

SWL

JULY 2017

ORDER OF SHEETS

Section No. 1	Title
Section No. 2	Typical Sections and Details (Includes Erosion Control Plans)
Section No. 3	Estimate of Quantities
Section No. 3	Miscellaneous Quantities
Section No. 4	Right of Way Plot
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

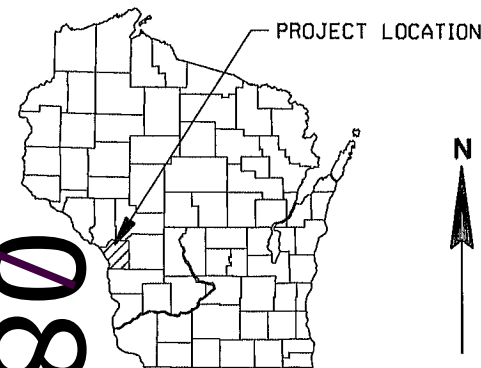
TOTAL SHEETS = 184

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
USH 53/STH 93 - MINDORO
(USH 53 TO STH 108)
CTH T
LA CROSSE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7068-01-60	WISC 2017341	1

STATE PROJECT NUMBER
7068-01-60

TREMPEALEAU COUNTY
JACKSON COUNTY



DESIGN DESIGNATION

A.A.D.T. (2016)	= 1,000
A.A.D.T. (2036)	= 1,400
D.H.V.	= 5.7%
D.D.	= 60/40
T.	= 6.9%
DESIGN SPEED	= 55 MPH
ESALS	= 192,900

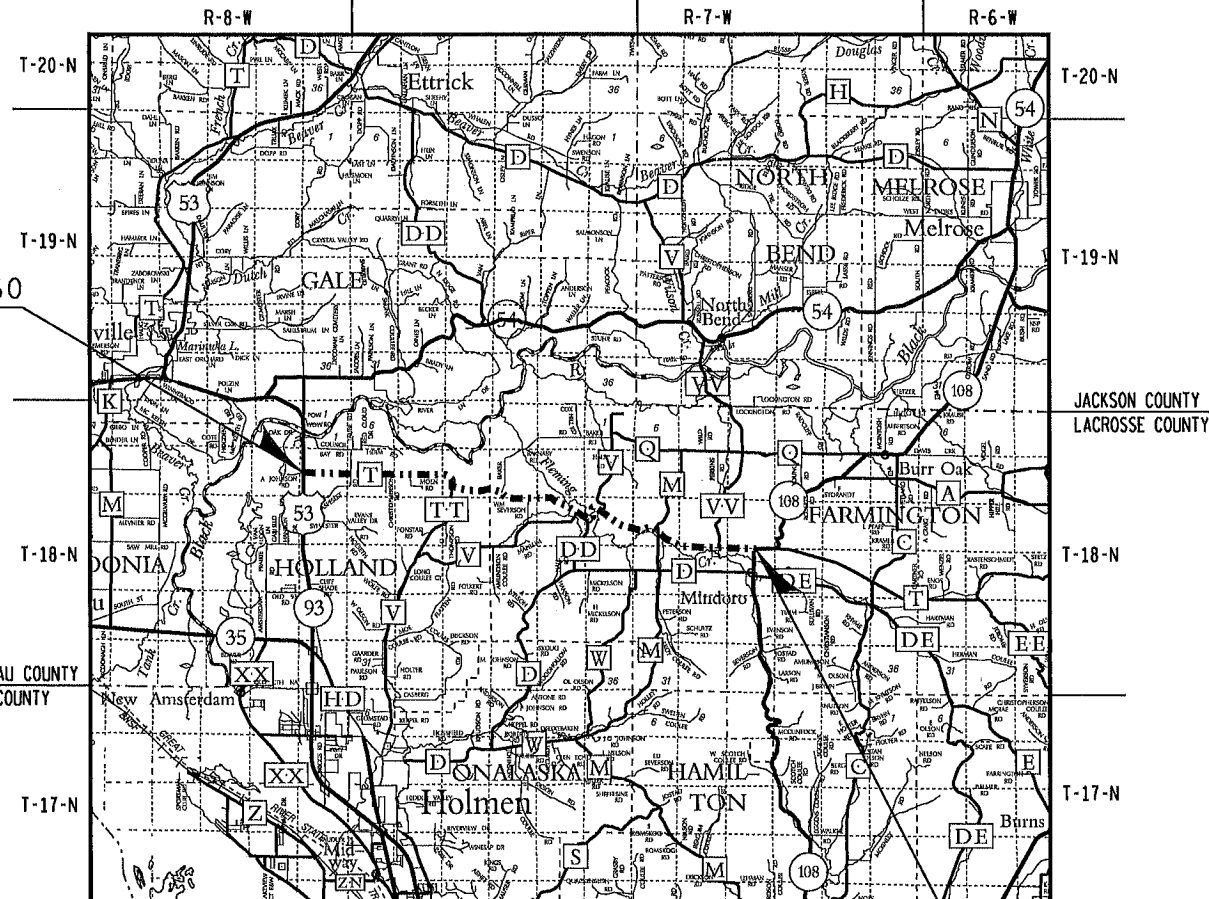
BEGIN PROJECT 7068-01-60
STA. 100+52.00
Y=218136.680
X=434812.113

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	////
PROPERTY LINE	---
LOT LINE	- - -
LIMITED HIGHWAY EASEMENT	L
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)	---
SPECIAL DITCH	---
GRADE ELEVATION	95.36
CULVERT (Profile View)	---
UTILITIES	
OVERHEAD UTILITIES	OH
ELECTRIC	E
FIBER OPTIC	FO
GAS	G
SANITARY SEWER	SAN
STORM SEWER	SS
TELEPHONE	T
WATER	W
UTILITY PEDESTAL	---
POWER POLE	---
TELEPHONE POLE	---

TREMPEALEAU COUNTY
LACROSSE COUNTY



LAYOUT
SCALE 0 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 10.260 MI.

END PROJECT 7068-01-60
STA. 642+27.00

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE
NATIONAL GEODETIC VERTICAL DATUM NAVD 88.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN
COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), MARATHON
COUNTY, NAD83 (2007).

ACCEPTED FOR

COUNTY of LA CROSSE

1/17/17
(Date) (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY

AECOM



1/17/17
(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	AECOM
Designer	AECOM
Management Consultant	KL ENGINEERING, INC.

APPROVED FOR THE DEPARTMENT
DATE: 1/31/17 (Signature)

E

GENERAL NOTES

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

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

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

DNR LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
KAREN KALVELAGE
3550 MORMON COULEE RD
LA CROSSE, WI 54601
608-785-9115
karen.kalvelage@wisconsin.gov

UTILITIES

RIVERLAND ENERGY COOP
(ELECTRIC)
BILL MASON
P.O. BOX 276
ONALASKA, WI 54650
608-783-2238 EX.326 OFFICE
608-769-2880 MOBILE
bmason@riverlandenergy.com

DAIRYLAND POWER
(TRANSMISSION)
JERRY IVERSON
PO BOX 817
LA CROSSE, WI 54602
608-788-4000
jerry.iversen@dairylandpower.com

XCEL ENERGY, INC.
(ELECTRIC)
DAVE KENITZ
3215 COMMERCE STREET
LA CROSSE, WI 54603
608-789-3674
david.l.kenitz@xcelenergy.com

WPPI ENERGY
(TRANSMISSION)
TIM NOELDNER
1425 CORPORATE CENTER DRIVE
SUN PRAIRIE, WI 53590
608-834-4579 OFFICE
608-220-1263 MOBILE
tnoeldner@wppienergy.org

JACKSON ELECTRIC COOP
(ELECTRIC)
ERIC STEIEN
N6868 CTY RD F
BLACK RIVER FALLS, WI 54615
715-284-5385 OFFICE
715-299-5208 MOBILE
esteien@jackelec.com

MIDWEST NATURAL GAS
DOUGLAS DICKENSON
3600 HWY 157
LA CROSSE, WI 54601
608-781-1011 OFFICE
608-780-1109 MOBILE
doug@midwestnaturalgas.com

XCEL ENERGY, INC.
(TRANSMISSION)
BRUCE ZEMKE
414 NICOLLET MALL, 5TH FLOOR
MINNEAPOLIS, MN 55401
612-330-7815 OFFICE
651-214-2620 MOBILE
bruce.m.zemke@xcelenergy.com

CENTURYLINK
BRIAN STELPLUGH
333 N. FRONT STREET
LA CROSSE, WI 54601
608-796-5142
brian.stelplugh@centurylink.com

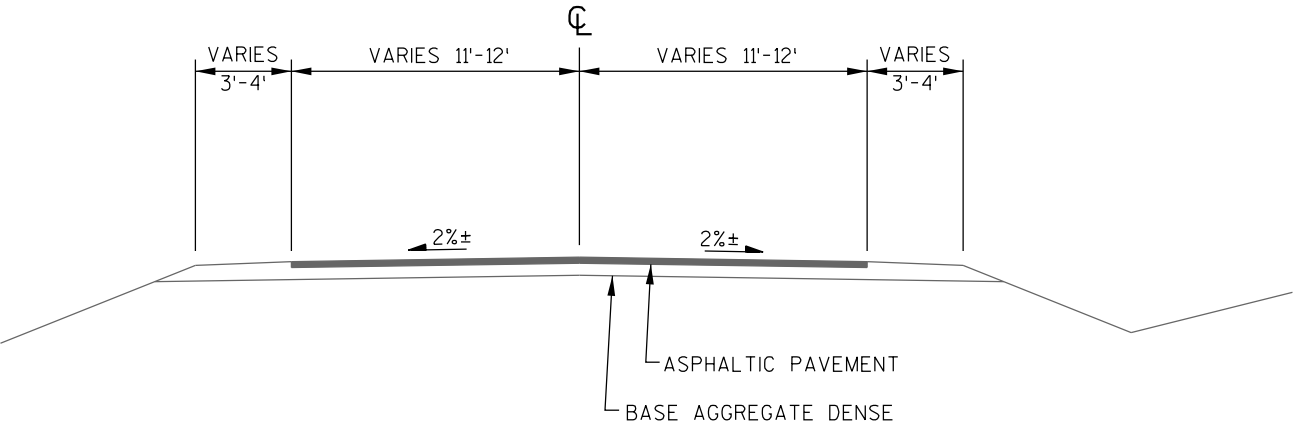
NORTHERN STATES POWER
(TRANSMISSION)
BRUCE ZEMKE
414 NICOLLET MALL, 5TH FLOOR
MINNEAPOLIS, MN 55401
612-330-7815 OFFICE
651-214-2620 MOBILE
bruce.m.zemke@xcelenergy.com

CHARTER COMMUNICATIONS
PERRY MCCLELLAN
1228 12TH AVE S.
ONALASKA, WI 54650
608-317-6213 OFFICE
perry.mcclellan@charter.com

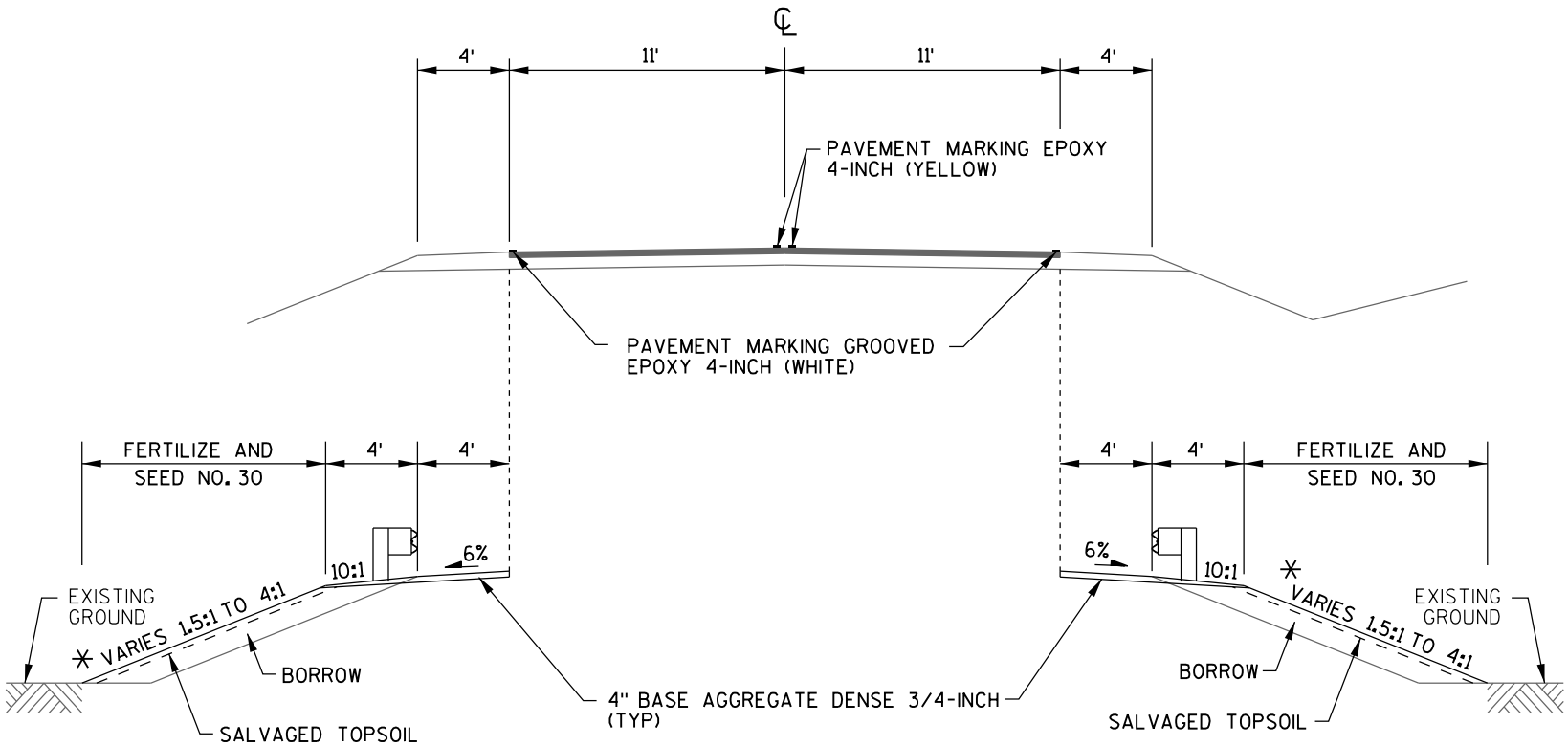


Dial 811 or (800) 242-8511
www.DiggersHotline.com

** DENOTES UTILITIES THAT ARE NOT
DIGGER'S HOTLINE MEMBERS



TYPICAL EXISTING SECTION - CTH T
STA 100+52 - STA 642+27

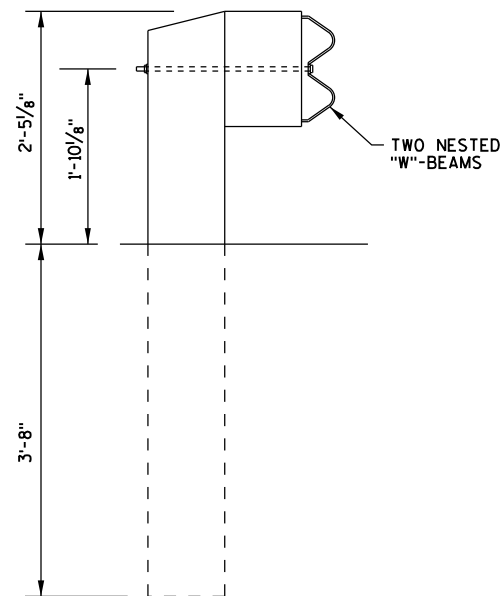


* EROSION MAT CLASS I TYPE A REQUIRED ON ALL SLOPES BETWEEN 1.5:1 AND 2.5:1.
HEAVY RIPRAP REQUIRED ON ALL SLOPES 1.5:1 OR STEEPER.
SEE EROSION CONTROL PLANS.

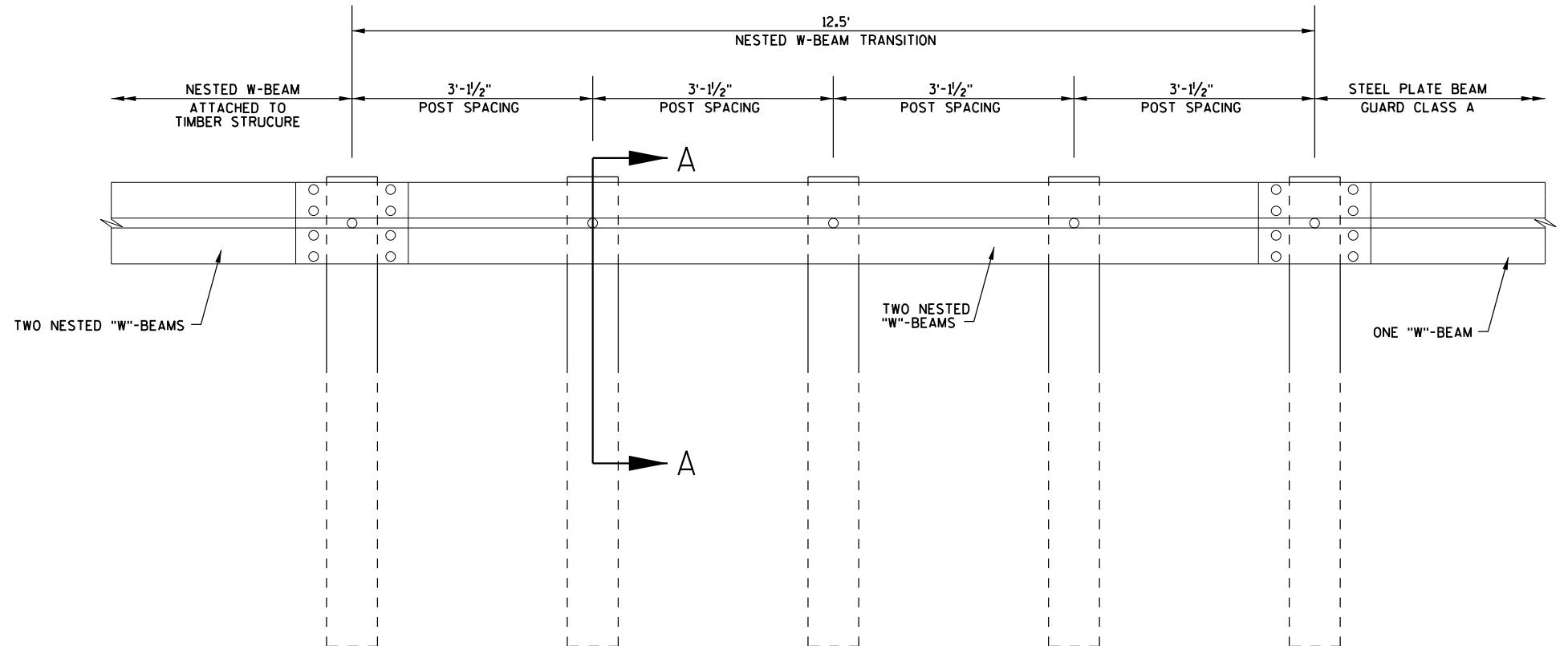
STA 109+96.88 LT - STA 116+53.12 LT
STA 223+18.75 LT - STA 227+37.50 LT
STA 407+63.68 LT - STA 409+18.70 LT
STA 410+03.45 LT - STA 412+20.97 LT
STA 444+29.38 LT - STA 446+83.79 LT

STA 121+18.75 RT - STA 125+00.00 RT
STA 223+93.75 RT - STA 228+25.00 RT
STA 319+93.87 RT - STA 325+97.29 RT
STA 326+13.77 RT - STA 330+54.69 RT
STA 406+19.46 RT - STA 409+49.48 RT
STA 410+33.74 RT - STA 411+51.26 RT
STA 443+55.65 RT - STA 446+86.90 RT
STA 458+95.35 RT - STA 463+48.83 RT
STA 504+46.72 RT - STA 510+27.96 RT
STA 510+71.68 RT - STA 514+02.92 RT
STA 533+91.21 RT - STA 543+64.84 RT
STA 601+83.81 RT - STA 608+00.45 RT

TYPICAL FINISHED SECTION - CTH T
STA 100+52 - STA 642+27

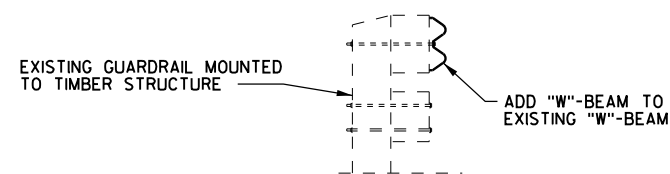


SECTION A-A



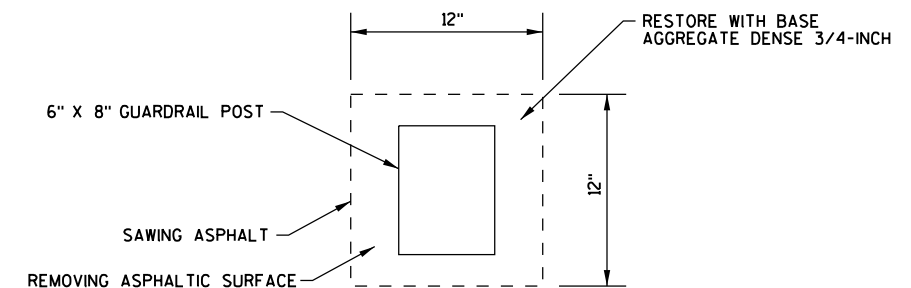
NESTED W-BEAM TRANSITION

STA 444+96.28, 15.3' LT - STA 445+08.78, 15.3' LT
 STA 445+83.78, 15.3' LT - STA 445+96.28, 15.3' LT
 STA 444+96.28, 15.3' RT - STA 445+08.78, 15.3' RT
 STA 445+83.78, 15.3' RT - STA 445+96.28, 15.3' RT

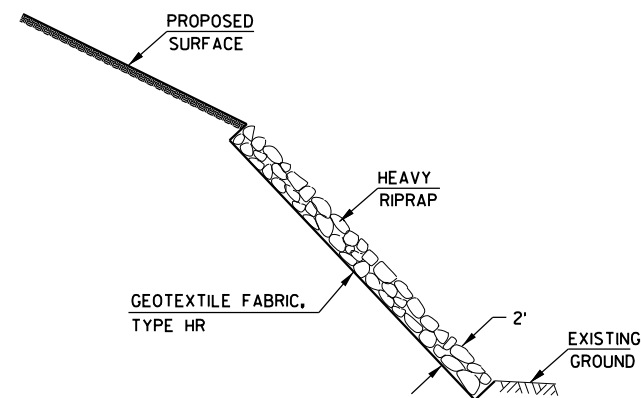


NESTED W-BEAM

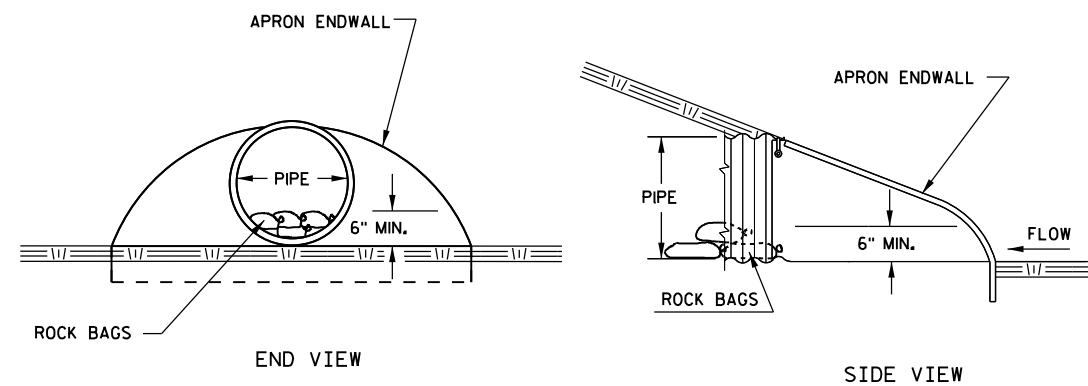
(STRUCTURE P-32-083)
 STA 445+08.78, 15.3' LT - STA 445+83.78, 15.3' LT
 STA 445+08.78, 15.3' RT - STA 445+83.78, 15.3' RT



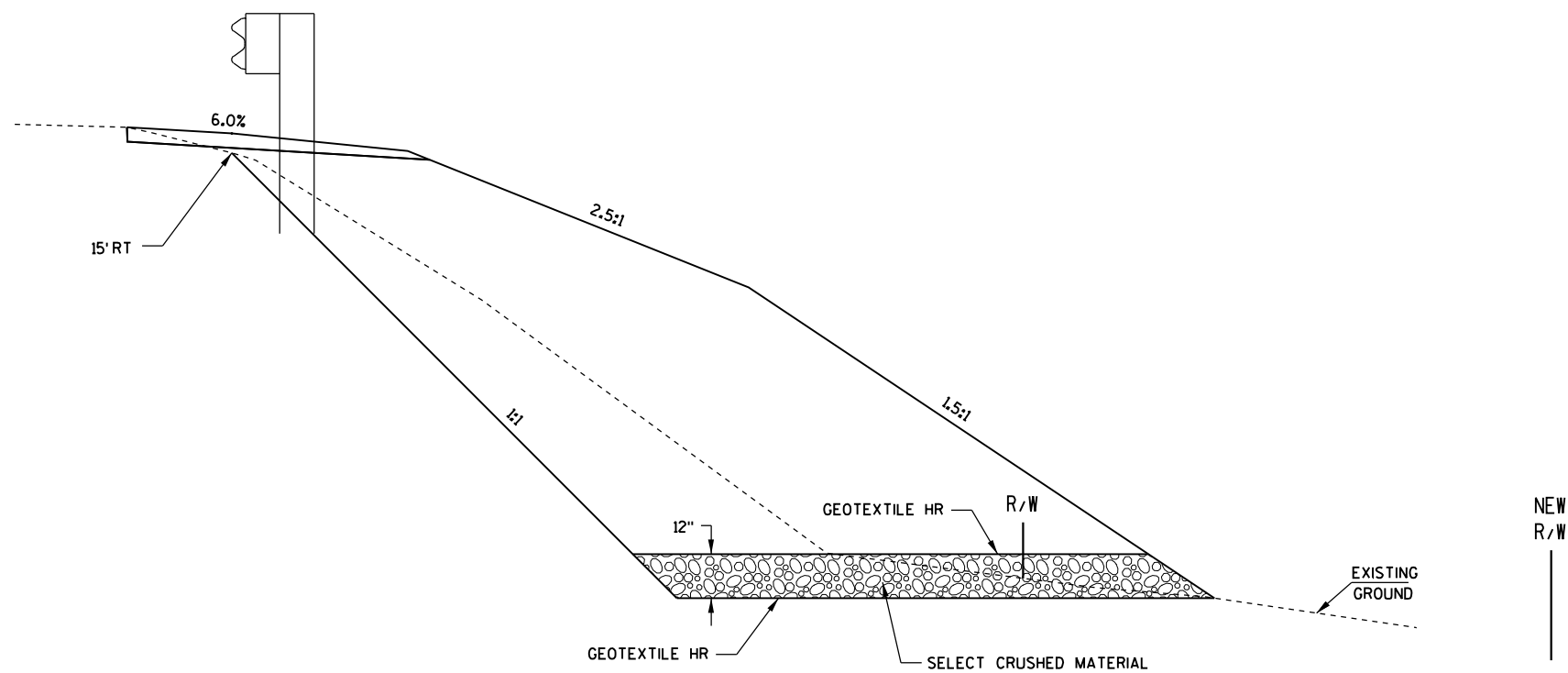
PROPOSED GUARDRAIL POST IN EXISTING ASPHALT



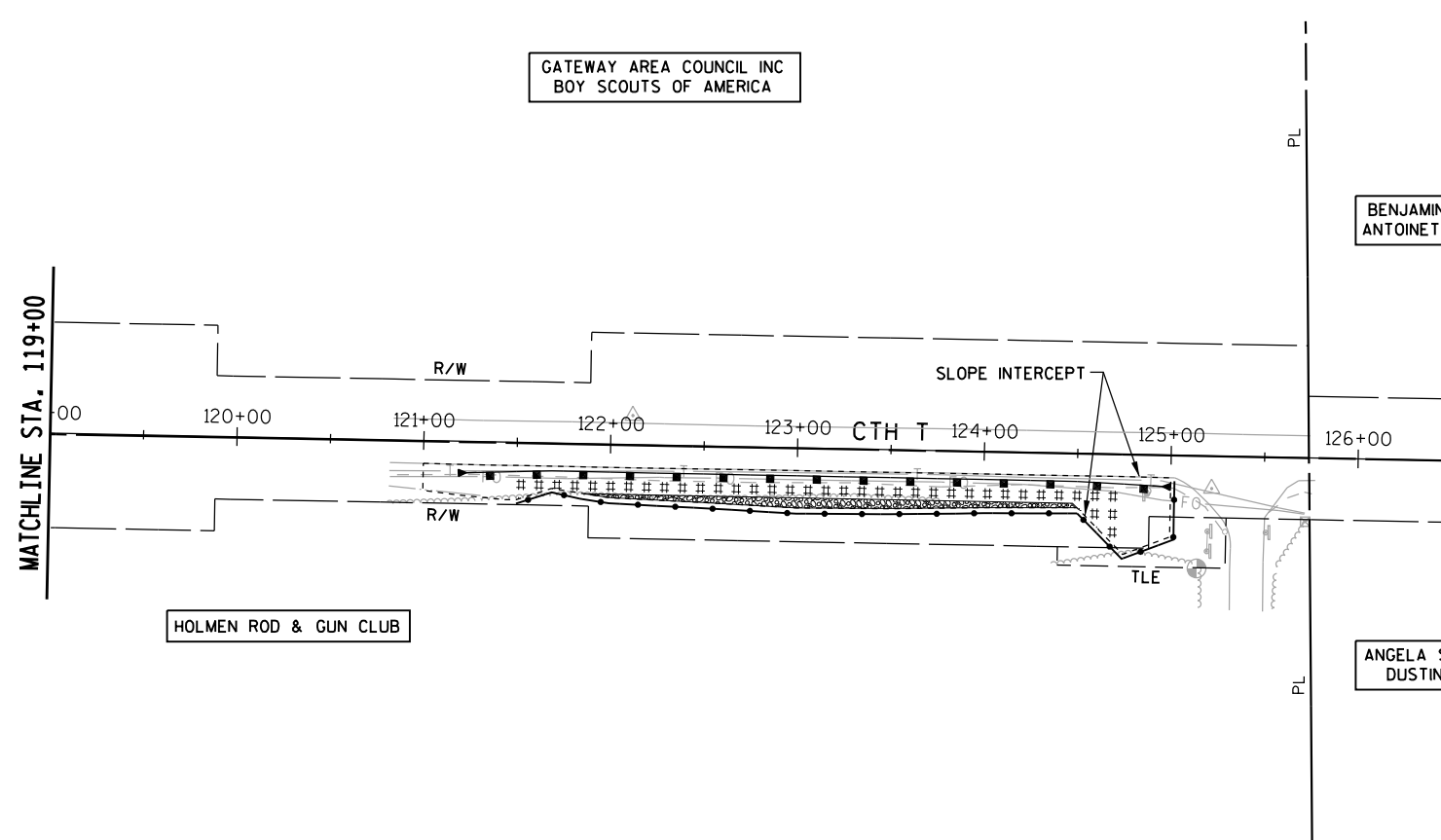
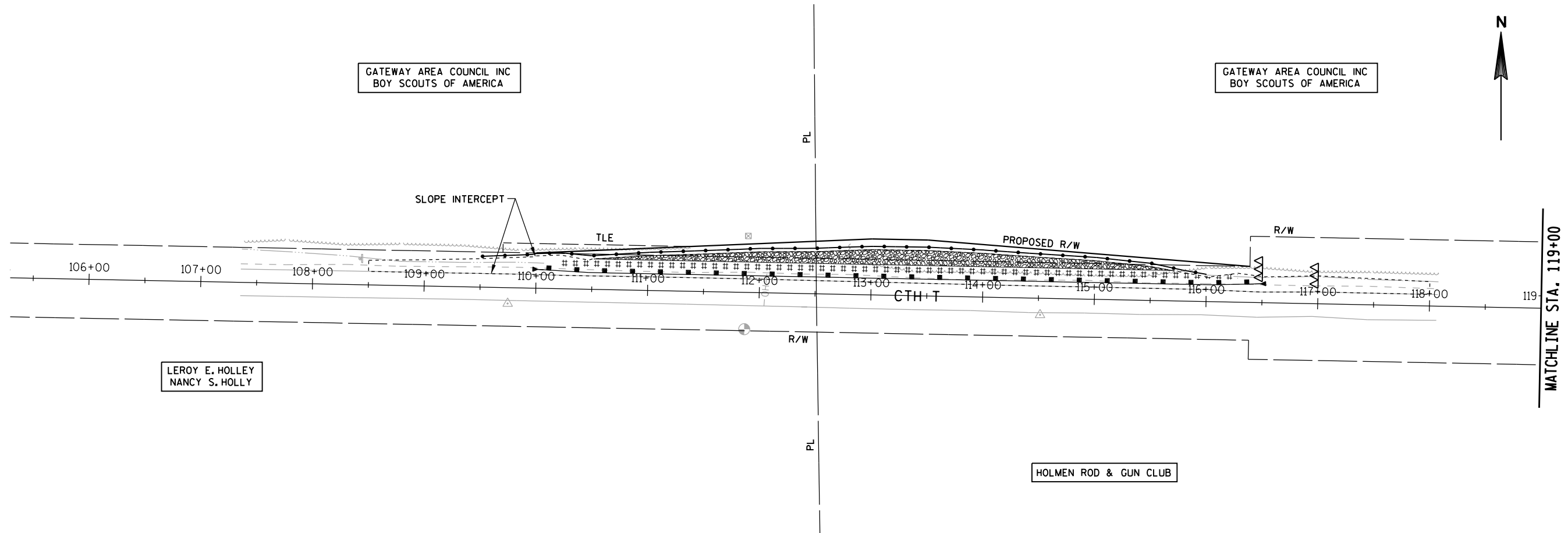
HEAVY RIPRAP AND GEOTEXTILE FABRIC
NTS



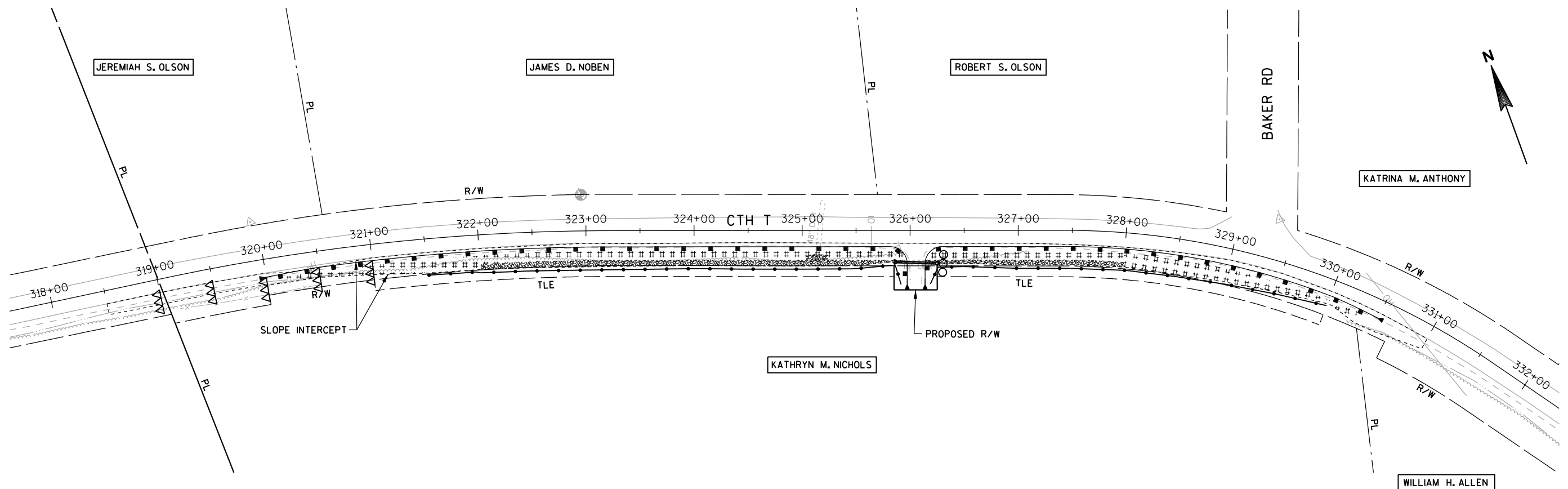
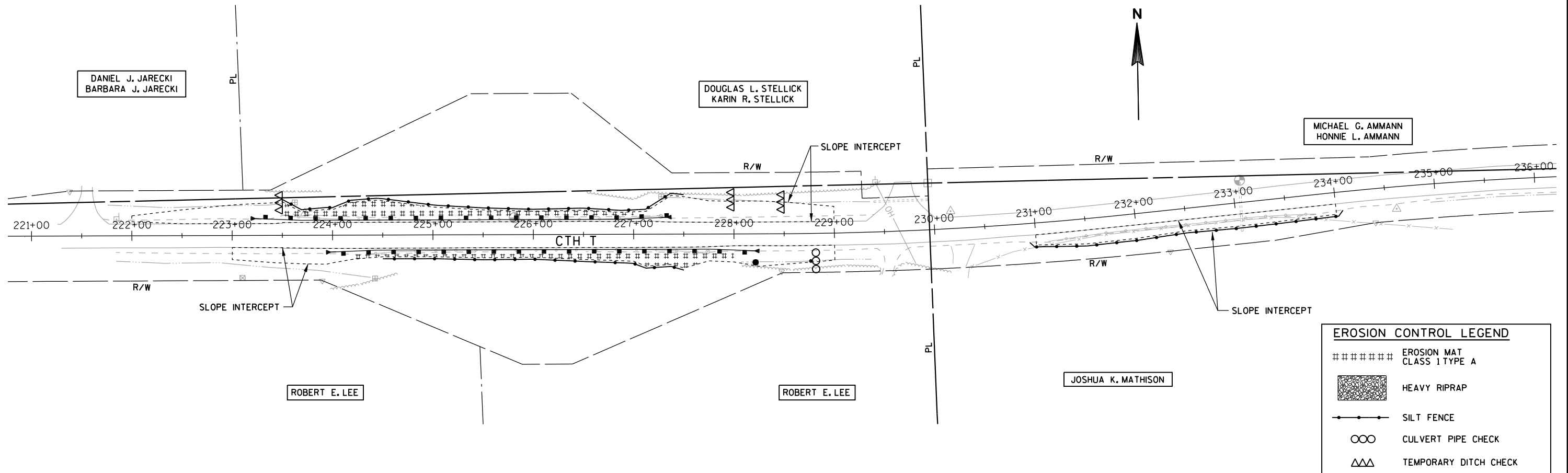
CULVERT PIPE CHECK
NTS

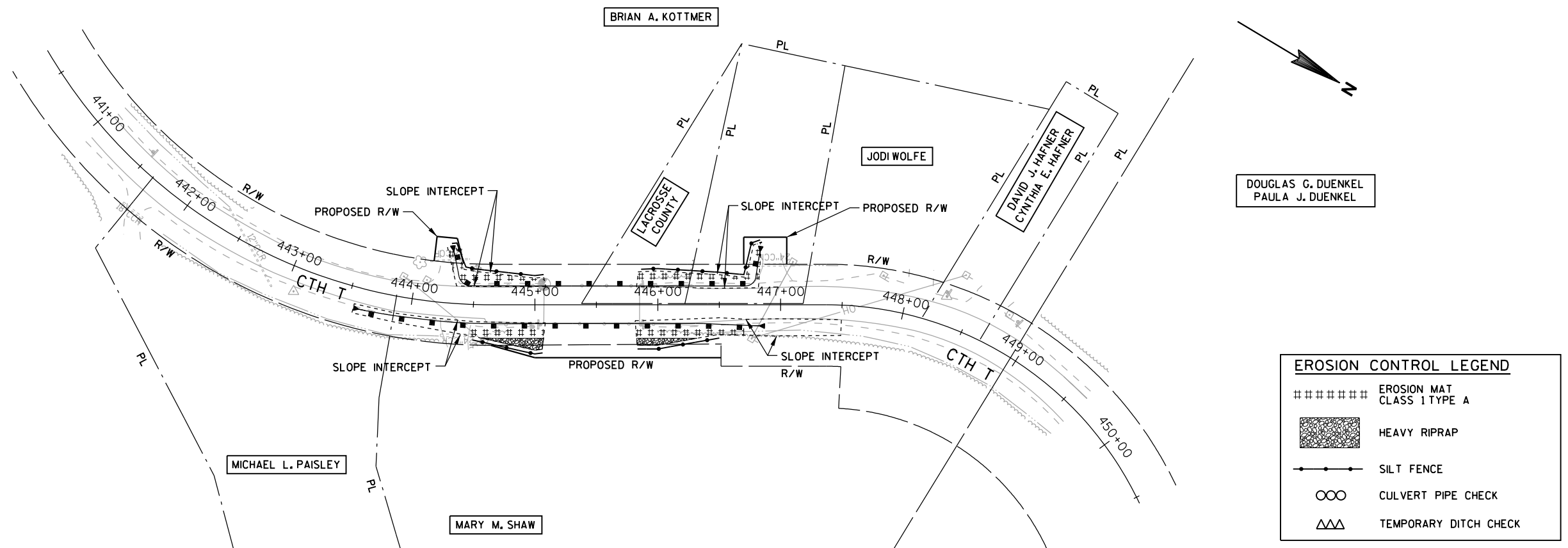
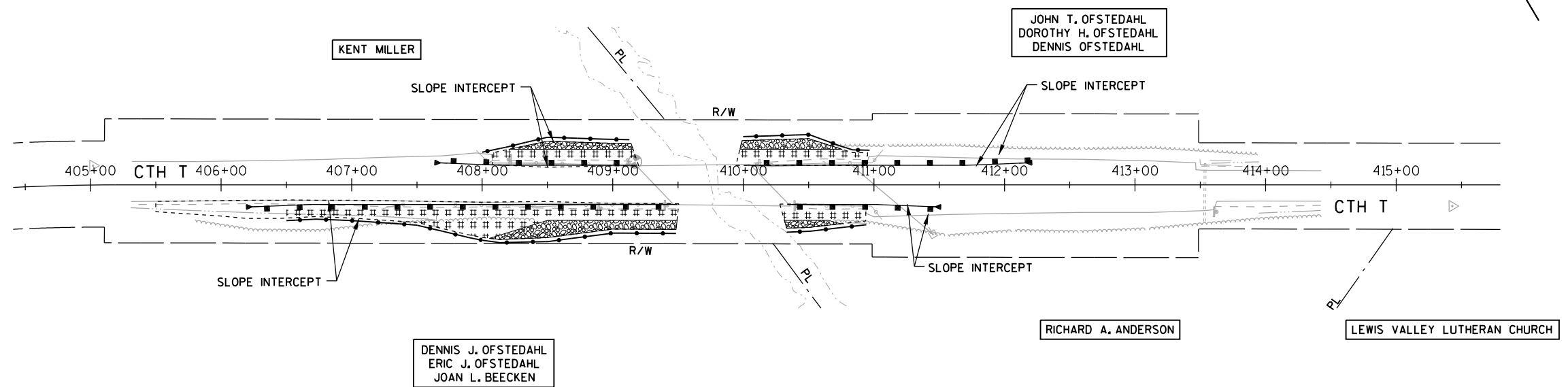


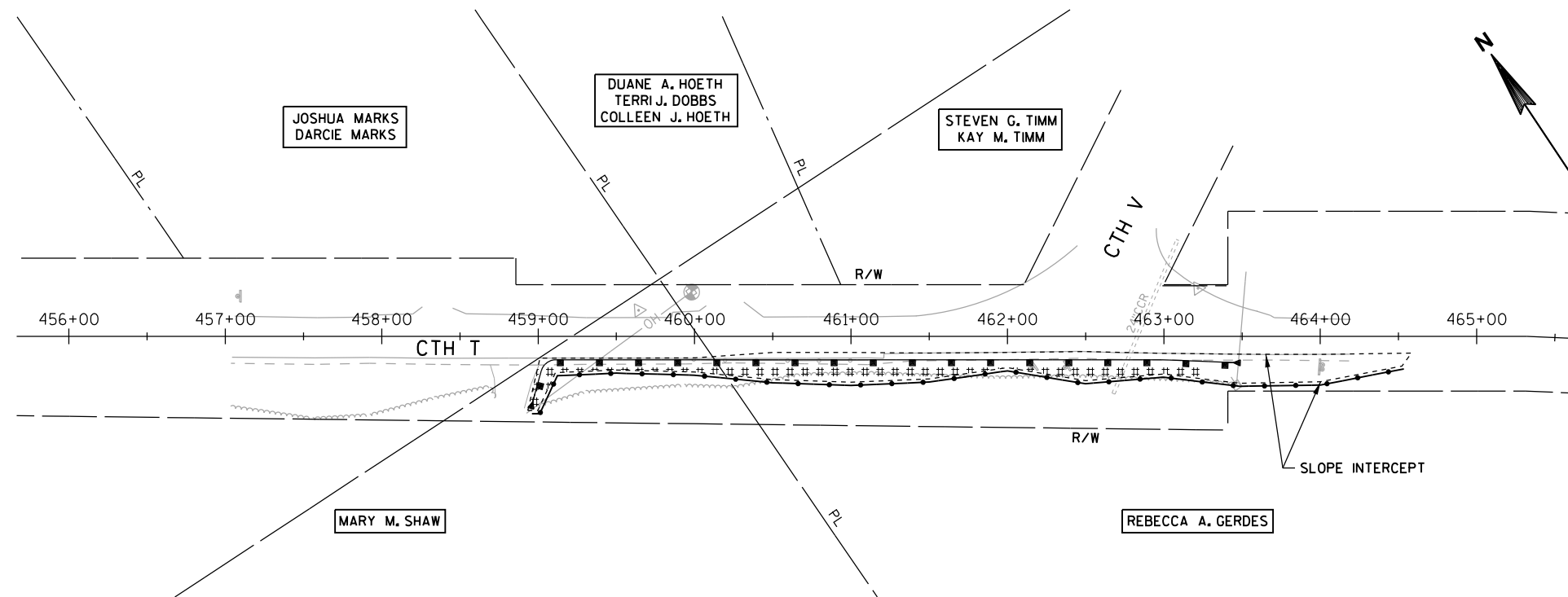
SUBGRADE DRAINAGE
STA 601+95, RT - STA 602+95, RT



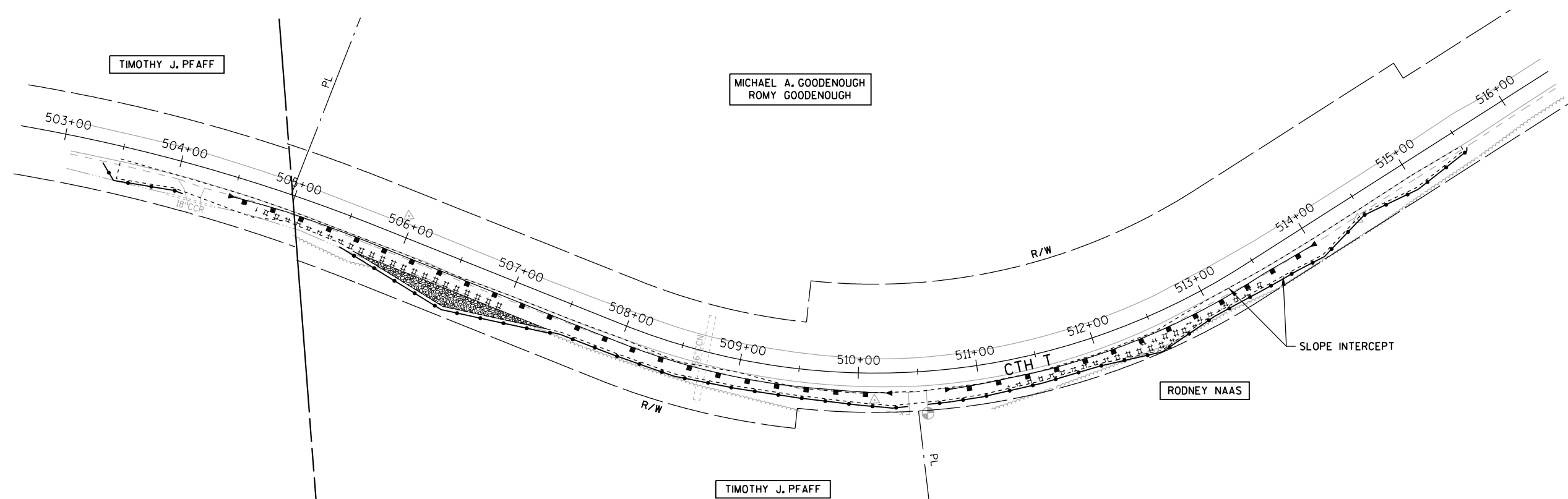
EROSION CONTROL LEGEND	
#####	EROSION MAT CLASS 1 TYPE A
	HEAVY RIPRAP
—●—●—●—	SILT FENCE
OO	CULVERT PIPE CHECK
△△	TEMPORARY DITCH CHECK

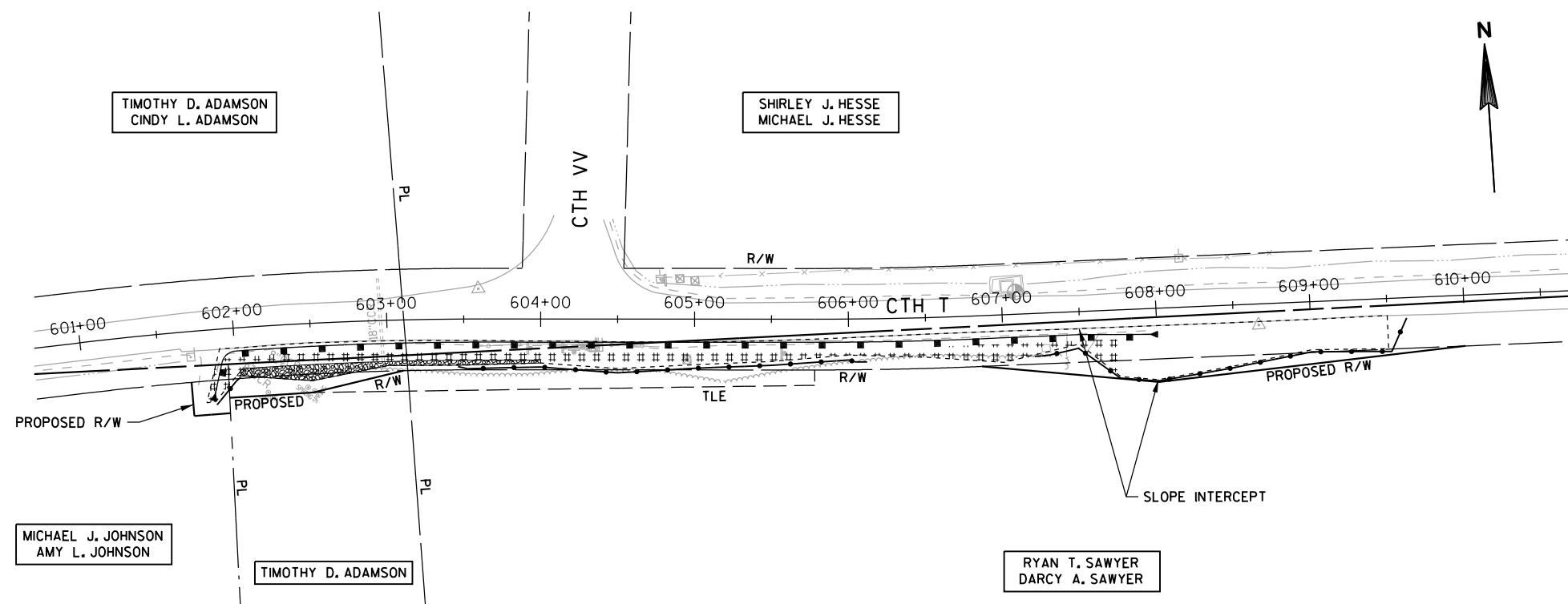
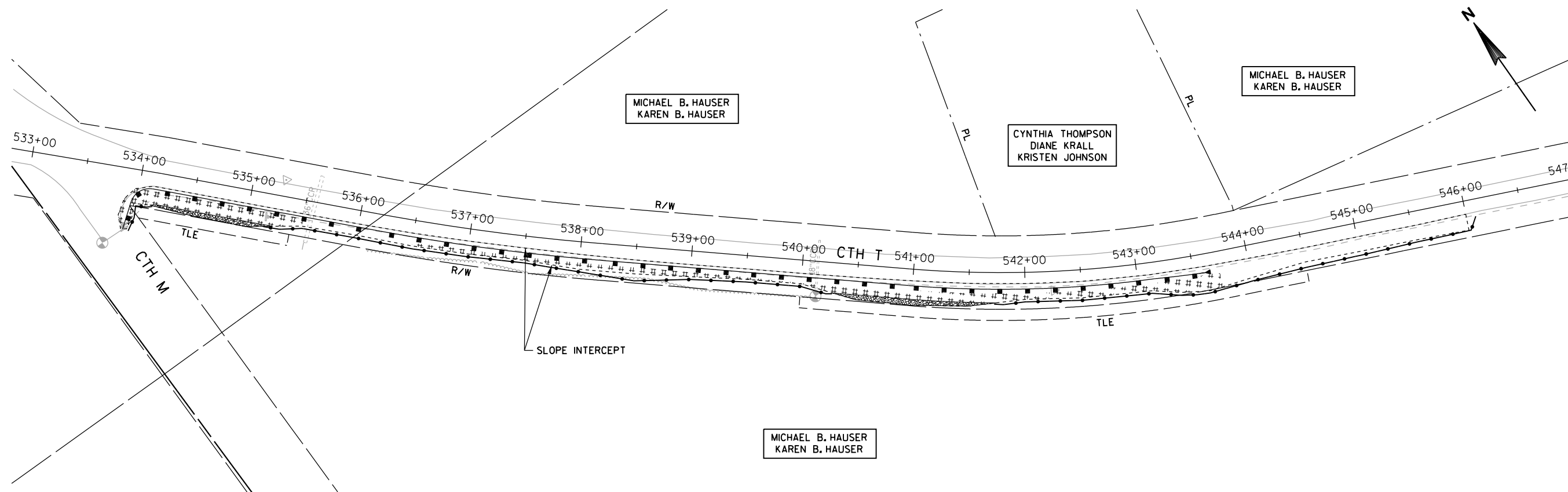




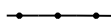


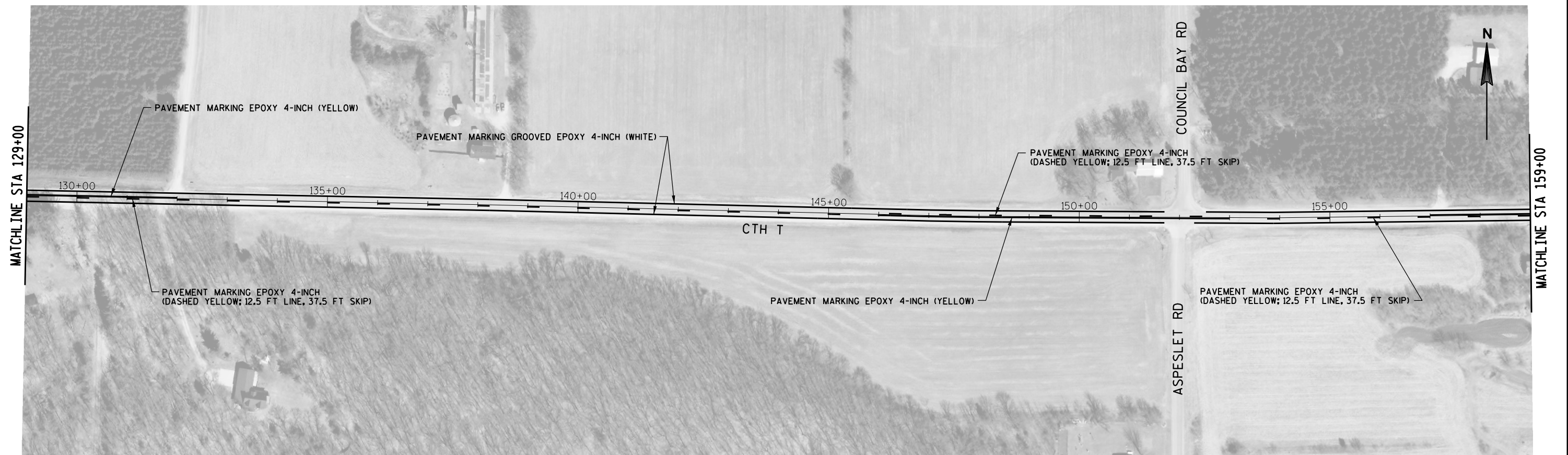
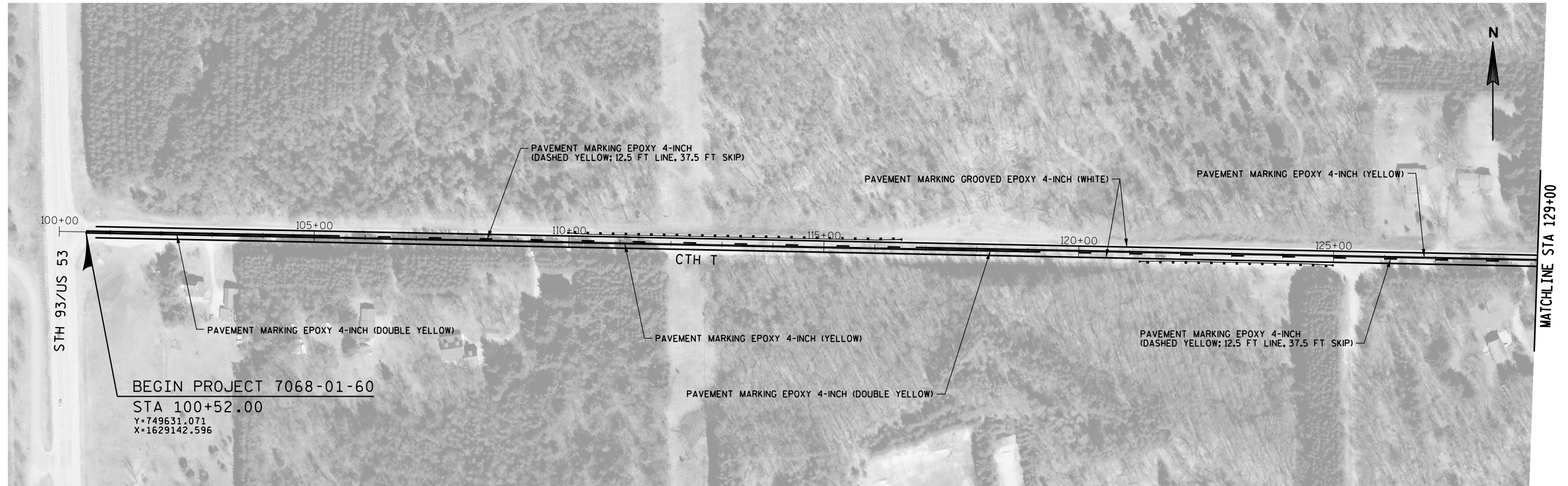
EROSION CONTROL LEGEND	
#####	EROSION MAT CLASS 1 TYPE A
	HEAVY RIPRAP
	SILT FENCE
	CULVERT PIPE CHECK
	TEMPORARY DITCH CHECK





EROSION CONTROL LEGEND

- ##### EROSION MAT CLASS 1 TYPE A
-  HEAVY RIPRAP
-  SILT FENCE
-  CULVERT PIPE CHECK
-  TEMPORARY DITCH CHECK



PROJECT NUMBER: 7068-01-60

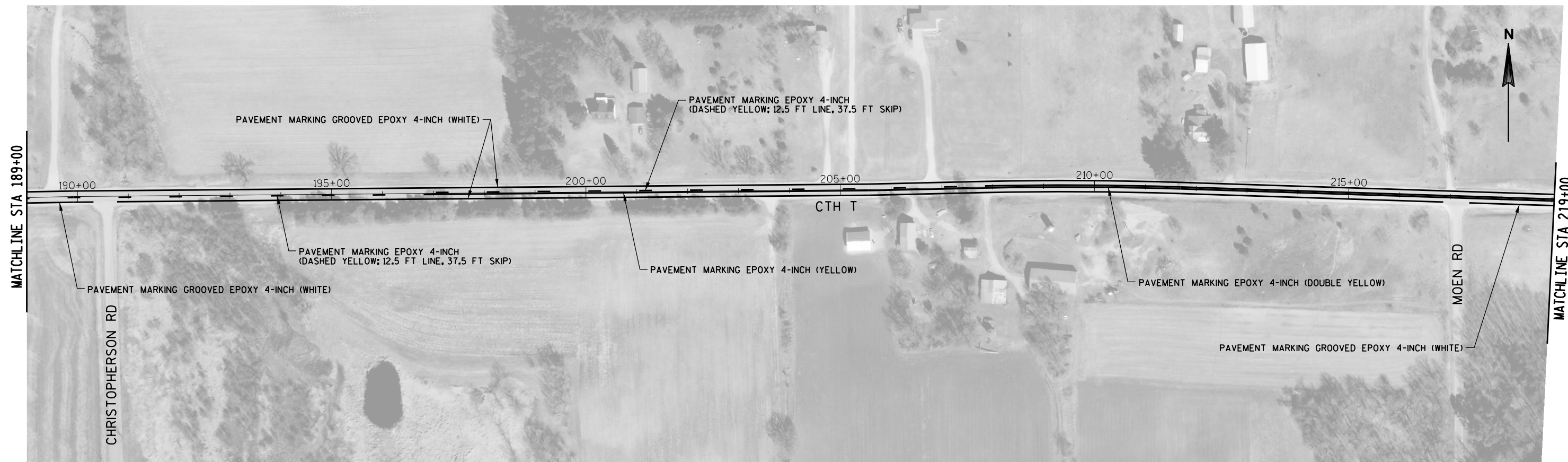
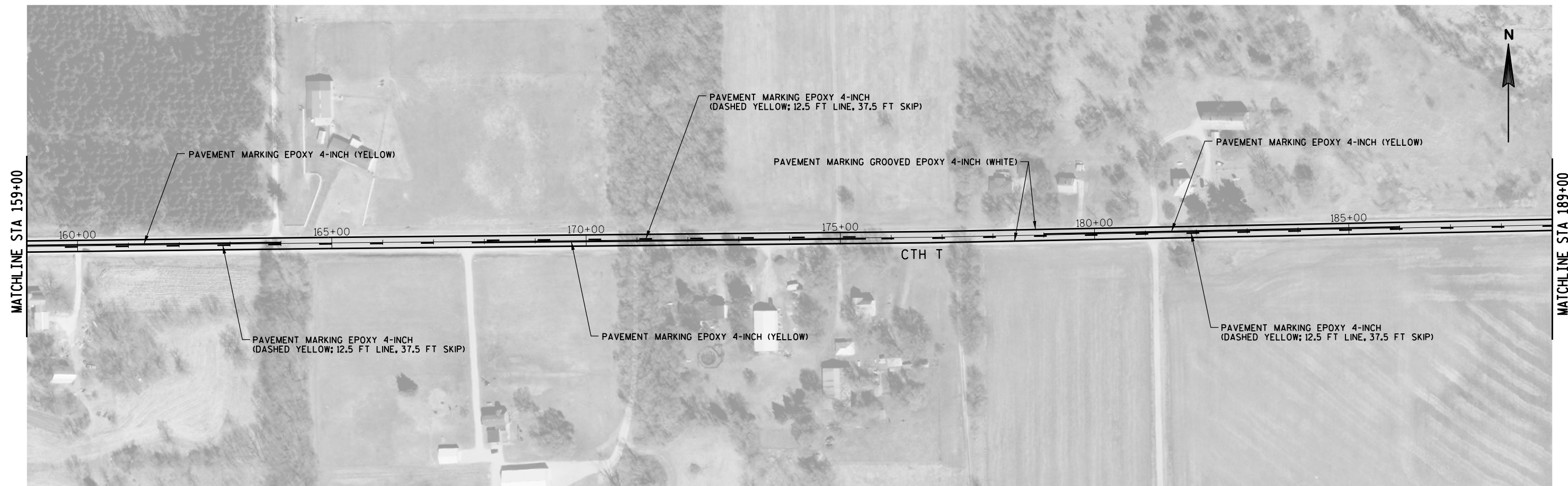
HWY: CTH T

COUNTY: LA CROSSE

PERMANENT SIGNING AND PAVEMENT MARKING

SHEET 10

E



PROJECT NUMBER: 7068-01-60

HWY: CTH T

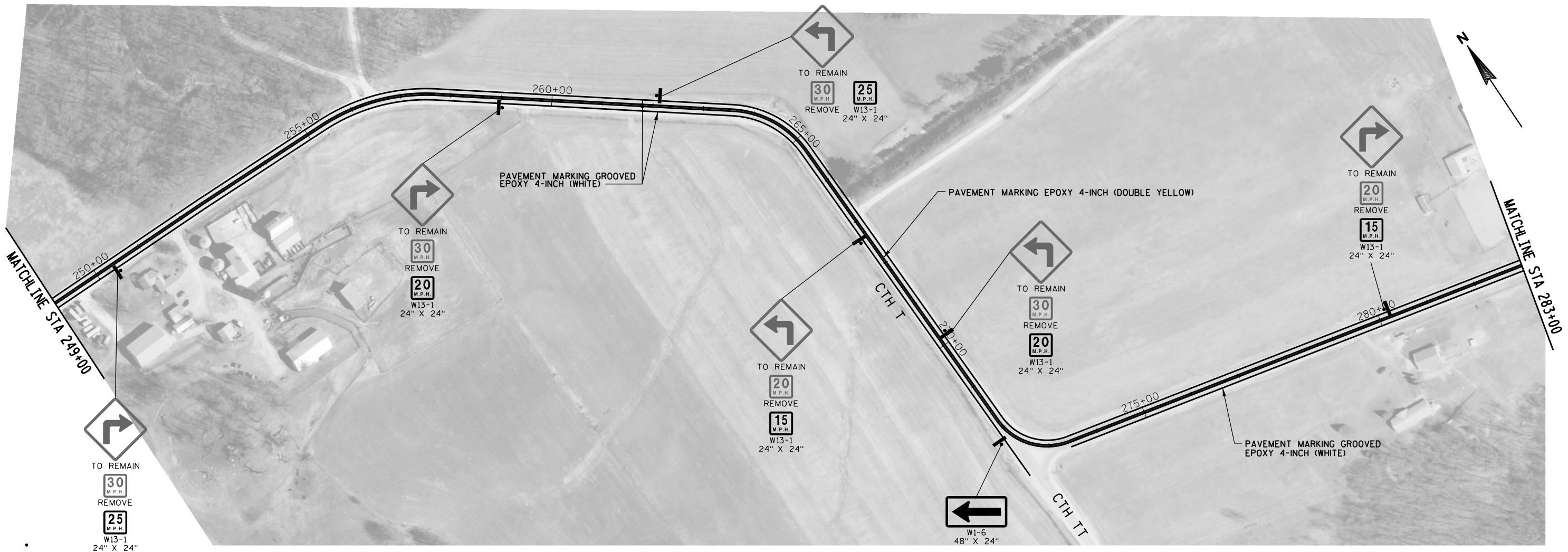
COUNTY: LA CROSSE

PERMANENT SIGNING AND PAVEMENT MARKING

SHEET

11

E



PROJECT NUMBER: 7068-01-60

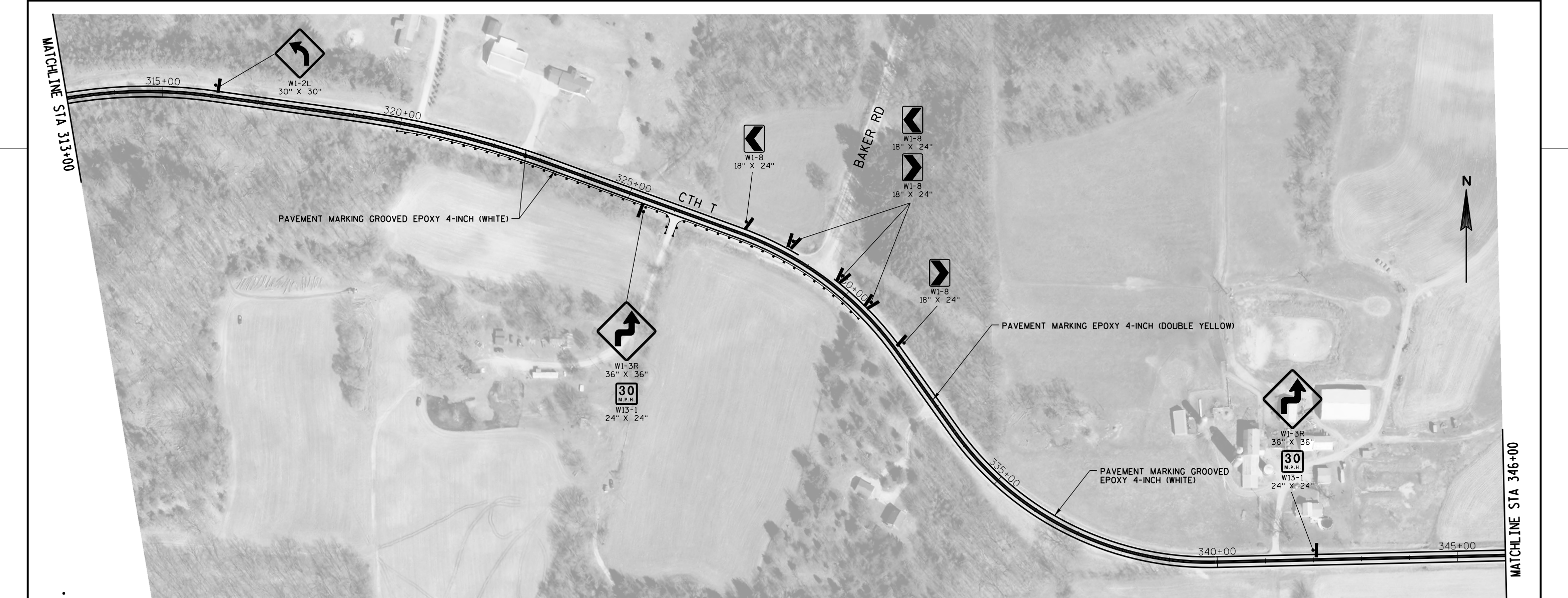
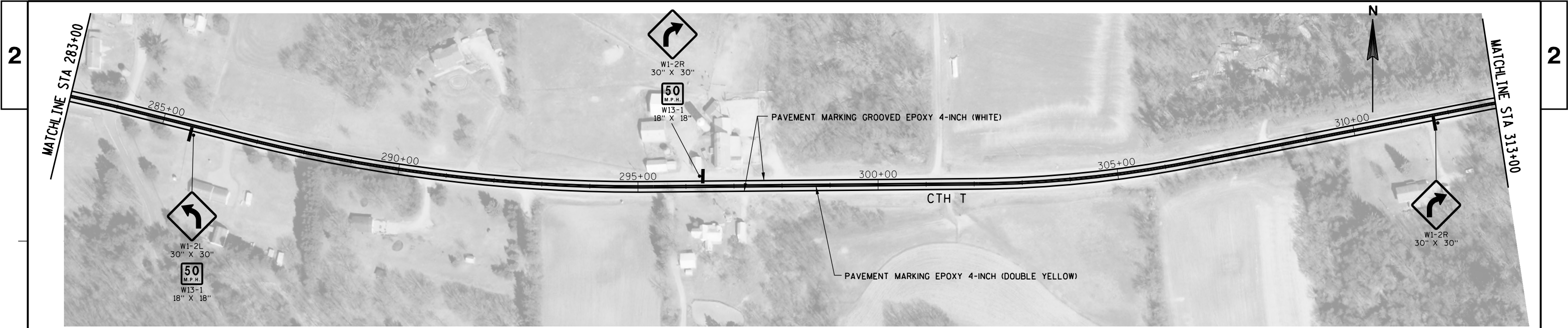
HWY: CTH T

COUNTY: LA CROSSE

PERMANENT SIGNING AND PAVEMENT MARKING

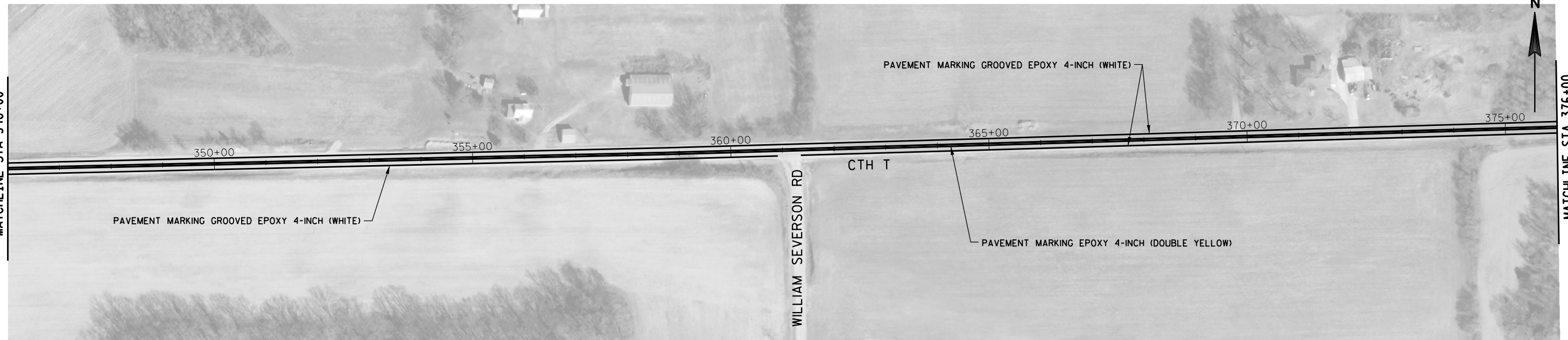
SHEET 12

E



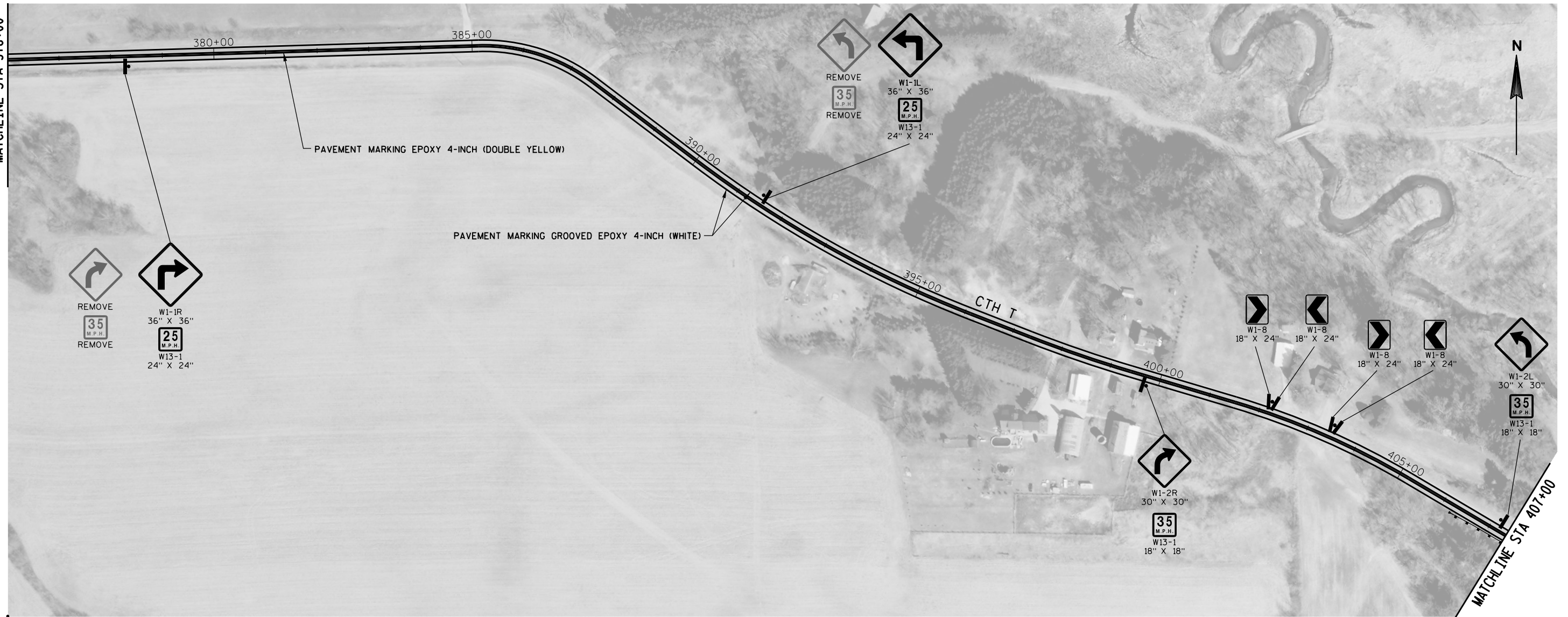
PROJECT NUMBER: 7068-01-60	HWY: CTH T	COUNTY: LA CROSSE	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 13	E
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MATCHLINE STA 346+00



MATCHLINE STA 376+00

MATCHLINE STA 376+00



PROJECT NUMBER: 7068-01-60

HWY: CTH T

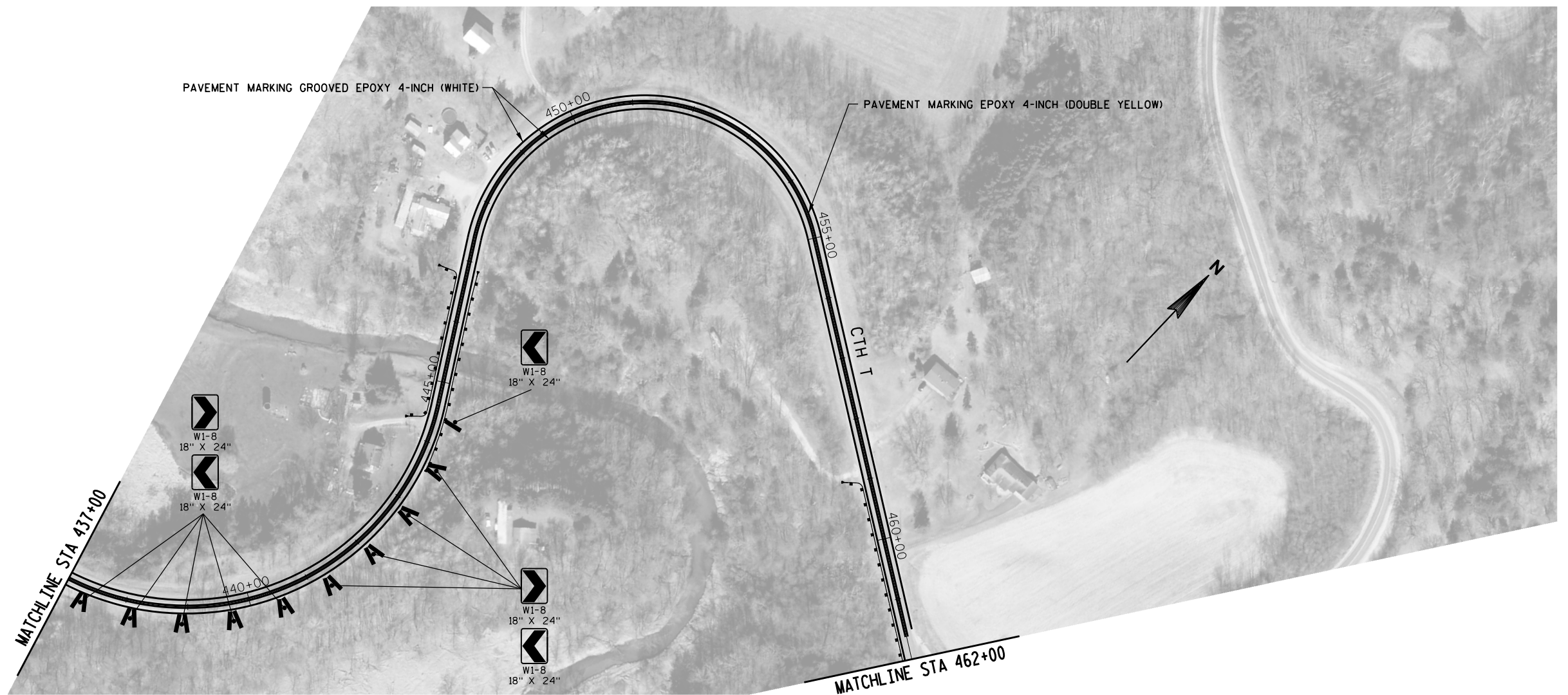
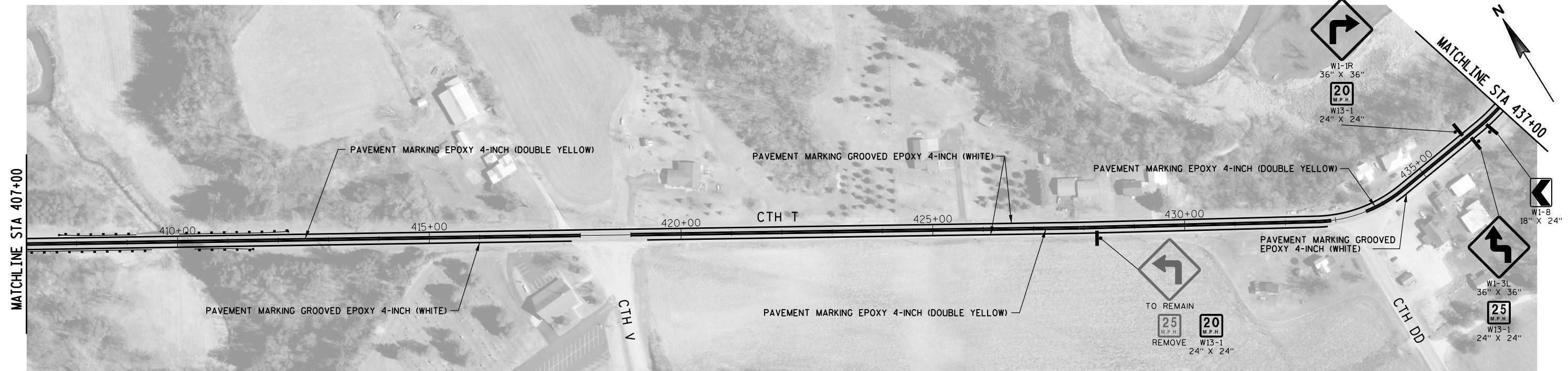
COUNTY: LA CROSSE

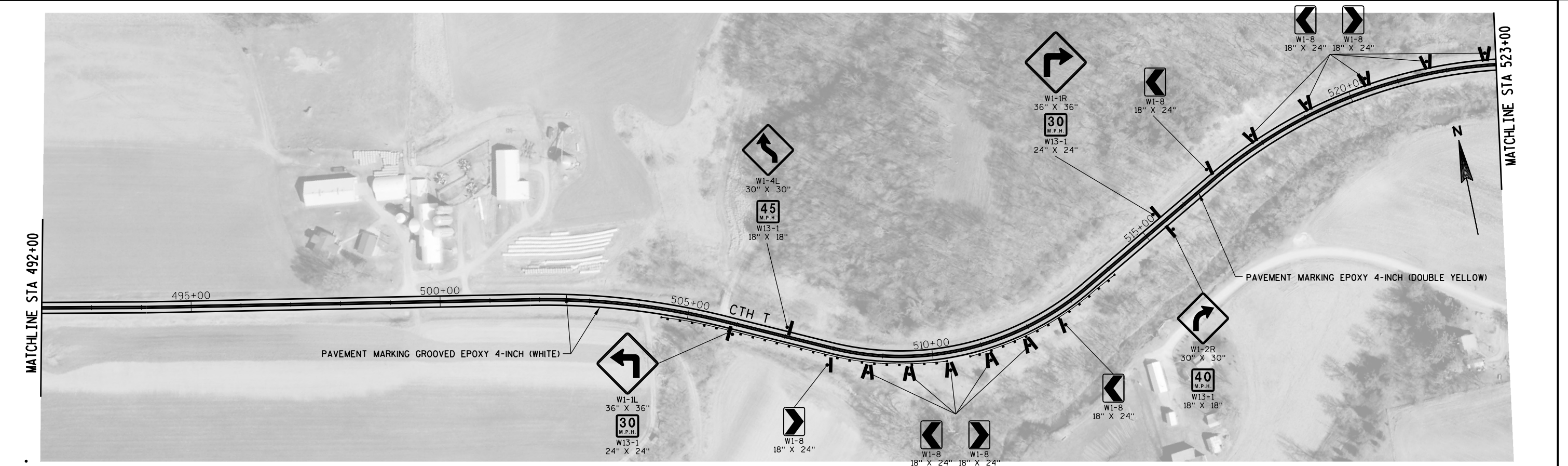
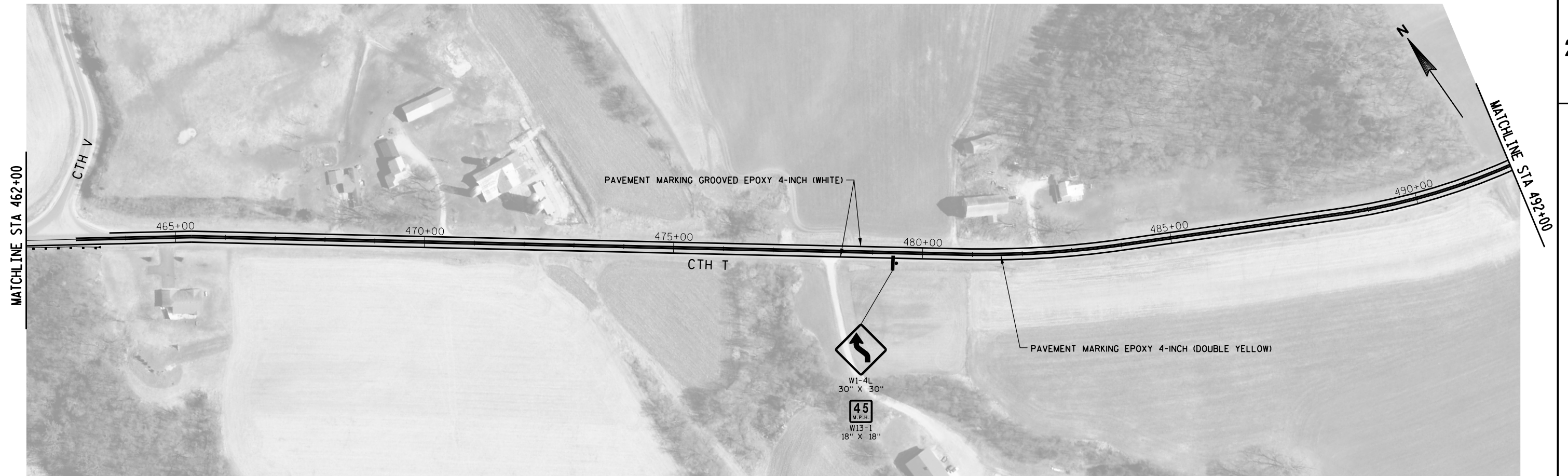
PERMANENT SIGNING AND PAVEMENT MARKING

SHEET

14

E





PROJECT NUMBER: 7068-01-60

HWY: CTH T

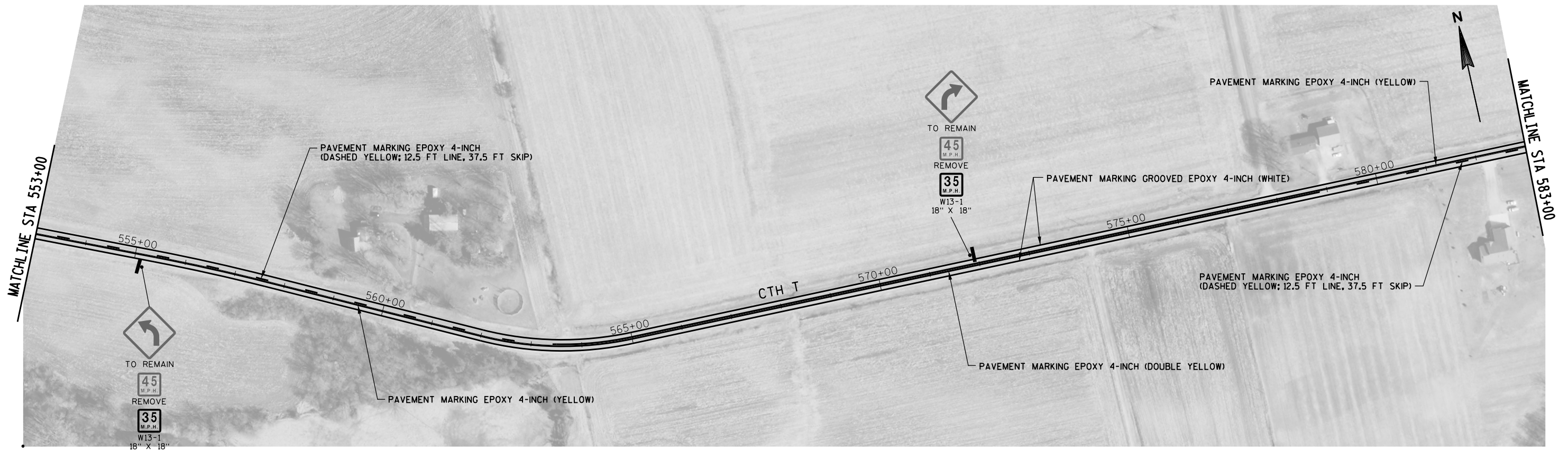
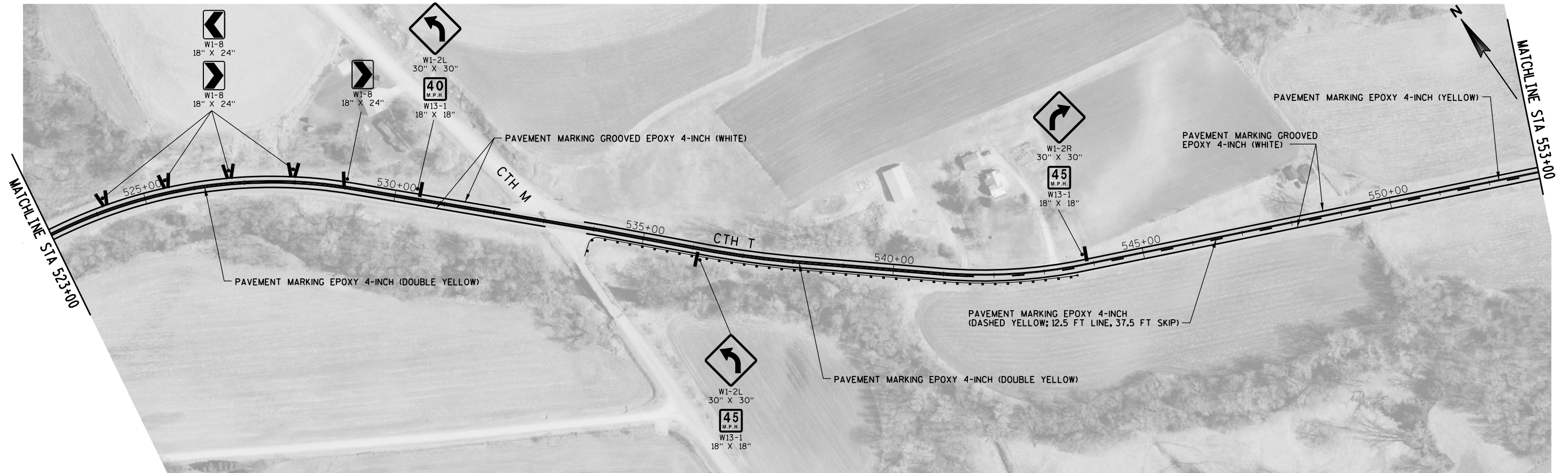
COUNTY: LA CROSSE

PERMANENT SIGNING AND PAVEMENT MARKING

SHEET

16

E



PROJECT NUMBER: 7068-01-60

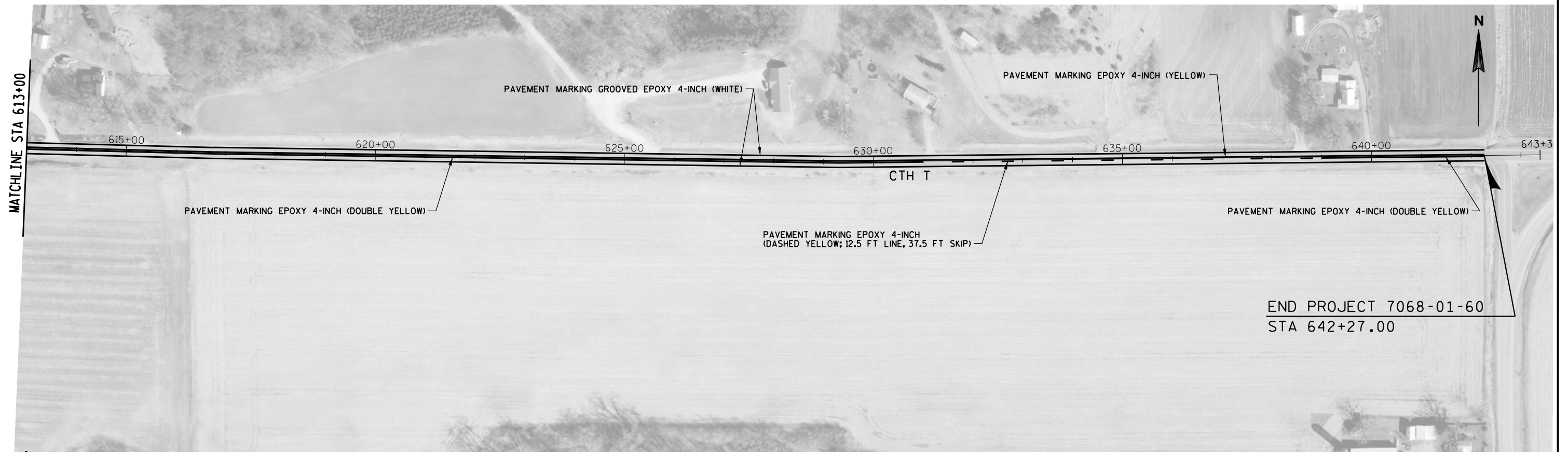
HWY: CTH T

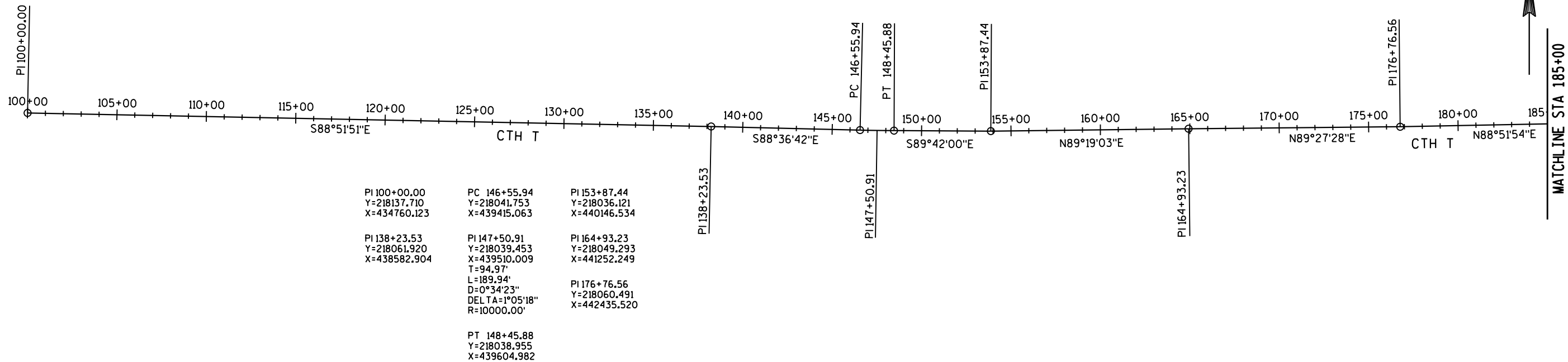
COUNTY: LA CROSSE

PERMANENT SIGNING AND PAVEMENT MARKING

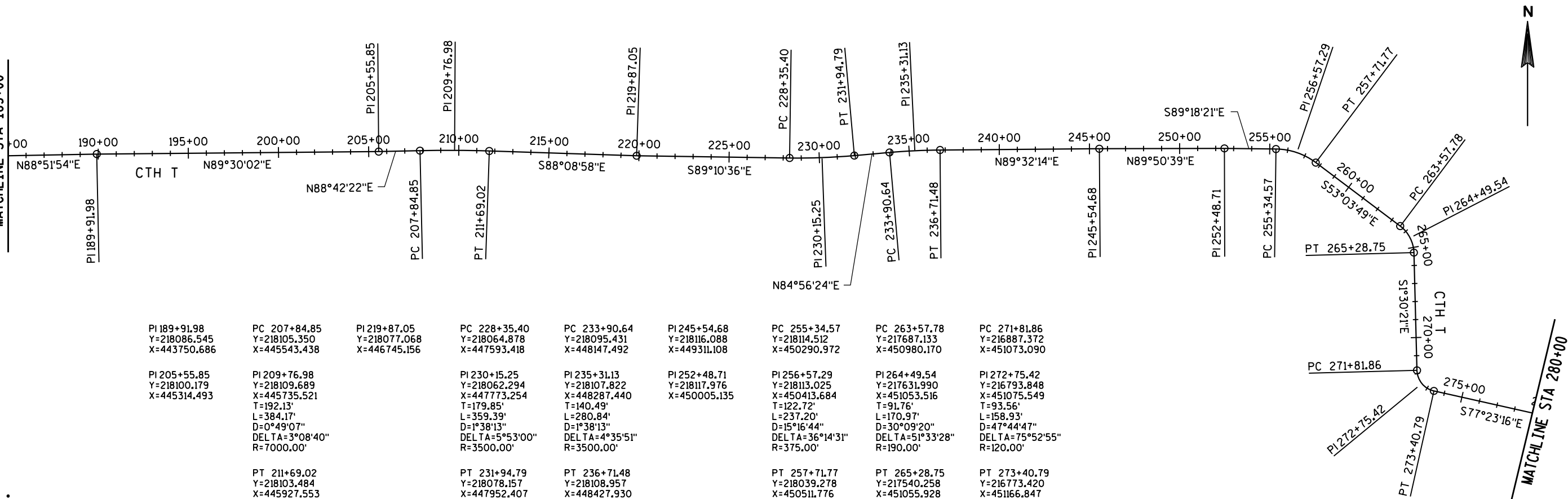
SHEET 17

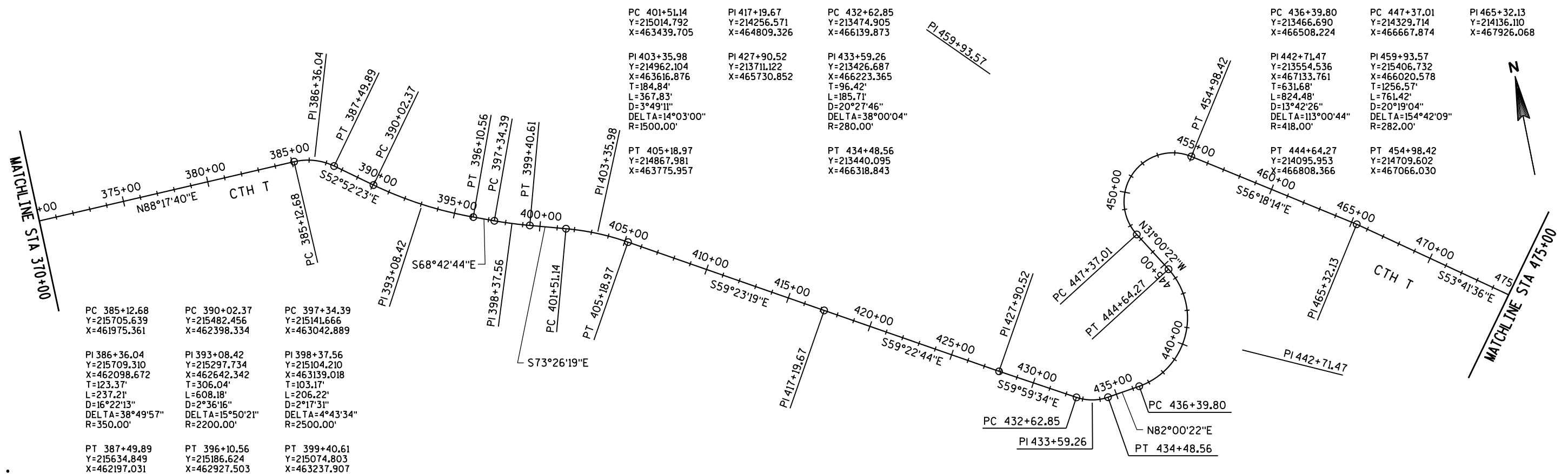
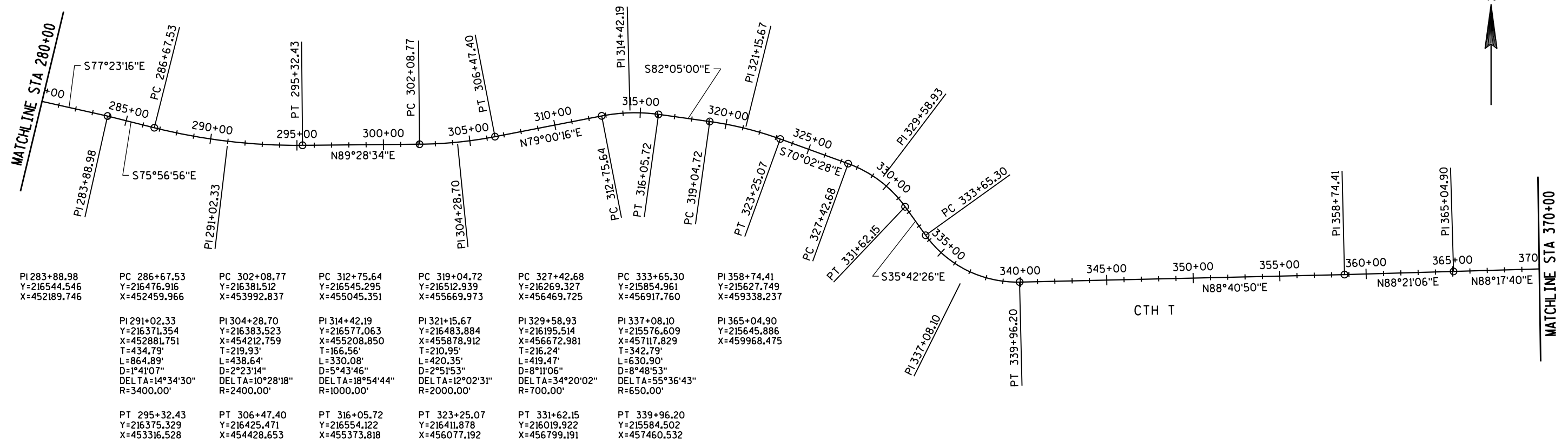
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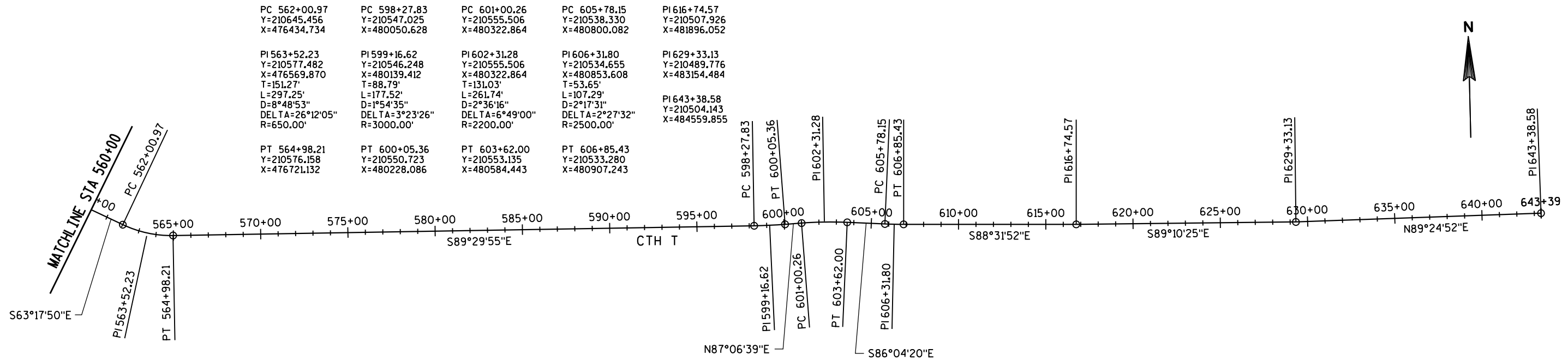
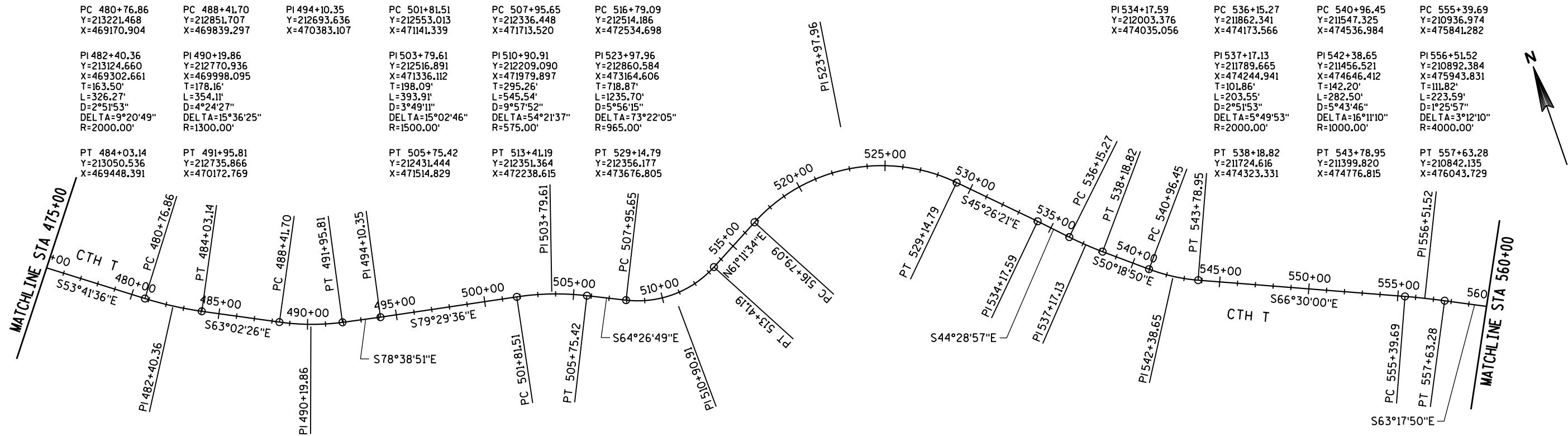




MATCHLINE STA 185+00







Estimate Of Quantities

7068-01-60					
Line	Item	Item Description	Unit	Total	Qty
0010	201.0115	Clearing	ACRE	0.410	0.410
0020	201.0120	Clearing	ID	436.000	436.000
0030	201.0215	Grubbing	ACRE	0.410	0.410
0040	201.0220	Grubbing	ID	436.000	436.000
0050	203.0100	Removing Small Pipe Culverts	EACH	2.000	2.000
0060	204.0110	Removing Asphaltic Surface	SY	4.000	4.000
0070	204.0165	Removing Guardrail	LF	1,937.000	1,937.000
0080	204.0220	Removing Inlets	EACH	1.000	1.000
0090	204.0260	Abandoning Inlets	EACH	1.000	1.000
0100	204.9090.S	Removing (item description) 01. Drain Tile 8-Inch	LF	62.000	62.000
0110	205.0100	Excavation Common	CY	247.000	247.000
0120	208.0100	Borrow	CY	4,007.000	4,007.000
0130	213.0100	Finishing Roadway (project) 01. 7068-01-60	EACH	1.000	1.000
0140	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,100.000	2,100.000
0150	312.0110	Select Crushed Material	TON	75.000	75.000
0160	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	1.000	1.000
0170	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	2.000	2.000
0180	520.3318	Culvert Pipe Class III-A 18-Inch	LF	36.000	36.000
0190	606.0300	Riprap Heavy	CY	1,013.000	1,013.000
0200	608.3012	Storm Sewer Pipe Class III-A 12-Inch	LF	54.000	54.000
0210	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0220	611.2003	Manholes 3-FT Diameter	EACH	1.000	1.000
0230	614.0305	Steel Plate Beam Guard Class A	LF	2,778.000	2,778.000
0240	614.0345	Steel Plate Beam Guard Short Radius	LF	285.000	285.000
0250	614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH	7.000	7.000
0260	614.0390	Steel Plate Beam Guard Short Radius Terminal	EACH	7.000	7.000
0270	614.0515	Guardrail Stifened LHW	LF	169.000	169.000
0280	614.2300	MGS Guardrail 3	LF	2,613.000	2,613.000
0290	614.2500	MGS Thrie Beam Transition	LF	158.000	158.000
0300	614.2610	MGS Guardrail Terminal EAT	EACH	16.000	16.000
0310	619.1000	Mobilization	EACH	1.000	1.000
0320	624.0100	Water	MGAL	21.000	21.000
0330	625.0500	Salvaged Topsoil	SY	12,350.000	12,350.000
0340	627.0200	Mulching	SY	10,050.000	10,050.000
0350	628.1504	Silt Fence	LF	9,300.000	9,300.000
0360	628.1520	Silt Fence Maintenance	LF	9,300.000	9,300.000
0370	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0380	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0390	628.2002	Erosion Mat Class I Type A	SY	6,000.000	6,000.000
0400	628.7504	Temporary Ditch Checks	LF	75.000	75.000

Estimate Of Quantities

7068-01-60					
Line	Item	Item Description	Unit	Total	Qty
0410	628.7555	Culvert Pipe Checks	EACH	4.000	4.000
0420	629.0210	Fertilizer Type B	CWT	6.300	6.300
0430	630.0130	Seeding Mixture No. 30	LB	200.000	200.000
0440	630.0300	Seeding Borrow Pit	LB	68.000	68.000
0450	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	64.000	64.000
0460	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	13.000	13.000
0470	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	7.000	7.000
0480	637.2230	Signs Type II Reflective F	SF	434.000	434.000
0490	638.2602	Removing Signs Type II	EACH	13.000	13.000
0500	638.3000	Removing Small Sign Supports	EACH	2.000	2.000
0510	642.5001	Field Office Type B	EACH	1.000	1.000
0520	643.0100	Traffic Control (project) 01. 7068-01-60	EACH	1.000	1.000
0530	643.0900	Traffic Control Signs	DAY	1,817.000	1,817.000
0540	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000
0550	645.0120	Geotextile Type HR	SY	1,759.000	1,759.000
0560	646.0106	Pavement Marking Epoxy 4-Inch	LF	92,555.000	92,555.000
0570	646.0107.S	Pavement Marking Grooved Epoxy 4-Inch	LF	106,689.000	106,689.000
0580	648.0100	Locating No-Passing Zones	MI	10.260	10.260
0590	650.4000	Construction Staking Storm Sewer	EACH	2.000	2.000
0600	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
0610	650.9910	Construction Staking Supplemental Control (project) 01. 7068-01-60	LS	1.000	1.000
0620	650.9920	Construction Staking Slope Stakes	LF	8,429.000	8,429.000
0630	690.0150	Sawing Asphalt	LF	148.000	148.000
0640	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0650	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	300.000	300.000
0660	SPV.0090	Special 01. Nested W-Beam	LF	150.000	150.000
0670	SPV.0090	Special 02. Nested W- Beam Transition	LF	50.000	50.000

CLEARING AND GRUBBING

			201.0115	201.0120	201.0215	201.0220
			CLEARING	CLEARING	GRUBBING	GRUBBING
STATION	STATION	OFFSET	ACRE	ID	ACRE	ID
116+93	- 122+81	LT	0.14	---	0.14	---
121+94	- 123+76	RT	0.14	---	0.14	---
160+87		LT	---	30	---	30
178+24		LT	---	30	---	30
178+53		LT	---	12	---	12
178+76		LT	---	13	---	13
178+97		LT	---	18	---	18
179+24		LT	---	24	---	24
180+06		LT	---	12	---	12
180+54		LT	---	9	---	9
180+59		LT	---	12	---	12
182+15		LT	---	30	---	30
182+34		LT	---	24	---	24
182+63		LT	---	30	---	30
182+82		LT	---	19	---	19
182+92		LT	---	36	---	36
183+03		LT	---	24	---	24
200+91		LT	---	24	---	24
289+56		RT	---	10	---	10
321+27	- 325+93	RT	0.05	---	0.05	---
358+75		LT	---	36	---	36
359+13		LT	---	9	---	9
391+02		LT	---	18	---	18
391+03		LT	---	8	---	8
391+14		LT	---	8	---	8
407+55	- 408+39	RT	0.02	---	0.02	---
444+97	- 445+08	RT	0.01	---	0.01	---
445+82	- 446+43	RT	0.01	---	0.01	---
445+96	- 446+25	LT	0.01	---	0.01	---
460+48	- 461+57	RT	0.01	---	0.01	---
506+14	- 506+88	RT	0.01	---	0.01	---
606+53	- 607+12	RT	0.01	---	0.01	---
PROJECT 7068-01-60 TOTAL			0.41	436	0.41	436

SUBGRADE DRAINAGE

		204.9090.S	312.0110	645.0120
		REMOVING DRAIN	SELECT CRUSHED	GEOTEXTILE
		TILE 8-INCH	MATERIAL	TYPE HR
STATION	LOCATION	LF	TON	SY
602+10	RT	26	--	--
602+20	RT	36	--	--
602+00 - 603+00	RT	--	75	240
PROJECT 7068-01-60 TOTALS		62	75	240

REMOVING SMALL PIPE CULVERTS

		203.0100	204.0220	204.0260
		REMOVING SMALL	REMOVING	ABANDONING
		PIPE CULVERTS	INLETS	INLETS
STATION	LOCATION	SIZE (IN)	TYPE	EACH
228+22	RT			---
326+05	RT	18	CMP	1
444+41	RT	24	CMP	1
607+25	RT			---
PROJECT 7068-01-60 TOTAL				2

CULVERT PIPES

		520.1018	**
		APRON ENDWALLS FOR	520.3318
		CULVERT PIPE	CULVERT PIPE
		18-INCH	CLASS III-A
		EACH	18-INCH
STATION	LOCATION		LF
228+75	27.4' RT	---	---
326+05	RT	2	36
PROJECT 7068-01-60 TOTAL		2	36

** Pipe thickness for 18" steel option is to be 0.064.

REMOVING GUARDRAIL

		204.0165
		REMOVING
		GUARDRAIL
STATION	STATION	LF
223+56	- 227+25	LT 369
224+33	- 227+73	RT 340
231+12	- 233+79	RT 268
407+23	- 409+49	RT 227
407+95	- 409+19	LT 127
410+03	- 411+07	LT 108
410+34	- 411+06	RT 77
444+62	- 445+07	LT 46
444+66	- 445+07	RT 46
445+85	- 446+28	LT 43
445+85	- 446+33	RT 48
459+94	- 461+11	RT 117
603+56	- 604+77	RT 121
PROJECT 7068-01-60 TOTAL		1,937

STORM SEWER

		608.3012	611.0530	611.2003	520.1012
		STORM SEWER PIPE	MANHOLE	MANHOLE	APRON ENDWALLS FOR
		CLASS III-A	COVERS	3-FT	CULVERT PIPE
		12-INCH	TYPE J	DIAMETER	12-INCH
STATION	LOCATION	EAST INVERT	WEST INVERT		RIM
228+21	28.3' RT	727.36	725.77	---	733.60
228+75	27.4' RT	735.46	--	54	--
PROJECT 7068-01-60 TOTAL				54	1

BASE AGGREGATE DENSE

		305.0110	624.0100
		3/4-INCH	WATER
STATION	STATION	TON	MGAL
108+50	- 118+00	190	1.9
121+00	- 125+00	80	0.8
222+00	- 229+00	140	1.4
223+00	- 229+00	120	1.2
231+00	- 234+00	60	0.6
318+50	- 331+00	250	2.5
405+50	- 409+50	80	0.8
407+60	- 409+19	35	0.35
410+03	- 412+31	45	0.45
410+34	- 411+55	25	0.25
443+55	- 445+08	30	0.3
444+36	- 446+85	50	0.5
445+82	- 447+50	35	0.35
458+93	- 464+58	120	1.2
503+50	- 515+50	240	2.4
533+85	- 546+00	240	2.4
601+77	- 609+50	160	1.6
UNDISTRIBUTED		200	2
PROJECT 7068-01-60 TOTAL		2,100	21.0

RIPRAP

		606.0300	645.0120
		RIPRAP	GEOTEXTILE
		HEAVY	TYPE HR
STATION	STATION	CY	SY
110+51	- 115+69	324	486
121+88	- 124+50	71	106
322+00	- 325+97	161	241
326+14	- 328+00	24	36
408+06	- 409+51	85	128
408+20	- 409+16	32	48
409+97	- 410+76	36	55
410+31	- 410+75	14	21
444+57	- 445+07	17	25
445+83	- 446+32	14	21
505+65	- 507+38	96	143
534+12	- 535+24	27	41
540+27	- 541+78	41	62
602+00	- 603+49	71	106
PROJECT 7068-01-60 TOTAL		1,013	1,519

* ADDITIONAL ITEMS FOR QUANTITIES LISTED ELSEWHERE.

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE SPECIFIED.

Project ID	From/To Station	Location	Common Excavation	Available Material (2)	Unexpanded Fill	Expanded Fill	Mass Ordinate +/- (3)	Borrow
			Cut (1)			Factor 1.25		
7068-01-60	108+00-118+00	LT	15	15	731	914	-899	(item #208.0100)
	121+00-125+50	RT	8	8	214	268	-260	
	221+50-229+50	LT & RT	33	33	317	396	-363	
	231+00-234+00	RT	17	17	5	6	11	
	318+00-331+50	RT	23	23	719	899	-876	
	405+50-412+50	LT & RT	19	19	394	492	-473	
	443+00-448+00	LT & RT	7	7	173	216	-209	
	458+50-464+00	RT	19	19	53	67	-48	
	503+50-516+00	RT	53	53	60	75	-22	
	533+00-547+00	RT	37	37	308	385	-348	
	601+50-610+50	RT	16	16	429	537	-521	
Grand Total			247	247	3,403	4,254	-4,007	4,007
Total Common Exc				247				

1) Salvaged/Unsuable Pavement Material is included in Cut.
2) Available Material = Cut - Salvaged/Unusuable Pavement Material
3) 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

3

GUARDRAIL

			614.0305	614.0345	614.0370	614.0390	614.0515	614.2300	614.2500	614.2610	SPV.0090.01	SPV.0090.02
			STEEL PLATE	STEEL PLATE	STEEL PLATE	STEEL PLATE	GUARDRAIL	MGS	MGS	MGS	NESTED	NESTED
			BEAM GUARD	BEAM GUARD	BEAM GUARD ENERGY	BEAM GUARD	STIFFENED	GUARDRAIL	THRIE BEAM	GUARDRAIL	W-BEAM	W-BEAM
			CLASS A	SHORT RADIUS	ABSORBING TERMINAL	SHORT RADIUS TERMINAL	LHW	3	TRANSITION	TERMINAL EAT		TRANSITION
STATION	- STATION	LOCATION	LF	LF	EACH	EACH	LF	LF	LF	EACH	LF	LF
109+97	- 116+53	LT	---	---	---	---	---	550	---	2	---	---
121+19	- 125+00	RT	---	---	---	---	---	275	---	2	---	---
223+19	- 227+38	LT	---	---	---	---	---	312.5	---	2	---	---
223+94	- 228+25	RT	---	---	---	---	---	325	---	2	---	---
319+94	- 325+97	RT	528.75	42.25	1	1	---	---	---	---	---	---
326+13	- 330+55	RT	361.75	42.25	1	1	---	---	---	---	---	---
406+19	- 409+49	RT	---	---	---	---	---	237.5	39.4	1	---	---
407+64	- 409+19	LT	---	---	---	---	---	62.5	39.4	1	---	---
410+03	- 412+21	LT	---	---	---	---	---	125	39.4	1	---	---
410+34	- 411+51	RT	---	---	---	---	---	25	39.4	1	---	---
443+56	- 446+87	RT	125	---	2	---	---	---	---	---	75	25
444+29	- 446+84	LT	112.5	62.5	---	2	---	---	---	---	75	25
458+95	- 463+49	RT	381.25	31.25	1	1	---	---	---	---	---	---
504+47	- 510+28	RT	---	---	---	---	---	475	---	2	---	---
510+72	- 514+03	RT	---	---	---	---	---	225	---	2	---	---
533+91	- 543+65	RT	787.5	43.75	1	1	106.25	---	---	---	---	---
601+84	- 608+00	RT	481.25	62.5	1	1	62.5	---	---	---	---	---
PROJECT 7068-01-60 TOTAL			2,778	285	7	7	169	2,613	158	16	150	50

FINISHING ROADWAY

		213.0100
		FINISHING
		ROADWAY
		EACH
PROJECT		
7068-01-60		1
PROJECT 7068-01-60 TOTAL		1

LANDSCAPING

			625.0500	629.0210	630.0130	630.0300
			SALVAGED	FERTILIZER	SEEDING	SEEDING
			TOPSOIL	TYPE B	MIXTURE NO. 30	BORROW PIT
STATION	- STATION	LOCATION	SY	CWT	LB	LB
108+50	- 118+00	LT	1,361	0.63	19	---
121+00	- 125+00	RT	553	0.31	9	---
222+00	- 229+00	LT	766	0.53	16	---
223+00	- 229+00	RT	495	0.36	11	---
231+00	- 234+00	RT	146	0.11	4	---
318+50	- 325+85	RT	985	0.52	15	---
326+14	- 331+00	RT	647	0.42	13	---
405+50	- 409+50	RT	590	0.32	10	---
408+08	- 409+18	LT	100	0.06	2	---
409+95	- 410+95	LT	90	0.06	2	---
410+29	- 411+28	RT	84	0.05	2	---
443+55	- 445+08	RT	146	0.09	3	---
444+22	- 445+08	LT	65	0.04	2	---
444+45	- 445+08	RT	56	0.04	2	---
445+82	- 447+50	RT	180	0.11	4	---
445+83	- 446+82	LT	100	0.06	2	---
458+93	- 464+58	RT	541	0.18	6	---
503+50	- 515+50	RT	1,219	0.56	17	---
534+08	- 546+00	RT	1,484	0.55	16	---
601+77	- 609+50	RT	1,358	0.47	14	---
BORROW SITE			---	---	---	68
UNDISTRIBUTED			2,744	1.43	50	---
PROJECT 7068-01-60 SUBTOTAL			12,350	6.30	200	68

EROSION CONTROL

			627.0200	628.1504	628.1520	628.2002	628.7504	628.7555
			MULCHING	SILT	SILT	EROSION MAT	TEMPORARY	EROSION
				FENCE	FENCE	CLASS I	DITCH	PIPE
					MAINTENANCE	TYPE A	CHECKS	CHECK
STATION	- STATION	LOCATION	SY	LF	LF	SY	LF	EACH
108+50	- 118+00	LT	1,006	---	---	140	---	---
109+50	- 116+00	LT	---	652	652	---	---	---
	116+50	LT	---	---	---	---	10	---
	117+00	LT	---	---	---	---	10	---
121+00	- 125+00	RT	157	---	---	---	---	---
121+50	- 124+75	RT	---	---	---	330	---	---
121+50	- 125+00	RT	---	397	397	---	---	---
222+00	- 229+00	LT	538	---	---	---	---	---
223+00	- 229+00	RT	317	---	---	---	---	---
223+50	- 227+00	LT	---	---	---	310	---	---
223+50	- 227+50	LT	---	410	410	---	---	---
	223+50	LT	---	---	---	---	10	---
224+19	- 228+00	RT	---	---	---	250	---	---
224+50	- 227+50	RT	---	302	302	---	---	---
	228+00	LT	---	---	---	---	---	---
	228+50	LT	---	---	---	---	---	---
	228+81	RT	---	---	---	---	---	1
230+94	- 234+07	RT	---	319	319	---	---	---
231+00	- 234+00	RT	180	---	---	---	---	---
318+50	- 325+98	RT	280	---	---	---	---	---
	319+00	RT	---	---	---	---	10	---
	319+50	RT	---	---	---	---	10	---
	320+00	RT	---	---	---	---	10	---
320+19	- 325+97	RT	---	---	---	550	---	---
	320+50	RT	---	---	---	---	---	---
	321+00	RT	---	---	---	---	---	---
321+50	- 325+92	RT	---	452	452	---	---	---
326+14	- 330+29	RT	---	---	---	430	---	---
326+14	- 331+00	RT	244	---	---	---	---	---
326+19	- 330+00	RT	---	380	380	---	---	---
	326+31	RT	---	---	---	---	---	2
405+50	- 409+50	RT	162	---	---	---	---	---
406+50	- 409+50	RT	---	300	300	350	---	---
408+00	- 409+13	LT	---	114	114	---	---	---
408+08	- 409+18	LT	---	---	---	100	---	---
409+95	- 410+95	LT	---	99	99	90	---	---
410+29	- 410+94	RT	---	61	61	65	---	---
410+29	- 411+28	RT	14	---	---	---	---	---
443+55	- 445+08	RT	145	---	---	---	---	---
444+22	- 445+08	LT	---	89	89	70	---	---
444+45	- 445+08	RT	---	---	---	60	---	---
444+50	- 445+06	RT	---	59	59	---	---	---
445+82	- 447+50	RT	179	---	---	---	---	---
445+83	- 446+82	LT	---	---	---	100	---	---
445+82	- 446+50	RT	---	67	67	---	---	---
445+86	- 446+83	LT	---	118	118	---	---	---
458+93	- 464+58	RT	290	576	576	320	---	---
503+50	- 515+50	RT	895	1,097	1,097	322	---	---
534+08	- 546+00	RT	869	998	998	710	---	---
601+77	- 609+50	RT	754	550	550	590	---	---
BORROW SITE			2,500	500	500	---	---	---
UNDISTRIBUTED			1,521	1,760	1,760	1,213	15	1
PROJECT 7068-01-60 TOTAL			10,050	9,300	9,300	6,000	75	4

PROJECT NUMBER: 7068-01-60

HWY: CTH T

COUNTY: LA CROSSE

MISCELLANEOUS QUANTITIES

SHEET

26

E

PERMANENT SIGNING

				634.0612	634.0616	634.0618	637.2230	638.2602	638.3000		
				POSTS	POSTS	POSTS	SIGNS	REMOVING	REMOVING		
				WOOD	WOOD	WOOD	TYPE II	SIGNS	SMALL SIGN		
				4X6-INCH	4X6-INCH	4X6-INCH	REFLECTIVE	TYPE II	SUPPORTS		
STATION	OFFSET	SIGN CODE	SIGN SIZE IN x IN	X 12-FT EACH	X 16-FT EACH	X 18-FT EACH	F SF	EACH	EACH	REMARKS	
250+40	RT	W13-1	24"X24"	---	---	---	4.00	1	---	SPEED LIMIT 25 MPH	
258+97	RT	W13-1	24"X24"	---	---	---	4.00	1	---	SPEED LIMIT 20 MPH	
262+06	LT	W13-1	24"X24"	---	---	---	4.00	1	---	SPEED LIMIT 25 MPH	
267+33	RT	W13-1	24"X24"	---	---	---	4.00	1	---	SPEED LIMIT 15 MPH	
269+76	LT	W13-1	24"X24"	---	---	---	4.00	1	---	SPEED LIMIT 20 MPH	
272+14	RT	W1-6	46"X24"	---	1	---	8.00	---	---	LEFT LARGE ARROW	
280+18	LT	W13-1	24"X24"	---	---	---	4.00	1	---	SPEED LIMIT 15 MPH	
285+65	RT	W1-2L	30"X30"	---	1	---	6.25	---	---	ROAD CURVES LEFT	
285+65	RT	W13-1	18"X18"	---	---	---	2.25	---	---	SPEED LIMIT 50 MPH, MOUNTED ON SAME POST AS W1-2L	
296+31	LT	W1-2R	30"X30"	---	1	---	6.25	---	---	ROAD CURVES RIGHT	
296+31	LT	W13-1	18"X18"	---	---	---	2.25	---	---	SPEED LIMIT 50 MPH, MOUNTED ON SAME POST AS W1-2R	
311+71	RT	W1-2R	30"X30"	---	1	---	6.25	---	---	ROAD CURVES RIGHT	
316+14	LT	W1-2L	30"X30"	---	---	---	6.25	---	---	ROAD CURVES LEFT	
325+38	RT	W1-3R	36"X36"	---	---	1	9.00	---	---	ROAD CURVES AHEAD	
325+38	RT	W13-1	24"X24"	---	---	---	4.00	---	---	SPEED LIMIT 30 MPH, MOUNTED ON SAME POST AS W1-3R	
327+49	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
328+50	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
328+50	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
329+71	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
329+71	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
330+47	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
330+47	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
331+52	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
342+06	LT	W1-3R	36"X36"	---	---	1	9.00	---	---	ROAD CURVES AHEAD	
342+06	LT	W13-1	24"X24"	---	---	---	4.00	---	---	SPEED LIMIT 30 MPH, MOUNTED ON SAME POST AS W1-3R	
378+34	RT	W1-1R	36"X36"	---	---	1	9.00	2	1	ROAD TURNS RIGHT	
378+34	RT	W13-1	24"X24"	---	---	---	4.00	---	---	SPEED LIMIT 25 MPH, MOUNTED ON SAME POST AS W1-1R	
391+50	LT	W1-1L	36"X36"	---	---	1	9.00	2	1	ROAD TURNS LEFT	
391+50	LT	W13-1	24"X24"	---	---	---	4.00	---	---	SPEED LIMIT 25 MPH, MOUNTED ON SAME POST AS W1-1L	
399+75	RT	W1-2R	30"X30"	---	1	---	6.25	---	---	ROAD CURVES RIGHT	
399+75	RT	W13-1	18"X18"	---	---	---	2.25	---	---	SPEED LIMIT 35 MPH, MOUNTED ON SAME POST AS W1-2R	
402+20	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
402+20	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
403+46	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
403+46	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
407+16	LT	W1-2L	30"X30"	---	1	---	6.25	---	---	ROAD CURVES LEFT	
407+16	LT	W13-1	18"X18"	---	---	---	2.25	---	---	SPEED LIMIT 35 MPH, MOUNTED ON SAME POST AS W1-2L	
428+29	RT	W13-1	24"X24"	---	---	---	4.00	1	---	SPEED LIMIT 20 MPH	
436+12	LT	W1-1R	36"X36"	---	---	1	9.00	---	---	ROAD TURNS RIGHT	
436+12	LT	W13-1	24"X24"	---	---	---	4.00	---	---	SPEED LIMIT 20 MPH, MOUNTED ON SAME POST AS W1-1R	
436+22	RT	W1-3L	36"X36"	---	---	1	9.00	---	---	ROAD CURVES AHEAD	
436+22	RT	W13-1	24"X24"	---	---	---	4.00	---	---	SPEED LIMIT 25 MPH, MOUNTED ON SAME POST AS W1-3L	
436+55	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
437+28	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
437+28	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
438+09	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
438+09	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
438+89	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
438+89	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
439+70	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
439+70	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
440+50	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
440+50	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
441+29	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
441+29	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
442+09	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
442+09	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
442+88	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
442+88	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
443+67	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT	
443+67	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
444+46	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT	
479+45	RT	W1-4L	30"X30"	---	1	---	6.25	---	---	ROAD CURVES AHEAD	
479+45	RT	W13-1	18"X18"	---	---	---	2.25	---	---	SPEED LIMIT 45 MPH, MOUNTED ON SAME POST AS W1-4L	
505+89	RT	W1-1L	36"X36"	---	---	1	9.00	---	---	ROAD TURNS LEFT	
505+89	RT	W13-1	24"X24"	---	---	---	4.00	---	---	SPEED LIMIT 30 MPH, MOUNTED ON SAME POST AS W1-1L	
SUBTOTALS				32	7	7	278.00	11	2		

PERMANENT SIGNING (CONT.)

STATION	OFFSET	SIGN CODE	SIGN SIZE IN x IN	634.0612	634.0616	634.0618	637.2230	638.2602	638.3000	REMARKS
				POSTS WOOD 4X6-INCH X 12-FT EACH	POSTS WOOD 4X6-INCH X 16-FT EACH	POSTS WOOD 4X6-INCH X 18-FT EACH	SIGNS TYPE II REFLECTIVE F SF	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	
506+98	LT	W1-4L	30"X30"	---	1	---	6.25	---	---	ROAD CURVES AHEAD
506+98	LT	W13-1	18"X18"	---	---	---	2.25	---	---	SPEED LIMIT 45 MPH, MOUNTED ON SAME POST AS W1-4L
507+92	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
508+71	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
508+71	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
509+50	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
509+50	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
510+28	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
510+28	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
511+08	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
511+08	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
511+86	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
511+86	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
512+66	RT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
515+47	RT	W1-2R	30"X30"	---	1	---	6.25	---	---	ROAD CURVES RIGHT
515+47	RT	W13-1	18"X18"	---	---	---	2.25	---	---	SPEED LIMIT 40 MPH, MOUNTED ON SAME POST AS W1-1R
515+49	LT	W1-1R	36"X36"	---	1	---	9.00	---	---	ROAD TURNS RIGHT
515+49	LT	W13-1	24"X24"	---	---	---	4.00	---	---	SPEED LIMIT 30 MPH, MOUNTED ON SAME POST AS W1-1R
516+79	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
517+88	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
517+88	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
519+13	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
519+13	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
520+37	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
520+37	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
521+62	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
521+62	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
522+76	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
522+76	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
524+21	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
524+21	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
525+46	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
525+46	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
526+71	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
526+71	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
527+95	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
527+95	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON LEFT
529+01	LT	W1-8	18"X24"	1	---	---	3.00	---	---	CHEVRON RIGHT
530+45	LT	W1-2L	30"X30"	---	1	---	6.25	---	---	ROAD CURVES LEFT
530+45	LT	W13-1	18"X18"	---	---	---	2.25	---	---	SPEED LIMIT 40 MPH, MOUNTED ON SAME POST AS W1-2L
536+08	RT	W1-2L	30"X30"	---	1	---	6.25	---	---	ROAD CURVES LEFT
536+08	RT	W13-1	18"X18"	---	---	---	2.25	---	---	SPEED LIMIT 45 MPH, MOUNTED ON SAME POST AS W1-2L
543+84	LT	W1-2R	30"X30"	---	1	---	6.25	---	---	ROAD CURVES RIGHT
543+84	LT	W13-1	18"X18"	---	---	---	2.25	---	---	SPEED LIMIT 45 MPH, MOUNTED ON SAME POST AS W1-2R
555+13	RT	W13-1	18"X18"	---	---	---	2.25	1	---	SPEED LIMIT 35 MPH
571+89	LT	W13-1	18"X18"	---	---	---	2.25	1	---	SPEED LIMIT 35 MPH
SUBTOTAL				32	6	---	156.00	2	0	
PROJECT 7068-01-60 TOTALS				64	13	7	434.00	13	2	

TRAFFIC CONTROL

LOCATION	DAYS IN SERVICE	643.0900 TRAFFIC CONTROL SIGNS		643.1050 TRAFFIC CONTROL SIGNS PCMS	
		NO.	DAY	NO.	DAY
PROJECT	7	---	---	4	28
PROJECT	79	23	1,817	---	---
PROJECT 7068-01-60 TOTAL			1,817	28	

FIELD OFFICE

	642.5001
	TYPE B
PROJECT	EACH
7068-01-60	1
PROJECT 7068-01-60 TOTAL	1

TRAFFIC CONTROL

	643.0100
	TRAFFIC CONTROL
	7068-01-60
PROJECT	EACH
7068-01-60	1
PROJECT 7068-01-60 TOTAL	1

CONSTRUCTION STAKING

650.9910	
SUPPLEMENTAL CONTROL	
PROJECT	LS
7068-01-60	1
PROJECT 7068-01-60 TOTAL	
	1

PAVEMENT MARKING ITEMS

			646.0106 PAVEMENT MARKING EPOXY 4-INCH YELLOW	646.0107.S PAVEMENT MARKING GROOVED EPOXY 4-INCH WHITE
			CATEGORY 0020	
STATION	- STATION	TYPE	LF	LF
100+52	- 105+50	CENTERLINE (DOUBLE SOLID), EDGE LINE	996	958
105+50	- 116+80	CENTERLINE (SOLID & DASHED), EDGE LINE	1,413	2,260
116+80	- 119+25	CENTERLINE (DOUBLE SOLID), EDGE LINE	490	490
119+25	- 132+00	CENTERLINE (SOLID & DASHED), EDGE LINE	1,594	2,550
132+00	- 145+98	CENTERLINE (DASHED), EDGE LINE	350	2,796
145+98	- 153+00	CENTERLINE (SOLID & DASHED), EDGE LINE	878	1,264
153+00	- 157+00	CENTERLINE (DASHED), EDGE LINE	100	800
157+00	- 164+00	CENTERLINE (SOLID & DASHED), EDGE LINE	875	1,400
164+00	- 167+75	CENTERLINE (DASHED), EDGE LINE	94	750
167+75	- 175+50	CENTERLINE (SOLID & DASHED), EDGE LINE	969	1,550
175+50	- 179+00	CENTERLINE (DASHED), EDGE LINE	88	700
179+00	- 186+00	CENTERLINE (SOLID & DASHED), EDGE LINE	875	1,400
186+00	- 196+81	CENTERLINE (DASHED), EDGE LINE	271	2,115
196+81	- 207+85	CENTERLINE (SOLID & DASHED), EDGE LINE	1,380	2,208
207+85	- 418+00	CENTERLINE (DOUBLE SOLID), EDGE LINE	42,030	41,638
418+00	- 432+91	CENTERLINE (DOUBLE SOLID), EDGE LINE	2,782	2,842
432+91	- 461+63	CENTERLINE (DOUBLE SOLID), EDGE LINE	5,600	5,587
463+00	- 541+61	CENTERLINE (DOUBLE SOLID), EDGE LINE	15,722	15,426
541+61	- 563+42	CENTERLINE (SOLID & DASHED), EDGE LINE	2,727	4,362
563+42	- 578+85	CENTERLINE (DOUBLE SOLID), EDGE LINE	3,086	3,086
578+85	- 589+00	CENTERLINE (SOLID & DASHED), EDGE LINE	1,269	2,030
589+00	- 591+00	CENTERLINE (DASHED), EDGE LINE	50	400
591+00	- 598+28	CENTERLINE (SOLID & DASHED), EDGE LINE	910	1,456
598+28	- 603+62	CENTERLINE (DOUBLE SOLID), EDGE LINE	1,068	1,008
603+62	- 631+00	CENTERLINE (DOUBLE SOLID), EDGE LINE	5,284	5,359
631+00	- 639+00	CENTERLINE (SOLID & DASHED), EDGE LINE	1,000	1,600
639+00	- 642+27	CENTERLINE (DOUBLE SOLID), EDGE LINE	654	654
PROJECT 7068-01-60 TOTAL			92,555	106,689

CONSTRUCTION STAKING

			650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
STATION	- STATION		EACH	EACH	LF
108+50	- 118+00		---	---	950
121+00	- 125+00		---	---	400
222+00	- 229+00		---	---	700
228+22			1	---	---
228+75			1	---	---
231+00	- 234+00		---	---	300
326+05			---	1	---
318+50	- 331+00		---	---	1,250
405+50	- 412+31		---	---	681
443+55	- 447+50		---	---	395
458+93	- 464+58		---	---	565
503+50	- 515+50		---	---	1,200
533+85	- 546+00		---	---	1,215
601+77	- 609+50		---	---	773
PROJECT 7068-01-60 TOTAL			2	1	8,429

LOCATING NO-PASSING ZONES

			648.0100 LOCATING NO-PASSING ZONES MI
CATEGORY	STATION - STATION		
0020	100+52 - 642+27		10.26
PROJECT 7068-01-60 TOTAL			10.26

REMOVING ASPHALTIC SURFACE

			204.0110 REMOVING ASPHALTIC SURFACE	
STATION	- STATION	LOCATION	SY	REMARKS
407+64	- 408+00	LT	0.5	6 POSTS
410+95	- 412+21	LT	2.3	21 POSTS
410+95	- 411+51	RT	1.1	10 POSTS
PROJECT 7068-01-60 TOTAL			4	

SAWING ASPHALT

			690.0150 SAWING ASPHALT LF	REMARKS
STATION	- STATION	LOCATION	LF	
407+64	- 408+00	LT	24	6 POST, 4 LF PER POST
410+95	- 412+21	LT	84	21 POST, 4 LF PER POST
410+95	- 411+51	RT	40	10 POST, 4 LF PER POST
PROJECT 7068-01-60 TOTAL			148	

CONVENTIONAL SYMBOLS

SECTION LINE	---	SECTION CORNER SYMBOL	⊙	R/W MONUMENT (TO BE SET)	●
QUARTER LINE	---	SECTION CORNER MONUMENT	⊕	NON-MONUMENTED R/W POINT	○
SIXTEENTH LINE	---	GEODETIC SURVEY MONUMENT	⊙	FOUND IRON PIN (1-INCH UNLESS NOTED)	IP
NEW REFERENCE LINE	---	SIXTEENTH CORNER MONUMENT	⊕	OFF-PREMISE SIGN	Ⓢ
NEW R/W LINE	---	SIGN	Ⓢ	COMPENSABLE	NON-COMPENSABLE
EXISTING R/W OR HE LINE	---	ELECTRIC POLE	Ⓢ	ACCESS RESTRICTED BY ACQUISITION	*****
PROPERTY LINE	---	TELEPHONE POLE	Ⓢ	NO ACCESS (BY STATUTORY AUTHORITY)	*****
LOT, TIE & OTHER MINOR LINES	---	PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	Ⓢ	ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)	*****
SLOPE INTERCEPT	---	NO ACCESS (NEW HIGHWAY)	*****	PARCEL NUMBER (25)	UTILITY NUMBER (40)
CORPORATE LIMITS	---	PARALLEL OFFSETS	---		
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)	---				
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	---				
TEMPORARY LIMITED EASEMENT AREA	---				
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	---				
TRANSMISSION STRUCTURES	---				
BUILDING TO BE REMOVED	---				
BRIDGE	---				

CONVENTIONAL UTILITY SYMBOLS

WATER	---
GAS	---
TELEPHONE OVERHEAD	---
TRANSMISSION LINES	---
ELECTRIC	---
CABLE TELEVISION	---
FIBER OPTIC	---
SANITARY SEWER	---
STORM SEWER	---

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	POINT OF REVERSE CURVATURE	PRC
ACCESS RIGHTS	AR	POINT ON TANGENT	POT
ACRES	AC	POINT OF TANGENCY	PT
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS (100')	R/L
AND OTHERS	ET AL	REFERENCE LINE	REM
BACK	BK	REMAINING	RT
BLOCK	BLK	RIGHT	R/W
CENTERLINE	C/L	RIGHT OF WAY	SEC
CERTIFIED SURVEY MAP	CSM	SECTION	SEPV
CONCRETE	CONC	SEPTIC VENT	SF
CORNER	COR	SQUARE FEET	STA
COUNTY	CO	STATE TRUNK HIGHWAY	SUBD
COUNTY TRUNK HIGHWAY	CTH	STATION	TAN
DISTANCE	DIST	SUBDIVISION	TP
DOCUMENT NUMBER	DOC	TANGENT	TLE
EASEMENT	EASE	TELEPHONE PEDESTAL	TPP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	USH
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	VOL
GOVERNMENT	GOV'T	UNITED STATES HIGHWAY	
GRID NORTH	GN	VOLUME	
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID		
IRON PIPE	IP		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NUMBER	NO		
OUTLOT	OL		
PAGE	PG		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF COMPOUND CURVE	PCC		
POINT OF CURVATURE	PC		
POINT OF INTERSECTION	PI		

CURVE DATA

LONG CHORD	LC
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ / DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

NOTES

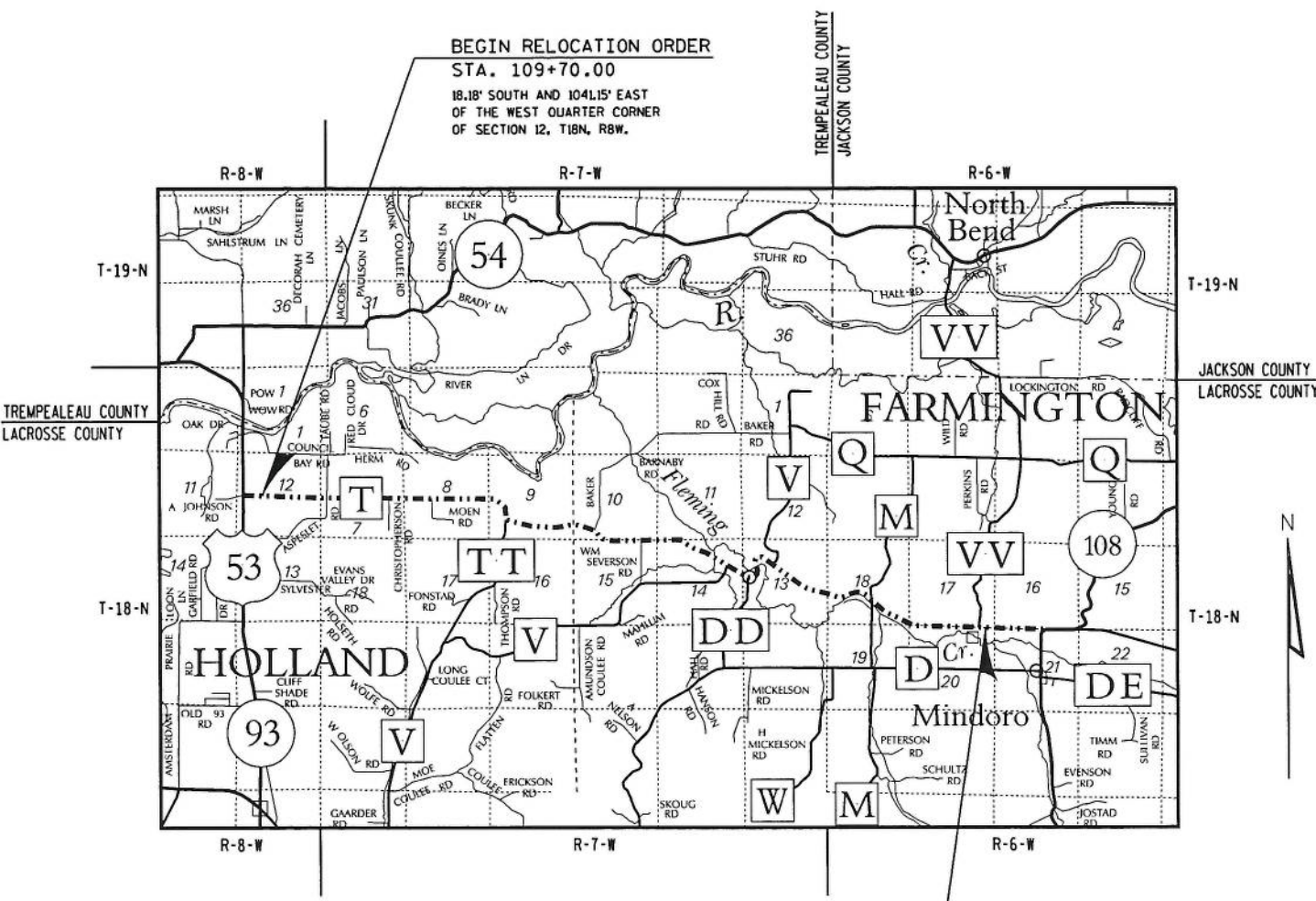
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), LA CROSSE COUNTY, NAD 83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED FOR GROUND DISTANCES.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 3/4 " X 24" REBAR) AND 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 CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE LA CROSSE COUNTY HIGHWAY DEPARTMENT.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. EXCLUDING RIGHT OF WAY LINES, THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.



LAYOUT
SCALE 0 1 MI.
TOTAL NET LENGTH OF CENTERLINE = 9.475 MI.

END RELOCATION ORDER
STA. 610+00.00
14.85' NORTH AND 625.27' WEST
OF THE NORTHEAST CORNER OF
SECTION 20, T18N, R6W.

R/W PROJECT NUMBER	7068-01-30	SHEET NUMBER	4.01	TOTAL SHEETS	8
FEDERAL PROJECT NUMBER					
PLAT OF RIGHT-OF-WAY REQUIRED FOR USH 53 / STH 93 - MINDORO (USH 53 TO STH 108)					
CTH T LA CROSSE COUNTY					
CONSTRUCTION PROJECT NUMBER 7068-01-60					

ORIGINAL PLAT PREPARED BY

AECOM

WISCONSIN LAND SURVEYOR

LANCE J. HABECK
S-1444
Plover, WI

Lance J. Habeck

LANCE J. HABECK, PLS-1444

DATE: 11/1/2016

REVISION DATE	LA CROSSE COUNTY HIGHWAY DEPARTMENT
APPROVED FOR THE DEPARTMENT	
DATE: 11/7/16	(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 LA CROSSE COUNTY.

PARCEL NUMBER	SHEET NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED			TLE ACRES
				NEW	EXISTING	TOTAL	
1	4.04	GATEWAY AREA COUNCIL, INC. BOY SCOUTS OF AMERICA	FEE & TLE	0.14	0.48	0.62	0.02
2	4.04	HOLMEN ROD & GUN CLUB, INC.	TLE	-----	-----	-----	0.04
3	4.05	JOYCE C. URBANEK & KATHRYN M. NICHOLS	FEE & TLE	0.02	-----	0.02	0.19
4	4.06	BRIAN A. KOTTMER	FEE	0.01	-----	0.01	-----
5	4.06	JODI L. WOLFE	FEE	0.02	-----	0.02	-----
6	4.06	MARY M. SHAW	FEE	0.04	-----	0.04	-----
7	4.07	MICHAEL B. HAUSER & KAREN B. HAUSER	TLE	-----	-----	-----	0.14
8	4.08	MICHAEL J. JOHNSON & AMY L. JOHNSON	FEE	0.01	0.01	0.02	-----
9	4.08	TIMOTHY D. ADAMSON	FEE & TLE	0.02	0.03	0.05	0.01
10	4.08	RYAN T. SAWYER & DARCY A. SAWYER	FEE & TLE	0.05	0.36	0.41	0.07

UTILITY INTERESTS REQUIRED				
PARCEL NUMBER	UTILITY	INTEREST REQUIRED	SHEET NUMBER	AFFECTED PARCEL
40	NORTHERN STATES POWER COMPANY (ELECTRIC)	RELEASE OF RIGHTS	4.04	1
41	XCEL ENERGY (ELECTRIC)	RELEASE OF RIGHTS	4.04	1
42	WPPI ENERGY (ELECTRIC)	RELEASE OF RIGHTS	4.04	1
43	DAIRYLAND POWER COOPERATIVE (ELECTRIC)	RELEASE OF RIGHTS	4.04	1
44	RIVERLAND ENERGY COOPERATIVE (ELECTRIC)	RELEASE OF RIGHTS	4.04	1 & 2

UTILITY EASEMENT TABLE		
UTILITY NAME	RECORDING INFORMATION	PARCEL
NORTHERN STATES POWER COMPANY 100' EASEMENT	VOL. 245 PG. 295 DOC. 601944	1
NORTHERN STATES POWER COMPANY 100' EASEMENT	VOL. 1183 PG. 198 DOC. 1175094	1
XCEL ENERGY, WPPI ENERGY & DAIRYLAND POWER COOPERATIVE 150' EASEMENT	DOC. 1661379	1
RIVERLAND ENERGY COOPERATIVE (TREMPEALEAU ELECTRIC) COOPERATIVE - 30' EASEMENT	VOL. 613 PG. 300 DOC. 885411	1
RIVERLAND ENERGY COOPERATIVE (TREMPEALEAU ELECTRIC) COOPERATIVE 30' - EASEMENT	VOL. 608 PG. 181 DOC. 881756	2

4



WISDOT/CADDS SHEET 75

NOTE: EXISTING RIGHT OF WAY FOR CTH T ESTABLISHED FROM CSM 76, VOL. 7 PG. 76, CSM 32, VOL 10 PG 32, CSM 171, VOL. 7 PG. 171 AND DEED VOL. 265 PG. 537. EXISTING RIGHT OF WAY FOR BAKER ROAD ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENT (CHAPTER 82.31).

R/W COURSE TABLE

FROM - TO	BEARING	DISTANCE
811 - 810	N70°02'28"W	40.00'
810 - 809	N19°57'32"E	22.24'
809 - 812	S69°57'57"E	40.00'
812 - 811	S19°57'32"W	22.19'

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
592	323+25.63	32.41'
603	327+38.52	32.96'
809	325+85.00	32.76'
810	325+85.00	55.00'
811	326+25.00	55.00'
812	326+25.00	32.81'

R/W COORDINATE TABLE

POINT	Y	X
592	216381.218	456066.656
603	216239.771	456454.559
809	216292.363	456310.332
810	216271.455	456302.739
811	216257.801	456340.336
812	216278.660	456347.911

P.I. = 321+15.67
Y 216483.884
X 455878.912
Δ. = 12°02'31" RT.
D. = 02°51'53"
T. = 210.95'
L. = 420.35'
R. = 2000.00'

P.I. = 329+58.93
Y 216195.514
X 456672.981
Δ. = 34°20'02" RT.
D. = 08°11'06"
T. = 216.24'
L. = 419.47'
R. = 700.00'

TLE COURSE TABLE

FROM - TO	BEARING	DISTANCE
809 - 922	S19°57'32"W	10.00'
922 - 921	N69°57'57"W	259.38'
921 - 920	CURVE	
920 - 919	N13°30'40"E	10.00'
919 - 592	CURVE	
592 - 809	S69°57'57"E	259.37'
812 - 603	S69°57'57"E	113.52'
603 - 926	CURVE	
926 - 927	S41°01'14"W	10.00'
927 - 924	CURVE	
924 - 923	N69°57'57"W	113.50'
923 - 812	N19°57'32"E	10.00'

TLE CURVE DATA TABLE

FROM - TO	RADIUS	LENGTH	CHORD	CHORD BEARING
921 - 920	1857.00'	220.83'	220.70'	N73°22'21"W
919 - 592	1867.00'	221.97'	221.84'	S73°22'18"E
603 - 926	683.20'	249.16'	247.78'	S59°31'04"E
927 - 924	673.20'	245.50'	244.14'	N59°31'07"W

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
919	321+00.00	32.86'
920	321+00.00	42.86'
921	323+25.62	42.41'
922	325+85.00	42.76'
923	326+25.00	42.81'
924	327+38.50	42.96'
926	330+00.00	33.70'
927	330+00.00	43.70'

TLE COORDINATE TABLE

POINT	Y	X
919	216444.700	455854.093
920	216434.977	455851.757
921	216371.823	456063.230
922	216282.963	456306.918
923	216269.260	456344.498
924	216230.376	456451.133
926	216114.078	456668.096
927	216106.533	456661.533

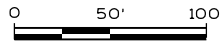
LUNDE MARKER
FOUND
Y=215574.244
X=455689.729

PK NAIL
FOUND
Y=215607.303
X=458300.365

REVISION DATE

DATE 11-1-2016

SCALE, FEET



HWY: CTH T

COUNTY R/W PROJECT NUMBER 7068-01-30

PLAT SHEET 4.05

GRID FACTOR N/A

COUNTY: LA CROSSE

CONSTRUCTION PROJECT NUMBER 7068-01-60

PS&E SHEET

34

E

NOTE: EXISTING RIGHT OF WAY FOR CTH T ESTABLISHED FROM
CSM 4, VOL. 1, PG. 4, DEED VOL. 239 PG. 234,
DEED VOL. 253 PG. 384 AND CENTERLINE OF EXISTING
PAVEMENT (CHAPTER 82.31).

P.I. = 442+71.47
Y 213554.536
X 467133.761
Δ. = 113°00'44" LT.
D. = 13°42'26"
T. = 631.68'
L. = 824.48'
R. = 418.00'
BK = N82°00'22"E
AH = N31°00'22"W

P.I. = 459+93.57
Y 215406.732
X 466020.578
Δ. = 154°42'09" RT.
D. = 20°19'04"
T. = 1256.57'
L. = 761.42'
R. = 282.00'
BK = N31°00'22"W
AH = S56°18'14"E

NW-NW
SEC. 13

R/W CURVE DATA TABLE

FROM - TO	RADIUS	LENGTH	CHORD	CHORD BEARING
820 - 817	385.00'	23.95'	23.94'	S25°53'49"E

R/W COURSE TABLE

FROM - TO	BEARING	DISTANCE
818 - 819	N25°25'02"W	16.59'
819 - 820	N45°22'07"E	20.96'
820 - 817	CURVE	
817 - 818	S65°53'06"W	20.00'
631 - 632	N31°00'22"W	187.23'
632 - 822	N58°59'38"E	10.00'
822 - 821	S31°00'22"E	151.51'
821 - 631	S15°22'06"E	37.10'
825 - 826	N58°59'38"E	22.00'
826 - 823	S31°00'22"E	35.00'
823 - 824	S58°59'38"W	22.00'
824 - 825	N31°00'22"W	35.00'

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
630	444+64.27	33.00'
631	444+64.27	33.00'
632	446+51.51	33.00'
633	446+51.51	50.00'
817	444+14.00	33.00'
818	444+14.00	53.00'
819	444+33.00	53.00'
820	444+40.00	33.00'
821	445+00.00	43.00'
822	446+51.51	43.00'
823	446+70.00	33.00'
824	446+70.00	55.00'
825	447+05.00	55.00'
826	447+05.00	33.00'

R/W COORDINATE TABLE

POINT	Y	X
630	214078.954	466780.081
631	214112.952	466836.650
632	214273.430	466740.202
633	214282.187	466754.773
817	214037.927	466801.493
818	214029.756	466783.239
819	214044.740	466776.118
820	214059.466	466791.036
821	214148.724	466826.818
822	214278.581	466748.773
823	214255.283	466674.106
824	214243.950	466655.249
825	214273.949	466637.220
826	214285.282	466656.076

1.25" IRON PIPE
FOUND
Y=215811.489
X=466159.895

S00°44'57"E 1543.65'

PL SECTION LINE
STA. 433+18.75

N00°44'57"W 1112.01'

N00°44'57"W 948.42'

N00°44'57"W 865.93'

1/16 LINE

STA. 448+95.13

JODI L. WOLFE

LOT 1 CSM 4
VOL. 1 PG. 4
DOC. 769829

CENTURYLINK
(TELEPHONE)

SW-NW
SEC. 13

MARY M. SHAW

BRIAN A. KOTTMER

GN

REVISION DATE

DATE 11-1-2016

SCALE, FEET

HWY: CTH T

COUNTY R/W PROJECT NUMBER 7068-01-30

PLAT SHEET 4.06

GRID FACTOR N/A

0 50' 100'

COUNTY: LA CROSSE

CONSTRUCTION PROJECT NUMBER 7068-01-60

PS&E SHEET 35

NE-SW
SEC. 18

NW-SE
SEC. 18

TOWN

FARMINGTON

NOTE: EXISTING RIGHT OF WAY FOR CTH T ESTABLISHED FROM
CENTERLINE OF EXISTING PAVEMENT. EXISTING RIGHT
OF WAY FOR CTH M ESTABLISHED FROM CENTERLINE OF
EXISTING PAVEMENT (CHAPTER 82.31).

P.I. = 534+17.59
Y 212003.376
X 474035.056
Δ. = 00°57'24" RT.

P.I. = 537+17.13
Y 211789.665
X 474244.941
Δ. = 05°49'53" LT.
D. = 02°51'53"
T. = 101.86'
L. = 203.55'
R. = 2000.00'

P.I. = 542+38.65
Y 211456.521
X 474646.412
Δ. = 16°11'10" LT.
D. = 05°43'46"
T. = 142.20'
L. = 282.50'
R. = 1000.00'

GN

1/16 LINE

STA. 536+20.91

1/16 LINE

TLE CURVE DATA TABLE

FROM - TO	RADIUS	LENGTH	CHORD	CHORD BEARING
693 - 696	1033.00'	291.82'	290.85'	S58°24'25"E
909 - 908	1043.00'	294.65'	293.67'	N58°24'25"W

TLE COURSE TABLE

FROM - TO	BEARING	DISTANCE
930 - 929	S45°31'03"W	10.00'
929 - 928	N44°28'57"W	135.69'
928 - 685	N01°01'31"W	13.71'
685 - 686	S45°51'45"E	23.64'
686 - 930	S44°28'57"E	122.01'
907 - 906	N39°41'10"E	10.00'
906 - 693	S50°18'50"E	96.45'
693 - 696	CURVE	
696 - 911	S66°30'00"E	71.05'
911 - 910	S23°30'00"W	10.00'
910 - 909	N66°30'00"W	71.05'
909 - 908	CURVE	
908 - 907	N50°18'50"W	96.45'

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
685	533+93.80	33.18'
686	534+17.99	33.00'
693	540+96.45	33.00'
696	543+78.95	33.00'

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
906	540+00.00	33.00'
907	540+00.00	43.00'
908	540+96.45	43.00'
909	543+78.95	43.00'
910	544+50.00	43.00'
911	544+50.00	33.00'
928	534+03.59	42.77'
929	535+40.00	43.00'
930	535+40.00	33.00'

R/W COORDINATE TABLE

POINT	Y	X
685	211996.433	473994.823
686	211979.970	474011.790
693	211521.930	474515.911
696	211369.557	474763.656

TLE COORDINATE TABLE

POINT	Y	X
906	211583.523	474441.686
907	211575.827	474435.300
908	211514.235	474509.525
909	211360.387	474759.668
910	211332.056	474824.824
911	211341.227	474828.812
928	211982.724	473995.069
929	211885.912	474090.148
930	211892.919	474097.282

LUNDE MARKER
FOUND
Y=210529.460
X=473965.758

RR SPIKE
FOUND
Y=210577.810
X=476604.475

REVISION DATE	DATE 11-1-2016	SCALE, FEET 0 50' 100'	HWY: CTH T	COUNTY R/W PROJECT NUMBER 7068-01-30	PLAT SHEET 4.07
	GRID FACTOR N/A		COUNTY: LA CROSSE	CONSTRUCTION PROJECT NUMBER 7068-01-60	PS&E SHEET 36

P.I. = 599+16.62
Y 210546.248
X 480139.412
Δ. = 03°23'26" LT.
D. = 01°54'35"
T. = 88.79'
L. = 177.52'
R. = 3000.00'

P.I. = 602+31.28
Y 210562.110
X 480453.724
Δ. = 06°49'00" RT.
D. = 02°36'16"
T. = 131.03'
L. = 261.74'
R. = 2200.00'

P.I. = 606+31.80
Y 210534.655
X 480853.608
Δ. = 02°27'32" LT.
D. = 02°17'31"
T. = 53.65'
L. = 107.29'
R. = 2500.00'

SW-SE
SEC. 17

TOWN

OF

FARMINGTON

SE-SE
SEC. 17

GN



TLE COURSE TABLE

FROM - TO	BEARING	DISTANCE
708 - 912	S03°55'40"W	10.00'
912 - 834	N86°54'54"W	325.84'
834 - 835	N80°17'03"E	60.14'
835 - 705	CURVE	
705 - 708	S86°04'20"E	216.15'

TLE CURVE DATA TABLE

FROM - TO	RADIUS	LENGTH	CHORD	CHORD BEARING
835 - 705	2167.00'	51.22'	51.22'	S86°44'58"E

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
912	605+78.15	43.00'

TLE COORDINATE TABLE

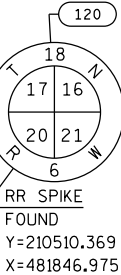
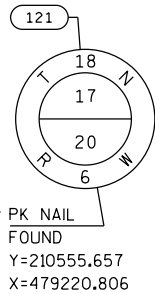
POINT	Y	X
912	210495.431	480797.136

JACKSON ELECTRIC
COOPERATIVE

END RELOCATION ORDER

STA. 610+00.00
Y=210525.217
X=481221.705

NOTE: EXISTING RIGHT OF WAY FOR CTH T ESTABLISHED FROM
CENTERLINE OF EXISTING PAVEMENT. EXISTING RIGHT
OF WAY FOR CTH VV ESTABLISHED FROM CENTERLINE OF
EXISTING PAVEMENT (CHAPTER 82.31).



R/W COURSE TABLE

FROM - TO	BEARING	DISTANCE
121 - 840	S89°00'43"E	1172.35'
840 - 842	S89°00'43"E	828.74'
842 - 837	S01°28'08"W	28.94'
837 - 836	S87°10'47"W	200.56'
836 - 709	N81°04'19"W	115.54'
709 - 708	CURVE	
708 - 705	N86°04'20"W	216.15'
705 - 835	CURVE	
835 - 834	S80°17'03"W	60.14'
834 - 833	N89°42'47"W	54.45'
833 - 832	S00°59'17"W	10.00'
832 - 831	S89°14'30"W	23.55'
831 - 830	N01°04'22"W	22.00'
830 - 840	N01°04'22"W	10.52'
120 - 842	N89°00'43"W	625.47'

R/W CURVE DATA TABLE

FROM - TO	RADIUS	LENGTH	CHORD	CHORD BEARING
709 - 708	2533.00'	108.71'	108.70'	N87°18'06"W
705 - 835	2167.00'	51.22'	51.22'	N86°44'58"W

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
705	603+62.00	33.00'
708	605+78.15	33.00'
709	606+85.43	33.00'
830	601+70.00	33.00'
831	601+70.00	55.00'
832	601+94.15	55.00'
833	601+94.41	45.00'
834	602+50.00	45.00'
835	603+10.00	33.00'
836	608+00.00	48.00'
837	610+00.00	33.00'

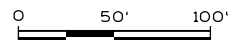
R/W COORDINATE TABLE

POINT	Y	X
705	210520.213	480582.183
708	210505.408	480797.821
709	210500.291	480906.398
830	210524.923	480393.182
831	210502.926	480393.594
832	210503.238	480417.140
833	210513.240	480417.312
834	210512.967	480471.766
835	210523.117	480531.047
836	210482.359	481020.541
837	210492.228	481220.860

REVISION DATE

DATE 11-1-2016

SCALE, FEET



HWY: CTH T

COUNTY R/W PROJECT NUMBER 7068-01-30

PLAT SHEET 4.08

GRID FACTOR N/A

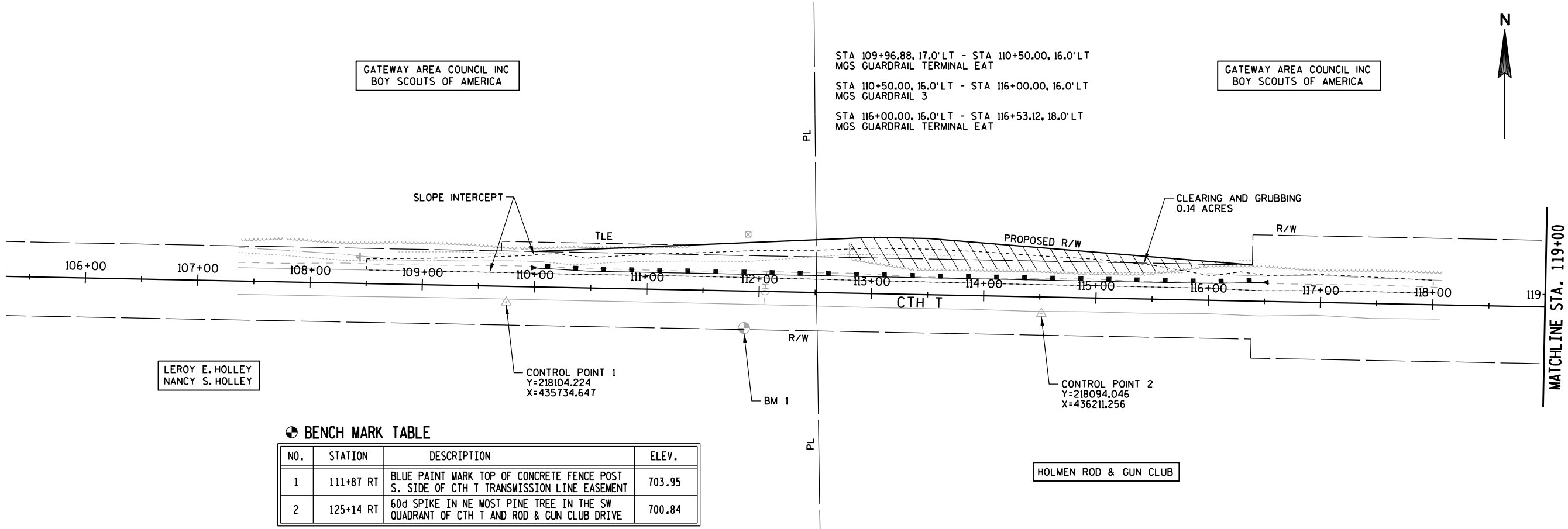
COUNTY: LA CROSSE

CONSTRUCTION PROJECT NUMBER 7068-01-60

PS&E SHEET 37

E

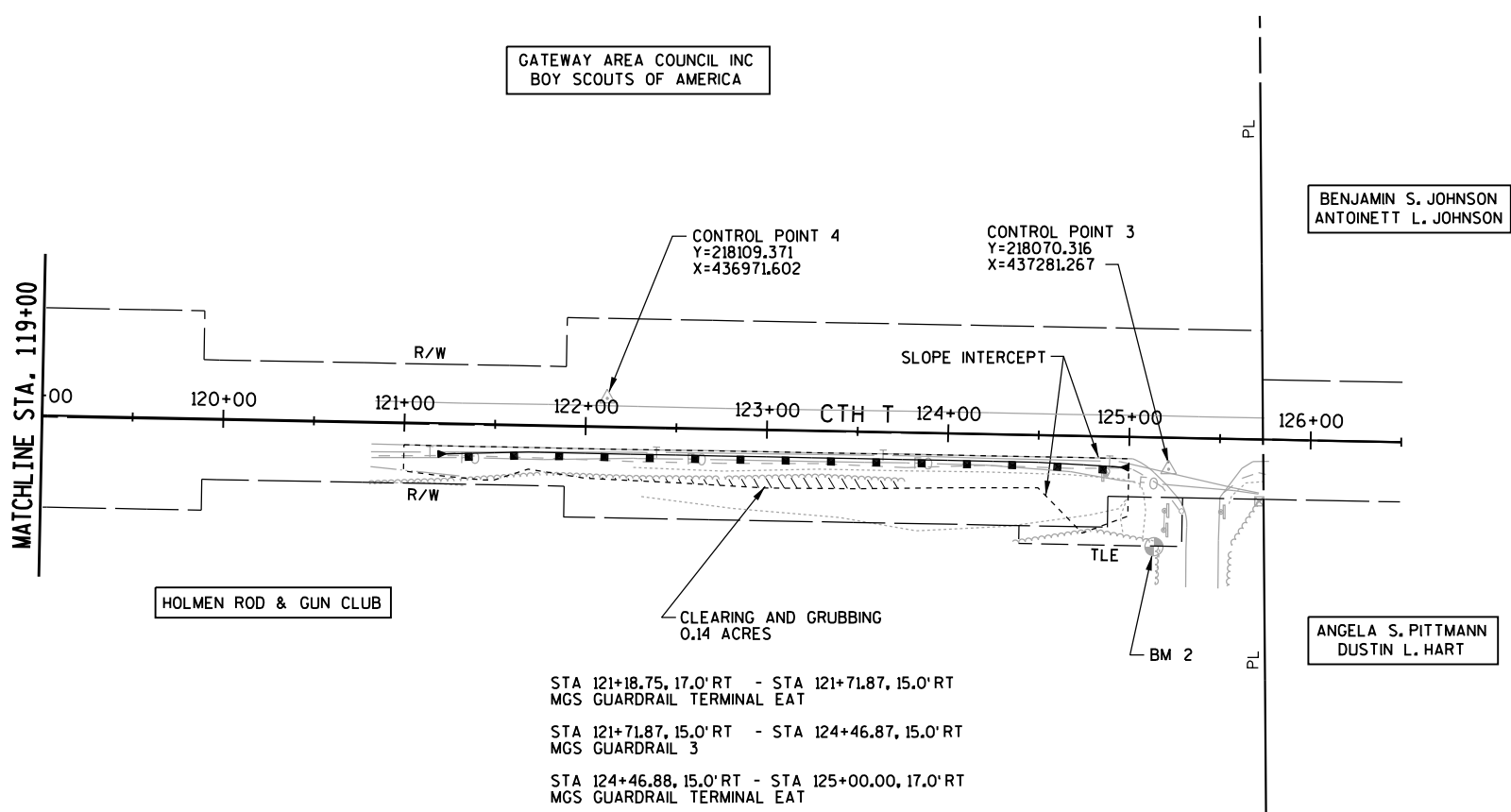
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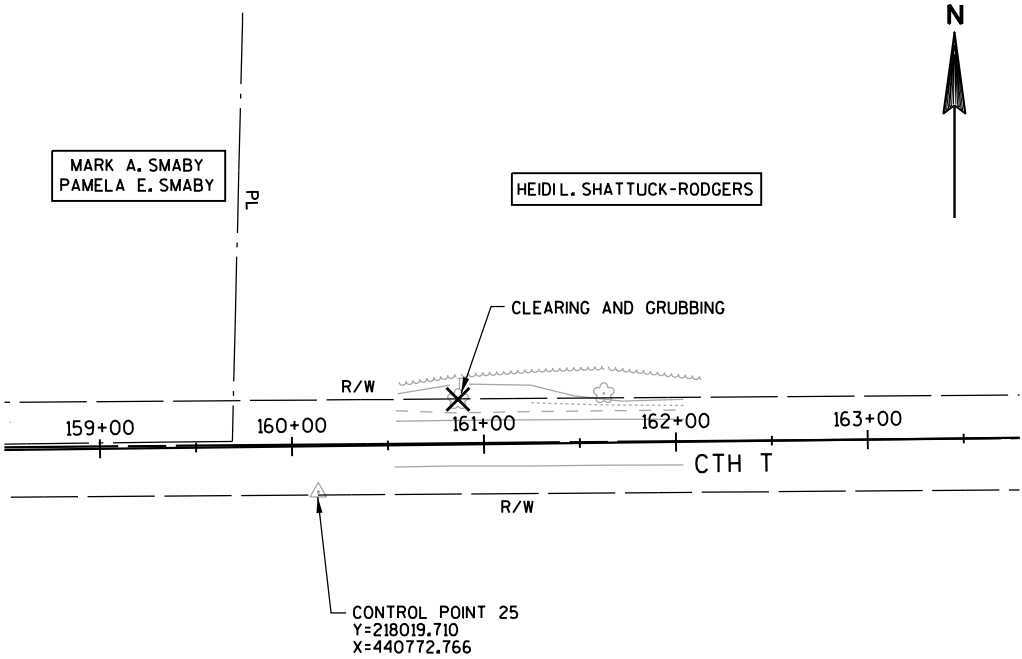
BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEV.
1	111+87 RT	BLUE PAINT MARK TOP OF CONCRETE FENCE POST S. SIDE OF CTH T TRANSMISSION LINE EASEMENT	703.95
2	125+14 RT	60d SPIKE IN NE MOST PINE TREE IN THE SW QUADRANT OF CTH T AND ROD & GUN CLUB DRIVE	700.84

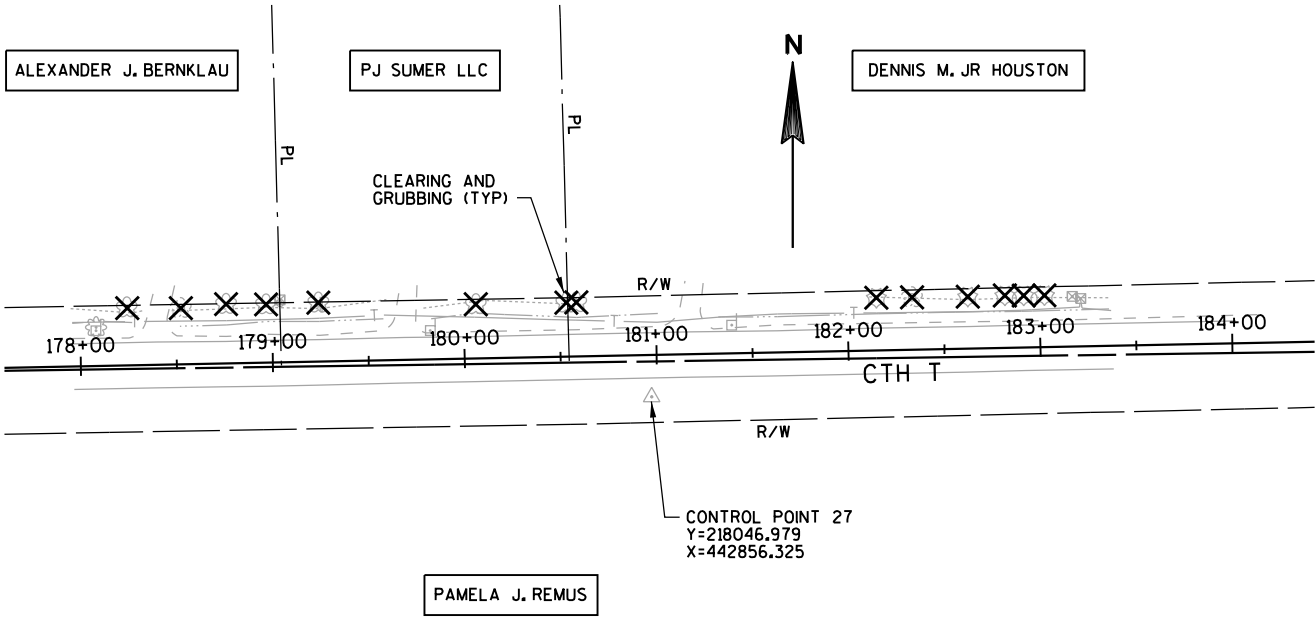
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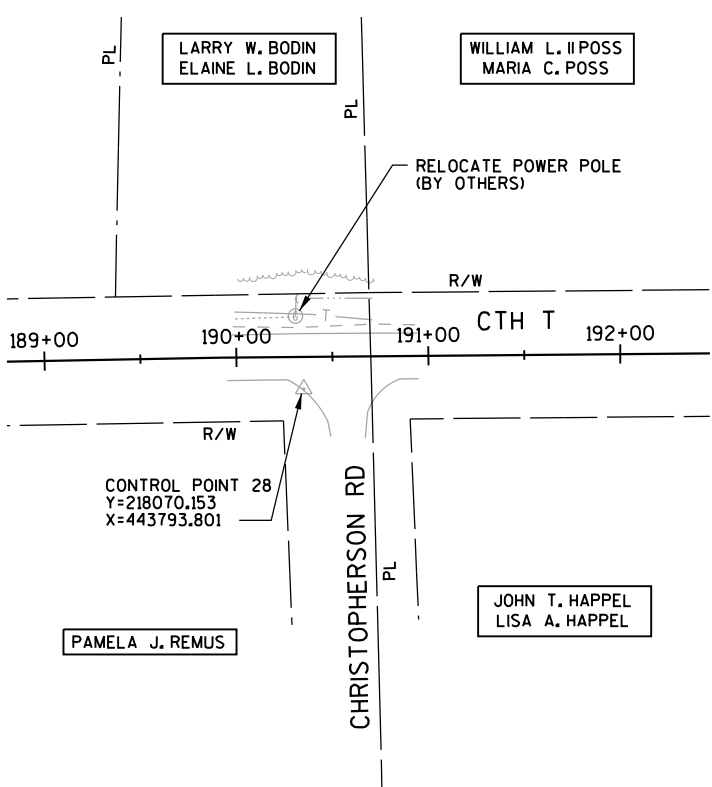
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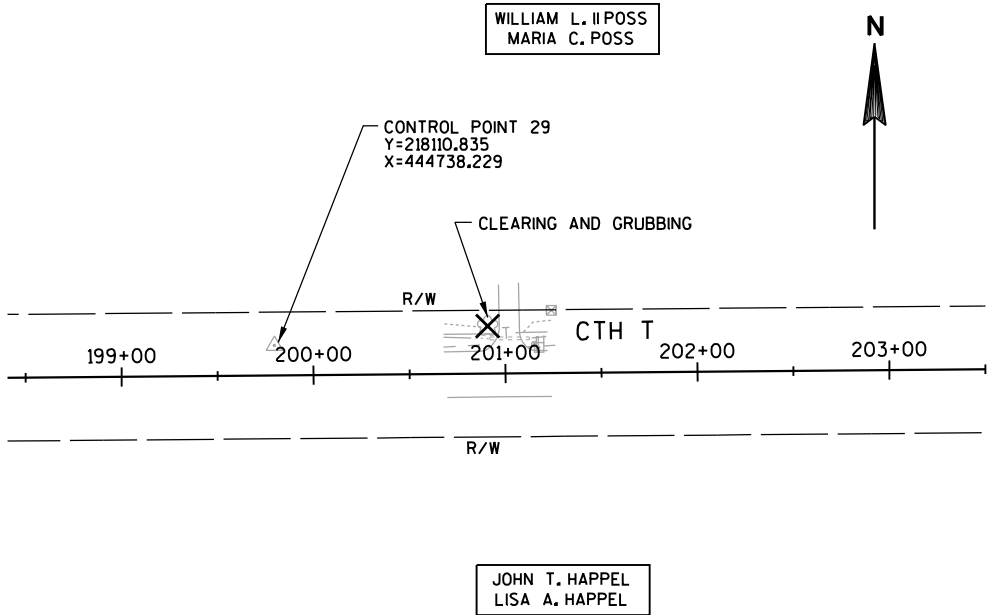
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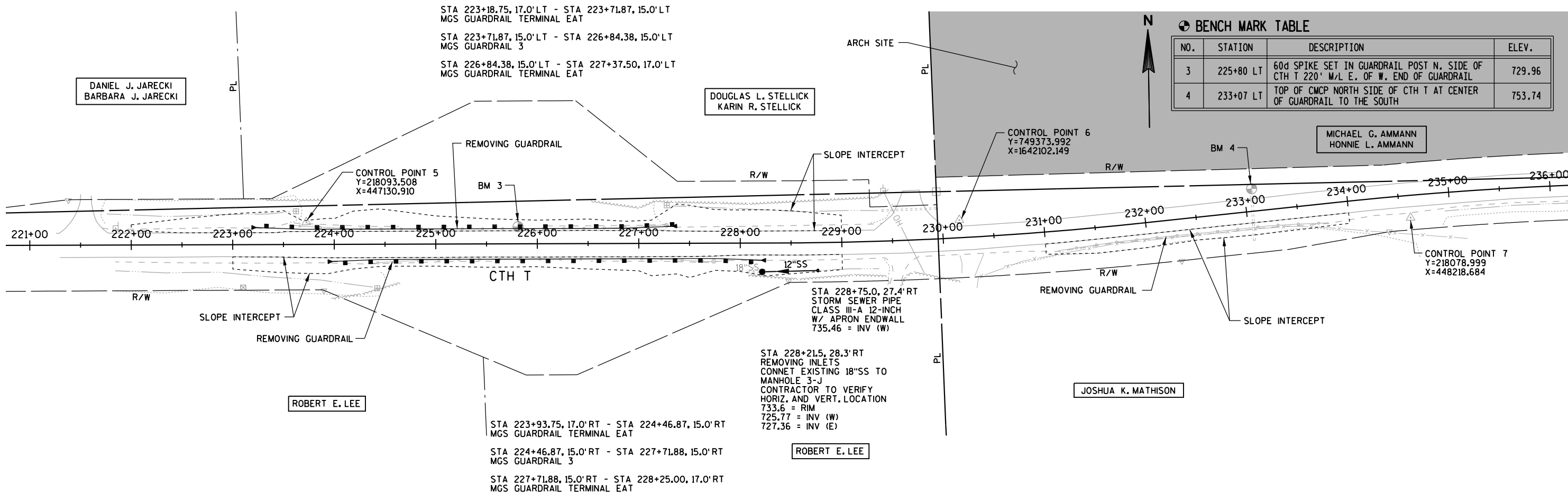
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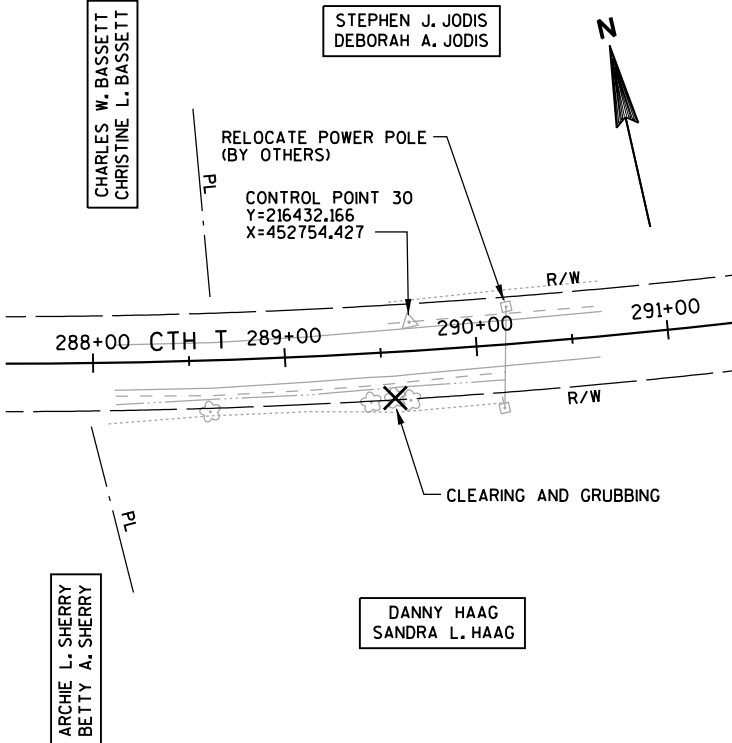
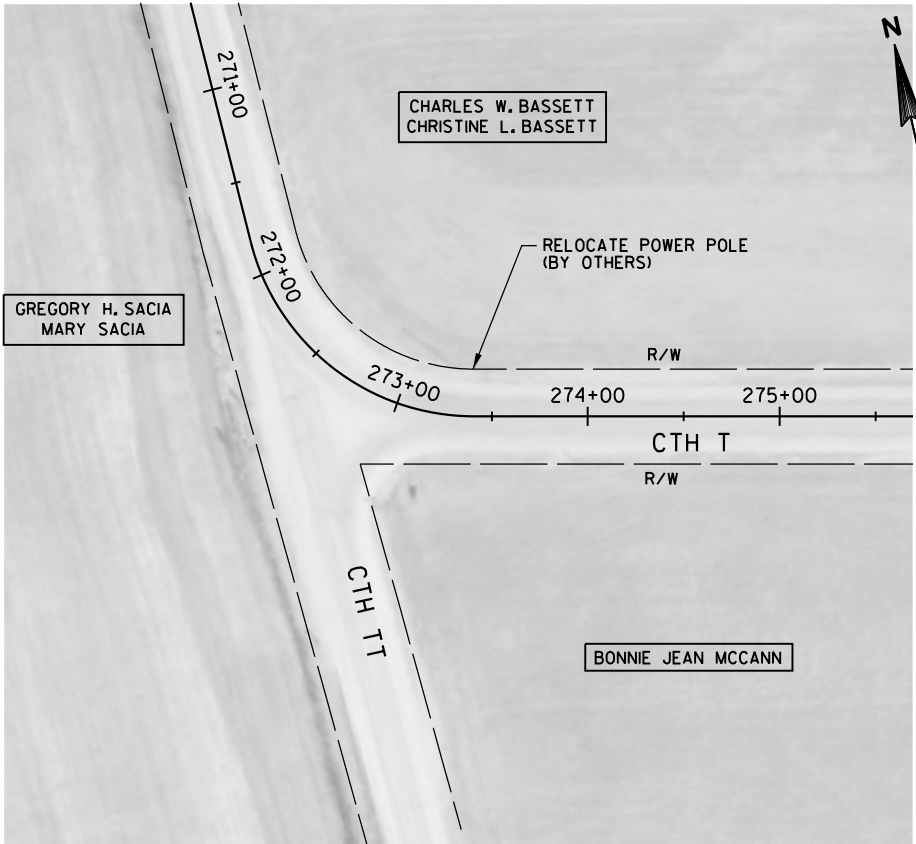
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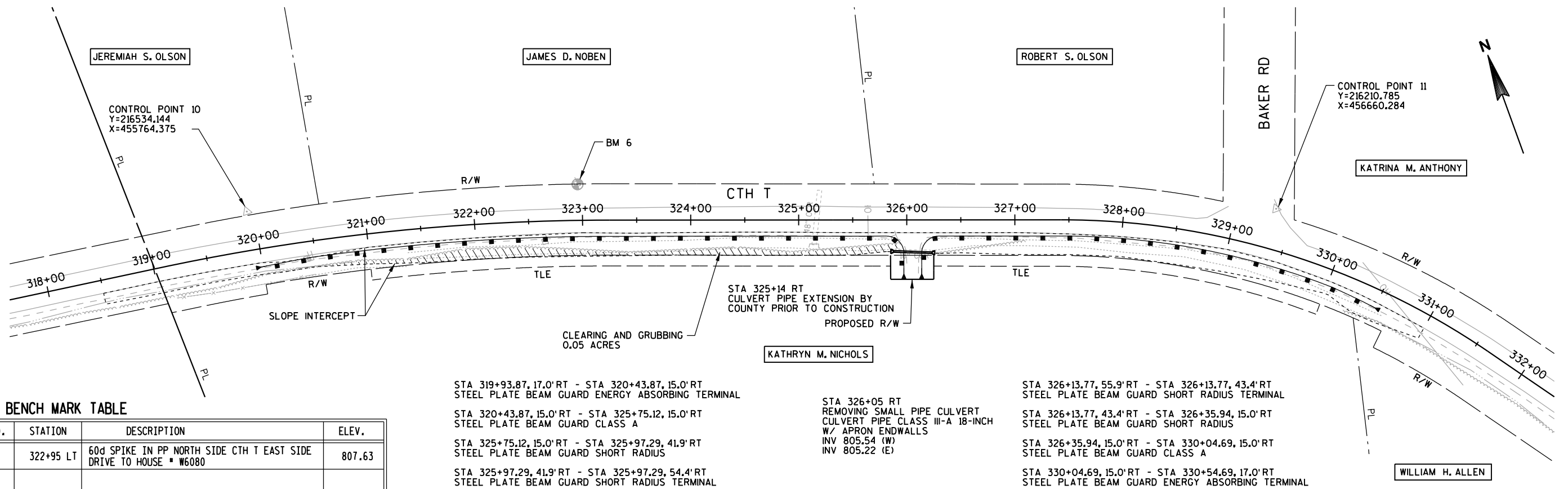


5



5





⊕ BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEV.
6	322+95 LT	60d SPIKE IN PP NORTH SIDE CTH T EAST SIDE DRIVE TO HOUSE ▪ W6080	807.63

STA 319+93.87, 17.0' RT - STA 320+43.87, 15.0' RT
STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

STA 320+43.87, 15.0' RT - STA 325+75.12, 15.0' RT
STEEL PLATE BEAM GUARD CLASS A

STA 325+75.12, 15.0' RT - STA 325+97.29, 41.9' RT
STEEL PLATE BEAM GUARD SHORT RADIUS

STA 325+97.29, 41.9' RT - STA 325+97.29, 54.4' RT
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

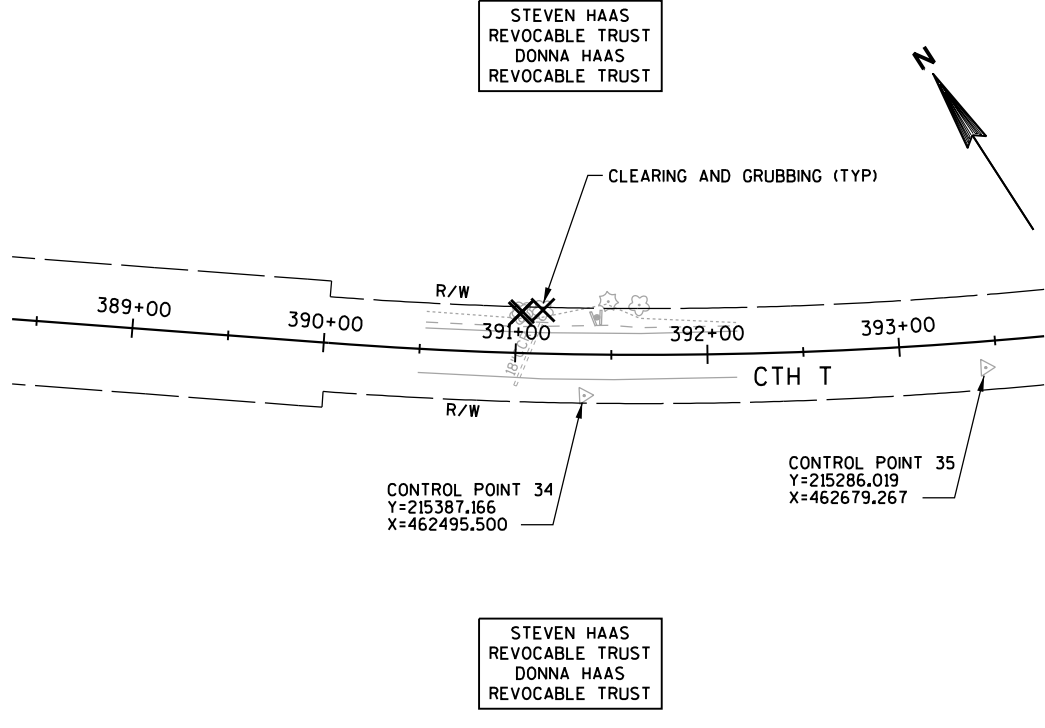
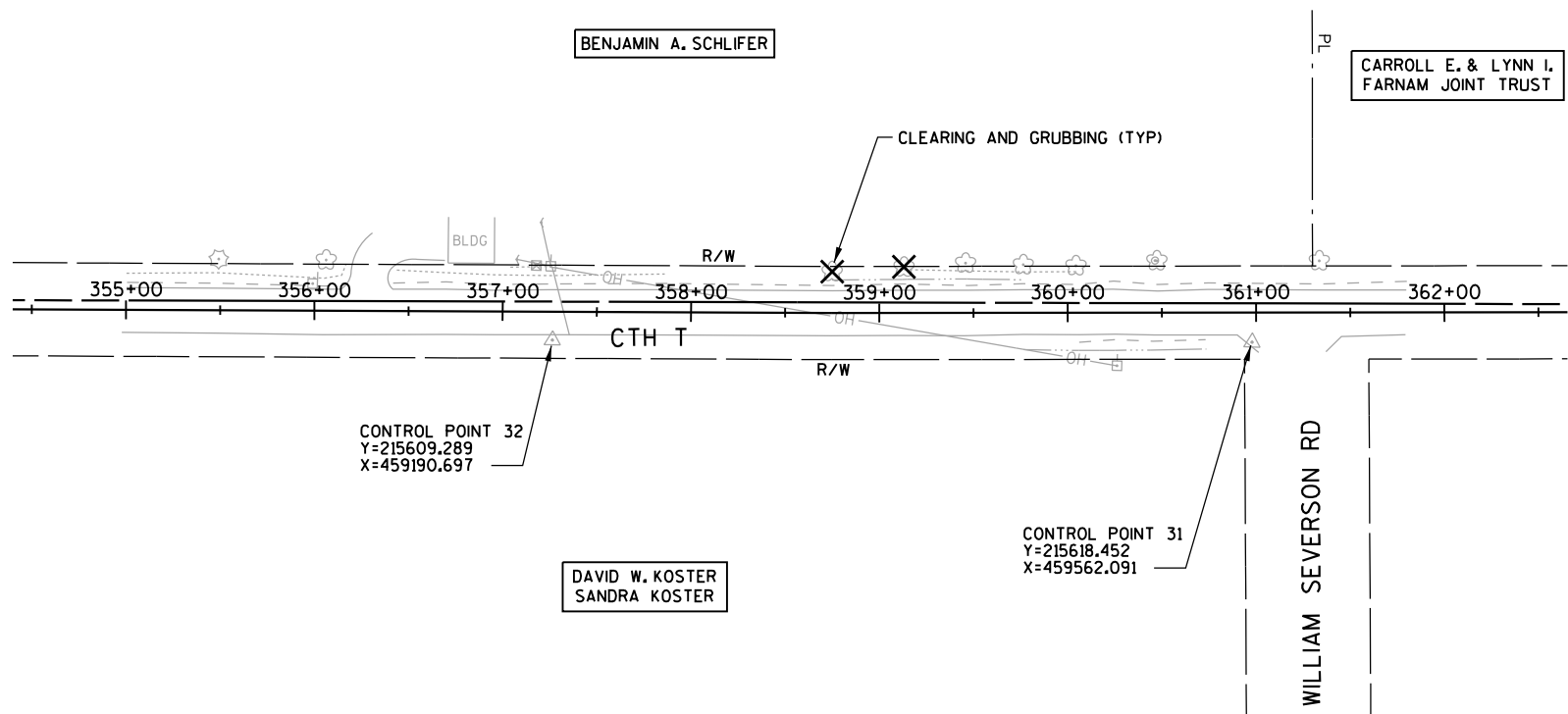
STA 326+05 RT
REMOVING SMALL PIPE CULVERT
CULVERT PIPE CLASS III-A 18-INCH
W/ APRON ENDWALLS
INV 805.54 (W)
INV 805.22 (E)

STA 326+13.77, 55.9' RT - STA 326+13.77, 43.4' RT
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

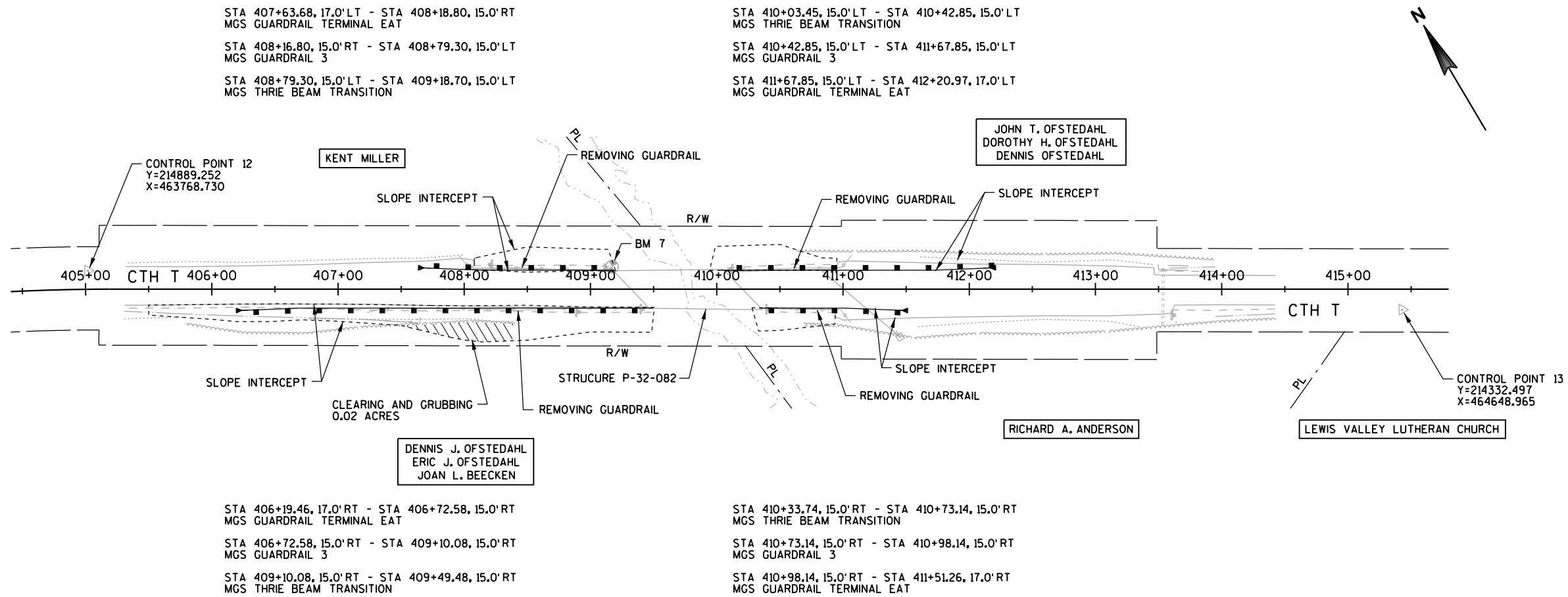
STA 326+13.77, 43.4' RT - STA 326+35.94, 15.0' RT
STEEL PLATE BEAM GUARD SHORT RADIUS

STA 326+35.94, 15.0' RT - STA 330+04.69, 15.0' RT
STEEL PLATE BEAM GUARD CLASS A

STA 330+04.69, 15.0' RT - STA 330+54.69, 17.0' RT
STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL



5



5

STA 444+29.38, 46.5' LT - STA 444+33.19, 34.5' LT
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STA 444+33.19, 34.5' LT - STA 444+52.53, 15.3' LT
STEEL PLATE BEAM GUARD SHORT RADIUS

STA 444+52.53, 15.3' LT - STA 444+96.28, 15.3' LT
STEEL PLATE BEAM GUARD CLASS A

STA 444+96.28, 15.3' LT - STA 445+08.78, 15.3' LT
NESTED W-BEAM TRANSITION

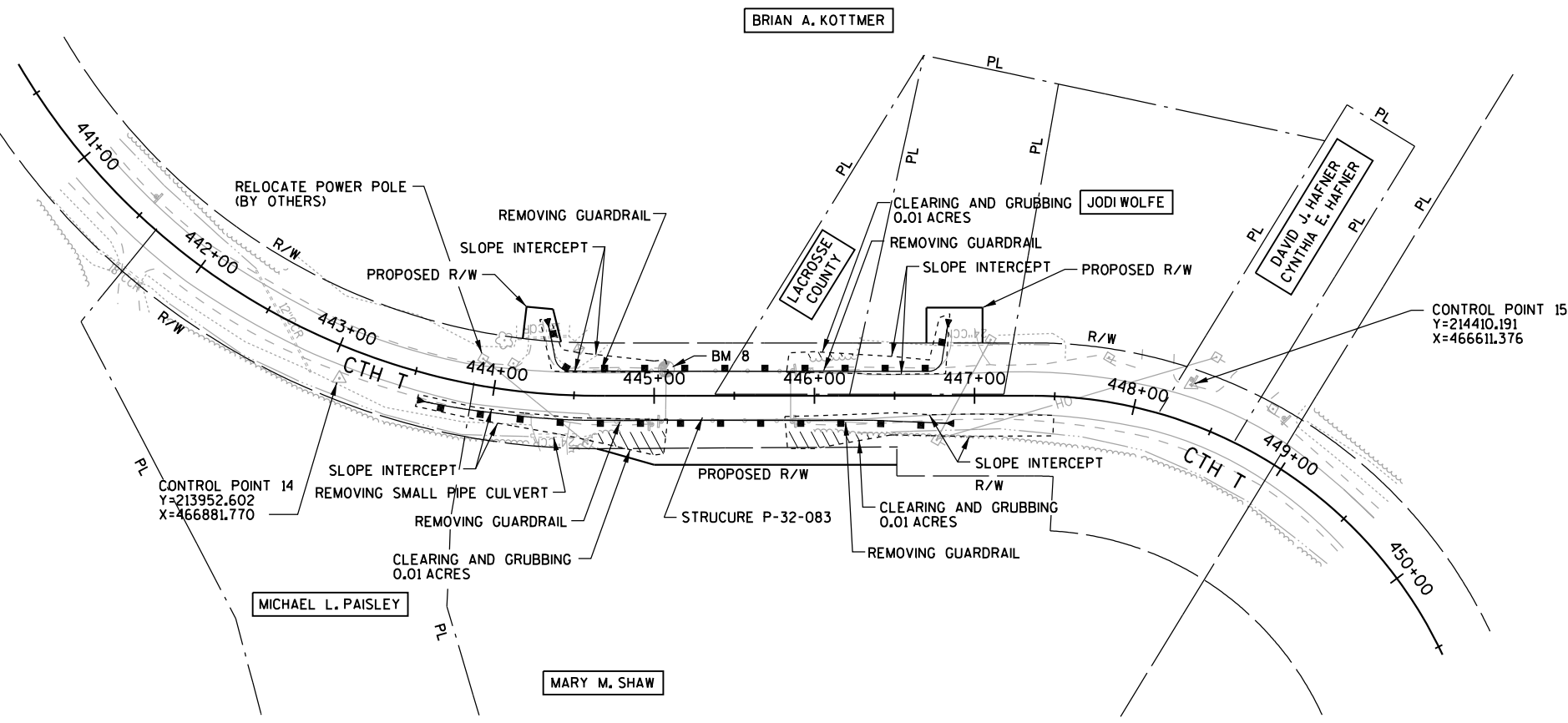
STA 445+08.78, 15.3' LT - STA 445+83.78, 15.3' LT
NESTED W-BEAM

STA 445+83.78, 15.3' LT - STA 445+96.28, 15.3' LT
NESTED W-BEAM TRANSITION

STA 445+96.28, 15.3' LT - STA 446+65.03, 15.3' LT
STEEL PLATE BEAM GUARD CLASS A

STA 446+65.03, 15.3' LT - STA 446+81.82, 35.2' LT
STEEL PLATE BEAM GUARD SHORT RADIUS

STA 446+81.82, 35.2' LT - STA 446+83.79, 47.6' LT
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL



STA 443+55.65, 17.3' RT - STA 444+08.78, 15.3' RT
STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

STA 444+08.78, 15.3' RT - STA 444+96.28, 15.3' RT
STEEL PLATE BEAM GUARD CLASS A

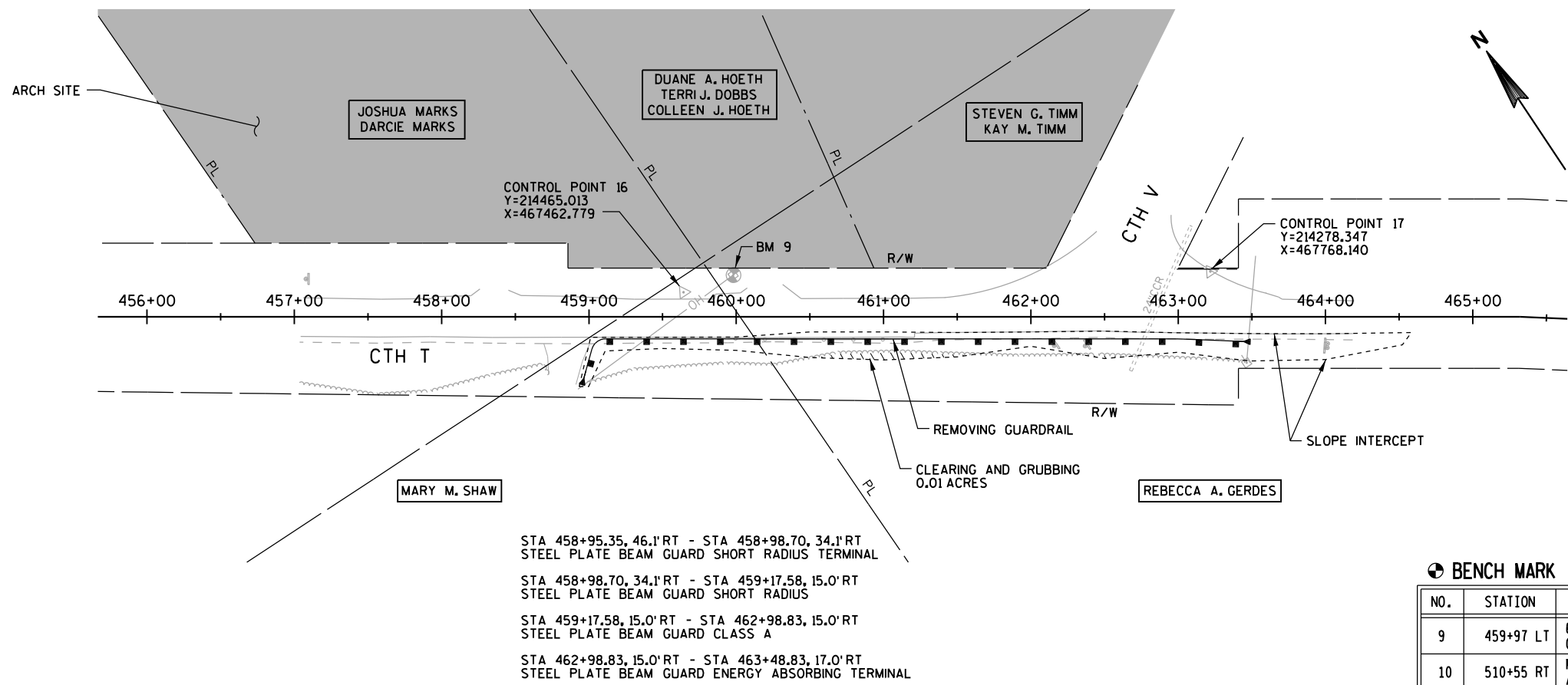
STA 444+96.28, 15.3' RT - STA 445+08.78, 15.3' RT
NESTED W-BEAM TRANSITION

STA 445+08.78, 15.3' RT - STA 445+83.78, 15.3' RT
NESTED W-BEAM

STA 445+83.78, 15.3' RT - STA 445+96.28, 15.3' RT
NESTED W-BEAM TRANSITION

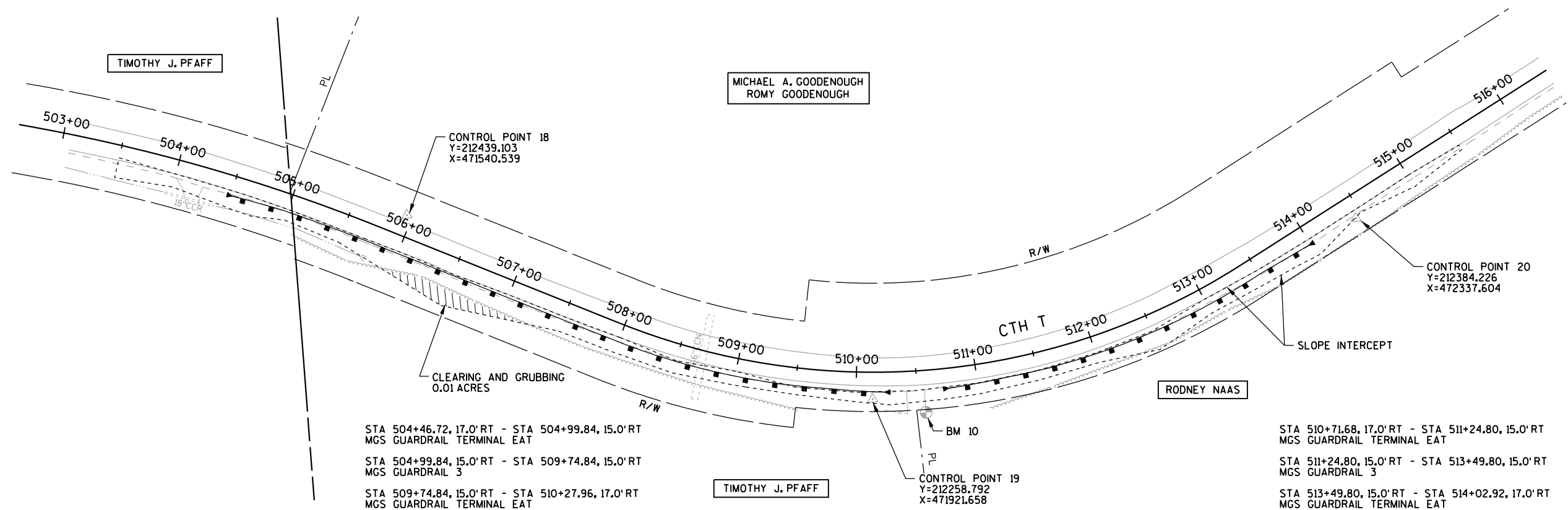
STA 445+96.28, 15.3' RT - STA 446+33.78, 15.3' RT
STEEL PLATE BEAM GUARD CLASS A

STA 446+33.78, 15.3' RT - STA 446+86.90, 17.30' RT
STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

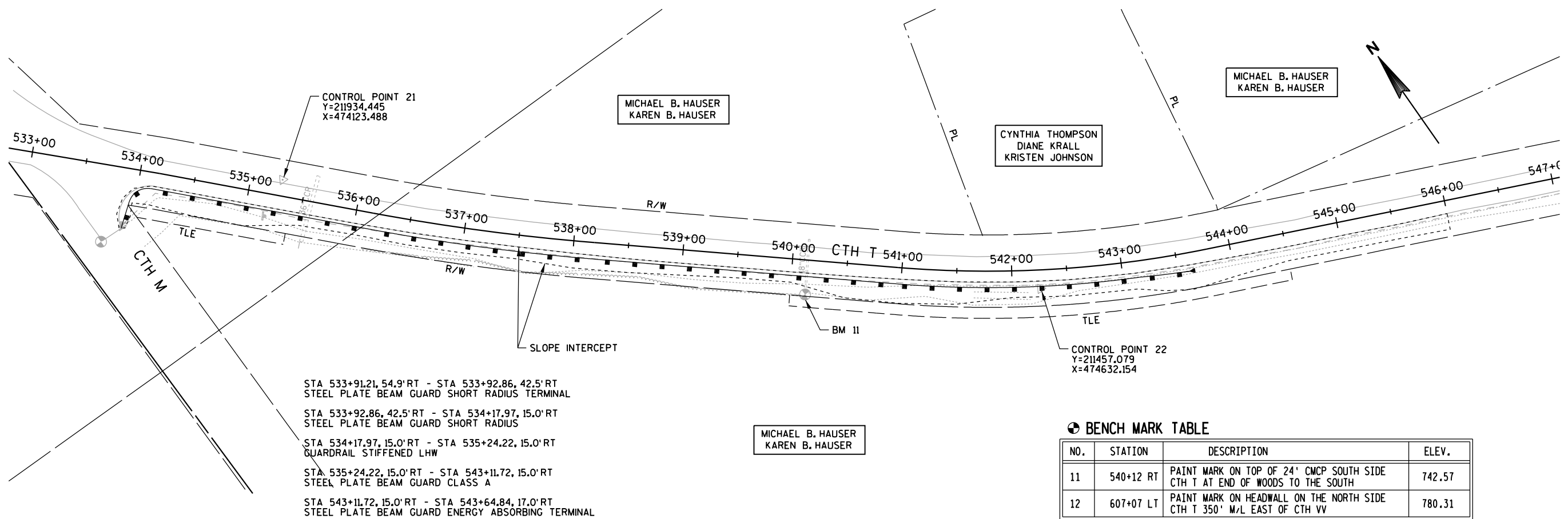


BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEV.
9	459+97 LT	60d SPIKE IN PP# 402DD135 ON THE NORTH SIDE CTH T WEST SIDE OF DRIVE TO HOUSE # W5206	804.14
10	510+55 RT	MAG NAIL IN LEANING FENCE POST S. SIDE CTH T AT FIELD ENTRANCE 200'M/L E. OF 66" RCCP	754.22



5



STA 533+91.21, 54.9' RT - STA 533+92.86, 42.5' RT
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STA 533+92.86, 42.5' RT - STA 534+17.97, 15.0' RT
STEEL PLATE BEAM GUARD SHORT RADIUS

STA 534+17.97, 15.0' RT - STA 535+24.22, 15.0' RT
GUARDRAIL STIFFENED LHW

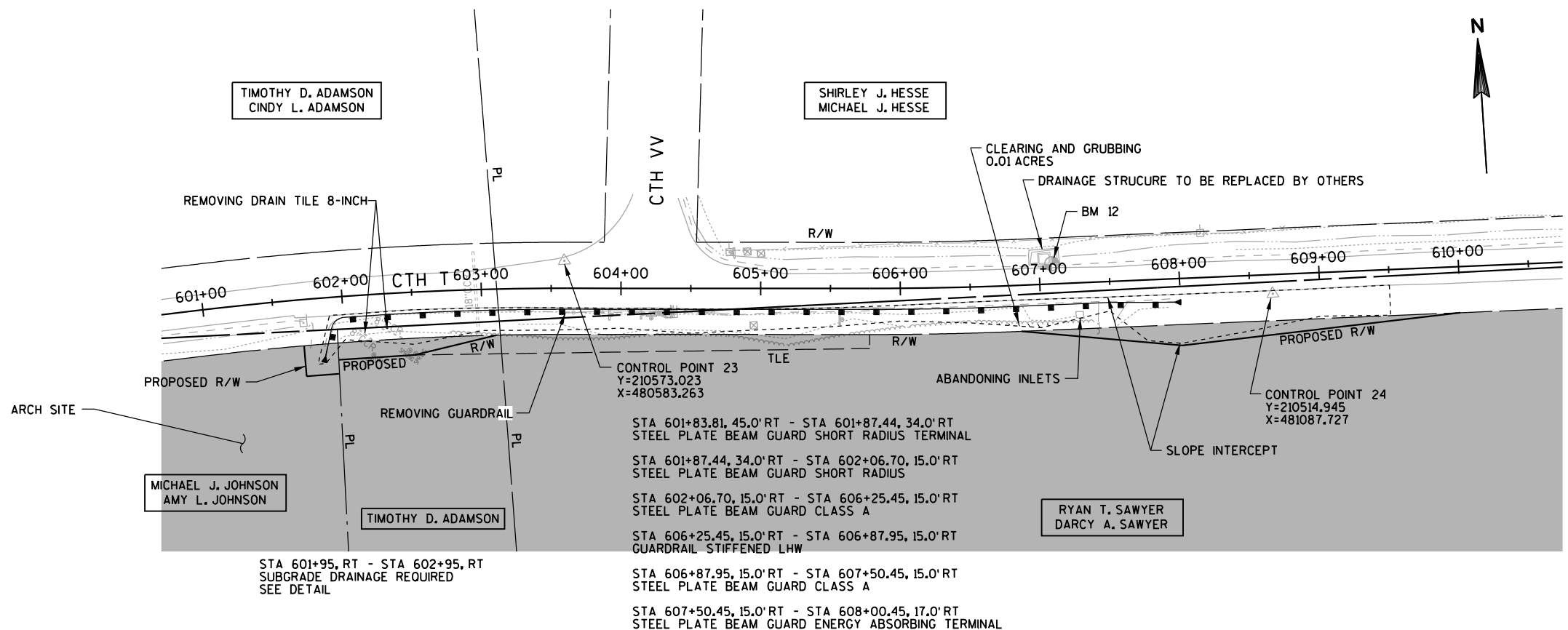
STA 535+24.22, 15.0' RT - STA 543+11.72, 15.0' RT
STEEL PLATE BEAM GUARD CLASS A

STA 543+11.72, 15.0' RT - STA 543+64.84, 17.0' RT
STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEV.
11	540+12 RT	PAINT MARK ON TOP OF 24' CMCP SOUTH SIDE CTH T AT END OF WOODS TO THE SOUTH	742.57
12	607+07 LT	PAINT MARK ON HEADWALL ON THE NORTH SIDE CTH T 350' M/L EAST OF CTH VV	780.31

5



STA 601+83.81, 45.0' RT - STA 601+87.44, 34.0' RT
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STA 601+87.44, 34.0' RT - STA 602+06.70, 15.0' RT
STEEL PLATE BEAM GUARD SHORT RADIUS

STA 602+06.70, 15.0' RT - STA 606+25.45, 15.0' RT
STEEL PLATE BEAM GUARD CLASS A

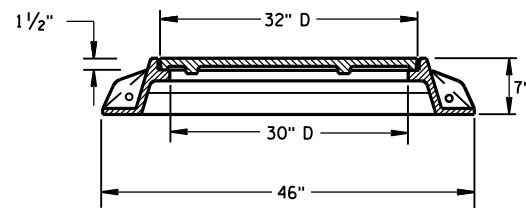
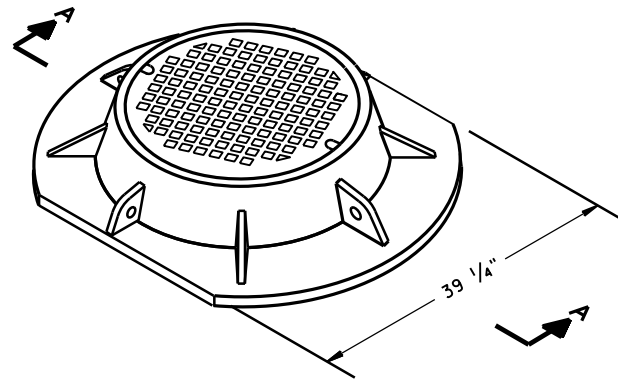
STA 606+25.45, 15.0' RT - STA 606+87.95, 15.0' RT
GUARDRAIL STIFFENED LHW

STA 606+87.95, 15.0' RT - STA 607+50.45, 15.0' RT
STEEL PLATE BEAM GUARD CLASS A

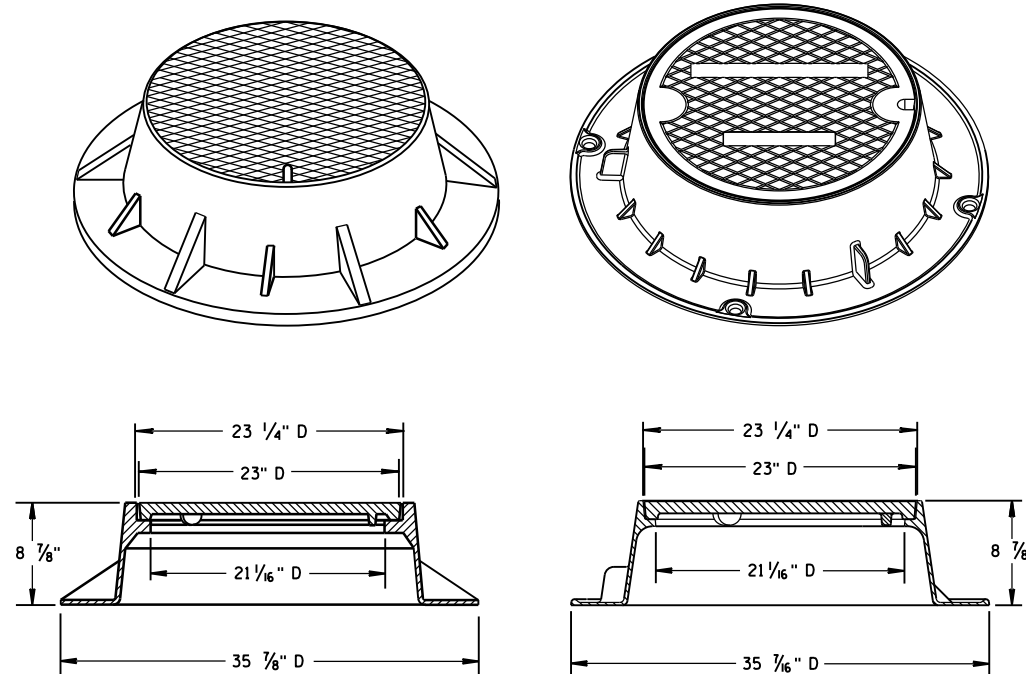
STA 607+50.45, 15.0' RT - STA 608+00.45, 17.0' RT
STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

Standard Detail Drawing List

08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
14B15-09A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-09B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-09C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B18-06A	STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)
14B24-08A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-08B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-08C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B27-01A	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01B	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01C	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B42-04A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-04A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15C12-05	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-04A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-01A	PAVEMENT MARKING (INTERSECTIONS)
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

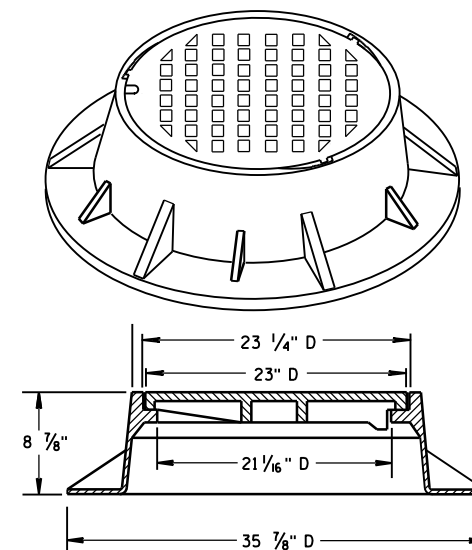
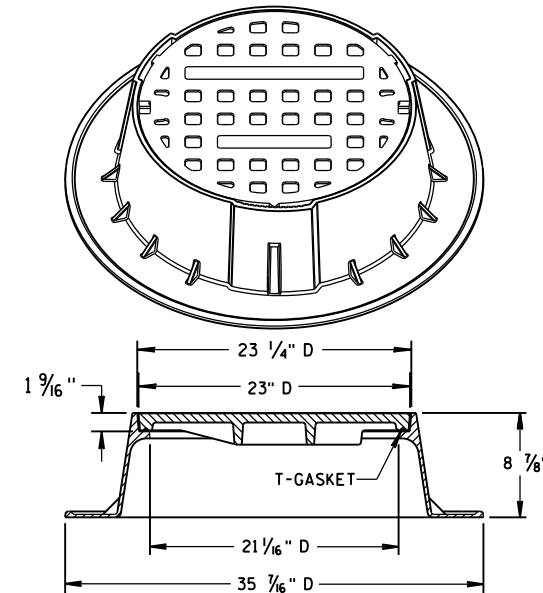


SECTION A-A
TYPE "K"



TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

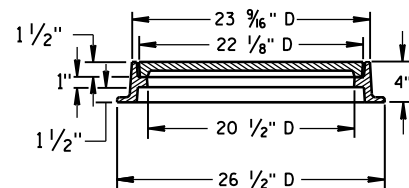
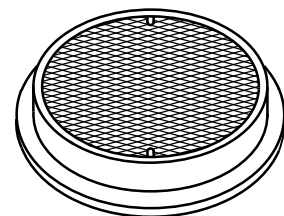


TYPE "J" SPECIAL

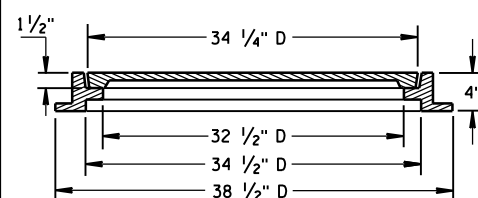
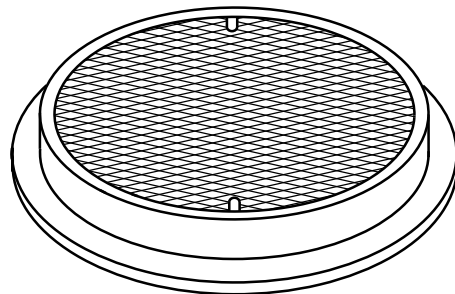
TYPE "B" NON-ROCKING SELF-SEAL LID

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

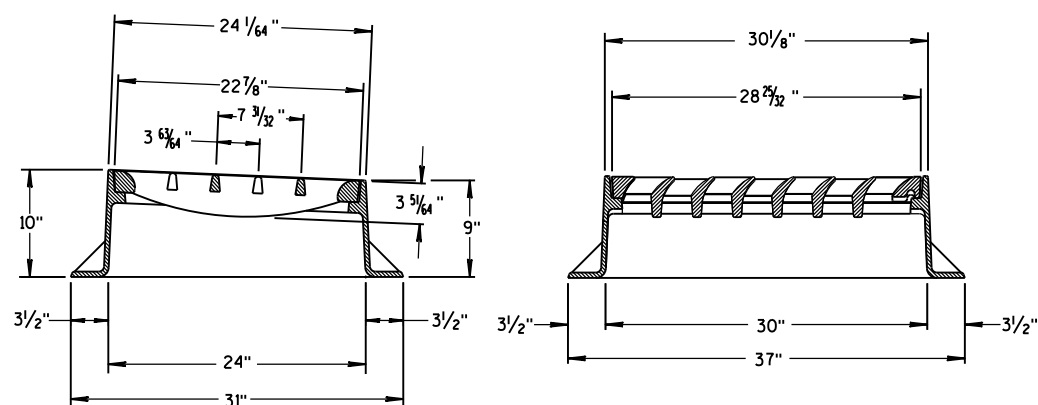
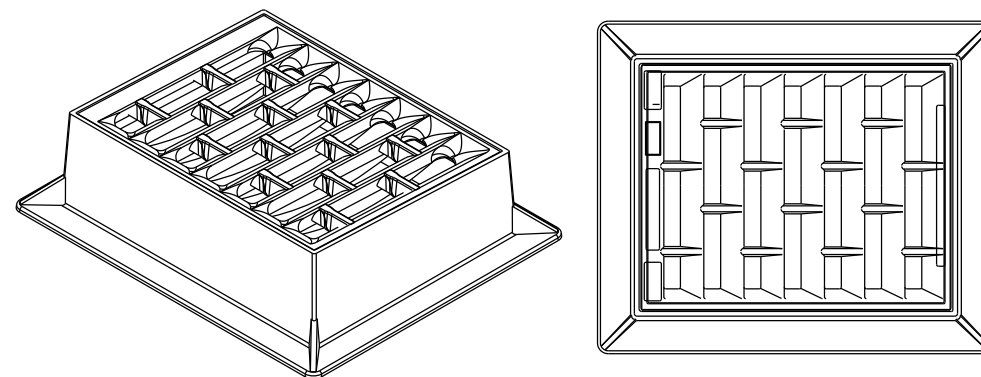
NOTE: EITHER CASTING IS ACCEPTABLE



TYPE "L"



TYPE "M"



INLET COVER TYPE "BW"

GENERAL NOTES

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

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K,
J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/27/2013

DATE

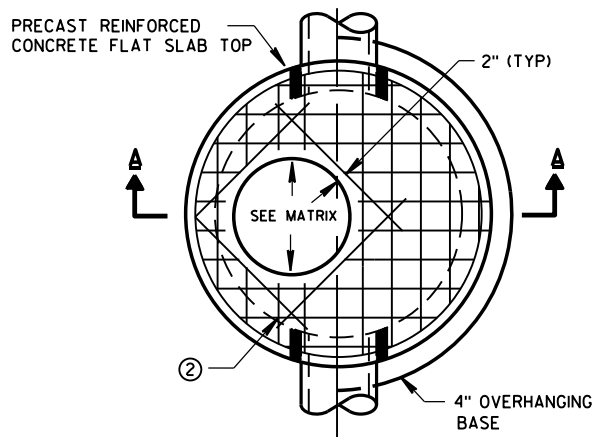
FHWA

/S/ Jerry H. Zogg

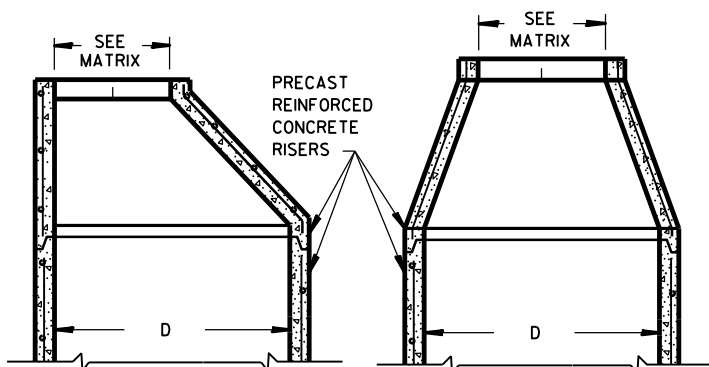
ROADWAY STANDARDS 046

ENGINEER

VT

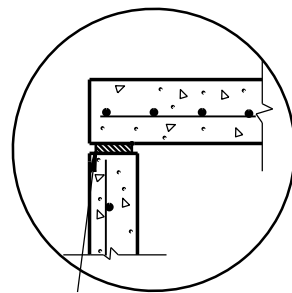


PLAN VIEW CIRCULAR OPENING

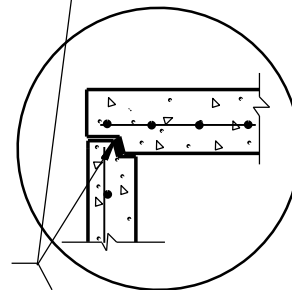


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

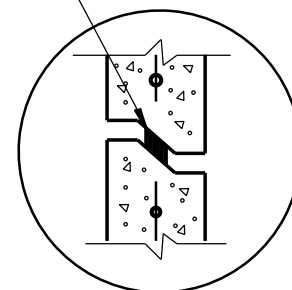
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT



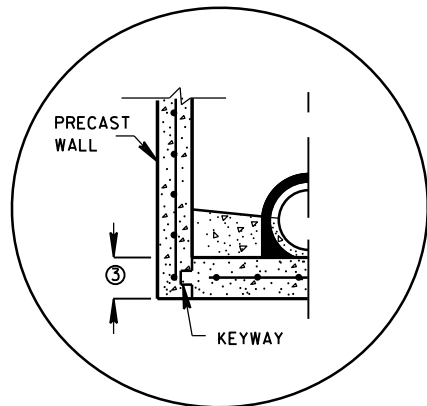
TOP WITH TONGUE AND GROOVE JOINT



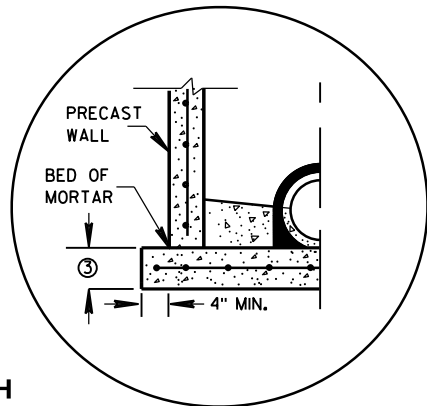
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

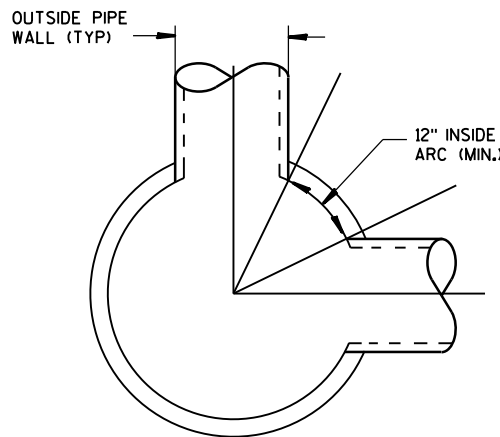


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

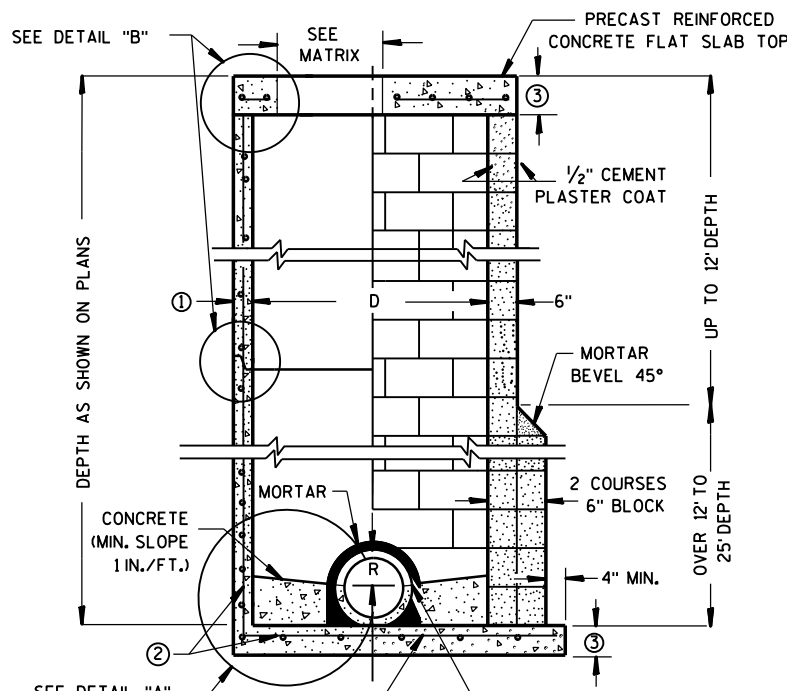


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"



CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

PRECAST REINFORCED CONCRETE BLOCK WITH CONCRETE WITH MONOLITHIC BASE CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

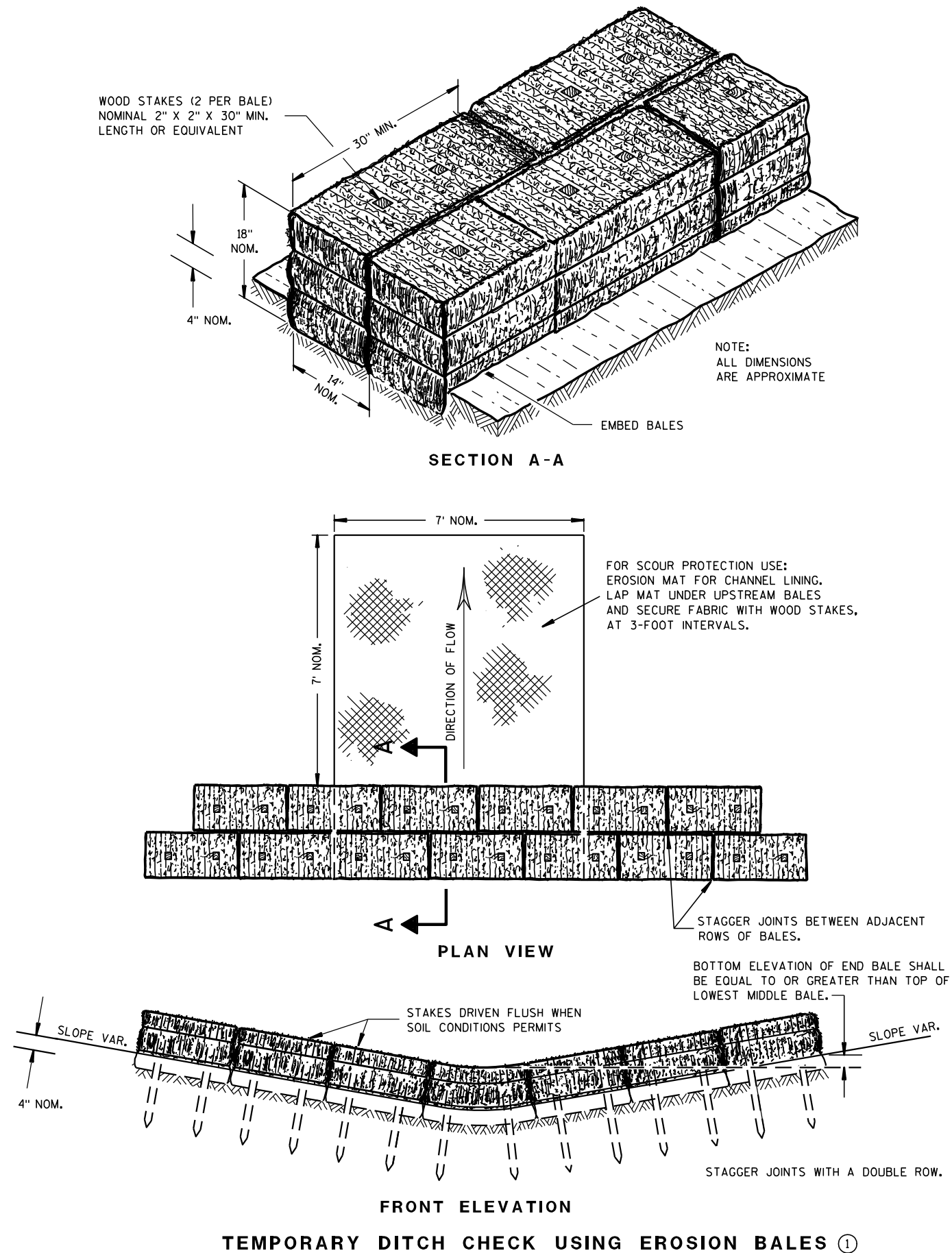
PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

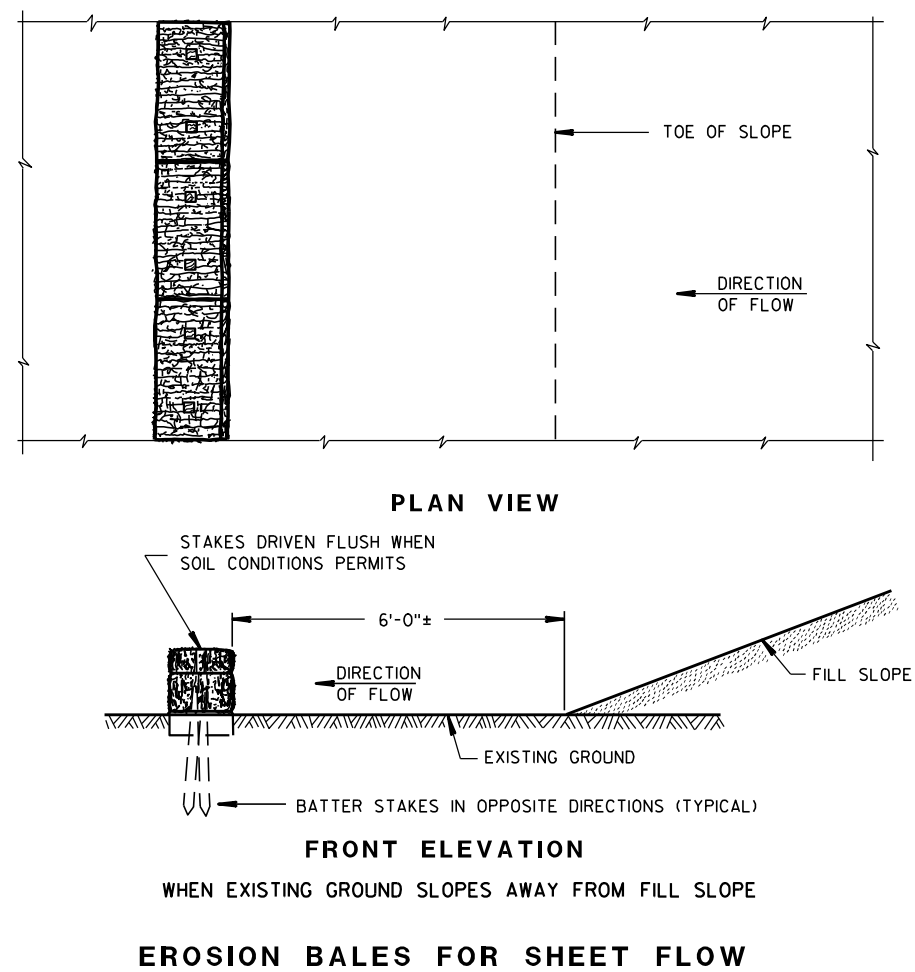
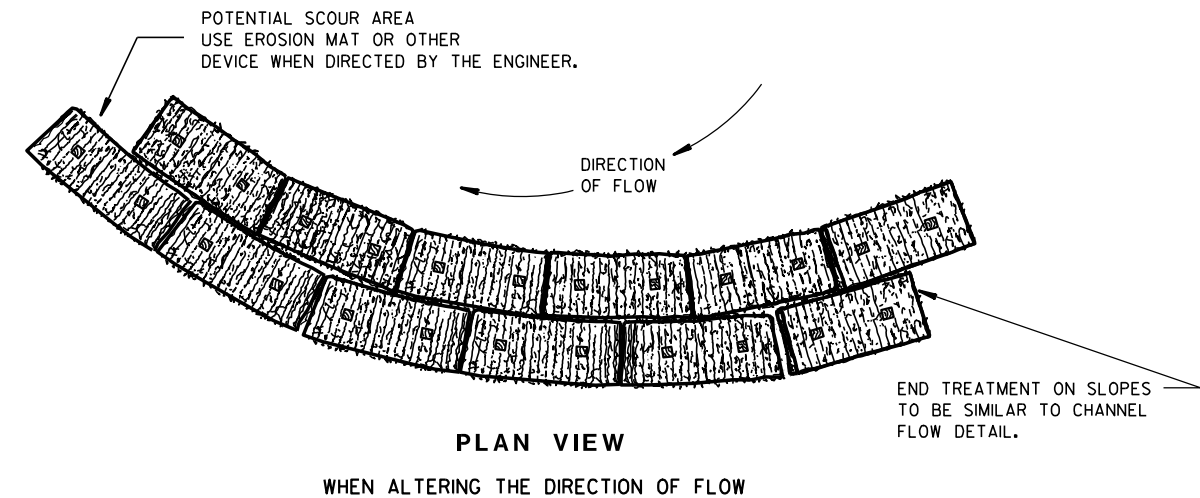
APPROVED
6/5/2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER 47
FHWA



GENERAL NOTES

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

- 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.

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

/S/ Beth Conn-----
CHIEF ROADWAY DEVELOPER

ENGINEER

FHWA



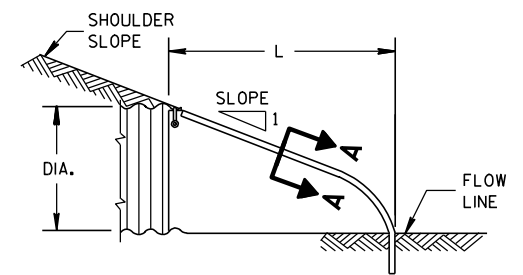
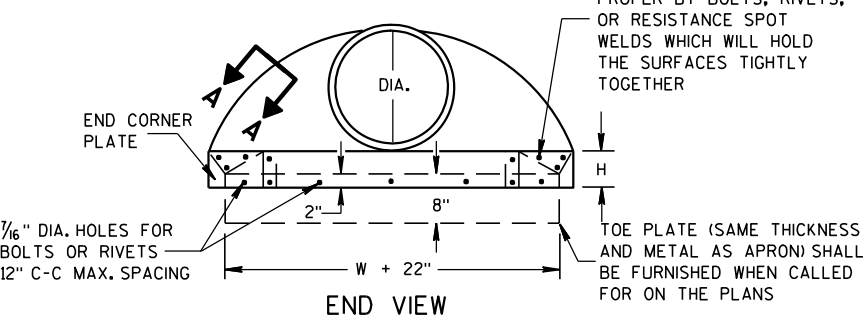
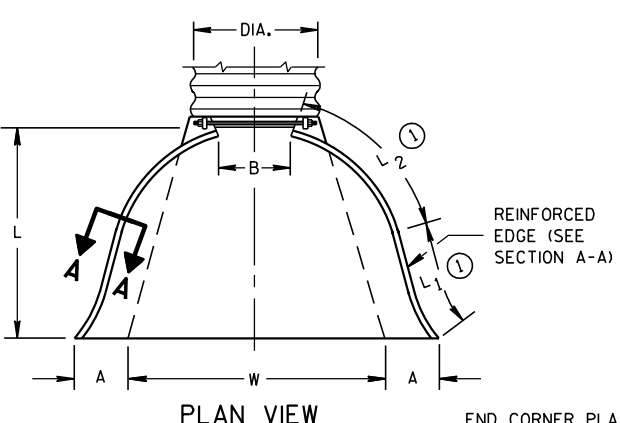
- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" 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.



SILT FENCE
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED <u>4-29-05</u> DATE <u>/S/ Beth Conn*****</u> CHIEF ROADWAY DEVELOP 49 ENGINEER

METAL APRON ENDWALLS												
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY	
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L ₁ ①	L ₂ ①	W (±2")			
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	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.	
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.	
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.	
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.	
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.	
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.	
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.	

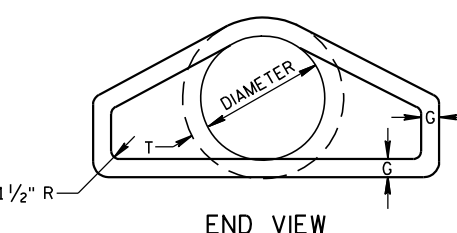
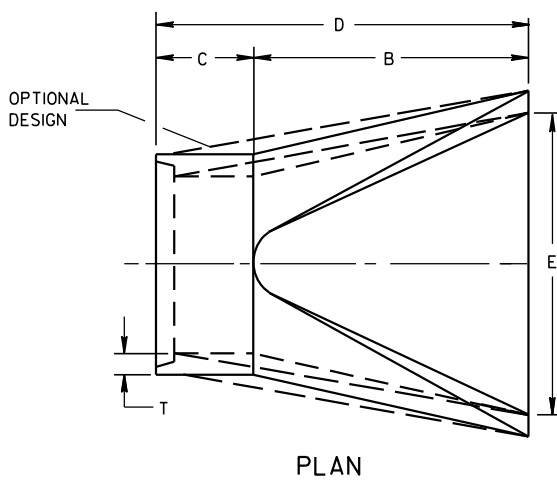
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



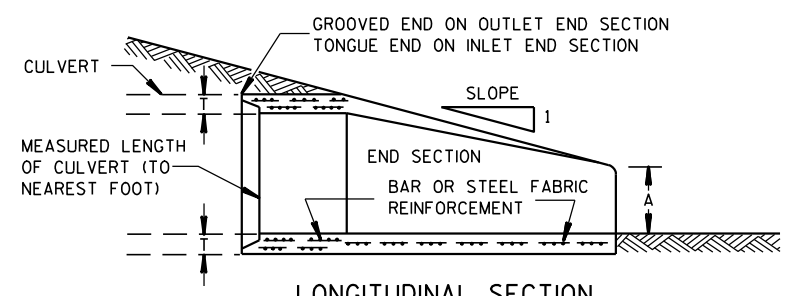
SIDE ELEVATION
METAL ENDWALLS

REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 ⁷ / ₈	72 ⁷ / ₈	24	2	3 to 1
15	2 ¹ / ₄	6	27	46	73	30	2 ¹ / ₄	3 to 1
18	2 ² / ₂	9	27	46	73	36	2 ² / 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 ³⁵ / ₄	^{**} / ₉₈ ¹⁰⁰ / ₄	90	5 ¹ / ₂	2 ⁵ / 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

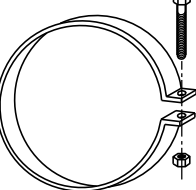


END VIEW

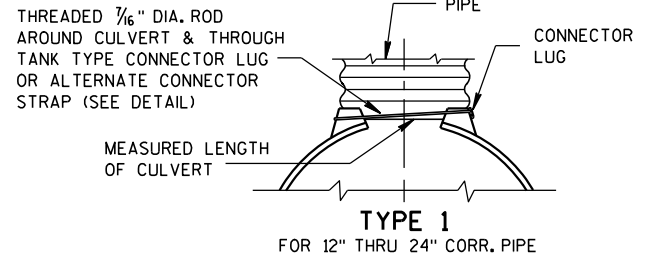


LONGITUDINAL SECTION
CONCRETE ENDWALLS

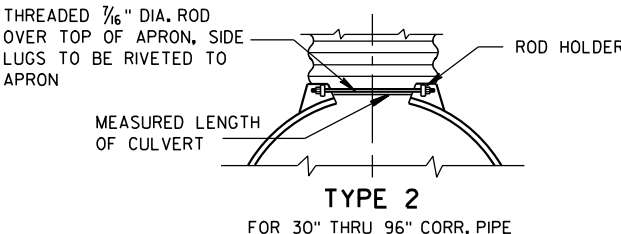
1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



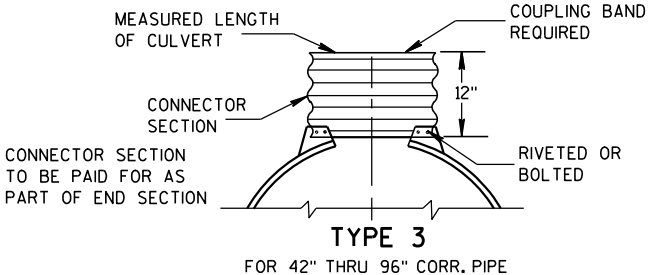
ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



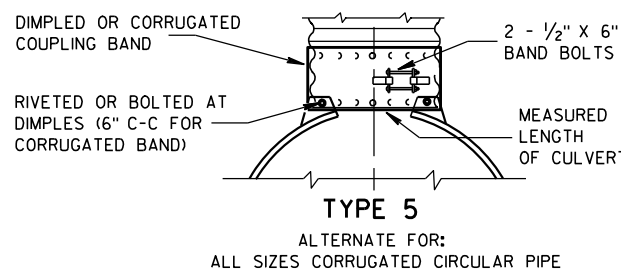
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



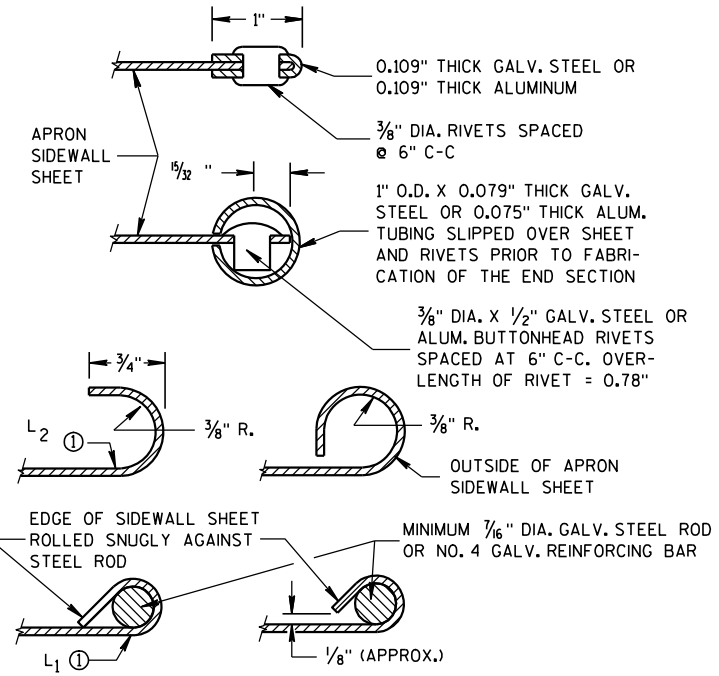
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

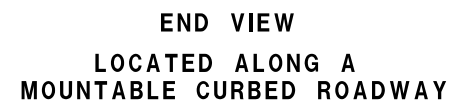
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

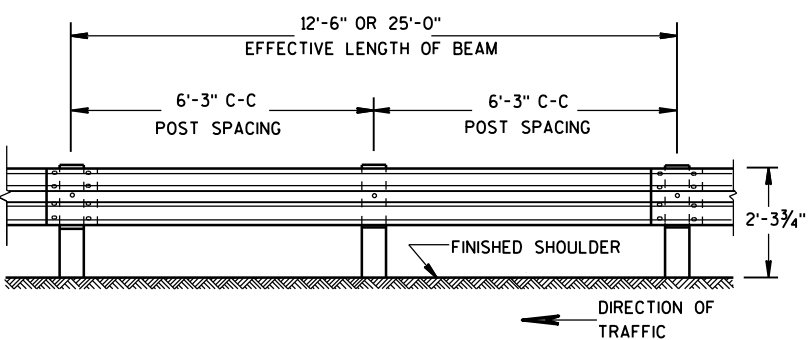
APPROVED
11/30/94
DATE
/S/ Rory L. Rhinehart
CHIEF ROADWAY DEVELOP 50
NEER
FHWA

6

- S.D.D. 14 B 15-9a

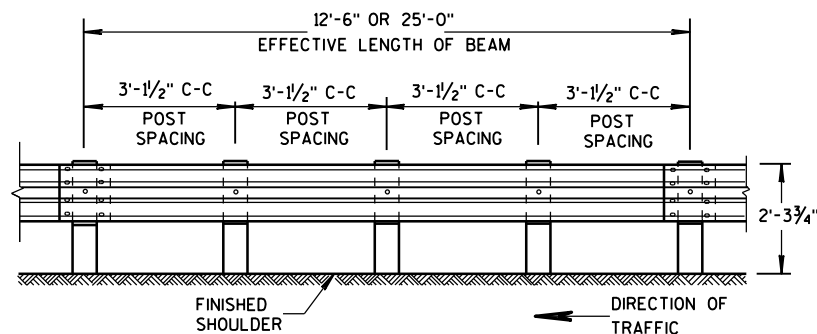


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION⁵¹



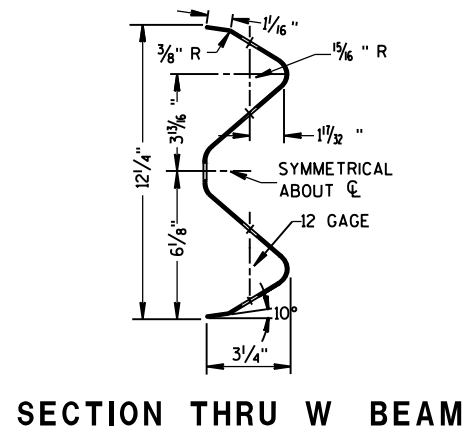
FRONT VIEW

POST SPACING STANDARD INSTALLATION

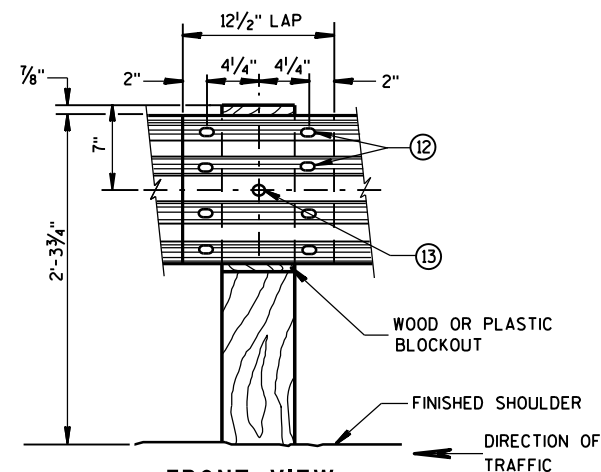


FRONT VIEW

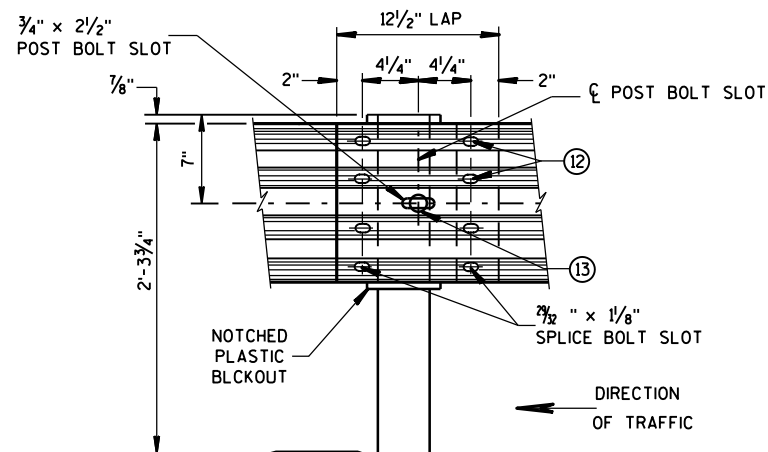
POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



SECTION THRU W BEAM



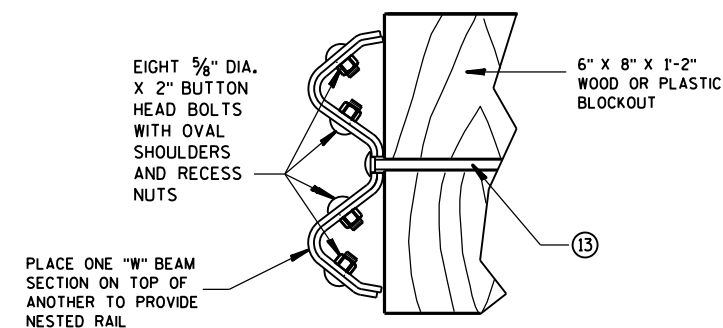
FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL



FRONT VIEW
BEAM SPLICE AT STEEL POST
TYPICAL SPLICING DETAILS
OF STEEL PLATE BEAM GUARD

GENERAL NOTES

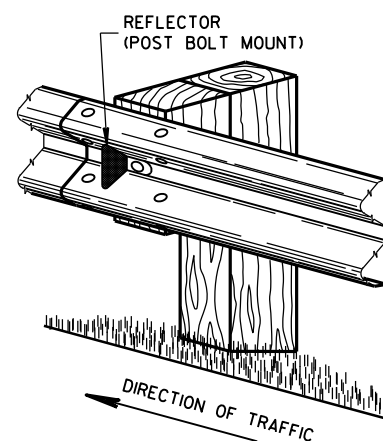
- ⑧ PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.
- ⑨ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- ⑩ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- ⑪ PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
- ⑫ 8 - 5/8" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
- ⑬ 5/8" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH 5/8" DIA. F844 FLAT WASHER UNDER NUT.



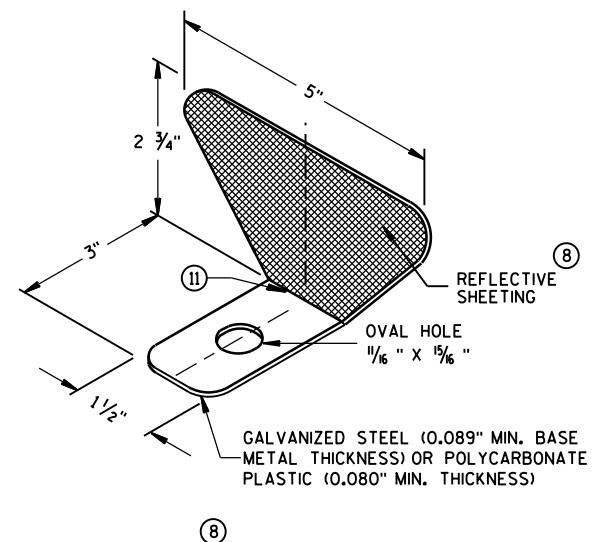
NESTED W BEAM (NW)
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR
CONSTRUCTING NESTED W BEAM (NW)

REFLECTOR SPACING ⑨

	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 ⑩	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ⑪	3
	> 200'	100' C-C	2	

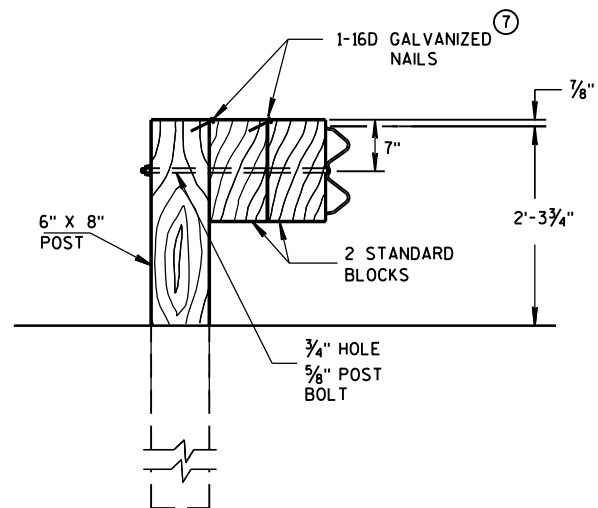


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION



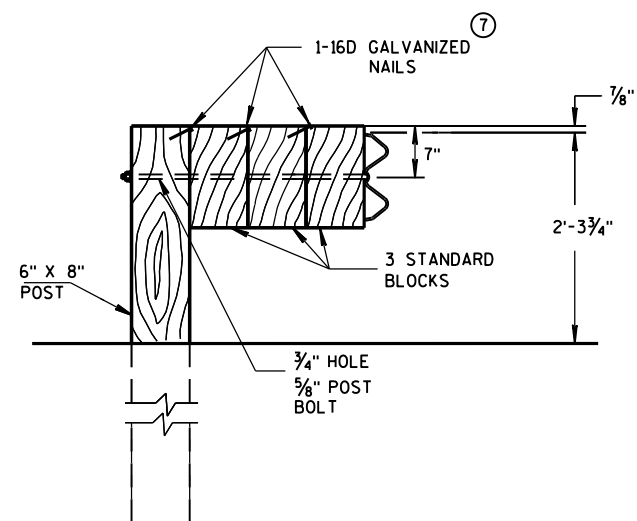
STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS
WITHIN A BARRIER RUN IS UNLIMITED

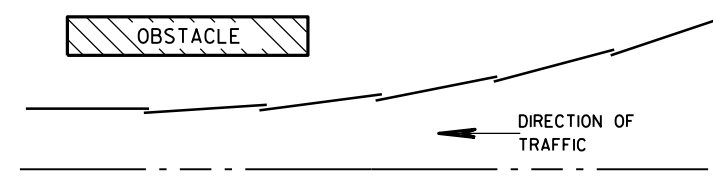


DETAIL FOR TRIPLE BLOCKS

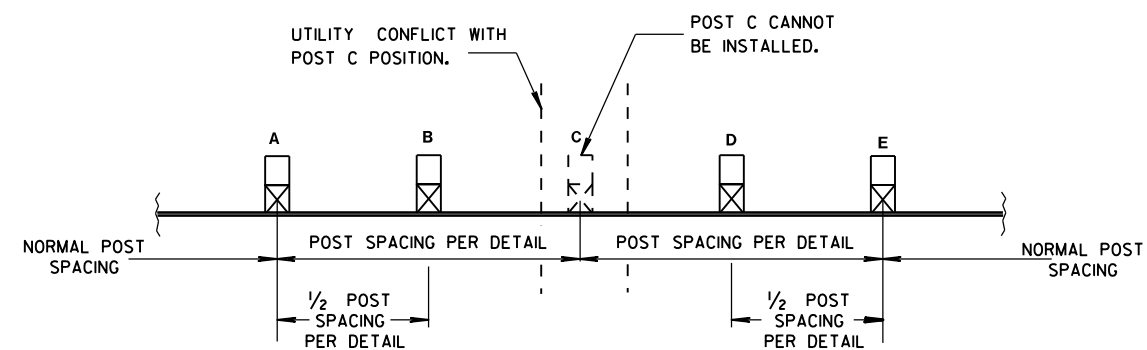
TRIPLE BLOCK DETAIL IS LIMITED TO ONE
LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES
PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA 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.



PLAN VIEW BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016

DATE

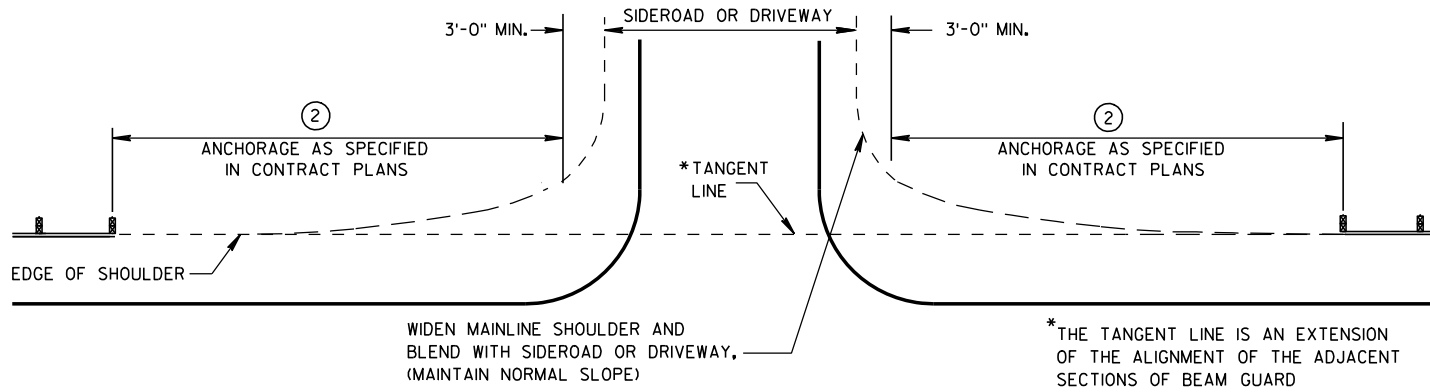
FHWA

/S/ Jerry H. Zogg

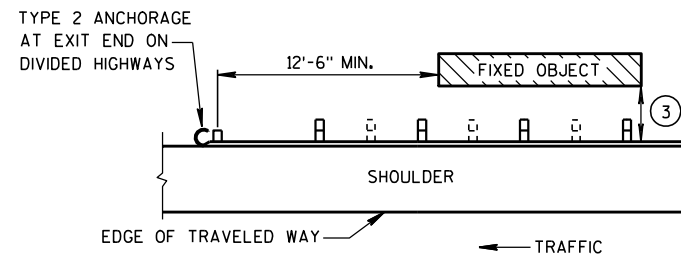
ROADWAY STANDARDS ENGINEER

53

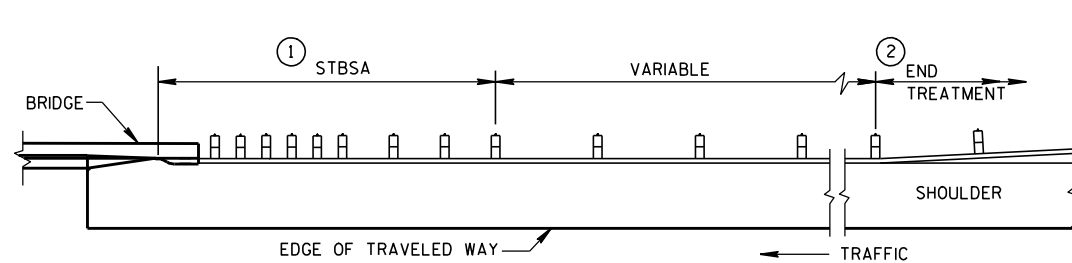
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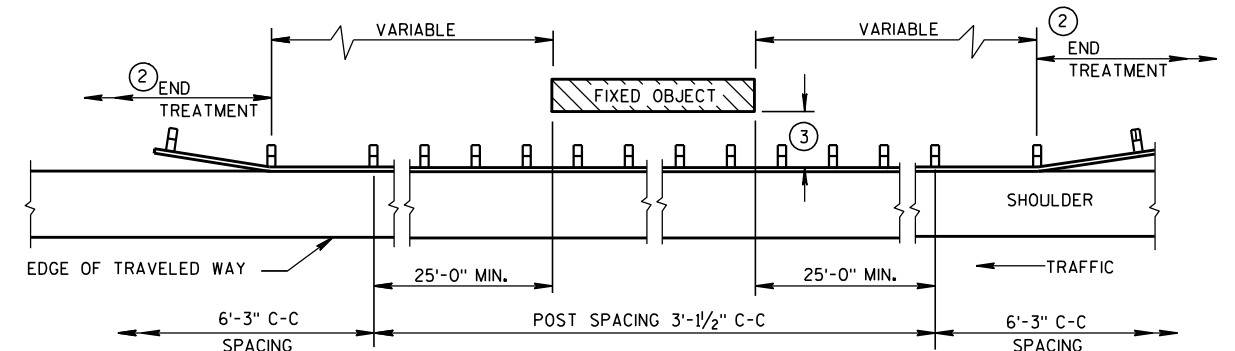
BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC



BEAM GUARD AT FULL WIDTH BRIDGES

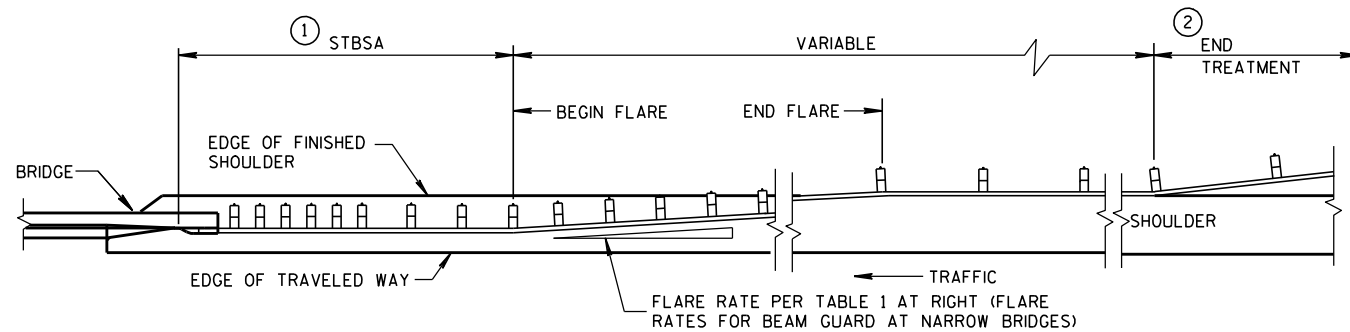


BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")

TABLE 1
FLARE RATES FOR BEAM
GUARD AT NARROW BRIDGES

POSTED SPEED (MPH)	FLARE RATE
25	13:1
30	15:1
35	16:1
40	18:1
45	21:1
50	24:1
55	26:1
65	30:1



BEAM GUARD AT NARROW BRIDGES (FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PERTINENT STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

W6 X 9 OR W6 X 8.5 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

- STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) - SEE CURRENT SDD 14B20.
- USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

MINIMUM LATERAL DISTANCE FROM FACE OF BEAM GUARD TO FIXED OBJECT	POST SPACING
3'-6"	3' - 1 1/2"
4'-6"	6' - 3"

STEEL PLATE BEAM GUARD
CLASS "A"
AT BRIDGES, OBSTACLES
AND SIDEROADS/DRIVEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-21-07 /S/ Jerry H. Zoon
DATE ROADWAY STANDARDS (54) INT
FHWA ENGINEER

BILL OF MATERIALS

NOTE NO.	QTY.	DESCRIPTION
①	4	WOOD BREAKAWAY TERMINAL POST: 5 1/2" X 7 1/2" X 3'-9"
②	**	STEEL TUBE: OPTION 1 - QUANTITY OF 4 TS 8" X 6" X 0.188", 4'-6" LONG OR OPTION 2 - QUANTITY OF 2 TS 8" X 6" X 0.188", 6'-0" AND 2 TS 8" X 6" X 0.188", 4'-6" LONG
③	2	SOIL PLATE: 2'-0" X 1'-6" X 1/4" **
④	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	1	PIPE SLEEVE: 2" X 5 1/2" STANDARD PIPE
⑦	1	BEARING PLATE
⑧	1	BCT CABLE ASSEMBLY
⑨	1	CABLE ANCHOR BOX
⑩	1	STRUT & YOKE
⑪	1	STEEL PLATE BEAM, END PANEL 12 GA. 13'-6 1/2" LONG FOR SKT-350, ET-2000 AND ET-2000 PLUS
⑫	3	STEEL PLATE BEAM: 12 GA. 13'-6 1/2"
⑬	1	ET-2000/ET-2000 PLUS GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
⑭	1	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
⑮	1	E.A.T. MARKER POST

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS, IF NONE ARE AVAILABLE, INSTALL 3/8" ϕ X 1'-6" BUTTON HEAD BOLTS AT ALL POSTS EXCEPT FOR POST 1.

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

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

(C) THE 13 SLOT FIRST RAIL PANEL MAY BE USED IN LIEU OF THE 3 SLOT RAIL PANEL ON SKT-350 ONLY.

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 THROUGH 4 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(E) THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST 5 THROUGH 8 SHALL BE 3/4" ABOVE THE FINISHED GROUND LINE.

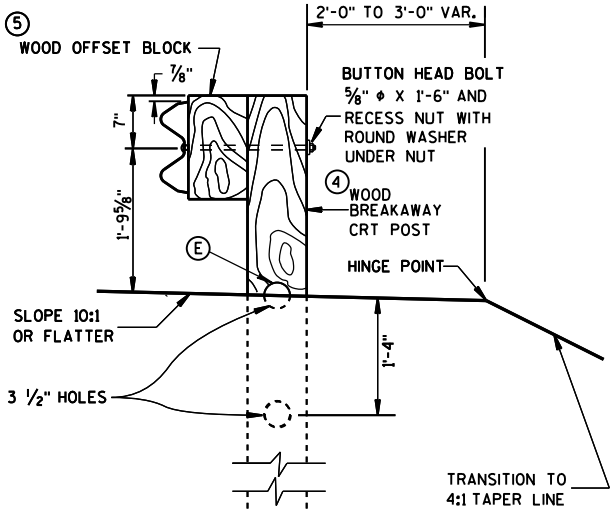
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER.

STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

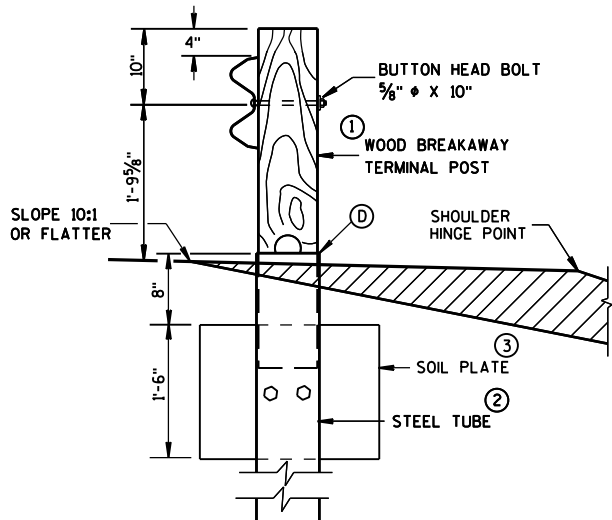
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

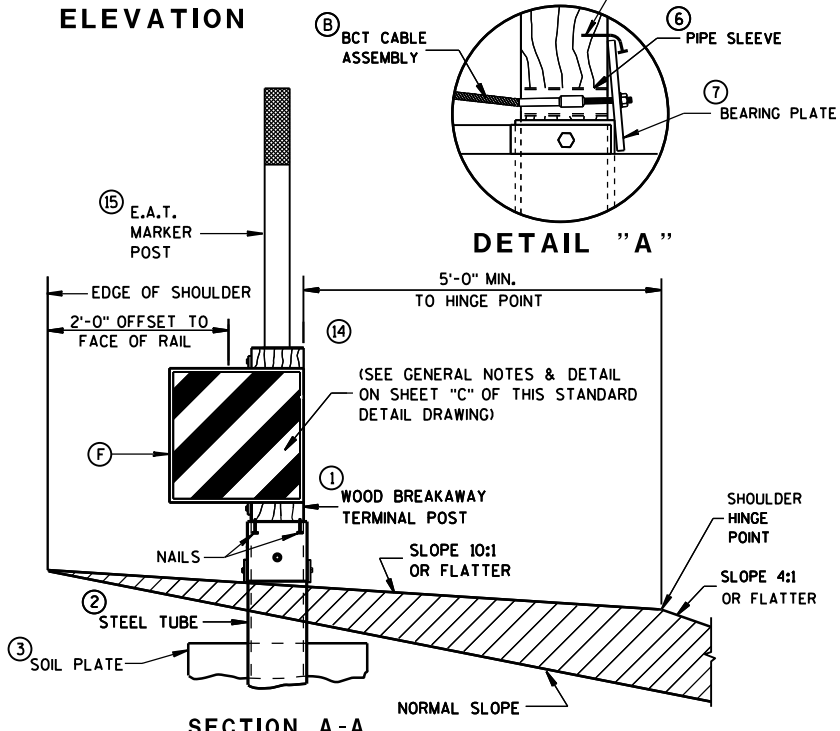
** SDD SHOWS 4 - 54 INCH STEEL TUBES WITH SOIL PLATES INSTALLED ON POST 1 AND POST 2. POST 3 AND 4 DO NOT NEED SOIL PLATES. AN ALTERNATIVE INSTALLATION WOULD CONSIST OF 2 - 72 INCH STEEL TUBES ON POST 1 AND POST 2 AND 54 INCH SOIL TUBES ON POSTS 3 AND 4. THE ALTERNATIVE INSTALLATION DOES NOT REQUIRE SOIL PLATES.



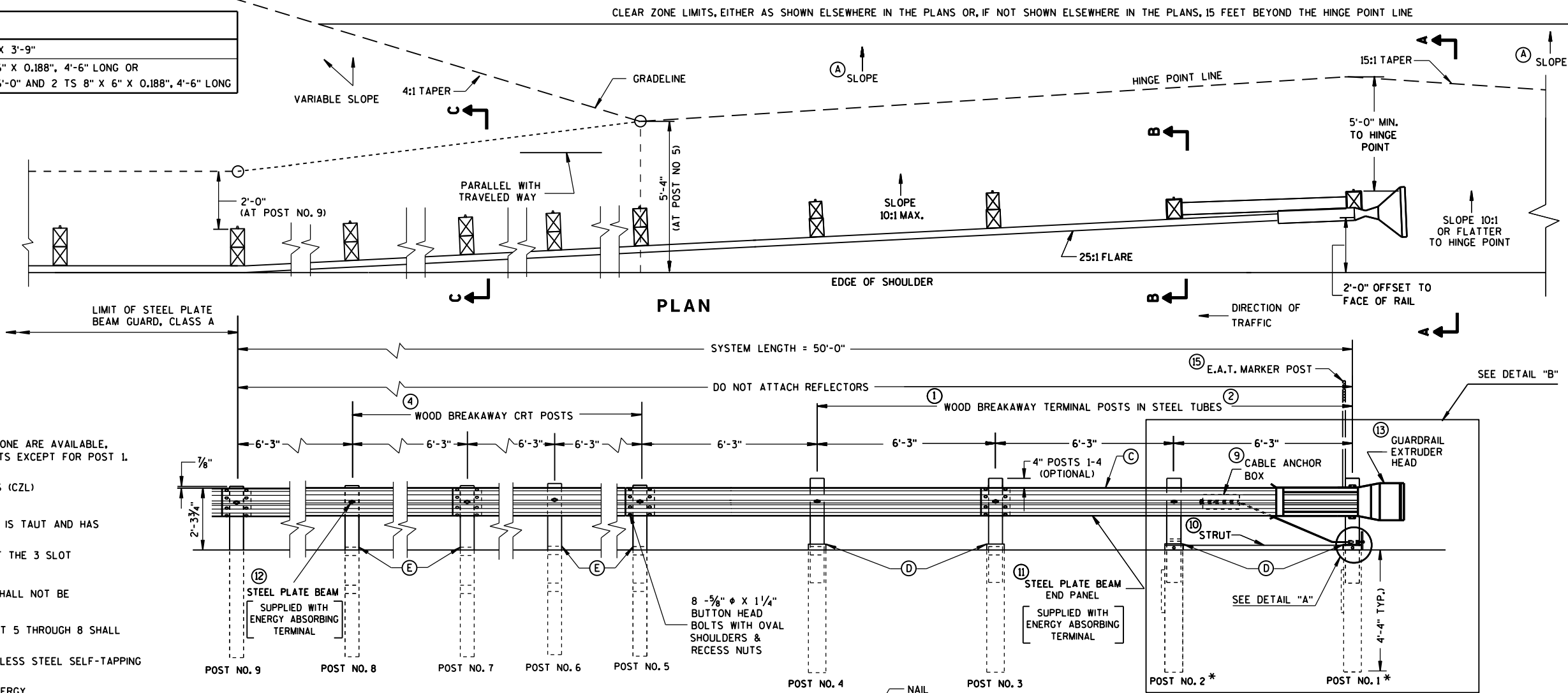
SECTION C-C
TYPICAL AT POST NOS. 6, 8



SECTION B-B
TYPICAL AT POST NO. 2 *



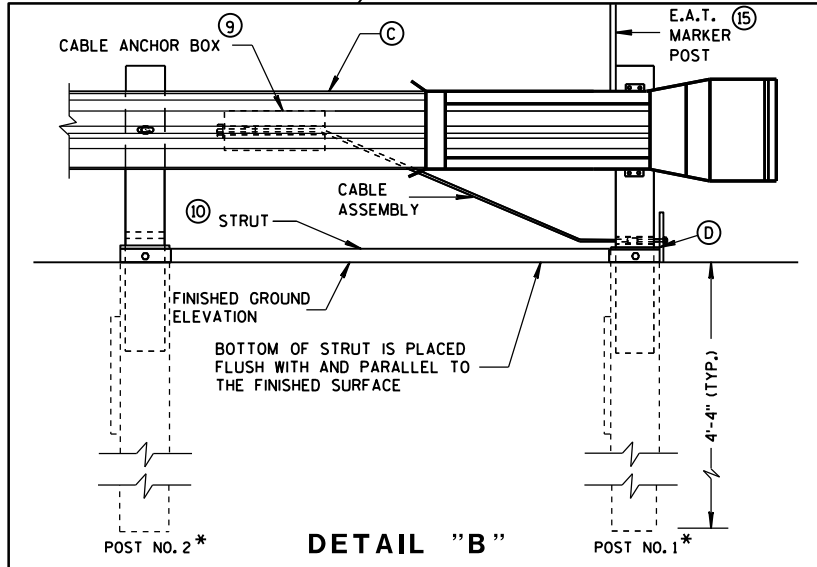
SECTION A-A
TYPICAL AT POST NO. 1 *



PLAN

ELEVATION

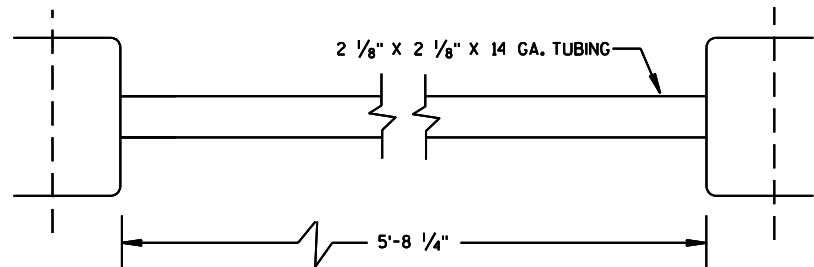
DETAIL "A"



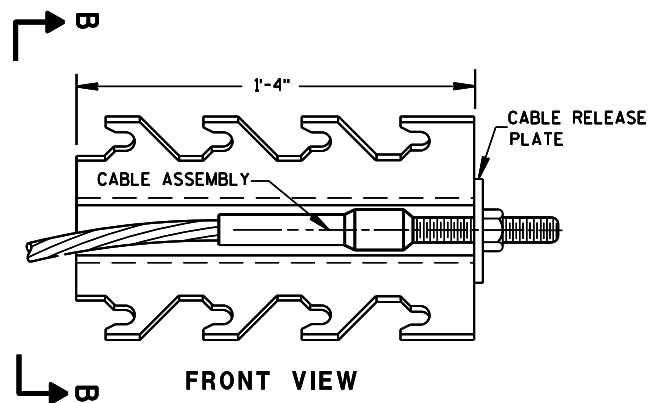
DETAIL "B"

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

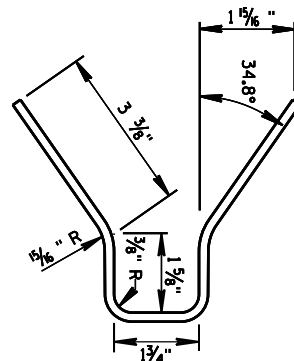
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



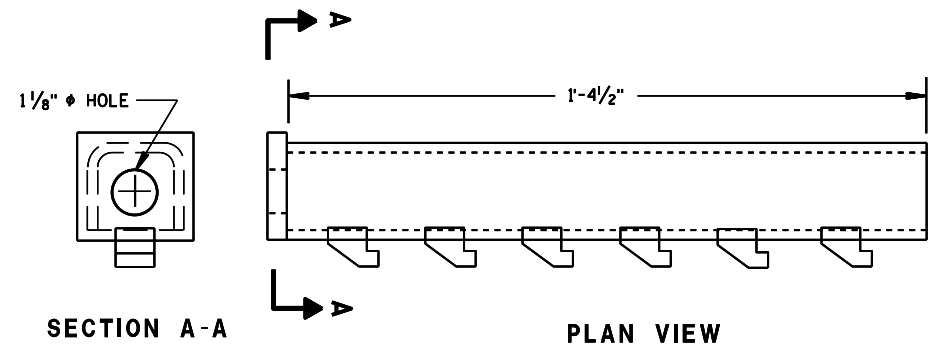
⑩ STRUT DETAIL (SKT-350)



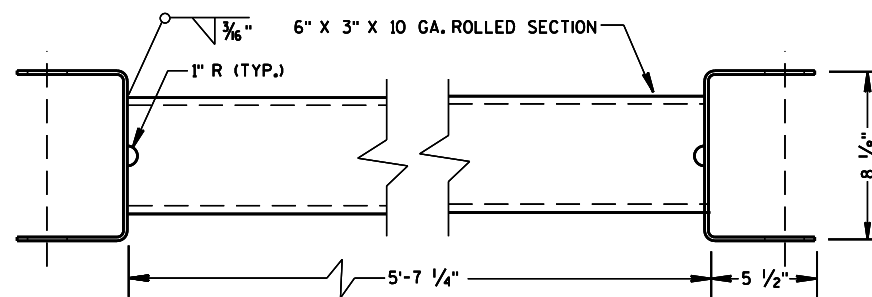
⑨ CABLE ANCHOR BOX (SKT-350)
(SKT-350)



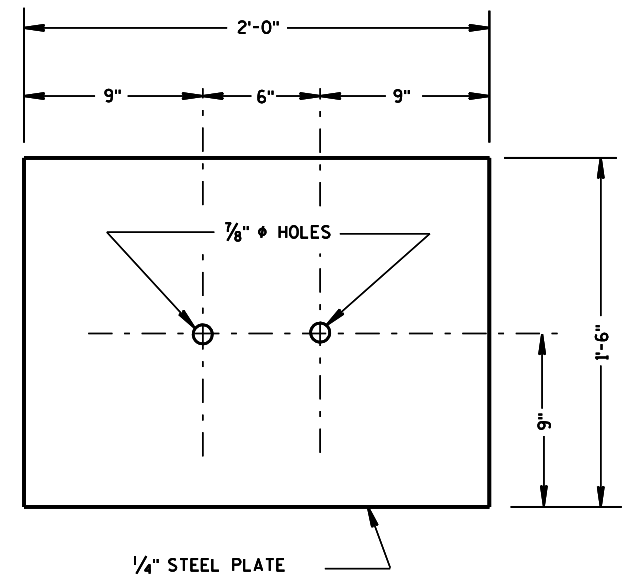
SECTION B-B



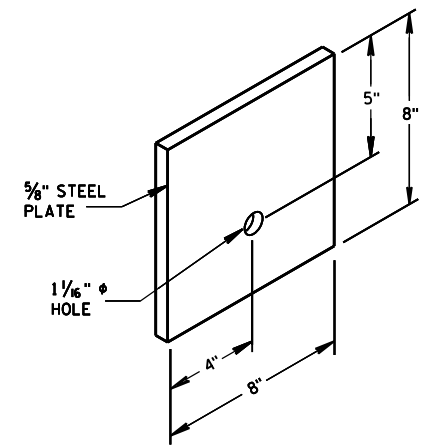
⑨ CABLE ANCHOR BOX (ET-2000/ET-2000 PLUS)



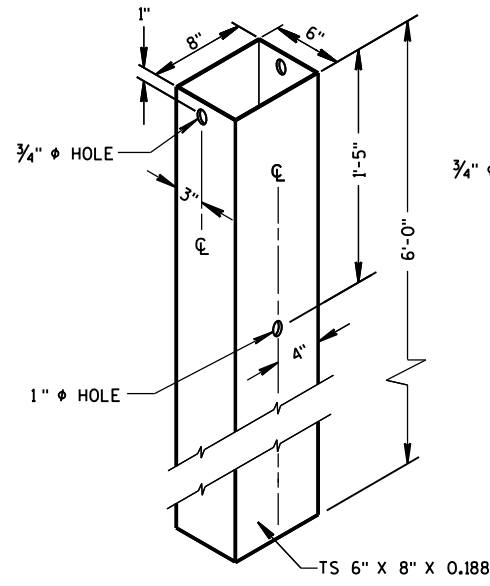
⑩ STRUT DETAIL (ET-2000/ET-2000 PLUS)
(ET-2000/ET-2000 PLUS)



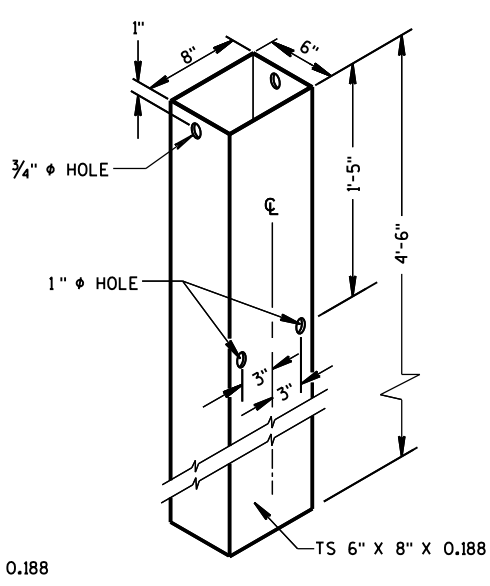
③ SOIL PLATE
(SKT-350, ET-2000/ET-2000 PLUS)



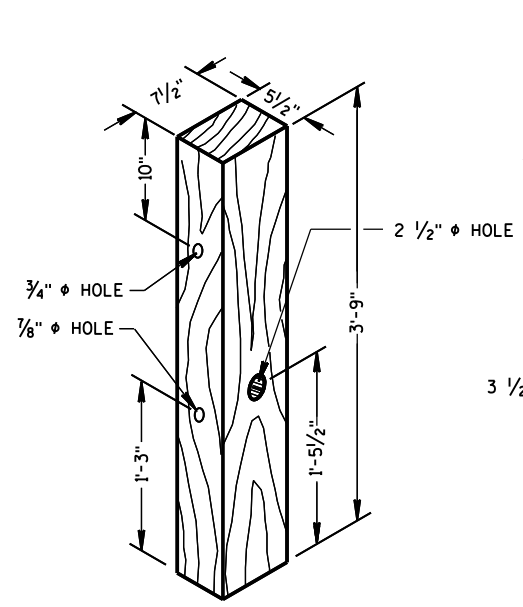
⑦ STEEL BEARING PLATE
(SKT-350, ET-2000/ET-2000 PLUS)



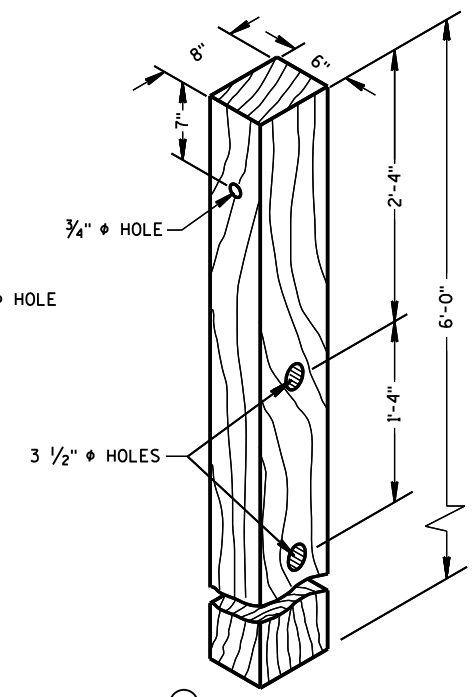
② 72" STEEL TUBE
(POSTS NO. 1-4)



② 54" STEEL TUBE
(POSTS NO. 1-4)

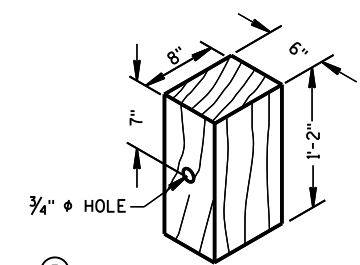


① TERMINAL POST
(POSTS NO. 1-4)

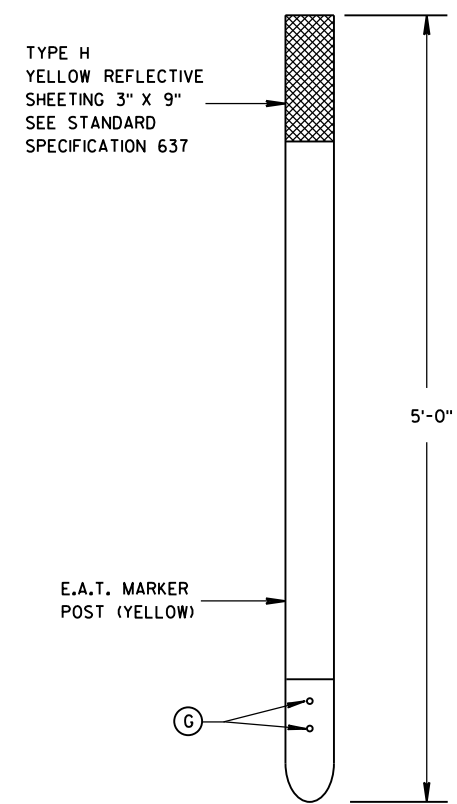


④ CRT POST
(POSTS NO'S 5-8)

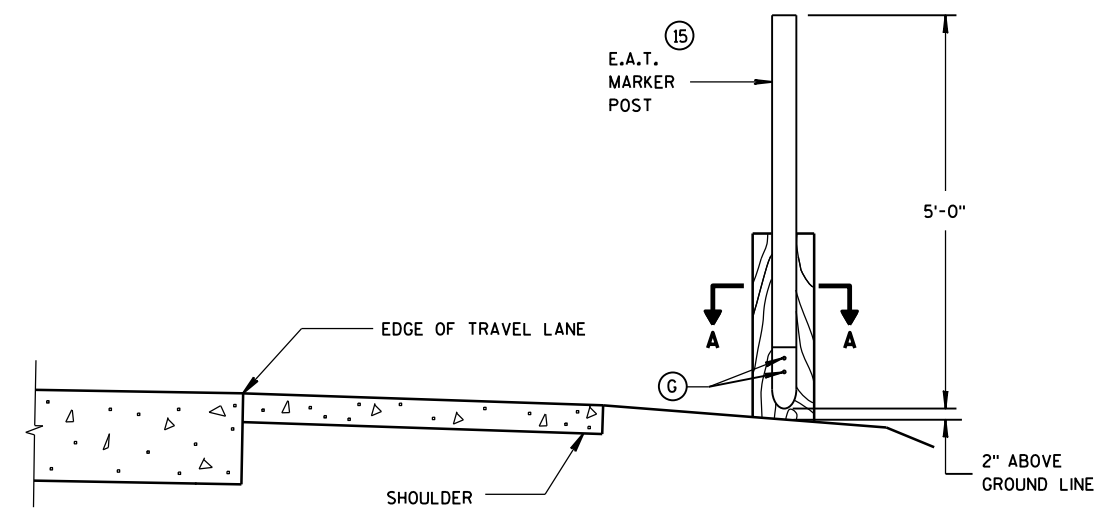
WOOD BREAKAWAY POSTS



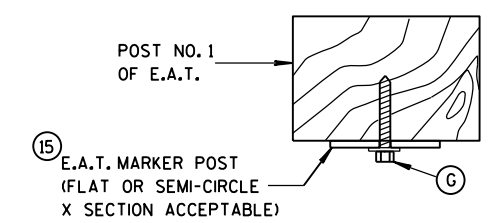
⑤ WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



⑮ E.A.T. MARKER POST



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1
(E.A.T. AND RAIL REMOVED FOR CLARITY)



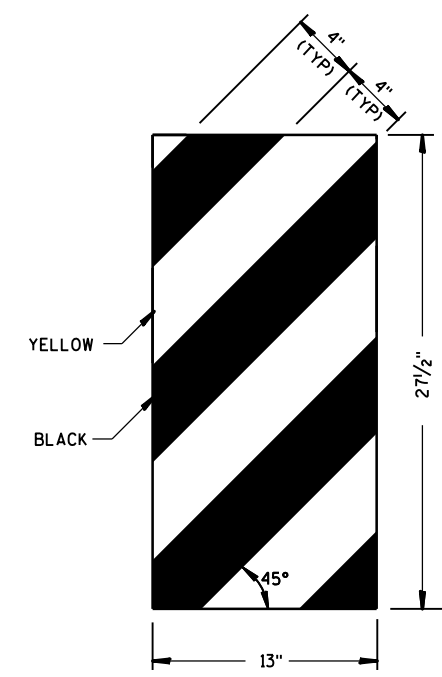
SECTION A-A

GENERAL NOTES

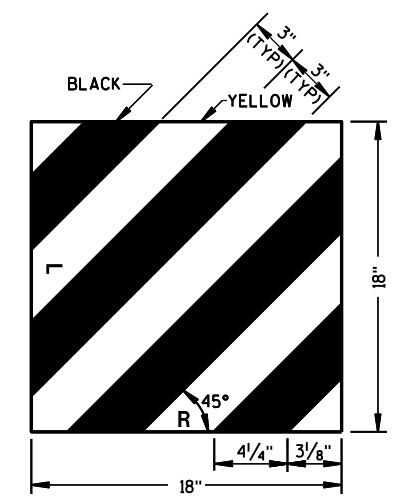
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.

SEE APPROVED PRODUCTS LIST FOR ACCEPTABLE E. A. T. MARKER POST.

⑮ 1/2" DIA. X 3" LAG BOLT WITH WASHER.



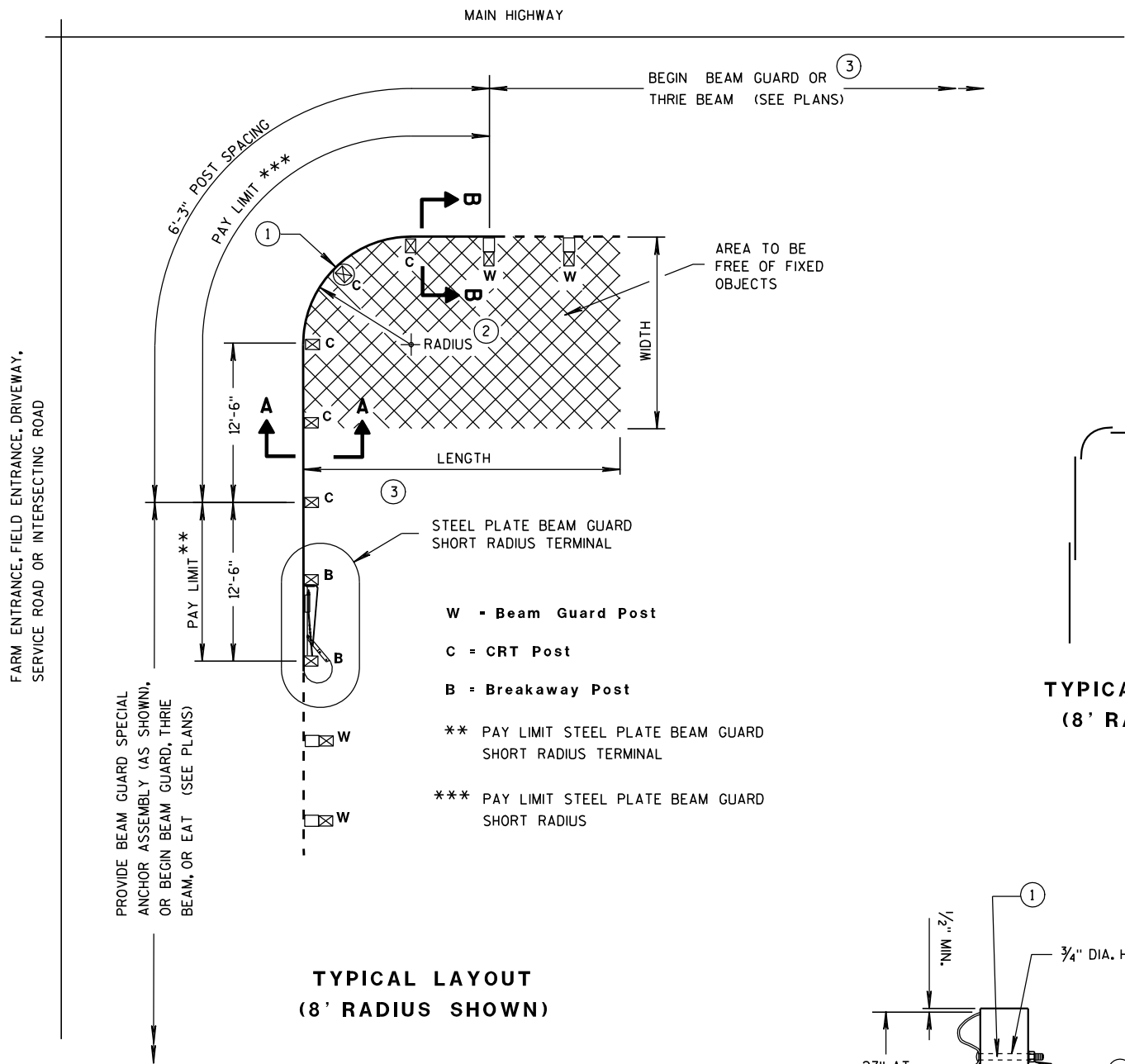
ET-2000 PLUS ONLY



ET-2000 AND SKT-350

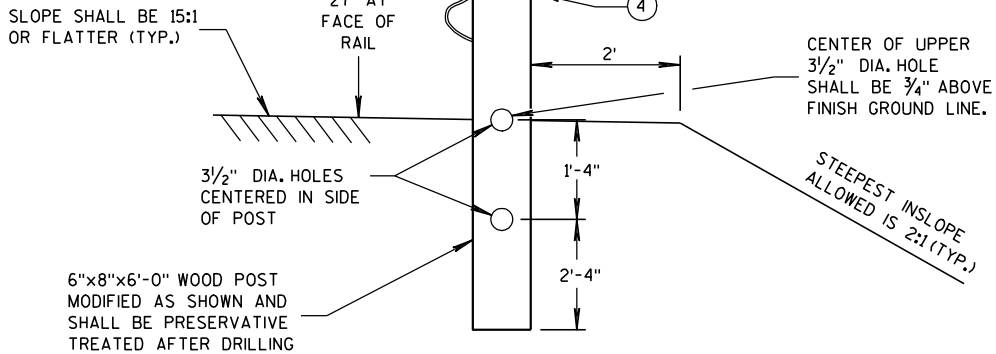
⑭ REFLECTIVE SHEETING DETAILS

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2014 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER



TYPICAL LAYOUT
(8' RADIUS SHOWN)

- W - Beam Guard Post
- C = CRT Post
- B = Breakaway Post
- ** PAY LIMIT STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
- *** PAY LIMIT STEEL PLATE BEAM GUARD SHORT RADIUS



SECTION A-A
(CRT POST)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

TYPICAL LAP SPLICES
(8' RADIUS SHOWN)

GENERAL NOTES

ALL ANGLES, CHANNELS, AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36 AND THE STRUCTURAL TUBING SHALL CONFORM TO ASTM A 500. WELDING SHALL MEET THE CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI/AWS D1.1. ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 123. PUNCHING, DRILLING, CUTTING, OR WELDING WILL NOT BE PERMITTED AFTER GALVANIZING. FURNISH AND INSTALL HARDWARE PER STANDARD SPECIFICATION 614.2, UNLESS NOTED OTHERWISE.

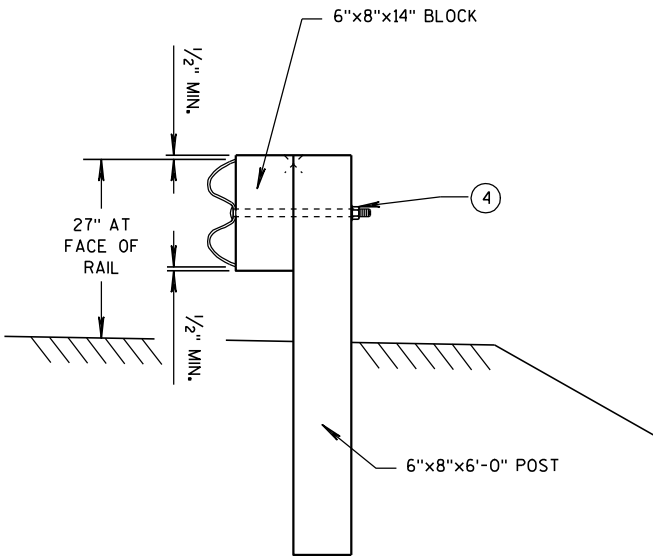
SHOP BEND CURVED RAIL SECTIONS.

SEE STANDARD DETAIL DRAWING 14 B 15 FOR OTHER DETAIL.

- 1 ON THE 8 FOOT RADIUS INSTALLATION, DO NOT INSTALL BUTTON HEAD BOLT AT CENTER CRT POST.
- 2 RADIUS FROM 8' - 36'. SEE PLAN.
- 3 HEIGHT TRANSITION MAY BE REQUIRED. SEE PLAN OR PROJECT ENGINEER.
- 4 5/8" Ø X 1'-6" BUTTON HEAD BOLT AND RECESS NUT WITH ROUND WASHER UNDER NUT.

RADIUS	NUMBER OF CRT POSTS	*NUMBER AND LENGTH OF CURVED RAILS	REQUIRED AREA FREE OF FIXED OBJECTS (LENGTH x WIDTH)
8'	5	1 at 12.5'	25' x 15'
16'	7	1 at 25'	30' x 15'
24'	9	1 at 25' and 1 at 12.5'	40' x 20'
32'	11	2 at 25'	50' x 20'

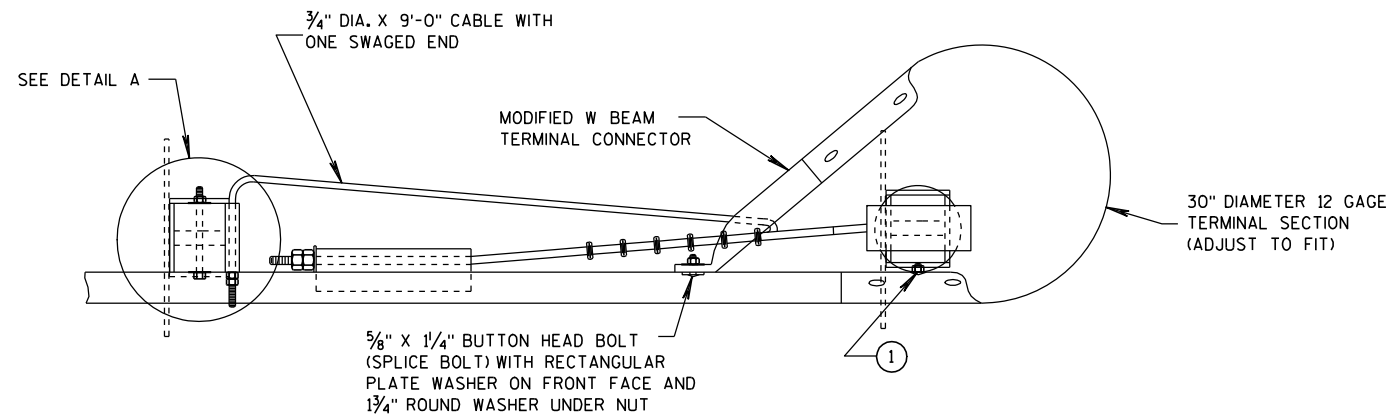
* THE NUMBER OF RAILS IS BASED ON A 90° INTERSECTION. SEE PLAN FOR NON 90° INSTALLATIONS.



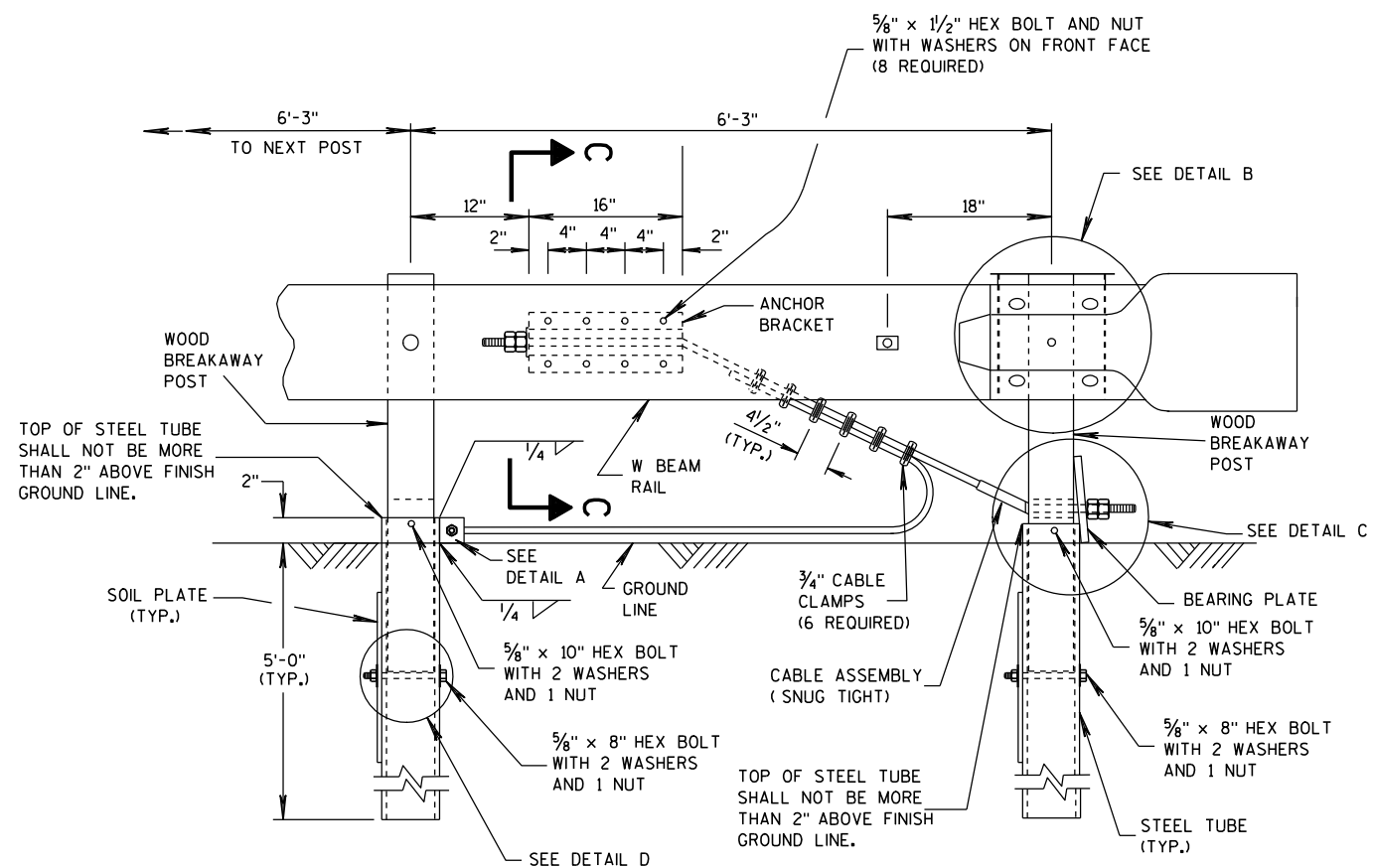
SECTION B-B
(BEAM GUARD POST)

STEEL PLATE BEAM GUARD
SHORT RADIUS TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW

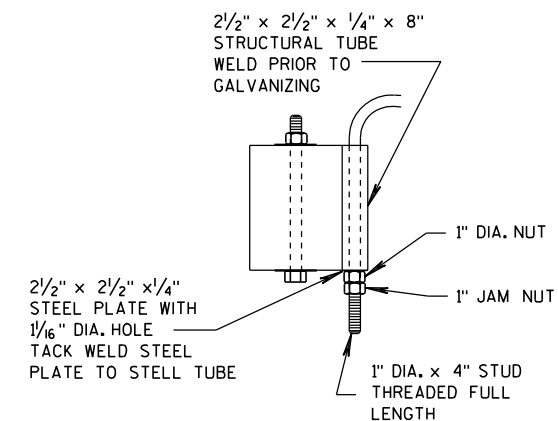


ELEVATION VIEW

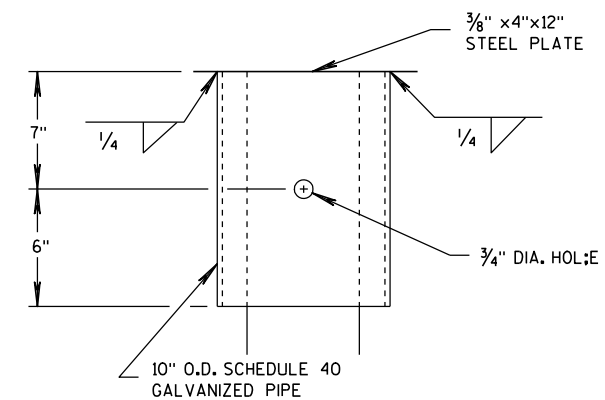
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

GENERAL NOTES

- ATTACH W BEAM RAIL TO THE STEEL PIPE WITH A 5/8" X 2" BUTTON HEAD BOLT WITH NO WASHER. CONNECTION TO THE POST IS NOT REQUIRED.
- INSTALL GALVANIZED 3/4" (6X19) PREFORMED WIRE OR INDEPENDENT WIRE ROPE CORE CONFORMING TO AASHTO M 30. MANUFACTURE WIRE ROPE OUT OF IMPROVED PLOW STEEL WITH A MINIMUM BREAKING STRENGTH OF 42,800 PSI.



DETAIL A

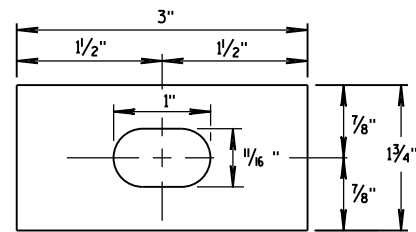


DETAIL B

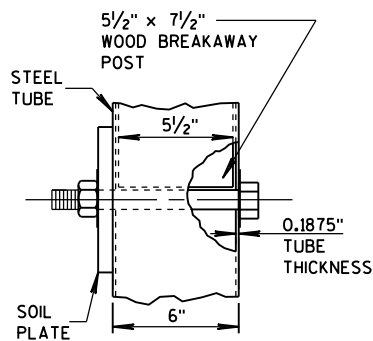
(BEAM GUARD AND TERMINAL SECTION NOT SHOWN)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

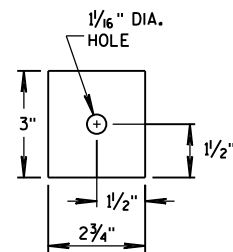
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



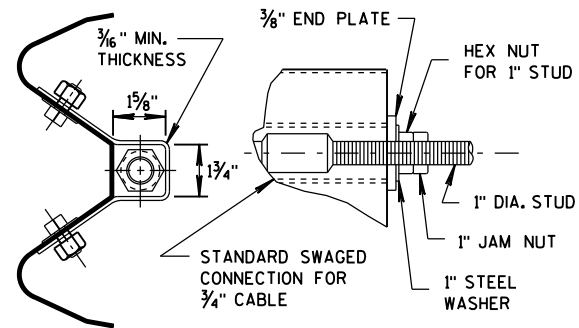
**RECTANGULAR
PLATE WASHER**



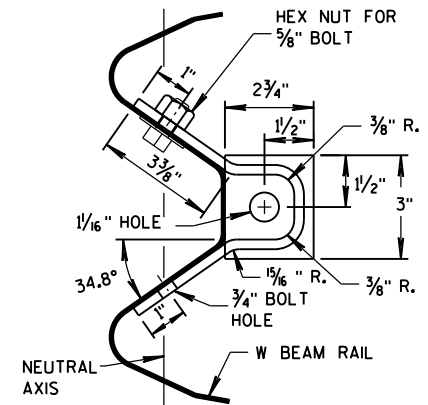
DETAIL D



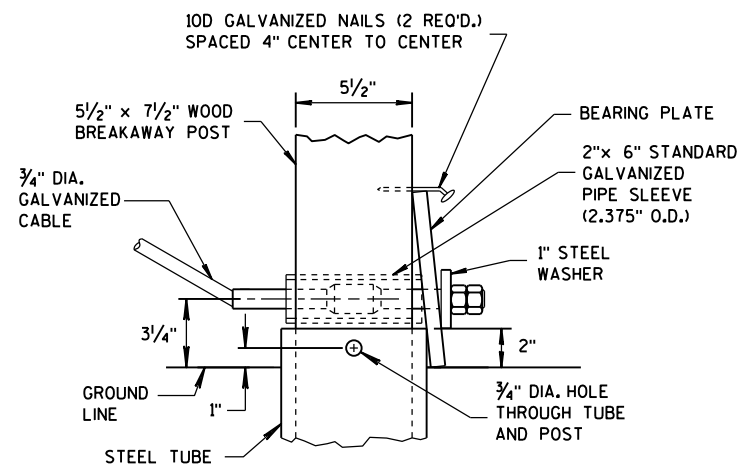
END PLATE



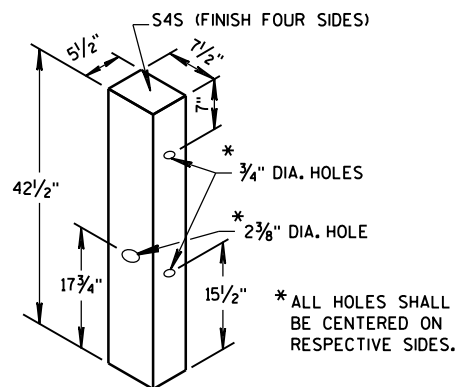
**SECTION C-C
(END PLATE REMOVED)**



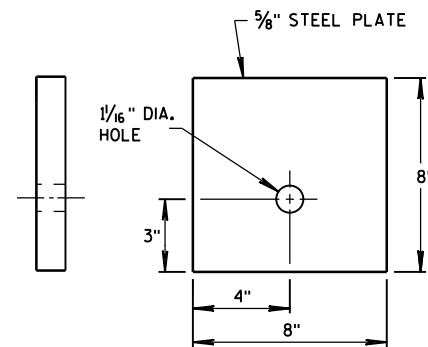
ANCHOR BRACKET



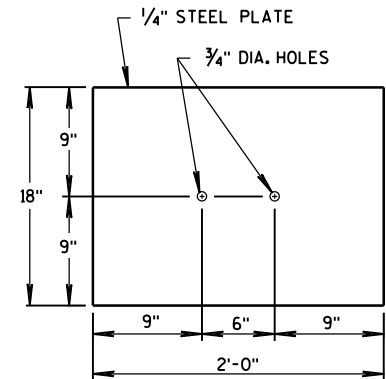
DETAIL C



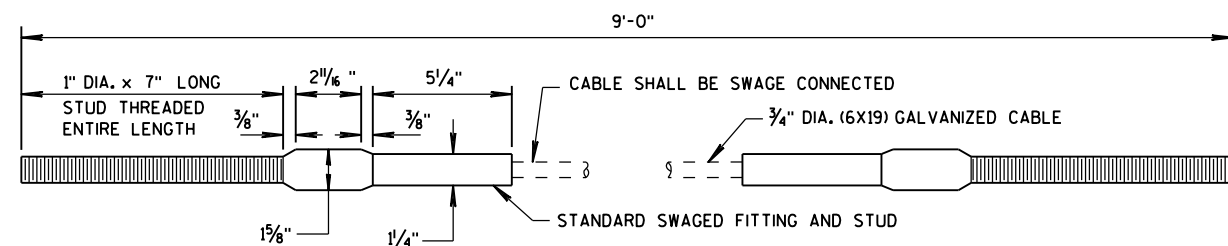
WOOD BREAKAWAY POST



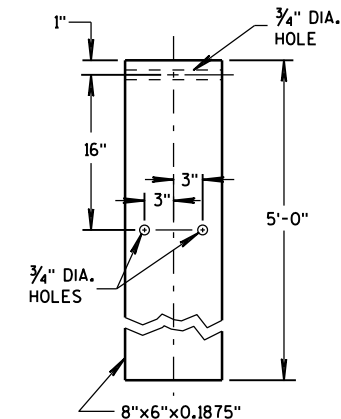
BEARING PLATE



SOIL PLATE



CABLE ASSEMBLY



STEEL TUBE

**STEEL PLATE BEAM GUARD
SHORT RADIUS TERMINAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

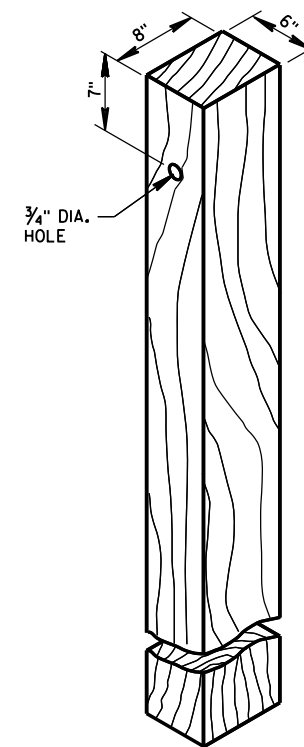
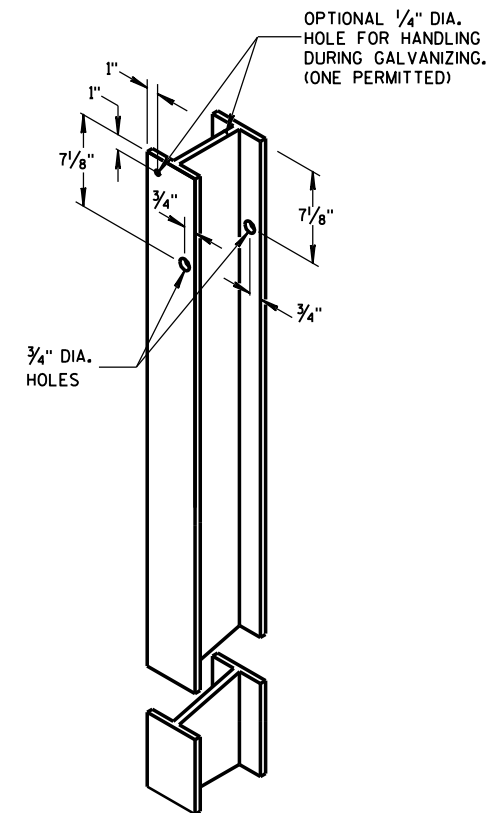
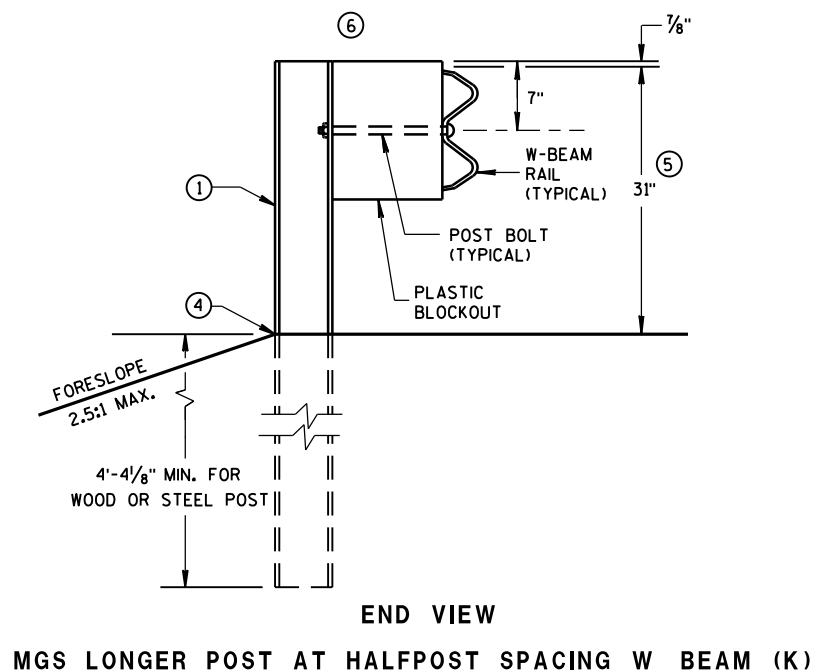
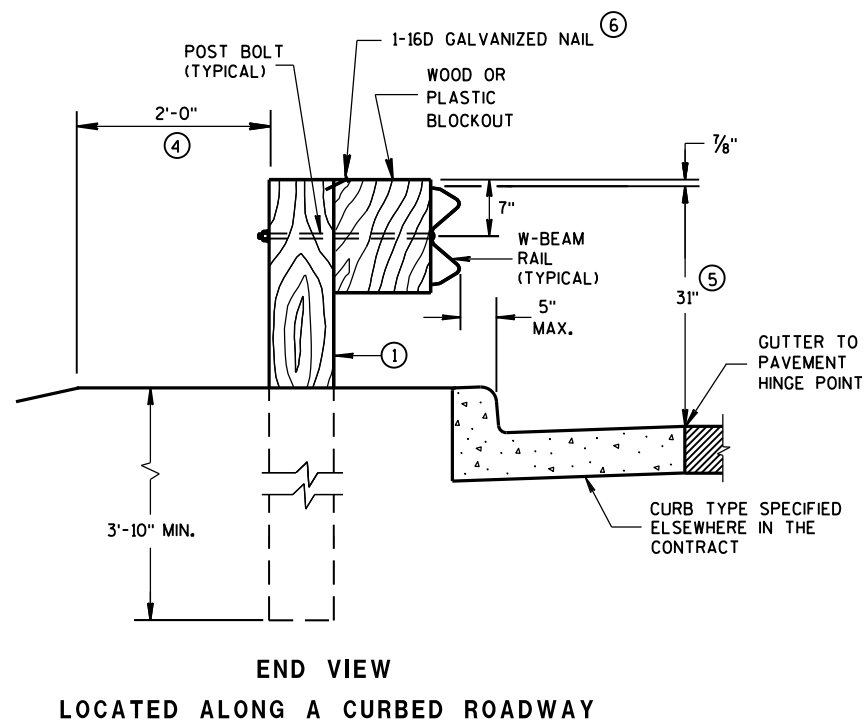
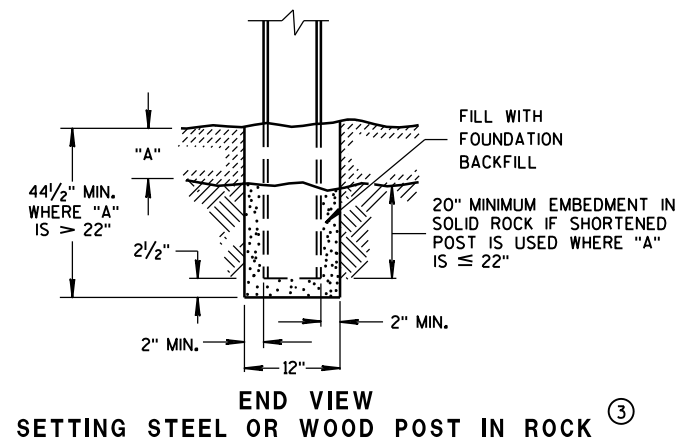
12/18/08
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

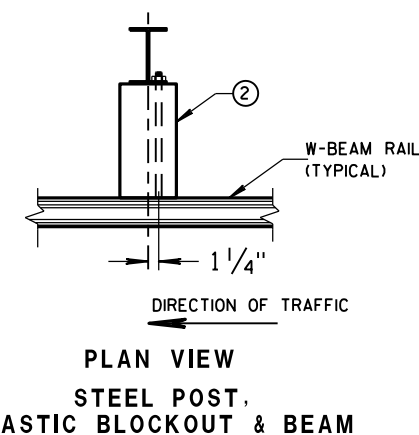
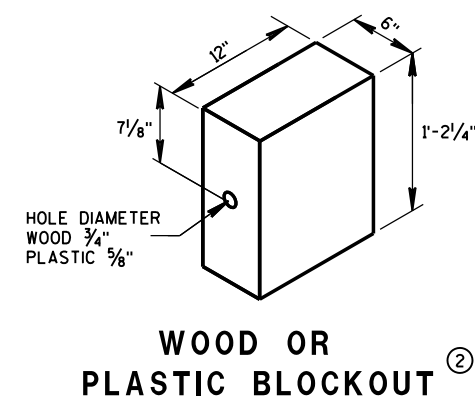
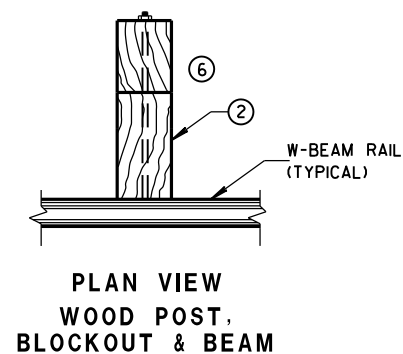
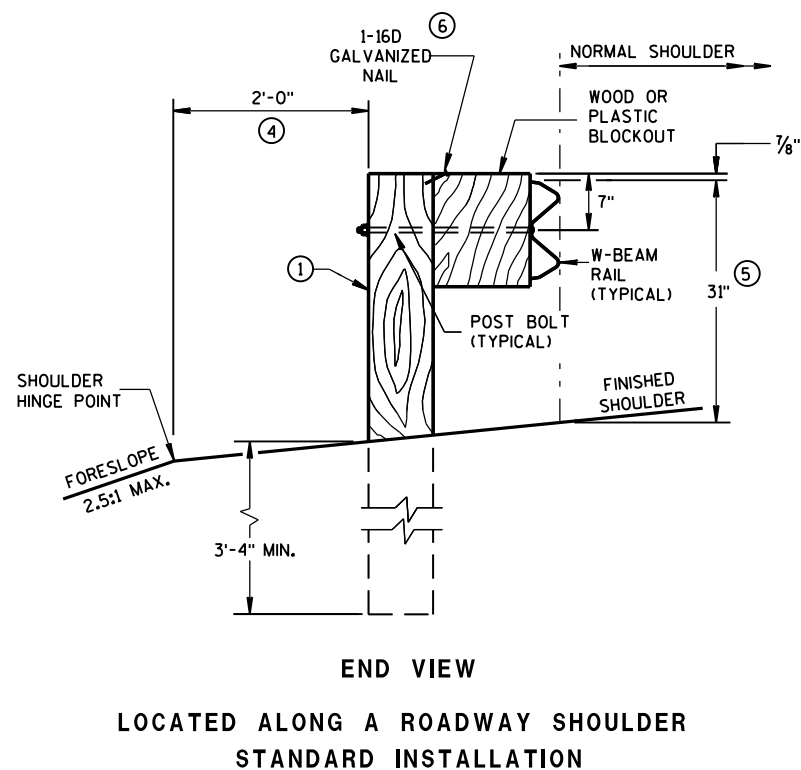
NT

- ① WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- ③ IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2 INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AND 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 $\pm 1"$. FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 3/4" TO 32".
- ⑥ WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



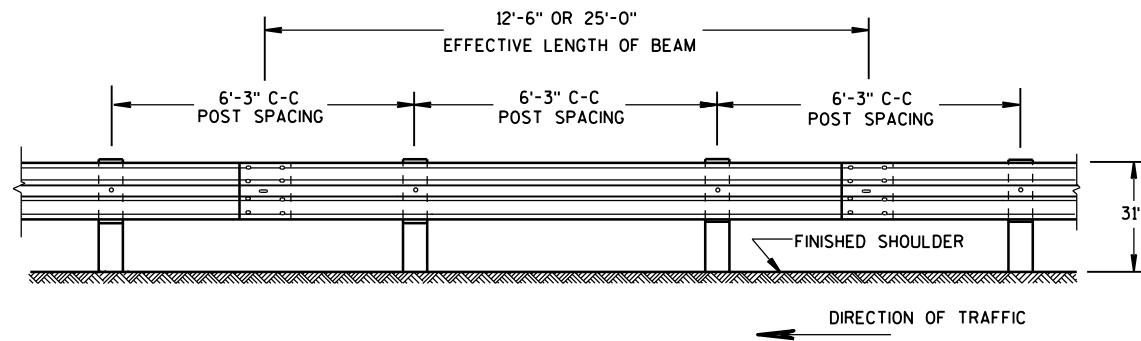
**STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①**

**WOOD POST
(6" X 8") NOMINAL ①**



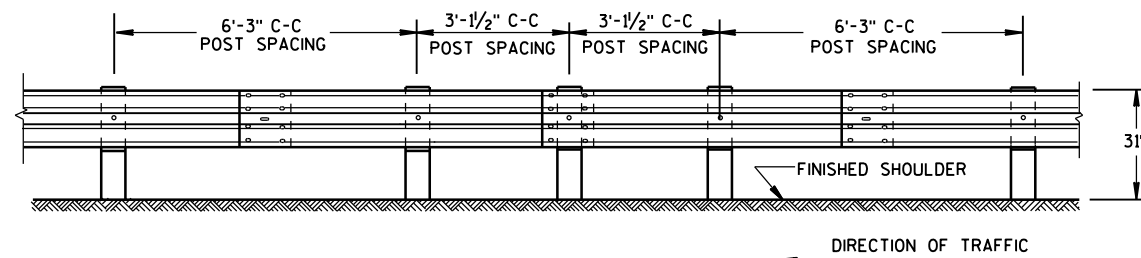
**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



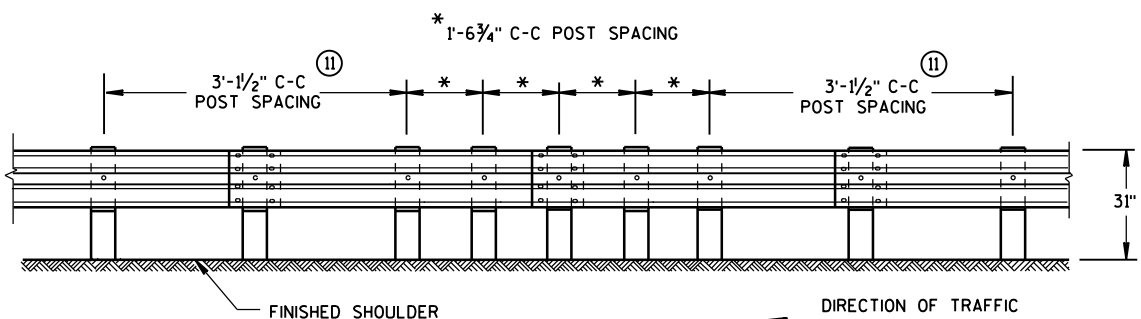
FRONT VIEW

POST SPACING STANDARD INSTALLATION



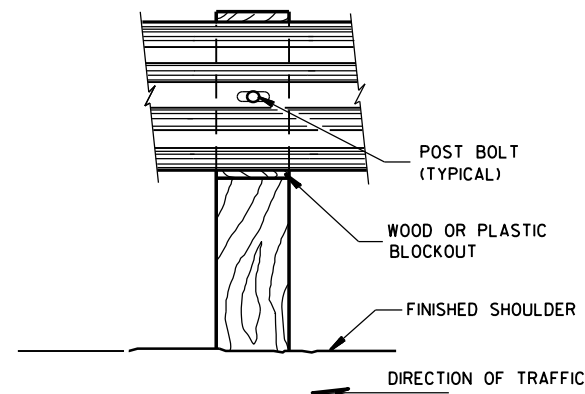
FRONT VIEW

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

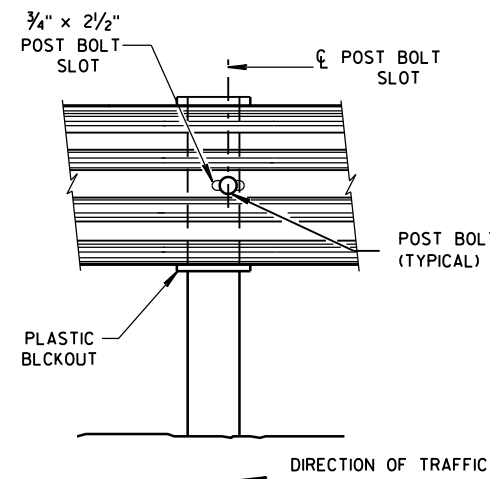


FRONT VIEW

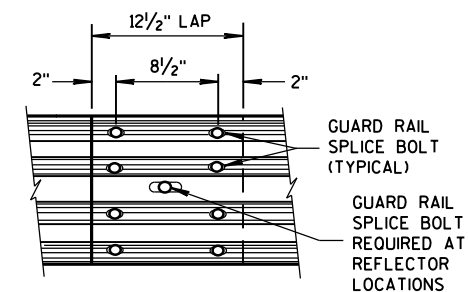
QUARTER POST SPACING (QS)



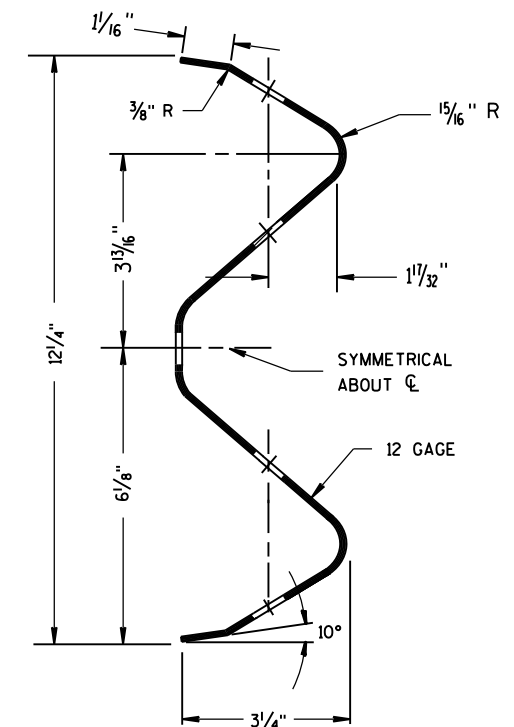
FRONT VIEW AT WOOD POST



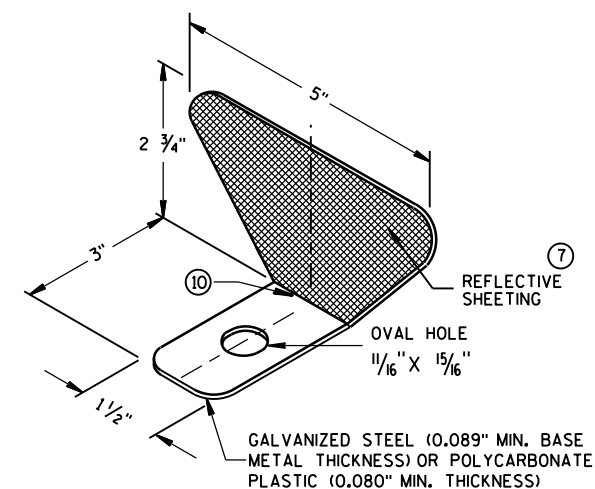
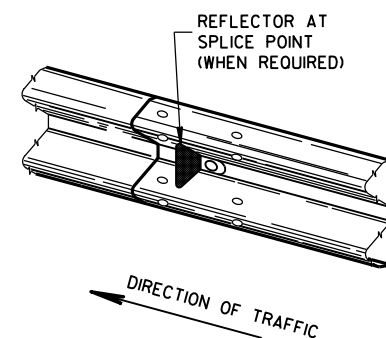
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

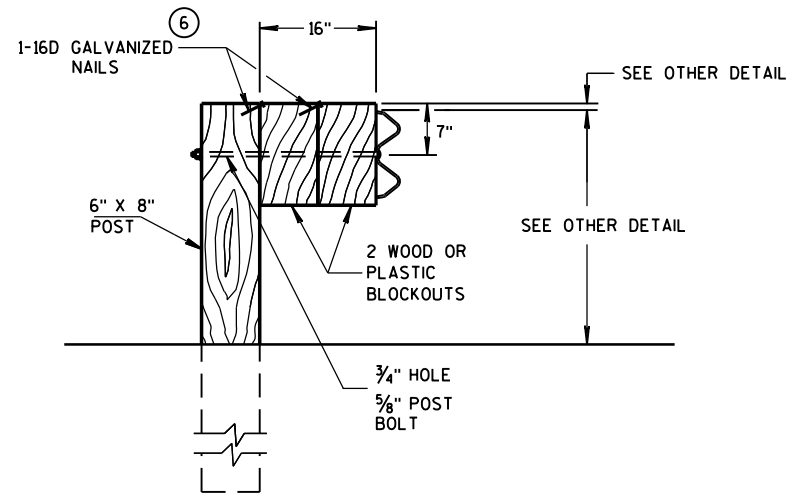
- ⑦ PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.
 - ⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
 - ⑨ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
 - ⑩ PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
 - ⑪ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.
- POST BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND $\frac{5}{8}$ " DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.
- GUARD RAIL SPLICE BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

REFLECTOR SPACING

	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 ⑨	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ⑩	3
	> 200'	100' C-C	2	

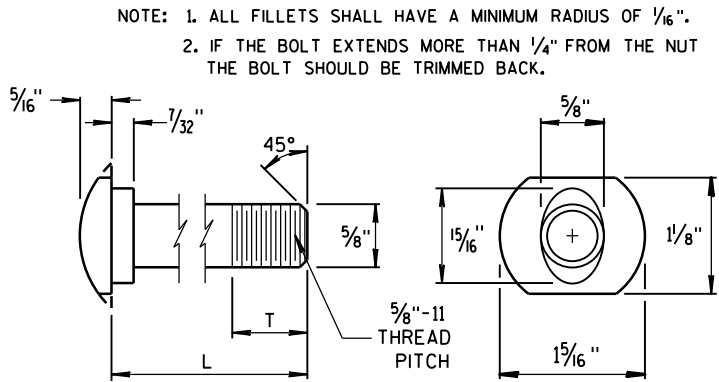
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

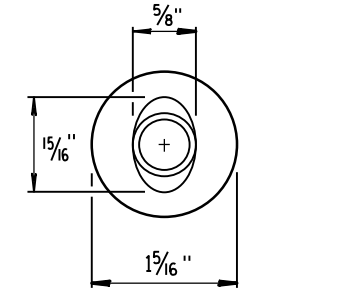


DETAIL FOR 16" BLOCKOUT DEPTH

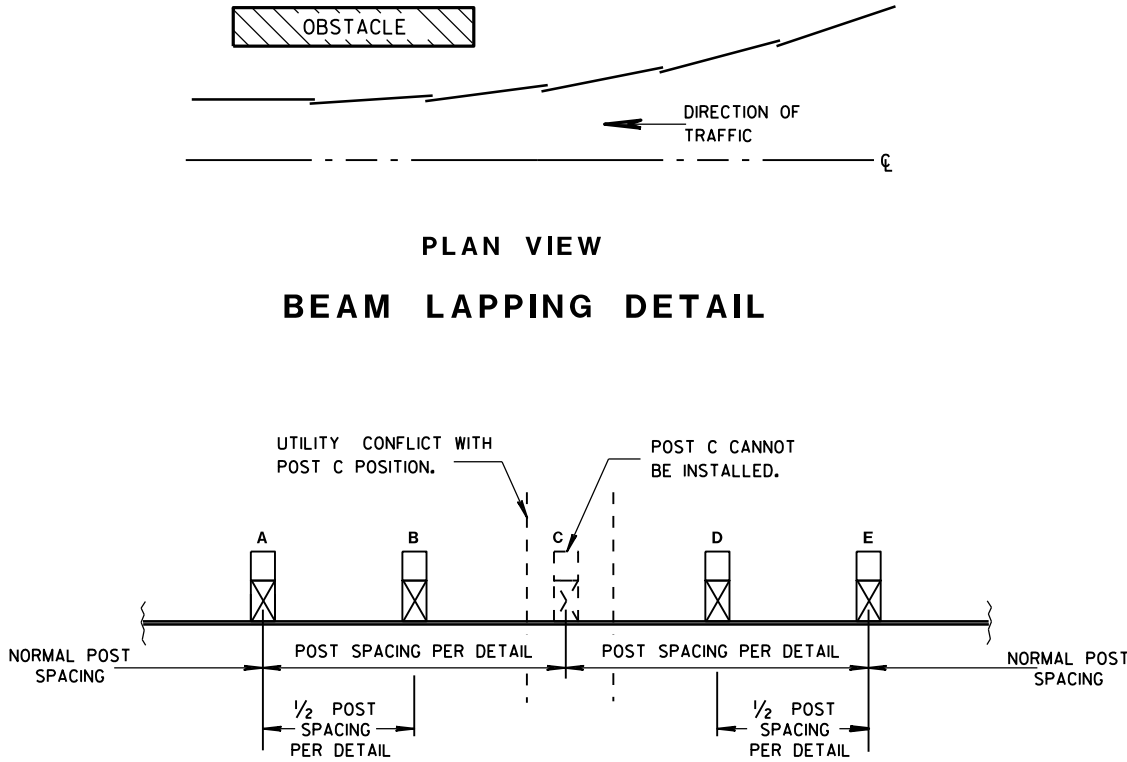
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



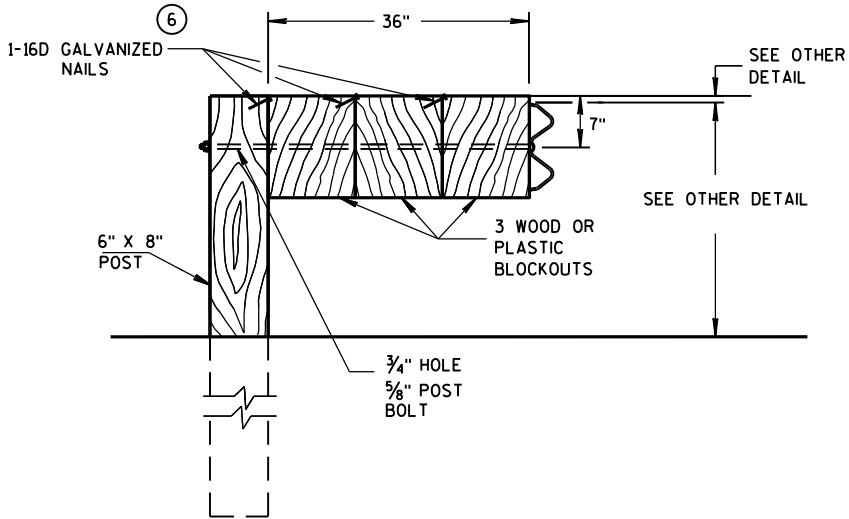
POST BOLT TABLE



ALTERNATE BOLT HEAD



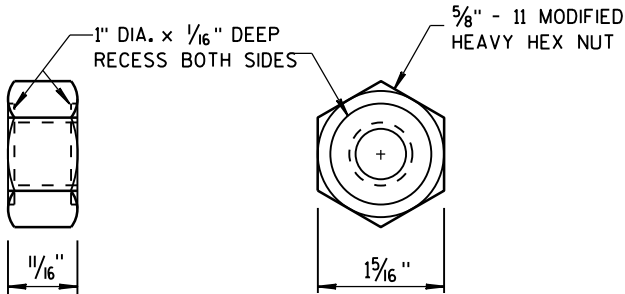
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



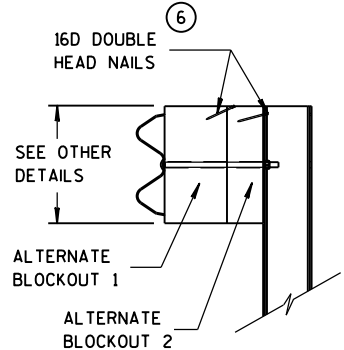
DETAIL FOR 36" BLOCKOUT DEPTH

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.

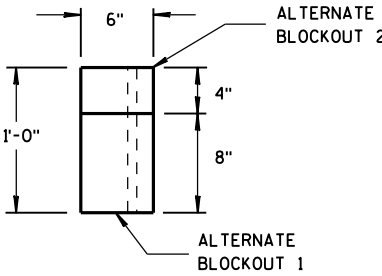
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 DATE /S/ Jerry H. Zogg
ROADWAY STANDARDS (63) ENGINEER
FHWA

GENERAL NOTES

- (A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (C) DIFFERENT 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.
- (E) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER.
- (G) 1/2" 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.

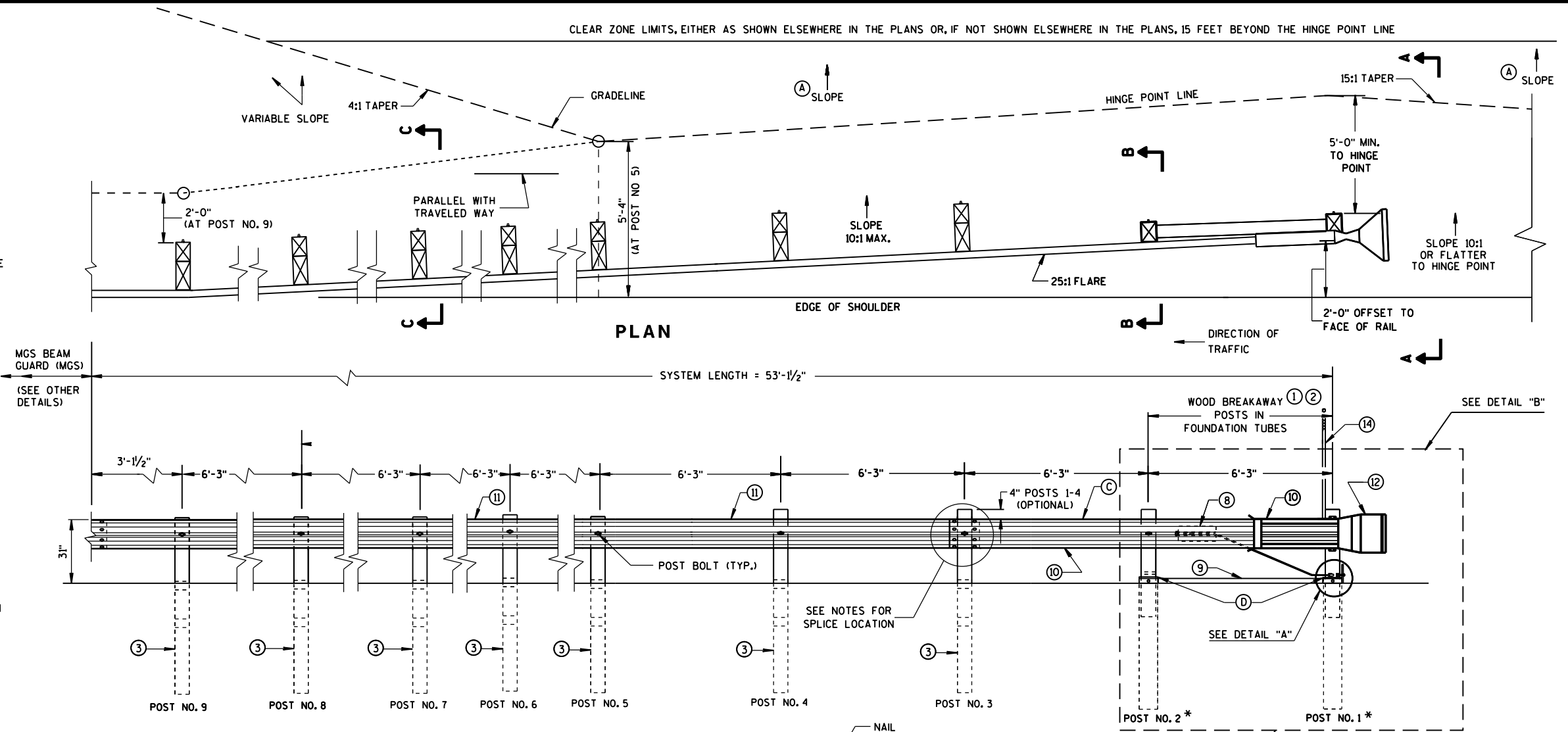
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

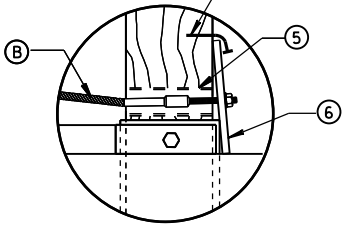
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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.

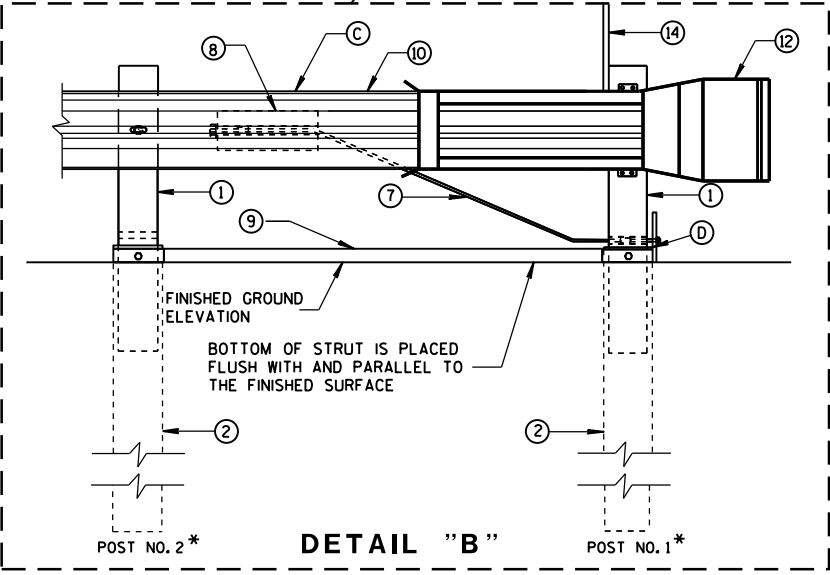
THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.



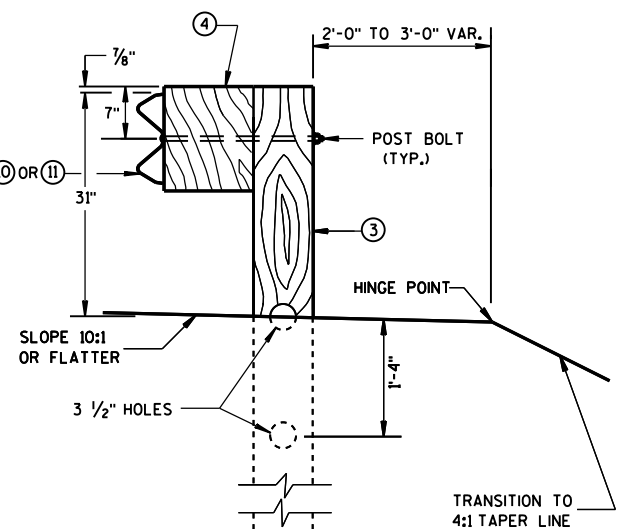
ELEVATION



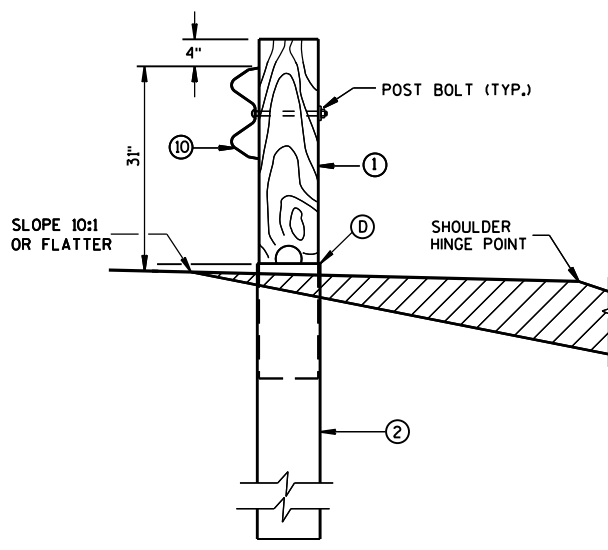
DETAIL "A"



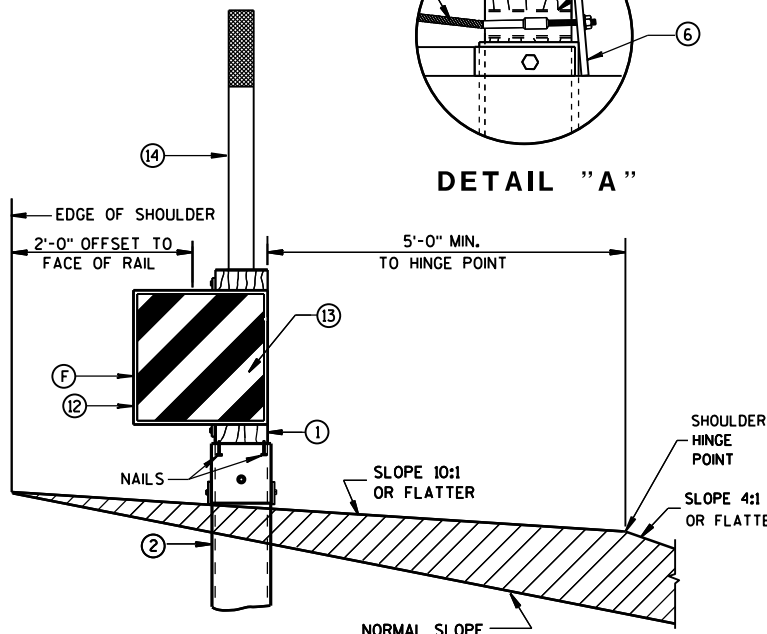
DETAIL "B"



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



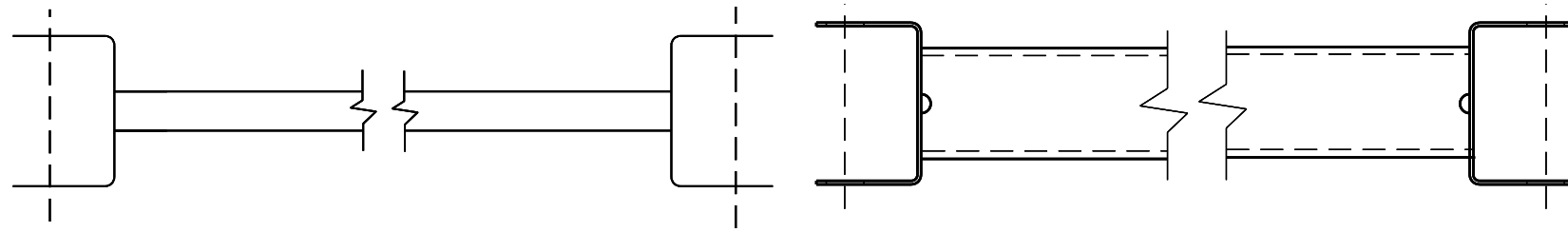
SECTION B-B
TYPICAL AT POST NO. 2*



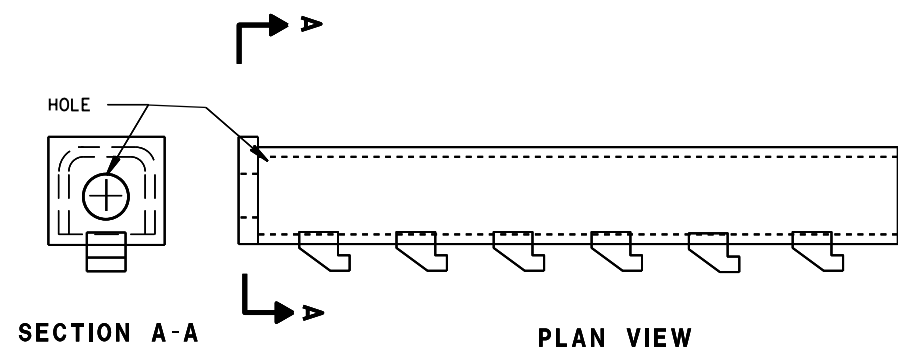
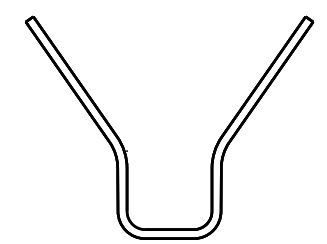
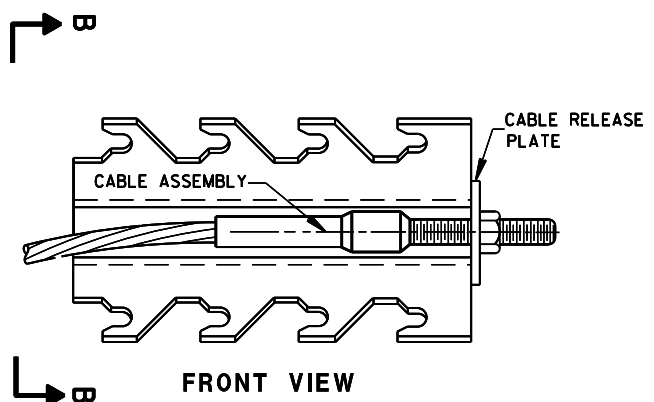
SECTION A-A
TYPICAL AT POST NO. 1*

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



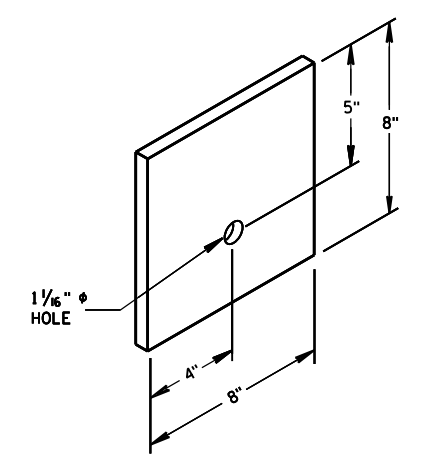
9 H
GENERIC GROUND STRUT



8 H
GENERIC ANCHOR CABLE BOX

BILL OF MATERIALS

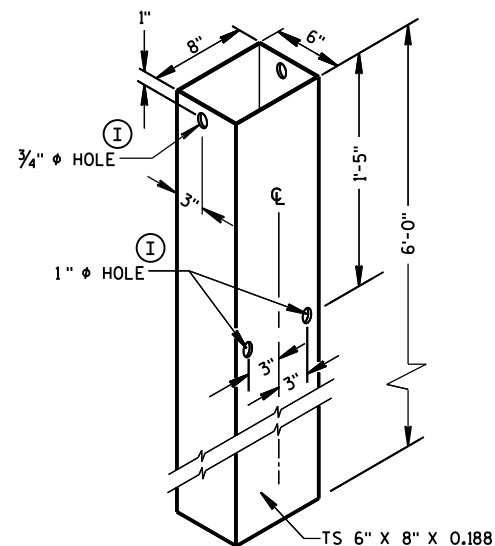
PART NO.	DESCRIPTION
MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.	
①	WOOD BREAKAWAY POST
②	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND 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 F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
⑭	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



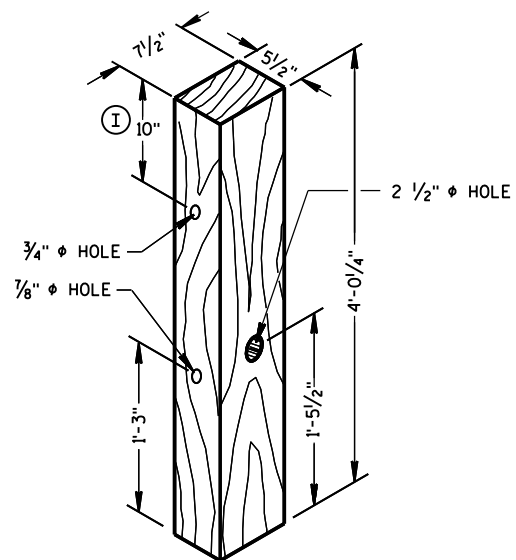
⑥
BEARING PLATE

6

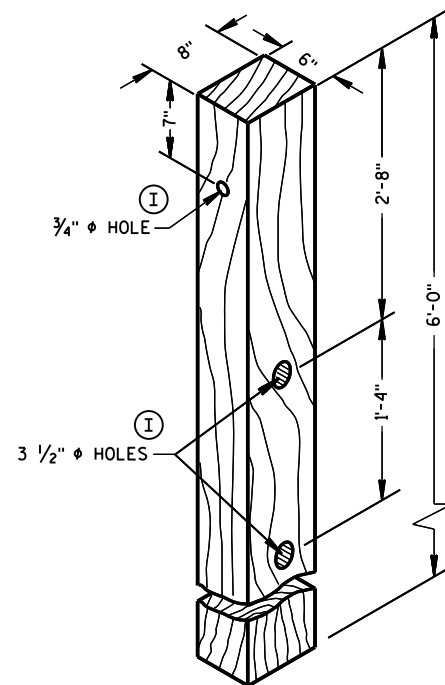
6



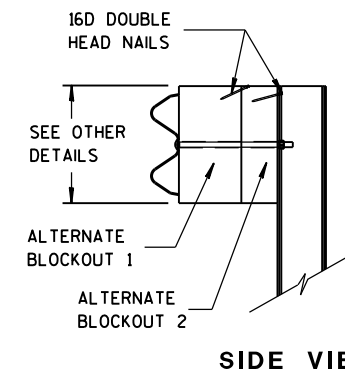
FOUNDATION TUBE ②



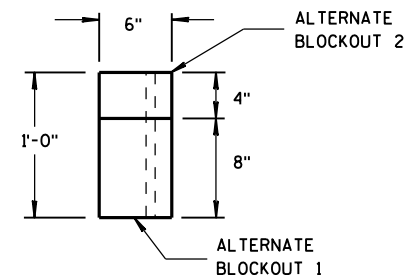
WOOD BREAKAWAY POST ①



WOOD CRT POST ③

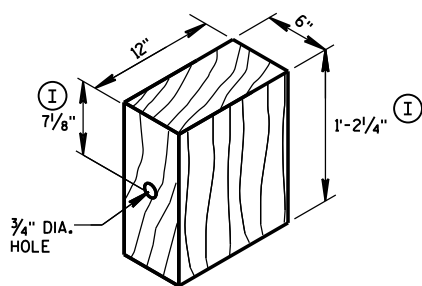


SIDE VIEW



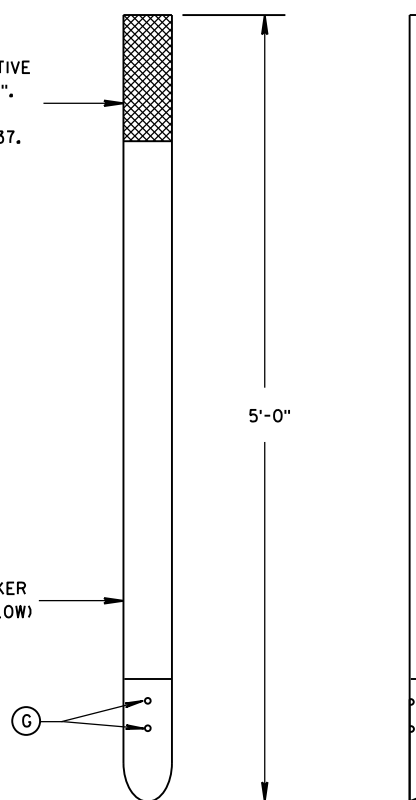
TOP VIEW

**ALTERNATE WOOD
BLOCKOUT DETAIL**



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

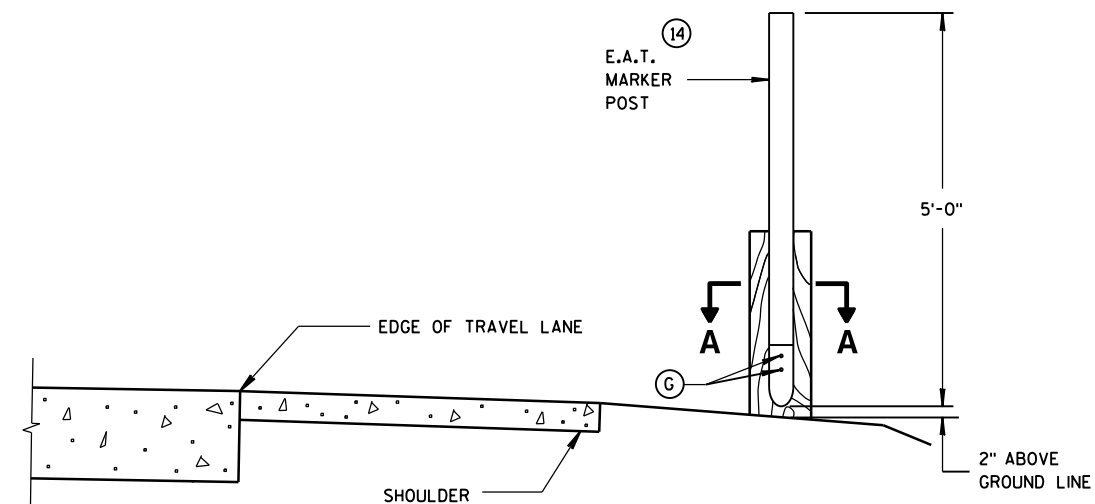
TYPE H
YELLOW REFLECTIVE
SHEETING 3" X 9".
SEE STANDARD
SPECIFICATION 637.



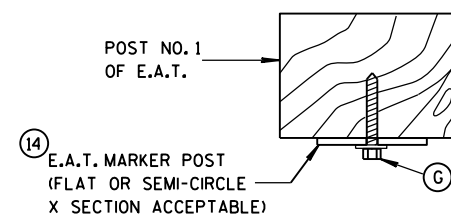
FRONT VIEW

SIDE VIEW

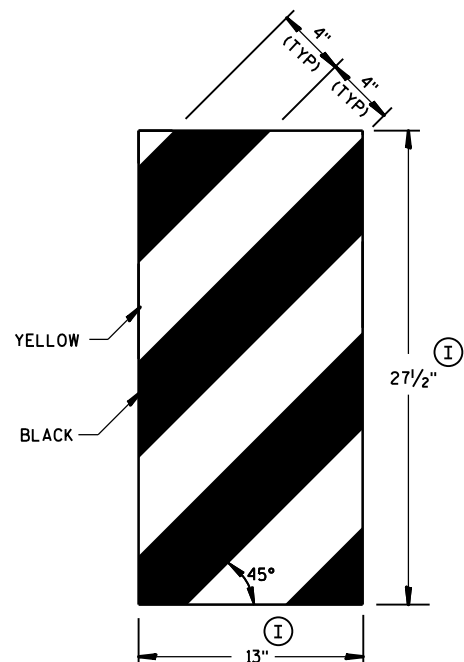
E.A.T. MARKER POST ⑭



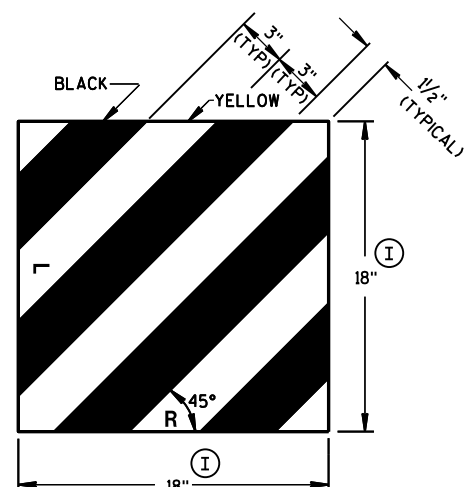
**TYPICAL INSTALLATION OF E.A.T.
MARKER POST BACKSIDE OF POST NO. 1**
(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A



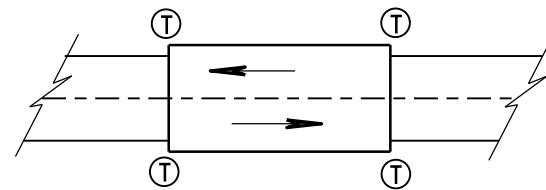
GENERIC REFLECTIVE SHEETING ⑬ ①



**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

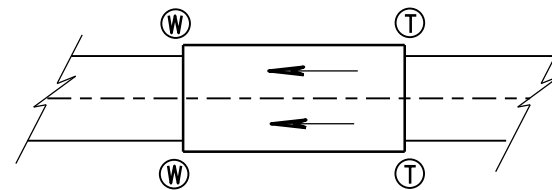
**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**

APPROVED
June 2014 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS 66 ENT
FHWA ENGINEER



TWO WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION



ONE WAY TRAFFIC

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

GENERAL NOTES

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

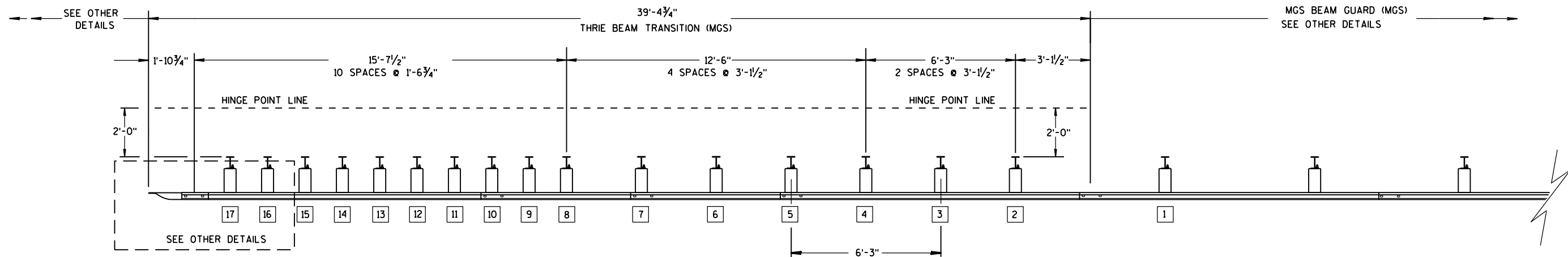
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

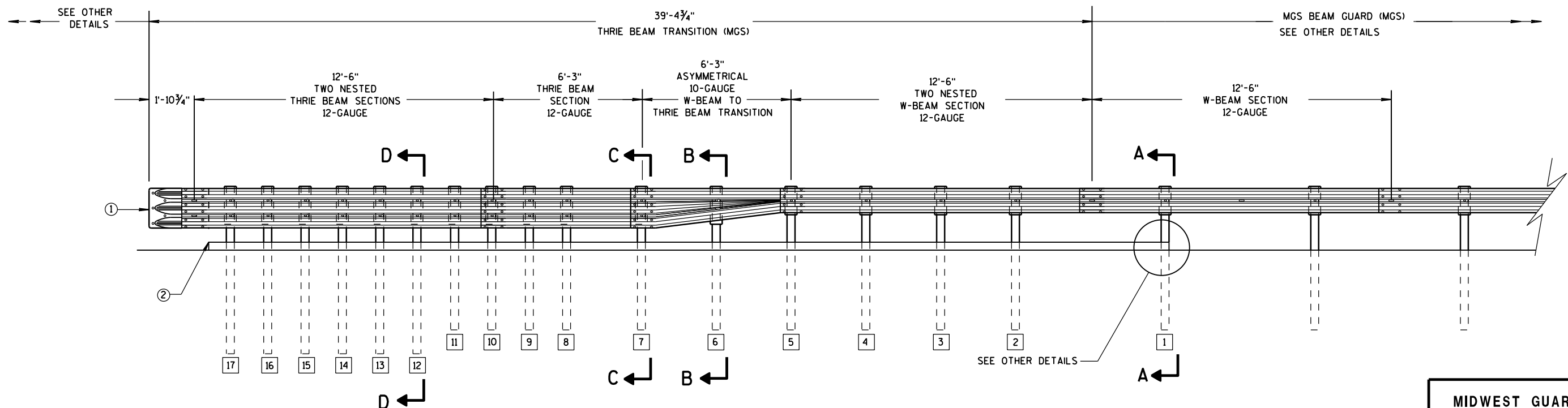
① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

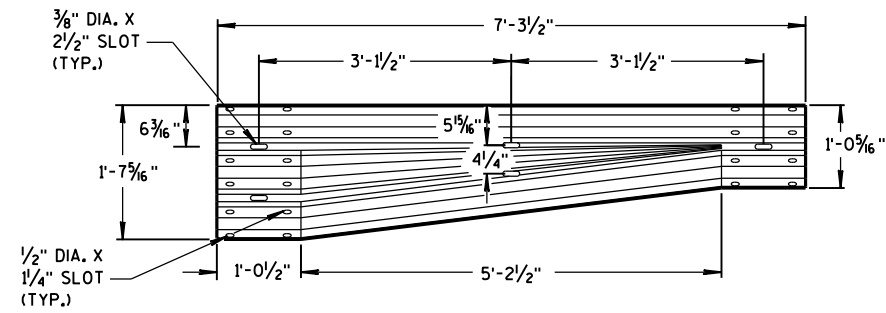
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 67

6

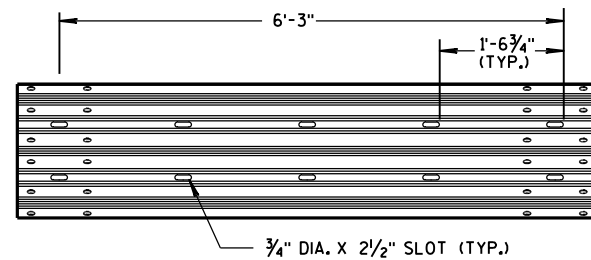
- S.D.D. 14 B 45-4b**



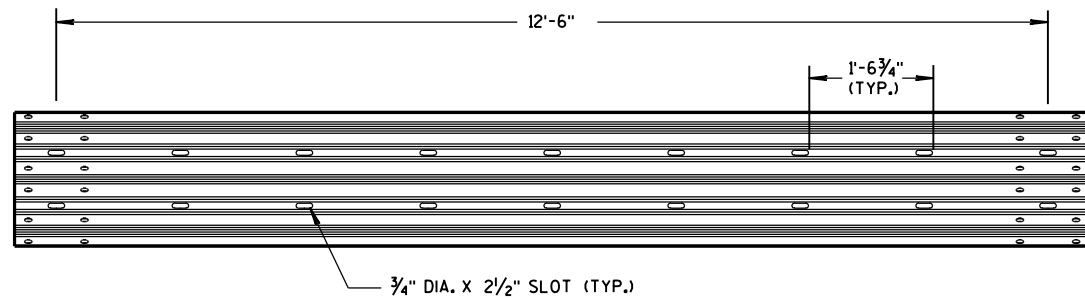
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION⁶⁸



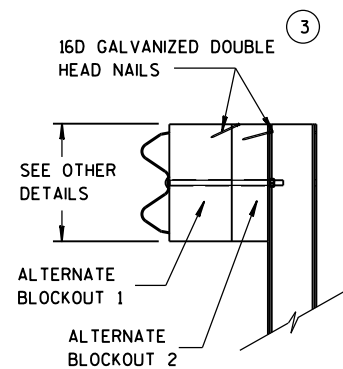
W-BEAM TO THRIE BEAM TRANSITION SECTION



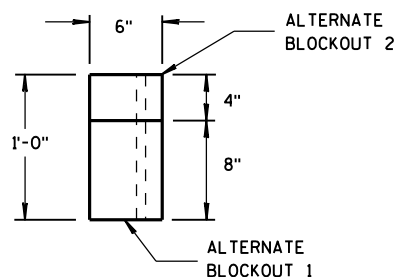
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

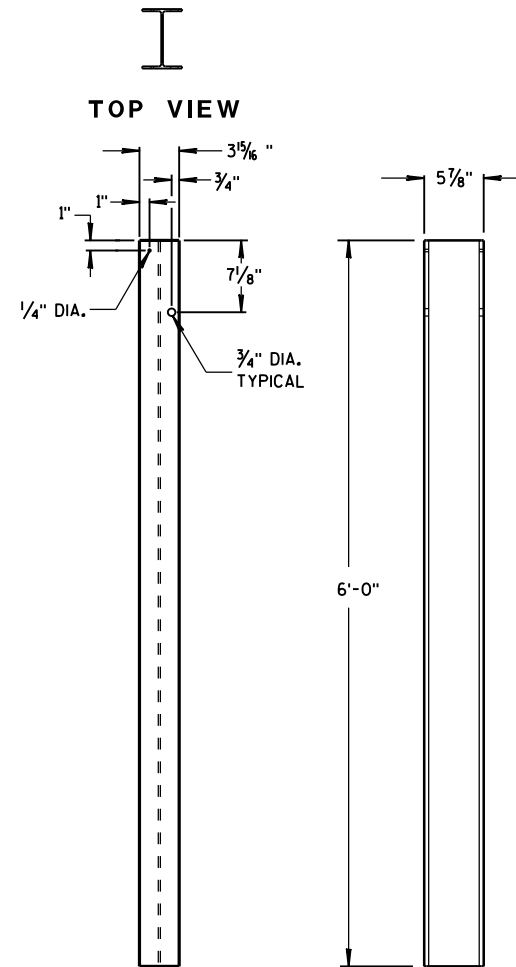


SIDE VIEW



TOP VIEW

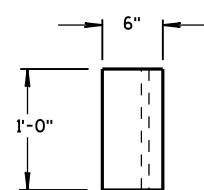
ALTERNATE WOOD BLOCKOUT DETAIL



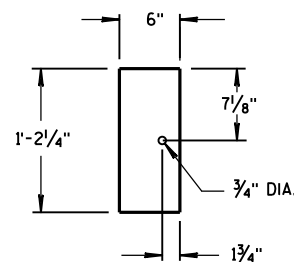
FRONT VIEW

SIDE VIEW

STEEL POSTS 1-5

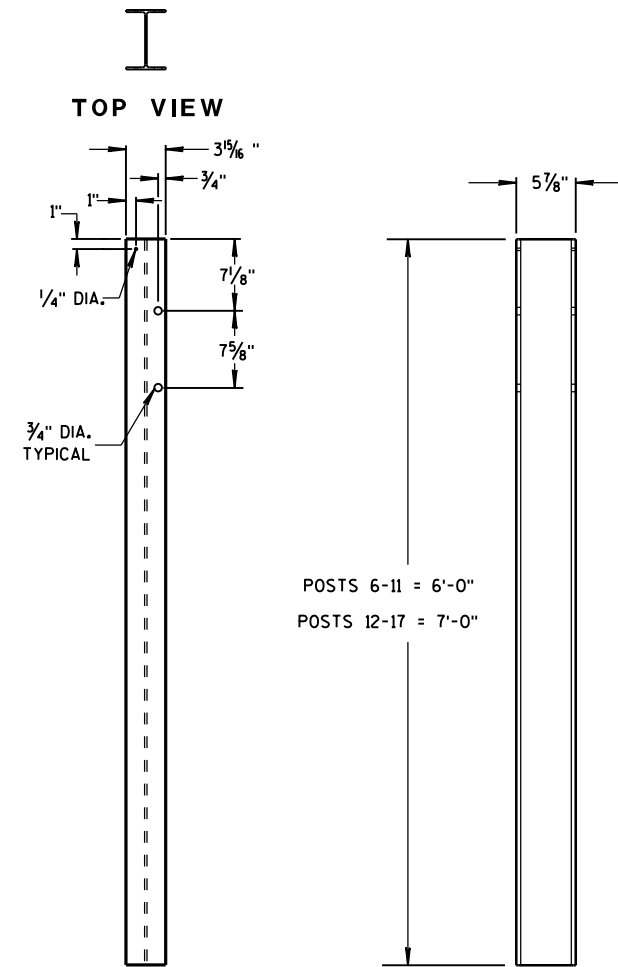


TOP VIEW



FRONT VIEW

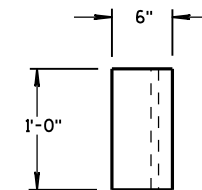
BLOCKOUT
POSTS 1-5



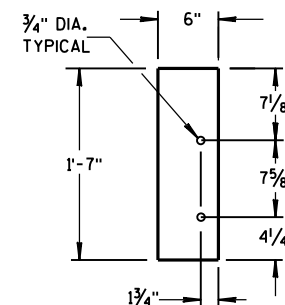
FRONT VIEW

SIDE VIEW

STEEL POSTS 6-17



TOP VIEW



FRONT VIEW

BLOCKOUT
POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

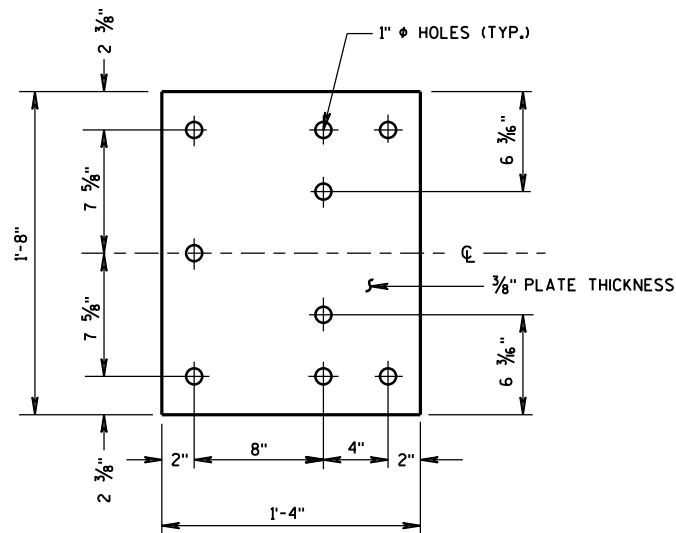
BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

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

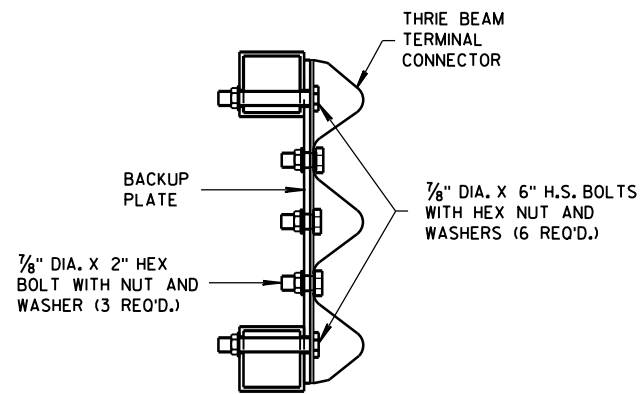
⑤ WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

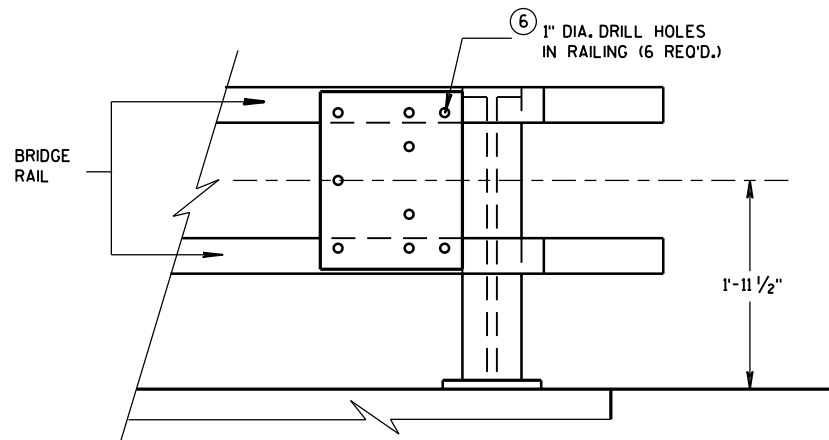
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



BACK-UP PLATE DETAIL



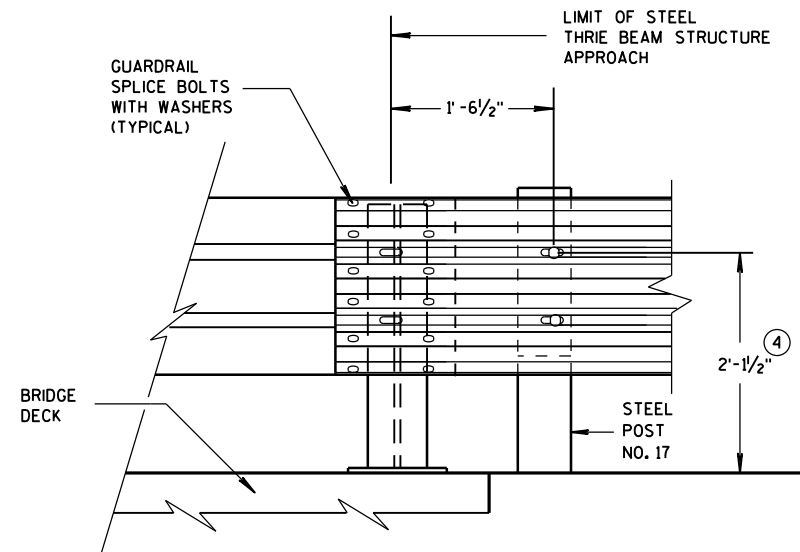
SECTION J-J



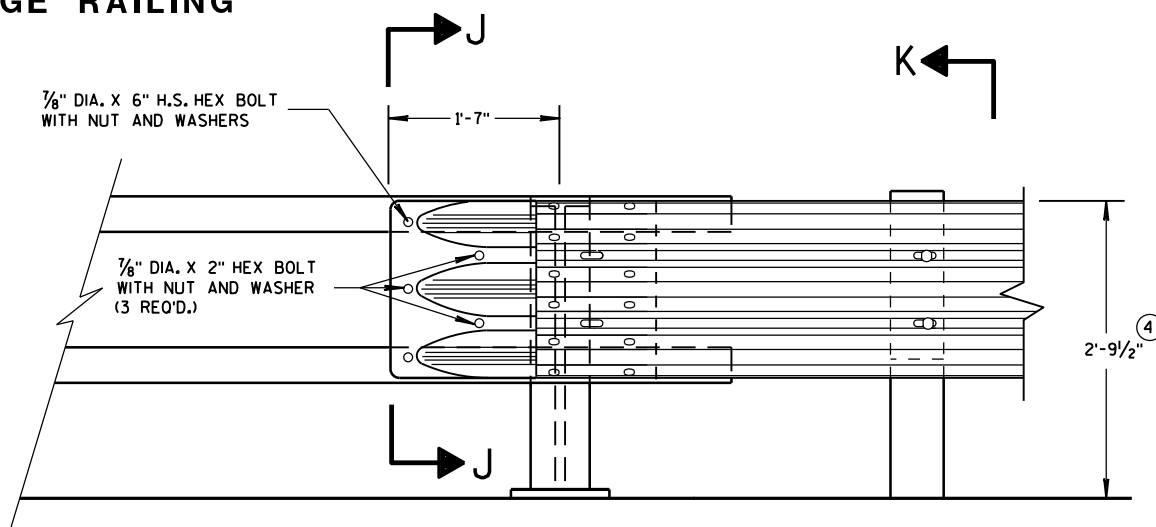
BACK-UP PLATE MOUNTING
ONTO BRIDGE RAILING

GENERAL NOTES

- ④ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.
- ⑥ DRILLING HOLES THROUGH THE PAPER, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

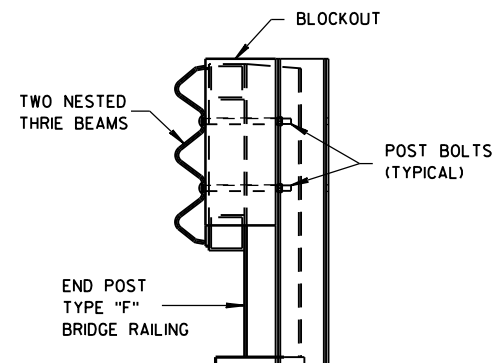


FRONT VIEW
THRIE BEAM CONNECTION TO
STEEL RAILING TYPE "W"



FRONT VIEW

THRIE BEAM CONNECTION TO
TUBULAR RAILING TYPE "F"

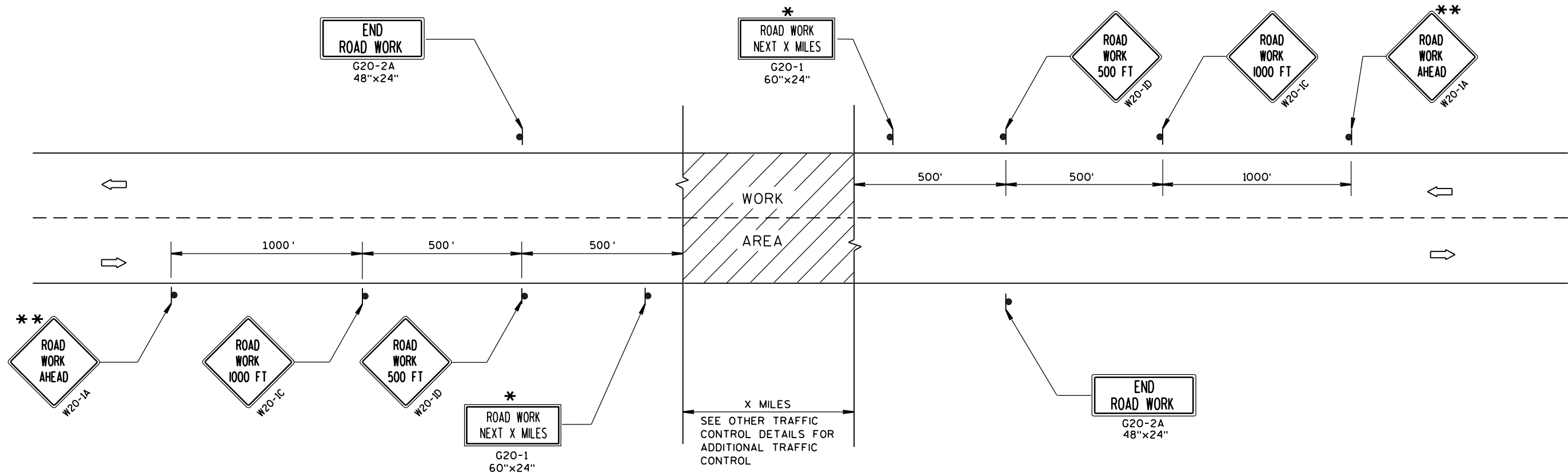


SECTION K-K

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS D 70 NT
FHWA ENGINEER



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.

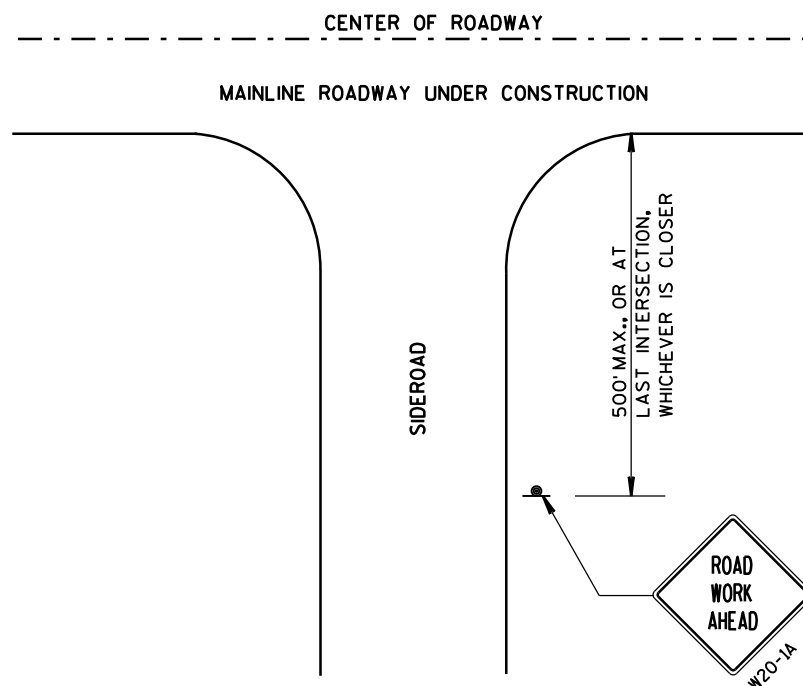
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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 W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



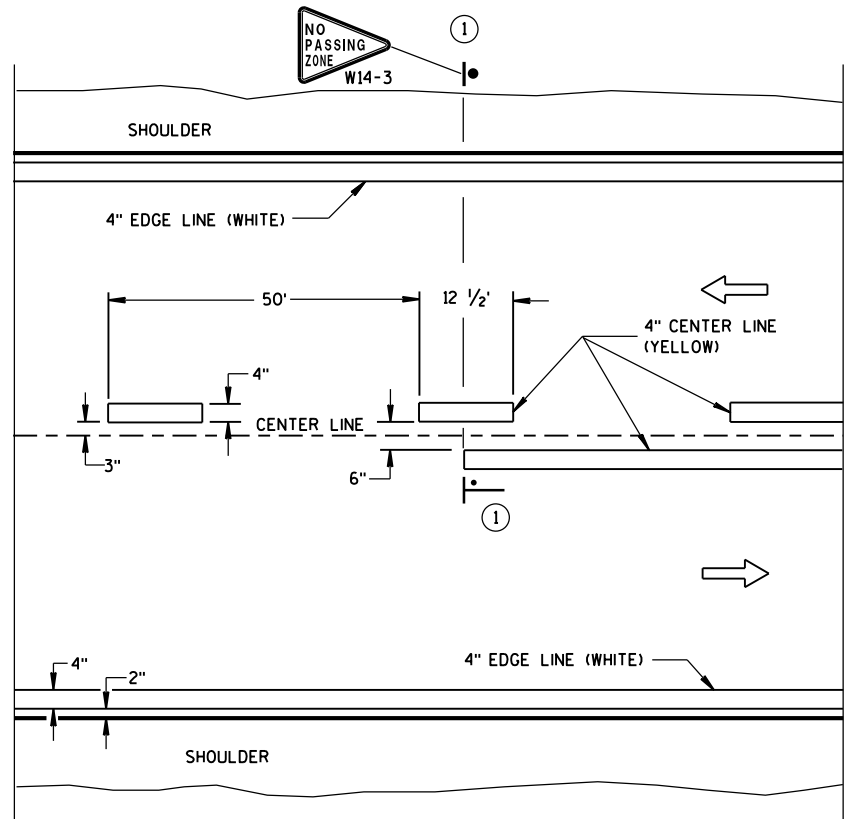
LEGEND

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

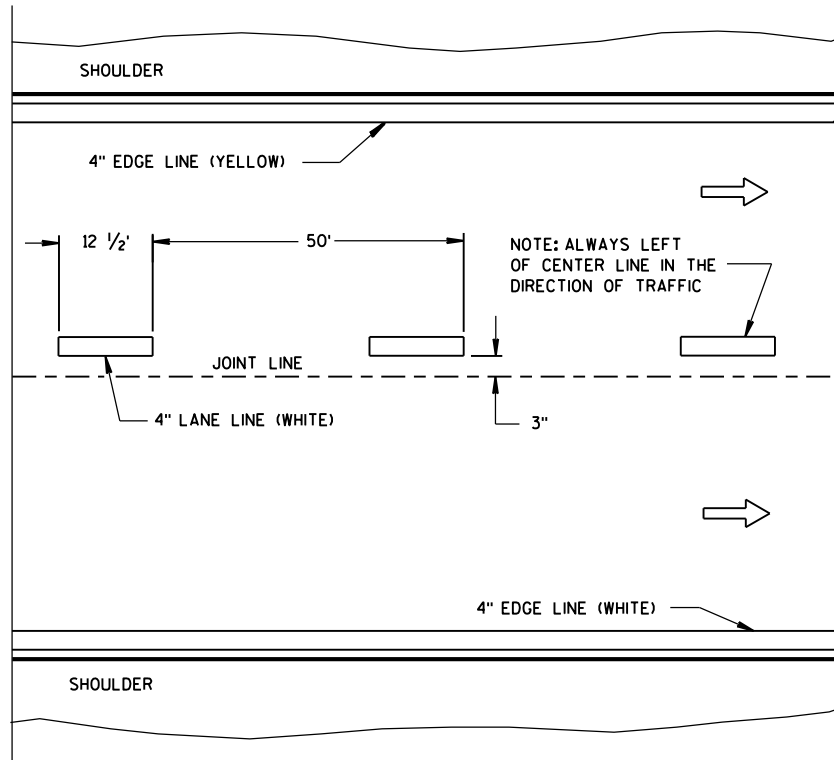
TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 /S/ Peter Amokobe Atepe
DATE STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

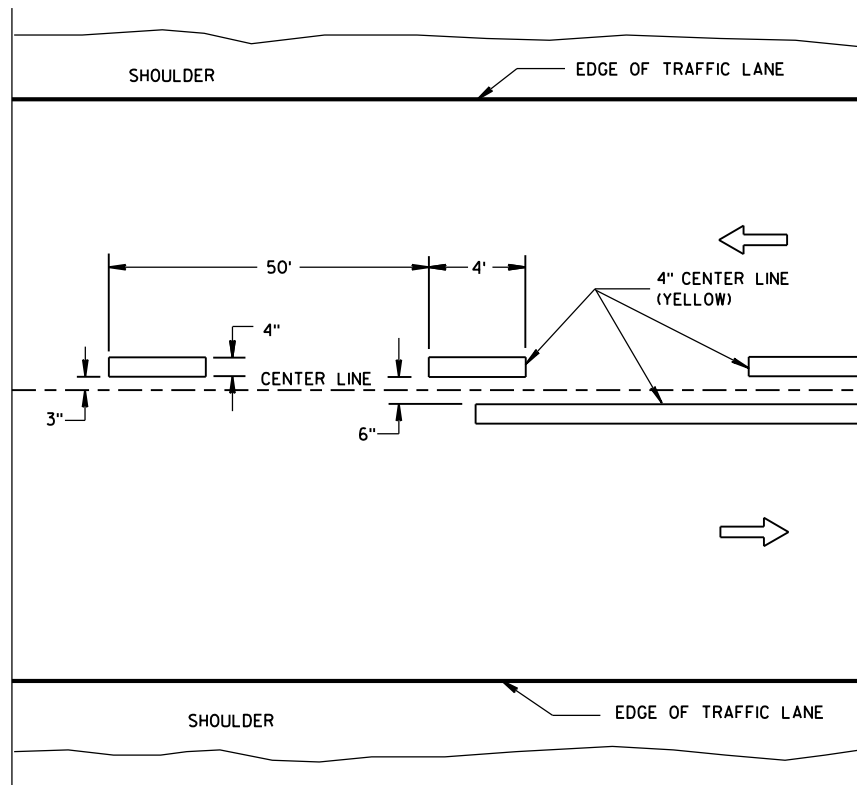


TWO WAY TRAFFIC

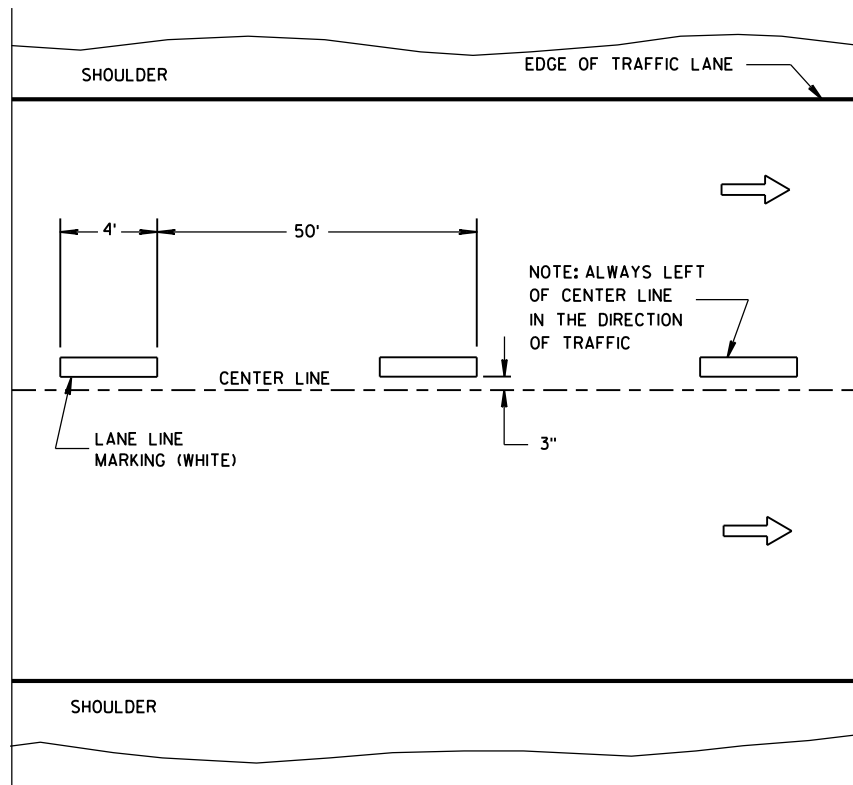


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

① NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

LEGEND

—●— "T" MARKING

● POST MOUNTED SIGN

LONGITUDINAL MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE Sept., 2016 /S/ Matthew R. Rauch
STATE SIGNING AND MAP 72 ENGINEER
FHWA

LEGEND

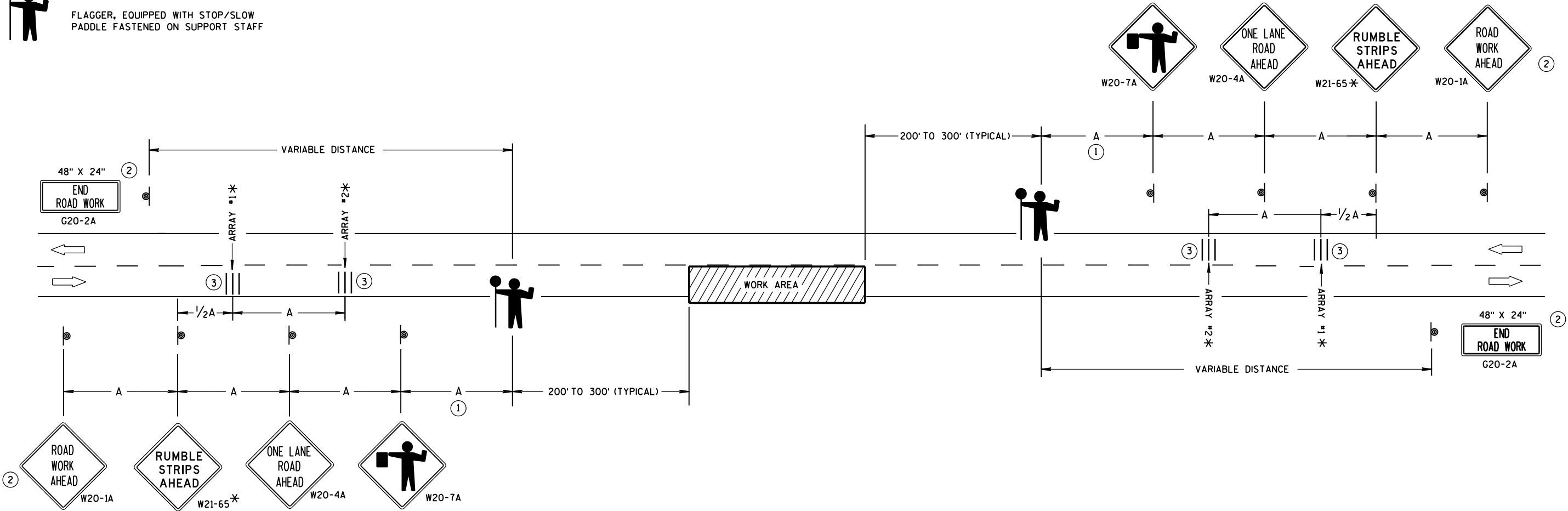
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING A.



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

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.

"W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS. PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- * UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.
- ① FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 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.
- ③ EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 /S/ Andrew Heldtke
DATE WORK ZONE ENC 73
FHWA



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

OR

WET PAINT

W21-64 W21-64

③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

① 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.

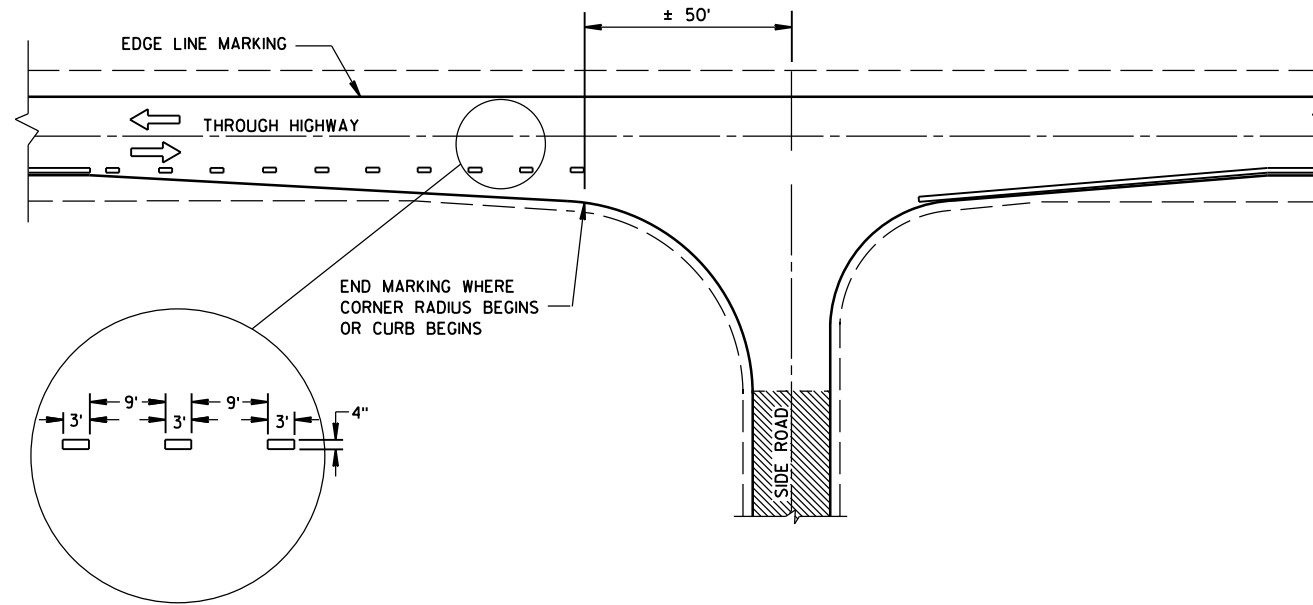
V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZON SAFETY ENGINE 74

FHWA



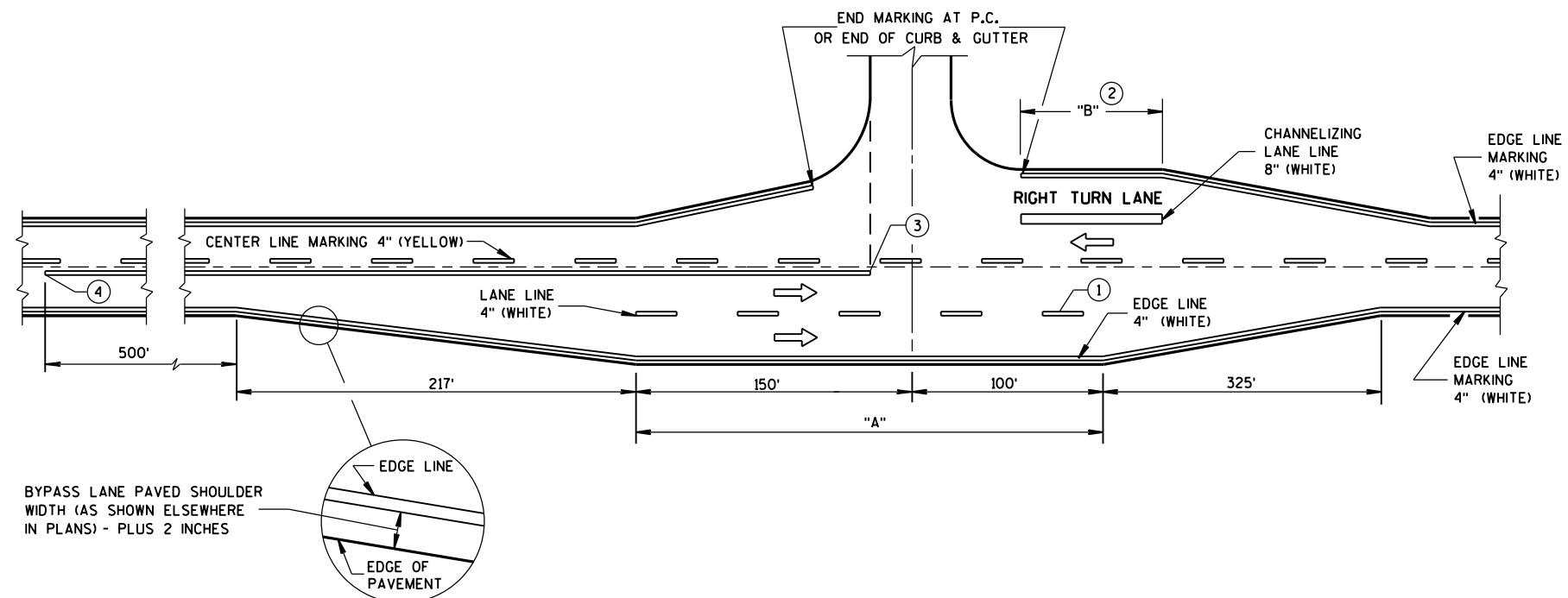
MINOR INTERSECTION WITHOUT CURBS

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 BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

ARROW SYMBOL () SHOWS DIRECTION OF TRAVEL



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)

**PAVEMENT MARKING
(INTERSECTIONS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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

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.

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

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

TABLE A

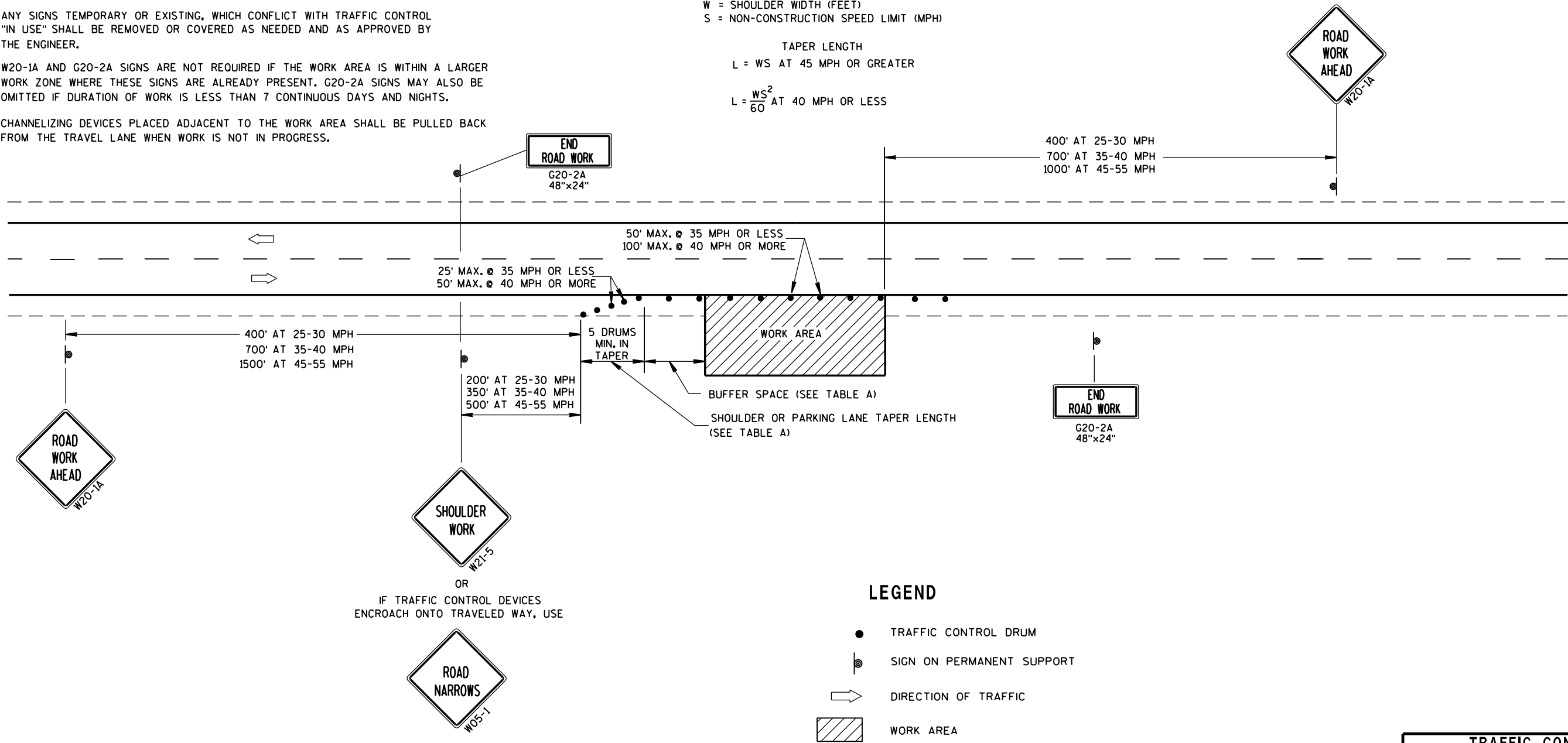
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S	W	4	6	8	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

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

TAPER LENGTH
L = WS AT 45 MPH OR GREATER

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

SHOULDER TAPER LENGTH = $\frac{1}{3}L$

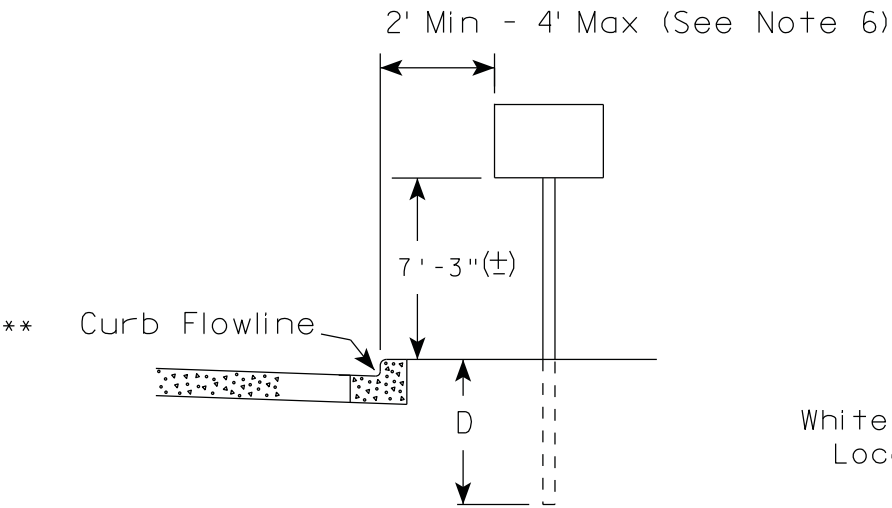


LEGEND

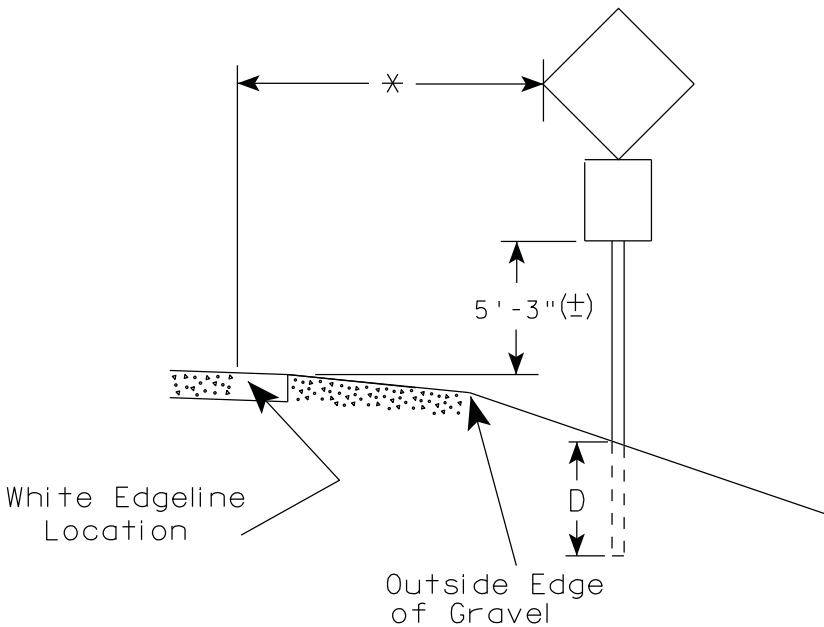
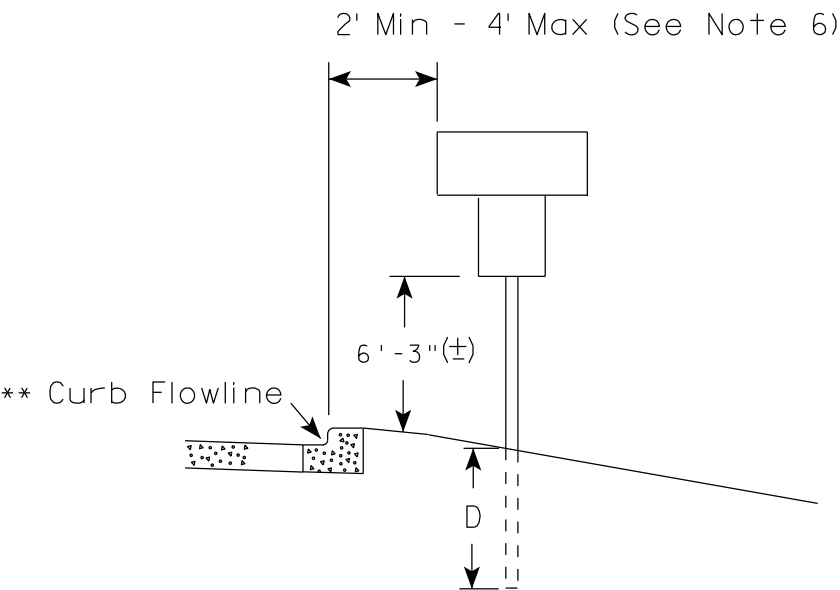
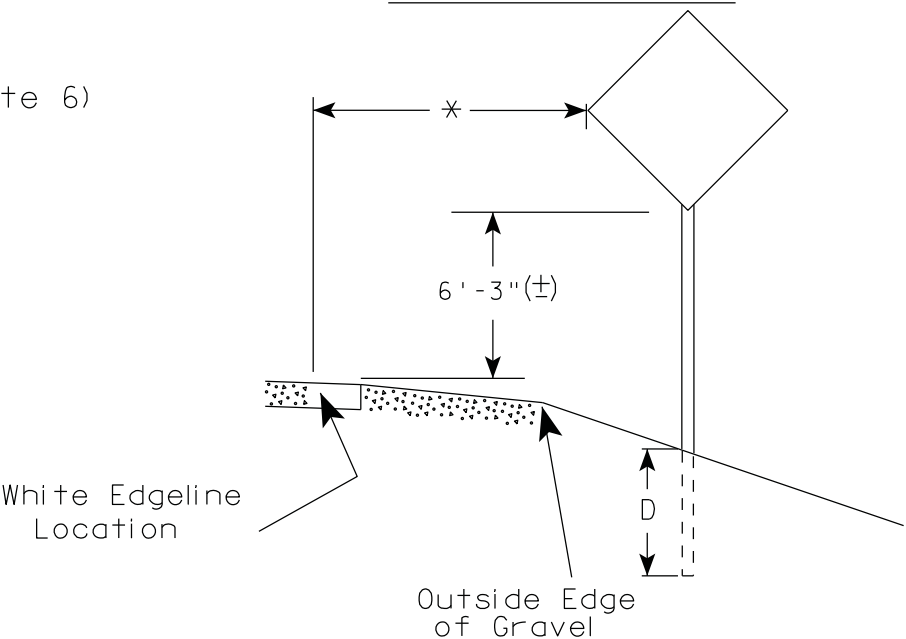
- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE SAFETY ENGINEER	IC
FHWA		

URBAN AREA



RURAL AREA (See Note 2)



POST EMBEDMENT DEPTH

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

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

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

GENERAL NOTES

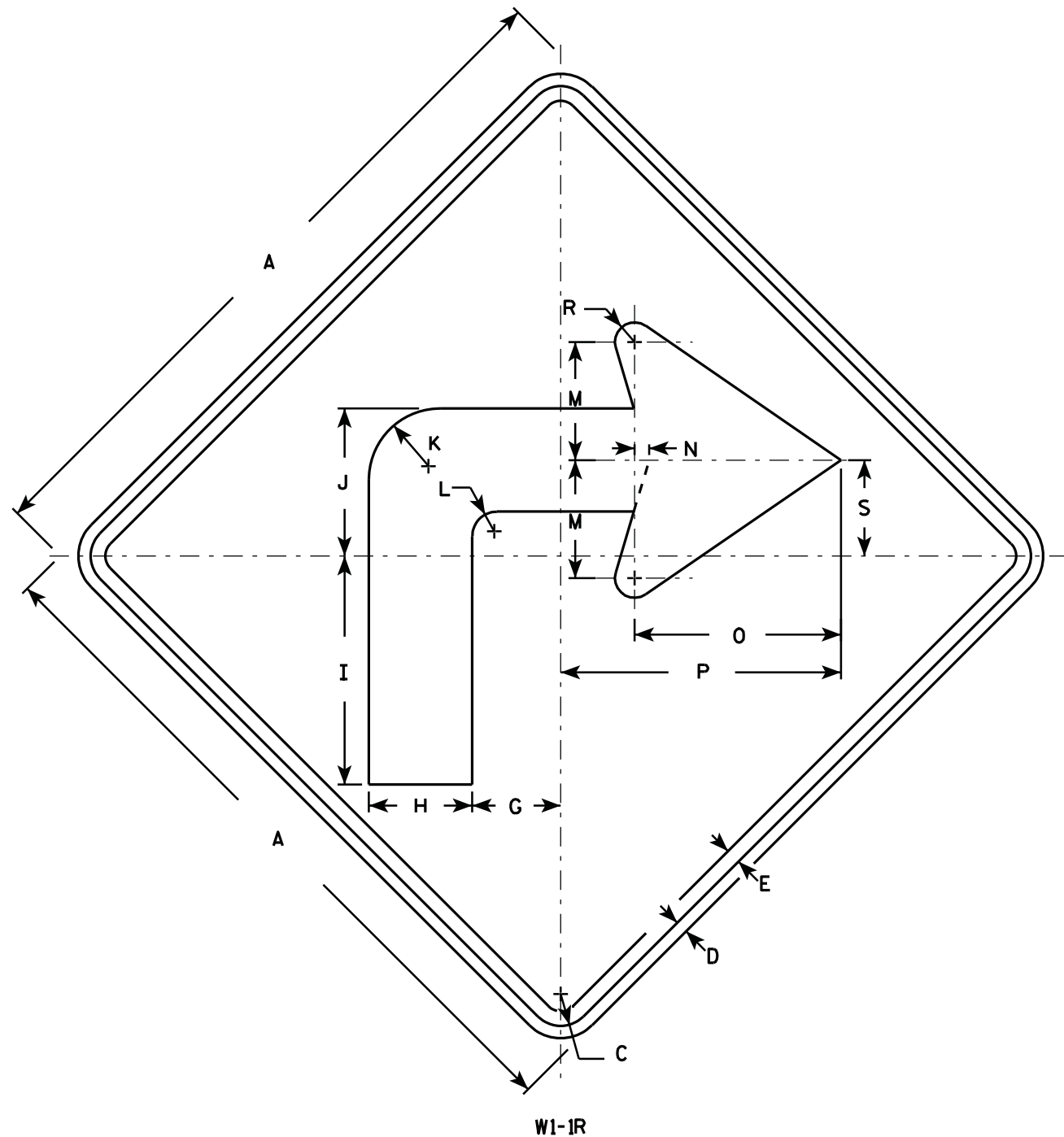
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) 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 signs 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), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20



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. W1-1L is the same as W1-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		3	3 1/2	7 3/4	5	2 1/2	7/8	4	1/2	7	9 1/2		5/8	3 1/4								4.0
2S	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
2M	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
3	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
4	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0
5	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0

STANDARD SIGN

W1-1

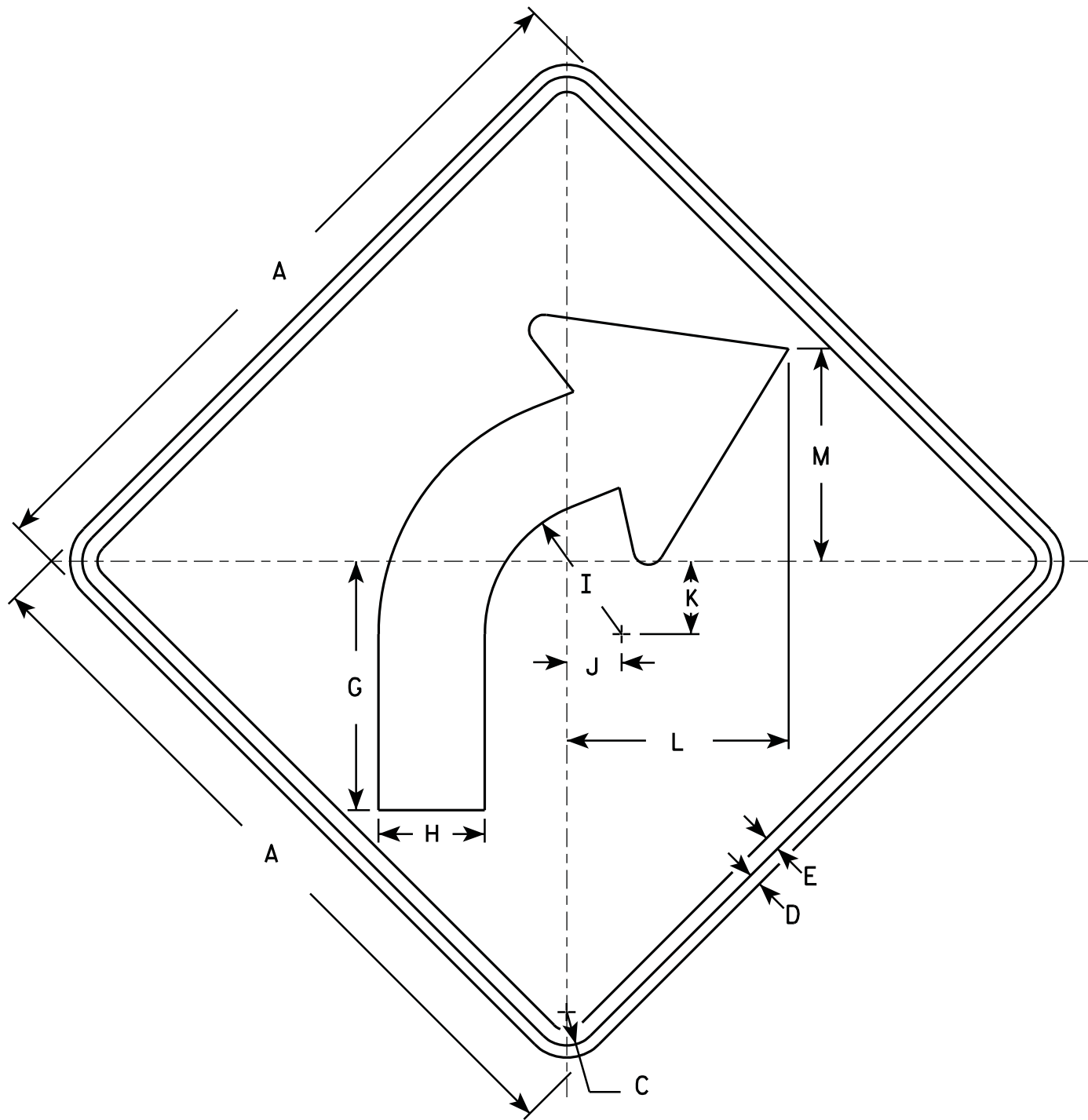
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

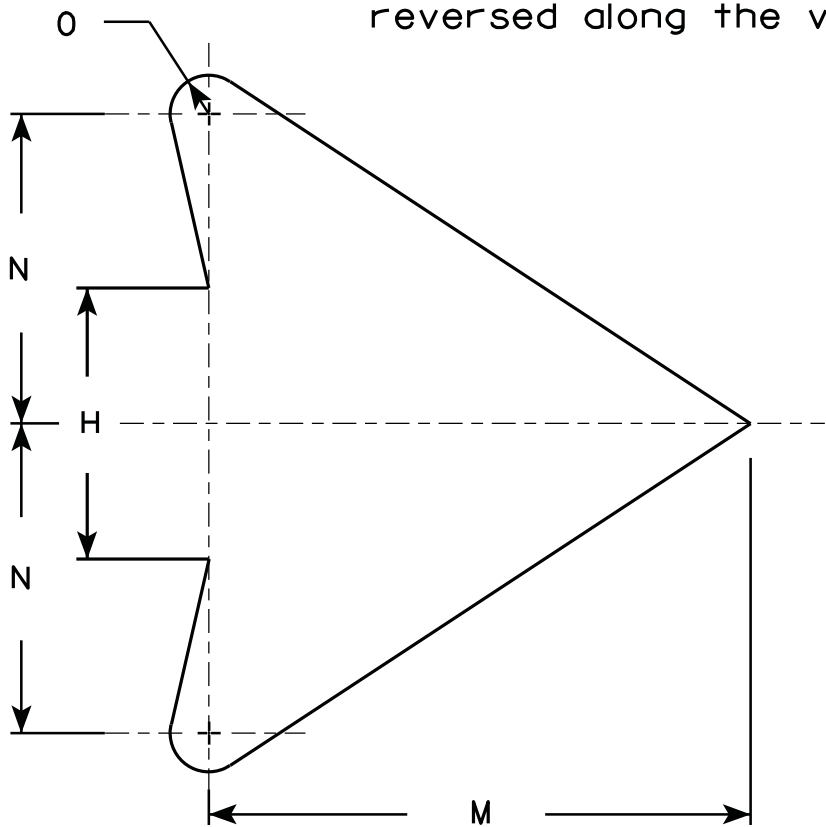
DATE 5/15/12 PLATE NO. W1-1.11

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

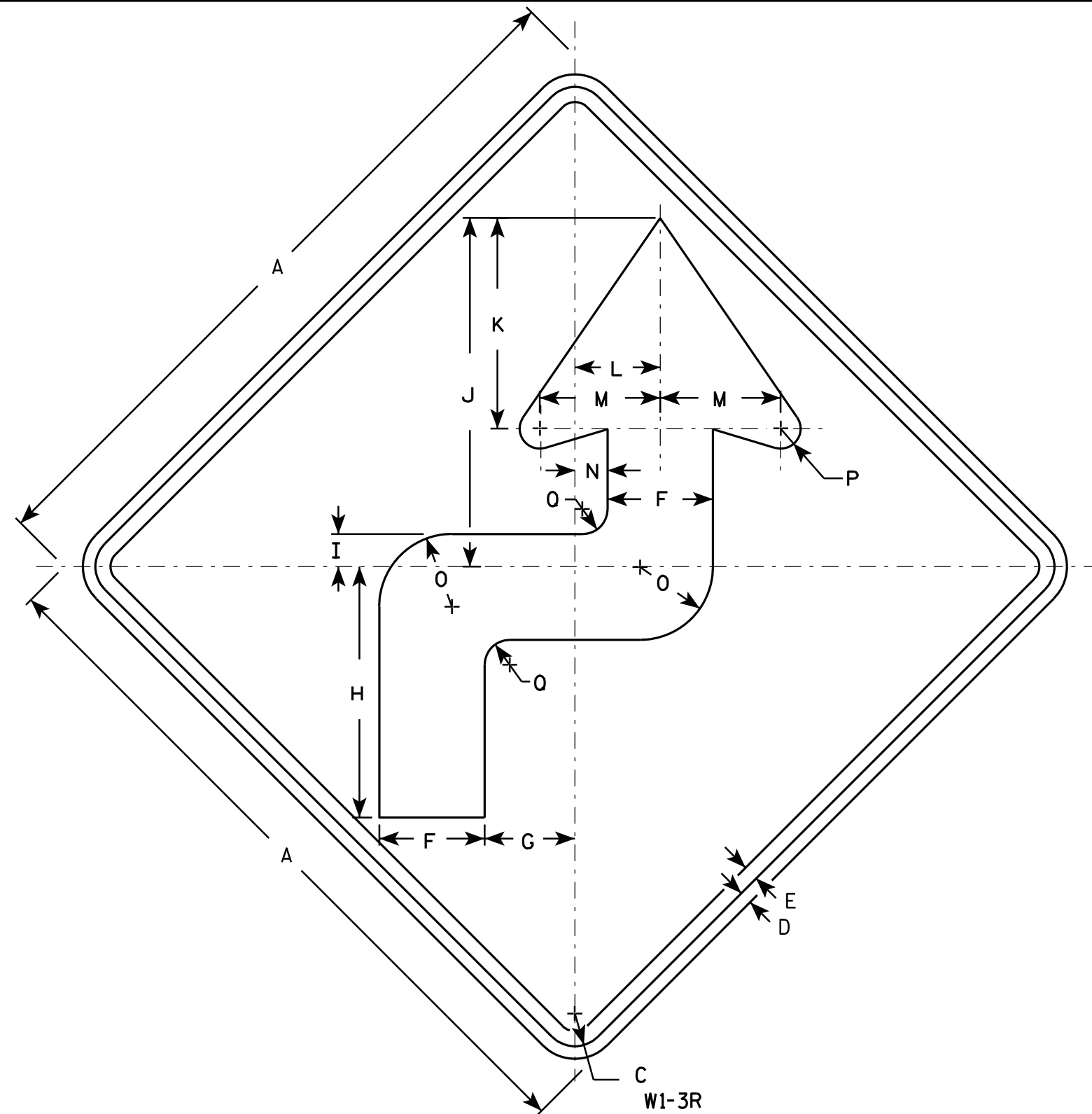
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6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



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. W1-3L is the same as W1-3R except the arrow is reversed along the vertical centerline.

W1-3R

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	3 1/2	3	8 3/8	1 1/8	11 5/8	7	2 3/4	4	1 1/8	2 1/2	5/8	7/8										4.0
2S	36		1 5/8	5/8	3/4	5 1/4	4 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
2M	36		1 5/8	5/8	3/4	5 1/4	4 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
3	36		1 5/8	5/8	3/4	5 1/4	4 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
4	36		1 5/8	5/8	3/4	5 1/4	6	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
5	48		2 1/4	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0

STANDARD SIGN W1-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 5/17/12 PLATE NO. W1-3.8

PROJECT NO: 7068-01-60

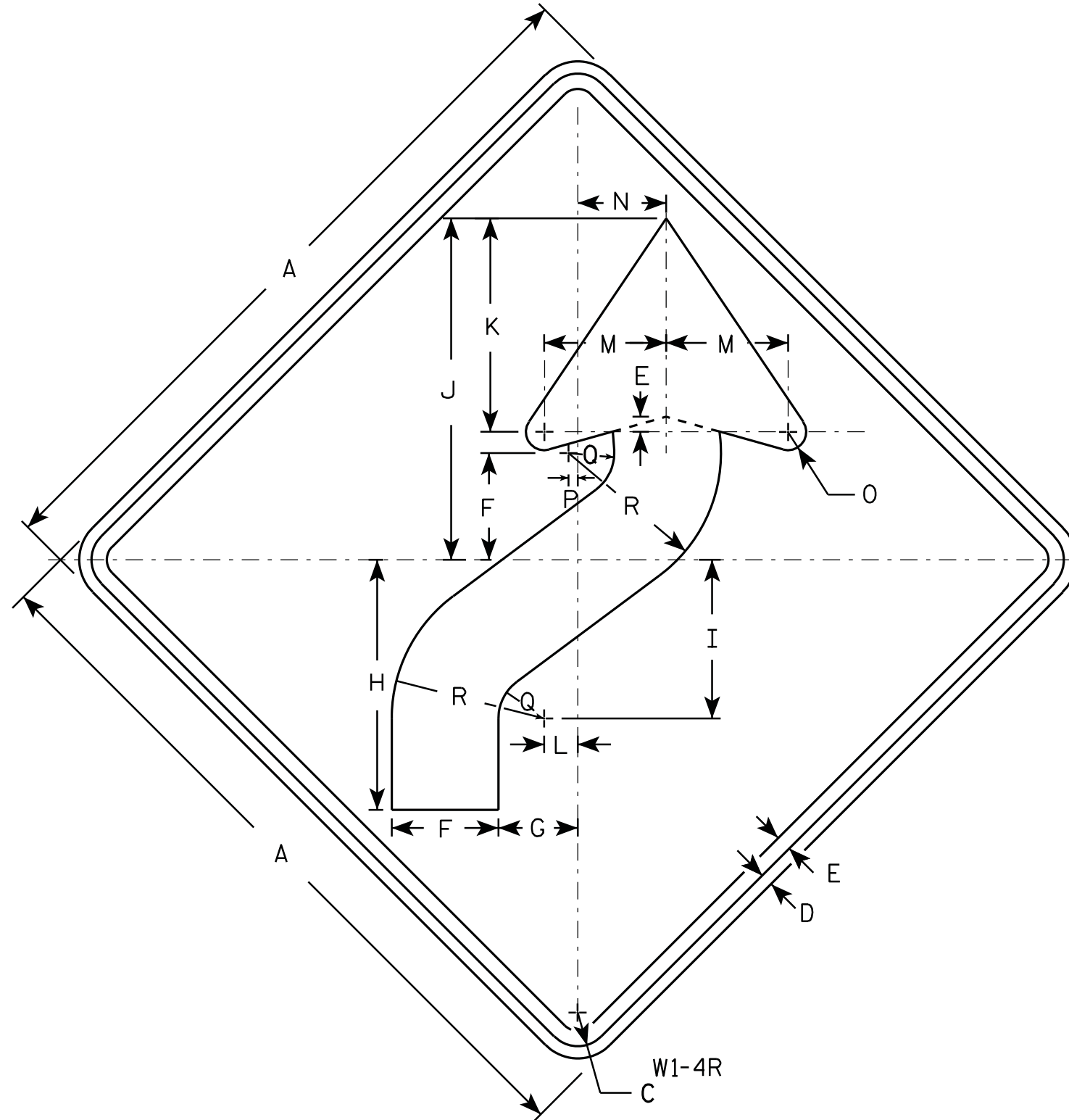
HWY: CTH T

COUNTY: LA CROSSE

SIGN PLATE

SHEET NO: 80

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. W1-4L is the same as W1-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	3 1/2	2 5/8	8 1/4	5 1/4	11 1/4	7	1 1/8	4	3	5/8	1/4	1 1/2	5									4.0
2S	30		1 3/8	1/2	5/8	4 3/8	3 1/4	10 1/4	6 1/2	14	8 3/4	1 3/8	5	3 5/8	3/4	3/8	1 7/8	6 1/4									6.25
2M	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
3	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
4	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN

W1 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-4.11

PROJECT NO:7068-01-60

HWY: CTH T

COUNTY: LA CROSSE

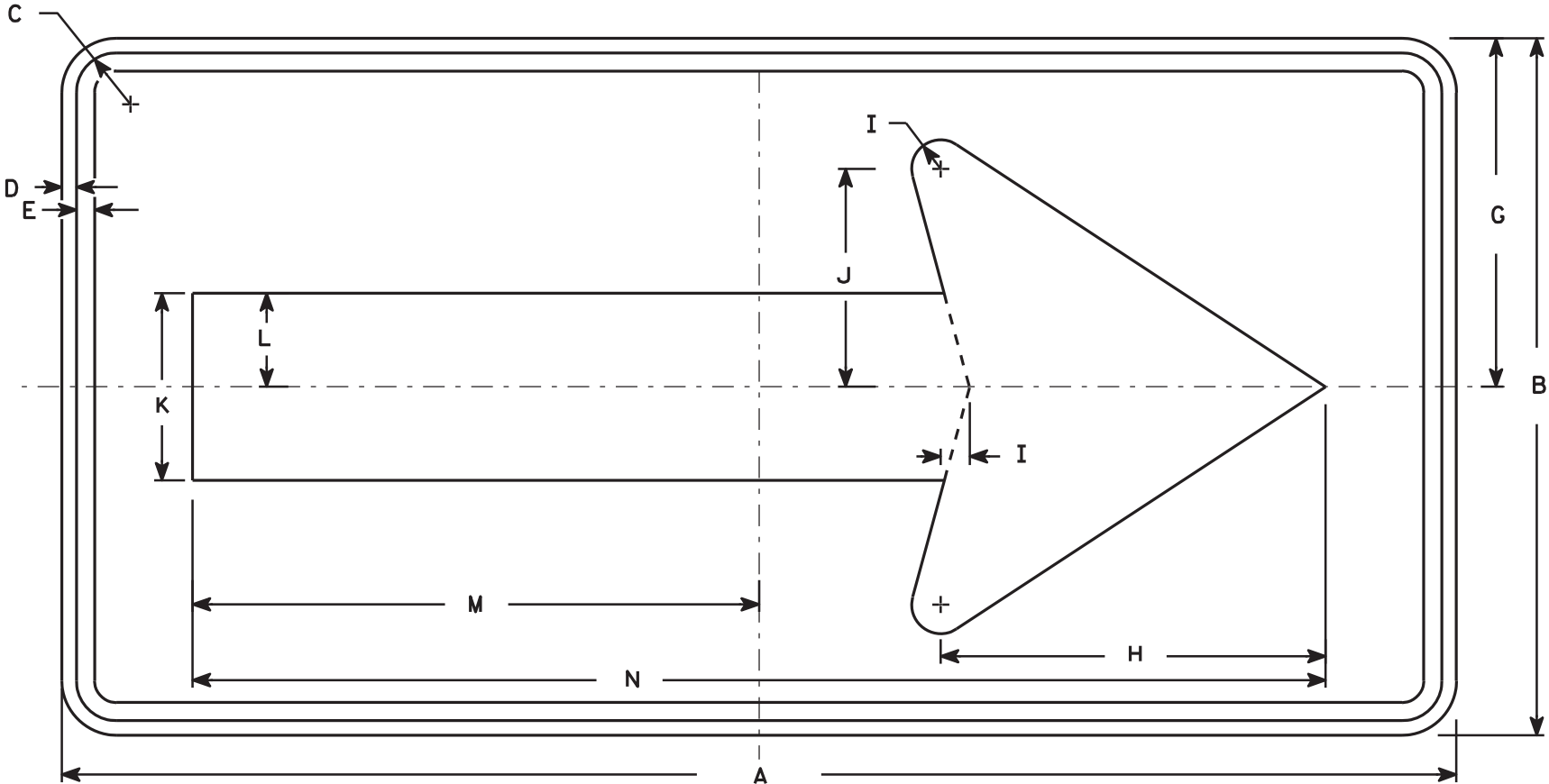
SIGN PLATE

SHEET NO: 81

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.



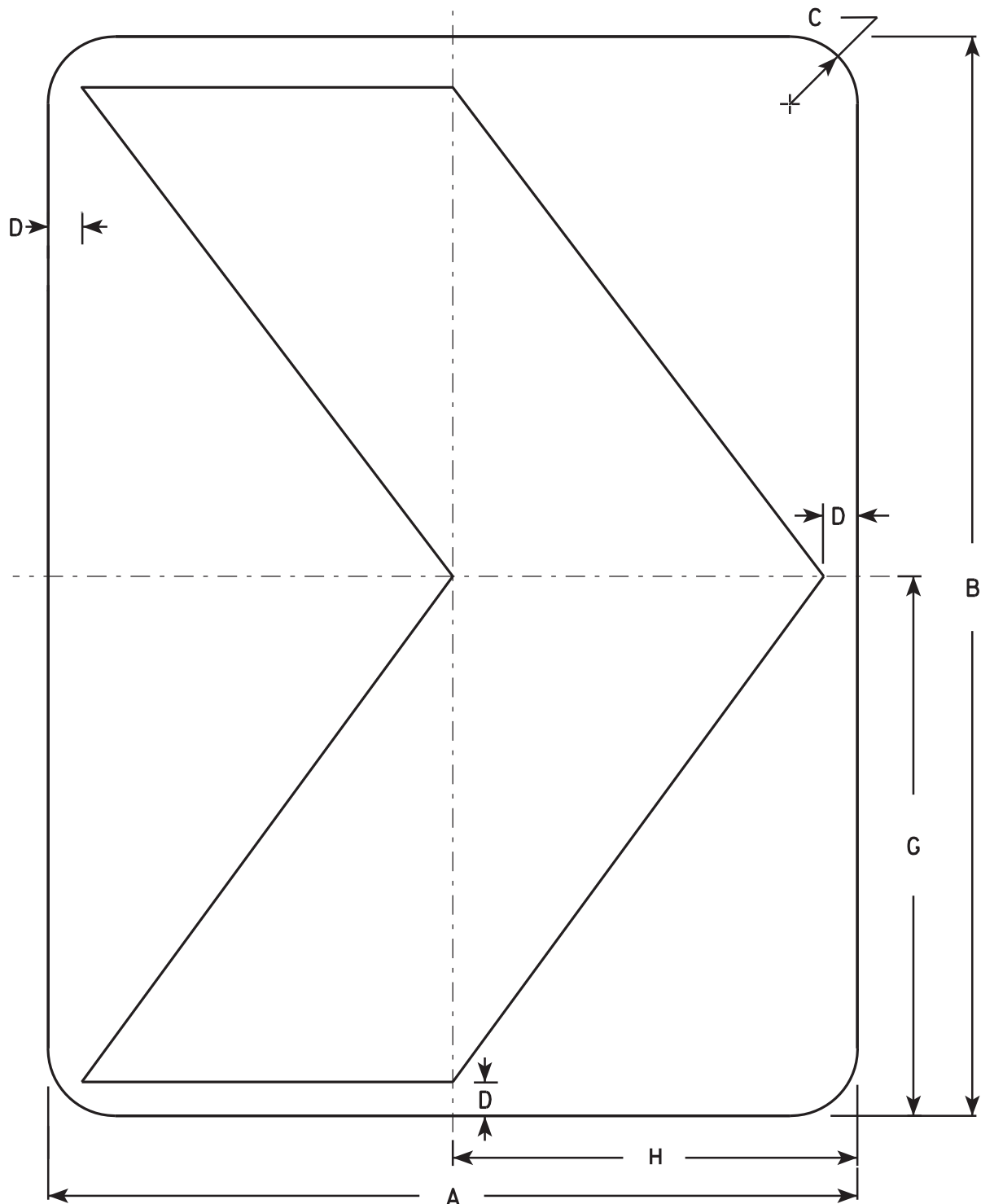
W1-6

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



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.

W1-8

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/2	1/2			9	6																			1.5
2S	18	24	1 1/2	3/4			12	9																			3.0
2M	18	24	1 1/2	3/4			12	9																			3.0
3	24	30	1 1/2	1			15	12																			5.0
4	30	36	1 7/8	1 1/4			18	15																			7.5
5	36	48	2 1/4	1 1/2			24	18																			12.0

STANDARD SIGN

W1-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-8.6

PROJECT NO:7068-01-60

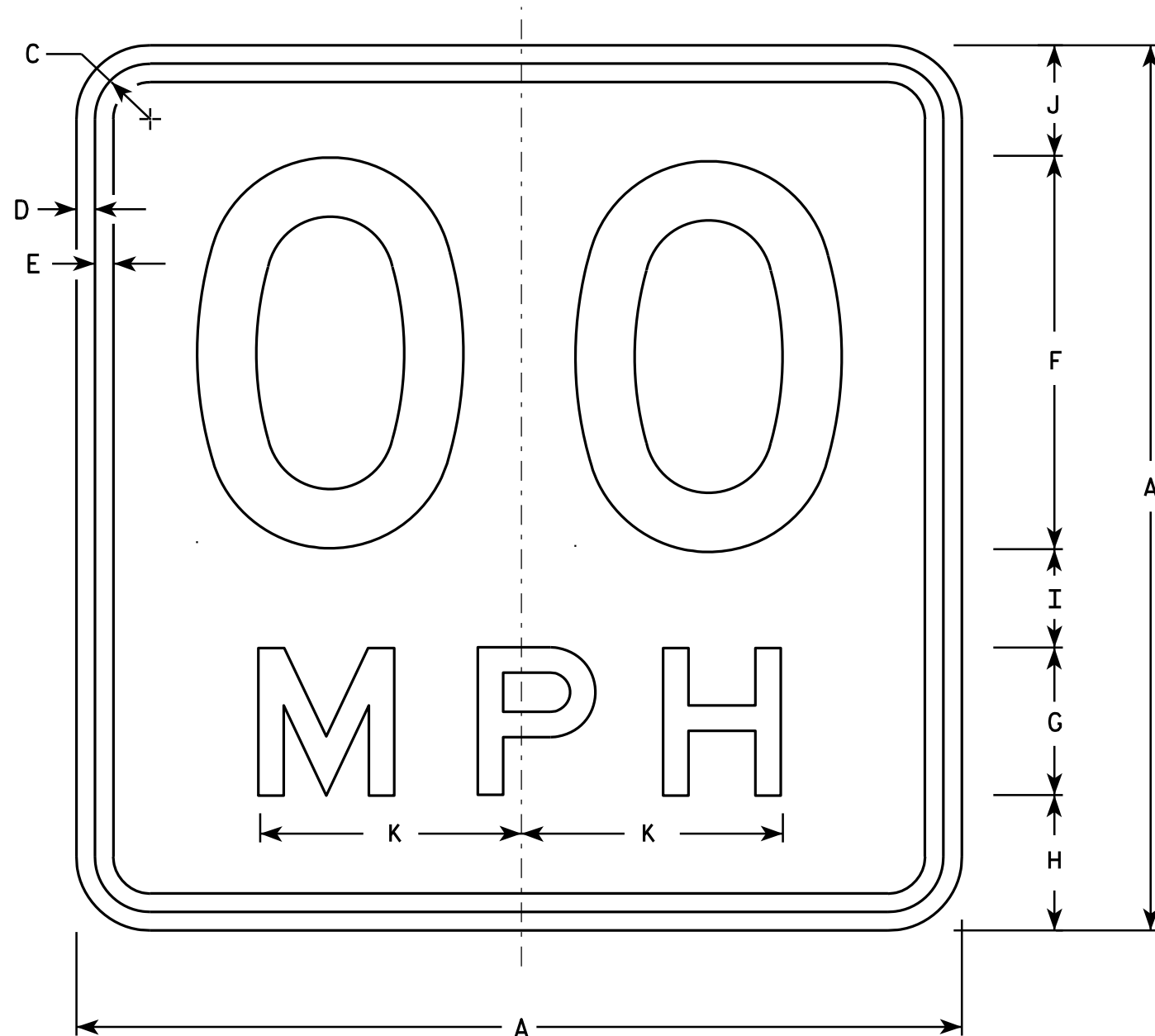
HWY: CTH T

COUNTY: LA CROSSE

SIGN PLATE

SHEET NO: 83

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 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

W13-1

- * For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area Sq. Ft.
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: 7068-01-60

HWY: CTH T

COUNTY: LA CROSSE

SIGN PLATE

SHEET NO: 84

E

STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut 1.00	Expanded Fill 1.25	Expanded Marsh Backfill 1.50	Expanded Rock 1.10	Expanded EBS Backfill 1.30	Reduced Marsh In Fill 0.60	Reduced EBS In Fill 0.80		
Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	Note 8																
108+00.00	10800	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
108+50.00	10850	50	0.38	0.00	2.57	0.00	0.00	0.00	0	0	2	0	0	0	0	3	0	0	0	0	0	-3	
109+00.00	10900	50	0.48	0.00	3.98	0.00	0.00	0.00	1	0	6	0	0	0	1	11	0	0	0	0	0	-9	
109+50.00	10950	50	0.59	0.00	4.68	0.00	0.00	0.00	1	0	8	0	0	0	2	21	0	0	0	0	0	-18	
109+96.88	10997	47	0.54	0.00	6.97	0.00	0.00	0.00	1	0	10	0	0	0	3	33	0	0	0	0	0	-30	
110+00.00	11000	3	0.53	0.00	8.13	0.00	0.00	0.00	0	0	1	0	0	0	3	34	0	0	0	0	0	-31	
110+21.88	11022	22	0.48	0.00	11.02	0.00	0.00	0.00	0	0	8	0	0	0	4	44	0	0	0	0	0	-40	
110+46.88	11047	25	0.42	0.00	8.93	0.00	0.00	0.00	0	0	9	0	0	0	4	56	0	0	0	0	0	-52	
110+50.00	11050	3	0.42	0.00	9.94	0.00	0.00	0.00	0	0	1	0	0	0	4	57	0	0	0	0	0	-53	
111+00.00	11100	50	0.28	0.00	25.36	0.00	0.00	0.00	1	0	33	0	0	0	5	98	0	0	0	0	0	-93	
111+50.00	11150	50	0.26	0.00	38.28	0.00	0.00	0.00	1	0	59	0	0	0	5	171	0	0	0	0	0	-166	
112+00.00	11200	50	0.26	0.00	49.83	0.00	0.00	0.00	0	0	82	0	0	0	6	273	0	0	0	0	0	-268	
112+50.00	11250	50	0.22	0.00	46.78	0.00	0.00	0.00	0	0	89	0	0	0	6	385	0	0	0	0	0	-379	
113+00.00	11300	50	0.35	0.00	45.87	0.00	0.00	0.00	1	0	86	0	0	0	7	492	0	0	0	0	0	-486	
113+50.00	11350	50	0.30	0.00	45.61	0.00	0.00	0.00	1	0	85	0	0	0	7	598	0	0	0	0	0	-591	
114+00.00	11400	50	0.36	0.00	40.79	0.00	0.00	0.00	1	0	80	0	0	0	8	698	0	0	0	0	0	-690	
114+50.00	11450	50	0.45	0.00	22.86	0.00	0.00	0.00	1	0	59	0	0	0	9	772	0	0	0	0	0	-763	
115+00.00	11500	50	0.63	0.00	23.03	0.00	0.00	0.00	1	0	42	0	0	0	10	825	0	0	0	0	0	-816	
115+50.00	11550	50	0.54	0.00	9.91	0.00	0.00	0.00	1	0	31	0	0	0	11	863	0	0	0	0	0	-853	
116+00.00	11600	50	0.40	0.00	3.40	0.00	0.00	0.00	1	0	12	0	0	0	12	879	0	0	0	0	0	-867	
116+03.13	11603	3	0.40	0.00	3.39	0.00	0.00	0.00	0	0	0	0	0	0	12	879	0	0	0	0	0	-868	
116+28.13	11628	25	0.41	0.00	5.55	0.00	0.00	0.00	0	0	4	0	0	0	12	884	0	0	0	0	0	-872	
116+50.00	11650	22	0.85	0.00	3.12	0.00	0.00	0.00	1	0	4	0	0	0	13	889	0	0	0	0	0	-876	
116+53.13	11653	3	0.83	0.00	3.34	0.00	0.00	0.00	0	0	0	0	0	0	13	889	0	0	0	0	0	-877	
117+00.00	11700	47	0.47	0.00	5.00	0.00	0.00	0.00	1	0	7	0	0	0	14	898	0	0	0	0	0	-884	
117+50.00	11750	50	0.45	0.00	3.28	0.00	0.00	0.00	1	0	8	0	0	0	15	908	0	0	0	0	0	-893	
118+00.00	11800	50	0.43	0.00	2.25	0.00	0.00	0.00	1	0	5	0	0	0	15	914	0	0	0	0	0	-899	
Totals									15	0	731	0	0	0									

STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Expanded Rock 1.10	Expanded EBS Backfill 1.30 Note 5	Reduced Marsh in Fill 0.60 Note 6	Reduced EBS In Fill 0.80 Note 7		
121+00.00	12100	0	0.50	0.00	4.42	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
121+18.75	12119	19	0.52	0.00	8.01	0.00	0.00	0.00	0	0	4	0	0	0	0	5	0	0	0	0	0		
121+43.75	12144	25	0.42	0.00	6.78	0.00	0.00	0.00	0	0	7	0	0	0	1	14	0	0	0	0	0		
121+50.00	12150	6	0.41	0.00	8.12	0.00	0.00	0.00	0	0	2	0	0	0	1	16	0	0	0	0	0		
121+68.75	12169	19	0.41	0.00	2.40	0.00	0.00	0.00	0	0	4	0	0	0	1	21	0	0	0	0	0		
122+00.00	12200	31	0.38	0.00	5.35	0.00	0.00	0.00	0	0	4	0	0	0	2	26	0	0	0	0	0		
122+50.00	12250	50	0.40	0.00	8.25	0.00	0.00	0.00	1	0	13	0	0	0	2	42	0	0	0	0	0		
123+00.00	12300	50	0.38	0.00	11.63	0.00	0.00	0.00	1	0	18	0	0	0	3	65	0	0	0	0	0		
123+50.00	12350	50	0.49	0.00	12.74	0.00	0.00	0.00	1	0	23	0	0	0	4	93	0	0	0	0	0		
124+00.00	12400	50	0.48	0.00	8.55	0.00	0.00	0.00	1	0	20	0	0	0	5	118	0	0	0	0	0		
124+50.00	12450	50	0.71	0.00	6.20	0.00	0.00	0.00	1	0	14	0	0	0	6	135	0	0	0	0	0		
124+75.00	12475	25	0.72	0.00	50.01	0.00	0.00	0.00	1	0	26	0	0	0	7	167	0	0	0	0	0		
125+00.00	12500	25	0.97	0.00	40.97	0.00	0.00	0.00	1	0	42	0	0	0	7	220	0	0	0	0	0		
125+50.00	12550	50	0.00	0.00	0.00	0.00	0.00	0.00	1	0	38	0	0	0	8	268	0	0	0	0	0		
			Totals						8	0	214	0	0	0									

STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Mass Ordinate							
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Expanded Fill	Expanded Marsh		Expanded EBS		Reduced Marsh			Reduced EBS						
																	Backfill	Expanded Rock	Backfill	Expanded Rock	Backfill	Expanded Rock		Backfill	Expanded Rock					
																										1.00	1.25	1.50	1.10	1.30
																			Note 1	Note 2	Note 3									Note 8
221+50.00	22150	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
222+00.00	22200	50	0.43	0.00	0.43	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
222+50.00	22250	50	0.54	0.00	3.11	0.00	0.00	0.00	1	0	3	0	0	0	1	5	0	0	0	0	0	0	0	-3						
223+00.00	22300	50	0.97	0.00	11.79	0.00	0.00	0.00	1	0	14	0	0	0	3	22	0	0	0	0	0	0	0	-19						
223+18.75	22319	19	0.88	0.00	17.79	0.00	0.00	0.00	1	0	10	0	0	0	3	35	0	0	0	0	0	0	0	-31						
223+43.75	22344	25	0.97	0.00	17.13	0.00	0.00	0.00	1	0	16	0	0	0	4	55	0	0	0	0	0	0	0	-51						
223+50.00	22350	6	0.96	0.00	17.89	0.00	0.00	0.00	0	0	4	0	0	0	4	60	0	0	0	0	0	0	0	-56						
223+68.75	22369	19	0.90	0.00	8.78	0.00	0.00	0.00	1	0	9	0	0	0	5	72	0	0	0	0	0	0	0	-66						
223+93.75	22394	25	1.47	0.00	9.43	0.00	0.00	0.00	1	0	8	0	0	0	6	82	0	0	0	0	0	0	0	-76						
224+00.00	22400	6	1.51	0.00	8.08	0.00	0.00	0.00	0	0	2	0	0	0	7	85	0	0	0	0	0	0	0	-78						
224+18.75	22419	19	1.82	0.00	6.33	0.00	0.00	0.00	1	0	5	0	0	0	8	91	0	0	0	0	0	0	0	-83						
224+43.75	22444	25	2.00	0.00	7.63	0.00	0.00	0.00	2	0	6	0	0	0	9	99	0	0	0	0	0	0	0	-90						
224+50.00	22450	6	1.91	0.00	7.34	0.00	0.00	0.00	0	0	2	0	0	0	10	101	0	0	0	0	0	0	0	-91						
225+00.00	22500	50	1.21	0.00	8.18	0.00	0.00	0.00	3	0	14	0	0	0	13	119	0	0	0	0	0	0	0	-106						
225+50.00	22550	50	1.68	0.00	5.55	0.00	0.00	0.00	3	0	13	0	0	0	15	135	0	0	0	0	0	0	0	-120						
226+00.00	22600	50	1.53	0.00	4.50	0.00	0.00	0.00	3	0	9	0	0	0	18	147	0	0	0	0	0	0	0	-128						
226+50.00	22650	50	0.78	0.00	9.06	0.00	0.00	0.00	2	0	13	0	0	0	21	162	0	0	0	0	0	0	0	-142						
226+87.50	22688	38	1.53	0.00	6.52	0.00	0.00	0.00	2	0	11	0	0	0	22	176	0	0	0	0	0	0	0	-154						
227+00.00	22700	13	0.99	0.00	6.58	0.00	0.00	0.00	1	0	3	0	0	0	23	180	0	0	0	0	0	0	0	-157						
227+12.50	22713	13	1.02	0.00	7.98	0.00	0.00	0.00	0	0	3	0	0	0	23	184	0	0	0	0	0	0	0	-161						
227+37.50	22738	25	1.64	0.00	32.65	0.00	0.00	0.00	1	0	19	0	0	0	24	207	0	0	0	0	0	0	0	-183						
227+50.00	22750	13	1.46	0.00	25.11	0.00	0.00	0.00	1	0	13	0	0	0	25	224	0	0	0	0	0	0	0	-199						
227+75.00	22775	25	0.87	0.00	16.85	0.00	0.00	0.00	1	0	19	0	0	0	26	248	0	0	0	0	0	0	0	-222						
228+00.00	22800	25	1.05	0.00	18.66	0.00	0.00	0.00	1	0	16	0	0	0	27	269	0	0	0	0	0	0	0	-242						
228+25.00	22825	25	1.07	0.00	42.11	0.00	0.00	0.00	1	0	28	0	0	0	28	304	0	0	0	0	0	0	0	-276						
228+50.00	22850	25	1.02	0.00	28.94	0.00	0.00	0.00	1	0	33	0	0	0	29	345	0	0	0	0	0	0	0	-316						
229+00.00	22900	50	1.39	0.00	7.55	0.00	0.00	0.00	2	0	34	0	0	0	31	387	0	0	0	0	0	0	0	-356						
229+50.00	22950	50	0.00	0.00	0.00	0.00	0.00	0.00	1	0	7	0	0	0	33	396	0	0	0	0	0	0	0	-364						
Totals									33	0	317	0	0	0																

STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Expanded Rock 1.10	Expanded EBS Backfill 1.30 Note 5	Reduced Marsh in Fill 0.60 Note 6	Reduced EBS In Fill 0.80 Note 7		
231+00.00	23100	0	1.43	0.00	0.03	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
231+50.00	23150	50	2.22	0.00	0.00	0.00	0.00	0.00	3	0	0	0	0	0	3	0	0	0	0	0	0		
232+00.00	23200	50	1.85	0.00	0.84	0.00	0.00	0.00	4	0	1	0	0	0	7	1	0	0	0	0	0		
232+50.00	23250	50	1.58	0.00	0.59	0.00	0.00	0.00	3	0	1	0	0	0	10	3	0	0	0	0	0		
233+00.00	23300	50	1.27	0.00	0.65	0.00	0.00	0.00	3	0	1	0	0	0	13	4	0	0	0	0	0		
233+50.00	23350	50	1.20	0.00	0.26	0.00	0.00	0.00	2	0	1	0	0	0	15	5	0	0	0	0	0		
234+00.00	23400	50	0.65	0.00	0.43	0.00	0.00	0.00	2	0	1	0	0	0	17	6	0	0	0	0	0		
			Totals						17	0	5	0	0	0									

STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut 1.00	Expanded Fill 1.25	Expanded Marsh		Expanded EBS		Reduced Marsh in Fill 0.60	Reduced EBS In Fill 0.80	
																	Backfill 1.50	Expanded Rock 1.10	Backfill 1.30				
																				Note 4			
Note 1	Note 2	Note 3	Note 1	Note 4	Note 5	Note 6	Note 7	Note 8															
318+00.00	31800	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
318+50.00	31850	50	0.45	0.00	2.44	0.00	0.00	0	0	2	0	0	0	0	3	0	0	0	0	0	0	-2	
319+00.00	31900	50	0.74	0.00	2.80	0.00	0.00	1	0	5	0	0	0	2	9	0	0	0	0	0	0	-7	
319+50.00	31950	50	0.74	0.00	2.16	0.00	0.00	1	0	5	0	0	0	3	15	0	0	0	0	0	0	-12	
319+93.87	31994	44	0.61	0.00	3.79	0.00	0.00	1	0	5	0	0	0	4	21	0	0	0	0	0	0	-17	
320+00.00	32000	6	0.59	0.00	4.60	0.00	0.00	0	0	1	0	0	0	4	22	0	0	0	0	0	0	-18	
320+18.88	32019	19	0.13	0.00	5.71	0.00	0.00	0	0	4	0	0	0	4	26	0	0	0	0	0	0	-22	
320+43.87	32044	25	0.22	0.00	4.71	0.00	0.00	0	0	5	0	0	0	5	32	0	0	0	0	0	0	-28	
320+50.00	32050	6	0.24	0.00	4.93	0.00	0.00	0	0	1	0	0	0	5	34	0	0	0	0	0	0	-29	
321+00.00	32100	50	0.41	0.00	11.74	0.00	0.00	1	0	15	0	0	0	5	53	0	0	0	0	0	0	-48	
321+50.00	32150	50	0.59	0.00	11.78	0.00	0.00	1	0	22	0	0	0	6	80	0	0	0	0	0	0	-74	
322+00.00	32200	50	0.64	0.00	18.01	0.00	0.00	1	0	28	0	0	0	7	115	0	0	0	0	0	0	-108	
322+50.00	32250	50	0.74	0.00	12.64	0.00	0.00	1	0	28	0	0	0	9	150	0	0	0	0	0	0	-142	
323+00.00	32300	50	0.57	0.00	19.71	0.00	0.00	1	0	30	0	0	0	10	188	0	0	0	0	0	0	-178	
323+50.00	32350	50	0.37	0.00	23.93	0.00	0.00	1	0	40	0	0	0	11	238	0	0	0	0	0	0	-228	
324+00.00	32400	50	0.39	0.00	27.92	0.00	0.00	1	0	48	0	0	0	11	298	0	0	0	0	0	0	-287	
324+50.00	32450	50	0.32	0.00	36.43	0.00	0.00	1	0	60	0	0	0	12	373	0	0	0	0	0	0	-361	
325+00.00	32500	50	0.37	0.00	25.31	0.00	0.00	1	0	57	0	0	0	13	444	0	0	0	0	0	0	-432	
325+14.30	32514	14	0.37	0.00	6.19	0.00	0.00	0	0	8	0	0	0	13	455	0	0	0	0	0	0	-442	
325+50.00	32550	36	0.42	0.00	31.63	0.00	0.00	1	0	25	0	0	0	13	486	0	0	0	0	0	0	-472	
325+81.37	32581	31	0.70	0.00	6.09	0.00	0.00	1	0	22	0	0	0	14	513	0	0	0	0	0	0	-499	
326+00.00	32600	19	0.00	0.00	0.00	0.00	0.00	0	0	2	0	0	0	14	516	0	0	0	0	0	0	-502	
326+29.69	32630	30	0.66	0.00	18.59	0.00	0.00	0	0	10	0	0	0	15	529	0	0	0	0	0	0	-514	
326+50.00	32650	20	0.47	0.00	23.74	0.00	0.00	0	0	16	0	0	0	15	549	0	0	0	0	0	0	-533	
327+00.00	32700	50	0.25	0.00	33.35	0.00	0.00	1	0	53	0	0	0	16	615	0	0	0	0	0	0	-599	
327+50.00	32750	50	0.26	0.00	28.17	0.00	0.00	0	0	57	0	0	0	16	686	0	0	0	0	0	0	-670	
328+00.00	32800	50	0.36	0.00	19.39	0.00	0.00	1	0	44	0	0	0	17	741	0	0	0	0	0	0	-724	
328+50.00	32850	50	0.37	0.00	21.26	0.00	0.00	1	0	38	0	0	0	17	788	0	0	0	0	0	0	-770	
329+00.00	32900	50	0.36	0.00	19.44	0.00	0.00	1	0	38	0	0	0	18	835	0	0	0	0	0	0	-817	
329+50.00	32950	50	0.45	0.00	11.22	0.00	0.00	1	0	28	0	0	0	19	870	0	0	0	0	0	0	-852	
330+00.00	33000	50	0.63	0.00	1.88	0.00	0.00	1	0	12	0	0	0	20	886	0	0	0	0	0	0	-866	
330+04.69	33005	5	0.67	0.00	1.56	0.00	0.00	0	0	0	0	0	0	20	886	0	0	0	0	0	0	-866	
330+29.67	33030	25	0.92	0.00	2.52	0.00	0.00	1	0	2	0	0	0	21	888	0	0	0	0	0	0	-868	
330+50.00	33050	20	0.98	0.00	3.68	0.00	0.00	1	0	2	0	0	0	21	891	0	0	0	0	0	0	-870	
330+54.69	33055	5	0.96	0.00	3.66	0.00	0.00	0	0	1	0	0	0	22	892	0	0	0	0	0	0	-871	
331+00.00	33100	45	0.57	0.00	1.56	0.00	0.00	1	0	4	0	0	0	23	898	0	0	0	0	0	0	-875	
331+50.00	33150	50	0.00	0.00	0.00	0.00	0.00	1	0	1	0	0	0	23	899	0	0	0	0	0	0	-876	
			Totals						23	0	719	0	0	0									

STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut 1.00	Expanded Fill 1.25	Expanded Marsh Backfill 1.50	Expanded Rock 1.10	Expanded EBS Backfill 1.30	Reduced Marsh in Fill 0.60	Reduced EBS In Fill 0.80		
Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	Note 8																
405+50.00	40550	0	0.44	0.00	0.44	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
406+00.00	40600	50	0.63	0.00	1.49	0.00	0.00	0.00	1	0	2	0	0	0	1	2	0	0	0	0	0	-1	
406+19.46	40619	19	0.84	0.00	2.81	0.00	0.00	0.00	1	0	2	0	0	0	2	4	0	0	0	0	0	-3	
406+44.46	40644	25	0.51	0.00	6.02	0.00	0.00	0.00	1	0	4	0	0	0	2	9	0	0	0	0	0	-7	
406+50.00	46050	5406	0.45	0.00	6.27	0.00	0.00	0.00	96	0	1230	0	0	0	98	1547	0	0	0	0	0	-1449	
406+72.58	40673	-5377	0.39	0.00	5.50	0.00	0.00	0.00	-84	0	-1172	0	0	0	15	82	0	0	0	0	0	-67	
407+00.00	40700	27	0.23	0.00	11.66	0.00	0.00	0.00	0	0	9	0	0	0	15	93	0	0	0	0	0	-78	
407+50.00	40750	50	0.17	0.00	22.13	0.00	0.00	0.00	0	0	31	0	0	0	15	132	0	0	0	0	0	-117	
407+63.68	40764	14	0.16	0.00	31.96	0.00	0.00	0.00	0	0	14	0	0	0	15	149	0	0	0	0	0	-134	
407+88.68	40789	25	0.14	0.00	27.65	0.00	0.00	0.00	0	0	28	0	0	0	16	184	0	0	0	0	0	-168	
408+00.00	40800	11	0.71	0.00	30.70	0.00	0.00	0.00	0	0	12	0	0	0	16	199	0	0	0	0	0	-183	
408+13.68	40814	14	0.76	0.00	39.78	0.00	0.00	0.00	0	0	18	0	0	0	16	221	0	0	0	0	0	-205	
408+50.00	40850	36	0.74	0.00	61.64	0.00	0.00	0.00	1	0	68	0	0	0	17	307	0	0	0	0	0	-289	
409+00.00	40900	50	0.29	0.00	29.69	0.00	0.00	0.00	1	0	85	0	0	0	18	412	0	0	0	0	0	-394	
409+32.00	40932	32	0.00	0.00	0.00	0.00	0.00	0.00	0	0	18	0	0	0	18	434	0	0	0	0	0	-416	
409+50.00	40950	18	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	18	434	0	0	0	0	0	-416	
410+00.00	41000	50	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	18	434	0	0	0	0	0	-416	
410+20.00	41020	20	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	18	434	0	0	0	0	0	-416	
410+50.00	41050	30	0.33	0.00	31.19	0.00	0.00	0.00	0	0	17	0	0	0	18	456	0	0	0	0	0	-437	
411+00.00	41100	50	0.00	0.00	0.00	0.00	0.00	0.00	0	0	29	0	0	0	19	492	0	0	0	0	0	-473	
411+01.26	41101	1	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	19	492	0	0	0	0	0	-473	
411+26.26	41126	25	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	19	492	0	0	0	0	0	-473	
411+50.00	41150	24	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	19	492	0	0	0	0	0	-473	
411+51.26	41151	1	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	19	492	0	0	0	0	0	-473	
411+70.97	41171	20	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	19	492	0	0	0	0	0	-473	
411+95.97	41196	25	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	19	492	0	0	0	0	0	-473	
412+00.00	41200	4	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	19	492	0	0	0	0	0	-473	
412+20.97	41221	21	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	19	492	0	0	0	0	0	-473	
412+50.00	41250	29	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	19	492	0	0	0	0	0	-473	
			Totals						19	0	394	0	0	0									

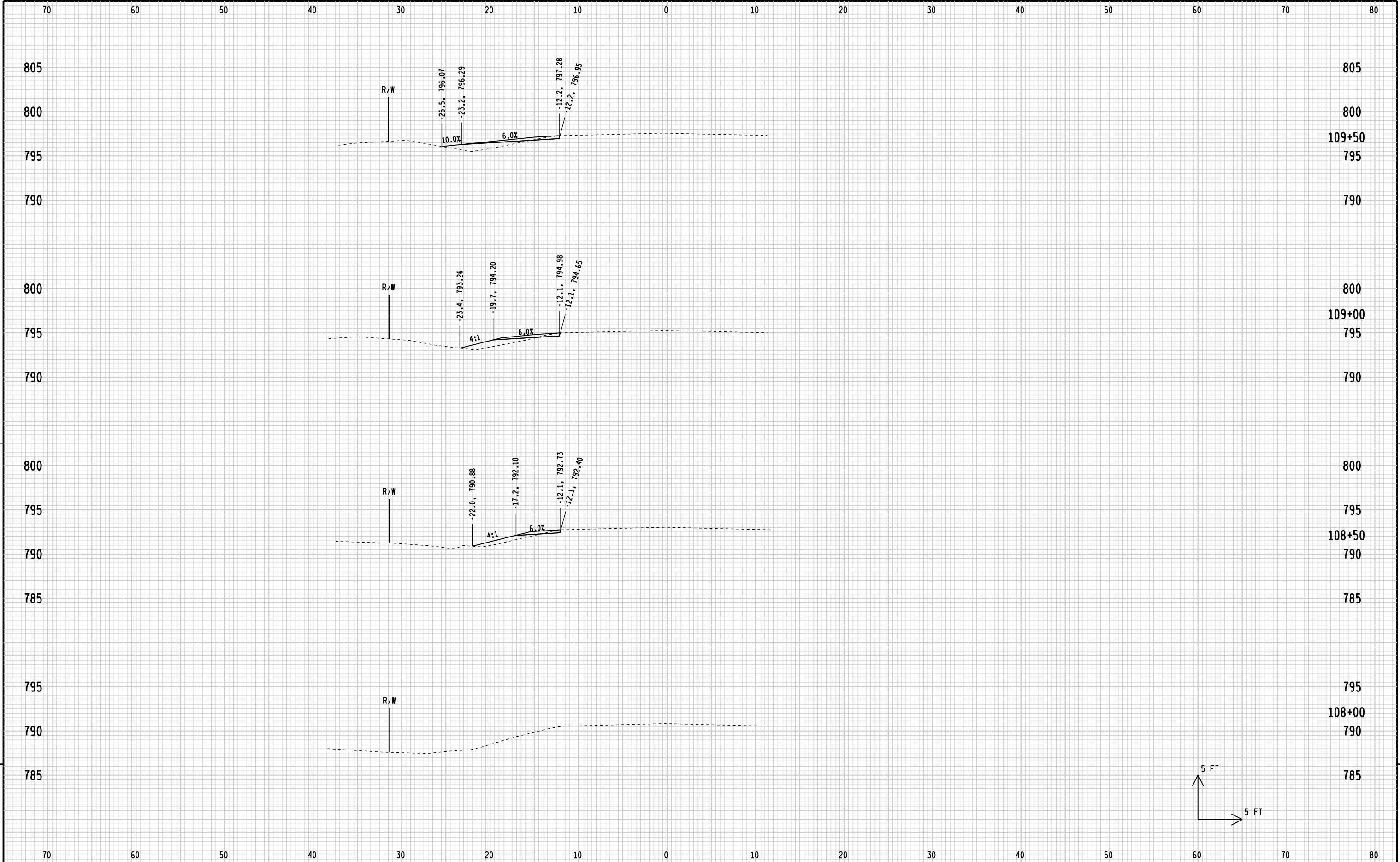
Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Expanded Rock 1.10	Expanded EBS Backfill 1.30 Note 5	Reduced Marsh in Fill 0.60 Note 6	Reduced EBS In Fill 0.80 Note 7		
44300	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
44350	50	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
44357	7	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
44382	25	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
44400	18	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
44407	7	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
44445	38	0.48	0.00	1.48	0.00	0.00	0.00	0	0	1	0	0	0	0	1	0	0	0	0	0		
44450	5	0.55	0.00	4.71	0.00	0.00	0.00	0	0	1	0	0	0	0	2	0	0	0	0	0		
44500	50	1.08	0.00	58.09	0.00	0.00	0.00	2	0	58	0	0	0	2	75	0	0	0	0	0		
44507	7	0.00	0.00	0.00	0.00	0.00	0.00	0	0	8	0	0	0	2	84	0	0	0	0	0		
44585	78	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	2	84	0	0	0	0	0		
44600	15	0.83	0.00	47.78	0.00	0.00	0.00	0	0	13	0	0	0	2	101	0	0	0	0	0		
44648	48	1.62	0.00	11.31	0.00	0.00	0.00	2	0	52	0	0	0	4	166	0	0	0	0	0		
44650	2	1.69	0.00	11.06	0.00	0.00	0.00	0	0	1	0	0	0	5	167	0	0	0	0	0		
44673	23	1.18	0.00	8.77	0.00	0.00	0.00	1	0	8	0	0	0	6	177	0	0	0	0	0		
44698	25	0.43	0.00	10.43	0.00	0.00	0.00	1	0	9	0	0	0	7	189	0	0	0	0	0		
44700	2	0.30	0.00	10.54	0.00	0.00	0.00	0	0	1	0	0	0	7	190	0	0	0	0	0		
44750	50	0.32	0.00	5.96	0.00	0.00	0.00	1	0	15	0	0	0	7	209	0	0	0	0	0		
44800	50	0.00	0.00	0.00	0.00	0.00	0.00	0	0	6	0	0	0	7	216	0	0	0	0	0		
Totals								7	0	173	0	0	0									

STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)										Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Expanded Rock 1.10	Expanded EBS Backfill 1.30 Note 5	Reduced Marsh in Fill 0.60 Note 6	Reduced EBS In Fill 0.80 Note 7				
458+50.00	45850	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
459+00.00	45900	50	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
459+11.33	45911	11	0.98	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
459+50.00	45950	39	0.50	0.00	0.47	0.00	0.00	0.00	1	0	0	0	0	0	1	0	0	0	0	0	0				
460+00.00	46000	50	0.22	0.00	1.75	0.00	0.00	0.00	1	0	2	0	0	0	2	3	0	0	0	0	0				
460+50.00	46050	50	1.31	0.00	4.90	0.00	0.00	0.00	1	0	6	0	0	0	3	11	0	0	0	0	0				
461+00.00	46100	50	1.62	0.00	6.46	0.00	0.00	0.00	3	0	11	0	0	0	6	24	0	0	0	0	0				
461+50.00	46150	50	1.84	0.00	0.51	0.00	0.00	0.00	3	0	6	0	0	0	9	32	0	0	0	0	0				
462+00.00	46200	50	1.24	0.00	0.18	0.00	0.00	0.00	3	0	1	0	0	0	12	33	0	0	0	0	0				
462+50.00	46250	50	1.00	0.00	4.09	0.00	0.00	0.00	2	0	4	0	0	0	14	38	0	0	0	0	0				
462+98.83	46299	49	0.76	0.00	1.99	0.00	0.00	0.00	2	0	5	0	0	0	16	45	0	0	0	0	0				
463+00.00	46300	1	0.75	0.00	2.00	0.00	0.00	0.00	0	0	0	0	0	0	16	45	0	0	0	0	0				
463+23.83	46324	24	0.71	0.00	3.98	0.00	0.00	0.00	1	0	3	0	0	0	16	48	0	0	0	0	0				
463+48.83	46349	25	0.73	0.00	5.72	0.00	0.00	0.00	1	0	4	0	0	0	17	54	0	0	0	0	0				
463+50.00	46350	1	0.73	0.00	5.51	0.00	0.00	0.00	0	0	0	0	0	0	17	54	0	0	0	0	0				
464+00.00	46400	50	1.04	0.00	5.65	0.00	0.00	0.00	2	0	10	0	0	0	19	67	0	0	0	0	0				
			Totals						19	0	53	0	0	0											

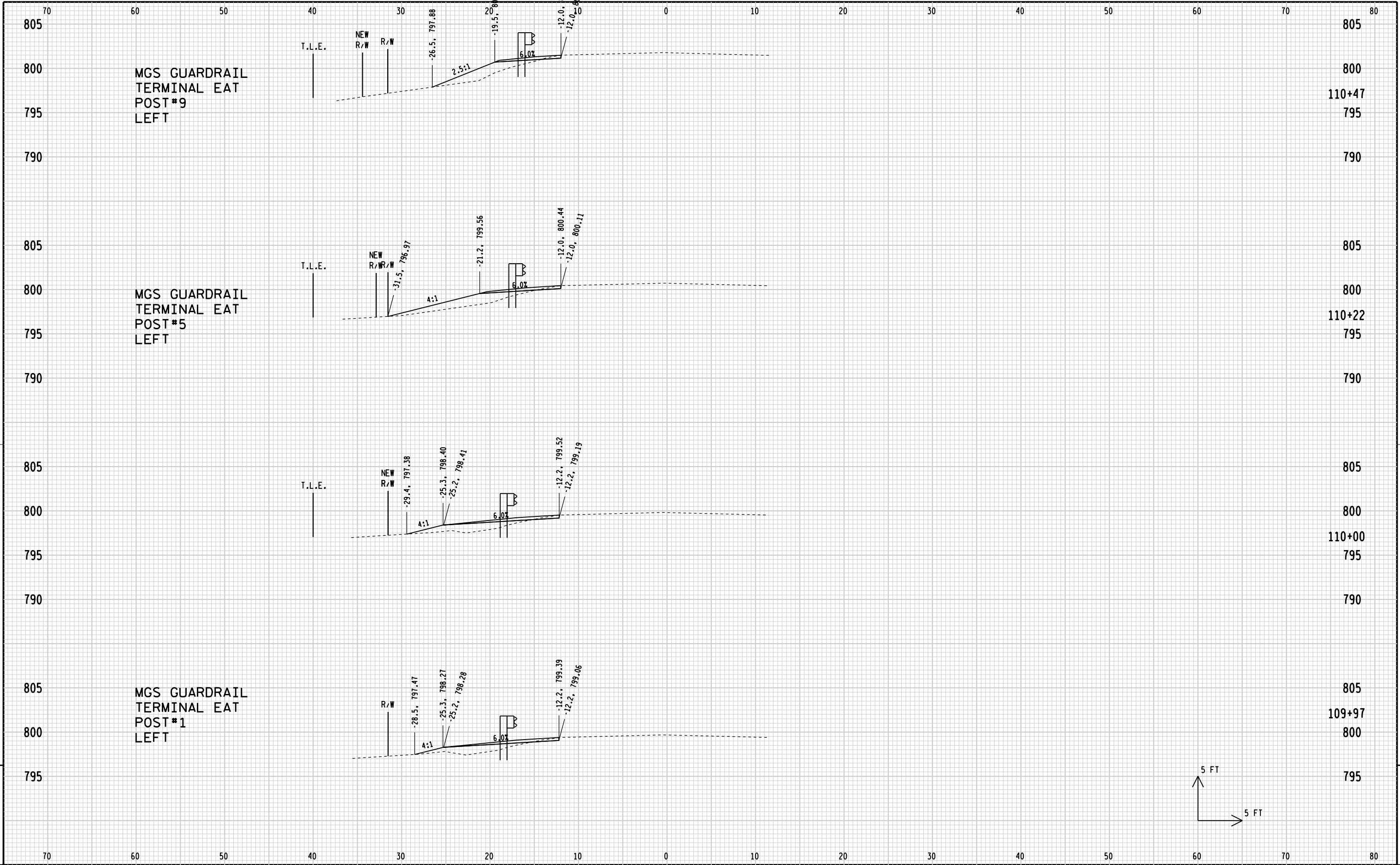
STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Expanded Rock 1.10	Expanded EBS Backfill 1.30 Note 5	Reduced Marsh in Fill 0.60 Note 6	Reduced EBS In Fill 0.80 Note 7		
503+50.00	50350	0	1.09	0.00	5.40	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
504+00.00	50400	50	3.94	0.00	0.00	0.00	0.00	0.00	5	0	5	0	0	0	5	6	0	0	0	0	0		
504+46.72	50447	47	2.26	0.00	5.27	0.00	0.00	0.00	5	0	5	0	0	0	10	12	0	0	0	0	0		
504+50.00	50450	3	1.88	0.00	5.63	0.00	0.00	0.00	0	0	1	0	0	0	10	13	0	0	0	0	0		
504+71.73	50472	22	0.52	0.00	5.32	0.00	0.00	0.00	1	0	4	0	0	0	11	18	0	0	0	0	0		
504+96.72	50497	25	0.44	0.00	1.50	0.00	0.00	0.00	0	0	3	0	0	0	12	22	0	0	0	0	0		
505+00.00	50500	3	0.43	0.00	1.50	0.00	0.00	0.00	0	0	0	0	0	0	12	22	0	0	0	0	0		
505+50.00	50550	50	0.40	0.00	2.13	0.00	0.00	0.00	1	0	3	0	0	0	13	27	0	0	0	0	0		
506+00.00	50600	50	0.42	0.00	1.62	0.00	0.00	0.00	1	0	3	0	0	0	13	31	0	0	0	0	0		
506+50.00	50650	50	0.51	0.00	5.03	0.00	0.00	0.00	1	0	6	0	0	0	14	39	0	0	0	0	0		
507+00.00	50700	50	0.76	0.00	0.84	0.00	0.00	0.00	1	0	5	0	0	0	15	45	0	0	0	0	0		
507+50.00	50750	50	1.10	0.00	0.07	0.00	0.00	0.00	2	0	1	0	0	0	17	47	0	0	0	0	0		
508+00.00	50800	50	1.56	0.00	0.80	0.00	0.00	0.00	2	0	1	0	0	0	19	48	0	0	0	0	0		
508+50.00	50850	50	0.55	0.00	1.41	0.00	0.00	0.00	2	0	2	0	0	0	21	50	0	0	0	0	0		
509+00.00	50900	50	1.93	0.00	0.36	0.00	0.00	0.00	2	0	2	0	0	0	24	52	0	0	0	0	0		
509+50.00	50950	50	0.86	0.00	0.04	0.00	0.00	0.00	3	0	0	0	0	0	26	53	0	0	0	0	0		
509+77.96	50978	28	1.07	0.00	0.04	0.00	0.00	0.00	1	0	0	0	0	0	27	53	0	0	0	0	0		
510+00.00	51000	22	1.28	0.00	0.00	0.00	0.00	0.00	1	0	0	0	0	0	28	53	0	0	0	0	0		
510+02.98	51003	3	1.47	0.00	0.01	0.00	0.00	0.00	0	0	0	0	0	0	28	53	0	0	0	0	0		
510+27.96	51028	25	4.07	0.00	0.00	0.00	0.00	0.00	3	0	0	0	0	0	31	53	0	0	0	0	0		
510+50.00	51050	22	4.68	0.00	0.00	0.00	0.00	0.00	4	0	0	0	0	0	35	53	0	0	0	0	0		
510+71.68	51072	22	0.76	0.00	0.77	0.00	0.00	0.00	2	0	0	0	0	0	37	53	0	0	0	0	0		
510+96.66	51097	25	0.70	0.00	0.85	0.00	0.00	0.00	1	0	1	0	0	0	37	54	0	0	0	0	0		
511+00.00	51100	3	0.72	0.00	0.73	0.00	0.00	0.00	0	0	0	0	0	0	38	54	0	0	0	0	0		
511+21.68	51122	22	0.77	0.00	0.34	0.00	0.00	0.00	1	0	0	0	0	0	38	55	0	0	0	0	0		
511+50.00	51150	28	0.54	0.00	0.71	0.00	0.00	0.00	1	0	1	0	0	0	39	55	0	0	0	0	0		
512+00.00	51200	50	0.39	0.00	0.86	0.00	0.00	0.00	1	0	1	0	0	0	40	57	0	0	0	0	0		
512+50.00	51250	50	0.44	0.00	2.81	0.00	0.00	0.00	1	0	3	0	0	0	40	61	0	0	0	0	0		
513+00.00	51300	50	1.51	0.00	1.10	0.00	0.00	0.00	2	0	4	0	0	0	42	66	0	0	0	0	0		
513+50.00	51350	50	1.31	0.00	0.63	0.00	0.00	0.00	3	0	2	0	0	0	45	68	0	0	0	0	0		
513+52.92	51353	3	1.32	0.00	0.53	0.00	0.00	0.00	0	0	0	0	0	0	45	68	0	0	0	0	0		
513+77.92	51378	25	1.29	0.00	0.91	0.00	0.00	0.00	1	0	1	0	0	0	46	69	0	0	0	0	0		
514+00.00	51400	22	1.27	0.00	2.16	0.00	0.00	0.00	1	0	1	0	0	0	47	70	0	0	0	0	0		
514+02.92	51403	3	1.27	0.00	2.31	0.00	0.00	0.00	0	0	0	0	0	0	47	71	0	0	0	0	0		
514+50.00	51450	47	1.22	0.00	0.00	0.00	0.00	0.00	2	0	2	0	0	0	50	73	0	0	0	0	0		
515+00.00	51500	50	0.80	0.00	0.64	0.00	0.00	0.00	2	0	1	0	0	0	51	74	0	0	0	0	0		
515+50.00	51550	50	0.35	0.00	0.09	0.00	0.00	0.00	1	0	1	0	0	0	52	75	0	0	0	0	0		
516+00.00	51600	50	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	53	75	0	0	0	0	0		
			Totals						53	0	60	0	0	0									

STATION	Real Station	Distance	AREA (SF)							Incremental Vol (CY) (Unadjusted)							Cumulative Vol (CY)										Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Expanded Marsh		Expanded Rock		Expanded EBS		Reduced Marsh		Reduced EBS				
															Backfill	Expanded Fill	Backfill	Expanded Rock	Backfill	In Fill	In Fill						
																						1.00	1.25	1.50	1.10	1.30	
Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	Note 8																				
533+00.00	53300	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
533+50.00	53350	50	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
534+00.00	53400	50	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
534+11.72	53412	12	2.91	0.00	0.00	0.00	0.00	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1				
534+50.00	53450	38	1.16	0.00	3.58	0.00	0.00	3	0	3	0	0	0	4	3	0	0	0	0	0	0	0	0				
535+00.00	53500	50	1.06	0.00	2.03	0.00	0.00	2	0	5	0	0	0	6	10	0	0	0	0	0	0	0	-4				
535+50.00	53550	50	0.92	0.00	0.29	0.00	0.00	2	0	2	0	0	0	7	12	0	0	0	0	0	0	0	-5				
536+00.00	53600	50	1.20	0.00	0.38	0.00	0.00	2	0	1	0	0	0	9	13	0	0	0	0	0	0	0	-4				
536+50.00	53650	50	1.06	0.00	0.80	0.00	0.00	2	0	1	0	0	0	11	14	0	0	0	0	0	0	0	-3				
537+00.00	53700	50	0.73	0.00	2.43	0.00	0.00	2	0	3	0	0	0	13	18	0	0	0	0	0	0	0	-5				
537+50.00	53750	50	0.66	0.00	1.80	0.00	0.00	1	0	4	0	0	0	14	23	0	0	0	0	0	0	0	-9				
538+00.00	53800	50	0.55	0.00	4.71	0.00	0.00	1	0	6	0	0	0	16	31	0	0	0	0	0	0	0	-15				
538+50.00	53850	50	0.37	0.00	4.19	0.00	0.00	1	0	8	0	0	0	16	41	0	0	0	0	0	0	0	-25				
539+00.00	53900	50	0.51	0.00	2.75	0.00	0.00	1	0	6	0	0	0	17	49	0	0	0	0	0	0	0	-32				
539+50.00	53950	50	0.63	0.00	1.14	0.00	0.00	1	0	4	0	0	0	18	53	0	0	0	0	0	0	0	-35				
540+00.00	54000	50	0.72	0.00	1.00	0.00	0.00	1	0	2	0	0	0	19	56	0	0	0	0	0	0	0	-36				
540+50.00	54050	50	0.58	0.00	9.59	0.00	0.00	1	0	10	0	0	0	21	68	0	0	0	0	0	0	0	-48				
541+00.00	54100	50	0.75	0.00	26.51	0.00	0.00	1	0	33	0	0	0	22	110	0	0	0	0	0	0	0	-88				
541+50.00	54150	50	0.87	0.00	22.65	0.00	0.00	2	0	46	0	0	0	23	167	0	0	0	0	0	0	0	-143				
542+00.00	54200	50	1.02	0.00	6.70	0.00	0.00	2	0	27	0	0	0	25	201	0	0	0	0	0	0	0	-176				
542+50.00	54250	50	1.11	0.00	8.79	0.00	0.00	2	0	14	0	0	0	27	219	0	0	0	0	0	0	0	-192				
543+00.00	54300	50	1.05	0.00	9.33	0.00	0.00	2	0	17	0	0	0	29	240	0	0	0	0	0	0	0	-211				
543+11.72	54312	12	1.03	0.00	9.11	0.00	0.00	0	0	4	0	0	0	30	245	0	0	0	0	0	0	0	-215				
543+36.73	54337	25	0.92	0.00	17.53	0.00	0.00	1	0	12	0	0	0	31	260	0	0	0	0	0	0	0	-230				
543+50.00	54350	13	0.83	0.00	19.83	0.00	0.00	0	0	9	0	0	0	31	272	0	0	0	0	0	0	0	-241				
543+61.72	54362	12	0.75	0.00	21.16	0.00	0.00	0	0	9	0	0	0	31	283	0	0	0	0	0	0	0	-252				
544+00.00	54400	38	0.75	0.00	14.94	0.00	0.00	1	0	26	0	0	0	32	315	0	0	0	0	0	0	0	-282				
544+50.00	54450	50	0.44	0.00	5.60	0.00	0.00	1	0	19	0	0	0	33	339	0	0	0	0	0	0	0	-305				
545+00.00	54500	50	0.61	0.00	5.85	0.00	0.00	1	0	11	0	0	0	34	352	0	0	0	0	0	0	0	-317				
545+50.00	54550	50	0.50	0.00	5.40	0.00	0.00	1	0	10	0	0	0	35	365	0	0	0	0	0	0	0	-329				
546+00.00	54600	50	0.59	0.00	5.96	0.00	0.00	1	0	11	0	0	0	36	378	0	0	0	0	0	0	0	-342				
546+50.00	54650	50	0.00	0.00	0.00	0.00	0.00	1	0	6	0	0	0	37	385	0	0	0	0	0	0	0	-348				
547+00.00	54700	50	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	37	385	0	0	0	0	0	0	0	-348				
			Totals							37	0	308	0	0	0												

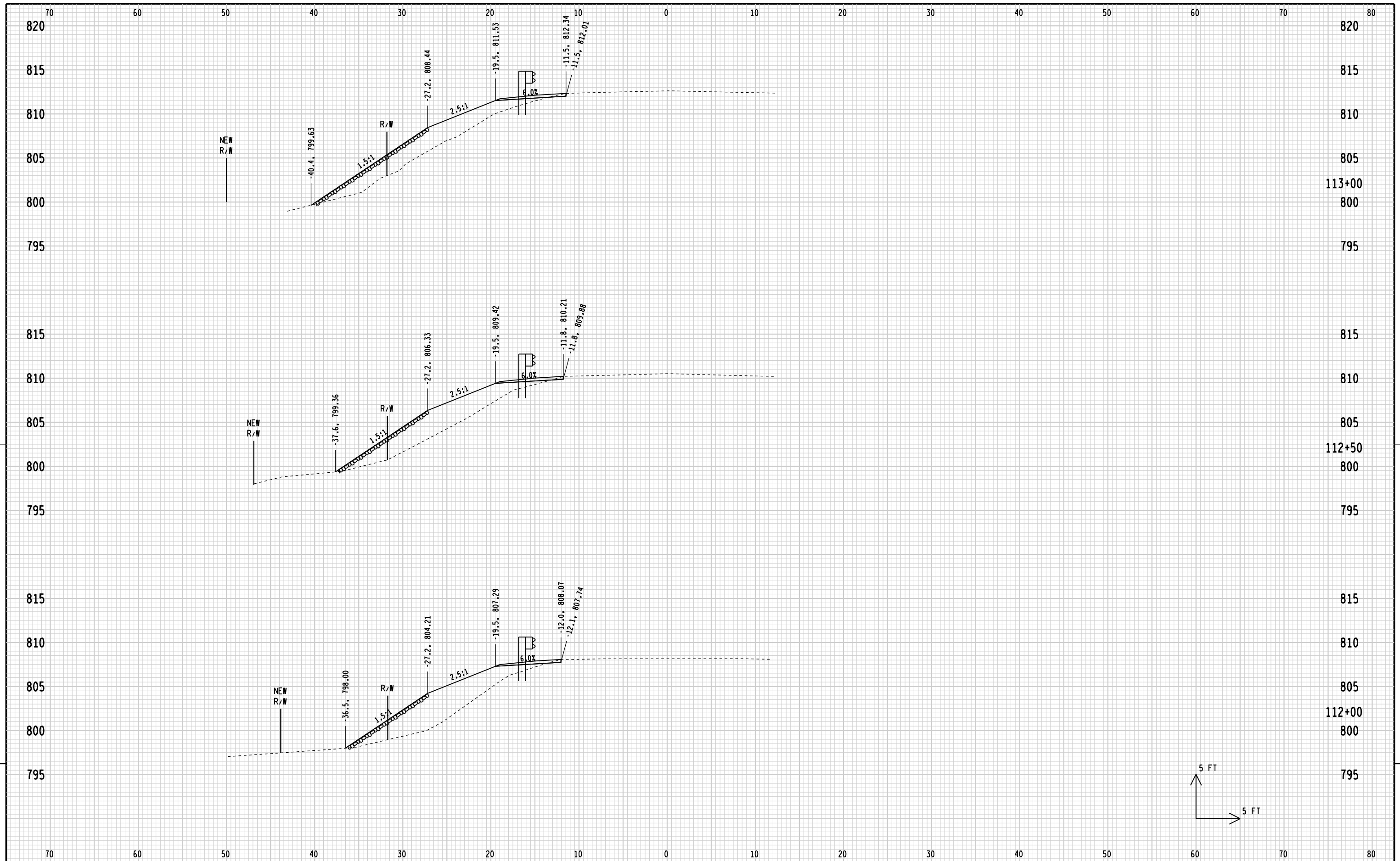
STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)							Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Expanded Rock 1.10	Expanded EBS Backfill 1.30 Note 5	Reduced Marsh in Fill 0.60 Note 6	Reduced EBS In Fill 0.80 Note 7	
601+50.00	60150	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
602+00.00	60200	50	1.03	0.00	9.16	0.00	0.00	0.00	1	0	8	0	0	0	1	11	0	0	0	0	0	
602+00.45	60200	0	1.02	0.00	9.51	0.00	0.00	0.00	0	0	0	0	0	0	1	11	0	0	0	0	0	
602+50.00	60250	50	0.31	0.00	61.36	0.00	0.00	0.00	1	0	65	0	0	0	2	92	0	0	0	0	0	
603+00.00	60300	50	0.48	0.00	11.98	0.00	0.00	0.00	1	0	68	0	0	0	3	177	0	0	0	0	0	
603+50.00	60350	50	0.32	0.00	14.83	0.00	0.00	0.00	1	0	25	0	0	0	4	208	0	0	0	0	0	
604+00.00	60400	50	0.43	0.00	7.43	0.00	0.00	0.00	1	0	21	0	0	0	4	234	0	0	0	0	0	
604+50.00	60450	50	0.29	0.00	7.08	0.00	0.00	0.00	1	0	13	0	0	0	5	251	0	0	0	0	0	
605+00.00	60500	50	0.41	0.00	7.25	0.00	0.00	0.00	1	0	13	0	0	0	6	267	0	0	0	0	0	
605+50.00	60550	50	0.31	0.00	5.36	0.00	0.00	0.00	1	0	12	0	0	0	6	282	0	0	0	0	0	
606+00.00	60600	50	0.75	0.00	1.46	0.00	0.00	0.00	1	0	6	0	0	0	7	290	0	0	0	0	0	
606+50.00	60650	50	1.02	0.00	1.85	0.00	0.00	0.00	2	0	3	0	0	0	9	293	0	0	0	0	0	
607+00.00	60700	50	0.77	0.00	7.71	0.00	0.00	0.00	2	0	9	0	0	0	11	305	0	0	0	0	0	
607+50.00	60750	50	0.77	0.00	1.40	0.00	0.00	0.00	1	0	8	0	0	0	12	315	0	0	0	0	0	
607+50.45	60750	0	0.78	0.00	1.75	0.00	0.00	0.00	0	0	0	0	0	0	12	315	0	0	0	0	0	
607+75.45	60775	25	0.73	0.00	31.72	0.00	0.00	0.00	1	0	15	0	0	0	13	334	0	0	0	0	0	
608+00.00	60800	25	0.43	0.00	45.70	0.00	0.00	0.00	1	0	35	0	0	0	13	378	0	0	0	0	0	
608+00.45	60800	0	0.43	0.00	45.38	0.00	0.00	0.00	0	0	1	0	0	0	13	379	0	0	0	0	0	
608+50.00	60850	50	0.33	0.00	22.32	0.00	0.00	0.00	1	0	62	0	0	0	14	457	0	0	0	0	0	
609+00.00	60900	50	0.50	0.00	8.89	0.00	0.00	0.00	1	0	29	0	0	0	15	493	0	0	0	0	0	
609+50.00	60950	50	0.44	0.00	14.37	0.00	0.00	0.00	1	0	22	0	0	0	16	520	0	0	0	0	0	
610+00.00	61000	50	0.00	0.00	0.00	0.00	0.00	0.00	0	0	13	0	0	0	16	537	0	0	0	0	0	
610+50.00	61050	50	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	16	537	0	0	0	0	0	
			Totals						16	0	429	0	0	0								

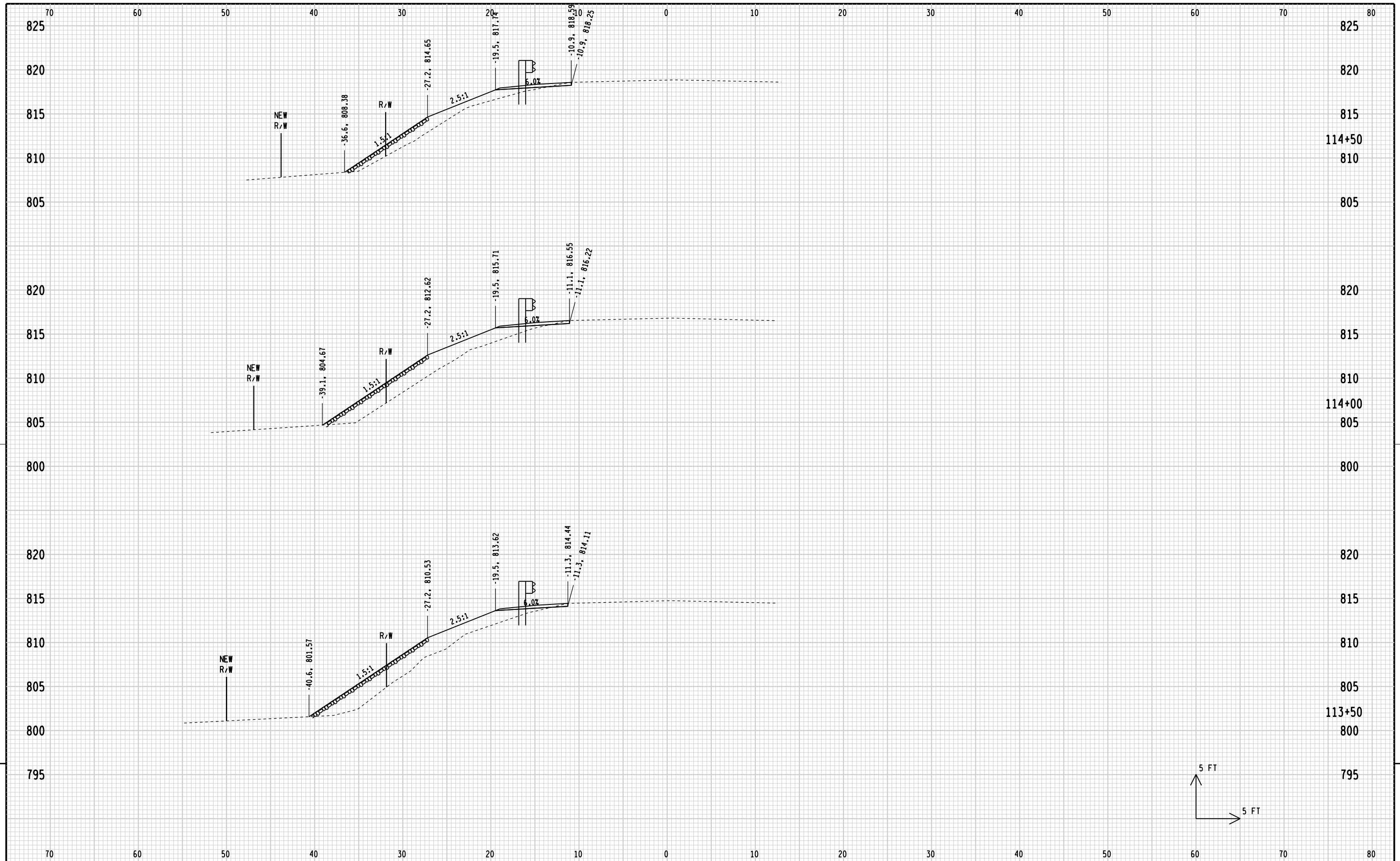


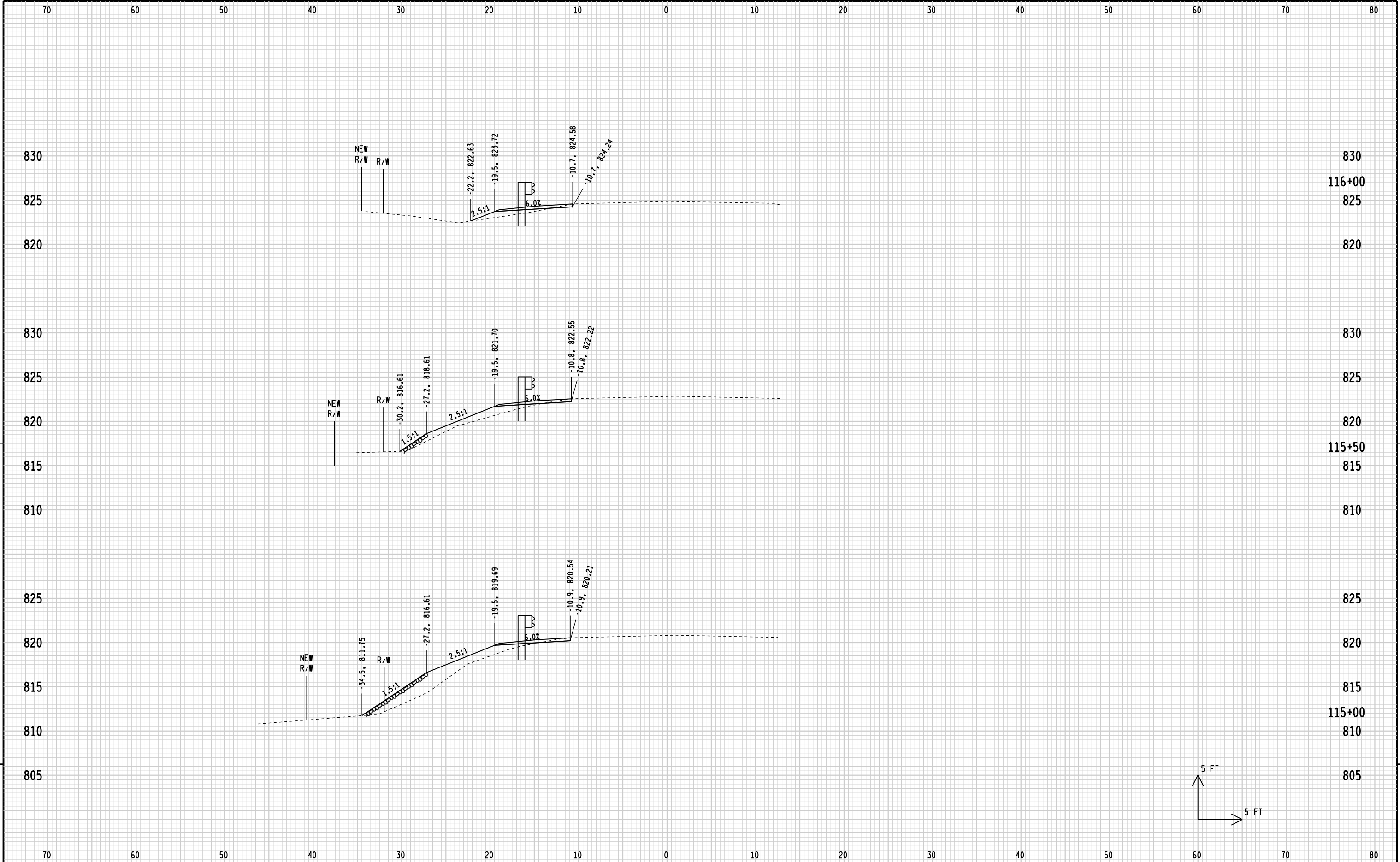
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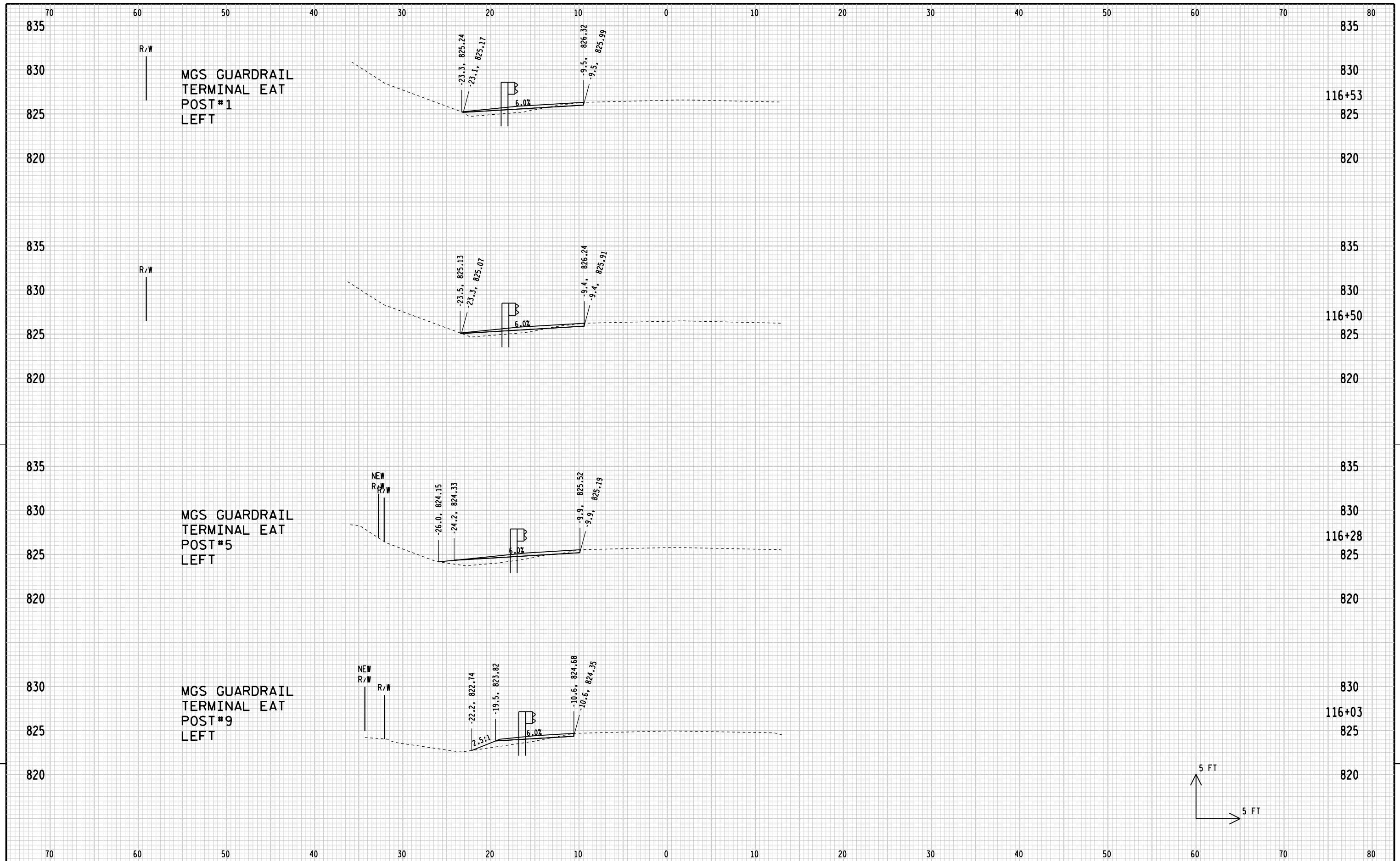


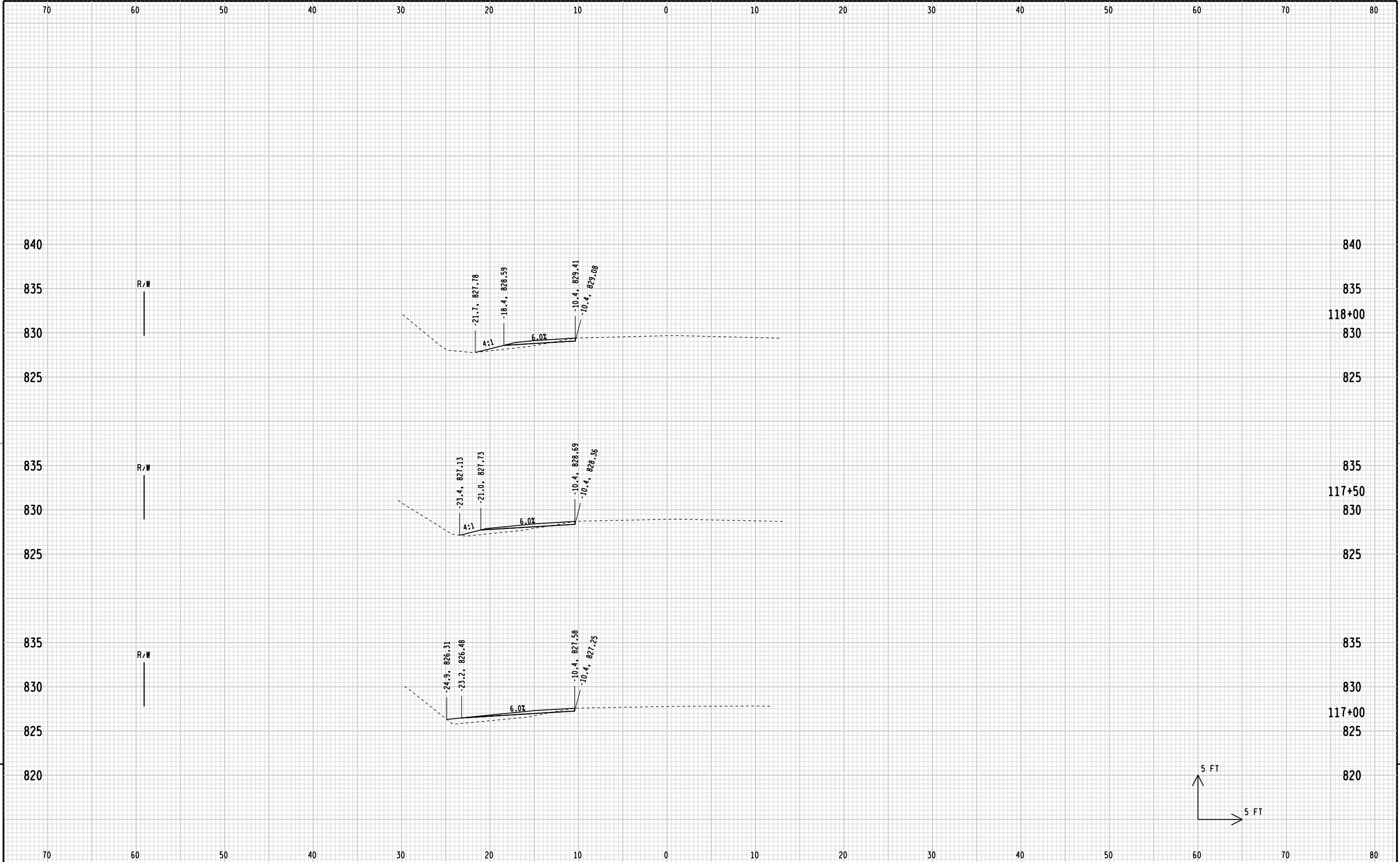




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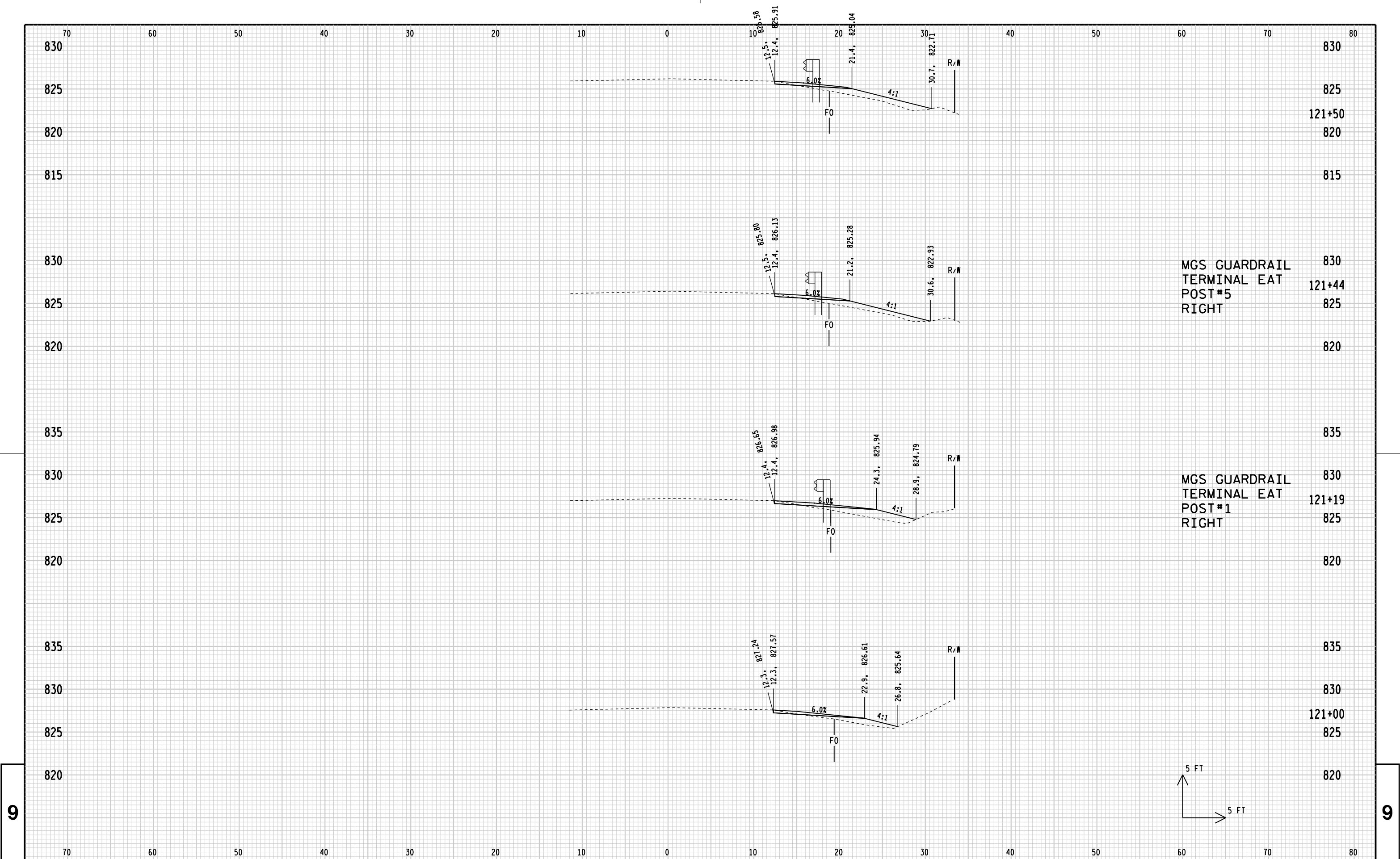
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MGS GUARDRAIL
TERMINAL EAT
POST#5
RIGHT

MGS GUARDRAIL
TERMINAL EAT
POST#1
RIGHT

9

9

STATE PROJECT NUMBER:7068-01-60

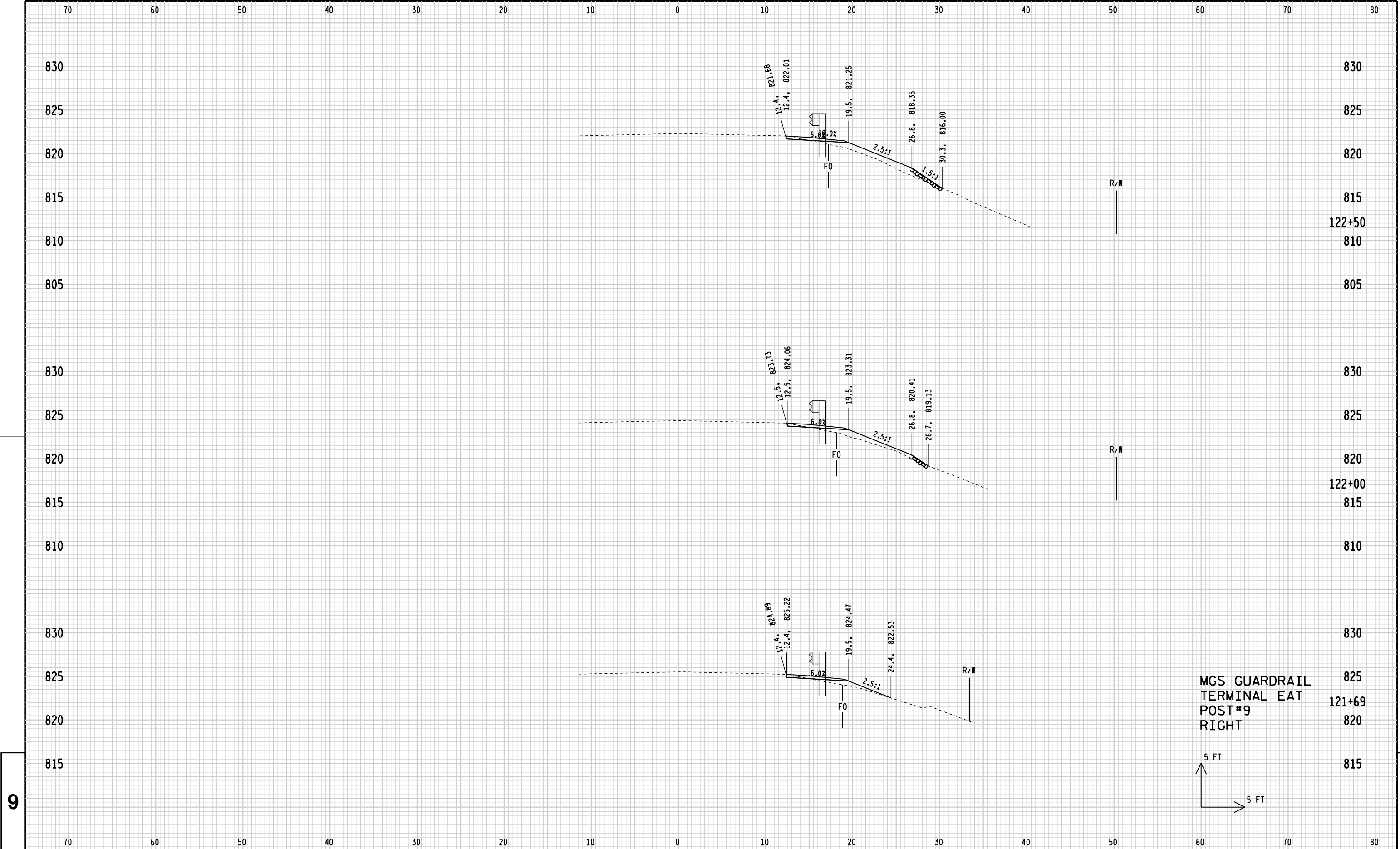
HWY:CTH T

COUNTY:LA CROSSE

CROSS SECTIONS:

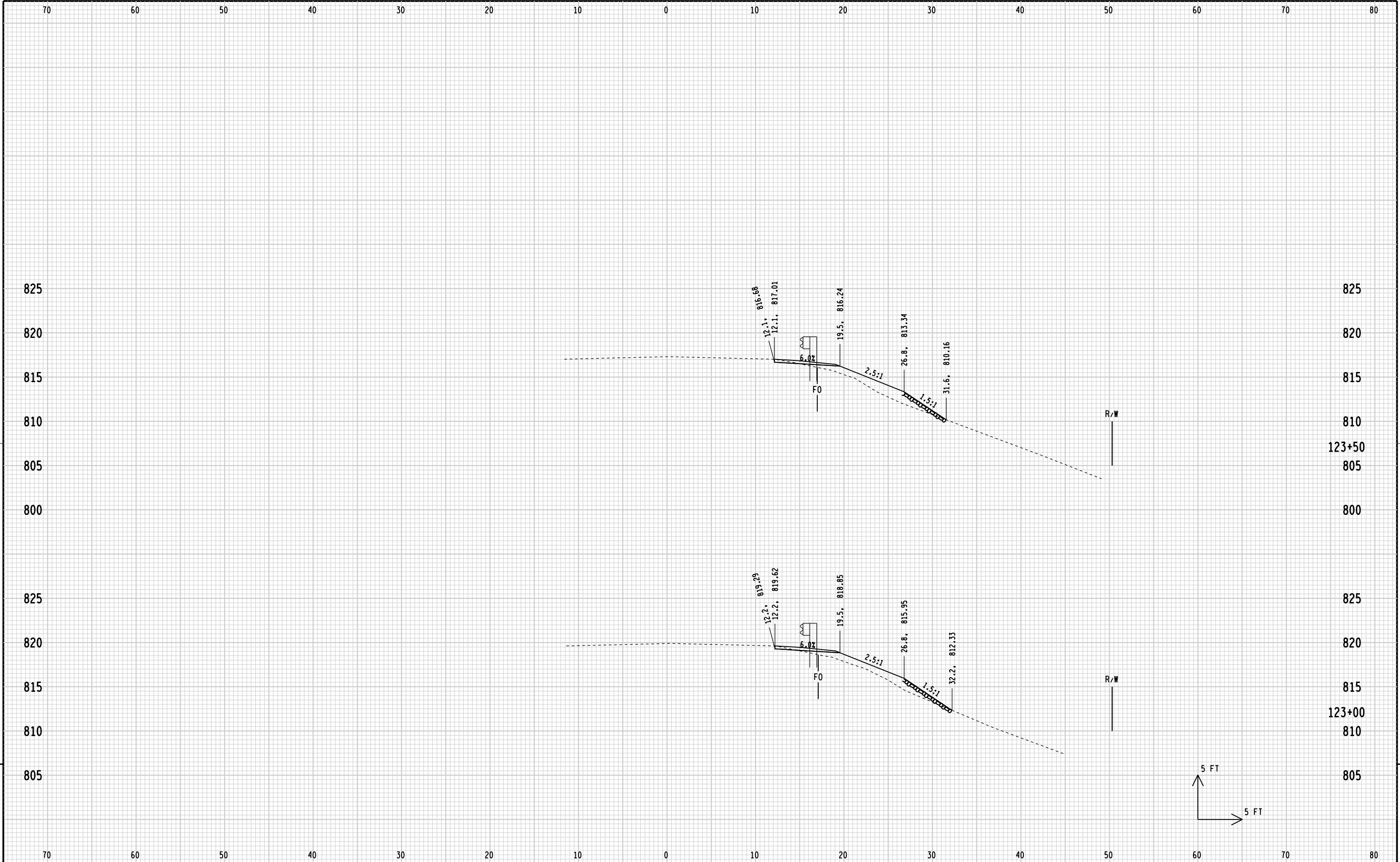
SHEET 99

E



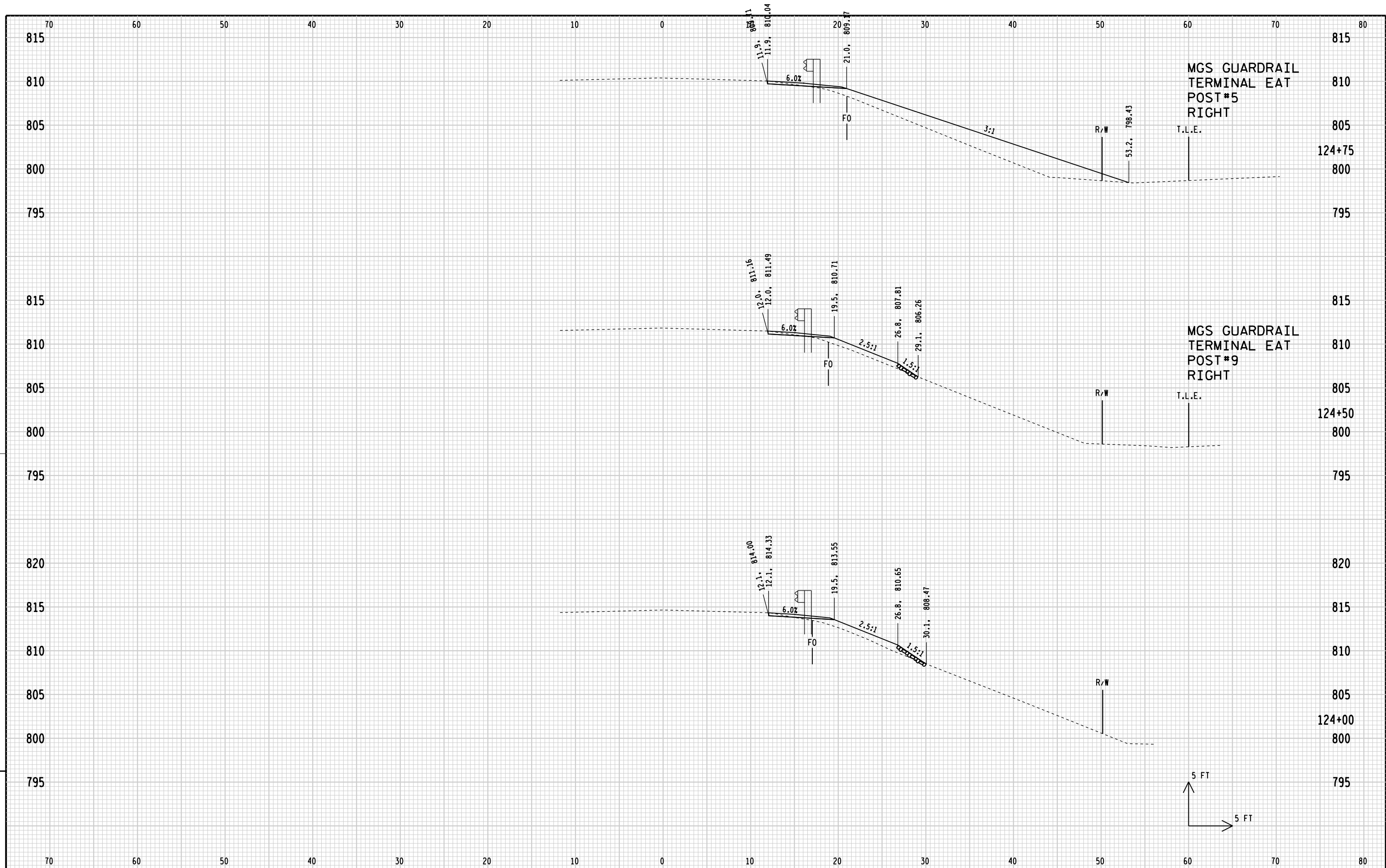
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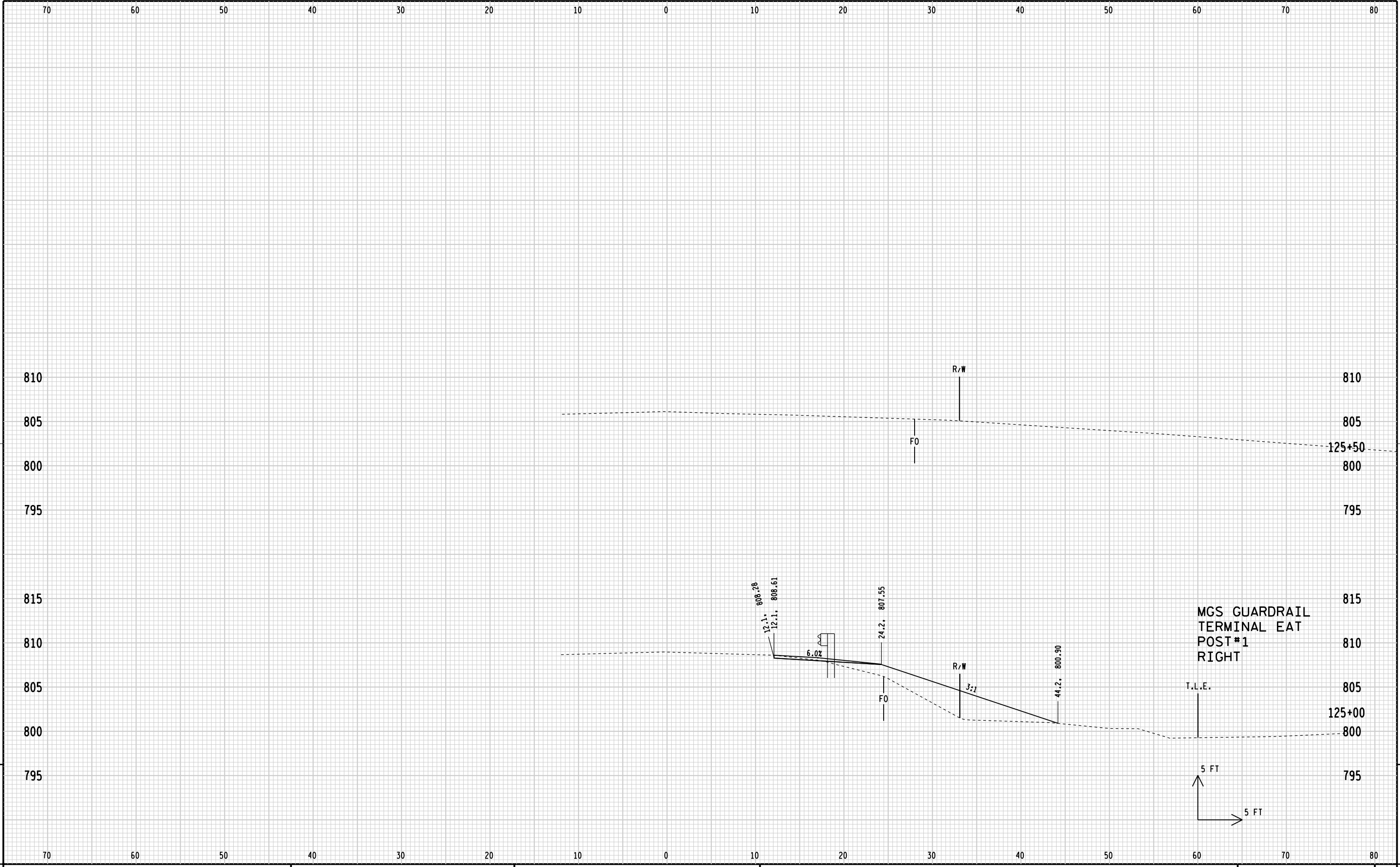
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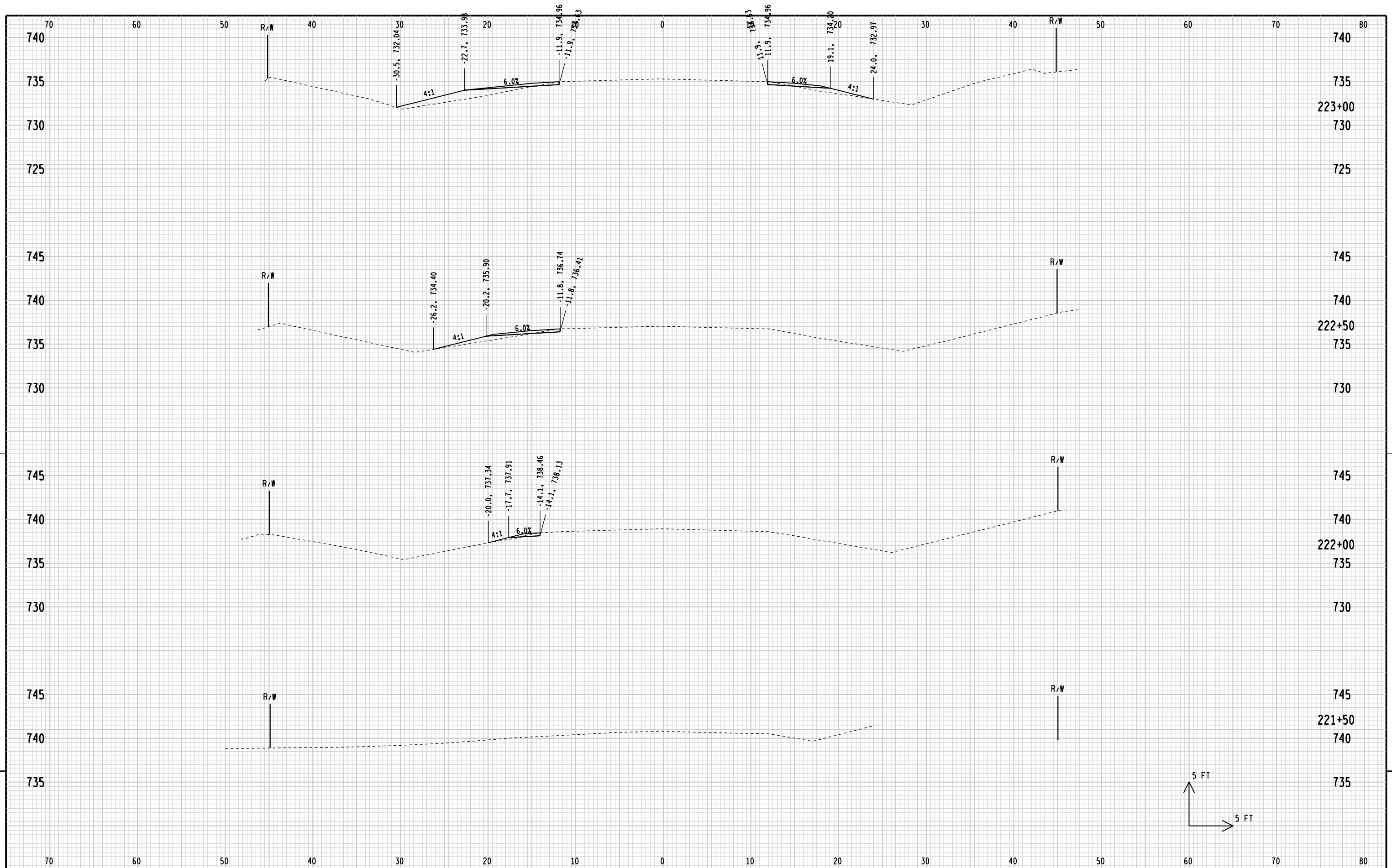
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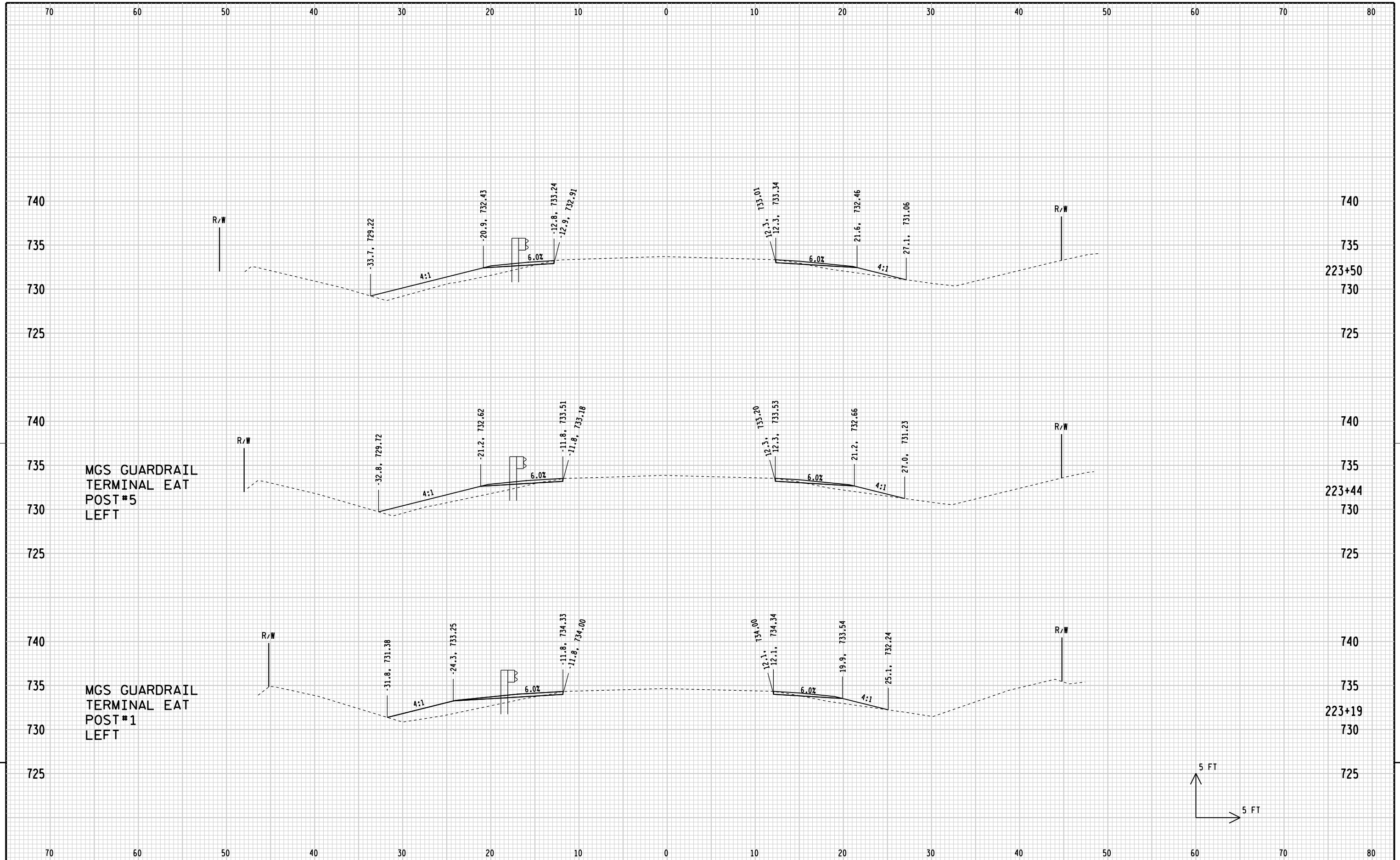


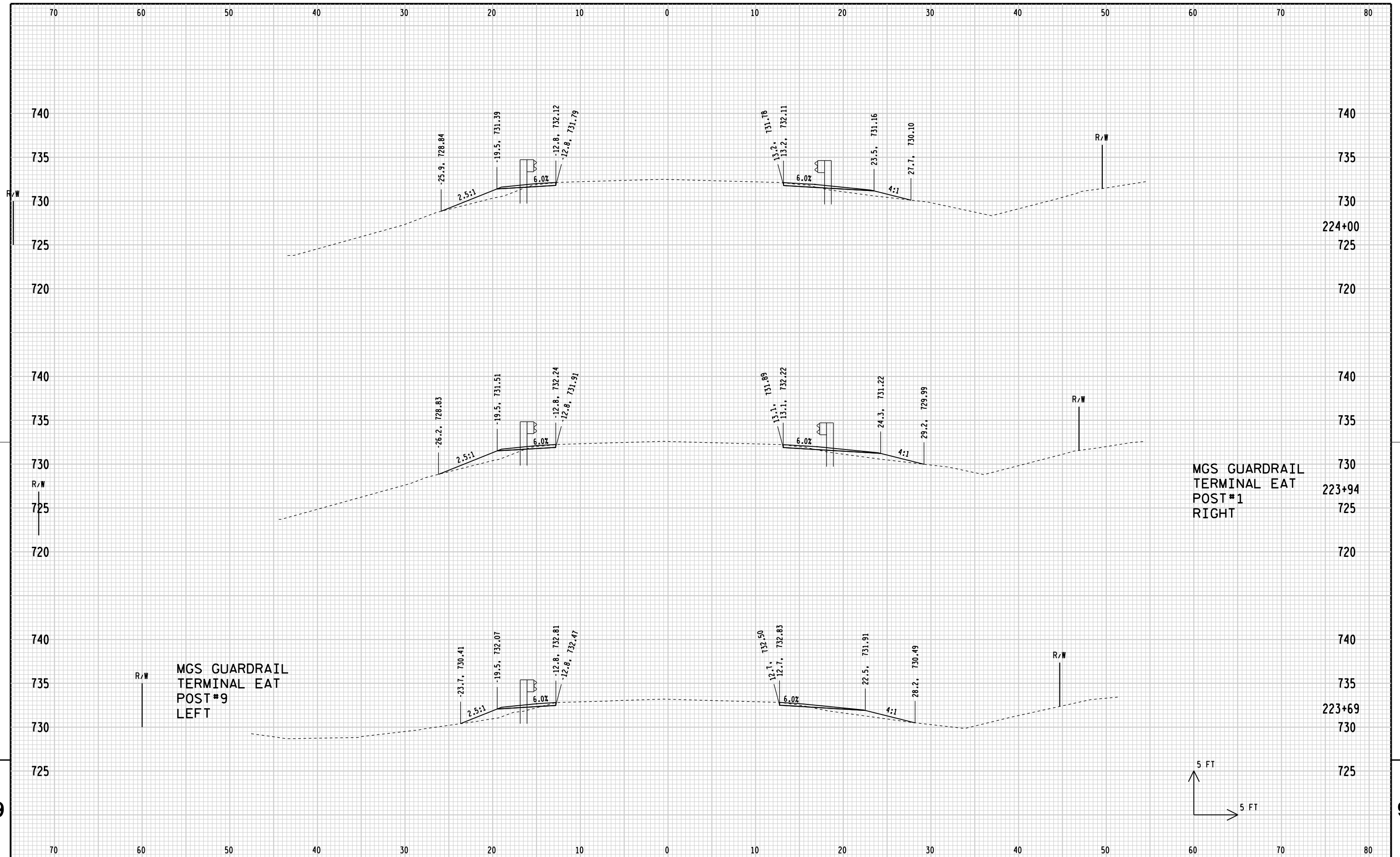


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STATE PROJECT NUMBER:7068-01-60

HWY:CTH T

COUNTY:LA CROSSE

CROSS SECTIONS:

SHEET 106

E

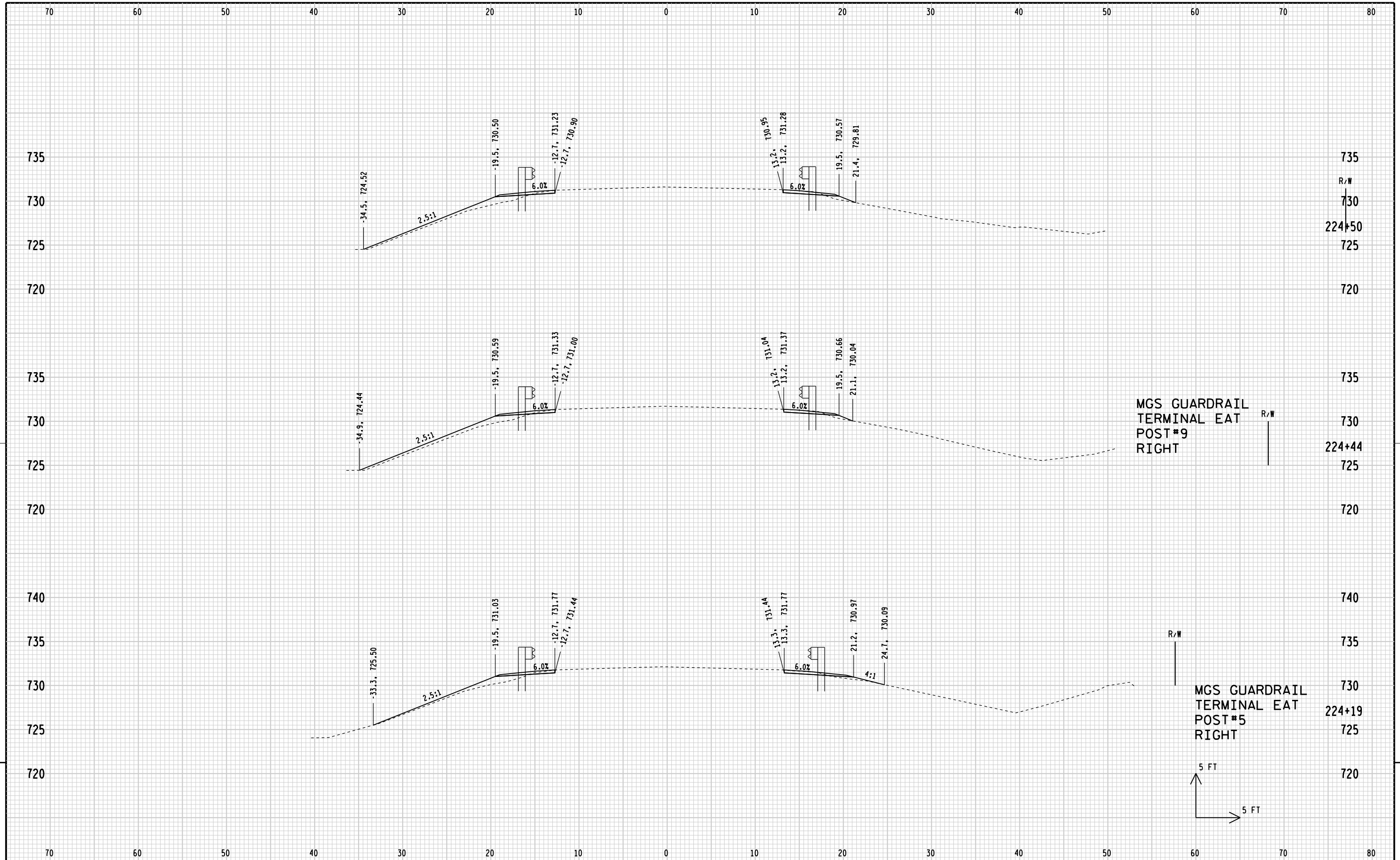
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BATCH PRINT SHEET 16 OF 92

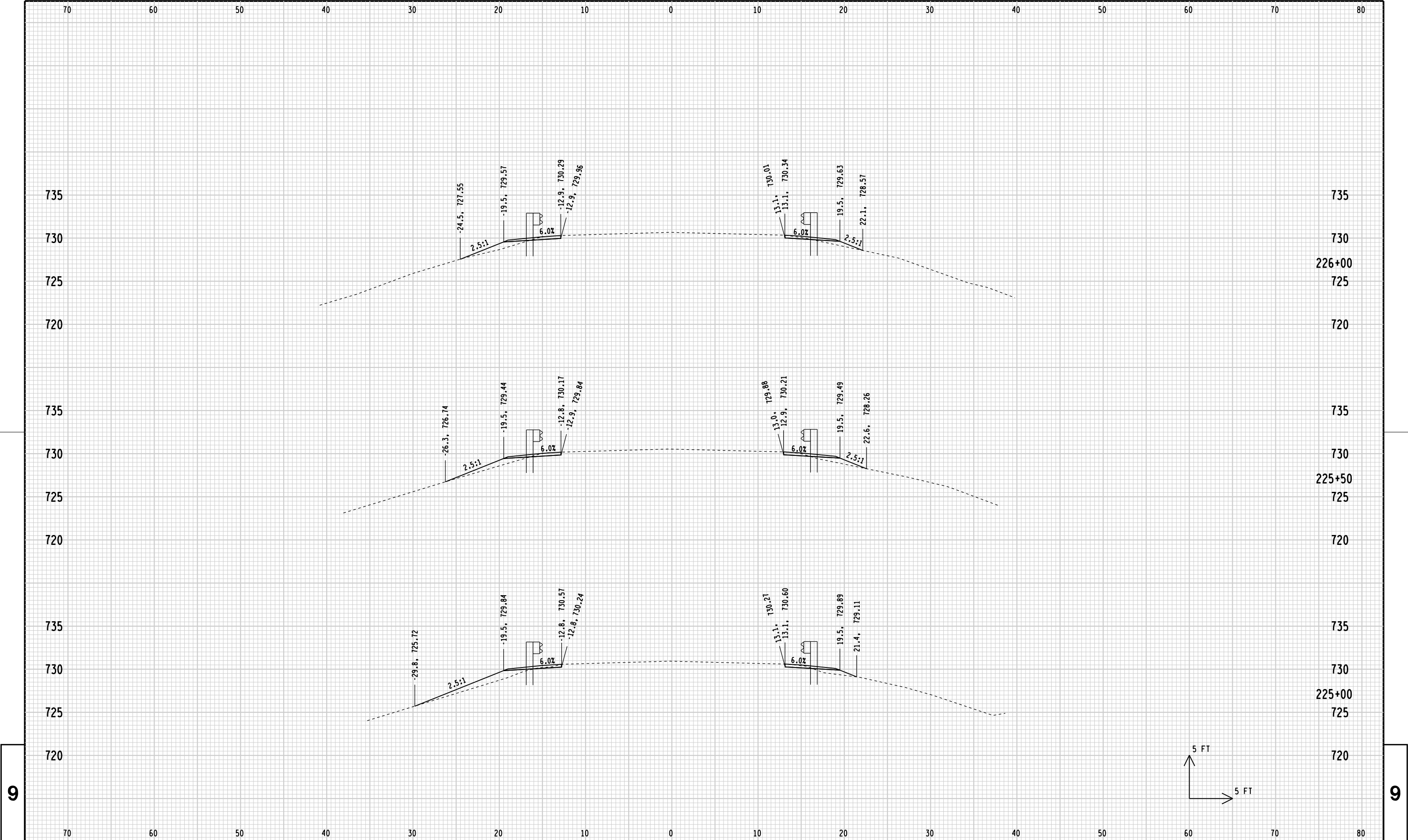
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PLOT DATE: 1/18/2017
PLOT TIME: 7:24:58 AM

PLOT SCALE: 1:10

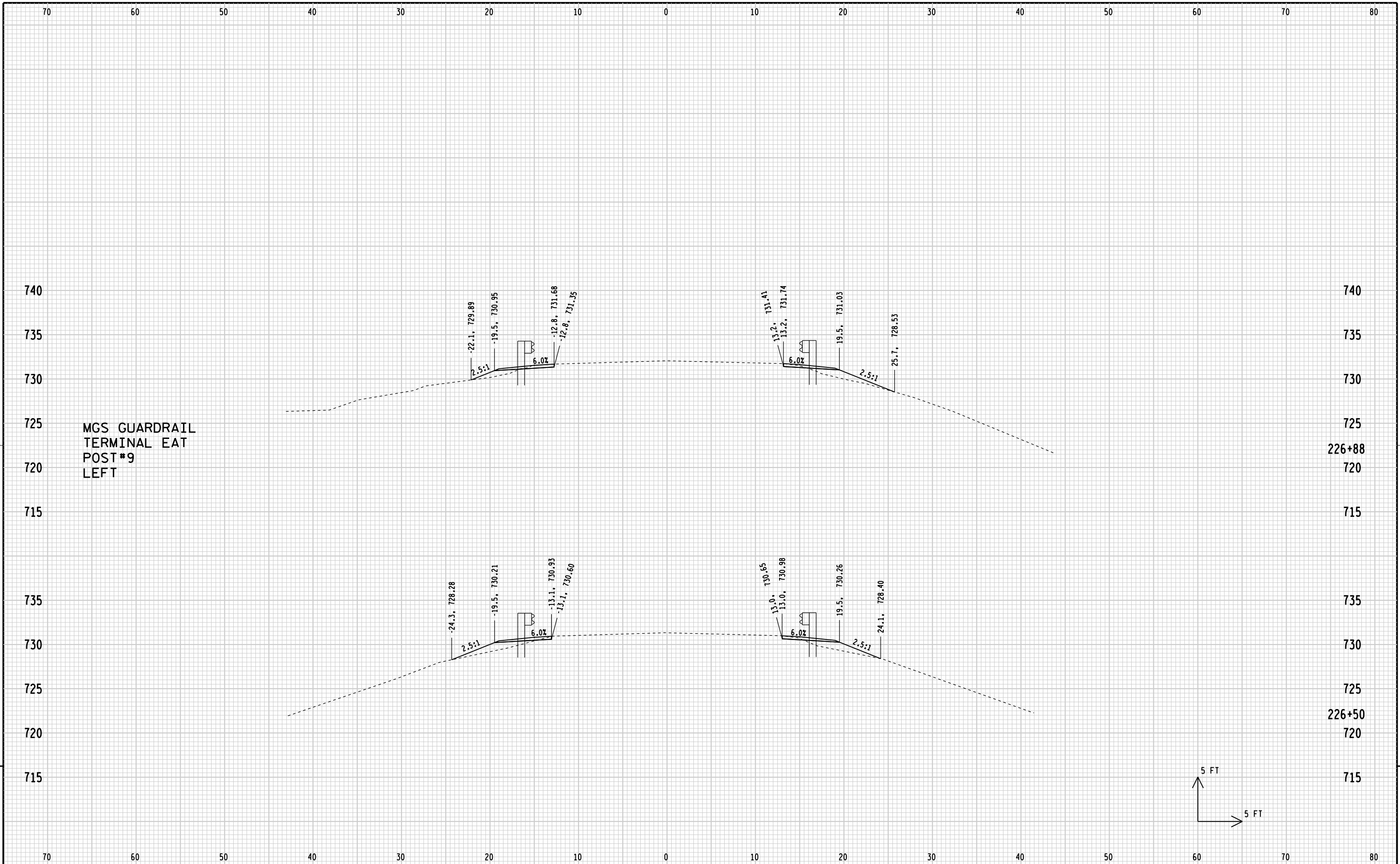
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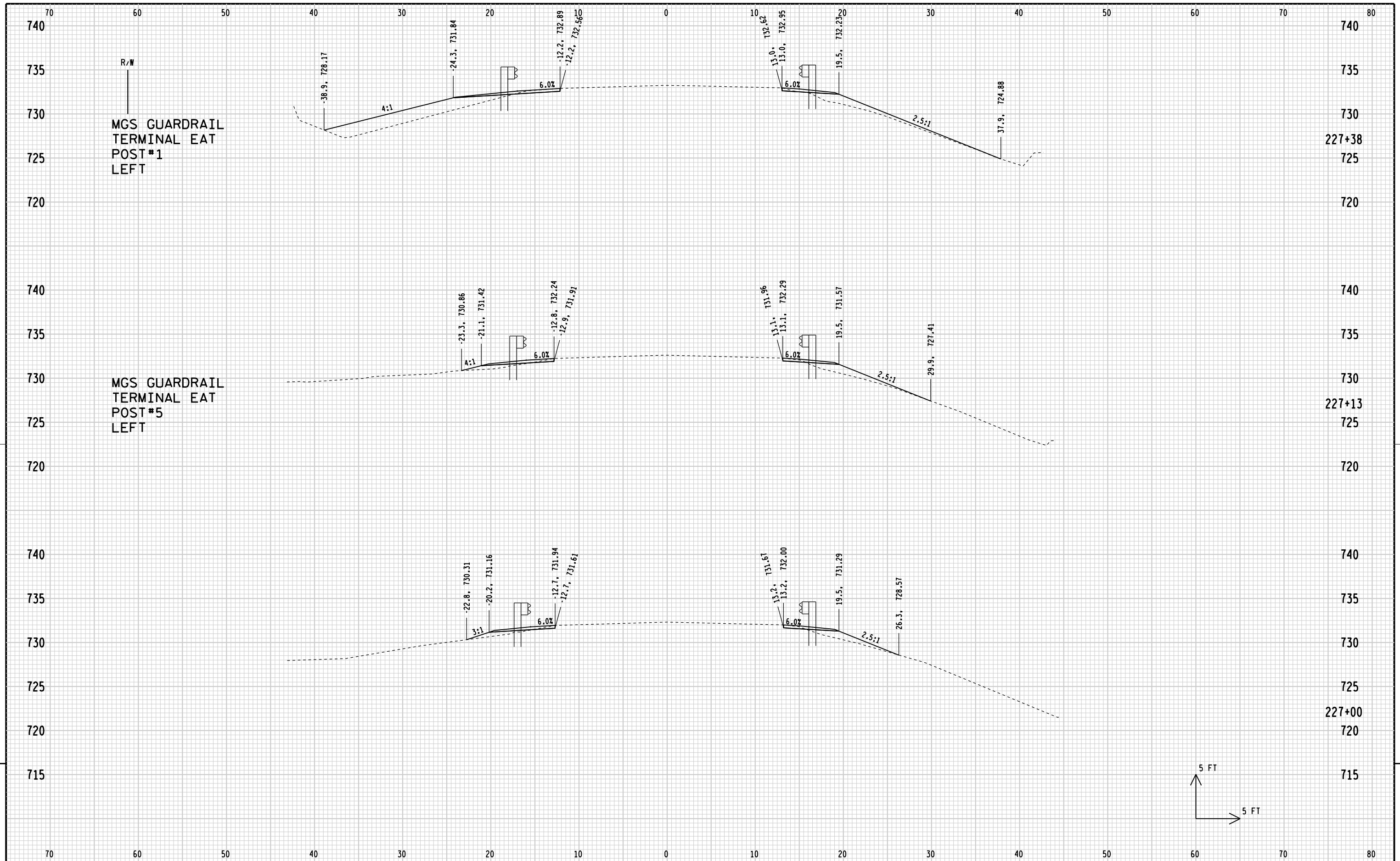


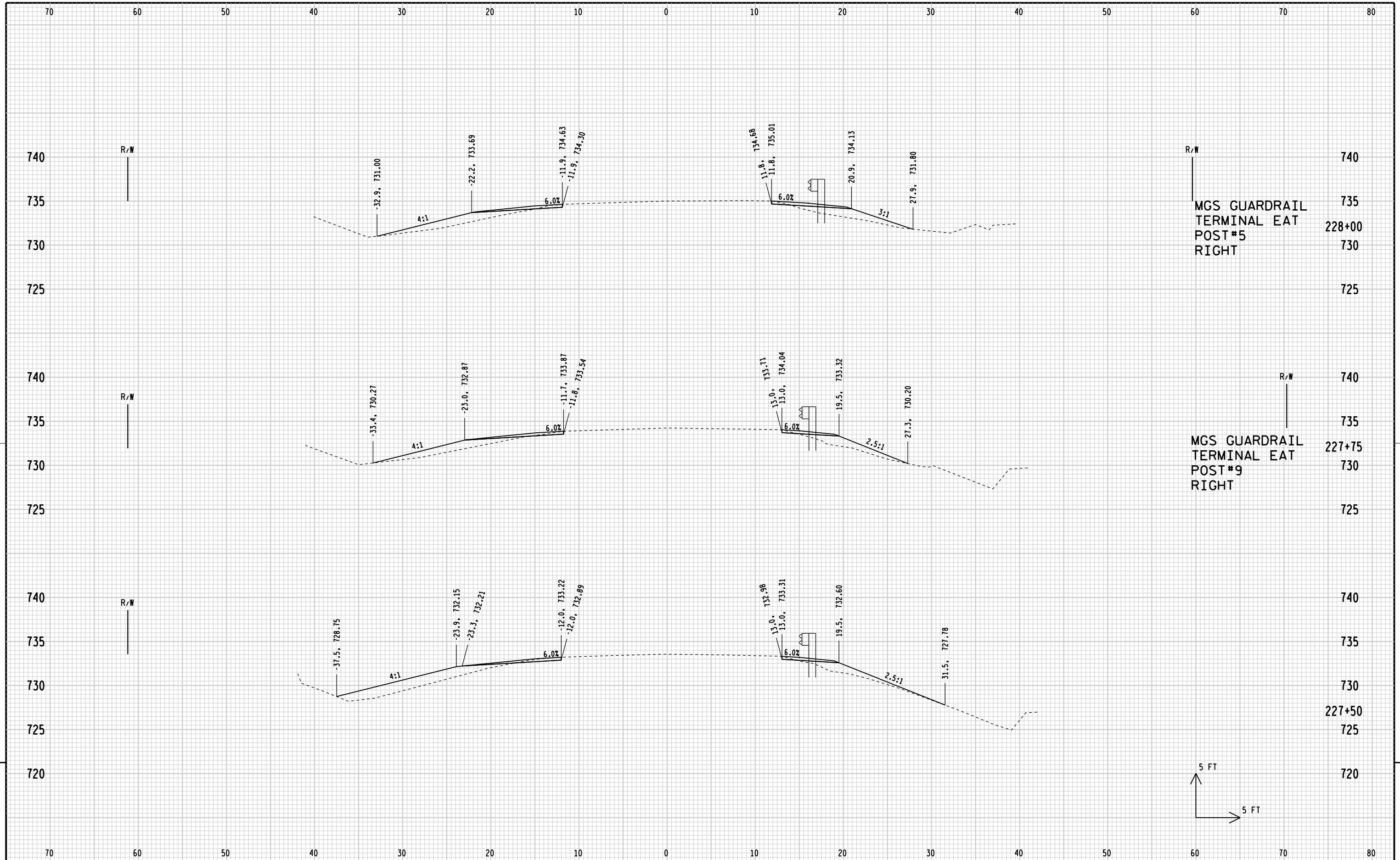


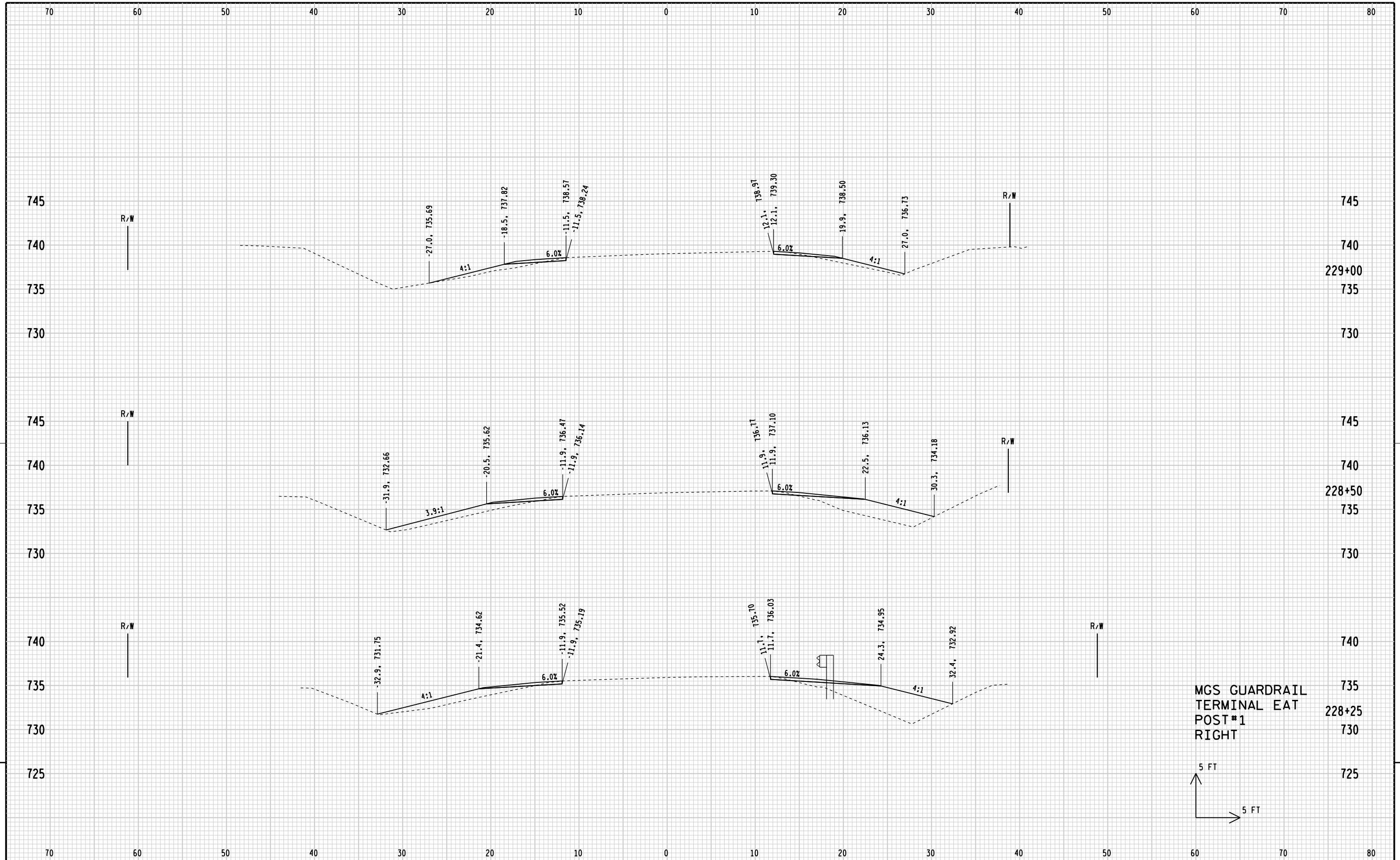
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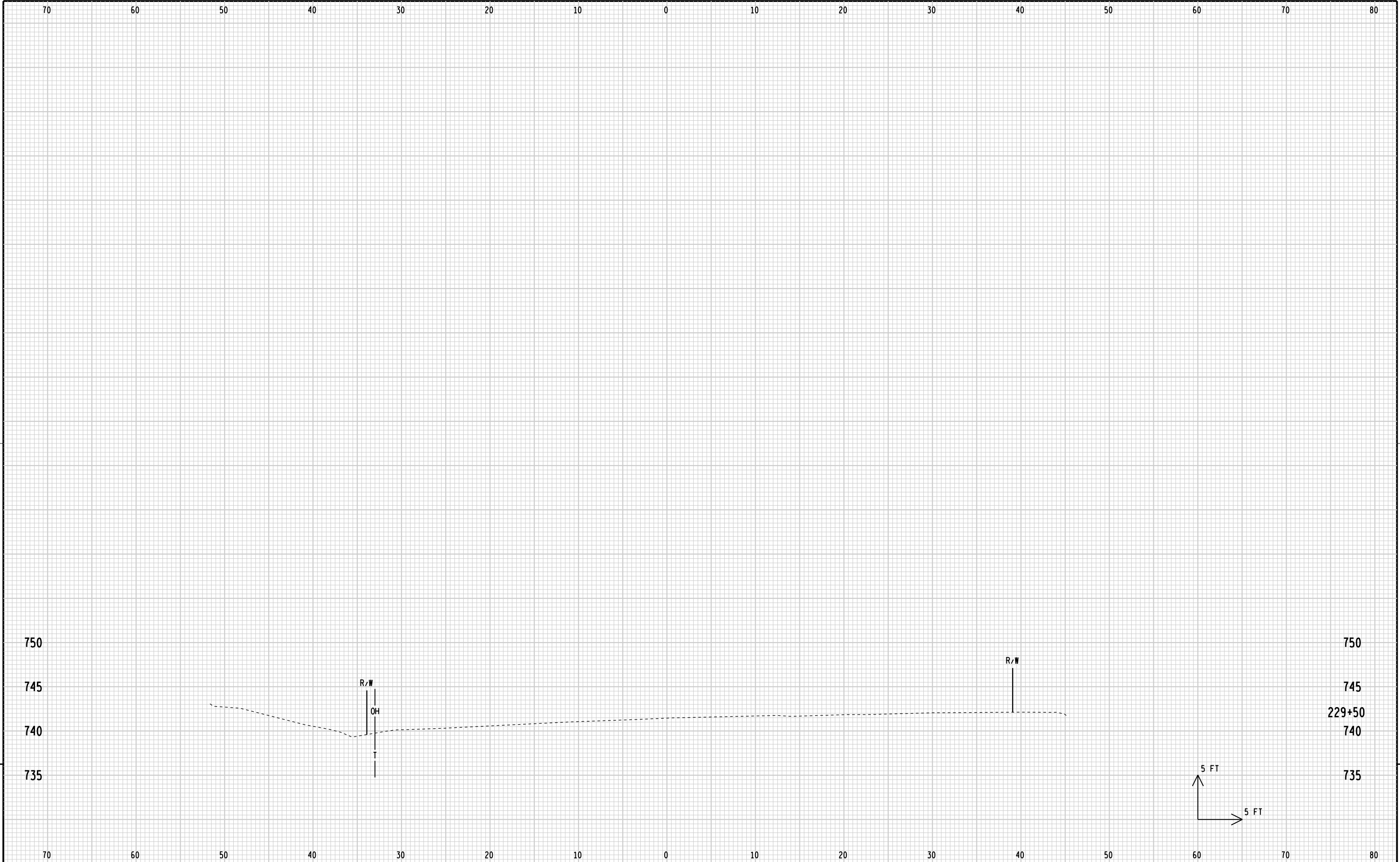
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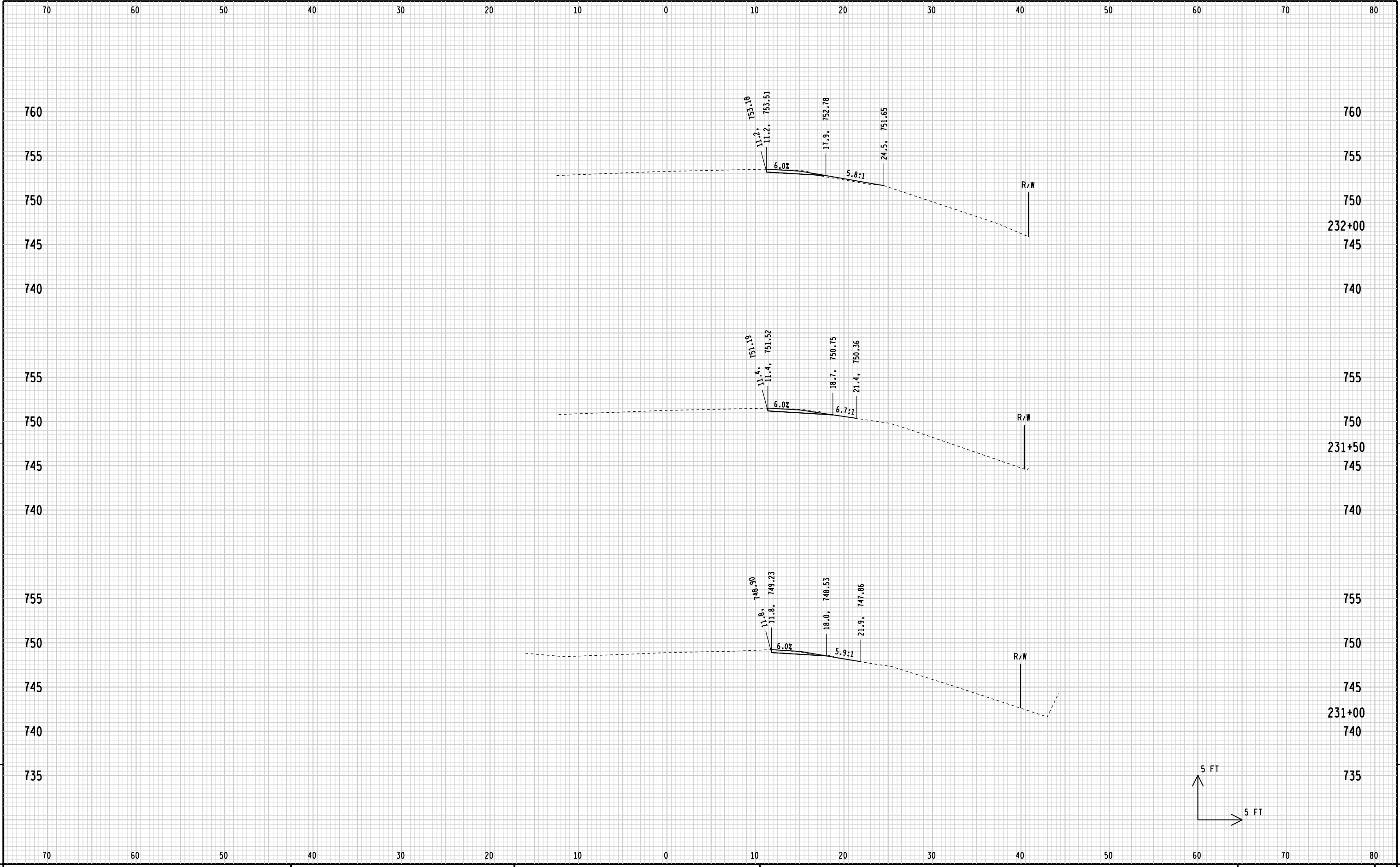






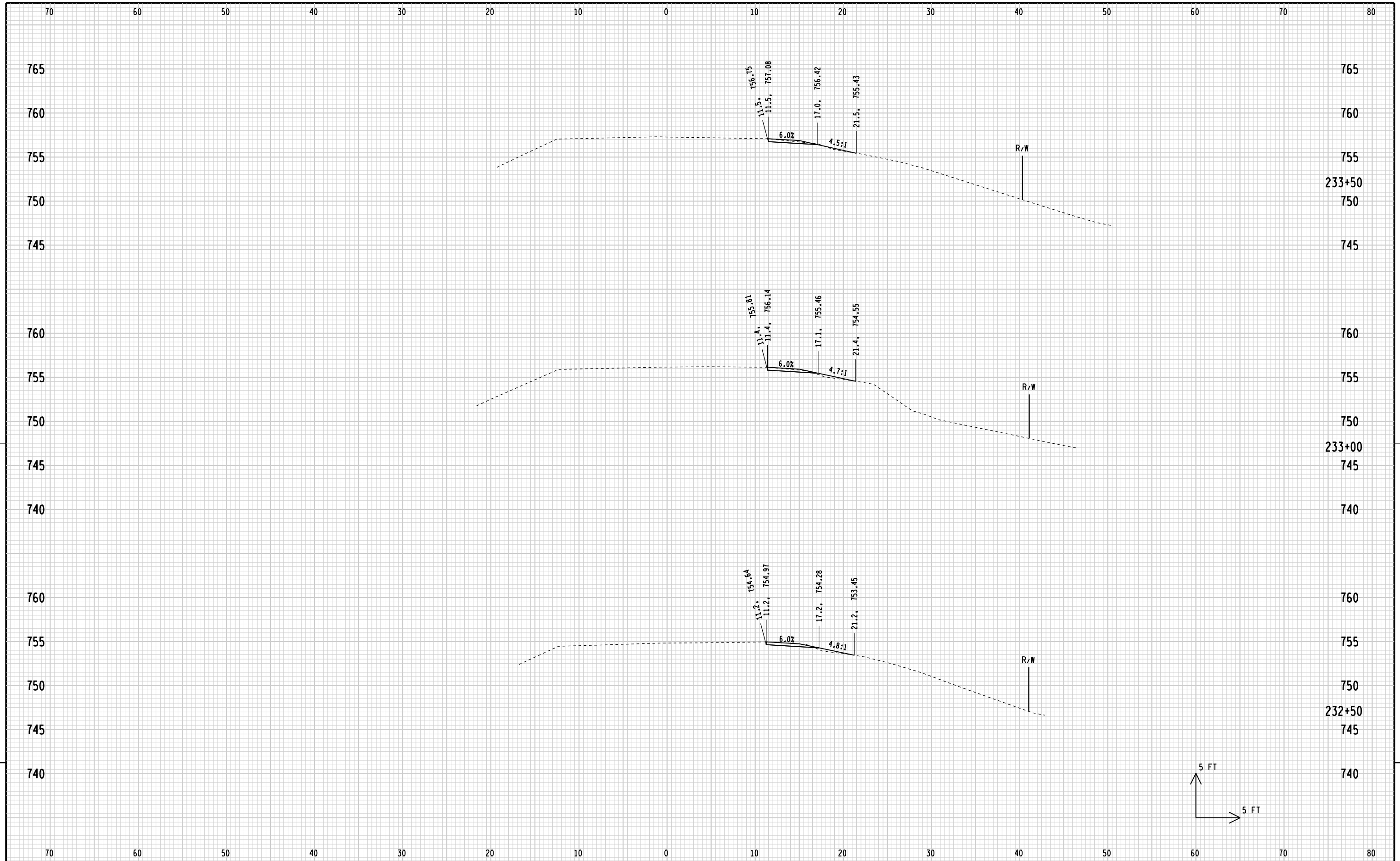


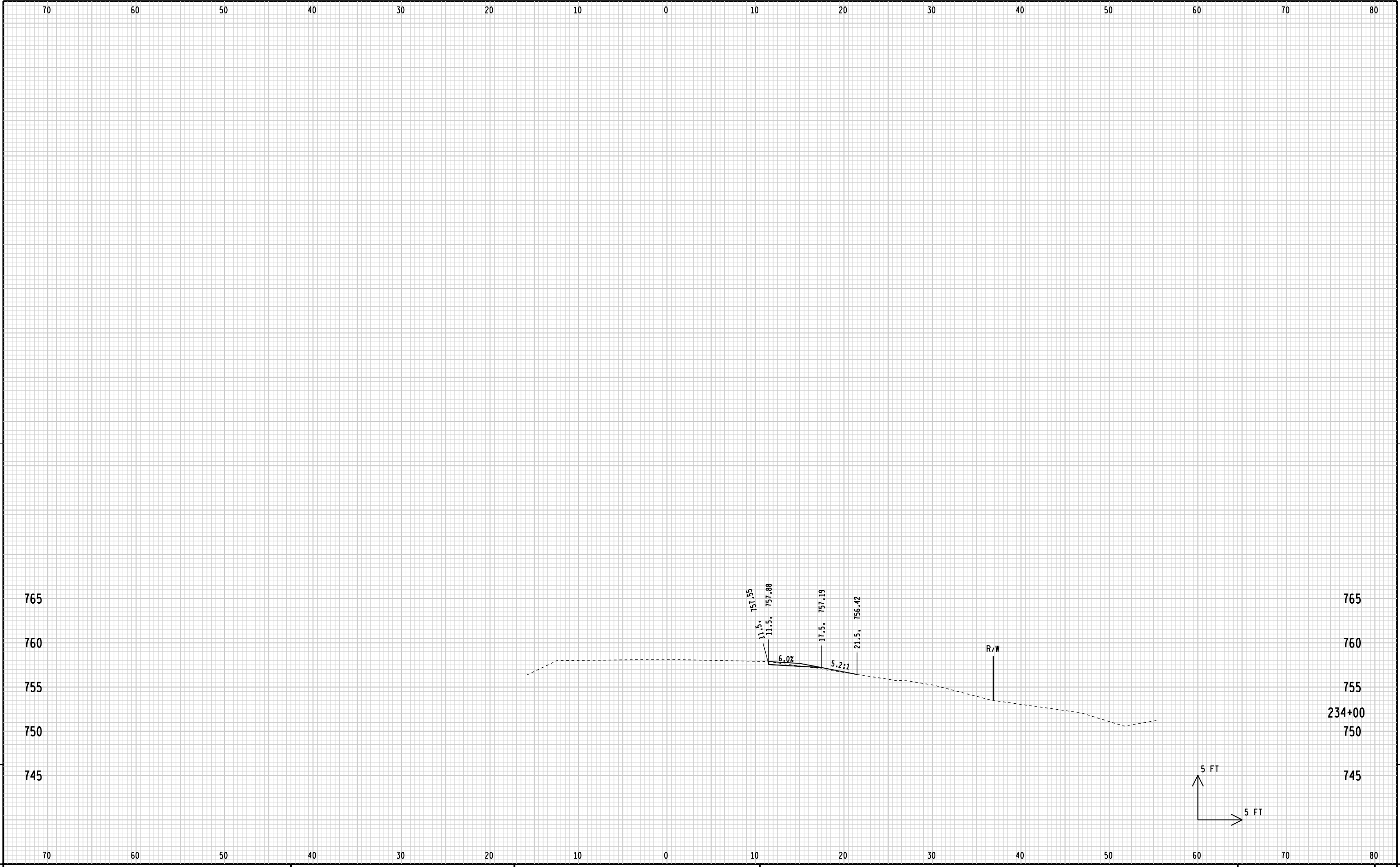




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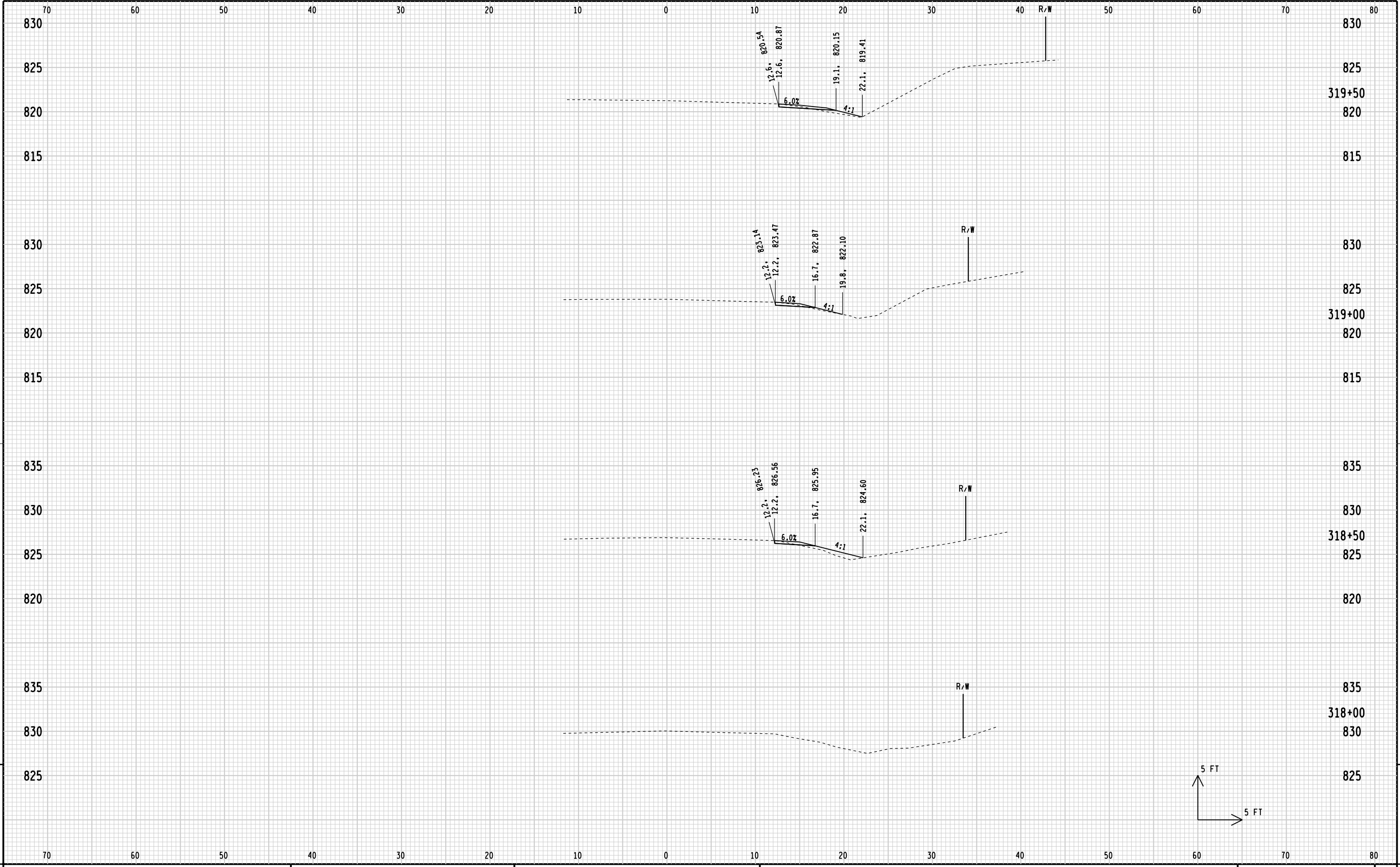
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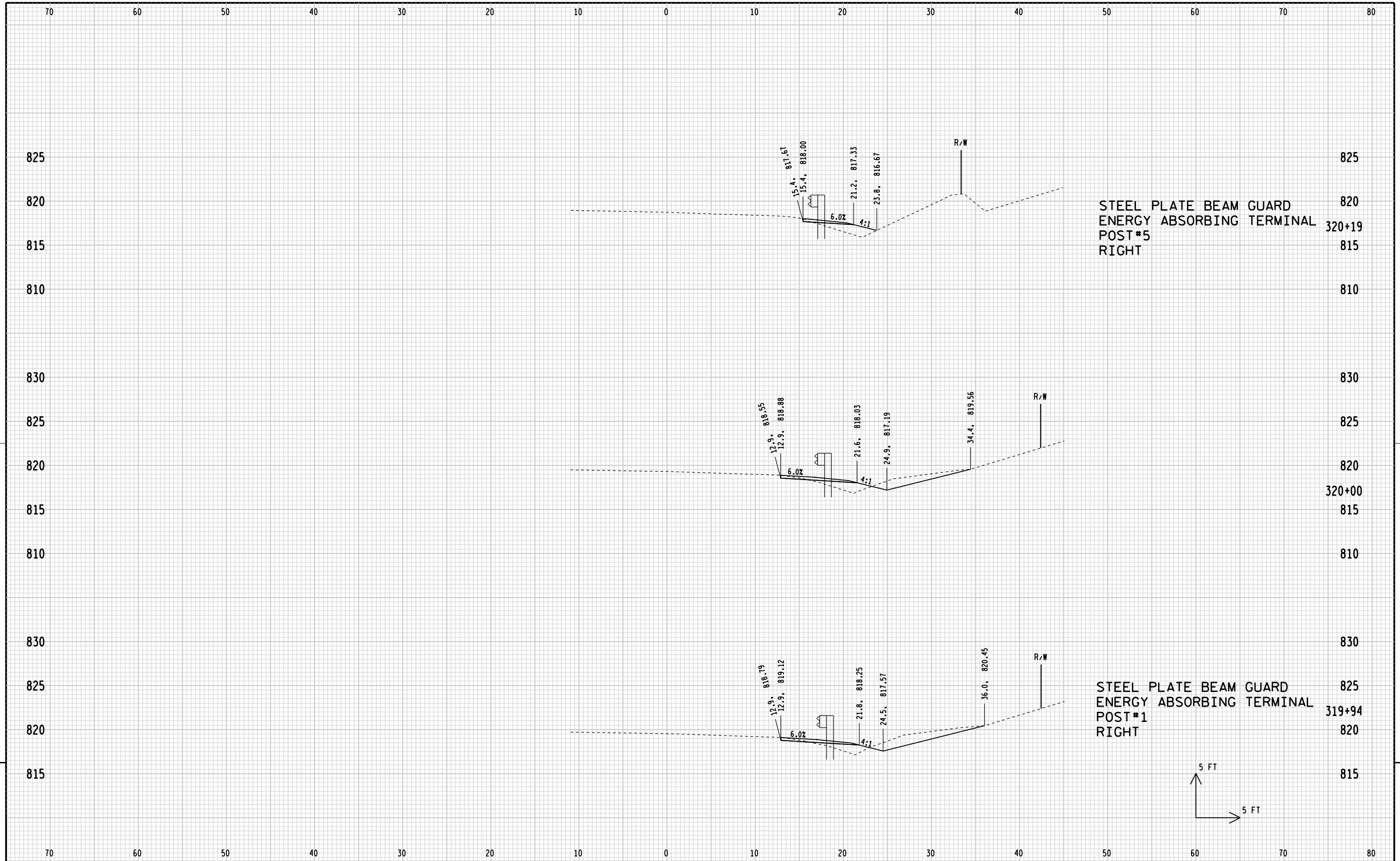
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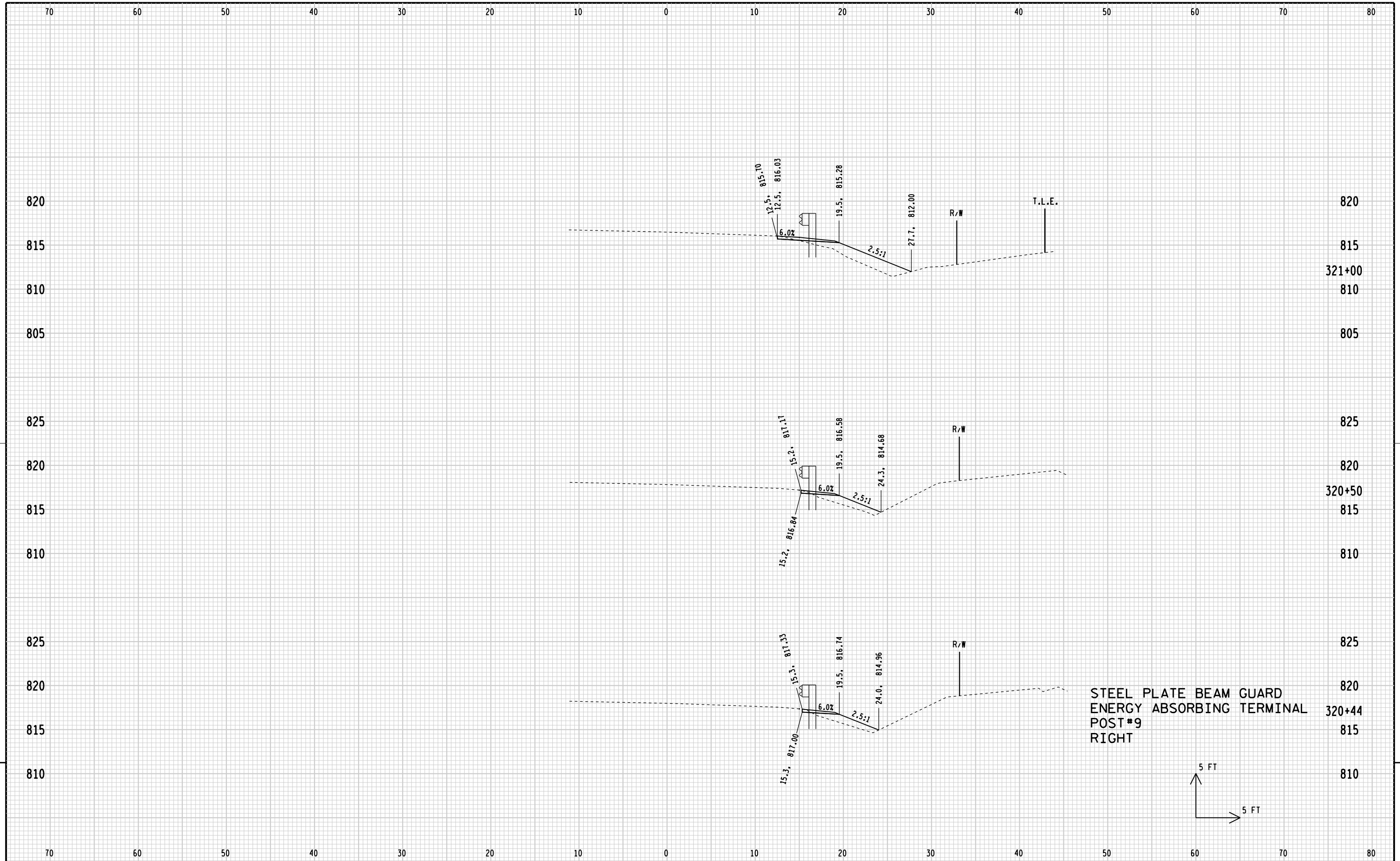
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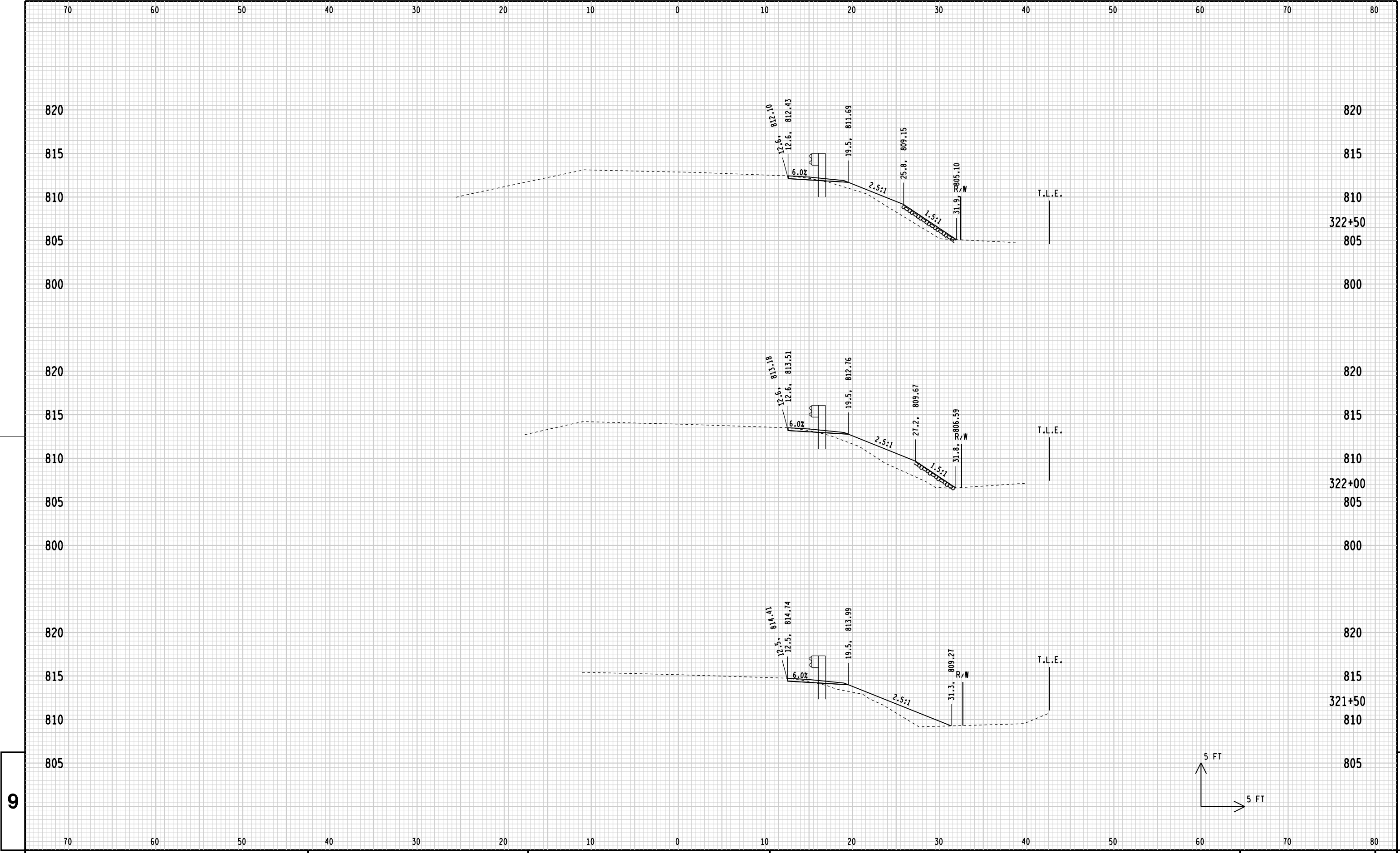


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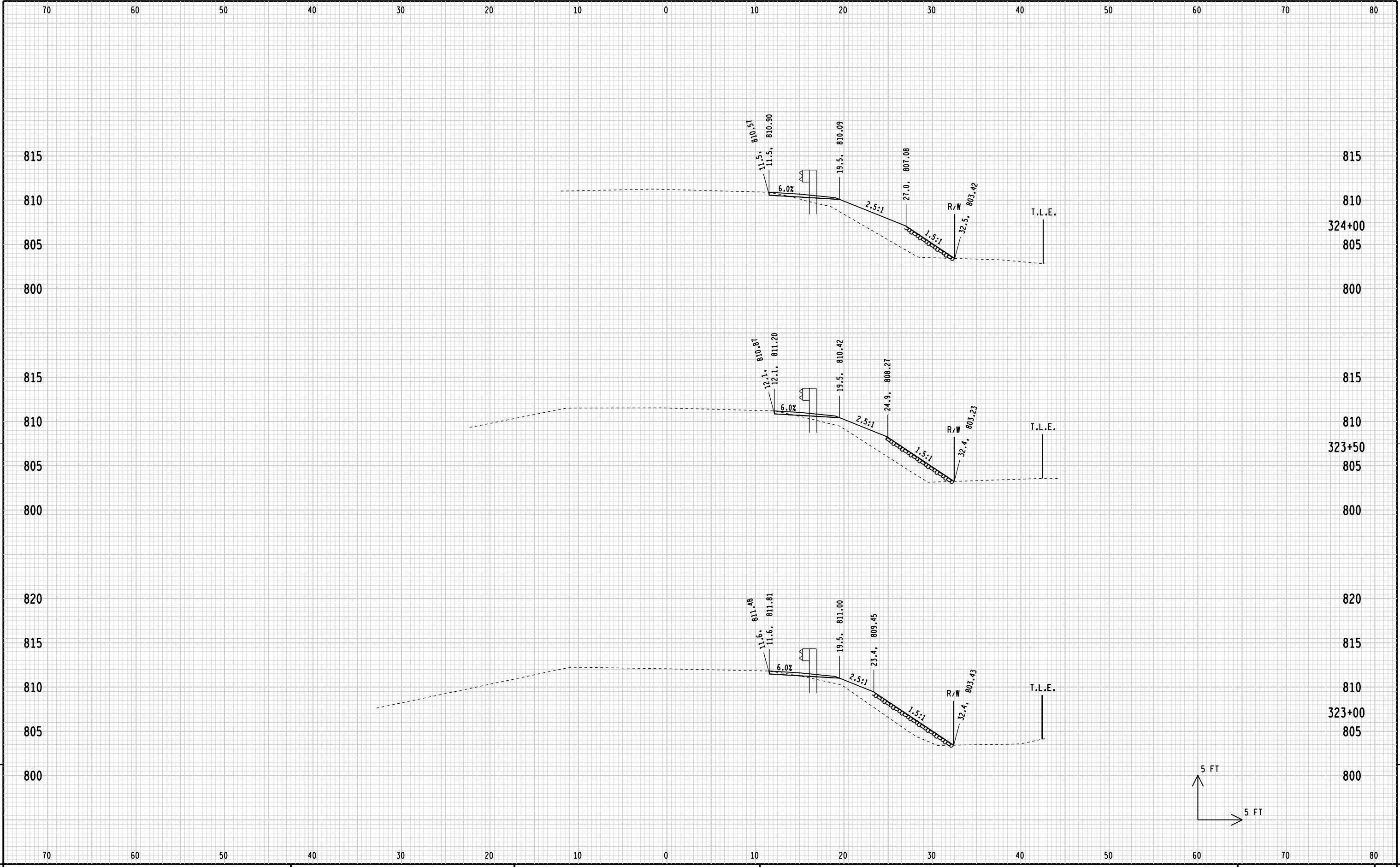


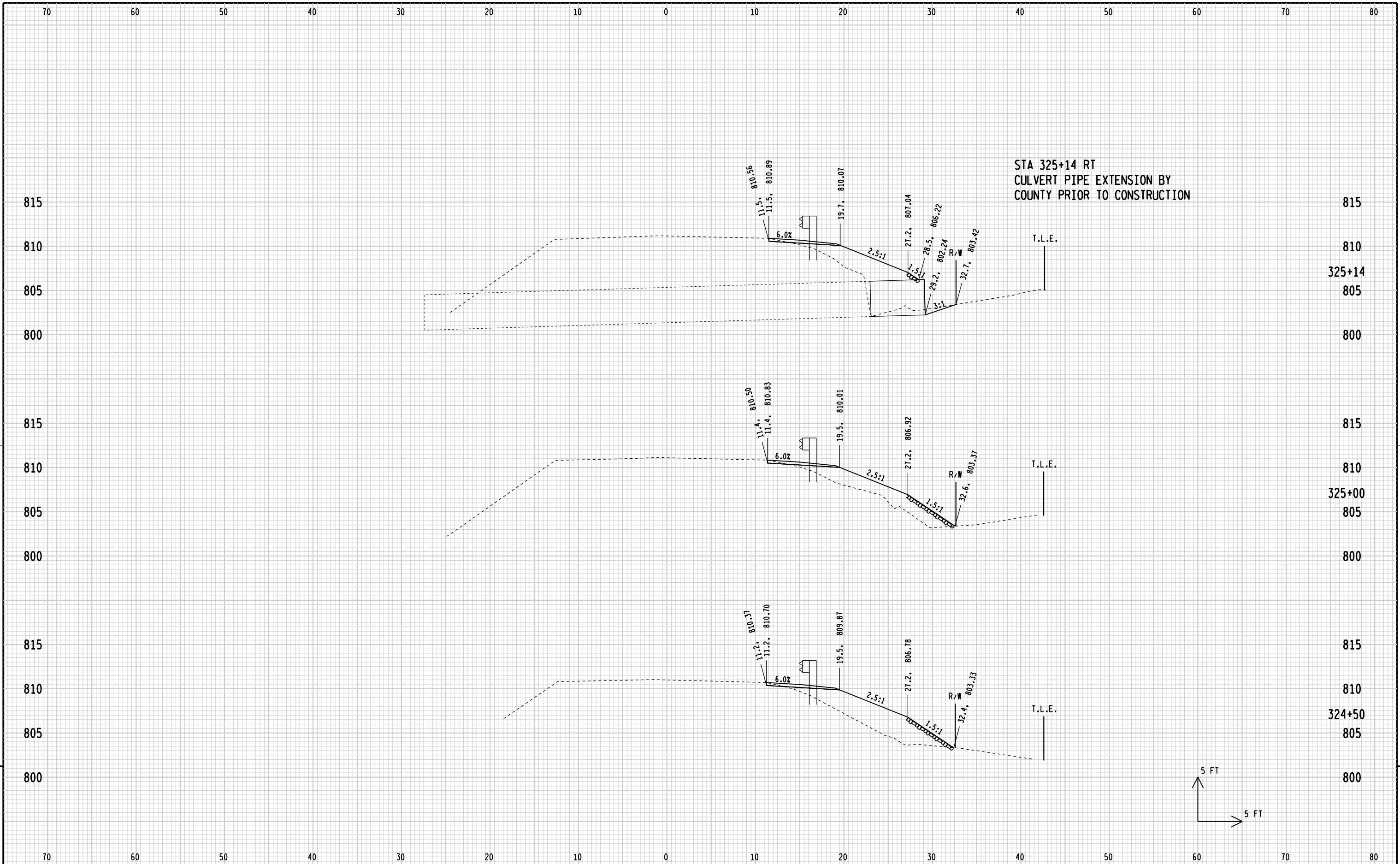




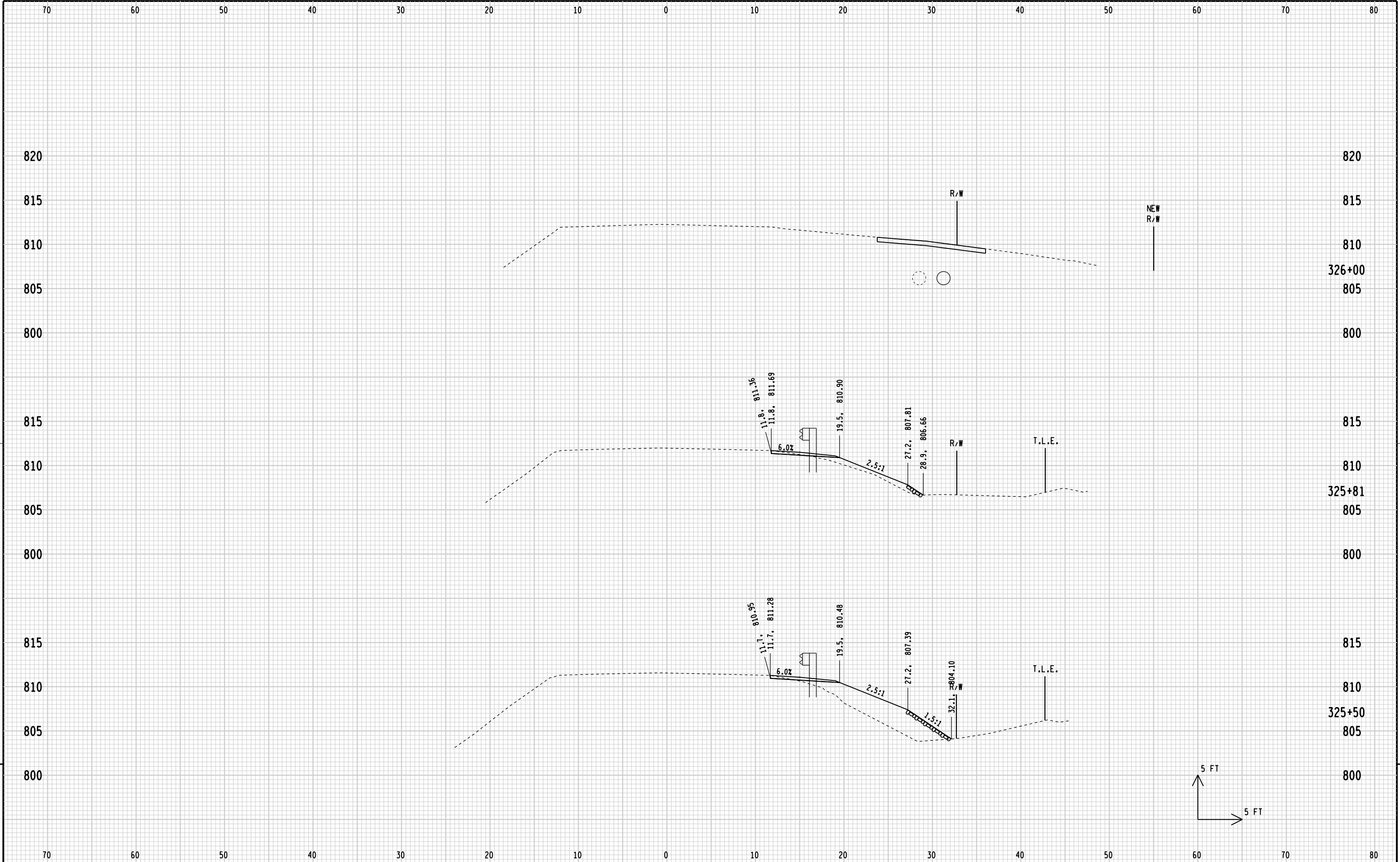
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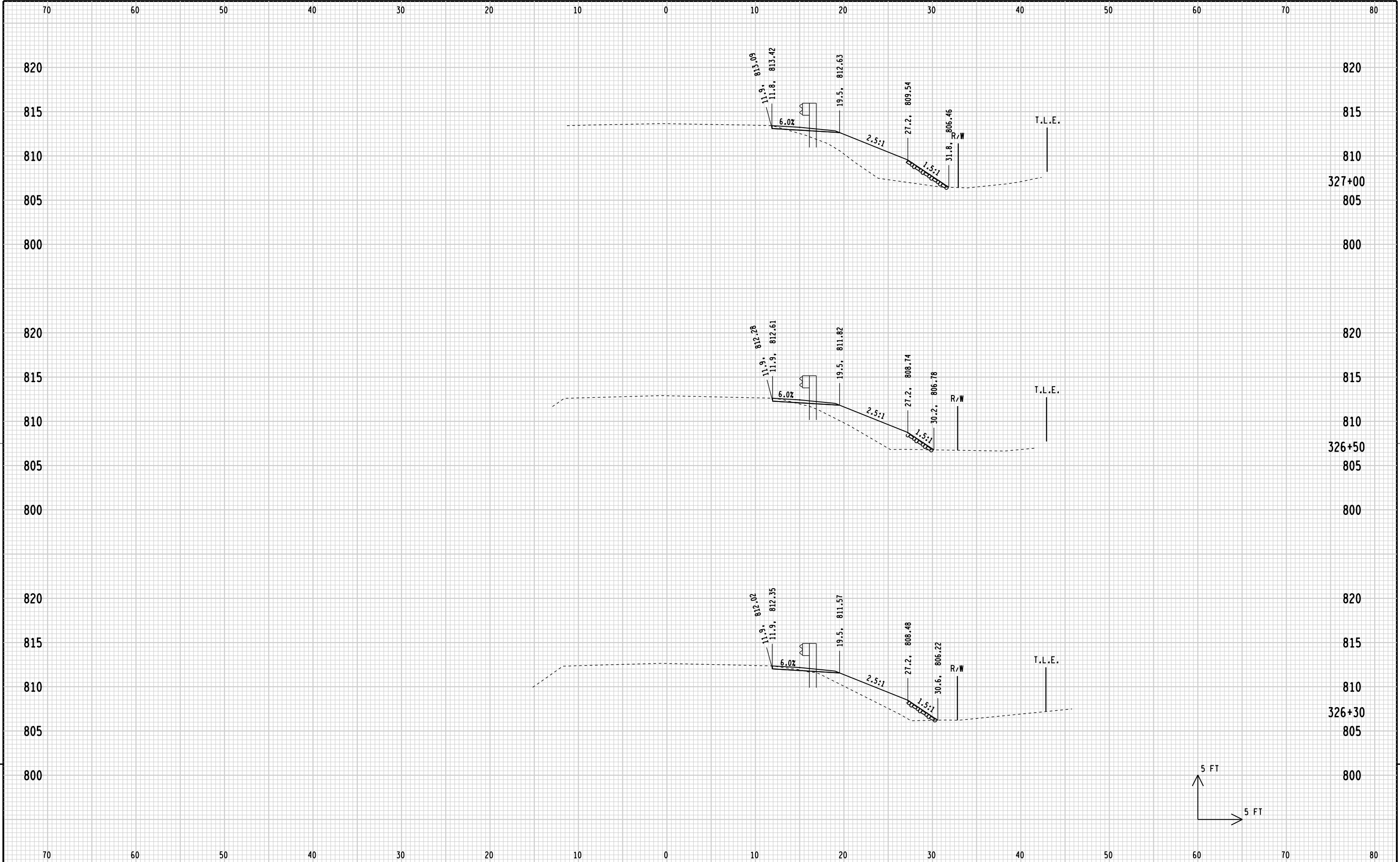


STA 325+14 RT
CULVERT PIPE EXTENSION BY
COUNTY PRIOR TO CONSTRUCTION



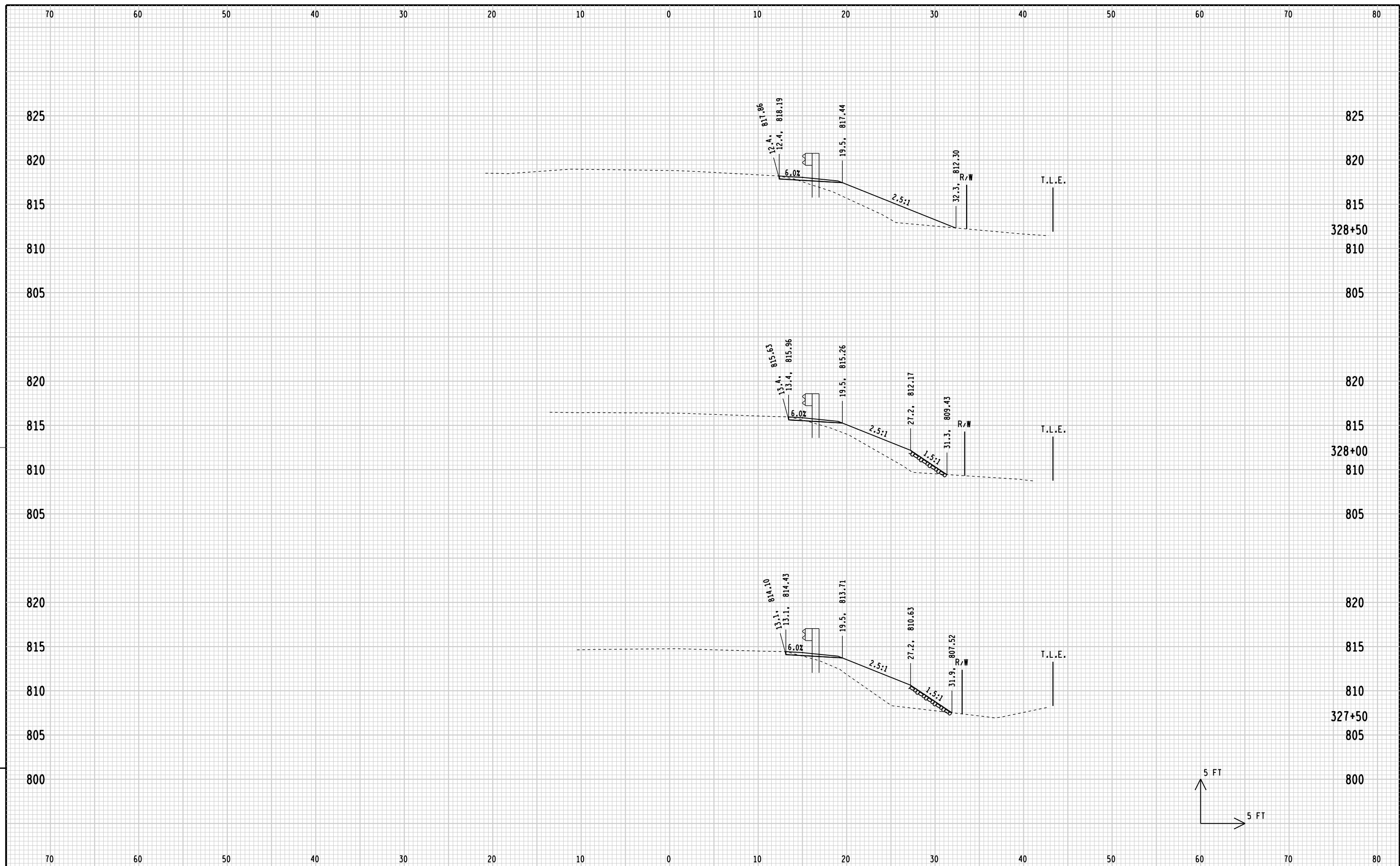
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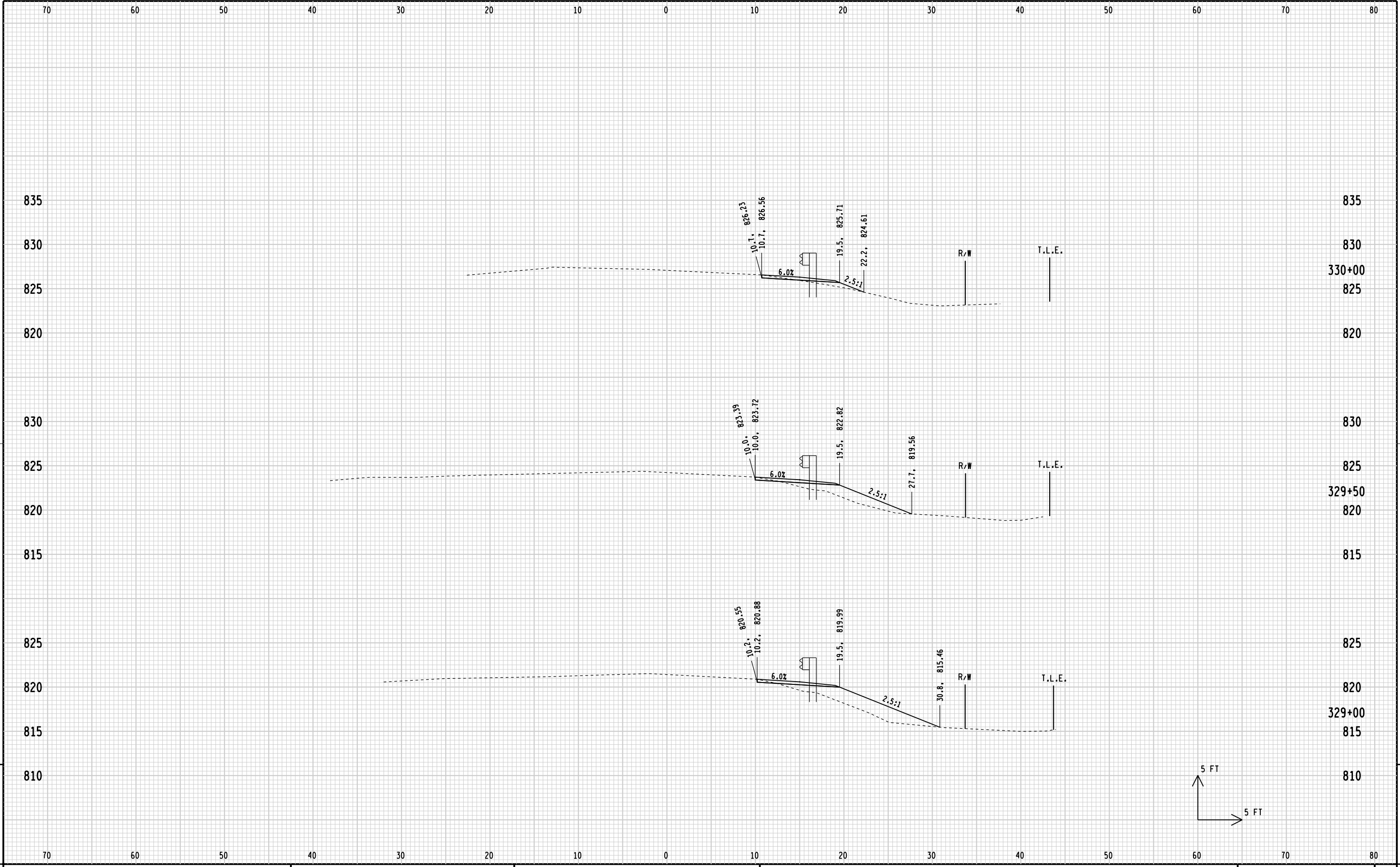
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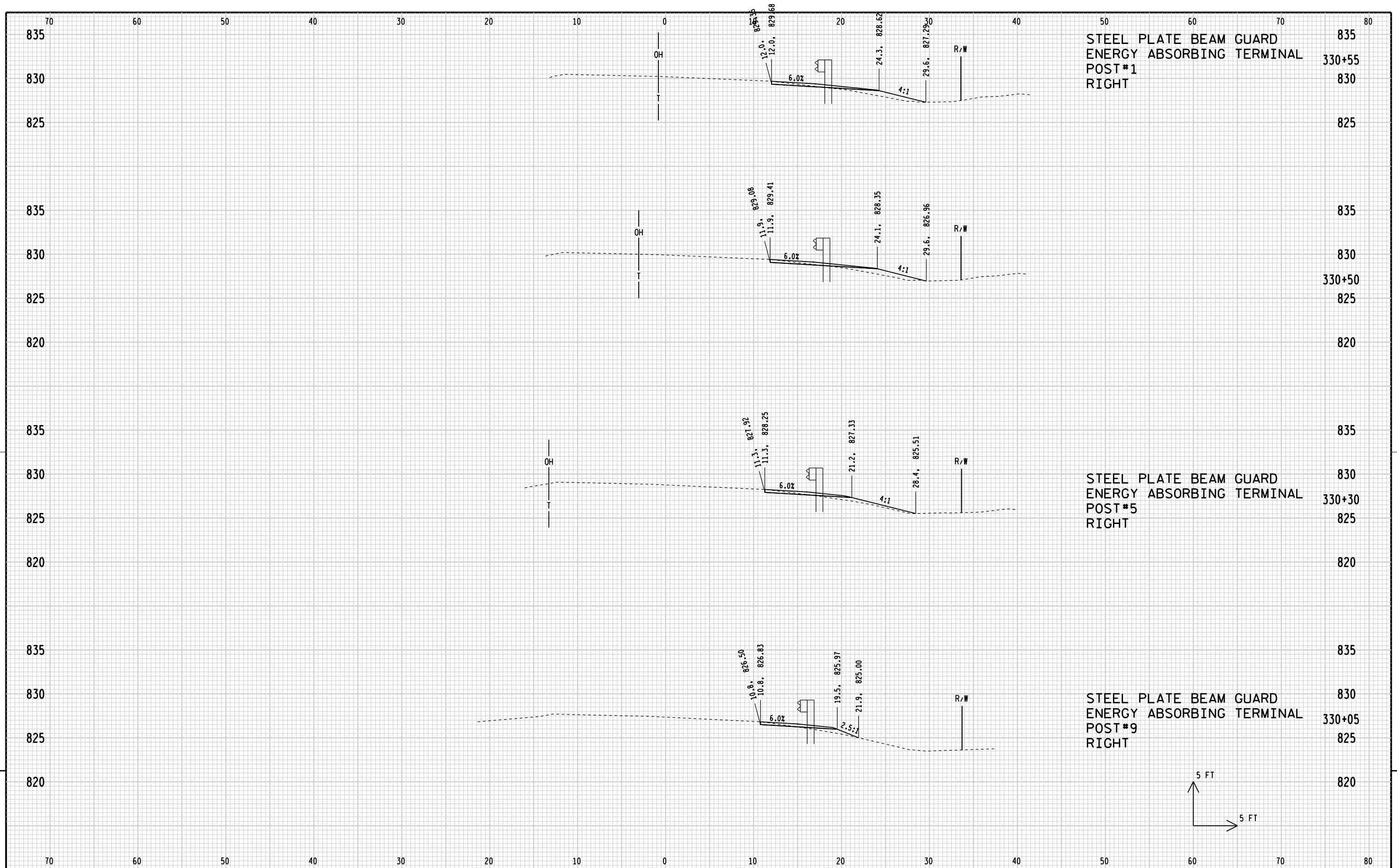
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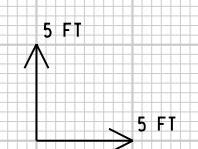
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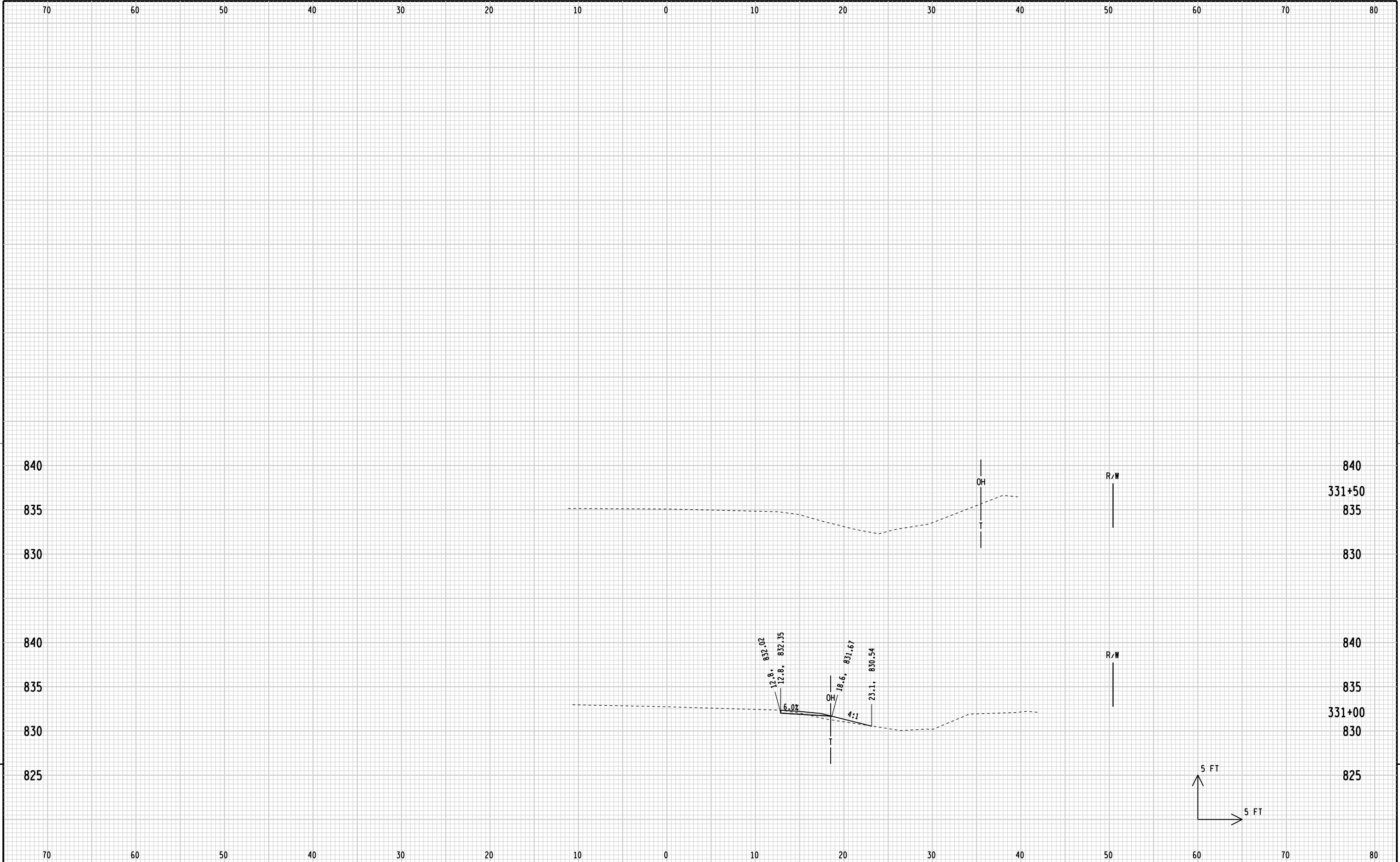


STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL
POST #1
RIGHT

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL
POST #5
RIGHT

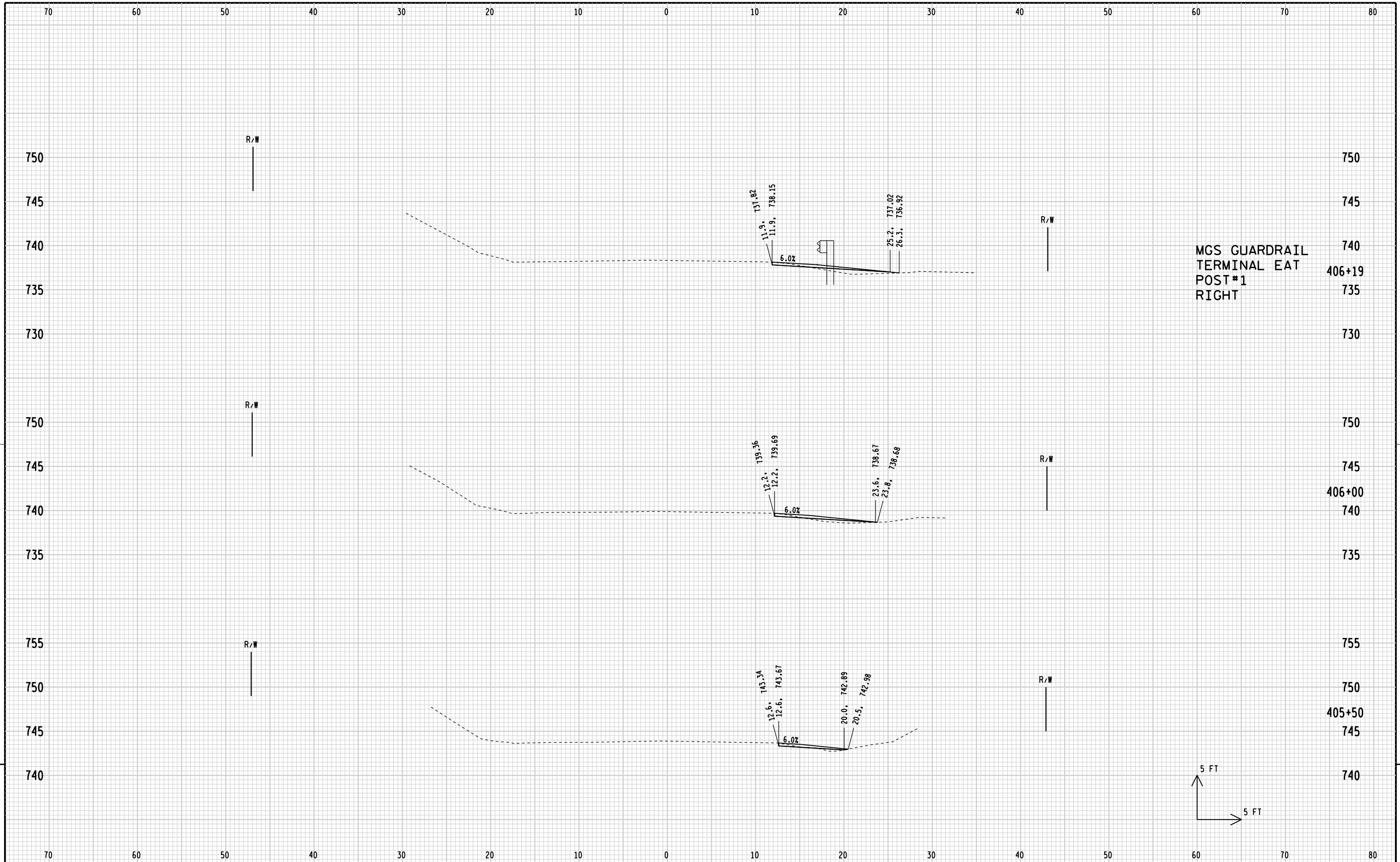
STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL
POST #9
RIGHT

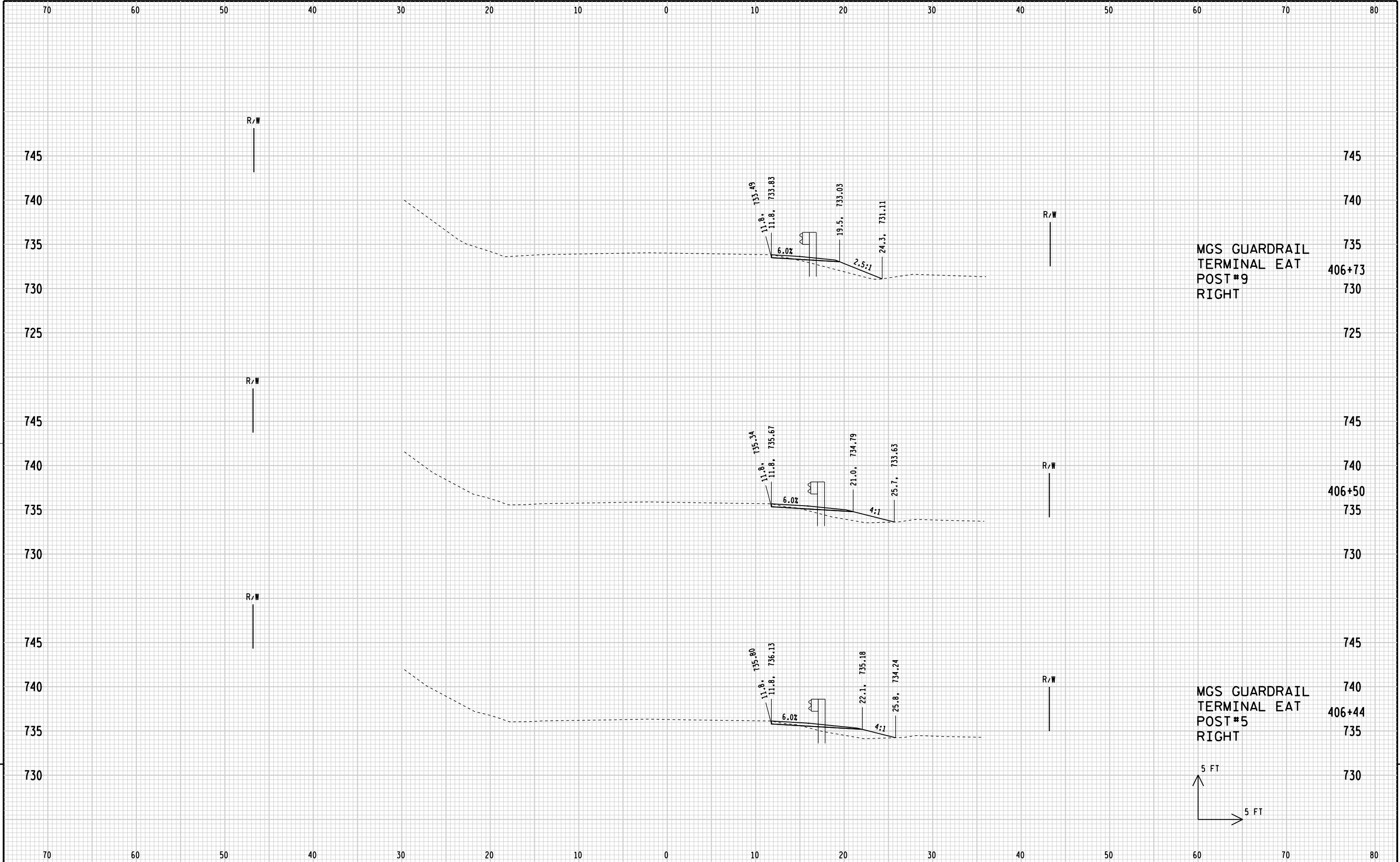


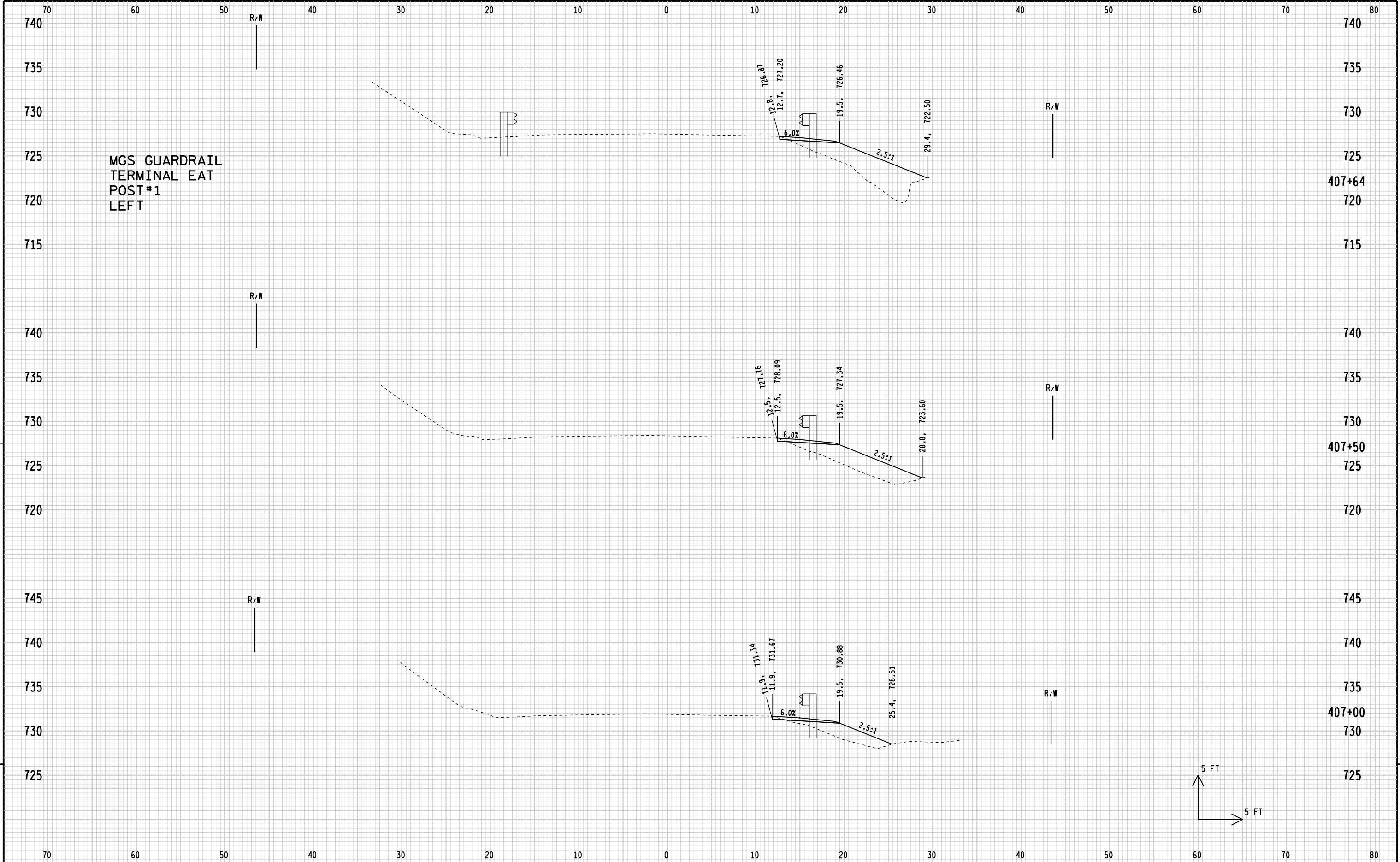


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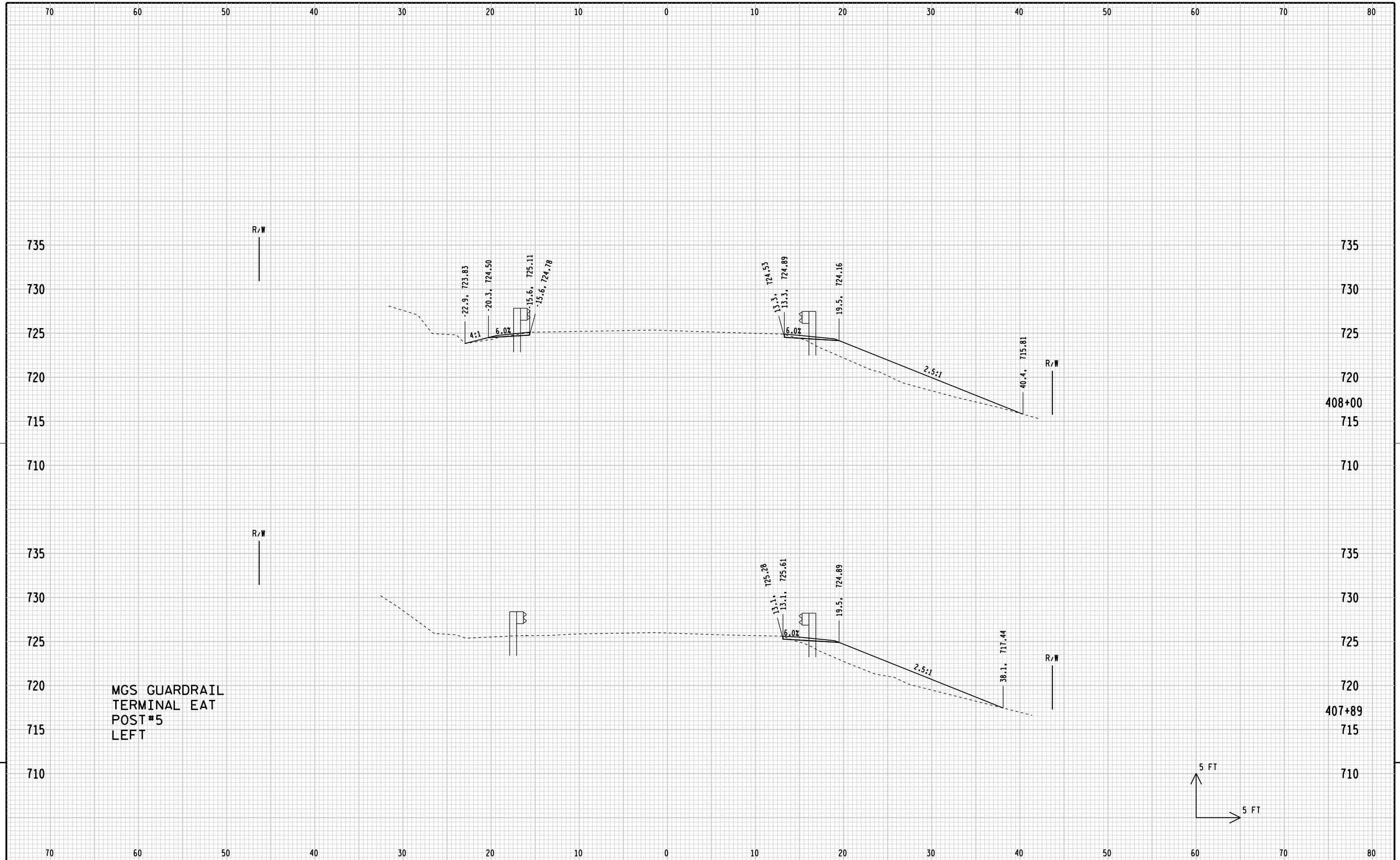
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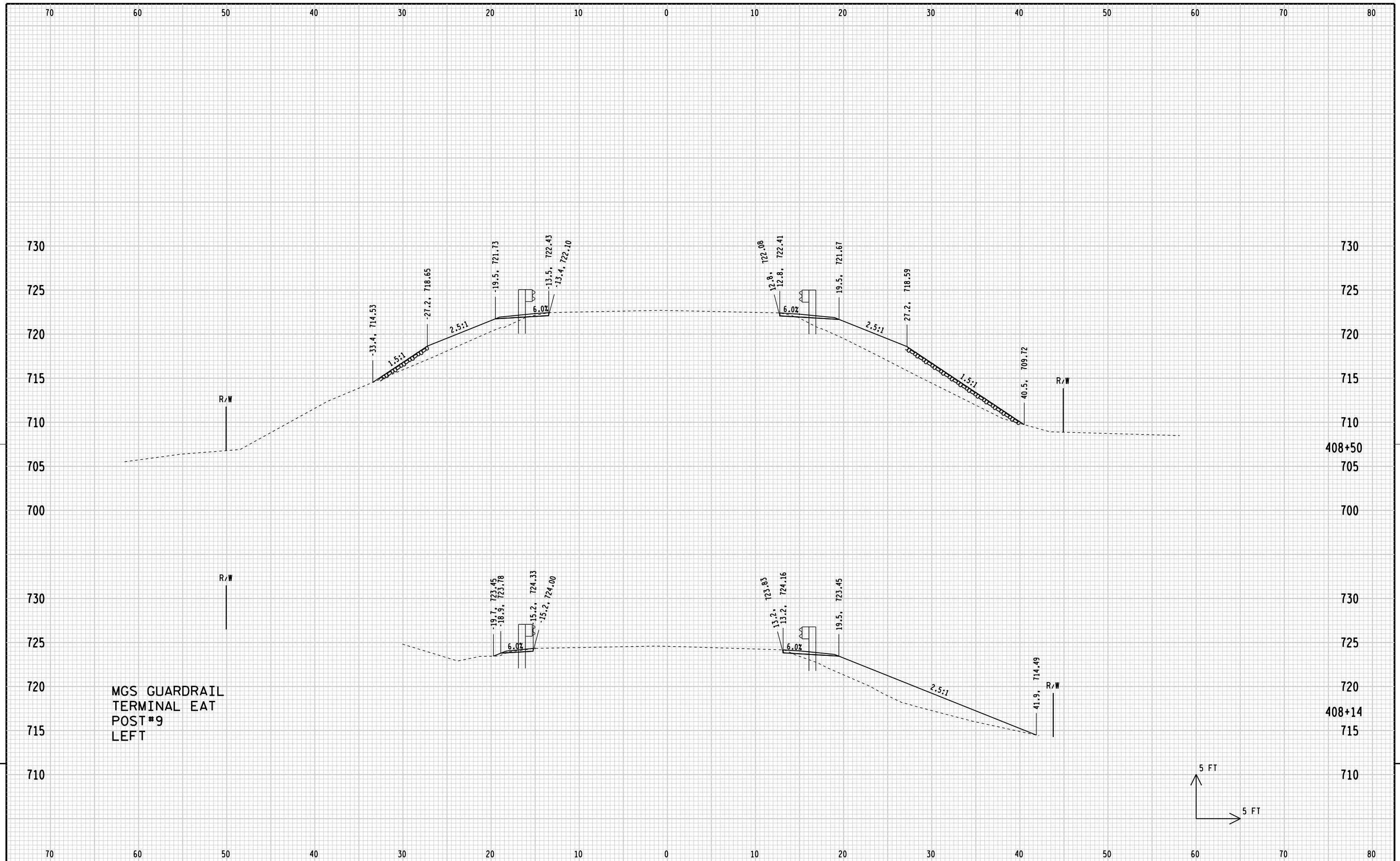


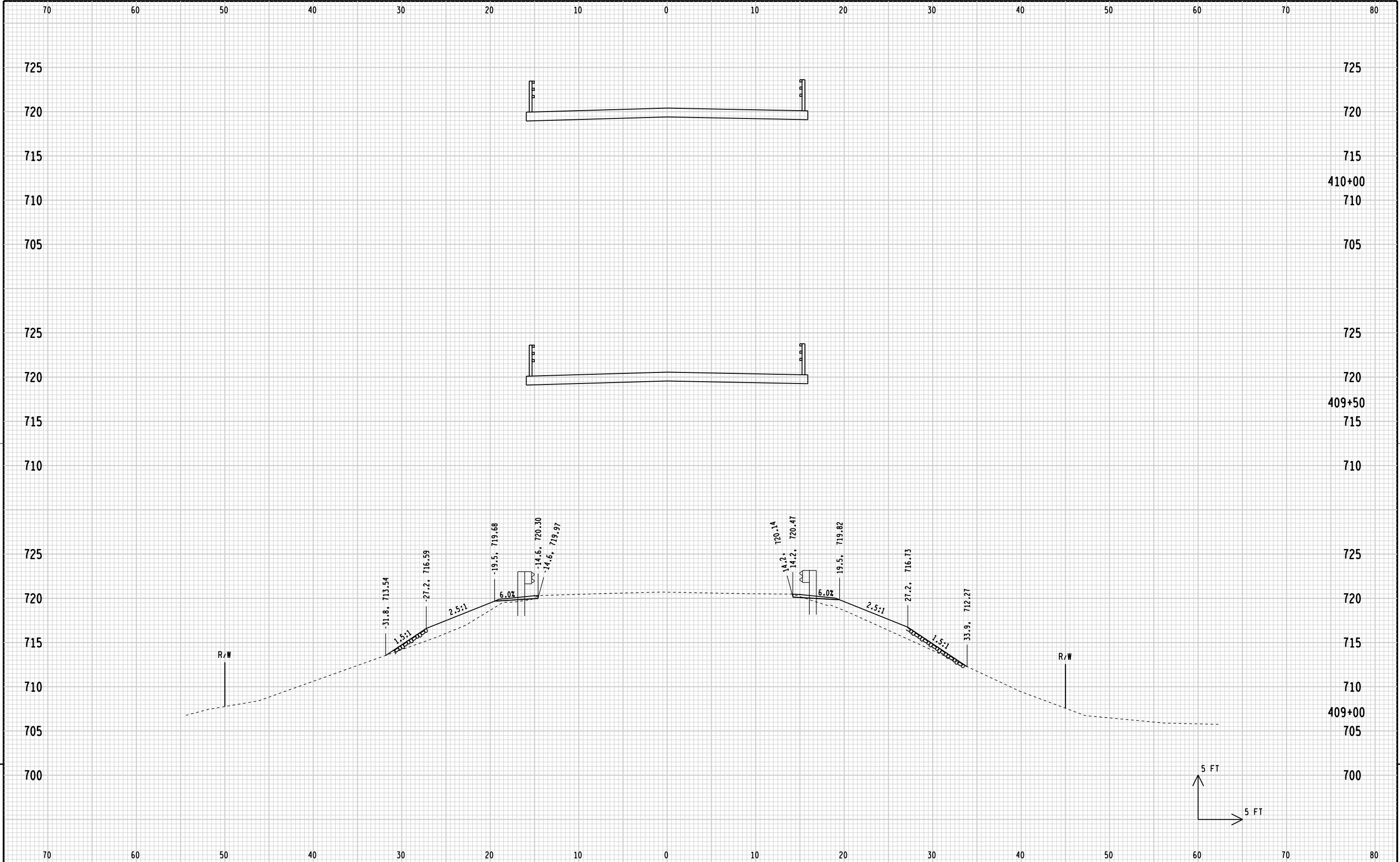


MGS GUARDRAIL
TERMINAL EAT
POST*1
LEFT



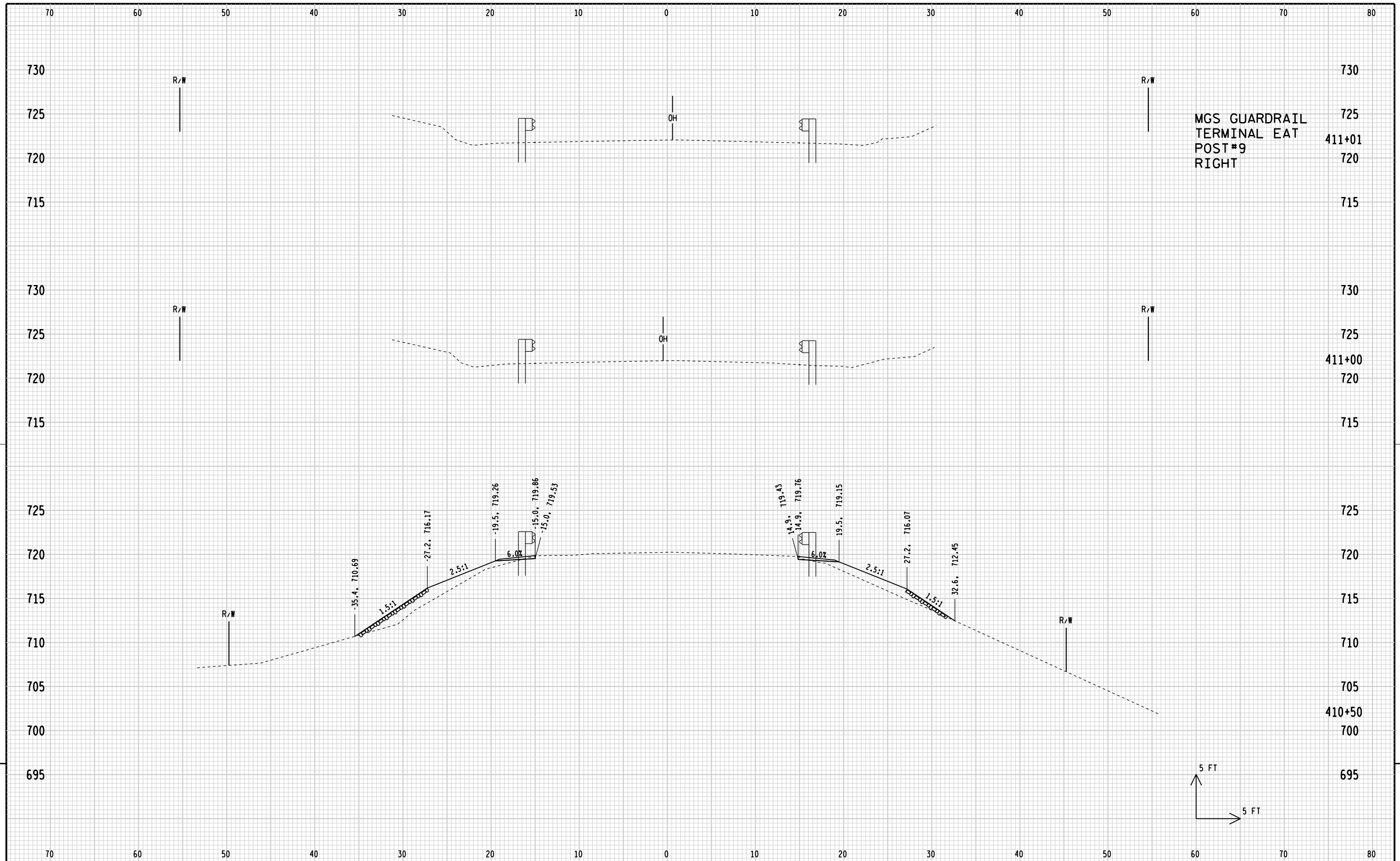
MGS GUARDRAIL
TERMINAL EAT
POST*5
LEFT

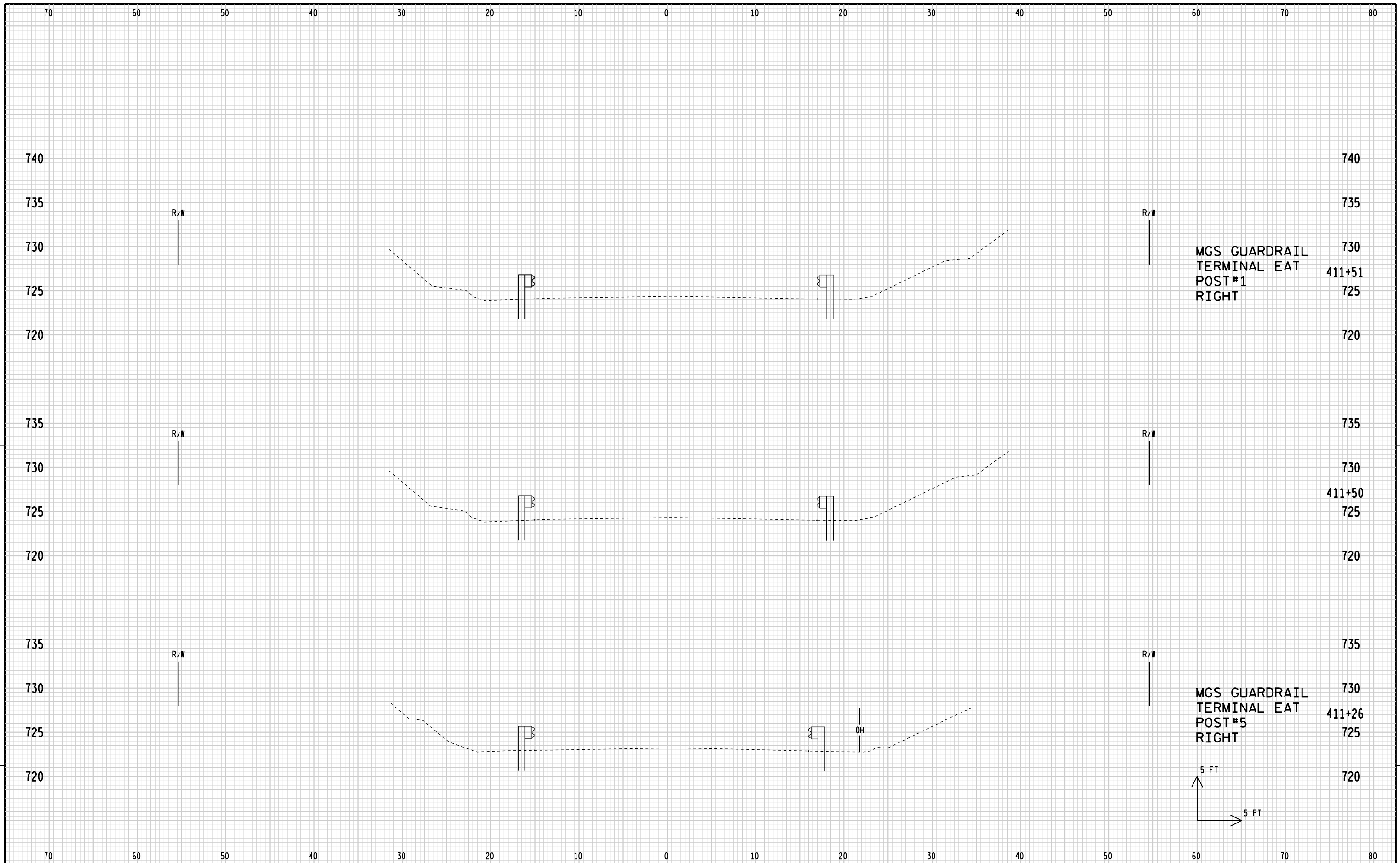


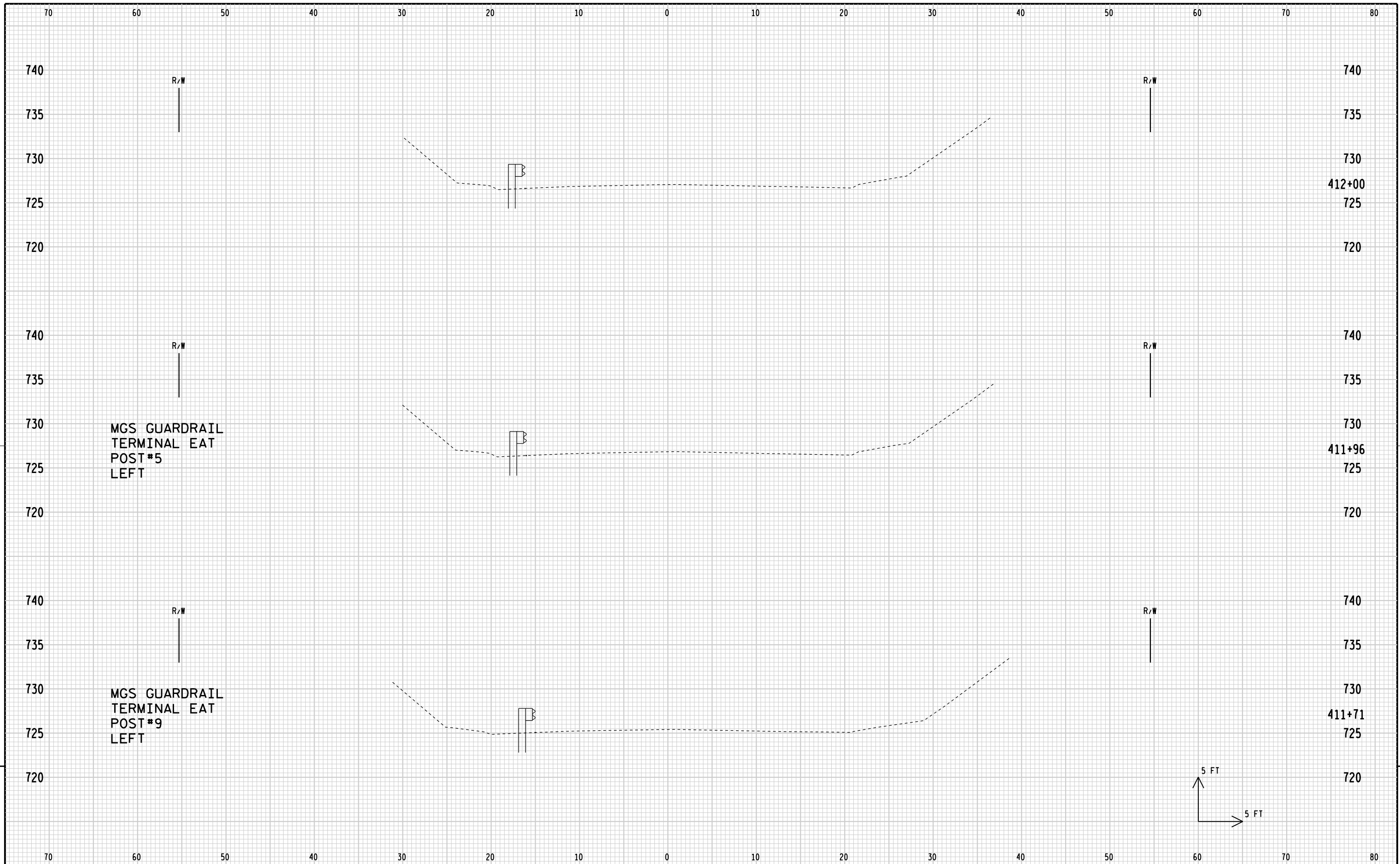


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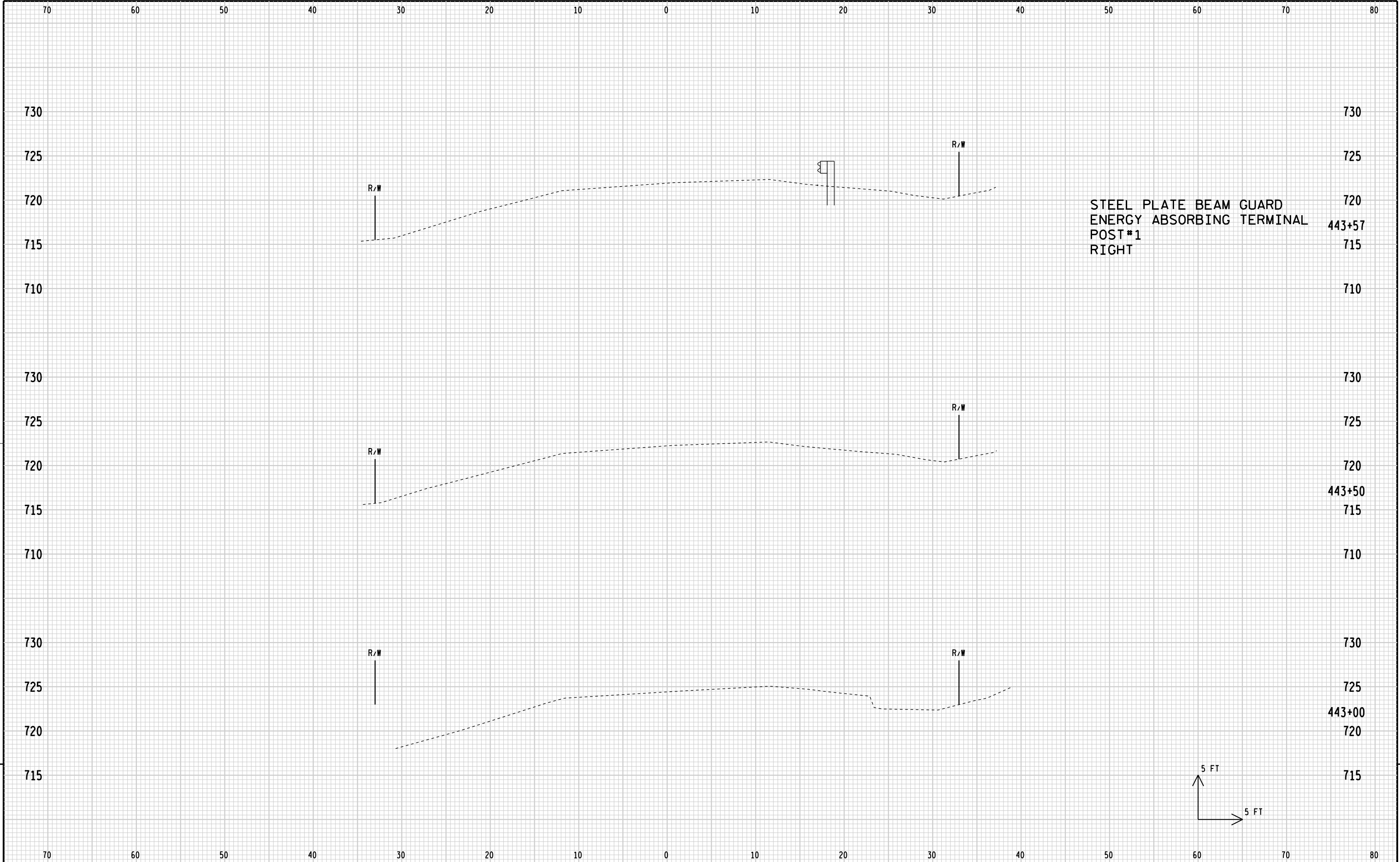


MGS GUARDRAIL
TERMINAL EAT
POST*5
LEFT

MGS GUARDRAIL
TERMINAL EAT
POST*9
LEFT



MGS GUARDRAIL
TERMINAL EAT
POST #1
LEFT



STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL
POST #1
RIGHT

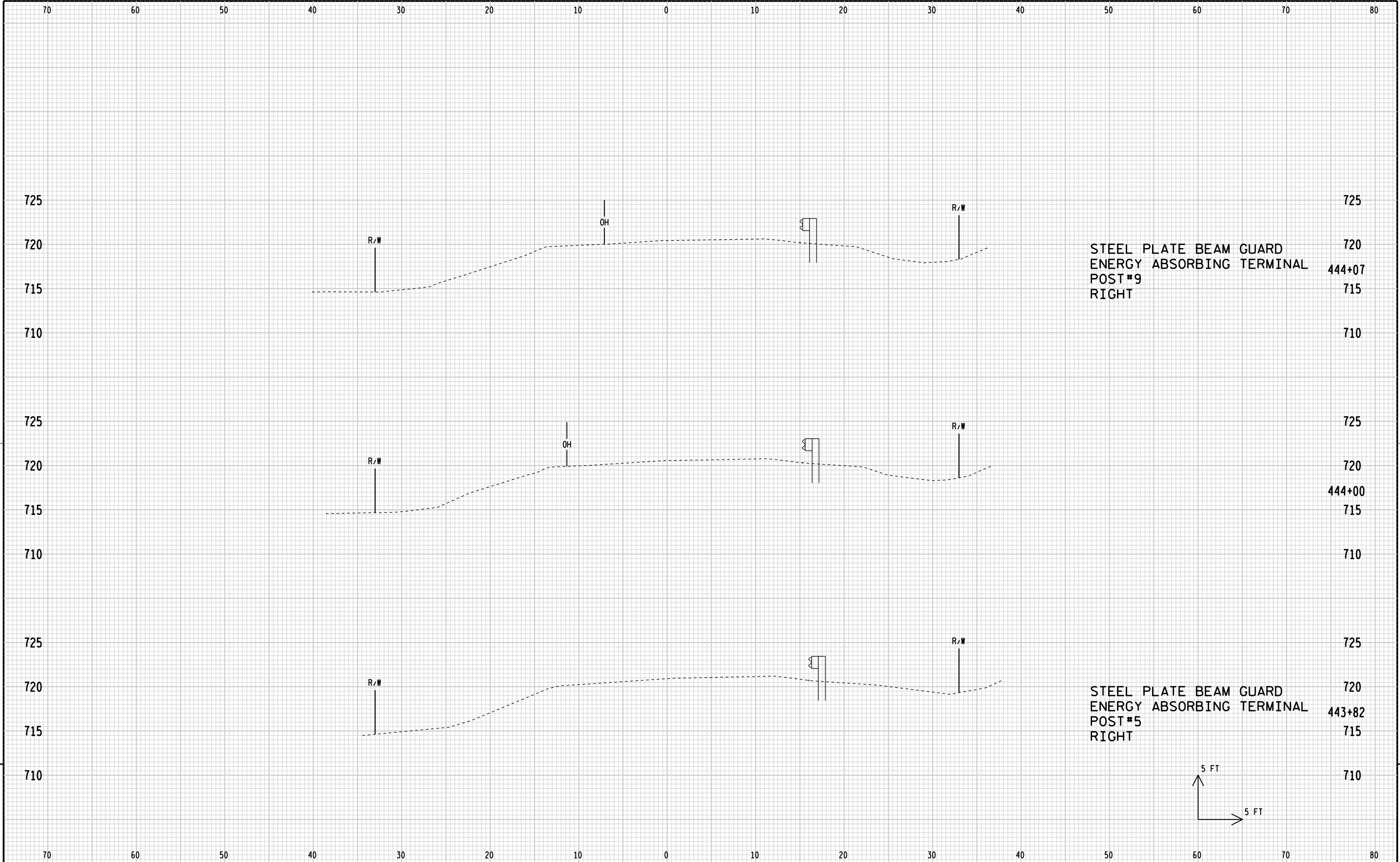
443+57

443+50

443+00

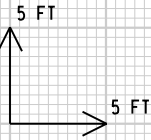
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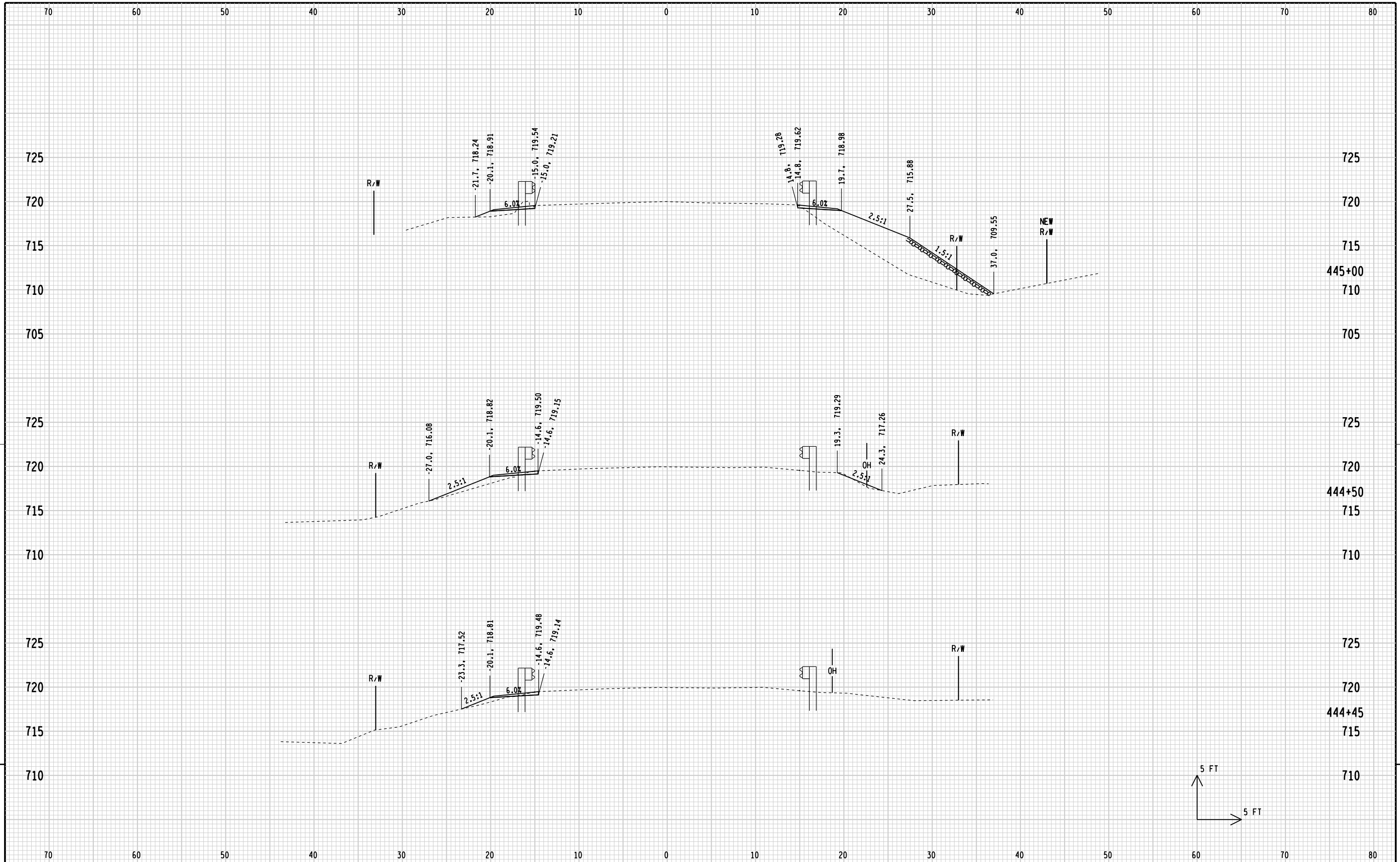
STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL
POST #9
RIGHT

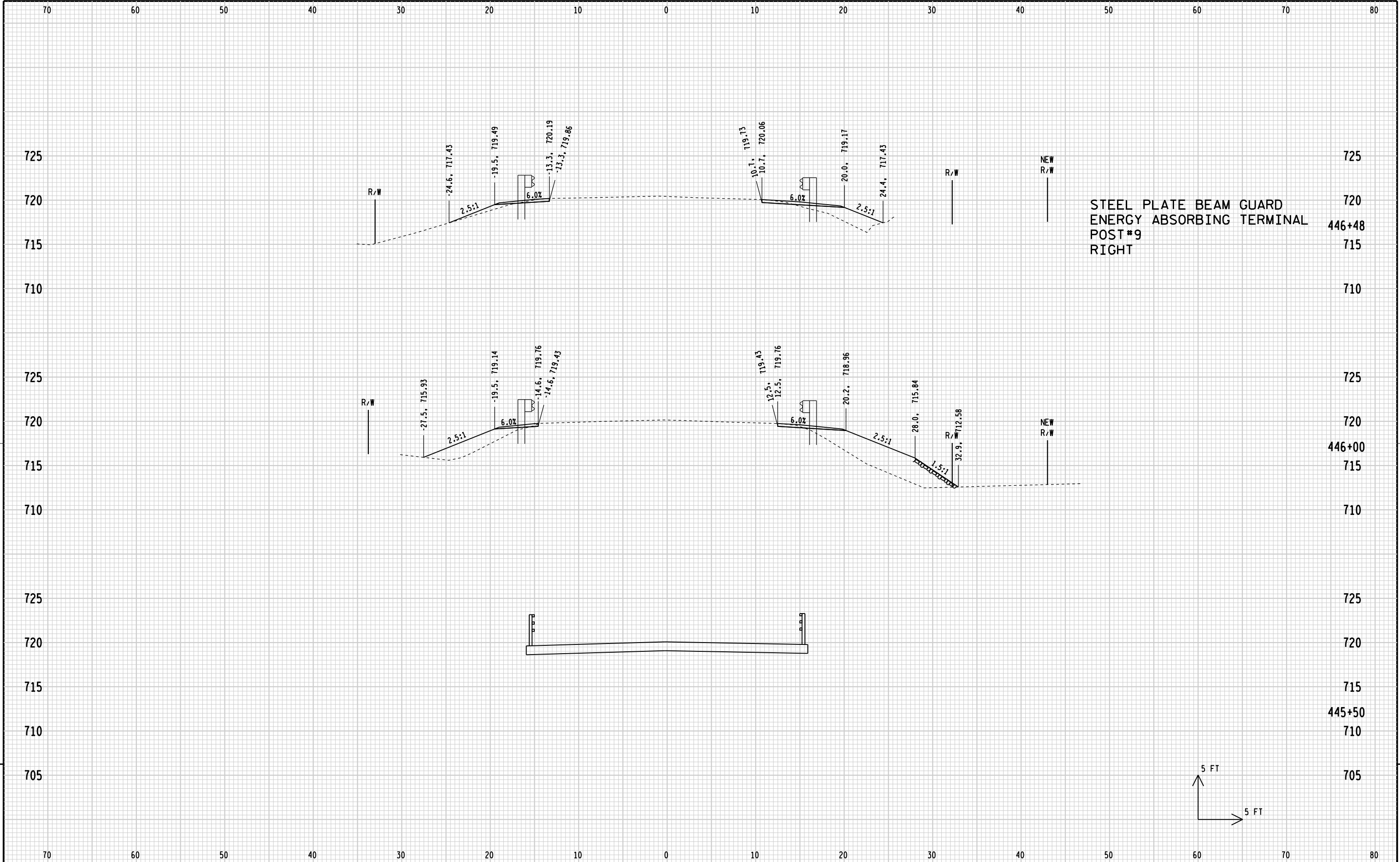
STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL
POST #5
RIGHT

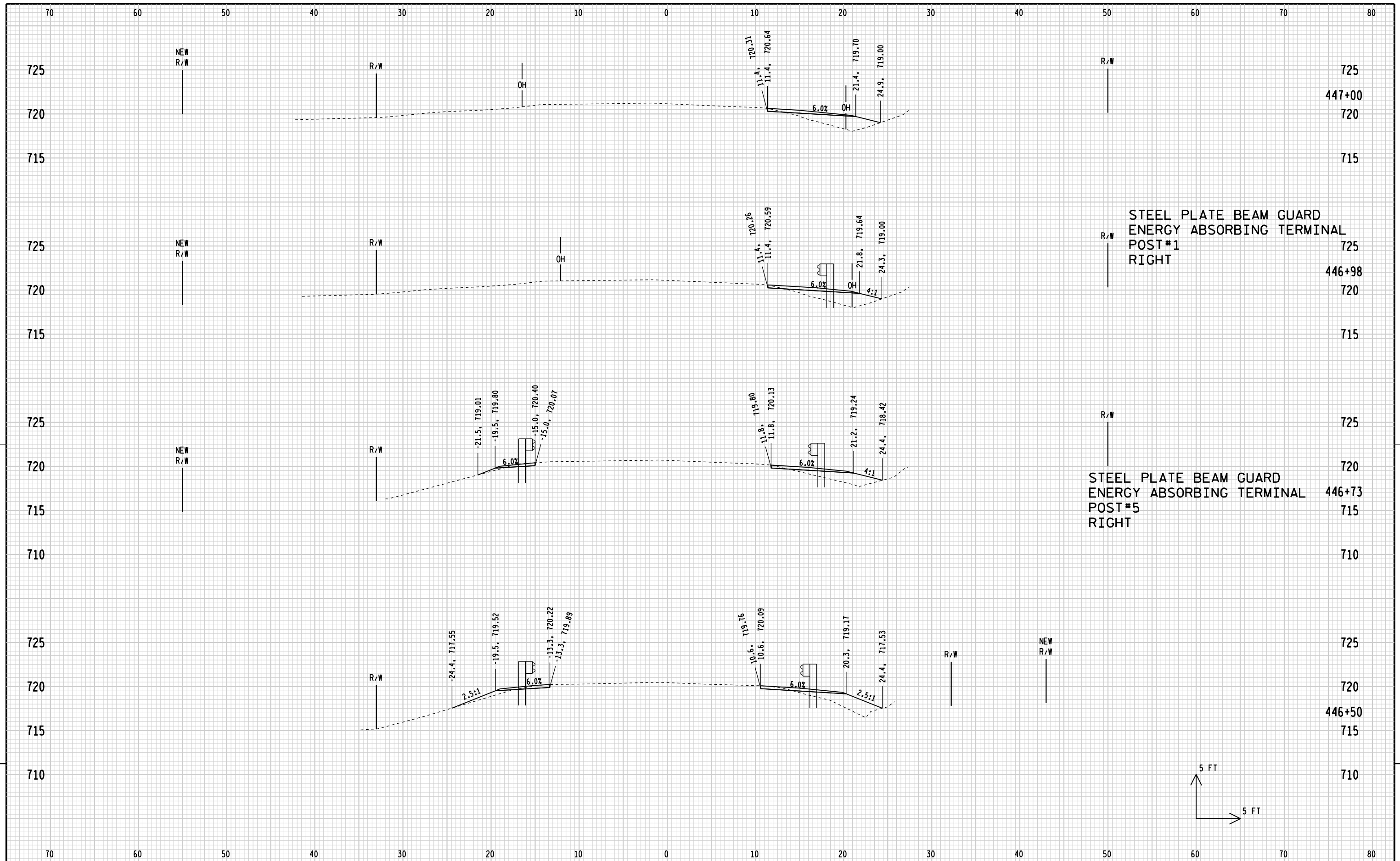


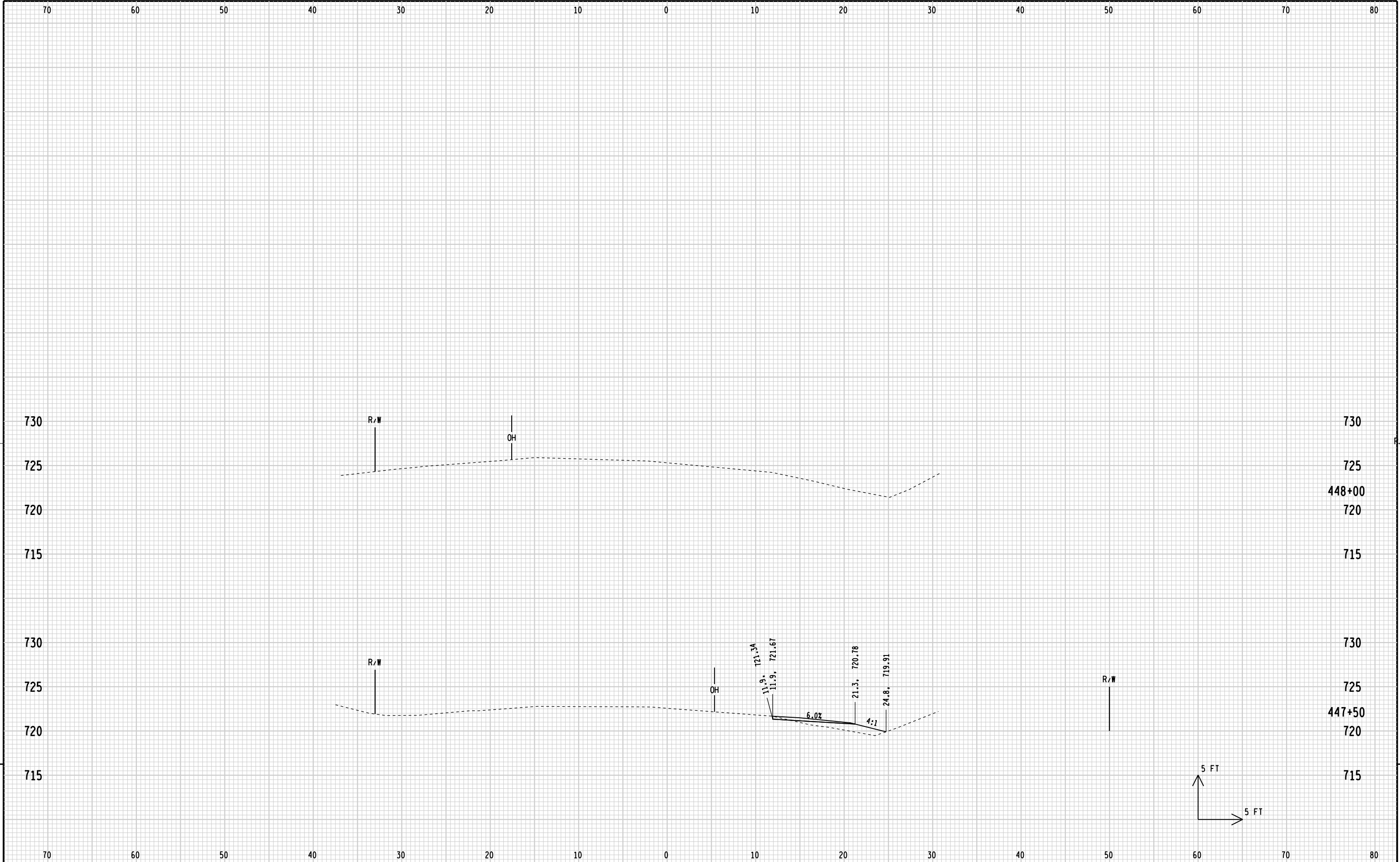
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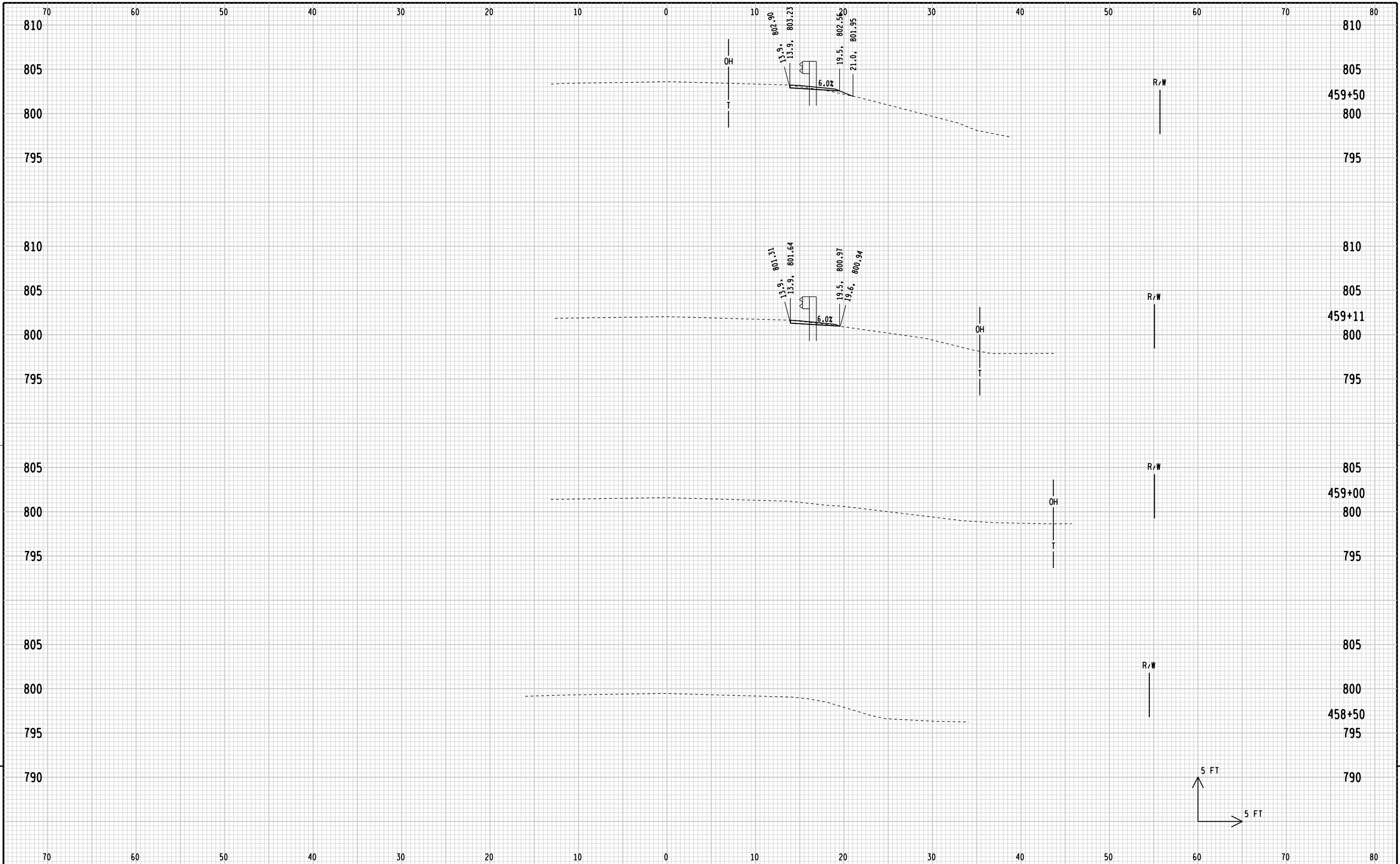


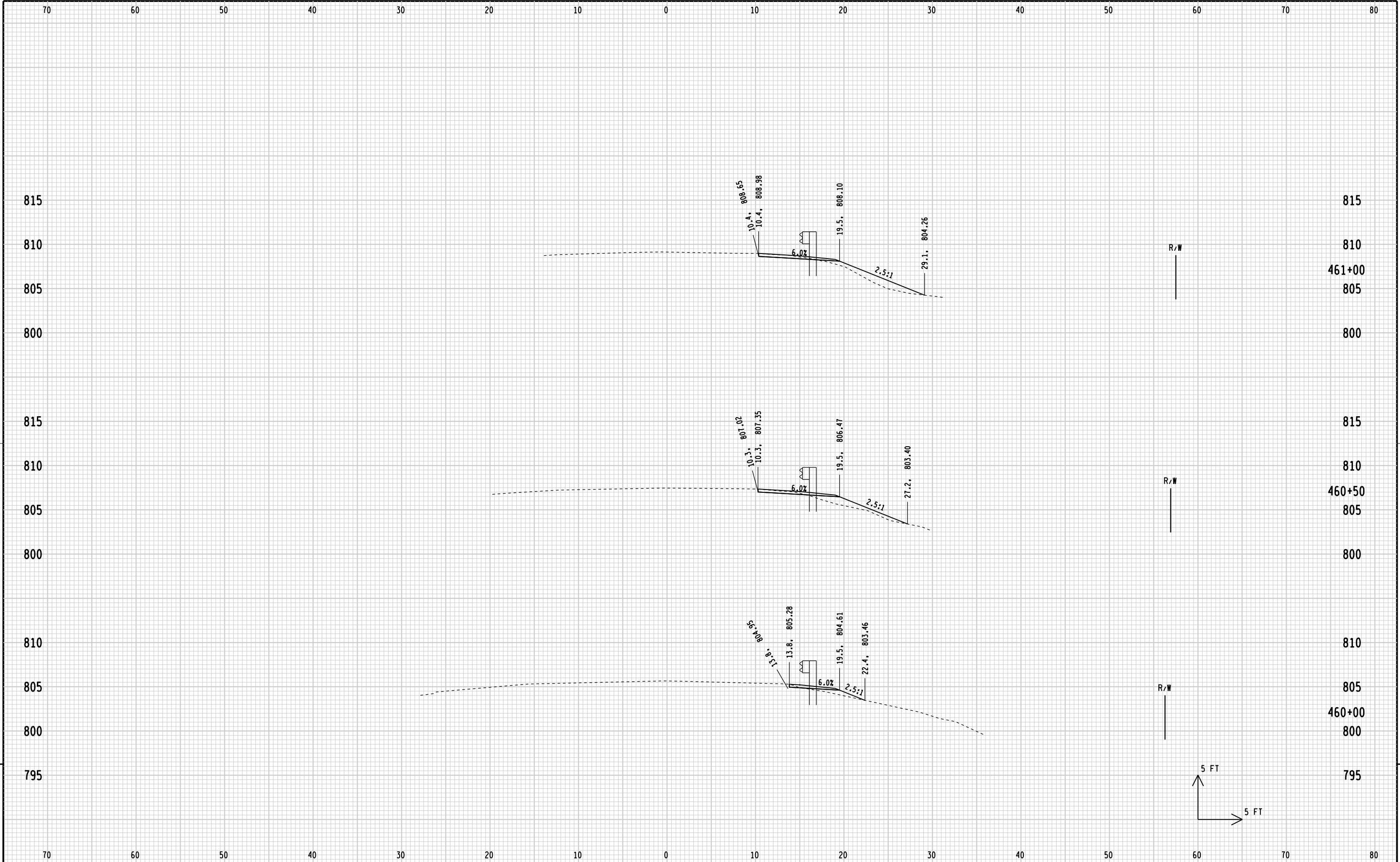


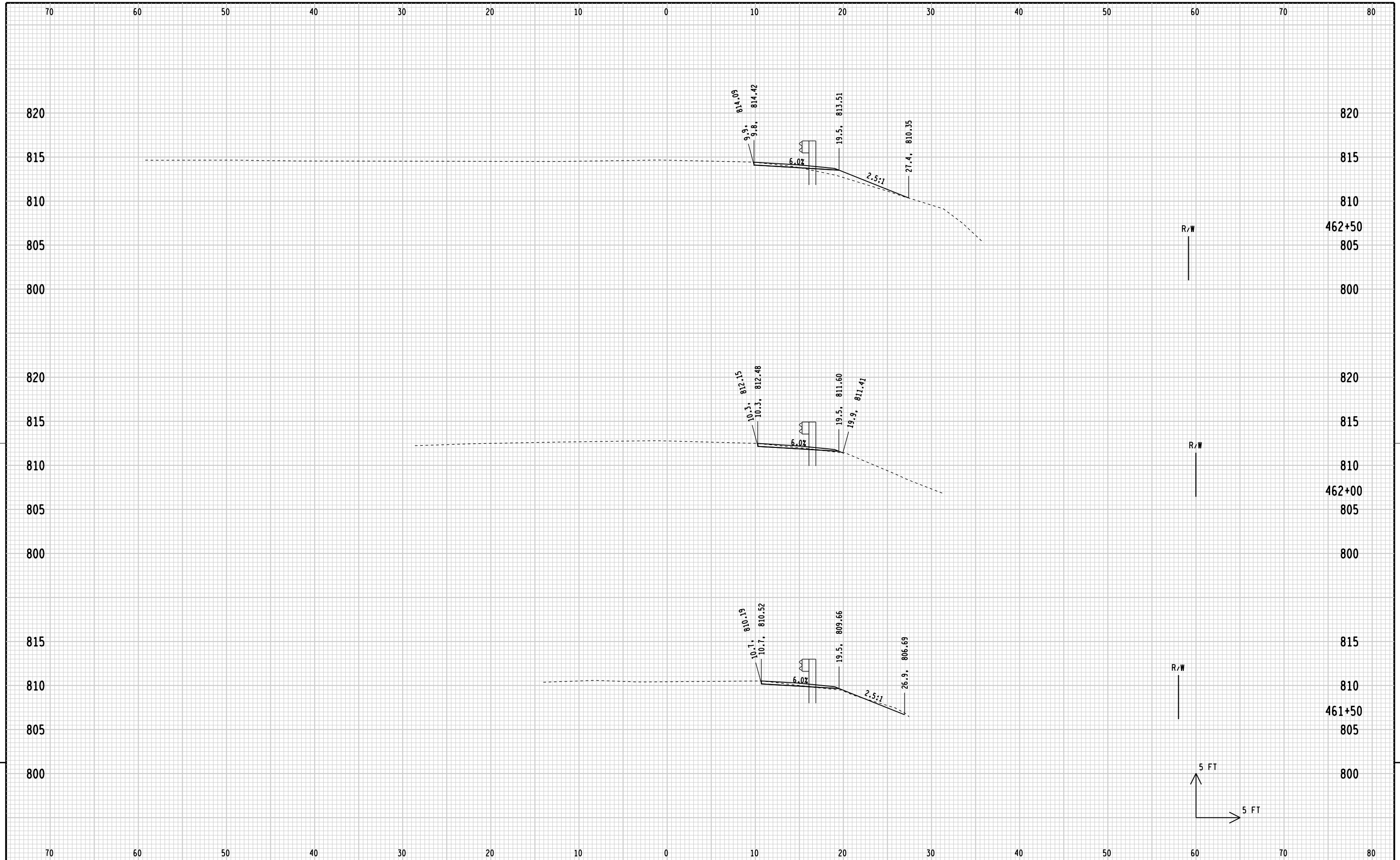


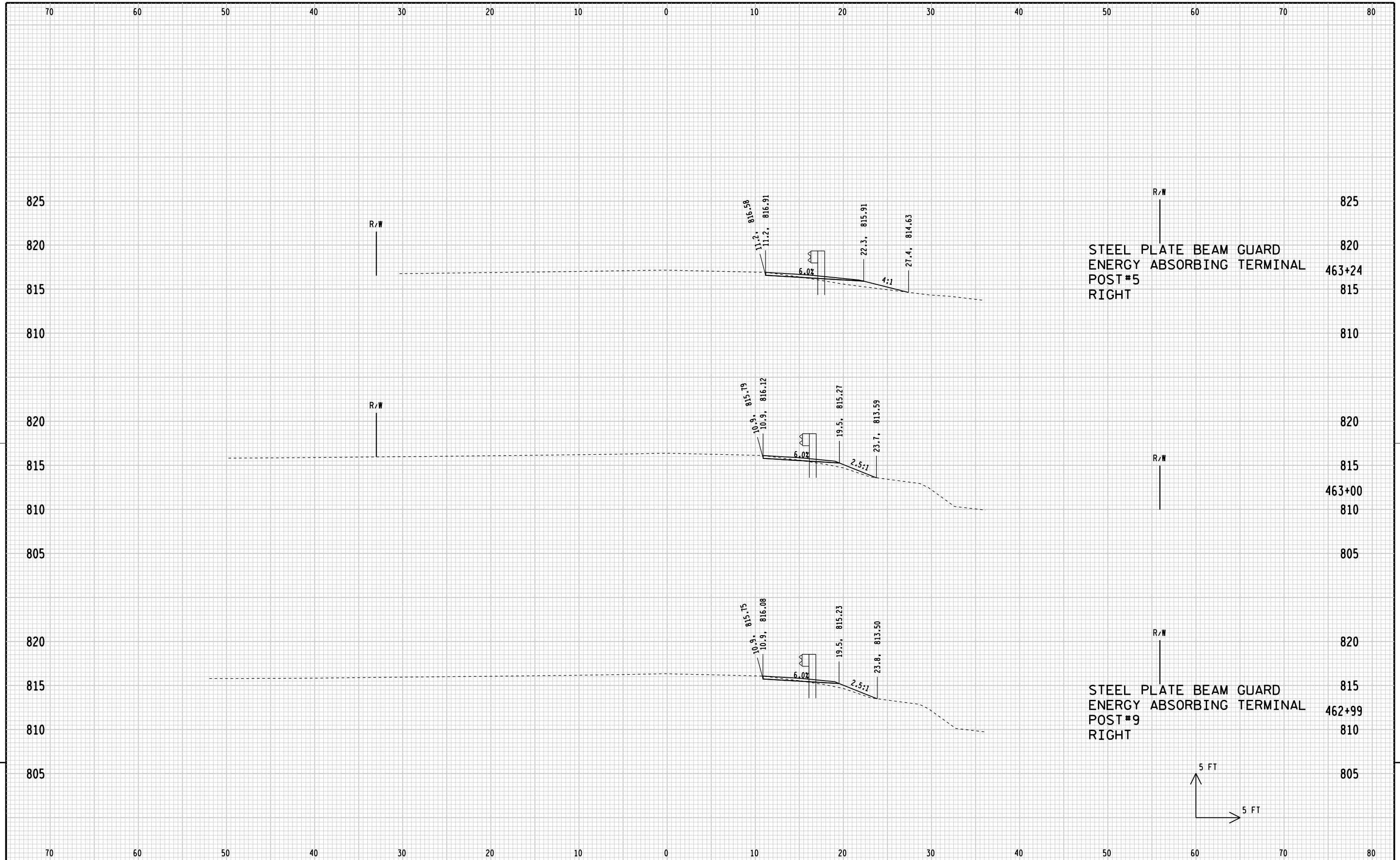
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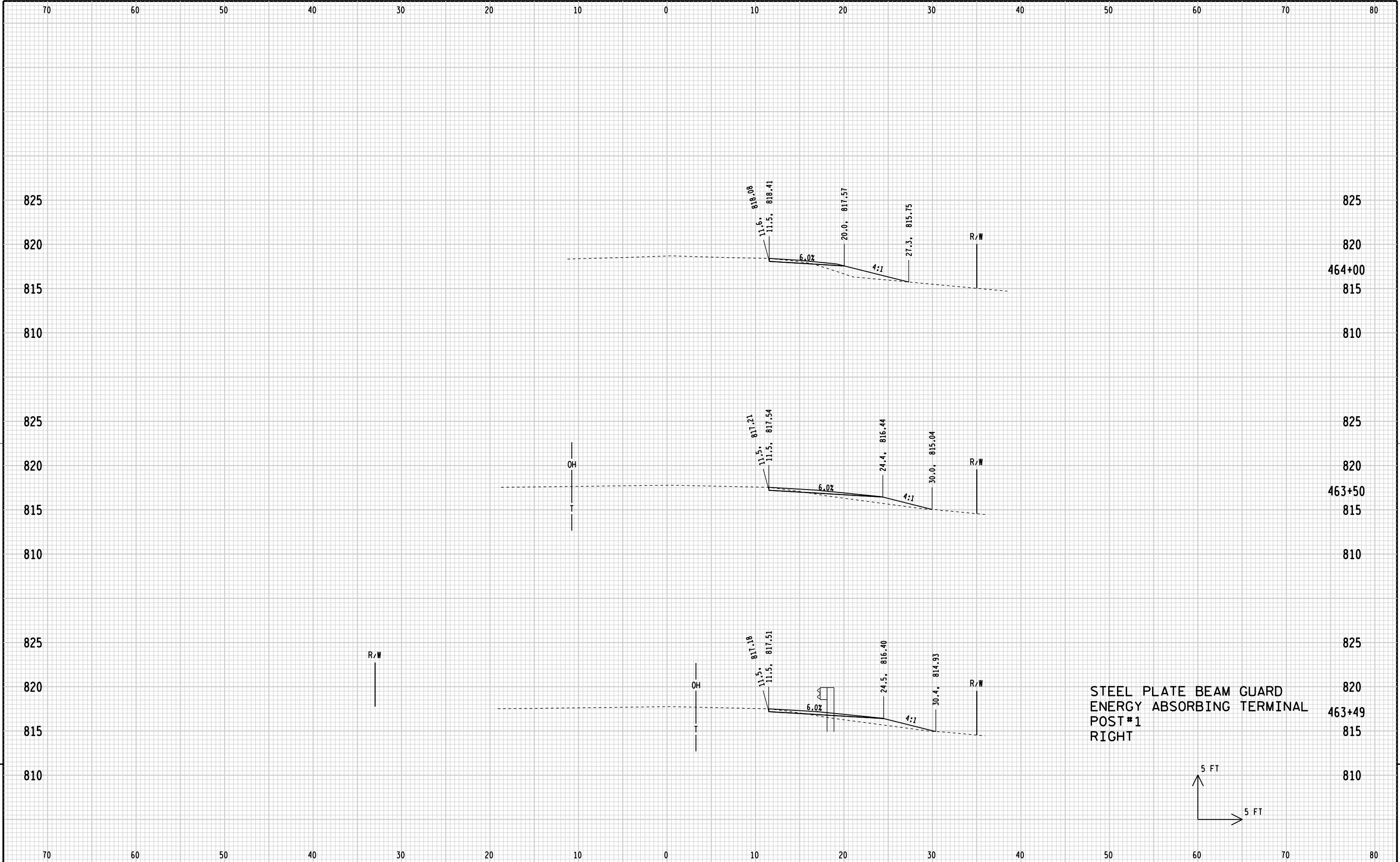
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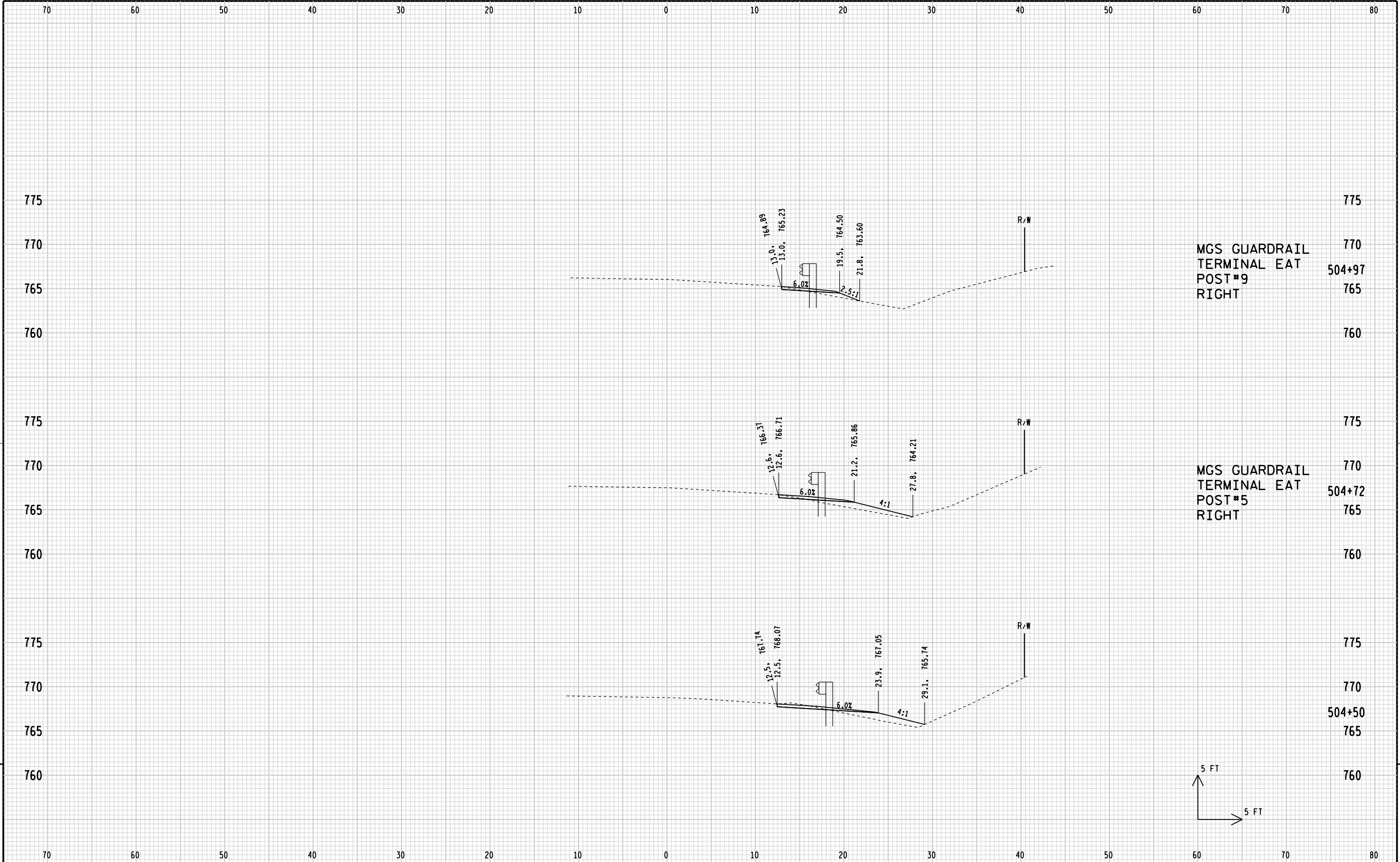








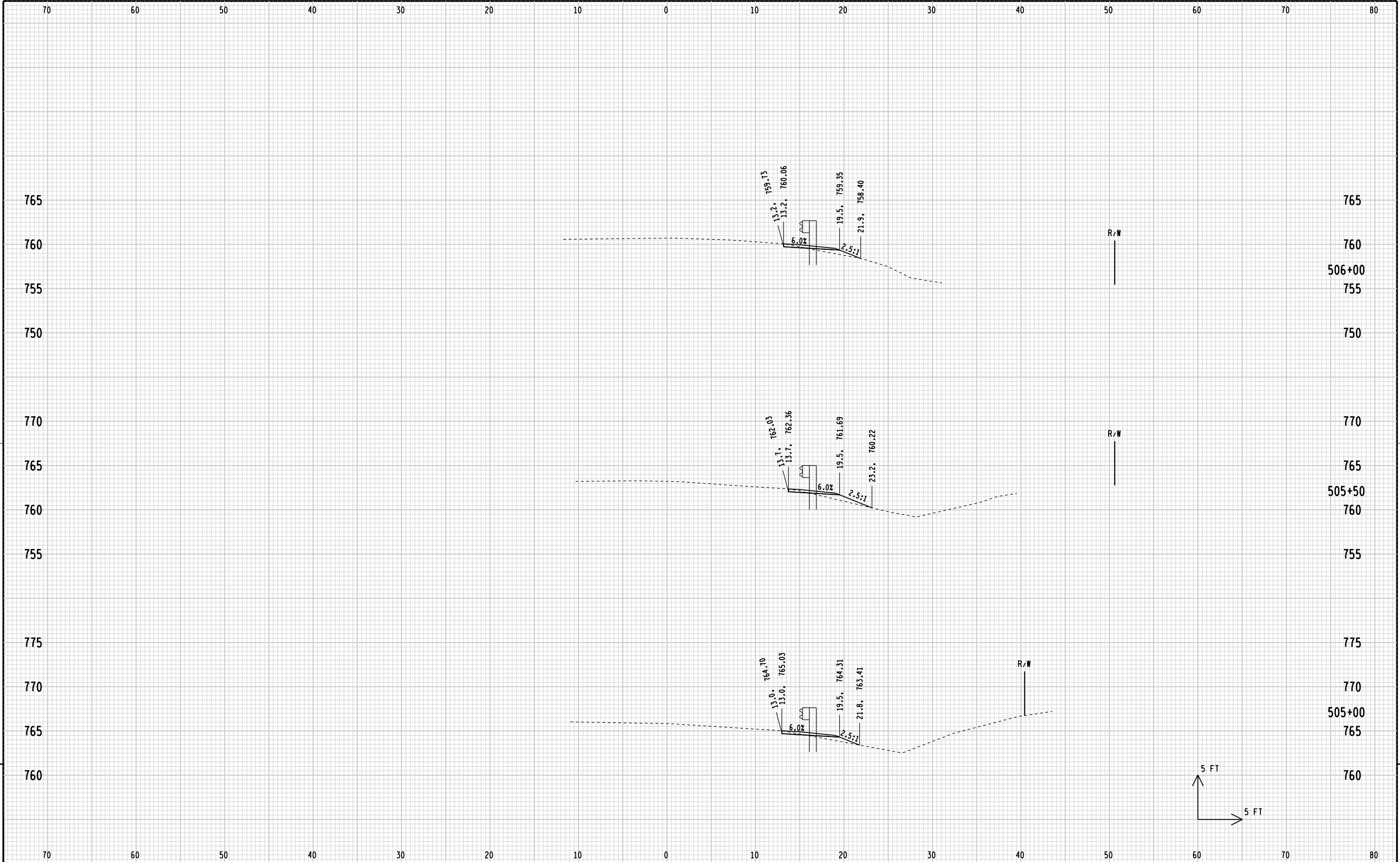




MGS GUARDRAIL
TERMINAL EAT
POST#9
RIGHT

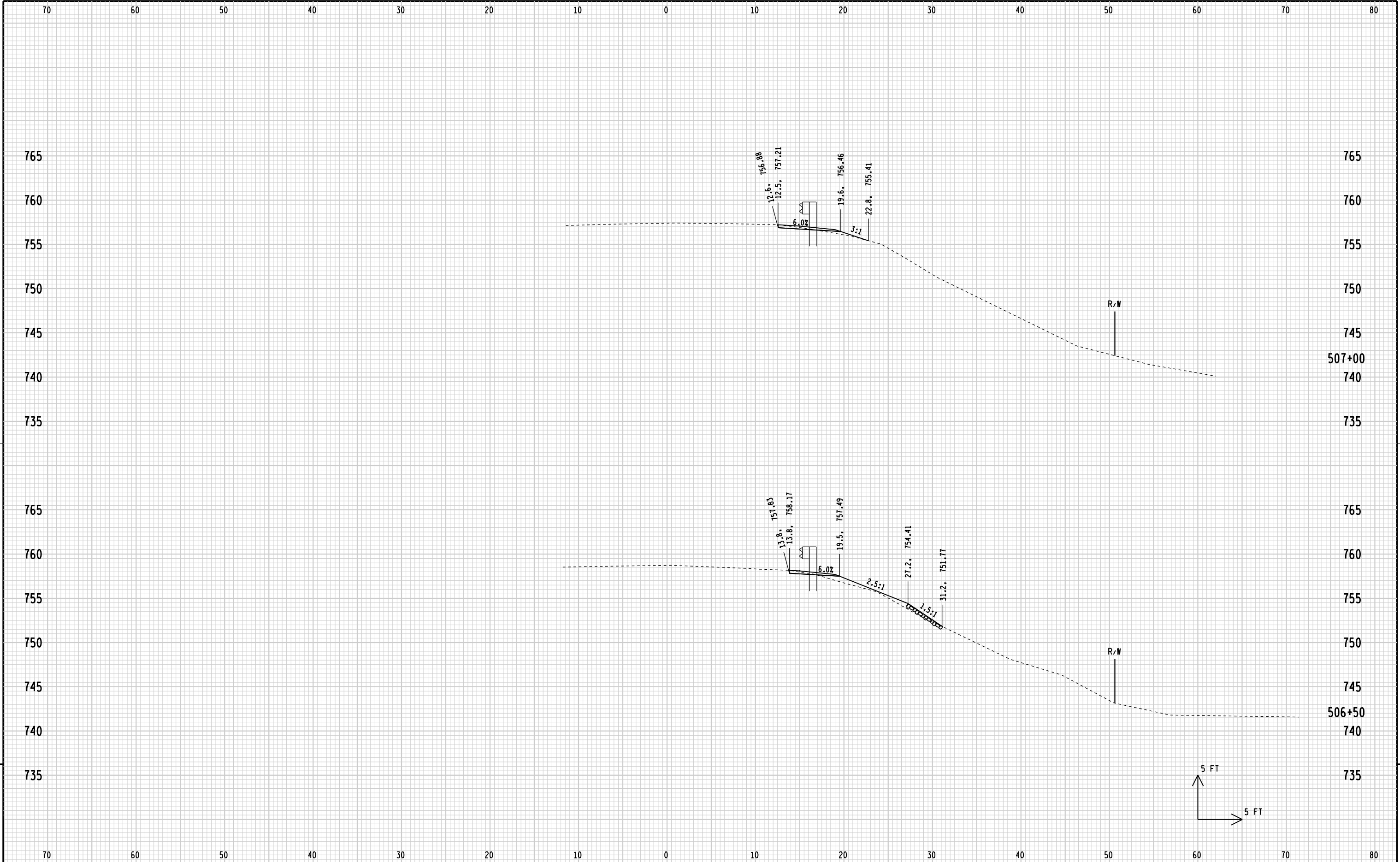
MGS GUARDRAIL
TERMINAL EAT
POST#5
RIGHT

5 FT
5 FT



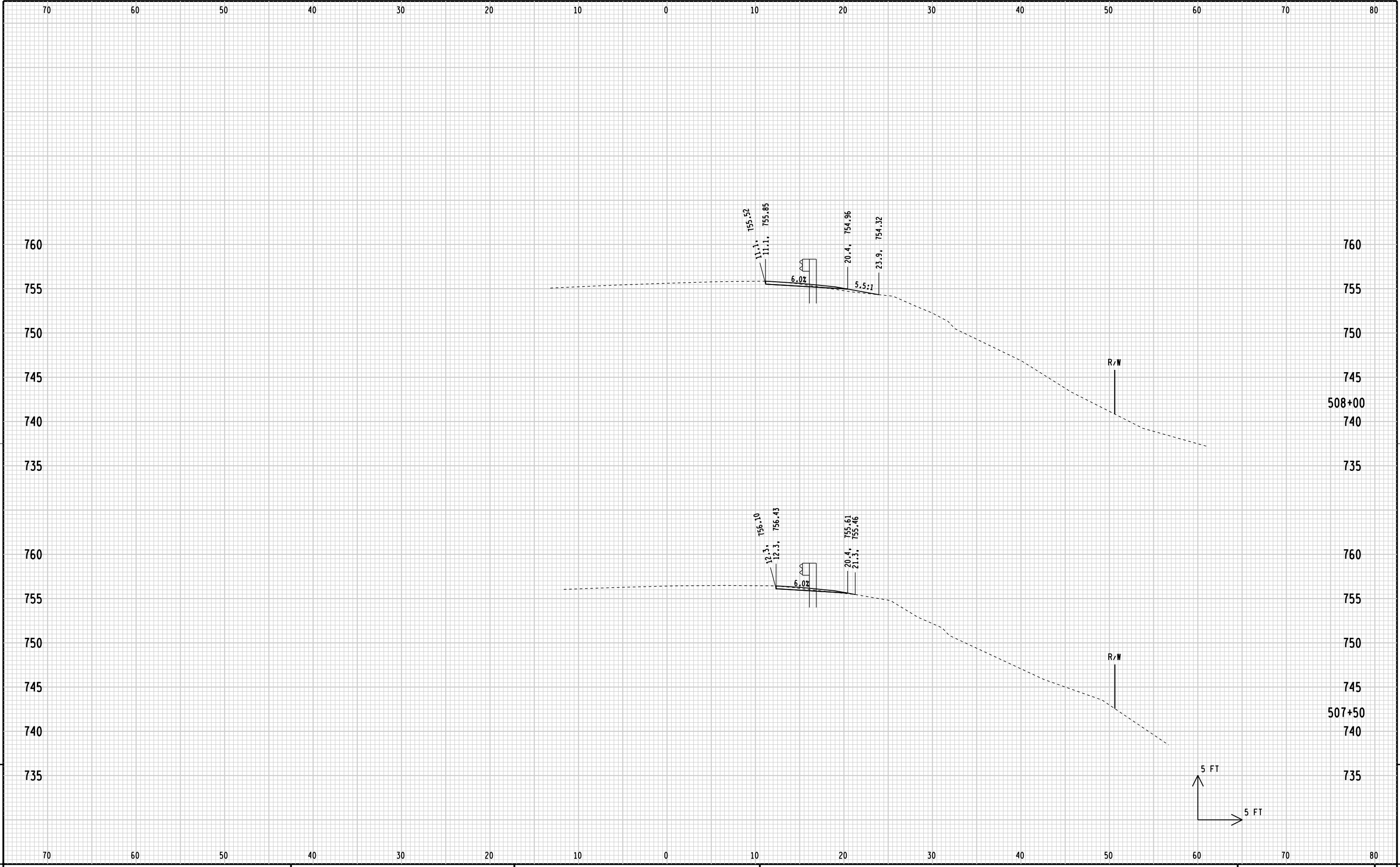
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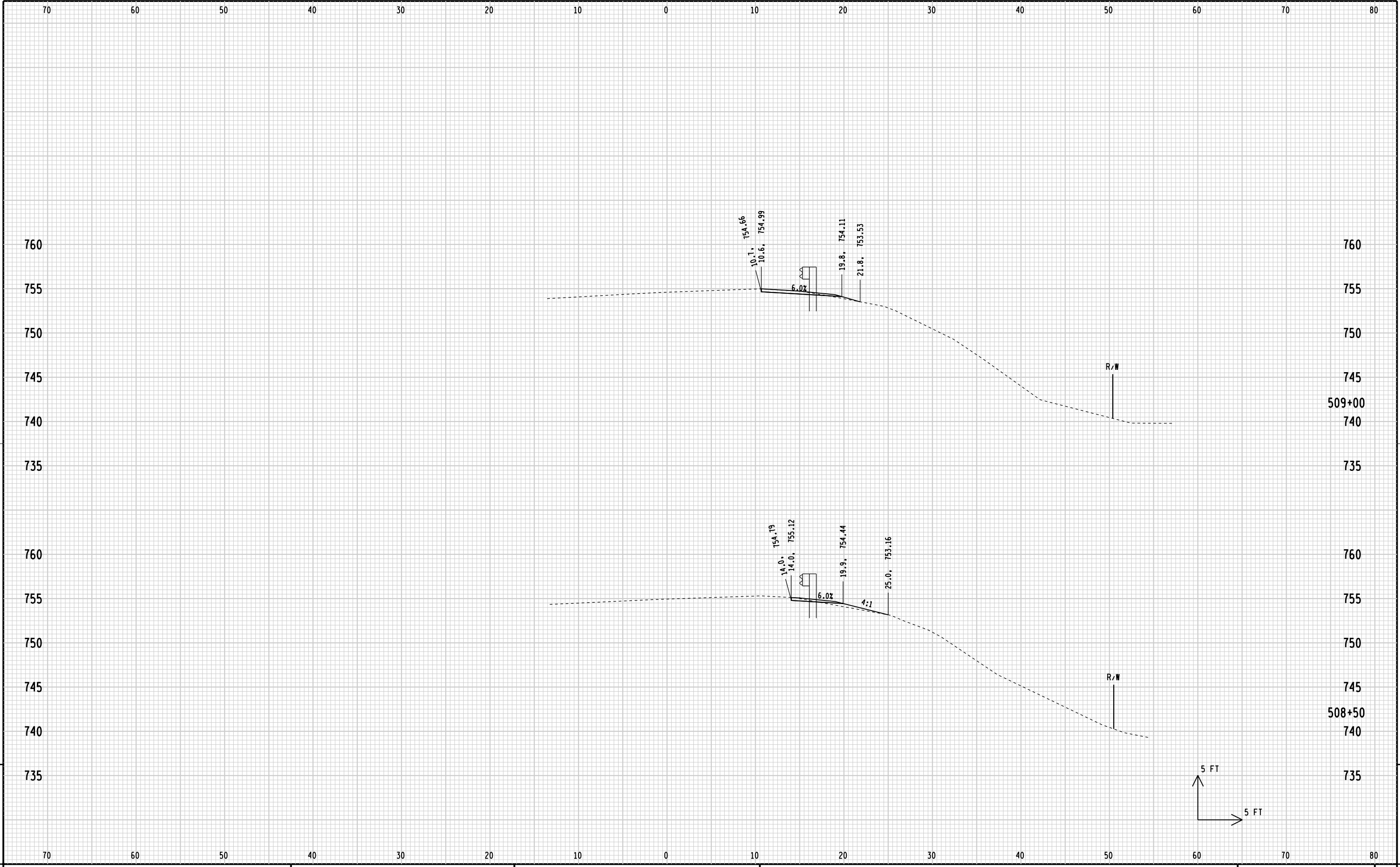
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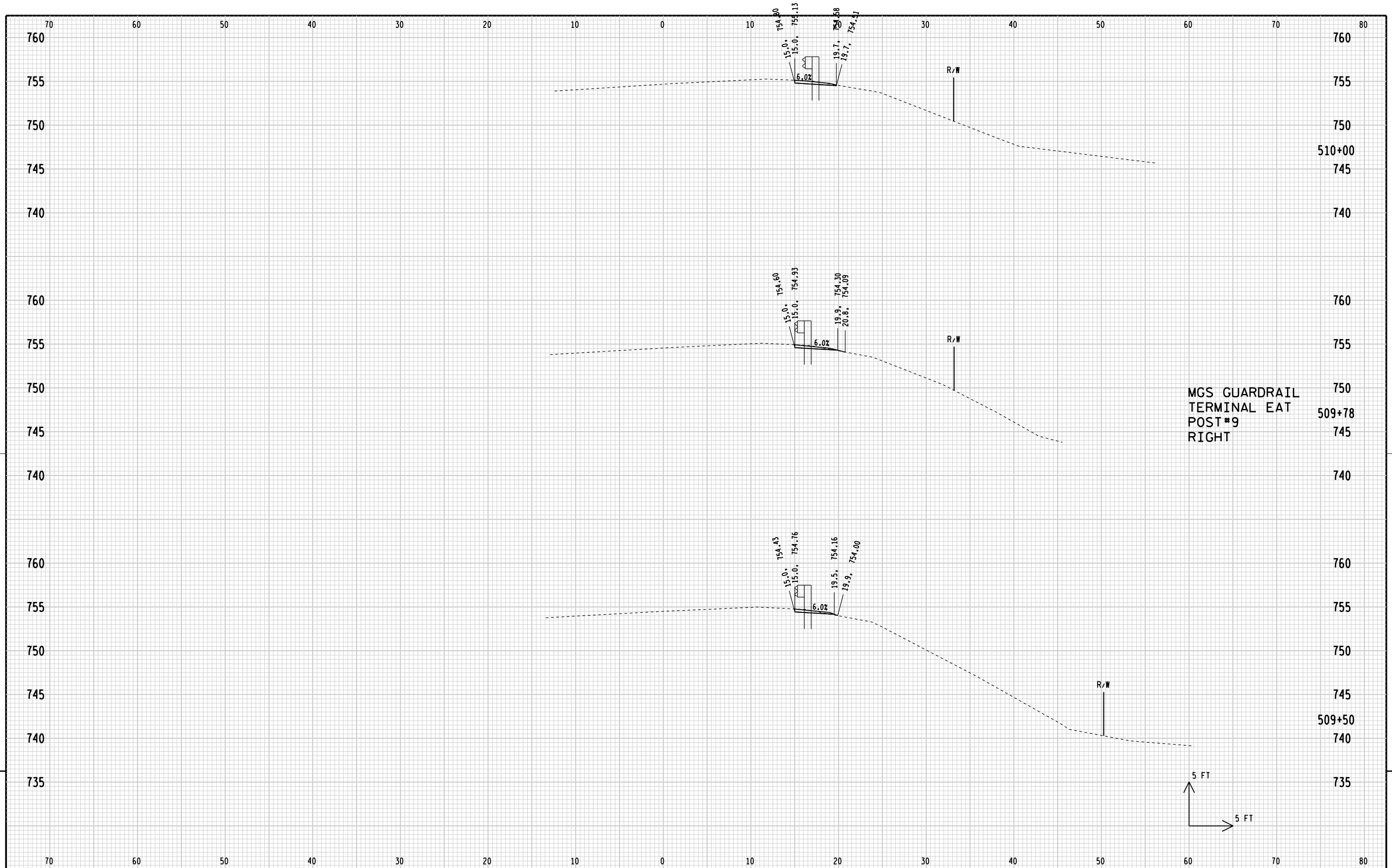
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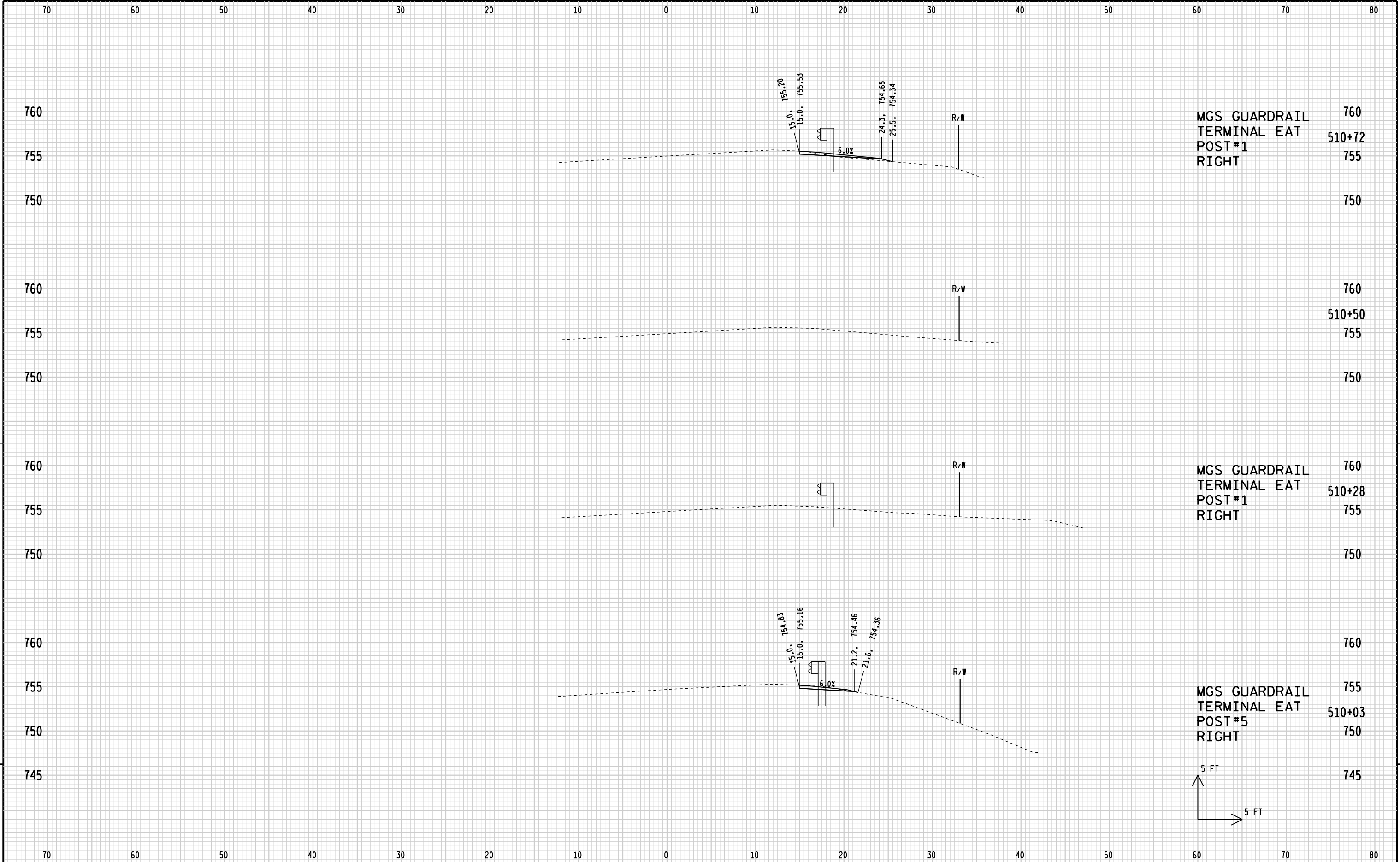
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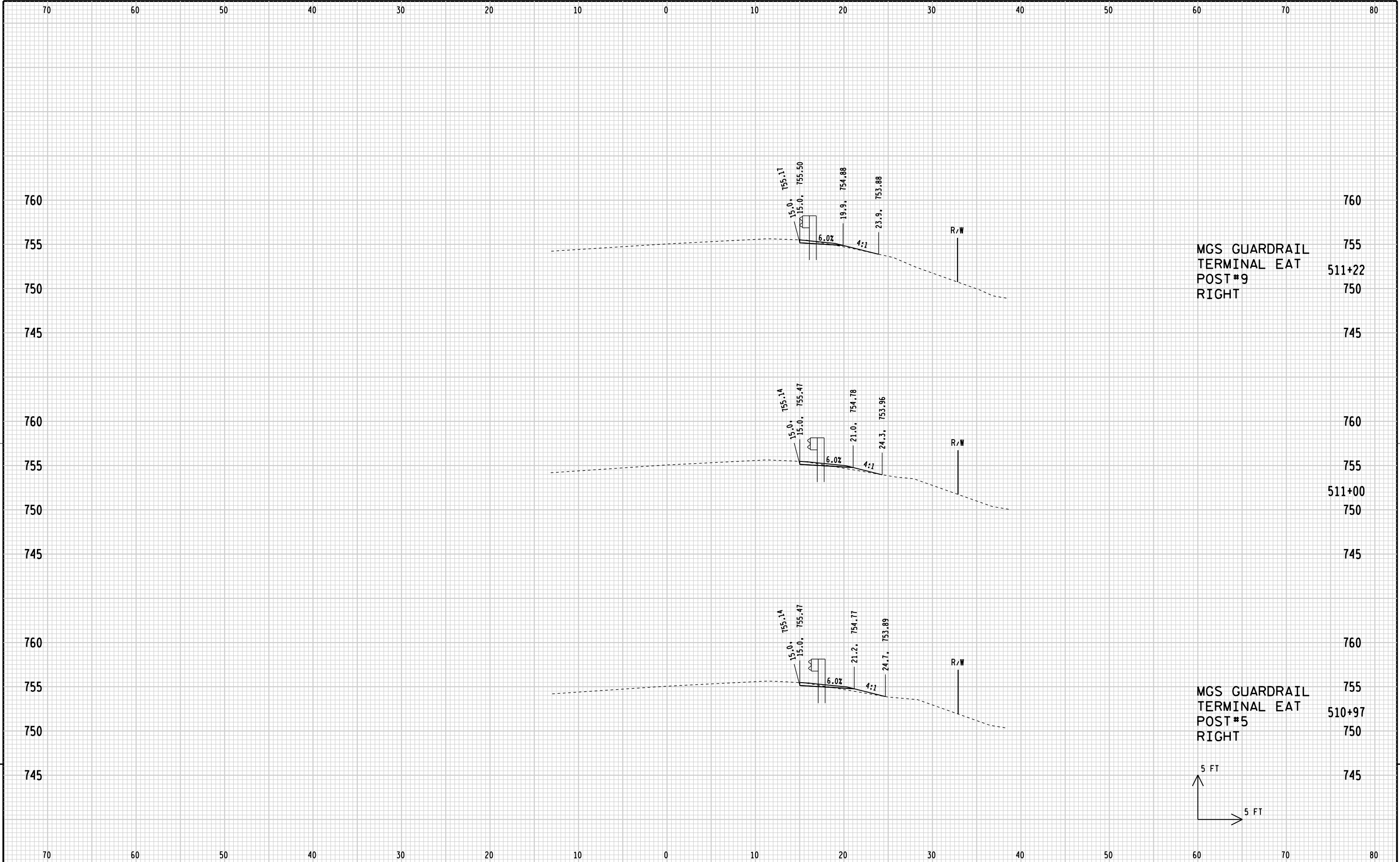


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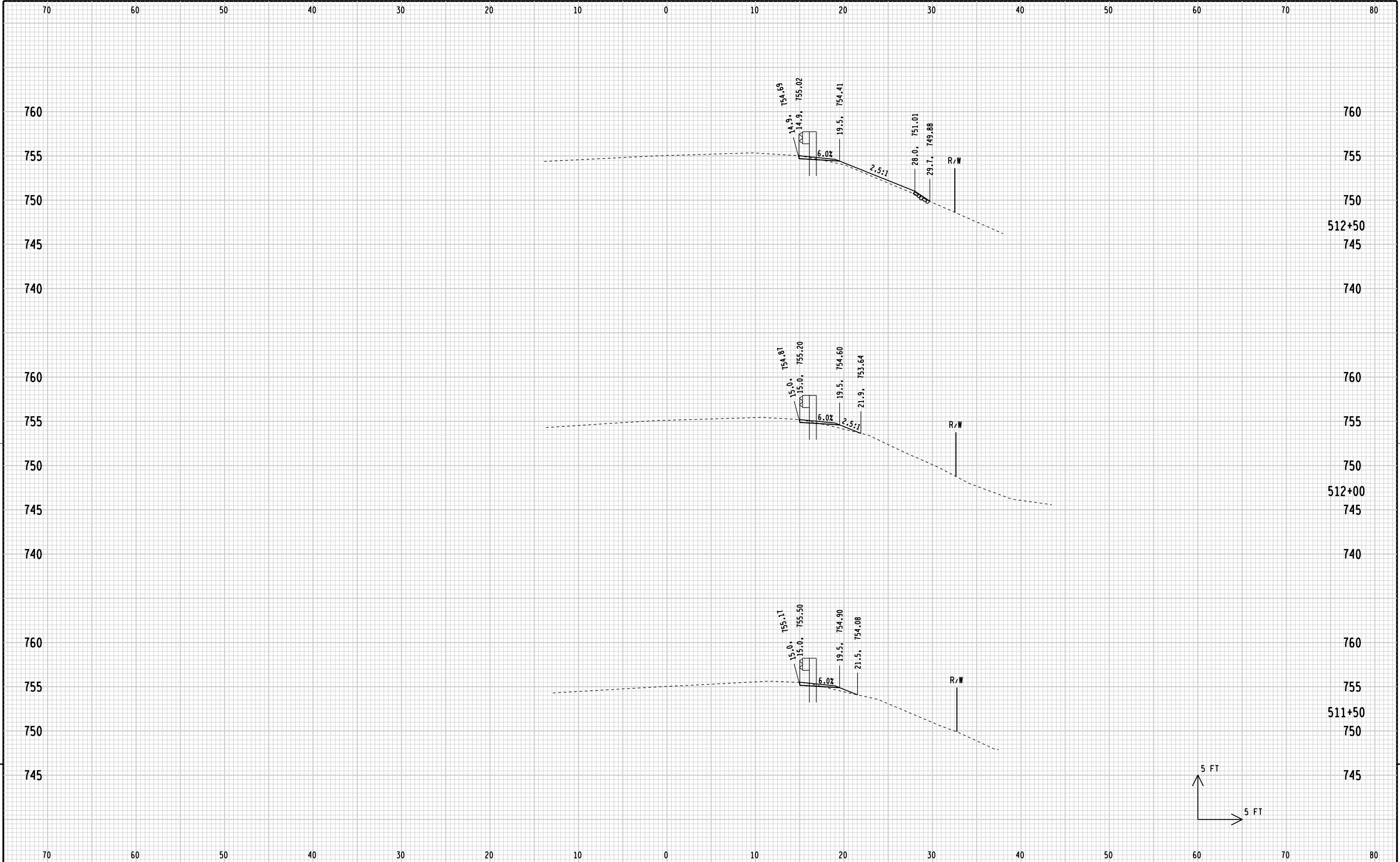
MGS GUARDRAIL
TERMINAL EAT
POST#9
RIGHT

MGS GUARDRAIL
TERMINAL EAT
POST#5
RIGHT

5 FT
5 FT

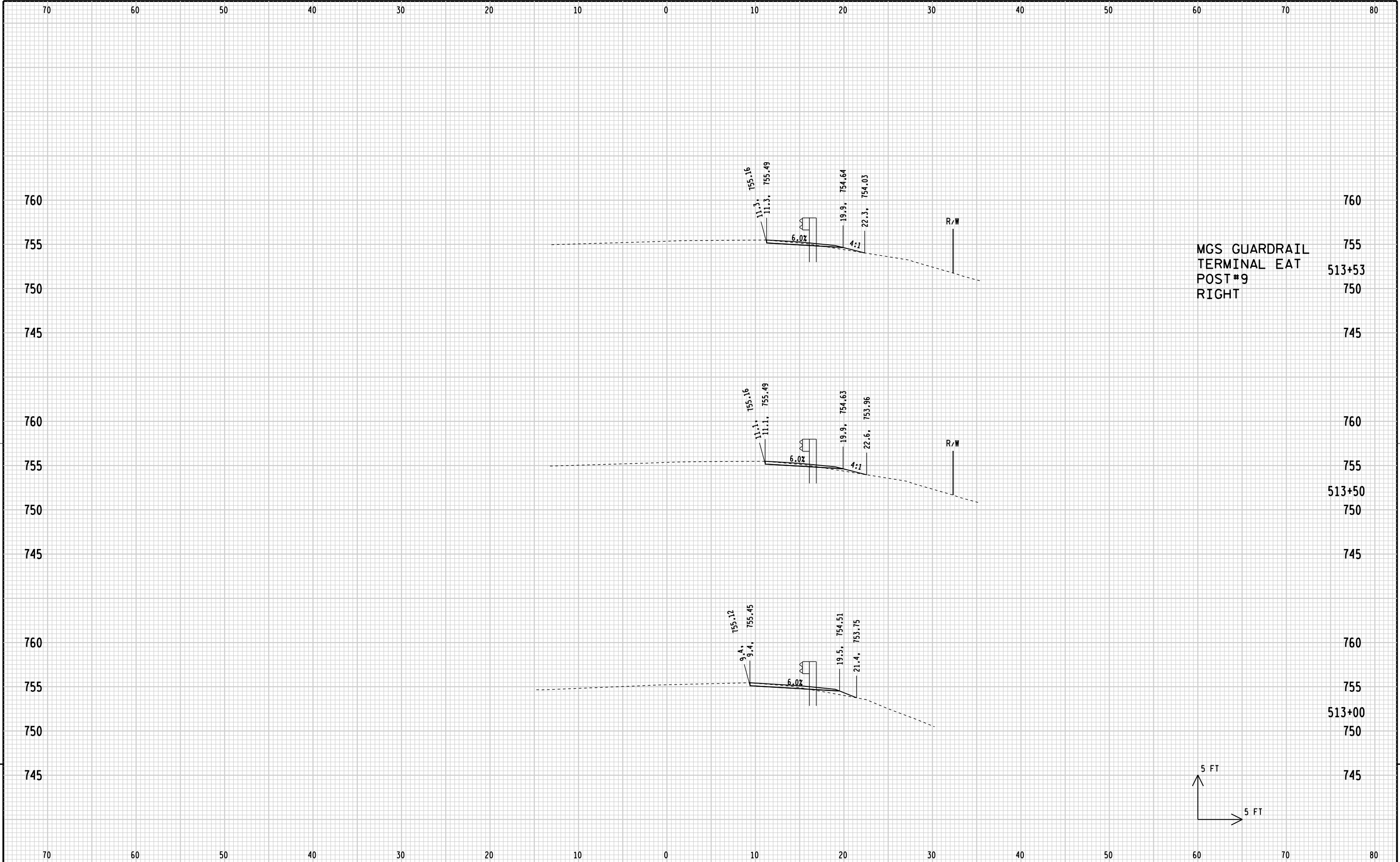
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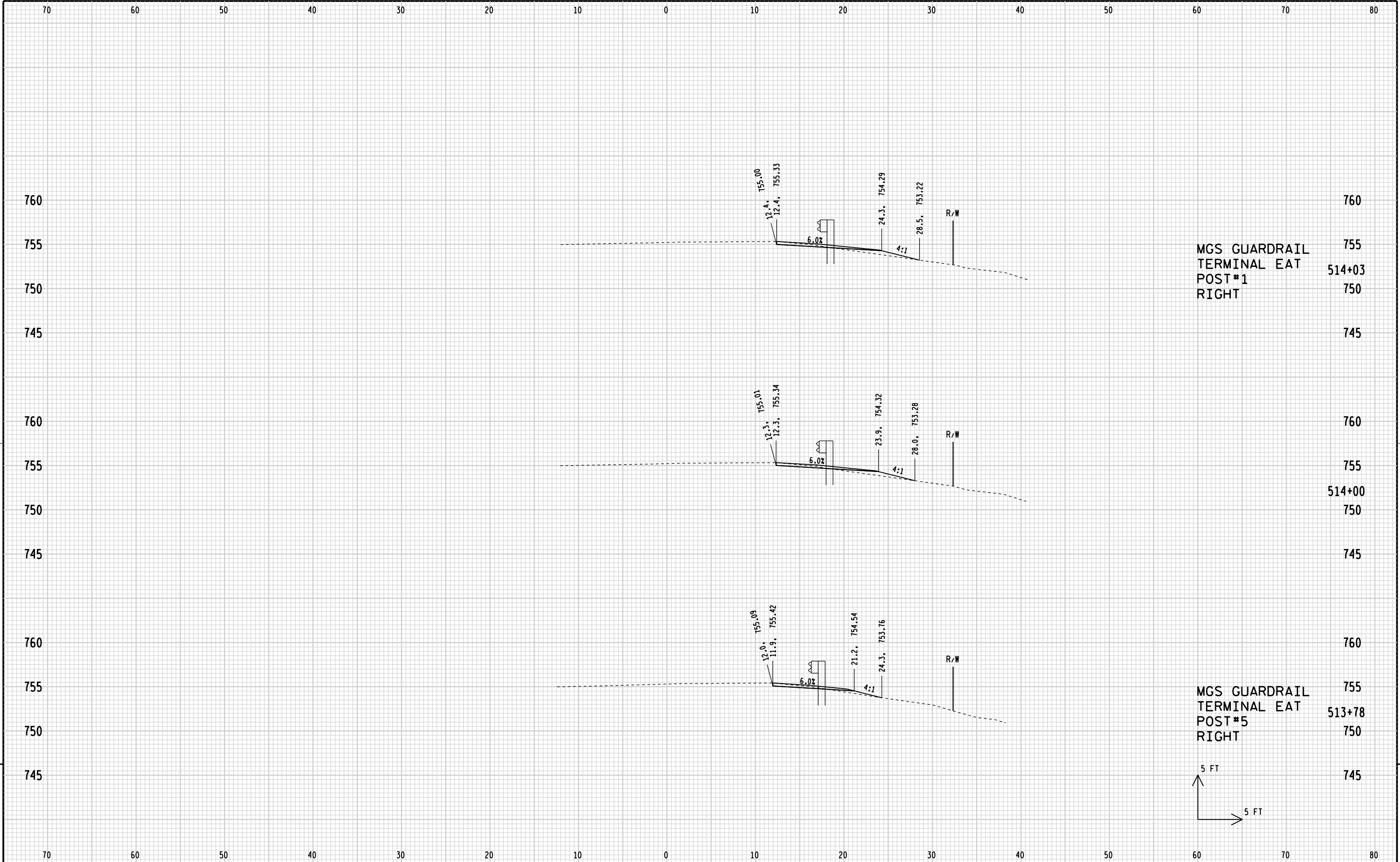
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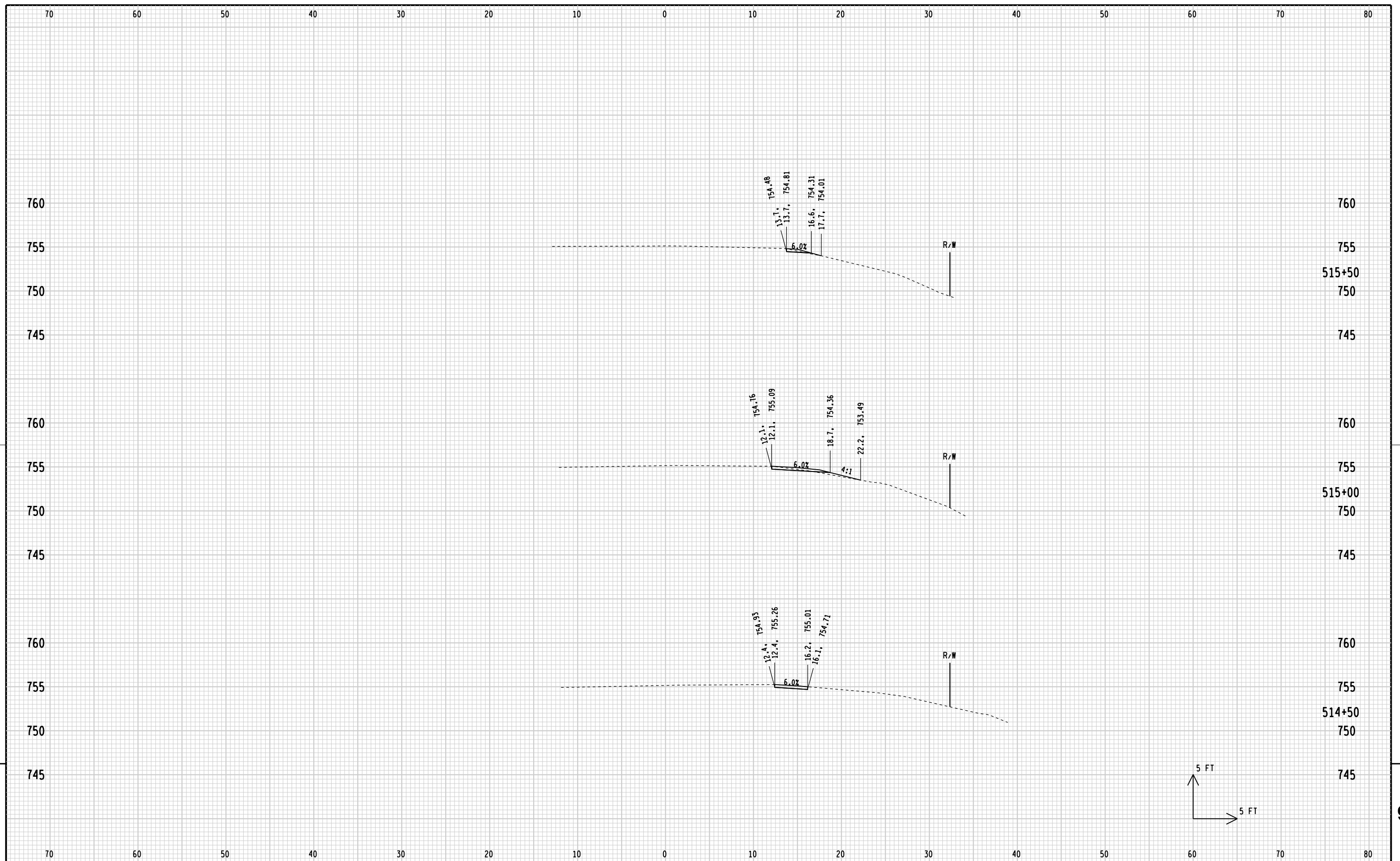


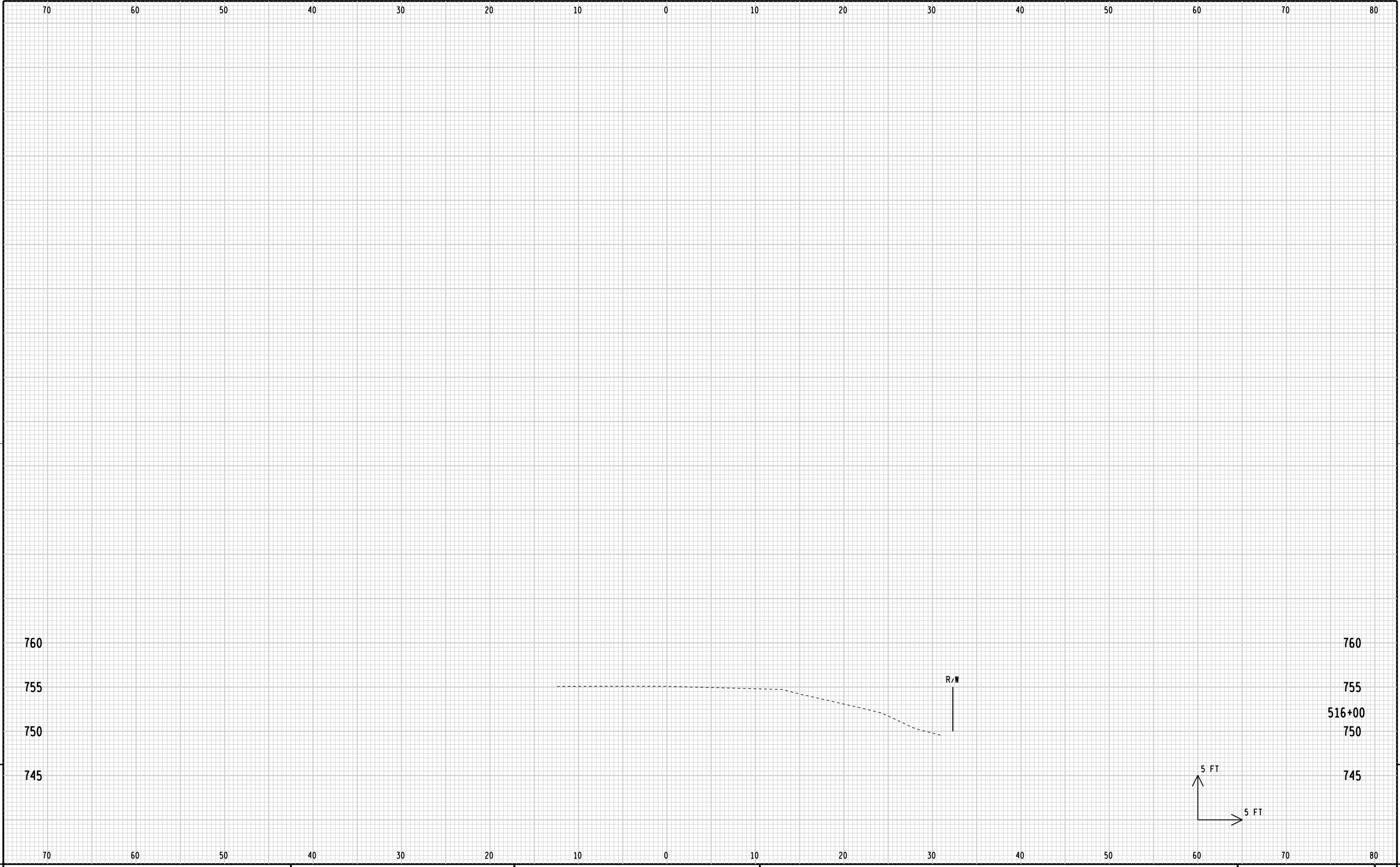
MGS GUARDRAIL
TERMINAL EAT
POST#9
RIGHT

9

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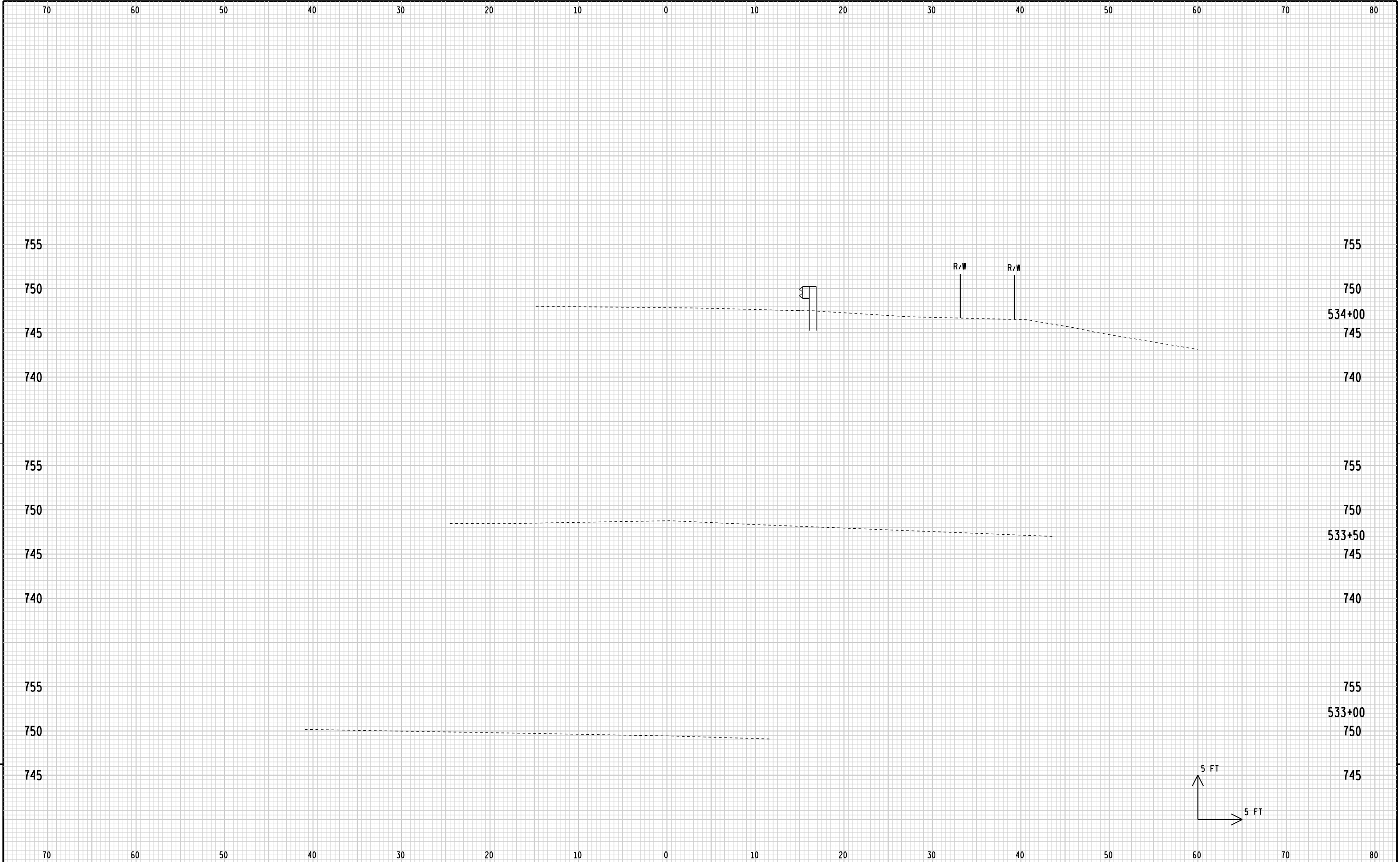






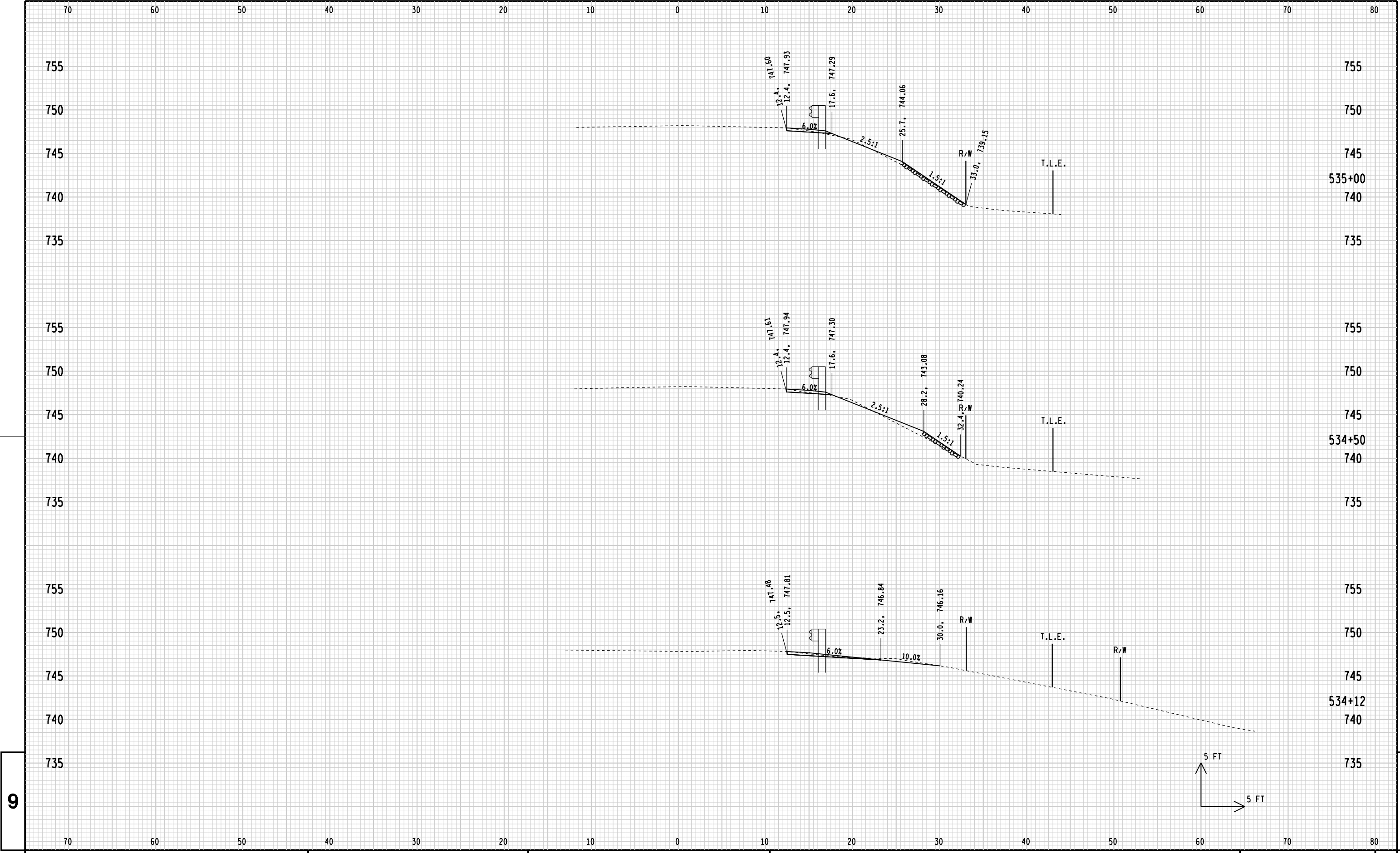
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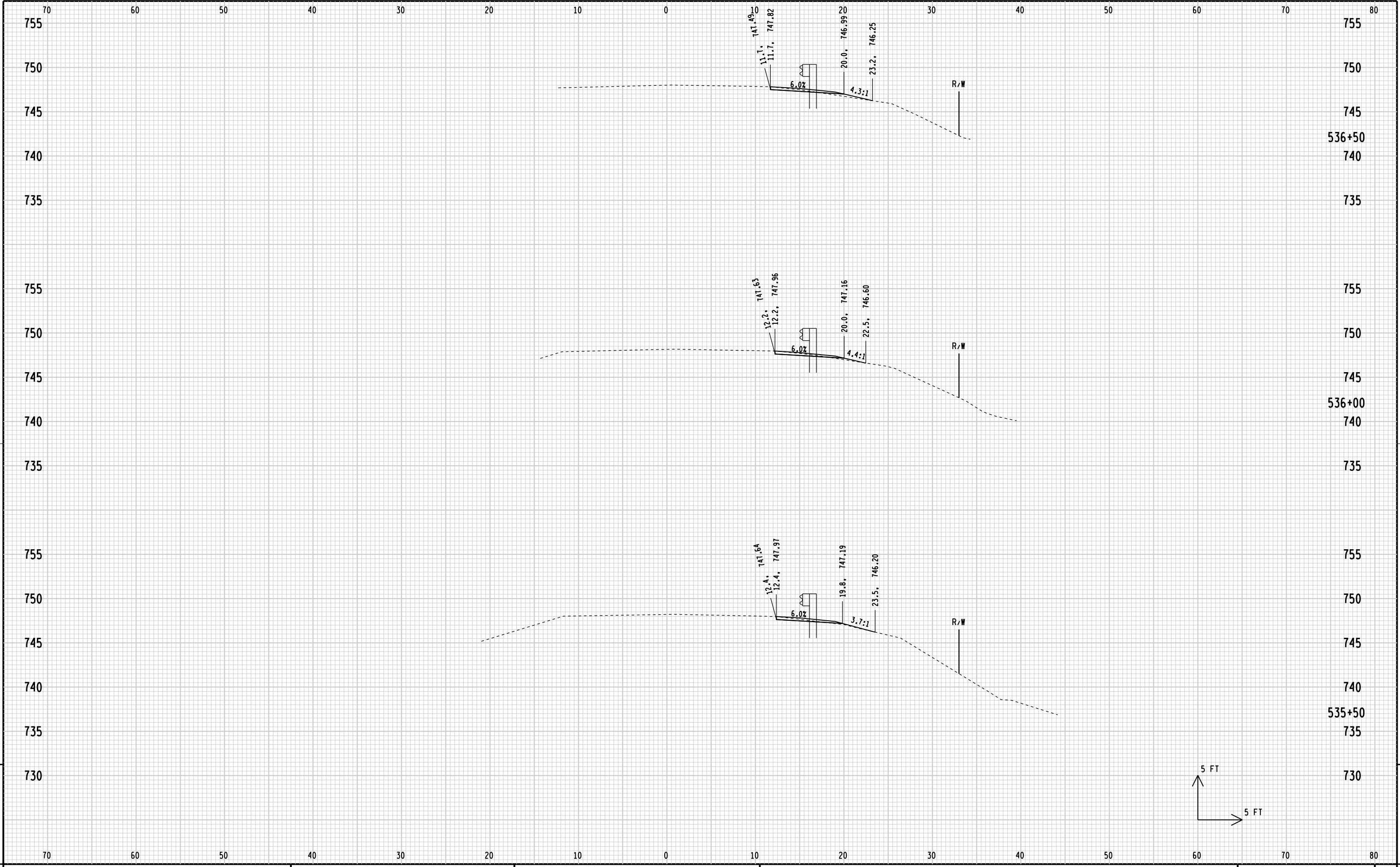
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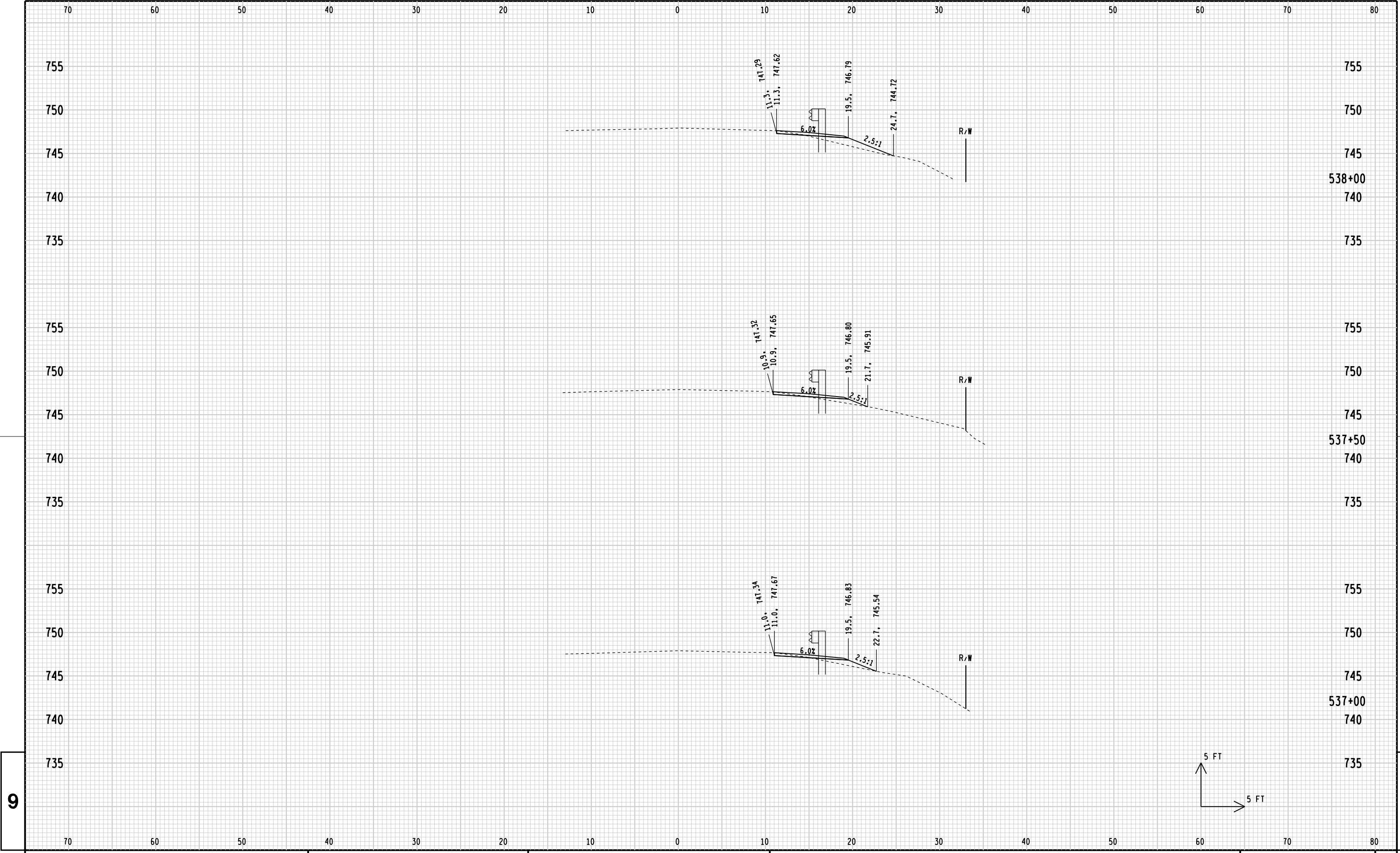
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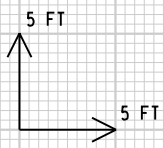
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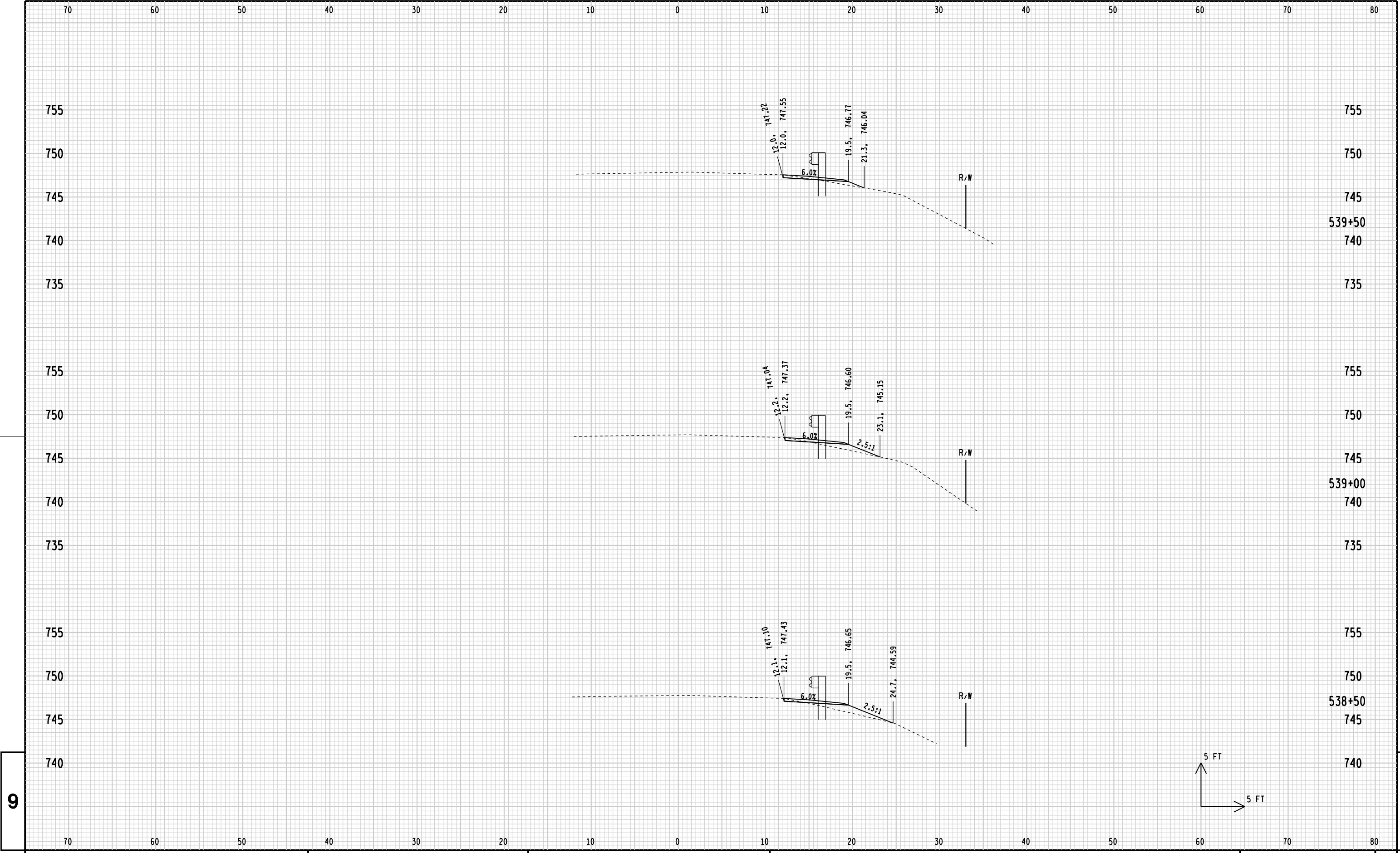
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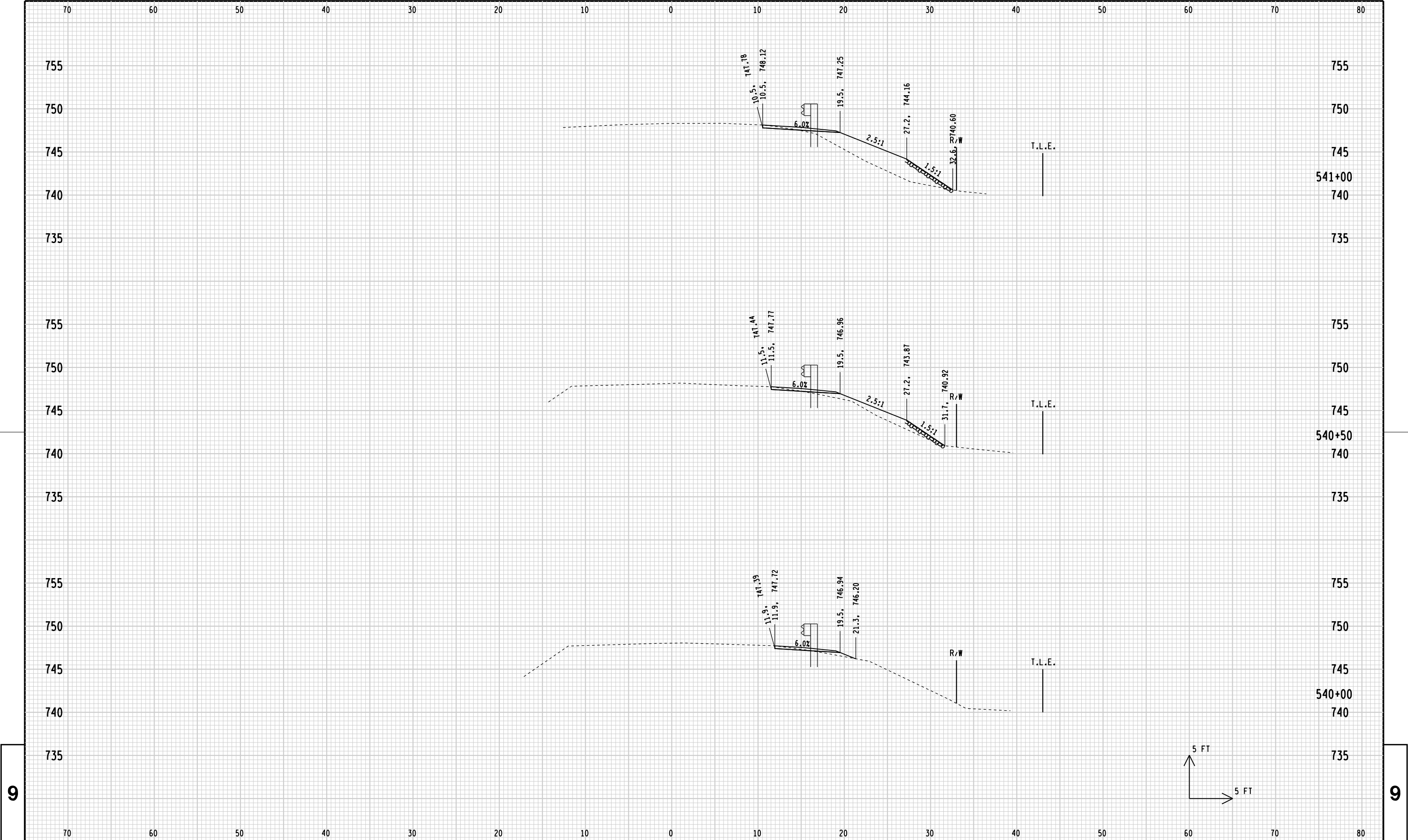
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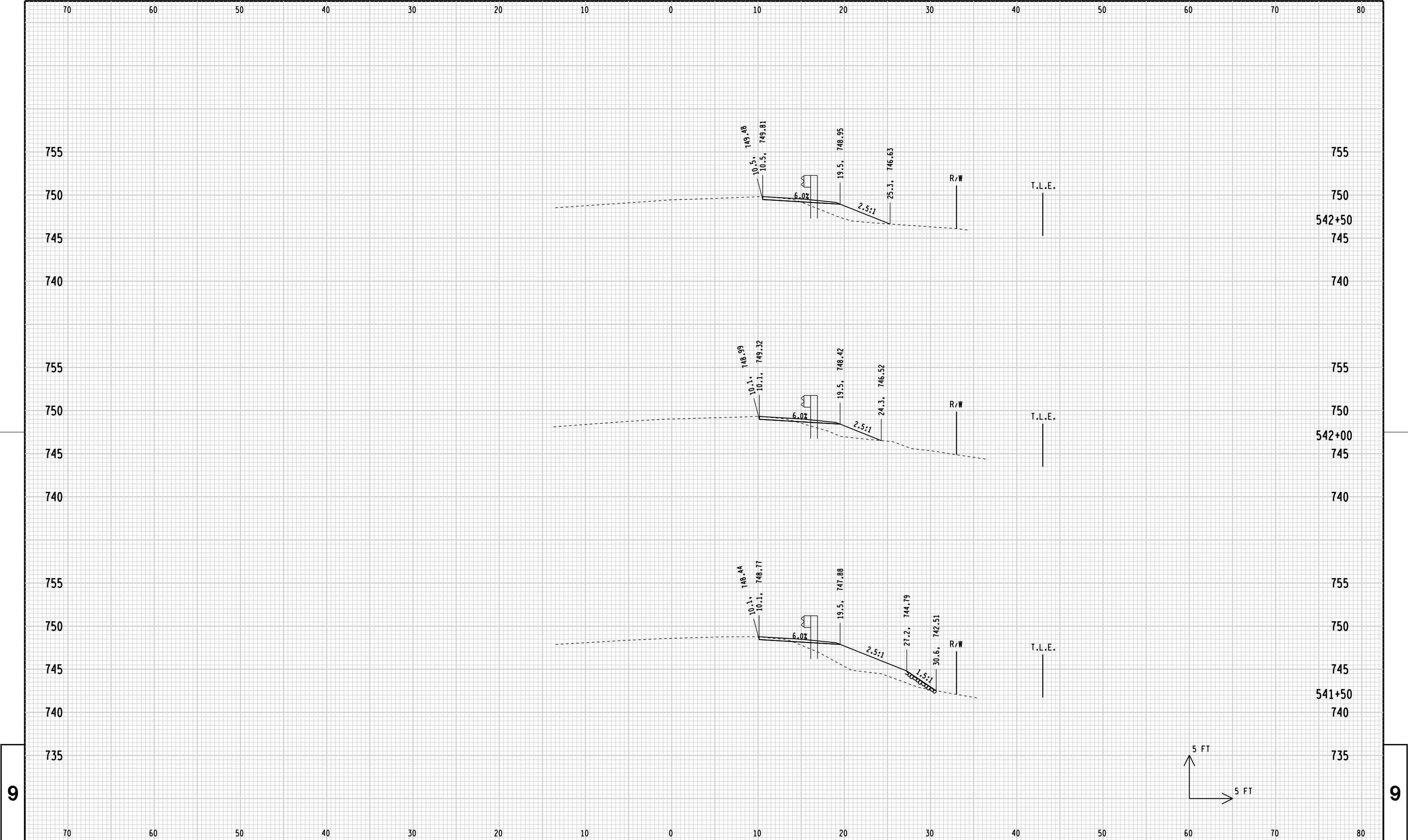
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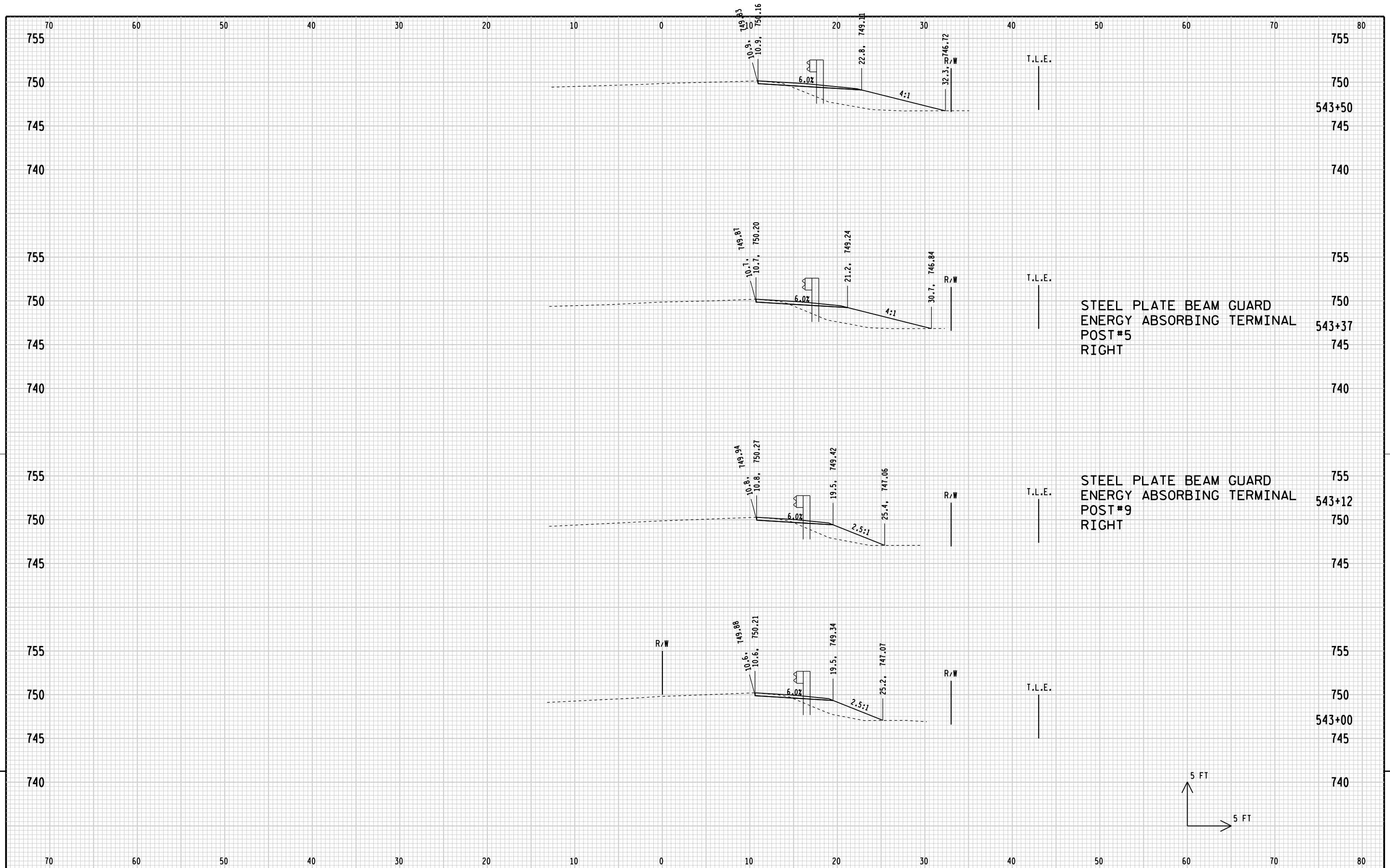
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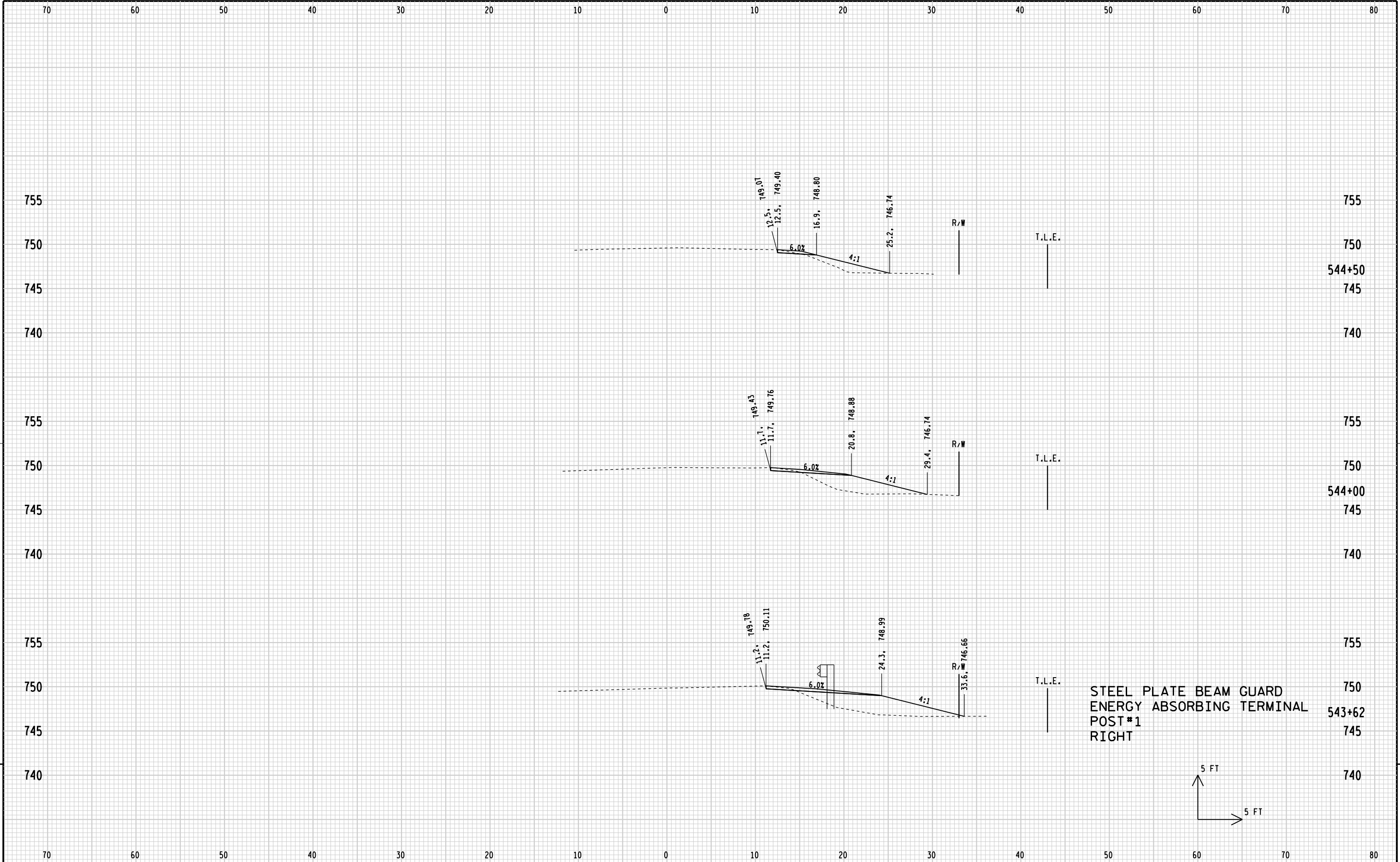


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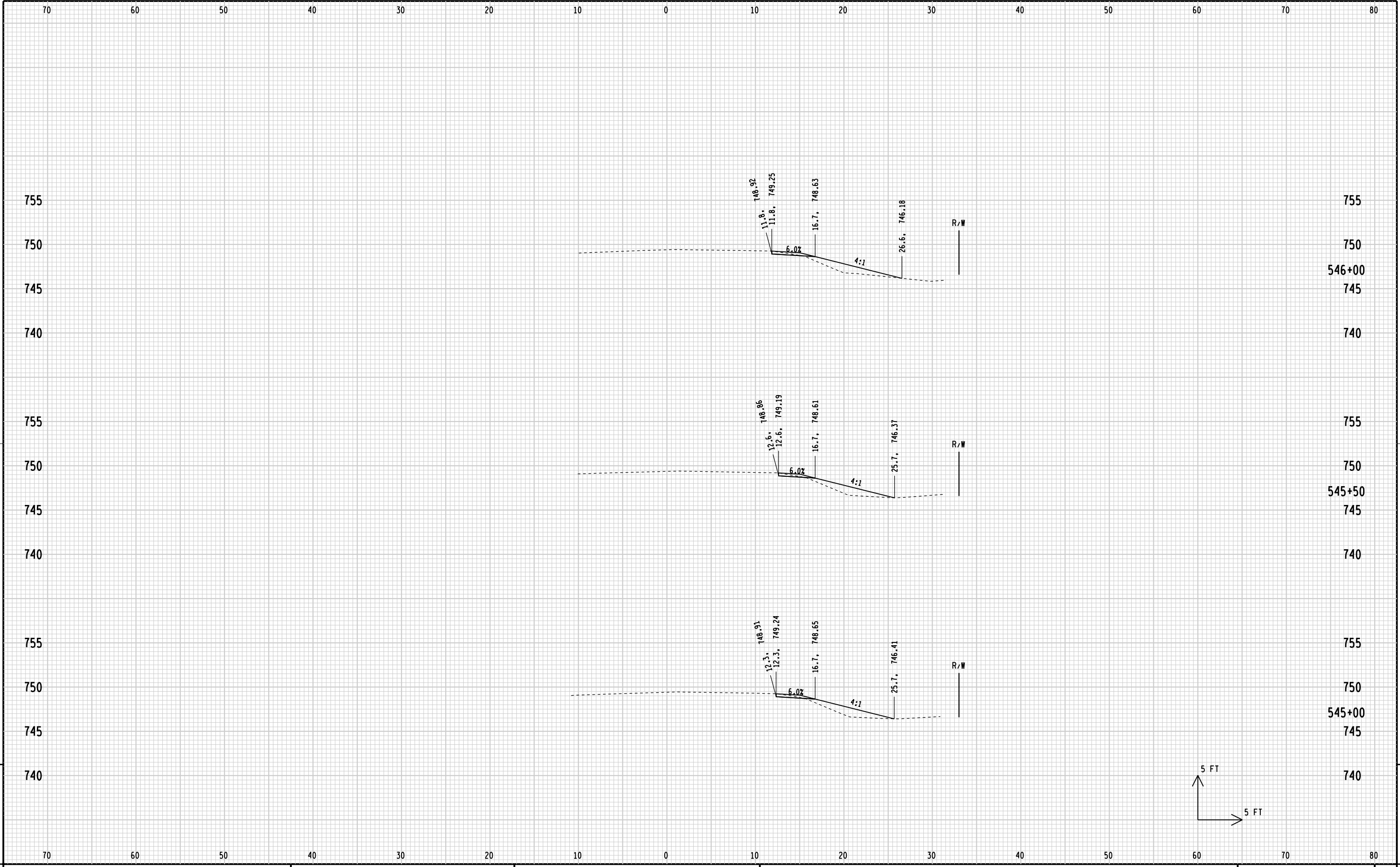






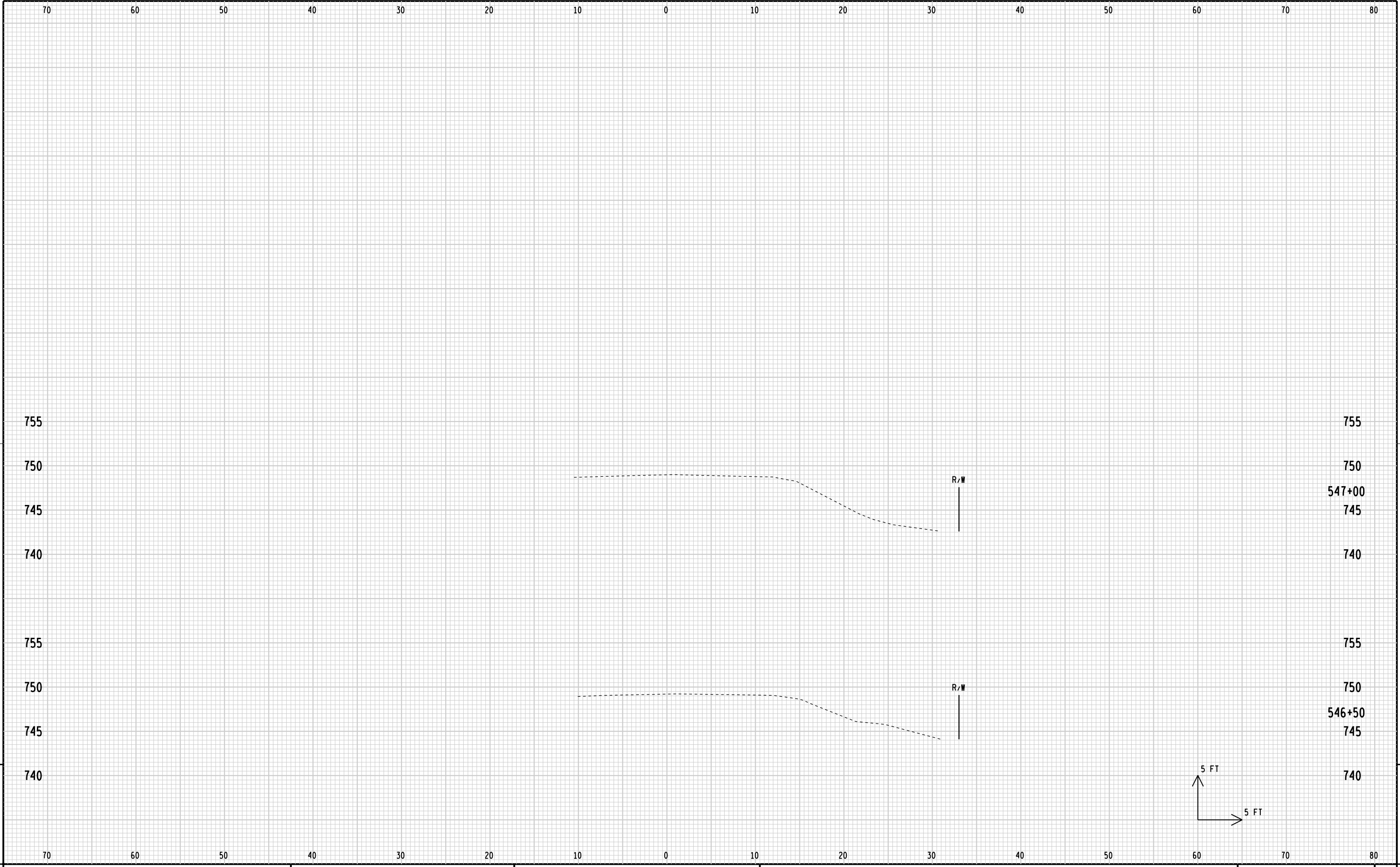
STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL
POST #1
RIGHT

5 FT
5 FT



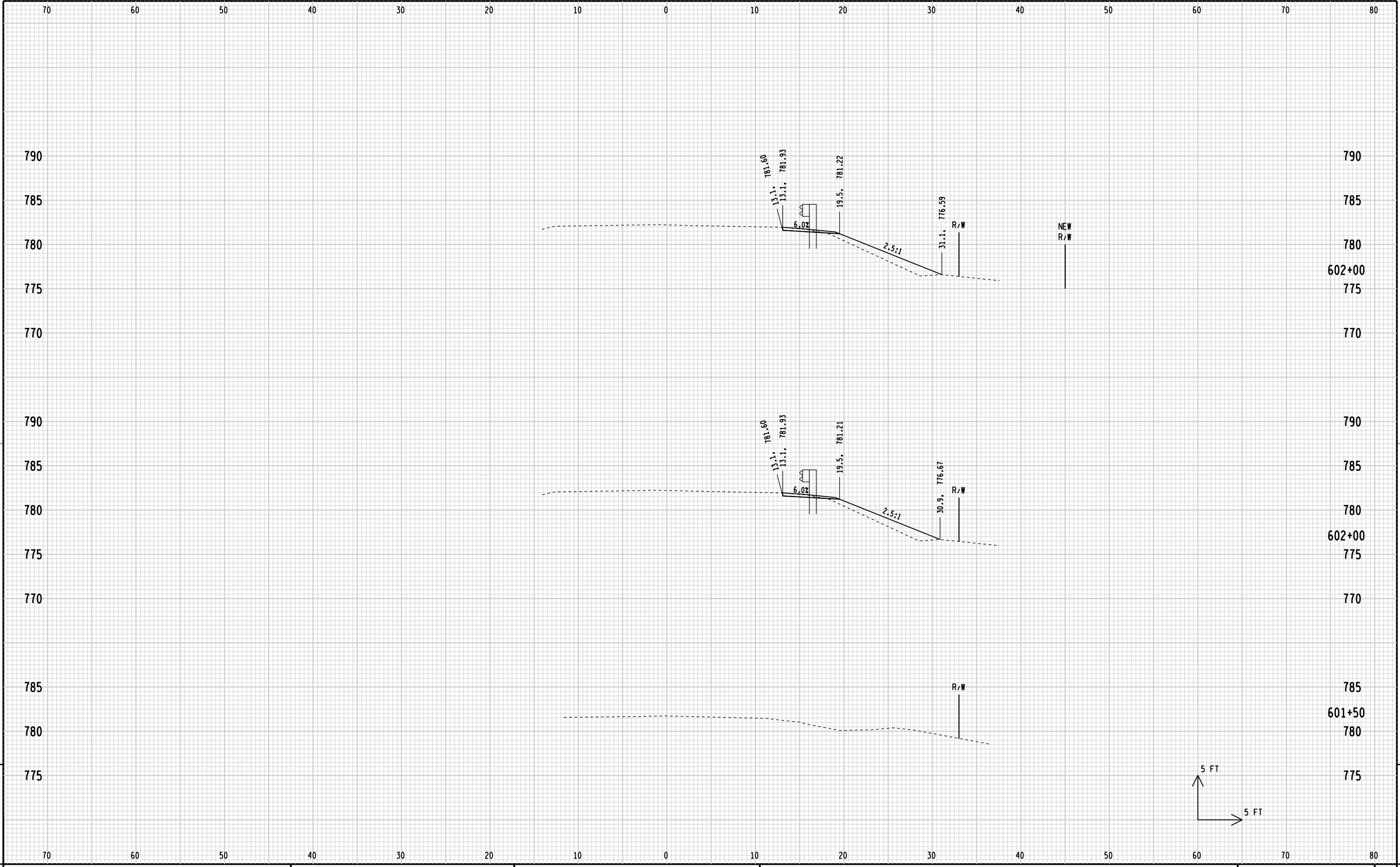
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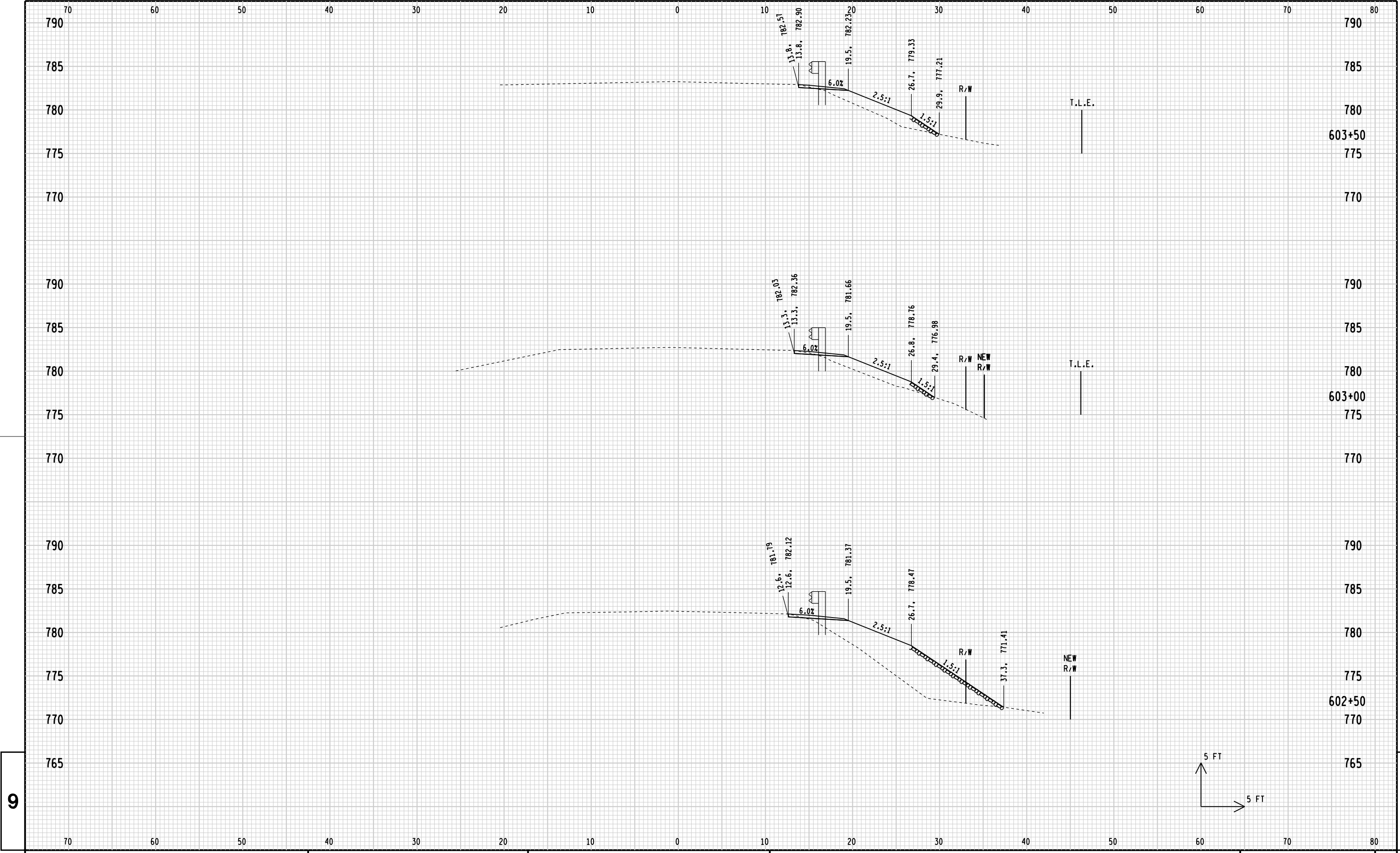
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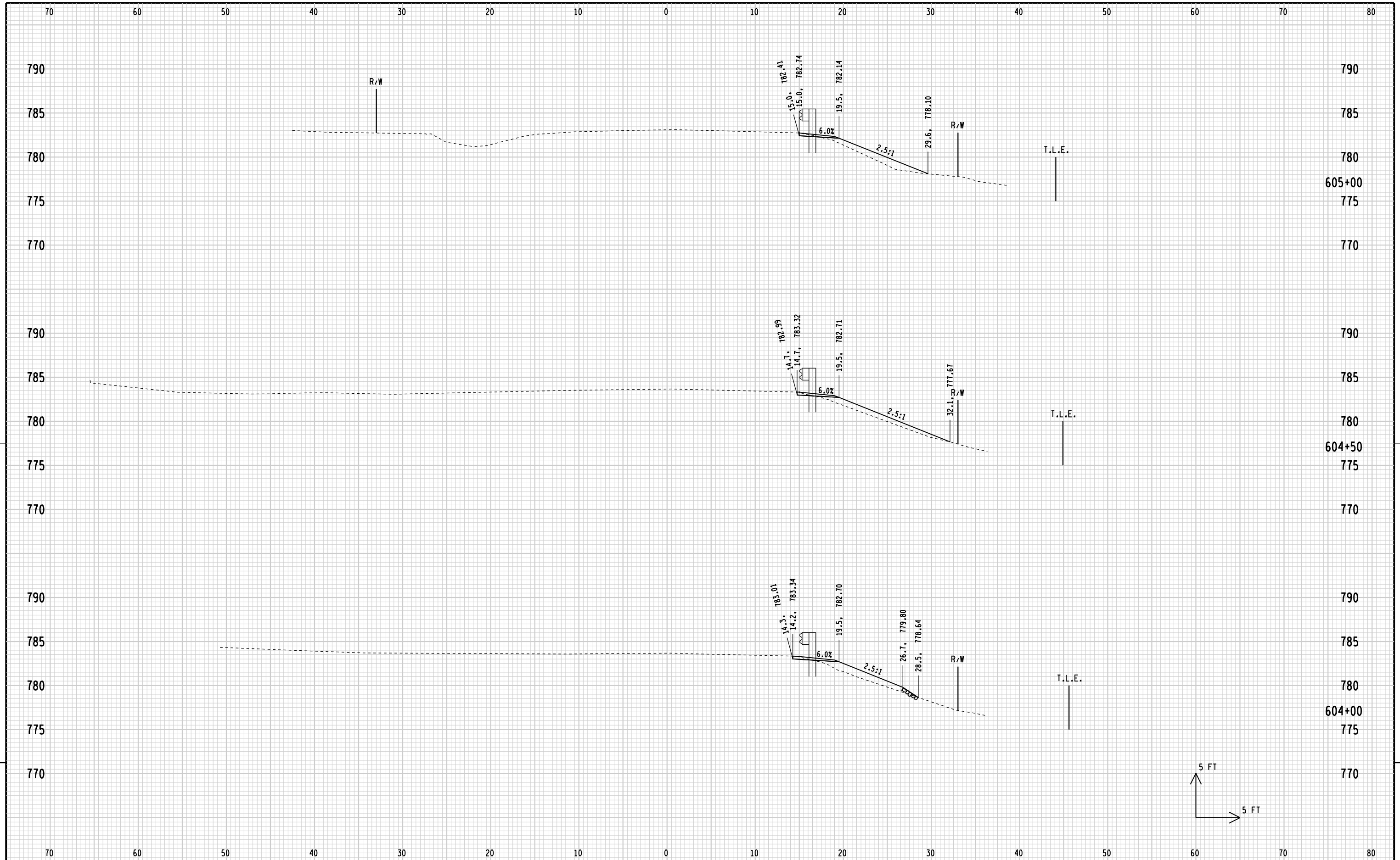
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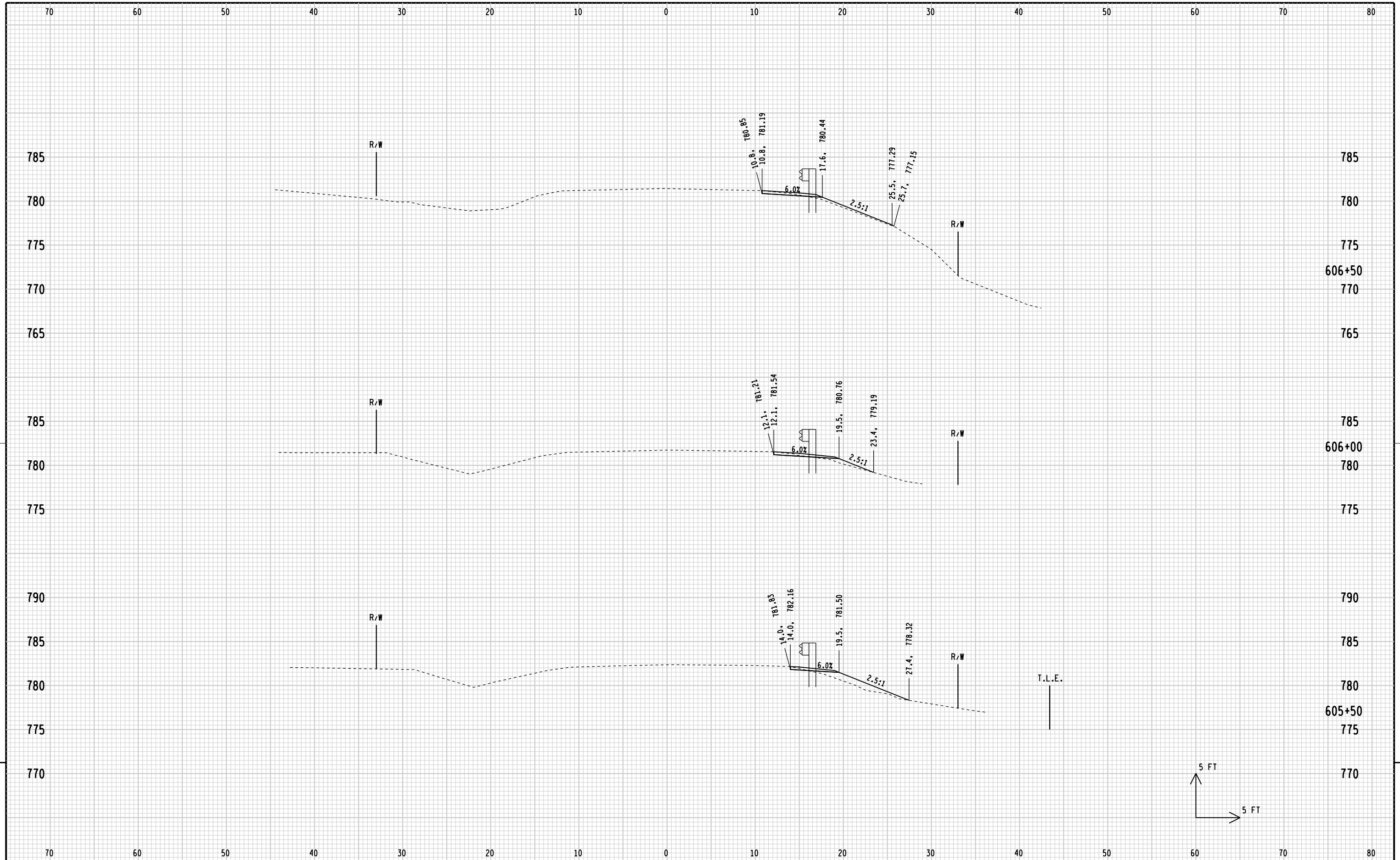
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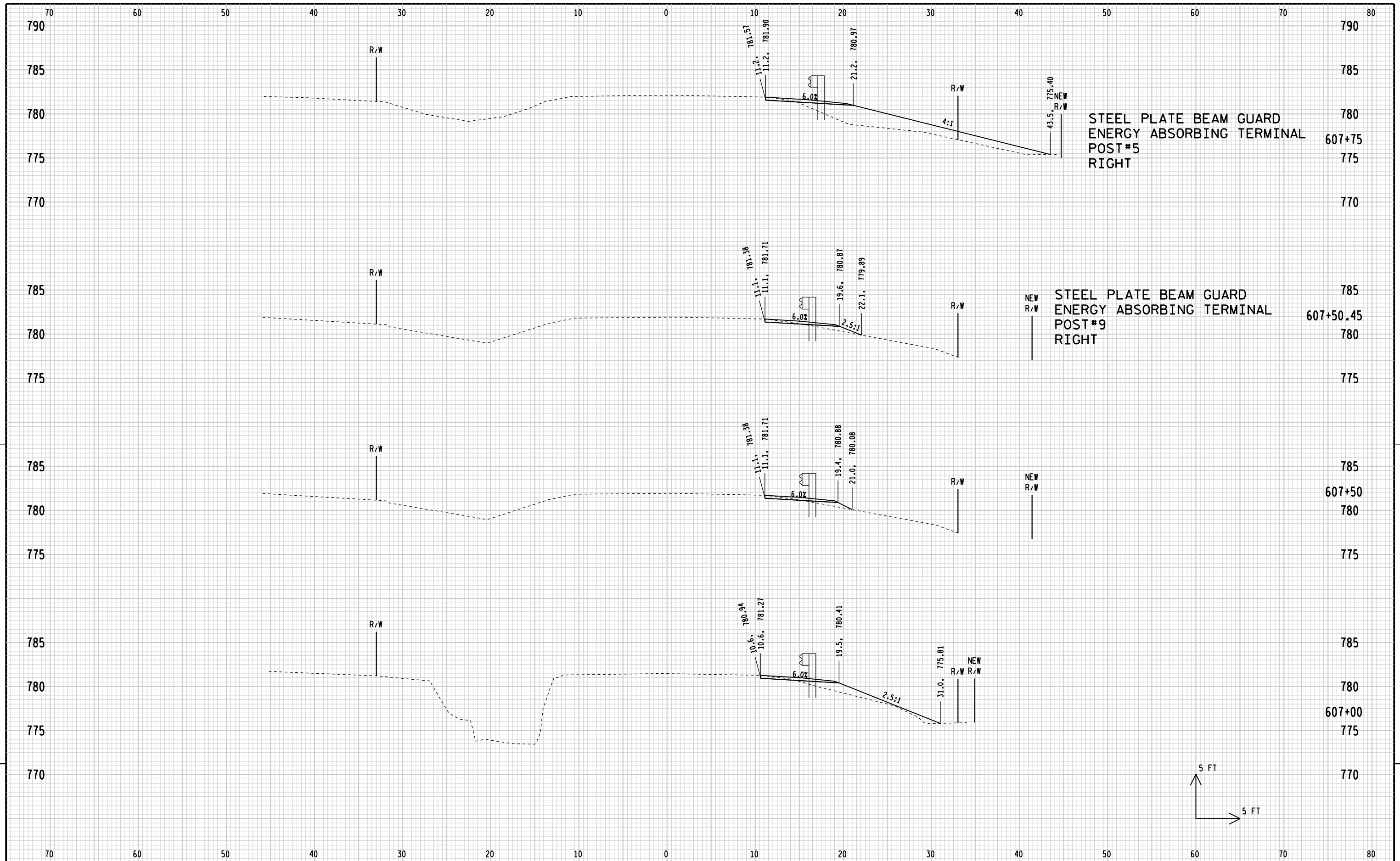


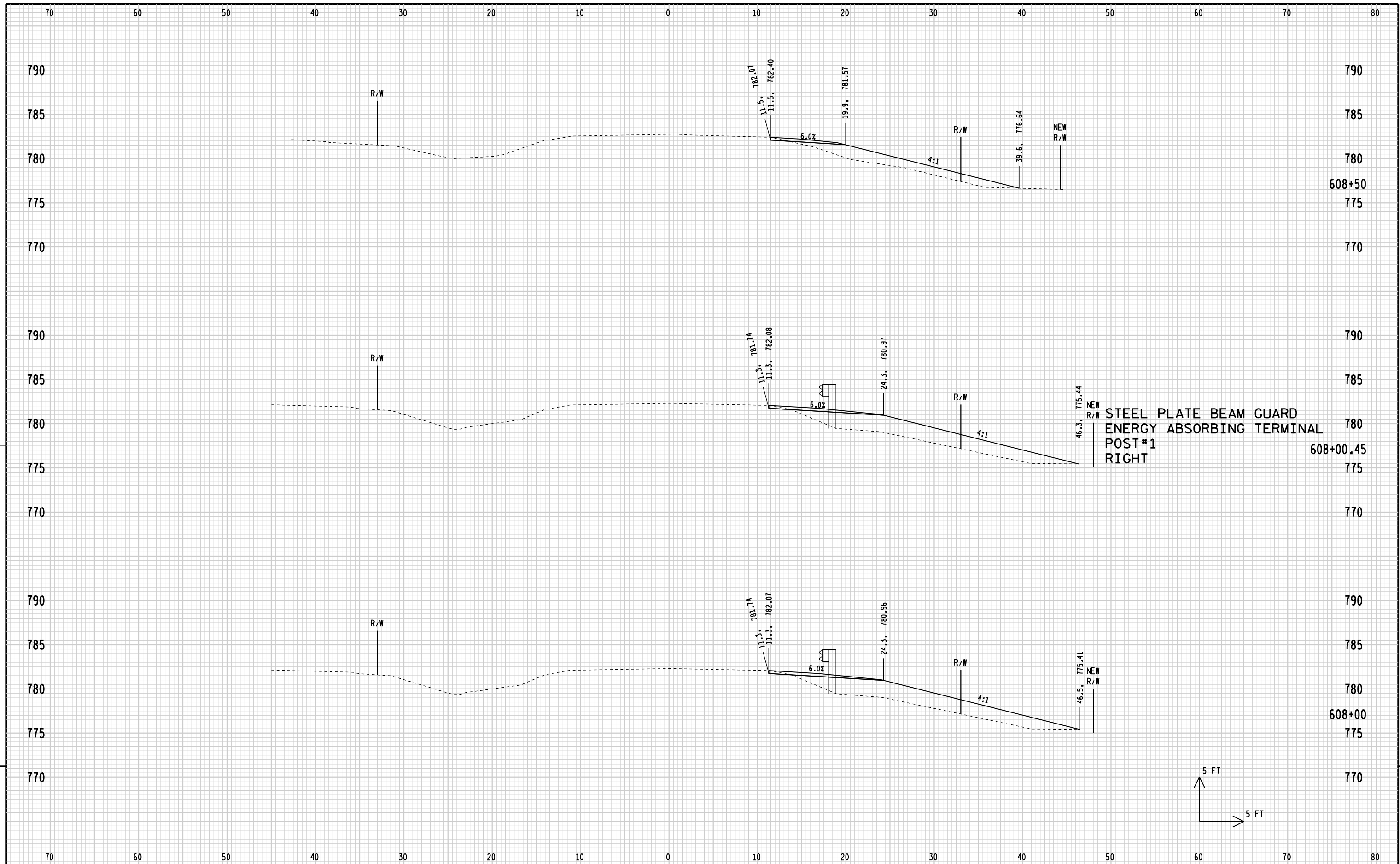
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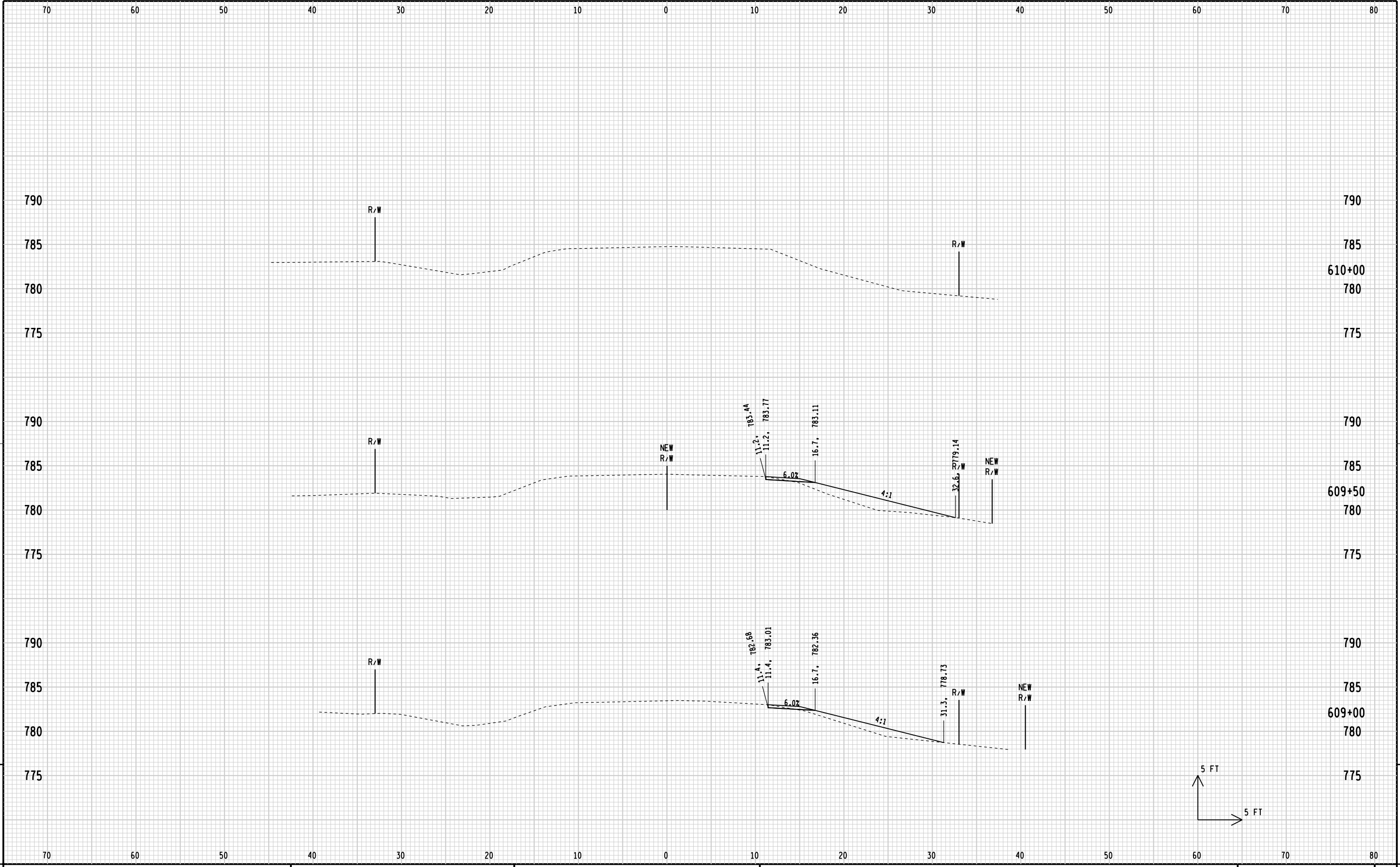
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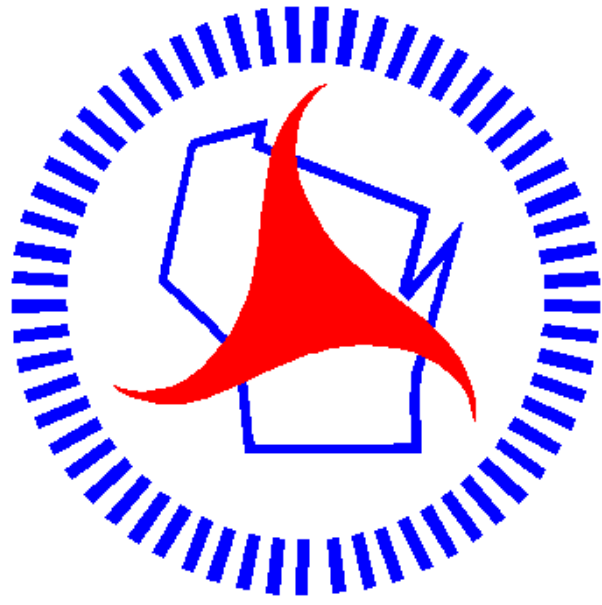








Notes



Wisconsin Department of Transportation

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