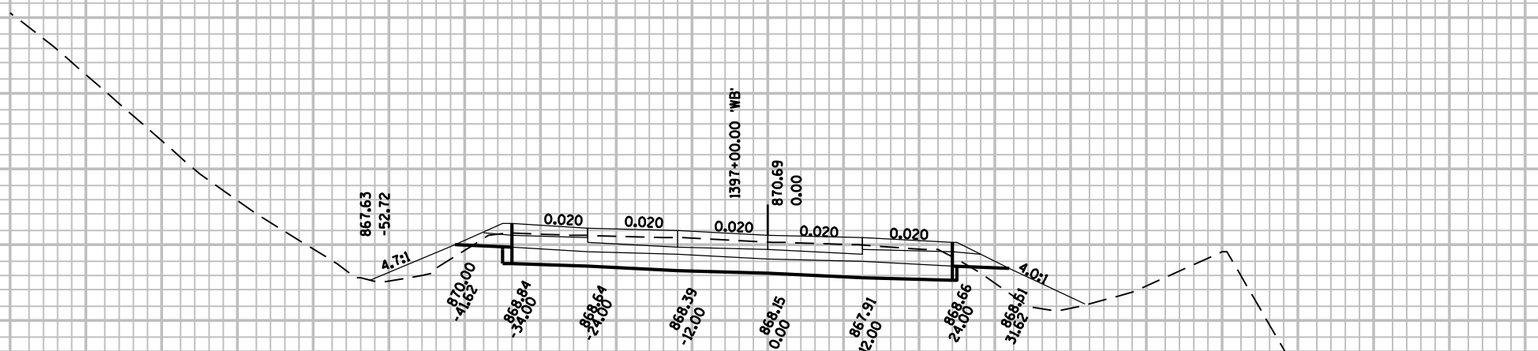


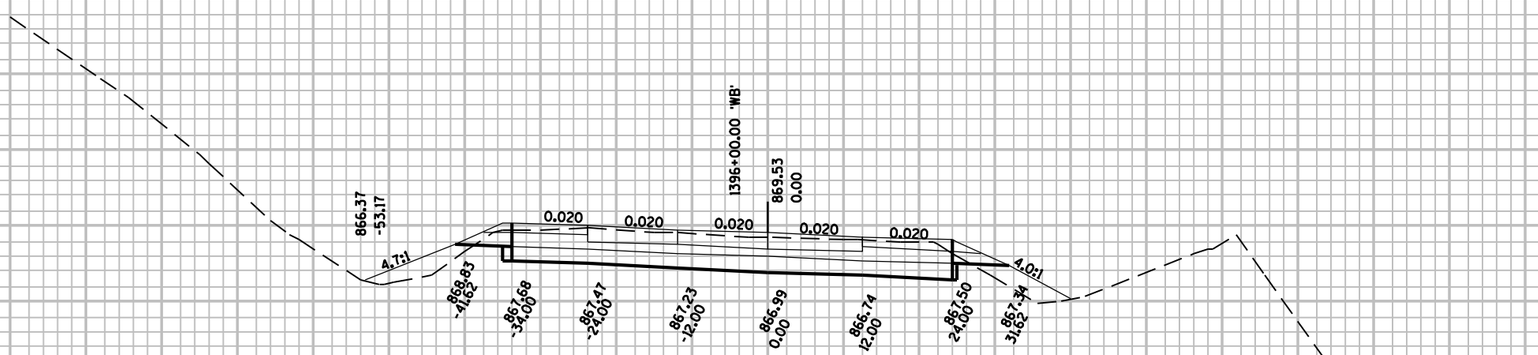
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PROJECT NO: 1010-04-72	HWY: IH-39	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET NO:	E

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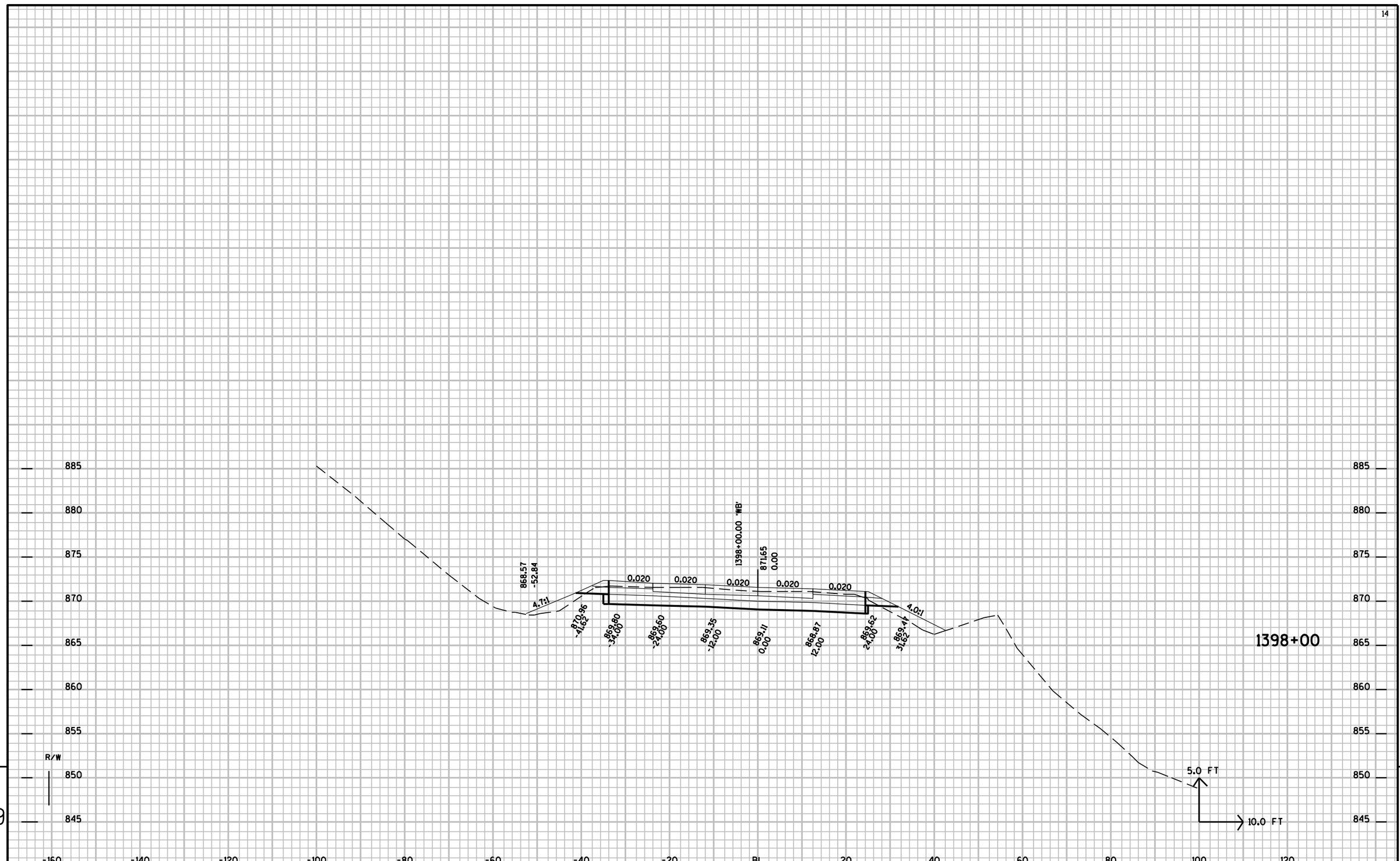


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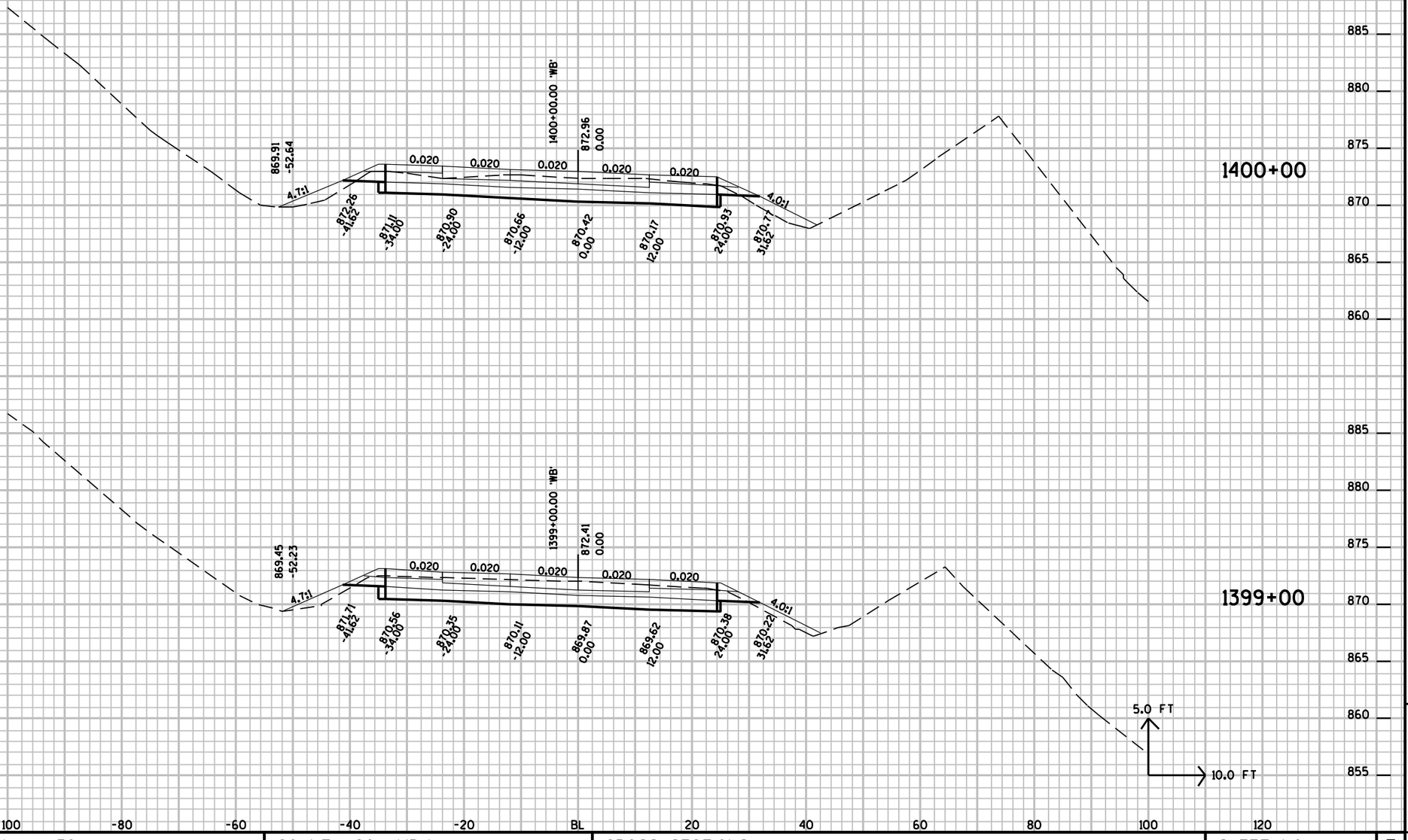
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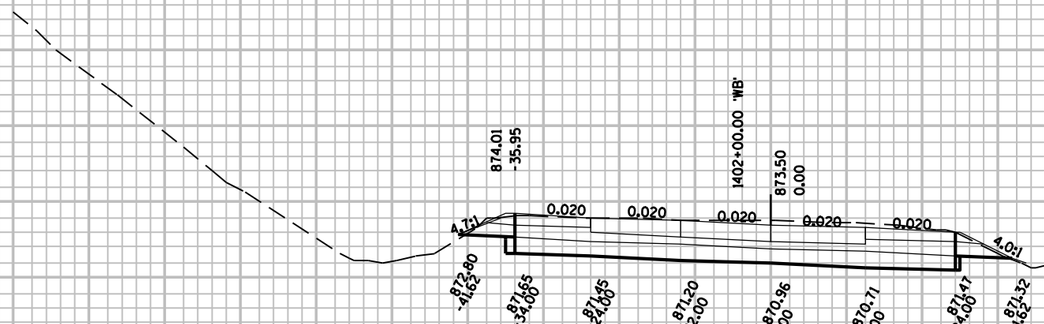
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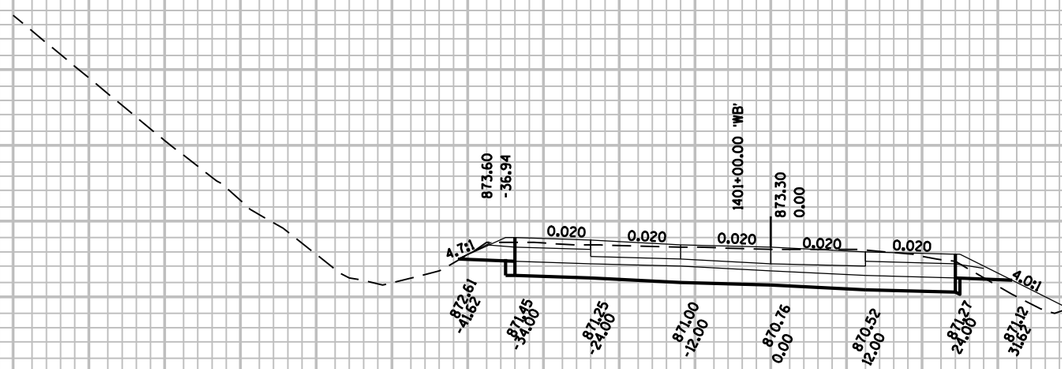


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1402+00



1401+00

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-160 -140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120

5.0 FT

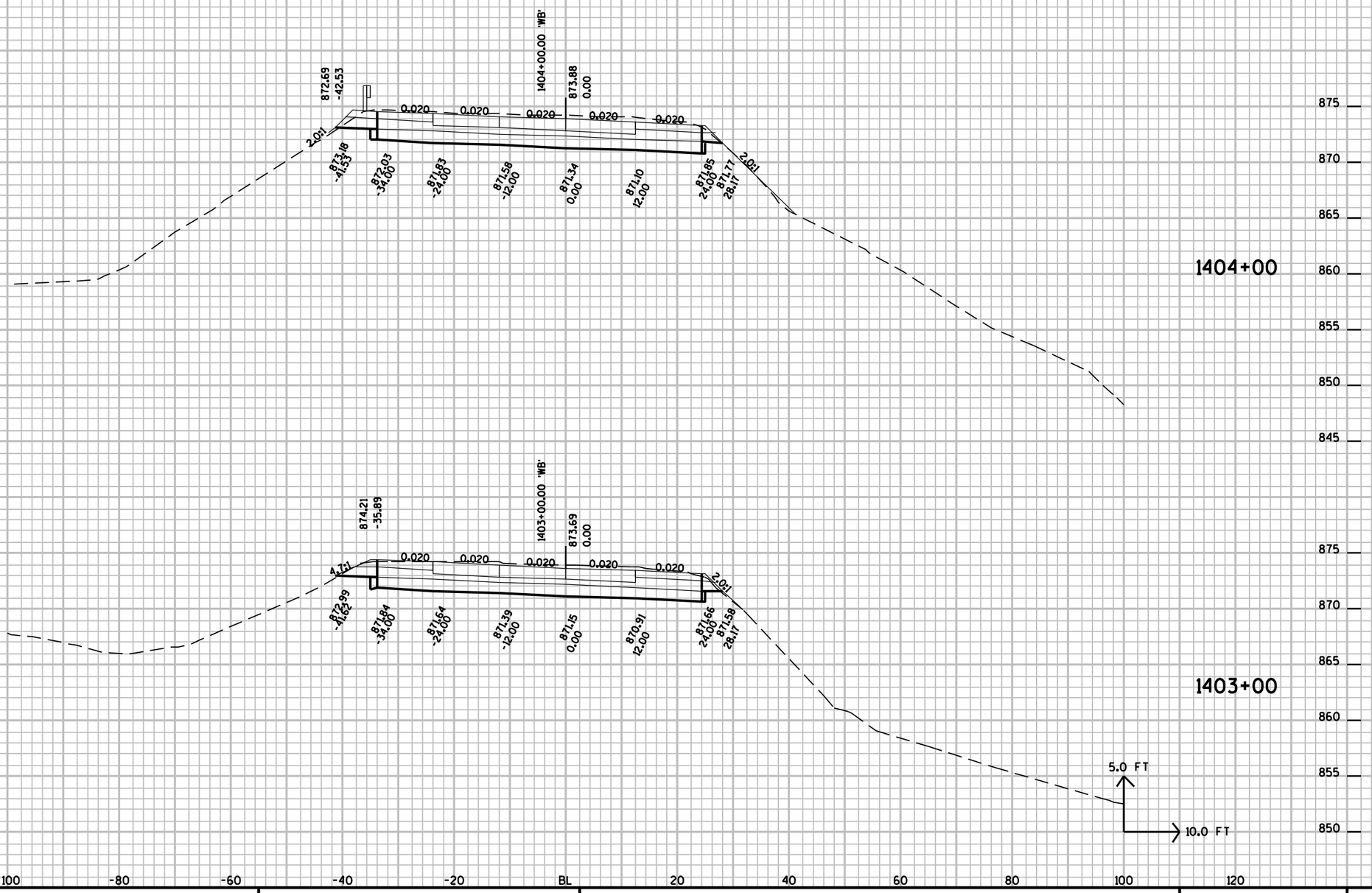
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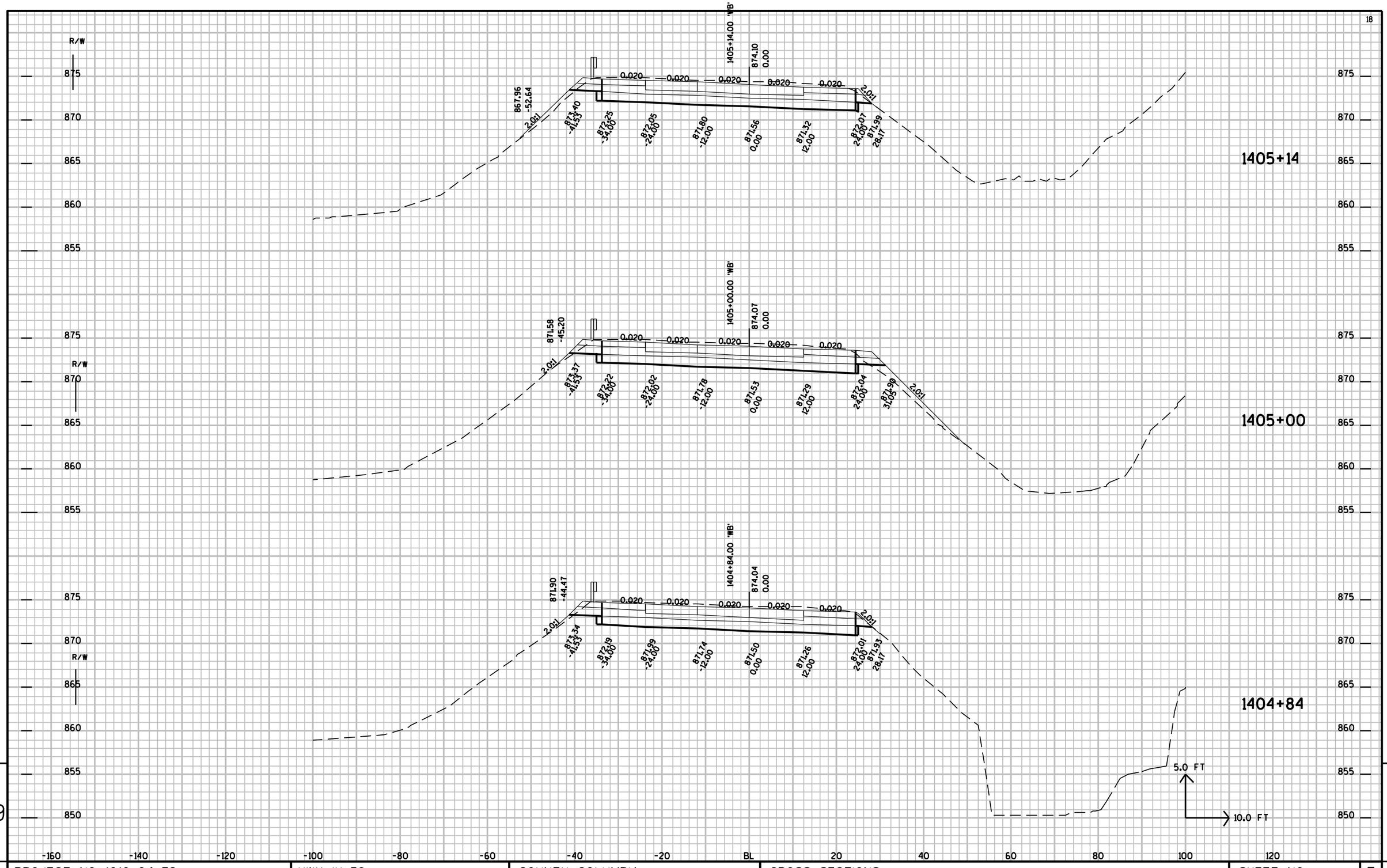


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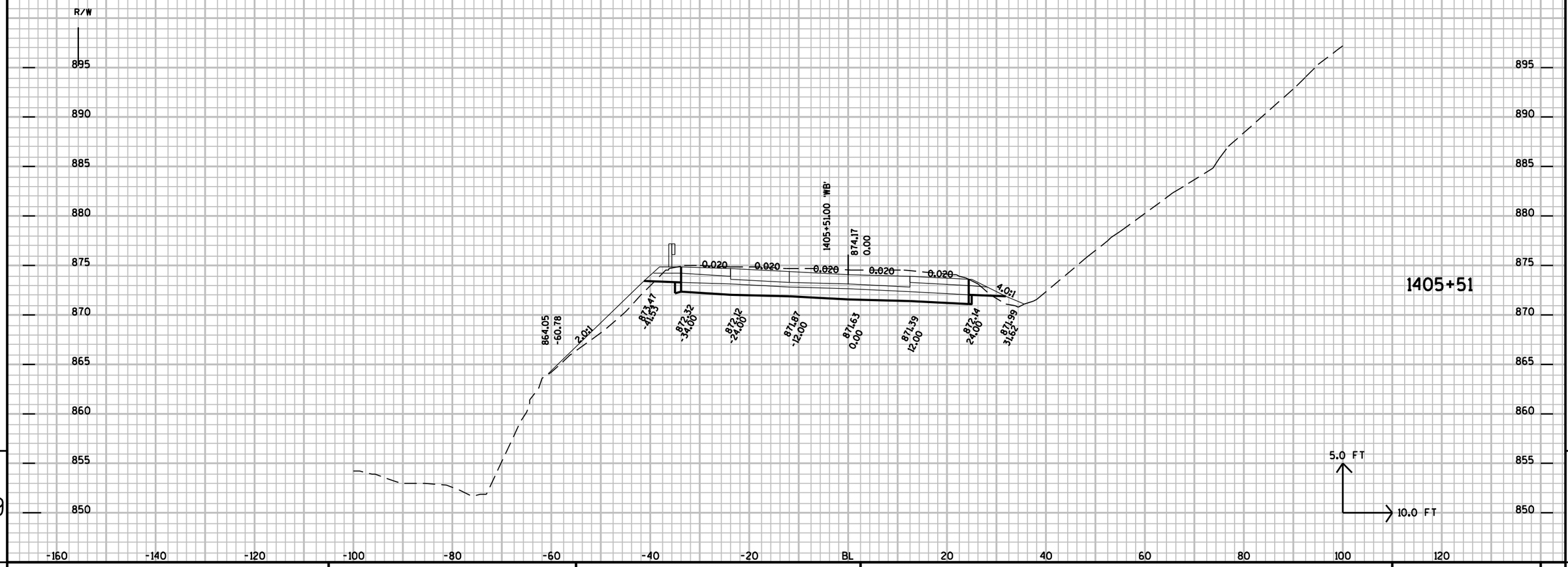
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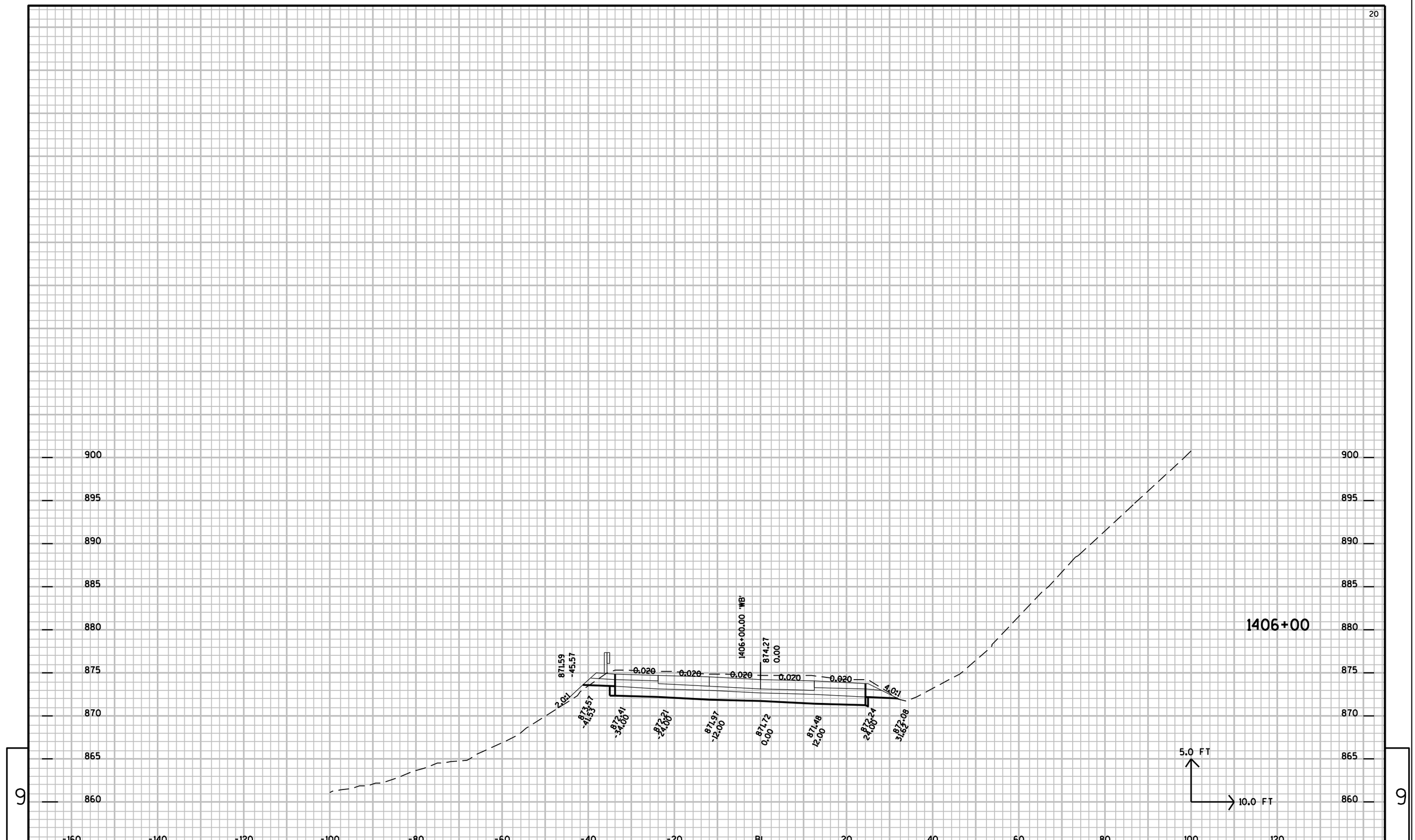
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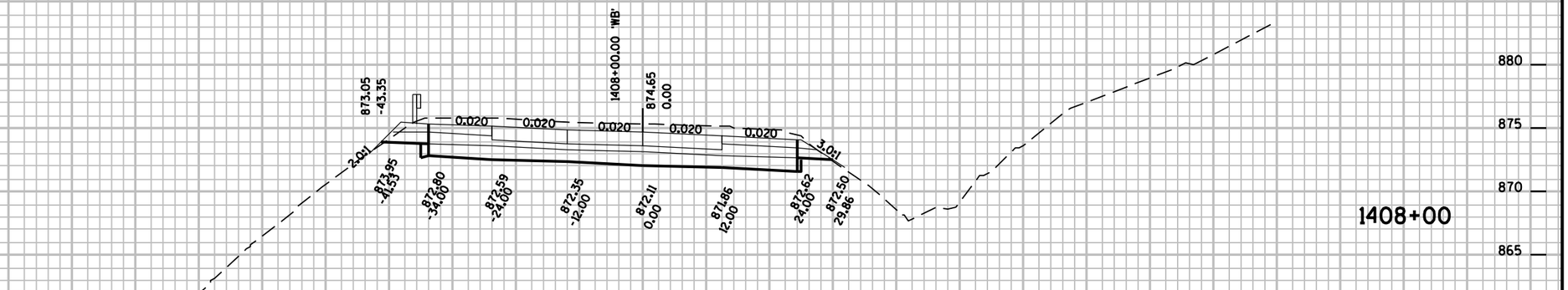
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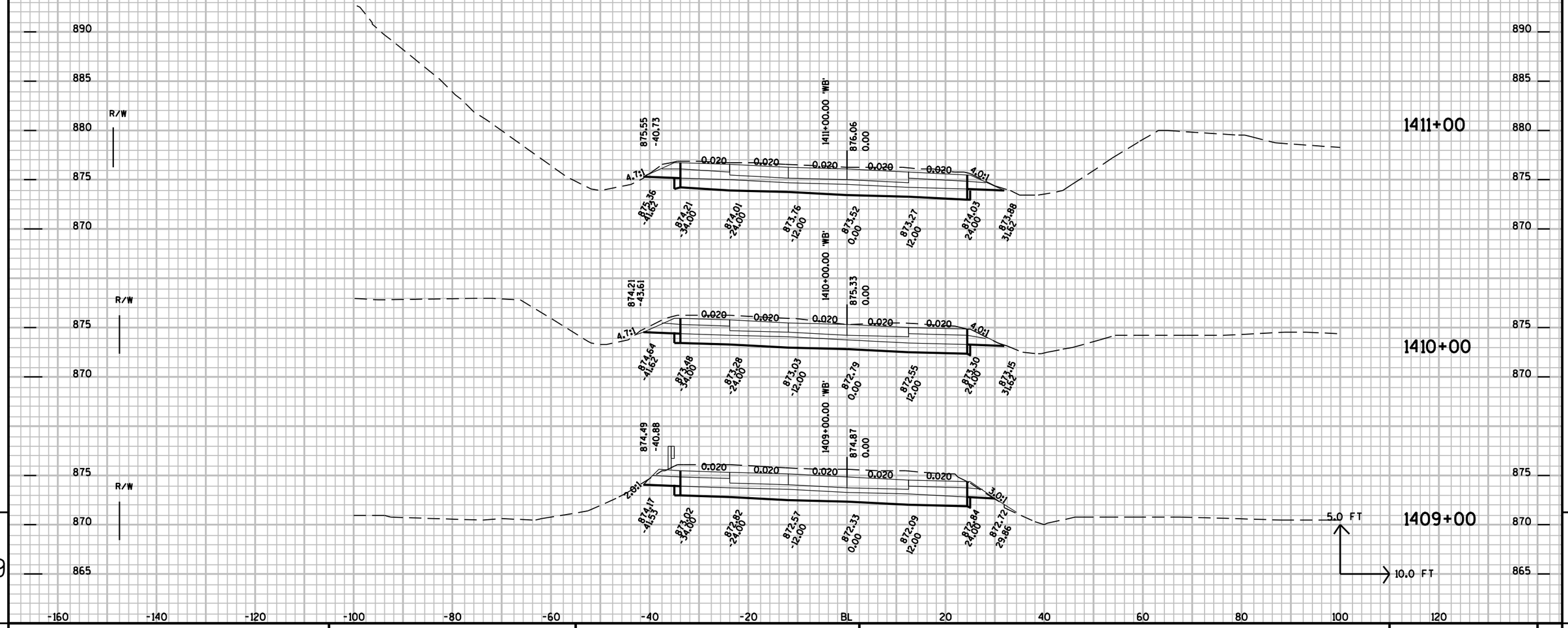
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9 9

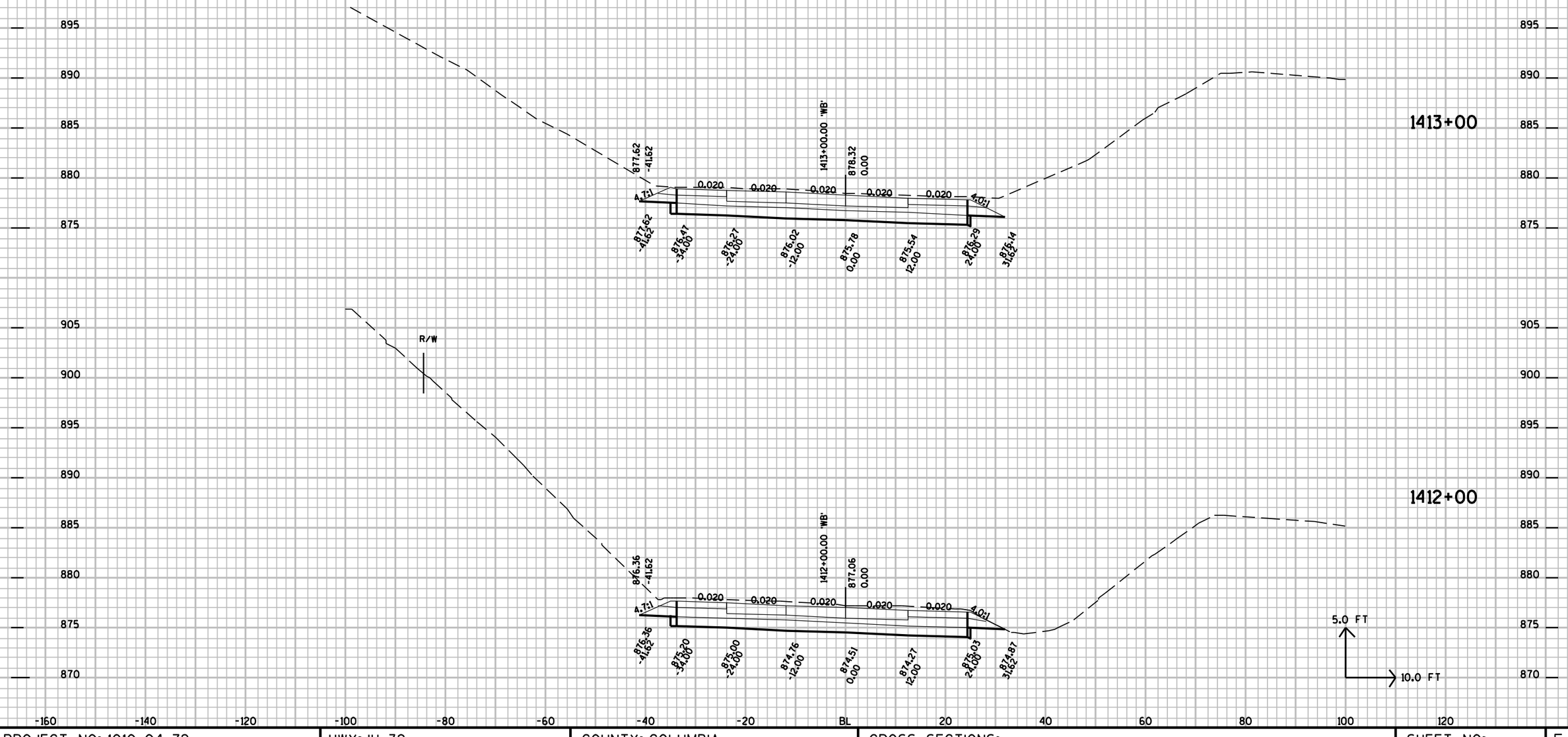
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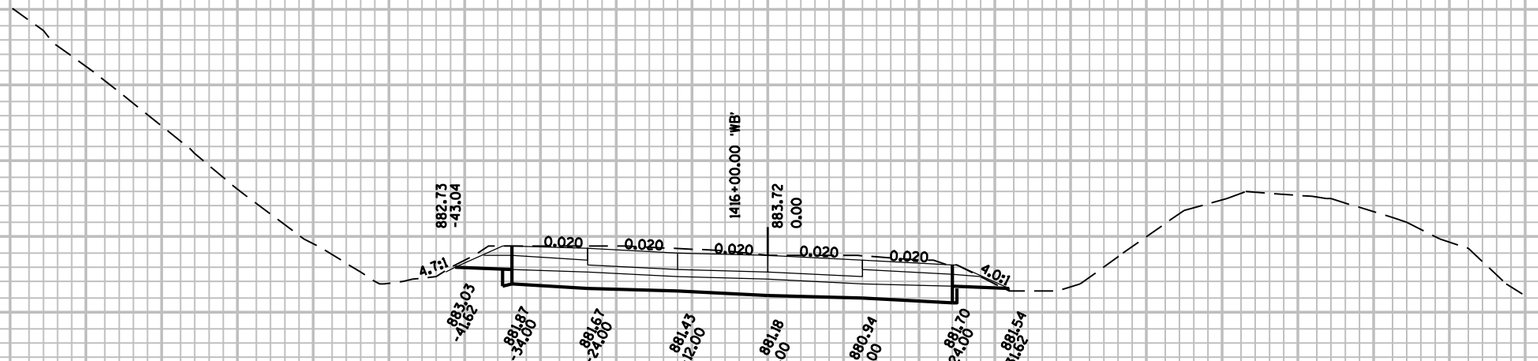
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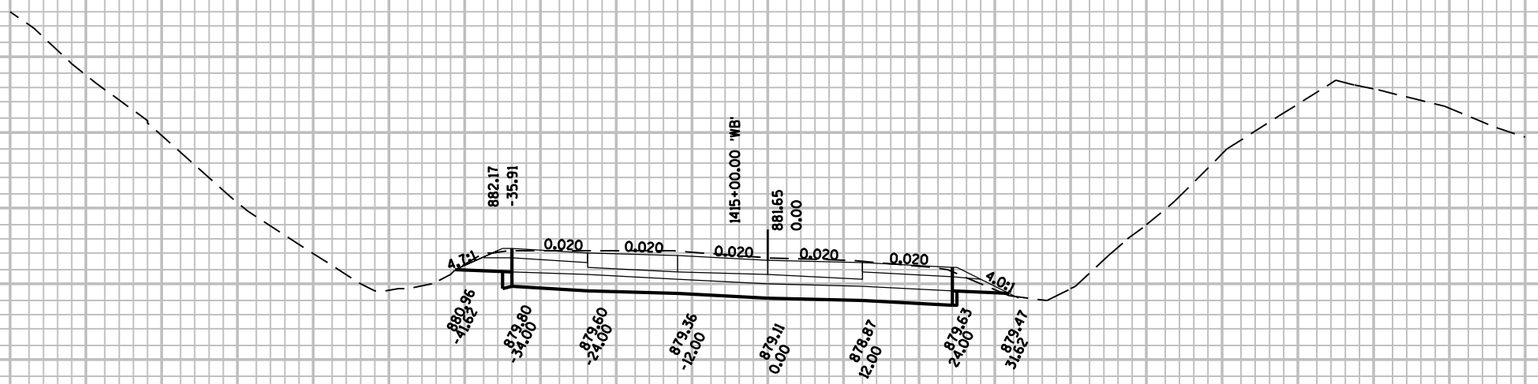
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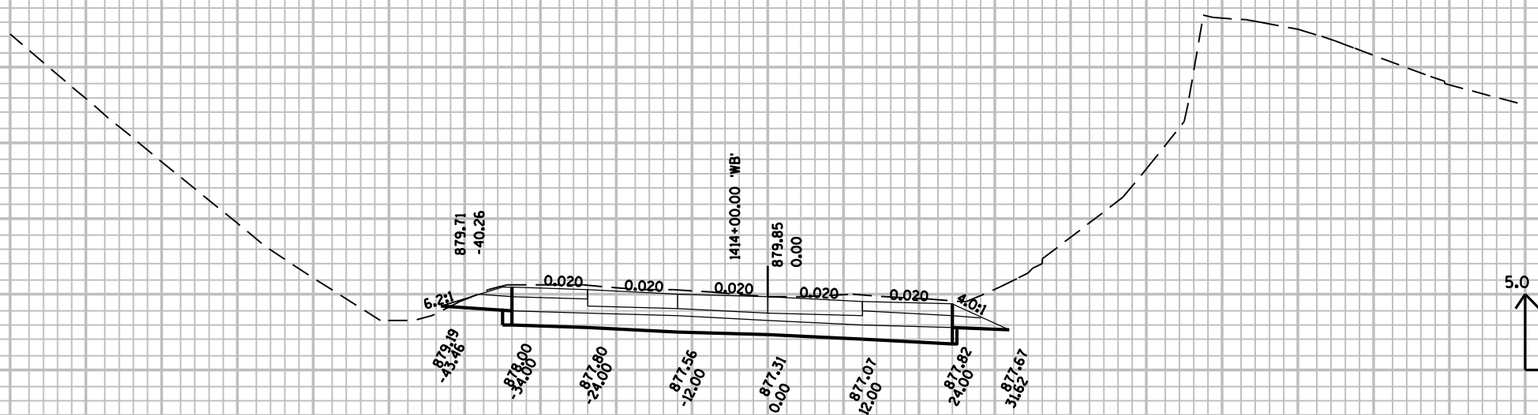


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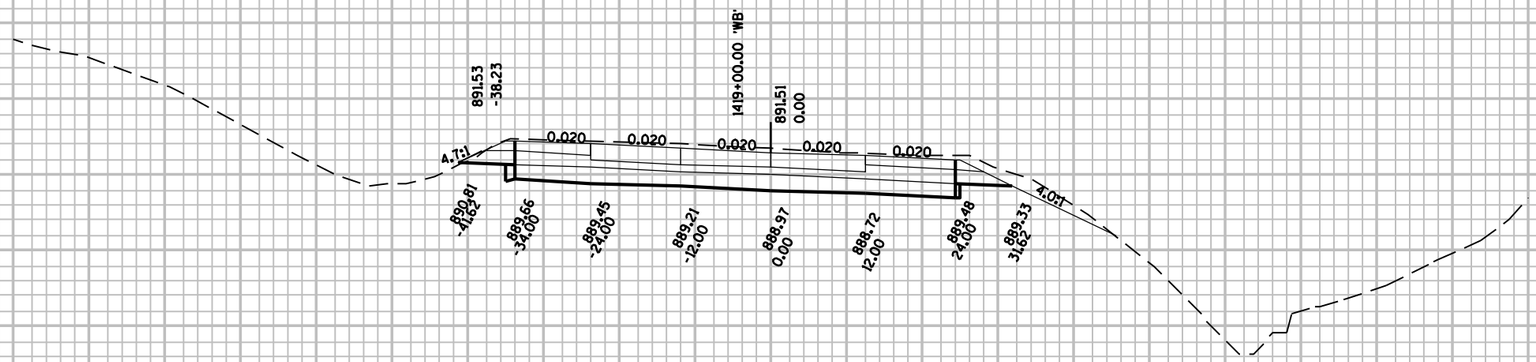
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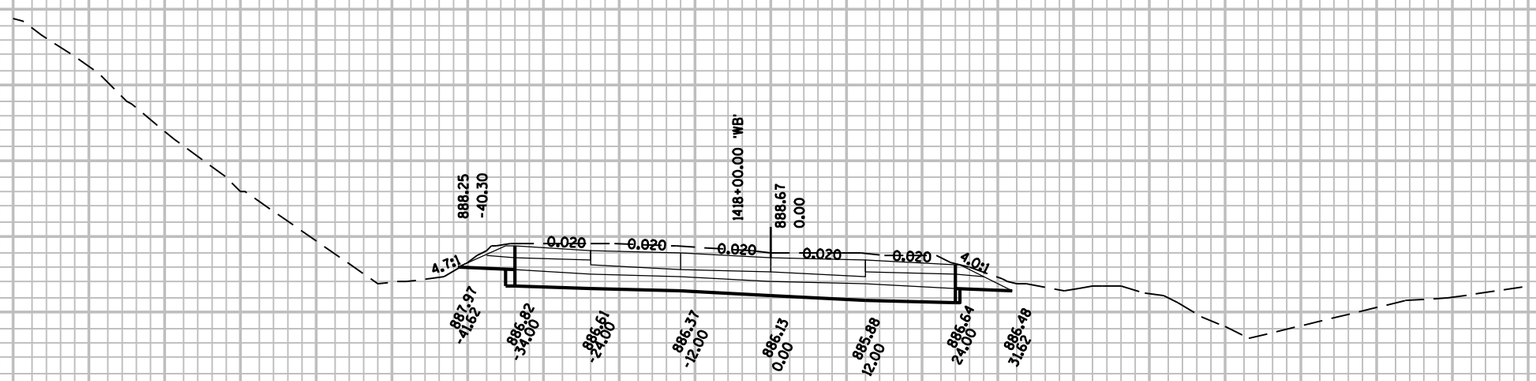
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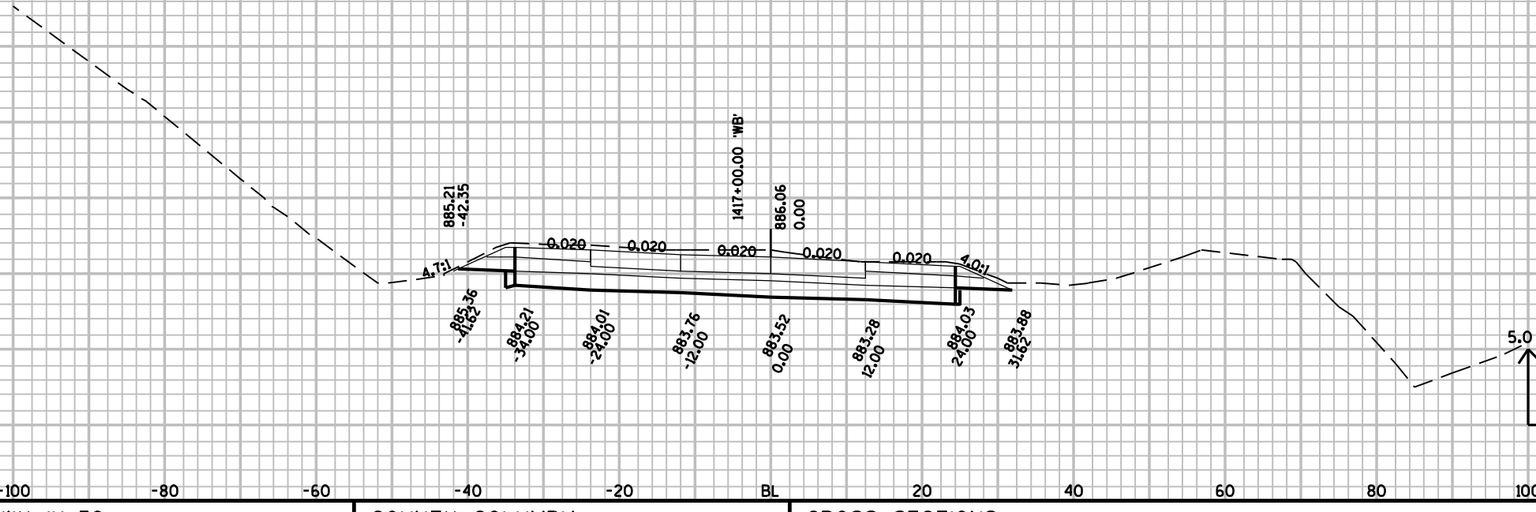
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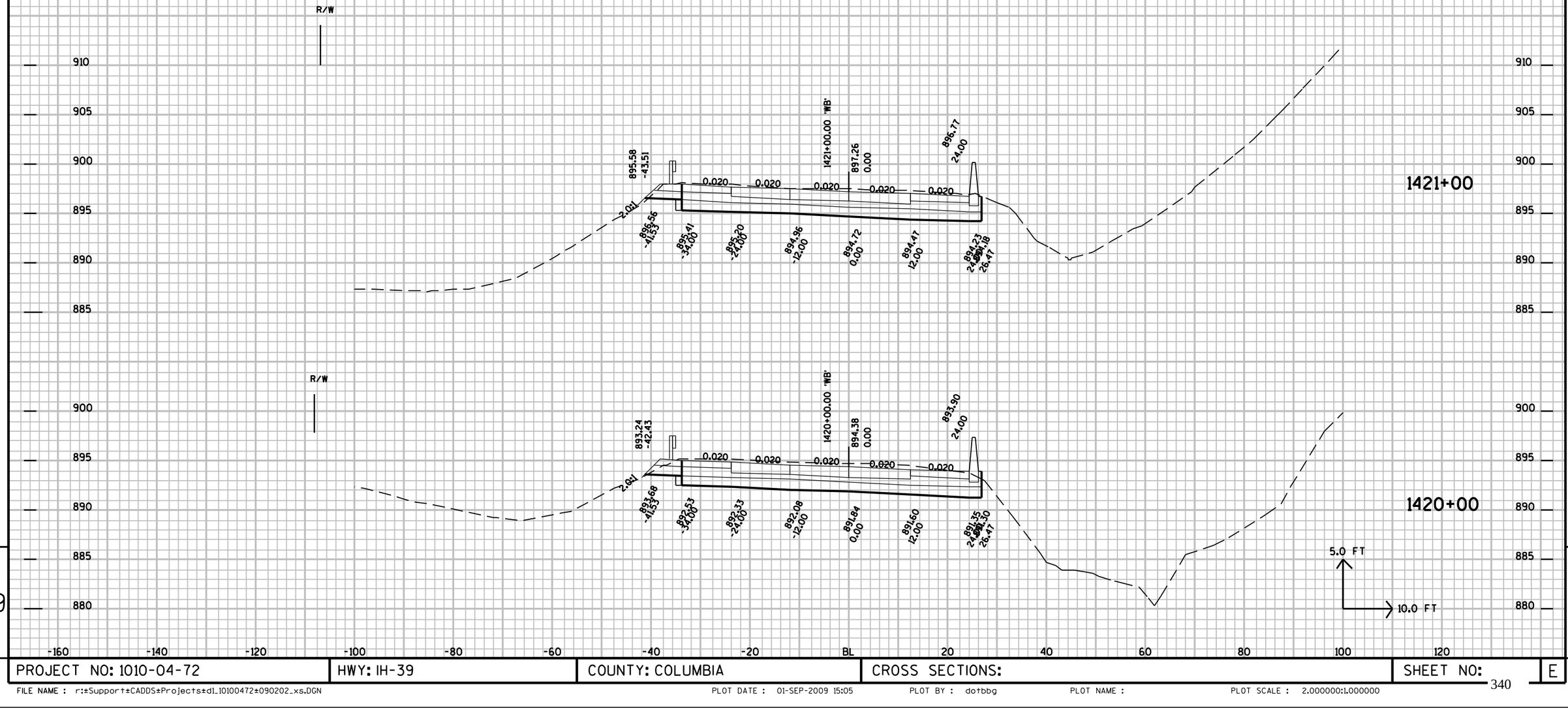


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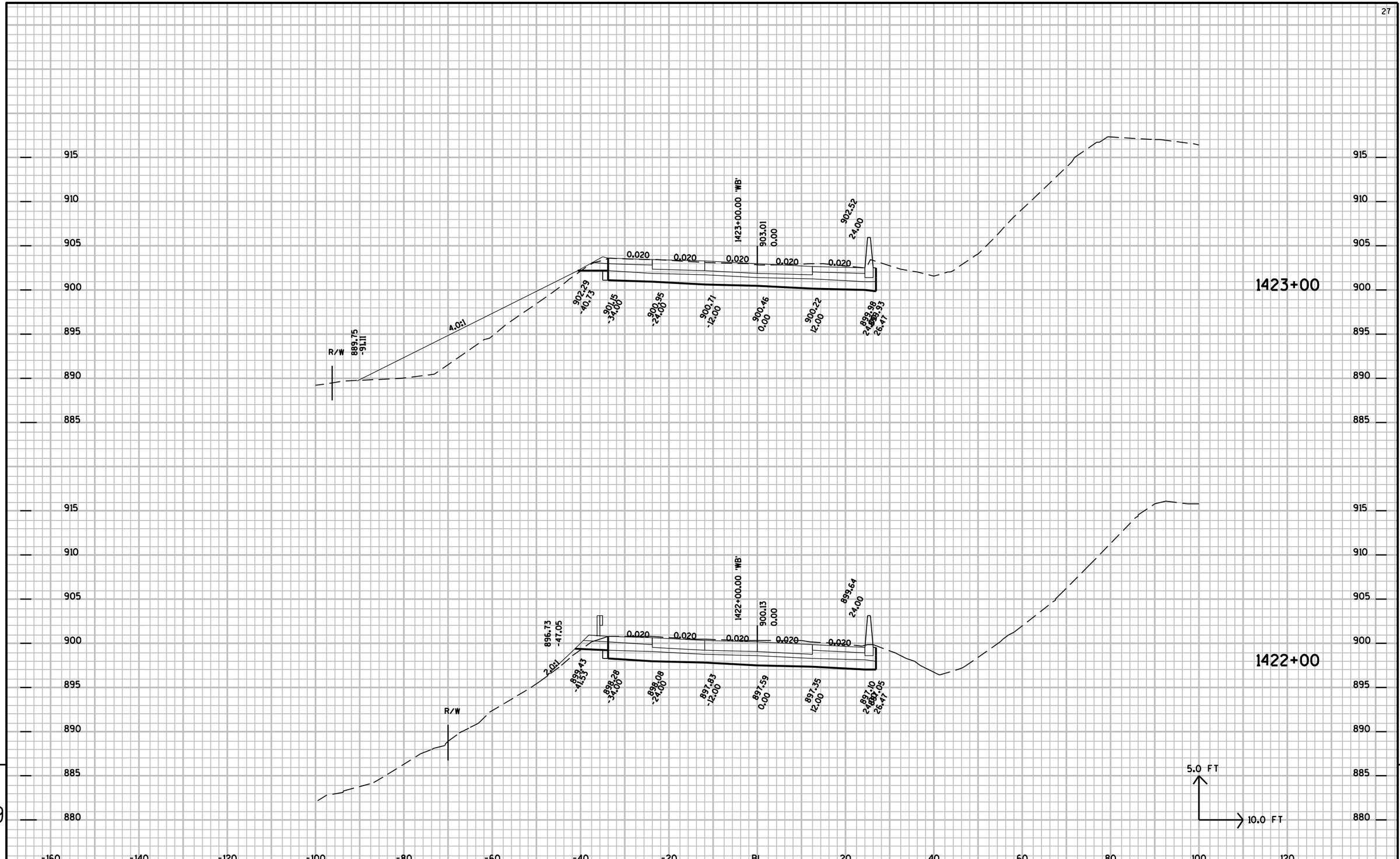
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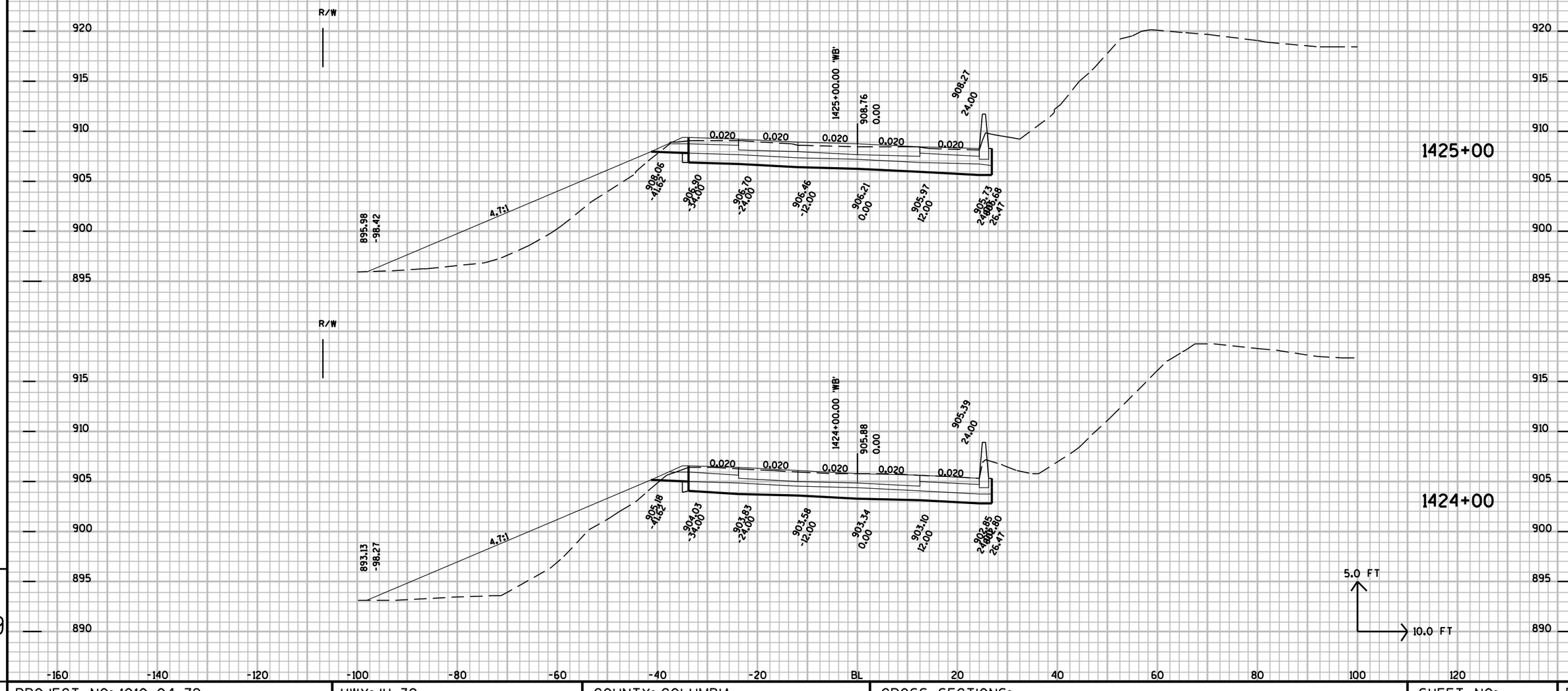
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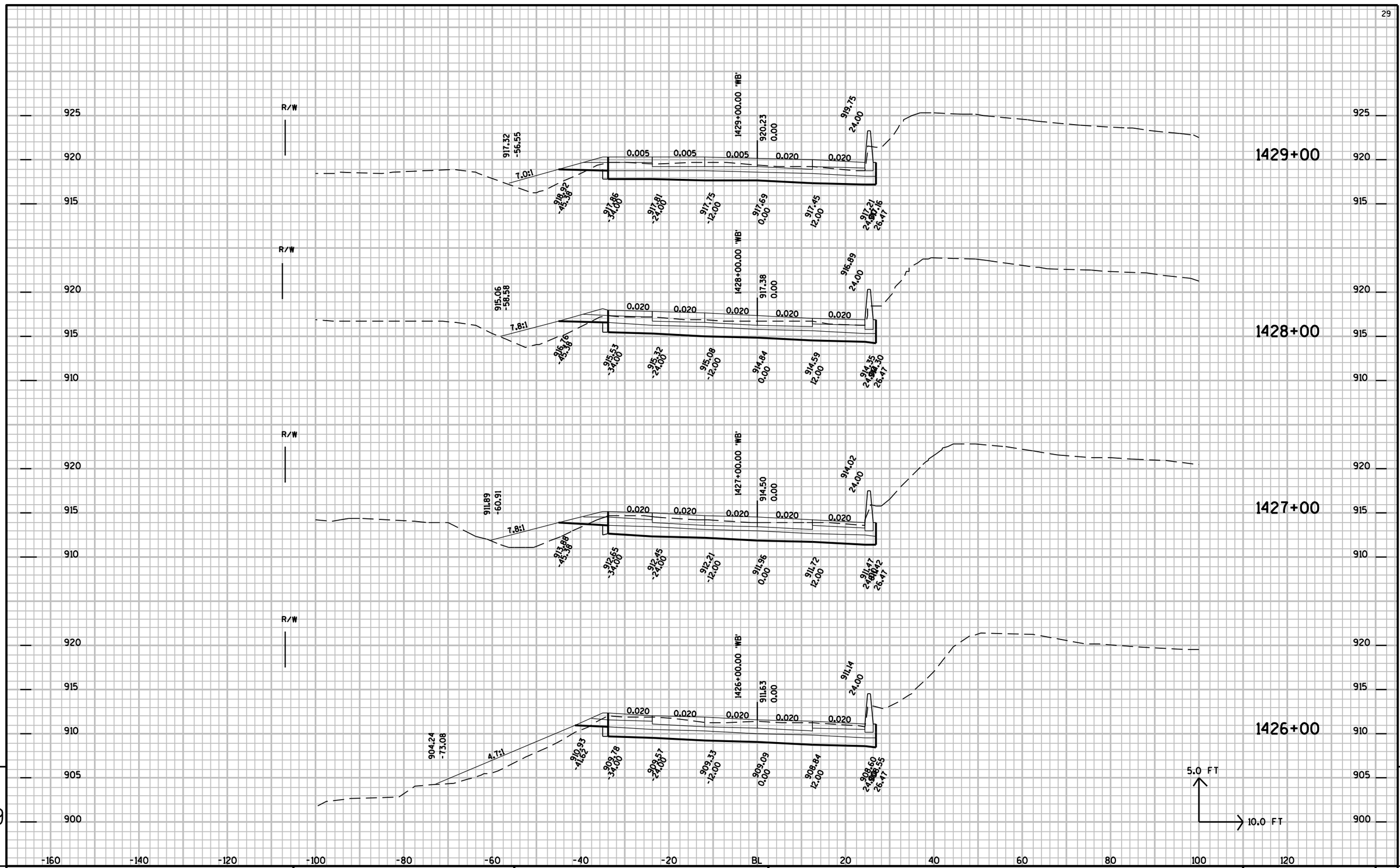
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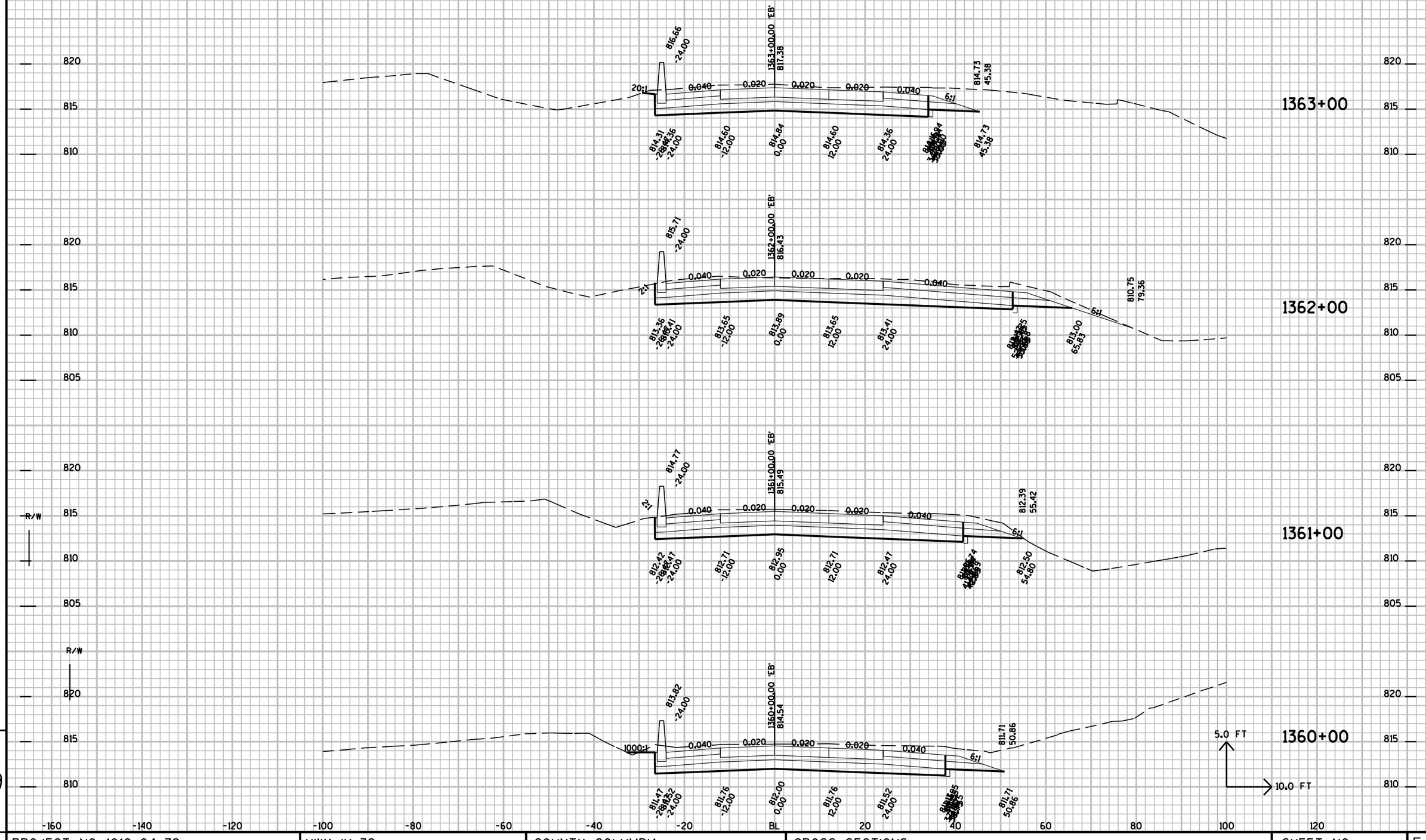
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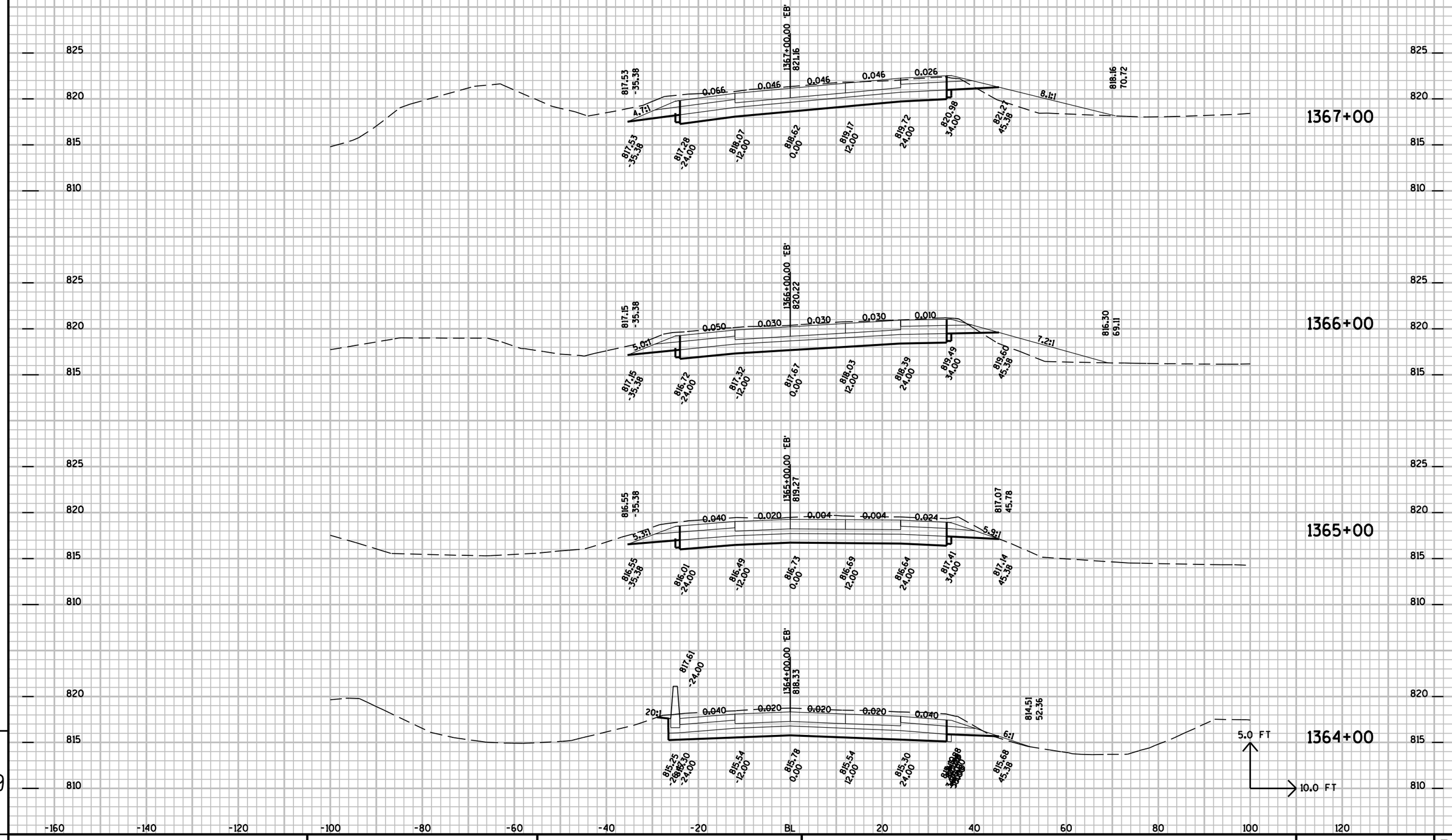
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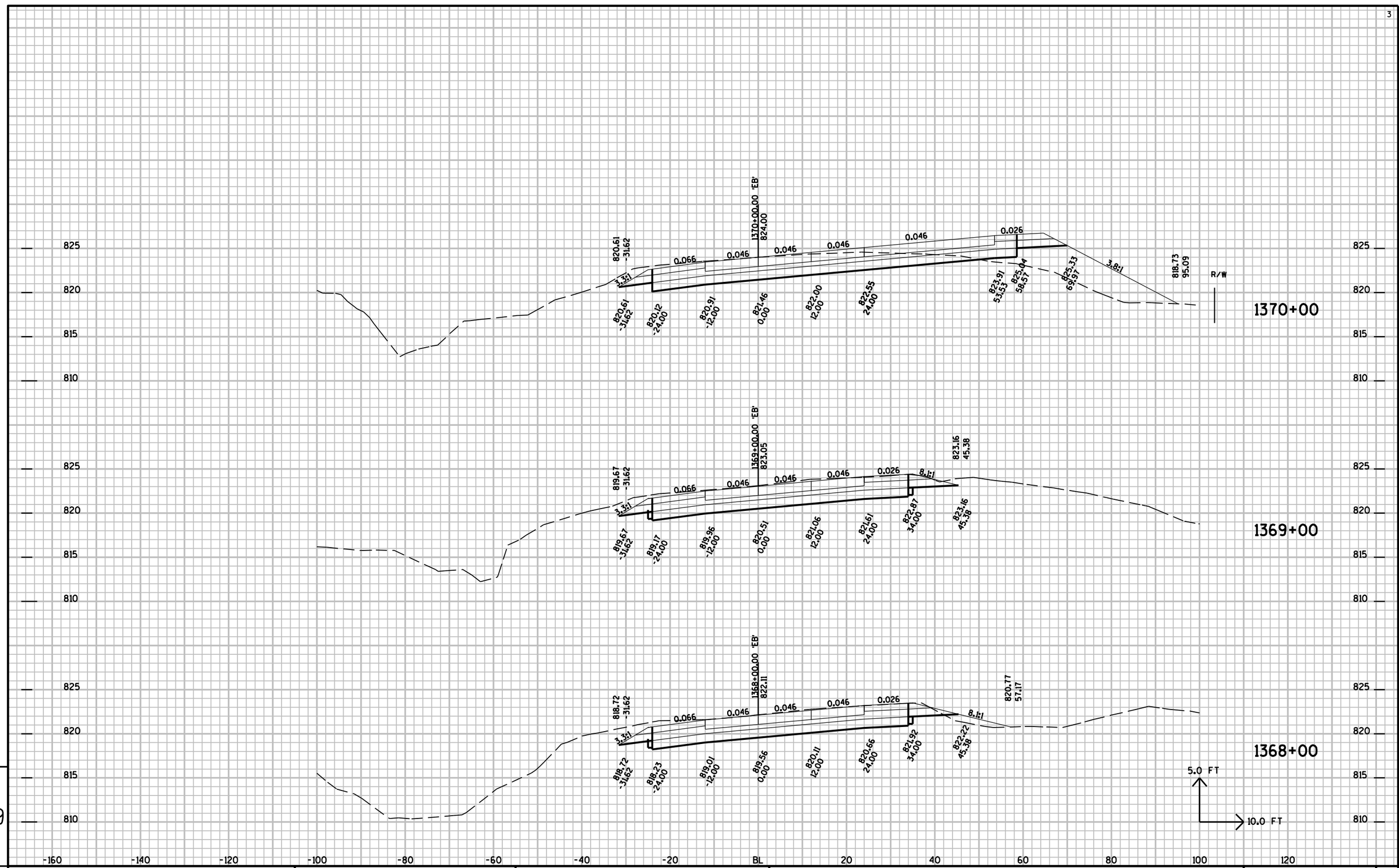
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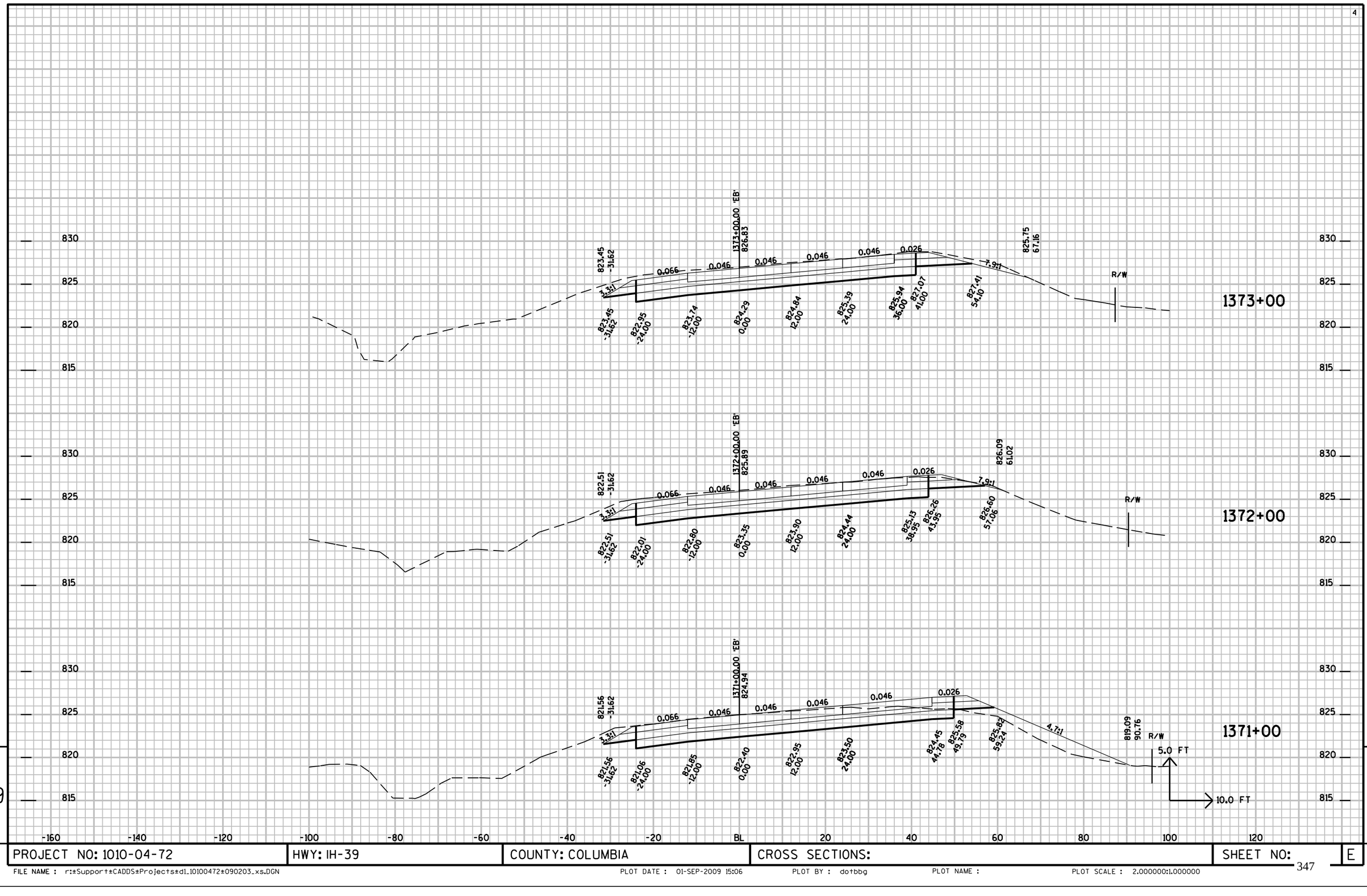
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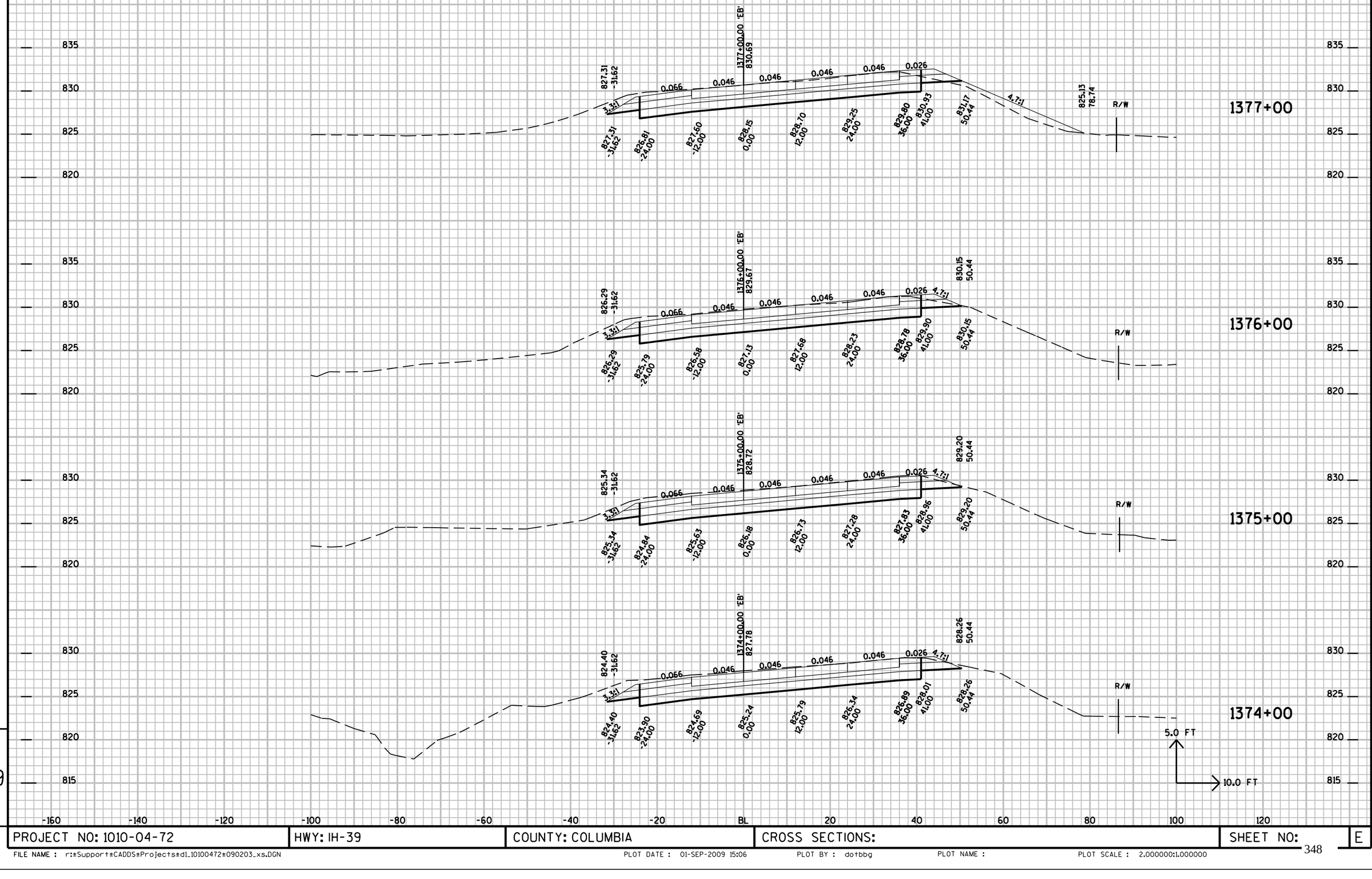
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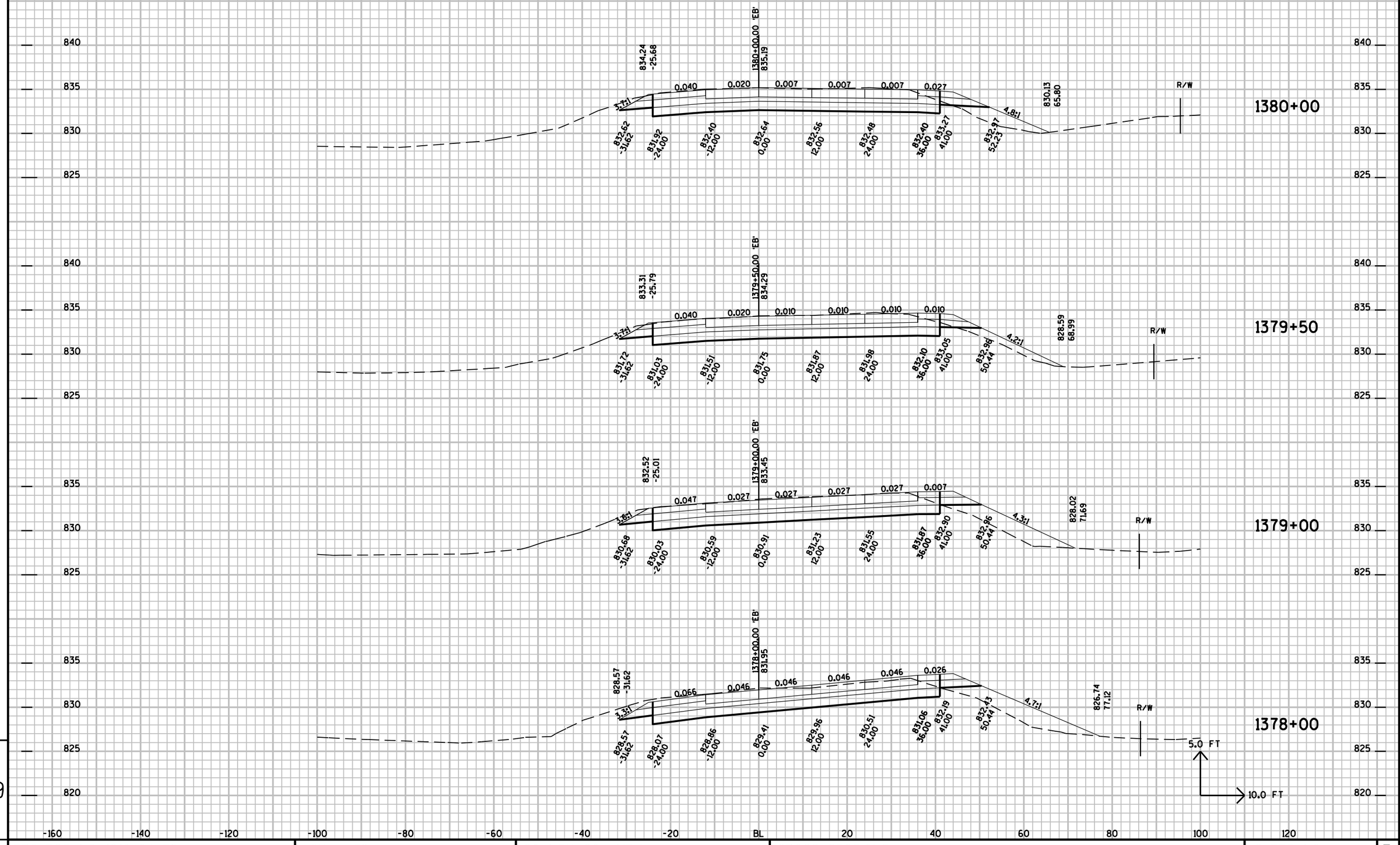
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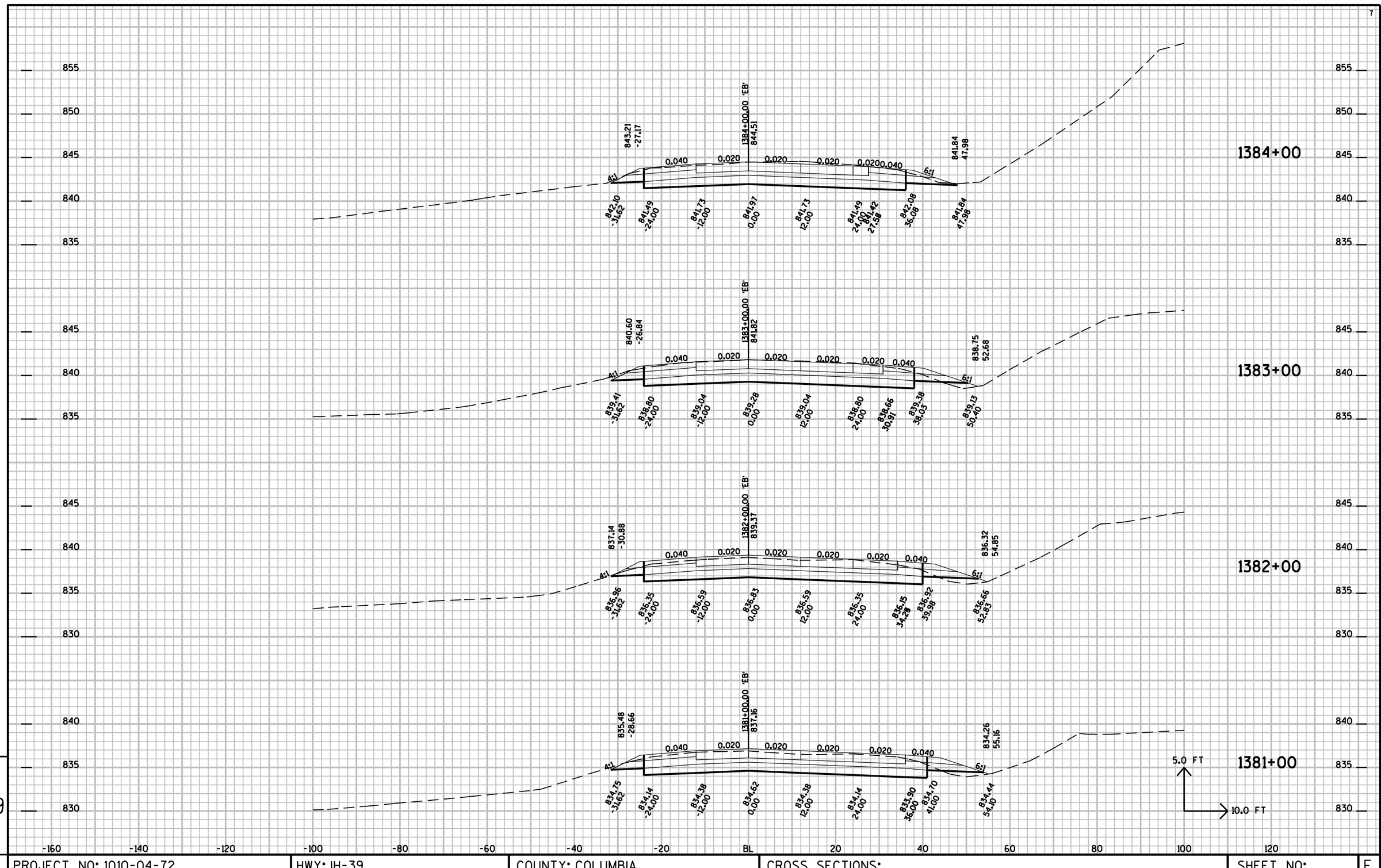
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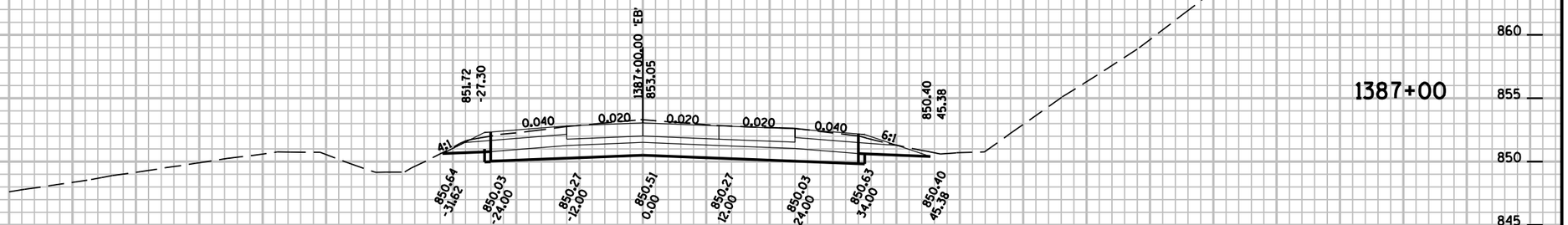


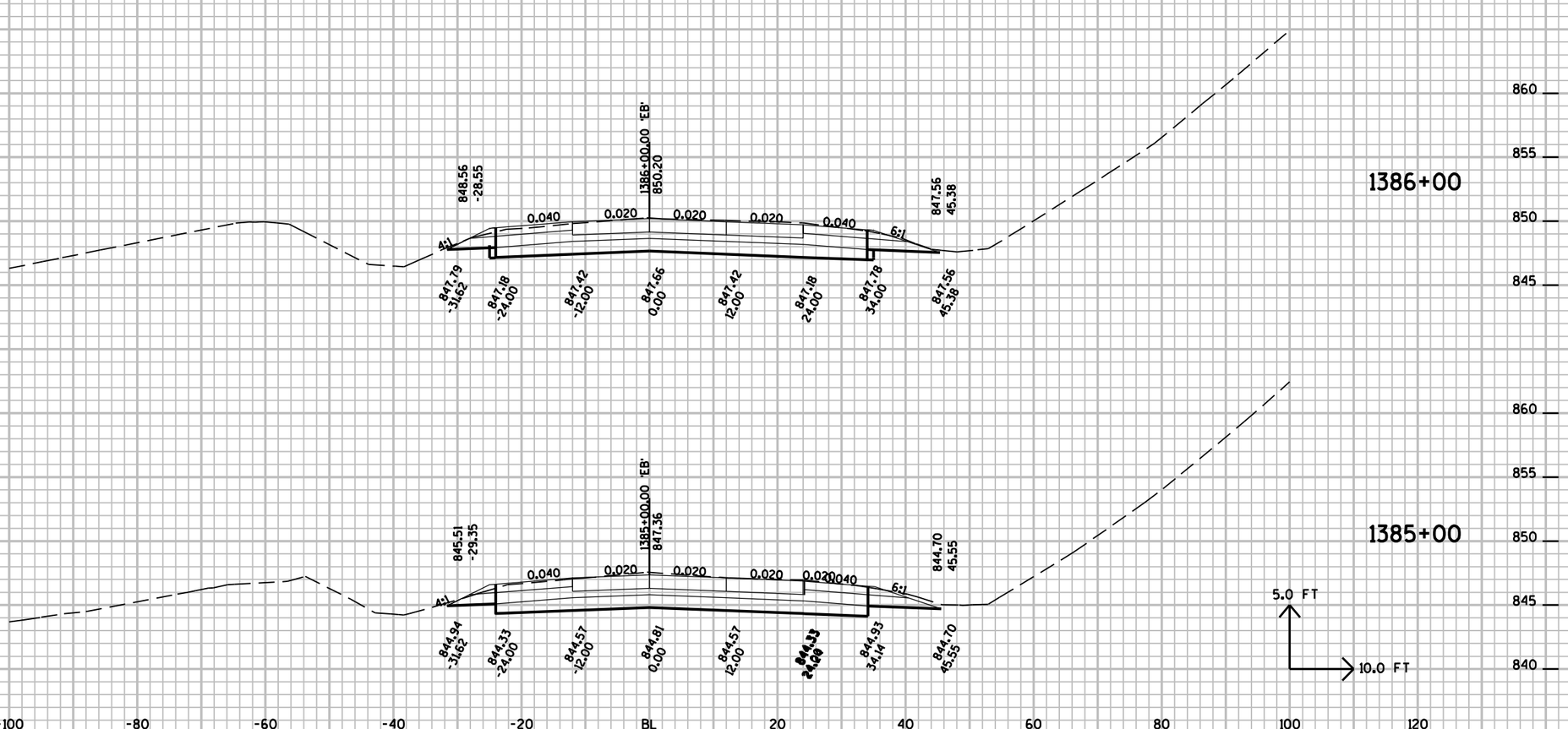
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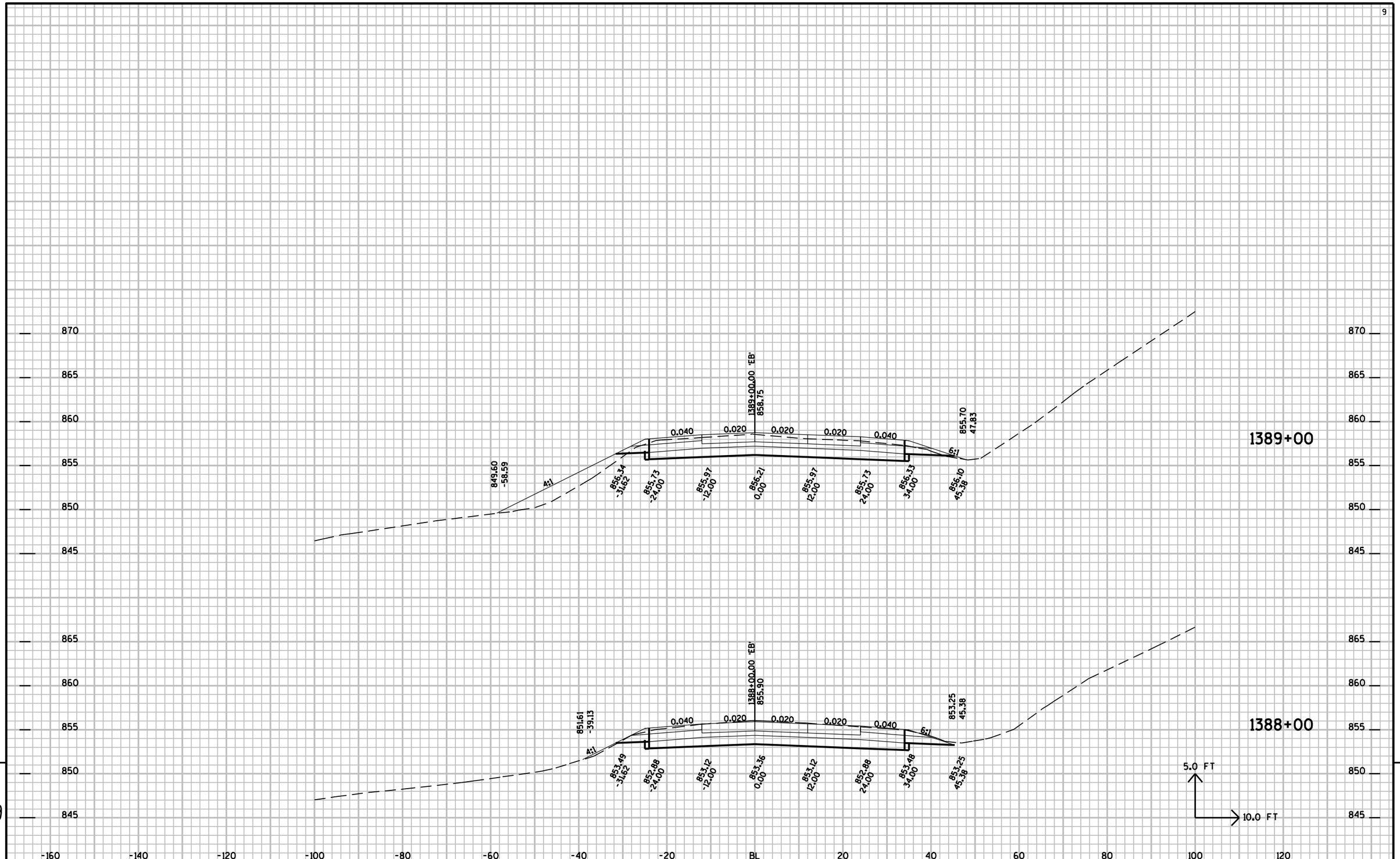
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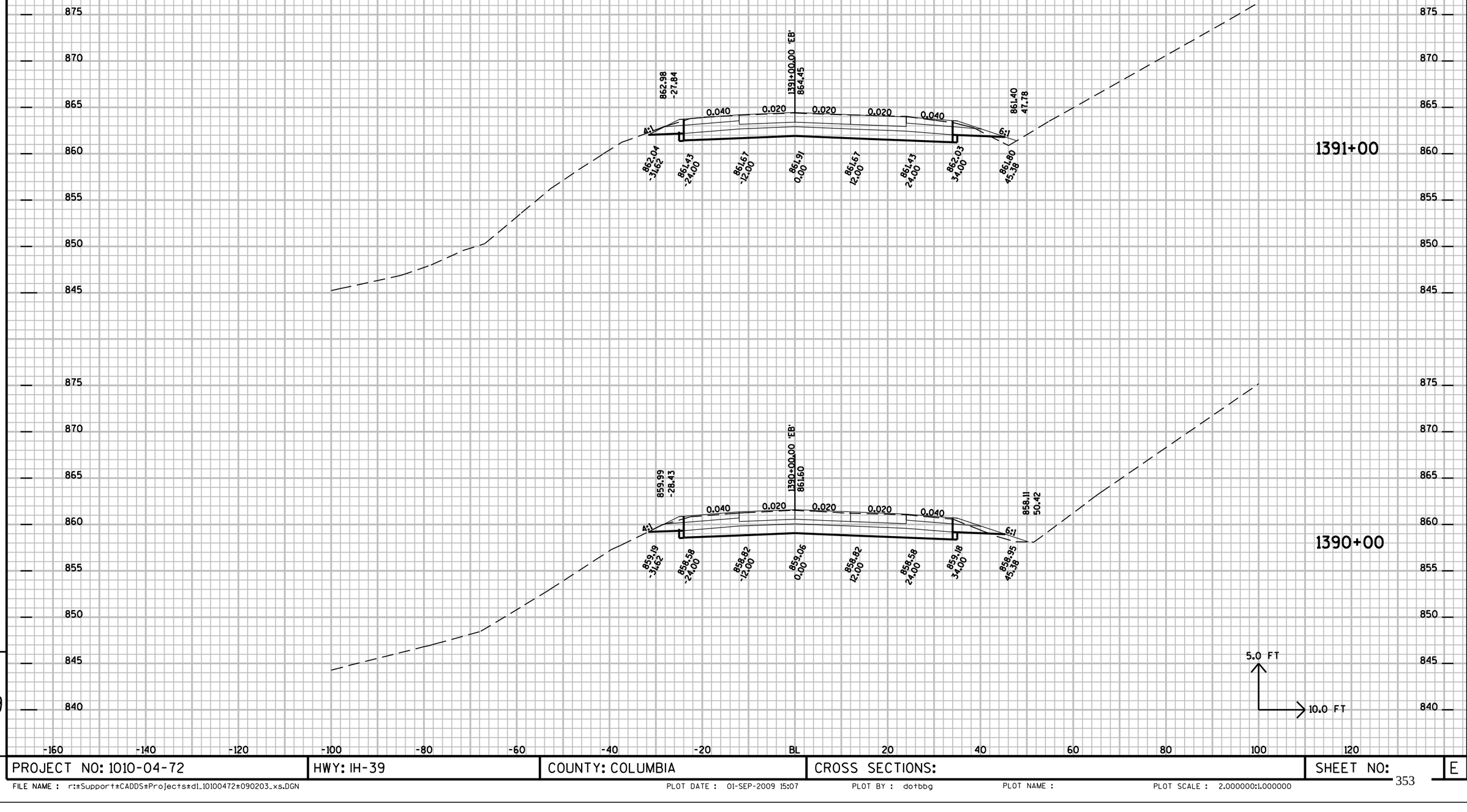
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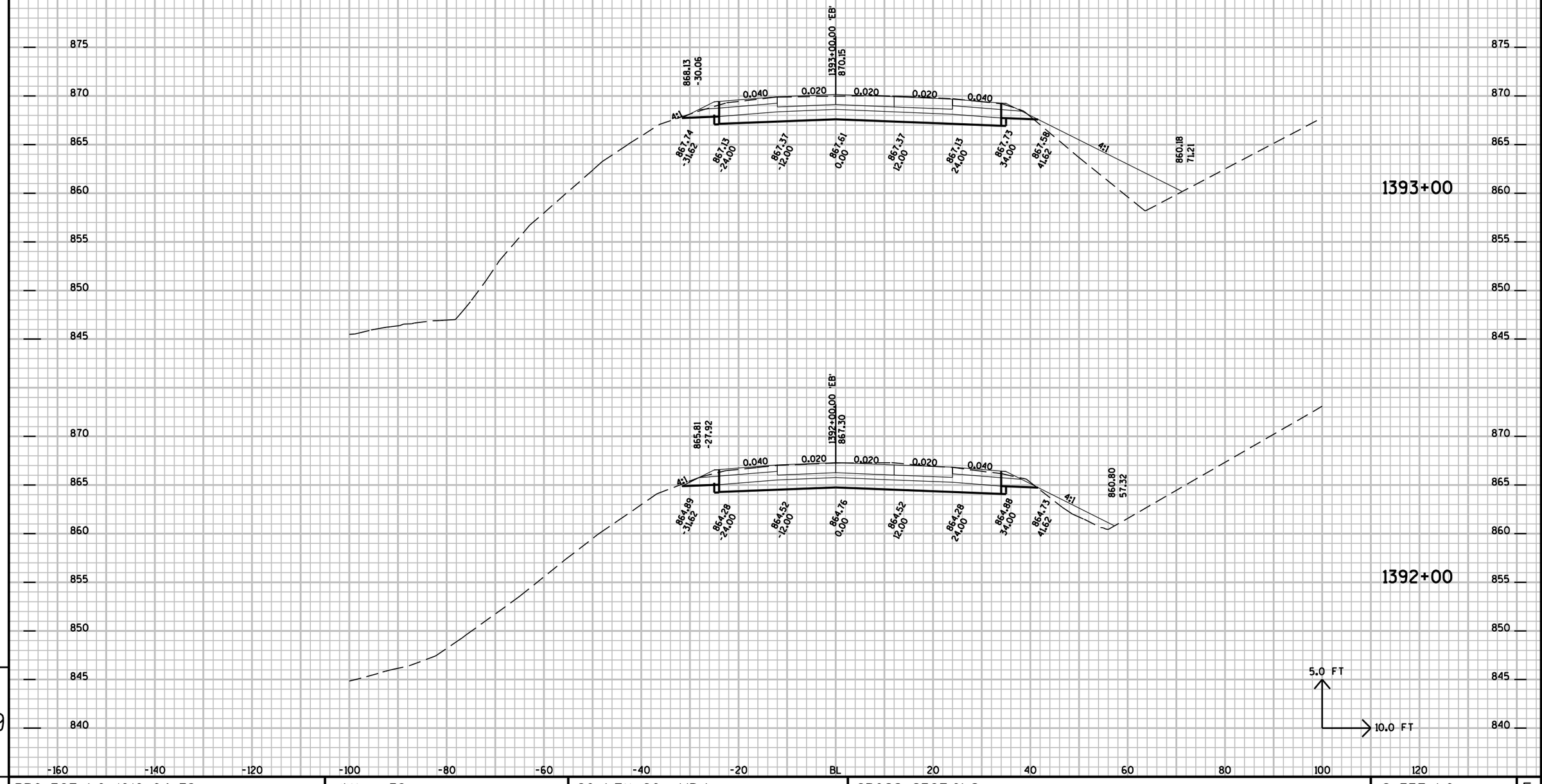


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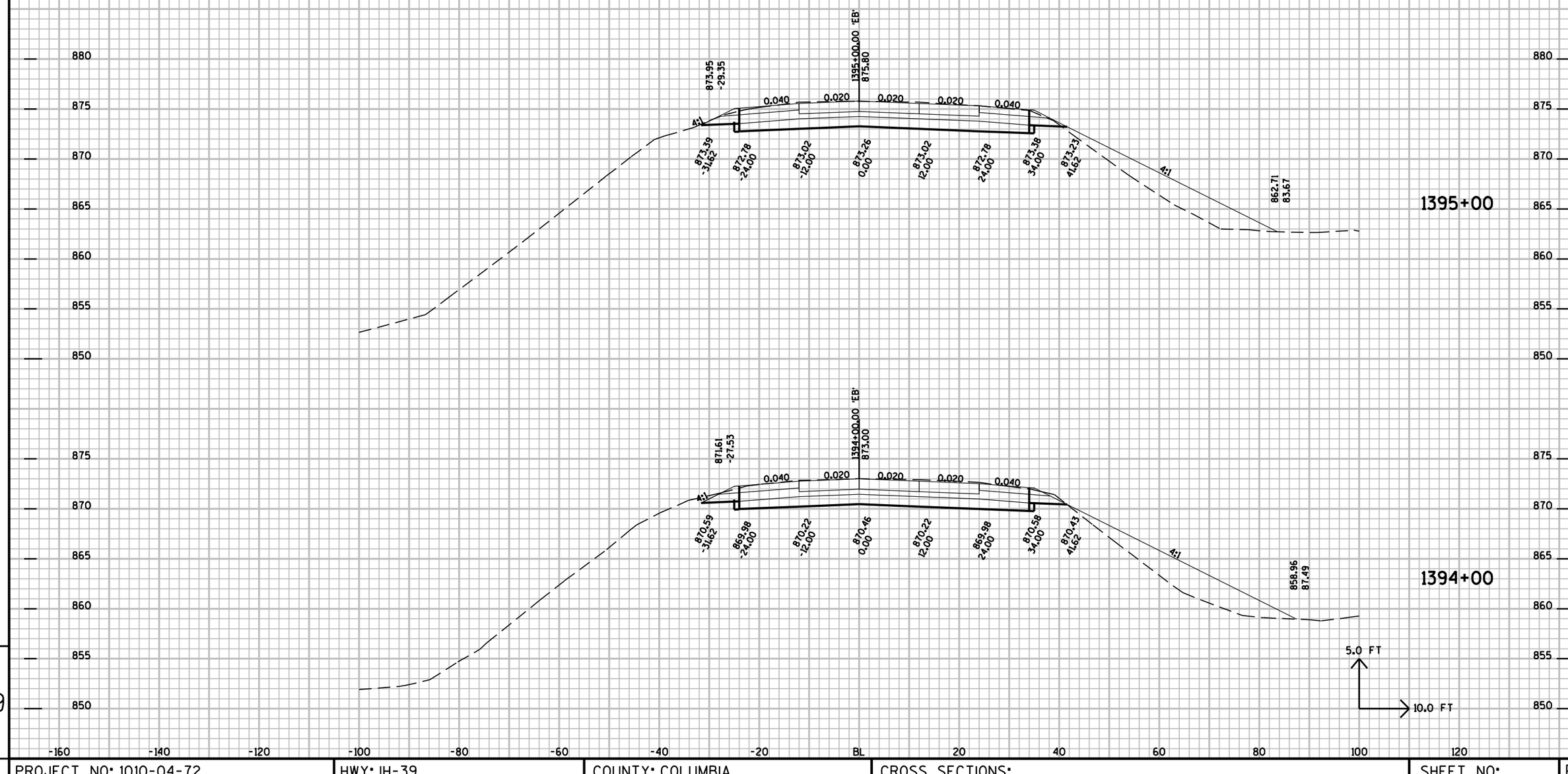


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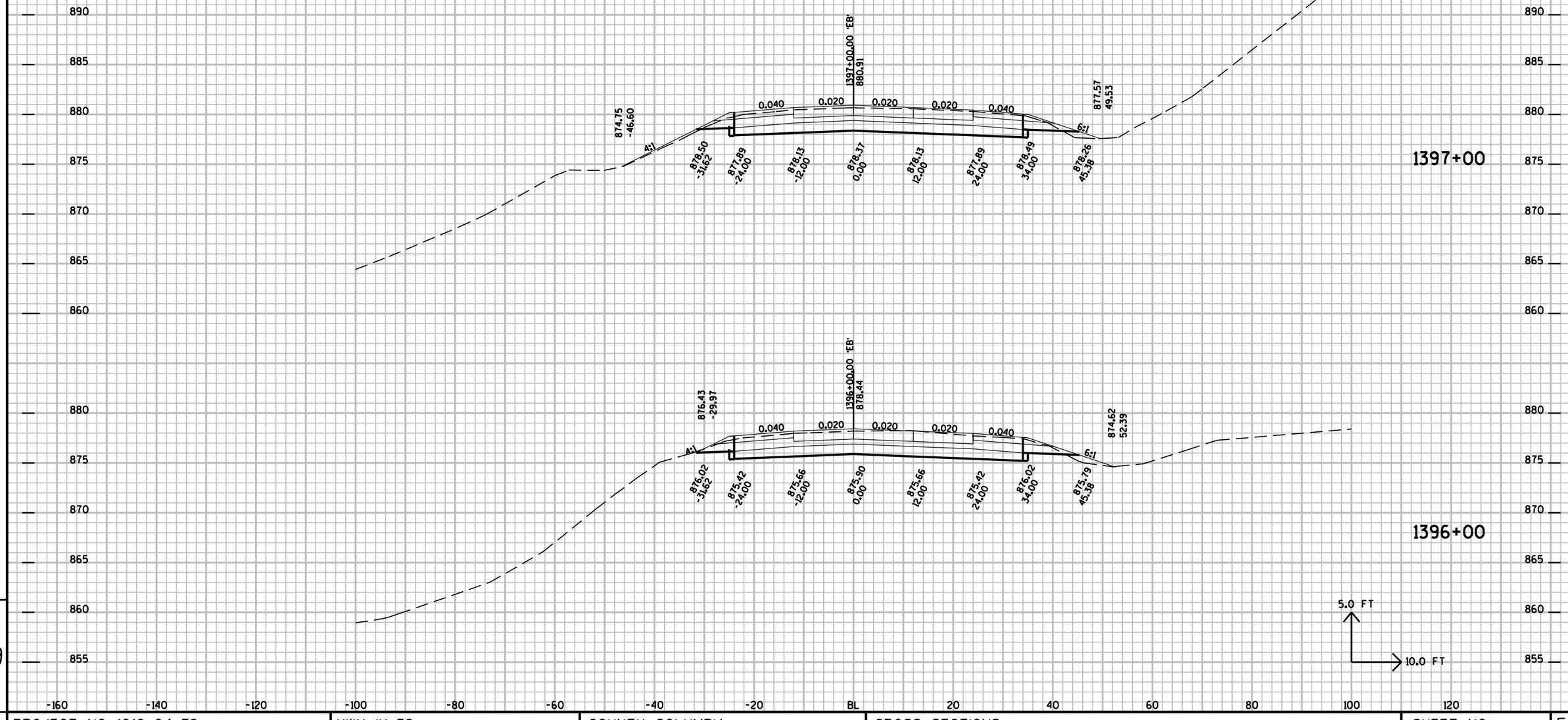
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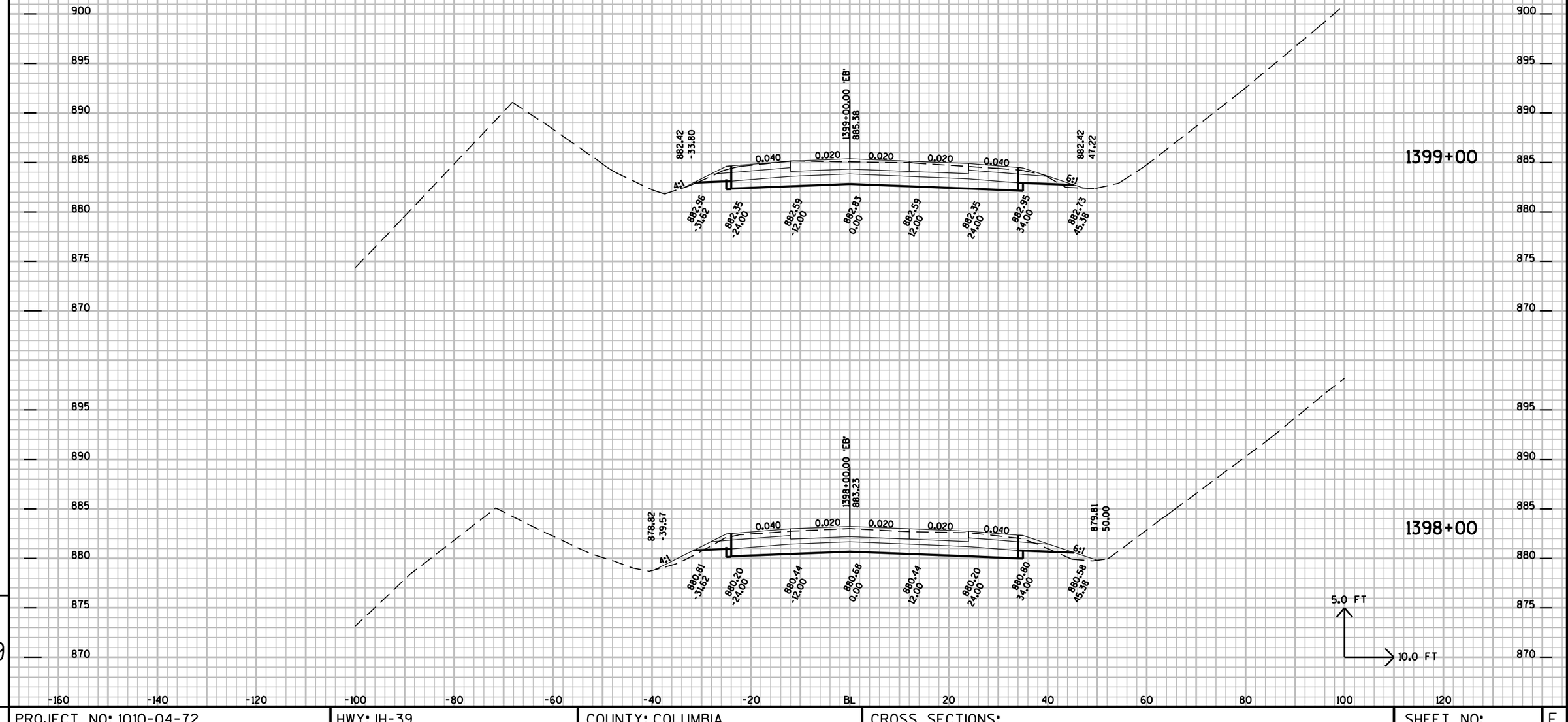
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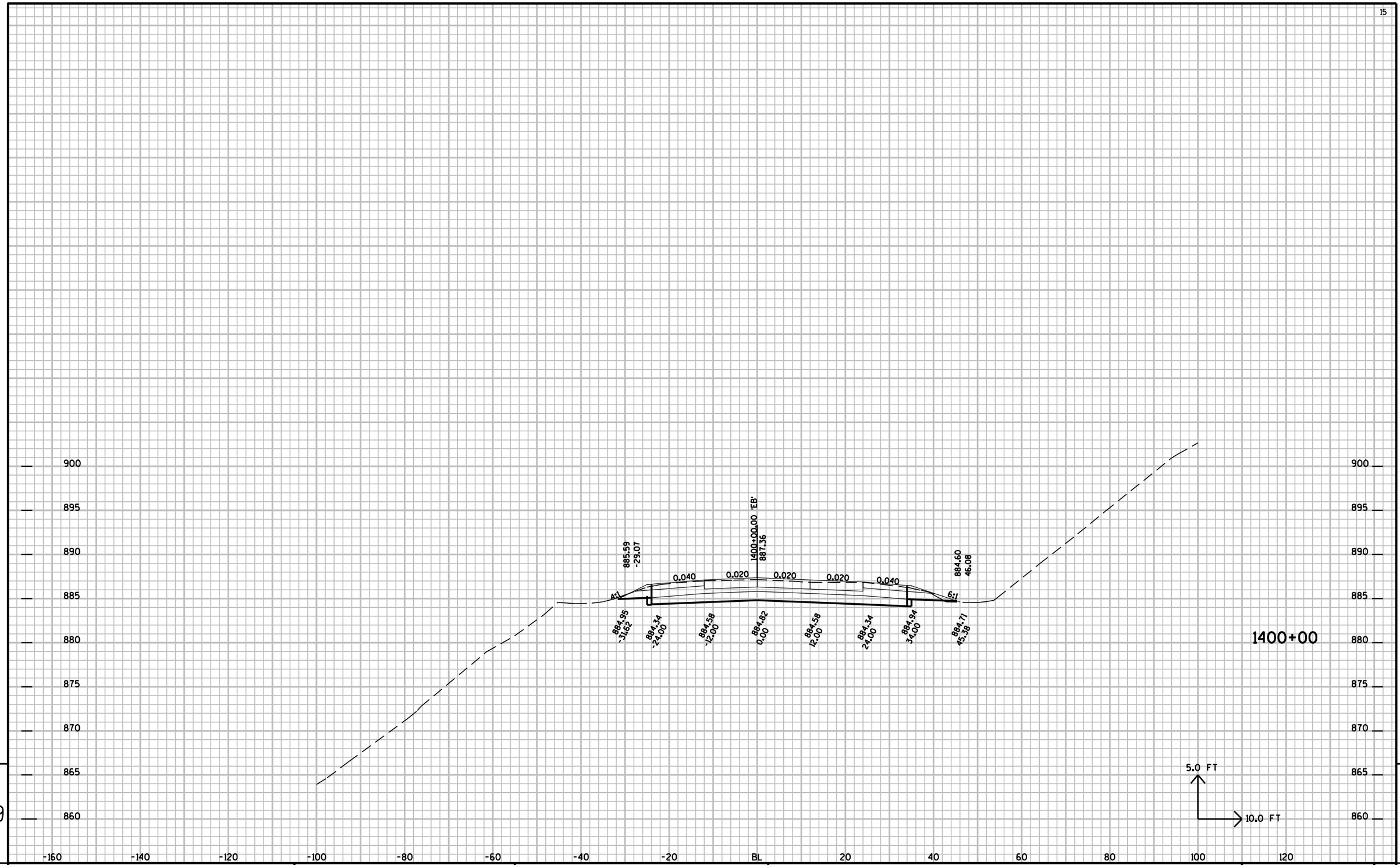


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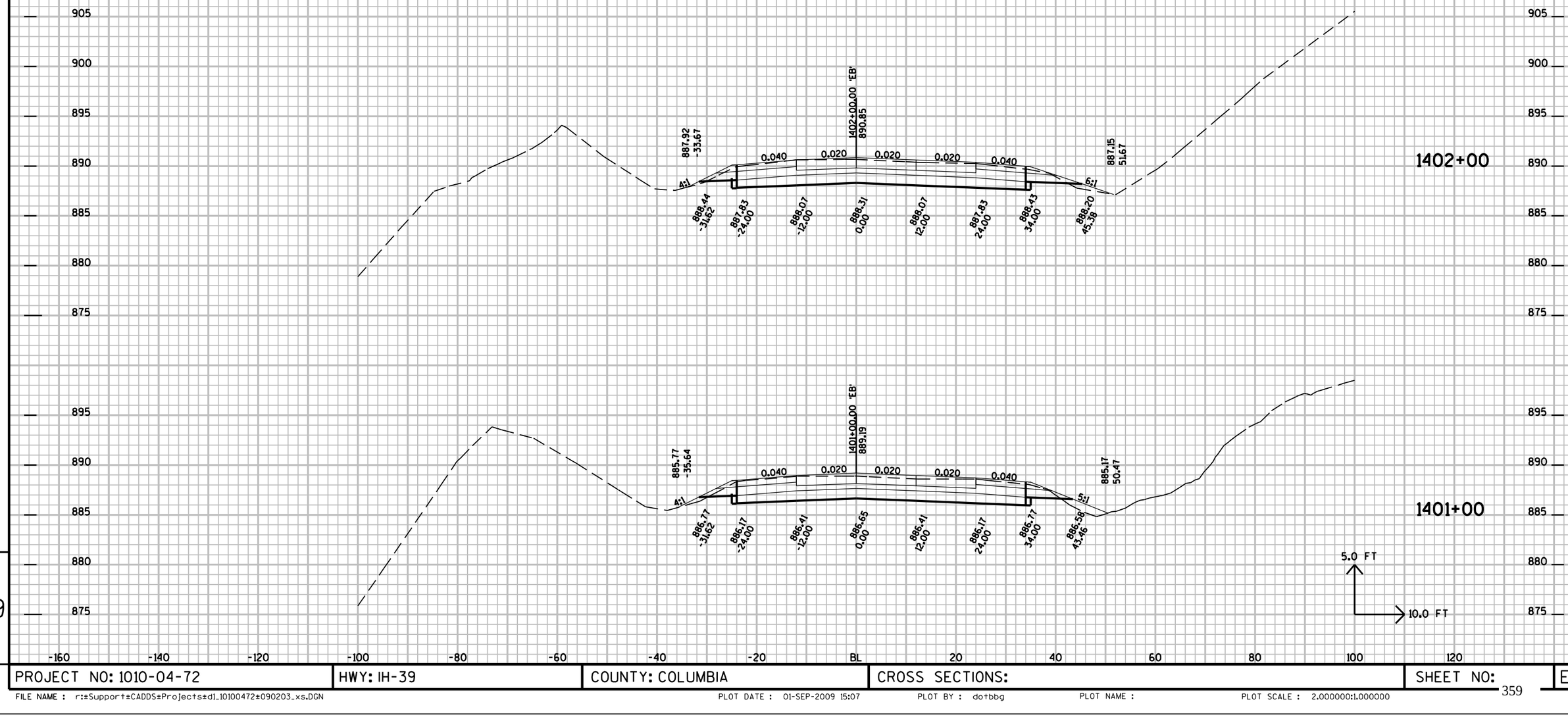


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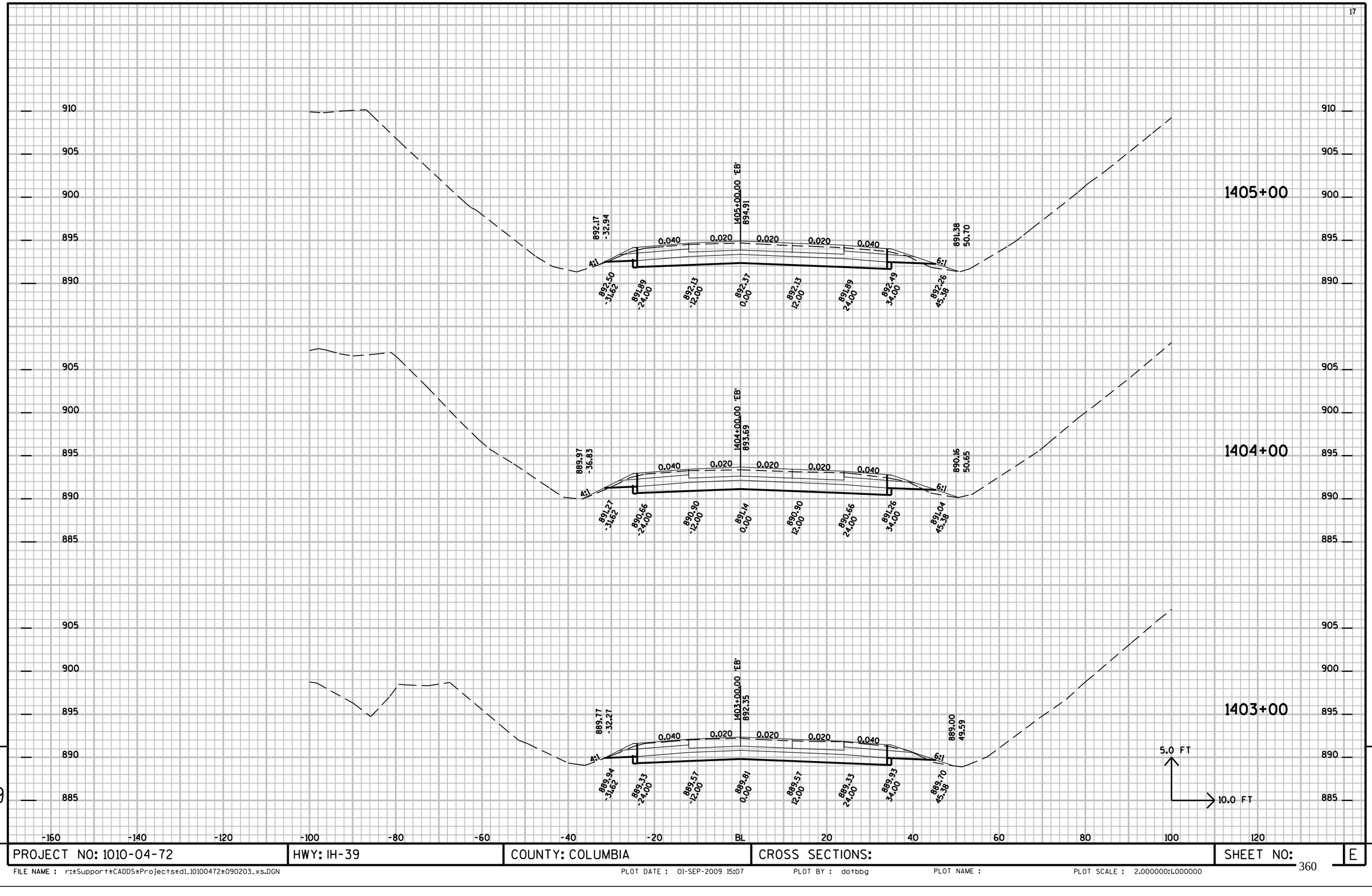
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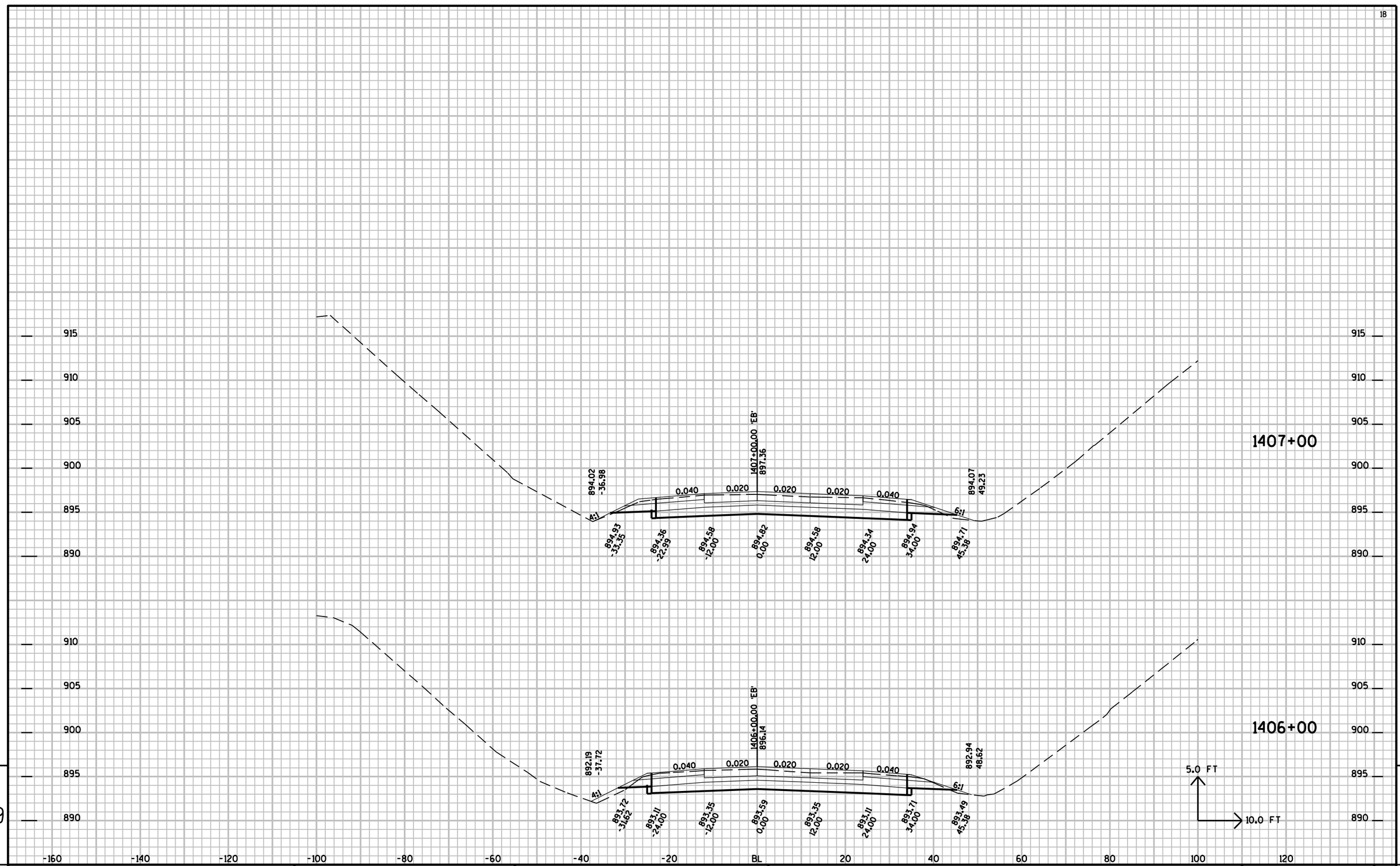
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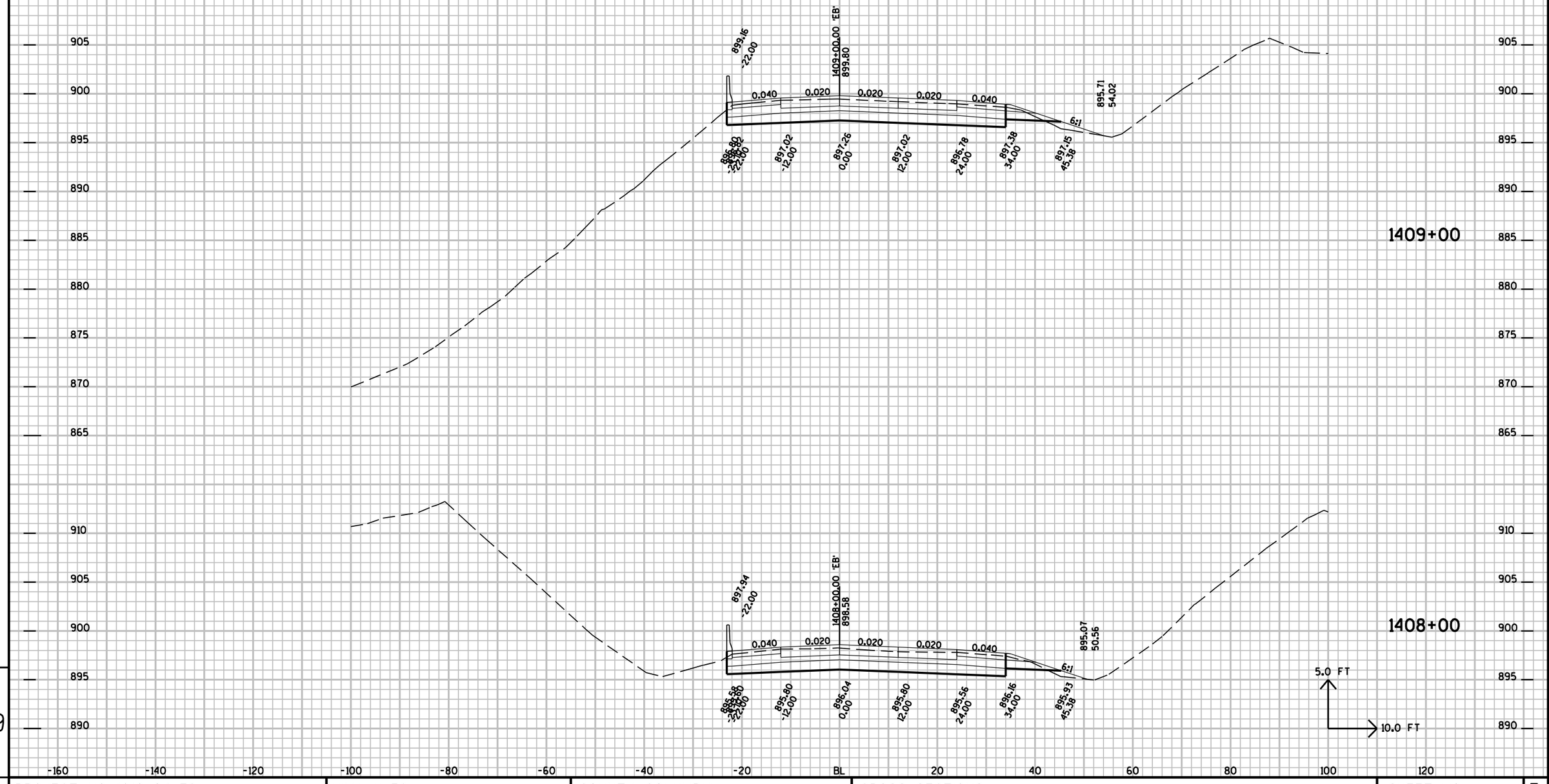


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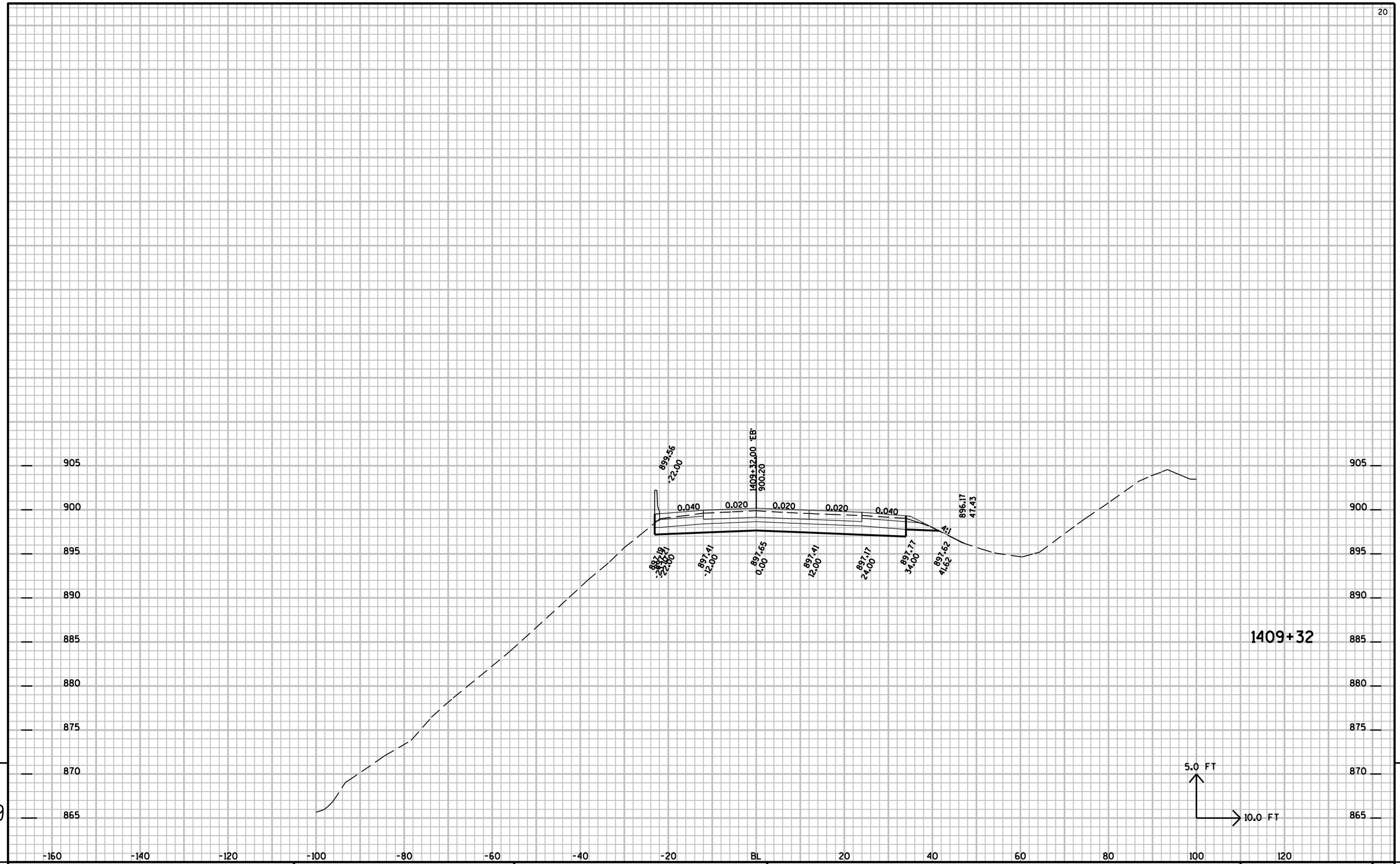
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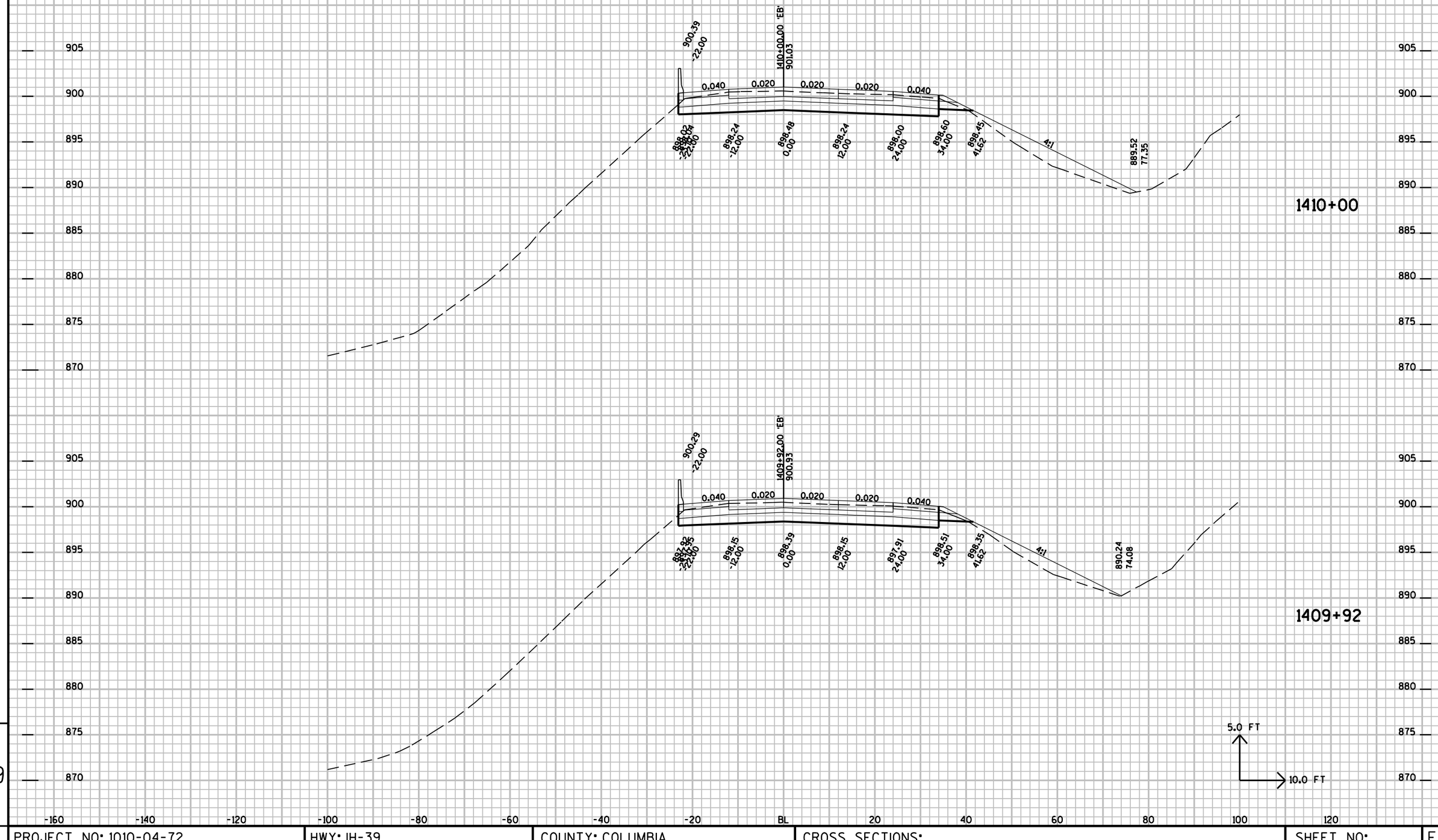


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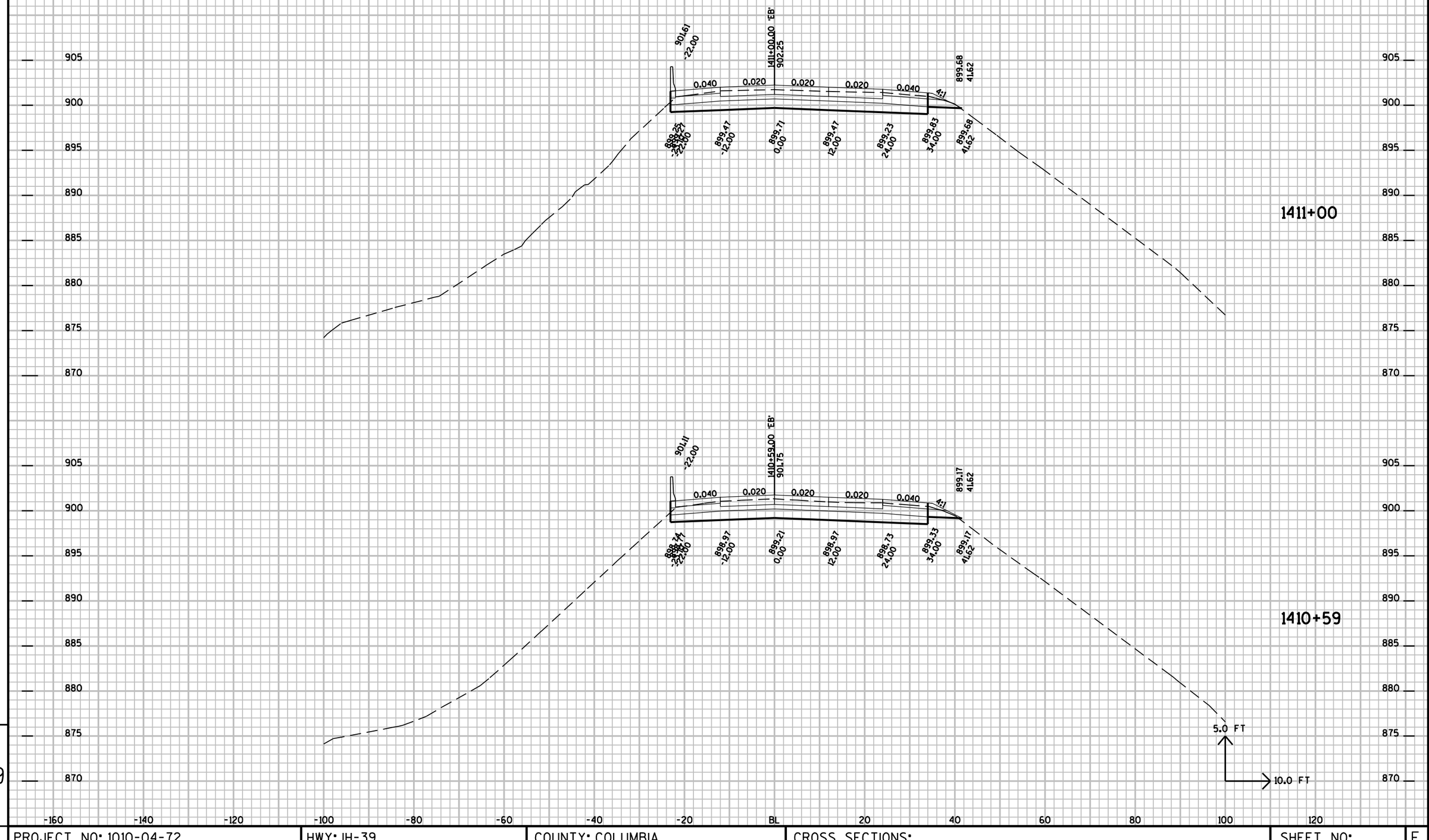
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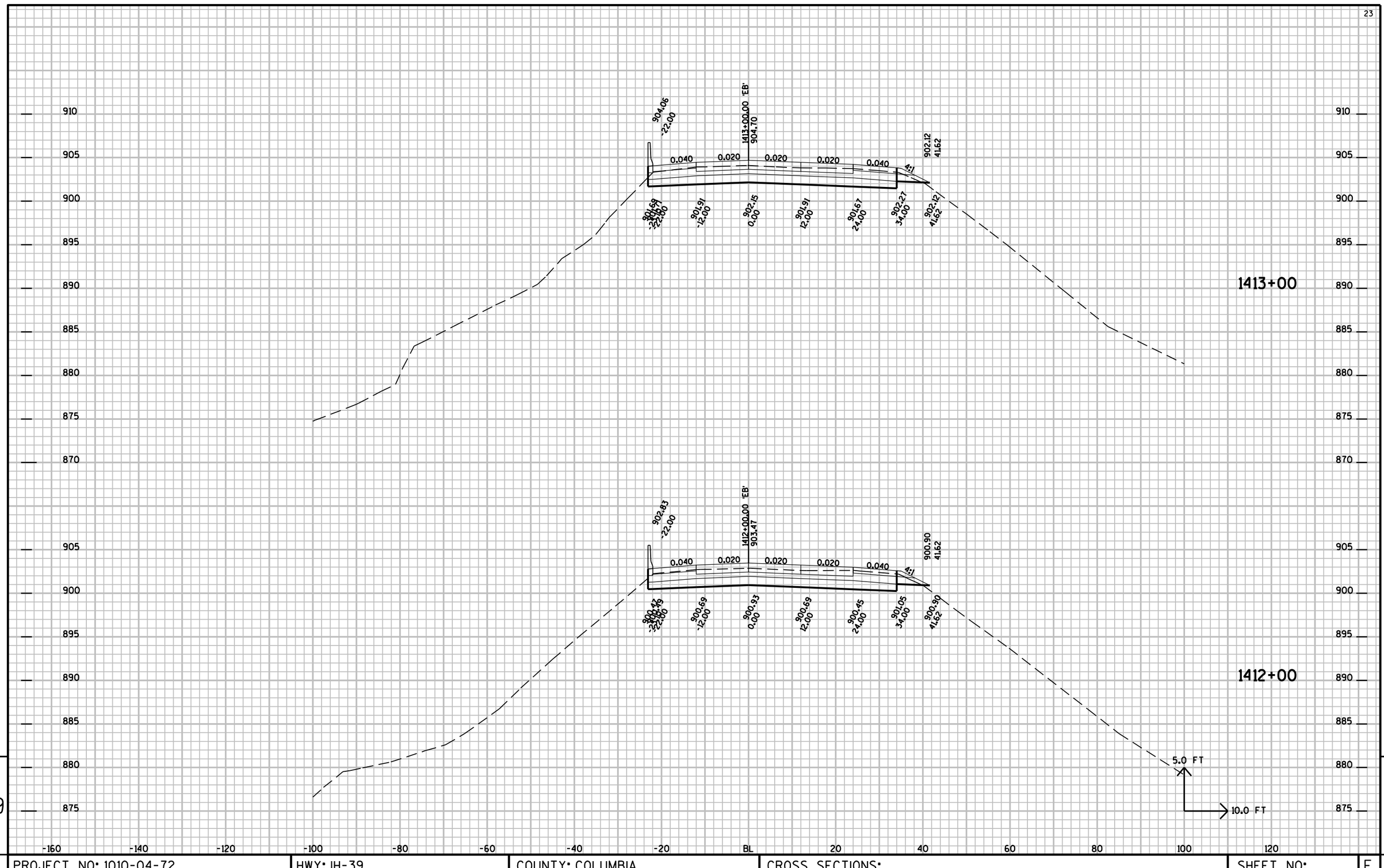


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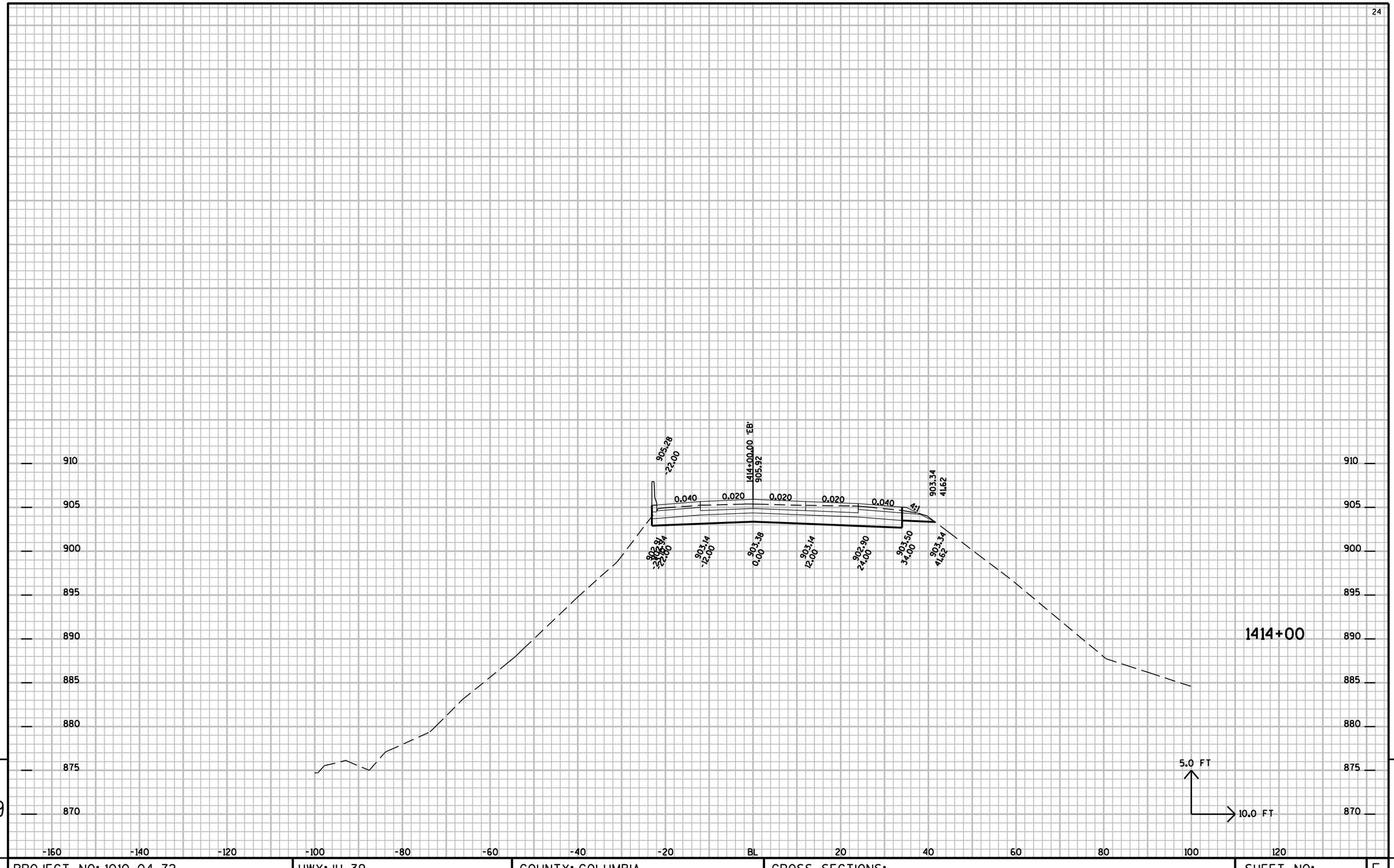


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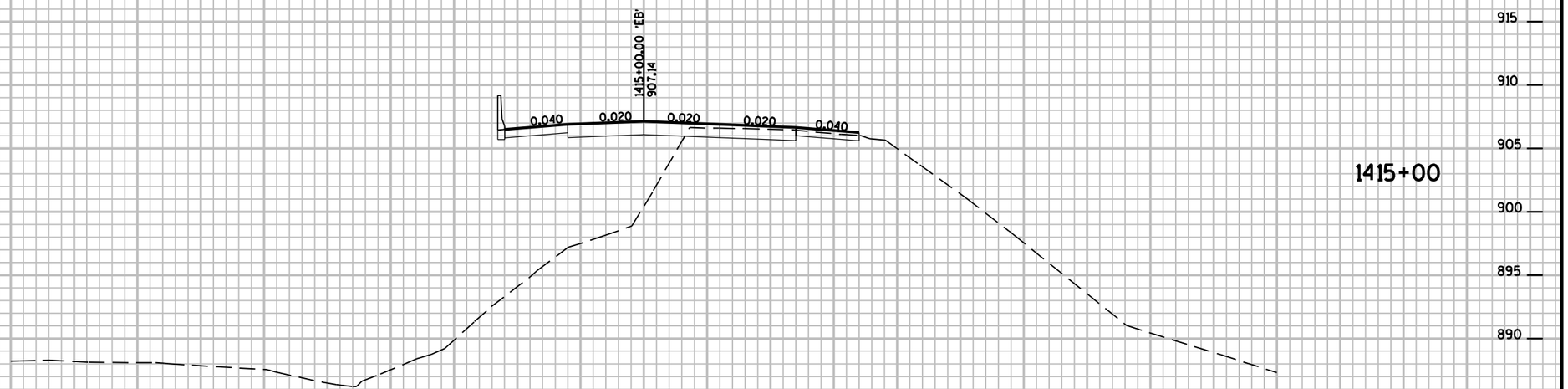
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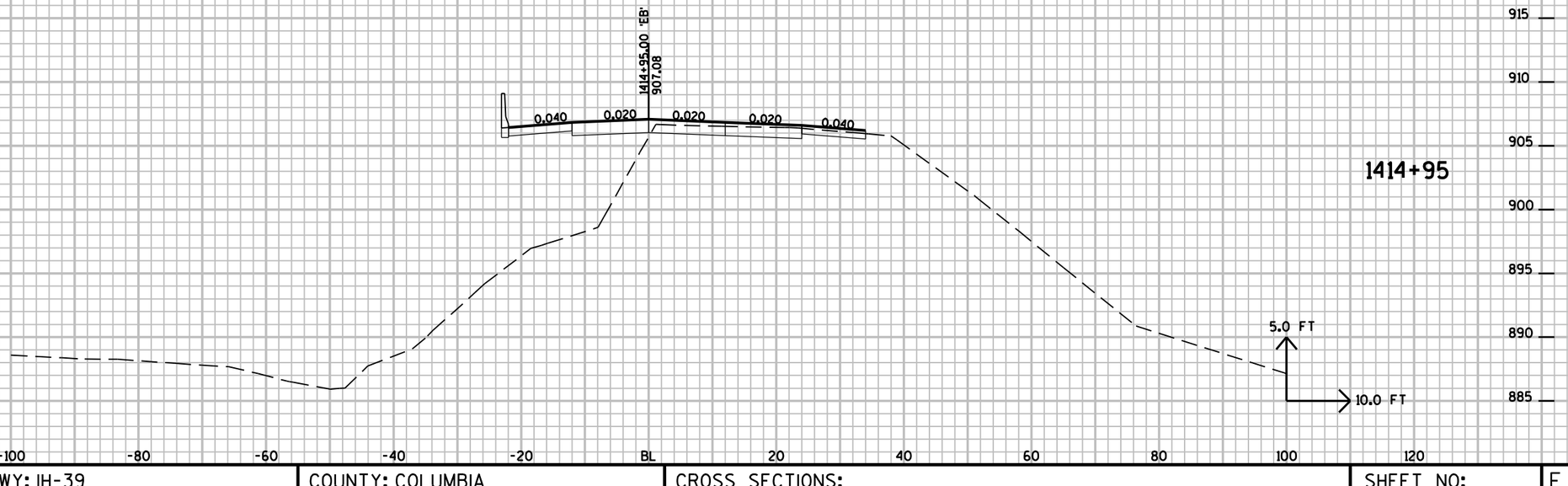
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SEE BRIDGE SHEETS



1415+00

SEE BRIDGE SHEETS



1414+95

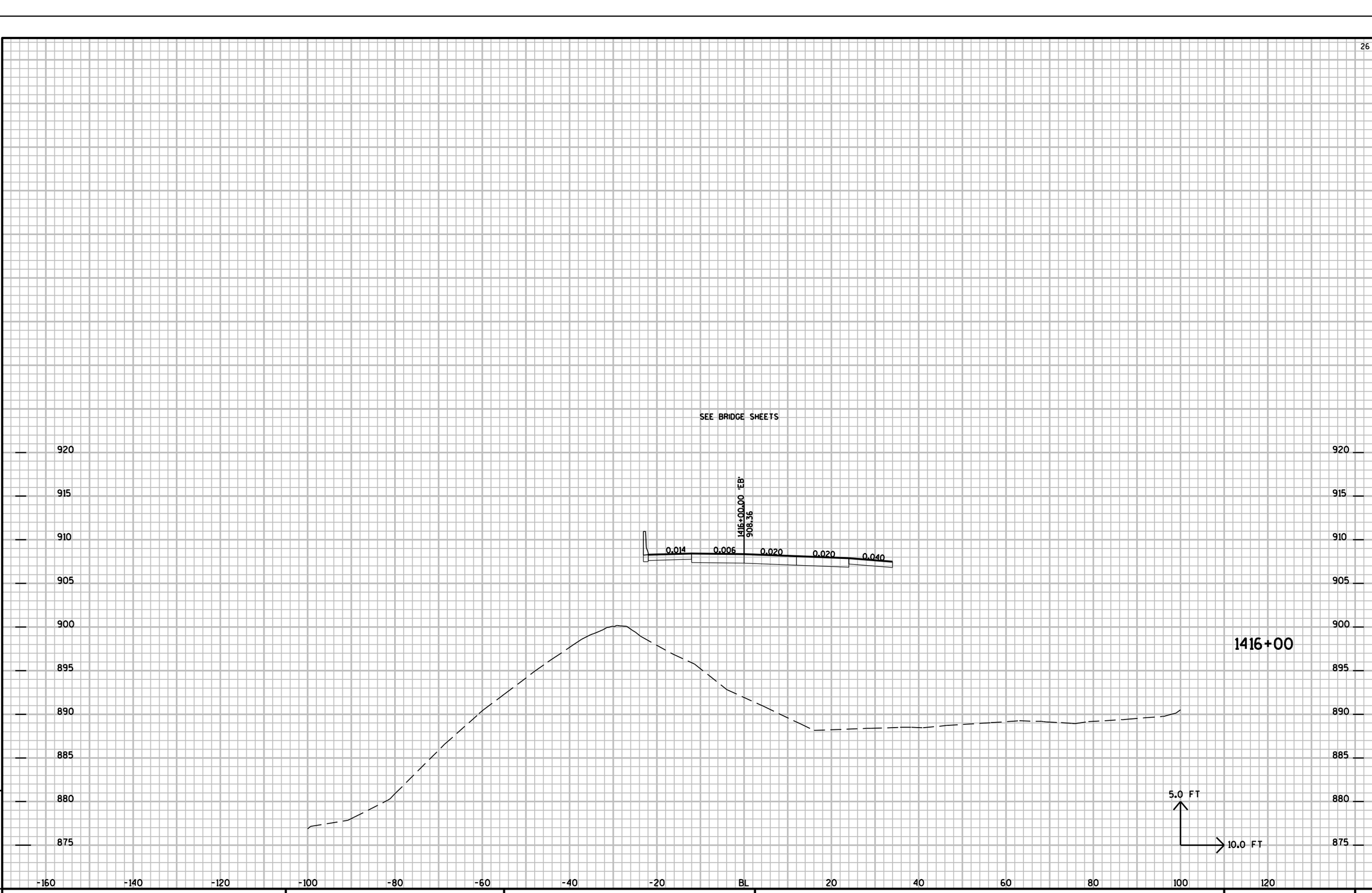
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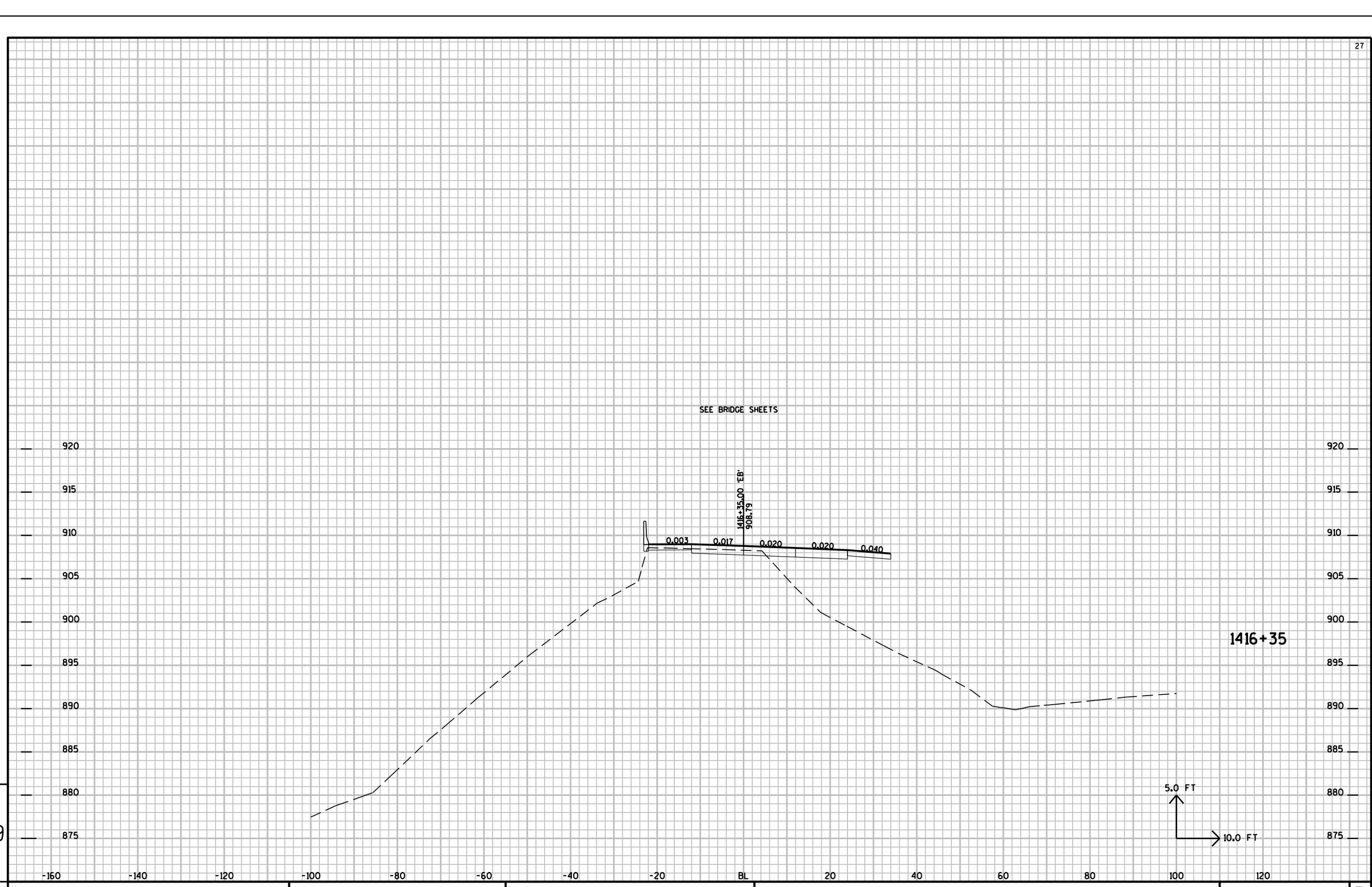
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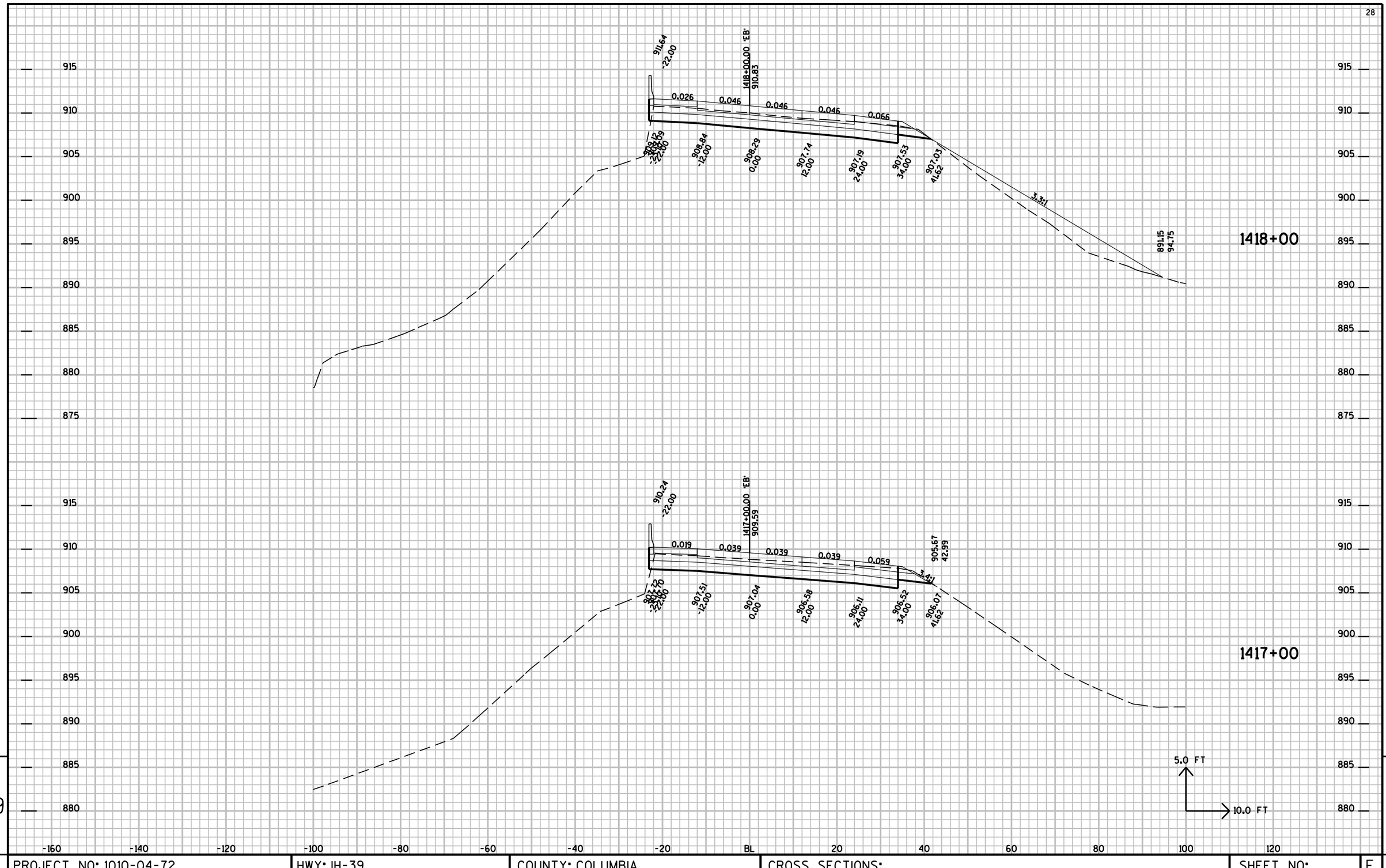
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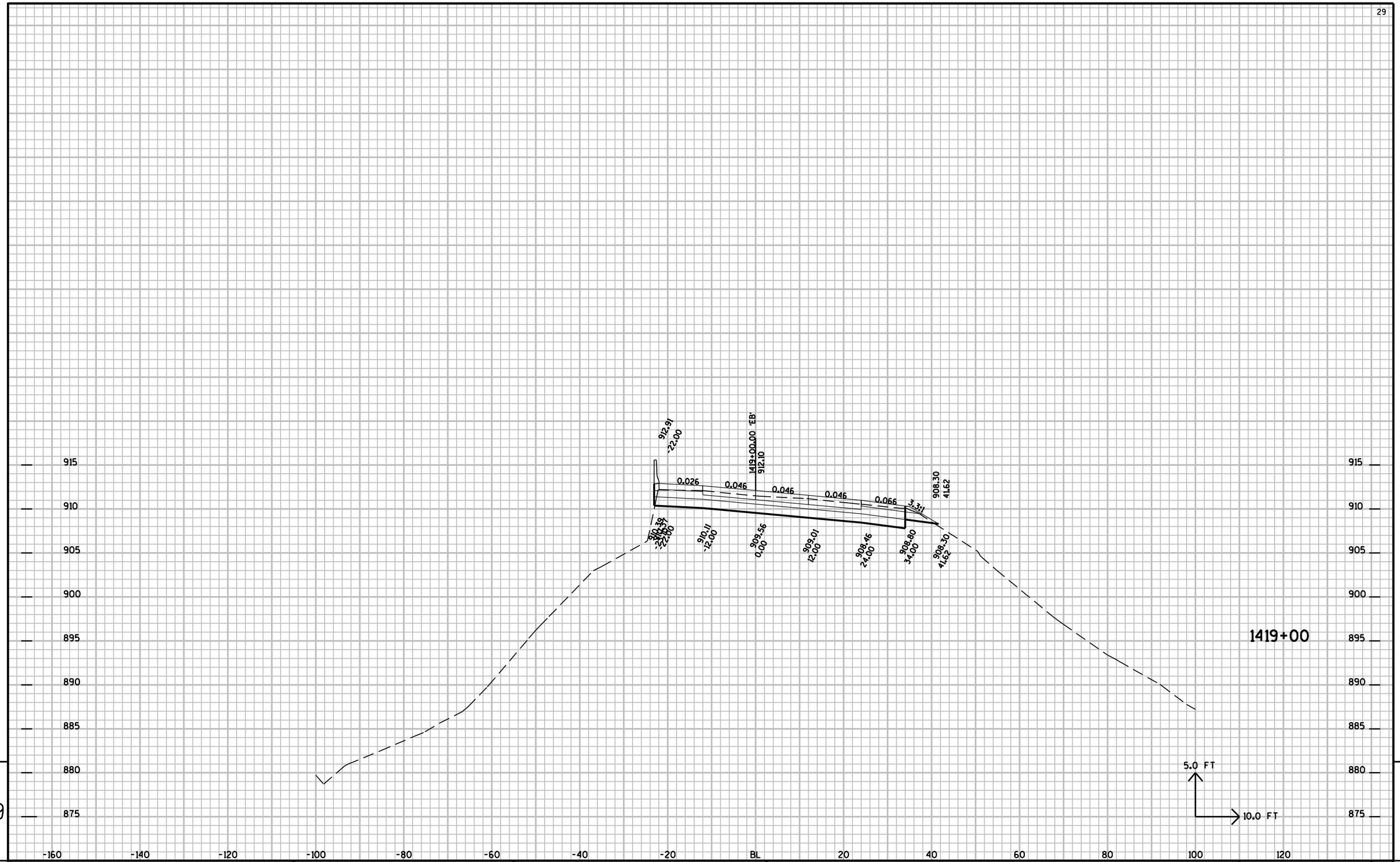


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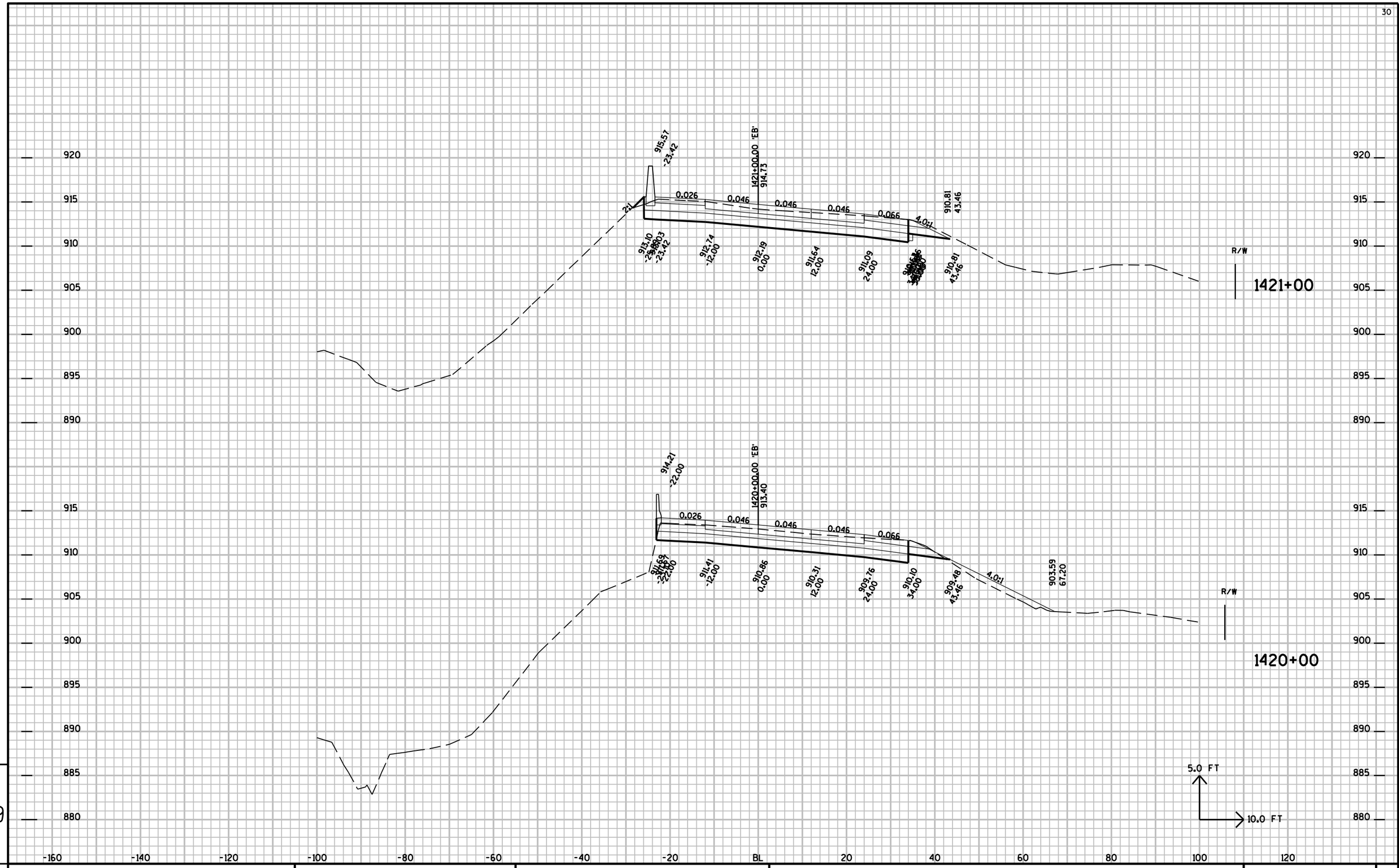


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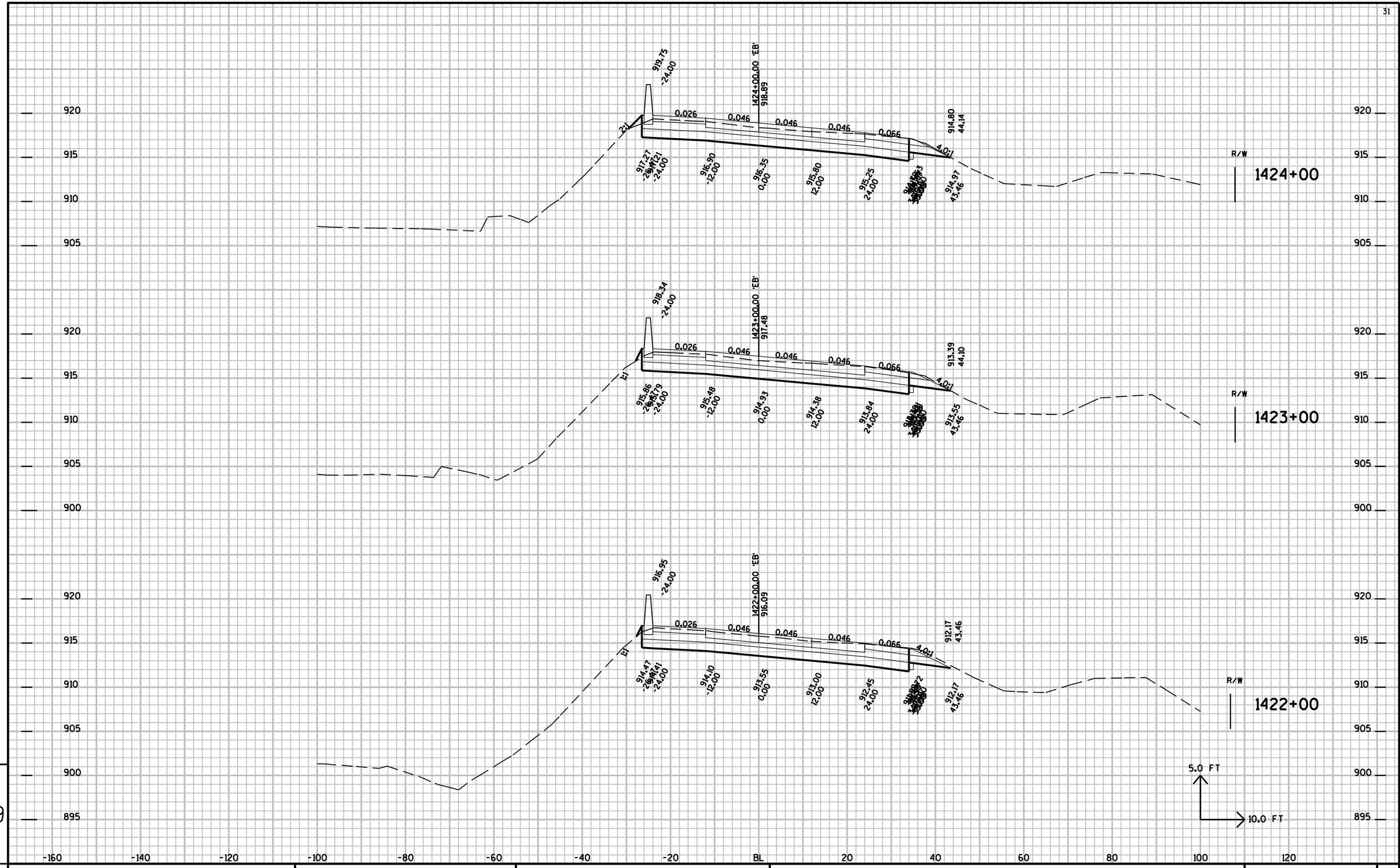


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PROJECT NO: 1010-04-72	HWY: IH-39	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET NO:	E

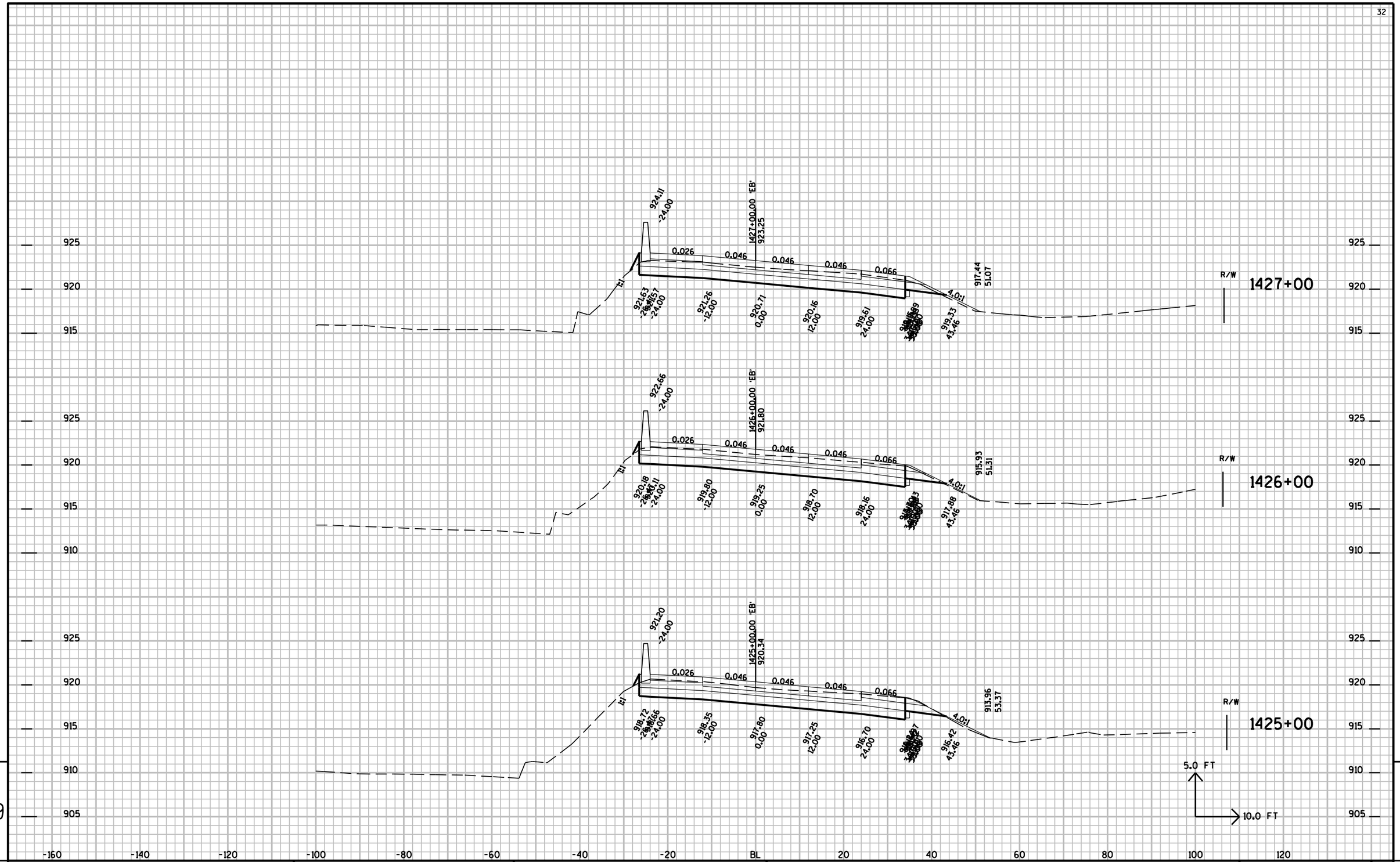
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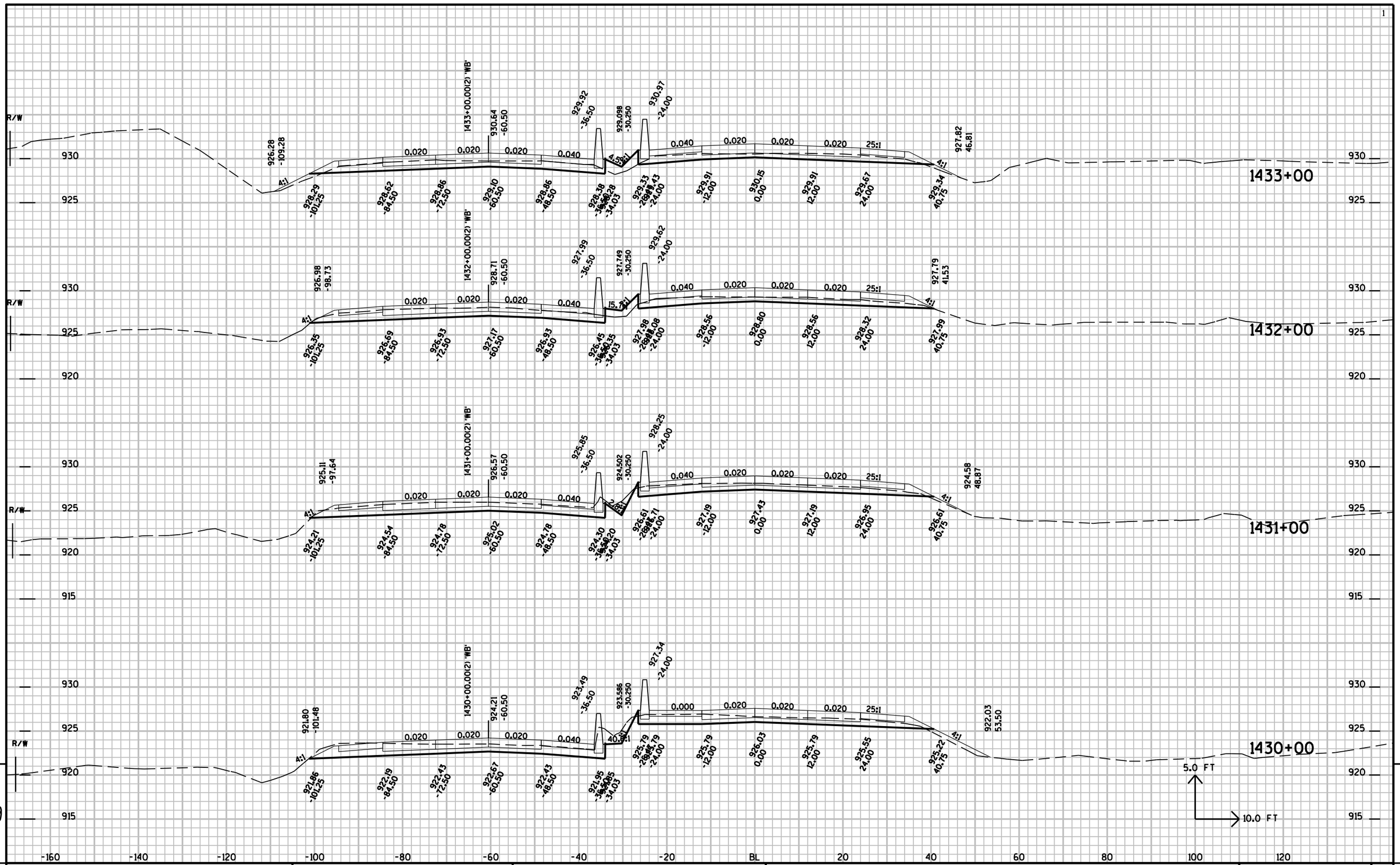


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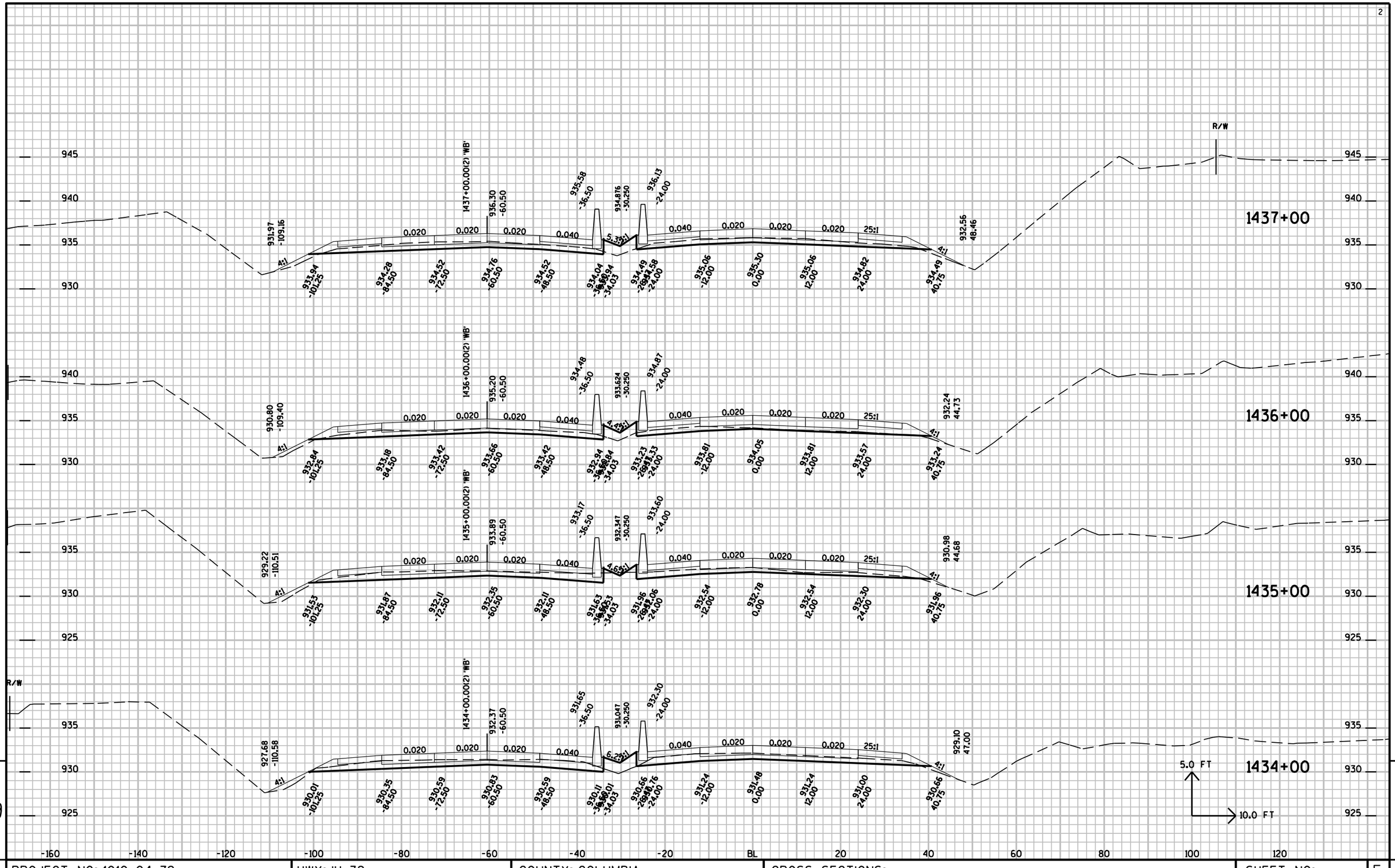
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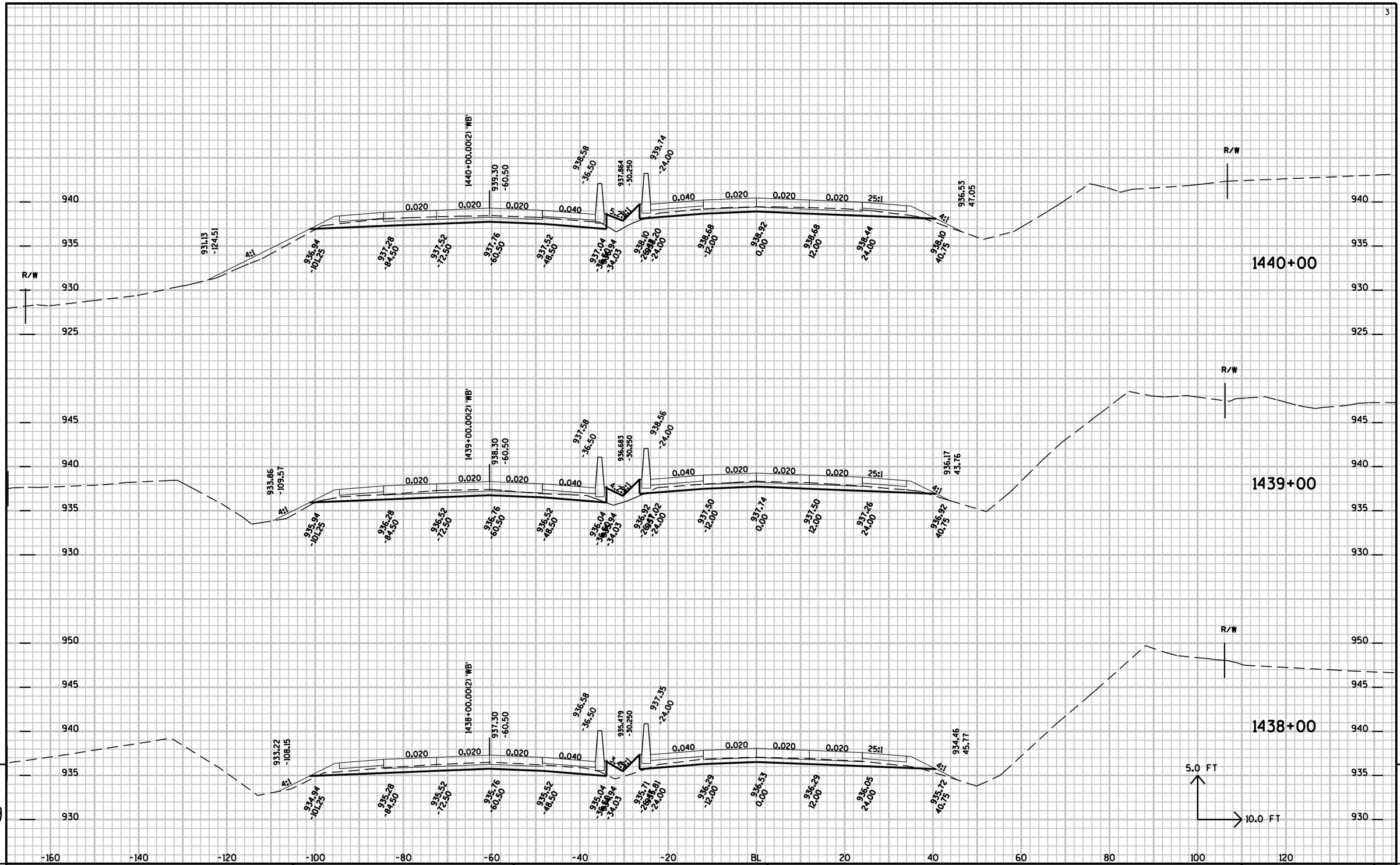
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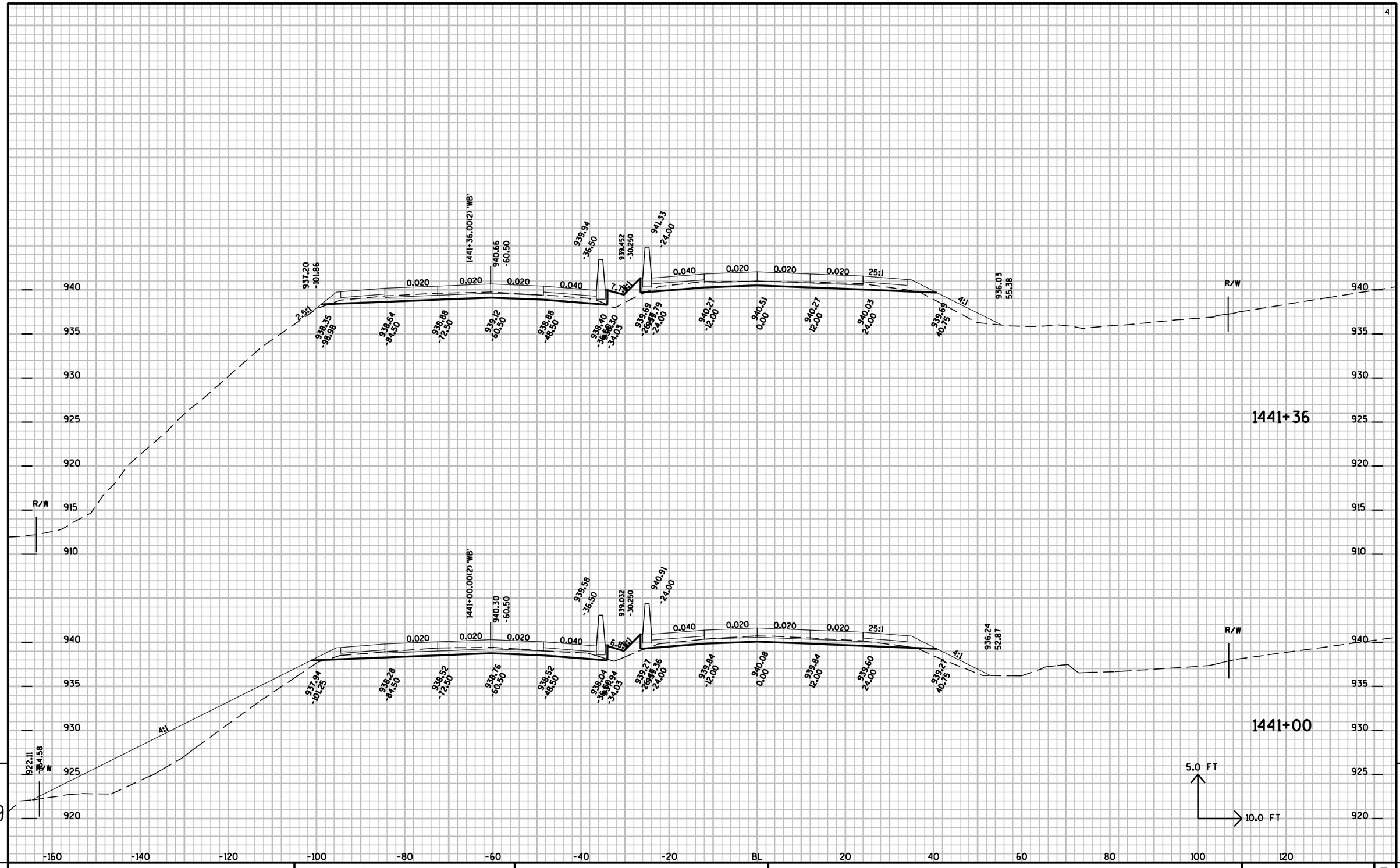
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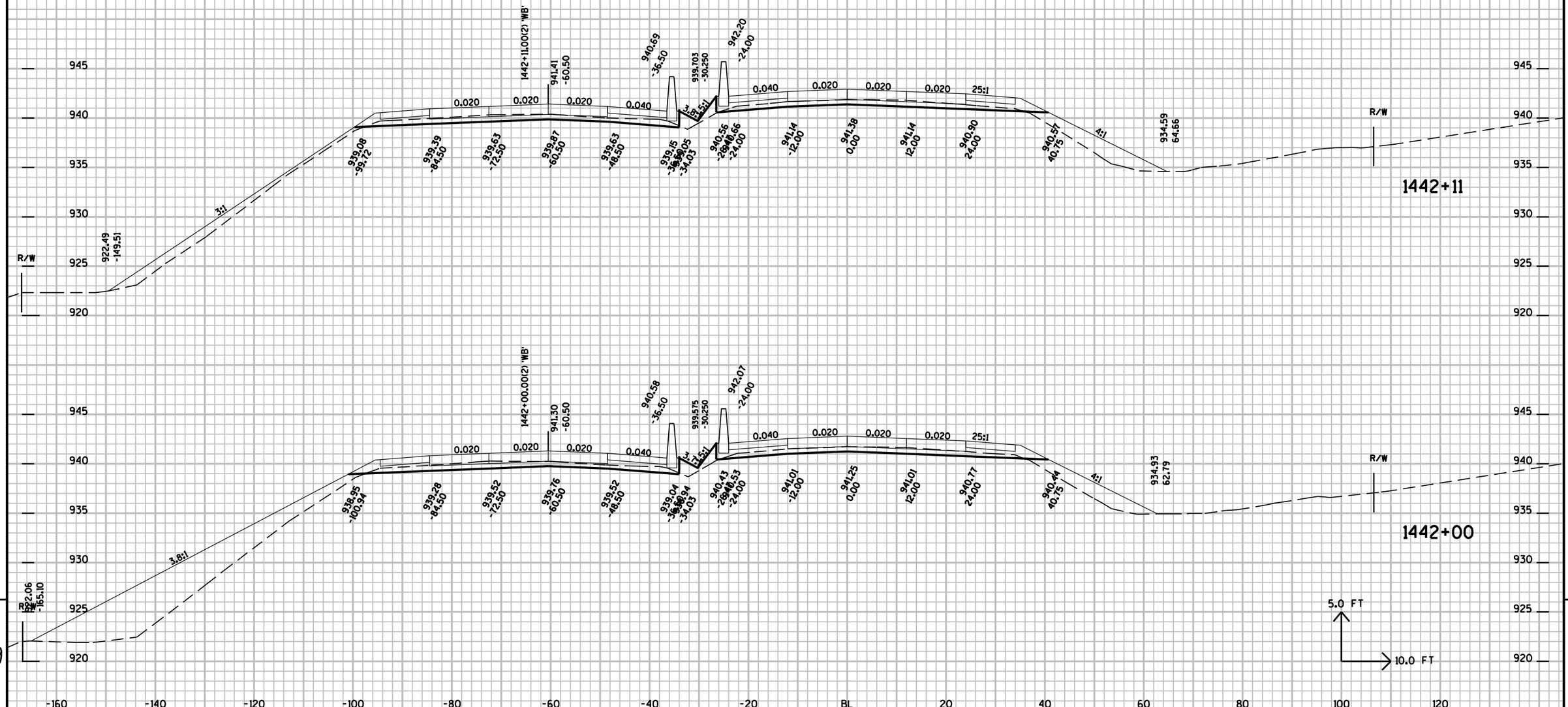
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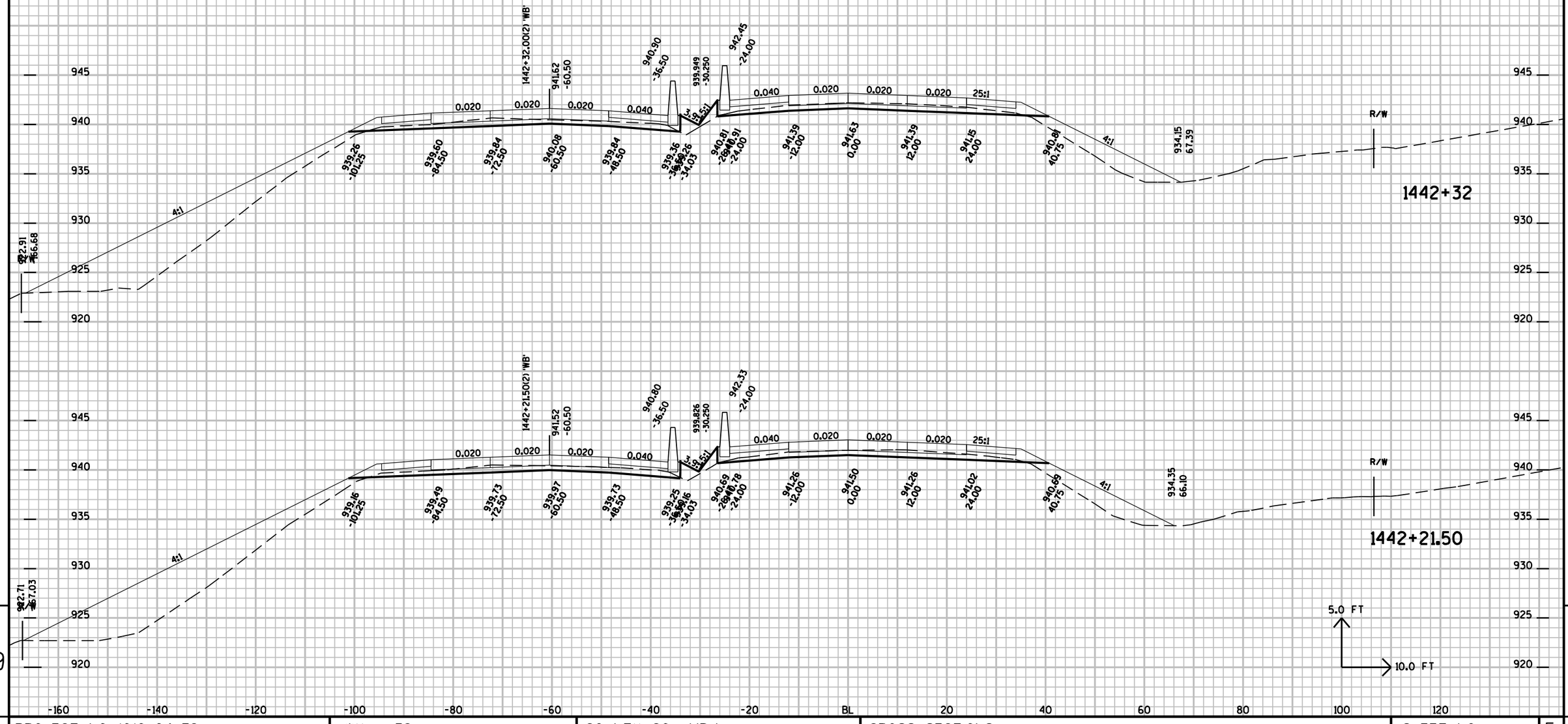
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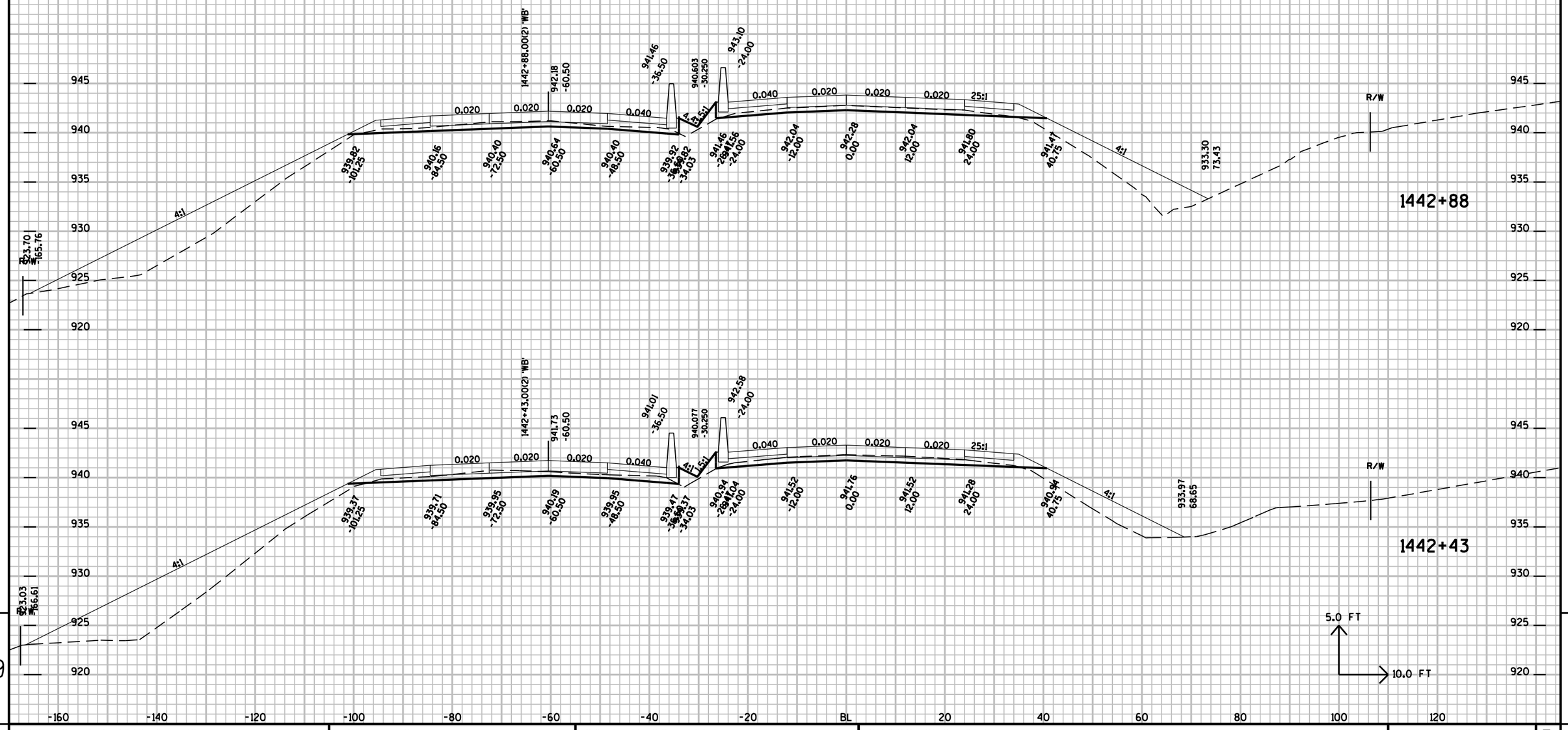
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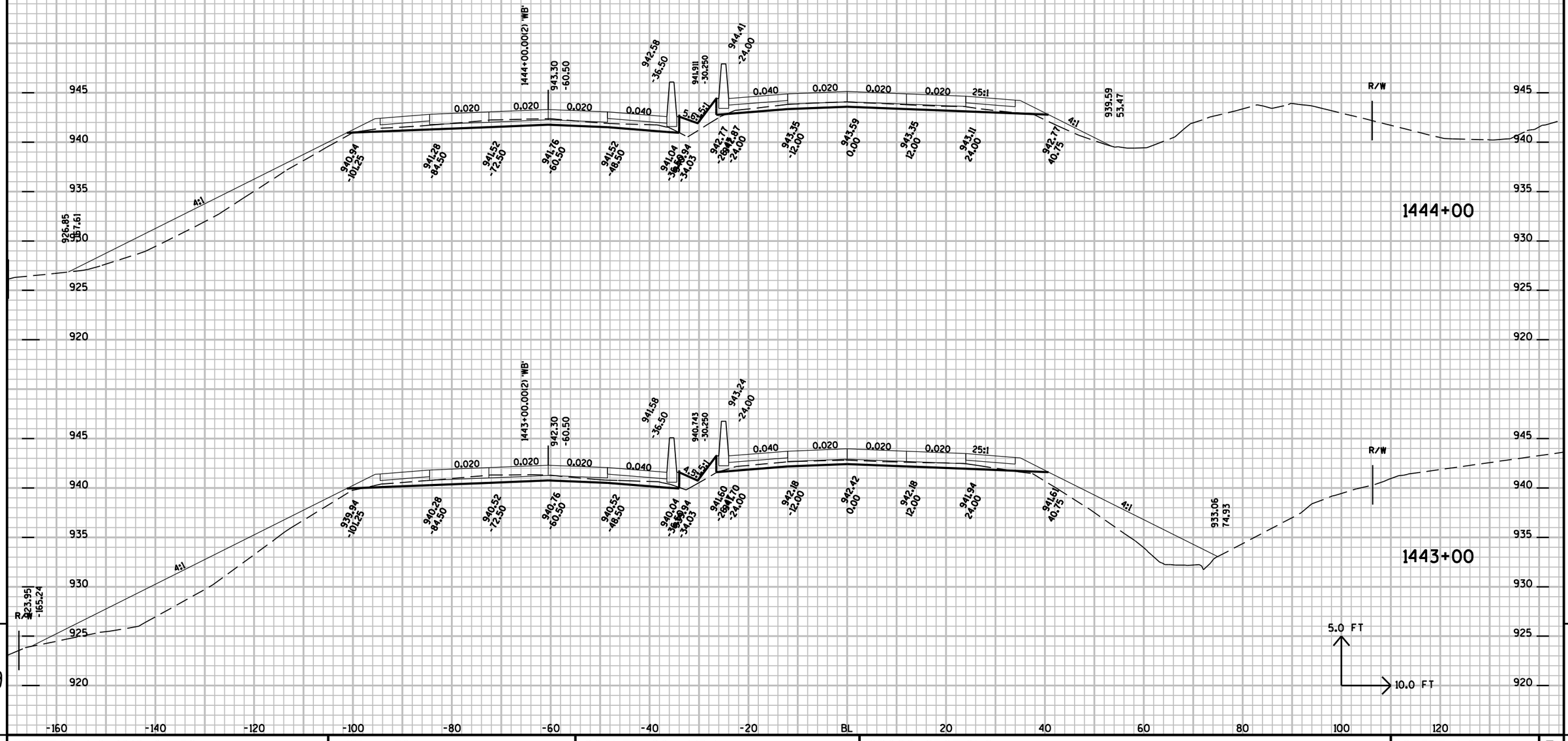
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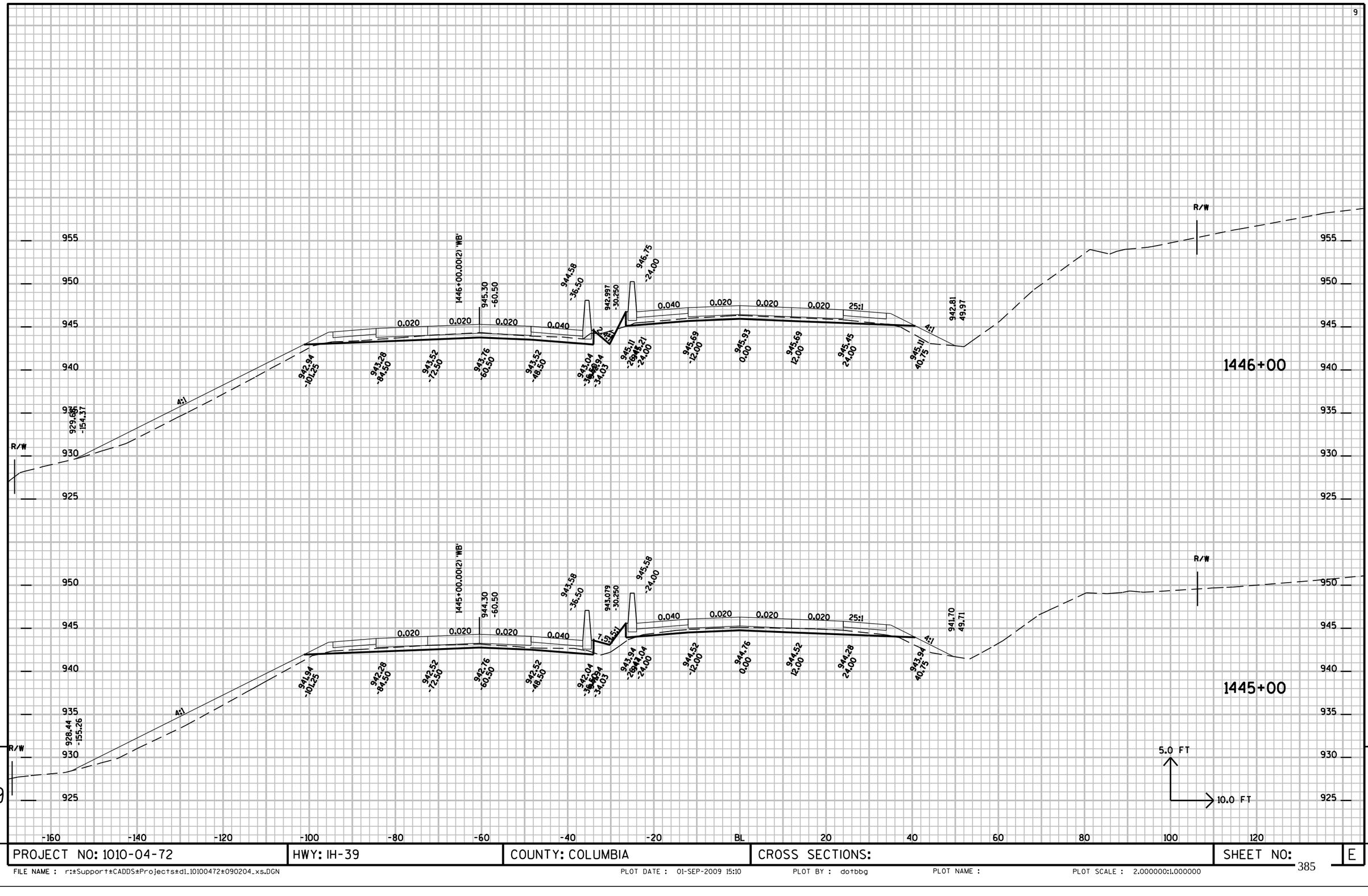
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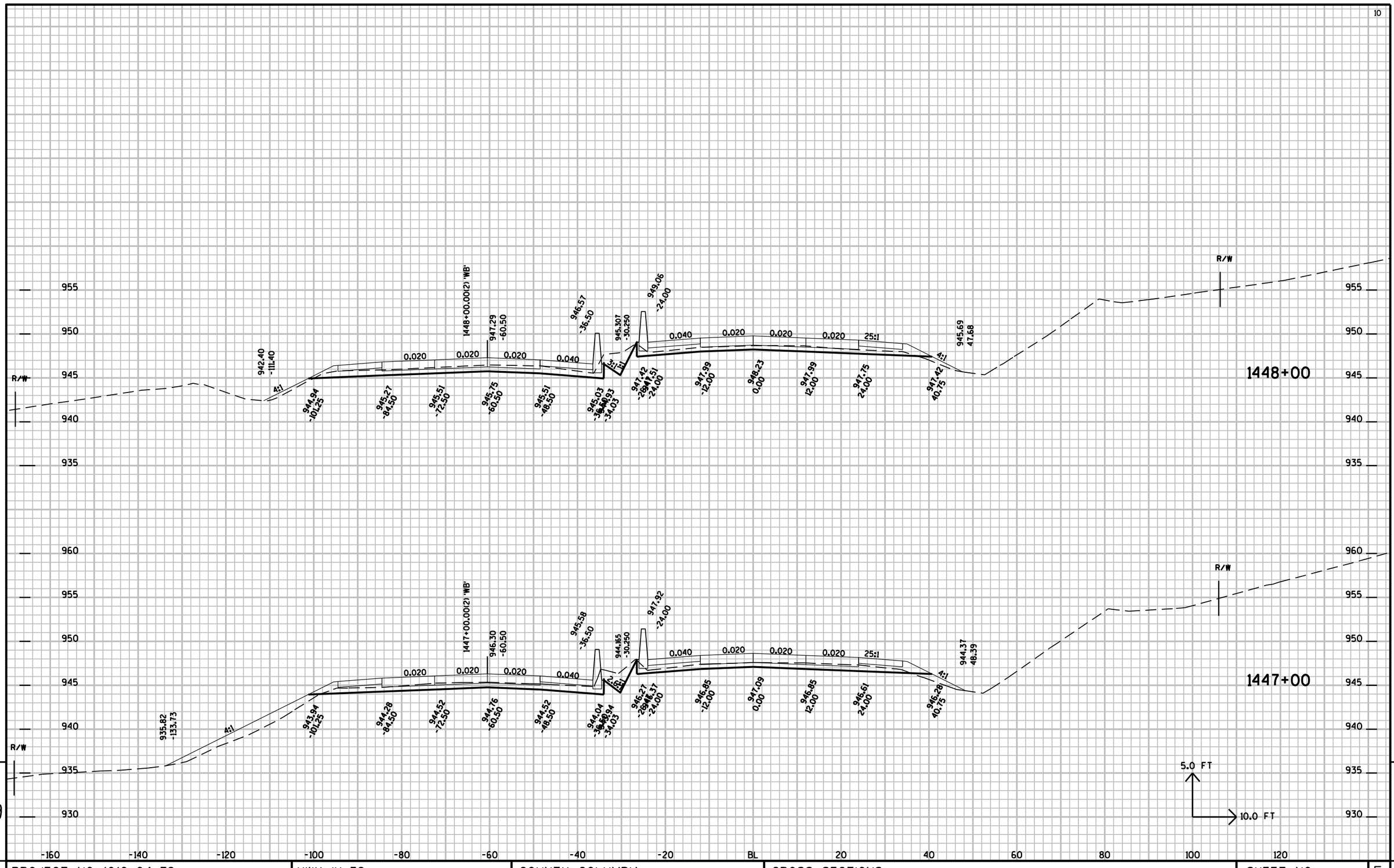
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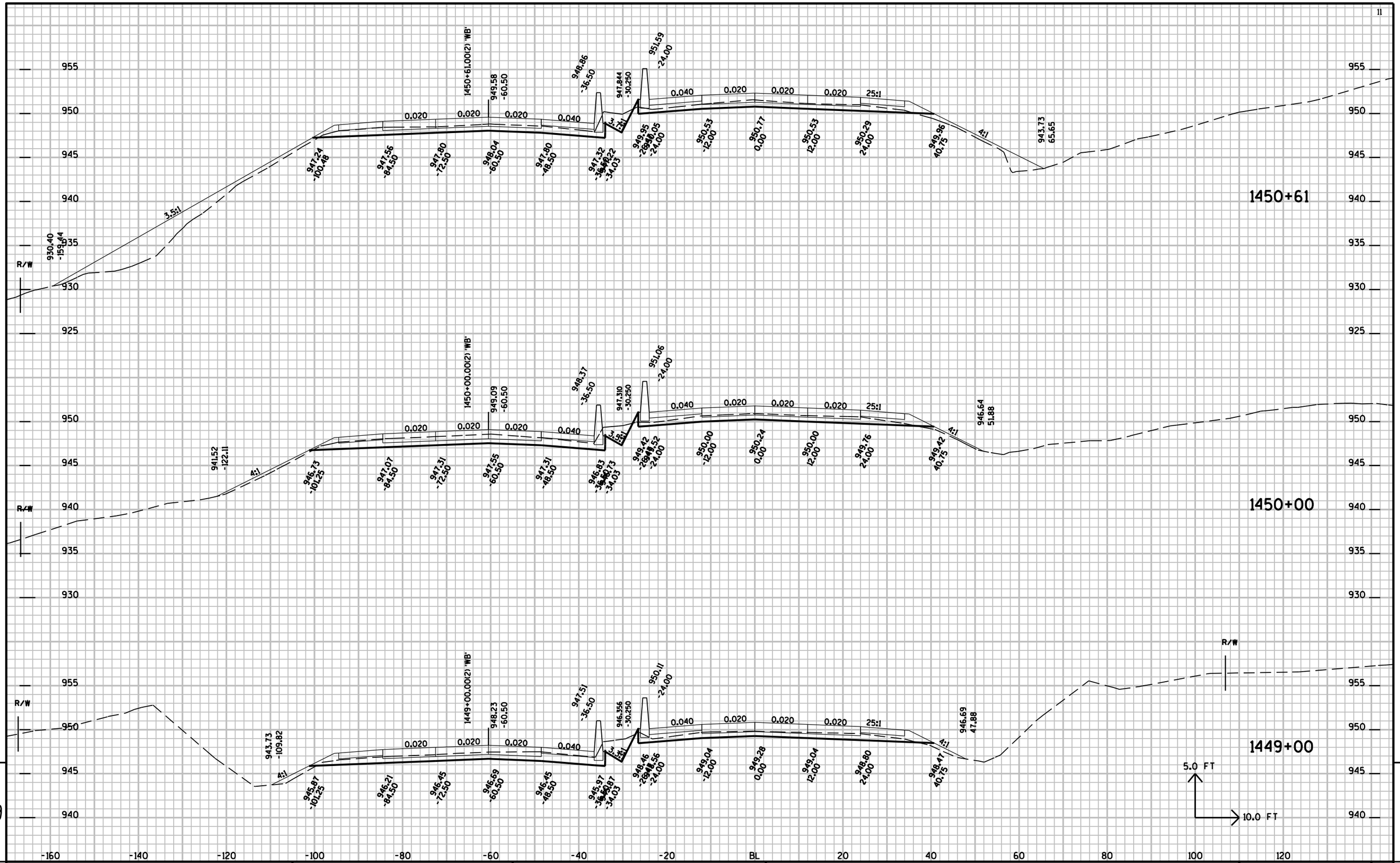
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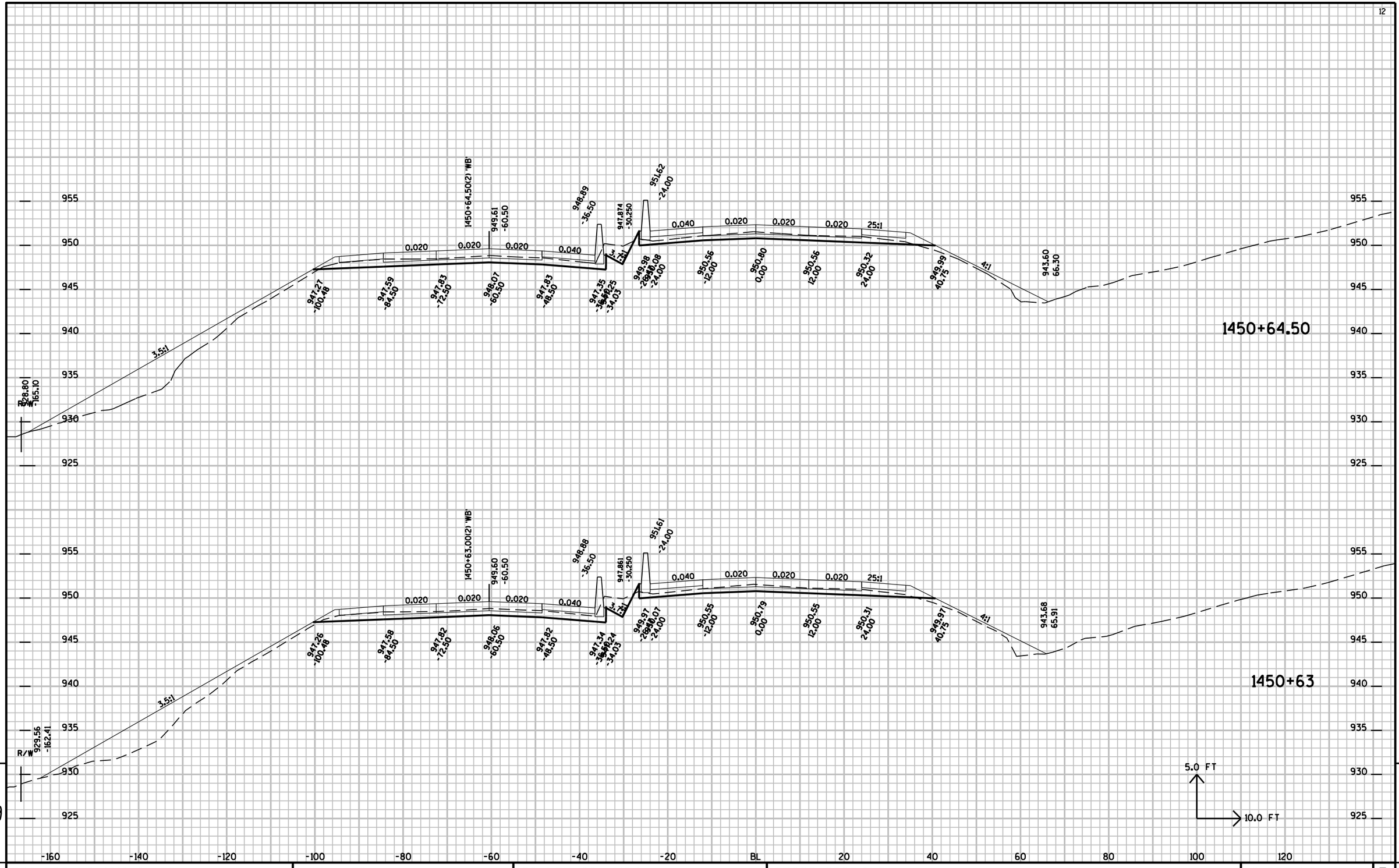
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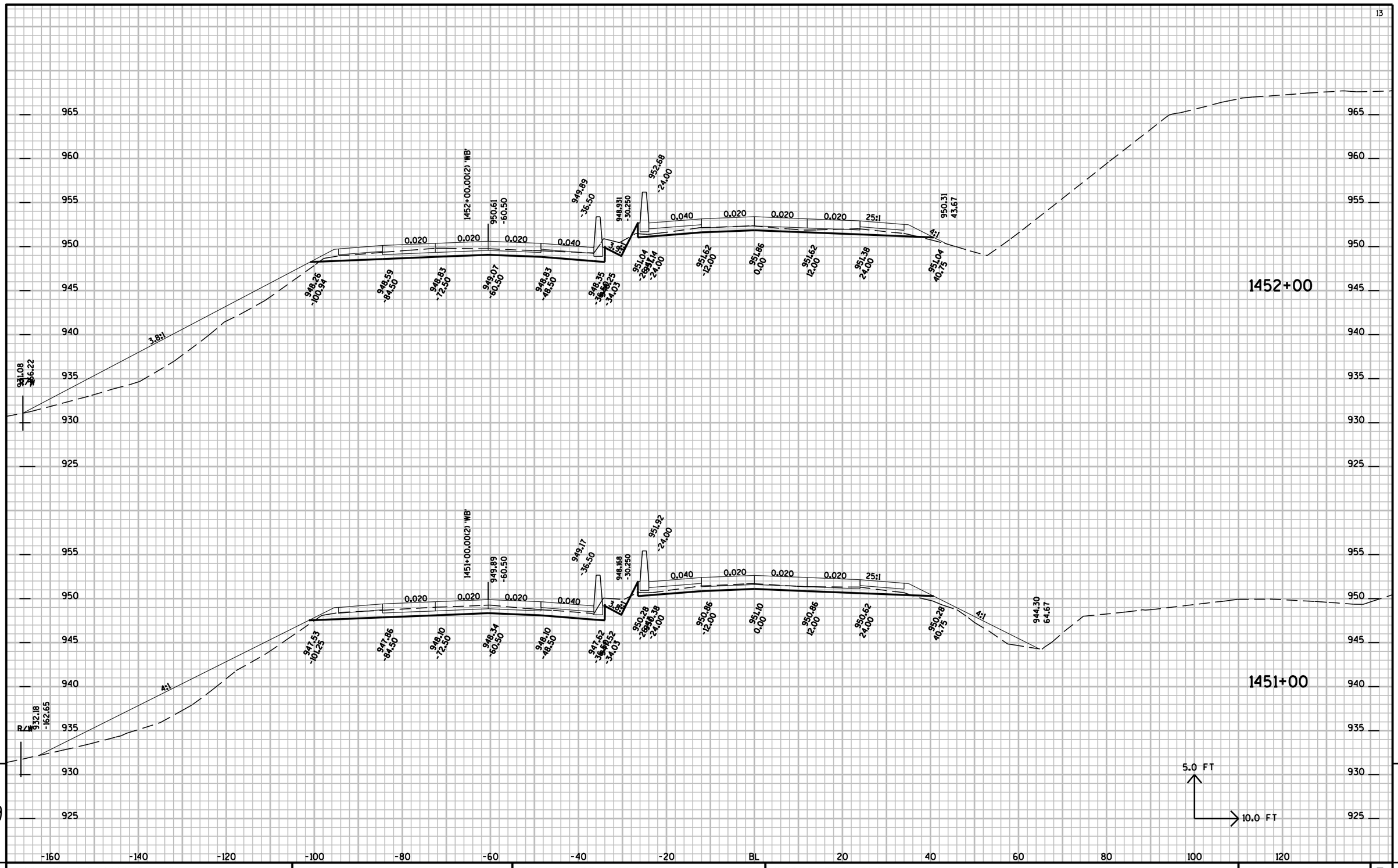
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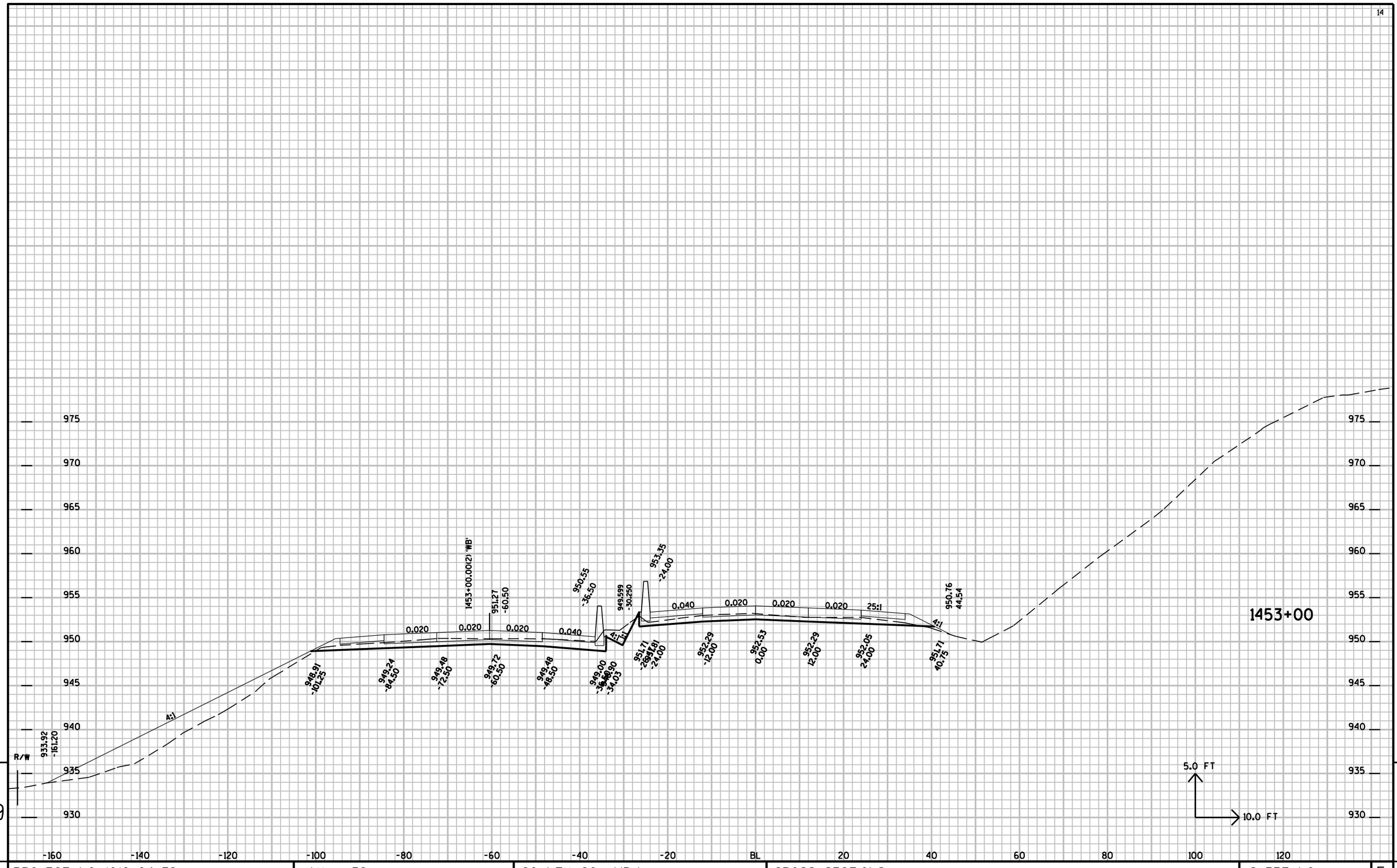
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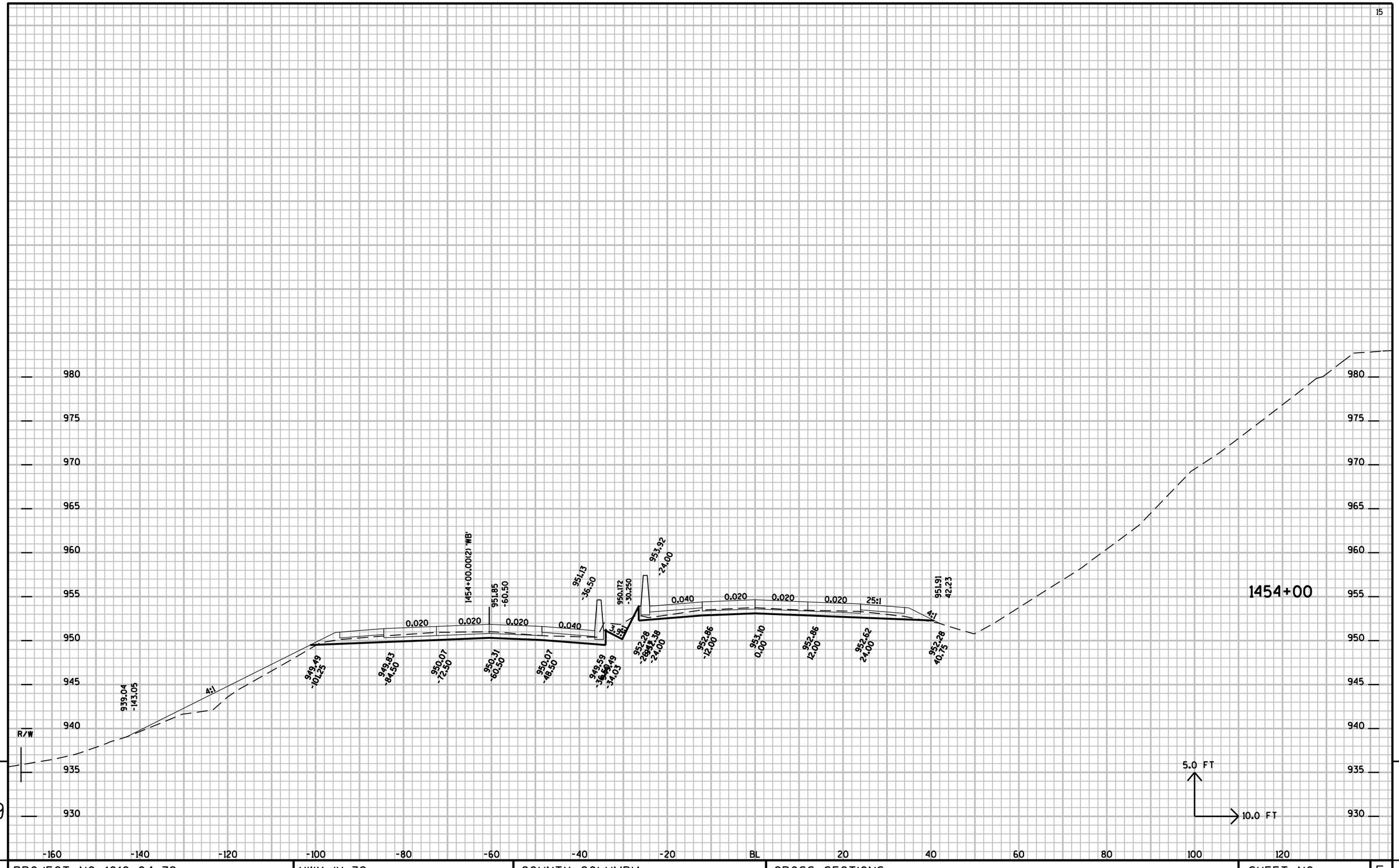


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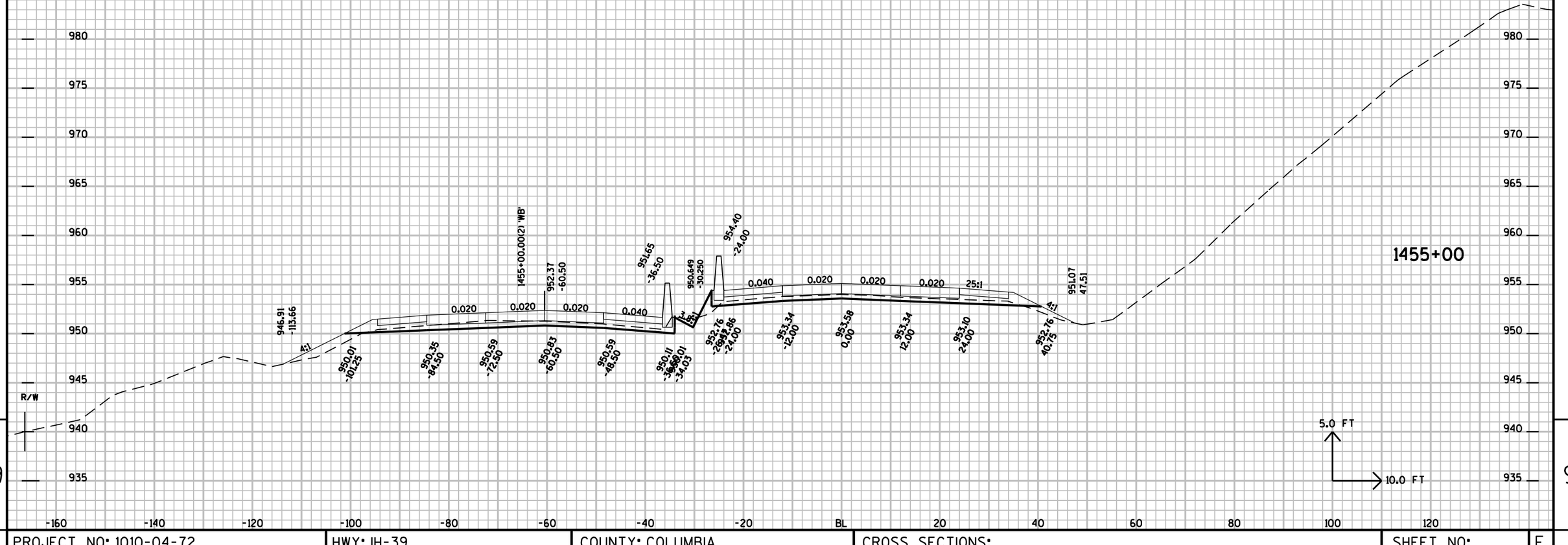
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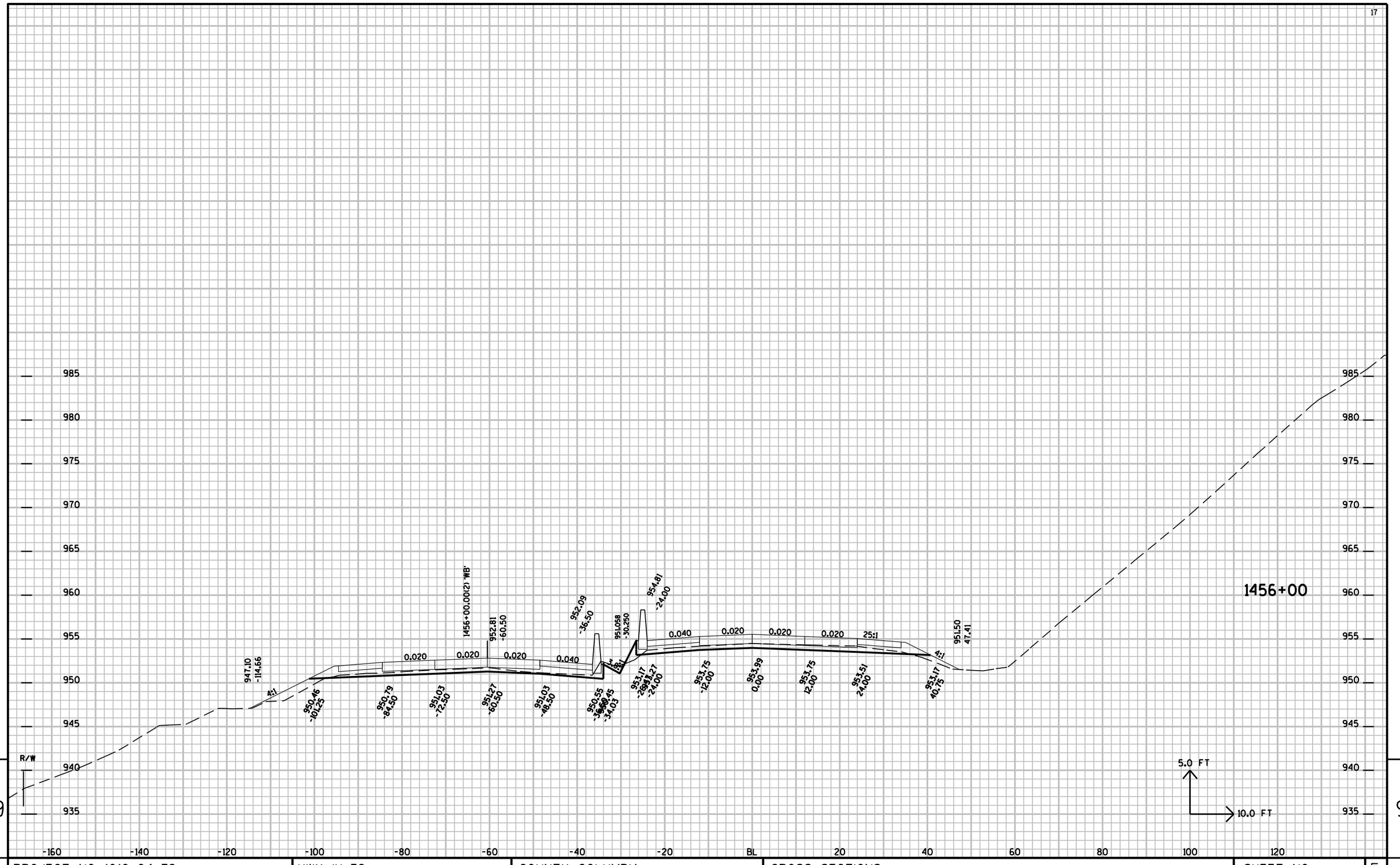
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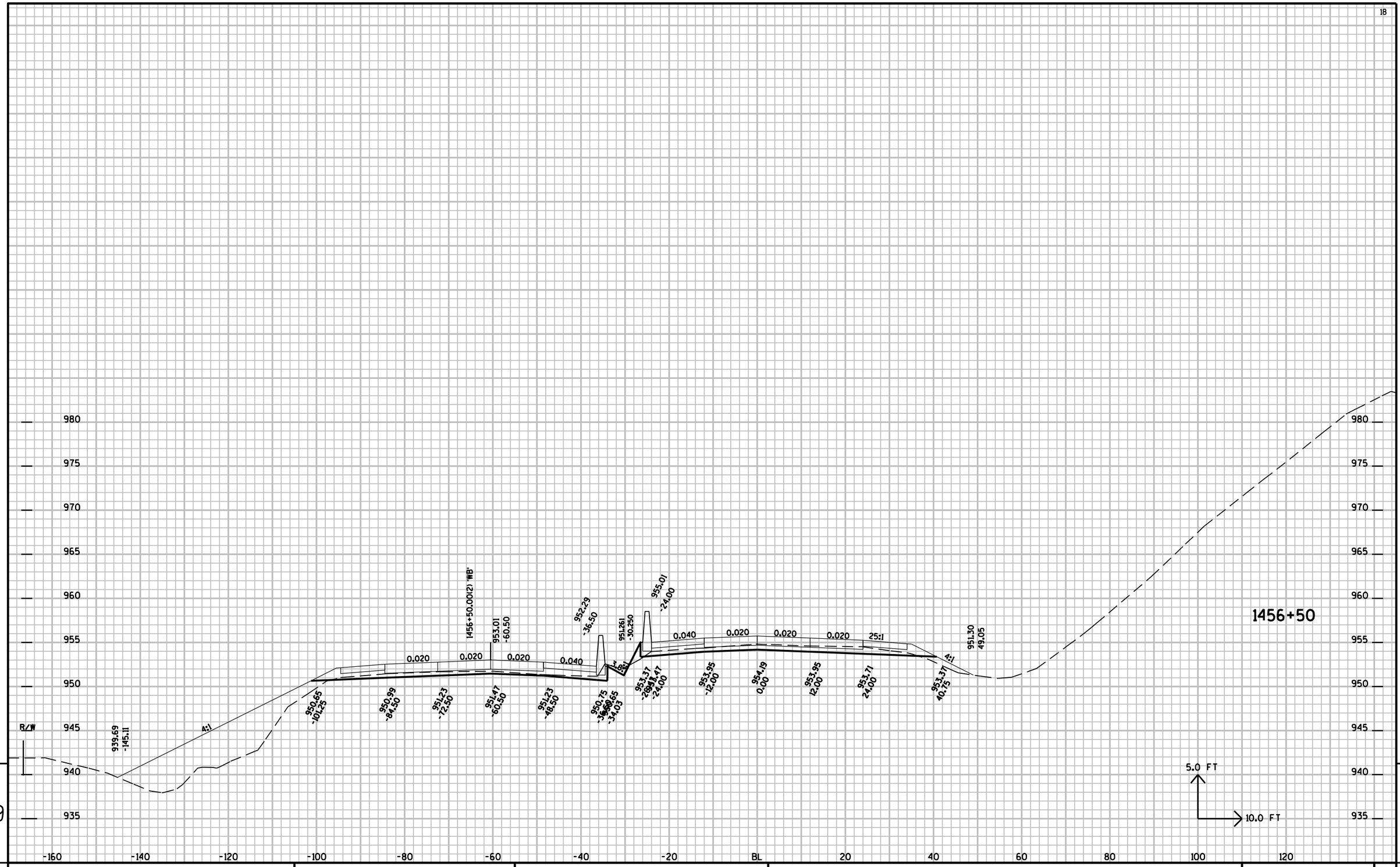
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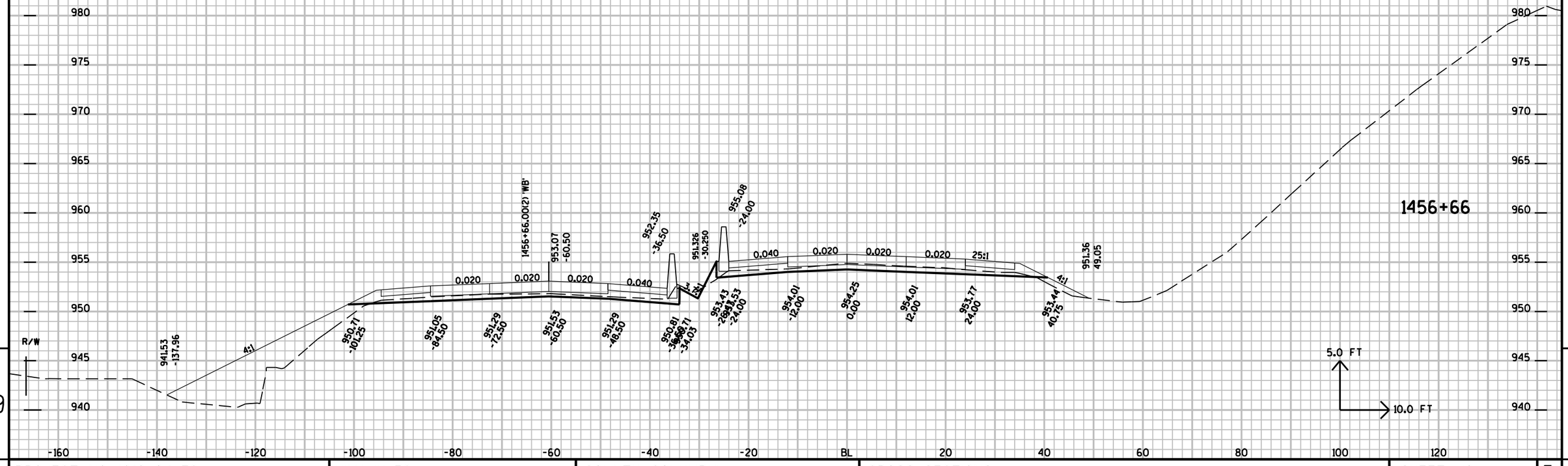


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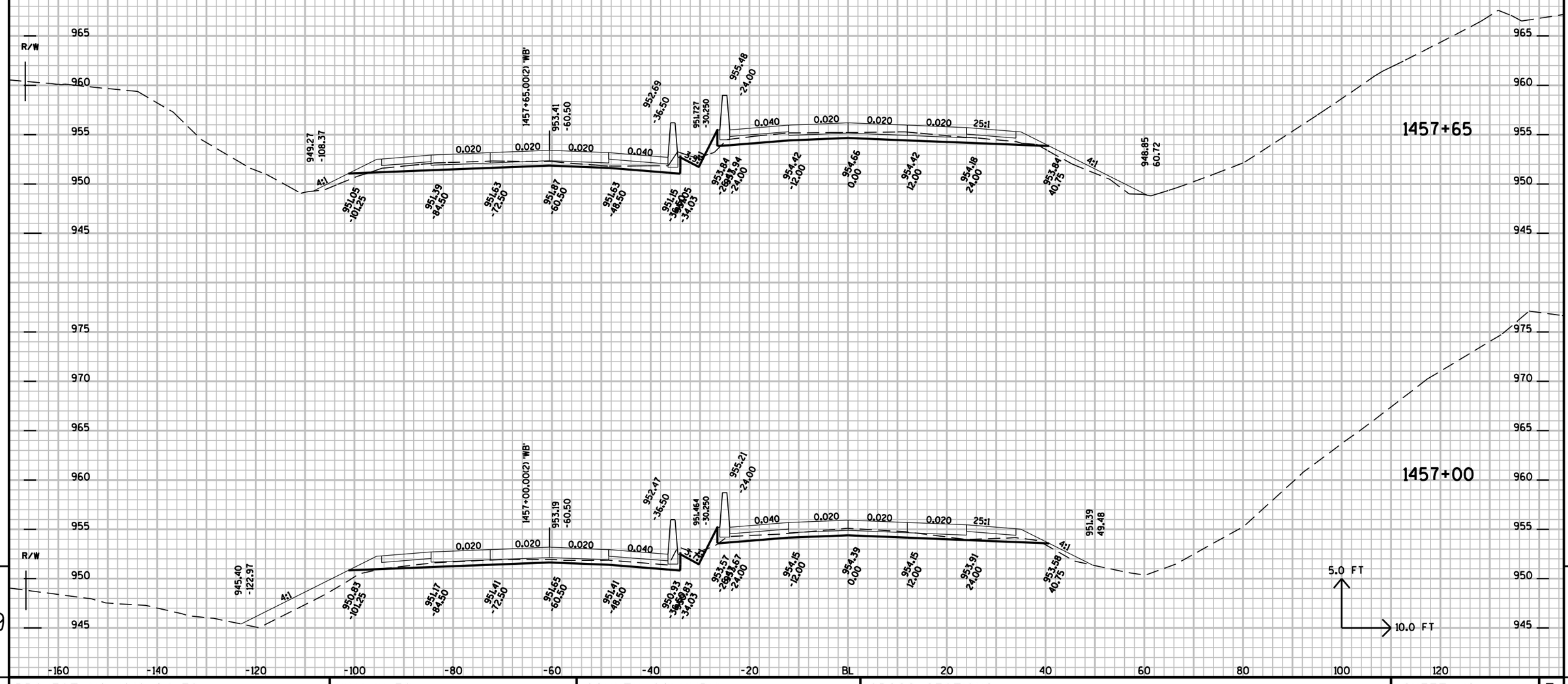
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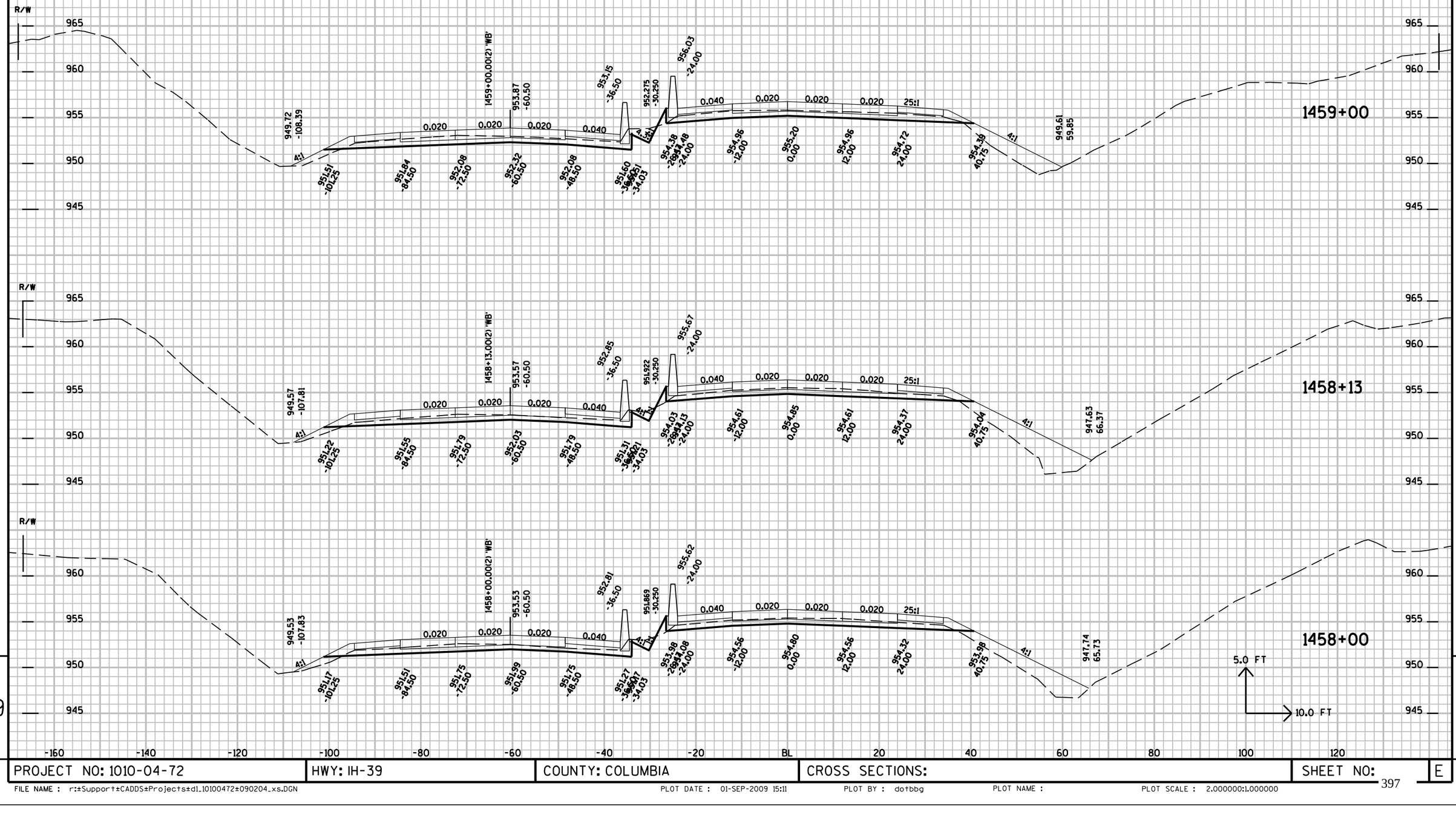
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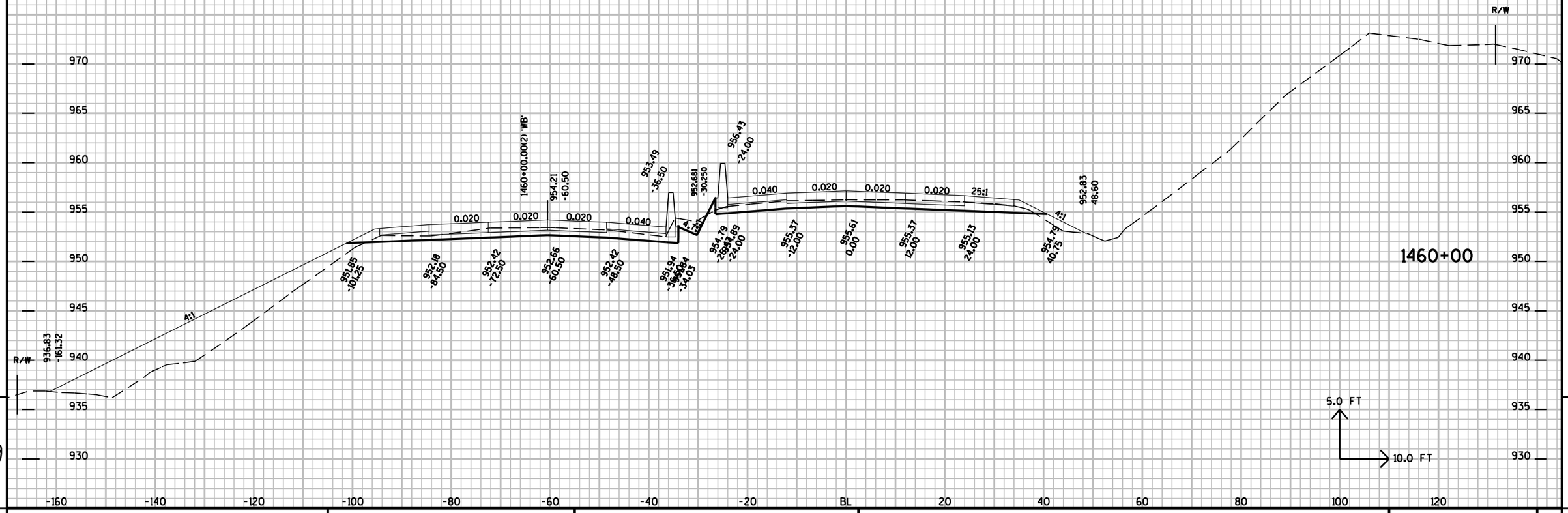
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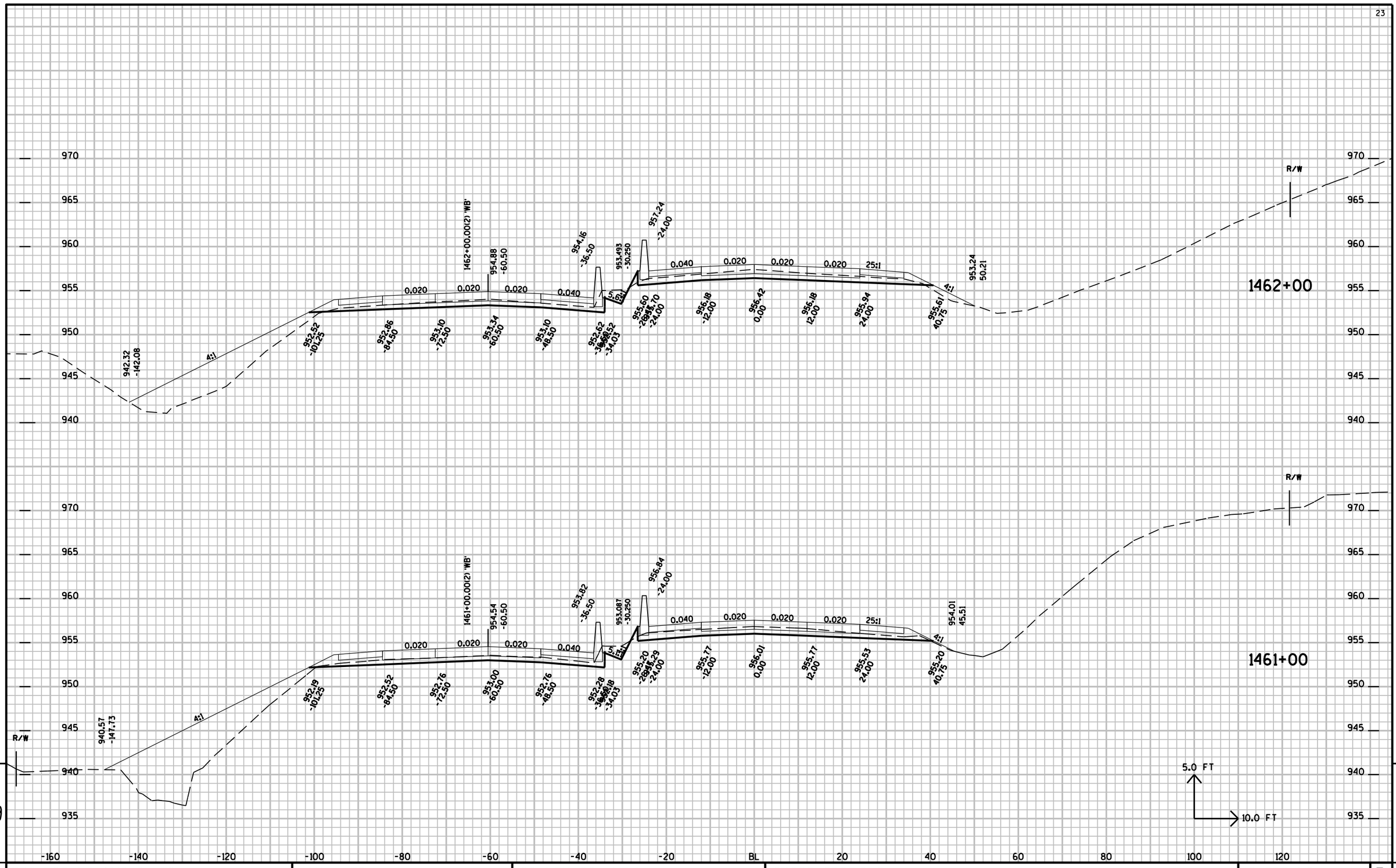
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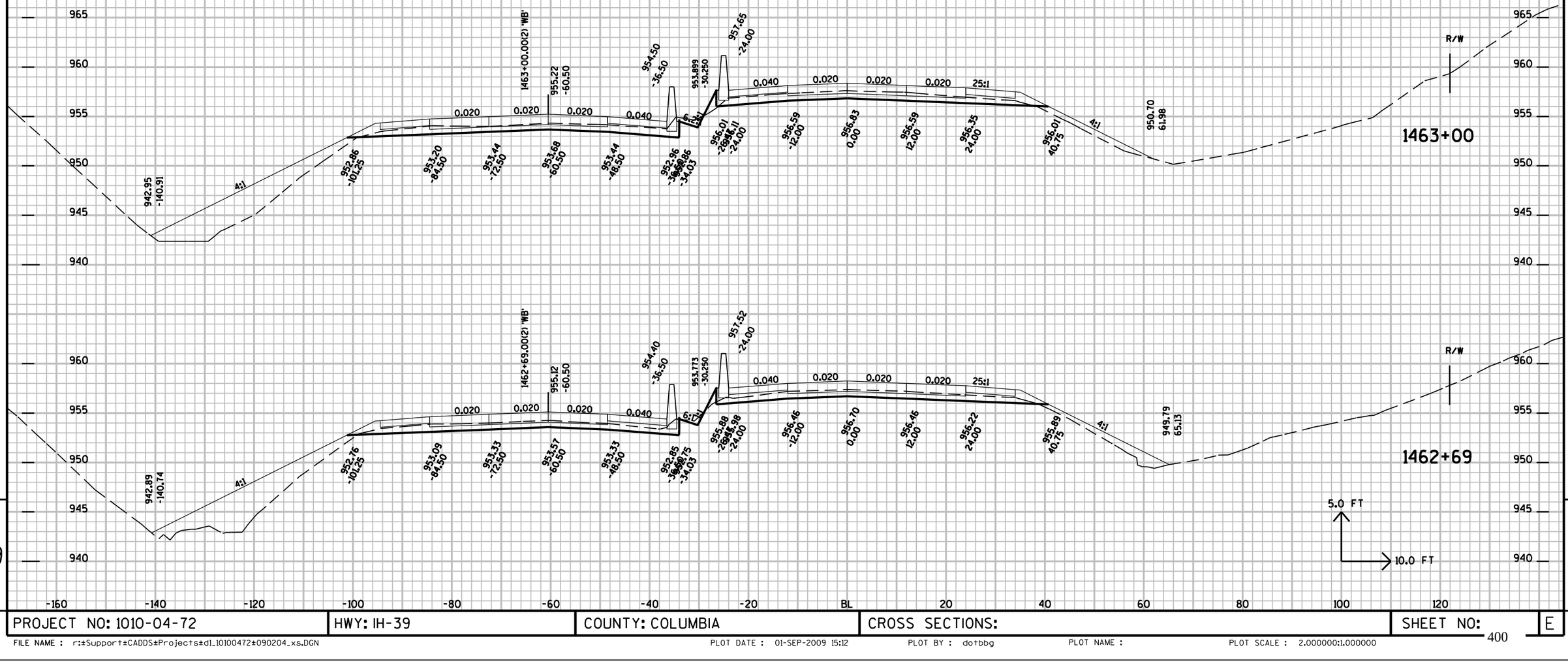
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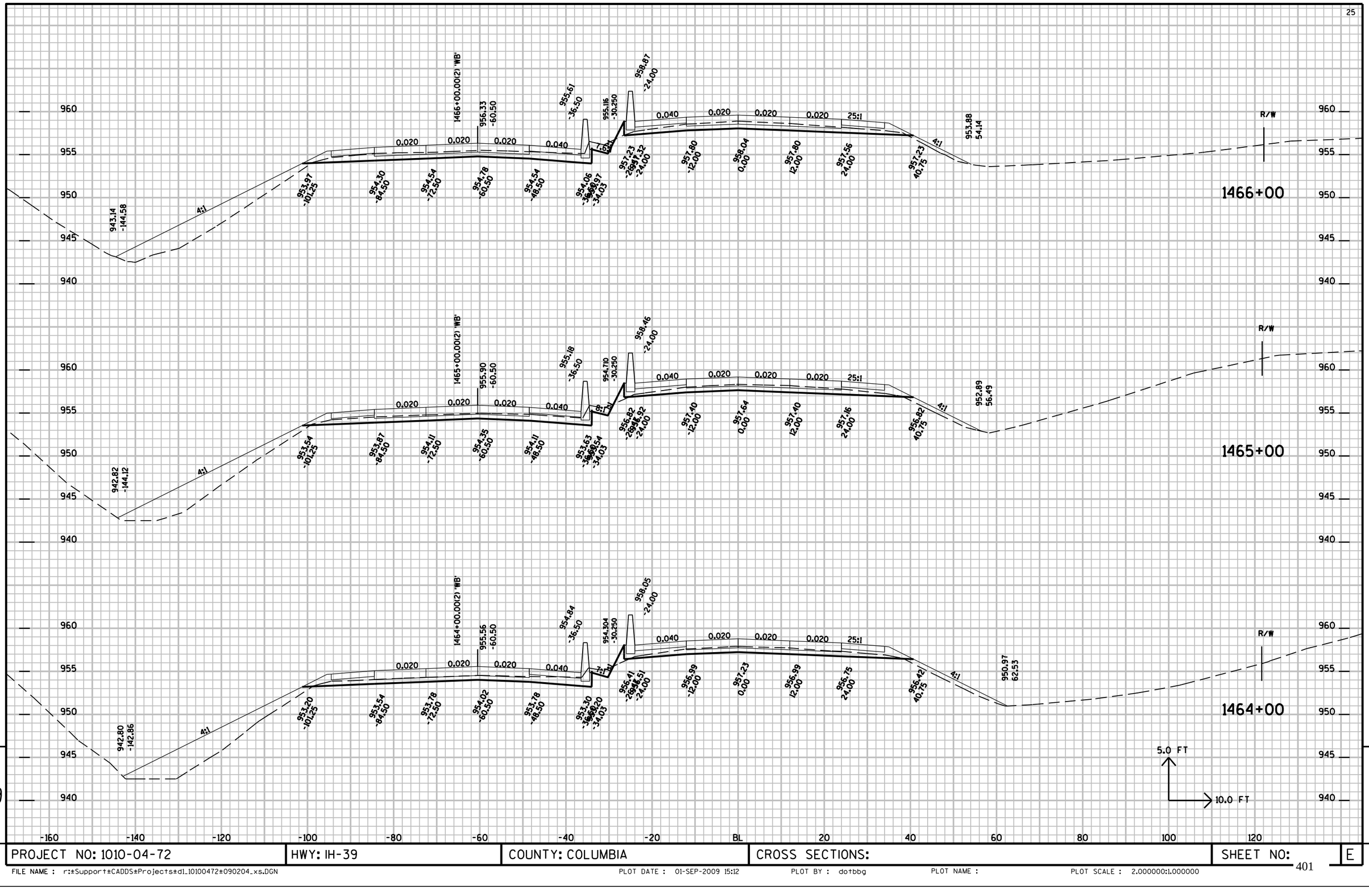
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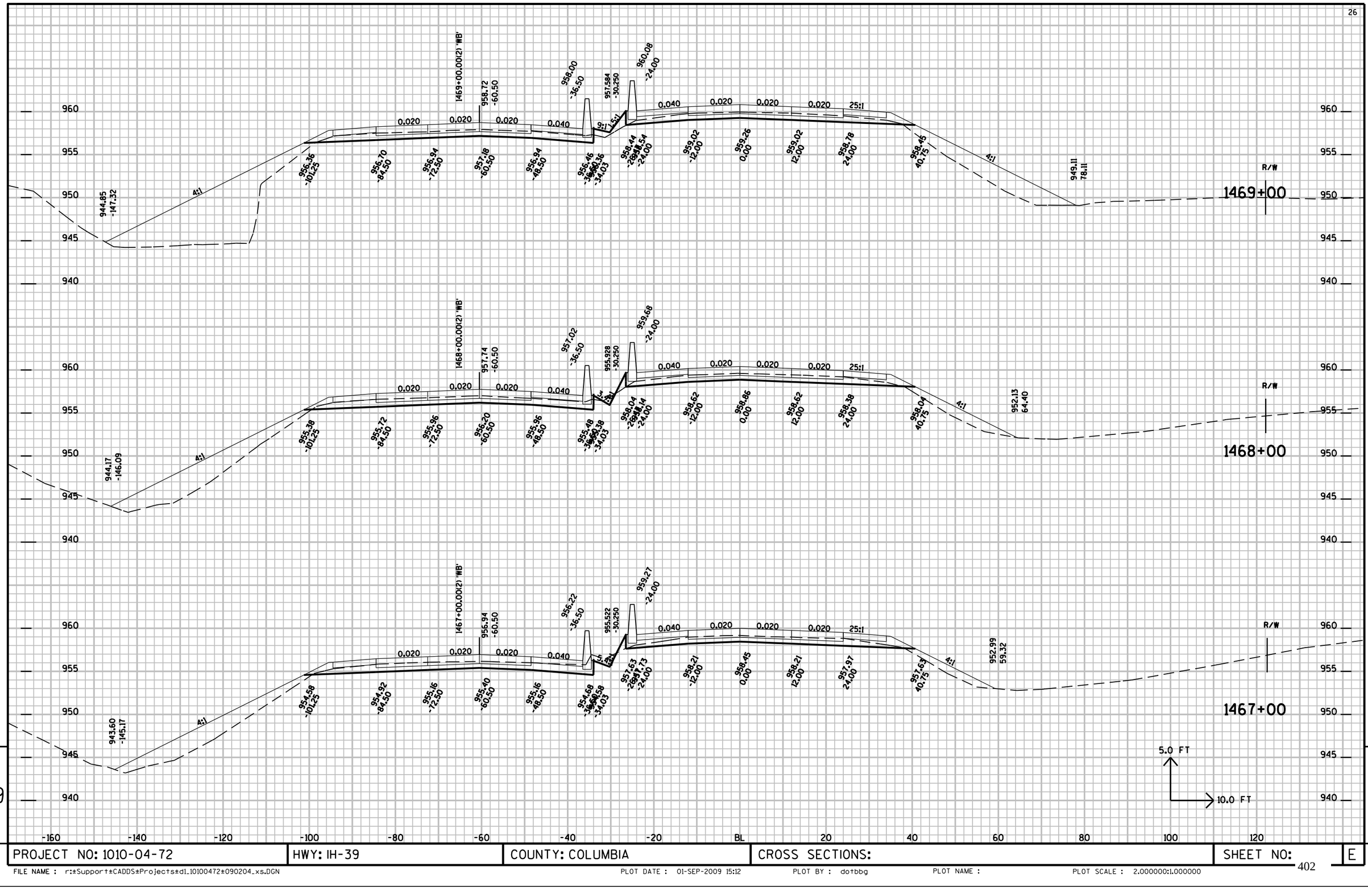
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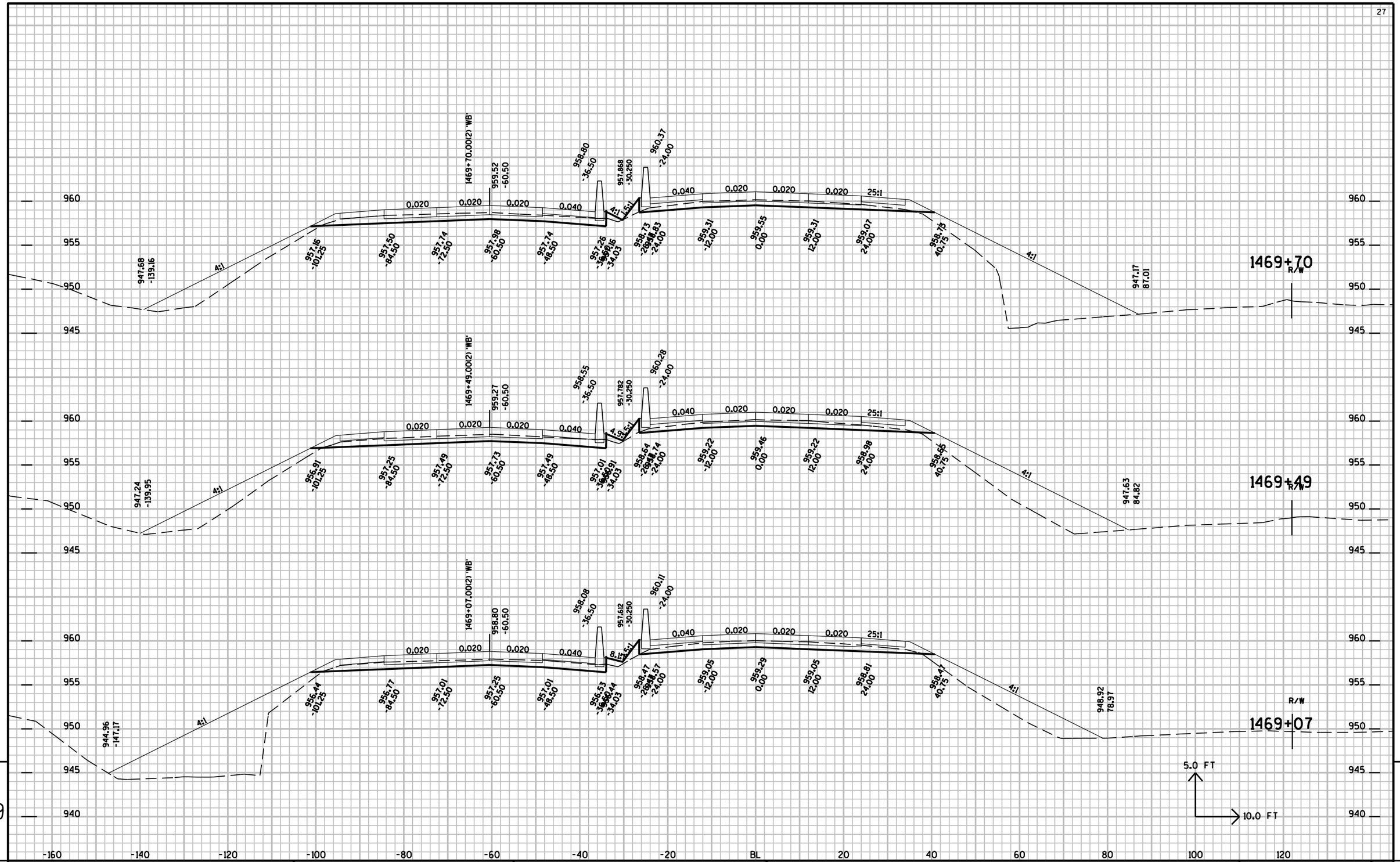


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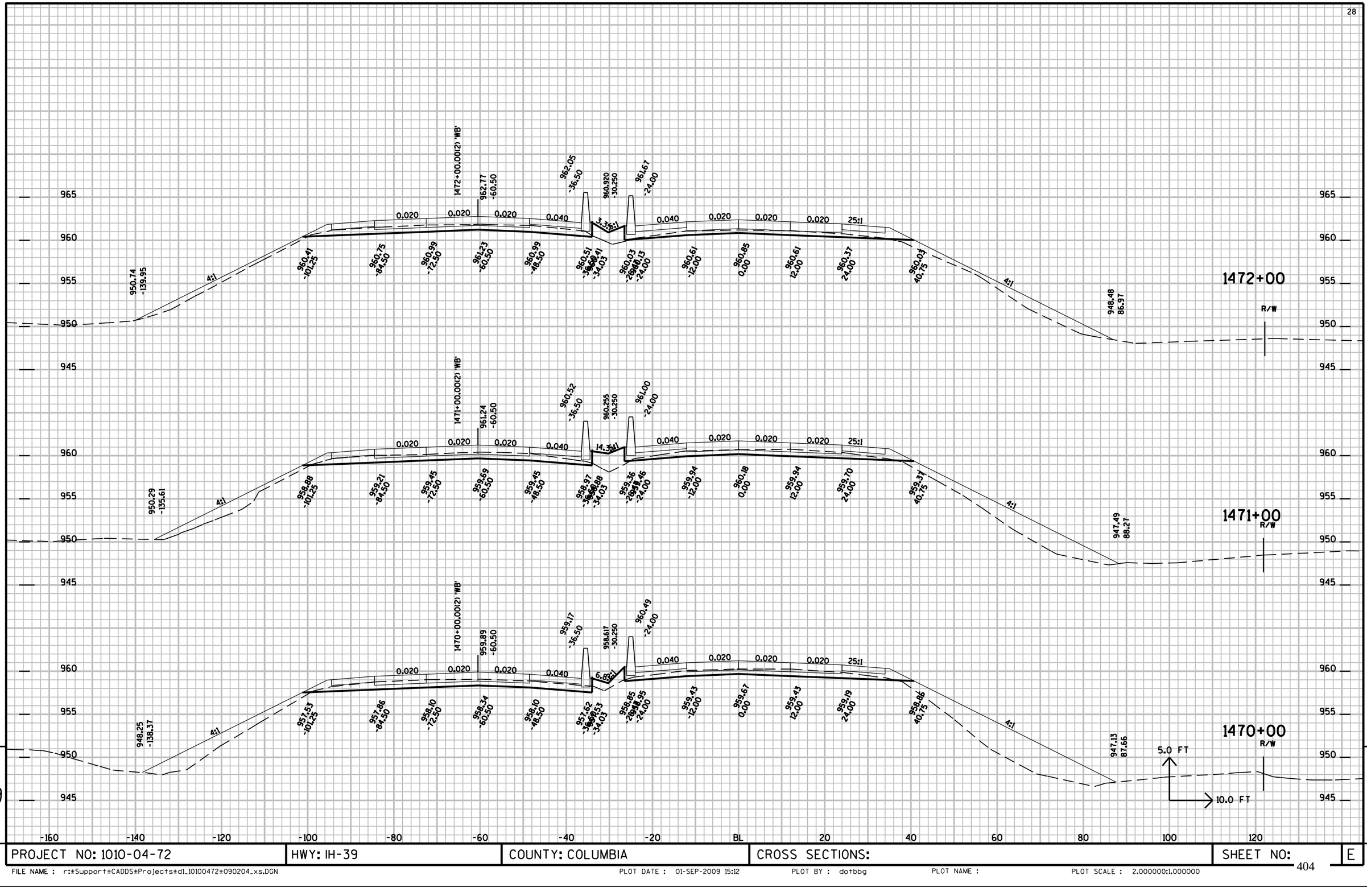


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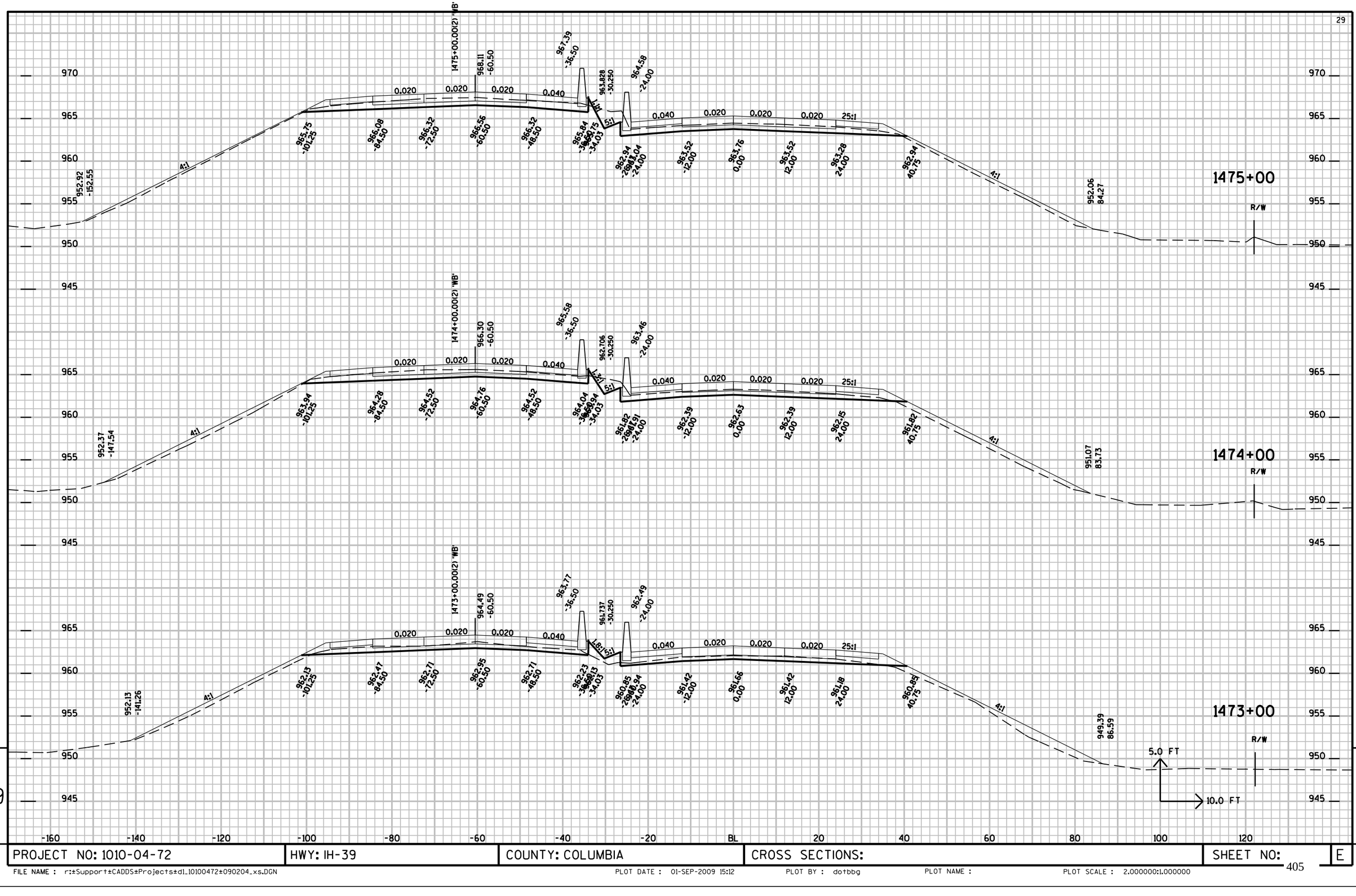
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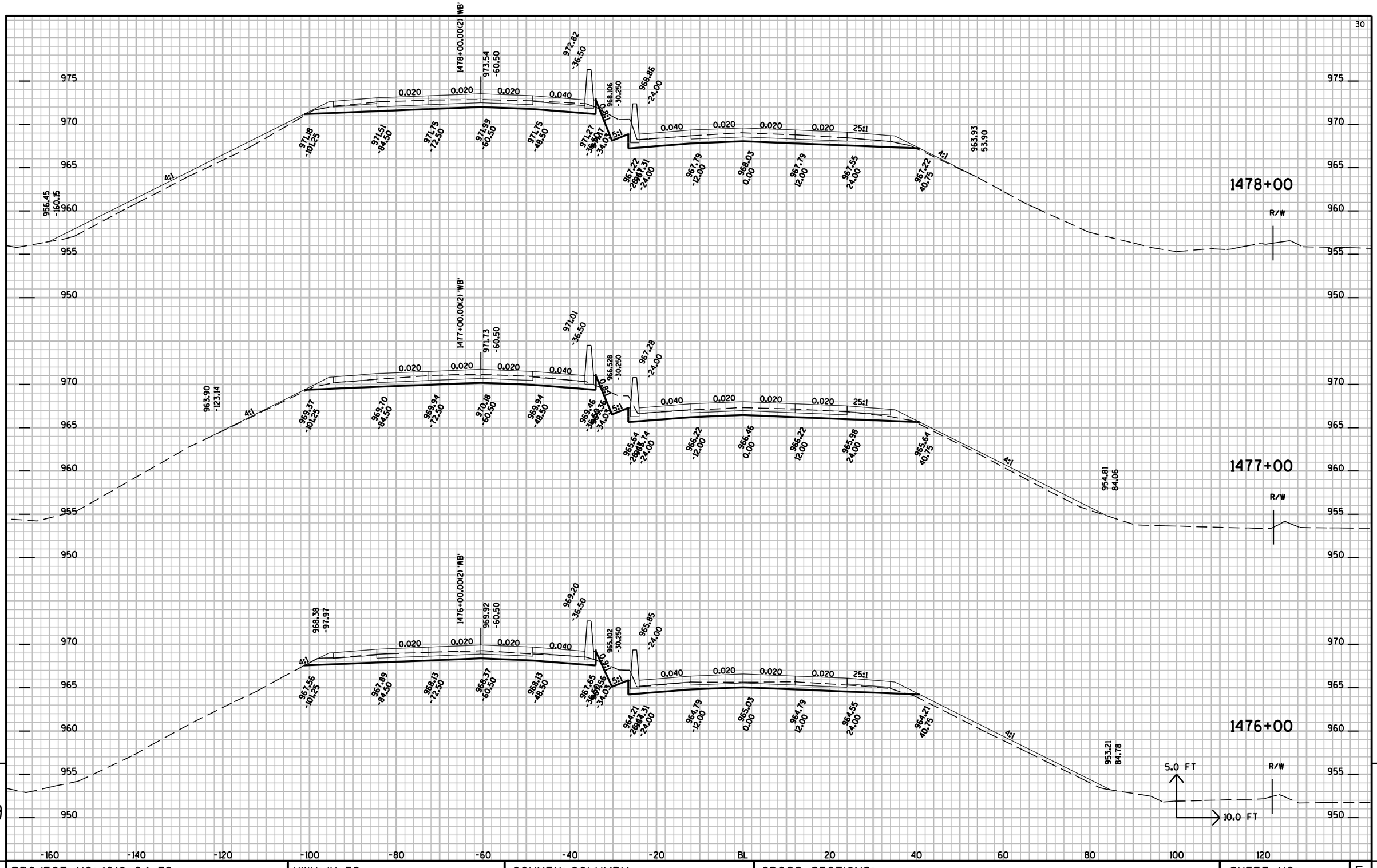


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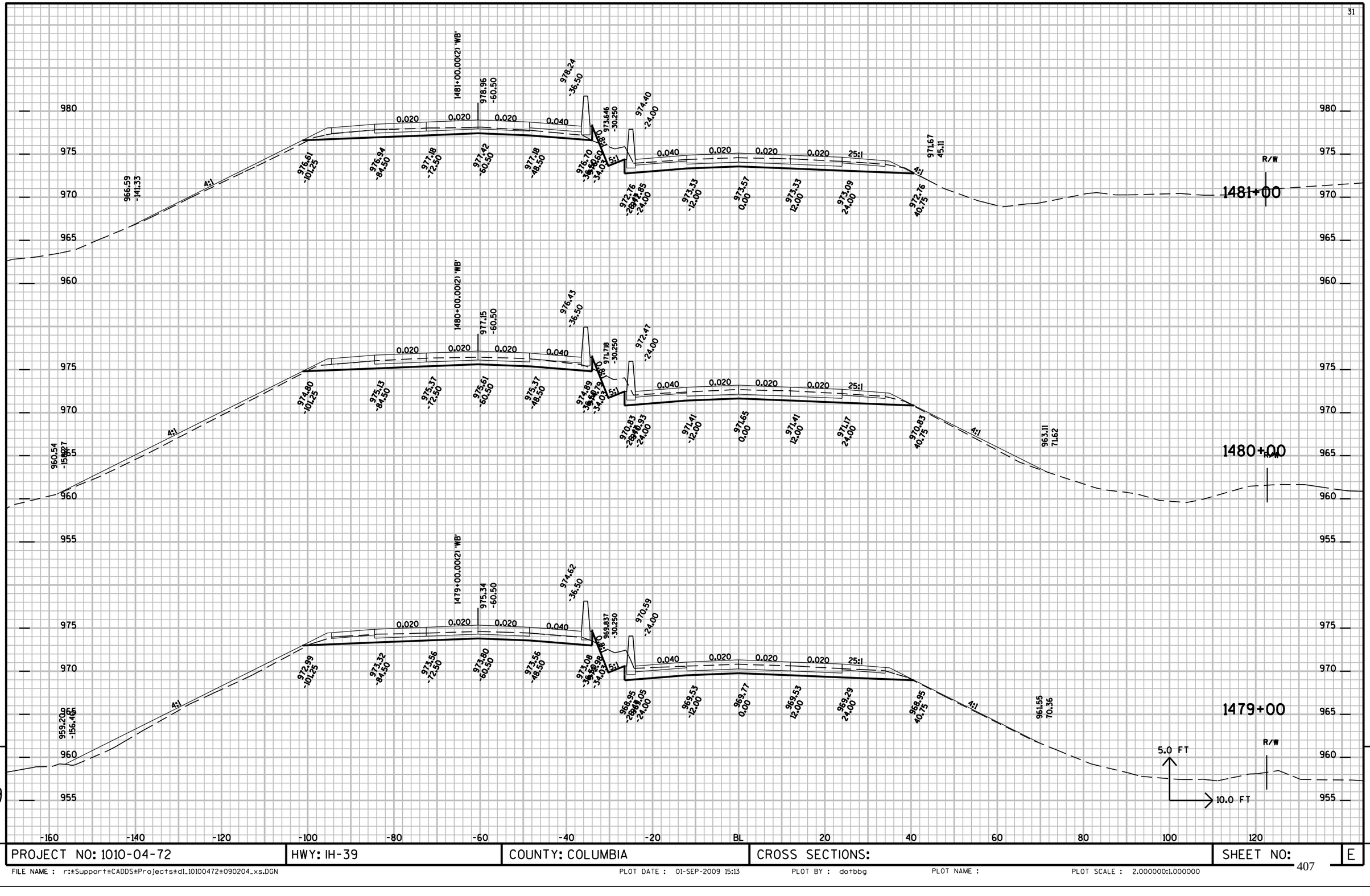
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PROJECT NO: 1010-04-72	HWY: IH-39	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET NO:	E

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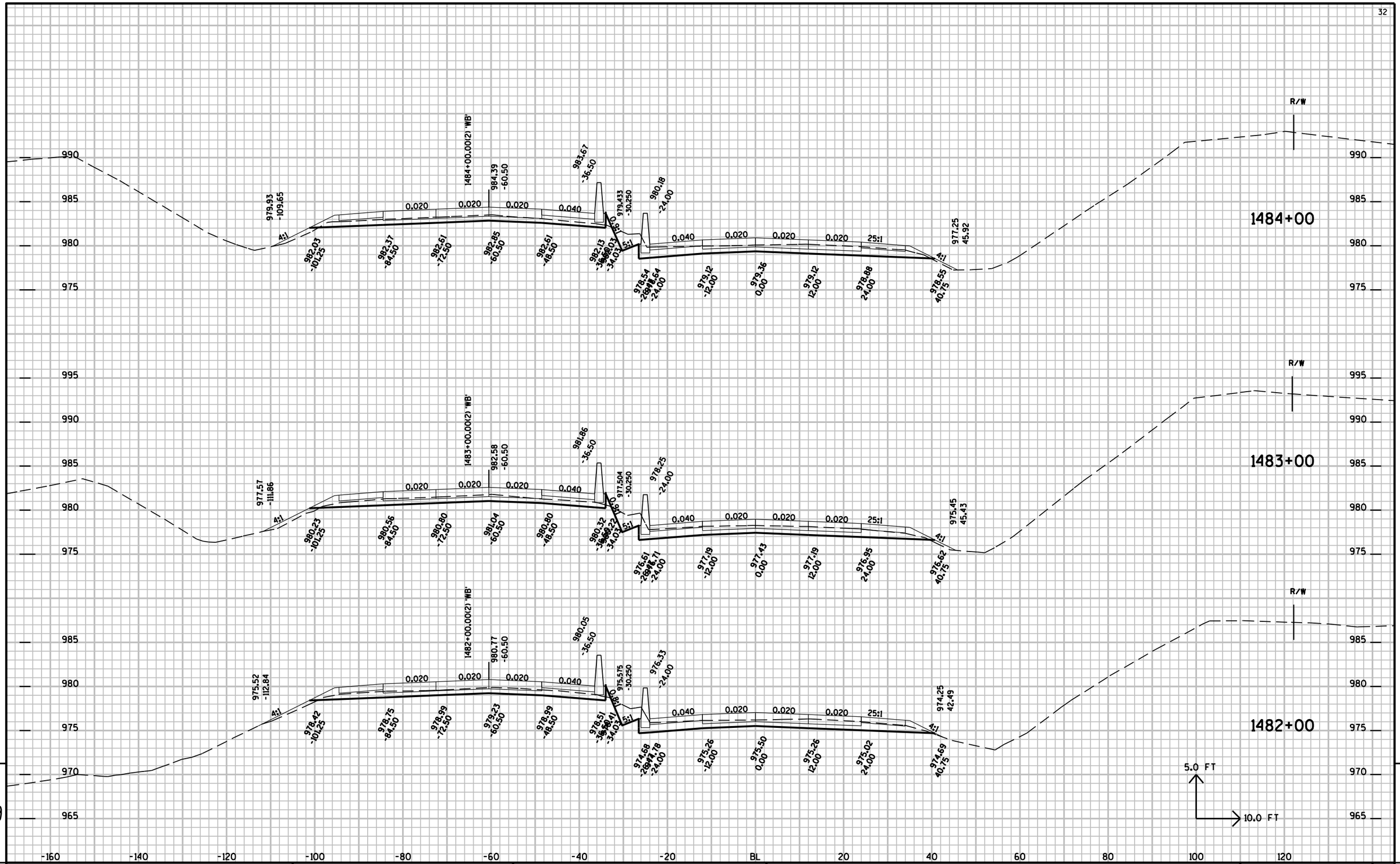


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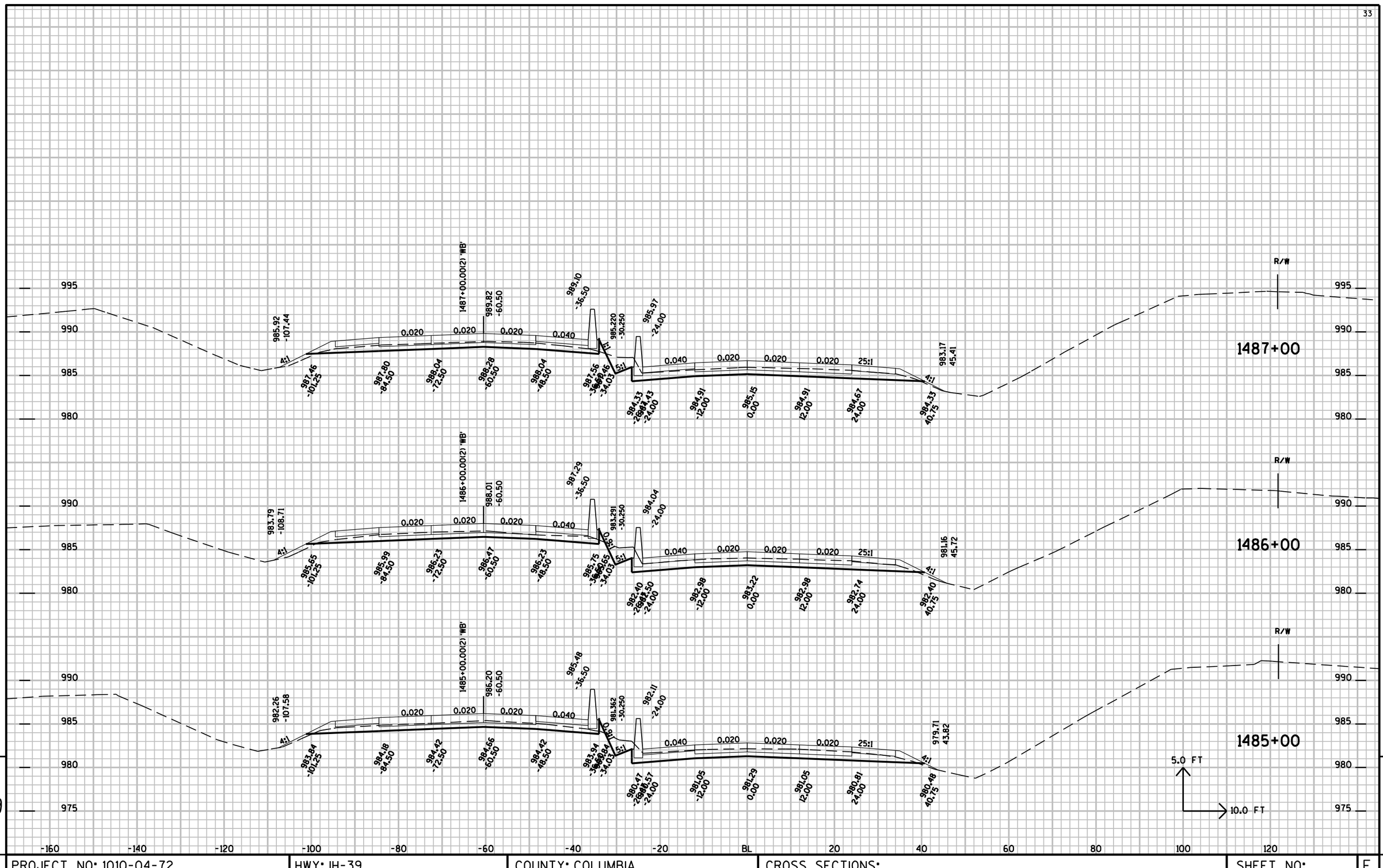
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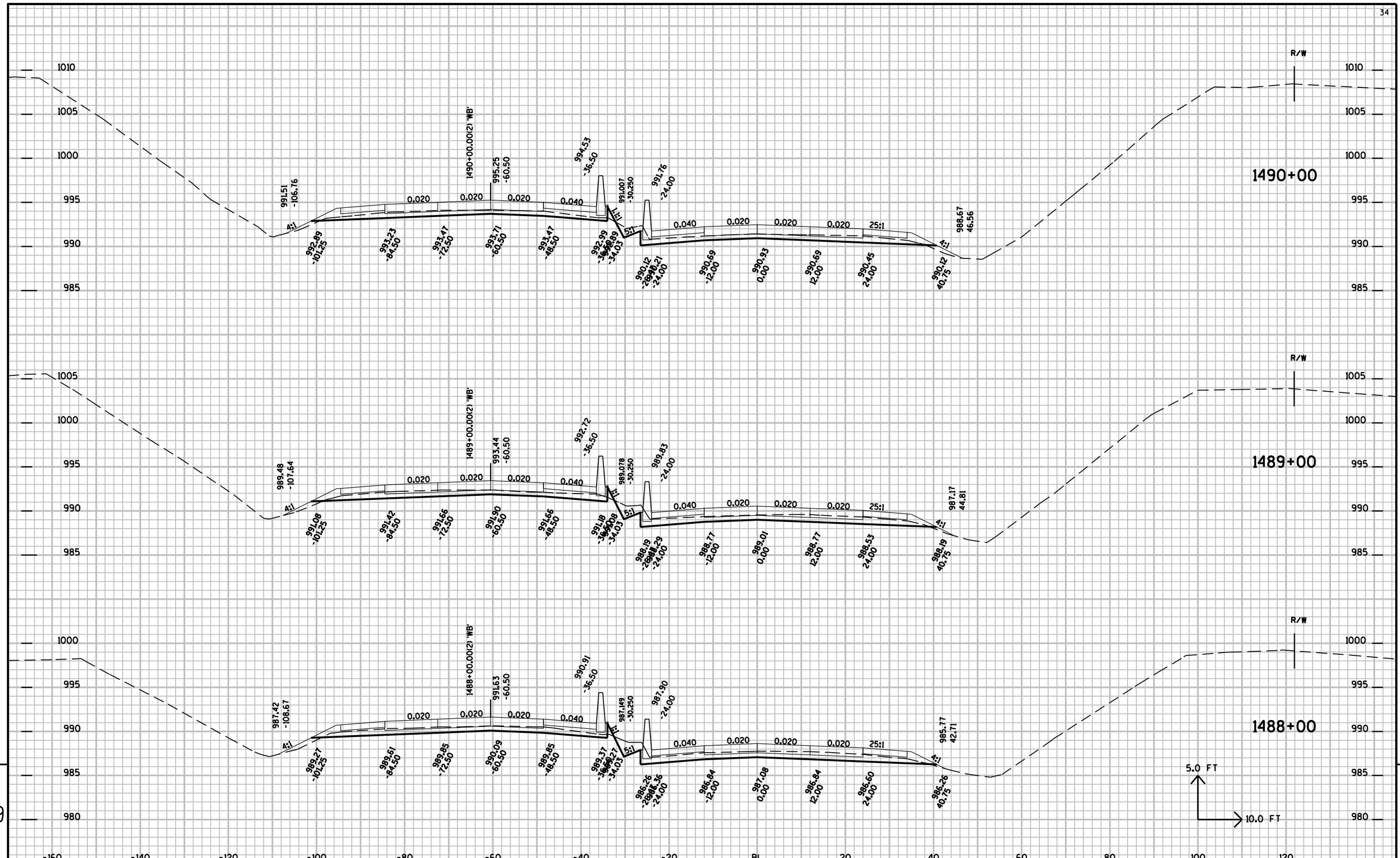
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PROJECT NO: 1010-04-72	HWY: IH-39	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET NO:	E

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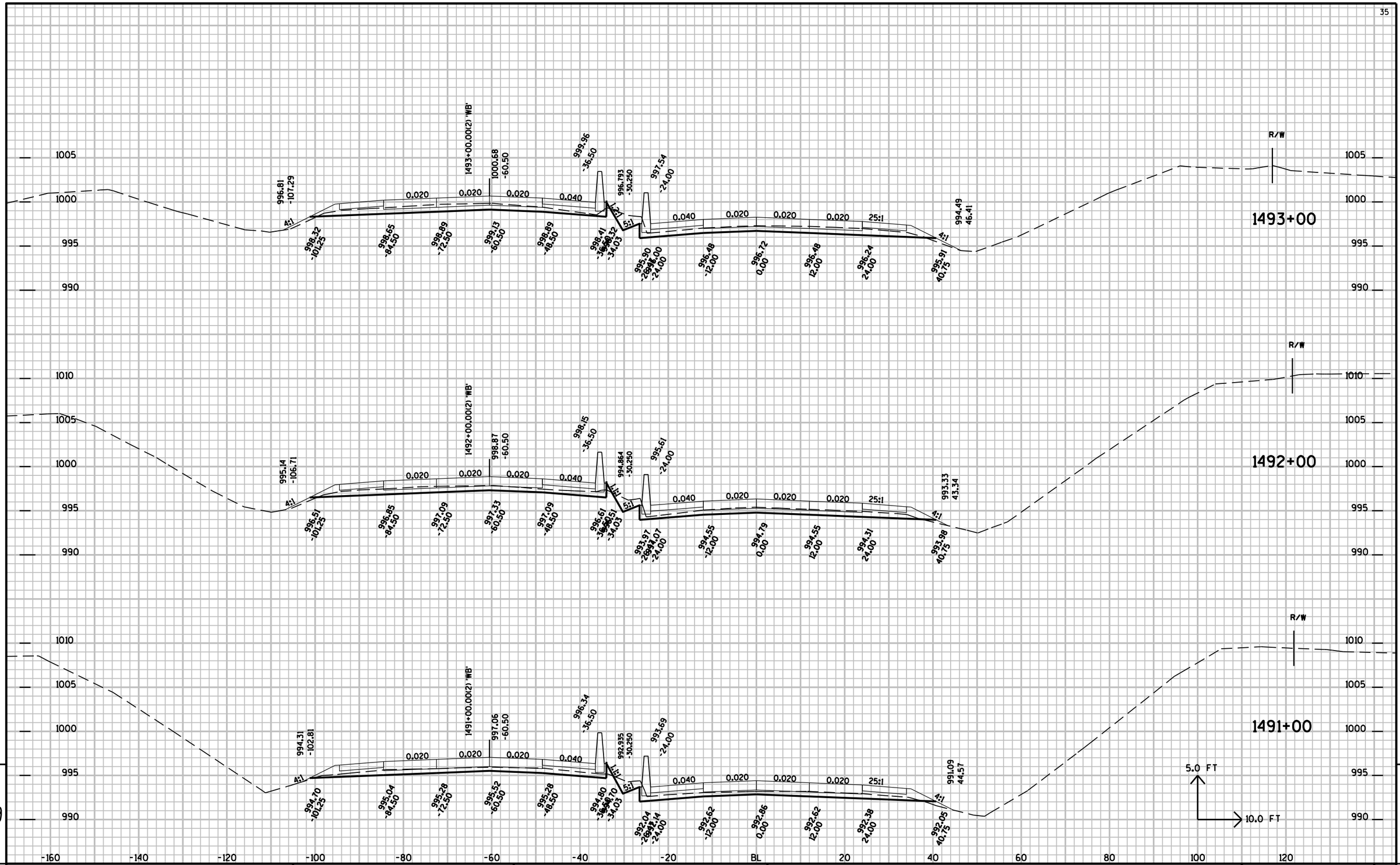


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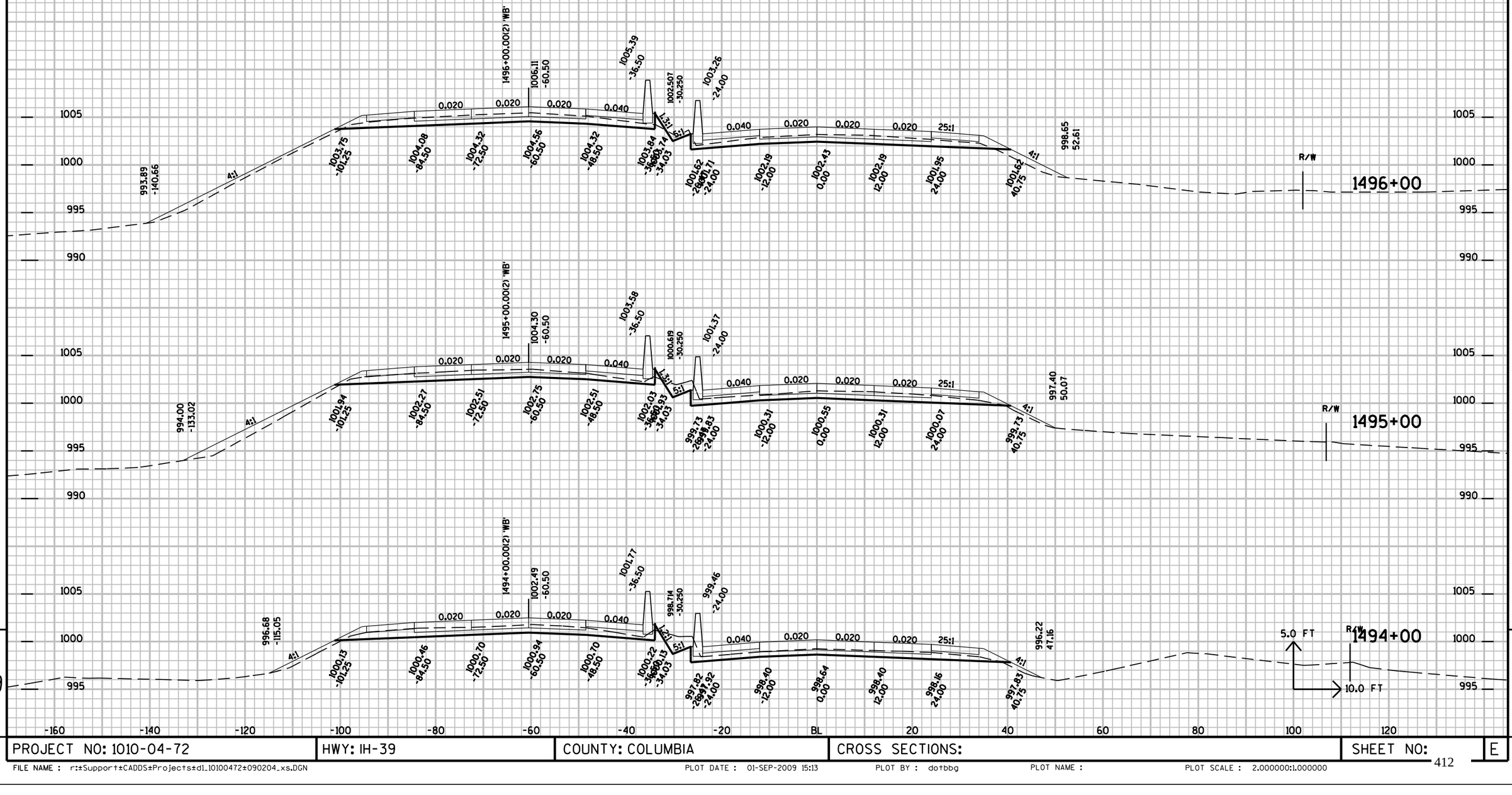
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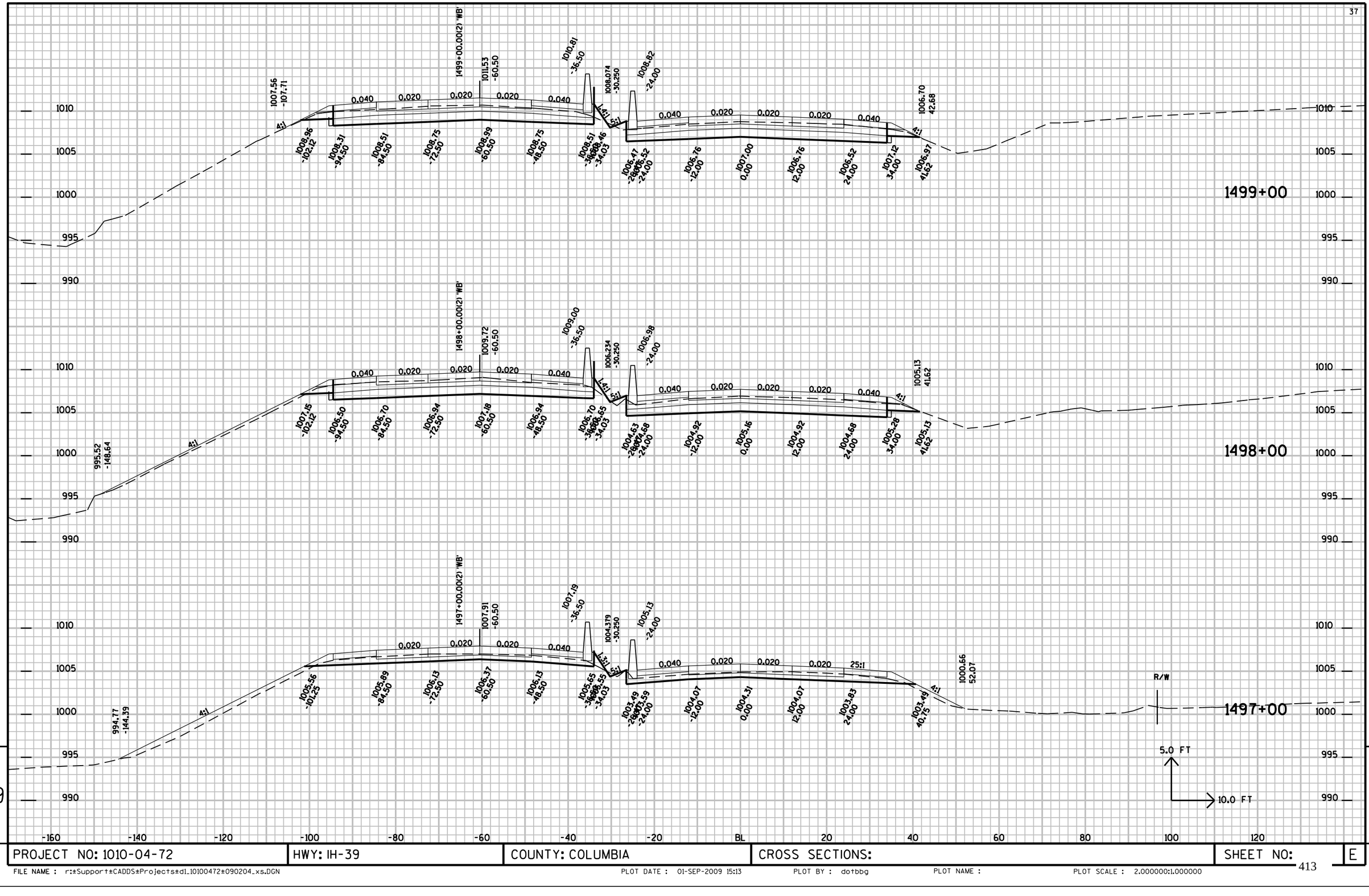
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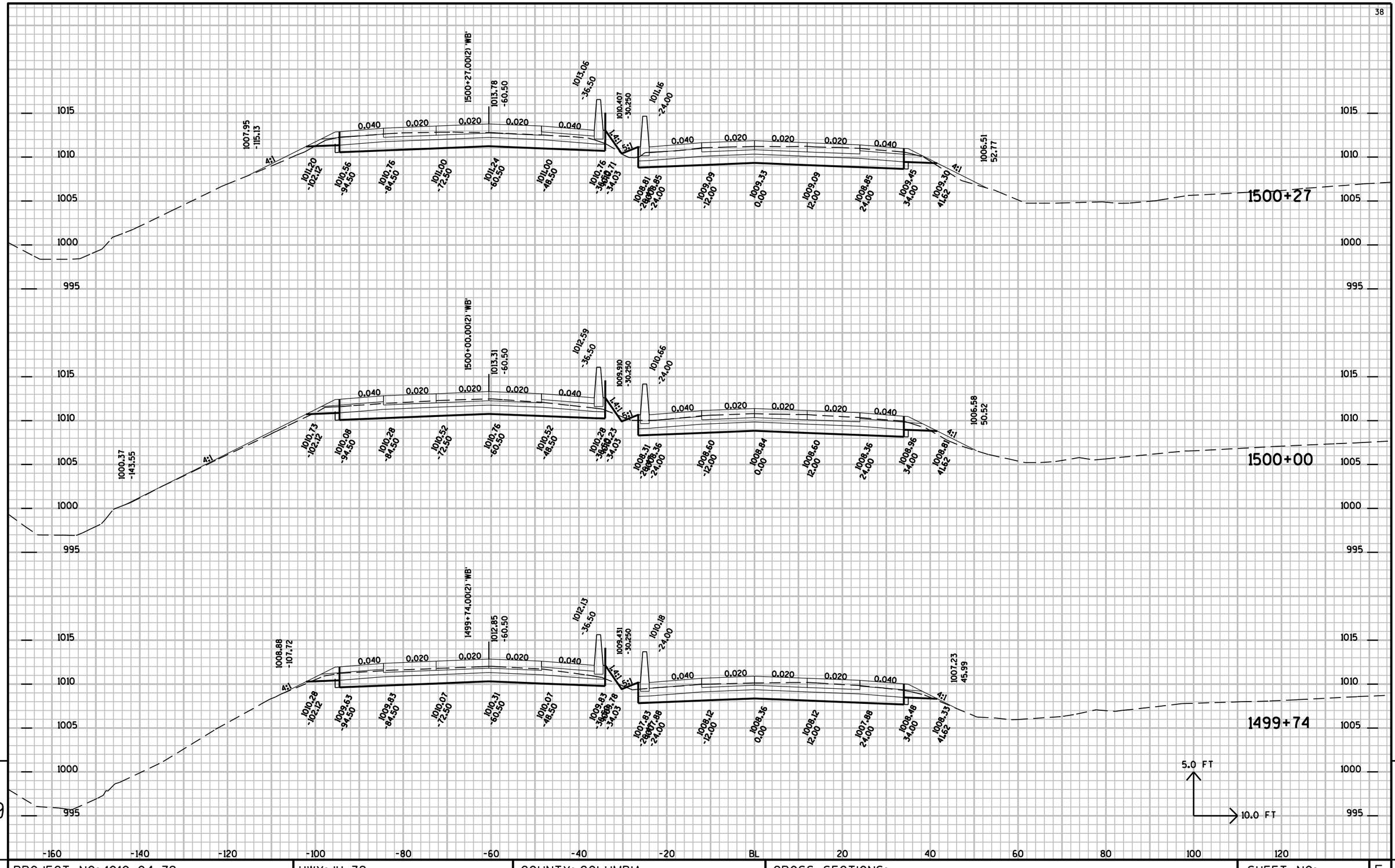
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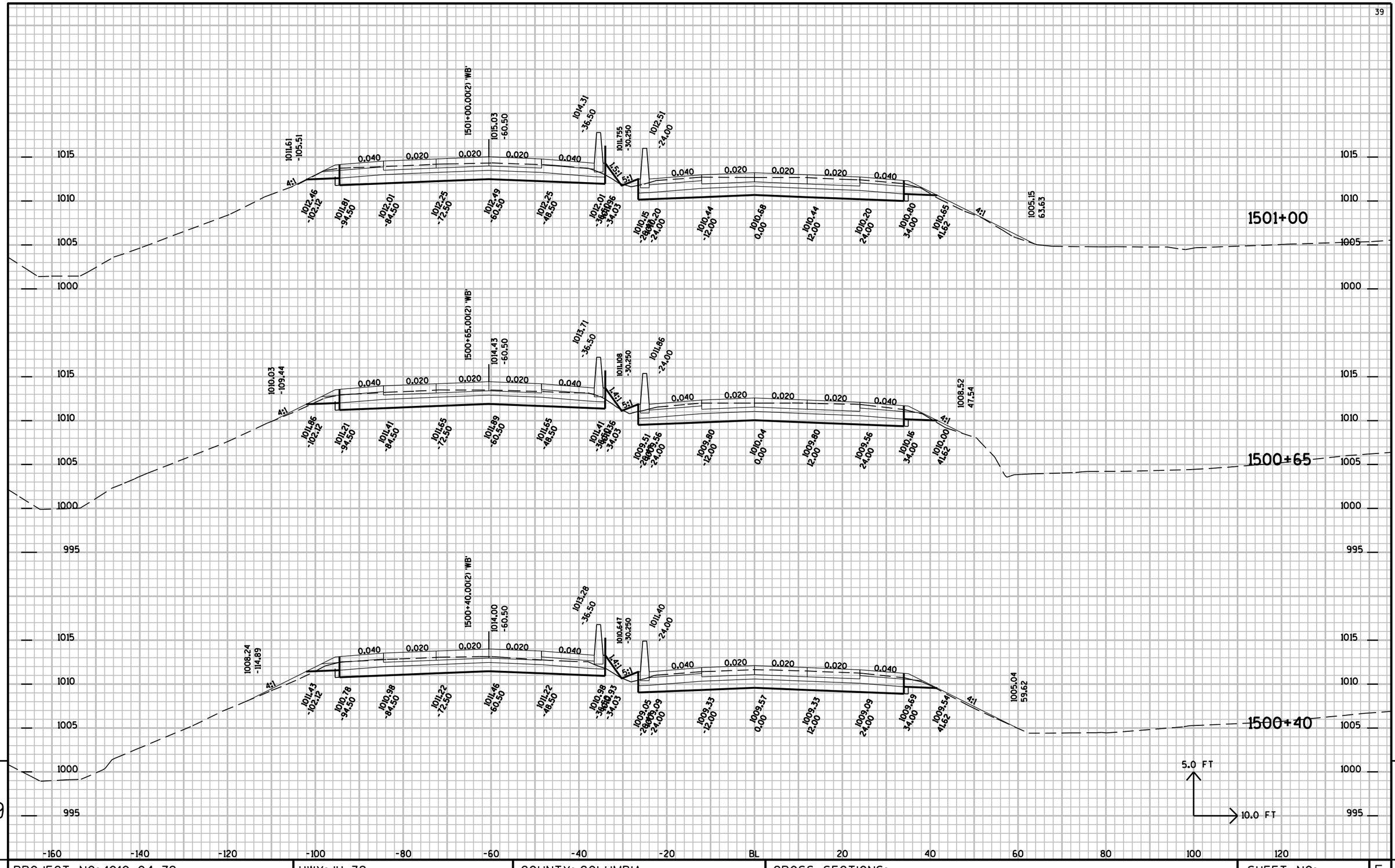
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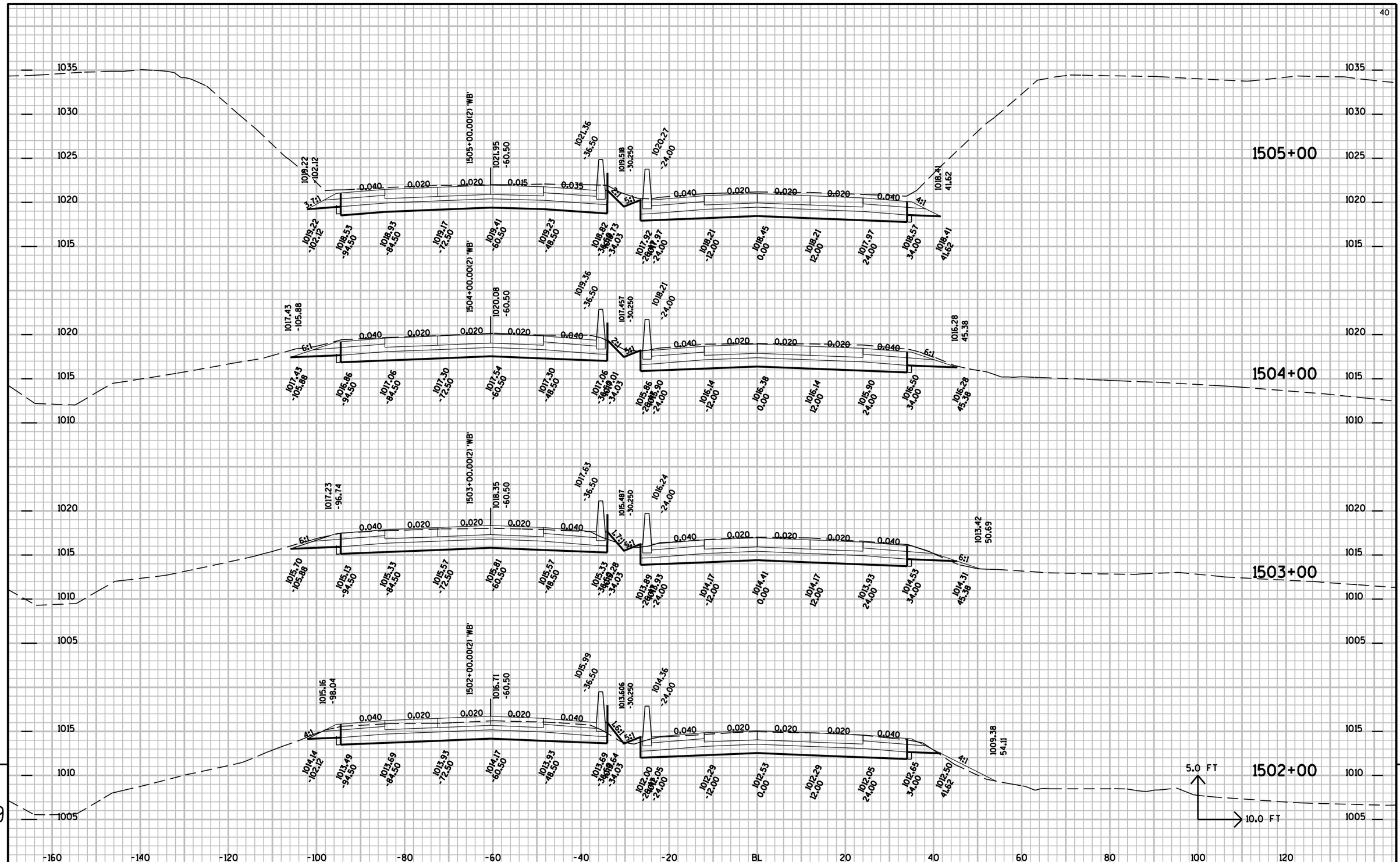
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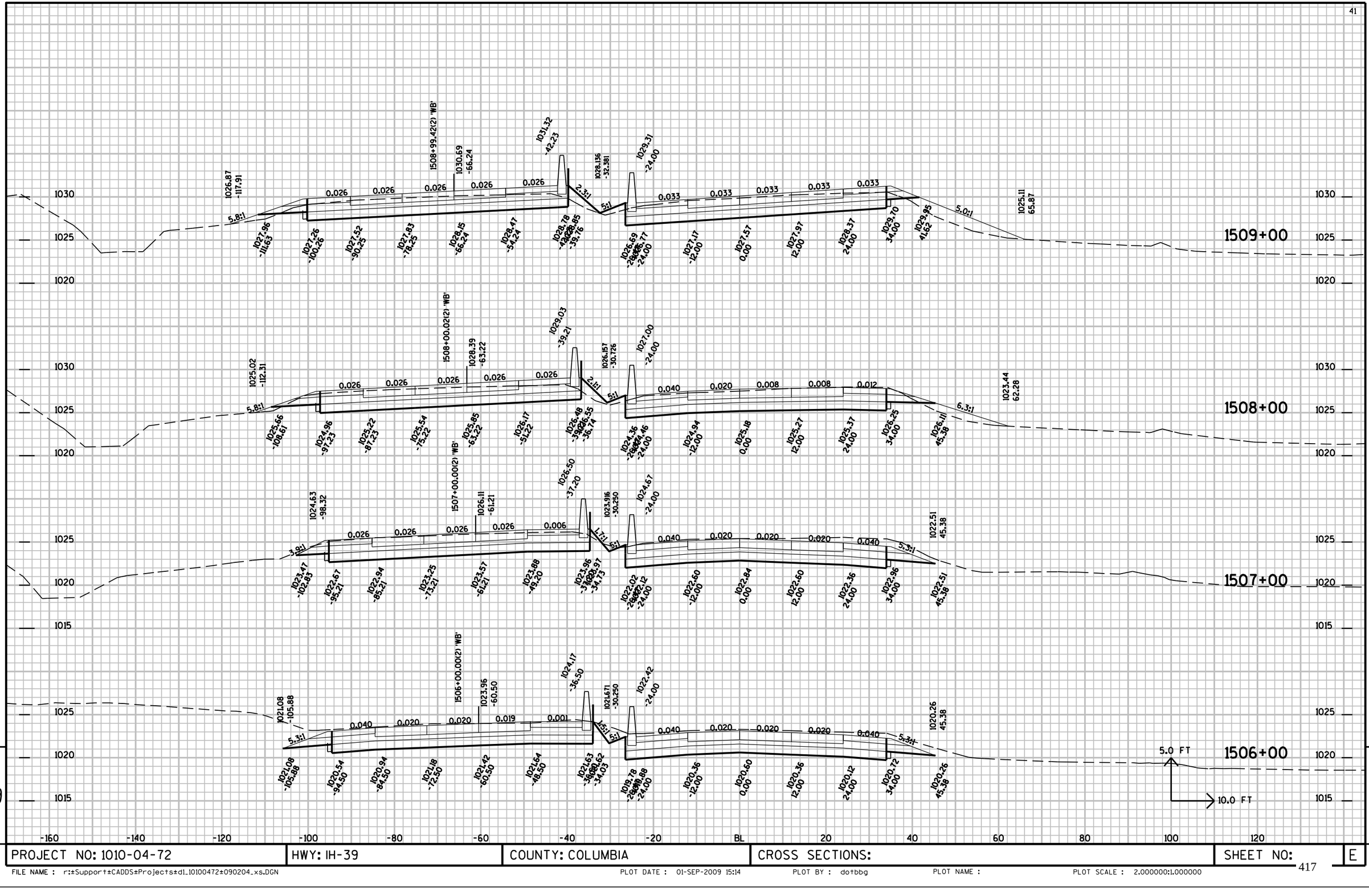
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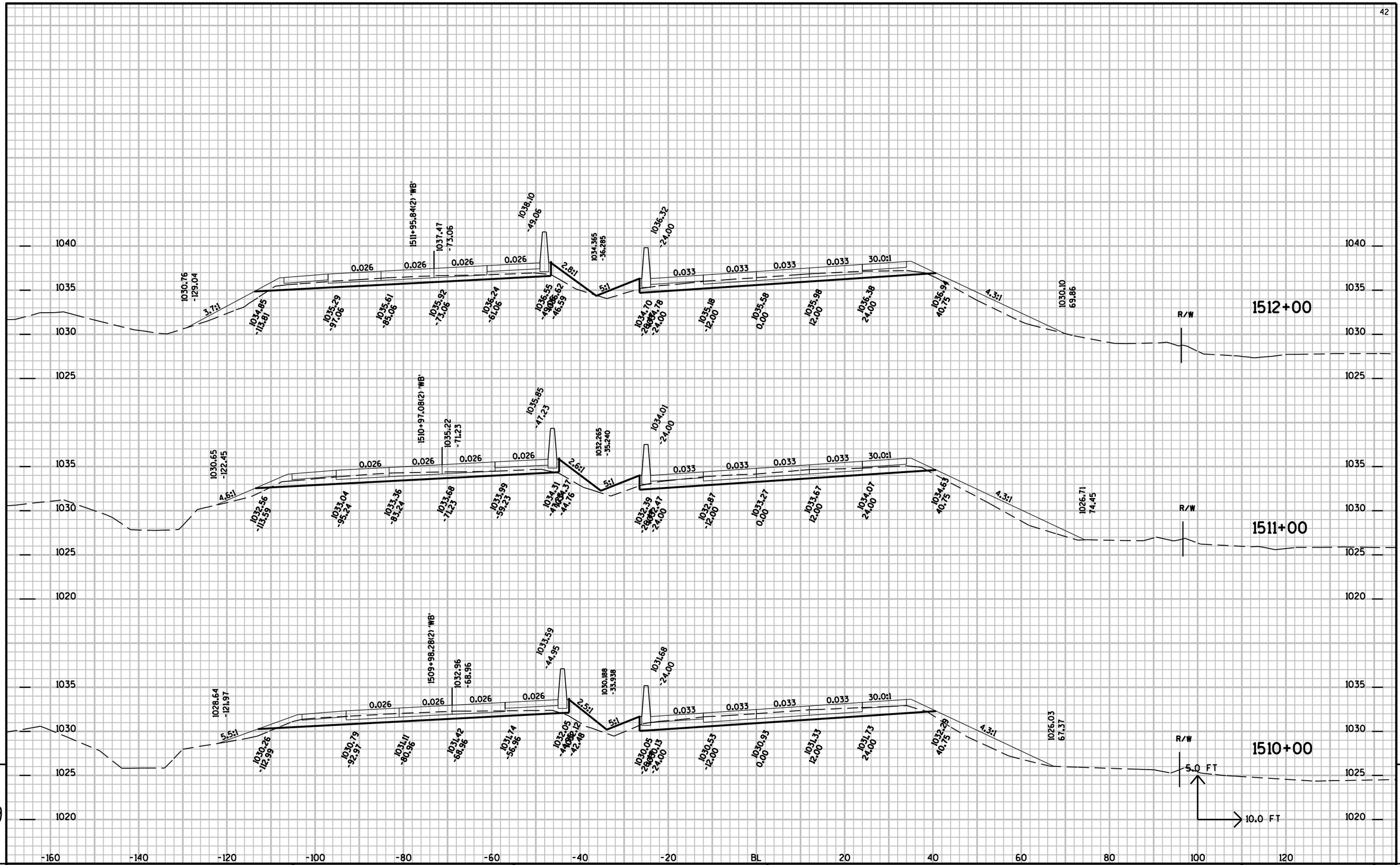
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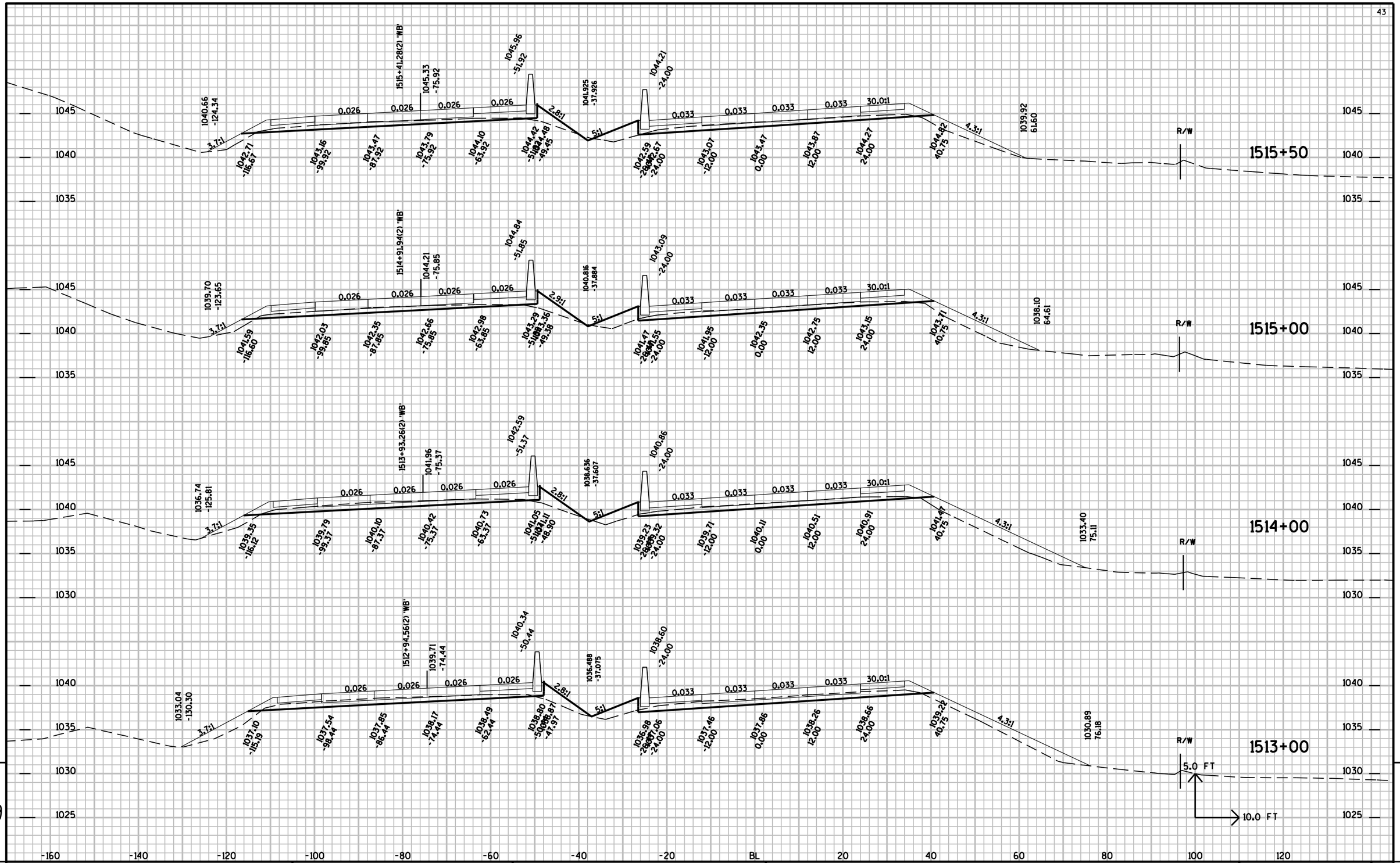


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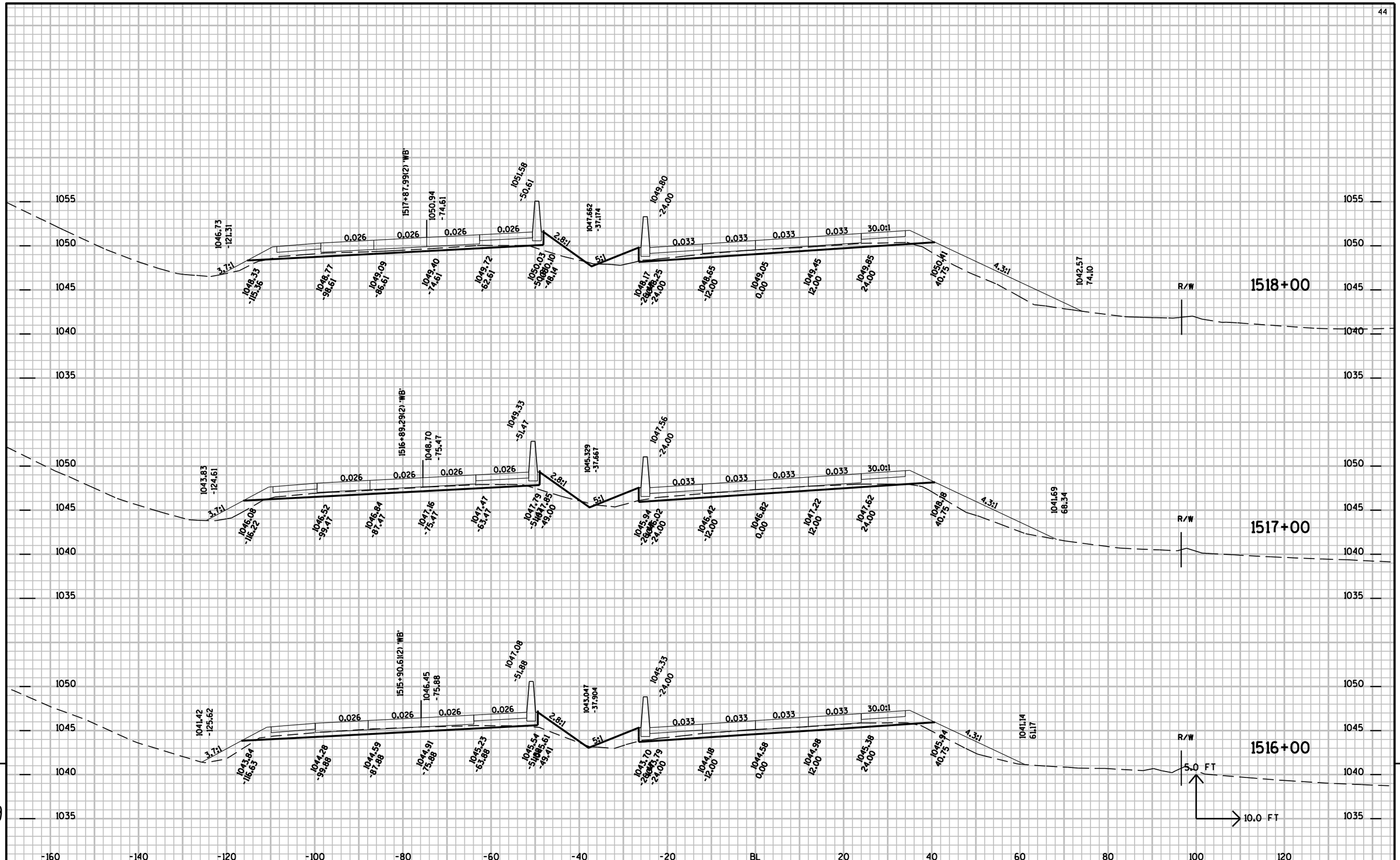


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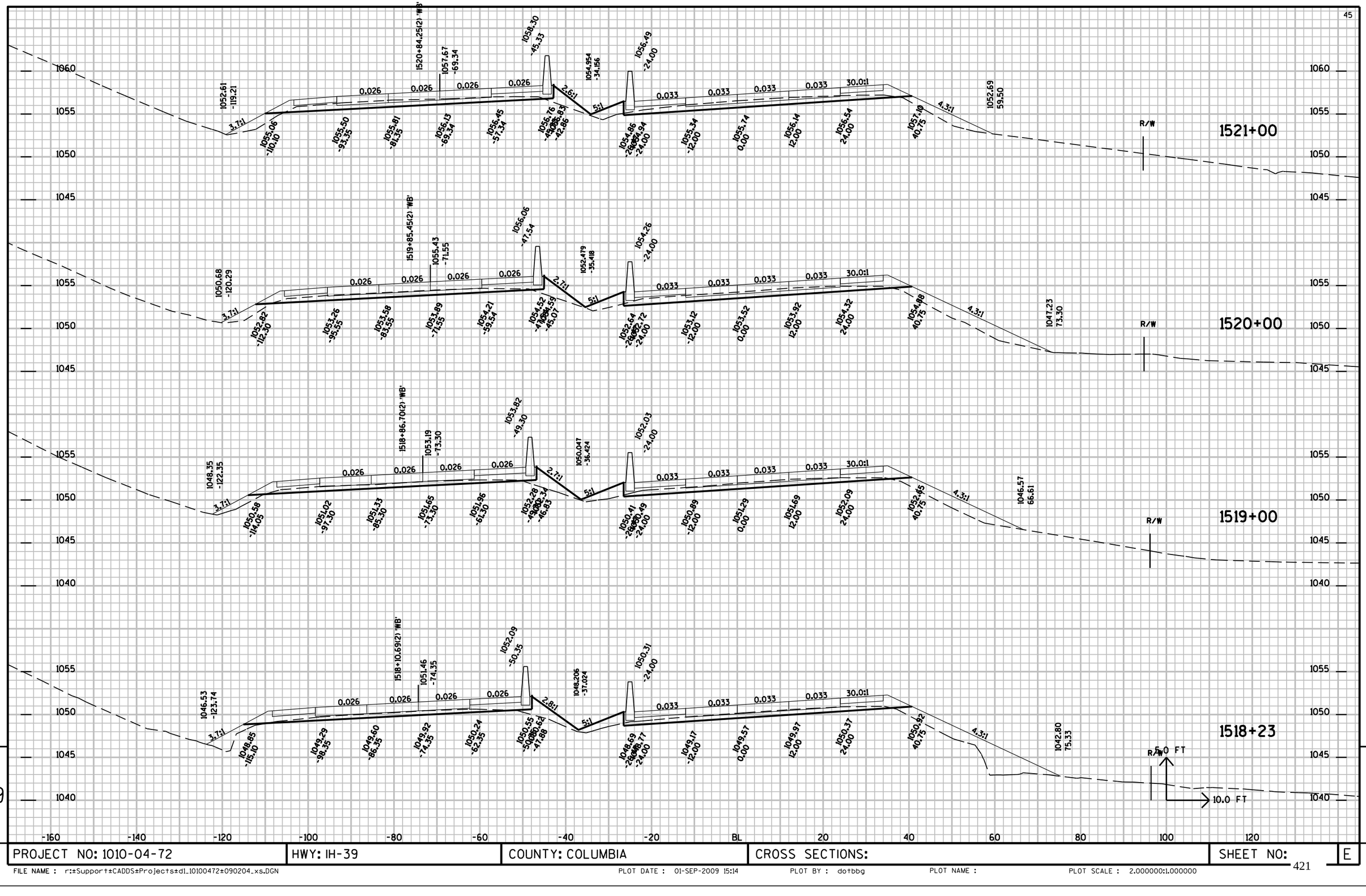


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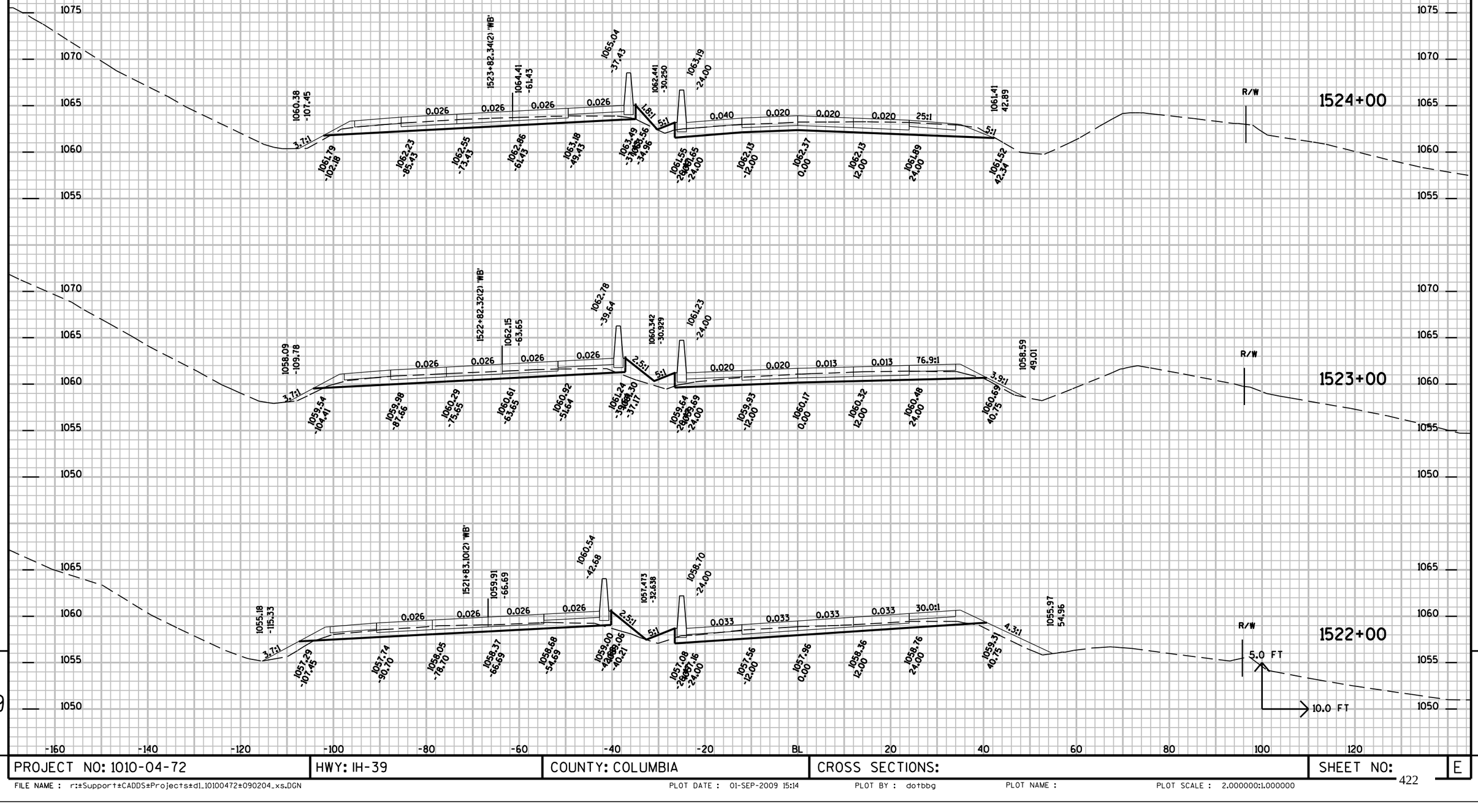
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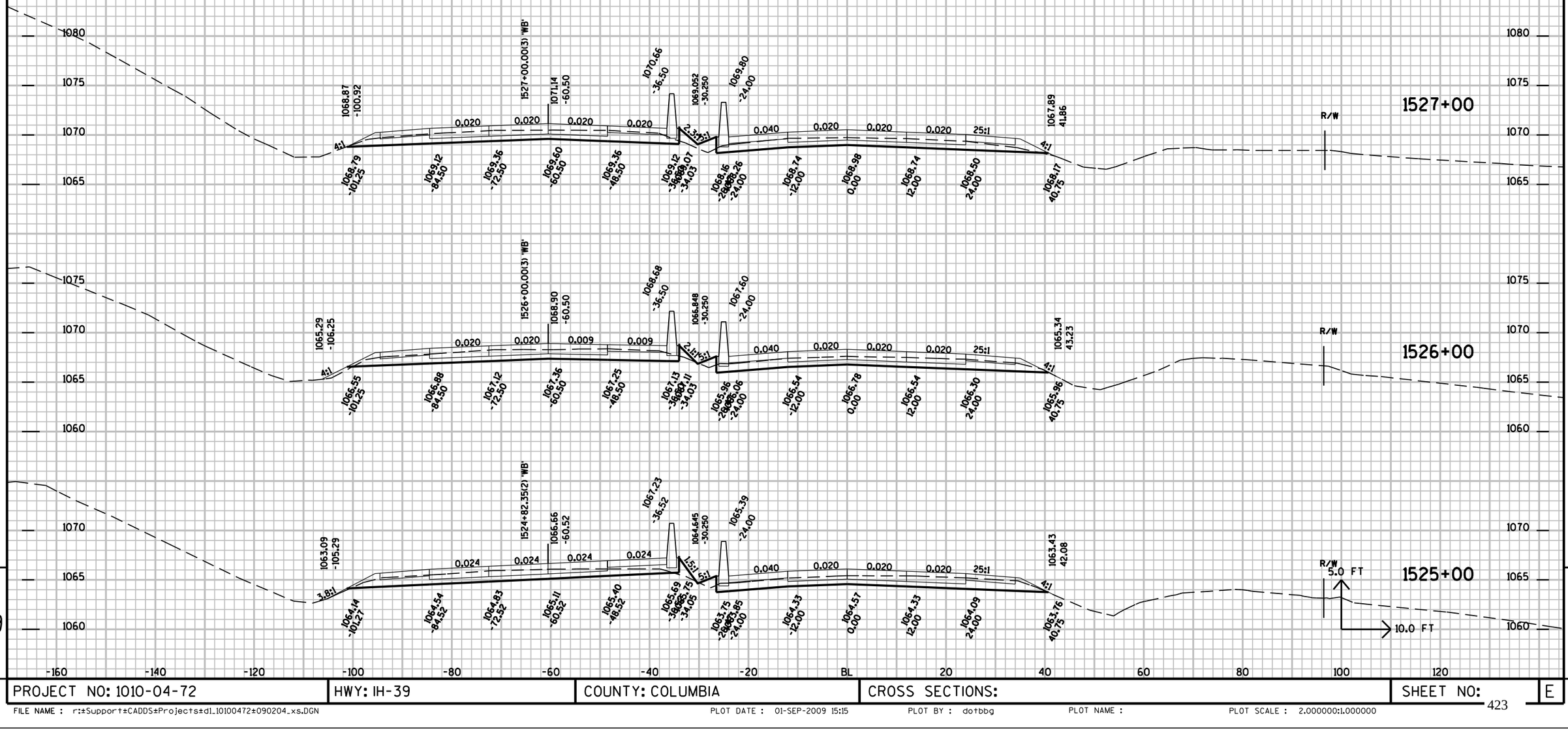
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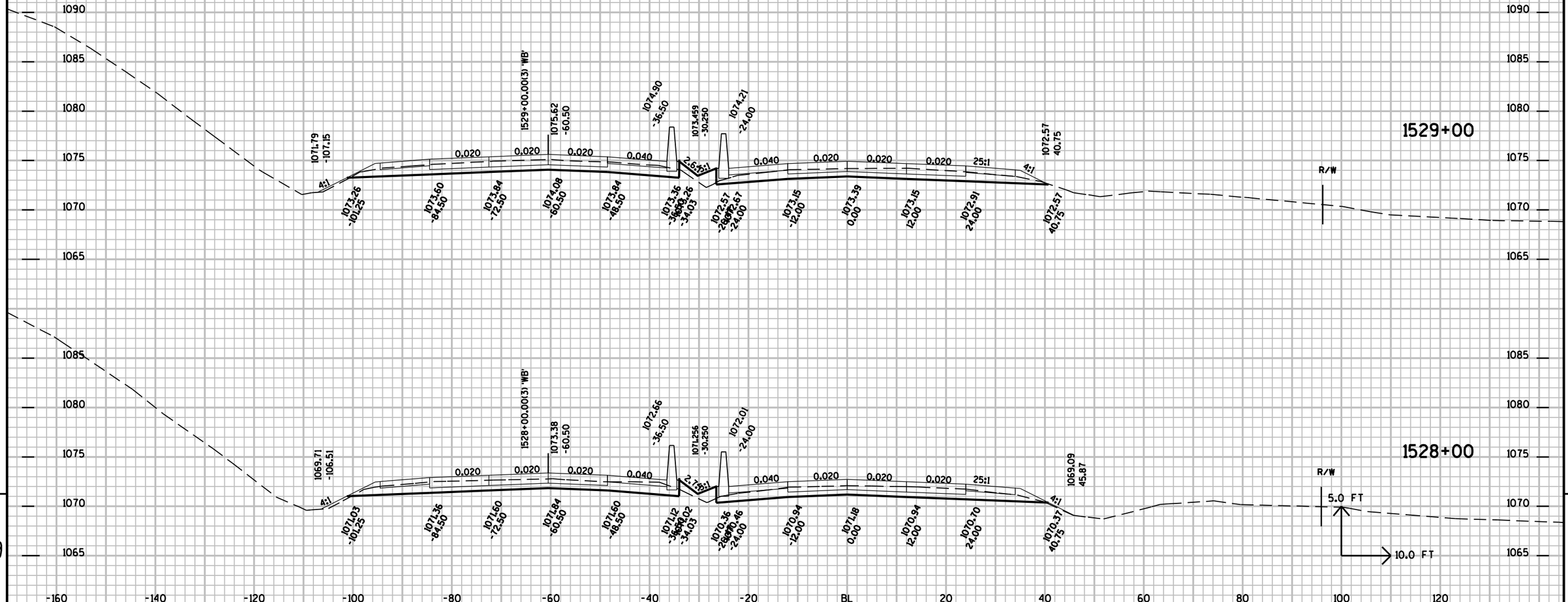
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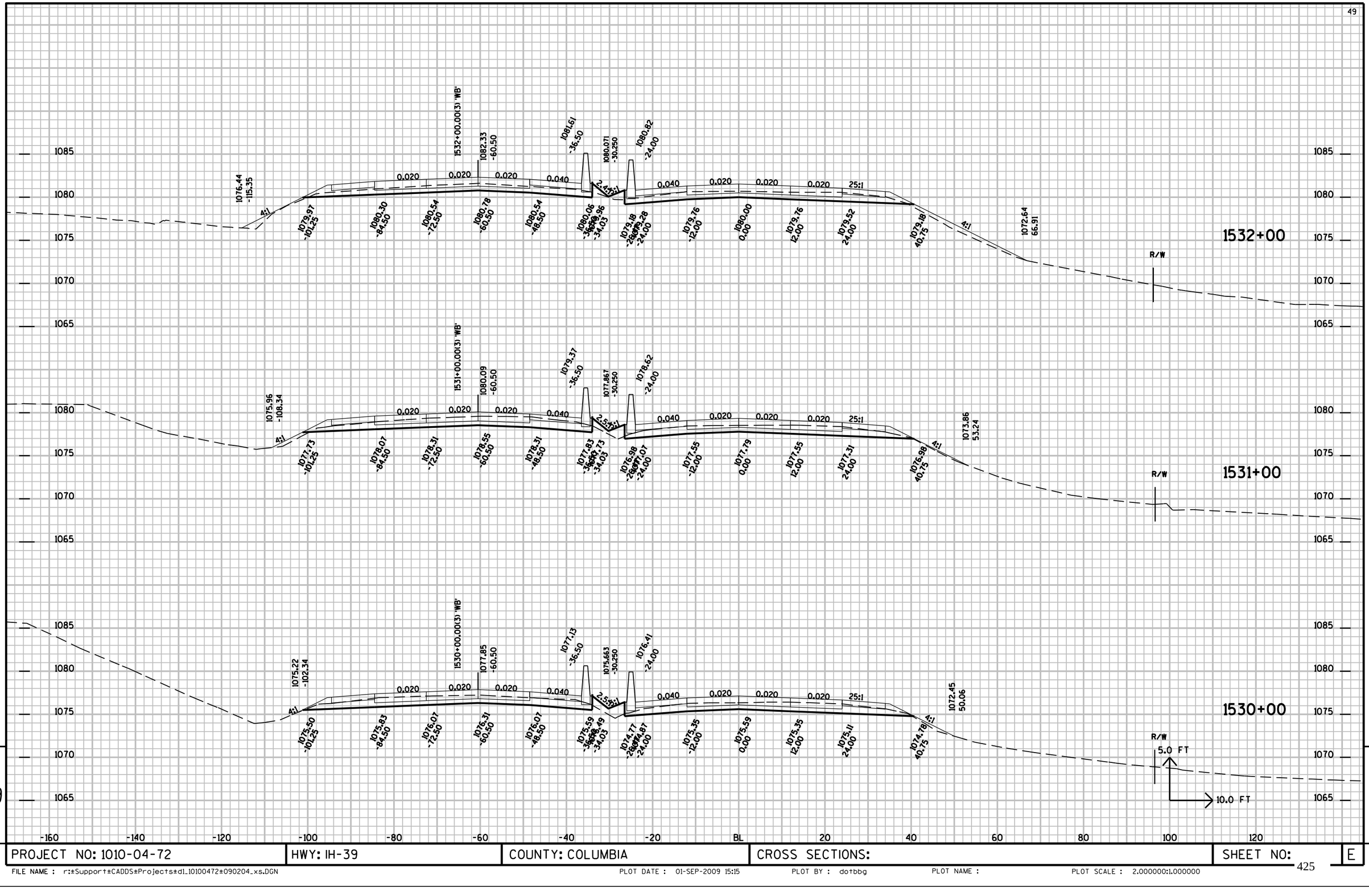
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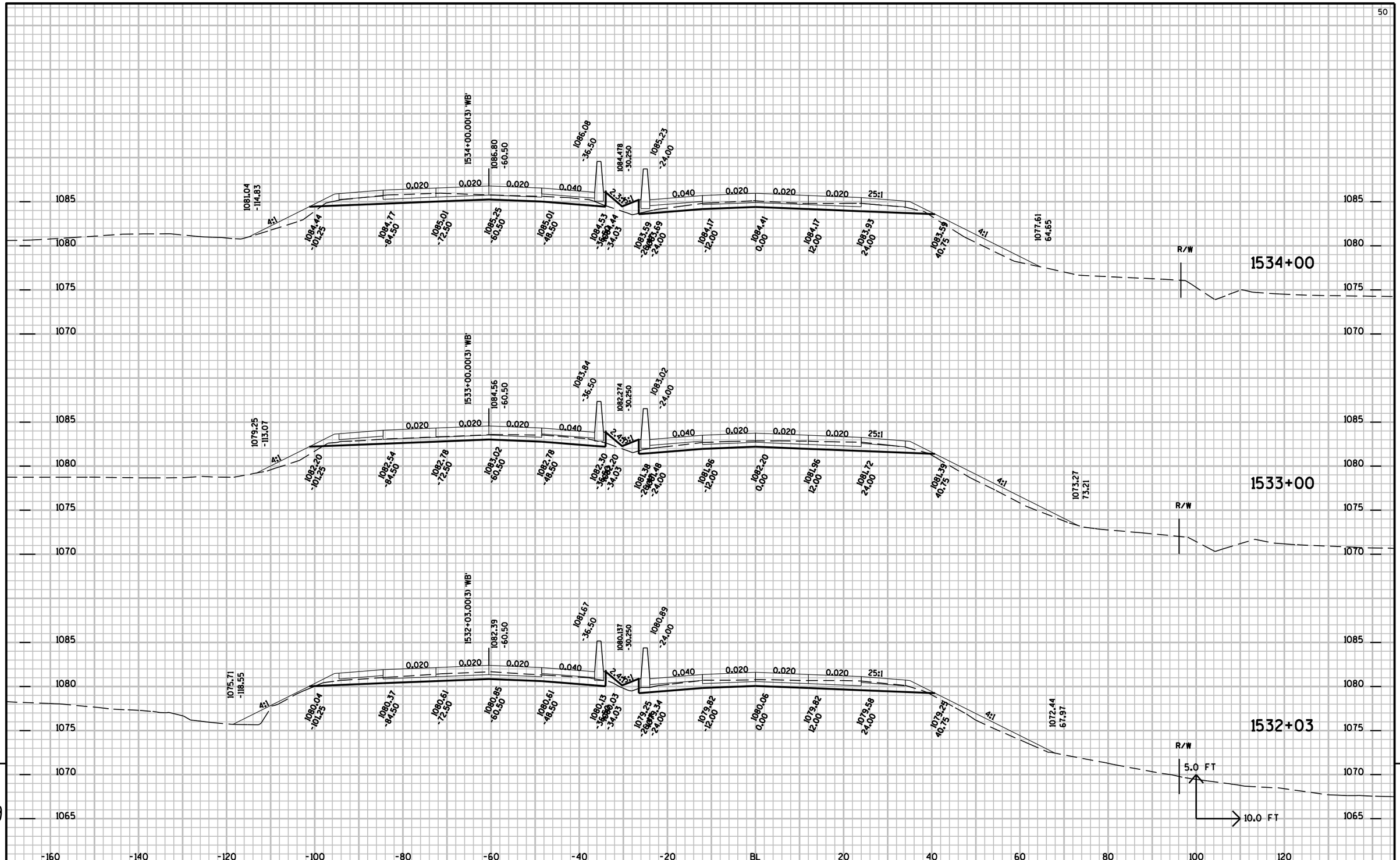
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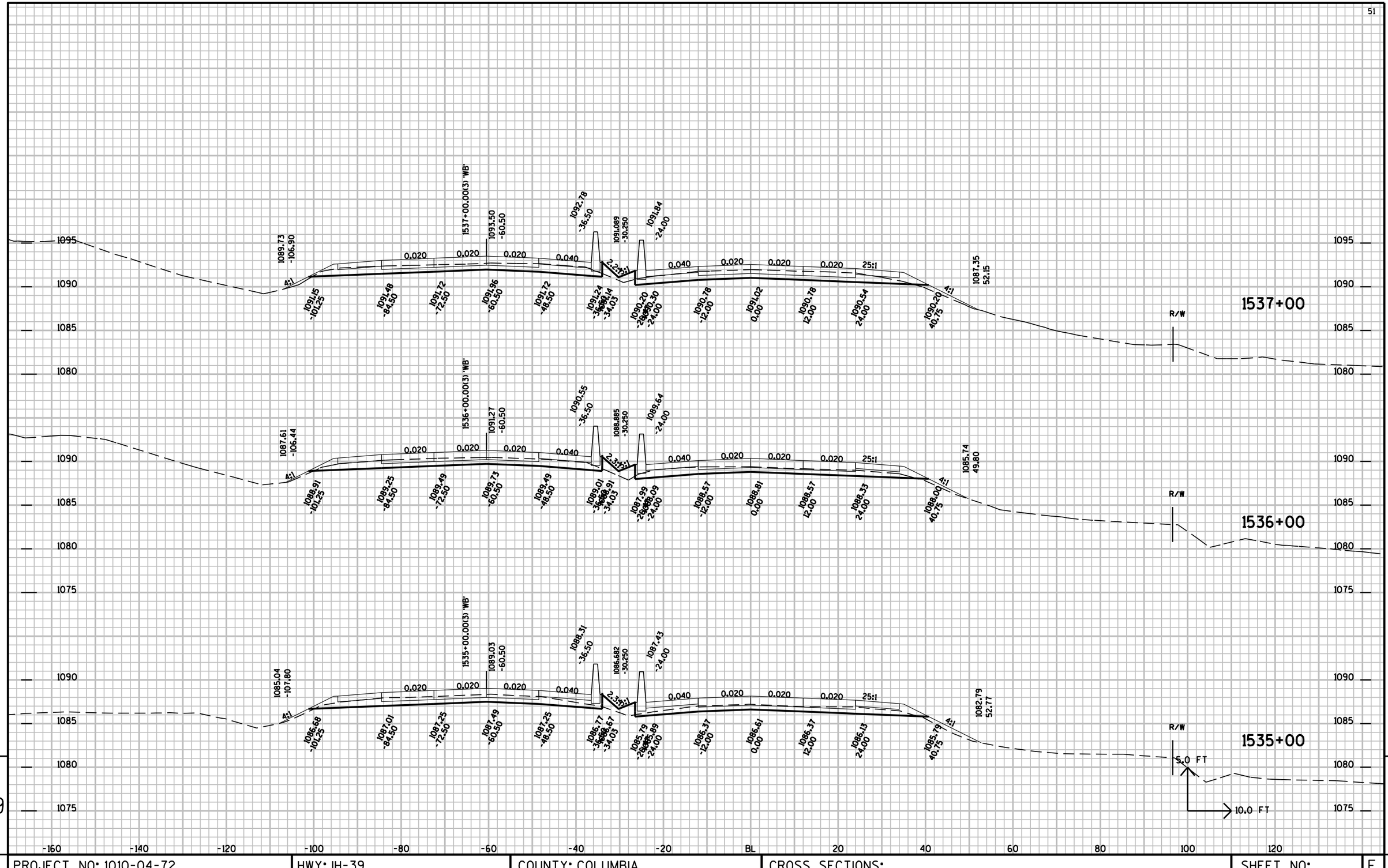
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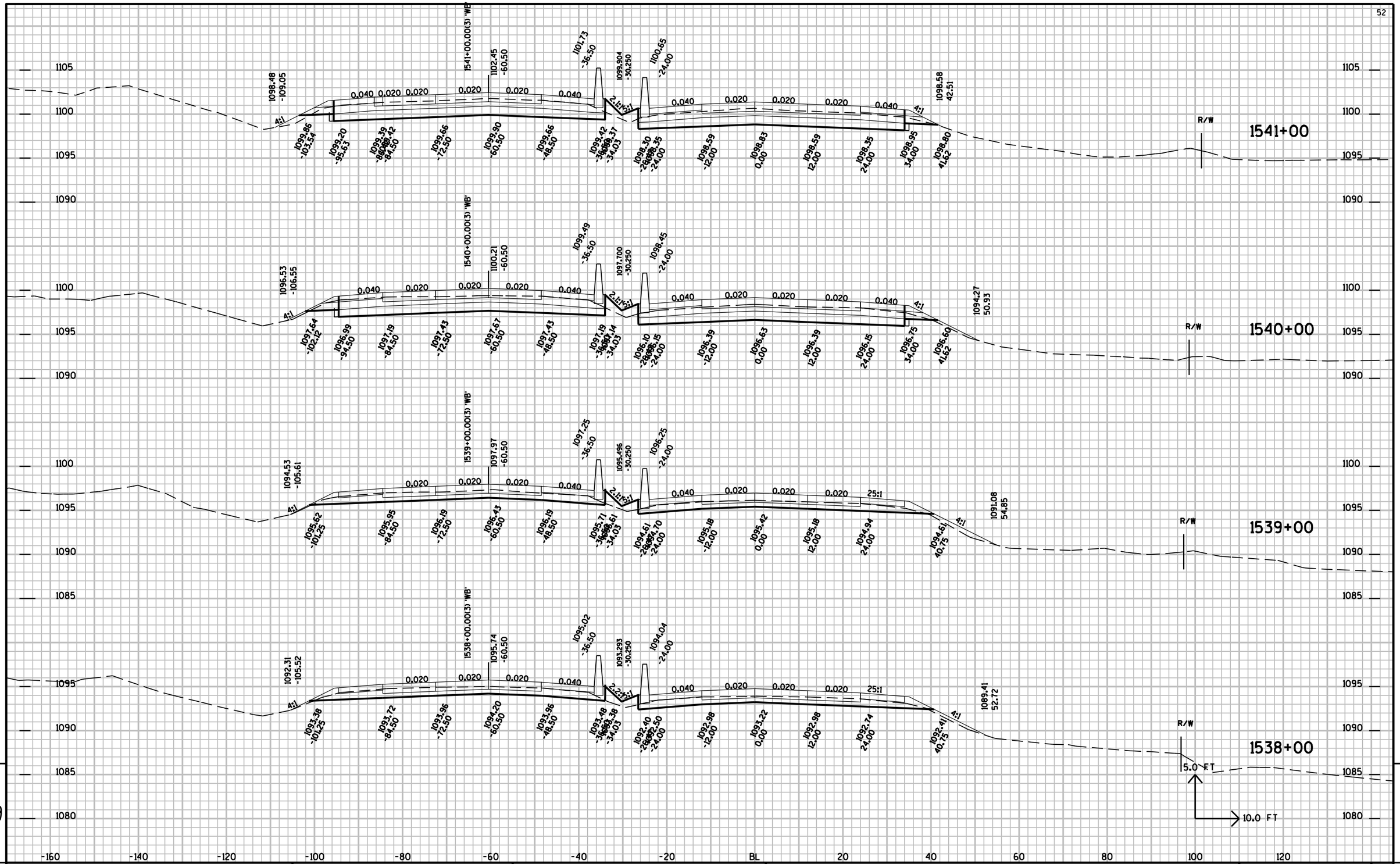
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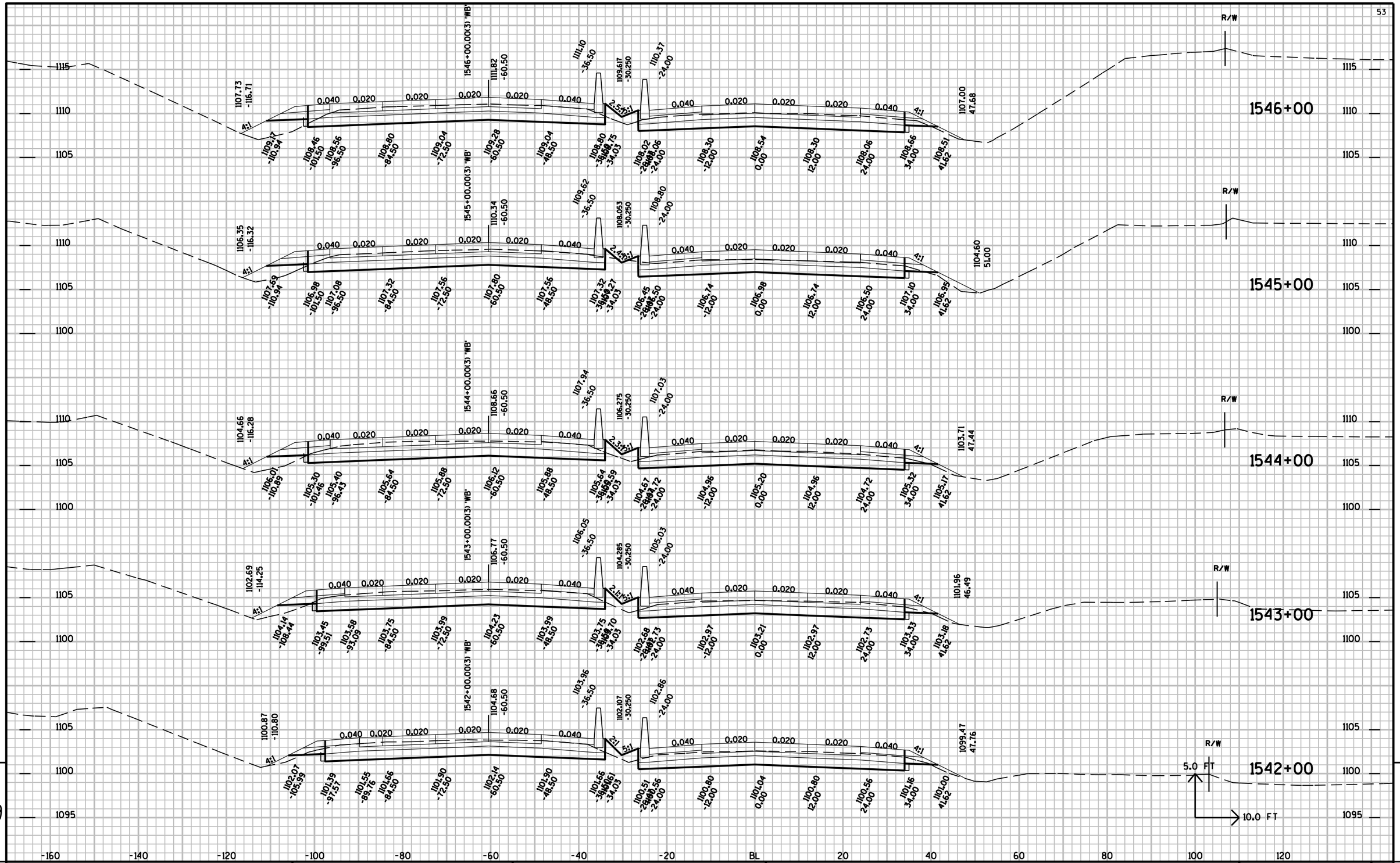
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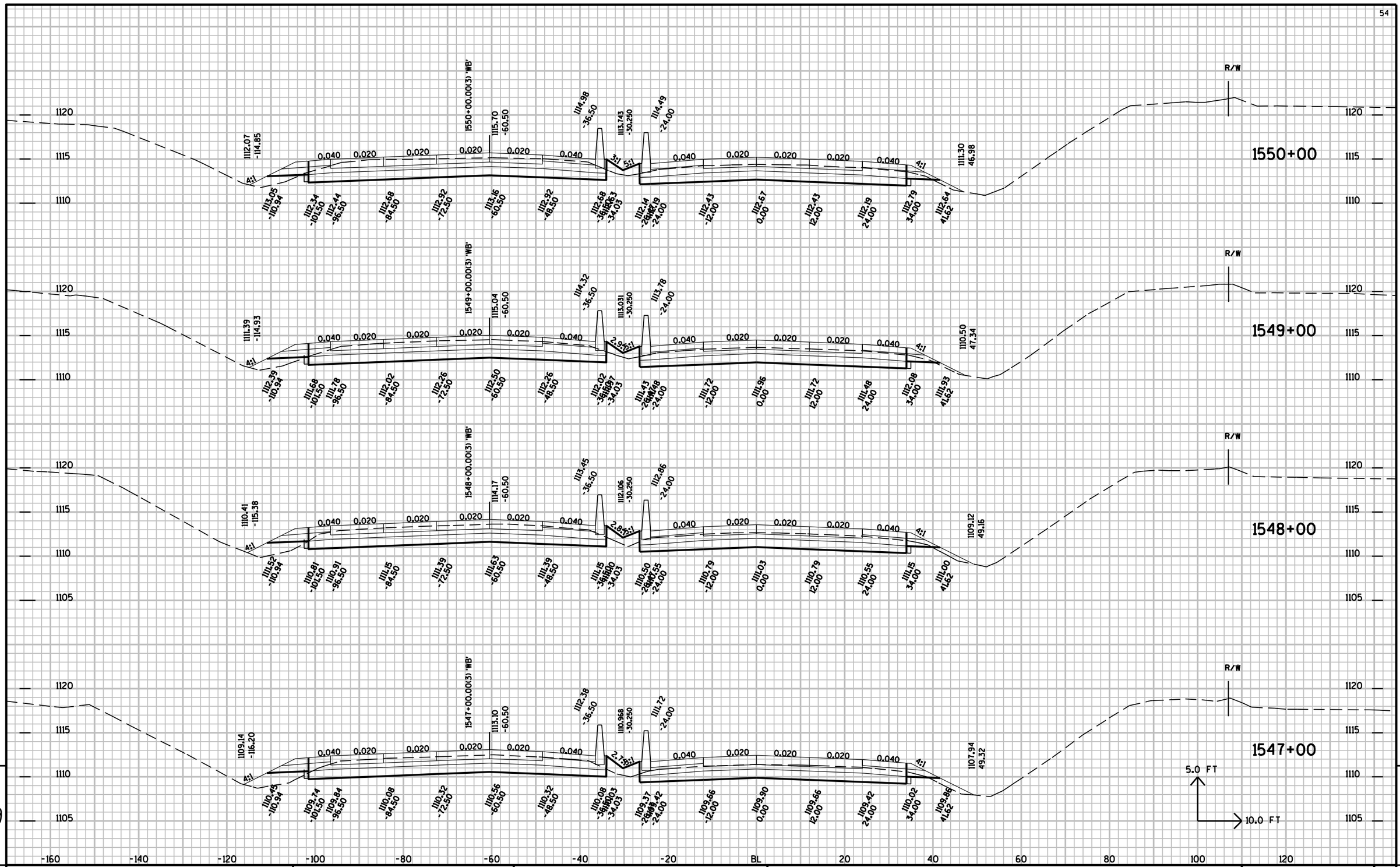
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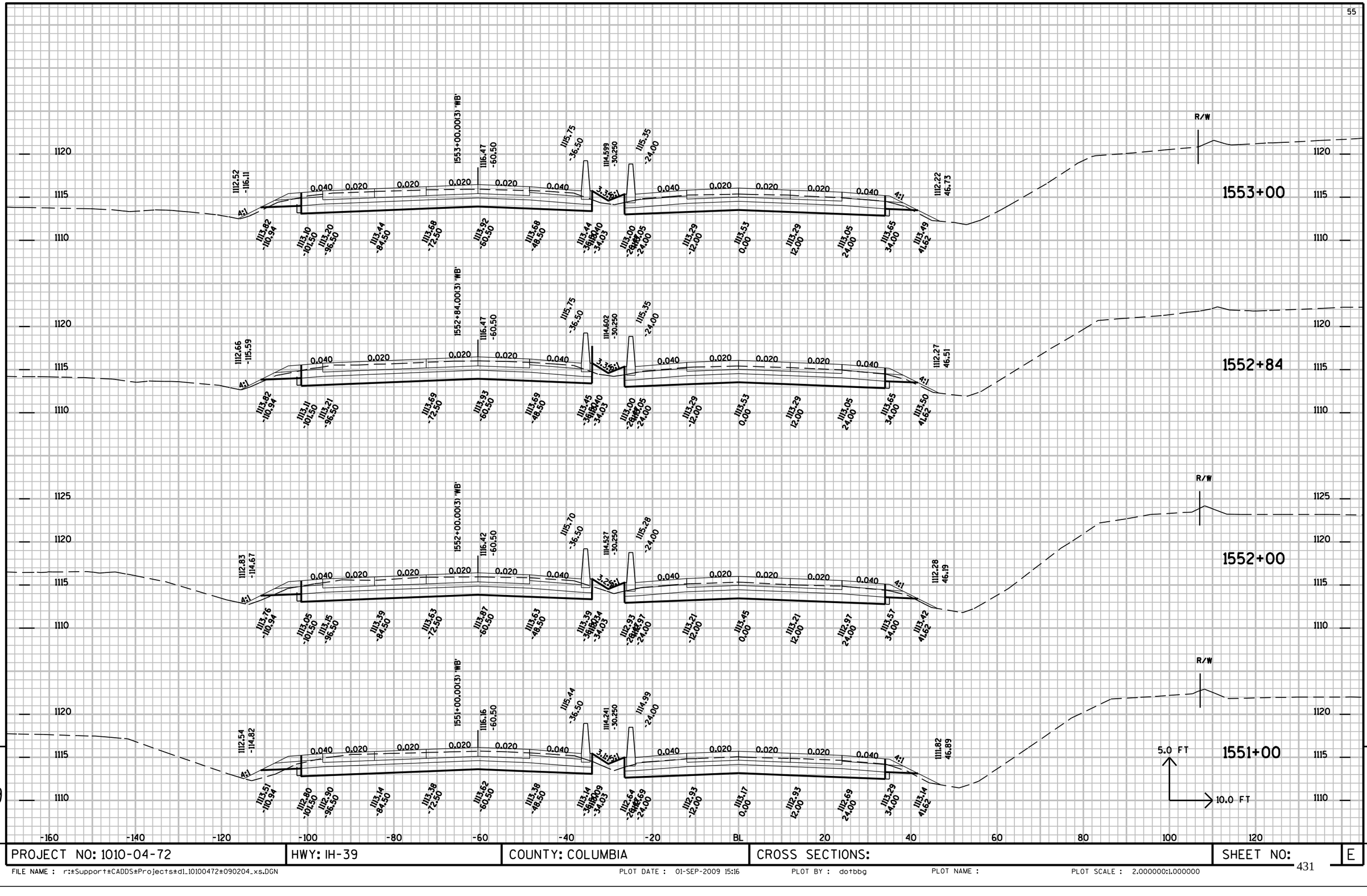
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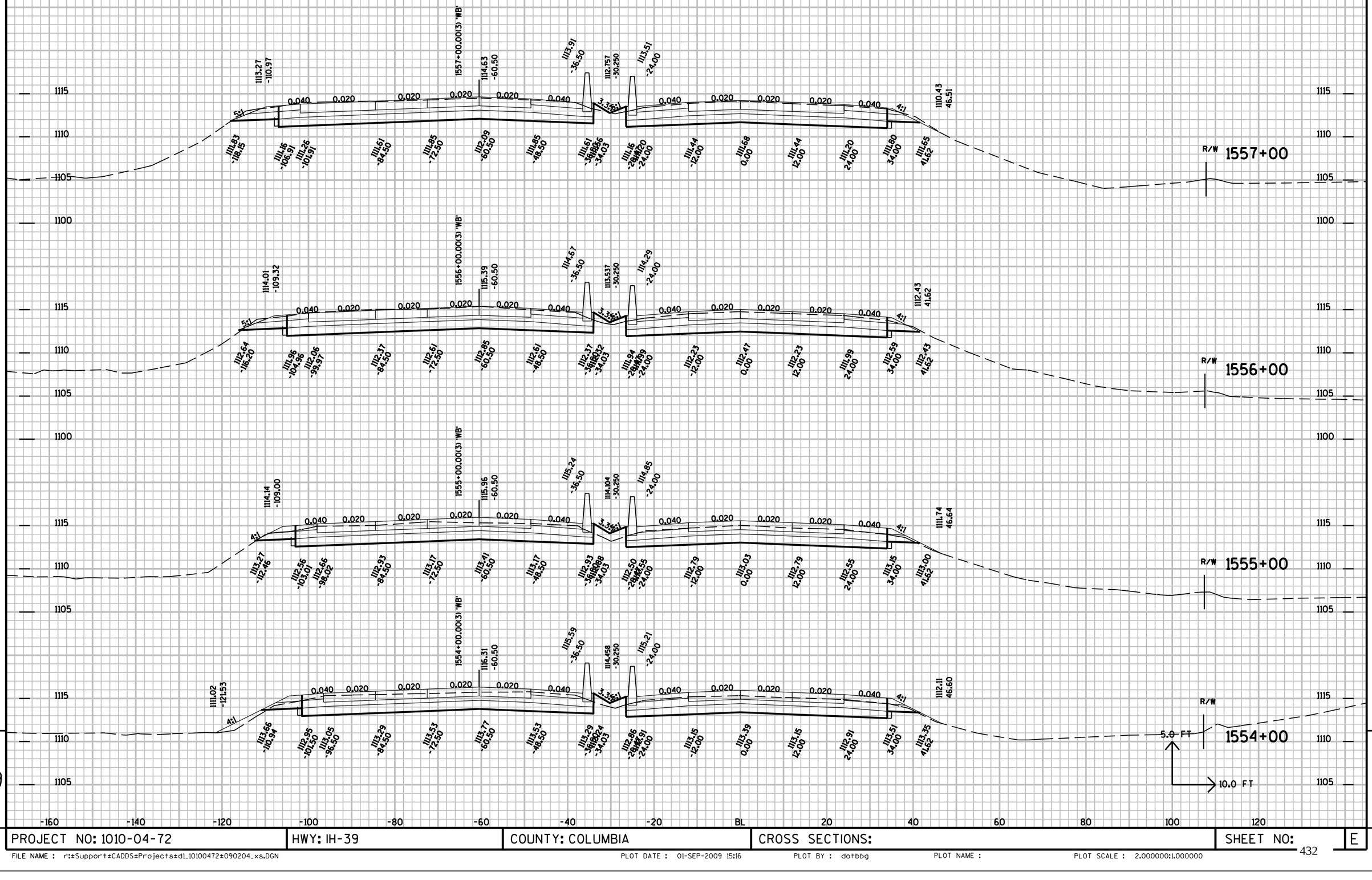
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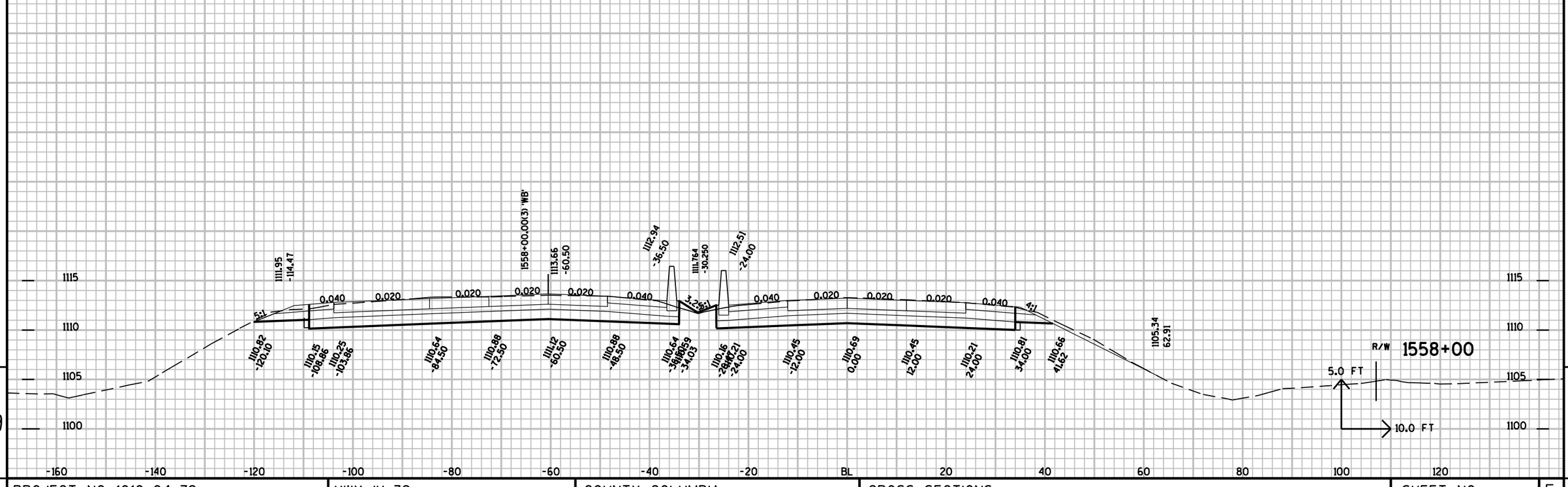


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PROJECT NO: 1010-04-72	HWY: IH-39	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET NO:	E



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PROJECT NO: 1010-04-72	HWY: IH-39	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET NO:	E

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Wisconsin Department of Transportation

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