GRE

JUNE 2014

PROJECT ID: 1491-08-71

WITH: N/A

COUNTY: MARINETTE

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 = 334



DESIGN DESIGNATION

A.A.D.T. 2013	=	7,200
A.A.D.T. 2033	=	8,800
D.H.V. 2033	=	1,223
D.D.	=	63-37
T.	=	9.1%
DESIGN SPEED	=	55 MPH
ESALS	=	2,766,700

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

MIDDLE INLET - WAUSAUKEE

CTH X - STH 180

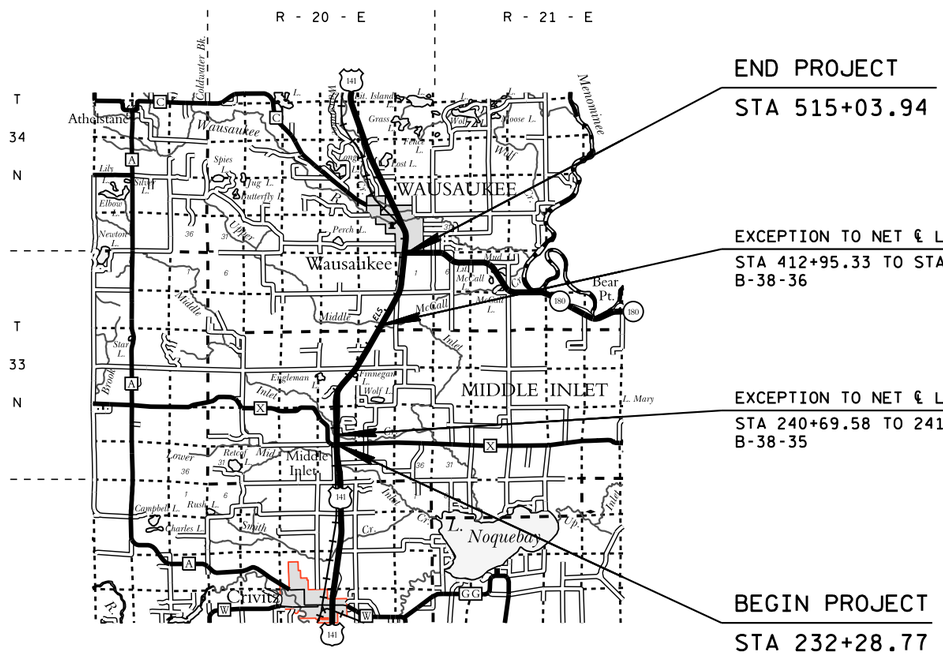
USH 141

MARINETTE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1491-08-71	WISC 2014230	1

STATE PROJECT NUMBER

1491-08-71



END PROJECT

STA 515+03.94

EXCEPTION TO NET ℄ LENGTH

STA 412+95.33 TO STA 413+30.67

B-38-36

EXCEPTION TO NET ℄ LENGTH

STA 240+69.58 TO 241+04.92

B-38-35

BEGIN PROJECT

STA 232+28.77

LAYOUT

SCALE 0 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 5.34 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), NAD 83 (1991) MARINETTE COUNTY.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	
Designer	S. A. DOOCY
Project Manager	P. R. ZOELLNER
Regional Examiner	
Regional Supervisor	D. J. SEGERSTROM
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 2-5-2014 (Signature)

E

FILE NAME : F:\d3_149108\010101_ti.dgn PLOT DATE: 04-FEB-2014 07:18 PLOT BY : dotbrb PLOT NAME : 010101_ti ORG DATE : 2-15-2012 Originator : NE Region PLOT SCALE : 21120.00043:1

WISDOT/CADDS SHEET 10

UTILITIES

MIKE OLSEN
ATC MANAGEMENT, INC - ELECTRICITY
801 O'KEEFE ROAD
PO BOX 6113
DE PERE, WI 54115-6113
(920) 660-2390
molsen@atcllc.com

WAYNE CRETTON
PACKERLAND BROADBAND - COMMUNICATION LINE
105 KENT STREET
IRON MOUNTAIN, MI 49801
(906) 774-6621
Wayne.Cretton@ccisystems.com

STEVE VANCAMPENHOUT
WISCONSIN PUBLIC SERVICE CORPORATION
ELECTRICITY
1717 10TH AVENUE
MENOMINEE, MI 49858
(877) 724-4296
AFTER HOURS: 800-450-7260
MOBILE: (715) 923-0583
SAVanCampenhout@wisconsinpublicservice.com

DENNIS HAAG
CENTURYLINK - COMMUNICATION LINE
144 N PEARL STREET
PO BOX 70
BERLIN, WI 54923
(920) 361-0040
dennis.haag@centurytel.com

TOSHIA RANALLO
VILLAGE OF WAUSAUKEE - WATER
428 HARRISON STREET
PO BOX 475
WAUSAUKEE, WI 54177

HOWARD SORENSEN
WISCONSIN PUBLIC SERVICE CORPORATION
GAS/PETROLEUM
1717 10TH AVENUE
MENOMINEE, MI 49858
(906) 863-4359
MOBILE: (715) 923-6806
hjsorensen@wisconsinpublicservice.com

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

GENERAL NOTES

DO NOT REMOVE ANY TREES OR SHRUBS WITHOUT THE APPPOVAL OF THE ENGINEER.

RADIUS DIMENSIONS OF CURB AND GUTTER ARE TO THE FLANGE (FLAG) OF THE CURB UNLESS OTHERWISE NOTED.

STATIONING FOR THE BEAM GUARD IS APPROXIMATE AND SHOULD BE VERIFIED BY THE ENGINEER.

LOCATIONS OF DRIVEWAYS AND CULVERT PIPES ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE ENGINEER. CULVERT PIPE LENGTHS ARE BASED ON AS-BUILT PLANS. ACTUAL LENGTHS MAY VARY FROM MISCELLANEOUS QUANTITIES AND SHOULD BE VERIFIED.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT AREAS WITHIN THE FINISHED SHOULDER POINTS SHALL BE TOPSOILED, SEEDED, FERTILIZED AND MULCHED.

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. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND ALL UTILITIES IN THE VICINITY OF THE PROJECT TO LOCATE THEIR FACILITIES AT LEAST THREE WORKING DAYS PRIOR TO BEGINNING WORK.

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

DRIVEWAYS SHALL BE REPLACED IN KIND. BASE AGGREGATE DENSE WILL BE USED UNDER ALL DRIVEWAYS.

ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NAVD88(91) VERTICAL DATUM.

COUNTY SURVEYOR OR SURVEYS CONTACT PERSON

CONTACT: JOHN M LEFEBVRE - MARINETTE COUNTY
LAND INFORMATION DIRECTOR
MARINETTE COUNTY COURT HOUSE
1926 HALL AVE
MARINETTE, WI 54143
715-923-4794
jlefebvre@marinettecounty.com

DNR AREA LIAISON

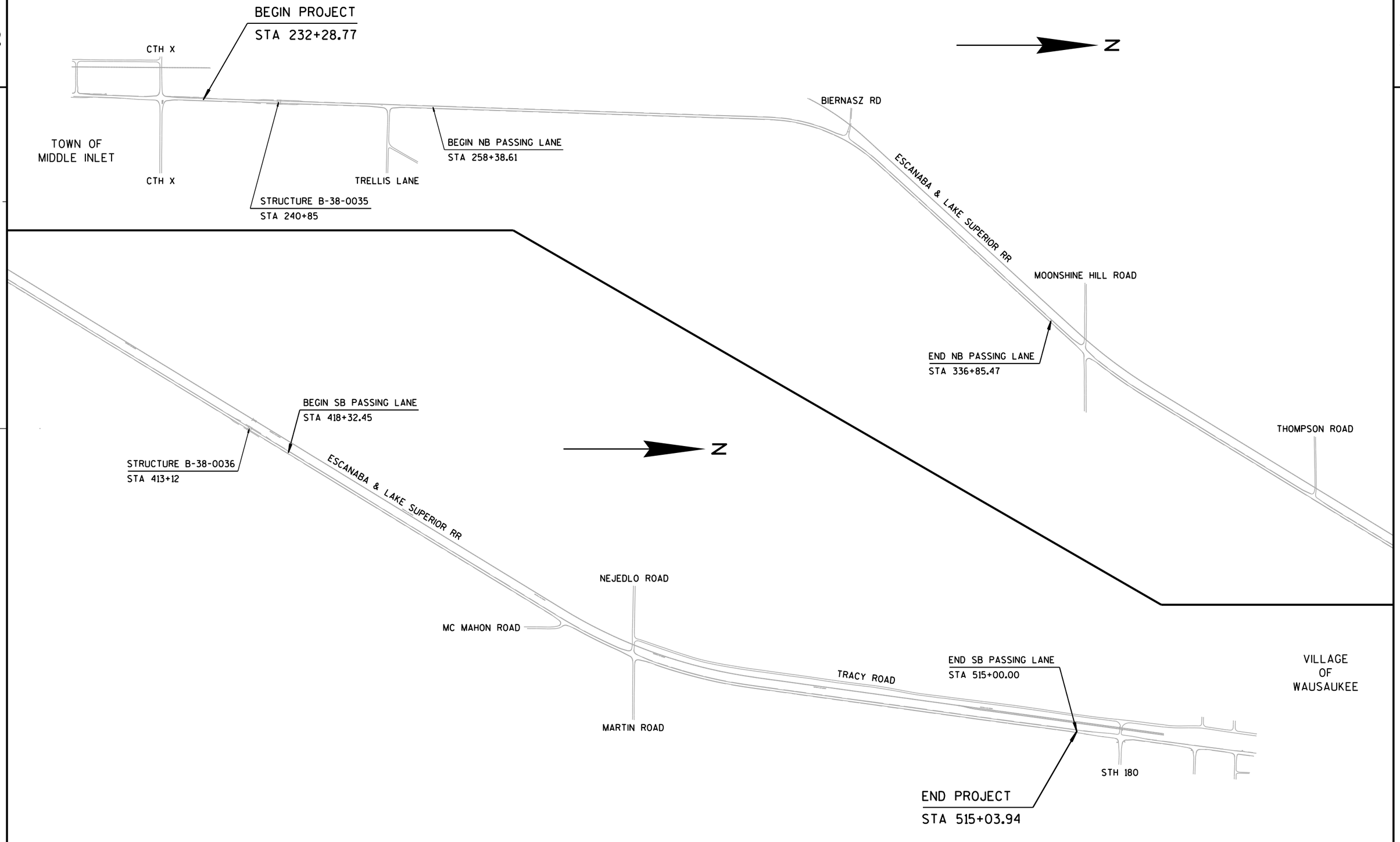
JAMES DOPERALSKI JR
DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION
2984 SHAWANO AVE
GREEN BAY, WI 54313
920-662-5119
JAMES.DOPERALSKI@WISCONSIN.GOV

ESCANABA AND LAKE SUPERIOR RAILROAD CONTACTS

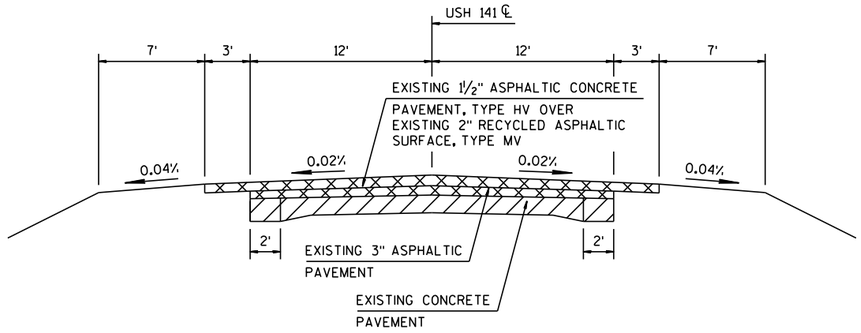
PRIMARY RAIL ROAD CONTACT
TOM KLIMEK, DIR-MARKETING, CUSTOMER
SERVICES GREEN BAY OPERATIONS
529 S JEFFERSON STREET SUITE 108
PO BOX 85
GREEN BAY, WI 54304
PHONE 920-435-8006
CELL 920-841-5062
FAX 906-435-6281
EMAIL elsklimek@gmail.com

TRAIN DISPATCH INFORMATION AND FLAGGING CONTACT
610 RAILROAD STREET
CHANNING, MI 49815
PHONE 906-542-3214
FAX 906-542-9811
DISPATCHER 800-200-2360

2

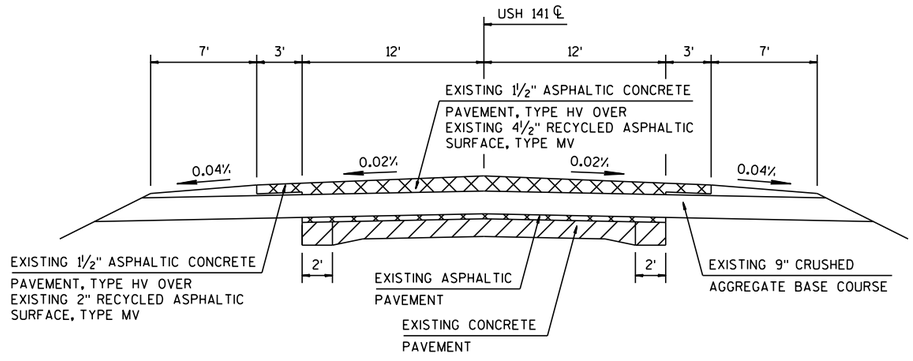


PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PROJECT OVERVIEW	SHEET 3	E



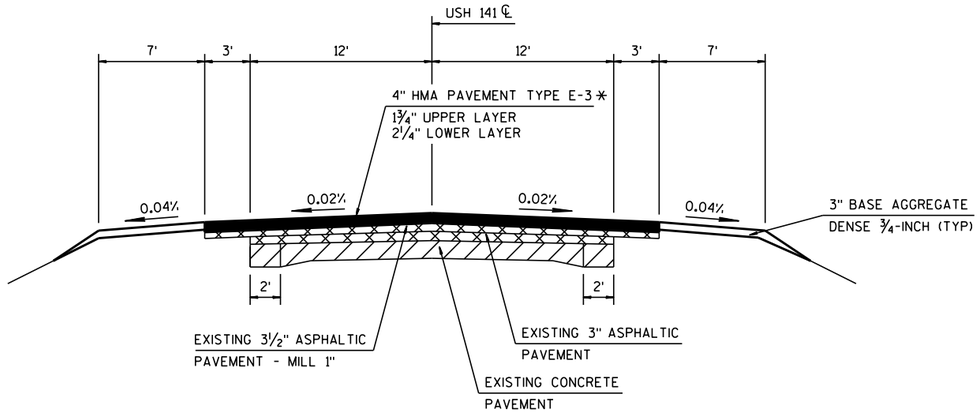
TYPICAL EXISTING CROSS SECTION FOR USH 141

232+28.77 TO 320+00
345+00 TO 515+03.94



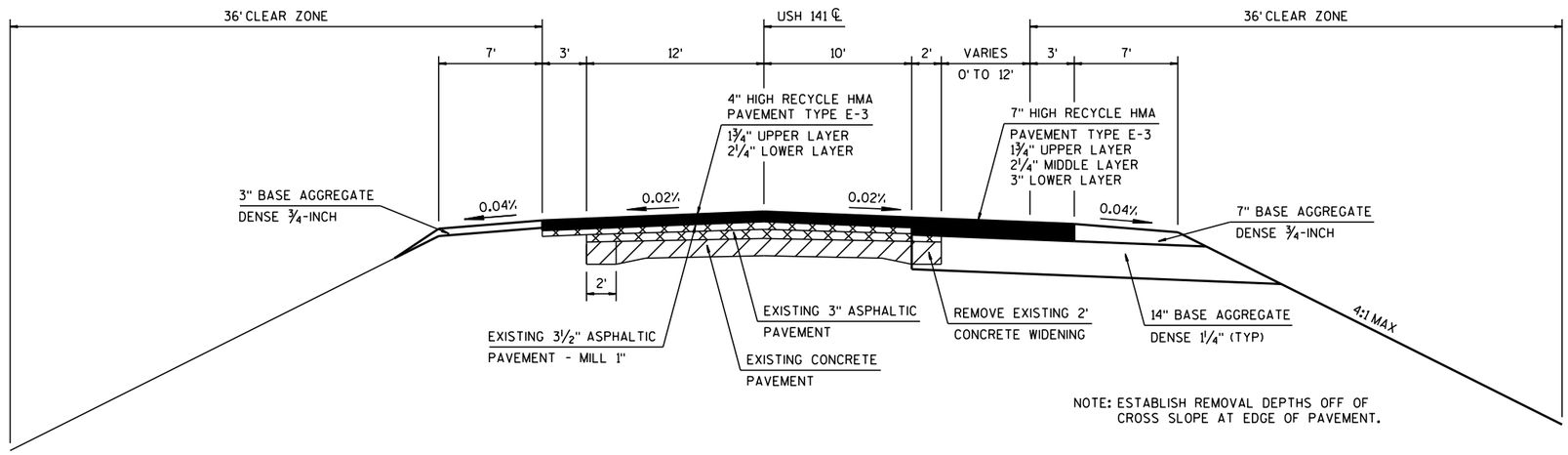
TYPICAL EXISTING CROSS SECTION FOR USH 141

320+00 TO 345+00



TYPICAL FINISHED CROSS SECTION FOR USH 141

232+28.77 TO 258+38 * HIGH RECYCLE HMA PAVEMENT TYPE E-3 BOTH LAYERS
345+00 TO 418+32.45 * HIGH RECYCLE HMA PAVEMENT TYPE E-3 UPPER LAYER ONLY

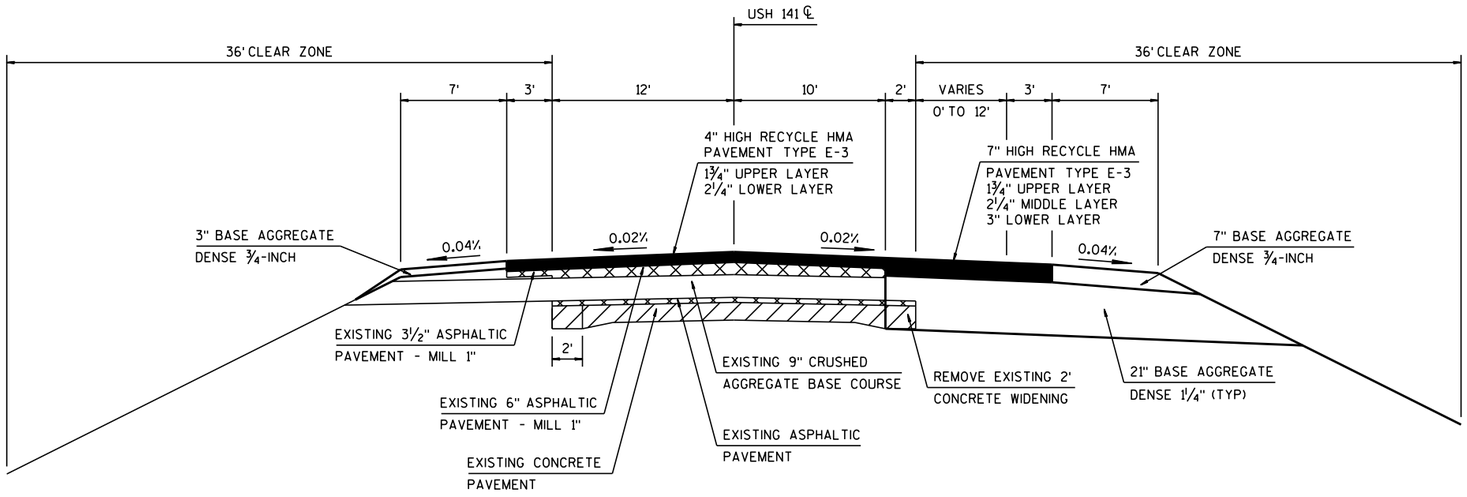


TYPICAL FINISHED CROSS SECTION FOR USH 141

258+38 TO 320+00

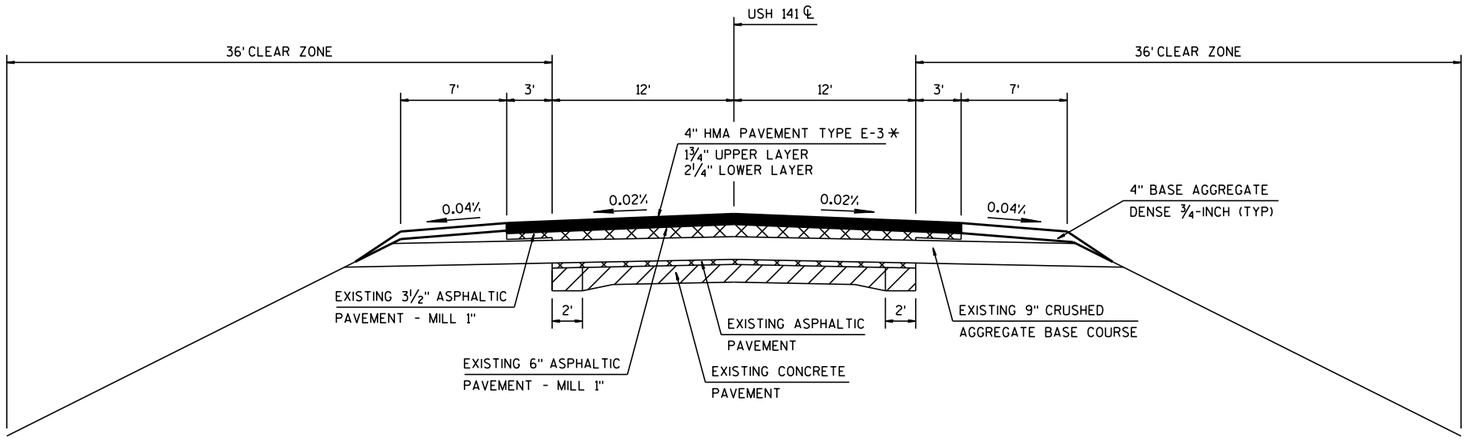
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	TYPICAL CROSS SECTIONS	SHEET 5	E

2



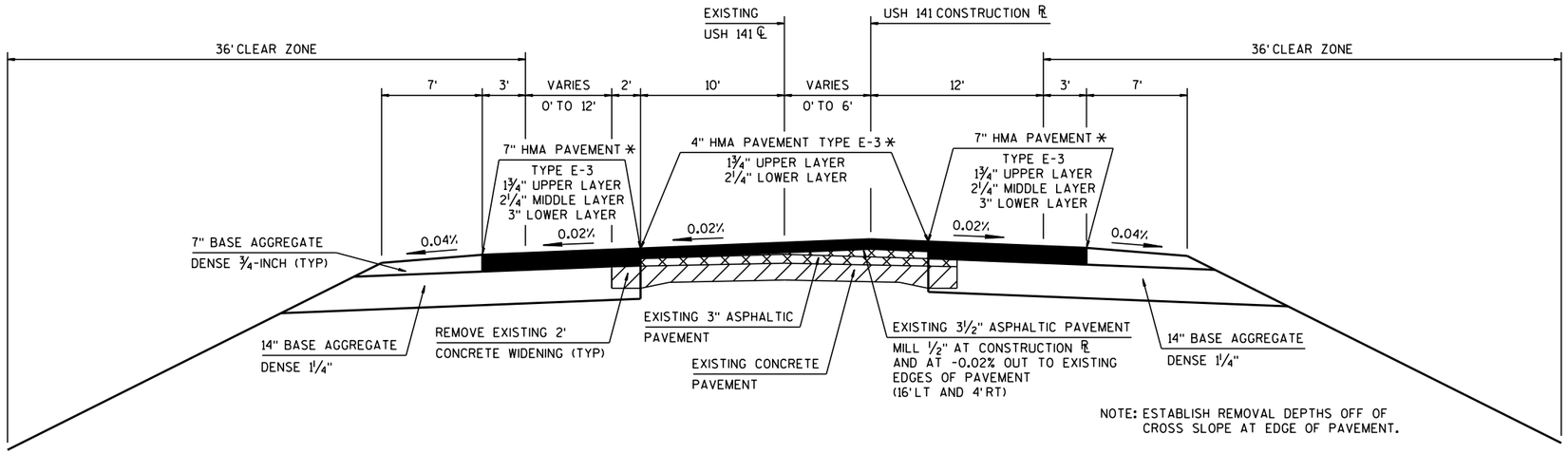
TYPICAL FINISHED CROSS SECTION FOR USH 141

320+00 TO 336+85



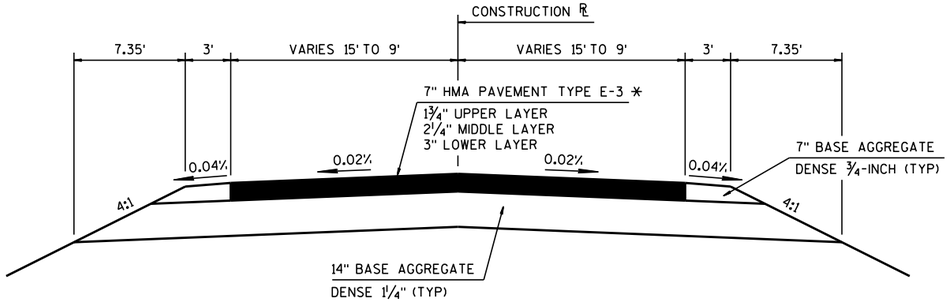
TYPICAL FINISHED CROSS SECTION FOR USH 141

336+85 TO 345+00 * 336+85 TO 340+00 HIGH RECYCLE HMA PAVEMENT TYPE E-3 BOTH LAYERS
* 340+00 TO 345+00 HIGH RECYCLE HMA PAVEMENT TYPE E-3 UPPER LAYER ONLY



TYPICAL FINISHED CROSS SECTION FOR USH 141

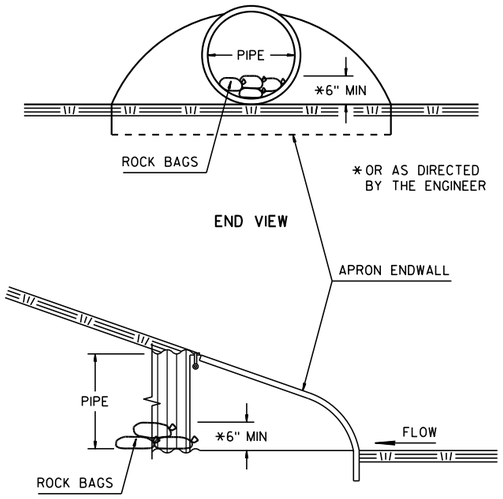
418+32.45 TO 515+03.94 * HIGH RECYCLE HMA PAVEMENT TYPE E-3 UPPER LAYER ONLY



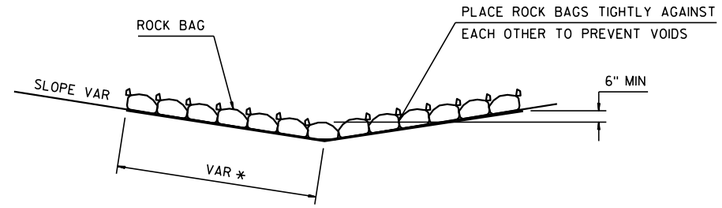
TYPICAL FINISHED CROSS SECTION FOR SIDE ROADS

TRELLIS LANE, BIERNASE ROAD } * HIGH RECYCLE HMA PAVEMENT TYPE E-3 ALL LAYERS

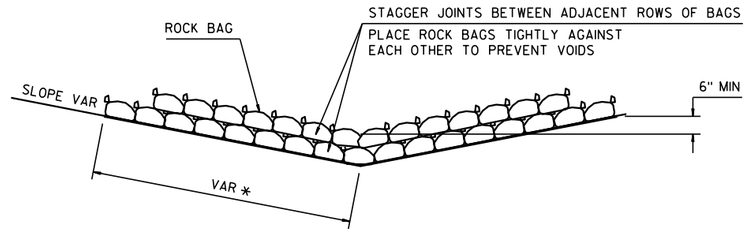
MOONSHINE HILL ROAD, THOMPSON ROAD, MCMAHON ROAD, MARTIN ROAD, NEJEDLO ROAD } * HIGH RECYCLE HMA PAVEMENT TYPE E-3 UPPER LAYER ONLY



CULVERT PIPE CHECKS



SIDE VIEW (SINGLE LAYER)

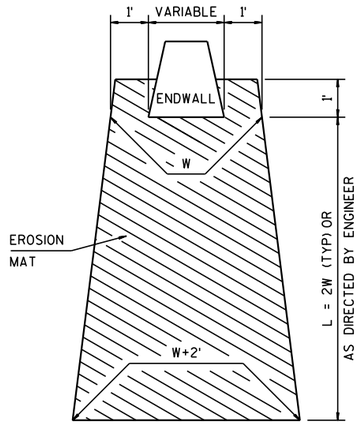


* LENGTH AND NUMBER OF BAGS MAY VARY DEPENDING ON DESIRED DEPTH OF WATER POOL

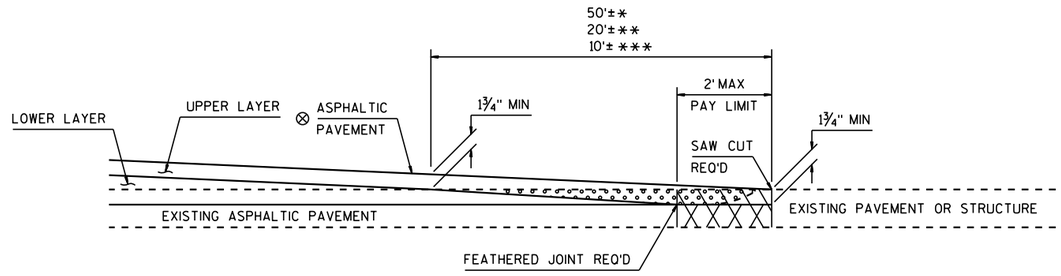
SIDE VIEW (MULTIPLE LAYER)

ROCK BAGS DITCH CHECK

PAID AS ROCK BAGS



EROSION MAT TREATMENT AT CULVERTS



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

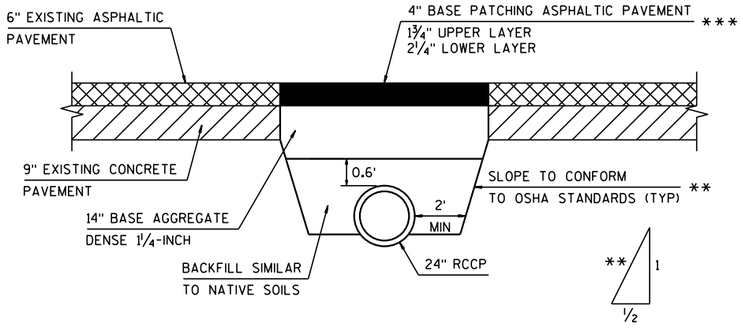
REMOVING ASPHALTIC SURFACE, MILLING

REMOVING ASPHALTIC SURFACE, BUTT JOINTS (FULL DEPTH REMOVAL OPTIONAL)

ASPHALTIC WEDGING (FULL DEPTH REMOVAL OPTION)

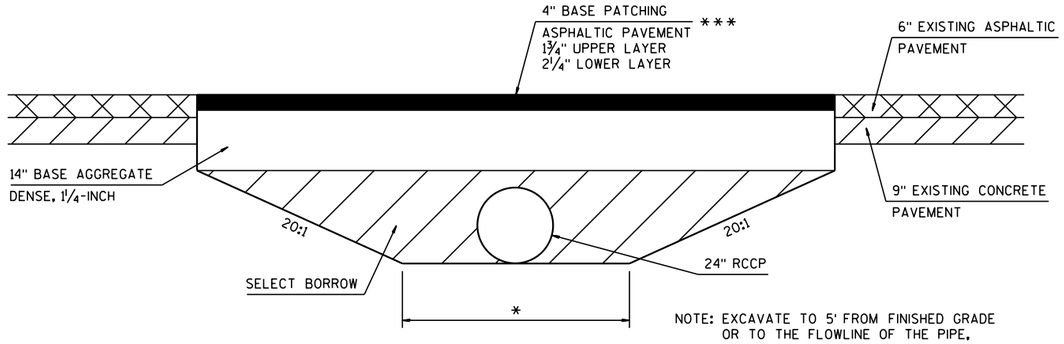
BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS

* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES



*** WORK TO BE COMPLETED PRIOR TO MILLING OPERATION

CULVERT PIPE REPLACEMENT

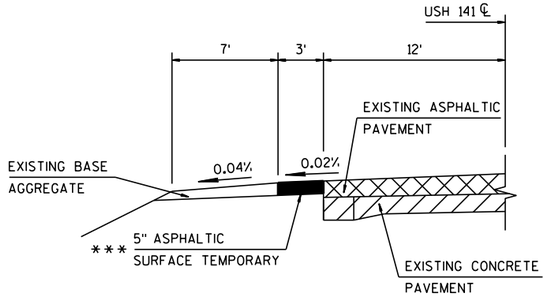


NOTE: EXCAVATE TO 5' FROM FINISHED GRADE OR TO THE FLOWLINE OF THE PIPE, WHICHEVER IS LESS.

*** WORK TO BE COMPLETED PRIOR TO MILLING OPERATION

LONGITUDINAL DETAIL FOR FROST HEAVE REPAIR AREAS

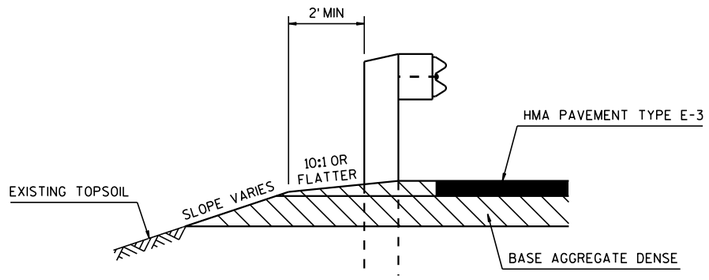
326+56 TO 326+76 * = 20'
394+05 TO 394+25 * = 20'
442+10 TO 442+40 * = 30'



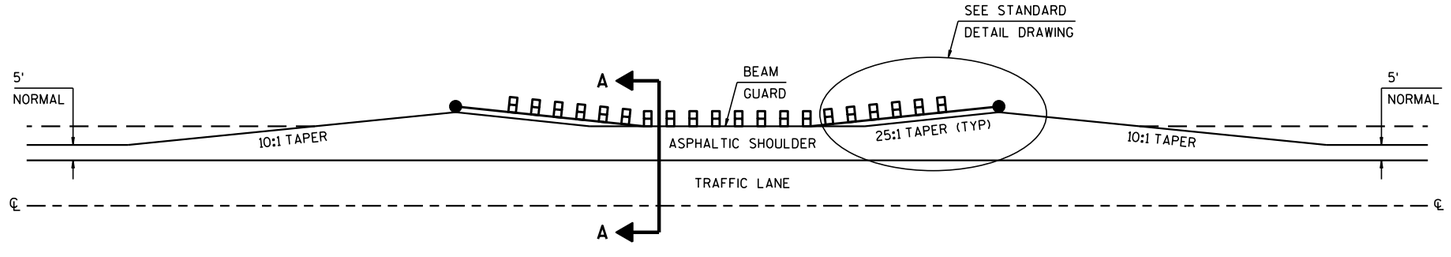
*** WORK TO BE COMPLETED PRIOR TO MILLING OPERATION

ASPHALTIC SHOULDER DETAIL

247+00 TO 252+00

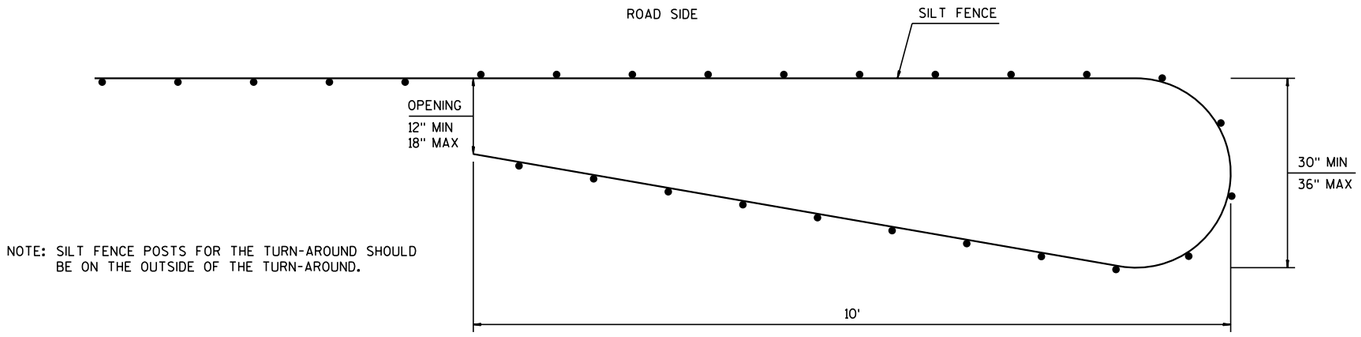


SECTION A-A

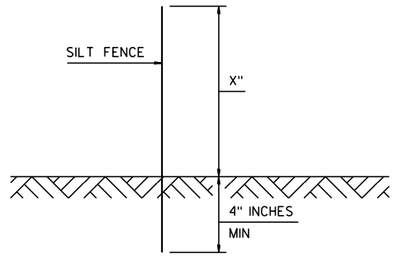


DETAIL FOR ASPHALTIC SHOULDER AT GUARDRAIL

2

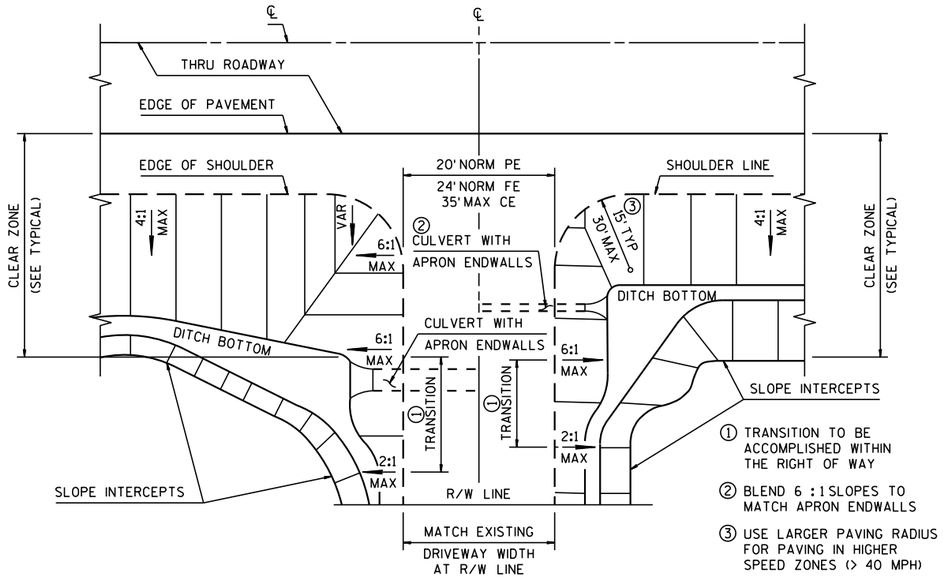


NOTE: SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND.



PLAN VIEW

SILT FENCE TURN-AROUND DETAIL

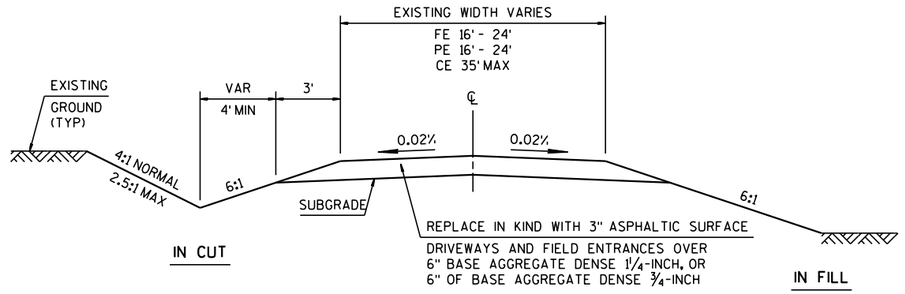


FOR CULVERTS OVER 24" DIAMETER

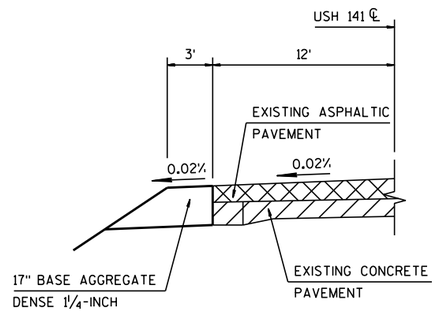
FOR CULVERTS 24" DIAMETER & LESS

PLAN VIEW

RURAL DRIVEWAY GRADING AND/OR PAVING DETAIL



TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE



USH 141 TEMPORARY SHOULDER WIDENING

(PROVIDE WIDENED SHOULDER FOR TRAFFIC SAFETY)

2

N

EXISTING R/W

SAW CUT REQ'D

SIGN

7'
15'
15'
7'

250 USH 141 251 252 253 254 255 256

253+38.64 USH 141=
10+00.00 TRELLIS LA

10'

22'

150' TAPER

3'

100' TAPER

SLOPE INTERCEPTS

ASPHALTIC FLUME
(TYP)

58' R

38' R

+82
+64

+62
+94

15'

3'

11'

80' TAPER

CAUTION

EXISTING R/W

253+38.64 USH 141
TYPE D INTERSECTION REQ'D

CONSTRUCTION LIMITS
11+62

12'

TRELLIS LA

SAW CUT REQ'D

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - TRELLIS LANE	SHEET E

FILE NAME : F:\d3_149108\021101_id.dgn PLOT DATE : 03-APR-2014 07:19 PLOT BY : dotbrb PLOT NAME : 021101id PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

N

PC 0+66.41

ESCANABA & LAKE SUPERIOR

SAW CUT REQ'D

CONSTRUCTION LIMITS
1+80

BIERNASZ RD

305+64.85 USH 141
TYPE C MODIFIED
INTERSECTION REQ'D

EXISTING R/W

SLOPE INTERCEPTS

+33 80+

40'R

PT 2+72.41

100' TAPER

3'

22'

83°-38'-34"

305

306

305+64.85 USH 141=
3+04.12 BIERNASZ RD

+31 +35

60'R

SAW CUT REQ'D

150' TAPER

10'

307

308

309

304

303

USH 141

7'
15'
12'
15'
7'

CAUTION

EXISTING R/W

SLOPE INTERCEPTS

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - BIERNASZ ROAD	SHEET E

FILE NAME : F:\d3_149108\021102_id.dgn PLOT DATE : 03-APR-2014 07:19 PLOT BY : dotbrb PLOT NAME : 021102 id PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

341+56.92 USH 141
TYPE B2 MODIFIED
INTERSECTION REQ'D

REFER TO SDD 13 B 1-10

N

MOONSHINE HILL RD 8

R/W LINE

R/W LINE

SAW CUT REQ'D

CONSTRUCTION LIMITS
8+48

GUY

ESCANABA & LAKE SUPERIOR

50' TAPER

PC 8+82.43

15'

9

3'

+17
+37

SAW CUT REQ'D

SLOPE INTERCEPTS

EXISTING R/W

+99
+82

38' R

100' TAPER

PT 9+66.12

58' R

150' TAPER

200'

1"

PC 339+70.60

7'

15'

339

USH 141

340

341

342

343

344

345

24'

12'

26'

341+56.92 USH 141=
9+99.91 MOONSHINE HILL RD

81°-36'-15"

22'

342+51.73 USH 141=
19+99.94 MOONSHINE HILL RD

90°-00'-00"

PC 20+20.39

100' TAPER

CAUTION

SLOPE INTERCEPTS

150' TAPER

GUY

38' R

+17
+27

PT 20+89.96

58' R

+56
+89

15'

3'

21'

50' TAPER

ASPHALTIC FLUME
(TYP)

MOONSHINE HILL RD

342+51.73 USH 141
TYPE D INTERSECTION REQ'D

CONSTRUCTION LIMITS
21+57

SAW CUT REQ'D

22

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - MOONSHINE HILL ROAD	SHEET	E

FILE NAME : F:\d3_149108\021103_id.dgn PLOT DATE : 03-APR-2014 07:19 PLOT BY : dotbrb PLOT NAME : 021103 id PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

N

THOMPSON RD

372+89.60 USH 141
TYPE C MODIFIED
INTERSECTION REQ'D

CONSTRUCTION LIMITS
7+95

PC 7+51.87

SLOPE INTERCEPTS

EXISTING R/W

100' TAPER

150' TAPER

PT 8+41.43

372+89.60 USH 141=
8+93.23 THOMPSON RD

SLOPE INTERCEPTS

SAW CUT REQ'D

CAUTION

EXISTING R/W

USH 141

370 371 372 373 374 375 376

ESCANABA

GUY

FO

G

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - THOMPSON ROAD	SHEET	E

2

ABA & LAKE SUPERIOR

N

SAW CUT REQ'D

SLOPE INTERCEPTS

EXISTING R/W

451

USH 141

452

453

454

PC 454+09.82

455+09.13 USH 141=
10+06.07 MC MAHON RD

456

457

99°-23'-28"

PC 10+35.44

150' TAPER

100' TAPER

38' R

CAUTION

EXISTING R/W

SLOPE INTERCEPTS

SIGN

ASPHALTIC FLUME
(TYP)

80' TAPER

PT 11+14.90

MC MAHON RD

455+09.13 USH 141
TYPE D INTERSECTION REQ'D

CONSTRUCTION LIMITS
12+04

SAW CUT REQ'D

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - MC MAHON ROAD	SHEET	E

FILE NAME : F:\d3_149108\021105_id.dgn PLOT DATE : 03-APR-2014 07:19 PLOT BY : dotbrb PLOT NAME : 021105 id PLOT SCALE : 40:1

2

N

SAW CUT REQ'D

R/W LINE

CONSTRUCTION LIMITS
7+66

NEJEDLO RD 8

TRACY RD

463+51.60 USH 141
TYPE B2 MODIFIED
INTERSECTION REQ'D

REFER TO SDD 13 B 1-10

ESCANABA & LAKE SUPERIO

SLOPE INTERCEPTS

EXISTING R/W

PC 8+91.12

PT 9+44.19

100' TAPER

150' TAPER

200'

150' TAPER

USH 141

461 462 463 464 465 466 467

463+51.60 USH 141=
9+91.00 NEJEDLO RD

463+99.46 USH 141=
10+06.00 MARTIN RD

86°-04'-55"

89°-12'-48"

PC 10+14.10

PT 10+56.42

100' TAPER

SAW CUT REQ'D

SLOPE INTERCEPTS

EXISTING R/W

ASPHALTIC FLUME
(TYP)

CONSTRUCTION LIMITS
11+51

MARTIN RD

60' TAPER

SAW CUT REQ'D

463+99.46 USH 141
TYPE D INTERSECTION REQ'D

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - NEJEDLO ROAD / MARTIN ROAD	SHEET	E

FILE NAME : F:\d3_149108\021106_id.dgn PLOT DATE : 03-APR-2014 07:19 PLOT BY : dotbrb PLOT NAME : 021106 id PLOT SCALE : 40:1

2

BEGIN PROJECT
STA 232+28.77

230 235 240 245

N

EXISTING R/W

INLET

SIGN

USH 141

EXISTING R/W

MIDDLE

245 250 255 260

N

253+38.64 USH 141=
10+00.00 TRELLIS LANE

EXISTING R/W

SIGN SIGN SIGN

USH 141

SIGN SIGN

EXISTING R/W

OT

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND

260 265 270 275

N

EXISTING R/W

SIGN

USH 141

SIGN

EXISTING R/W

2

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET 17	E

FILE NAME : F:\d3_149108\022002_ec.dgn PLOT DATE : 06-FEB-2014 15:16 PLOT BY : dotbrb PLOT NAME : 022002 ec PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

275 280 285 290

EXISTING R/W

USH 141

EXISTING R/W

SIGN

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND

295 300

EXISTING R/W

290 305

USH 141

PC 29+80.59

EXISTING R/W

PT 2+72

ESCANABA & LAKE SUPERIOR

305 310 315 320

USH 141

PT 2+72.41

PT 310+18.24

EXISTING R/W

EXISTING R/W

305+64.85 USH 141=
3+04.12 BIERNASZ ROAD

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET E

FILE NAME : F:\d3_149108\022003_ec.dgn PLOT DATE : 06-FEB-2014 15:16 PLOT BY : dotbrb PLOT NAME : 022003 ec PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

2

320

ESCANABA & LAKE SUPERIOR

325

330

335

EXISTING R/W

USH 141

SIGN

EXISTING R/W

PI 7+12.26

R/W LINE

R/W LINE

335

340

345

350

ESCANABA & LAKE SUPERIOR

PC 339+70.60

PC 8+82.43

PT 9+56.12

USH 141

EXISTING R/W

SIGN

PC 20+20.39

PT 20+89.96

EXISTING R/W

SIGN

341+56.92 USH 141=
9+99.91 MOONSHINE HILL RD

342+51.73 USH 41=
19+99.94 MOONSHINE HILL RD

PI 22+29.08

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET 19	E

FILE NAME : F:\d3_149108\022004_ec.dgn PLOT DATE : 06-FEB-2014 15:16 PLOT BY : dotbrb PLOT NAME : 022004 ec PLOT SCALE : 100:1

2

2

350

PT 350+70.89

355

EXISTING R/W

ESCANABA & LAKE SUPERIOR

360

365

USH 141

EXISTING R/W

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND

PC 7+51.87

365

370

EXISTING R/W

PT 8+41.43

ESCANABA & LAKE SUPERIOR

375

380

USH 141

372+89.60 USH 141=
8+93.23 THOMPSON ROAD

EXISTING R/W

380

385

EXISTING R/W

390

395

USH 141

EXISTING R/W

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET	E

FILE NAME : F:\d3_149108\022005_ec.dgn PLOT DATE : 06-FEB-2014 15:16 PLOT BY : dotbrb PLOT NAME : 022005 ec PLOT SCALE : 100:1

2

2

ESCANABA & LAKE SUPERIOR

395 400 405 410

EXISTING R/W

USH 141

EXISTING R/W

LEGEND

EROSION MAT
SILT FENCE
TEMPORARY DITCH CHECK
CULVERT PIPE CHECK
SLOPE INTERCEPT
SURFACE WATER FLOW
WETLAND

ESCANABA & LAKE SUPERIOR

410 415 420 425

EXISTING R/W

PC 423+50.35

PT 424+49.65

USH 141

EXISTING R/W

ESCANABA & LAKE SUPERIOR

425 430 435 440

EXISTING R/W

USH 141

EXISTING R/W

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET	E

FILE NAME : F:\d3_149108\022006_ec.dgn PLOT DATE : 06-FEB-2014 15:16 PLOT BY : dotbrb PLOT NAME : 022006 ec PLOT SCALE : 100:1

2

2

N

440

445

EXISTING R/W

450

ESCANABA & LAKE SUPERIOR

455

PC 454+09.82

USH 141

SIGN

PC 10+35.44

EXISTING R/W

PT 11+44.90

N

TRACY RD.

R/W LINE

463+51.60 USH 141=
9+91.00 NEJEDLO ROAD

455

460

EXISTING R/W

PC 8+91.12

PT 9+44.19

465

470

ESCANABA & LAKE SUPERIOR

USH 141

SIGN

PC 10+14.10

PT 10+56.42

EXISTING R/W

455+09.13 USH 141=
10+06.07 MC MAHON ROAD

463+99.46 USH 141=
10+06.00 MARTIN ROAD

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET	E

FILE NAME : F:\d3_149108\022007_ec.dgn PLOT DATE : 06-FEB-2014 15:16 PLOT BY : dotbrb PLOT NAME : 022007 ec PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

2

470 475 480 485

EXISTING R/W

PT 77+94.65

USH 141

SIGN

EXISTING R/W

ESCANABA & LAKE SUPERIOR

485 490 495 500

EXISTING R/W

USH 141

EXISTING R/W

ESCANABA & LAKE SUPERIOR

500 505 510 515

PT 504+41.06

PT 505+55.12

EXISTING R/W

USH 141

SIGN

EXISTING R/W

SIGN

END PROJECT
STA 515+03.94

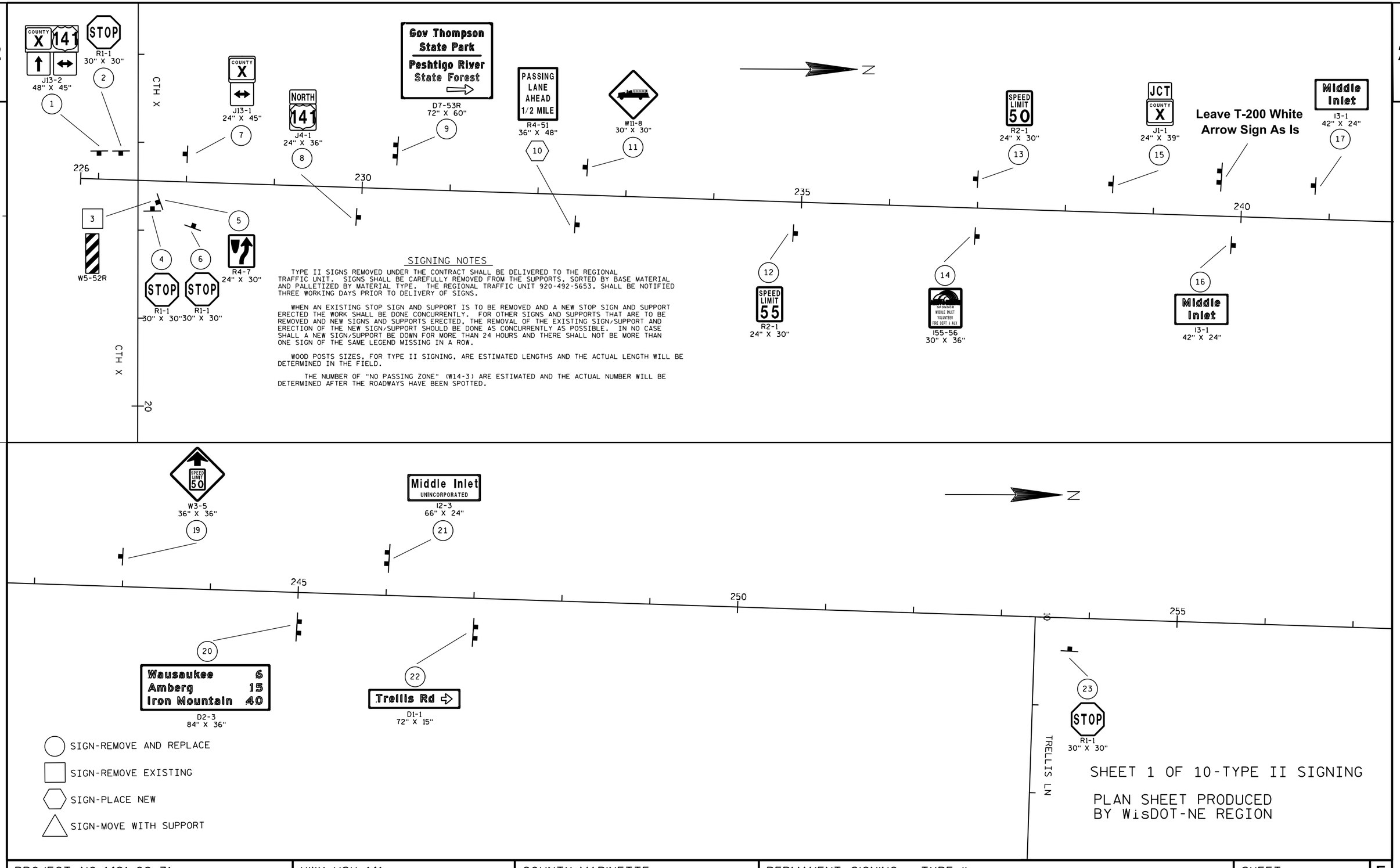
LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET	E

FILE NAME : F:\d3_149108\022008_ec.dgn PLOT DATE : 06-FEB-2014 15:16 PLOT BY : dotbrb PLOT NAME : 022008 ec PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42



SIGNING NOTES

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

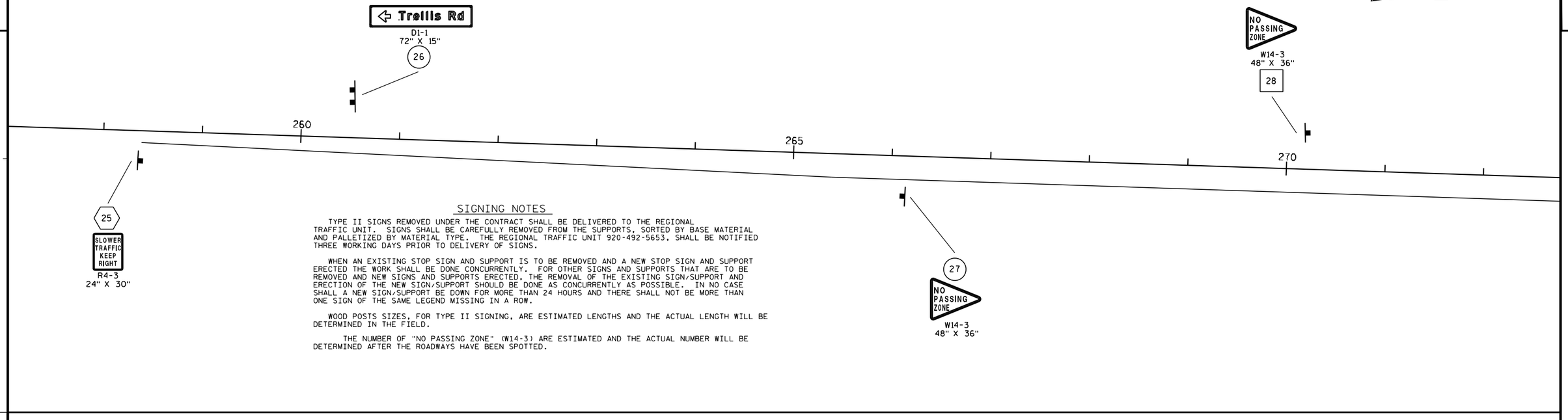
THE NUMBER OF "NO PASSING ZONE" (W14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

SHEET 1 OF 10-TYPE II SIGNING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 24	E

2



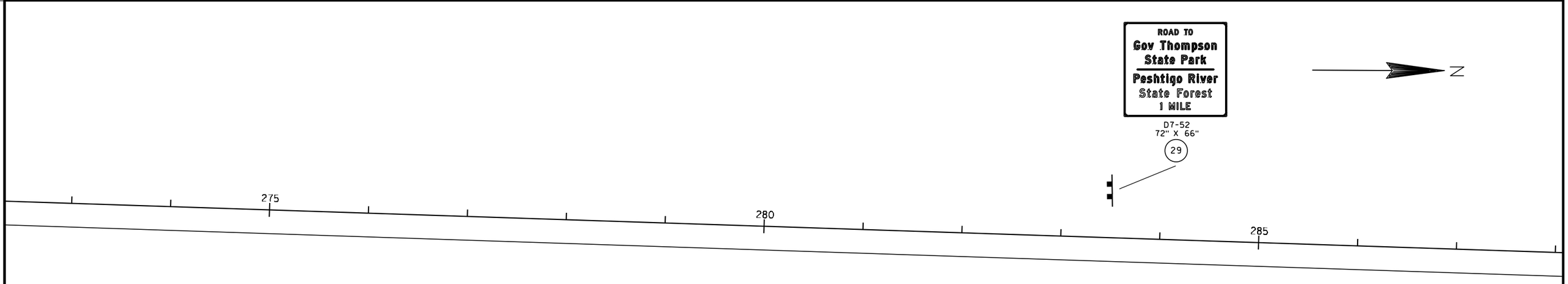
SIGNING NOTES

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" (W14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



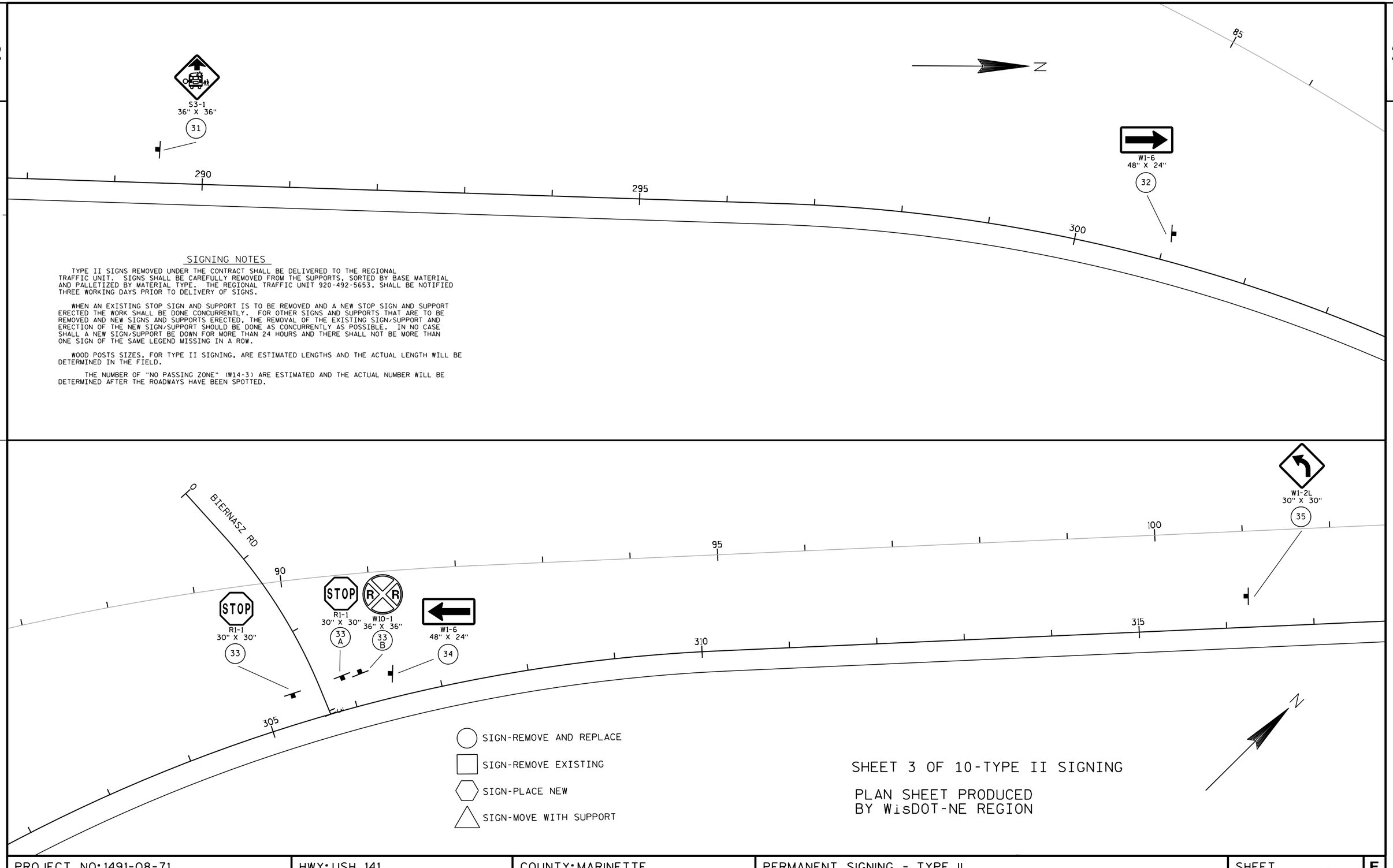
- SIGN-REMOVE AND REPLACE
- SIGN-REMOVE EXISTING
- SIGN-PLACE NEW
- SIGN-MOVE WITH SUPPORT

SHEET 2 OF 10-TYPE II SIGNING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1491-08-71	HWY: USH 141	COUNTY:MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 25	E

2



SIGNING NOTES

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" (W14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

SHEET 3 OF 10-TYPE II SIGNING

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

PROJECT NO:1491-08-71	HWY: USH 141	COUNTY:MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 26	E

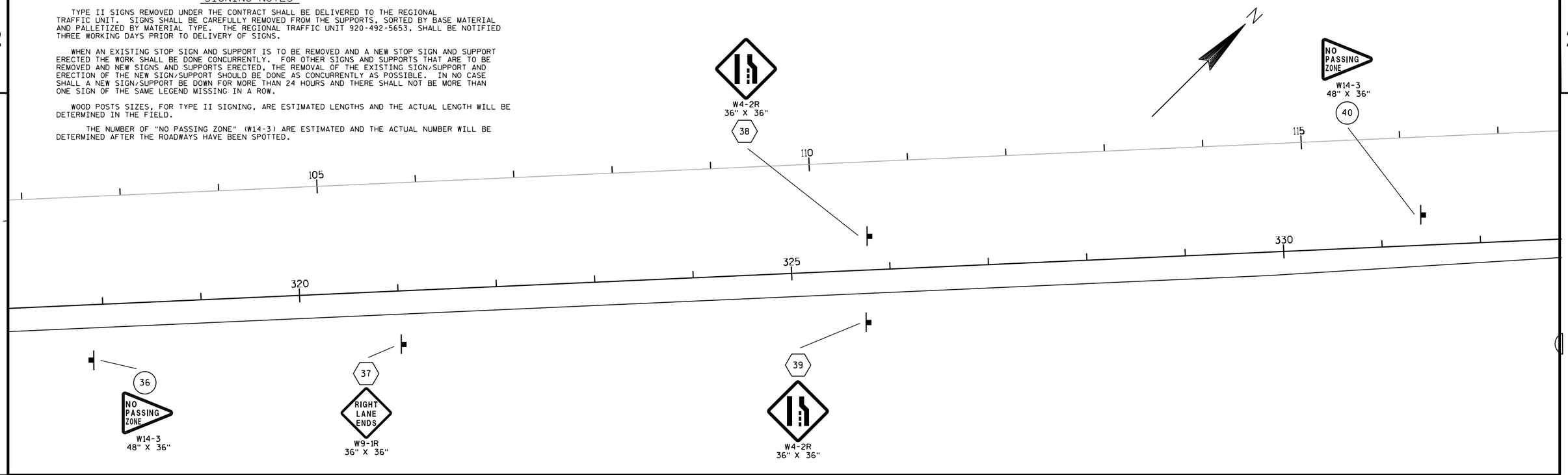
SIGNING NOTES

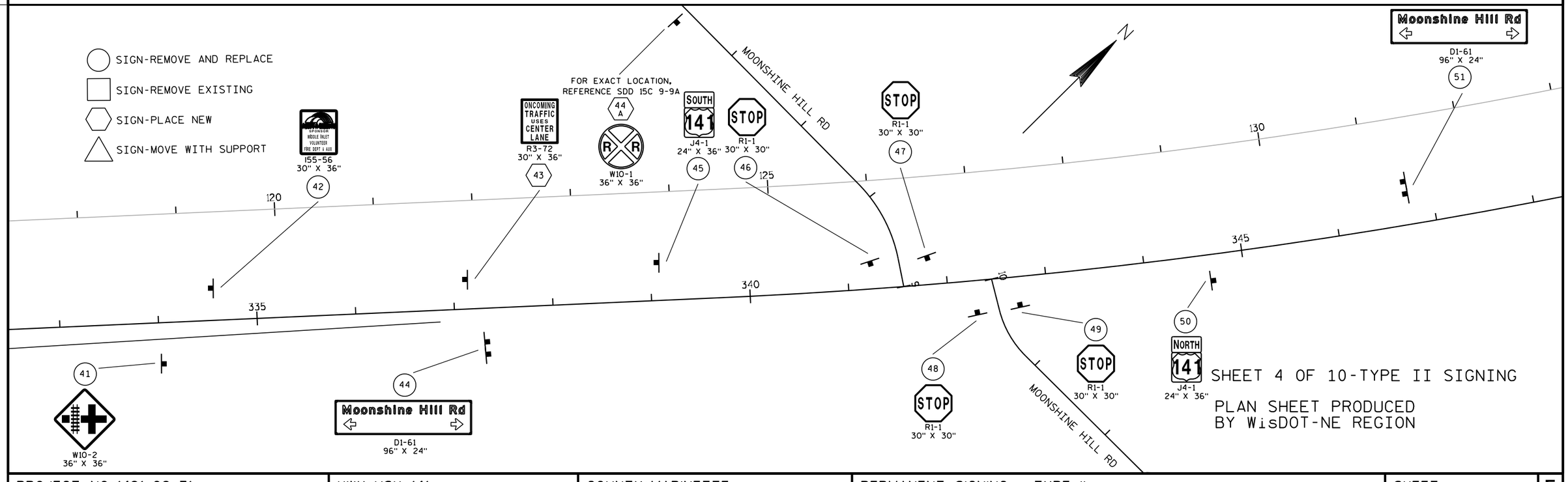
TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" (W14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.





SHEET 4 OF 10-TYPE II SIGNING

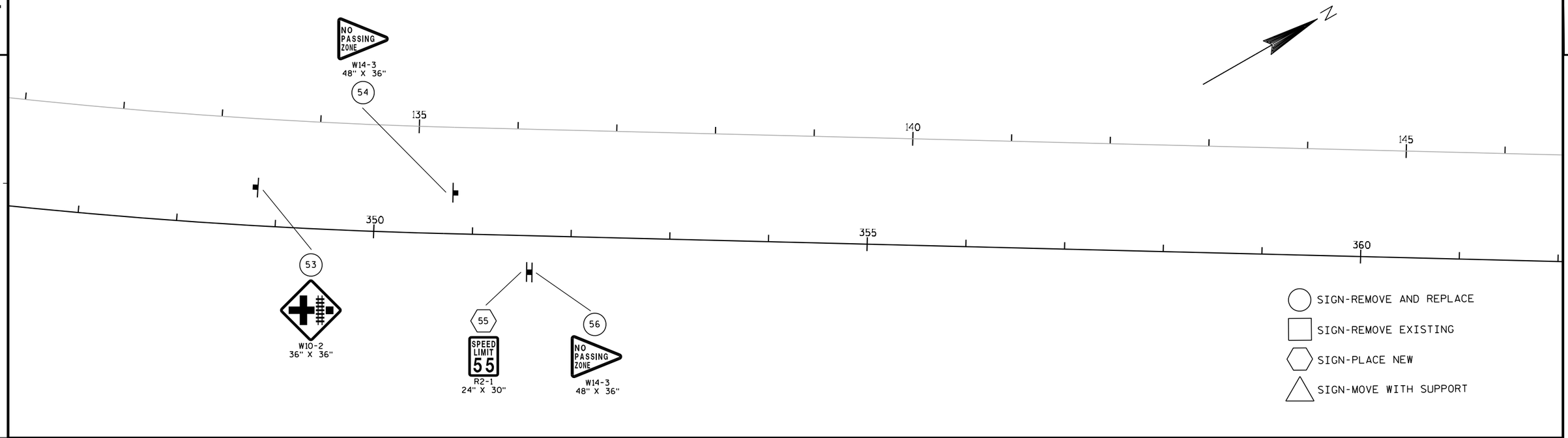
PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 27	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1491-08-71 USH 141\023204_ps.dgn PLOT DATE : 04-FEB-2014 13:15 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2



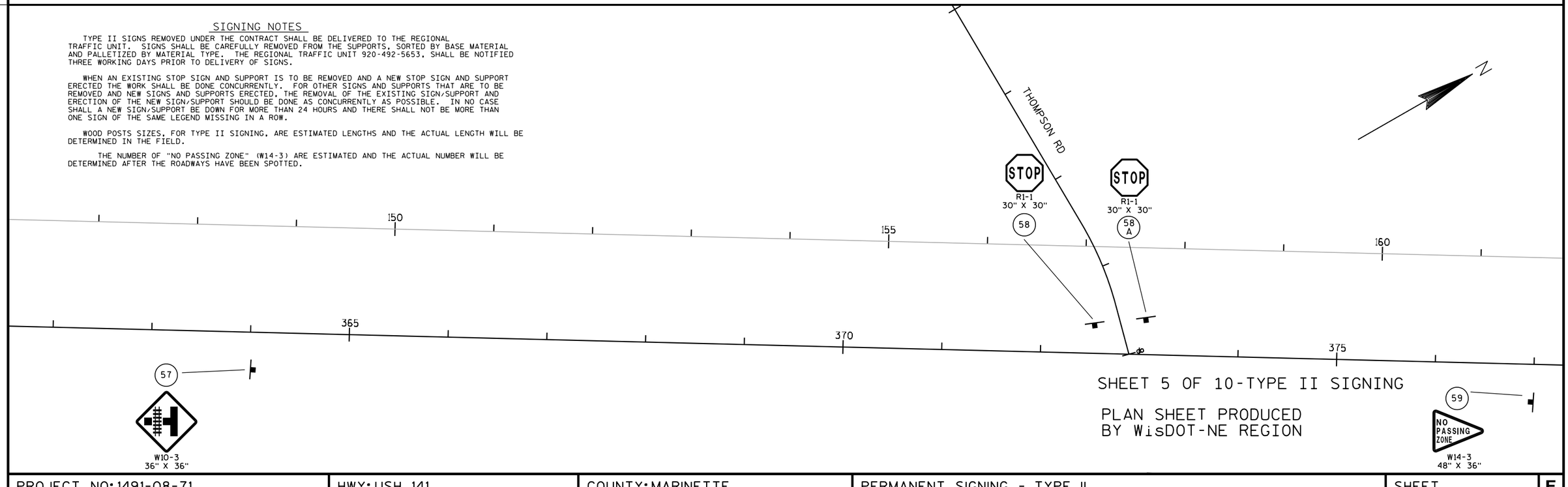
SIGNING NOTES

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" (W14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

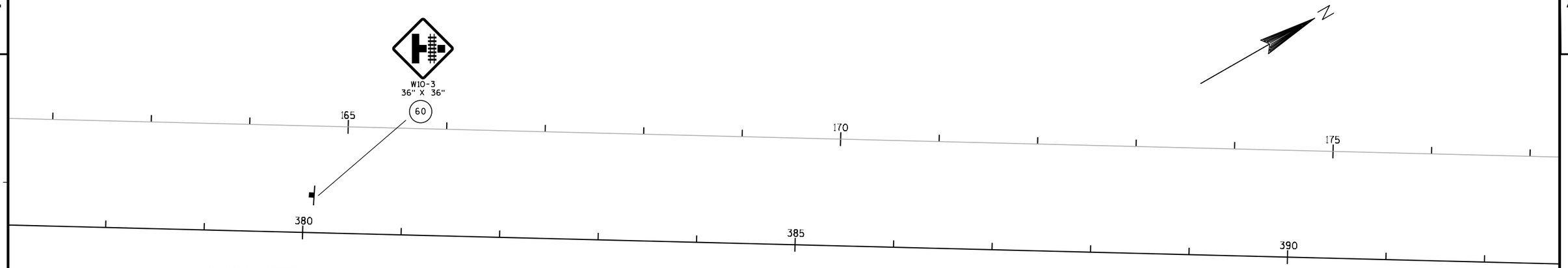


SHEET 5 OF 10-TYPE II SIGNING

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

PROJECT NO:1491-08-71	HWY: USH 141	COUNTY:MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 28	E

2



SIGNING NOTES

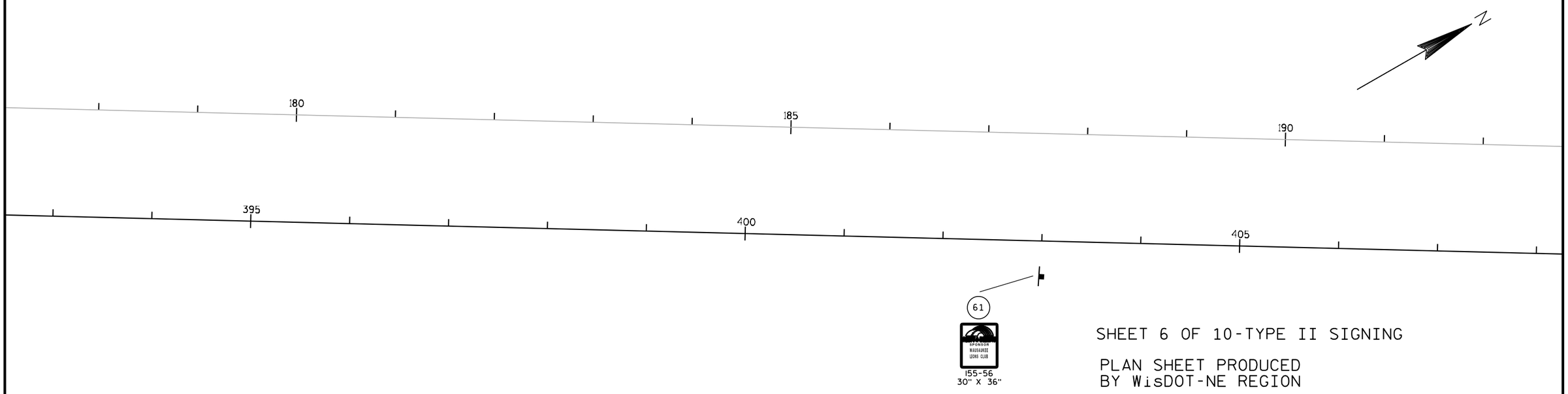
TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" (W14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

- SIGN-REMOVE AND REPLACE
- SIGN-REMOVE EXISTING
- SIGN-PLACE NEW
- SIGN-MOVE WITH SUPPORT

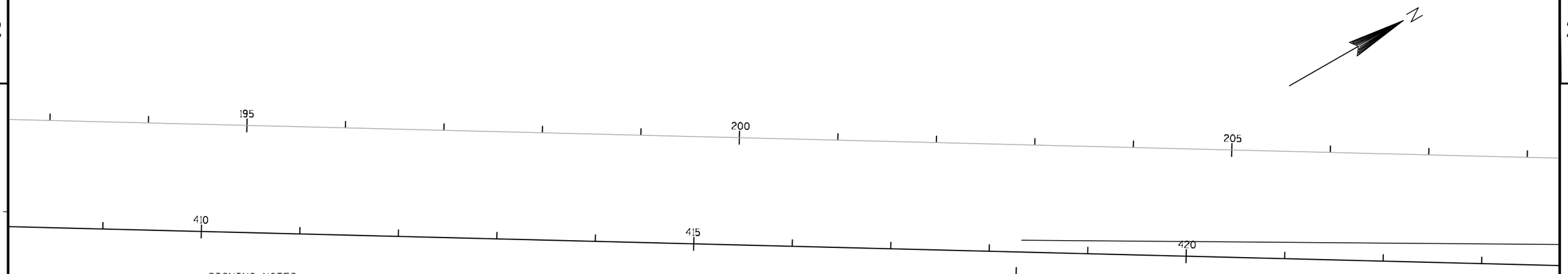


SHEET 6 OF 10-TYPE II SIGNING

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

PROJECT NO:1491-08-71	HWY:USH 141	COUNTY:MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 29	E

2



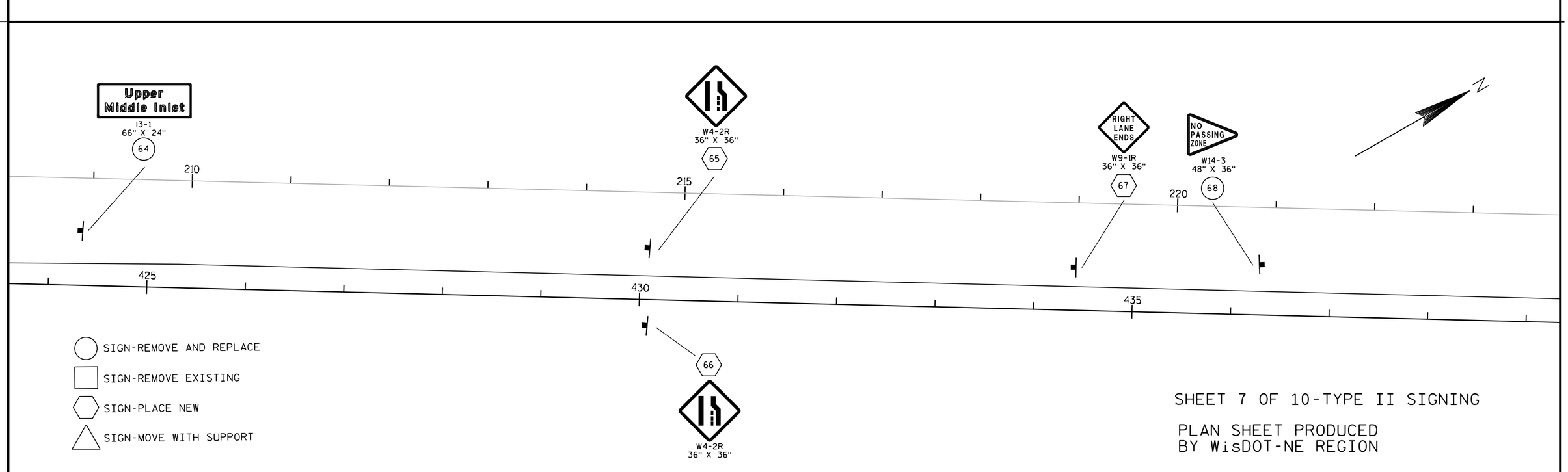
SIGNING NOTES

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" (W14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



SHEET 7 OF 10-TYPE II SIGNING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1491-08-71	HWY: USH 141	COUNTY:MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 30	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1491-08-71 USH 141\023207_ps.dgn PLOT DATE : 21-JAN-2014 14:27 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 100:1

2

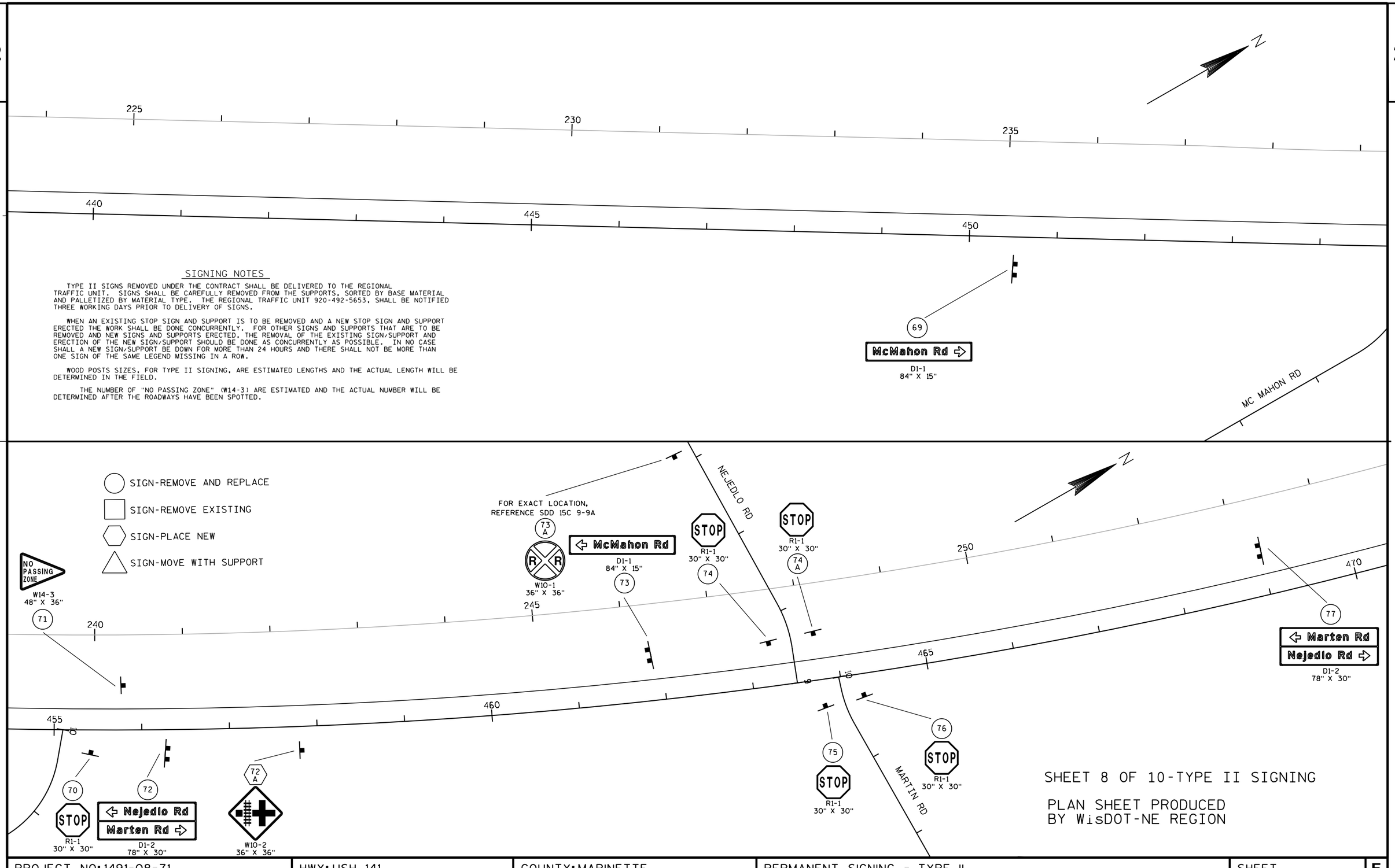
SIGNING NOTES

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WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" (W14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



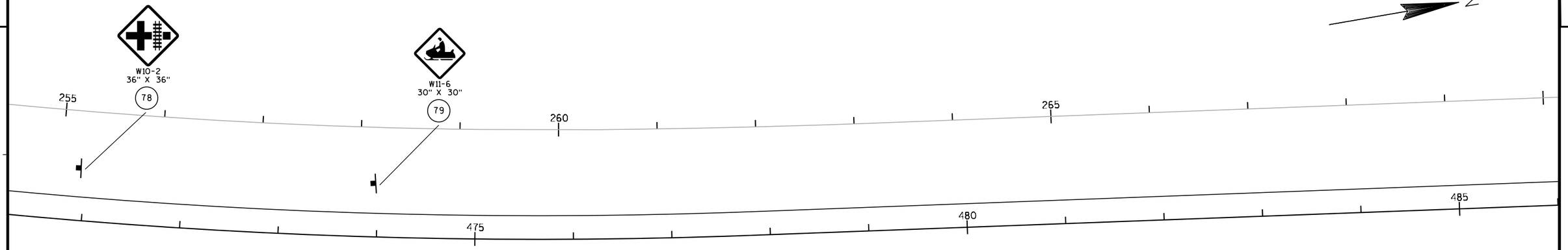
SHEET 8 OF 10-TYPE II SIGNING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 31	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1491-08-71 USH 141\023208_ps.dgn PLOT DATE : 04-FEB-2014 13:15 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 100:1

2



SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

SIGN-MOVE WITH SUPPORT

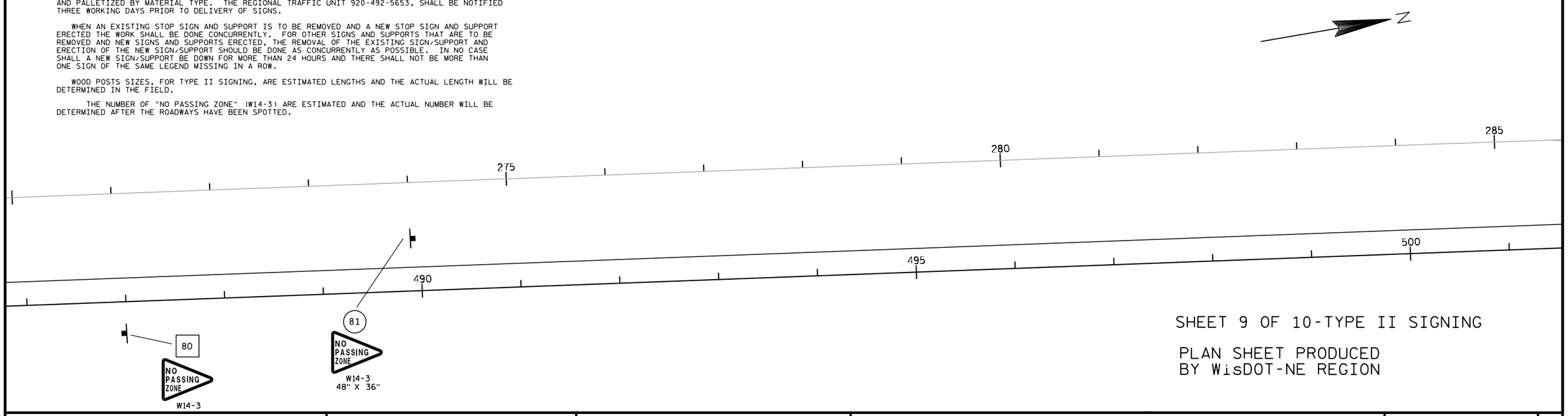
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WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" (W14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

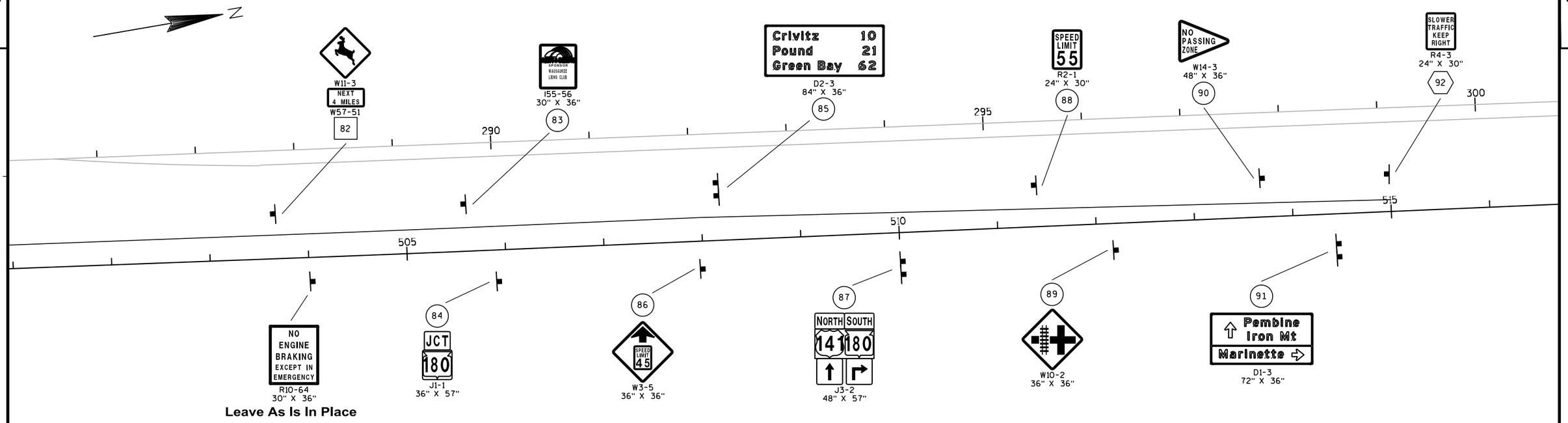


SHEET 9 OF 10-TYPE II SIGNING

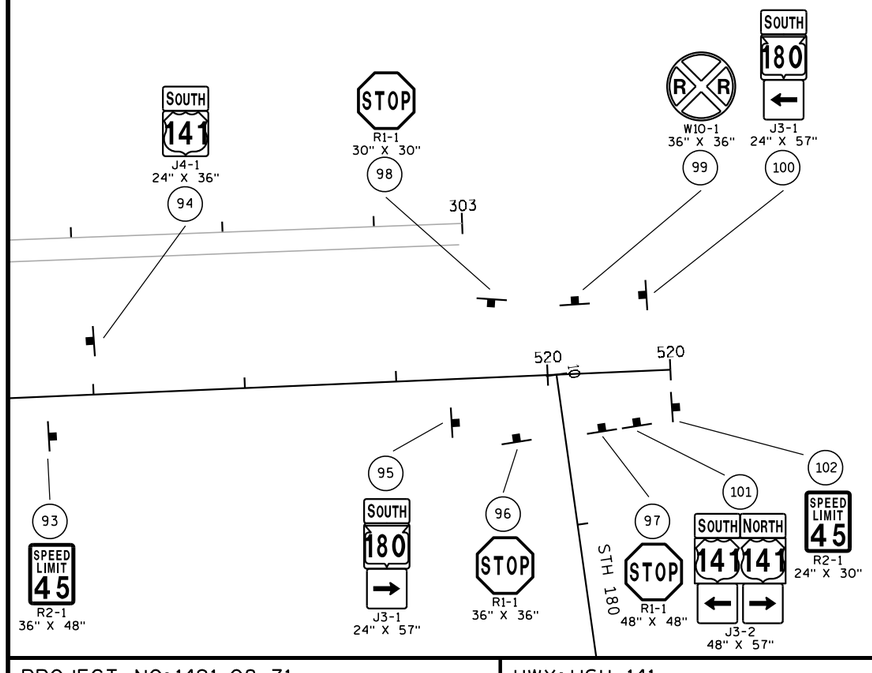
PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1491-08-71	HWY: USH 141	COUNTY:MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 32	E

2



Leave As Is In Place



SIGNING NOTES

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" (W14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

SIGN-MOVE WITH SUPPORT

SHEET 10 OF 10-TYPE II SIGNING

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 33	E

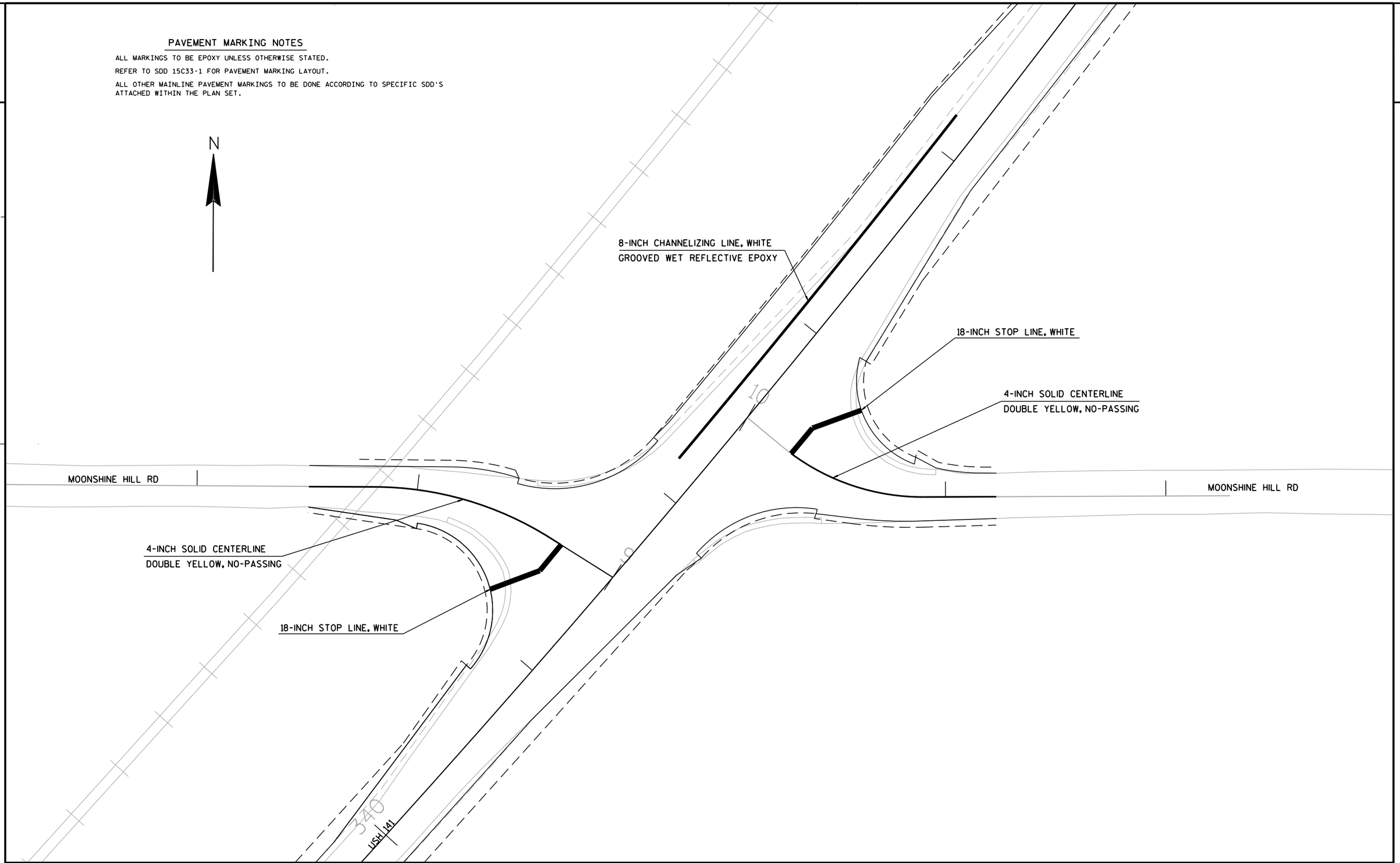
PAVEMENT MARKING NOTES

ALL MARKINGS TO BE EPOXY UNLESS OTHERWISE STATED.

REFER TO SDD 15C33-1 FOR PAVEMENT MARKING LAYOUT.

ALL OTHER MAINLINE PAVEMENT MARKINGS TO BE DONE ACCORDING TO SPECIFIC SDD'S ATTACHED WITHIN THE PLAN SET.

N



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PAVEMENT MARKING - MOONSHINE HILL RD	SHEET 34	E

FILE NAME : F:\d3_149108\024501_pm.dgn PLOT DATE : 02-APR-2014 13:42 PLOT BY : dotbrb PLOT NAME : 024501pm PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

PAVEMENT MARKING NOTES

ALL MARKINGS TO BE EPOXY UNLESS OTHERWISE STATED.

REFER TO SDD 15C33-1 FOR PAVEMENT MARKING LAYOUT.

ALL OTHER MAINLINE PAVEMENT MARKINGS TO BE DONE ACCORDING TO SPECIFIC SDD'S ATTACHED WITHIN THE PLAN SET.

N

8-INCH CHANNELIZING LINE, WHITE
GROOVED WET REFLECTIVE EPOXY

18-INCH STOP LINE, WHITE

4-INCH SOLID CENTERLINE
DOUBLE YELLOW, NO-PASSING

MARTIN RD

NEJEDLO RD

4-INCH SOLID CENTERLINE
DOUBLE YELLOW, NO-PASSING

18-INCH STOP LINE, WHITE

465

10

9

USH 141

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PAVEMENT MARKING - NEJEDLO/MARTIN RD	SHEET 35	E

TRAFFIC CONTROL NOTES

THIS DETAIL IS TYPICAL FOR SHIFTING TRAFFIC TO THE LEFT, REVERSE TRAFFIC CONTROL FOR SHIFTING TRAFFIC TO THE RIGHT.

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

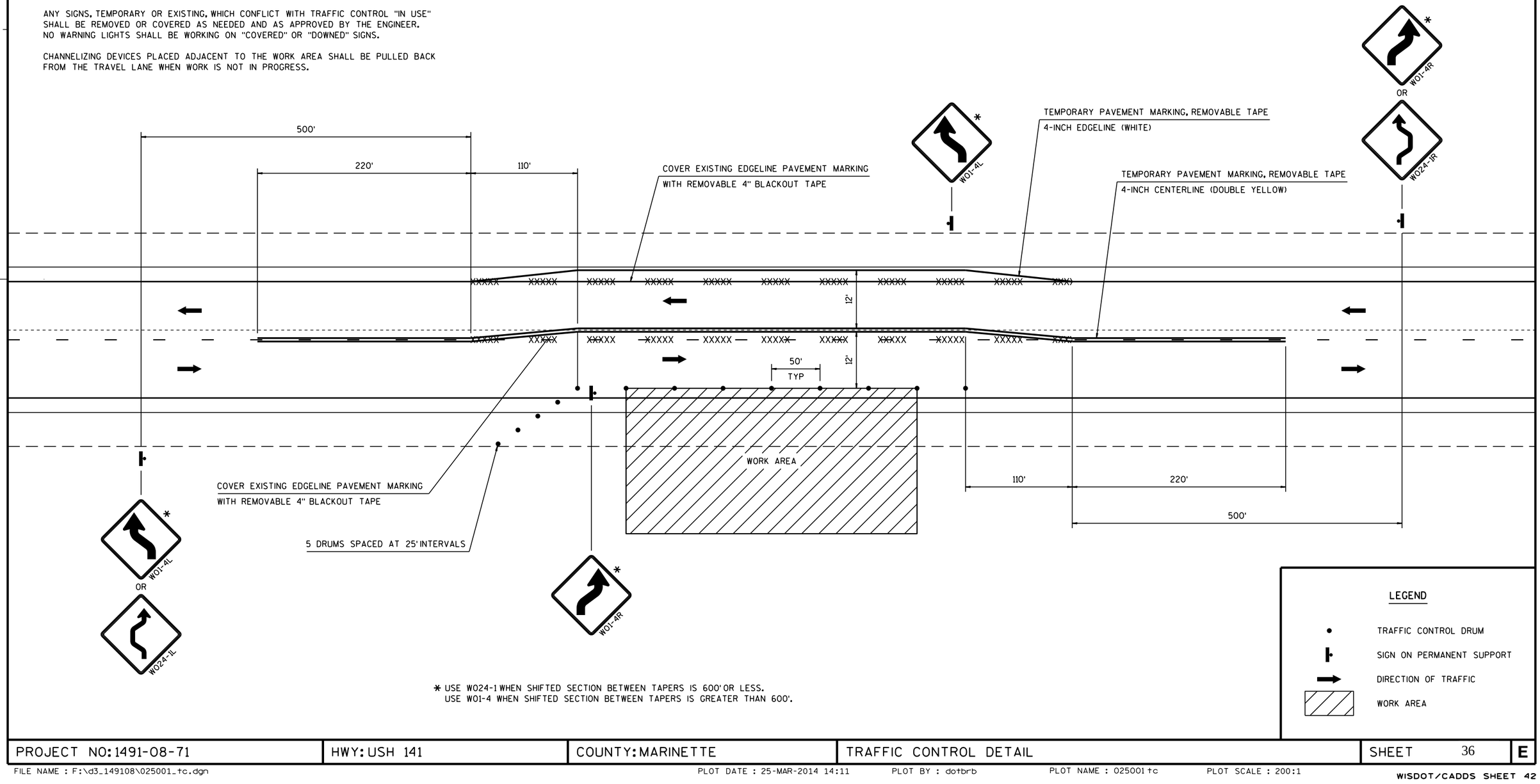
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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.

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



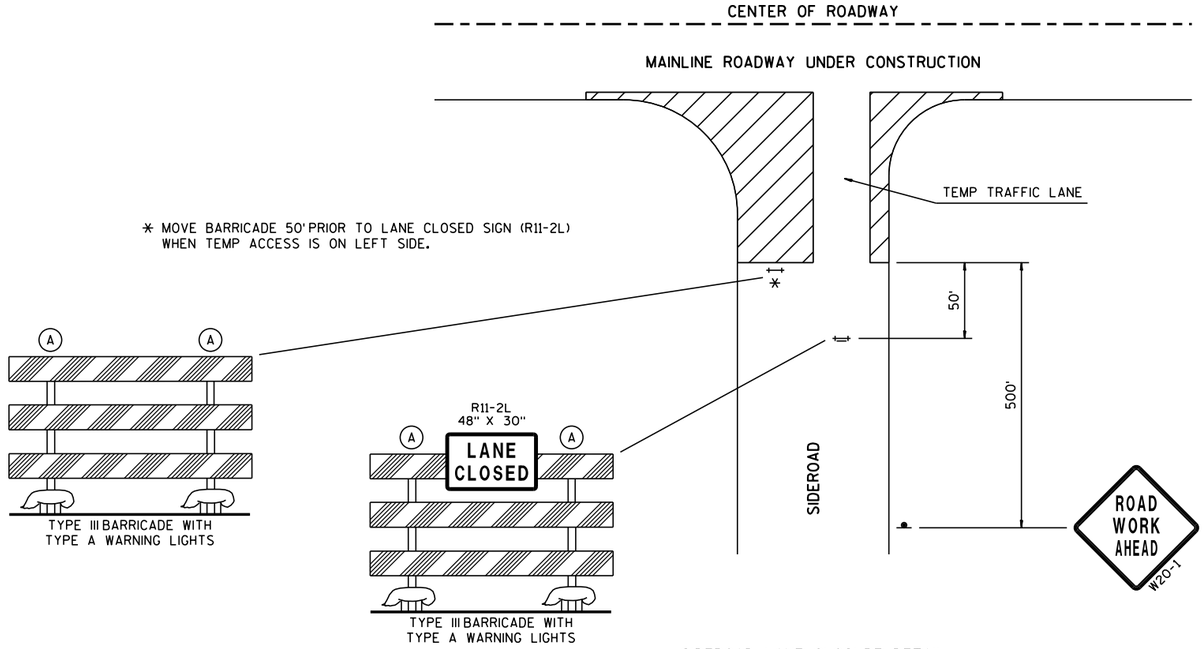
* USE W024-1 WHEN SHIFTED SECTION BETWEEN TAPERS IS 600' OR LESS.
USE W01-4 WHEN SHIFTED SECTION BETWEEN TAPERS IS GREATER THAN 600'.

LEGEND

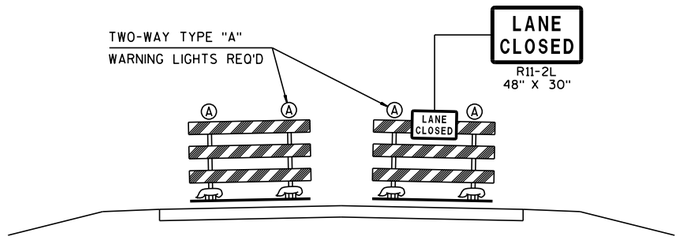
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	TRAFFIC CONTROL DETAIL	SHEET 36	E

2



SIDEROAD LANE CLOSURE DETAIL



LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- WORK AREA

TRAFFIC CONTROL NOTES

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

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.

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.

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	TRAFFIC CONTROL DETAILS	SHEET	E

DATE 29APR14 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	1491-08-71 QUANTITY
0010	201.0105	CLEARING	STA	47.000	47.000
0020	201.0205	GRUBBING	STA	47.000	47.000
0030	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	22.000	22.000
0040	204.0100	REMOVING PAVEMENT	SY	7,550.000	7,550.000
0050	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	55.000	55.000
0060	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	103,800.000	103,800.000
0070	204.0150	REMOVING CURB & GUTTER	LF	835.000	835.000
0080	204.0165	REMOVING GUARDRAIL	LF	1,270.000	1,270.000
0090	204.9060.S	REMOVING (ITEM DESCRIPTION) 01. CULVERT PIPE MARKERS	EACH	24.000	24.000
0100	205.0100	EXCAVATION COMMON	CY	29,900.000	29,900.000
0110	208.0100	BORROW	CY	780.000	780.000
0120	208.1100	SELECT BORROW	CY	870.000	870.000
0130	211.0400	PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS	STA	5.000	5.000
0140	213.0100	FINISHING ROADWAY (PROJECT) 01. 1491-08-71	EACH	1.000	1.000
0150	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	15,540.000	15,540.000
0160	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	80,500.000	80,500.000
0170	390.0201	BASE PATCHING ASPHALTIC	TON	455.000	455.000
0180	440.4410.S	INCENTIVE IRI RIDE	DOL	26,940.000	26,940.000
0190	455.0105	ASPHALTIC MATERIAL PG58-28	TON	400.000	400.000
0200	455.0605	TACK COAT	GAL	6,200.000	6,200.000
0210	460.1103	HMA PAVEMENT TYPE E-3	TON	7,350.000	7,350.000
0220	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	23,070.000	23,070.000
0230	460.4110.S	REHEATING HMA PAVEMENT LONGITUDINAL JOINTS	LF	85,834.000	85,834.000
0240	465.0110	ASPHALTIC SURFACE PATCHING	TON	40.000	40.000
0250	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	14.000	14.000
0260	465.0125	ASPHALTIC SURFACE TEMPORARY	TON	50.000	50.000
0270	465.0315	ASPHALTIC FLUMES	SY	84.000	84.000
0280	465.0475	ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL	LF	25,310.000	25,310.000
0290	520.0130	CULVERT PIPE CLASS III 30-INCH	LF	8.000	8.000
0300	520.1030	APRON ENDWALLS FOR CULVERT PIPE 30-INCH	EACH	1.000	1.000
0310	520.7000	CLEANING CULVERT PIPES	EACH	4.000	4.000
0320	520.8000	CONCRETE COLLARS FOR PIPE	EACH	5.000	5.000
0330	521.0112	CULVERT PIPE CORRUGATED STEEL 12-INCH	LF	365.000	365.000
0340	521.0118	CULVERT PIPE CORRUGATED STEEL 18-INCH	LF	12.000	12.000
0350	521.1012	APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH	EACH	22.000	22.000
0360	521.1018	APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH	EACH	1.000	1.000
0370	522.0124	CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	336.000	336.000
0380	522.0130	CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	488.000	488.000
0390	522.0142	CULVERT PIPE REINFORCED CONCRETE CLASS III 42-INCH	LF	168.000	168.000
0400	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	8.000	8.000
0410	522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	11.000	11.000
0420	522.1042	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 42-INCH	EACH	4.000	4.000

3

DATE 29APR14 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	1491-08-71 QUANTITY
0430	522.1048	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH	EACH	1.000	1.000
0440	523.0129	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH	LF	72.000	72.000
0450	523.0529	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH	EACH	2.000	2.000
0460	601.0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	LF	900.000	900.000
0470	614.2300	MGS GUARDRAIL 3	LF	550.000	550.000
0480	614.2500	MGS THRIE BEAM TRANSITION	LF	315.000	315.000
0490	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	8.000	8.000
0500	616.0700.S	FENCE SAFETY	LF	290.000	290.000
0510	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1491-08-71	EACH	1.000	1.000
0520	619.1000	MOBILIZATION	EACH	1.000	1.000
0530	621.0100	LANDMARK REFERENCE MONUMENTS	EACH	4.000	4.000
0540	624.0100	WATER	MGAL	960.000	960.000
0550	625.0500	SALVAGED TOPSOIL	SY	40,700.000	40,700.000
0560	627.0200	MULCHING	SY	29,700.000	29,700.000
0570	628.1504	SILT FENCE	LF	16,600.000	16,600.000
0580	628.1520	SILT FENCE MAINTENANCE	LF	4,150.000	4,150.000
0590	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	7.000	7.000
0600	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	4.000	4.000
0610	628.2004	EROSION MAT CLASS I TYPE B	SY	13,000.000	13,000.000
0620	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	7,500.000	7,500.000
0630	628.7504	TEMPORARY DITCH CHECKS	LF	300.000	300.000
0640	628.7555	CULVERT PIPE CHECKS	EACH	116.000	116.000
0650	628.7570	ROCK BAGS	EACH	300.000	300.000
0660	629.0210	FERTILIZER TYPE B	CWT	30.000	30.000
0670	630.0130	SEEDING MIXTURE NO. 30	LB	740.000	740.000
0680	630.0140	SEEDING MIXTURE NO. 40	LB	60.000	60.000
0690	630.0200	SEEDING TEMPORARY	LB	370.000	370.000
0700	633.5200	MARKERS CULVERT END	EACH	20.000	20.000
0710	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	76.000	76.000
0720	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	35.000	35.000
0730	637.2210	SIGNS TYPE II REFLECTIVE H	SF	614.200	614.200
0740	637.2230	SIGNS TYPE II REFLECTIVE F	SF	273.280	273.280
0750	638.2602	REMOVING SIGNS TYPE II	EACH	116.000	116.000
0760	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	104.000	104.000
0770	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0780	643.0100	TRAFFIC CONTROL (PROJECT) 01. 1491-08-71	EACH	1.000	1.000
0790	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	336.000	336.000
0800	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	672.000	672.000
0810	643.0900	TRAFFIC CONTROL SIGNS	DAY	4,625.000	4,625.000
0820	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	14.000	14.000
0830	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	970.000	970.000
0840	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	43,300.000	43,300.000
0850	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	155.000	155.000
0860	648.0100	LOCATING NO-PASSING ZONES	MI	5.340	5.340
0870	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	84,825.000	84,825.000
0880	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	120,550.000	120,550.000
0890	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	19,700.000	19,700.000

3

DATE 29APR14 E S T I M A T E O F Q U A N T I T I E S

LINE 1491-08-71

NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0900	650.5000	CONSTRUCTION STAKING BASE	LF	19,700.000	19,700.000
0910	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	900.000	900.000
0920	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	14.000	14.000
0930	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	28,276.000	28,276.000
0940	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1491-08-71	LS	1.000	1.000
0950	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	19,631.000	19,631.000
0960	690.0150	SAWING ASPHALT	LF	2,000.000	2,000.000
0970	690.0250	SAWING CONCRETE	LF	28,100.000	28,100.000
0980	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5.00/HR	HRS	2,000.000	2,000.000
0990	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	1,320.000	1,320.000
1000	SPV.0090	SPECIAL 01. 4-INCH EPOXY YELLOW	LF	39,300.000	39,300.000
1010	SPV.0090	SPECIAL 02. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY PAVEMENT MARKING 4-INCH	LF	62,160.000	62,160.000
1020	SPV.0090	SPECIAL 03. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY PAVEMENT MARKING 8-INCH	LF	400.000	400.000
1030	SPV.0105	SPECIAL 01. HOT MIX ASPHALT TEST STRIP	LS	1.000	1.000
1040	SPV.0195	SPECIAL 01. HIGH RECYCLE HMA PAVEMENT TYPE-3	TON	28,630.000	28,630.000

CLEARING AND GRUBBING

STATION	TO	STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
301+00	-	303+00	USH 141 RT	2	2
340+00	-	343+00	USH 141 LT	3	3
350+00	-	352+00	USH 141 LT	2	2
370+00	-	374+00	USH 141 LT	4	4
430+00	-	443+00	USH 141 LT	13	13
455+00	-	473+00	USH 141 LT	18	18
479+50	-	481+00	USH 141 RT	2	2
492+00	-	495+00	USH 141 LT	3	3
			TOTAL	47	47

REMOVING PAVEMENT

STATION	TO	STATION	LOCATION	204.0100 SY	REMARKS
379+40	-	381+80	USH 141 RT	89	TRELLIS RD
259+50	-	336+50	USH 141 RT	1711	NB PASSING LANE
261+00	-	261+20	USH 141	49	PIPE REPLACEMENT
270+45	-	270+65	USH 141	49	PIPE REPLACEMENT
281+28	-	281+88	USH 141	147	PIPE REPLACEMENT
295+10	-	295+30	USH 141	49	PIPE REPLACEMENT
304+40	-	307+60	USH 141 LT	71	BIERNASZ RD
326+21	-	327+11	USH 141	220	FROST HEAVE/PIPE REPLACE
370+40	-	374+60	USH 141 LT	93	THOMPSON RD
393+70	-	394+60	USH 141	240	FROST HEAVE/PIPE REPLACE
419+50	-	513+50	USH 141 LT	2089	SB PASSING LANE
419+50	-	513+50	USH 141 RT	2089	SB PASSING LANE
441+40	-	443+10	USH 141	378	FROST HEAVE/PIPE REPLACE
459+85	-	460+15	USH 141	67	PIPE REPLACEMENT
464+15	-	464+45	USH 141	67	PIPE REPLACEMENT
480+85	-	481+15	USH 141	67	PIPE REPLACEMENT
494+75	-	495+05	USH 141	67	PIPE REPLACEMENT
			TOTAL	7550	

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	203.0100 EACH	REMARKS
261+10	USH 141	1	CROSS DRAIN
270+55	USH 141	1	CROSS DRAIN
281+58	USH 141	1	CROSS DRAIN
295+20	USH 141	1	CROSS DRAIN
326+68	USH 141	1	HEAVE, CROSS DRAIN
394+15	USH 141	1	HEAVE, CROSS DRAIN
442+26	USH 141	1	HEAVE, CROSS DRAIN
460+00	USH 141	1	CROSS DRAIN
464+30	USH 141	1	CROSS DRAIN
481+00	USH 141	1	CROSS DRAIN
494+90	USH 141	1	CROSS DRAIN
264+50	USH 141 RT	1	DRIVEWAY
278+00	USH 141 RT	1	DRIVEWAY
280+00	USH 141 RT	1	DRIVEWAY
290+50	USH 141 RT	1	DRIVEWAY
304+90	USH 141 RT	1	DRIVEWAY
306+50	USH 141 RT	1	DRIVEWAY
311+50	USH 141 RT	1	DRIVEWAY
320+75	USH 141 RT	1	DRIVEWAY
443+00	USH 141 LT	1	DRIVEWAY
451+00	USH 141 RT	1	DRIVEWAY
472+88	USH 141 RT	1	DRIVEWAY
	TOTAL	22	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION	LOCATION	204.0115 SY
232+29	USH 141 PROJ LIMITS	8
240+69.6	USH 141	10
241+04.9	USH 141	10
412+95.3	USH 141	10
413+30.7	USH 141	10
515+04	USH 141 PROJ LIMITS	7
	TOTAL	55

EARTHWORK SUMMARY

CATEGORY	ROADWAY	STATION	TO	STATION	205.0100 EXCAVATION COMMON (1) CY CUT (2)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) Factor 1.25	MASS ORDINATE +/- (14)	Waste	208.0100 BORROW CY
0010	USH 141 - MAINLINE	250+00.00	-	257+00.00	389	389	35	44	345	345	0
0010	USH 141 - MAINLINE	257+50.00	-	339+00.00	7,743	7,743	5,378	6,723	1,020	1,020	0
0010	USH 141 - MAINLINE	339+50.00	-	370+00.00	933	933	387	484	449	449	0
0010	USH 141 - MAINLINE	371+00.00	-	375+00.00	283	283	254	318	-35	0	-35
0010	USH 141 - MAINLINE	418+00.00	-	452+50.00	6,109	6,109	2,652	3,315	2,794	2,794	0
0010	USH 141 - MAINLINE	452+50.00	-	460+25.00	1,127	1,127	1,496	1,870	-743	0	-743
0010	USH 141 - MAINLINE	461+50.00	-	468+00.00	1,110	1,110	708	885	225	225	0
0010	USH 141 - MAINLINE	468+50.00	-	515+75.00	8,173	8,173	2,474	3,092	5,080	5,080	0
		SUBTOTAL			25,866	25,866	13,384	16,730	9,136	9,914	-778
0010	TRELLIS RD	10+00.00	-	11+75.00	500	500	0	1	499	499	0
0010	THOMPSON RD	7+50.00	-	8+89.00	226	226	41	51	175	175	0
0010	NEJEDLO RD	7+65.00	-	9+91.00	678	678	12	14	663	663	0
0010	MOONSHINE HILL RD (WEST)	8+38.00	-	10+00.00	384	384	33	41	343	343	0
0010	MC MAHON RD	10+25.00	-	12+45.00	338	338	124	156	182	182	0
0010	MARTIN RD	10+06.00	-	12+00.00	258	258	47	59	199	199	0
0010	MOONSHINE HILL RD (EAST)	20+00.00	-	21+57.00	404	404	71	89	314	314	0
0010	BIERNASZ RD	1+81.00	-	3+04.00	358	358	7	9	349	349	0
		SUBTOTAL			3,145.55	3,145.55	335.76	419.70	2,725.85	2,726	0.00
	GRAND TOTALS	(I.D. 1491-08-71)			29,012	29,012	13,719.77	17,149.71	11,862.08	12,640.35	-778.27
		SUBTOTAL			3,145.55	3,145.55	335.76	419.70	2,725.85	2,726	0.00
	GRAND TOTALS	(I.D. 1491-08-71)			29,012	29,012	13,719.77	17,149.71	11,862.08	12,640.35	-778.27

TOTAL EXCAVATION COMMON **29,900.00**

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Select Borrow material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Marsh Excavation - to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well. Item number 20505
7) Rock Excavation item number 205.0200
8) Reduced Marsh in Fill - Excavated Marsh material is usuable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
9) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor = 1.5. Item number 208.1100
11) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.3. Item number 208.1100
12) Expanded Rock - Factor = 1.1
13) Expanded Fill. Factor = 1.25

Depending on selections:

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor

OR Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor

OR Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor

OR Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor

14) 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.

3

REMOVING ASPHALTIC SURFACE MILLING

STATION	TO	STATION	LOCATION	204.0120 SY
232+29	-	237+93	USH 141	1816
237+93	-	240+69	USH 141	1270
241+05	-	243+70	USH 141	1234
243+70	-	258+38	USH 141	4854
253+38	-		TRELLIS LN	573
258+38	-	336+85	USH 141	26320
305+50	-		BIERNASZ RD	479
336+85	-	410+50	USH 141	24665
341+50	-		MOONSHINE HILL	649
342+00	-		MOONSHINE HILL	630
373+00	-		THOMPSON RD	410
410+50	-	412+95	USH 141	1102
413+30	-	415+70	USH 141	1113
415+70	-	515+00	USH 141	33773
454+00	-		MCMAHON RD	675
464+00	-		NEJEDLO RD	863
464+00	-		MARTIN RD	667
515+00	-	520+00	USH 141	2671
			TOTAL	103800

EXCAVATION COMMON

STATION	TO	STATION	LOCATION	205.0100 CY	REMARKS
326+21	-	327+11	USH 141	125	FROST HEAVE/PIPE REPLACE
393+70	-	394+60	USH 141	175	FROST HEAVE/PIPE REPLACE
441+40	-	443+10	USH 141	459	FROST HEAVE/PIPE REPLACE
			TOTAL	759	

SELECT BORROW

STATION	TO	STATION	LOCATION	208.1100 CY	REMARKS
326+21	-	327+11	USH 141	143	FROST HEAVE/PIPE REPLACE
393+70	-	394+60	USH 141	201	FROST HEAVE/PIPE REPLACE
441+40	-	443+10	USH 141	528	FROST HEAVE/PIPE REPLACE
			TOTAL	870	

FINISHING ROADWAY (PROJECT) 01. 1491-08-71

LOCATION	213.0100 EACH
PROJECT	1
TOTAL	1

REMOVING GUARDRAIL

STATION	TO	STATION	LOCATION	204.0165 LF
238+74	-	240+70	USH 141 RT	196
239+24	-	240+70	USH 141 LT	146
241+04	-	242+50	USH 141 RT	146
241+04	-	243+00	USH 141 LT	196
411+13	-	412+85	USH 141 RT	172
411+64	-	412+85	USH 141 LT	121
413+30	-	414+51	USH 141 RT	121
413+30	-	415+02	USH 141 LT	172
			TOTAL	1270

REMOVING CURB & GUTTER

STATION	LOCATION	204.0150 LF
254+34	TRELLIS LN	158
341+57	MOONSHINE HILL RD LT	142
342+51	MOONSHINE HILL RD RT	140
454+00	MCMAHON RD	151
464+00	NEJEDLO RD	117
464+50	MARTIN RD	124
	TOTAL	835

REMOVING CULVERT PIPE MARKERS

STATION	LOCATION	204.9060.S EACH
270+55	USH 141 LT & RT	2
281+58	USH 141 LT & RT	2
295+20	USH 141 LT & RT	2
308+75	USH 141 LT & RT	2
326+66	USH 141 LT & RT	2
334+45	USH 141 LT & RT	2
351+28	USH 141 LT & RT	2
373+85	USH 141 LT & RT	2
388+25	USH 141 LT & RT	2
442+25	USH 141 LT & RT	2
481+00	USH 141 LT & RT	2
494+90	USH 141 LT & RT	2
	TOTAL	24

3/4" BASE AGGREGATE DENSE SUMMARY

STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4 INCH TON	624.0100 WATER MGAL
232+29	-	240+70	USH 141 LT & RT	347	3.5
241+05	-	251+00	USH 141 LT & RT	414	4.1
10+62	-	11+62	TRELLIS LANE	33	0.3
251+00	-	255+00	USH 141 LT & RT	157	1.6
255+00	-	304+35	USH 141 LT & RT	2755	27.6
304+35	-	307+60	USH 141 LT & RT	164	1.6
1+80	-	2+82	BIERNASZ RD	48	0.5
307+60	-	336+50	USH 141 LT & RT	1654	16.5
336+50	-	393+70	USH 141 LT & RT	2357	23.6
8+48	-	9+37	MOONSHINE HILL RD	25	0.3
20+56	-	21+57	MOONSHINE HILL RD	27	0.3
7+55	-	8+71	THOMPSON RD	42	0.4
393+70	-	412+95	USH 141 LT & RT	839	8.4
413+31	-	419+50	USH 141 LT & RT	252	2.5
419+50	-	515+04	USH 141 LT & RT	6306	63.1
10+52	-	12+04	MC MAHON RD	42	0.4
7+66	-	9+07	NEJEDLO RD	52	0.5
10+62	-	11+51	MARTIN RD	27	0.3
			TOTAL	15540	155 *

BASE PATCHING ASPHALTIC

STATION	TO	STATION	LOCATION	390.0201 TON
261+00	-	261+20	USH 141	15
270+45	-	270+65	USH 141	15
281+28	-	281+88	USH 141	46
295+10	-	295+30	USH 141	16
326+21	-	327+11	USH 141	69
393+70	-	394+60	USH 141	69
441+40	-	443+10	USH 141	131
459+85	-	460+15	USH 141	23
464+15	-	464+45	USH 141	23
480+85	-	481+15	USH 141	23
494+75	-	495+05	USH 141	23
			TOTAL	455

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

STATION	TO	STATION	LOCATION	211.0400 STA	REMARKS
247+00	-	252+00	USH 141 RT	5	FOR TRAFFIC SHIFT
			TOTAL	5	

1-1/4" BASE AGGREGATE DENSE SUMMARY

STATION	TO	STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1-1/4 INCH TON	624.0100 WATER MGAL
251+00	-	255+00	USH 141 RT	670	6.7
10+22	-	11+63	TRELLIS LANE	755	7.6
259+50	-	336+50	USH 141 RT	23036	230.4
261+00	-	261+20	USH 141	79	0.8
207+45	-	270+65	USH 141	79	0.8
281+28	-	281+88	USH 141	238	2.4
295+10	-	295+30	USH 141	79	0.8
304+35	-	307+60	USH 141 LT	534	5.3
1+80	-	2+82	BIERNASZ RD	581	5.8
326+21	-	327+11	USH 141	357	3.6
340+00	-	345+75	USH 141 LT	1021	10.2
340+40	-	344+25	USH 141 RT	598	6.0
8+48	-	9+76	MOONSHINE HILL RD	703	7.0
20+22	-	21+57	MOONSHINE HILL RD	744	7.4
371+40	-	374+60	USH 141 LT	588	5.9
7+55	-	8+71	THOMPSON RD	625	6.3
393+70	-	394+60	USH 141	496	5.0
419+50	-	453+82	USH 141 RT	8216	82.2
419+50	-	462+35	USH 141 LT	10305	103.1
441+40	-	443+10	USH 141	368	3.7
453+82	-	462+95	USH 141 RT	2195	22.0
10+28	-	12+04	MC MAHON RD	1253	12.5
462+35	-	513+50	USH 141 LT	12640	126.4
462+95	-	513+50	USH 141 RT	12337	123.4
7+66	-	9+55	NEJEDLO RD	1014	10.1
10+28	-	11+51	MARTIN RD	685	6.9
480+85	-	481+15	USH 141	65	0.7
494+75	-	495+05	USH 141	65	0.7
			TOTAL	80500	805 *

HMA SUMMARY

STATION	TO	STATION	LOCATION	455.0105 ASPHALTIC MATERIAL PG58-28 TON	455.0605 TACK COAT GAL	460.1103 HMA PAVEMENT TYPE E-3 TON	SPV.0195.01 HIGH RECYCLE HMA PAVEMENT TYPE E-3 TON	REMARKS
232+29	-	240+69	USH 141	0	157	0	724	4" TOTAL
241+05	-	251+00	USH 141	0	184	0	848	4" TOTAL
251+00	-	255+00	USH 141 RT	0	11	0	88	7" TOTAL
251+00	-	255+00	USH 141	0	56	0	256	4" TOTAL
10+15	-	11+62	TRELLIS LN	0	34	0	271	7" TOTAL
255+00	-	259+50	USH 141	0	142	0	652	4" TOTAL
259+50	-	304+35	USH 141	0	623	0	2865	4" TOTAL
304+35	-	307+60	USH 141	0	36	0	166	4" TOTAL
307+60	-	336+50	USH 141	0	401	0	1846	4" TOTAL
259+50	-	336+50	USH 141 RT	0	681	0	5378	7" TOTAL
304+35	-	307+60	USH 141 LT	0	9	0	71	7" TOTAL
1+80	-	2+89	BIERNASZ RD	0	29	0	228	7" TOTAL
336+50	-	340+00	USH 141	0	58	0	268	4" TOTAL
340+00	-	340+40	USH 141	1	6	12	16	4" TOTAL
340+40	-	344+25	USH 141	5	51	99	137	4" TOTAL
340+00	-	345+75	USH 141 LT	1	10	18	57	7" TOTAL
8+48	-	9+85	MOONSHINE HILL RD	5	44	86	266	7" TOTAL
340+40	-	344+25	USH 141 RT	0	2	4	13	7" TOTAL
20+15	-	21+57	MOONSHINE HILL RD	3	29	55	172	7" TOTAL
344+25	-	345+75	USH 141	2	23	43	60	4" TOTAL
345+75	-	371+40	USH 141	45	428	823	1144	4" TOTAL
7+55	-	8+78	THOMPSON RD	3	29	56	173	7" TOTAL
371+40	-	374+60	USH 141 LT	1	9	17	53	7" TOTAL
371+40	-	374+60	USH 141	5	44	86	119	4" TOTAL
374+60	-	412+95	USH 141	70	659	1268	1762	4" TOTAL
413+31	-	419+50	USH 141	13	122	236	327	4" TOTAL
419+50	-	513+50	USH 141	111	1044	2011	2794	4" TOTAL
419+50	-	454+75	USH 141 LT	23	215	415	1287	7" TOTAL
419+50	-	456+15	USH 141 RT	24	224	431	1338	7" TOTAL
10+21	-	12+04	MC MAHON RD	4	41	79	246	7" TOTAL
454+75	-	455+00	USH 141 LT	0	2	3	10	7" TOTAL
455+00	-	467+20	USH 141 LT	9	88	170	526	7" TOTAL
456+15	-	465+34	USH 141 RT	7	66	128	397	7" TOTAL
465+34	-	465+50	USH 141	0	1	2	6	4" TOTAL
7+66	-	9+62	NEJEDLO RD	7	65	124	386	7" TOTAL
10+23	-	11+51	MARTIN RD	3	32	62	191	7" TOTAL
467+20	-	467+60	USH 141 LT	0	3	5	16	7" TOTAL
465+50	-	513+50	USH 141 RT	30	284	547	1698	7" TOTAL
467+60	-	513+50	USH 141 LT	29	271	522	1621	7" TOTAL
513+50	-	515+04	USH 141	3	26	49	153	4" TOTAL
			TOTALS	400	6200	7350	28630	

REHEATING HMA LONGITUDINAL JOINTS

STATION	TO	STATION	LOCATION	460.4110.S LF	REMARKS
232+29	-	240+69	USH 141	1680	
241+05	-	251+00	USH 141	1990	
251+00	-	255+00	USH 141	800	
255+00	-	259+50	USH 141	900	
259+50	-	304+35	USH 141	8970	
304+35	-	307+60	USH 141	650	
307+60	-	336+50	USH 141	5780	
265+39	-	329+85	USH 141 RT	12892	FULL WIDTH PASSING LANE
336+50	-	340+00	USH 141	700	
340+00	-	340+40	USH 141	80	
340+40	-	344+25	USH 141	770	
344+25	-	345+75	USH 141	300	
345+75	-	371+40	USH 141	5130	
371+40	-	374+60	USH 141	640	
374+60	-	412+95	USH 141	7670	
413+31	-	419+50	USH 141	1238	
419+50	-	513+50	USH 141	18800	
425+32	-	508+00	USH 141 LT	16536	FULL WIDTH PASSING LANE
513+50	-	515+04	USH 141	308	
			TOTAL	85834	

ASPHALTIC SURFACE TEMPORARY

STATION	TO	STATION	LOCATION	465.0125 TON
247+00	-	252+00	USH 141 LT	48
			TOTAL	50

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

STATION	LOCATION	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
233+10	USH 141 RT	5
253+00	USH 141 LT	5
290+50	USH 141 LT	4
	TOTAL	14

ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL

STATION	TO	STATION	LOCATION	465.0475 LF
234+28	-	240+44	USH 141	616
241+31	-	251+39	USH 141	1008
255+39	-	303+68	USH 141	4829
307+67	-	339+70	USH 141	3203
344+51	-	370+90	USH 141	2639
374+90	-	412+70	USH 141	3780
413+57	-	453+22	USH 141	3965
457+22	-	461+76	USH 141	454
465+92	-	514+05	USH 141	4813
			TOTAL	25310

ASPHALTIC FLUMES

STATION	TO	465.0315 SY
252+60	USH 141 RT	7
253+98	USH 141 RT	7
340+78	USH 141 LT	7
342+21	USH 141 LT	7
20+60	MOONSHINE HILL RD RT	7
21+11	MOONSHINE HILL RD LT	7
10+56	MC MAHON RD LT	7
11+26	MC MAHON RD RT	7
462+86	USH 141 LT	7
464+23	USH 141 LT	7
10+66	MARTIN RD RT	7
10+95	MARTIN RD LT	7
	TOTAL	84

ASPHALTIC SURFACE PATCHING

LOCATION	465.0110 TON	REMARKS
	-	FOR FILLING POT HOLES
UNDISTRIBUTED	40	AND RAMPING AT MATCHES
TOTAL	40	

3

CULVERT PIPE SUMMARY

STATION	LOCATION	CULVERT PIPE CORRUGATED STEEL 12-INCH 521.0112 LF	CULVERT PIPE CORRUGATED STEEL 18-INCH 521.0118 LF	APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH 521.1012 EACH	APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH 521.1018 EACH	CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH 522.0124 LF	CULVERT PIPE CLASS III 30-INCH 520.0130 LF	CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH 522.0130 LF	CULVERT PIPE REINFORCED CONCRETE CLASS III 42-INCH 522.0142 LF	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH 523.0129 LF	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH 522.1024 EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH 522.1030 EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 42-INCH 522.1042 EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH 522.1048 EACH
264+50	DRIVEWAY RT	30	-	2	-	-	-	-	-	-	-	-	-	-
278+00	DRIVEWAY RT	30	-	2	-	-	-	-	-	-	-	-	-	-
280+00	DRIVEWAY RT	30	-	2	-	-	-	-	-	-	-	-	-	-
290+50	DRIVEWAY RT	35	-	2	-	-	-	-	-	-	-	-	-	-
305+00	DRIVEWAY RT	50	-	2	-	-	-	-	-	-	-	-	-	-
306+50	DRIVEWAY RT	50	-	2	-	-	-	-	-	-	-	-	-	-
311+50	DRIVEWAY RT	25	-	2	-	-	-	-	-	-	-	-	-	-
320+75	DRIVEWAY RT	25	-	2	-	-	-	-	-	-	-	-	-	-
443+00	DRIVEWAY LT	30	-	2	-	-	-	-	-	-	-	-	-	-
451+00	DRIVEWAY RT	30	-	2	-	-	-	-	-	-	-	-	-	-
472+80	DRIVEWAY RT	30	-	2	-	-	-	-	-	-	-	-	-	-
10+66	MCMAHON ROAD RT	-	12	-	1		-	-	-	-		-	-	-
281+58	USH 141	-	-	-	-	144	-	-	-	-	2	-	-	-
373+85	USH 141	-	-	-	-	-	-	-	-	-	2	-	-	-
442+25	USH 141	-	-	-	-	96	-	-	-	-	2	-	-	-
481+00	USH 141	-	-	-	-	96	-	-	-	-	2	-	-	-
261+10	USH 141	-	-	-	-	-	-	104	-	-	-	2	-	-
270+55	USH 141	-	-	-	-	-	-	96	-	-	-	2	-	-
295+20	USH 141	-	-	-	-	-	-	96	-	-	-	2	-	-
308+75	USH 141	-	-	-	-	-	-	16	-	-	-	1	-	-
326+66	USH 141	-	-	-	-	-	-	72	-	-	-	2	-	-
334+45	USH 141	-	-	-	-	-	8	-	-	-	-	-	-	-
464+30	USH 141	-	-	-	-	-	-	104	-	-	-	2	-	-
460+00	USH 141	-	-	-	-	-	-	-	80	-	-	-	2	-
494+90	USH 141	-	-	-	-	-	-	-	88	-	-	-	2	-
351+28	USH 141	-	-	-	-	-	-	-	-	-	-	-		1
394+15	USH 141	-	-	-	-	-	-	-	-	72	-	-	-	-
	TOTALS	365	12	22	1	336	8	488	168	72	8	11	4	1

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CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D

STATION	TO	STATION	LOCATION	601.0557 LF	REMARKS
252+64	-	253+23	USH 141 RT	91	TRELLIS LANE
253+54	-	253+94	USH 141 RT	60	TRELLIS LANE
340+82	-	341+41	USH 141 LT	83	MOONSHINE HILL RD
341+72	-	342+17	USH 141 LT	73	MOONSHINE HILL RD
341+89	-	342+36	USH 141 RT	70	MOONSHINE HILL RD
342+67	-	343+27	USH 141 RT	86	MOONSHINE HILL RD
454+28	-	454+68	USH 141 RT	92	MC MAHON RD
455+23	-	455+54	USH 141 RT	48	MC MAHON RD
462+90	-	463+30	USH 141 LT	73	NEJEDLO RD
463+61	-	464+19	USH 141 LT	79	NEJEDLO RD
463+42	-	463+95	USH 141 RT	69	MARTIN RD
464+30	-	464+72	USH 141 RT	73	MARTIN RD
			TOTAL	900	

CLEANING CULVERT PIPES

STATION	LOCATION	520.7000 EACH
308+75	USH 141	1
334+45	USH 141	1
351+28	USH 141	1
373+85	USH 141	1
	TOTAL	4

MGS GUARDRAIL 3

STATION	TO	STATION	LOCATION	614.2300 LF
239+43	-	240+30	MIDDLE INLET RT	87.0
239+80	-	240+30	MIDDLE INLET LT	50.0
241+44	-	241+94	MIDDLE INLET RT	50.0
241+44	-	242+32	MIDDLE INLET LT	87.5
411+68	-	412+56	UPPER MIDDLE INLET RT	87.5
412+06	-	412+56	UPPER MIDDLE INLET LT	50.0
413+70	-	414+20	UPPER MIDDLE INLET RT	50.0
413+70	-	414+58	UPPER MIDDLE INLET LT	87.5
			TOTAL	550

MGS THRIE BEAM TRANSITION

STATION	TO	STATION	LOCATION	614.2500 LF
240+30	-	240+70	MIDDLE INLET RT	39.4
240+30	-	240+70	MIDDLE INLET LT	39.4
241+05	-	241+44	MIDDLE INLET RT	39.4
241+05	-	241+44	MIDDLE INLET LT	39.4
412+56	-	412+95	UPPER MIDDLE INLET RT	39.4
412+56	-	412+95	UPPER MIDDLE INLET LT	39.4
413+31	-	413+70	UPPER MIDDLE INLET RT	39.4
413+31	-	413+70	UPPER MIDDLE INLET LT	39.4
			TOTAL	315

MGS GUARDRAIL TERMINAL ENERGY ABSORBING TERMINAL

STATION	TO	STATION	LOCATION	614.2610 EACH
238+90	-	239+43	MIDDLE INLET RT	1
239+27	-	239+80	MIDDLE INLET LR	1
241+94	-	242+53	MIDDLE INLET RT	1
242+32	-	242+91	MIDDLE INLET LT	1
411+15	-	411+68	UPPER MIDDLE INLET RT	1
411+53	-	412+06	UPPER MIDDLE INLET LT	1
414+20	-	414+73	UPPER MIDDLE INLET RT	1
414+58	-	415+11	UPPER MIDDLE INLET LT	1
			TOTAL	8

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LANDSCAPING SUMMARY

STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	REMARKS
250+58	-	252+55	USH 141 RT	67	47	0.0	1.2		0.6	
10+27	-	11+62	TRELLIS LA RT	109	76	0.1	2.0		1.0	
10+27	-	11+62	TRELLIS LA LT	49	34	0.0	0.9		0.4	
253+94	-	303+75	USH 141 RT	5175	3622	3.3	93.1	32.3	46.6	NB PASSING LANE
1+80	-	2+79	BIERNASZ RD RT	85	60	0.1	1.5		0.8	
1+80	-	2+79	BIERNASZ RD LT	221	155	0.1	4.0		2.0	
303+75	-	336+50	USH 141 RT	1382	967	0.9	24.9	12.2	12.4	NB PASSING LANE
306+41	-	308+09	USH 141 LT	392	274	0.2	7.0	15.2	3.5	NB PASSING LANE
339+83	-	341+89	USH 141 RT	983	688	0.6	17.7		8.8	
8+48	-	9+73	MOONSHINE HILL RD RT	176	123	0.1	3.2		1.6	
8+48	-	9+73	MOONSHINE HILL RD LT	141	99	0.1	2.5		1.3	
20+25	-	21+57	MOONSHINE HILL RD RT	180	126	0.1	3.2		1.6	
20+25	-	21+57	MOONSHINE HILL RD LT	142	99	0.1	2.5		1.3	
343+29	-	345+54	USH 141 RT	344	241	0.2	6.2		3.1	
342+17	-	345+53	USH 141 LT	280	196	0.2	5.0		2.5	
7+95	-	8+68	THOMPSON RD RT	340	238	0.2	6.1		3.1	
7+95	-	8+68	THOMPSON RD LT	847	593	0.5	15.2		7.6	
418+32	-	454+28	USH 141 RT	4445	3111	2.8	80.0		40.0	SB PASSING LANE
10+31	-	12+04	MC MAHON RD RT	494	346	0.3	8.9		4.4	
10+31	-	12+04	MC MAHON RD LT	153	107	0.1	2.8		1.4	
455+54	-	463+41	USH 141 RT	1603	1122	1.0	28.9		14.4	SB PASSING LANE
418+32	-	462+88	USH 141 LT	4531	3172	2.9	81.6		40.8	SB PASSING LANE
7+66	-	9+52	NEJEDLO RD RT	92	65	0.1	1.7		0.8	
7+66	-	9+52	NEJEDLO RD LT	154	108	0.1	2.8		1.4	
10+31	-	11+51	MARTIN RD RT	103	72	0.1	1.9		0.9	
10+31	-	11+51	MARTIN RD LT	131	91	0.1	2.4		1.2	
464+70	-	515+00	USH 141 RT	9025	6318	5.7	162.5		81.2	SB PASSING LANE
464+20	-	515+00	USH 141 LT	5047	3533	3.2	90.8		45.4	SB PASSING LANE
			UNDISTRIBUTED	4000	4000	2.5	72.0		36.0	
			TOTAL	40700	29700	30	740	60	370	

CONCRETE COLLARS FOR PIPE

STATION	LOCATION	520.8000 EACH
308+75	USH 141 RT	1
334+45	USH 141 RT	1
351+28	USH 141 RT	1
373+85	USH 141 LT & RT	2
	TOTAL	5

FENCE SAFETY

STATION	TO	STATION	LOCATION	616.0700.S LF	REMARKS
379+40	-	381+80	USH 141 RT	290	TO PROTECT ARCHAEOLGICAL AREA PLACE AT 35' PARALLEL OFFSET FROM CL AND PERPENDICULAR AT ENDS 25' LONG
			TOTAL	290	

MOBILIZATION

LOCATION	619.1000 EACH
PROJECT	1
TOTAL	1

MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1491-08-71

LOCATION	618.0100 EACH
PROJECT	1
TOTAL	1

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SILT FENCE SUMMARY

STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
237+50	-	239+50	USH 141 LT	260	65
237+20	-	239+10	USH 141 RT	250	63
242+25	-	243+60	USH 141 LT	195	49
242+25	-	244+15	USH 141 RT	250	63
256+00	-	264+50	USH 141 RT	850	213
268+00	-	278+00	USH 141 RT	1000	250
278+20	-	280+00	USH 141 RT	180	45
290+60	-	297+00	USH 141 RT	640	160
303+50	-	305+50	USH 141 LT	200	50
305+80	-	308+50	USH 141 LT	270	68
312+20	-	320+70	USH 141 RT	850	213
321+00	-	337+90	USH 141 RT	1690	423
339+25	-	341+00	USH 141 LT	175	44
339+80	-	342+90	USH 141 RT	310	78
341+30	-	346+50	USH 141 LT	520	130
343+10	-	345+00	USH 141 RT	190	48
370+65	-	372+40	USH 141 LT	175	44
372+70	-	375+80	USH 141 LT	310	78
410+00	-	411+65	USH 141 LT	225	56
409+50	-	411+40	USH 141 RT	250	63
414+90	-	416+70	USH 141 LT	240	60
414+20	-	416+20	USH 141 RT	260	65
418+25	-	429+35	USH 141 RT	1110	278
418+25	-	431+00	USH 141 LT	1275	319
438+00	-	444+00	USH 141 RT	600	150
451+15	-	454+00	USH 141 RT	285	71
454+25	-	464+25	USH 141 RT	1000	250
462+30	-	463+05	USH 141 LT	75	19
463+65	-	465+15	USH 141 LT	150	38
464+70	-	472+00	USH 141 RT	730	183
477+75	-	484+00	USH 141 LT	625	156
488+00	-	496+00	USH 141 RT	800	200
	-		UNDISTRIBUTED	1600	400
			TOTAL	16600	4150

MOBILIZATIONS EROSION CONTROL AND MOBILIZATIONS EMERGENCY EROSION CONTROL

STATION	TO	STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
232+28	-	515+04	PROJECT	7	4
			TOTAL	7	4

EROSION MAT CLASS I TYPE B

STATION	TO	STATION	LOCATION	628.2004 SY
264+70	-	268+50	USH 141 RT	296
277+50	-	278+00	USH 141 RT	39
278+25	-	280+00	USH 141 RT	136
280+00	-	290+40	USH 141 RT	809
290+60	-	291+90	USH 141 RT	101
303+90	-	304+70	USH 141 RT	62
305+05	-	306+20	USH 141 RT	89
306+60	-	311+35	USH 141 RT	369
303+60	-	305+40	USH 141 LT	140
306+00	-	308+20	USH 141 LT	171
311+60	-	320+50	USH 141 RT	692
418+25	-	429+35	USH 141 RT	863
418+25	-	419+00	USH 141 LT	58
441+40	-	442+75	USH 141 LT	105
429+70	-	450+90	USH 141 RT	1649
443+15	-	452+70	USH 141 LT	743
451+20	-	452+70	USH 141 RT	117
456+70	-	463+50	USH 141 RT	529
472+50	-	513+00	USH 141 LT	3150
464+50	-	472+65	USH 141 RT	634
473+10	-	505+00	USH 141 RT	2481
505+80	-	506+00	USH 141 RT	16
			TOTAL	13000

EROSION MAT URBAN CLASS I TYPE B

STATION	TO	STATION	LOCATION	628.2008 SY	REMARKS
252+64	-	253+23	USH 141 RT	71	BACK OF CURB
253+54	-	253+94	USH 141 RT	47	BACK OF CURB
258+25	-	264+50	USH 141 RT	486	
268+50	-	277+50	USH 141 RT	700	
291+90	-	303+90	USH 141 RT	933	
321+00	-	336+80	USH 141 RT	1229	
340+82	-	341+41	USH 141 LT	65	BACK OF CURB
341+72	-	342+17	USH 141 LT	57	BACK OF CURB
341+89	-	342+36	USH 141 RT	54	BACK OF CURB
342+67	-	343+27	USH 141 RT	67	BACK OF CURB
419+00	-	441+40	USH 141 LT	1742	
452+70	-	463+10	USH 141 LT	809	
464+00	-	472+50	USH 141 LT	661	
454+28	-	454+68	USH 141 RT	72	BACK OF CURB
455+23	-	455+54	USH 141 RT	37	BACK OF CURB
462+90	-	463+30	USH 141 LT	57	BACK OF CURB
463+61	-	464+19	USH 141 LT	61	BACK OF CURB
463+42	-	463+95	USH 141 RT	54	BACK OF CURB
464+30	-	464+72	USH 141 RT	57	BACK OF CURB
452+70	-	454+30	USH 141 RT	124	
454+21	-	456+70	USH 141 RT	194	
10+50	-	11+90	MARTIN RD RT	109	
10+50	-	11+90	MARTIN RD LT	109	
			TOTAL	7500	

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TEMPORARY DITCH CHECKS

STATION	LOCATION	628.7504 LF
251+00	USH 141 RT	15
255+30	USH 141 RT	15
256+60	USH 141 RT	15
277+35	USH 141 RT	15
279+00	USH 141 RT	15
281+00	USH 141 RT	15
289+90	USH 141 RT	15
291+40	USH 141 RT	15
299+30	USH 141 RT	15
301+60	USH 141 RT	15
303+18	USH 141 RT	15
306+40	USH 141 LT	15
415+75	USH 141 LT	15
415+75	USH 141 RT	15
418+25	USH 141 LT & RT	30
421+20	USH 141 LT & RT	30
454+00	MCMAHON RD LIMITS LT & RT	15
454+00	MCMAHON RD LIMITS LT & RT	15
	TOTAL	300

ROCK BAGS

LOCATION	628.7570 EACH
UNDISTRIBUTED	300
TOTAL	300

LANDMARK REFERENCE MONUMENTS

LOCATION	621.0100 EACH
T33N R20E S 1/4 CORNER SEC. 22	4
TOTAL	4

CULVERT PIPE CHECKS

STATION	LOCATION	628.7555 EACH
261+10	USH 141	4
264+50	USH 141 RT	4
270+55	USH 141	4
278+00	USH 141 RT	4
280+00	USH 141 RT	4
281+58	USH 141	4
290+50	USH 141 RT	4
295+20	USH 141	4
305+00	USH 141 RT	4
306+50	USH 141 RT	4
308+75	USH 141	4
311+50	USH 141 RT	4
320+75	USH 141 RT	4
326+66	USH 141	4
334+45	USH 141	4
373+85	USH 141	4
394+15	USH 141	4
442+25	USH 141	4
443+00	USH 141 LT	4
451+00	USH 141 RT	4
10+66	MC MAHON RD	4
460+00	USH 141	4
464+30	USH 141	4
472+80	USH 141 RT	4
481+00	USH 141	4
494+90	USH 141	4
	UNDISTRIBUTED	12
	TOTAL	116

MARKERS CULVERT END

STATION	STATION	633.5200 EACH
261+10	USH 141 LT & RT	2
270+55	USH 141 LT & RT	2
281+58	USH 141 LT & RT	2
295+20	USH 141 LT & RT	2
308+75	USH 141 LT & RT	2
326+66	USH 141 LT & RT	2
334+45	USH 141 LT & RT	2
351+28	USH 141 LT & RT	2
373+85	USH 141 LT & RT	2
388+25	USH 141 LT & RT	2
394+15	USH 141 LT & RT	2
442+25	USH 141 LT & RT	2
10+66	MCMAHON ROAD LT & RT	2
460+00	USH 141 LT & RT	2
464+30	USH 141 LT & RT	2
481+00	USH 141 LT & RT	2
494+90	USH 141 LT & RT	2
	TOTAL	20

FIELD OFFICE TYPE B (PROJECT) 01. 1491-10-71

STATION	TO	STATION	LOCATION	642.5001 EACH
232+29	-	515+04	PROJECT	1
			TOTAL	1

TRAFFIC CONTROL (PROJECT) 01. 1491-08-71

STATION	TO	STATION	LOCATION	643.0100 EACH
232+29	-	515+04	PROJECT	1
				1

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ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0614 POSTS WOOD 4X6X14 EACH	634.0616 POSTS WOOD 4X6X16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1	WEST CTH X	J13-2	48" X 45"	15.00			1	4	1	CTH X, USH 141, SEE PLAN SHEET
2	"	R1-1	30" X 30"	5.18		1		1	1	
3	EAST CTH X, INSIDE SPLITTER ISLAND	W5-52R						1		
4	"	R1-1	30" X 30"	5.18		1		1	1	
5	"	R4-7	24" X 30"	5.00		1		1	1	
6	EAST CTH X	R1-1	30" X 30"	5.18		1		1	1	
7	USH 141, NORTH OF CTH X	J13-1	24" X 45"	7.50		1		2	1	CTH X, SEE PLAN SHEET
8	"	J4-1	24" X 36"	6.00		1		2	1	NORTH USH 141
9	"	D7-53R	72" X 60"	30.00			2	1	2	SEE SIGN DETAIL SHEET
10	"	R4-51	36" X 48"	12.00			1			SEE PLAN SHEET
11	"	W11-8	30" X 30"		6.25	1		1	1	
12	"	R2-1	24" X 30"	5.00		1		1	1	55 MPH
13	"	R2-1	24" X 30"	5.00		1		1	1	50 MPH
14	"	I55-56	30" X 36"	7.50		1		1	1	SEE PLAN SHEET
15	"	J1-1	24" X 39"	6.50		1		2	1	JCT CTH X
16	"	I3-1	42" X 24"	7.00		1		1	1	SEE SIGN DETAIL SHEET
17	"	I3-1	42" X 24"	7.00		1		1	1	SEE SIGN DETAIL SHEET
18	VACANT									
19	USH 141, NORTH OF CTH X	W3-5	36" X 36"		9.00	1		1	1	50 MPH
20	"	D2-3	84" X 36"	21.00			2	1	2	SEE SIGN DETAIL SHEET
21	"	I2-3	66" X 24"	11.00			1	1	2	
22	"	D1-1	72" X 15"	7.50		2		1	2	SEE SIGN DETAIL SHEET
23	TRELLIS LN	R1-1	30" X 30"	5.18		1		1	1	
24	VACANT									
25	USH 141, NORTH OF TRELLIS LN	R4-3	24" X 30"	5.00		1				
26	"	D1-1	72" X 15"	7.50		2		1	2	SEE SIGN DETAIL SHEET
27	"	W14-3	48" X 36"		6.00	1		1	1	
28	"	W14-3						1	1	
29	"	D7-52	72" X 66"	33.00			2	1	2	SEE SIGN DETAIL SHEET
30	"	W1-2R	30" X 30"		6.25	1		1	1	
31	"	S3-1	36" X 36"		9.00	1		1	1	
32	"	W1-6	48" X 24"		8.00		1	1	1	
33	BIERNASZ RD	R1-1	30" X 30"	5.18		1		1	1	
33A	"	R1-1	30" X 30"	5.18		1		1	1	
33B	"	W10-1	36" X 36"		7.07	1		1		
34	USH 141, NORTH OF BIERNASZ RD	W1-6	48" X 24"		8.00		1	1	1	
	PAGE SUBTOTALS			229.58	59.57	26	11	38	36	

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ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0614 POSTS WOOD 4X6X14 EACH	634.0616 POSTS WOOD 4X6X16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
35	USH 141, NORTH OF BIERNASZ RD	W1-2L	30" X 30"		6.25	1		1	1	
36	"	W14-3	48" X 36"		6.00		1	1	1	
37	"	W9-1R	36" X 36"		9.00	1				
38	"	W4-2R	36" X 36"		9.00	1				
39	"	W4-2R	36" X 36"		9.00	1				
40	"	W14-3	48" X 36"		6.00		1	1	1	
41	"	W10-2	36" X 36"		9.00	1		1	1	
42	"	I55-56	30" X 36"	7.50		1		1	1	SEE PLAN SHEET
43	"	R3-72	30" X 36"	7.50		1				
44	"	D1-61	96" X 24"	16.00		2		1	2	SEE SIGN DETAIL SHEET
44A	MOONSHINE HILL RD	W10-1	36" X 36"		7.07	1				SEE SDD 15C 9-9A FOR DISTANCE OF PLACEMENT FROM R&R TRACKS
45	USH 141, NORTH OF BIERNASZ RD	J4-1	24" X 36"	6.00		1		2	1	SOUTH USH 141
46	MOONSHINE HILL RD	R1-1	30" X 30"	5.18		1		1	1	
47	"	R1-1	30" X 30"	5.18		1		1	1	
48	"	R1-1	30" X 30"	5.18		1		1	1	
49	"	R1-1	30" X 30"	5.18		1		1	1	
50	USH 141, NORTH OF MOONSHINE HILL RD	J4-1	24" X 36"	6.00		1		2	1	NORTH USH 141
51	"	D1-61	96" X 24"	16.00		2		1	2	SEE SIGN DETAIL SHEET
52	VACANT									
53	"	W10-2	36" X 36"		9.00	1		1	1	
54	"	W14-3	48" X 36"		6.00		1	1	1	
55	"	R2-1	24" X 30"	5.00			1			55 MPH
56	"	W14-3	48" X 36"		6.00			1	1	MOUNT ON BACKSIDE OF SIGN #55
57	"	W10-3	36" X 36"		9.00	1		1	1	
58	THOMPSON RD	R1-1	30" X 30"	5.18		1		1	1	
58A	"	R1-1	30" X 30"	5.18		1		1	1	
59	USH 141, NORTH OF THOMPSON RD	W14-3	48" X 36"		6.00		1	1	1	
60	"	W10-3	36" X 36"		9.00	1		1	1	
61	"	I55-56	30" X 36"	7.50		1		1	1	SEE PLAN SHEET
62	"	R3-72	30" X 36"	7.50		1				
63	"	I3-1	66" X 24"	11.00			1	1	1	SEE SIGN DETAIL SHEET
64	"	I3-1	66" X 24"	11.00			1	1	1	SEE SIGN DETAIL SHEET
65	"	W4-2R	36" X 36"		9.00	1				
66	"	W4-2R	36" X 36"		9.00	1				
67	"	W9-1R	36" X 36"		9.00	1				
68	"	W14-3	48" X 36"		6.00		1	1	1	
	PAGE SUBTOTALS			132.08	139.32	28	8	27	27	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0614 POSTS WOOD 4X6X14 EACH	634.0616 POSTS WOOD 4X6X16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
69	USH 141, NORTH OF THOMPSON RD	D1-1	84" X 15"	8.75		2		1	2	SEE SIGN DETAIL SHEET
70	MC MAHON RD	R1-1	30" X 30"	5.18		1		1	1	
71	USH 141, NORTH OF MC MAHON RD	W14-3	48" X 36"		6.00		1	1	1	
72	"	D1-2	78" X 30"	16.25			2	1	2	SEE SIGN DETAIL SHEET
72A	"	W10-2	36" X 36"		9.00	1				
73	"	D1-1	84" X 15"	8.75		2				
73A	NEJEDLO RD	W10-1	36" X 36"		7.07	1		1	1	SEE SDD 15C 9-9A FOR DISTANCE OF PLACEMENT FROM R&R TRACKS
74	"	R1-1	30" X 30"	5.18		1		1	1	
74A	"	R1-1	30" X 30"	5.18		1		1	1	
75	MARTIN RD	R1-1	30" X 30"	5.18		1		1	1	
76	"	R1-1	30" X 30"	5.18		1		1	1	
77	USH 141, NORTH OF NEJEDLO / MARTIN RD	D1-2	78" X 30"	16.25			2	1	2	SEE SIGN DETAIL SHEET
78	"	W10-2	36" X 36"		9.00	1		1	1	
79	"	W11-6	30" X 30"		6.25	1		1	1	
80	"	W14-3						1	1	
81	"	W14-3	48" X 36"		6.00		1	1	1	
82	"	W11-3						2	1	ALSO REMOVE W57-51
83	"	I55-56	30" X 36"	7.50		1		1	1	SEE PLAN SHEET
84	"	J1-1	36" X 57"	14.25			1	2	1	JCT STH 180
85	"	D2-3	84" X 36"	21.00				1	2	SEE SIGN DETAIL SHEET
86	"	W3-5	36" X 36"		9.00	1		1	1	45 MPH
87	"	J3-2	48" X 57"	19.00			2	6	2	NORTH USH 141, SOUTH STH 180, SEE PLAN SHEET
88	"	R2-1	24" X 30"	5.00		1		1	1	55 MPH
89	"	W10-2	36" X 36"		9.00	1		1	1	
90	"	W14-3	48" X 36"		6.00		1	1	1	
91	"	D1-3	72" X 36"	18.00				1	2	SEE SIGN DETAIL SHEET
92	"	R4-3	24" X 30"	5.00		1				
93	"	R2-1	36" X 48"	12.00			1	1	1	45 MPH
94	"	J4-1	24" X 36"	6.00		1		2	1	SOUTH USH 141
95	"	J3-1	24" X 57"	9.50			1	3	1	SOUTH STH 180
96	STH 180	R1-1	36" X 36"	7.46			1	1	1	
97	"	R1-1	48" X 48"	13.25			1	1	1	
98	1st STREET	R1-1	30" X 30"	5.18		1		1	1	
99	"	W10-1	36" X 36"		7.07	1		1	1	
100	USH 141, N. OF STH 180	J3-1	24" X 57"	9.50			1	3	1	SOUTH STH 180, SEE PLAN SHEET
101	STH 180	J3-2	48" X 57"	19.00			1	6	2	SOUTH USH 141, NORTH USH 141, SEE PLAN SHEET, MOVED ONTO STH 180 FROM USH 141
102	USH 141, N. OF STH 180	R2-1	24" X 30"	5.00		1		1	1	
	PAGE SUBTOTALS			252.54	74.39	22	16	51	41	
	PROJECT TOTALS			**614.20**	**273.28**	**76**	**35**	**116**	**104**	

3

TRAFFIC CONTROL SIGNS

LOCATION	SIGNS	PROJECT DURATION	643.0900 DAY	REMARKS
SOUTH PROJECT END	5	131	655	
NORTH PROJECT END	5	131	655	
2 MILES INTO WORK NB	1	131	131	ROAD WORK NEXT X MILES
4 MILES INTO WORK NB	1	131	131	ROAD WORK NEXT X MILES
2 MILES INTO WORK SB	1	131	131	ROAD WORK NEXT X MILES
4 MILES INTO WORK SB	1	131	131	ROAD WORK NEXT X MILES
TRELLIS LANE	2	131	262	ADVANCED WARNING SIGNS
BIERNASZ ROAD	2	131	262	ADVANCED WARNING SIGNS
MOONSHINE HILL ROAD	2	131	262	ADVANCED WARNING SIGNS
MOONSHINE HILL ROAD	2	131	262	ADVANCED WARNING SIGNS
THOMPSON ROAD	2	131	262	ADVANCED WARNING SIGNS
MC MAHON ROAD	2	131	262	ADVANCED WARNING SIGNS
NEJEDLO ROAD	2	131	262	ADVANCED WARNING SIGNS
MARTIN ROAD	2	131	262	ADVANCED WARNING SIGNS
SOUTH END OF SHIFT	2	131	262	TRAFFIC SHIFT
NORTH END OF SHIFT	2	131	262	TRAFFIC SHIFT
SIDE ROADS	8	21	168	SIGN R11-2L, SEE TRAFFIC CONTROL DETAIL
TOTAL			4625	

LOCATING NO-PASSING ZONES

STATION	TO	STATION	LOCATION	648.0100 MI
232+29	-	515+04	USH 141	5.34
			TOTAL	5.34

PAVEMENT MARKING SAME DAY EPOXY 4-INCH

STATION	TO	STATION	LOCATION	646.0406 YELLOW LF
232+29	-	520+85	USH 141	43300
			TOTAL	43300

PAVEMENT MARKING STOP LINE EPOXY 18-INCH

STATION	LOCATION	647.0566 LF
20+26	MOONSHINE HILL RD	39
9+72	MOONSHINE HILL RD	39
9+51	NEJEDLO RD	37
10+34	MARTIN RD	37
	TOTAL	155

PAVEMENT MARKING EPOXY 4-INCH

STATION	-	STATION	LOCATION	646.0106 YELLOW LF	REMARKS
20+26	-	21+57	MOONSHINE HILL RD	262	DOUBLE YELLOW
8+48	-	9+72	MOONSHINE HILL RD	248	DOUBLE YELLOW
8+38	-	9+51	NEJEDLO RD	226	DOUBLE YELLOW
10+34	-	11+51	MARTIN RD	234	DOUBLE YELLOW
			TOTAL	970	

PAVEMENT MARKING EPOXY 8-INCH

STATION	TO	STATION	LOCATION	646.0126 LF
342+17	-	344+17	USH 141 LT	200
464+19	-	466+19	USH 141 LT	200
			TOTAL	400

SPECIAL 01. 4-INCH EPOXY YELLOW

STATION	TO	STATION	LOCATION	SPV.0090.01 LF	REMARKS
234+28	-	514+05	USH 141	39300	RUMBLE STRIP AREAS
			TOTAL	39300	

SPECIAL 02. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY PAVEMENT MARKING 4-INCH

STATION	-	STATION	LOCATION	SPV.0090.02 LF	REMARKS
232+29	-	520+85	USH 141 2 LANE	57712	EDGELINES
258+38	-	336+85	USH 141 NB PASS	2000	12.5' SKIPS 37.5' GAP
418+32	-	515+00	USH 141 SB PASS	2450	12.5' SKIPS 37.5' GAP
			TOTAL	62160	

SPECIAL 03. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY PAVEMENT MARKING 8-INCH

STATION	TO	STATION	LOCATION	SPV.0090.03 LF
342+17	-	344+17	USH 141 LT	200
464+19	-	466+19	USH 141 LT	200
			TOTAL	400

TEMPORARY PAVEMENT MARKING 4-INCH

STATION	-	STATION	LOCATION	649.0100 LF	REMARKS
232+29	-	515+04	USH 141	42413	MILLED SURFACE
232+29	-	515+04	USH 141	42413	BINDER ASPHALT LAYER
			TOTAL	84825	

TRAFFIC CONTROL WARNING LIGHTS TYPE A

LOCATION	LIGHTS	PROJECT DURATION	643.0705 DAY	REMARKS
SIDE ROADS	32	21	672	SEE TRAFFIC CONTROL DETAIL
TOTAL			672	

CONSTRUCTION STAKING SUBGRADE

STATION	TO	STATION	LOCATION	650.4500 LF
251+00	-	255+00	USH 141	400
10+22	-	11+62	TRELLIS LANE	140
259+50	-	336+50	USH 141	7700
1+80	-	2+82	BIERNASZ RD	102
340+00	-	345+75	USH 141	575
8+48	-	9+77	MOONSHINE HILL RD	129
20+22	-	21+57	MOONSHINE HILL RD	135
370+40	-	374+60	USH 141	420
7+55	-	8+68	THOMPSON RD	113
393+70	-	394+60	USH 141	90
419+50	-	513+50	USH 141	9400
10+29	-	12+04	MC MAHON RD	175
7+66	-	9+62	NEJEDLO RD	196
10+28	-	11+51	MARTIN RD	123
			TOTAL	19700

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH

STATION	TO	STATION	LOCATION	649.0400 LF	REMARKS
247+70	-	338+00	USH 141 LT	18060	DOUBLE YELLOW, SHIFT LEFT
249+90	-	335+80	USH 141 LT	8590	WHITE EDGELINE, SHIFT LEFT
247+70	-	338+00	USH 141	13545	BLACK OUT EXIST CENTERLINE
301+10	-	310+90	USH 141 RT	1960	DOUBLE YELLOW, SHIFT RIGHT
303+30	-	308+70	USH 141 RT	540	WHITE EDGELINE, SHIFT RIGHT
368+10	-	377+90	USH 141 RT	1960	DOUBLE YELLOW, SHIFT RIGHT
370+30	-	375+70	USH 141 RT	540	WHITE EDGELINE, SHIFT RIGHT
368+10	-	377+90	USH 141	1470	BLACK OUT EXIST CENTERLINE
416+20	-	516+80	USH 141 LT	20120	DOUBLE YELLOW, SHIFT LEFT
418+40	-	514+60	USH 141 LT	9620	WHITE EDGELINE, SHIFT LEFT
416+20	-	516+80	USH 141 RT	20120	DOUBLE YELLOW, SHIFT RIGHT
418+40	-	514+60	USH 141 RT	9620	WHITE EDGELINE, SHIFT RIGHT
418+40	-	514+60	USH 141	14400	BLACK OUT EXIST CENTERLINE
			TOTAL	120550	

TRAFFIC CONTROL BARRICADES TYPE III

LOCATION	BARRICADES	PROJECT DURATION	643.0420 DAY	REMARKS
SIDE ROADS	16	21	336	SEE TRAFFIC CONTROL DETAIL
TOTAL			336	

CONSTRUCTION STAKING BASE

STATION	TO	STATION	LOCATION	650.5000 LF
251+00	-	255+00	USH 141	400
10+22	-	11+62	TRELLIS LANE	140
259+50	-	336+50	USH 141	7700
1+80	-	2+82	BIERNASZ RD	102
340+00	-	345+75	USH 141	575
8+48	-	9+77	MOONSHINE HILL RD	129
20+22	-	21+57	MOONSHINE HILL RD	135
370+40	-	374+60	USH 141	420
7+55	-	8+68	THOMPSON RD	113
393+70	-	394+60	USH 141	90
419+50	-	513+50	USH 141	9400
10+29	-	12+04	MC MAHON RD	175
7+66	-	9+62	NEJEDLO RD	196
10+28	-	11+51	MARTIN RD	123
			TOTAL	19700

3

CONSTRUCTION STAKING CURB AND GUTTER

650.5500

STATION	TO	STATION	LOCATION	LF	REMARKS
252+64	-	253+23	USH 141 RT	91	TRELLIS LANE
253+54	-	253+94	USH 141 RT	60	TRELLIS LANE
340+82	-	341+41	USH 141 LT	83	MOONSHINE HILL RD
341+72	-	342+17	USH 141 LT	73	MOONSHINE HILL RD
341+89	-	342+36	USH 141 RT	70	MOONSHINE HILL RD
342+67	-	343+27	USH 141 RT	86	MOONSHINE HILL RD
454+28	-	454+68	USH 141 RT	92	MC MAHON RD
455+23	-	455+54	USH 141 RT	48	MC MAHON RD
462+90	-	463+30	USH 141 LT	73	NEJEDLO RD
463+61	-	464+19	USH 141 LT	79	NEJEDLO RD
463+42	-	463+95	USH 141 RT	69	MARTIN RD
464+30	-	464+72	USH 141 RT	73	MARTIN RD
			TOTAL	900	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1491-08-71

650.9910

STATION	TO	STATION	LOCATION	LS
379+40	-	381+80	USH 141 RT	1
			TOTAL	1

CONSTRUCTION STAKING RESURFACE REFERENCE

650.8000

STATION	TO	STATION	LOCATION	LF
232+28	-	515+04	USH 141	28276
			TOTAL	28276

CONSTRUCTION STAKING PIPE CULVERTS

650.6000

TO	STATION	EACH
261+10	USH 141	1
270+55	USH 141	1
281+58	USH 141	1
295+20	USH 141	1
308+75	USH 141 RT	1
326+66	USH 141	1
334+45	USH 141 RT	1
394+15	USH 141	1
442+25	USH 141	1
10+66	MC MAHON RD RT	1
460+00	USH 141	1
464+30	USH 141	1
481+00	USH 141	1
494+90	USH 141	1
	TOTAL	14

CONSTRUCTION STAKING SLOPE STAKES

650.9920

STATION	TO	STATION	LOCATION	LF
251+00	-	255+00	USH 141	400
10+40	-	11+62	TRELLIS LANE	122
258+50	-	336+50	USH 141	7800
1+80	-	2+60	BIERNASZ ROAD	80
339+50	-	346+50	USH 141	700
8+48	-	9+50	MOONSHINE HILL RD	102
20+50	-	21+57	MOONSHINE HILL RD	107
371+00	-	375+00	USH 141	400
7+55	-	8+50	THOMPSON RD	95
419+50	-	513+50	USH 141	9400
10+50	-	12+04	MC MAHON RD	154
7+66	-	9+41	NEJEDLO RD	175
10+55	-	11+51	MARTIN RD	96
			TOTAL	19631

SAWING ASPHALT

690.0150

STATION	TO	STATION	LOCATION	LF	REMARKS
23229	-	USH 141 RT	USH 141 PROJ LIMITS	10	PROJECT LIMITS
233+00	-		USH 141 RT	32	DRIVEWAY
240+69.6	-		USH 141	44	STRUCT B-38-35
241+04.9	-		USH 141	44	STRUCT B-38-35
247+00	-	252+00	USH 141 LT	506	3' ASPHALT SHOULDER REMOVAL
251+00	-		USH 141 RT	3	
255+00	-		USH 141 RT	3	
11+62	-		TRELLIS LN	19	
255+35	-		USH 141 LT	23	DRIVEWAY
259+50	-		USH 141 RT	3	
336+50	-		USH 141 RT	3	
261+00	-		USH 141 LT	3	
261+20	-		USH 141 LT	3	
270+45	-		USH 141 LT	3	
270+65	-		USH 141 LT	3	
281+28	-		USH 141 LT	3	
281+88	-		USH 141 LT	3	
290+50	-		USH 141 LT	25	DRIVEWAY
295+10			USH 141 LT	3	
295+30			USH 141 LT	3	
304+40	-		USH 141 LT	3	
307+60			USH 141 LT	3	
326+21			USH 141 LT	3	
327+11			USH 141 LT	3	
8+48	-		MOONSHINE HILL RD	19	
340+00	-	345+75	USH 141 LT	581	
340+40	-	344+25	USH 141 RT	391	
21+57	-		MOONSHINE HILL RD	21	
371+40	-		USH 141 LT	3	
374+60	-		USH 141 LT	3	
393+70			USH 141 LT & RT	6	
394+60			USH 141 LT & RT	6	
412+95.3	-		USH 141	44	STRUCT B-38-36
413+30.7	-		USH 141	44	STRUCT B-38-36
419+50	-		USH 141 LT	3	
513+50	-		USH 141 LT	3	
419+50			USH 141 RT	3	
513+50			USH 141 RT	3	
12+04	-		MCMAHON RD	21	
7+66	-		NEJEDLO RD	20	
8+65			NEJEDLO RD	24	RAILROAD TRACK EDGE
8+78	-		NEJEDLO RD	24	RAILROAD TRACK EDGE
11+51	-		MARTIN RD	18	
515+04	-		USH 141 PROJ LIMITS	10	
			TOTAL	2000	

SAWING CONCRETE

STATION	TO	STATION	LOCATION	690.0250 LF	REMARKS
232+29			USH 141 PROJ LIMITS	24	PROJECT LIMITS
251+00	-		USH 141 RT	404	
259+50	-	336+50	USH 141 RT	7704	NORTHBOUND PASSING LANE
261+00			USH 141	22	
261+20			USH 141	22	
270+45			USH 141	22	
270+65			USH 141	22	
281+28			USH 141	22	
281+88			USH 141	22	
295+10			USH 141	22	
295+30			USH 141	22	
304+35	-	307+60	USH 141 LT	329	
326+21			USH 141	22	
327+11			USH 141	22	
371+40	-	374+60	USH 141 LT	324	
393+70			USH 141	24	
394+60			USH 141	24	
419+50	-	513+50	USH 141 LT	9404	SOUTHBOUND PASSING LANE
419+50	-	513+50	USH 141 RT	9404	SOUTHBOUND PASSING LANE
441+40			USH 141	20	
443+10			USH 141	20	
459+85			USH 141	20	
460+15			USH 141	20	
464+15			USH 141	20	
464+45			USH 141	20	
480+85			USH 141	20	
481+15			USH 141	20	
494+75			USH 141	20	
495+05			USH 141	20	
515+04	-		USH 141 PROJ LIMITS	24	PROJECT LIMITS
			TOTAL	28100	

SIGNS PORTABLE CHANGEABLE MESSAGE

LOCATION	SIGNS	PROJECT DURATION	643.1050.S DAY
SOUTH PROJECT END	1	7	7
NORTH PROJECT END	1	7	7
TOTAL			14

SPECIAL 01. HOT MIX ASPHALT TEST STRIP

STATION	TO	STATION	LOCATION	SPV.0105.01 LS
232+29	-	340+00	PROJECT	-
340+00	-	515+04	PROJECT	-
			TOTAL	1

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
1491-08-21		
FEDERAL PROJECT NUMBER	4.1	11

PLAT OF RIGHT-OF-WAY REQUIRED FOR

MIDDLE INLET - WAUSAUKEE

CTH X - STH 180

US 141 MARINETTE CO.

CONSTRUCTION PROJECT NUMBER
1491-08-71

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	JACKET	J.
HIGHWAY EASEMENT	H.E.	IMAGE	I.
LAND CONTRACT	LC	**CURVE DATA**	
MONUMENT	MON.	LONG CHORD	LCH
PAGE	P.	LONG CHORD BEARING	LCB
PERMANENT LIMITED EASEMENT	PLE	RADIUS	R
PROPERTY LINE	P.L.	DEGREE OF CURVE	D
RECORDED AS	(100')	CENTRAL ANGLE OR DELTA	DELTA
		LENGTH OF CURVE	L
		TANGENT	TAN

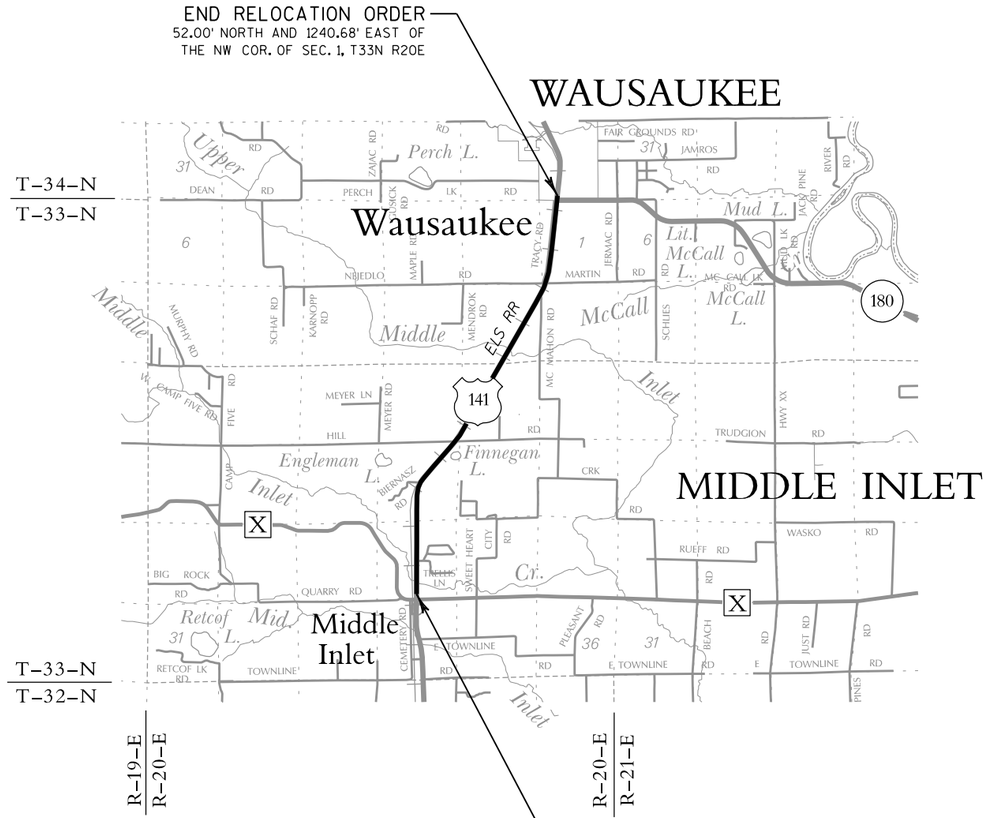
CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LS (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	○ =(SET)	PROPERTY LINE	
R/W STANDARD	△ =(SET)	LOT & TIE LINES	
SIGN	ISIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS RESTRICTED (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RWB20	QUARTER LINE	
PARCEL NUMBER	102	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING (BLDG.)		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

END RELOCATION ORDER
52.00' NORTH AND 1240.68' EAST OF
THE NW COR. OF SEC. 1, T33N R20E



BEGIN RELOCATION ORDER
482.00' NORTH OF AND 5.95' WEST OF
THE S1/4 COR. OF SEC. 27, T33N R20E

GN

MIDDLE INLET

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 5.45 MI.

NOTES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MARINETTE COUNTY, NAD 83 (1991) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY. SEE ACCESS CONTROL PROJECT 1490-03-29.

THE ALIGNMENT ON THIS PLAT DIFFERS FROM THE DESIGN ALIGNMENT. THIS ALIGNMENT IS CALULATED BASED ON EXISTING RAILROAD PLATS, RW PLATS, SURVEYS & EXISTING FIELD MONUMENTATION. THE DESIGN ALIGNMENT IS BASED ON EXISTING IMPROVEMENTS AND DOES NOT CORRELATE TO THE EXISTING RIGHT OF WAY.

emcs INC

PREPARED BY EMCS, INC.

WISCONSIN
KEVIN C BOYER S-2675 HEWITT WI
10/17/13
LAND SURVEYOR

Kevin C Boyer
KEVIN C. BOYER, RLS - 2675
DATE: 10/17/13

REVISION DATE	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
	APPROVED FOR THE DEPARTMENT
	DATE: 10/25/13 Curt VanEss (Signature)

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSED ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
1	4.4	ERNEST & DONNA M. PINTARELLI	TLE	---	---	---	0.03
2	4.4	THOMAS JO PORZUC	TLE	---	---	---	0.21
3	4.5	JOHN & DEBORAH GUARISCO	TLE	---	---	---	0.02
4	4.5	VIRGINIA R. PRUSINSKY	TLE	---	---	---	0.19
6	4.6	CHARLES L. & ROSE M. BUECHLER, TRUSTEES OR SUCCESSOR TRUSTEE(S) OF THE CHARLES L. BUECHLER AND ROSE M. BUECHLER REVOCABLE TRUST OF 2003 U/A/D AUGUST 5, 2003	TLE	---	---	---	0.14
8	4.7	WALTER & JOANNE BIERNASZ	TLE	---	---	---	0.04
9	4.7	NORA L. WOLFF	TLE	---	---	---	0.02
12	4.11	RICHARD J. LEDVINA & JOYCE A. LEDVINA AS TRUSTEE OF THE RICHARD F. LEDVINA AND JOYCE A. LEDVINA REVOCABLE TRUST DATED AUG, 29, 2002, OR HIS/HER SUCCESSORS IN TRUST	FEE/TLE	0.13	---	0.13	0.05
13	4.11	KENNETH C. & JOANNE M. SZWEDA	TLE	---	---	---	0.06
17	4.8	BRIAN C. & MARIA R. YOUNG	FEE	0.05	---	0.05	---
18	4.8	DENNIS J. VRANY	FEE	0.07	---	0.07	---
19	4.8	JOSEPH P. & ANGELIQUE A. TARANTOLA	FEE	0.01	---	0.01	---
40	4.5, 4.6, 4.11	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---
41	4.6	WISCONSIN PUBLIC SERVICE (GAS)	RELEASE OF RIGHTS	---	---	---	---
42	4.4, 4.5, 4.6, 4.7, 4.10, 4.11	CENTURYLINK	RELEASE OF RIGHTS	---	---	---	---
50	4.9, 4.10, 4.11	ESCANABA & LAKE SUPERIOR RAILROAD COMPANY	TLE	---	---	---	0.07

TOWN

ESCANABA & LAKE SUPERIOR RR

US 141

27

CTH X

TRELLIS LN

22

BIERNASZ RD

GN

4

OF

T33N R20E

ESCANABA & LAKE SUPERIOR RR

US 141

MOONSHINE HILL RD

MIDDLE INLET

4

TOWN

TOWN

11

THOMPSON RD

NEJEDLO RD

GN

ESCANABA & LAKE SUPERIOR RR

US 141

OF

OF

McMAHON RD

MARTIN RD

T33N R20E

14

MIDDLE INLET

WAUSAUKEE

REVISION DATE	DATE 10/17/2013	NOT TO SCALE	HWY: US 141	STATE R/W PROJECT NUMBER 1491-08-21	PLAT SHEET 4.3	
			COUNTY: MARINETTE	CONSTRUCTION PROJECT NUMBER 1491-08-71	PS&E SHEET	E

FILE NAME : P:\47xx\4778.4750W05.SP.USH141.MARN\CADDS\Plan\040103_rp.dgn PLOT DATE : 12/4/2013 PLOT BY : tgr PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 70

ESCANABA & LAKE SUPERIOR RR

P.L.

FND. 4" IRON PIPE
Y=225100.897
X=708221.785

T 33 N R 20 E — 21 22 28 27

GN

TOWN

SE/NW SEC. 27

SOUTH LINE OF THE NE1/4 OF THE NW1/4

NE/NW SEC. 27

NORTH LINE OF THE NE1/4 OF THE NW1/4

S 89°08'50" E 2584.73' COR. TO RW

4

4

85'

N01°53'28"E 351.76'

S88°06'32"E 10.00'

N01°53'28"E 1078.57'

75'

SLOPE INTERCEPT

OF US 141

STA 1265+00

85.00'

75.01'

1266+00 1268+00 1270+00 1272+00 1274+00 1276+00 1278+00 STA 1279+31.69

N 1°53'28" E

N88°06'32"W 27.98'

57.02'

S88°06'32"E 20.00'

30.32'

34.73'

FND. 1.5" IRON PIPE
Y=225060.856
X=710911.558

S01°53'28"W 351.76'

S01°53'28"W 1082.25'

10' 85' 10' 65'

STA 1265+50.00 85.00' & 95.00'

STA 1267+00.00 85.00' & 95.00'

STA 1268+51.76 65.00' & 75.00'

STA 1277+70.00 65.00' & 75.00'

42 CENTURYLINK RELEASE OF RIGHTS PARCEL 2 NO EASEMENT OF RECORD

THOMAS JO PORZUC

2

ERNEST & DONNA M. PINTARELLI

1

BLDG

BLDG

BLDG

SW/NE SEC. 27

SOUTH LINE OF THE NW1/4 OF THE NE1/4

NW/NE SEC. 27

MIDDLE INLET

NORTH LINE OF THE NW1/4 OF THE NE1/4

S 88°58'35" W 2596.37' COR. TO RW

P.L.

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 141	RW PLAT 3572	VARIES	1937

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 1490-03-29

FND. 6" CONC. MON.
Y=225107.862
X=713542.231

T 33 N R 20 E — 22 21 26 23

REVISION DATE	DATE 10/17/2013	SCALE, FEET 0 50 100	HWY: US 141	STATE R/W PROJECT NUMBER 1491-08-21	PLAT SHEET 4.4	
	GRID FACTOR 0.999986		COUNTY: MARINETTE	CONSTRUCTION PROJECT NUMBER 1491-08-71	PS&E SHEET 63	E

FILE NAME : P:\47xx\4778.4750W05.SP.USH141.MARN\CADDS\Plan\040104_rp.dgn PLOT DATE : 10/23/2013 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:100

4

ESCANABA & LAKE SUPERIOR RR

P.L.

.75" IR

.75" IR

GN

T 33 N R 20 E 21 22 28 27

FND. 4"
IRON PIPE
Y=225100.897
X=708221.785

S 89°08'50" E 2569.73' COR. TO RW

P.L. SOUTH LINE OF THE SE1/4 OF THE SW1/4

TOWN

SE/SW SEC. 22

P.L.

BLDG

BLDG

BLDG

BLDG

NORTH LINE OF THE SE1/4 OF THE SW1/4 P.L.

90'

N01°53'28"E

1332.30'

.75" IR

.75" IR

IP

SLOPE INTERCEPT

90.01'

STA 1279+31.69

1280+00

1282+00

1284+00

US 141

1286+00

1288+00

1290+00

1292+00

90.03'

N 1°53'28" E

S89°41'11"E

55.97'

T 33 N R 20 E 22 27

30.32'

FND. 1.5"
IRON PIPE
Y=225060.856
X=710911.558

WEST LINE OF THE SW1/4 OF THE SE1/4

54.75'

.75" IR

TOP MH

FO

G

.75" IR

S01°53'28"W

STA 1280+40.00
85.00' & 95.00'

CENTURYLINK
RELEASE OF RIGHTS
PARCEL 4
NO EASEMENT OF RECORD

42

10'

WISCONSIN PUBLIC SERVICE
RELEASE OF RIGHTS
PARCEL 4
NO EASEMENT OF RECORD

40

STA 1289+20.00
85.00' & 95.00'

85'

1332.63'

STA 1291+50.00
85.00' & 88.00'

3'

.75" IR

29.08'

N89°22'40"E

STA 1292+67.65
85.00'

STA 1292+67.78
88.00'

N 88°58'35" W 2576.34' COR. TO RW

P.L. SOUTH LINE OF THE SW1/4 OF THE SE1/4

JOHN & DEBORAH GUARISCO

3

P.L.

VIRGINIA R. PRUSINSKY

4

SW/SE SEC. 22

NORTH LINE OF THE SW1/4 OF THE SE1/4 P.L.

MIDDLE INLET

T 33 N R 20 E 22 23 26 27

FND. 6"
CONC. MON.
Y=225107.862
X=713542.231

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 1490-03-29

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 141	RW PLAT 3572	175'	1937

REVISION DATE	DATE 10/17/2013	SCALE. FEET 0 50 100	HWY: US 141	STATE R/W PROJECT NUMBER 1491-08-21	PLAT SHEET 4.5
	GRID FACTOR 0.999986		COUNTY: MARINETTE	CONSTRUCTION PROJECT NUMBER 1491-08-71	PS&E SHEET 64 E

FILE NAME : P:\47xx\4778.4750W05.SP.USH141.MARN\CADDS\Plan\040105_rp.dgn PLOT DATE : 10/23/2013 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:100

TOWN

NE/SW SEC. 22

10' UTILITY EASEMENT
WISCONSIN RSA #4
(COMMUNICATION)
J. 6392 I. 40
DOC. 565441

ESCANABA & LAKE SUPERIOR RR

P.L.

FND. 4" BRASS
CAP MON.
Y=227715.506
X=708338.811

T 33 N
R 20 E
21 22

NORTH LINE OF THE NE1/4 OF THE SW1/4

BIERNASZ RD

SE/NW SEC. 22

WEST LINE OF THE SW1/4 OF THE NE1/4

FND. COTTON
GIN SPIKE
Y=230388.180
X=711189.952

T 33 N
R 20 E
15 22

GN

SW/NE SEC. 22

L = 708.06
LCH = 704.36'
R = 2000.10'
DELTA = 20°17'00" LT

PI STA1303+73.98

30.63'
N74°29'29"W

L = 229.71'
LCH = 229.65'
R = 2814.93'
DELTA = 04°40'32" LT

N42°28'41"E

SLOPE INTERCEPT

STA 1306+49.23

124.67'

70.85'

CURVE

WISCONSIN PUBLIC SERVICE
RELEASE OF RIGHTS
PARCEL 6
NO EASEMENT OF RECORD

41

L = 223.53'
LCH = 223.40'
R = 1850.10'
DELTA = 06°55'21" LT

L = 322.75'
LCH = 322.34'
R = 1850.10'
DELTA = 09°59'43" LT

575.78'

PT STA1310+20.73

N 42°28'41" E

MATCH LINE STA 1313+00

S47°31'19"E

US 141

WEST LINE OF THE NW1/4 OF THE SE1/4

STA 1302+00.18

N89°46'43"E
27.81'

L = 591.83'
LCH = 589.25'
R = 1825.10'
DELTA = 18°34'46" LT

BLDG

BLDG

BLDG

STA 1304+90.00
60.00' & 75.00'

STA 1306+00.00
75.00'

STA 1307+00.00
70.00'

STA 1308+00.00
70.00'

STA 1309+50.00
65.00'

STA 1311+00.00
60.00' & 65.00'

CENTURYLINK
RELEASE OF
RIGHTS
PARCEL 6
NO EASEMENT
OF RECORD

S42°28'41"W
279.26'

FND. 1.5"
IRON PIPE
Y=225060.856
X=710911.558

T 33 N
R 20 E
22 27

N 02°59'29" E 1912.25'
COR. TO MATCH LINE

CENTURYLINK
RELEASE OF RIGHTS
16' EASEMENT
PARCEL 6
J. 2410 I. 43
DOC. 467184

42

WISCONSIN PUBLIC SERVICE
RELEASE OF RIGHTS
PARCEL 6
NO EASEMENT OF RECORD

40

CHARLES L. & ROSE M. BUECHLER, TRUSTEES
OR SUCCESSOR TRUSTEE(S) OF THE CHARLES L.
BUECHLER AND ROSE M. BUECHLER REVOCABLE
TRUST OF 2003 U/A/D AUGUST 5, 2003

6

NW/SE SEC. 22

NORTH LINE OF THE NW1/4 OF THE SE1/4

S 89°46'43" W 2397.40'
COR. TO RW

BLDG

BLDG

P.L.

MIDDLE INLET

FND. 2"
IRON PIPE
Y=227736.150
X=713684.304

T 33 N
R 20 E
22 23

US 141
CURVE DATA
PI= 1303+73.98
Y = 227502.27
X = 710961.83
T = 706.32
L = 1353.07
R = 1910.10
DELTA = 40°35'13.58" RT
D = 02°59'58.64"

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 1490-03-29

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 141	RW PLAT 3572	VARIES	1937

REVISION DATE	DATE 10/17/2013	SCALE, FEET 0 50 100	HWY: US 141	STATE R/W PROJECT NUMBER 1491-08-21	PLAT SHEET 4.6
	GRID FACTOR 0.999986		COUNTY: MARINETTE	CONSTRUCTION PROJECT NUMBER 1491-08-71	PS&E SHEET 65 E

FILE NAME : P:\47xx\4778.4750W05.SP.USH141.MARN\CADDS\Plan\040106_rp.dgn PLOT DATE : 10/23/2013 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 75

FND. COTTON
GIN SPIKE
Y=230388.180
X=711189.952

T 33 N
R 20 E
15
22

FND. 1.5"
IRON PIPE
Y=225060.856
X=710911.558

T 33 N
R 20 E
22
27

S1°27'15"E 2202.88'
COR. TO MATCH LINE

TOWN

P.L.

NORTH LINE OF THE SW1/4 OF THE NE1/4

NW/NE SEC. 22

GN

BLDG

30' UTILITY EASEMENT
AMERICAN TRANSMISSION COMPANY, LLC
(FORMERLY NORTHERN ELECTRIC COMPANY)
(ELECTRIC)
DOC. 129038
V.116 P. 393-394

LOT 1
CSM 2232
V.14 P.288
DOC. 647588

TRANS 233 RESTRICTIONS
D.O.T. NO. 38-141-1141-03

10' UTILITY EASEMENT
WISCONSIN RSA #4
(COMMUNICATION)
J. 6392 I. 40
DOC. 565441

SW/NE SEC. 22

100'

IP

ESCANABA & LAKE SUPERIOR RR

WEST LINE OF THE NE1/4 OF THE NE1/4

60'

N42°28'41"E

1500.00'

MATCH LINE STA 1313+00
N47°31'19"W
60.00'

FO — SLOPE INTERCEPT

S47°31'19"E
60.00'
STA 1328+00

1314+00 1316+00 1318+00 1320+00 US 141 1322+00 1324+00 1326+00 1328+00

N 42°28'41" E

OF

SLOPE INTERCEPT

G

S42°28'41"W

60'

5'

STA 1317+00.00
60.00' & 65.00'

STA 1320+60.00
60.00' & 65.00'

STA 1325+30.00
60.00' & 65.00'

STA 1327+00.00
60.00' & 65.00'

16' UTILITY EASEMENT
CENTURYLINK
(FORMERLY CENCOM OF
WISCONSIN-WAUSAUKEE
TEL. DIVISION)
(COMMUNICATION)
J. 2410 I. 42
DOC. 467183

CENTURYLINK
RELEASE OF RIGHTS
16' EASEMENT
PARCEL 8
J. 2410 I. 41
DOC. 467182

42

WALTER BIERNASZ

8

LOT 2
CSM 2232
V.14 P.288
DOC. 647588

TRANS 233 RESTRICTIONS
D.O.T. NO. 38-141-1141-03

NE/NE SEC. 22

NORA L. WOLFF

9

BLDG
BLDG

P.L.

WEST LINE OF THE NW1/4 OF THE NE1/4

SE/NE SEC. 22

NORTH LINE OF THE SE1/4 OF THE NE1/4

MIDDLE INLET

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 141	RW PLAT 3572	120'	1937
US 141	CSM 2232	120'	2003

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 1490-03-29

REVISION DATE	DATE 10/17/2013	SCALE, FEET 0 50 100	HWY: US 141	STATE R/W PROJECT NUMBER 1491-08-21	PLAT SHEET 4.7
	GRID FACTOR 0.999986		COUNTY: MARINETTE	CONSTRUCTION PROJECT NUMBER 1491-08-71	PS&E SHEET 66 E

FILE NAME : P:\47xx\4778.4750W05.SP.USH141.MARN\CADDS\Plan\040107_rp.dgn PLOT DATE : 10/23/2013 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 75

FND. COTTON GIN SPIKE
Y=230388.180
X=711189.952

T 33 N
R 20 E
15
22

GN

TOWN

SE/SE SEC. 15

LOT 1
CSM 2232
V.14 P.288
DOC. 647588

BRIAN C. & MARIA R. YOUNG
17

DENNIS J. VRANY
18

JOSEPH P. & ANGELIQUE A. TARANTOLA
19

S89°44'26"E 2130.39' MOONSHINE HILL RD
COR. TO TIE
99'
NORTH LINE OF THE NE1/4 OF THE NE1/4

P.L.

30' INGRESS-EGRESS EASMENT
DOC. 652651 & DOC. 729398

US 141
CURVE DATA
PI = 1345+16.35
Y = 230601.35
X = 713799.43
T = 564.15
L = 1124.81
R = 5839.65
DELTA = 11°02'10" LT
D = 00°58'52"

10' UTILITY EASEMENT
WISCONSIN RSA #4
(COMMUNICATION)
J. 6392 I. 40
DOC. 565441

STA 1339+65.28
199.34'
63.73'
N39°17'55"E
STA 1340+97.19
204.69'
N54°27'10"E
181.09'
STA 1342+78.35
160.00'
STA 1338+81.48
160.00'
N17°12'7"E
92.18'
S42°28'41"W
70.72'
N89°44'26"W
133.09'
S89°44'26"E
130.52'
L = 48.16'
LCH = 48.16'
R = 5679.65'
DELTA = 00°29'09" LT
L = 137.73'
LCH = 137.73'
R = 5679.65'
DELTA = 01°23'22" LT
L = 625.73'
LCH = 625.42'
R = 5779.65'
DELTA = 06°12'11" LT

ESCANABA & LAKE SUPERIOR RR

60'
N42°28'41"E
3227.99'
PC STA1339+52.20
L = 137.61'
LCH = 137.60'
R = 5779.65'
DELTA = 01°21'51" LT
SLOPE INTERCEPT
STA 1347+51.01
118.95'
S3°50'34"W
115.55'
STA 1342+07.57
PI STA1345+16.35
N 42°28'41" E
N47°31'19"W
60.00'
2931.47'
61.05'
32.02'
S39°37'57"W
L = 368.22'
LCH = 368.16'
R = 5889.65'
DELTA = 03°34'56" LT
L = 246.48'
LCH = 246.46'
R = 5889.65'
DELTA = 02°23'52" LT

1336+00
1338+00
1340+00
1342+00
1344+00
1346+00
MATCH LINE STA 1336+00

OF

MOONSHINE HILL RD
N89°44'26"W 222.63'
COR. TO TIE
49.5'

WEST LINE OF THE SW1/4 OF THE SW1/4
WEST LINE OF THE NW1/4 OF THE NW1/4

NE/NE SEC. 22
SW/SW SEC. 14
NW/NW SEC. 23

LOT 2
CSM 2232
V.14 P.288
DOC. 647588

MIDDLE INLET

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 141	RW PLAT 3572	120'	1937
US 141	CSM 2232	120'	2003

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 1490-03-29

REVISION DATE	DATE 10/17/2013	SCALE, FEET 0 50 100	HWY: US 141	STATE R/W PROJECT NUMBER 1491-08-21	PLAT SHEET 4.8	
	GRID FACTOR 0.999986		COUNTY: MARINETTE	CONSTRUCTION PROJECT NUMBER 1491-08-71	PS&E SHEET	E

FILE NAME : P:\47xx\4778.4750W05.SP.USH141.MARN\CADDS\Plan\040108_rp.dgn PLOT DATE : 10/23/2013 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:100

PER TIES
Y=232983.285
X=714062.004

T 33 N
R 20 E
15 14

SW/NW SEC. 14

GN

P.L.

TOWN

BLDG

LDG

BLDG

NW/SW SEC. 14

NORTH LINE OF THE NW1/4 OF THE SW1/4

68'

THOMPSON RD

N 89°24'43" E 1130.60'
COR. TO RW

10' UTILITY EASEMENT
WISCONSIN RSA #4
(COMMUNICATION)
J. 6392 I. 40
DOC. 565441

100'

STA 1372+85.85
115.50'

STA 1373+03.54
115.50'

STA 1373+32.01
70.00'

STA 1373+90.00
60.00' & 70.00'

15'

10'

SLOPE INTERCEPT

ESCABNABA & LAKE SUPERIOR
RAILROAD COMPANY

ESCANABA & LAKE SUPERIOR RR

50

P.L.

P.L.

FO

60'

N31°26'31"E

692.72'

N31°26'31"E

729.43'

60.00'

STA 1365+50
N58°33'29"W

1366+00

US 141

1368+00

1370+00

1372+00

1374+00

1376+00

1378+00

US 141

1380+00

60.00'

STA 1380+50
S58°33'29"E

38.93'

38.93'

70.71'

STA 1373+19.18

N 31°26'31" E

106.16'

90.00'

70.00'

G

S31°26'31"W

825.49'

S31°26'31"W

169.36'

S58°33'29"E
20.00'

S31°26'31"W

505.15'

90'

70'

S 89°24'43" W 3944.24'
COR. TO RW

P.L.

NORTH LINE OF THE
NE1/4 OF THE SW1/4

WEST LINE OF THE
NE1/4 OF THE NW1/4

NE/SW SEC. 14

SE/NW SEC. 14

WEST LINE OF THE
SE1/4 OF THE NW1/4

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 1490-03-29

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 141	RW PLAT 3572	VARIES	1937

FND. COTTON
GIN SPK.
Y=233037.182
X=719313.551

T 33 N
R 20 E
14 13

MIDDLE INLET

REVISION DATE	DATE 10/17/2013	SCALE. FEET 0 50 100	HWY: US 141	STATE R/W PROJECT NUMBER 1491-08-21	PLAT SHEET 4.9
	GRID FACTOR 0.999986		COUNTY: MARINETTE	CONSTRUCTION PROJECT NUMBER 1491-08-71	PS&E SHEET 68 E

FILE NAME : P:\47xx\4778.4750W05.SP.USH141.MARN\CADDS\Plan\040109_rp.dgn PLOT DATE : 10/23/2013 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 75

TOWN

OF

WAUSAUKEE

GN

NE/NE
SEC. 11

SE/NE
SEC. 11

NW/NW
SEC. 12

SW/NW
SEC. 12

NORTH LINE OF THE
SE1/4 OF THE NE1/4

P.L.

CENTURYLINK
RELEASE OF RIGHTS
PARCEL 50
NO EASEMENT OF RECORD

42

10' UTILITY EASEMENT
WISCONSIN RSA #4
(COMMUNICATION)
J. 6392 I. 40
DOC. 565441

.75" IR

100'

P.L.

.75" IR

STA 1442+50.00
60.00' & 70.00'

STA 1443+50.00
60.00' & 70.00'

ESCANABA & LAKE SUPERIOR RR

ESCABNABA & LAKE SUPERIOR
RAILROAD COMPANY

50

SLOPE INTERCEPT

10'

60'

1500.00'

N31°26'31"E

N58°33'29"W
60.00'

S58°33'29"E
60.00'

FO

1438+00
1440+00
1442+00
US 141
1444+00
1446+00
1448+00
1450+00
1452+00

MATCH LINE STA 1453+00

N 31°26'31" E

169.40'

86.75'

STA 1438+00

75.00'

75.00'

G FO T

S31°26'31"W

75'

1156.20'

S31°26'31"W

343.80'

P.L.

N88°43'39"W 282.10'
SEC. LINE TO RW

SET PK NAIL
PER TIES
Y=240767.885
X=719631.633

McMAHON RD

N01°41'47"E 1302.57'
COR. TO 1/16TH LINE
WEST LINE OF THE
SW1/4 OF THE NW1/4

S01°41'47"W 1302.57'
COR. TO 1/16TH LINE
WEST LINE OF THE
SW1/4 OF THE NW1/4

49.50'

T 33 N
R 20 E
11 12 2 1

FND. PK NAIL
Y=238163.886
X=719554.515

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 1490-03-29

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 141	RW PLAT 3572	135'	1937
MCMAHON RD	PLAT OF SURVEY	49.50'	1979
MCMAHON RD	PLAT OF SURVEY	49.50'	1985
MCMAHON RD	PLAT OF SURVEY	49.50'	1989

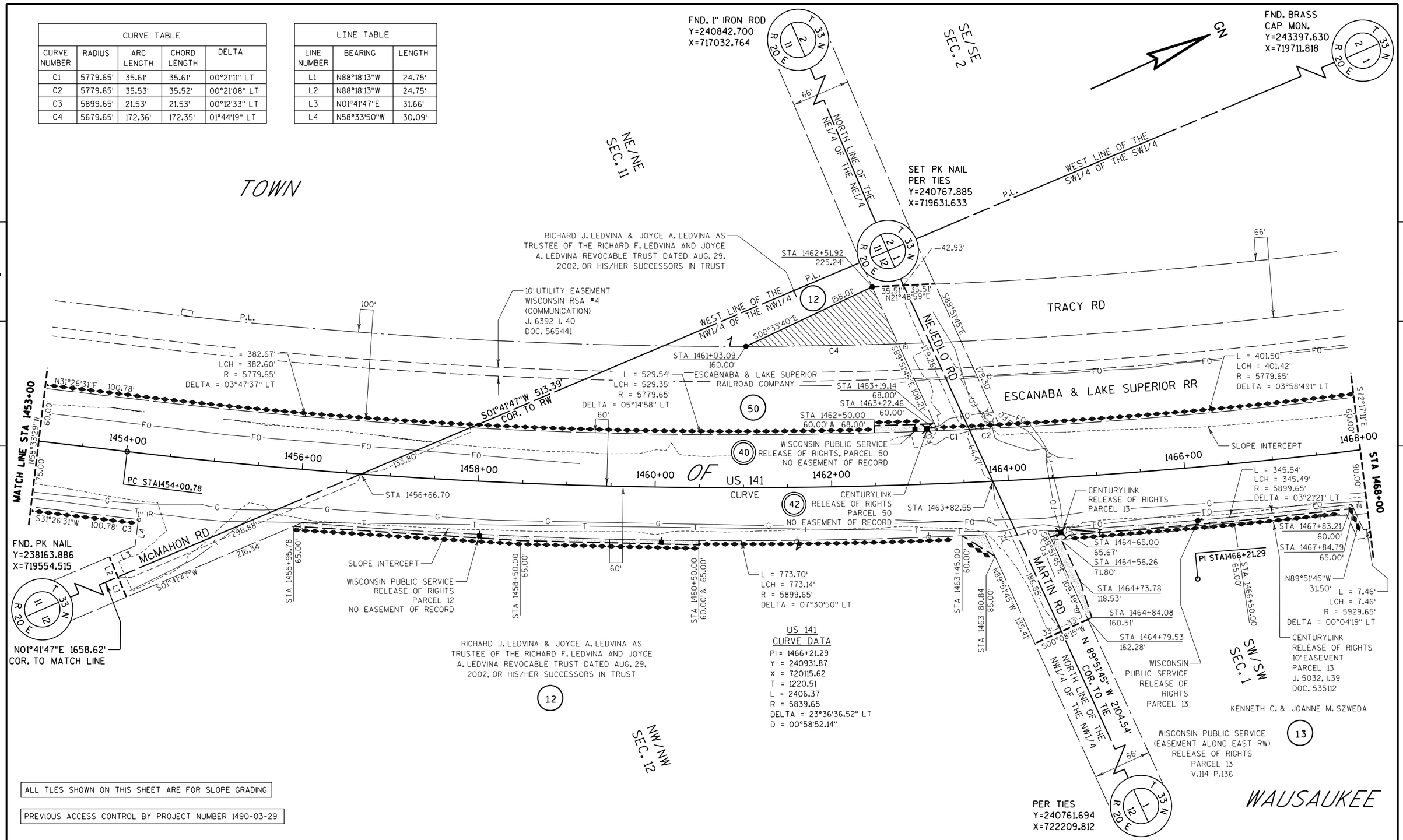
REVISION DATE	DATE 10/17/2013	SCALE. FEET 0 50 100	HWY: US 141	STATE R/W PROJECT NUMBER 1491-08-21	PLAT SHEET 4.10	
	GRID FACTOR 0.999986		COUNTY: MARINETTE	CONSTRUCTION PROJECT NUMBER 1491-08-71	PS&E SHEET 69	E

FILE NAME : P:\47xx\4778.4750W05.SP.USH141.MARN\CADDS\Plan\040110_rp.dgn PLOT DATE : 12/4/2013 PLOT BY : tgr PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 75

CURVE TABLE				
CURVE NUMBER	RADIUS	ARC LENGTH	CHORD LENGTH	DELTA
C1	5779.65'	35.61'	35.61'	00°21'11" LT
C2	5779.65'	35.53'	35.52'	00°21'08" LT
C3	5899.65'	21.53'	21.53'	00°12'33" LT
C4	5679.65'	172.36'	172.35'	01°44'19" LT

LINE TABLE		
LINE NUMBER	BEARING	LENGTH
L1	N88°18'13"W	24.75'
L2	N88°18'13"W	24.75'
L3	N01°41'47"E	31.66'
L4	N58°33'50"W	30.09'



ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 1490-03-29

REVISION DATE	DATE 10/17/2013	SCALE, FEET 0 50 100	HWY: US 141	STATE R/W PROJECT NUMBER 1491-08-21	PLAT SHEET 4.11	
	GRID FACTOR 0.999986		COUNTY: MARINETTE	CONSTRUCTION PROJECT NUMBER 1491-08-71	PS&E SHEET 70	E

FILE NAME : P:\47xx\4778.4750W05.SP.USH141.MARN\CADDS\Plan\040111_rp.dgn PLOT DATE : 12/4/2013 PLOT BY : tgr PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 75

N

BEGIN PROJECT
STA 232+28.77

EXCEPTION TO NET ℄ LENGTH
STA 240+69.58 TO 241+04.92
B-38-35

STA 253+38.64 USH 141
TYPE D INTERSECTION REQ'D

253+38.64 USH 141=
10+00.00 TRELLIS LANE

BP 226+73.33

USH 141

EXISTING R/W

227+45.00 USH 141=
17+43.31 CTH X

STA BACK = 227+38.55
STA AHEAD = 227+45.00

EQUATION

CTH X

SLOPE INTERCEPTS

CONSTRUCTION LIMITS
STA 11+62
PI 12+76.19

TRELLIS LANE

5

5

N

STA 261+10
REMOVE EXISTING 30" CMCP
1-30" X 104' RCCP REQ'D
2 APRON ENDWALLS REQ'D

STA 270+55
REMOVE EXISTING 30" CMCP
1-30" X 96' RCCP REQ'D
2 APRON ENDWALLS REQ'D

STA 281+58
REMOVE EXISTING 24" RCCP
1-24" X 144' RCCP REQ'D
2 APRON ENDWALLS REQ'D
SKEW 45° RHF

USH 141

EXISTING R/W

CP 2001

CAUTION

STA 258+38
BEGIN NB PASSING LANE TAPER

STA 265+39
END TAPER NB PASSING LANE
BEGIN FULL LANE WIDTH

SLOPE INTERCEPTS

CONTROL

PT#	N	E	ELEV
2001	225060.854	710911.528	733.66

STA 264+50 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

STA 278+00 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

STA 280+00 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET E

FILE NAME : F:\d3_149108\050201_pn.dgn PLOT DATE : 26-MAR-2014 11:23 PLOT BY : dotbrb PLOT NAME : 050201pn PLOT SCALE : 200:1

STA 295+20
REMOVE EXISTING 30" CMCP
1-30" X 96'RCCP REQ'D
2 APRON ENDWALLS REQ'D

N

EXISTING R/W

300

295

290

285

USH 141

CAUTION

STA 290+50 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

SLOPE INTERCEPTS

PC 296+65.58

USH 141
CURVE NOTES

PI = 303+71.11
Y = 227,500.42
X = 710,962.19
∠ = 220°-32'-41"
△ = 40°-32'-41"
D = 3°-00'
T = 705.52'
L = 1351.66'
R = 1910.10'
RUNOFF = 149'
SE = 0.055%
SE TRANSITION = 257'

STA 304+90 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

PI 0+00.00

PC 0+66.41

BIERNASZ RD

CONSTRUCTION LIMITS
STA 1+80

305

PT 2+72.41

EXISTING R/W

305+64.85 USH 141=
3+04.12 BIERNASZ ROAD

STA 305+64.85 USH 141
TYPE C MODIFIED
INTERSECTION REQ'D

STA 306+50 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

STA 308+75
EXISTING 30" RCCP TO REMAIN
EXTEND RIGHT SIDE 14'LF
CLEANING CULVERT PIPE REQ'D
1 APRON ENDWALL REQ'D

310

PT 310+17.24

STA 311+50 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

STA 326+66
FROST HEAVE
REMOVE EXISTING 30" X 61'CMCP
1-30" X 71'RCCP REQ'D
2 APRON ENDWALLS REQ'D

N

STA 334+45
EXISTING 30" CMCP TO REMAIN
EXTEND RIGHT SIDE 7'LF
CLEANING CULVERT PIPE REQ'D
1 APRON ENDWALL REQ'D

STA 341+56.92 USH 141
TYPE B2 MODIFIED
INTERSECTION REQ'D

MOONSHINE HILL RD

PI 7+12.26

CONSTRUCTION LIMITS
STA 8+48

315

320

325

330

335

340

USH 141

EXISTING R/W

EXISTING R/W

PC 339+70.60

PC 8+82.43

IPT 9+66.12

PC 20+20.39

PT 20+89.96 PI 22+2

CAUTION

SLOPE INTERCEPTS

STA 320+75 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

STA 329+85
BEGIN NB PASSING LANE TAPER
END FULL WIDTH LANE

STA 336+85
END NB PASSING
LANE TAPER

341+56.92 USH 141=
9+99.91 MOONSHINE HILL RD

342+51.73 USH 41=
19+99.94 MOONSHINE HILL RD

STA 342+51.73 USH 141
TYPE D INTERSECTION REQ'D

CONSTRUCTION LIMITS
STA 21+57

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET E

FILE NAME : F:\d3_149108\050202_pn.dgn PLOT DATE : 26-MAR-2014 11:25 PLOT BY : dotbrb PLOT NAME : 050202 pn PLOT SCALE : 200:1

USH 141
CURVE NOTES

PI = 345+22.44
Y = 230,607.87
X = 713,803.66
∠ = 168°-59'-30"
Δ = 11°-00-10"
D = 1°-00'
T = 551.84'
L = 1100.30'
R = 5729.70'
RUNOFF = 80'
SE = 0.03¼
SE TRANSITION = 187'

SLOPE INTERCEPTS

PT 350+70.89

345 350 355 360 365 370

USH 141

EXISTING R/W

EXISTING R/W

C 20+20.39

20+89.96 PI 22+29.08

PI 4+67.00

THOMPSON RD

CONSTRUCTION LIMITS
7+55

PC 7+51.87

PT 8+41.43

372+89.60 USH 141=
8+93.23 THOMPSON ROAD

STA 351+28
EXISTING 48" RCCP TO REMAIN
1 APRON ENDWALL RIGHT SIDE
WITH TIES REQ'D
CLEANING CULVERT PIPE REQ'D

STA 372+89.60 USH 141
TYPE C MODIFIED
INTERSECTION REQ'D

STA 373+85
EXISTING 24" RCCP TO REMAIN
REPAIR RIGHT SIDE
CLEANING CULVERT PIPE REQ'D
2 APRON ENDWALL REQ'D

STA 388+25
EXISTING 36" RCCP TO REMAIN

STA 394+15
FROST HEAVE
REMOVE EXISTING 42" X 70' RCCP
1-26'-⅝" X 43-¾" RCPA REQ'D
2-ENDWALLS REQ'D

375 380 385 390 395 400

USH 141

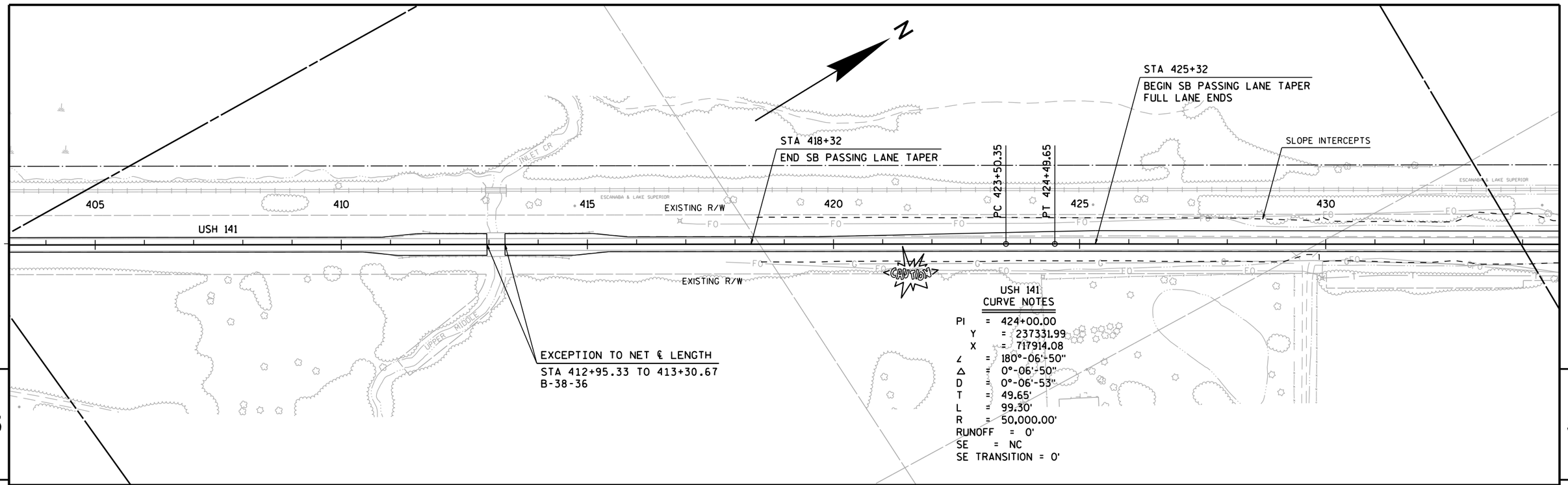
EXISTING R/W

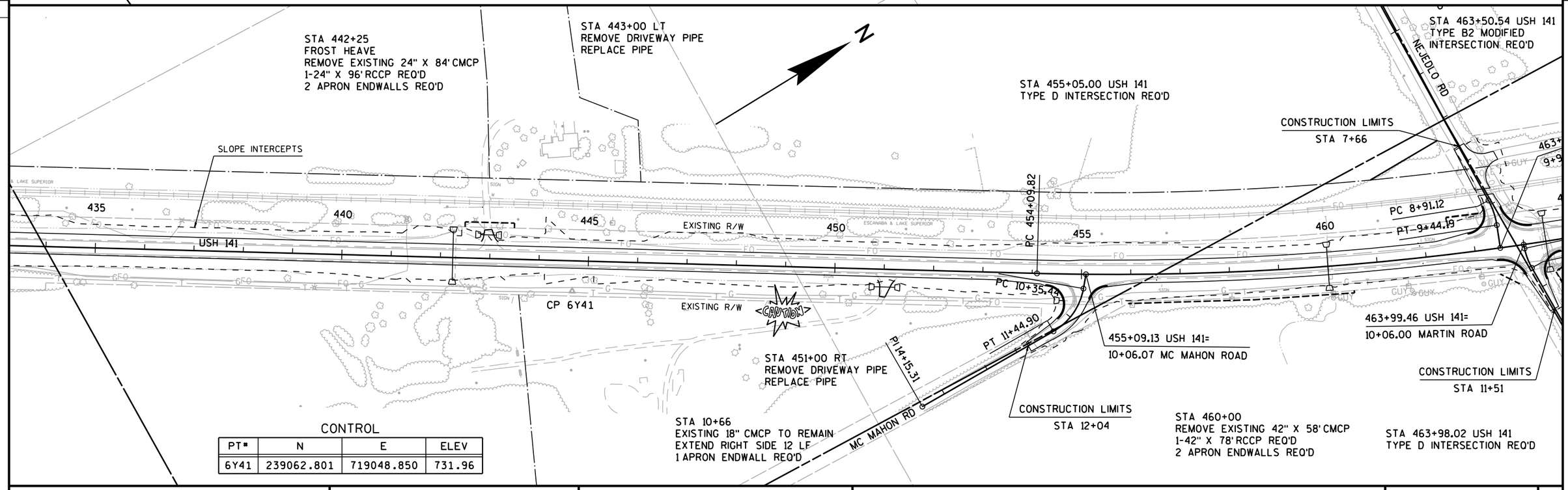
EXISTING R/W

SLOPE INTERCEPTS

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET	E

FILE NAME : F:\d3_149108\050203_pn.dgn PLOT DATE : 26-MAR-2014 11:26 PLOT BY : dotbrb PLOT NAME : 050203 pn PLOT SCALE : 200:1





PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET 74	E

STA 464+30
REMOVE EXISTING 30" X 86' CMCP
1-30" X 105' RCCP REQ'D
2 APRON ENDWALLS REQ'D

USH 141
CURVE NOTES

PI = 466+17.29
Y = 240,930.24
X = 720,113.67
∠ = 156°-25'-03"
Δ = 23°-34'-57"
D = 1°-00'
T = 1196.08'
L = 2358.30'
R = 5729.70'
RUNOFF = 80'
SE = 0.03%
SE TRANSITION = 187'

STA 481+00
REMOVE EXISTING 24" CMCP
1-24" X 96' RCCP REQ'D
2 APRON ENDWALLS REQ'D

N

463+51.60 USH 141=
9+91.00 NEJEDLO ROAD

TRACY RD

SLOPE INTERCEPTS

PT 477+94.65

465 470 475 480 485 490

EXISTING R/W

PC 10+14.10
PT 10+56.42

USH 141

CAUTION

CP
WAUSAUKEE
GPS AZ

EXISTING R/W

CONSTRUCTION LIMITS
STA 11+51

MARTIN RD

STA 463+98.02 USH 141
TYPE D INTERSECTION REQ'D

STA 477+88 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

CONTROL

PT*	N	E	ELEV
WAUSAUKEE GPS AZ	239062.801	719048.850	731.96

STA 494+90
REMOVE EXISTING 42" CMCP
1-42" X 88' RCCP REQ'D
2 APRON ENDWALLS REQ'D

N

SLOPE INTERCEPTS

TRACY RD

PC 504+41.06
PT 505+55.12

495 500 505 510 515 520

EXISTING R/W

USH 141

STA 508+00
END SB PASSING LANE TAPER
BEGIN FULL WIDTH LANE

END PROJECT
STA 515+03.94

EP 521+04.99

CAUTION

STA 515+00
BEGIN SB PASSING LANE TAPER

520+08.34 USH 141=
10+00.00 STH 180

STH 180

USH 141
CURVE NOTES

PI = 504+98.09
Y = 244,805.72
X = 720,648.32
∠ = 179°-48'-36"
Δ = 0°-11'-24"
D = 0°-10'
T = 57.03'
L = 114.06'
R = 34,377.50'
RUNOFF = 0'
SE = NC
SE TRANSITION = 0'

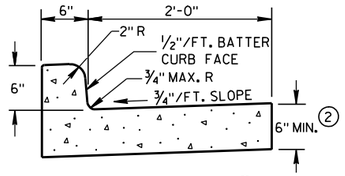
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET E

FILE NAME : F:\d3_149108\050205_pn.dgn PLOT DATE : 26-MAR-2014 11:30 PLOT BY : dotbrb PLOT NAME : 050205 pn PLOT SCALE : 200:1

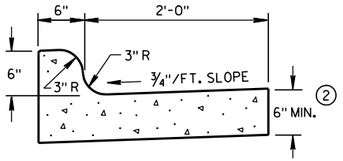
Standard Detail Drawing List

08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13B01-10	PAVEMENT DETAILS FOR RAILROAD APPROACH
14B29-01	SAFETY EDGE
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-01A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16C	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-16D	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C09-09A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

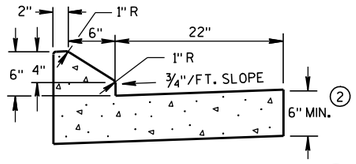
6



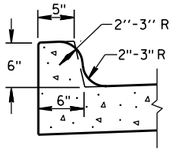
TYPES A & D (1)



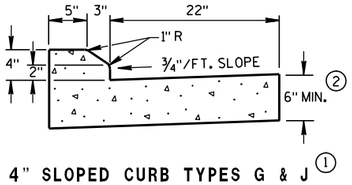
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

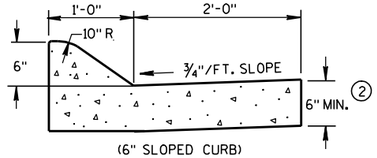


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

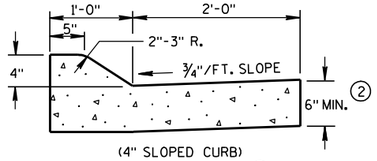


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

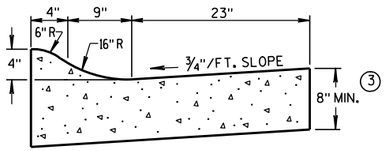


(6" SLOPED CURB)



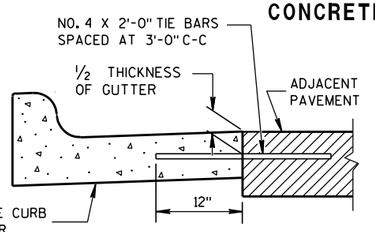
(4" SLOPED CURB)

TYPES A & D (1)

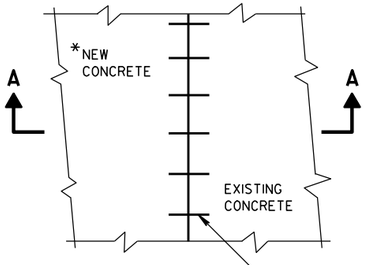


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

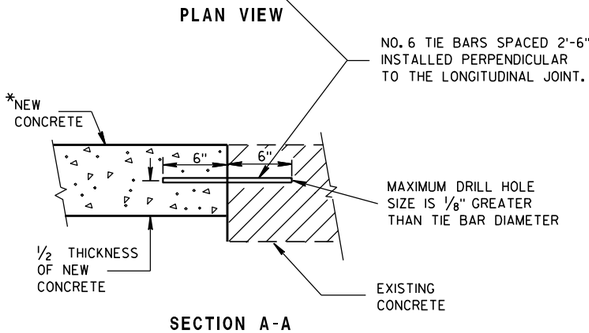


TYPICAL TIE BAR LOCATION (1)



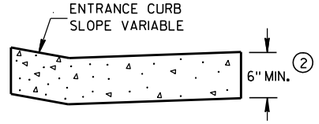
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

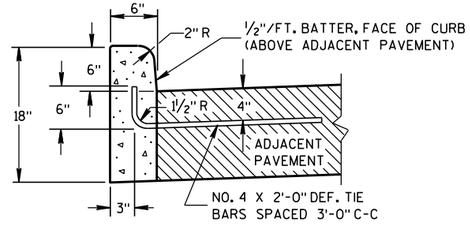


SECTION A-A

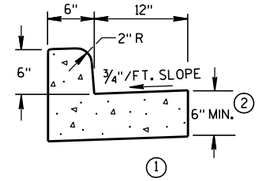
TIE BARS DRILLED INTO EXISTING PAVEMENT



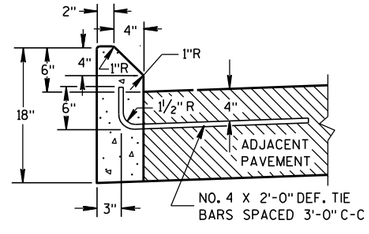
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D

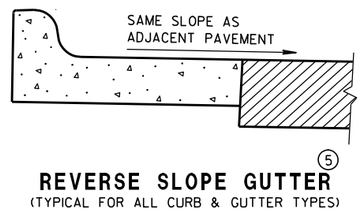


(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"



(1)
TYPES G & J

CONCRETE CURB



REVERSE SLOPE GUTTER (5)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

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.

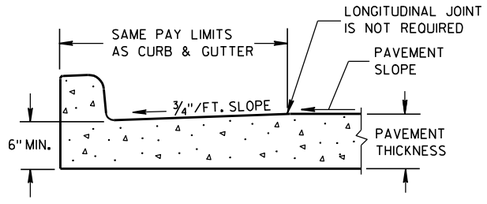
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(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.

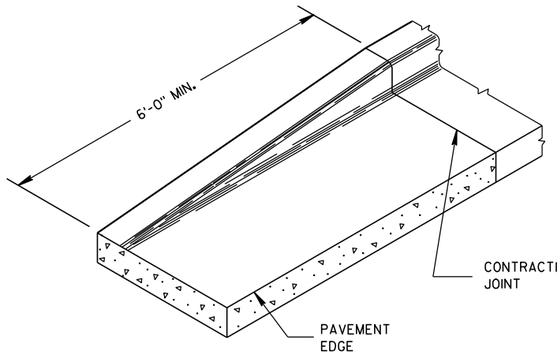
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

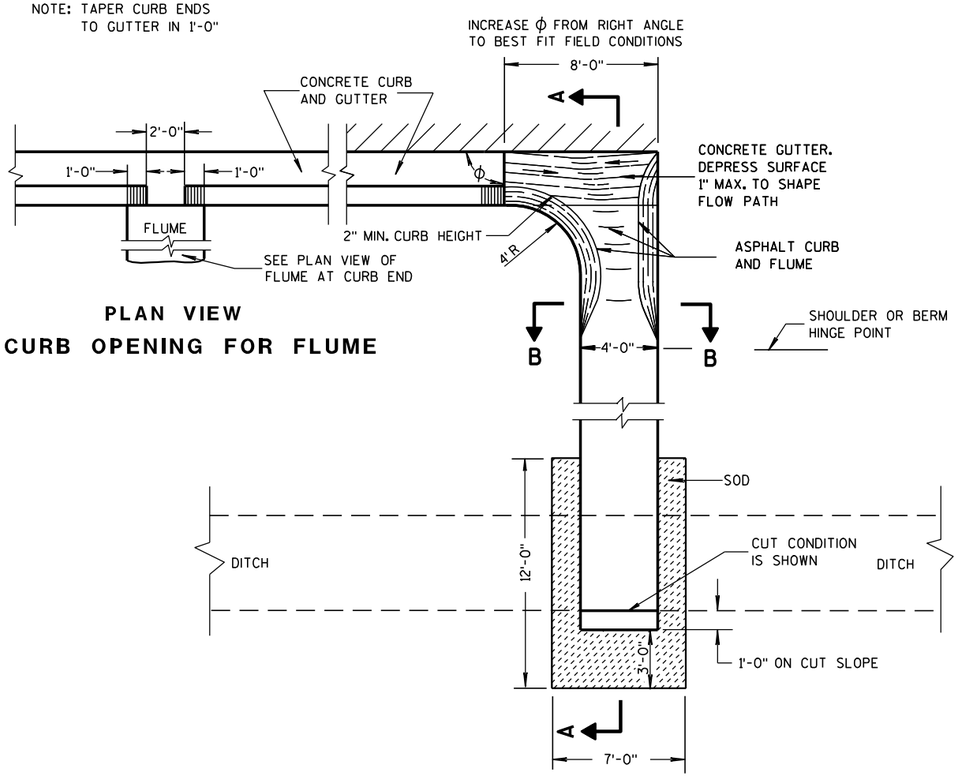
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
FHWA

6

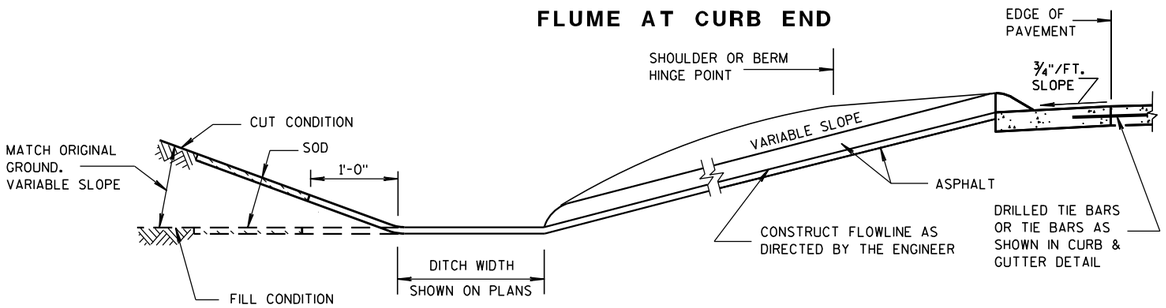
S.D.D. 8 D 1-17

ASPHALTIC FLUME

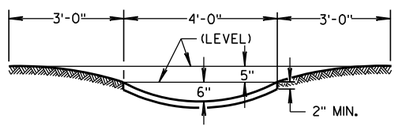


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

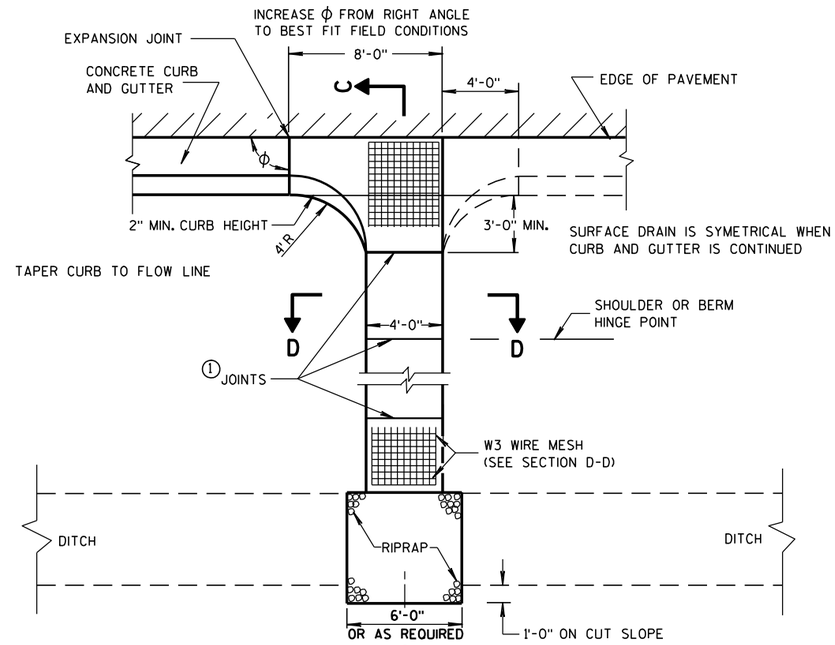
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

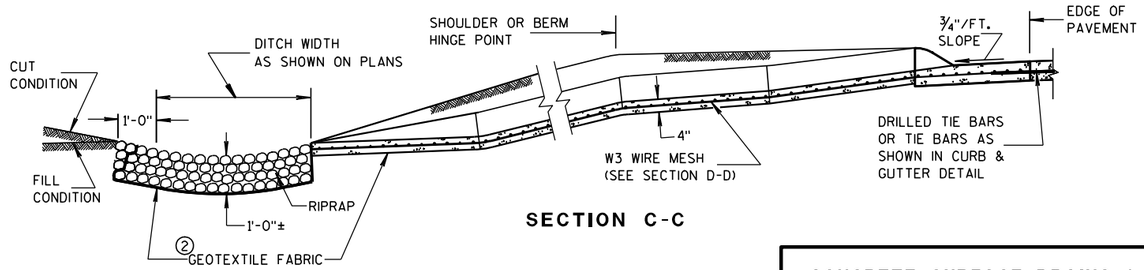
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

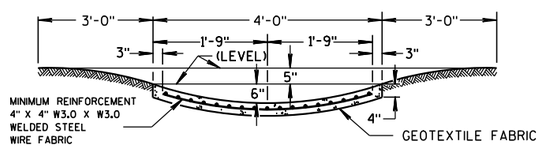
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

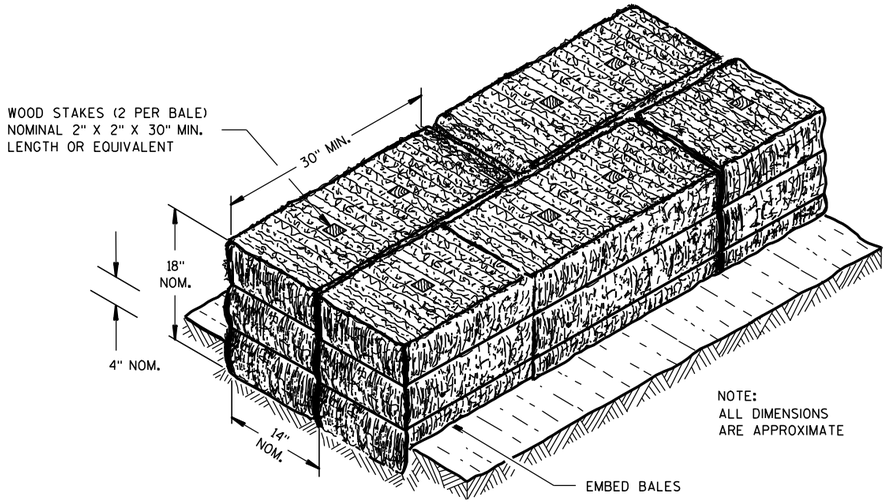
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT

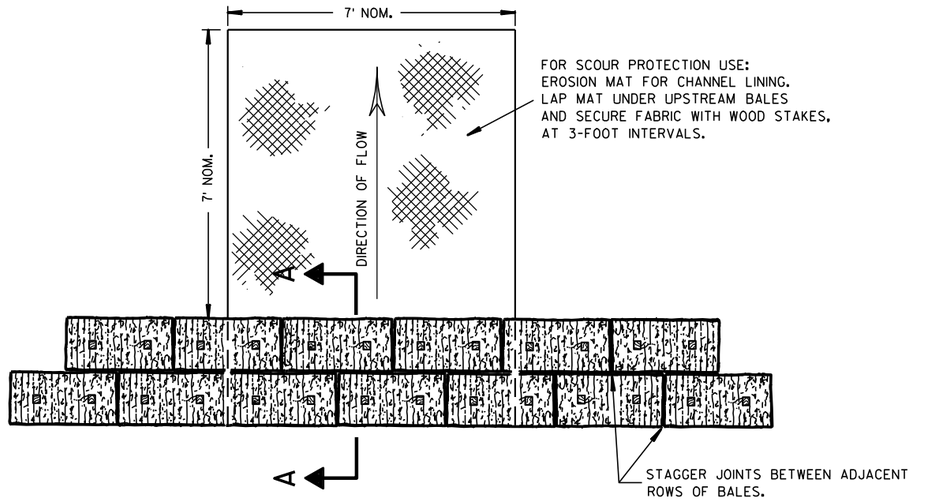
FHWA

6

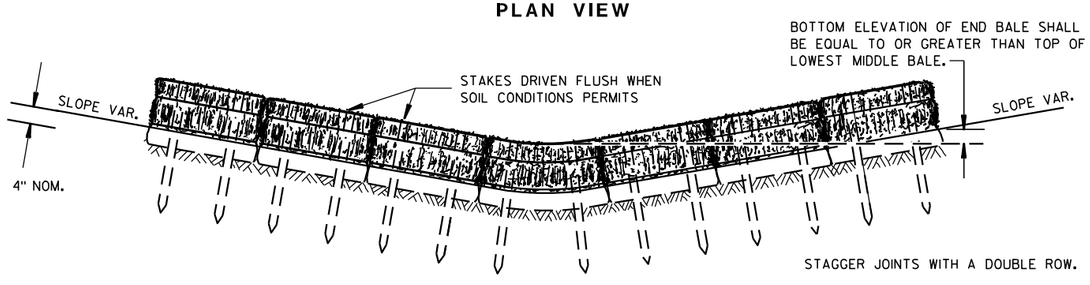
S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



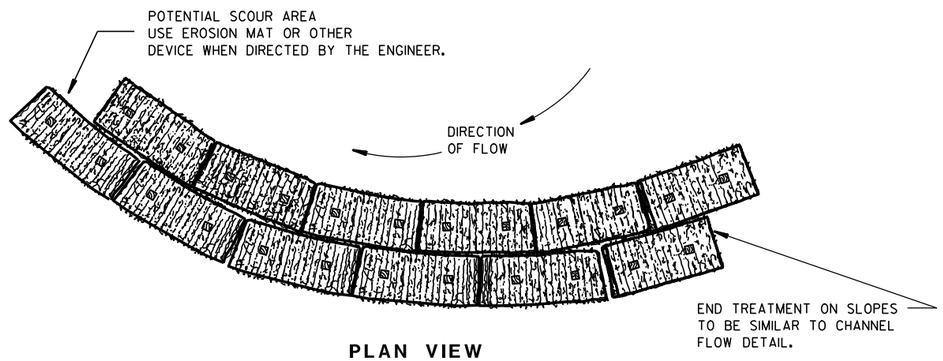
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

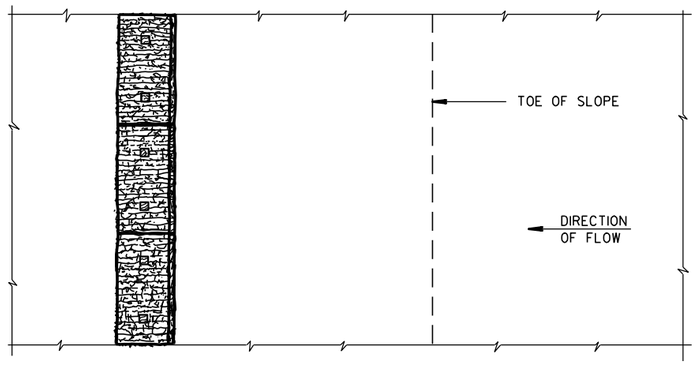
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

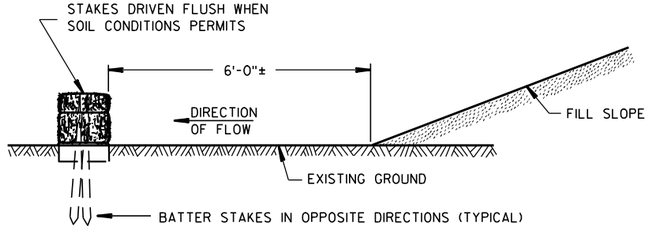


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

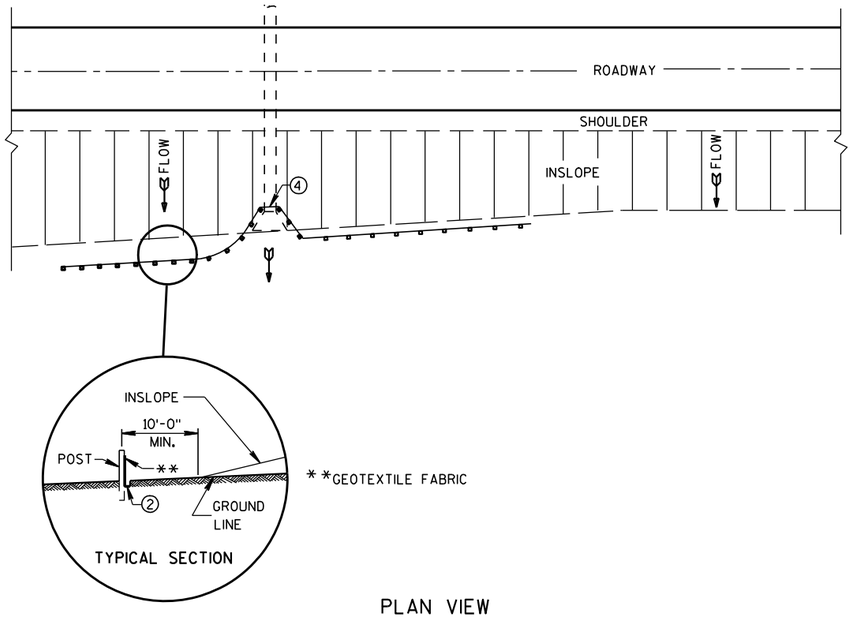
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 DATE — /S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

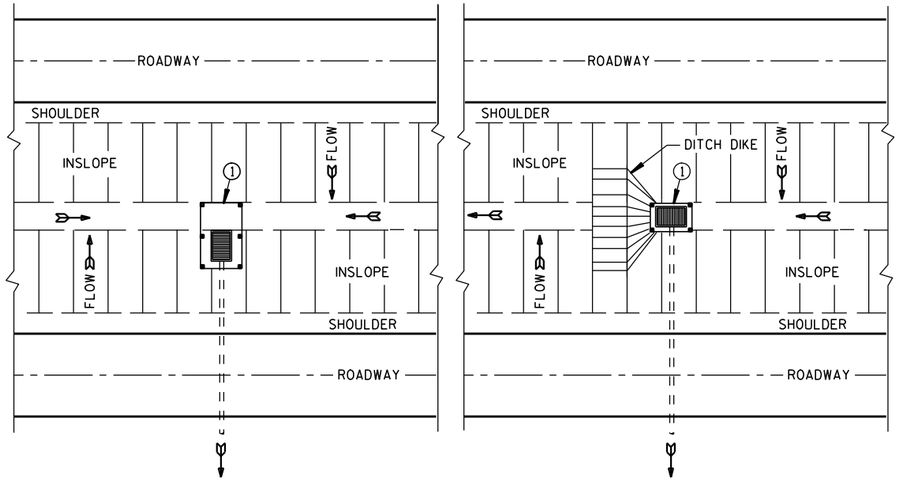
FHWA

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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

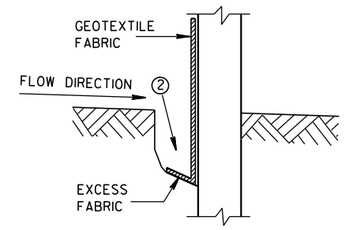
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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

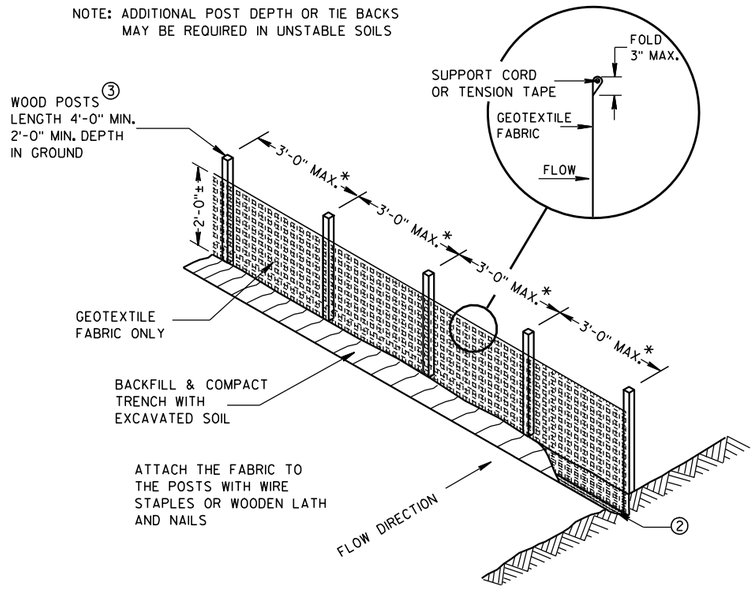
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

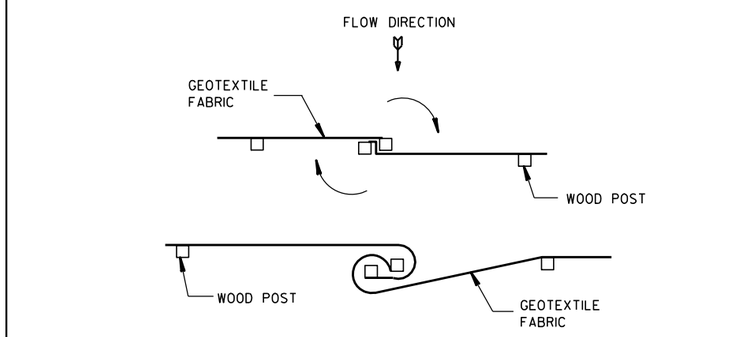
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



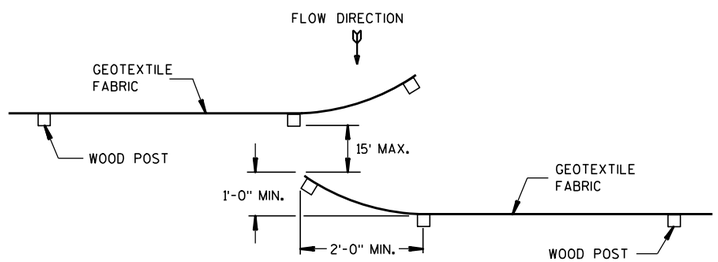
TRENCH DETAIL



SILT FENCE

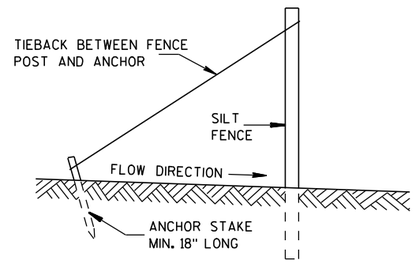


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6

METAL APRON ENDWALLS

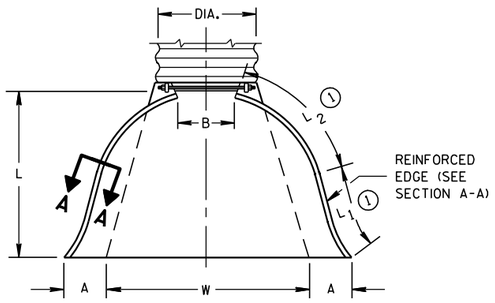
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

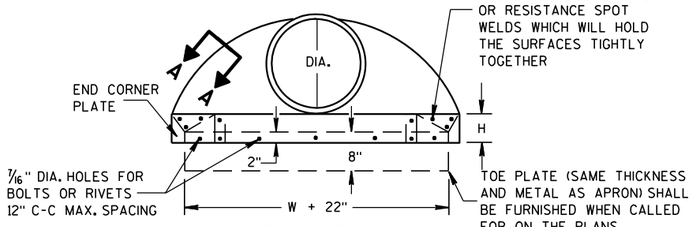
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

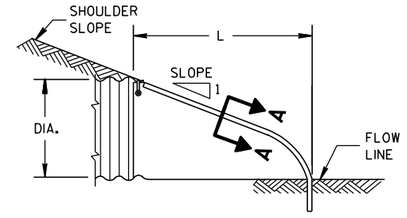
*MINIMUM
**MAXIMUM



PLAN VIEW

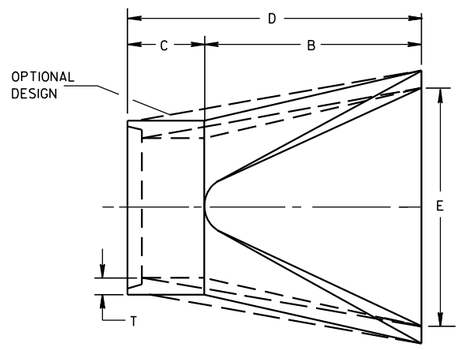


END VIEW

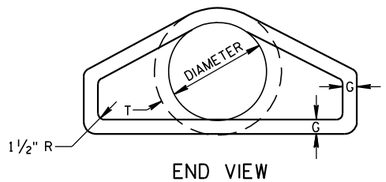


SIDE ELEVATION

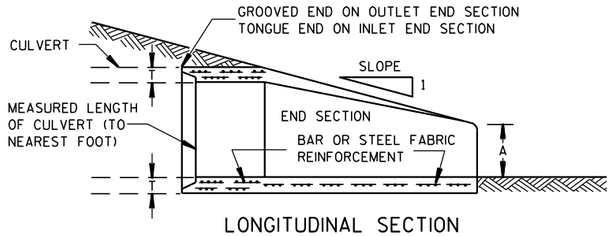
METAL ENDWALLS



PLAN

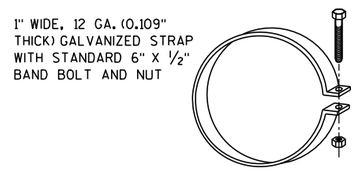


END VIEW



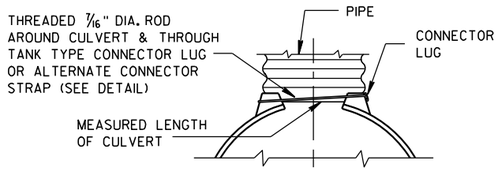
LONGITUDINAL SECTION

CONCRETE ENDWALLS

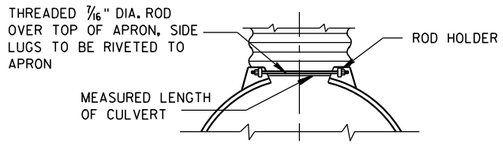


ALTERNATE FOR TYPE 1 CONNECTION

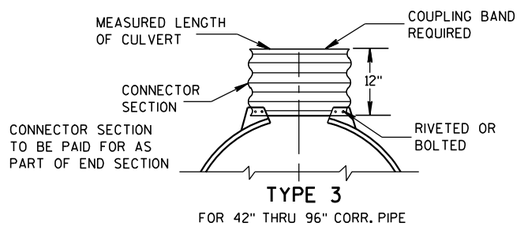
END SECTION CONNECTOR STRAP



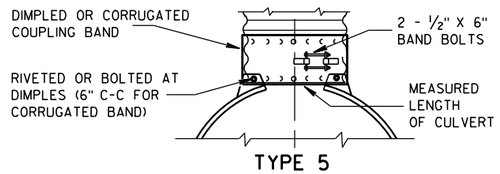
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

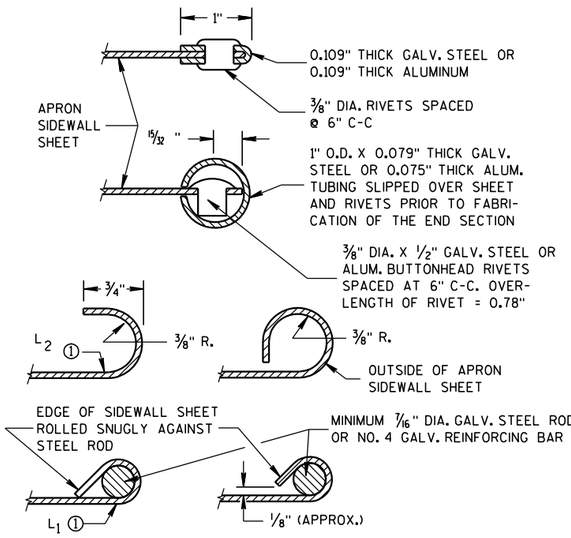
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

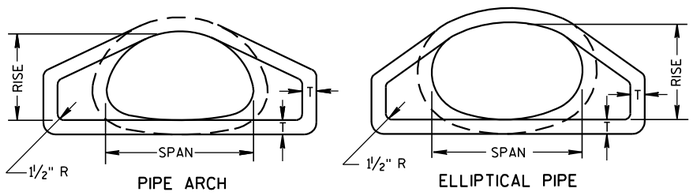
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

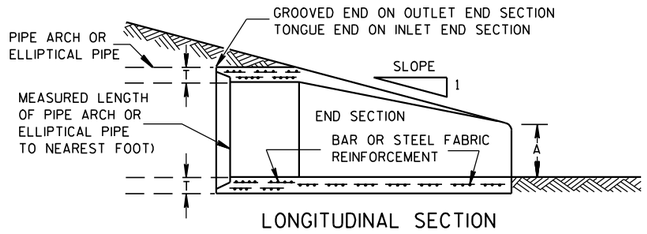
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

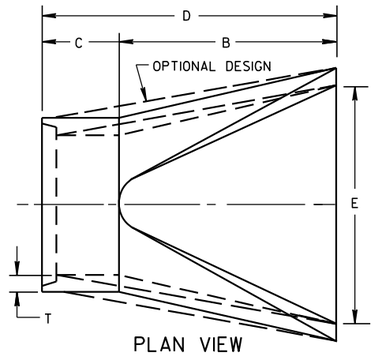
6
S.D.D. 8 F 1-11



END VIEW

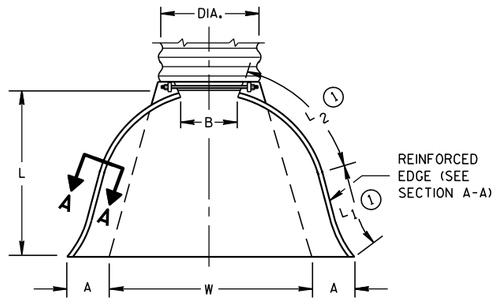


LONGITUDINAL SECTION

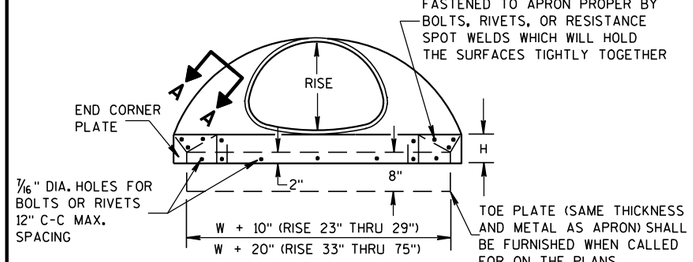


PLAN VIEW

CONCRETE ENDWALLS

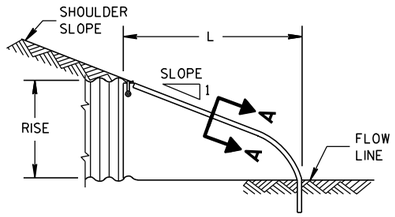


PLAN VIEW



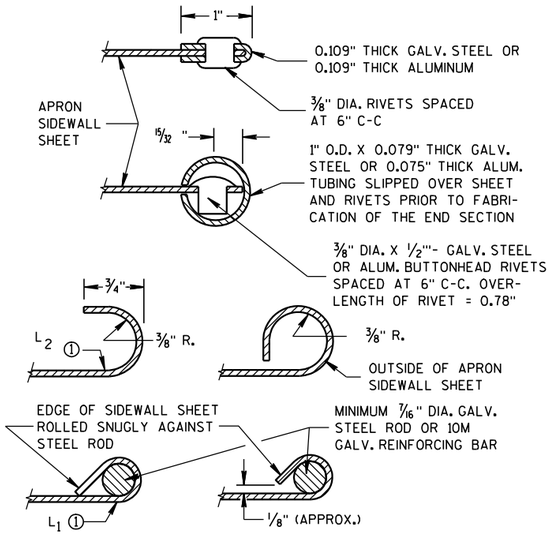
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

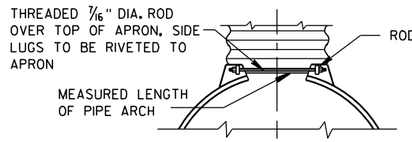
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

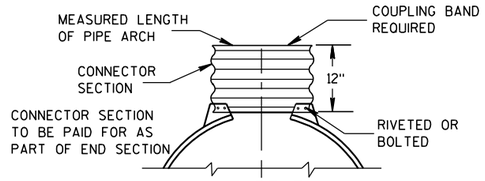
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



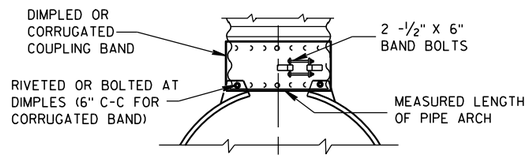
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

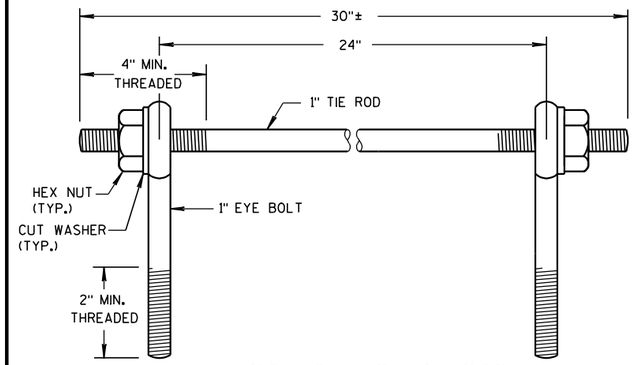
FHWA

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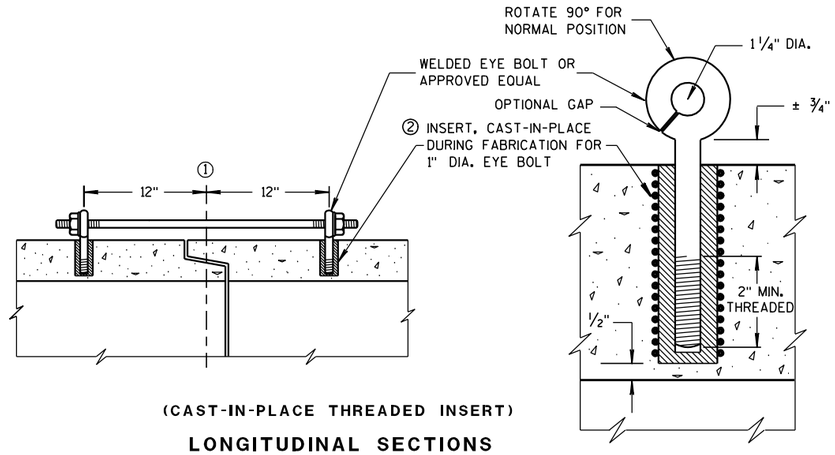
S.D.D. 8 F 2-1

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S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

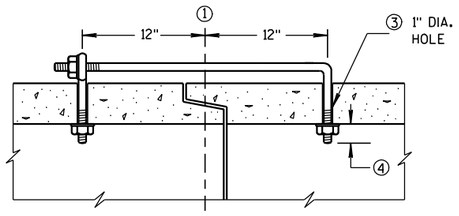
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

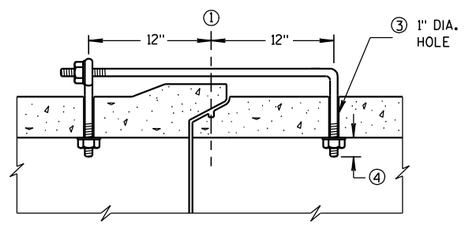
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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.



(TONGUE & GROOVE PIPE)

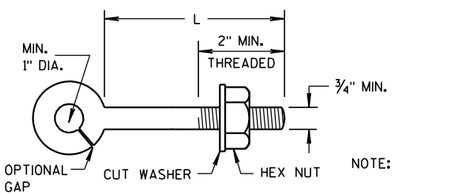


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

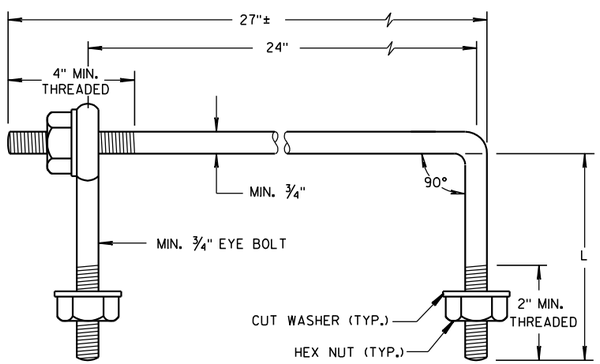
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

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

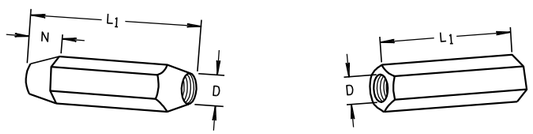
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

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 1/16

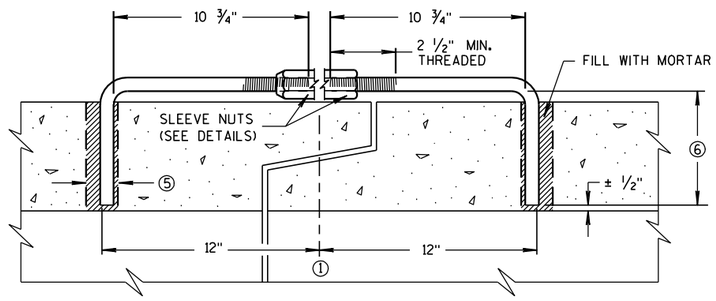
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

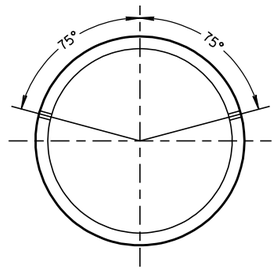
SLEEVE NUTS



LONGITUDINAL SECTION

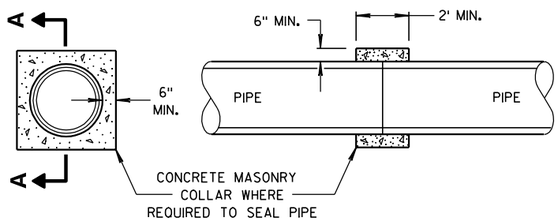
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

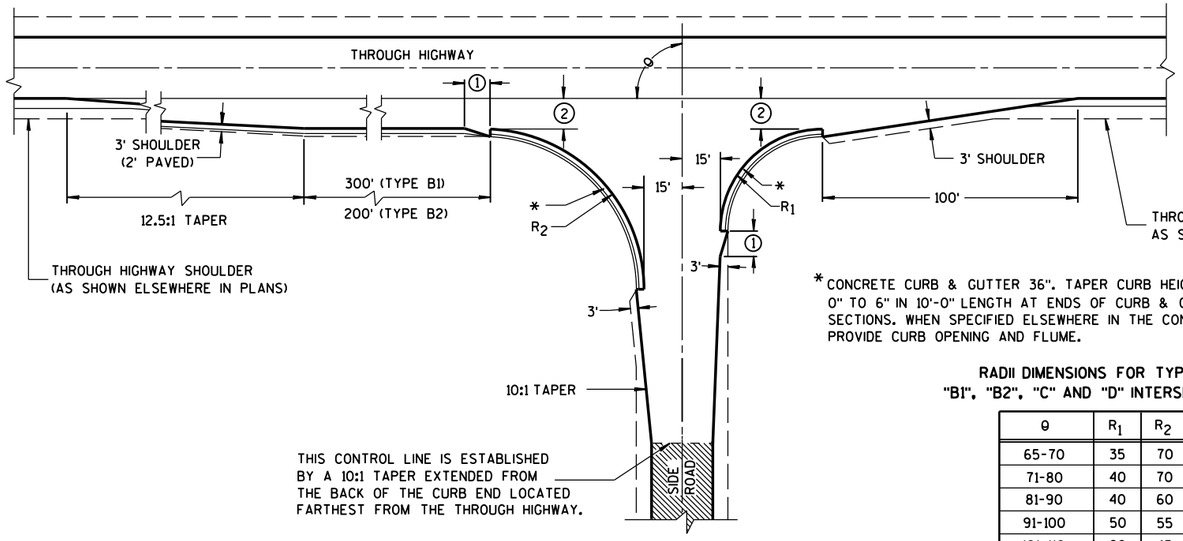
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 8 F 4-7

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S.D.D. 8 F 4-7

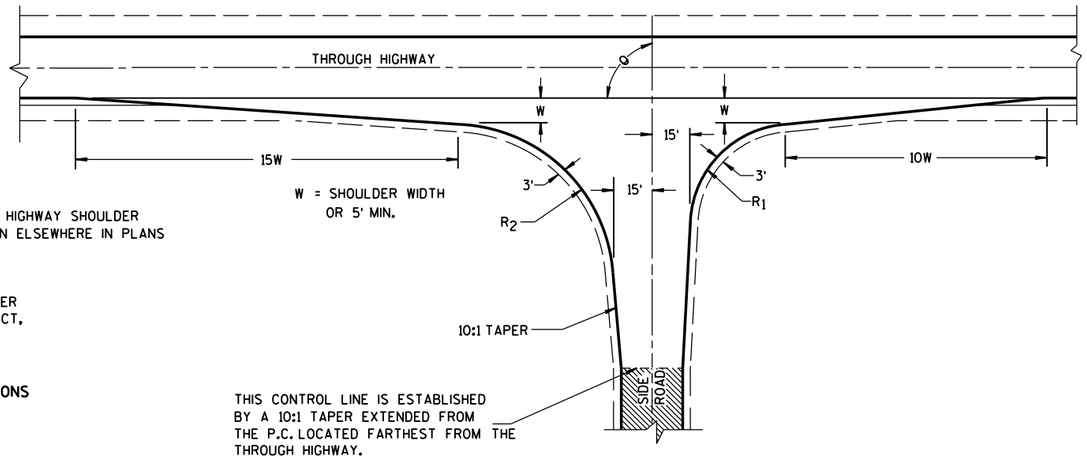


TYPE "B1" AND "B2"

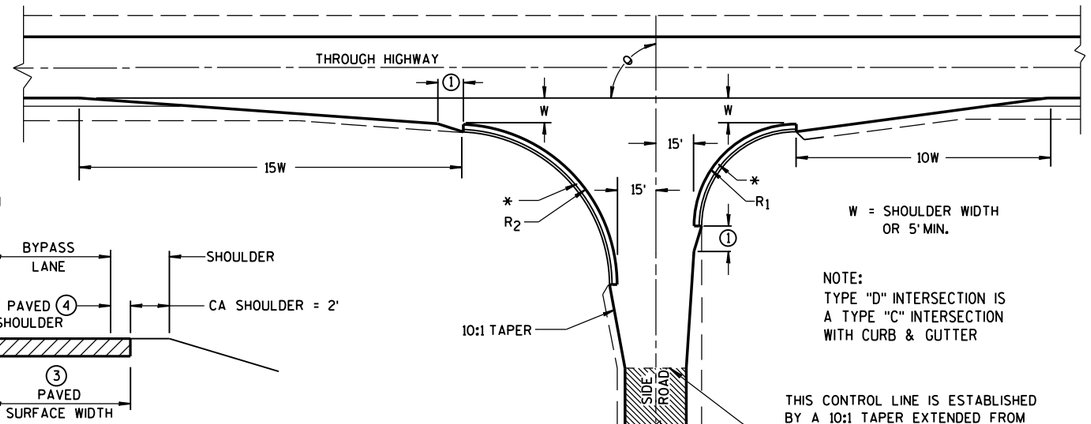
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

(1) 10-FT TYPICAL.

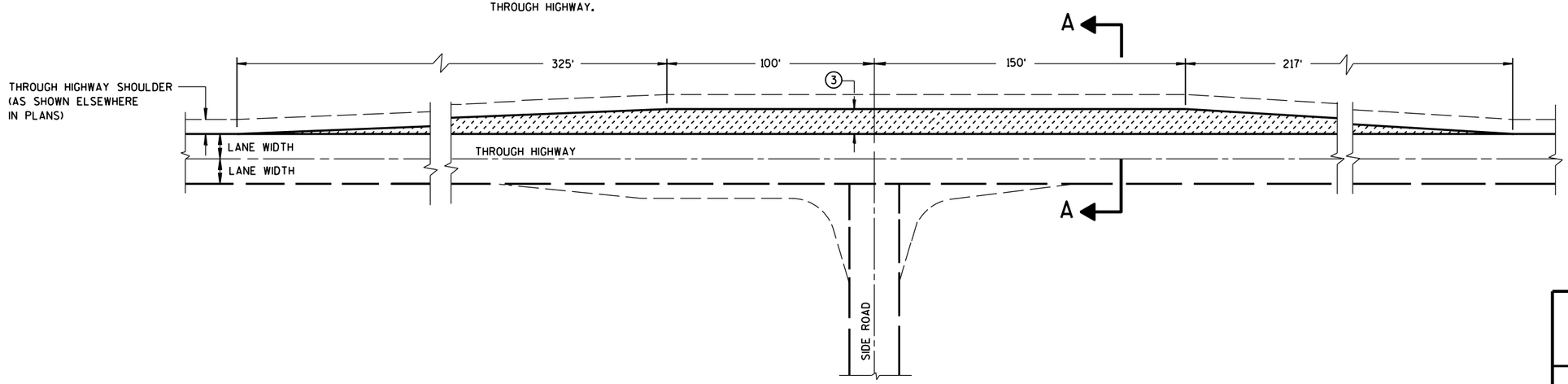
(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.

SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



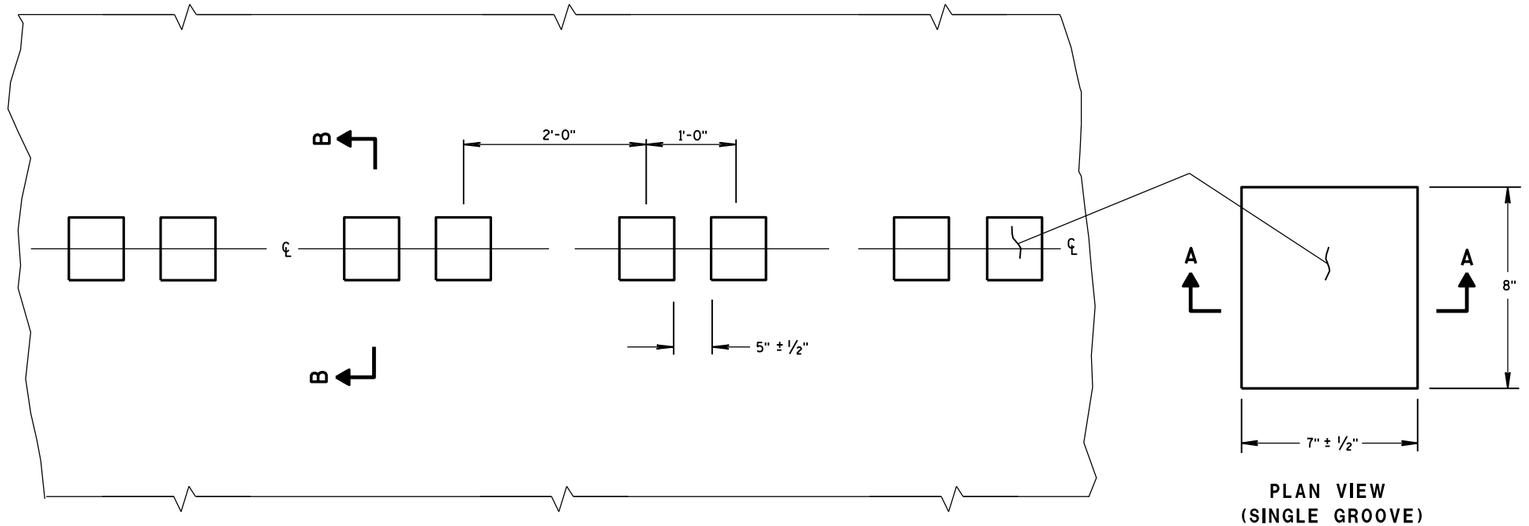
TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

S.D.D. 9 A 1-13a



PLAN VIEW
CENTER LINE WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

GENERAL NOTES

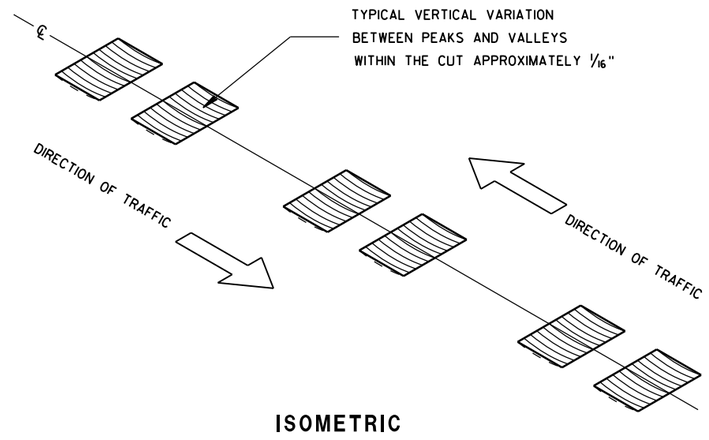
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

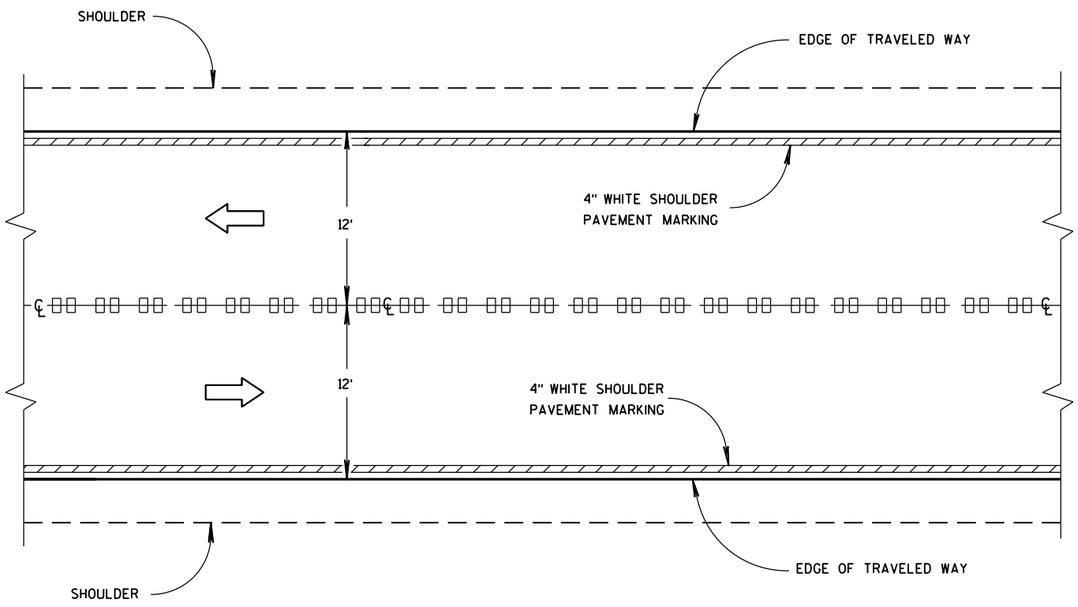
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

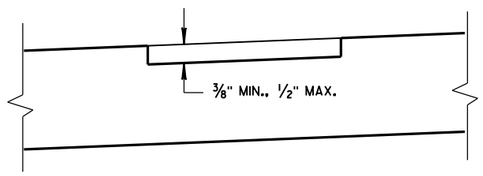
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



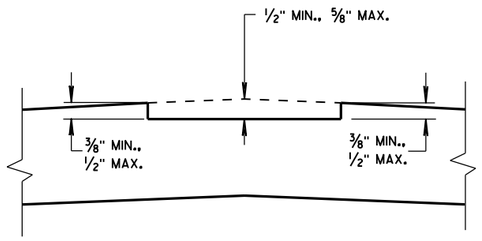
ISOMETRIC



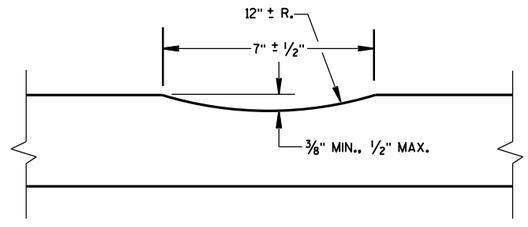
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY



SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

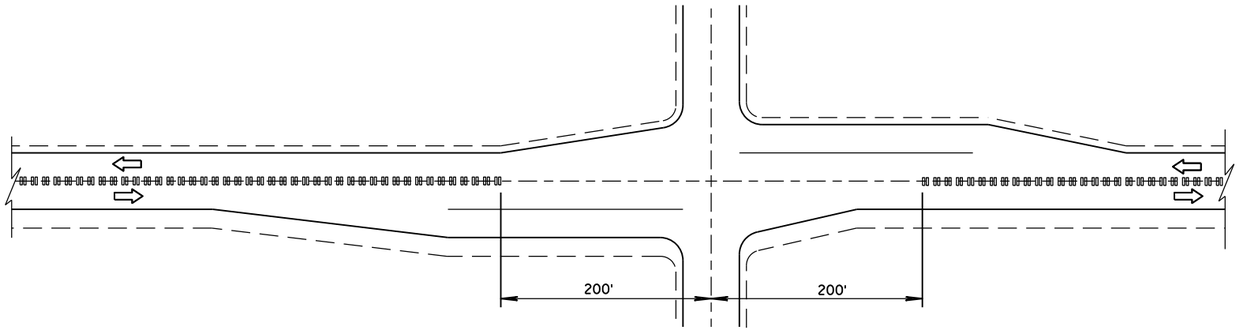
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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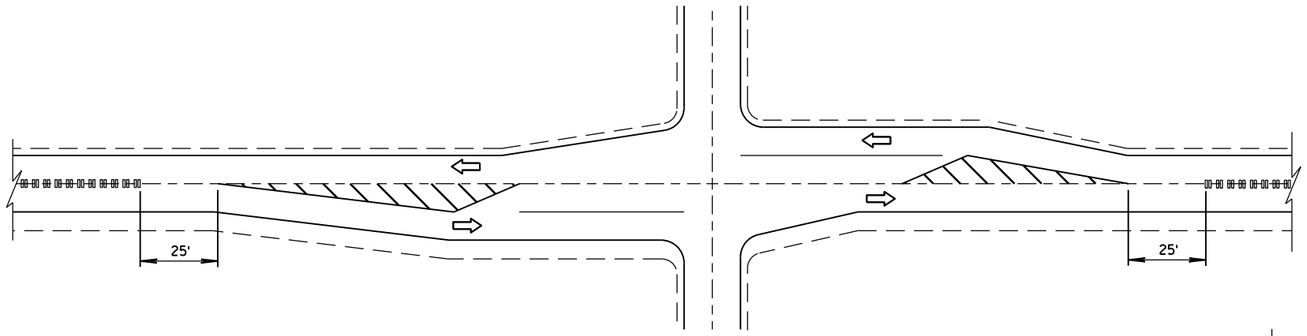
S.D.D. 13 A 11-2a

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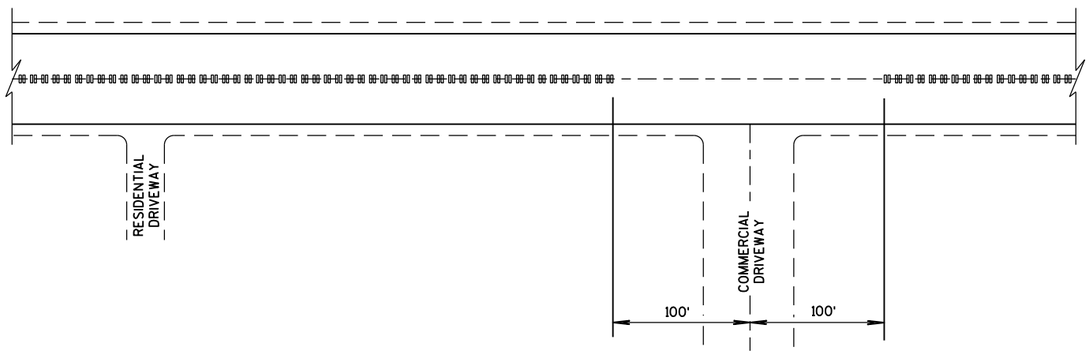
S.D.D. 13 A 11-2a



CENTER LINE GROOVES AT INTERSECTIONS

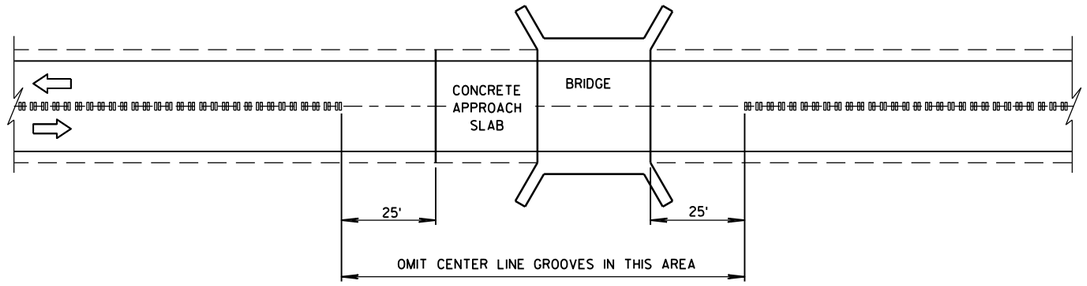


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

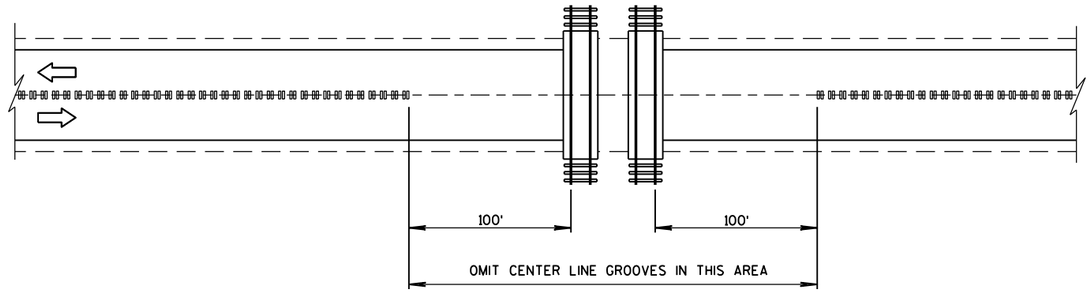


CENTER LINE GROOVES AT DRIVEWAYS (1)

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

6

S.D.D. 13 A 11-2b

2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/15/2013
DATE

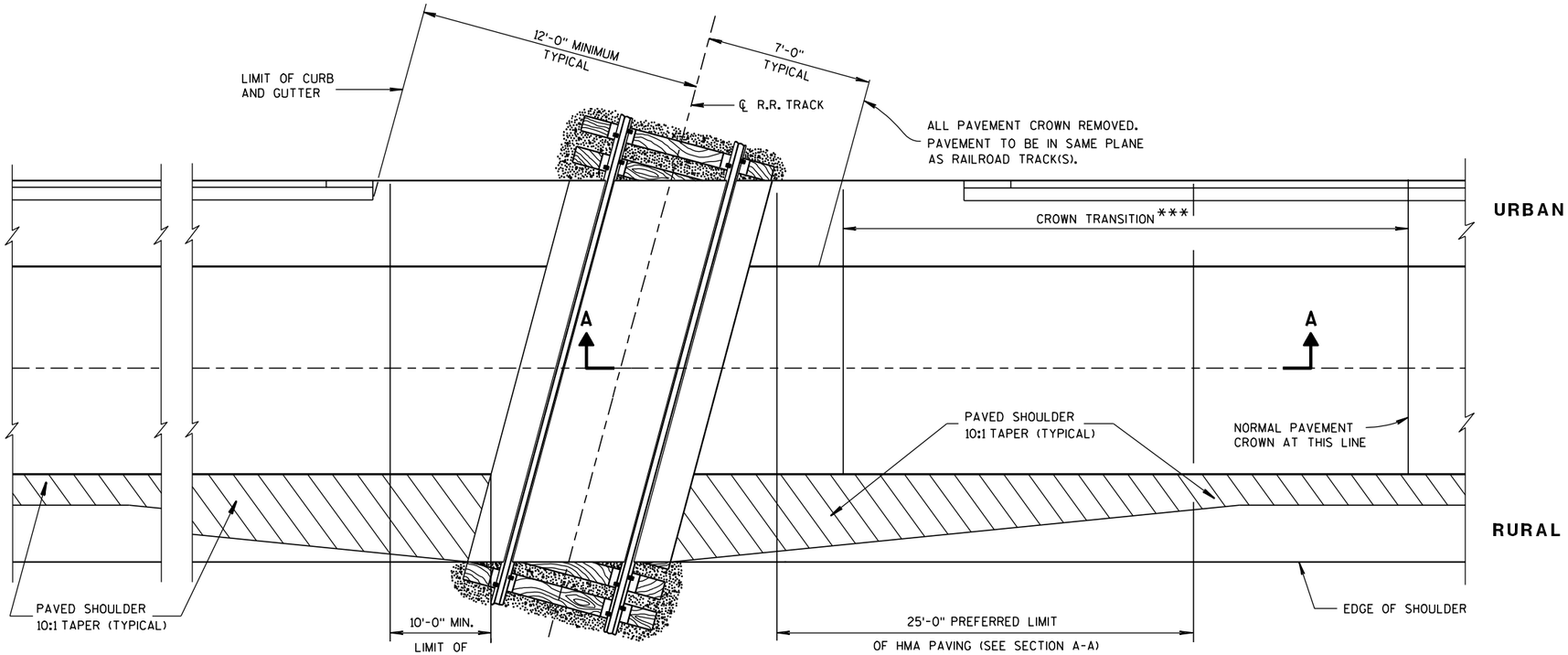
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

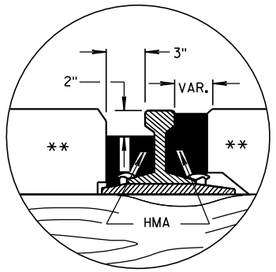
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FHWA

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S.D.D. 13 A 11-2b





DETAIL B

HMA FLANGEWAY AND FIELD FILLERS

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.

TIMBER, CONCRETE OR RUBBER CROSSING SURFACE MATERIAL, RAILS, TIES, BALLAST, GEOTEXTILE FABRIC AND CROSSING DRAINAGE SYSTEM BY OTHERS UNLESS OTHERWISE PROVIDED.

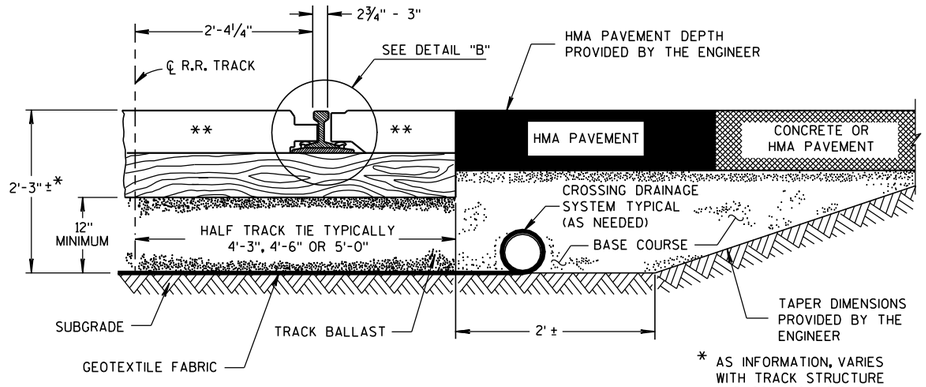
HMA PAVEMENT APPROACHES AND HMA PAVEMET CROSSING SURFACES TO BE PLACED BY CONTRACTOR UNLESS OTHERWISE PROVIDED.

HMA FLANGEWAY AND FIELD FILLERS TO BE PLACED AND THOROUGHLY HAND COMPACTED BY THE CONTRACTOR WHEN NOT PROVIDED BY OTHERS. SEE DETAIL B. HMA FILLERS NOT REQUIRED WHEN RUBBER FILLERS ARE PROVIDED.

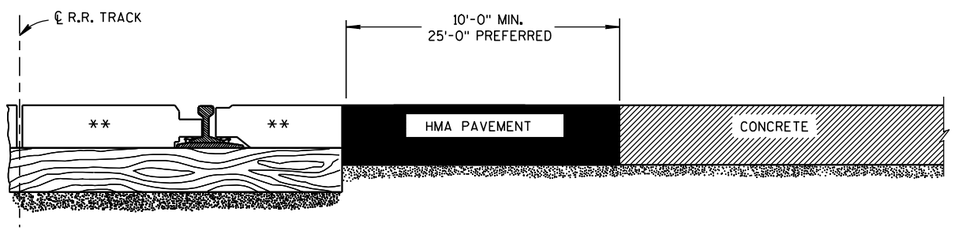
HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

** CROSSING SURFACE MAY BE TIMBER, RUBBER, CONCRETE, HMA PAVEMENT OR A COMBINATION OF SUCH MATERIALS.

*** CROWN TRANSITION LENGTH SHOWN ELSEWHERE IN THE PLAN.



TYPICAL HALF SECTION



SECTION A-A

CONCRETE PAVEMENT APPROACH



SECTION A-A

HMA PAVEMENT APPROACH

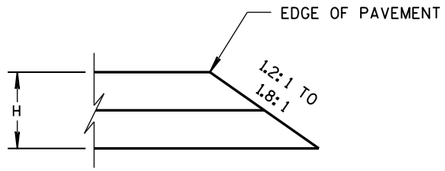
EXAMPLES OF PAVEMENT APPROACHES

PAVEMENT DETAILS FOR RAILROAD APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

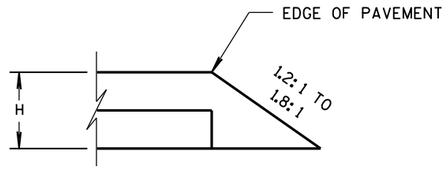
APPROVED
8-28-09 DATE
/S/ Ronald E. Adams
CHIEF, RAILROADS & HAI[illegible]CTION
FHWA

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S.D.D. 13 B 1-10



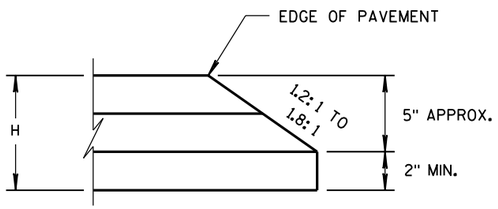
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



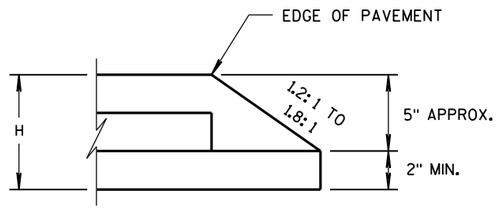
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

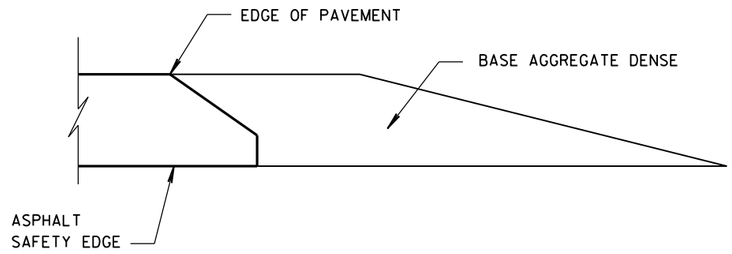
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

GENERAL NOTES

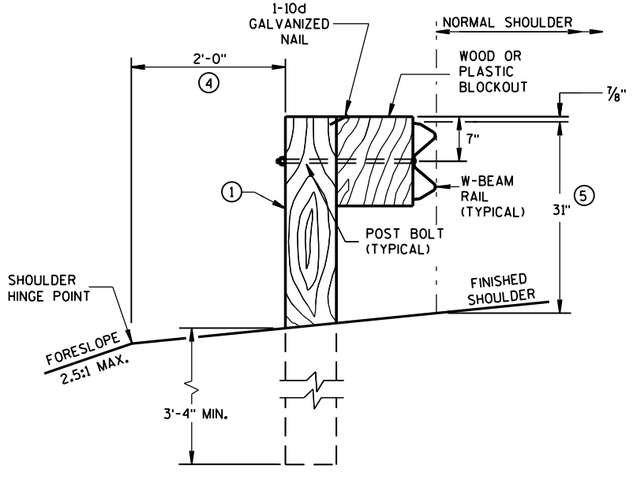
1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

2. USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

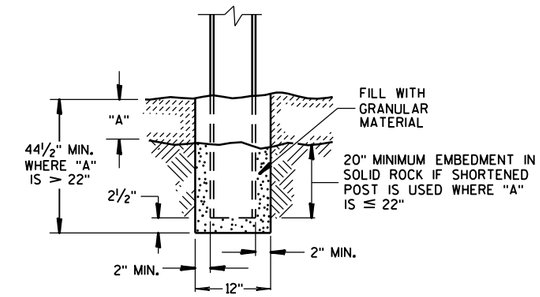
4. WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".



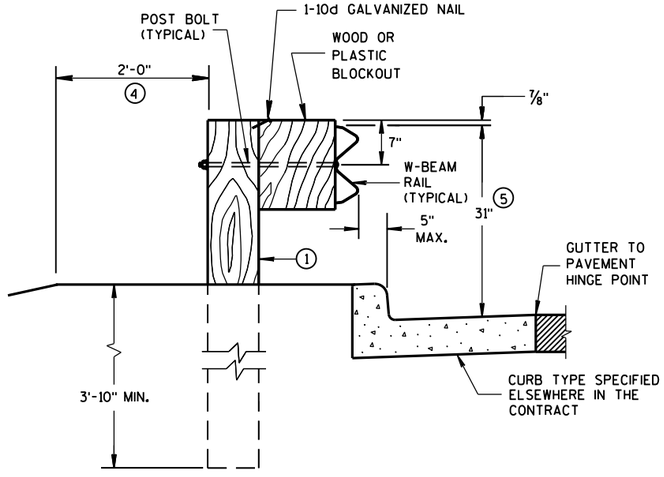
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



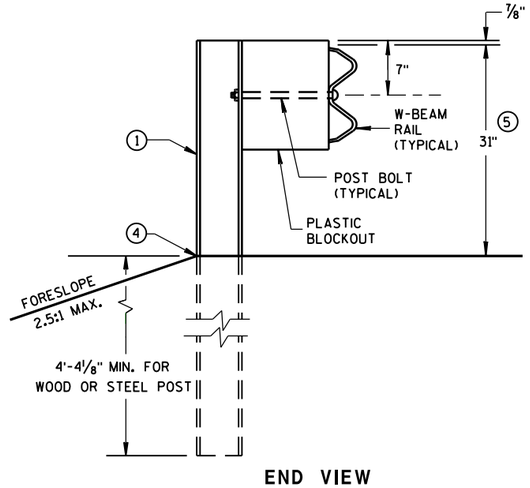
END VIEW

SETTING STEEL OR WOOD POST IN ROCK ③



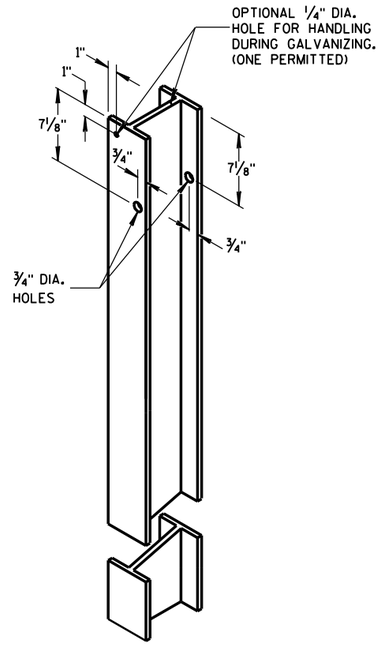
END VIEW

LOCATED ALONG A CURBED ROADWAY

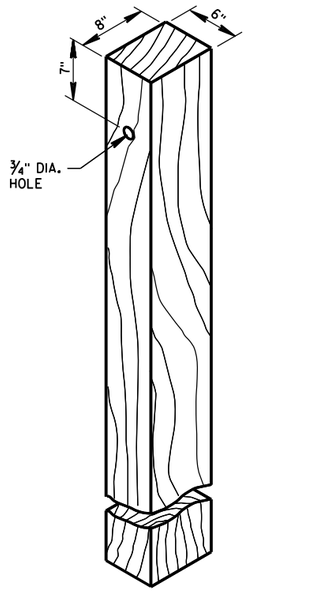


END VIEW

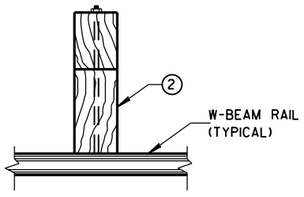
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



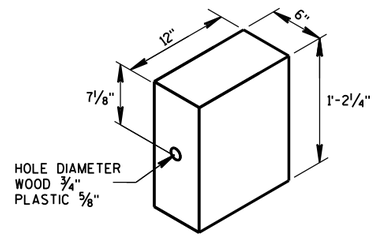
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



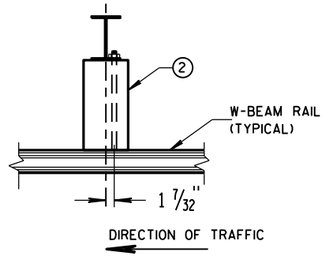
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②

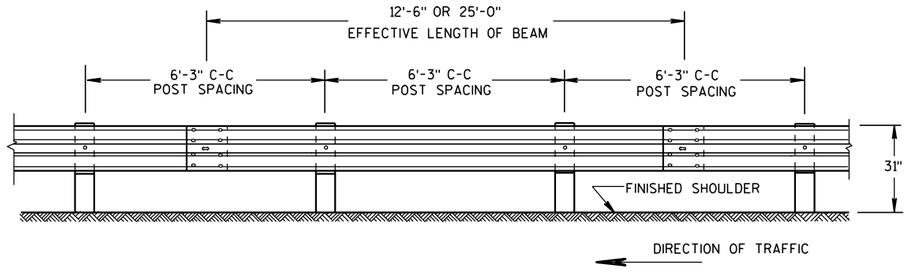


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

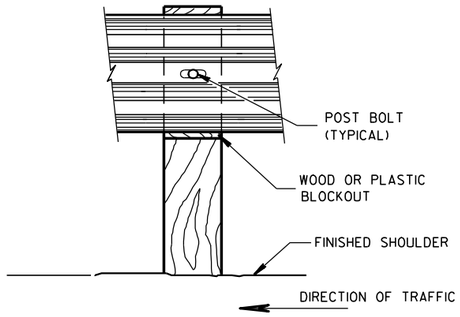
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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S.D.D. 14 B 42-2a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



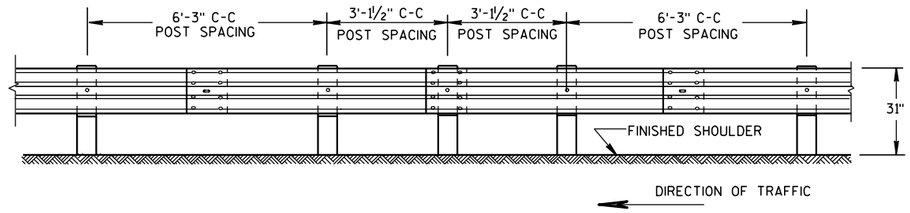
FRONT VIEW AT WOOD POST

GENERAL NOTES

1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

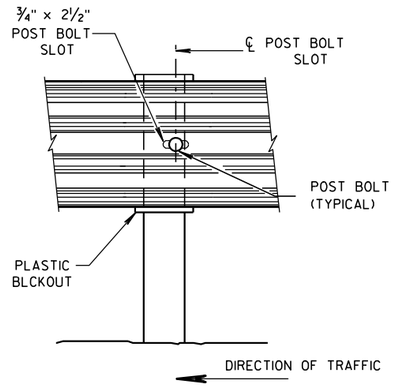
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

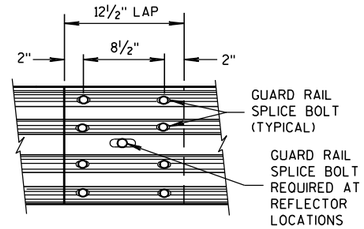


FRONT VIEW

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

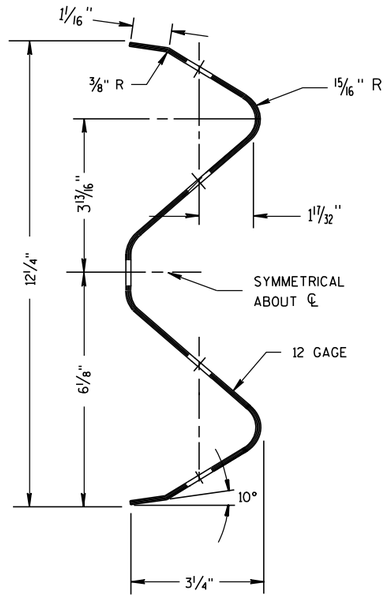


FRONT VIEW AT STEEL POST

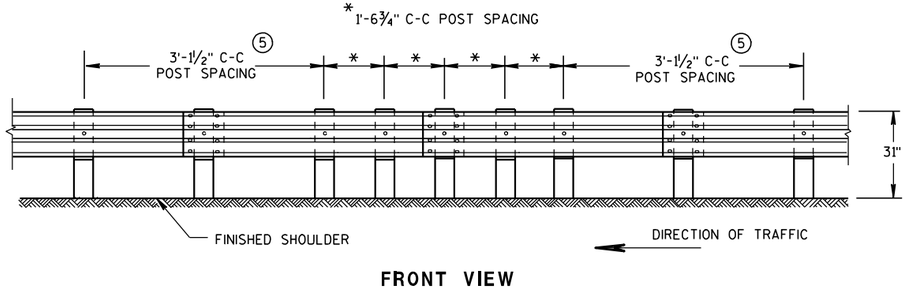


FRONT VIEW

MID-SPAN BEAM SPLICE

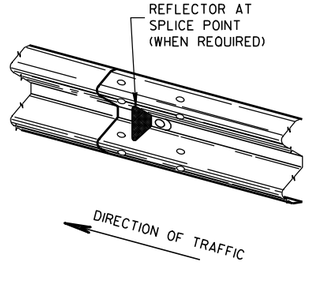


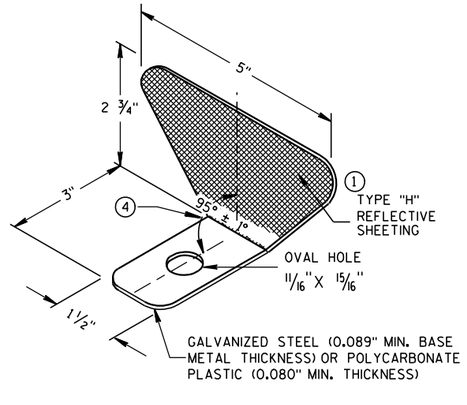
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ①

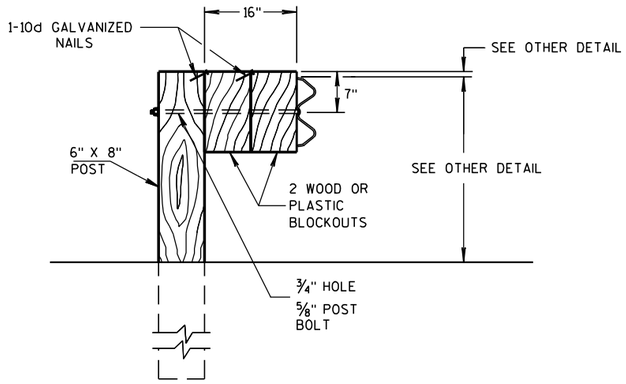
REFLECTOR SPACING ②

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 ③	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ④	3
	> 200'	100' C-C	2	

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

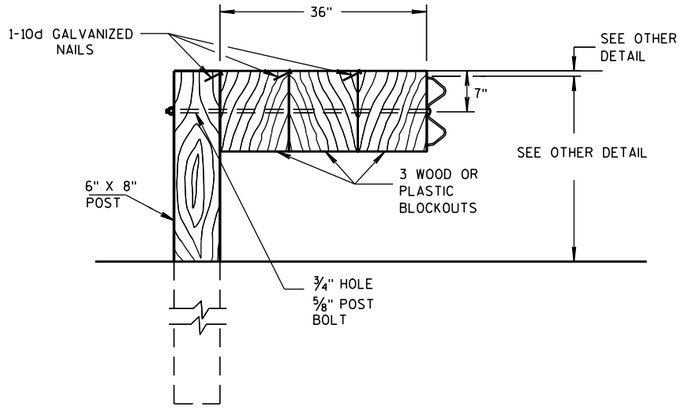
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 42-2b



DETAIL FOR 16" BLOCKOUT DEPTH

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

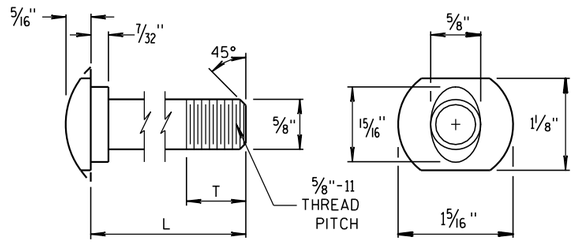


DETAIL FOR 36" BLOCKOUT DEPTH

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

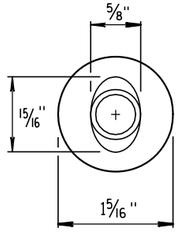
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

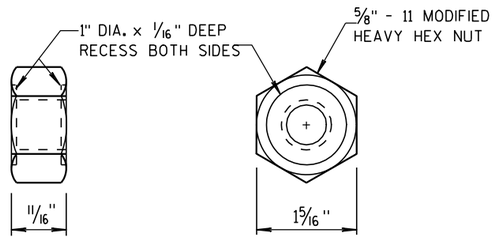


POST BOLT TABLE

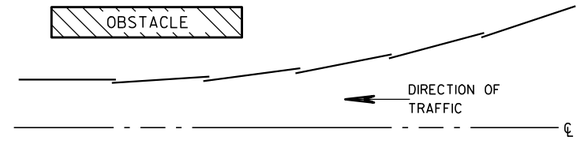
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

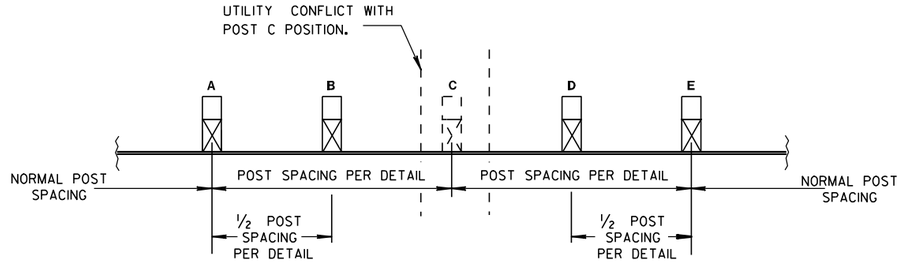


POST BOLT AND RECESS NUT

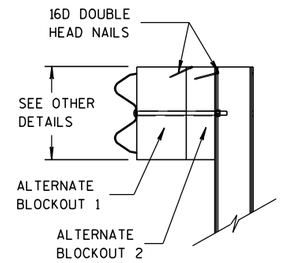


PLAN VIEW

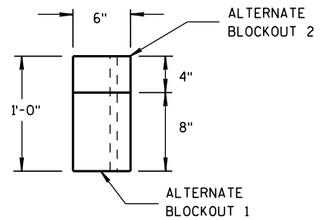
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/15/2011
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

FHWA

ENT

GENERAL NOTES

(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) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

SEE SDD 14B42 FOR MORE INFORMATION.

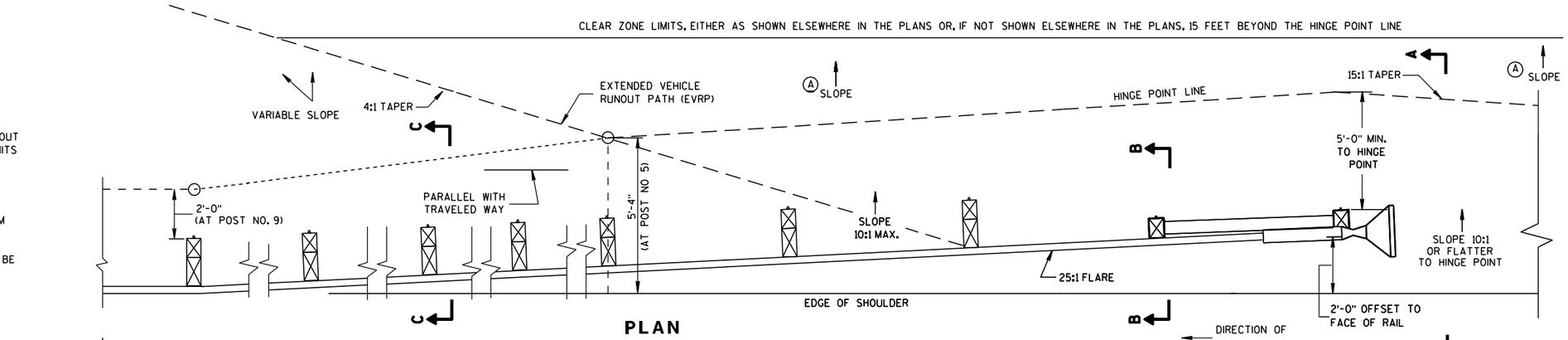
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

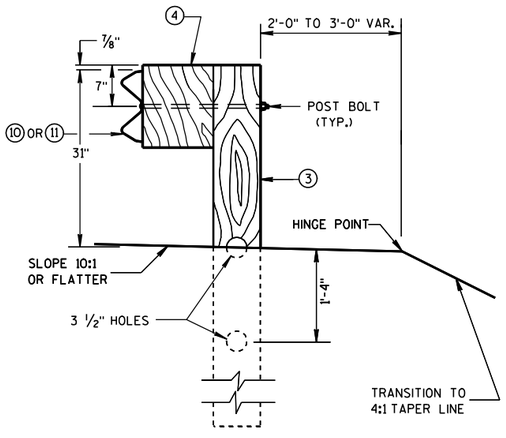
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

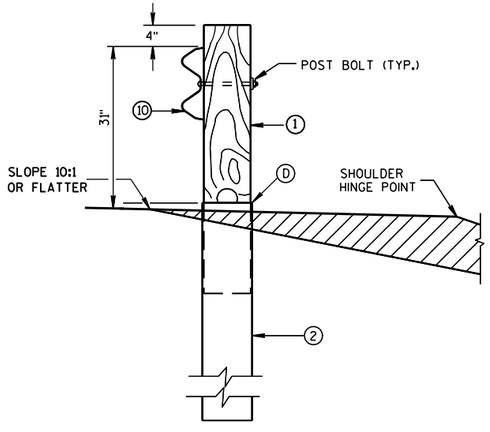
PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE (± ¾")

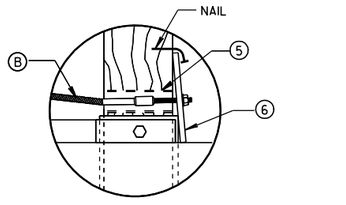




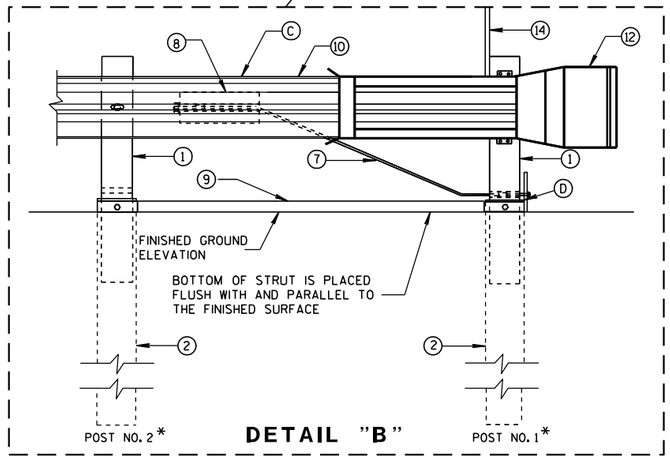
SECTION C-C
TYPICAL AT POST NOS. 3-9



SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

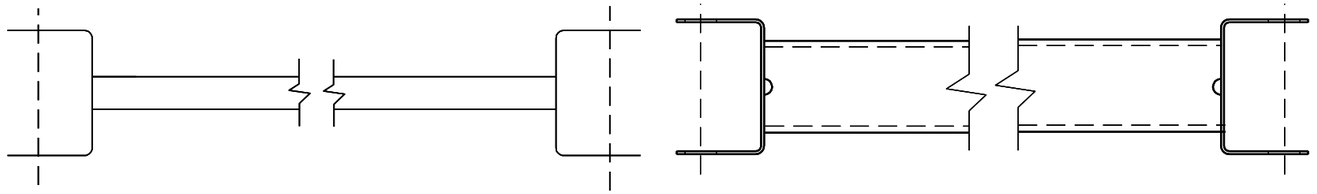
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 44-1a

6

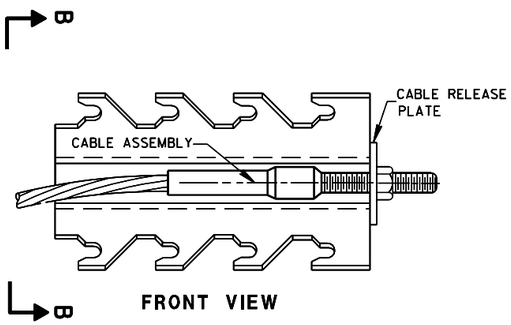
S.D.D. 14 B 44-1a



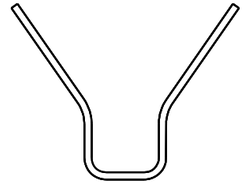
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

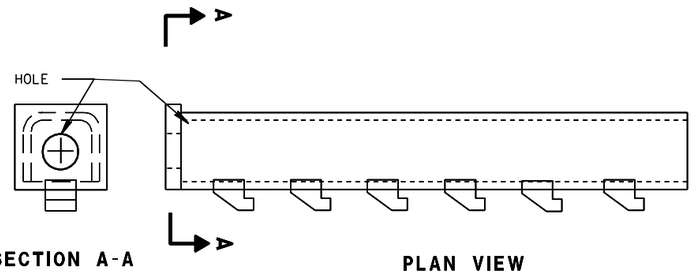
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE H (ONLY THE SHEETING IS SUPPLIED BY THE MANUFACTURER)
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



FRONT VIEW



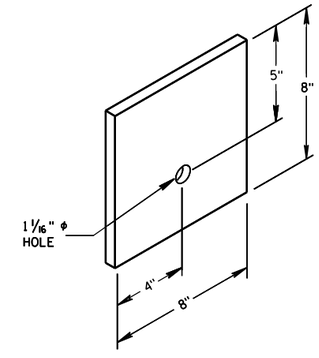
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



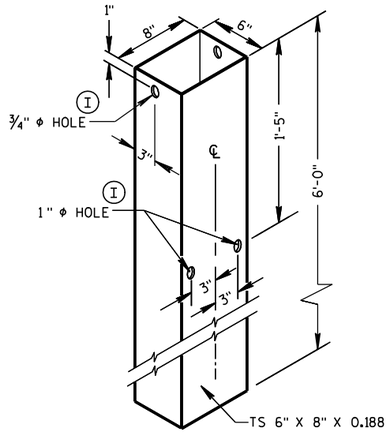
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

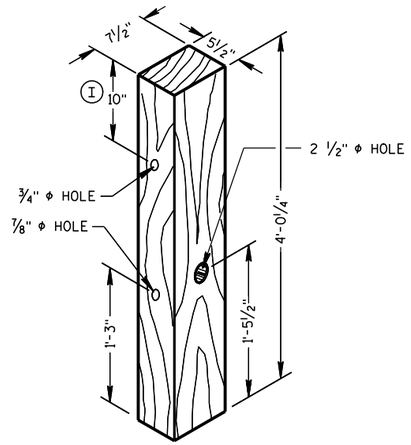
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 44-1b

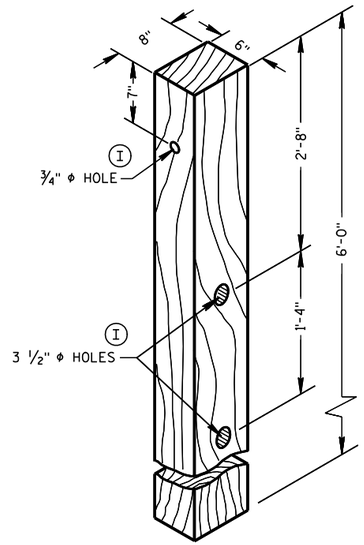


FOUNDATION TUBE (2)



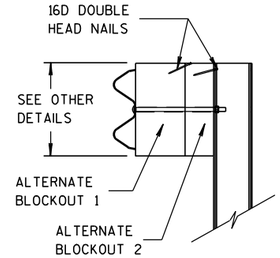
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

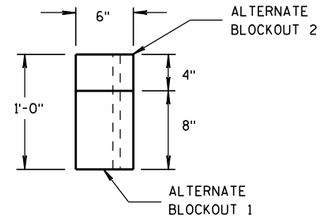


POSTS NUMBER 3-9

WOOD CRT POST (3)

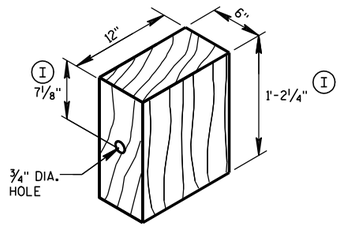


SIDE VIEW



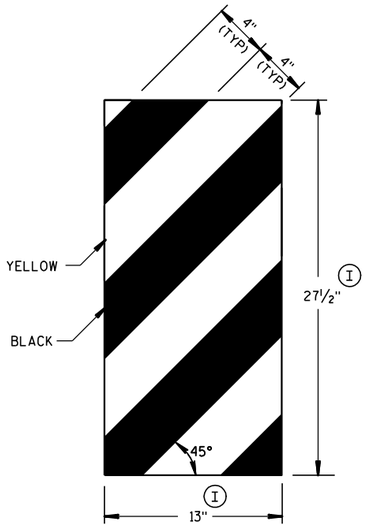
TOP VIEW

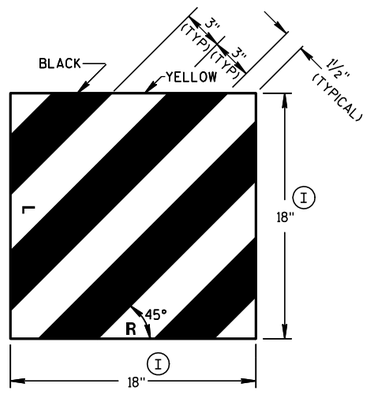
ALTERNATE WOOD BLOCKOUT DETAIL



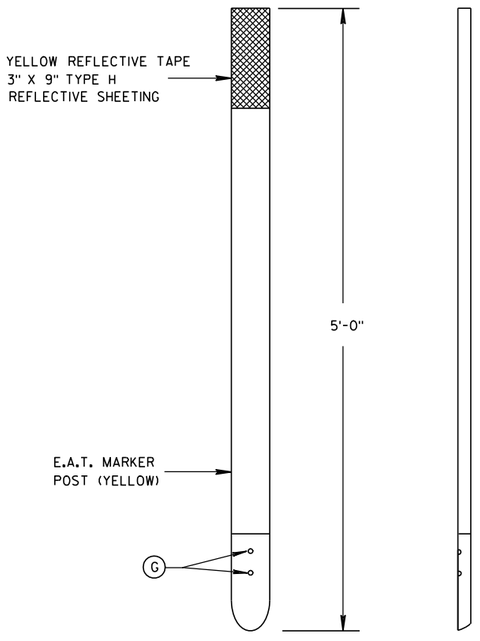
WOOD BLOCKOUT (4)

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





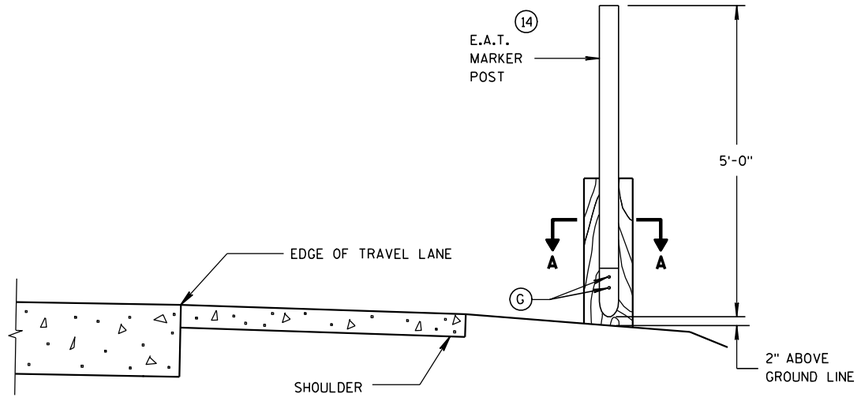
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

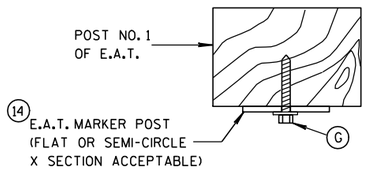
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

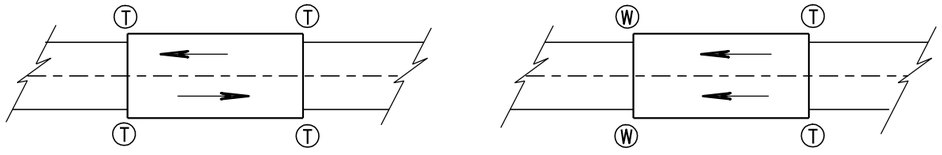
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2011
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS 94
ENGINEER
FHWA

6

S.D.D. 14 B 44-1c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

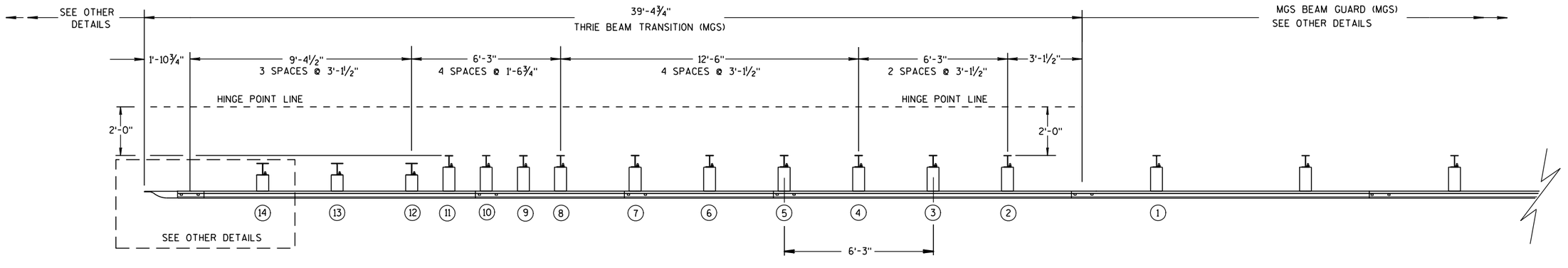
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

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

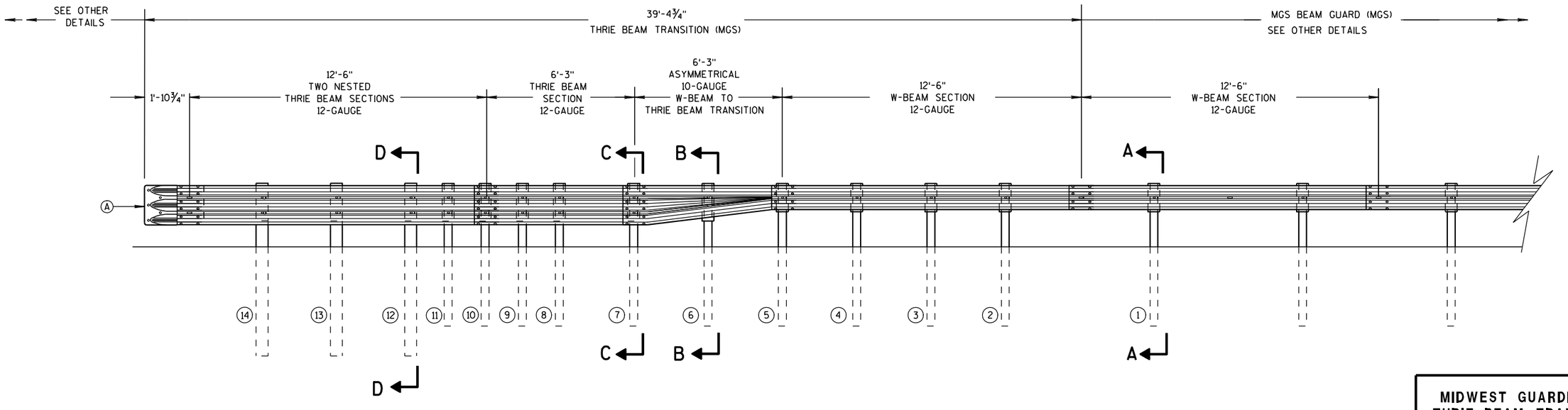
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

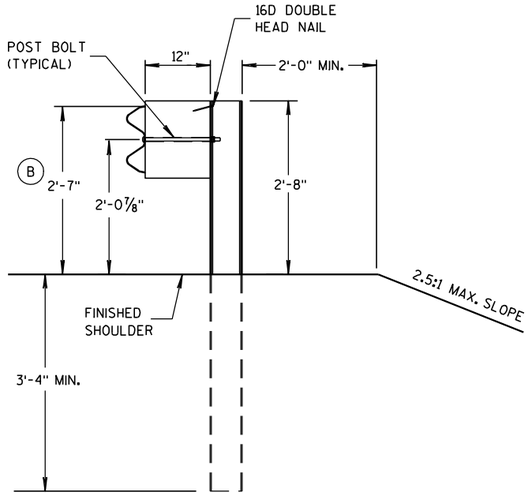
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-3a

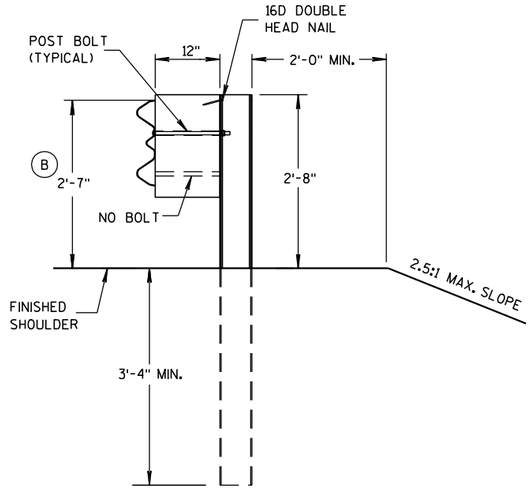
GENERAL NOTES

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



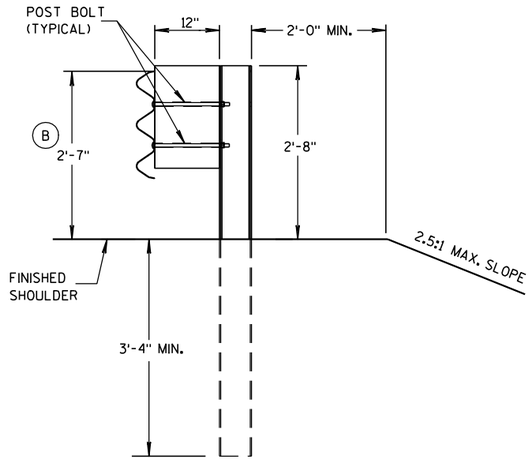
SECTION A-A

POSTS 1-5



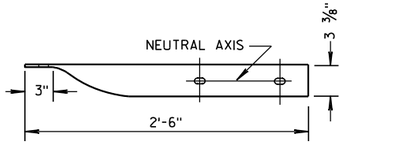
SECTION B-B

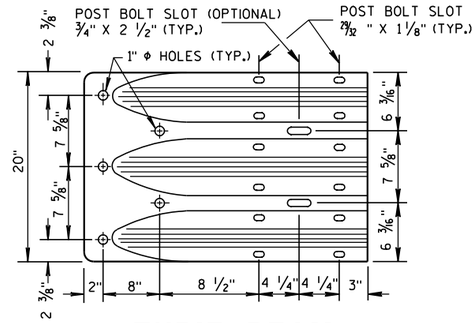
POST 6



SECTION C-C

POSTS 7-11





THRIE BEAM TERMINAL CONNECTOR

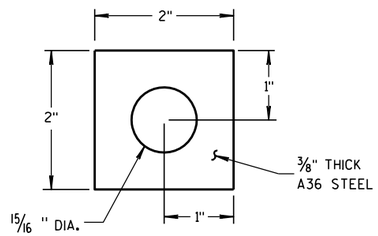
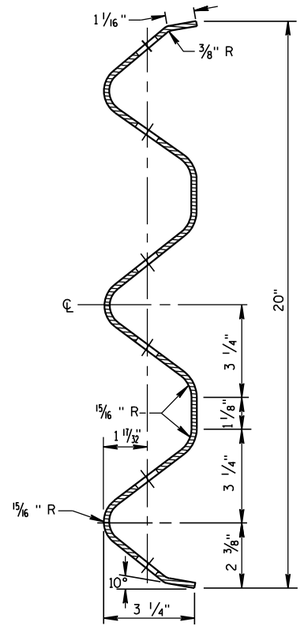
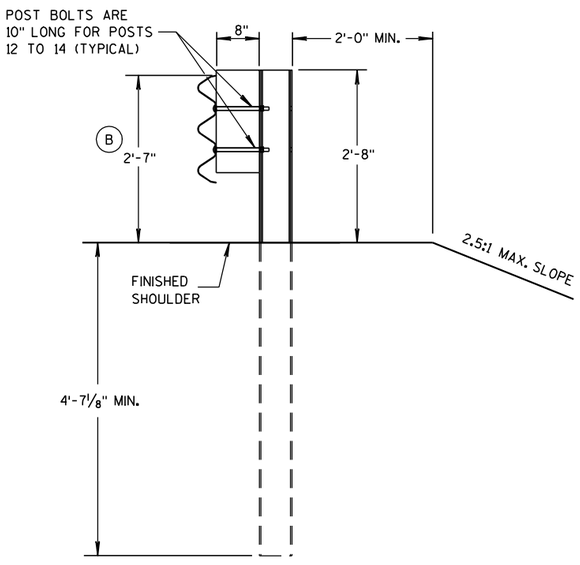


PLATE WASHER DETAIL

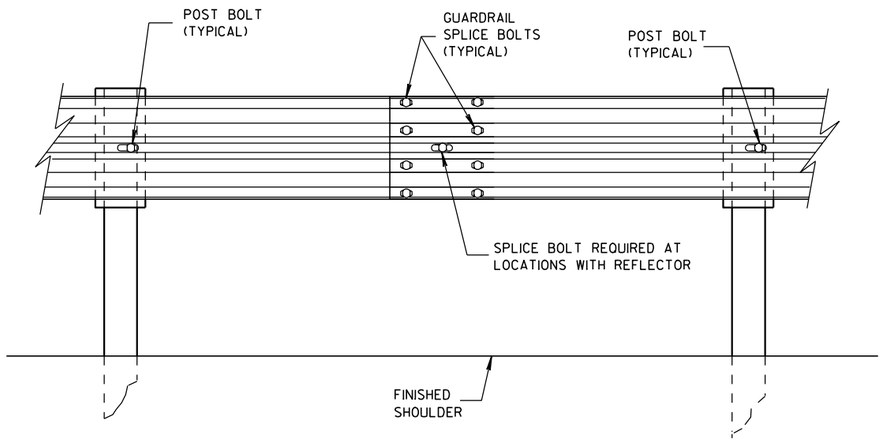


SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION D-D

POSTS 12-14



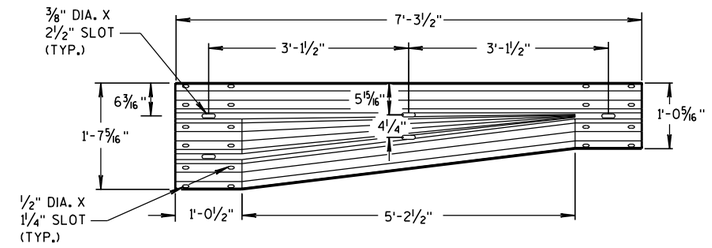
SPLICE DETAIL

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

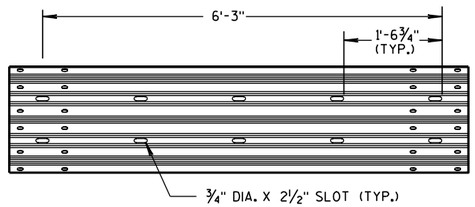
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

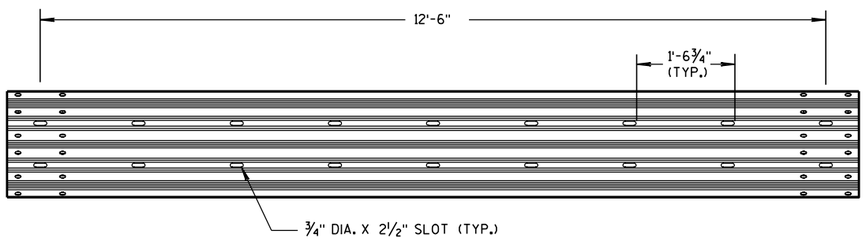
S.D.D. 14 B 45-3b



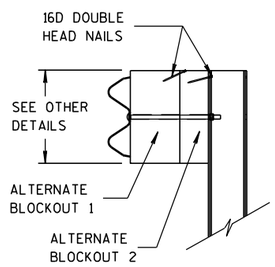
W-BEAM TO THRIE BEAM TRANSITION SECTION



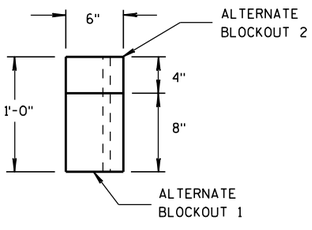
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

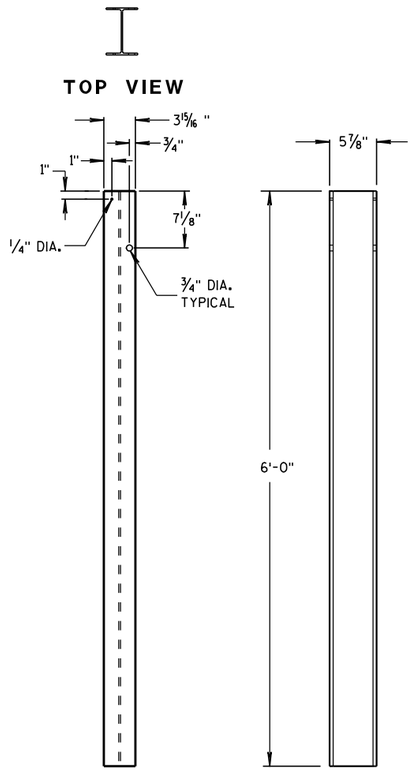


SIDE VIEW

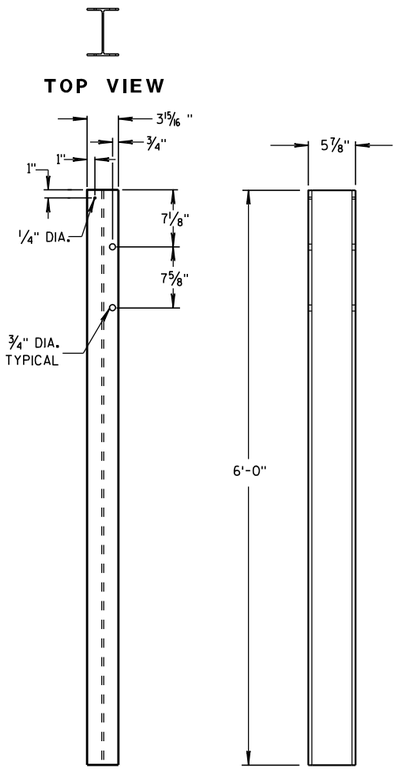


TOP VIEW

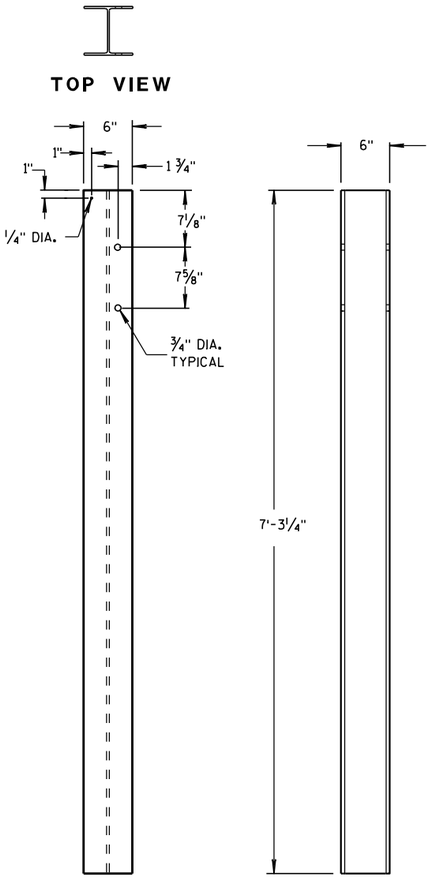
ALTERNATE WOOD BLOCKOUT DETAIL



STEEL POSTS 1-5

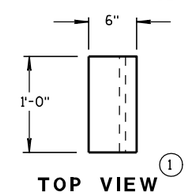


STEEL POSTS 6-11

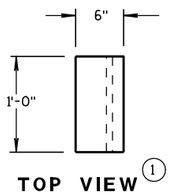


STEEL POSTS 12-14

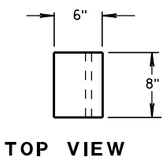
① WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



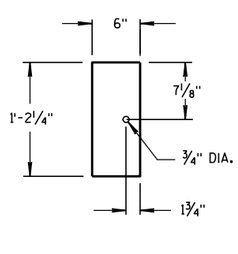
TOP VIEW ①



TOP VIEW ①

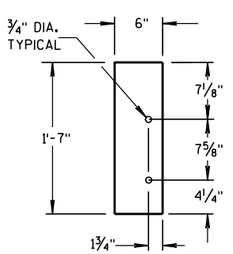


TOP VIEW



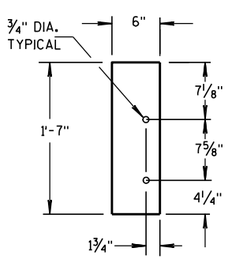
FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-11



FRONT VIEW

BLOCKOUT POSTS 12-14

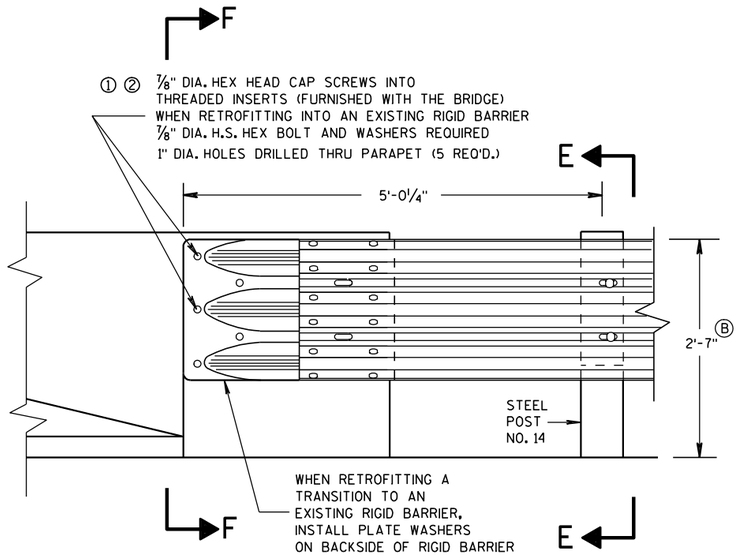
STEEL POST SIZES

POST NUMBER	SECTION TYPE	LENGTH
1	W6x9	72"
2	W6x9	72"
3	W6x9	72"
4	W6x9	72"
5	W6x9	72"
6	W6x9	72"
7	W6x9	72"
8	W6x9	72"
9	W6x9	72"
10	W6x9	72"
11	W6x9	72"
12	W6x15	87 1/8"
13	W6x15	87 1/8"
14	W6x15	87 1/8"

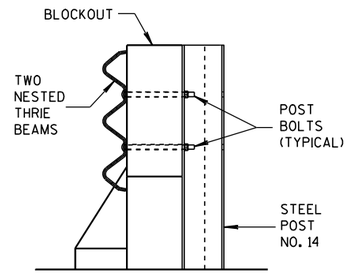
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-3c



FRONT VIEW



SECTION E-E

GENERAL NOTES

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

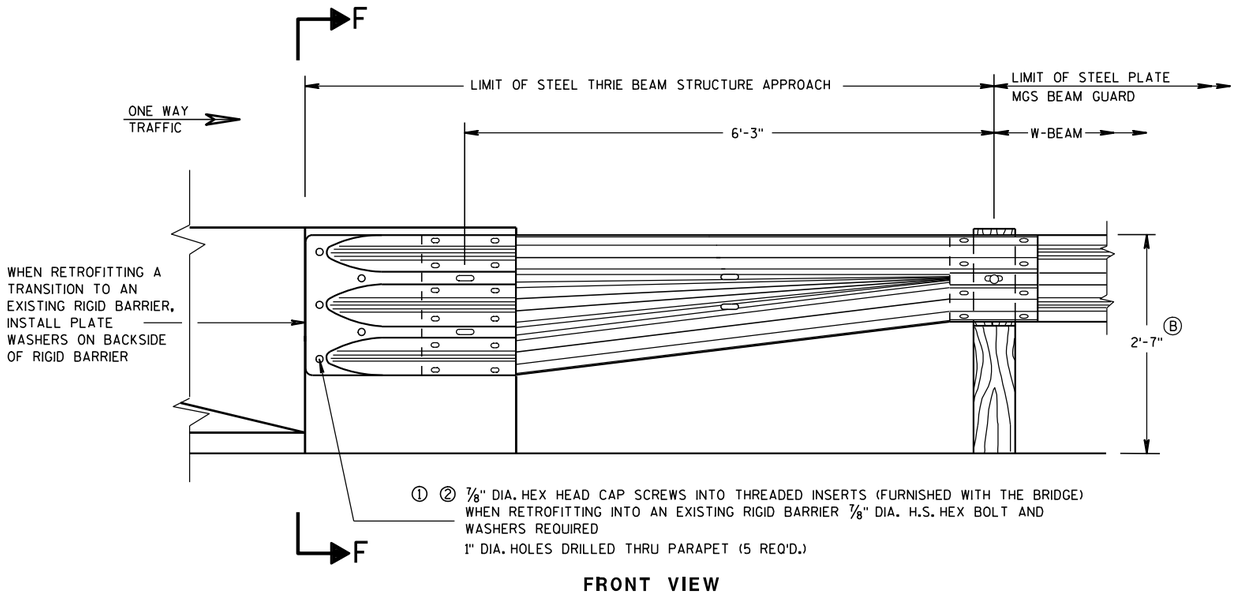
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

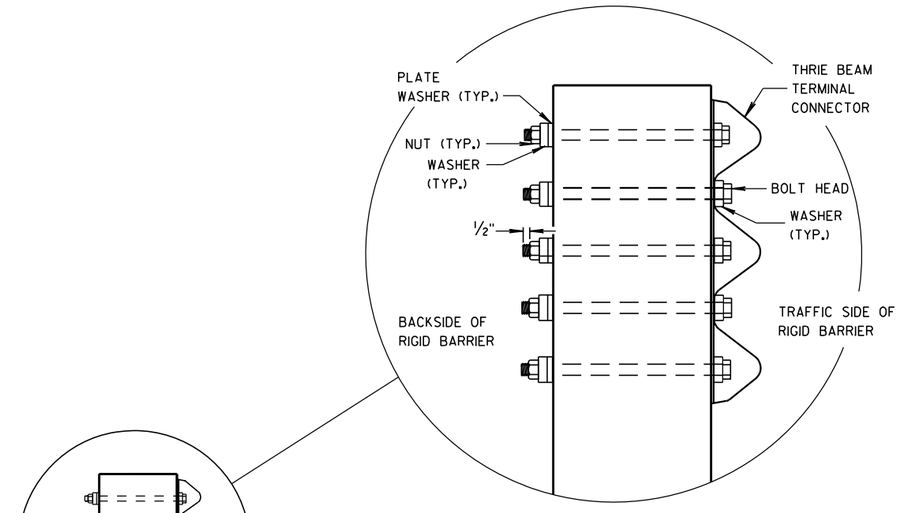
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

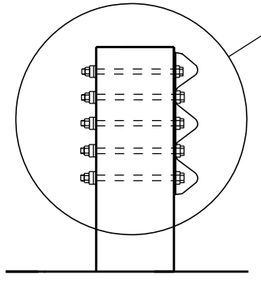
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



FRONT VIEW





SECTION F-F

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

/S/ Jerry H. [illegible] — ROADWAY STANDARDS ENGINEER

FHWA

6

S.D.D. 14 B 45-3d

6

S.D.D. 14 B 45-3d

GENERAL NOTES

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

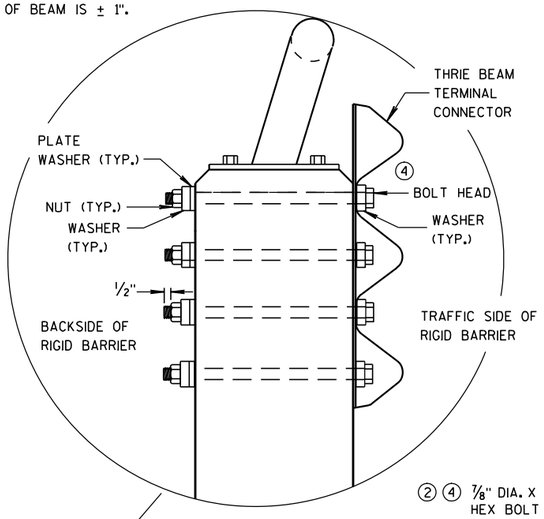
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

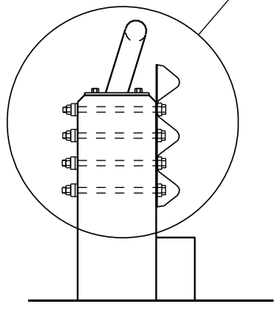
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

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". BLOCK IS INCIDENTAL TO THE CONTRACT.

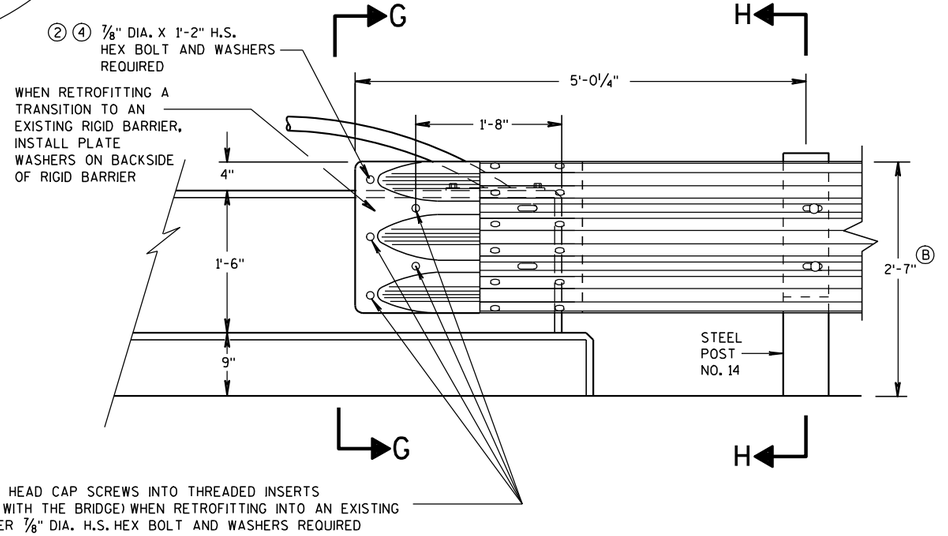
④ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

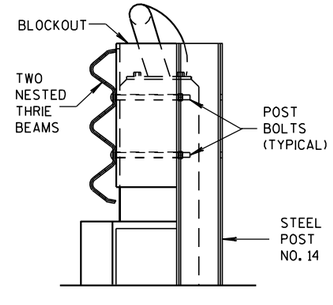




SECTION G-G

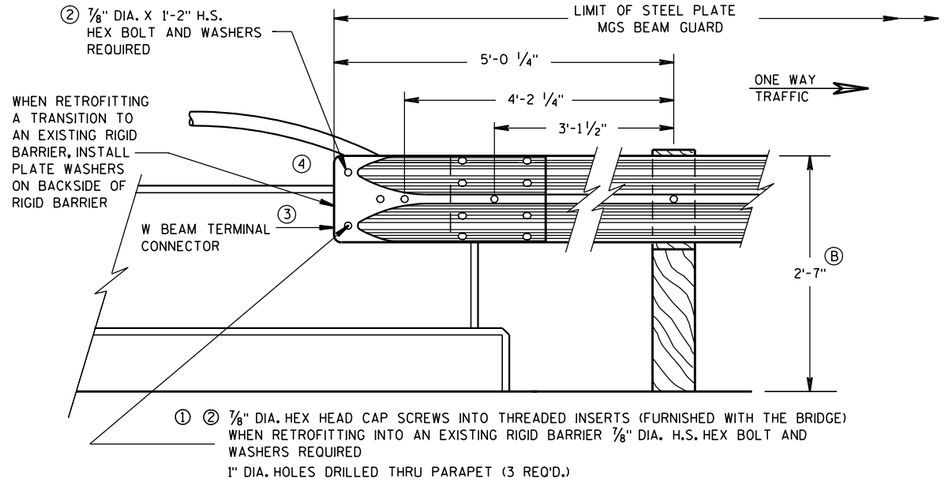


FRONT VIEW



SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8-31-2012 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

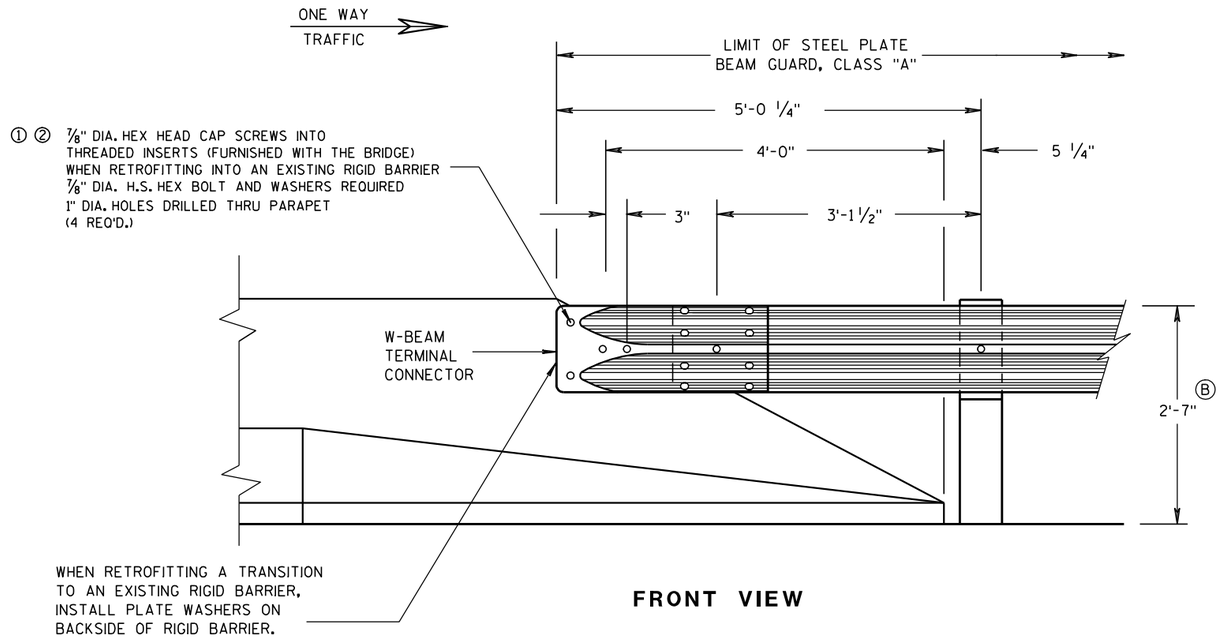
FHWA

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S.D.D. 14 B 45-3e

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S.D.D. 14 B 45-3e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

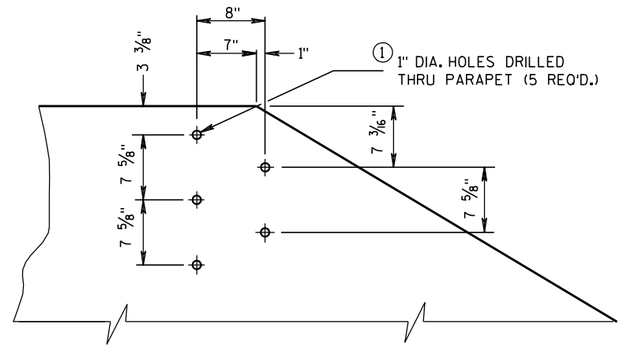
(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

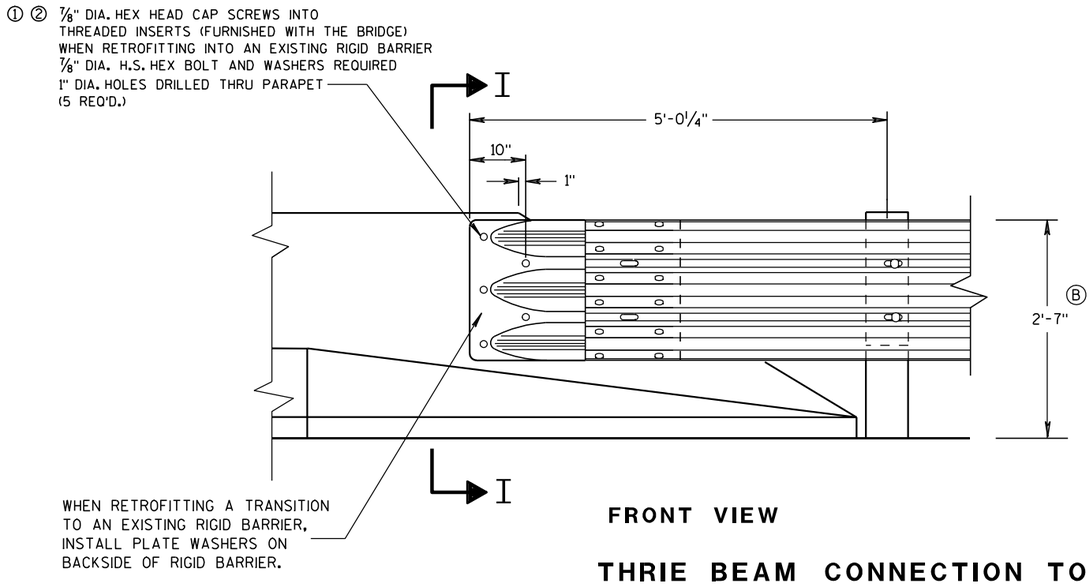
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

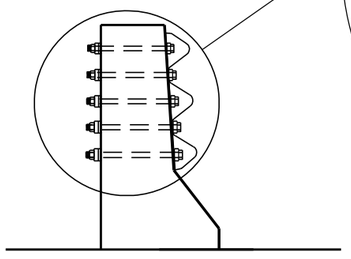
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



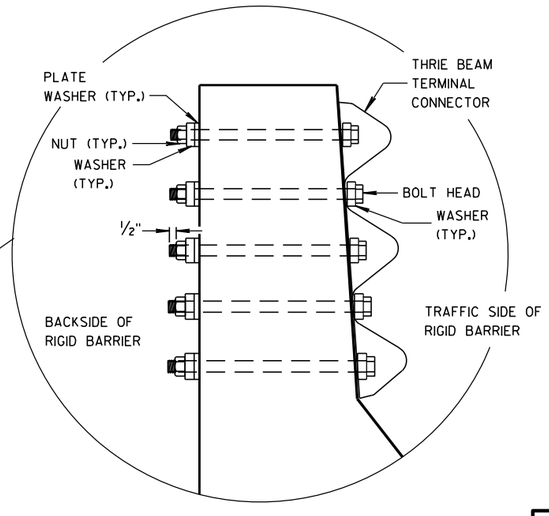
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

100

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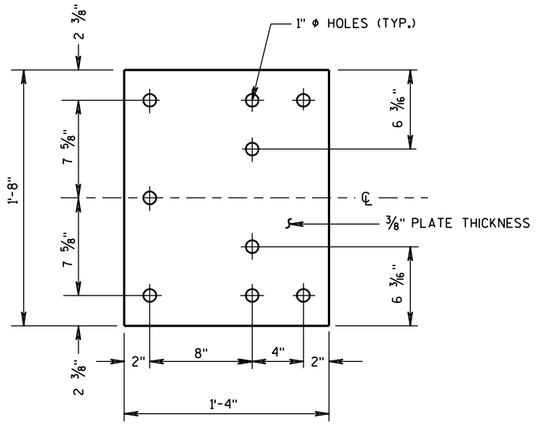
FHWA

6

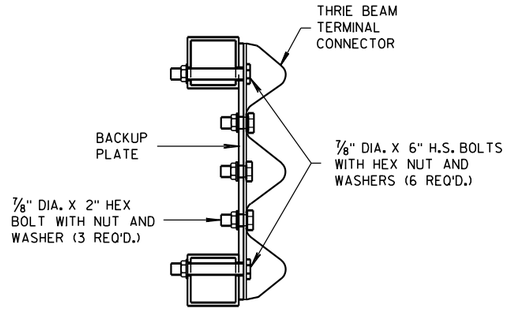
S.D.D. 14 B 45-3f

6

S.D.D. 14 B 45-3f



BACK-UP PLATE DETAIL

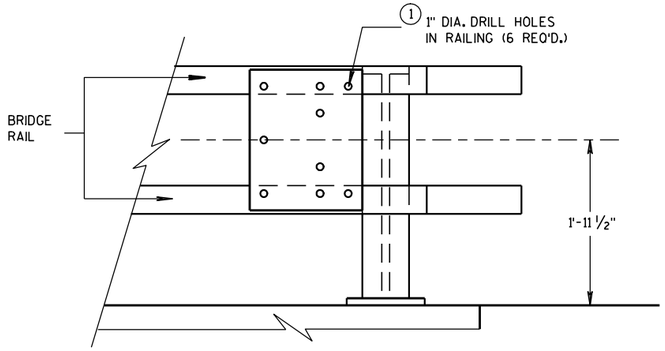


SECTION J-J

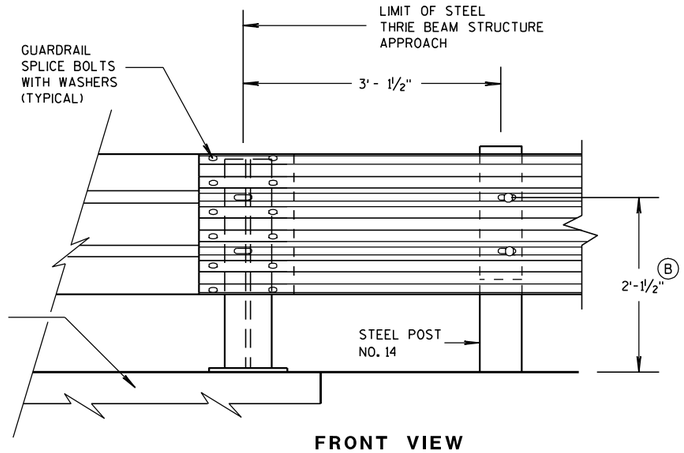
GENERAL NOTES

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

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

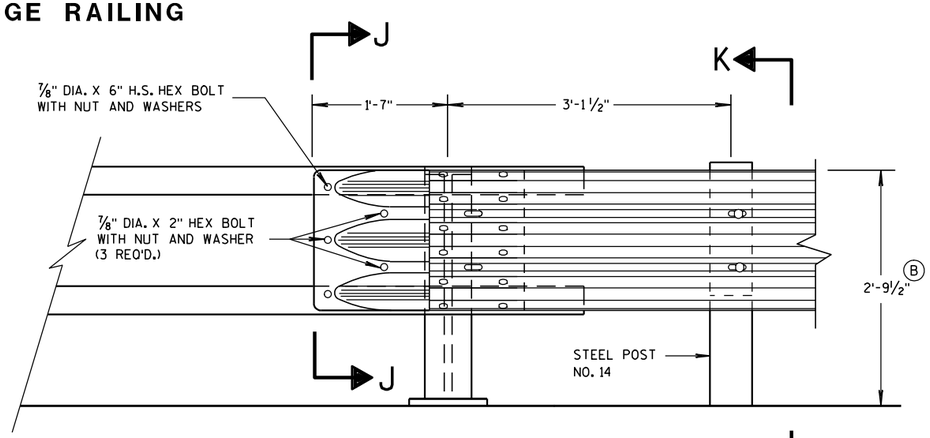


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

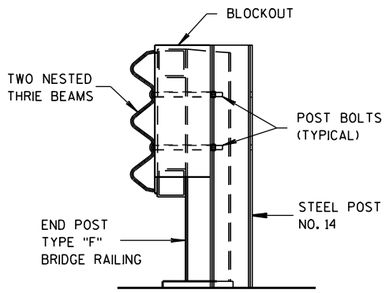


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/31/2012 DATE FHWA	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER

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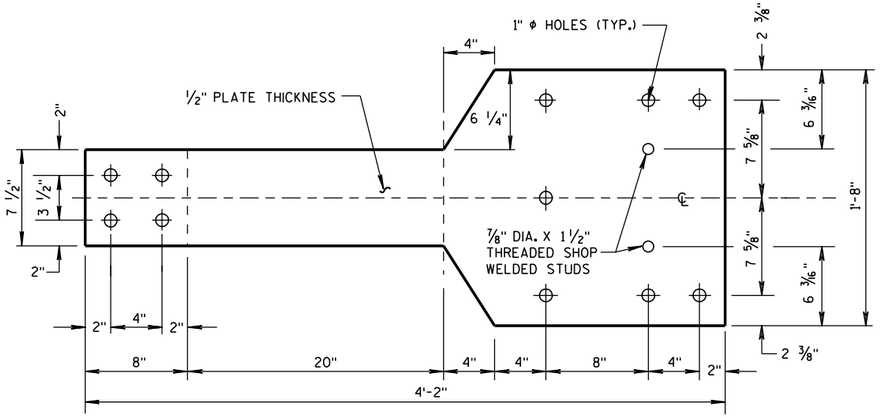
S.D.D. 14 B 45-3g

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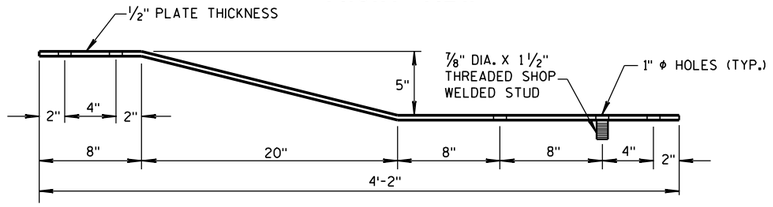
S.D.D. 14 B 45-3g

GENERAL NOTES

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

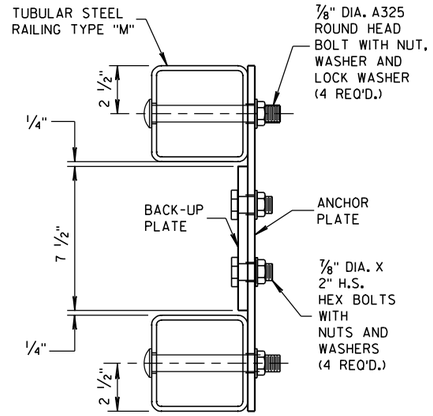


FRONT VIEW

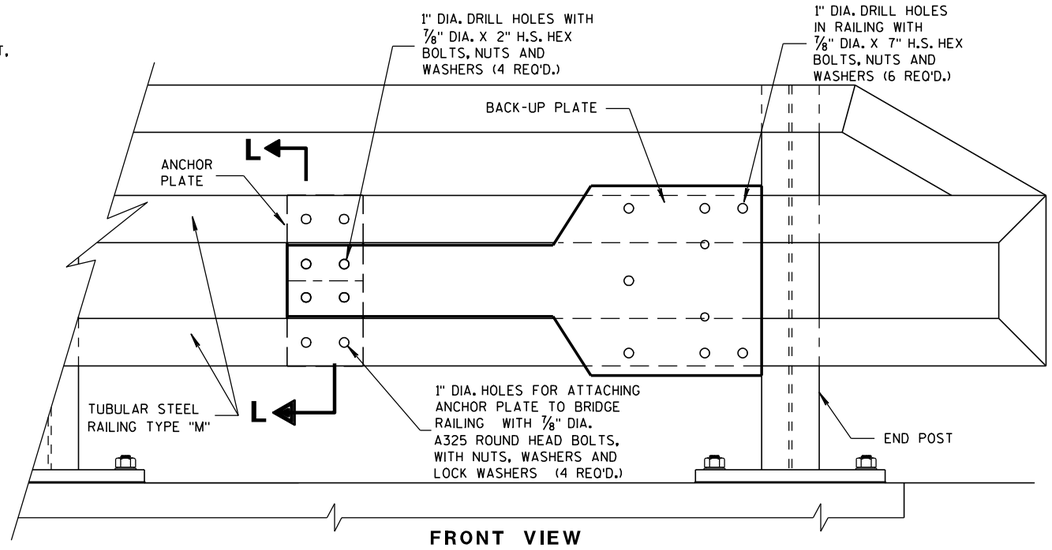


PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"



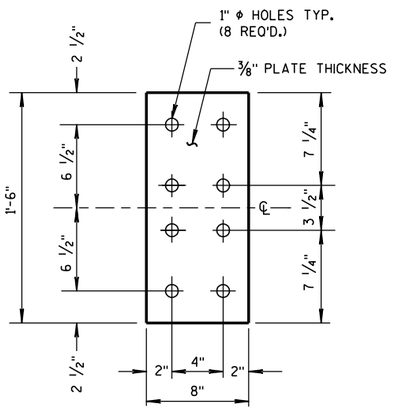
SECTION L-L



FRONT VIEW

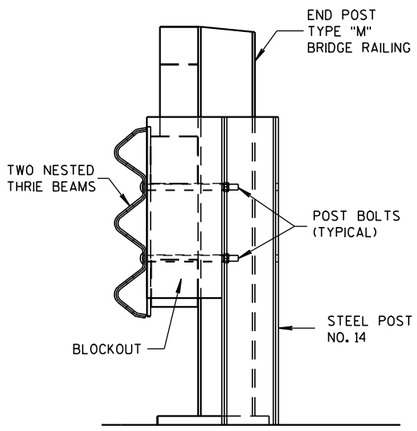
ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"

FRONT VIEW

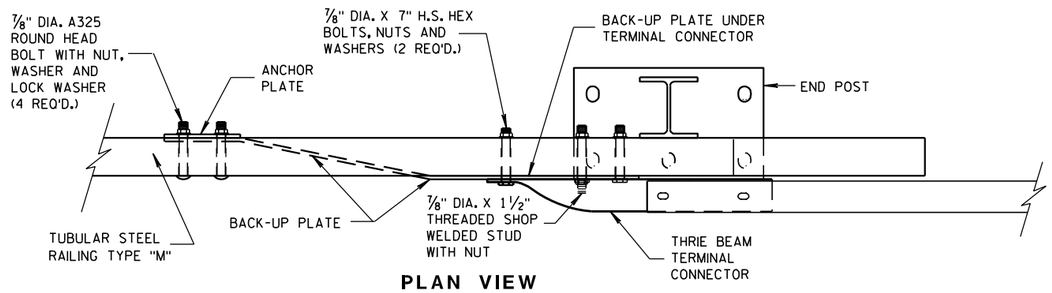


FRONT VIEW

ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8-31-2012 DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

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S.D. 14 B 45-3h

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S.D. 14 B 45-3h

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

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

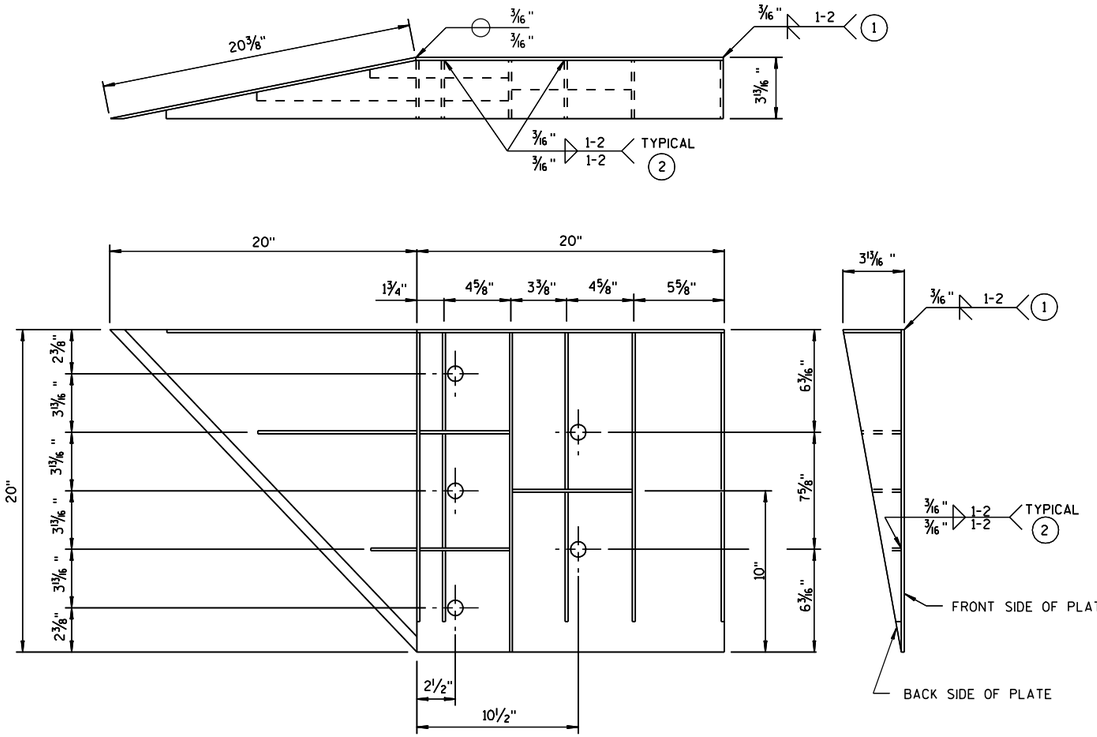
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(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) STIFFENERS 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

(VIEWED FROM BACK SIDE OF PLATE)

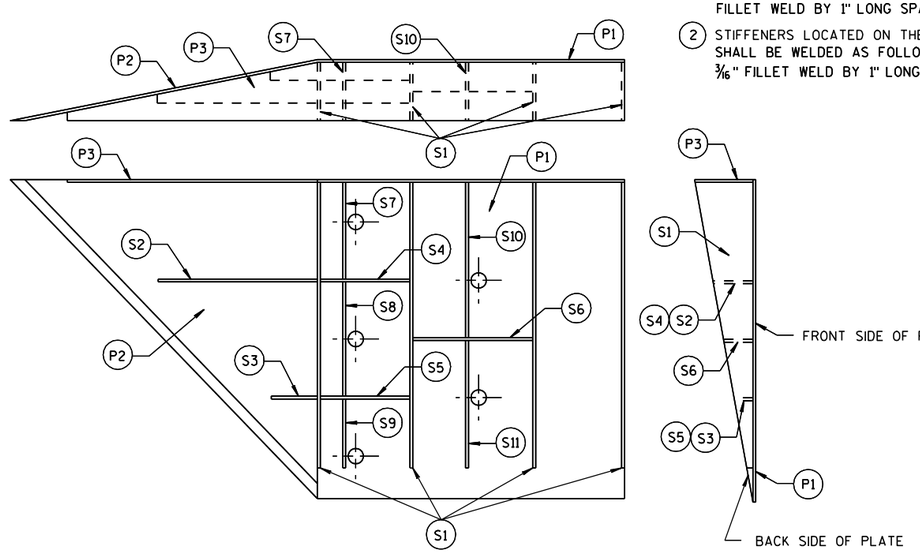


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

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

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

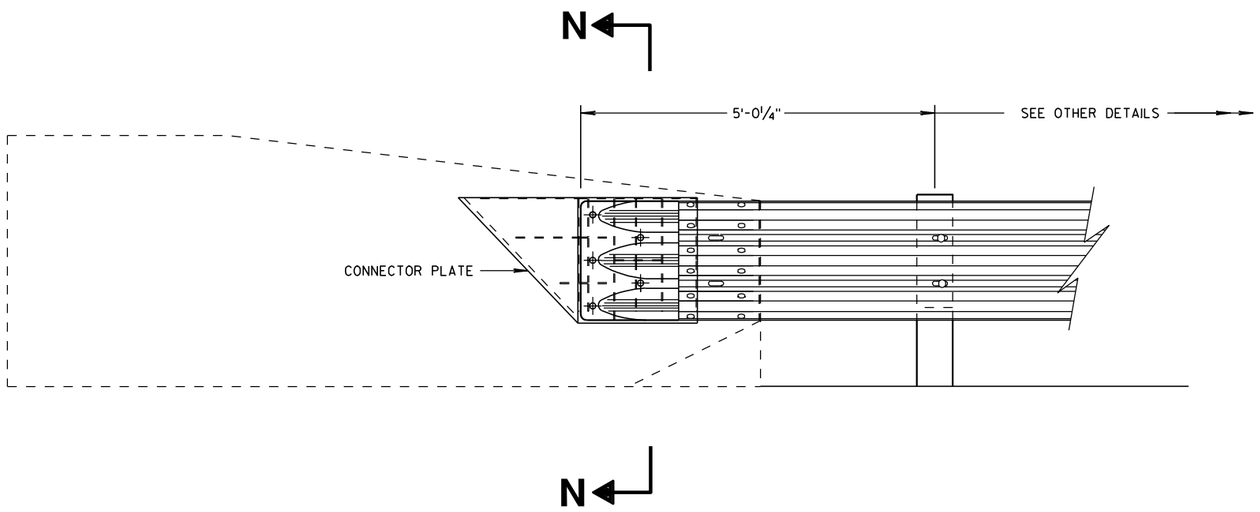
APPROVED
8/31/2012 DATE
/S/ Jerry H ____
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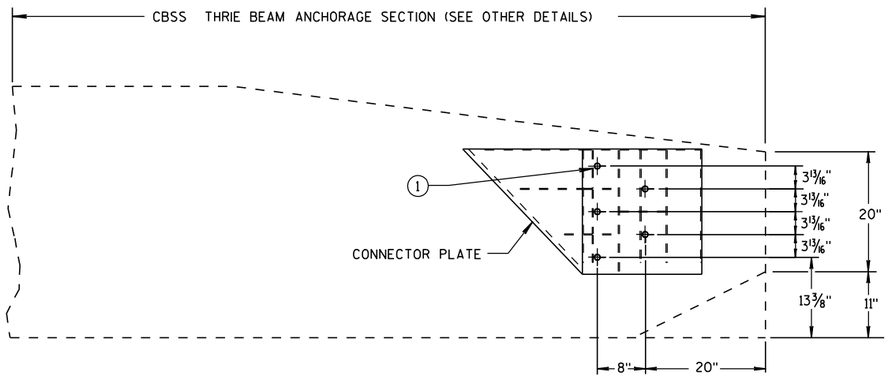
S.D.D. 14 B 45-3i

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S.D.D. 14 B 45-3i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER

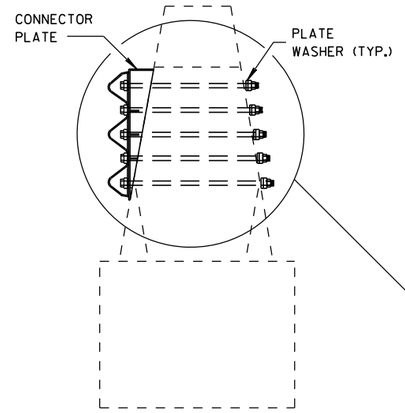


SINGLE SLOPE CONNECTION PLATE PLACEMENT

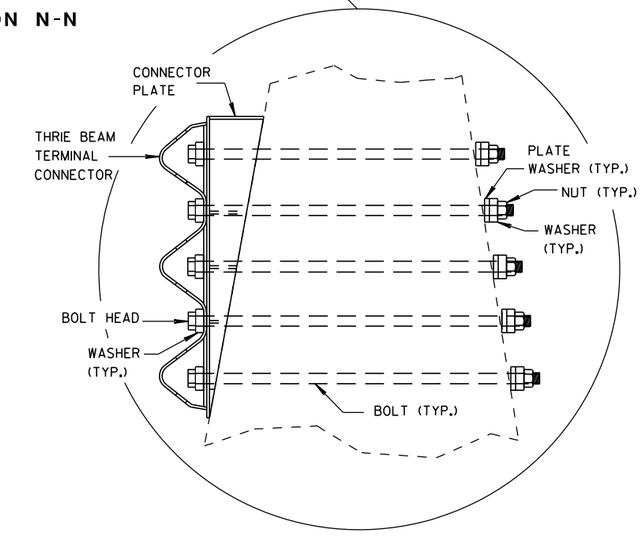
GENERAL NOTES

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

(1) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X ⅝" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N

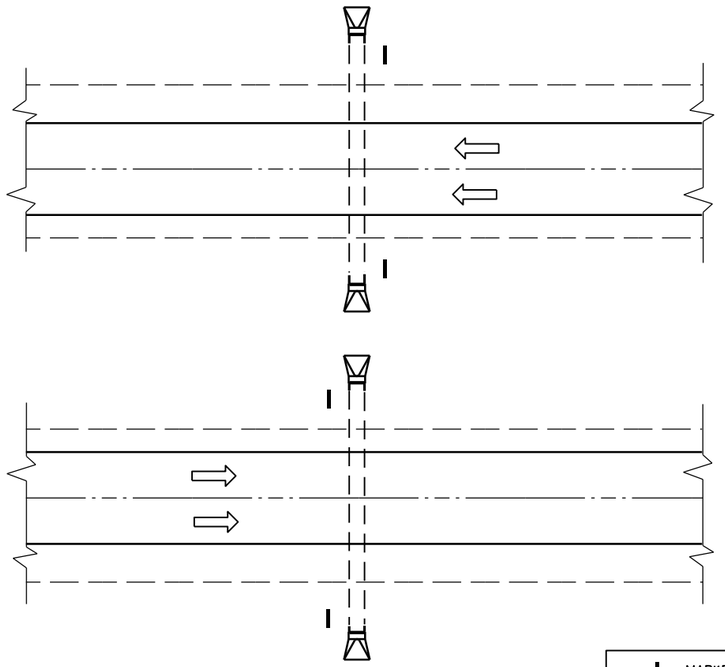


MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

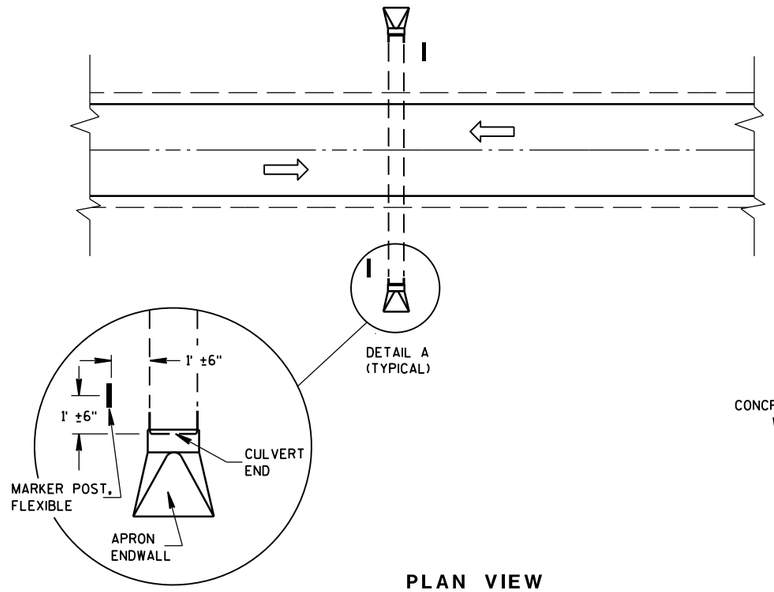
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8/31/2012 — DATE
/S/ Jerry H. [illegible] — ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 14 B 45-3j



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

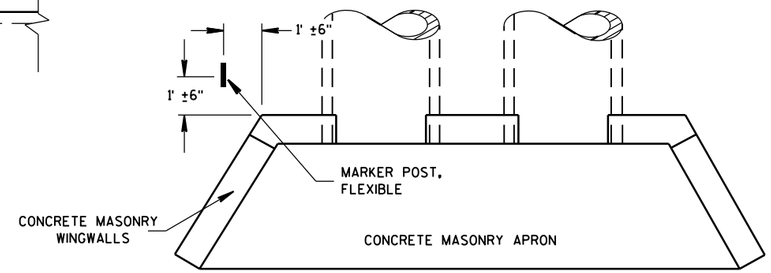
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

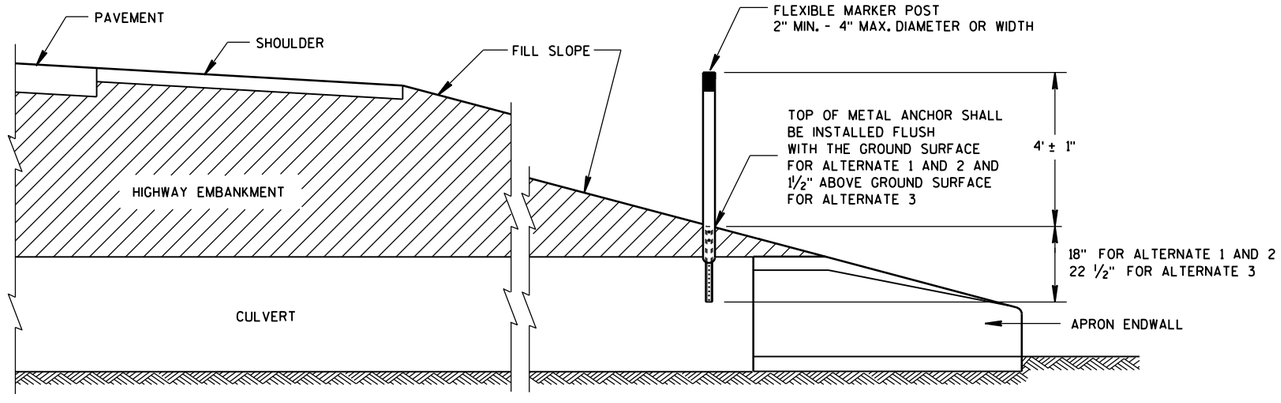
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

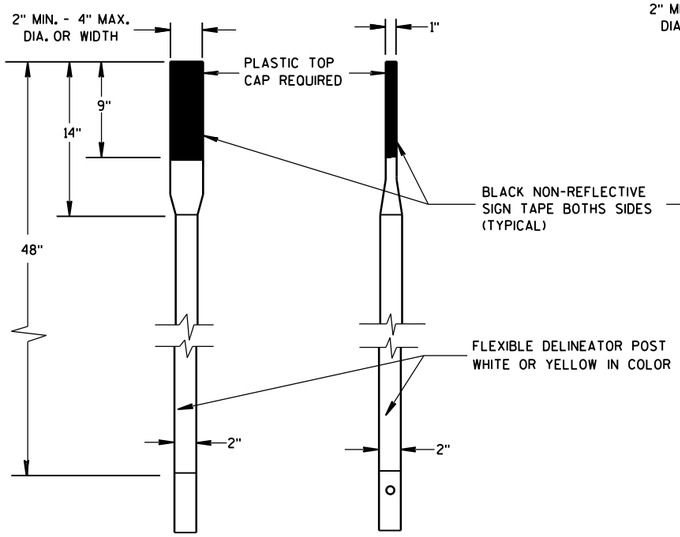
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

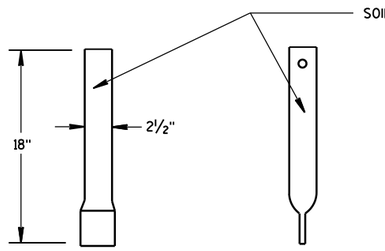
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S.D.D. 15 A 3-2a

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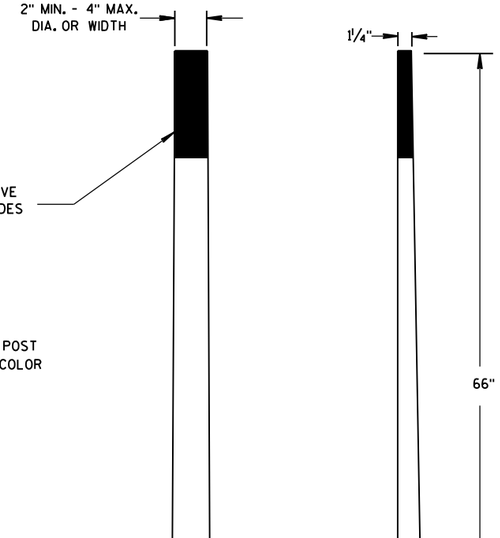
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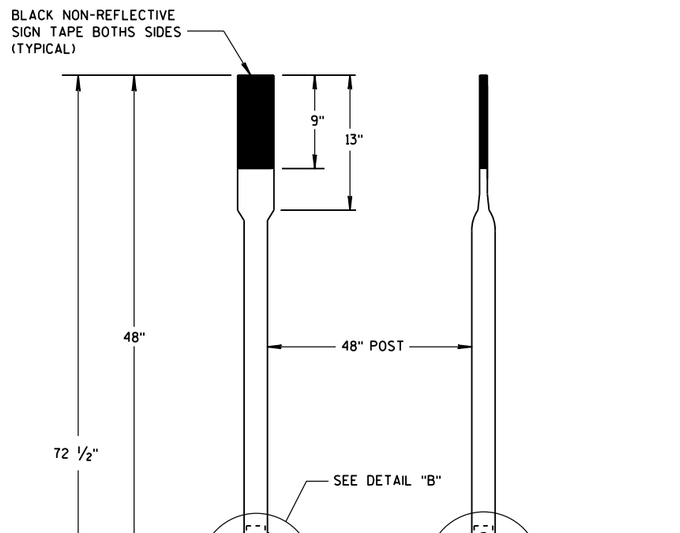
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

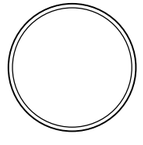
ALTERNATE 2



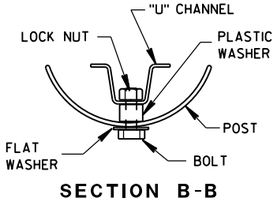
FRONT VIEW SIDE VIEW

ALTERNATE 3

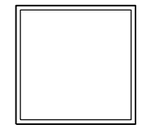
FLEXIBLE MARKER POSTS



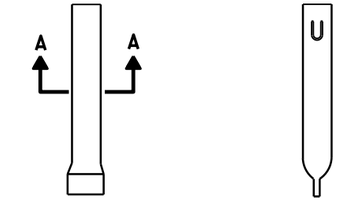
SECTION A-A



SECTION B-B

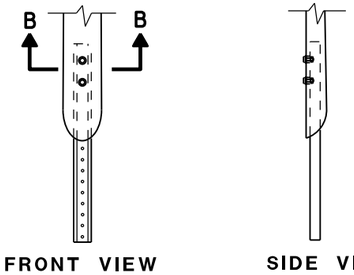


SECTION C-C



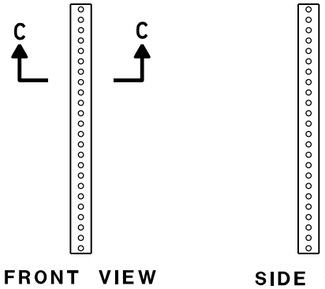
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

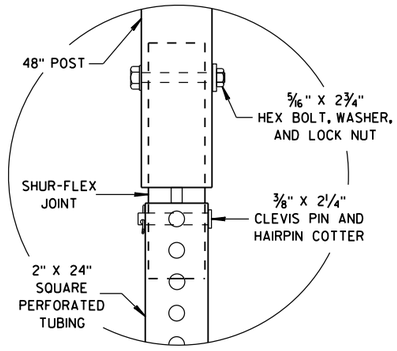
ALTERNATE 2



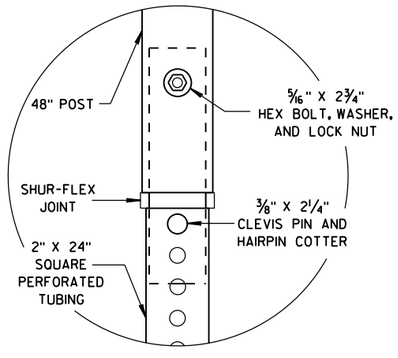
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

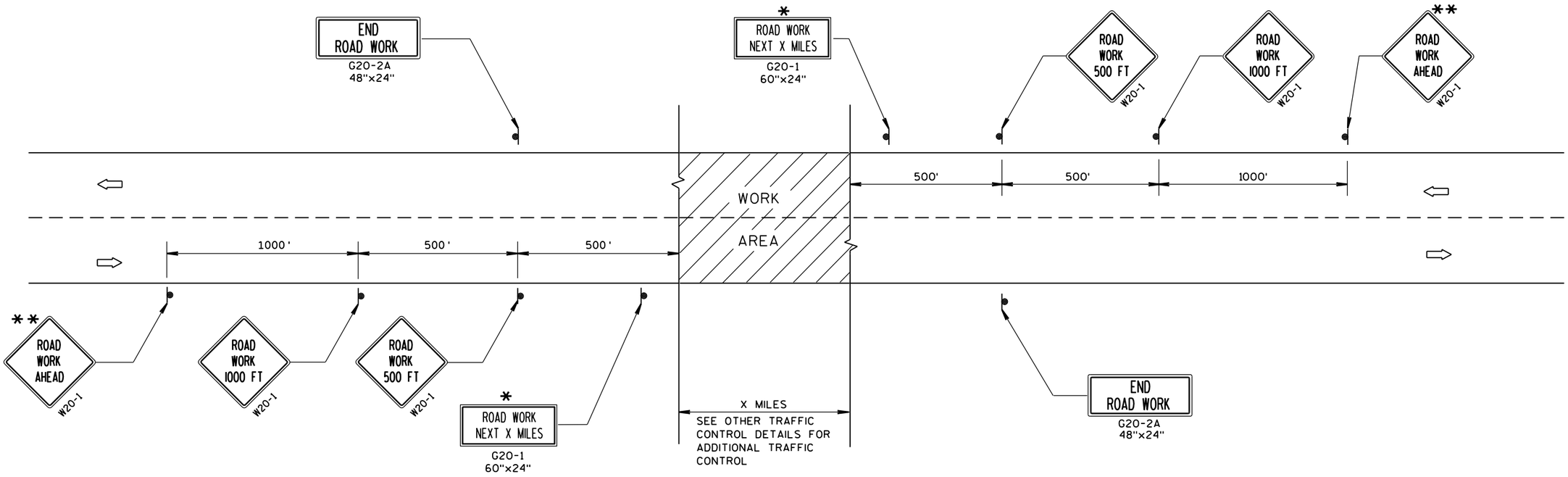
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10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 A 3-2b

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S.D.D. 15 A 3-2b



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

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.

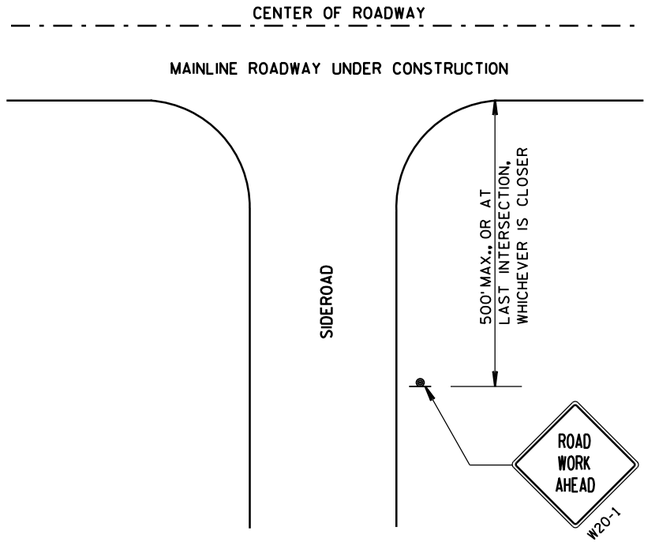
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

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

8/2013 — DATE

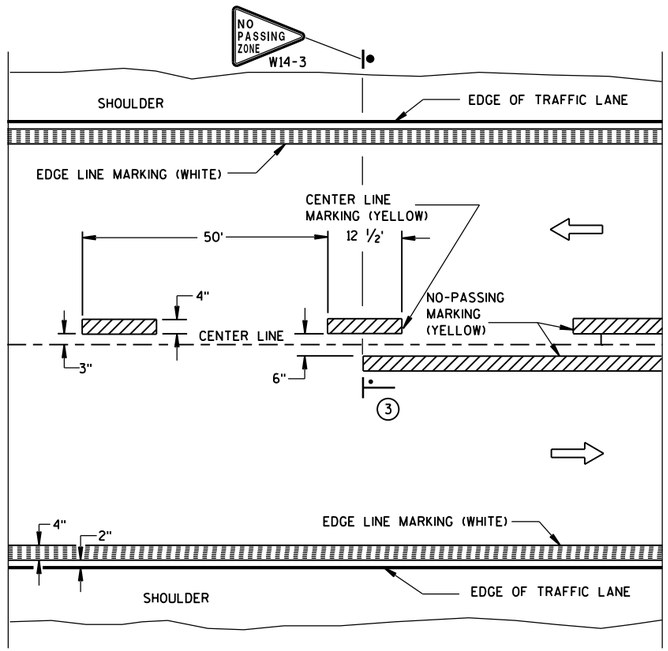
/S/ Travis Feltes — STATE TRAFFIC ENGINEER

SIGN

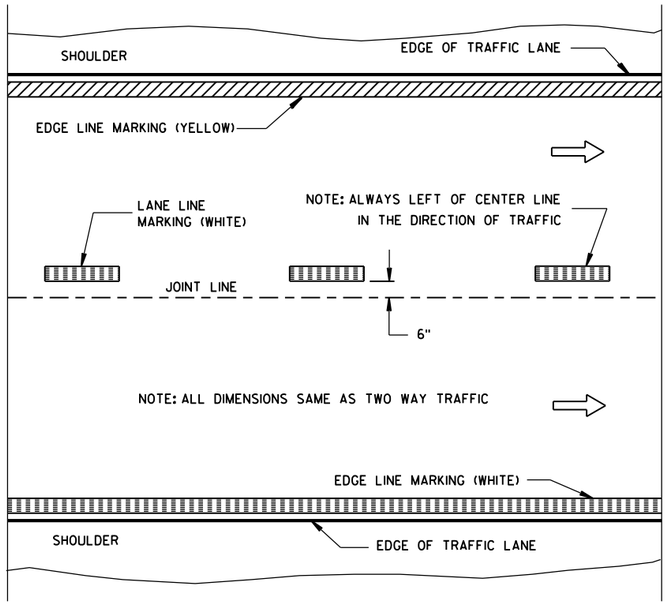
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S.D.D. 15 C 4-2

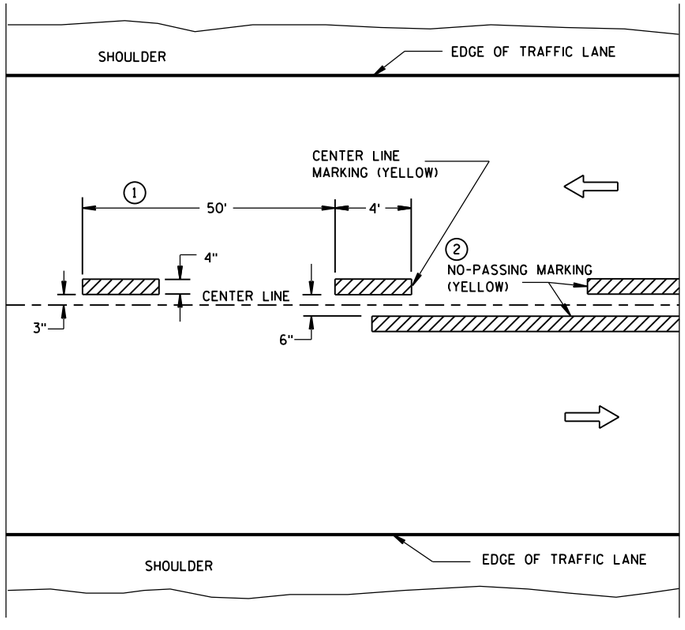


TWO WAY TRAFFIC

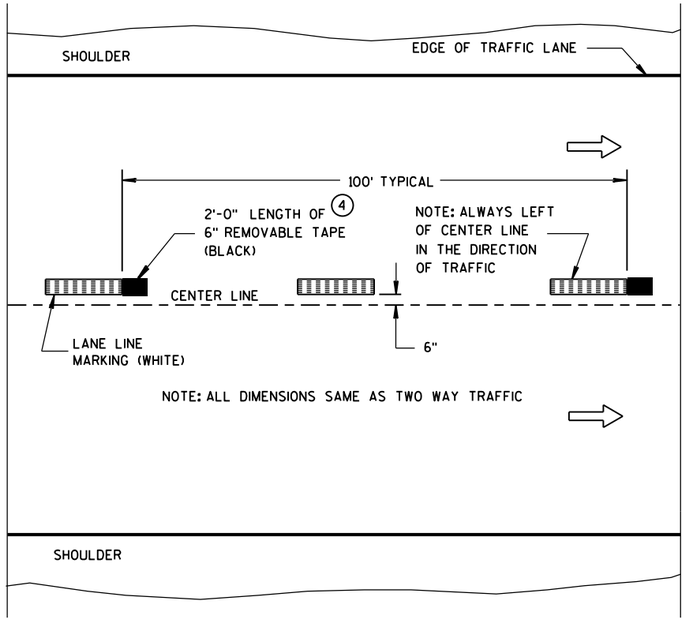


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

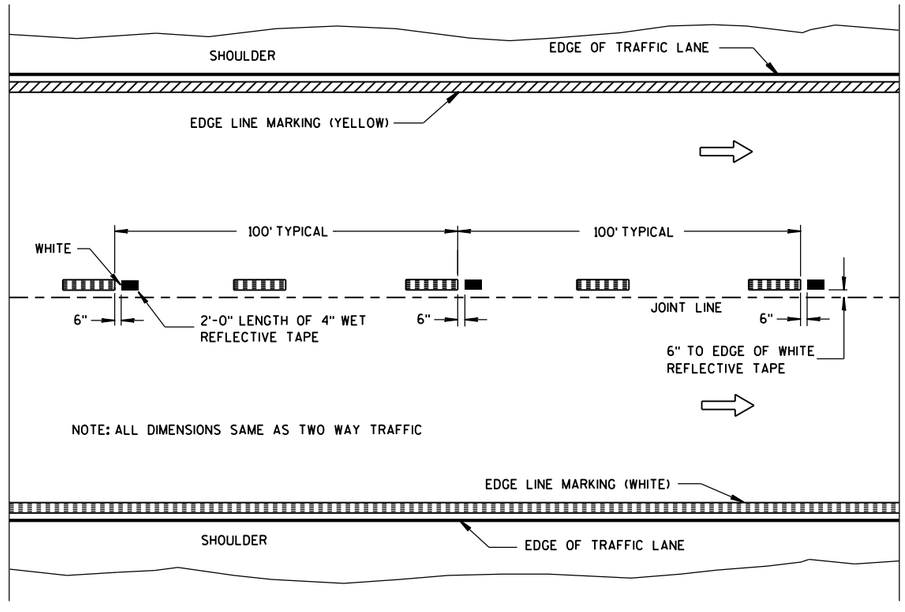
GENERAL NOTES

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.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC E

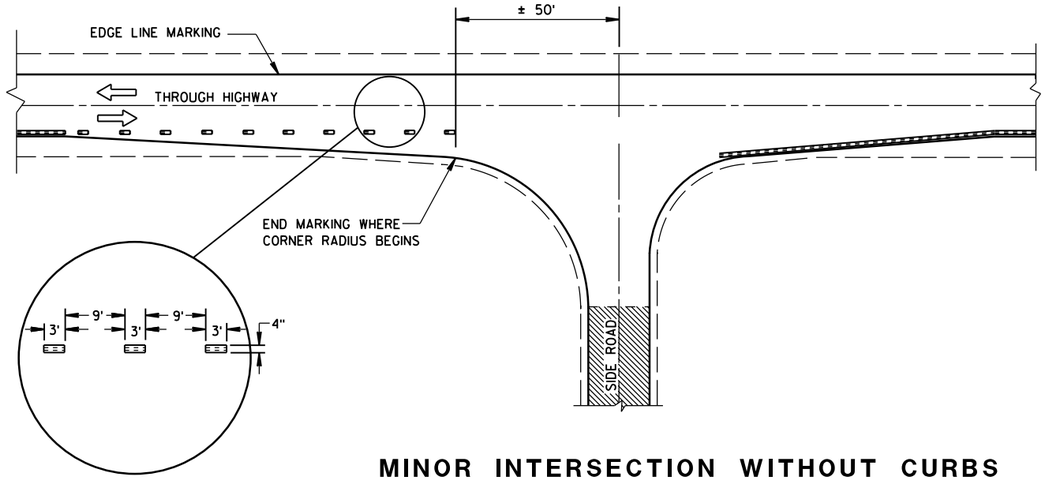
FHWA

6

S.D.D. 15 C 8-16a

6

S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

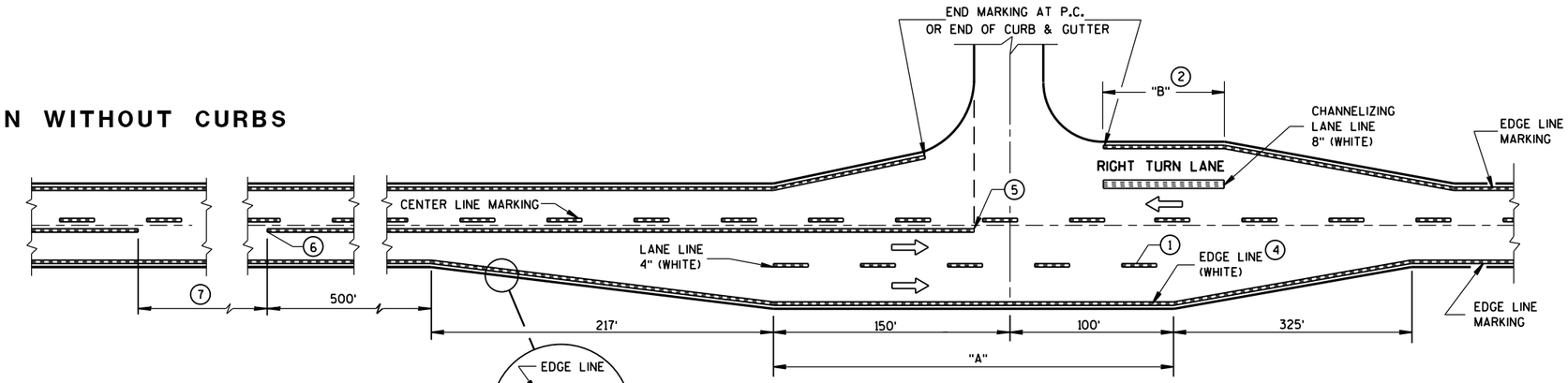
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

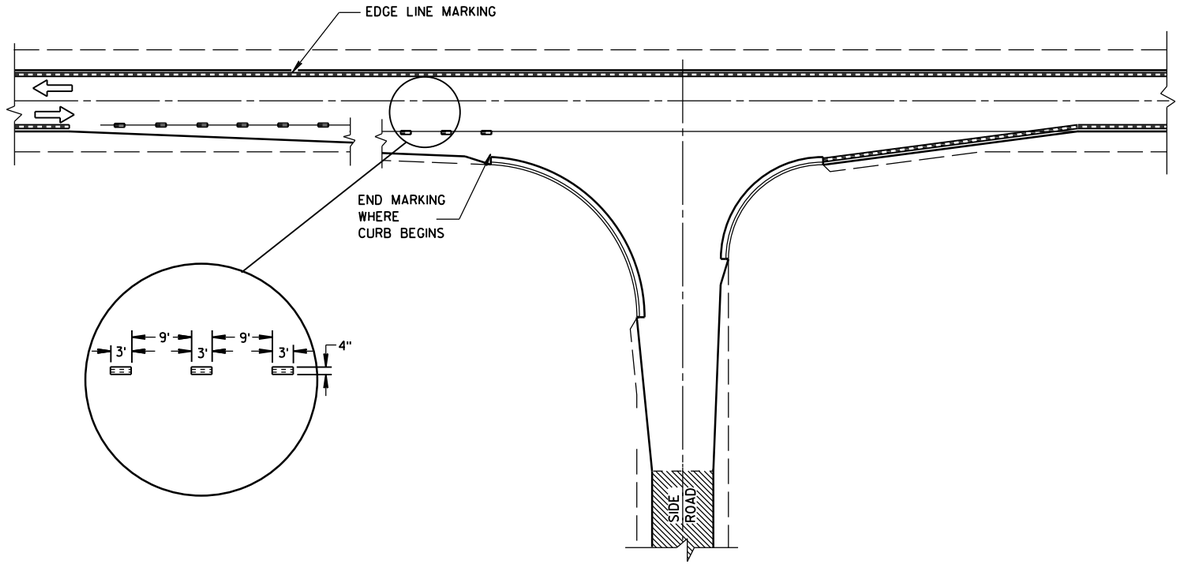
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



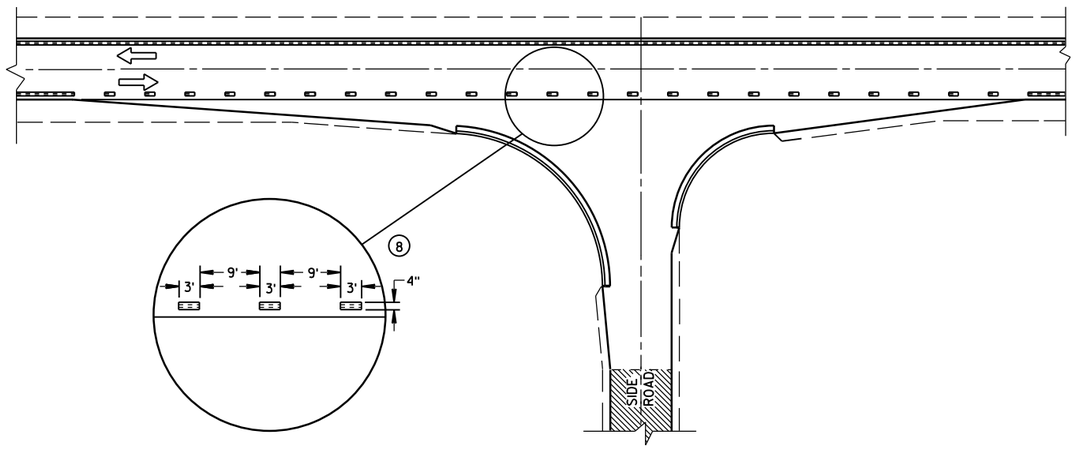
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

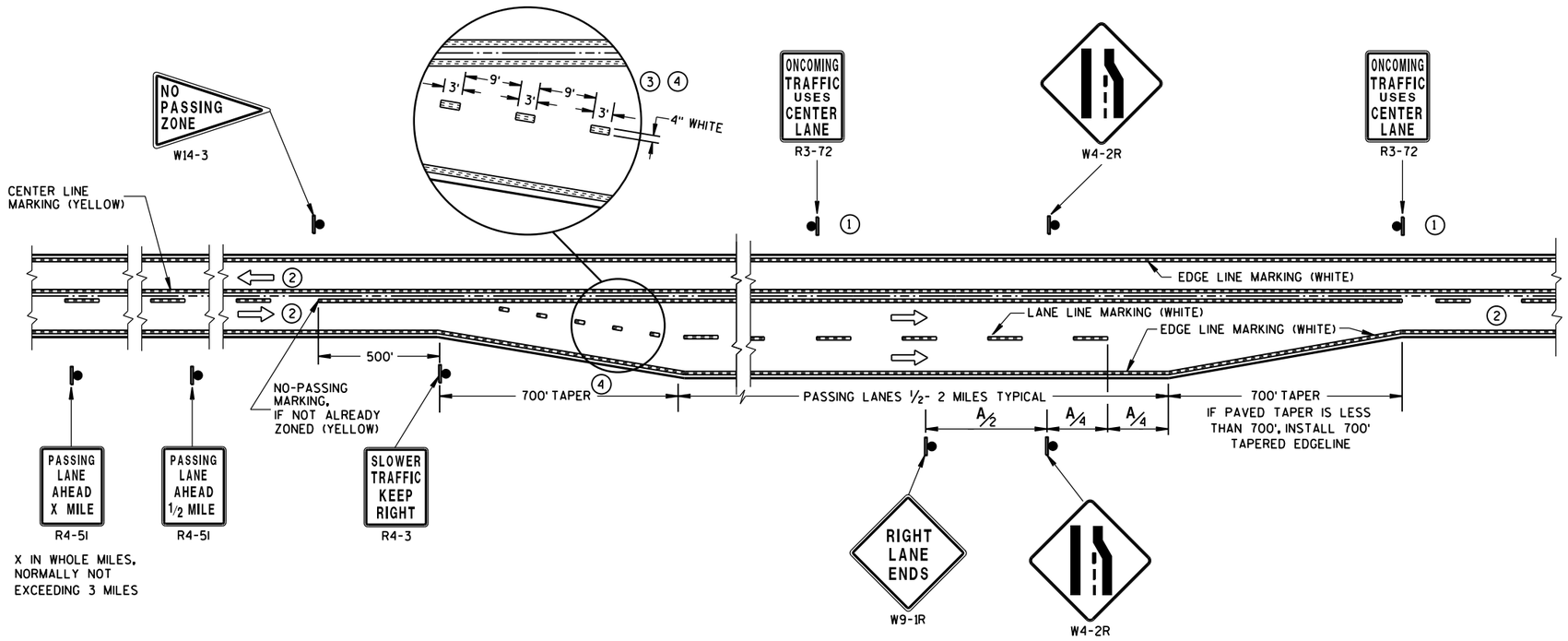
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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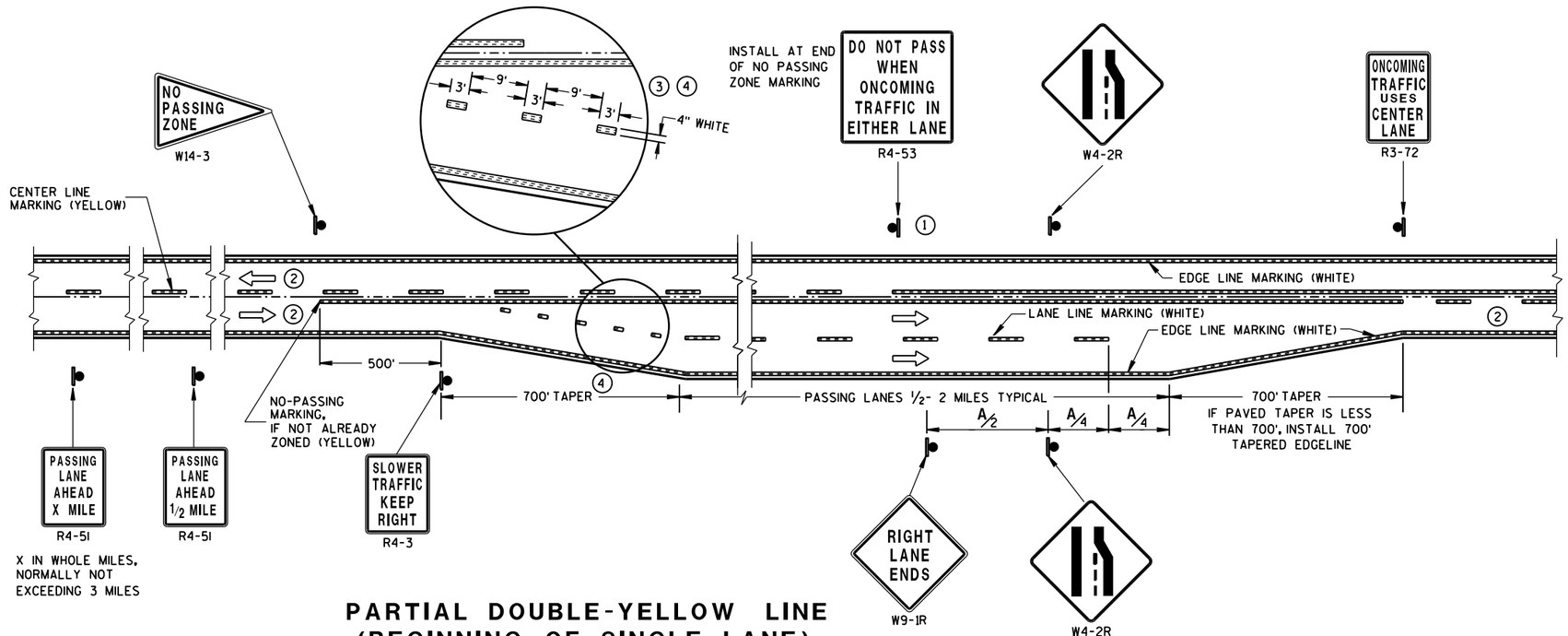
S.D.D. 15 C 8-16b

6

S.D.D. 15 C 8-16b



SOLID DOUBLE-YELLOW LINE
(THROUGHOUT ENTIRE PASSING/CLIMBING LANE)



PARTIAL DOUBLE-YELLOW LINE
(BEGINNING OF SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3'LINE 9'GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING/CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

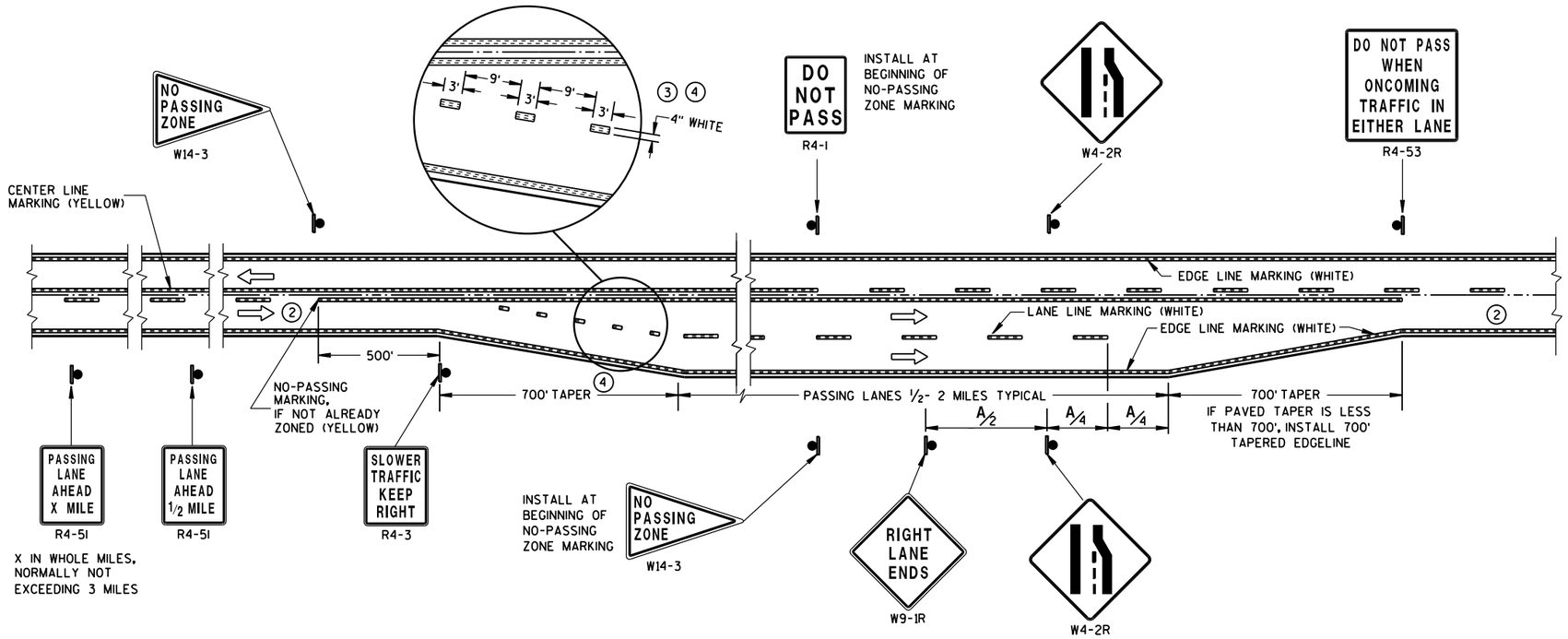
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

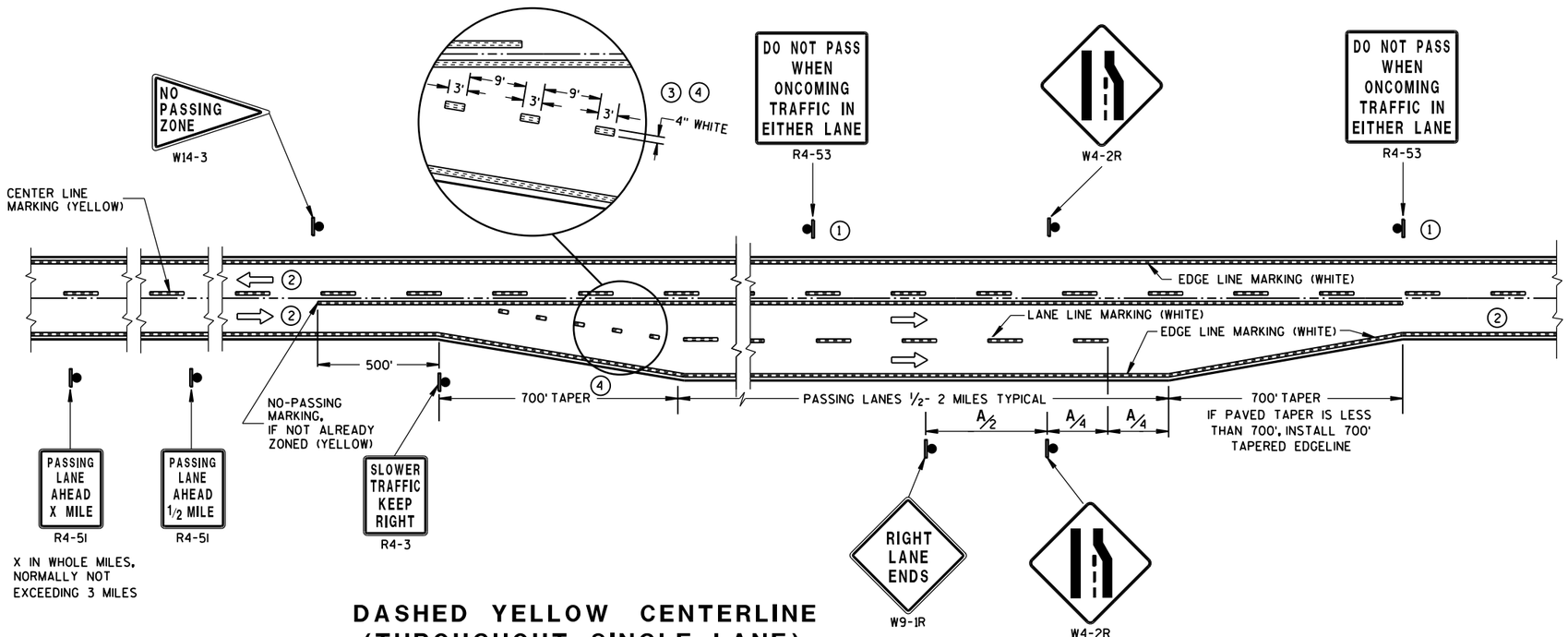
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 C 8-16c



SOLID DOUBLE-YELLOW LINE (END OF SINGLE LANE)



DASHED YELLOW CENTERLINE (THROUGHOUT SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1/2 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3'LINE 9'GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING/CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

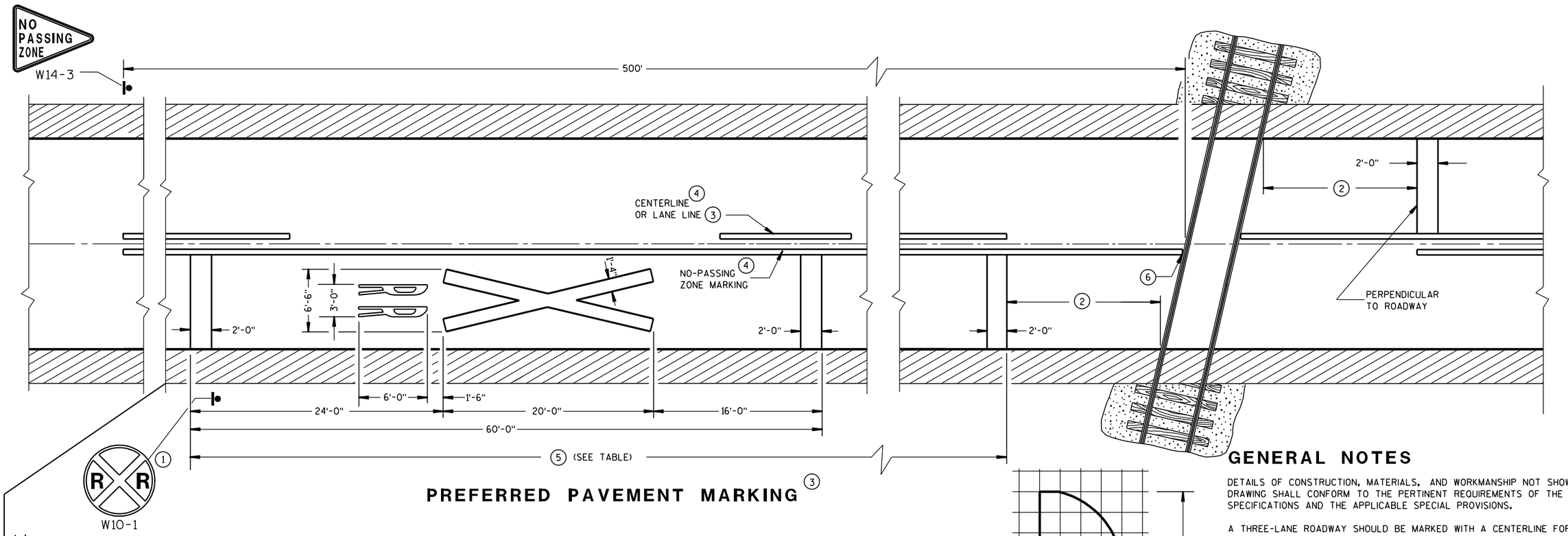
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

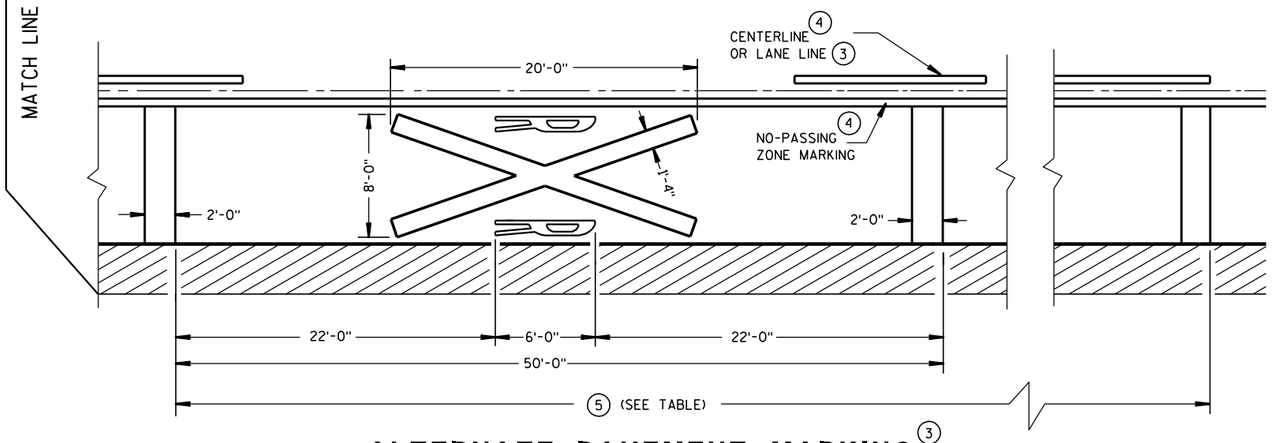
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 15 C 8-16d



PREFERRED PAVEMENT MARKING 3

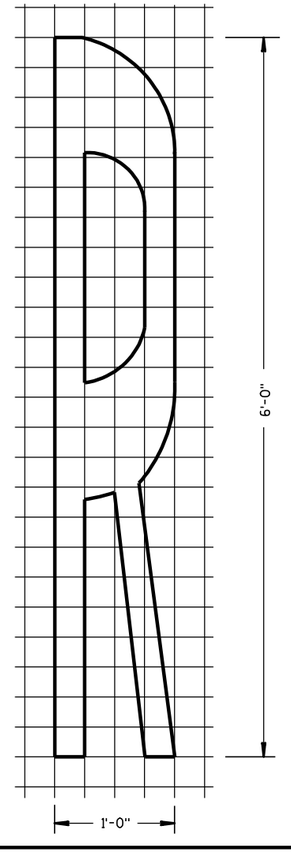


ALTERNATE PAVEMENT MARKING 3

5

Posted Speed (M.P.H.)	Dimension Range (Feet)
25	150*- 250
30	200*- 300
35	250*- 450
40	300*- 500
45	400*- 650
50	550*- 800
55	750*- 1000
60	1000*- 1250
65	1000*- 1250

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSE PROXIMITY OF DRIVEWAYS, BRIDGES, SIDEROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.



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.

A THREE-LANE ROADWAY SHOULD BE MARKED WITH A CENTERLINE FOR TWO-LANE APPROACH OPERATION ON THE APPROACH TO A CROSSING.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE. ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" (ADOPTED BY THE FEDERAL HIGHWAY ADMINISTRATION).

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

1. A PORTION OF THE PAVEMENT MARKING SYMBOL SHOULD BE DIRECTLY OPPOSITE THE ADVANCE WARNING SIGN (W10-1).
2. MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.
3. REFLECTIVE WHITE.
4. REFLECTIVE YELLOW 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.
5. TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
6. FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

1-9-2012
DATE

/S/ Thomas N. [illegible]
STATE TRAFFIC ENGINEER

FHWA

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S.D.D. 15 C 9-9a

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S.D.D. 15 C 9-9a

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

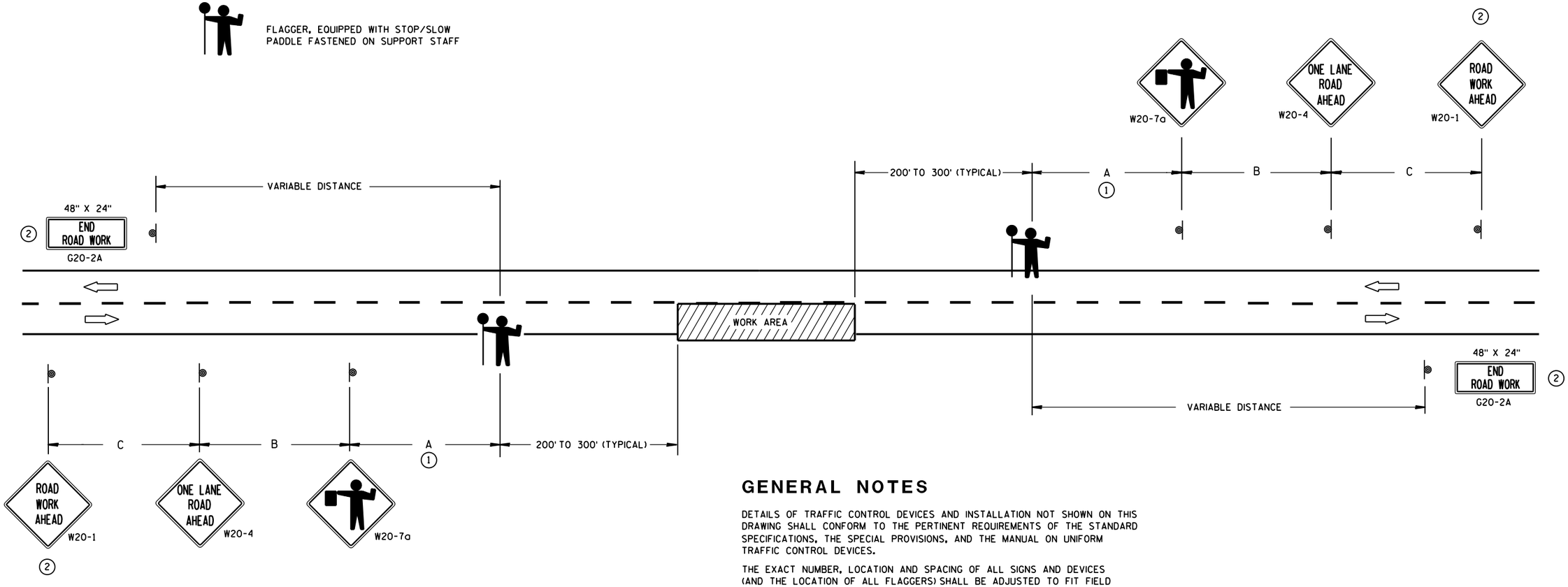
SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



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, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

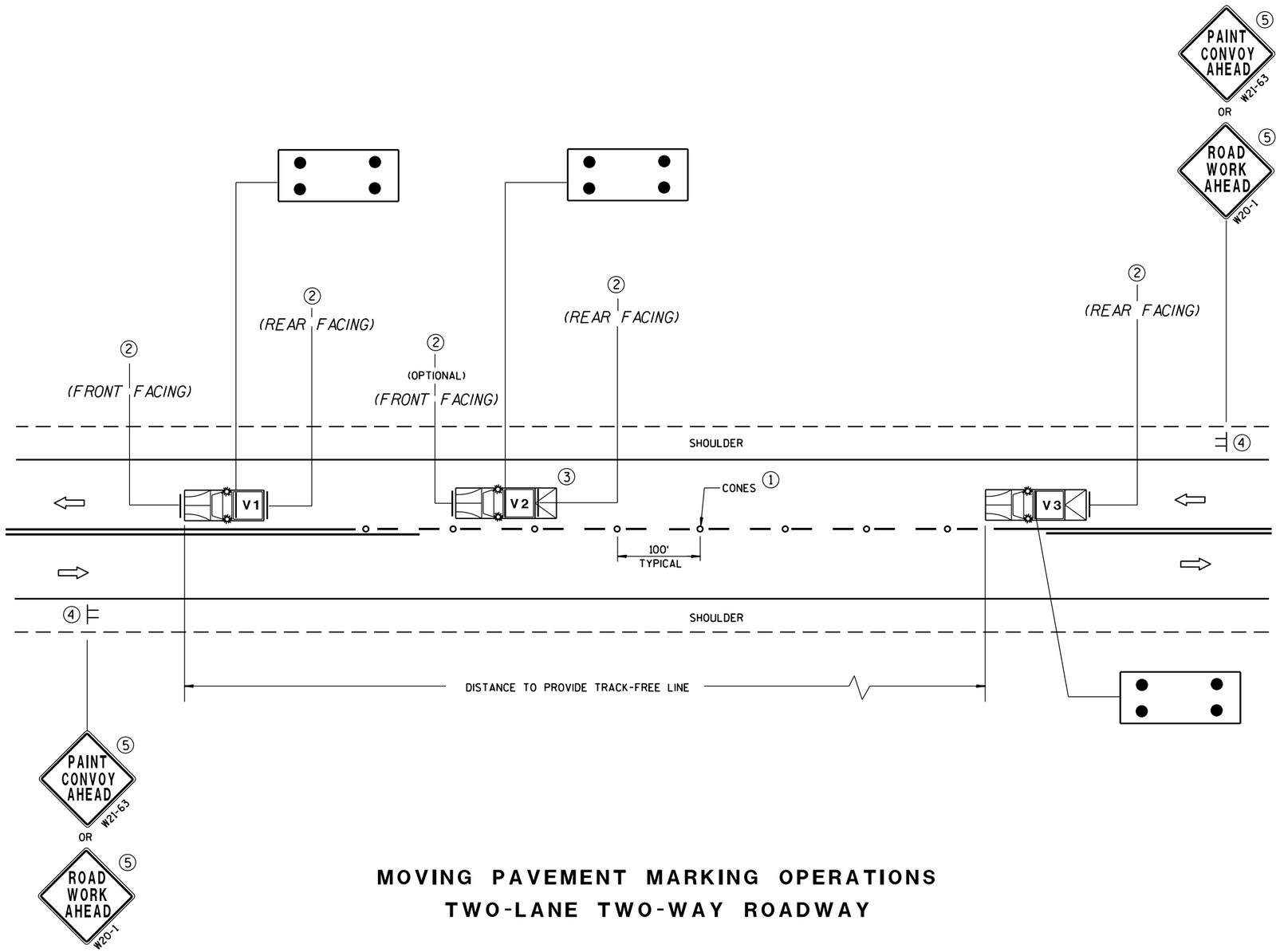
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 C 12-4

6

S.D.D. 15 C 12-4



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

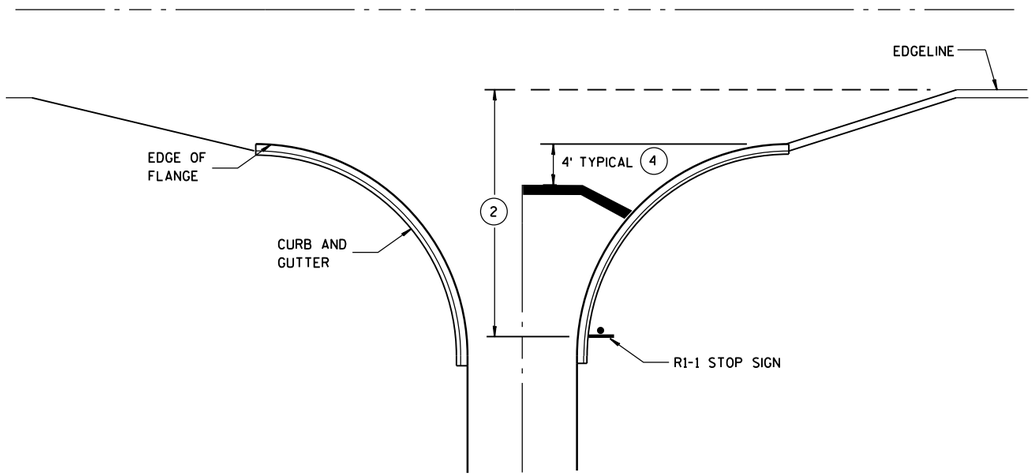
LEGEND

- **V1** LEAD VEHICLE
- **V2** SHADOW VEHICLE
- **V3** TRAIL VEHICLE WITH TMA
- **TMA** TRUCK-MOUNTED ATTENUATOR
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONES
- FLASHING ARROW PANEL (CAUTION)

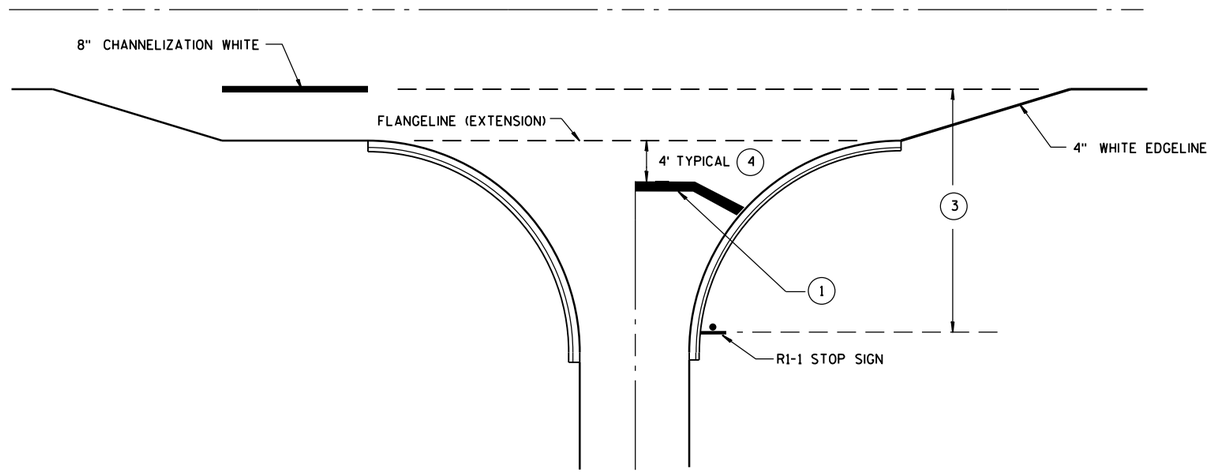
MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/3/2013 DATE	/S/ Travis Feltes STATE TRAFFIC E
FHWA	

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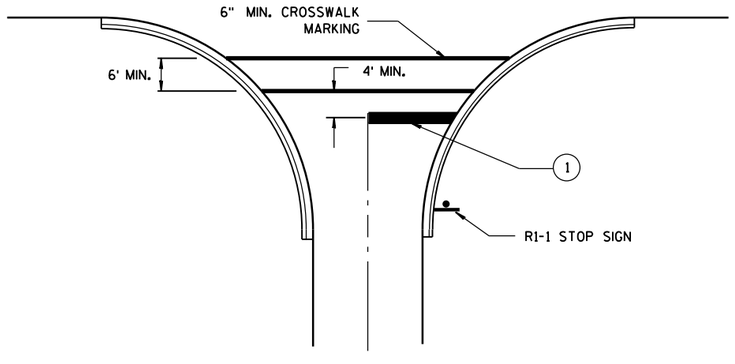
S.D.D. 15 C 19-2a



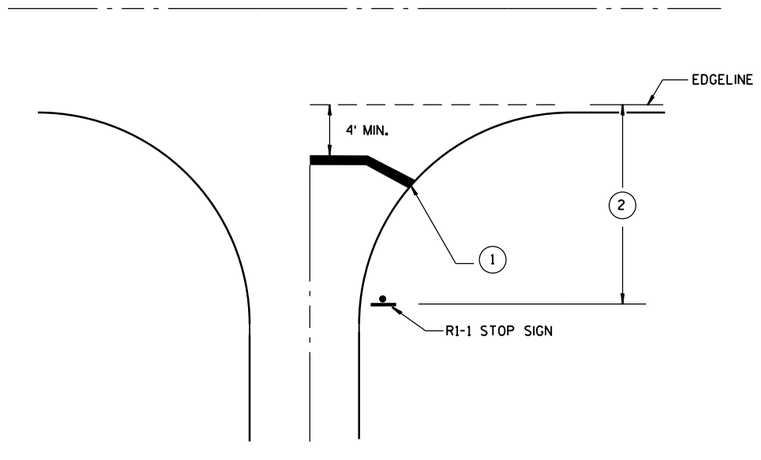
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

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S.D.D. 15 C 33-1

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.

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

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

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.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

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

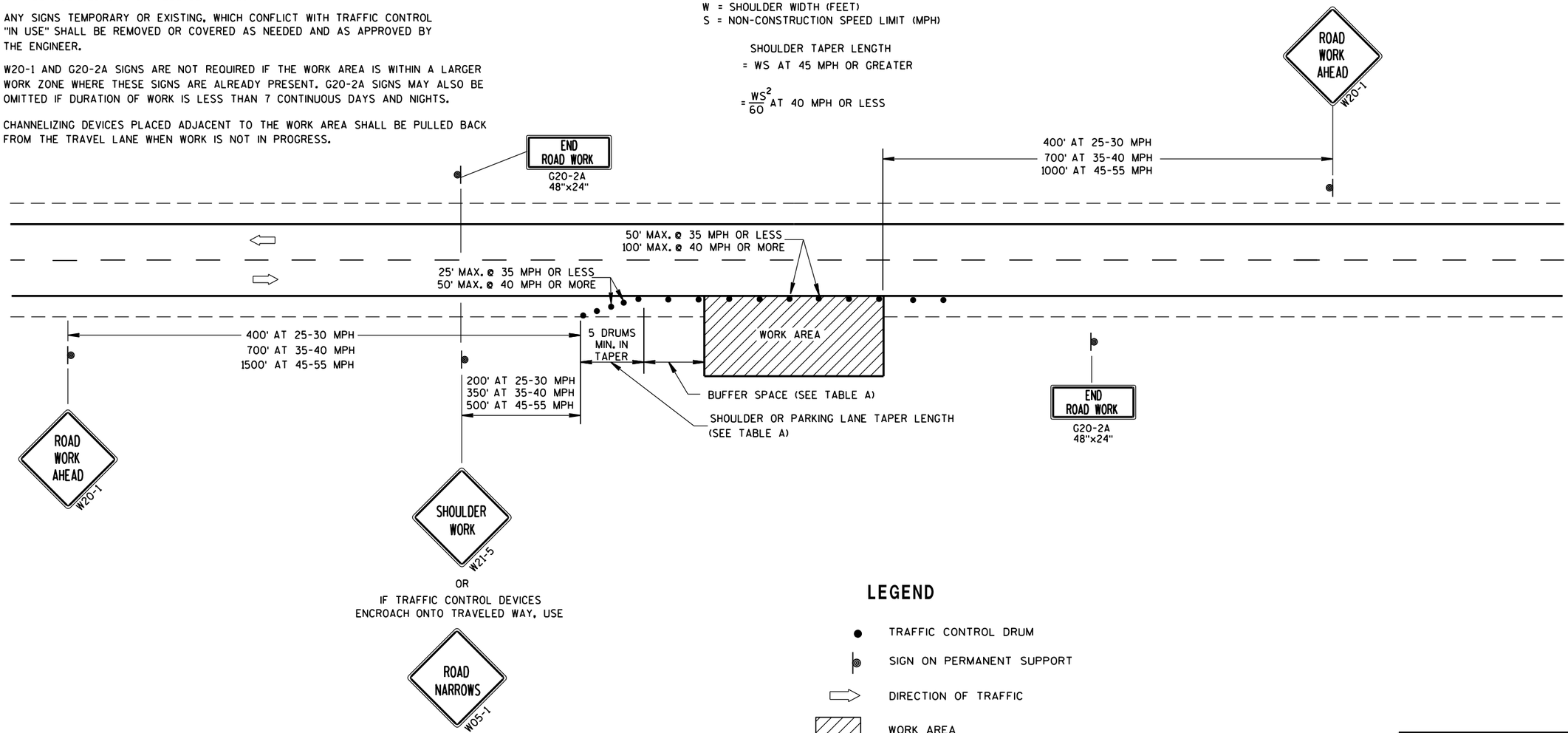
TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
= WS AT 45 MPH OR GREATER

$= \frac{WS^2}{60}$ AT 40 MPH OR LESS



LEGEND

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

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

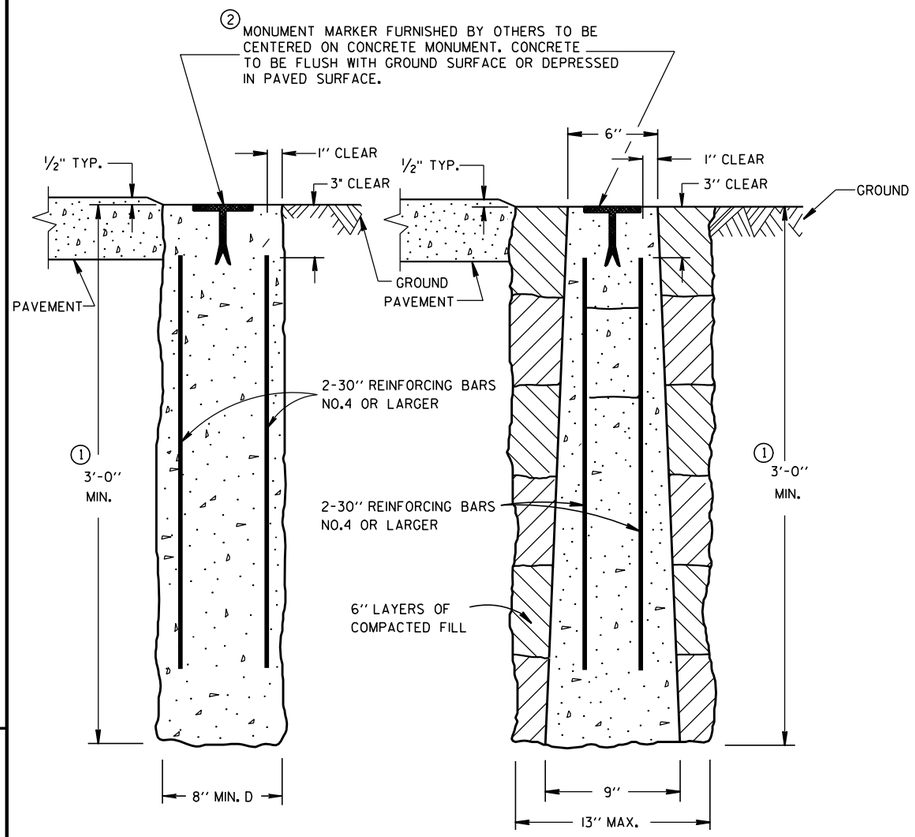
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

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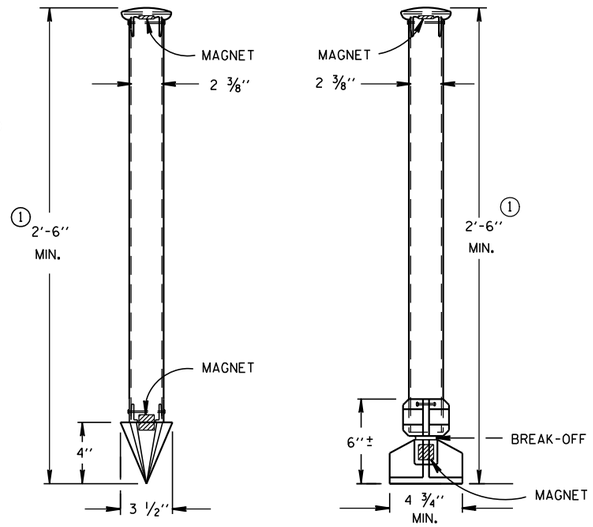
S.D.D. 15 D 28-2



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



TYPE C DRIVE-IN MONUMENT

TYPE D BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

GENERAL NOTES

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

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

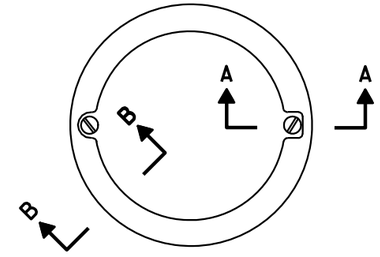
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

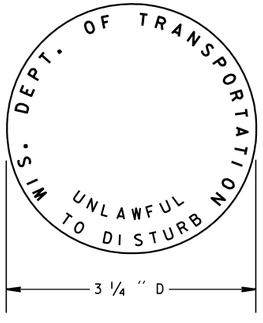
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

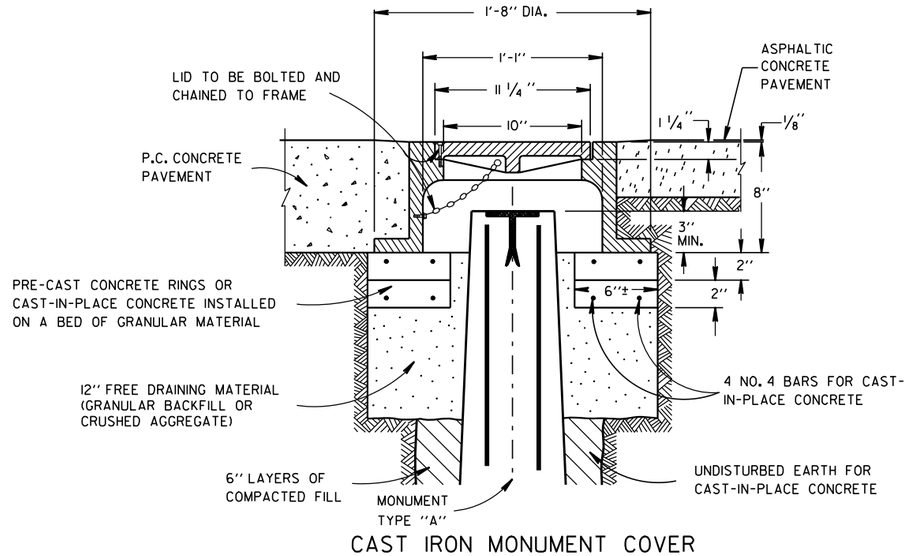
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

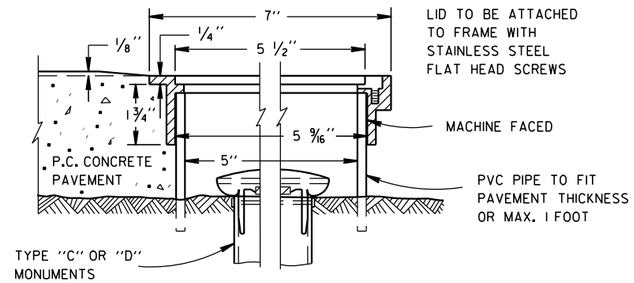


② WIS DOT MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MOUNMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/22/1999 DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

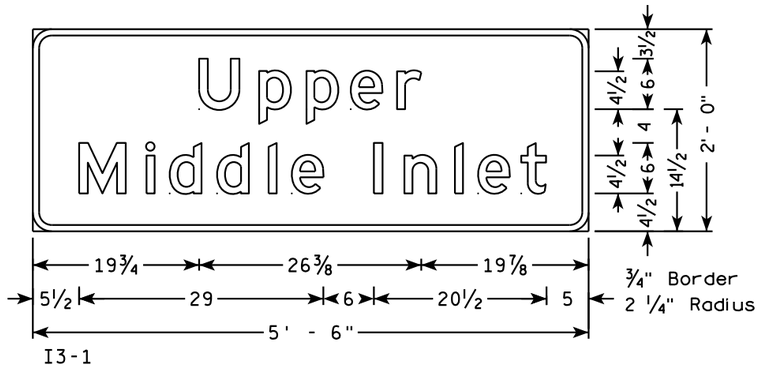
FHWA

6

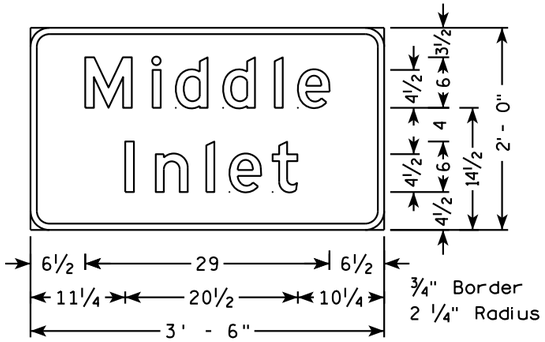
S.D.D. 16 A 1-6

6

S.D.D. 16 A 1-6



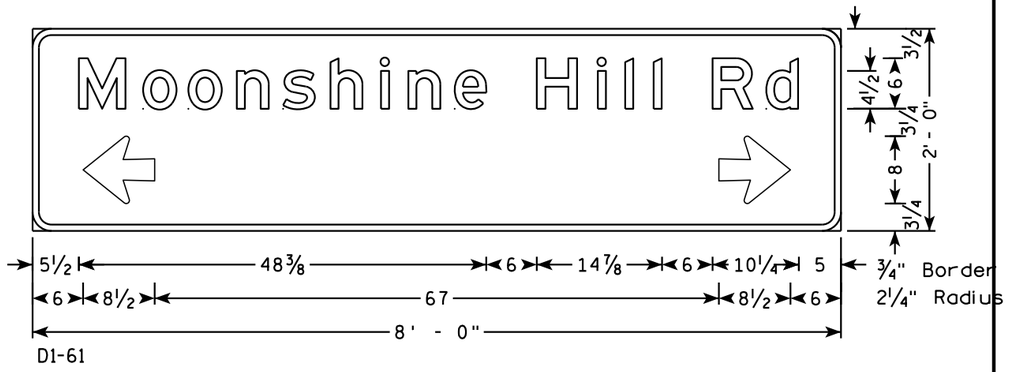
I3-1



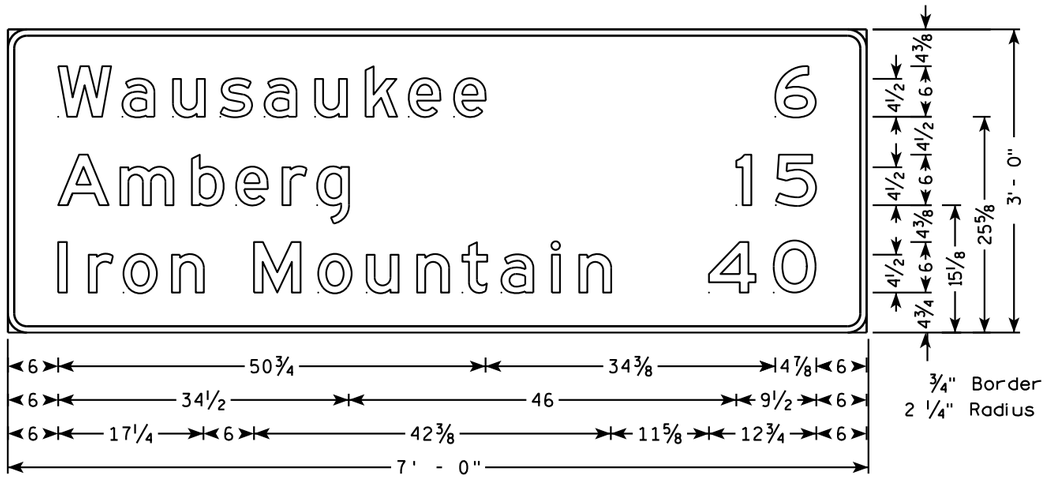
I3-1

NOTES

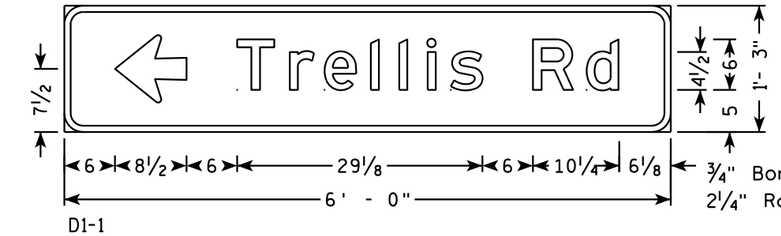
1. All Sign Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E



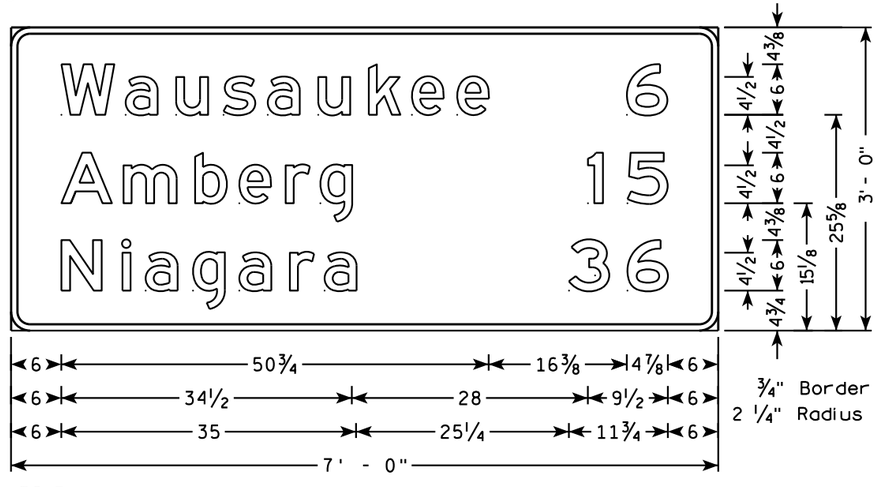
D1-61



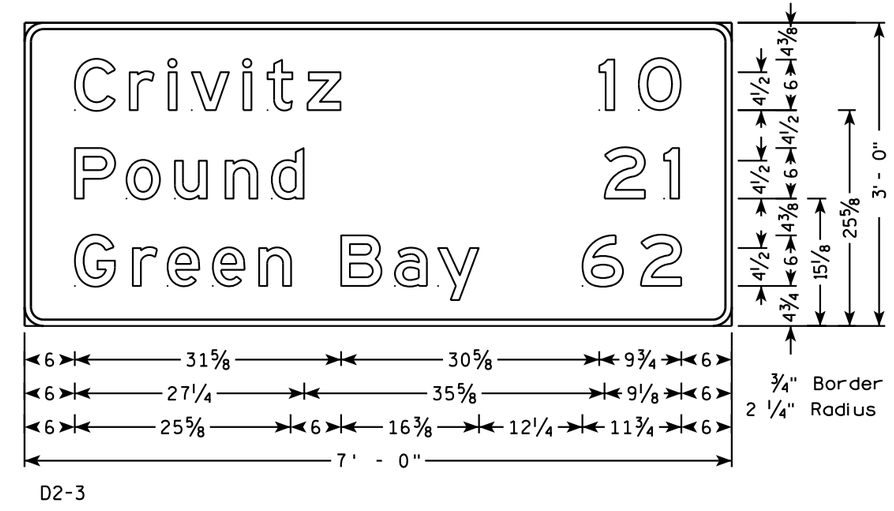
D2-3



D1-1



D2-3



D2-3

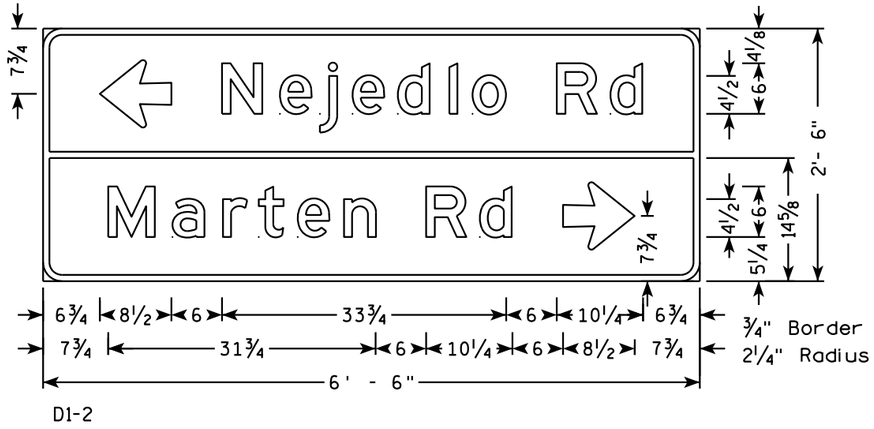
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7

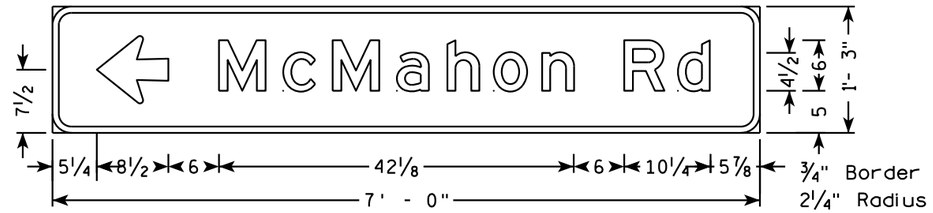
PROJECT NO: 1491-08-71	HWY: USH 41	COUNTY: MARINETTE	PERMANENT SIGNING	SHEET NO: 118	E

NOTES

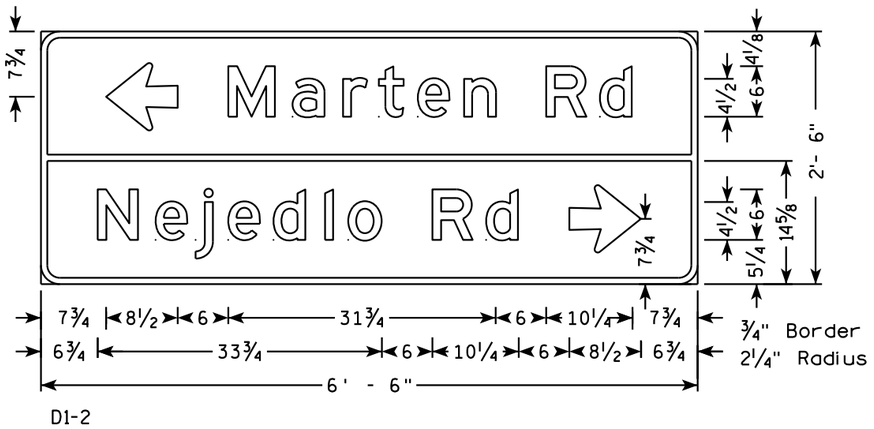
1. All Sign Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E



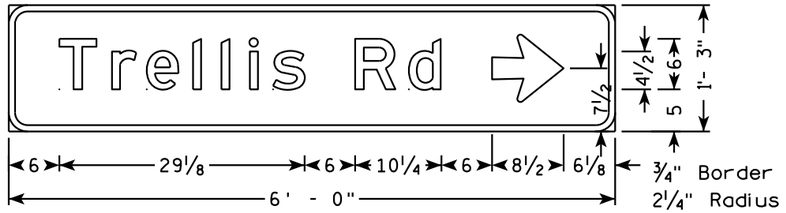
D1-2



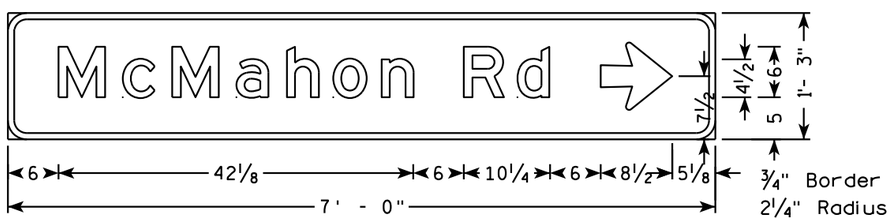
D1-1



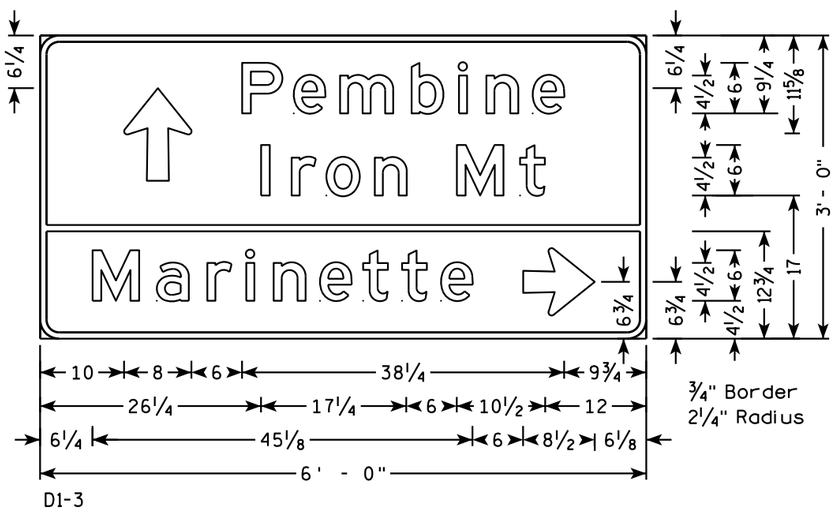
D1-2



D1-1



D1-1

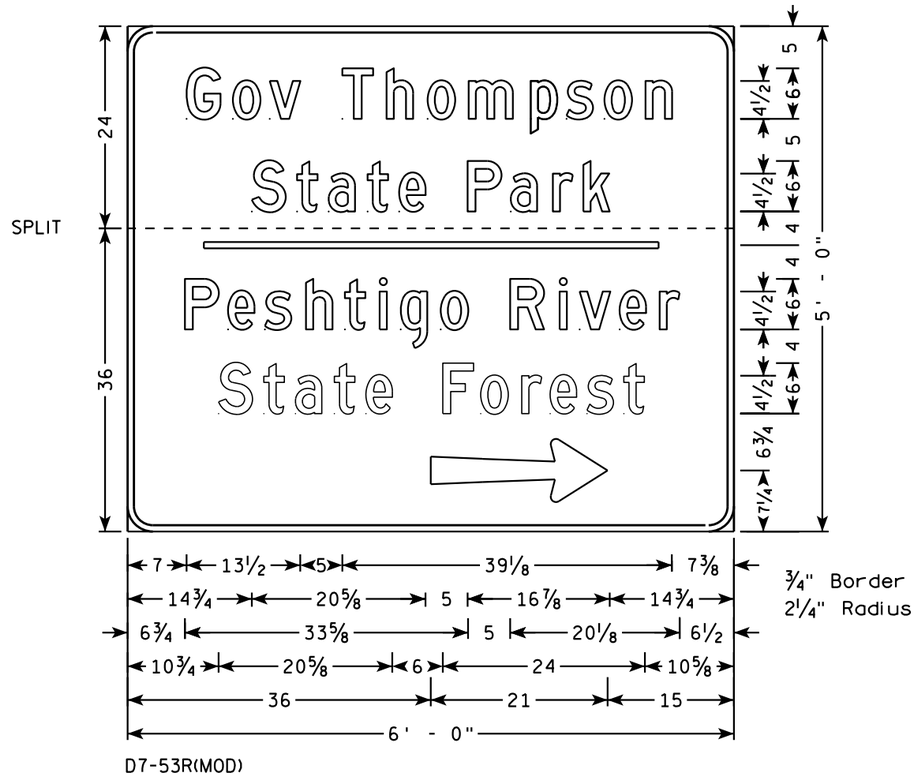


D1-3

7

7

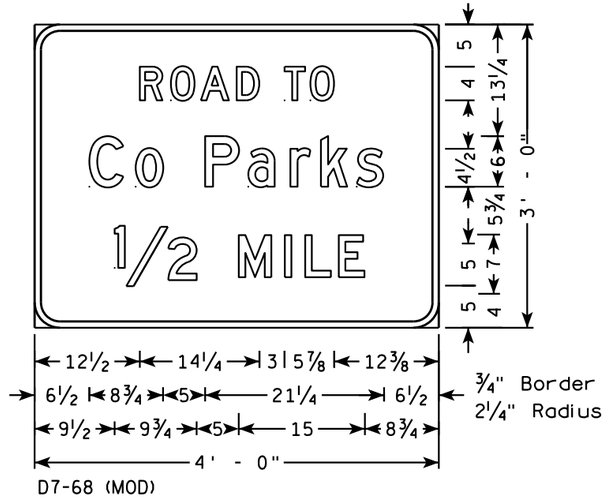
PROJECT NO: 1491-08-71	HWY: USH 41	COUNTY: MARINETTE	PERMANENT SIGNING	SHEET NO: 119	E



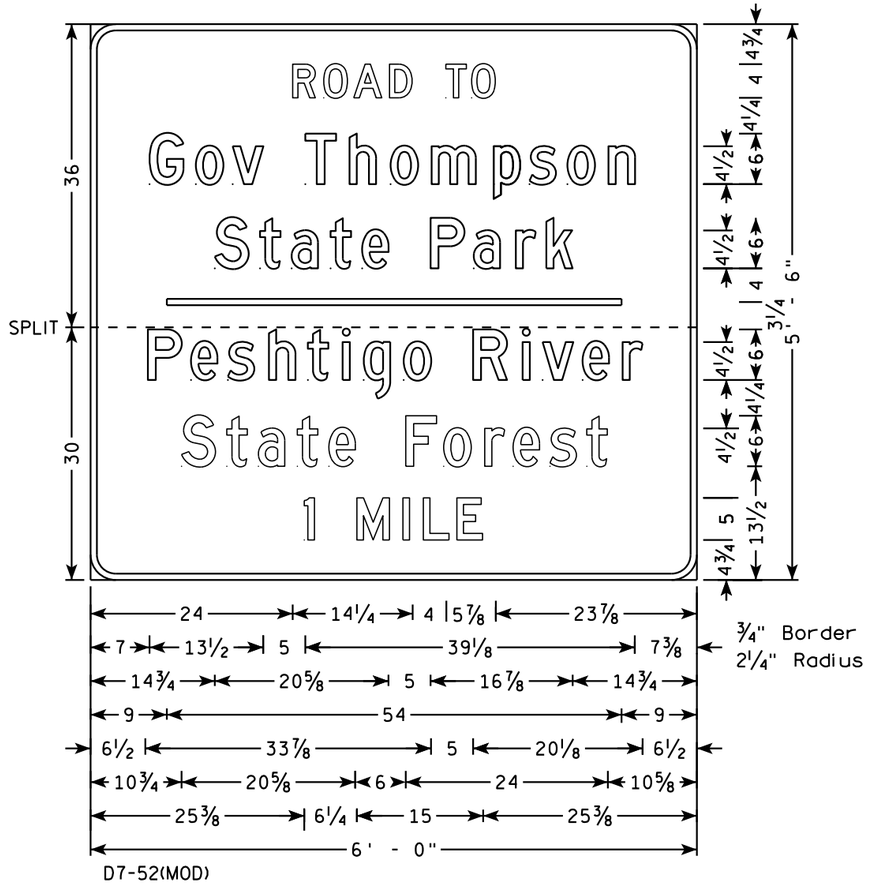
D7-53R(MOD)

NOTES

1. All Sign 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 - D



D7-68 (MOD)



D7-52(MOD)

7

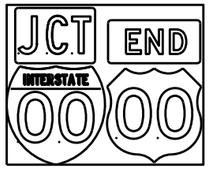
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PROJECT NO: 1491-08-71	HWY: USH 41	COUNTY: MARINETTE	PERMANENT SIGNING	SHEET NO: 120	E

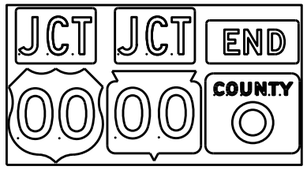
TYPICAL ASSEMBLIES



J1-1



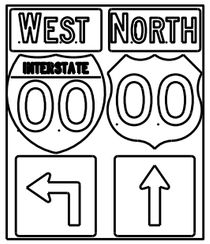
J1-2



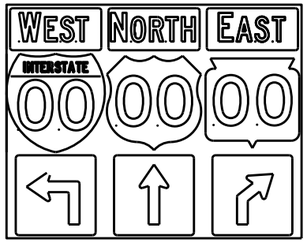
J1-3



J2-1



J2-2

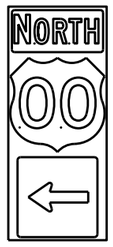


J2-3

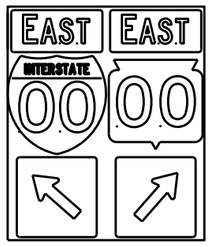


JV

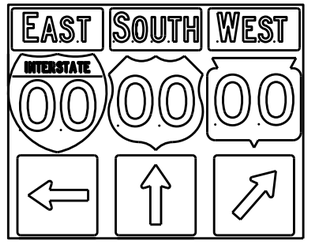
(Typical Vertical J-Assembly
See Note 10 and 11)



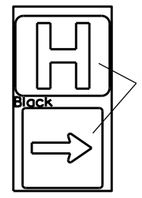
J3-1



J3-2



J3-3

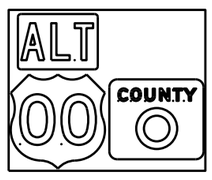


Blue Background

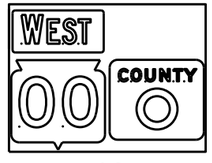
JH-1



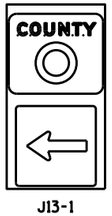
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

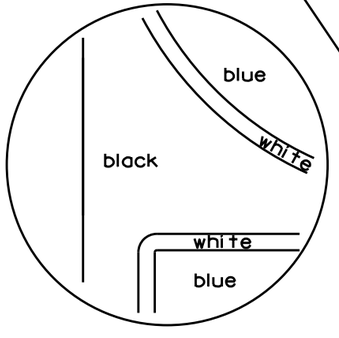


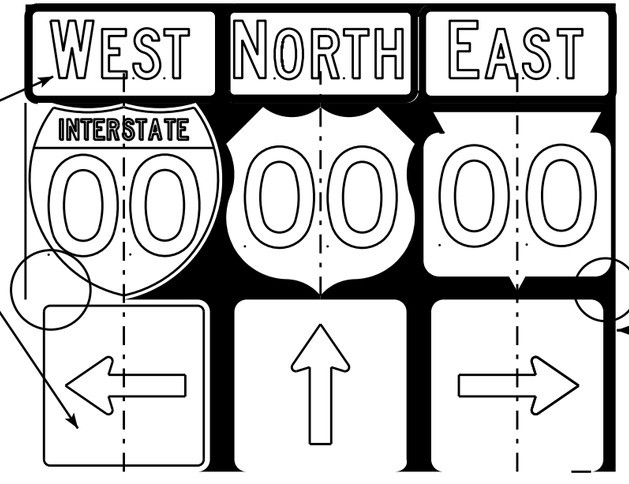
J23-1

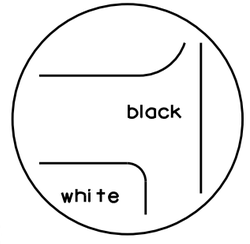


J22-1

[blue background with interstate]







[black background]

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 or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

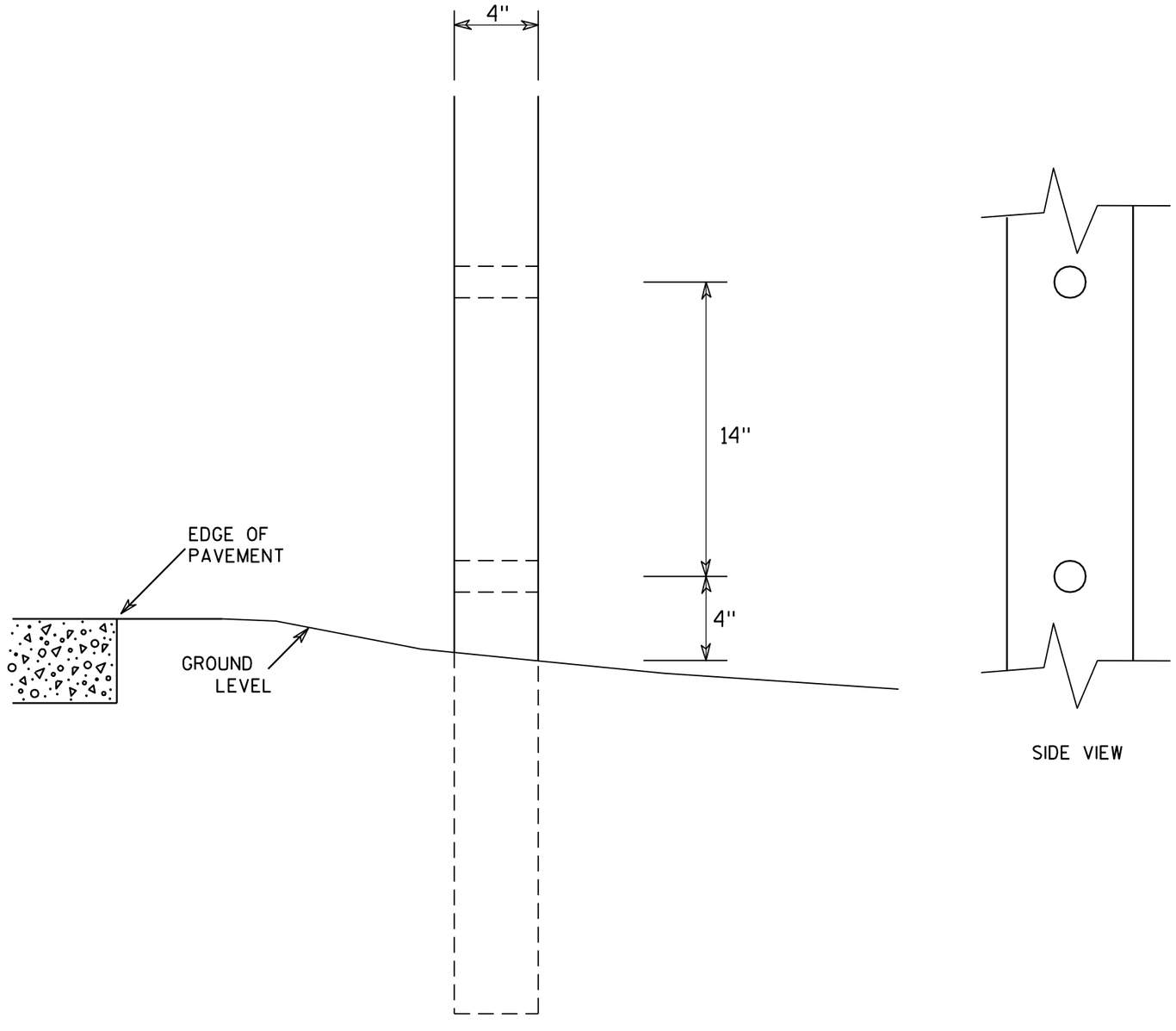
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

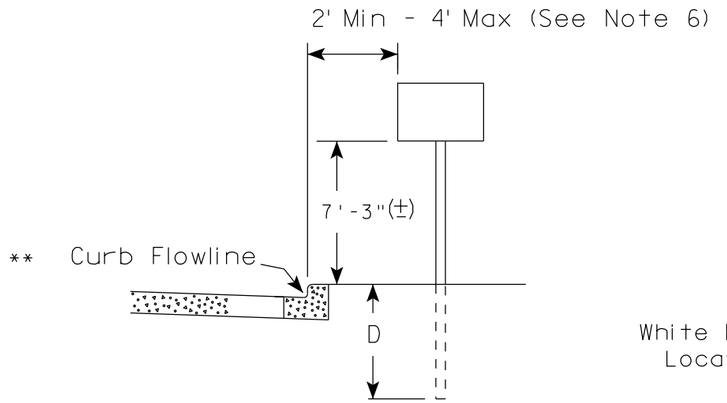
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

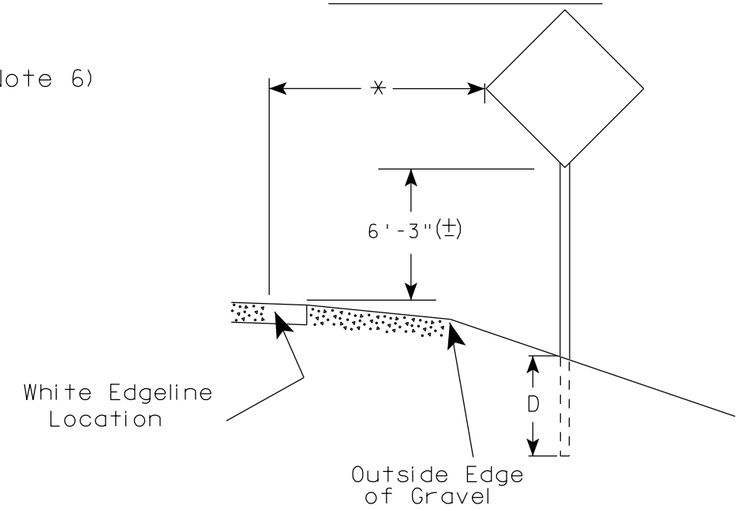
DATE 3/27/97 PLATE NO. A4-11.2

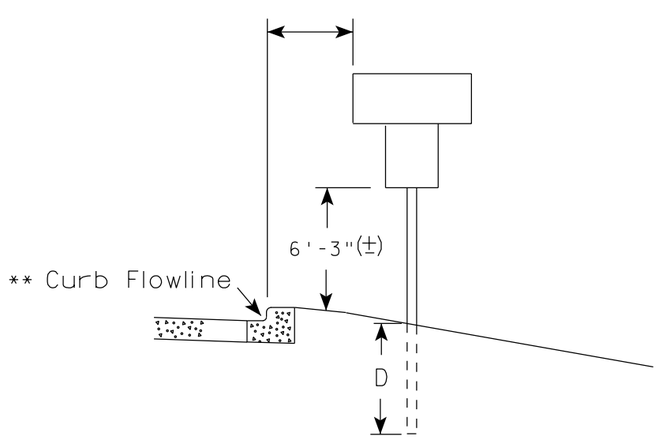
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 122	E

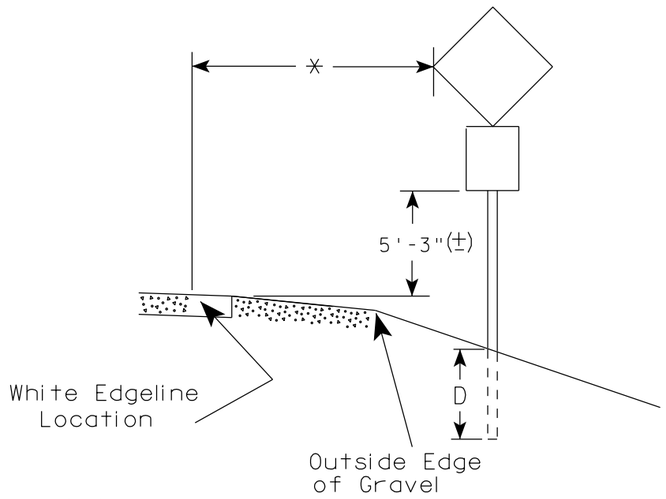
URBAN AREA



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, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series) & End of Rod 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'

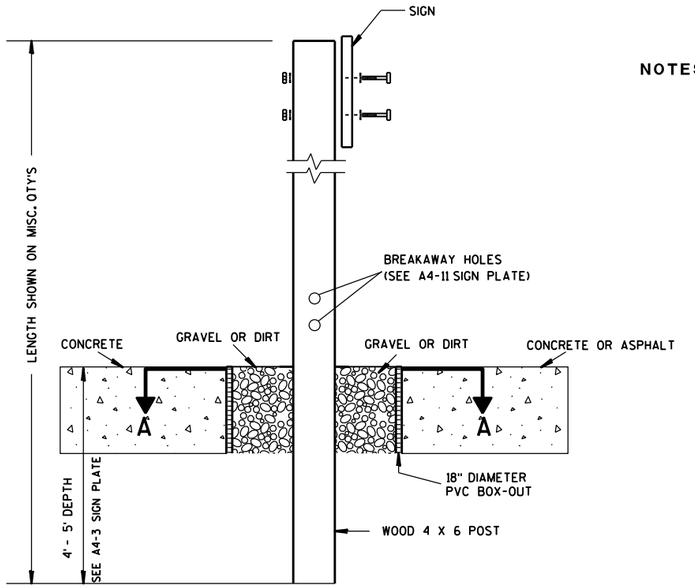
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-3.18

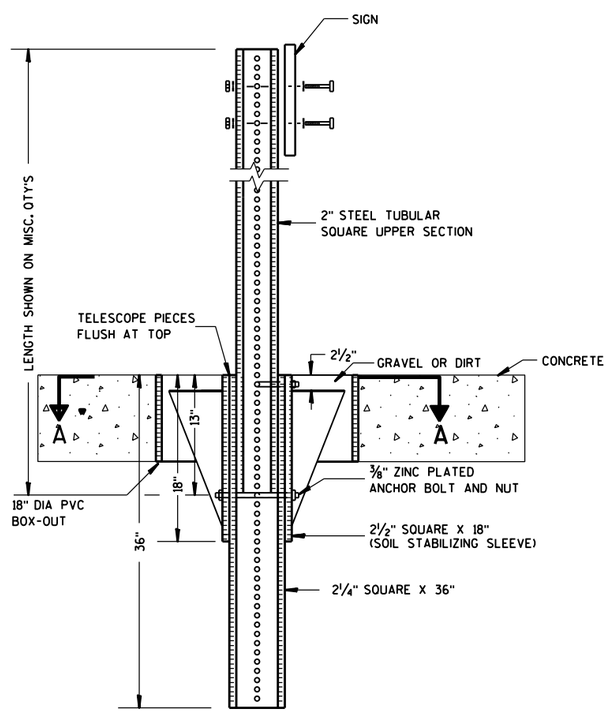
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

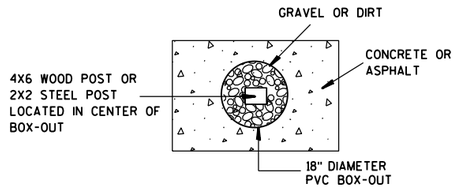
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

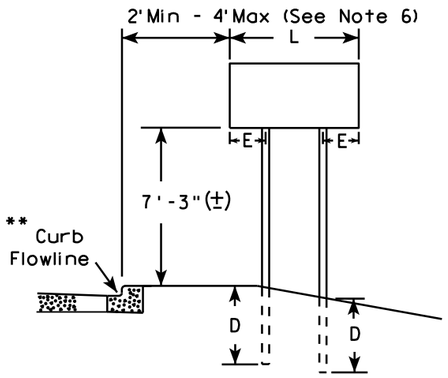
APPROVED Matthew R Rauch
for State Traffic Engineer

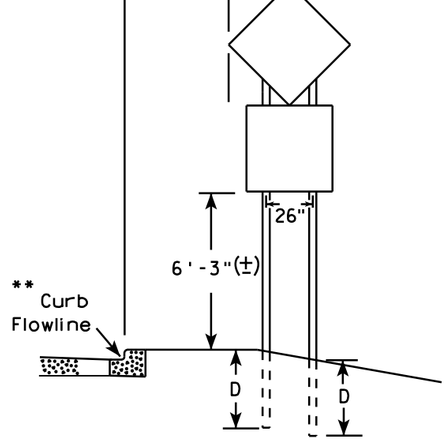
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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

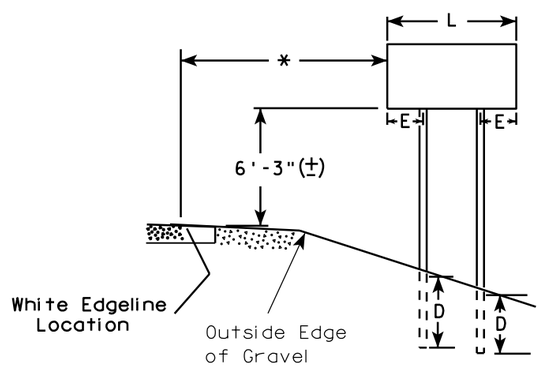
URBAN AREA

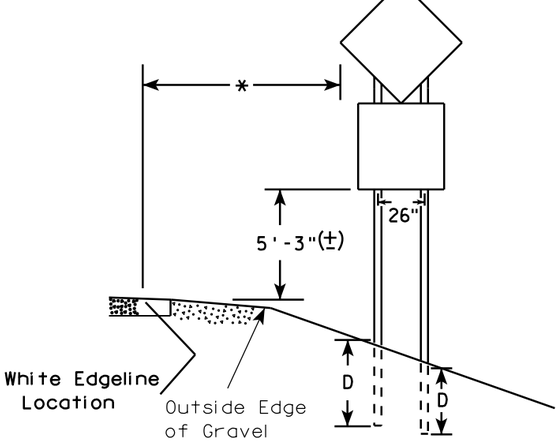




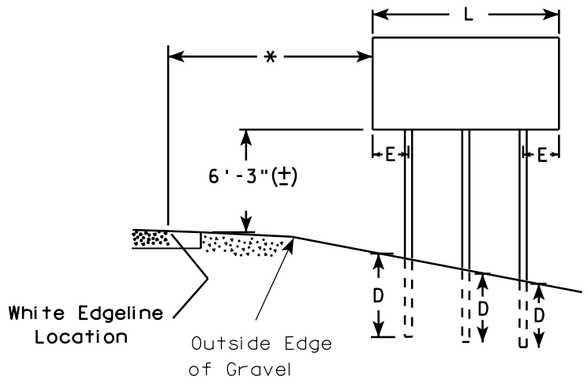
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 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 (R6-4B), 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.

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

***

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

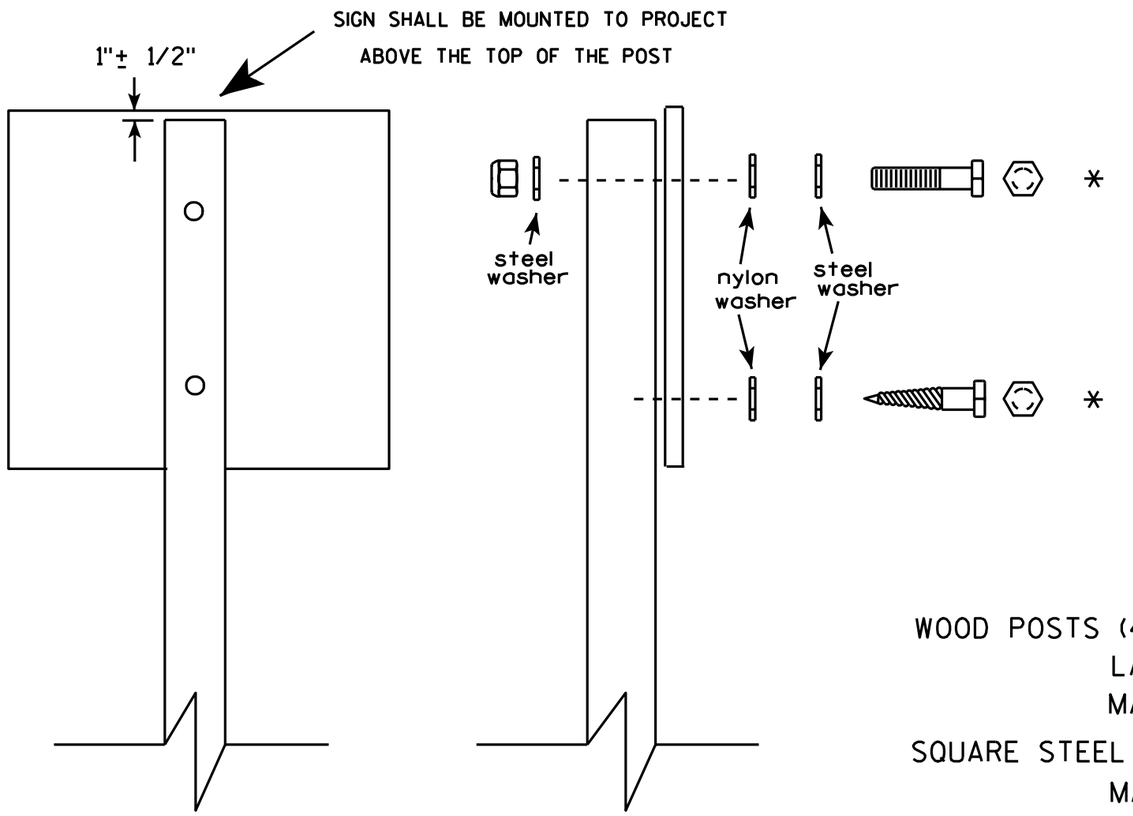
DATE 9/30/13 PLATE NO. A4-4 12
125

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 30-SEP-2013 13:27 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 107.021305:1.000000

7

7



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

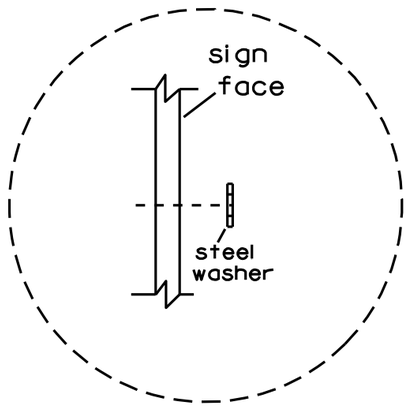
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD 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
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON 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 3/23/10 PLATE NO. A4-8.7

7

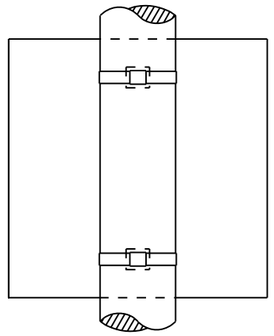
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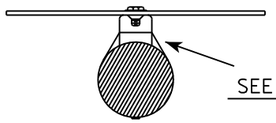
PROJECT NO:

SHEET NO: 126 E

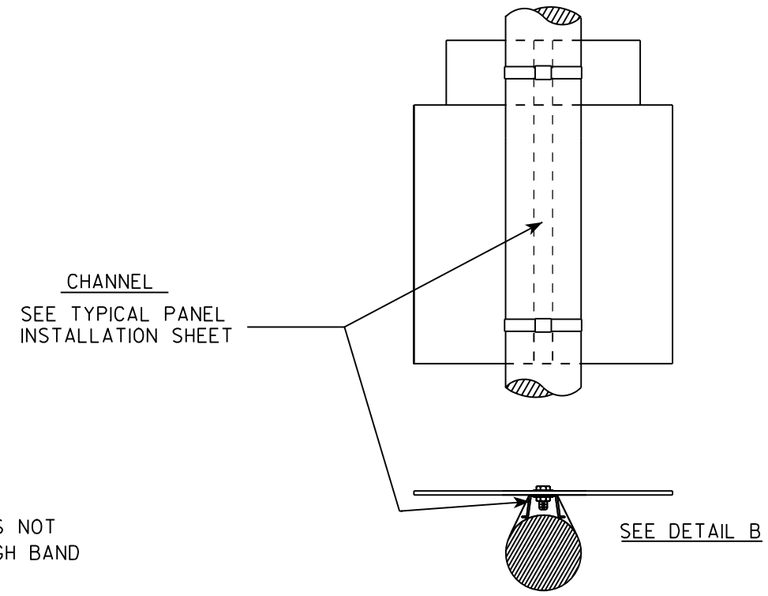
BANDING

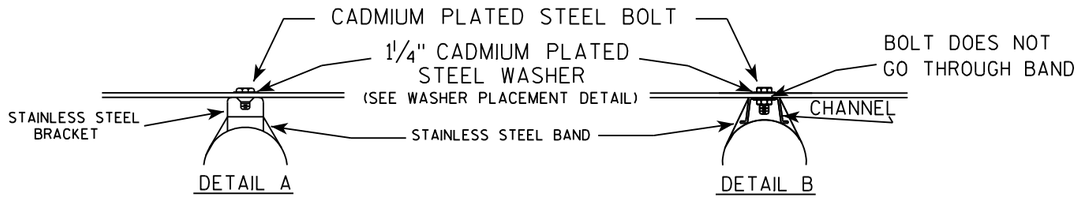
SINGLE SIGN



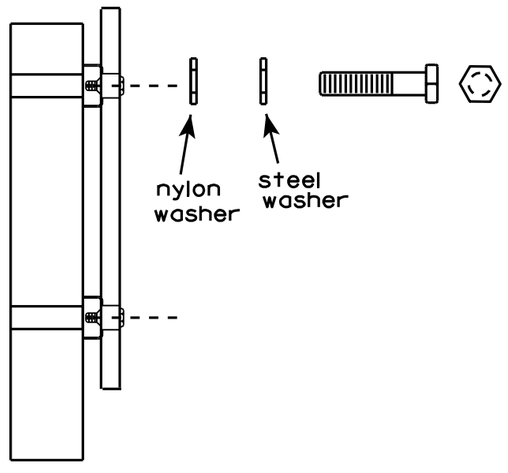


"J" ASSEMBLY





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

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

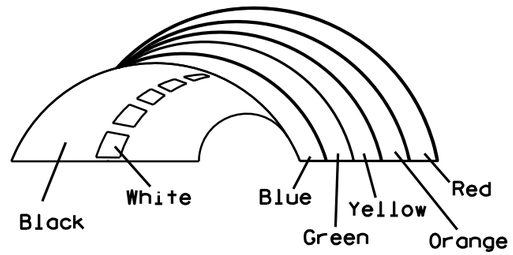
DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 127	E



* VARIES

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - (See Note 5)
3. Message Series - (See Note 6)
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Border - Blue
   Line 1 - Red
   Line 2 - Black
   Line 3-5 - Blue
6. Line 1 - Dutch 8011L
   Line 2 - Series E
   Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

STANDARD SIGN
I55-56

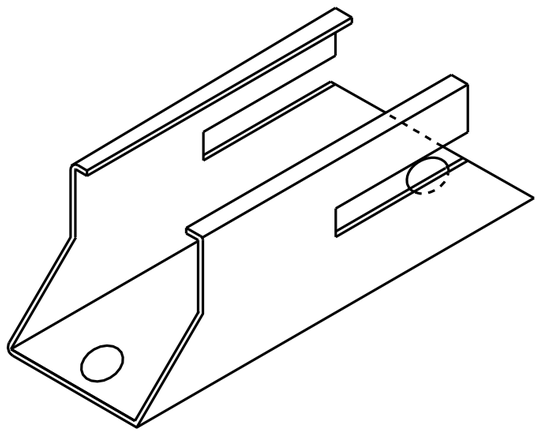
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/27/11 PLATE NO. 155-56.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 128

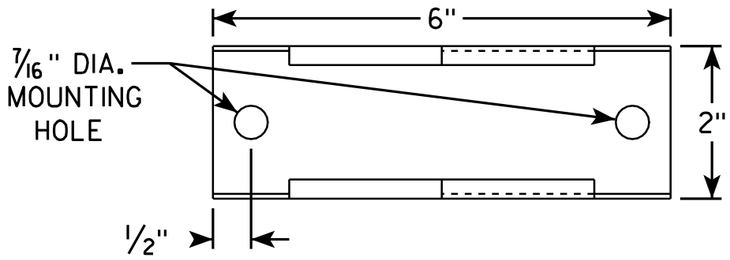
ISOMETRIC VIEW



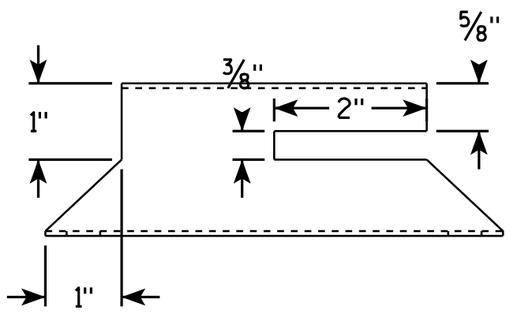
NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

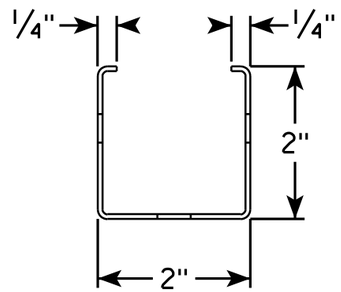
TOP VIEW



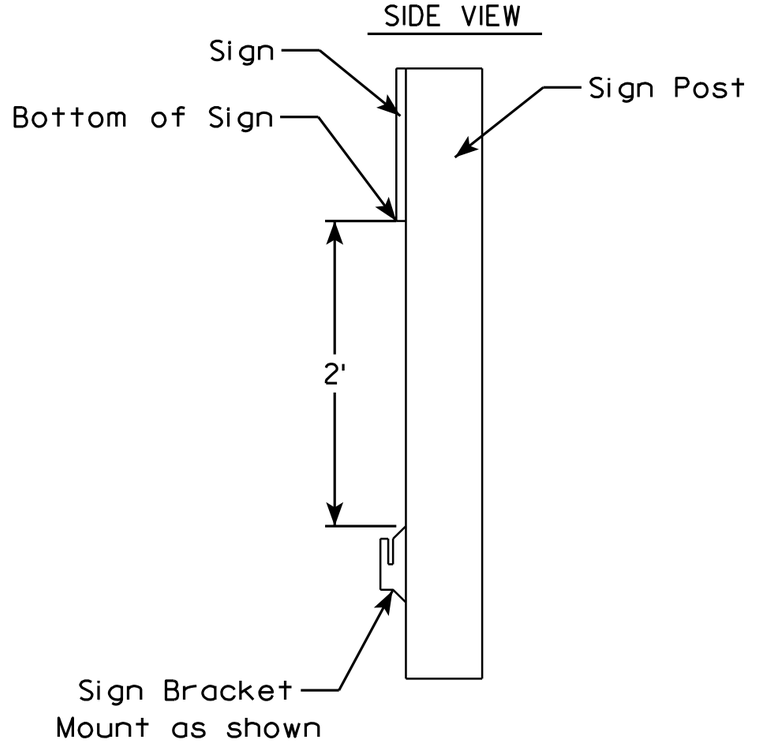
SIDE VIEW



END VIEW



SIDE VIEW



7

7

ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

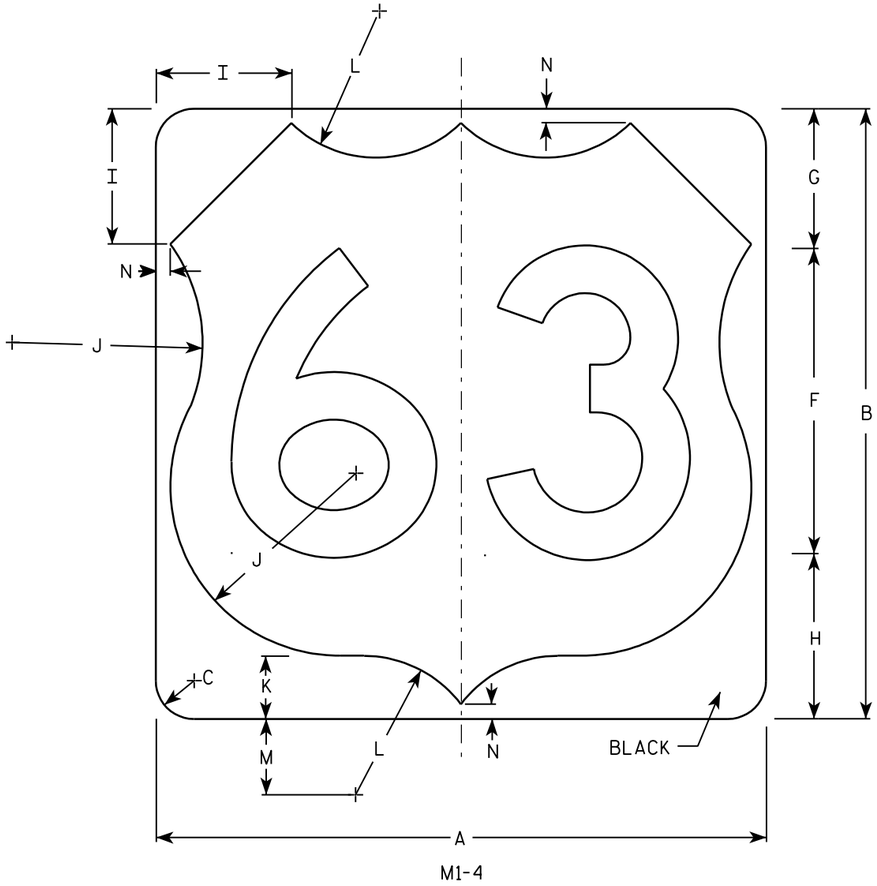
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/10 PLATE NO. I55-56B.1

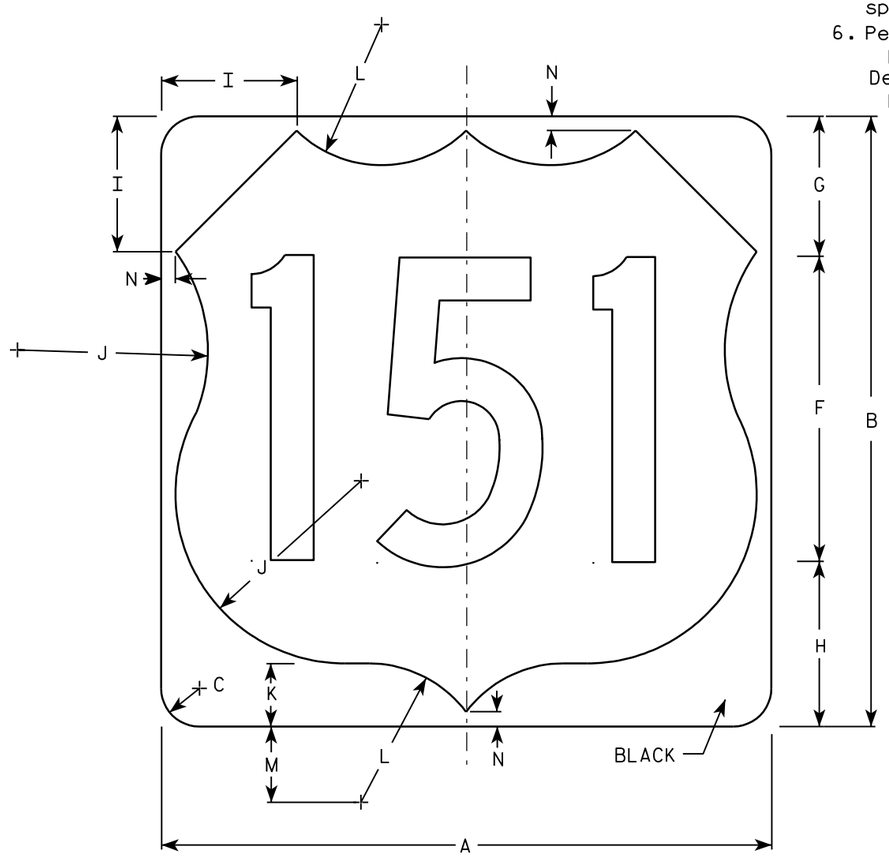
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 129	E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
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	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

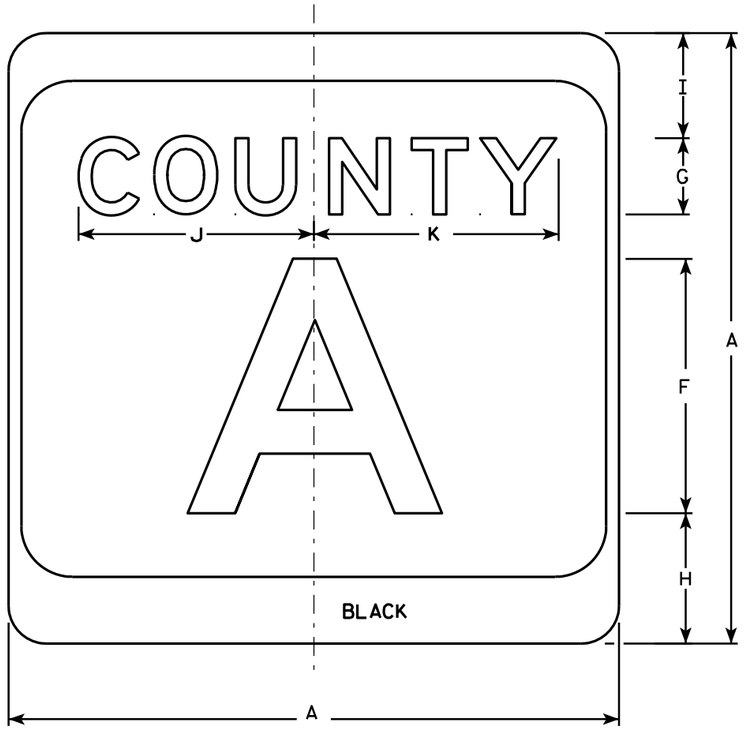
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

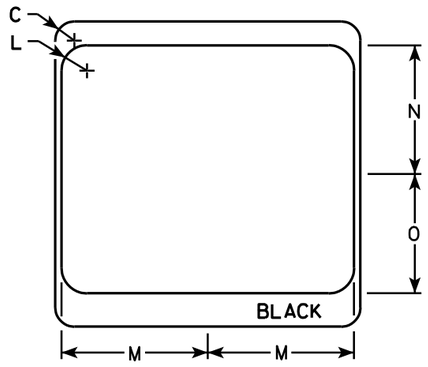
APPROVED Matthew R Rauch
for State Traffic Engineer

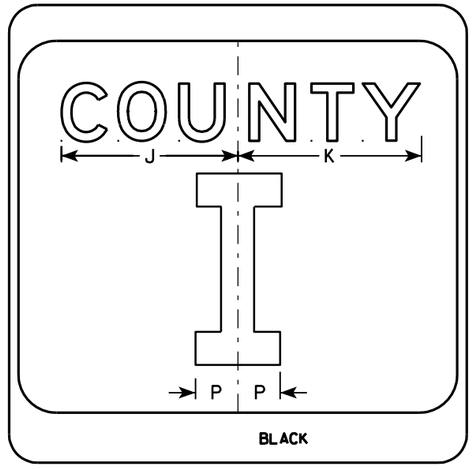
DATE 08/25/05 PLATE NO. M1-4.9

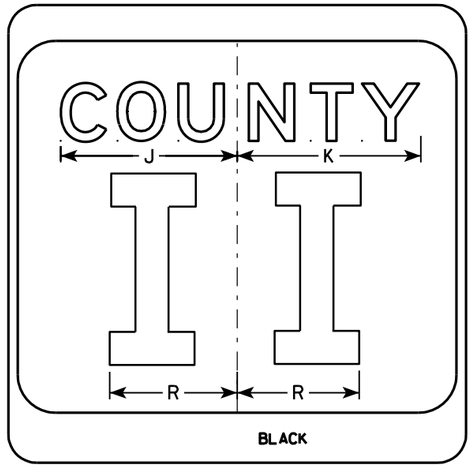
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 130 | E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

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

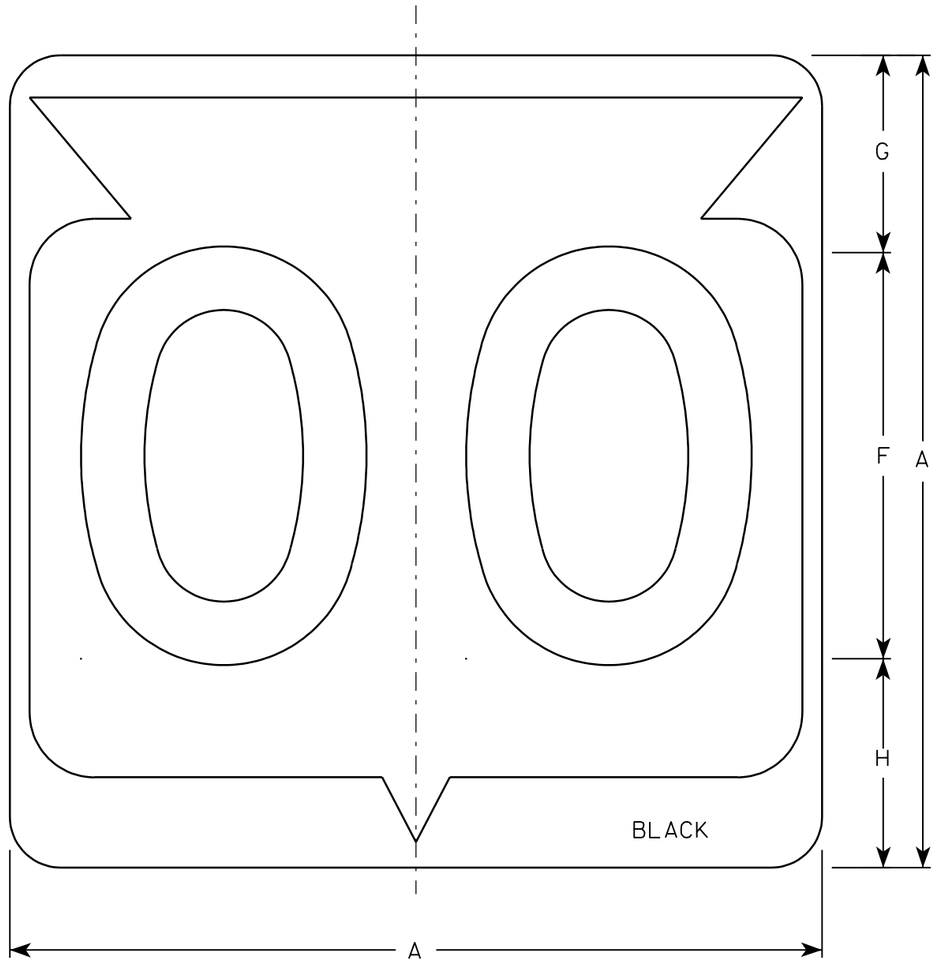
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

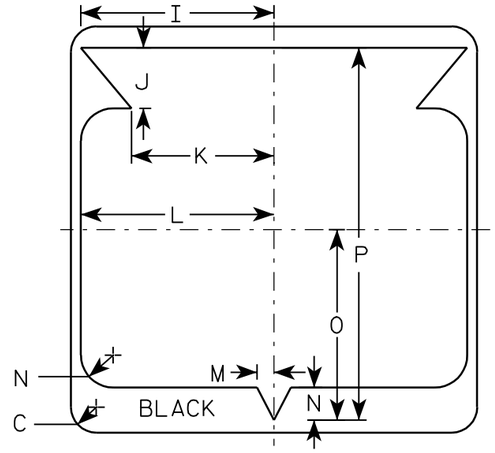
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 131 | E



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
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	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

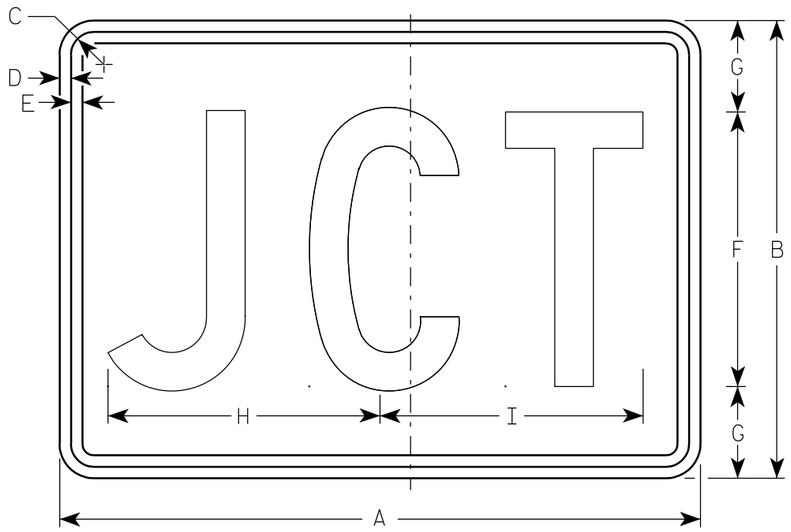
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

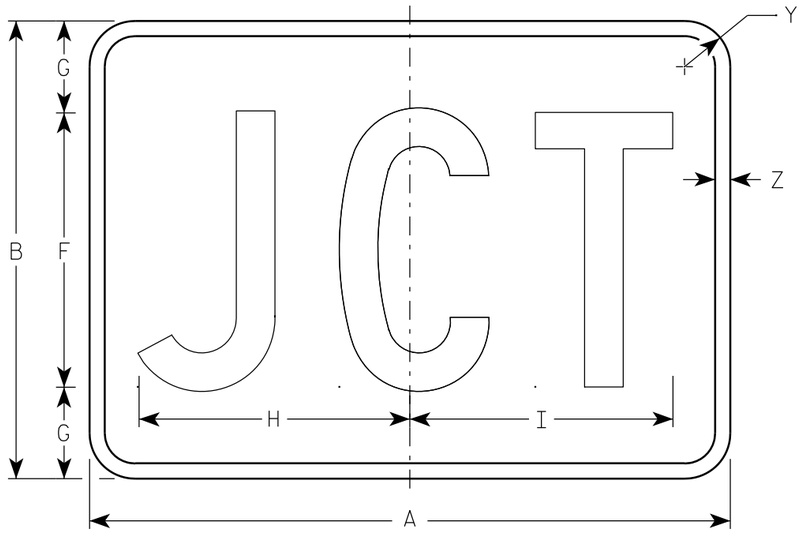
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 132	E



M2-1
MK2-1
MM2-1
MR2-1



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

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

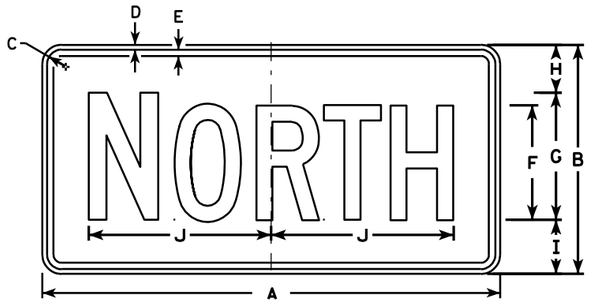
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M2-1.10

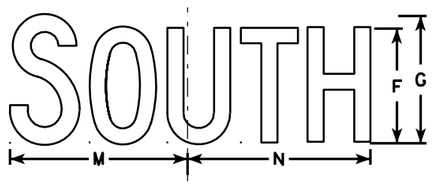
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 133	E



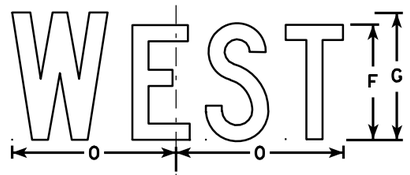
M3-1
MK3-1
MO3-1



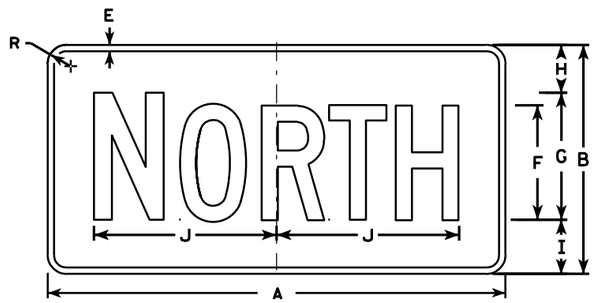
M3-2
MK3-2
MO3-2



M3-3
MK3-3
MO3-3



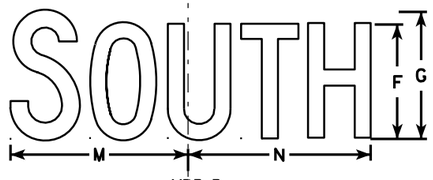
M3-4
MK3-4
MO3-4



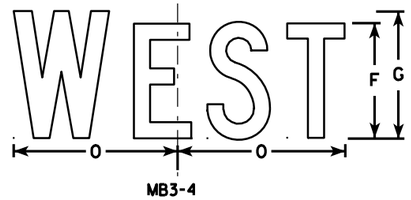
MB3-1
MG3-1
MM3-1
MN3-1



MB3-2
MG3-2
MM3-2
MN3-2



MB3-3
MG3-3
MM3-3
MN3-3



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
   M03-1 thru M03-4 Background - Orange - Reflective
   Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

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

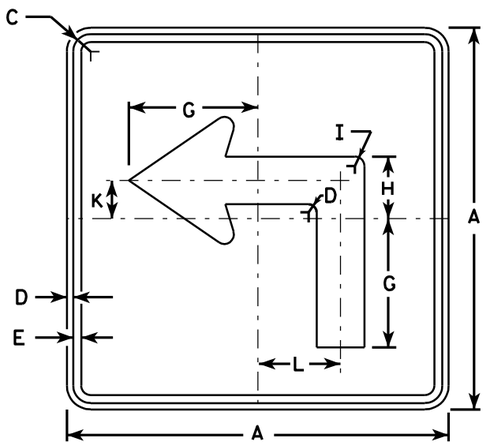
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

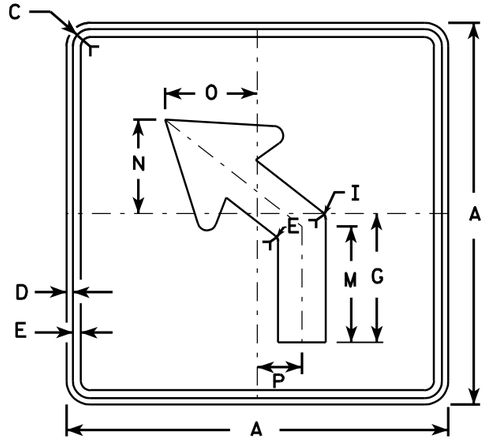
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 11/10/10 PLATE NO. M3-1.12

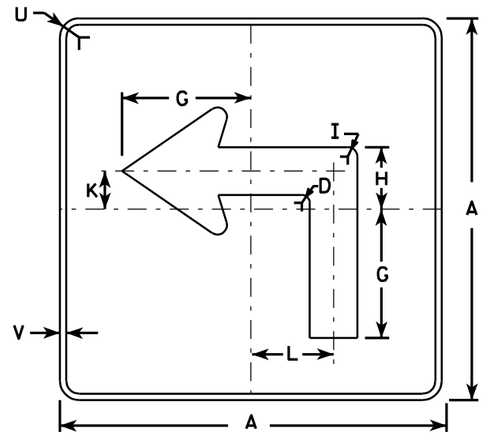
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 134	E



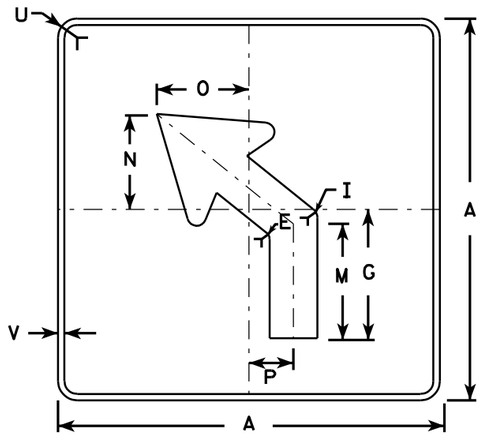
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



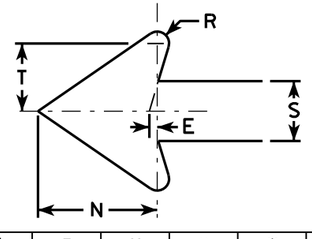
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



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
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H 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 - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow - 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.

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

STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

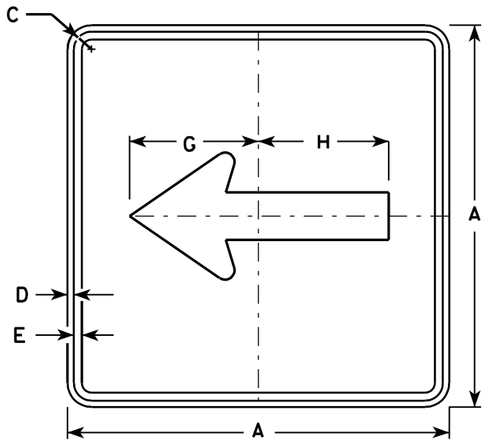
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

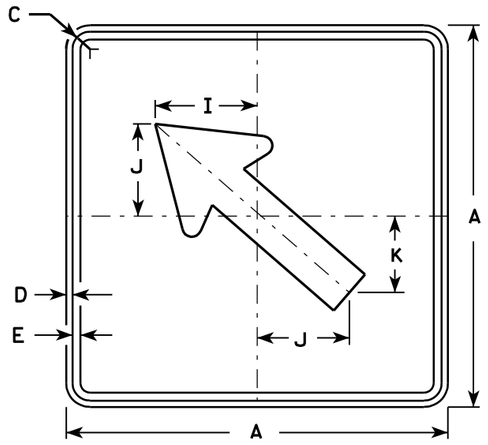
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 135 | E

7

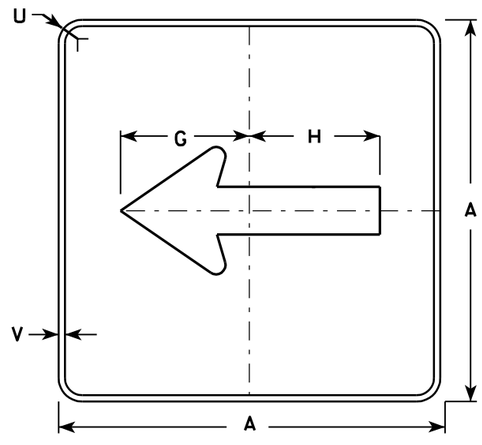
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 29-JUL-2013 13:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.908552:1.000000



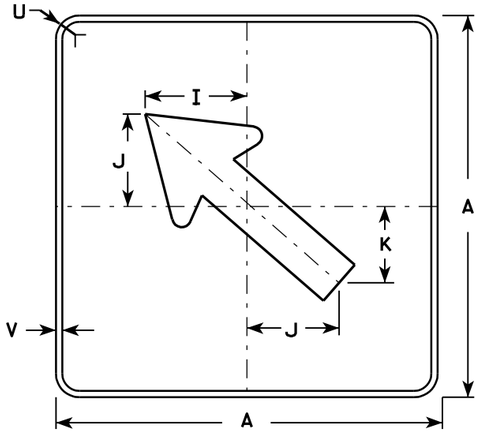
M6-1
MK6-1
MM6-1
MO6-1
MP6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MP6-2
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
   Message - Black

   MB6-1 and MB6-2 Background - Blue
   Message - White - Type H 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

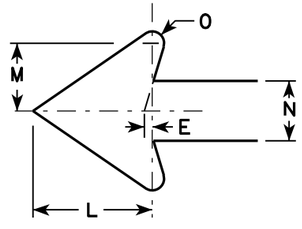
   MM6-1 and MM6-2 Background - White - Type H Reflective
   Message - Green

   MN6-1 and MN6-2 Background - Brown
   Message - White - Type H Reflective

   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black

   MP6-1 and MP6-2 Background - White - Type H Reflective
   Message - Blue

   MR6-1 and MR6-2 Background - Brown
   Message - White - Type H Reflective



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

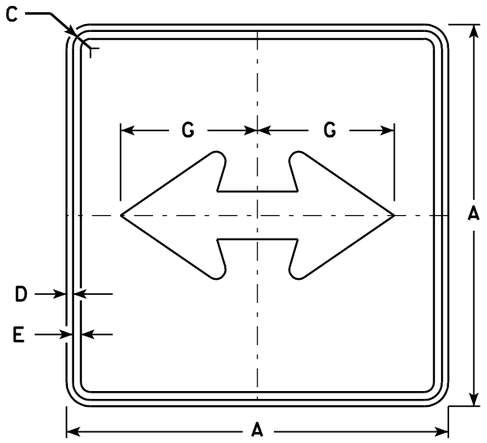
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

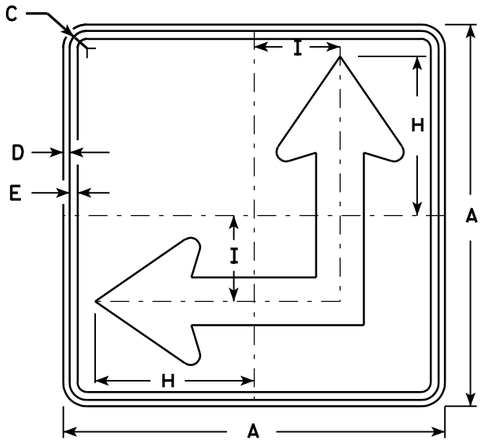
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M6-1.13

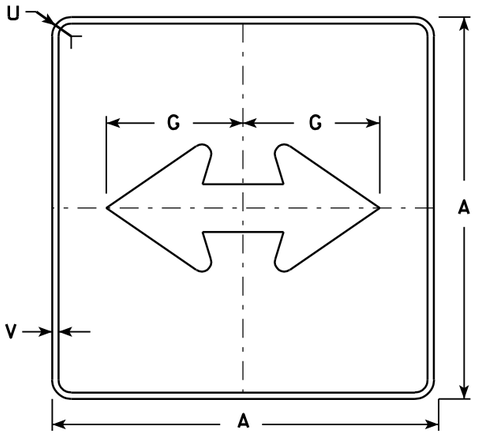
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 136 | E



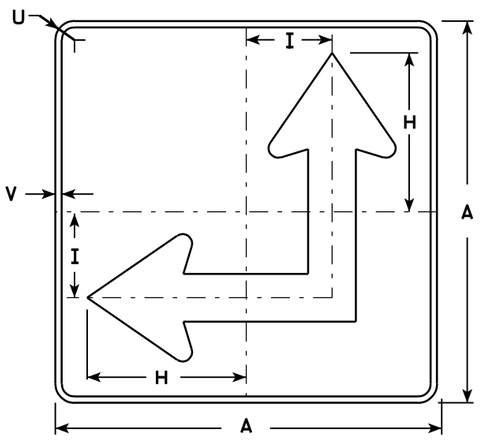
M6-4
MK6-4
MM6-4
MO6-4
MP6-4
MR6-4



M6-6
MK6-6
MM6-6
MO6-6
MP6-6
MR6-6



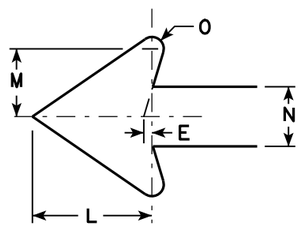
MB6-4
MG6-4
MN6-4



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
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White - Type H 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 - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White - Type H Reflective
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - White - Type H Reflective
5. M6-6R same as M6-6L except arrow points ahead and right.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

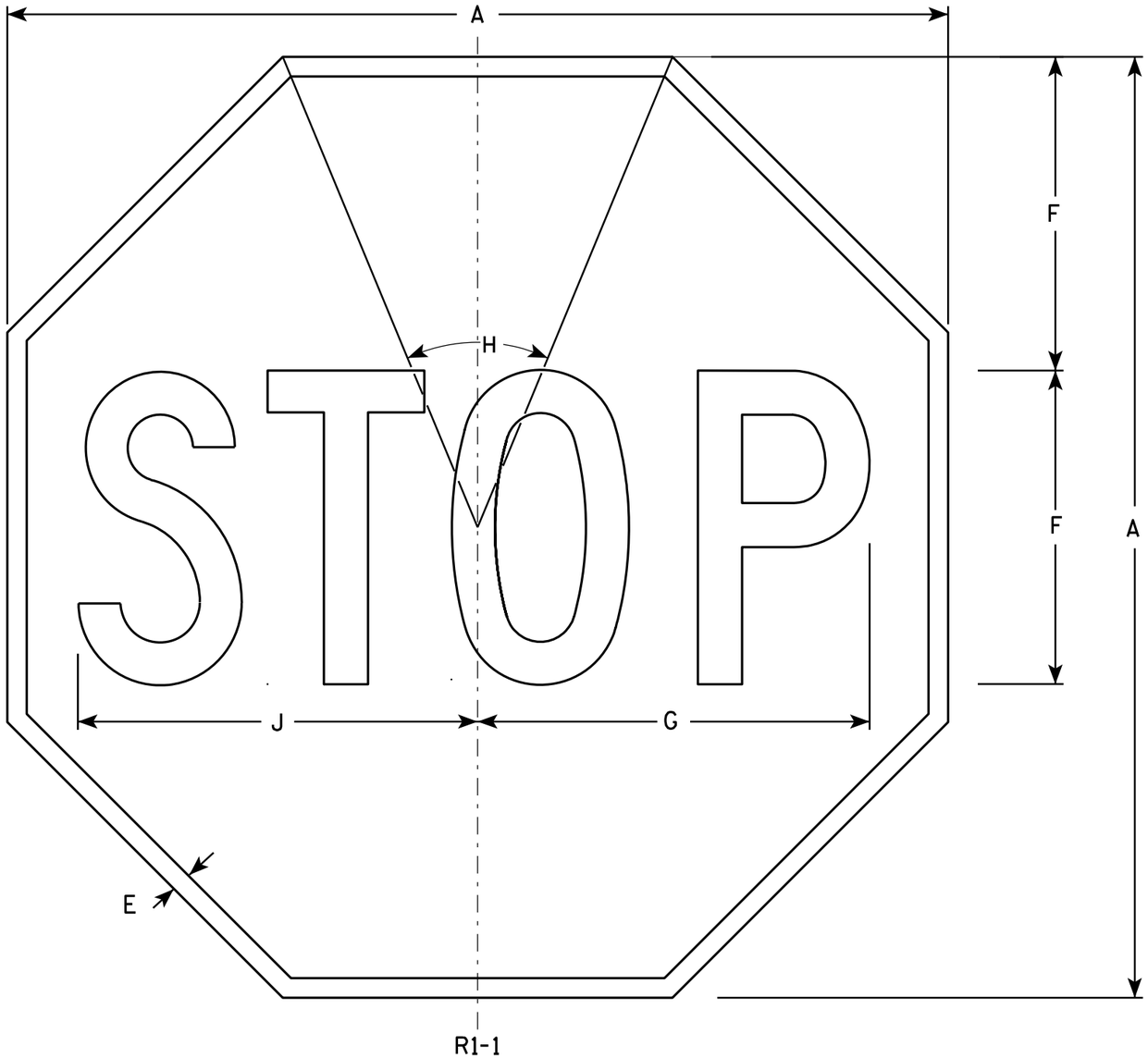
STANDARD SIGN M6-4 & M6-6 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 7/29/13 PLATE NO. M6-4.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 137 | 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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

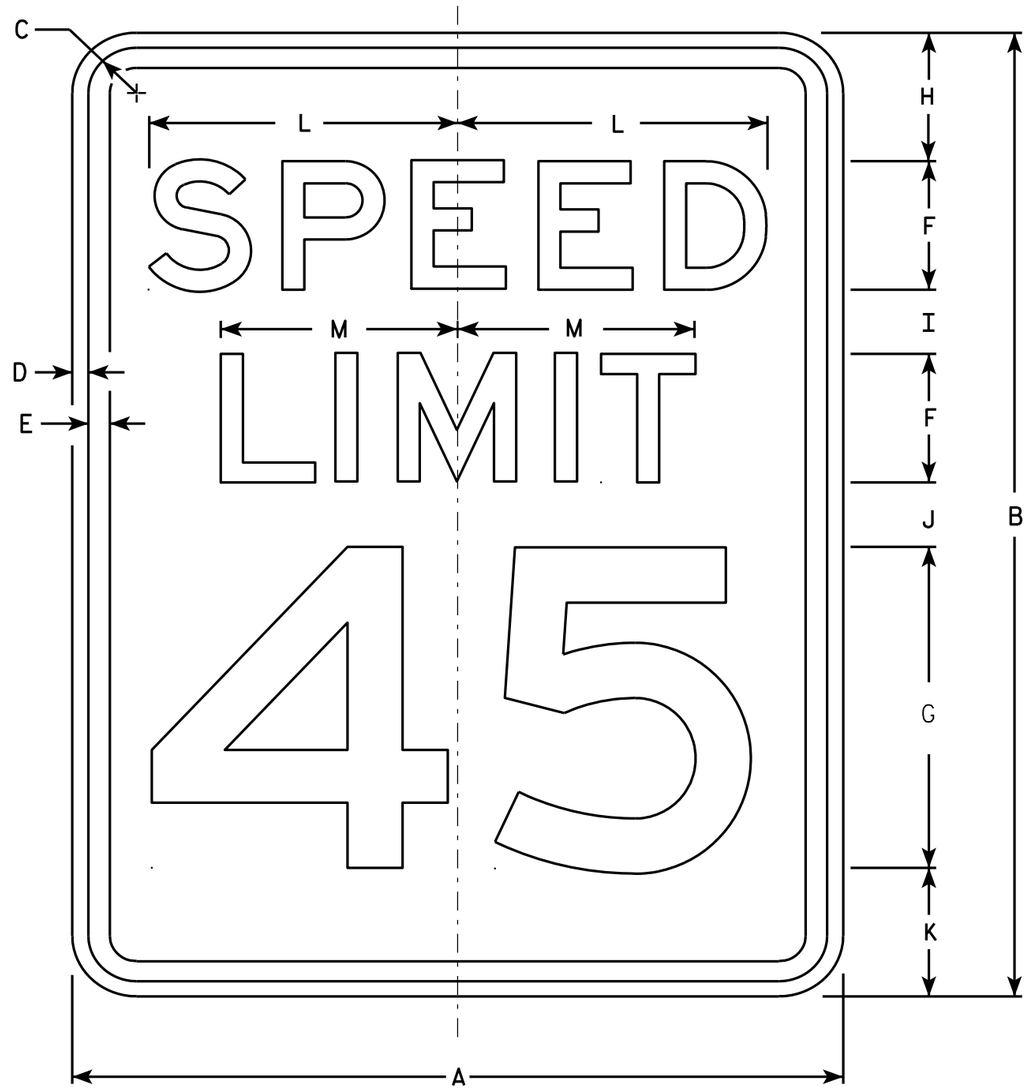
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 138	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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

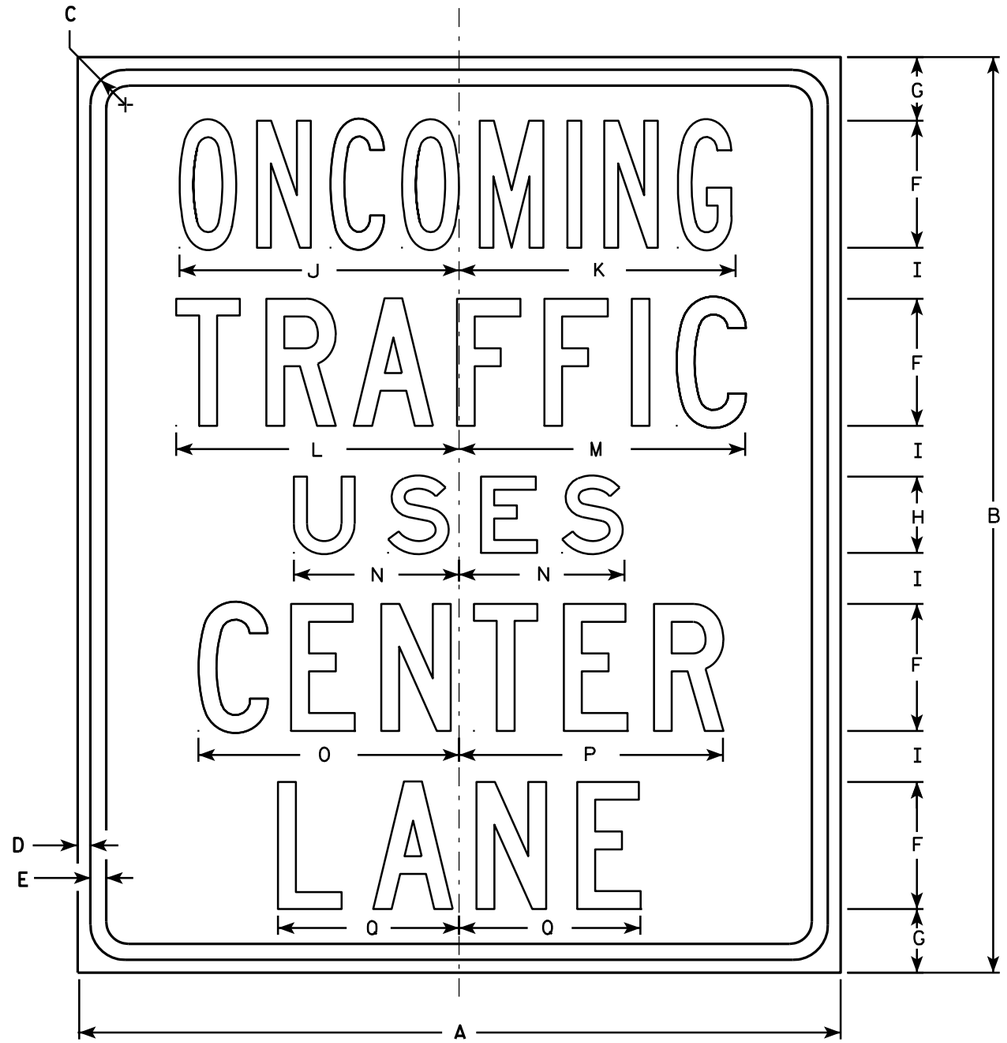
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 139	E



R3-72

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B, Lines 2, 4 and 5 are Series C, and Line 3 is 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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	36	1 3/8	1/2	5/8	5	2 1/2	3	2	11	10 7/8	11 1/8	11 1/4	6 1/2	10 1/4	10 3/8	7 1/8										7.50
2S	30	36	1 3/8	1/2	5/8	5	2 1/2	3	2	11	10 7/8	11 1/8	11 1/4	6 1/2	10 1/4	10 3/8	7 1/8										7.50
2M	30	36	1 3/8	1/2	5/8	5	2 1/2	3	2	11	10 7/8	11 1/8	11 1/4	6 1/2	10 1/4	10 3/8	7 1/8										7.50
3																											
4																											
5																											

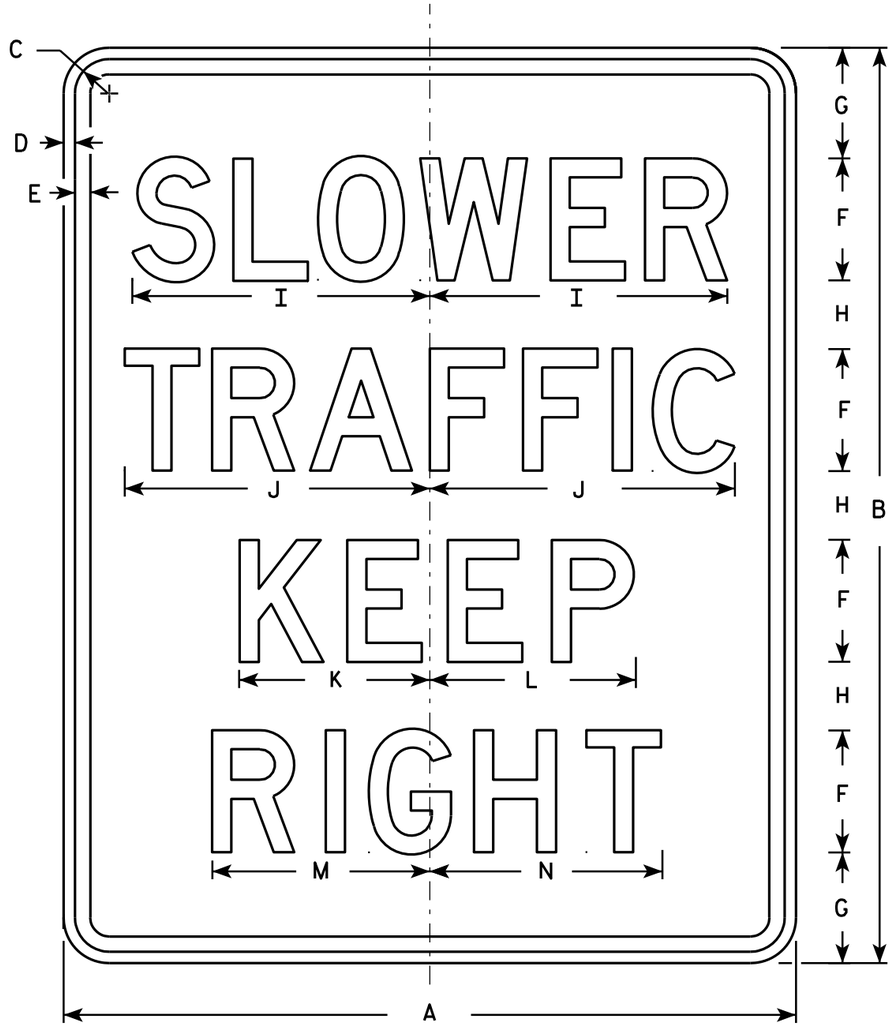
STANDARD SIGN
R3-72

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R3-72.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 140	E



R4-3

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8													5.0
2M	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8													5.0
3	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0
4	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0
5	48	60	2 1/4	3/4	1	8	7 1/4	4 1/2	19 1/2	20	12 1/2	13 1/2	14 1/4	15 1/4													20.0

STANDARD SIGN
R4-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-3.8

PROJECT NO:

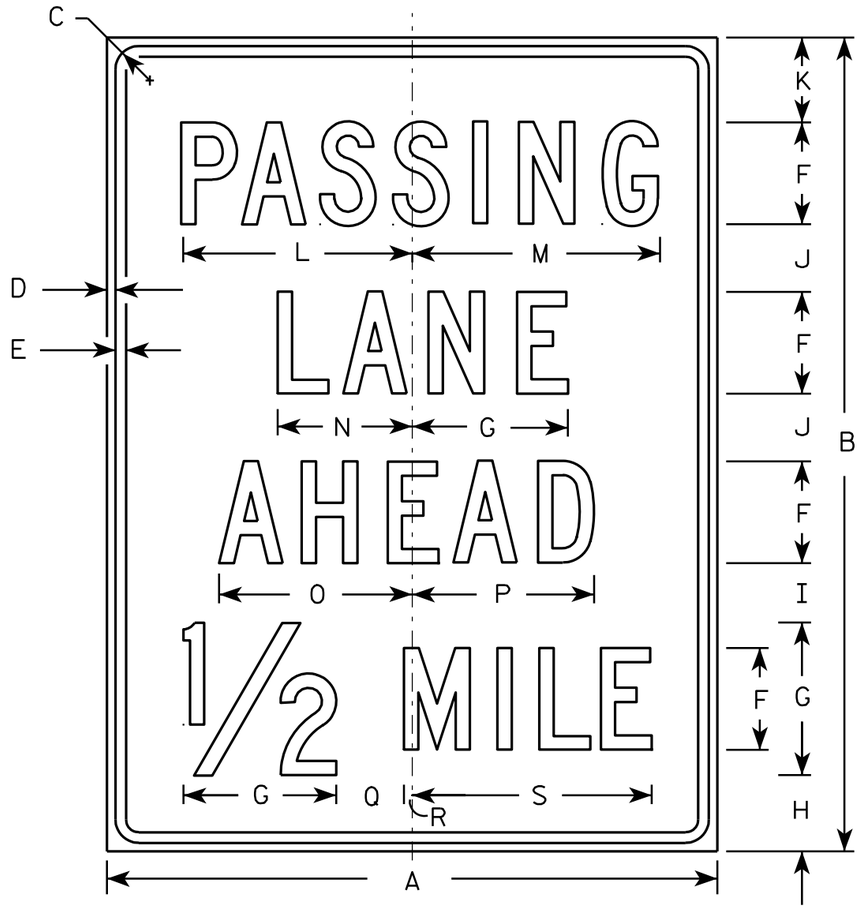
SHEET NO: 141 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R43.DGN PLOT DATE : 25-MAR-2011 13:40 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

7

7



R4-51

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	48	1 3/8	1/2	5/8	6	9	4 1/2	3 1/2	4	5	13 5/8	14 1/2	8	11 3/8	10 3/4	4	1/2	14 1/8								12.0
2M	36	48	1 3/8	1/2	5/8	6	9	4 1/2	3 1/2	4	5	13 5/8	14 1/2	8	11 3/8	10 3/4	4	1/2	14 1/8								12.0
3																											
4																											
5																											

STANDARD SIGN
R4-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R4-51.4

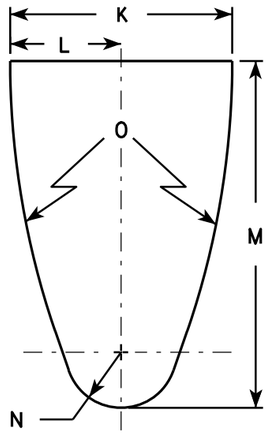
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 142 | E

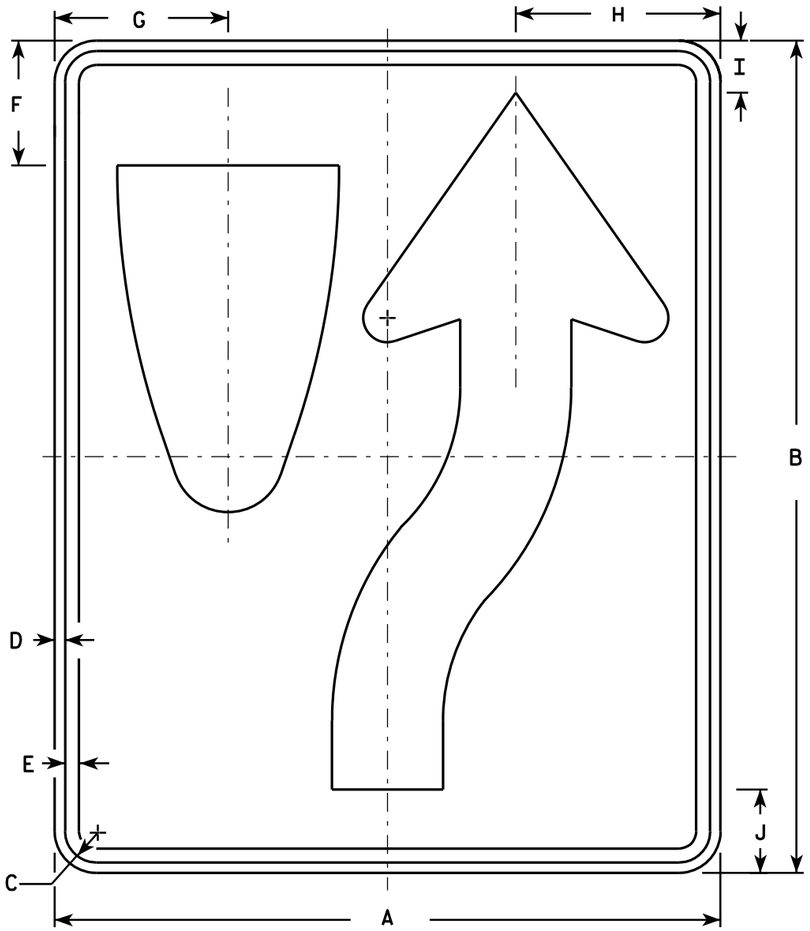
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R451.DGN PLOT DATE : 29-MAR-2011 10:36 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 8.938567:1.000000

WISDOT/CADDS SHEET 42

7

7

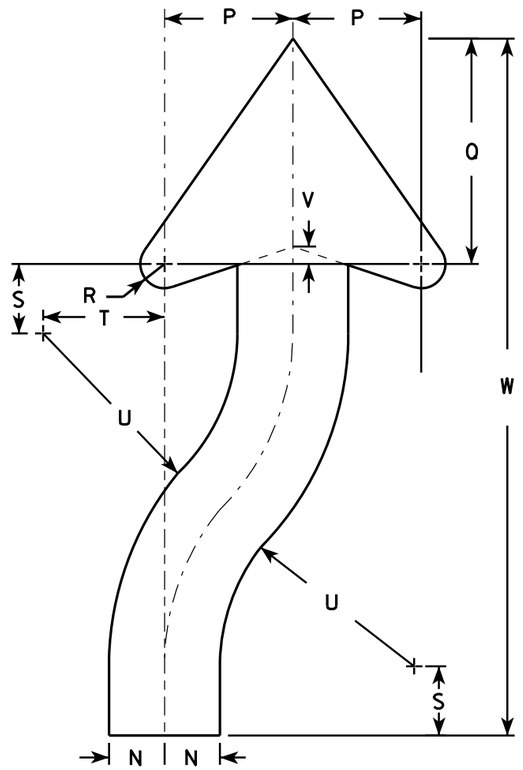




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

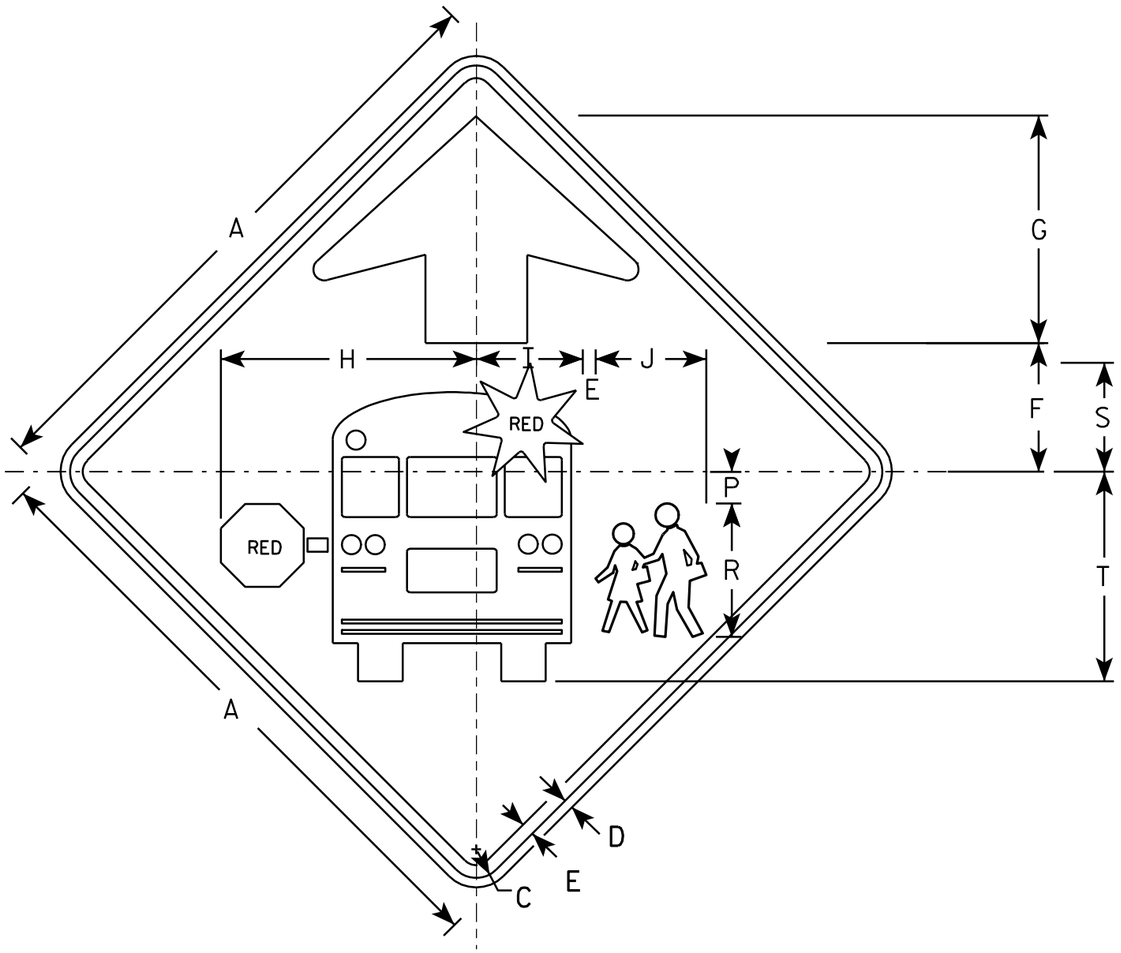
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

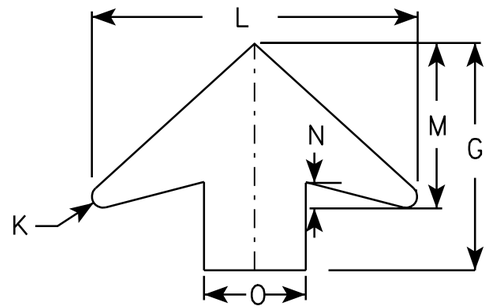
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 143	E



S3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW-GREEN
   Message - BLACK except as noted
   Circles except PEDS- RED BACKGROUND
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	12 1/2	5 1/4	5 1/2	1/2	16	8	1 1/4	5	1 1/2		6 5/8	5 3/8	10 3/8							6.25
2	36		1 5/8	5/8	3/4	7 1/2	13 1/2	15 1/8	6 1/4	6 1/2	5/8	19 1/4	9 3/4	1 5/8	6	1 7/8		7 7/8	6 3/8	12 3/8							9.0
3	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
4	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
5																											

STANDARD SIGN
S3-1

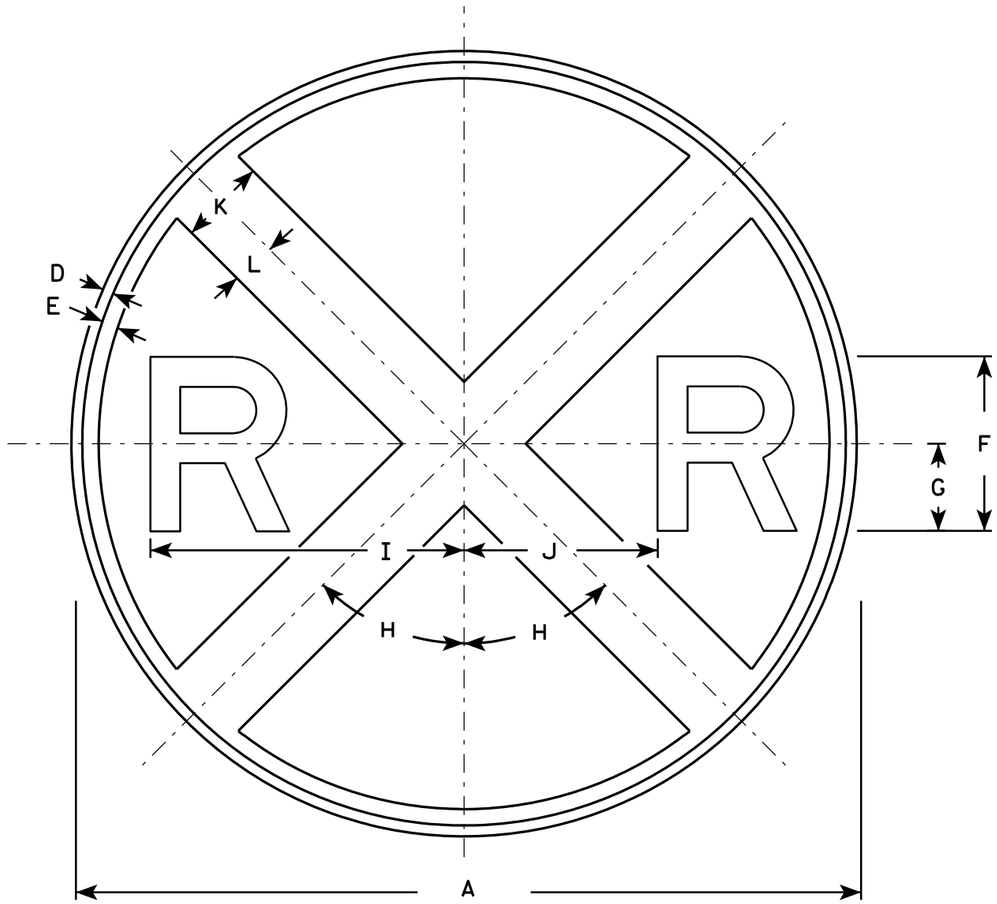
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/8/10 PLATE NO. S3-1.6

PROJECT NO:

SHEET NO: 144 E



W10-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30			3/8	5/8	7	3 1/2	45°	12 3/8	7 1/8	3	1 1/2															4.91
2S	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
2M	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
3																											
4	48			3/4	1 1/4	10	5	45°	18 3/8	11 5/8	5	2 1/2															12.57
5																											

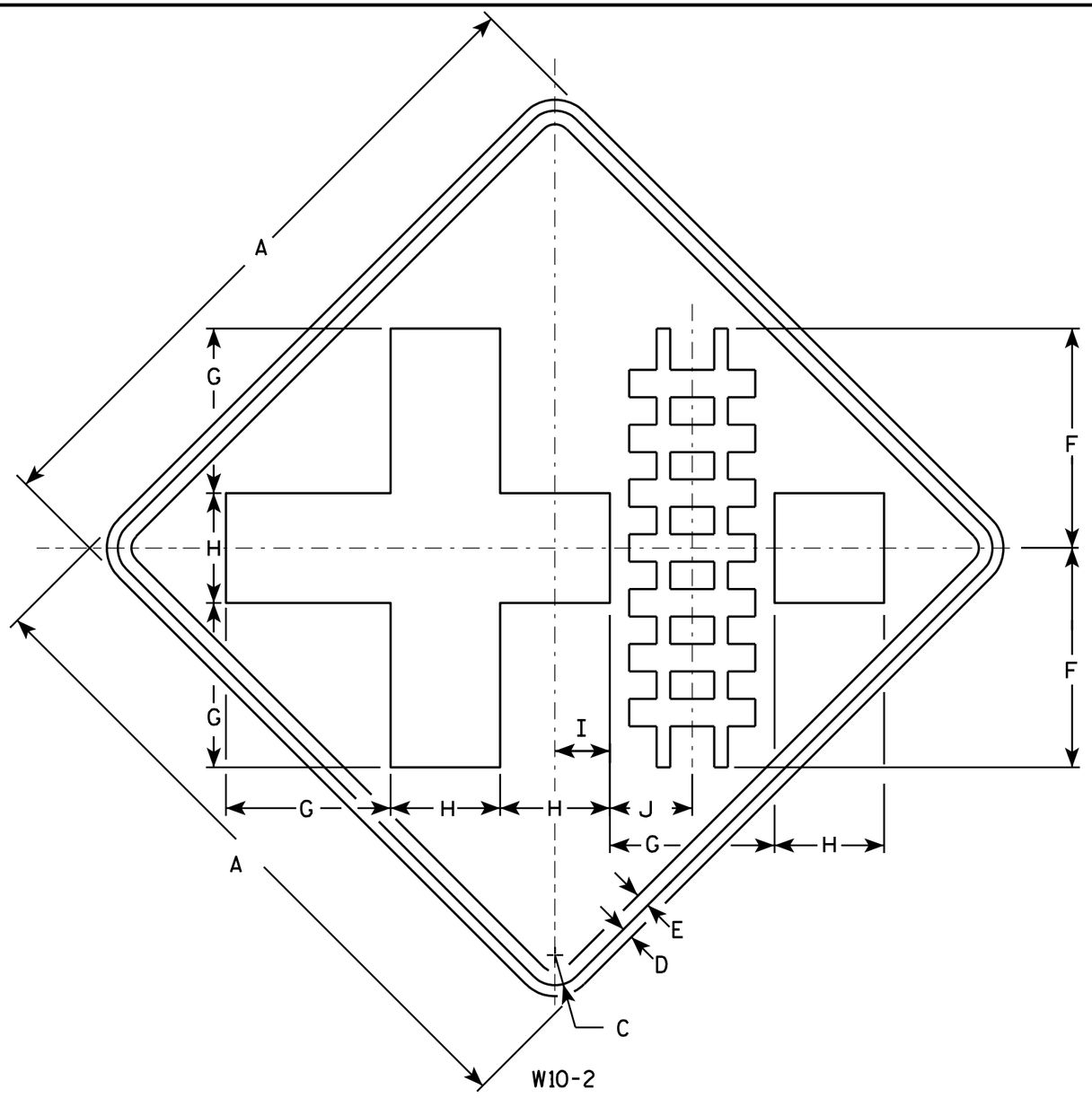
STANDARD SIGN
W10-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

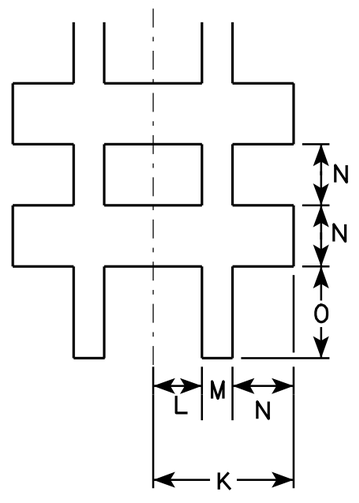
DATE 3/13/13 PLATE NO. W10-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 145	E



NOTES

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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	7 1/2	5	2 1/2	3 3/4	2 7/8	1	5/8	1 1/4	1 7/8												6.25
2S	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
2M	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
3	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
4	48		2 1/4	3/4	1	16	12	8	4	6	4 1/2	1 1/2	1	2	3												16.0
5																											

STANDARD SIGN
W10-2

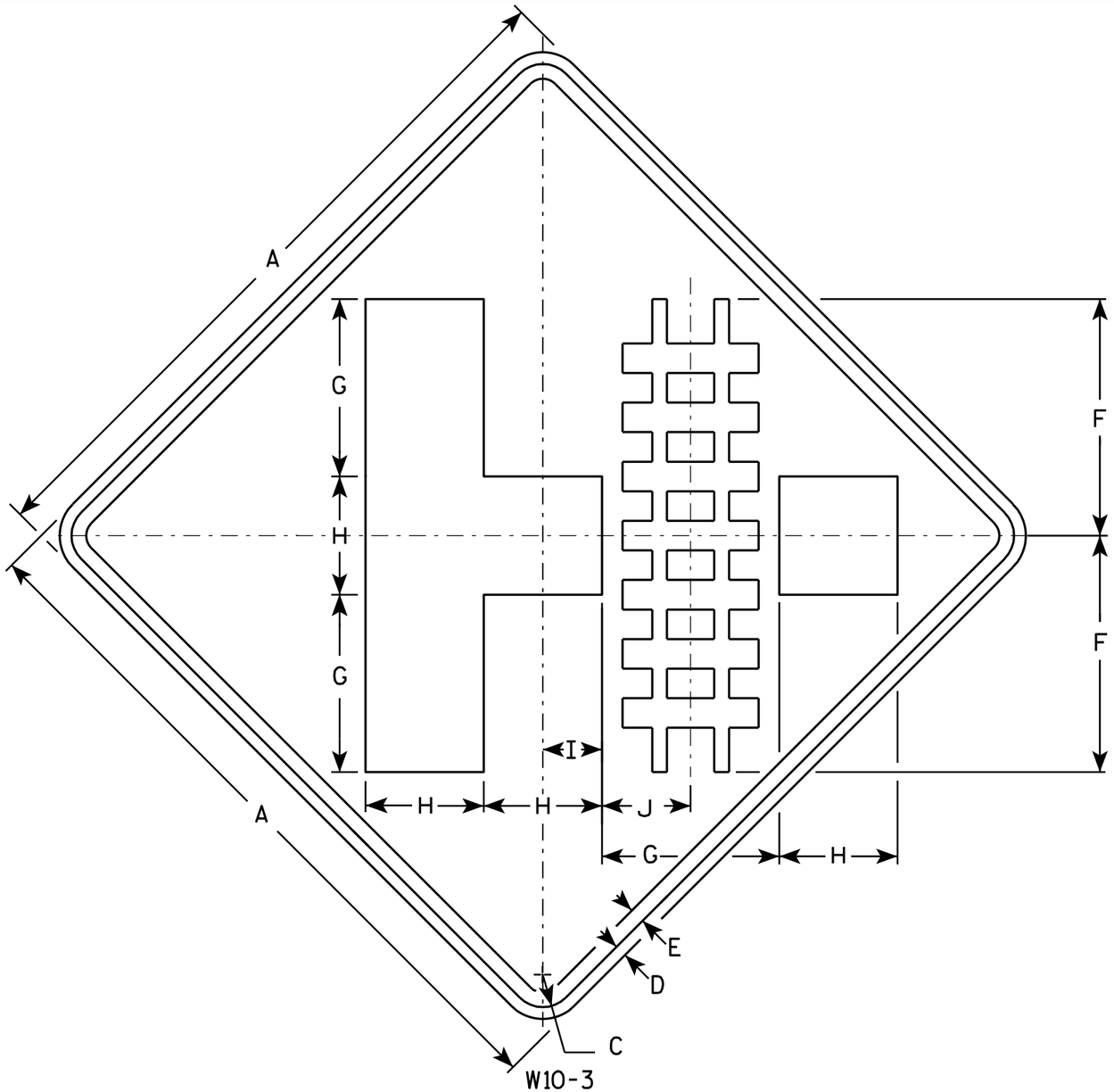
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-2.8

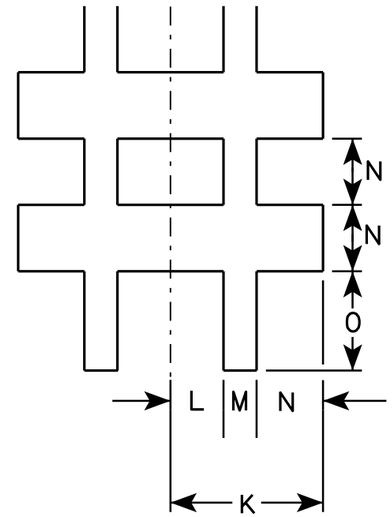
PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 146 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W102.DGN PLOT DATE : 13-MAR-2013 11:13 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.202372:1.000000
WISDOT/CADDS SHEET 42



NOTES

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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	7 1/2	5	2 1/2	3 3/4	2 7/8	1	5/8	1 1/4	1 7/8												6.25
2S	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
2M	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
3	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
4	48		2 1/4	3/4	1	16	12	8	4	6	4 1/2	1 1/2	1	2	3												16.0
5																											

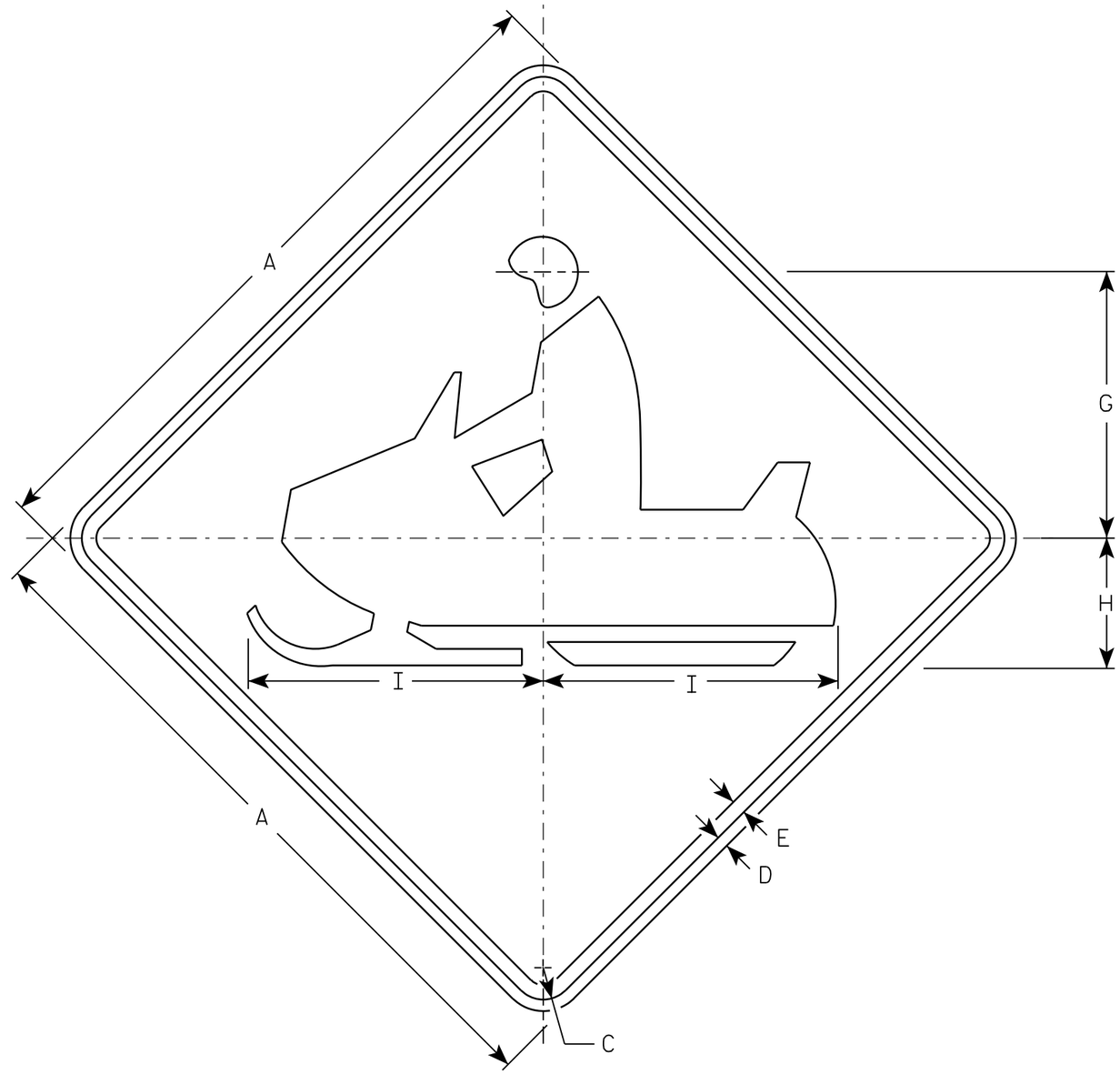
STANDARD SIGN
W10-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-3.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 147 | E



W11-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		9 1/2	4 1/2	10 1/4																		4.0
2S	30		1 3/8	1/2	5/8		11 1/2	5 5/8	12 3/4																		6.25
2M	30		1 3/8	1/2	5/8		11 1/2	5 5/8	12 3/4																		6.25
3	36		1 5/8	5/8	3/4		14 1/8	6 3/4	15 1/4																		9.0
4	48		2 1/4	3/4	1		19	9	20 1/2																		16.0
5																											

STANDARD SIGN
W11-6

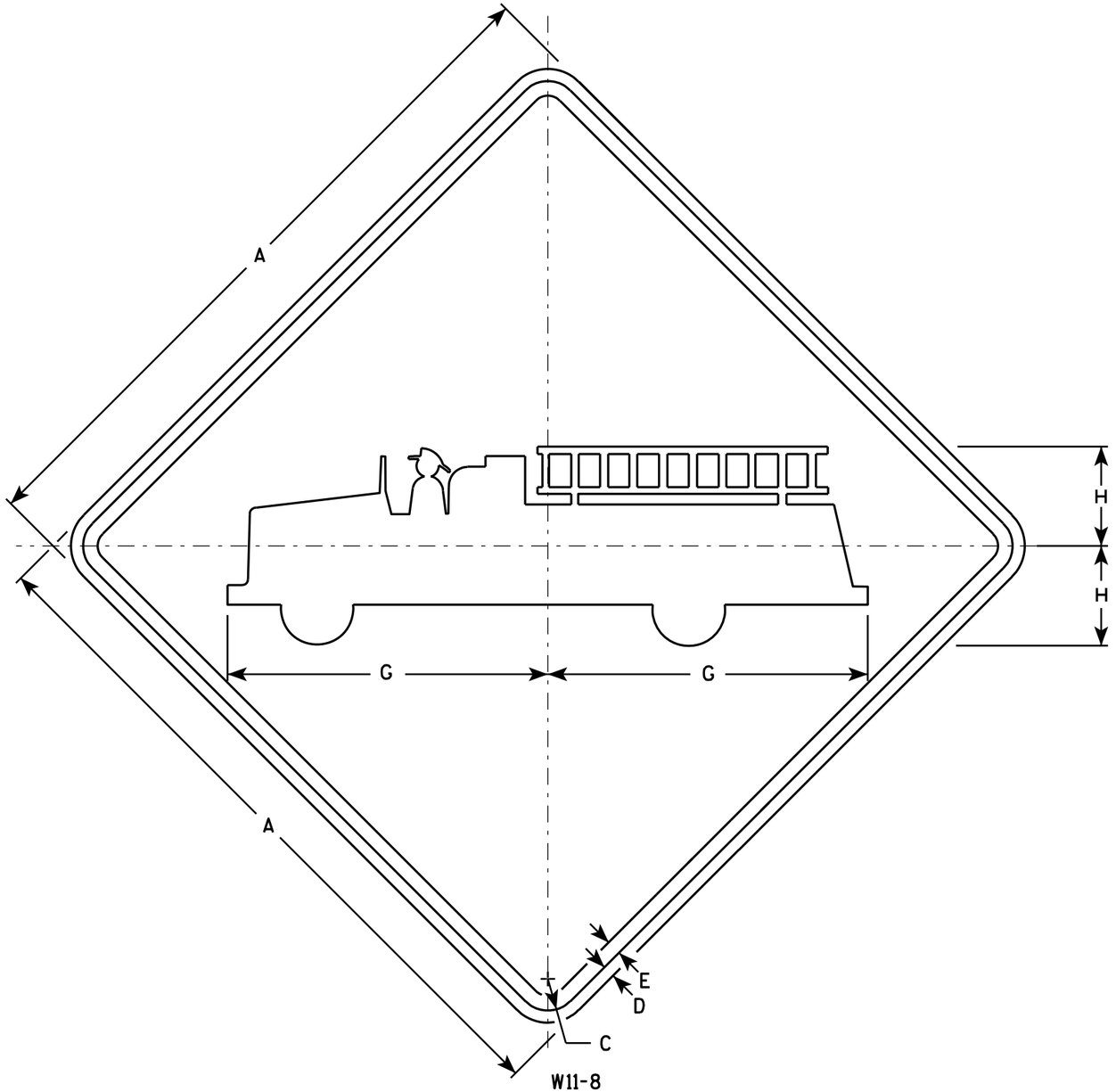
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W11-6.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 148 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W116.DGN PLOT DATE : 13-MAR-2013 12:57 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.954276:1.000000
WISDOT/CADDS SHEET 42



W11-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		11	3 3/8																			4.0
2S	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
2M	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
3	36		1 5/8	5/8	3/4		16 1/2	5 1/4																			9.0
4	48		2 1/4	3/4	1		22	7																			16.0
5																											

STANDARD SIGN
W11-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

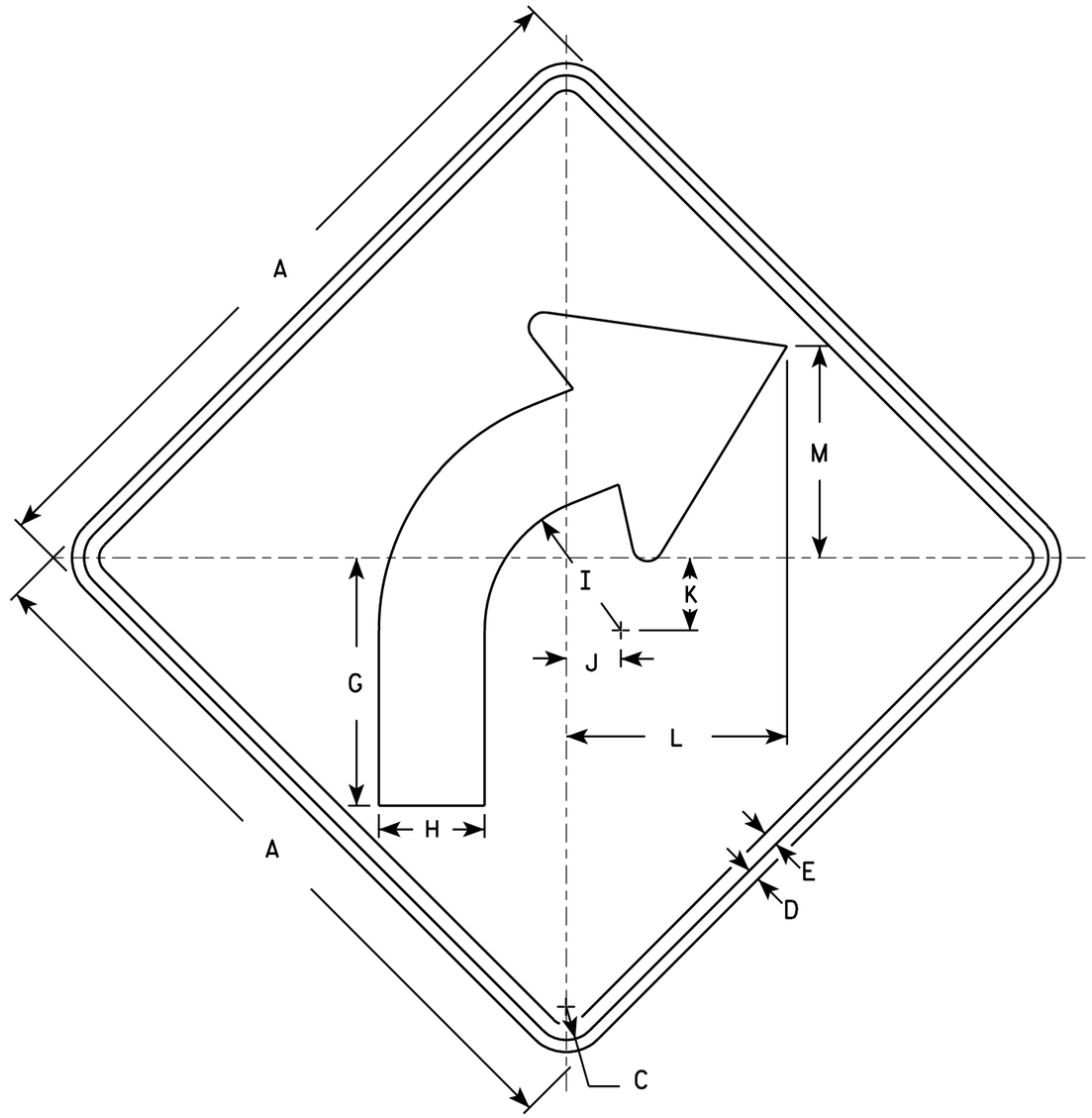
DATE 3/13/13 PLATE NO. W11-8.7

PROJECT NO:

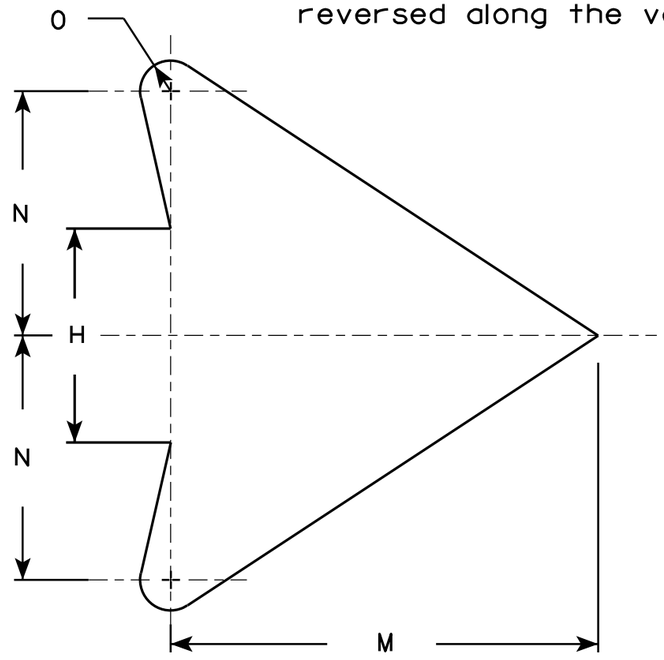
SHEET NO: 149 E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

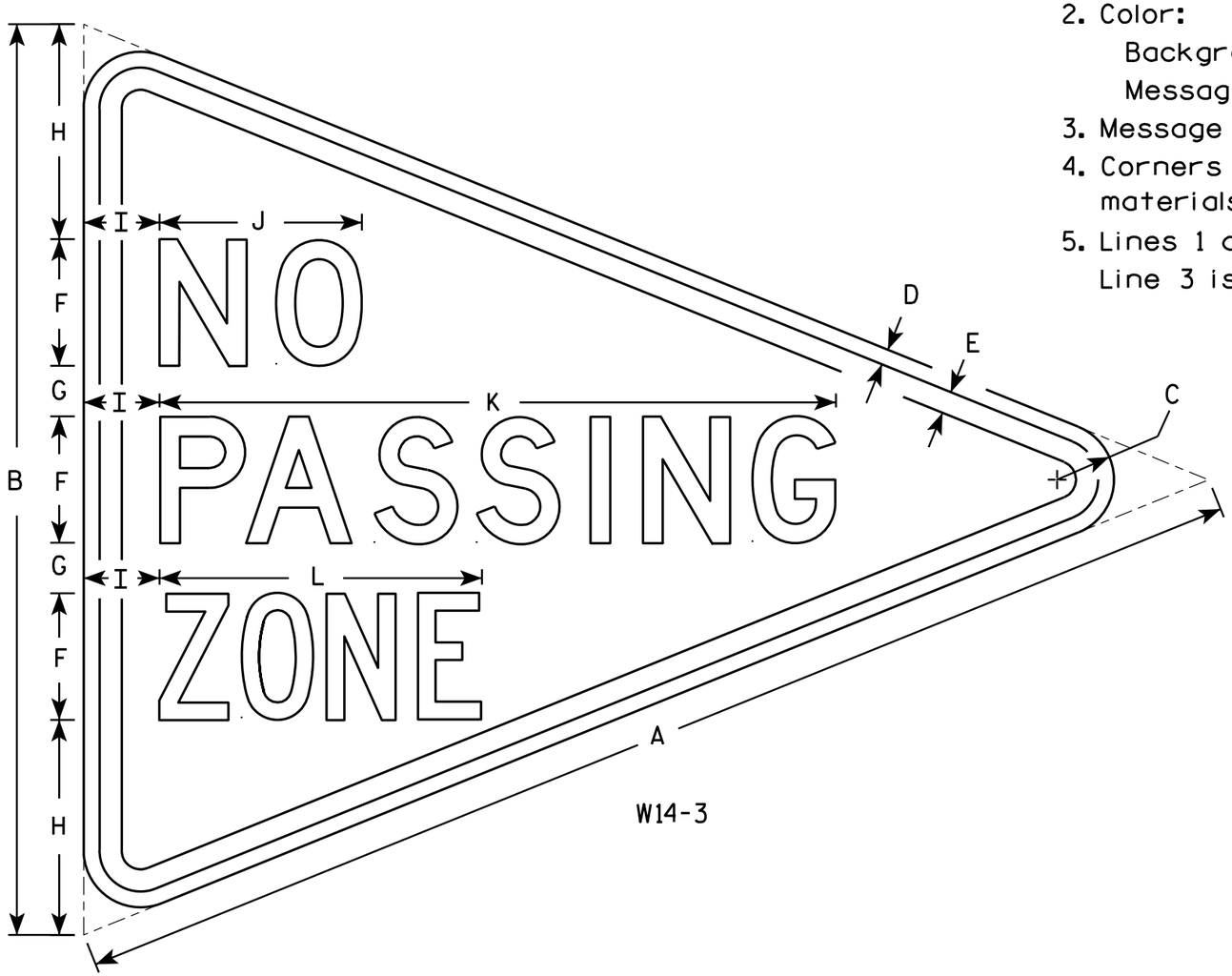
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 150	E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See note 5
4. Corners and borders shall be rounded on all base materials for this sign.
5. Lines 1 and 2 are Series D.
   Line 3 is series C.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

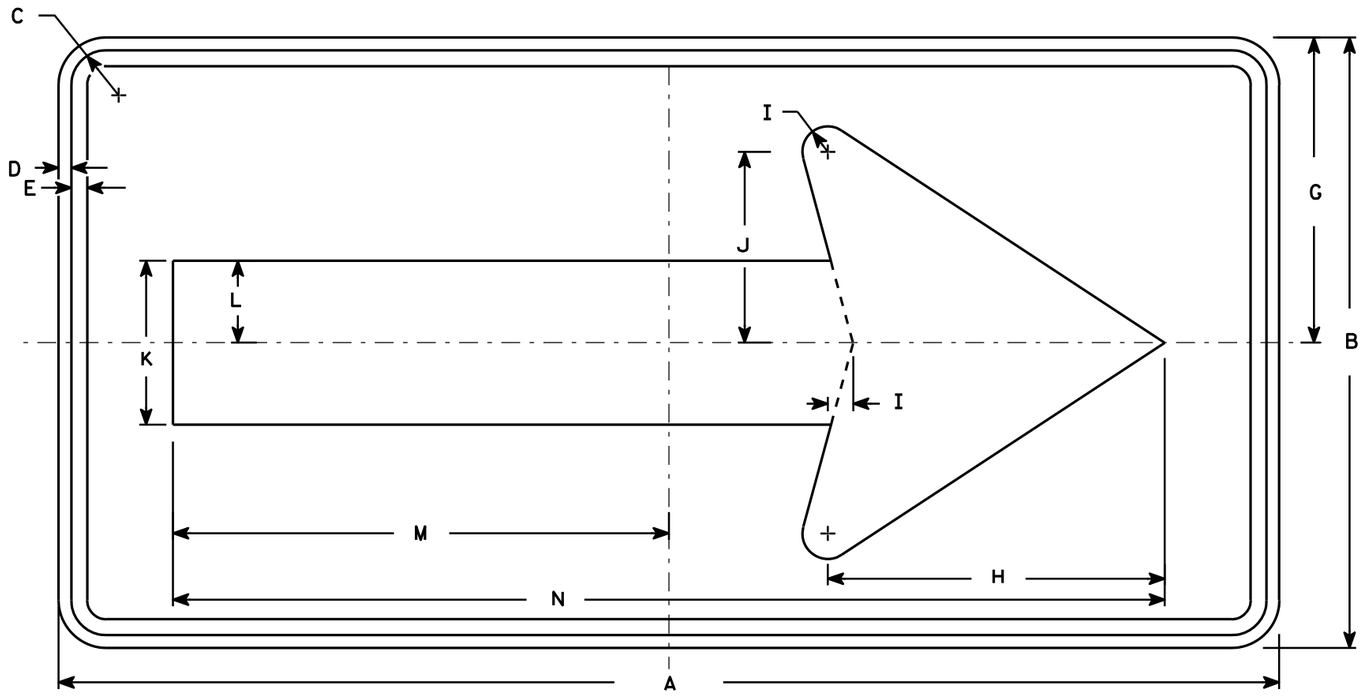
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 151	E

NOTES

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



W1-6

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

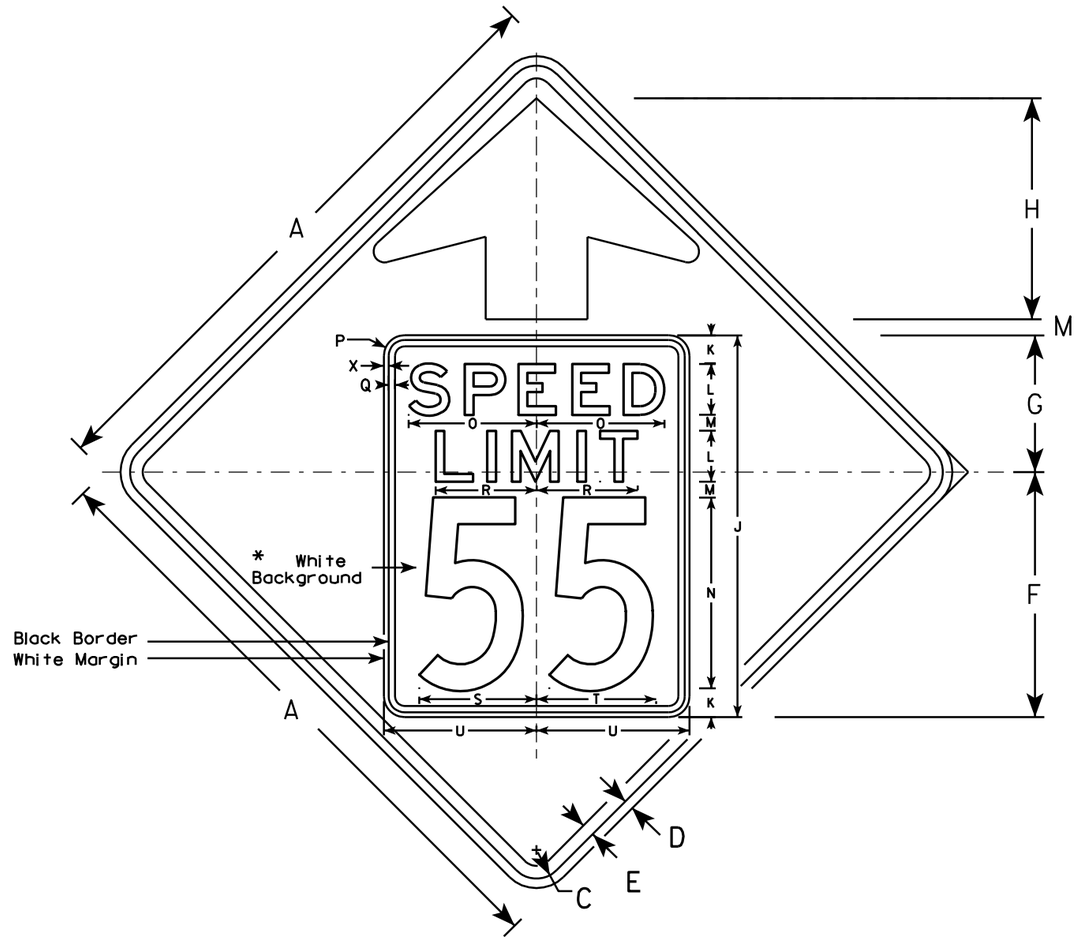
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 152

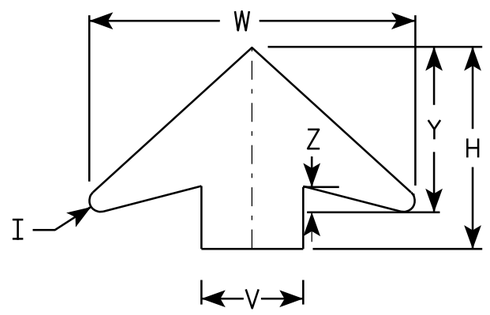


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - YELLOW*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

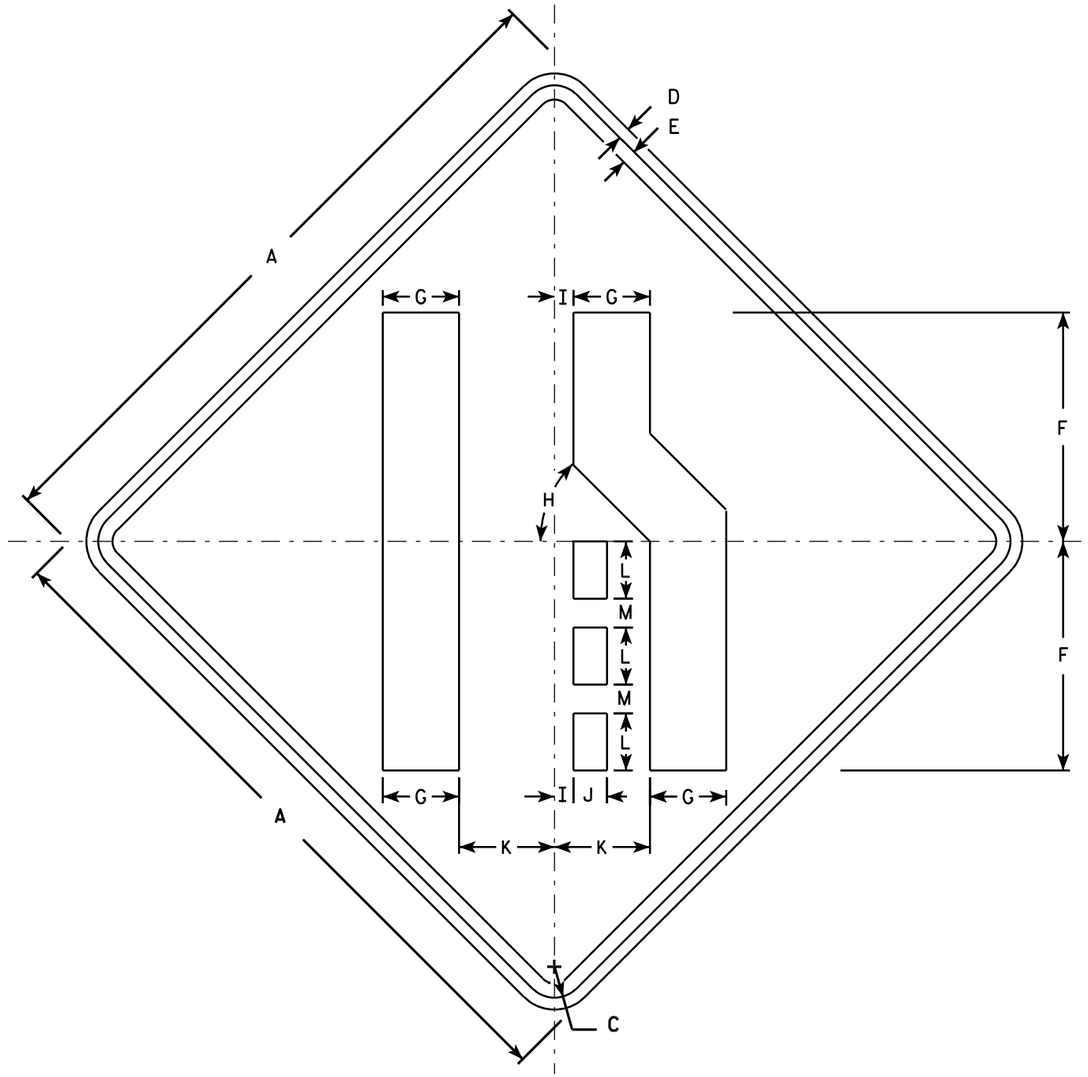
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 153 E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W4-2

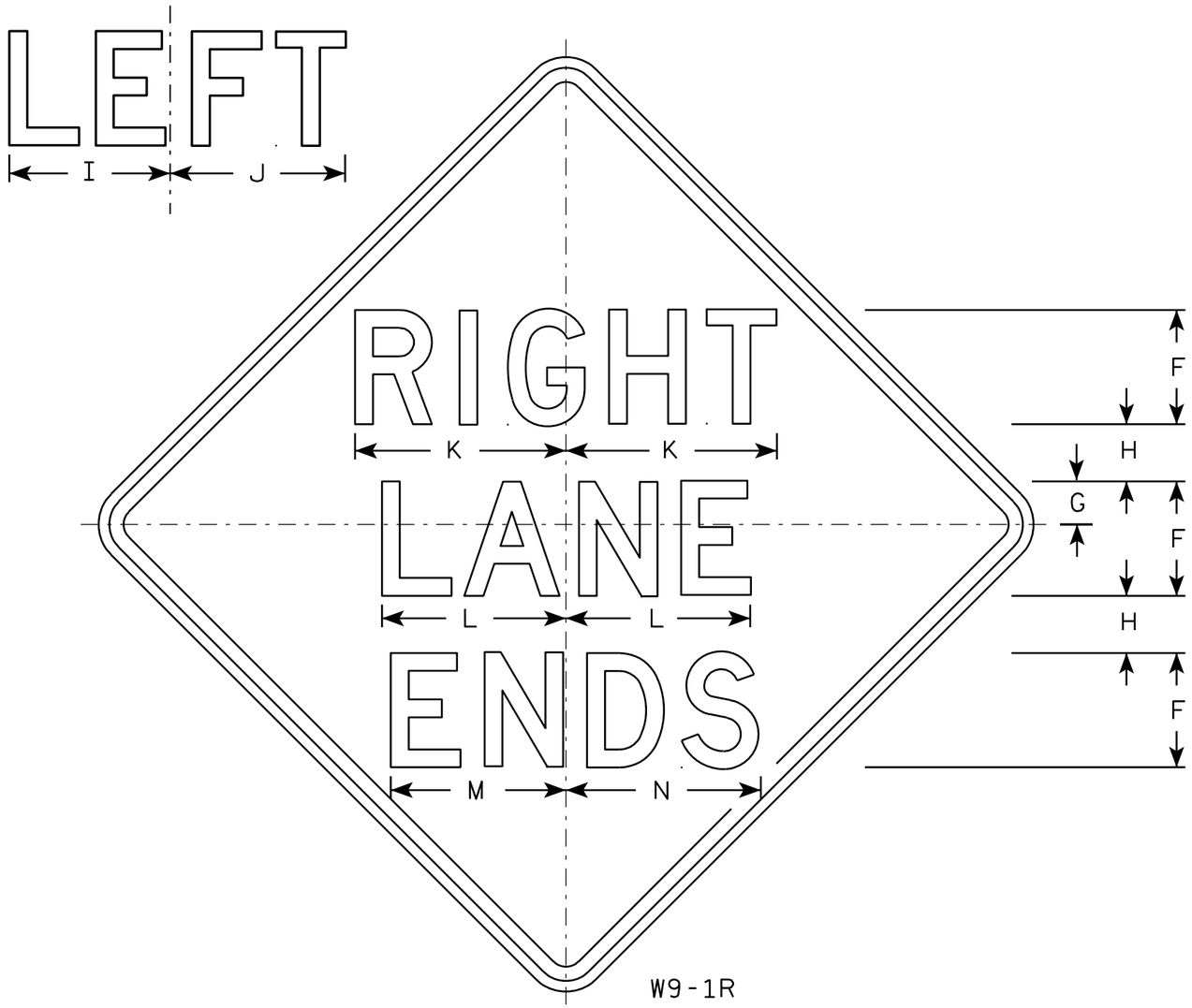
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 154 E



W9-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. W9-1L same as W9-1R except the word Left replaces Right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	1 1/2	2 1/2	7 1/8	7 5/8	9 1/4	8 1/8	7 5/8	8 5/8													6.25
2S	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
2M	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
3	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
4	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
5	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0

STANDARD SIGN
W9-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 03/18/13 PLATE NO. W9-1.8

PROJECT NO:

SHEET NO: 155 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W91.DGN PLOT DATE : 18-MAR-2013 11:42 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

EARTHWORK SUMMARY

CATEGORY	ROADWAY	STATION	TO	STATION	205.0100 EXCAVATION COMMON (1) CY CUT (2)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) Factor 1.25	MASS ORDINATE +/- (14)	Waste	208.0100 BORROW CY
0010	USH 141 - MAINLINE	250+00.00	-	257+00.00	389	389	35	44	345	345	0
0010	USH 141 - MAINLINE	257+50.00	-	339+00.00	7,743	7,743	5,378	6,723	1,020	1,020	0
0010	USH 141 - MAINLINE	339+50.00	-	370+00.00	933	933	387	484	449	449	0
0010	USH 141 - MAINLINE	371+00.00	-	375+00.00	283	283	254	318	-35	0	-35
0010	USH 141 - MAINLINE	418+00.00	-	452+50.00	6,109	6,109	2,652	3,315	2,794	2,794	0
0010	USH 141 - MAINLINE	452+50.00	-	460+25.00	1,127	1,127	1,496	1,870	-743	0	-743
0010	USH 141 - MAINLINE	461+50.00	-	468+00.00	1,110	1,110	708	885	225	225	0
0010	USH 141 - MAINLINE	468+50.00	-	515+75.00	8,173	8,173	2,474	3,092	5,080	5,080	0
		SUBTOTAL			25,866	25,866	13,384	16,730	9,136	9,914	-778
0010	TRELLIS RD	10+00.00	-	11+75.00	500	500	0	1	499	499	0
0010	THOMPSON RD	7+50.00	-	8+89.00	226	226	41	51	175	175	0
0010	NEJEDLO RD	7+65.00	-	9+91.00	678	678	12	14	663	663	0
0010	MOONSHINE HILL RD (WEST)	8+38.00	-	10+00.00	384	384	33	41	343	343	0
0010	MC MAHON RD	10+25.00	-	12+45.00	338	338	124	156	182	182	0
0010	MARTIN RD	10+06.00	-	12+00.00	258	258	47	59	199	199	0
0010	MOONSHINE HILL RD (EAST)	20+00.00	-	21+57.00	404	404	71	89	314	314	0
0010	BIERNASZ RD	1+81.00	-	3+04.00	358	358	7	9	349	349	0
		SUBTOTAL			3,145.55	3,145.55	335.76	419.70	2,725.85	2,726	0.00
	GRAND TOTALS	(I.D. 1491-08-71)			29,012	29,012	13,719.77	17,149.71	11,862.08	12,640.35	-778.27

TOTAL EXCAVATION COMMON **29,900.00**

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Select Borrow material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Marsh Excavation - to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well. Item number 20505
7) Rock Excavation item number 205.0200
8) Reduced Marsh in Fill - Excavated Marsh material is usuable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
9) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor = 1.5. Item number 208.1100
11) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.3. Item number 208.1100
12) Expanded Rock - Factor = 1.1
13) Expanded Fill. Factor = 1.25

Depending on selections:

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor

OR Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor

OR Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor

OR Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor

14) 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.

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME **205.0100** CUT CY	INCREMENTAL VOLUME **205.0100** FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
250+50	0	0	0					
251+00	50	17.20	2	16	2	16	2	13.58
251+50	50	22.10	2	36	3	52	7	45.65
252+00	50	22.61	3	41	4	94	12	81.65
252+50	50	27.17	2	46	5	140	18	121.92
252+63	13	27.96	1	14	1	154	19	134.62
253+00	37	44.78	0	49	1	203	20	182.72
253+50	50	3.71	1	45	1	248	21	226.80
253+94	44	19.43	2	19	2	266	24	242.65
254+00	6	31.06	3	6	1	272	24	247.87
254+50	50	20.64	5	48	8	320	34	286.19
255+00	50	18.02	1.08	36	6	356	41	314.46
256+00	100	0.00	0	33	2	389	44	345.32
257+00	100	0.00	0	0	0	389	44	345.32
		SUBTOTAL		389	35			

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME **205.0100** CUT CY	INCREMENTAL VOLUME **205.0100** FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
257+50	50.00	2.88	0.17					
258+00	50.00	3.04	0.18	5	0	5	0	5.08
258+50	50.00	19.33	0.09	21	0	26	1	25.49
259+00	50.00	23.31	0.05	39	0	66	1	64.81
259+50	50.00	18.52	34.78	39	32	104	41	63.23
260+00	50.00	18.33	29.65	34	60	139	116	22.78
260+50	50.00	22.76	25.12	38	51	177	179	-2.56
261+00	50.00	20.41	16.61	40	39	217	227	-10.88
261+50	50.00	20.24	18.64	38	33	254	268	-14.03
262+00	50.00	21.41	14.24	39	30	293	306	-13.52
262+50	50.00	17.91	8.84	36	21	329	333	-3.82
263+00	50.00	24.45	11.42	39	19	368	356	11.96
263+50	50.00	22.88	14.73	44	24	412	387	25.52
264+00	50.00	22.45	19.55	42	32	454	426	27.82
264+50	50.00	42.40	0.39	60	18	514	449	64.78
265+00	50.00	20.32	13.88	58	13	572	466	106.33
265+50	50.00	19.41	12.44	37	24	609	496	112.65
266+00	50.00	20.16	7.84	37	19	646	520	125.81
266+50	50.00	25.62	6.76	42	14	688	537	151.30
267+00	50.00	23.88	6.17	46	12	734	552	182.18
267+50	50.00	21.17	10.70	42	16	776	571	204.36
268+00	50.00	19.70	12.99	38	22	813	599	214.77
268+50	50.00	22.81	13.33	39	24	853	629	223.66
269+00	50.00	28.85	12.50	48	24	901	659	241.60
269+50	50.00	23.54	7.83	49	19	949	683	266.59
270+00	50.00	22.33	12.24	42	19	992	706	285.83
270+50	50.00	19.59	18.09	39	28	1,030	741	289.53
271+00	50.00	21.68	9.25	38	25	1,069	773	296.10
271+50	50.00	20.78	8.23	39	16	1,108	793	315.19
272+00	50.00	22.35	7.84	40	15	1,148	811	336.51
272+50	50.00	25.03	5.56	44	12	1,192	827	364.88
273+00	50.00	24.22	14.46	46	19	1,237	850	387.31
273+50	50.00	23.45	17.75	44	30	1,282	887	394.18
274+00	50.00	23.20	30.20	43	44	1,325	943	381.88
274+50	50.00	22.07	48.98	42	73	1,367	1,035	332.15

(CONTINUED)

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME **205.0100** CUT CY	INCREMENTAL VOLUME **205.0100** FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
275+00	50.00	20.51	67.46	39	108	1,406	1,169	236.80
275+50	50.00	17.28	87.89	35	144	1,441	1,349	91.99
276+00	50.00	15.43	100.24	30	174	1,471	1,567	-95.47
276+50	50.00	18.86	79.86	32	167	1,503	1,775	-272.18
277+00	50.00	21.47	86.82	37	154	1,540	1,968	-427.75
277+50	50.00	18.19	66.40	37	142	1,577	2,146	-568.37
278+00	50.00	23.31	0.32	38	62	1,616	2,223	-607.16
278+50	50.00	20.22	30.64	40	29	1,656	2,259	-602.68
279+00	50.00	25.23	1.81	42	30	1,698	2,296	-598.15
279+50	50.00	27.97	0.10	49	2	1,747	2,298	-551.10
280+00	50.00	40.78	0.08	64	0	1,811	2,299	-487.65
280+50	50.00	23.62	8.43	60	8	1,871	2,308	-437.87
281+00	50.00	20.08	6.96	40	14	1,911	2,326	-415.22
281+50	50.00	28.34	2.34	45	9	1,956	2,337	-381.15
282+00	50.00	19.54	14.55	44	16	2,000	2,357	-356.36
282+50	50.00	18.77	7.57	35	20	2,036	2,382	-346.48
283+00	50.00	20.68	3.64	37	10	2,072	2,395	-322.92
283+50	50.00	23.40	3.43	41	7	2,113	2,403	-290.29
284+00	50.00	21.70	6.90	42	10	2,155	2,415	-260.48
284+50	50.00	23.25	6.69	42	13	2,196	2,431	-234.59
285+00	50.00	23.57	3.61	43	10	2,240	2,443	-203.15
285+50	50.00	26.40	2.65	46	6	2,286	2,450	-164.12
286+00	50.00	27.07	1.66	50	4	2,336	2,455	-119.60
286+50	50.00	25.98	1.49	49	3	2,385	2,459	-74.14
287+00	50.00	24.68	1.82	47	3	2,432	2,463	-31.07
287+50	50.00	31.13	0.80	52	2	2,483	2,466	17.58
288+00	50.00	26.91	2.90	54	3	2,537	2,470	67.04
288+50	50.00	23.60	5.11	47	7	2,584	2,479	104.54
289+00	50.00	21.41	10.46	42	14	2,625	2,497	128.19
289+50	50.00	18.11	18.78	37	27	2,662	2,531	130.93

(CONTINUED)

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
290+00	50.00	19.41	33.30	35	48	2,697	2,591	105.39
290+50	50.00	34.73	0.06	50	31	2,747	2,630	116.90
291+00	50.00	22.92	63.60	53	59	2,800	2,704	96.61
291+50	50.00	19.56	89.94	39	142	2,840	2,881	-41.77
292+00	50.00	24.16	98.09	40	174	2,880	3,099	-218.92
292+50	50.00	23.57	86.67	44	171	2,924	3,313	-388.57
293+00	50.00	26.46	58.38	46	134	2,971	3,481	-510.13
293+50	50.00	25.00	37.39	48	89	3,018	3,592	-573.34
294+00	50.00	27.36	21.17	48	54	3,067	3,659	-592.64
294+50	50.00	26.29	13.30	50	32	3,116	3,699	-582.87
295+00	50.00	22.76	13.27	45	25	3,162	3,730	-568.20
295+50	50.00	19.96	41.47	40	51	3,201	3,793	-592.00
296+00	50.00	17.71	39.87	35	75	3,236	3,887	-651.26
296+50	50.00	20.75	31.15	36	66	3,272	3,970	-697.85
296+65	15.59	24.56	25.39	13	16	3,285	3,990	-705.17
297+00	34.41	26.72	19.57	33	29	3,318	4,026	-708.30
297+50	50.00	28.79	13.14	51	30	3,369	4,064	-694.75
298+00	50.00	25.31	13.21	50	24	3,419	4,094	-675.15
298+50	50.00	18.75	18.94	41	30	3,460	4,131	-671.56
299+00	50.00	23.86	14.95	39	31	3,499	4,171	-671.34
299+50	50.00	21.51	16.37	42	29	3,541	4,207	-665.58
300+00	50.00	23.88	14.22	42	28	3,583	4,242	-658.96
300+50	50.00	28.06	11.24	48	24	3,631	4,272	-640.34
301+00	50.00	28.67	13.49	53	23	3,684	4,300	-616.44
301+50	50.00	25.61	14.33	50	26	3,734	4,333	-598.38
302+00	50.00	30.02	8.02	52	21	3,786	4,358	-572.74
302+50	50.00	26.62	11.03	52	18	3,838	4,381	-542.34
303+00	50.00	23.29	13.39	46	23	3,884	4,409	-524.39
303+50	50.00	24.40	8.08	44	20	3,929	4,434	-505.07
304+00	50.00	53.10	14.25	72	21	4,000	4,434	-539.94
304+50	50.00	55.26	14.59	100	27	4,101	4,444	-472.99
305+00	50.00	107.47	4.95	151	18	4,251	4,457	-344.93
305+50	50.00	32.31	8.19	129	12	4,381	4,468	-230.71

(CONTINUED)

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME **205.0100** CUT CY	INCREMENTAL VOLUME **205.0100** FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
306+00	50.00	33.08	11.22	61	18	4,441	5,208	-192.62
306+50	50.00	87.27	9.87	111	20	4,553	5,227	-105.59
307+00	50.00	48.33	31.74	126	39	4,678	5,266	-192.62
307+50	50.00	41.54	44.79	83	71	4,762	5,337	-197.99
308+00	50.00	38.06	54.37	74	92	4,835	5,428	-239.06
308+50	50.00	18.89	21.06	53	70	4,888	5,516	-273.63
309+00	50.00	20.09	41.26	36	58	4,924	5,588	-309.66
309+50	50.00	22.95	31.72	40	68	4,964	5,672	-354.27
310+00	50.00	18.98	47.66	39	74	5,003	5,764	-407.32
310+17	17.24	19.13	47.32	12	30	5,015	5,802	-433.07
310+50	32.76	16.54	40.54	22	53	5,037	5,869	-478.05
311+00	50.00	18.38	28.68	32	64	5,069	5,949	-525.83
311+50	50.00	40.74	0.01	55	27	5,124	5,982	-504.29
312+00	50.00	20.19	24.83	56	23	5,180	6,011	-476.62
312+50	50.00	19.15	21.82	36	43	5,216	6,065	-494.20
313+00	50.00	23.31	19.85	39	39	5,256	6,113	-503.11
313+50	50.00	22.71	18.79	43	36	5,298	6,158	-505.21
314+00	50.00	20.91	13.14	40	30	5,339	6,195	-501.78
314+50	50.00	24.99	6.44	42	18	5,381	6,217	-481.95
315+00	50.00	26.37	7.51	48	13	5,429	6,233	-450.53
315+50	50.00	29.14	7.43	51	14	5,480	6,251	-416.43
316+00	50.00	26.89	8.53	52	15	5,532	6,269	-383.03
316+50	50.00	26.99	7.23	50	15	5,582	6,287	-351.38
317+00	50.00	27.28	7.30	50	13	5,632	6,304	-317.94
317+50	50.00	27.65	6.46	51	13	5,683	6,320	-283.00
318+00	50.00	26.49	7.07	50	13	5,733	6,336	-248.54
318+50	50.00	27.96	6.79	50	13	5,784	6,352	-214.16
319+00	50.00	22.90	8.97	47	15	5,831	6,370	-185.31
319+50	50.00	24.64	8.23	44	16	5,875	6,390	-161.21
320+00	50.00	28.05	7.12	49	14	5,924	6,408	-130.20
320+50	50.00	26.36	9.72	50	16	5,974	6,427	-99.31
321+00	50.00	27.24	11.30	50	19	6,024	6,452	-74.00
321+50	50.00	21.56	15.17	45	25	6,069	6,482	-59.45
322+00	50.00	25.69	18.91	44	32	6,112	6,522	-55.14
322+50	50.00	27.09	18.35	49	34	6,161	6,565	-49.39

(CONTINUED)

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME **205.0100** CUT CY	INCREMENTAL VOLUME **205.0100** FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
323+00	50	22	15	46	31	6,207	6,604	-42.34
323+50	50	25	14	44	27	6,251	6,637	-31.77
324+00	50	25	11	46	22	6,297	6,665	-13.52
324+50	50	28	8	49	17	6,346	6,686	13.65
325+00	50	27	8	51	15	6,397	6,706	45.27
325+50	50	27	8	50	15	6,447	6,724	76.96
326+00	50	77	5	97	12	6,544	6,740	158.21
326+50	50	76	13	141	17	6,685	6,761	278.34
327+00	50	75	11	140	22	6,825	6,789	390.48
327+50	50	23	17	90	26	6,915	6,821	448.50
328+00	50	24	15	43	29	6,958	6,858	454.61
328+50	50	22	13	43	25	7,001	6,889	465.73
329+00	50	21	13	40	24	7,041	6,919	475.84
329+50	50	19	16	38	28	7,079	6,954	478.93
330+00	50	15	23	32	36	7,111	6,999	465.66
330+50	50	18	19	31	39	7,142	7,047	448.28
331+00	50	16	20	32	36	7,173	7,093	434.61
331+50	50	19	13	32	31	7,205	7,131	427.51
332+00	50	23	9	38	20	7,243	7,157	440.10
332+50	50	22	11	41	18	7,284	7,179	458.51
333+00	50	20	12	38	21	7,322	7,206	470.04
333+50	50	19	11	36	22	7,358	7,234	478.54
334+00	50	19	14	35	23	7,393	7,263	484.58
334+50	50	23	14	39	26	7,432	7,295	490.61
335+00	50	24	2	43	15	7,475	7,314	515.00
335+50	50	21	1	42	3	7,517	7,317	554.07
336+00	50	17	1	35	1	7,553	7,319	587.55
336+50	50	19	0	33	1	7,586	7,320	619.44
337+00	50	15	0	31	0	7,617	7,321	650.46
337+50	50	14	0	27	0	7,644	7,321	677.09
338+00	50	18	0	30	0	7,674	7,321	706.69
338+50	50	19	0	34	0	7,708	7,322	740.87
339+00	50	18	0	35	0	7,743	7,322	775.18
		SUBTOTAL		8,563	5,378			

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME Cut 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
339+50	50	26	4					
339+70	21	21	4	18	3	18	4	14.32
339+75	4	17	4	3	1	21	5	16.54
340+00	25	42	9	27	6	48	12	36.03
340+25	25	26	11	32	9	80	24	56.02
340+50	25	33	4	28	7	107	33	74.67
340+75	25	44	2	36	3	143	36	106.86
341+00	25	57	6	47	4	190	41	148.87
341+25	25	92	3	69	4	259	46	212.55
341+50	25	20	3	52	3	311	50	260.71
341+80	30	86	19	59	12	370	66	304.33
342+00	20	62	19	55	14	425	83	341.74
342+17	17	65	19	41	12	465	98	367.24
342+50	33	19	21	51	24	517	128	388.37
342+75	25	19	24	18	21	534	154	380.05
343+00	25	67	25	40	23	574	183	391.43
343+25	25	43	25	51	23	625	211	413.93
343+50	25	39	23	38	22	663	239	424.07
343+75	25	37	24	35	22	698	266	431.89
344+00	25	32	25	32	23	730	295	435.41
344+25	25	32	29	29	25	760	326	433.31
344+50	25	30	29	28	27	788	360	427.88
344+75	25	31	28	28	27	816	393	422.91
345+00	25	31	28	29	26	845	426	419.15
345+25	25	40	20	33	22	878	454	424.14
345+50	25	39	16	37	17	915	474	440.21
345+75	25	0	0	18	7	933	484	449.23
346+00	25	0	0	0	0	933	484	449.23
		SUBTOTAL		933	387			

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA Cut SF	END AREA Fill SF	INCREMENTAL VOLUME **205.0100** Cut CY	INCREMENTAL VOLUME **205.0100** Fill CY	CUMULATIVE VOLUME Cut 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
371+00	0	0	0					
371+50	50	17	4	16	3	16	4	11.24
372+00	50	17	10	31	13	47	20	26.57
372+15	15	23	0	11	3	58	24	34.16
373+00	85	31	37	86	58	143	96	47.03
373+50	50	16	53	44	84	187	201	-13.39
374+00	50	24	20	37	68	225	285	-60.47
374+50	50	19	4	40	22	265	313	-47.76
375+00	50	0	0	18	4	283	318	-34.80
		SUBTOTAL		283	254			

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
418+00	0	0	0					
418+50	50	33.54	42.87	31	40	31	50	-18.56
419+00	50	31.60	34.00	60	71	91	139	-47.22
419+50	50	33.67	39.62	60	68	152	224	-71.99
420+00	50	39.09	32.50	67	67	219	307	-88.09
420+50	50	39.33	32.11	73	60	292	382	-90.25
421+00	50	38.27	31.31	72	59	364	455	-91.79
421+50	50	35.39	30.47	68	57	432	527	-95.08
422+00	50	33.42	33.32	64	59	496	601	-105.19
422+50	50	33.14	34.81	62	63	557	680	-122.42
423+00	50	30.29	40.16	59	69	616	766	-150.47
423+50	50	35.15	35.02	61	70	677	853	-176.90
424+00	50	37.91	32.30	67	62	744	931	-187.08
424+50	50	34.76	32.80	67	60	811	1,006	-195.10
425+00	50	35.64	29.74	68	58	879	1,079	-199.58
425+50	50	36.02	28.25	66	54	946	1,146	-200.35
426+00	50	33.60	28.33	64	52	1,010	1,212	-201.37
426+50	50	38.74	31.94	67	56	1,077	1,281	-204.14
427+00	50	35.05	34.62	68	62	1,146	1,358	-212.86
427+50	50	34.77	36.95	65	66	1,210	1,441	-231.04
428+00	50	32.03	31.97	62	64	1,272	1,521	-248.96
428+50	50	27.85	41.12	55	68	1,327	1,606	-278.11
429+00	50	19.63	44.74	44	80	1,371	1,705	-333.52
429+50	50	23.51	23.24	40	63	1,411	1,784	-372.26
430+00	50	39.80	11.03	59	32	1,470	1,823	-353.30
430+50	50	37.94	9.23	72	19	1,542	1,847	-304.78
431+00	50	44.09	11.22	76	19	1,618	1,870	-252.50
431+50	50	38.16	13.69	76	23	1,694	1,899	-205.19
432+00	50	43.71	11.20	76	23	1,770	1,928	-158.20
432+50	50	42.63	8.14	80	18	1,850	1,950	-100.65
433+00	50	49.23	22.59	85	28	1,935	1,986	-51.18
433+50	50	52.97	20.88	95	40	2,029	2,036	-6.87
434+00	50	50.73	23.85	96	41	2,126	2,088	37.37
434+50	50	37.75	21.56	82	42	2,207	2,141	66.74
435+00	50	41.06	18.61	73	37	2,280	2,187	93.22
435+50	50	44.40	15.30	79	31	2,360	2,226	133.10

(CONTINUED)

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
436+00	50	49.22	12.67	87	26	2,446	2,259	187.42
436+50	50	40.47	29.72	83	39	2,529	2,308	221.41
437+00	50	44.41	26.03	79	52	2,608	2,372	235.48
437+50	50	37.34	29.12	76	51	2,684	2,436	247.35
438+00	50	42.44	23.26	74	49	2,757	2,497	260.59
438+50	50	40.20	18.85	77	39	2,834	2,546	288.37
439+00	50	40.14	19.09	74	35	2,908	2,589	318.85
439+50	50	39.95	19.86	74	36	2,982	2,635	347.93
440+00	50	43.97	19.83	78	37	3,060	2,680	379.70
440+50	50	41.46	36.39	79	52	3,139	2,746	393.74
441+00	50	71.28	31.33	104	63	3,244	2,824	419.76
441+50	50	84.59	16.17	144	44	3,388	2,879	509.11
442+00	50	85.36	15.81	157	30	3,545	2,916	629.46
442+50	50	85.86	28.20	159	41	3,704	2,967	737.05
443+00	50	99.36	10.34	171	36	3,875	3,011	863.94
443+50	50	84.85	8.52	171	17	4,046	3,033	1,012.68
444+00	50	165.04	1.73	231	9	4,277	3,045	1,232.19
444+50	50	53.73	0.00	203	2	4,480	3,047	1,432.76
445+00	50	61.07	0.00	106	0	4,586	3,047	1,539.05
445+50	50	61.18	0.00	113	0	4,699	3,047	1,652.24
446+00	50	57.07	0.00	109	0	4,809	3,047	1,761.73
446+50	50	61.17	0.74	109	1	4,918	3,048	1,870.36
447+00	50	53.09	4.07	106	4	5,024	3,054	1,970.59
447+50	50	63.52	7.90	108	11	5,132	3,067	2,064.71
448+00	50	55.98	9.11	111	16	5,243	3,087	2,155.67
448+50	50	56.17	7.36	104	15	5,347	3,106	2,240.45
449+00	50	53.12	7.94	101	14	5,448	3,124	2,323.94
449+50	50	53.49	7.20	99	14	5,547	3,141	2,405.12
450+00	50	47.94	9.90	94	16	5,640	3,161	2,479.24
450+50	50	50.36	7.58	91	16	5,731	3,181	2,550.02
451+00	50	58.87	3.34	101	10	5,833	3,194	2,638.52
451+50	50	48.33	15.36	99	17	5,932	3,216	2,716.13
452+00	50	48.85	18.58	90	31	6,022	3,255	2,766.83
452+50	50	45.34	33.30	87	48	6,109	3,315	2,794.00
			SUBTOTAL	6,109	2,652			

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME **205.0100** CUT CY	INCREMENTAL VOLUME **205.0100** FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
468+00	50	0	0					
468+50	50	51.10	25.42	47	24	47	29	17.90
469+00	50	56.78	20.30	100	42	147	82	64.89
469+50	50	62.49	16.42	110	34	258	125	132.82
470+00	50	57.78	15.29	111	29	369	162	207.48
470+50	50	63.70	11.31	112	25	481	192	289.18
471+00	50	62.67	10.53	117	20	599	218	380.92
471+50	50	65.95	12.08	119	21	718	244	473.85
472+00	50	61.02	13.93	118	24	835	274	561.31
472+50	50	61.51	12.53	113	24	949	304	644.14
473+00	50	63.77	1.49	116	13	1,065	321	743.92
473+50	50	56.47	15.67	111	16	1,176	341	835.40
474+00	50	49.65	18.39	98	32	1,274	380	894.25
474+50	50	48.52	20.52	91	36	1,365	425	940.12
475+00	50	50.86	14.94	92	33	1,457	466	991.10
475+50	50	48.99	12.53	92	25	1,550	498	1,051.77
476+00	50	49.67	18.00	91	28	1,641	533	1,107.79
476+50	50	52.74	19.63	95	35	1,736	577	1,159.06
477+00	50	48.77	27.16	94	43	1,830	631	1,198.90
477+50	50	47.46	40.23	89	62	1,919	709	1,210.00
477+95	45	39.67	44.94	72	70	1,991	797	1,194.01
478+00	5	38.42	47.40	8	9	1,999	808	1,190.31
478+50	50	38.33	46.71	71	87	2,070	917	1,152.45
479+00	50	43.87	38.79	76	79	2,146	1,016	1,129.59
479+50	50	41.52	34.82	79	68	2,225	1,101	1,123.46
480+00	50	45.60	32.21	81	62	2,306	1,179	1,126.53
480+50	50	42.98	38.00	82	65	2,388	1,260	1,127.28
481+00	50	40.32	52.81	77	84	2,465	1,365	1,099.30
481+50	50	40.41	36.94	75	83	2,539	1,469	1,070.18
482+00	50	41.12	32.56	75	64	2,615	1,550	1,065.25
482+50	50	43.81	25.95	79	54	2,694	1,617	1,076.18

(CONTINUED)

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
483+00	50	44.15	15.91	81	39	2,775	1,666	1,109.17
483+50	50	47.32	12.24	85	26	2,860	1,698	1,161.28
484+00	50	43.13	14.61	84	25	2,943	1,730	1,213.94
484+50	50	41.85	14.25	79	27	3,022	1,763	1,259.22
485+00	50	47.59	9.64	83	22	3,105	1,791	1,314.39
485+50	50	48.71	11.33	89	19	3,194	1,815	1,379.29
486+00	50	51.40	9.79	93	20	3,287	1,839	1,447.54
486+50	50	52.37	10.00	96	18	3,383	1,862	1,520.73
487+00	50	51.76	9.84	96	18	3,479	1,885	1,594.19
487+50	50	49.93	9.17	94	18	3,573	1,907	1,666.36
488+00	50	47.91	7.72	91	16	3,664	1,927	1,737.40
488+50	50	46.77	14.47	88	21	3,752	1,952	1,799.38
489+00	50	48.41	16.17	88	28	3,840	1,988	1,852.06
489+50	50	45.89	17.75	87	31	3,927	2,027	1,900.12
490+00	50	48.46	16.97	87	32	4,015	2,067	1,947.30
490+50	50	50.09	15.00	91	30	4,106	2,104	2,001.55
491+00	50	48.97	16.29	92	29	4,198	2,140	2,057.05
491+50	50	51.40	5.91	93	21	4,290	2,166	2,124.28
492+00	50	49.42	7.33	93	12	4,384	2,182	2,202.31
492+50	50	50.64	8.26	93	14	4,476	2,200	2,276.91
493+00	50	51.55	8.71	95	16	4,571	2,219	2,351.89
493+50	50	49.17	12.44	93	20	4,664	2,244	2,420.67
494+00	50	46.97	18.79	89	29	4,753	2,280	2,473.55
494+50	50	50.19	21.02	90	37	4,843	2,326	2,517.43
495+00	50	36.72	58.40	80	74	4,924	2,418	2,505.99
495+50	50	39.92	32.76	71	84	4,995	2,523	2,471.44
496+00	50	44.47	20.98	78	50	5,073	2,585	2,487.39
496+50	50	42.58	14.17	81	33	5,153	2,626	2,527.30
497+00	50	40.84	7.45	77	20	5,231	2,651	2,579.51
497+50	50	44.43	4.81	79	11	5,310	2,665	2,644.28

(CONTINUED)

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
498+00	50	46.02	4.38	84	9	5,393	2,676	2,717.39
498+50	50	40.07	5.56	80	9	5,473	2,688	2,785.59
499+00	50	42.62	7.34	77	12	5,550	2,702	2,847.22
499+50	50	39.25	10.35	76	16	5,626	2,723	2,902.55
500+00	50	43.48	11.35	77	20	5,702	2,748	2,954.04
500+50	50	38.10	12.01	76	22	5,778	2,775	3,002.54
501+00	50	40.52	7.59	73	18	5,850	2,798	3,052.65
501+50	50	40.52	7.47	75	14	5,925	2,815	3,110.25
502+00	50	42.76	3.84	77	10	6,003	2,828	3,174.28
502+50	50	41.10	4.49	78	8	6,080	2,838	3,242.29
503+00	50	39.36	8.34	74	12	6,155	2,853	3,301.93
503+50	50	38.69	9.02	72	16	6,227	2,873	3,354.10
504+00	50	41.03	7.84	74	16	6,301	2,892	3,408.41
504+41	41	42.85	8.63	64	13	6,365	2,908	3,456.53
504+50	9	43.34	9.76	14	3	6,379	2,912	3,467.00
505+00	50	42.12	8.48	79	17	6,458	2,933	3,525.02
505+50	50	44.01	5.72	80	13	6,538	2,949	3,588.34
505+55	5	44.11	5.46	8	1	6,546	2,951	3,595.37
506+00	45	44.90	3.17	74	7	6,620	2,960	3,660.39
506+50	50	47.71	2.15	86	5	6,706	2,966	3,739.99
507+00	50	43.20	3.05	84	5	6,790	2,972	3,818.14
507+50	50	44.83	3.99	82	7	6,872	2,980	3,891.50
508+00	50	47.16	3.57	85	7	6,957	2,989	3,967.94
508+50	50	44.79	2.06	85	5	7,042	2,995	4,046.57
509+00	50	41.85	4.71	80	6	7,122	3,003	4,118.95
509+50	50	46.13	1.74	81	6	7,204	3,011	4,192.95
510+00	50	42.69	1.77	82	3	7,286	3,015	4,271.13
510+50	50	42.51	2.35	79	4	7,365	3,019	4,345.25
511+00	50	45.52	2.16	82	4	7,446	3,025	4,421.54
511+50	50	45.73	3.24	84	5	7,531	3,031	4,499.78
512+00	50	43.01	6.98	82	9	7,613	3,043	4,570.11
512+50	50	44.82	3.54	81	10	7,694	3,055	4,639.24
513+00	50	42.59	4.43	81	7	7,775	3,064	4,710.94
513+50	50	45.40	5.24	81	9	7,857	3,075	4,781.20
514+00	50	46.52	2.65	85	7	7,942	3,084	4,857.18
514+50	50	50.82	0.57	90	3	8,032	3,088	4,943.58
515+00	50	50.57	1.41	94	2	8,126	3,091	5,035.16
515+50	50	0.00	0.00	47	1	8,173	3,092	5,080.36
515+75	25	0.00	0.00	0	0	8,173	3,092	5,080.36
		SUBTOTAL		8,173	2,474			

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME **205.0100** CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
452+50	0.00	43.50	33.02					
453+00	50.00	44.05	53.21	81	80	81	100	-18.75
453+50	50.00	43.91	74.20	81	118	163	247	-84.77
454+00	50.00	48.37	63.99	85	128	248	407	-159.27
454+10	9.82	48.07	60.67	18	23	265	436	-170.07
454+35	25.18	48.20	83.11	45	67	310	519	-208.99
454+50	15.00	35.85	34.36	23	33	334	560	-226.44
455+00	50.00	33.76	39.67	64	69	398	646	-247.68
455+50	50.00	39.21	44.44	68	78	466	743	-277.46
456+00	50.00	39.88	79.23	73	115	539	886	-347.35
456+50	50.00	33.57	82.16	68	149	607	1,073	-466.14
457+00	50.00	37.76	62.71	66	134	673	1,241	-567.77
457+50	50.00	37.28	46.67	69	101	743	1,367	-624.88
458+00	50.00	38.65	43.90	70	84	813	1,472	-659.42
458+50	50.00	41.66	32.38	74	71	887	1,561	-673.35
459+00	50.00	38.92	27.22	75	55	962	1,629	-667.72
459+50	50.00	40.70	24.82	74	48	1,035	1,690	-654.22
460+00	50.00	38.67	87.51	73	104	1,109	1,820	-710.74
460+25	25.00	0.00	0.00	18	41	1,127	1,870	-743.47
				1,127	1,496			

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME **205.0100** CUT CY	INCREMENTAL VOLUME **205.0100** FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
461+50	0	50	11					
462+00	50	46	14	89	23	89	29	60.13
462+50	50	54	15	93	27	182	63	118.66
463+00	50	56	9	102	23	284	92	192.40
463+50	50	54	2	101	10	385	104	281.49
464+00	50	56	1	102	3	487	107	380.25
464+50	50	56	11	104	11	592	121	470.59
465+00	50	48	37	96	44	688	176	511.75
465+50	50	38	45	80	76	768	271	496.44
466+00	50	42	51	74	89	842	383	458.99
466+50	50	33	67	69	109	911	519	391.52
467+00	50	36	55	64	113	975	661	313.48
467+50	50	37	42	67	90	1,042	774	268.56
468+00	50	36	54	68	89	1,110	885	225.19
				1,110	708			

EARTHWORK DETAIL - TRELLIS RD

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
10+00	0	13	0					0.00
10+25	25	214	0	105	0	105	0	105.06
10+62	37	77	0	200	0	305	0	304.67
10+82	20	55	0	49	0	353	0	353.32
11+00	18	54	0	36	0	390	0	389.61
11+25	25	52	0	49	0	439	0	438.60
11+50	25	40	0.45	43	0	481	0	480.91
11+75	25	0	0	19	0	500	1	499.23
				500	0			

EARTHWORK DETAIL - BIERNASZ RD

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME **205.0100** CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
1+81	0	50						
2+00	19	53	3	37	2	37	3	33.93
2+25	25	63	2	54	2	91	6	85.31
2+50	25	68	1	60	1	151	8	143.18
2+72	22	160	0	94	1	245	8	236.79
3+00	28	51	0	108	0	353	9	344.16
3+04	4	16	0	5	0	358	9	349.24
				358	7			

EARTHWORK DETAIL - MOONSHINE HILL RD (WEST)

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
8+50	12	0	0					
8+75	25	65	0	30	0	30	0	30.32
8+82	7	34	1	14	0	44	0	43.84
9+00	18	73	2	35	1	79	1	77.59
9+25	25	59	16	61	8	140	12	128.31
9+50	25	119	1	82	8	222	21	200.57
9+66	16	82	0	60	0	282	22	259.99
9+75	9	98	9	30	1	311	23	287.81
9+99.91	25	60	22	73	14	384	41	342.91
				384	33			

EARTHWORK DETAIL - MARTIN RD (EAST)

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
19+99.94	0	0	17					
20+12	12	229	0	53	4	53	5	47.56
20+20	8	131	0	54	0	106	5	101.16
20+40	19	45	0	63	0	169	5	164.46
20+55	15	105	3	43	1	212	6	205.96
20+75	20	57	25	59	11	271	19	251.87
20+90	15	41	39	27	18	298	42	256.54
21+06	16	41	14	24	16	322	61	261.10
21+30	24	44	12	38	12	360	76	284.33
21+57	27	43	9	43	11	404	89	314.37
				404	71			

EARTHWORK DETAIL - THOMPSON RD

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
7+52	2	0	0					
7+91	39	52	0	38	0	38	0	37.92
8+00	9	50	5	17	1	55	1	53.99
8+24	24	58	22	47	12	102	16	86.60
8+34	10	65	15	23	7	125	24	100.94
8+50	16	44	22	33	11	158	38	120.34
8+75	25	60	0	48	10	206	51	155.69
8+89	14	16	1	20	0	226	51	175.47
				226	41			

EARTHWORK DETAIL - MOONSHINE HILL RD

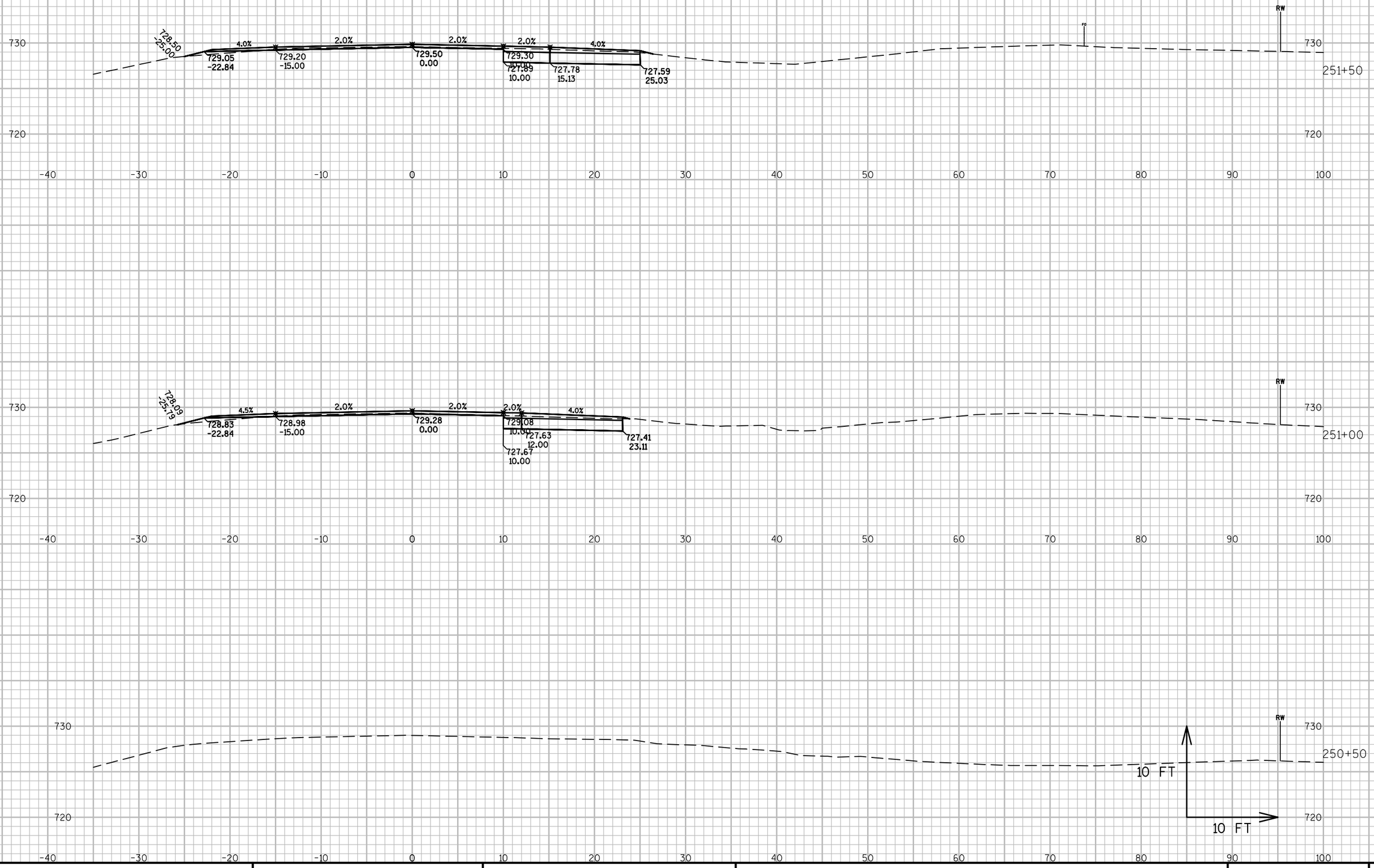
STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
10+25	0	36	26	0	0	0	0	0.00
10+34	9	65	6	18	6	18	7	10.67
10+50	16	95	4	46	3	64	11	53.11
10+57	7	18	2	15	1	78	12	66.63
10+75	18	36	21	18	8	96	22	74.63
11+00	25	31	82	31	48	127	82	45.53
11+25	25	38	18	32	47	159	140	19.16
11+50	25	44	2	38	9	197	152	45.23
11+66	16	45	3	27	1	224	153	70.09
11+75	9	47	2	15	1	239	154	84.12
12+00	25	40	0	40	1	279	156	123.07
12+25	25	34	0	34	0	313	156	157.26
12+45	20	33	0	25	0	338	156	182.24
				338	124			

EARTHWORK DETAIL - NEJEDLO RD

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
7+65	0	0	0					
7+75	10	55	0	10	0	10	0	9.88
8+00	25	110	0	77	0	86	0	86.42
8+25	25	129	0	111	0	197	0	197.30
8+50	25	65	0.01	90	0	287	0	287.19
8+75	25	70	0.11	62	0	349	0	349.33
8+76	1	71	0.14	1	0	351	0	350.79
9+00	24	70	0	64	0	415	0	414.44
9+25	25	120	6	88	3	503	3	499.18
9+50	25	112	7	105	6	608	10	597.34
9+50	0	114	5	2	0	610	10	599.15
9+75	25	4	1	55	3	664	14	650.47
9+91	16	41	0.06	13	0	678	14	663.46
				678	12			

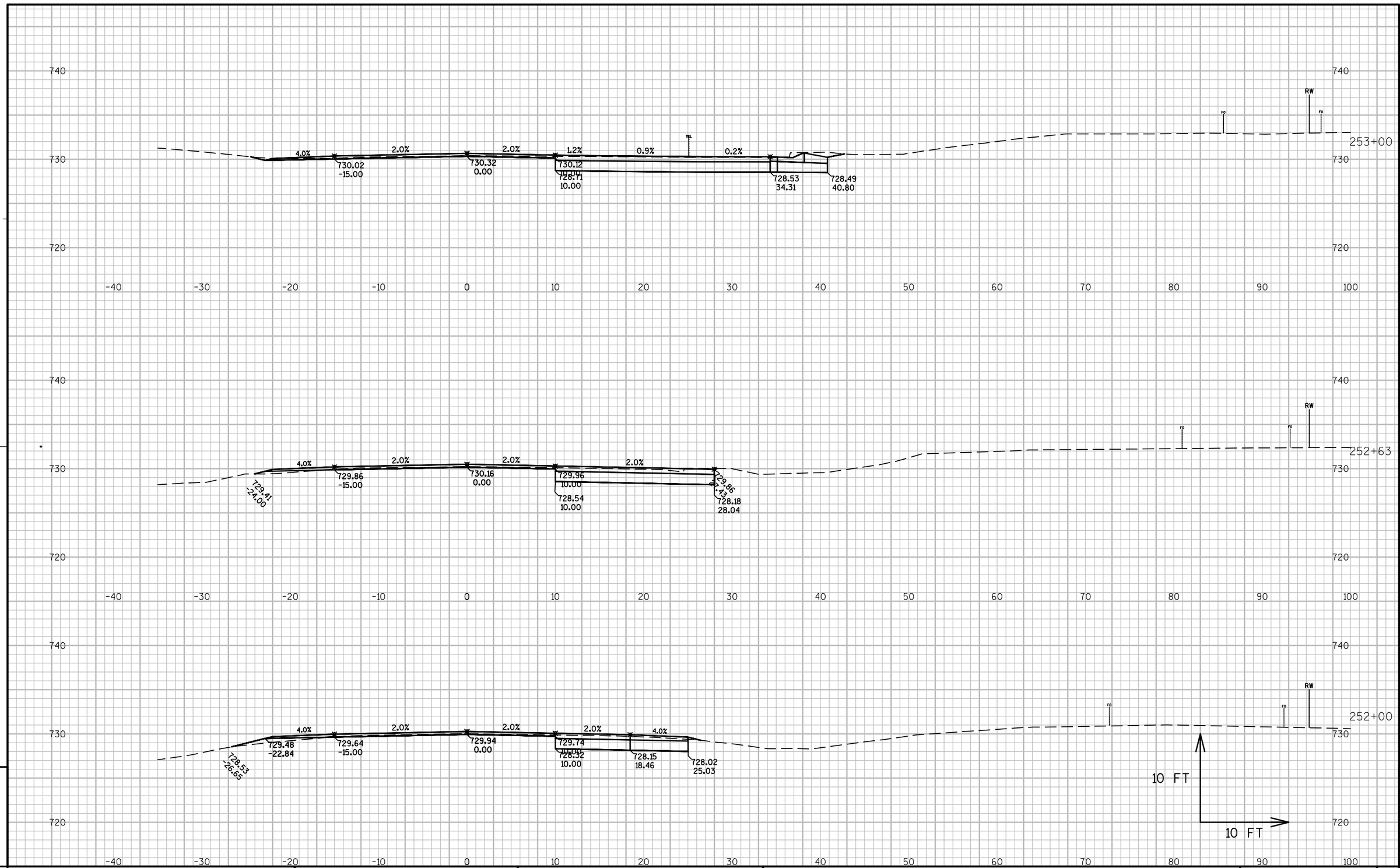
EARTHWORK DETAIL - MARTIN RD

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME EXP. FILL 1.25 CY	MASS ORDINATE CY
10+06	0	13	0					
10+21	15	167	0	50	0	50	0	49.67
10+25	4	139	0	23	0	73	0	72.80
10+50	25	3	37	66	17	138	21	117.17
10+75	25	5	15	4	24	142	51	91.24
10+77	2	6	13	0	1	143	52	90.56
11+00	23	32	0	16	5	159	59	100.25
11+25	25	41	0	34	0	193	59	134.10
11+50	25	49	0	42	0	235	59	176.15
11+75	25	0	0	23	0	258	59	198.95
12+00	25	0	0	0	0	258	59	198.95
				258	47			

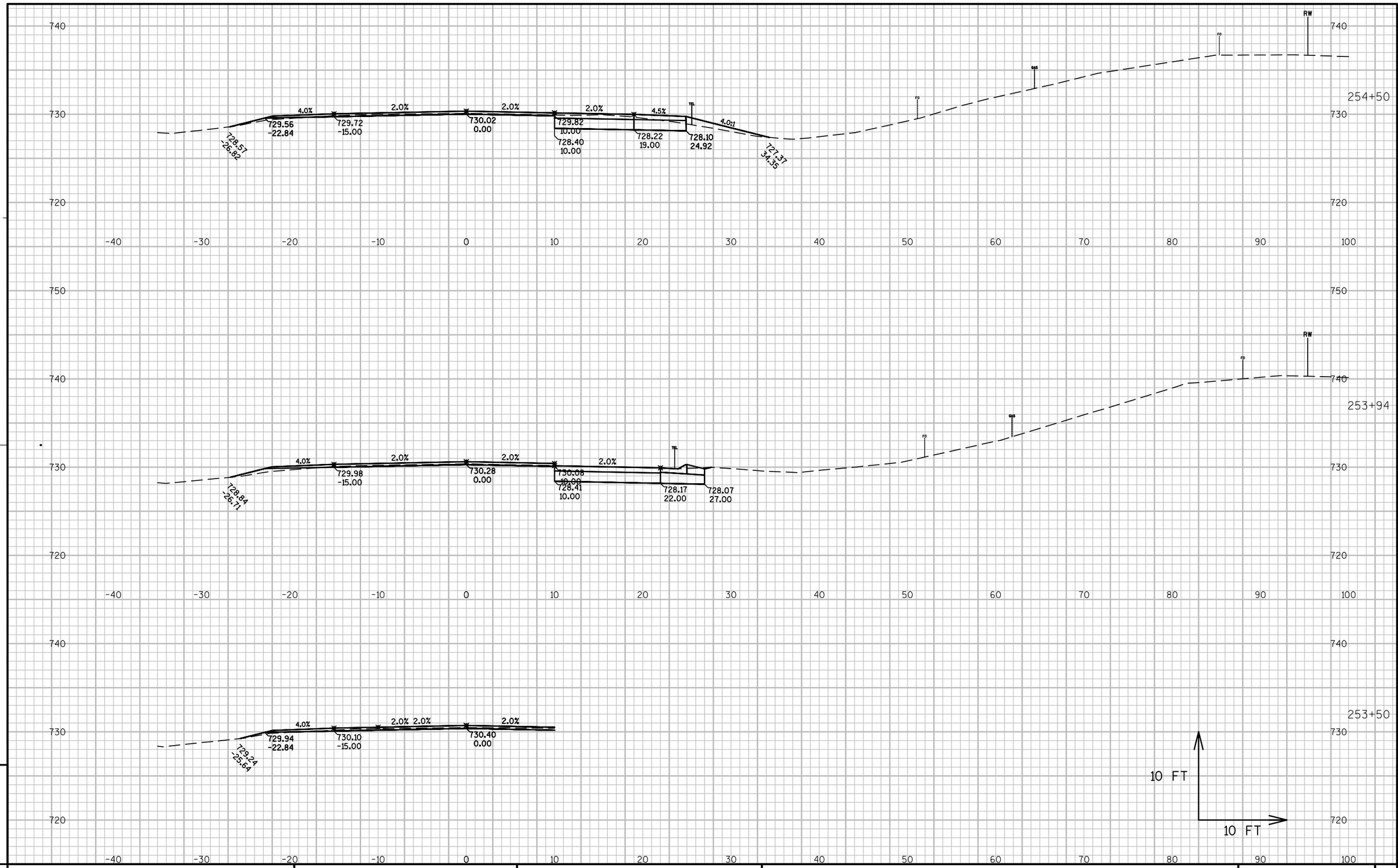


PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-TRELLIS INT (1-13-2014).DWG PLOT DATE : 3/5/2014 2:38 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 177	E



9

9

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-TRELLIS INT (1-13-2014).DWG
PLOT DATE : 3/5/2014 2:38 PM
PLOT BY : CREAPEAU, QUINTON D PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

257+00

256+00

255+00

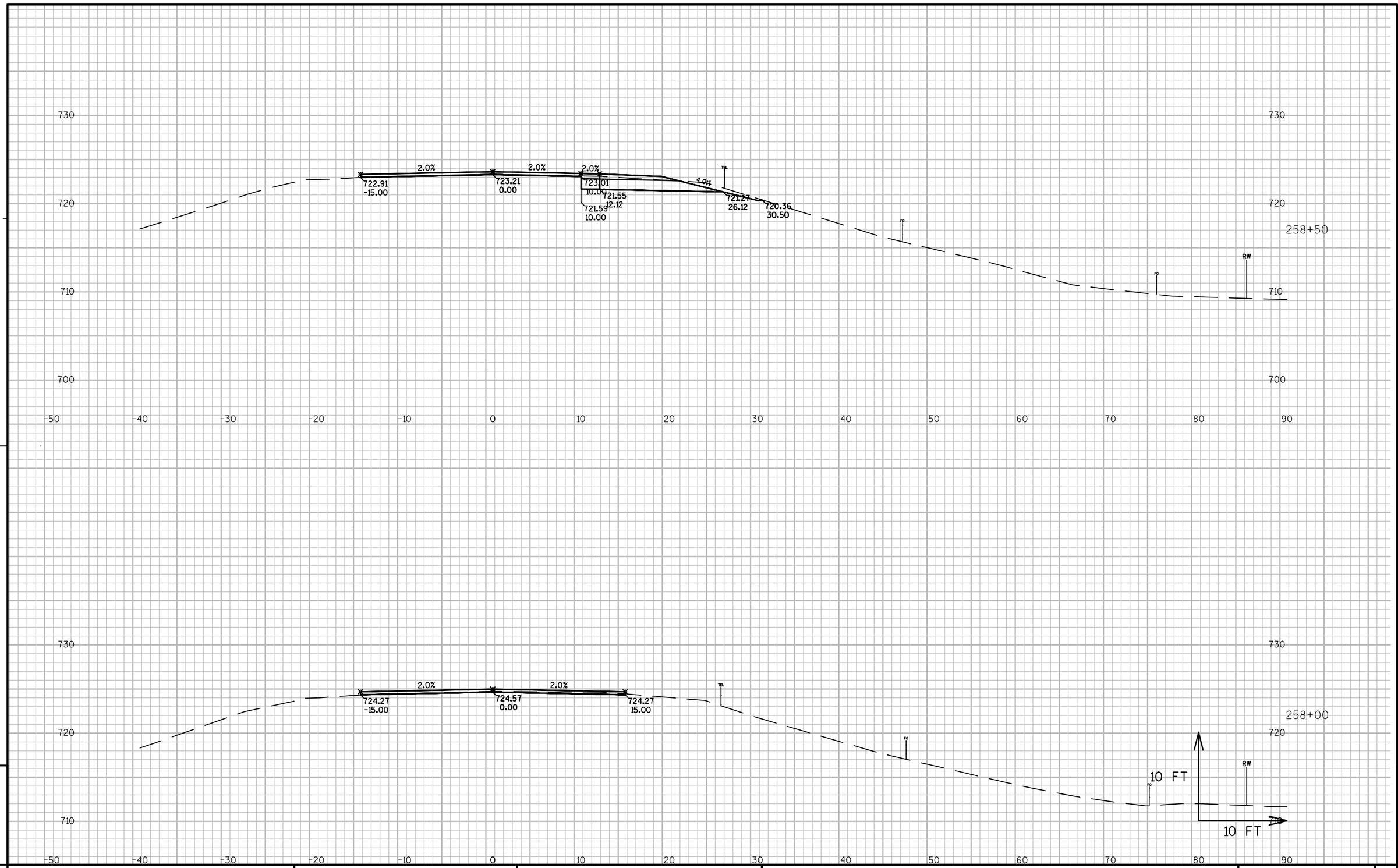
10 FT

10 FT

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

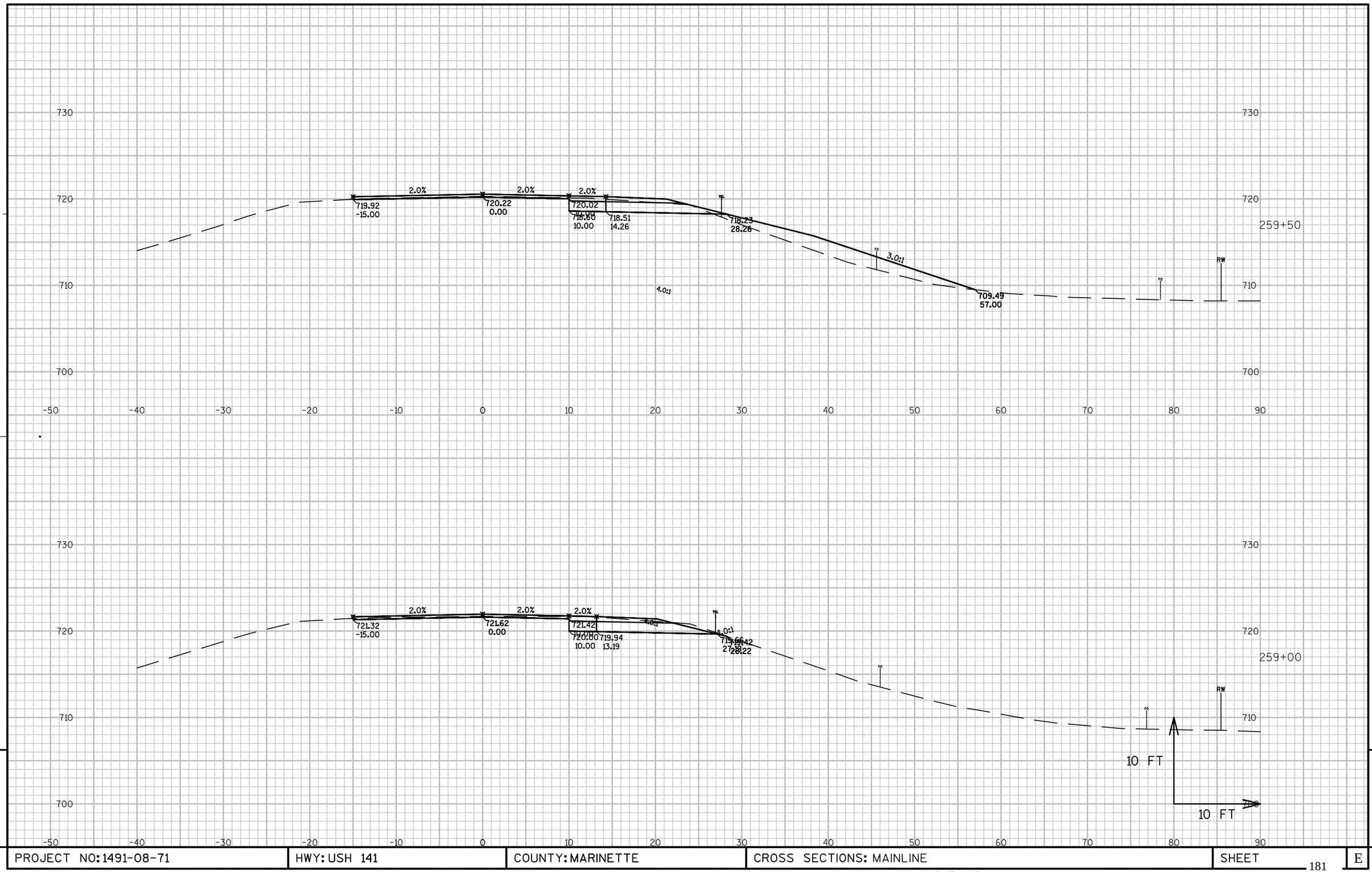
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WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:35 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

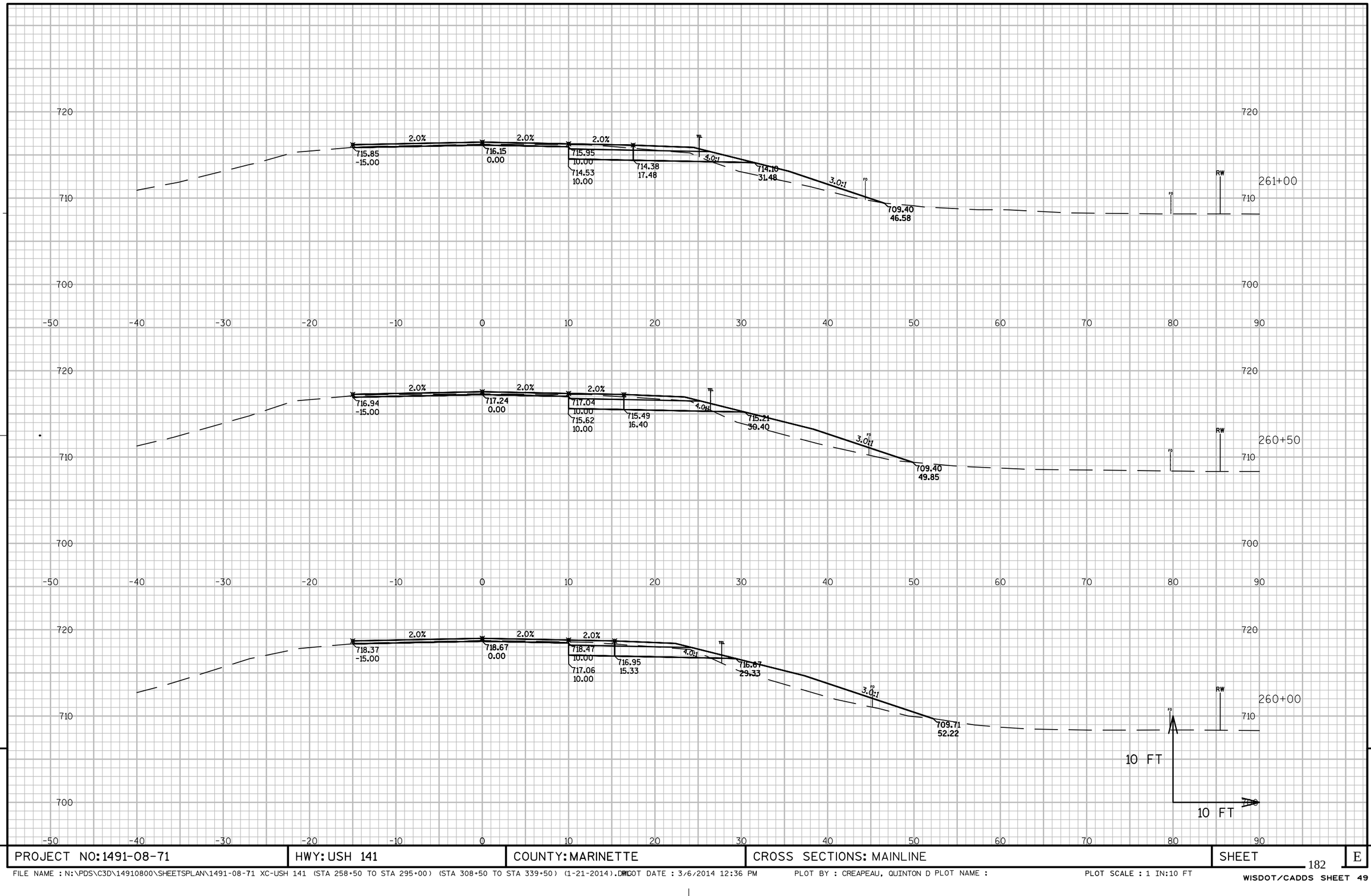


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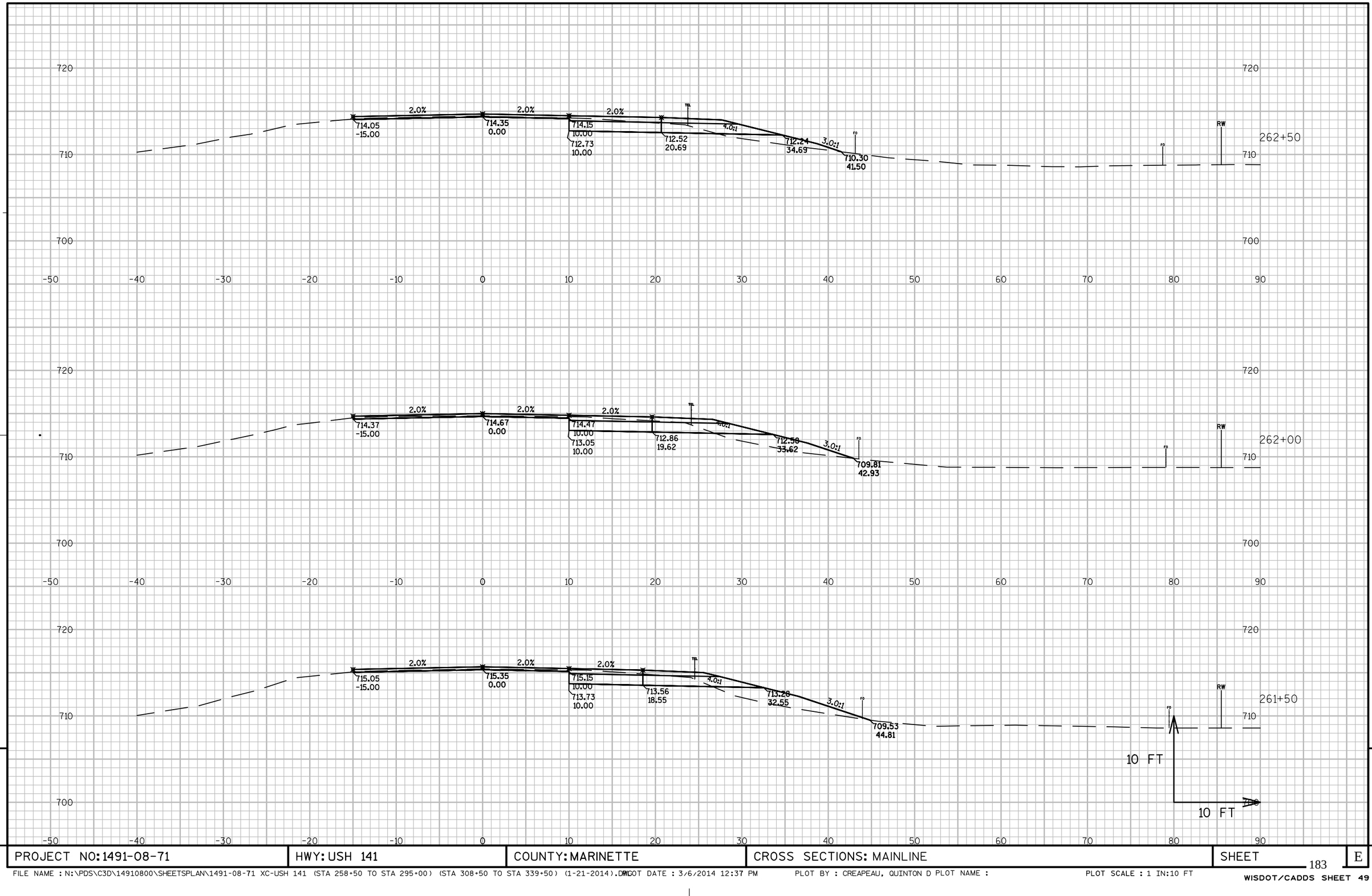
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:35 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



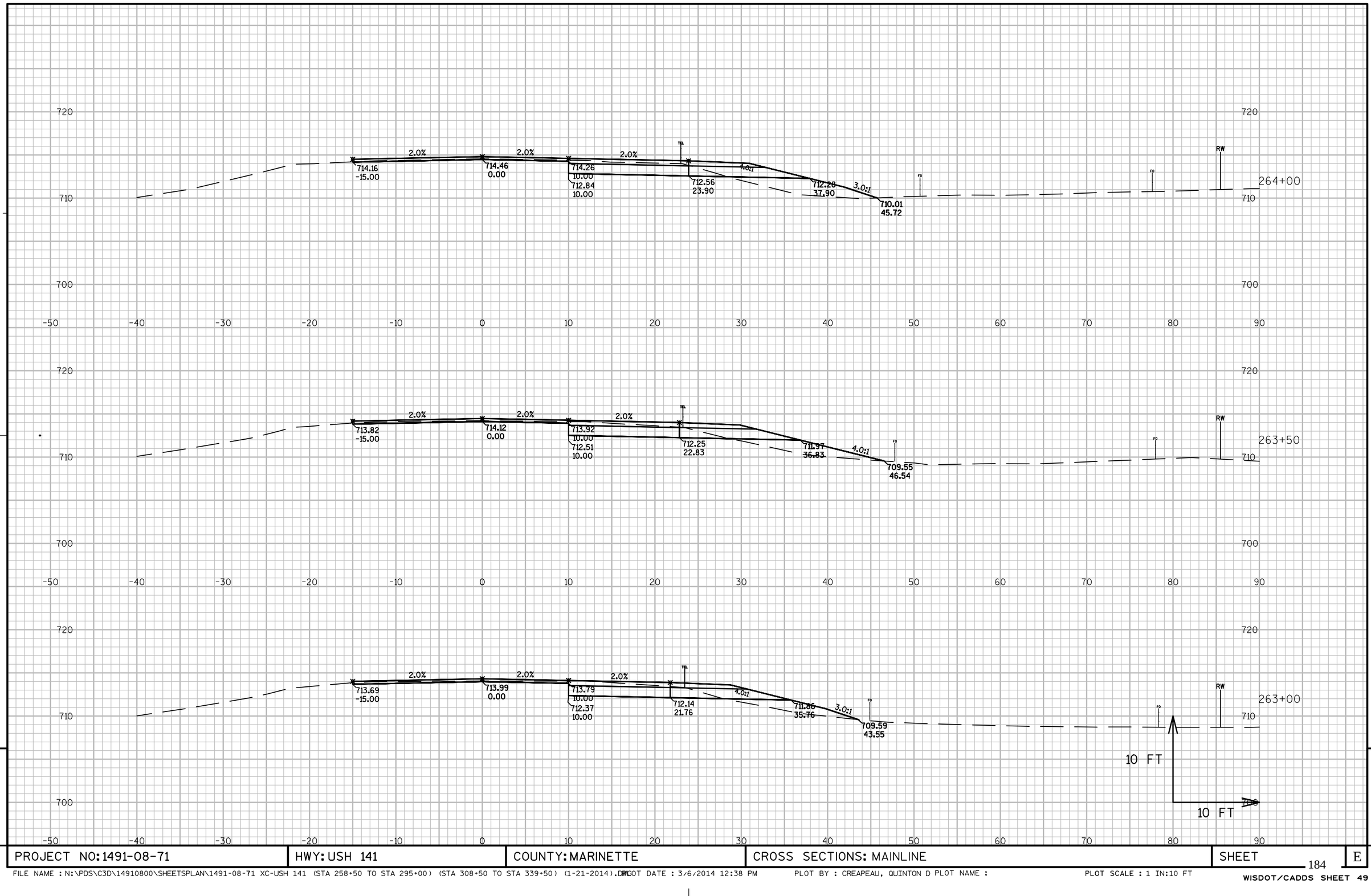
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:36 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



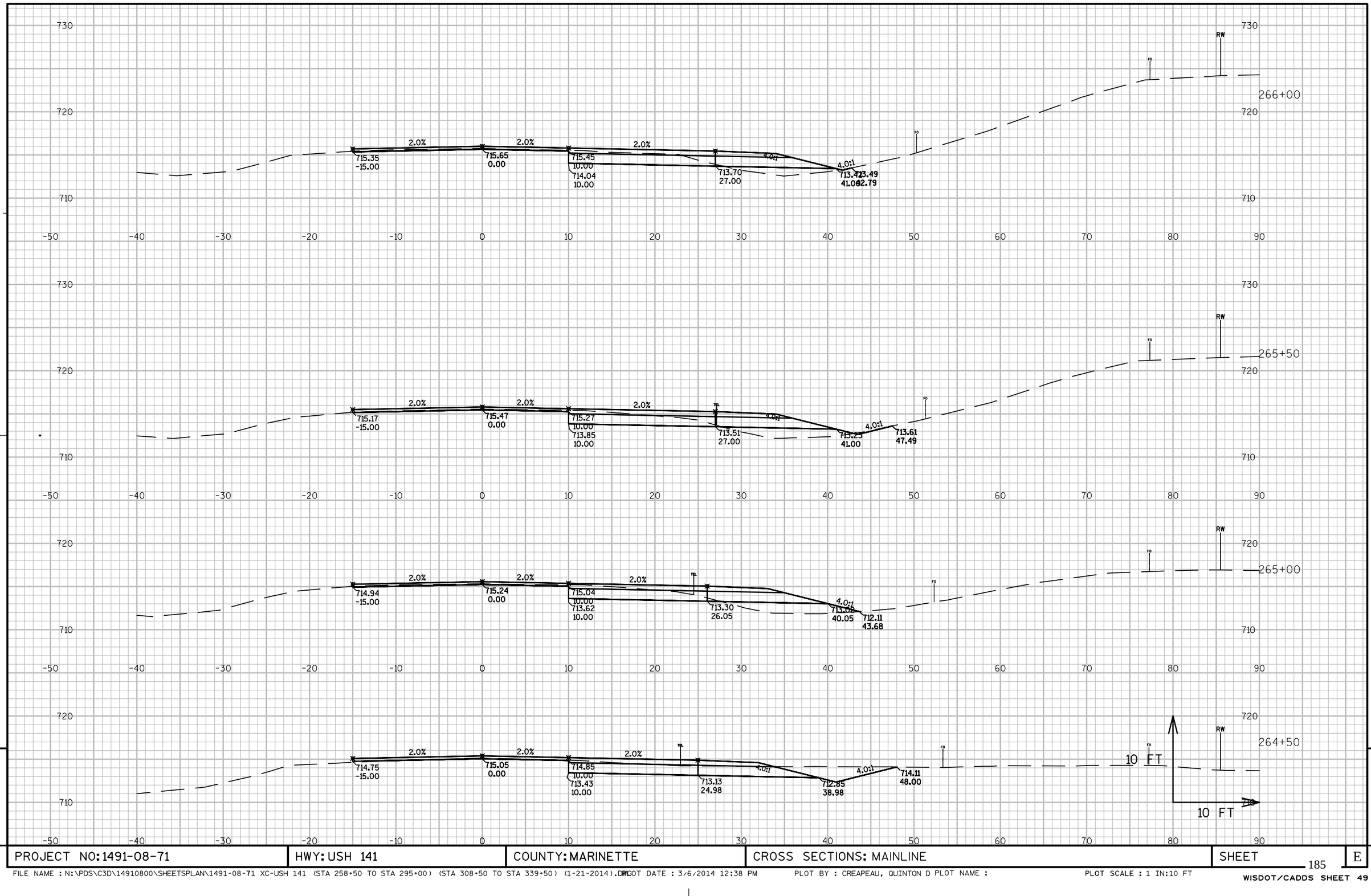
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:37 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

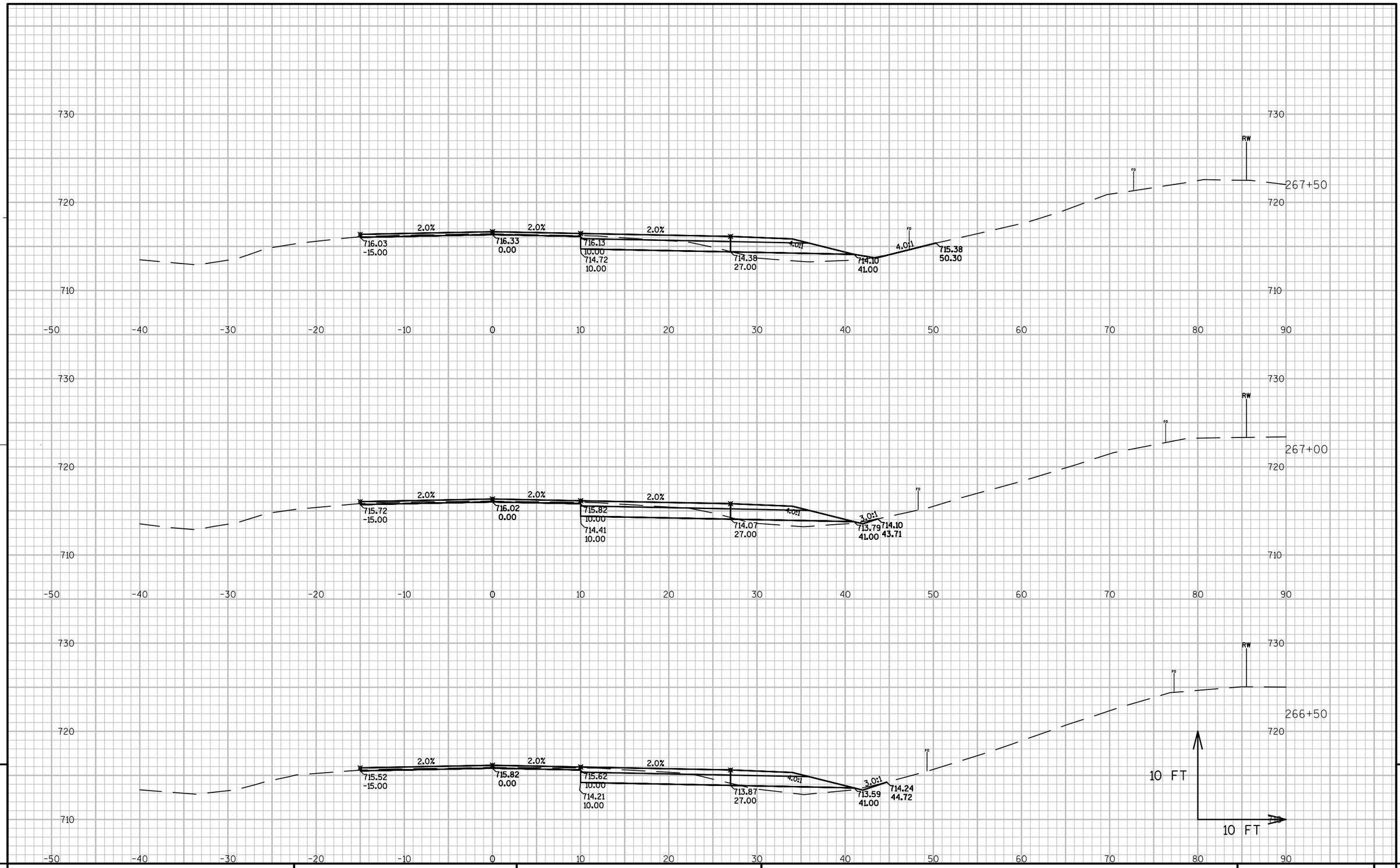
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:38 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

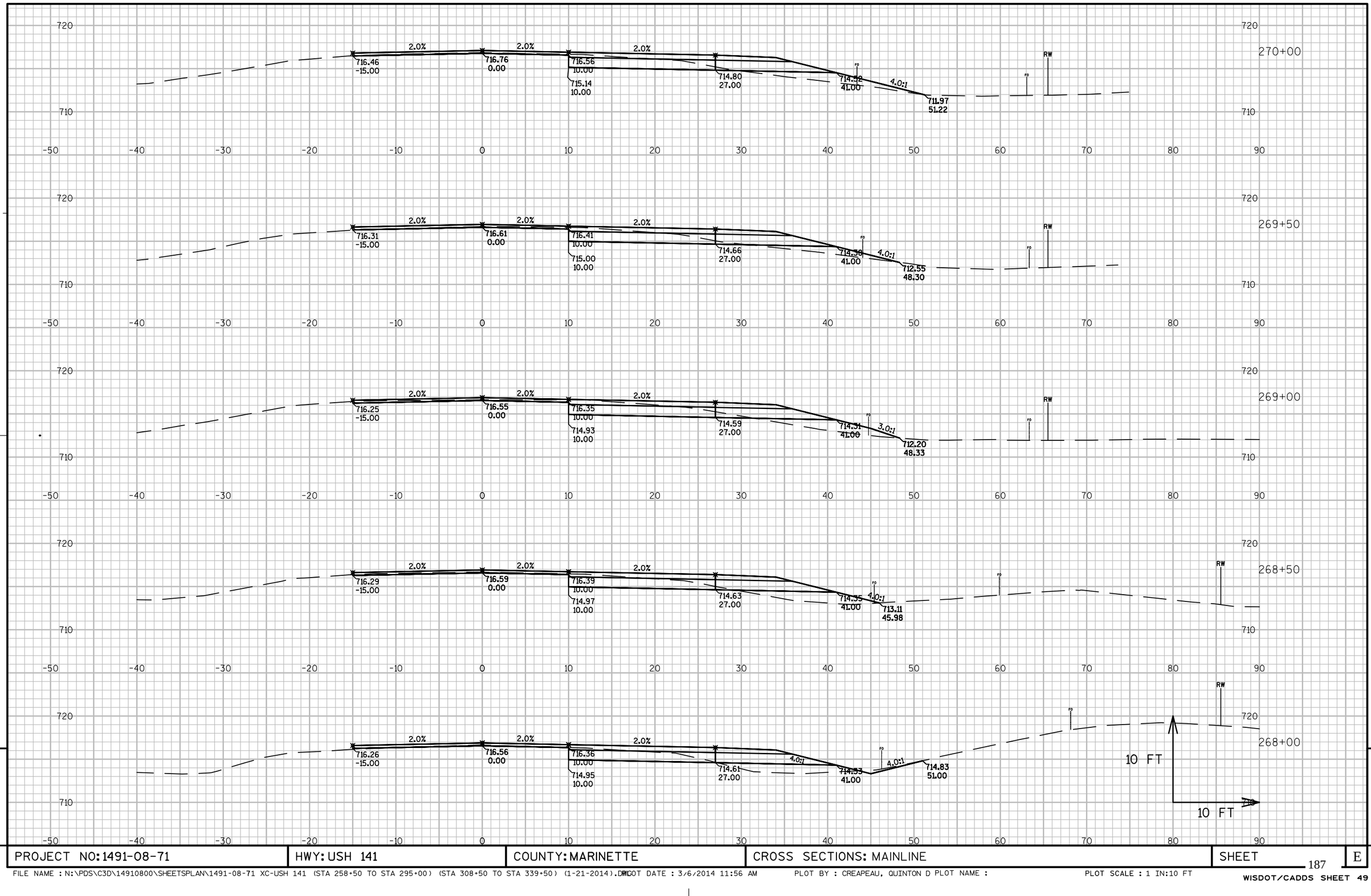
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WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

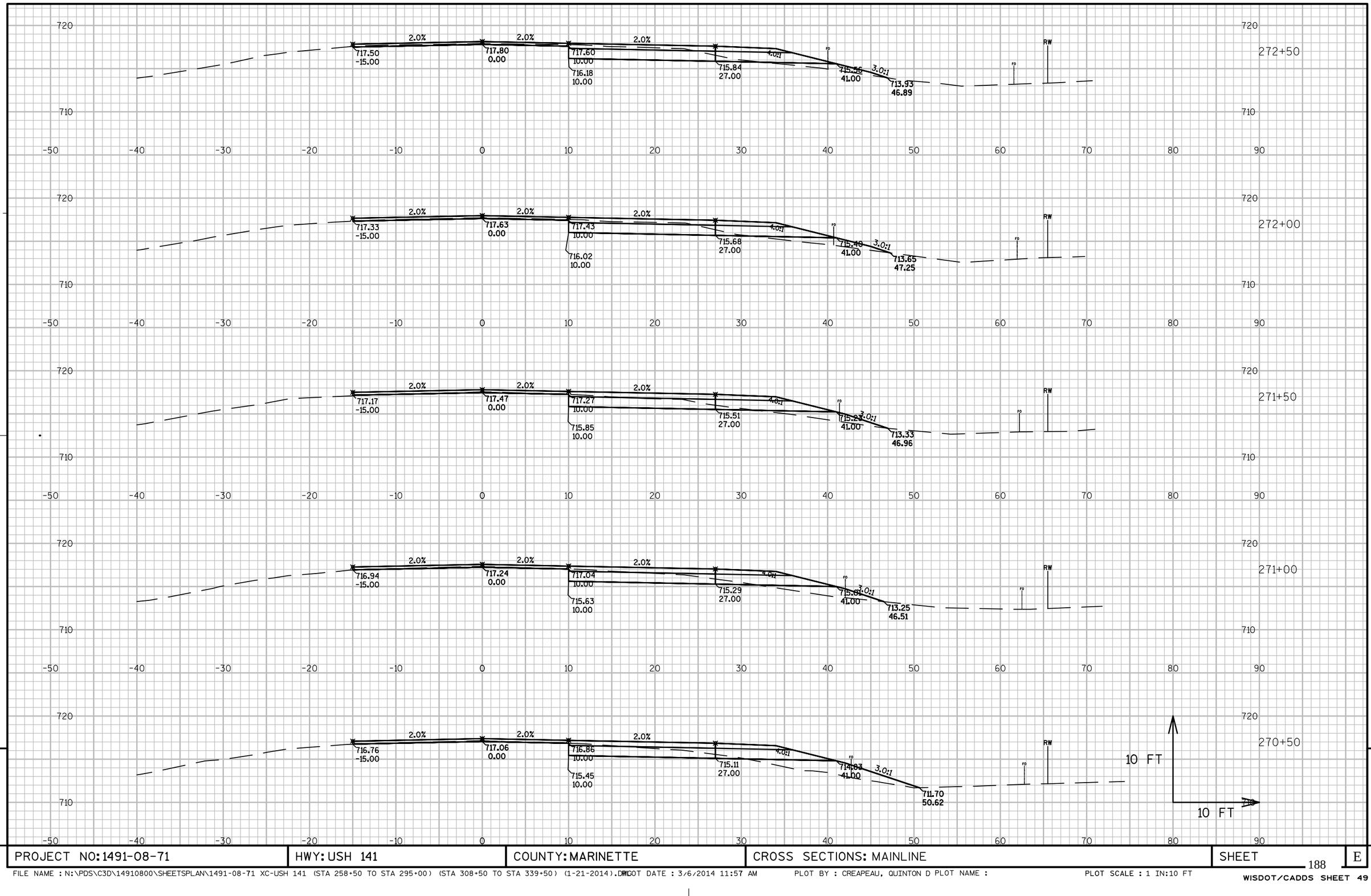
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 11:55 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 187	E

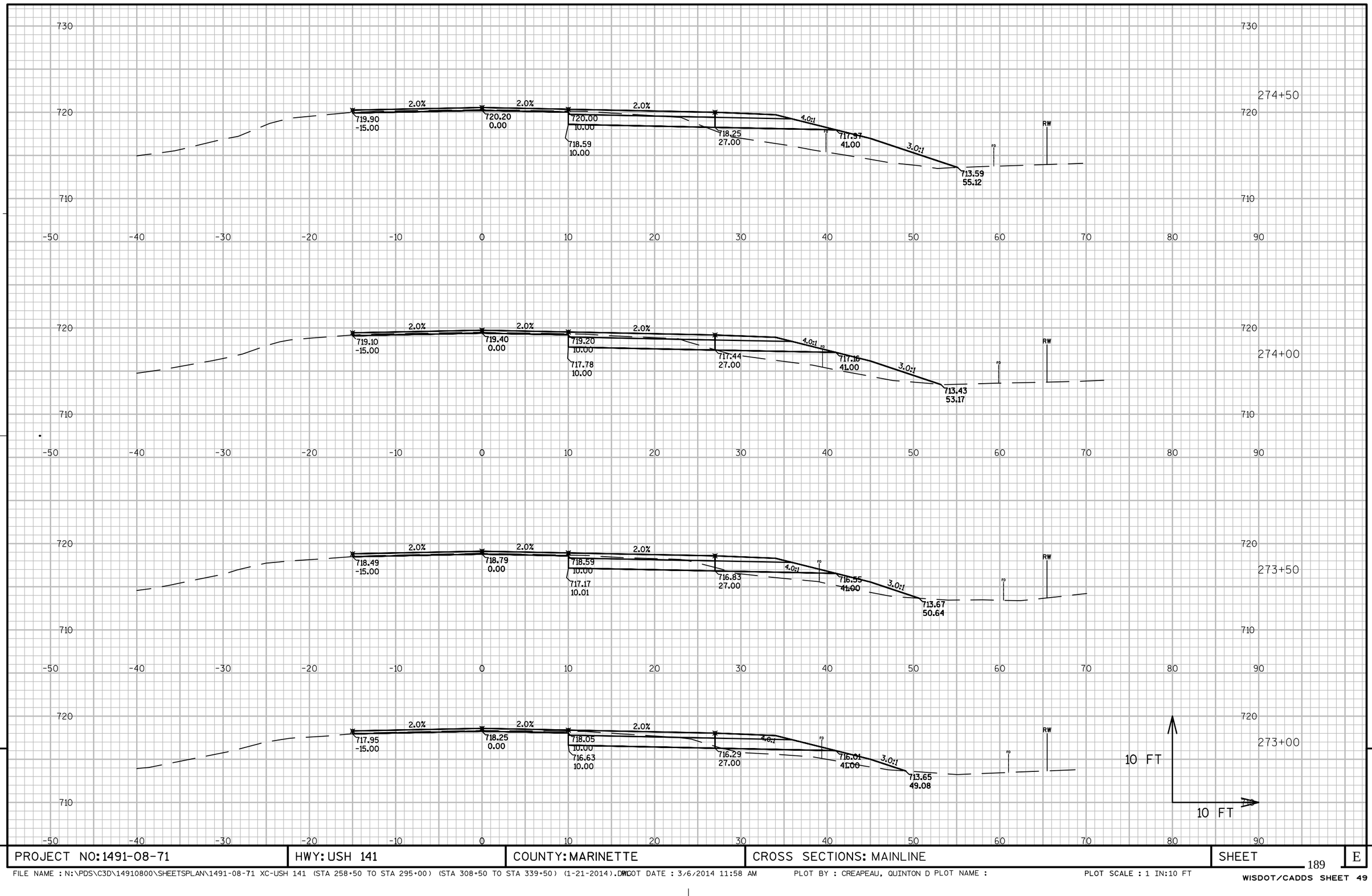
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 11:56 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



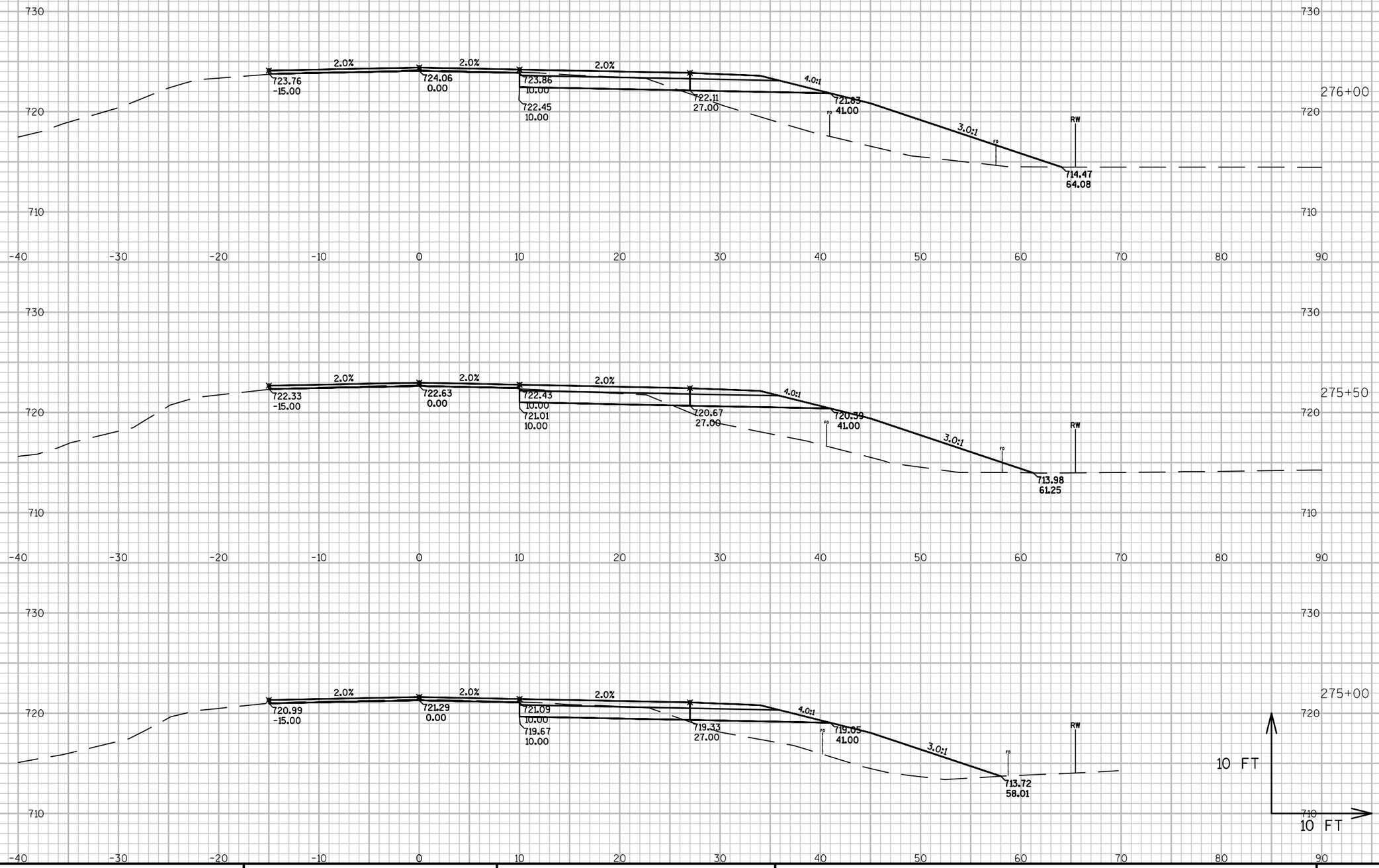
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 11:57 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 11:58 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

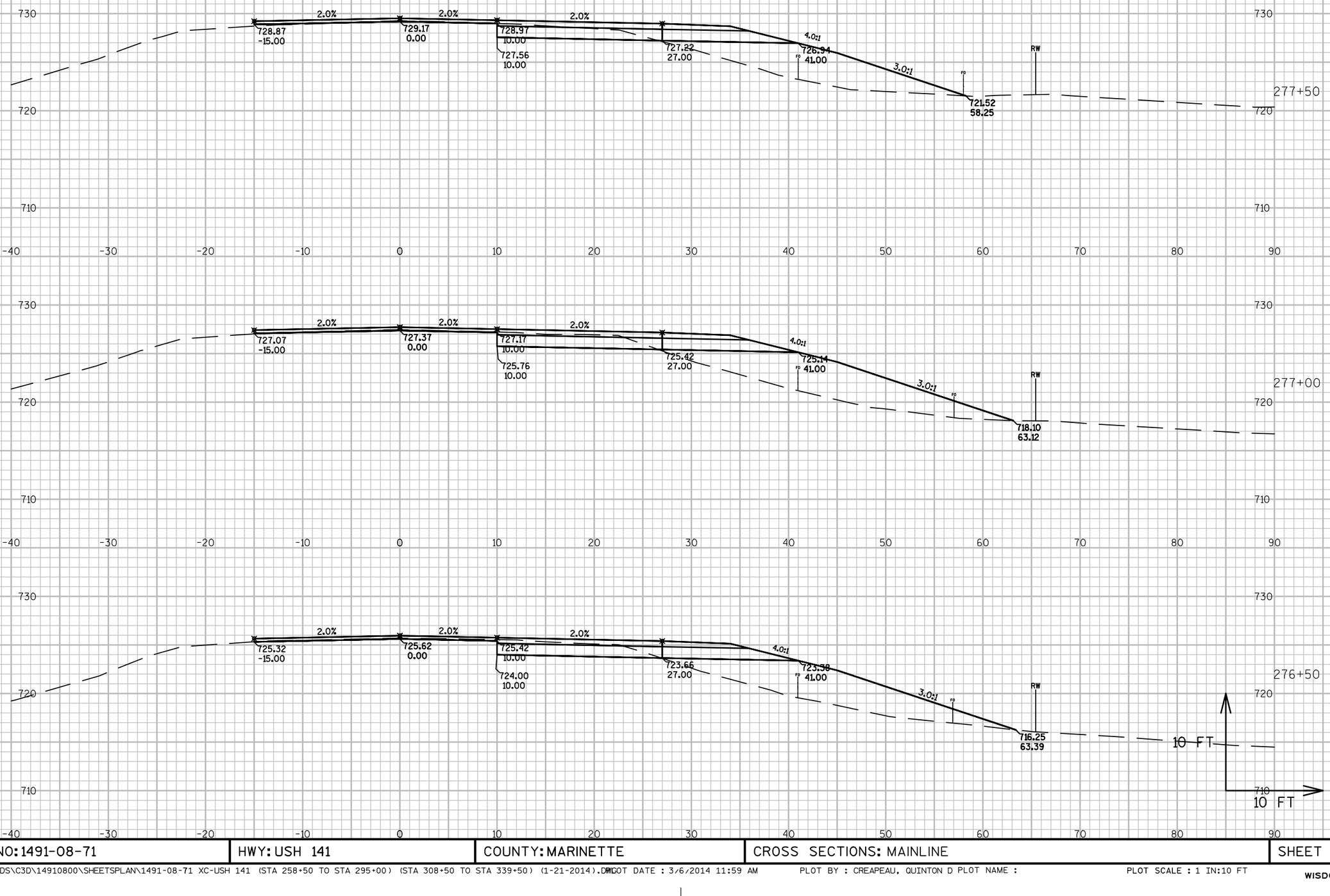


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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

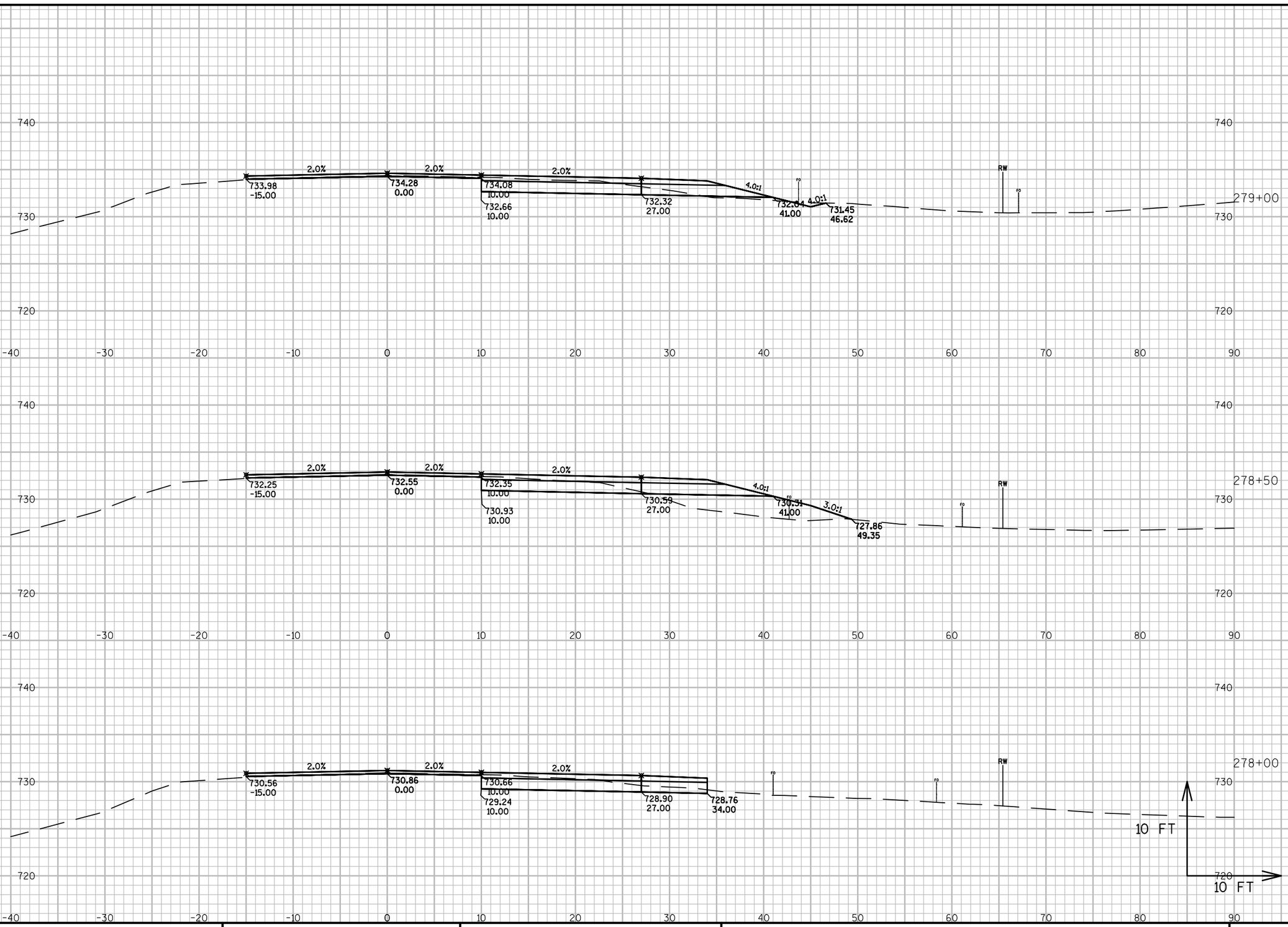
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 11:58 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



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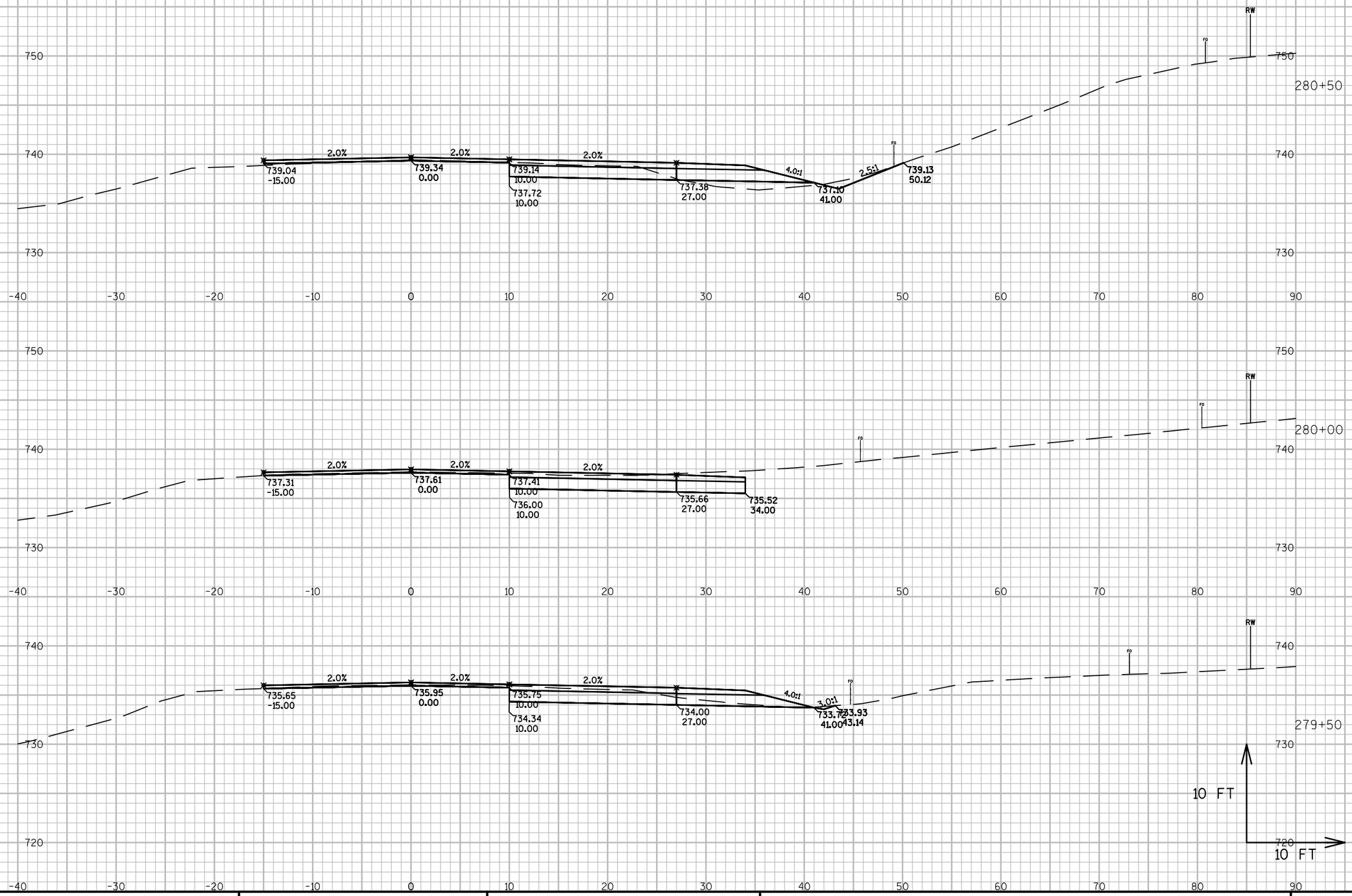
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 191	E



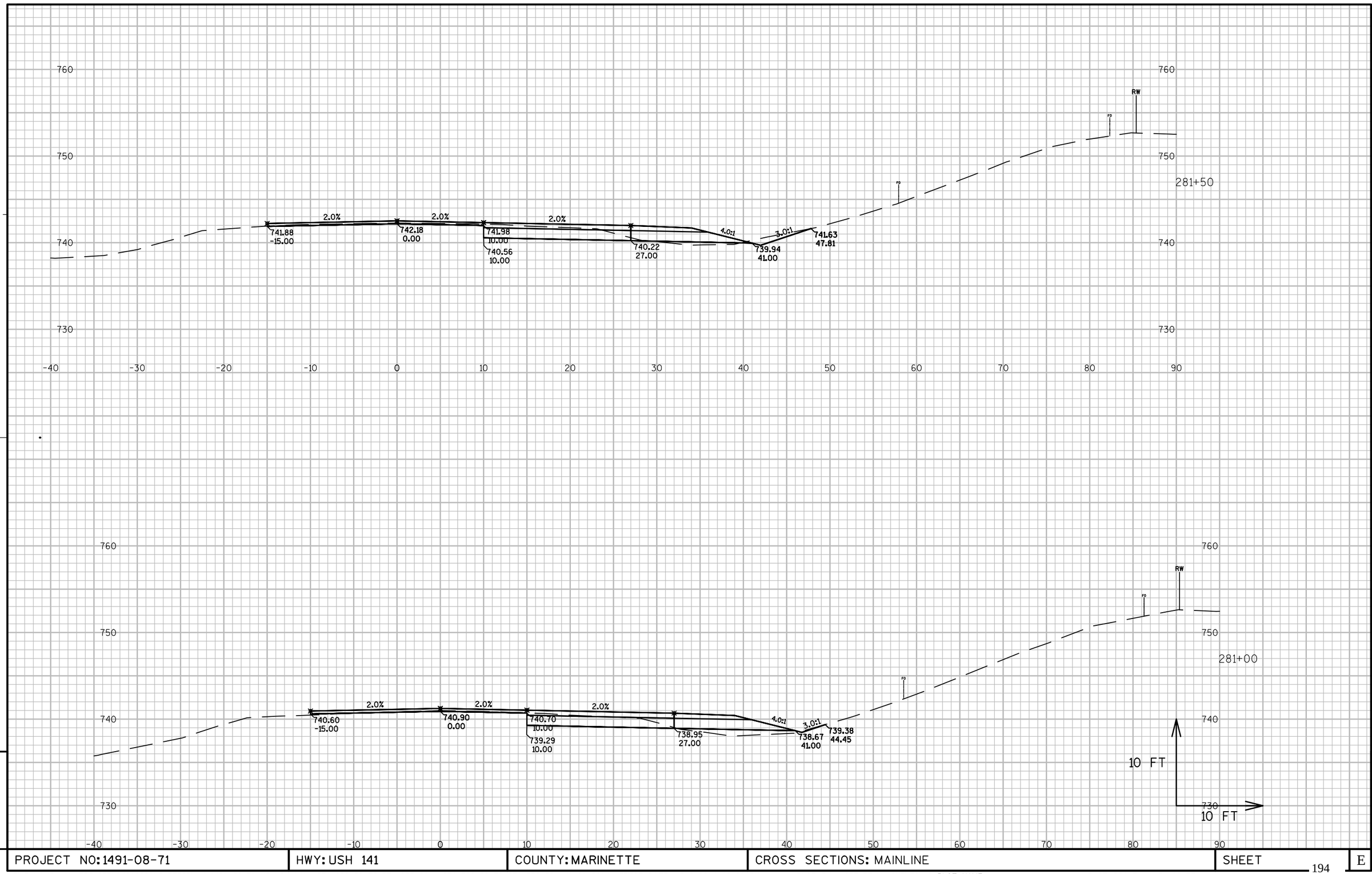
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:00 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:01 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

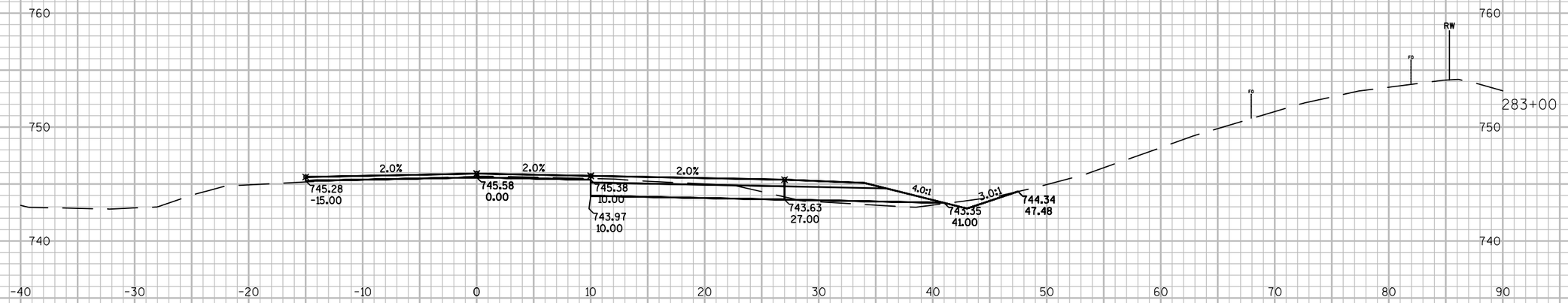


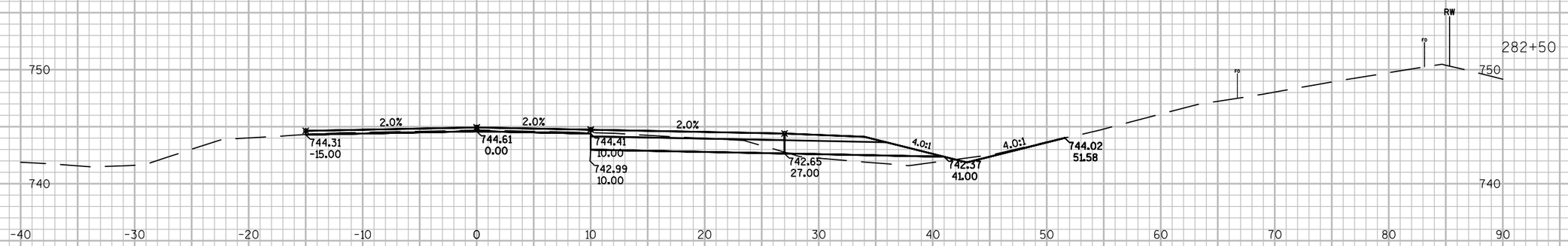
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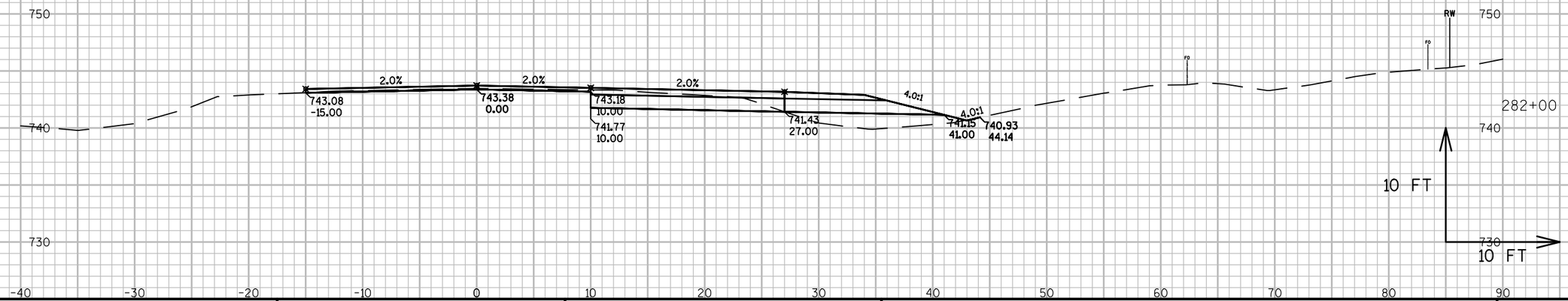
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:01 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT







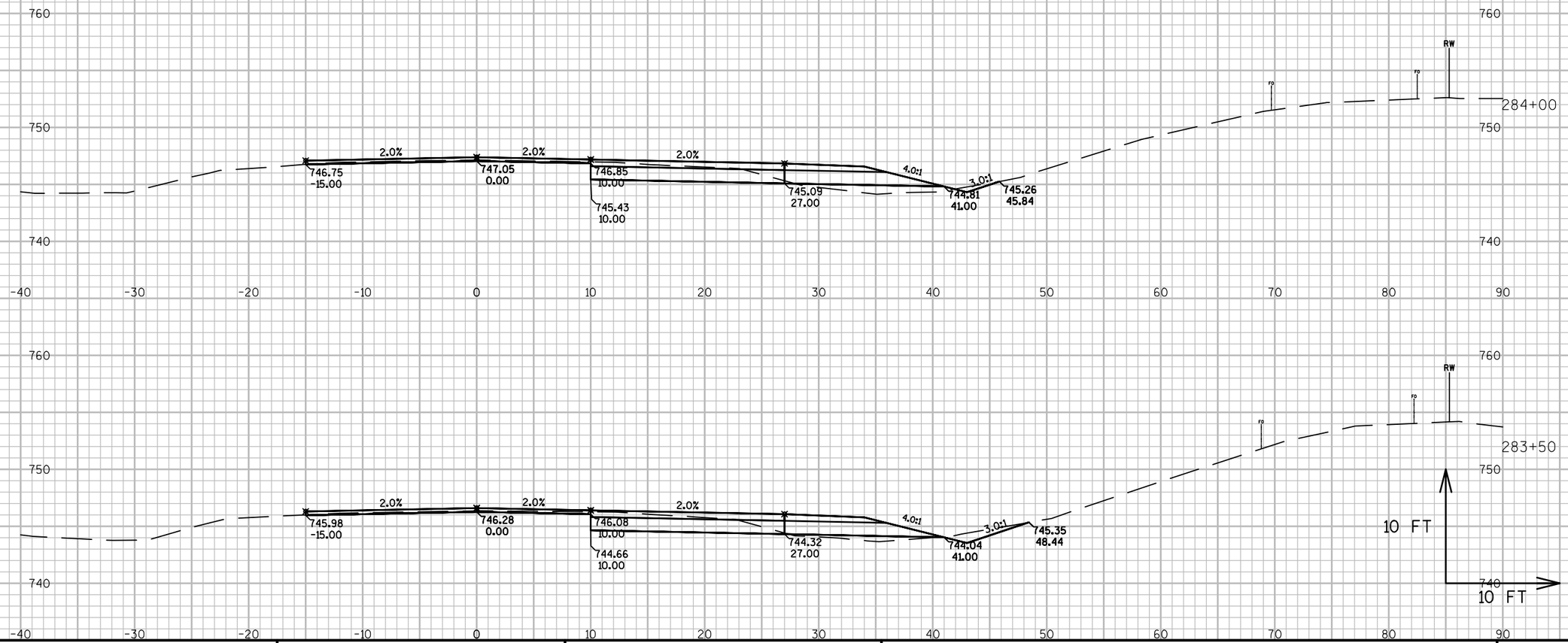
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:02 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



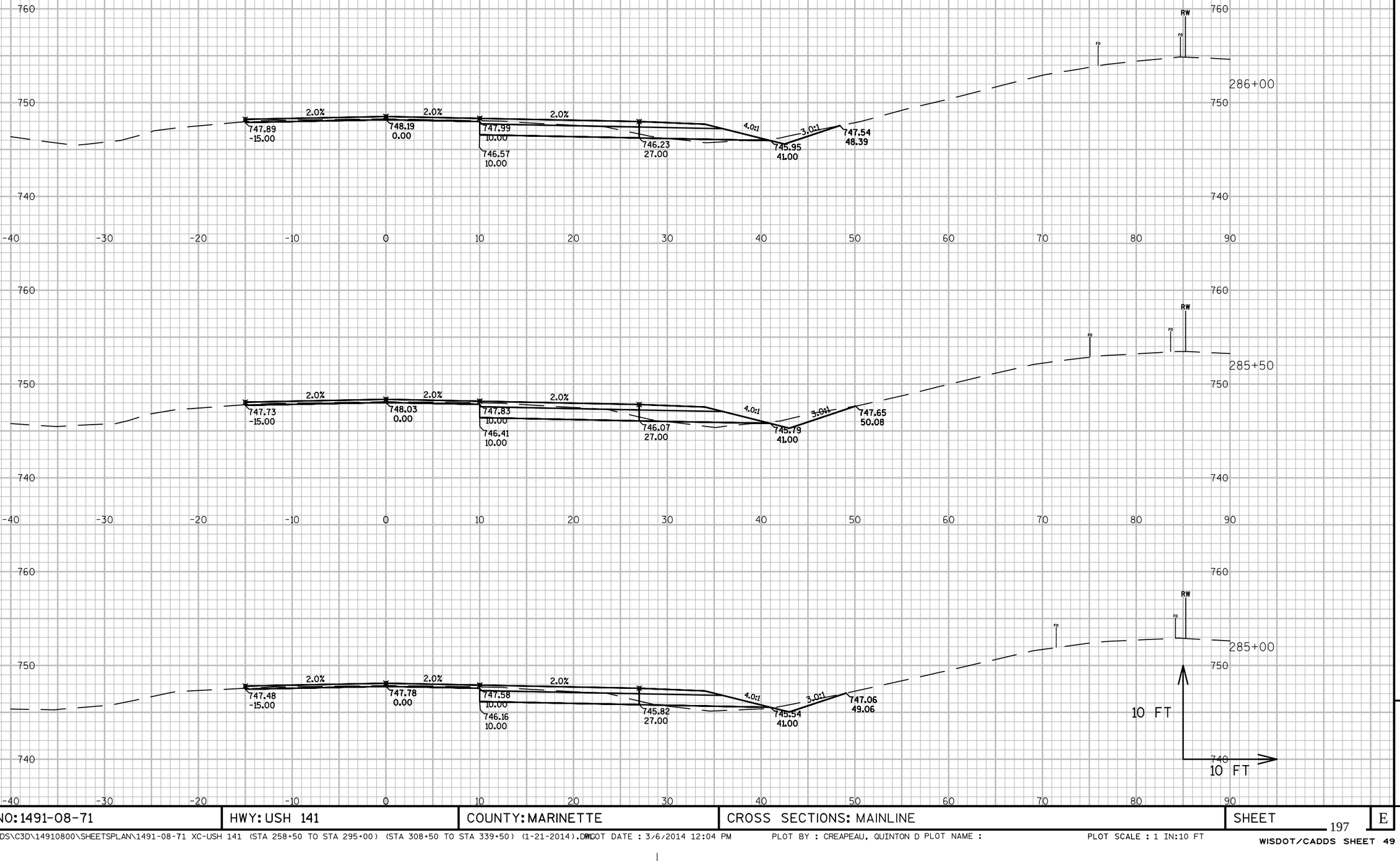


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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:03 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

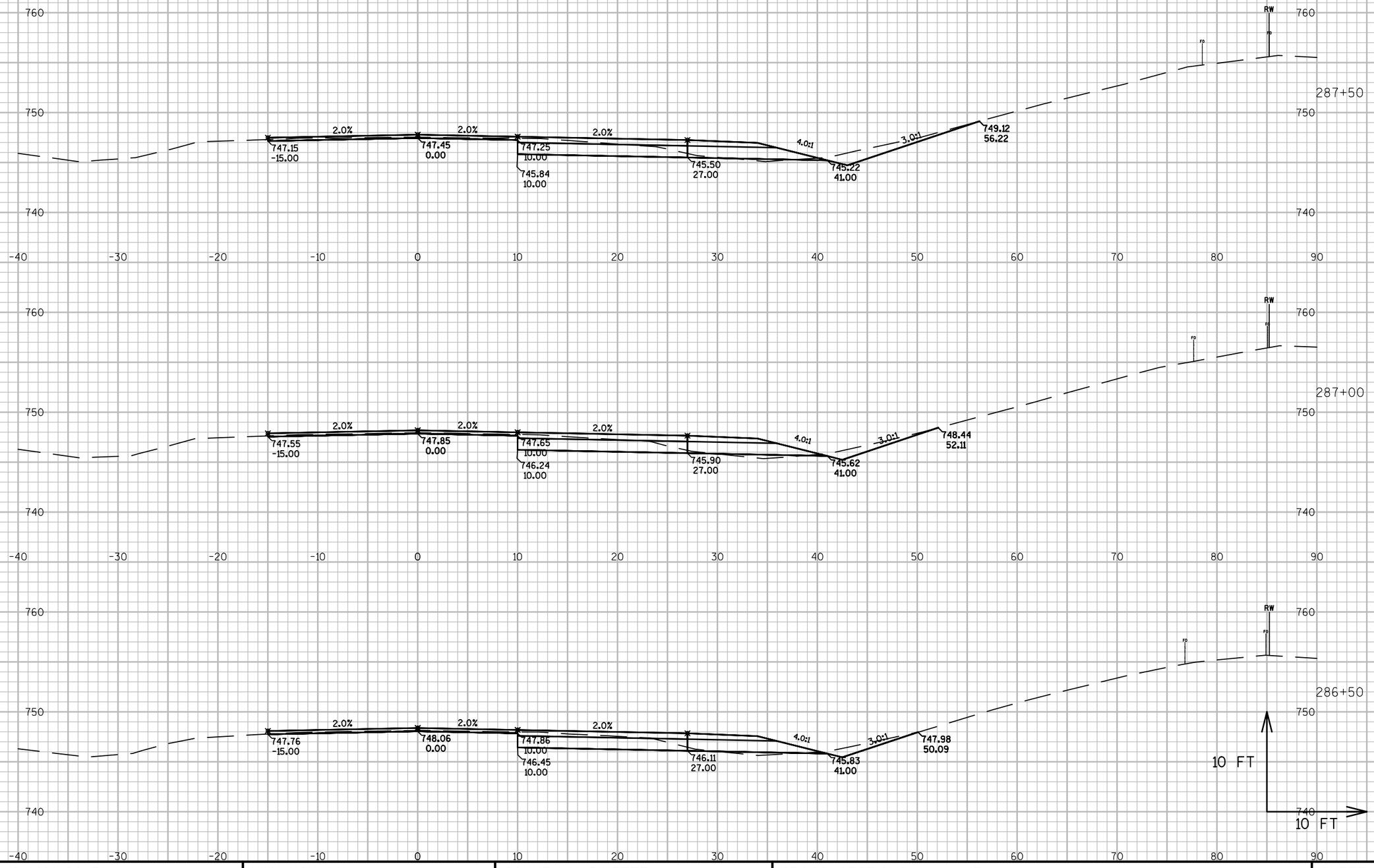


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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:04 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

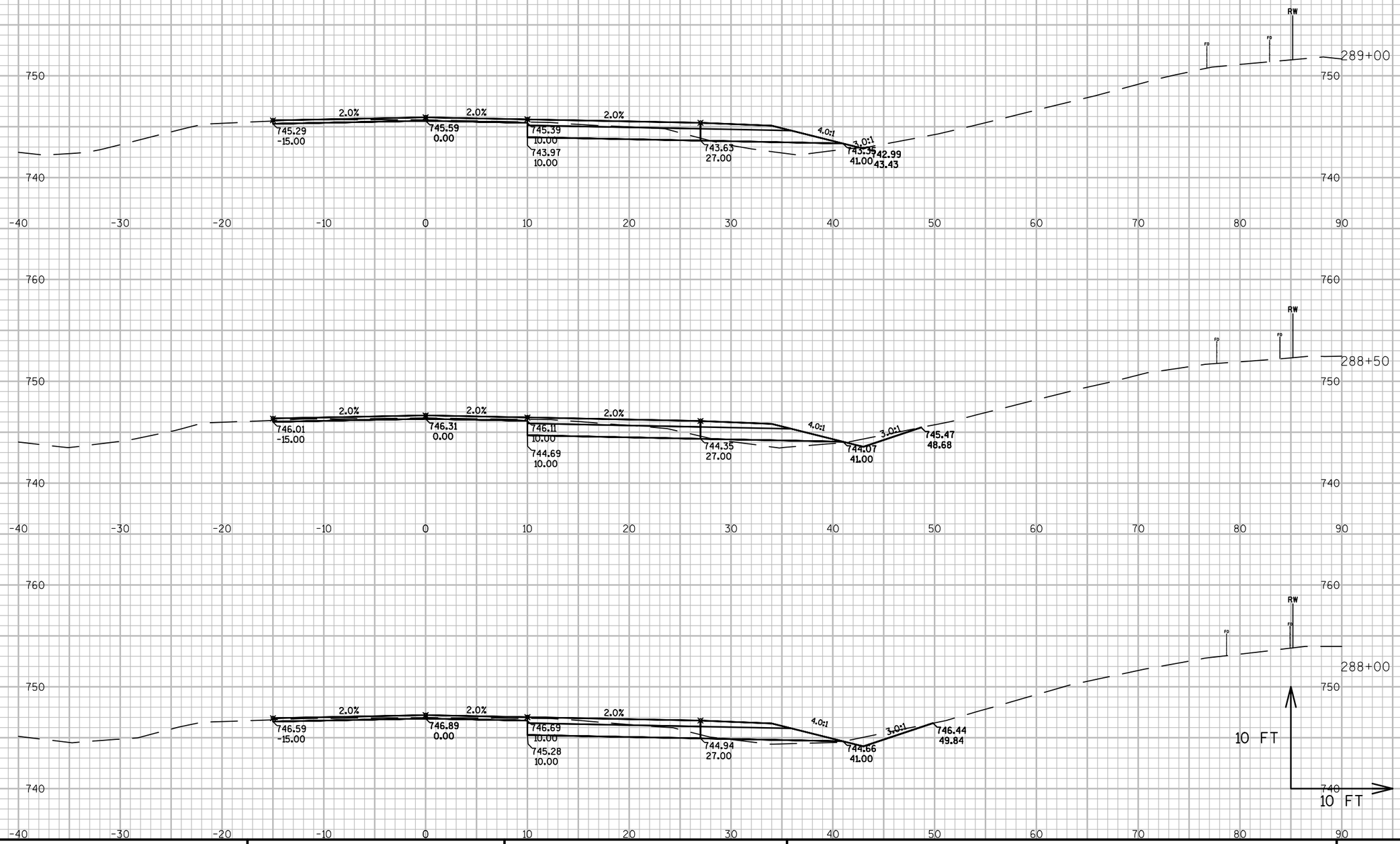


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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

9

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:04 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

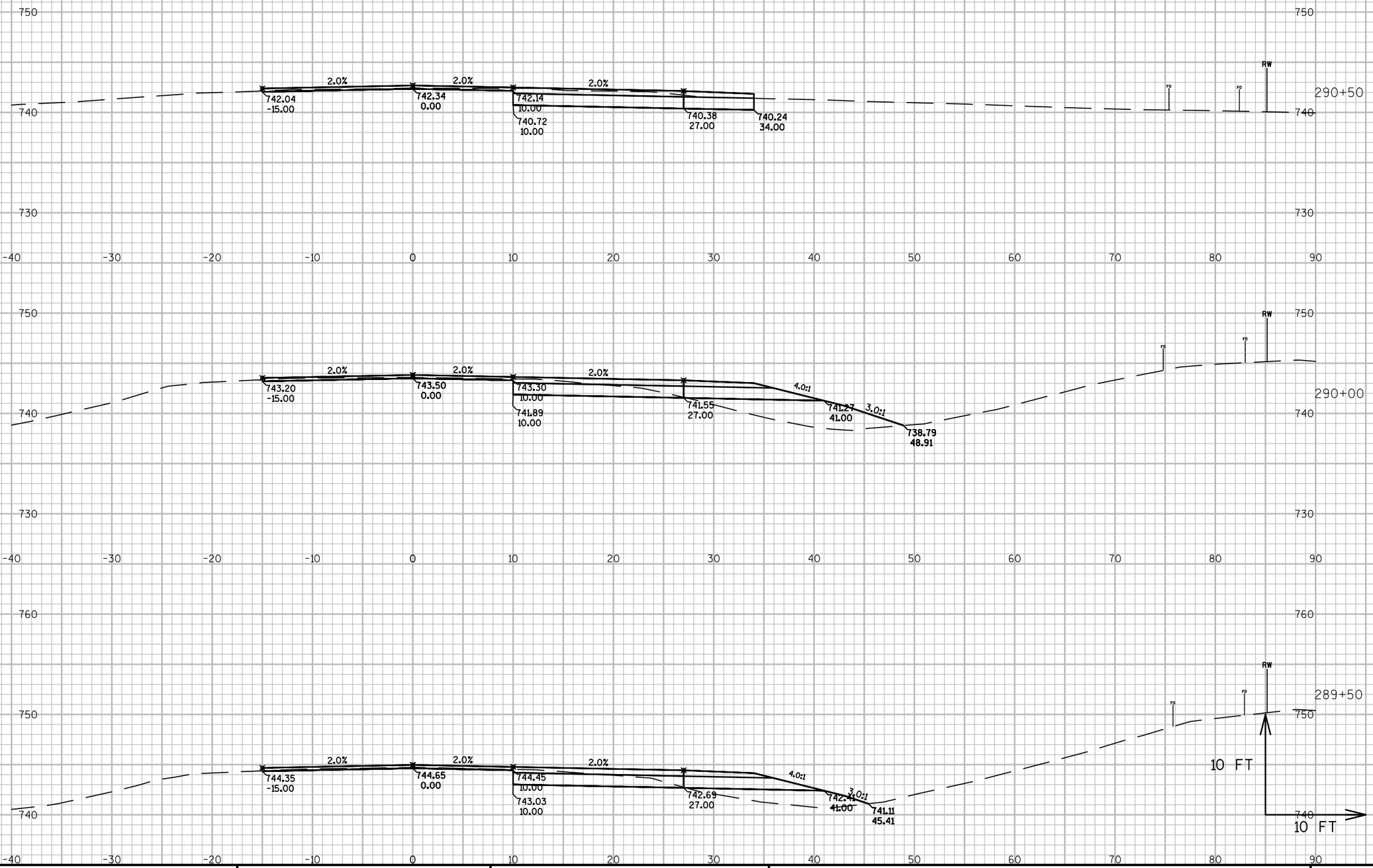


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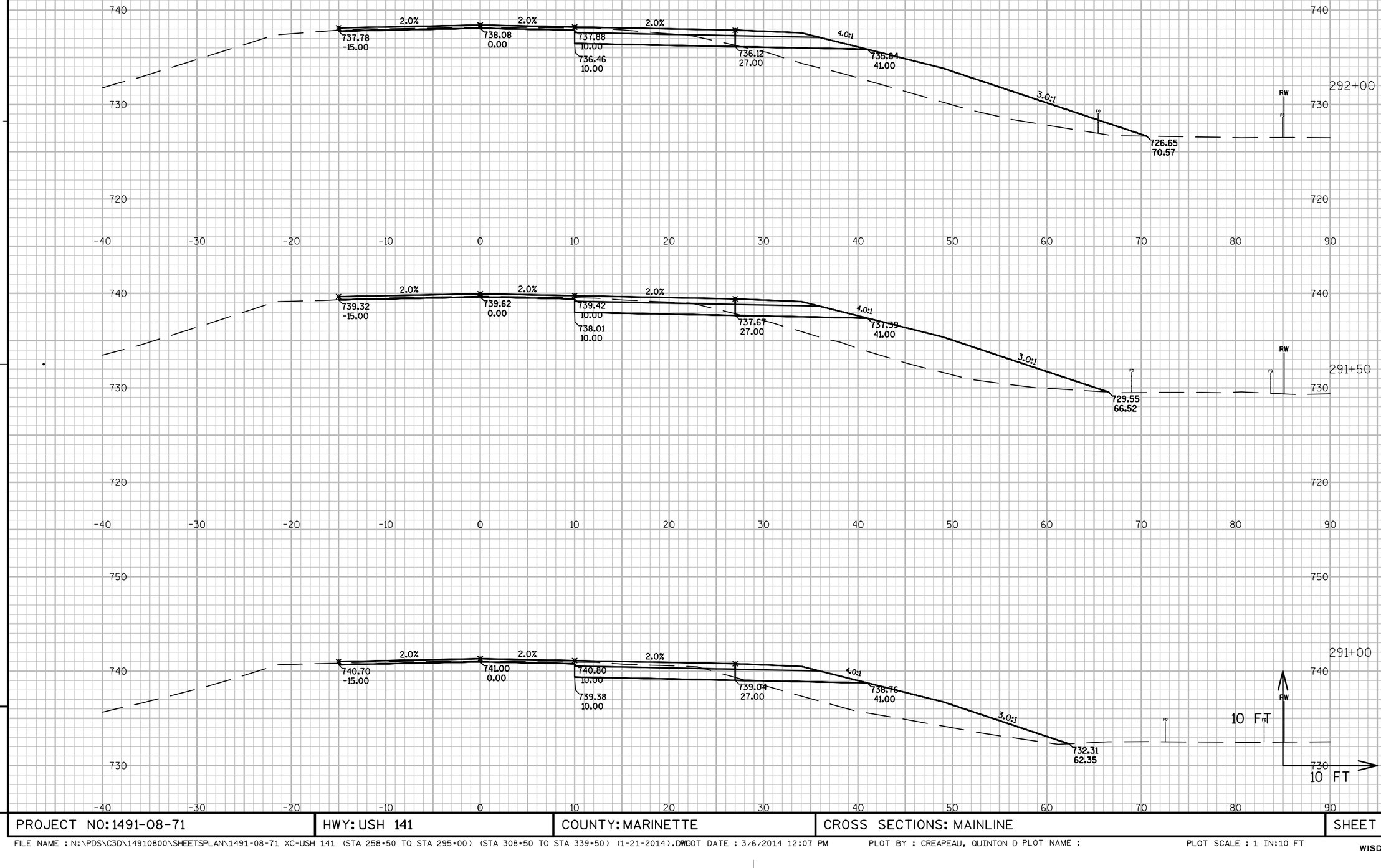
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:05 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



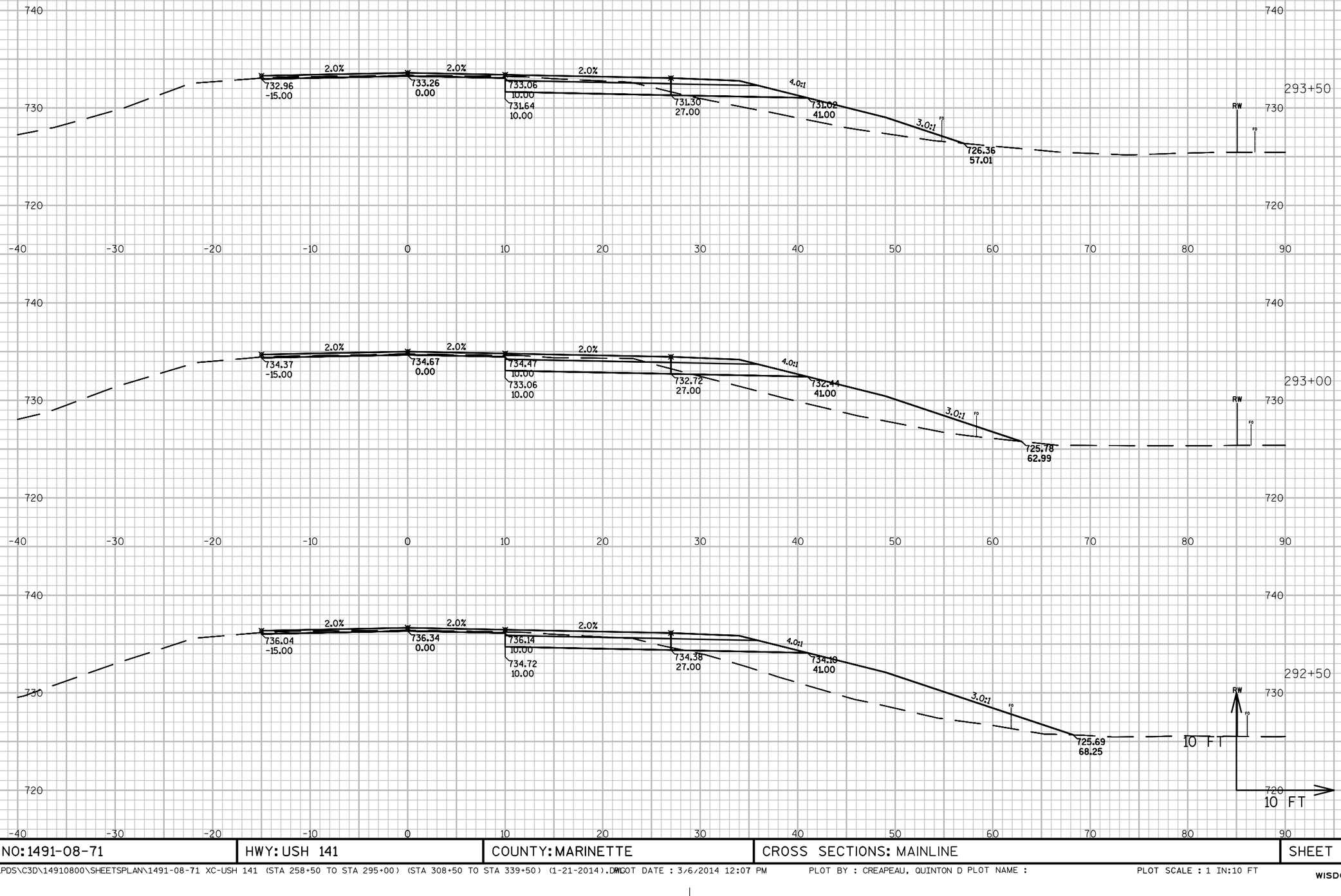
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:06 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



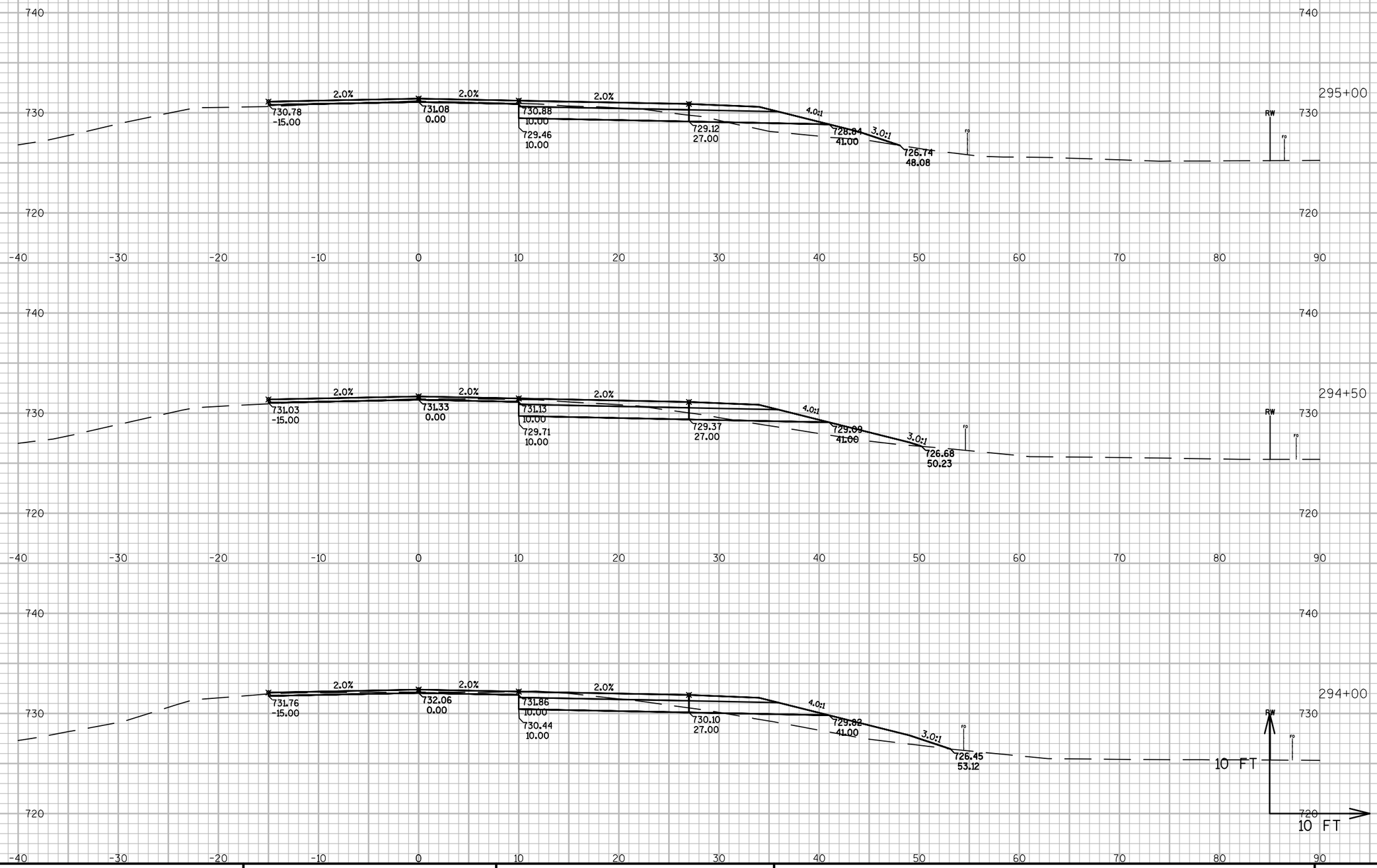
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:07 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



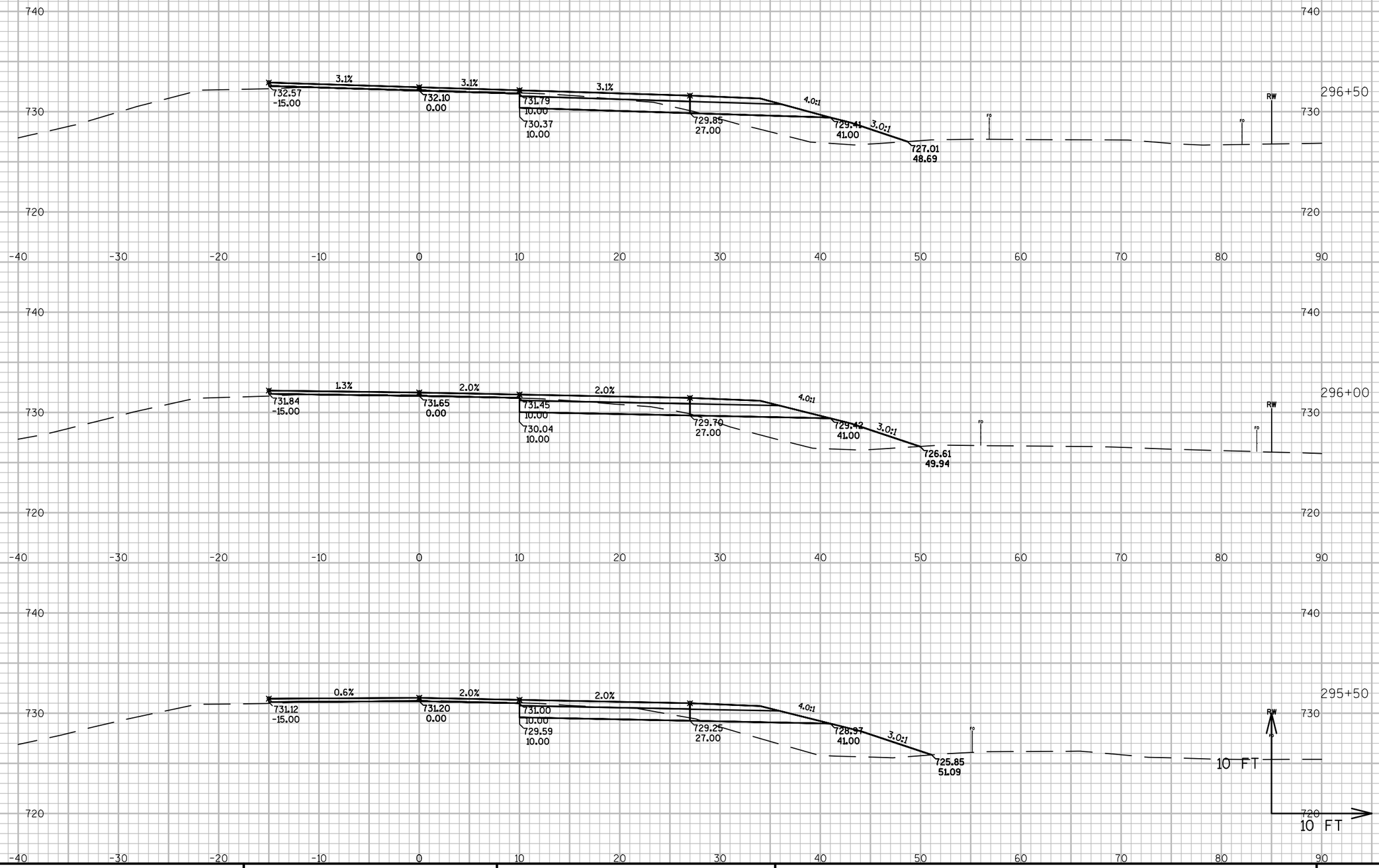
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:07 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



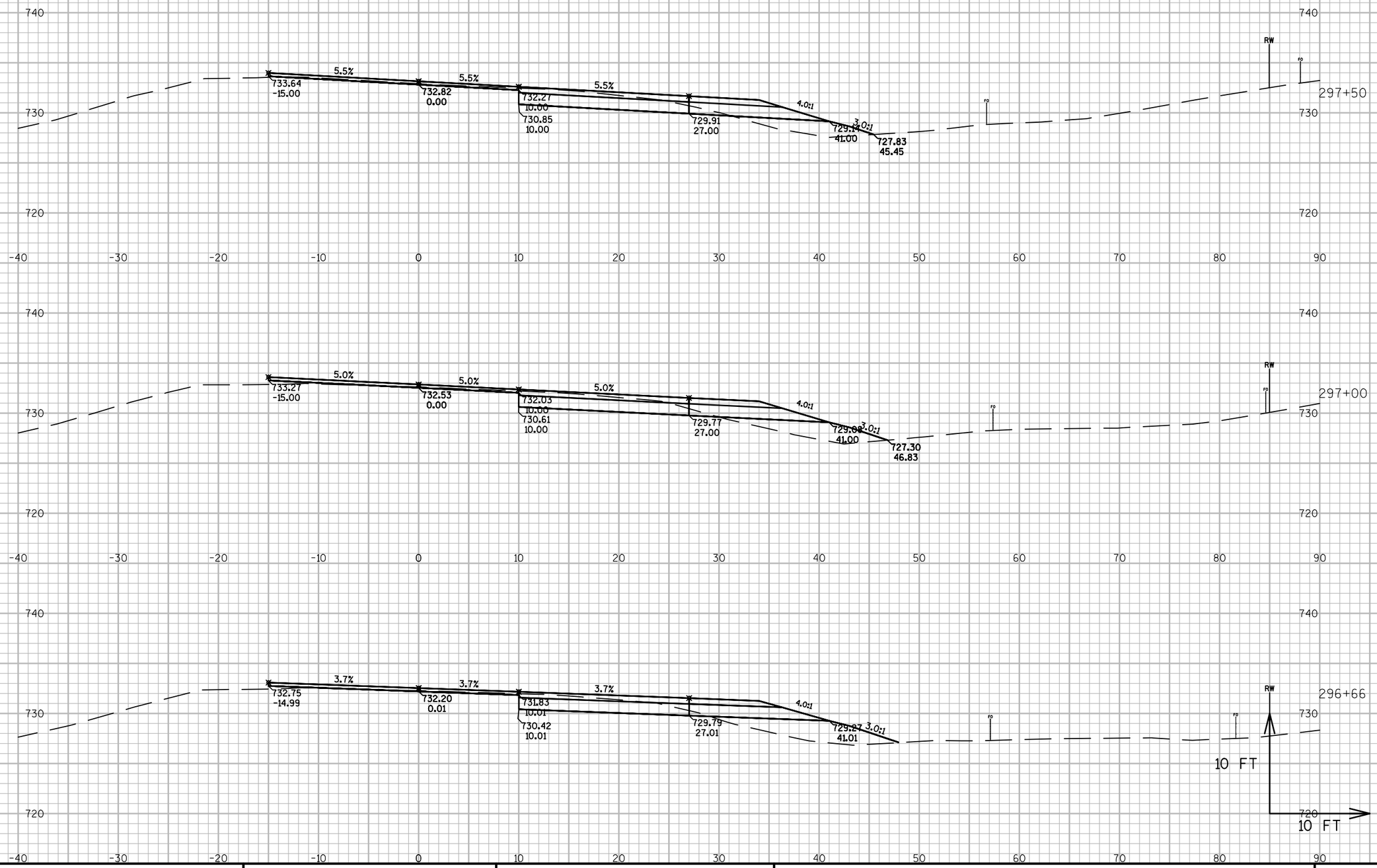
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:08 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



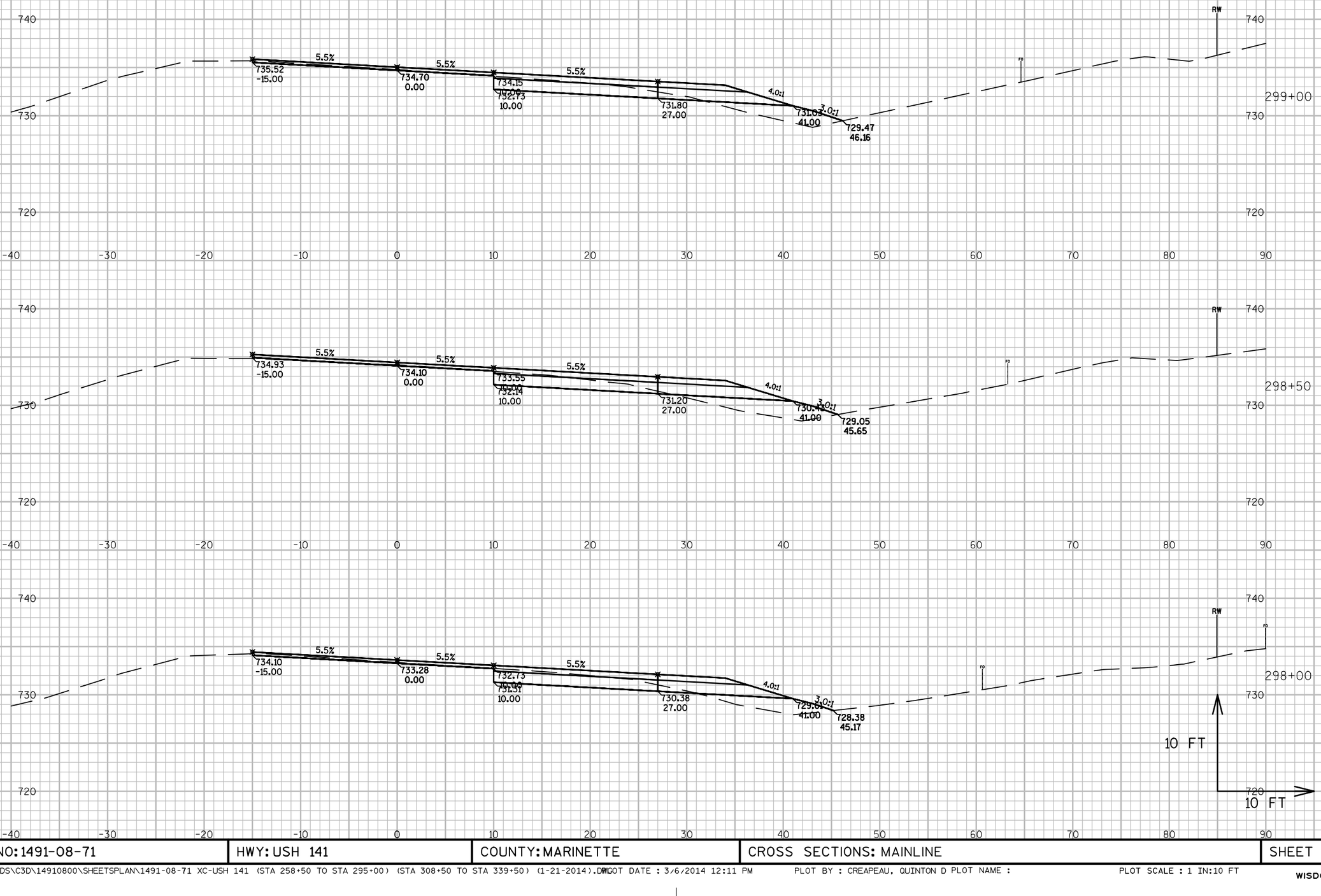
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:09 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



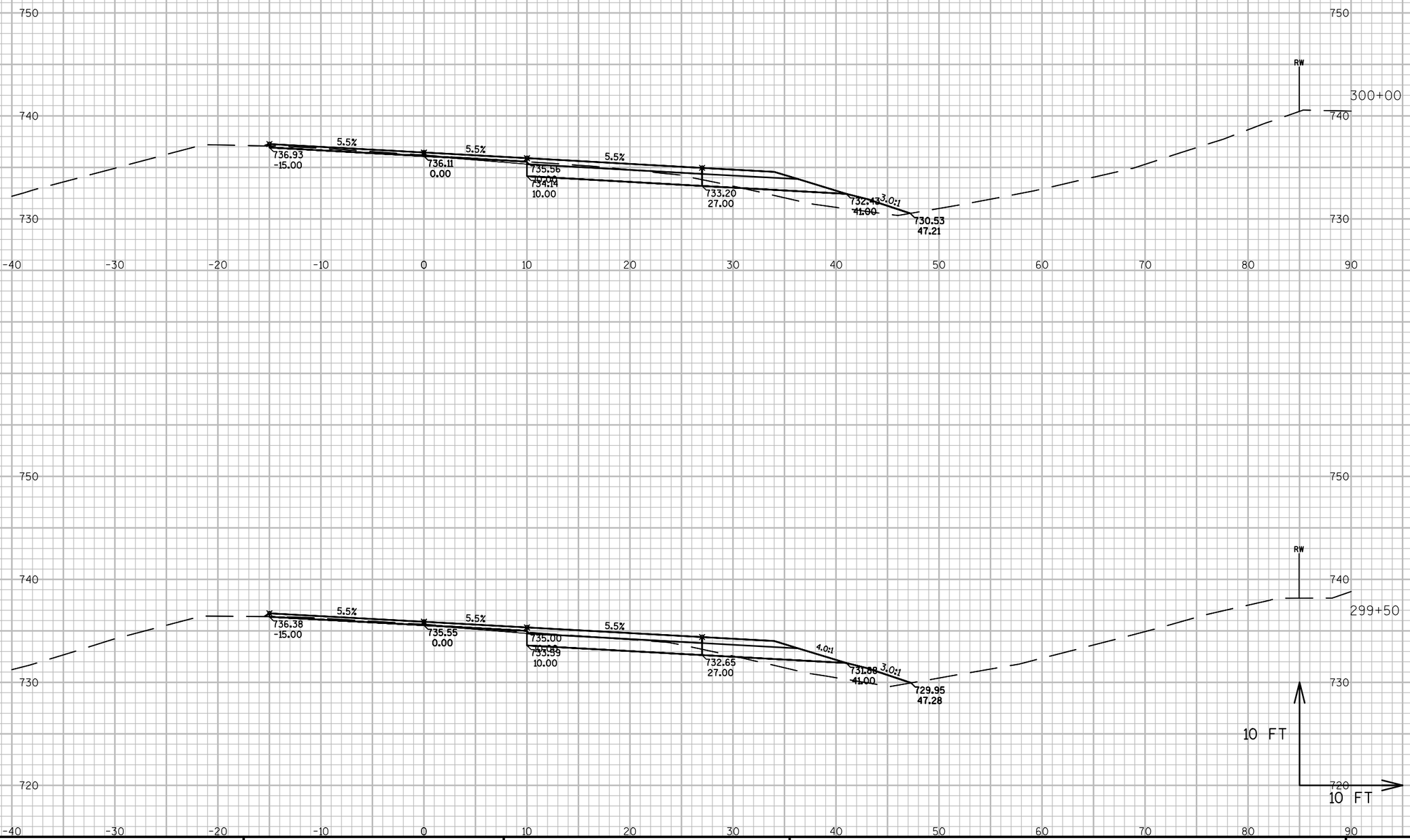
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:10 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



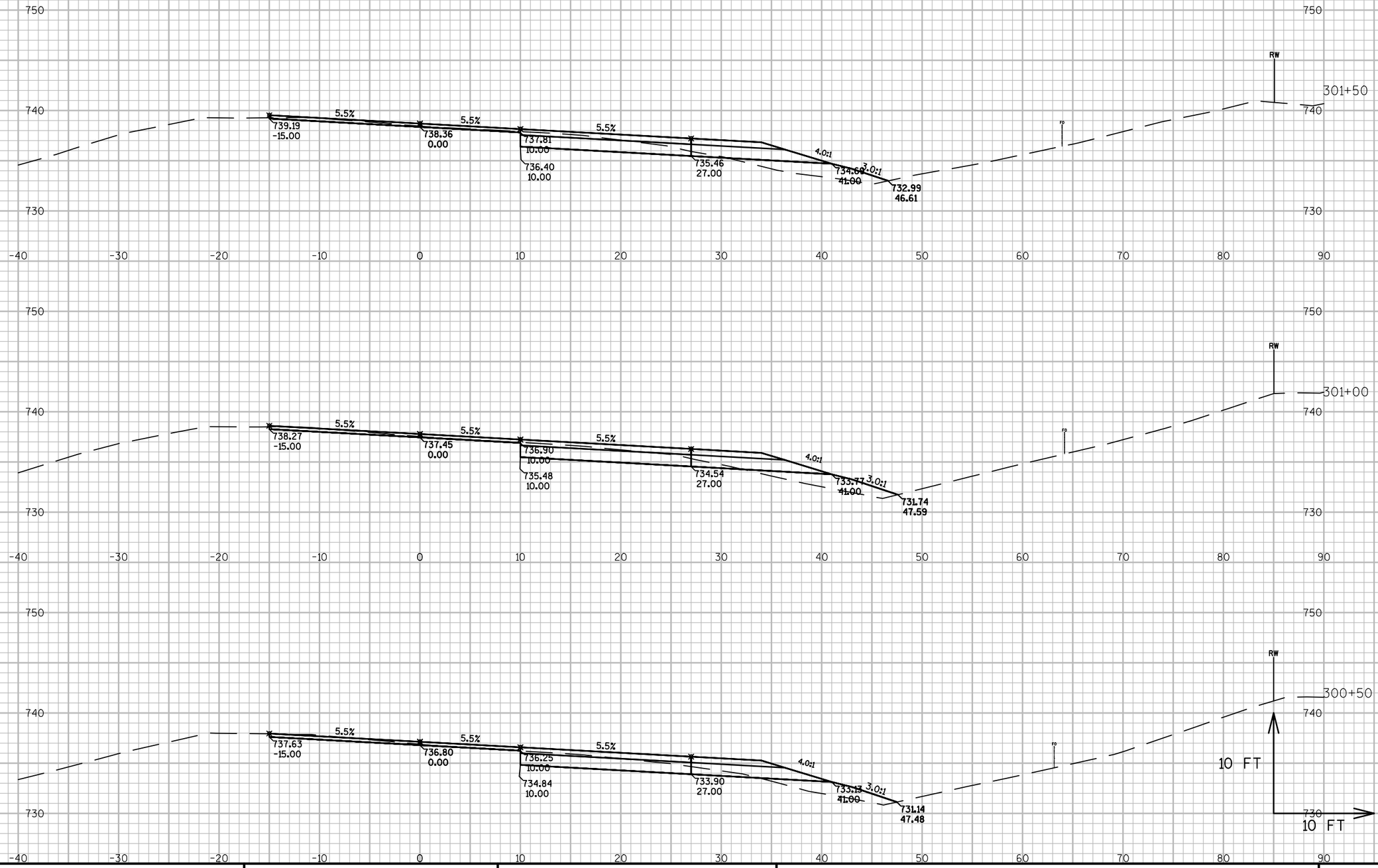
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:11 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



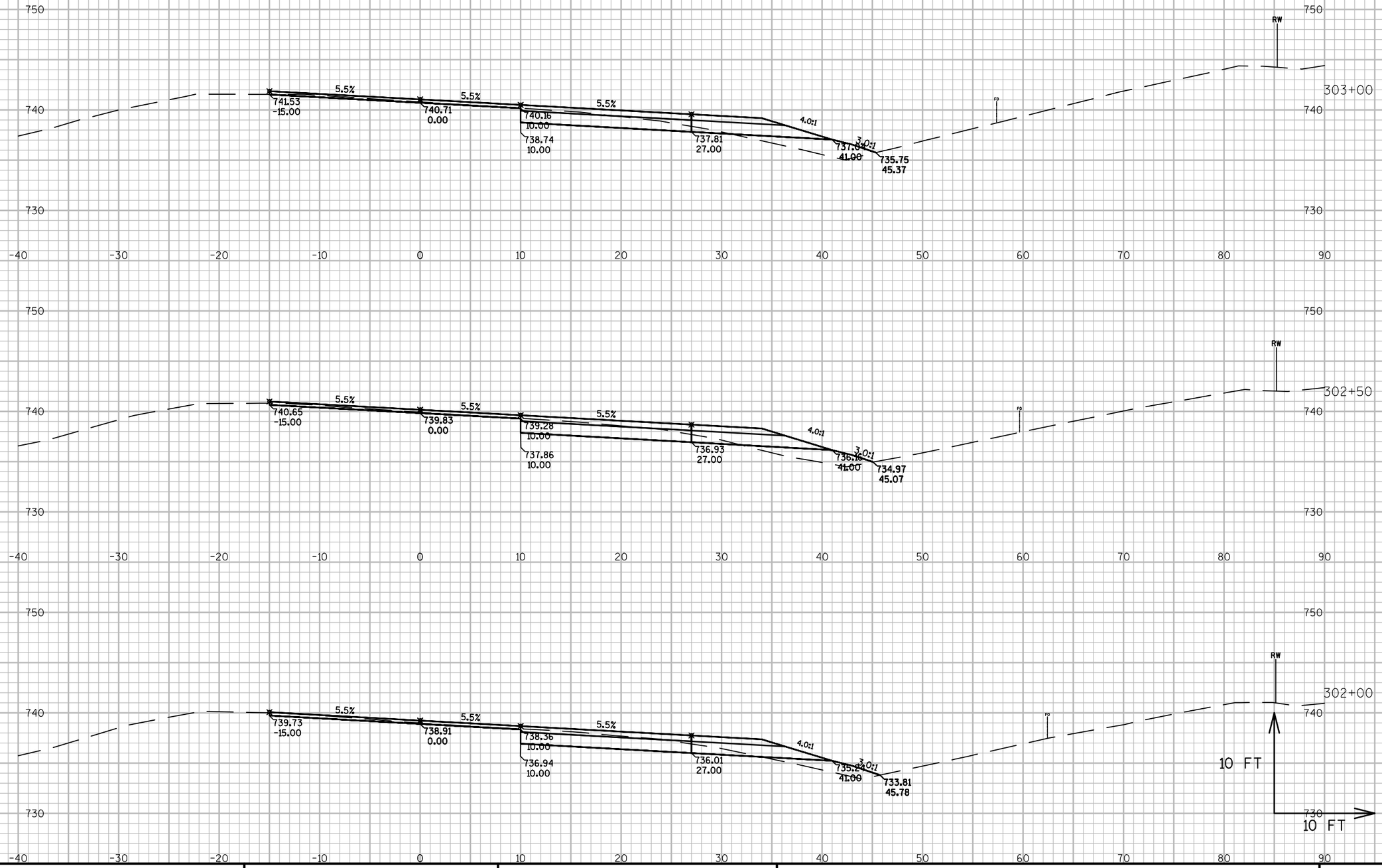
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : E:\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 4/2/2014 9:30 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:12 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

9

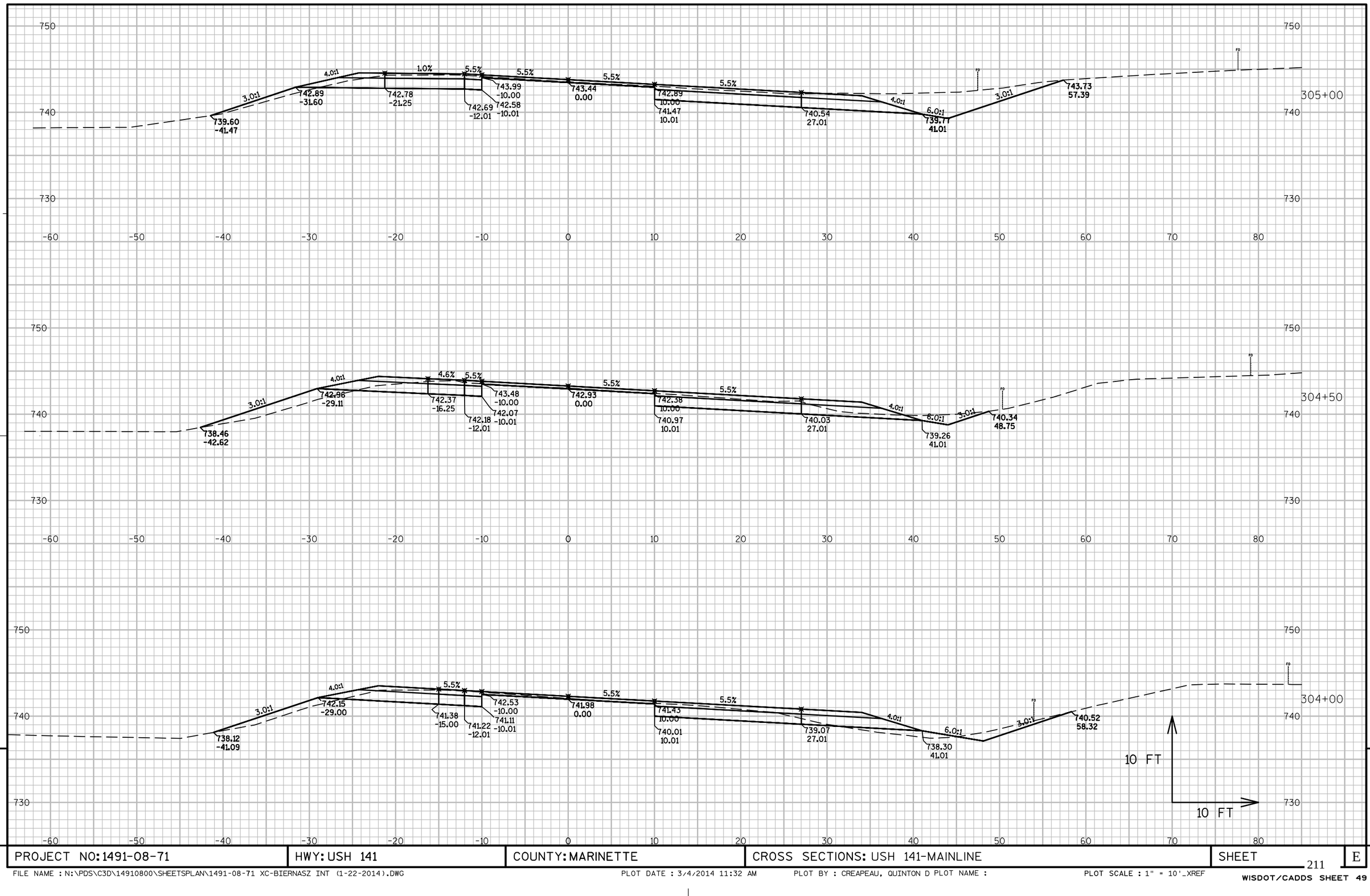
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:13 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



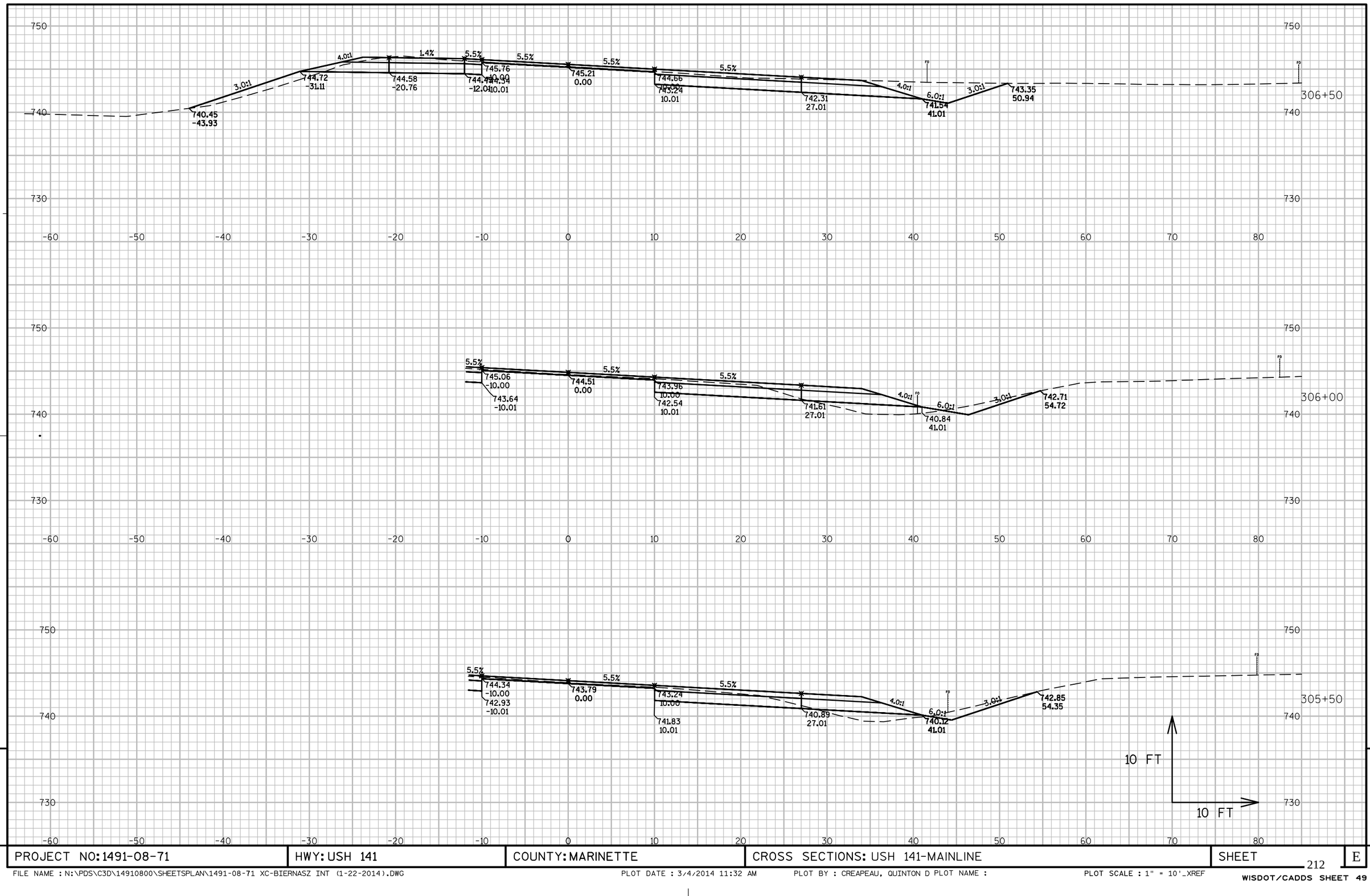
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:14 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



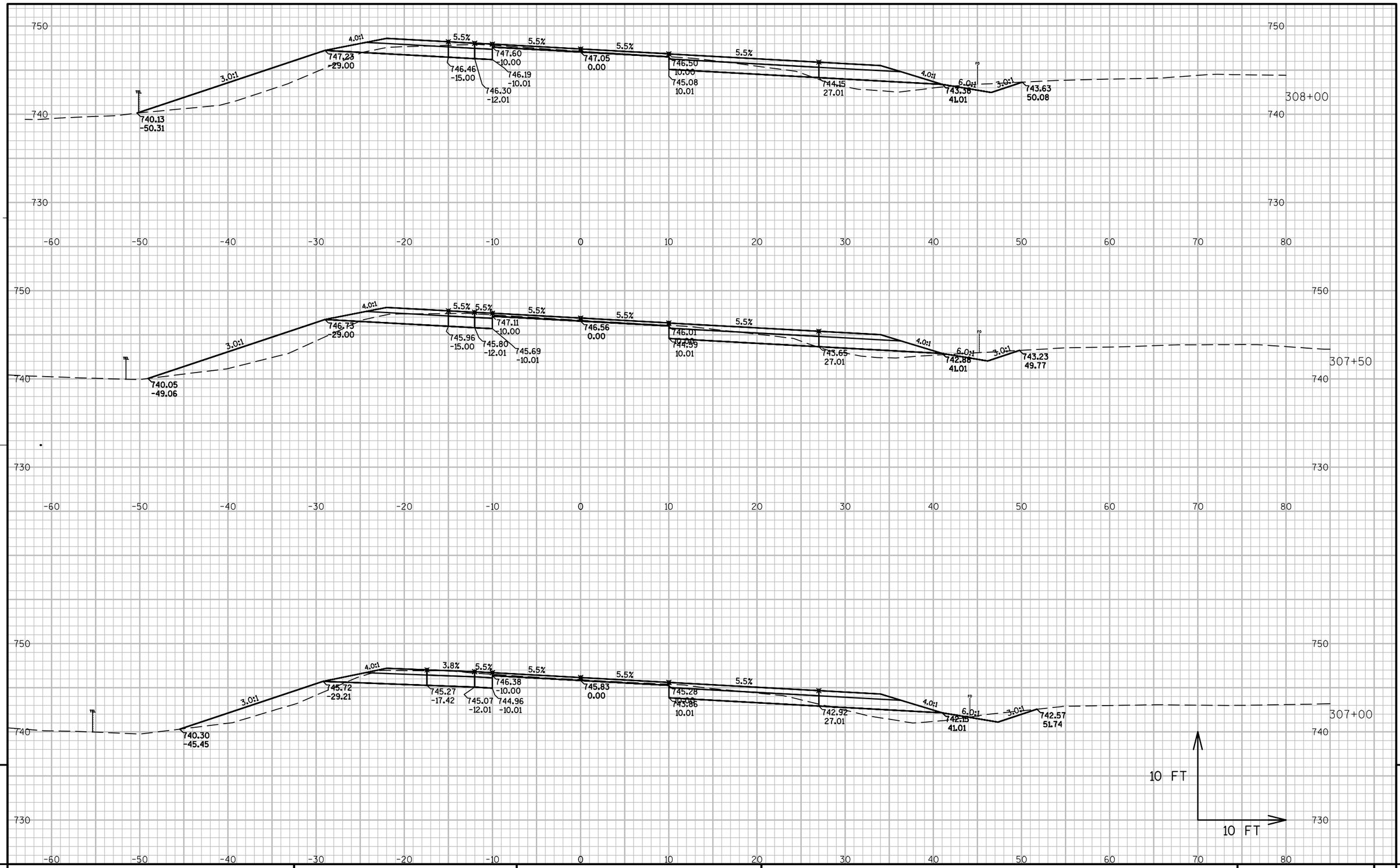
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-BIERNASZ INT (1-22-2014).DWG PLOT DATE : 3/4/2014 11:32 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

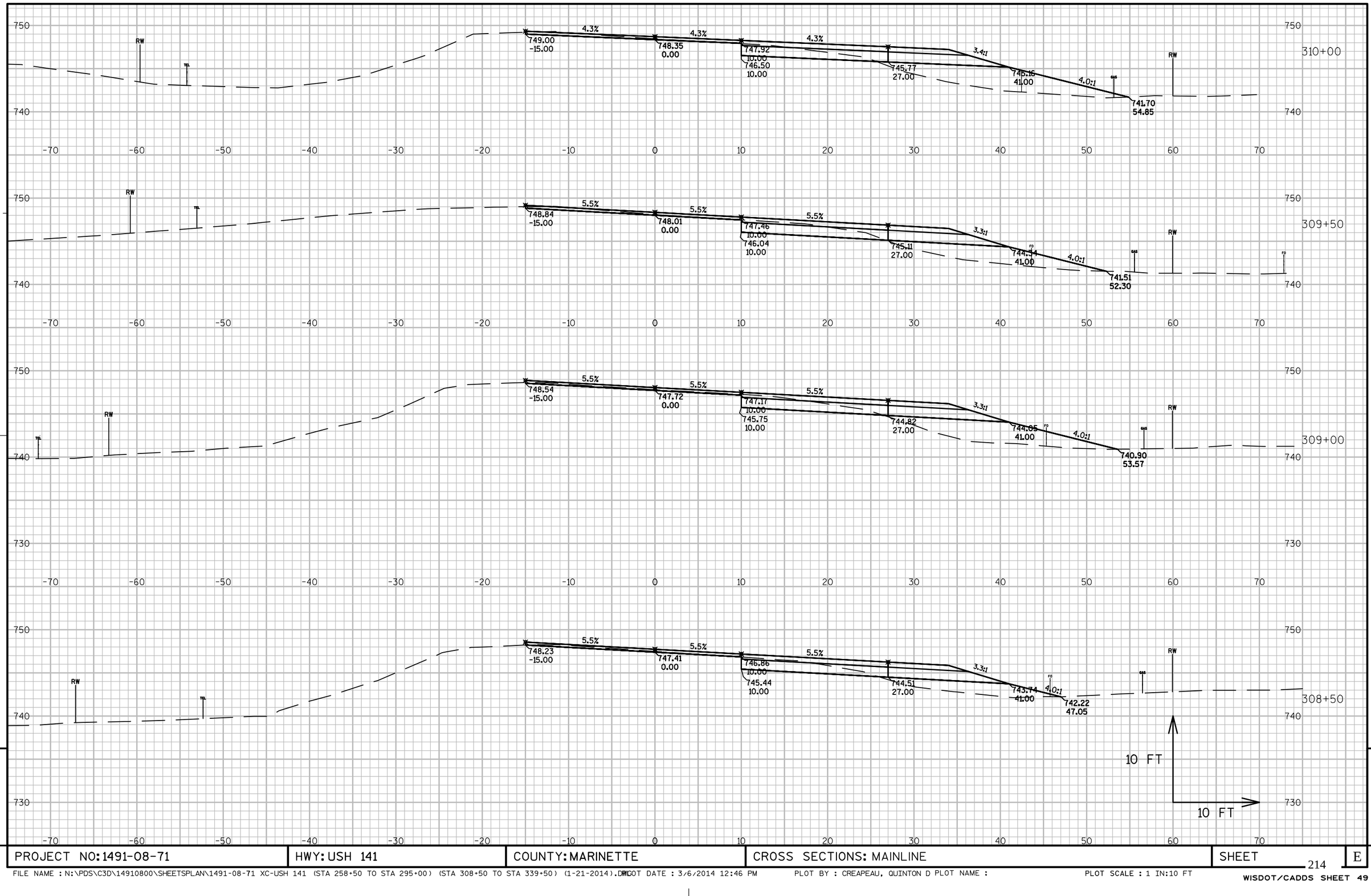
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-BIERNASZ INT (1-22-2014).DWG PLOT DATE : 3/4/2014 11:32 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



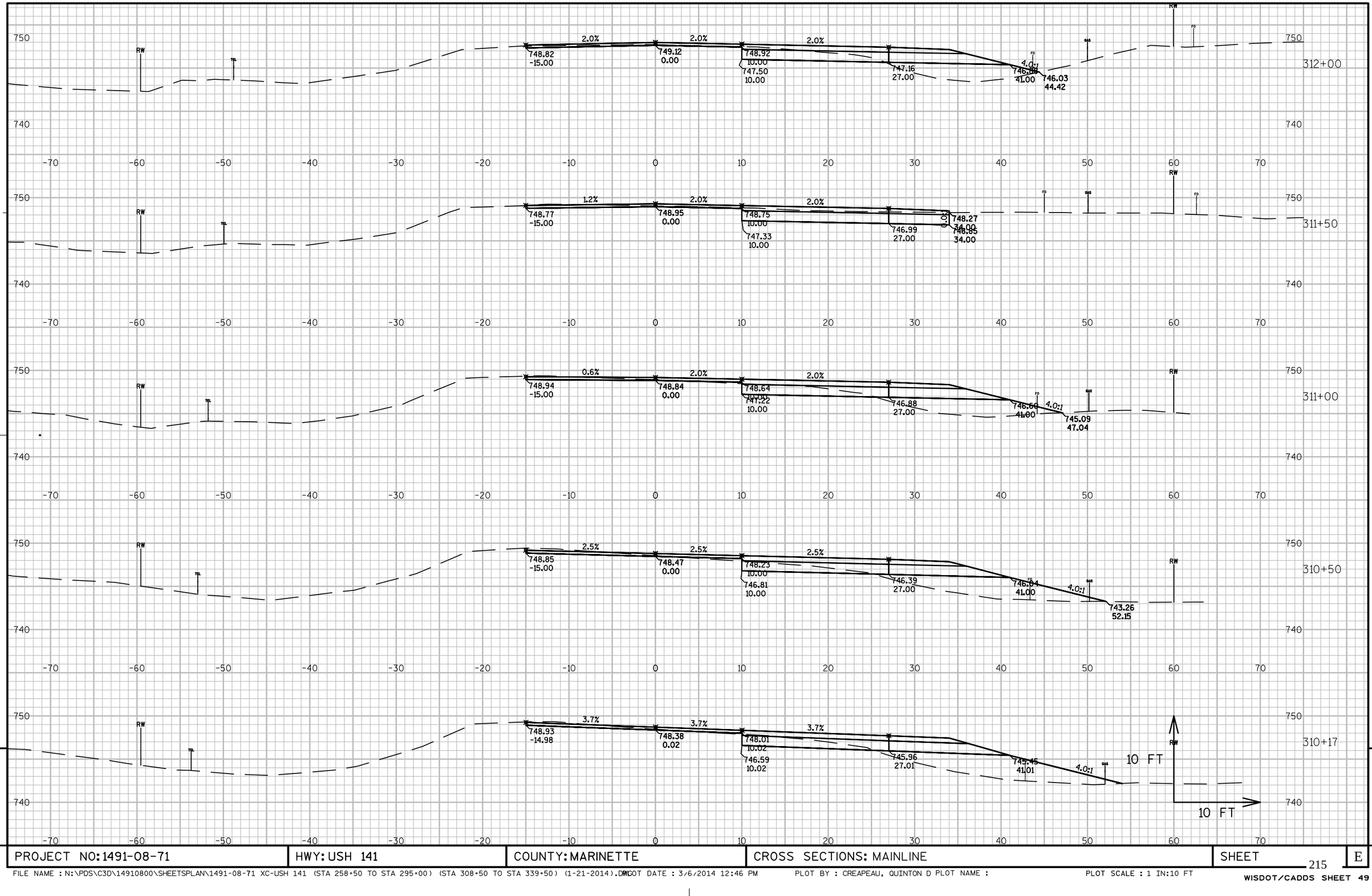
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-BIERNASZ INT (1-22-2014).DWG PLOT DATE : 3/4/2014 11:32 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

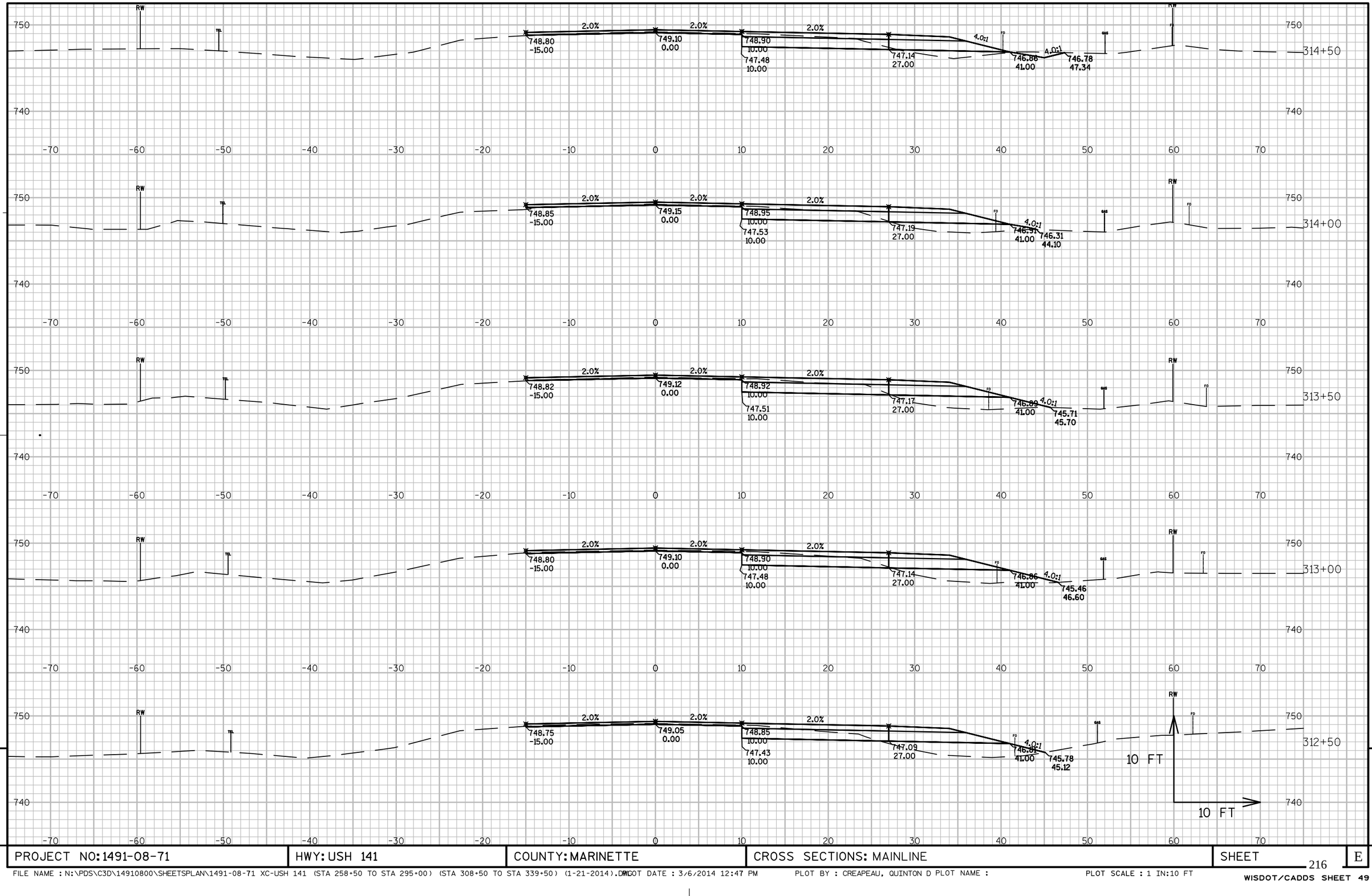
WISDOT/CADDS SHEET 49



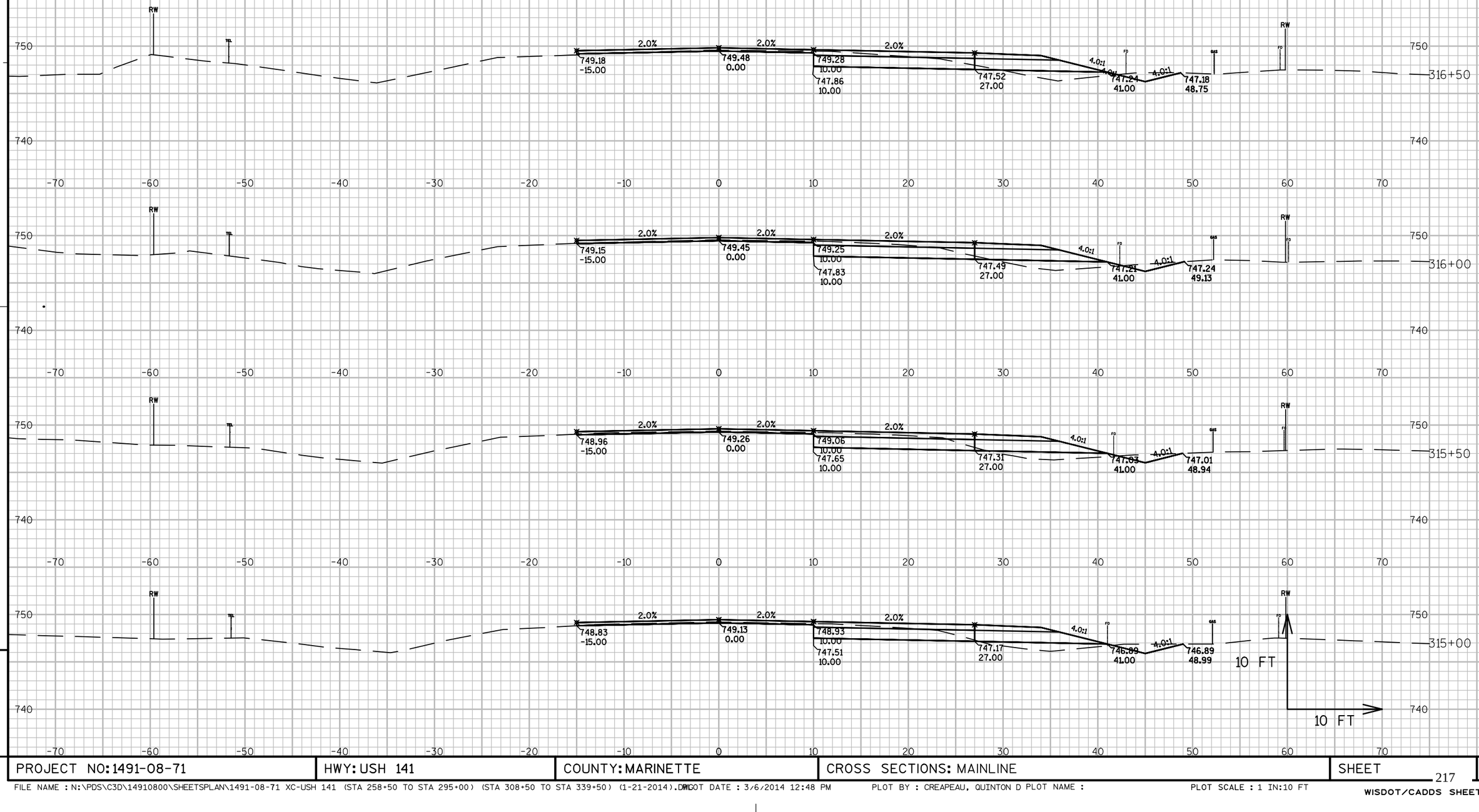
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 214	E



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 215	E

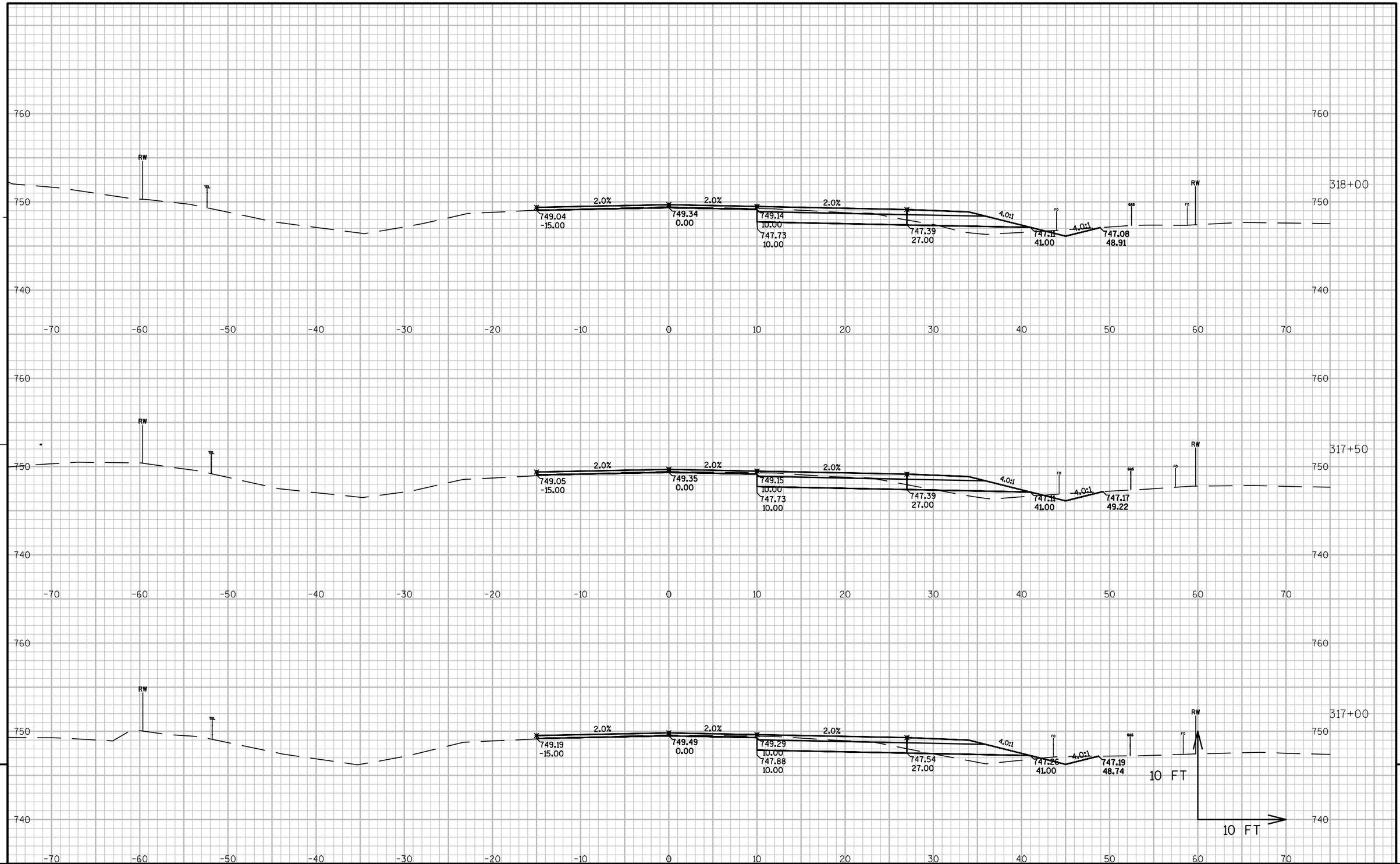


PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

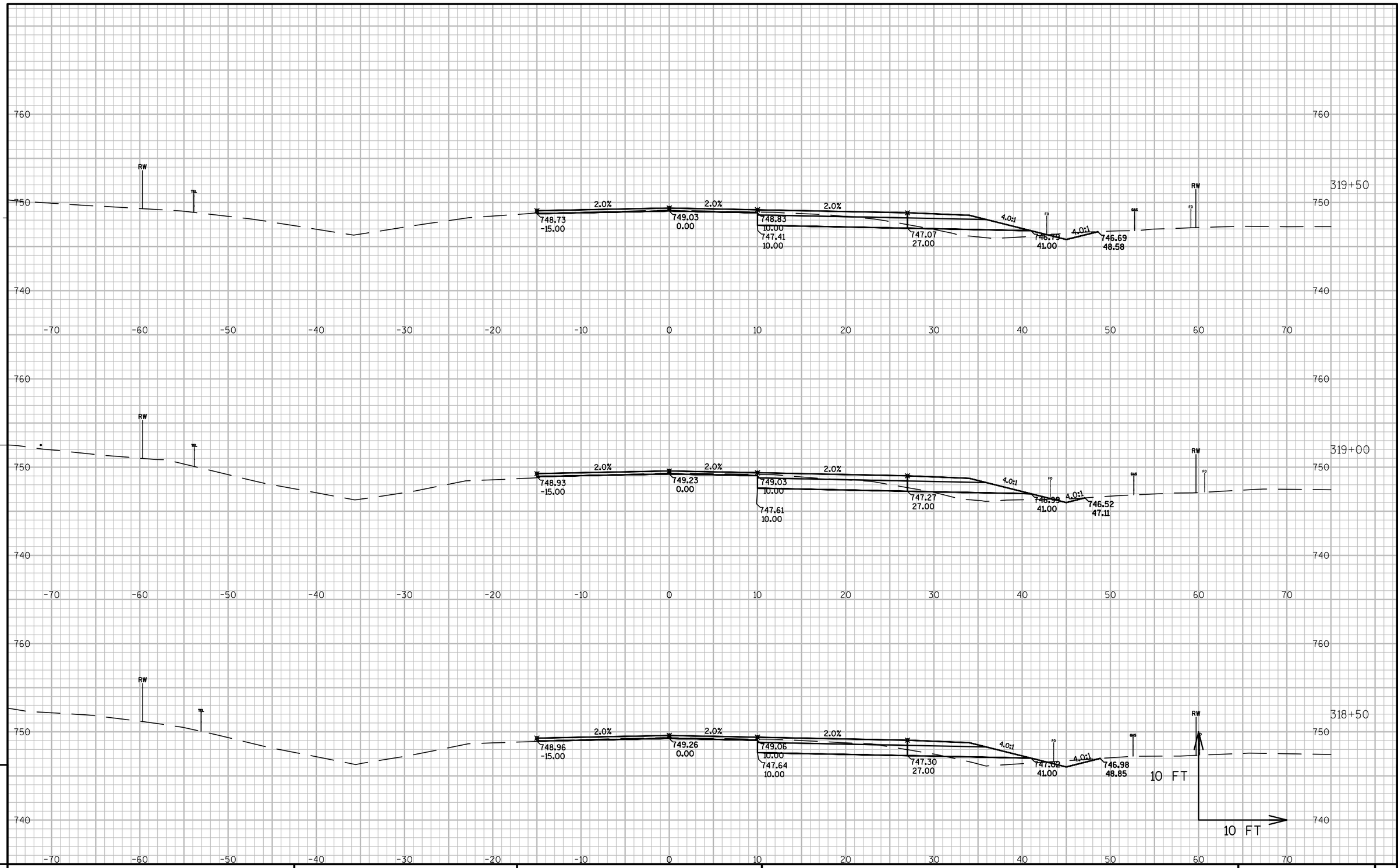
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:48 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 218	E

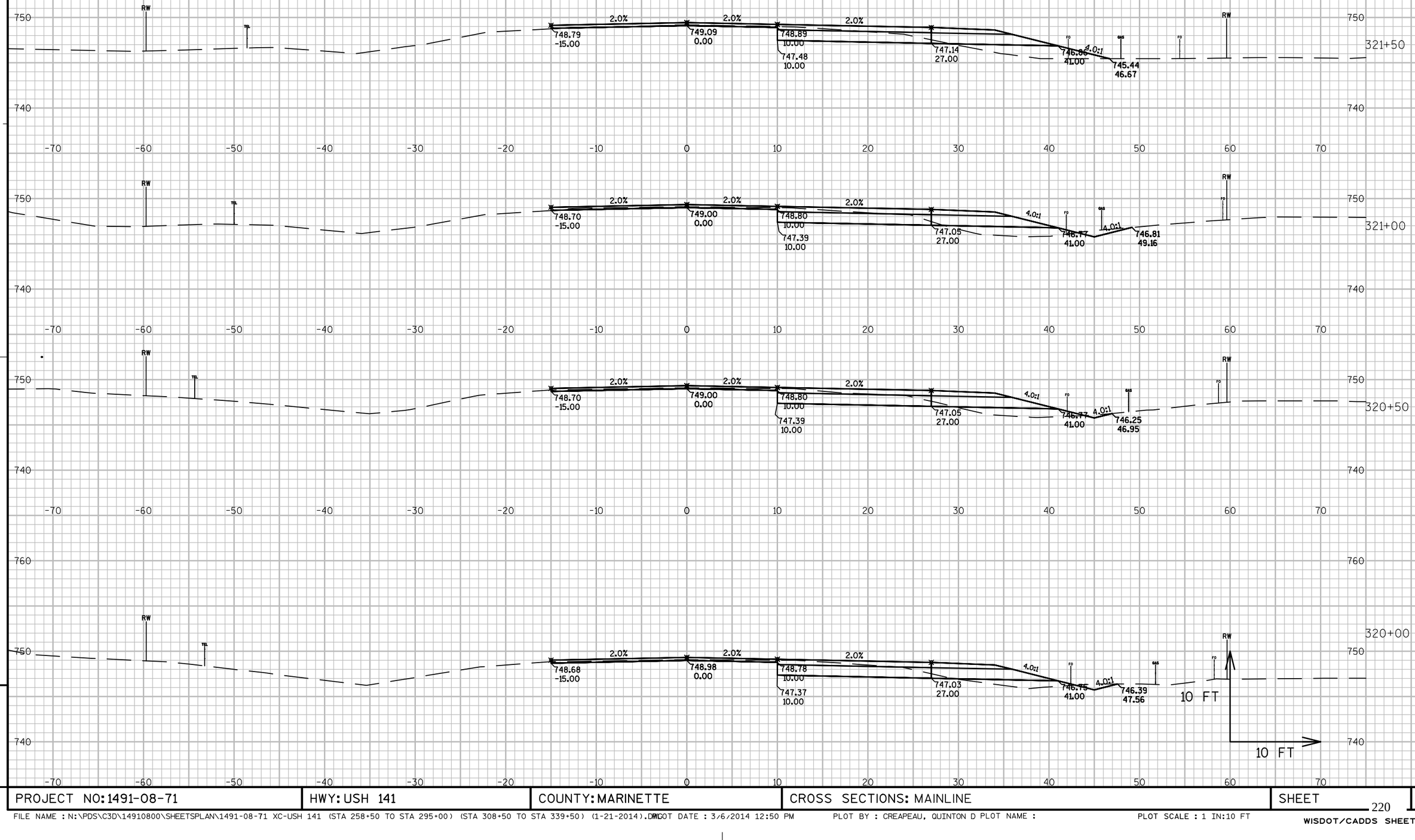
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:49 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

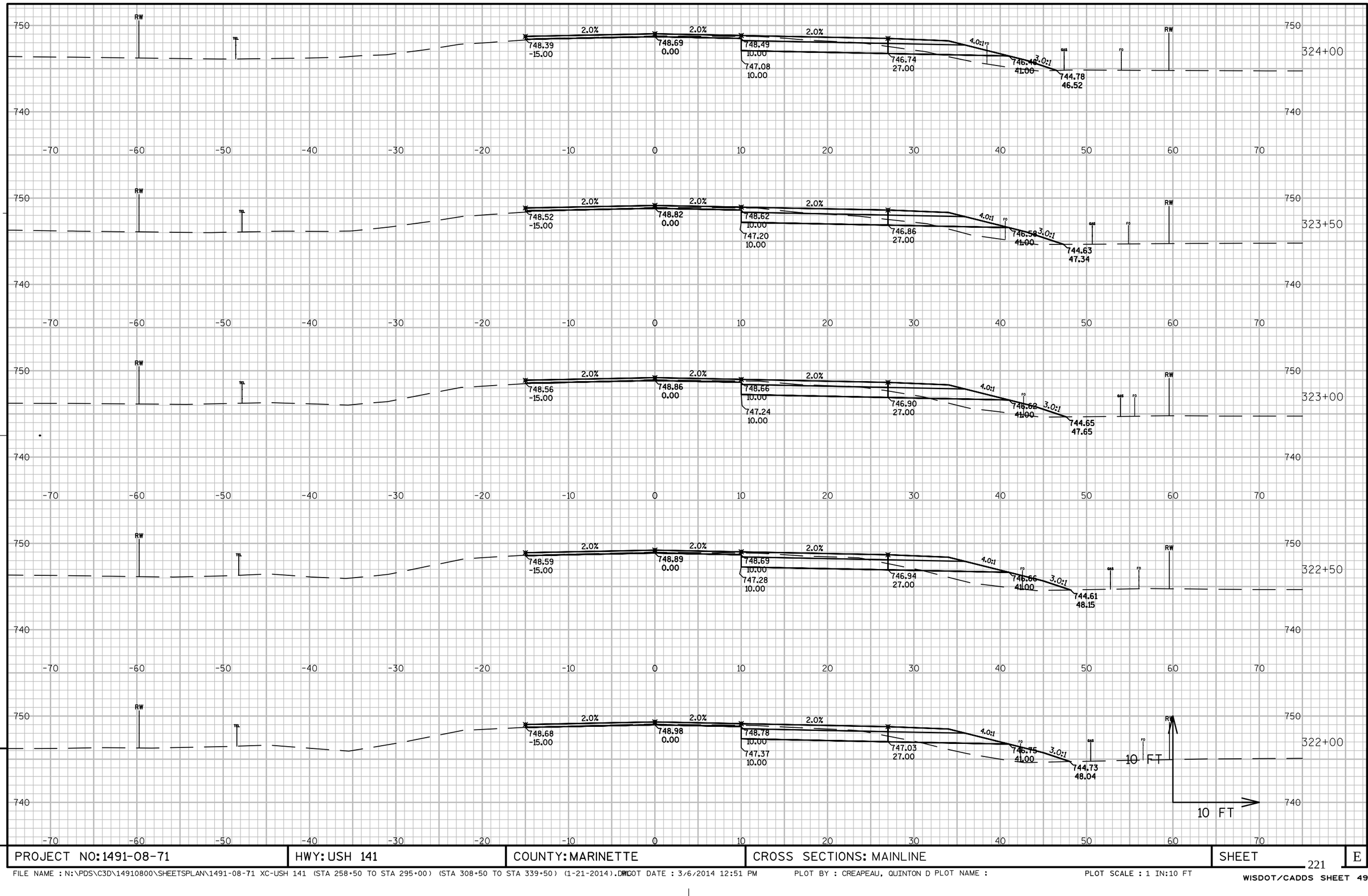
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:49 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 220	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:50 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

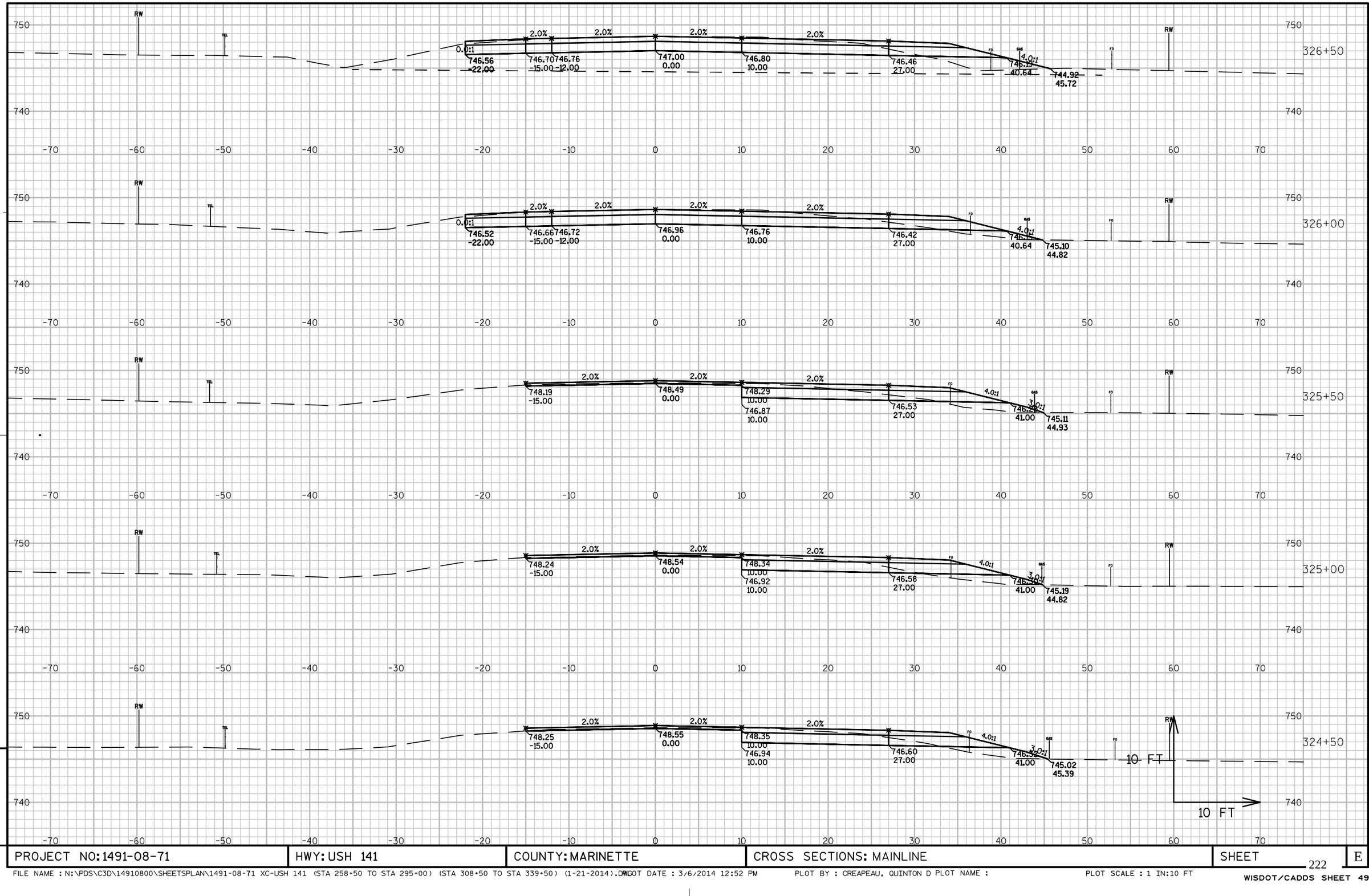
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 221	E

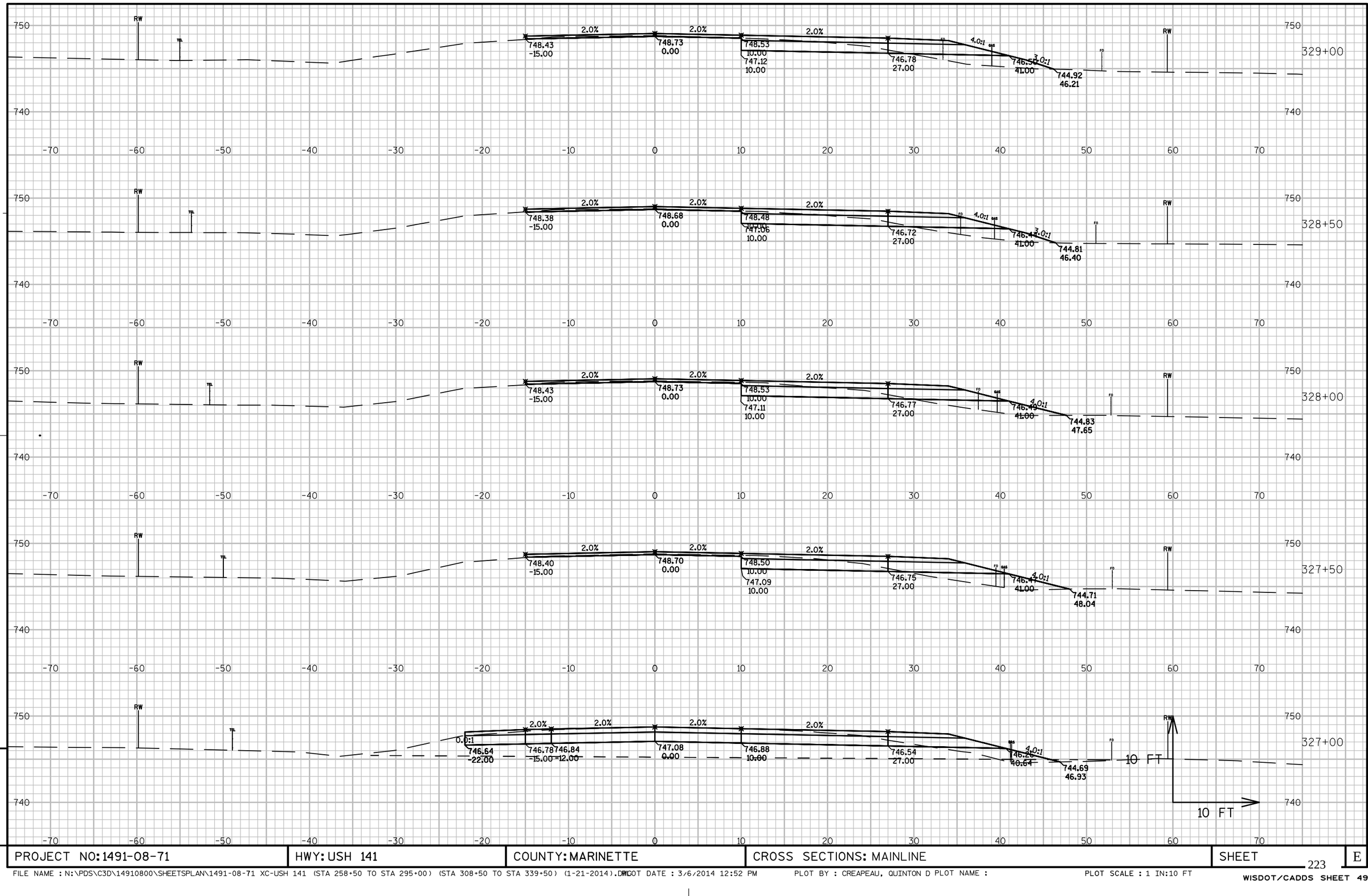
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:51 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

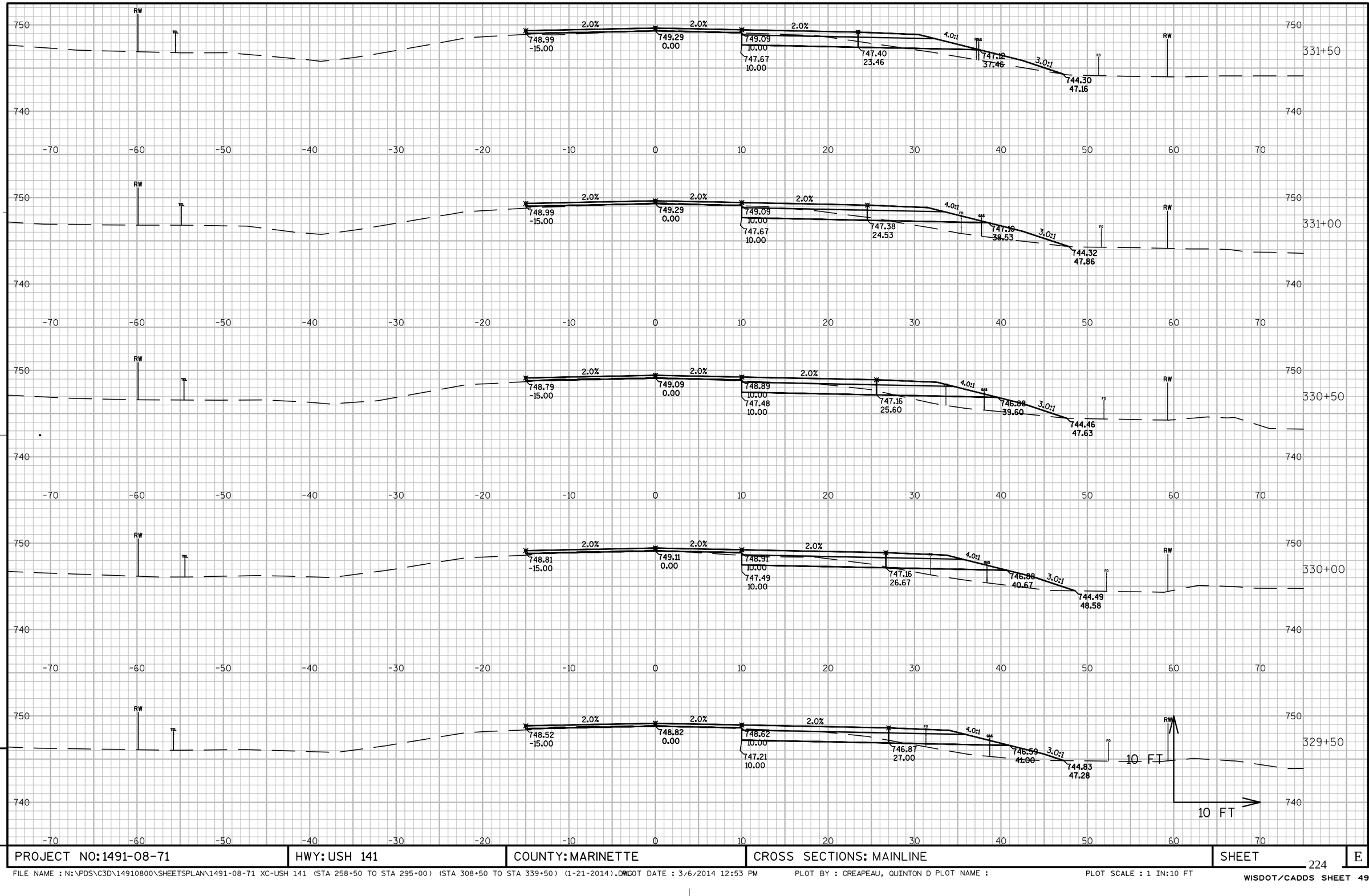
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:52 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:52 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



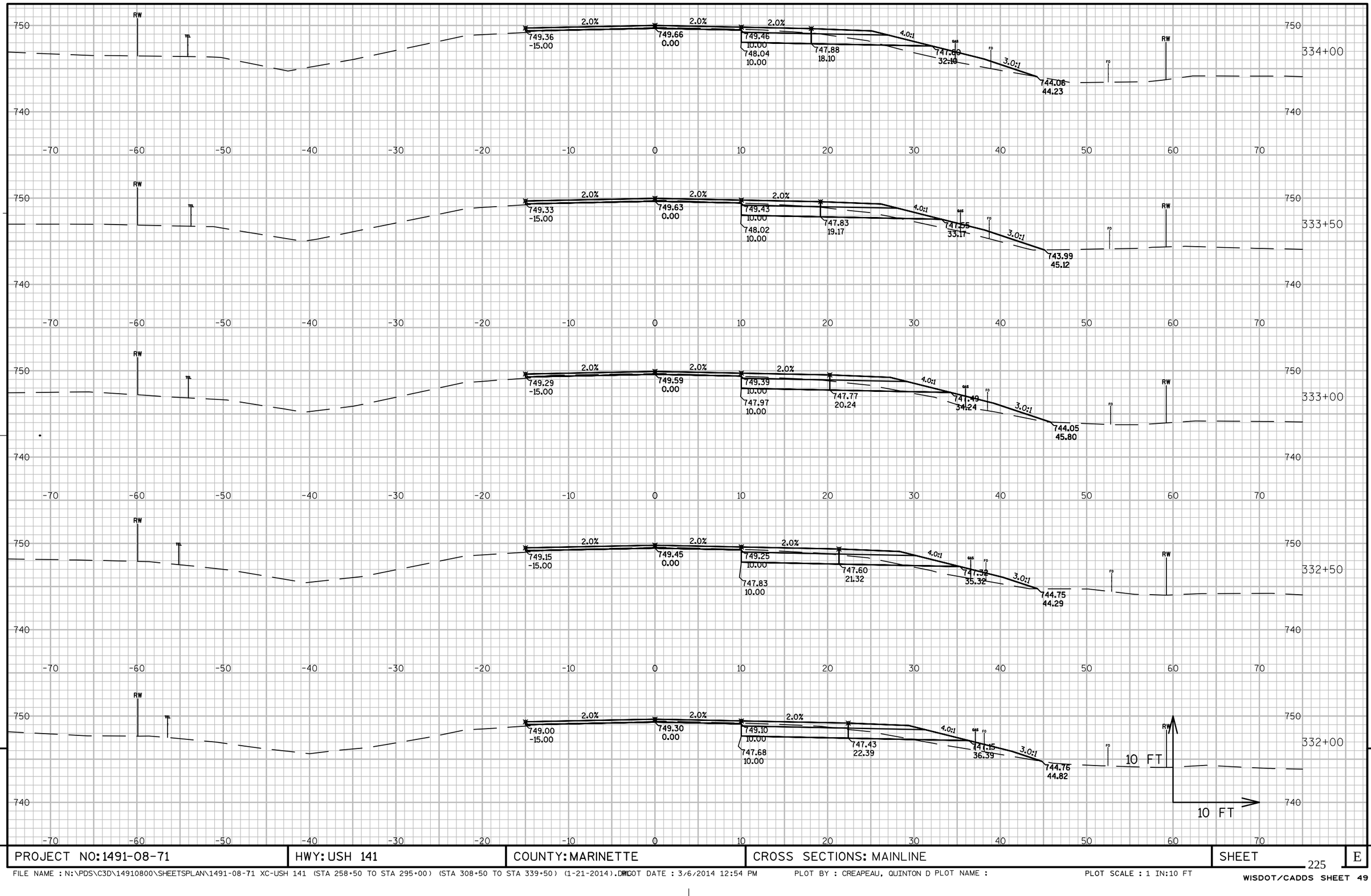
9

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 224	E

9

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:53 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

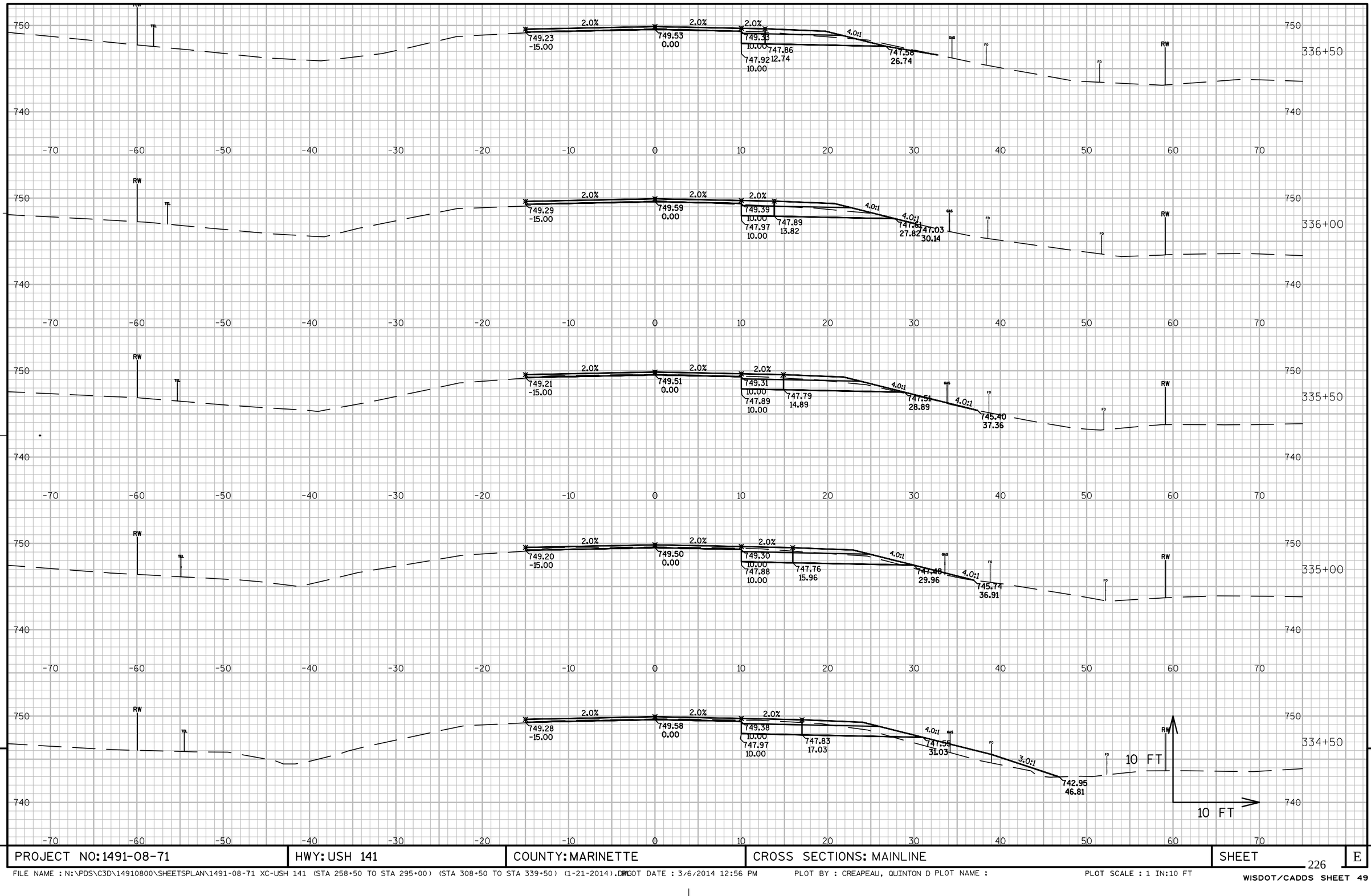
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 225	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:54 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



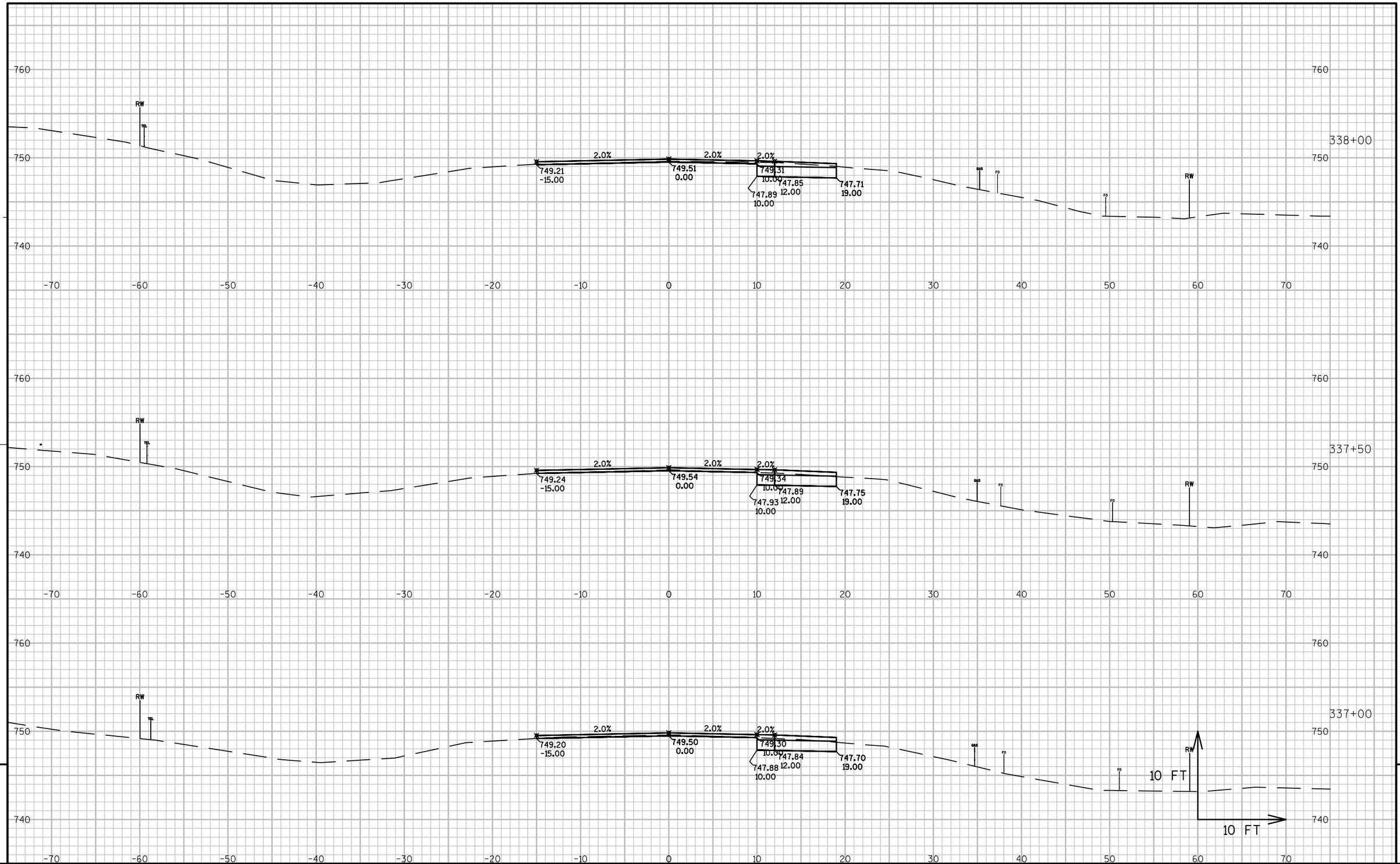
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9

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:56 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

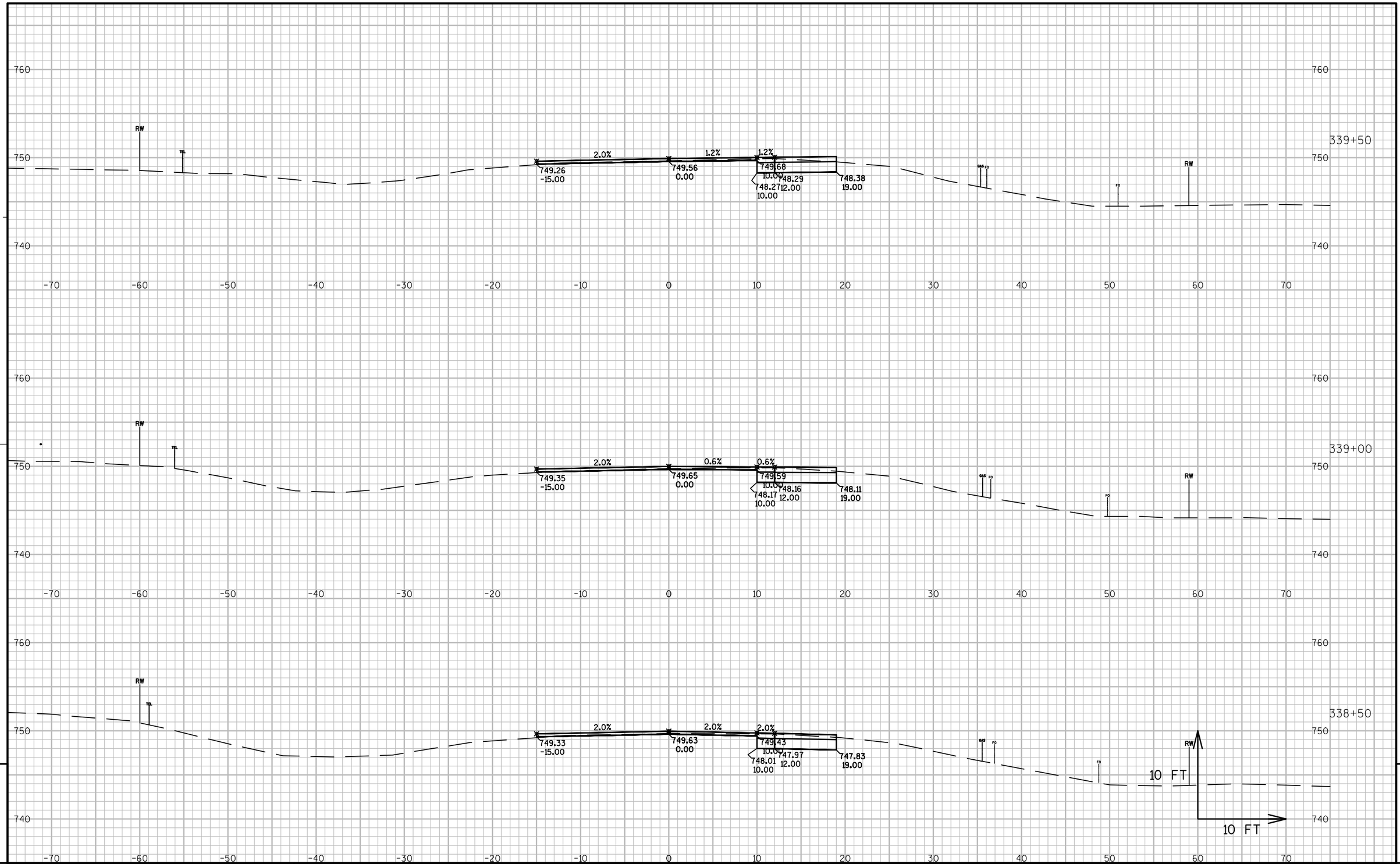
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 227	E

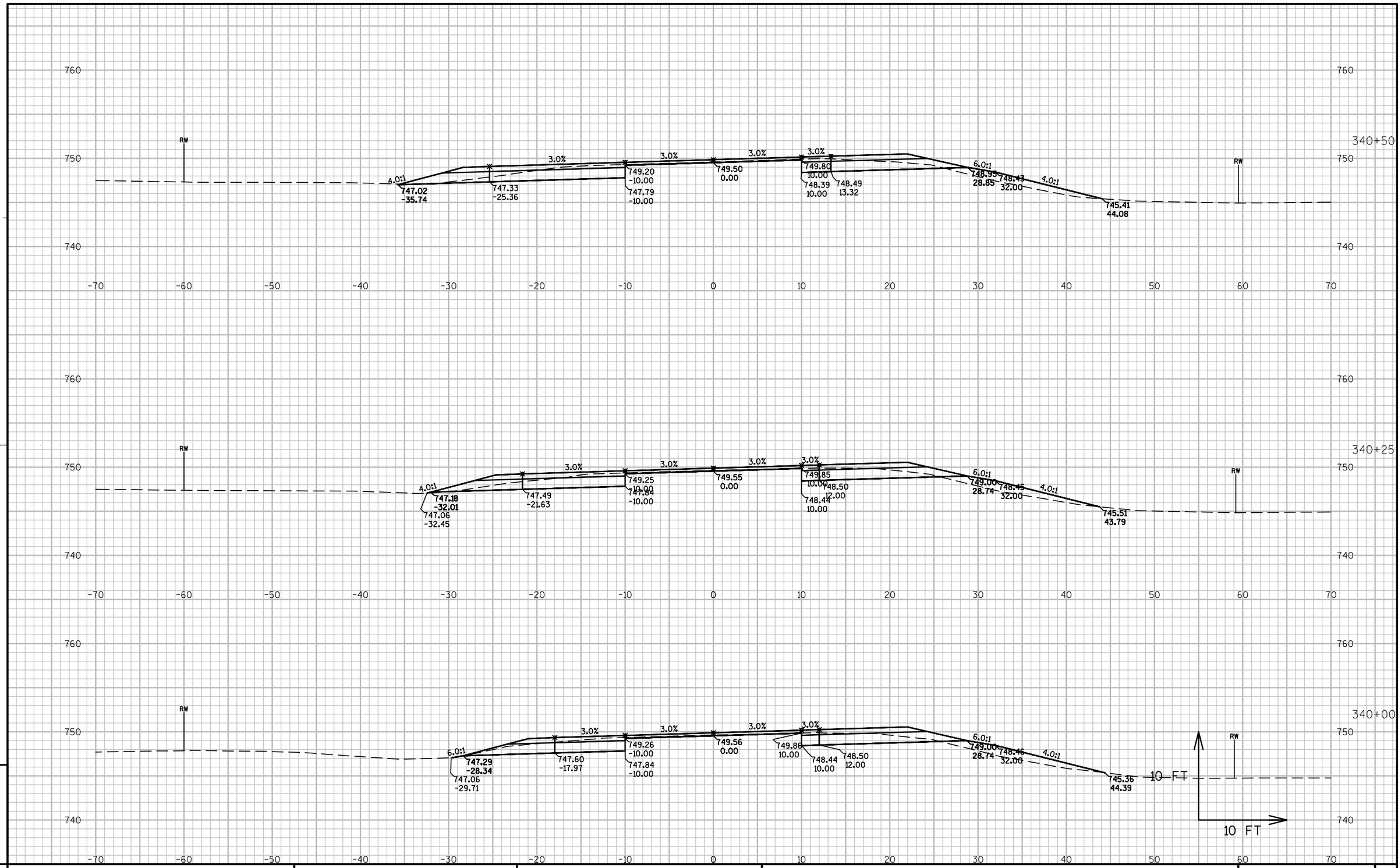


PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

228

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 258+50 TO STA 295+00) (STA 308+50 TO STA 339+50) (1-21-2014).DWG PLOT DATE : 3/6/2014 12:58 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

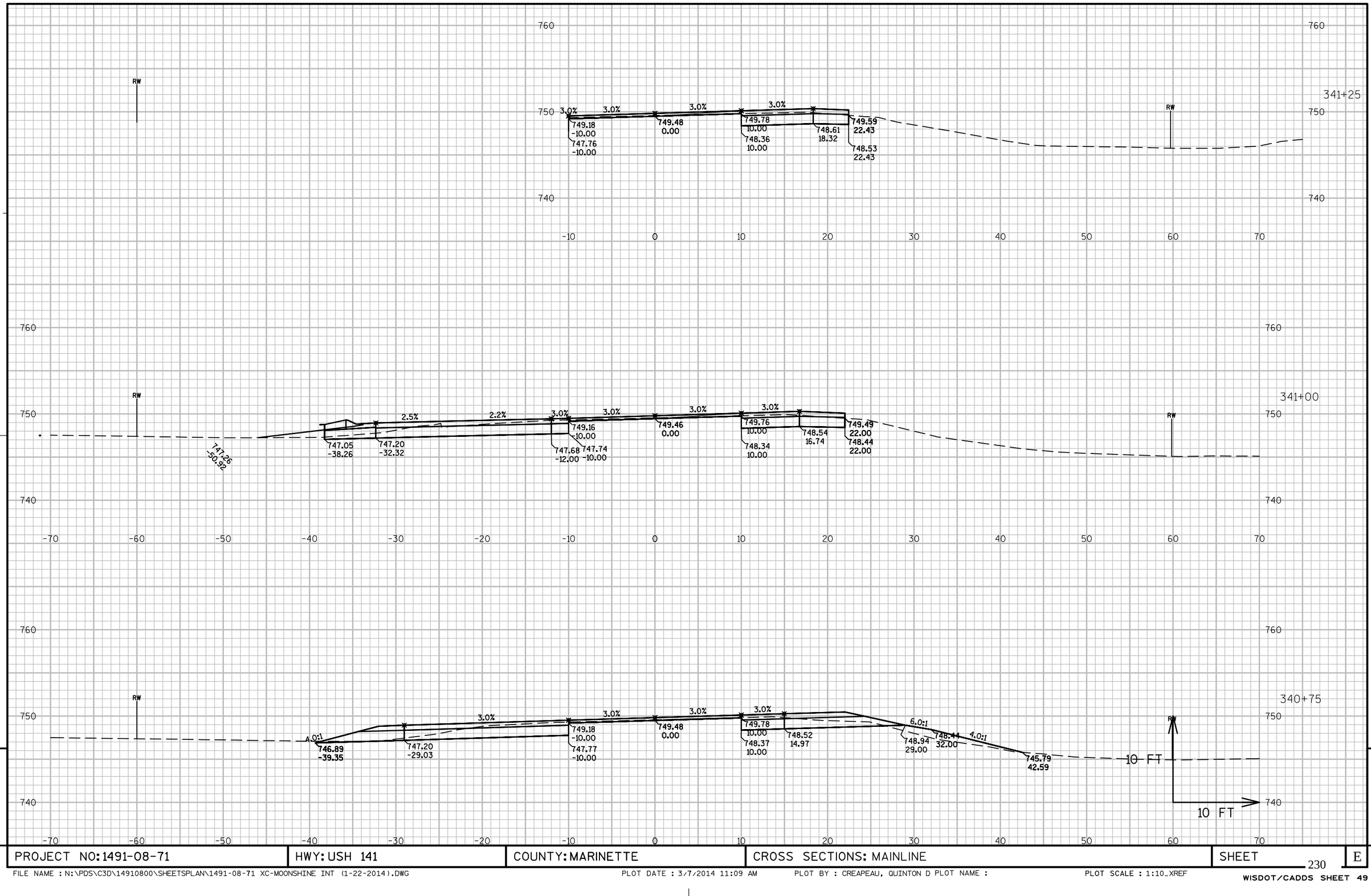
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 229	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-MOONSHINE INT (1-22-2014).DWG PLOT DATE : 3/7/2014 11:09 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



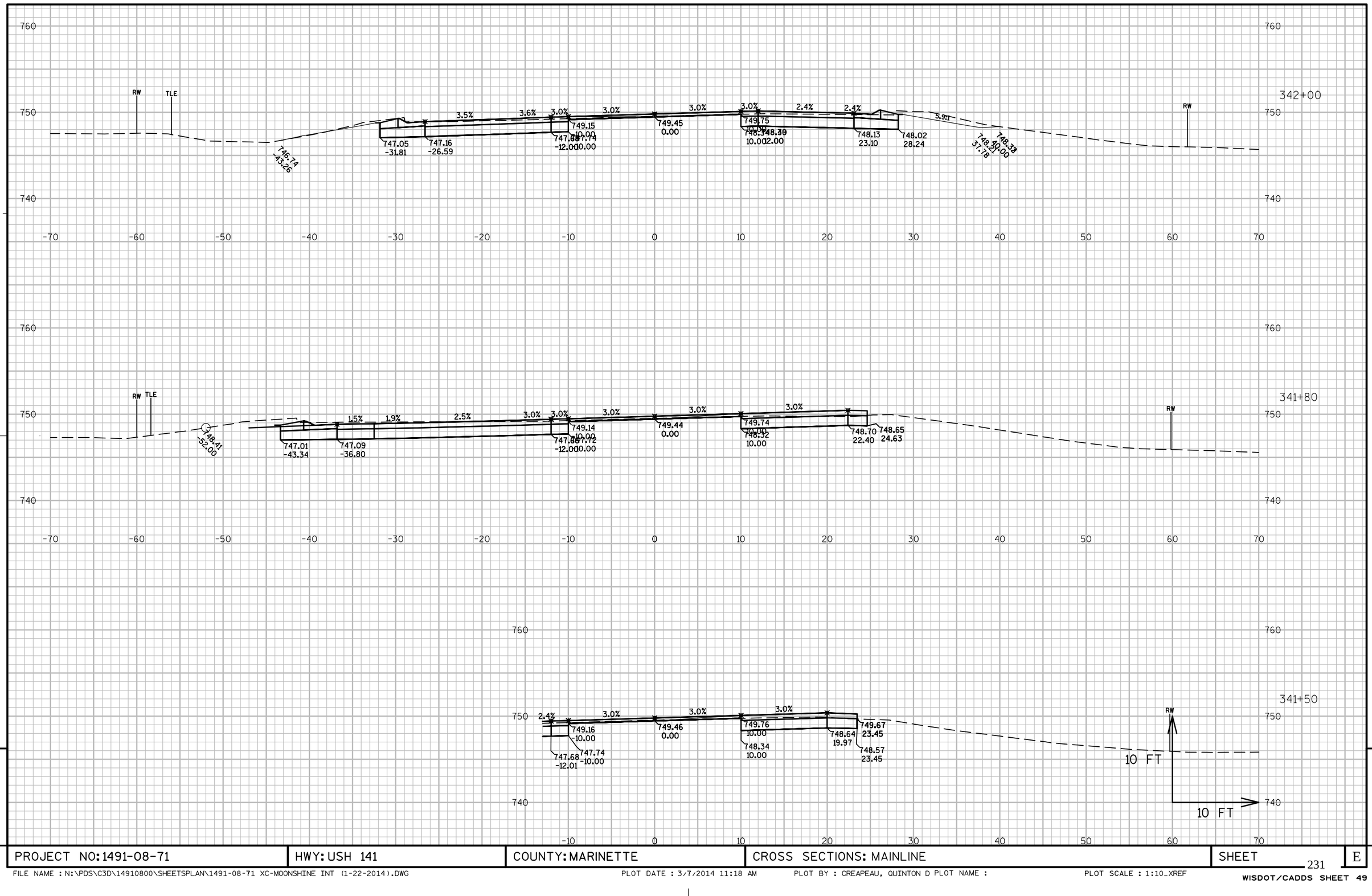
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 230	E

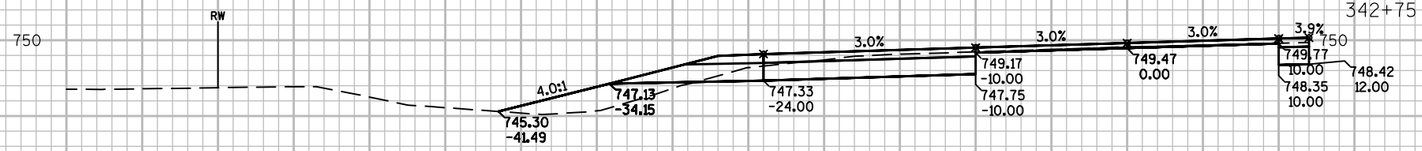
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FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-MOONSHINE INT (1-22-2014).DWG PLOT DATE : 3/7/2014 11:09 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

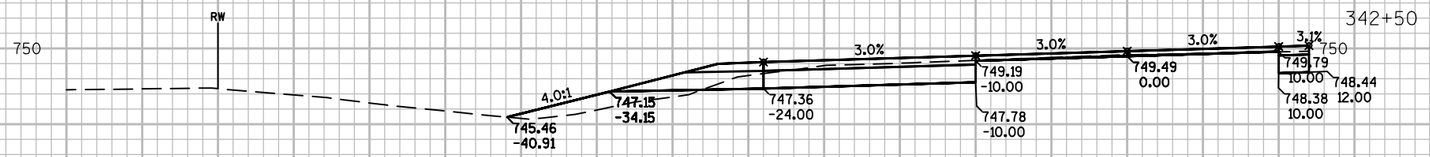
WISDOT/CADDS SHEET 49



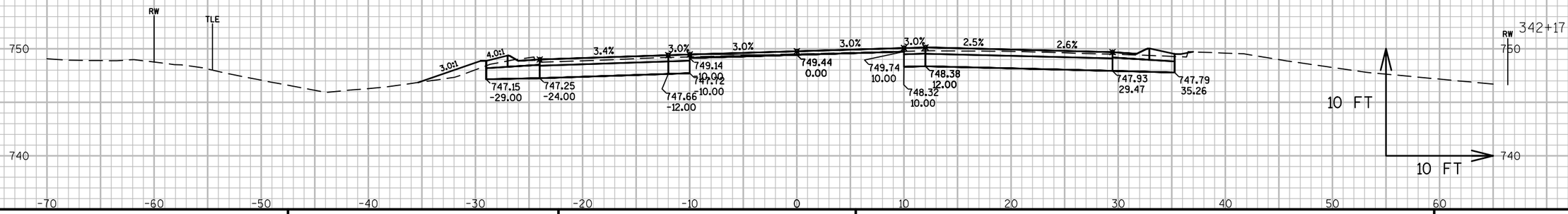
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 231	E



342+75



342+50

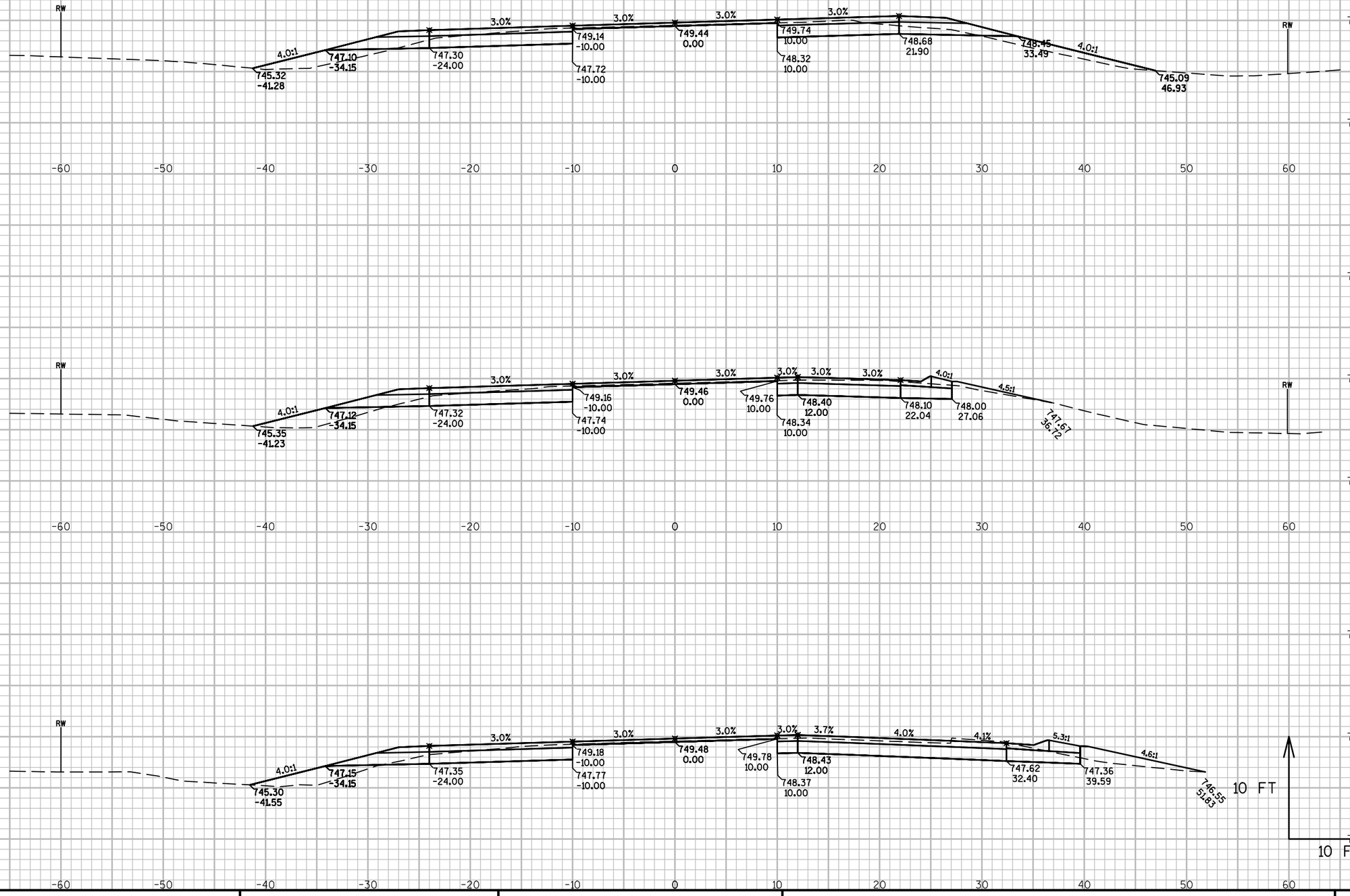


342+17

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-MOONSHINE INT (1-22-2014).DWG PLOT DATE : 3/4/2014 3:15 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

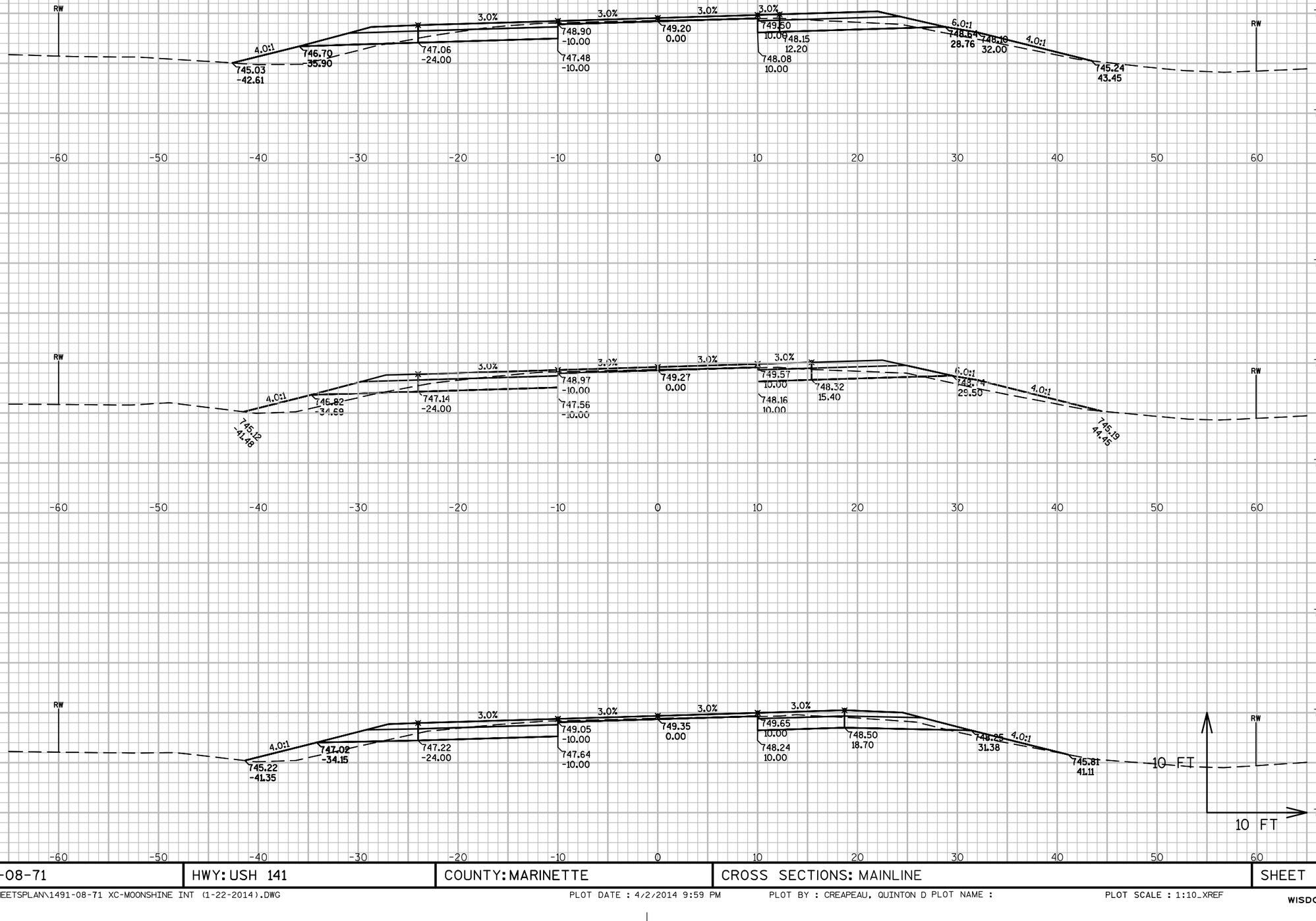
WISDOT/CADDS SHEET 49



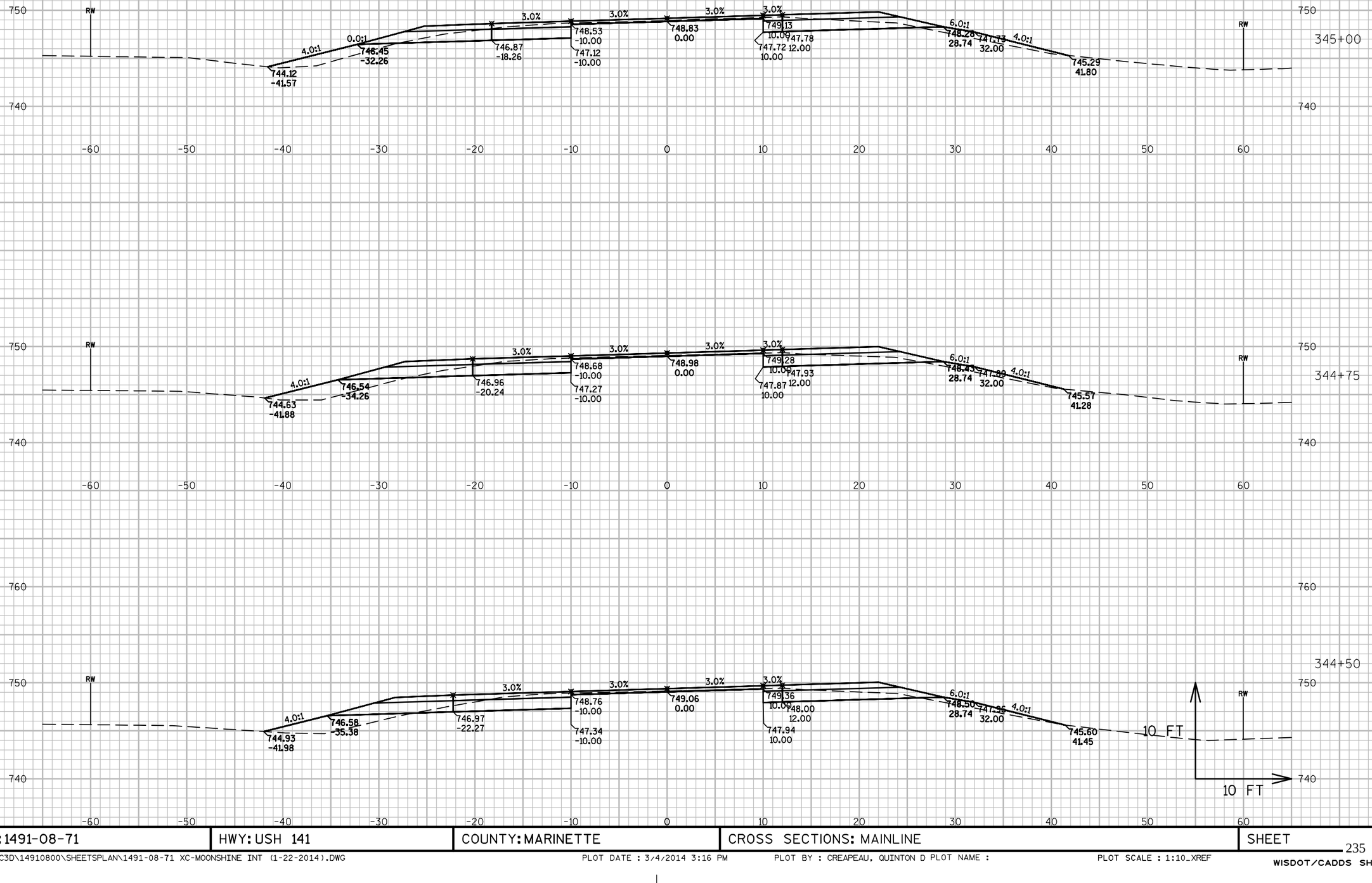
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-MOONSHINE INT (1-22-2014).DWG PLOT DATE : 3/4/2014 3:15 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

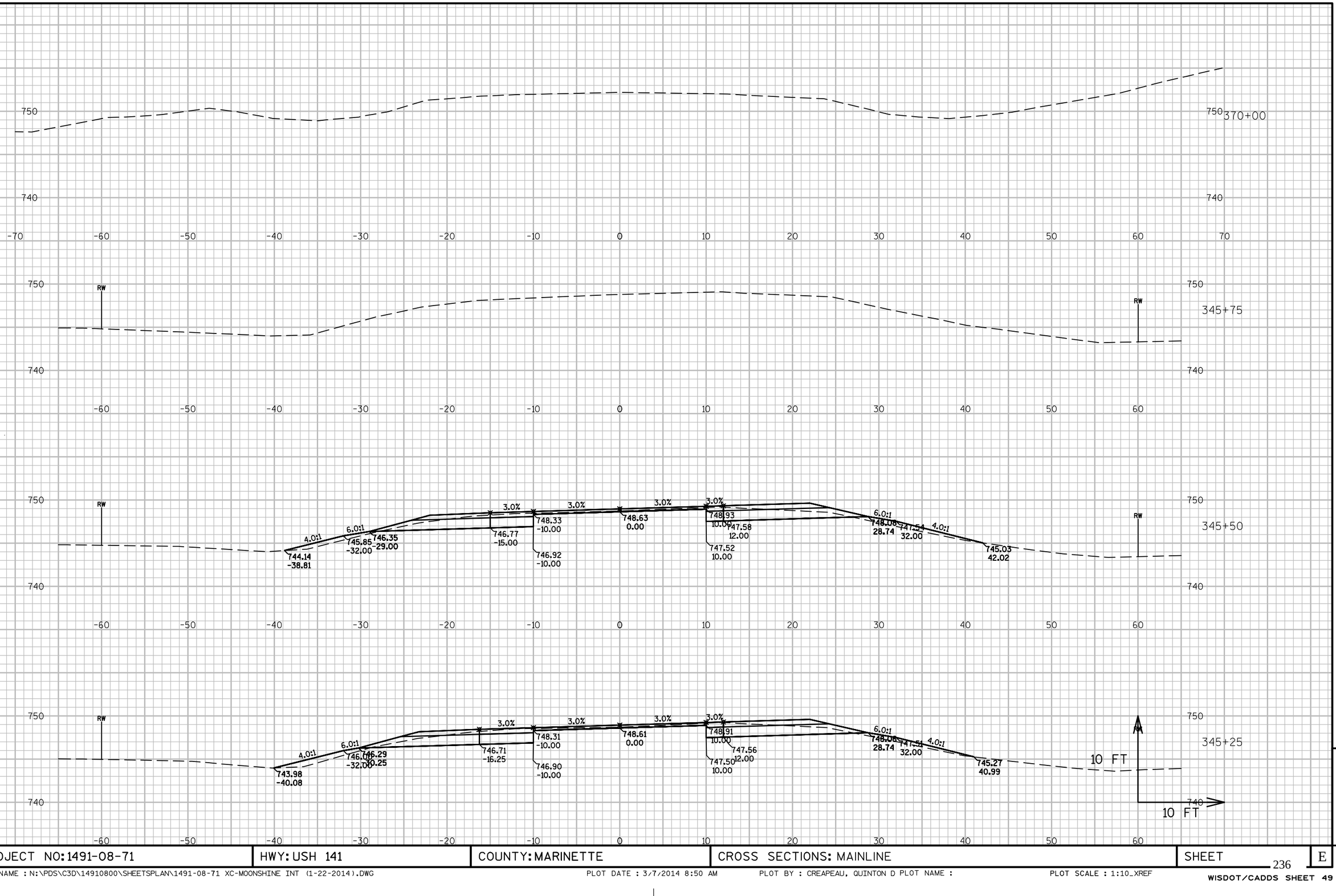


PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 234	E

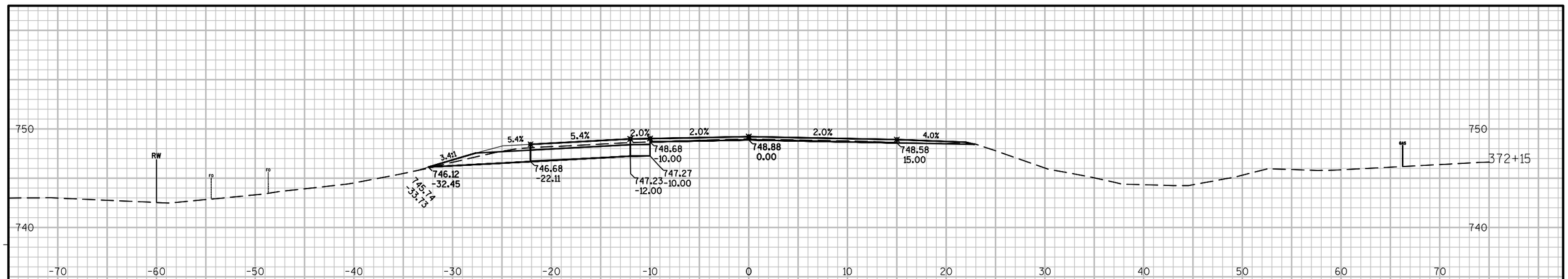


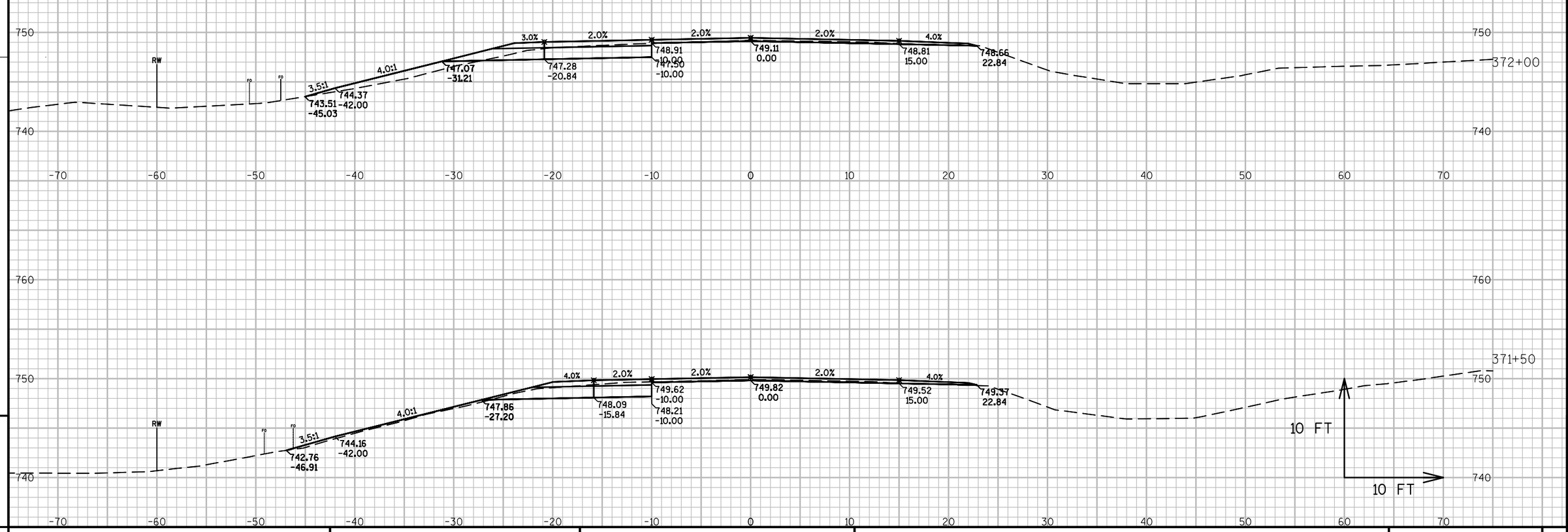
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-MOONSHINE INT (1-22-2014).DWG PLOT DATE : 3/4/2014 3:16 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

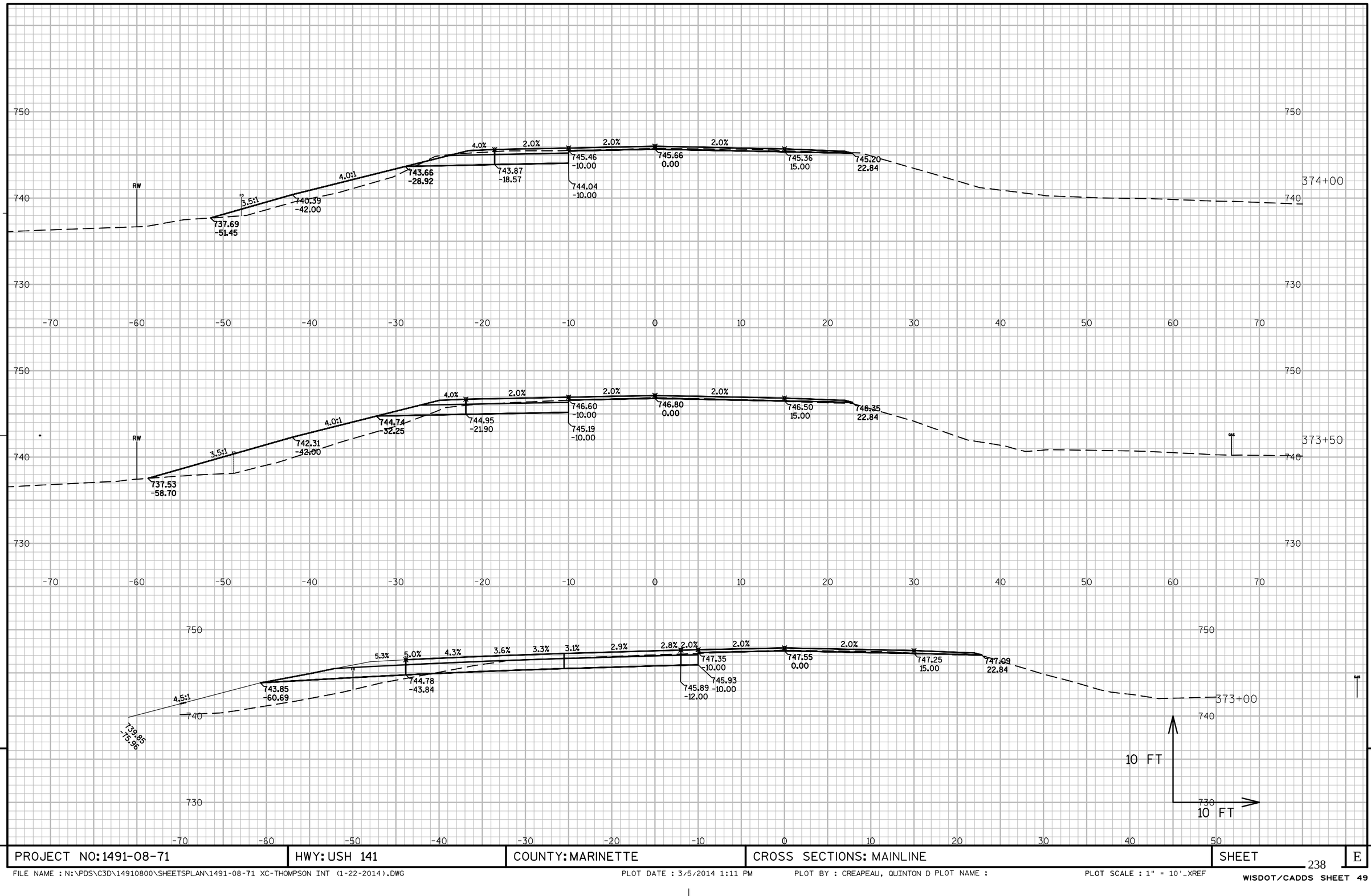




PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 237	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-THOMPSON INT (1-22-2014).DWG PLOT DATE : 3/5/2014 1:11 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

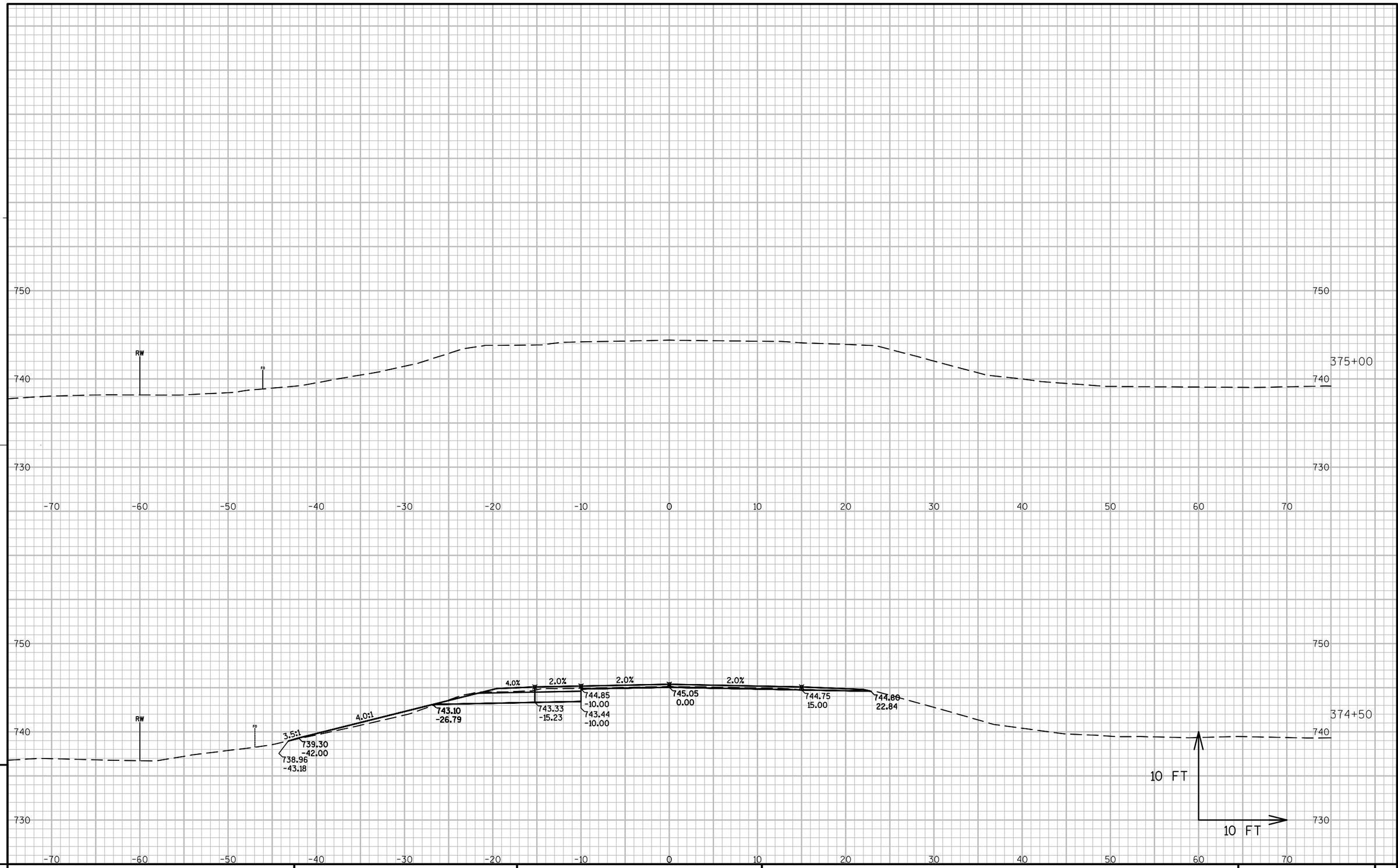
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-THOMPSON INT (1-22-2014).DWG PLOT DATE : 3/5/2014 1:11 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



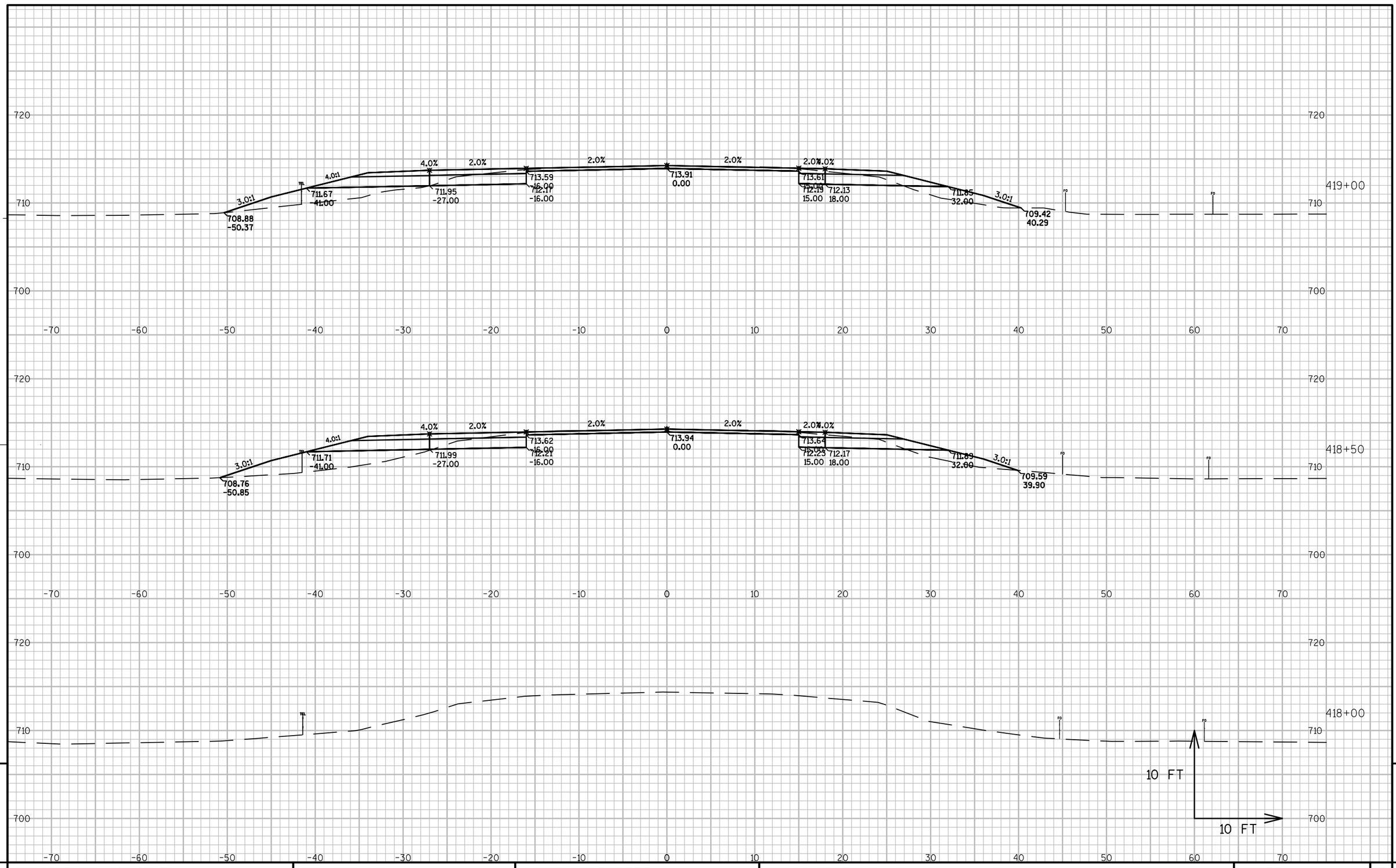
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

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FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-THOMPSON INT (1-22-2014).DWG PLOT DATE : 3/7/2014 8:57 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



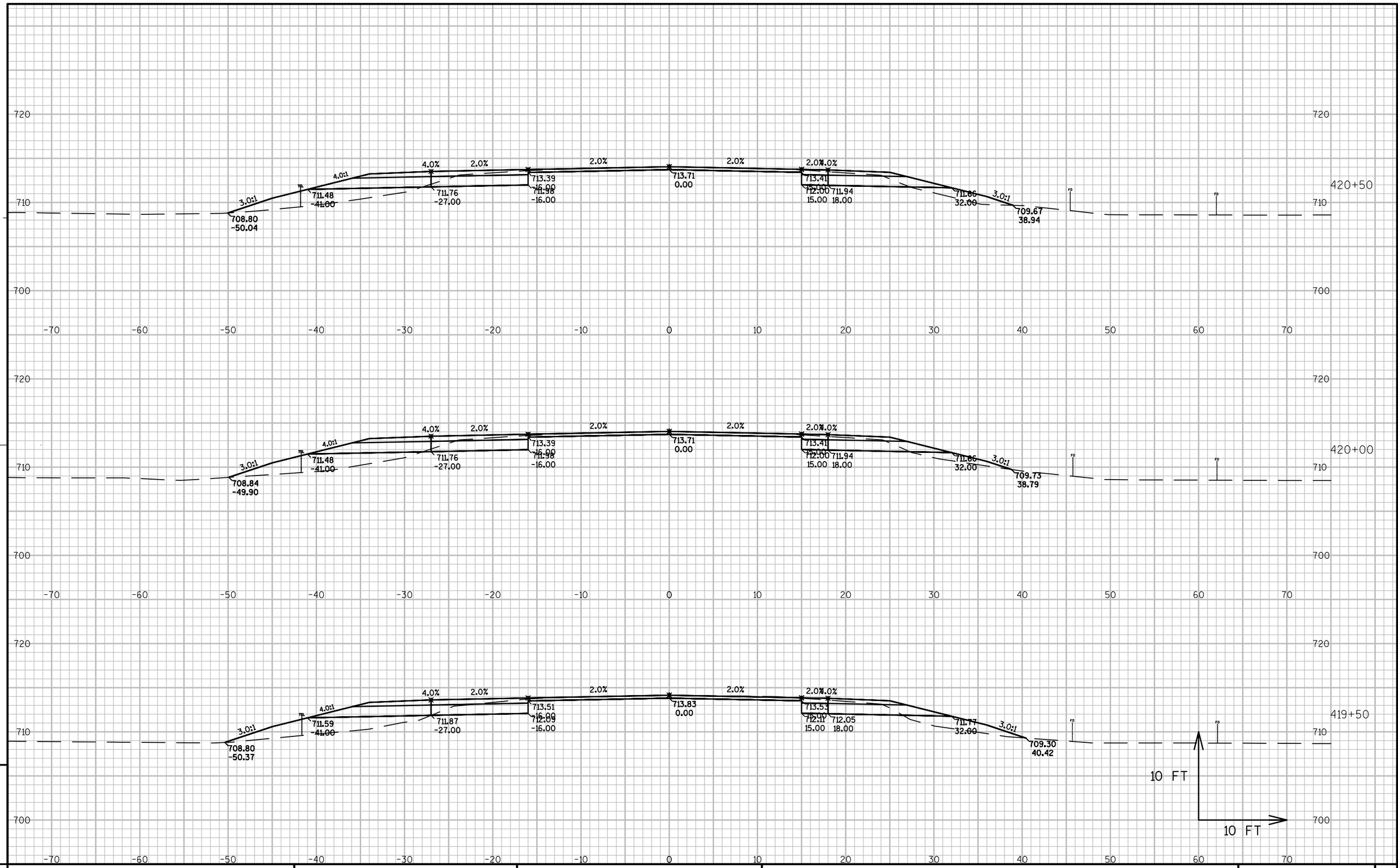
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9

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 240	E

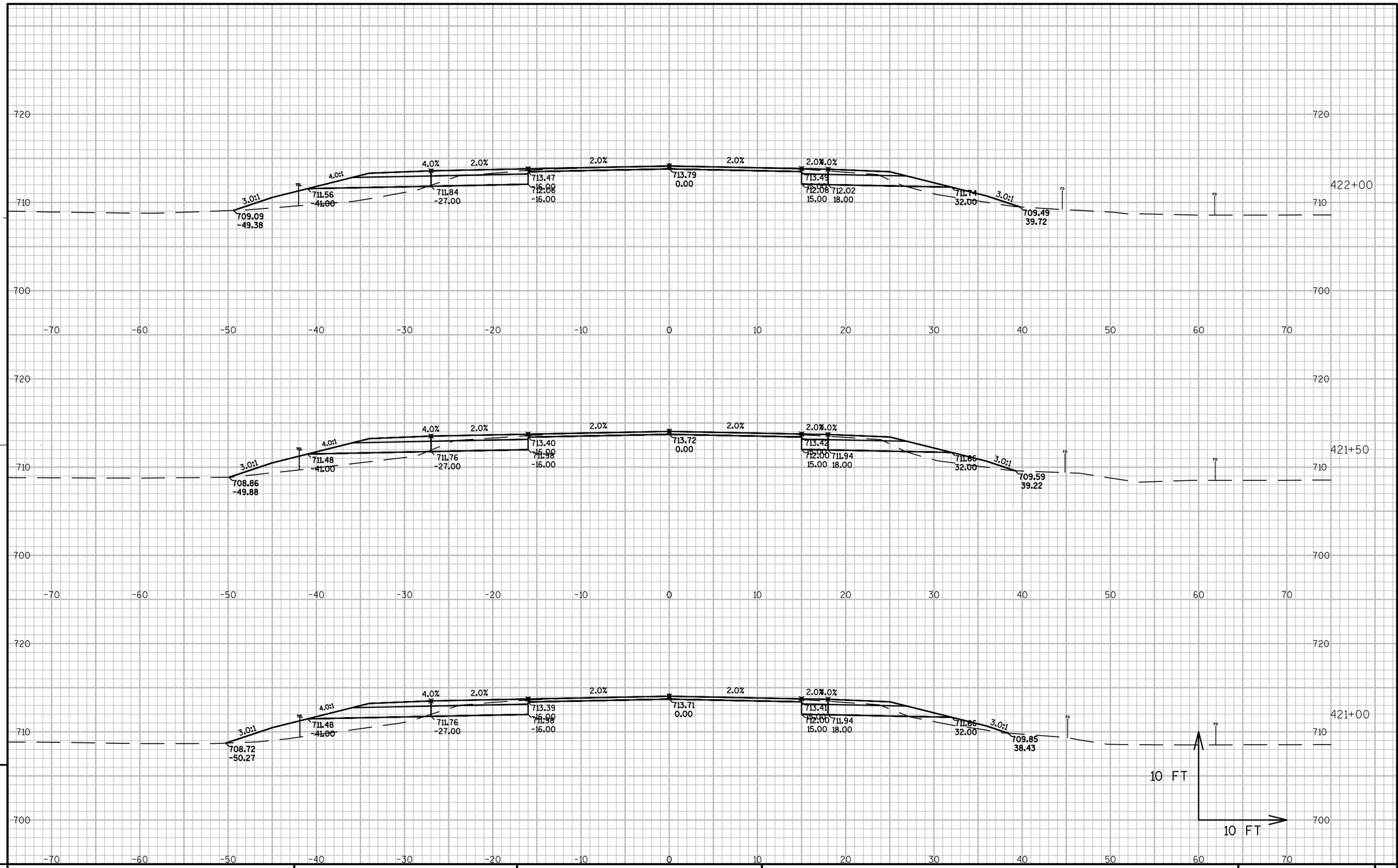
FILE NAME : E:\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 4/2/2014 10:52 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



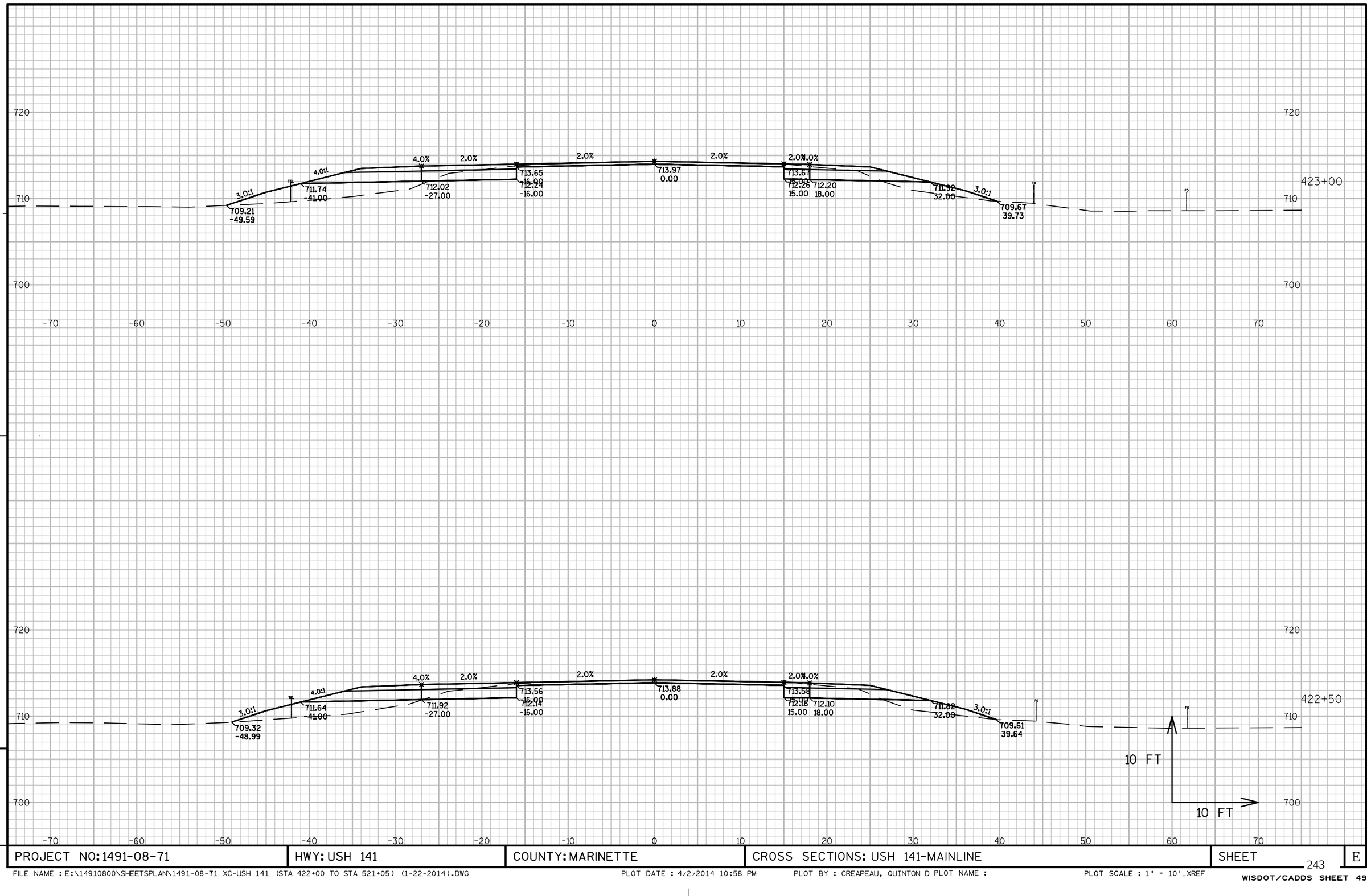
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

FILE NAME : E:\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 4/2/2014 10:53 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

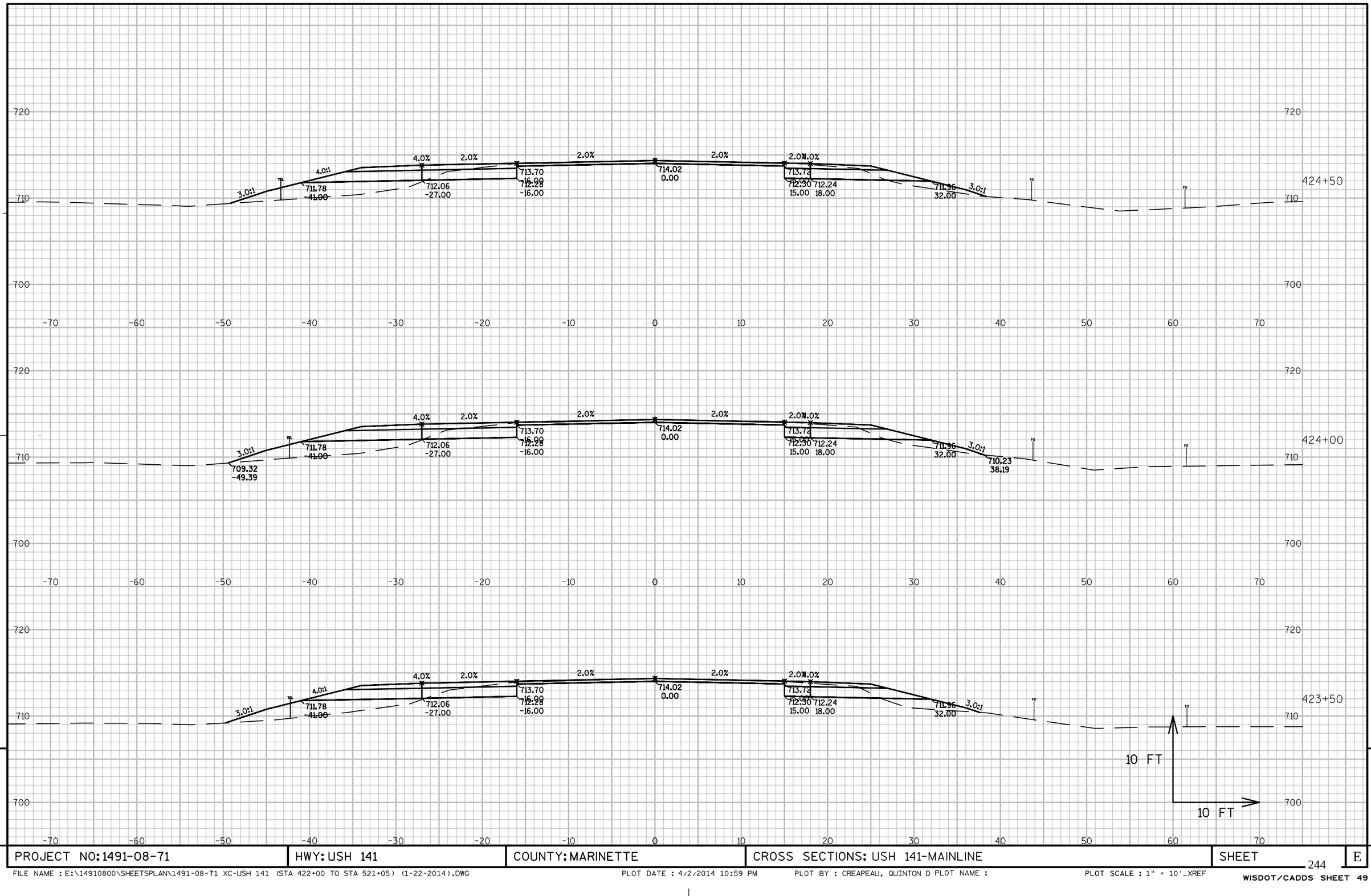
FILE NAME : E:\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 4/2/2014 10:54 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 243 E

FILE NAME : E:\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 4/2/2014 10:58 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

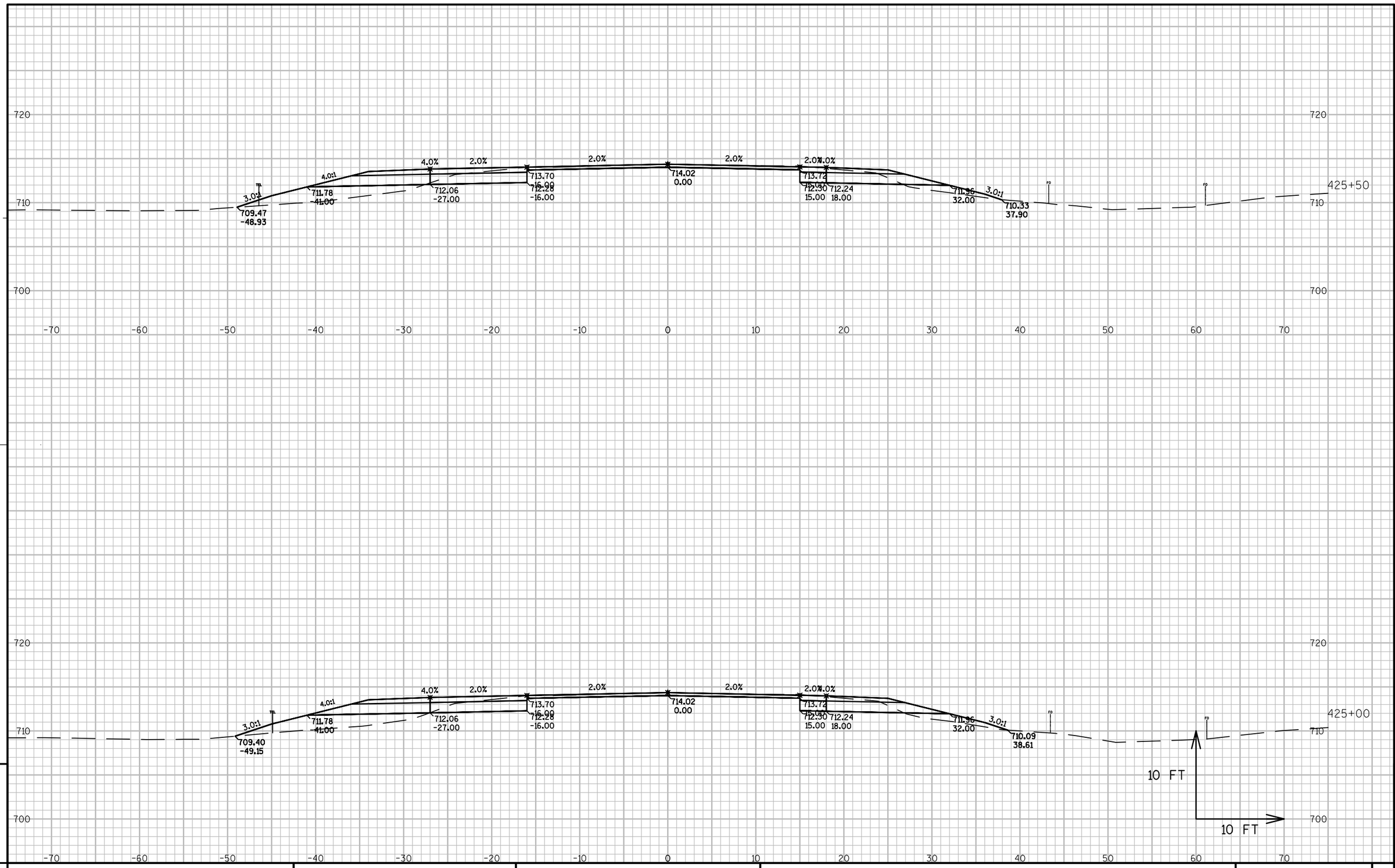
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 244	E

FILE NAME : E:\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 4/2/2014 10:59 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

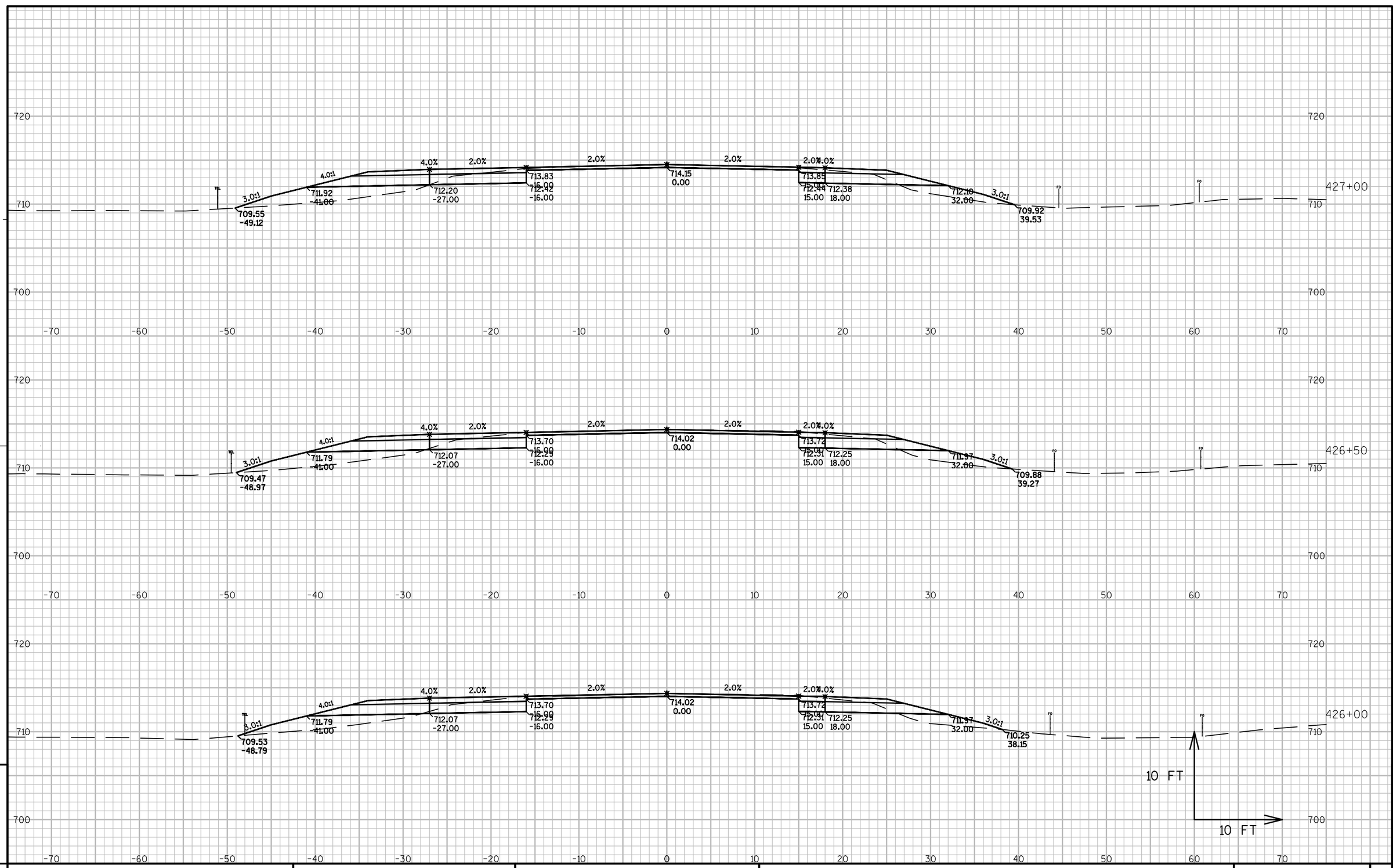
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 245	E

FILE NAME : E:\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 4/2/2014 11:04 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

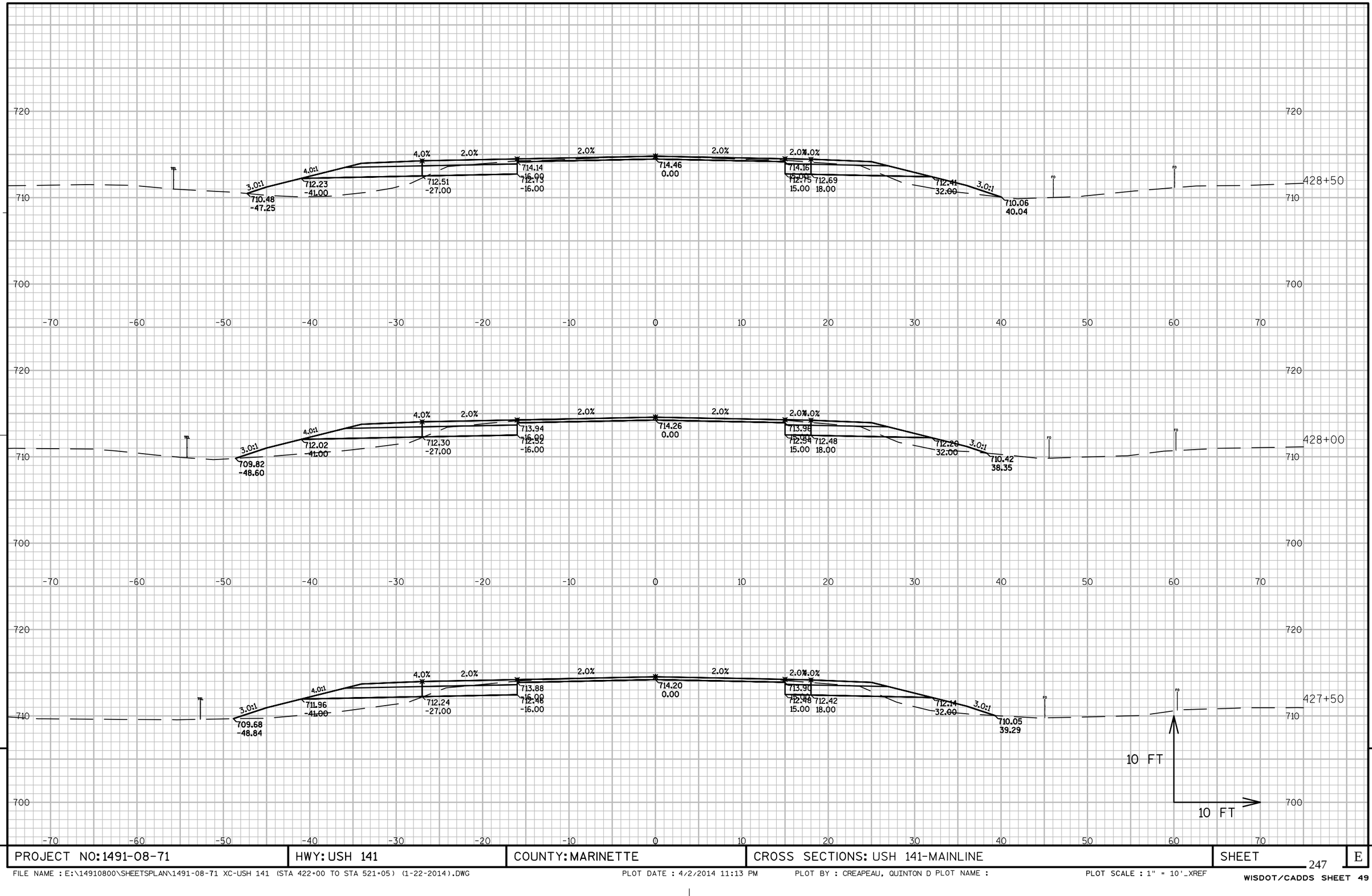


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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 246	E

9

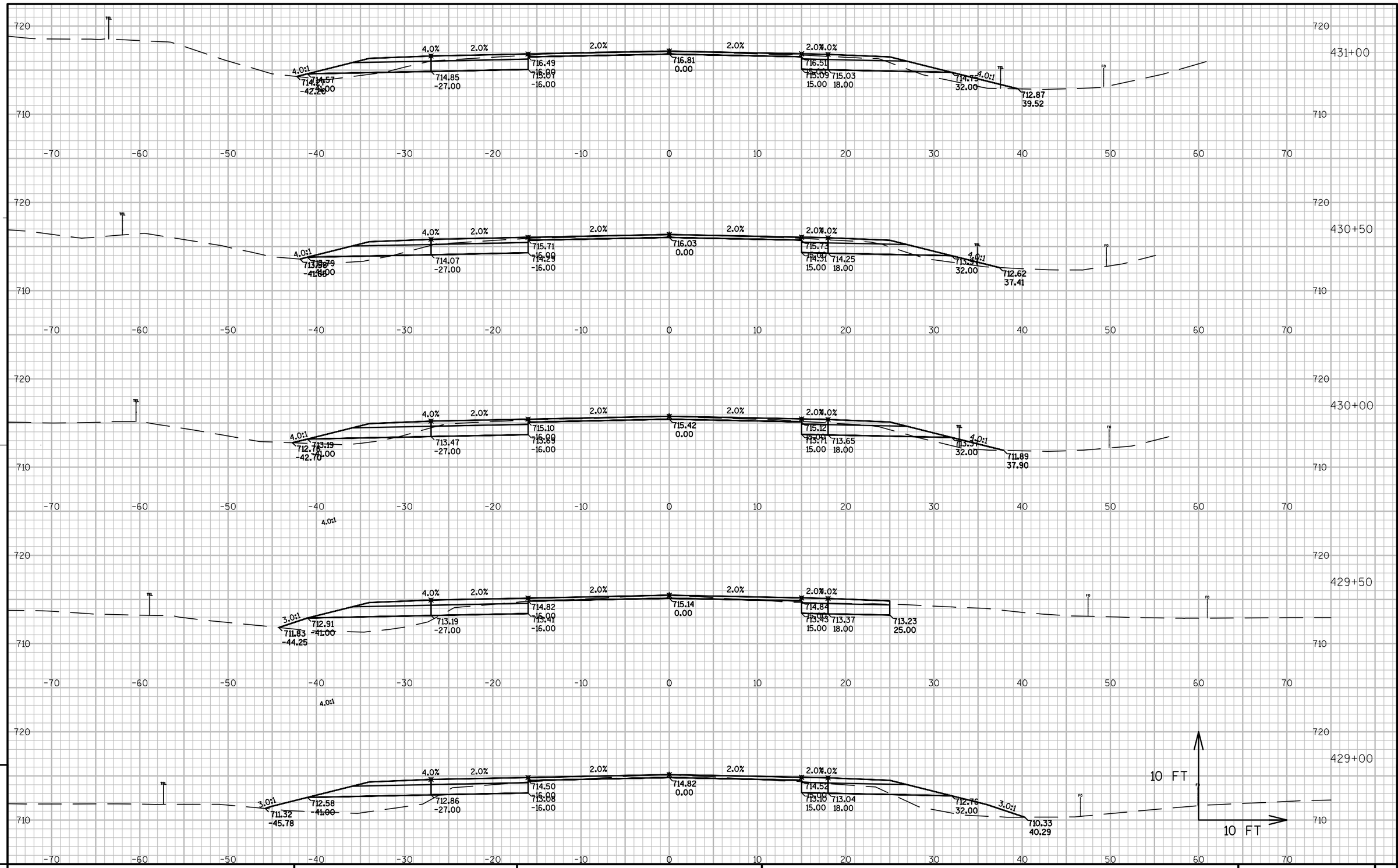
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 247	E

FILE NAME : E:\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 4/2/2014 11:13 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

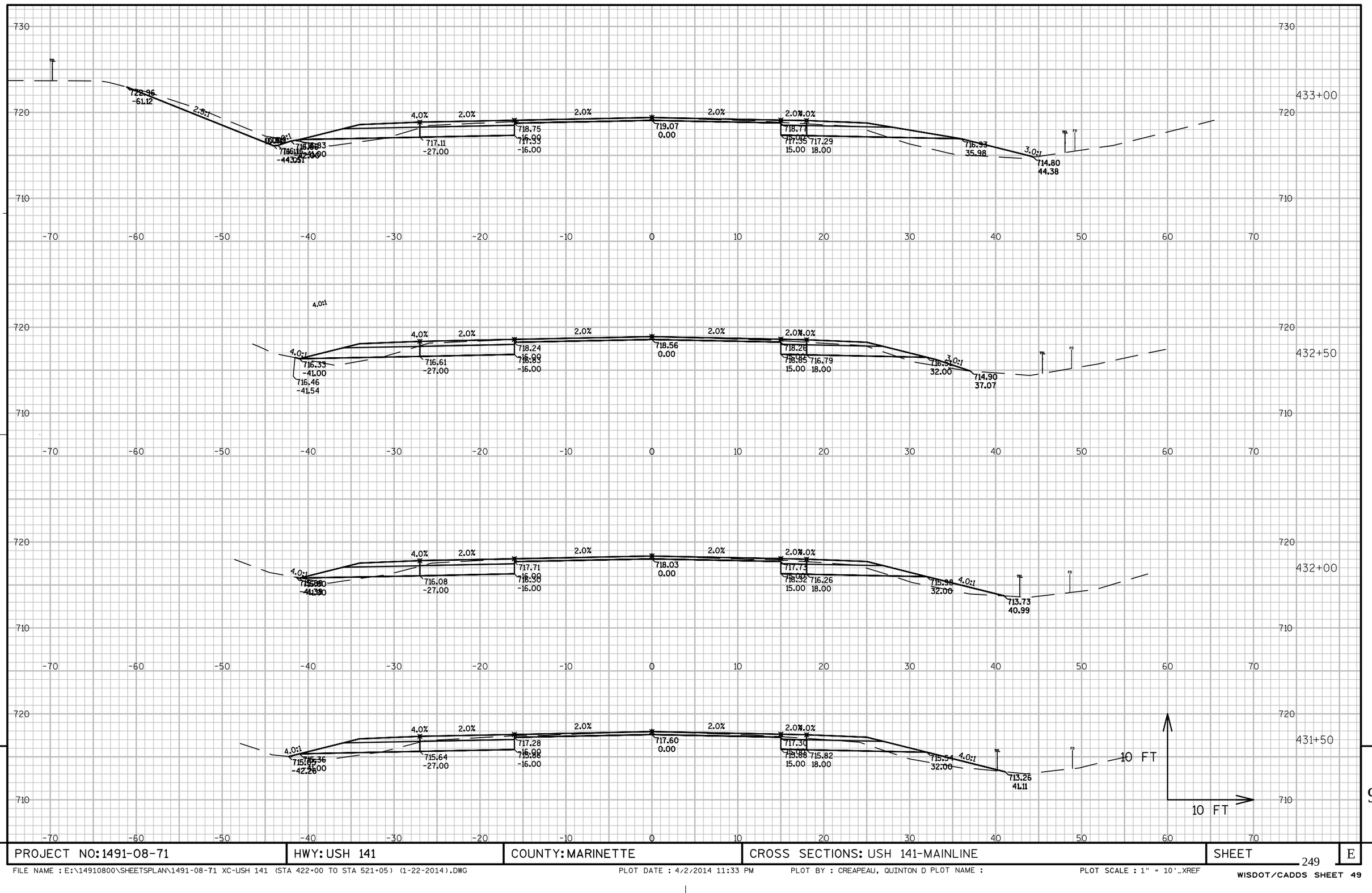
WISDOT/CADDS SHEET 49



9

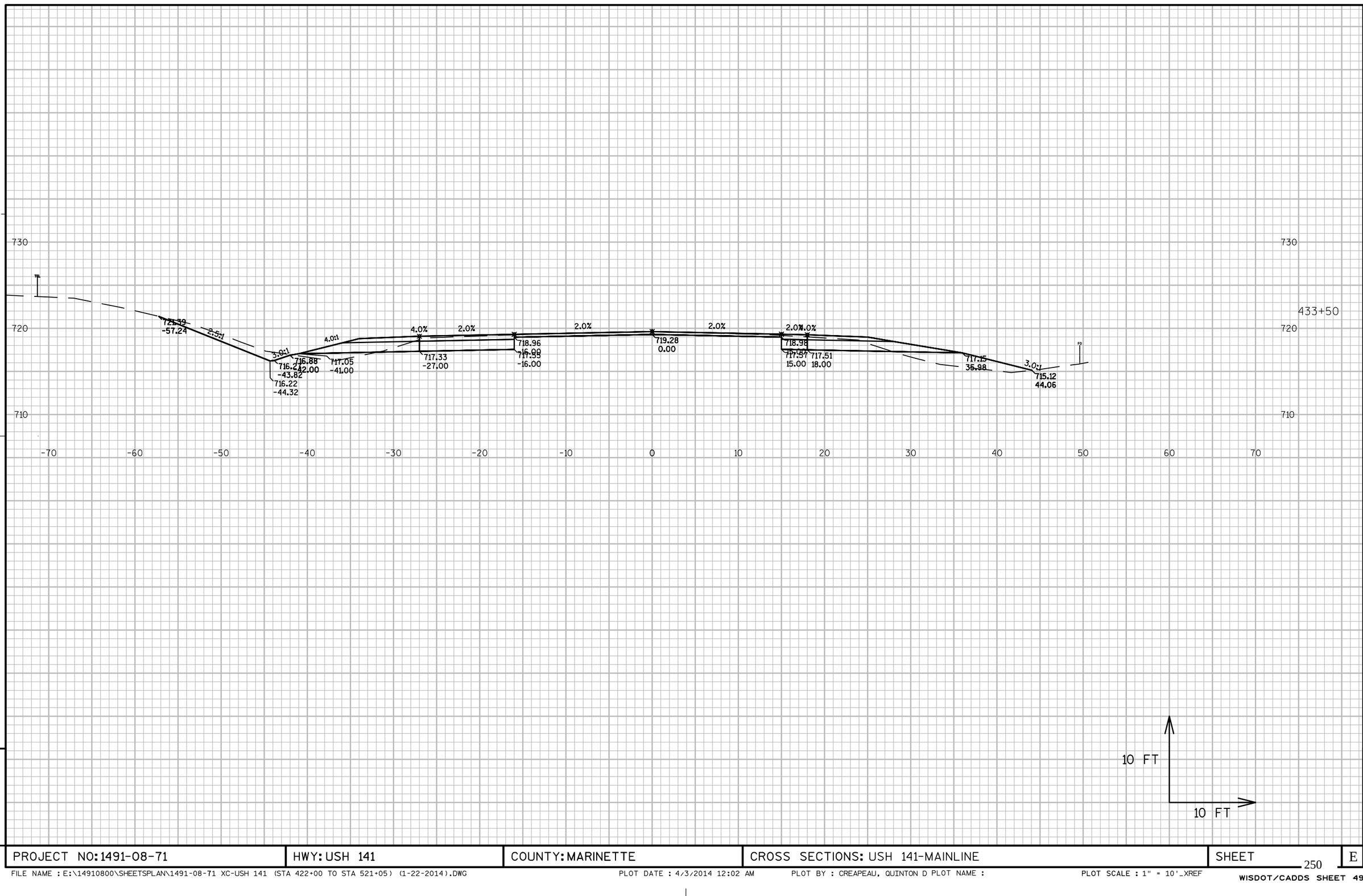
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 248	E



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

FILE NAME : E:\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 4/2/2014 11:33 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

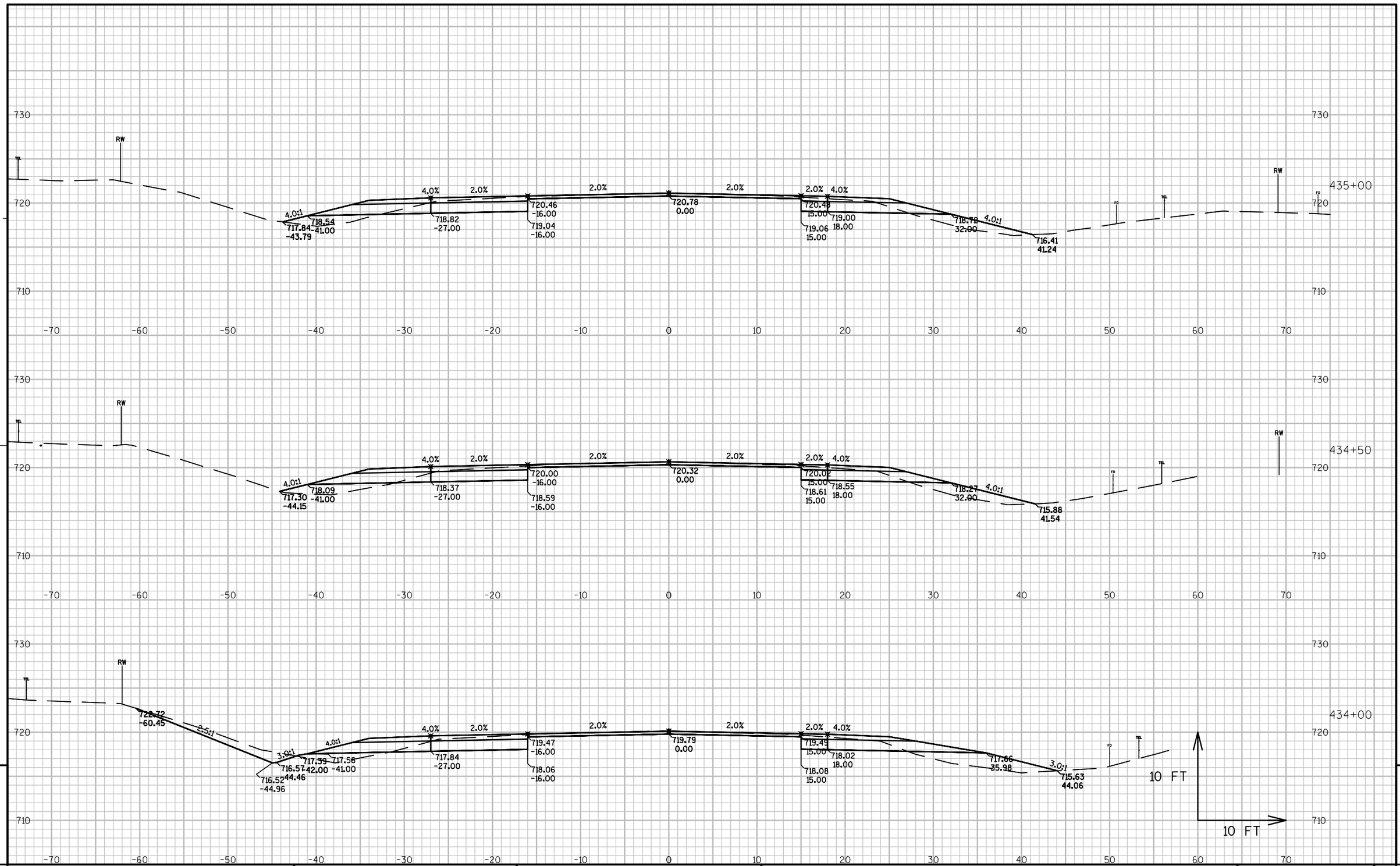


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9

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

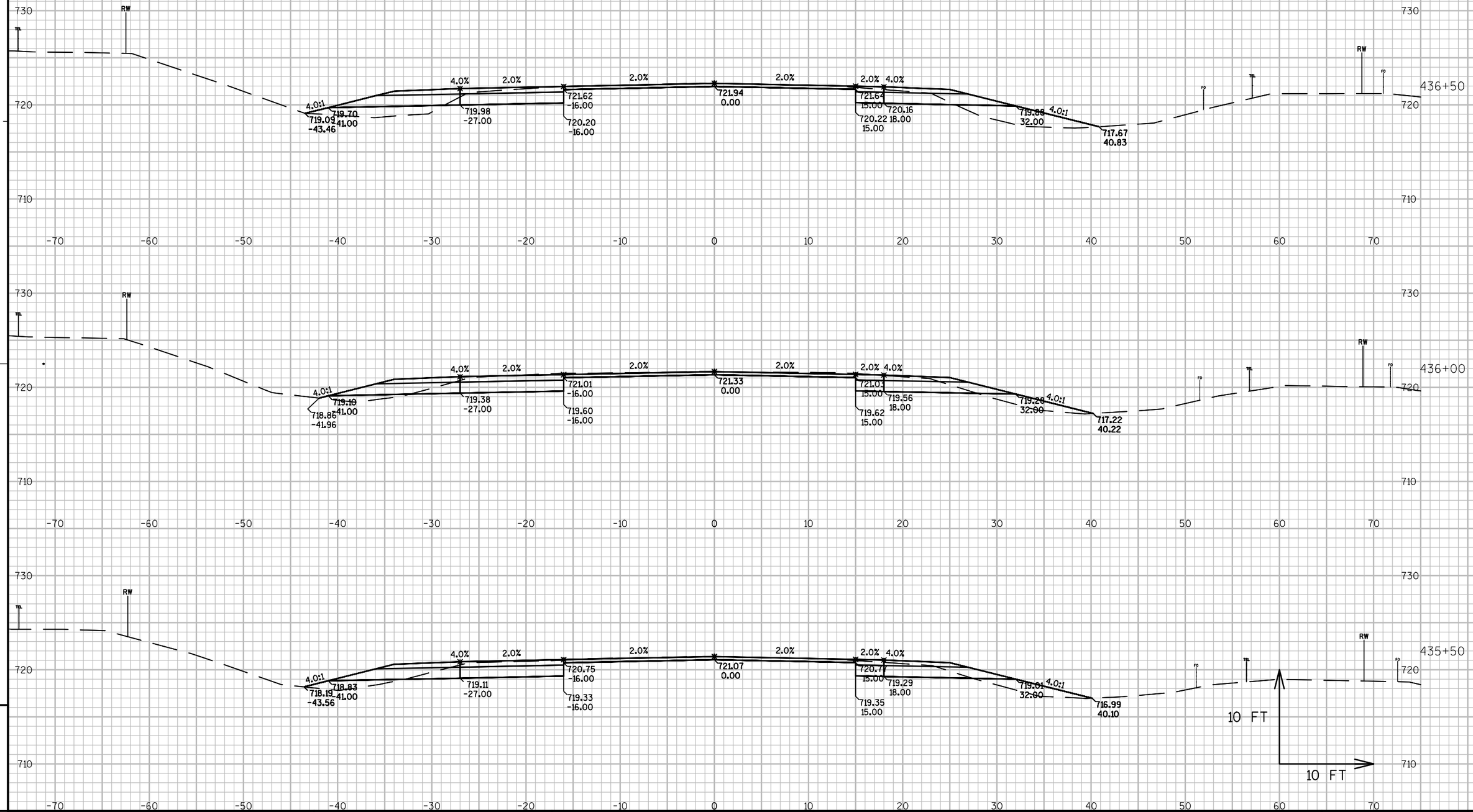
FILE NAME : E:\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 4/3/2014 12:02 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 251	E

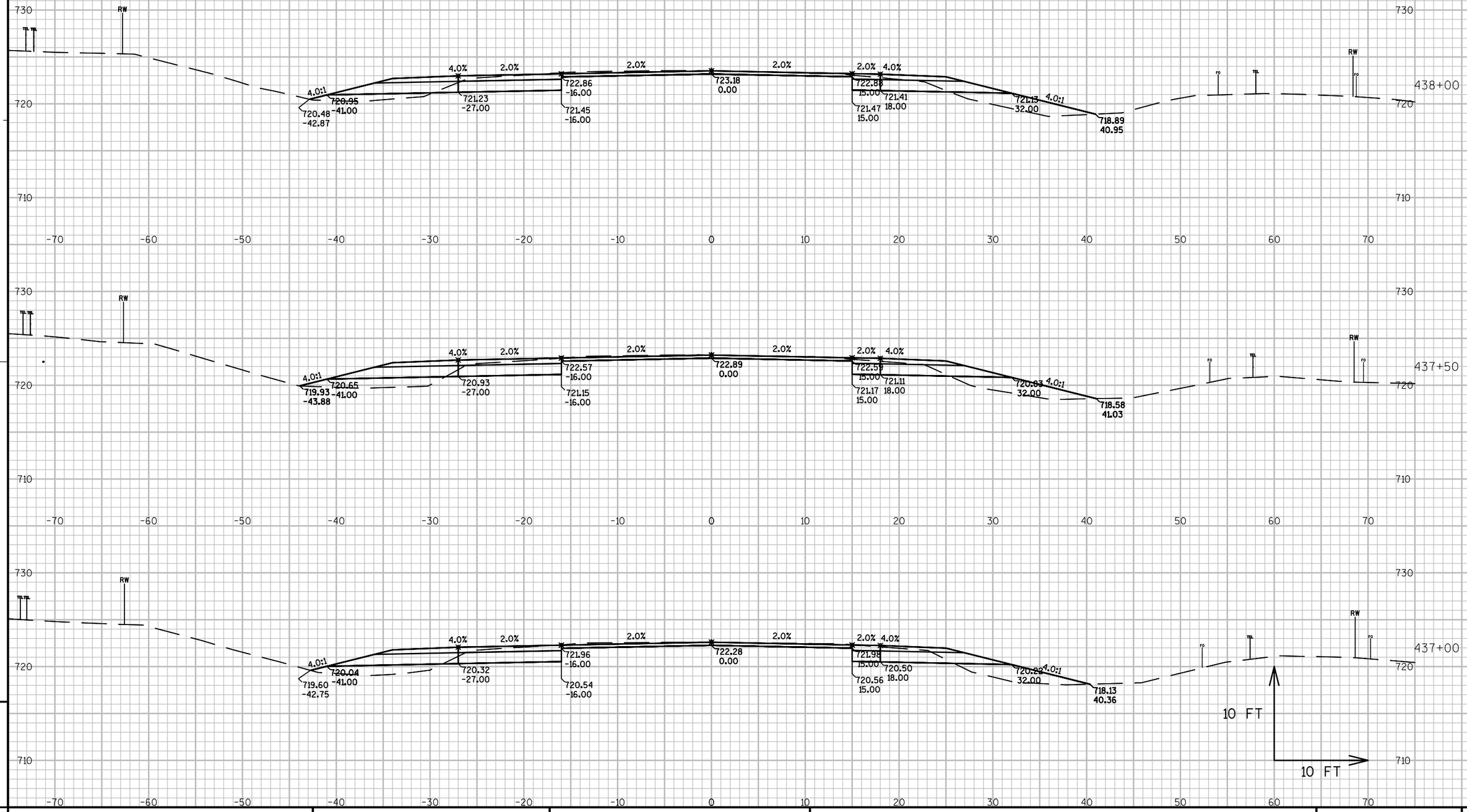
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:04 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 252	E

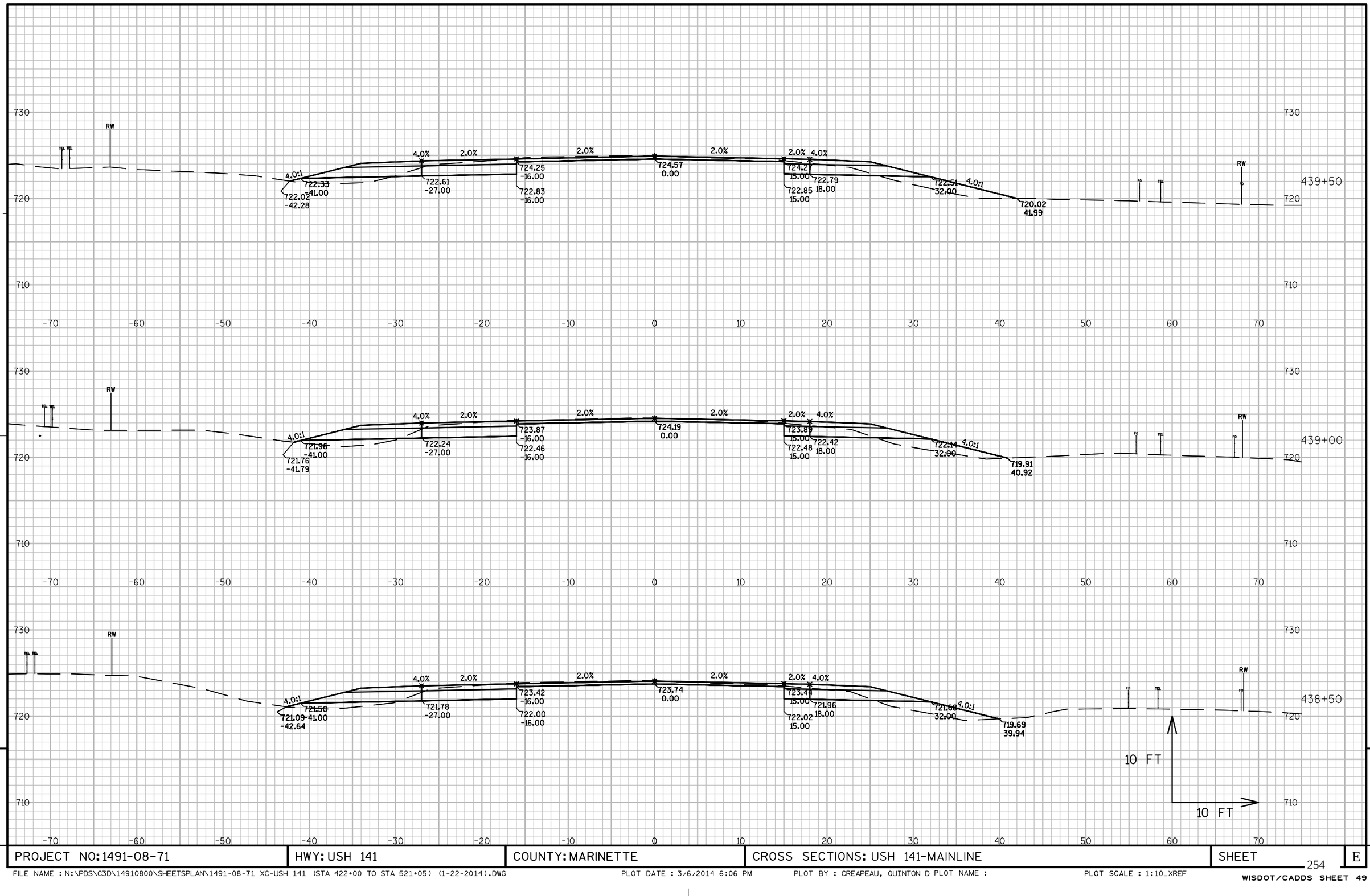
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:05 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 253	E

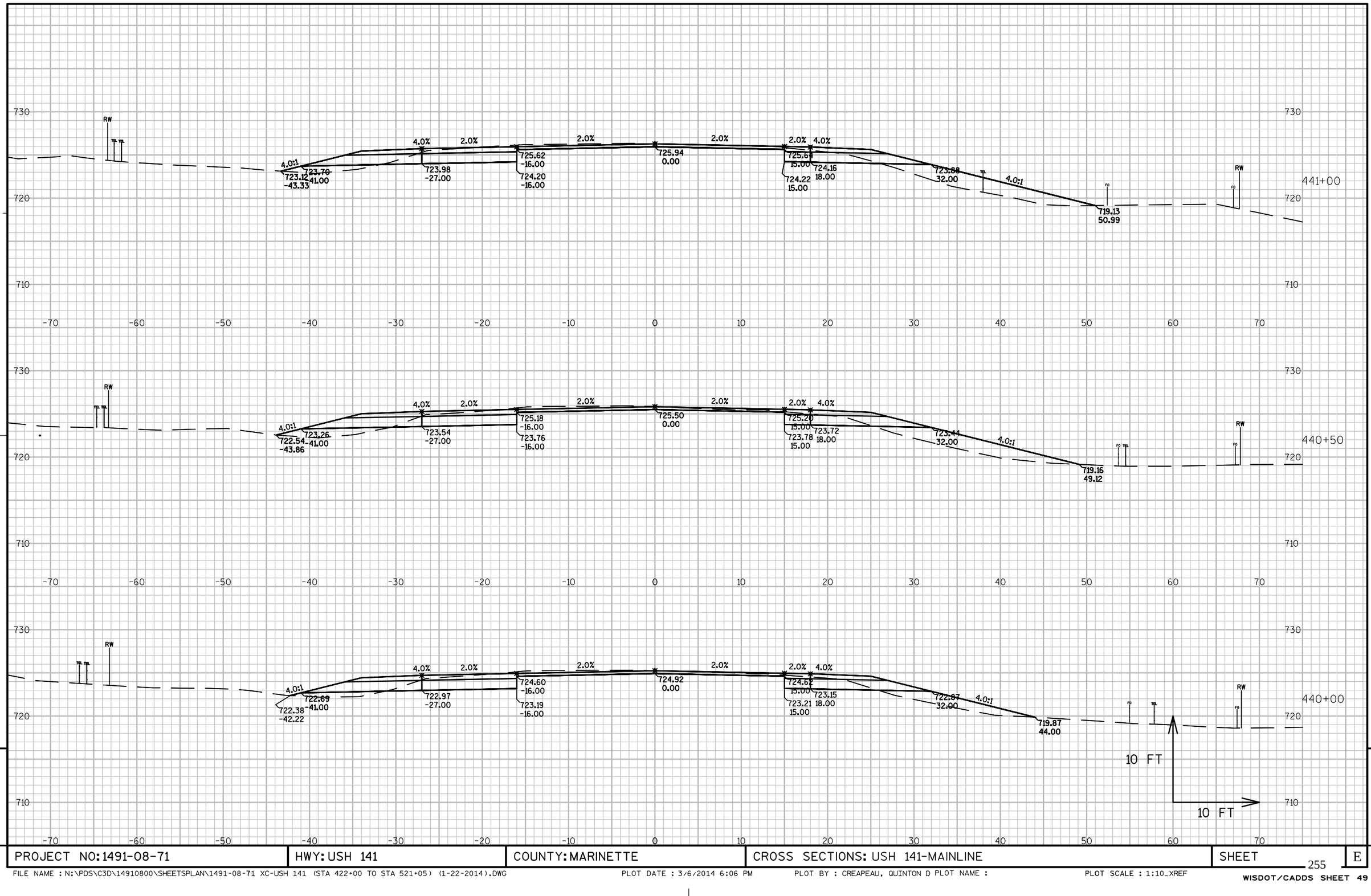
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:05 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

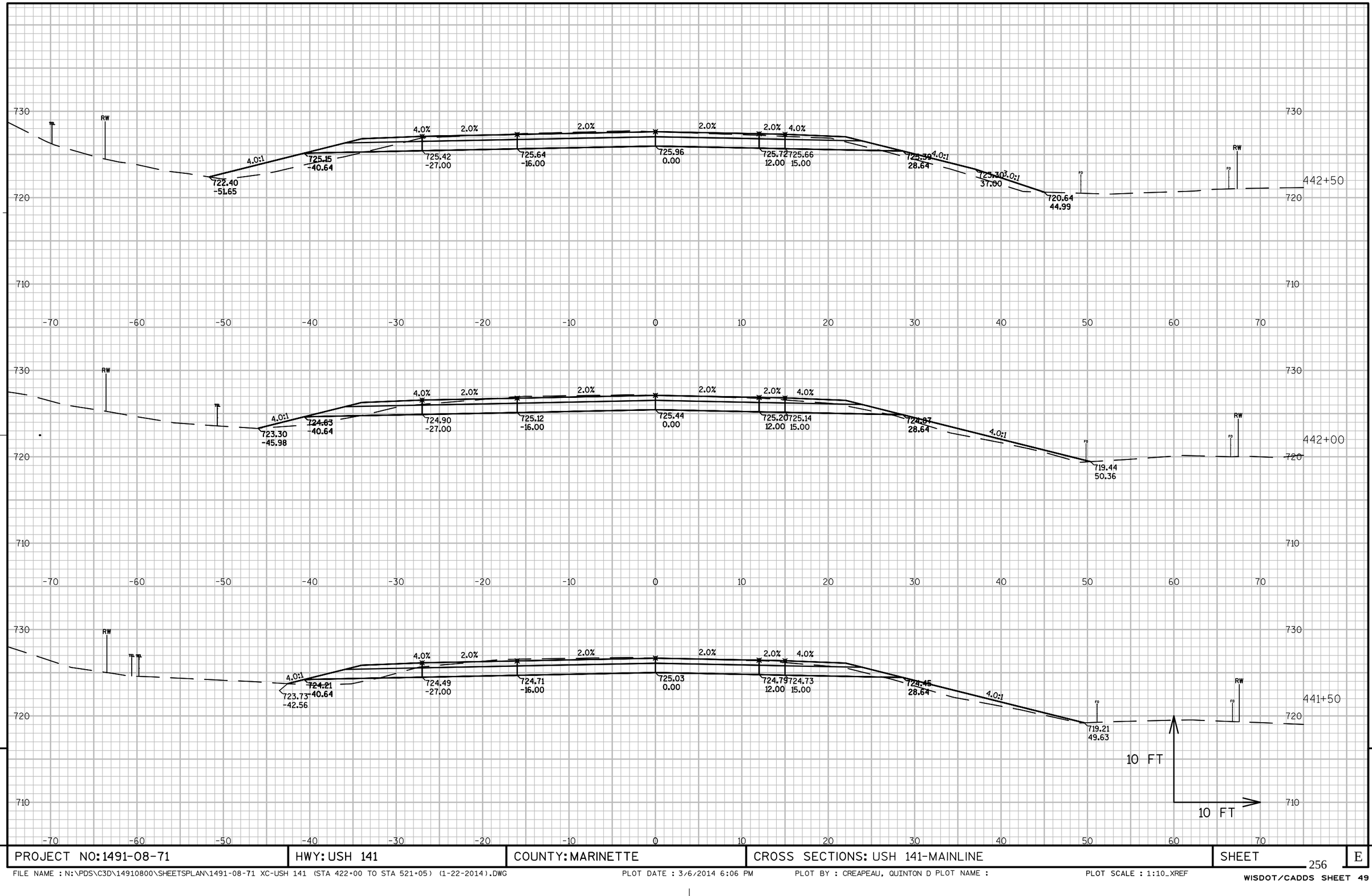


PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 254	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:06 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

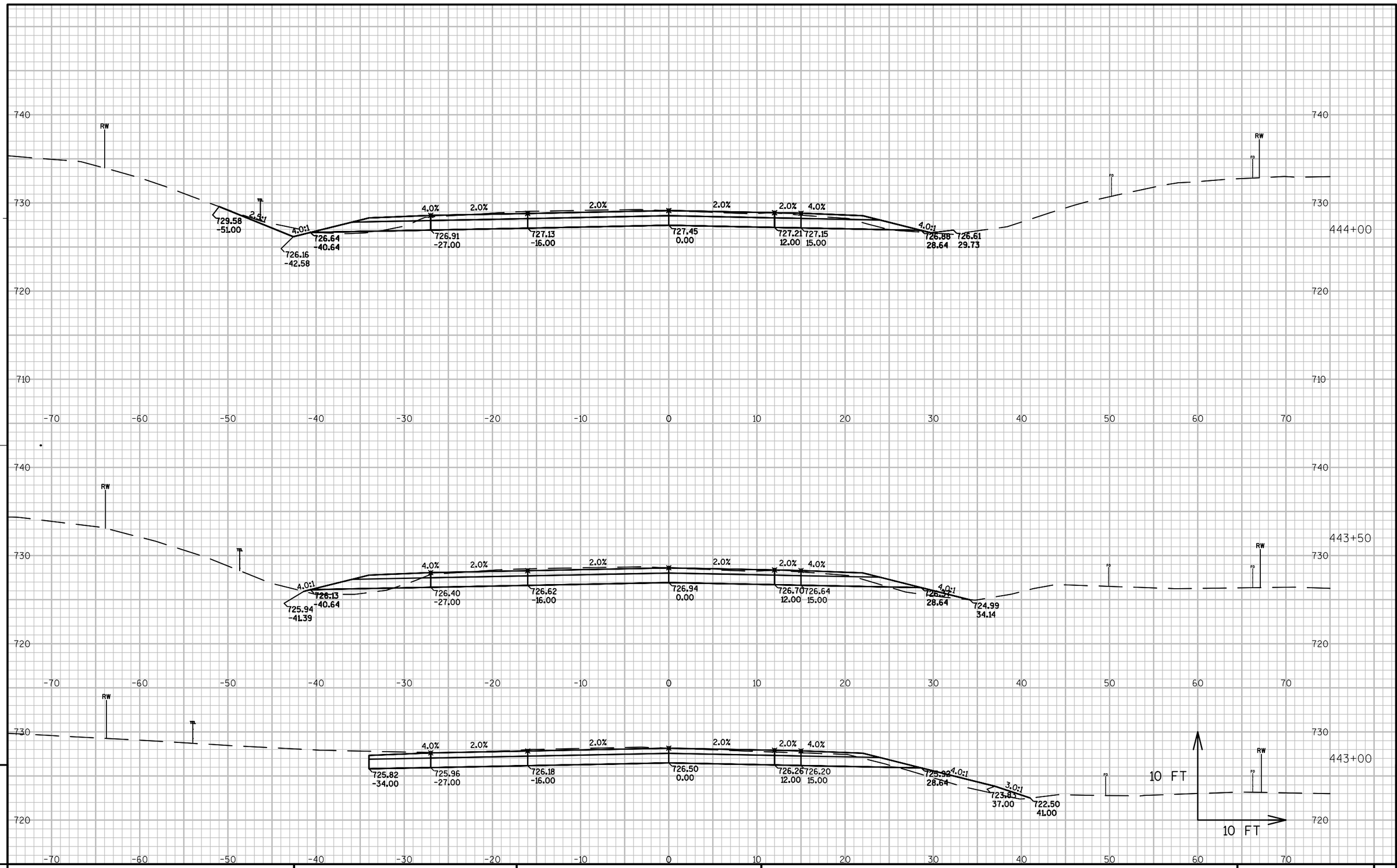


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9

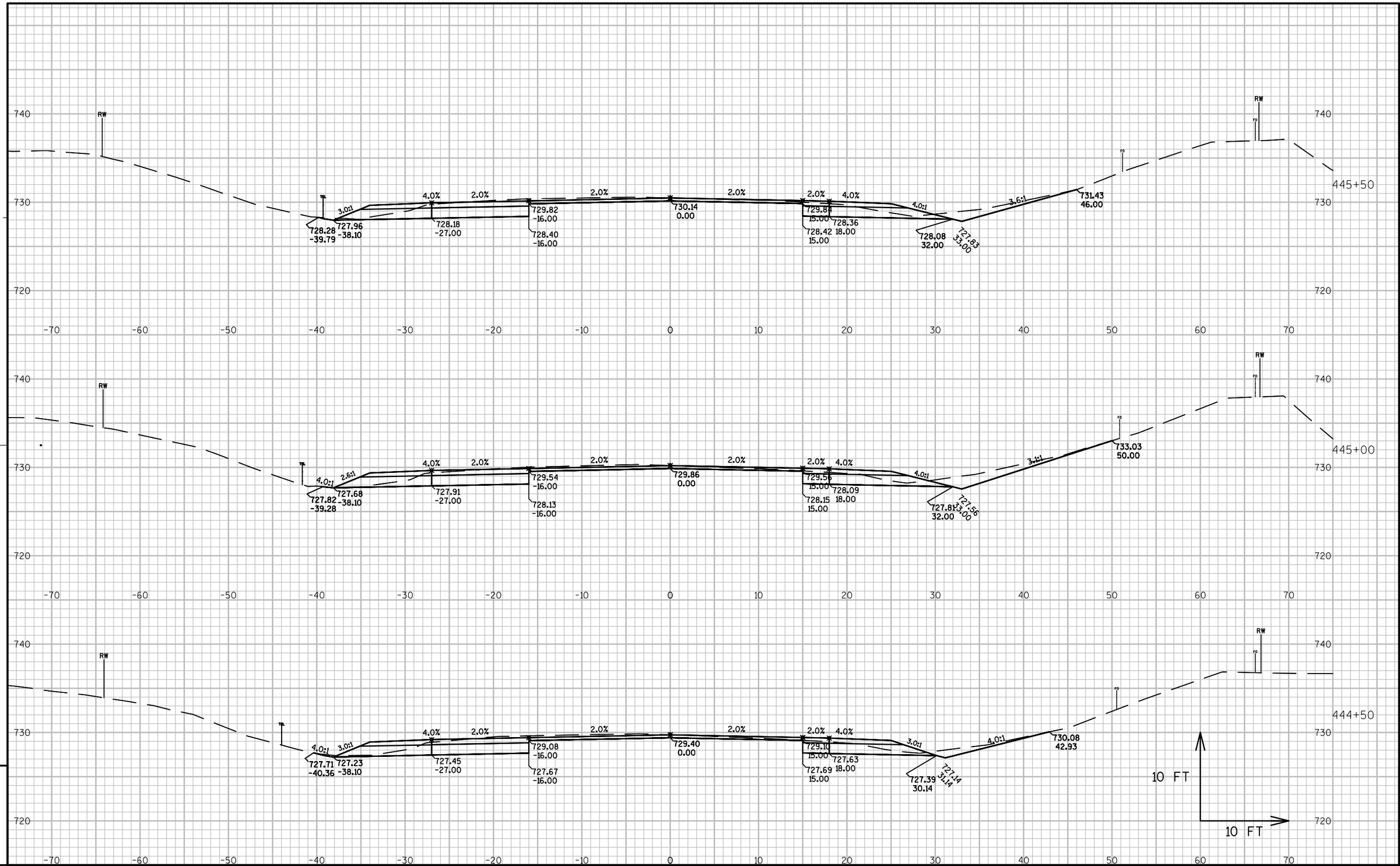
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 256	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG
PLOT DATE : 3/6/2014 6:06 PM
PLOT BY : CREAPEAU, QUINTON D PLOT NAME :
PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:07 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



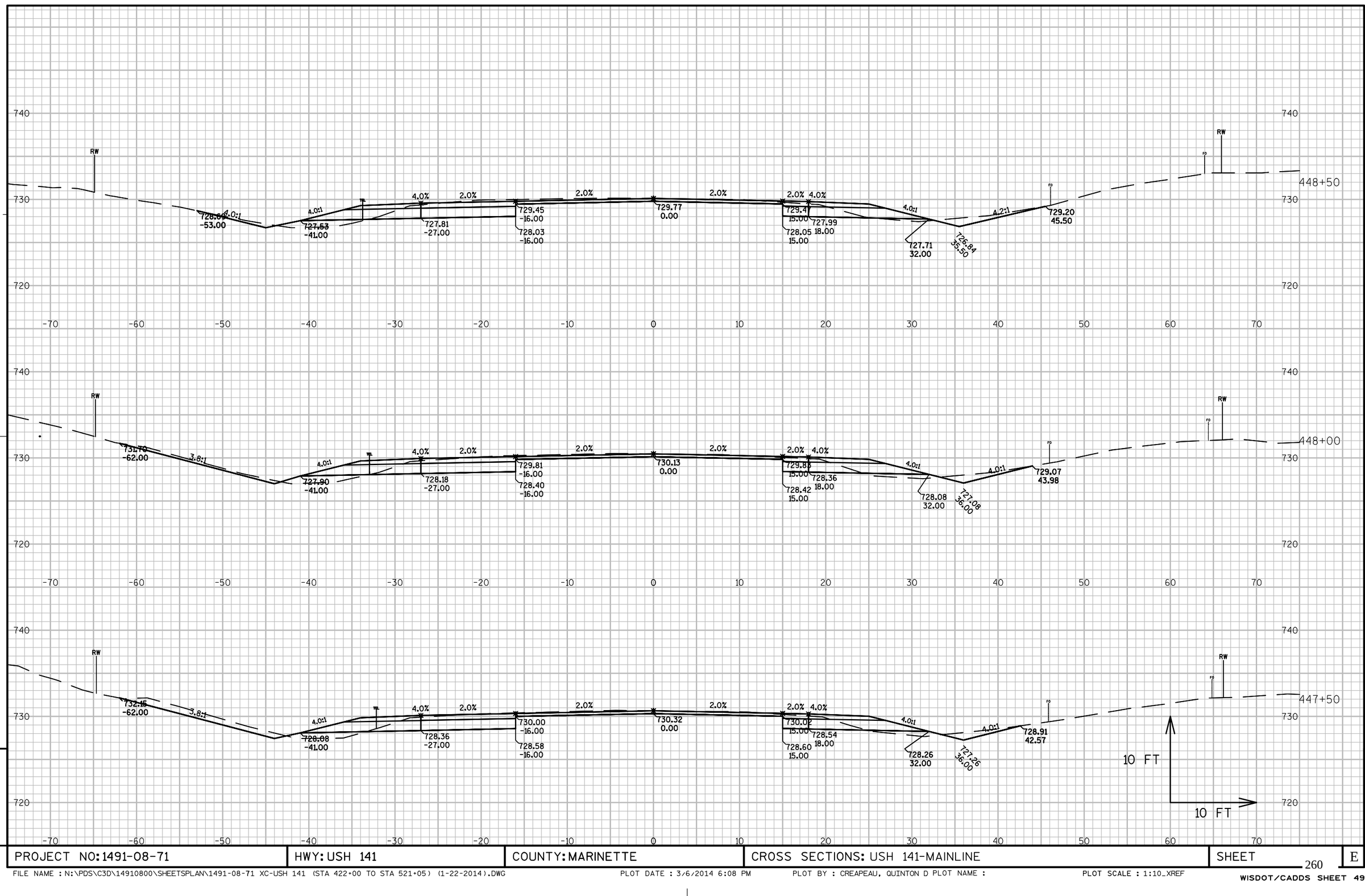
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 258 E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:07 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 259	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:08 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

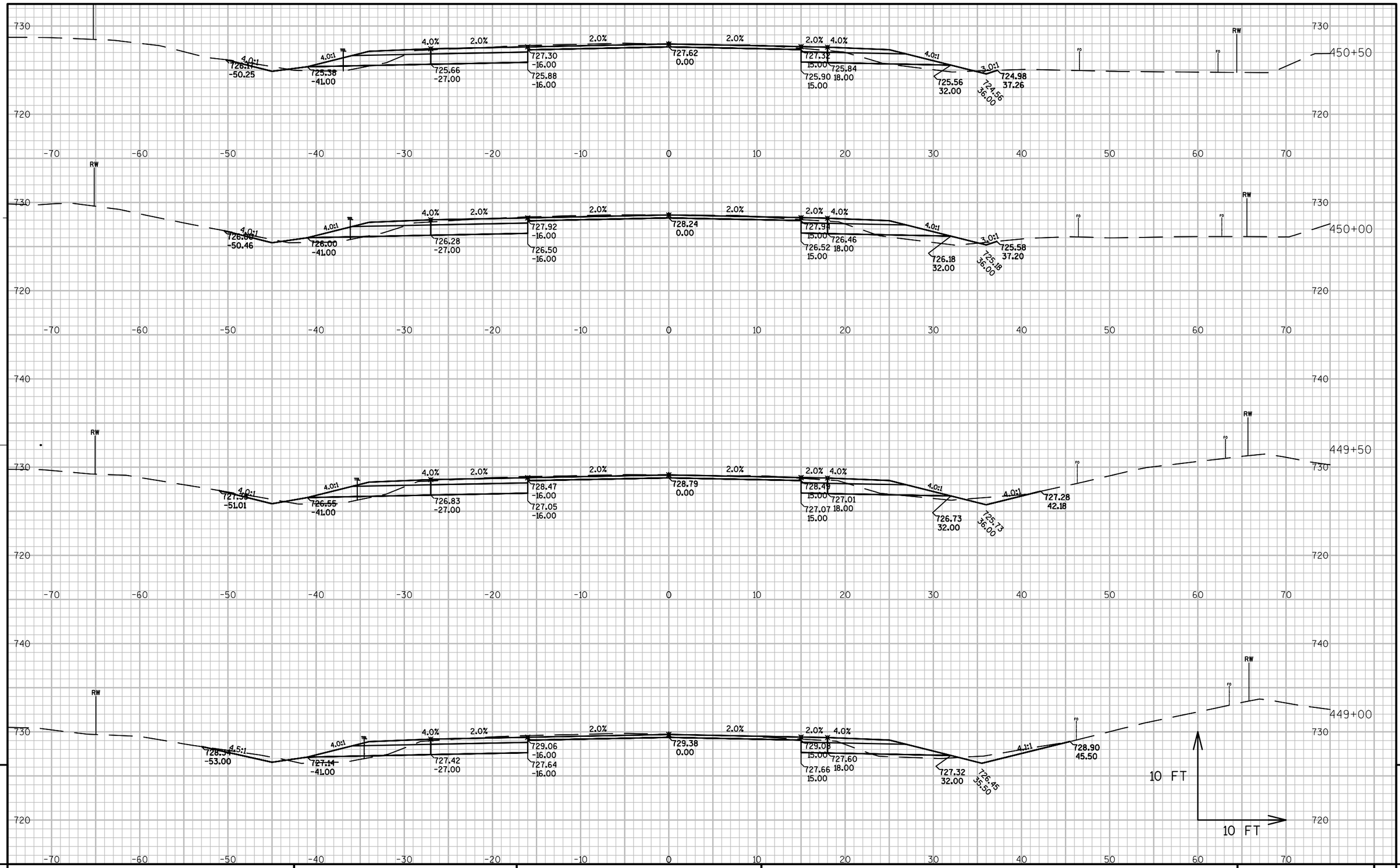


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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

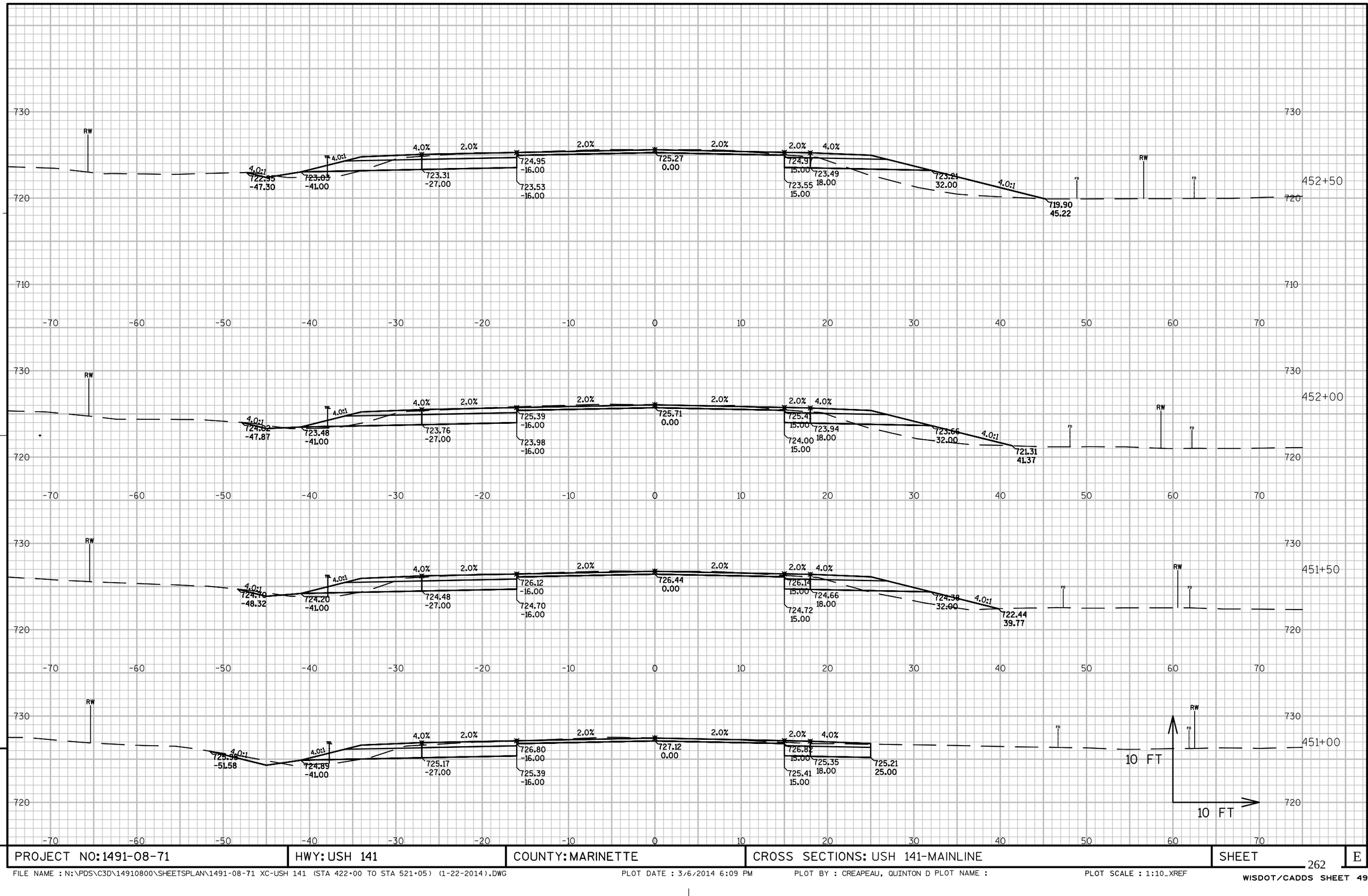
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FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:08 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

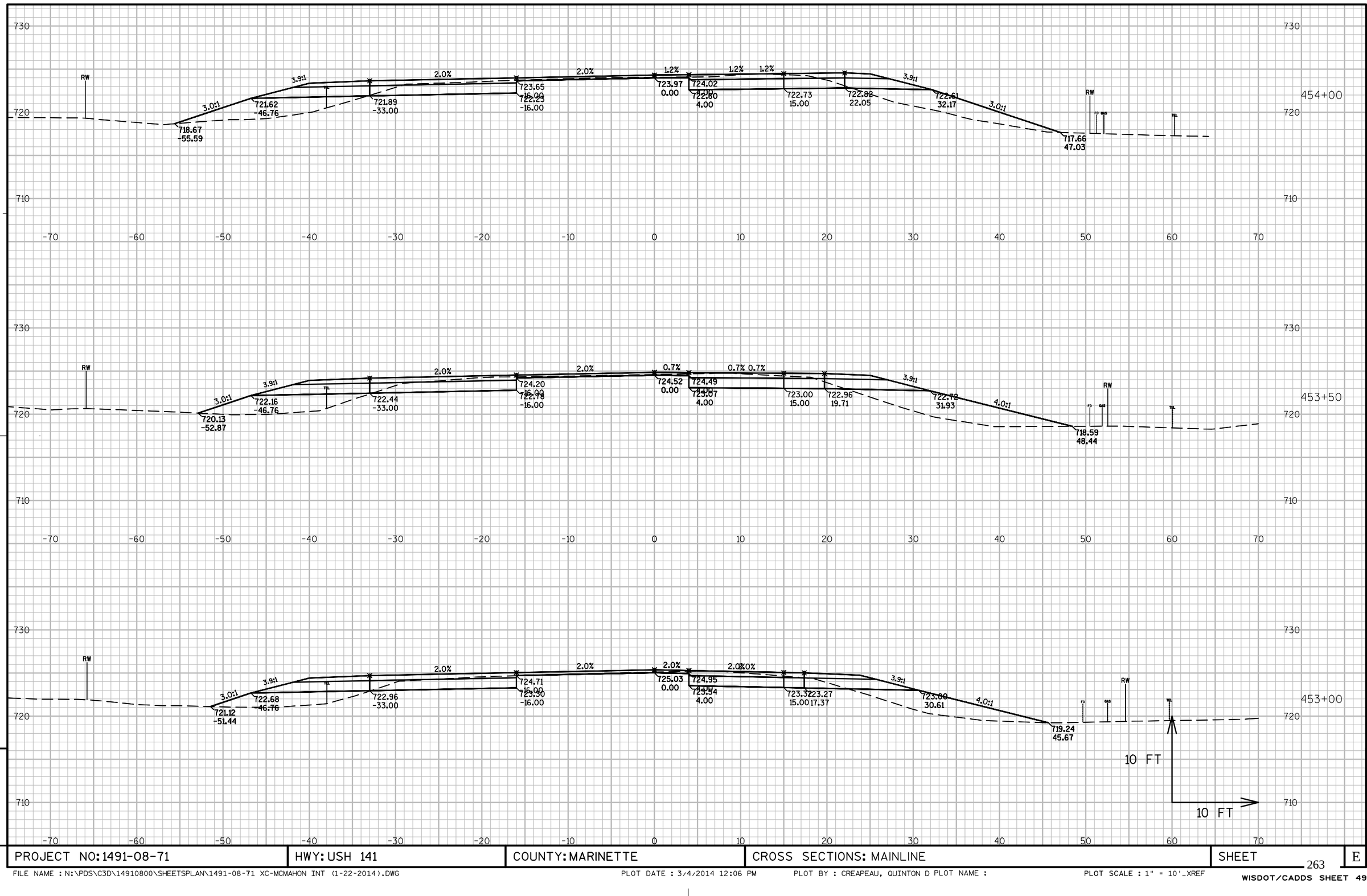
FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:09 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 262	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:09 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



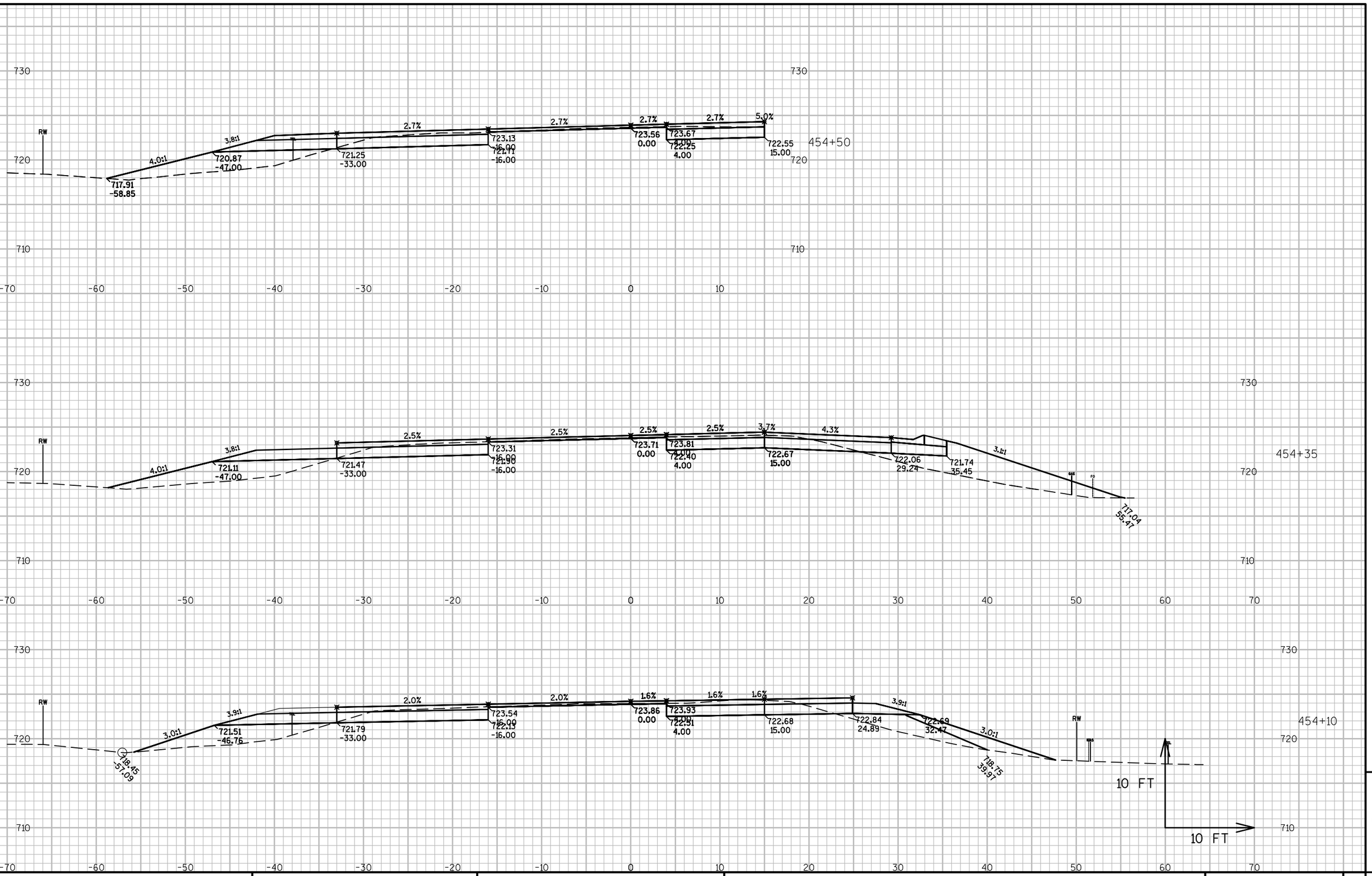
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

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FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-MCMAHON INT (1-22-2014).DWG PLOT DATE : 3/4/2014 12:06 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

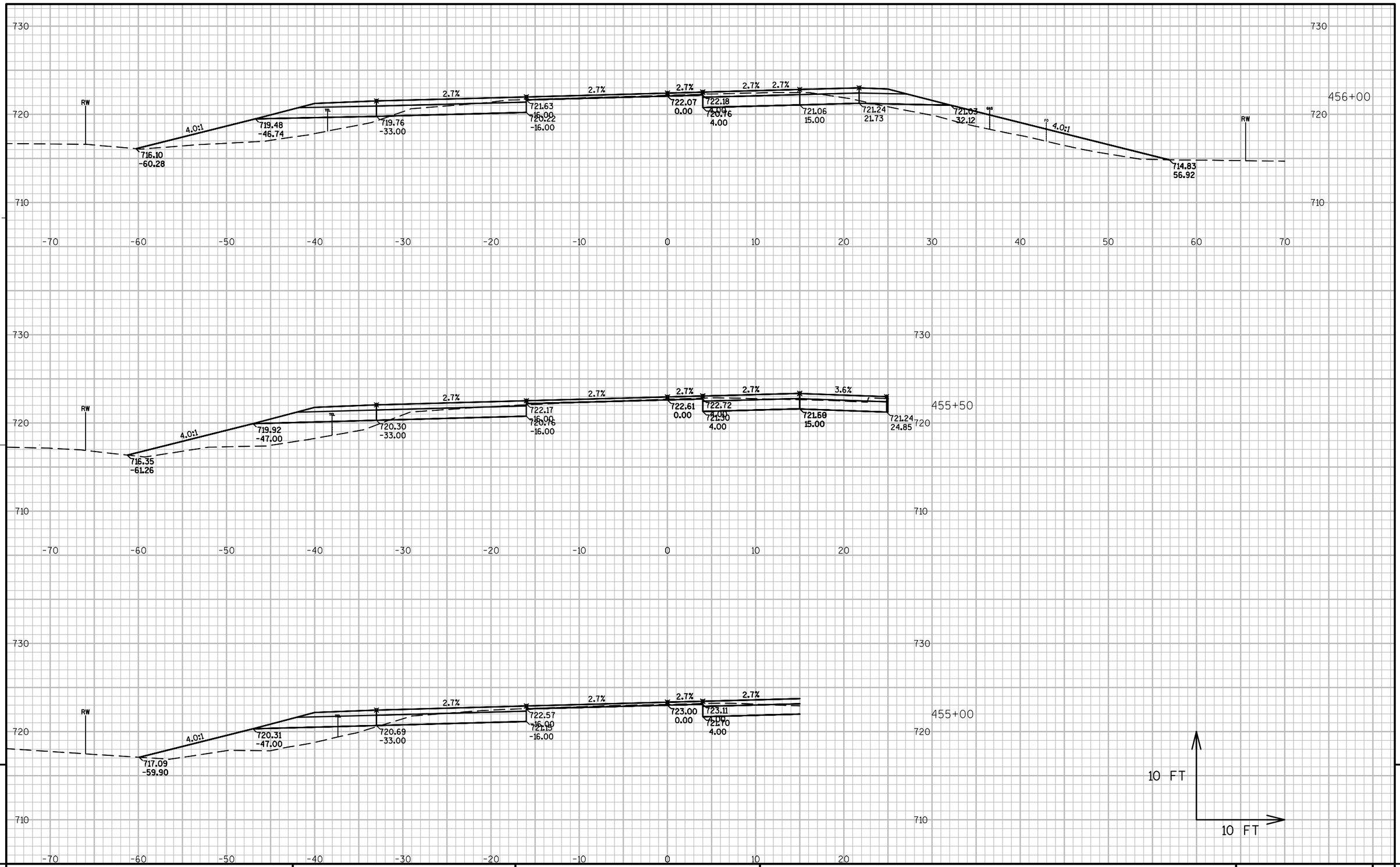
WISDOT/CADDS SHEET 49



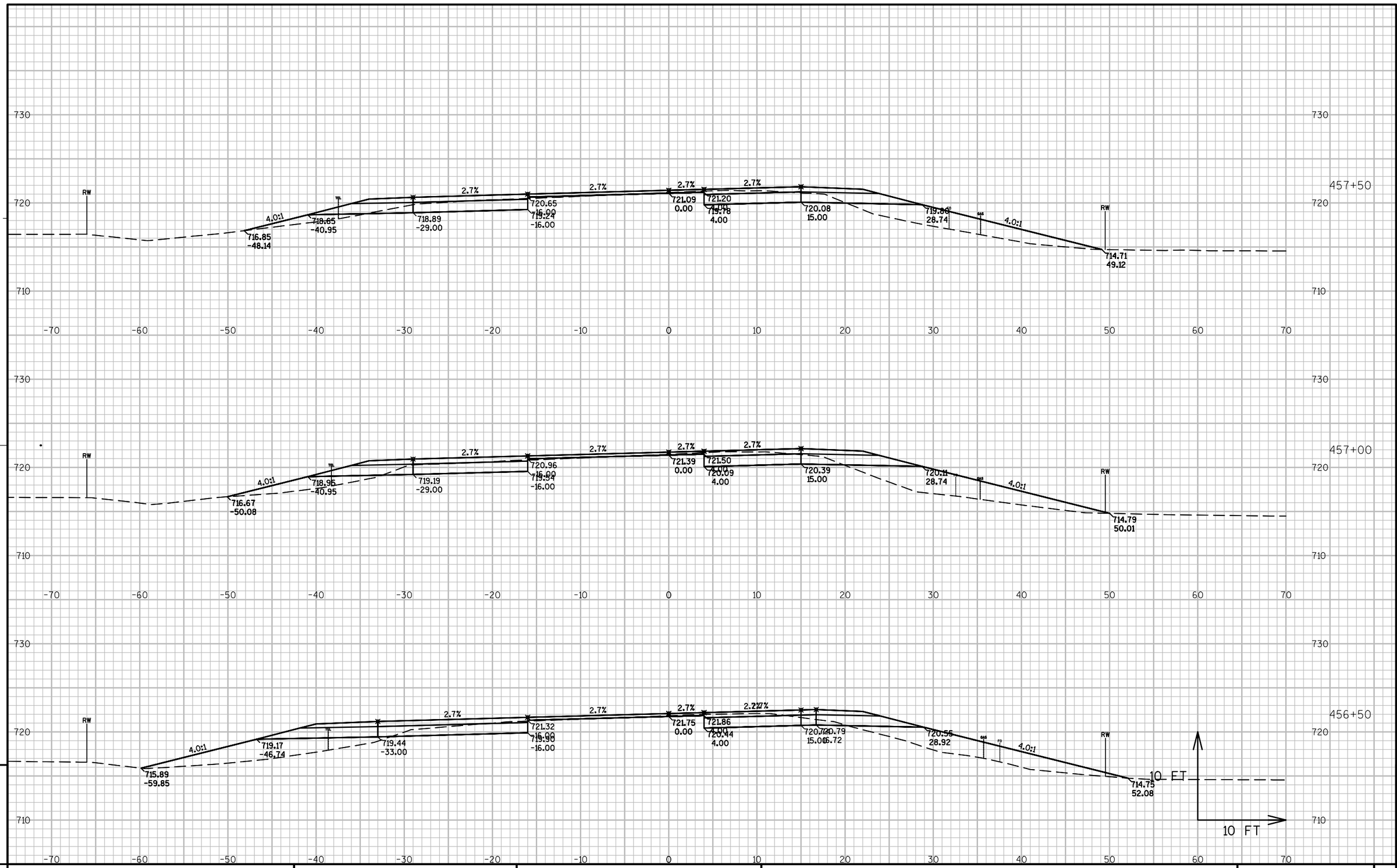
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 264	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-MCMAHON INT (1-22-2014).DWG PLOT DATE : 3/4/2014 12:10 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

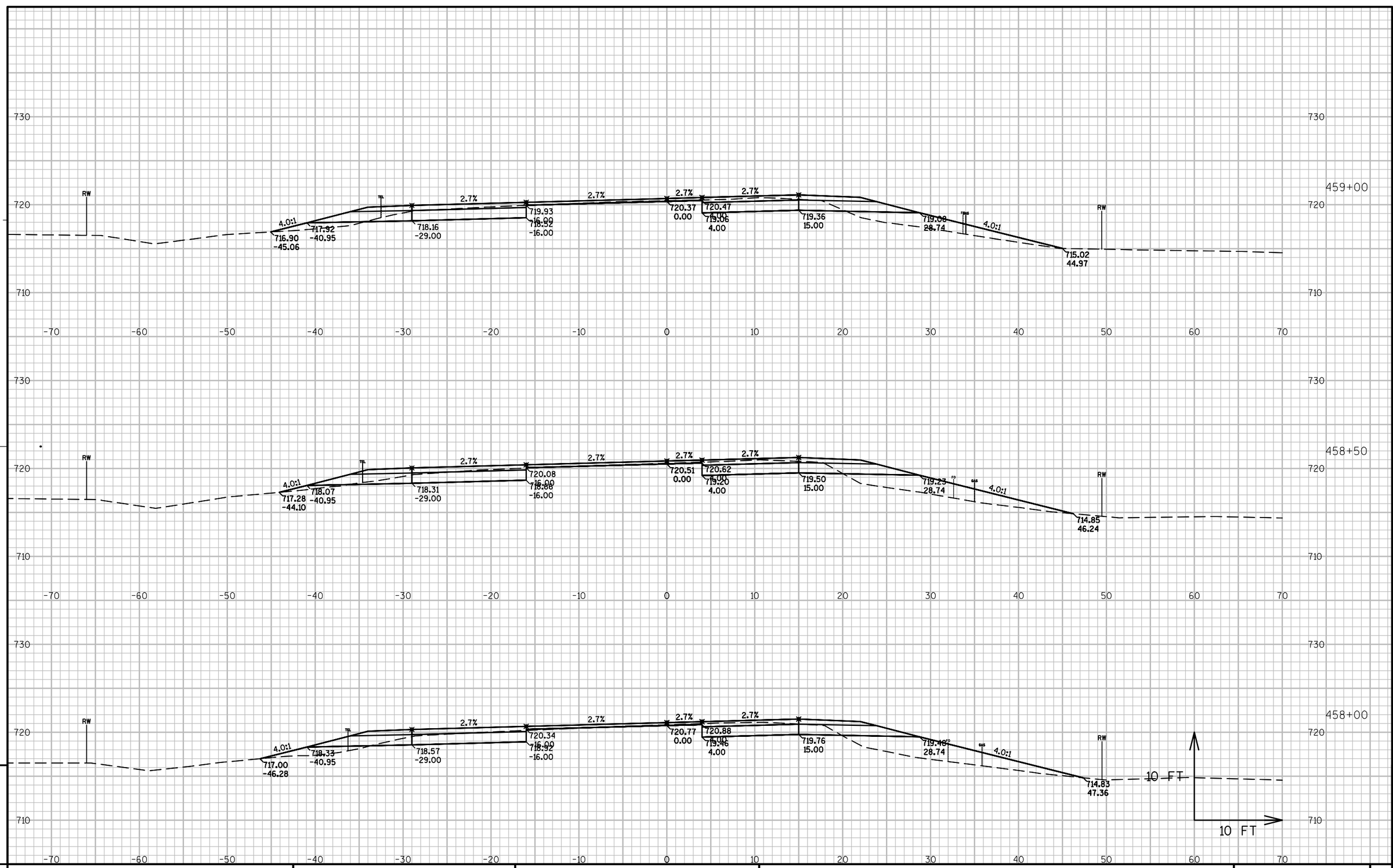
WISDOT/CADDS SHEET 49



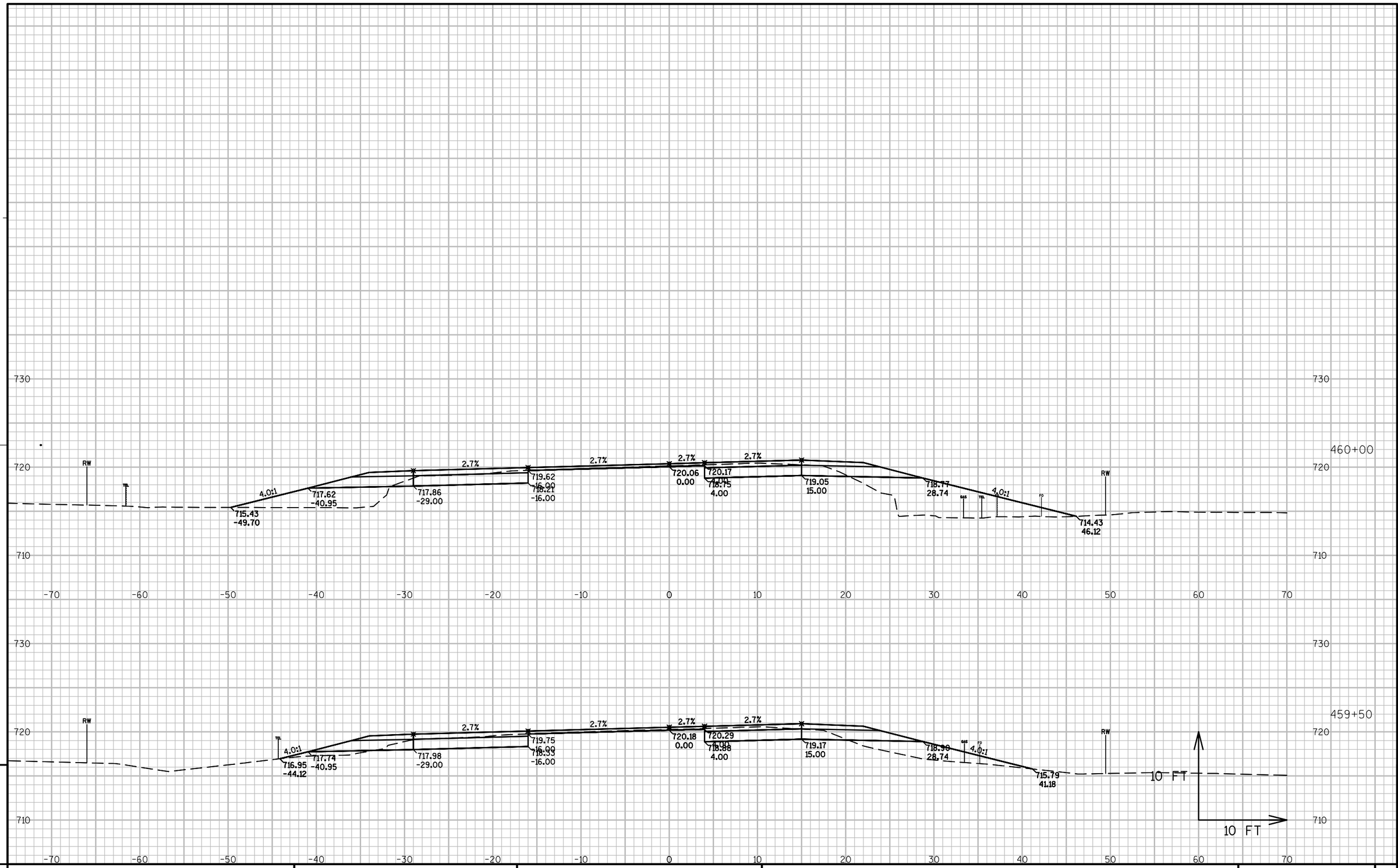
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 265	E



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E



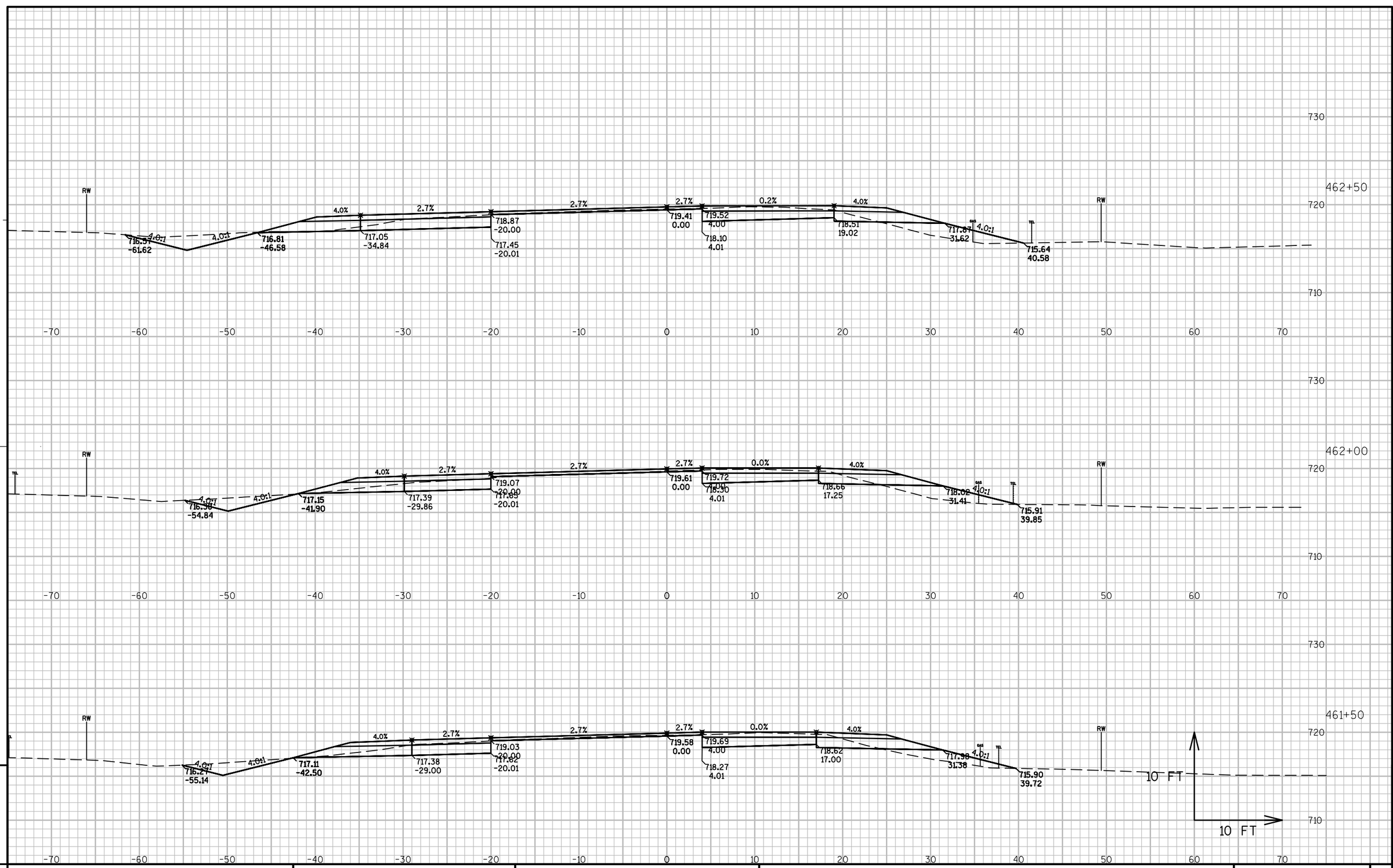
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

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WISDOT/CADDS SHEET 49



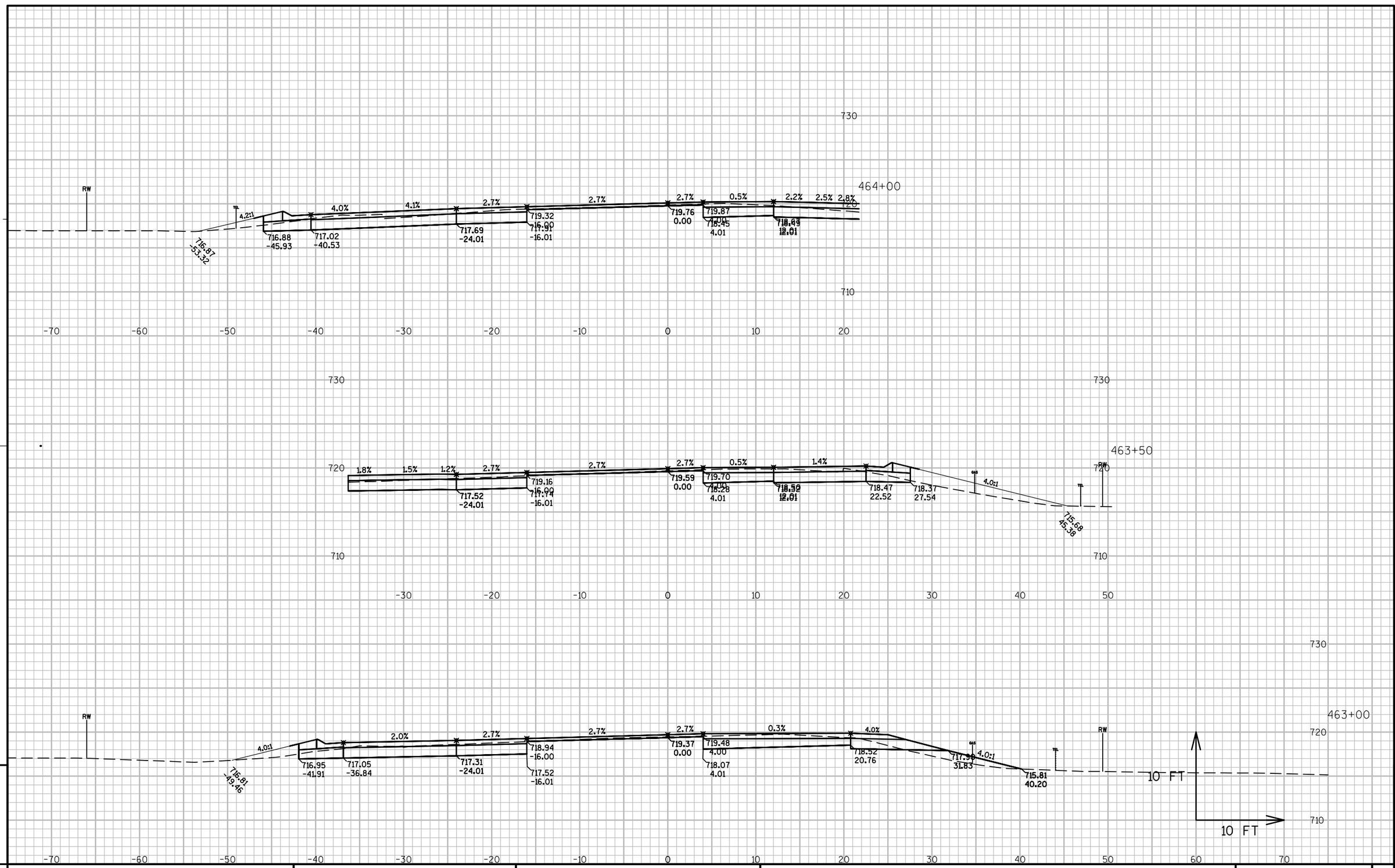
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-NEJEDLO-MARTIN INT (1-22-2014).DWG PLOT DATE : 3/5/2014 8:58 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

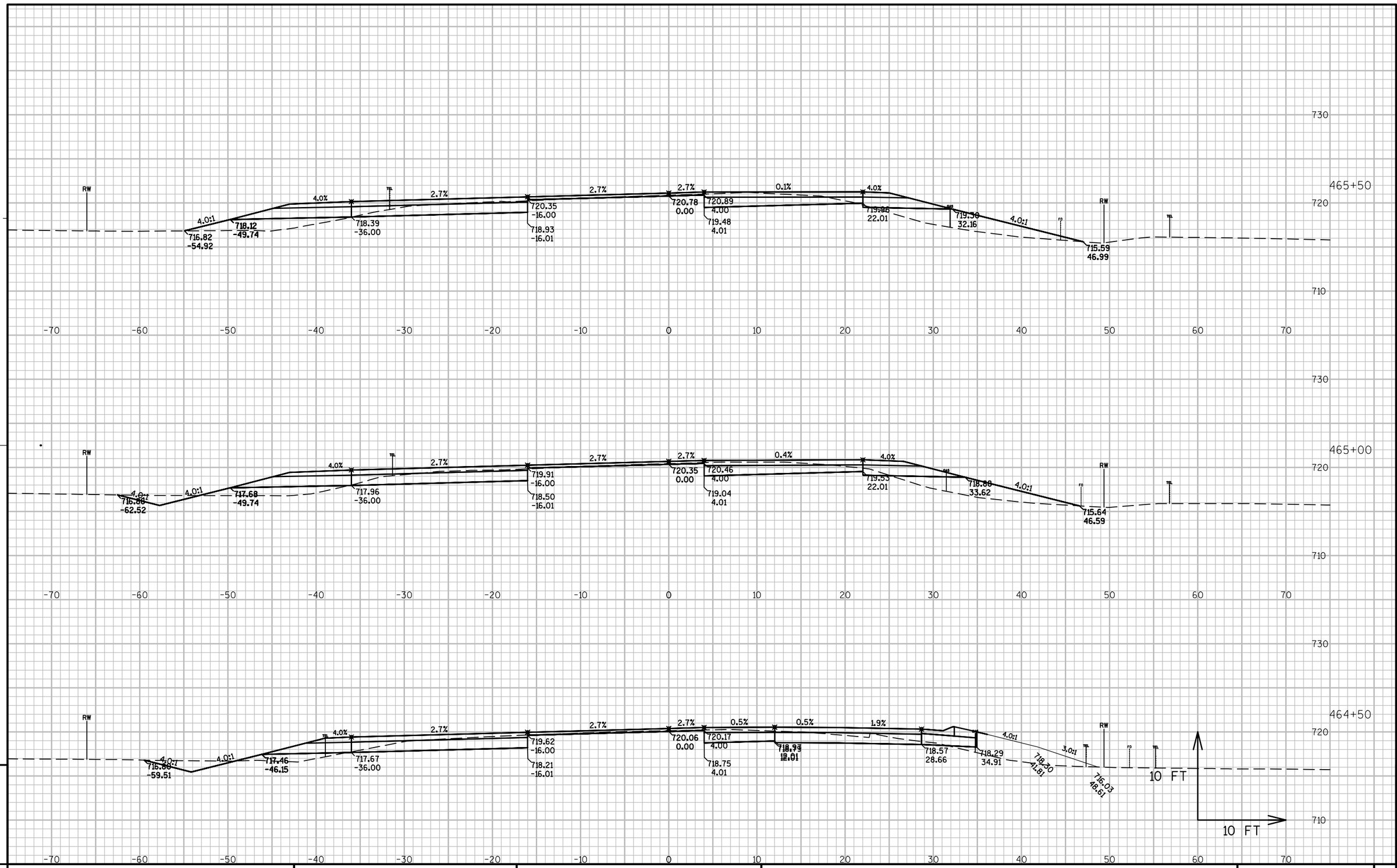
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 270	E

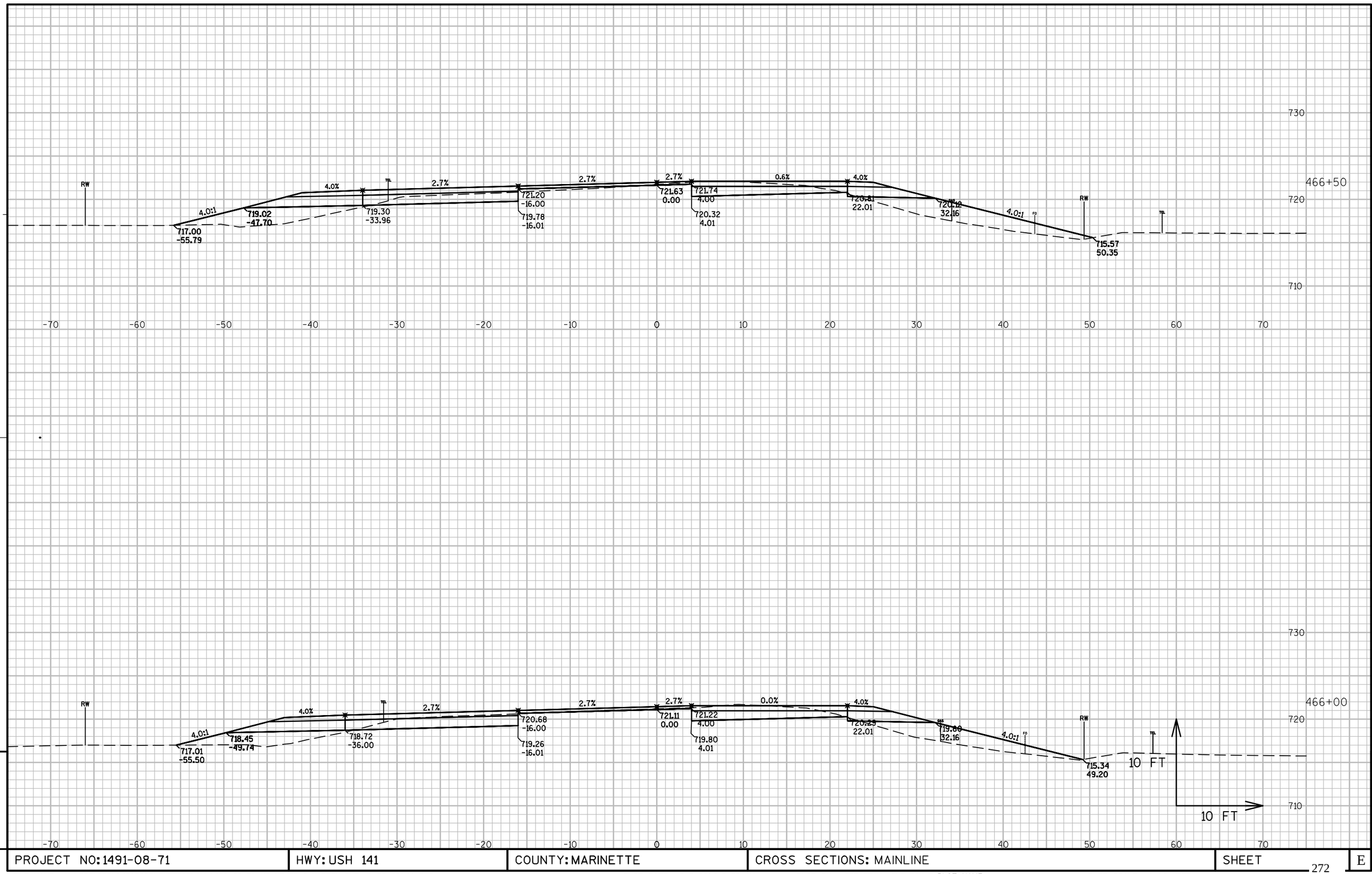
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WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

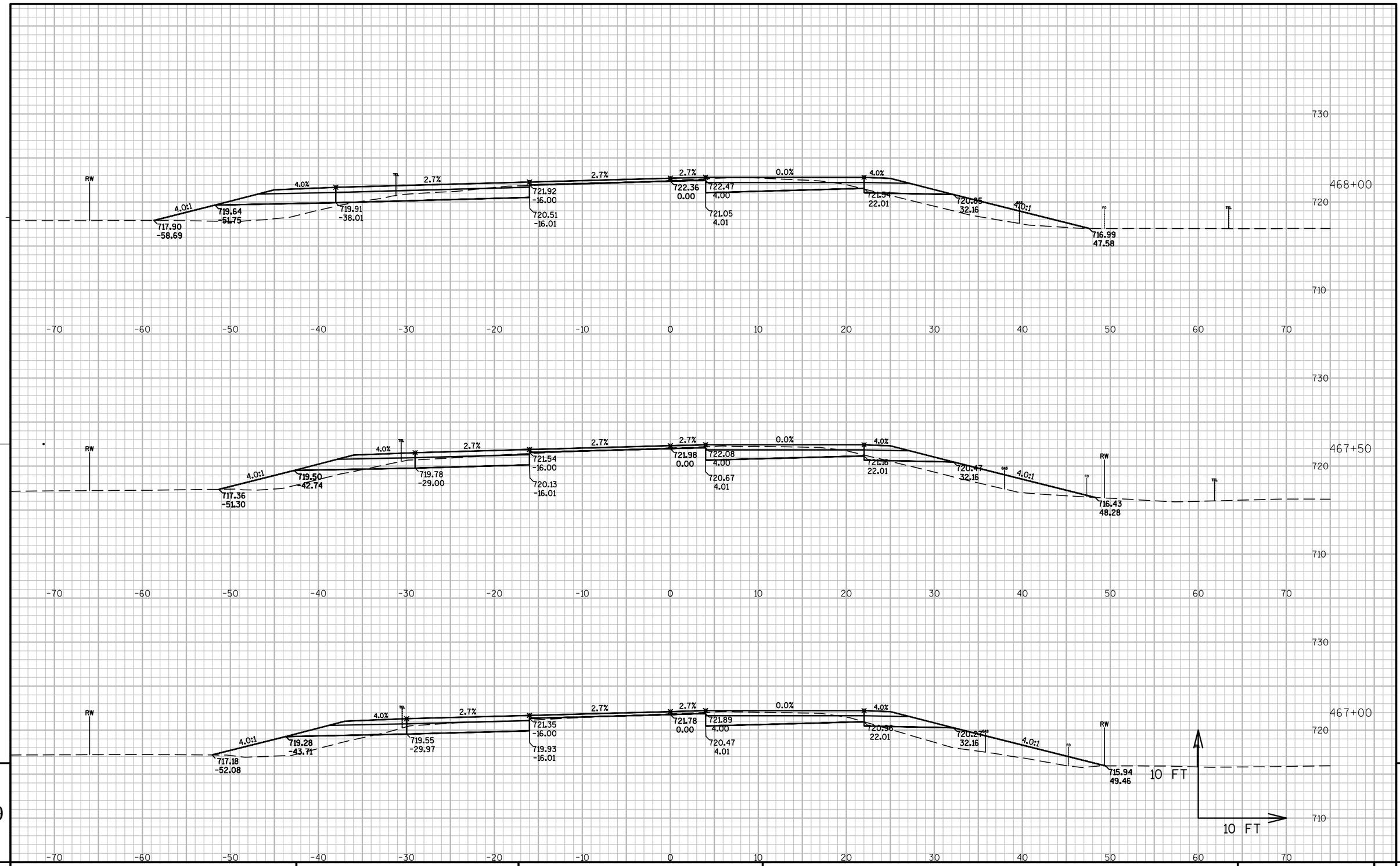
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET 272 E

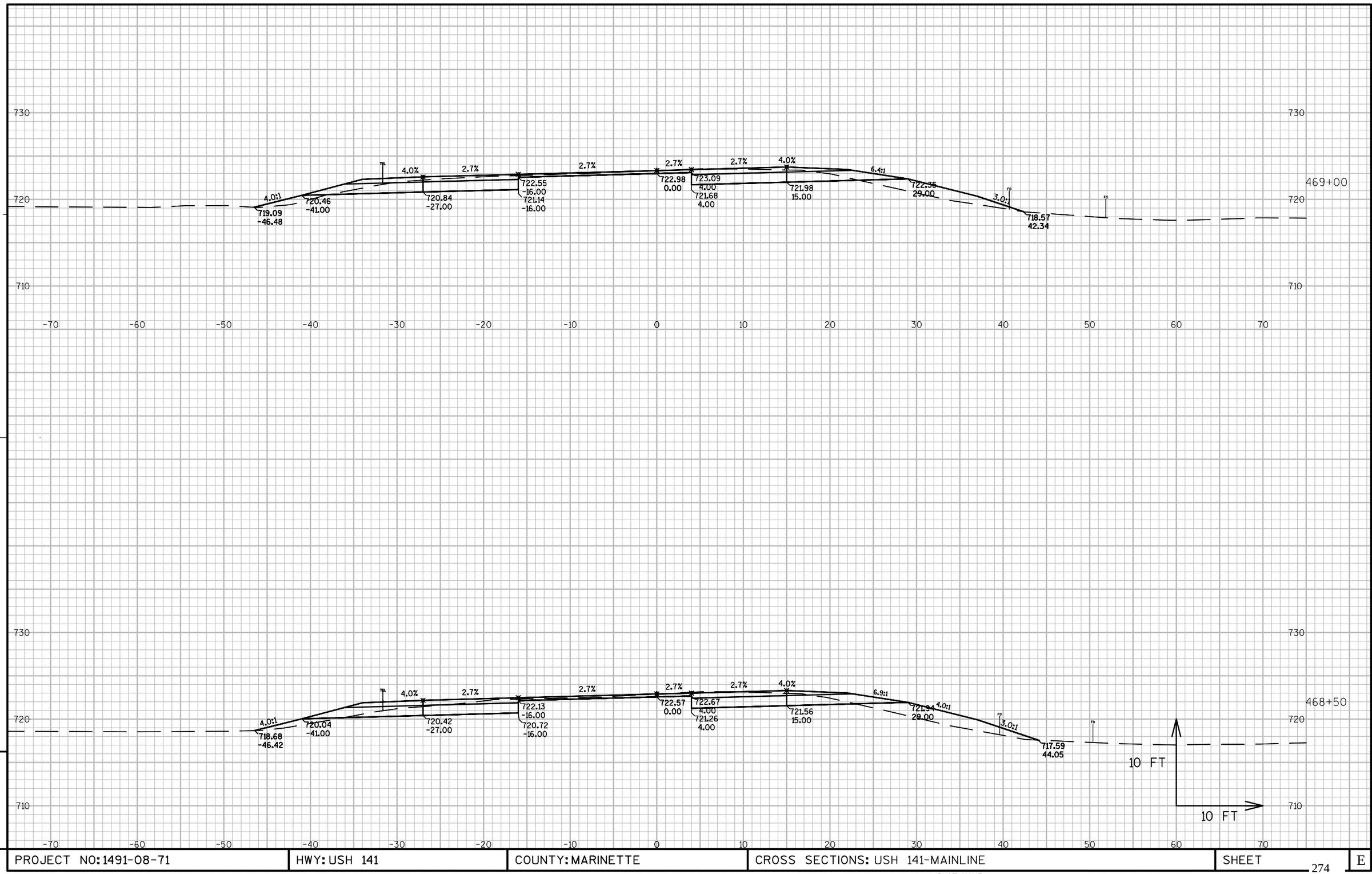
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WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: MAINLINE	SHEET	E

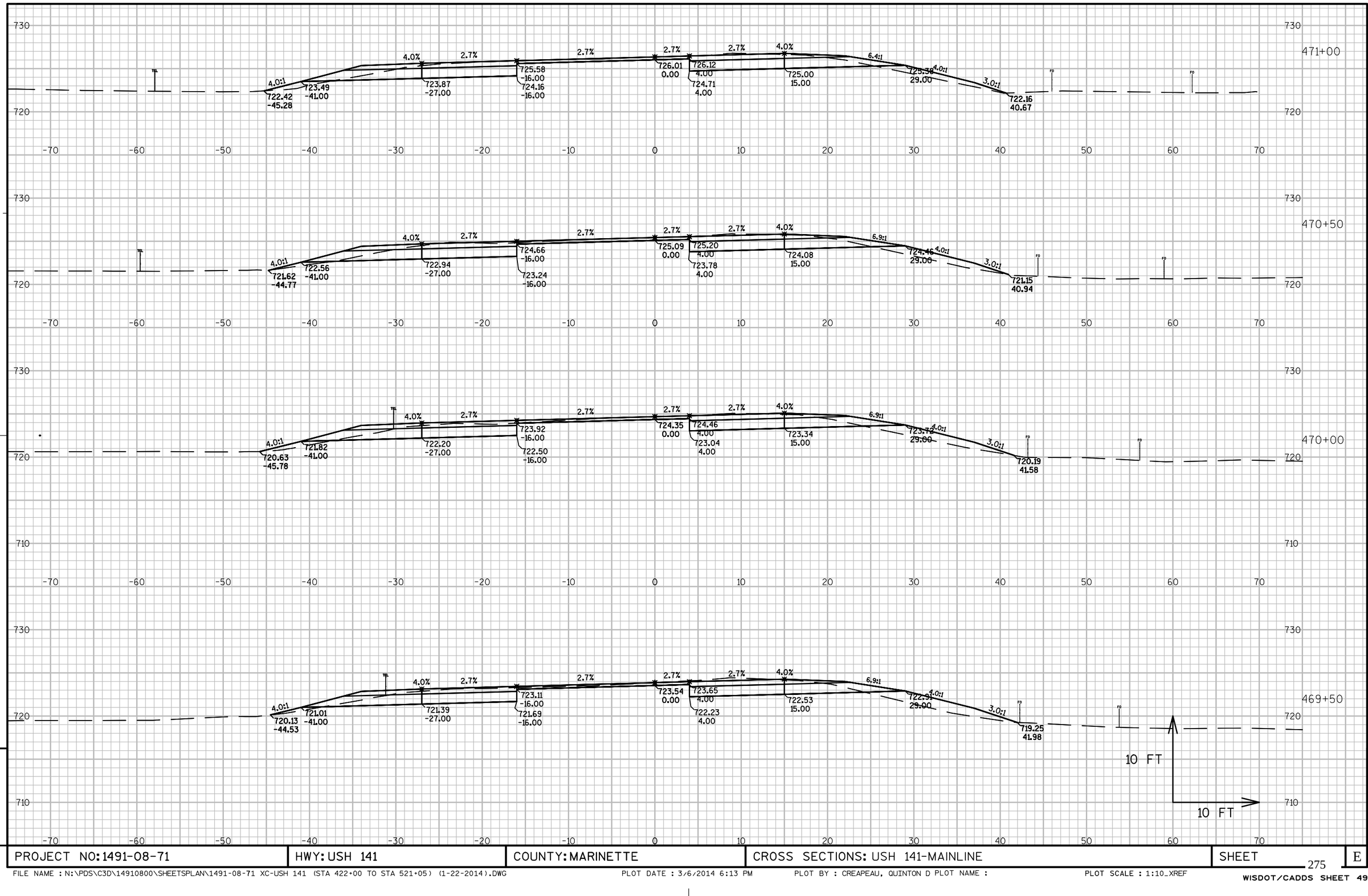
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 274	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/7/2014 9:29 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



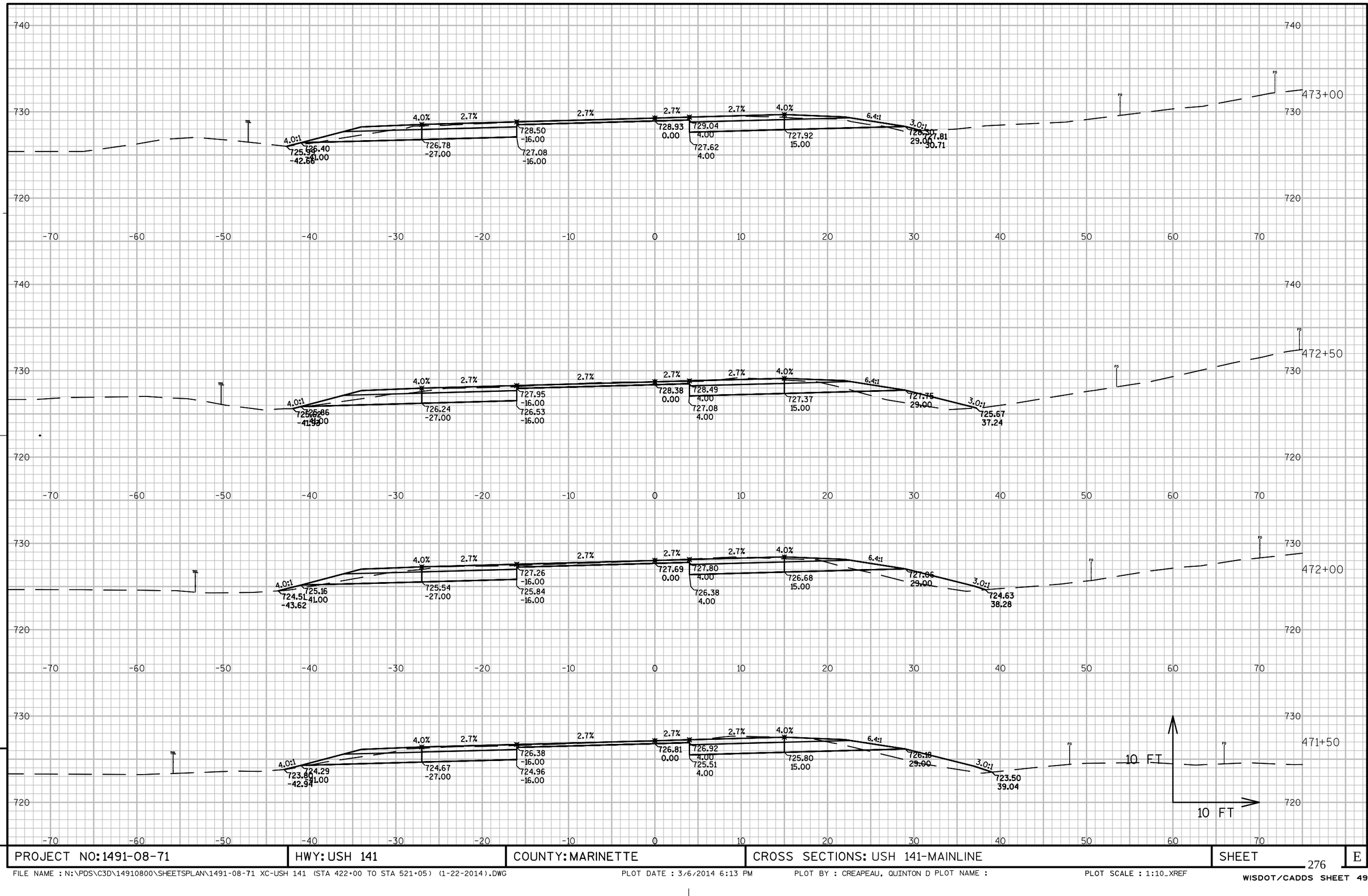
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 275	E

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FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:13 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

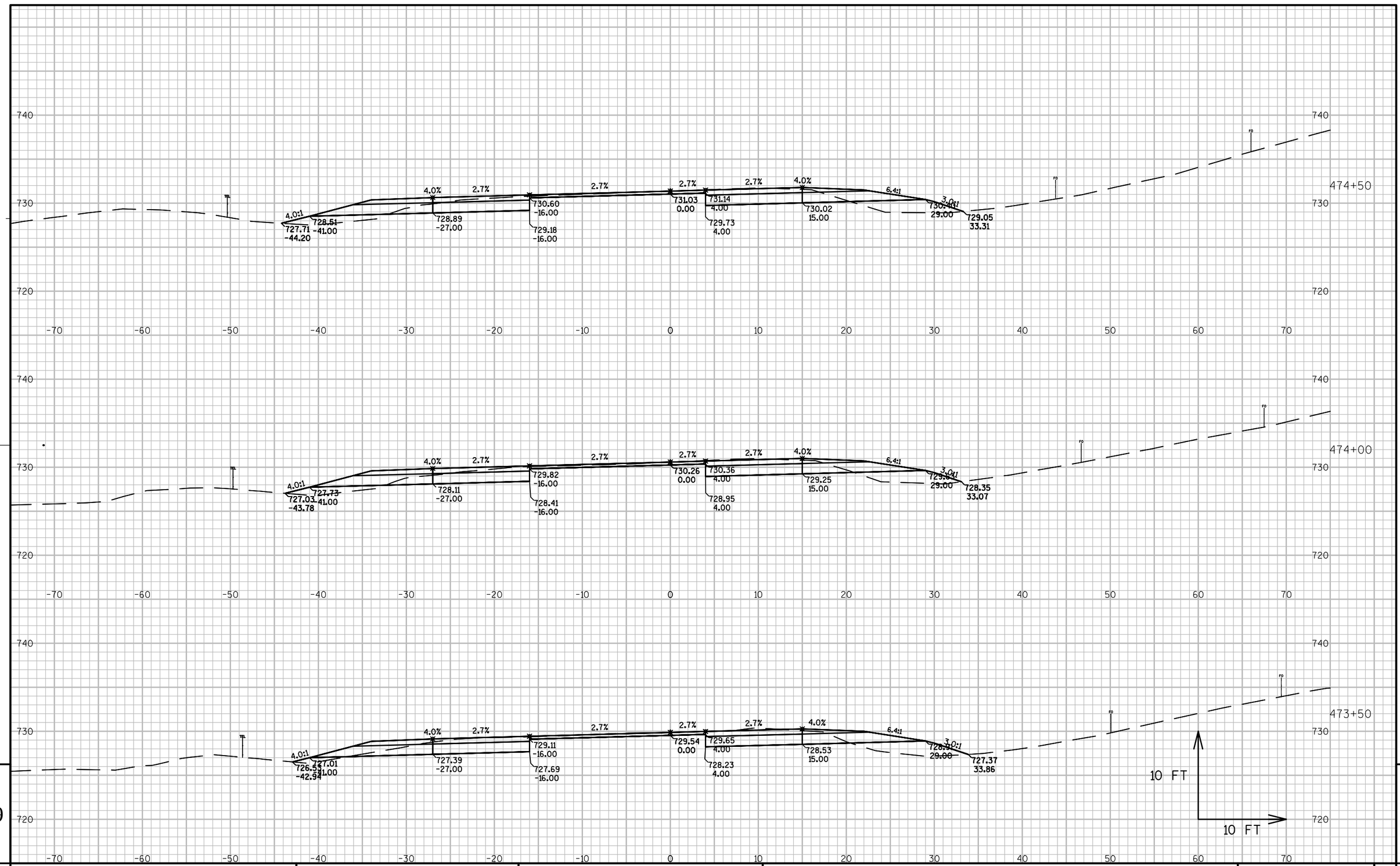
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 276	E

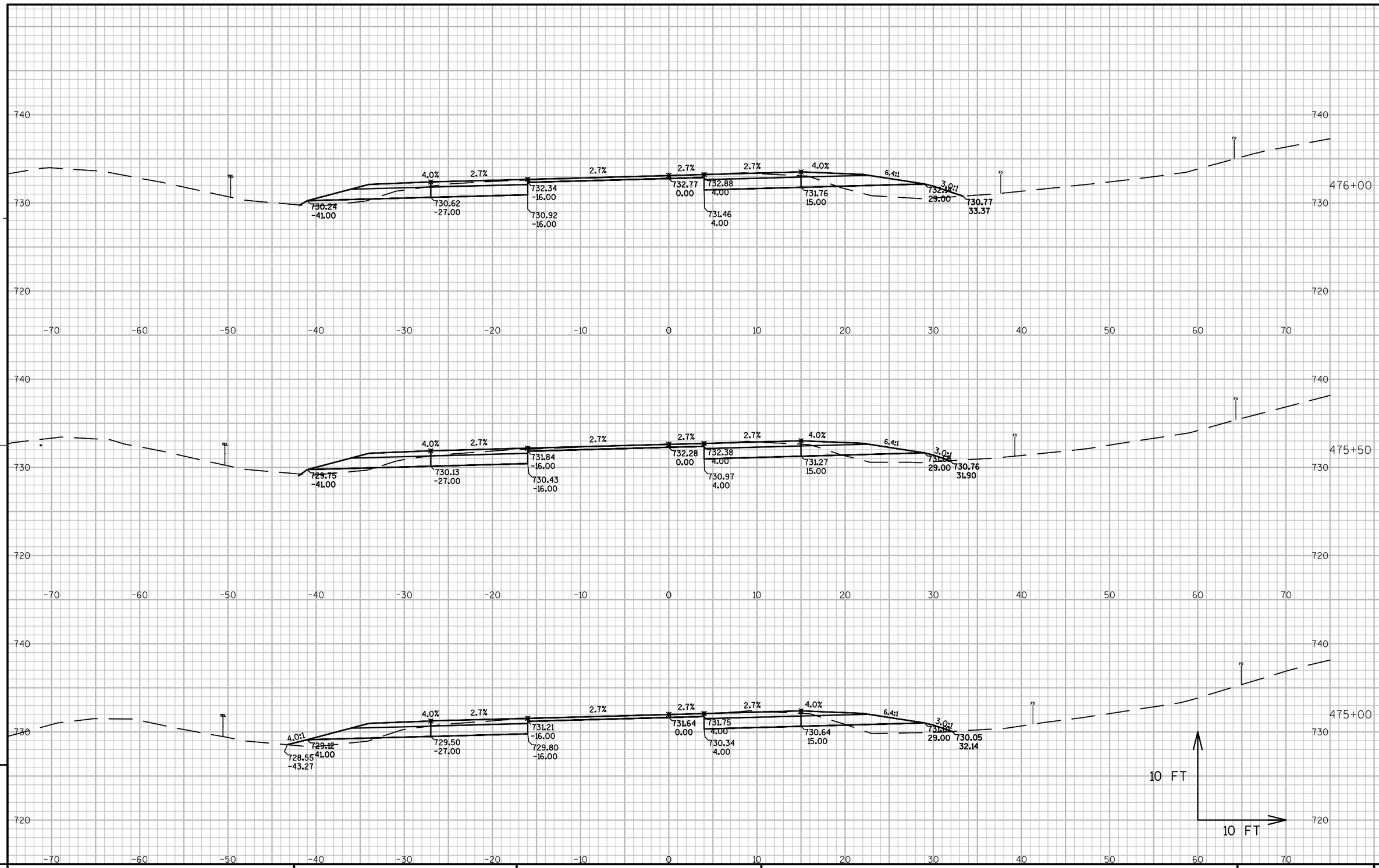
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WISDOT/CADDS SHEET 49



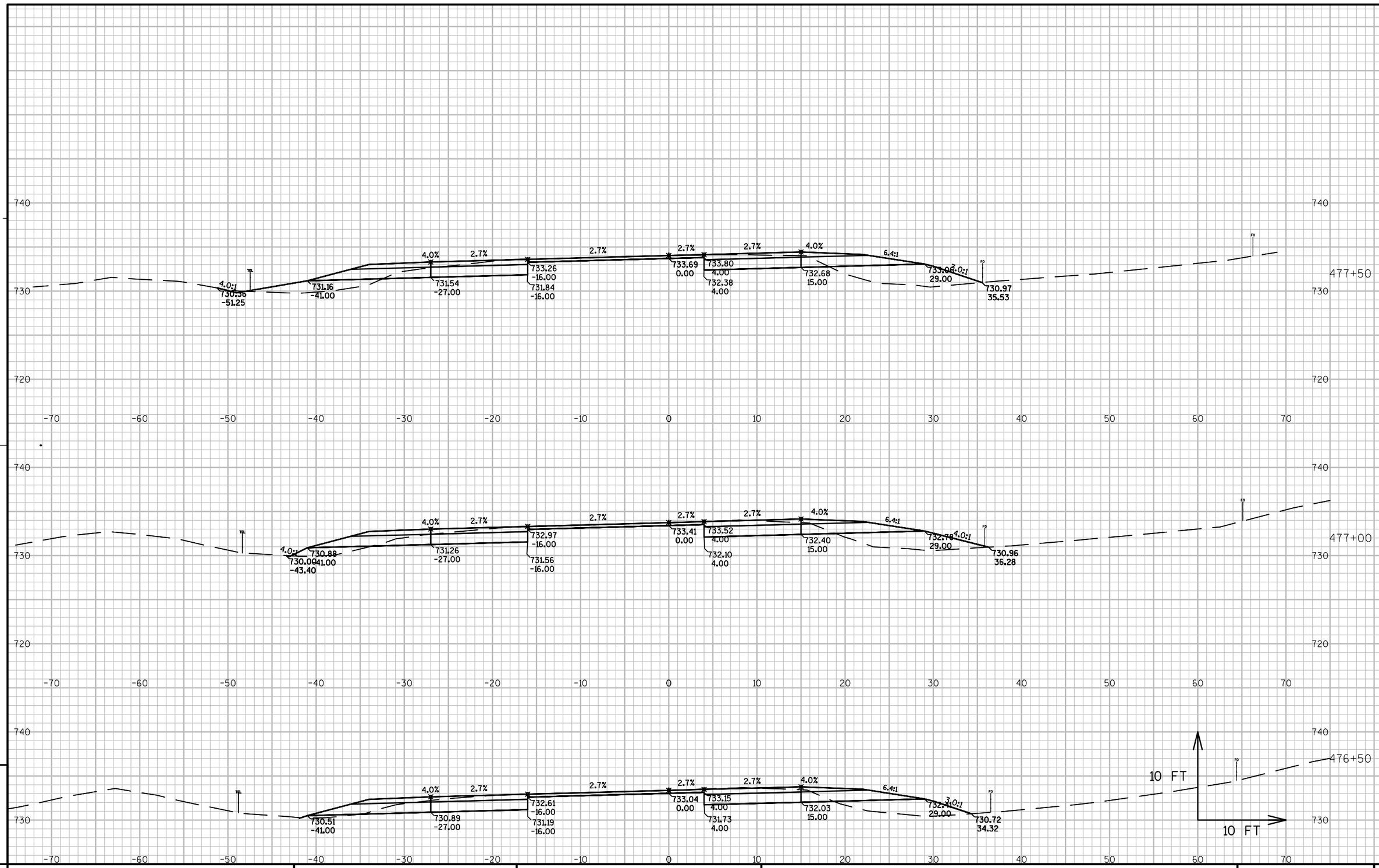
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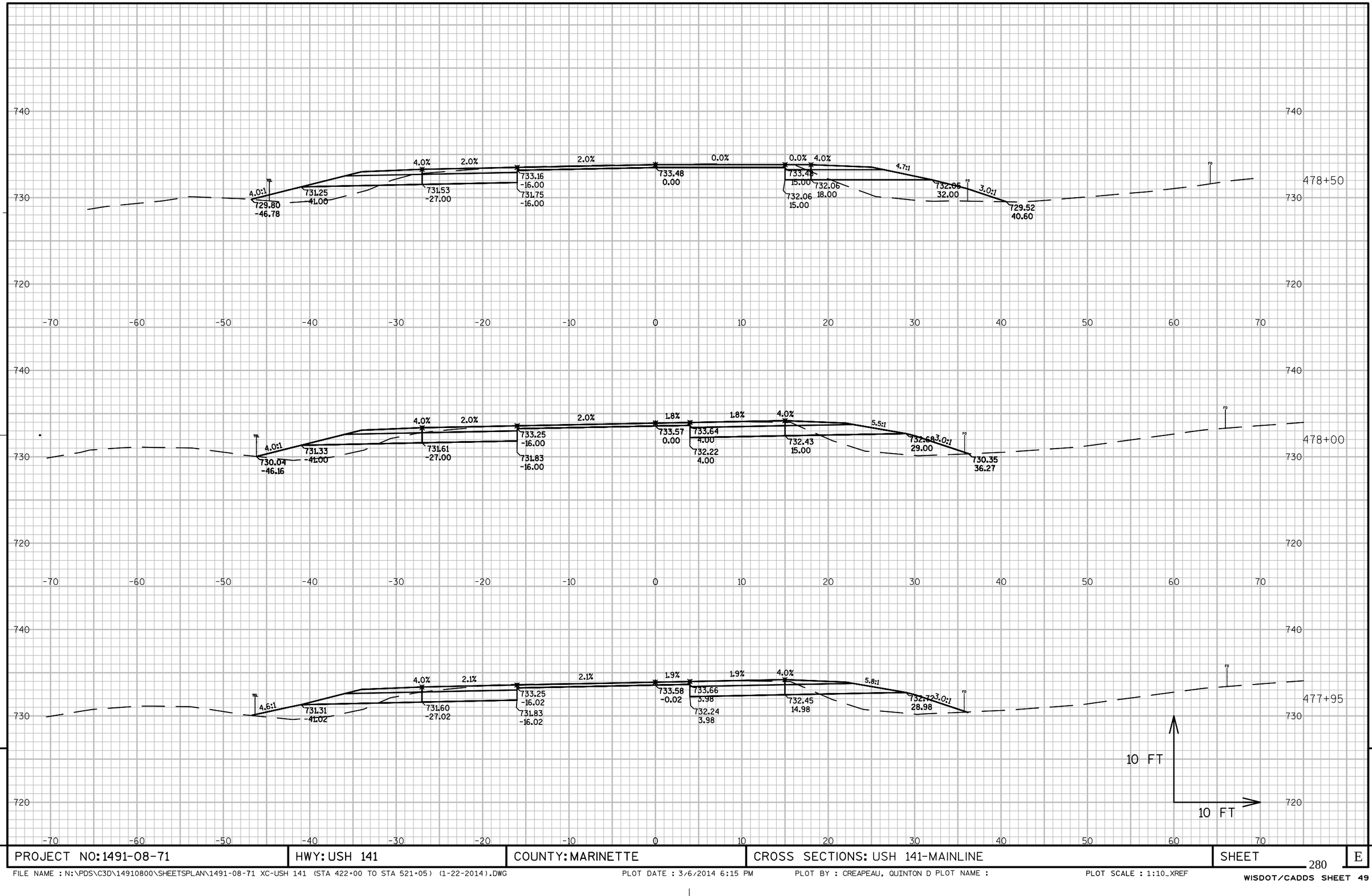
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WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

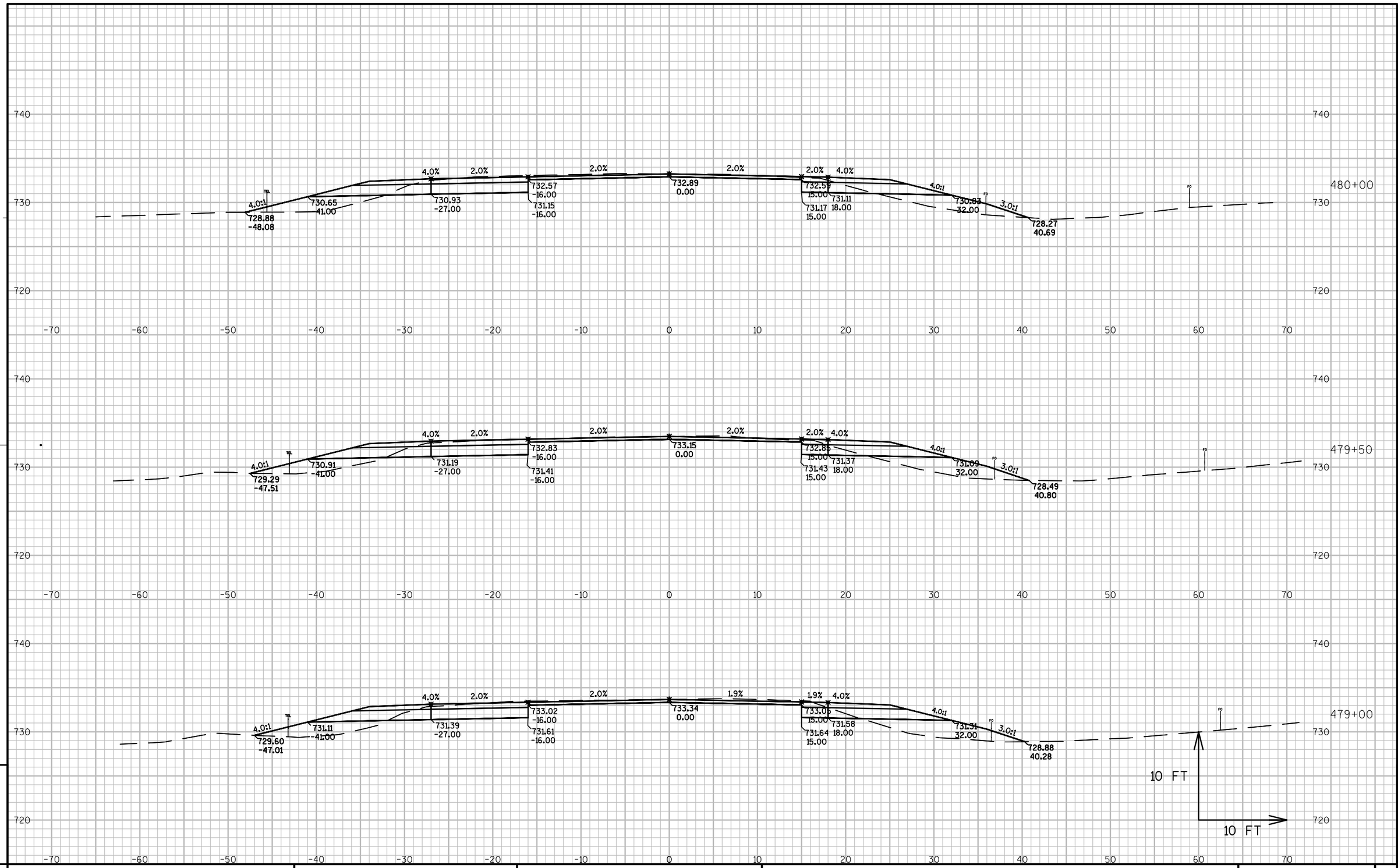
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 280	E

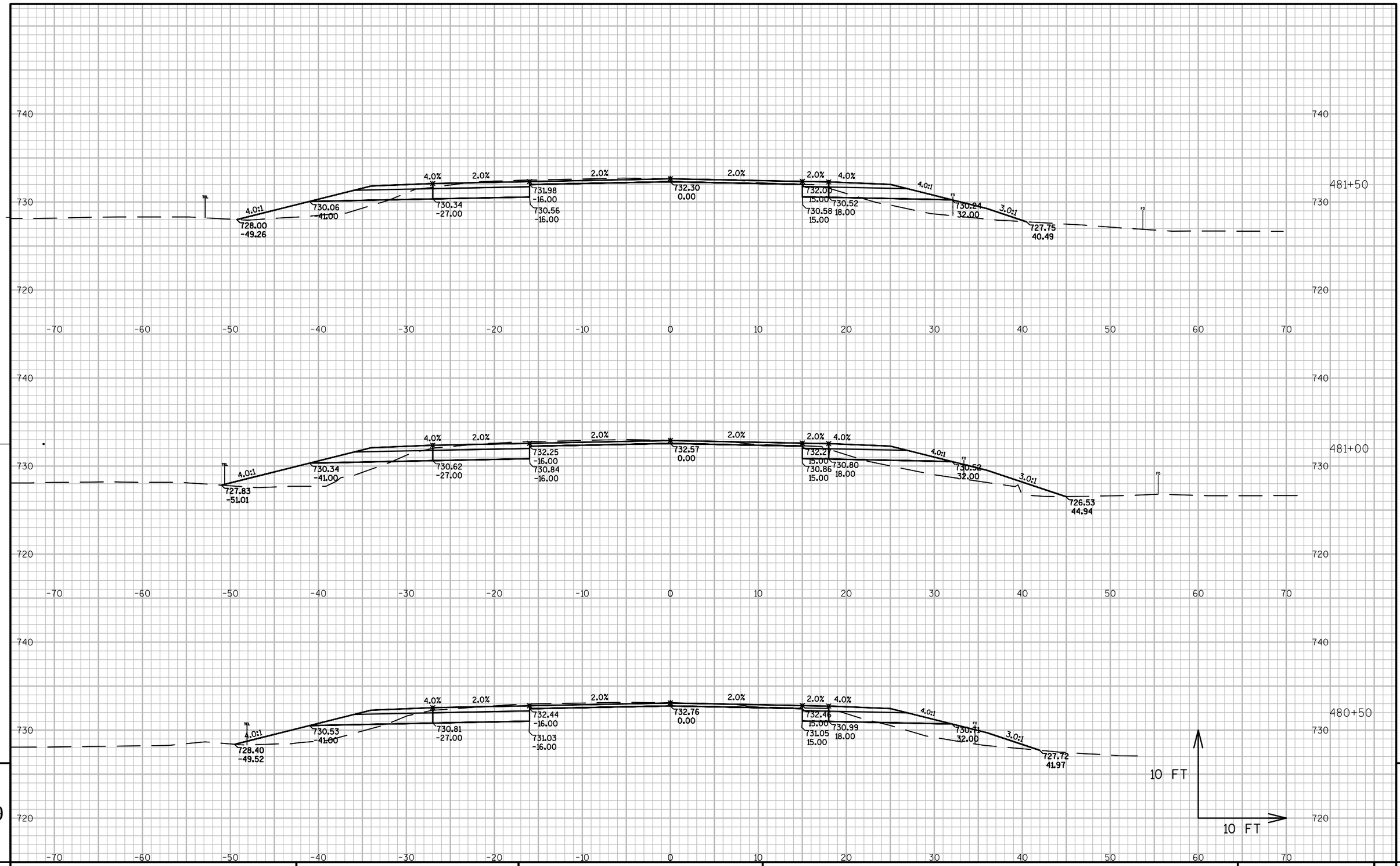
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WISDOT/CADDS SHEET 49



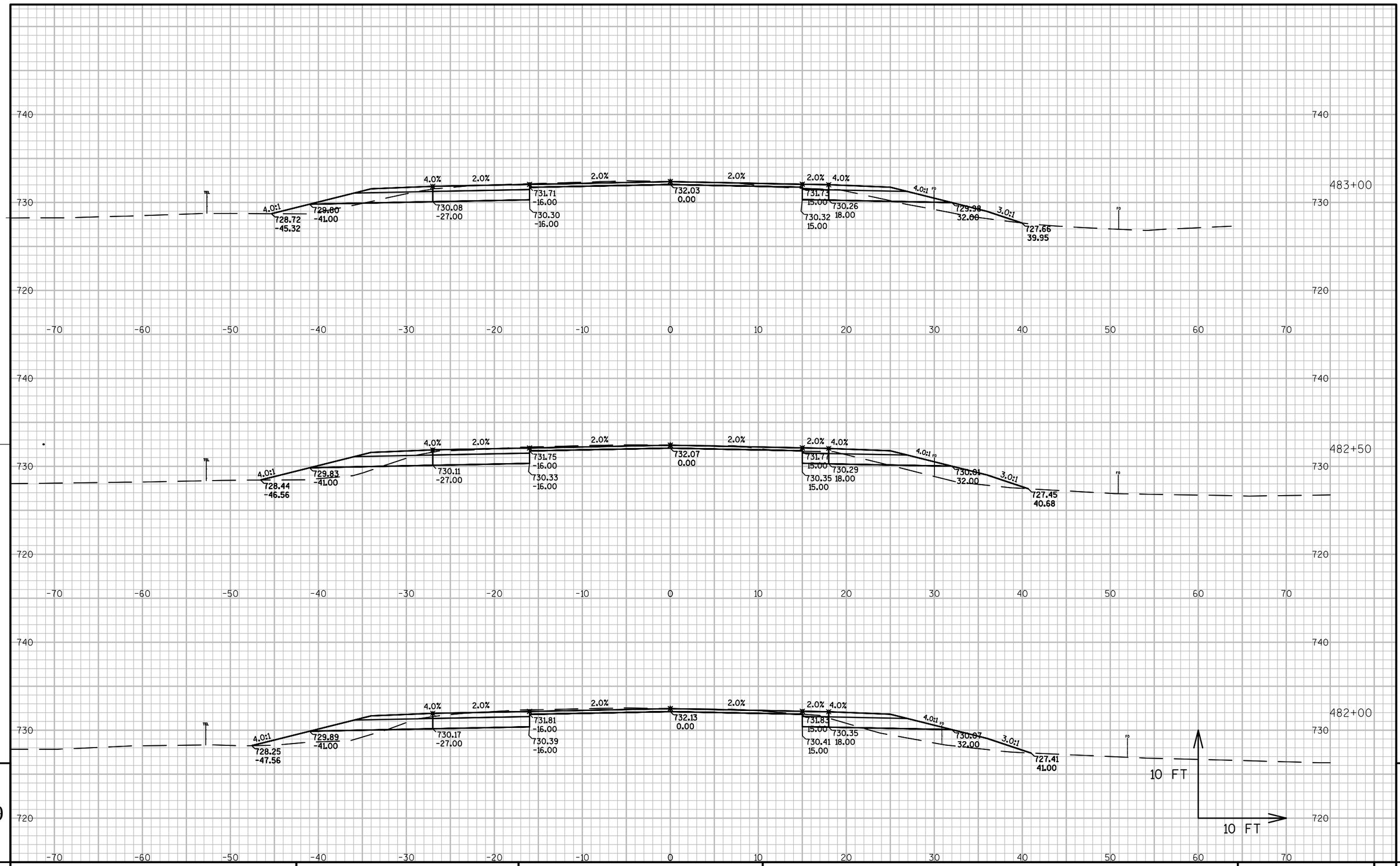
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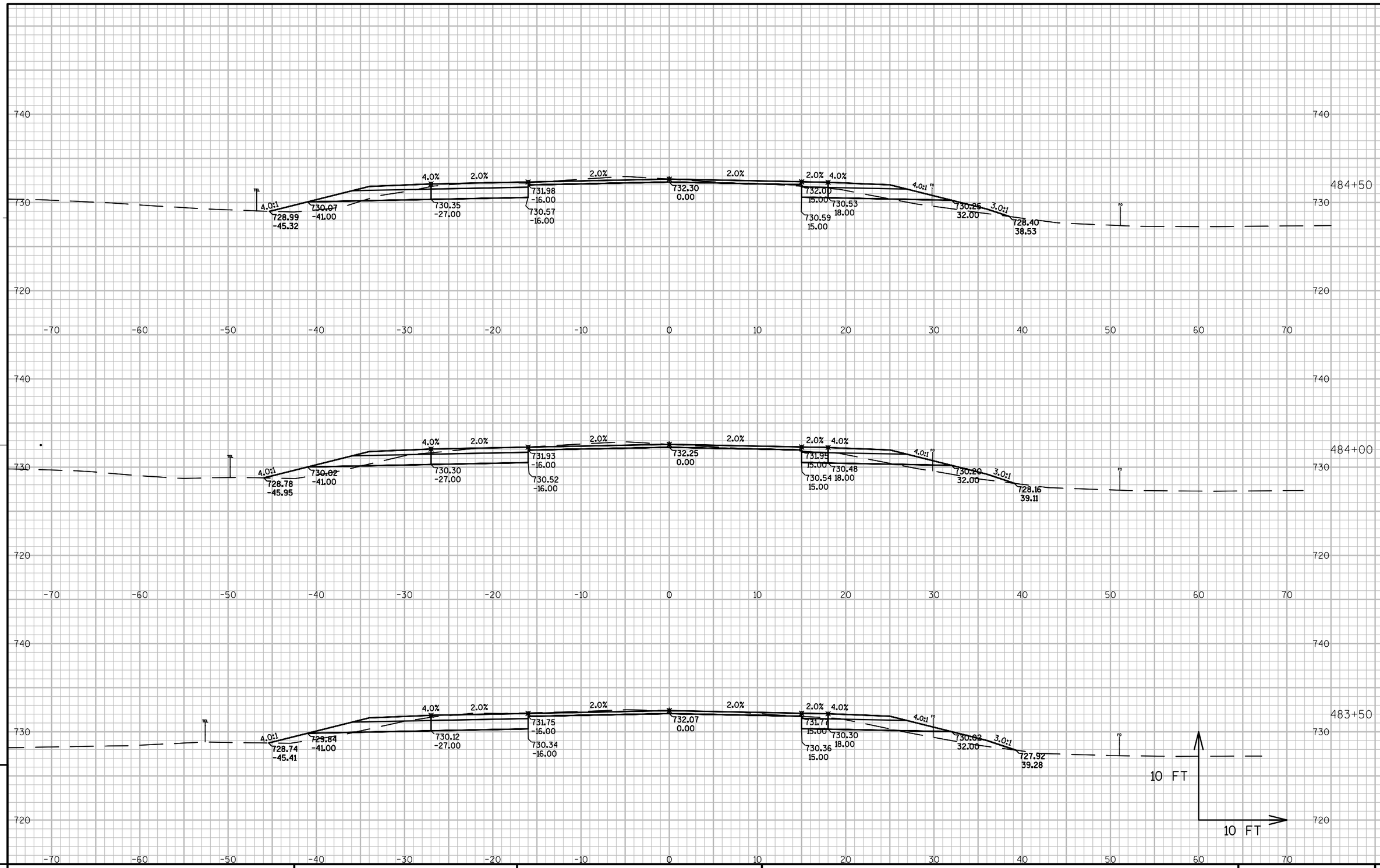
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PLOT DATE : 3/6/2014 6:16 PM
PLOT BY : CREAPEAU, QUINTON D PLOT NAME :
PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



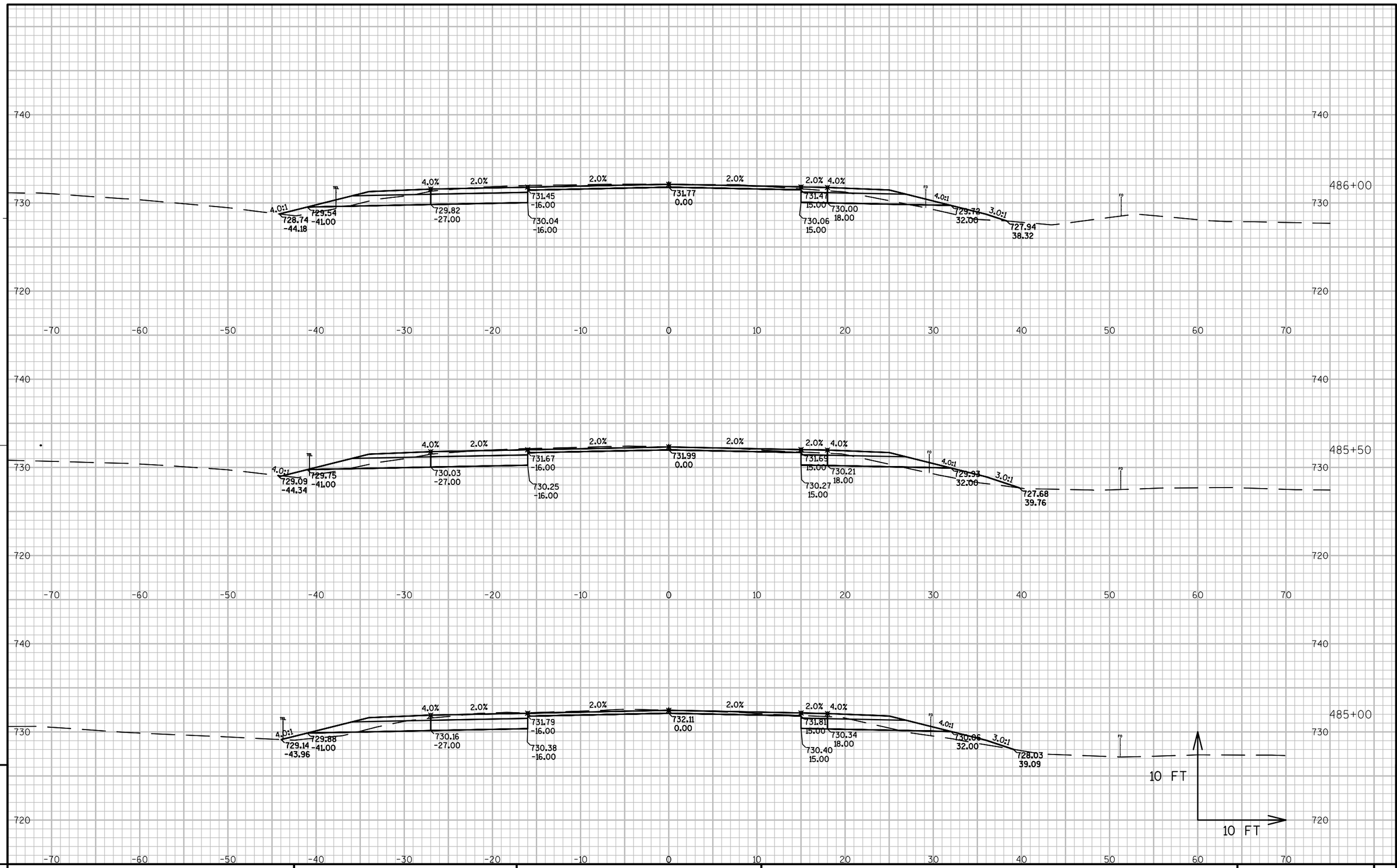
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FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:16 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:17 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49

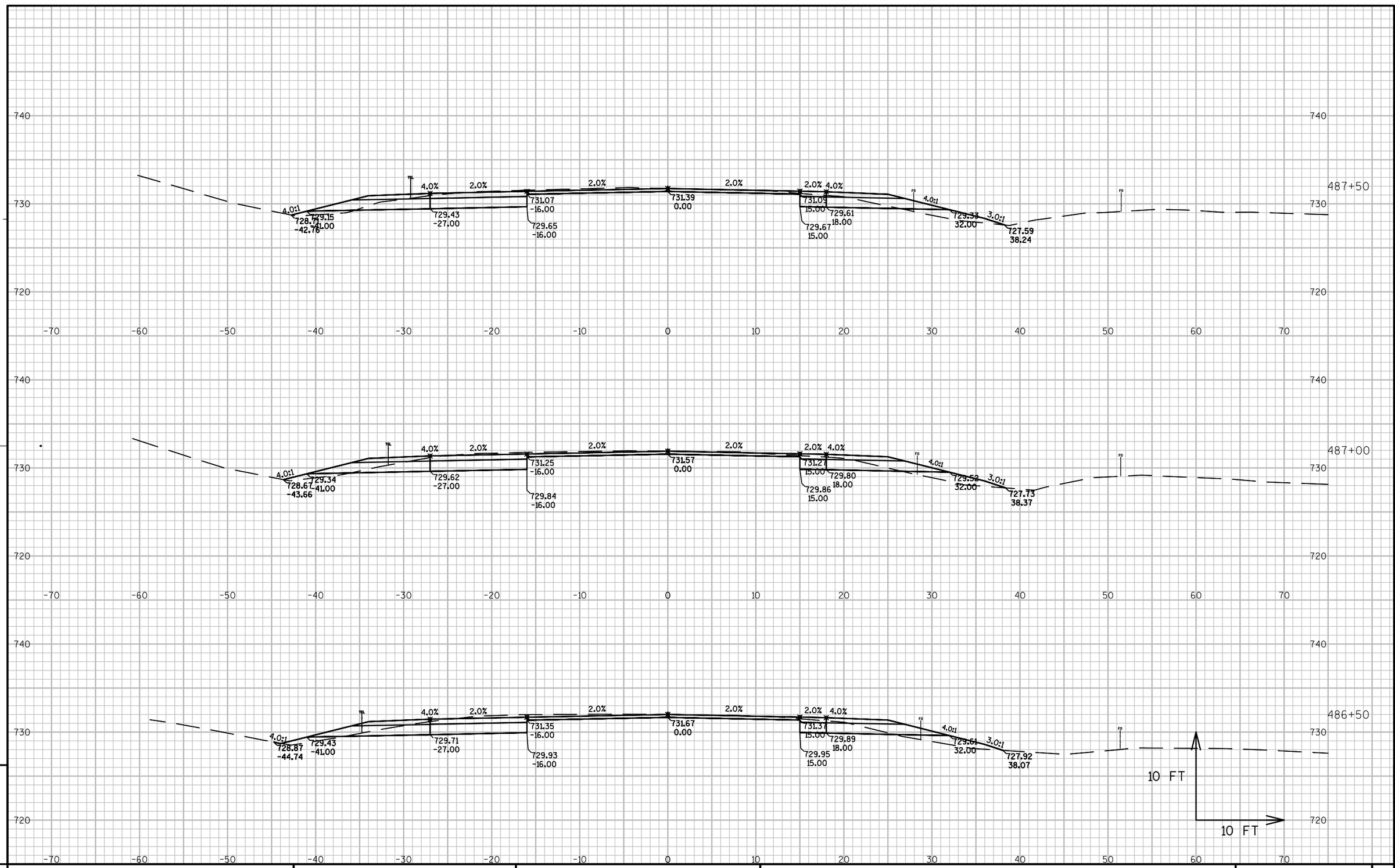


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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

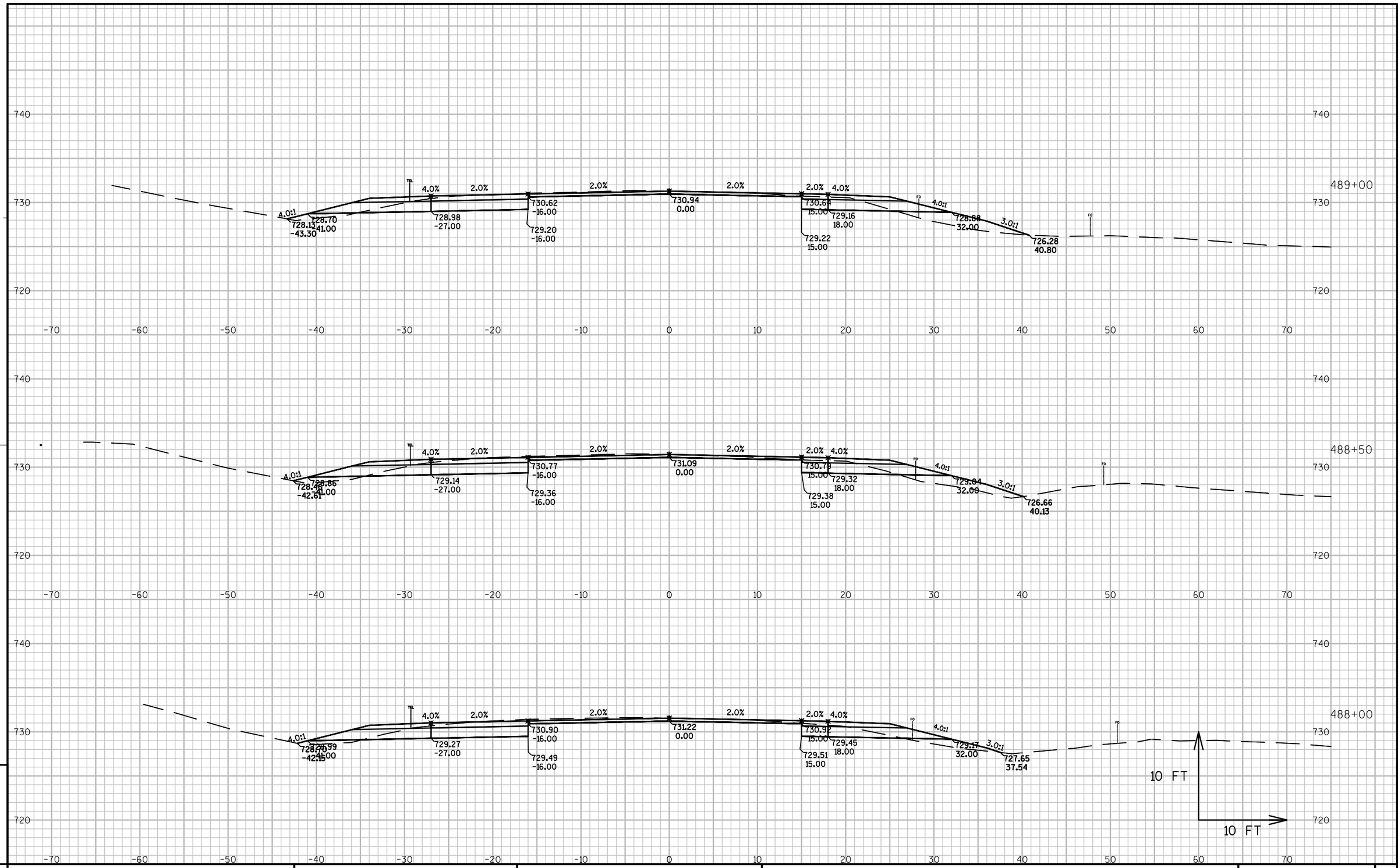
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WISDOT/CADDS SHEET 49



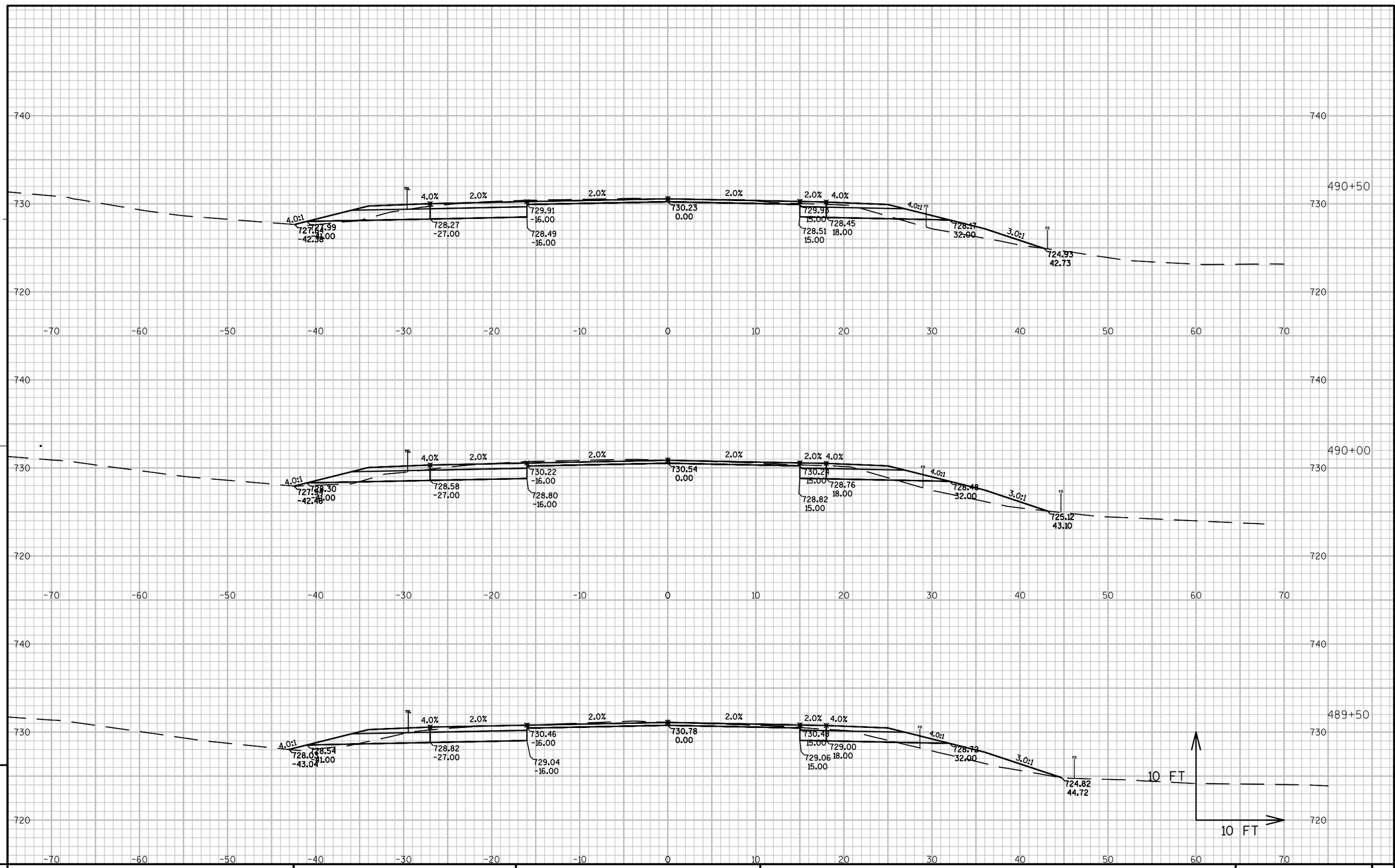
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WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

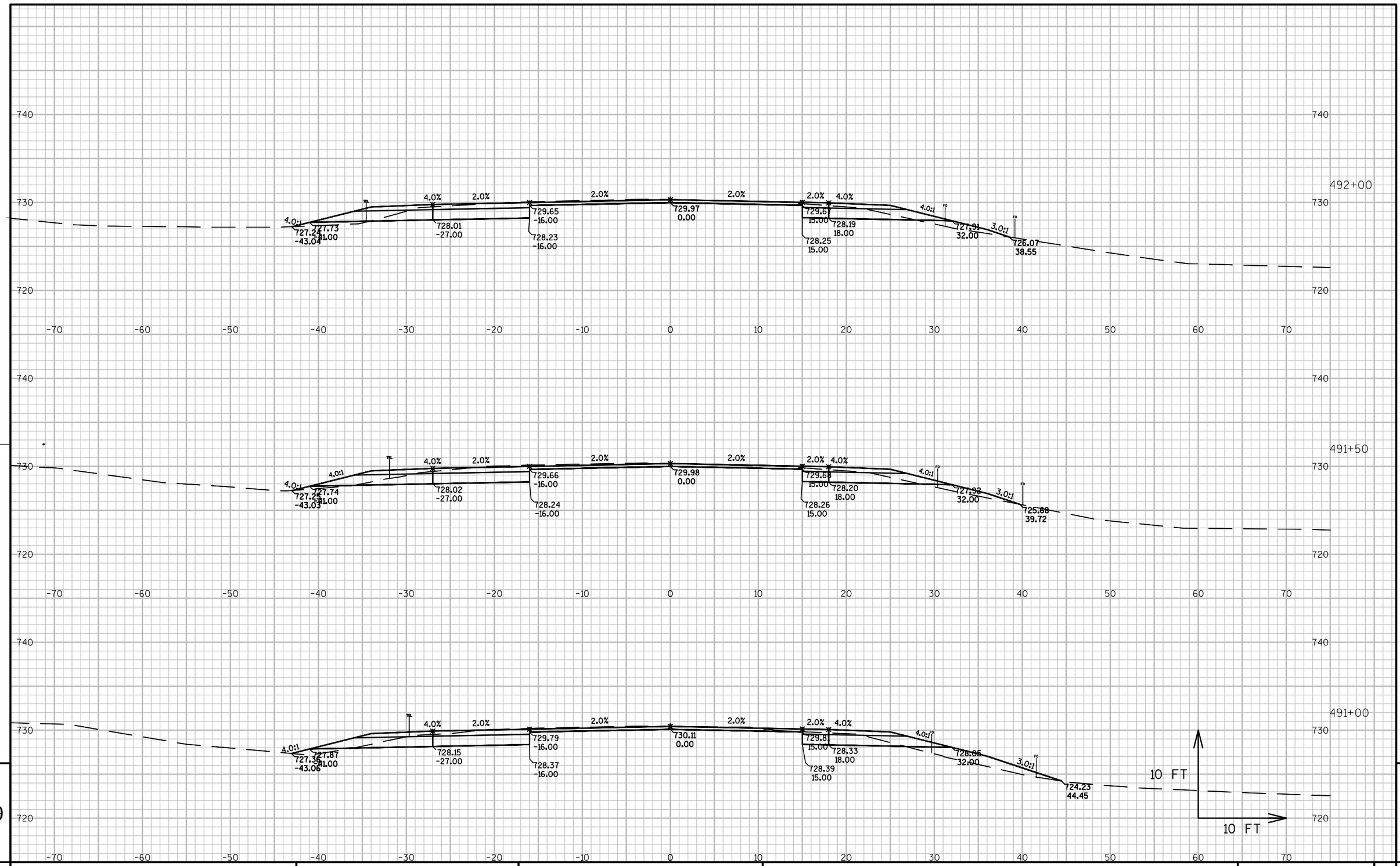
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

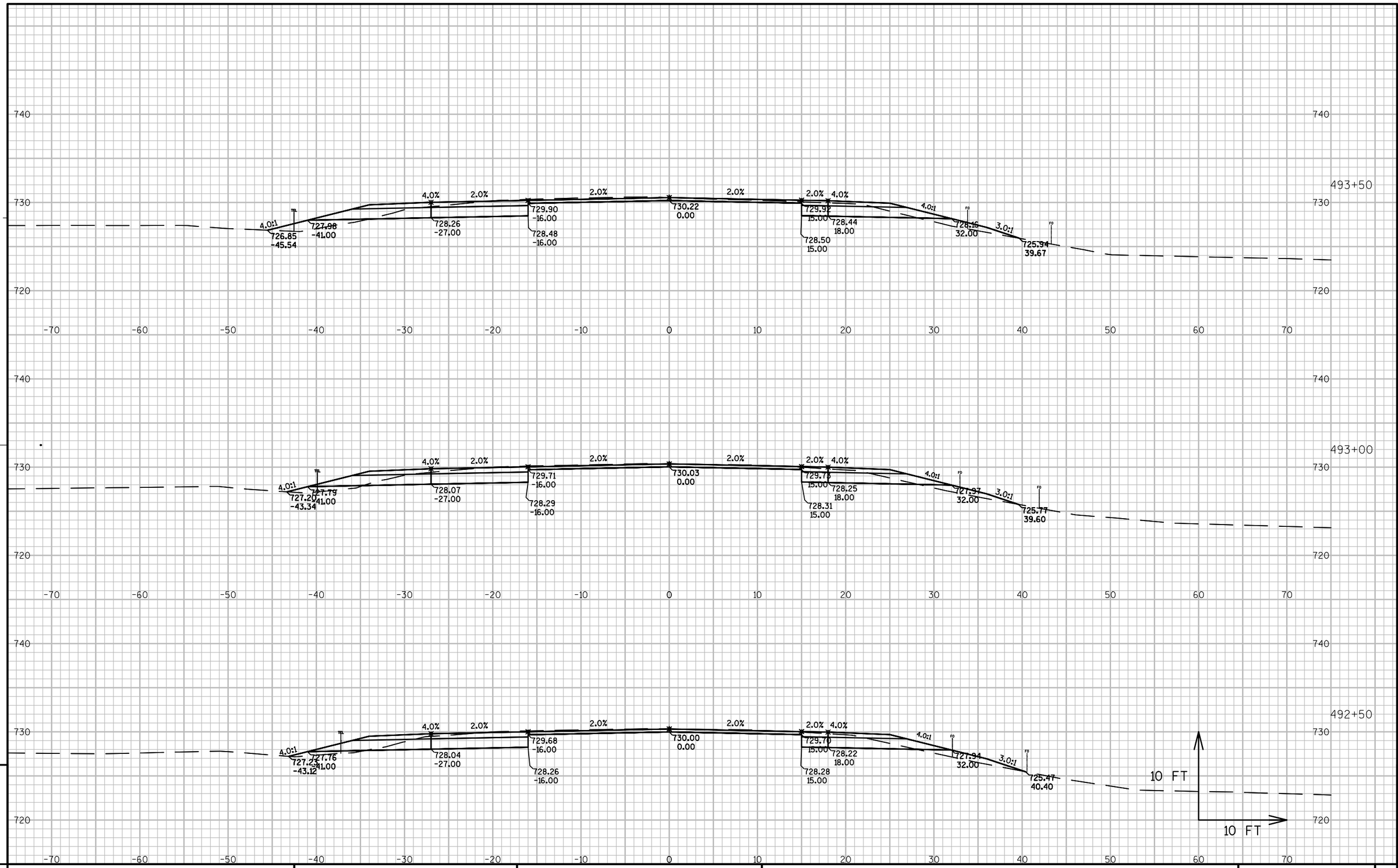
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WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:19 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

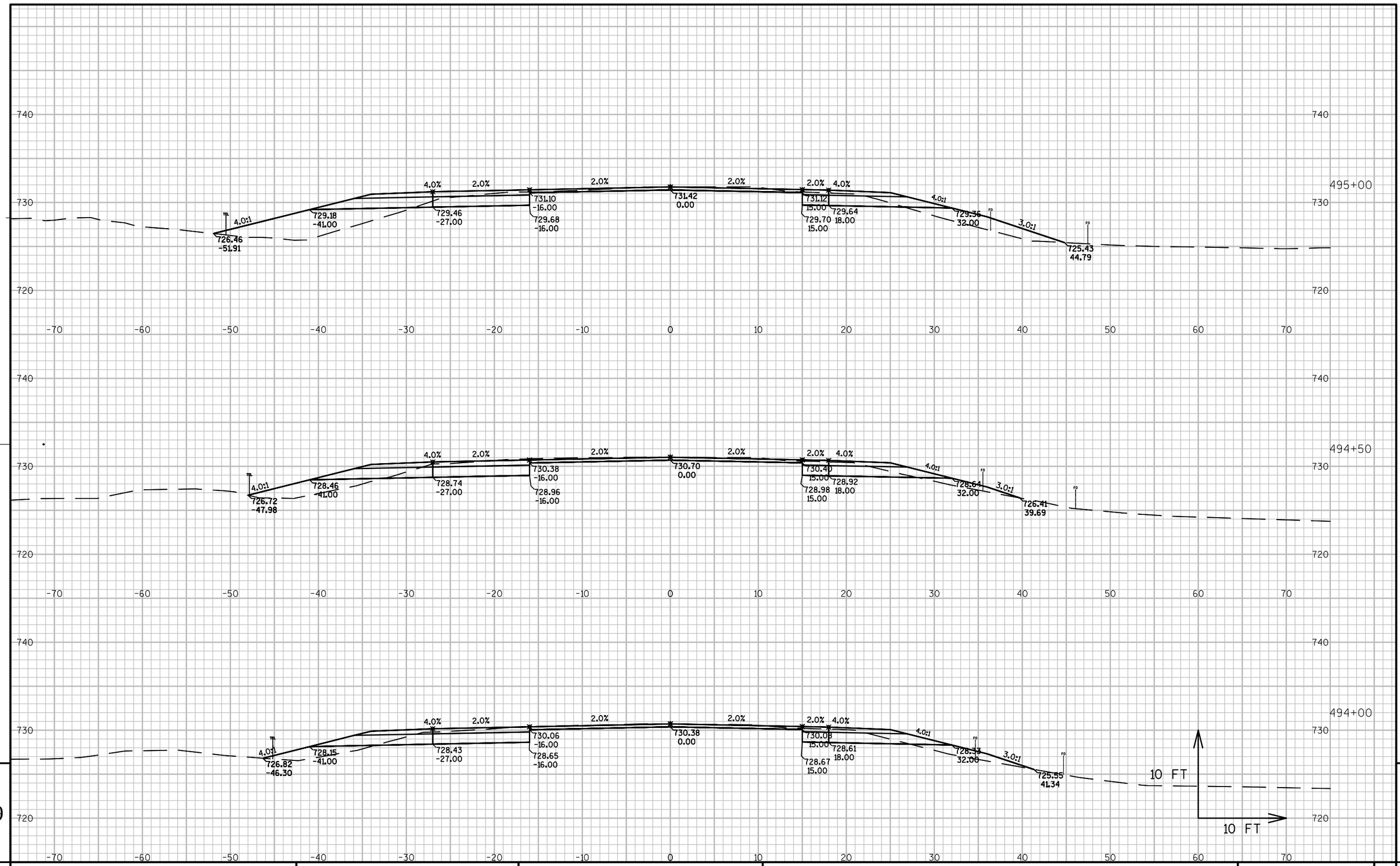


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290

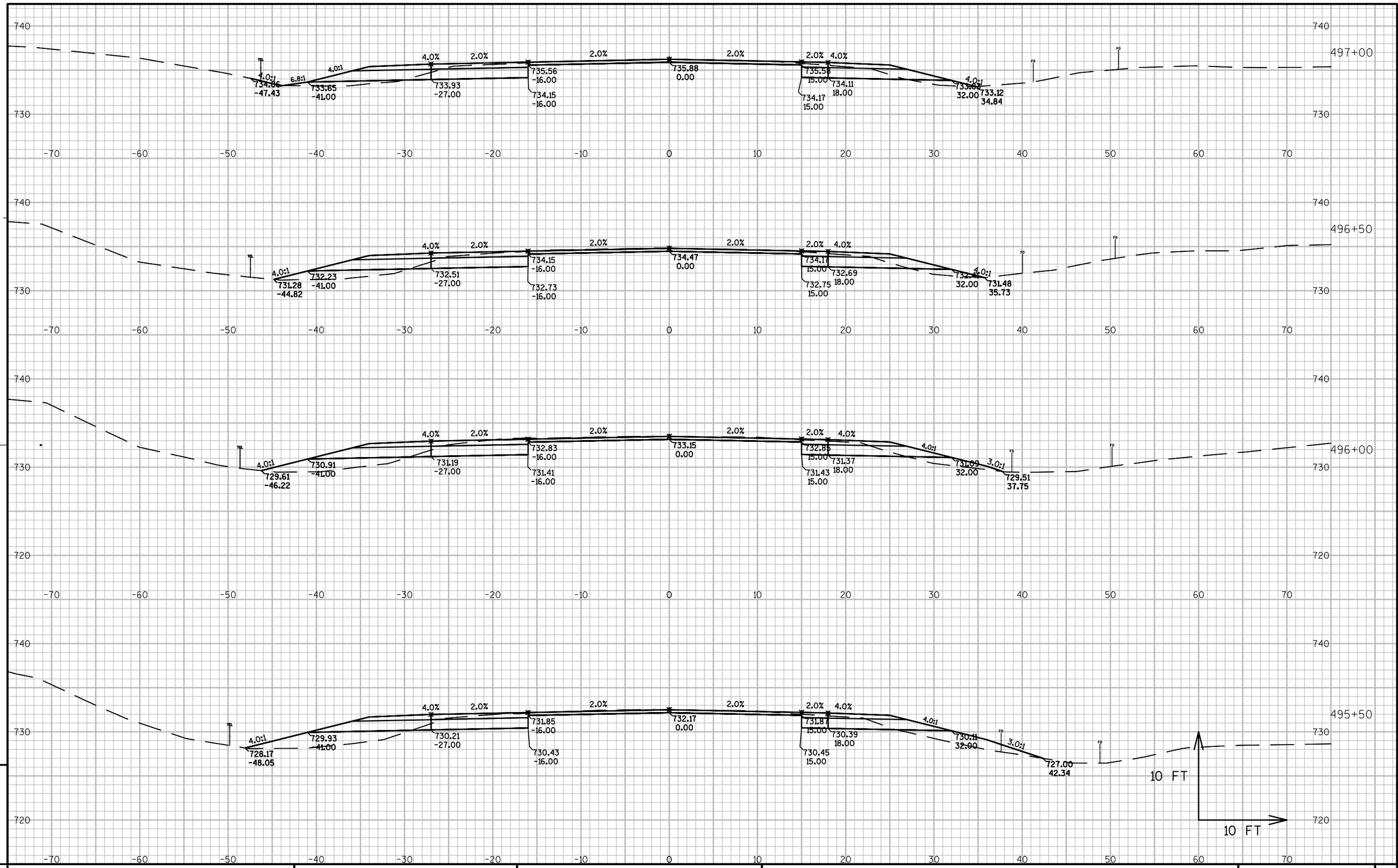
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WISDOT/CADDS SHEET 49



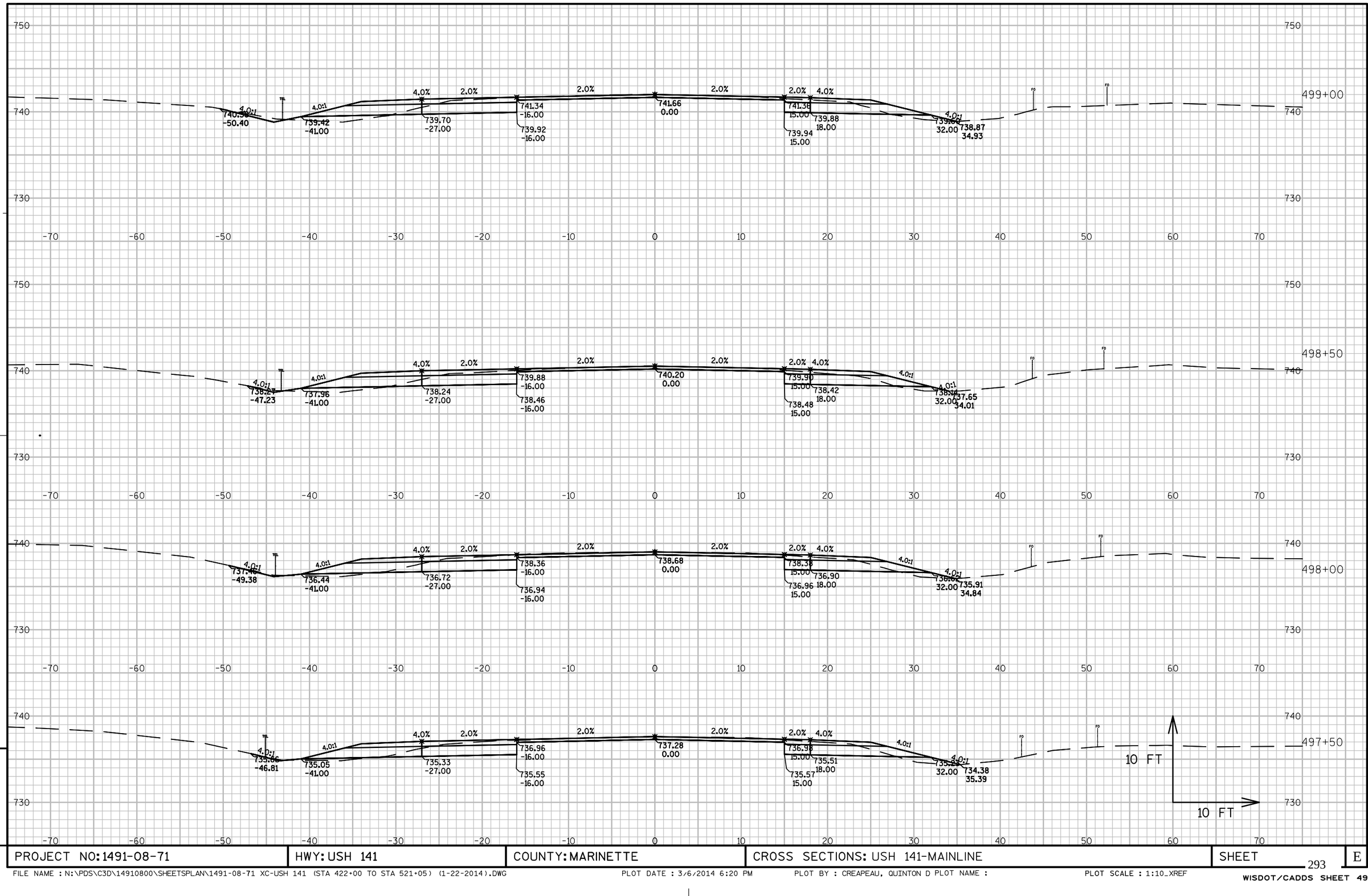
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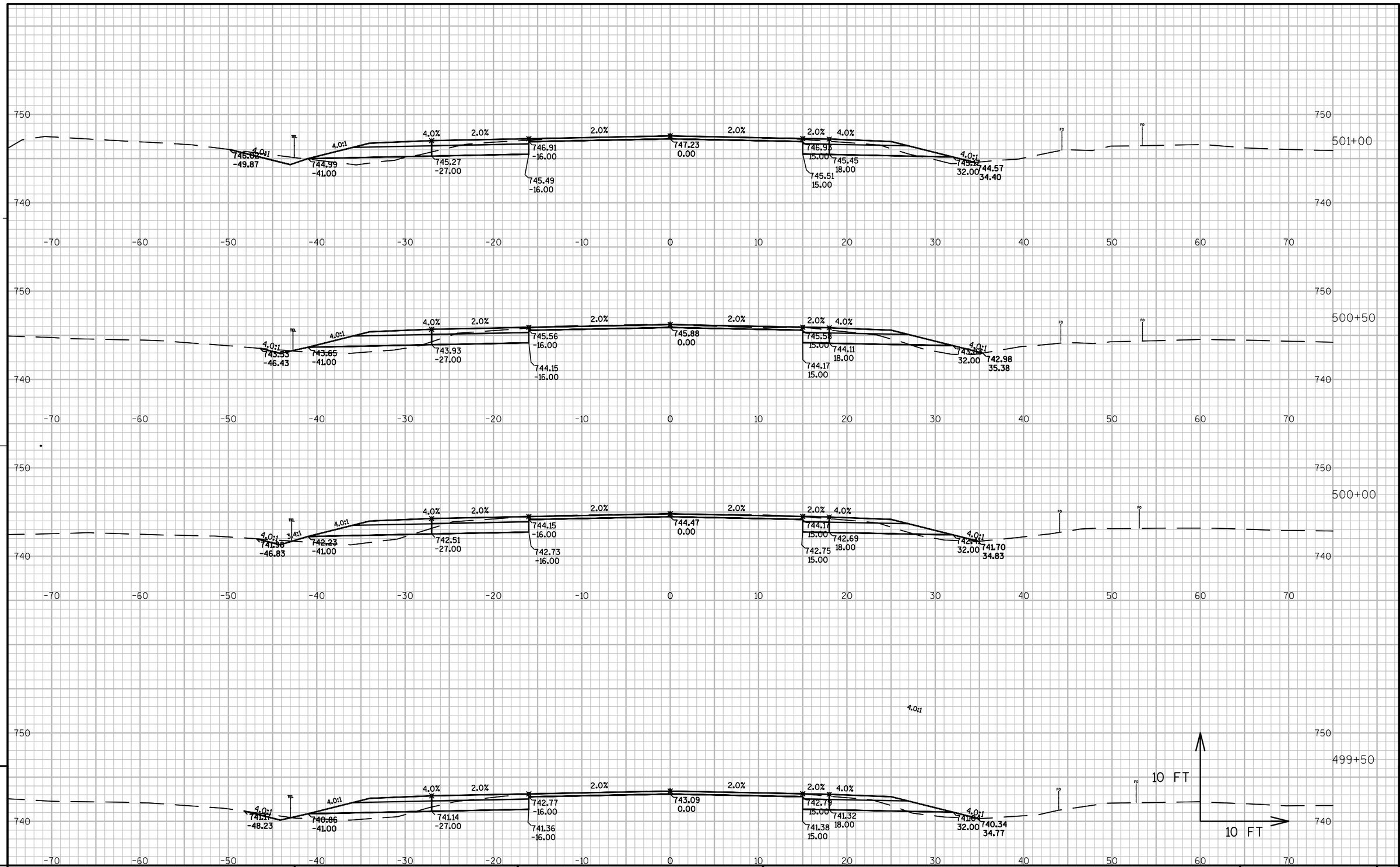
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET 293	E

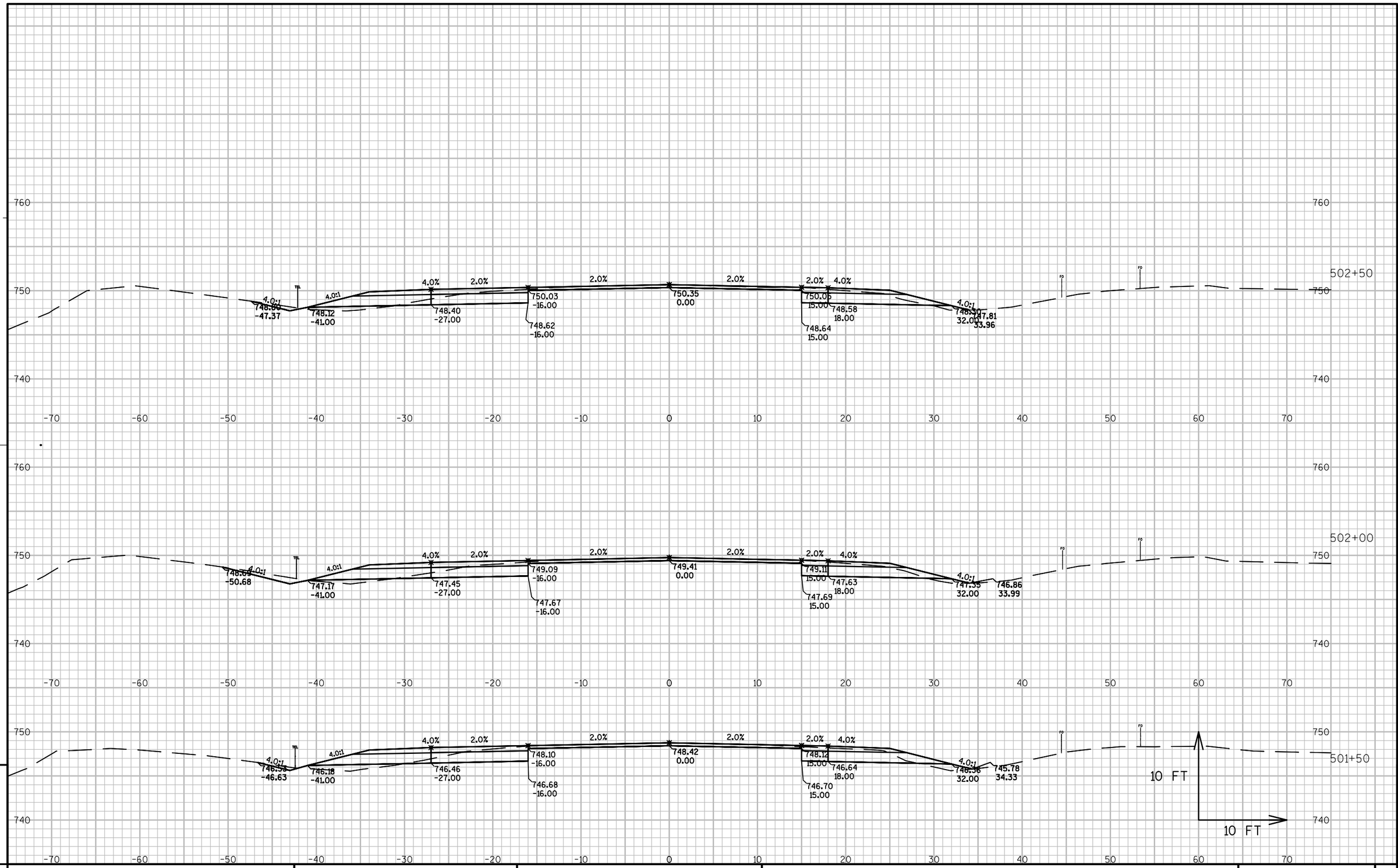
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WISDOT/CADDS SHEET 49



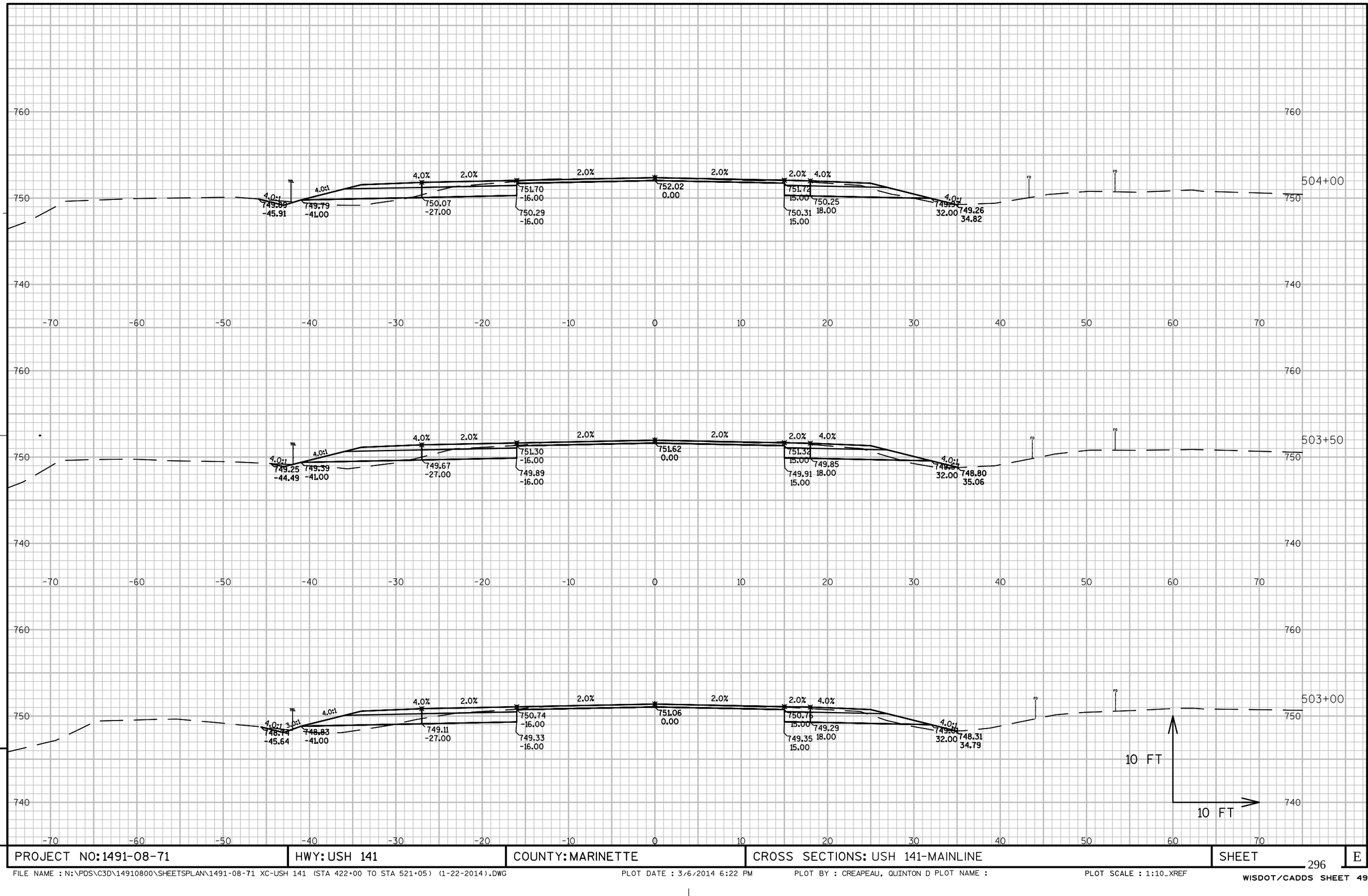
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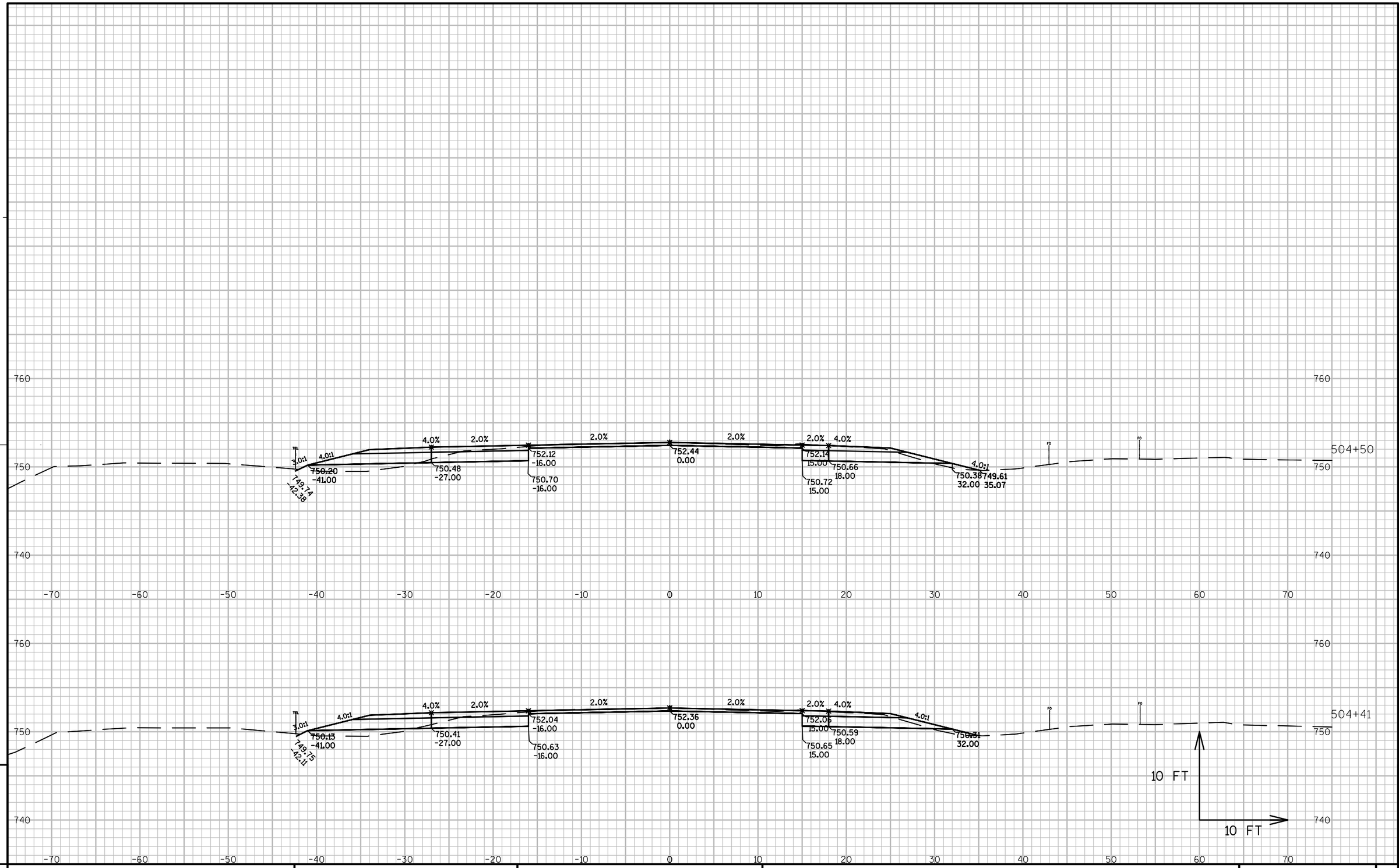
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FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:21 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF



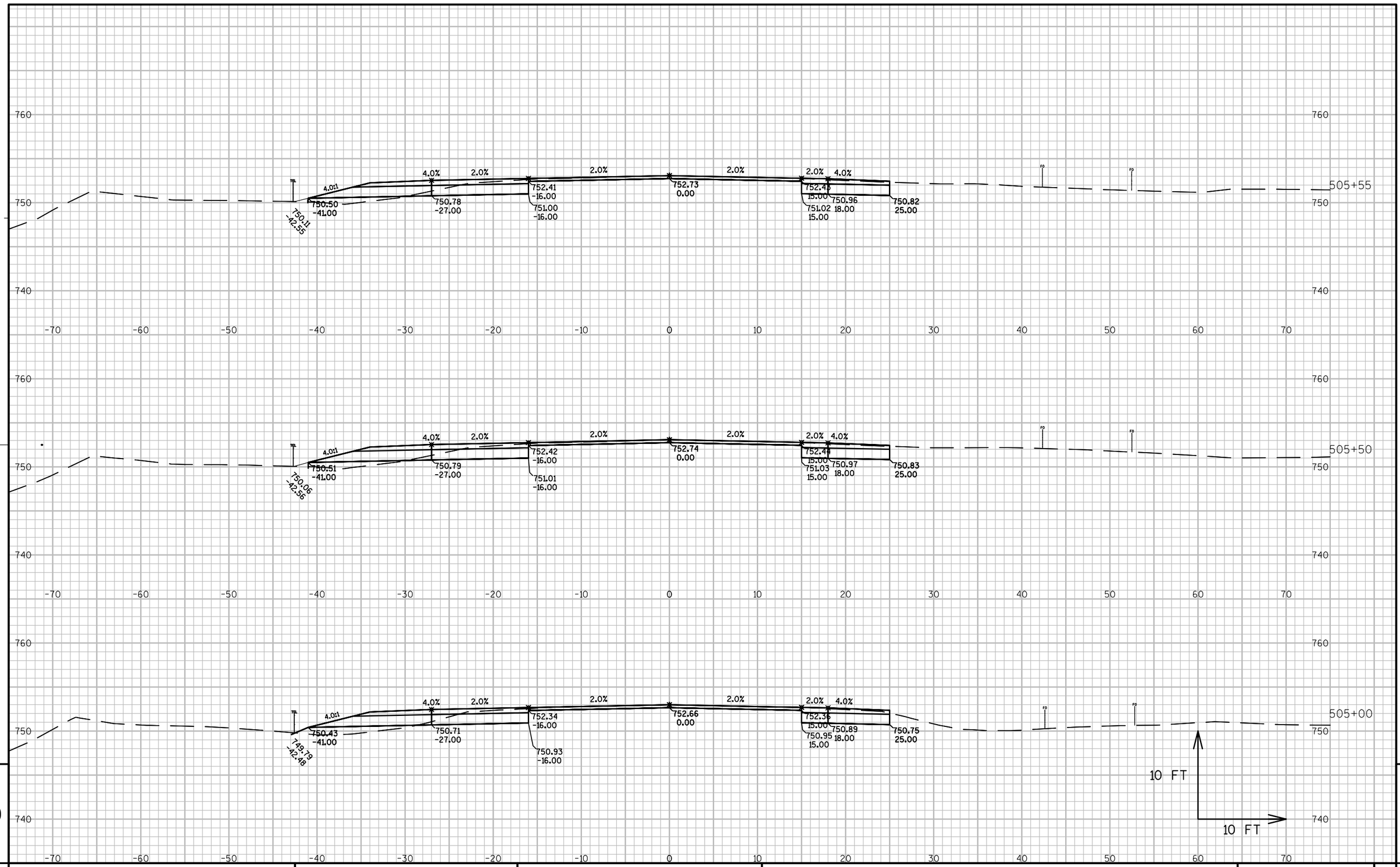
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FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/6/2014 6:22 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF



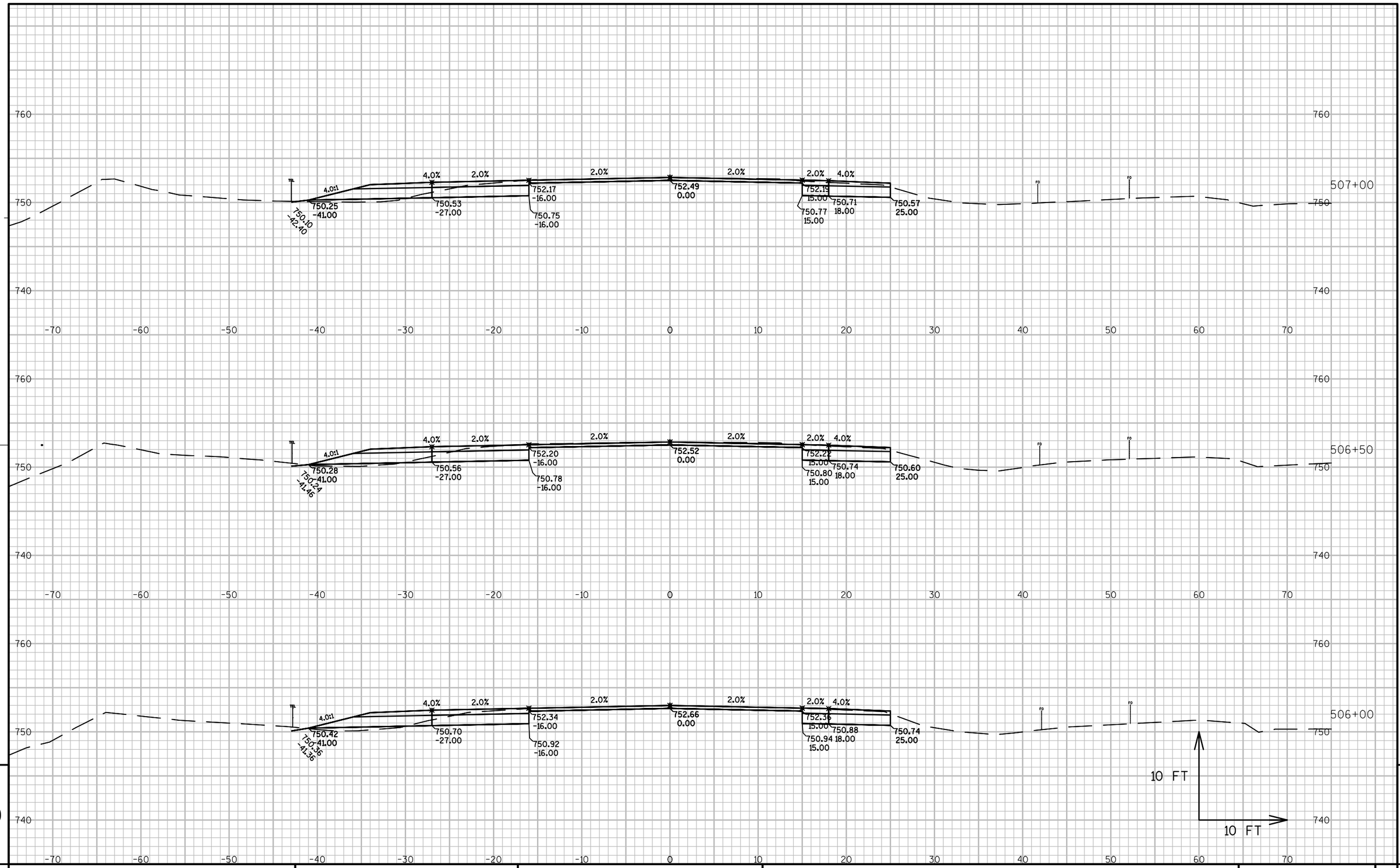
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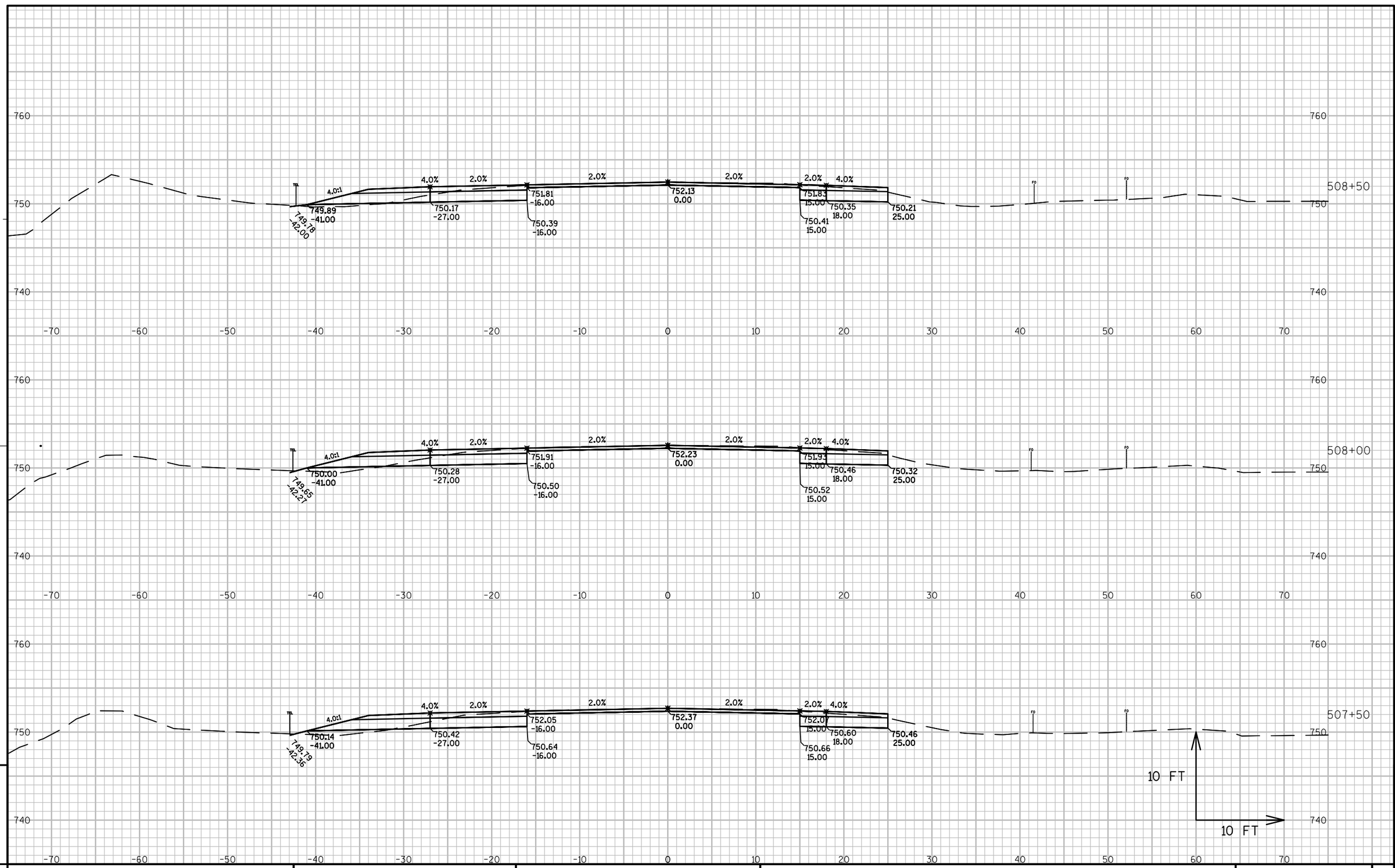
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FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/7/2014 2:24 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF



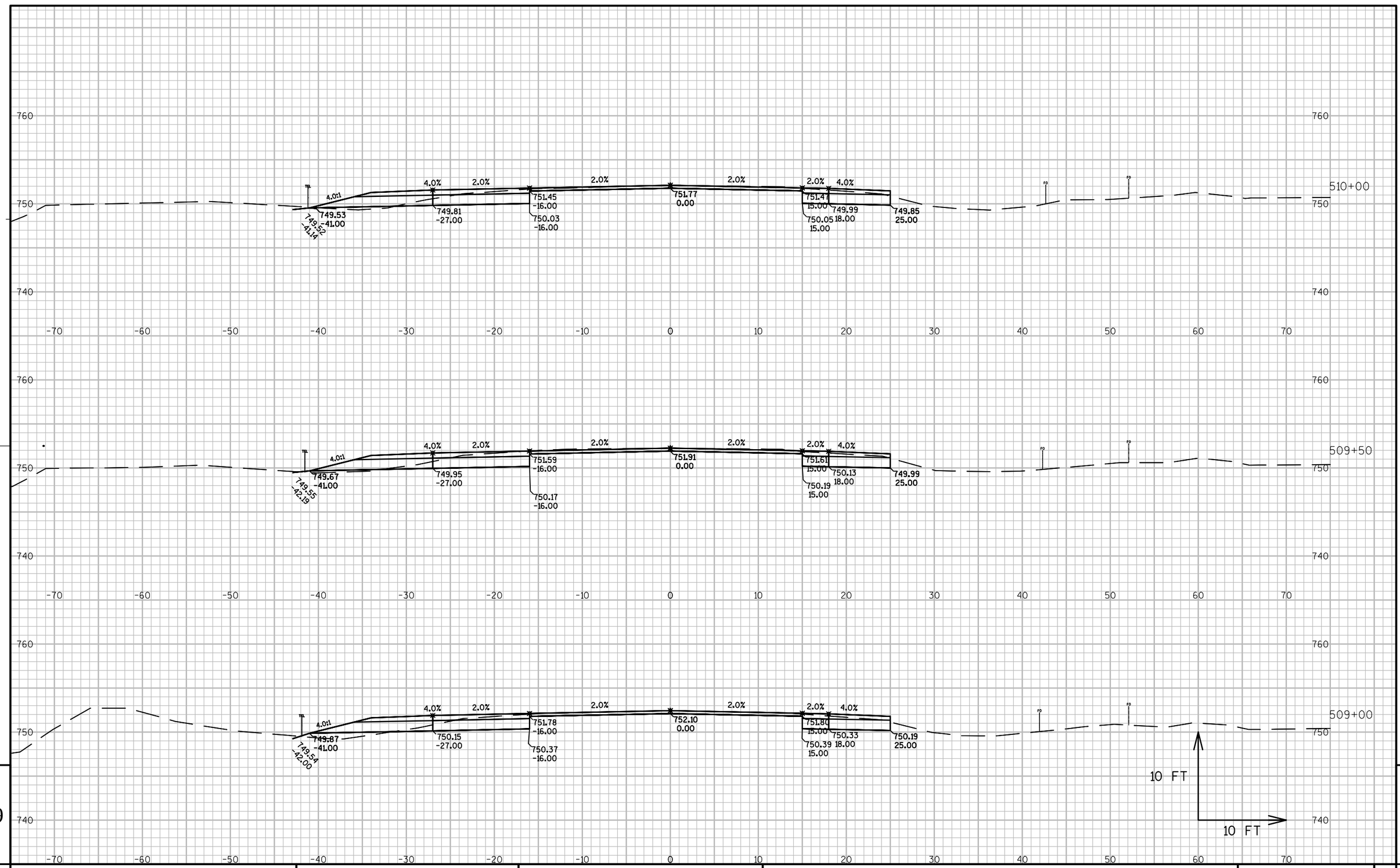
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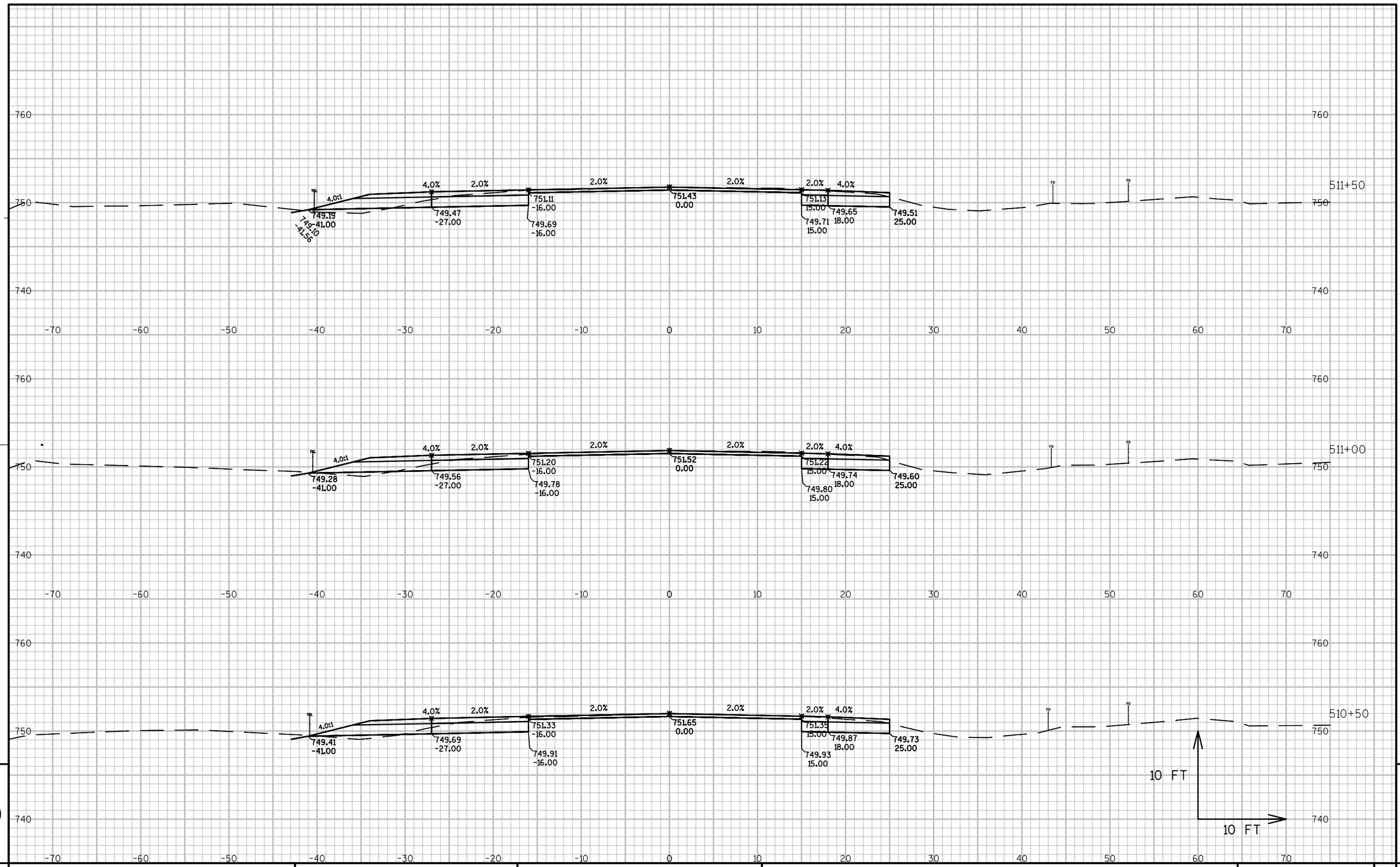
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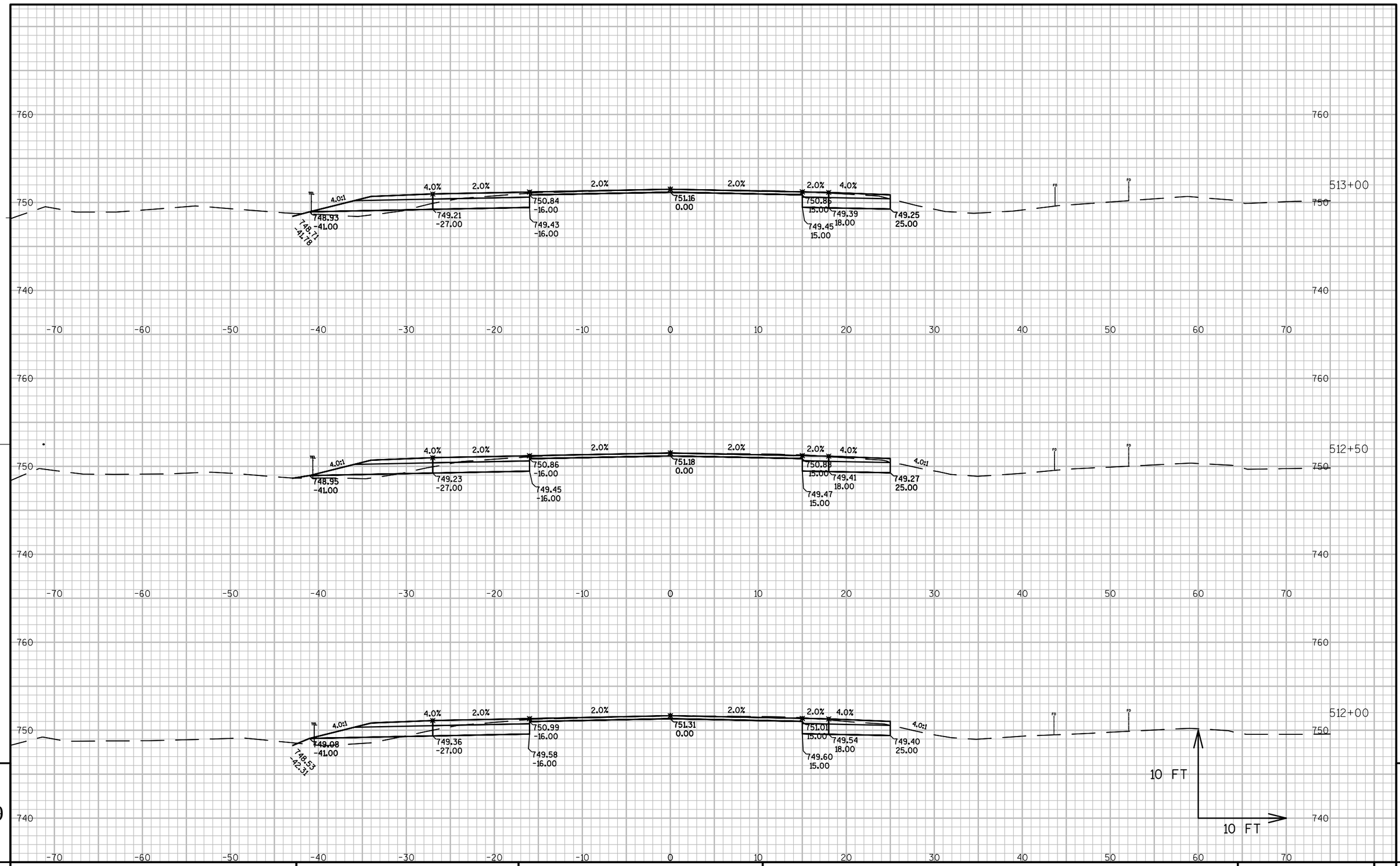


PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E

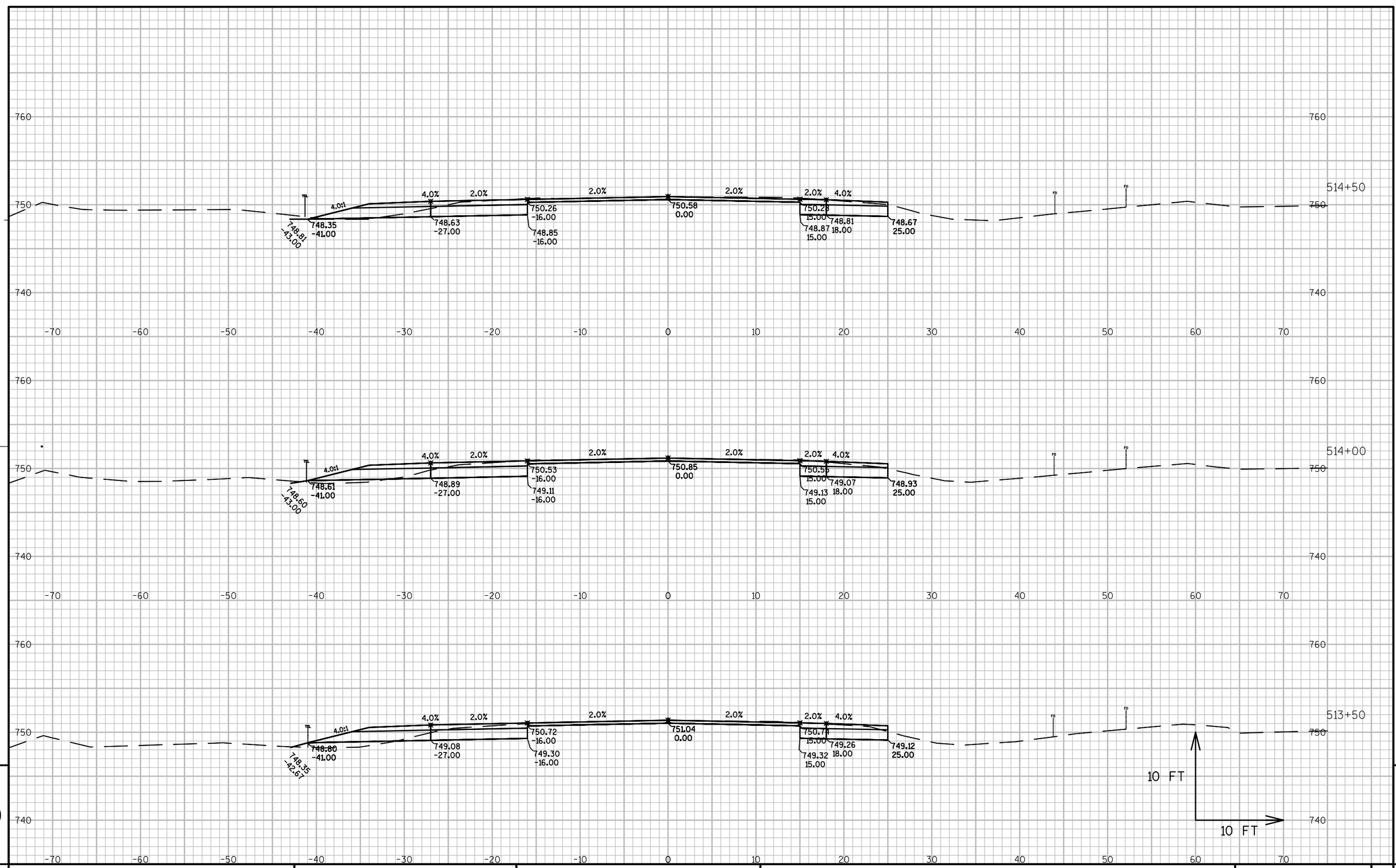
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E



PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141-MAINLINE	SHEET	E



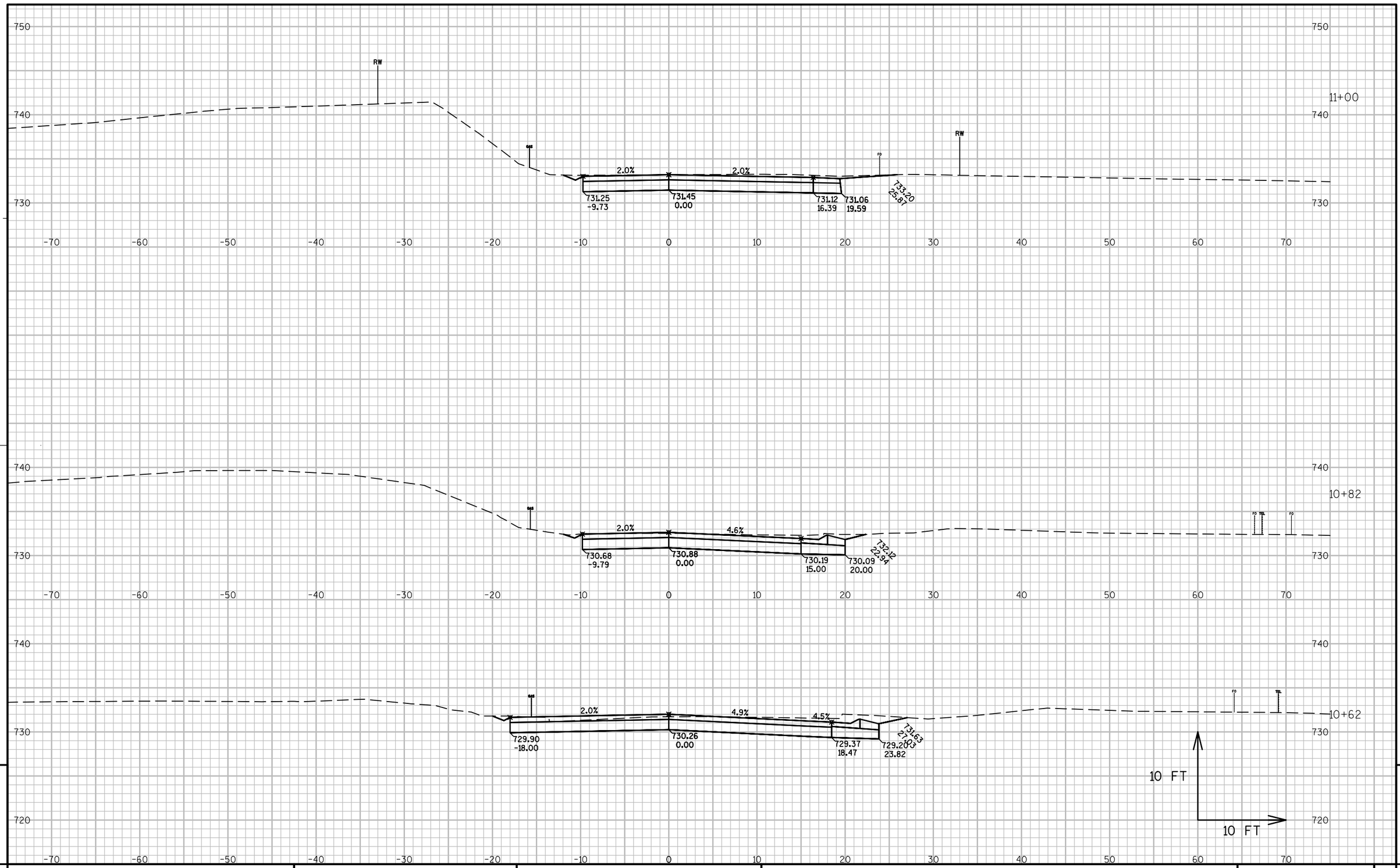
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FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-USH 141 (STA 422+00 TO STA 521+05) (1-22-2014).DWG PLOT DATE : 3/7/2014 2:26 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

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760
750
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760
750
740
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70
760
750
740
515+75
515+50
515+00
TEL
FO
4.0%
2.0%
4.0:1
748.23
-41.00
748.51
-27.00
750.14
-16.00
748.73
-16.00
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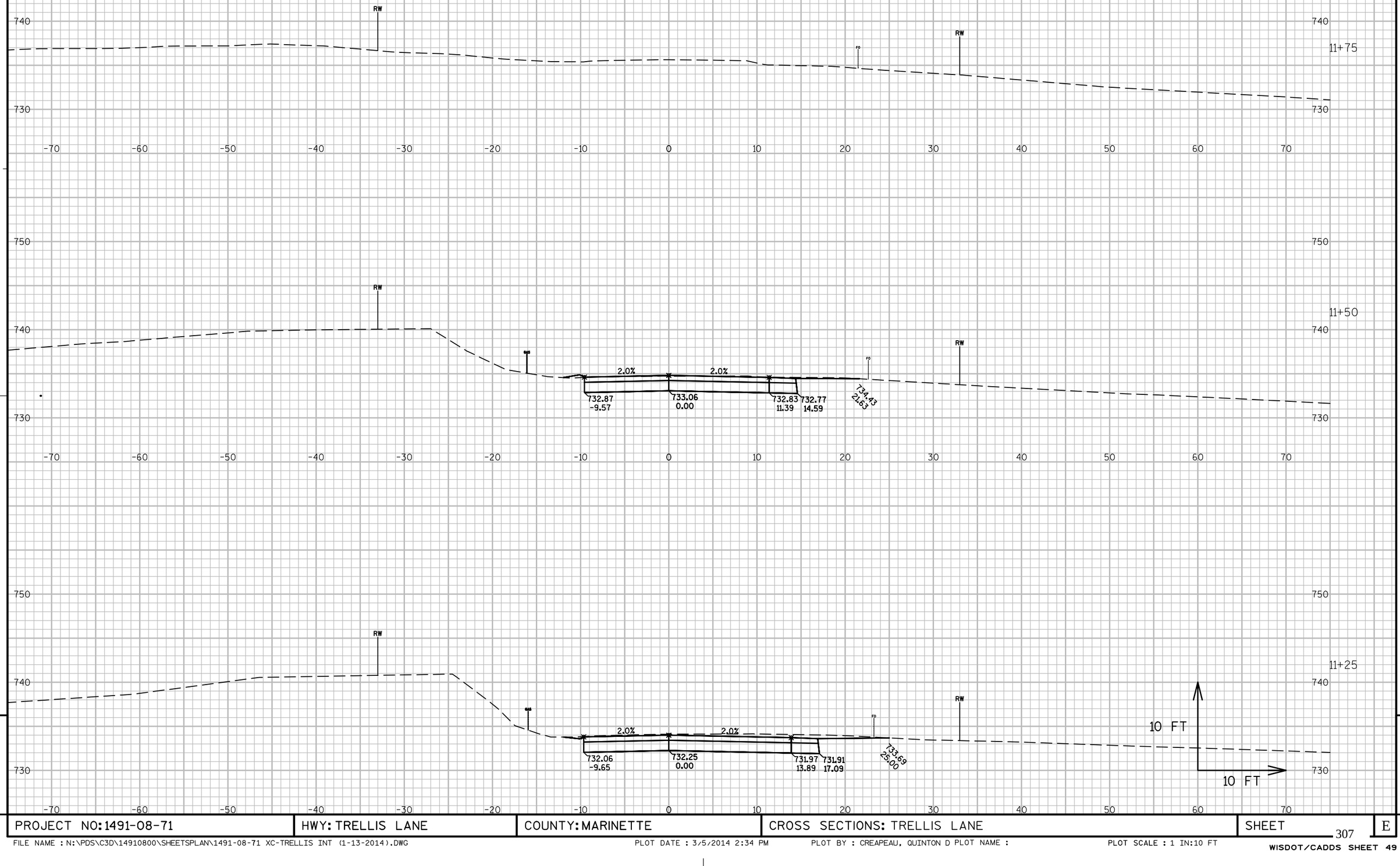
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PLOT DATE : 3/7/2014 2:27 PM
PLOT BY : CREAPEAU, QUINTON D PLOT NAME :
PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-08-71	HWY: TRELLIS LANE	COUNTY: MARINETTE	CROSS SECTIONS: TRELLIS LANE	SHEET	E

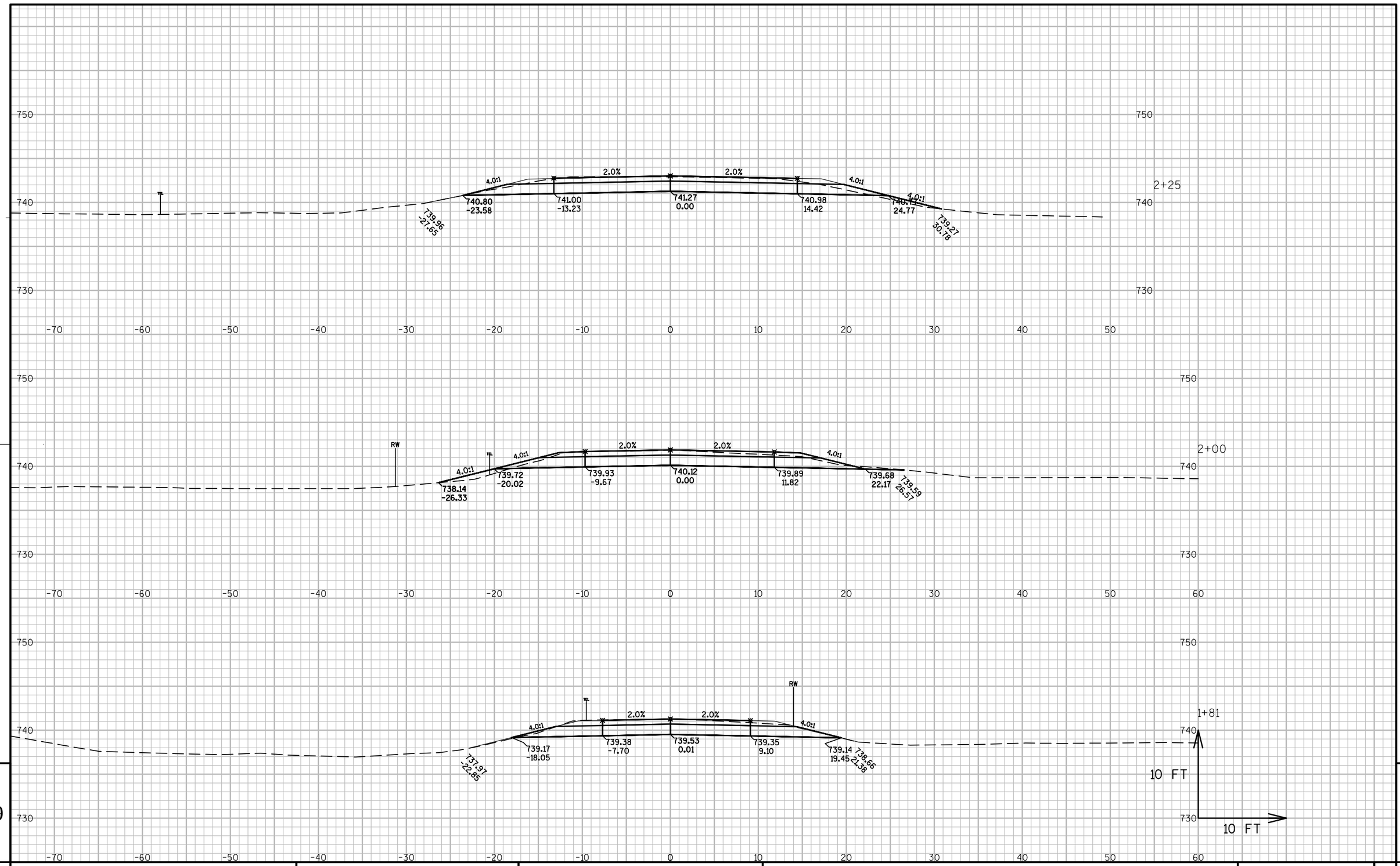
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PROJECT NO: 1491-08-71	HWY: TRELLIS LANE	COUNTY: MARINETTE	CROSS SECTIONS: TRELLIS LANE	SHEET	E

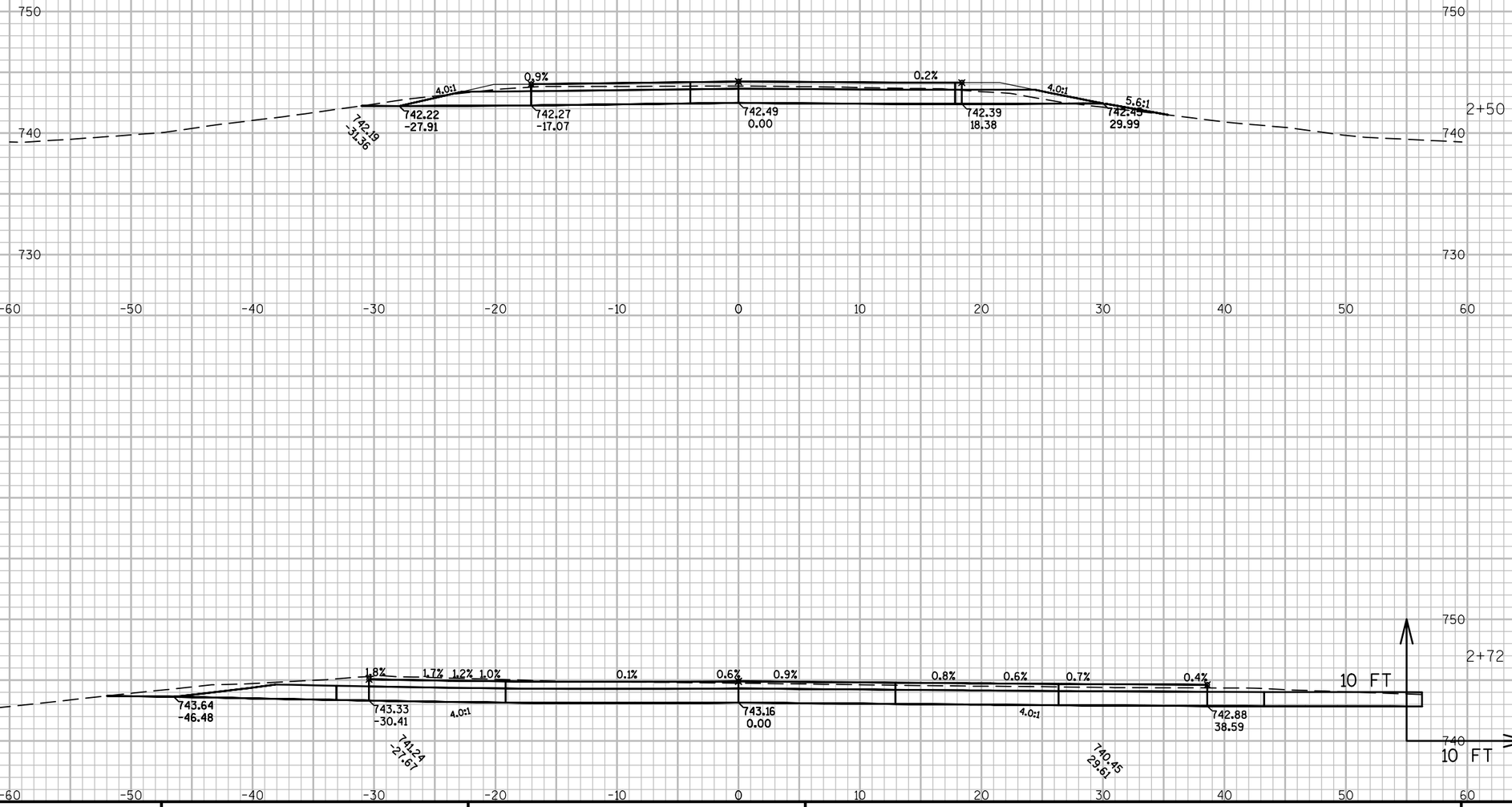
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WISDOT/CADDS SHEET 49



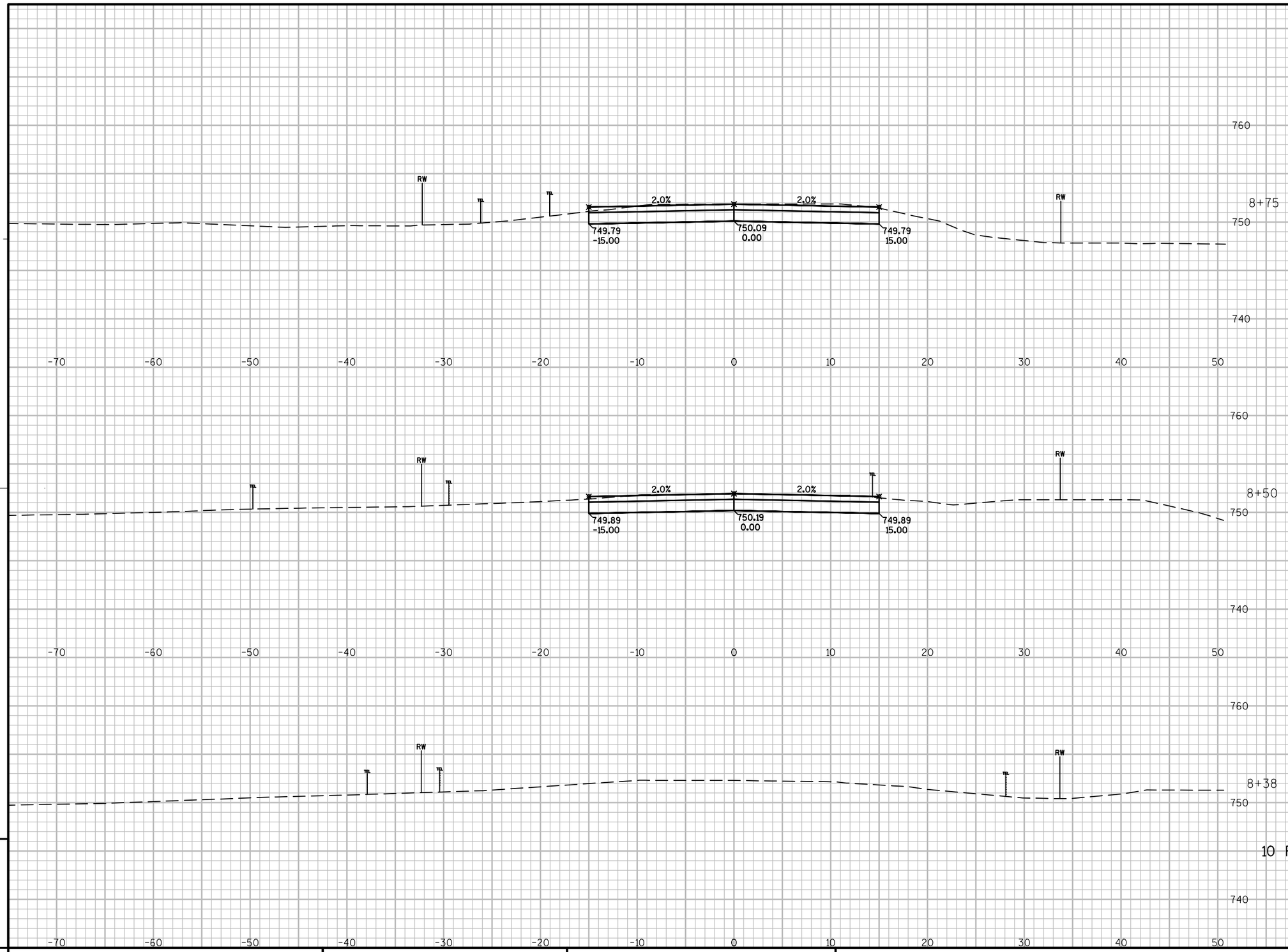
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FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-BIERNASZ INT (1-22-2014).DWG PLOT DATE : 3/7/2014 9:42 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF



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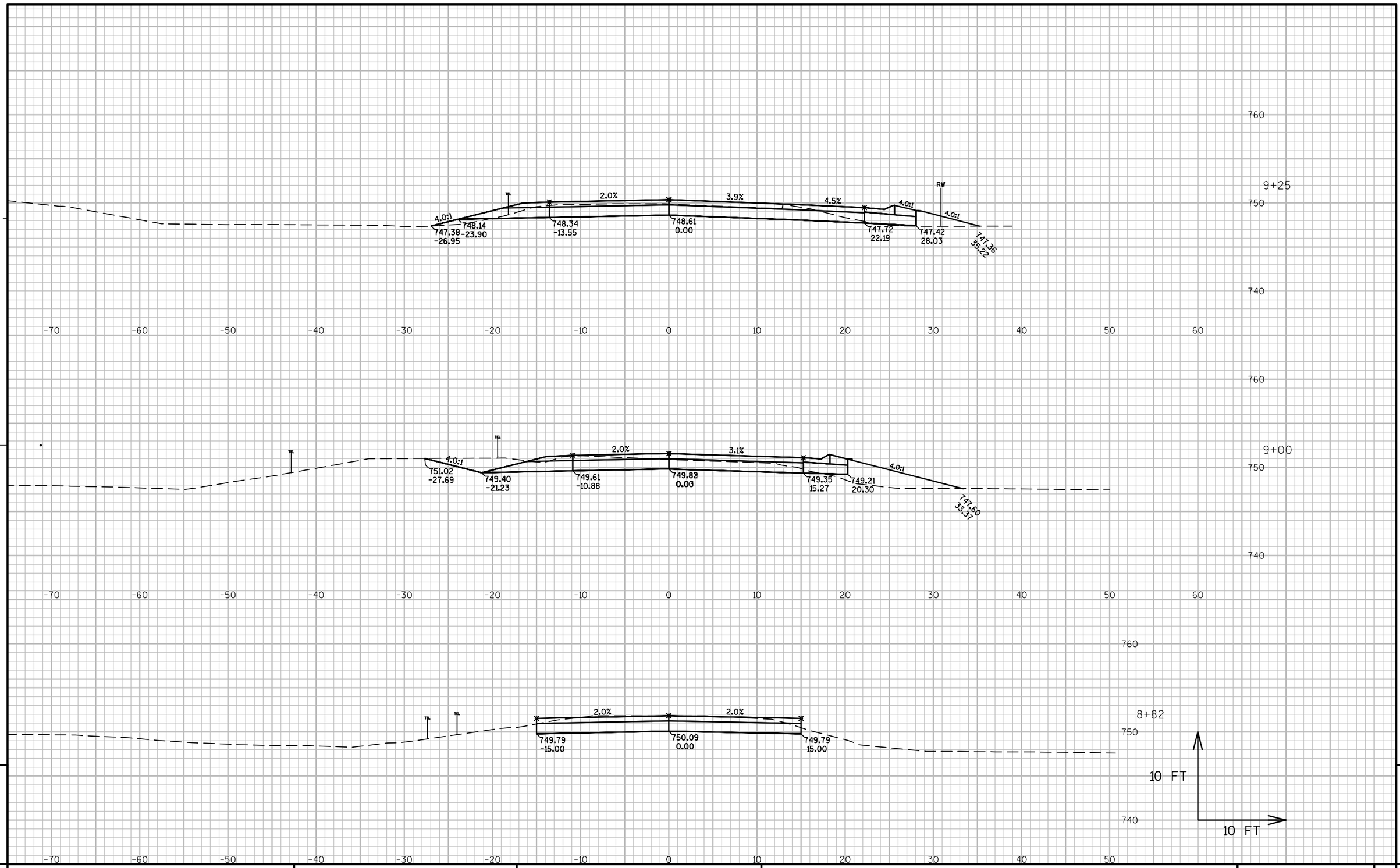
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PROJECT NO: 1491-08-71	HWY: MOONSHINE HILL ROAD	COUNTY: MARINETTE	CROSS SECTIONS: MOONSHINE HILL ROAD - WEST	SHEET	E

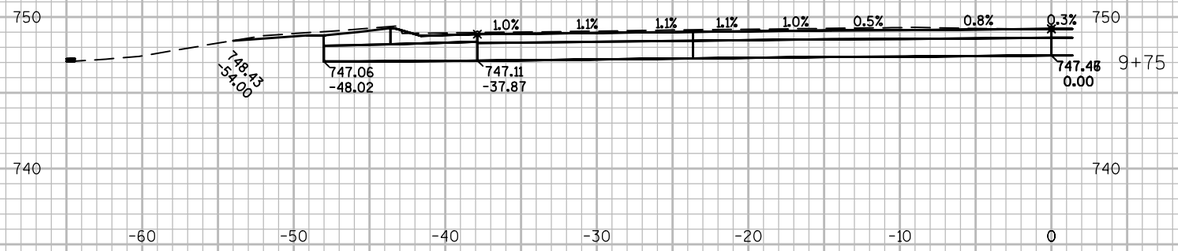
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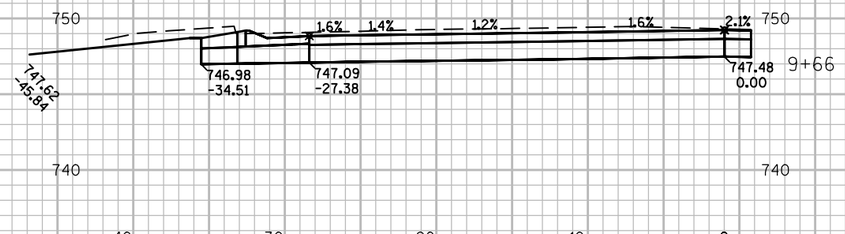
WISDOT/CADDS SHEET 49

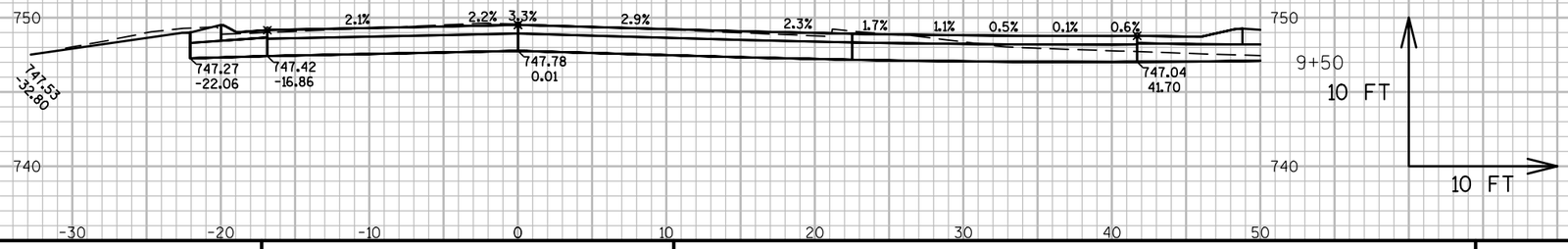


PROJECT NO: 1491-08-71	HWY: MOONSHINE HILL ROAD	COUNTY: MARINETTE	CROSS SECTIONS: MOONSHINE HILL ROAD - WEST	SHEET	E

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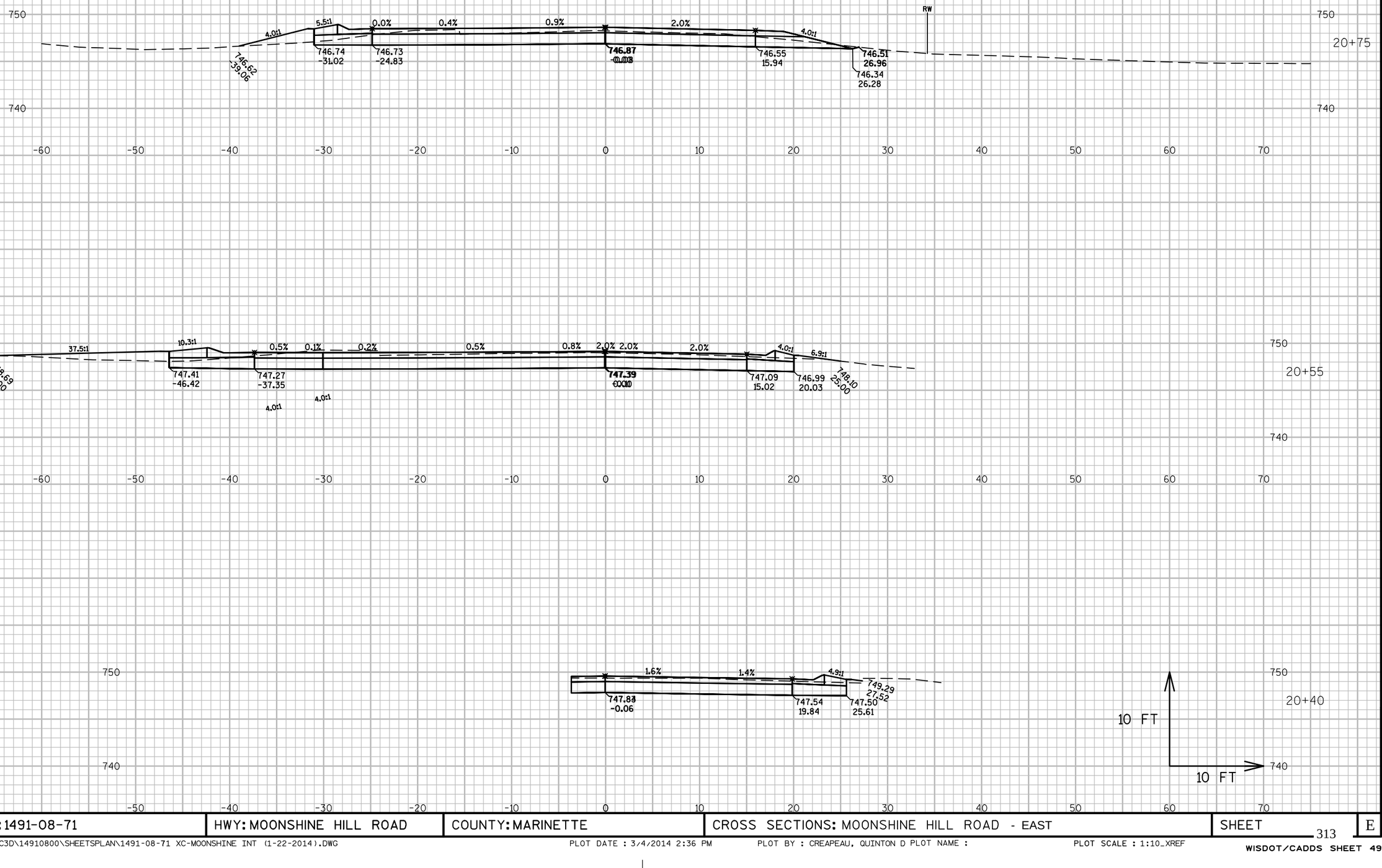






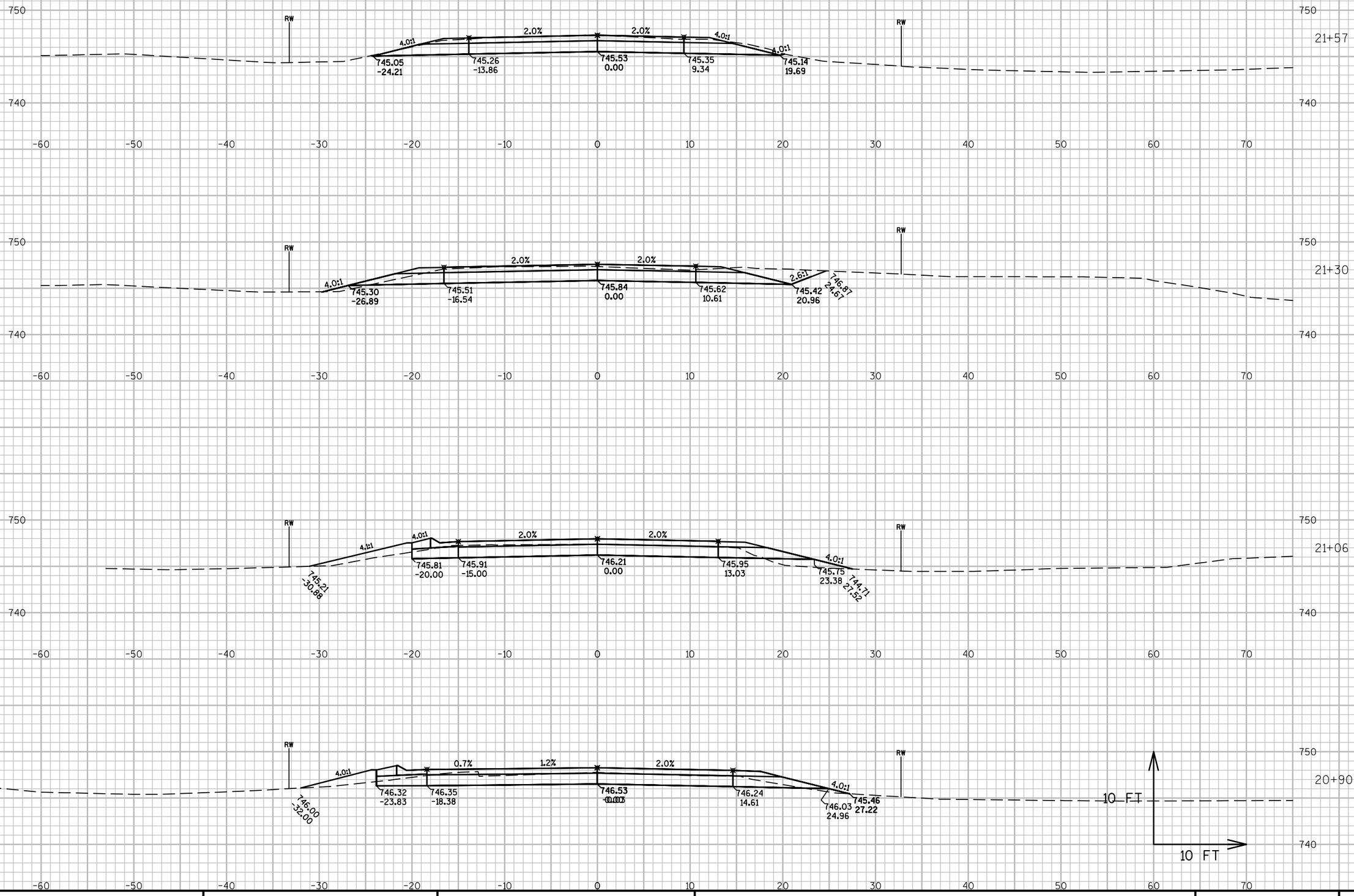
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PLOT BY : CREAPEAU, QUINTON D PLOT NAME :
PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49

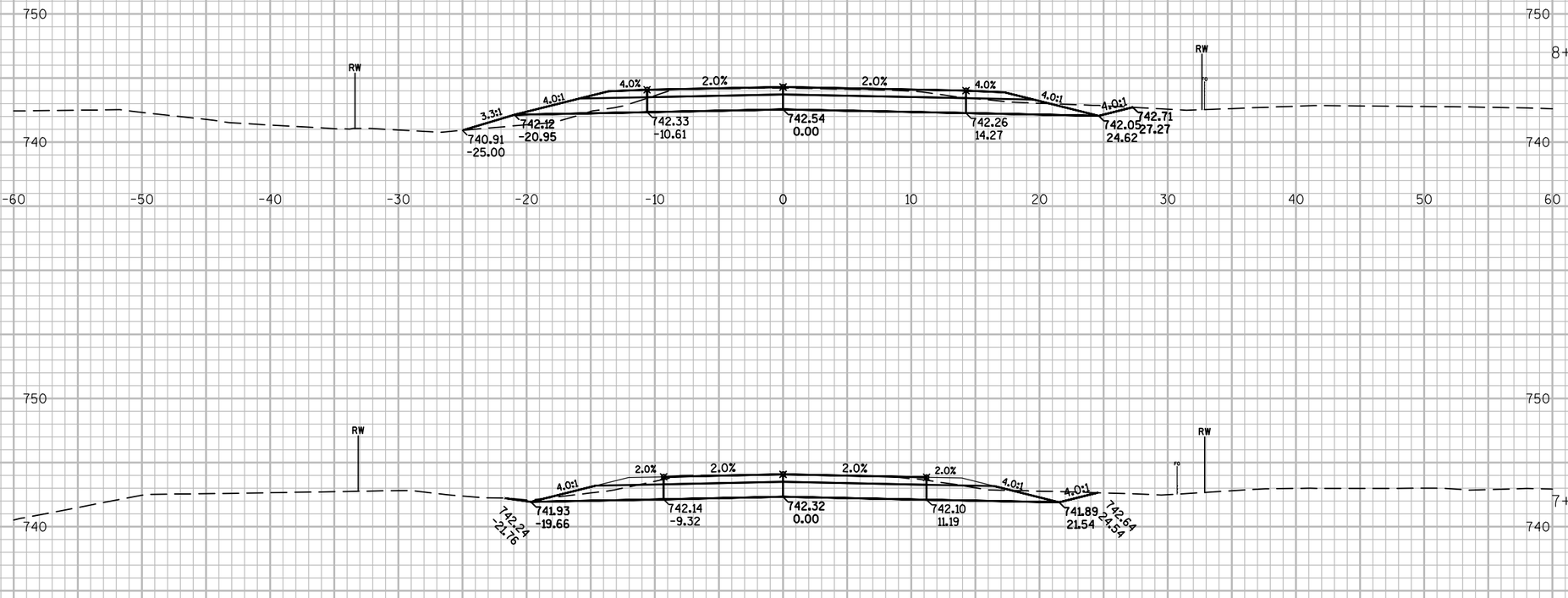


PROJECT NO: 1491-08-71	HWY: MOONSHINE HILL ROAD	COUNTY: MARINETTE	CROSS SECTIONS: MOONSHINE HILL ROAD - EAST	SHEET	E

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PROJECT NO: 1491-08-71	HWY: MOONSHINE HILL ROAD	COUNTY: MARINETTE	CROSS SECTIONS: MOONSHINE HILL ROAD - EAST	SHEET 314	E

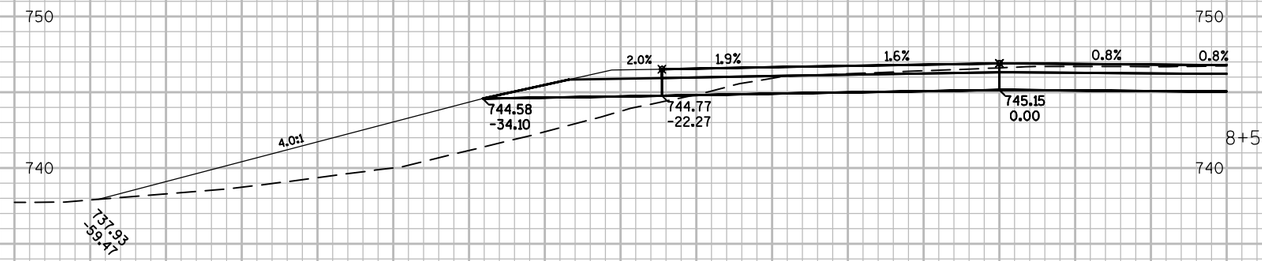


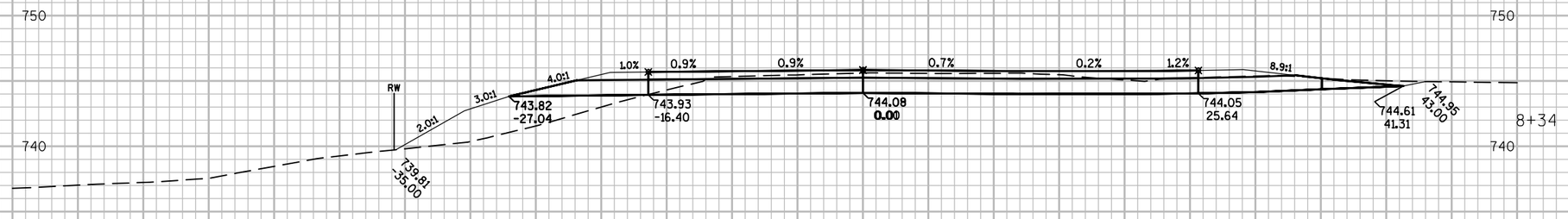
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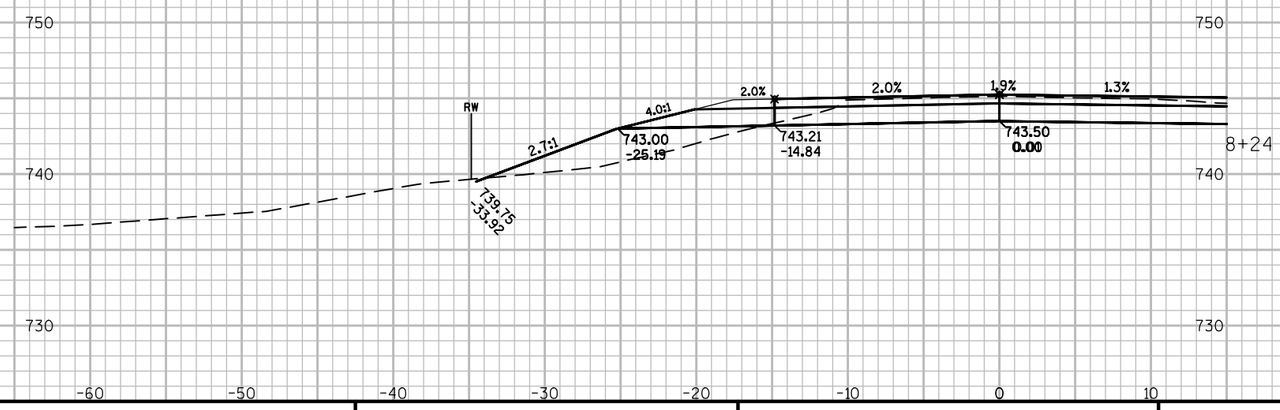
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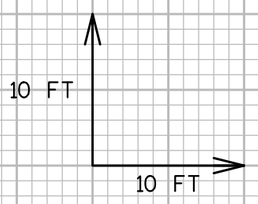
PROJECT NO: 1491-08-71	HWY: THOMPSON ROAD	COUNTY: MARINETTE	CROSS SECTIONS: THOMPSON ROAD	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-THOMPSON INT (1-22-2014).DWG PLOT DATE : 3/5/2014 1:05 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49







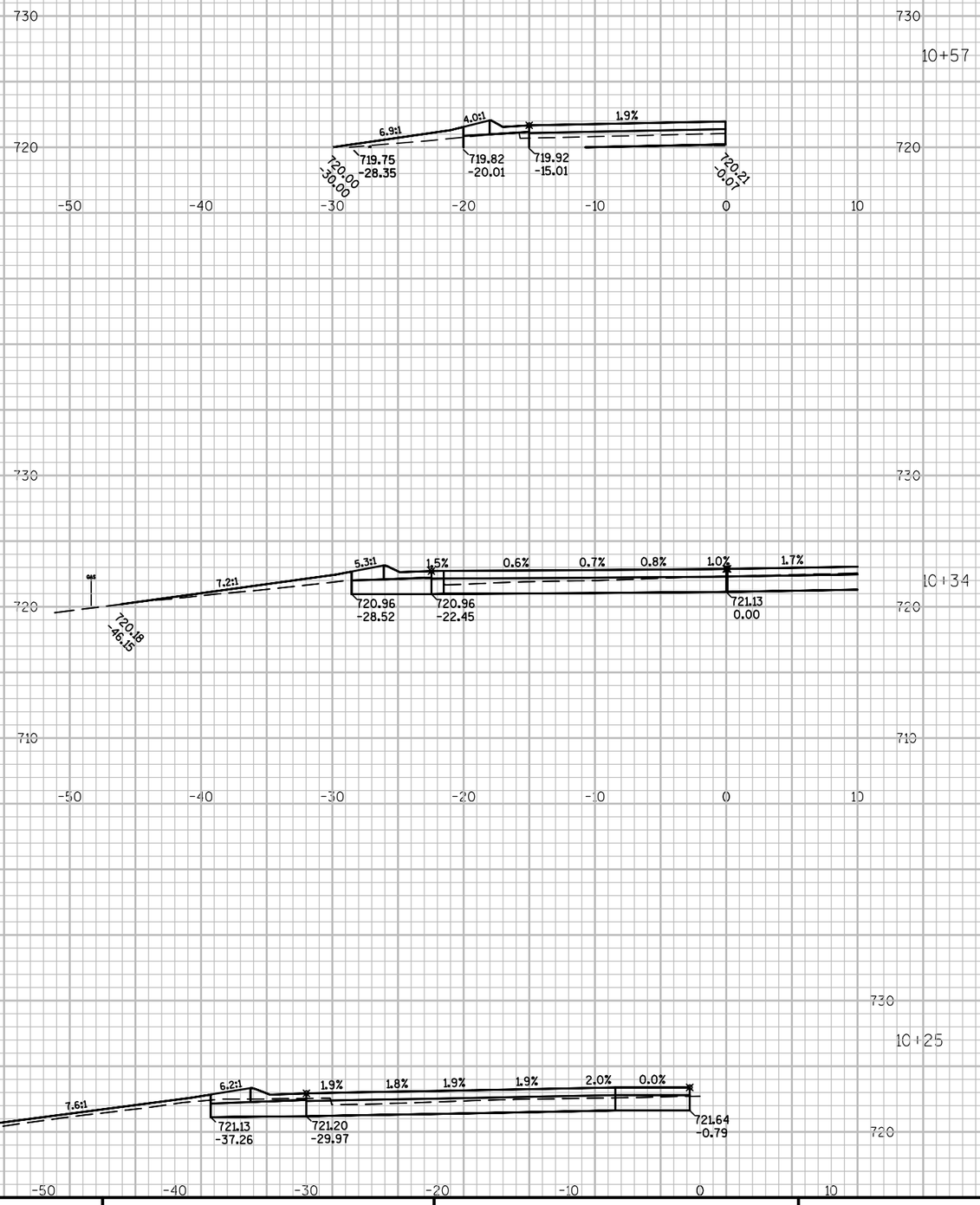


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PROJECT NO: 1491-08-71	HWY: THOMPSON ROAD	COUNTY: MARINETTE	CROSS SECTIONS: THOMPSON ROAD	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-THOMPSON INT (1-22-2014).DWG PLOT DATE : 3/5/2014 1:05 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49

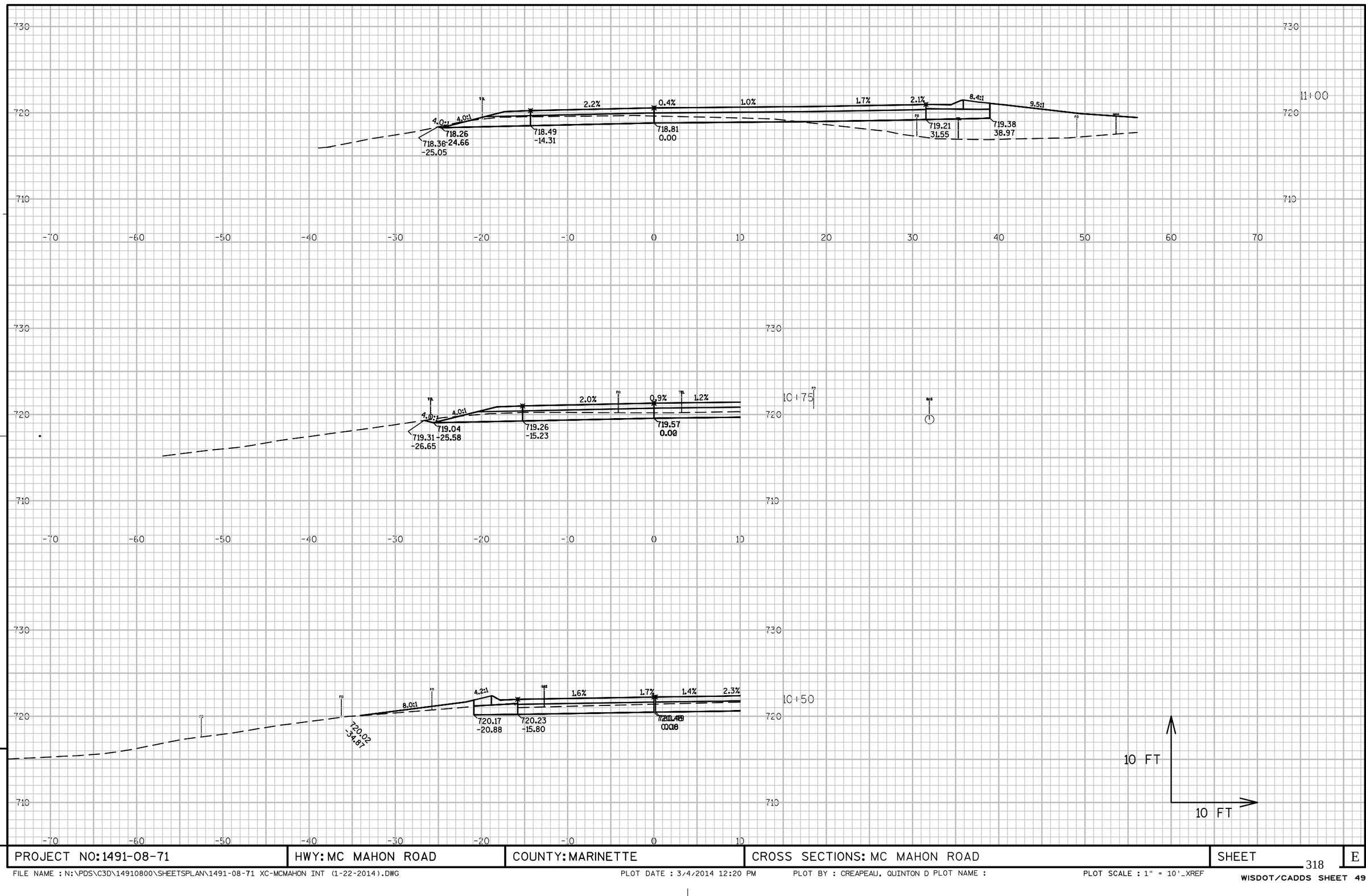


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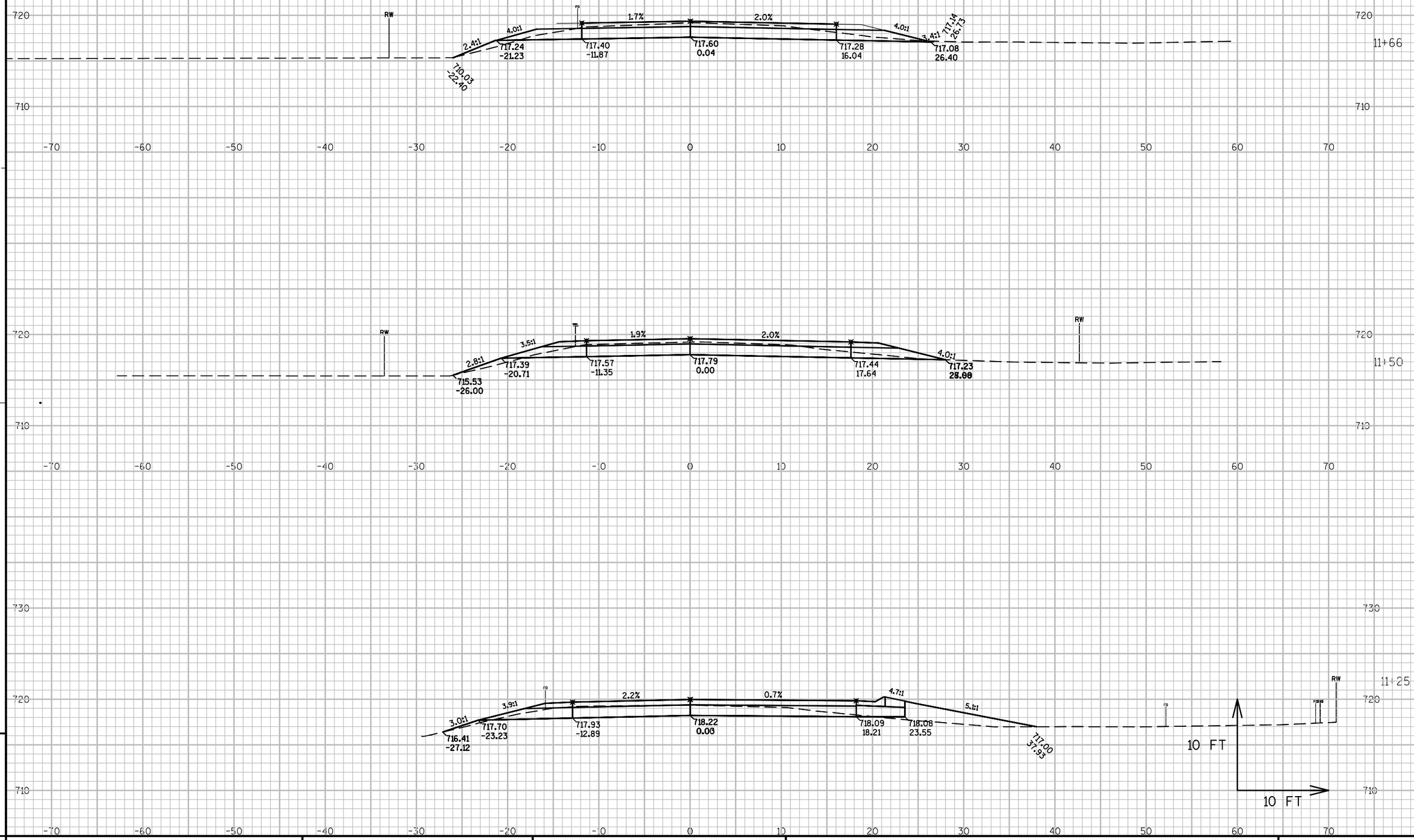
PROJECT NO: 1491-08-71	HWY: MC MAHON ROAD	COUNTY: MARINETTE	CROSS SECTIONS: MC MAHON ROAD	SHEET	E

9

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-MCMAHON INT (1-22-2014).DWG
PLOT DATE : 3/4/2014 12:19 PM
PLOT BY : CREAPEAU, QUINTON D PLOT NAME :
PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



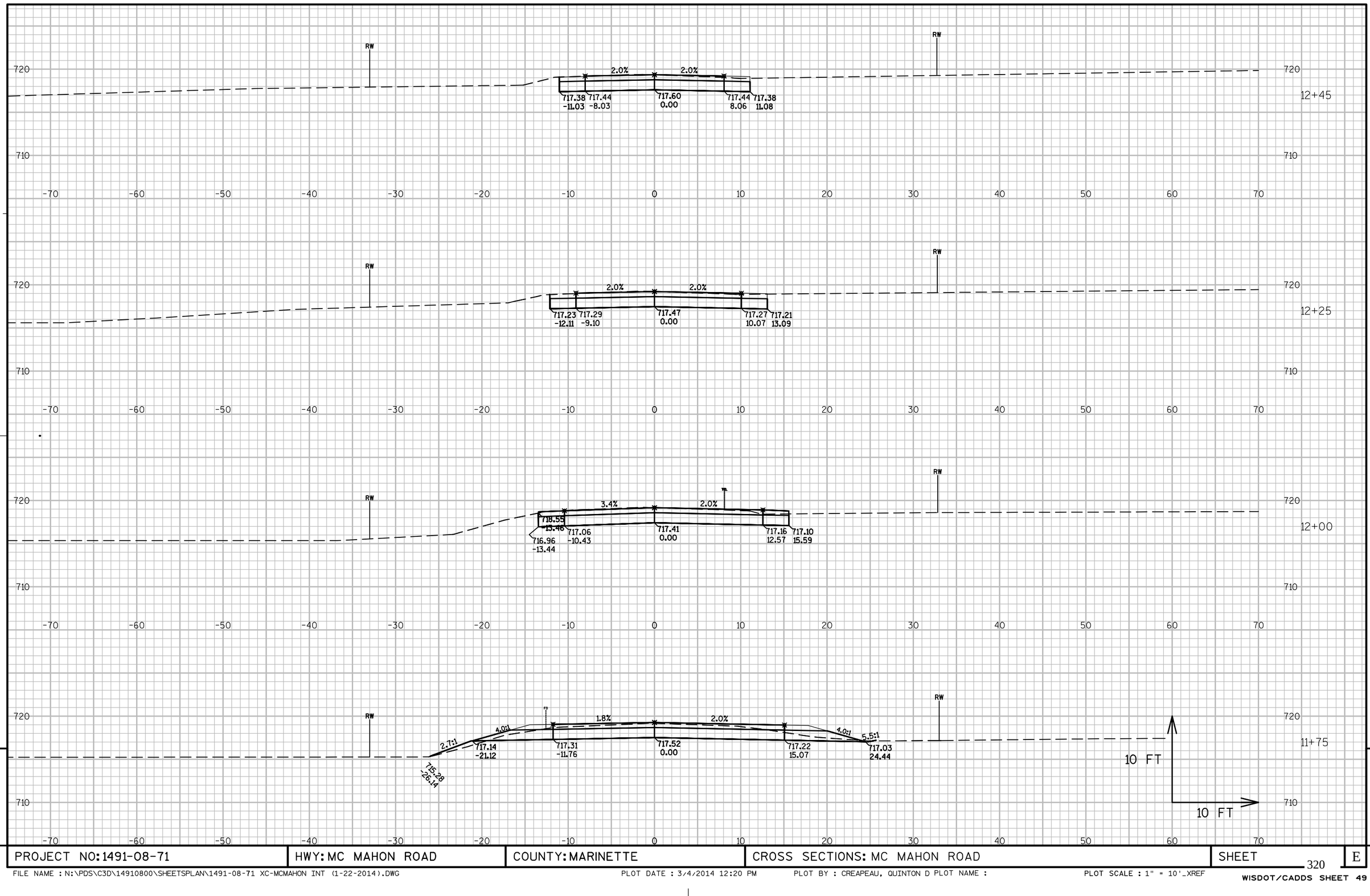
PROJECT NO: 1491-08-71	HWY: MC MAHON ROAD	COUNTY: MARINETTE	CROSS SECTIONS: MC MAHON ROAD	SHEET	E



PROJECT NO: 1491-08-71	HWY: MC MAHON ROAD	COUNTY: MARINETTE	CROSS SECTIONS: MC MAHON ROAD	SHEET 319	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-MCMAHON INT (1-22-2014).DWG PLOT DATE : 3/4/2014 12:20 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

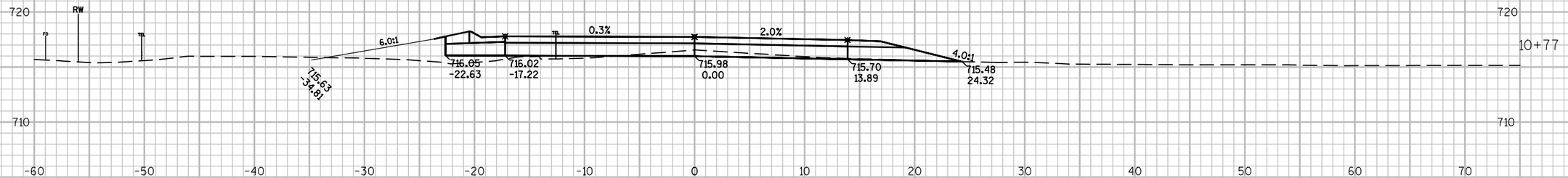
WISDOT/CADDS SHEET 49

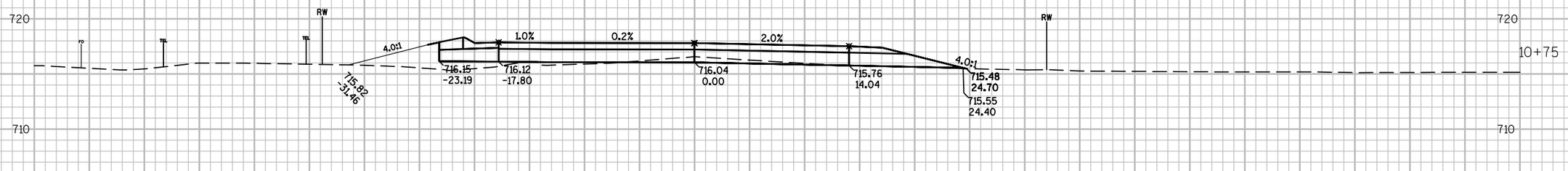


PROJECT NO: 1491-08-71	HWY: MC MAHON ROAD	COUNTY: MARINETTE	CROSS SECTIONS: MC MAHON ROAD	SHEET 320	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-MCMAHON INT (1-22-2014).DWG PLOT DATE : 3/4/2014 12:20 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49







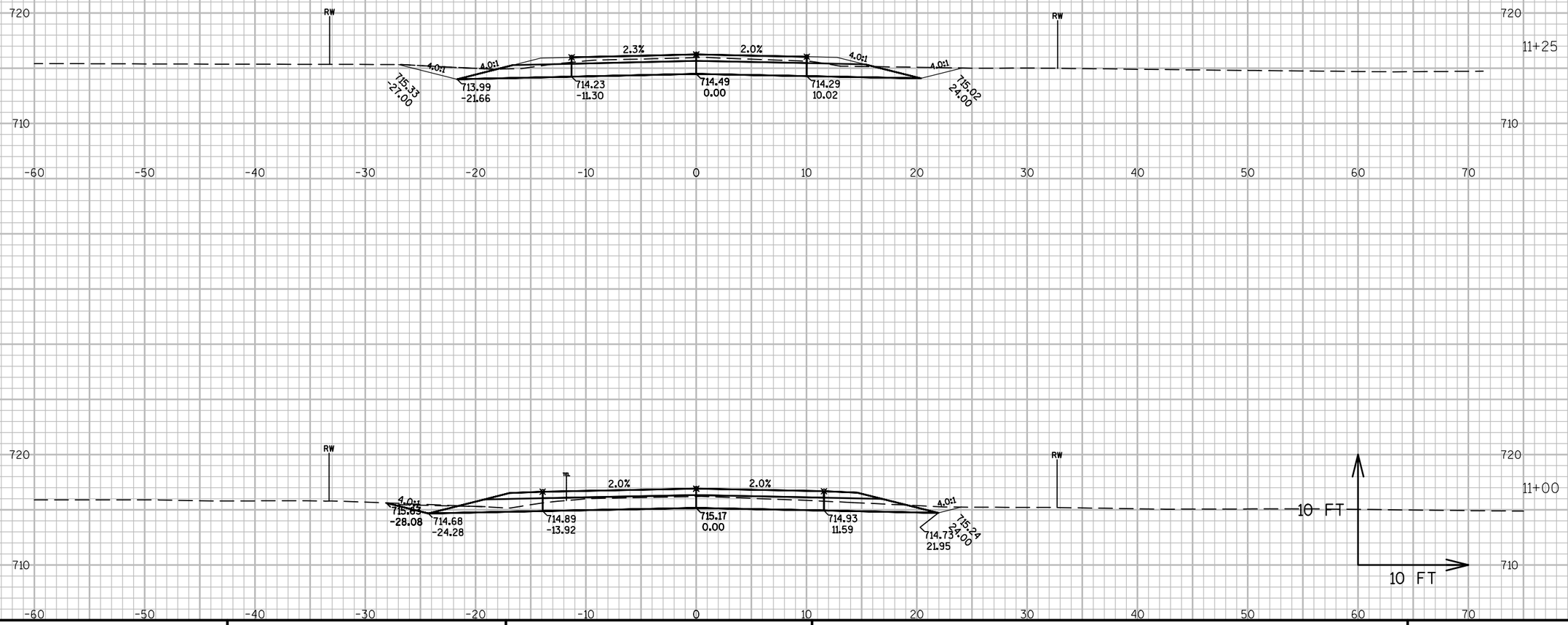
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PROJECT NO: 1491-08-71	HWY: MARTIN ROAD	COUNTY: MARINETTE	CROSS SECTIONS: MARTIN ROAD	SHEET 321	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-NEJEDLO-MARTIN INT (1-22-2014).DWG PLOT DATE : 3/5/2014 8:25 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



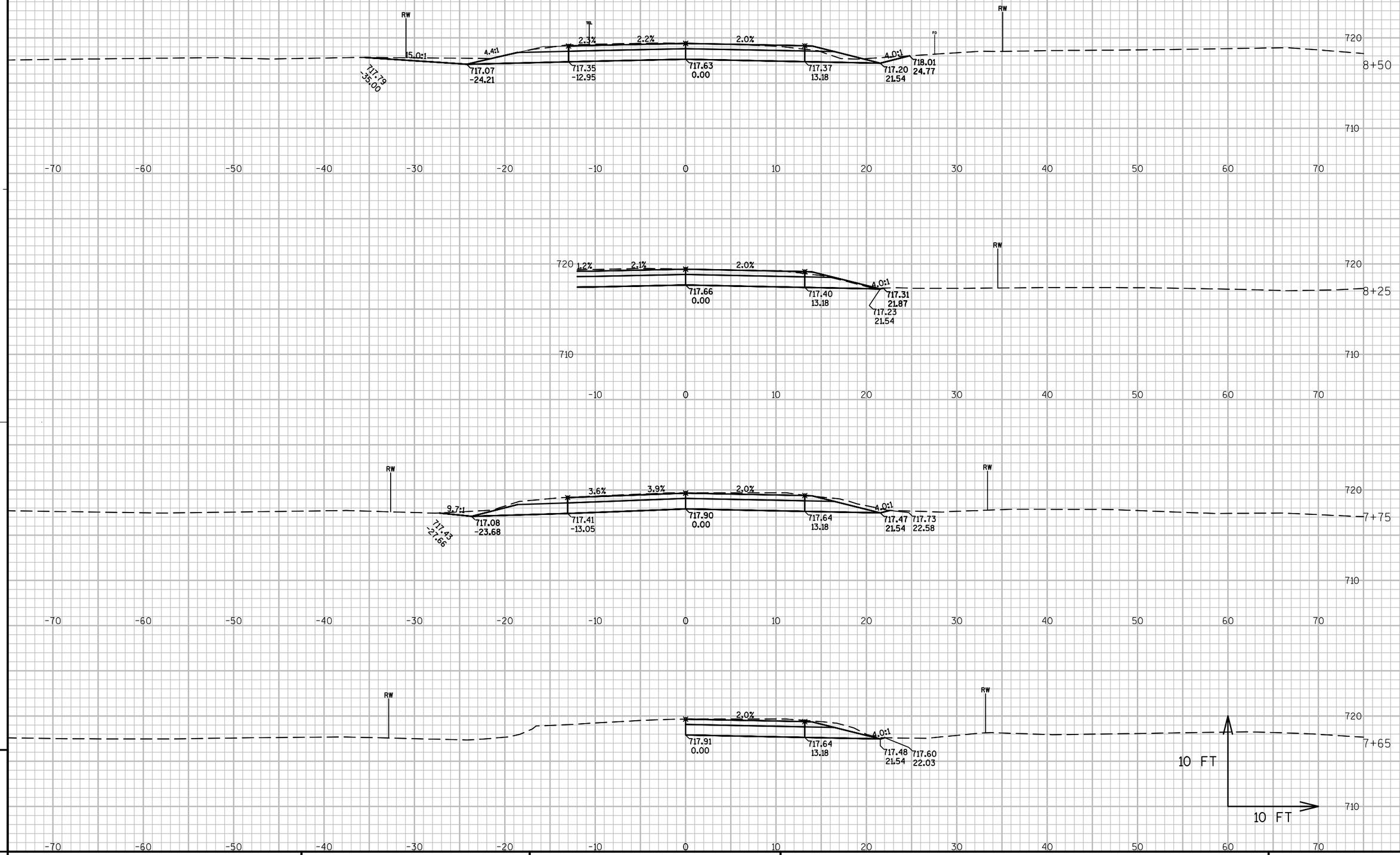
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PROJECT NO: 1491-08-71	HWY: MARTIN ROAD	COUNTY: MARINETTE	CROSS SECTIONS: MARTIN ROAD	SHEET 322	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-NEJEDLO-MARTIN INT (1-22-2014).DWG PLOT DATE : 3/5/2014 8:26 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

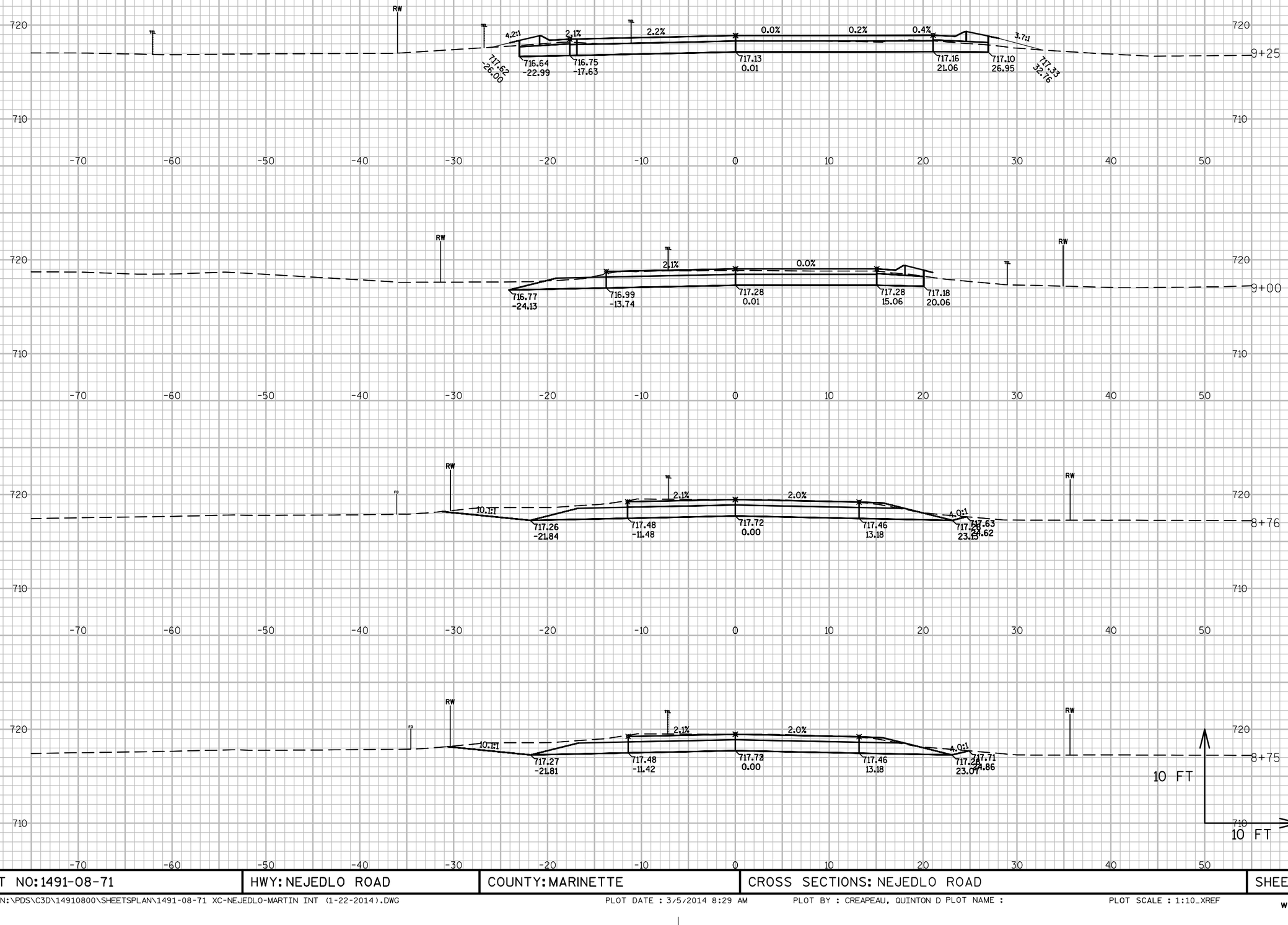
WISDOT/CADDS SHEET 49



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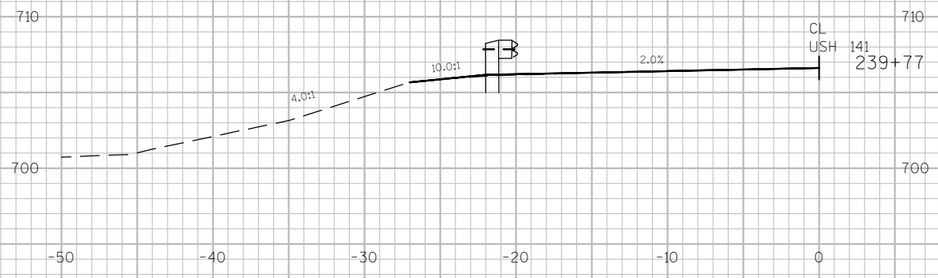
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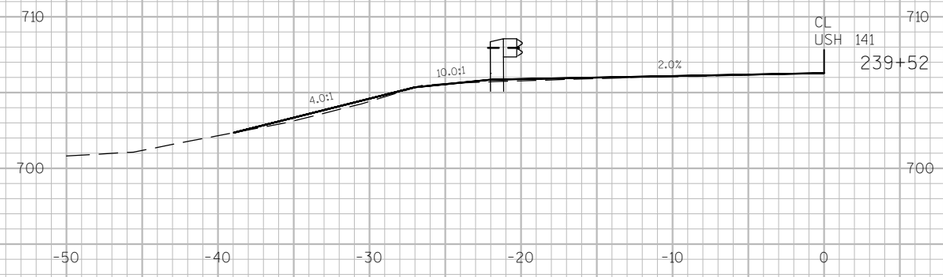
PROJECT NO: 1491-08-71	HWY: NEJEDLO ROAD	COUNTY: MARINETTE	CROSS SECTIONS: NEJEDLO ROAD	SHEET 323	E

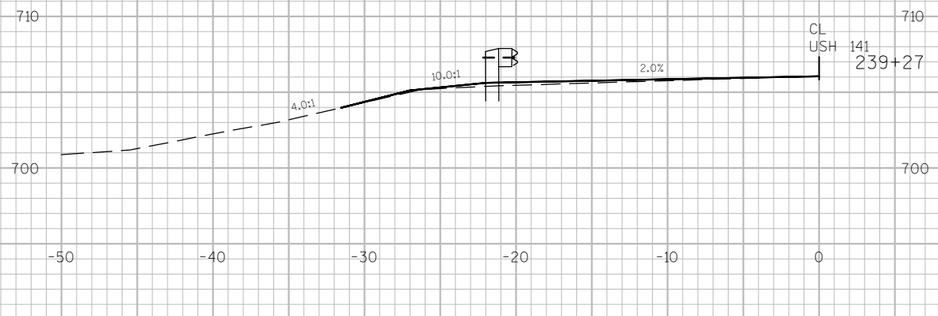


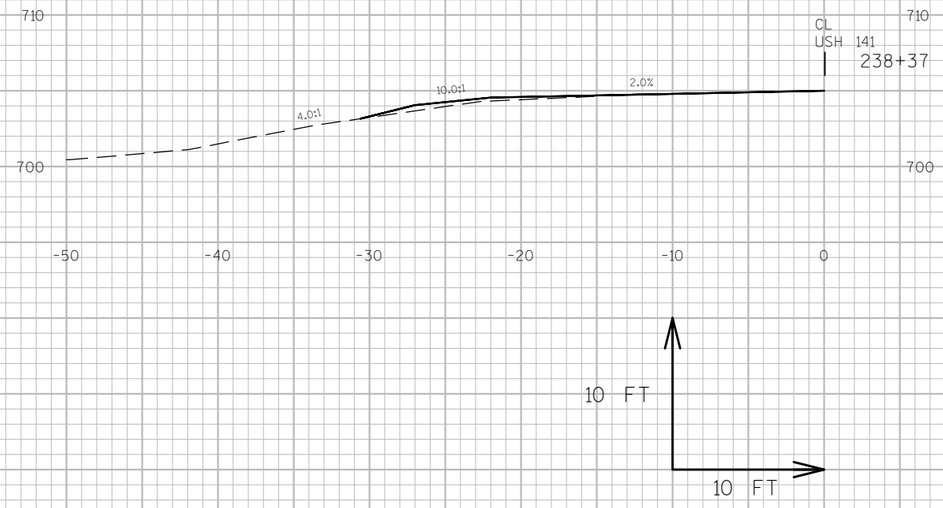
PROJECT NO: 1491-08-71	HWY: NEJEDLO ROAD	COUNTY: MARINETTE	CROSS SECTIONS: NEJEDLO ROAD	SHEET	E

FILE NAME : N:\PDS\C3D\14910800\SHEETSPLAN\1491-08-71 XC-NEJEDLO-MARTIN INT (1-22-2014).DWG PLOT DATE : 3/5/2014 8:29 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF









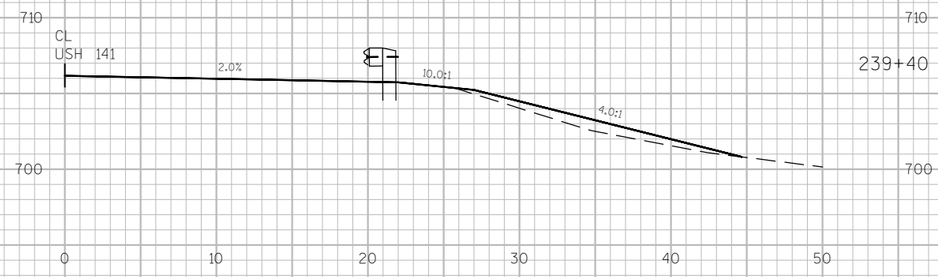
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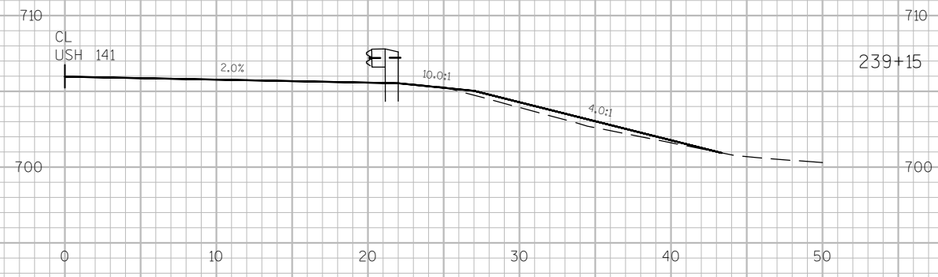
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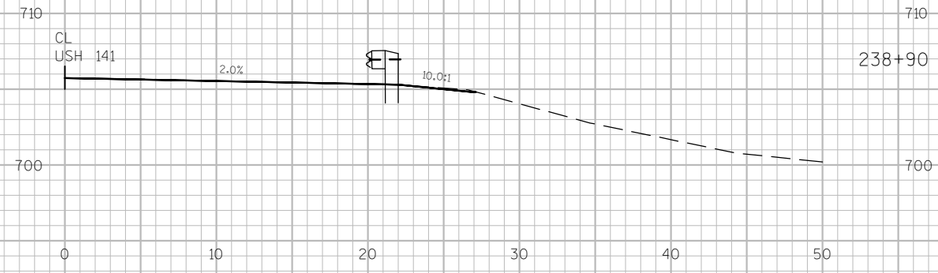
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: BEAMGUARD - EAT, POSTS 1,5,9 & TAPER	SHEET 325	E

FILE NAME : E:\14910800\DESIGN\CORRIDORS\BEAMGUARD GRADING.DWG PLOT DATE : 4/2/2014 8:49 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49





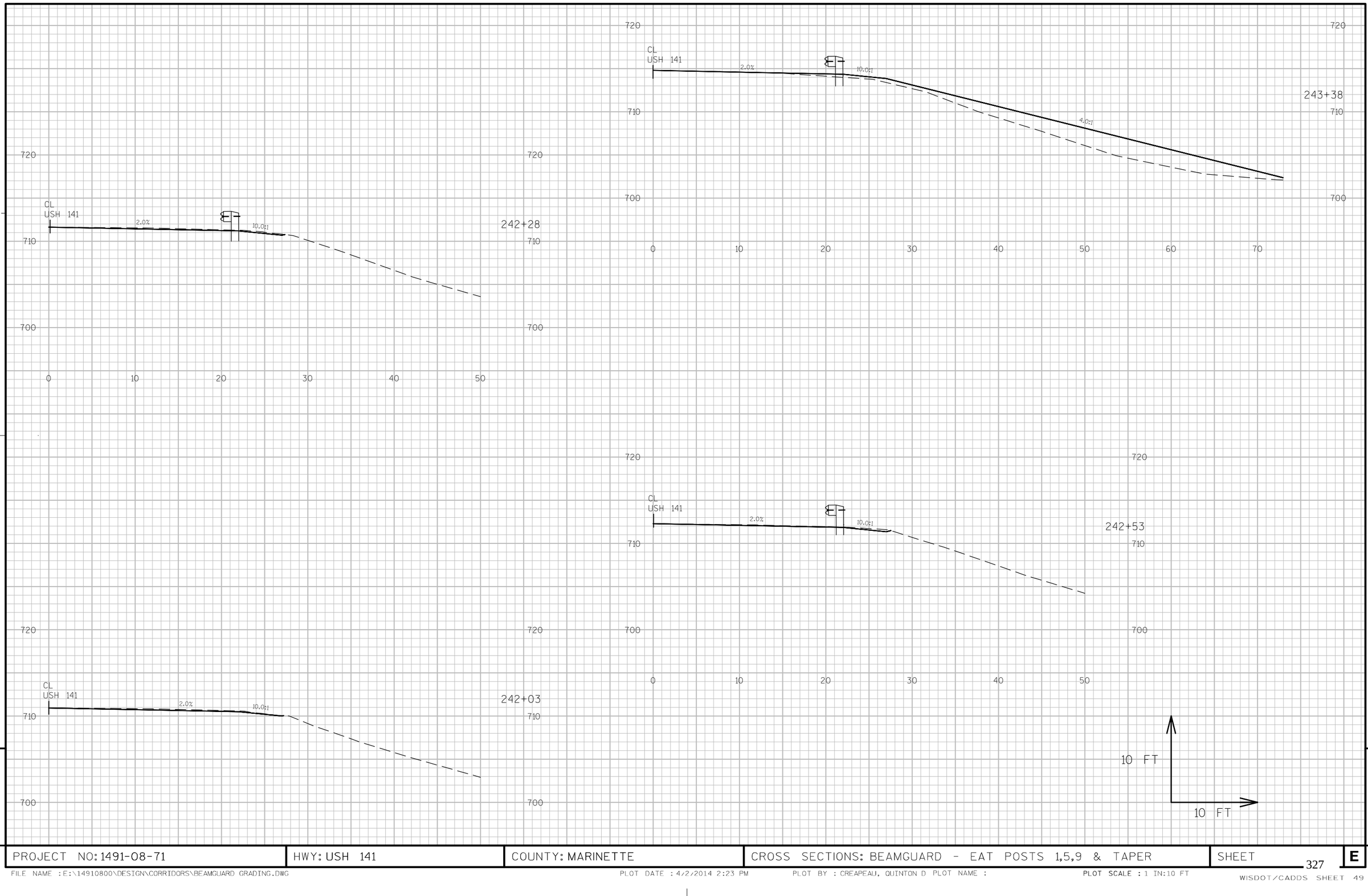




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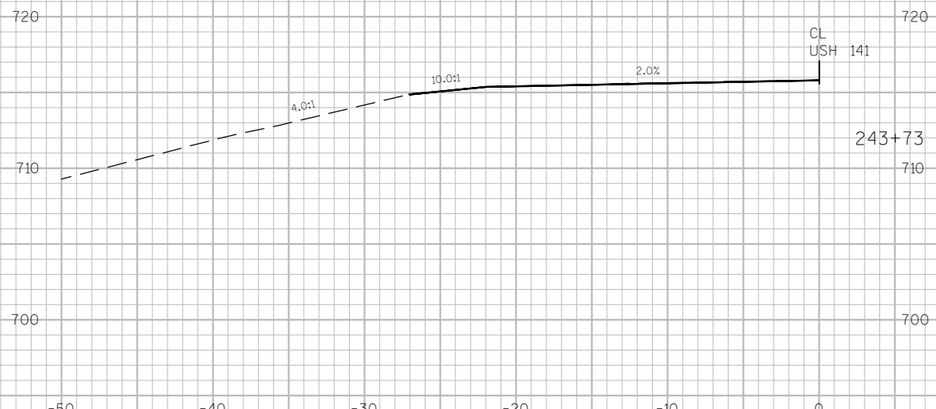
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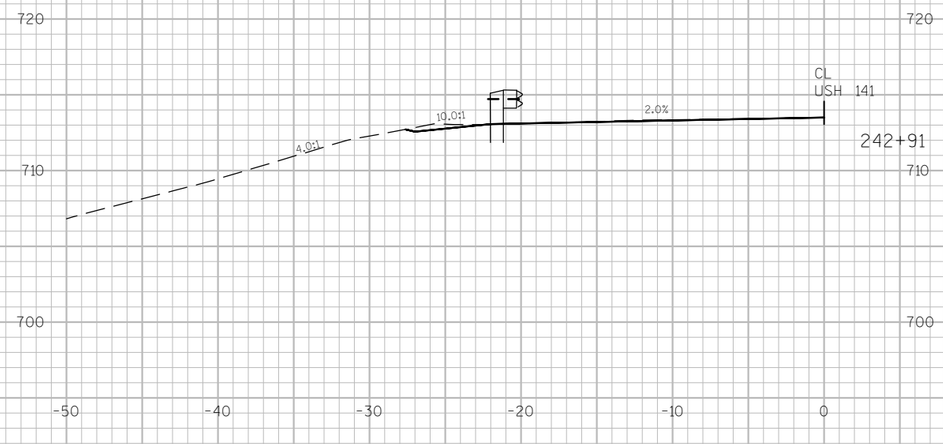


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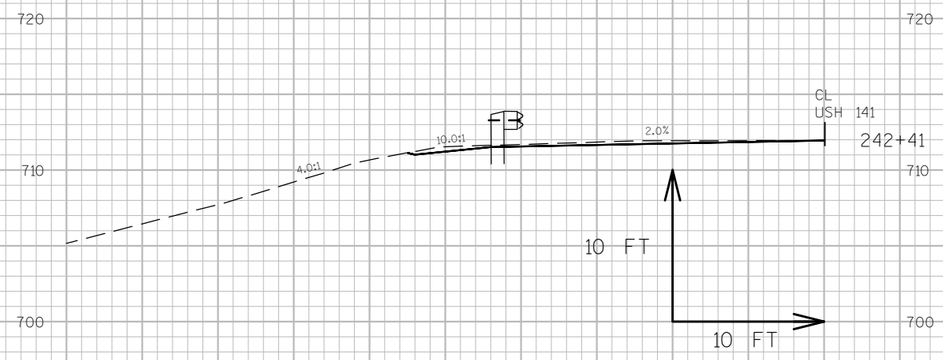
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: BEAMGUARD - EAT POSTS 1,5,9 & TAPER	SHEET 327	E







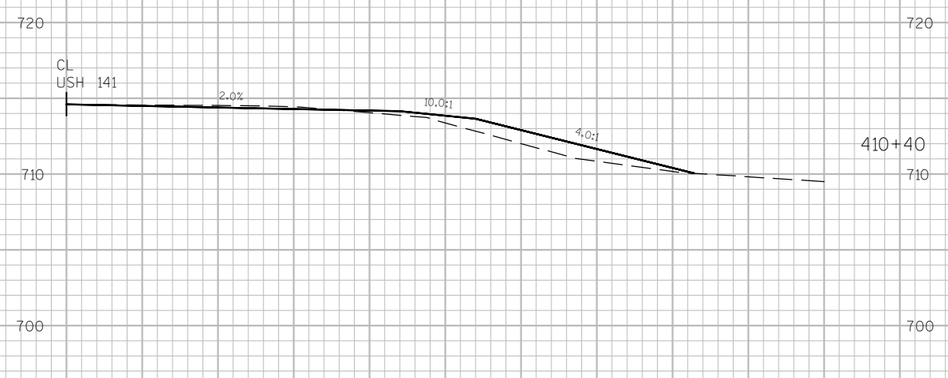


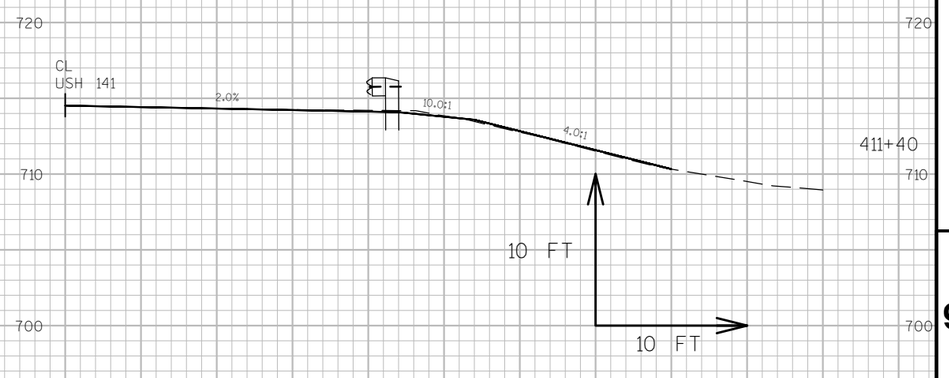
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: BEAMGUARD - EAT, POSTS 1,5,9 & TAPER	SHEET 328	E









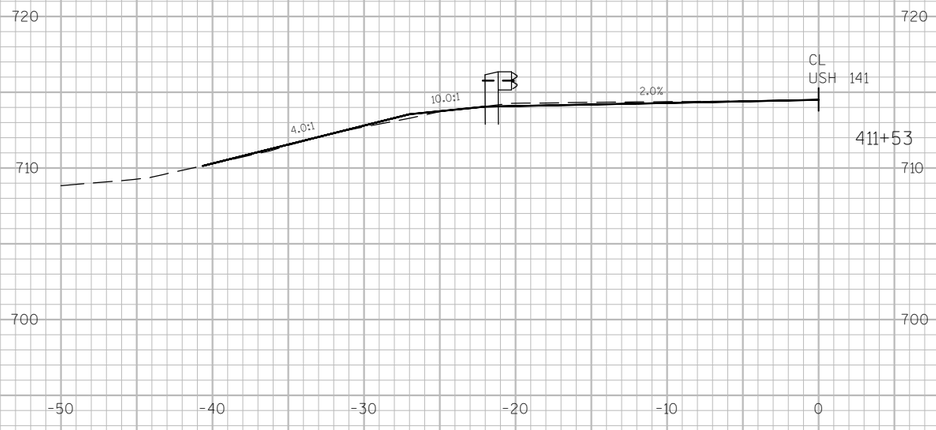
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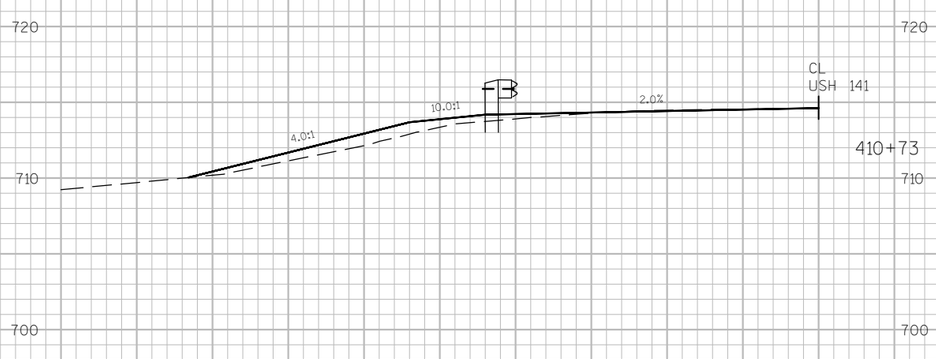
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: BEAMGUARD - EAT, POSTS 1,5,9 & TAPER	SHEET 329	E

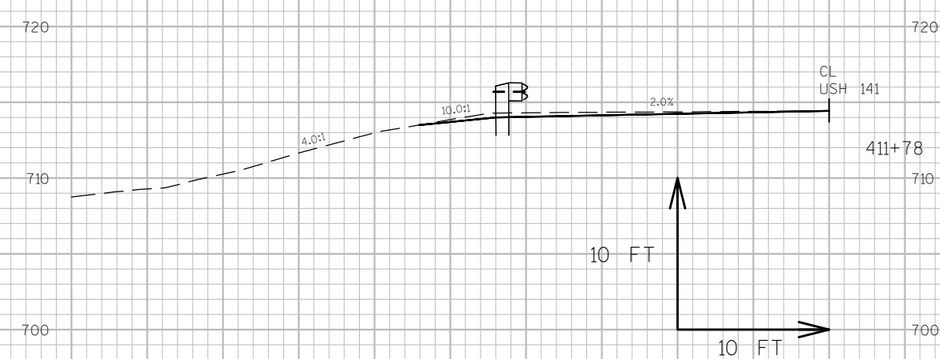
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WISDOT/CADDS SHEET 49







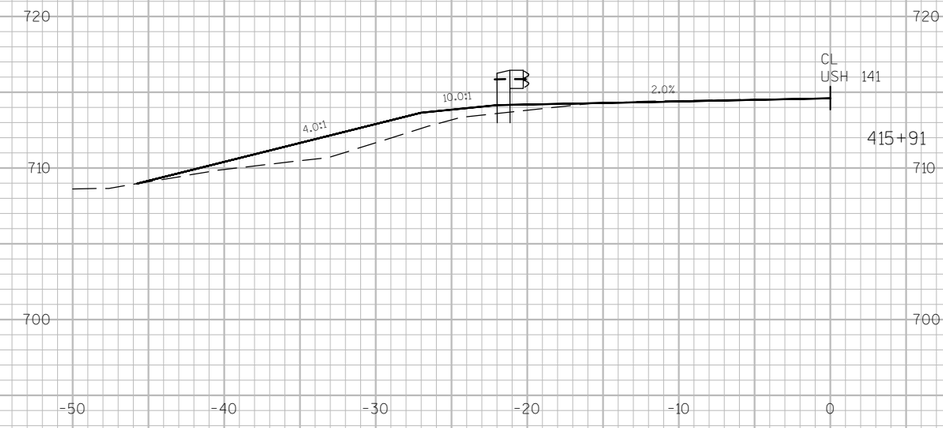


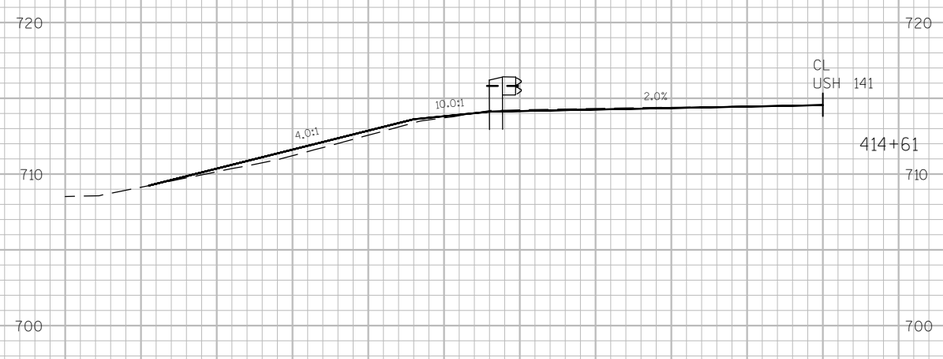
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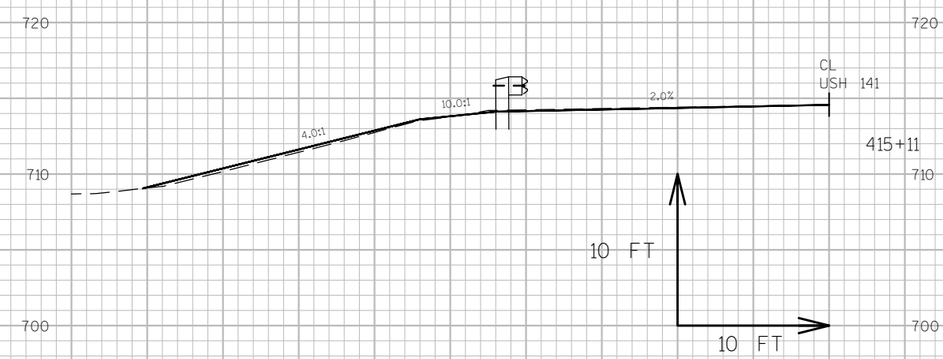
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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: BEAMGUARD - EAT, POSTS 1,5,9 & TAPER	SHEET 330	E









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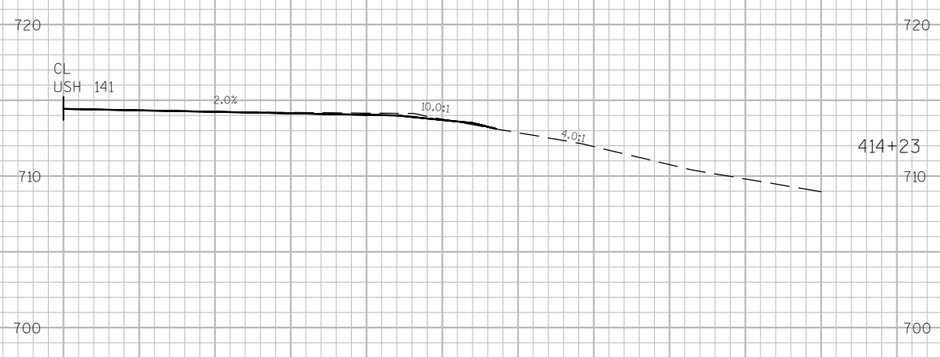
PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: BEAMGUARD - EAT, POSTS 1,5,9 & TAPER	SHEET 331	E

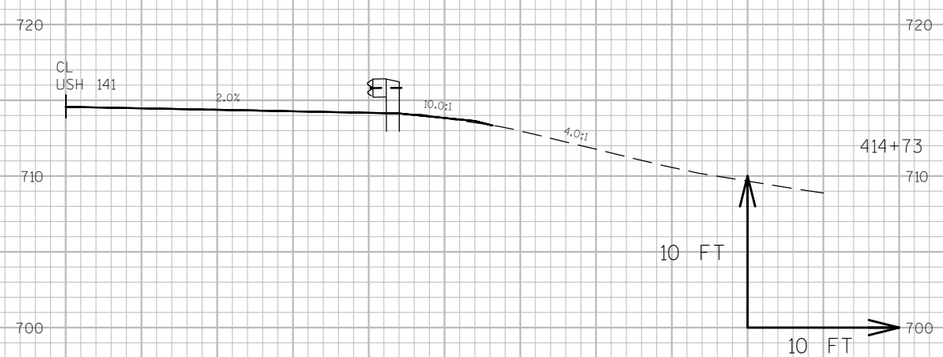
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WISDOT/CADDS SHEET 49









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PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: BEAMGUARD - EAT, POSTS 1,5,9 & TAPER	SHEET 332	E

FILE NAME : E:\14910800\DESIGN\CORRIDORS\BEAMGUARD GRADING.DWG PLOT DATE : 4/2/2014 2:31 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1 IN:10 FT

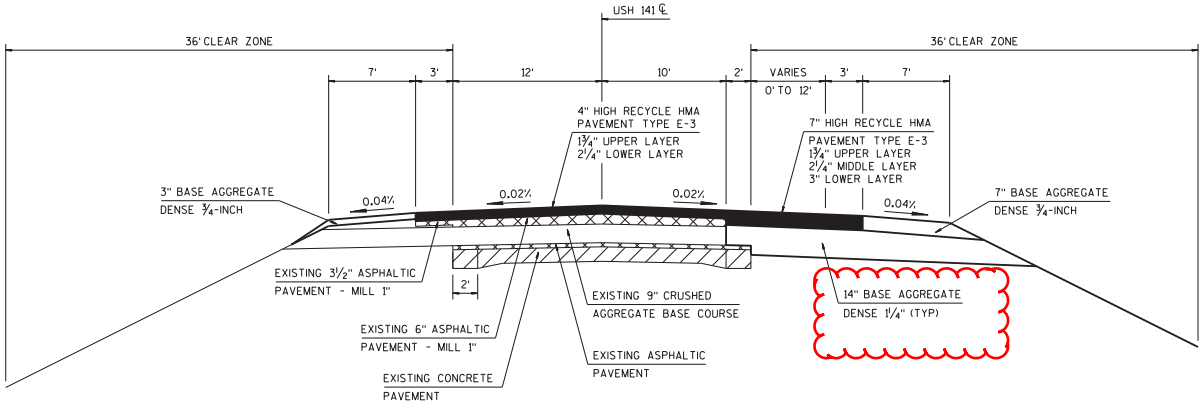
WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

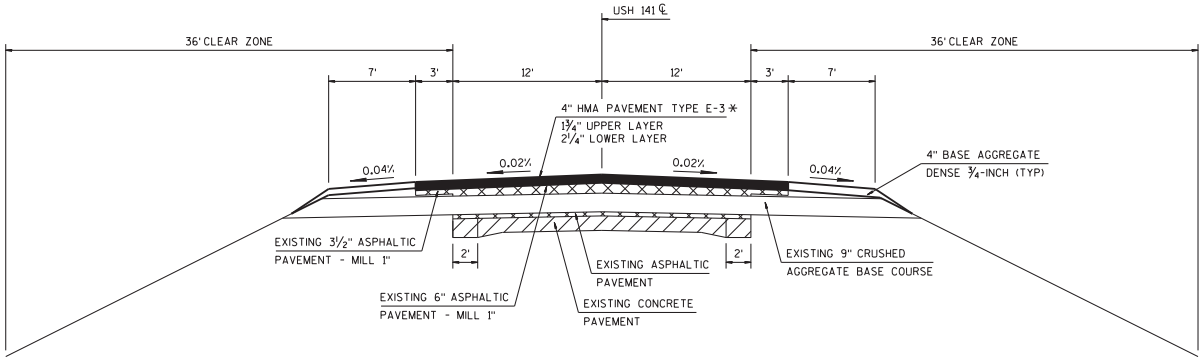
Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov



TYPICAL FINISHED CROSS SECTION FOR USH 141

320+00 TO 336+85



TYPICAL FINISHED CROSS SECTION FOR USH 141

336+85 TO 345+00 * 336+85 TO 340+00 HIGH RECYCLE HMA PAVEMENT TYPE E-3 BOTH LAYERS
* 340+00 TO 345+00 HIGH RECYCLE HMA PAVEMENT TYPE E-3 UPPER LAYER ONLY

Addendum No. 1
ID 1491-08-71
Revised Sheet 6
May 29, 2014

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	TYPICAL CROSS SECTIONS	SHEET 6	E