

ORDER OF SHEETS

- Section No. 1 Title
- Section No. 2 Typical Sections and Details
- Section No. 3 Estimate of Quantities
- Section No. 3 Miscellaneous Quantities
- Section No. 4 Right of Way Plat
- Section No. 5 Plan and Profile
- Section No. 6 Standard Detail Drawings
- Section No. 7 Sign Plates
- ~~Section No. 8 Structure Plans~~
- ~~Section No. 9 Computer Earthwork Data~~
- Section No. 9 Cross Sections

TOTAL SHEETS = 238

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

ASHLAND - BAYFIELD

SUPERIOR AVENUE TO 7TH STREET

STH 13

BAYFIELD COUNTY

STATE PROJECT NUMBER
8160-04-64

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8160-04-64	-----	-----
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PROJECT ID: 8160-04-64

COUNTY: BAYFIELD

42



DESIGN DESIGNATION 8160-04-34	WASHBURN	GARY RD TO CTH J	CTH J TO BAYFIELD
A.A.D.T. (2017)	= 4,600	= 3,950	= 3,600
A.A.D.T. (2037)	= 5,400	= 4,800	= 4,400
D.H.V.	= 729	= 648	= 594
D.D.	= 61/39	= 61/39	= 61/39
T.	= 10.0%	= 10.0%	= 10.0%
DESIGN SPEED	= 55 MPH	= 55 MPH	= 45 MPH
ESALS	= 943,890	= 825,904	= 755,112

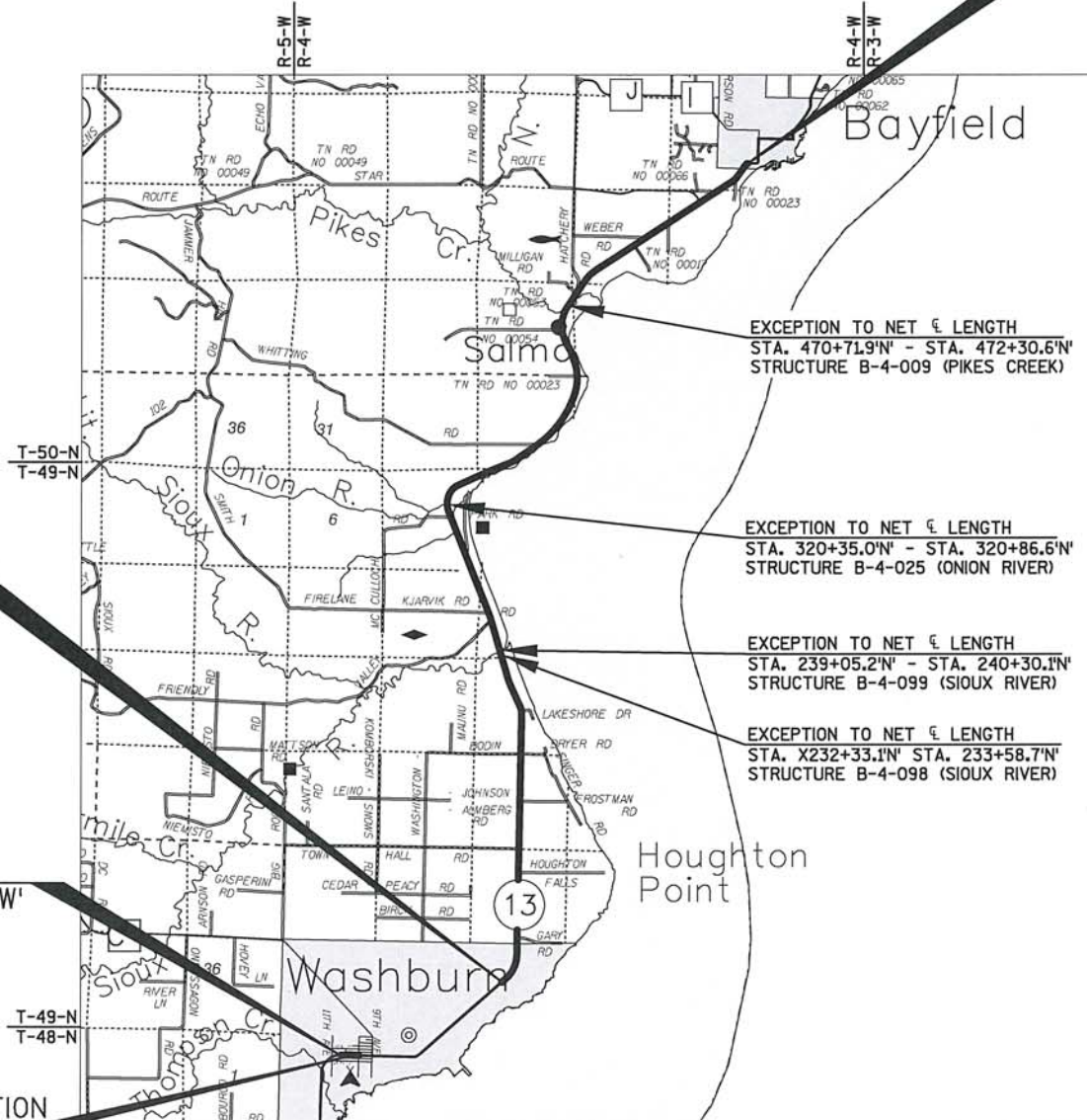
CONVENTIONAL SYMBOLS

<p>PLAN</p> <p>CORPORATE LIMITS</p> <p>PROPERTY LINE</p> <p>LOT LINE</p> <p>LIMITED HIGHWAY EASEMENT</p> <p>EXISTING RIGHT OF WAY</p> <p>PROPOSED OR NEW R/W LINE</p> <p>SLOPE INTERCEPT</p> <p>REFERENCE LINE</p> <p>EXISTING CULVERT</p> <p>PROPOSED CULVERT (Box or Pipe)</p> <p>COMBUSTIBLE FLUIDS</p> <p>MARSH AREA</p> <p>WOODED OR SHRUB AREA</p>	<p>PROFILE</p> <p>GRADE LINE</p> <p>ORIGINAL GROUND</p> <p>MARSH OR ROCK PROFILE (To be noted as such)</p> <p>SPECIAL DITCH</p> <p>GRADE ELEVATION</p> <p>CULVERT (Profile View)</p> <p>UTILITIES</p> <p>ELECTRIC</p> <p>FIBER OPTIC</p> <p>GAS</p> <p>SANITARY SEWER</p> <p>STORM SEWER</p> <p>TELEPHONE</p> <p>WATER</p> <p>UTILITY PEDESTAL</p> <p>POWER POLE</p> <p>TELEPHONE POLE</p>	<p>ROCK</p> <p>LABEL</p> <p>95.36</p> <p>E</p> <p>FO</p> <p>G</p> <p>SAN</p> <p>SS</p> <p>T</p> <p>W</p>
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BEGIN CONSTRUCTION
STA. 37+00.00'N
X = 818,683.34
Y = 491,488.77

BEGIN PROJECT
STA. 343+00.00'W
X = 810,412.76
Y = 487,834.41

END CONSTRUCTION
STA. 350+00.00'W



LAYOUT
SCALE 0 2 MILE

TOTAL NET LENGTH OF CENTERLINE = 10.850 MILES

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

END PROJECT
STA. 602+84.21'N

EXCEPTION TO NET LENGTH
STA. 470+71.9'N - STA. 472+30.6'N
STRUCTURE B-4-009 (PIKES CREEK)

EXCEPTION TO NET LENGTH
STA. 320+35.0'N - STA. 320+86.6'N
STRUCTURE B-4-025 (ONION RIVER)

EXCEPTION TO NET LENGTH
STA. 239+05.2'N - STA. 240+30.1'N
STRUCTURE B-4-099 (SIOUX RIVER)

EXCEPTION TO NET LENGTH
STA. X232+33.1'N STA. 233+58.7'N
STRUCTURE B-4-098 (SIOUX RIVER)

ORIGINAL PLAN PREPARED BY



DATE: 7/26/16

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	NWBE, INC.
Surveyor	NWBE, INC.
Designer	PHILIP KEPPERS
Project Manager	CHRISTINE KOSKI
Regional Examiner	DAVID OSTROWSKI
Regional Supervisor	

APPROVED FOR THE DEPARTMENT
DATE: 7/26/2016 *Philip S. Keppers*
(Signature)

E

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN SHALL BE IN ACCORDANCE WITH THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

CURVE DATA IS BASED ON THE ARC DEFINITION. BEARINGS SHOWN ON THE PLAN ARE GRID BEARINGS AND ARE TO THE NEAREST SECOND.

WHEN THE QUANTITY OF THE ITEMS OF BASE AGGREGATE OR ASPHALTIC SURFACE COURSE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYERS SHOWN ON THE PLAN IS APPROXIMATE. THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGER'S HOTLINE AND/OR A DIRECT CALL TO UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGER'S HOTLINE.

VERTICAL SAWCUTS SHALL BE MADE THROUGH ALL EXISTING PAVEMENTS AT REMOVAL LIMITS.

SHRINKAGE OF EARTHWORK IS VARIABLE AND IS ESTIMATED AT 25% IN THE YARDAGE SUMMARY. EXCAVATION BELOW SUBGRADE (EBS) IS ESTIMATED AND MAY VARY AS DIRECTED BY THE ENGINEER.

7 1/2-INCH ASPHALTIC SURFACE SHALL BE CONSTRUCTED IN 3 LAYERS MINIMUM.

8-INCH ASPHALTIC SURFACE SHALL BE CONSTRUCTED IN 3 LAYERS MINIMUM..

RADIUS DIMENSIONS AS SHOWN ON THE PLAN ARE TO THE EDGE OF PAVEMENT. ELEVATIONS SHOWN ON INTERSECTION DETAIL SHEETS ARE AT THE EDGE OF PAVEMENT.

RESTORE SIDE ROAD INTERSECTIONS, DRIVEWAYS, AND OTHER ENTRANCES TO EXISTING SURFACE CONDITIONS UNLESS SHOWN OTHERWISE ON THE PLAN. EXACT LOCATION AND THE LIMITS OF PRIVATE ENTRANCES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS INDICATED FOR REMOVAL BY THE ENGINEER.

SILT FENCE SHALL BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, AND IT SHALL BE INSTALLED PRIOR TO CONSTRUCTION.

THE EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND APPROVED BY THE ENGINEER IN CONSULTATION WITH THE DNR.

EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT OF WAY SHALL BE RESTORED AS DIRECTED BY THE ENGINEER.

STATIONING, DISTANCES AND OFFSETS FOR PROPOSED SIGNS SHOWN ON THE PLAN ARE APPROXIMATE. ACTUAL LOCATIONS OF SIGNS ARE TO BE COORDINATED IN THE FIELD WITH THE ENGINEER.

ALL CONCRETE CULVERT PIPE AND STORM SEWER JOINTS SHALL BE TIED.

CONTACTS

WISDOT CONTACT
WISCONSIN DEPARTMENT OF TRANSPORTATION
ATTN: PHILIP KEPPERS, PE - PROJECT MANAGER
1701 NORTH 4TH STREET
SUPERIOR, WI 54880
PHONE (715) 395-3027
EMAIL: Philip.Keppers@dot.wi.gov

WDNR CONTACT
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
ATTN: SHAWN HASELEU
ENVIRONMENTAL ANALYSIS AND REVIEW SPECIALIST
810 WEST MAPLE STREET
SPOONER, WI 54801
PHONE (715) 635-4228
EMAIL: Shawn.Haseleu@wisconsin.gov

DESIGN CONTACT
NORTHERN WISCONSIN-BASED ENGINEERS (NWBE)
ATTN: HEATHER HARRINGTON, PE
P.O. BOX 328
HAYWARD, WI 54843
PHONE (715) 634-4334
EMAIL: heather@cheqnet.net

BAYFIELD COUNTY CONTACT
BAYFIELD COUNTY HIGHWAY DEPARTMENT
ATTN: THOMAS TOEPFER - COMMISSIONER
P.O. BOX 428
311 S. FIRST AVENUE EAST
WASHBURN, WI 54891
PHONE (715) 373-6115
EMAIL: ttoepfer@bayfieldcounty.org



LIST OF STANDARD ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
AADT	ANNUAL AVERAGE DAILY TRAFFIC
APPROX.	APPROXIMATE
A.E.W.	APRON END WALL
ASPH.	ASPHALTIC
BK.	BACK
BEG.	BEGIN
B.M.	BENCH MARK
C/L OR ĩ	CENTER LINE
C.E.	COMMERCIAL ENTRANCE
CONC.	CONCRETE
CONSTR.	CONSTRUCTION
CO.	COUNTY
C.T.H.	COUNTY TRUNK HIGHWAY
X-SEC.	CROSS SECTION
CULV.	CULVERT
C.P.	CULVERT PIPE
D.O.T.	DEPARTMENT OF TRANSPORTATION
D.H.V.	DESIGN HOUR VOLUME
CR.	DIAMETER
DISCH. OR DIS.	DISCHARGE
E.	EAST
X	EAST GRID COORDINATE
EB	EASTBOUND
EA.	EACH
ELEC.	ELECTRIC
EL. OR ELEV.	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
E.B.S.	EXCAVATION BELOW SUBGRADE
EXIST.	EXISTING
FERT.	FERTILIZE
F.E.	FIELD ENTRANCE
FIN.	FINISHED
F.L. OR ĩ	FLOW LINE
HORIZ.	HORIZONTAL
INL.	INLET
INT.	INTERSECTION
INV.	INVERT
LT.	LEFT

UTILITIES

BAYFIELD ELECTRIC COOPERATIVE
ATTN: GARY TARASEWICZ - FIELD TECHNICIAN
P.O. BOX 68
IRON RIVER, WI 54847
BEC OFFICE (715) 372-4287
DIRECT LINE (715) 372-7539
EMAIL: gary.tarasewicz@bayfeldelectric.com

CITY OF BAYFIELD PUBLIC WORKS
ATTN: THOMAS KOVACHEVICH - PUBLIC WORKS DIRECTOR
P.O. BOX 1170
BAYFIELD, WI 54814
PHONE (715) 779-5731
MOBILE (715) 209-3956
EMAIL: citypublicworks@cityofbayfield.com

CENTURYLINK
MARK SCRIBNER
120 E. MAIN ST.
ASHLAND, WI 54806
PHONE (715) 682-0022
MOBILE (715) 492-7976
EMAIL: mark.scribner@centurylink.com

CHARTER COMMUNICATIONS
TOM HAASE
2304 S. MAIN ST.
RICE LAKE, WI 54868
PHONE (715) 719-0564
MOBILE (715) 418-9317
EMAIL: tom.haase@charter.com

XCEL ENERGY - ELECTRIC
ATTN: SCOTT FROEMMING
2400 FARM ROAD
ASHLAND, WI 54806
PHONE (715) 682-6927
EMAIL: scott.s.froemming@xcelenergy.com

L.H.F.	LEFT-HAND FORWARD
L.F.	LINEAR FOOT
L.S.	LUMP SUM
MAX.	MAXIMUM
MISC.	MISCELLANEOUS
N.	NORTH
Y	NORTH GRID COORDINATE
N.E.	NORTHEAST
N.W.	NORTHWEST
PAVT.	PAVEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.O.T.	POINT ON TANGENT
P.E.	PRIVATE ENTRANCE
PROJ.	PROJECT
R.	RANGE
REQD.	REQUIRED
R/L	REFERENCE LINE
RT.	RIGHT
R.H.F.	RIGHT-HAND FORWARD
R/W	RIGHT-OF-WAY
RD.	ROAD
SHLD.	SHOULDER
S.	SOUTH
S.D.D.	STANDARD DETAIL DRAWINGS
S.T.H.	STATE TRUNK HIGHWAYS
STA.	STATION
STRUCT.	STRUCTURE
TEL.	TELEPHONE
TEMP.	TEMPORARY
TN.	TOWN
T.	TRUCKS (PERCENT OF)
TYP.	TYPICAL
U.G.	UNDERGROUND
VAR.	VARIABLE
V.	VELOCITY OR DESIGN SPEED
V.C.	VERTICAL CURVE
W.	WEST
WB	WESTBOUND
W.A.	WORKING DAY
WZ	WORK ZONE

UTILITIES

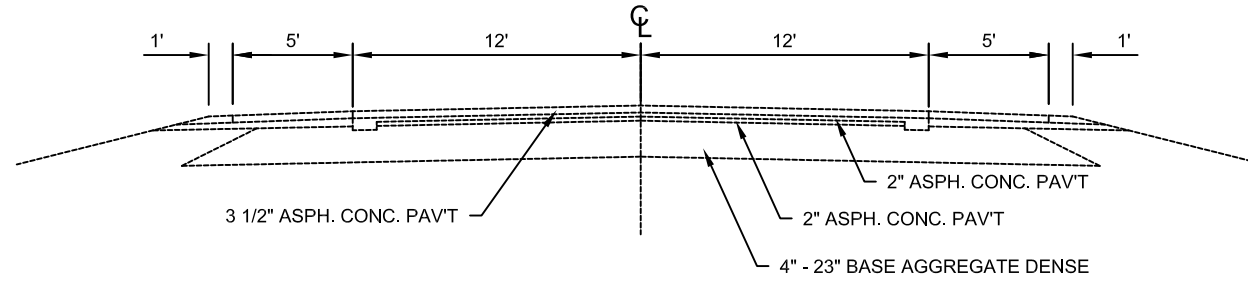
XCEL ENERGY - GAS
ATTN: MURRAY SMERER - SENIOR DESIGNER
2400 FARM ROAD
ASHLAND, WI 54806
PHONE (715) 682-6928
EMAIL: murray.j.smerer@xcelenergy.com

NORTHERN NATURAL GAS COMPANY
ATTN: JEFF TELKER - TEAM LEADER
1995 N. NATURAL GAS RD.
CARLTON, MN 55718
PHONE (402) 530-3466
MOBILE (218) 348-3470
EMAIL: Jeff.Telker@NNGCO.com

NORVADO
ATTN: GUY FOLSOM - FIELD ENGINEER
P.O. BOX 67
CABLE, WI 54821
PHONE (715) 798-7123
MOBILE (715) 580-8123
EMAIL: gfolson@norvado.com

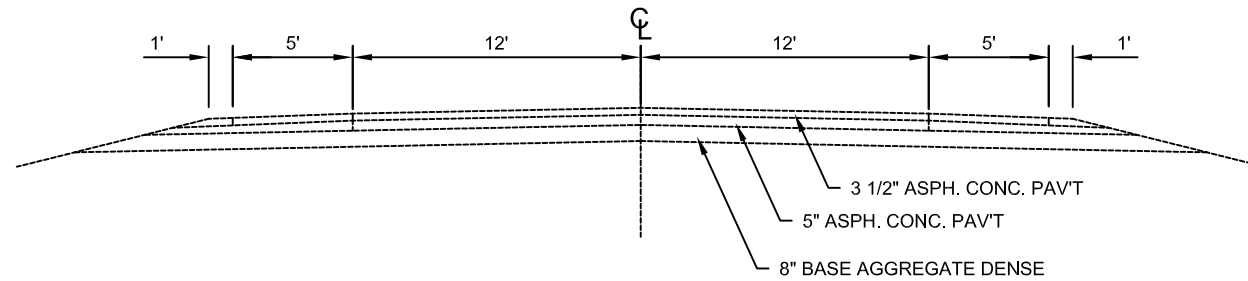
PIKES BAY SANITARY DISTRICT
ATTN: REX DOLLINGER - PRESIDENT
P.O. BOX 689
BAYFIELD, WI 54814
PHONE (715) 779-9866
EMAIL: rex.dollinger@yahoo.com

WASHBURN MUNICIPAL WATER AND SEWER UTILITY
ATTN: GAYLA SALMI - DIRECTOR OF PUBLIC WORKS
P.O. BOX 638
WASHBURN, WI 54891
PHONE (715) 373-6171
AFTER HOURS DISPATCH (715) 373-6120
EMAIL: dpw@cityofwashburn.org



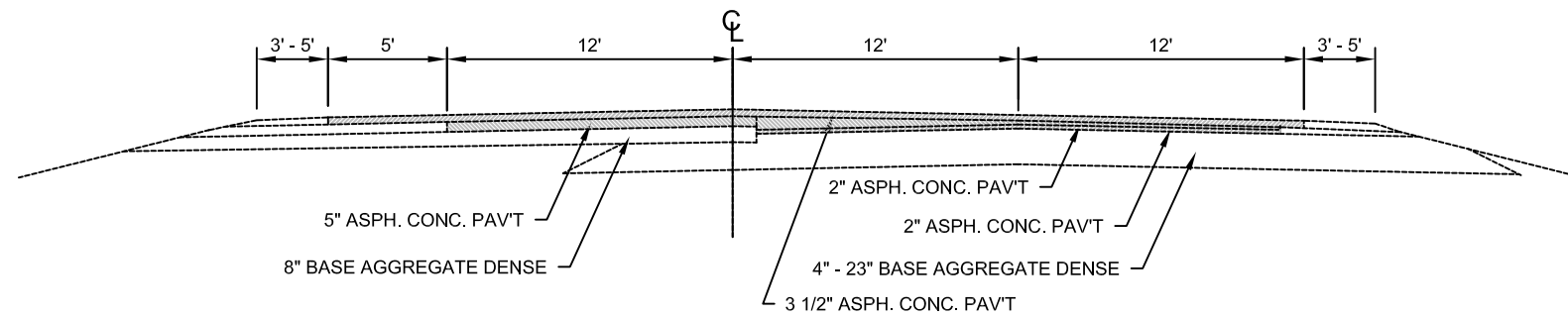
TYPICAL EXISTING SECTION

- STA. 37+00'N' - 70+00'N'
- STA. 77+59'N' - 232+33'N'
- STA. 233+59'N' - 239+05'N'
- STA. 240+22'N' - 314+50'N'
- STA. 422+00'N' - 439+00'N'
- STA. 440+50'N' - 442+00'N'
- STA. 453+00'N' - 454+16'N'
- STA. 459+44'N' - 470+72'N'
- STA. 472+31'N' - 486+90'N'
- STA. 550+00'N' - 572+00'N'
- STA. 585+00'N' - 601+70'N'



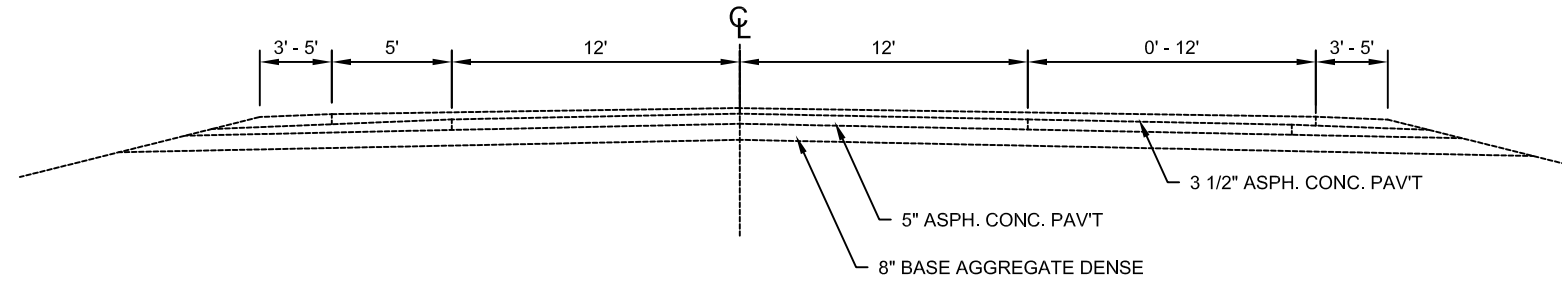
TYPICAL EXISTING SECTION

- STA. 70+00'N' - 77+59'N'
- STA. 314+50'N' - 320+35'N'
- STA. 320+87'N' - 330+85'N'
- STA. 391+00'N' - 398+00'N'
- STA. 545+00'N' - 550+00'N'
- STA. 572+00'N' - 585+00'N'



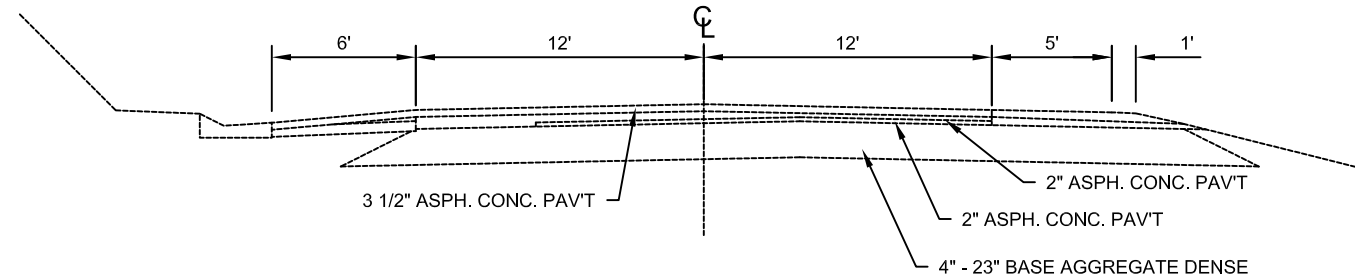
TYPICAL EXISTING SECTION

- STA. 337+00'N' - 351+00'N'
- STA. 486+90'N' - 539+30'N'



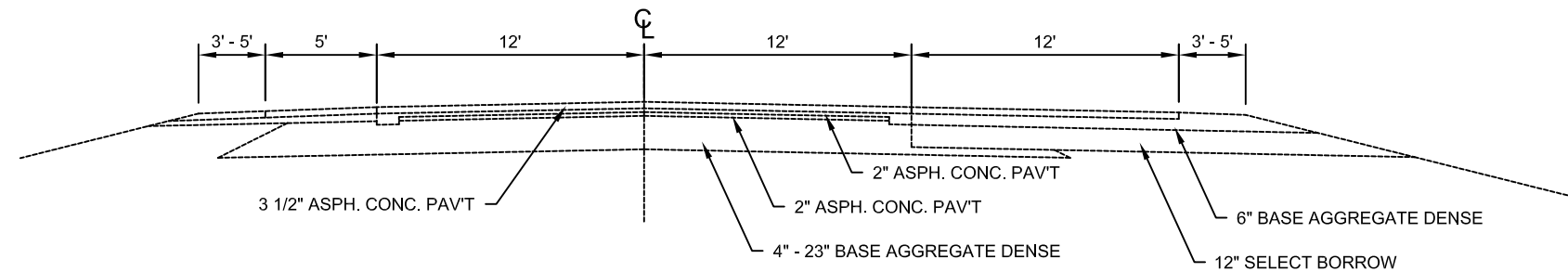
TYPICAL EXISTING SECTION

STA. 330+85'N' - 337+00'N'
 STA. 351+00'N' - 357+70'N'
 STA. 479+00'N' - 486+90'N'
 STA. 532+50'N' - 535+01'N' (ASPH. CONC. SHLD. AND CURB AND GUTTER)
 STA. 539+30'N' - 544+00'N'



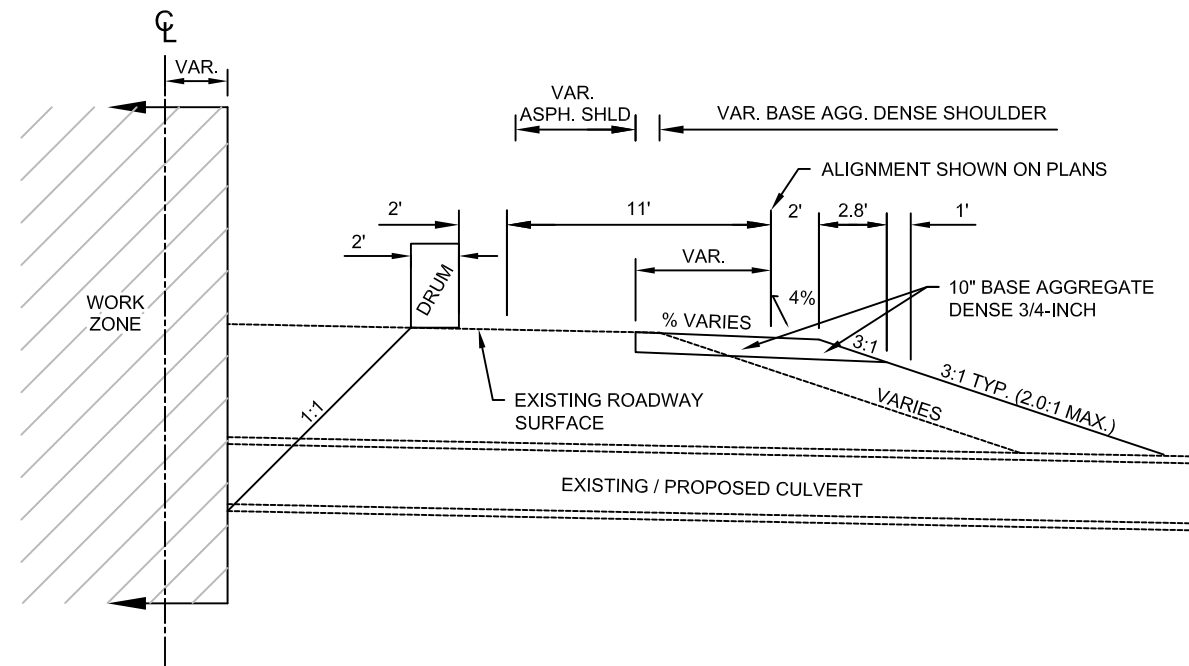
TYPICAL EXISTING SECTION

STA. 371+13'N' - 379+00'N'	STA. 414+22'N' - 415+38'N'
STA. 379+89'N' - 382+14'N'	STA. 417+50'N' - 419+26'N'
STA. 384+14'N' - 389+19'N'	STA. 439+68'N' - 440+56'N'
STA. 393+35'N' - 395+48'N'	STA. 532+50'N' - 535+01'N'
STA. 397+48'N' - 411+12'N'	



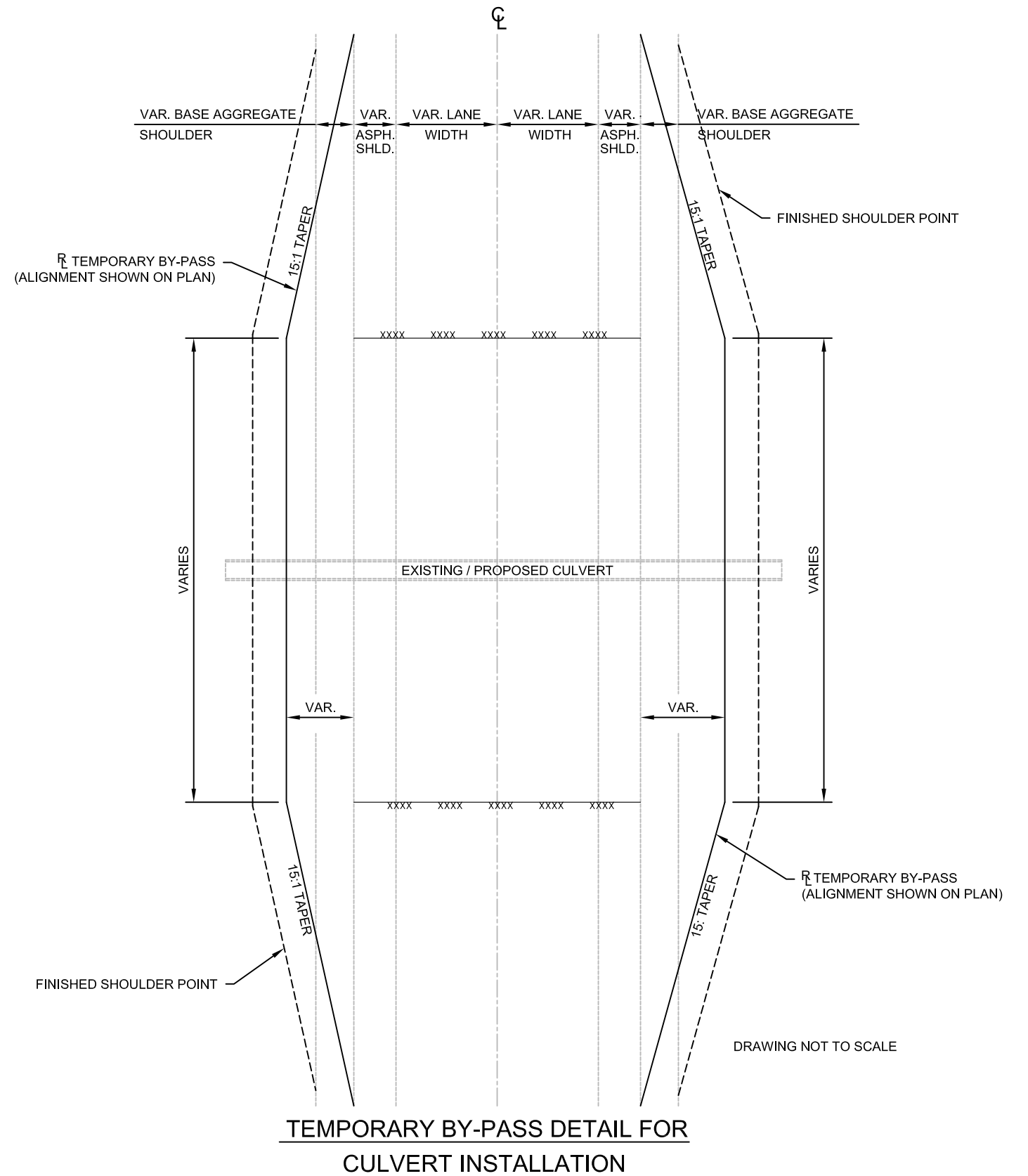
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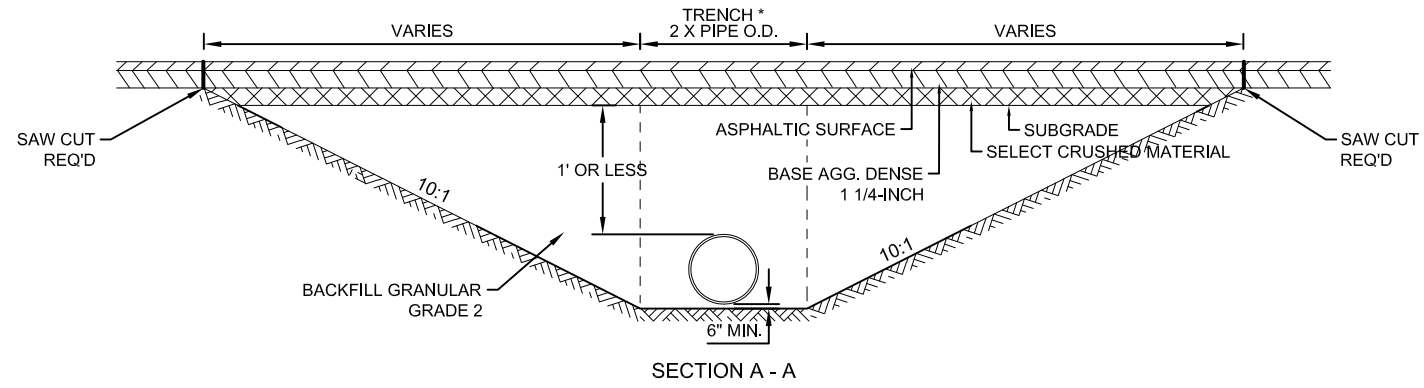
STA. 454+16'N' - 459+44'N'



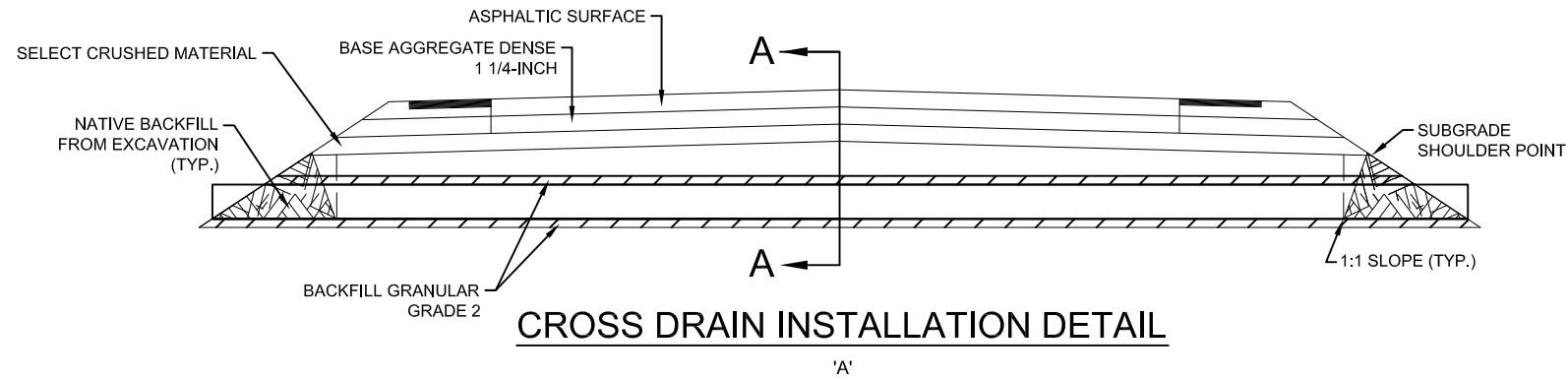
**TYPICAL TEMPORARY BY-PASS SECTION
FOR CULVERT INSTALLATION**

- STA. 208+37'N' LT & RT
- STA. 208+49'N' LT & RT
- STA. 304+76'N' RT
- STA. 379+40'N' RT
- STA. 401+23'N' RT
- STA. 459+21'N' RT
- STA. 461+00'N' RT
- STA. 485+64'N' LT



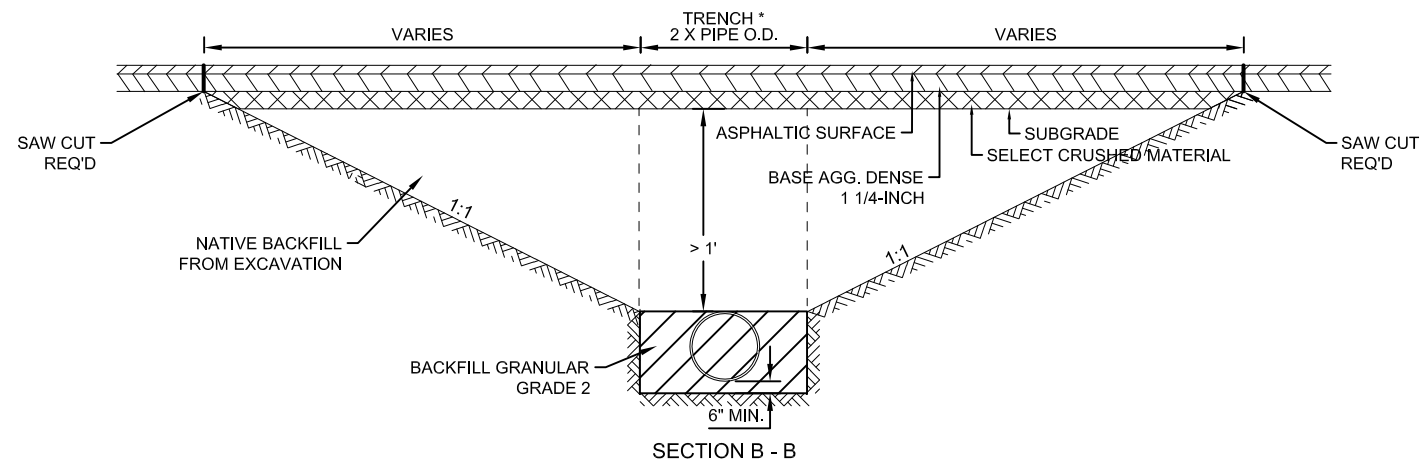


SECTION A - A

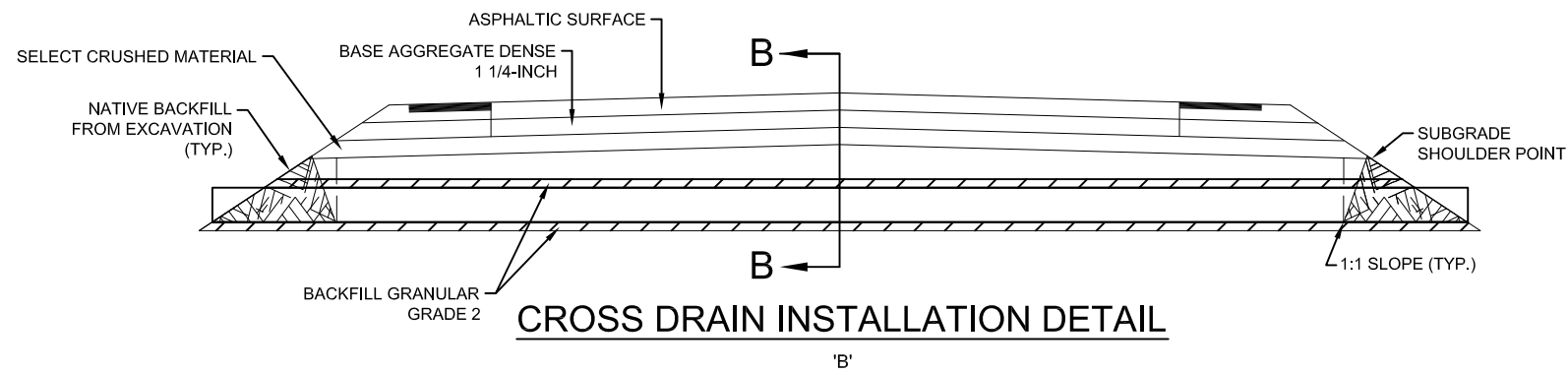


CROSS DRAIN INSTALLATION DETAIL

'A'



SECTION B - B

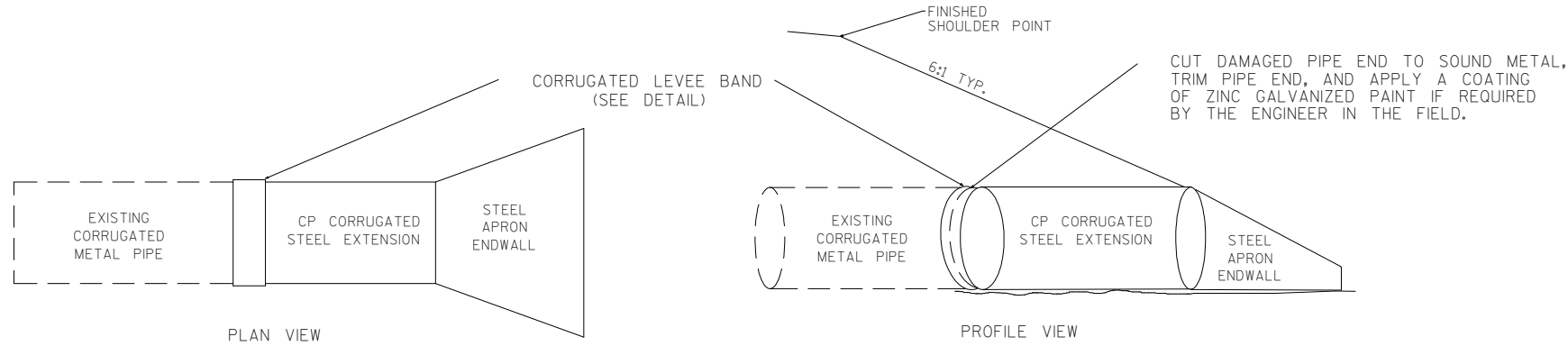


CROSS DRAIN INSTALLATION DETAIL

'B'

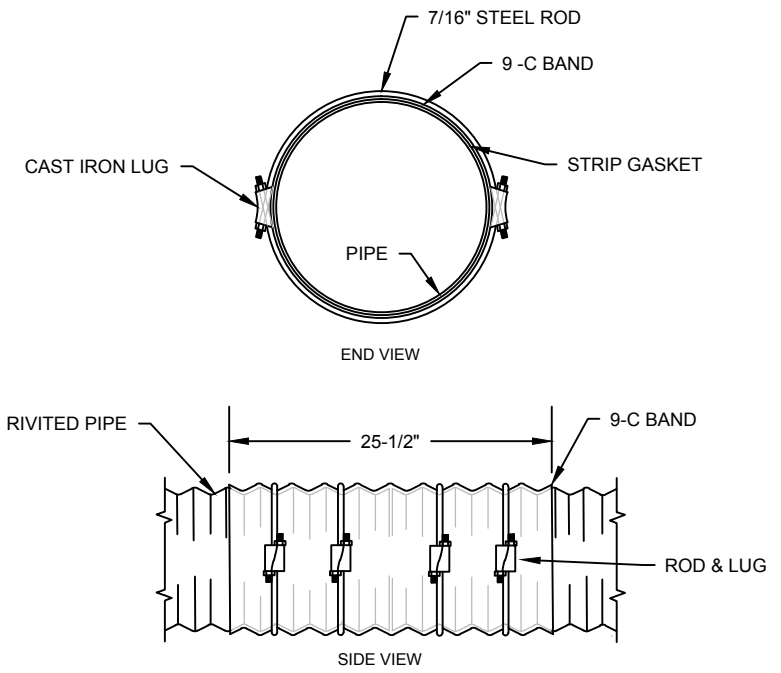
CROSS DRAIN REPLACEMENT STATION		PAVEMENT DEPTH	BASE AGGREGATE DENSE 1 1/4-INCH DEPTH	SELECT CRUSHED	DEPTH TO TOP OF PIPE AT CENTERLINE	INSTALLATION DETAIL
		INCHES	INCHES	INCHES	FT	-
77+85	'N'	8	8	---	0.8	A
111+84	'N'	8	8	---	2.8	B
174+02	'N'	7.5	12	---	2.0	A
208+34	'N'	7.5	12	12	2.0	A
208+49	'N'	7.5	12	12	2.0	A
304+76	'N'	7.5	12	---	2.1	A
312+56	'N'	7.5	12	---	2.9	B
379+40	'N'	7.5	12	---	7.9	B
401+23	'N'	7.5	12	---	6.6	B
419+54	'N'	7.5	12	---	3.5	B
459+21	'N'	7.5	12	---	3.4	B
461+00	'N'	7.5	12	---	3.1	B
483+23	'N'	7.5	12	---	5.0	B
485+64	'N'	7.5	12	---	4.3	B
488+39	'N'	7.5	12	---	2.9	B
568+56	'N'	7.5	12	---	5.0	B
568+64	'N'	7.5	12	---	5.0	B
585+88	'N'	7.5	12	---	15.8	B
591+49	'N'	7.5	12	---	10.8	B

* FOR PIPE DIAMETERS < 36" TRENCH WIDTH = DIAMETER + 3' (18" EACH SIDE OF PIPE)



NOTE:
THE 2-FOOT WIDE METAL BAND COLLAR IS INCIDENTAL TO THE CULVERT PIPE CORRUGATED STEEL PAY ITEM, AND THE DIAMETER MUST MATCH THE PIPE EXTENSION DIAMETER.

CULVERT PIPE END EXTENSION DETAIL



NOTES:
PIPE BANDS SHALL HAVE THE SAME COATING AS THE MANUFACTURED PIPE. PIPE BANDS SHALL BE 24\"/>

CORRUGATED LEVEE BAND DETAIL

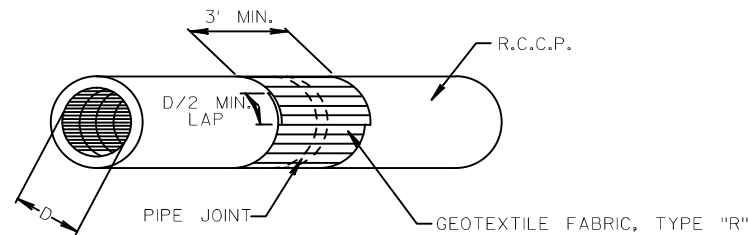
RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP-TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPE-TURF			.25			.27			.28			.30
			.32			.34			.36			.38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 165 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 29.6 ACRES (INCLUDING ROADWAYS)

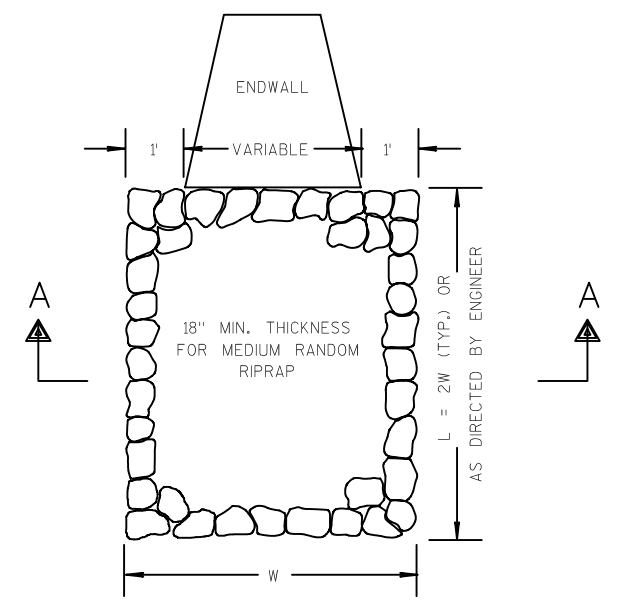
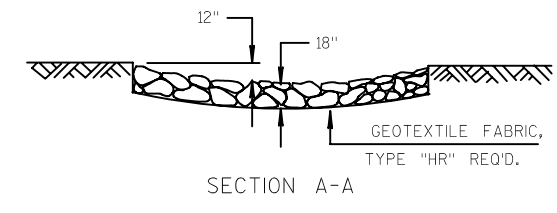
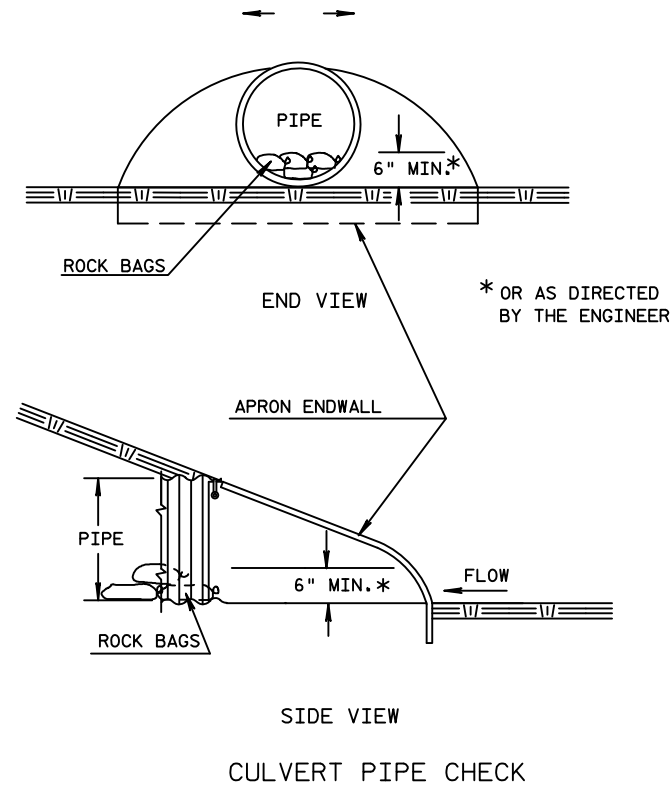
GEOTEXTILE FABRIC REQUIRED FOR PIPE JOINTS

PIPE DIA. (IN.)	PIPE O.D. (IN.)	FABRIC/JOINT (S.Y.)
18	23	2.3
21	26.5	2.6
24	30	3.0
27	33.5	3.3
30	37	3.6
36	44	4.3
42	51	5.0
48	58	5.7
54	65	6.4
60	72	7.1
66	79	7.8
72	86	8.5

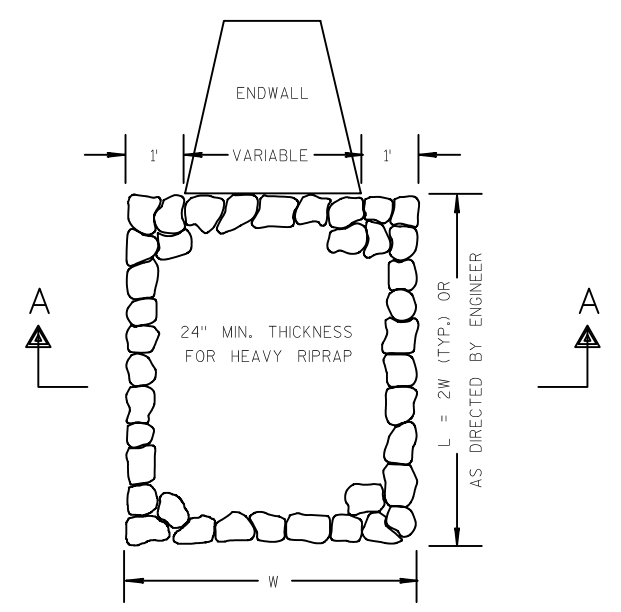
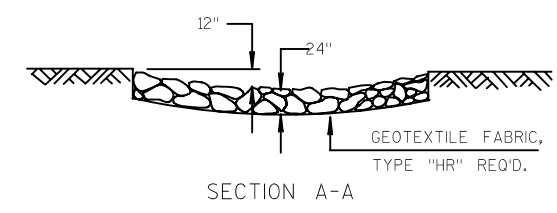
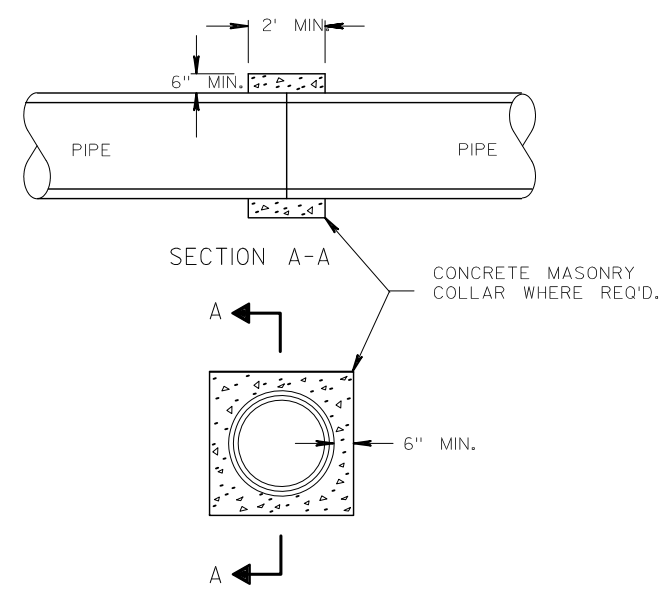
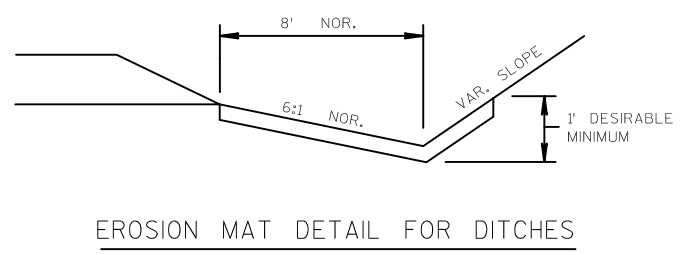


NOTE: GEOTEXTILE FABRIC FOR PIPE JOINTS IS INCIDENTAL TO THE PIPE ITEM.

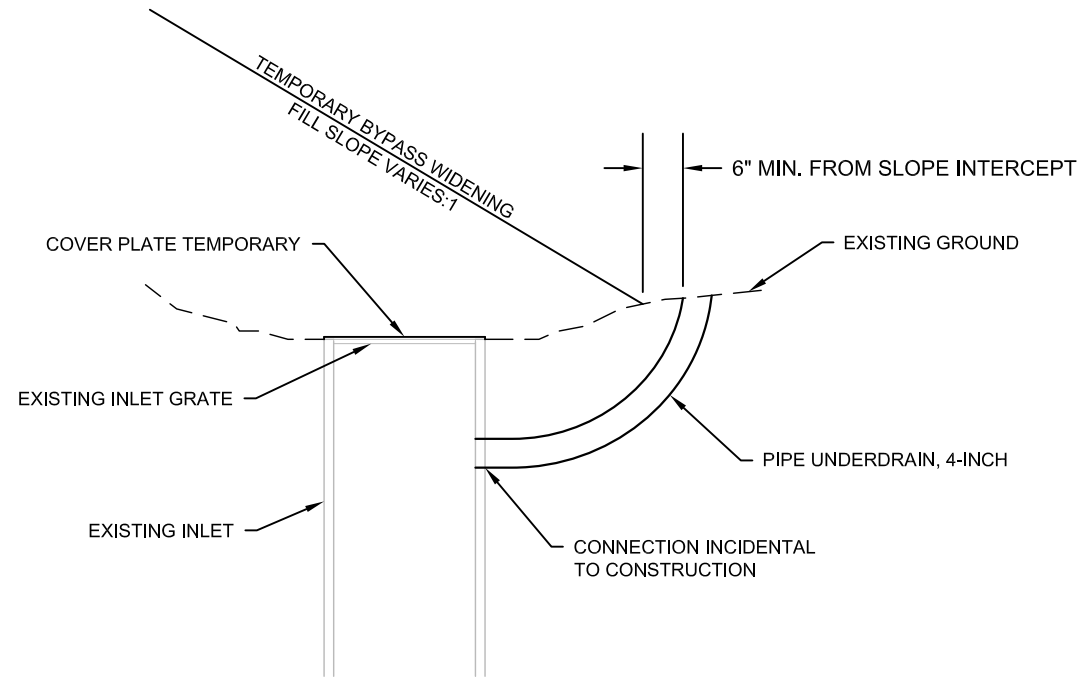
DETAIL OF WRAPPED PIPE JOINT
WRAP ALL JOINTS



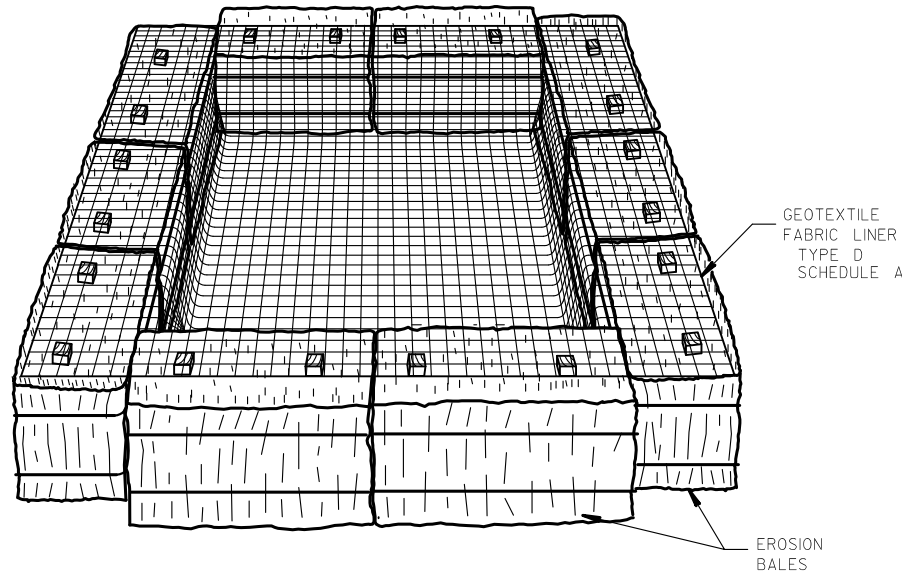
MEDIUM RIPRAP TREATMENT AT CULVERTS



HEAVY RIPRAP TREATMENT AT CULVERTS



TEMPORARY WATER PASSAGE DETAIL



TEMPORARY SETTLING BASIN
(SIZE TO BE DETERMINED IN BY WATER QUANTITY AND QUALITY)

TEMPORARY SETTLING BASIN:

THE TEMPORARY SETTLING BASIN SHALL BE COMPLETED PRIOR TO THE BEGINNING OF PUMPING OPERATIONS. CONTRACTOR SHALL PUMP WATER TO BASIN PRIOR TO DISCHARGE INTO ADJACENT WETLANDS, LAKES OR STREAMS.

TEMPORARY SETTLING BASINS SHALL BE PLACED IN LOCATIONS NOT TO IMPEDE TRAFFIC FLOW OR AFFECT WETLANDS OR FLOOD PLAINS.

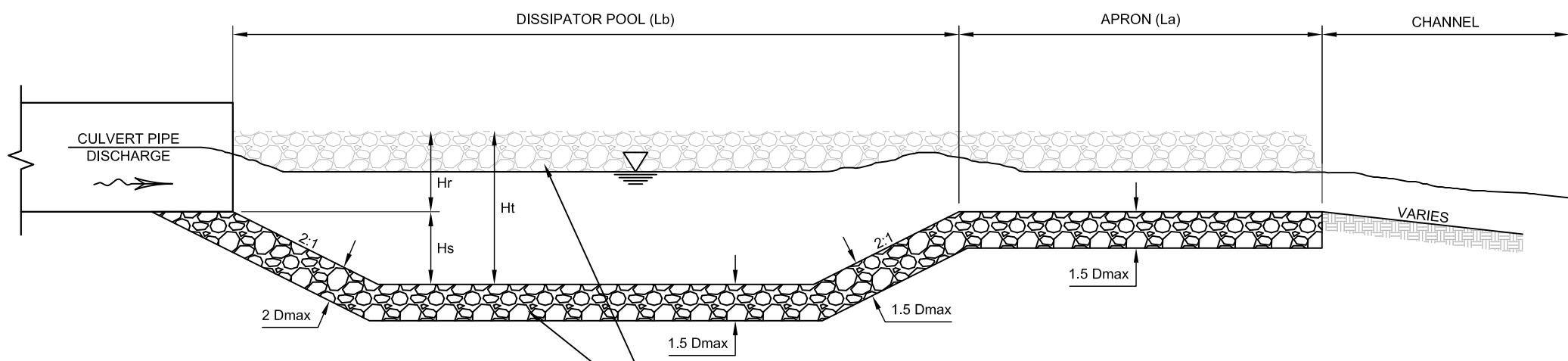
BASINS SHALL BE SIZED SO THAT THE TURBIDITY OF THE WATER LEAVING THE SETTLING BASIN DOES NOT EXCEED THE TURBIDITY OF THE RECEIVING WATERS OR CAUSE ANY DEPOSITION OF MATERIALS INTO ANY ADJACENT WETLAND OR FLOOD PLAIN.

MAINTAIN THE TEMPORARY SETTLING BASIN AS REQUIRED INCLUDING REMOVING AND DISPOSING OF SEDIMENT DEPOSITS. BASINS SHALL BE KEPT LESS THAN 10% FULL OF SEDIMENT. REMOVE AND REPLACE ANY PORTION OF THE SETTLING BASIN NO LONGER FIT FOR USE, AS THE ENGINEER DIRECTS.

UPON COMPLETION OF THE WORK, REMOVE THE TEMPORARY SETTLING BASIN AND RETURN AREA TO PRE-CONSTRUCTION CONDITIONS. DISPOSED OF BALES, GEOTEXTILE FABRIC AND SEDIMENTS OFF THE PROJECT SITE IN A MANNER ACCEPTABLE TO THE ENGINEER.

PAYMENT IS FULL COMPENSATION FOR FURNISHING, PLACING, MAINTAINING AND REMOVING ALL MATERIALS NEEDED TO CONSTRUCT THE TEMPORARY SETTLING BASIN; AND FOR FURNISHING ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE CONTRACT WORK.

PAID FOR AS EROSION BALES AND GEOTEXTILE FABRIC TYPE DF.

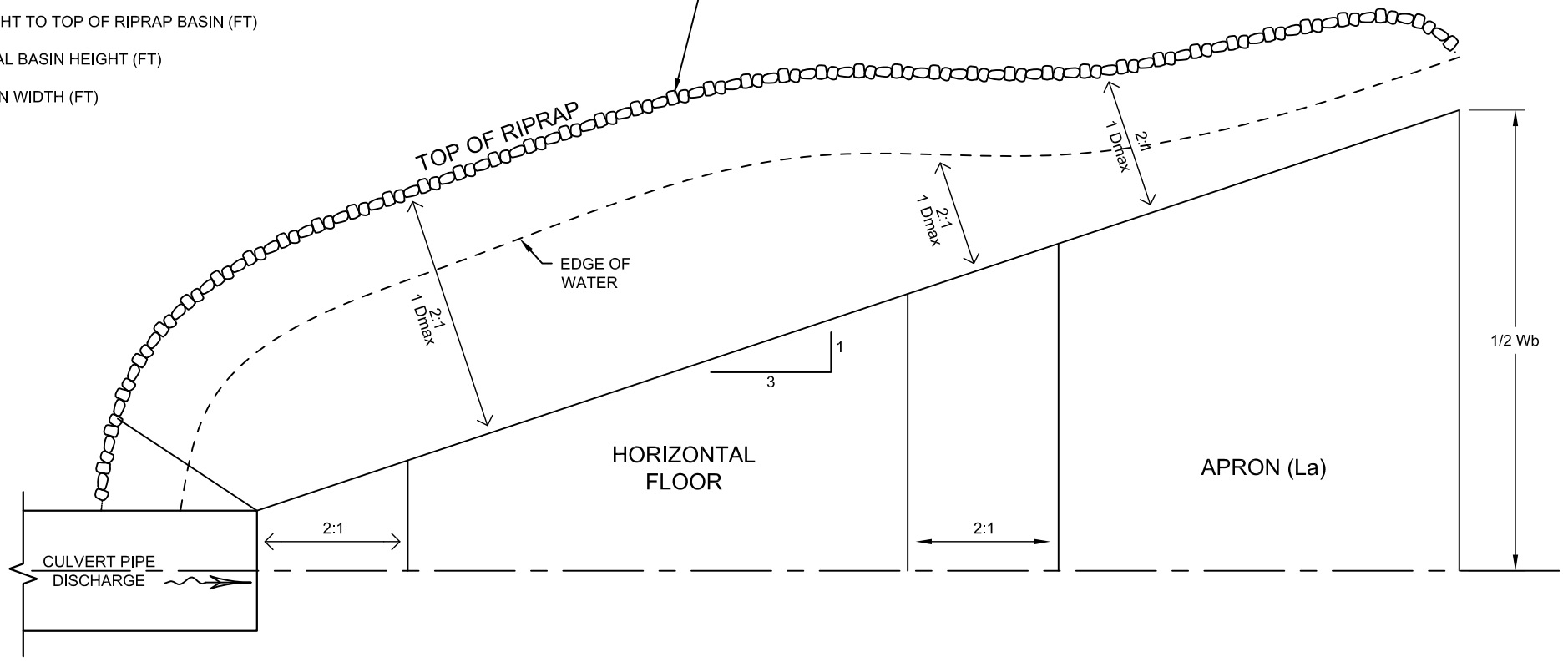


LEGEND

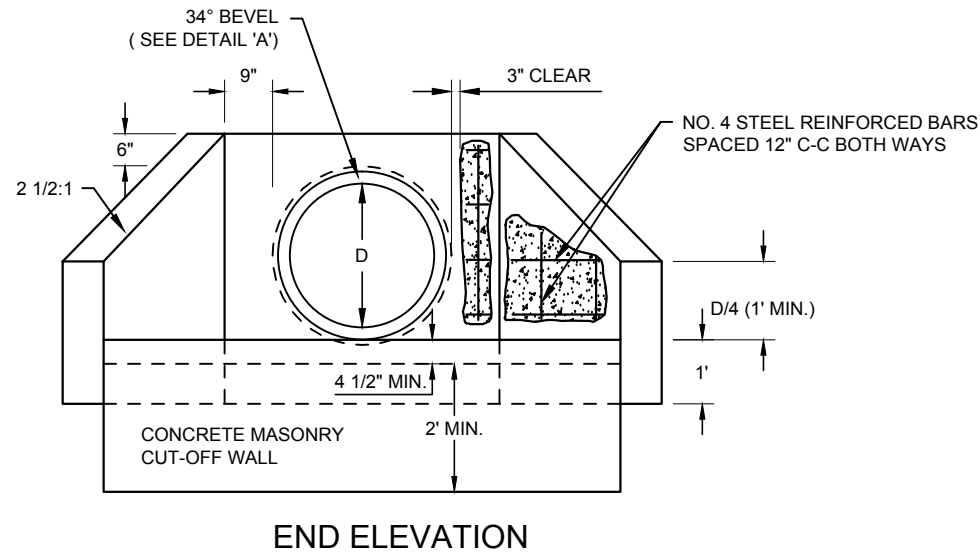
- CALCULATED WATER SURFACE ELEVATION
- Dmax MAXIMUM RIPRAP SIZE
- Hs DEPTH TO BOTTOM OF BASIN (FT)
- Hr HEIGHT TO TOP OF RIPRAP BASIN (FT)
- Ht TOTAL BASIN HEIGHT (FT)
- Wb BASIN WIDTH (FT)

RIPRAP W/ GEOTEXTILE FABRIC
(SEE TABLE FOR TYPE AND DIMENSIONS)

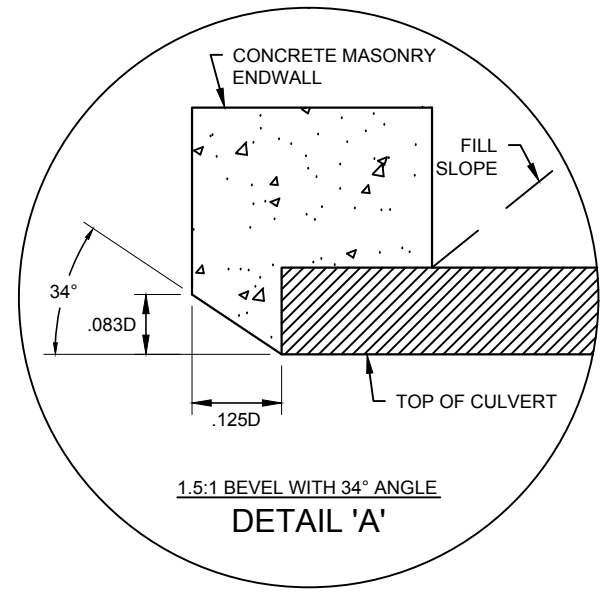
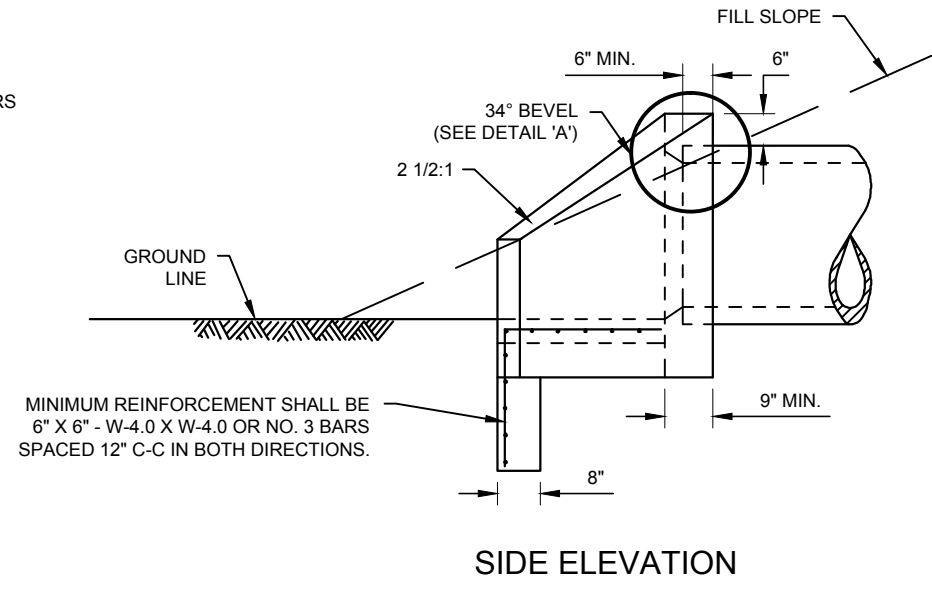
STATION	PIPE DIAMETER INCH	Dmax FT	Hs FT	Hr FT	Ht FT	Lb FT	La FT	Wb FT	RIPRAP TYPE	Tw FT
345+43 'S'	RT 36	1.5	2.5	2.9	5.4	25.0	12.5	28.0	MEDIUM	1.9
55+83 'N'	RT 72	1.5	1.7	5.2	7.0	17.3	8.7	23.3	MEDIUM	4.2
342+10 'N'	RT 36	1.0	1.1	1.8	2.9	11.0	5.5	14.0	LIGHT	0.8
346+42 'N'	RT 36	1.0	1.5	1.3	2.8	15.2	7.6	18.2	LIGHT	0.3
348+96 'N'	RT 30	1.0	1.2	1.9	3.1	11.8	5.9	14.3	LIGHT	0.9
438+55 'N'	RT 30	1.5	2.0	1.9	3.9	20.0	5.0	19.2	MEDIUM	0.9
499+11 'N'	RT 36	1.0	1.4	2.1	3.5	14.3	7.2	17.3	LIGHT	1.1
591+49 'N'	RT 30	1.0	1.1	1.6	2.7	11.0	5.5	13.5	LIGHT	0.6
598+50 'N'	RT 36	1.0	1.9	2.4	4.3	19.4	9.7	22.4	LIGHT	1.4



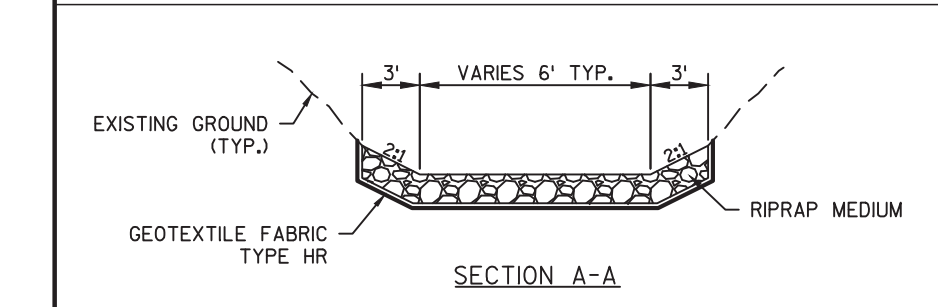
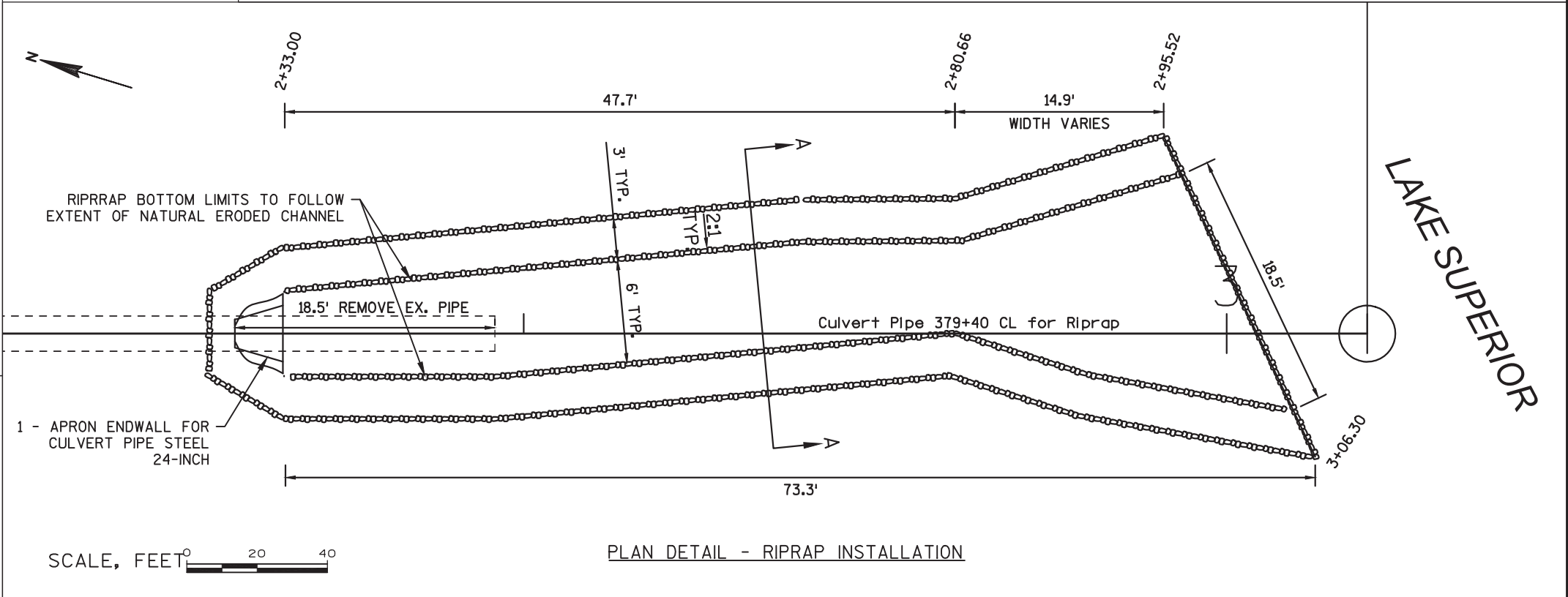
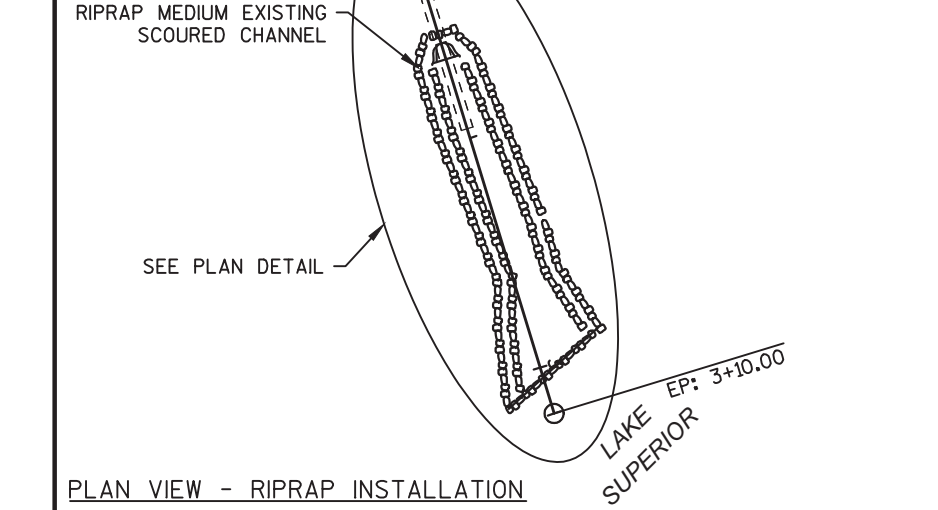
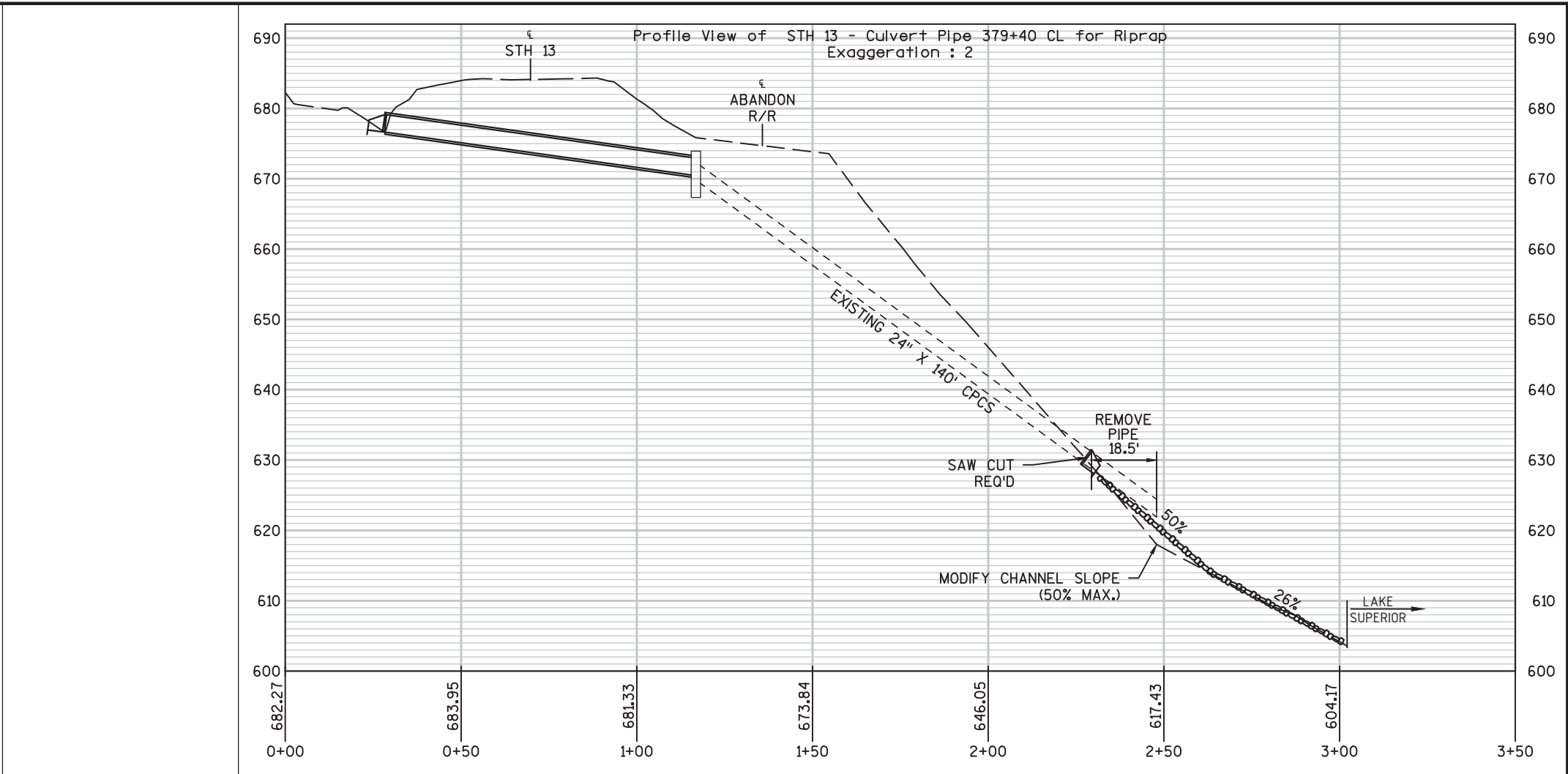
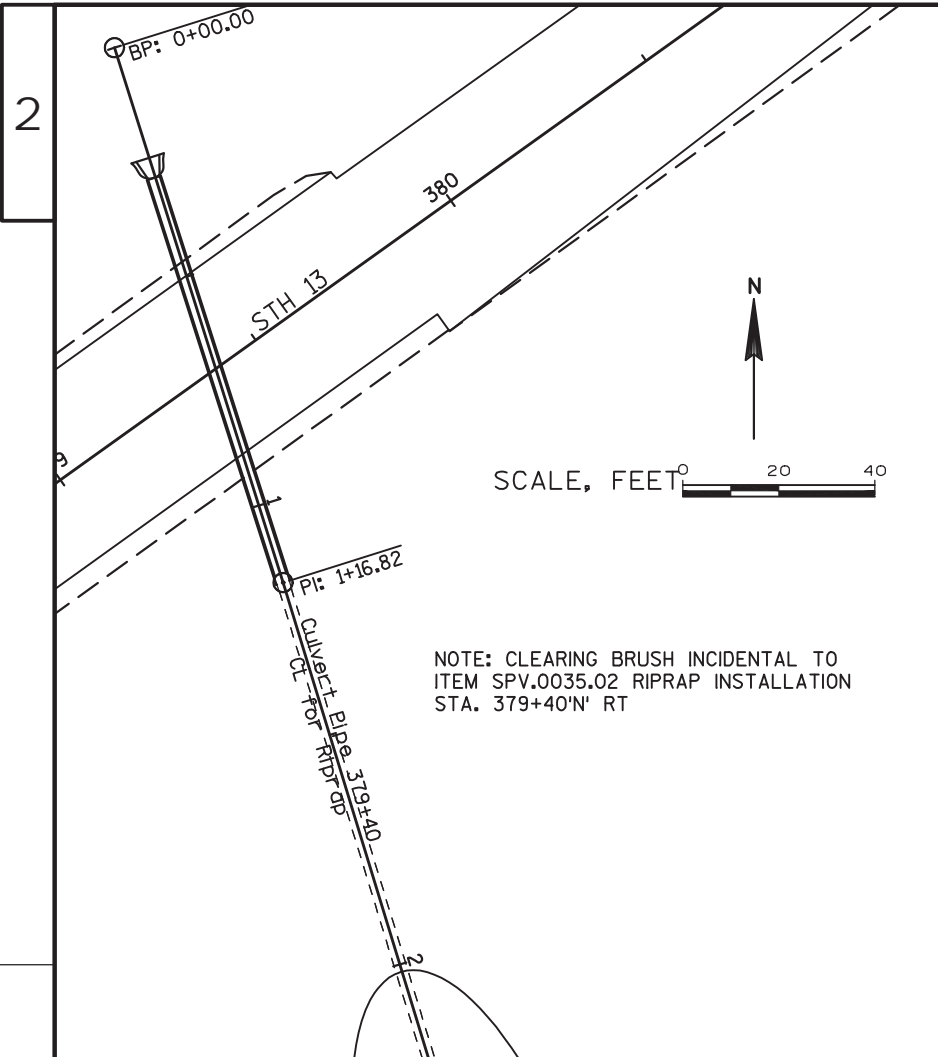
ENERGY DISSIPATING RIPRAP BASIN DETAIL

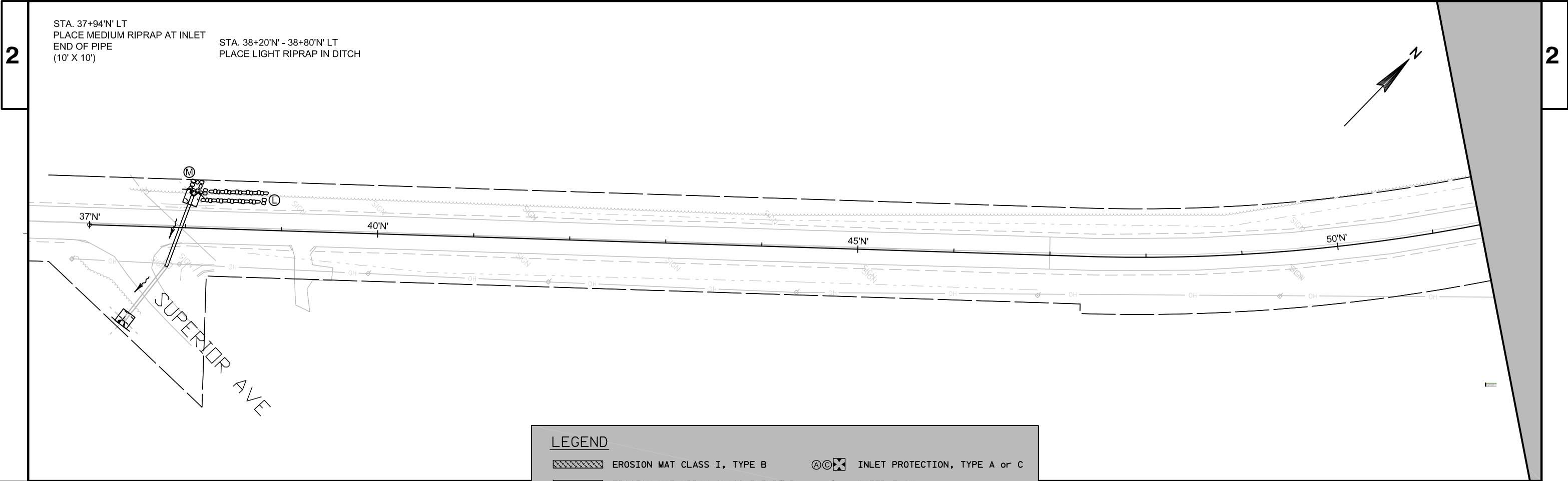


NOTE:
REFER TO SDD 8F 10-1 FOR ALL ADDITIONAL DETAILS

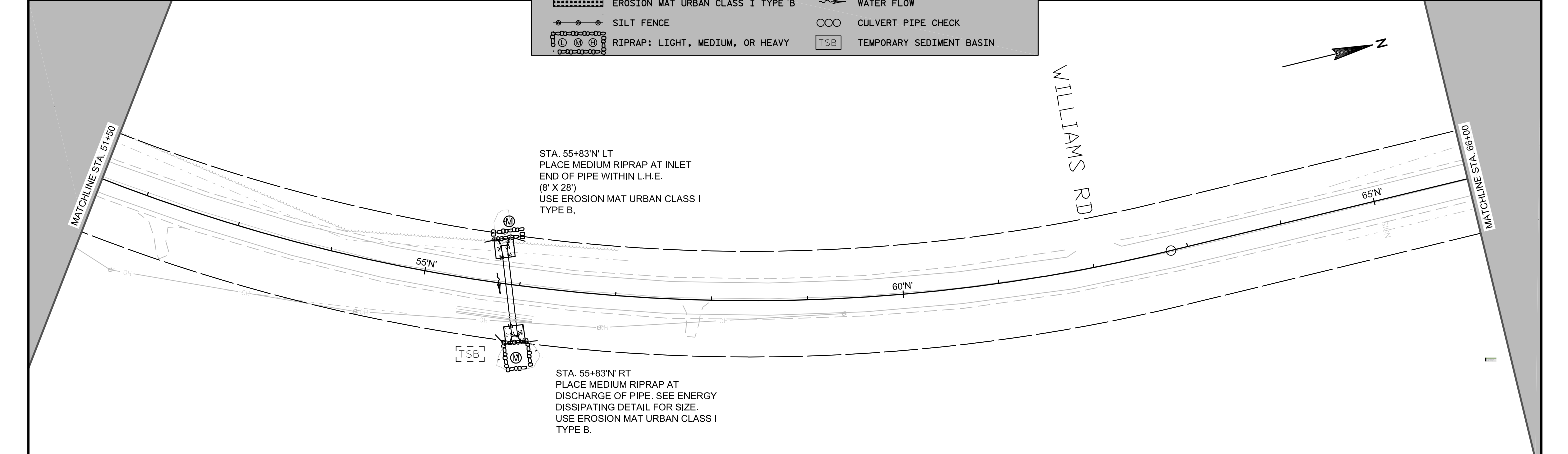


BEVELED EDGE CONCRETE MASONRY ENDWALL DETAIL





LEGEND	
	EROSION MAT CLASS I, TYPE B
	EROSION MAT URBAN CLASS I TYPE B
	SILT FENCE
	RIPRAP: LIGHT, MEDIUM, OR HEAVY
	INLET PROTECTION, TYPE A or C
	WATER FLOW
	CULVERT PIPE CHECK
	TEMPORARY SEDIMENT BASIN



2

2

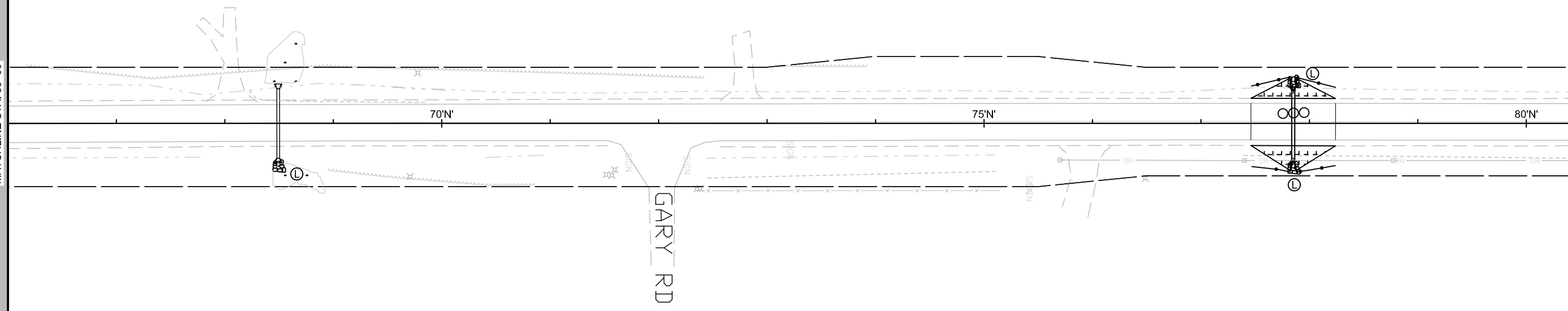
STA. 68+45'N' RT
PLACE LIGHT RIPRAP AT
DISCHARGE END OF PIPE
(7.5' X 7.5')

STA. 77+85'N' RT & LT
PLACE LIGHT RIPRAP AT INLET
AND DISCHARGE OF PIPE.
(8' X 8')



MATCHLINE STA. 66+00

MATCHLINE STA. 80+50



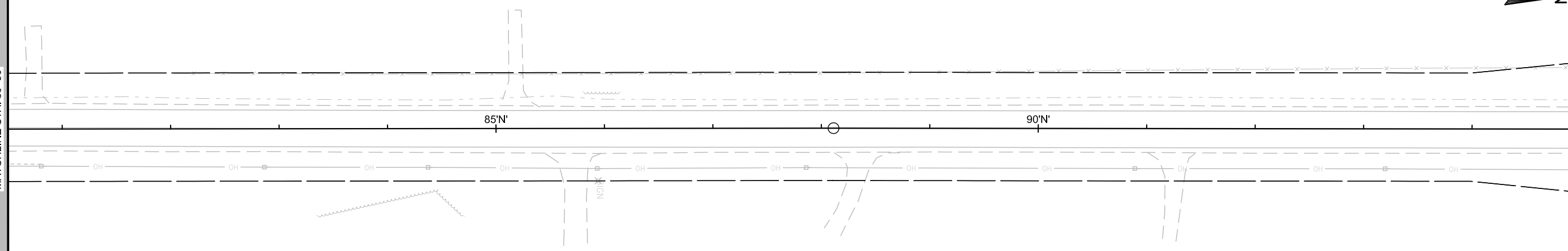
LEGEND

	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN



MATCHLINE STA. 80+50

MATCHLINE STA. 95+00



STA. 96+09 & 96+23'N' LT
 PLACE MEDIUM RIPRAP AT INLET
 END OF PIPES
 (10' X 26')
 USE EROSION MAT URBAN CLASS I
 TYPE B.

STA. 96+09 & 96+23'N' RT
 PLACE MEDIUM RIPRAP AT INLET
 END OF PIPES TO R/W (60' LT)
 (16' X 26')
 USE EROSION MAT URBAN CLASS I
 TYPE B.

STA. 111+80'N' & 111+84'N' RT & LT
 PLACE LIGHT RIPRAP AT INLET AND
 DISCH. END OF PIPES. R/W IS @ 50' RT &
 60' LT.
 (8' X 10')

LEGEND

	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN

MATCHLINE STA. 95+00

MATCHLINE STA. 109+50

MATCHLINE STA. 124+00

MATCHLINE STA. 124+00

MATCHLINE STA. 138+50

125'N'

130'N'

135'N'



LEGEND

- | | | | |
|--|----------------------------------|--|-------------------------------|
| | EROSION MAT CLASS I, TYPE B | | INLET PROTECTION, TYPE A or C |
| | EROSION MAT URBAN CLASS I TYPE B | | WATER FLOW |
| | SILT FENCE | | CULVERT PIPE CHECK |
| | RIPRAP: LIGHT, MEDIUM, OR HEAVY | | TEMPORARY SEDIMENT BASIN |

STA. 151+93'N RT
PLACE MEDIUM RIPRAP AT DISCH.
END OF PIPE TO R/W
(12' X 9')



MATCHLINE STA. 138+50

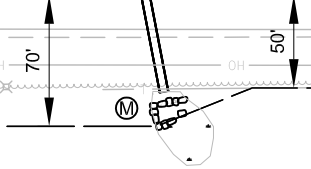
MATCHLINE STA. 153+00

140'N'

145'N'

150'N'

FROSTMAN RD



MATCHLINE STA. 153+00

MATCHLINE STA. 167+50

STA. 162+85'N' LT
PLACE LIGHT RIPRAP AT INLET
END OF PIPE
(8' X 8')

STA. 162+85'N' RT
PLACE MEDIUM RIPRAP AT DISCH.
END OF PIPE
(8' X 15').
EXISTING L.H.E. FOR DRAINAGE
EXISTS RT

LEGEND

	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN

STA. 174+02'N' RT & LT
PLACE MEDIUM RIPRAP AT INLET
AND DISCH. ENDS OF PIPE
(9' X 9').

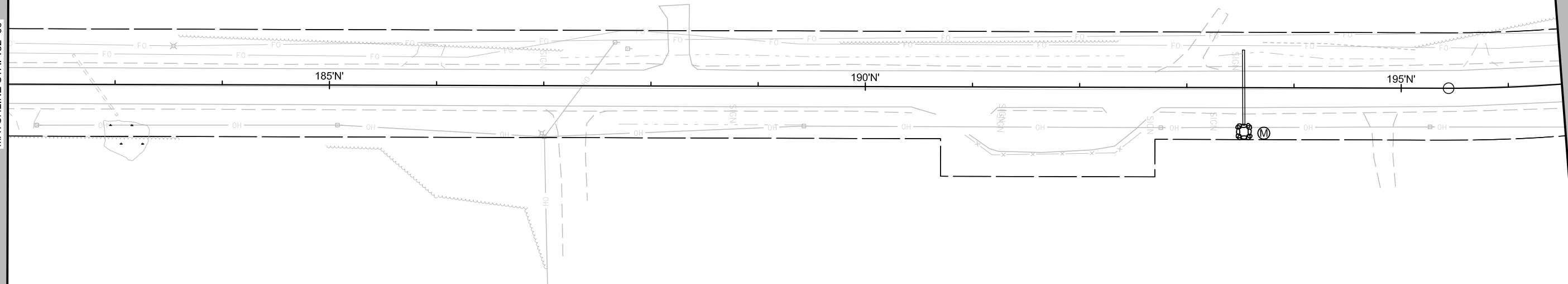
BURLAGER RD
BODDIN RD

MATCHLINE STA. 167+50

MATCHLINE STA. 182+00

MATCHLINE STA. 182+00

STA. 193+53'N RT
PLACE MEDIUM RIPRAP AT DISCH.
END OF PIPE
(12' X 12')

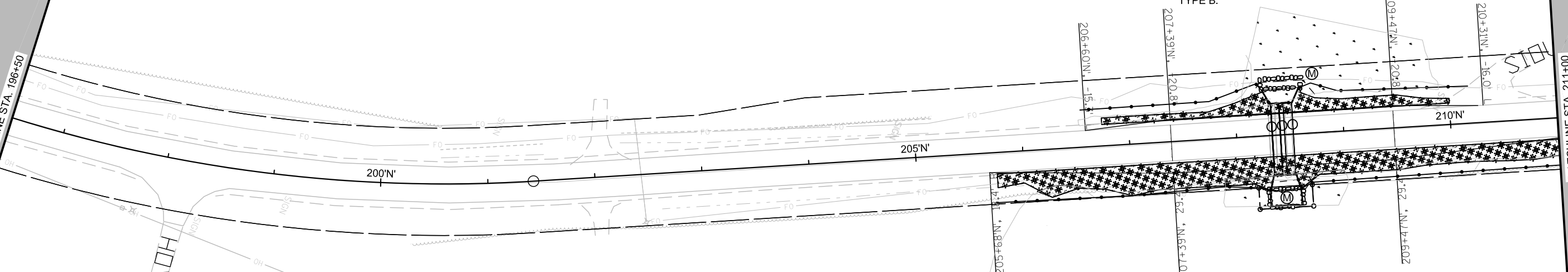


LEGEND

	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN

MATCHLINE STA. 196+50

STA. 208+37'N & 208+49'N LT
PLACE MEDIUM RIPRAP AT INLET END
OF PIPES
(8' X 36')
USE EROSION MAT URBAN CLASS I
TYPE B.

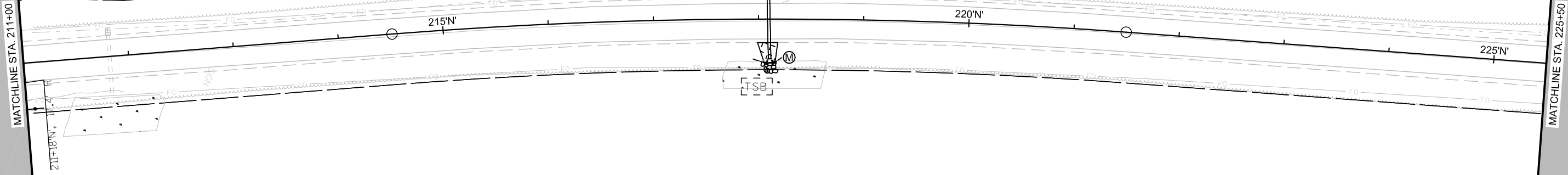


STA. 208+37'N & 208+49'N RT
PLACE MEDIUM RIPRAP AT DISCH. END
OF PIPES WITHIN PLE
(15' X 30')
USE EROSION MAT URBAN CLASS I
TYPE B.

MATCHLINE STA. 211+00

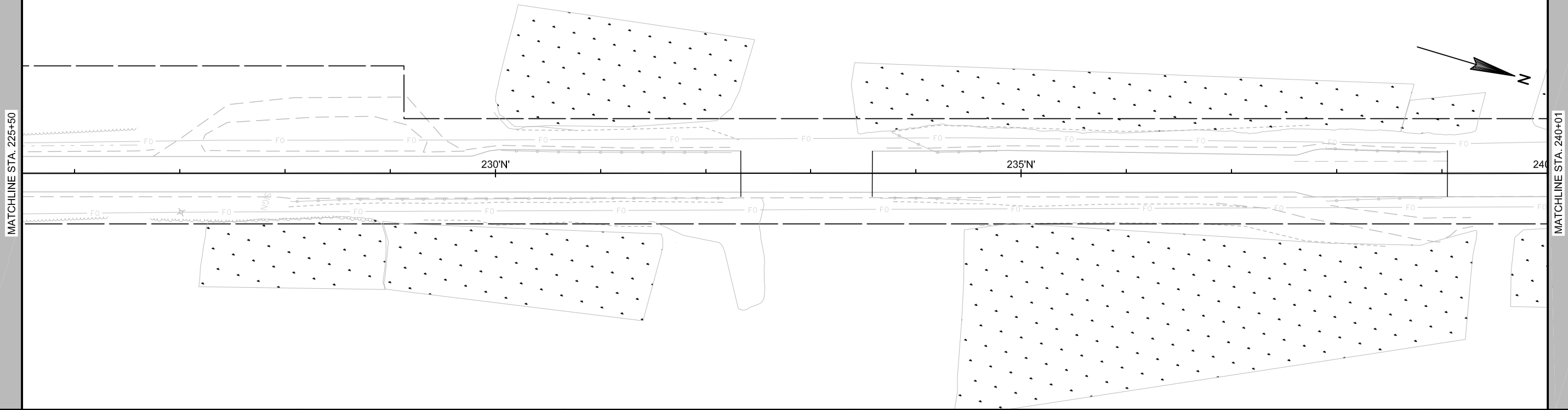
X RIVER HEIGHTS RD

STA. 218+10'N RT
PLACE MEDIUM RIPRAP AT DISCH. END
OF PIPE TO R/W (50')
(9.5' X 9.5')



LEGEND

	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN

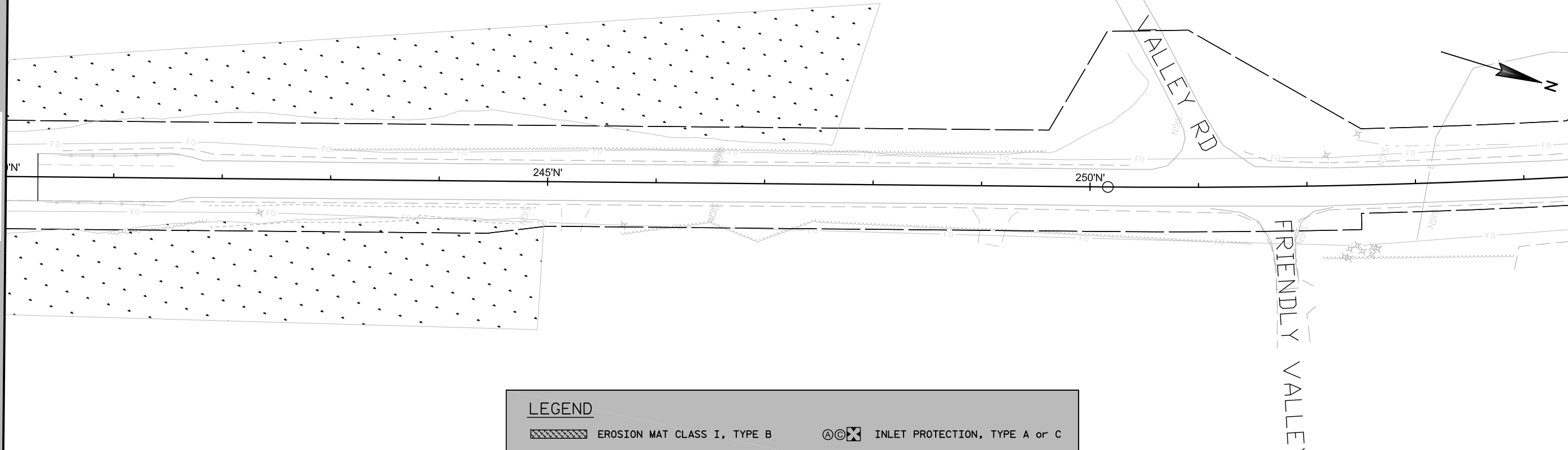


2

2

MATCHLINE STA. 240+01

MATCHLINE STA. 254+51

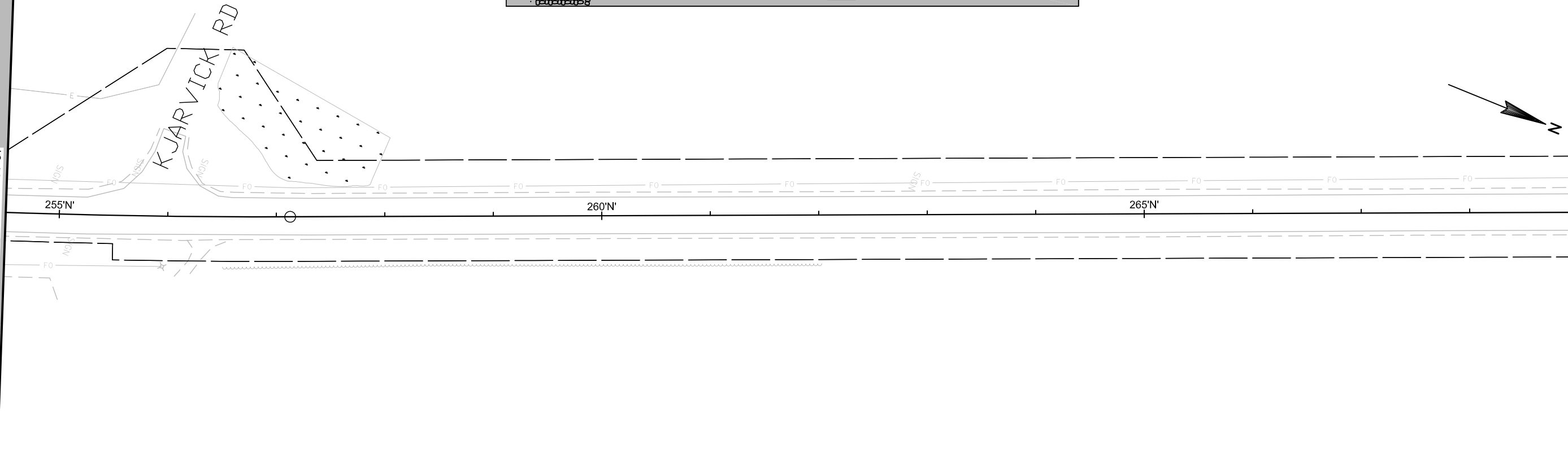


LEGEND

	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN

MATCHLINE STA. 254+51

MATCHLINE STA. 269+01

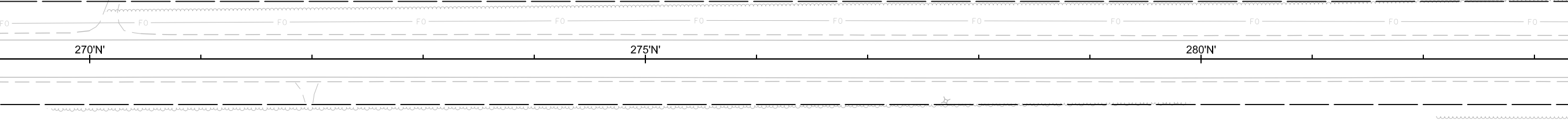


2

2

MATCHLINE STA. 269+01

MATCHLINE STA. 283+51

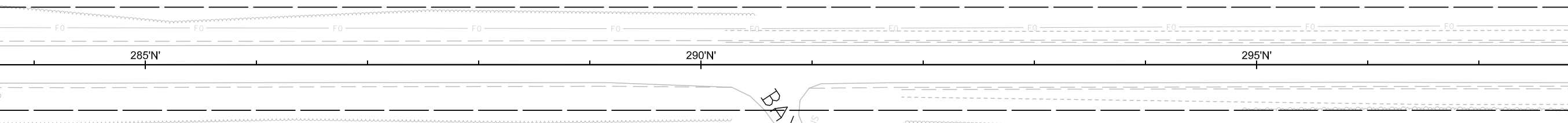


LEGEND

	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN

MATCHLINE STA. 283+51

MATCHLINE STA. 298+01



BAYVIEW PARK RD

STA. 304+76'N LT & RT
 PLACE MEDIUM RIPRAP AT INLET AND
 DISCH. END OF PIPE.
 (13.5' X 13.5')
 PLE RT. R/W @ 50' LT AND 43' RT.
 USE EROSION MAT URBAN CLASS I TYPE
 B.

STA. 312+56'N RT
 PLACE MEDIUM RIPRAP AT DISCH. END OF
 PIPE TO R/W.
 (7.5' X 7.5')
 R/W @ 43' RT

MATCHLINE STA. 298+01

MATCHLINE STA. 312+51

LEGEND

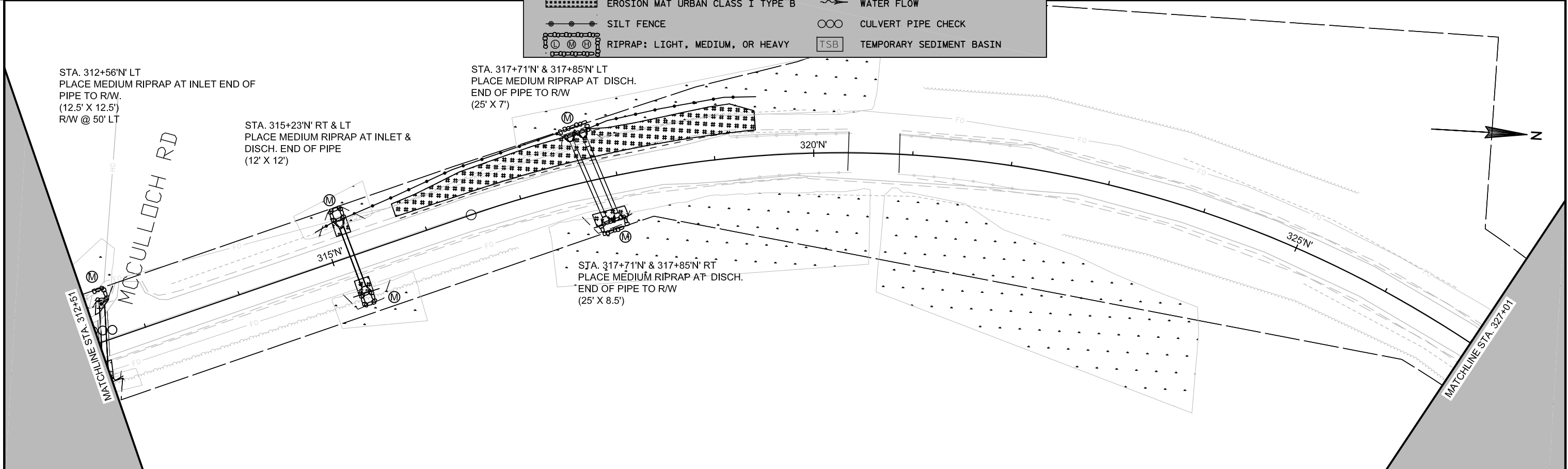
	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN

STA. 312+56'N LT
 PLACE MEDIUM RIPRAP AT INLET END OF
 PIPE TO R/W.
 (12.5' X 12.5')
 R/W @ 50' LT

STA. 315+23'N RT & LT
 PLACE MEDIUM RIPRAP AT INLET &
 DISCH. END OF PIPE
 (12' X 12')

STA. 317+71'N & 317+85'N LT
 PLACE MEDIUM RIPRAP AT DISCH.
 END OF PIPE TO R/W
 (25' X 7')

STA. 317+71'N & 317+85'N RT
 PLACE MEDIUM RIPRAP AT DISCH.
 END OF PIPE TO R/W
 (25' X 8.5')



STA. 332+04'N RT & LT
 PLACE LIGHT RIPRAP AT INLET & DISCH. END
 OF PIPE TO R/W
 (10' X 10')
 R/W @ 52' RT

STA. 337+88'N RT
 PLACE LIGHT RIPRAP AT DISCH.
 END OF PIPE TO R/W
 (7.5' X 7.5')
 R/W @ 52' RT

STA. 340+63'N RT & LT
 PLACE LIGHT RIPRAP AT INLET &
 DISCH. END OF PIPE
 (9' X 9', LT; 9' X 18' RT)
 R/W @ 52' RT. PLE RT.

LEGEND

	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN

STA. 342+16'N LT
 PLACE LIGHT RIPRAP AT INLET
 END OF PIPE
 (10' X 20', LT)

STA. 348+96'N LT
 PLACE LIGHT RIPRAP AT INLET
 END OF PIPE.
 (9' X 9')

STA. 354+60'N LT
 PLACE LIGHT RIPRAP AT INLET
 END OF PIPE
 (9' X 9')

STA. 342+16'N RT
 PLACE LIGHT RIPRAP AT DISCH.
 END OF PIPE. SEE ENERGY
 DISSIPATING DETAIL FOR SIZE.
 R/W @ 52' RT. PLE RT.

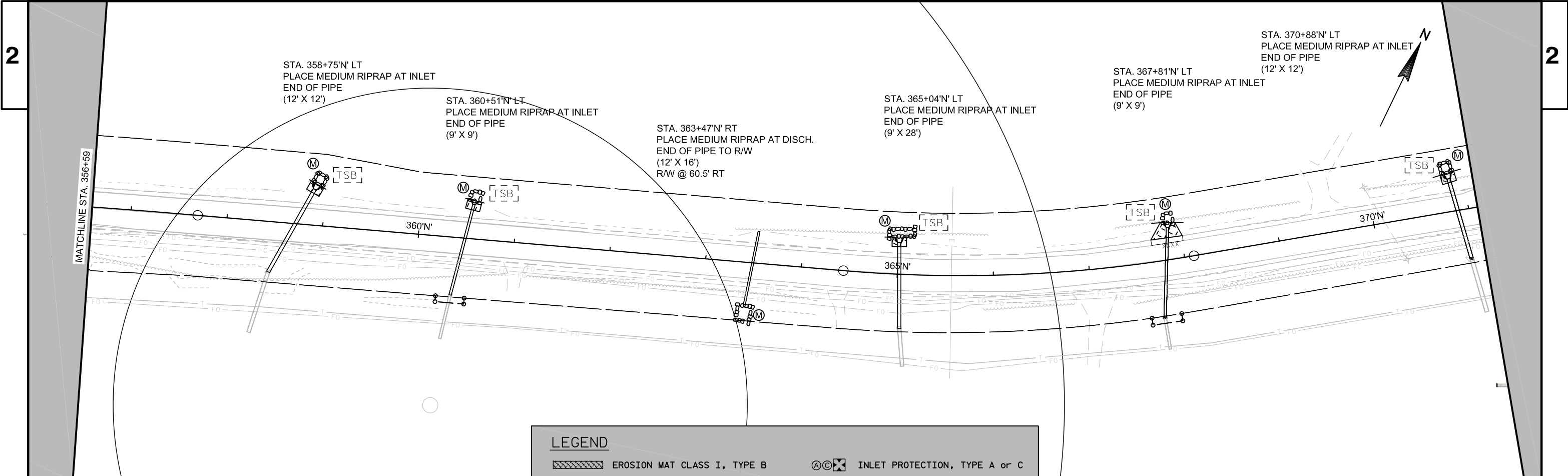
STA. 346+42'N RT
 PLACE LIGHT RIPRAP AT DISCH.
 END OF PIPE
 (10' X 20', RT)
 R/W @ 52' RT. PLE RT.

STA. 348+96'N RT
 PLACE LIGHT RIPRAP AT DISCH.
 END OF PIPE. SEE ENERGY
 DISSIPATING DETAIL FOR SIZE.
 R/W @ 52' RT. PLE RT.

STA. 354+60'N RT
 PLACE MEDIUM RIPRAP AT DISCH.
 END OF PIPE TO TRAIL PIPE.
 (9' X 8.5')
 PLE RT.

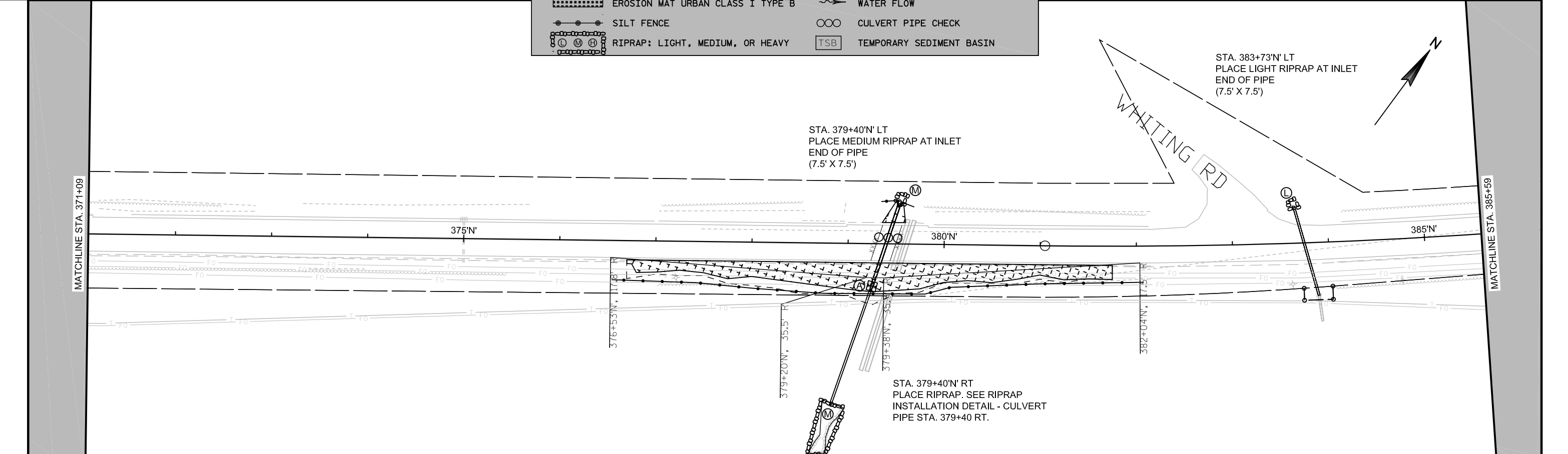
MATCHLINE STA. 341+67

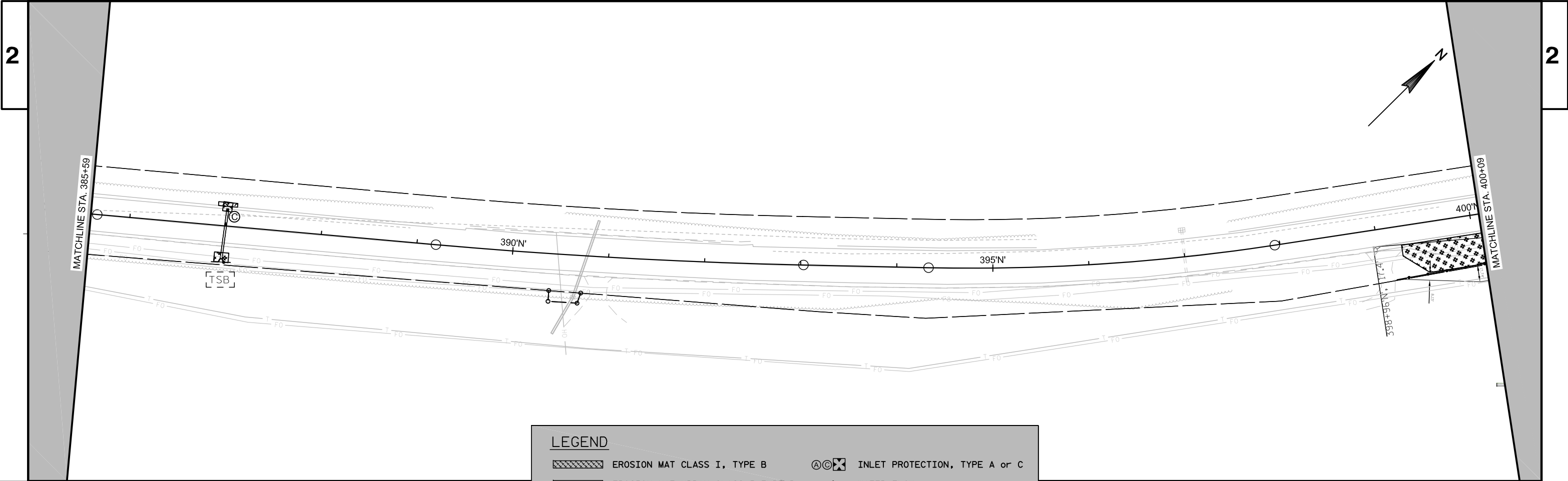
MATCHLINE STA. 356+59



LEGEND

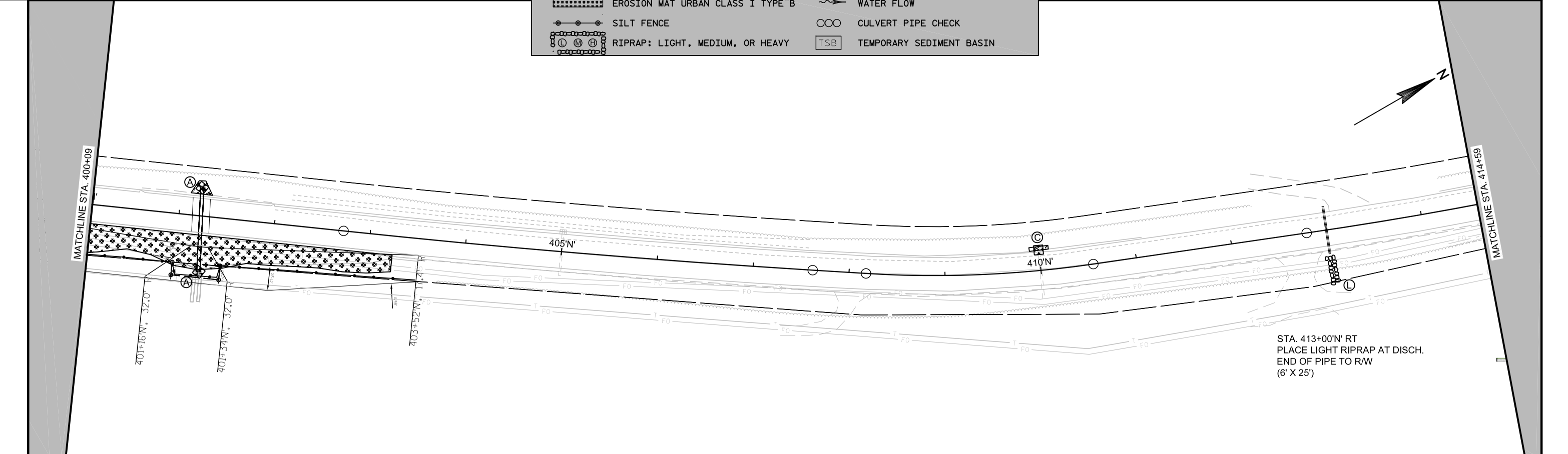
	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN

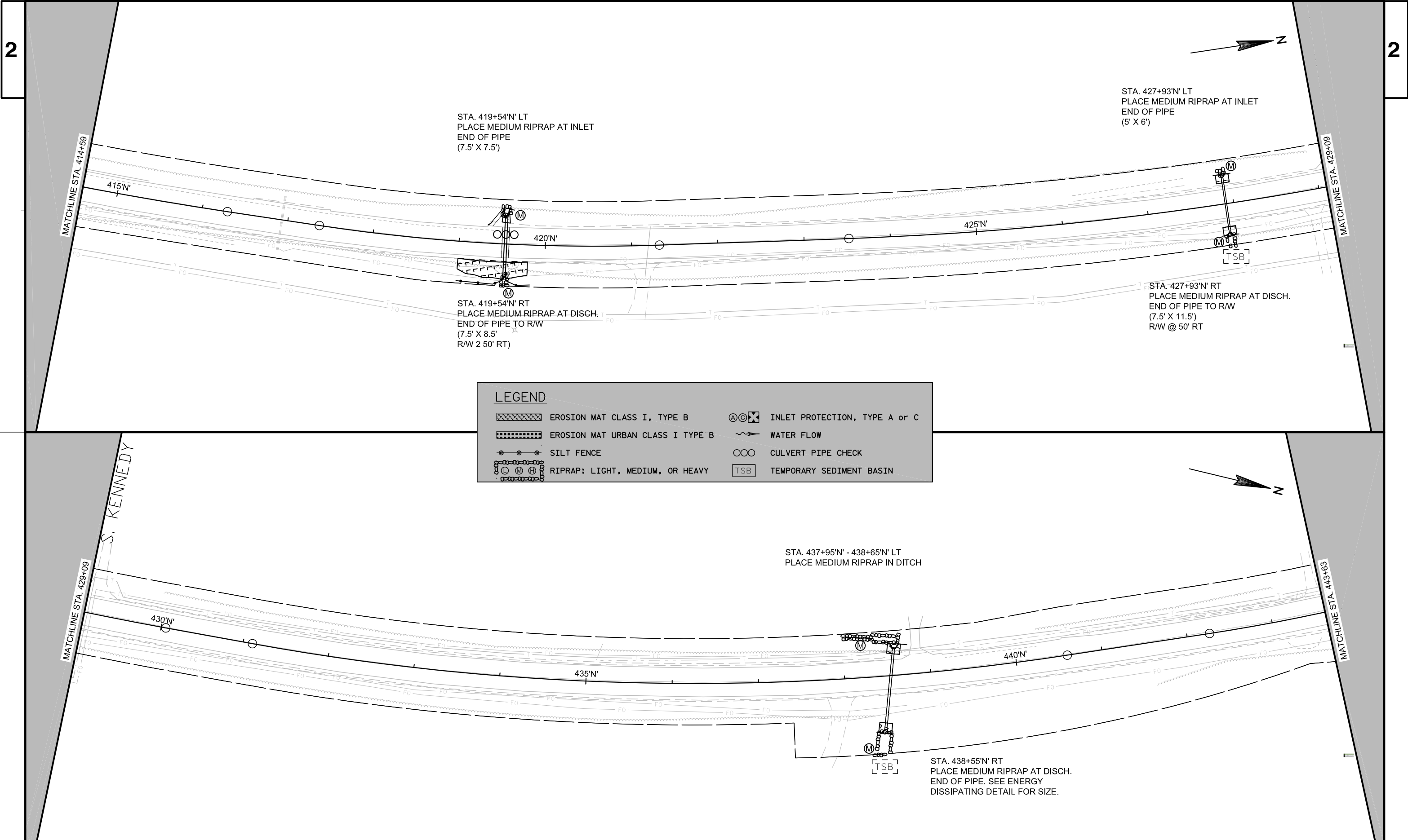




LEGEND

	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN





STA. 419+54' LT
PLACE MEDIUM RIPRAP AT INLET
END OF PIPE
(7.5' X 7.5')

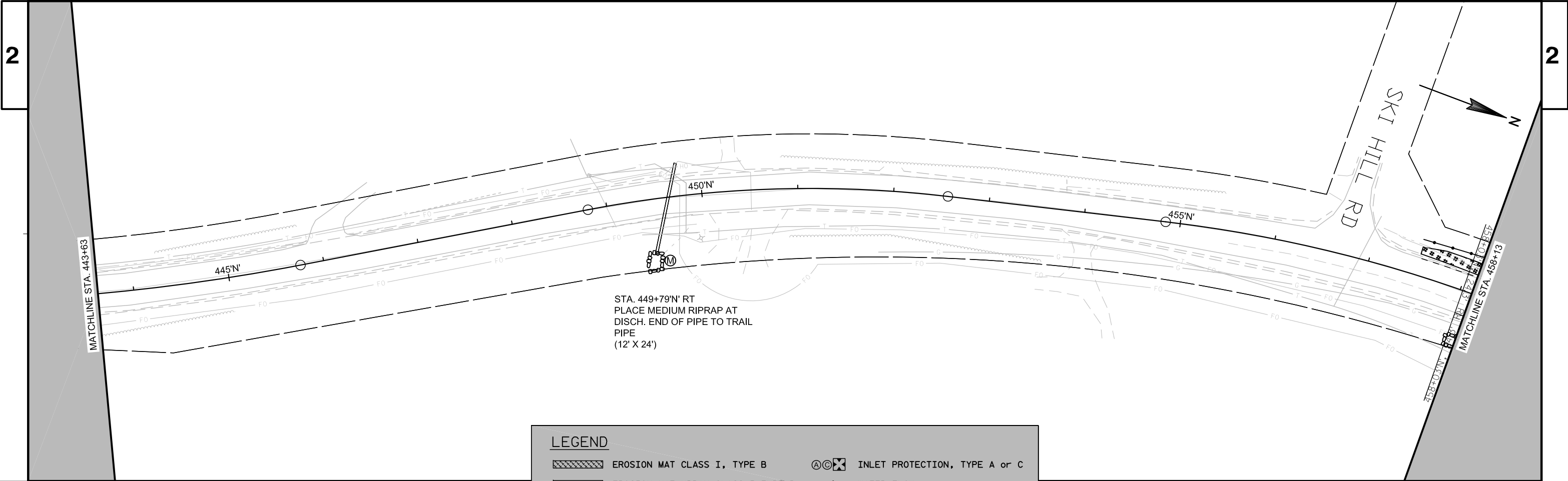
STA. 419+54' RT
PLACE MEDIUM RIPRAP AT DISCH.
END OF PIPE TO R/W
(7.5' X 8.5'
R/W 2 50' RT)

STA. 427+93' LT
PLACE MEDIUM RIPRAP AT INLET
END OF PIPE
(5' X 6')

STA. 427+93' RT
PLACE MEDIUM RIPRAP AT DISCH.
END OF PIPE TO R/W
(7.5' X 11.5')
R/W @ 50' RT

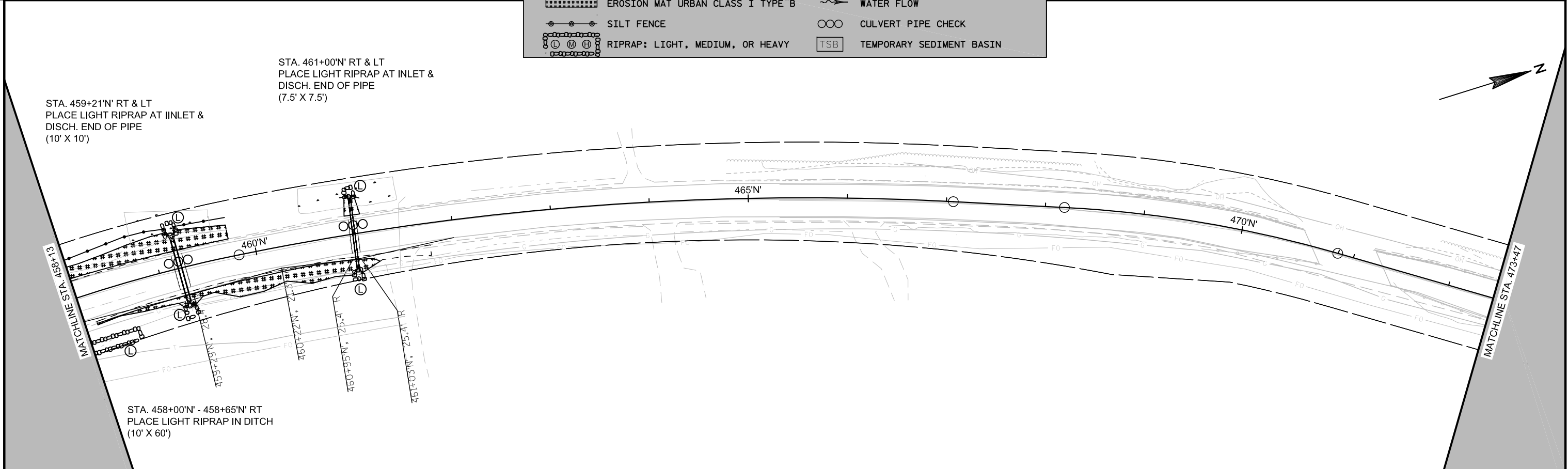
STA. 437+95' - 438+65' LT
PLACE MEDIUM RIPRAP IN DITCH

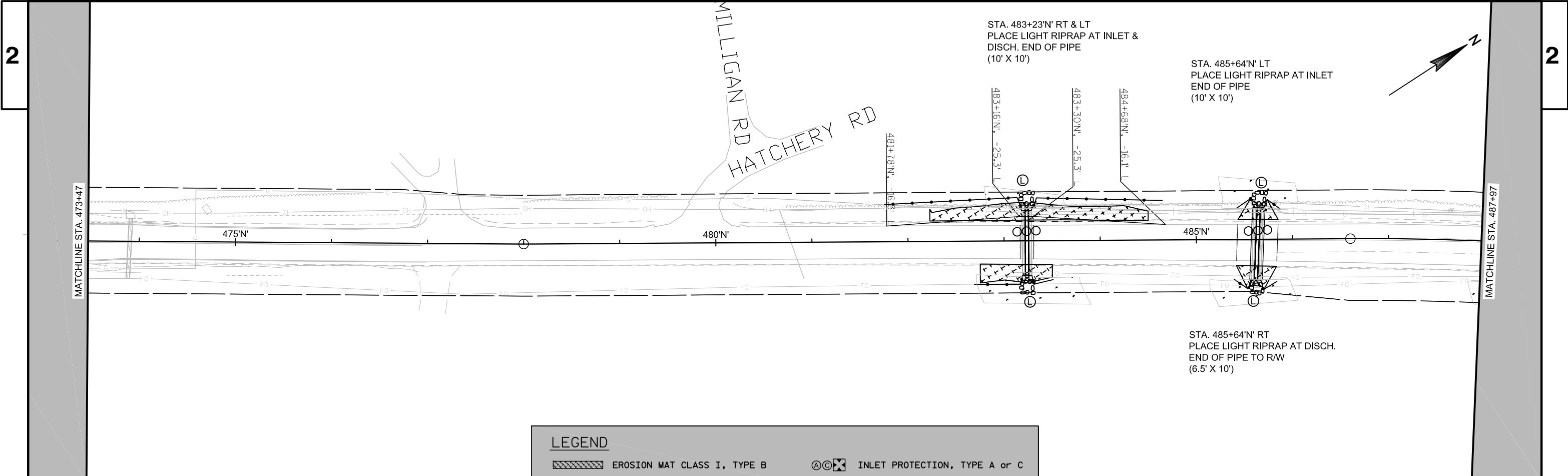
STA. 438+55' RT
PLACE MEDIUM RIPRAP AT DISCH.
END OF PIPE. SEE ENERGY
DISSIPATING DETAIL FOR SIZE.



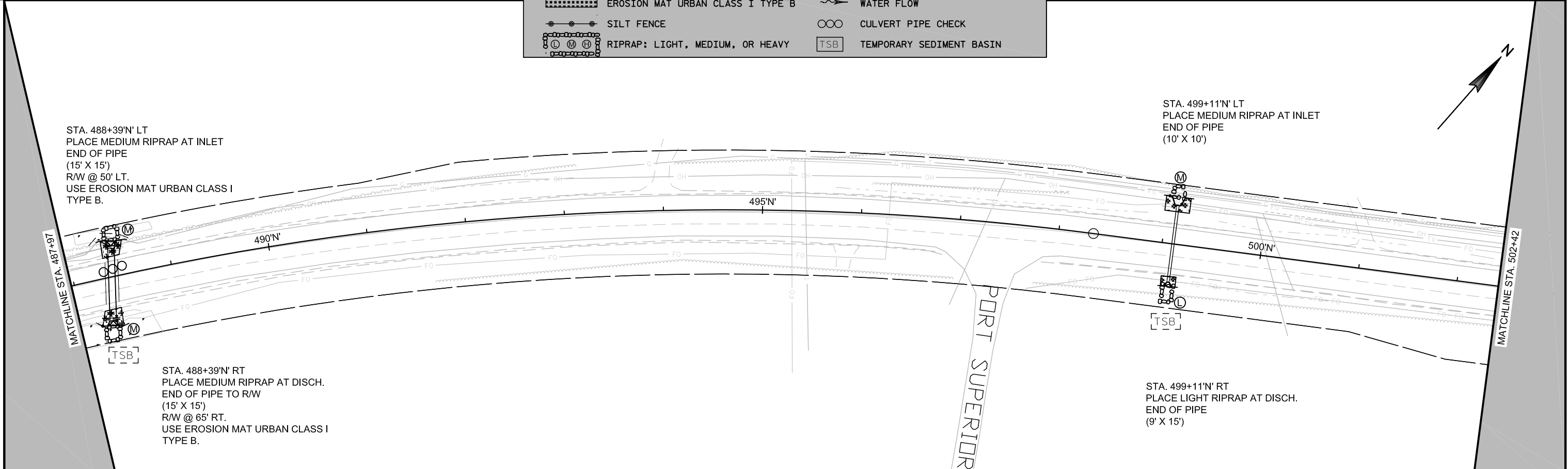
LEGEND

	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN





LEGEND			
	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN



STA. 504+25'N' LT
PLACE MEDIUM RIPRAP AROUND
INLET END OF PIPE
(17' X 20')
RW @ 70' LT

STA. 504+25'N' RT
PLACE LIGHT RIPRAP AT DISCH.
END OF PIPE TO R/W
(10' X 20')
RW @ 80' RT

STA. 520+74'N' LT
PLACE LIGHT RIPRAP AT INLET
END OF PIPE
(8' X 55')

LEGEND

	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN

MATCHLINE STA. 502+42

MATCHLINE STA. 516+92

MATCHLINE STA. 516+92

MATCHLINE STA. 531+42









STA. 543+84'N' LT
 PLACE MEDIUM RIPRAP AT DISCH.
 END OF PIPE TO RW
 (7.5' X 8.5')
 RW @ 50' LT

STA. 543+84'N' RT
 PLACE MEDIUM RIPRAP AT INLET
 END OF PIPE
 (7.5' X 7.5')

STA. 558+09'N' LT
 PLACE LIGHT RIPRAP AT INLET
 END OF PIPE (8' X 14')
 RW @ 50' LT

STA. 558+09'N' RT
 PLACE MEDIUM RIPRAP AT DISCH.
 END OF PIPE TO RW
 (7.5' X 12.5')
 RW @ 50' RT

LEGEND

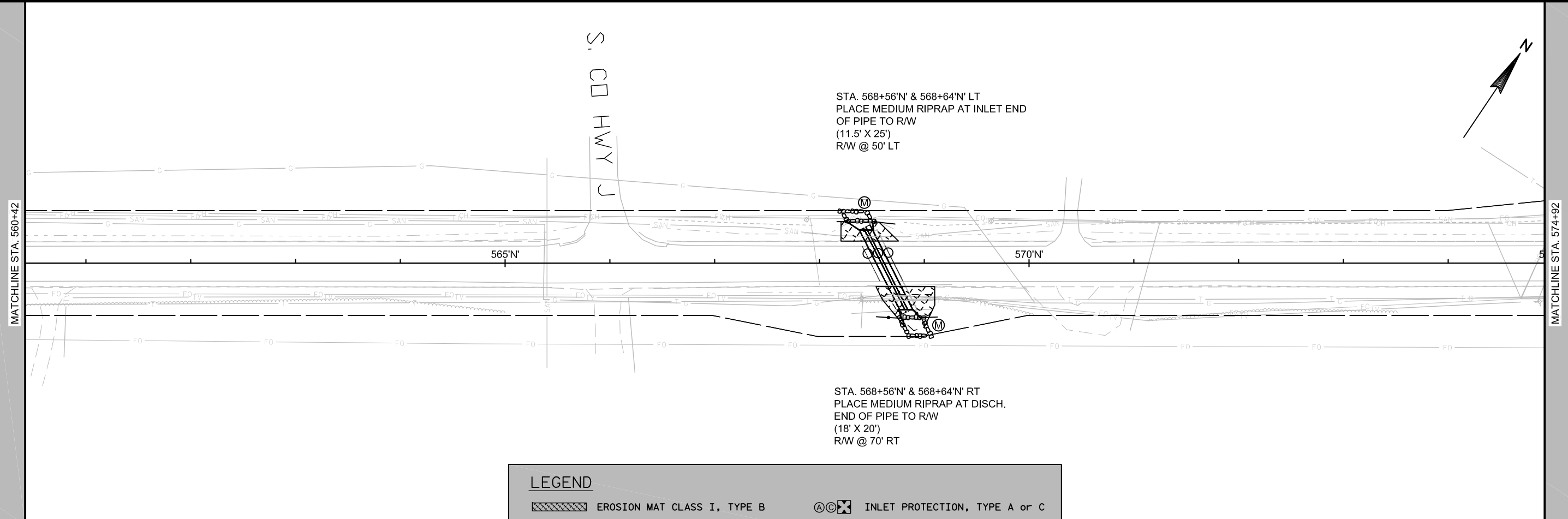
	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN

MATCHLINE STA. 531+42

MATCHLINE STA. 545+92

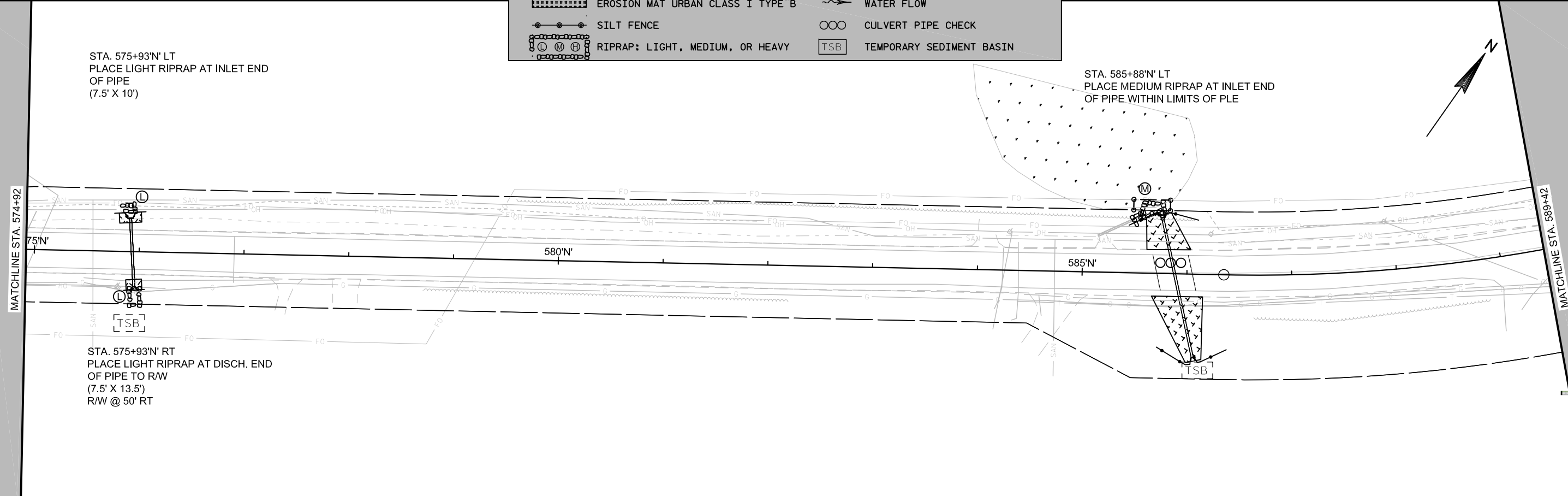
MATCHLINE STA. 545+92

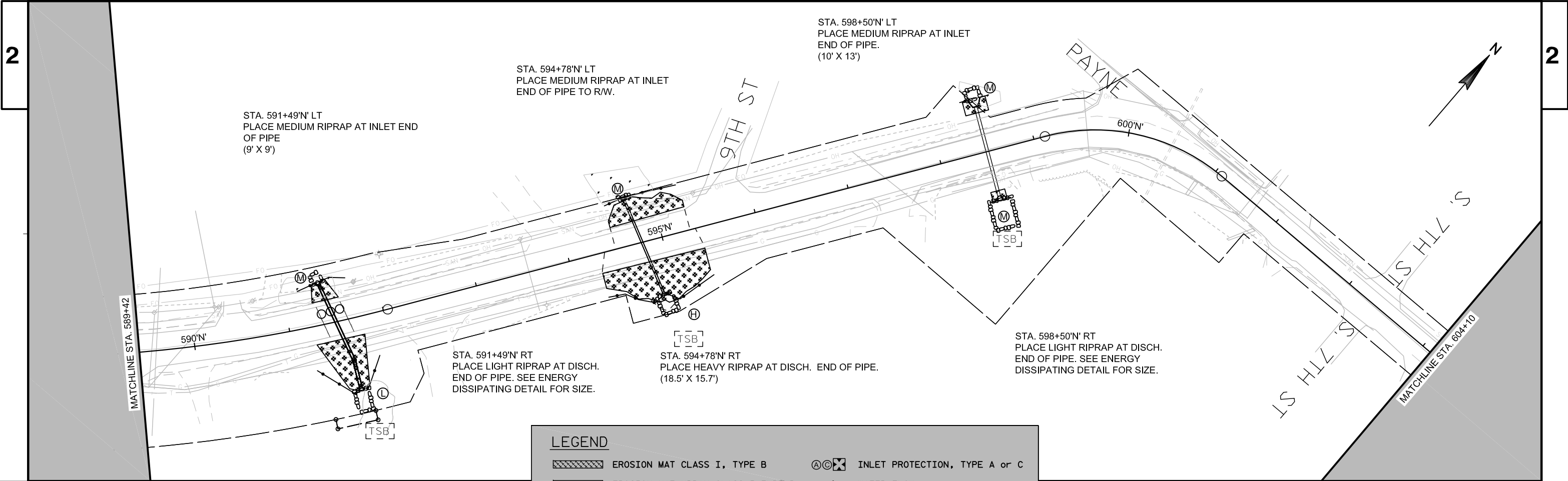
MATCHLINE STA. 560+42



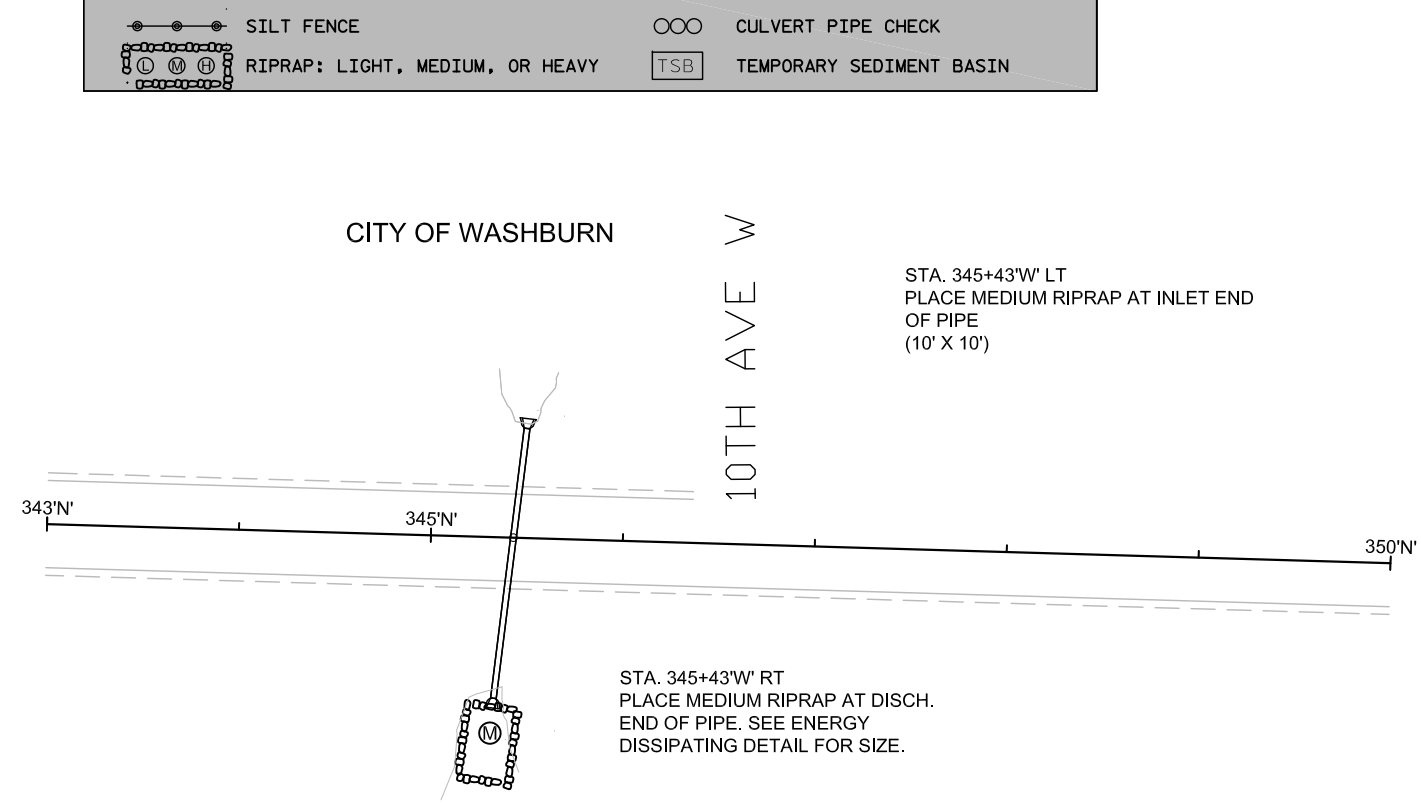
LEGEND

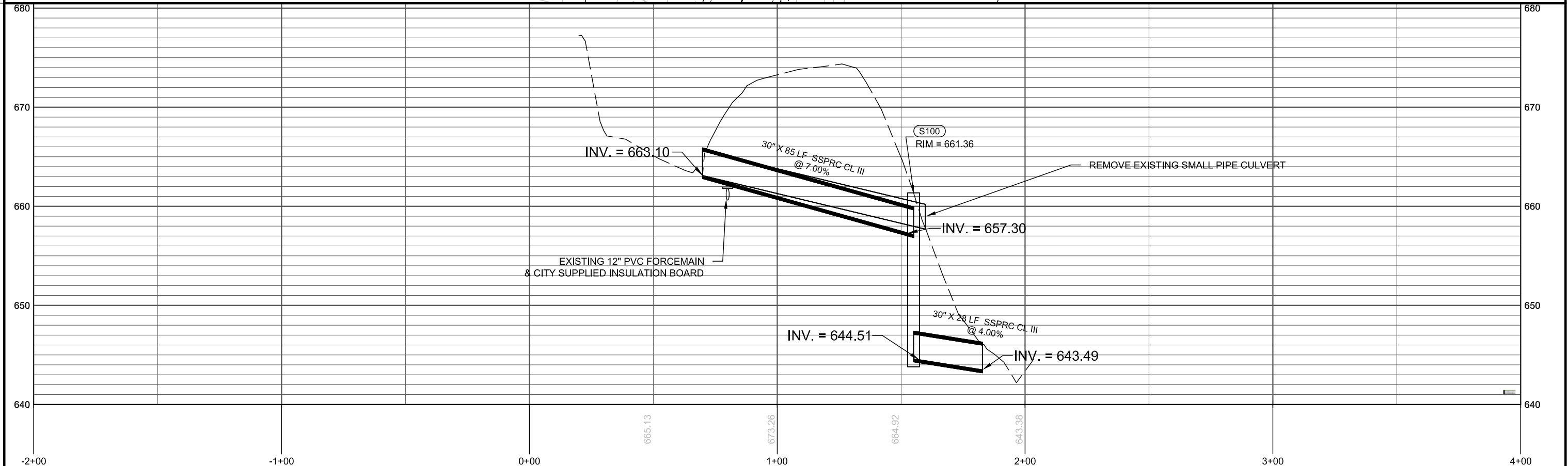
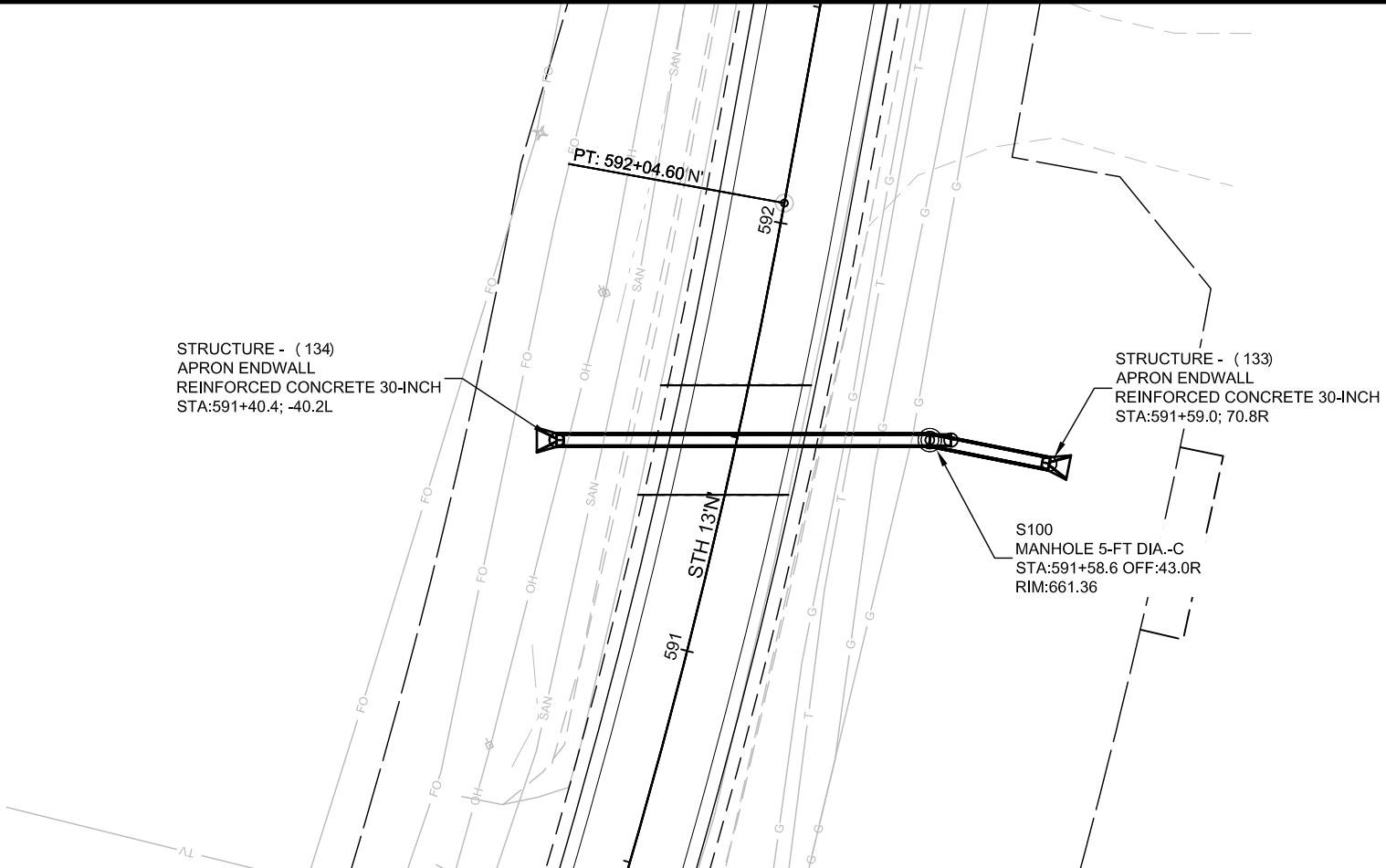
	EROSION MAT CLASS I, TYPE B		INLET PROTECTION, TYPE A or C
	EROSION MAT URBAN CLASS I TYPE B		WATER FLOW
	SILT FENCE		CULVERT PIPE CHECK
	RIPRAP: LIGHT, MEDIUM, OR HEAVY		TEMPORARY SEDIMENT BASIN



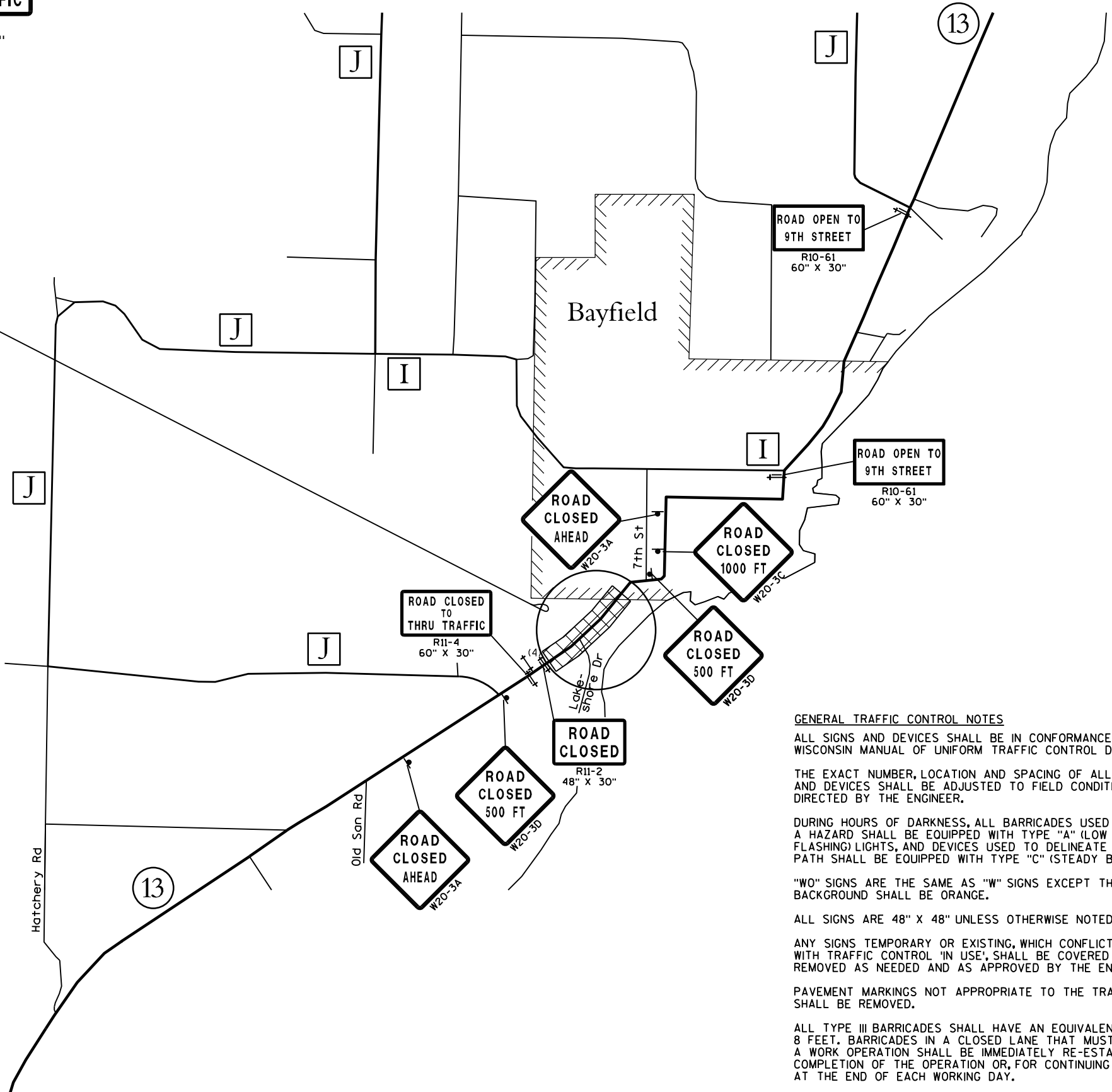
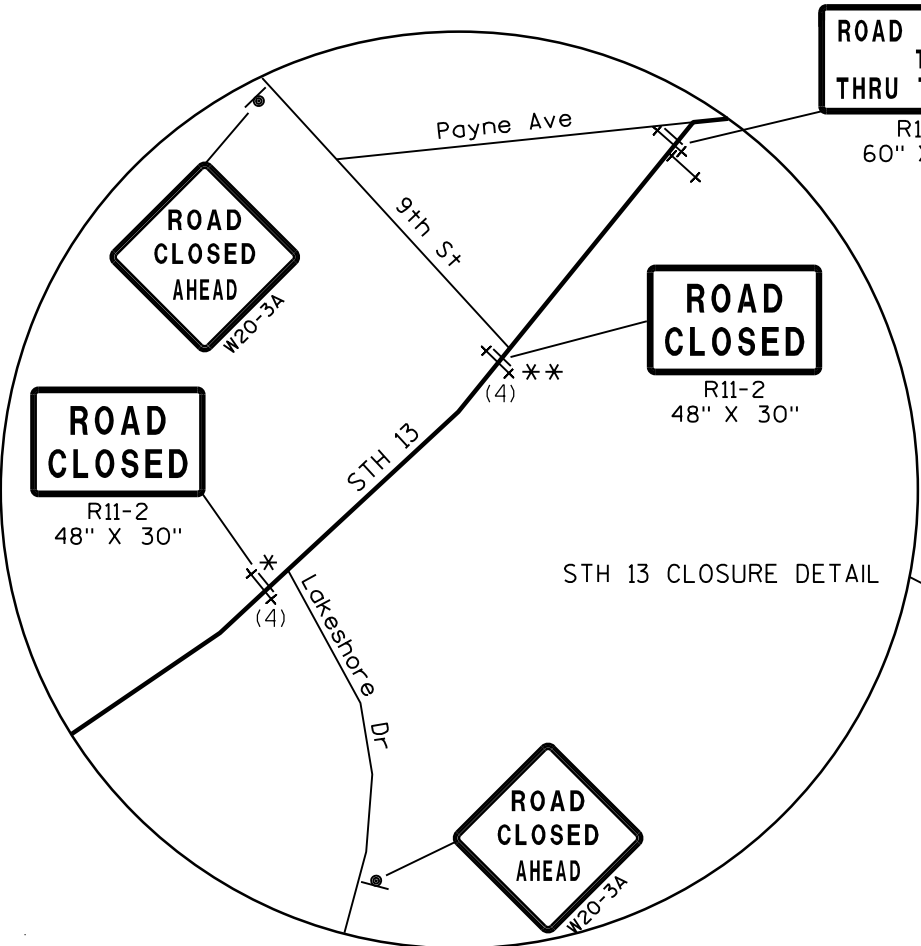


LEGEND	
	EROSION MAT CLASS I, TYPE B
	EROSION MAT URBAN CLASS I TYPE B
	SILT FENCE
	RIPRAP: LIGHT, MEDIUM, OR HEAVY
	INLET PROTECTION, TYPE A or C
	WATER FLOW
	CULVERT PIPE CHECK
	TEMPORARY SEDIMENT BASIN



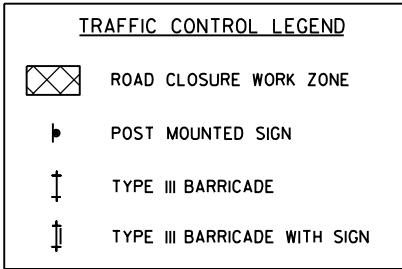


PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	STORM SEWER: STH 13	SHEET	E
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NOTES:

- * CLOSE STH 13 SOUTHBOUND AT LAKESHORE DRIVE WHEN PIPES BETWEEN CTH J AND LAKESHORE DRIVE ARE BEING REPLACED.
- ** CLOSE STH 13 SOUTHBOUND AT 9TH STREET WHEN PIPES BETWEEN LAKESHORE DRIVE AND 9TH STREET ARE BEING REPLACED, AND ADD BARRICADES AND 'CLOSED' SIGN FACING STH 13 NORTHBOUND TRAFFIC NORTH OF LAKESHORE DRIVE.



GENERAL TRAFFIC CONTROL NOTES

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD).

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

DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" (LOW INTENSITY FLASHING) LIGHTS, AND DEVICES USED TO DELINEATE A TRAVEL PATH SHALL BE EQUIPPED WITH TYPE "C" (STEADY BURN) LIGHTS.

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







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

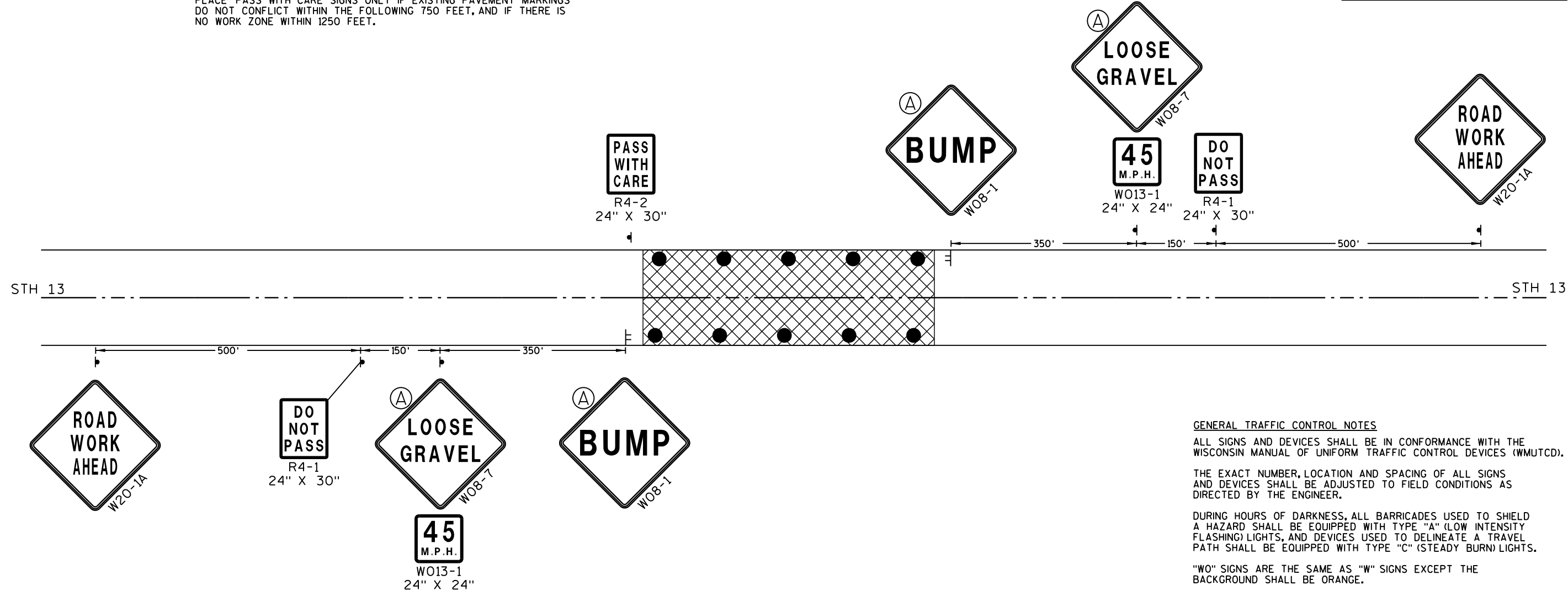
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL 'IN USE', SHALL BE COVERED OR REMOVED AS NEEDED AND AS APPROVED BY THE ENGINEER.

PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH SHALL BE REMOVED.

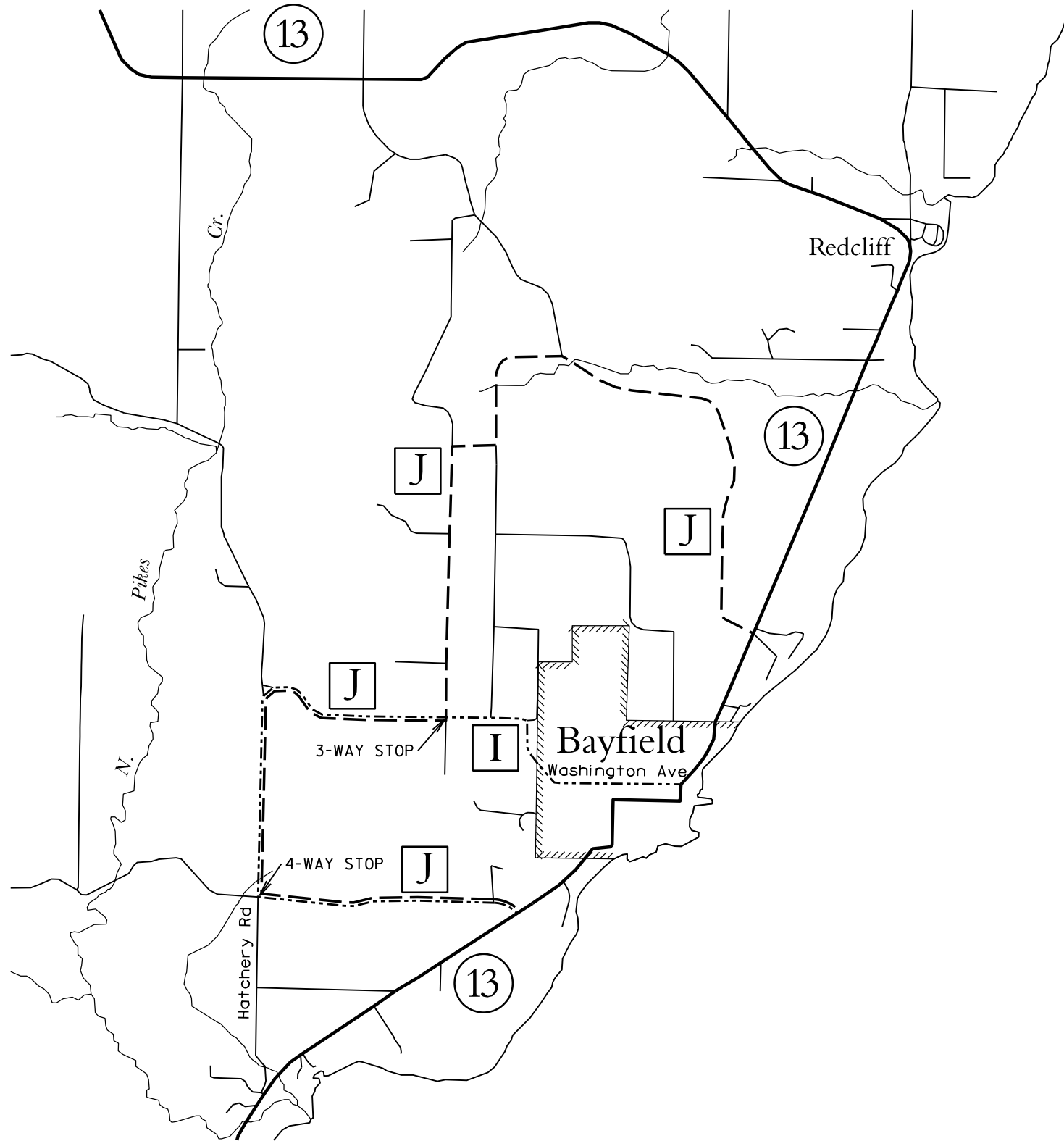
ALL TYPE III BARRICADES SHALL HAVE AN EQUIVALENT WIDTH OF 8 FEET. BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

NOTES:
 PLACE SIGNS IN EACH DIRECTION AT THE END OF EACH WORK DAY, AND WHEN CULVERT PIPE REPLACEMENT WORK IS COMPLETE.
 'ROAD WORK AHEAD' SIGNS ARE NOT REQUIRED WHEN REPLACEMENT WORK ZONES ARE SPACED LESS THAN 1500 FEET APART.
 MAINTAIN 'BUMP' AND 'LOOSE GRAVEL' SIGNS UNTIL ASPHALTIC SURFACE PAVEMENT IS COMPLETED. INSTALL TYPE 'A' (FLASHING) WARNING LIGHTS ON THESE SIGNS FOR EACH DIRECTION OF TRAFFIC.
 PLACE DRUMS ON GRAVEL 15 FEET FROM CENTERLINE UNTIL ASPHALTIC SURFACING AND SHOULDERS ARE IN PLACE.
 PLACE 'PASS WITH CARE' SIGNS ONLY IF EXISTING PAVEMENT MARKINGS DO NOT CONFLICT WITHIN THE FOLLOWING 750 FEET, AND IF THERE IS NO WORK ZONE WITHIN 1250 FEET.

TRAFFIC CONTROL LEGEND	
	CULVERT REPLACEMENT ZONE
	TC SIGN - PERMANENT SUPPORT
	TC SIGN - TEMPORARY SUPPORT
	TYPE III BARRICADE
	TYPE III BARRICADE WITH SIGN
	DRUM (TYP. 50 FOOT SPACING)



GENERAL TRAFFIC CONTROL NOTES
 ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD).
 THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
 DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" (LOW INTENSITY FLASHING) LIGHTS, AND DEVICES USED TO DELINEATE A TRAVEL PATH SHALL BE EQUIPPED WITH TYPE "C" (STEADY BURN) LIGHTS.
 "W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND SHALL BE ORANGE.
 ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
 ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL 'IN USE', SHALL BE COVERED OR REMOVED AS NEEDED AND AS APPROVED BY THE ENGINEER.
 PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH SHALL BE REMOVED IF TRAFFIC CONTROL WILL BE INPLACE FOR MORE THAN 4 DAYS.
 ALL TYPE III BARRICADES SHALL HAVE AN EQUIVALENT WIDTH OF 8 FEET. BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.



DETOUR OVERVIEW LEGEND	
---	CTH J DETOUR ROUTE (FOR STH 13 TRUCK TRAFFIC)
- - - - -	CTH J/CTH 1/WASHINGTON AVE DETOUR ROUTE (FOR STH 13 AUTO TRAFFIC)

GENERAL DETOUR NOTES:

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.

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

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.

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

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

ANY SIGNS, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

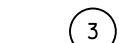
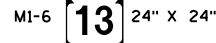
PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH SHALL BE REMOVED IF TRAFFIC CONTROL WILL BE INPLACE FOR MORE THAN 4 DAYS.



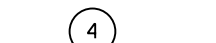
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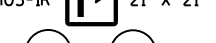
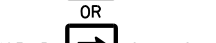
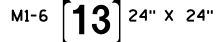
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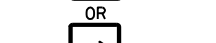
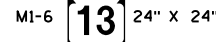
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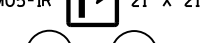
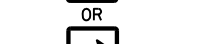
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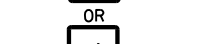
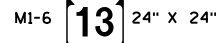
5-L OR 5-R



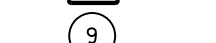
6-L OR 6-R



7-L OR 7-R



8-L OR 8-R



9



10

GENERAL DETOUR NOTES:
 THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.

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

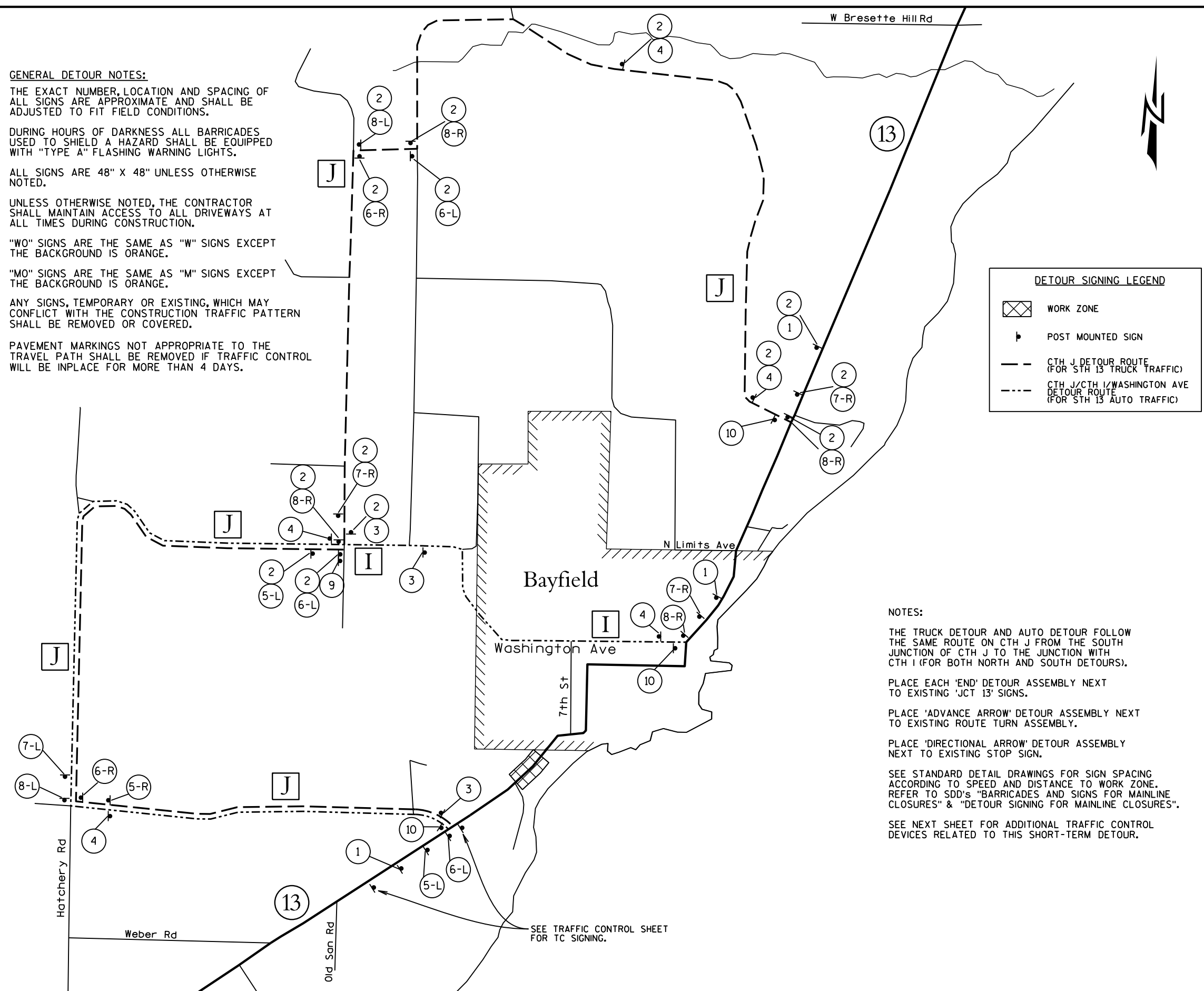
UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.

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

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

ANY SIGNS, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH SHALL BE REMOVED IF TRAFFIC CONTROL WILL BE IN PLACE FOR MORE THAN 4 DAYS.



DETOUR SIGNING LEGEND

- WORK ZONE
- POST MOUNTED SIGN
- CTH J DETOUR ROUTE (FOR STH 13 TRUCK TRAFFIC)
- CTH J/CTH I/WASHINGTON AVE DETOUR ROUTE (FOR STH 13 AUTO TRAFFIC)

NOTES:

THE TRUCK DETOUR AND AUTO DETOUR FOLLOW THE SAME ROUTE ON CTH J FROM THE SOUTH JUNCTION OF CTH J TO THE JUNCTION WITH CTH I (FOR BOTH NORTH AND SOUTH DETOURS).

PLACE EACH 'END' DETOUR ASSEMBLY NEXT TO EXISTING 'JCT 13' SIGNS.

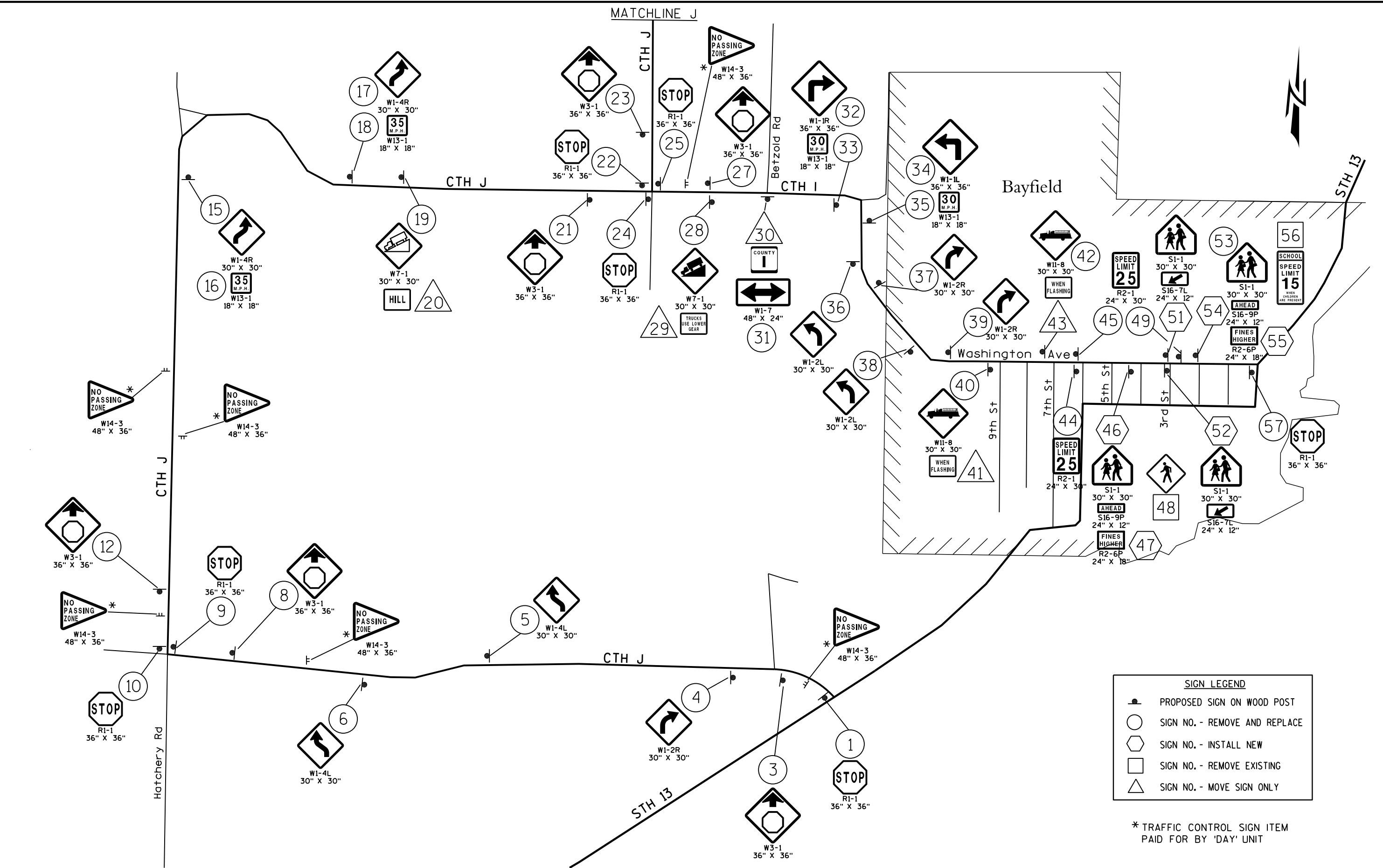
PLACE 'ADVANCE ARROW' DETOUR ASSEMBLY NEXT TO EXISTING ROUTE TURN ASSEMBLY.

PLACE 'DIRECTIONAL ARROW' DETOUR ASSEMBLY NEXT TO EXISTING STOP SIGN.

SEE STANDARD DETAIL DRAWINGS FOR SIGN SPACING ACCORDING TO SPEED AND DISTANCE TO WORK ZONE. REFER TO SDD'S "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" & "DETOUR SIGNING FOR MAINLINE CLOSURES".

SEE NEXT SHEET FOR ADDITIONAL TRAFFIC CONTROL DEVICES RELATED TO THIS SHORT-TERM DETOUR.

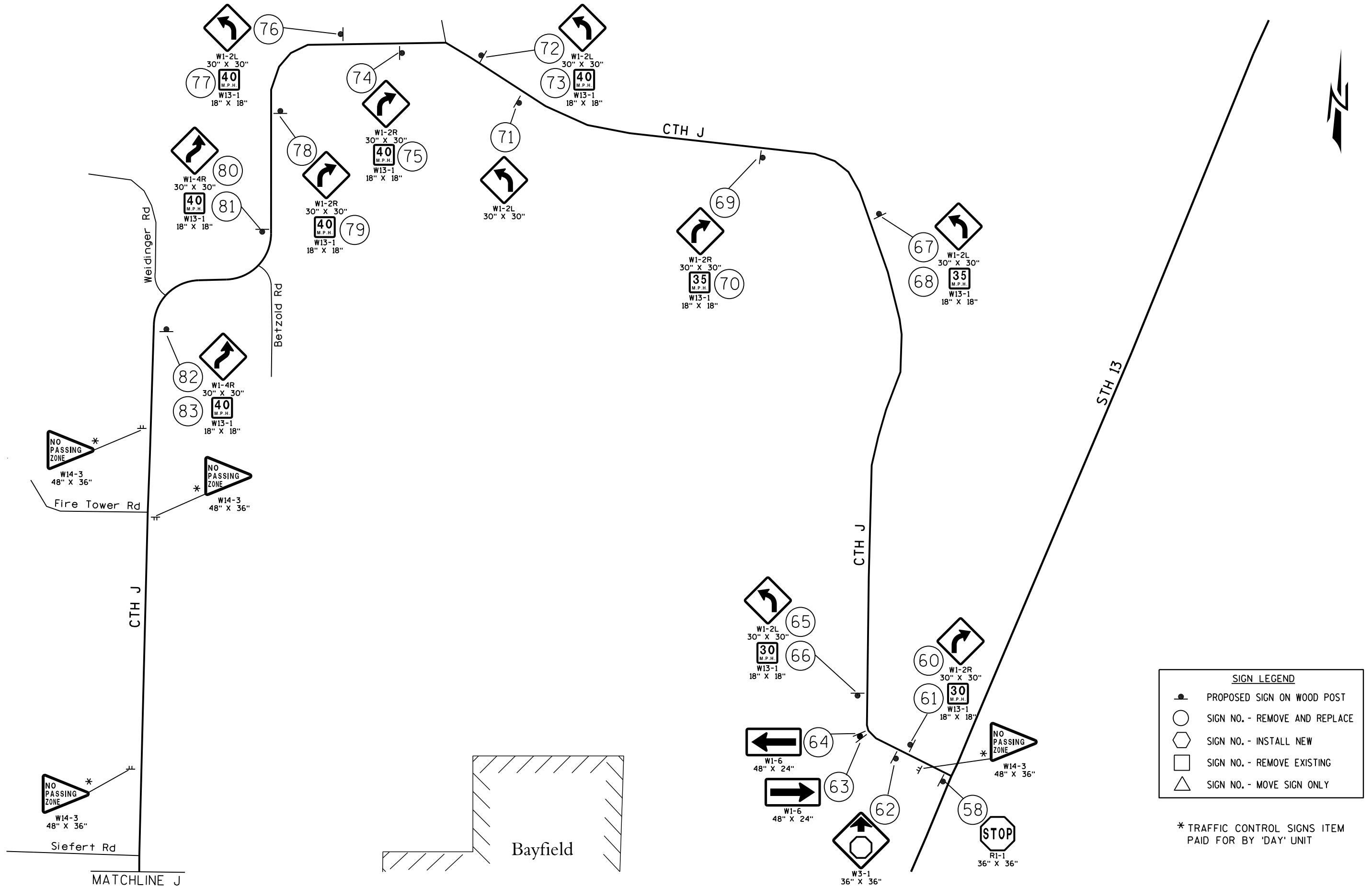
MATCHLINE J



SIGN LEGEND

- PROPOSED SIGN ON WOOD POST
- SIGN NO. - REMOVE AND REPLACE
- SIGN NO. - INSTALL NEW
- SIGN NO. - REMOVE EXISTING
- SIGN NO. - MOVE SIGN ONLY

* TRAFFIC CONTROL SIGN ITEM
PAID FOR BY 'DAY' UNIT



DATE 07OCT16

ESTIMATE OF QUANTITIES

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8160-04-64 QUANTITY
0010	201.0105	Clearing	STA	21.000	21.000
0020	201.0205	Grubbing	STA	21.000	21.000
0030	203.0100	Removing Small Pipe Culverts	EACH	22.000	22.000
0040	203.0200	Removing Old Structure (station) 01. Sta 208+34' N'	LS	1.000	1.000
0050	203.0200	Removing Old Structure (station) 02. Sta 208+49' N'	LS	1.000	1.000
0060	204.0150	Removing Curb & Gutter	LF	47.000	47.000
0070	204.0190	Removing Surface Drains	EACH	1.000	1.000
0080	204.9060.S	Removing (item description) 01. Apron Endwalls	EACH	44.000	44.000
0090	209.2100	Backfill Granular Grade 2	CY	4,000.000	4,000.000
0100	213.0100	Finishing Roadway (project) 01. 8160-04-64	EACH	1.000	1.000
0110	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,830.000	1,830.000
0120	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,125.000	2,125.000
0130	312.0110	Select Crushed Material	TON	400.000	400.000
0140	455.0605	Tack Coat	GAL	344.000	344.000
0150	465.0105	Asphaltic Surface	TON	1,232.000	1,232.000
0160	465.0315	Asphaltic Flumes	SY	10.000	10.000
0170	504.0900	Concrete Masonry Endwalls	CY	27.200	27.200
0180	520.2024	Culvert Pipe Temporary 24-Inch	LF	12.000	12.000
0190	520.8700	Cleaning Culvert Pipes	EACH	1.000	1.000
0200	520.9700.S	Culvert Pipe Liners (size) 01. 24-Inch	LF	488.000	488.000
0210	520.9700.S	Culvert Pipe Liners (size) 02. 30-Inch	LF	494.000	494.000
0220	520.9700.S	Culvert Pipe Liners (size) 03. 36-Inch	LF	406.000	406.000
0230	520.9700.S	Culvert Pipe Liners (size) 04. 42-Inch	LF	274.000	274.000
0240	520.9700.S	Culvert Pipe Liners (size) 05. 48-Inch	LF	232.000	232.000
0250	520.9700.S	Culvert Pipe Liners (size) 06. 54-Inch	LF	128.000	128.000
0260	520.9700.S	Culvert Pipe Liners (size) 07. 72-Inch	LF	96.000	96.000
0270	520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH	28.000	28.000
0280	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	13.000	13.000
0290	521.1030	Apron Endwalls for Culvert Pipe Steel 30-Inch	EACH	9.000	9.000
0300	521.1036	Apron Endwalls for Culvert Pipe Steel 36-Inch	EACH	9.000	9.000
0310	521.1042	Apron Endwalls for Culvert Pipe Steel 42-Inch	EACH	3.000	3.000
0320	521.1048	Apron Endwalls for Culvert Pipe Steel 48-Inch	EACH	6.000	6.000
0330	521.1054	Apron Endwalls for Culvert Pipe Steel 54-Inch	EACH	4.000	4.000
0340	521.1072	Apron Endwalls for Culvert Pipe Steel 72-Inch	EACH	2.000	2.000
0350	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	88.000	88.000
0360	522.0136	Culvert Pipe Reinforced Concrete Class III 36-Inch	LF	222.000	222.000
0370	522.0148	Culvert Pipe Reinforced Concrete Class III 48-Inch	LF	184.000	184.000
0380	522.0324	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	64.000	64.000
0390	522.0336	Culvert Pipe Reinforced Concrete Class IV 36-Inch	LF	64.000	64.000

DATE 07OCT16

ESTIMATE OF QUANTITIES

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8160-04-64 QUANTITY
0400	522.0354	Culvert Pipe Reinforced Concrete Class IV 54-Inch	LF	60.000	60.000
0410	522.0384	Culvert Pipe Reinforced Concrete Class IV 84-Inch	LF	136.000	136.000
0420	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000
0430	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	3.000	3.000
0440	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	6.000	6.000
0450	522.1054	Apron Endwalls for Culvert Pipe Reinforced Concrete 54-Inch	EACH	2.000	2.000
0460	523.0119	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 19x30-Inch	LF	64.000	64.000
0470	523.0138	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 38x60-Inch	LF	64.000	64.000
0480	523.0148	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 48x76-Inch	LF	70.000	70.000
0490	523.0419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	60.000	60.000
0500	523.0424	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	LF	86.000	86.000
0510	523.0519	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	4.000	4.000
0520	523.0524	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch	EACH	2.000	2.000
0530	523.0538	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 38x60-Inch	EACH	2.000	2.000
0540	523.0548	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 48x76-Inch	EACH	2.000	2.000
0550	528.0124	Culvert Pipe Corrugated Steel Polymer Coated 24-Inch	LF	202.000	202.000
0560	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	67.000	67.000
0570	606.0100	Riprap Light	CY	352.000	352.000
0580	606.0200	Riprap Medium	CY	542.000	542.000
0590	606.0300	Riprap Heavy	CY	21.000	21.000
0600	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	113.000	113.000
0610	611.0430	Reconstructing Inlets	EACH	4.000	4.000
0620	611.0612	Inlet Covers Type C	EACH	1.000	1.000
0630	611.0642	Inlet Covers Type MS	EACH	1.000	1.000
0640	611.2005	Manholes 5-FT Diameter	EACH	1.000	1.000
0650	611.8115	Adjusting Inlet Covers	EACH	1.000	1.000
0660	611.8120.S	Cover Plates Temporary	EACH	1.000	1.000
0670	618.0100	Maintenance And Repair of Haul Roads (project) 01. 8160-04-64	EACH	1.000	1.000
0680	619.1000	Mobilization	EACH	1.000	1.000
0690	625.0500	Salvaged Topsoil	SY	3,068.000	3,068.000

DATE 07OCT16

ESTIMATE OF QUANTITIES

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8160-04-64 QUANTITY
0700	628.1104	Erosion Bales	EACH	360.000	360.000
0710	628.1504	Silt Fence	LF	7,020.000	7,020.000
0720	628.1520	Silt Fence Maintenance	LF	7,020.000	7,020.000
0730	628.1905	Mobilizations Erosion Control	EACH	8.000	8.000
0740	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	6.000
0750	628.2004	Erosion Mat Class I Type B	SY	7,105.000	7,105.000
0760	628.2008	Erosion Mat Urban Class I Type B	SY	3,254.000	3,254.000
0770	628.6505	Soil Stabilizer Type A	ACRE	1.000	1.000
0780	628.7005	Inlet Protection Type A	EACH	3.000	3.000
0790	628.7015	Inlet Protection Type C	EACH	2.000	2.000
0800	628.7555	Culvert Pipe Checks	EACH	170.000	170.000
0810	628.7560	Tracking Pads	EACH	1.000	1.000
0820	629.0210	Fertilizer Type B	CWT	2.050	2.050
0830	630.0110	Seeding Mixture No. 10	LB	42.900	42.900
0840	630.0200	Seeding Temporary	LB	86.800	86.800
0850	633.5200	Markers Culvert End	EACH	134.000	134.000
0860	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	50.000	50.000
0870	637.2210	Signs Type II Reflective H	SF	74.680	74.680
0880	637.2230	Signs Type II Reflective F	SF	319.260	319.260
0890	638.2102	Moving Signs Type II	EACH	5.000	5.000
0900	638.2602	Removing Signs Type II	EACH	64.000	64.000
0910	638.3000	Removing Small Sign Supports	EACH	48.000	48.000
0920	642.5001	Field Office Type B	EACH	1.000	1.000
0930	643.0100	Traffic Control (project) 01. 8160-04-64	EACH	1.000	1.000
0940	643.0300	Traffic Control Drums	DAY	1,750.000	1,750.000
0950	643.0420	Traffic Control Barricades Type III	DAY	196.000	196.000
0960	643.0705	Traffic Control Warning Lights Type A	DAY	924.000	924.000
0970	643.0900	Traffic Control Signs	DAY	4,744.000	4,744.000
0980	643.2000	Traffic Control Detour (project) 01. 8160-04-64	EACH	1.000	1.000
0990	643.3000	Traffic Control Detour Signs	DAY	1,764.000	1,764.000
1000	645.0111	Geotextile Type DF Schedule A	SY	1,000.000	1,000.000
1010	645.0120	Geotextile Type HR	SY	1,728.000	1,728.000
1020	645.0130	Geotextile Type R	SY	1,126.000	1,126.000
1030	646.0103	Pavement Marking Paint 4-Inch	LF	186,526.000	186,526.000
1040	646.0106	Pavement Marking Epoxy 4-Inch	LF	3,038.000	3,038.000
1050	647.0563	Pavement Marking Stop Line Paint 18-Inch	LF	60.000	60.000
1060	647.0763	Pavement Marking Crosswalk Paint 6-Inch	LF	70.000	70.000
1070	650.4000	Construction Staking Storm Sewer	EACH	3.000	3.000
1080	650.4500	Construction Staking Subgrade	LF	3,764.000	3,764.000
1090	650.5000	Construction Staking Base	LF	3,764.000	3,764.000
1100	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	47.000	47.000
1110	650.6000	Construction Staking Pipe Culverts	EACH	18.000	18.000
1120	650.9910	Construction Staking Supplemental Control (project) 01. 8160-04-64	LS	1.000	1.000
1130	650.9920	Construction Staking Slope Stakes	LF	6,499.000	6,499.000
1140	690.0150	Sawing Asphalt	LF	1,339.000	1,339.000
1150	690.0250	Sawing Concrete	LF	18.000	18.000
1160	SPV.0035	Special 01. Beveled Edge Concrete Masonry Endwall	CY	15.400	15.400
1170	SPV.0035	Special 02. Riprap Installation Sta. 379+40' N' RT	CY	60.000	60.000

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ESTIMATE OF QUANTITIES

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8160-04-64 QUANTITY
1180	SPV.0060	Special 01. Cleaning Culvert Pipes Minimal	EACH	6.000	6.000
1190	SPV.0060	Special 02. Temporary Water Passage	EACH	1.000	1.000
1200	SPV.0060	Special 03. Cofferdams Special	EACH	8.000	8.000
1210	SPV.0060	Special 04. Utility Line Opening (ULO)	EACH	9.000	9.000
1220	SPV.0090	Special 01. Cured-In-Place Pipe Lining (CI PP), 30-Inch	LF	114.000	114.000
1230	SPV.0090	Special 02. Concrete Curb and Gutter Cure and Seal Treatment	LF	67.000	67.000
1240	SPV.0090	Special 03. Regrade Ditch	LF	380.000	380.000
1250	SPV.0105	Special 01. Grading, Shaping and Finishing Temporary Widening Sta. 208+34' N'	LS	1.000	1.000
1260	SPV.0105	Special 02. Grading, Shaping and Finishing Temporary Widening Sta. 304+76' N'	LS	1.000	1.000
1270	SPV.0105	Special 03. Grading, Shaping and Finishing Temporary Widening Sta. 379+40' N'	LS	1.000	1.000
1280	SPV.0105	Special 04. Grading, Shaping and Finishing Temporary Widening Sta. 401+23' N'	LS	1.000	1.000
1290	SPV.0105	Special 05. Grading, Shaping and Finishing Temporary Widening Sta. 459+21' N'	LS	1.000	1.000
1300	SPV.0105	Special 06. Grading, Shaping and Finishing Temporary Widening Sta. 483+23' N'	LS	1.000	1.000
1310	SPV.0105	Special 07. Grading, Shaping and Finishing Temporary Widening Removal Sta. 208+34' N'	LS	1.000	1.000
1320	SPV.0105	Special 08. Grading, Shaping and Finishing Temporary Widening Removal Sta. 304+76' N'	LS	1.000	1.000
1330	SPV.0105	Special 09. Grading, Shaping and Finishing Temporary Widening Removal Sta. 379+40' N'	LS	1.000	1.000
1340	SPV.0105	Special 10. Grading, Shaping and Finishing Temporary Widening Removal Sta. 401+23' N'	LS	1.000	1.000
1350	SPV.0105	Special 11. Grading, Shaping and Finishing Temporary Widening Removal Sta. 459+21' N'	LS	1.000	1.000
1360	SPV.0105	Special 12. Grading, Shaping and Finishing Temporary Widening Removal Sta. 483+23' N'	LS	1.000	1.000
1370	SPV.0105	Special 13. Slope Flattening Grading, Shaping and Finishing Sta. 315+75' N' - 319+43' N'	LS	1.000	1.000
1380	SPV.0105	Special 14. Slope Flattening Grading, Shaping and Finishing Sta. 419+00' N' - 419+80' N'	LS	1.000	1.000
1390	SPV.0105	Special 15. Slope Flattening Grading, Shaping and Finishing Sta. 457+50' N' - 459+75' N'	LS	1.000	1.000
1400	SPV.0105	Special 16. Slope Flattening Grading, Shaping and Finishing Sta. 482+75' N' - 483+50' N'	LS	1.000	1.000

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E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8160-04-64 QUANTITY
1410	SPV.0105	Special 17. Slope Flattening Grading, Shaping and Finishing Sta. 568+60' N' - 569+10' N'	LS	1.000	1.000
1420	SPV.0105	Special 18. Slope Flattening Grading, Shaping and Finishing Sta. 594+30' N' - 595+40' N'	LS	1.000	1.000
1430	SPV.0180	Special 01. Install City Furnished Insulation Board Polystyrene	SY	50.000	50.000

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CLEARING AND GRUBBING

STATION - STATION	LOCATION	201.0105		201.0205		COMMENTS
		CLEARING STA	GRUBBING STA			
37+30 - 38+15	STH 13'N' LT	1	1			
342+10 - -	STH 13'N' RT	1	1			RIPRAP BASIN
348+96 - -	STH 13'N' RT	1	1			RIPRAP BASIN
354+35 - 354+80	STH 13'N' RT	1	1			
376+53 - 382+04	STH 13'N' RT	6	6			
398+96 - 403+52	STH 13'N' RT	5	5			
568+60 - 569+10	STH 13'N' RT	1	1			
585+60 - 586+10	STH 13'N' LT & RT	1	1			
591+25 - 591+75	STH 13'N' RT	1	1			
594+30 - 595+40	STH 13'N' LT & RT	2	2			
598+50 - -	STH 13'N' RT	1	1			RIPRAP BASIN
TOTALS		21	21			

REMOVING OLD STRUCTURE

STATION	LOCATION	203.0200.01		203.0200.02	
		REMOVING OLD STRUCTURE LS	REMOVING OLD STRUCTURE LS		
208+34	STH 13'N'	1	-		
208+49	STH 13'N'	-	1		
TOTALS		1	1		

CURB AND GUTTER ITEMS

STATION - STATION	LOCATION	204.0150		601.0557		650.5500		SPV.0090.02	
		REMOVING CURB & GUTTER LF	CONCRETE CURB & GUTTER LF	CONCRETE CURB & GUTTER LF	CONCRETE CURB & GUTTER LF	CONCRETE CURB & GUTTER LF	CONCRETE CURB & GUTTER LF	CONCRETE CURB & GUTTER LF	CONCRETE CURB & GUTTER LF
176+23 - 176+50	STH 13'N' RT	27	47	47	47				
386+95 - 387+05	STH 13'N' LT	10	10	-	10				
409+95 - 410+05	STH 13'N' LT	10	10	-	10				
TOTALS		47	67	47	67				

BACKFILL GRANULAR

PIPE CULVERT	LOCATION	209.2100		
		BACKFILL GRANULAR CY	PIPE DIAMETER INCH	DEPTH FROM CL PROFILE TO TOP OF PIPE CULVERT FT
77+85	STH 13'N'	289	30	1.4
111+84	STH 13'N'	12	24	2.8
208+34	STH 13'N'	2182	84	2.0
218+10	STH 13'N'	3	30	-
304+76	STH 13'N'	1024	54	2.1
312+56	STH 13'N'	38	38	2.9
346+42	STH 13'N'	5	36	-
367+81	STH 13'N'	7	30	-
379+40	STH 13'N'	30	30	7.9
401+23	STH 13'N'	41	36	6.6
419+54	STH 13'N'	16	20	3.5
459+21	STH 13'N'	40	36	3.4
461+00	STH 13'N'	13	24	3.1
483+23	STH 13'N'	52	36	5.0
485+64	STH 13'N'	53	36	4.3
488+39	STH 13'N'	54	48	3.0
568+56	STH 13'N'	88	48	5.0
585+88	STH 13'N'	13	24	15.8
591+49	STH 13'N'	30	30	10.8
594+78	STH 13'N'	10	24	-
TOTAL		4000		

FINISHING ROADWAY

213.0100.01	
LOCATION	EACH
STH 13'N'	1
TOTAL	1

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	203.0100		204.9060.S.01	
		REMOVING SMALL PIPE CULVERTS EACH	REMOVING APRON ENDWALLS EACH		
345+43'W'	STH 13 'N' LT & RT	-	2		
37+94	STH 13 'N' LT & RT	-	2		
55+83	STH 13 'N' LT & RT	-	2		
77+85	STH 13 'N'	1	-		
96+09	STH 13 'N' LT & RT	-	2		
96+23	STH 13 'N' LT & RT	-	2		
162+58	STH 13 'N' LT & RT	-	2		
174+02	STH 13 'N'	1	-		
218+10	STH 13 'N' RT	1	-		
304+76	STH 13 'N'	1	-		
312+56	STH 13 'N'	1	-		
315+23	STH 13 'N' LT & RT	-	2		
317+72	STH 13 'N' LT & RT	-	2		
317+85	STH 13 'N' LT & RT	-	2		
340+63	STH 13 'N' LT & RT	-	2		
342+16	STH 13 'N' LT & RT	-	2		
346+42	STH 13 'N' RT	1	-		
348+98	STH 13 'N' LT & RT	-	2		
354+60	STH 13 'N' LT & RT	-	2		
358+75	STH 13 'N' LT	-	1		
360+51	STH 13 'N' LT	-	1		
365+02	STH 13 'N' LT	-	1		
367+81	STH 13 'N' LT	1	-		
370+88	STH 13 'N' LT	-	1		
379+40	STH 13 'N'	-	1		
401+23	STH 13 'N'	-	1		
419+54	STH 13 'N'	-	1		
427+93	STH 13 'N' LT & RT	-	2		
438+55	STH 13 'N' LT & RT	-	2		
459+21	STH 13 'N'	-	1		
461+00	STH 13 'N'	-	1		
483+20	STH 13 'N'	-	1		
483+27	STH 13 'N'	-	1		
485+60	STH 13 'N'	-	1		
485+68	STH 13 'N'	-	1		
488+39	STH 13 'N'	-	1		
499+11	STH 13 'N' LT & RT	-	2		
543+84	STH 13 'N' LT & RT	-	2		
558+09	STH 13 'N' LT & RT	-	2		
568+56	STH 13 'N'	-	1		
568+68	STH 13 'N'	-	1		
575+93	STH 13 'N' LT & RT	-	2		
585+88	STH 13 'N'	-	1		
591+49	STH 13 'N'	-	1		
594+78	STH 13 'N' RT	1	-		
598+50	STH 13 'N' LT & RT	-	2		
TOTALS			22		44

ASPHALTIC SURFACE & ASSOCIATED ITEMS

STATION	STATION	LOCATION	465.0105 ASPHALTIC SURFACE TON	455.0605 TACK COAT GAL	305.0110** BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON
77+46	- 78+24	'N'	132	35	18	159	-
111+80	- 111+88	'N'	12	3	2	15	-
173+35	- 174+68	'N'	221	59	7	321	-
207+39	- 209+47	'N'	329	94	43	646	400
304+08	- 305+44	'N'	216	62	28	424	-
312+51	- 312+61	'N'	20	6	2	30	-
379+31	- 379+49	'N'	32	9	2	67	-
401+14	- 401+32	'N'	29	8	2	62	-
419+50	- 419+58	'N'	13	4	2	25	-
459+16	- 459+26	'N'	18	5	1	32	-
460+96	- 461+04	'N'	12	3	1	22	-
483+16	- 483+30	'N'	23	7	3	45	-
485+54	- 485+66	'N'	23	6	3	40	-
488+33	- 488+45	'N'	25	7	3	40	-
568+49	- 568+71	'N'	35	10	6	54	-
585+72	- 586+04	'N'	53	15	8	67	-
591+37	- 591+61	'N'	39	11	5	76	-
TOTALS			1232	344	136	2125	400

**SUB-TOTAL FOR ITEM 305.0110 (SEE ADDITIONAL QUANTITIES)

BASE AGGREGATE DENSE 3/4-INCH

REPLACEMENT STATION	STATION - STATION	LOCATION	305.0110** BASE AGGREGATE DENSE 3/4-INCH TON	COMMENT
77+85	77+30 - 78+40	STH 13'N' LT & RT	22	SHLD MAINTENANCE
111+84	111+69 - 111+91	STH 13'N' LT & RT	22	SHLD MAINTENANCE
208+34, 208+49	206+60 - 210+31	STH 13'N' LT	142	TEMP. WIDENING
	205+68 - 211+18	STH 13'N' RT	312	TEMP. WIDENING
304+76	304+08 - 305+44	STH 13'N' LT	11	SHLD MAINTENANCE
312+56	303+08 - 306+44	STH 13'N' RT	146	TEMP. WIDENING
379+40	312+01 - 313+11	STH 13'N' LT & RT	22	SHLD MAINTENANCE
	379+31 - 379+49	STH 13'N' LT	11	SHLD MAINTENANCE
401+23	376+53 - 382+04	STH 13'N' RT	332	TEMP. WIDENING
	401+14 - 401+32	STH 13'N' LT	11	SHLD MAINTENANCE
419+54	398+96 - 403+52	STH 13'N' RT	254	TEMP. WIDENING
	419+50 - 419+58	STH 13'N' LT & RT	22	SHLD MAINTENANCE
459+21, 461+00	458+03 - 462+00	STH 13'N' RT	181	TEMP. WIDENING
	456+66 - 461+55	STH 13'N' LT	22	SHLD MAINTENANCE
483+23	481+78 - 484+68	STH 13'N' LT	129	TEMP. WIDENING
	483+16 - 483+30	STH 13'N' RT	11	SHLD MAINTENANCE
485+64	485+54 - 485+66	STH 13'N' LT & RT	22	SHLD MAINTENANCE
488+39	488+33 - 488+45	STH 13'N' LT & RT	22	SHLD MAINTENANCE
TOTAL			1694	

**SUB-TOTAL FOR ITEM 305.0110 (SEE ADDITIONAL QUANTITIES)

CONCRETE MASONRY ENDWALLS

STATION	LOCATION	504.0900 CONCRETE MASONRY ENDWALLS CY	SPV.0035.01 BEVELED EDGE CONCRETE MASONRY ENDWALL CY
111+84	STH 13'N' LT	1.4	-
111+84	STH 13'N' RT	1.2	-
208+41	STH 13'N' LT	8.4	-
208+41	STH 13'N' RT	7.0	-
348+98	STH 13'N' LT	-	2.2
438+55	STH 13'N' LT	-	2.2
499+11	STH 13'N' LT	-	3.5
558+09	STH 13'N' LT	-	2.0
568+60	STH 13'N' LT	4.8	-
568+60	STH 13'N' RT	4.4	-
575+93	STH 13'N' LT	-	2
598+50	STH 13'N' LT	-	3.5
TOTALS		27.2	15.4

ASPHALTIC FLUMES

STATION	STATION	LOCATION	465.0315 ASPHALTIC FLUMES SY	204.0190 REMOVING SURFACE DRAINS EACH
419+32	- 419+50	STH 13'N' LT	10	1
TOTALS			10	1

CULVERT PIPE TEMPORARY

STATION	LOCATION	520.2024 CULVERT PIPE TEMPORARY 24-INCH LF
483+20	STH 13'N' LT	6
483+27	STH 13'N' LT	6
TOTAL		12

CLEANING CULVERT PIPES

STATION	LOCATION	520.8700 CLEANING CULVERT PIPES EACH	SPV.0060.01 CLEANING CULVERT PIPES MINIMAL EACH
68+45	STH 13'N' RT	-	1
111+80	STH 13'N' -	1	-
193+53	STH 13'N' RT	-	1
332+04	STH 13'N' LT	-	1
332+04	STH 13'N' RT	-	1
337+86	STH 13'N' RT	-	1
383+73	STH 13'N' LT	-	1
TOTALS		1	6

CULVERT PIPE LINER ITEMS

STATION	LOCATION	520.9700.S.01	520.9700.S.02	520.9700.S.03	520.9700.S.04	520.9700.S.05	520.9700.S.06	520.9700.S.07	SPV.0090.01	520.9750.S	COMMENTS
		CULVERT PIPE LINERS 24-INCH	CULVERT PIPE LINERS 30-INCH	CULVERT PIPE LINERS 36-INCH	CULVERT PIPE LINERS 42-INCH	CULVERT PIPE LINERS 48-INCH	CULVERT PIPE LINERS 54-INCH	CULVERT PIPE LINERS 72-INCH	CURED-IN-PLACE PIPE LINING (CIPP) 30-INCH	CLEANING CULVERT PIPES FOR LINER VERIFICATION EACH	
37+94	STH 13 'N'	-	-	80	-	-	-	-	-	1	-
55+83	STH 13 'N'	-	-	-	-	-	-	96	-	1	-
96+09	STH 13 'N'	-	-	-	-	-	64	-	-	1	-
96+23	STH 13 'N'	-	-	-	-	-	64	-	-	1	-
162+58	STH 13 'N'	68	-	-	-	-	-	-	-	1	-
218+10	STH 13 'N'	-	62	-	-	-	-	-	-	1	DIRECT BURY
315+23	STH 13 'N'	-	-	-	-	64	-	-	-	1	-
317+71	STH 13 'N'	-	-	-	-	84	-	-	-	1	EXTEND 10 FT LT
317+85	STH 13 'N'	-	-	-	-	84	-	-	-	1	EXTEND 10 FT LT
340+63	STH 13 'N'	-	70	-	-	-	-	-	-	1	-
342+10	STH 13 'N'	-	-	76	-	-	-	-	-	1	-
346+42	STH 13 'N'	-	-	76	-	-	-	-	-	1	DIRECT BURY
348+98	STH 13 'N'	-	74	-	-	-	-	-	-	1	-
354+60	STH 13 'N'	-	-	-	-	-	-	114	-	1	-
358+75	STH 13 'N'	-	-	-	100	-	-	-	-	1	-
360+51	STH 13 'N'	-	98	-	-	-	-	-	-	1	-
365+02	STH 13 'N'	-	-	-	88	-	-	-	-	1	-
367+81	STH 13 'N'	-	94	-	-	-	-	-	-	1	DIRECT BURY
370+88	STH 13 'N'	-	-	-	86	-	-	-	-	1	-
387+00	STH 13 'N'	52	-	-	-	-	-	-	-	1	-
427+93	STH 13 'N'	64	-	-	-	-	-	-	-	1	-
438+55	STH 13 'N'	-	96	-	-	-	-	-	-	1	-
499+11	STH 13 'N'	-	-	78	-	-	-	-	-	1	-
543+84	STH 13 'N'	70	-	-	-	-	-	-	-	1	-
558+09	STH 13 'N'	66	-	-	-	-	-	-	-	1	-
575+93	STH 13 'N'	64	-	-	-	-	-	-	-	1	-
594+78	STH 13 'N'	104	-	-	-	-	-	-	-	1	EXTEND 4' LT
598+50	STH 13 'N'	-	-	96	-	-	-	-	-	1	-
TOTALS		488	494	406	274	232	128	96	114	28	

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CORRUGATED STEEL PIPE CULVERT ITEMS

STATION	LOCATION	528.0124 *	521.1024	521.1030	521.1036	521.1042	521.1048	521.1054	521.1072
		CULVERT PIPE	APRON	APRON	APRON	APRON	APRON	APRON	APRON
		CORRUGATED STEEL	ENDWALLS FOR	ENDWALLS FOR	ENDWALLS FOR	ENDWALLS FOR	ENDWALLS FOR	ENDWALLS FOR	ENDWALLS FOR
		POLYMER COATED	CULVERT PIPE	CULVERT PIPE	CULVERT PIPE	CULVERT PIPE	CULVERT PIPE	CULVERT PIPE	CULVERT PIPE
		24-INCH	STEEL 24-INCH	STEEL 30-INCH	STEEL 36-INCH	STEEL 42-INCH	STEEL 48-INCH	STEEL 54-INCH	STEEL 72-INCH
		LF	EACH	EACH	EACH	EACH	EACH	EACH	EACH
345+43	STH 13 'W'	-	-	-	2	-	-	-	-
37+94	STH 13 'N'	-	-	-	2	-	-	-	-
55+83	STH 13 'N'	-	-	-	-	-	-	-	2
96+09	STH 13 'N'	-	-	-	-	-	-	2	-
96+23	STH 13 'N'	-	-	-	-	-	-	2	-
111+84	STH 13 'N'	-	66	-	-	-	-	-	-
162+58	STH 13 'N'	-	-	2	-	-	-	-	-
218+10	STH 13 'N' RT	-	-	-	1	-	-	-	-
315+23	STH 13 'N'	-	-	-	-	-	2	-	-
317+71	STH 13 'N'	-	-	-	-	-	2	-	-
317+85	STH 13 'N'	-	-	-	-	-	2	-	-
340+63	STH 13 'N'	-	-	-	2	-	-	-	-
342+10	STH 13 'N'	-	-	-	-	2	-	-	-
346+42	STH 13 'N' RT	-	-	-	-	1	-	-	-
348+98	STH 13 'N' RT	-	-	-	1	-	-	-	-
354+60	STH 13 'N'	-	-	-	2	-	-	-	-
358+75	STH 13 'N' LT	-	-	-	-	1	-	-	-
360+51	STH 13 'N' LT	-	-	-	1	-	-	-	-
365+02	STH 13 'N' LT	-	-	-	-	1	-	-	-
367+81	STH 13 'N' LT	-	-	-	1	-	-	-	-
370+88	STH 13 'N' LT	-	-	-	-	1	-	-	-
379+40	STH 13 'N' RT	-	-	1	-	-	-	-	-
427+93	STH 13 'N'	-	-	2	-	-	-	-	-
438+55	STH 13 'N' RT	-	-	-	1	-	-	-	-
499+11	STH 13 'N' RT	-	-	-	-	1	-	-	-
543+84	STH 13 'N'	-	-	2	-	-	-	-	-
558+09	STH 13 'N' RT	-	-	1	-	-	-	-	-
575+93	STH 13 'N' RT	-	-	1	-	-	-	-	-
585+88	STH 13 'N'	-	136	2	-	-	-	-	-
594+78	STH 13 'N'	-	-	2	-	-	-	-	-
598+50	STH 13 'N' RT	-	-	-	-	1	-	-	-
TOTALS		202	13	9	9	3	6	4	2

* CULVERT PIPE CORRUGATED STEEL PIPE THICKNESS TO BE .064-INCHES. TIE JOINTS WITH CORRUGATED LEVEE BAND.

REINFORCED CONCRETE PIPE CULVERT ITEMS

STATION	LOCATION	522.0324	522.0130	522.0136	522.0148	522.0336	522.0354	522.0384	522.1024	522.1030	522.1036	522.1054
		CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV 36-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV 54-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV 84-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 54-INCH
		LF	LF	LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH
208+37	STH 13 'N'	-	-	-	-	-	-	68	-	-	-	-
208+49	STH 13 'N'	-	-	-	-	-	-	68	-	-	-	-
304+76	STH 13 'N'	-	-	-	-	-	60	-	-	-	-	2
379+40	STH 13 'N'	-	88	-	-	-	-	-	-	1	-	-
401+23	STH 13 'N'	-	-	88	-	-	-	-	-	-	-	-
459+21	STH 13 'N'	-	-	-	-	64	-	-	-	-	2	-
461+00	STH 13 'N'	64	-	-	-	-	-	-	2	-	-	-
483+23	STH 13 'N'	-	-	66	-	-	-	-	-	-	2	-
485+64	STH 13 'N'	-	-	68	-	-	-	-	-	-	2	-
568+56	STH 13 'N'	-	-	-	92	-	-	-	-	-	-	-
568+64	STH 13 'N'	-	-	-	92	-	-	-	-	-	-	-
591+40	STH 13 'N'	-	-	-	-	-	-	-	-	1	-	-
591+59	STH 13 'N'	-	-	-	-	-	-	-	-	1	-	-
TOTALS		64	88	222	184	64	60	136	2	3	6	2

* TIE ALL JOINTS

HORIZONTAL ELLIPTICAL PIPE CULVERT ITEMS

STATION	LOCATION	523.0119	523.0138	523.0148	523.0419	523.0424	523.0519	523.0524	523.0538	523.0548
		CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 19X30-INCH	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 38X60-INCH	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 48X76-INCH	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 24X38-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24X38-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 38X60-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 48X76-INCH
		LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH
77+85	STH 13 'N'	-	-	-	60	-	2	-	-	-
174+02	STH 13 'N'	-	-	-	-	86	-	2	-	-
312+56	STH 13 'N'	-	64	-	-	-	-	-	2	-
419+54	STH 13 'N'	64	-	-	-	-	2	-	-	-
488+39	STH 13 'N'	-	-	70	-	-	-	-	-	2
TOTALS		64	64	70	60	86	4	2	2	2

* TIE ALL JOINTS

RIPRAP ITEMS

STATION - STATION	LOCATION	606.0100	606.0200	606.0300	SPV.0035.02	645.0130	645.0120
		RIPRAP	RIPRAP	RIPRAP	RIPRAP INSTALL.	GEOTEXTILE	GEOTEXTILE
		LIGHT	MEDIUM	HEAVY	STA. 379+40'N'RT	FABRIC TYPE R	FABRIC TYPE HR
345+43 - -	STH 13'W' LT	-	6	-	-	-	18
345+43 - -	STH 13'W' RT	-	53	-	-	-	113
37+94 - -	STH 13'N' LT	-	6	-	-	-	18
38+20 - 38+80	STH 13'N' LT	18	-	-	68	-	-
55+65 - 55+93	STH 13'N' LT	-	9	-	-	-	30
55+83 - -	STH 13'N' RT	-	34	-	-	-	84
68+45 - -	STH 13'N' RT	2	-	-	10	-	-
77+85 - -	STH 13'N' LT	2	-	-	10	-	-
77+85 - -	STH 13'N' RT	2	-	-	10	-	-
96+03 - 96+29	STH 13'N' LT	-	15	-	-	-	43
96+03 - 96+29	STH 13'N' RT	-	22	-	-	-	57
111+82 - -	STH 13'N' RT	3	-	-	13	-	-
111+82 - -	STH 13'N' LT	3	-	-	13	-	-
152+05 - -	STH 13'N' RT	-	6	-	-	-	19
162+58 - -	STH 13'N' LT	2	-	-	10	-	-
162+58 - -	STH 13'N' RT	-	7	-	-	-	21
174+02 - -	STH 13'N' RT	-	5	-	-	-	15
174+02 - -	STH 13'N' LT	-	5	-	-	-	15
193+53 - -	STH 13'N' RT	-	8	-	-	-	24
208+43 - -	STH 13'N' RT	-	25	-	-	-	66
208+43 - -	STH 13'N' LT	-	12	-	-	-	38
218+10 - -	STH 13'N' RT	-	5	-	-	-	16
304+76 - -	STH 13'N' RT	-	10	-	-	-	29
304+76 - -	STH 13'N' LT	-	10	-	-	-	29
312+56 - -	STH 13'N' RT	-	3	-	-	-	12
312+56 - -	STH 13'N' LT	-	8	-	-	-	25
315+23 - -	STH 13'N' LT	-	8	-	-	-	24
315+23 - -	STH 13'N' RT	-	8	-	-	-	24
317+71 - 317+85	STH 13'N' LT	-	9	-	-	-	28
317+71 - 317+85	STH 13'N' RT	-	11	-	-	-	34
332+04 - -	STH 13'N' RT	4	-	-	17	-	-
332+04 - -	STH 13'N' LT	4	-	-	16	-	-
337+86 - -	STH 13'N' RT	2	-	-	10	-	-
340+63 - -	STH 13'N' RT	6	-	-	24	-	-
340+63 - -	STH 13'N' LT	3	-	-	13	-	-
342+16 - -	STH 13'N' RT	13	-	-	36	-	-
342+16 - -	STH 13'N' LT	7	-	-	29	-	-
346+42 - -	STH 13'N' RT	23	-	-	60	-	-
348+98 - -	STH 13'N' LT	3	-	-	13	-	-
348+98 - -	STH 13'N' RT	14	-	-	38	-	-
354+60 - -	STH 13'N' LT	3	-	-	13	-	-
354+60 - -	STH 13'N' RT	-	4	-	-	-	15
358+75 - -	STH 13'N' LT	-	8	-	-	-	24
360+51 - -	STH 13'N' LT	-	5	-	-	-	15
363+47 - -	STH 13'N' RT	-	11	-	-	-	30
364+90 - 365+18	STH 13'N' LT	-	14	-	-	-	40
SUBTOTALS		114	327	0	0	403	906

MOBILIZATION

619.1000	
MOBILIZATION	
LOCATION	EACH
STH 13'N'	1
TOTAL	1

RIPRAP ITEMS CONT'D

STATION - STATION	LOCATION	606.0100	606.0200	606.0300	SPV.0035.02	645.0130	645.0120
		RIPRAP	RIPRAP	RIPRAP	RIPRAP INSTALL.	GEOTEXTILE	GEOTEXTILE
		LIGHT	MEDIUM	HEAVY	STA. 379+40'N'RT	FABRIC TYPE R	FABRIC TYPE HR
367+81 - -	STH 13'N' LT	-	5	-	-	-	15
370+88 - -	STH 13'N' LT	-	8	-	-	-	24
379+40 - -	STH 13'N' LT	-	3	-	-	-	11
379+40 - -	STH 13'N' RT	-	-	-	60	-	145
383+73 - -	STH 13'N' LT	2	-	-	-	10	-
413+00 - -	STH 13'N' RT	6	-	-	-	24	-
419+54 - -	STH 13'N' RT	-	3	-	-	-	11
419+54 - -	STH 13'N' LT	-	4	-	-	-	12
427+93 - -	STH 13'N' LT	-	2	-	-	-	7
427+93 - -	STH 13'N' RT	-	5	-	-	-	16
437+95 - 438+65	STH 13'N' LT	-	22	-	-	-	69
438+55 - -	STH 13'N' RT	-	19	-	-	-	51
449+79 - -	STH 13'N' RT	-	12	-	-	-	34
458+00 - 458+65	STH 13'N' RT	24	-	-	-	88	-
459+21 - -	STH 13'N' RT	4	-	-	-	16	-
459+21 - -	STH 13'N' LT	4	-	-	-	16	-
461+00 - -	STH 13'N' RT	2	-	-	-	11	-
461+00 - -	STH 13'N' LT	2	-	-	-	11	-
483+23 - -	STH 13'N' RT	4	-	-	-	16	-
483+23 - -	STH 13'N' LT	4	-	-	-	16	-
485+64 - -	STH 13'N' RT	3	-	-	-	12	-
485+64 - -	STH 13'N' LT	4	-	-	-	16	-
488+39 - -	STH 13'N' RT	-	13	-	-	-	35
488+39 - -	STH 13'N' LT	-	13	-	-	-	35
499+11 - -	STH 13'N' LT	4	-	-	-	16	-
499+11 - -	STH 13'N' RT	47	-	-	-	115	-
504+25 - -	STH 13'N' LT	-	19	-	-	-	50
504+25 - -	STH 13'N' RT	-	11	-	-	-	32
520+55 - 521+10	STH 13'N' LT	16	-	-	-	63	-
543+84 - -	STH 13'N' LT	-	5	-	-	-	15
543+84 - -	STH 13'N' RT	-	3	-	-	-	11
558+09 - -	STH 13'N' RT	4	-	-	-	17	-
558+09 - -	STH 13'N' LT	-	5	-	-	-	17
568+60 - -	STH 13'N' LT	-	14	-	-	-	41
568+60 - -	STH 13'N' RT	-	18	-	-	-	49
575+93 - -	STH 13'N' LT	3	-	-	-	12	-
575+93 - -	STH 13'N' RT	4	-	-	-	17	-
585+88 - -	STH 13'N' LT	-	17	-	-	-	49
591+49 - -	STH 13'N' LT	-	5	-	-	-	15
591+49 - -	STH 13'N' RT	29	-	-	-	72	-
594+78 - -	STH 13'N' LT	-	2	-	-	-	8
594+78 - -	STH 13'N' RT	-	-	21	-	-	48
598+50 - -	STH 13'N' RT	72	-	-	-	175	-
598+50 - -	STH 13'N' LT	-	7	-	-	-	22
SUBTOTALS		238	215	21	60	723	822
TOTALS		352	542	21	60	1126	1728

MAINTENANCE AND REPAIR OF HAUL ROADS

618.0100.01	
MAINTENANCE AND REPAIR OF HAUL ROADS	
LOCATION	EACH
STH 13'N'	1
TOTAL	1

STORM SEWER PIPE

STATION	DESC.	LOCATION	FT	FT	%	LF
591+40.4	STH 13	40.2 LT	134	633.10	667.14	85
591+68.6	STH 13	43.0 RT	S100	644.60	644.60	28
TOTAL						113

STORM SEWER STRUCTURES

STATION	DESC.	LOCATION	FT	FT	FT	FT	EACH	EACH
591+58.6	'C'	43 RT	S100	661.36	657.14	644.60	15.81	1
PROJECT TOTALS							1	1

RECONSTRUCT INLET ITEMS

STATION	LOCATION	EACH	EACH
379+40	STH 13 'N' RT	1	1
387+00	STH 13 'N' LT	1	-
401+23	STH 13 'N' RT & LT	2	-
TOTALS		4	1

ADJUSTING INLET COVERS

STATION	LOCATION	EACH
410+00	STH 13 'N' LT	1
TOTAL		1

SILT FENCE ITEMS

STATION - STATION	LOCATION	LF	LF
37+95 - 38+20	LT STH 13 'N'	30	30
37+25 - 37+45	RT STH 13 'N'	30	30
55+55 - 56+00	LT STH 13 'N'	50	50
55+80 - 56+25	LT STH 13 'N'	50	50
77+46 - 78+24	LT STH 13 'N'	100	100
77+46 - 78+24	RT STH 13 'N'	100	100
95+90 - 96+35	LT STH 13 'N'	60	60
95+90 - 96+35	RT STH 13 'N'	60	60
111+70 - 112+00	RT STH 13 'N'	30	30
111+70 - 112+00	LT STH 13 'N'	30	30
173+60 - 173+80	LT STH 13 'N'	20	20
174+25 - 174+55	RT STH 13 'N'	50	50
205+70 - 211+20	RT STH 13 'N'	570	570
206+60 - 210+20	RT STH 13 'N'	380	380
217+95 - 218+20	RT STH 13 'N'	40	40
303+10 - 306+45	RT STH 13 'N'	190	190
304+08 - 305+45	LT STH 13 'N'	170	170
312+30 - 312+60	RT STH 13 'N'	40	40
312+55 - 312+80	LT STH 13 'N'	40	40
314+90 - 319+50	LT STH 13 'N'	500	500
315+10 - 315+35	RT STH 13 'N'	30	30
317+65 - 318+05	RT STH 13 'N'	60	60
340+60 - 340+80	LT STH 13 'N'	30	30
340+55 - 340+75	RT STH 13 'N'	30	30
342+05 - 342+25	RT STH 13 'N'	30	30
342+10 - 342+30	LT STH 13 'N'	30	30
346+30 - 346+50	RT STH 13 'N'	30	30
348+80 - 349+10	RT STH 13 'N'	40	40
348+80 - 349+10	LT STH 13 'N'	40	40
354+30 - 354+50	LT STH 13 'N'	30	30
354+70 - 354+90	RT STH 13 'N'	30	30
358+80 - 359+00	LT STH 13 'N'	30	30
360+45 - 360+65	LT STH 13 'N'	30	30
365+85 - 365+15	LT STH 13 'N'	40	40
367+65 - 368+05	LT STH 13 'N'	40	40
SUBTOTALS		3060	3060

SILT FENCE ITEMS CONT'D

STATION - STATION	LOCATION	LF	LF
370+70 - 371+00	LT STH 13 'N'	40	40
376+50 - 382+05	RT STH 13 'N'	550	550
379+35 - 379+70	LT STH 13 'N'	40	40
386+90 - 387+10	RT STH 13 'N'	30	30
399+15 - 403+50	RT STH 13 'N'	460	460
419+00 - 419+80	RT STH 13 'N'	100	100
419+45 - 419+60	LT STH 13 'N'	30	30
427+80 - 428+00	RT STH 13 'N'	30	30
427+80 - 428+00	LT STH 13 'N'	30	30
438+30 - 438+50	RT STH 13 'N'	30	30
438+45 - 438+75	LT STH 13 'N'	40	40
457+50 - 459+75	LT STH 13 'N'	260	260
460+90 - 461+10	LT STH 13 'N'	30	30
481+75 - 484+70	LT STH 13 'N'	310	310
482+75 - 483+50	RT STH 13 'N'	100	100
485+40 - 485+85	RT STH 13 'N'	70	70
485+45 - 485+90	LT STH 13 'N'	70	70
488+10 - 488+45	RT STH 13 'N'	50	50
488+30 - 488+60	LT STH 13 'N'	40	40
499+00 - 499+20	RT STH 13 'N'	30	30
498+95 - 499+25	LT STH 13 'N'	40	40
543+70 - 543+90	LT STH 13 'N'	30	30
543+70 - 543+90	RT STH 13 'N'	30	30
557+90 - 558+20	LT STH 13 'N'	40	40
558+00 - 558+20	RT STH 13 'N'	30	30
568+15 - 568+75	LT STH 13 'N'	70	70
568+55 - 569+10	RT STH 13 'N'	70	70
575+75 - 576+05	LT STH 13 'N'	40	40
575+85 - 576+05	RT STH 13 'N'	30	30
585+70 - 586+40	RT STH 13 'N'	80	80
585+45 - 586+10	LT STH 13 'N'	80	80
591+15 - 591+70	LT STH 13 'N'	60	60
591+30 - 591+90	RT STH 13 'N'	100	100
594+30 - 595+40	RT STH 13 'N'	130	130
594+50 - 595+30	LT STH 13 'N'	80	80
598+35 - 598+65	LT STH 13 'N'	40	40
598+35 - 598+65	RT STH 13 'N'	30	30
UNDISTRIBUTED		640	640
SUBTOTALS		3960	3960
TOTALS		7020	7020

3

LANDSCAPING ITEMS

STATION - STATION	LOCATION	625.0500	628.2004*	628.2008*	629.0210	630.0110	630.0200	COMMENTS
		SALVAGED TOPSOIL	EROSION MAT CLASS I TYPE B	EROSION MAT URBAN CLASS I TYPE B	FERTILIZER TYPE B	SEEDING MIXTURE NO. 10	SEEDING TEMPORARY	
37+94 - -	STH 13 'N' RT	25	25	0	0.02	0.3	0.7	
37+94 - -	STH 13 'N' LT	25	25	0	0.02	0.3	0.7	
55+83 - -	STH 13 'N' LT	37	0	37	0.02	0.5	1.0	
55+83 - -	STH 13 'N' RT	33	0	33	0.02	0.4	0.9	
77+46 - 78+24	STH 13 'N' RT	102	102	0	0.06	1.4	2.7	
77+46 - 78+24	STH 13 'N' LT	81	81	0	0.05	1.1	2.2	
95+95 - 96+35	STH 13 'N' RT	47	0	47	0.03	0.6	1.3	
95+95 - 96+95	STH 13 'N' LT	46	0	46	0.03	0.6	1.2	
111+75 - 111+90	STH 13 'N' LT	22	22	0	0.01	0.3	0.6	
111+75 - 111+90	STH 13 'N' RT	24	24	0	0.02	0.3	0.7	
162+45 - -	STH 13 'N' RT	9	9	0	0.01	0.1	0.3	
162+66 - -	STH 13 'N' LT	9	9	0	0.01	0.1	0.3	
174+02 - -	STH 13 'N' LT	13	13	0	0.01	0.2	0.3	
174+02 - -	STH 13 'N' RT	27	27	0	0.02	0.4	0.7	
218+00 - 218+15	STH 13 'N' RT	29	29	0	0.02	0.4	0.8	
304+08 - 305+44	STH 13 'N' LT	164	164	0	0.10	2.2	4.4	
312+40 - 312+55	STH 13 'N' RT	25	25	0	0.02	0.3	0.7	
312+55 - 312+75	STH 13 'N' LT	11	11	0	0.01	0.1	0.3	
315+23 - -	STH 13 'N' LT	19	19	0	0.01	0.3	0.5	
315+23 - -	STH 13 'N' RT	19	19	0	0.01	0.3	0.5	
317+60 - 317+85	STH 13 'N' LT	0	0	0	0.00	0.0	0.0	
317+65 - 318+00	STH 13 'N' RT	33	33	0	0.02	0.4	0.9	
340+63 - -	STH 13 'N' LT	13	13	0	0.01	0.2	0.4	
340+63 - -	STH 13 'N' RT	13	13	0	0.01	0.2	0.4	
342+10 - -	STH 13 'N' LT	13	13	0	0.01	0.2	0.4	
342+10 - -	STH 13 'N' RT	13	13	0	0.01	0.2	0.4	
346+42 - -	STH 13 'N' RT	13	13	0	0.01	0.2	0.4	
348+98 - -	STH 13 'N' RT	13	13	0	0.01	0.2	0.4	
348+98 - -	STH 13 'N' LT	29	29	0	0.02	0.4	0.8	
354+80 - -	STH 13 'N' RT	14	14	0	0.01	0.2	0.4	
354+40 - -	STH 13 'N' LT	14	14	0	0.01	0.2	0.4	
358+86 - -	STH 13 'N' LT	12	12	0	0.01	0.2	0.3	
360+51 - -	STH 13 'N' LT	14	14	0	0.01	0.2	0.4	
365+02 - -	STH 13 'N' LT	12	12	0	0.01	0.2	0.3	
367+81 - -	STH 13 'N' LT	38	38	0	0.02	0.5	1.0	
SUBTOTALS		1011	848	163	0.67	13.7	27.7	

* QUANTITIES LISTED ELSEWHERE

LANDSCAPING ITEMS CONT'D

STATION - STATION	LOCATION	625.0500	628.2004*	628.2008*	629.0210	630.0110	630.0200	COMMENTS
		SALVAGED TOPSOIL	EROSION MAT CLASS I TYPE B	EROSION MAT URBAN CLASS I TYPE B	FERTILIZER TYPE B	SEEDING MIXTURE NO. 10	SEEDING TEMPORARY	
370+88 - -	STH 13 'N' LT	12	12	0	0.01	0.2	0.3	
379+35 - 379+60	STH 13 'N' LT	37	37	0	0.02	0.5	1.0	
387+00 - -	STH 13 'N' LT	8	8	0	0.01	0.1	0.2	
387+00 - -	STH 13 'N' RT	15	15	0	0.01	0.2	0.4	
400+90 - 401+55	STH 13 'N' LT	22	22	0	0.01	0.3	0.6	
410+00 - -	STH 13 'N' LT	8	8	0	0.01	0.1	0.2	
419+48 - 419+58	STH 13 'N' LT	10	10	0	0.01	0.1	0.3	
427+93 - -	STH 13 'N' RT	14	14	0	0.01	0.2	0.4	
427+93 - -	STH 13 'N' LT	14	14	0	0.01	0.2	0.4	
438+55 - -	STH 13 'N' RT	18	18	0	0.01	0.2	0.5	
438+55 - -	STH 13 'N' LT	16	16	0	0.01	0.2	0.4	
461+00 - -	STH 13 'N' LT	27	27	0	0.02	0.4	0.7	
482+50 - 484+25	STH 13 'N' LT	214	214	0	0.13	2.9	5.8	
482+95 - 483+50	STH 13 'N' RT	66	66	0	0.04	0.9	1.8	
485+40 - 485+85	STH 13 'N' RT	70	70	0	0.04	0.9	1.9	
485+40 - 485+85	STH 13 'N' LT	63	63	0	0.04	0.8	1.7	
488+18 - 488+40	STH 13 'N' RT	33	0	33	0.02	0.4	0.9	
488+35 - 488+55	STH 13 'N' LT	31	0	31	0.02	0.4	0.8	
499+11 - -	STH 13 'N' LT	32	32	0	0.02	0.4	0.9	
499+11 - -	STH 13 'N' RT	14	14	0	0.01	0.2	0.4	
543+84 - -	STH 13 'N' LT	15	15	0	0.01	0.2	0.4	
543+84 - -	STH 13 'N' RT	15	15	0	0.01	0.2	0.4	
558+09 - -	STH 13 'N' LT	20	20	0	0.01	0.3	0.5	
558+09 - -	STH 13 'N' RT	15	15	0	0.01	0.2	0.4	
568+20 - 568+75	STH 13 'N' LT	76	76	0	0.05	1.0	2.0	
575+93 - -	STH 13 'N' LT	18	18	0	0.01	0.2	0.5	
575+93 - -	STH 13 'N' RT	15	15	0	0.01	0.2	0.4	
585+60 - 586+05	STH 13 'N' LT	124	124	0	0.08	1.7	3.3	
585+65 - 586+10	STH 13 'N' RT	218	218	0	0.14	2.9	5.9	
591+30 - 591+55	STH 13 'N' LT	46	46	0	0.03	0.6	1.2	
591+25 - 591+75	STH 13 'N' RT	213	213	0	0.13	2.9	5.8	
598+50 - -	STH 13 'N' RT	14	14	0	0.01	0.2	0.4	
598+50 - -	STH 13 'N' LT	32	32	0	0.02	0.4	0.9	
UNDISTRIBUTED		512	467	45	0.40	8.6	17.4	
SUBTOTALS		2057	1948	109	1.38	29.2	59.1	
TOTALS		3068	2796	272	2.05	42.9	86.8	

* QUANTITIES LISTED ELSEWHERE

3

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905	628.1910
	MOBILIZATION EROSION CONTROL EACH	MOBILIZATION EMERGENCY EROSION CONTROL EACH
PROJECT LIMITS STH 13 'N'	8	6
TOTALS	8	6

INLET PROTECTION

STATION	LOCATION	628.7005	628.7015
		INLET PROTECTION TYPE A EACH	INLET PROTECTION TYPE C EACH
379+40	STH 13 'N' RT	1	-
387+00	STH 13 'N' LT	-	1
401+23	STH 13 'N' RT & LT	2	-
410+00	STH 13 'N' LT	-	1
TOTAL		3	2

TRACKING PADS

LOCATION	628.7560
	TRACKING PADS EACH
STH 13 'N' UNDISTRIBUTED	1
TOTAL	1

EROSION BALES & GEOTEXTILE FABRIC TYPE DF

LOCATION	EACH	628.1104	645.0111	COMMENTS
		EROSION BALES	GEOTEXTILE FABRIC TYPE DF SCHEDULE A	
STH 13 'N'	360	1000		30 TEMP. SETTLING BASINS
TOTALS	360	1000		

CULVERT PIPE CHECKS

STATION	LOCATION	628.7555 CULVERT PIPE CHECKS EACH
77+85	STH 13 'N'	5
111+84	STH 13 'N'	5
174+02	STH 13 'N'	7
208+37	STH 13 'N'	20
208+49	STH 13 'N'	20
304+76	STH 13 'N'	12
312+56	STH 13 'N'	10
379+40	STH 13 'N'	6
419+54	STH 13 'N'	5
459+21	STH 13 'N'	7
461+00	STH 13 'N'	5
483+23	STH 13 'N'	7
485+64	STH 13 'N'	7
488+39	STH 13 'N'	10
568+56	STH 13 'N'	10
568+64	STH 13 'N'	10
585+88	STH 13 'N'	5
591+49	STH 13 'N'	6
UNDISTRIBUTED		13
TOTAL		170

TRAFFIC CONTROL DETOUR SIGNS

LOCATION	(EST. DAYS)	643.3000 TRAFFIC CONTROL DETOUR SIGNS (COUNT)	DAY
STH 13 NB AUTO DETOUR	14	9	126
CTH J NB AUTO DETOUR	14	15	210
CTH I NB AUTO DETOUR	14	6	84
CTH J NB TRUCK DETOUR	14	27	378
STH 13 SB TRUCK DETOUR	14	12	168
CTH J SB TRUCK DETOUR	14	28	392
STH 13 SB AUTO DETOUR	14	20	280
CTH J SB AUTO DETOUR	14	9	126
TOTAL			1764

CULVERT END MARKER ITEM

STATION	DESCRIPTION	633.5200 MARKERS CULVERT END EACH
37+94	STH 13 'N'	2
55+83	STH 13 'N'	2
68+45	STH 13 'N'	2
77+85	STH 13 'N'	2
96+09	STH 13 'N'	2
96+23	STH 13 'N'	2
111+75	STH 13 'N'	2
141+63	STH 13 'N'	2
161+00	STH 13 'N'	2
162+58	STH 13 'N'	2
174+02	STH 13 'N'	2
182+82	STH 13 'N'	2
193+53	STH 13 'N'	2
208+37	STH 13 'N'	2
208+49	STH 13 'N'	2
211+82	STH 13 'N'	2
218+10	STH 13 'N'	2
304+76	STH 13 'N'	2
312+56	STH 13 'N'	2
315+23	STH 13 'N'	2
317+69	STH 13 'N'	2
332+62	STH 13 'N'	2
337+83	STH 13 'N'	2
340+63	STH 13 'N'	2
342+10	STH 13 'N'	2
346+42	STH 13 'N'	2
348+98	STH 13 'N'	2
354+60	STH 13 'N'	2
358+75	STH 13 'N'	2
360+51	STH 13 'N'	2
364+93	STH 13 'N'	2
367+81	STH 13 'N'	2
370+88	STH 13 'N'	2
375+00	STH 13 'N'	2
379+40	STH 13 'N'	2
383+98	STH 13 'N'	2
387+00	STH 13 'N'	2
390+77	STH 13 'N'	2
397+00	STH 13 'N'	2
401+23	STH 13 'N'	2
405+00	STH 13 'N'	2
410+00	STH 13 'N'	2
419+54	STH 13 'N'	2
416+93	STH 13 'N'	2
427+93	STH 13 'N'	2
SUB-TOTAL		90

CULVERT END MARKER ITEM CONT'D

STATION	DESCRIPTION	633.5200 MARKERS CULVERT END EACH
438+55	STH 13 'N'	2
459+21	STH 13 'N'	2
461+00	STH 13 'N'	2
473+89	STH 13 'N'	2
483+20	STH 13 'N'	2
483+27	STH 13 'N'	2
485+60	STH 13 'N'	2
485+68	STH 13 'N'	2
488+39	STH 13 'N'	2
510+87	STH 13 'N'	2
520+74	STH 13 'N'	2
543+84	STH 13 'N'	2
554+85	STH 13 'N'	2
558+09	STH 13 'N'	2
568+56	STH 13 'N'	2
568+64	STH 13 'N'	2
575+93	STH 13 'N'	2
585+88	STH 13 'N'	2
591+49	STH 13 'N'	2
594+78	STH 13 'N'	2
598+50	STH 13 'N'	2
607+47	STH 13 'N'	2
SUB-TOTAL		44
TOTAL		134

TRAFFIC CONTROL DEVICES

LOCATION	(EST. DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III		643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0900 TRAFFIC CONTROL SIGNS		SIGN CODE
		(COUNT)	DAY	(COUNT)	DAY	(COUNT)	DAY	
STH 13'N' PROJECT TERMINI	61	---	---	---	---	2	122	G20-1
STH 13'N' PROJECT TERMINI	61	---	---	---	---	2	122	G20-2A
STH 13'N' ADVANCE SIGNING	61	---	---	---	---	3	183	SEE SDD 15C4-1
STH 13 ADD'L SIGNS AT WORK ZONES	61	---	---	---	---	10	610	W20-1
PROJECT SIDEROADS (40)	61	---	---	---	---	40	2440	W20-1
STH 13 NB CLOSURE	14	6	84	12	168	4	56	SEE DETOUR CLOSURE
STH 13 SB CLOSURE	14	6	84	12	168	5	70	SEE DETOUR CLOSURE
STH 13 SB CLOSURE	14	2	28	4	56	2	28	R10-61; SEE CLOSURE
CTH J DETOUR 'NO PASSING ZONE'	14	---	---	---	---	10	140	W14-3
LAKESHORE DR FOR STH 13 CLOSURE	14	---	---	---	---	1	14	W20-3
9TH ST FOR STH 13 CLOSURE	14	---	---	---	---	1	14	W20-3
TOTALS			196					
				SUBTOTAL*	392	SUBTOTAL*	3799	

*SEE ADDITIONAL QUANTITY FOR PIPE REPLACEMENT TC SIGNS

TRAFFIC CONTROL DEVICES (FOR PIPE REPLACEMENTS)

STATION - STATION	LOCATION	643.0300 TRAFFIC CONTROL DRUMS		643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0900 TRAFFIC CONTROL SIGNS	
		(AVE. # DAYS)	(COUNT)	(AVE. # DAYS)	(COUNT)	(AVE. # DAYS)	(COUNT)
77+46 - 78+24	STH 13'N' RT & LT	7	10	7	4	7	10
111+80 - 111+88	STH 13'N' RT & LT	7	10	7	4	7	10
173+35 - 174+68	STH 13'N' RT & LT	7	20	7	4	7	10
205+68 - 211+18	STH 13'N' RT	7	25	7	4	7	5
206+60 - 210+31	STH 13'N' LT	7	25	7	4	7	5
303+08 - 306+44	STH 13'N' RT & LT	7	10	7	4	7	10
312+51 - 312+61	STH 13'N' RT & LT	7	10	7	4	7	10
379+31 - 379+49	STH 13'N' LT	7	5	7	4	7	5
376+53 - 382+04	STH 13'N' RT	7	25	7	4	7	5
398+96 - 403+52	STH 13'N' RT	7	25	7	4	7	5
401+14 - 401+32	STH 13'N' LT	7	5	7	4	7	5
419+50 - 419+58	STH 13'N' RT & LT	7	10	7	4	7	10
458+03 - 461+03	STH 13'N' RT	7	20	7	4	7	5
459+16 - 459+26	STH 13'N' LT	7	5	7	4	7	5
460+96 - 461+04	STH 13'N' LT	7	5	7	4	7	5
481+78 - 484+68	STH 13'N' LT	7	15	7	4	7	5
483+16 - 483+30	STH 13'N' RT	7	5	7	4	7	5
485+54 - 485+66	STH 13'N' RT & LT	7	10	7	4	7	10
488+33 - 488+45	STH 13'N' RT & LT	7	10	7	4	7	10
TOTAL			1750				
				SUBTOTAL*	532	SUBTOTAL*	945

*SEE ADDITIONAL QUANTITY FOR PROJECT TC SIGNS

PERMANENT PAVEMENT MARKINGS

STATION	- STATION		646.0106 PAVEMENT MARKING EPOXY 4-INCH		COMMENTS (CENTERLINE MARKINGS)
			WHITE LF	YELLOW LF	
77+41	- 78+29	'N'	188	188	DBL Yellow
111+75	- 111+93	'N'	48	48	DBL Yellow
207+34	- 209+52	'N'	448	265	Solid YellowSB/Skips NB
304+03	- 305+49	'N'	304	35	Yellow Skips
312+46	- 312+65	'N'	50	42	Solid Yellow NB/Skips SB
379+26	- 379+54	'N'	68	33	Yellow Skips
401+09	- 401+37	'N'	68	68	DBL Yellow
419+45	- 419+63	'N'	48	48	DBL Yellow
459+11	- 459+31	'N'	52	52	DBL Yellow
460+91	- 461+09	'N'	48	48	DBL Yellow
483+15	- 483+39	'N'	60	60	DBL Yellow
485+49	- 485+71	'N'	56	56	DBL Yellow
488+29	- 488+49	'N'	52	93	DBL Yellow/White Skips Pass Lane
568+44	- 568+76	'N'	76	76	DBL Yellow
585+66	- 586+10	'N'	100	100	DBL Yellow
591+32	- 591+66	'N'	80	80	DBL Yellow
SUB-TOTALS			1746	1292	
TOTAL				3038	

PAVEMENT MARKING STOP LINE AND CROSSWALK

LOCATION	647.0563 PAVEMENT MARKING STOP LINE PAINT 18-INCH		647.0763 PAVEMENT MARKING CROSSWALK PAINT 6-INCH		COMMENTS
	LF		LF		
CTH J/ HATCHERY INTERSECTION	24		-		DETOUR ROUTE
CTH J/ CTH I INTERSECTION	36		-		DETOUR ROUTE
WASHINGTON AVE & 3RD ST INTERSECTION			70		DETOUR ROUTE
TOTALS	60		70		

TRAFFIC CONTROL DETOUR

LOCATION	643.2000 TRAFFIC CONTROL DETOUR 01. 8160-04-64	
	EACH	
STH 13'N'	1	
TOTAL	1	

TRAFFIC CONTROL

LOCATION	643.0100 TRAFFIC CONTROL 01. 8160-04-64	
	EACH	
STH 13'N'	1	
TOTAL	1	

PERMANENT PAVEMENT MARKING PAINT

646.0103 PAVEMENT MARKING PAINT 4-INCH			
DETOUR LOCATION	WHITE LF	YELLOW LF	COMMENTS (CENTERLINE MARKINGS)
CTH J	9900	9900	DBL Yellow
CTH J	2850	1781	Solid Yellow EB/Skips WB
CTH J	1100	138	Yellow Skips
CTH J	1070	669	Solid Yellow EB/Skips WB
CTH J	2410	2410	DBL Yellow
CTH J	1230	769	Solid Yellow SB/Skips NB
CTH J	1870	234	Yellow Skips
CTH J	1990	1244	Solid Yellow NB/Skips SB
CTH J	14256	14256	DBL Yellow
CTH J	1030	644	Solid Yellow SB/Skips NB
CTH J	2350	294	Yellow Skips
CTH J	2510	1569	Solid Yellow NB/Skips SB
CTH J	1950	1950	DBL Yellow
CTH J	2620	1638	Solid Yellow SB/Skips NB
CTH J	1600	200	Yellow Skips
CTH J	34540	34540	DBL Yellow
CTH I	15508	15508	DBL Yellow
SUB-TOTALS	98784	87742	
TOTAL	186526		

FIELD OFFICE TYPE B

642.5001 FIELD OFFICE TYPE B	
LOCATION	EACH
STH 13'N'	1
TOTAL	1

SIGNS TYPE II ITEMS

SIGN NO.	LOCATION	SIGN CODE	SIGN SIZE (INCHES) W X H	637.2210 SIGNS TYPE II REFLECTIVE		634.0616 POSTS WOOD 4X6-INCH 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
				H SF	F SF					
1	CTH J	R1-1	36 X 36	7.46	---	1	---	1	1	
3	CTH J	W3-1	36 X 36	---	9.00	1	---	1	1	
4	CTH J	W1-2R	30 X 30	---	6.25	1	---	1	1	
5	CTH J	W1-4L	30 X 30	---	6.25	1	---	1	1	
6	CTH J	W1-4L	30 X 30	---	6.25	1	---	1	1	
8	CTH J	W3-1	36 X 36	---	9.00	1	---	1	1	
9	CTH J	R1-1	36 X 36	7.46	---	1	---	1	1	
10	CTH J	R1-1	36 X 36	7.46	---	1	---	1	1	
12	CTH J	W3-1	36 X 36	---	9.00	1	---	1	1	
15	CTH J	W1-4R	30 X 30	---	6.25	1	---	1	1	
16	CTH J	W13-1	18 X 18	---	2.25	---	---	1	---	"35 M.P.H." below Sign No. 15
17	CTH J	W1-4R	30 X 30	---	6.25	1	---	1	1	
18	CTH J	W13-1	18 X 18	---	2.25	---	---	1	---	"35 M.P.H." below Sign No. 17
19	CTH J	W7-1	30 X 30	---	6.25	1	---	1	1	
20	CTH J	---	---	---	---	---	1	---	---	Move existing sign below Sign No. 19
21	CTH J	W3-1	36 X 36	---	9.00	1	---	1	1	
22	CTH J	R1-1	36 X 36	7.46	---	1	---	1	1	
23	CTH J	W3-1	36 X 36	---	9.00	1	---	1	1	
24	CTH J	R1-1	36 X 36	7.46	---	1	---	1	1	
25	CTH I	R1-1	36 X 36	7.46	---	1	---	1	1	
27	CTH I	W3-1	36 X 36	---	9.00	1	---	1	1	
28	CTH I	W7-1	30 X 30	---	6.25	1	---	1	1	
29	CTH I	---	---	---	---	---	1	---	---	Move existing sign below Sign No. 28
30	CTH I	---	---	---	---	---	1	---	---	Move existing sign above Sign No. 31
31	CTH I	W1-7	48 X 24	---	8.00	1	---	1	1	
32	CTH I	W1-1R	36 X 36	---	9.00	1	---	1	1	
33	CTH I	W13-1	18 X 18	---	2.25	---	---	1	---	"30 M.P.H." below Sign No. 32
34	CTH I	W1-1L	36 X 36	---	9.00	1	---	1	1	
35	CTH I	W13-1	18 X 18	---	2.25	---	---	1	---	"30 M.P.H." below Sign No. 34
36	CTH I	W1-2L	30 X 30	---	6.25	1	---	1	1	
37	CTH I	W1-2R	30 X 30	---	6.25	1	---	1	1	
38	Washington Ave. EB	W1-2L	30 X 30	---	6.25	1	---	1	1	
39	Washington Ave. EB	W1-2R	30 X 30	---	6.25	1	---	1	1	
40	Washington Ave. EB	W11-8	30 X 30	---	6.25	1	---	1	1	
41	---	---	---	---	---	---	1	---	---	Move existing sign below Sign No. 40
42	Washington Ave. WB	W11-8	30 X 30	---	6.25	1	---	1	1	
43	---	---	---	---	---	---	1	---	---	Move existing sign below Sign No. 42
44	Washington Ave. EB	R2-1	24 X 30	5.00	---	1	---	1	1	"25"
45	Washington Ave. WB	R2-1	24 X 30	5.00	---	1	---	1	1	"25"
SUBTOTALS				54.76	170.25	30	5	34	30	

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SIGNS TYPE II ITEMS CONT'D

SIGN NO.	LOCATION	SIGN CODE	SIGN SIZE W X H (INCHES)	REFLECTVE		4X6-INCH 16-FT EACH	MOVING SIGNS TYPE II EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
				H SF	F SF					
46	Washington Ave. EB	S1-1	30 X 30	---	4.69	1	---	---	---	
47	Washington Ave. EB	S16-9P	24 X 12	---	2.00	---	---	---	---	"FINES HIGHER" below school Signs No. 46 Install Signs 46&47 @ this location
48	Washington Ave. EB Ped sign	---	---	---	---	---	---	1	1	
49	Washington Ave. WB	R2-1	24 X 30	5.00	---	1	---	1	1	"25"
51	Washington Ave. WB	S1-1	30 X 30	---	4.69	1	---	---	---	School crossing with down arrow
		S16-7L	24 X 12	---	2.00	---	---	---	---	
52	Washington Ave. EB	S1-1	30 X 30	---	4.69	1	---	---	---	School crossing with down arrow
		S16-7L	24 X 12	---	2.00	---	---	---	---	
53	Washington Ave. EB	S1-1	30 X 30	---	4.69	1	---	1	1	"AHEAD" below Sign No. 53
54	Washington Ave. EB	S16-9P	24 X 12	---	2.00	---	---	---	---	
55	Washington Ave. WB	R2-6P	24 X 18	---	3.00	---	---	---	---	"FINES HIGHER" below school Signs 53&54 Existing sign on same post as Sign No. 53
56	Washington Ave. WB SL 15 sign	---	---	---	---	---	---	1	---	
57	Washington Ave. EB	R1-1	36 X 36	7.46	---	1	---	1	1	
58	CTH J	R1-1	36 X 36	7.46	---	1	---	1	1	
60	CTH J	W1-2R	30 X 30	---	6.25	1	---	1	1	
61	CTH J	W13-1	18 X 18	---	2.25	---	---	1	---	"30 M.P.H." below sign No. 60
62	CTH J	W3-1	36 X 36	---	9.00	1	---	1	1	
63	CTH J	W1-6	48 X 24	---	8.00	1	---	1	1	
64	CTH J	W1-6	48 X 24	---	8.00	---	---	1	---	Install on same post as Sign No. 63
65	CTH J	W1-2L	30 X 30	---	6.25	1	---	1	1	
66	CTH J	W13-1	18 X 18	---	2.25	---	---	1	---	"30 M.P.H." below Sign No. 65
67	CTH J	W1-2L	30 X 30	---	6.25	1	---	1	1	
68	CTH J	W13-1	18 X 18	---	2.25	---	---	1	---	"35 M.P.H." below Sign No. 67
69	CTH J	W1-2R	30 X 30	---	6.25	1	---	1	1	
70	CTH J	W13-1	18 X 18	---	2.25	---	---	1	---	"35 M.P.H." below Sign No. 69
71	CTH J	W1-2L	30 X 30	---	6.25	1	---	1	1	
72	CTH J	W1-2L	30 X 30	---	6.25	1	---	1	1	
73	CTH J	W13-1	18 X 18	---	2.25	---	---	1	---	"40 M.P.H." below Sign No. 72
74	CTH J	W1-2R	30 X 30	---	6.25	1	---	1	1	
75	CTH J	W13-1	18 X 18	---	2.25	---	---	1	---	"40 M.P.H." below Sign No. 74
76	CTH J	W1-2L	30 X 30	---	6.25	1	---	1	1	
77	CTH J	W13-1	18 X 18	---	2.25	---	---	1	---	"40 M.P.H." below Sign No. 76
78	CTH J	W1-2R	30 X 30	---	6.25	1	---	1	1	
79	CTH J	W13-1	18 X 18	---	2.25	---	---	1	---	"40 M.P.H." below Sign No. 78
80	CTH J	W1-4R	30 X 30	---	6.25	1	---	1	1	
81	CTH J	W13-1	18 X 18	---	2.25	---	---	1	---	"40 M.P.H." below Sign No. 80
82	CTH J	W1-4R	30 X 30	---	6.25	1	---	1	1	
83	CTH J	W13-1	18 X 18	---	2.25	---	---	1	---	"40 M.P.H." below Sign No. 82
SUBTOTALS				19.92	149.01	20	0	30	18	
TOTALS				74.68	319.26	50	5	64	48	

CONSTRUCTION STAKING STORM SEWER

650.4000
CONSTRUCTION
STAKING STORM
SEWER

STATION	LOCATION	EACH
591+40	STH 13 'N'	1
591+59	STH 13 'N'	1
591+67	STH 13 'N'	1
TOTAL		3

SAWING ITEMS

690.0150 690.0250
SAWING SAWING
ASPHALT CONCRETE

STATION	LOCATION	LF	LF
77+46	STH 13 'N'	34	-
78+24	STH 13 'N'	34	-
111+80	STH 13 'N'	34	-
111+88	STH 13 'N'	34	-
174+02	STH 13 'N'	290	-
207+39	STH 13 'N'	34	-
209+47	STH 13 'N'	34	-
304+08	STH 13 'N'	34	-
305+44	STH 13 'N'	34	-
312+44	STH 13 'N'	38	-
312+67	STH 13 'N'	51	-
378+74	STH 13 'N'	37	3
380+06	STH 13 'N'	37	3
386+95	STH 13 'N'	-	3
387+05	STH 13 'N'	-	3
401+56	STH 13 'N'	36	-
409+95	STH 13 'N'	-	3
410+05	STH 13 'N'	-	3
419+41	STH 13 'N'	36	-
419+67	STH 13 'N'	36	-
459+05	STH 13 'N'	36	-
459+37	STH 13 'N'	35	-
482+98	STH 13 'N'	35	-
483+50	STH 13 'N'	35	-
485+30	STH 13 'N'	38	-
485+90	STH 13 'N'	38	-
488+22	STH 13 'N'	42	-
488+54	STH 13 'N'	42	-
568+16	STH 13 'N'	34	-
569+04	STH 13 'N'	34	-
584+96	STH 13 'N'	35	-
586+79	STH 13 'N'	34	-
590+88	STH 13 'N'	34	-
592+10	STH 13 'N'	34	-
TOTALS		1339	18

CONSTRUCTION STAKING PIPE CULVERTS

650.6000
CONSTRUCTION
STAKING PIPE
CULVERTS

STATION	LOCATION	EACH
77+85	STH 13 'N'	1
111+80	STH 13 'N'	1
174+02	STH 13 'N'	1
208+34	STH 13 'N'	1
208+49	STH 13 'N'	1
304+76	STH 13 'N'	1
312+56	STH 13 'N'	1
379+40	STH 13 'N'	1
401+23	STH 13 'N'	1
419+54	STH 13 'N'	1
459+21	STH 13 'N'	1
461+00	STH 13 'N'	1
483+23	STH 13 'N'	1
485+64	STH 13 'N'	1
488+39	STH 13 'N'	1
568+56	STH 13 'N'	1
568+64	STH 13 'N'	1
585+88	STH 13 'N'	1
TOTAL		18

REGRADE DITCH

SPV.0090.03
REGRADE DITCH

STATION - STATION	LOCATION	LF
77+35 - 78+35	RT STH 13 'N'	100
77+35 - 78+35	LT STH 13 'N'	100
458+00 - 459+80	RT STH 13 'N'	180
TOTAL		380

TEMPORARY WATER PASSAGE ITEMS

611.8120.S SPV.0060.02
COVER PLATES TEMPORARY WATER
TEMPORARY PASSAGE

STATION	LOCATION	EACH	EACH
379+26	STH 13 'N' RT	1	1
TOTALS		1	1

CONSTRUCTION STAKING ROADWAY ITEMS

650.4500 650.5000 650.9920
CONSTRUCTION CONSTRUCTION CONSTRUCTION
STAKING STAKING STAKING SLOPE
SUBGRADE BASE STAKES

STATION - STATION	LOCATION	LF	LF	LF	COMMENT
205+68 - 211+18	'N' RT	550	550	550	TEMPORARY WIDENING
206+59 - 210+26	'N' LT	367	367	367	TEMPORARY WIDENING
303+08 - 306+44	'N' RT	336	336	336	TEMPORARY WIDENING
376+53 - 382+04	'N' RT	551	551	551	TEMPORARY WIDENING
398+96 - 403+52	'N' RT	456	456	456	TEMPORARY WIDENING
458+03 - 462+00	'N' RT	397	397	397	TEMPORARY WIDENING
481+76 - 484+68	'N' LT	292	292	292	TEMPORARY WIDENING
205+75 - 211+00	'N' RT	-	-	525	TEMP. WIDENING REMOVAL
206+75 - 210+00	'N' LT	-	-	325	TEMP. WIDENING REMOVAL
303+50 - 306+00	'N' RT	-	-	250	TEMP. WIDENING REMOVAL
376+70 - 381+75	'N' RT	-	-	505	TEMP. WIDENING REMOVAL
399+25 - 403+25	'N' RT	-	-	400	TEMP. WIDENING REMOVAL
458+25 - 461+75	'N' RT	-	-	350	TEMP. WIDENING REMOVAL
482+23 - 484+30	'N' LT	-	-	207	TEMP. WIDENING REMOVAL
315+75 - 319+43	'N' LT	-	-	368	SLOPE FLATTENING
419+00 - 419+80	'N' RT	-	-	80	SLOPE FLATTENING
457+50 - 459+75	'N' LT	-	-	225	SLOPE FLATTENING
482+75 - 483+50	'N' RT	-	-	75	SLOPE FLATTENING
568+60 - 569+10	'N' RT	-	-	50	SLOPE FLATTENING
594+30 - 595+40	'N' RT	-	-	110	SLOPE FLATTENING
594+50 - 595+30	'N' LT	-	-	80	SLOPE FLATTENING
77+46 - 78+24	'N' -	78	78	-	PIPE CULVERT REPLACEMENT
111+80 - 111+88	'N' -	8	8	-	PIPE CULVERT REPLACEMENT
173+35 - 174+68	'N' -	133	133	-	PIPE CULVERT REPLACEMENT
207+39 - 209+47	'N' -	208	208	-	PIPE CULVERT REPLACEMENT
304+08 - 305+44	'N' -	84	84	-	PIPE CULVERT REPLACEMENT
312+51 - 312+61	'N' -	10	10	-	PIPE CULVERT REPLACEMENT
379+31 - 379+49	'N' -	18	18	-	PIPE CULVERT REPLACEMENT
401+14 - 401+32	'N' -	18	18	-	PIPE CULVERT REPLACEMENT
419+50 - 419+58	'N' -	8	8	-	PIPE CULVERT REPLACEMENT
459+16 - 459+26	'N' -	10	10	-	PIPE CULVERT REPLACEMENT
460+96 - 461+04	'N' -	8	8	-	PIPE CULVERT REPLACEMENT
483+16 - 483+30	'N' -	14	14	-	PIPE CULVERT REPLACEMENT
485+54 - 485+66	'N' -	50	50	-	PIPE CULVERT REPLACEMENT
488+33 - 488+45	'N' -	12	12	-	PIPE CULVERT REPLACEMENT
568+49 - 568+71	'N' -	100	100	-	PIPE CULVERT REPLACEMENT
585+72 - 586+04	'N' -	32	32	-	PIPE CULVERT REPLACEMENT
591+37 - 591+61	'N' -	24	24	-	PIPE CULVERT REPLACEMENT
TOTALS		3764	3764	6499	

COFFERDAMS SPECIAL

SPV.0060.03
COFFERDAMS
SPECIAL

STATION	LOCATION	EACH
208+37	STH 13 'N' LT	1
208+49	STH 13 'N' RT	1
312+56	STH 13 'N' RT	1
315+23	STH 13 'N' LT&RT	2
317+71	STH 13 'N' LT	1
317+85	STH 13 'N' RT	1
488+39	STH 13 'N' LT	1
TOTAL		8

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL

650.9910.01
CONSTRUCTION STAKING SUPPLEMENTAL CONTROL
8160-04-64

LOCATION	EACH
STH 13 'N'	1
TOTAL	1

GRADING, SHAPING AND FINISHING TEMPORARY WIDENING

STATION - STATION	LOCATION		GRADING, SHAPING AND FINISHING TEMPORARY WIDENING	EXCAVATION COMMON*	BORROW 1.25*	SALVAGED TOPSOIL*	TEMPORARY SEED*	MULCH*	628.6505 SOIL STABILIZER TYPE A ACRE
			LS	CY	CY	SY	LB	SY	
Item No. SPV.0105.01. STA. 208+34									
206+59 - 210+26	STH 13	LT		56	48	172	10	376	0.1
205+68 - 211+18	STH 13	RT	1	111	174	404	19	710	0.2
	LOCATION TOTAL		1	167	222	576	29	1086	0.3
Item No. SPV.0105.02. STA. 304+76									
303+08 - 306+44	STH 13	RT	1	63	48	268	12.3	455	0.1
	LOCATION TOTAL		1	63	48	268	12.3	455	0.1
Item No. SPV.0105.03. STA. 379+40									
376+53 - 382+04	STH 13	RT	1	79	563	613	16.6	613	0.2
	LOCATION TOTAL		1	79	563	613	16.6	613	0.2
Item No. SPV.0105.04. STA. 401+23									
398+96 - 403+52	STH 13	RT	1	65	404	604	23.2	857	0.2
	LOCATION TOTAL		1	65	404	604	23	857	0.2
Item No. SPV.0105.05. STA. 459+21									
458+03 - 462+00	STH 13	RT	1	81	33	189	8.1	300	0.1
	LOCATION TOTAL		1	81	33	189	8.1	300	0.1
Item No. SPV.0105.06. STA. 483+23									
481+78 - 484+68	STH 13	LT	1	31	94	302	12.6	463	0.1
	LOCATION TOTAL		1	31	94	302	12.6	463	0.1
	TOTALS			486	1364	2552	102	3774	1.0

* ITEMS AND QUANTITIES LISTED FOR BID INFORMATION ONLY

GRADING, SHAPING, FINISHING TEMPORARY WIDENING REMOVAL

STATION - STATION	LOCATION		SPV.0105 REMOVE TEMPORARY WIDENING	EXCAVATION COMMON*	BORROW 1.25*	TOPSOIL*	FERTILIZER TYPE B	SEED #10	TEMPORARY SEED*	628.2004 # EROSION MAT CLASS I	628.2008 # EROSION MAT URBAN CLASS I
			LS	CY	CY	SY	CWT	LB	LB	SY	SY
Item No. SPV.0105.07. STA. 208+34'N'											
206+75 - 210+00	STH 13	LT		15	19	337	0.33	7.0	14.0	-	337
205+75 - 211+00	STH 13	RT	1	243	10	1163	0.92	19.7	39.3	-	1163
	LOCATION TOTAL		1	258	29	1500	1.25	26.7	53.3	0	1500
Item No. SPV.0105.08. STA. 304+76'N'											
303+50 - 306+00	STH 13	RT	1	23	19	486	0.39	8.5	16.9	-	486
	LOCATION TOTAL		1	23	19	486	0.39	8.5	16.9	0	486
Item No. SPV.0105.09. STA. 379+40'N'											
376+70 - 381+75	STH 13	RT	1	517	12	1042	0.83	17.9	35.7	1042	-
	LOCATION TOTAL		1	517	12	1042	0.83	17.9	35.7	1042	0
Item No. SPV.0105.10. STA. 401+23'N'											
399+25 - 403+25	STH 13	RT	1	295	85	1180	0.88	19.0	37.9	1180	-
	LOCATION TOTAL		1	295	85	1180	0.88	19.0	37.9	1180	0
Item No. SPV.0105.11. STA. 459+21'N'											
458+25 - 461+75	STH 13	RT	1	13	32	311	0.32	6.9	13.7	311	-
	LOCATION TOTAL		1	13	32	311	0.32	6.9	13.7	311	0
Item No. SPV.0105.12. STA. 483+23'N'											
482+23 - 484+30	STH 13	LT	1	64	4	370	0.31	6.6	13.1	370	-
	LOCATION TOTAL		1	64	4	370	0.31	6.6	13.1	370	0
	TOTALS			1170	181	4889	3.98	85.6	170.6	2903	1986

* ITEMS AND QUANTITIES LISTED FOR BID INFORMATION ONLY
QUANTITIES LISTED ELSEWHERE

SLOPE FLATTENING GRADING, SHAPING AND FINISHING

STATION	- STATION	LOCATION	LS	SPV.0105				SEED #10	TEMPORARY SEED*	628.2004 #		628.2008 #	
				SLOPE FLATTENING GRADING, SHAPING AND FINISHING	EXCAVATION COMMON*	BORROW 1.25*	TOPSOIL*			FERTILIZER TYPE B	EROSION MAT CLASS I	EROSION MAT CLASS I	
				CY	CY	SY	CWT	LB	LB	TYPE B SY	TYPE B SY		
Item No. SPV.0105.13. STA. 315+75 - 319+43'N'													
315+75	- 319+43	STH 13	LT	1	4	429	996	0.76	16.2	32.4	-	996	
LOCATION TOTAL				1	4	429	996	0.76	16.2	32.4	0	996	
Item No. SPV.0105.14. 419+00 - 419+80'N'													
419+00	- 419+80	STH 13	RT	1	2	21	156	0.13	2.8	5.5	156	-	
LOCATION TOTAL				1	2	21	156	0.13	2.8	5.5	156	0	
Item No. SPV.0105.15. STA. 457+50 - 459+75'N'													
457+50	- 459+75	STH 13	LT	1	3	127	380	0.32	6.9	13.7	380	-	
LOCATION TOTAL				1	3	127	380	0.32	6.9	13.7	380	0	
Item No. SPV.0105.16. STA. 482+75 - 483+50'N'													
482+75	- 483+50	STH 13	RT	1	0	35	143	0.12	2.5	5.0	143	-	
LOCATION TOTAL				1	0	35	143	0.12	2.5	5.0	143	0	
Item No. SPV.0105.17. STA. 568+60 - 569+10'N'													
568+60	- 569+10	STH 13	RT	1	0	68	143	0.11	2.4	4.7	143	-	
LOCATION TOTAL				1	0	68	143	0.11	2.4	4.7	143	0	
Item No. SPV.0105.18. STA. 594+30'N' - 595+40'N'													
594+30	- 595+40	STH 13	RT	1	25	86	415	0.30	6.5	12.9	415	-	
594+50	- 595+30	STH 13	LT		2	54	169	0.13	2.9	5.8	169	-	
LOCATION TOTAL				1	27	140	584	0.43	9.4	18.7	584	0	
TOTALS					36	820	2402	1.87	40.2	80.0	1406	996	

* ITEMS AND QUANTITIES LISTED FOR BID INFORMATION ONLY
QUANTITIES LISTED ELSEWHERE

UTILITY LINE OPENING

STATION	LOCATION	SPV.0060.04 UTILITY LINE OPENING (ULO) EACH
379+40	STH 13 'N'	1
401+23	STH 13 'N'	1
483+23	STH 13 'N'	1
485+64	STH 13 'N'	1
488+39	STH 13 'N'	1
568+56	STH 13 'N'	1
585+88	STH 13 'N'	1
591+49	STH 13 'N'	1
594+78	STH 13 'N'	1
TOTAL		9

INSTALL CITY FURNISHED POLYSTYRENE BOARD

STATION	LOCATION	SPV.0180.01 INSTALL CITY FURNISHED POLYSTYRENE BOARD SY	COMMENTS
UNDISTRIBUTED	STH 13 'N'	50	FOR FORCEMAIN
TOTAL		50	

TRANSPORTATION PROJECT PLAT NO: 8160-04-24-4.01

PART OF LOTS 3 AND 4, BLOCK 7, NEILL & WINGS ADDITION TO THE CITY OF WASHBURN, SECTION 6, T 48 N, R 4 W, CITY OF WASHBURN, BAYFIELD COUNTY, WISCONSIN.

RELOCATION ORDER STH 13 ASHLAND - BAYFIELD (SUPERIOR AVENUE TO 7TH STREET)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02(3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

- THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
- THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

POINT TABLE - STATION OFFSET & COORDS.				
POINT#	STATION	OFFSET	Y (N)	X (E)
STH 13				
901	343+50.00	0.00'	487833.22	810462.75
902	343+50.00	-53.00'	487886.20	810464.02
918	343+50.00	60.00'	487773.23	810461.32
917	344+52.32	60.00'	487770.79	810563.61
916	344+52.60	100.00'	487730.80	810562.93
904	344+91.42	-68.00'	487897.82	810605.75
903	344+91.52	-53.00'	487882.82	810605.50
101	345+05.00	100.00'	487729.54	810615.32
102	345+05.00	135.00'	487694.55	810614.48
103	345+55.00	135.00'	487693.36	810664.47
104	345+55.00	100.00'	487728.35	810665.30
905	345+71.41	-68.00'	487895.91	810685.72
906	345+71.51	-53.00'	487880.91	810685.47
907	346+11.52	-53.00'	487879.96	810725.47
908	346+11.67	-33.00'	487859.96	810725.13
914	346+12.38	68.00'	487758.97	810723.43
915	346+12.60	100.00'	487726.98	810722.89
912	346+52.13	33.00'	487793.01	810764.01
913	346+52.38	68.00'	487758.02	810763.42
909	347+50.00	-33.00'	487856.66	810863.42
910	347+50.00	0.00'	487823.67	810862.64
911	347+50.00	33.00'	487790.68	810861.85

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED			PLE (S, F.) REQUIRED
			NEW	EXISTING	TOTAL	
1	MARCELLINE J. FROSTMAN, LE	PLE	0.00	N/A	N/A	(1750)

PLSS TIE TABLE			
FROM	TO	BEARING	DISTANCE
QTR623	SEC625	S 89°36'52" E	2633.77'
QTR623	QTR603	S 00°42'05" E	5239.00'
QTR623	TIE100	S 00°42'05" E	1061.03'
TIE100	901	S 88°37'54" E	956.13'

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN BAYFIELD COUNTY, WISCONSIN AT 1:30 PM ON JANUARY 11, 2016... AS DOCUMENT #2016R-561955, AND FILED IN VOL. 1, T.P.P. PAGE 21....

PATRICIA A. OLSON
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8160-04-24-4.01
AMENDMENT NO:

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, BAYFIELD COUNTY, NAD83 (1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (3/4" O.D. X 24" IRON PIPE WITH CAP) 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".

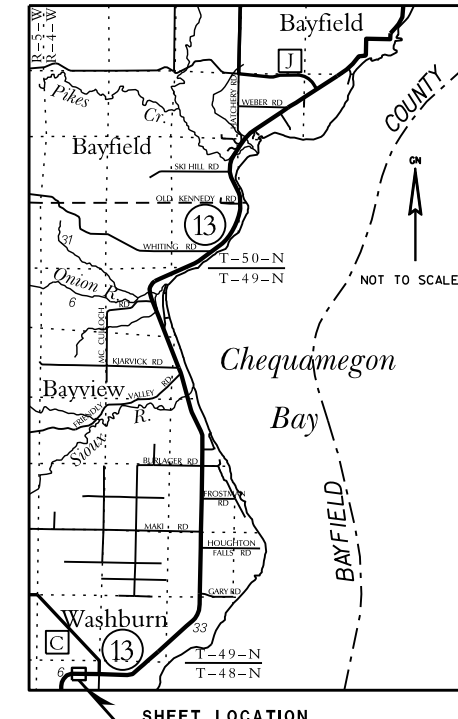
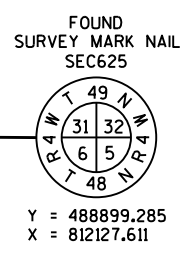
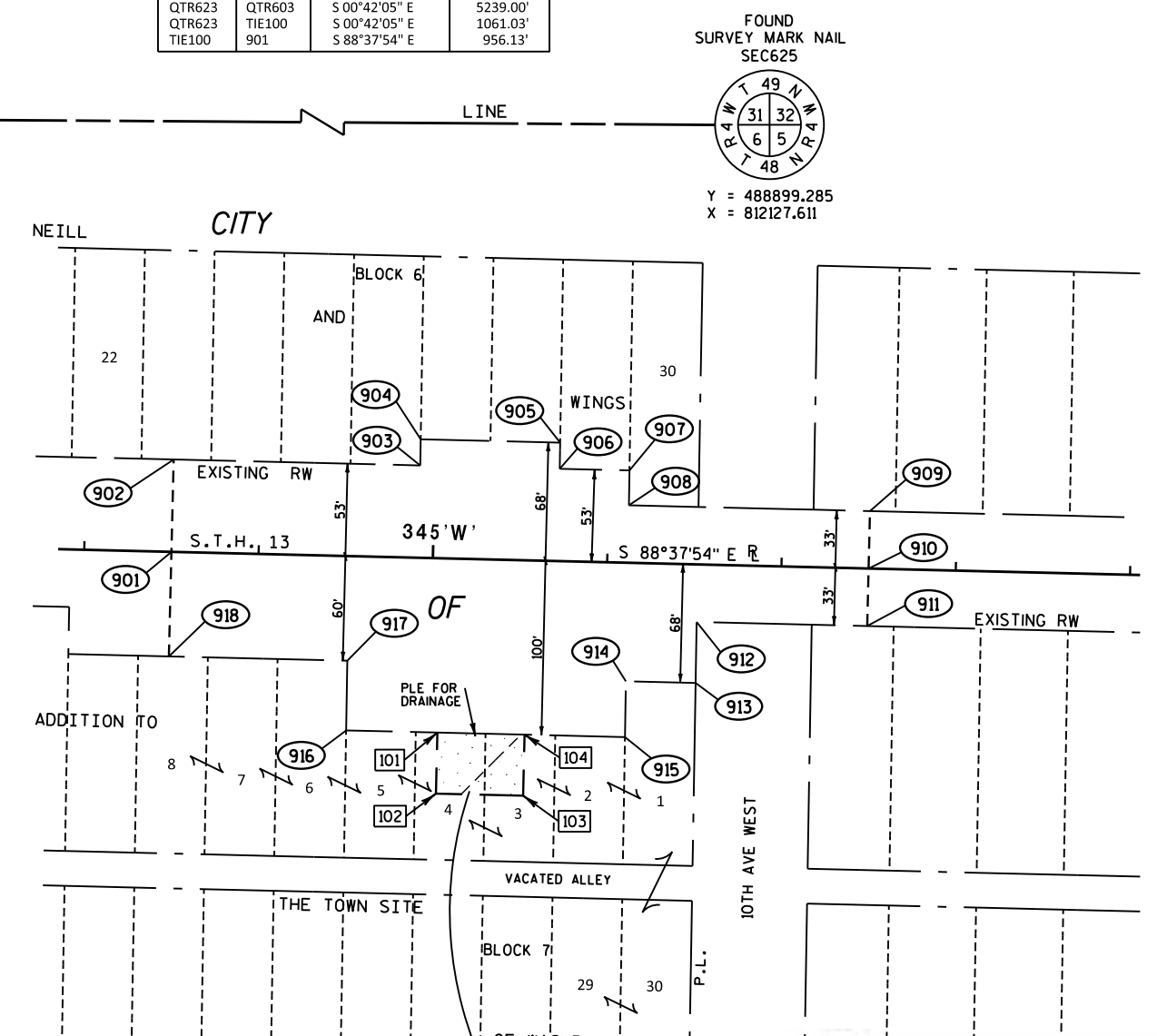
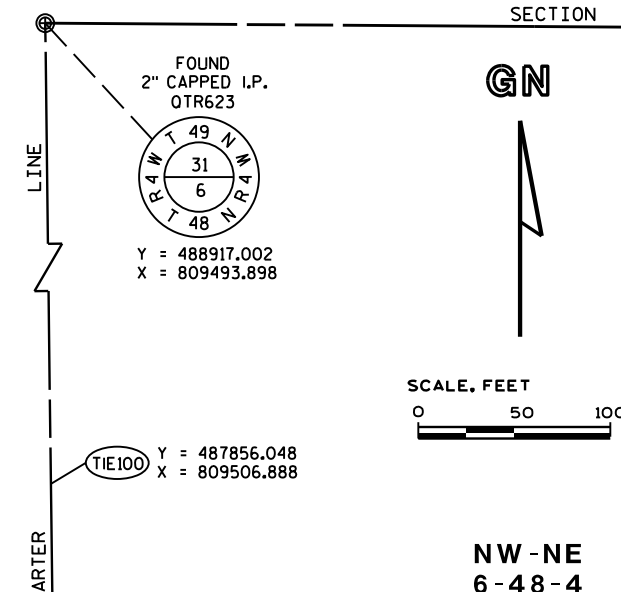
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: RIGHT-OF-WAY FOR STH 13 ESTABLISHED FROM PREVIOUS RW PLAT 8161-00-21.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

DIMENSIONING FOR EXISTING RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO A NEW REFERENCE LINE.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGIONAL OFFICE.



COURSE TABLE			
FROM	TO	BEARING	DISTANCE
901	902	N 01°22'06" E	53.00'
902	903	S 88°37'54" E	141.52'
903	904	N 00°58'16" E	15.00'
904	905	S 88°37'54" E	79.99'
905	906	S 00°57'14" W	15.00'
906	907	S 88°37'54" E	40.01'
907	908	S 00°57'52" E	20.00'
908	909	S 88°37'54" E	138.33'
909	910	S 01°22'06" W	33.00'
910	911	S 01°22'06" W	33.00'
911	912	N 88°37'54" W	97.87'
912	913	S 00°57'33" W	35.00'
913	914	N 88°37'54" W	40.00'
914	915	S 00°58'28" W	32.00'
915	916	N 88°37'54" W	160.00'
916	917	N 00°58'02" E	40.00'
917	918	N 88°37'54" W	102.32'
918	901	N 01°22'06" E	60.00'

UTILITY EASEMENT INFORMATION	
PARCEL 1	NO UTILITY INFORMATION FOUND

CONVENTIONAL ABBREVIATIONS		
ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE
ACCESS RIGHTS	AR	RELEASE OF RIGHTS
ACRES	AC.	REMAINING
AND OTHERS	ET AL.	RIGHT-OF-WAY
CENTERLINE	C./L.	SECTION
CERTIFIED SURVEY MAP	CSM	STATION
CORNER	COR.	TEMPORARY LIMITED EASEMENT
DOCUMENT	DOC.	VOLUME
EASEMENT	EASE.	
HIGHWAY EASEMENT	H.E.	LONG CHORD
LAND CONTRACT	L.C.	LONG CHORD BEARING
MONUMENT	MON.	RADIUS
PAGE	P.	DEGREE OF CURVE
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA
PROPERTY LINE	P.L.	LENGTH OF CURVE
RECORDED AS	(100')	TANGENT

CONVENTIONAL SYMBOLS	
FOUND IRON PIPE/PIN	(1" UNLESS NOTED)
R/W MONUMENT	• (SET)
R/W STANDARD	▲ (SET)
SIGN	ISIGN
SECTION CORNER MONUMENT	●
SECTION CORNER SYMBOL	⊙
FEE (HATCH VARIES)	▨
TEMPORARY LIMITED EASEMENT	▨
PERMANENT LIMITED EASEMENT	▨
R/W BOUNDARY POINT	○
PARCEL NUMBER	102
UTILITY INTEREST	⑩
SIGN NUMBER (OFF PREMISE)	21-1
BUILDING	■

CONVENTIONAL UTILITY SYMBOLS	
WATER	— W —
GAS	— G —
TELEPHONE	— T —
OVERHEAD	— OH —
TRANSMISSION LINES	— TL —
ELECTRIC	— E —
CABLE TELEVISION	— TV —
FIBER OPTIC	— FO —
SANITARY SEWER	— SAN —
STORM SEWER	— SS —
NON COMPENSABLE	—
POWER POLE	⊕
TELEPHONE POLE	⊙
TELEPHONE PEDESTAL	⊗

TAX ID 32885
DOC. 201R-540849
V. 1070, P. 719

N.W.B.E.
NORTHWESTERN WISCONSIN-BASED ENGINEERS, INC.

I, ROY E. WILLIAMS, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 8160-04-24-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

REW SURVEYING, LLC DATE JANUARY 5, 2016

ROY E. WILLIAMS REGISTRATION NO. S1354
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
DATE

MICHAEL PILLER

TRANSPORTATION PROJECT PLAT NO: 8160-04-24-4.02

PART OF GOV'T LOT 2, SECTION 16, T 49 N, R 4 W, TOWN OF BAYVIEW, BAYFIELD COUNTY, WISCONSIN.

RELOCATION ORDER STH 13 ASHLAND - BAYFIELD (SUPERIOR AVENUE TO 7TH STREET)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02(3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
 1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
 2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED		OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.				
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED			PLE (S.F.) REQUIRED
			NEW	EXISTING	TOTAL	
2	MICHAEL C. JACKSON	PLE	0.00	N/A	N/A	(1000)

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, BAYFIELD COUNTY, NAD83 (1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (3/4" O.D. X 24" IRON PIPE WITH CAP) 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".

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: RIGHT-OF-WAY FOR STH 13 ESTABLISHED FROM PREVIOUS RW PLAT 8161-1-21.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

DIMENSIONING FOR EXISTING RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO A NEW REFERENCE LINE.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGIONAL OFFICE.

CONVENTIONAL ABBREVIATIONS

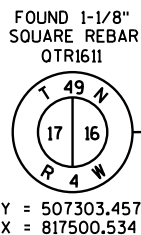
ACCESS POINT / DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET AL.	RIGHT-OF-WAY	RW
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP CORNER	CSM	STATION	STA.
DOCUMENT	DOC.	TEMPORARY LIMITED EASEMENT	TLE
EASEMENT	EASE.	VOLUME	V.
HIGHWAY EASEMENT	H.E.	CURVE DATA	
LAND CONTRACT	L.C.	LONG CHORD	LC
MONUMENT	MON.	LONG CHORD BEARING	LCB
PAGE	P.	RADIUS	R
PERMANENT LIMITED EASEMENT	PLE	DEGREE OF CURVE	D
PROPERTY LINE	P.L.	CENTRAL ANGLE OR DELTA	DELTA
RECORDED AS	(100')	LENGTH OF CURVE	L
		TANGENT	T

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	(IF UNLESS NOTED)	PROPOSED R/W LINE	---
R/W MONUMENT	• (SET)	EXISTING H.E. LINE	---
R/W STANDARD	▲ (SET)	PROPERTY LINE	---
SIGN	ISIGN	LOT & TIE LINES	---
SECTION CORNER MONUMENT	●	SLOPE INTERCEPTS	---
SECTION CORNER SYMBOL	⊙	CORPORATE LIMITS	---
FEE (HATCH VARIES)	▨	RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	---
TEMPORARY LIMITED EASEMENT	▨	RESTRICTED ACCESS (BY ACQUISITION)	---
PERMANENT LIMITED EASEMENT	▨	NO ACCESS (BY STATUTORY AUTHORITY)	---
R/W BOUNDARY POINT	⊙	SECTION LINE	---
PARCEL NUMBER	102	QUARTER LINE	---
UTILITY INTEREST	40	SIXTEENTH LINE	---
SIGN NUMBER (OFF PREMISE)	21-1	EXISTING CENTERLINE	---
BUILDING	⊞	PROPOSED REFERENCE LINE	---
		PARALLEL OFFSET	---

CONVENTIONAL UTILITY SYMBOLS

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



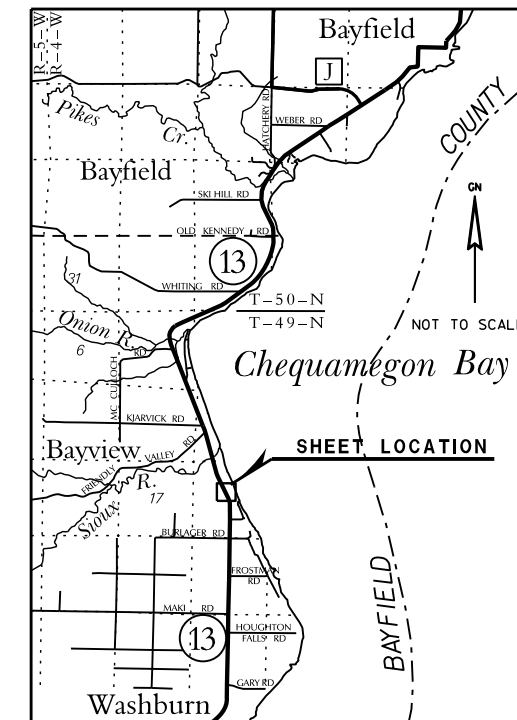
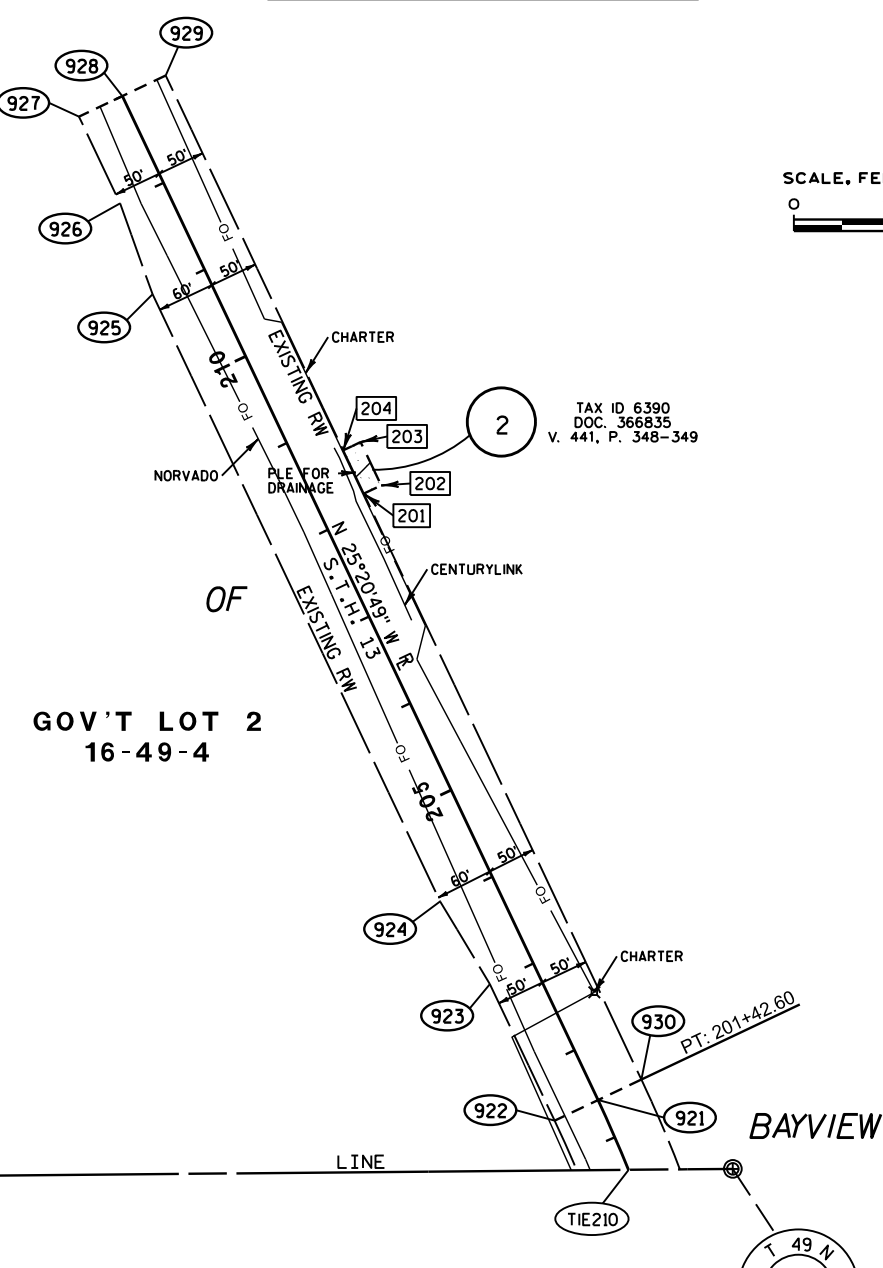
PLSS TIE TABLE			
FROM	TO	BEARING	DISTANCE
QTR1611	CEN1613	N 89°28'50" E	2617.15'
QTR1611	TIE210	N 89°28'50" E	2508.48'
TIE210	921	N 23°39'33" W	79.35'



ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN BAYFIELD COUNTY, WISCONSIN AT 1:30 PM ON JANUARY 11, 2016... AS DOCUMENT # 2016R-561956 AND FILED IN VOL. 1, T.P.P. PAGE 22....

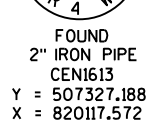
..... PATRICIA A. OLSON
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8160-04-24-4.02
AMENDMENT NO:



COURSE TABLE			
FROM	TO	BEARING	DISTANCE
921	922	S 64°39'16" W	50.00'
922	923	N 25°20'49" W	157.40'
923	924	N 31°03'27" W	100.50'
924	925	N 25°20'49" W	700.00'
925	926	N 19°38'11" W	100.50'
926	927	N 25°20'49" W	100.00'
927	928	N 64°39'11" E	50.00'
928	929	N 64°39'11" E	50.00'
929	930	S 25°20'49" E	1157.40'
930	921	S 64°39'16" W	50.00'

POINT TABLE - STATION OFFSET & COORDS.				
POINT#	STATION	OFFSET	Y (N)	X (E)
STH 13				
TIE210	200+63.24	0.00'	507326.20	820008.91
922	201+42.60	-50.00'	507377.48	819931.88
921	201+42.60	0.00'	507398.88	819977.07
930	201+42.60	50.00'	507420.29	820022.26
923	203+00.00	-50.00'	507519.73	819864.50
924	204+00.00	-60.00'	507605.82	819812.65
201	208+18.00	50.00'	508030.67	819733.12
202	208+18.00	70.00'	508039.23	819751.19
203	208+68.00	70.00'	508084.42	819729.79
204	208+68.00	50.00'	508075.86	819711.71
925	211+00.00	-60.00'	508238.43	819512.98
926	212+00.00	-50.00'	508333.08	819479.21
927	213+00.00	-50.00'	508423.46	819436.40
928	213+00.00	0.00'	508444.86	819481.59
929	213+00.00	50.00'	508466.27	819526.78



I, ROY E. WILLIAMS, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 8160-04-24-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

REW SURVEYING, LLC DATE JANUARY 5, 2016
 ROY E. WILLIAMS
 ROY E. WILLIAMS REGISTRATION NO. S1354
 THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
 DATE



MICHAEL PILLER

TRANSPORTATION PROJECT PLAT NO: 8160-04-24-4.03

PART OF GOV'T LOT 3, SECTION 5, T 49 N, R 4 W, TOWN OF BAYVIEW,
BAYFIELD COUNTY, WISCONSIN.

RELOCATION ORDER STH 13 ASHLAND - BAYFIELD (SUPERIOR AVENUE TO 7TH STREET)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02(3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED			PLE (S.F.) REQUIRED	TLE (S.F.) REQUIRED
			NEW	EXISTING	TOTAL		
3	NINA MICEVYCH REVOCABLE TRUST	PLE, TLE	0.00	N/A	N/A	(1000)	(550)

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, BAYFIELD COUNTY, NAD83 (1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (3/4" O.D. X 24" IRON PIPE WITH CAP) 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".

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: RIGHT-OF-WAY FOR STH 13 ESTABLISHED FROM PREVIOUS RW PLAT 8161-1-21.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR EXISTING RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO A NEW REFERENCE LINE.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGIONAL OFFICE.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT / DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET AL.	RIGHT-OF-WAY	RW
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP CORNER	CSM	STATION	STA.
DOCUMENT	DOC.	TEMPORARY LIMITED EASEMENT	TLE
EASEMENT	EASE.	VOLUME	V.
HIGHWAY EASEMENT	H.E.	CURVE DATA	
LAND CONTRACT	L.C.	LONG CHORD	LC
MONUMENT	MON.	LONG CHORD BEARING	LCB
PAGE	P.	RADIUS	R
PERMANENT LIMITED EASEMENT	PLE	DEGREE OF CURVE	D
PROPERTY LINE	P.L.	CENTRAL ANGLE OR DELTA	DELTA
RECORDED AS	(100')	LENGTH OF CURVE	L
		TANGENT	T

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	(IF UNLESS NOTED)	PROPOSED R/W LINE	---
R/W MONUMENT	• (SET)	EXISTING H.E. LINE	---
R/W STANDARD	▲ (SET)	PROPERTY LINE	---
SIGN	ISIGN	LOT & TIE LINES	---
SECTION CORNER MONUMENT	•	SLOPE INTERCEPTS	---
SECTION CORNER SYMBOL	(Symbol)	CORPORATE LIMITS	---
FEE (HATCH VARIES)	///	RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	---
TEMPORARY LIMITED EASEMENT	---	RESTRICTED ACCESS (BY ACQUISITION)	---
PERMANENT LIMITED EASEMENT	---	NO ACCESS (BY STATUTORY AUTHORITY)	---
R/W BOUNDARY POINT	(Symbol)	SECTION LINE	---
PARCEL NUMBER	(102)	QUARTER LINE	---
UTILITY INTEREST	(40)	SIXTEENTH LINE	---
SIGN NUMBER (OFF PREMISE)	(21-)	EXISTING CENTERLINE	---
BUILDING	(Symbol)	PROPOSED REFERENCE LINE	---
		PARALLEL OFFSET	---

CONVENTIONAL UTILITY SYMBOLS

WATER	—W—	NON COMPENSABLE	—
GAS	—G—	COMPENSABLE	—
TELEPHONE	—T—	POWER POLE	⊕
OVER-HEAD	—OH—	TELEPHONE POLE	⊕
TRANSMISSION LINES	—E—	TELEPHONE PEDESTAL	⊕
ELECTRIC	—E—		
CABLE TELEVISION	—TV—		
FIBER OPTIC	—FO—		
SANITARY SEWER	—SAN—		
STORM SEWER	—SS—		

FOUND 3/4" IRON PIPE OTR503
Y = 520541.147
X = 814798.305

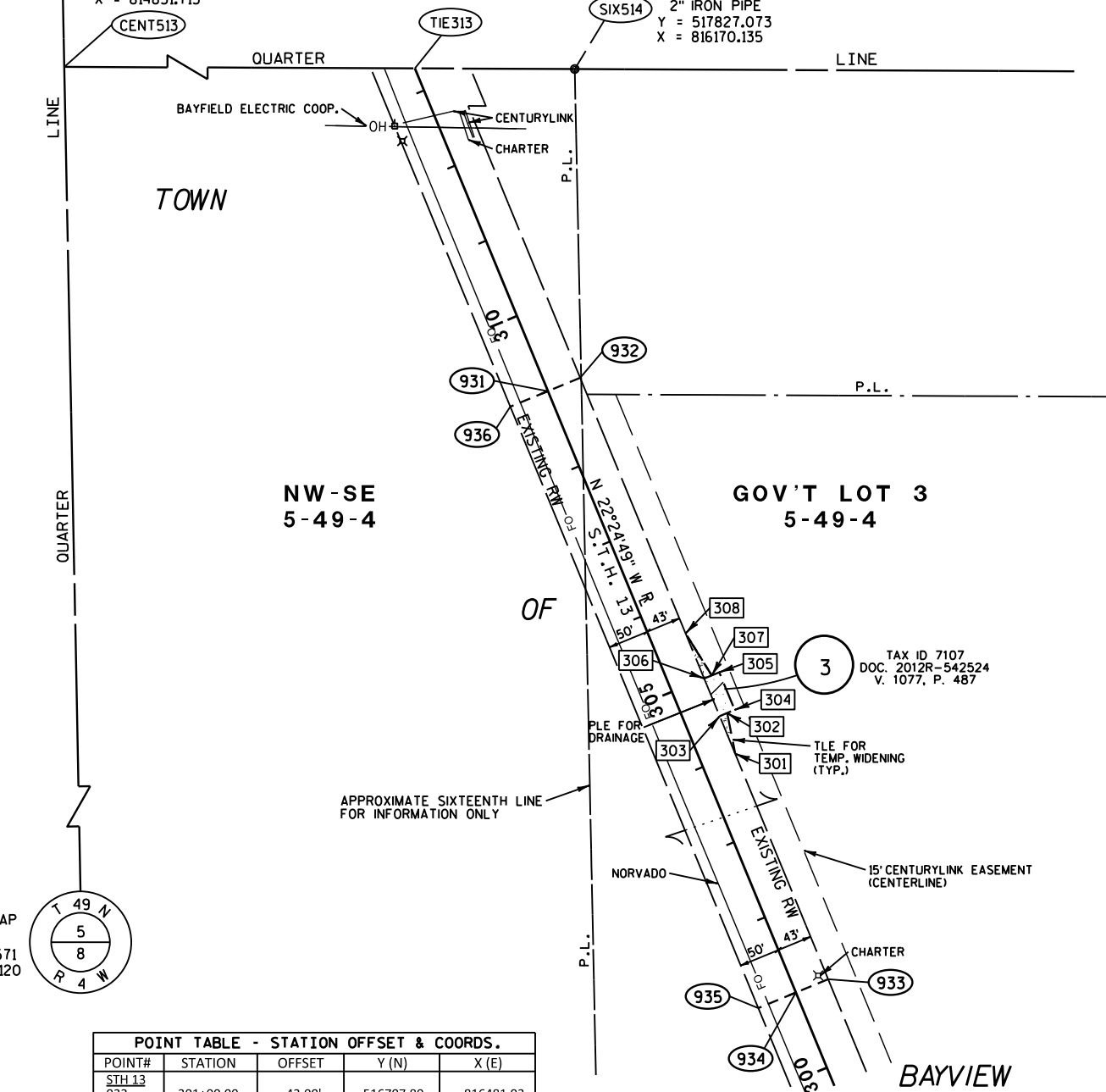
CALCULATED
Y = 517832.940
X = 814851.713

FOUND 2" IRON PIPE
Y = 517827.073
X = 816170.135

FOUND ALUMINUM CAP OTR523
Y = 515175.571
X = 814904.120

PLSS TIE TABLE

FROM	TO	BEARING	DISTANCE
QTR503	QTR523	S 01°07'47" E	5366.62'
QTR503	CENT513	S 01°07'47" E	2708.73'
CENT513	SIX514	S 89°44'42" E	1318.43'
CENT513	TIE313	S 89°44'42" E	1121.71'
TIE313	931	S 22°24'49" E	429.42'



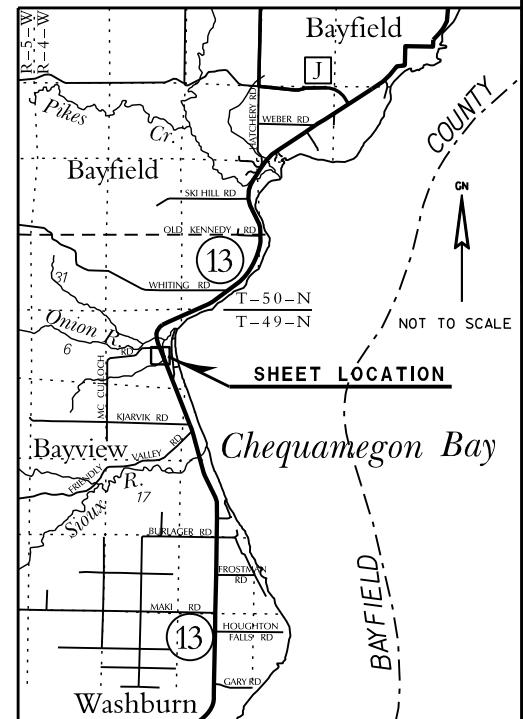
POINT TABLE - STATION OFFSET & COORDS.

POINT#	STATION	OFFSET	Y (N)	X (E)
STH 13				
933	301+00.00	43.00'	516707.80	816481.93
934	301+00.00	0.00'	516691.41	816442.18
935	301+00.00	-50.00'	516672.34	816395.96
301	304+00.00	43.00'	516985.14	816367.54
302	304+50.00	53.00'	517035.17	816357.72
303	304+50.00	43.00'	517031.36	816348.48
304	304+50.00	63.00'	517038.99	816366.97
305	305+00.00	63.00'	517085.21	816347.90
306	305+00.00	43.00'	517077.58	816329.41
307	305+00.00	53.00'	517081.40	816338.66
308	305+60.00	43.00'	517133.05	816306.54
931	309+00.00	0.00'	517430.97	816137.15
932	309+00.00	43.00'	517447.37	816176.90
936	309+00.00	-50.00'	517411.91	816090.92
TIE313	313+29.42	0.00'	517827.95	815973.41



ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN BAYFIELD COUNTY, WISCONSIN AT 1:30 PM ON JANUARY 11, 2016... AS DOCUMENT # 2016R-561957... AND FILED IN VOL. 1, T.P.P. PAGE 23...
PATRICIA A. OLSON
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8160-04-24-4.03
AMENDMENT NO:



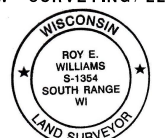
COURSE TABLE

FROM	TO	BEARING	DISTANCE
931	932	N 67°35'11" E	43.00'
932	933	S 22°24'49" E	800.00'
933	934	S 67°35'11" W	43.00'
934	935	S 67°35'11" W	50.00'
935	936	N 22°24'49" W	800.00'
936	931	N 67°35'11" E	50.00'



I, ROY E. WILLIAMS, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 8160-04-24-4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

REW SURVEYING, LLC DATE JANUARY 5, 2016
ROY E. WILLIAMS
ROY E. WILLIAMS REGISTRATION NO. S1354
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
DATE
MICHAEL PILLER



TRANSPORTATION PROJECT PLAT NO: 8160-04-24-4.04

PART OF GOV'T LOT 1, SECTION 5, T 49 N, R 4 W, TOWN OF BAYVIEW, BAYFIELD COUNTY, WISCONSIN.

RELOCATION ORDER STH 13 ASHLAND - BAYFIELD (SUPERIOR AVENUE TO 7TH STREET)

TO PROPERLY ESTABLISH LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02(3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
 1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
 2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN BAYFIELD COUNTY, WISCONSIN AT 1:30 PM ON JANUARY 11, 2016... AS DOCUMENT # 2016R-561958 AND FILED IN VOL. 1 T.P.P. PAGE 24....

PATRICIA A. OLSON
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8160-04-24-4.04
AMENDMENT NO:

SCHEDULE OF LANDS & INTERESTS REQUIRED		OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.				
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED			PLE (S.F.) REQUIRED
			NEW	EXISTING	TOTAL	
4	JAMES K. WILMAN ET AL	PLE	0.00	N/A	N/A	(350)
6	RICHARD A. & JANET KURSCHNER	PLE	0.00	N/A	N/A	(473)

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, BAYFIELD COUNTY, NAD83 (1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (3/4" O.D. X 24" IRON PIPE WITH CAP) 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".

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: RIGHT-OF-WAY FOR STH 13 ESTABLISHED FROM PREVIOUS RW PLAT 8161-1-21.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

DIMENSIONING FOR EXISTING RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO A NEW REFERENCE LINE.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGIONAL OFFICE.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT / DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET AL.	RIGHT-OF-WAY	RW
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP CORNER	CSM	STATION	STA.
DOCUMENT	DOC.	TEMPORARY LIMITED EASEMENT	TLE
EASEMENT	EASE.	VOLUME	V.
HIGHWAY EASEMENT	H.E.	CURVE DATA	
LAND CONTRACT	L.C.	LONG CHORD	LC
MONUMENT	MON.	LONG CHORD BEARING	LCB
PAGE	P.	RADIUS	R
PERMANENT LIMITED EASEMENT	PLE	DEGREE OF CURVE	D
PROPERTY LINE	P.L.	CENTRAL ANGLE OR DELTA	DELTA
RECORDED AS	(100')	LENGTH OF CURVE	L
		TANGENT	T

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	(IF UNLESS NOTED)	PROPOSED R/W LINE	---
R/W MONUMENT	(ISET)	EXISTING H.E. LINE	---
R/W STANDARD	(ISET)	PROPERTY LINE	---
SIGN	(ISET)	LOT & TIE LINES	---
SECTION CORNER MONUMENT	(ISET)	SLOPE INTERCEPTS	---
SECTION CORNER SYMBOL	(ISET)	CORPORATE LIMITS	---
FEE (HATCH VARIES)	(ISET)	RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	---
TEMPORARY LIMITED EASEMENT	(ISET)	RESTRICTED ACCESS (BY ACQUISITION)	---
PERMANENT LIMITED EASEMENT	(ISET)	NO ACCESS (BY STATUTORY AUTHORITY)	---
R/W BOUNDARY POINT	(ISET)	SECTION LINE	---
PARCEL NUMBER	(ISET)	QUARTER LINE	---
UTILITY INTEREST	(ISET)	SIXTEENTH LINE	---
SIGN NUMBER (OFF PREMISE)	(ISET)	EXISTING CENTERLINE	---
BUILDING	(ISET)	PROPOSED REFERENCE LINE	---
		PARALLEL OFFSET	---

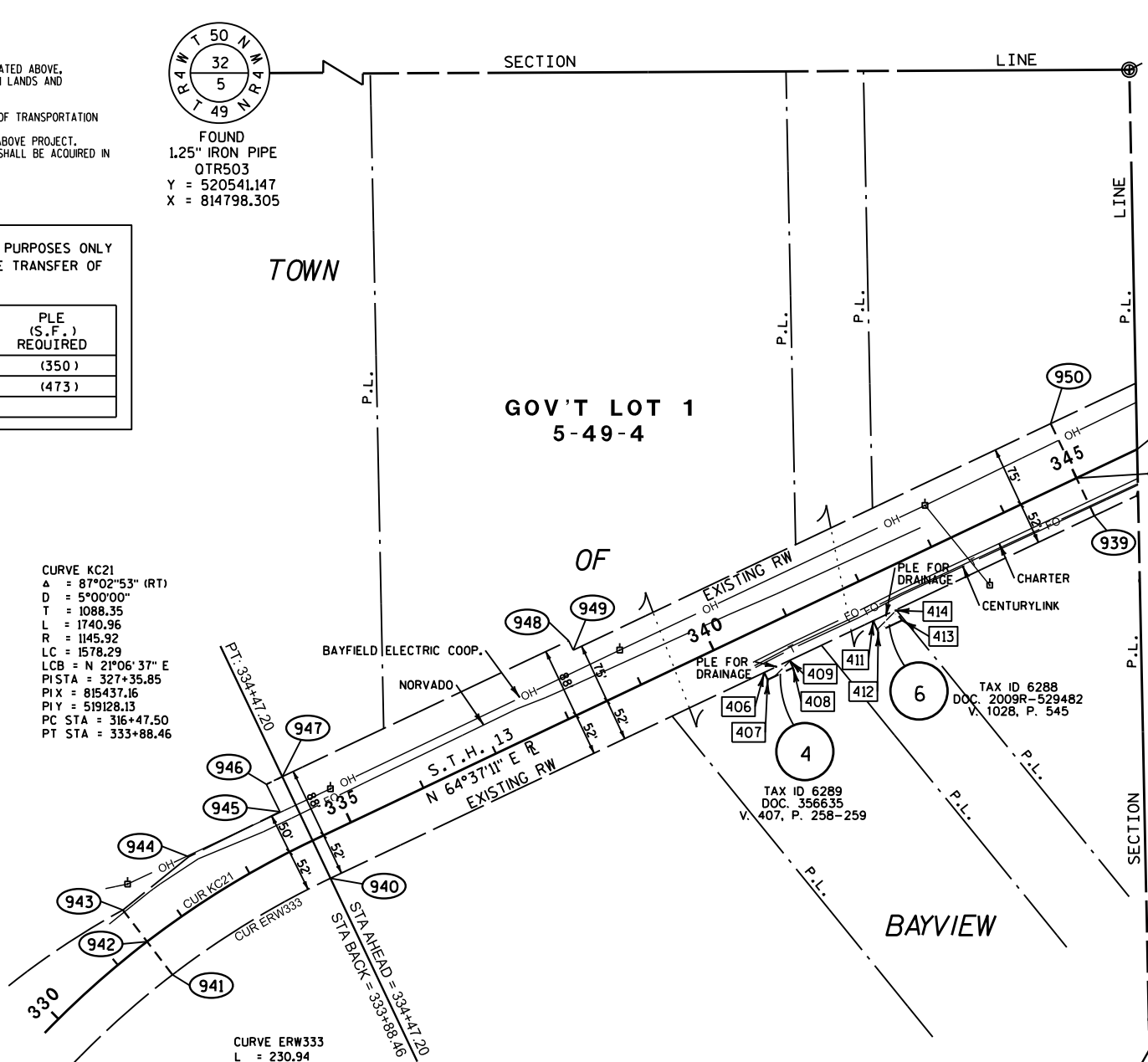
EASEMENT INFORMATION	
PARCEL 6	DOC. 370126 / V.454, P.71&82 (Mineral Rights)

COURSE TABLE			
FROM	TO	BEARING	DISTANCE
938	939	S 25°22'49" E	52.00'
939	940	S 64°37'11" W	1052.80'
CURVE ERW333			
941	942	N 37°27'38" W	52.00'
942	943	N 37°27'38" W	49.61'
943	944	N 51°03'46" E	105.49'
944	945	N 63°44'12" E	126.62'
945	946	N 26°23'19" W	38.00'
946	947	N 64°07'21" E	22.01'
947	948	N 64°37'11" E	394.80'
948	949	S 25°22'49" E	13.00'
949	950	N 64°37'11" E	658.00'
950	938	S 25°22'49" E	75.00'

CONVENTIONAL UTILITY SYMBOLS

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

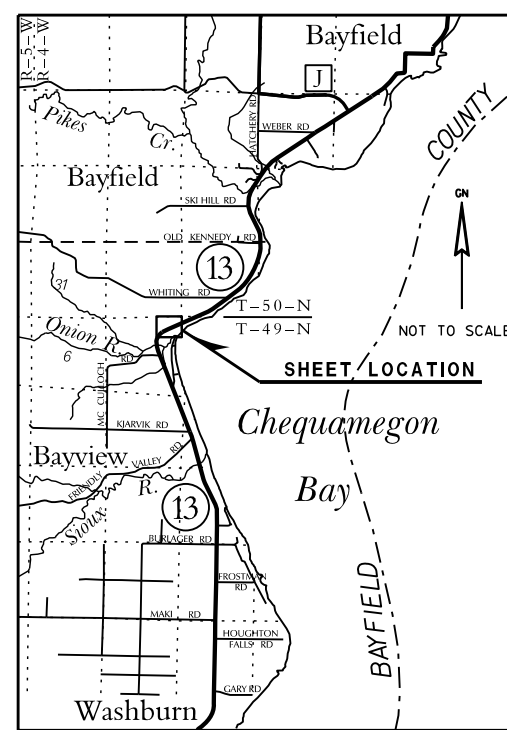
UTILITY EASEMENT INFORMATION	
PARCEL 4	NO UTILITY INFORMATION FOUND



CURVE KC21
 A = 87°02'53" (RT)
 D = 5°00'00"
 T = 1088.35
 L = 1740.96
 R = 1145.92
 LC = 1578.29
 LCB = N 21°06'37" E
 PISTA = 327+35.85
 PIX = 815437.16
 PIY = 519128.13
 PC STA = 316+47.50
 PT STA = 333+88.46

CURVE ERW333
 L = 230.94
 R = 1093.91
 LC = 230.51
 LCB = S 58°35'14" W

POINT TABLE - STATION OFFSET & COORDS.				
POINT#	STATION	OFFSET	Y (N)	X (E)
STH 13				
941	331+46.56	52.00'	519427.25	816246.14
942	331+46.56	0.00'	519468.52	816214.52
943	331+46.56	-49.61'	519507.90	816184.34
944	332+47.15	-56.96'	519574.20	816266.40
945	333+68.00	-50.00'	519630.23	816379.95
946	333+68.00	-88.00'	519664.27	816363.06
947	334+47.20	-88.00'	519673.87	816382.86
940	334+47.20	52.00'	519547.39	816442.87
948	338+42.00	-88.00'	519843.09	816739.55
949	338+42.00	-75.00'	519831.35	816745.13
406	340+45.00	52.00'	519803.62	816982.97
407	340+45.00	62.00'	519794.58	817018.88
408	340+80.00	52.00'	519818.62	817014.59
409	340+80.00	52.00'	519867.91	817118.49
411	341+95.00	67.00'	519854.36	817124.92
412	342+28.00	67.00'	519868.50	817154.74
414	342+25.00	52.00'	519880.77	817145.60
950	345+00.00	-75.00'	520113.38	817339.62
938	345+00.00	0.00'	520045.62	817371.76
939	345+00.00	52.00'	519998.64	817394.05
TIE346	345+83.51	0.00'	520081.42	817447.22



PLSS TIE TABLE			
FROM	TO	BEARING	DISTANCE
SEC401	QTR503	S 89°43'20" W	2639.26'
SEC401	SEC525	S 01°10'26" E	5414.38'
SEC401	TIE346	S 01°10'26" E	472.62'
TIE346	938	S 64°37'11" W	83.51'

FOUND 2" CAPPED I.P. SEC525
 Y = 515140.700
 X = 817548.469



I, ROY E. WILLIAMS, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPT. OF TRANSPORTATION, I HAVE SURVEYED THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



REW SURVEYING, LLC
 DATE JANUARY 5, 2016
 ROY E. WILLIAMS
 REGISTRATION NO. S1354
 APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
 DATE
 MICHAEL PILLER

TRANSPORTATION PROJECT PLAT NO: 8160-04-24-4.05

PART OF LOTS 2 & 3, C.S.M. 7-156 LOCATED IN AND INCLUDING PART OF GOV'T LOT 2, ALL IN SECTION 4, T 49 N, R 4 W, TOWN OF BAYVIEW, BAYFIELD COUNTY, WISCONSIN.

RELOCATION ORDER STH 13 ASHLAND - BAYFIELD (SUPERIOR AVENUE TO 7TH STREET)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02(3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
 1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAY OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
 2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED			PLE (S.F.) REQUIRED
			NEW	EXISTING	TOTAL	
7	RICHARD J. TOKARCZYK REV TRUST JUDITH D. ZIMBEROFF REV TRUST	PLE	0.00	N/A	N/A	(1650)
8	HOMER G. & MARY ROSS NORDLING	PLE	0.00	N/A	N/A	(600)
9	STEPHEN E. ANICH	PLE	0.00	N/A	N/A	(1640)

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, BAYFIELD COUNTY, NAD83 (1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (3/4" O.D. X 24" IRON PIPE WITH CAP) 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".

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: RIGHT-OF-WAY FOR STH 13 ESTABLISHED FROM PREVIOUS RW PLAT 8161-1-2L.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

DIMENSIONING FOR EXISTING RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO A NEW REFERENCE LINE.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGIONAL OFFICE.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET AL.	RIGHT-OF-WAY	RW
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	CURVE DATA	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LC
LAND CONTRACT	L.C.	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	P.L.	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	T

CONVENTIONAL SYMBOLS

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

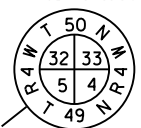
CONVENTIONAL UTILITY SYMBOLS

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

FROM	TO	BEARING	DISTANCE
951	952	S 22°34'09" E	75.00'
952	953	S 22°34'09" E	38.05'
CURVE ERW353			
954	955	S 65°07'13" W	132.59'
955	956	S 64°37'11" W	616.36'
956	TIE346	N 01°10'26" W	57.01'
TIE346	958	N 01°10'26" W	82.23'
958	959	N 64°37'11" E	559.27'
CURVE ERW354			
951	ERW354		

POINT#	STATION	OFFSET	Y (N)	X (E)
STH 13				
956	345+60.14	52.00'	520024.42	817448.39
TIE346	345+83.51	0.00'	520081.42	817447.22
958	346+17.23	-75.00'	520163.63	817445.53
501	346+15.00	52.00'	520047.93	817497.95
502	346+15.00	85.00'	520018.12	817512.10
503	346+65.00	85.00'	520039.55	817557.27
504	346+65.00	52.00'	520069.36	817543.13
506	348+75.00	52.00'	520159.38	817732.86
507	348+75.00	67.00'	520145.82	817739.29
508	349+15.00	67.00'	520162.97	817775.43
509	349+15.00	52.00'	520176.52	817769.00
959	351+76.50	-75.00'	520403.35	817950.82
955	351+76.50	52.00'	520288.61	818005.26
954	353+10.00	52.00'	520344.39	818125.54
511	354+55.00	42.16'	520411.62	818253.38
512	354+55.00	85.00'	520372.27	818270.32
513	354+95.00	80.00'	520392.42	818304.74
514	354+95.00	40.22'	520429.05	818289.20
951	355+51.30	-75.00'	520557.12	818296.62
952	355+51.30	0.00'	520487.87	818325.40
953	355+51.30	38.05'	520452.73	818340.00

FOUND 2" CAPPED I.P. SEC401
 Y = 520553.941
 X = 817437.536

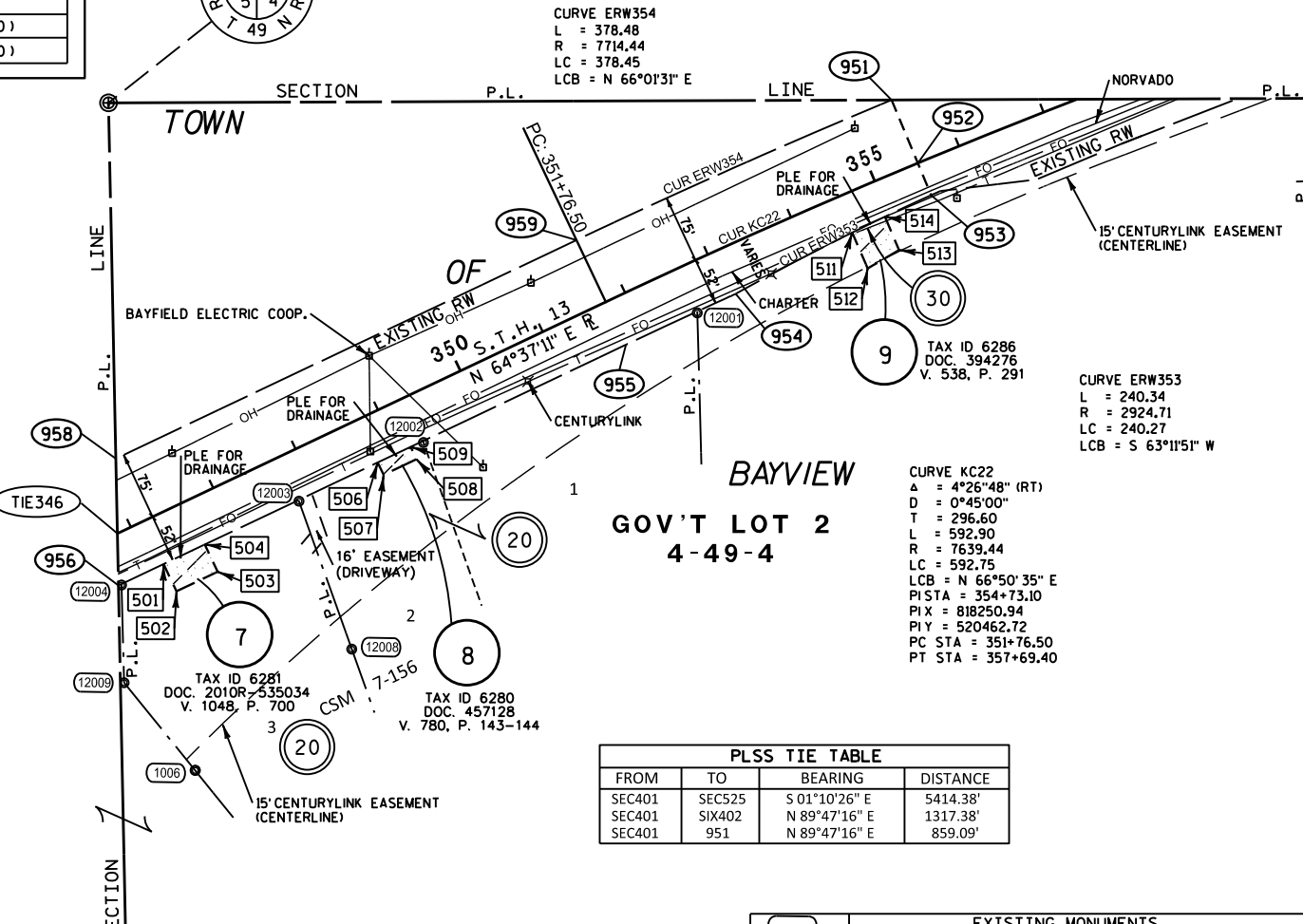


CURVE ERW354
 L = 378.48
 R = 7714.44
 LC = 378.45
 LCB = N 66°01'31" E

GN



FOUND 1.25" REBAR SIX402
 Y = 520558.822
 X = 818754.911



FROM	TO	BEARING	DISTANCE
SEC401	SEC525	S 01°10'26" E	5414.38'
SEC401	SIX402	N 89°47'16" E	1317.38'
SEC401	951	N 89°47'16" E	859.09'

UTILITY NUMBER	OWNERS	INTEREST REQUIRED
20	BAYFIELD ELECTRIC	RELEASE OF RIGHTS
30	CENTURYLINK	RELEASE OF RIGHTS

PARCEL	UTILITY EASEMENT INFORMATION
PARCEL 7	BAYFIELD ELECTRIC COOP. 2004R-493451, V.898, P.474-480
PARCEL 8	BAYFIELD ELECTRIC COOP. 326137, V.324, P.383-392
PARCEL 9	WISCONSIN BELL, INC. DBA CENTURYLINK 379140, V.485, P.377-378

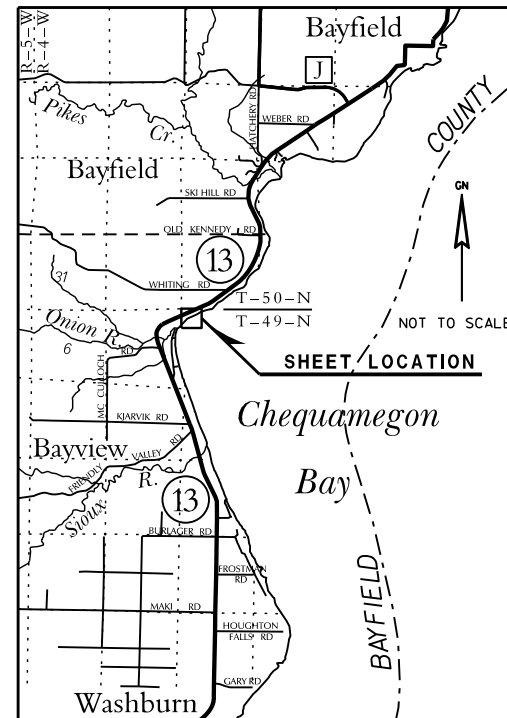
POINT NUMBER	EXISTING MONUMENTS		
	Y (N)	X (E)	DESCRIPTION
12001	520323.53	818083.45	5.8" REBAR CAP
12002	520181.27	817783.04	5.8" REBAR
12003	520116.92	817646.46	2" IRON PIPE
12004	520024.91	817451.83	1" IRON PIPE
12008	519954.60	817704.40	5.8" REBAR CAP
12009	519917.81	817454.67	5.8" REBAR CAP
1006	519821.67	817532.67	5.8" REBAR

PARCEL	OTHER EASEMENT INFORMATION
PARCEL 7,8	DOC. 464321 / V.7, P.156-157 (Perpetual Access, Lots 2&3)

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN BAYFIELD COUNTY, WISCONSIN AT 1:30 PM ON JANUARY 11, 2016... AS DOCUMENT #2016R-561959 AND FILED IN VOL. 1, T.P.P. PAGE 25....

PATRICIA A. OLSON
 SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS PROJECT NUMBER 8160-04-24-4.05 AMENDMENT NO:



I, ROY E. WILLIAMS, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 8160-04-24-4.05 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

REW SURVEYING, LLC DATE JANUARY 5, 2016
 ROY E. WILLIAMS REGISTRATION NO. S1354
 THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
 DATE
 MICHAEL PILLER



TRANSPORTATION PROJECT PLAT NO: 8160-04-24-4.06

PART OF LOT 1, C.S.M. 11-169 AND LOT 2, C.S.M. 4-109, LOCATED IN AND INCLUDING PART OF GOV'T LOT 3, ALL IN SECTION 33, T 50 N, R 4 W, TOWN OF BAYVIEW, BAYFIELD COUNTY, WISCONSIN.

RELOCATION ORDER STH 13 ASHLAND - BAYFIELD (SUPERIOR AVENUE TO 7TH STREET)

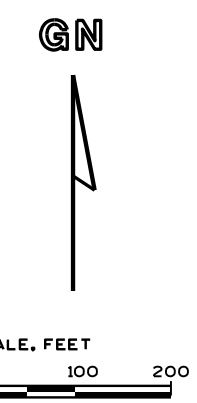
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02(3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
 1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
 2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN BAYFIELD COUNTY, WISCONSIN AT 1:30 PM ON JANUARY 11, 2016... AS DOCUMENT # 2016R-561960, AND FILED IN VOL. 1, T.P.P. PAGE 26...

PATRICIA A. OLSON
 SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
 PROJECT NUMBER 8160-04-24-4.06
 AMENDMENT NO:



FROM	TO	BEARING	DISTANCE
SEC525	SEC401	N 01°10'26" W	5414.38'
SEC401	SIX402	N 89°47'16" E	1317.38'
SEC401	TIE357	N 89°47'16" E	1062.34'
TIE357	TIE358	N 68°57'13" E	30.10'
TIE358	961	N 69°04'11" E	180.60'

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED			PLE (S.F.) REQUIRED
			NEW	EXISTING	TOTAL	
11	JEAN K. DIXON ET AL	PLE	0.00	N/A	N/A	(185)
12	GREG SEBALD & PATRICIA DOCHERTY	PLE	0.00	N/A	N/A	(235)

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

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, BAYFIELD COUNTY, NAD83 (1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (3/4" O.D. X 24" IRON PIPE WITH CAP) 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".

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: RIGHT-OF-WAY FOR STH 13 ESTABLISHED FROM PREVIOUS RW PLAT 8161-1-21.

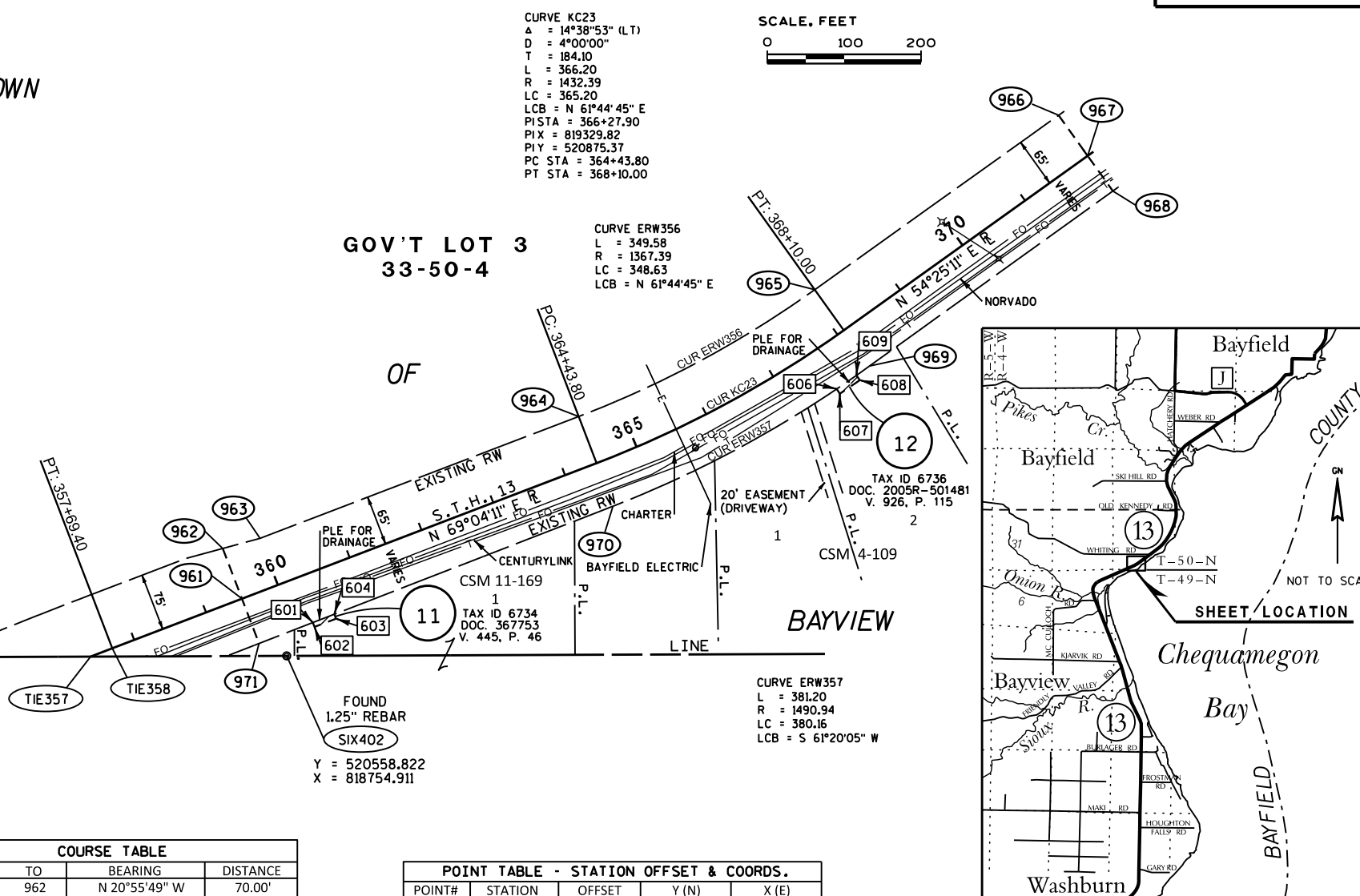
A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

DIMENSIONING FOR EXISTING RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO A NEW REFERENCE LINE.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGIONAL OFFICE.

TOWN

GOV'T LOT 3
 33-50-4

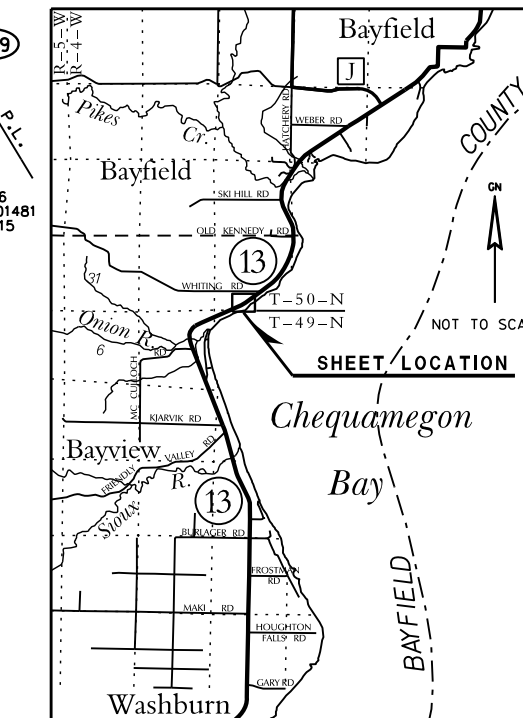


FROM	TO	BEARING	DISTANCE
961	962	N 20°55'49" W	70.00'
962	963	N 74°46'49" E	50.25'
963	964	N 69°04'11" E	443.80'
CURVE ERW356			
965	966	N 54°25'11" E	390.00'
966	967	S 35°34'49" E	65.00'
967	968	S 35°34'49" E	56.34'
968	969	S 54°17'10" W	390.00'
CURVE ERW357			
970	971	S 68°48'23" W	493.81'
971	961	N 20°55'49" W	62.27'

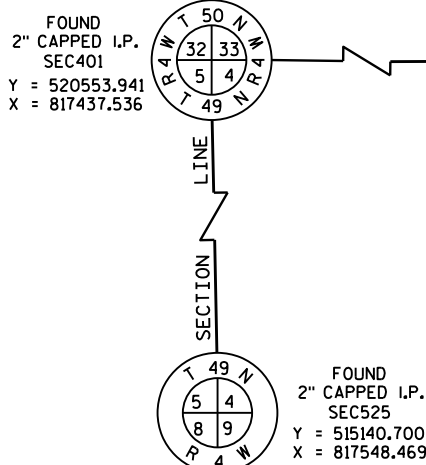
POINT#	STATION	OFFSET	Y (N)	X (E)
STH 13				
TIE357	357+39.30	0.00'	520557.88	818499.87
TIE358	357+69.40	0.00'	520568.69	818527.97
961	359+50.00	0.00'	520633.20	818696.65
962	359+50.00	-70.00'	520698.58	818671.64
963	360+00.00	-65.00'	520711.78	818720.13
601	360+25.00	61.92'	520602.16	818788.82
602	360+25.00	68.00'	520596.48	818790.99
603	360+55.00	68.00'	520607.20	818819.01
604	360+55.00	61.79'	520613.00	818816.79
964	364+43.80	-65.00'	520870.31	819134.65
970	364+43.80	60.00'	520753.56	819179.30
606	367+60.00	57.62'	520906.10	819470.26
607	367+60.00	65.00'	520899.96	819474.34
608	367+90.00	65.00'	520917.57	819500.29
609	367+90.00	57.40'	520923.82	819495.95
965	368+10.00	-65.00'	521035.35	819441.74
969	368+10.00	57.25'	520935.92	819512.87
966	372+00.00	-65.00'	521262.27	819758.92
967	372+00.00	0.00'	521209.40	819796.74
968	372+00.00	56.34'	521163.58	819829.53

PARCEL	DESCRIPTION
12	DOC. 384277 / V. 504, P. 11 (Driveway Easement)

PARCEL	UTILITY INFORMATION
11	NO UTILITY INFORMATION FOUND
12	NO UTILITY INFORMATION FOUND



- CONVENTIONAL ABBREVIATIONS**
- | | | | |
|-----------------------------------|----------|-----------------------------------|--------|
| ACCESS POINT/ DRIVEWAY CONNECTION | AP | REFERENCE LINE | R/L |
| ACCESS RIGHTS | AR | RELEASE OF RIGHTS | ROR |
| ACRES | AC. | REMAINING | REM. |
| AND OTHERS | ET AL. | RIGHT-OF-WAY | RW |
| CENTERLINE | C/L | SECTION | SEC. |
| CERTIFIED SURVEY MAP CORNER | CSM COR. | STATION | STA. |
| DOCUMENT | DOC. | TEMPORARY LIMITED EASEMENT VOLUME | TLE V. |
| EASEMENT | EASE. | CURVE DATA | |
| HIGHWAY EASEMENT | H.E. | LONG CHORD | LC |
| LAND CONTRACT | L.C. | LONG CHORD BEARING | LCB |
| MONUMENT | MON. | RADIUS | R |
| PAGE | P. | DEGREE OF CURVE | D |
| PERMANENT LIMITED EASEMENT | P.L.E. | CENTRAL ANGLE OR DELTA | DELTA |
| PROPERTY LINE | P.L. | LENGTH OF CURVE | L |
| RECORDED AS | (100') | TANGENT | T |
- CONVENTIONAL SYMBOLS**
- | | | | |
|----------------------------|------------------|---|-----|
| FOUND IRON PIPE/ PIN | ○ (UNLESS NOTED) | PROPOSED R/W LINE | --- |
| R/W MONUMENT | ● (SET) | EXISTING H.E. LINE | --- |
| R/W STANDARD | ▲ (SET) | PROPERTY LINE | --- |
| SIGN | ISIGN | LOT & TIE LINES | --- |
| SECTION CORNER MONUMENT | ○ | SLOPE INTERCEPTS | --- |
| SECTION CORNER SYMBOL | ○ | CORPORATE LIMITS | --- |
| FEE (HATCH VARIES) | /// | RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL) | --- |
| TEMPORARY LIMITED EASEMENT | --- | RESTRICTED ACCESS (BY ACQUISITION) | --- |
| PERMANENT LIMITED EASEMENT | --- | NO ACCESS (BY STATUTORY AUTHORITY) | --- |
| R/W BOUNDARY POINT | ○ | SECTION LINE | --- |
| PARCEL NUMBER | 102 | QUARTER LINE | --- |
| UTILITY INTEREST | 102 | SIXTEENTH LINE | --- |
| SIGN NUMBER (OFF PREMISE) | 21-1 | EXISTING CENTERLINE | --- |
| BUILDING | --- | PROPOSED REFERENCE LINE | --- |
| | | PARALLEL OFFSET | --- |
- CONVENTIONAL UTILITY SYMBOLS**
- | | | | |
|--------------------|-----|-----------------------------|-----|
| WATER | --- | NON COMPENSABLE COMPENSABLE | --- |
| GAS | --- | POWER POLE | --- |
| TELEPHONE | --- | TELEPHONE POLE | --- |
| OVERHEAD | --- | TELEPHONE PEDESTAL | --- |
| TRANSMISSION LINES | --- | | |
| ELECTRIC | --- | | |
| CABLE TELEVISION | --- | | |
| FIBER OPTIC | --- | | |
| SANITARY SEWER | --- | | |
| STORM SEWER | --- | | |



N.W.B.E.
 NORTHWESTERN WISCONSIN BASED ENGINEERS, INC.

I, ROY E. WILLIAMS, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 8160-04-24-4.06 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

REW SURVEYING, LLC DATE JANUARY 5, 2016
 Roy E. Williams
 ROY E. WILLIAMS REGISTRATION NO. S1354
 THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
 DATE
 MICHAEL PILLER

TRANSPORTATION PROJECT PLAT NO: 8160-04-24-4.07

PART OF C.S.M. 2-189 LOCATED IN AND INCLUDING PART OF GOV'T LOT 2, ALL IN SECTION 33, T 50 N, R 4 W, TOWN OF BAYVIEW, BAYFIELD COUNTY, WISCONSIN.

RELOCATION ORDER STH 13 ASHLAND - BAYFIELD (SUPERIOR AVENUE TO 7TH STREET)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02(3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
 1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
 2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

PLSS TIE TABLE			
FROM	TO	BEARING	DISTANCE
QTR3215	CTR3313	S 88°51'41" E	2596.30'
CTR3313	SIX3318	S 01°42'16" E	1299.86'
SIX3318	TIE3319	S 89°01'45" E	414.38'
TIE3319	978	S 35°34'49" E	49.94'

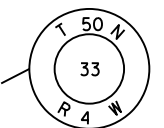
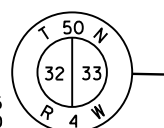
SCHEDULE OF LANDS & INTERESTS REQUIRED		OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.					
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED			PLE (S.F.) REQUIRED	TLE (S.F.) REQUIRED
			NEW	EXISTING	TOTAL		
13	KILBANE FAMILY INVESTMENT CO.	PLE, TLE	0.00	N/A	N/A	(664)	(568)
14	MARK T. & CONNIE GREYLAKE ET AL	PLE	0.00	N/A	N/A	(79)	---

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN BAYFIELD COUNTY, WISCONSIN AT 1:30 PM ON JANUARY 11, 2016... AS DOCUMENT # 2016R-561961 AND FILED IN VOL. 1, TYP. PAGE 27...
PATRICIA A. OLSON.....
 SIGNATURE OF REGISTER OF DEEDS

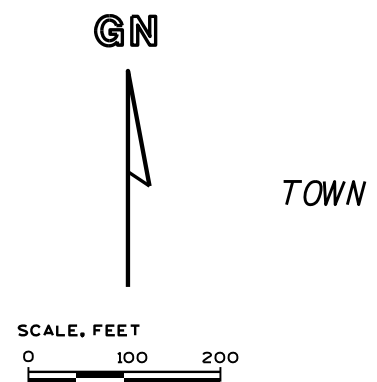
RESERVED FOR REGISTER OF DEEDS
 PROJECT NUMBER 8160-04-24-4.07
 AMENDMENT NO:

COURSE TABLE			
FROM	TO	BEARING	DISTANCE
978	979	N 53°53'28" E	175.54'
979	980	N 63°44'59" W	168.64'
980	981	N 83°49'24" E	316.88'
981	982	N 50°26'25" E	124.81'
982	983	N 49°49'11" E	353.80'
CURVE ERW390			
984	973	S 44°00'49" E	50.00'
973	974	S 44°00'49" E	47.67'
974	975	S 49°13'33" W	913.34'
CURVE ERW380			
976	977	N 35°34'49" W	54.00'
977	978	N 35°34'49" W	65.00'

FOUND GALVANIZED 1.25" PIPE QTR3215
 Y = 523164.025
 X = 817384.520



FOUND IRON PIPE WITH 2.5" CAP CTR3313
 Y = 523112.431
 X = 819980.308



NOTES:
 POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, BAYFIELD COUNTY, NAD83 (1991) IN SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.
 RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (3/4" O.D. X 24" IRON PIPE WITH CAP) 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".
 PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.
 EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: RIGHT-OF-WAY FOR STH 13 ESTABLISHED FROM PREVIOUS RW PLAT 8161-1-21.
 A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.
 A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.
 DIMENSIONING FOR EXISTING RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO A NEW REFERENCE LINE.
 FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGIONAL OFFICE.

CONVENTIONAL ABBREVIATIONS		
ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE
ACCESS RIGHTS	AR	RELEASE OF RIGHTS
ACRES	AC.	REMAINING
AND OTHERS	ET AL.	RIGHT-OF-WAY
CENTERLINE	C/L	SECTION
CERTIFIED SURVEY MAP CORNER	CSM	STATION
CORNER	COR.	TEMPORARY LIMITED EASEMENT VOLUME
DOCUMENT	DOC.	
EASEMENT	EASE.	CURVE DATA
HIGHWAY EASEMENT	H.E.	LONG CHORD
LAND CONTRACT	L.C.	LONG CHORD BEARING
MONUMENT	MON.	RADIUS
PAGE	P.	DEGREE OF CURVE
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA
PROPERTY LINE	P.L.	LENGTH OF CURVE
RECORDED AS	(100')	TANGENT

EXISTING MONUMENTS			
POINT NUMBER	Y (N)	X (E)	DESCRIPTION
14000	522424.89	821540.81	1" IRON PIPE
14002	522114.47	821489.71	1" IRON PIPE
14005	521799.98	820795.77	2" IRON PIPE

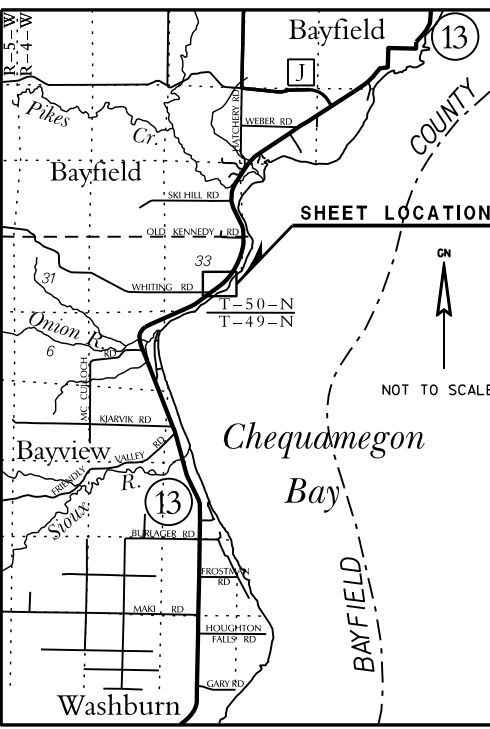
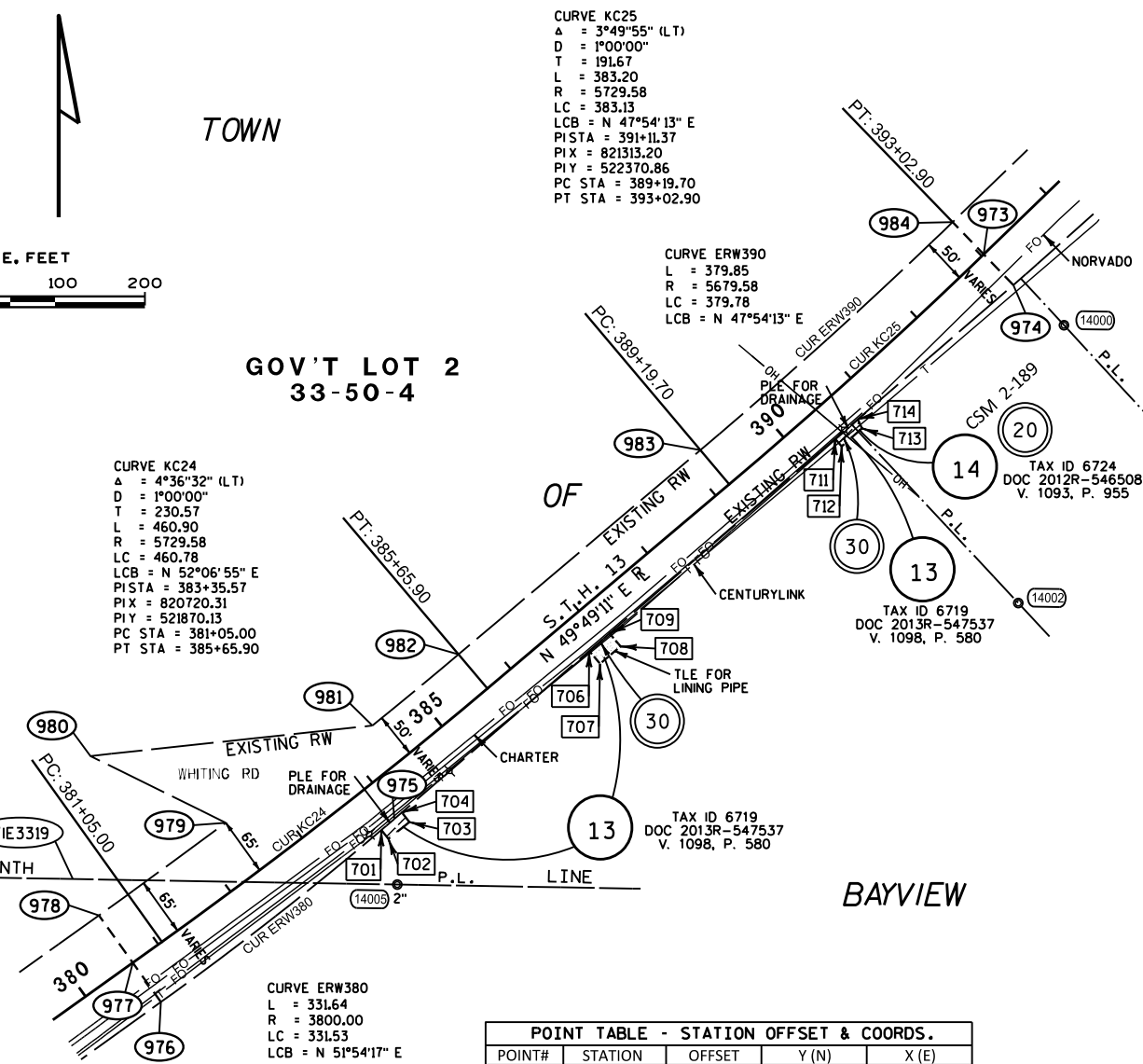
OTHER EASEMENT INFORMATION	
PARCEL 14	DOC. 330791/V.333, P.240-244 (Shared Access Easement)
PARCEL 13, PARCEL 14	DOC. 388657/V.519, P.103 (Perpetual Driveway Easement)

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNERS	INTEREST REQUIRED
20	BAYFIELD ELECTRIC	RELEASE OF RIGHTS
30	CENTURYLINK	RELEASE OF RIGHTS

UTILITY EASEMENT INFORMATION		
PARCEL 13	NO UTILITY INFORMATION FOUND	
PARCEL 14	BAYFIELD ELECTRIC COOP.	443815/V.746, P.49-54

CONVENTIONAL SYMBOLS		
FOUND IRON PIPE/PIN	(IF UNLESS NOTED)	PROPOSED R/W LINE
R/W MONUMENT	▲ (SET)	EXISTING H.E. LINE
R/W STANDARD	▲ (SET)	PROPERTY LINE
SIGN	ISIGN	LOT & TIE LINES
SECTION CORNER MONUMENT	●	SLOPE INTERCEPTS
SECTION CORNER SYMBOL	⊙	CORPORATE LIMITS
FEE (HATCH VARIES)	////	RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL)
TEMPORARY LIMITED EASEMENT		RESTRICTED ACCESS (BY ACQUISITION)
PERMANENT LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)
R/W BOUNDARY POINT	⊙	SECTION LINE
PARCEL NUMBER	102	QUARTER LINE
UTILITY INTEREST	⊙	SIXTEENTH LINE
SIGN NUMBER (OFF PREMISE)	⊙	EXISTING CENTERLINE
BUILDING	⊙	PROPOSED REFERENCE LINE
	⊙	PARALLEL OFFSET

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



I, ROY E. WILLIAMS, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 8160-04-24-4.07 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.
 REW SURVEYING, LLC DATE JANUARY 5, 2016
 Roy E. Williams
 ROY E. WILLIAMS REGISTRATION NO. S1354
 THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
 DATE _____
 MICHAEL PILLER



TRANSPORTATION PROJECT PLAT NO: 8160-04-24-4.08

PART OF LOT 1, C.S.M. 5-60, BEING PART OF GOV'T LOT 2, AND LOT 3, C.S.M. 4-160, BEING PART OF GOV'T LOT 1, ALL IN SECTION 33, T 50 N, R 4 W, TOWN OF BAYVIEW, BAYFIELD COUNTY, WISCONSIN.

RELOCATION ORDER STH 13 ASHLAND - BAYFIELD (SUPERIOR AVENUE TO 7TH STREET)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02(3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS Laid OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED			PLE (S.F.) REQUIRED	TLE (S.F.) REQUIRED
			NEW	EXISTING	TOTAL		
16	DWAYNE K. & MARGARET TRUHLSEN	PLE, TLE	0.00	N/A	N/A	(95)	(2359)
17	CHRISTOPHER M. & JOANNE MOE	PLE, TLE	0.00	N/A	N/A	(597)	(2727)

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, BAYFIELD COUNTY, NAD83 (1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (3/4" O.D. X 24" IRON PIPE WITH CAP) 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".

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: RIGHT-OF-WAY FOR STH 13 ESTABLISHED FROM PREVIOUS RW PLAT 8161-1-21.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR EXISTING RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO A NEW REFERENCE LINE.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGIONAL OFFICE.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET AL.	RIGHT-OF-WAY	RW
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP CORNER	CSM COR.	STATION	STA.
DOCUMENT	DOC.	TEMPORARY LIMITED EASEMENT VOLUME	TLE V.
EASEMENT	EASE.	CURVE DATA	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LC
LAND CONTRACT	L.C.	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	P.L.	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	T

CONVENTIONAL SYMBOLS

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

CONVENTIONAL UTILITY SYMBOLS

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

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNERS	INTEREST REQUIRED
20	BAYFIELD ELECTRIC	RELEASE OF RIGHTS
30	CENTURYLINK	RELEASE OF RIGHTS

UTILITY EASEMENT INFORMATION

PARCEL	WISCONSIN BELL, INC. DBA CENTURYLINK	376589 / V.476, P.289-290
PARCEL 17	BAYFIELD ELECTRIC COOP.	343227 / V.363, P.209-218

OTHER EASEMENT INFORMATION

PARCEL 16	DOC. 390024 / V.5, P.60-61 (Driveway Easement, Lots 1-2)
PARCEL 17	DOC. 367735 / V.4, P.160-161 (Perpetual Access, Lots 1-3)

FOUND ALUM. CAP OTR3303
Y = 525754.172
X = 819988.114
COUNTY COORDINATES

POINT TABLE - STATION OFFSET & COORDS.

POINT#	STATION	OFFSET	Y (N)	X (E)
STH 13				
987	398+25.00	-50.00'	522920.92	821759.08
986	398+25.00	0.00'	522891.50	821799.51
993	398+25.00	58.53'	522857.07	821846.84
806	399+25.00	56.07'	522939.38	821903.68
807	400+00.00	70.00'	522991.84	821959.07
TIE401	400+65.86	0.00'	523086.27	821941.21
801	401+00.00	51.77'	523083.43	822003.16
802	401+00.00	65.00'	523075.64	822013.85
803	401+50.00	65.00'	523116.07	822043.27
804	401+50.00	50.42'	523124.65	822031.48
808	402+00.00	70.00'	523153.57	822076.73
988	402+72.20	-50.00'	523282.55	822022.17
992	402+72.20	47.52'	523225.17	822101.03
809	403+50.00	45.52'	523289.67	822145.14
989	407+62.10	-50.00'	523682.98	822300.60
990	407+62.10	0.00'	523655.32	822342.25
991	407+62.10	43.64'	523631.18	822378.60

COURSE TABLE

FROM	TO	BEARING	DISTANCE
986	987	N 53°57'49" W	50.00'
987	988	N 36°02'11" E	447.20'
CURVE ERW405			
989	990	S 56°24'49" E	50.00'
990	991	S 56°24'49" E	43.64'
991	992	S 34°21'31" W	491.83'
992	993	S 34°37'35" W	447.34'
993	986	N 53°57'49" W	58.53'

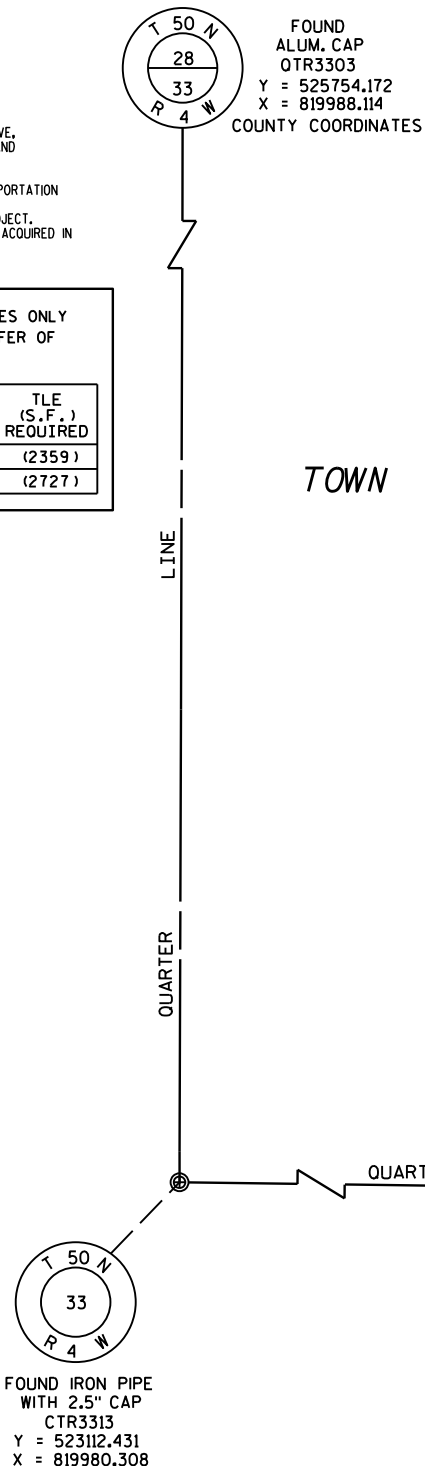
PLSS TIE TABLE

FROM	TO	BEARING	DISTANCE
QTR3303	CTR3313	S 00°10'09" W	2641.75'
CTR3313	MC3314A1	S 89°14'09" E	2194.67'
CTR3313	TIE401	S 89°14'09" E	1961.07'
TIE401	986	S 36°02'11" W	240.86'

FOUND IRON PIPE WITH 2.5" CAP CTR3313
Y = 523112.431
X = 819980.308

CURVE KC27
A = 2°26'58" (LT)
D = 0°30'00"
T = 244.99
L = 489.90
R = 11459.16
LC = 489.86
LCB = N 34°48'42" E
PISTA = 405+17.19
PIX = 822206.72
PIY = 523451.24
PC STA = 402+72.20
PT STA = 407+62.10

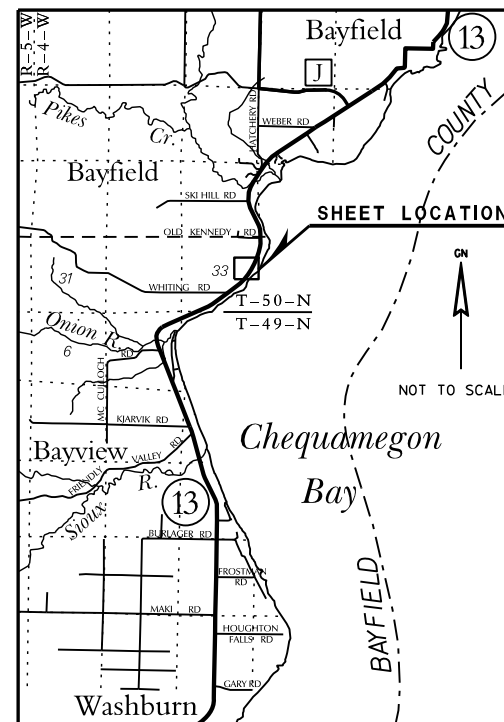
CURVE ERW405
L = 487.76
R = 11409.16
LC = 487.72
LCB = N 34°48'42" E



ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN BAYFIELD COUNTY, WISCONSIN AT 1:30 PM ON JANUARY 11, 2016... AS DOCUMENT # 2016R-561962 AND FILED IN VOL. 1, T.P.P. PAGE 28...

PATRICIA A. OLSON
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8160-04-24-4.08
AMENDMENT NO:



I, ROY E. WILLIAMS, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 8160-04-24-4.08 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

REW SURVEYING, LLC DATE JANUARY 5, 2016
ROY E. WILLIAMS
ROY E. WILLIAMS REGISTRATION NO. S1354
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
DATE



MICHAEL PILLER

TRANSPORTATION PROJECT PLAT NO: 8160-04-24-4.09

PART OF LOT 1, C.S.M. 8-3 LOCATED IN AND INCLUDING PART OF GOV'T LOT 2, ALL IN SECTION 14, T 50 N, R 4 W, TOWN OF BAYFIELD, BAYFIELD COUNTY, WISCONSIN.

RELOCATION ORDER STH 13 ASHLAND - BAYFIELD (SUPERIOR AVENUE TO 7TH STREET)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02(3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
 1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
 2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

PLSS TIE TABLE			
FROM	TO	BEARING	DISTANCE
SEC2301	QTR2303	S 89°48'08" E	2631.44'
QTR2303	TIE577	S 89°48'08" E	1.08'
TIE577	1011	N 56°07'11" E	569.84'

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN BAYFIELD COUNTY, WISCONSIN AT 1:30 PM ON JANUARY 11, 2016... AS DOCUMENT # 2016R-561963... AND FILED IN VOL. 1, TTP, PAGE 29...

..... PATRICIA A. OLSON
 SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
 PROJECT NUMBER 8160-04-24-4.09
 AMENDMENT NO:

SCHEDULE OF LANDS & INTERESTS REQUIRED		OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.				
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED			PLE (S.F.) REQUIRED
			NEW	EXISTING	TOTAL	
19	STARK FAMILY TRUST	PLE	0.00	N/A	N/A	(350)
21	MARILYN & R.W. VAN SANT REV. TRUST	PLE	0.00	N/A	N/A	(429)

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, BAYFIELD COUNTY, NAD83 (1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (3/4" O.D. X 24" IRON PIPE WITH CAP) 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".

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: RIGHT-OF-WAY FOR STH 13 ESTABLISHED FROM PREVIOUS RW PLAT 8161-1-21.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

DIMENSIONING FOR EXISTING RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO A NEW REFERENCE LINE.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGIONAL OFFICE.

CONVENTIONAL ABBREVIATIONS		
ACCESS POINT	AP	REFERENCE LINE
DRIVEWAY CONNECTION	ROR	RELEASE OF RIGHTS
ACCESS RIGHTS	AR	REMAINING
ACRES	AC.	RIGHT-OF-WAY
AND OTHERS	ET AL.	SECTION
CENTERLINE	C/L	STATION
CERTIFIED SURVEY MAP	CSM	TEMPORARY LIMITED EASEMENT
CORNER	COR.	VOLUME
DOCUMENT	DOC.	
EASEMENT	EASE.	
HIGHWAY EASEMENT	H.E.	
LAND CONTRACT	L.C.	
MONUMENT	MON.	
PAGE	P.	
PERMANENT LIMITED EASEMENT	PLE	
PROPERTY LINE	P.L.	
RECORDED AS	(100')	

QTR2303
 Y = 536116.795
 X = 830479.804
 COUNTY COORDINATES

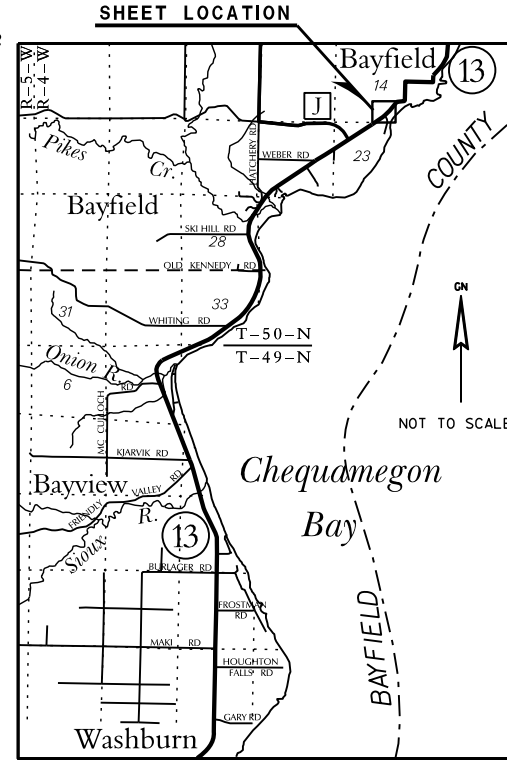
FOUND S.M. NAIL
 SEC2301
 Y = 536125.878
 X = 827848.383
 COUNTY COORDINATES

CONVENTIONAL SYMBOLS	
FOUND IRON PIPE/PIN	(Symbol)
R/W MONUMENT	(Symbol)
R/W STANDARD	(Symbol)
SIGN	(Symbol)
SECTION CORNER MONUMENT	(Symbol)
SECTION CORNER SYMBOL	(Symbol)
FEE (HATCH VARIES)	(Symbol)
TEMPORARY LIMITED EASEMENT	(Symbol)
PERMANENT LIMITED EASEMENT	(Symbol)
R/W BOUNDARY POINT	(Symbol)
PARCEL NUMBER	(Symbol)
UTILITY INTEREST	(Symbol)
SIGN NUMBER (OFF PREMISE)	(Symbol)
BUILDING	(Symbol)

CONVENTIONAL UTILITY SYMBOLS	
WATER	(Symbol)
GAS	(Symbol)
TELEPHONE	(Symbol)
OVERHEAD	(Symbol)
TRANSMISSION LINES	(Symbol)
ELECTRIC	(Symbol)
CABLE TELEVISION	(Symbol)
FIBER OPTIC	(Symbol)
SANITARY SEWER	(Symbol)
STORM SEWER	(Symbol)
NON COMPENSABLE	(Symbol)
COMPENSABLE	(Symbol)
POWER POLE	(Symbol)
TELEPHONE POLE	(Symbol)
TELEPHONE PEDESTAL	(Symbol)

COURSE TABLE			
FROM	TO	BEARING	DISTANCE
1011	1012	N 33°52'49" W	60.00'
1012	1013	N 56°07'11" E	385.30'
CURVE ERW587			
1014	1015	N 40°45'13" E	95.92'
1015	1016	S 55°13'49" E	50.00'
1016	1017	S 55°13'49" E	50.00'
1017	1018	S 34°46'11" W	74.00'
1018	1019	S 55°13'49" E	25.00'
1019	1020	S 14°40'00" E	32.91'
CURVE ERW592			
1021	1022	S 56°07'11" W	85.30'
1022	1023	S 82°41'05" W	111.80'
1023	1024	S 56°07'11" W	200.00'
1024	1011	N 33°52'49" W	50.00'

POINT TABLE - STATION OFFSET & COORDS.				
POINT#	STATION	OFFSET	Y (N)	X (E)
STH 13				
TIE577	576+80.16	0.00'	536116.79	830480.88
1011	582+50.00	0.00'	536434.46	830953.97
1012	582+50.00	-60.00'	536484.27	830920.52
1024	582+50.00	50.00'	536392.95	830981.84
1023	584+50.00	50.00'	536504.44	831147.88
1022	585+50.00	100.00'	536518.67	831258.78
1051	585+50.00	-60.00'	536651.51	831169.58
1052	585+50.00	-70.00'	536659.81	831164.01
1053	585+85.00	-70.00'	536679.32	831193.07
1054	585+85.00	-60.00'	536671.02	831198.64
1013	586+35.30	-60.00'	536699.06	831240.40
1021	586+35.30	100.00'	536566.22	831329.59
1056	591+30.00	100.00'	536925.17	831712.42
1057	591+30.00	110.00'	536919.07	831720.34
1058	591+70.00	110.00'	536953.39	831746.04
1059	591+70.00	100.00'	536959.28	831737.96
1014	592+04.60	-60.00'	537080.57	831627.89
1020	592+04.60	100.00'	536989.32	831759.32
1018	592+26.00	50.00'	537035.42	831730.45
1019	592+26.00	75.00'	537021.16	831750.99
1015	593+00.00	-50.00'	537153.23	831690.51
1016	593+00.00	0.00'	537124.72	831731.58
1017	593+00.00	50.00'	537096.21	831772.65



I, ROY E. WILLIAMS, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 8160-04-24-4.09 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE JANUARY 5, 2016

REW SURVEYING, LLC
 WISCONSIN
 ROY E. WILLIAMS
 S-1954
 SOUTH RANGE
 WI
 LAND SURVEYOR

ROY E. WILLIAMS
 REGISTRATION NO. S1354
 THIS PLAT AND RELOCATION ORDER ARE
 APPROVED FOR THE WISCONSIN DEPARTMENT
 OF TRANSPORTATION.
 DATE _____

MICHAEL PILLER

4

4

BEGIN CONSTRUCTION

STA. 37+00.00'N'

X = 818683.34
Y = 491488.77

STA. 38+20'N' - 38+80'N' LT
RIPRAP LIGHT IN DITCH

PI STA = 55+56.62'N'
Y = 492736.23
X = 820058.44
DELTA = 47°42'19"
D = 3°05'00"
T = 821.62
L = 1547.20
R = 1858.24
PC STA = 47+35.00
PT STA = 62+82.20
SE = 5.1%
TRANS. = 181'

STA. 37+94'N'
EXISTING 36" X 80' CPCS
2 - REMOVE AEW'S (LT AND S.R. RT).
1 - 36" X 80' CULVERT PIPE LINER.
2 - AEW'S FOR CPCS 36-INCH REQ'D.
PLACE RIPRAP LT.
LINE TO INLET RT.

STA. 55+83'N'
EXISTING 72" X 96' CPCS
2 - REMOVE AEW'S.
1 - 72" X 96' CULVERT PIPE LINER.
2 - AEW'S FOR CPCS 72-INCH REQ'D.
PLACE RIPRAP RT & LT.

PI STA. 88+11.20
Y = 496086.85
X = 820063.41

STA. 77+35'N' - 78+35'N'
REGRADE DITCH RT & LT

STA. 68+45'N'
EXISTING 30" X 64' LINED CPCS
CLEAN CULVERT PIPE MINIMAL RT.
PLACE RIPRAP RT.

STA. 77+85'N'
EXISTING 28" X 20" X 66' CPCA
1 - REMOVE SMALL PIPE CULVERT.
1 - 19" X 30" X 60' CPRC CL HE-IV.
2 - AEW'S FOR CPCR HE 19 X 30-INCH REQ'D.
PLACE RIPRAP LT & RT.

STA. 96+09'N'
EXISTING CPCS 54" X 64'
2 - REMOVE AEW'S.
1 - 54" X 64' CULVERT PIPE LINER.
2 - AEW'S FOR CPCS 54-INCH REQ'D.
USE 10' PIPE LINER SECTIONS.
PLACE RIPRAP RT & LT.

STA. 96+23'N'
EXISTING CPCS 54" X 64'
2 - REMOVE AEW'S.
1 - 54" X 64' CULVERT PIPE LINER.
2 - AEW'S FOR CPCS 54-INCH REQ'D.
USE 10' PIPE LINER SECTIONS.
PLACE RIPRAP RT & LT.

STA. 111+80'N
CLEAN EXISTING 24" X 66' CPCS

STA. 111+84'N
1 - 24" X 66' CPCS POLYMER COATED.
2 - CONCRETE MASONRY ENDWALL'S REQ'D.
PLACE RIPRAP LT & RT.



MATCHLINE STA. 97+00'N

MATCHLINE STA. 127+00'N

5

5

PI STA. 135+10.20
Y = 500785.81
X = 820081.43

STA. 141+63'N
EXISTING 48" X 66' LINED CPCS
TO REMAIN IN PLACE.



MATCHLINE STA. 127+00'N

MATCHLINE STA. 157+00'N

STA. 151+93'N
EXISTING 48" X 88' LINED CPCS
TO REMAIN IN PLACE.
PLACE RIPRAP RT.



PI STA. 170+14.40
Y = 504289.95
X = 820103.02

STA. 161+00'N'
EXISTING 35" X 24" X 68' CPCA
TO REMAIN IN PLACE.

STA. 182+82'N'
EXISTING 42" X 29" X 78' CPCA
TO REMIAN IN PLACE.

STA. 162+58'N'
EXISTING 24" X 68' CPCS
2 - REMOVE AEW'S
1 - 24" X 68' CULVERT PIPE LINER (20.6" I.D. OR LARGER REQ'D).
2 - AEW'S FOR CPCS 24-INCH REQ'D.
PLACE RIPRAP LT & RT.
LINE PIPE FROM DISCHARGE END ON LHE.

STA. 174+02'N'
EXISTING 35" X 24" X 88' CPCS
1 - REMOVE SMALL PIPE CULVERT
27 - LF REMOVING CONCRETE C&G.
47 - LF CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D.
1 - 24" X 38" X 86' CPRC CL HE - IV.
2 - AEW'S FOR CPRC HE 24X38-INCH REQ'D.
PLACE RIPRAP LT & RT.

STA. 208+34'N'
EXISTING 72" X 66' CPCS
1 - REMOVING OLD STRUCTURE.

STA. 208+37'N' AND STA. 208+49'N'
2 - 84" X 68' CPRC CL IV.
2 - CONCRETE MASONRY ENDWALL'S REQ'D.
PLACE RIPRAP RT & LT.
COFFERDAM REQ'D RT & LT.

STA. 208+49'N'
EXISTING 72" X 66' CPCS
1 - REMOVING OLD STRUCTURE.

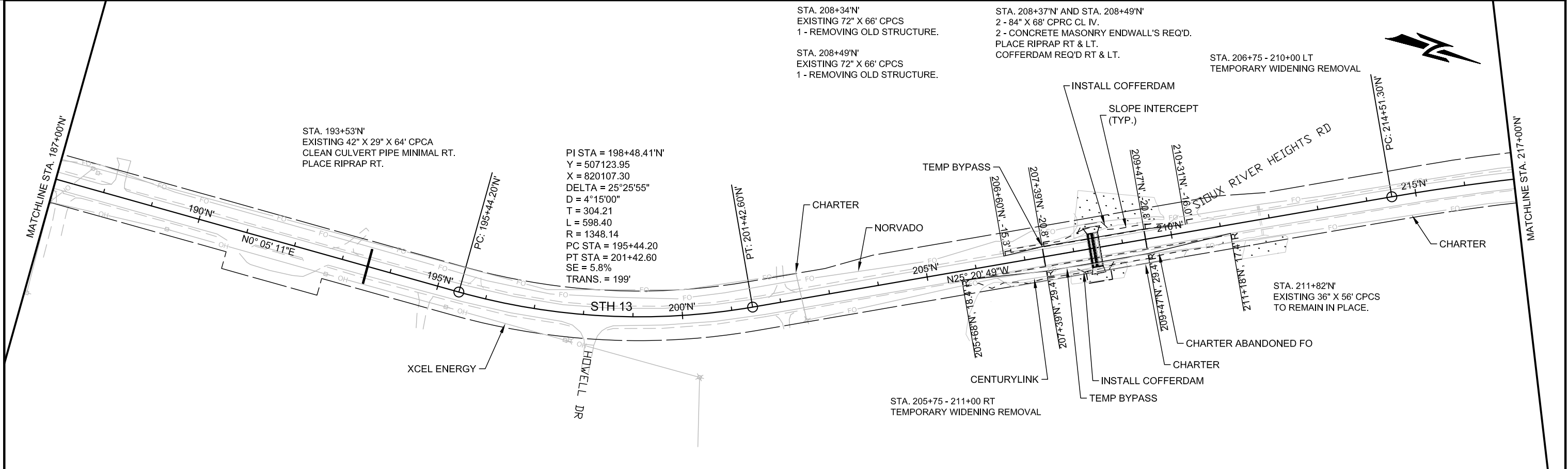
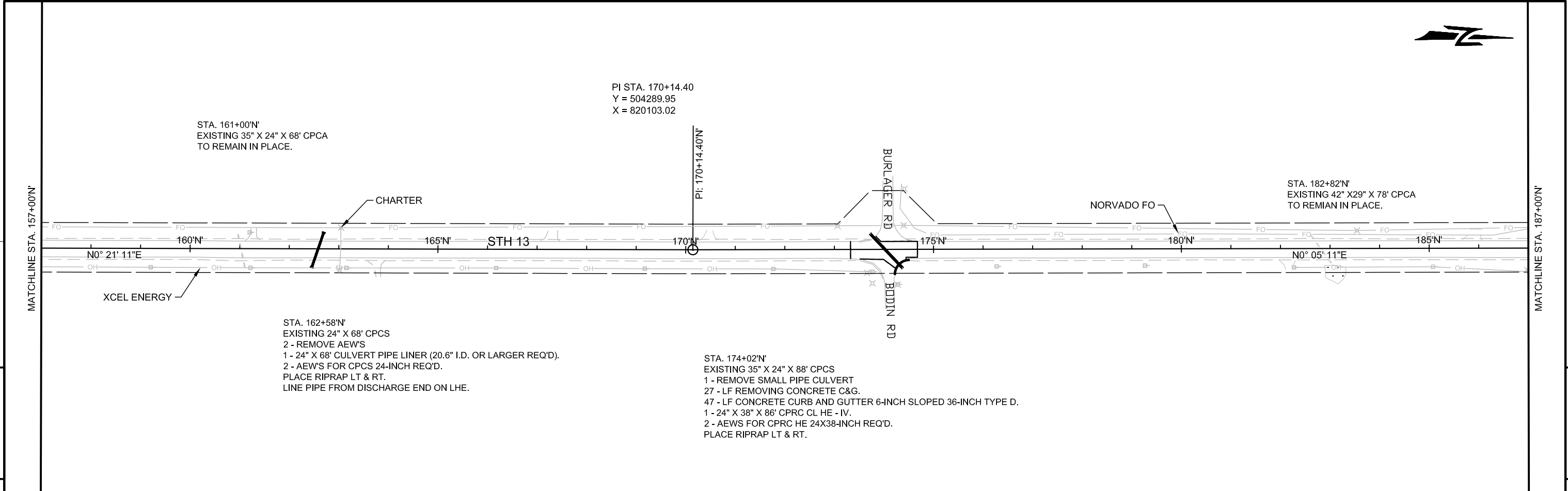
STA. 206+75 - 210+00 LT
TEMPORARY WIDENING REMOVAL

STA. 193+53'N'
EXISTING 42" X 29" X 64' CPCA
CLEAN CULVERT PIPE MINIMAL RT.
PLACE RIPRAP RT.

PI STA = 198+48.41'N'
Y = 507123.95
X = 820107.30
DELTA = 25°25'55"
D = 4°15'00"
T = 304.21
L = 598.40
R = 1348.14
PC STA = 195+44.20
PT STA = 201+42.60
SE = 5.8%
TRANS. = 199'

STA. 211+82'N'
EXISTING 36" X 56' CPCS
TO REMAIN IN PLACE.

STA. 205+75 - 211+00 RT
TEMPORARY WIDENING REMOVAL



STA. 218+10'N
 EXISTING 30" X 62" CPCS
 1 - REMOVE SMALL PIPE CULVERT (6' RT).
 1 - 30" X 62" CULVERT PIPE LINER .
 1 - AEW FOR CP 30-INCH REQ'D.
 PLACE RIPRAP RT.
 USE 10' PIPE LINER SECTIONS AND LINE TO
 ORIGINAL LENGTH. DIRECT BURY 6" OF LINER RT.
 LINE TO INLET LT.

PI STA = 218+01.13'N
 Y = 508897.75
 X = 819267.06
 DELTA = 8°43'44"
 D = 1°15'00"
 T = 349.83
 L = 698.30
 R = 4583.66
 PC STA = 214+51.30
 PT STA = 221+49.60
 SE = 2.8%
 TRANS. = 122'

EXCEPTION TO NET CENTERLINE

STA. 232+33.13 - 233+58.66'N

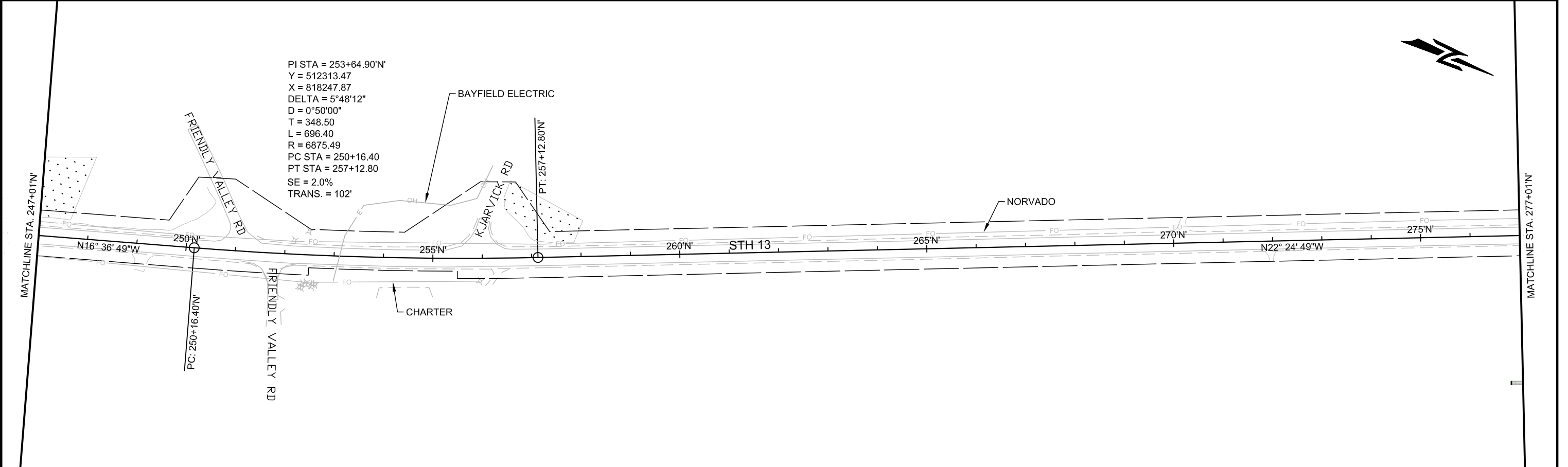
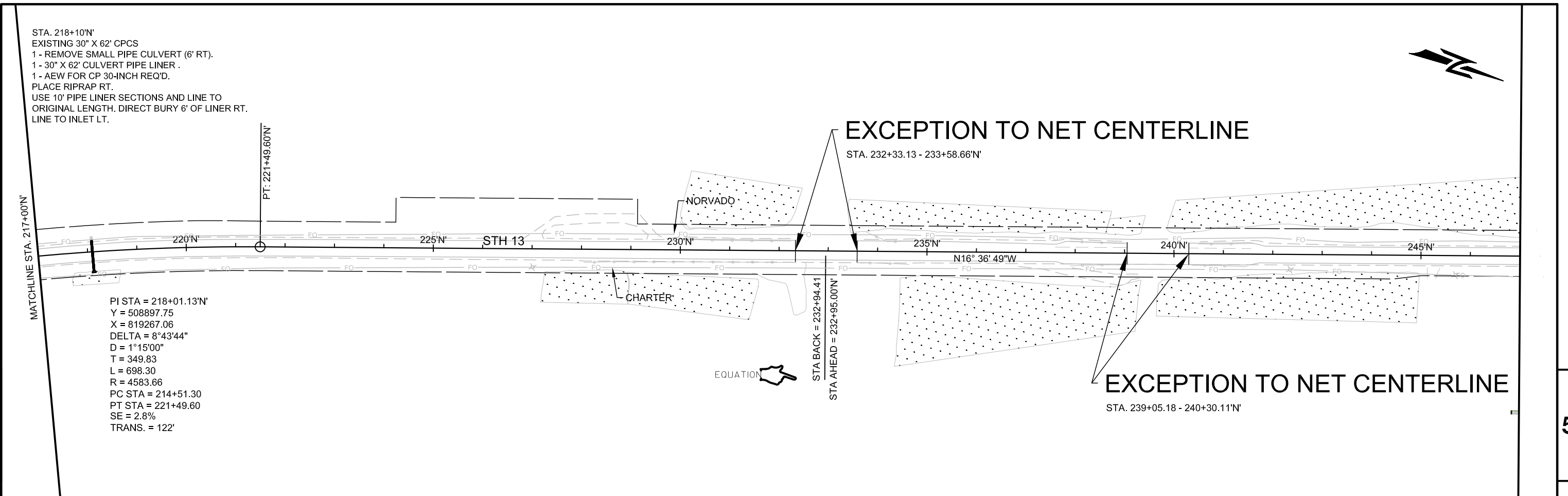
EXCEPTION TO NET CENTERLINE

STA. 239+05.18 - 240+30.11'N

EQUATION

STA BACK = 232+94.41
 STA AHEAD = 232+95.00'N

PI STA = 253+64.90'N
 Y = 512313.47
 X = 818247.87
 DELTA = 5°48'12"
 D = 0°50'00"
 T = 348.50
 L = 696.40
 R = 6875.49
 PC STA = 250+16.40
 PT STA = 257+12.80
 SE = 2.0%
 TRANS. = 102'





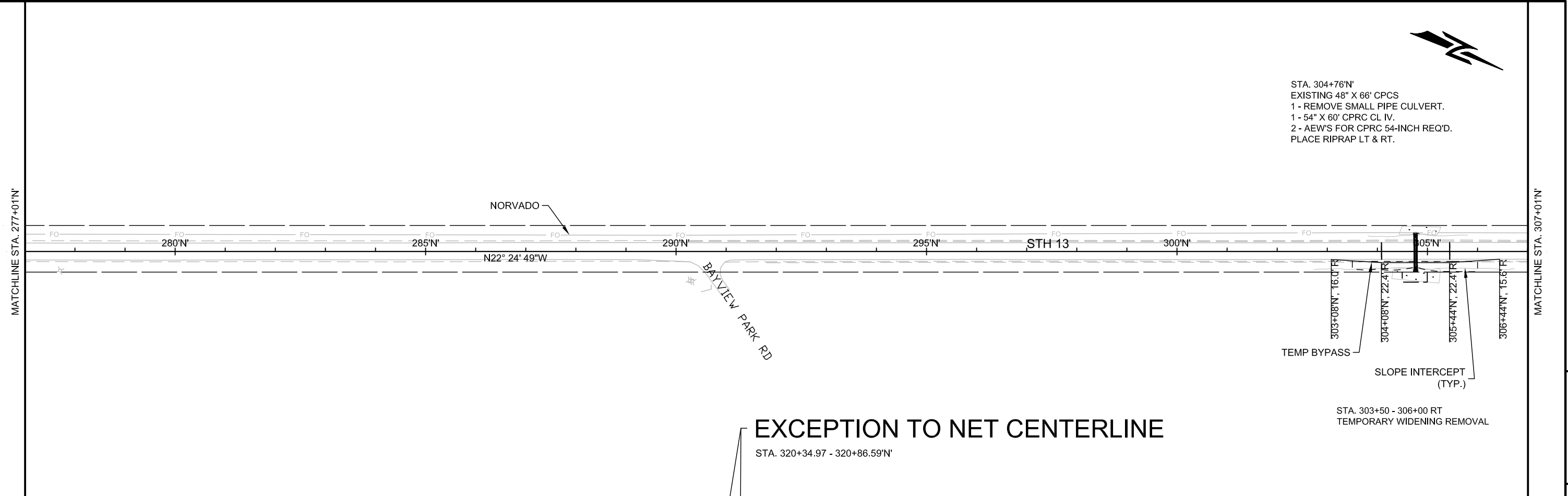
STA. 304+76'N
 EXISTING 48" X 66' CPCS
 1 - REMOVE SMALL PIPE CULVERT.
 1 - 54" X 60' CPCR CL IV.
 2 - AEW'S FOR CPCR 54-INCH REQ'D.
 PLACE RIPRAP LT & RT.

MATCHLINE STA. 277+01'N

MATCHLINE STA. 307+01'N

5

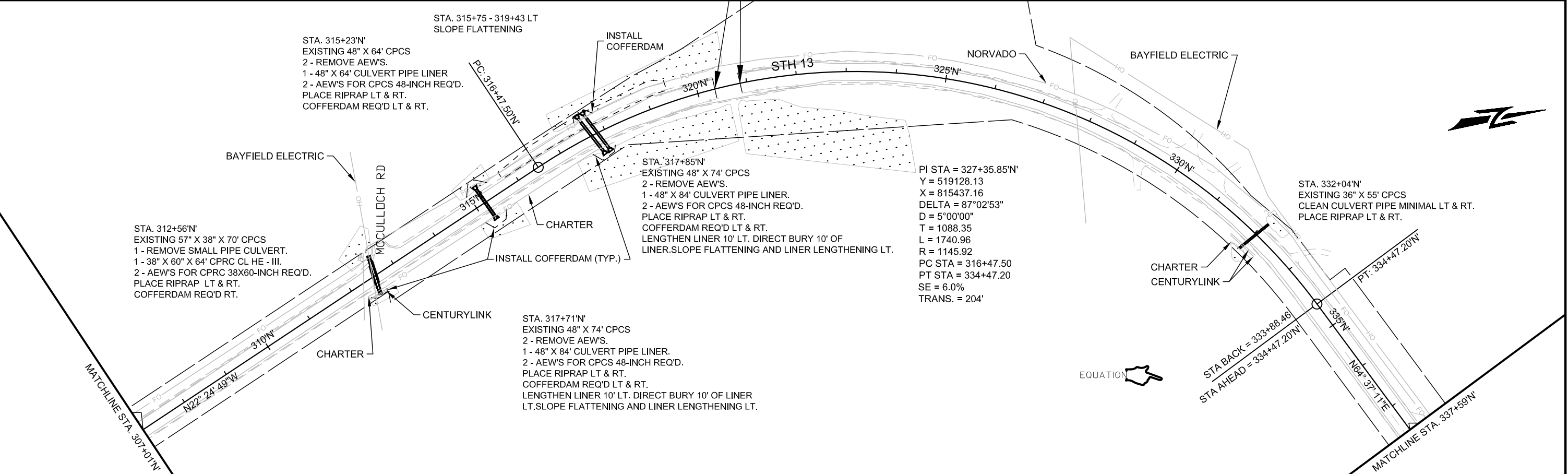
5



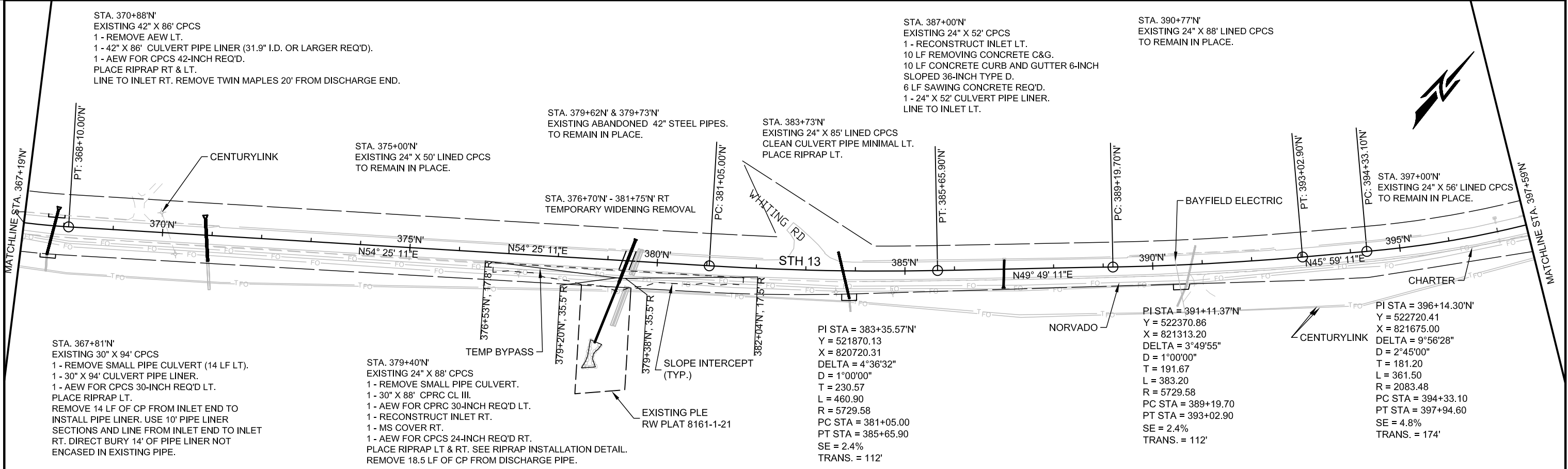
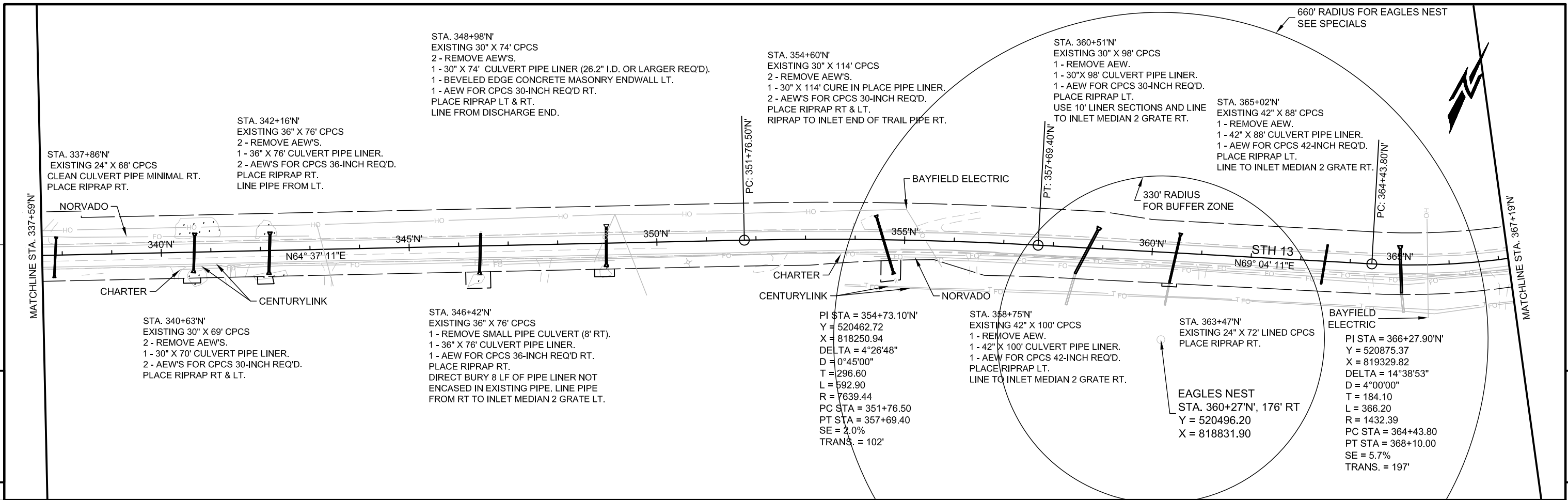
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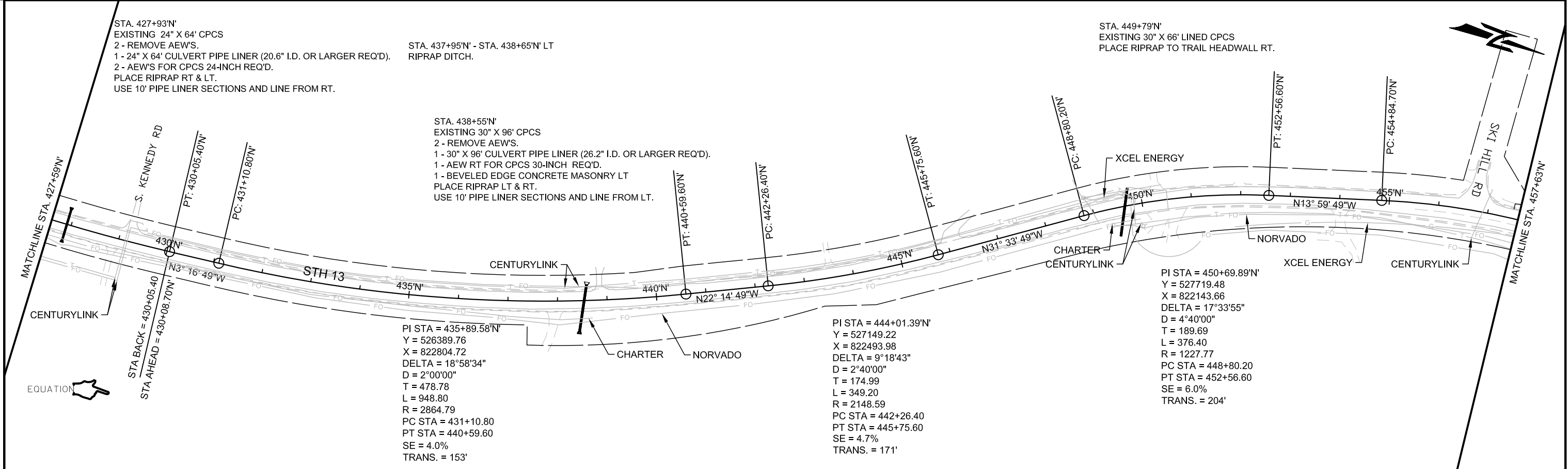
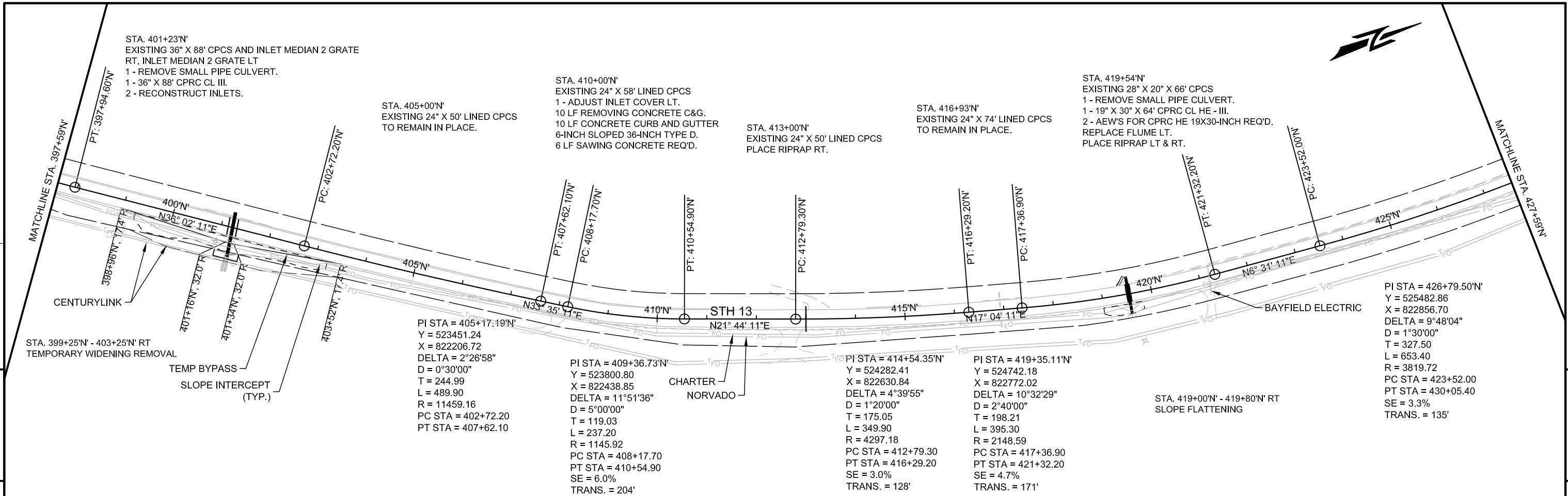
STA. 320+34.97 - 320+86.59'N

STA. 303+50 - 306+00 RT
 TEMPORARY WIDENING REMOVAL



EQUATION





PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	PLAN SHEETS: STH 13 'N'	SHEET	E
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STA. 459+21'N'
EXISTING 42" X 29" X 64' CPCA.
1 - REMOVE SMALL PIPE CULVERT.
1 - 36" X 64' CPRC CL IV.
2 - AEW'S FOR CPRC 36-INCH REQ'D.
PLACE RIPRAP LT & RT.

STA. 461+00'N'
EXISTING 24" X 66" CPCS
1 - REMOVE SMALL PIPE CULVERT.
1 - 24" X 64' CPRC CL IV.
2 - AEW'S FOR CPRC 24-INCH REQ'D.
PLACE RIPRAP RT & LT.

PI STA = 469+59.86'N'
Y = 529559.52
X = 822260.37
DELTA = 13°04'17"
D = 4°40'00"
T = 140.66
L = 280.10
R = 1227.77
PC STA = 468+19.20
PT STA = 470+99.30
SE = 6.0%
TRANS. = 204'

PI STA. 479+46.83
Y = 530191.12
X = 822677.95

STA. 485+60'N'
EXISTING 24" X 76" CPCS
1 - REMOVE SMALL PIPE CULVERT.

STA. 485+68'N'
EXISTING 24" X 76" CPCS.
1 - REMOVE SMALL PIPE CULVERT.

STA. 485+64'N'
1 - 36" X 68' CPRC CL III.
2 - AEW'S FOR CPRC 36-INCH REQ'D.
PLACE RIPRAP LT & RT.
BURY PIPE 6-INCHES.

STA. 457+50 - 459+75'N' LT
SLOPE FLATTENING.

STA. 473+89'N'
EXISTING 42" X 62" CPCS
TO REMAIN IN PLACE.

STA. 482+75 - 484+30'N' LT
TEMPORARY WIDENING REMOVAL

SLOPE INTERCEPT (TYP.)
TEMP BYPASS

CAUTION
483+16'N' -25.3'L
483+30'N' -25.3'L
484+68'N' -16.1'L

CAUTION
485'N'

CAUTION
485'N'

XCEL ENERGY

XCEL ENERGY

MILLIGAN RD
HATCHERY RD

CAUTION
485'N'

CAUTION
485'N'

CAUTION
485'N'

XCEL ENERGY

STA. 458+00 - 459+80'N' RT
REGRADE DITCH.

STA. 458+00 - 458+65'N' RT
PLACE RIPRAP IN DITCH.

STA. 482+75 - 483+50'N' RT
SLOPE FLATTENING.

STA. 483+20'N'
EXISTING 24" X 68" CPCS
1 - 24" X 6" CP TEMP. REQ'D LT.
1 - REMOVE SMALL PIPE CULVERT.

STA. 483+23'N'
1 - 36" X 66' CPRC CL III.
2 - AEW'S FOR CPRC 36-INCH REQ'D.
PLACE RIPRAP LT & RT.
BURY PIPE 6-INCHES.

STA. 483+27'N'
EXISTING 24" X 68" CPCS
1 - 24" X 6" CP TEMP. REQ'D LT.
1 - REMOVE SMALL PIPE CULVERT.

STA. 488+39'N'
EXISTING 48" X 68" CPCS
REMOVE SMALL PIPE CULVERT
1 - 48" X 76" X 70' CPRC HE-III.
2 - AEW'S FOR CPRC HE 48X76-INCH REQ'D.
PLACE RIPRAP LT & RT.
EXTEND PIPE RT SO THAT END OF BARREL
SECTION IS BEYOND THE CLEAR ZONE.
MAINTAIN EXISTING STREAM FLOW WITH
PUMPING DEVICE THAT DISCHARGES TO
PIPE AT STA. 485+64'N'.
COFFERDAM LT REQ'D.

STA. 458+25 - 461+75'N' RT
TEMPORARY WIDENING REMOVAL.

PI STA = 457+36.14'N'
Y = 528368.84
X = 821981.79
DELTA = 19°54'43"
D = 4°00'00"
T = 251.44
L = 497.80
R = 1432.39
PC STA = 454+84.70
PT STA = 459+82.50
SE = 5.7%
TRANS. = 197'

PI STA = 463+46.64'N'
Y = 528981.14
X = 822045.23
DELTA = 14°29'17"
D = 2°00'00"
T = 364.14
L = 724.40
R = 2864.79
PC STA = 459+82.50
PT STA = 467+06.90
SE = 4.0%
TRANS. = 153'

EQUATION

EXCEPTION TO NET CENTERLINE

STA. 470+71.86 - 472+30.60'N'

STA. 504+25'N'
EXISTING 36" X 136' LINED CPCS
PLACE RIPRAP TO RW LT & RT.

STA. 510+87'N'
EXISTING 24" X 72' LINED CPCS
TO REMAIN IN PLACE.

PI STA = 492+55.95'N'
Y = 531416.50
X = 823464.22
DELTA = 23°23'32"
D = 1°59'30"
T = 595.55
L = 1174.50
R = 2876.78
PC STA = 486+60.40
PT STA = 498+34.90
SE = 4.0%
TRANS. = 153'

STA. 499+11'N'
EXISTING 36" X 78" CPCS
2 - REMOVE AEW'S.
1 - 36" X 78' CULVERT PIPE LINER (30.0" I.D. OR LARGER REQ'D).
1 - AEW FOR CPCS 36-INCH REQ'D.
1 - BEVELED EDGE CONCRETE MASONRY ENDWALL LT.
PLACE RIPRAP LT & RT.

EQUATION

5

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STA. 520+74'N
EXISTING 36" X 74' LINED CPCS
PLACE RIPRAP LT.

PI STA. 536+36.86
Y = 533793.56
X = 826999.69

PI STA. 546+42.03
Y = 534353.90
X = 827834.18

STA. 543+84'N
EXISTING 24" X 70' CPCS
2 - REMOVE AEW'S.
1 - 24" X 70' CULVERT PIPE LINER.
2 - AEW'S FOR CPS 24-INCH REQ'D.
PLACE RIPRAP RT & LT.

MATCHLINE STA. 518+42'N

MATCHLINE STA. 548+42'N

5

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PI STA. 552+42.15
Y = 534678.53
X = 828338.93

STA. 558+09'N
EXISTING 24" X 66' CPCS
2 - REMOVE AEW'S.
1 - 24" X 66' CULVERT PIPE LINER (20.6" I.D. OR LARGER REQ'D).
1 - AEW FOR CPS 24-INCH REQ'D RT.
1 - BEVELED EDGE CONCRETE MASONRY ENDWALL LT.
PLACE RIPRAP LT & RT.
LINE FROM RT.

STA. 568+56'N
EXISTING 48" X 84' CPCS
1 - REMOVE SMALL PIPE CULVERT.
1 - 48" X 92' CPRC CL III.

STA. 568+68'N
EXISTING 48" X 84' CPCS
1 - REMOVE SMALL PIPE CULVERT.

STA. 568+64'N
1 - 48" X 92' CPRC CL III.
CONCRETE MASONRY ENDWALLS LT & RT REQ'D.
PLACE RIPRAP LT & RT.

MATCHLINE STA. 548+42'N

MATCHLINE STA. 578+42'N

5

5

STA. 554+85'N
EXISTING 24" X 82' LINED CPCS
TO REMAIN IN PLACE.

STA. 554+85'N
EXISTING 24" X 82' LINED CPCS
TO REMAIN IN PLACE.

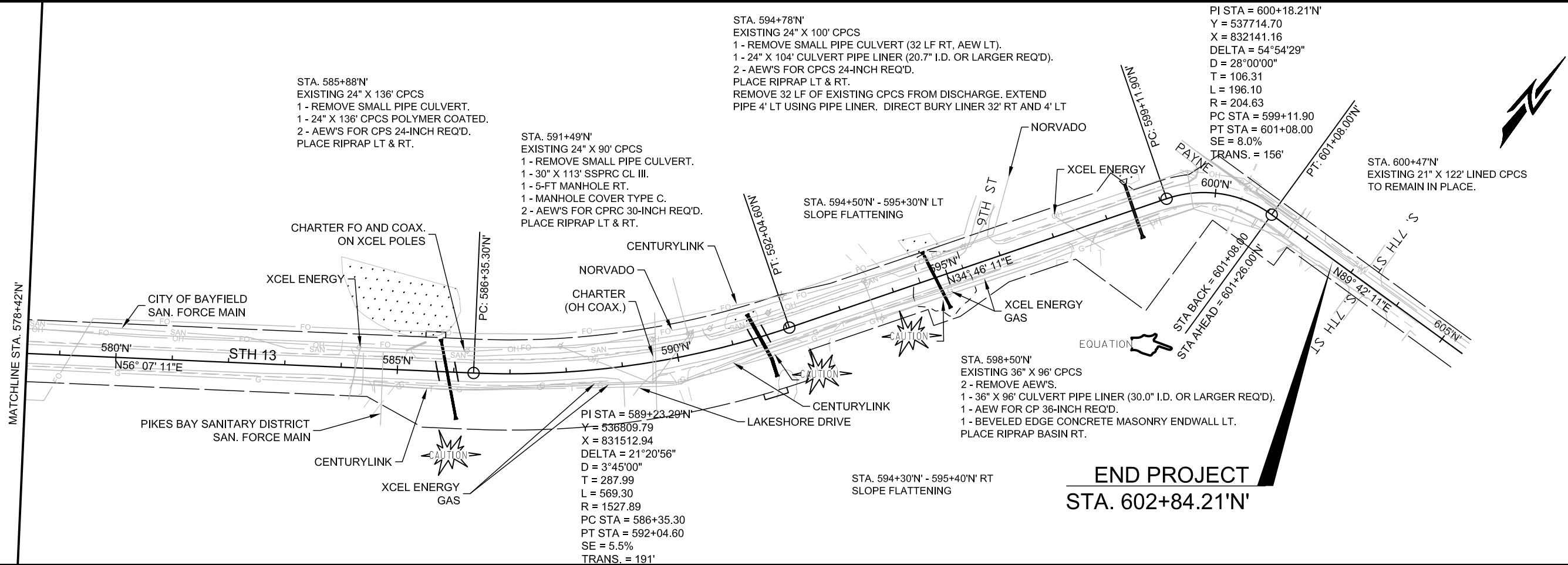
PIKES BAY SANITARY DISTRICT
SAN. FORCE MAIN

CAUTION

PIKES BAY SANITARY DISTRICT
SAN. FORCE MAIN

STA. 575+93'N
EXISTING 24" X 64' CPCS
2 - REMOVE AEW'S
1 - 24" X 64' CULVERT PIPE LINER (20.6" I.D. OR LARGER REQ'D).
1 - AEW FOR CPS 24-INCH RT.
1 - BEVELED EDGE CONCRETE MASONRY ENDWALL LT.
PLACE RIPRAP LT & RT.

STA. 568+60'N - 569+10'N RT
SLOPE FLATTENING



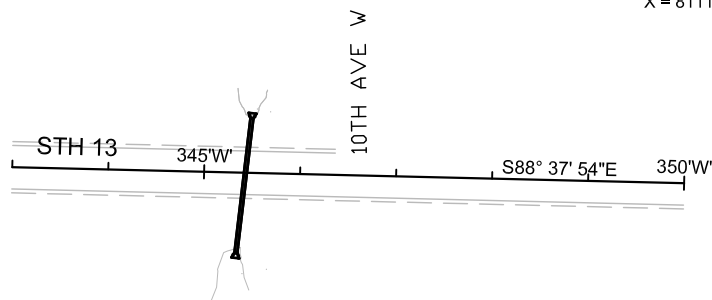
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CITY OF WASHBURN

PI STA. 343+00.00'W'
 Y = 487834.41
 X = 810412.76

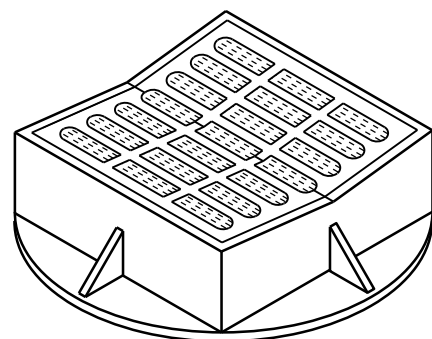
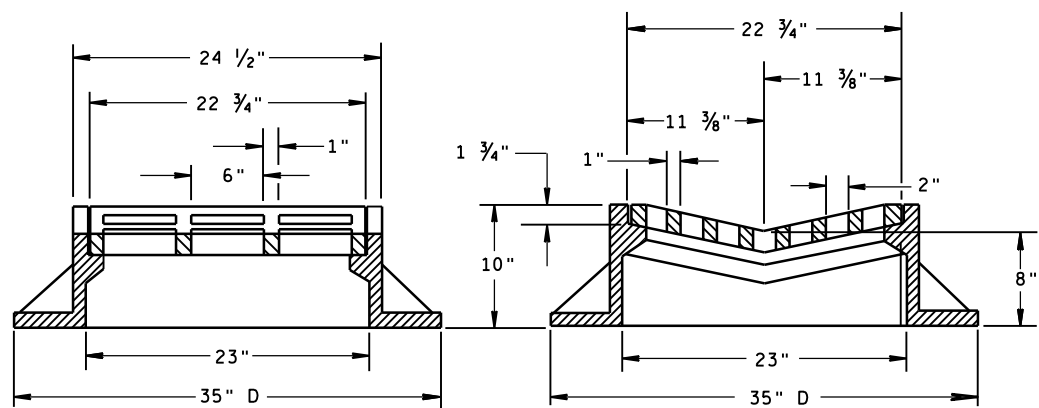
PI STA. 350+00.00'W'
 Y = 487817.70
 X = 811112.56



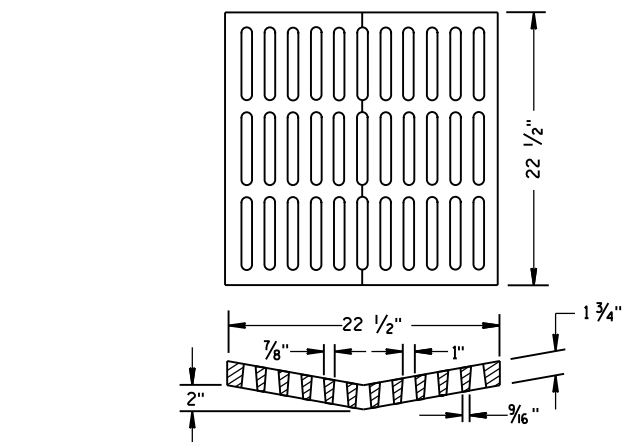
STA. 345+43'W'
 EXISTING 36" X 140' LINED CPCS
 2 - REMOVE AEW'S.
 2 - AEW FOR CPCS 36-INCH REQ'D LT & RT.
 PLACE RIPRAP LT & RT.

Standard Detail Drawing List

08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D01-19	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F10-01	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16C	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-16D	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

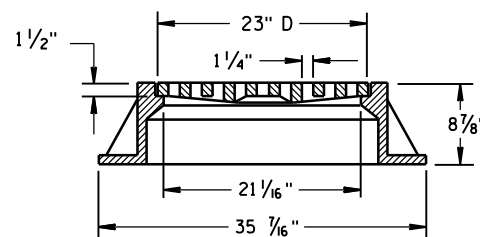
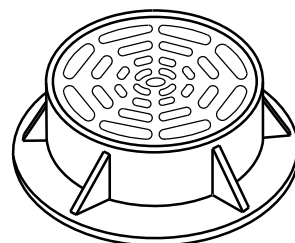
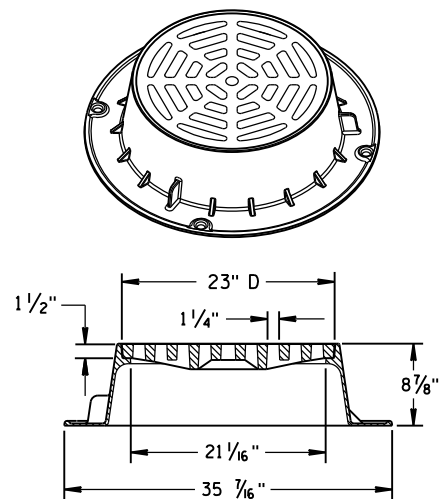


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

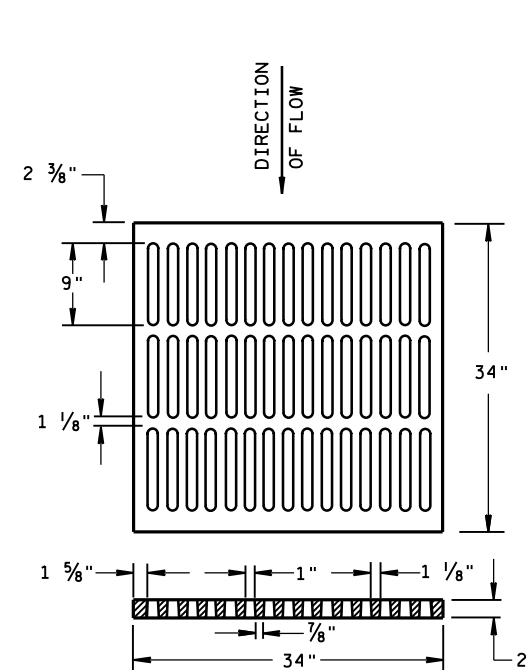
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

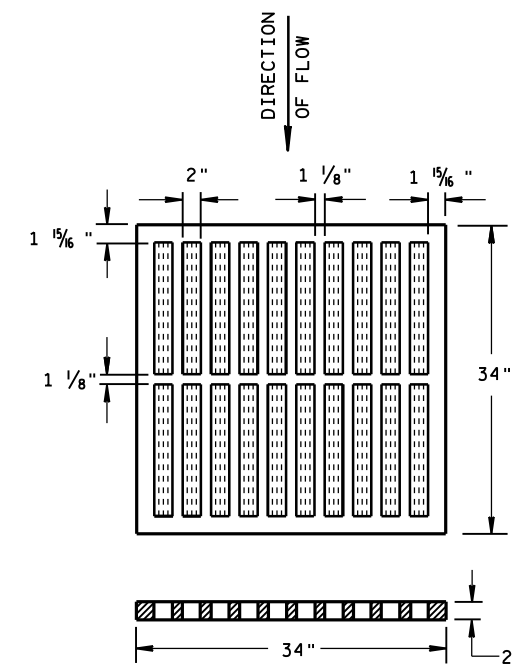
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



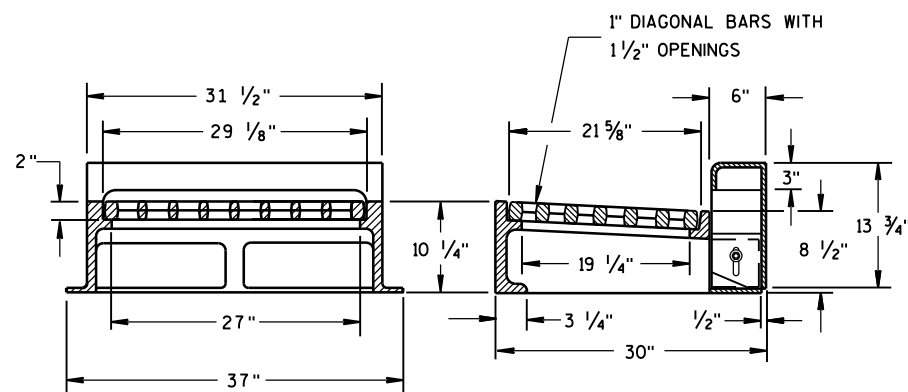
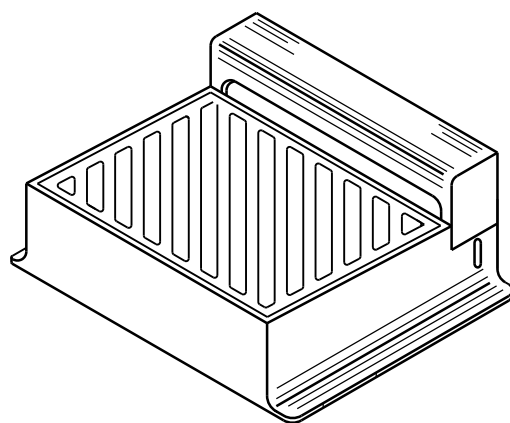
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

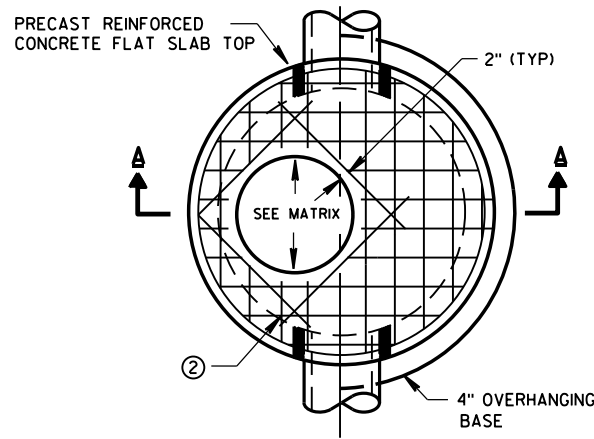
DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.

DIRECTION OF FLOW

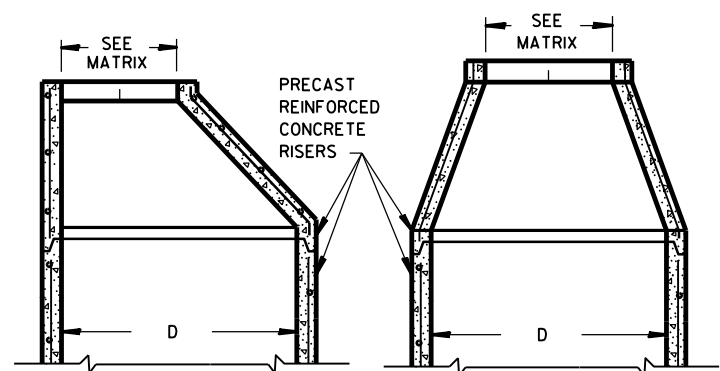
INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE 11/27/2013 /S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

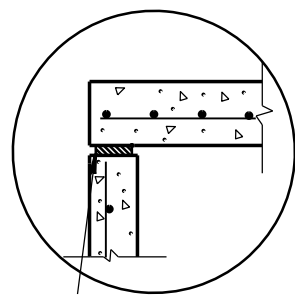


PLAN VIEW CIRCULAR OPENING

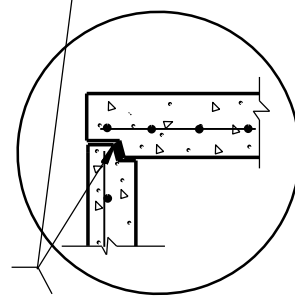


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

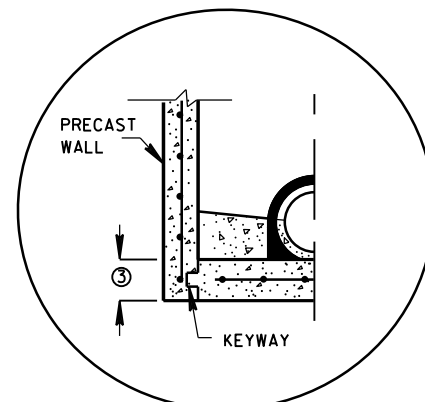
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT

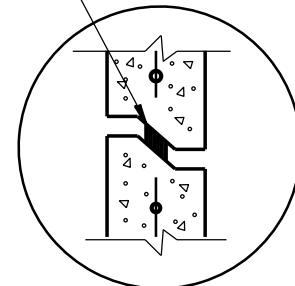


TOP WITH TONGUE AND GROOVE JOINT

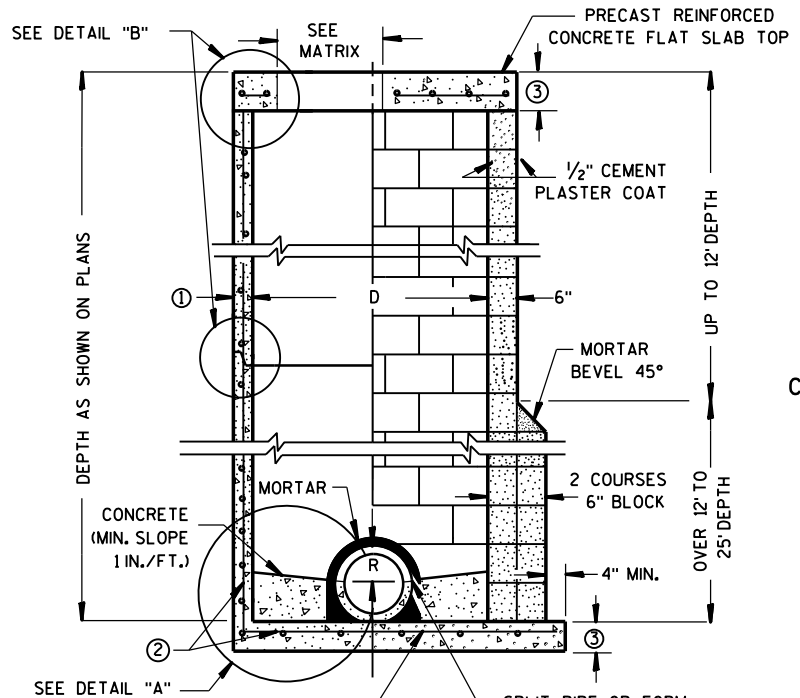


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

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

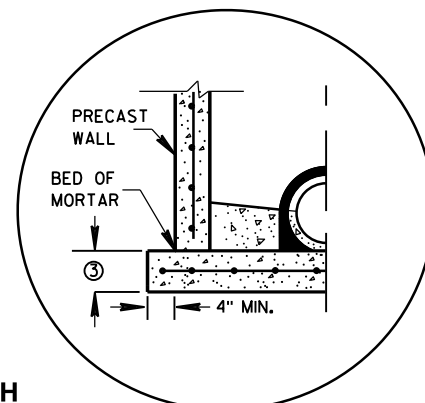


RISE WITH TONGUE AND GROOVE JOINT
DETAIL "B"

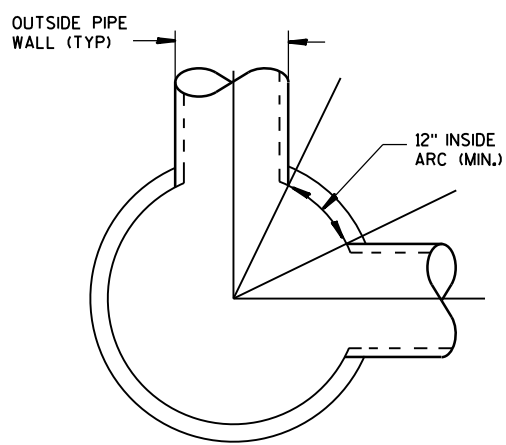


CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

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



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION
DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF 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

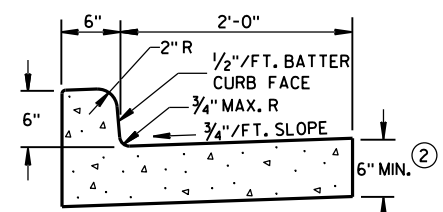
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

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

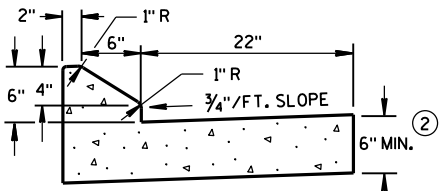
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

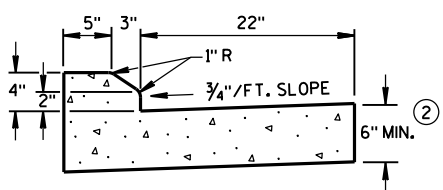
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER



TYPES A & D ①

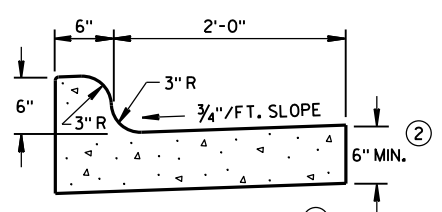


6" SLOPED CURB TYPES G & J ①



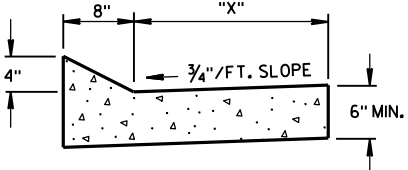
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



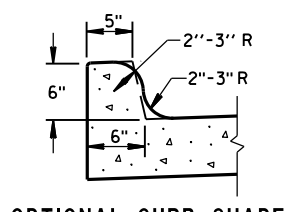
TYPES K & L ①

CONCRETE CURB & GUTTER 30"

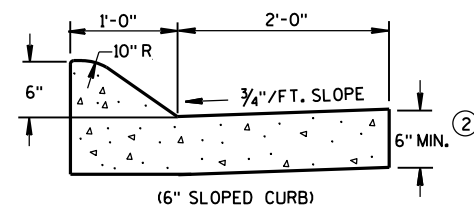


TYPES TBT & TBTT ①
CONCRETE CURB & GUTTER

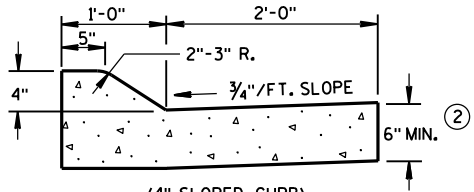
TBT & TBTT	"X"
30"	22"
36"	28"



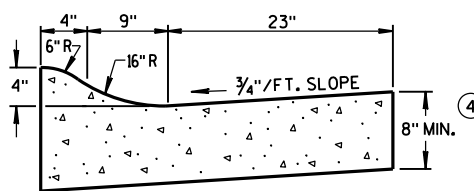
OPTIONAL CURB SHAPE FOR TYPES K & L ①



(6" SLOPED CURB)



(4" SLOPED CURB)
TYPES A & D ①

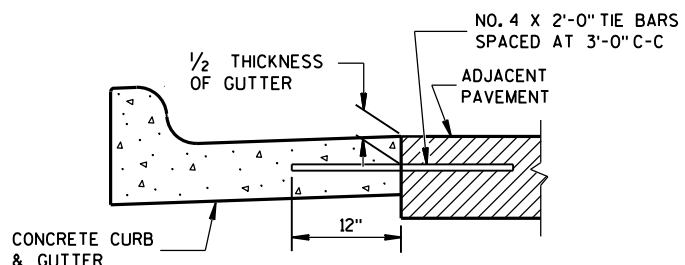


4" SLOPED CURB TYPES R & T ① ⑤
CONCRETE CURB & GUTTER 36"

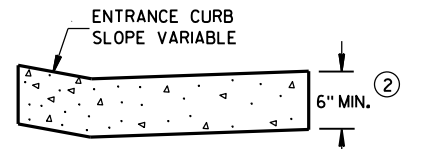
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.
INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

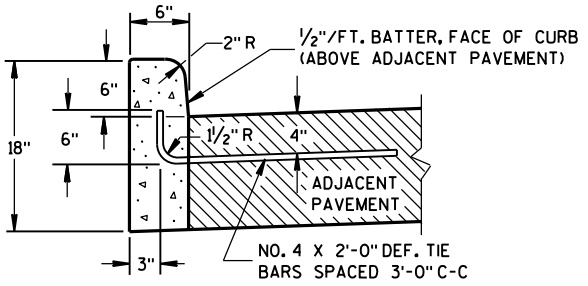
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



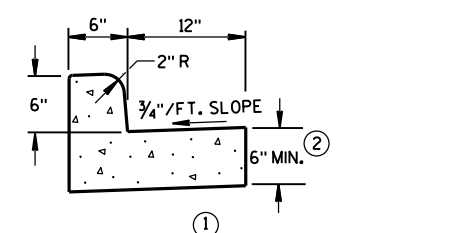
TYPICAL TIE BAR LOCATION ①



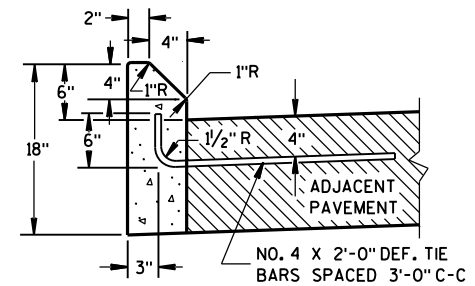
DRIVEWAY ENTRANCE CURB (WHEN DIRECTED BY THE ENGINEER)



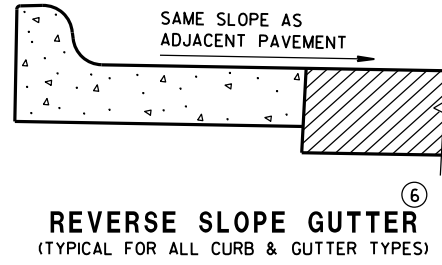
TYPES A & D ①
CONCRETE CURB



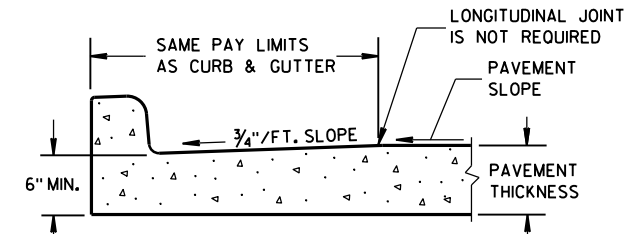
TYPES A & D
CONCRETE CURB & GUTTER 18"



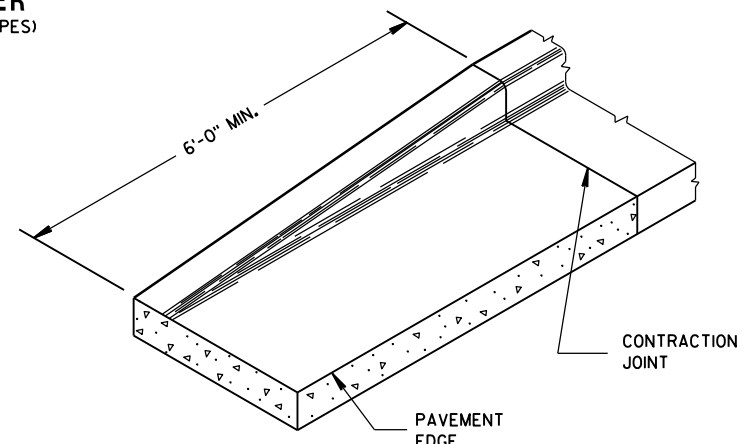
TYPES G & J ①



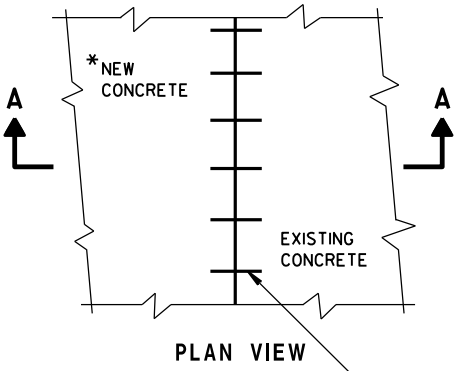
REVERSE SLOPE GUTTER (TYPICAL FOR ALL CURB & GUTTER TYPES) ⑥



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

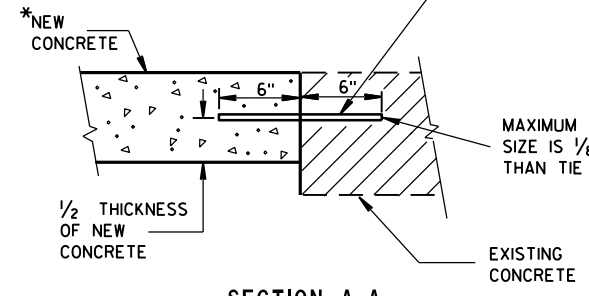


PLAN VIEW

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

NO. 6 TIE BARS SPACED 2'-6" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT.

MAXIMUM DRILL HOLE SIZE IS 1/8" GREATER THAN TIE BAR DIAMETER



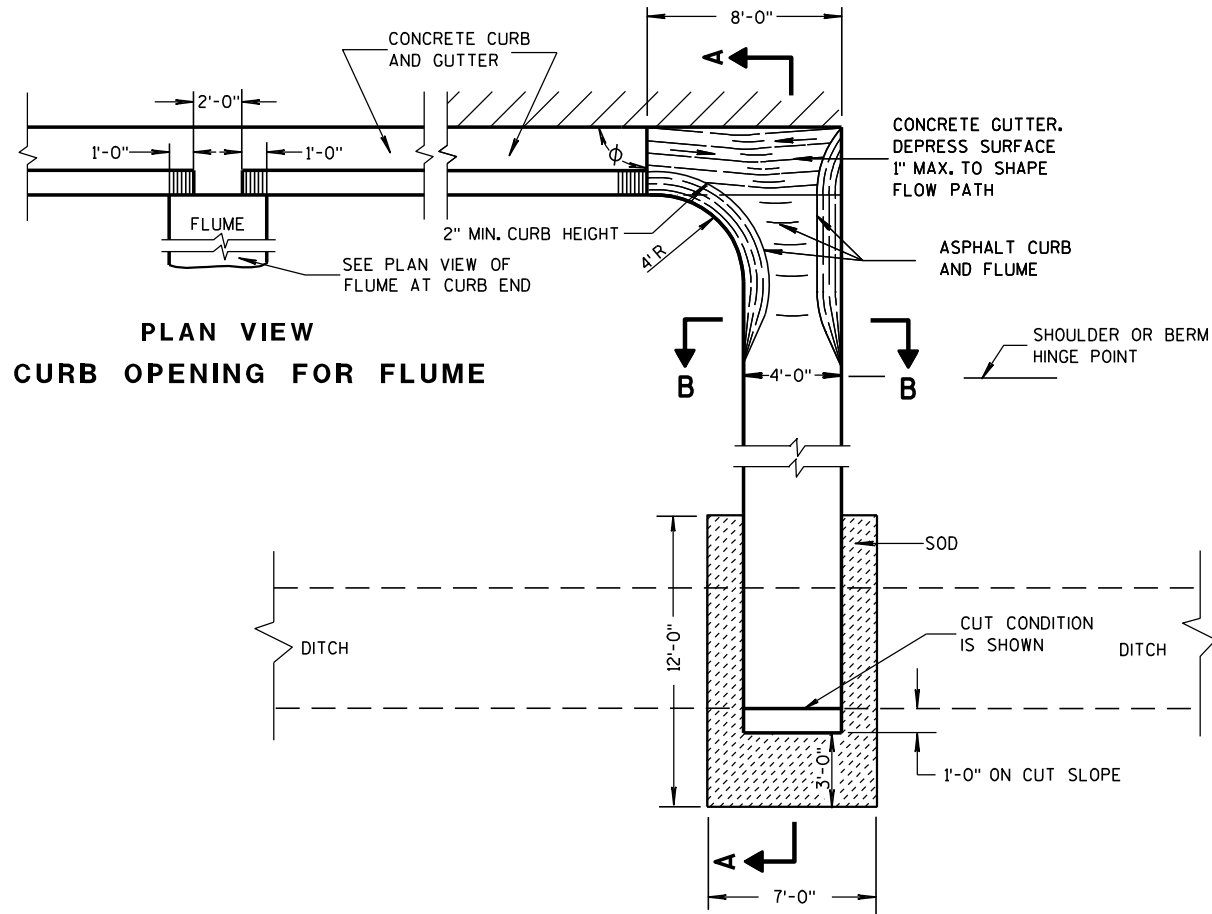
SECTION A-A
TIE BARS DRILLED INTO EXISTING PAVEMENT

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June, 2016 DATE	/s/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

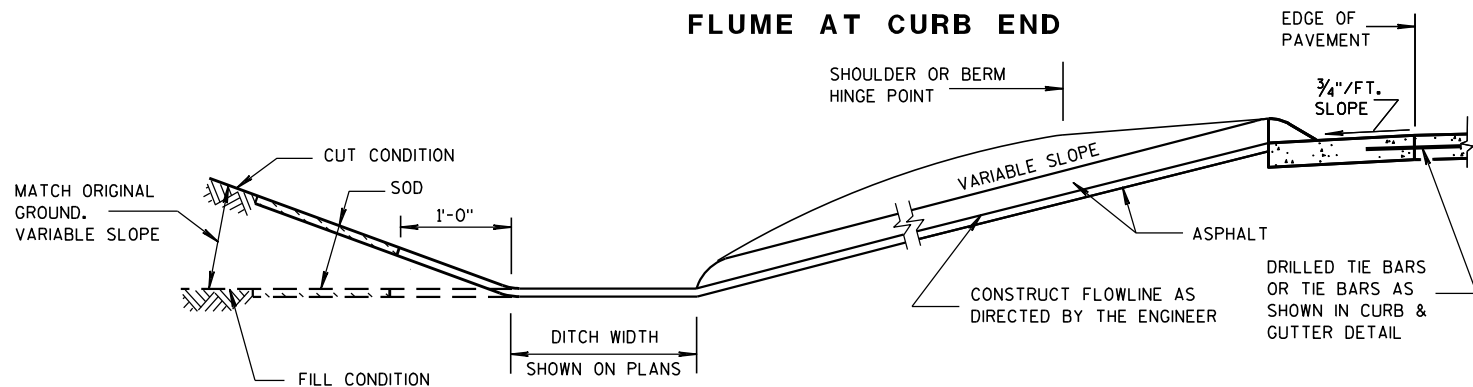
ASPHALTIC FLUME

NOTE: TAPER CURB ENDS TO GUTTER IN 1'-0"

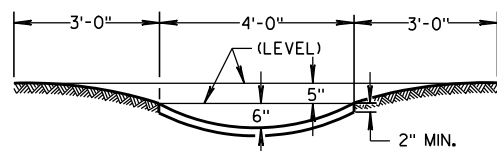
INCREASE ϕ FROM RIGHT ANGLE TO BEST FIT FIELD CONDITIONS



SECTION A-A



SECTION B-B



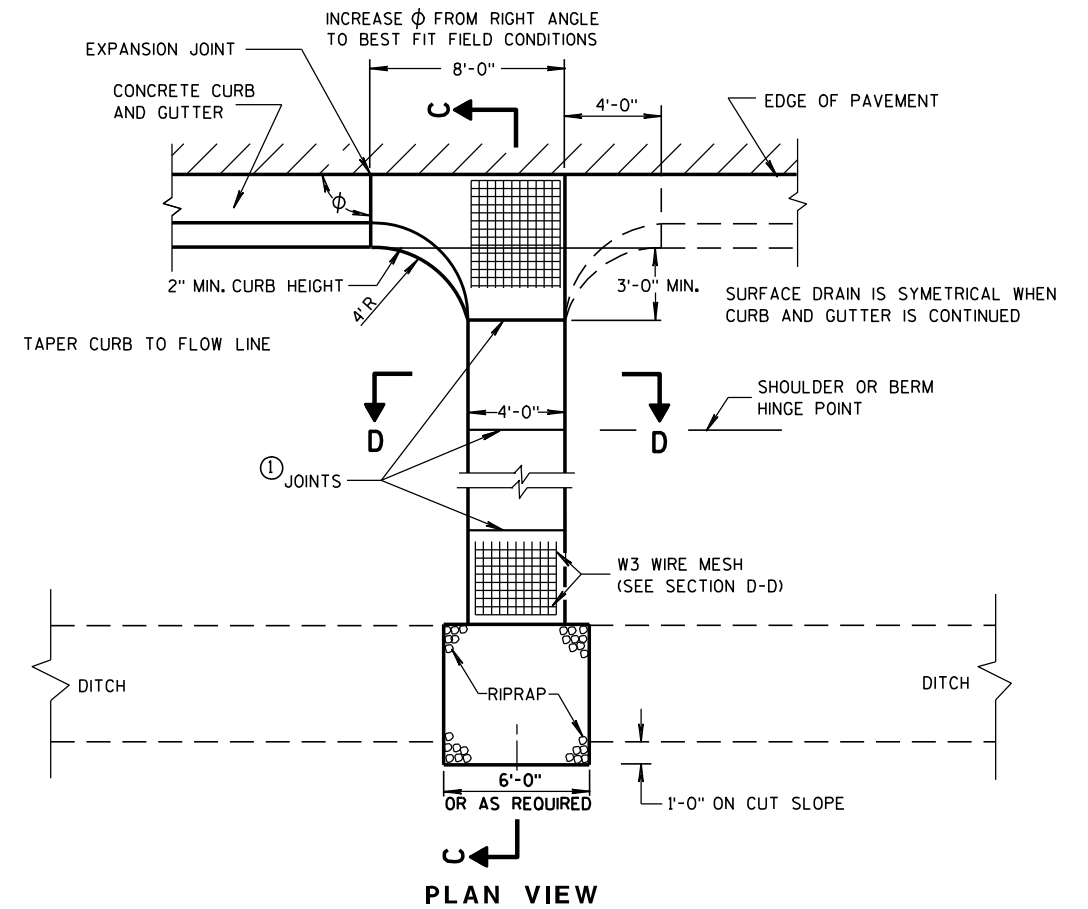
GENERAL NOTES

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

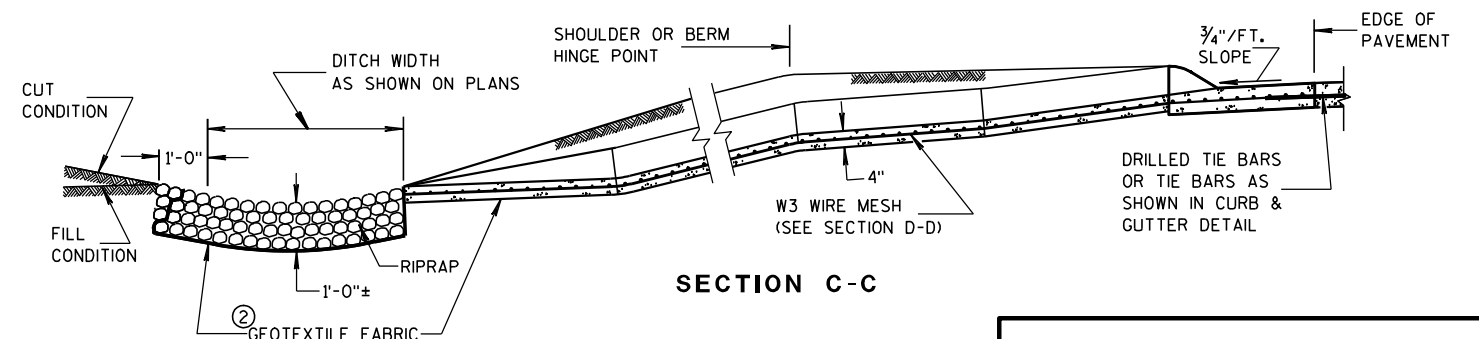
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

- ① JOINTS SHALL BE 1/8 TO 1/4 INCH WIDE BY 1/2 INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- ② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- ③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

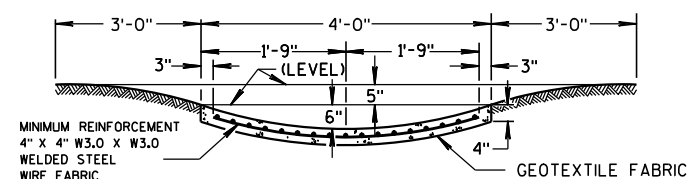
③ CONCRETE SURFACE DRAIN



SECTION C-C



SECTION D-D



CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

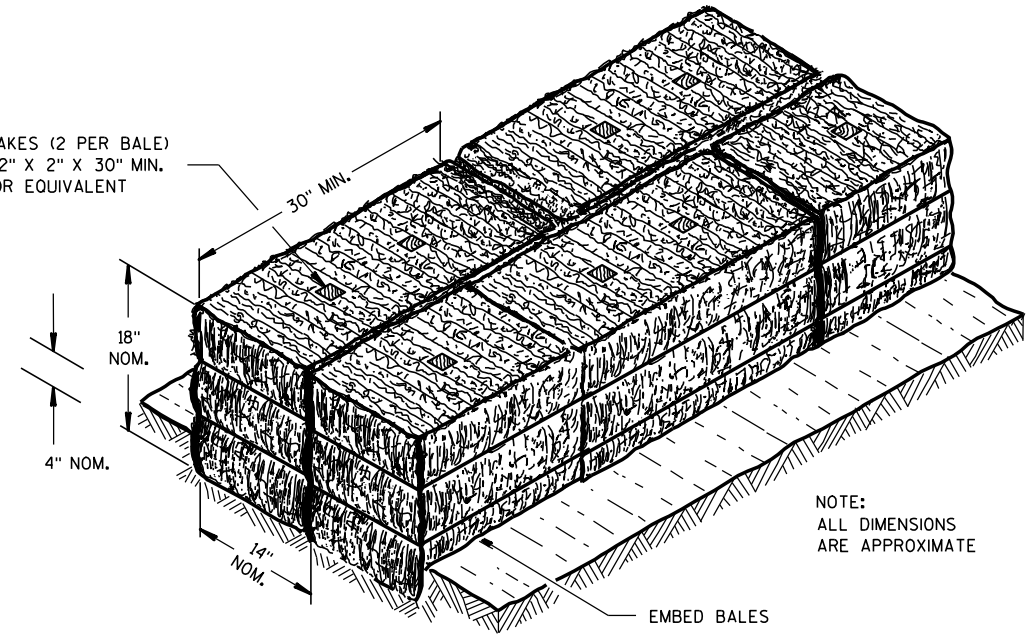
9-4-08

DATE

FHWA

/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

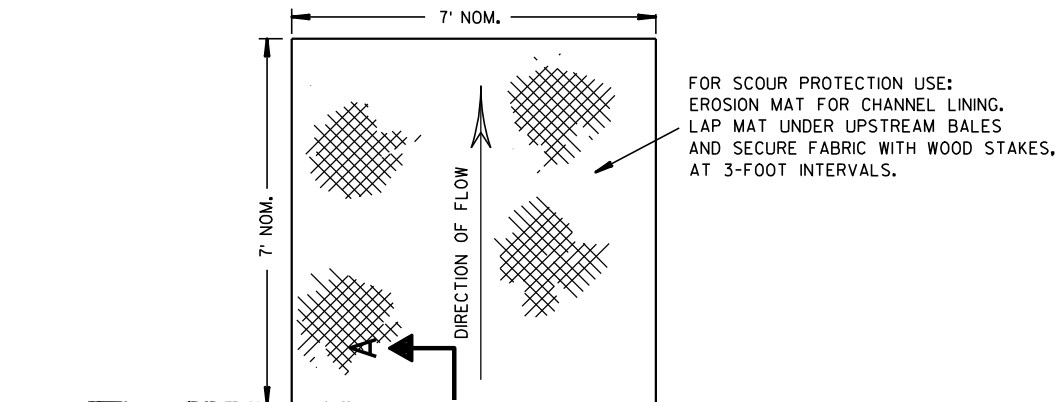
WOOD STAKES (2 PER BALE)
NOMINAL 2" X 2" X 30" MIN.
LENGTH OR EQUIVALENT



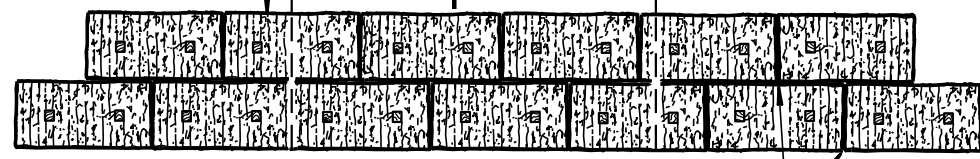
NOTE:
ALL DIMENSIONS
ARE APPROXIMATE

EMBED BALES

SECTION A-A



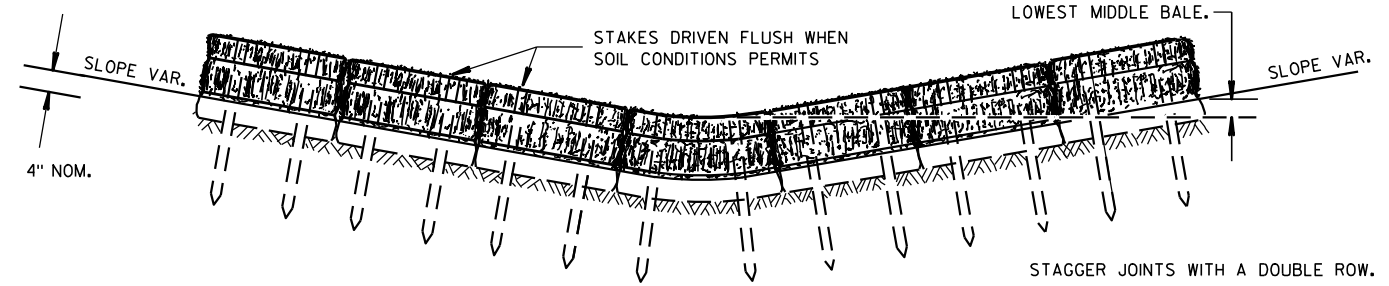
FOR SCOUR PROTECTION USE:
EROSION MAT FOR CHANNEL LINING.
LAP MAT UNDER UPSTREAM BALES
AND SECURE FABRIC WITH WOOD STAKES,
AT 3-FOOT INTERVALS.



STAGGER JOINTS BETWEEN ADJACENT
ROWS OF BALES.

PLAN VIEW

BOTTOM ELEVATION OF END BALE SHALL
BE EQUAL TO OR GREATER THAN TOP OF
LOWEST MIDDLE BALE.



FRONT ELEVATION

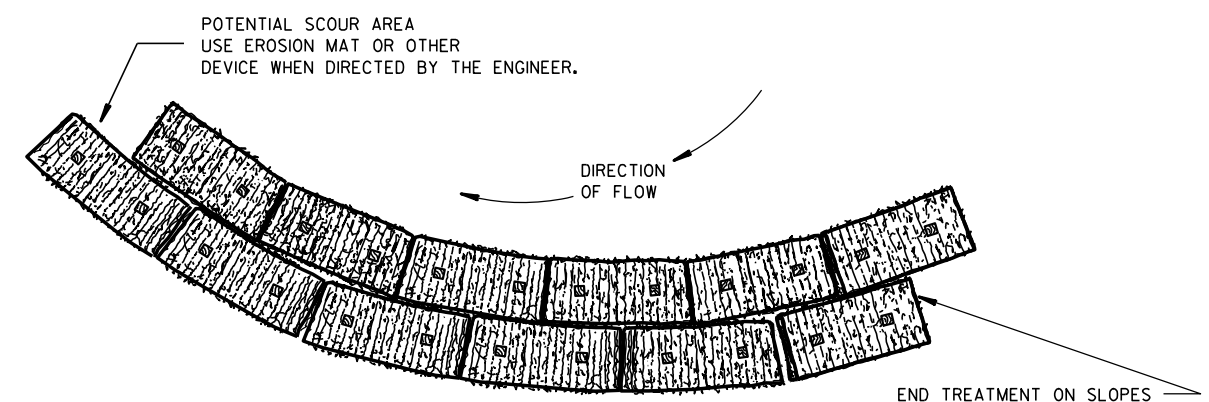
STAGGER JOINTS WITH A DOUBLE ROW.

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

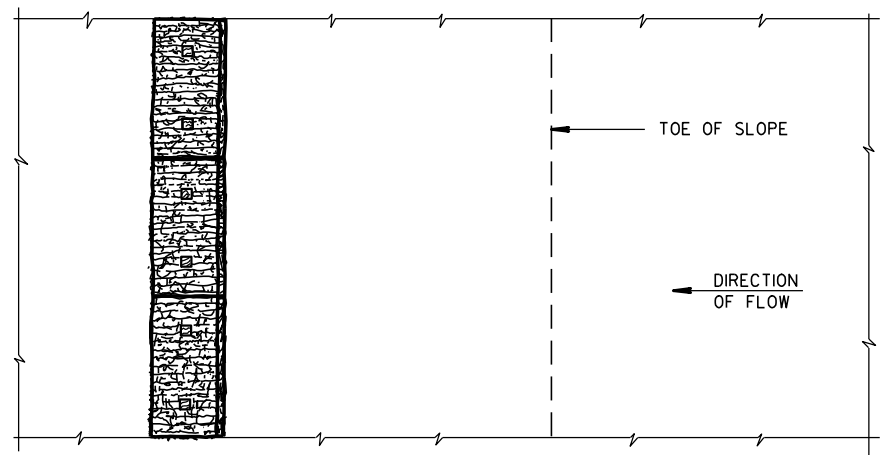
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

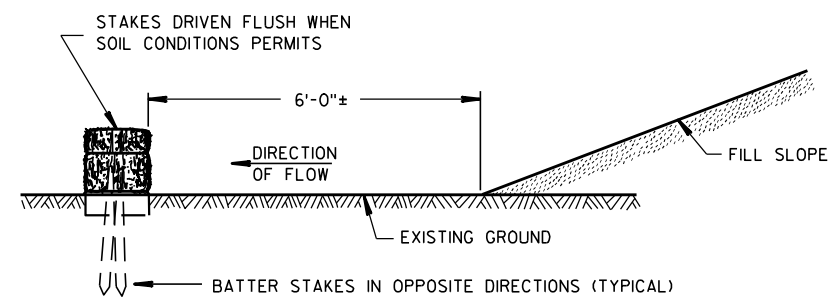


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

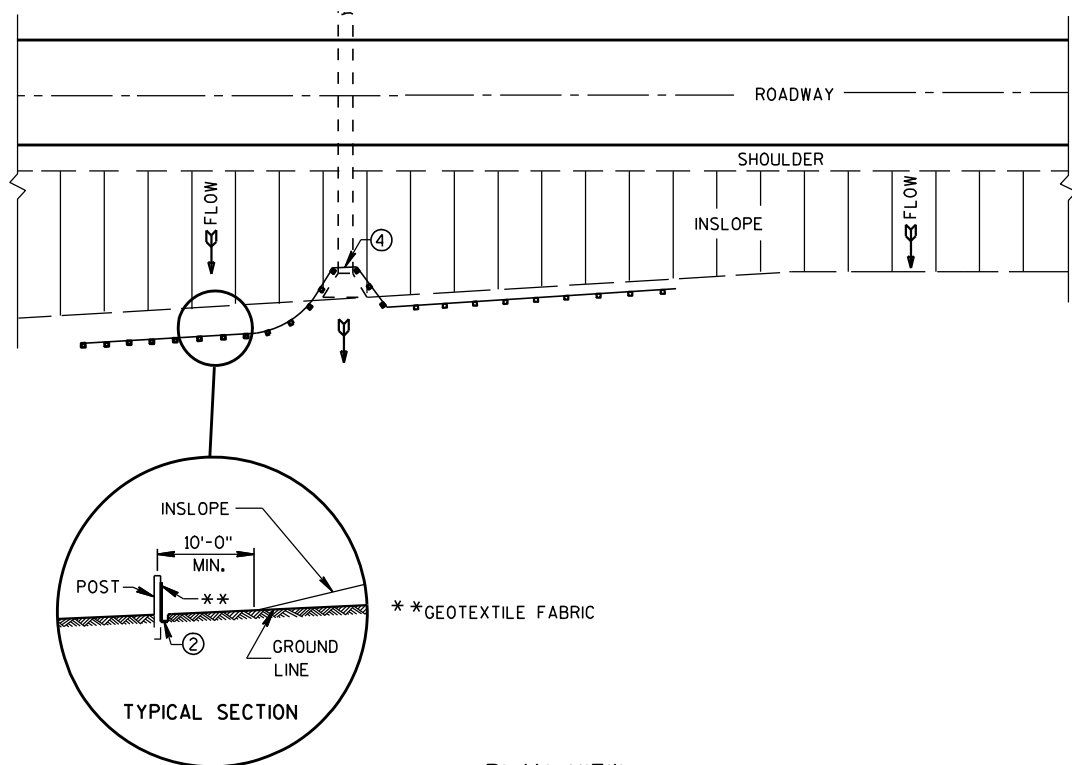
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

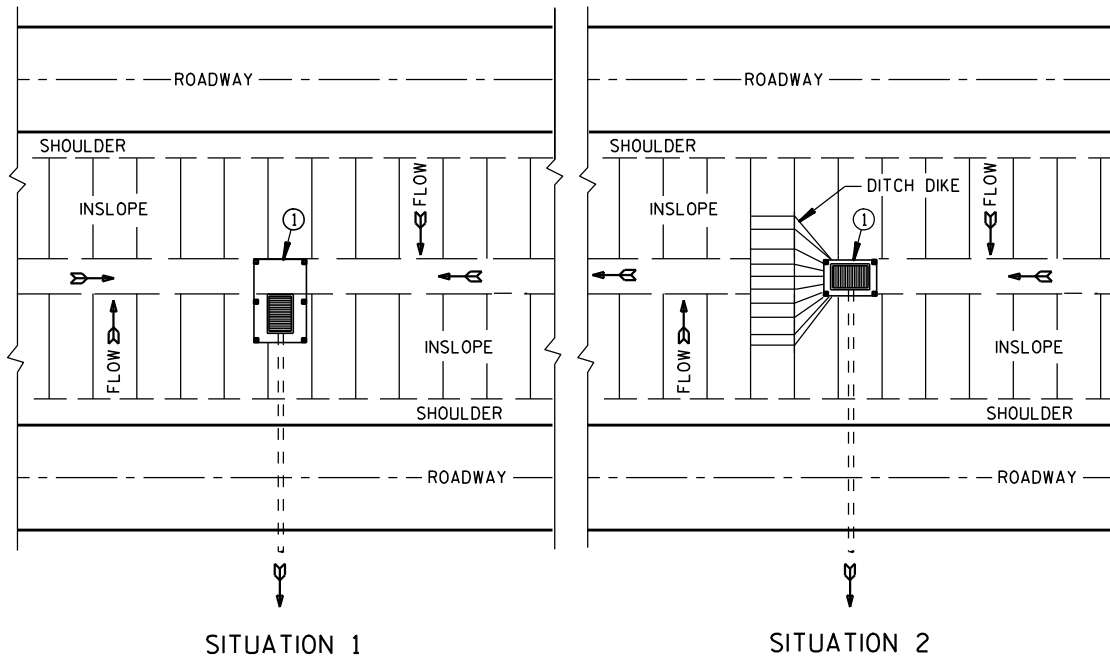
TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
 6/04/02 /S/ Beth Canestra
 DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
 FHWA



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

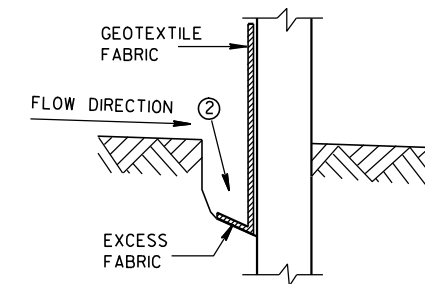


SITUATION 1 SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

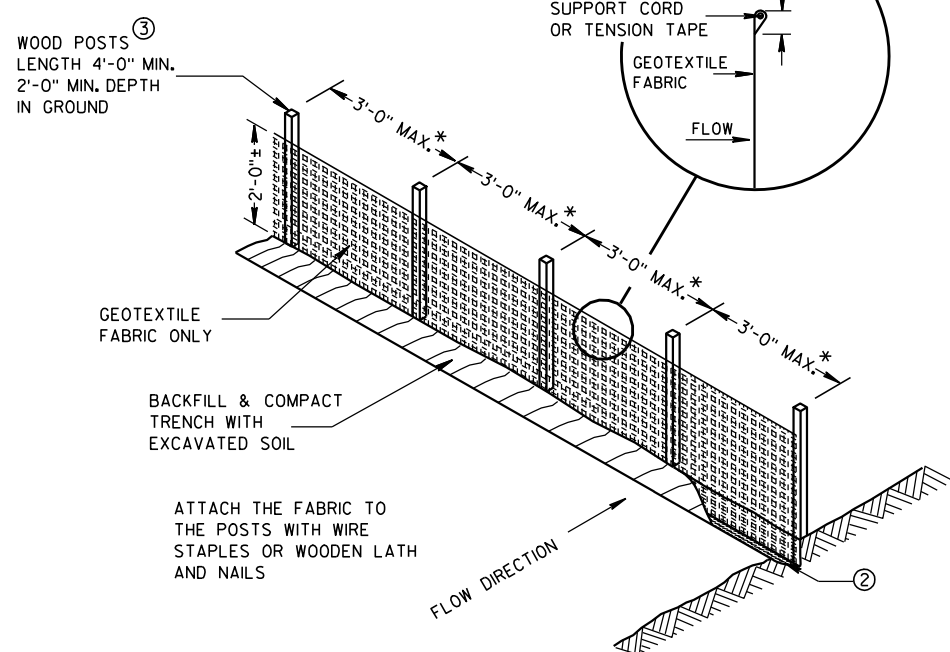
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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



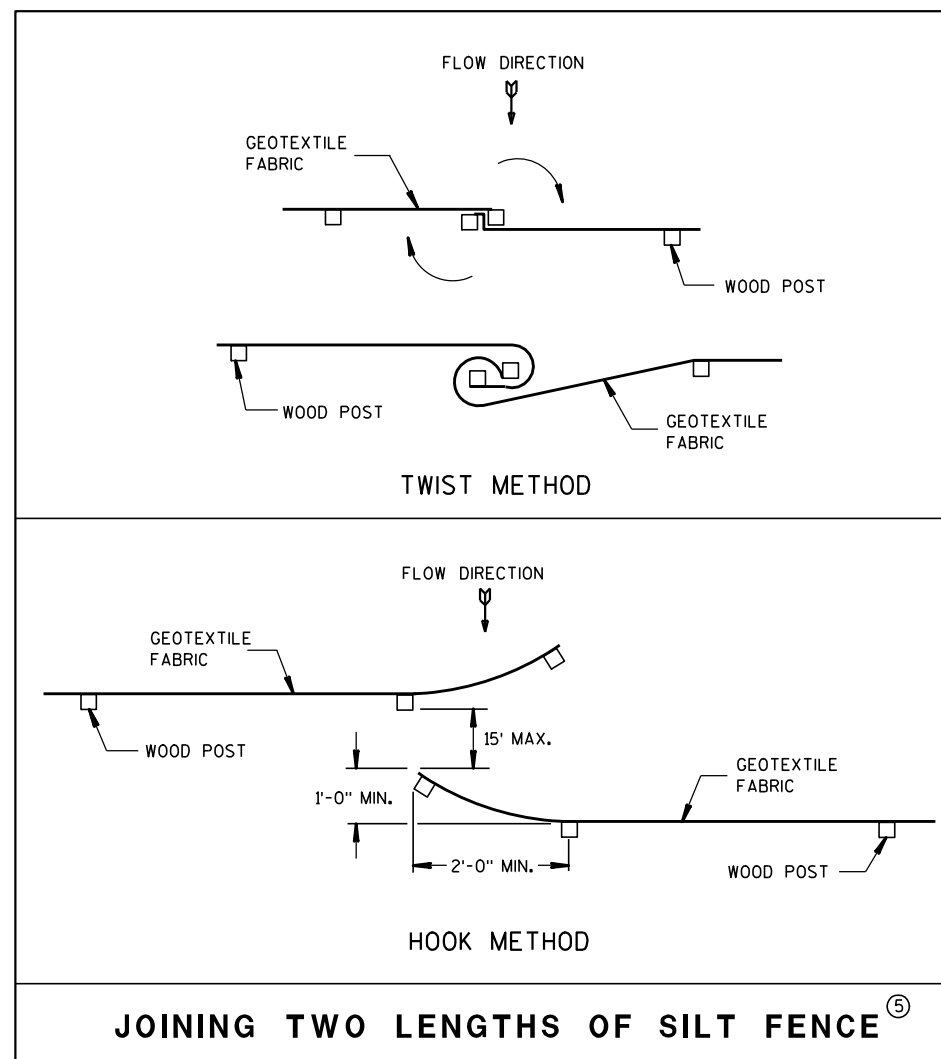
TRENCH DETAIL

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

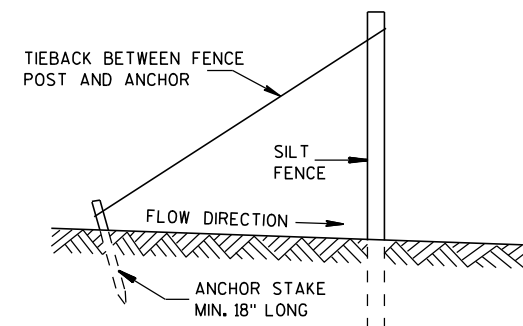


SILT FENCE

* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

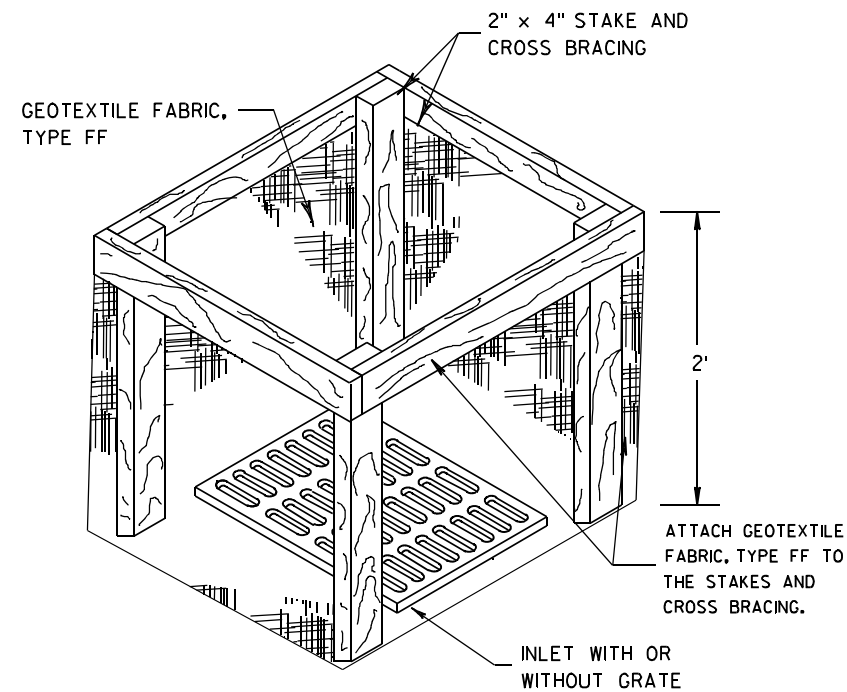
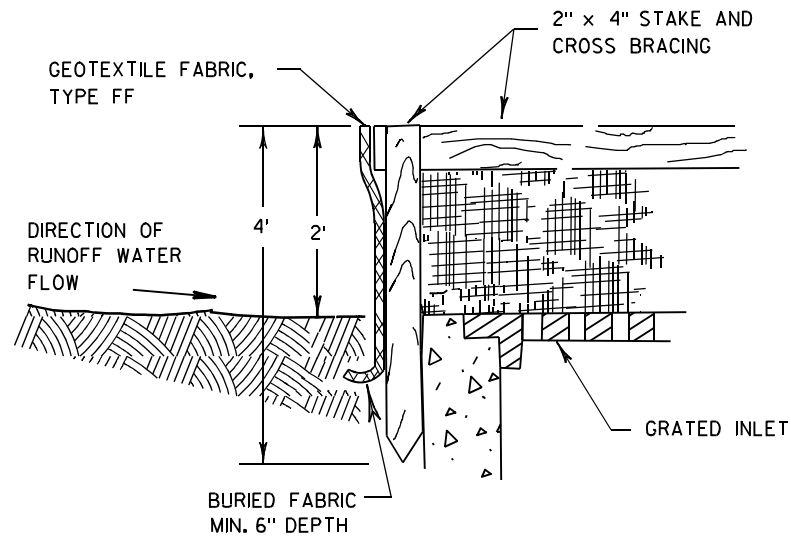
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-29-05
DATE

FHWA

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



INLET PROTECTION, TYPE A

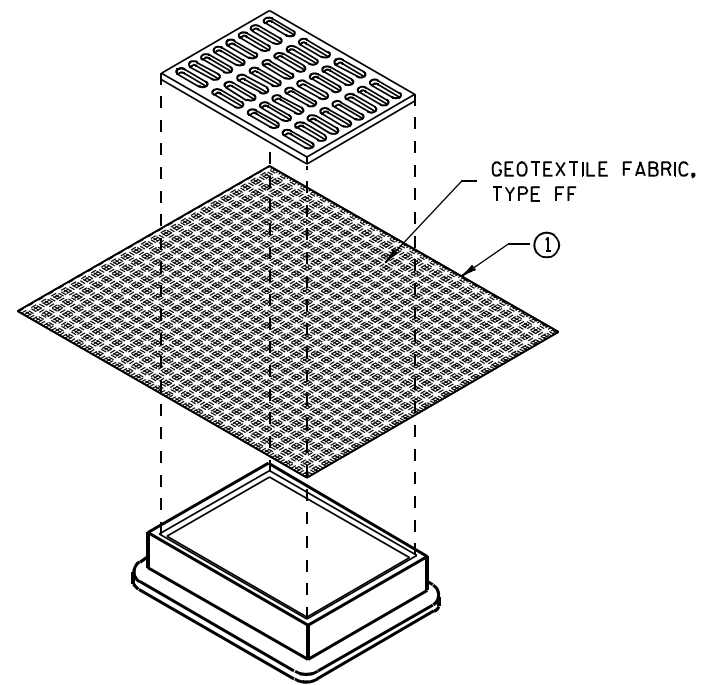
GENERAL NOTES

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

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

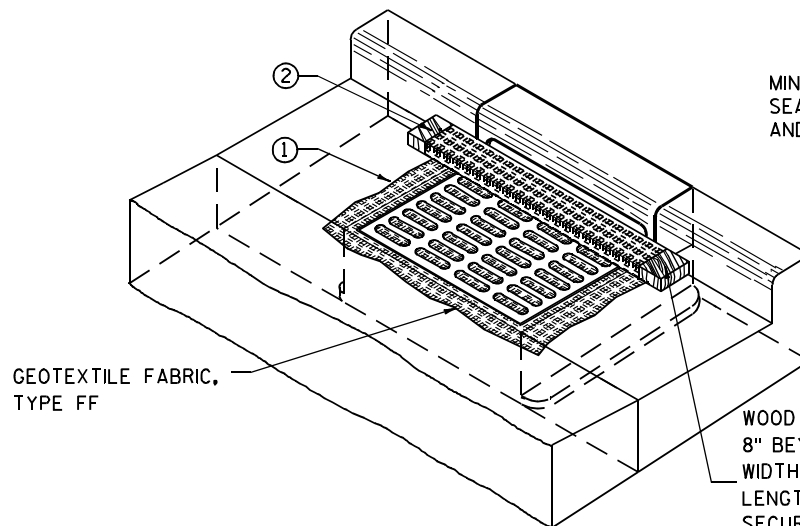
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

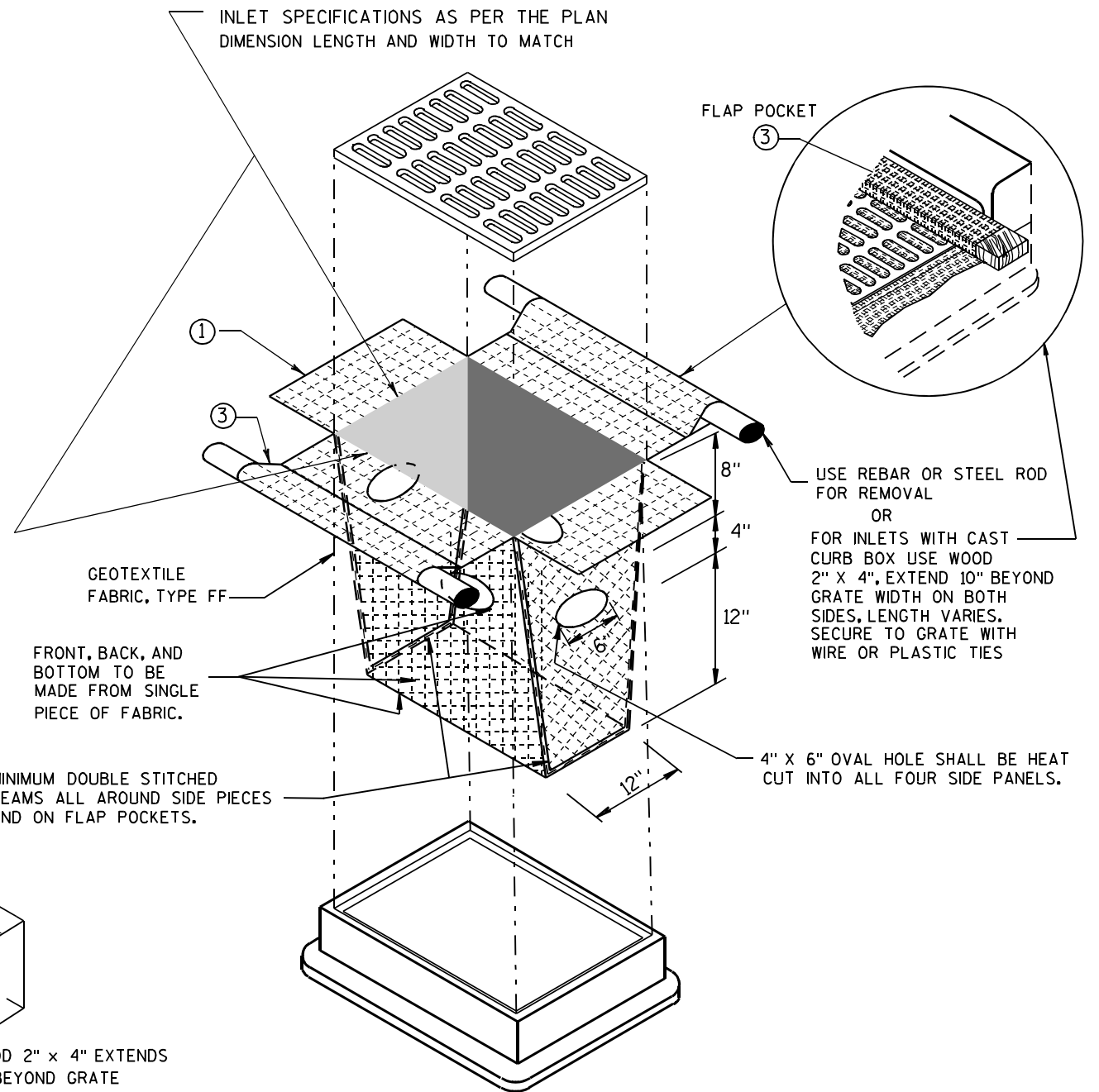
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

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



INLET PROTECTION, TYPE D

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

**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Connestra
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

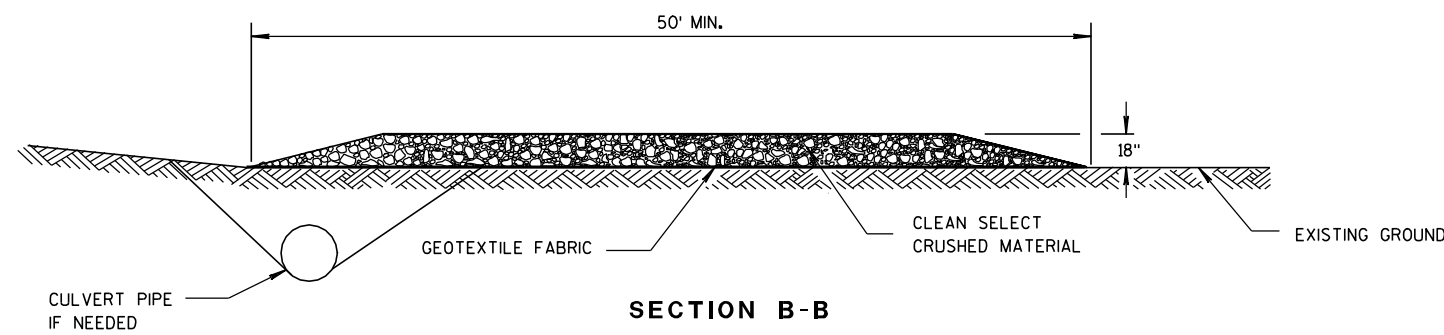
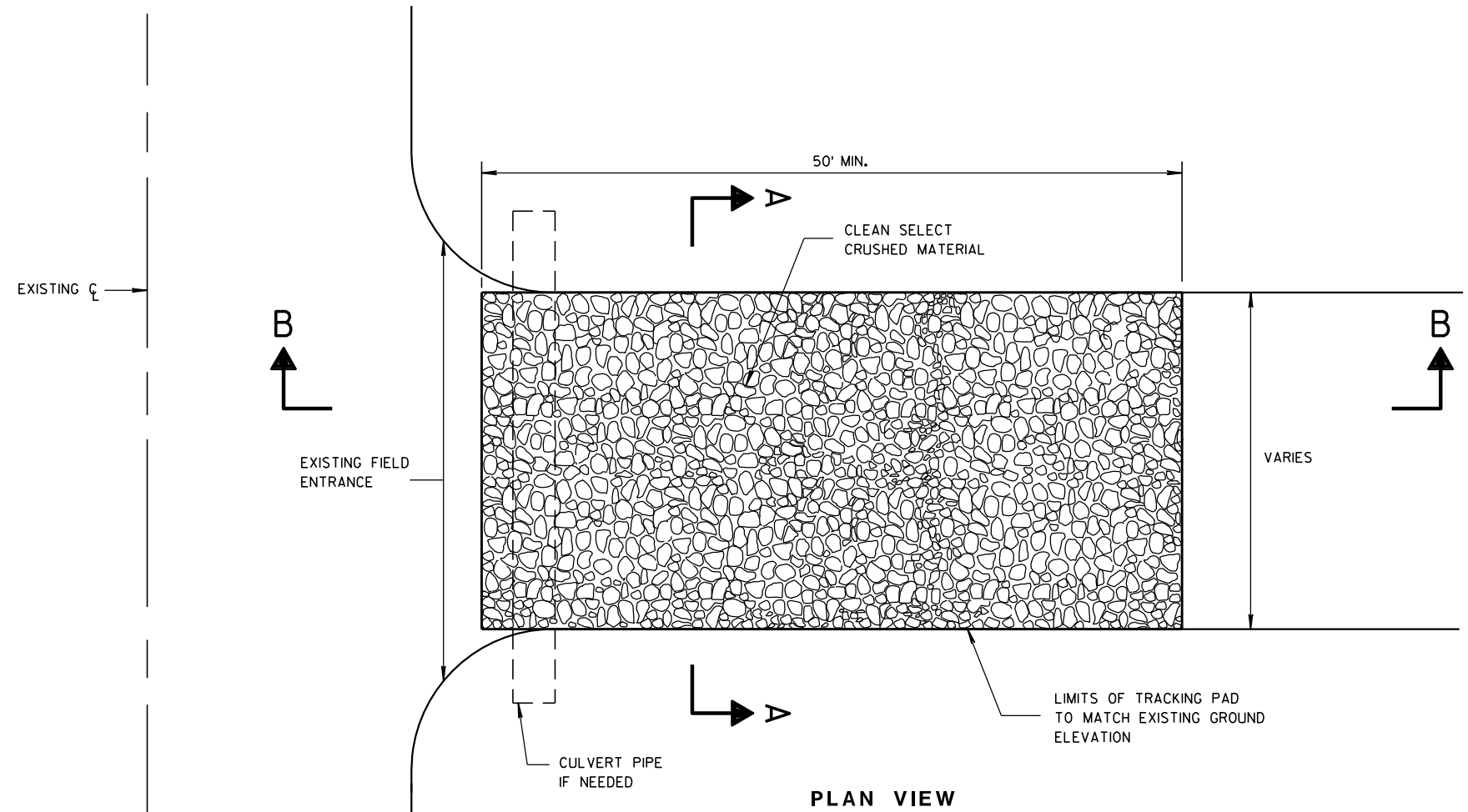
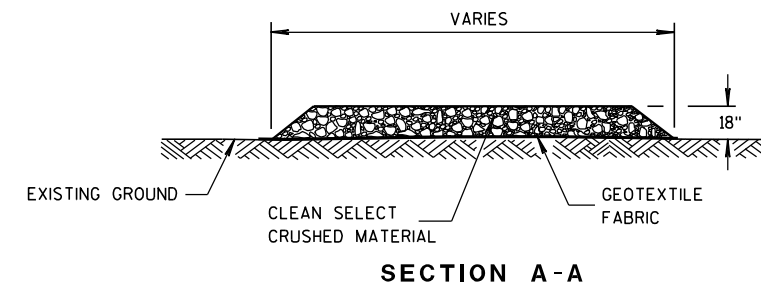
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



TRACKING PAD

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

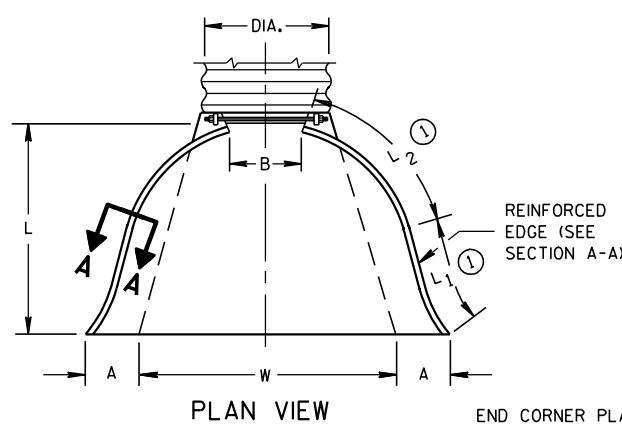
APPROVED
3/24/2011 DATE /S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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")	L1	L2	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.

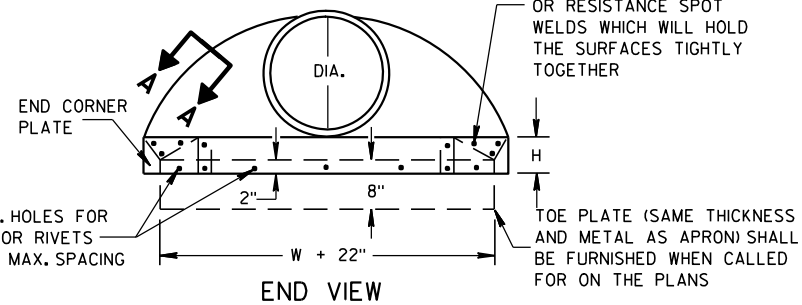
* EXCEPT CENTER PANEL SEE GENERAL NOTES

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

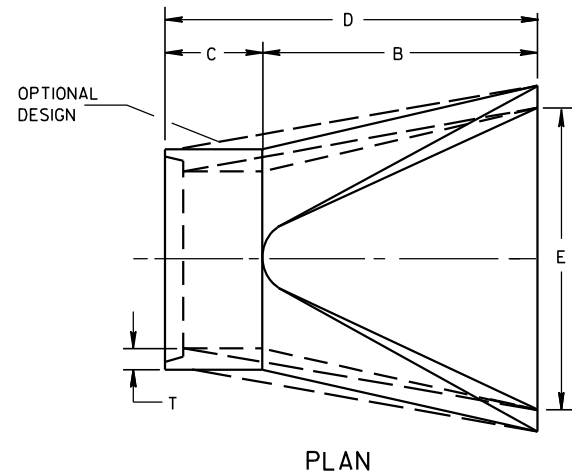
* MINIMUM
** MAXIMUM



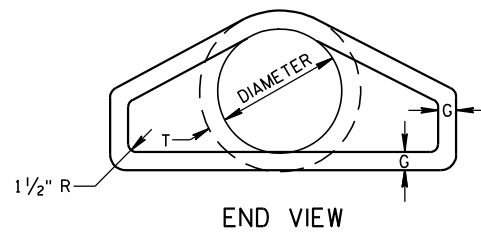
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



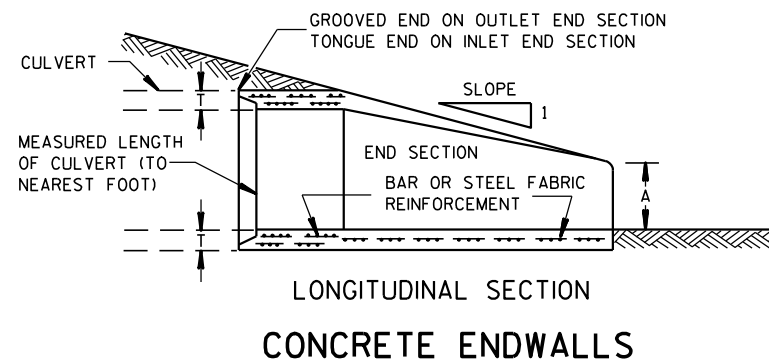
SIDE ELEVATION
METAL ENDWALLS



PLAN

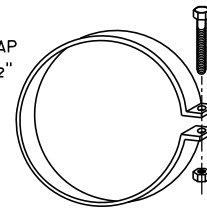


END VIEW

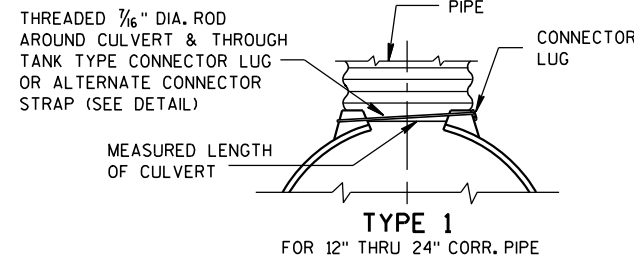


LONGITUDINAL SECTION
CONCRETE ENDWALLS

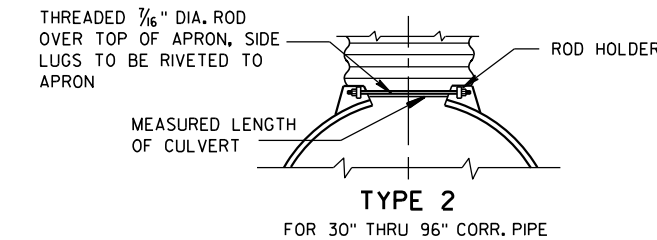
1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



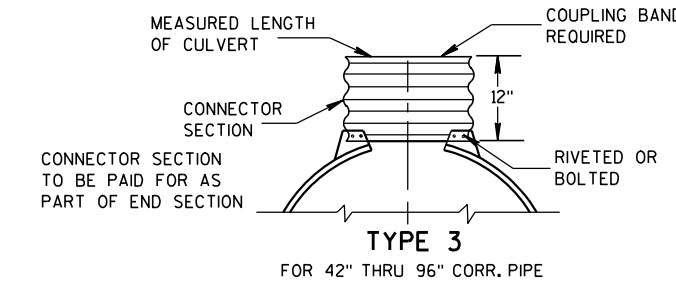
ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



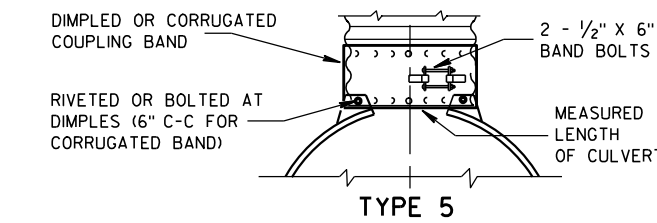
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

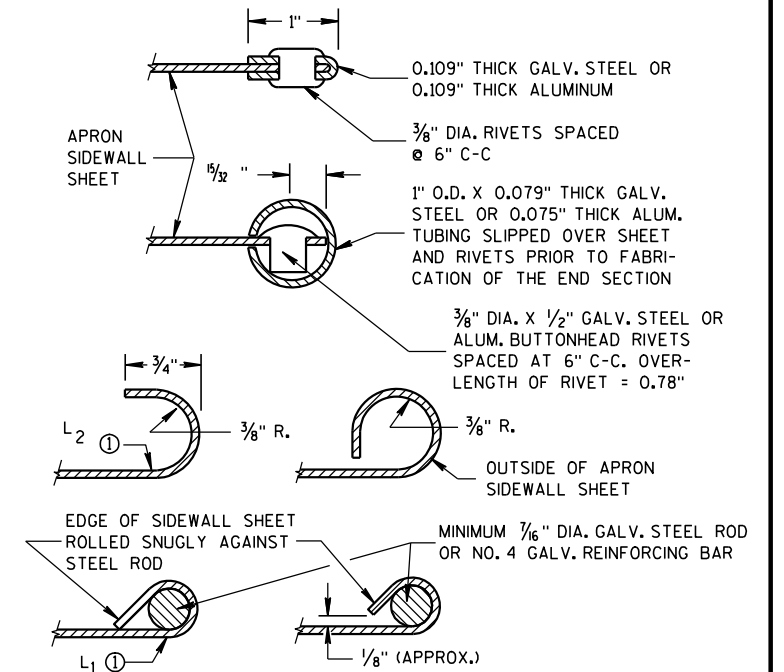
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

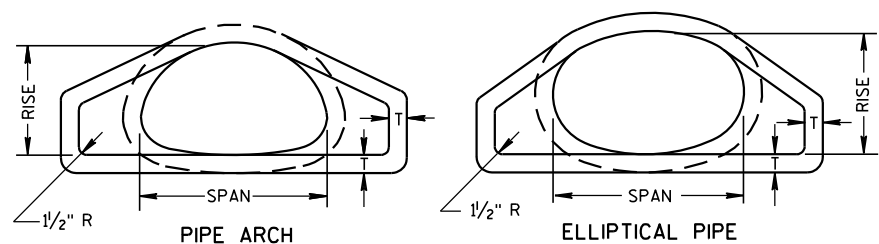
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

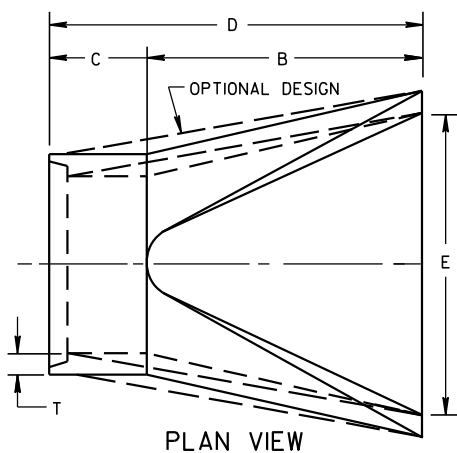
APRON ENDWALLS FOR
CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

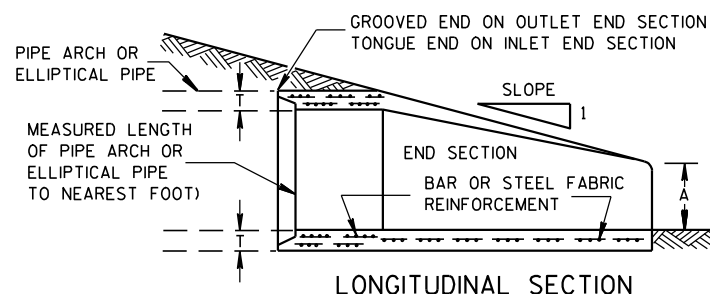
APPROVED
11/30/94 DATE /S/ Rory L. Rhinesmith
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



END VIEW



PLAN VIEW



LONGITUDINAL SECTION

CONCRETE ENDWALLS

2- 2 2/3" X 1/2" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 (±1")	L2 (±1")	W (±2")		
15	17	13	.064	.060	7	9	6	19	14	16	30	2 1/2 to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2 1/2 to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21 3/4	42	2 1/2 to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27 1/2	48	2 1/2 to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2 1/2 to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2 1/2 to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54 3/4	85	2 1/2 to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2 1/2 to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72 3/4	102	2 1/4 to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82 1/4	114	2 1/4 to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 (±1")	L2 (±1")	W (±2")		
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2 1/2 to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82 1/4	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1 1/2 to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1 1/2 to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1 1/2 to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1 1/2 to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1 1/2 to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1 1/2 to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED. * EXCEPT CENTER PANEL SEE GENERAL NOTES

REINFORCED CONCRETE PIPE ARCH										
EQUIV. DIA. (Inches)	DIMENSIONS (Inches)									APPROX. SLOPE
	**SPAN	**RISE	T	A	B	C	D	E		
24	29	18	3	8 1/2	39	33	72	48	3 to 1	
30	36	22	3 1/2	9 1/2	50	46	96	60	3 to 1	
36	44	27	4	11 1/8	60	36	96	72	3 to 1	
42	51	31	4 1/2	15 1/8	60	36	96	78	3 to 1	
48	58	36	5	21	60	36	96	84	3 to 1	
54	65	40	5 1/2	25 1/2	60	36	96	90	3 to 1	
60	73	45	6	31	60	36	96	96	3 to 1	
72	88	54	7	31	60	39	99	120	2 to 1	
84	102	62	8	28 1/2	83	19	102	144	2 to 1	

REINFORCED CONCRETE ELLIPTICAL PIPE										
EQUIV. DIA. (Inches)	DIMENSIONS (Inches)									APPROX. SLOPE
	**SPAN	**RISE	T	A	B	C	D	E		
24	30	19	3 1/4	8 1/2	39	33	72	48	3 to 1	
30	38	24	3 3/4	9 1/2	54	18	72	60	3 to 1	
36	45	29	4 1/2	11 1/8	60	24	84	72	2 1/2 to 1	
42	53	34	5	15 3/4	60	36	96	78	2 1/2 to 1	
48	60	38	5 1/2	21	60	36	96	84	2 1/2 to 1	
54	68	43	6	25 1/2	60	36	96	90	2 1/2 to 1	
60	76	48	6 1/2	30	60	36	96	96	2 1/2 to 1	

**NOMINAL SIZE

GENERAL NOTES

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

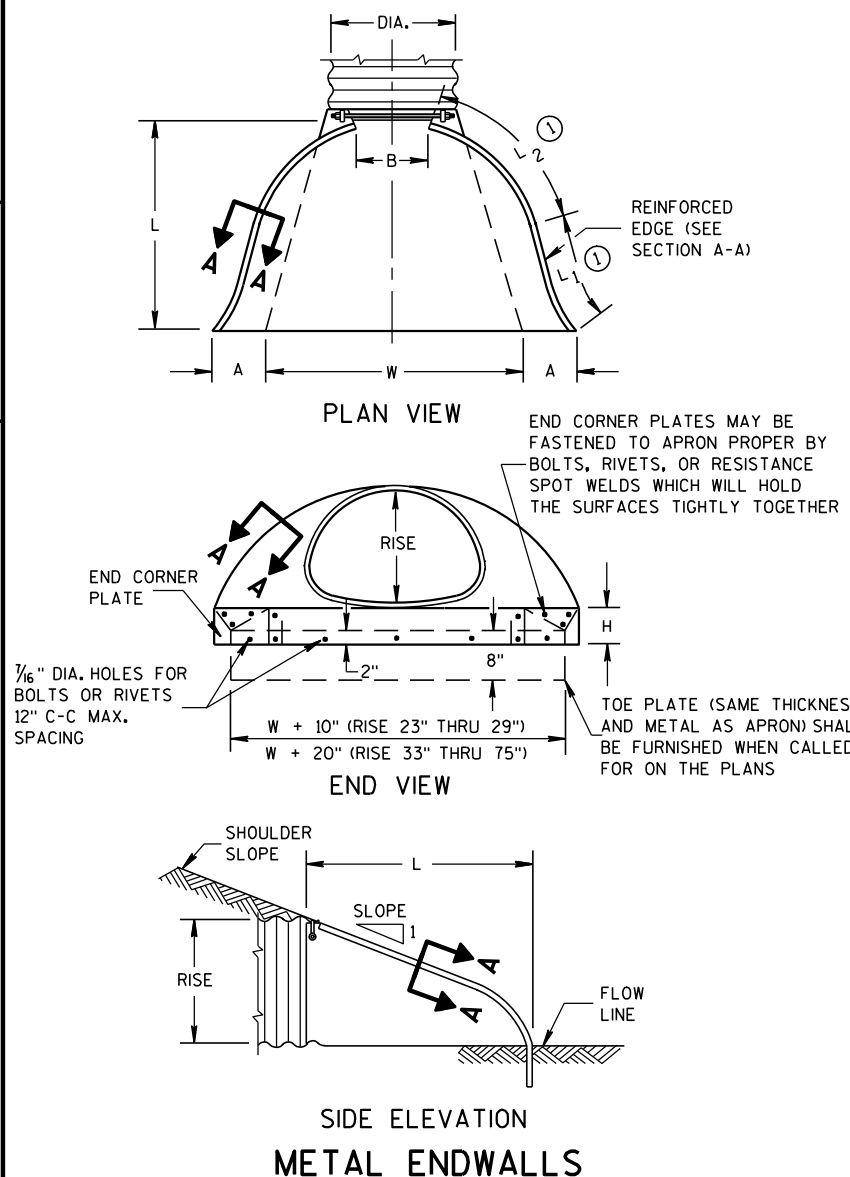
CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

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

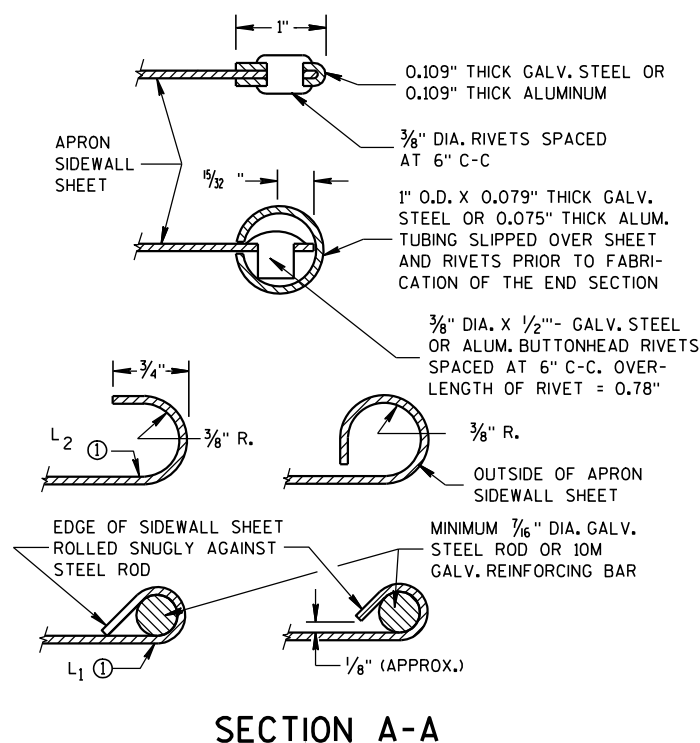
LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER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

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

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



METAL ENDWALLS

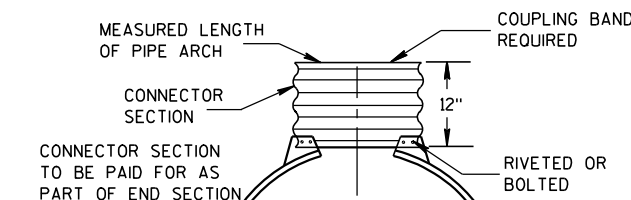


SECTION A-A



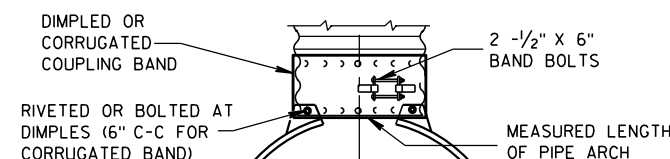
TYPE 2

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



TYPE 3

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



TYPE 5

ALTERNATE FOR: ALL SIZES CORRUGATED PIPE ARCHES

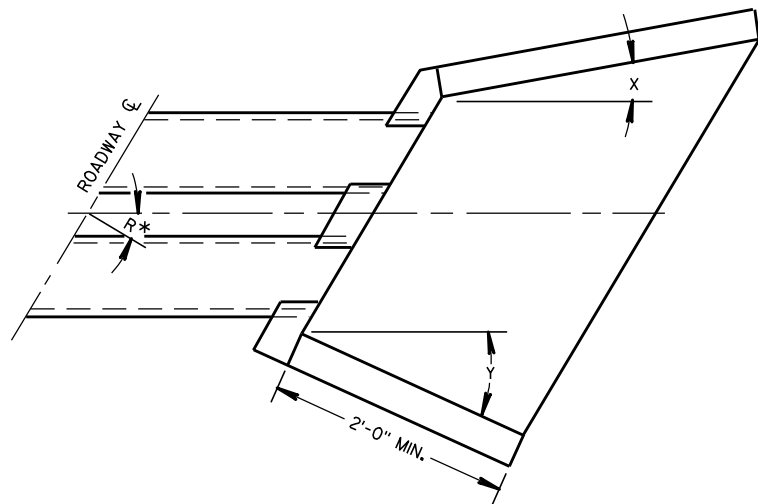
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

GENERAL NOTES

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

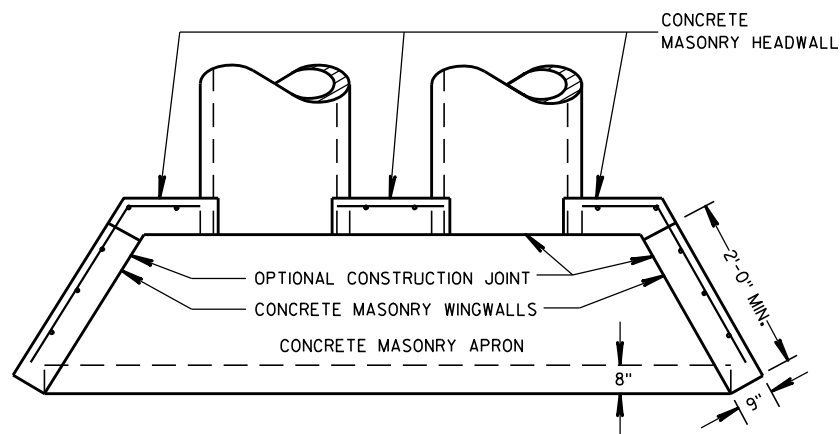
FILL SLOPES FLATTER THAN 2 1/2:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

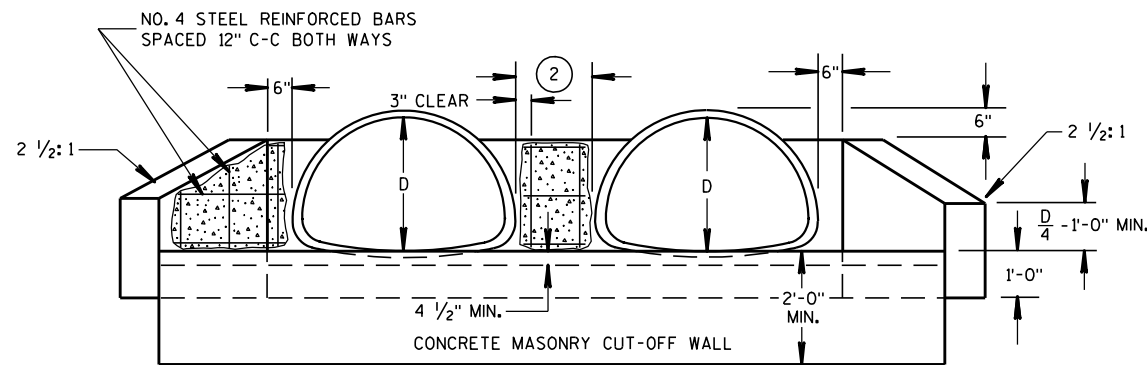
1 MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

2 THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

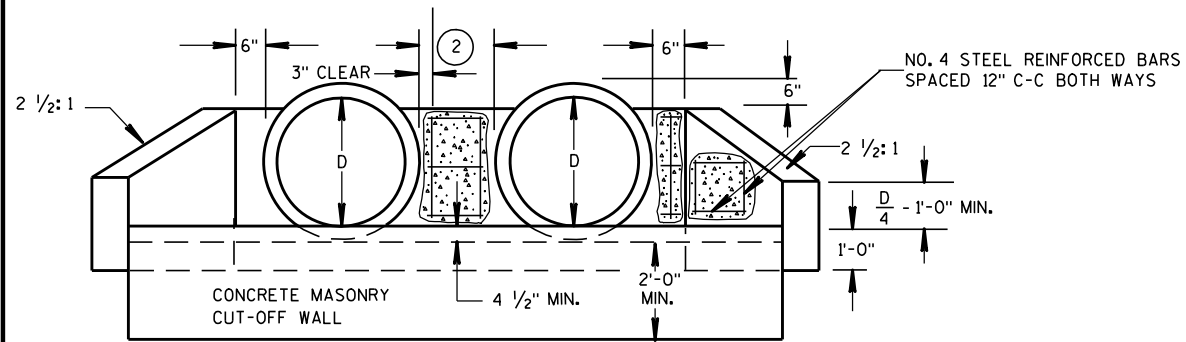
DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	1/2 DIA. OR SPAN
OVER 72"	3'-0"



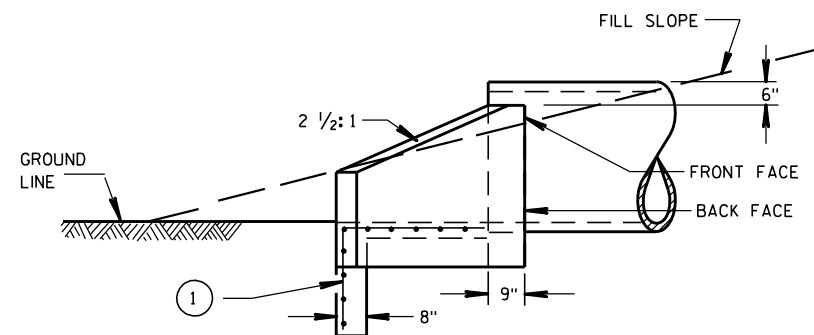
**PLAN VIEW
CULVERT PIPE AND PIPE ARCH**



**END ELEVATION
PIPE ARCH**



**END ELEVATION
CULVERT PIPE**

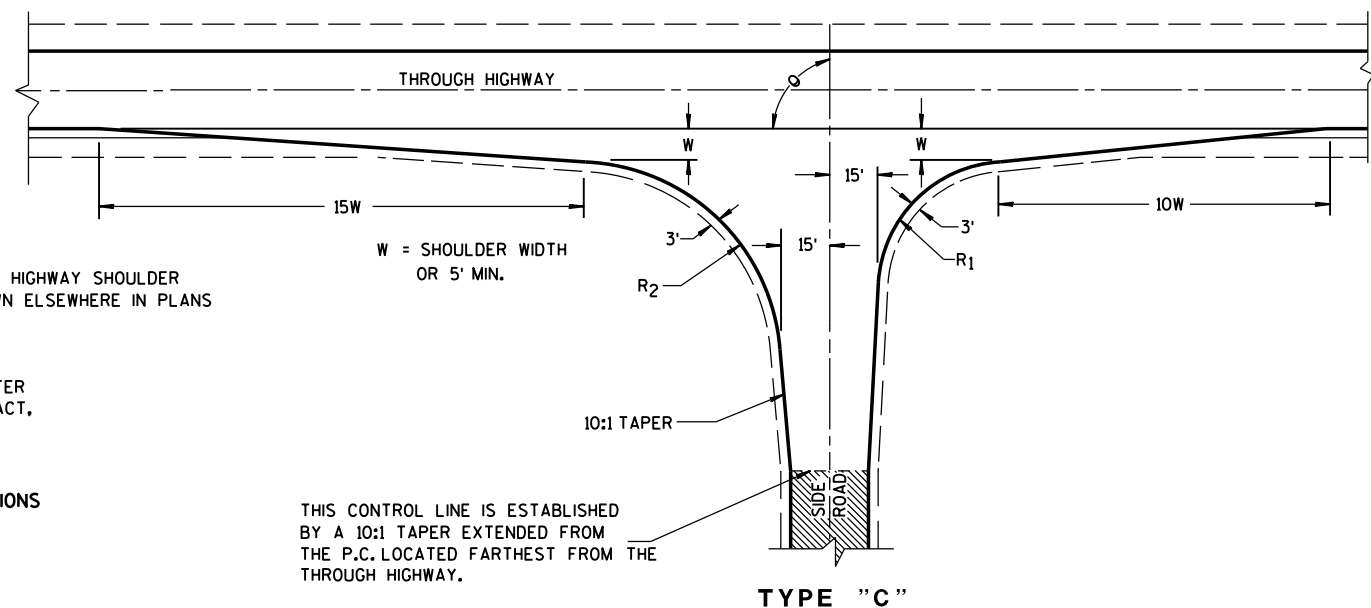
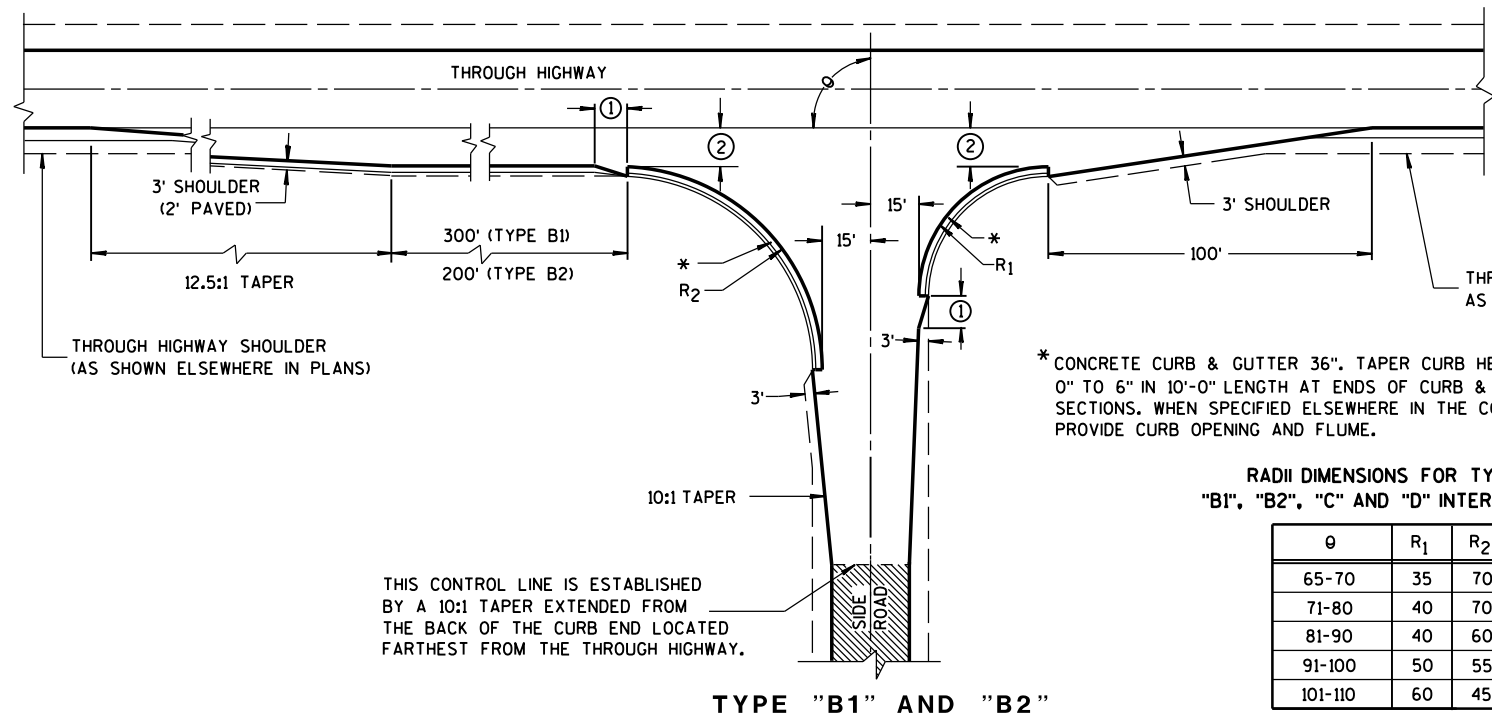


**SIDE ELEVATION
CULVERT PIPE AND PIPE ARCH**

**CONCRETE MASONRY ENDWALLS
FOR CULVERT PIPE AND
PIPE ARCH**

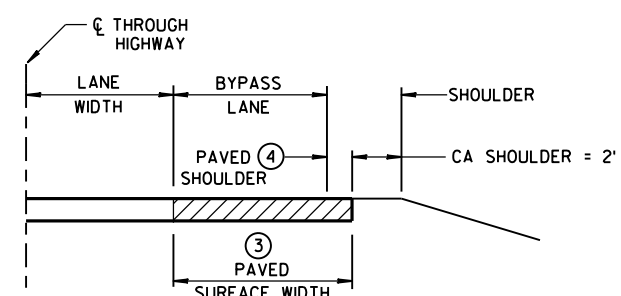
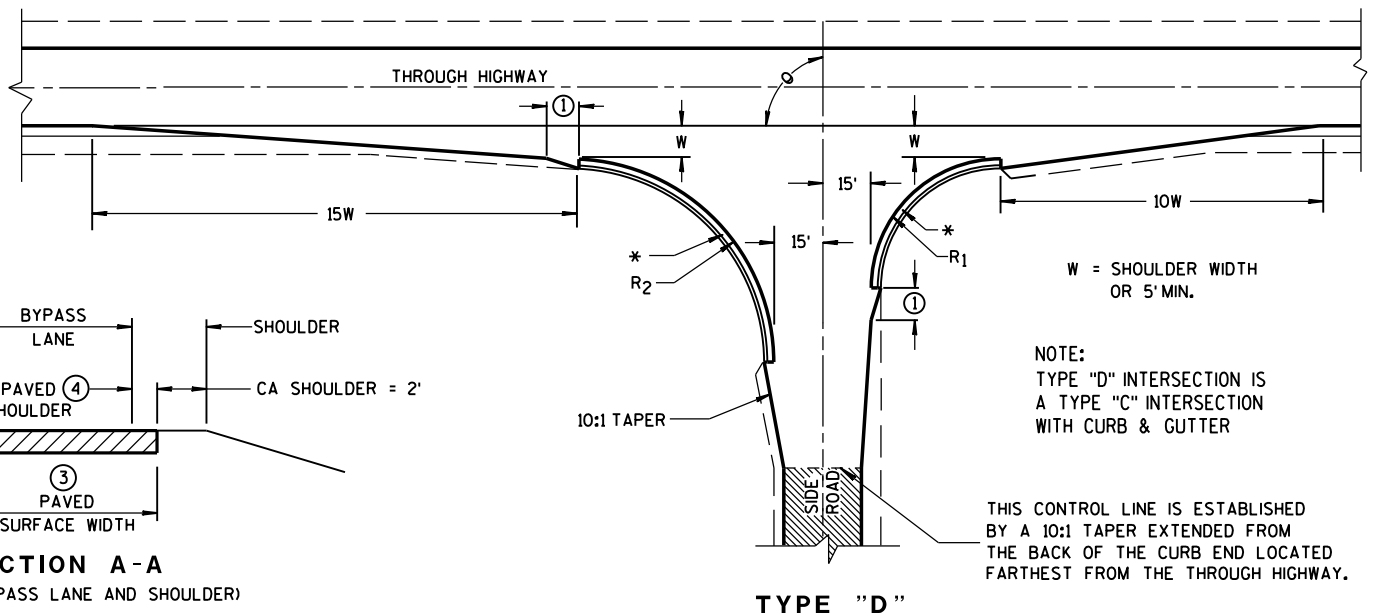
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/14/98 /S/ Rory L. Rhinesmith
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



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

θ	R ₁	R ₂
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

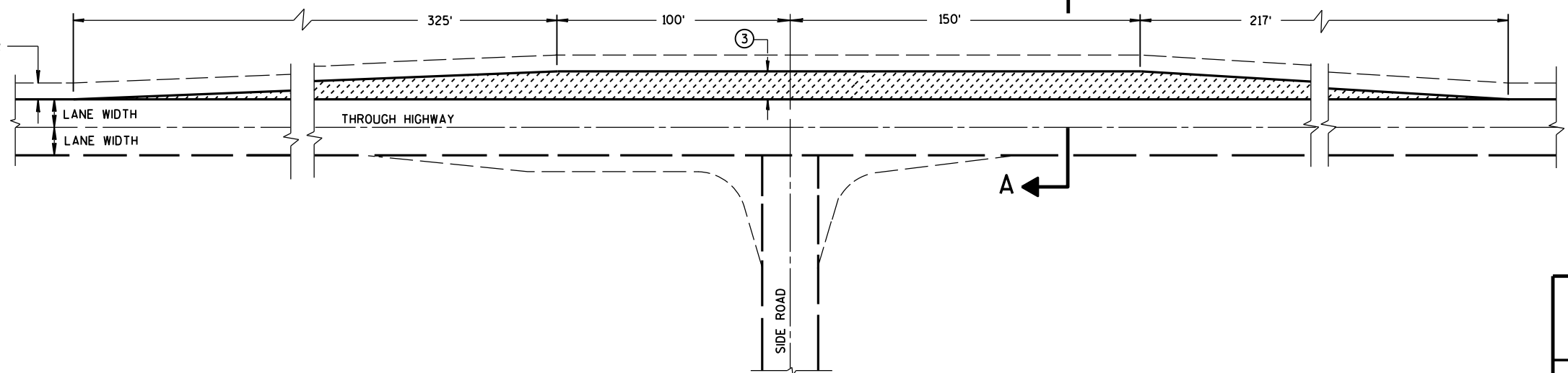
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

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

EXISTING PAVED SURFACE

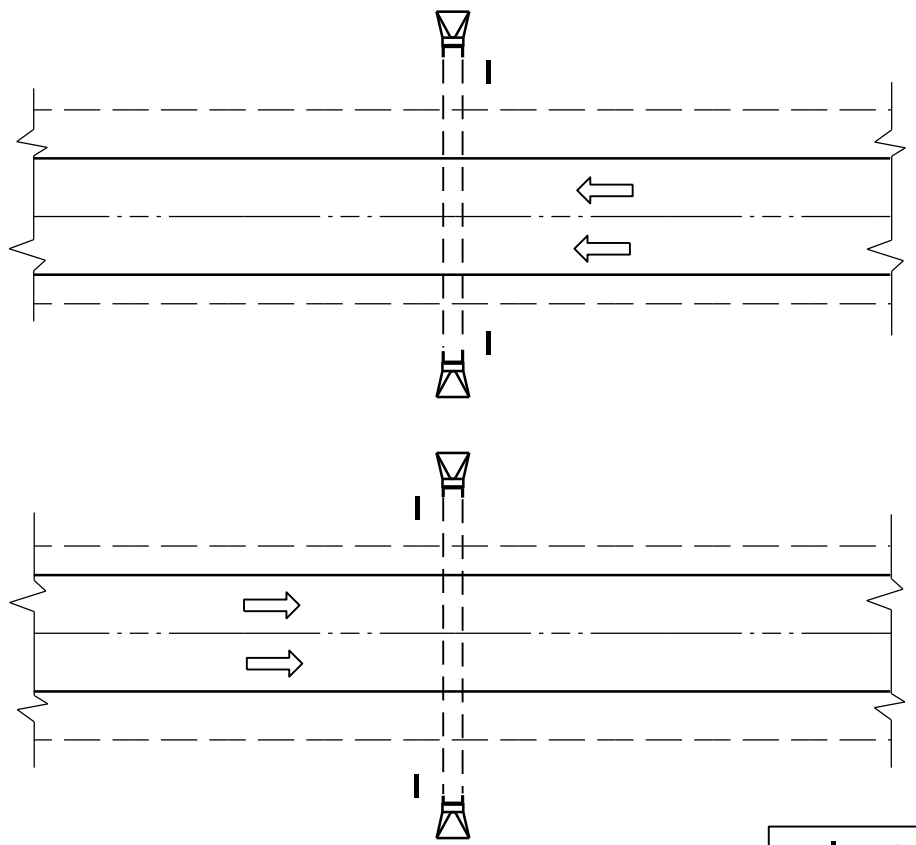
BYPASS LANE

- ① 10-FT TYPICAL.
- ② 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.
- **10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.
- ③ BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.
- ④ BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.

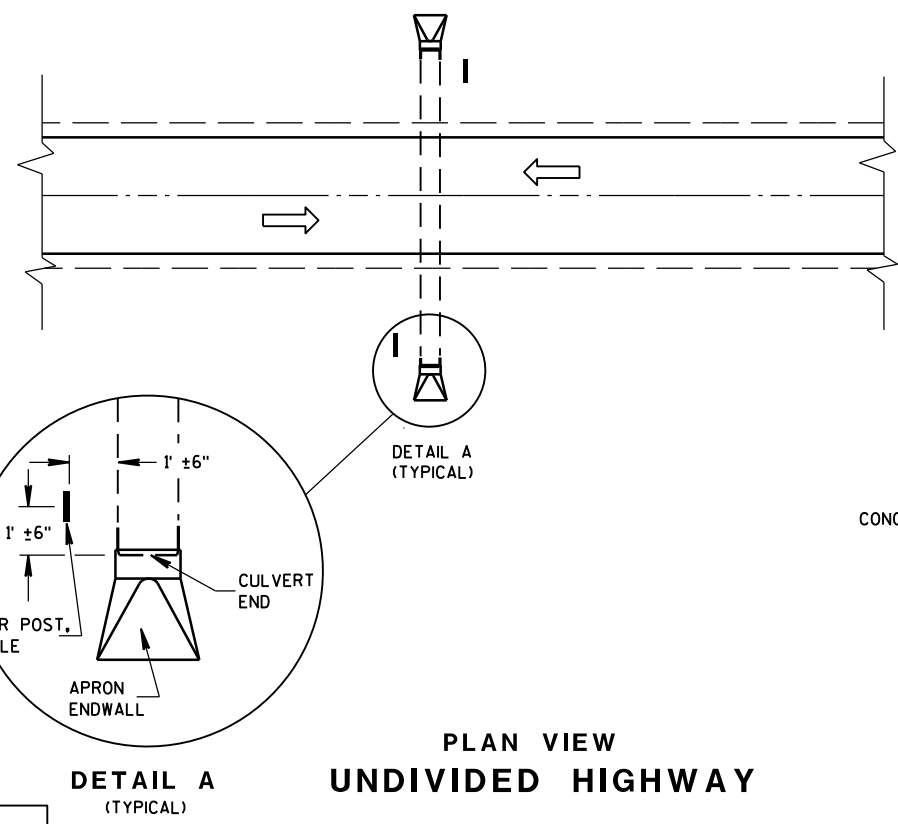


AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



PLAN VIEW
DIVIDED HIGHWAY

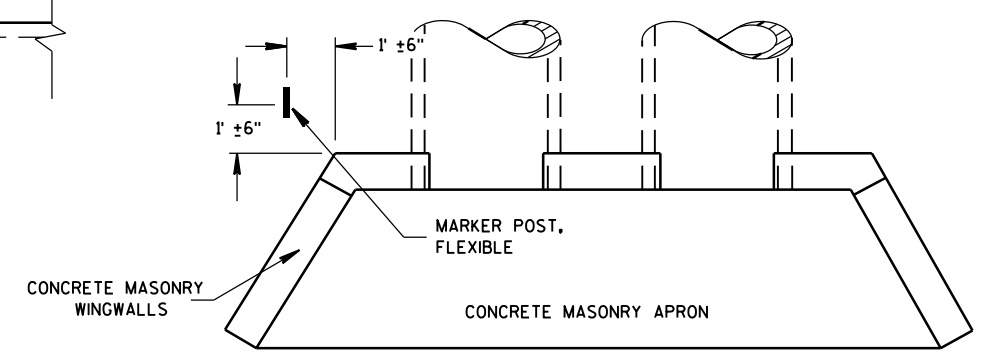


PLAN VIEW
UNDIVIDED HIGHWAY

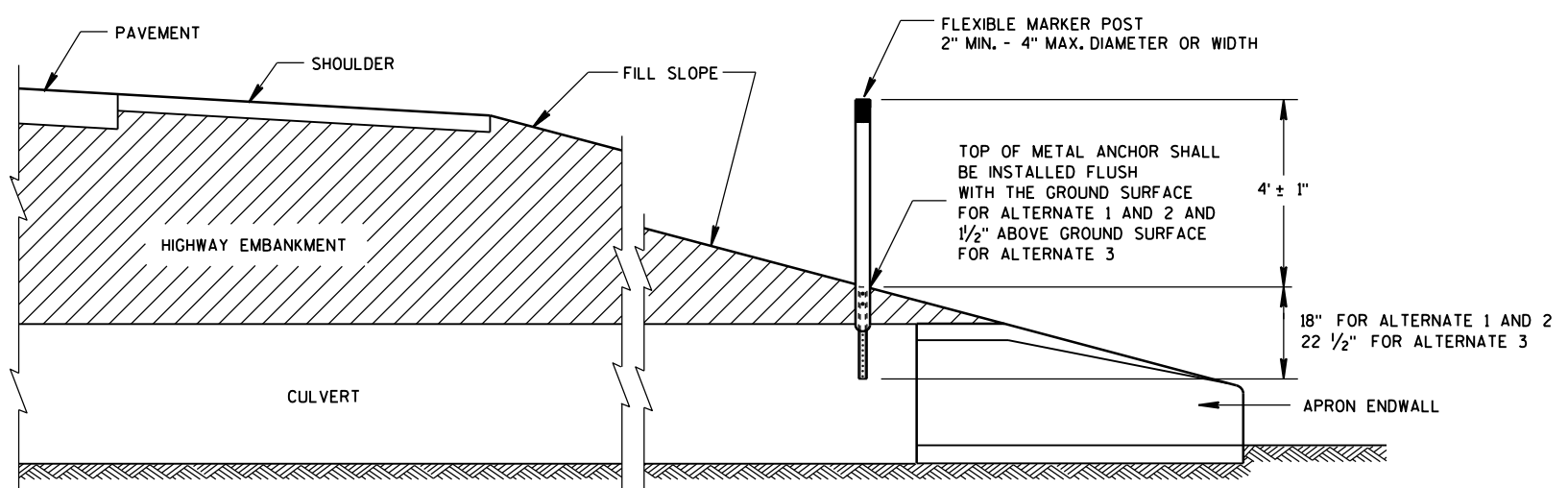
FLEXIBLE MARKER POST LOCATION

GENERAL NOTES

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



PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

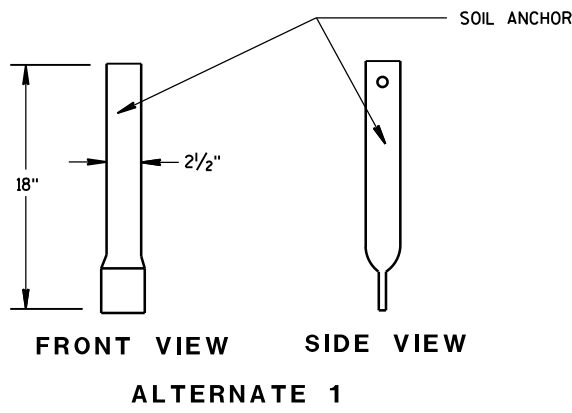
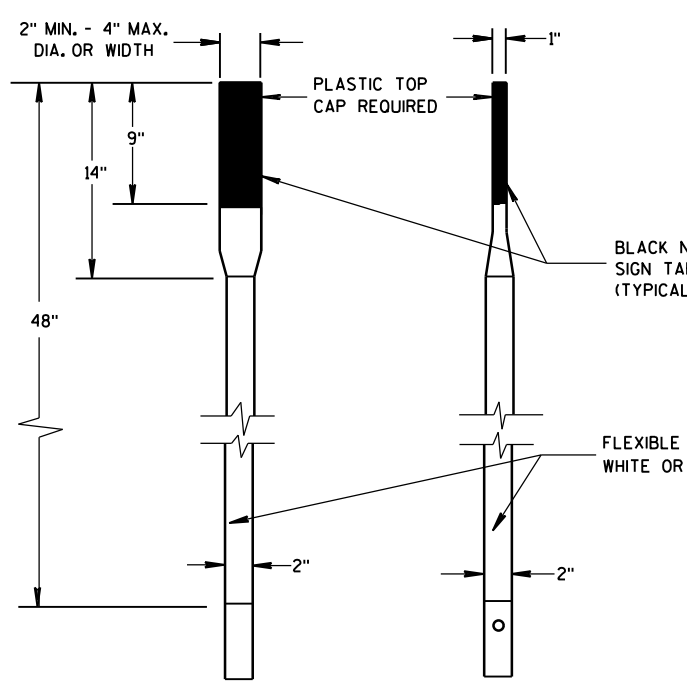
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

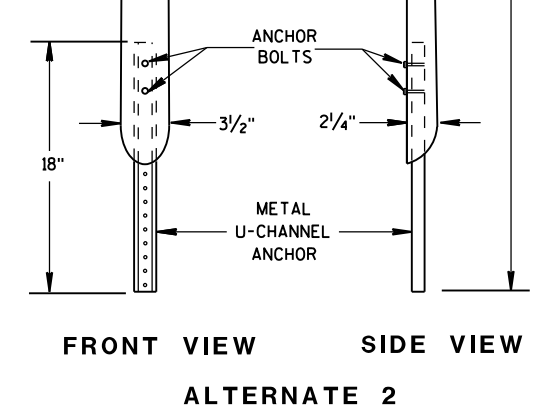
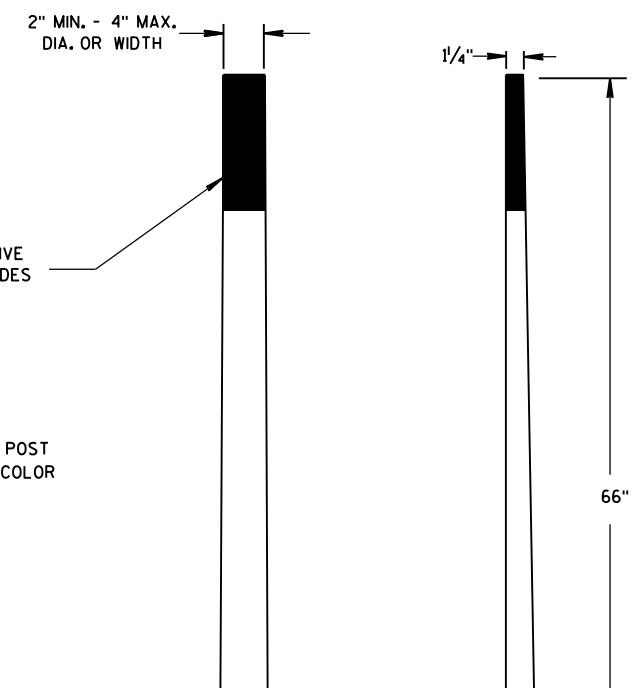
6

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

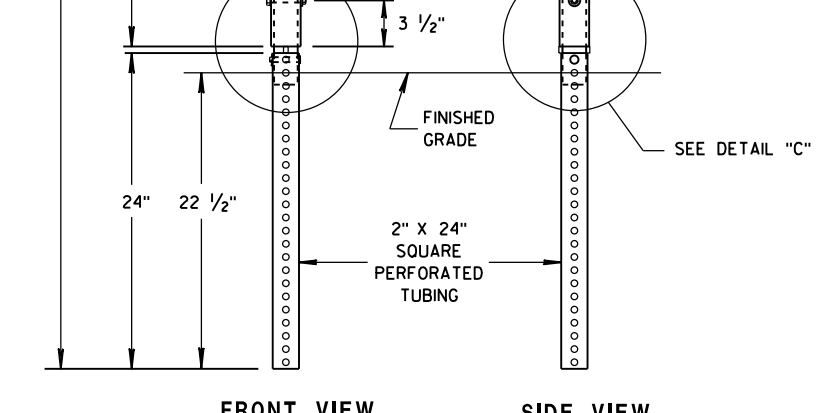
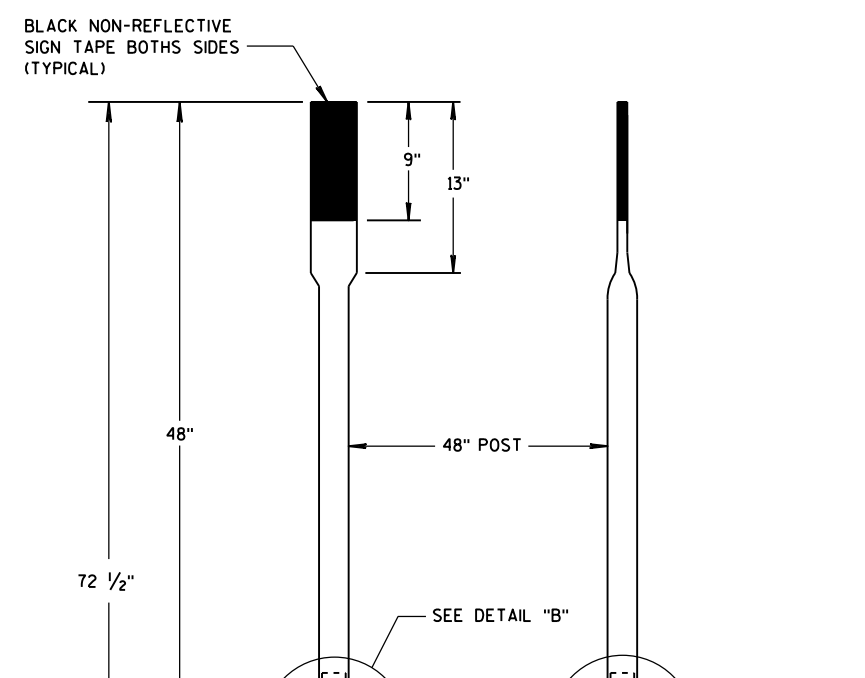
S.D.D. 15 A 3-2a



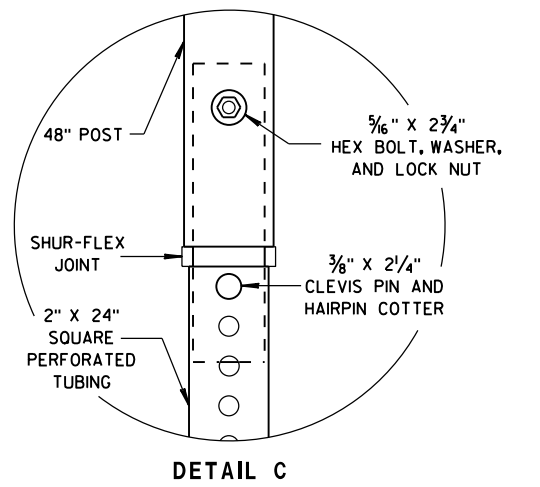
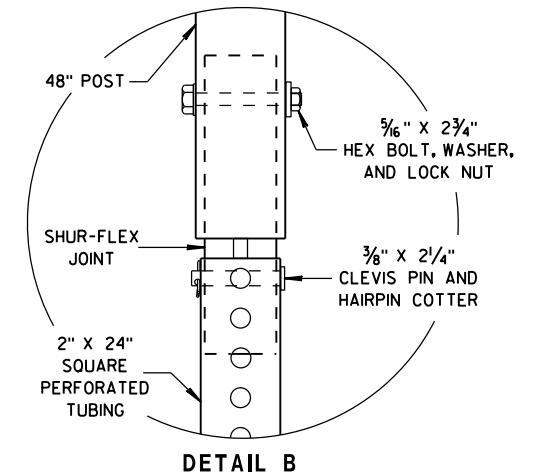
FRONT VIEW SIDE VIEW
ALTERNATE 1



FRONT VIEW SIDE VIEW
ALTERNATE 2

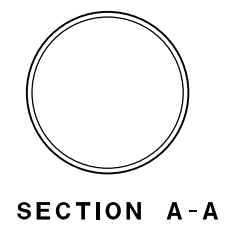


FRONT VIEW SIDE VIEW
ALTERNATE 3

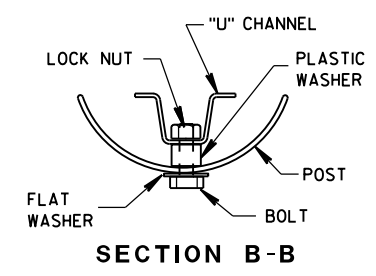


DETAIL B

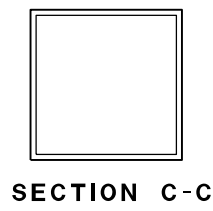
DETAIL C



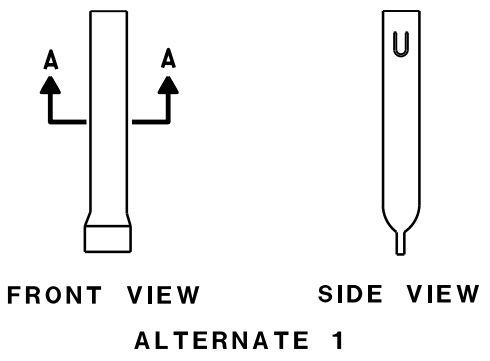
SECTION A-A



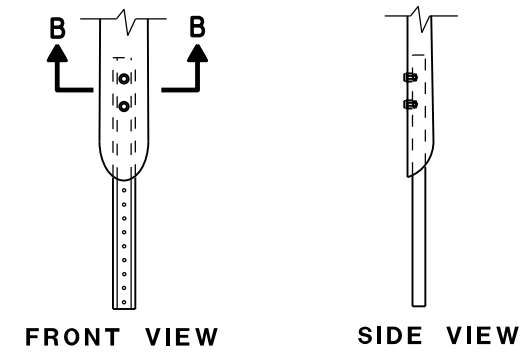
SECTION B-B



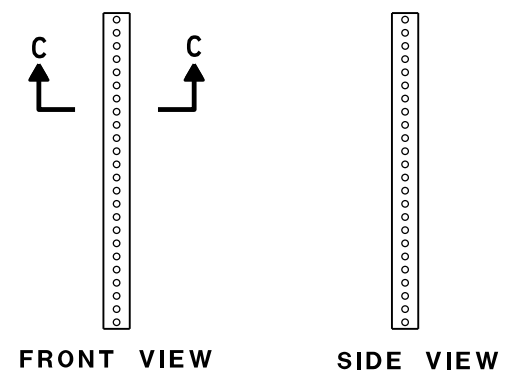
SECTION C-C



FRONT VIEW SIDE VIEW
ALTERNATE 1



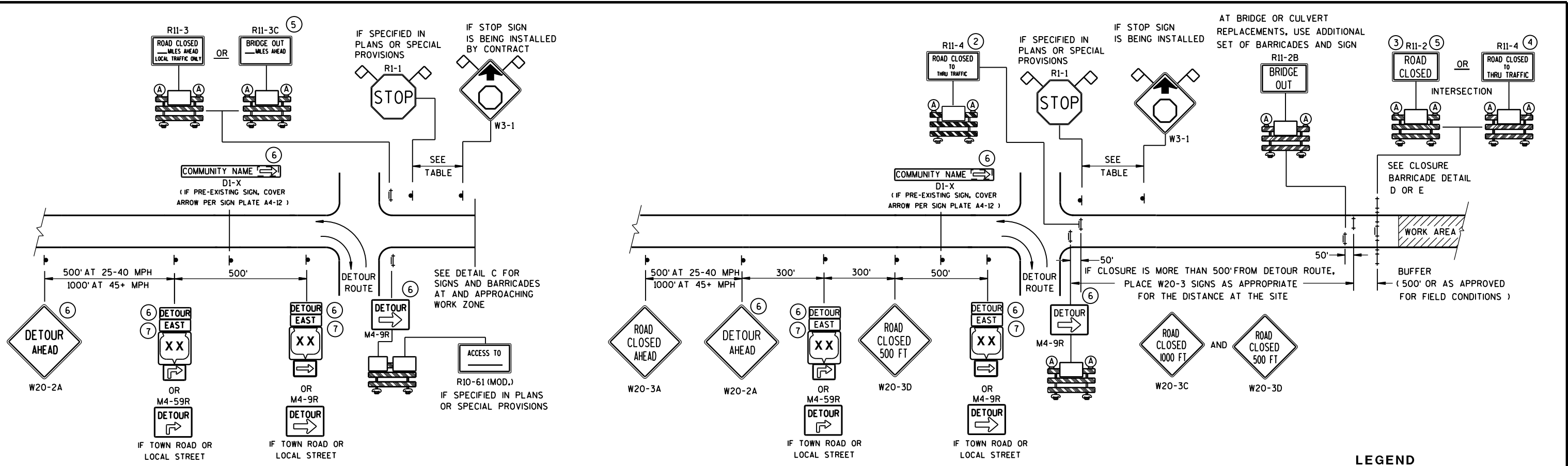
FRONT VIEW SIDE VIEW
ALTERNATE 2



FRONT VIEW SIDE VIEW
ALTERNATE 3

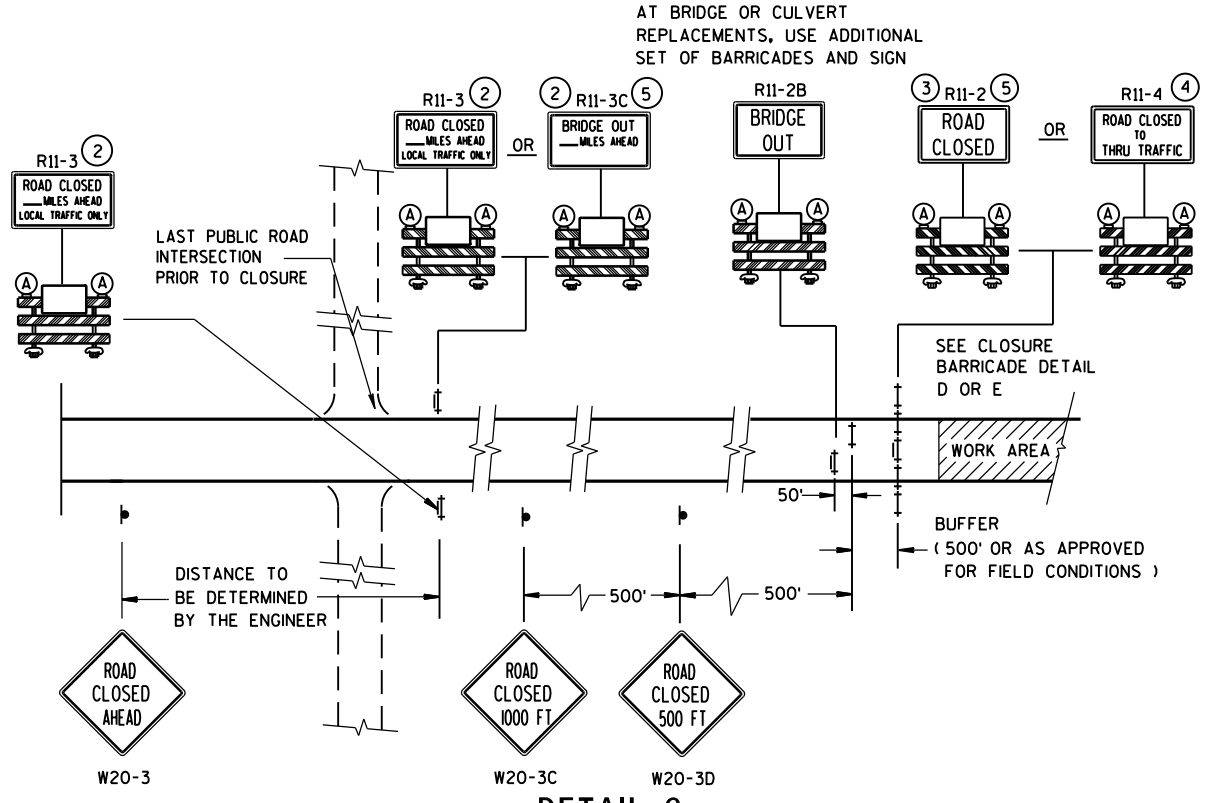
FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST FOR CULVERT END	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/1/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
 WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
 WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

- LEGEND**
- ⊙ SIGN ON PERMANENT SUPPORT
 - ⊥ TYPE III BARRICADE
 - ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
 - Ⓐ TYPE "A" WARNING LIGHT (FLASHING)
 - ▨ WORK AREA
 - DETOUR EAST M4-8, M3-X
 - XX OR COUNTY XX OR XX M1-4, M1-5A, M1-6
 - OR M05-1, M06-1
 - ◇ FLAGS, 16" X 16" MIN., (ORANGE)

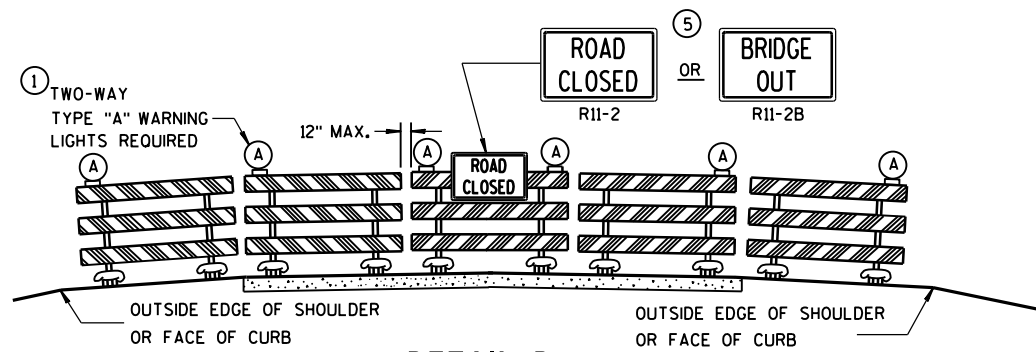
SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
 FOR GENERAL NOTES
 AND FOOTNOTES ① THROUGH ⑦

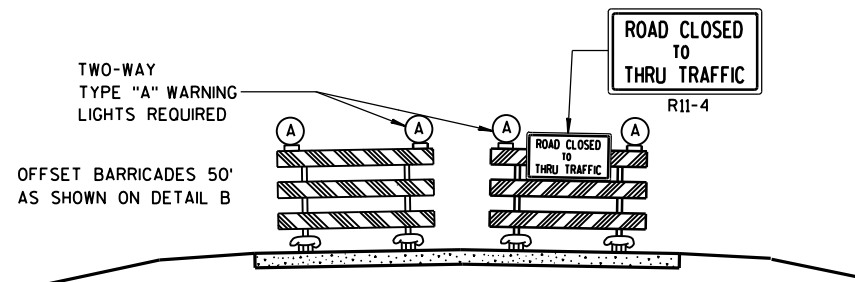
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

Sept. 2015 /S/ Peter Amakobe Atepe
 DATE STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
 FHWA



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
 APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
 APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)

M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

R1-1 SHALL BE 36" X 36".

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
Sept. 2015 DATE	/S/ Peter Amokobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

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

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
 IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

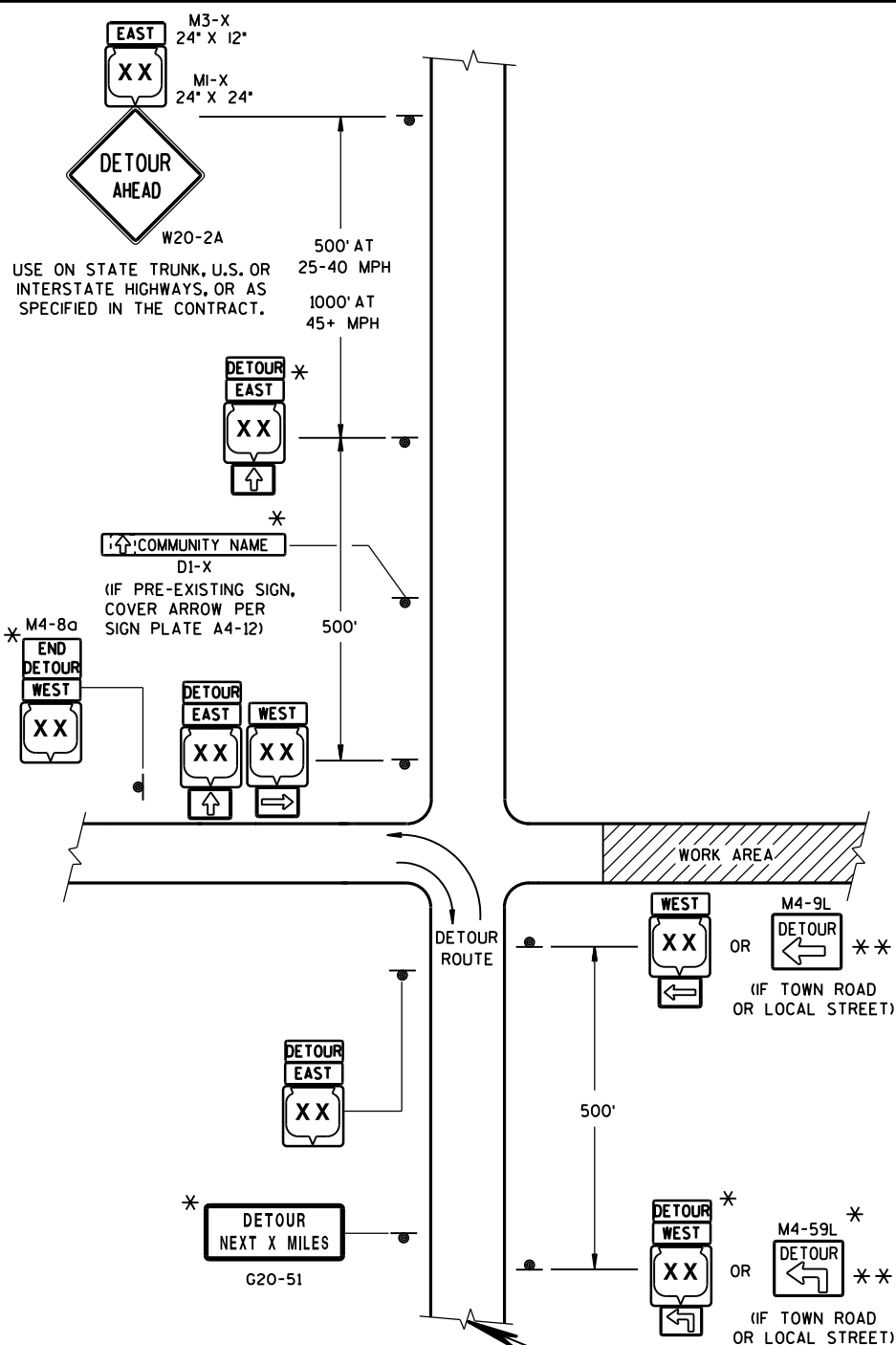
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

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

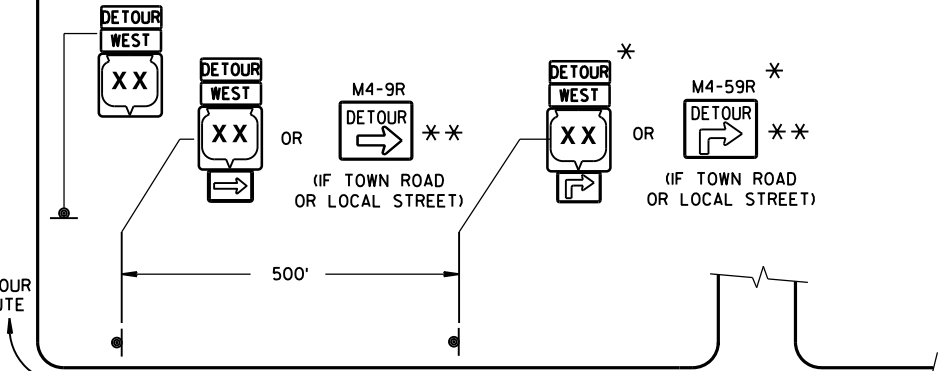
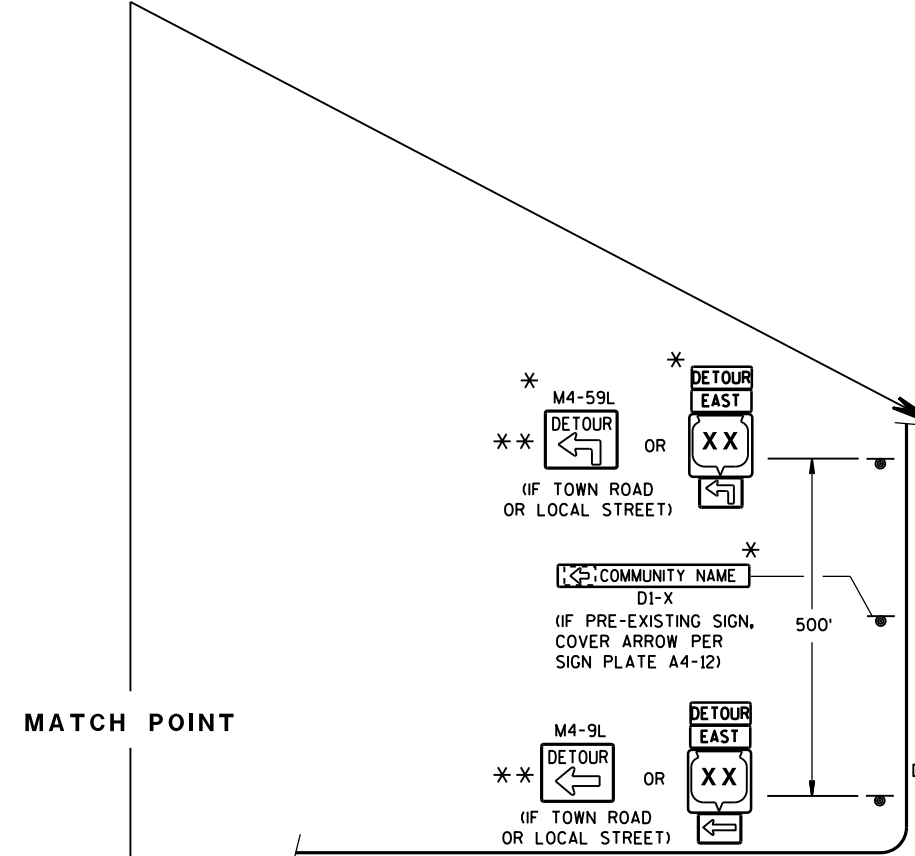
** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

6

6

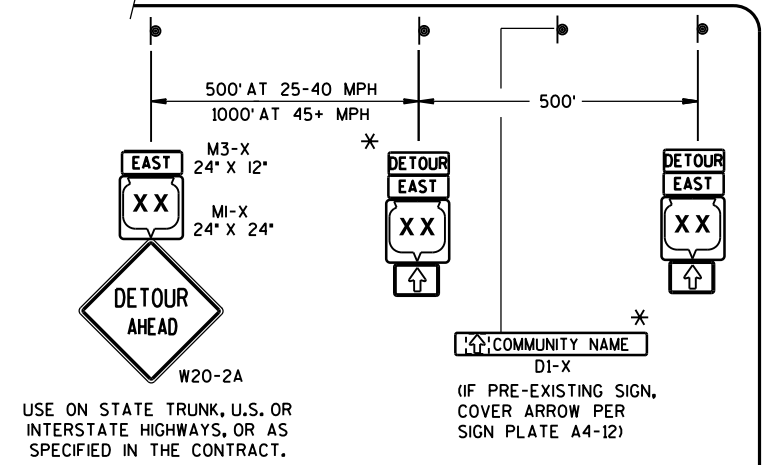


MATCH POINT

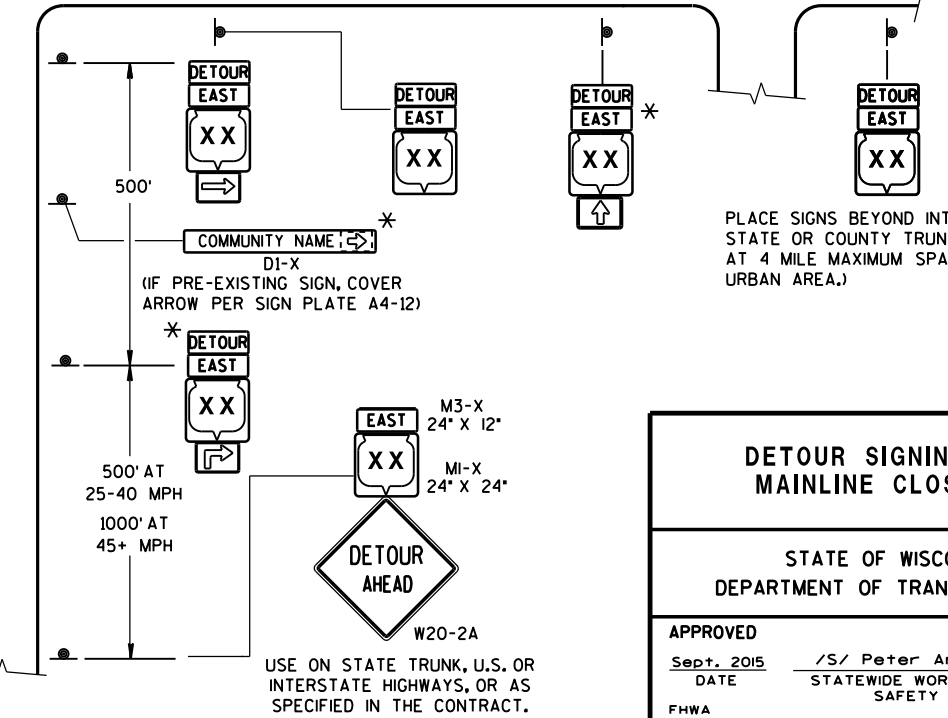


- LEGEND**
- SIGN ON PERMANENT SUPPORT
 - WORK AREA
 - M4-8, M3-X, M1-4, M1-5A, M1-6, M05-1, M06-1, M06-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"



**DETAIL F
DETOUR SIGNING**



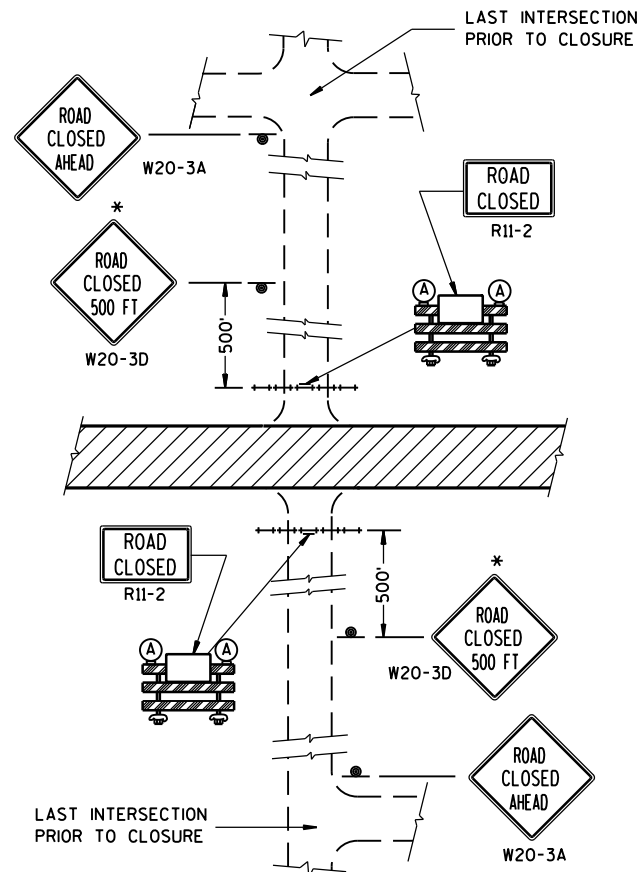
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

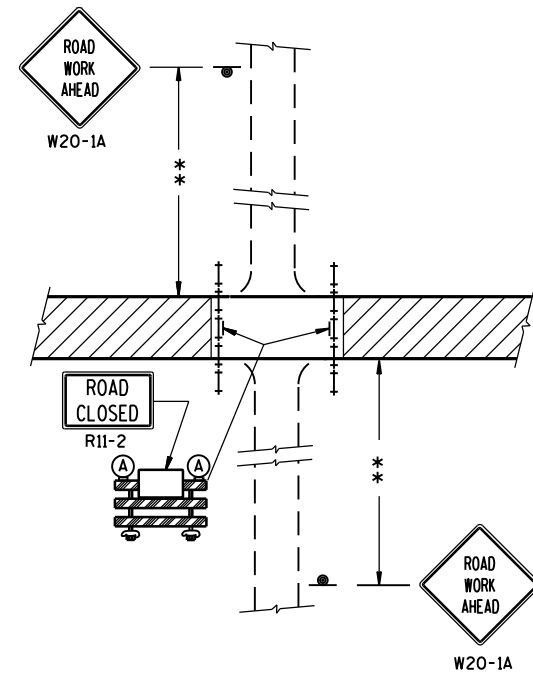
APPROVED
 DATE: Sept. 2015 /S/ Peter Amakobe Atepe
 STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

S.D.D. 15 C 2-6c

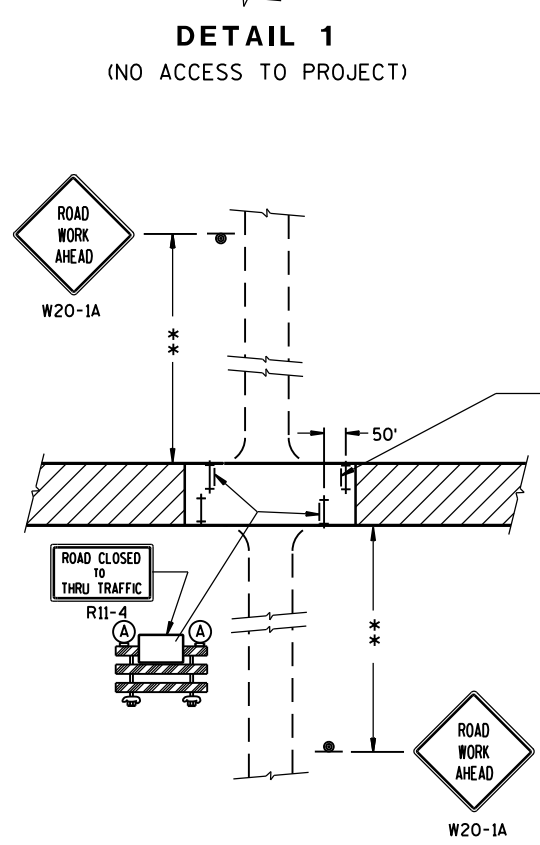
S.D.D. 15 C 2-6c



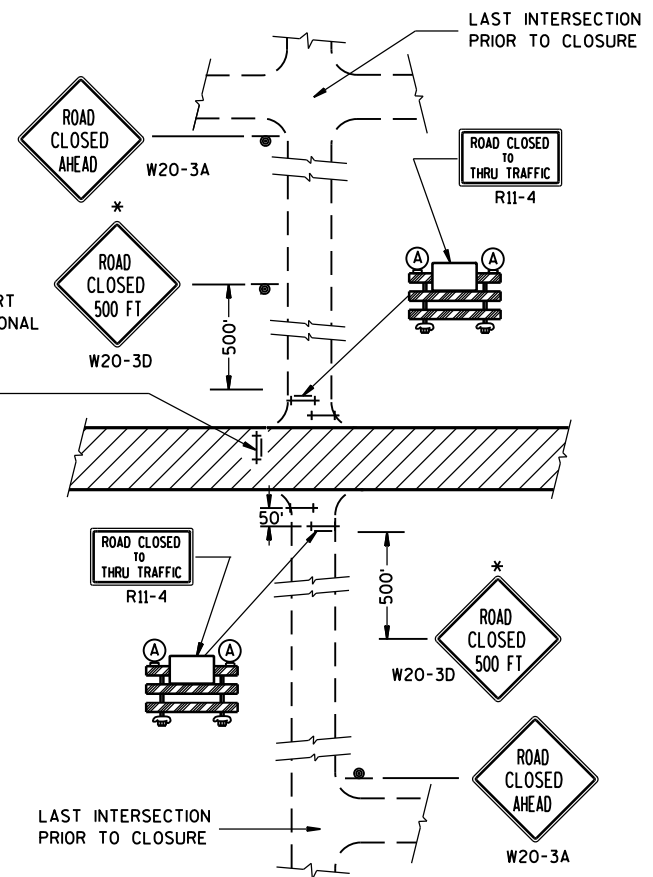
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR,
LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

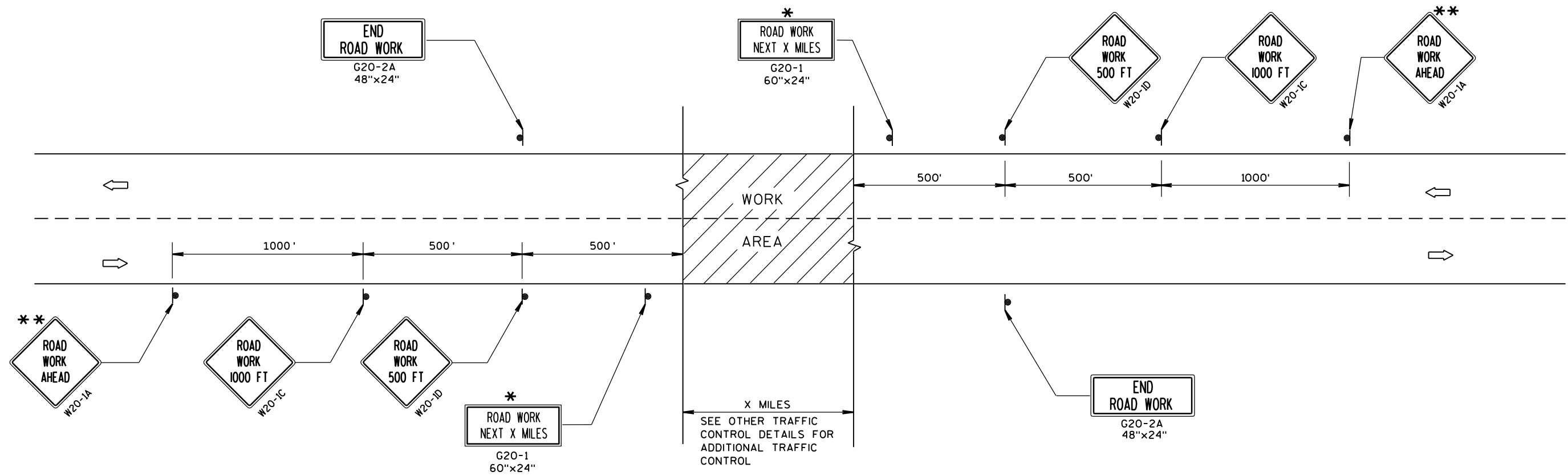
LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ⊥ TYPE III BARRICADE
- ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
- Ⓐ TYPE "A" WARNING LIGHT (FLASHING)
- ▨ WORK AREA

**BARRICADES AND SIGNS
FOR
SIDEROAD CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY 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.

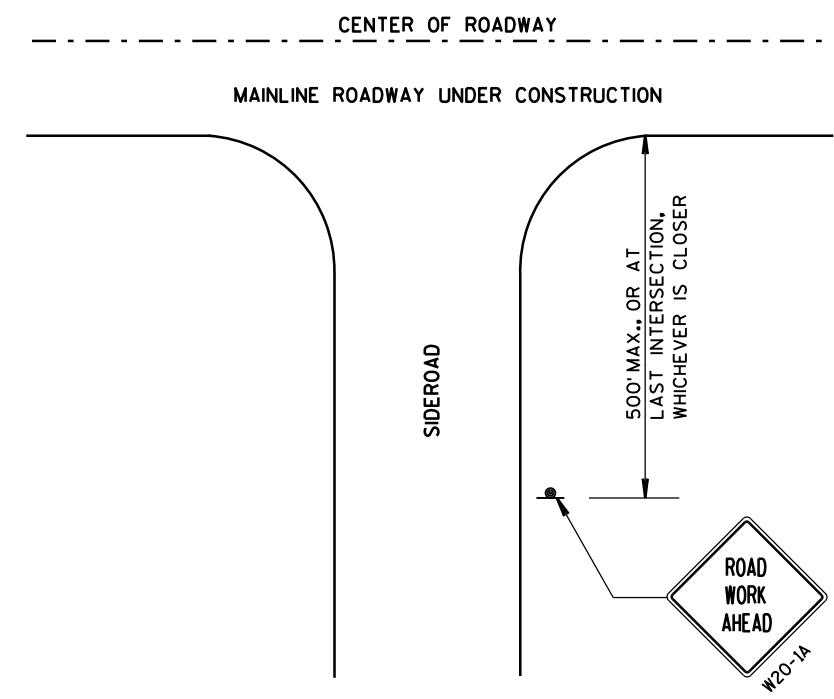
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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.

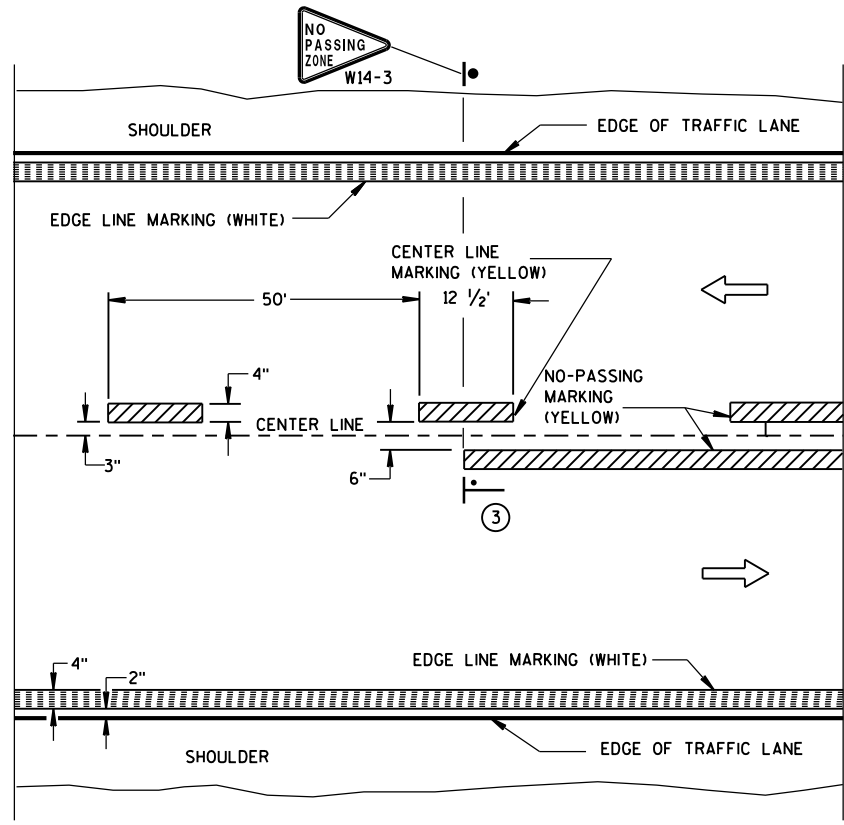
** PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



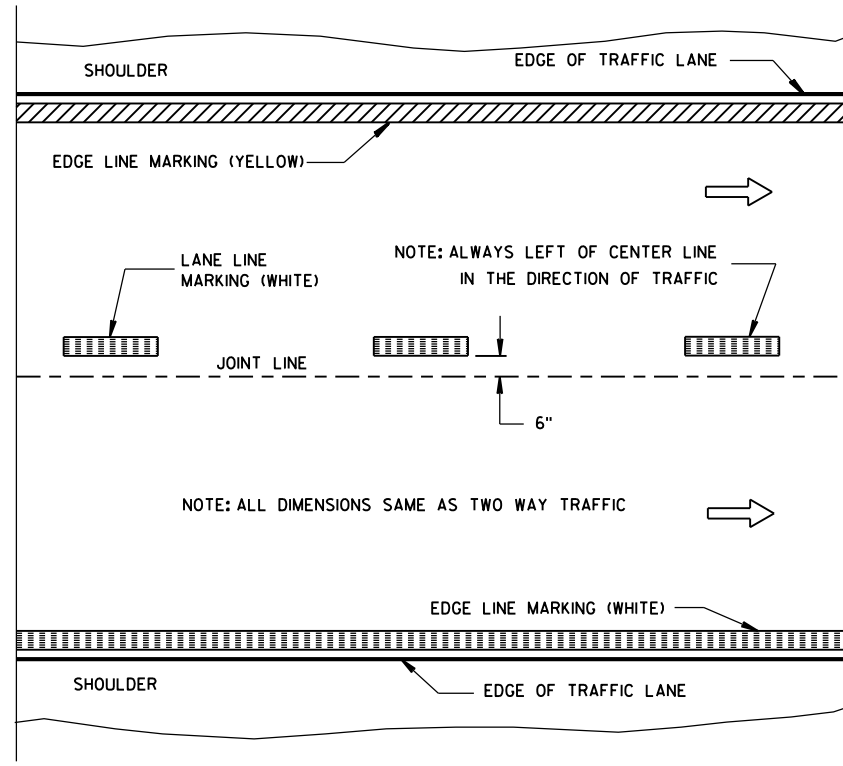
LEGEND

- 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 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

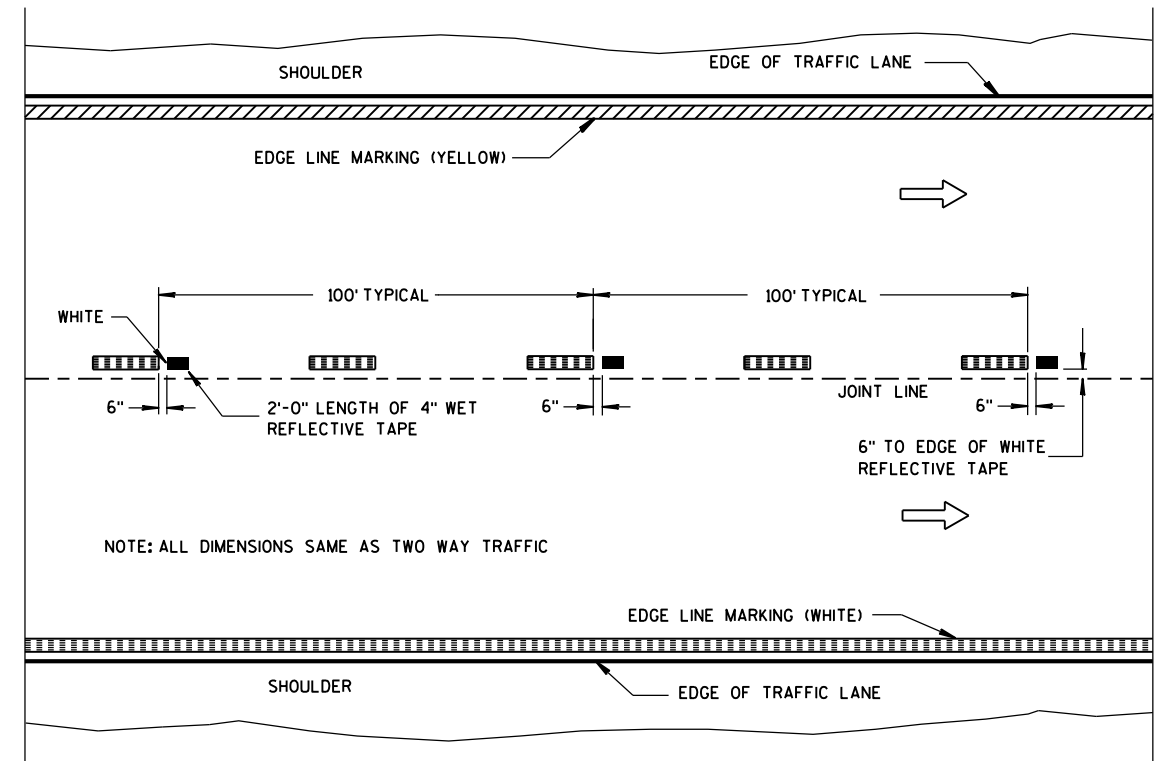
GENERAL NOTES

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

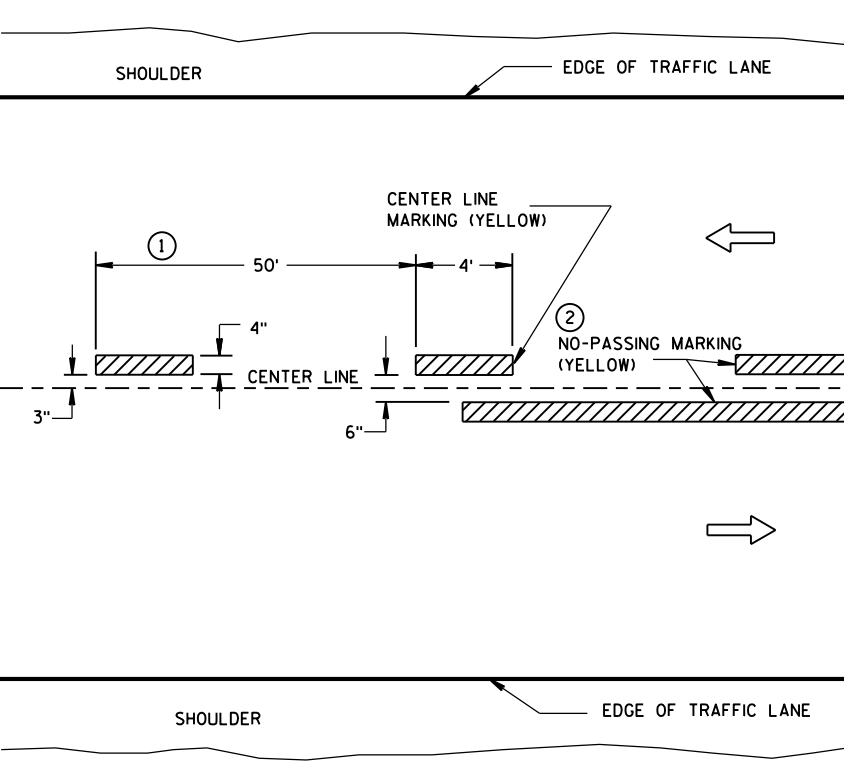
- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

NOTE

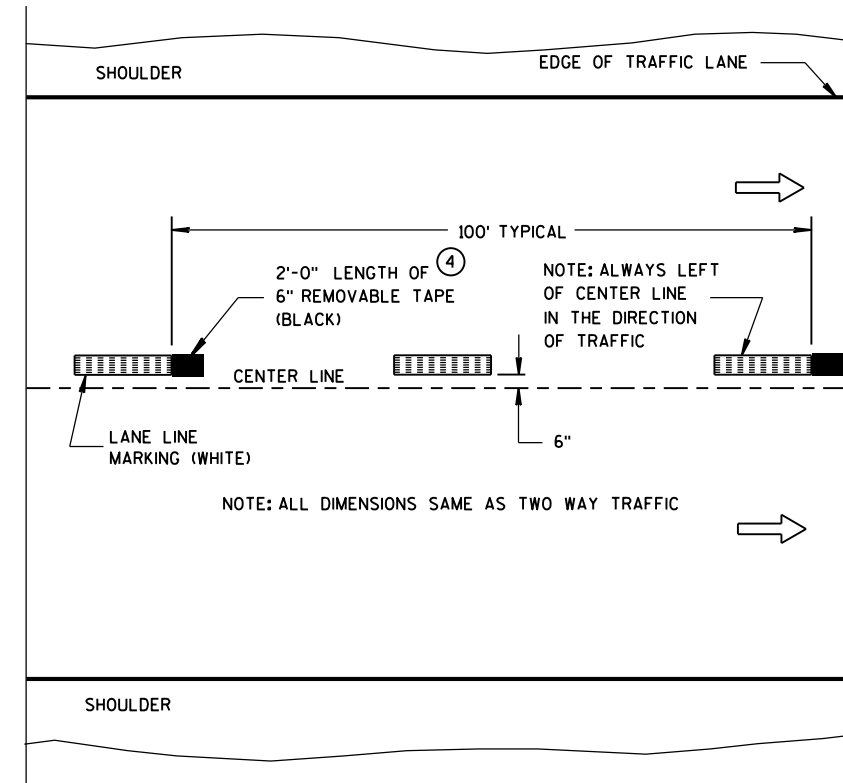
ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

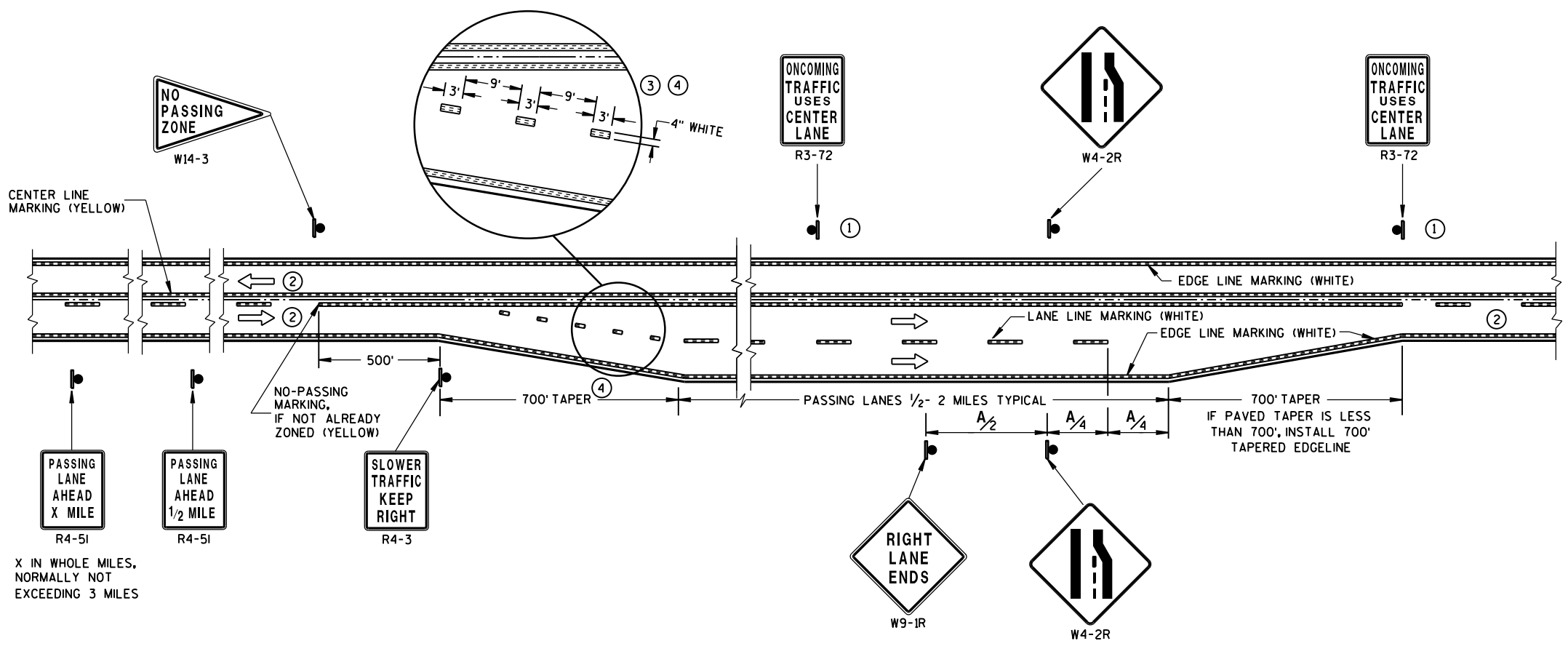
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

**PAVEMENT MARKING
(MAINLINE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER
FHWA



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

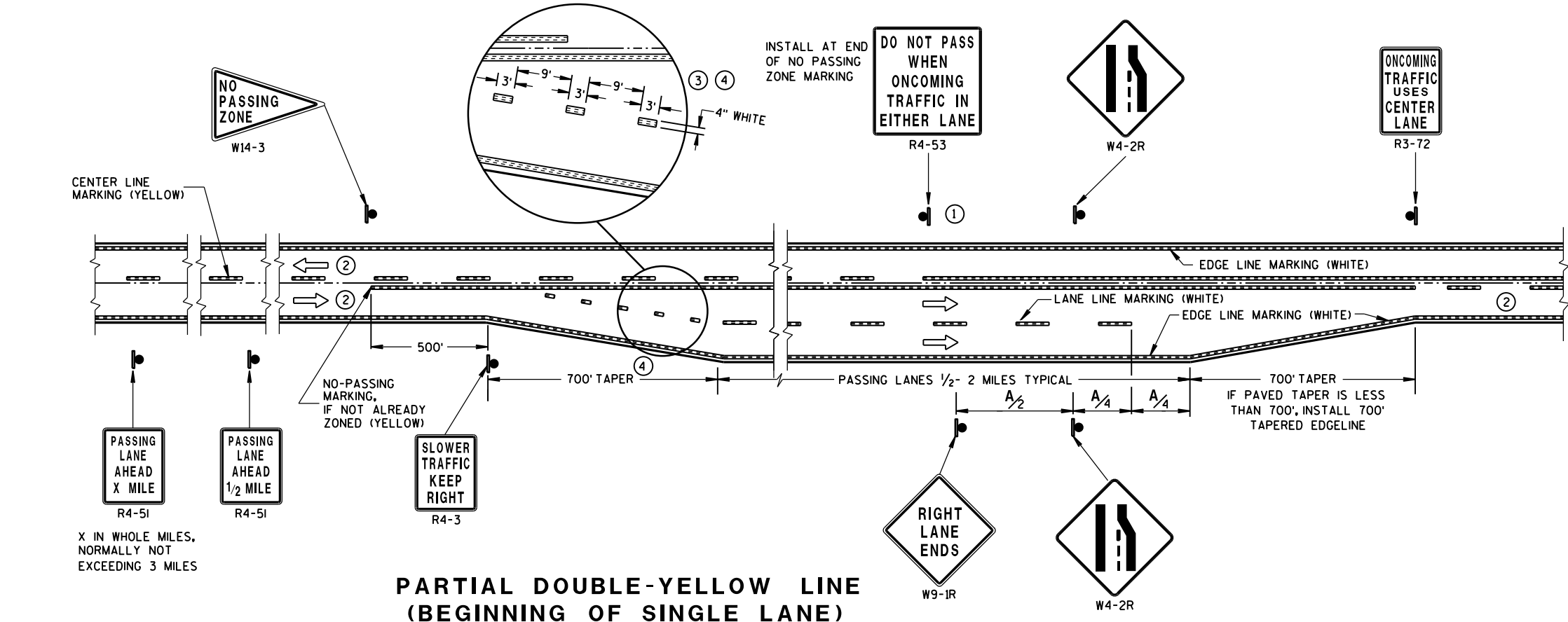
GENERAL NOTES

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

ARROW SYMBOL (\Rightarrow) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

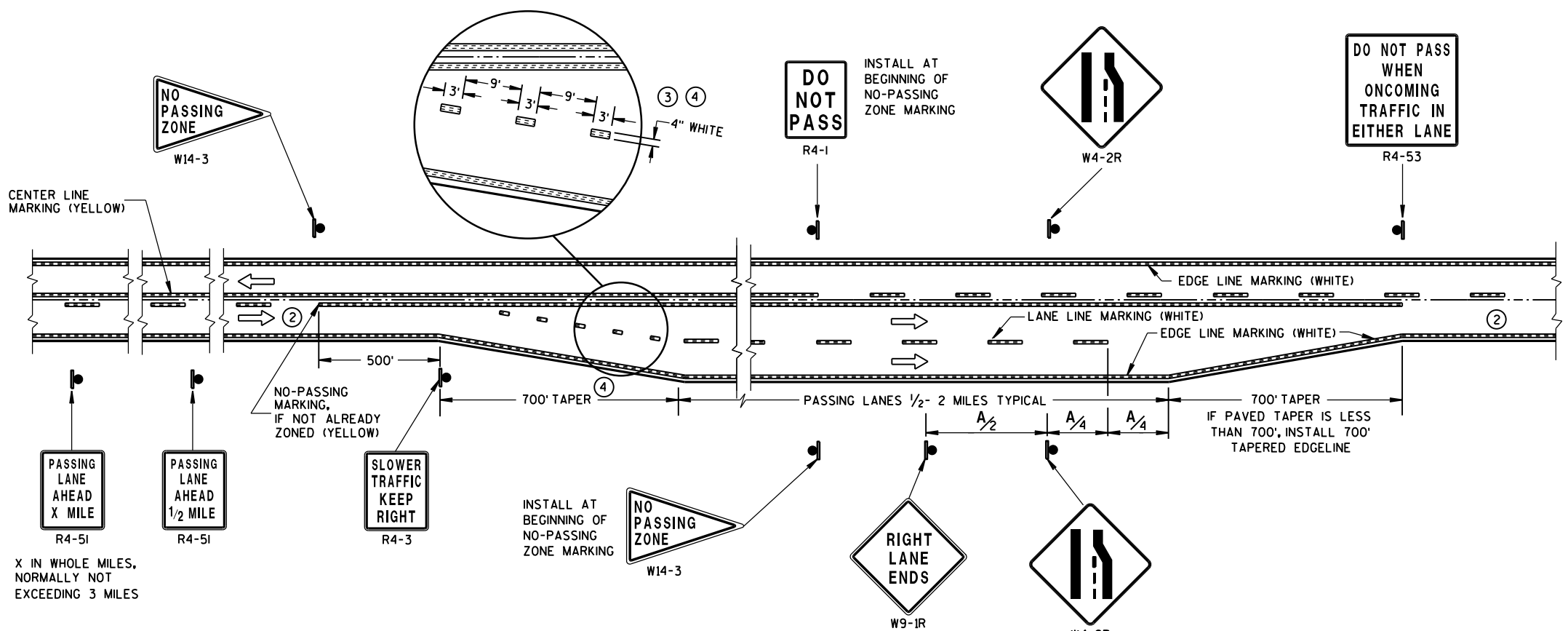
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950



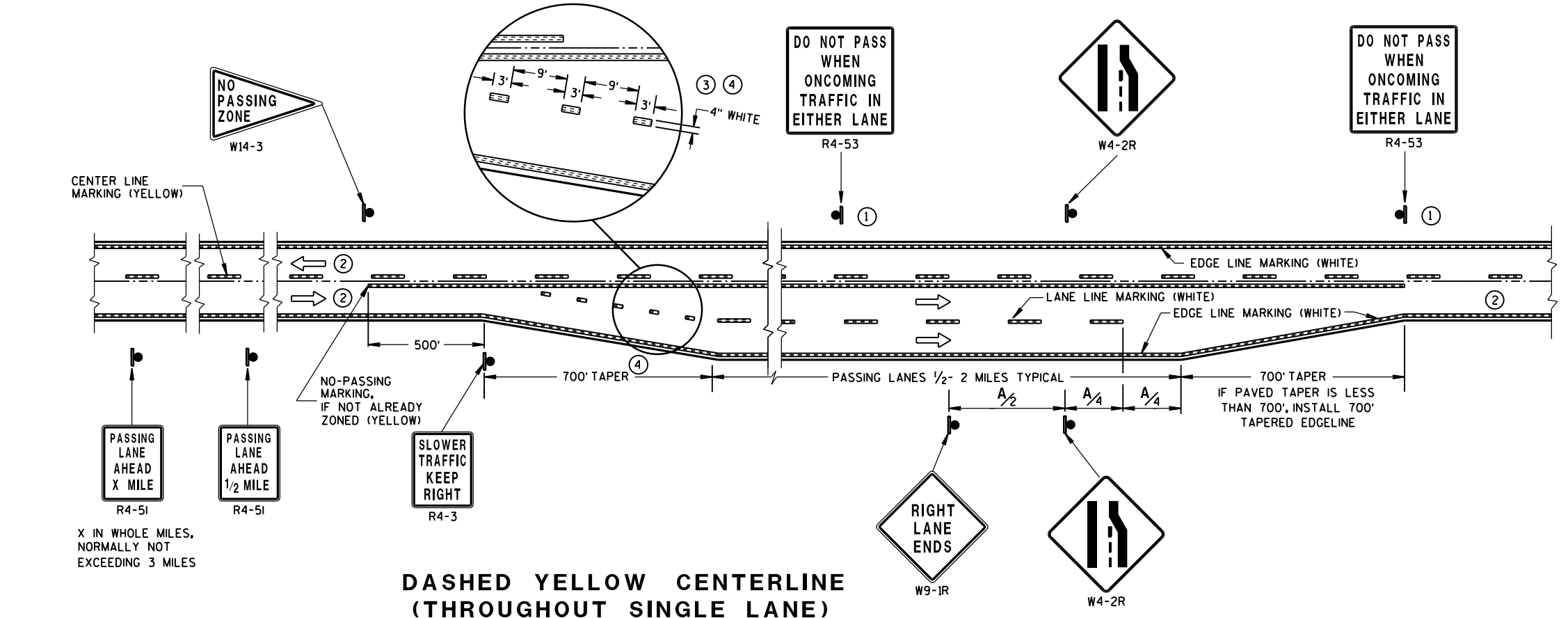
**PARTIAL DOUBLE-YELLOW LINE
(BEGINNING OF SINGLE LANE)**

**PAVEMENT MARKING & SIGNING
(CLIMBING LANE & PASSING LANE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**SOLID DOUBLE-YELLOW LINE
(END OF SINGLE LANE)**



**DASHED YELLOW CENTERLINE
(THROUGHOUT SINGLE LANE)**





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

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

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

LEGEND

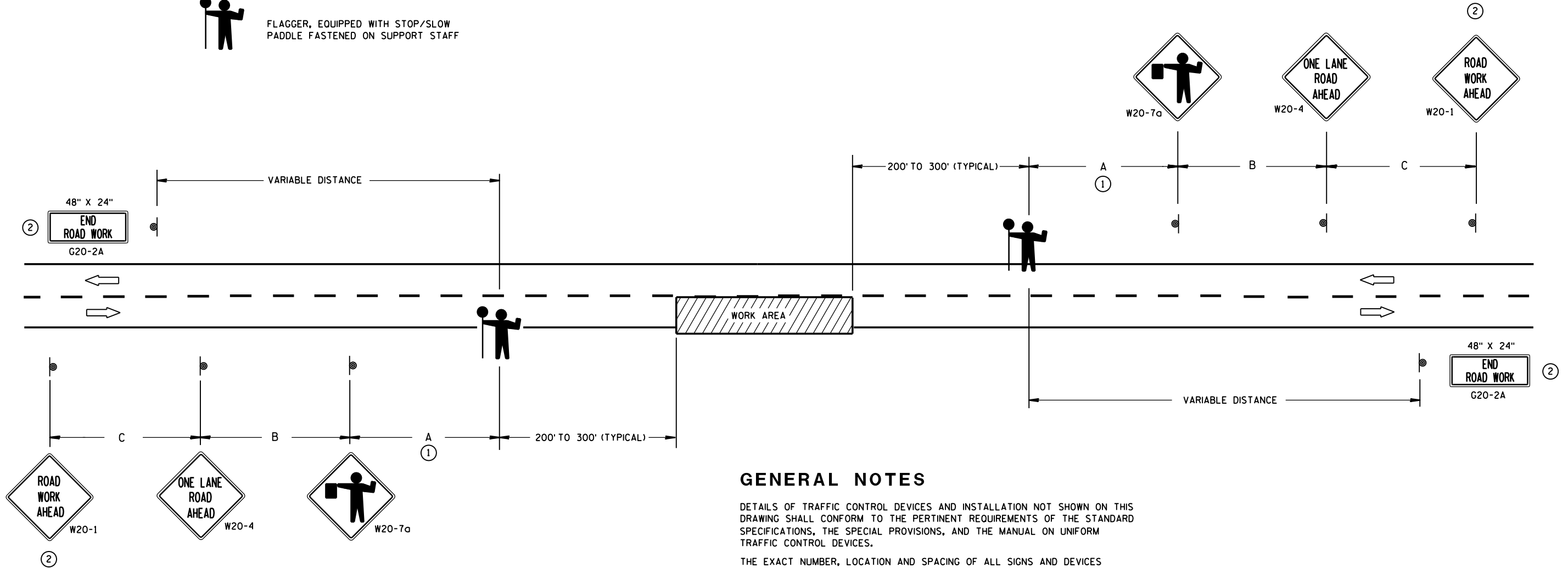
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

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



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

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

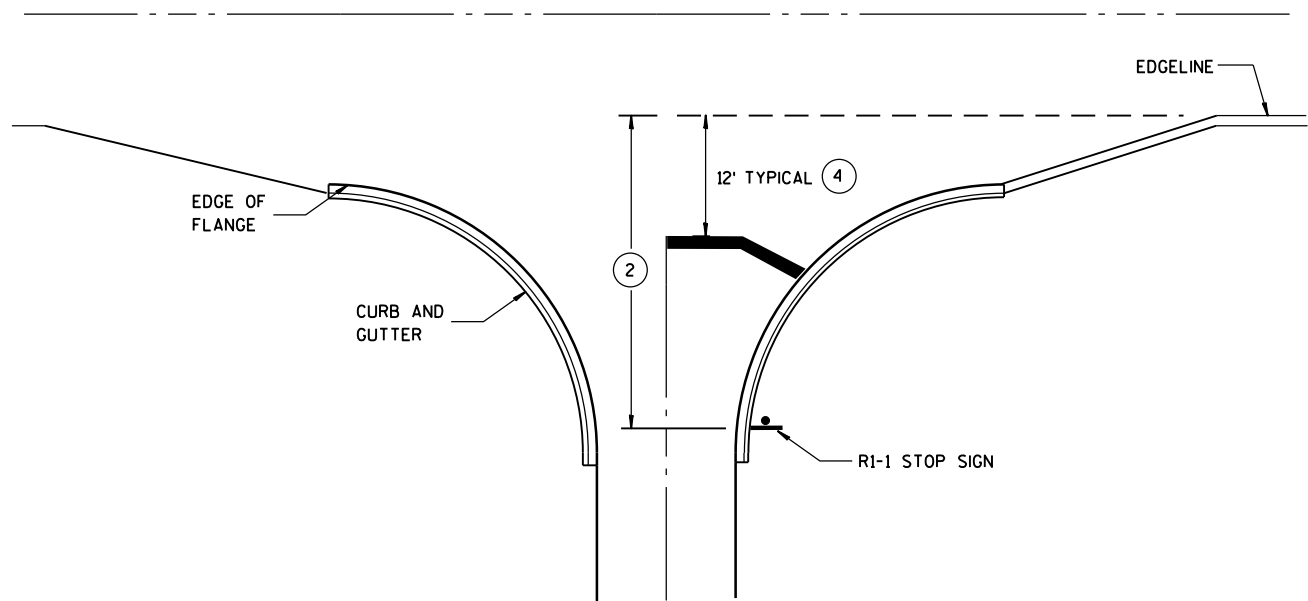
- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

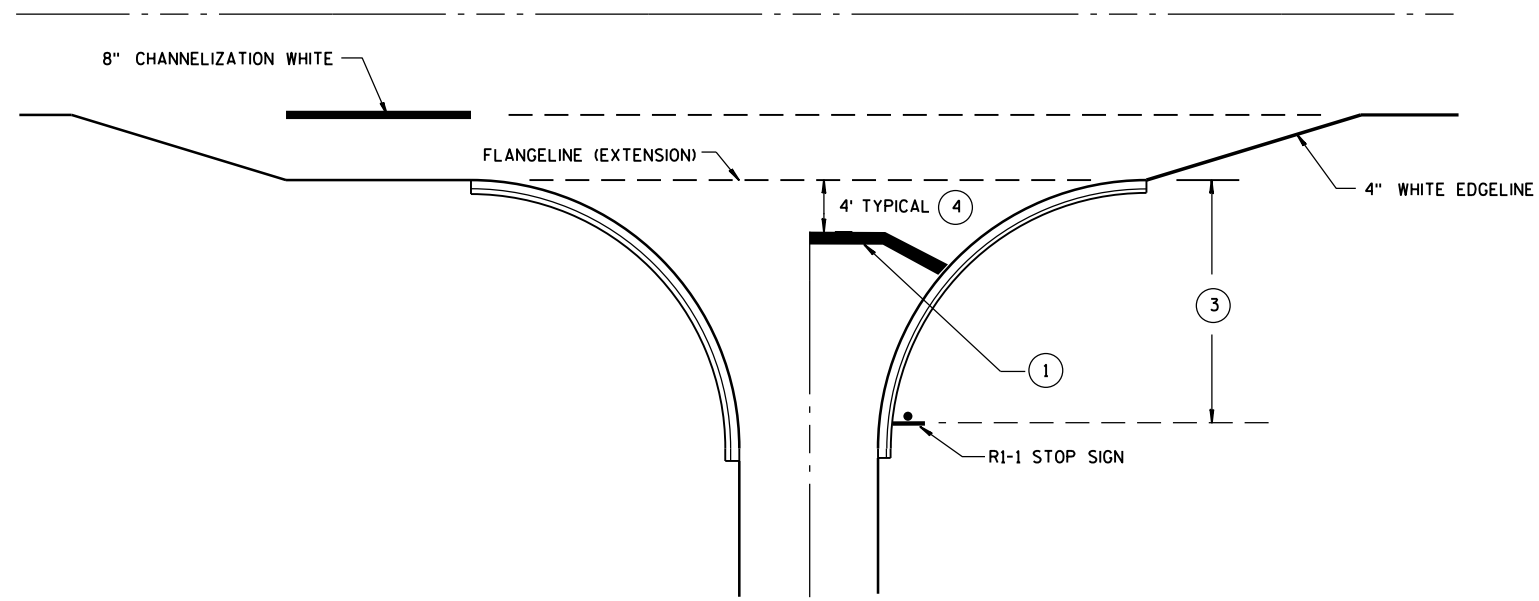
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE: 8/2013 /S/ Travis Feltes
STATE TRAFFIC ENGINEER OF DESIGN

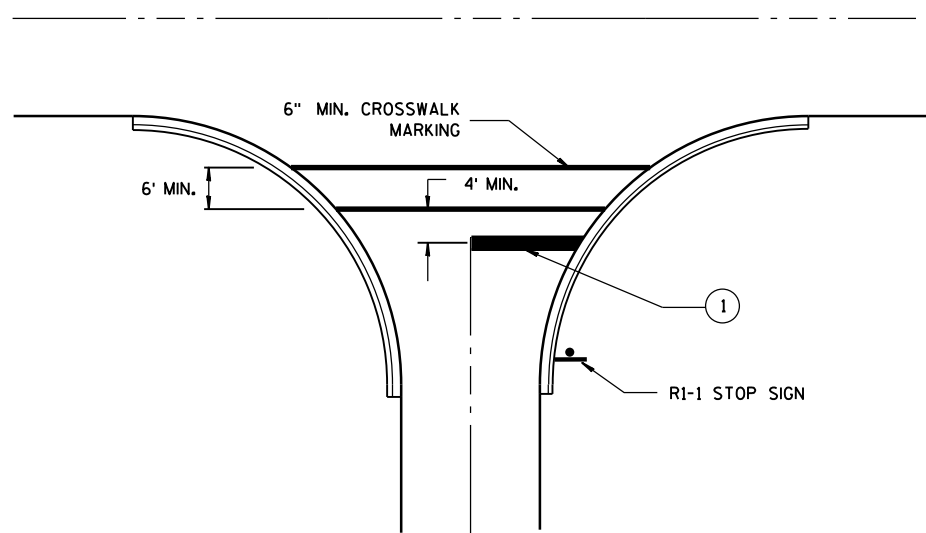
FHWA



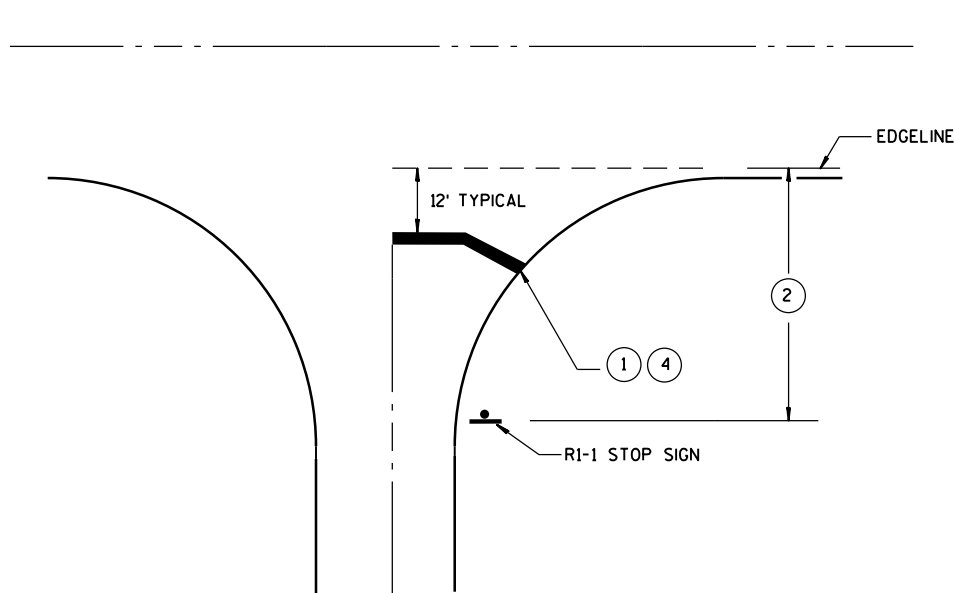
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

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

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-18-2016 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA

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)		SHOULDER TAPER LENGTH (FEET)				BUFFER SPACE (FEET)
S	W	4	6	8	10	
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	

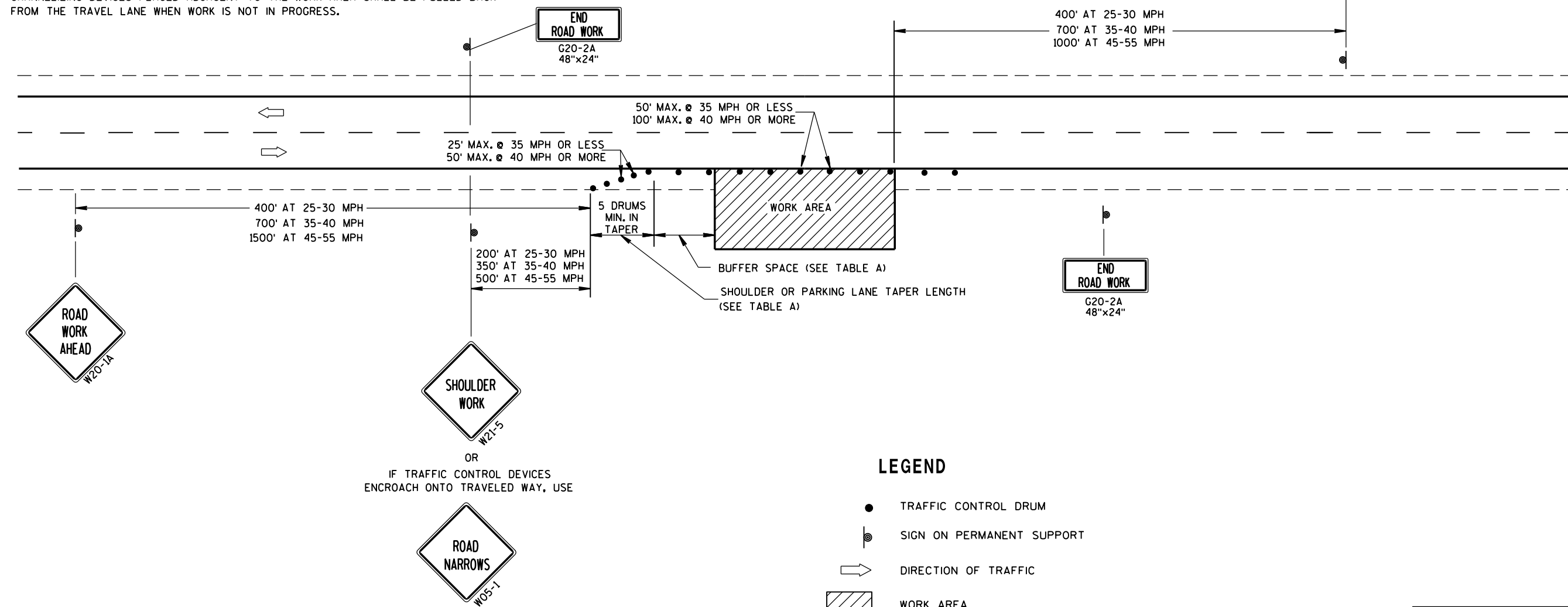
SHOULDER TAPER LENGTH = $\frac{1}{3}L$

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



LEGEND

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

6

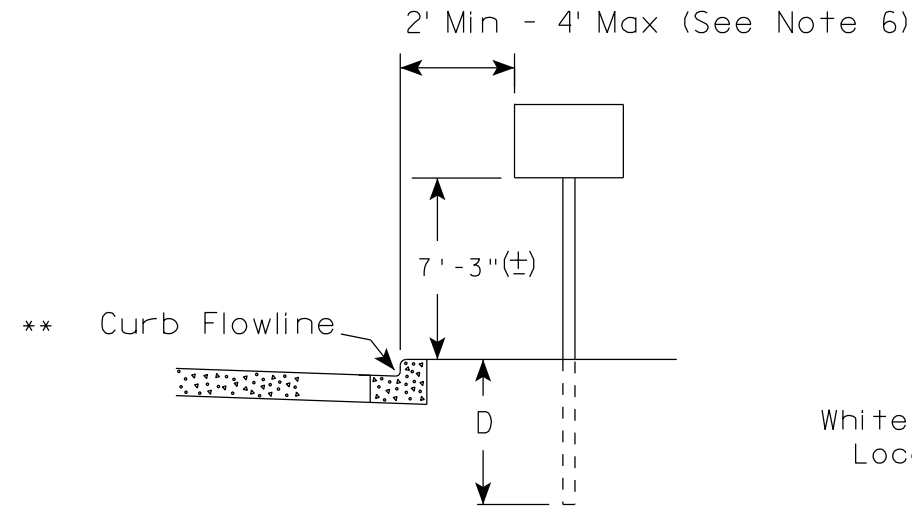
6

S.D.D. 15 D 28-3

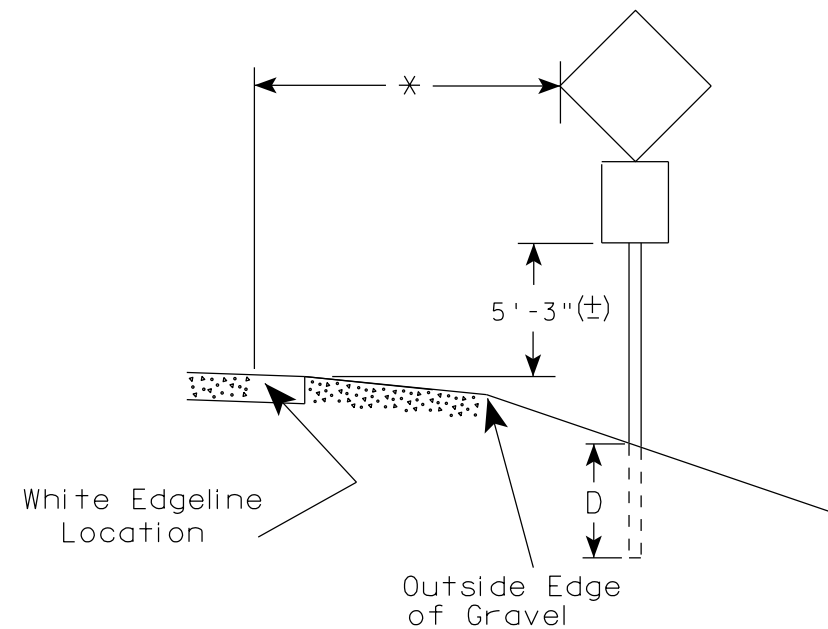
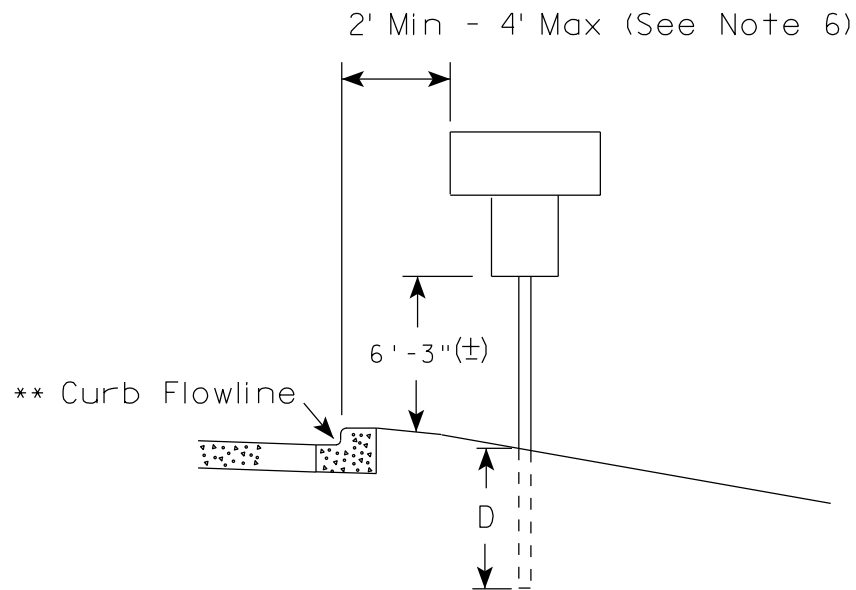
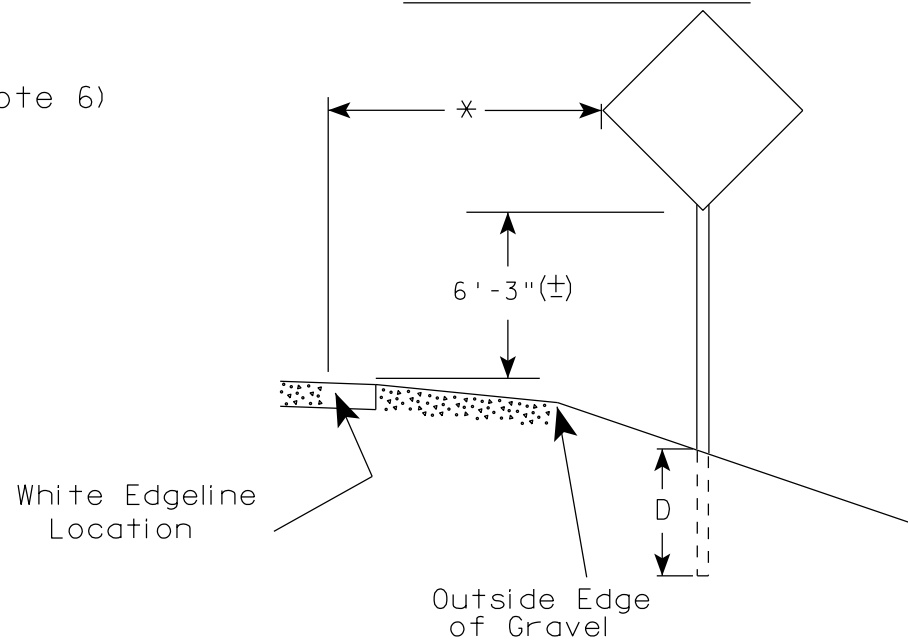
S.D.D. 15 D 28-3

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 TRAFFIC SAFETY ENGINEER
FHWA	

URBAN AREA



RURAL AREA (See Note 2)



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" (±).

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.

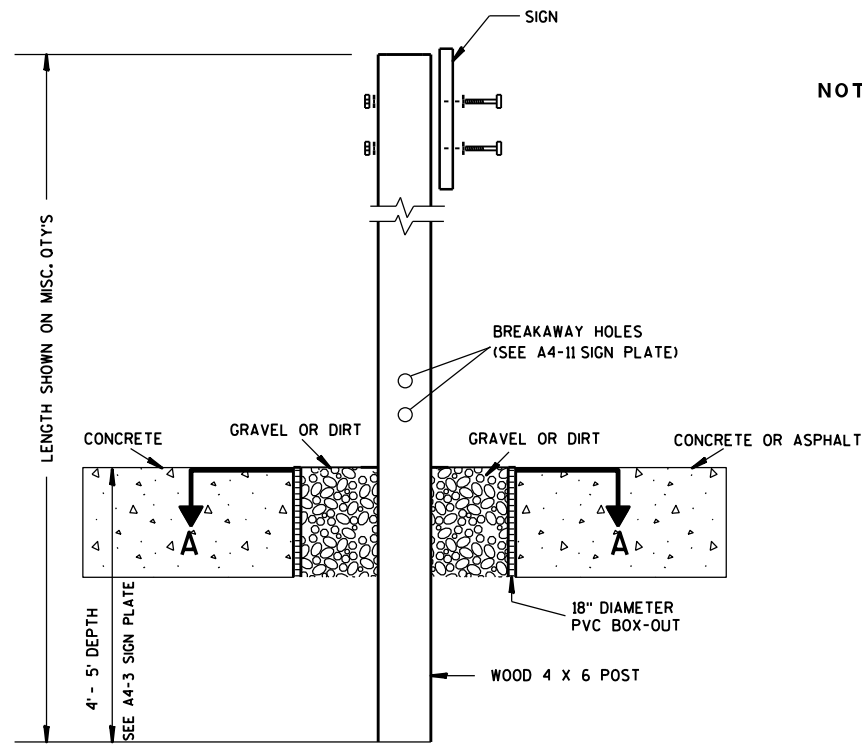
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

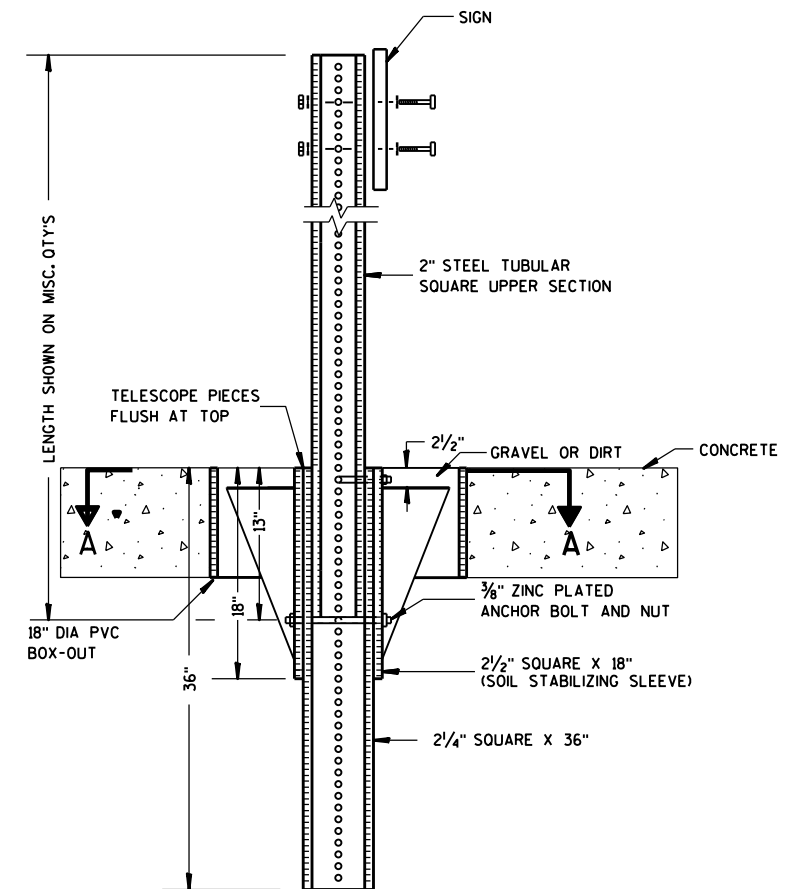
DATE 7/23/15 PLATE NO. A4-3.20



ELEVATION VIEW

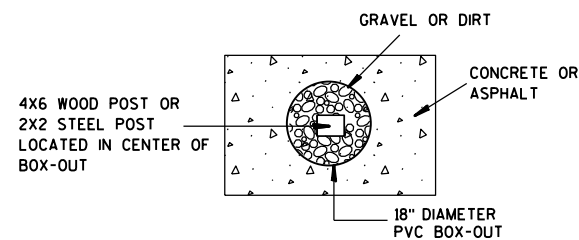
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ ASPHALT INSTALLATIONS

**SIGN POST
BOX-OUTS
A4-3B**

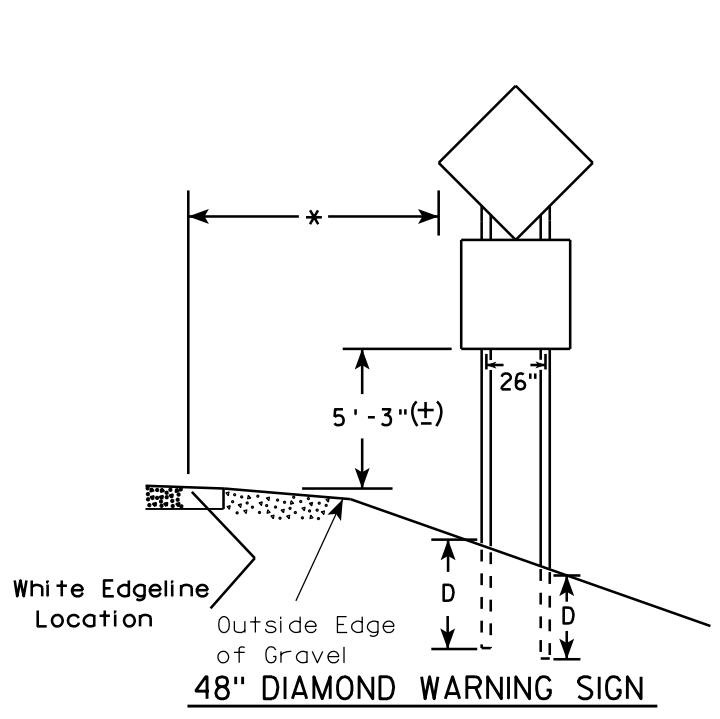
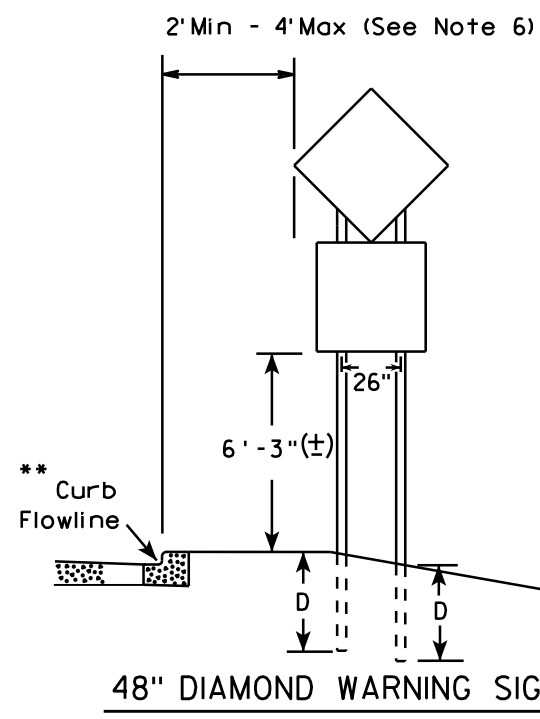
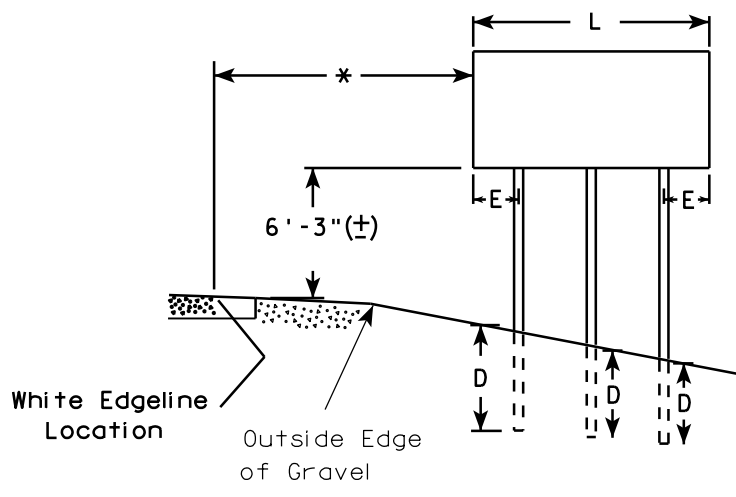
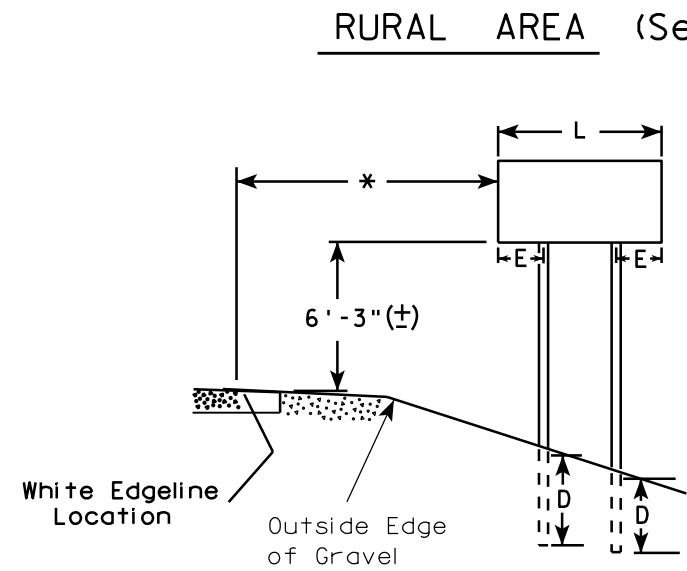
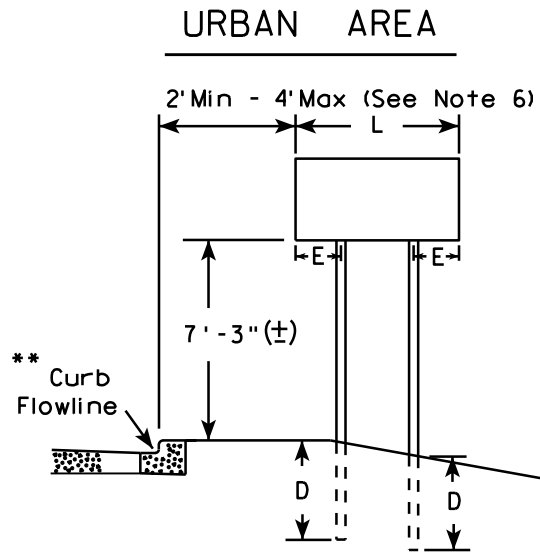
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

GENERAL NOTES

- For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
- The (±) tolerance for mounting height is 3 inches.
- Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
- The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).



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

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

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

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

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

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

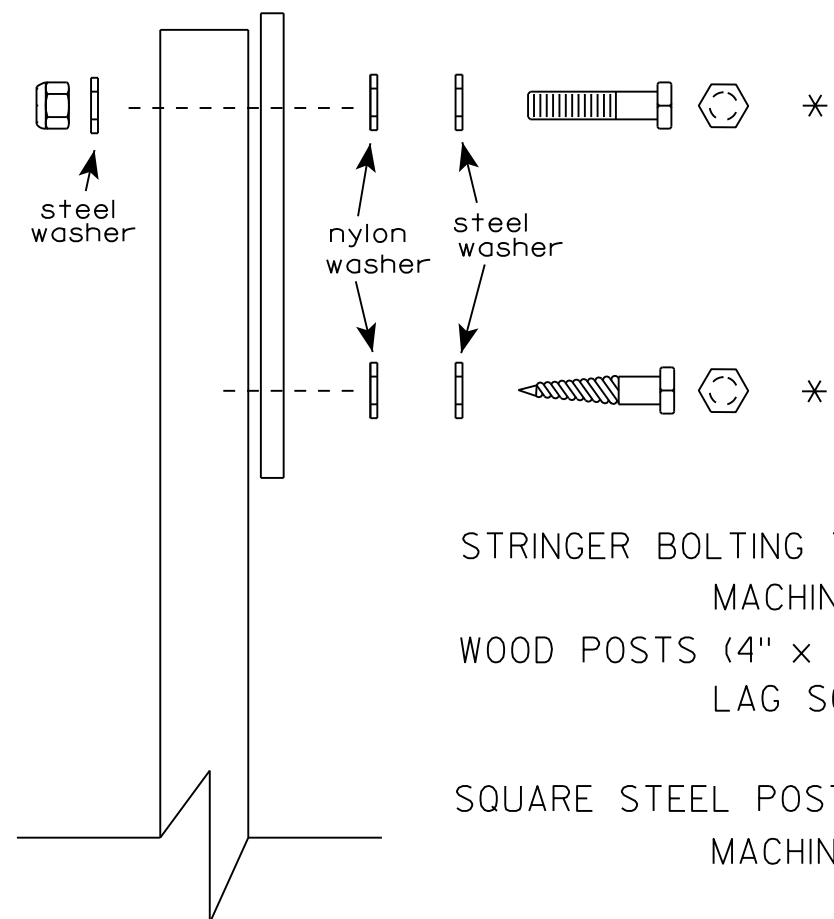
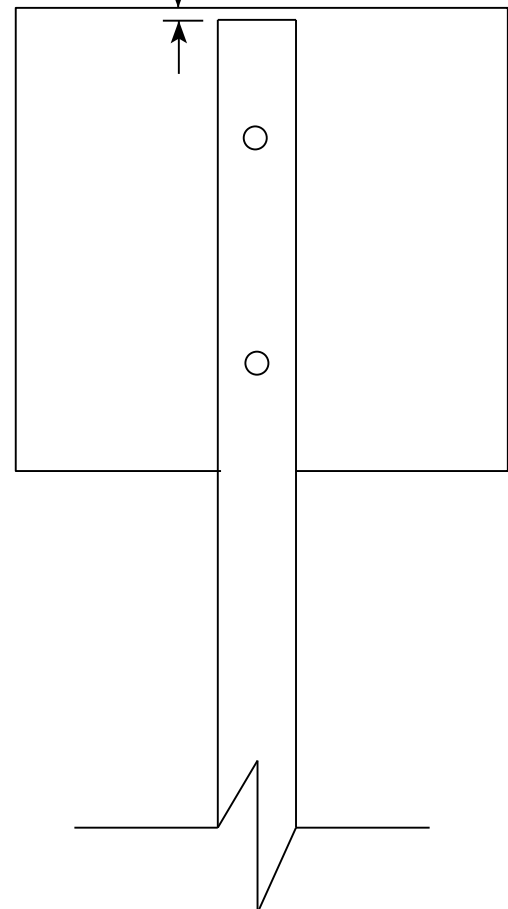
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4.14

1"± 1/2"

SIGN SHALL BE MOUNTED TO PROJECT ABOVE THE TOP OF THE POST



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

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
 - 3/8" X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 - 3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
- O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
 - 1-1/4" O.D. X 3/8" I.D. X .080 NYLON

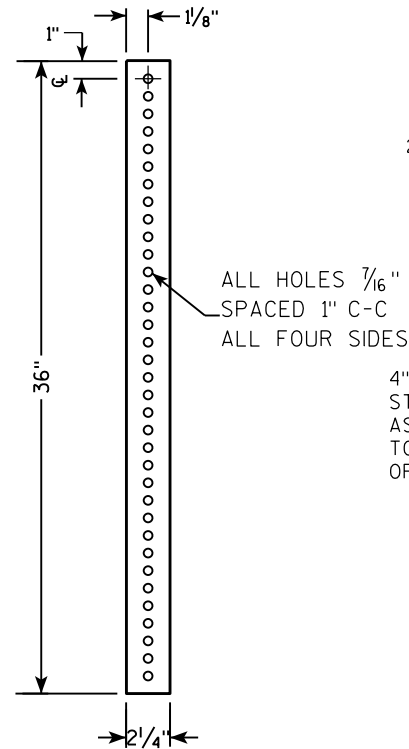
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

7

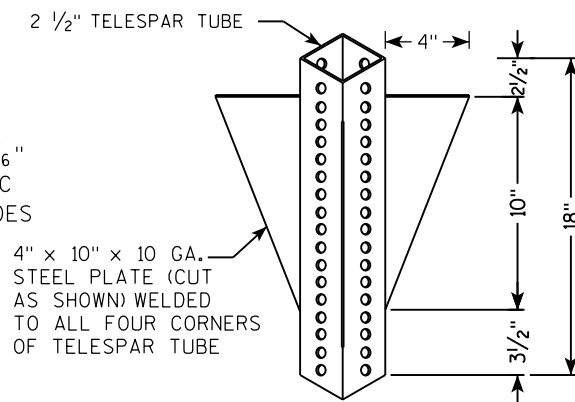
ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 8/11/16	PLATE NO. A4-8.8

**TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM**

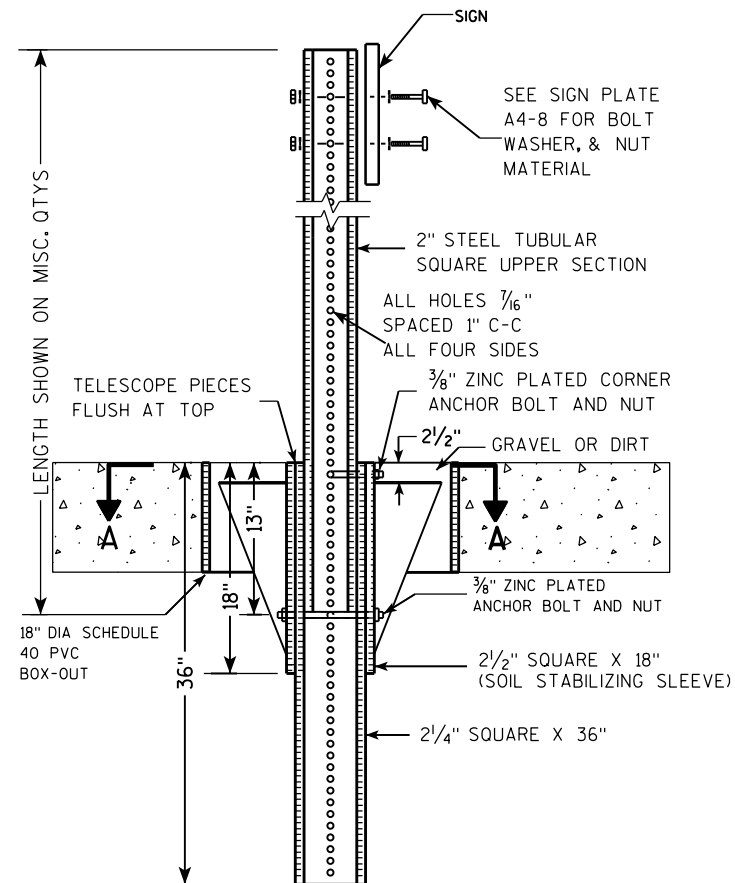
**2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**



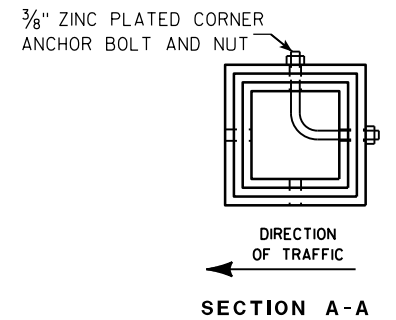
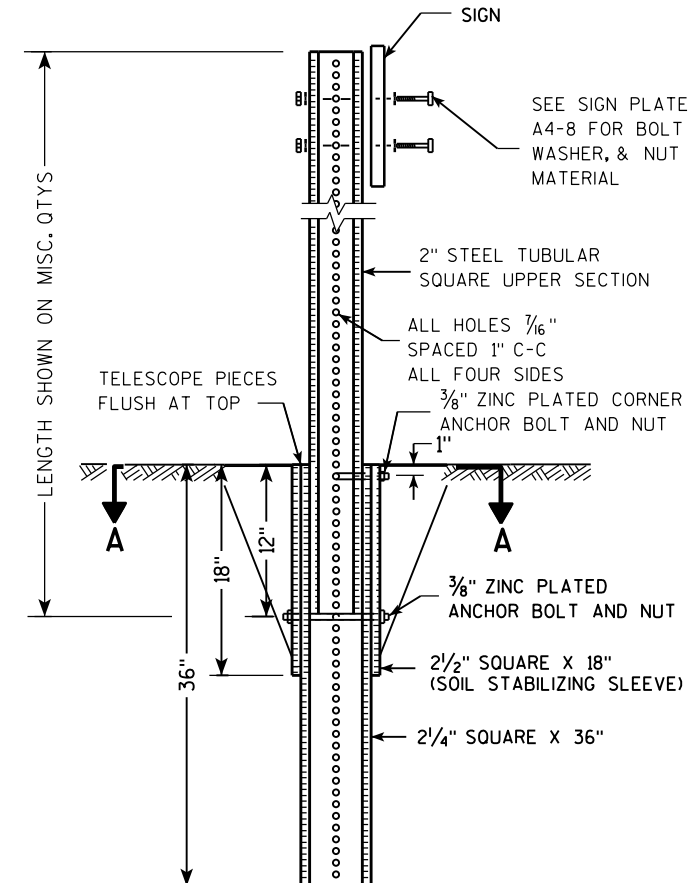
**2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH**



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



**DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)**



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

**TUBULAR STEEL
SIGN POST
A4-9**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

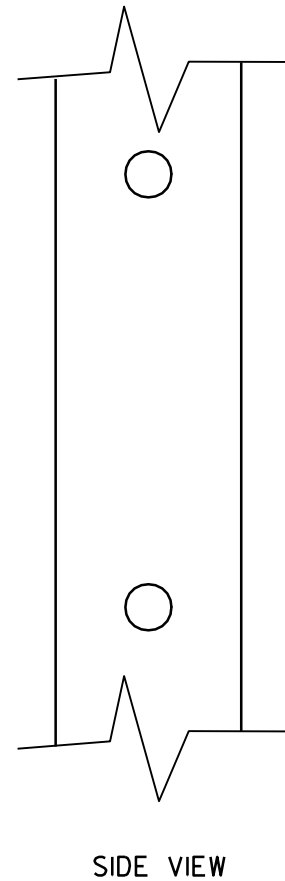
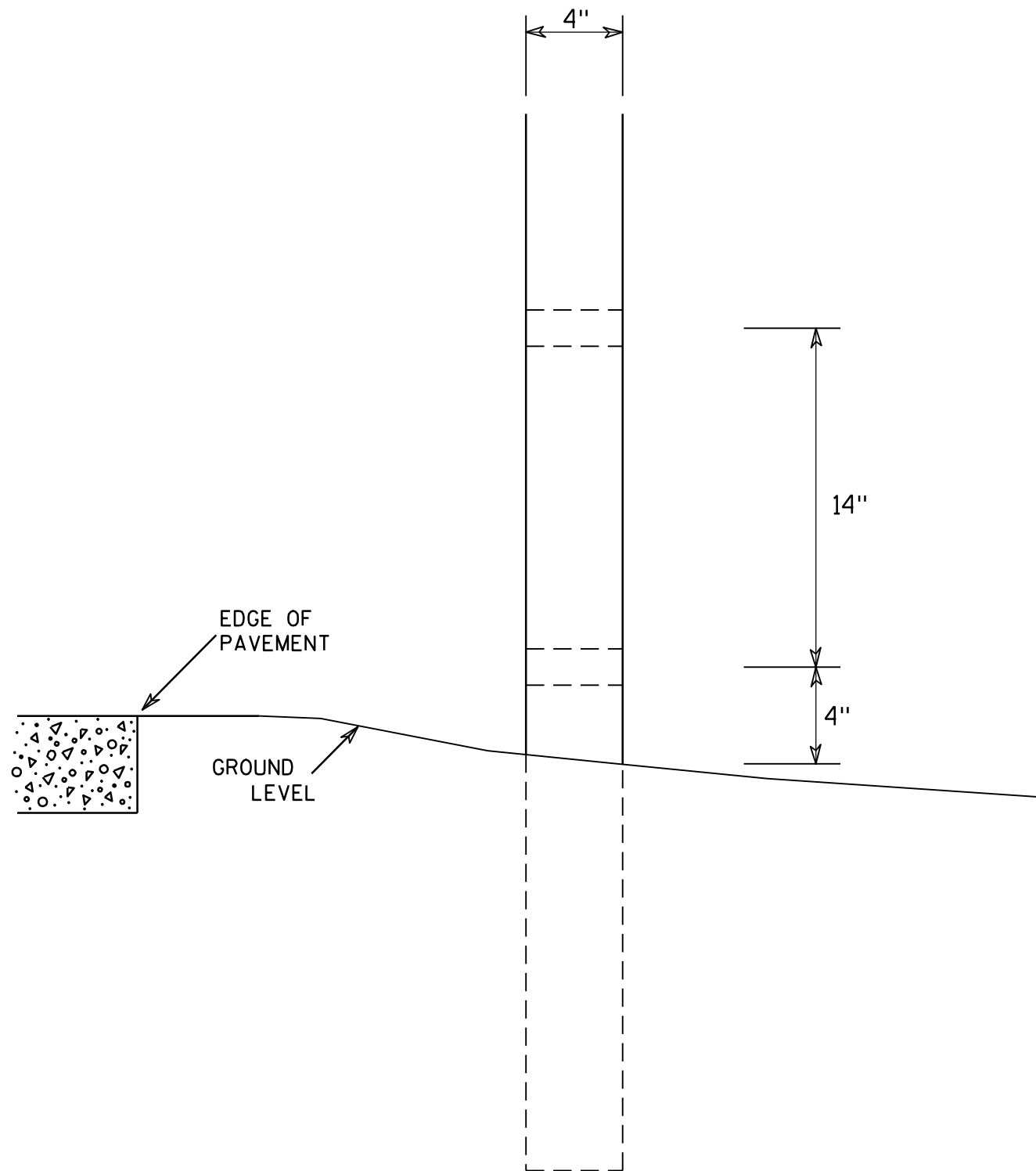
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



GENERAL NOTES

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

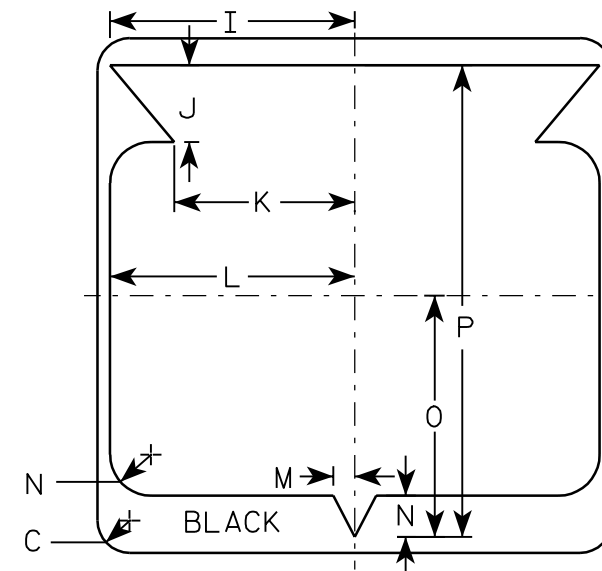
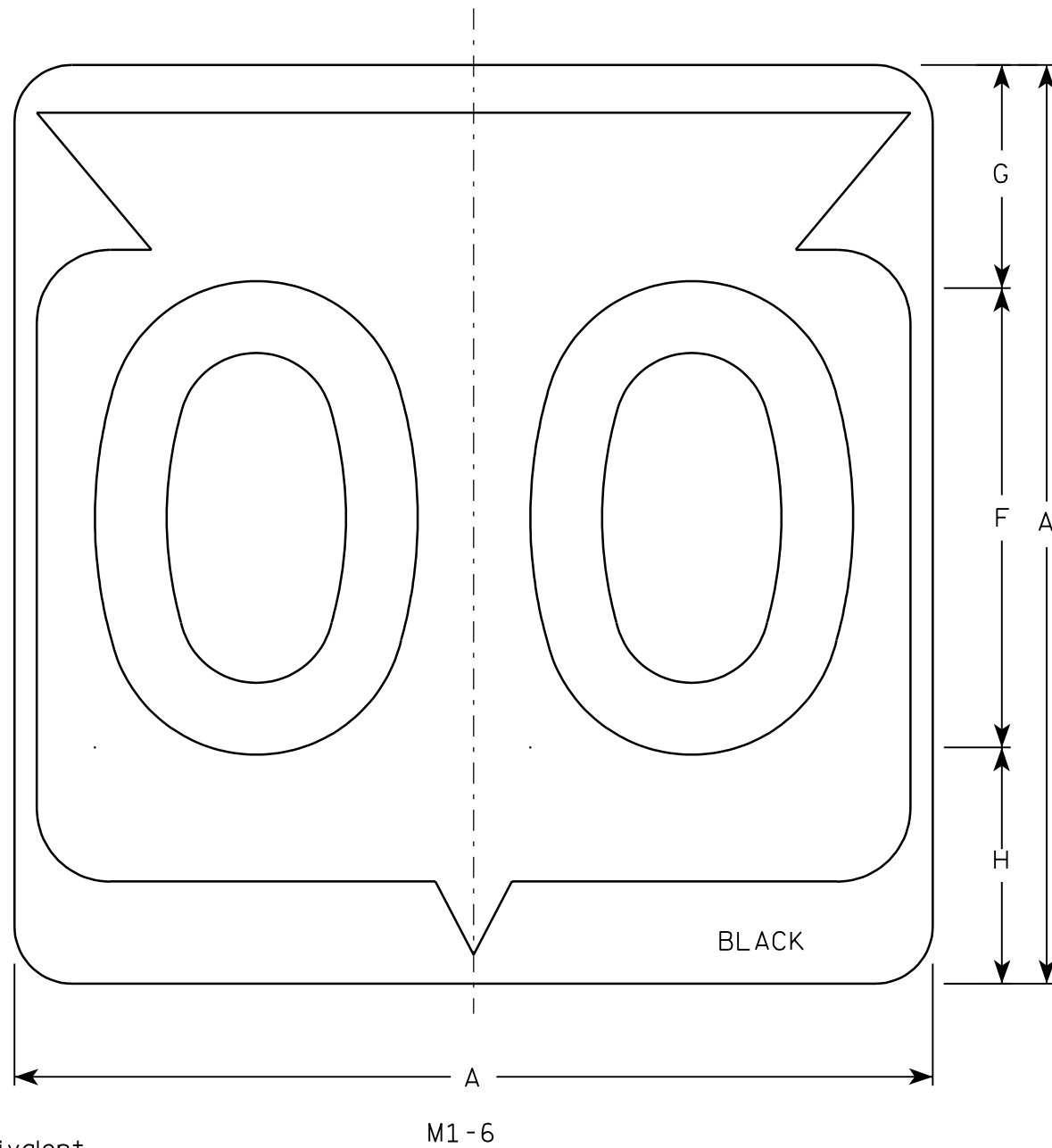
7

7

4 X 6 WOOD POST MODIFICATIONS	
<i>WISCONSIN DEPT OF TRANSPORTATION</i>	
APPROVED	<i>Chester J Spang</i> for State Traffic Engineer
DATE <u>3/27/97</u>	PLATE NO. <u>A4-11.2</u>

NOTES

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



Metric equivalent for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

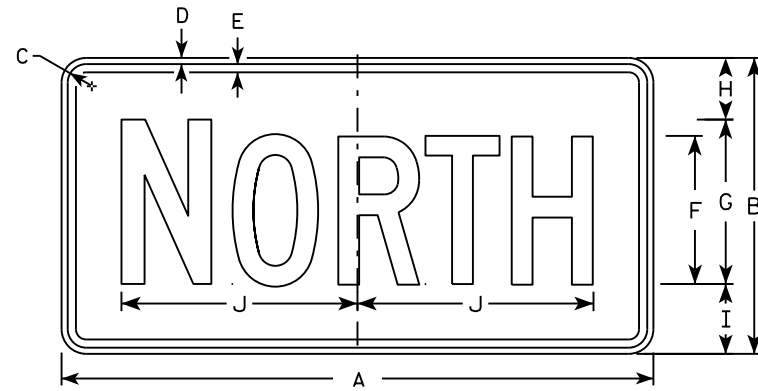
APPROVED *Chester J. Spang*
for State Traffic Engineer

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

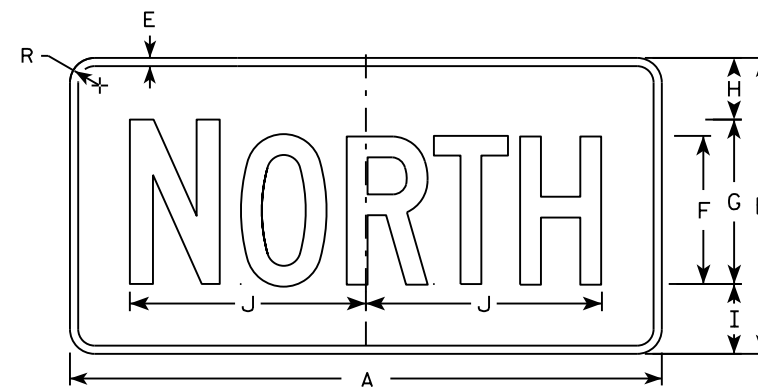
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**

NOTES

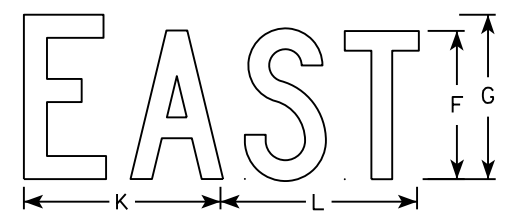
- All Signs Type II - Type H
- Color:
 - Background - See note 5
 - Message - See note 5
- Message Series - C
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M3-1 thru M3-4 Background - White
 Message - Black
 MB3-1 thru MB3-4 Background - Blue
 Message - White
 MK3-1 thru MK3-4 Background - Green
 Message - White
 MM3-1 thru MM3-4 Background - White
 Message - Green
 MN3-1 thru MN3-4 Background - Brown
 Message - White
 MP3-1 thru MP3-4 Background - White
 Message - Blue
- Note the first letter of each direction is larger than the remainder of the message.



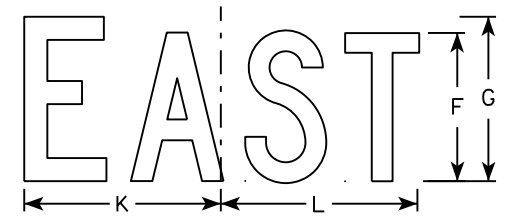
M3-1
MM3-1
MP3-1



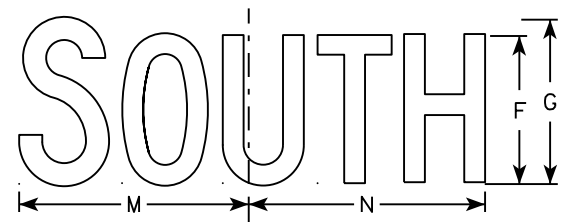
MB3-1
MK3-1
MN3-1



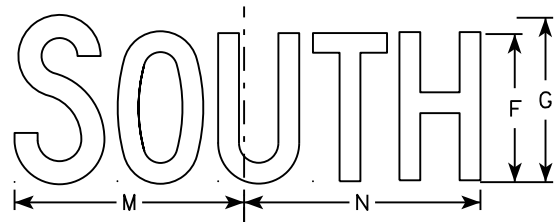
M3-2
MM3-2
MP3-2



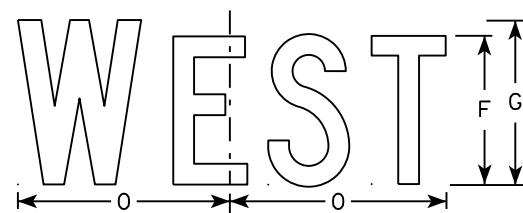
MB3-2
MK3-2
MN3-2



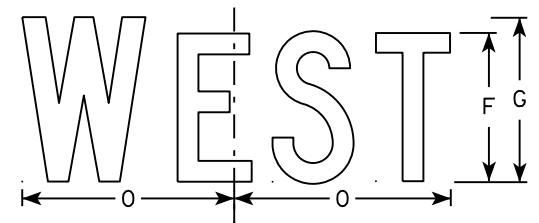
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

7

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

STANDARD SIGNS
M3-1 thru M3-4
SERIES

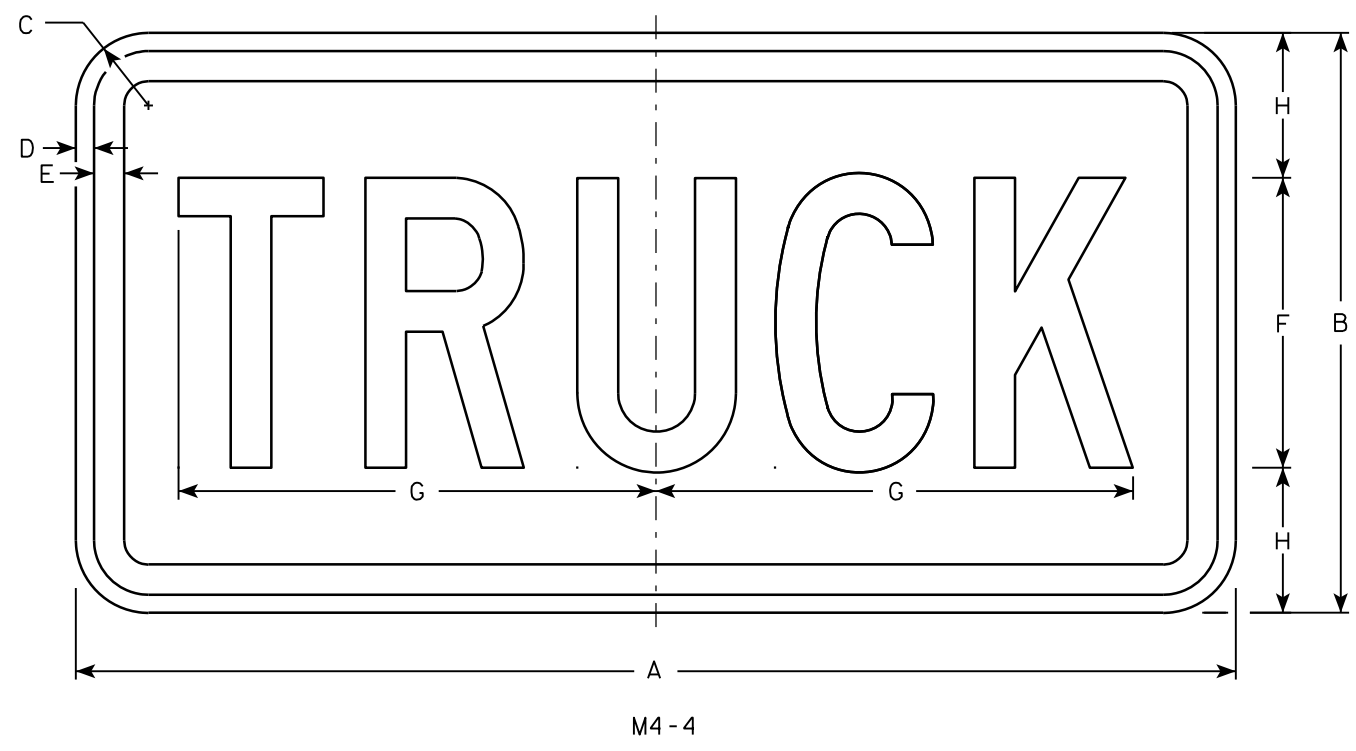
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M3-1.14

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White - See Note 5
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Permanent Signs
Background - Type H Reflective
Temporary or other temporary Signs
Background - Reflective



7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/2	3/8	3/8	6	9 7/8	3																			2.0
3	36	18	1 1/2	3/8	1/2	9	15 5/8	4 1/2																			4.5
4																											
5																											

STANDARD SIGN
M4-4

WISCONSIN DEPT OF TRANSPORTATION

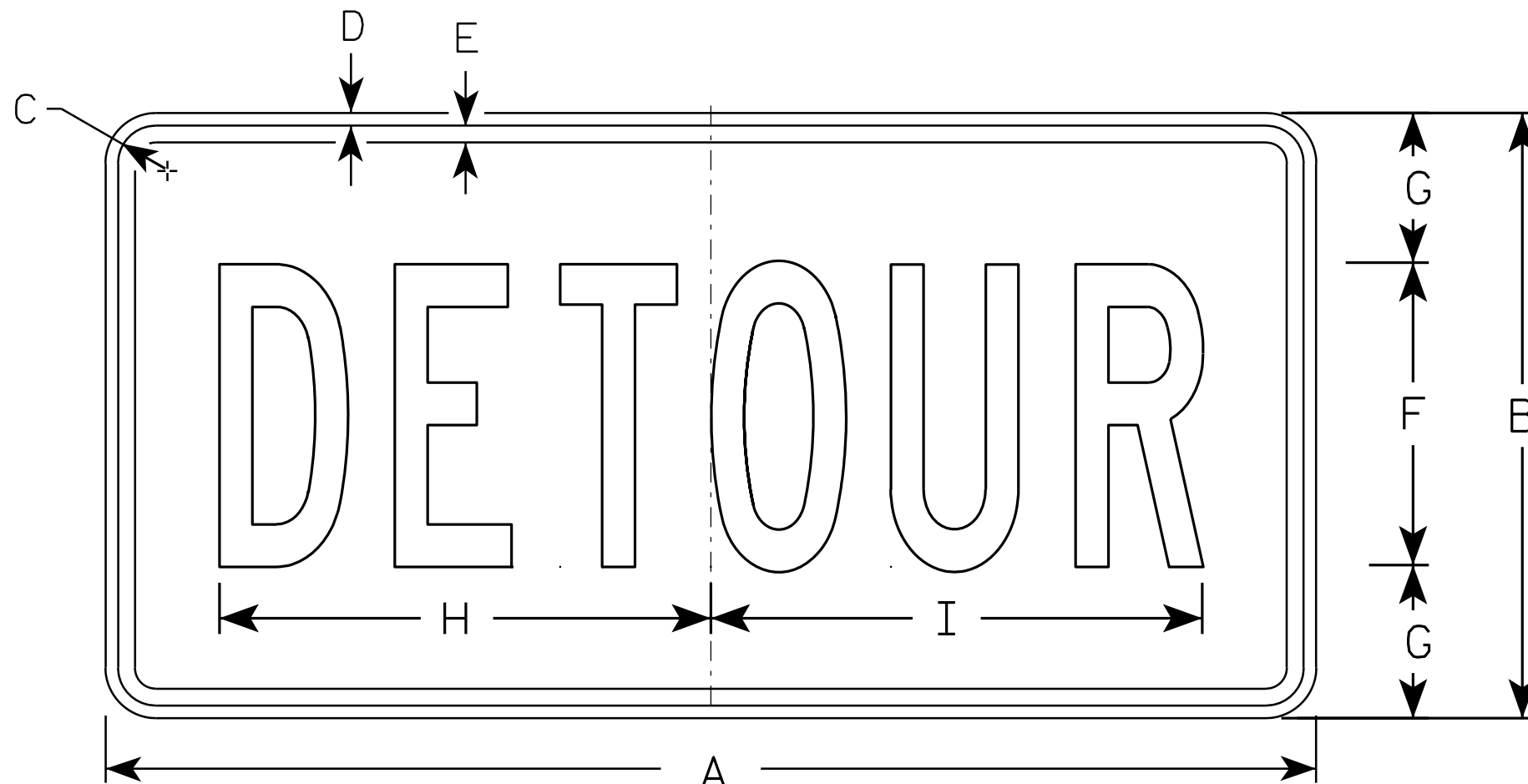
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-4.3

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **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 - Orange
Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



M4-8

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

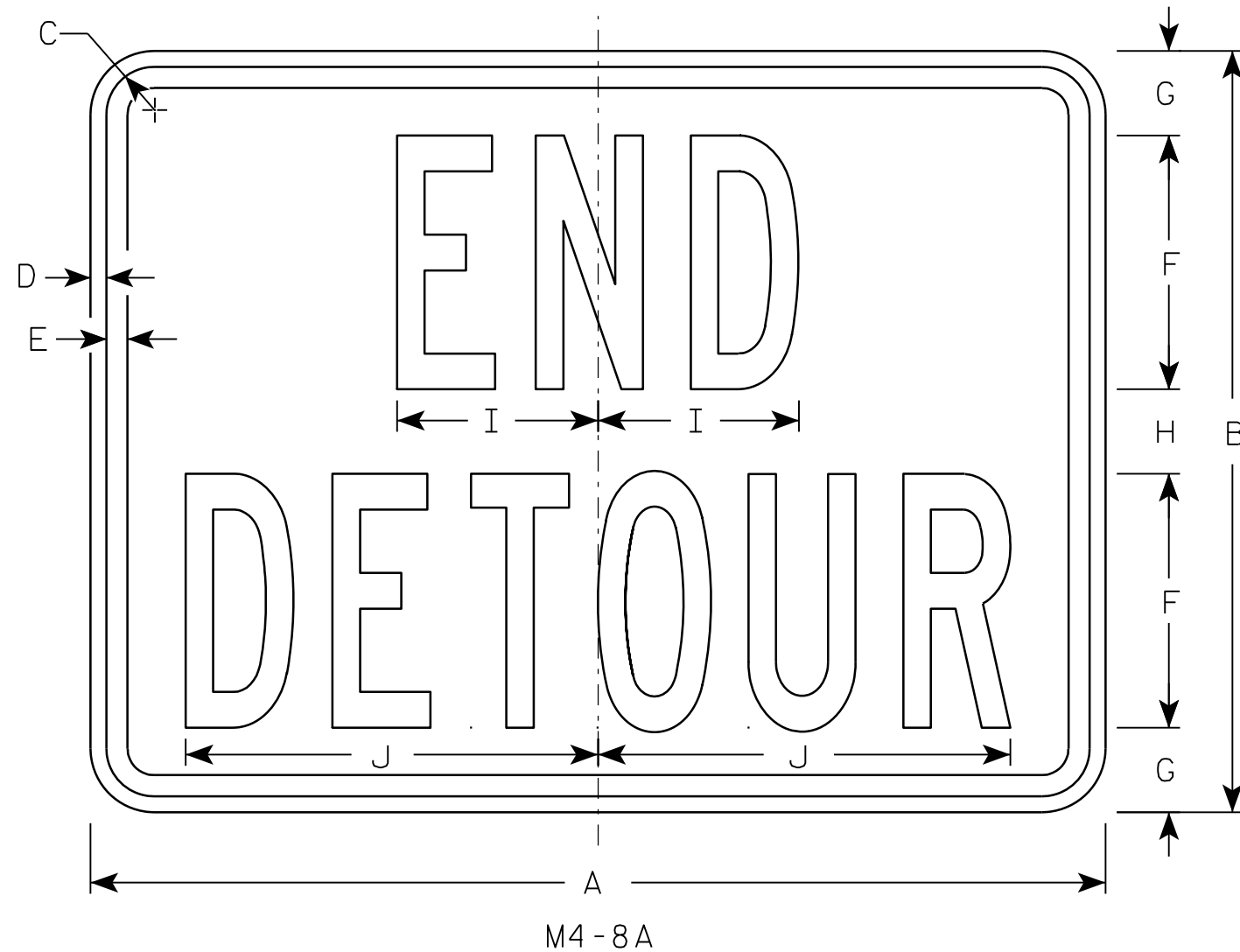
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **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 - Orange
Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

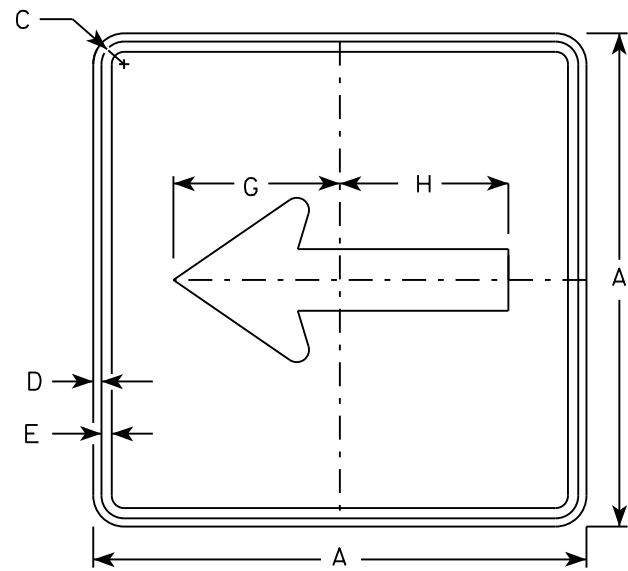
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

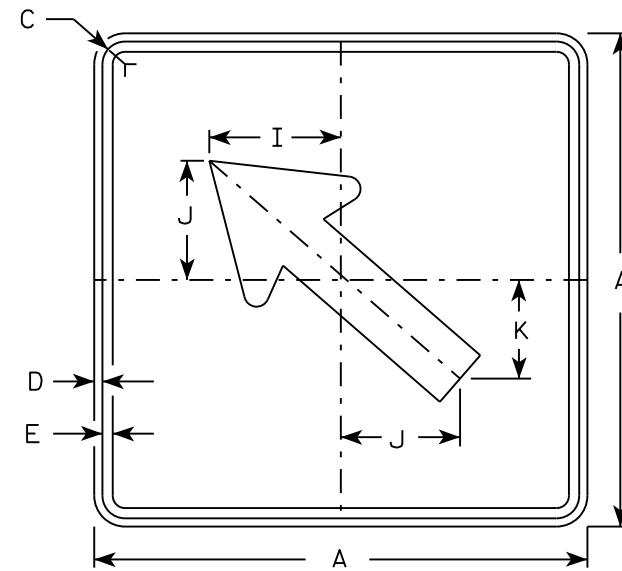
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

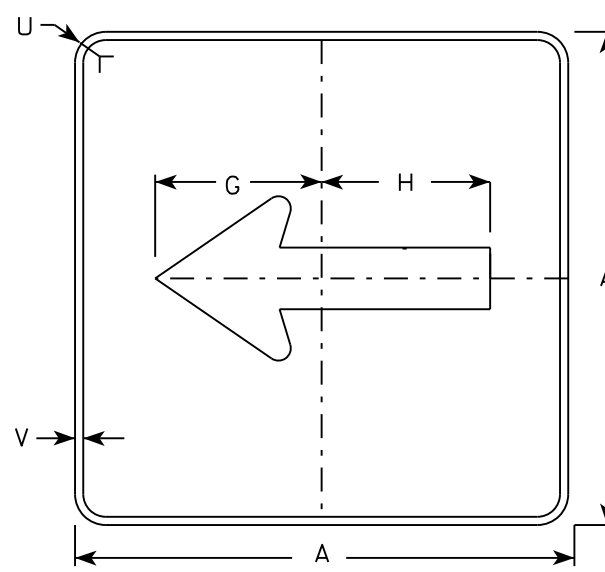
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**



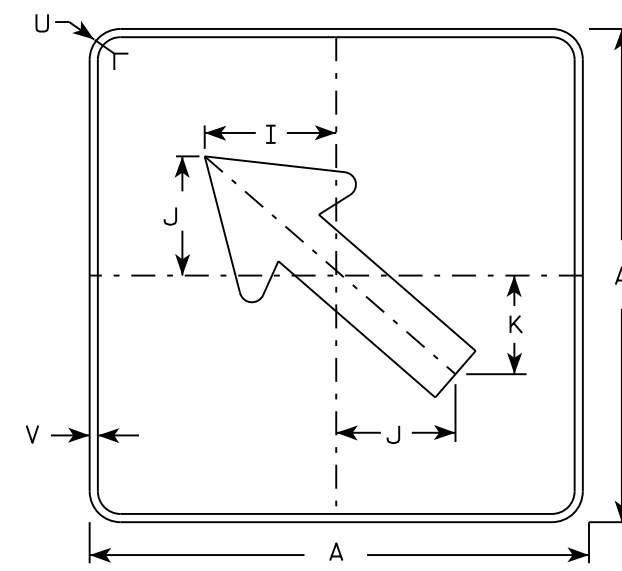
M6-1
MM6-1
M06-1
MP6-1



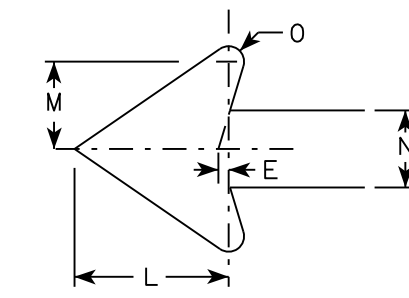
M6-2
MM6-2
M06-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See note 4
Message - See note 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.
- M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
M06-1 and M06-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow

7

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

STANDARD SIGN
M6-1 & M6-2
SERIES

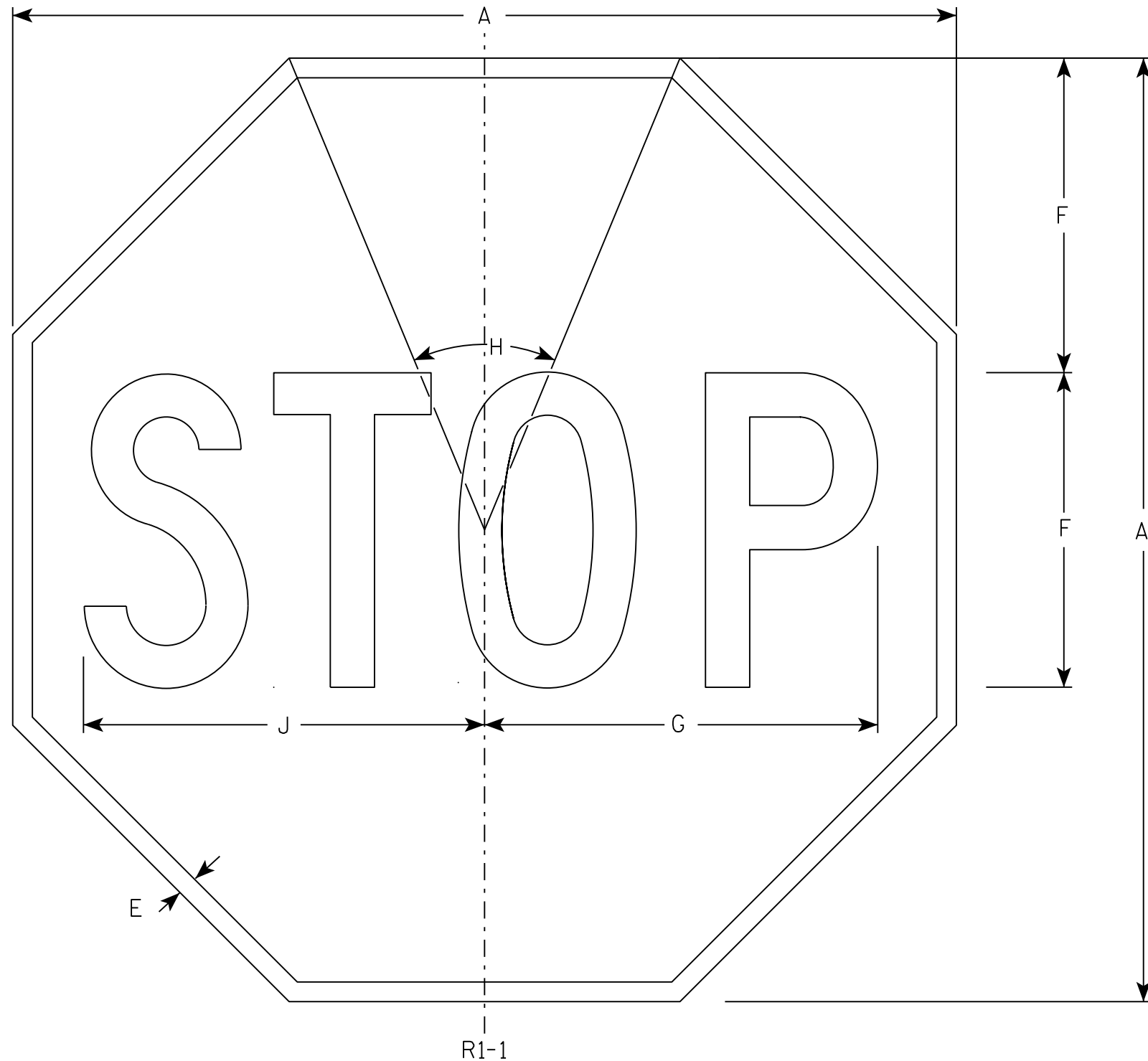
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Red
Message - White
3. Message Series - C



7

R1-1

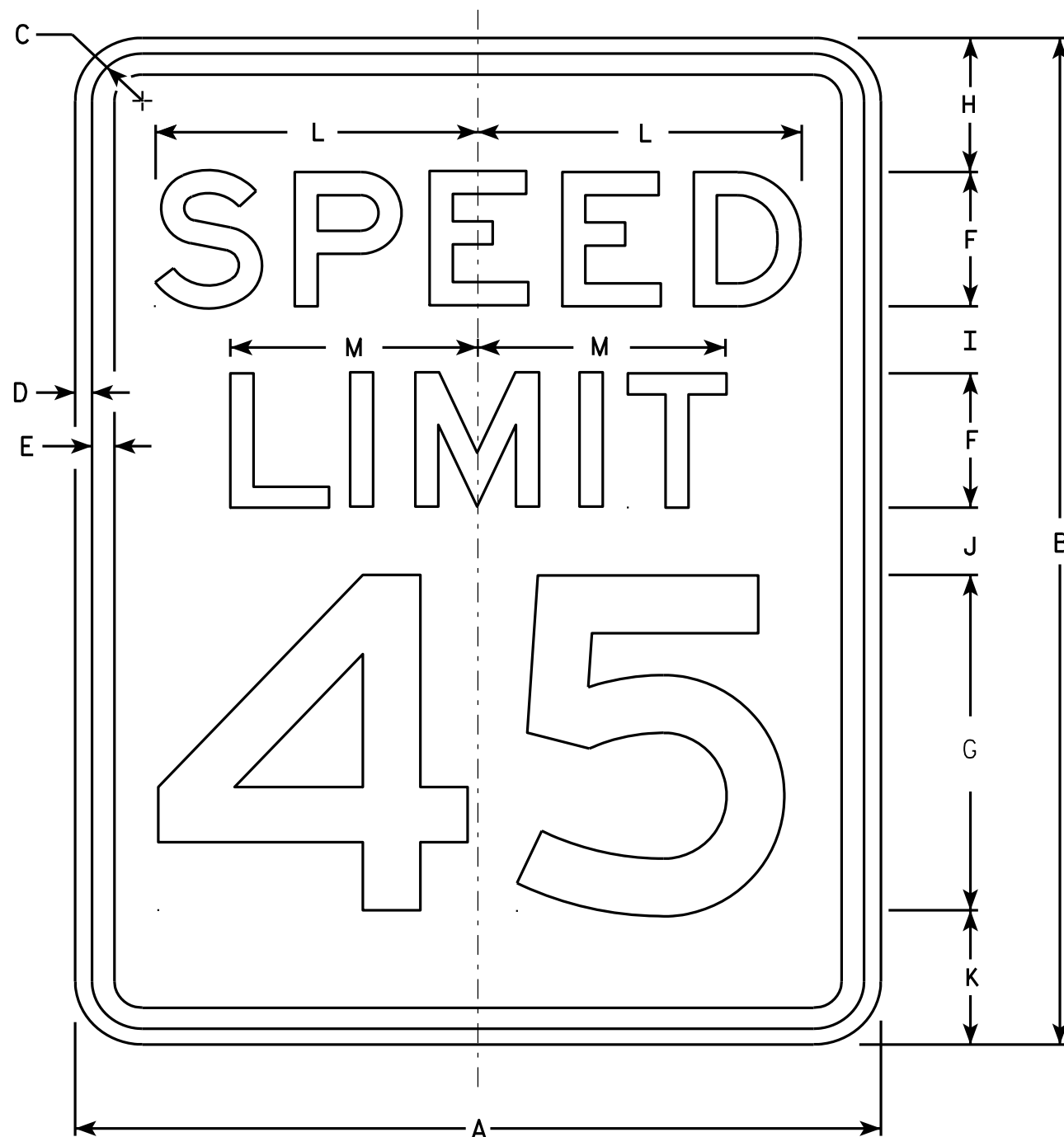
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°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

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

7

7

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

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E

NOTES

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



R2-6P

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

STANDARD SIGN
R2-6P

WISCONSIN DEPT OF TRANSPORTATION

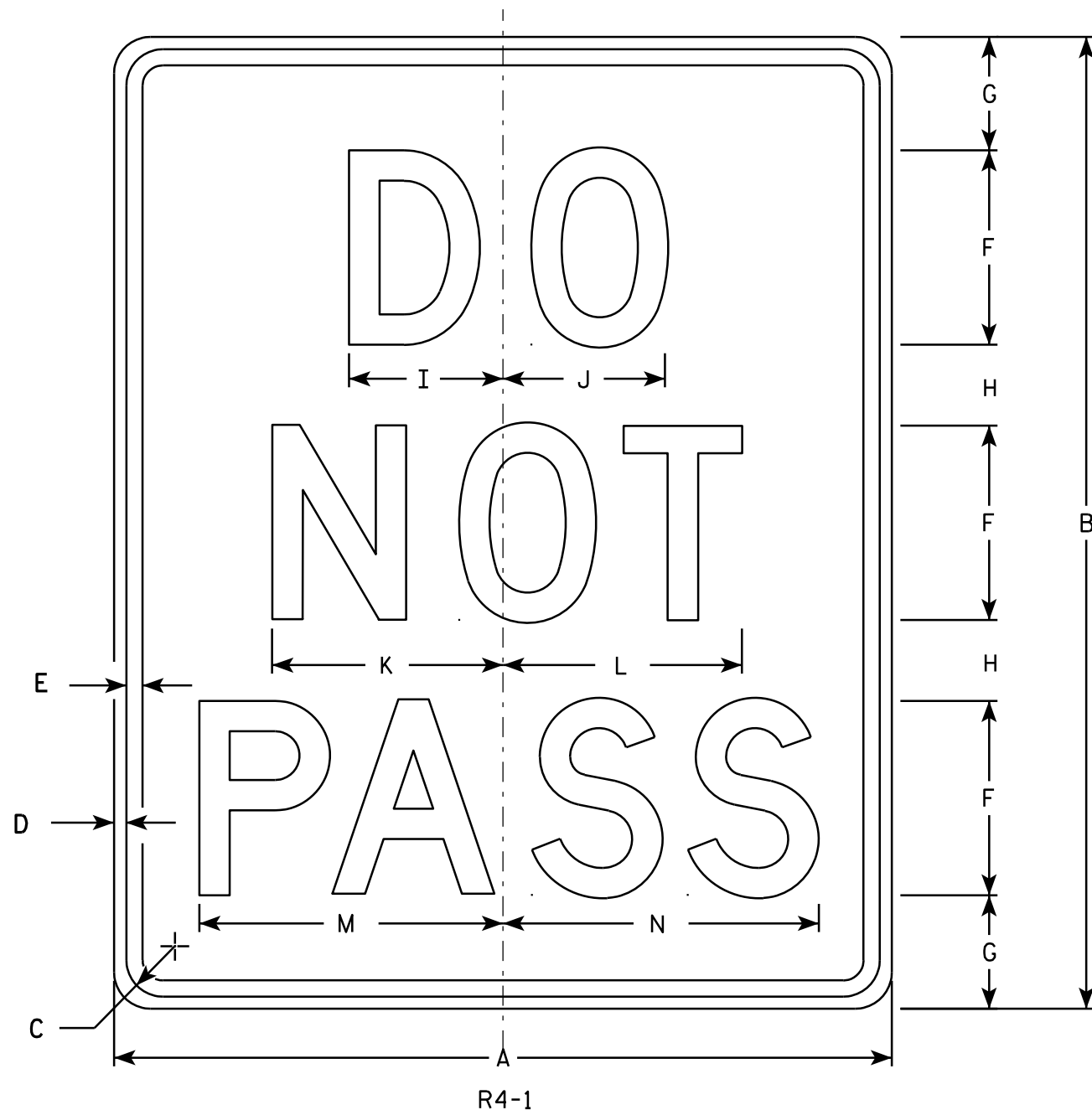
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E

NOTES

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



7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 1/8	12 1/4	15 5/8	16 1/4													20.0

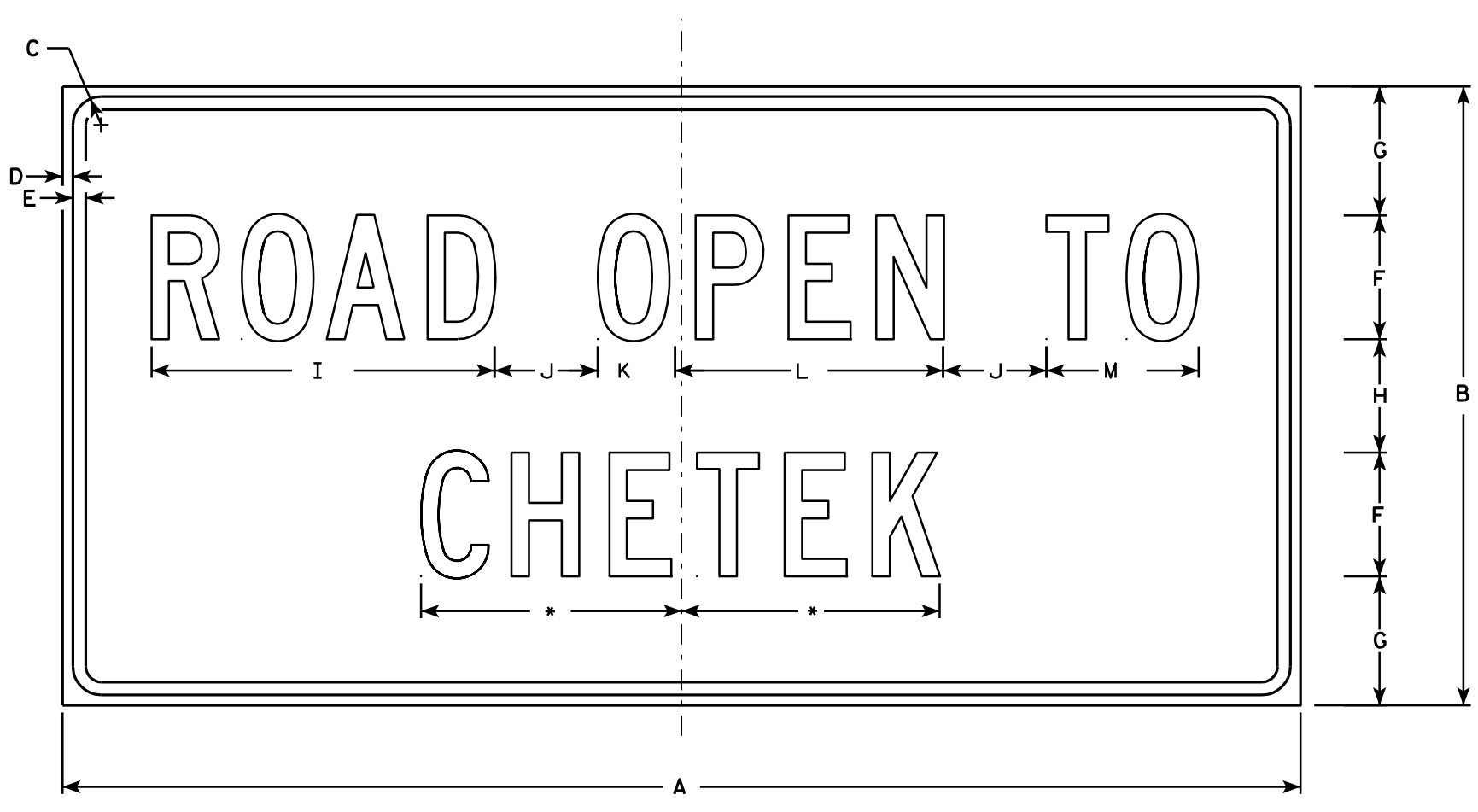
STANDARD SIGN
R4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-1.7

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E



R10-61

*See note 5

NOTES

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

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 3/8	1/2	5/8	4	5 1/2	5	10 3/4	2	2 1/8	8 3/8	4 5/8														6.0
2S	60	30	1 3/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
2M	60	30	1 3/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
3																											
4																											
5																											

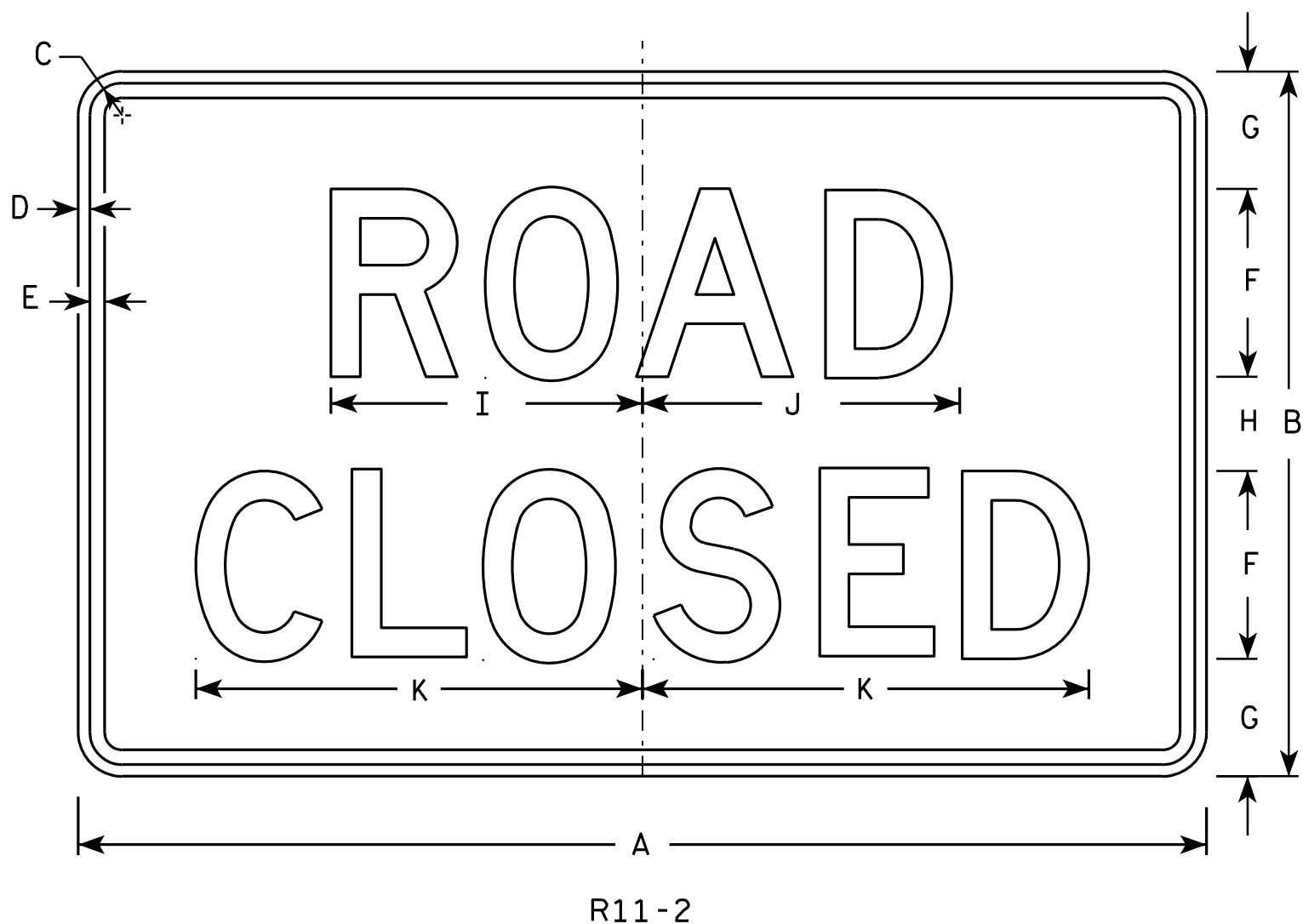
STANDARD SIGN
R10-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

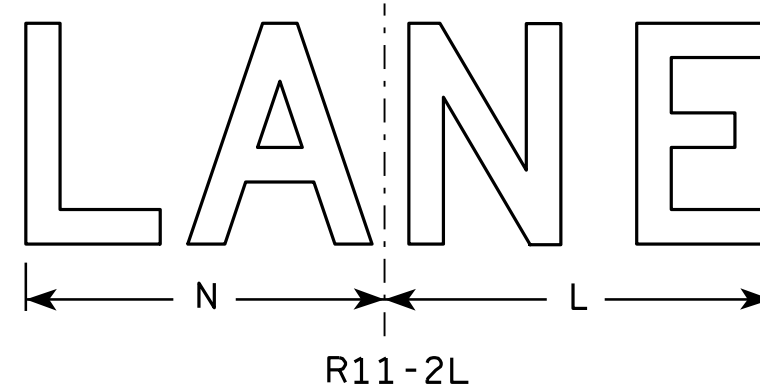
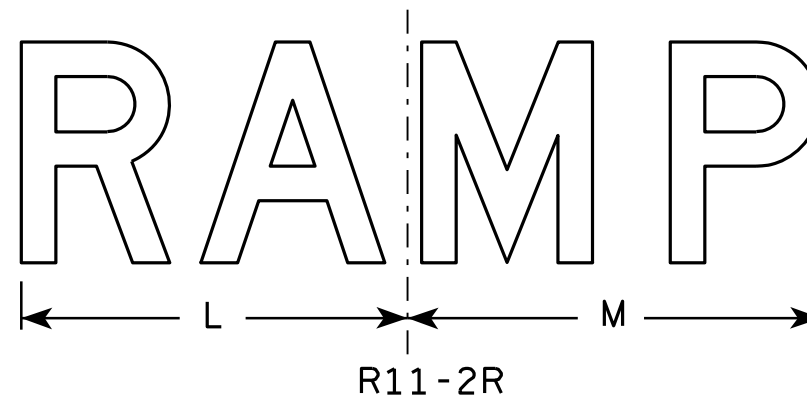
DATE 4/4/11 PLATE NO. R10-61.5

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E



NOTES

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



7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

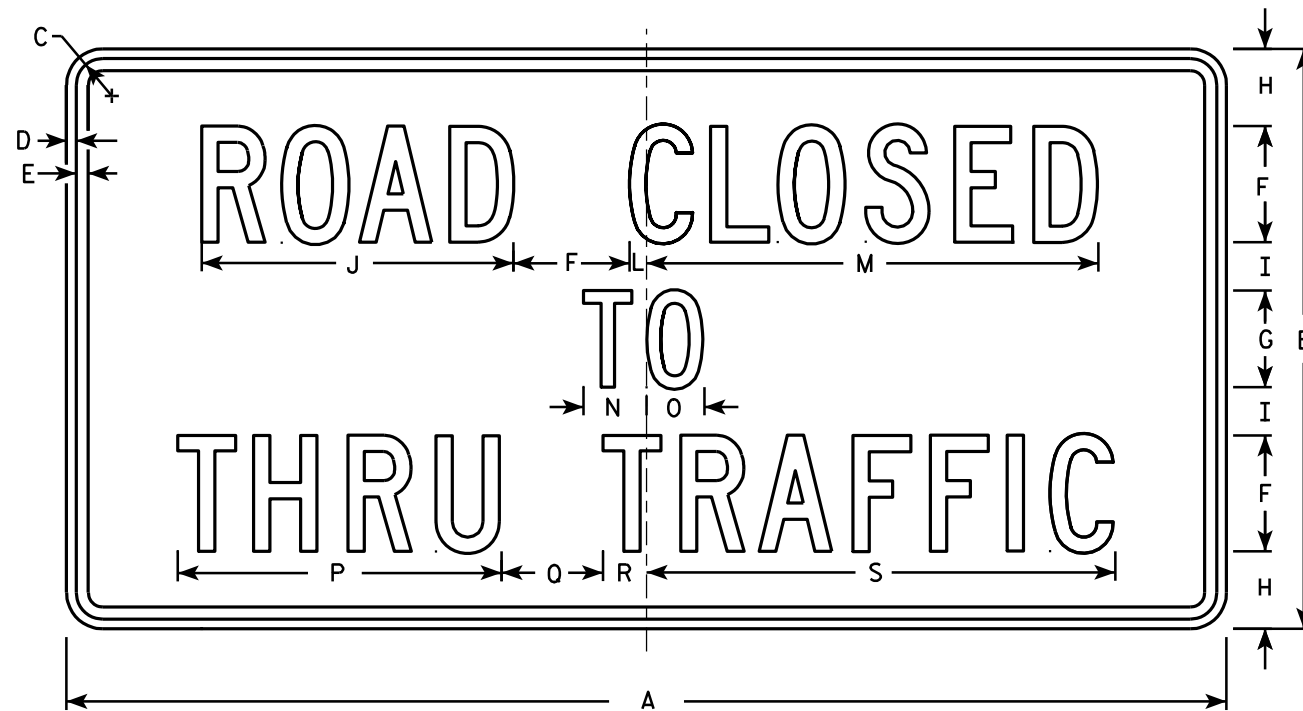
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E

NOTES

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



R11-4

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

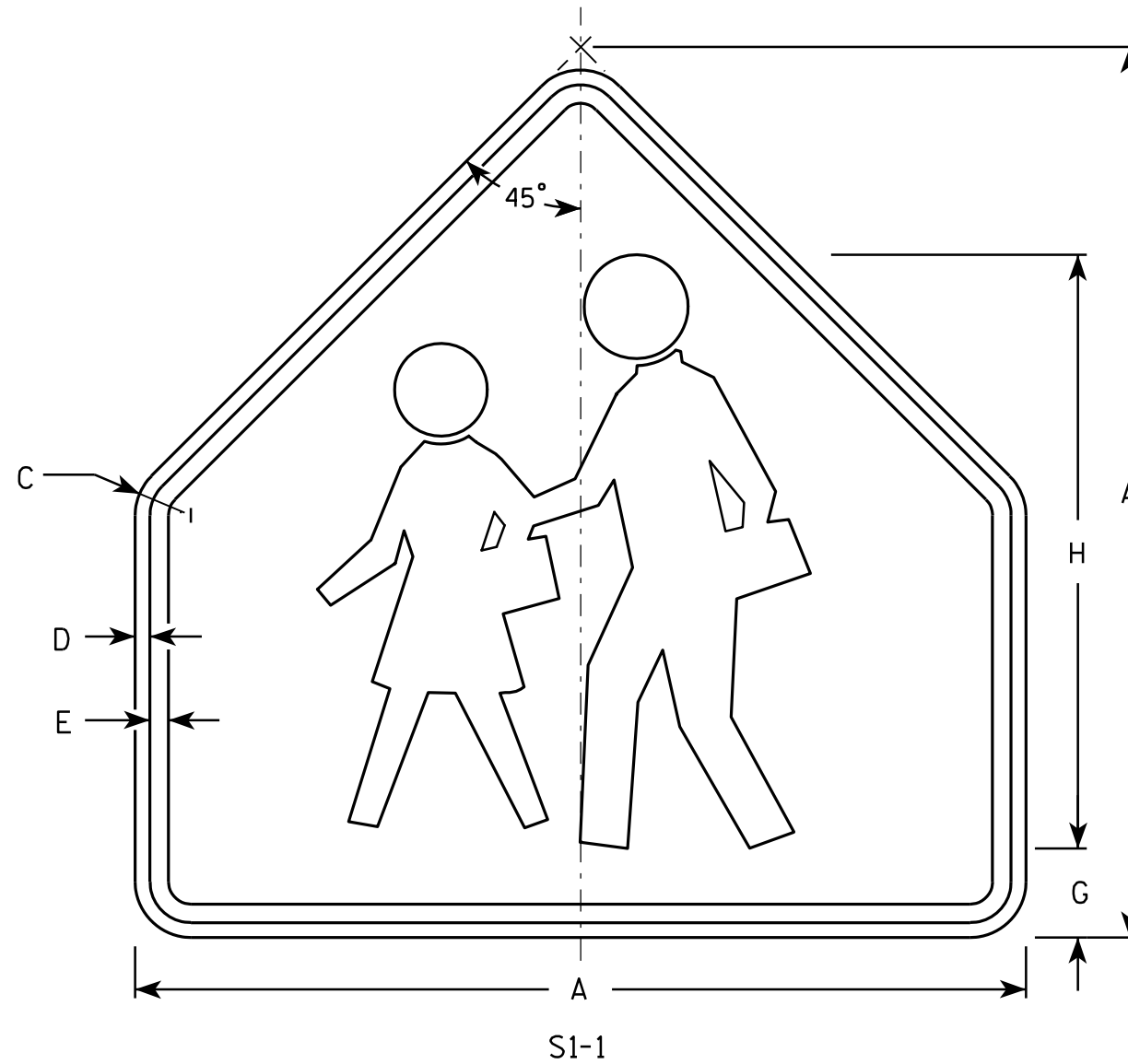
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Raush*
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ 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-Green
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.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

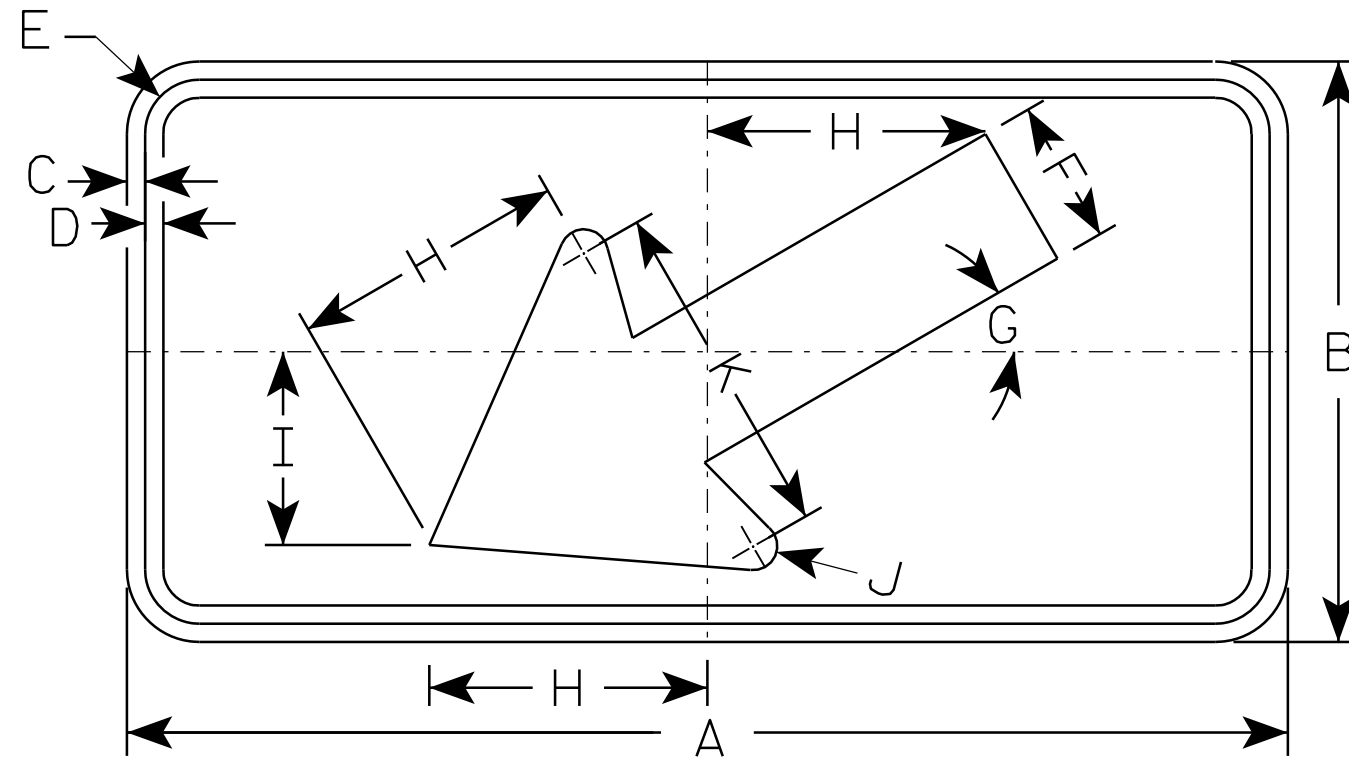
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ 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-Green
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. S16-7R are the same as S16-7L except the arrow is reversed along the vertical centerline.



S16-7L

7

7

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	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

STANDARD SIGN
S16-7

WISCONSIN DEPT OF TRANSPORTATION

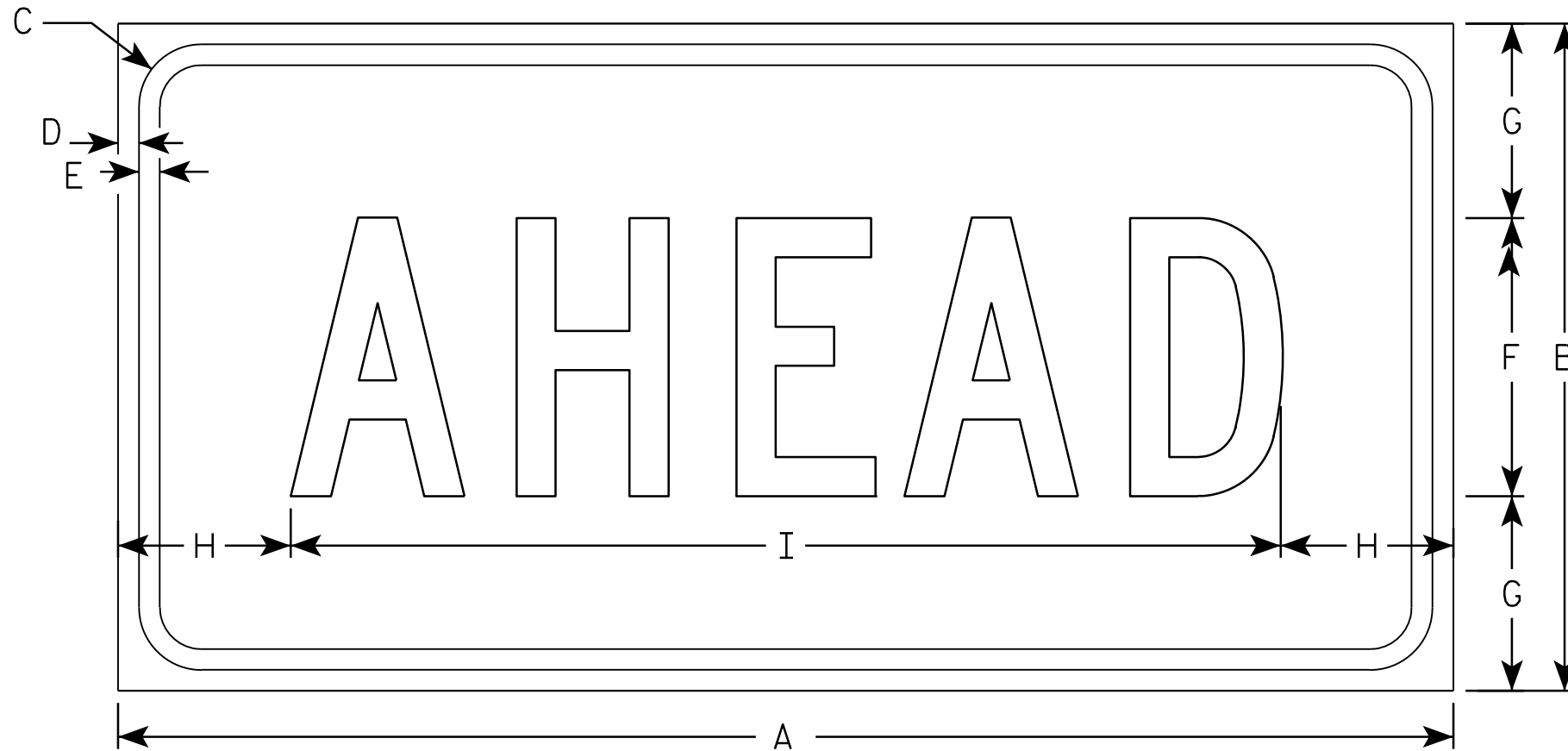
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-7.1

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ 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-Green
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



S16-9P

7

7

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	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN

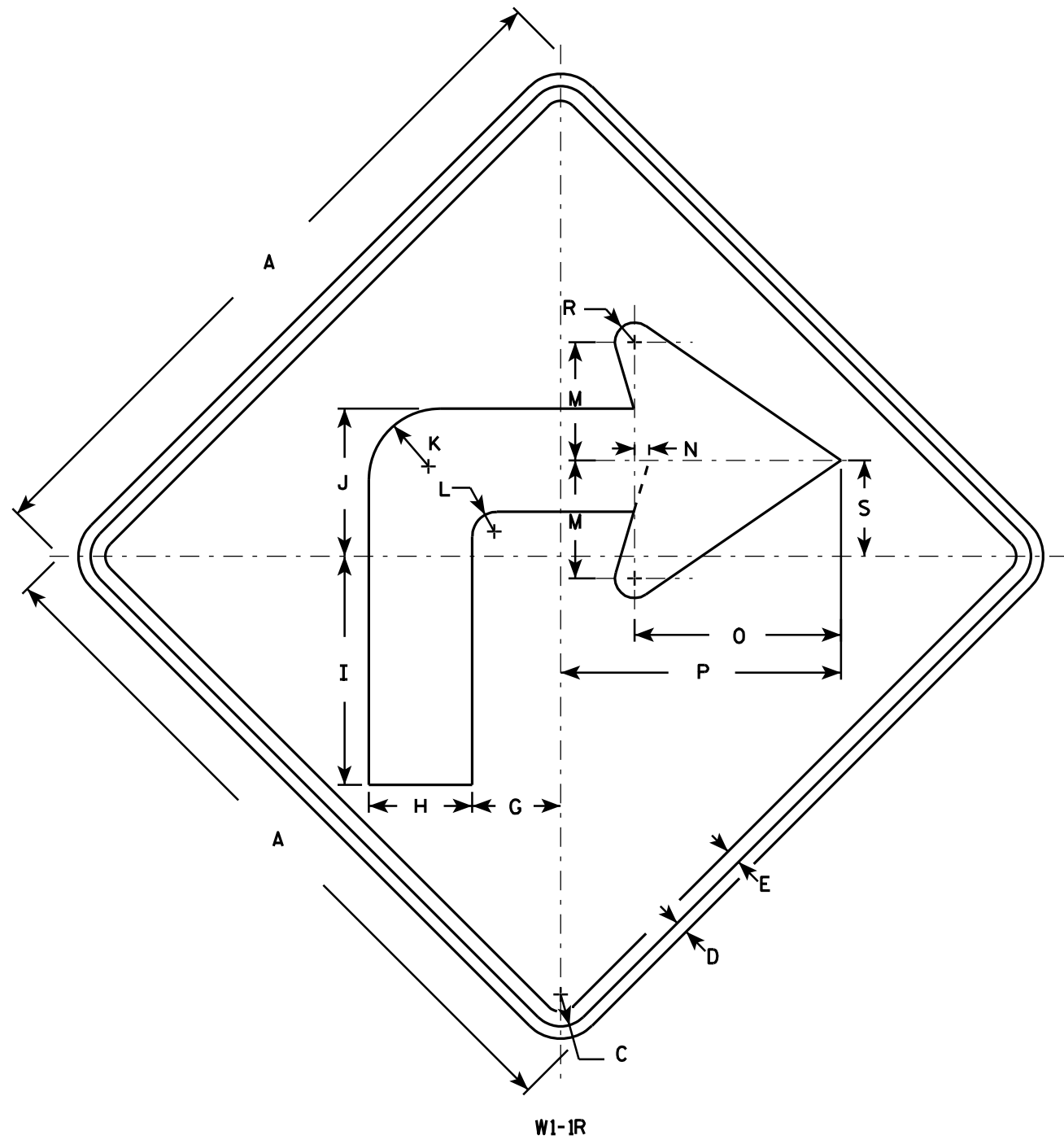
S16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ 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. W1-1L is the same as W1-1R except the arrow is reversed along the vertical centerline.

7

7

W1-1R

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

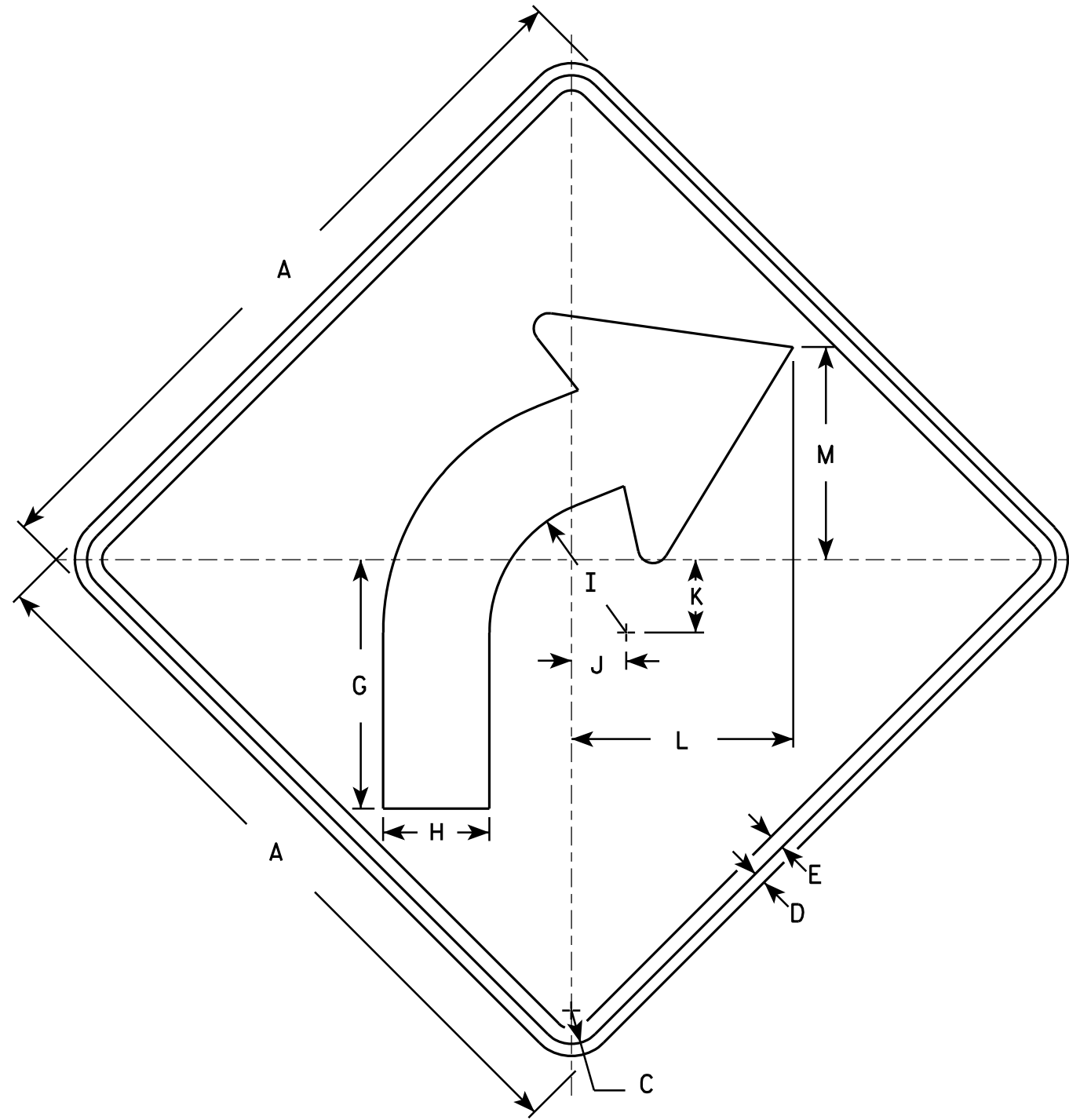
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

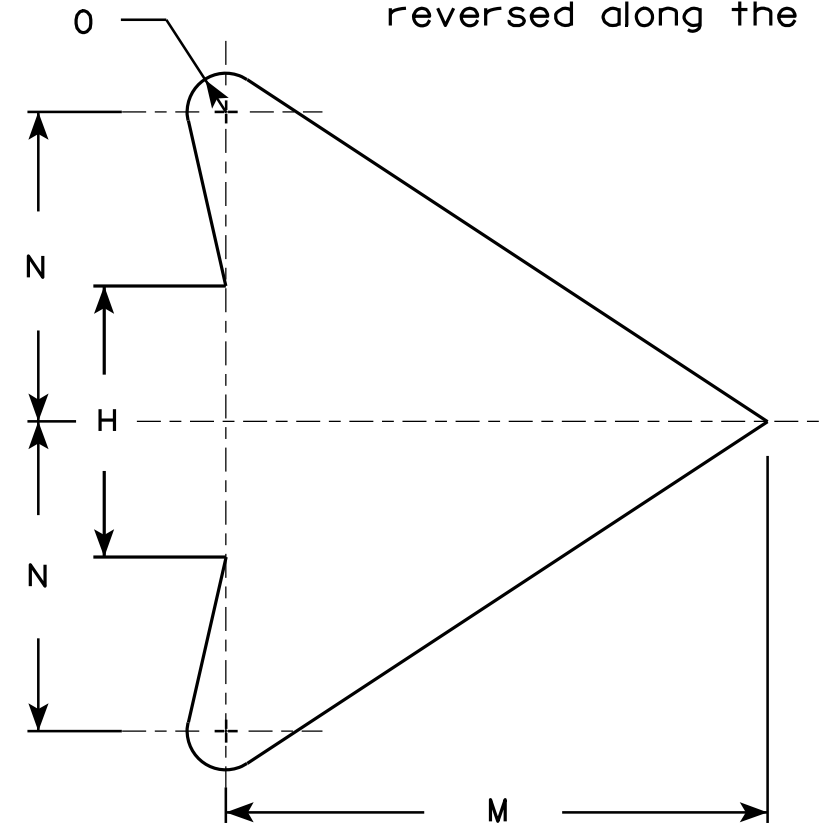
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E

NOTES

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



W1-2R

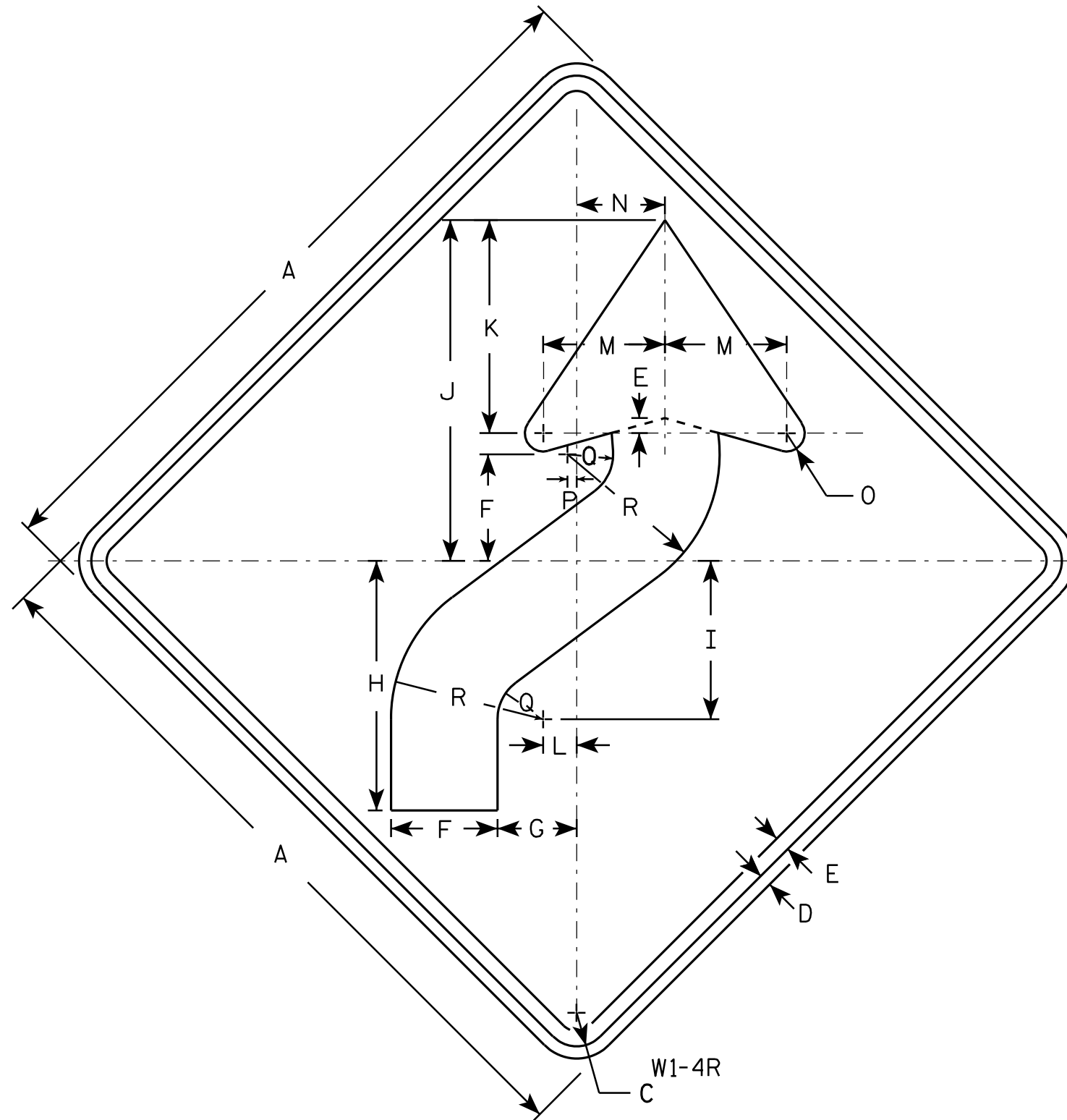


ARROW DETAIL

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

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/15/12 PLATE NO. W1-2.10



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.

7

7

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

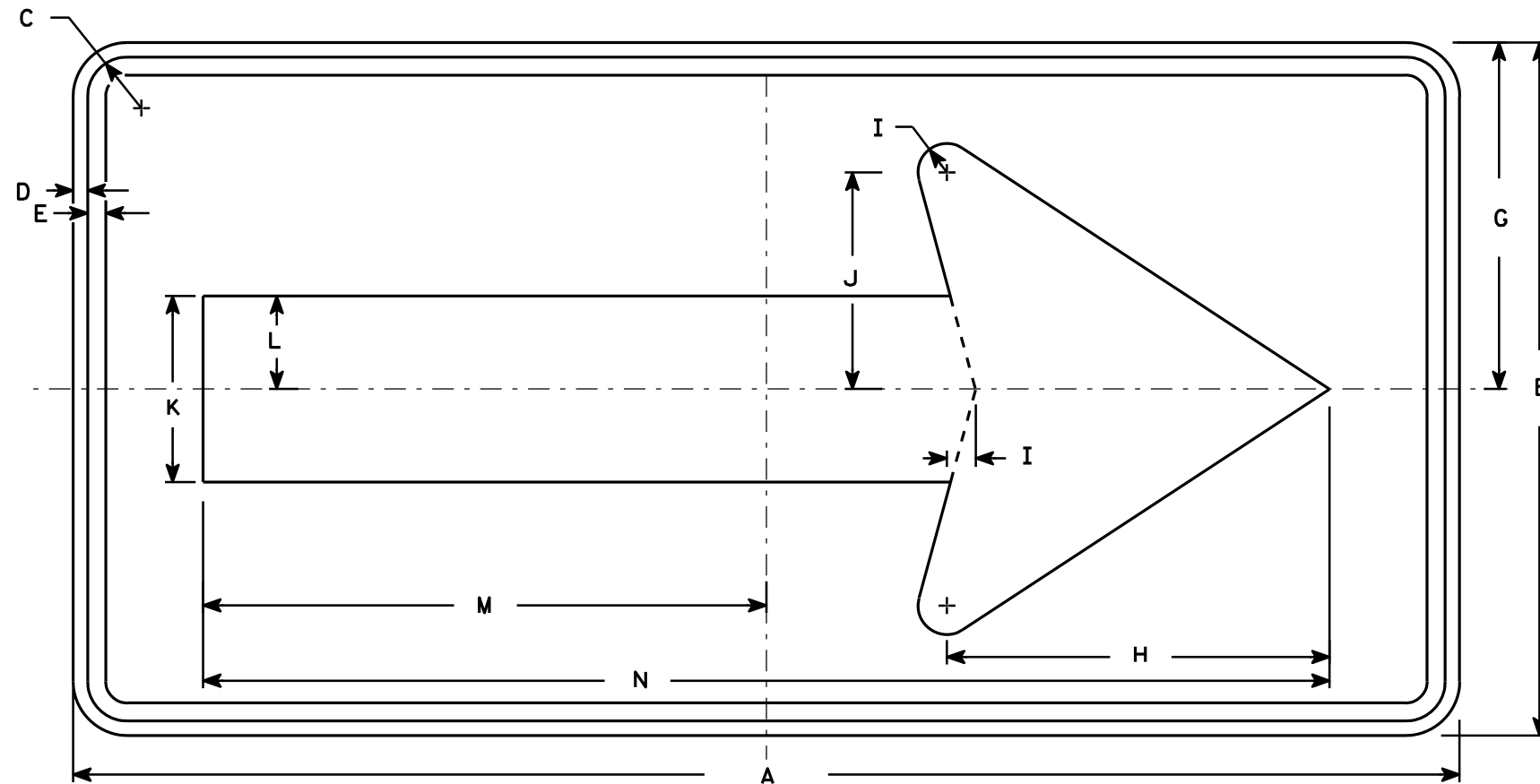
APPROVED *Matthew R. Raub*
for State Traffic Engineer

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

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ 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

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

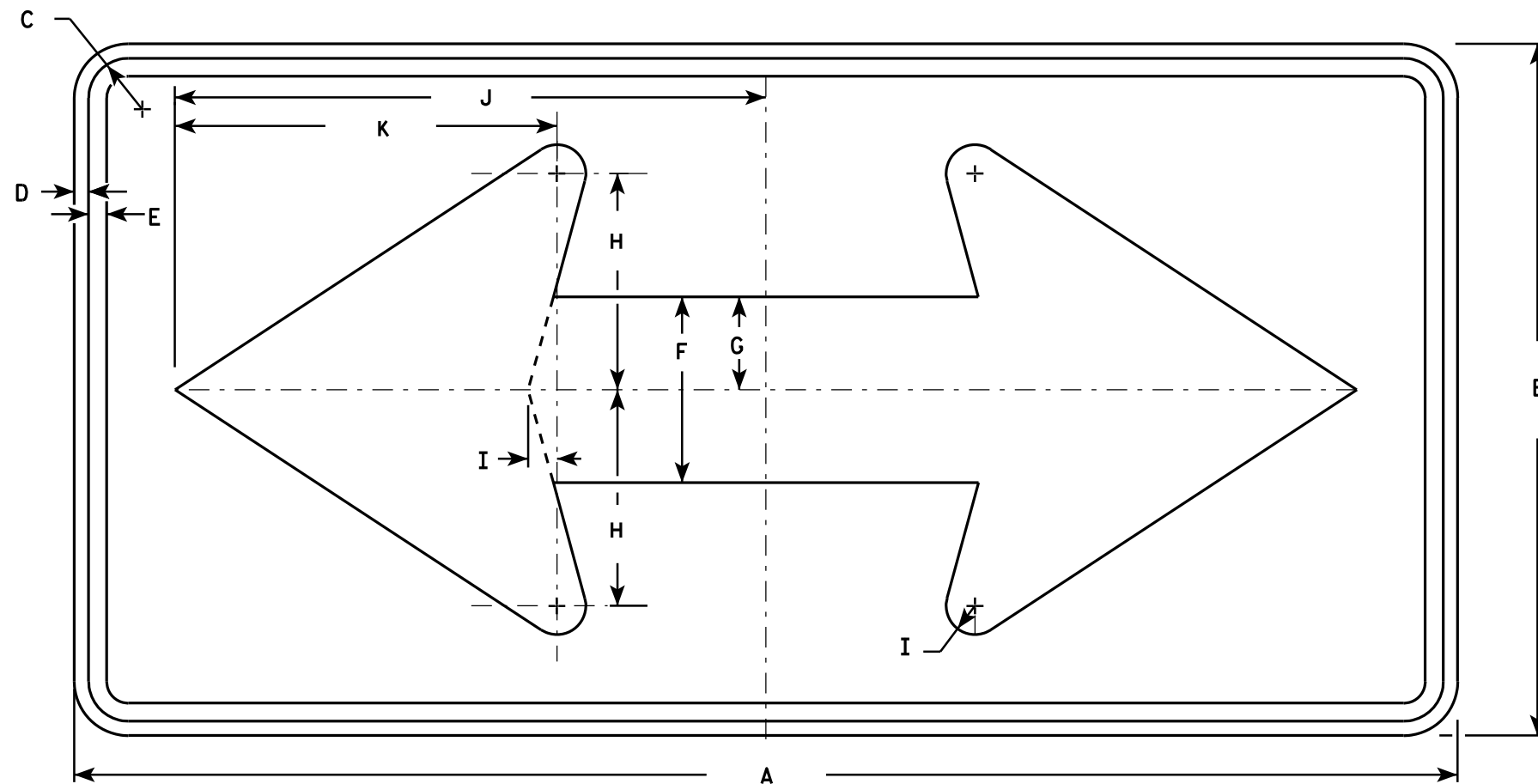
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____

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.



W1-7

7

7

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	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

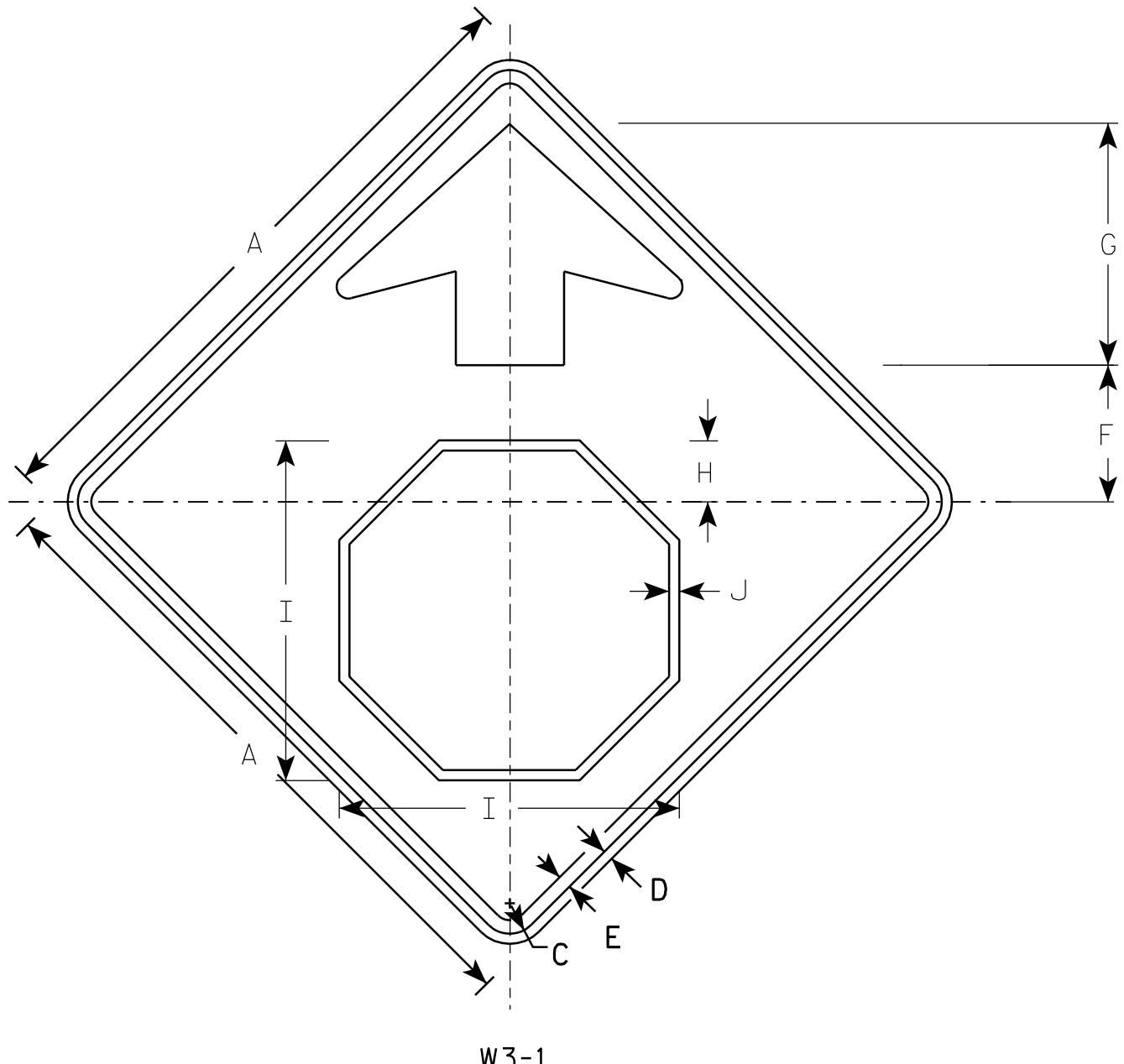
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

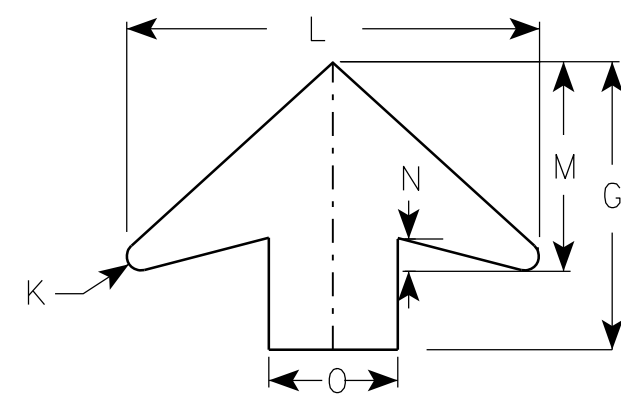
DATE 6/7/10 PLATE NO. W1-7.7

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E



NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 Background - YELLOW
 Arrow & Border - BLACK
 Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

7

7

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

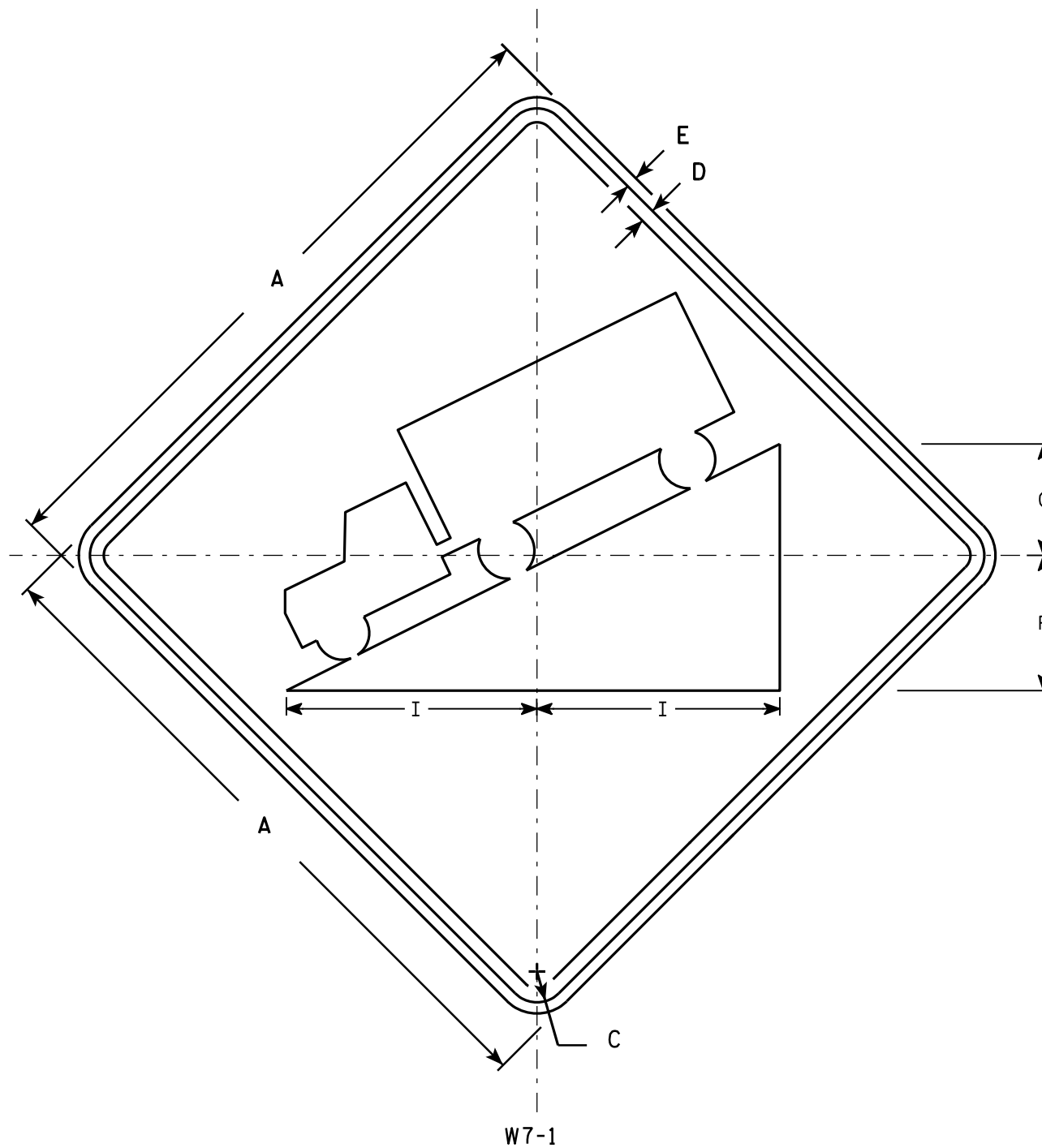
STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO: _____ SHEET NO: _____ 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 - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

7

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	3/8	5	4		8 3/4																		4.0
2S	30		1 3/8	1/2	5/8	6	5		11																		6.25
2M	36		1 5/8	5/8	3/4	7 1/4	6		13 1/4																		9.0
3	36		1 5/8	5/8	3/4	7 1/4	6		13 1/4																		9.0
4	36		1 5/8	5/8	3/4	7 1/4	6		13 1/4																		9.0
5	48		2 1/4	3/4	1	9 3/4	8		17 1/2																		16.0

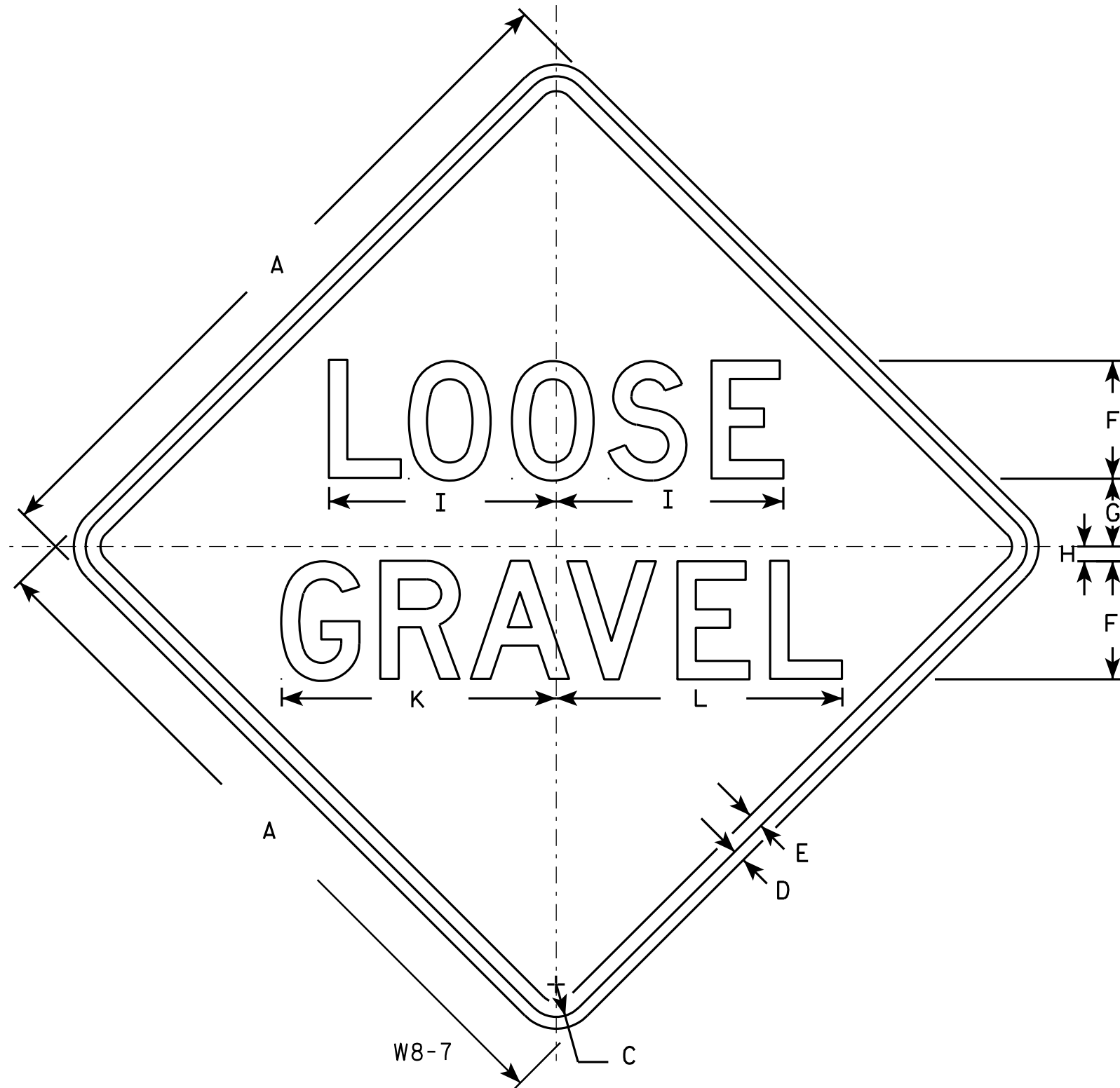
STANDARD SIGN
W7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 03/12/13 PLATE NO. W7-1.13

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **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 - Orange
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

7

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	4	2 3/4	1/2	7 3/4		9 1/4	9 3/4															4.0
2S	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
2M	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
3	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
4	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
5	48		2 1/4	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0

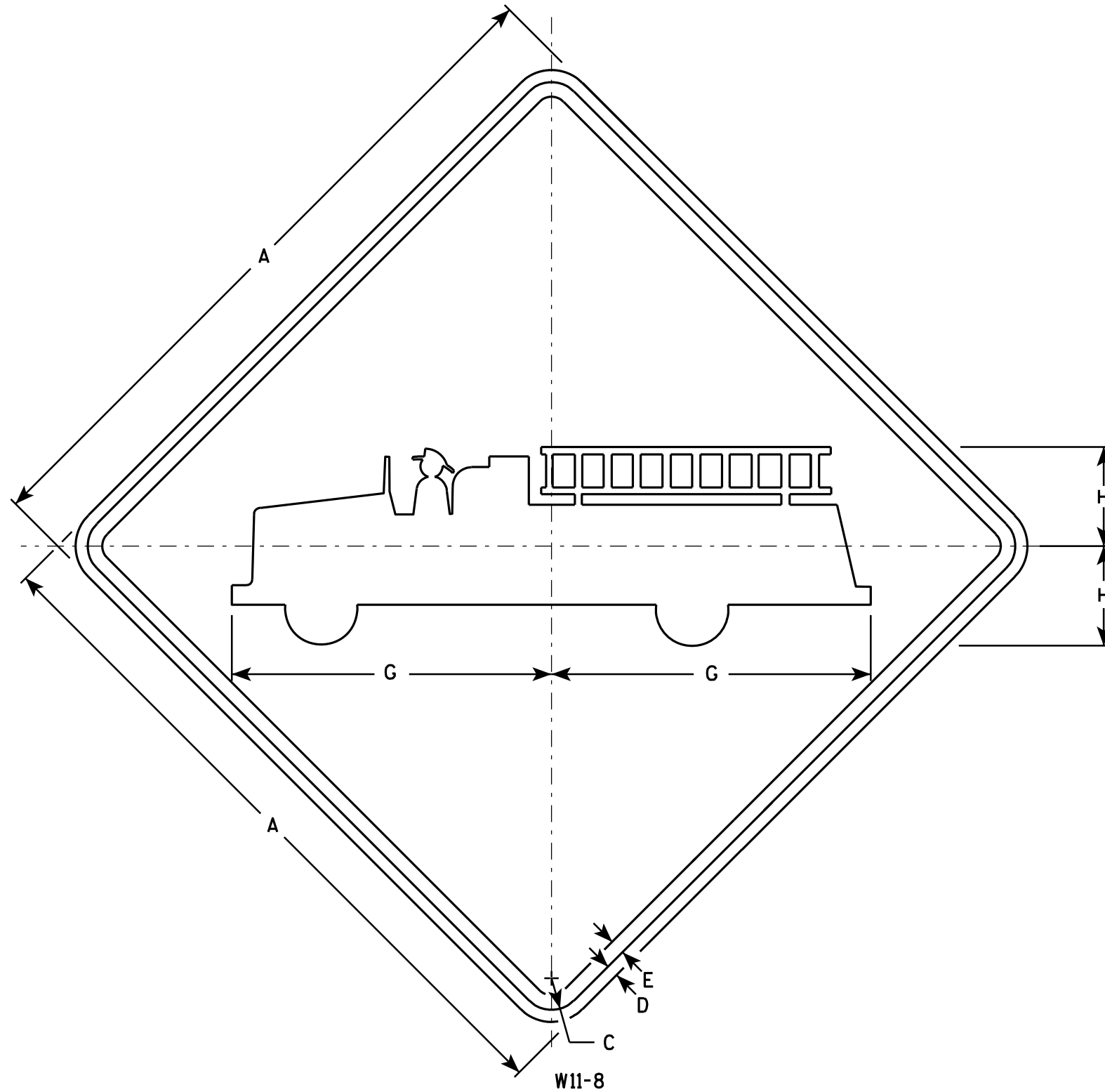
STANDARD SIGN
W8-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
for State Traffic Engineer

DATE 5/30/12 PLATE NO. W8-7.7

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ 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.

7

7

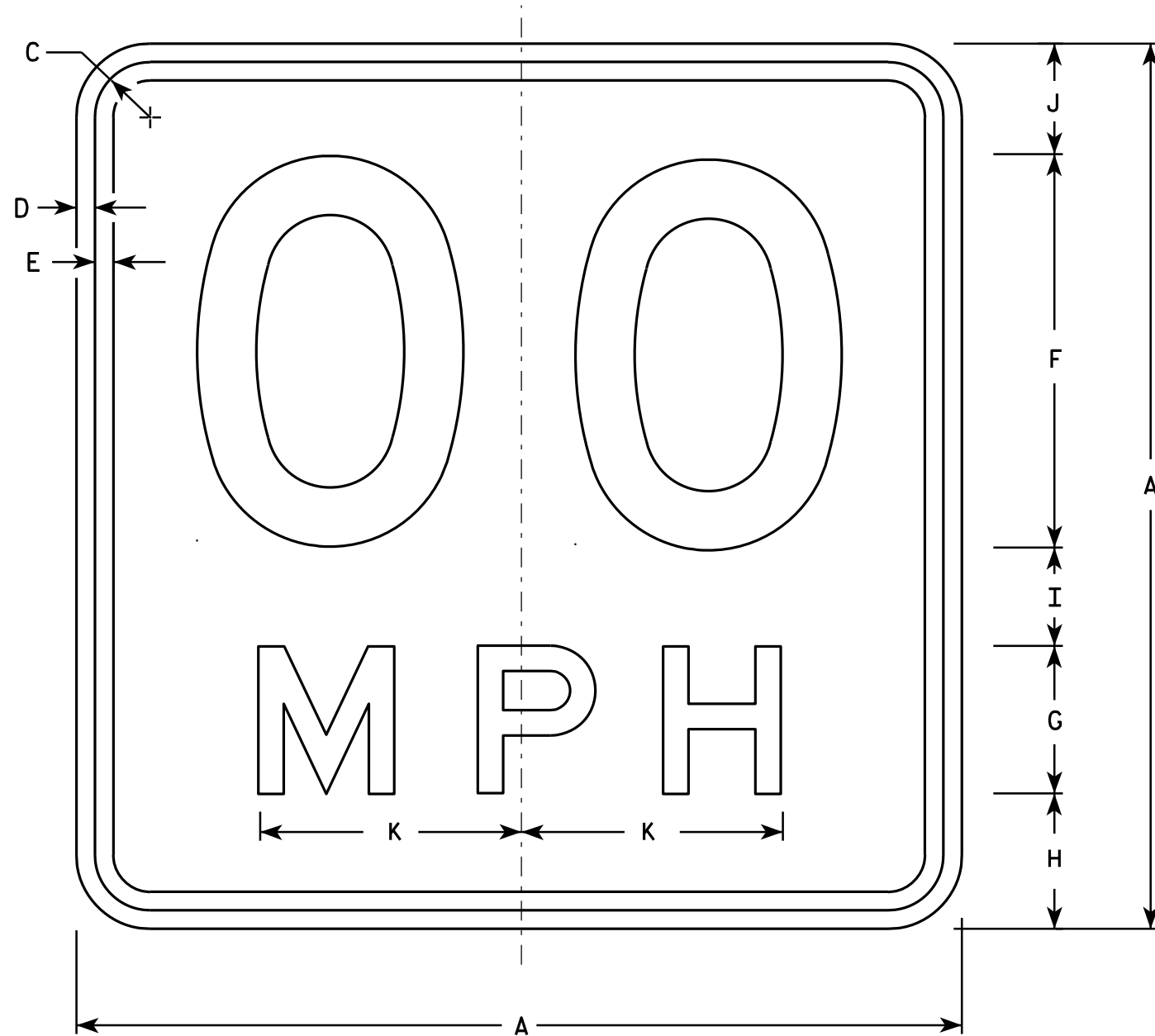
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		11	3 3/8																			4.0
2S	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
2M	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
3	36		1 5/8	5/8	3/4		16 1/2	5 1/4																			9.0
4	48		2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

STANDARD SIGN
W11-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



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:

HWY:

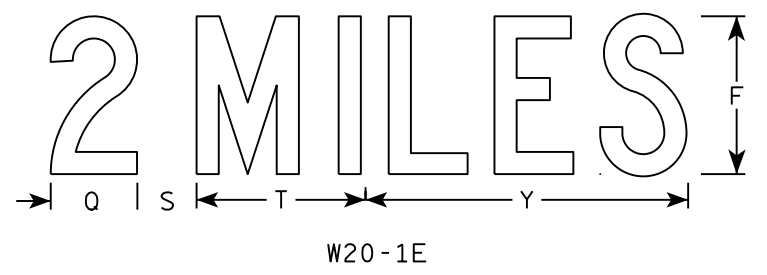
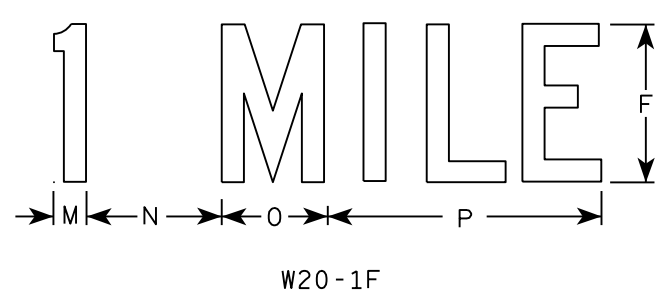
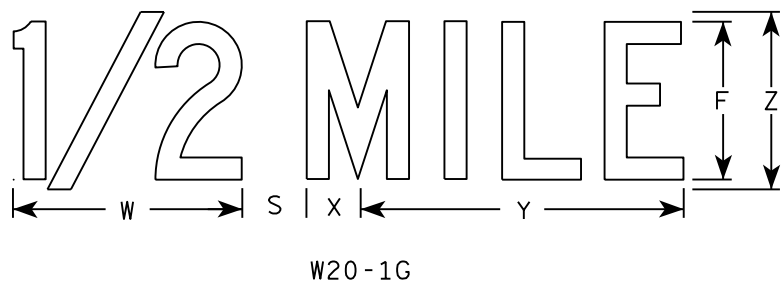
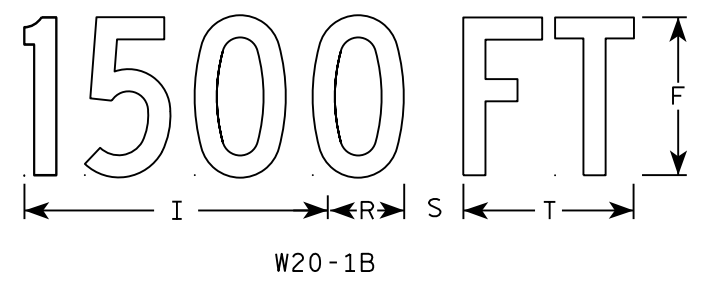
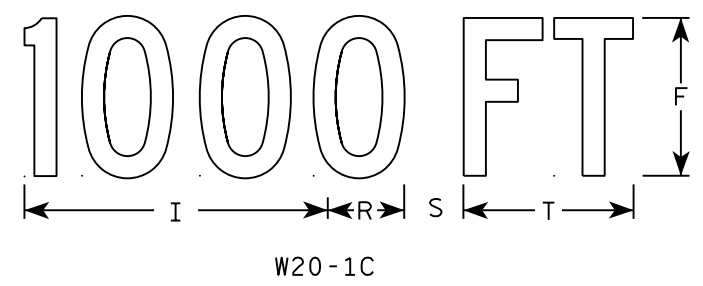
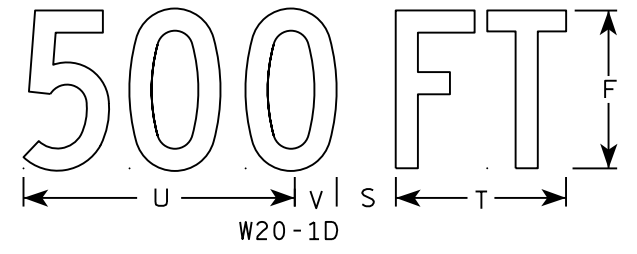
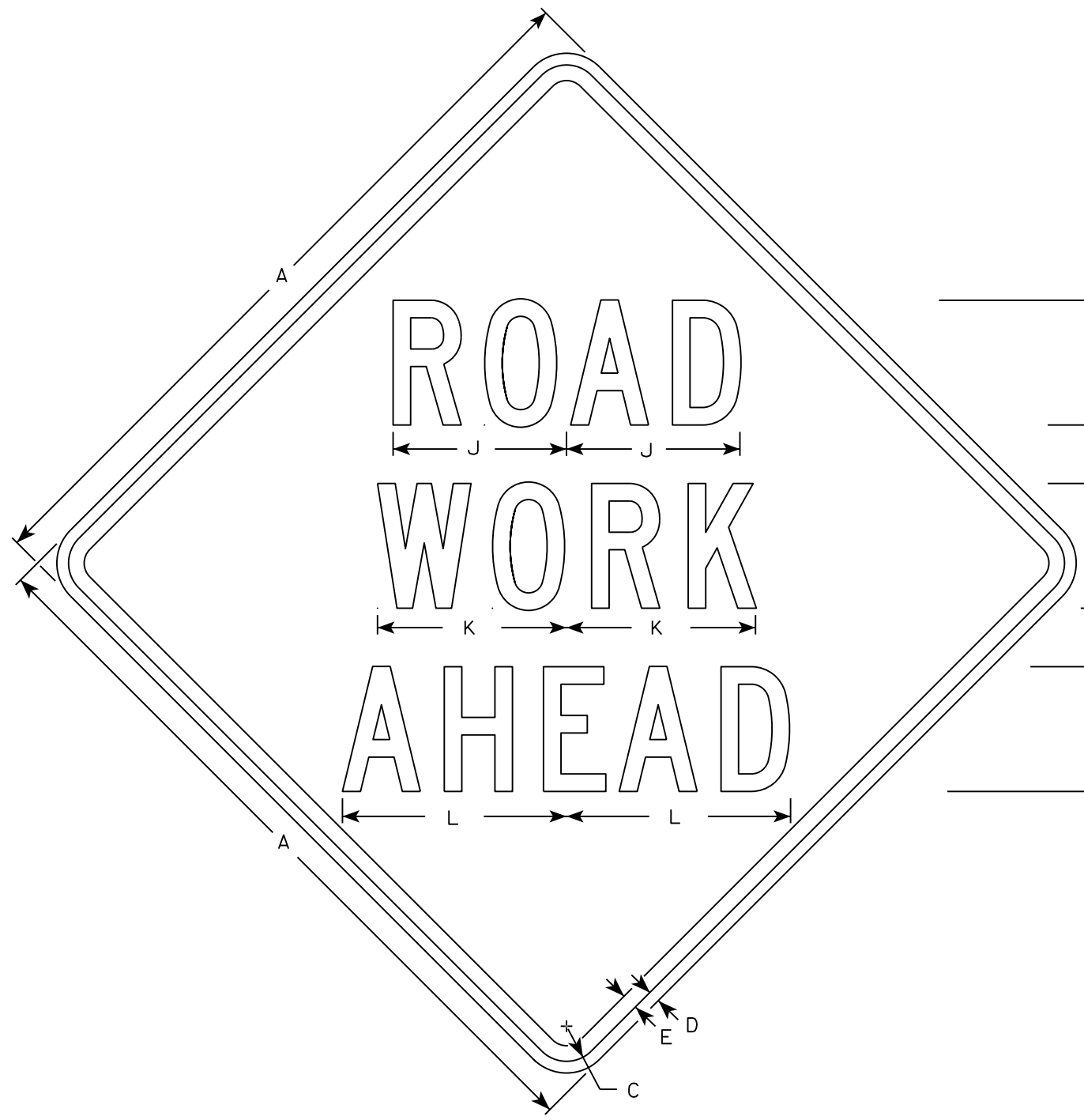
COUNTY:

SHEET NO:

E

NOTES

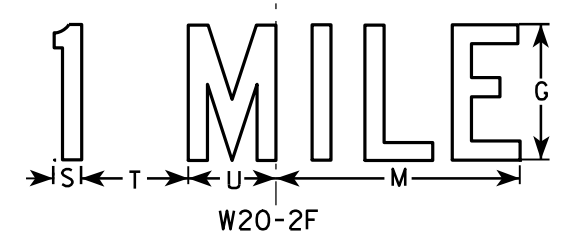
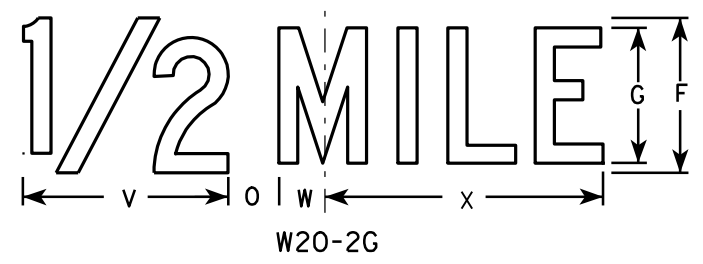
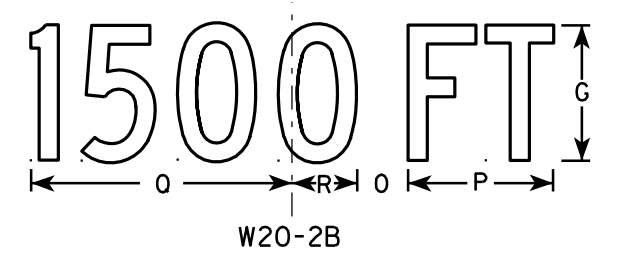
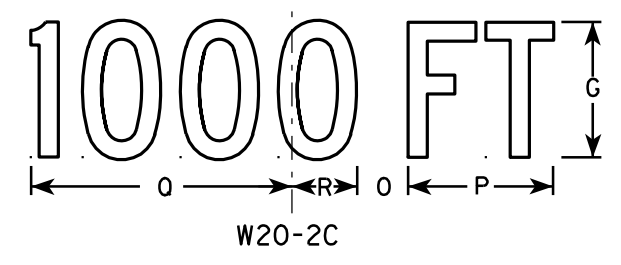
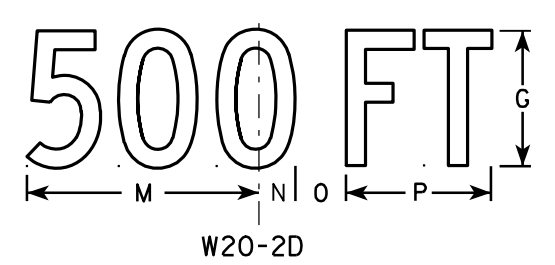
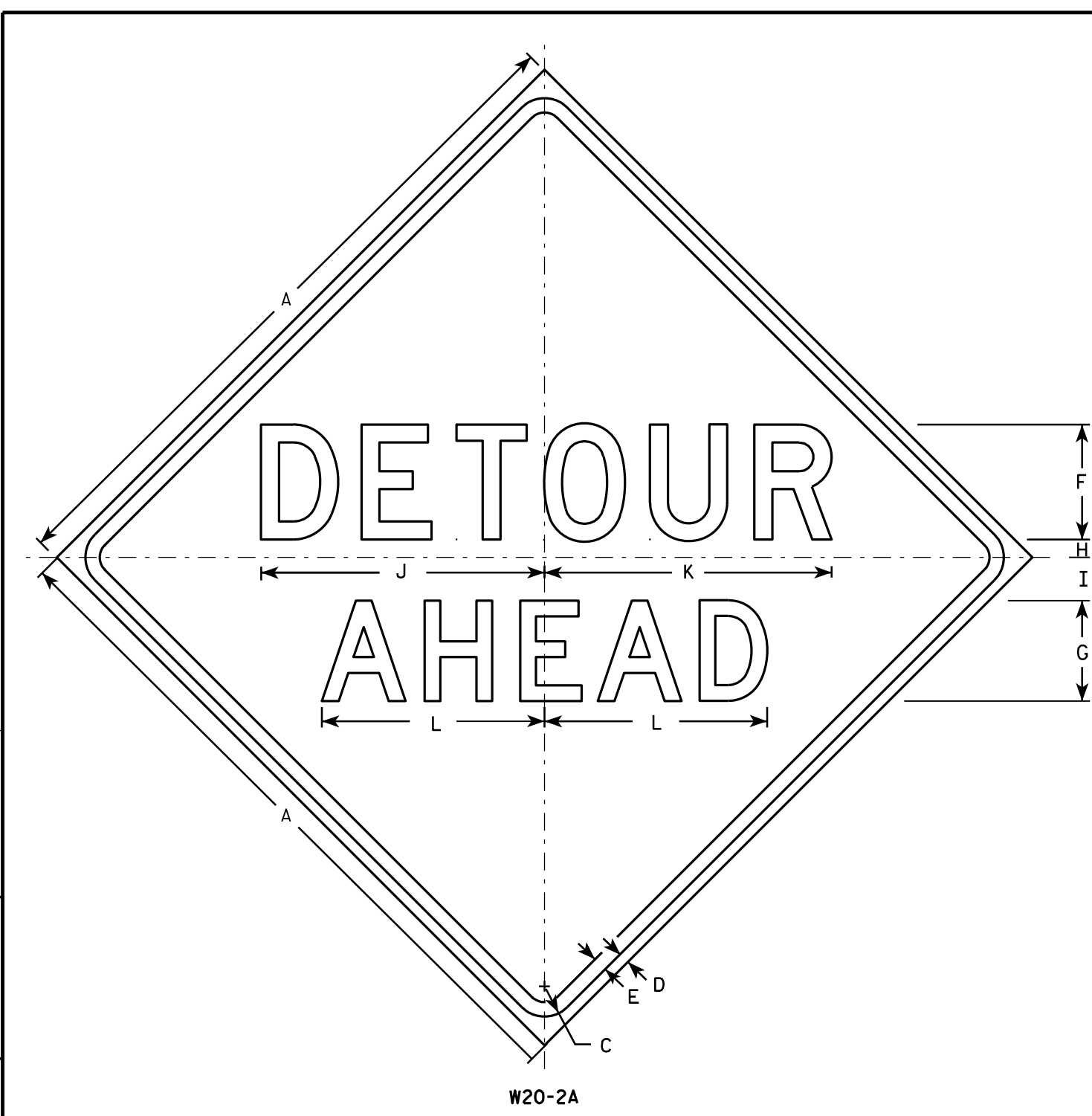
1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G
WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 5/07/15 PLATE NO. W20-1.10



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
Line 2 is Series D for AHEAD and Series C for all other distances.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

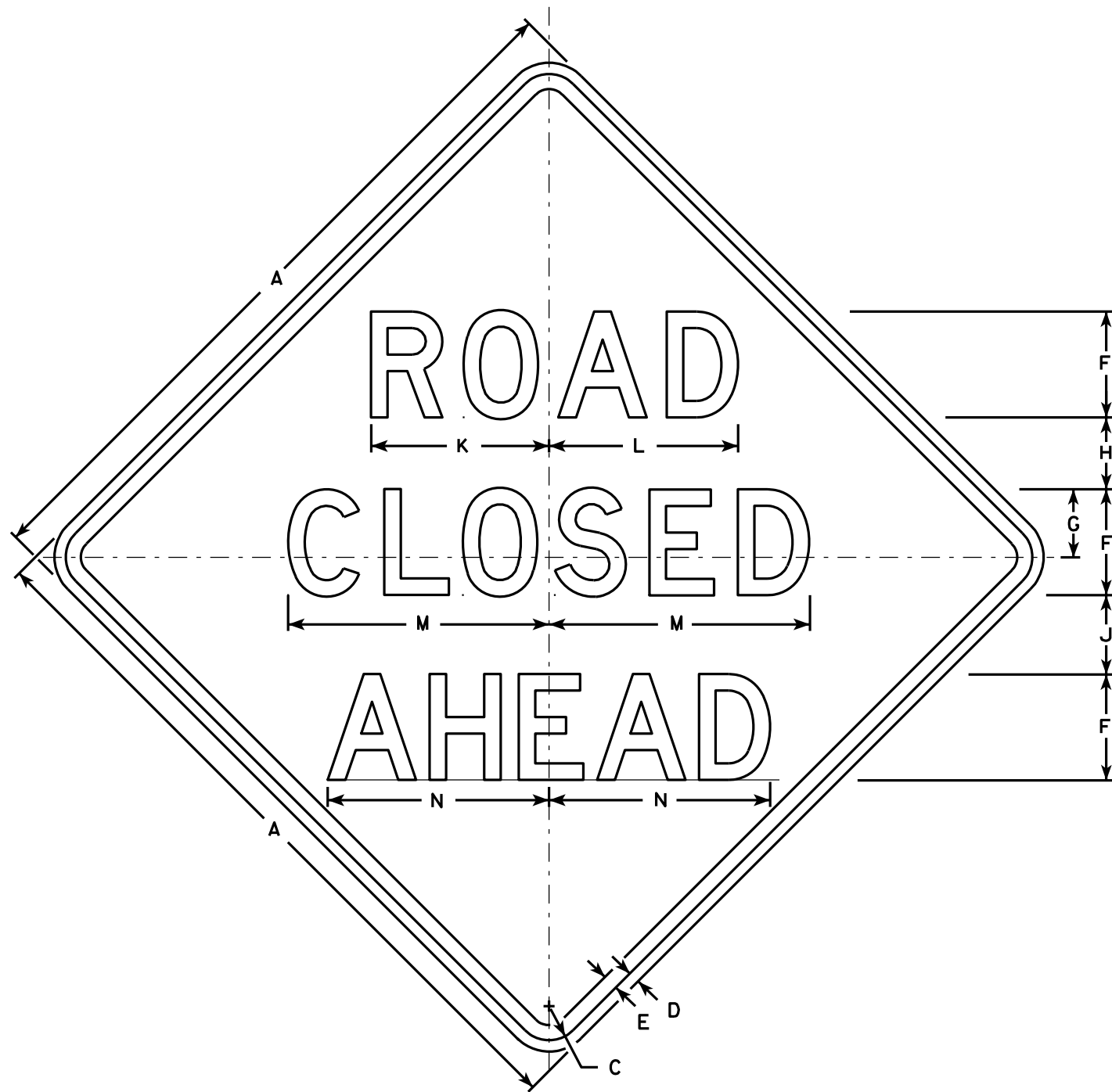
STANDARD SIGN
W20-2A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

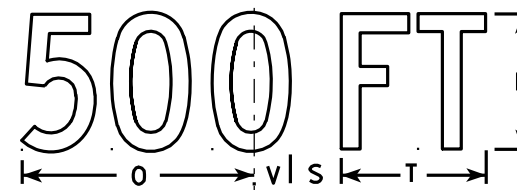
APPROVED *Matthew R. Raub*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

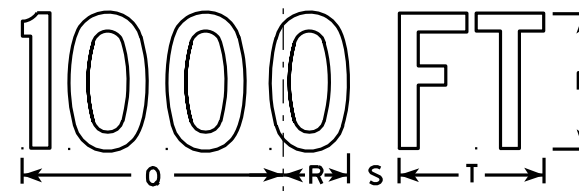
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E



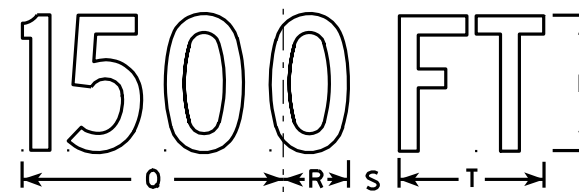
W20-3A



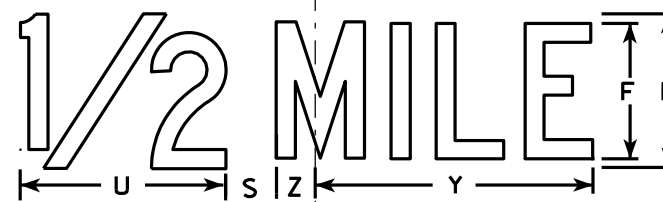
W20-3D



W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
Line 3 is Series D for AHEAD and Series C for all other distances.

7

7

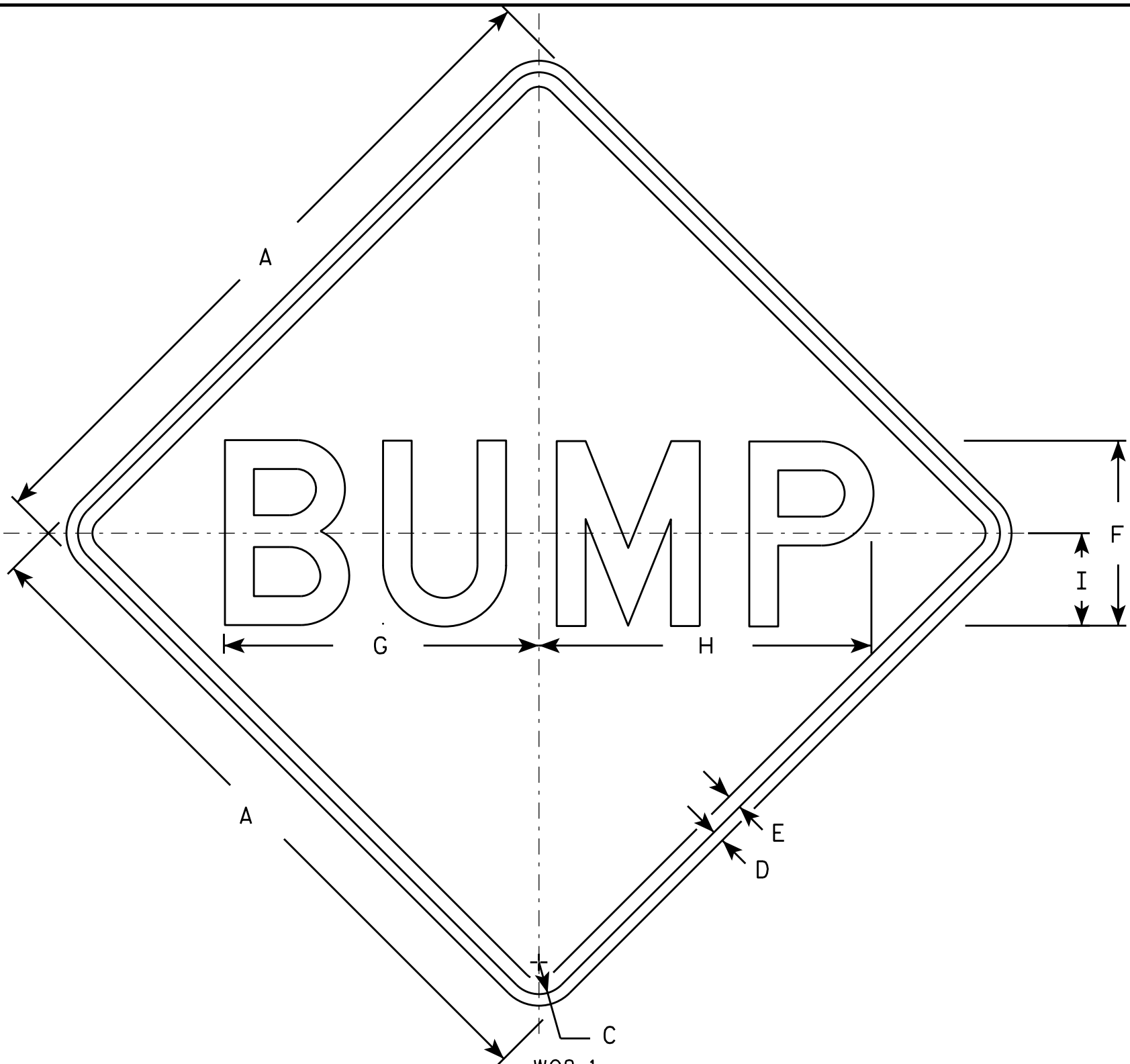
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7



NOTES

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

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	10	16 7/8	17 7/8	5																		9.0
2S	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
2M	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
3	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
4	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
5	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0

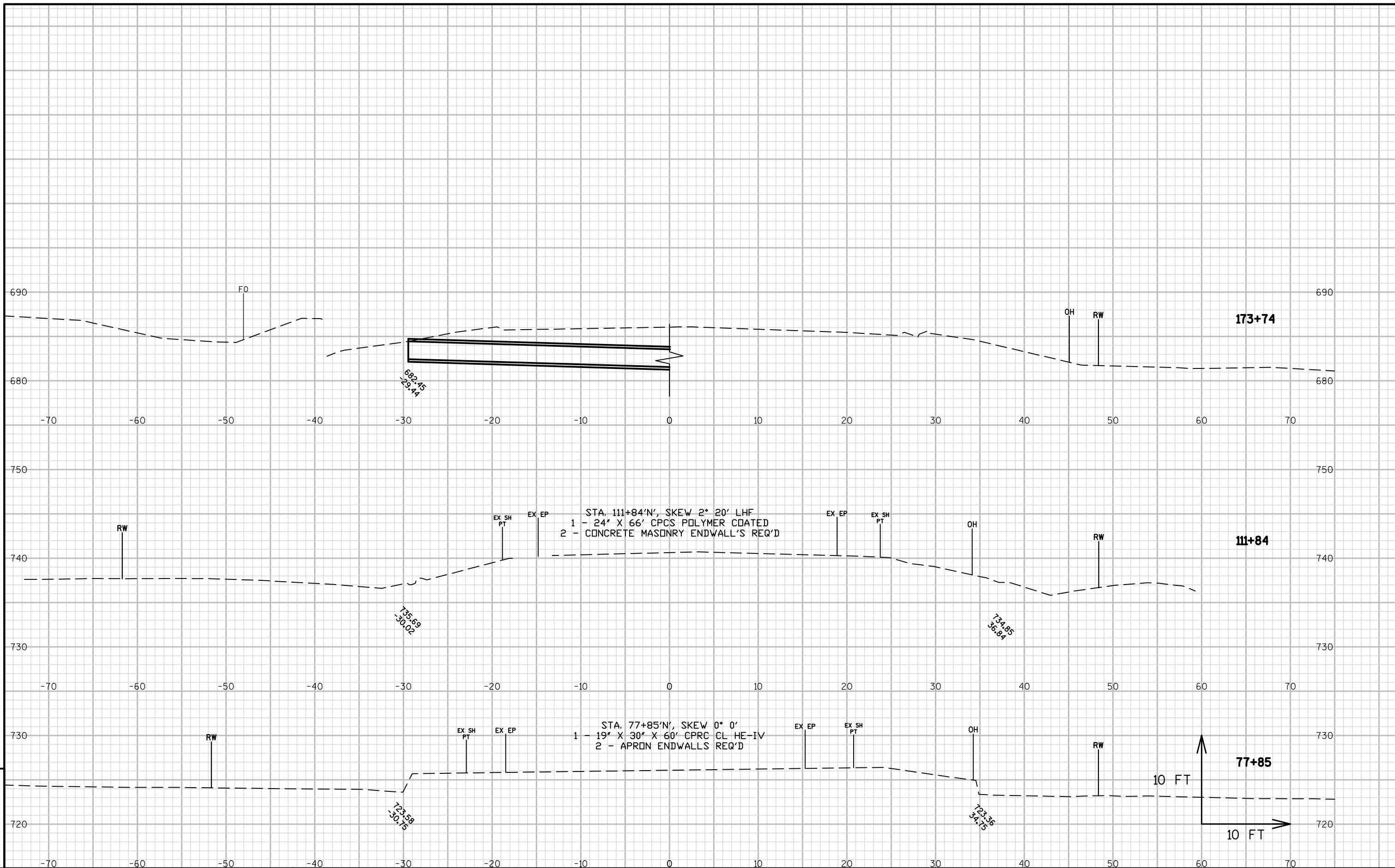
STANDARD SIGN
W08-1

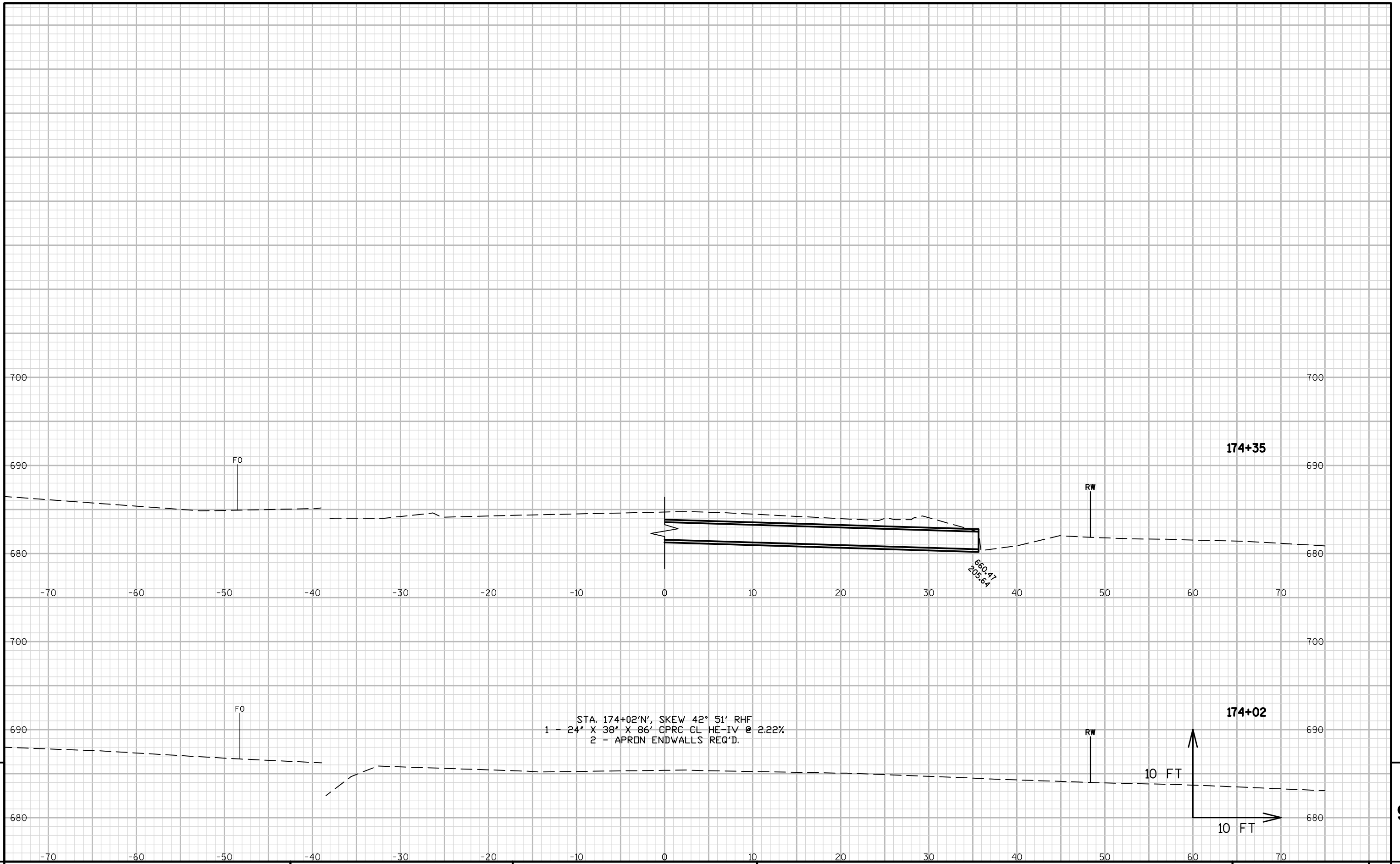
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
For State Traffic Engineer

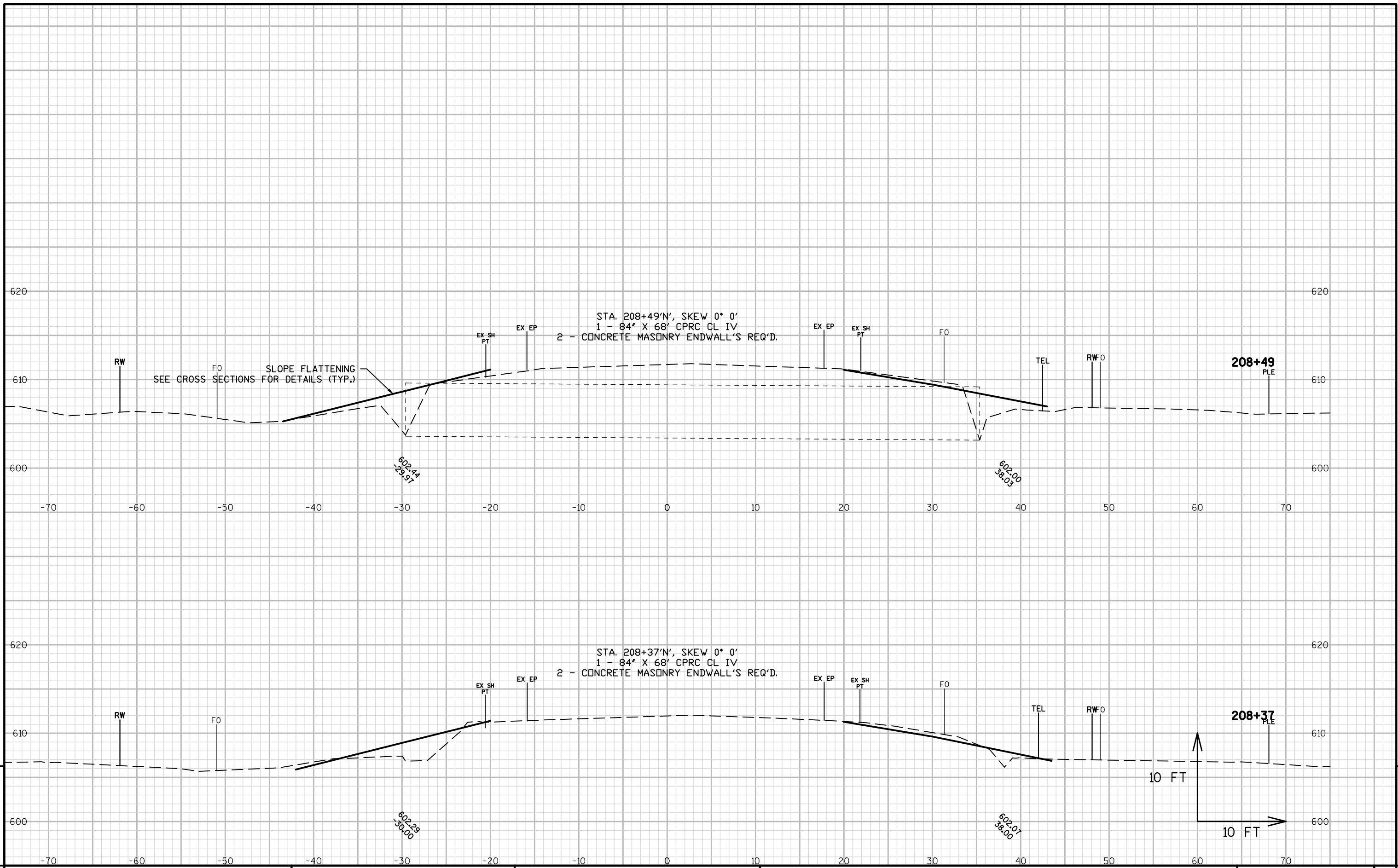
DATE 11/20/13 PLATE NO. W08-1.1

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**

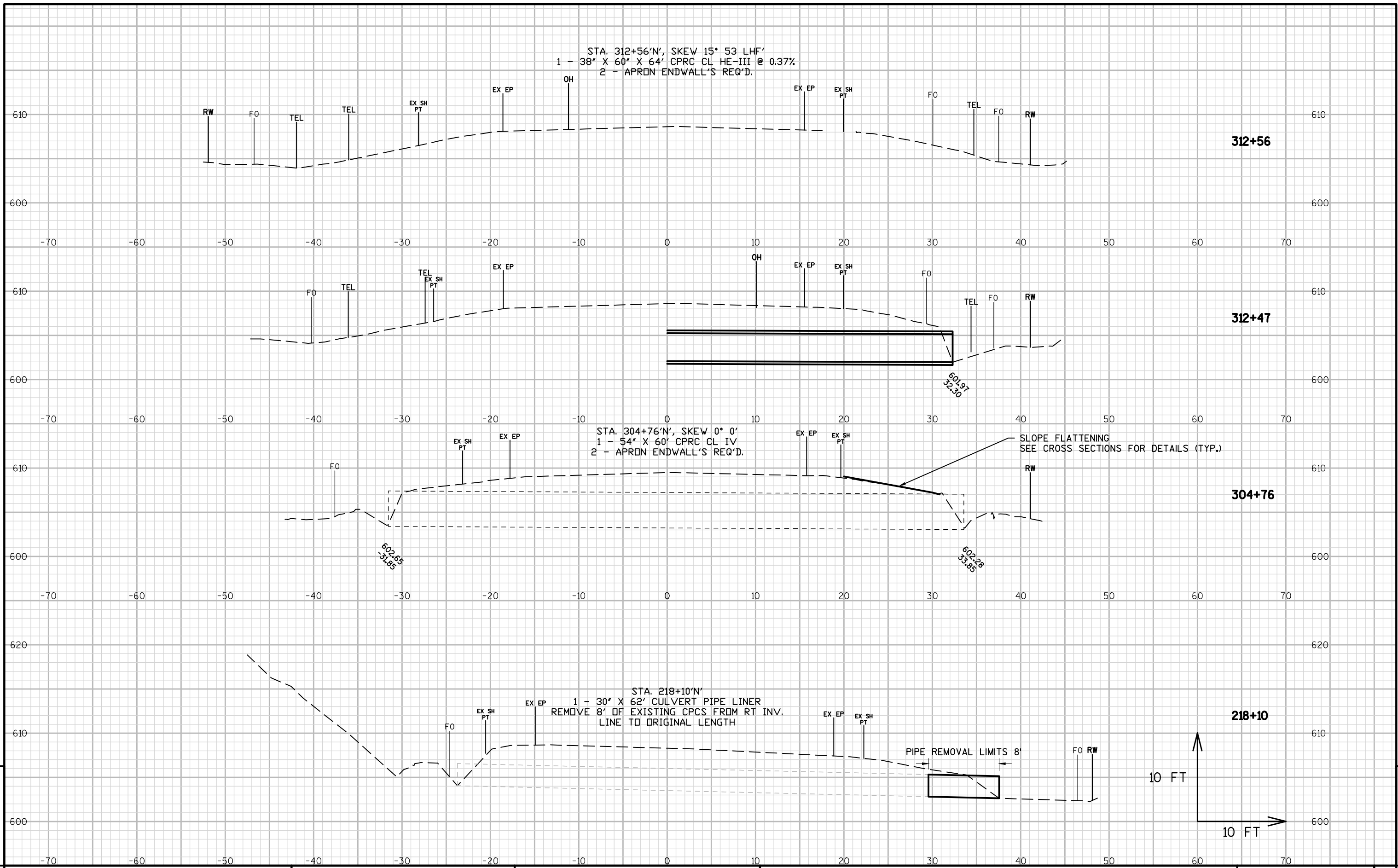


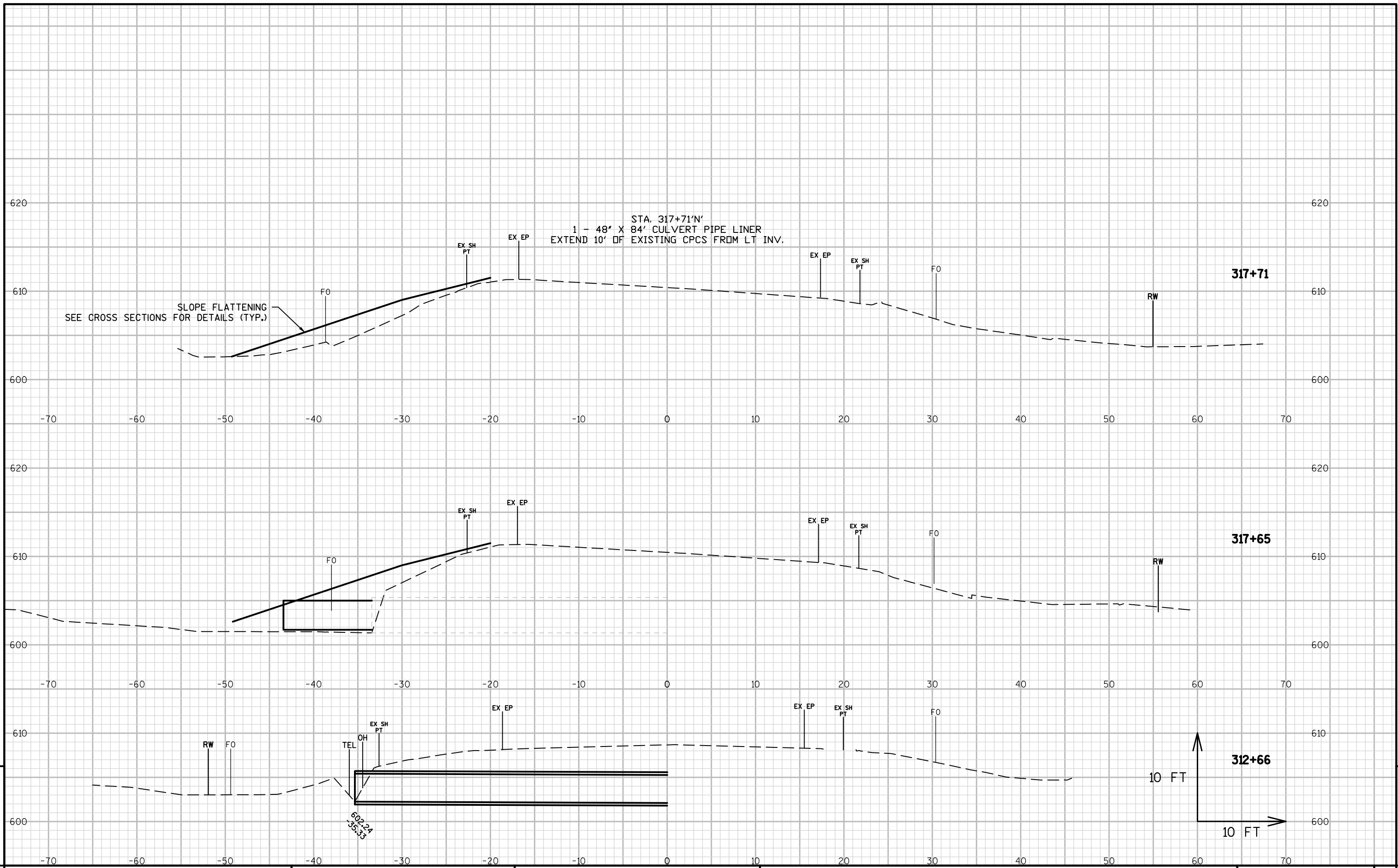


STA. 174+02'N', SKEW 42° 51' RHF
 1 - 24" X 38" X 86' CPVC CL HE-IV @ 2.22%
 2 - APRON ENDWALLS REQ'D.

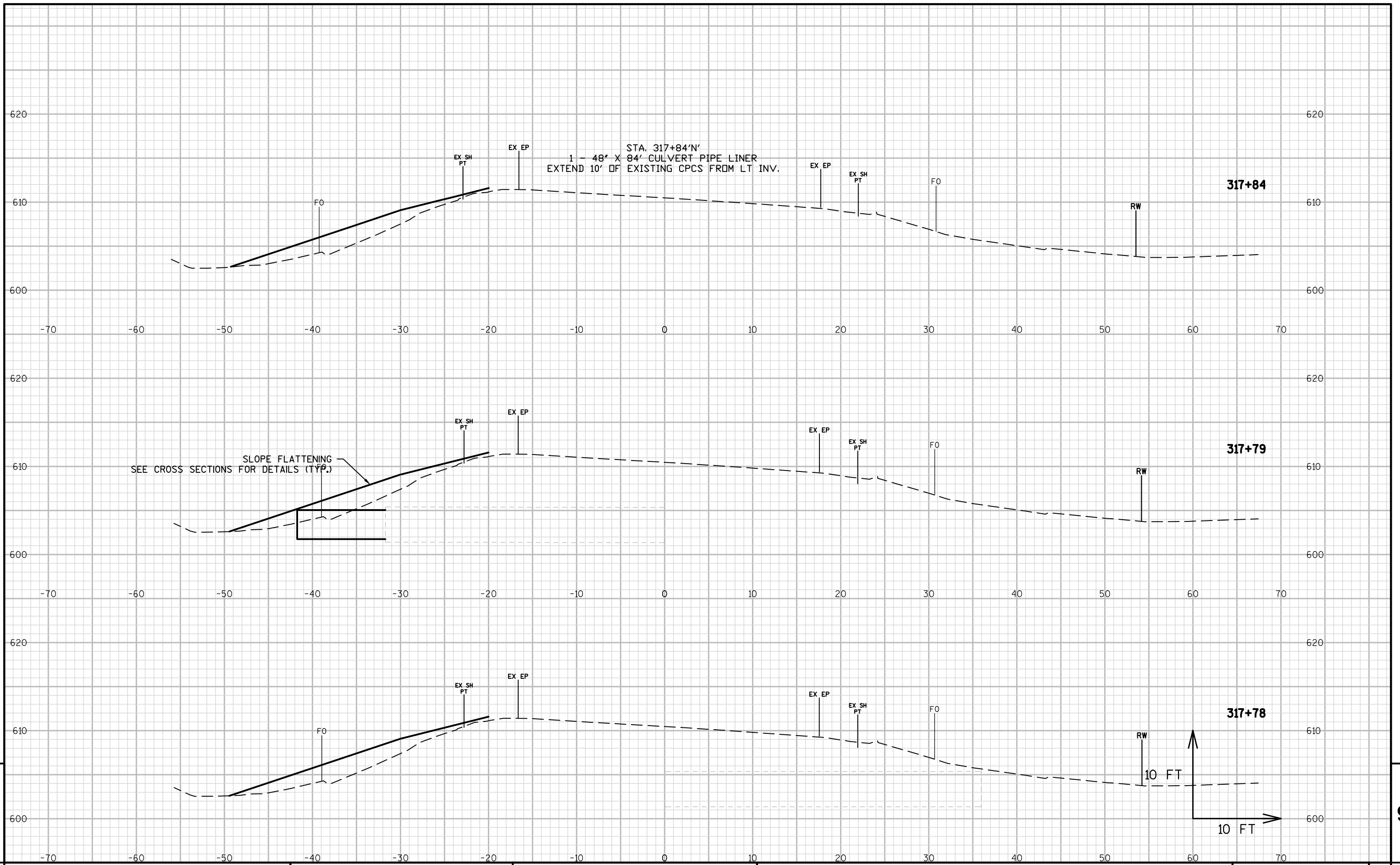


PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: PIPE REPLACEMENT/LINER LENGTHENING	SHEET	E
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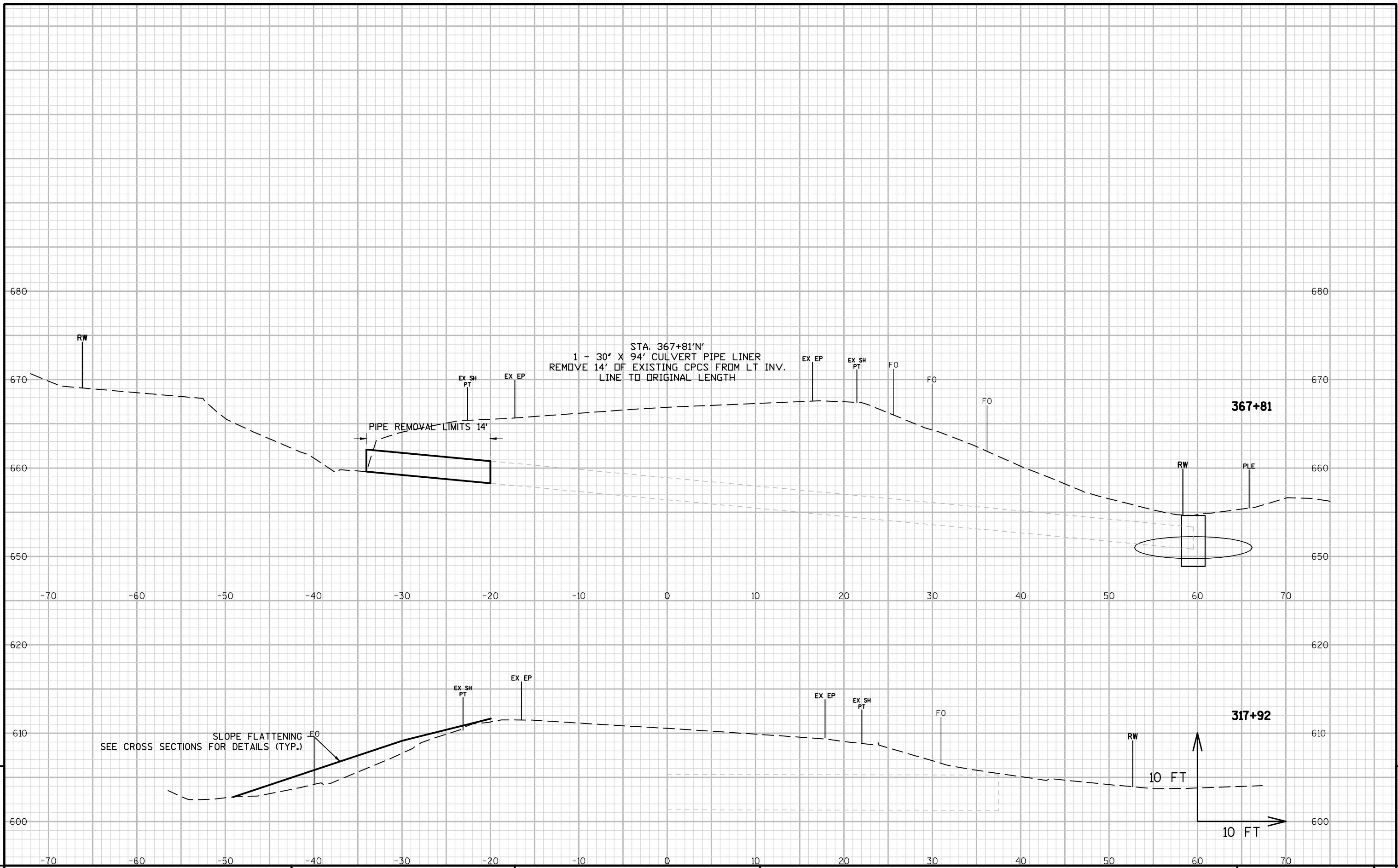


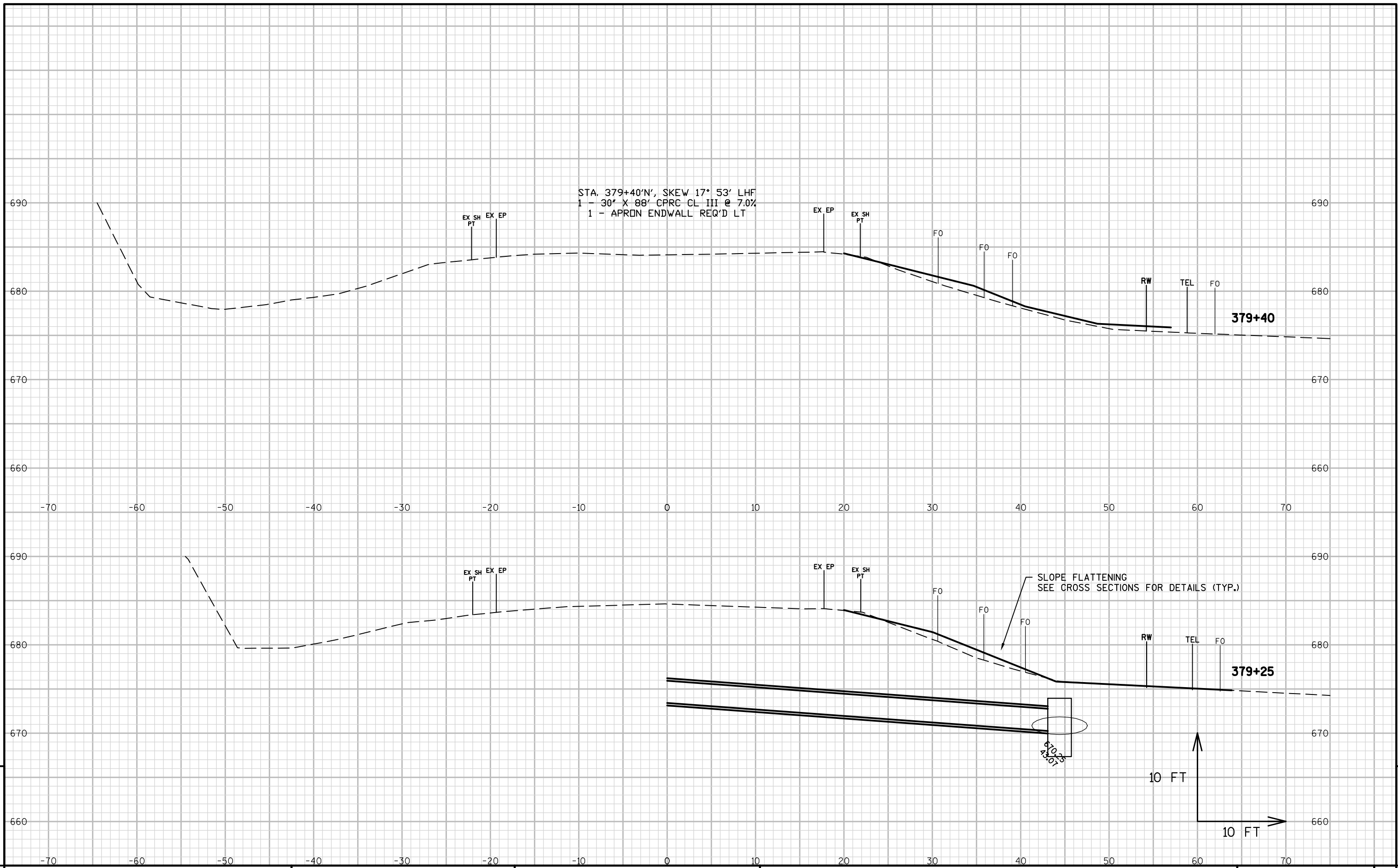
PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: PIPE REPLACEMENT/LINER LENGTHENING	SHEET	E
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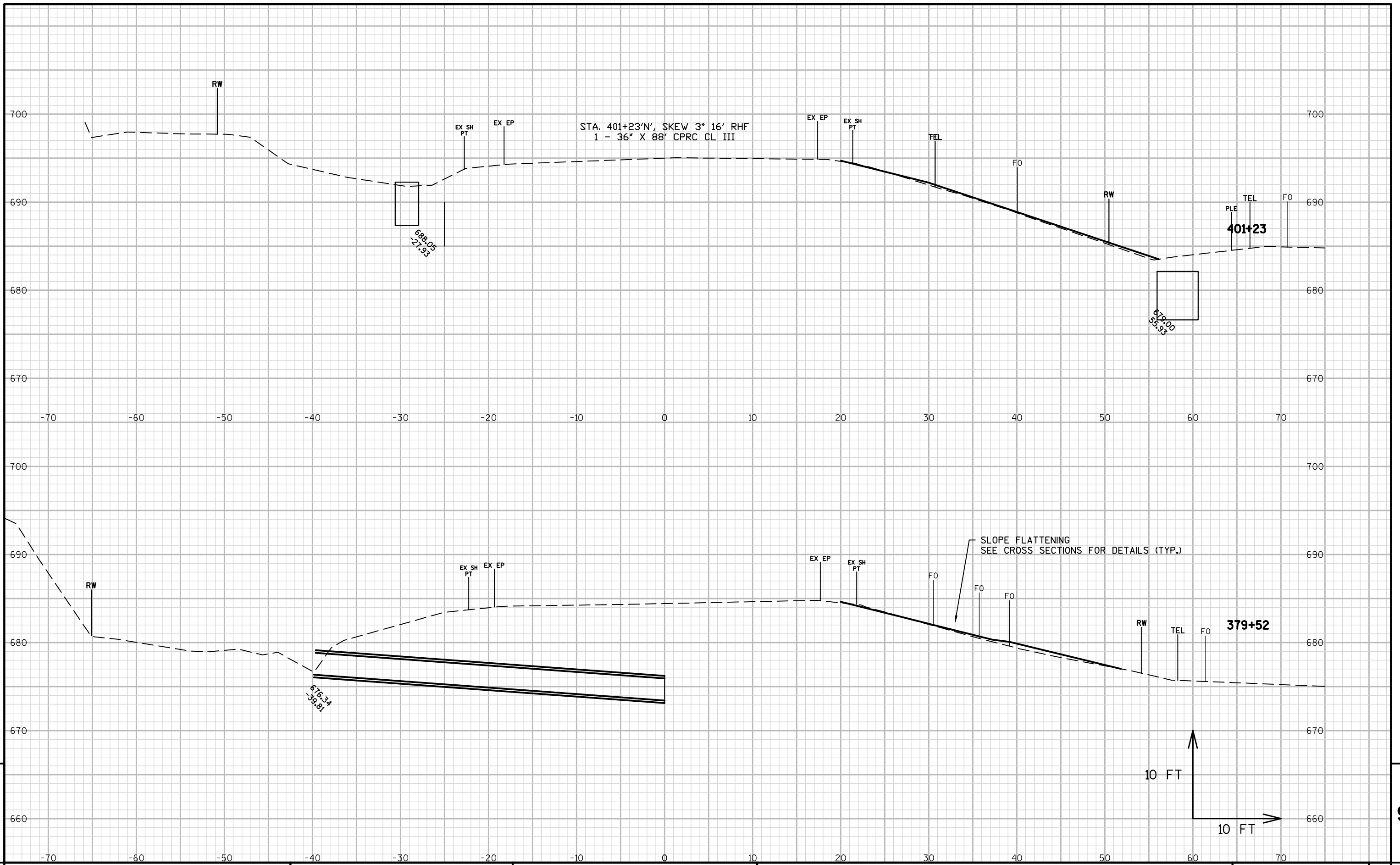
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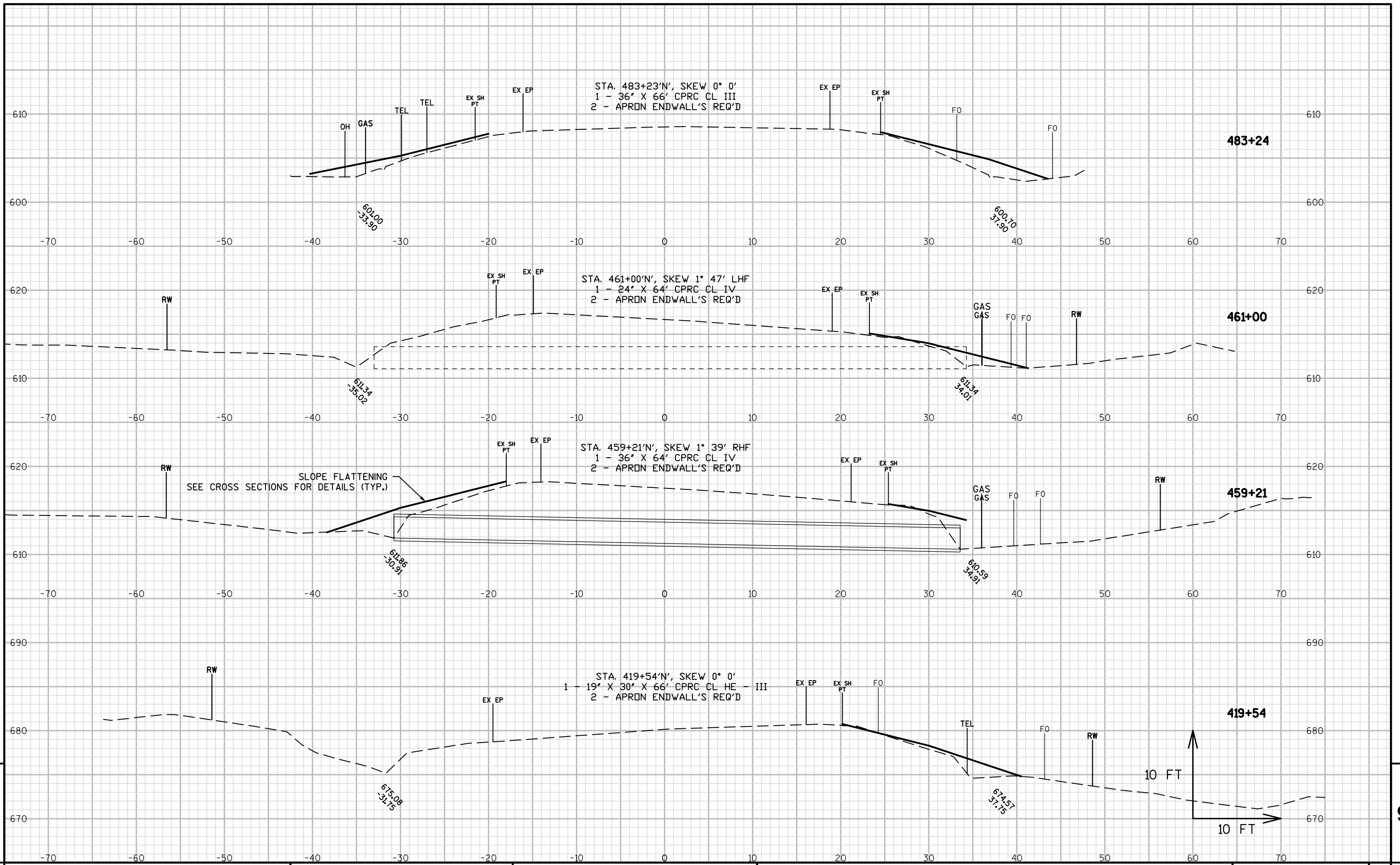




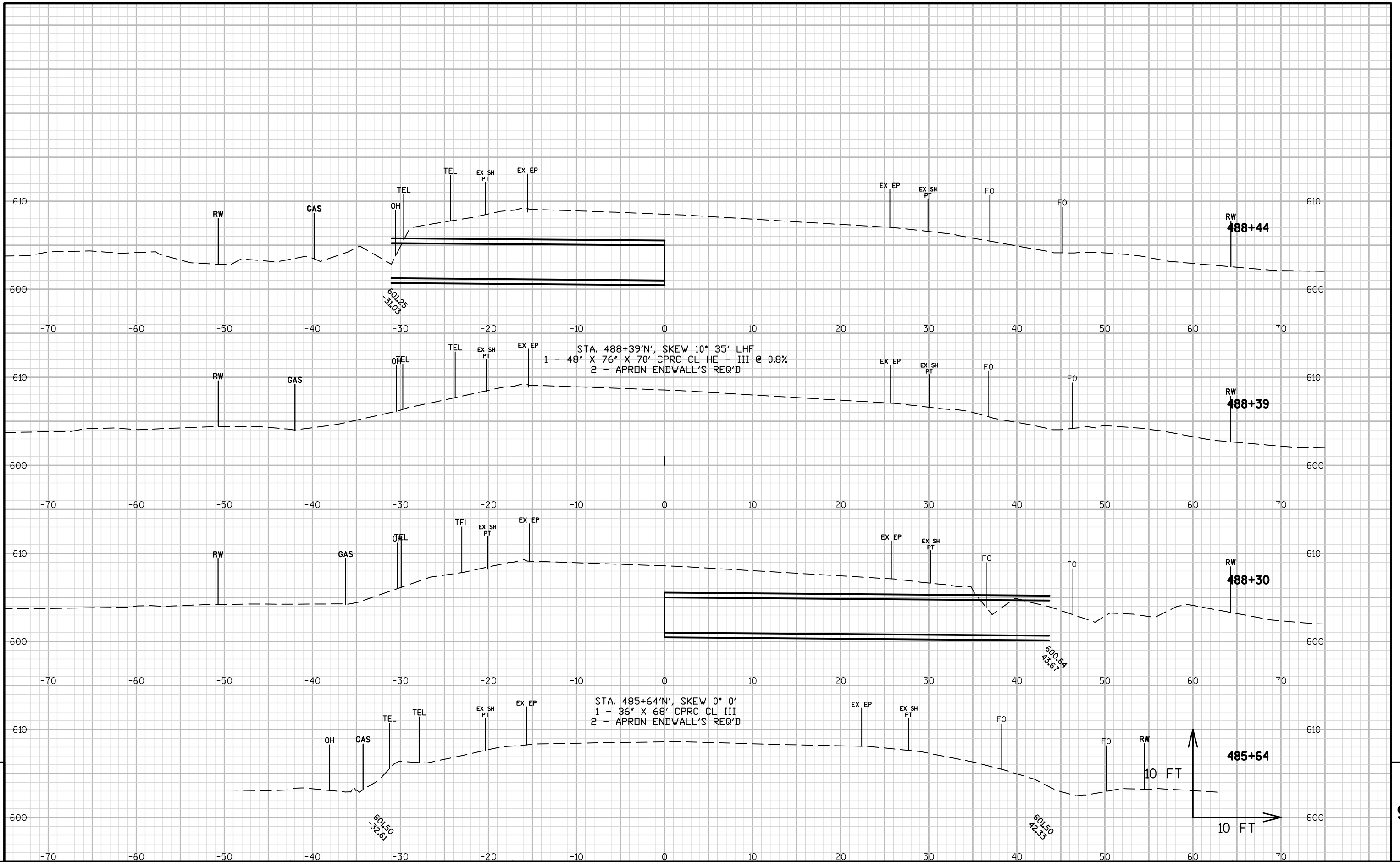
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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: PIPE REPLACEMENT/LINER LENGTHENING SHEET 9



PROJECT NO: 8160-04-64

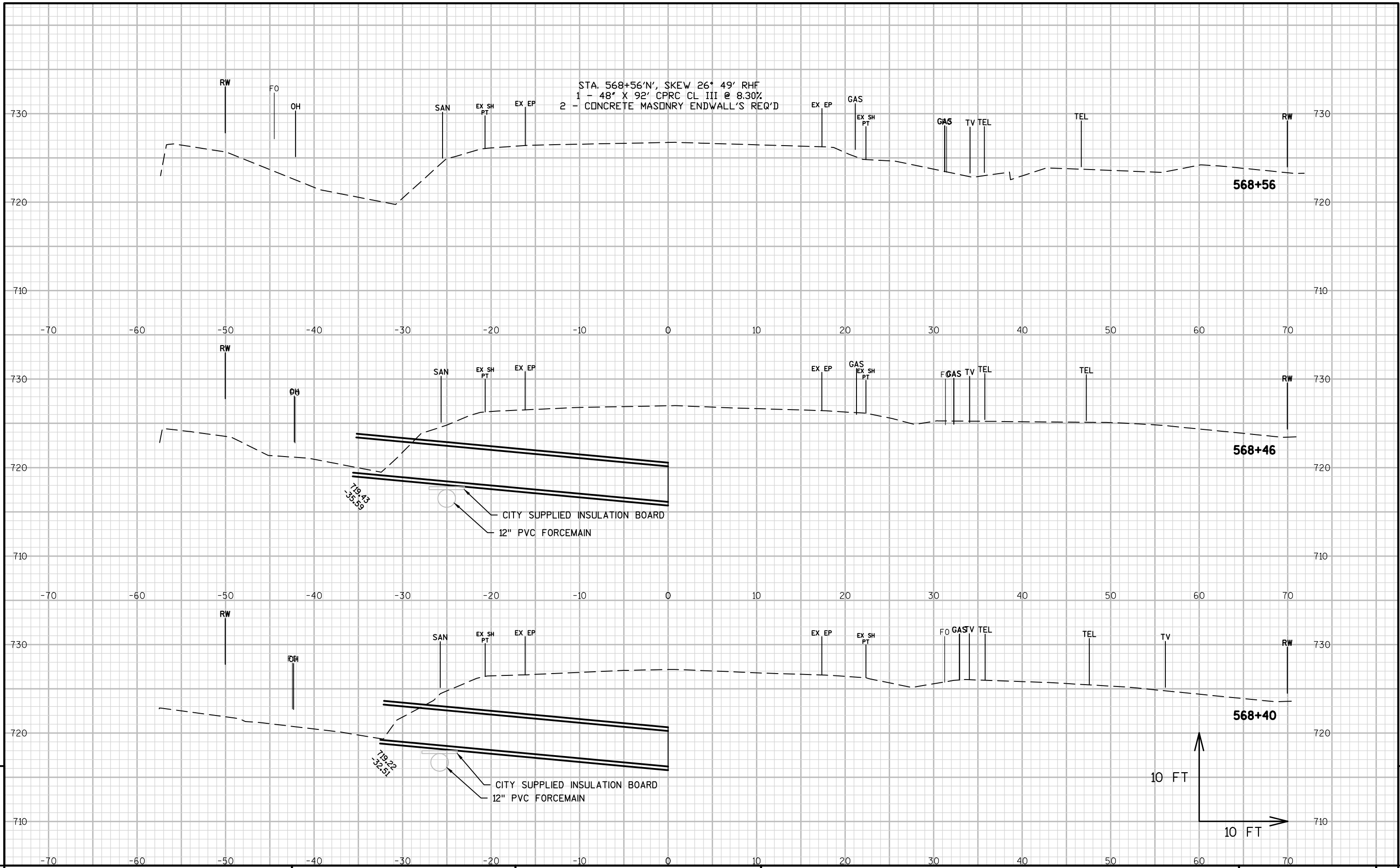
HWY: STH 13

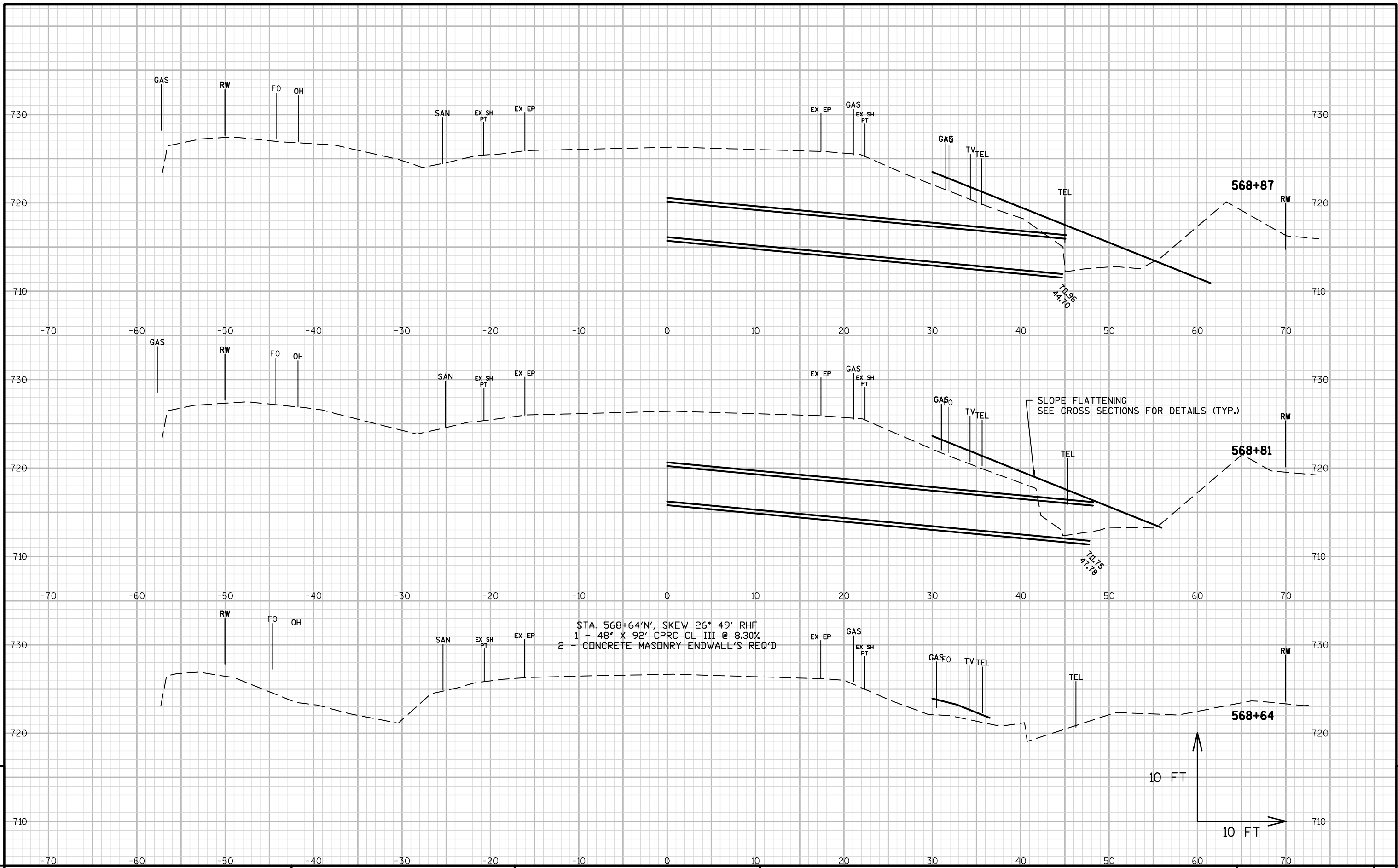
COUNTY: BAYFIELD

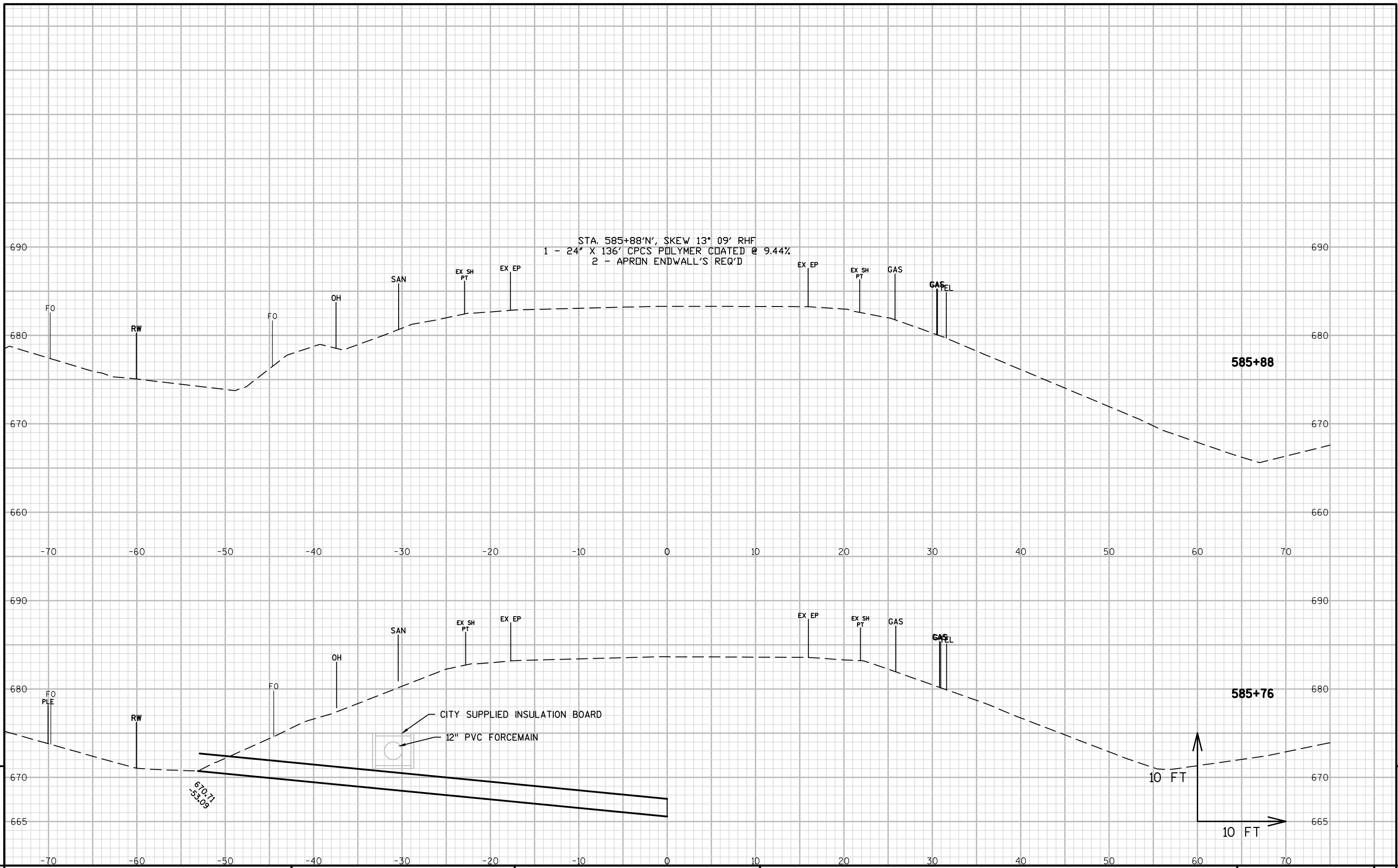
CROSS SECTIONS: PIPE REPLACEMENT/LINER LENGTHENING

SHEET

E







STA. 585+88'N', SKEW 13° 09' RHF
 1 - 24" X 136' CPCS POLYMER COATED @ 9.44%
 2 - APRON ENDWALL'S REQ'D

585+88

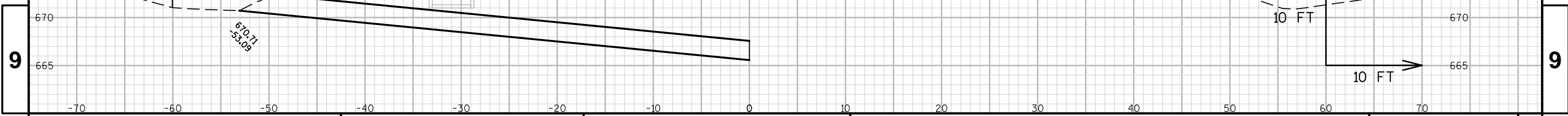
585+76

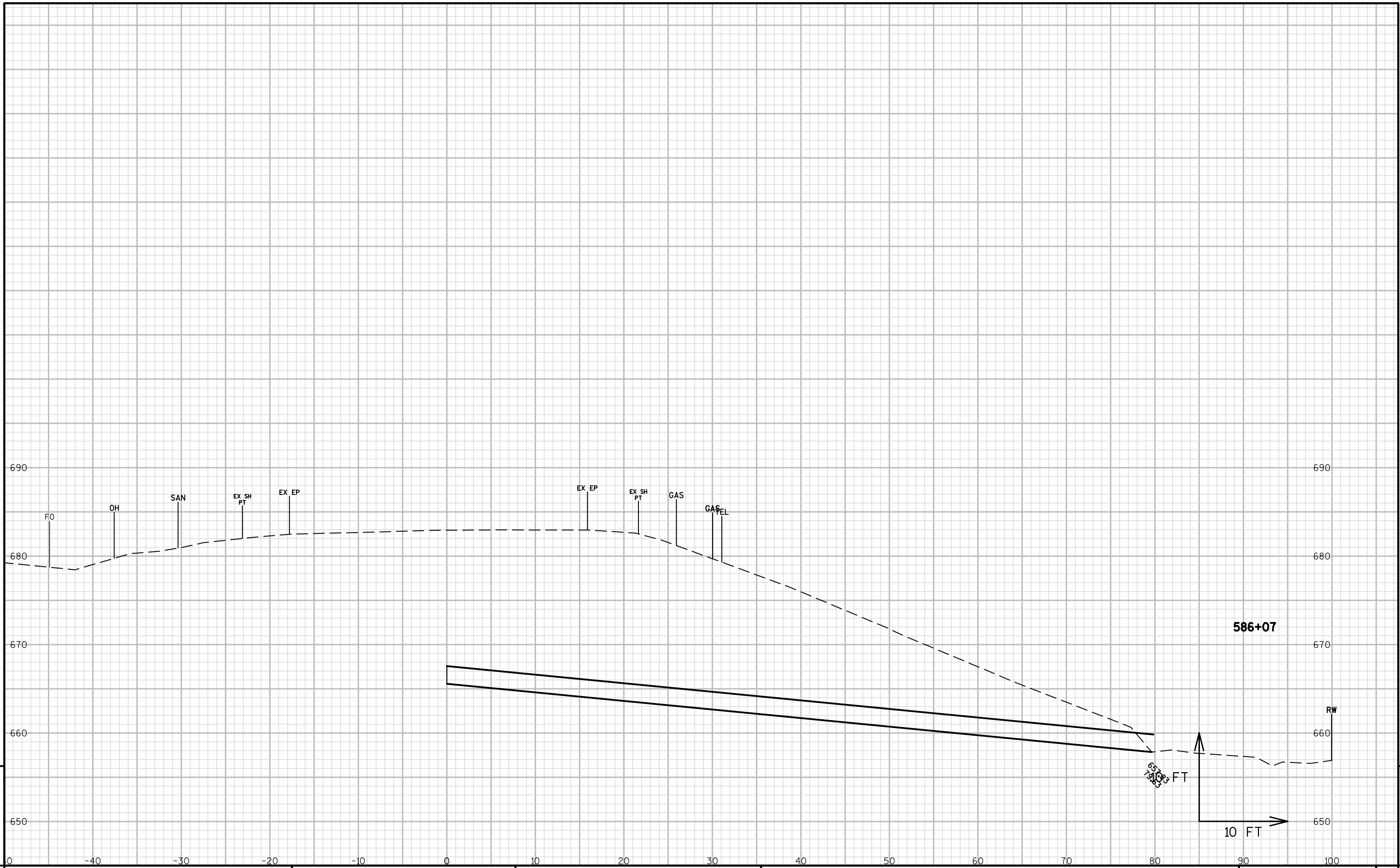
CITY SUPPLIED INSULATION BOARD
 12" PVC FORCEMAIN

670.11
 -53.08

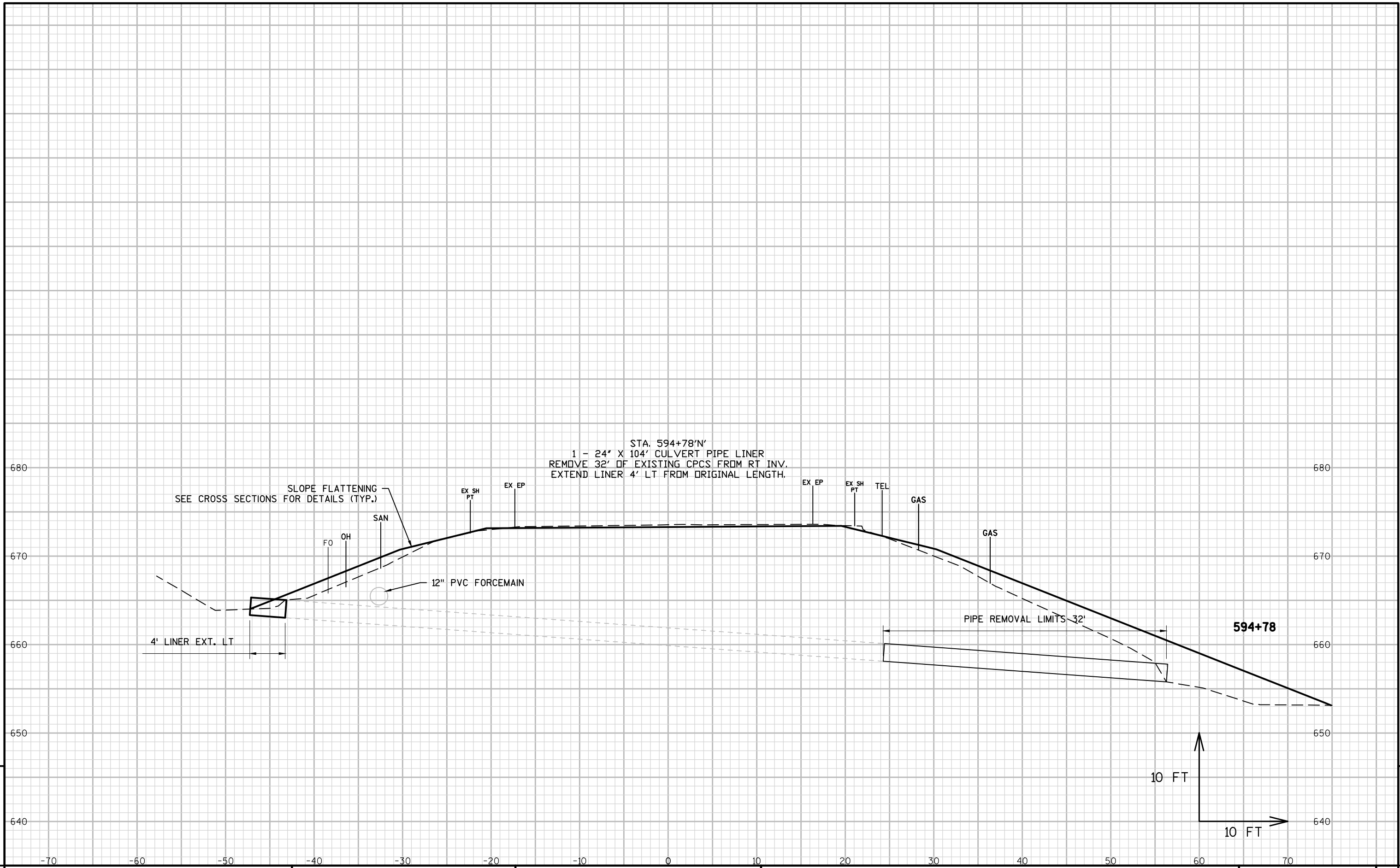
10 FT

10 FT



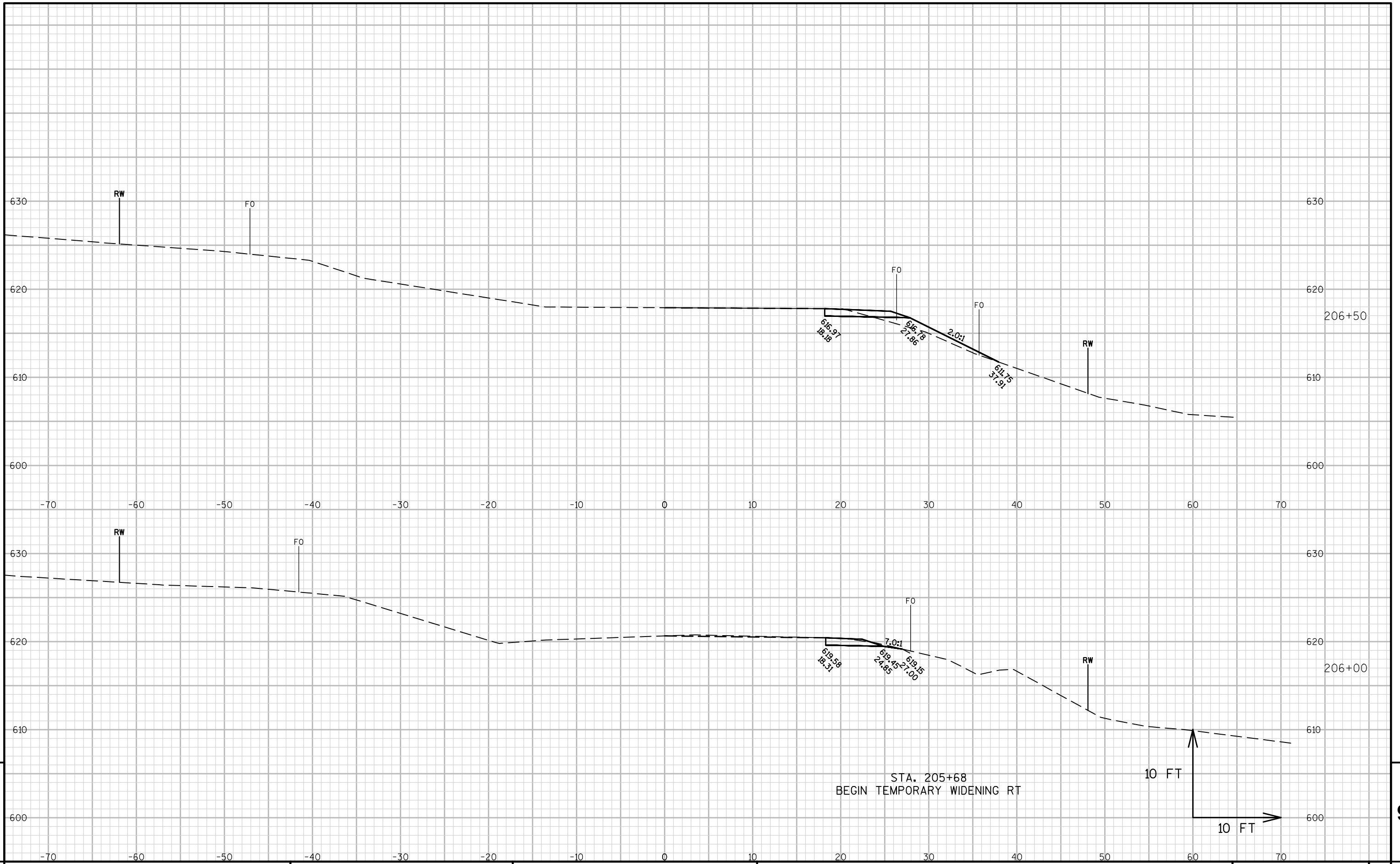


PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: PIPE REPLACEMENT/LINER LENGTHENING	SHEET	E
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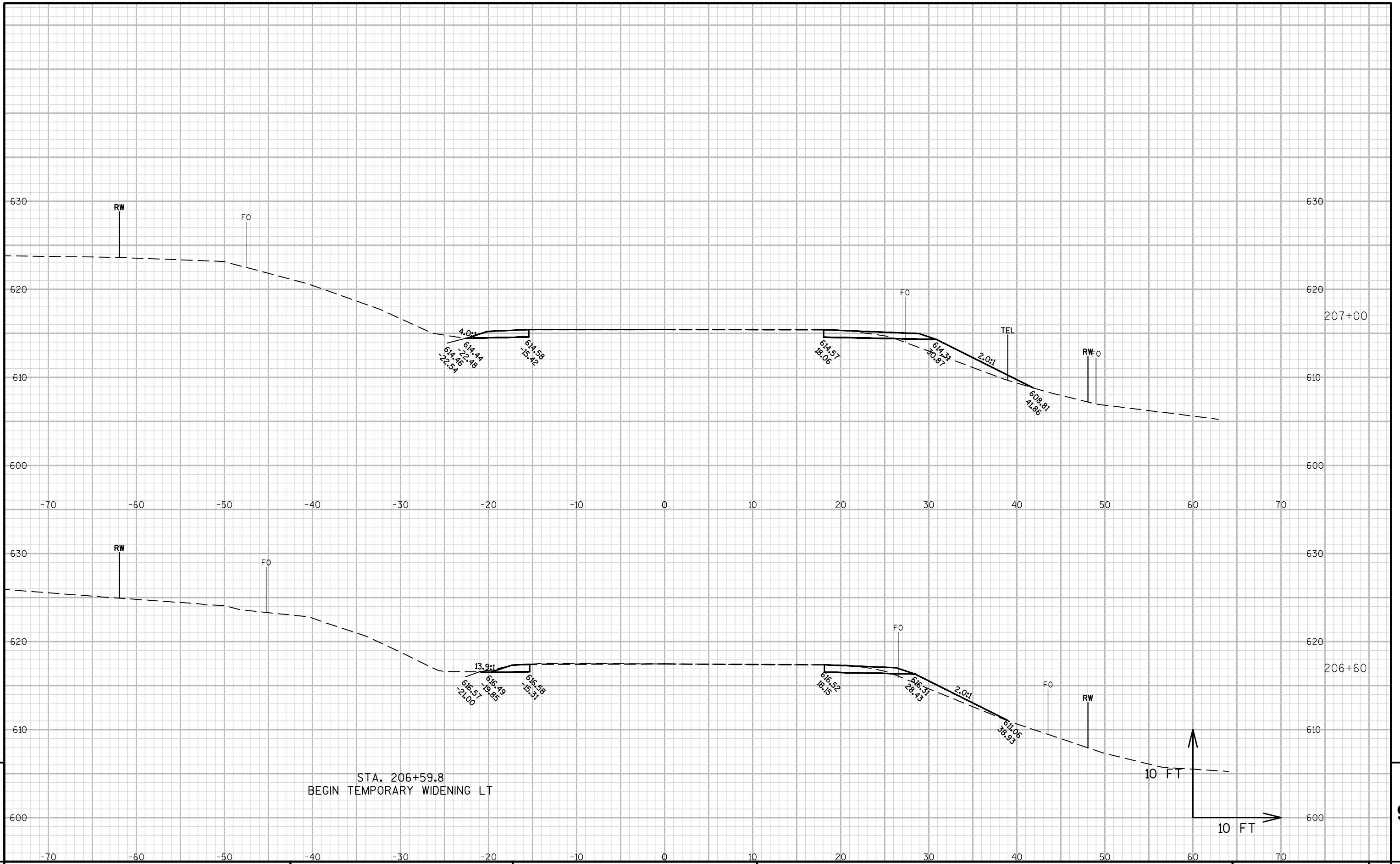


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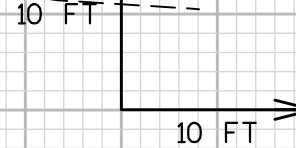
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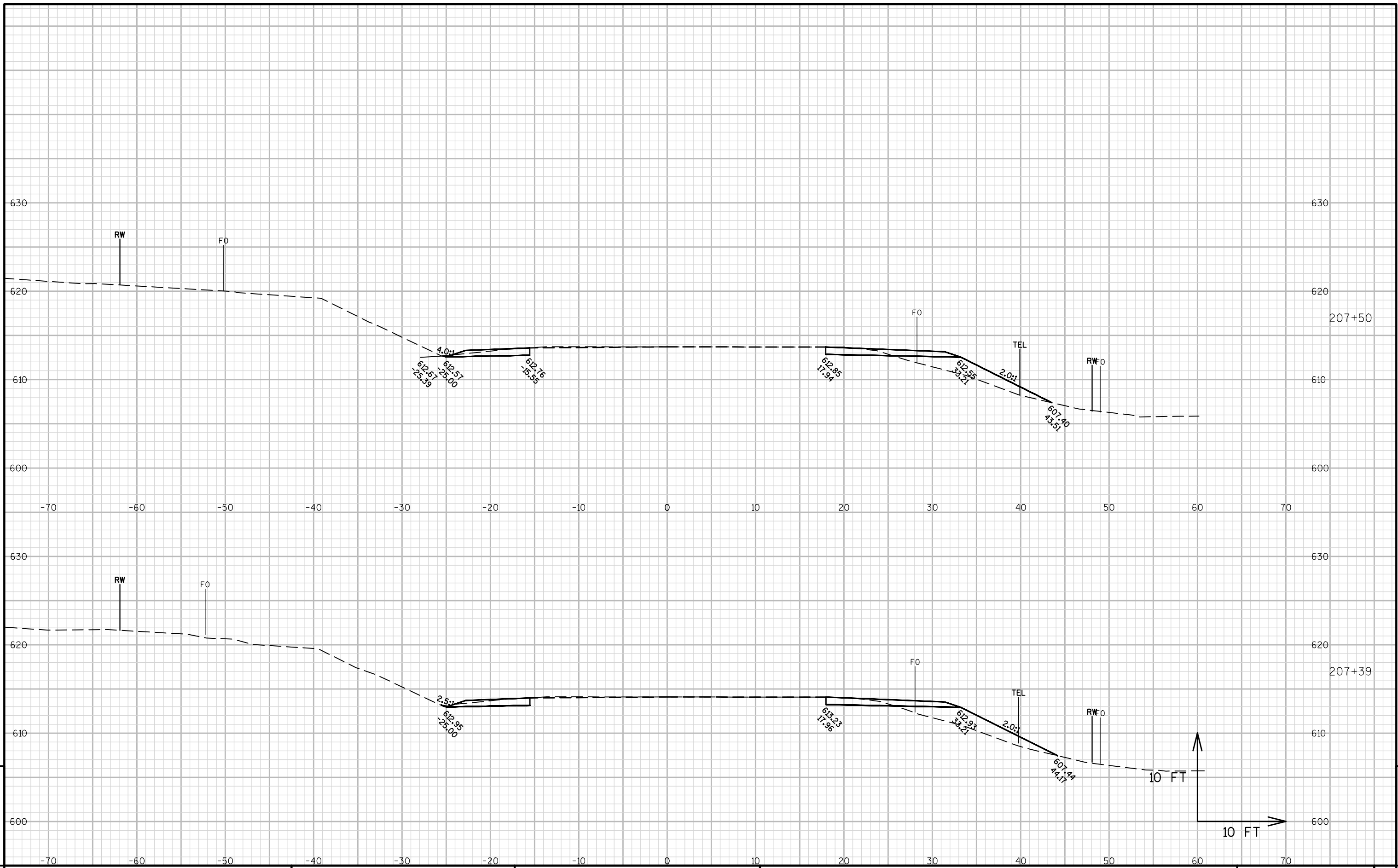


PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 208+34 SHEET E

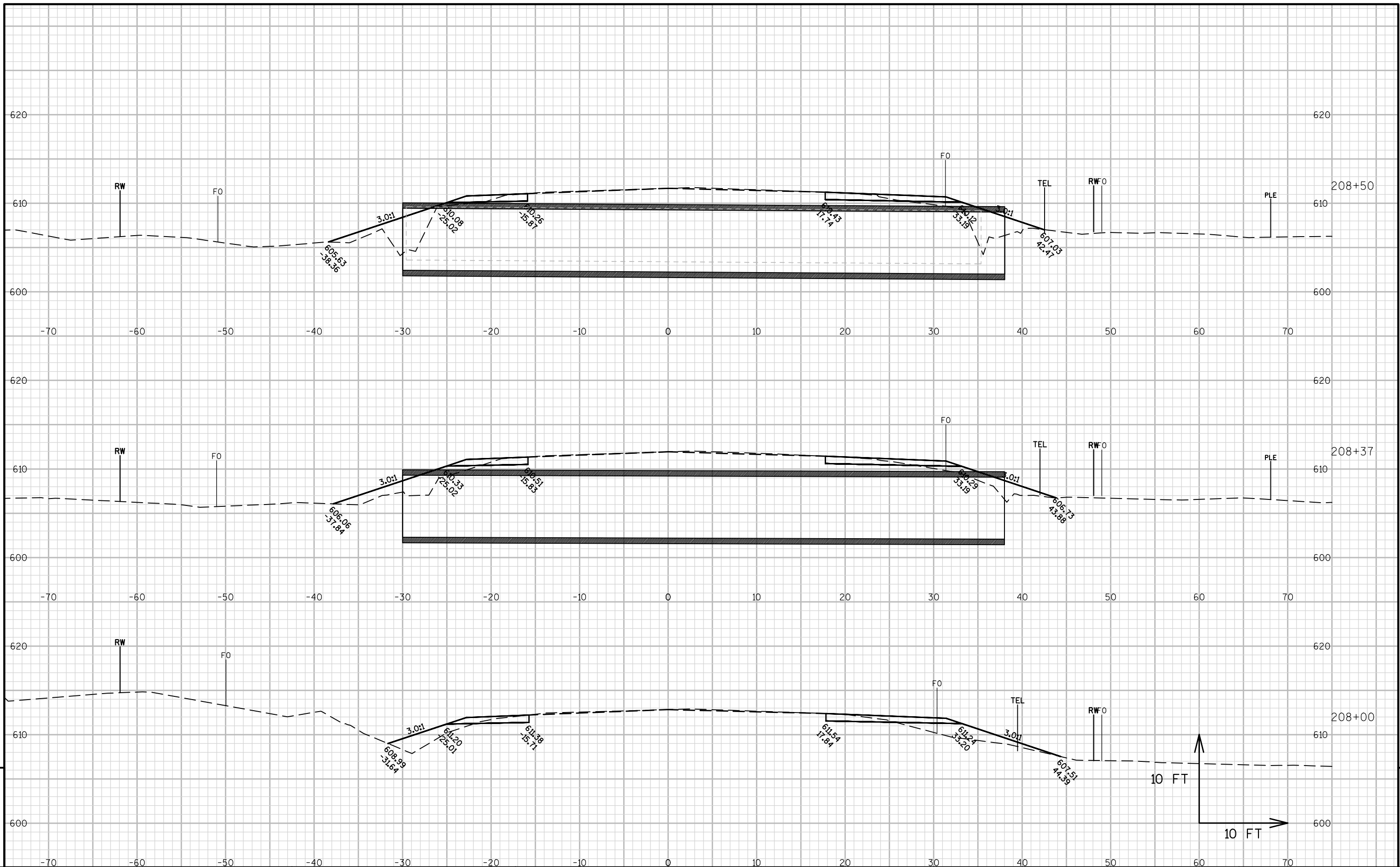


STA. 206+59.8
 BEGIN TEMPORARY WIDENING LT

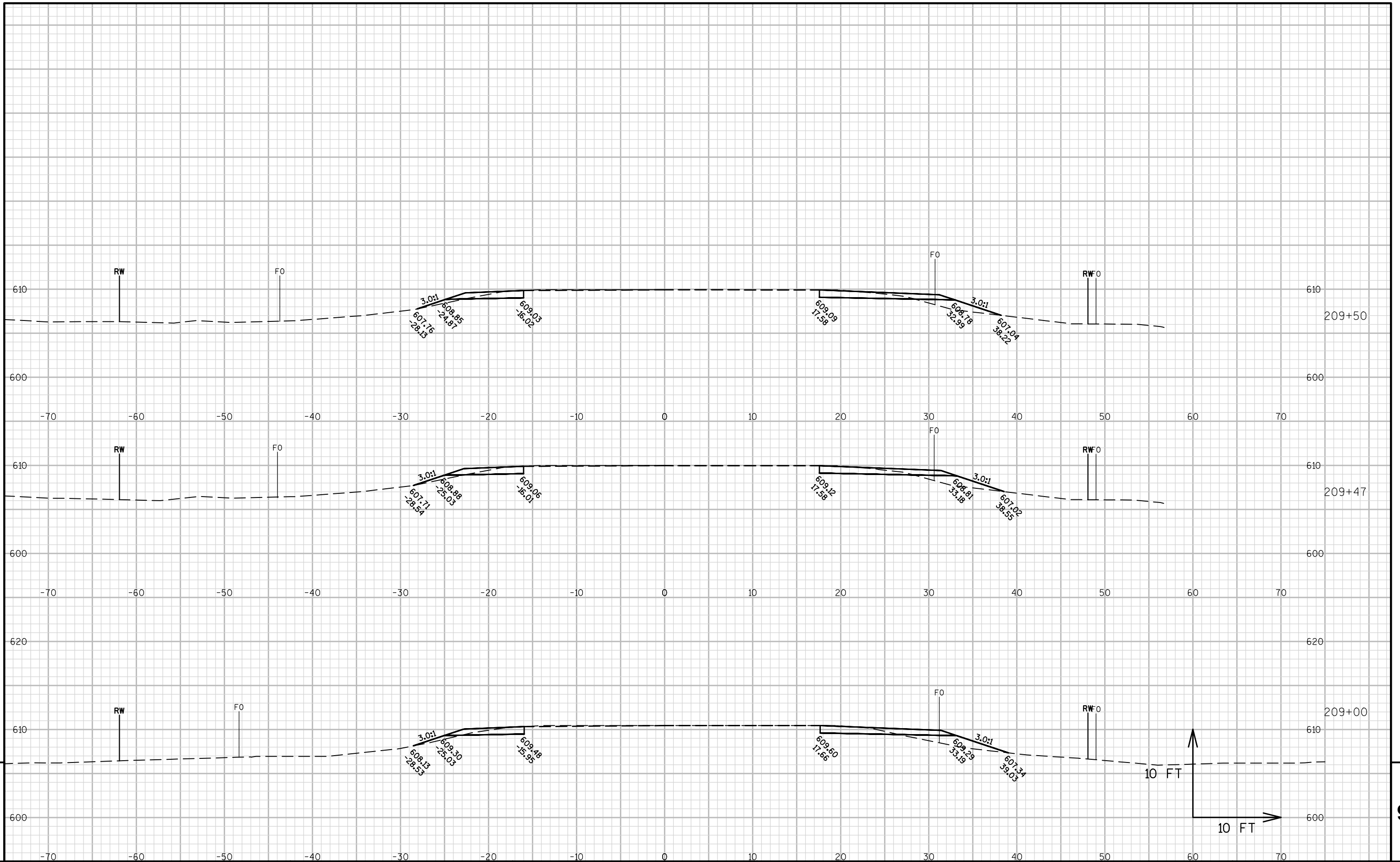




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PROJECT NO: 8160-04-64
HWY: STH 13
COUNTY: BAYFIELD
CROSS SECTIONS: TEMPORARY WIDENING
STA. 208+34
SHEET
E



PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 208+34 SHEET E



PROJECT NO: 8160-04-64

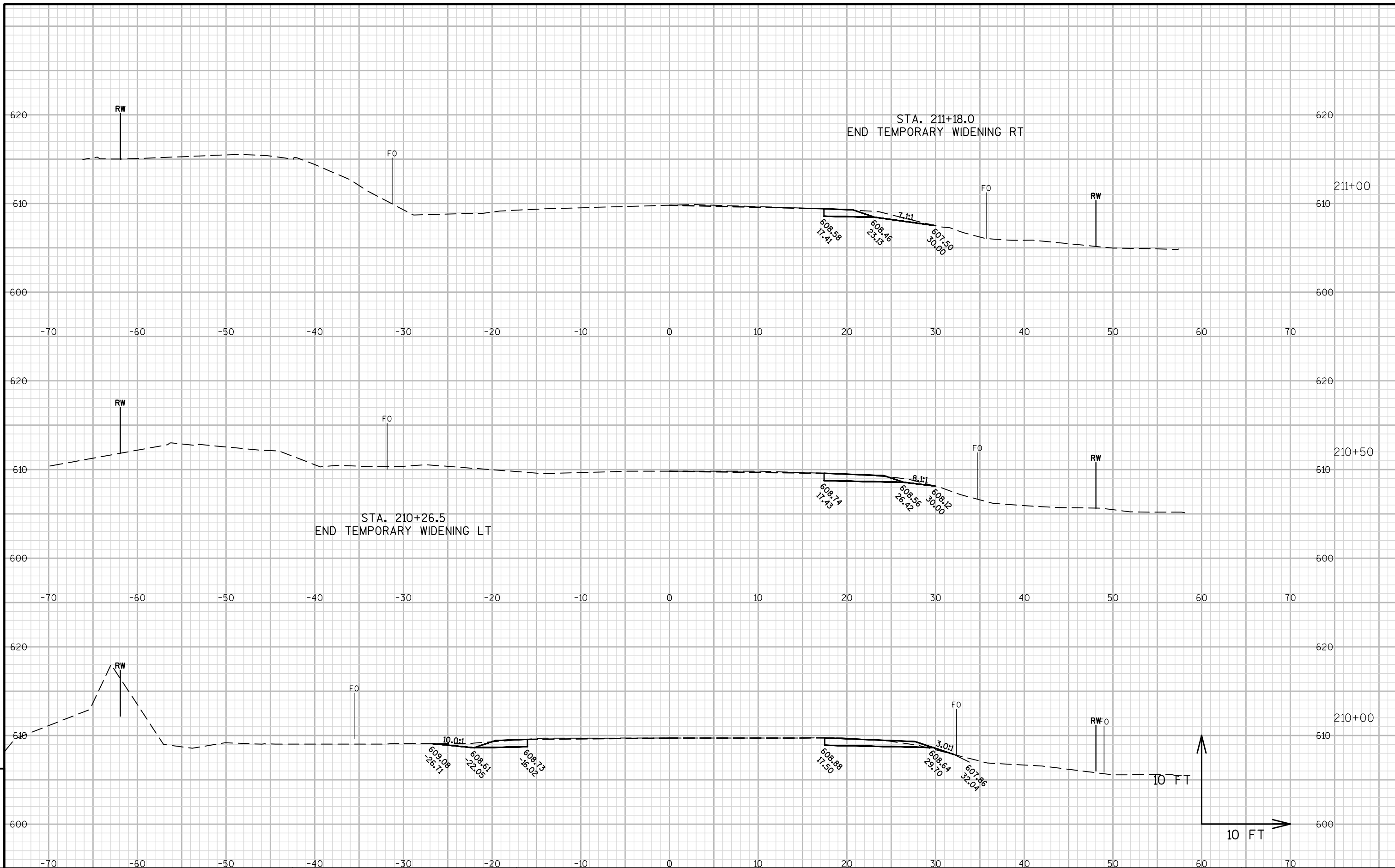
HWY: STH 13

COUNTY: BAYFIELD

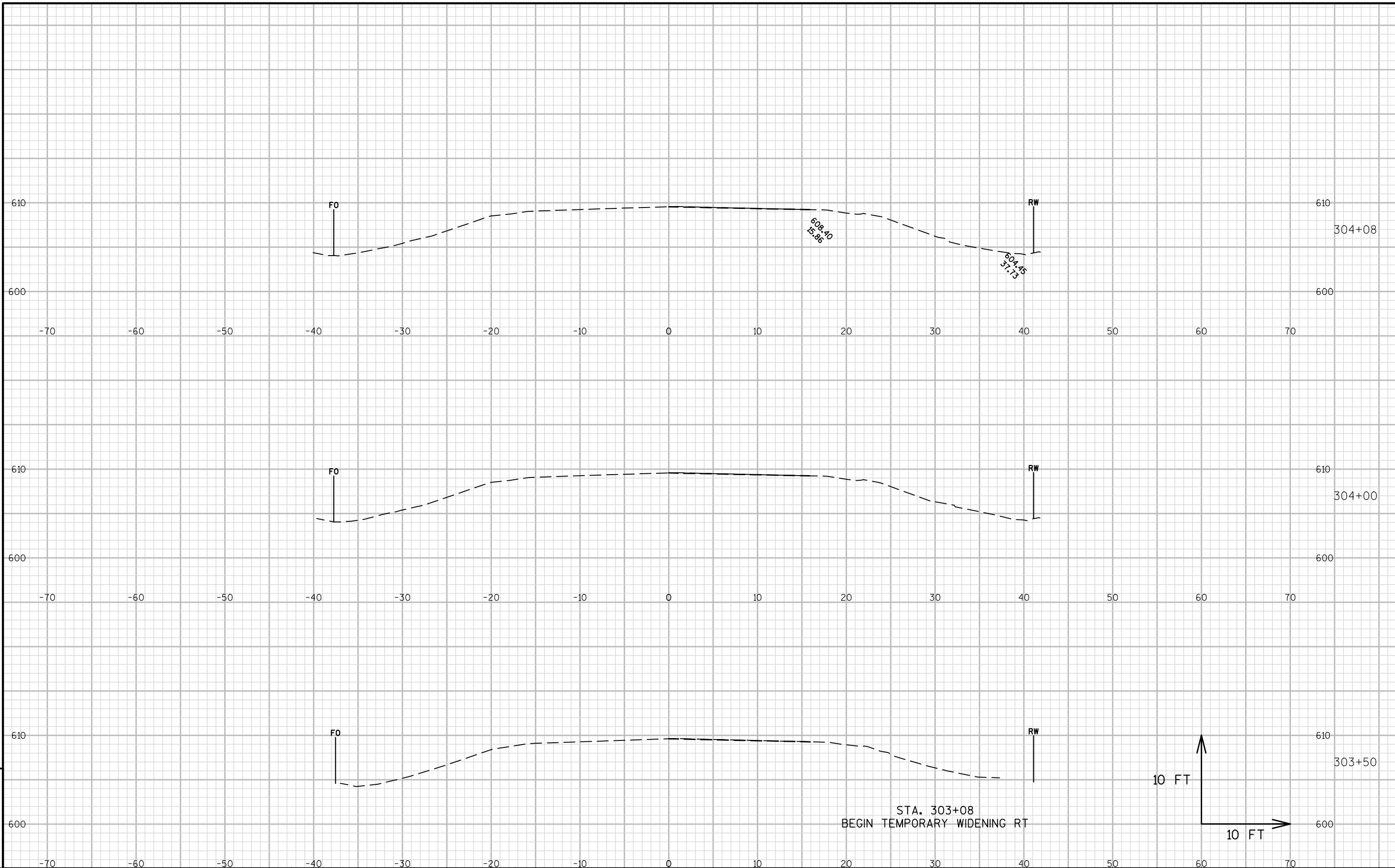
CROSS SECTIONS: TEMPORARY WIDENING STA. 208+34

SHEET

E



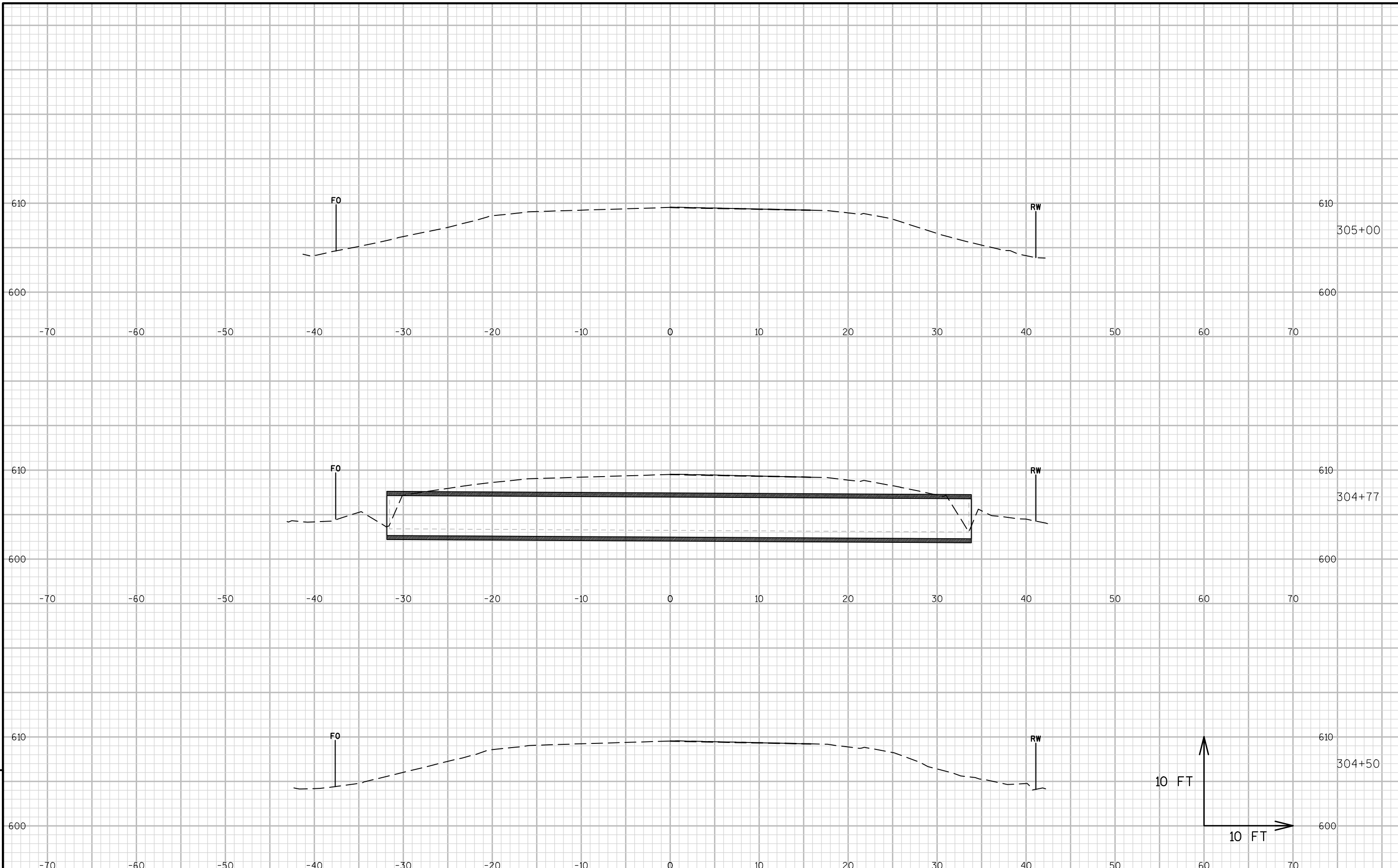
PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 208+34 SHEET E



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PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: TEMPORARY WIDENING	STA. 304+76	SHEET	E
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PROJECT NO: 8160-04-64

HWY: STH 13

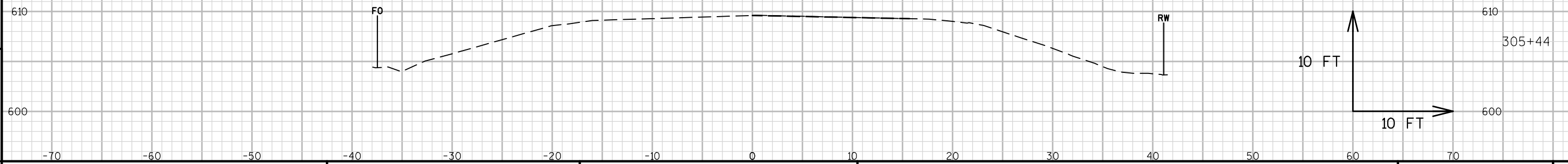
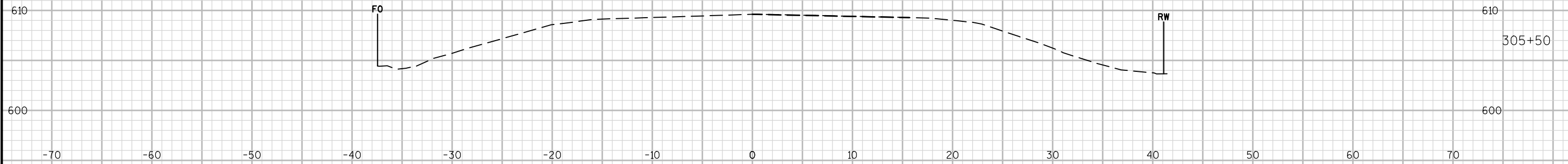
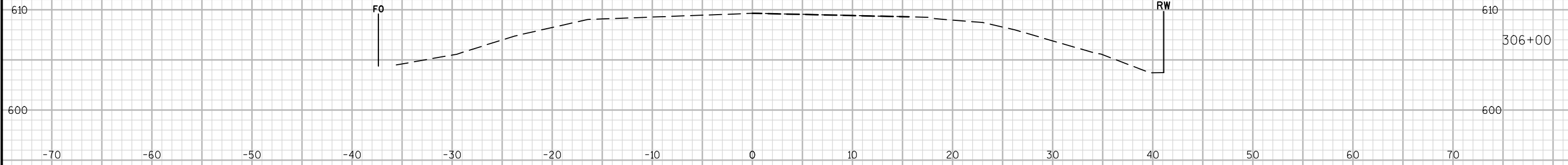
COUNTY: BAYFIELD

CROSS SECTIONS: TEMPORARY WIDENING STA. 304+76

SHEET

E

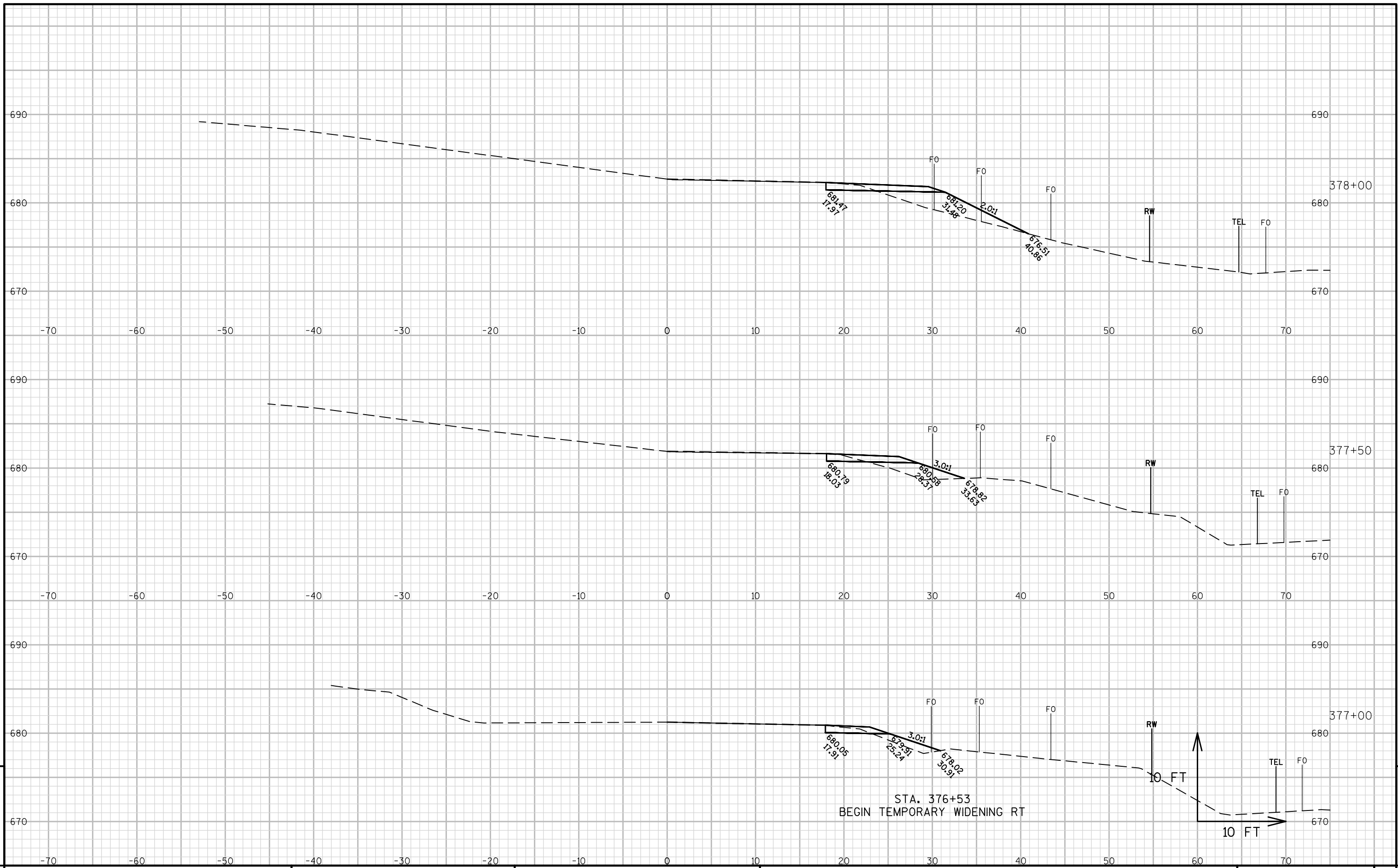
STA. 306+44
END TEMPORARY WIDENING RT



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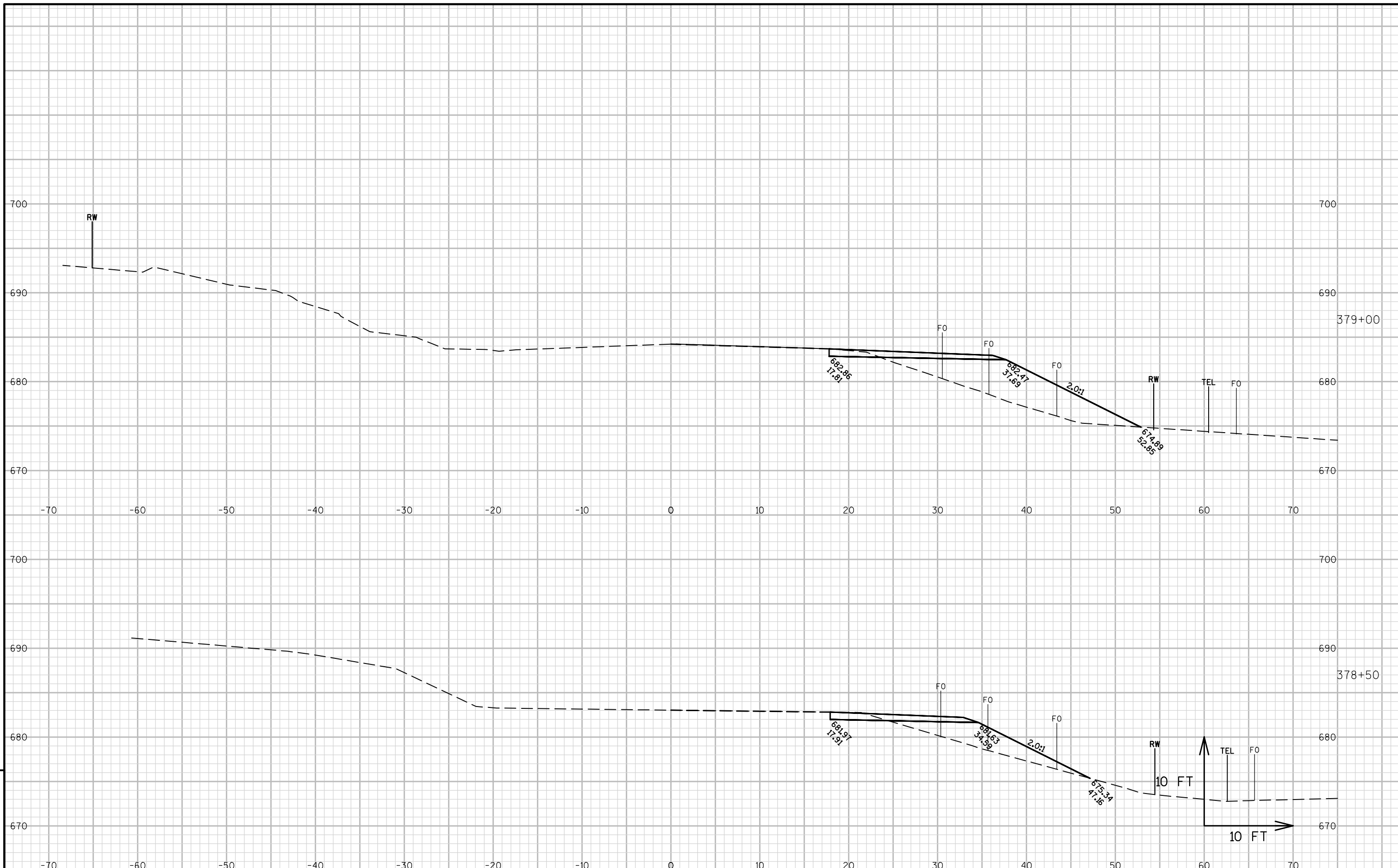
PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 304+76 SHEET E



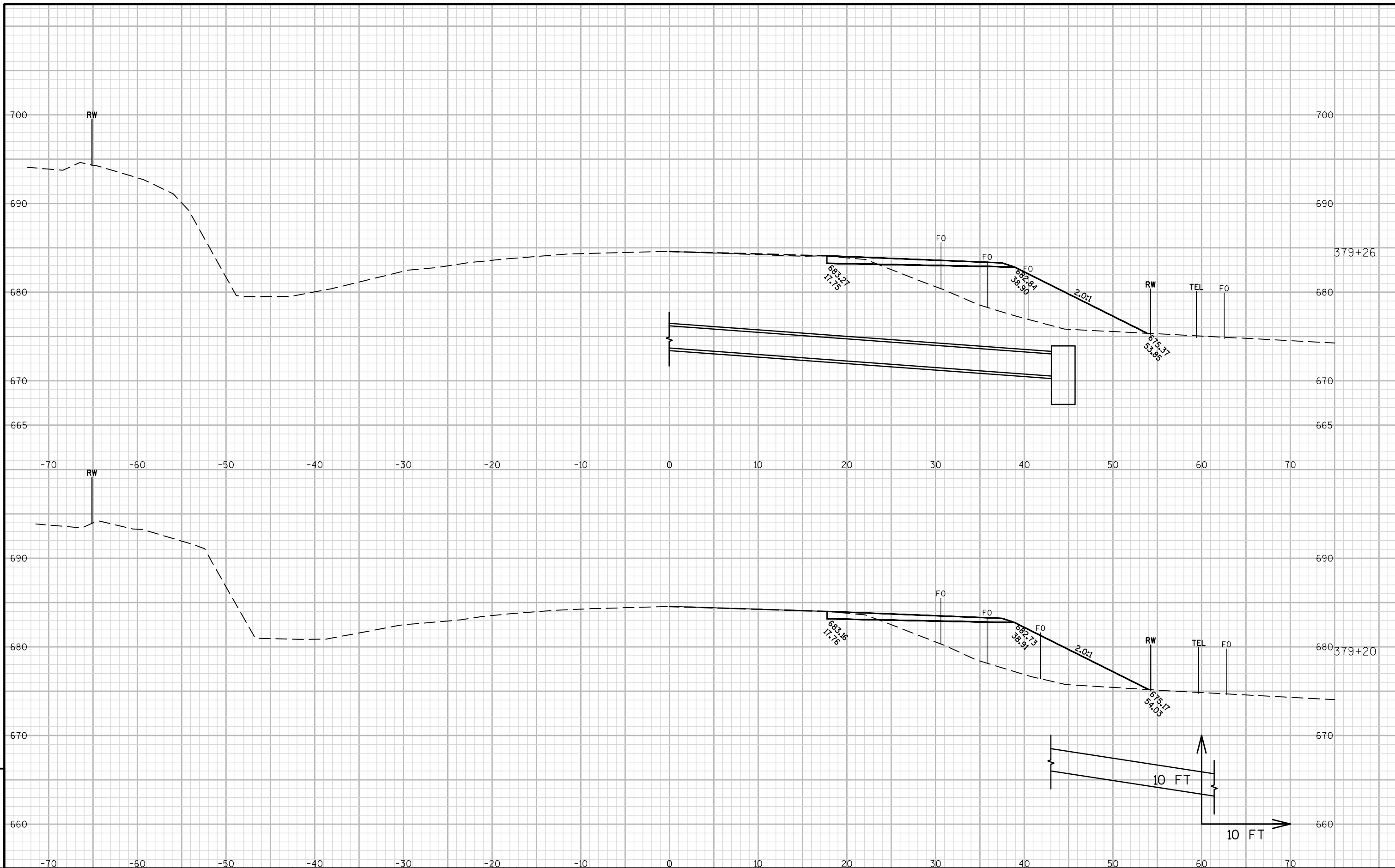
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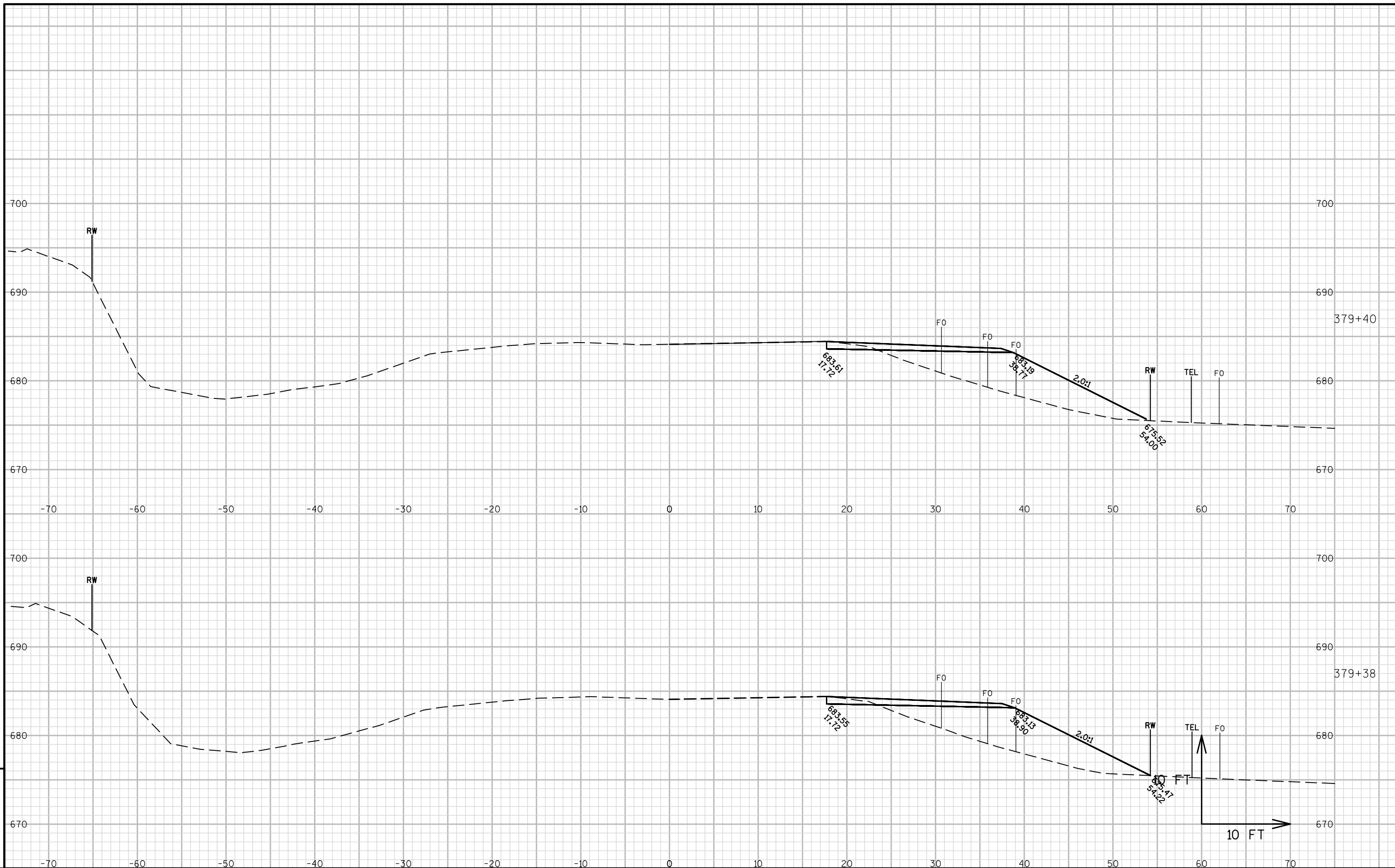
PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 379+40 SHEET E



PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 379+40 SHEET E



PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 379+40 SHEET E



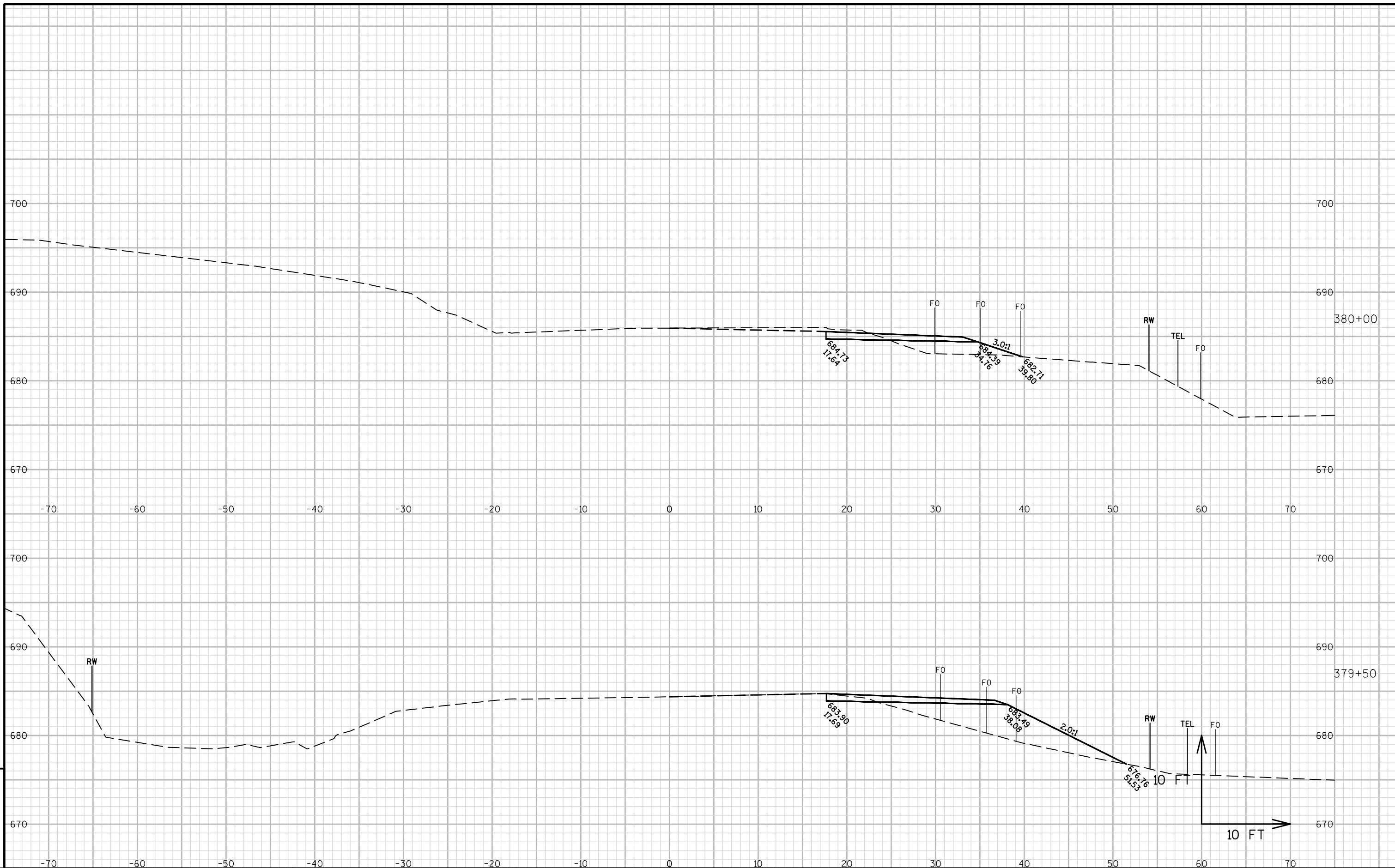
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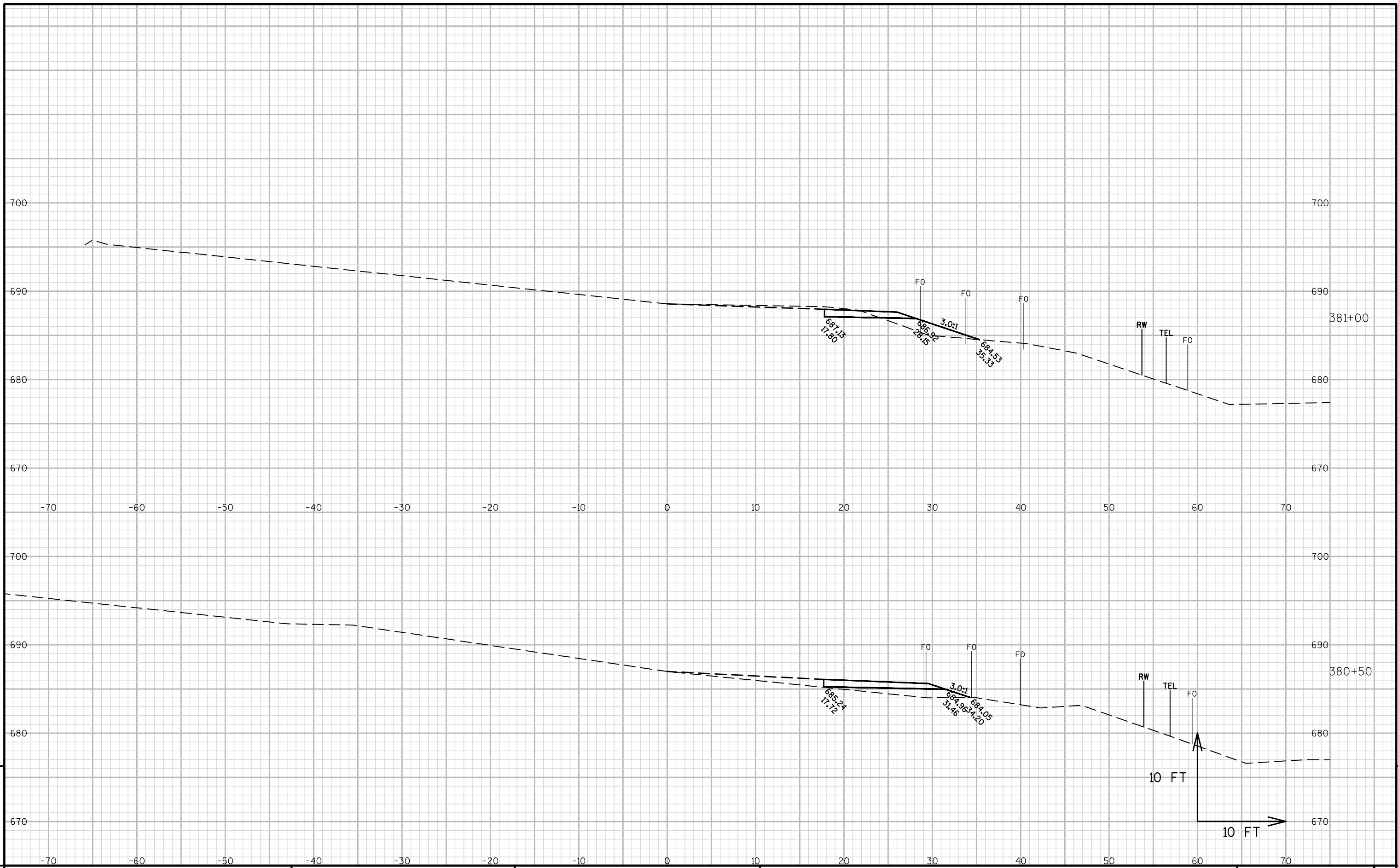
PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 379+40 SHEET E

FILE NAME : \\NWBSERVER\DRAWINGS\NWBE_PROJECTS\DESIGN\1229 STH13 SUPERIOR AVE - 7TH ST\C3D\SHEETSPLAN\090204_XS_TEMP WIDENING 3794BLD\DWGDATE : 7/25/2016 11:42 AM PLOT BY : USER PLOT NAME : PLOT SCALE : 1 IN:10 FT WISDOT/CADD SHEET 49

LAYOUT NAME - TMP WIDE 37940_XS-4



PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 379+40 SHEET E



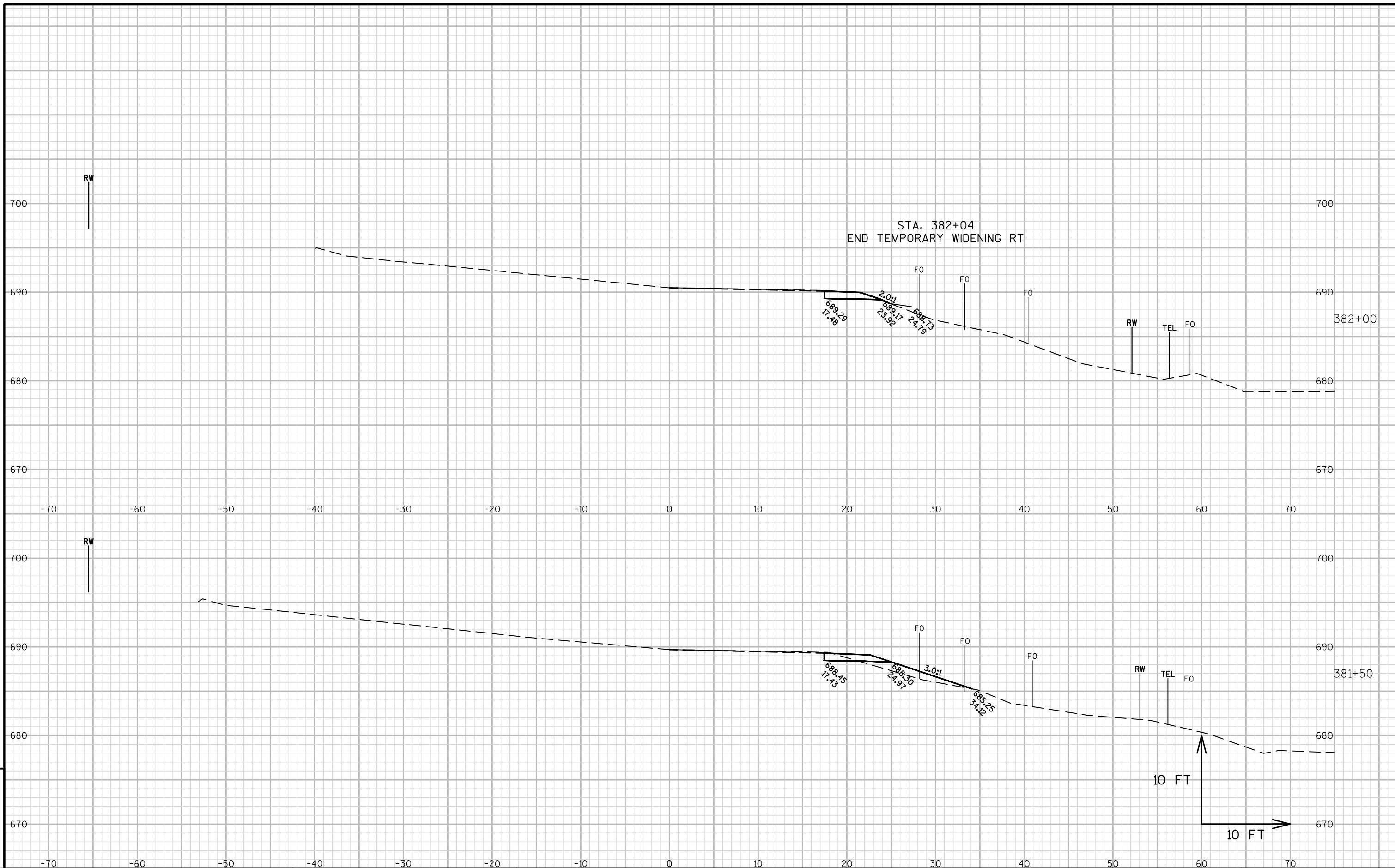
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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 379+40 SHEET E

FILE NAME : \\NWESERVER\DRAWINGS\NWBE_PROJECTS\DESIGN\1229 STH13 SUPERIOR AVE - 7TH ST\C3D\SHEETSPLAN\090204_XS_TEMP WIDENING 3794BLDWGDATE : 7/25/2016 11:42 AM PLOT BY : USER PLOT NAME : PLOT SCALE : 1 IN:10 FT WISDOT/CADD SHEET 49

LAYOUT NAME - TMP WIDE 37940_XS-6



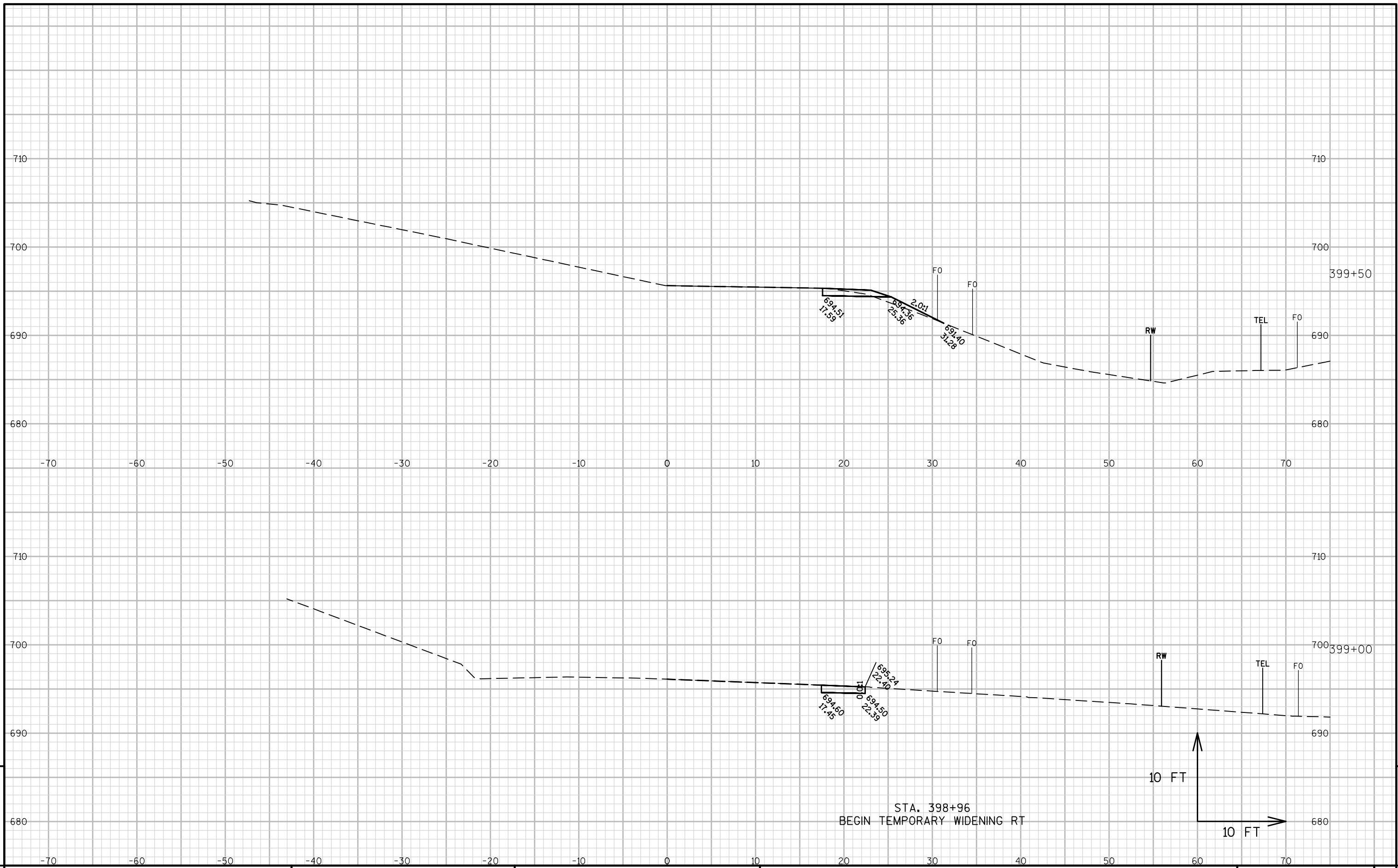
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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 379+40 SHEET E

FILE NAME : \\NWBESEVER\DRAWINGS\NWBE_PROJECTS\DESIGN\1229 STH13 SUPERIOR AVE - 7TH ST\C3D\SHEETSPLAN\090204_XS_TEMP WIDENING 3794BLDWGDATE : 7/25/2016 11:42 AM PLOT BY : USER PLOT NAME : PLOT SCALE : 1 IN:10 FT WISDOT/CADD SHEET 49

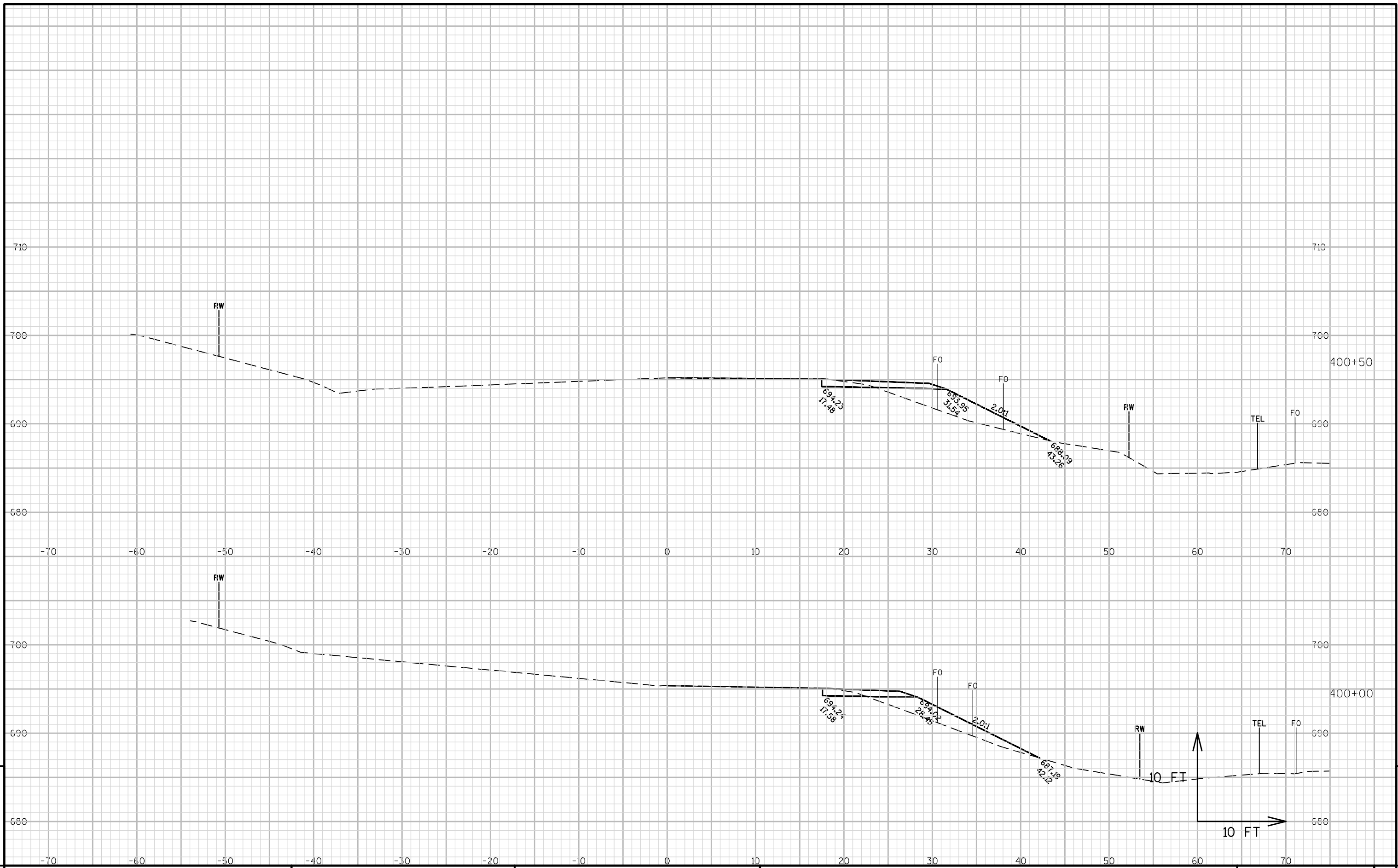
LAYOUT NAME - TMP WIDE 37940_XS-7



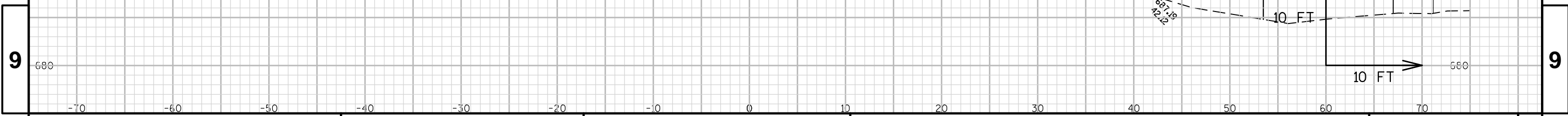
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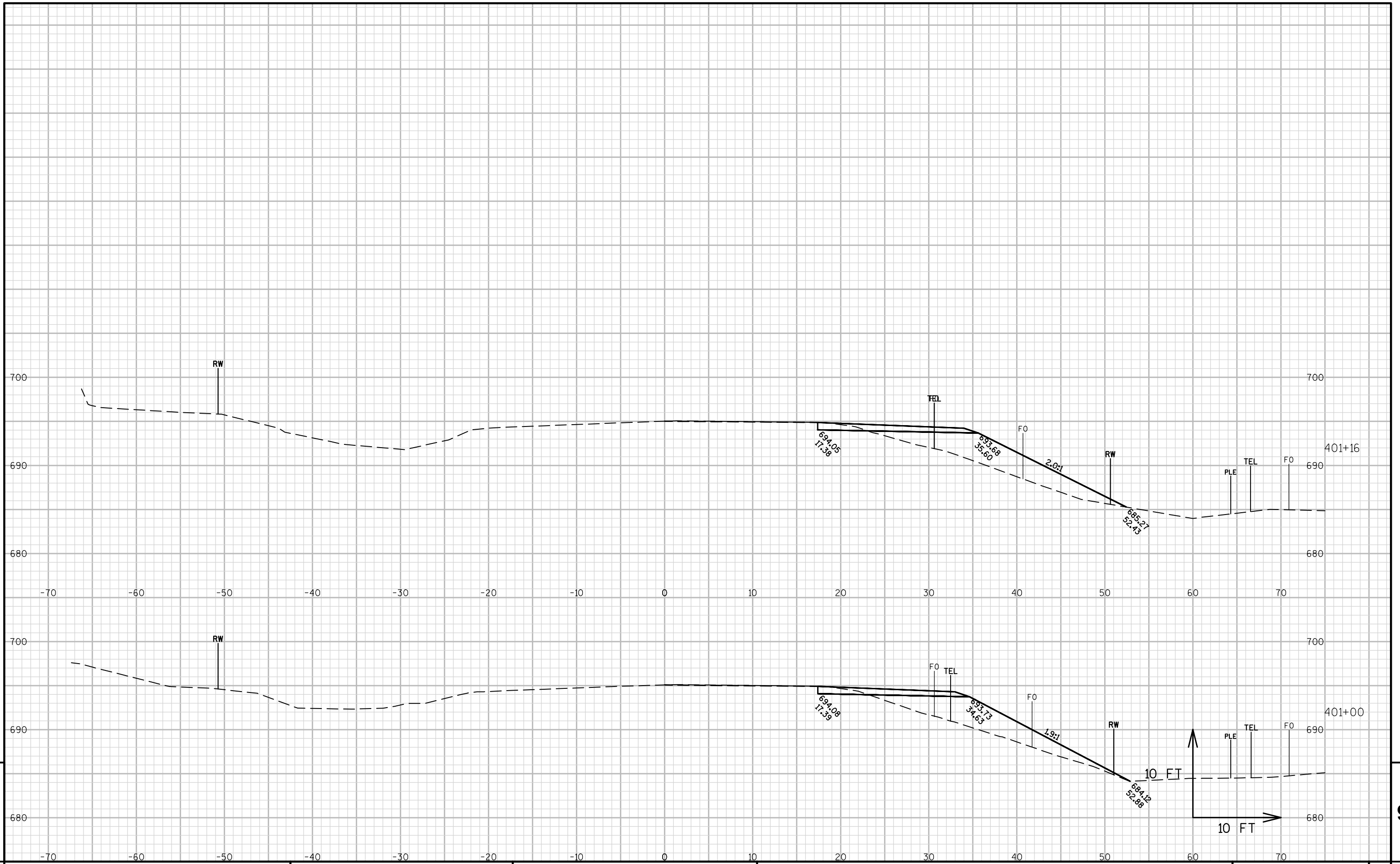
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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 401+23 SHEET E



PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: TEMPORARY WIDENING STA. 401+23	SHEET	E
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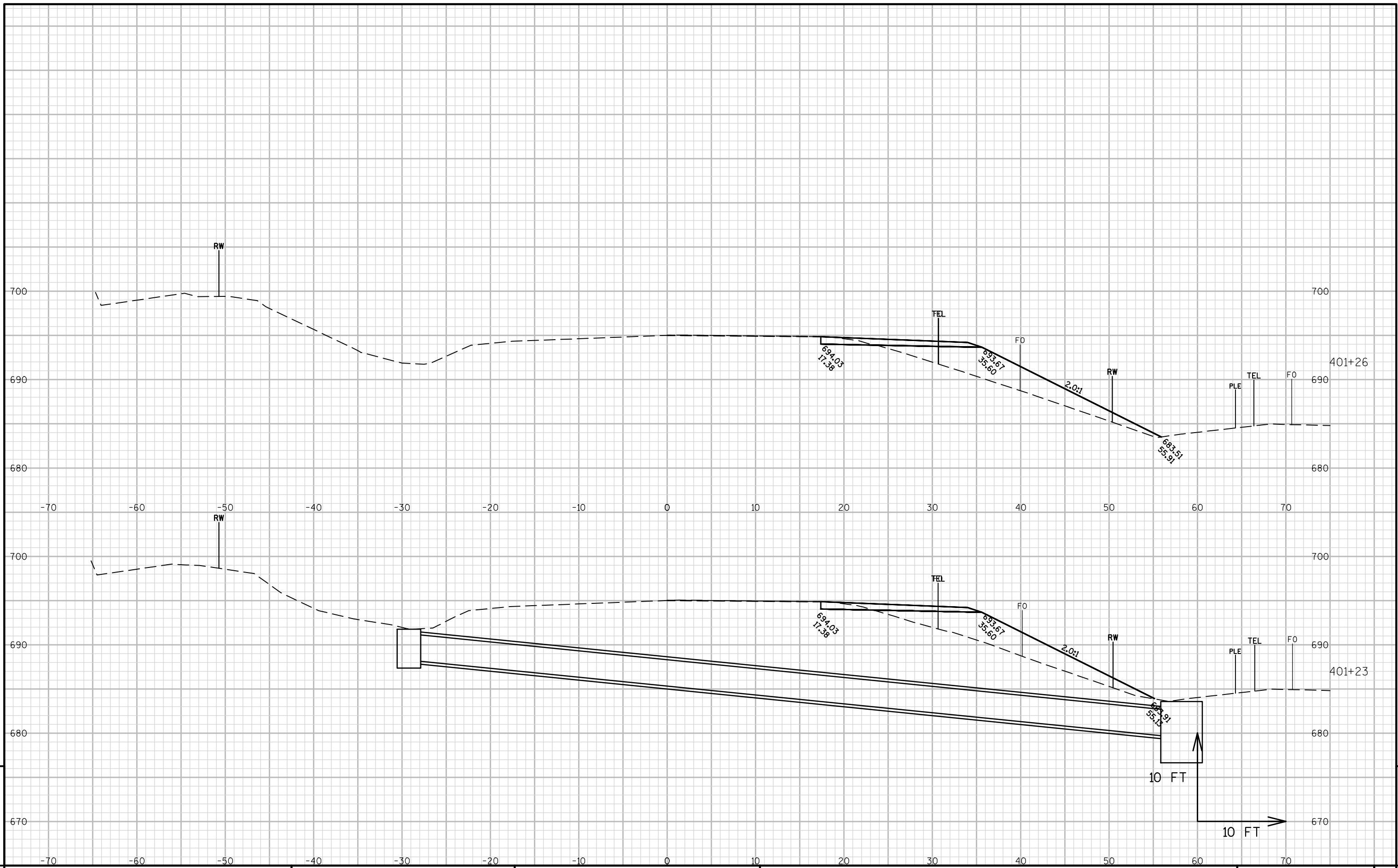




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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 401+23 SHEET E



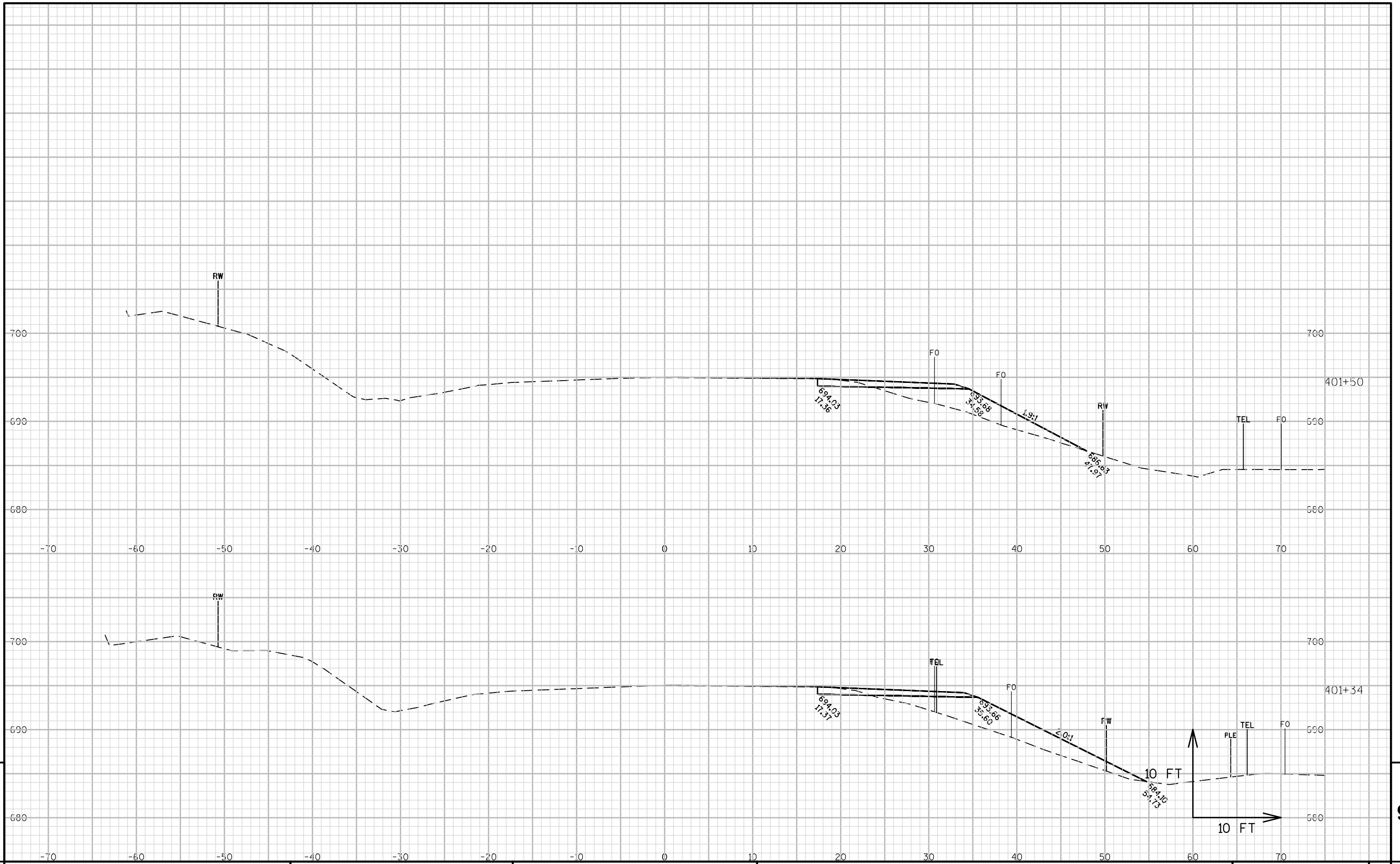
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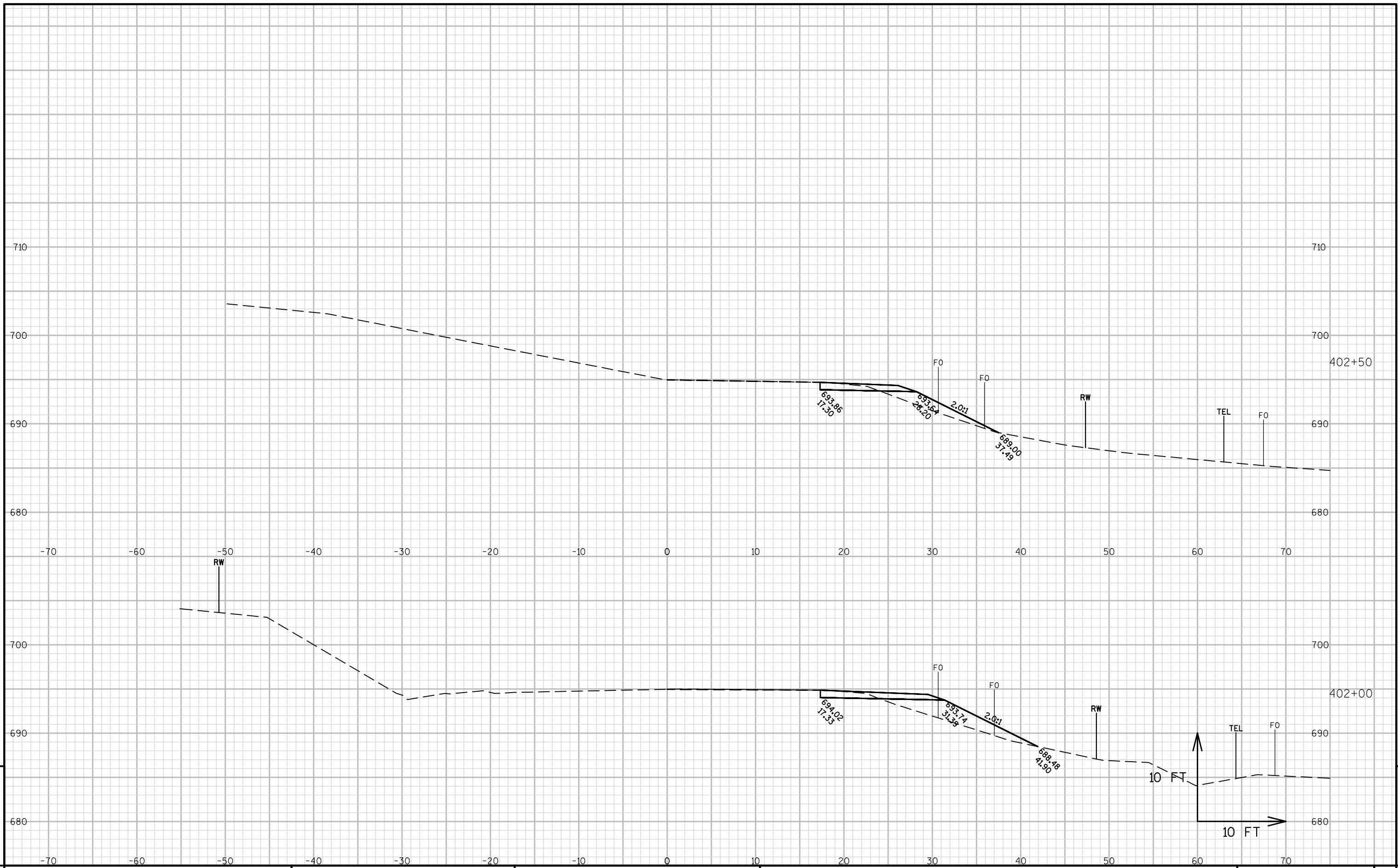
PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 401+23 SHEET E

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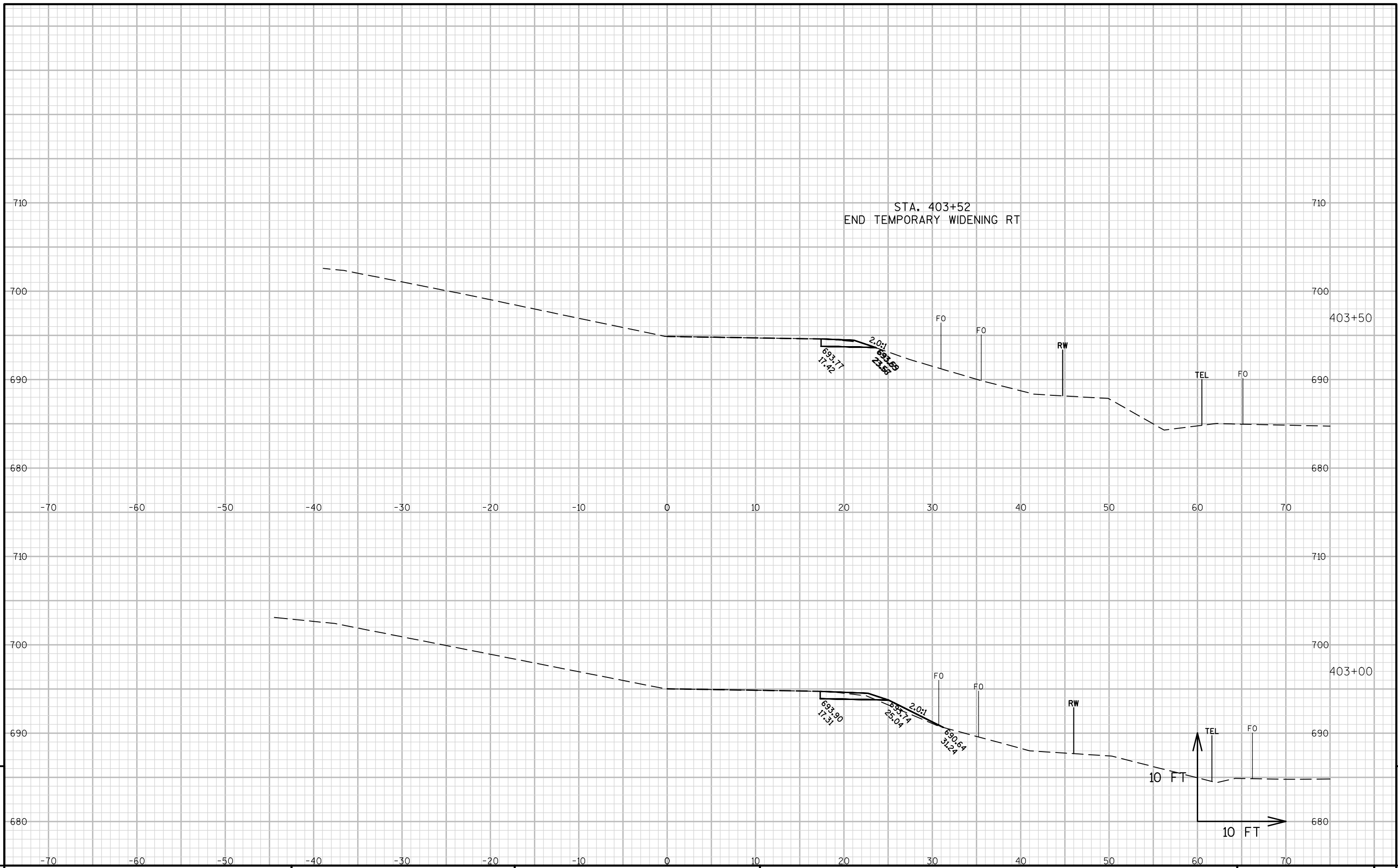
LAYOUT NAME - TMP WIDE 40123_XS-4



PROJECT NO: 8160-04-64 | HWY: STH 13 | COUNTY: BAYFIELD | CROSS SECTIONS: TEMPORARY WIDENING STA. 401+23 | SHEET | E



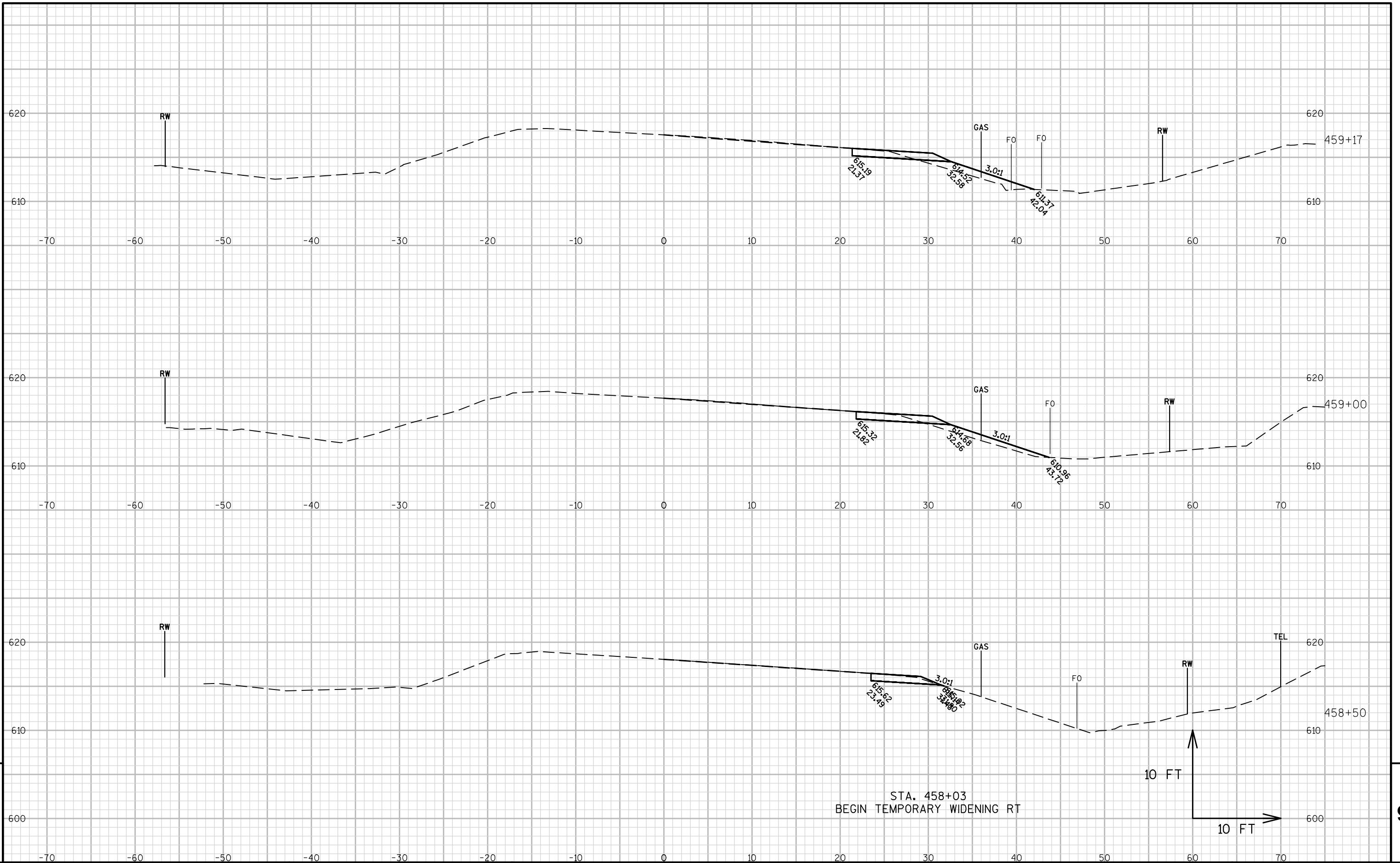
PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 401+23 SHEET E



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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 401+23 SHEET E



PROJECT NO: 8160-04-64

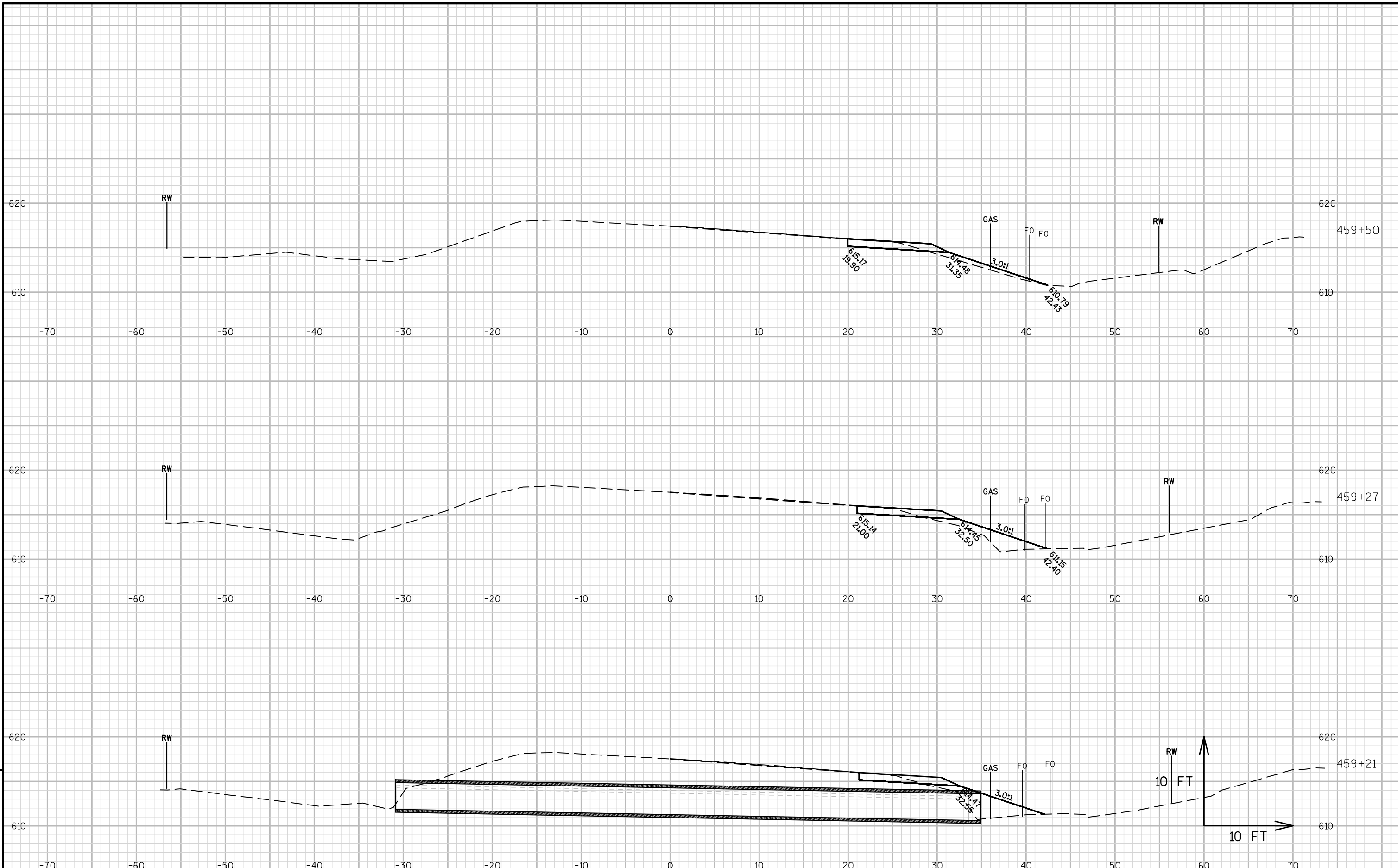
HWY: STH 13

COUNTY: BAYFIELD

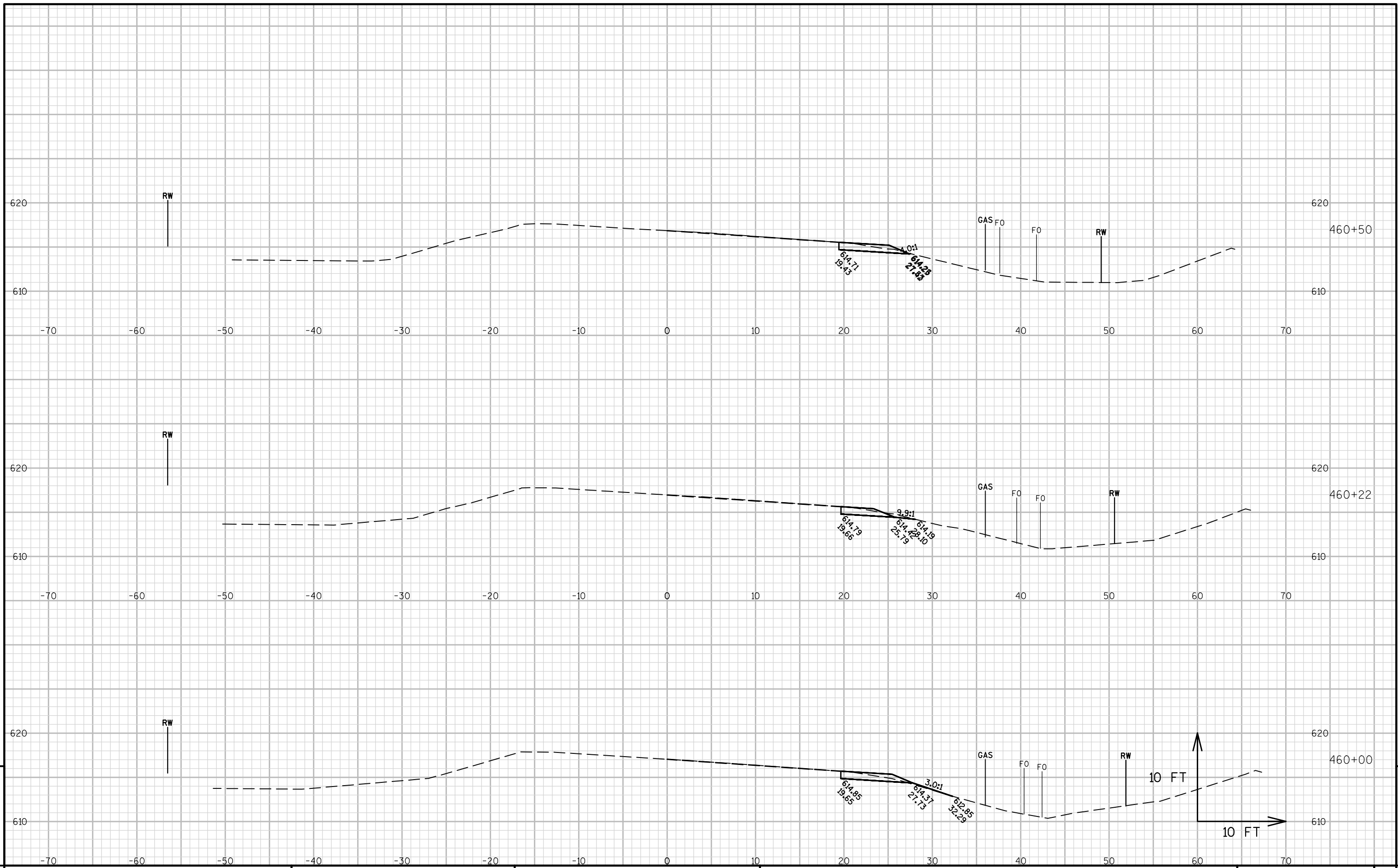
CROSS SECTIONS: TEMPORARY WIDENING STA. 459+21

SHEET

E



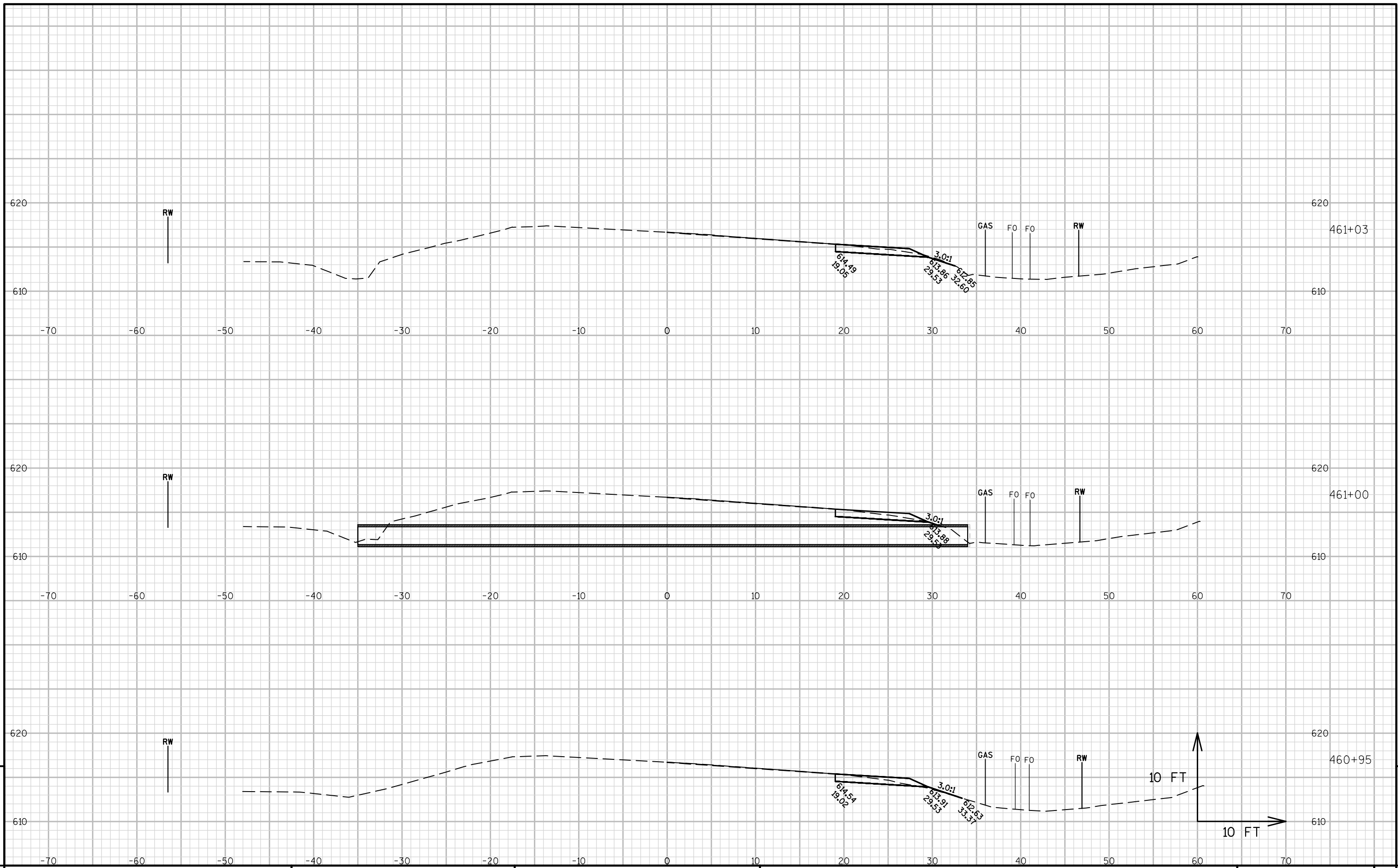
PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 459+21 SHEET E



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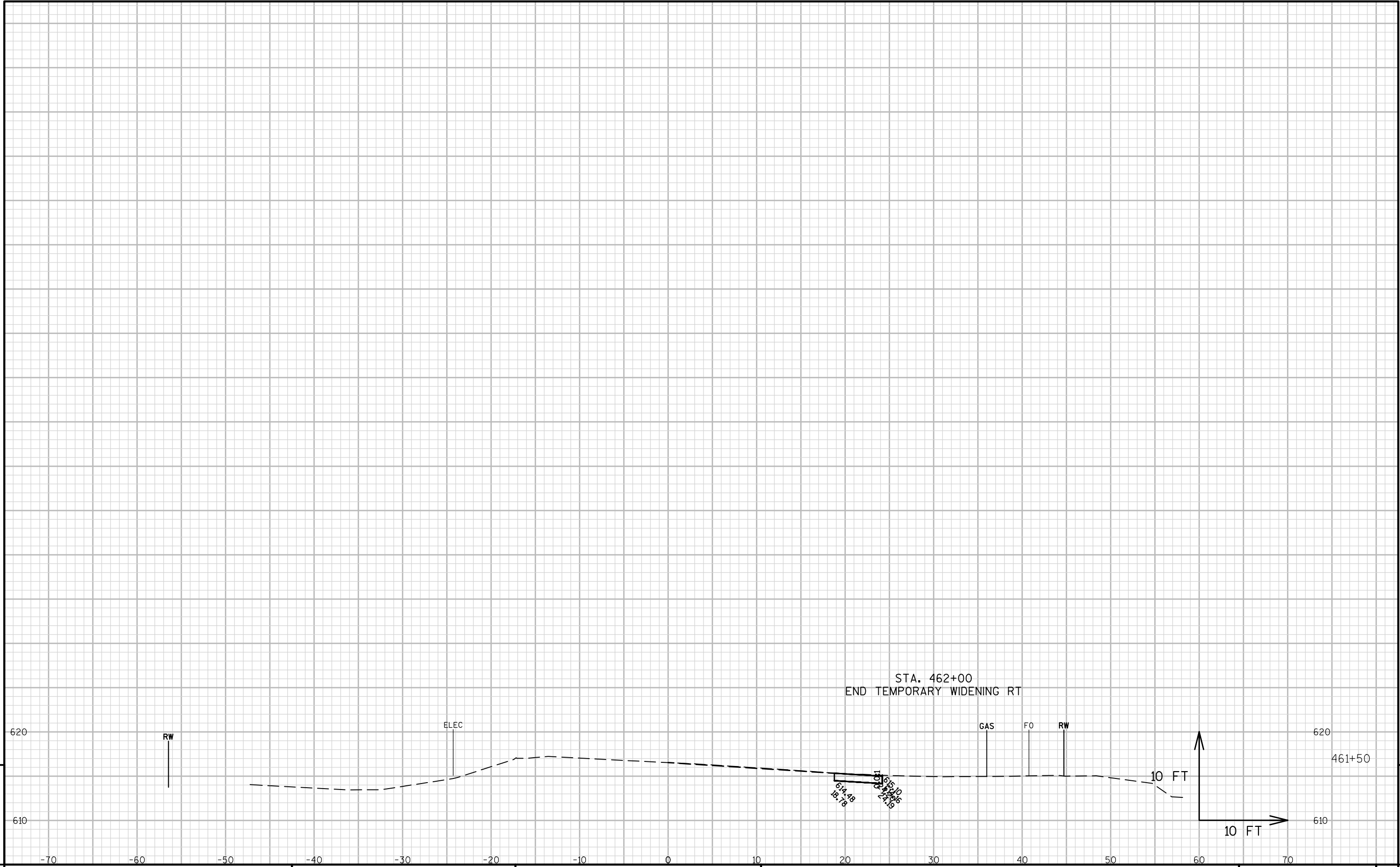
PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 459+21 SHEET E



PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 459+21 SHEET E

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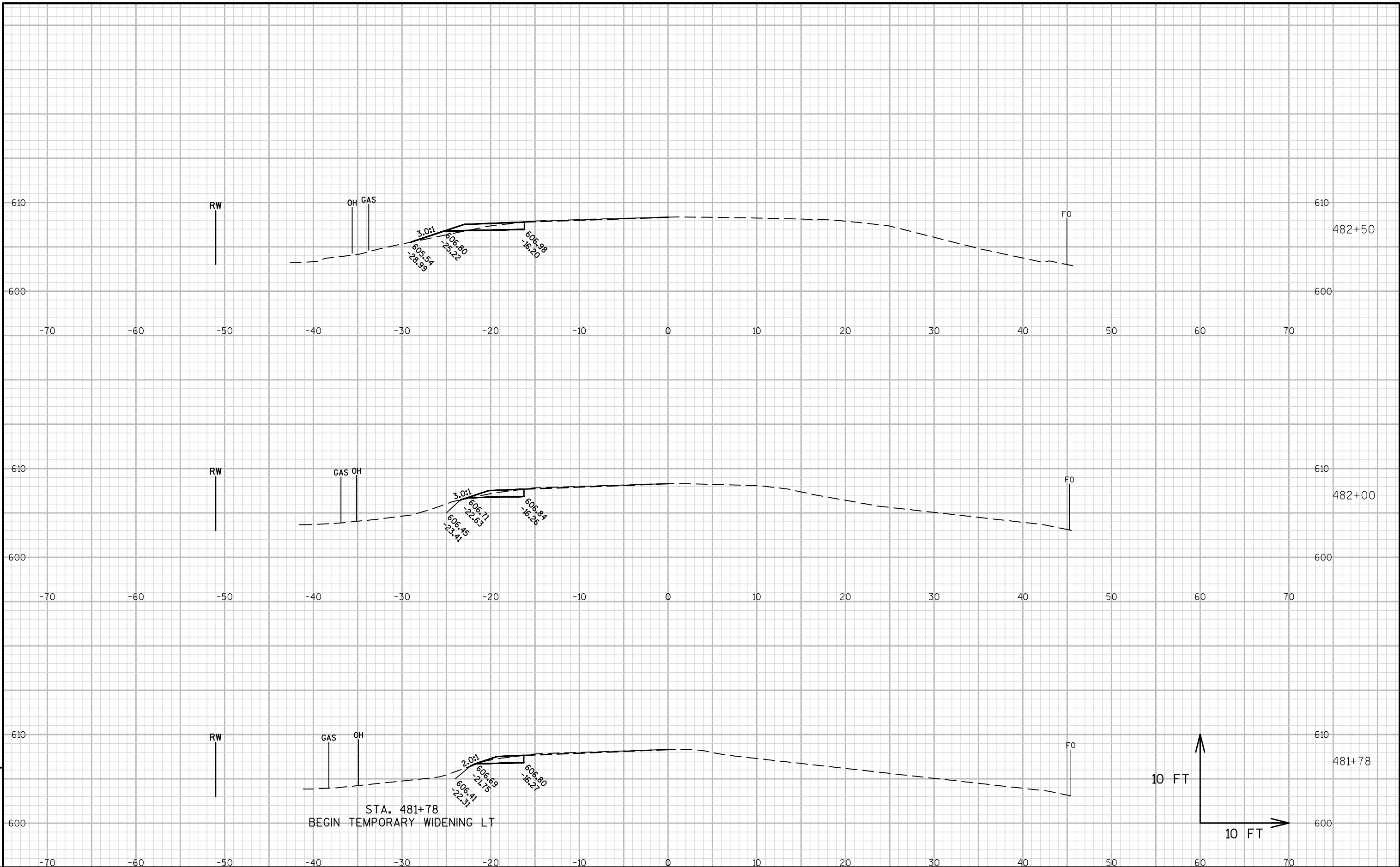
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PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: TEMPORARY WIDENING STA. 459+21	SHEET	E
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FILE NAME : \\NWESERVER\DRAWINGS\NWBE_PROJECTS\DESIGN\1229 STH13 SUPERIOR AVE - 7TH ST\C3D\SHEETSPLAN\090206_XS_TEMP WIDENING 45921.DWG DATE : 7/25/2016 11:55 AM PLOT BY : USER PLOT NAME : PLOT SCALE : 1 IN:10 FT WISDOT/CADD SHEET 49

LAYOUT NAME - TMP WIDE 45921_XS-5



PROJECT NO: 8160-04-64

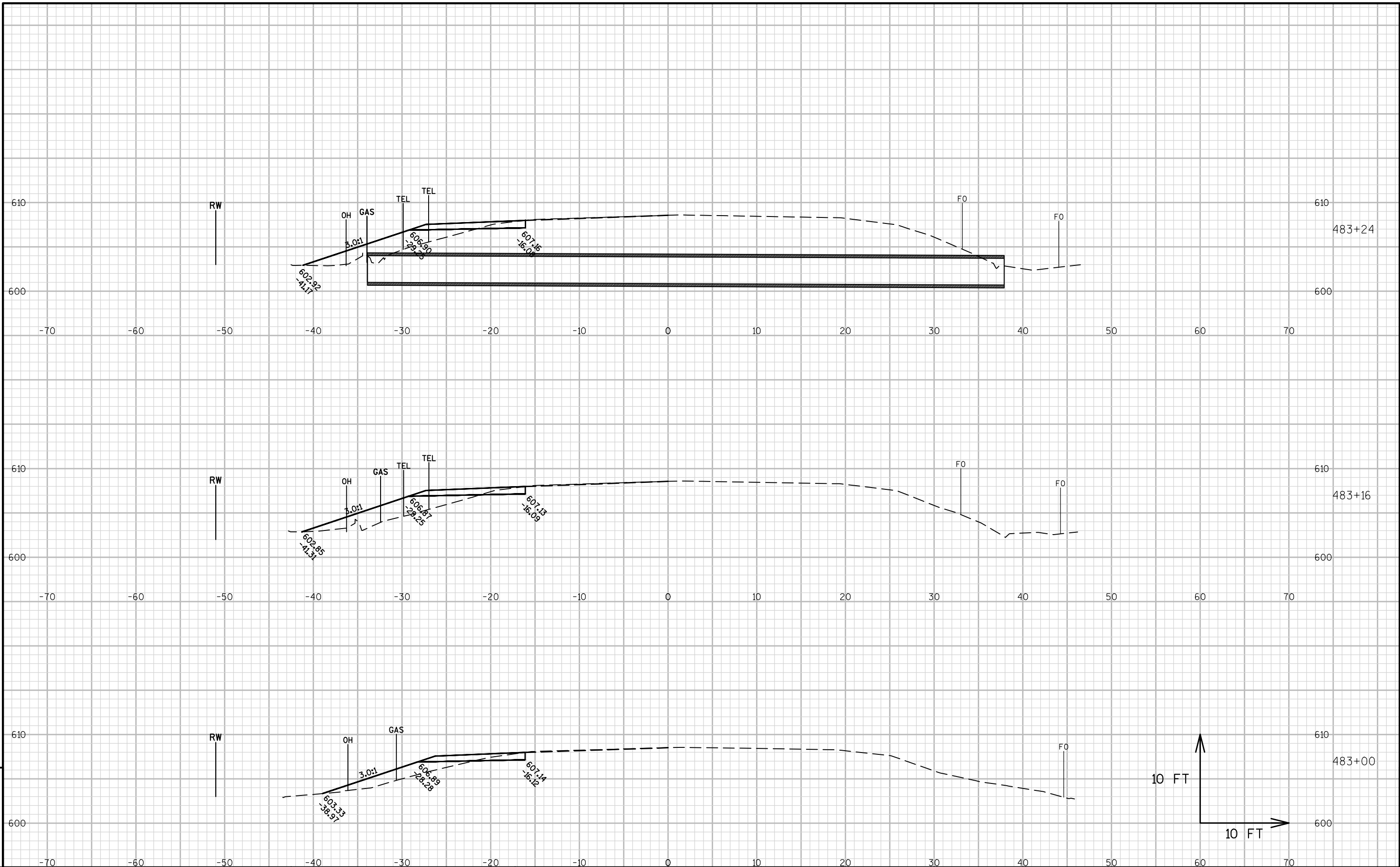
HWY: STH 13

COUNTY: BAYFIELD

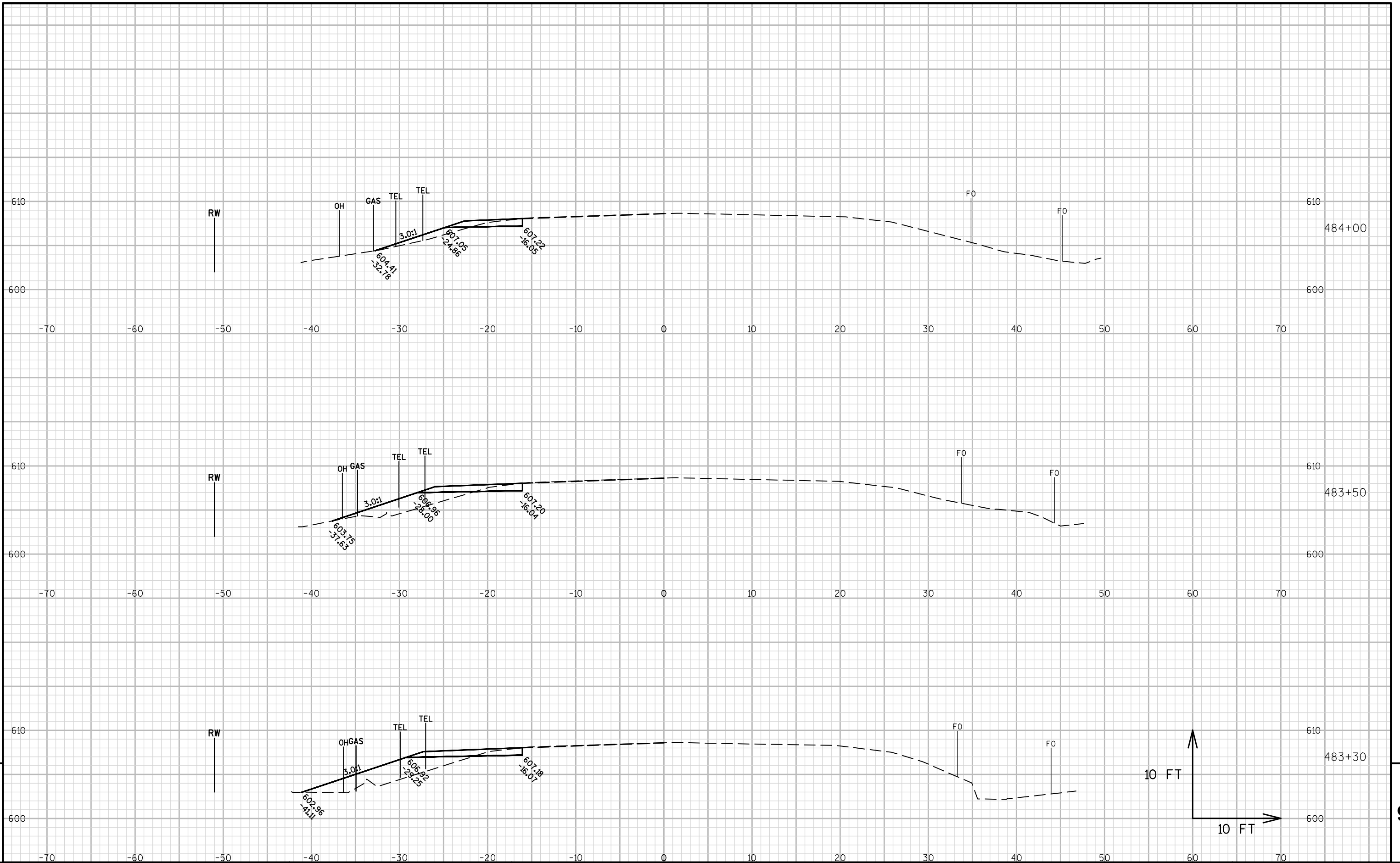
CROSS SECTIONS: TEMPORARY WIDENING STA. 483+23

SHEET

E



PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMOPARY WIDENING STA. 483+23 SHEET E



PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: TEMPORARY WIDENING STA. 483+23 SHEET E

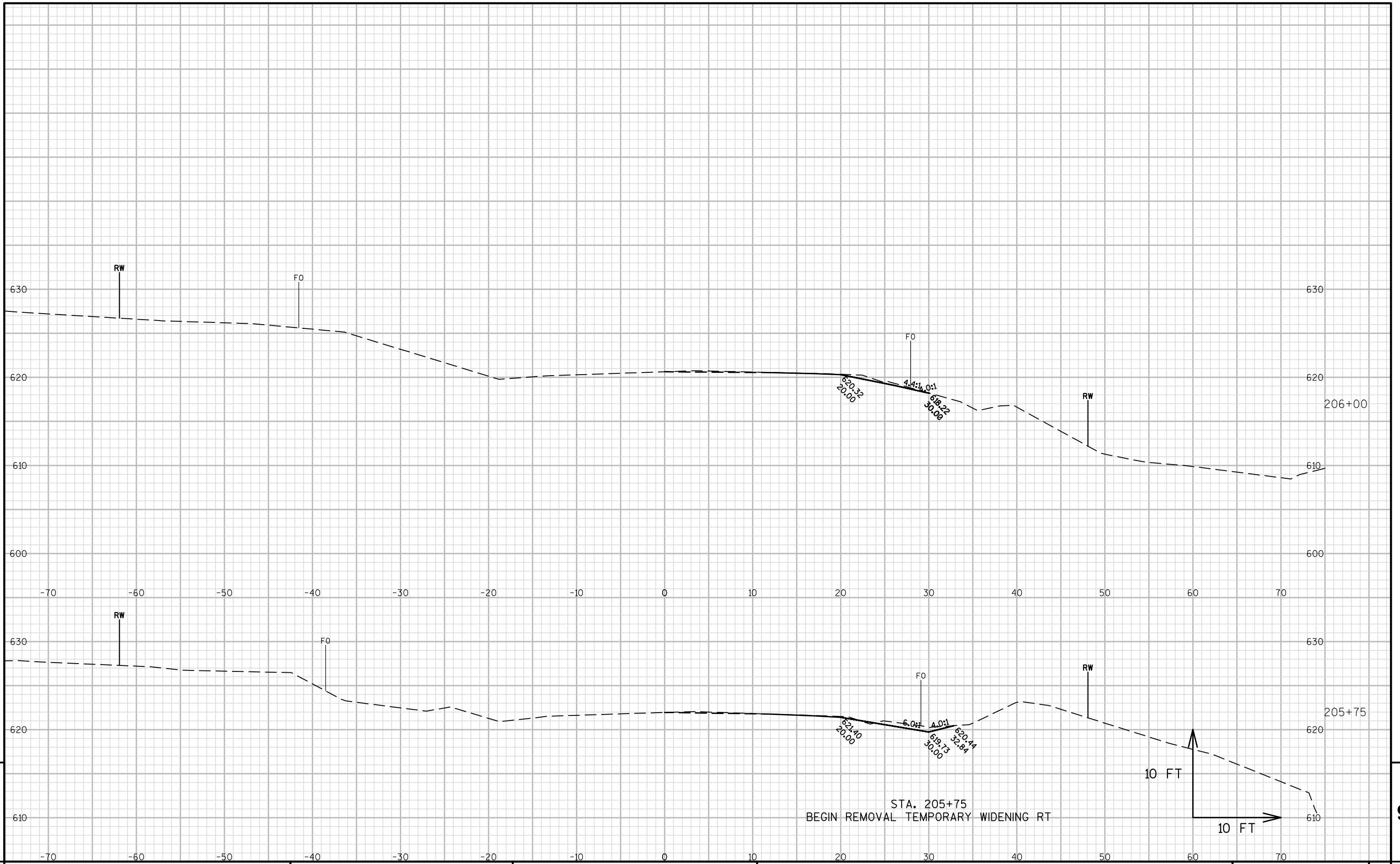
STA. 484+68
END TEMPORARY WIDENING LT



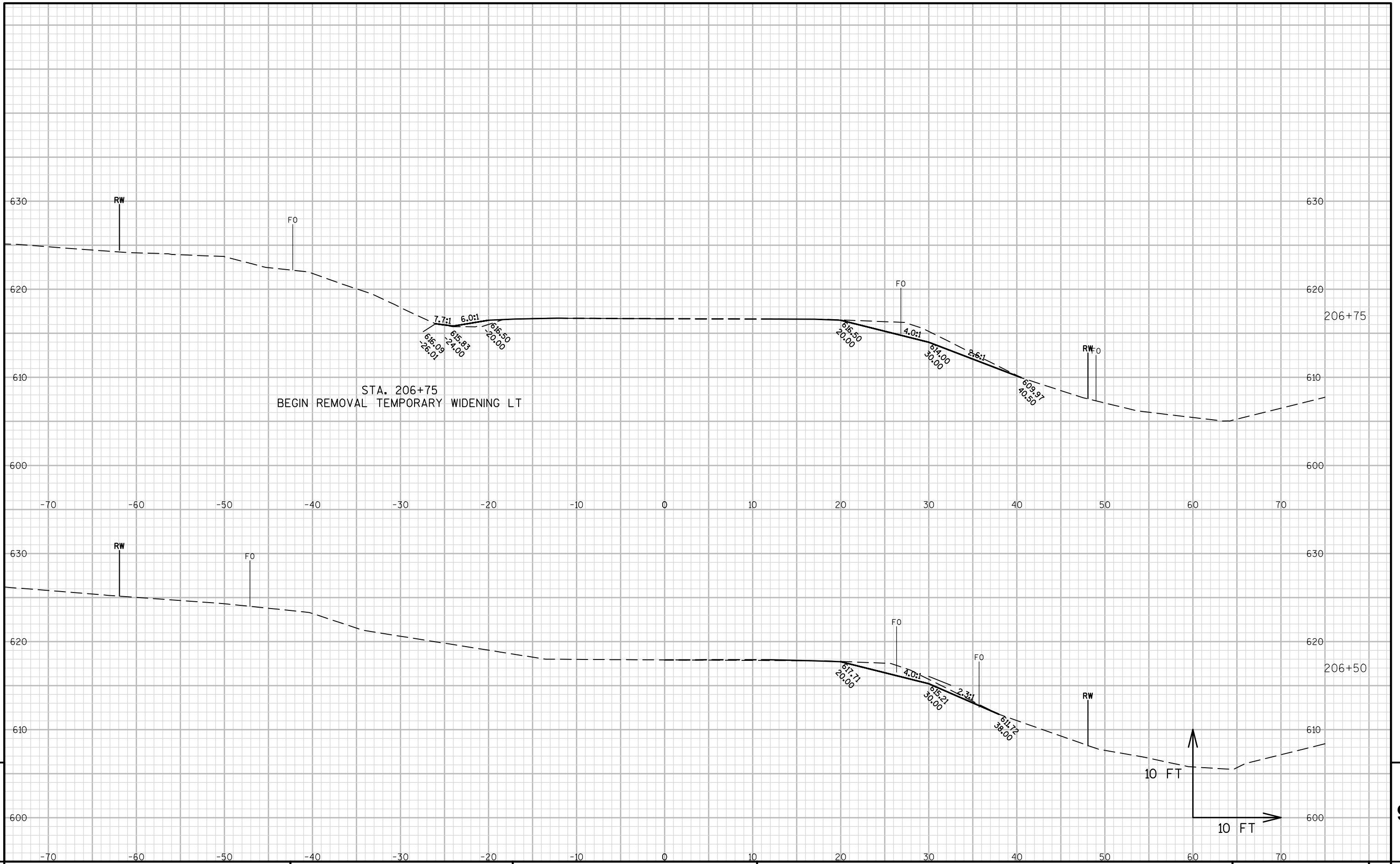
PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: TEMPORARY WIDENING STA. 483+23	SHEET	E
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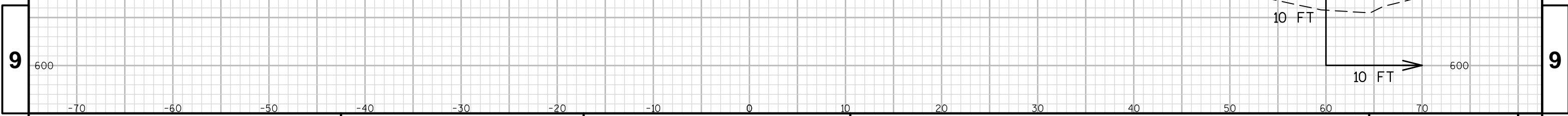
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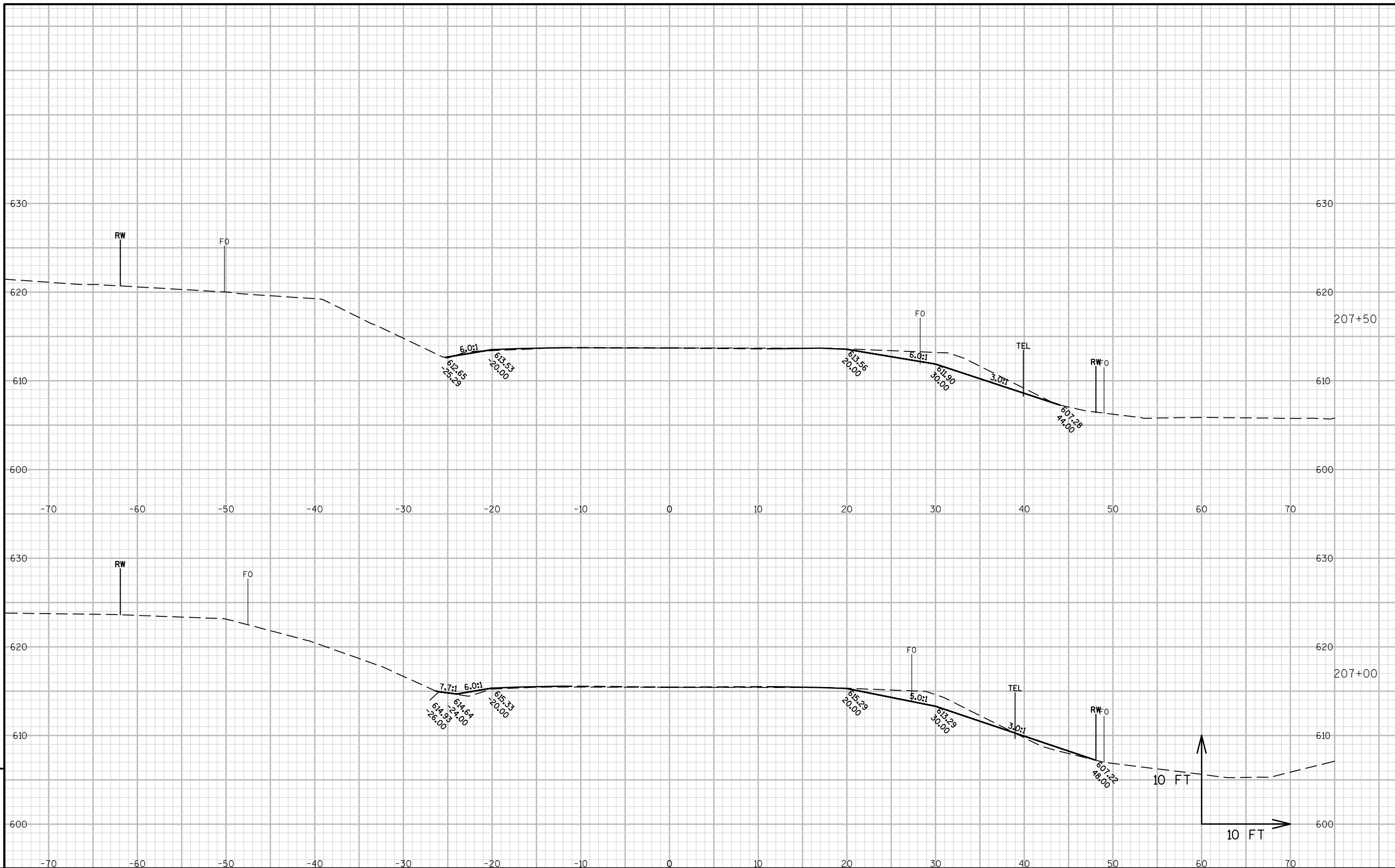


PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 208+34 SHEET E

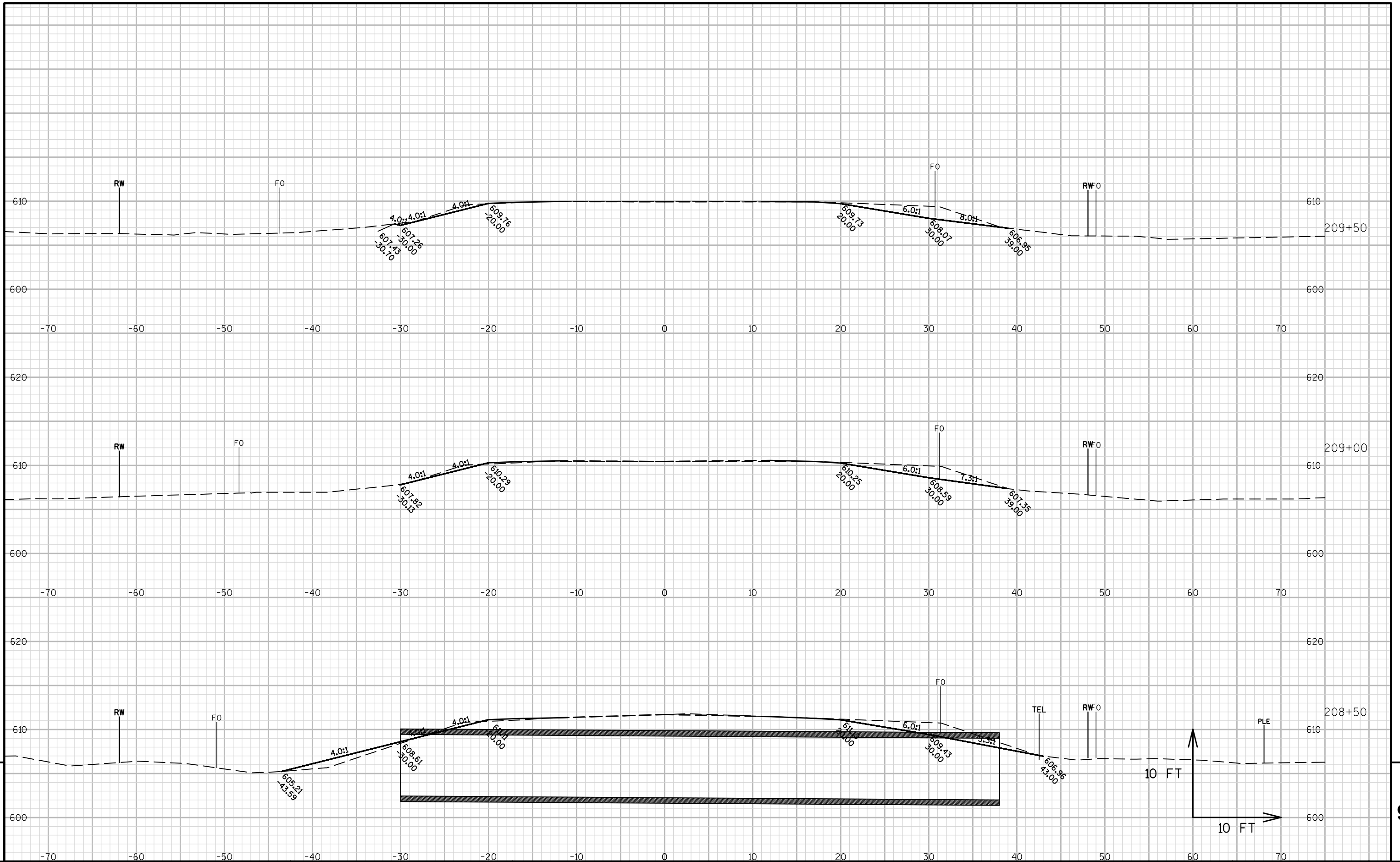


PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 208+34 SHEET E

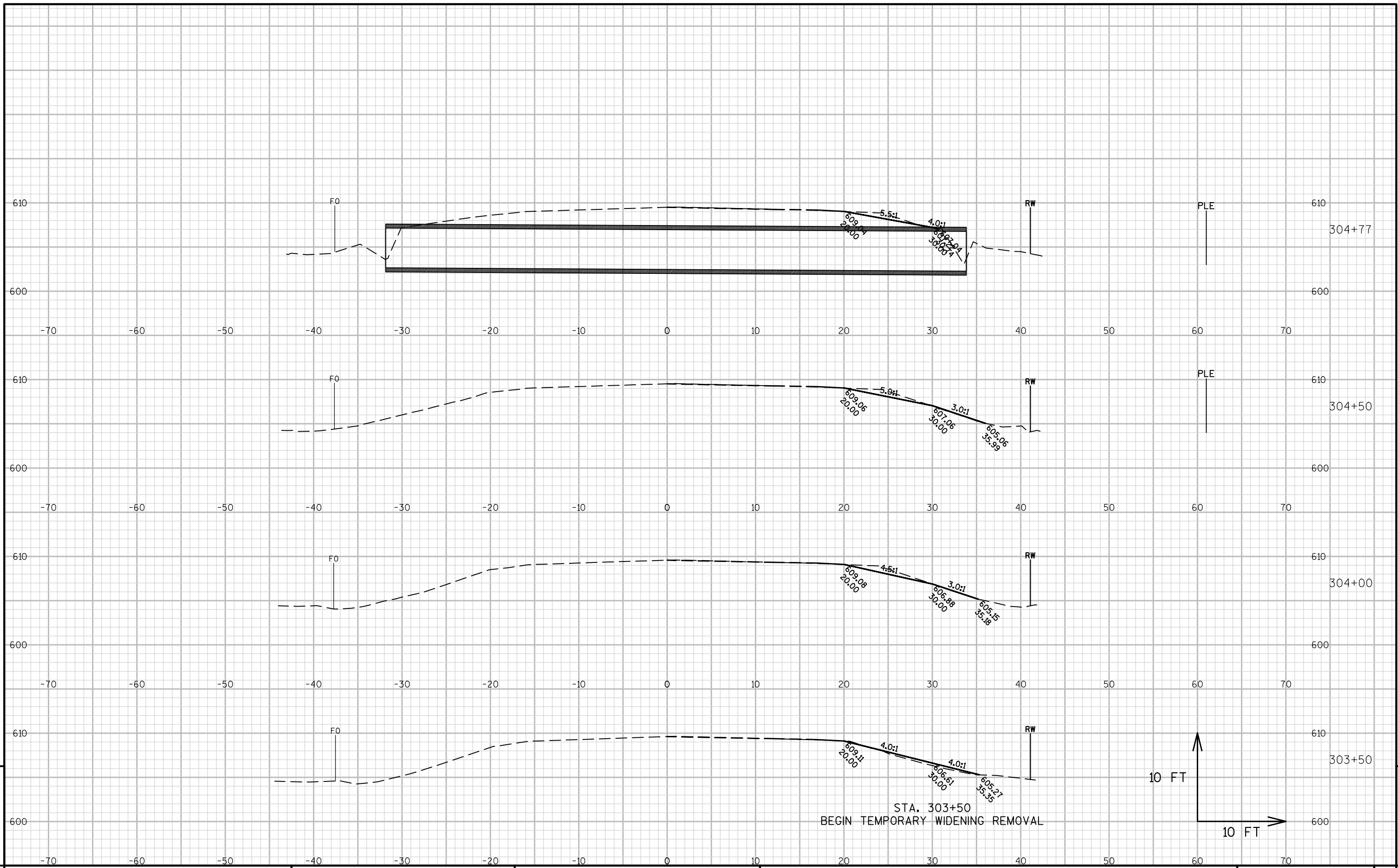




PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 208+34 SHEET E

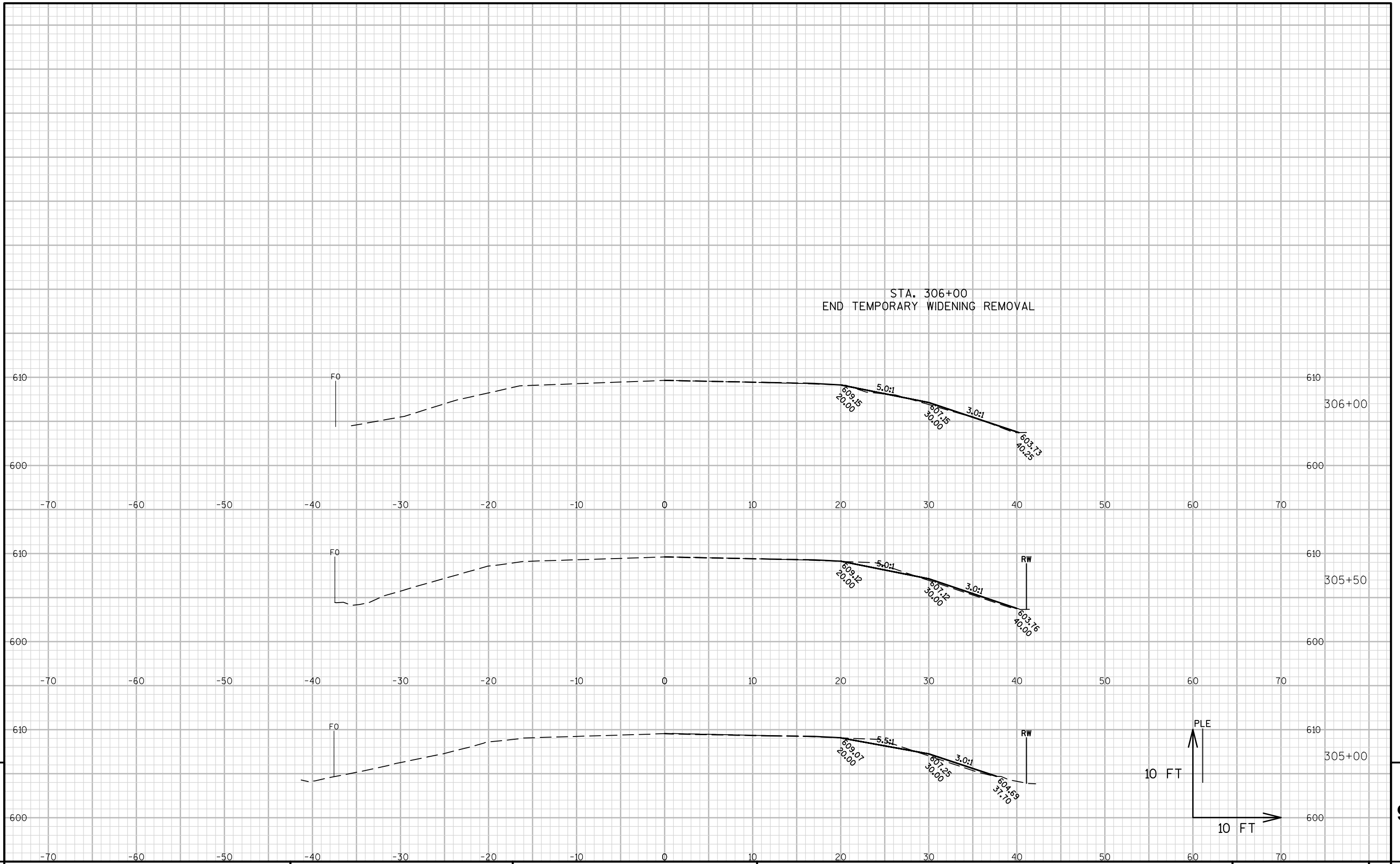


PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 208+34 SHEET E

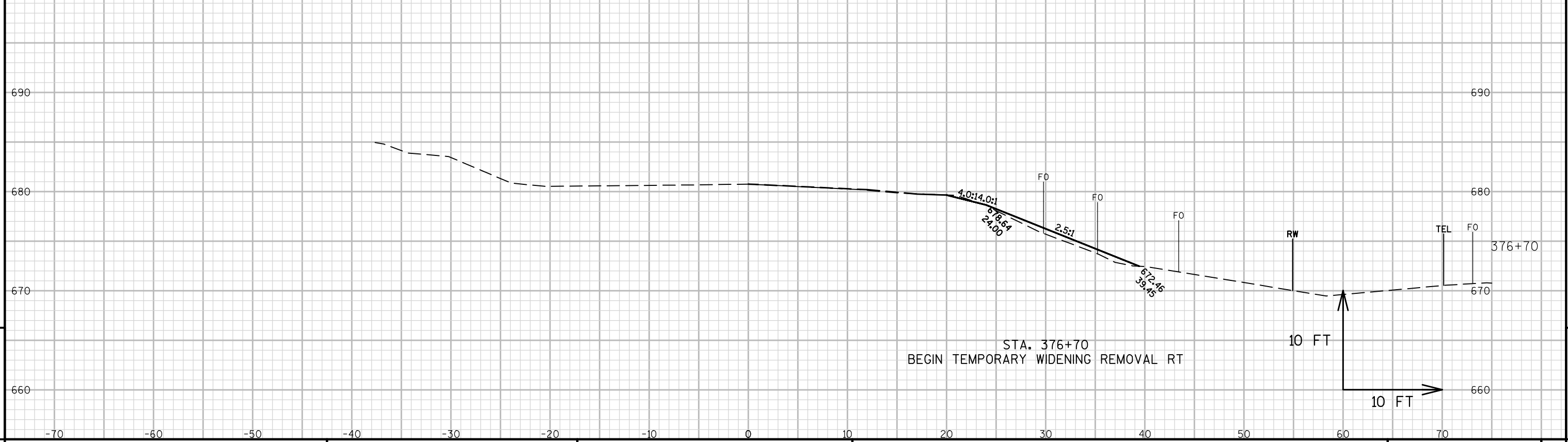


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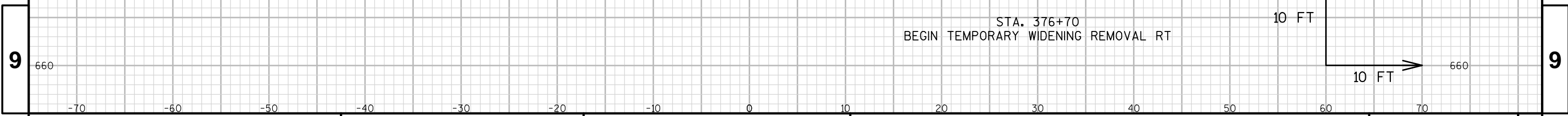
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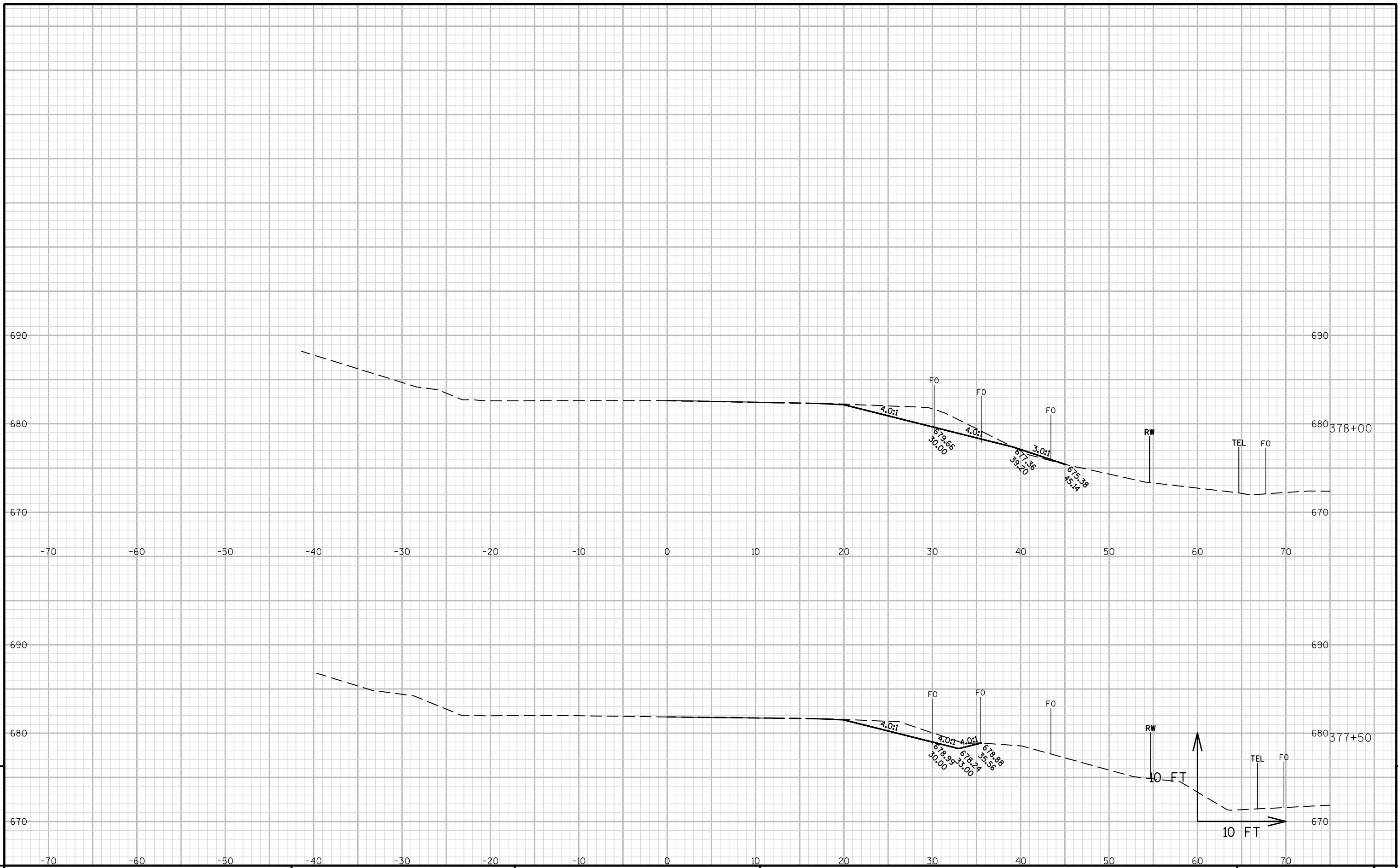


PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 304+76 SHEET E



PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 379+40 SHEET





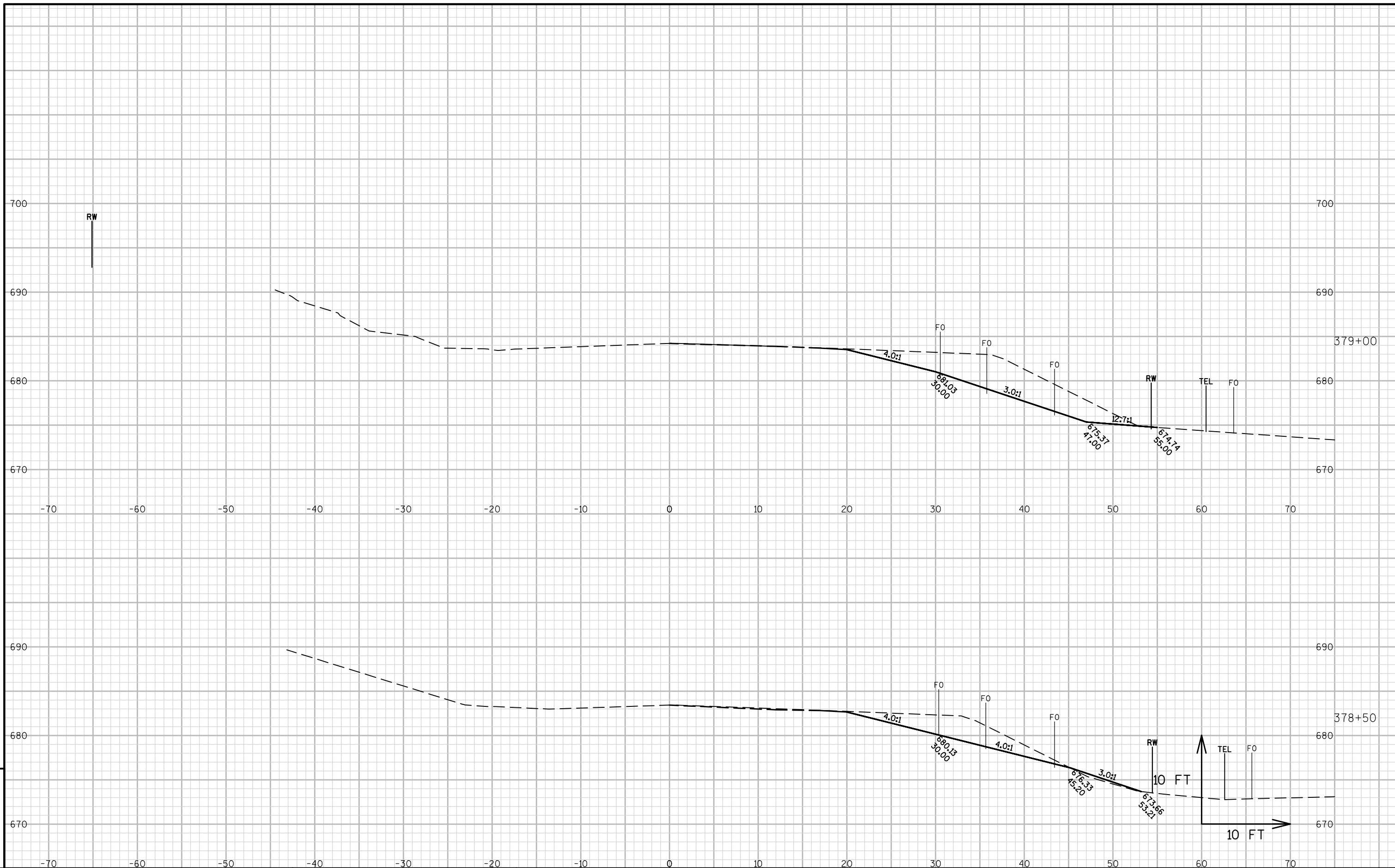
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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 379+40 SHEET E

FILE NAME : \\NWBESEVER\DRAWINGS\NWBE_PROJECTS\DESIGN\1229 STH13 SUPERIOR AVE - 7TH ST\C3D\SHEETSPLAN\0902010_XS_REMOVE_TEMP_WIDENING\NO374.DWG PLOT BY : USER PLOT NAME : PLOT SCALE : 1 IN:10 FT WISDOT/CADD SHEET 49

LAYOUT NAME - REMOVE TMP WIDE_XS-2



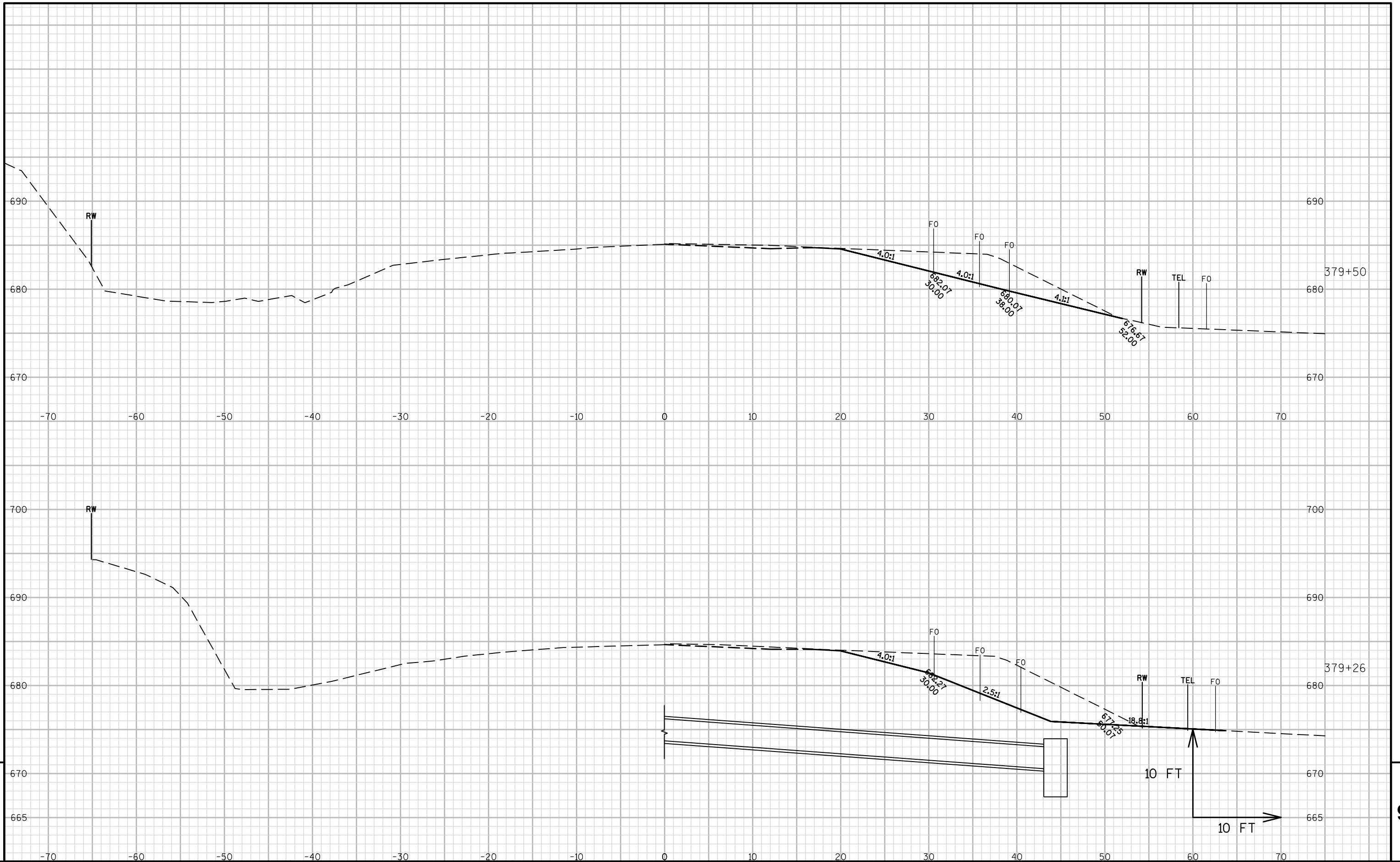
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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 379+40 SHEET E

FILE NAME : \\NWBESEVER\DRAWINGS\NWBE_PROJECTS\DESIGN\1229 STH13 SUPERIOR AVE - 7TH ST\C3D\SHEETS\PLAN\0902010_XS_REMOVE_TEMP_WIDENING\NO37940.DWG / 25/2016 12:54 PM PLOT BY : USER PLOT NAME : PLOT SCALE : 1 IN:10 FT WISDOT/CADD SHEET 49

LAYOUT NAME - REMOVE TMP WIDE_XS-3



PROJECT NO: 8160-04-64

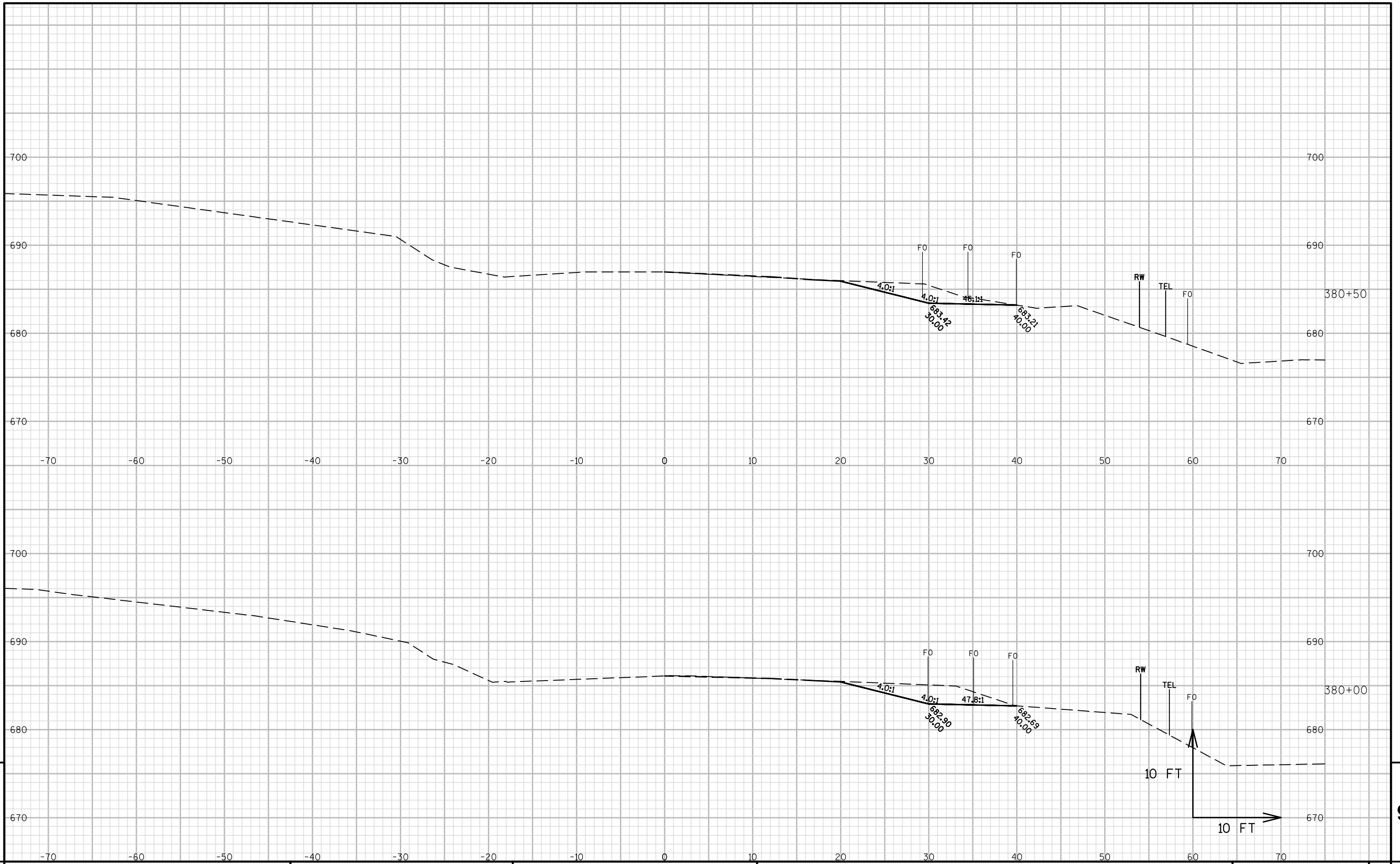
HWY: STH 13

COUNTY: BAYFIELD

CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 379+40

SHEET

E



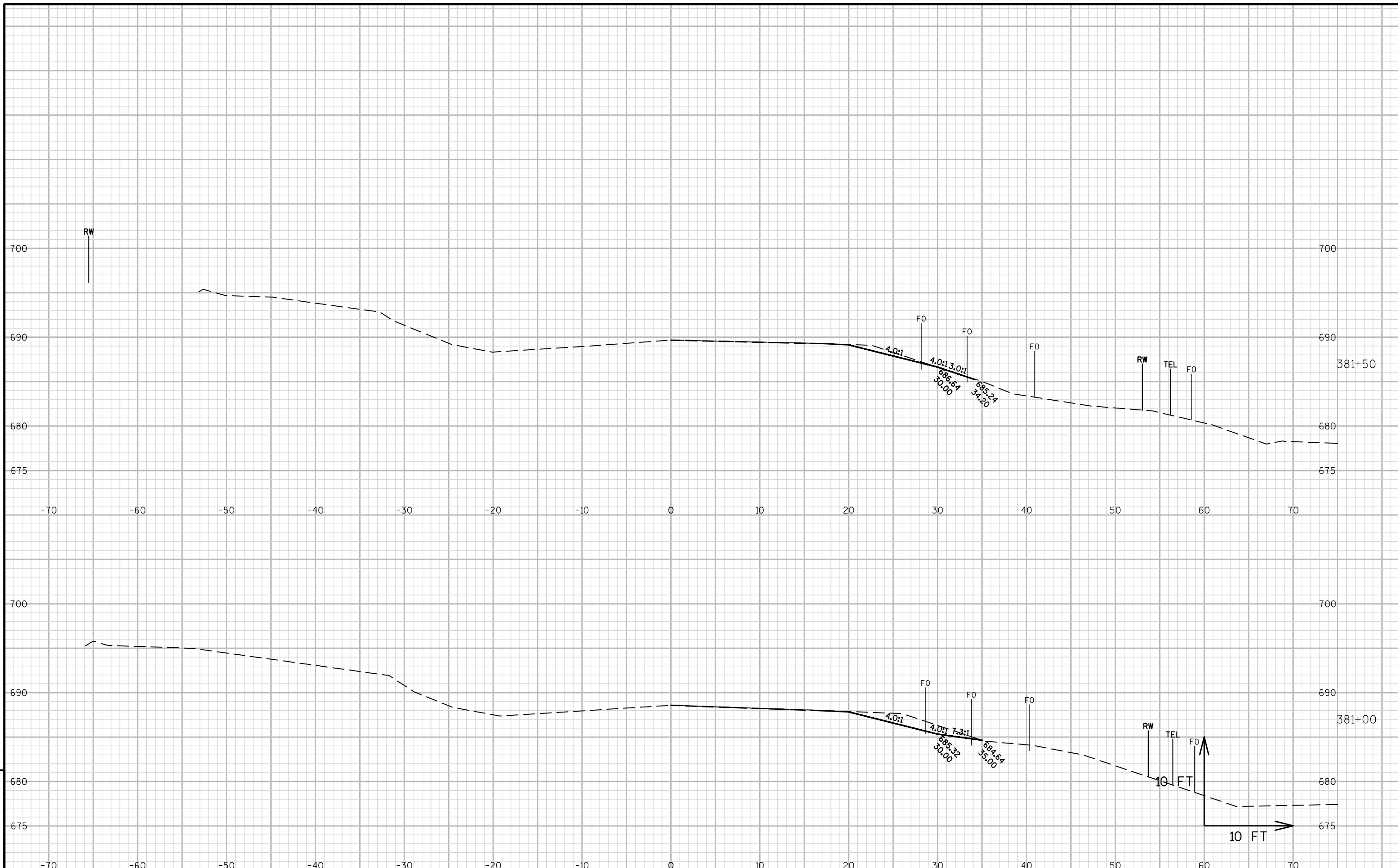
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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 379+40 SHEET E

FILE NAME : \\NWESERVER\DRAWINGS\NWBE_PROJECTS\DESIGN\1229 STH13 SUPERIOR AVE - 7TH ST\C3D\SHEETSPLAN\0902010_XS_REMOVE_TEMP_WIDENING\NO37940.DWG PLOT DATE: 7/25/2016 12:54 PM PLOT BY : USER PLOT NAME : PLOT SCALE : 1 IN:10 FT WISDOT/CADD SHEET 49

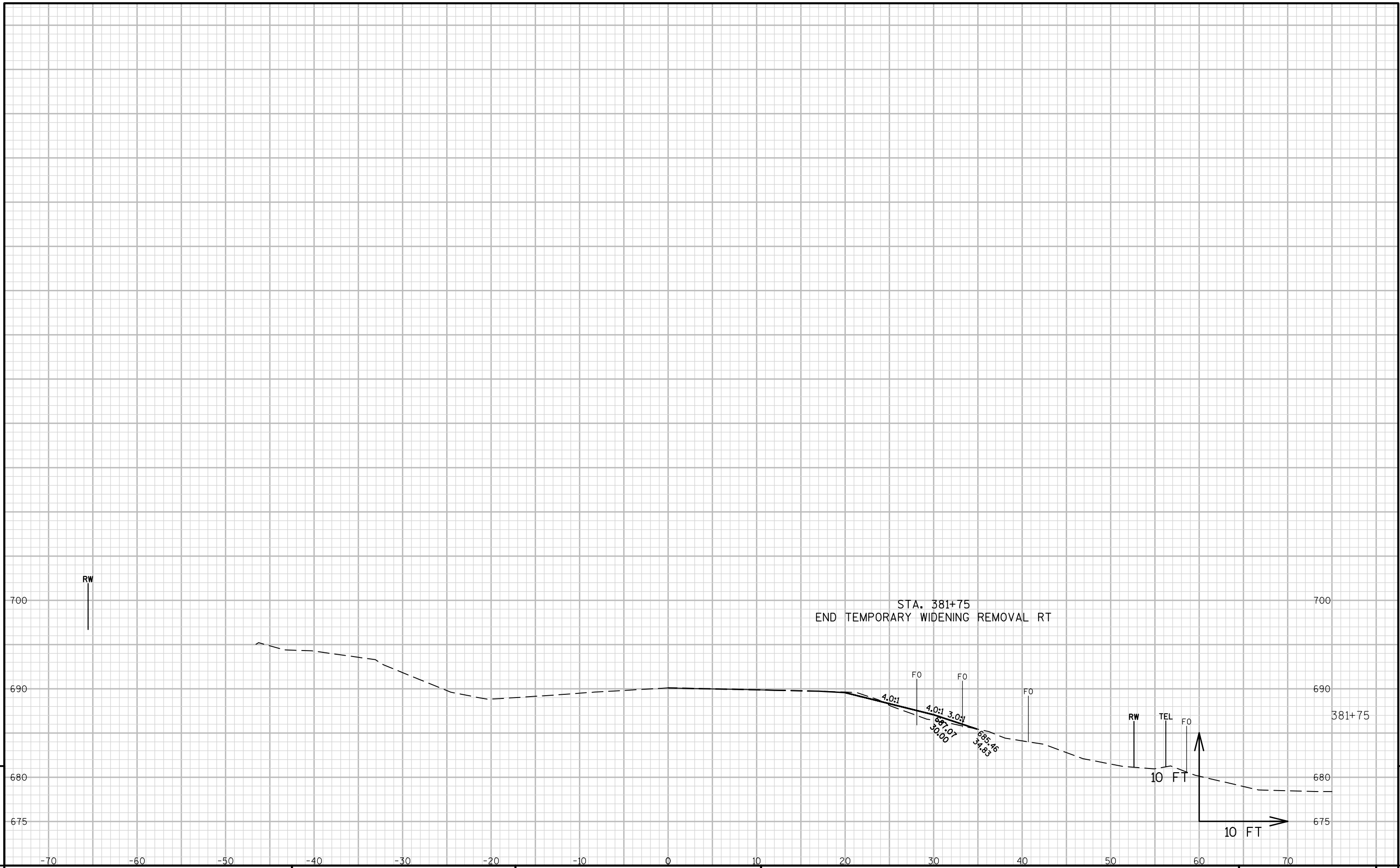
LAYOUT NAME - REMOVE TMP WIDE_XS-5



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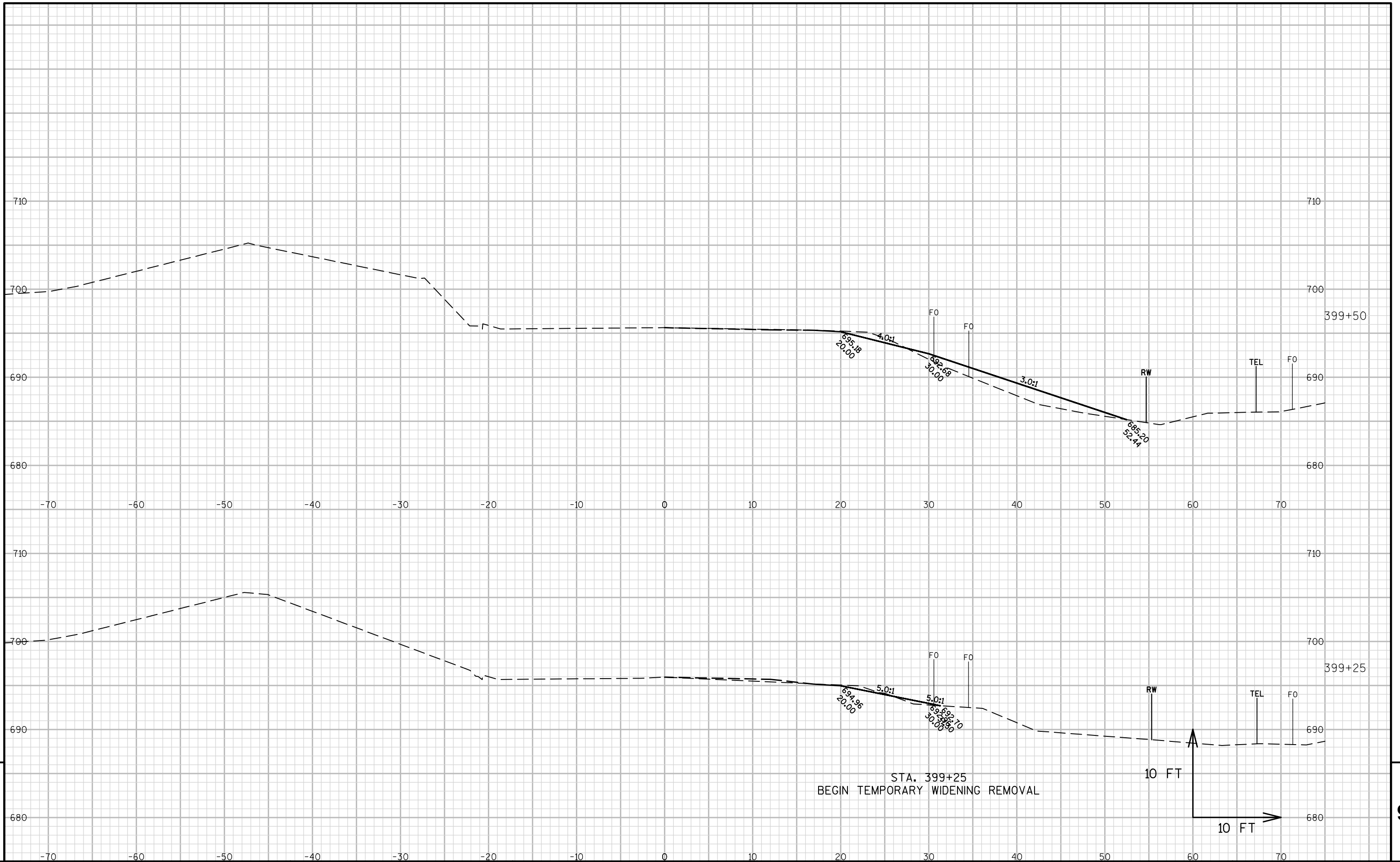
PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 379+40 SHEET E



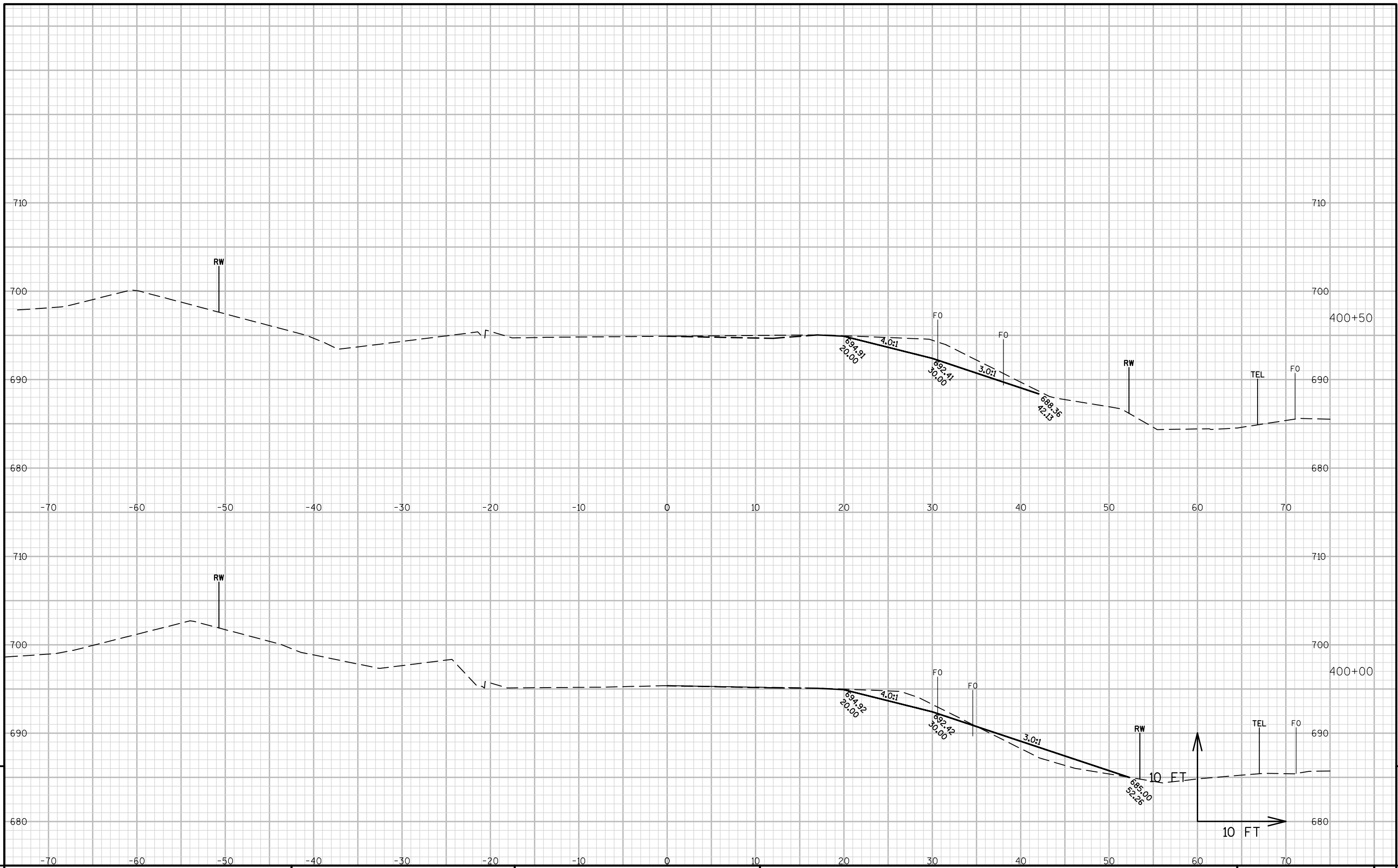
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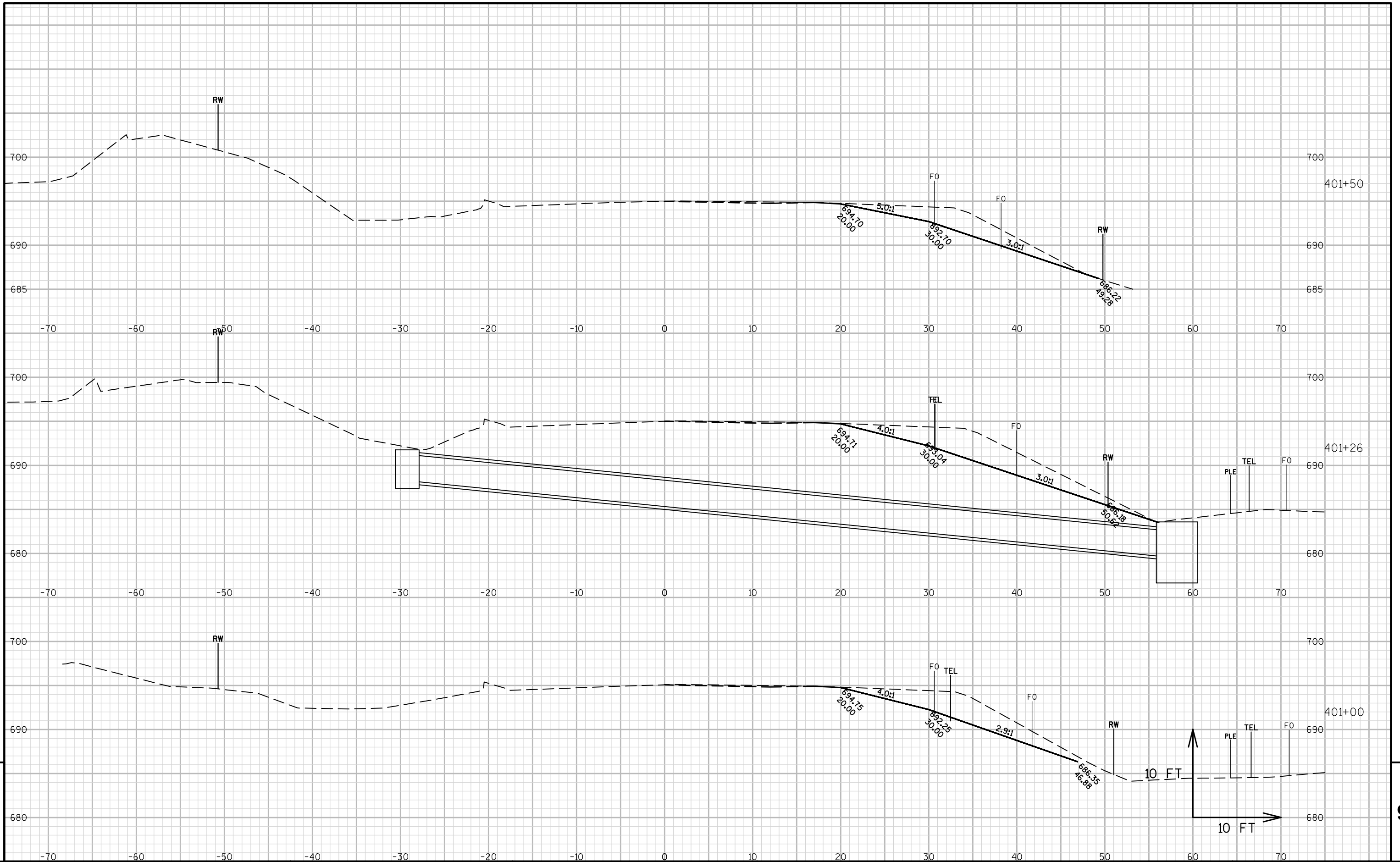
PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 379+40	SHEET	E
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PROJECT NO: 8160-04-64 | HWY: STH 13 | COUNTY: BAYFIELD | CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 401+23 | SHEET | E



PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 401+23 SHEET E



PROJECT NO: 8160-04-64

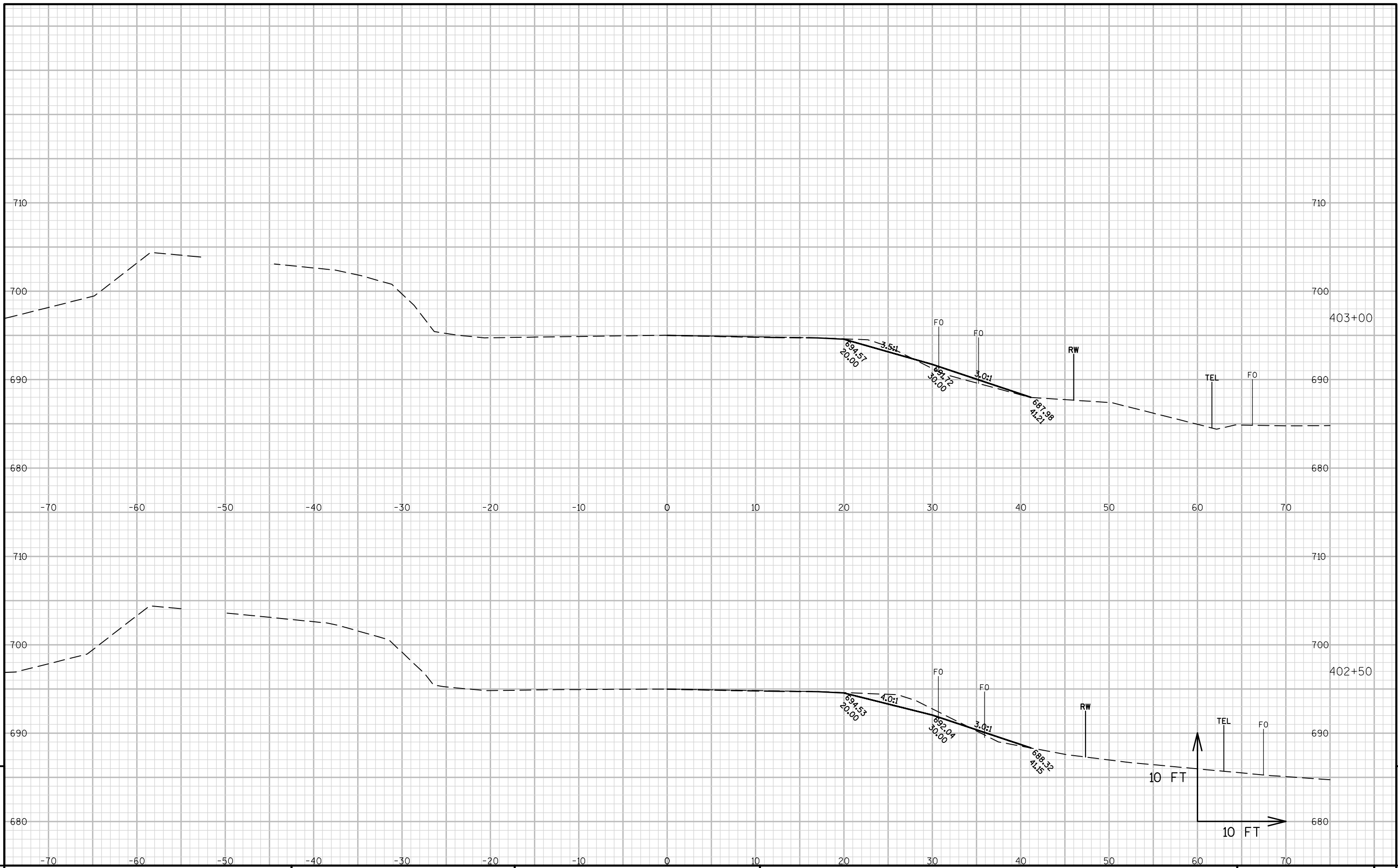
HWY: STH 13

COUNTY: BAYFIELD

CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 401+23

SHEET

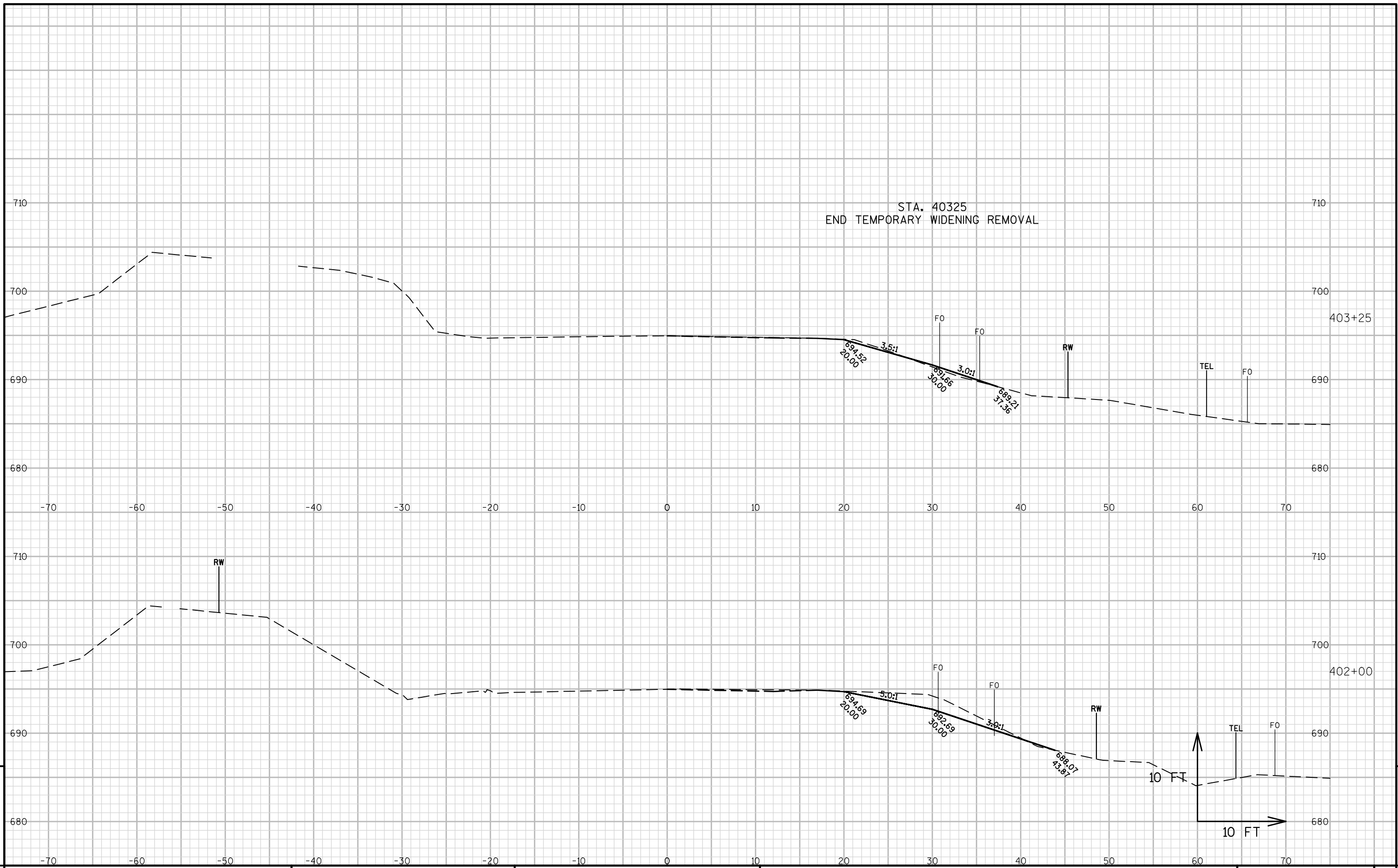
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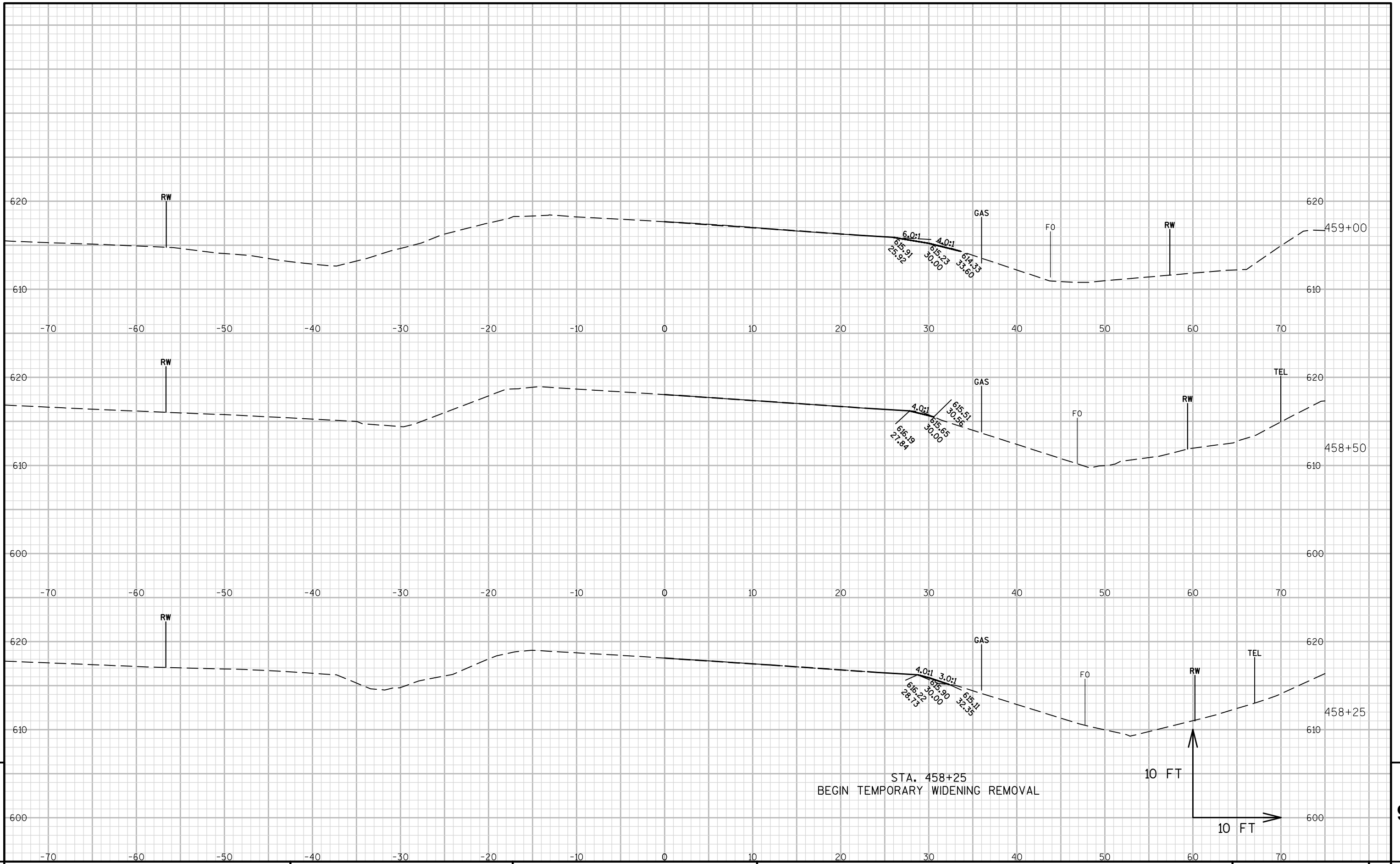
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PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 401+23	SHEET	E
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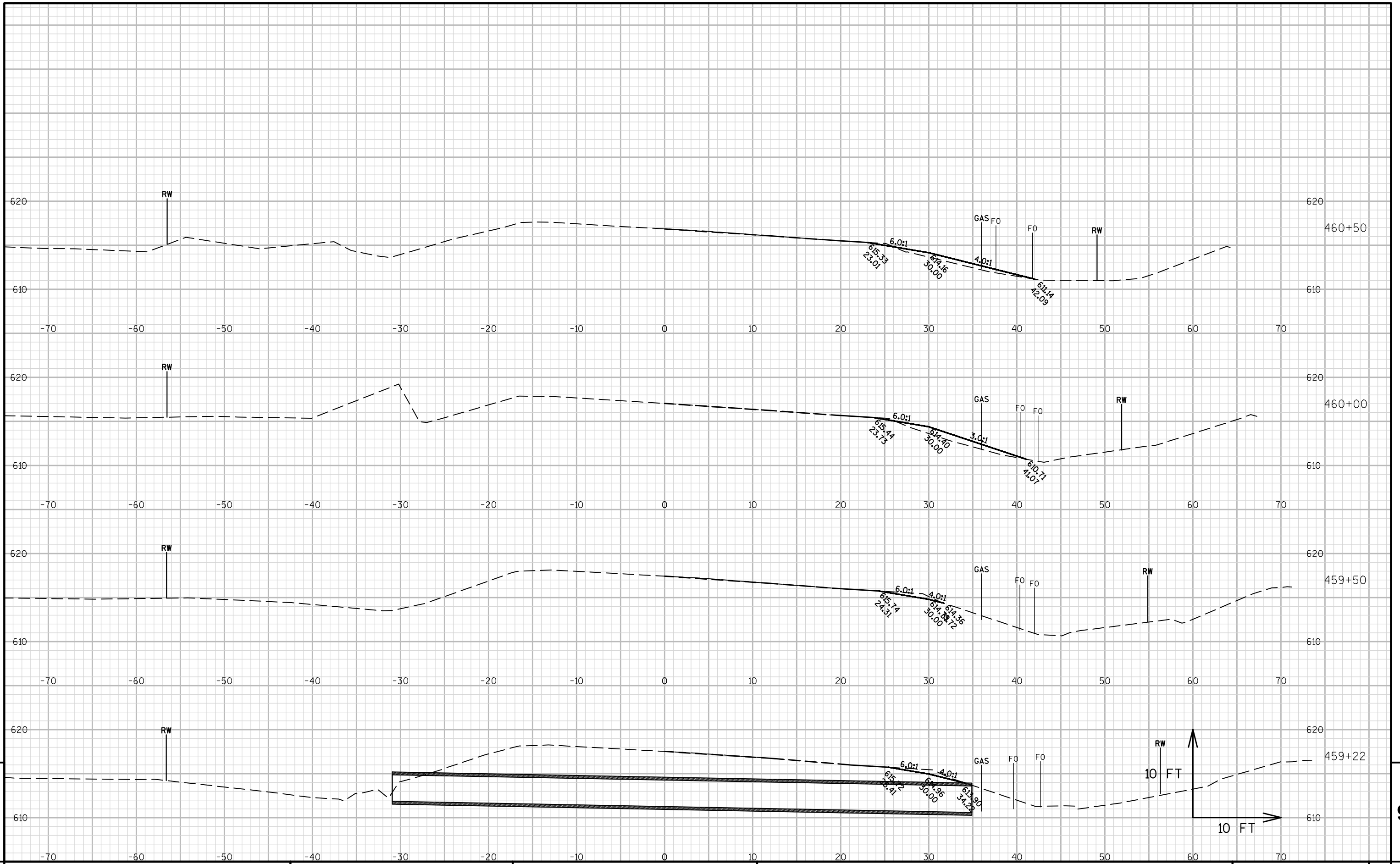
PROJECT NO: 8160-04-64 | HWY: STH 13 | COUNTY: BAYFIELD | CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 401+23 | SHEET | E



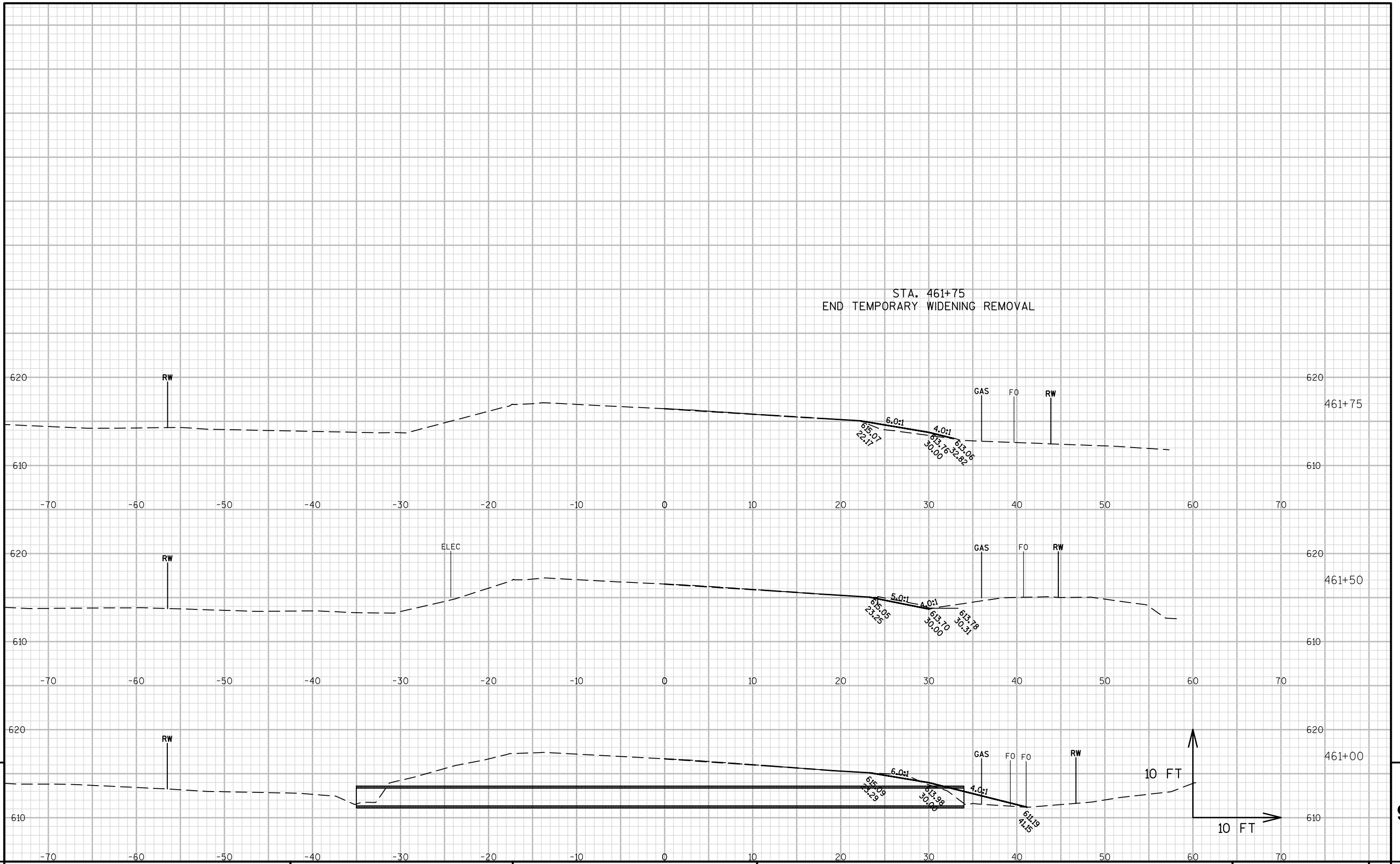
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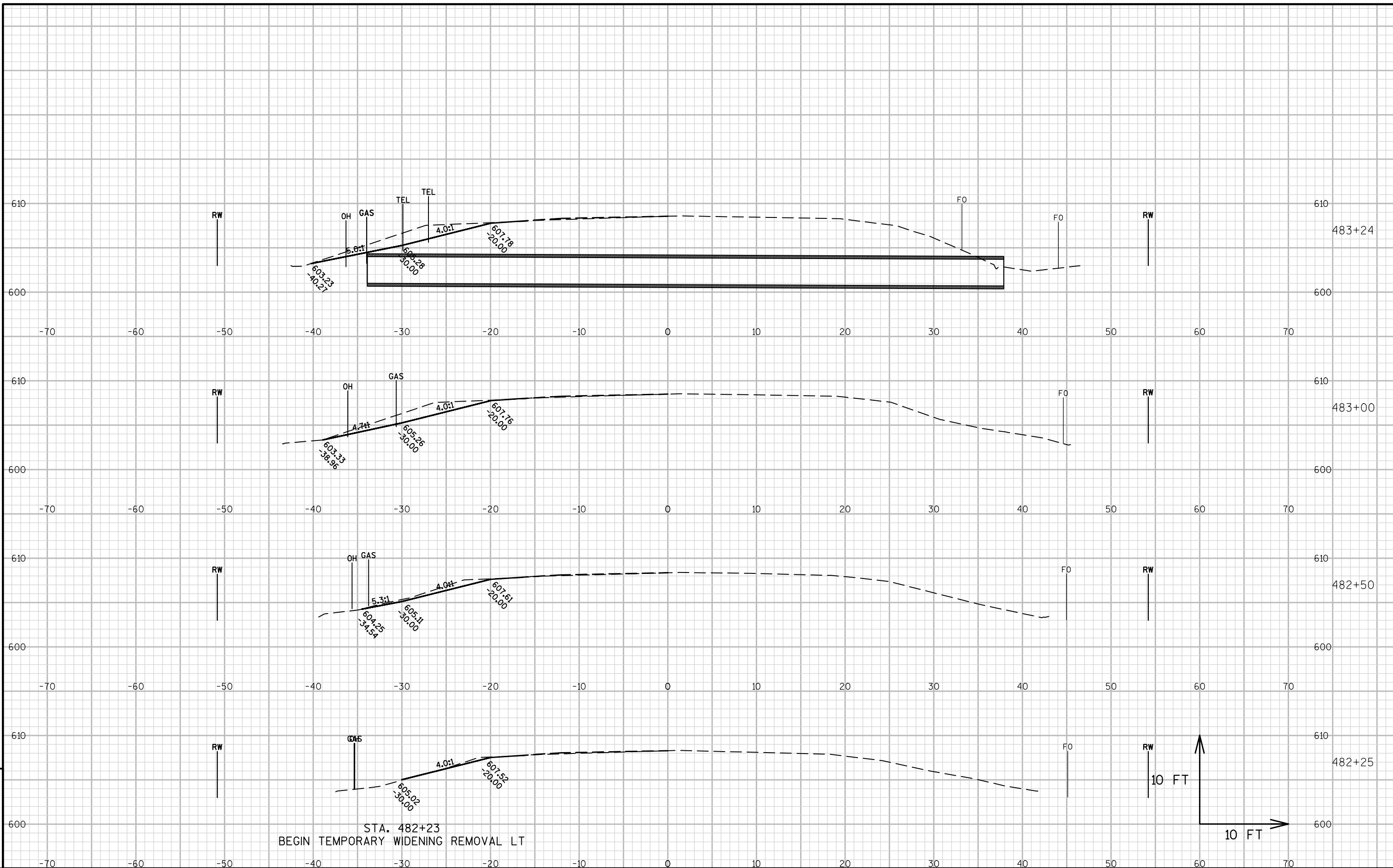
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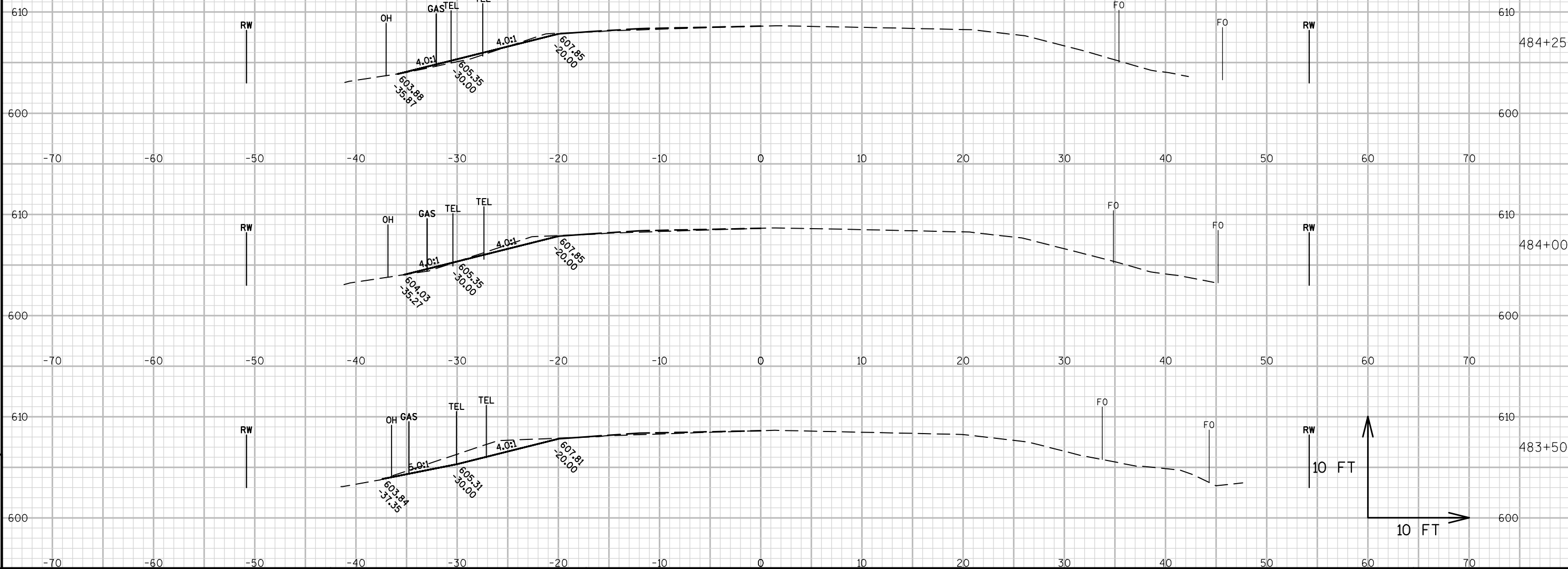
PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 459+21 SHEET E



STA. 461+75
 END TEMPORARY WIDENING REMOVAL



STA. 484+30
END TEMPORARY WIDENING REMOVAL LT



PROJECT NO: 8160-04-64

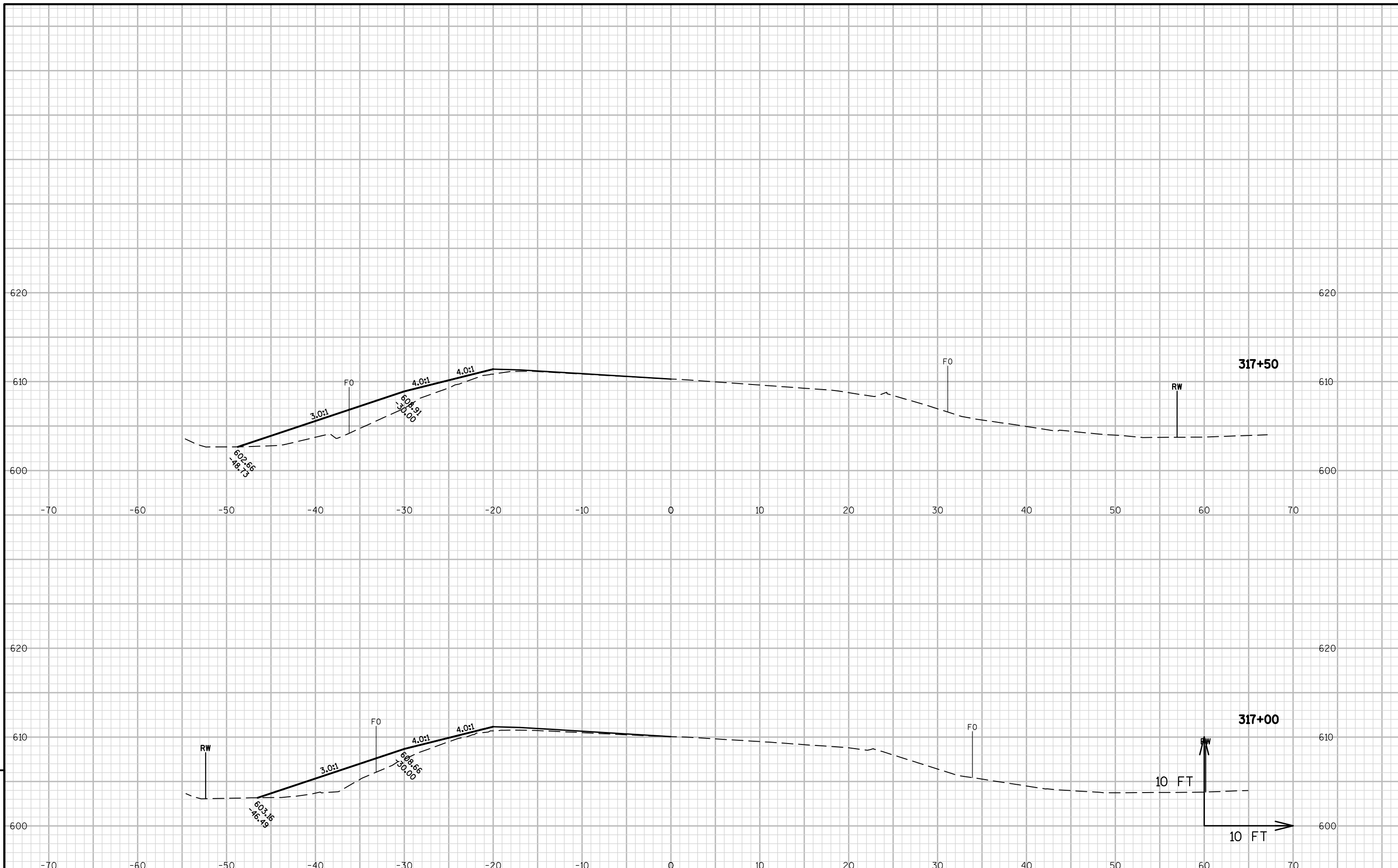
HWY: STH 13

COUNTY: BAYFIELD

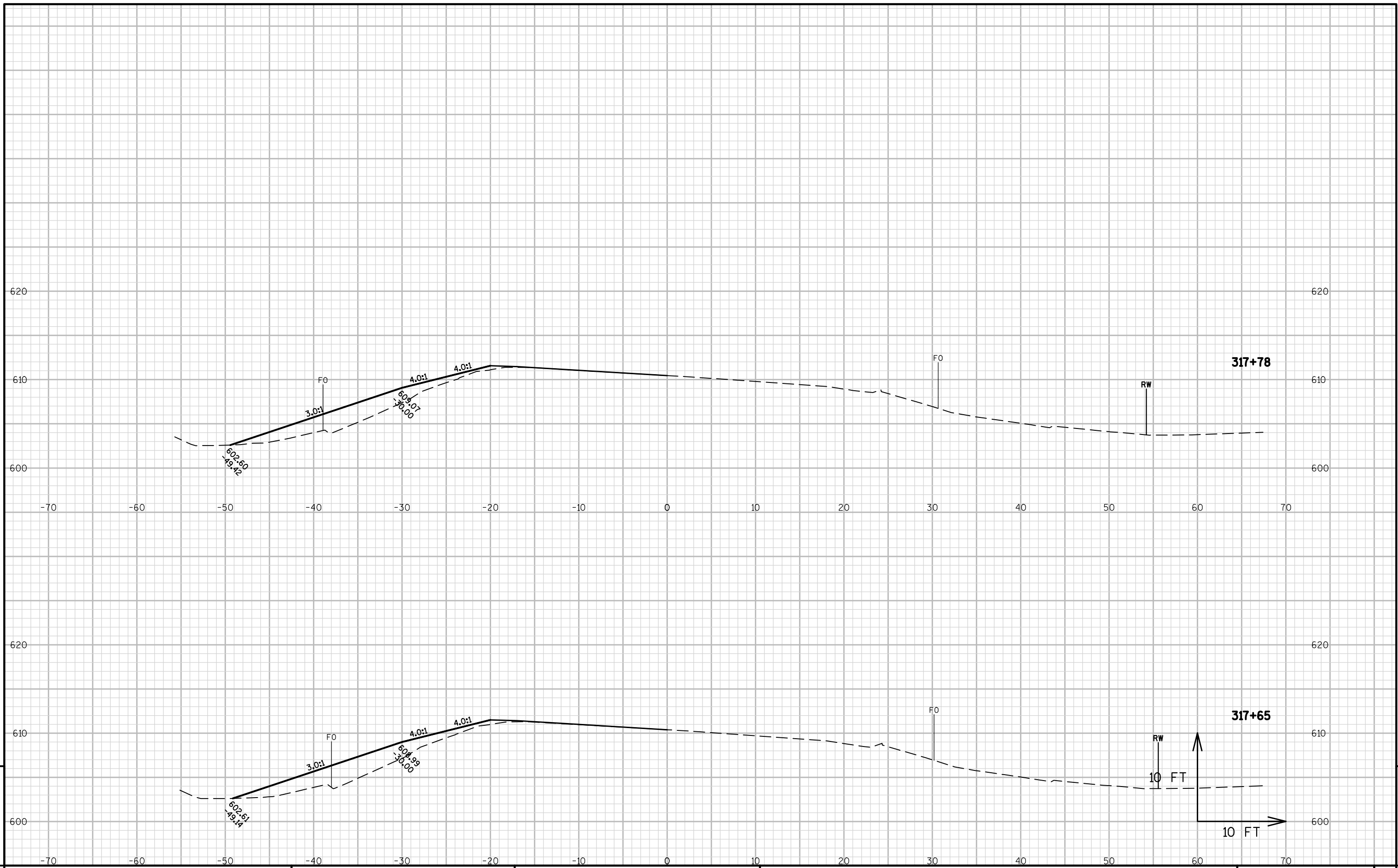
CROSS SECTIONS: REMOVE TEMPORARY WIDENING STA. 483+23

SHEET

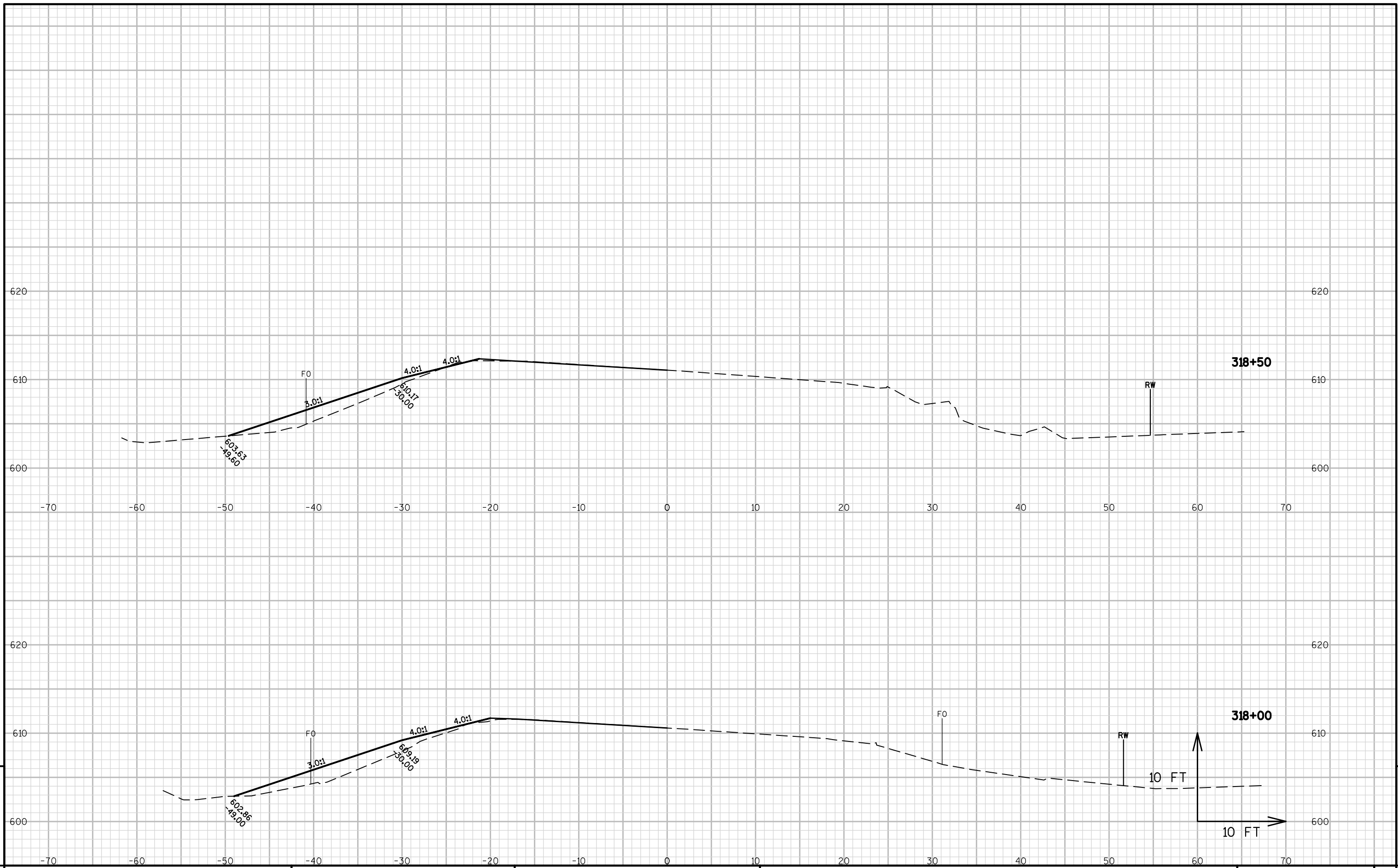
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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: SLOPE FLATTENING SHEET E



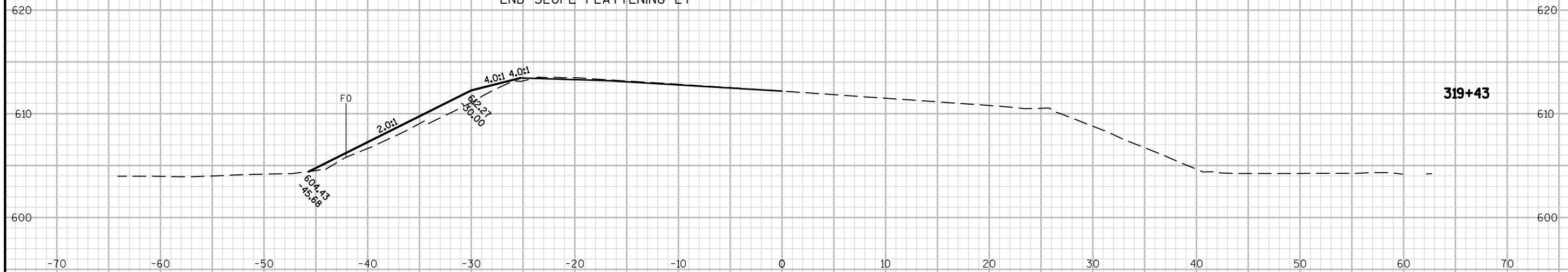
PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: SLOPE FLATTENING SHEET E



PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: SLOPE FLATTENING SHEET E

STA. 319+43
END SLOPE FLATTENING LT

319+43



PROJECT NO: 8160-04-64

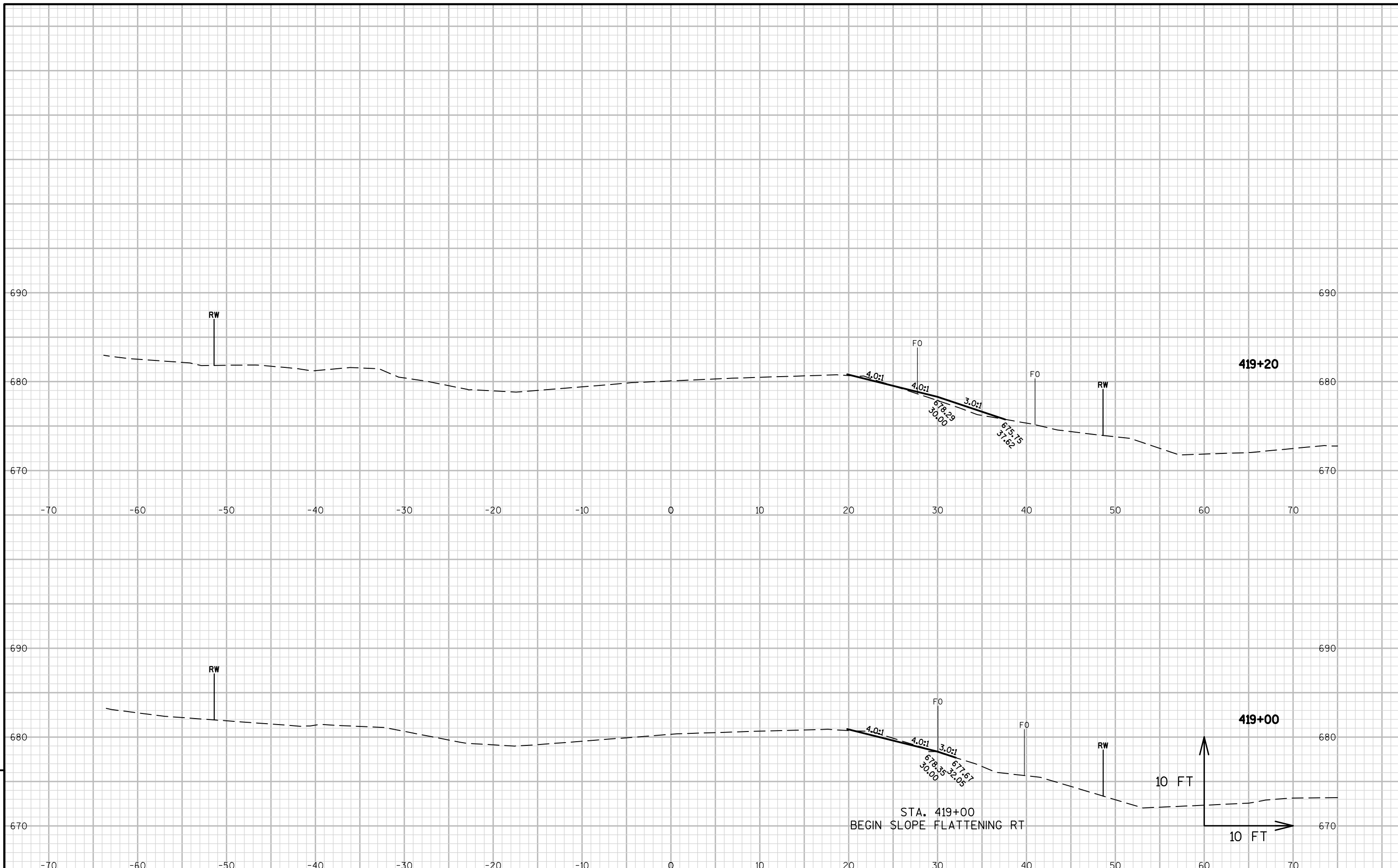
HWY: STH 13

COUNTY: BAYFIELD

CROSS SECTIONS: SLOPE FLATTENING

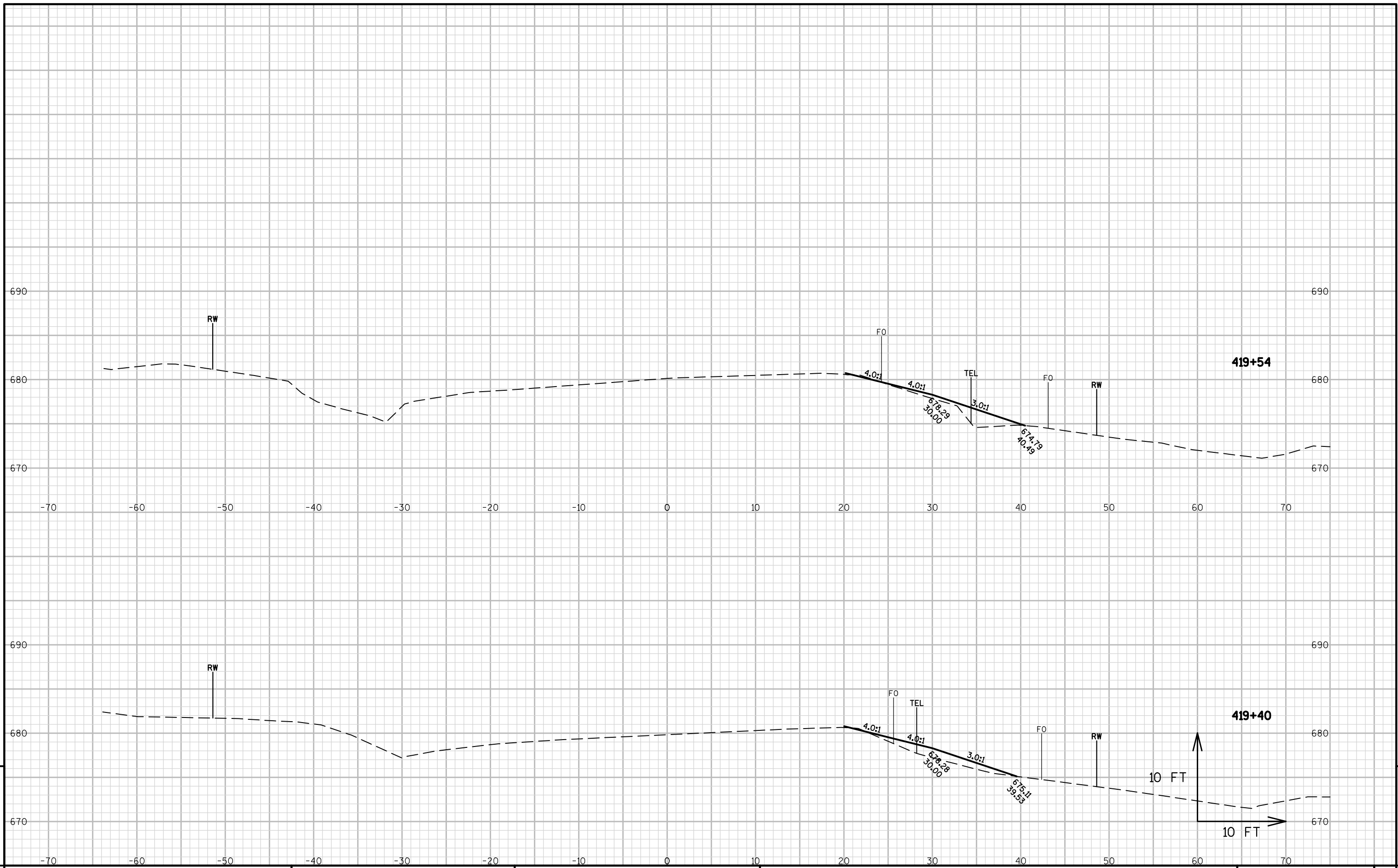
SHEET

E



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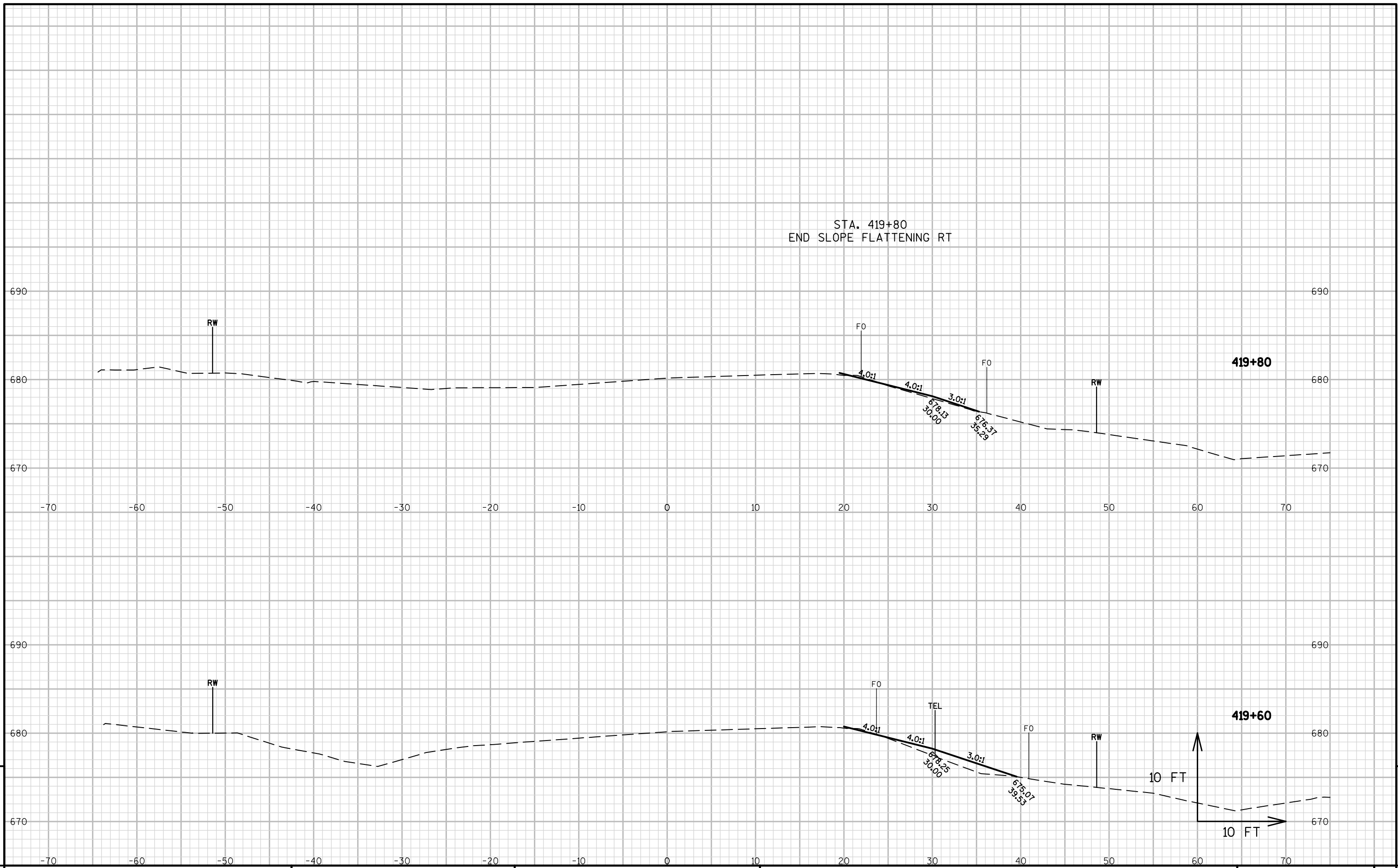
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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: SLOPE FLATTENING SHEET E

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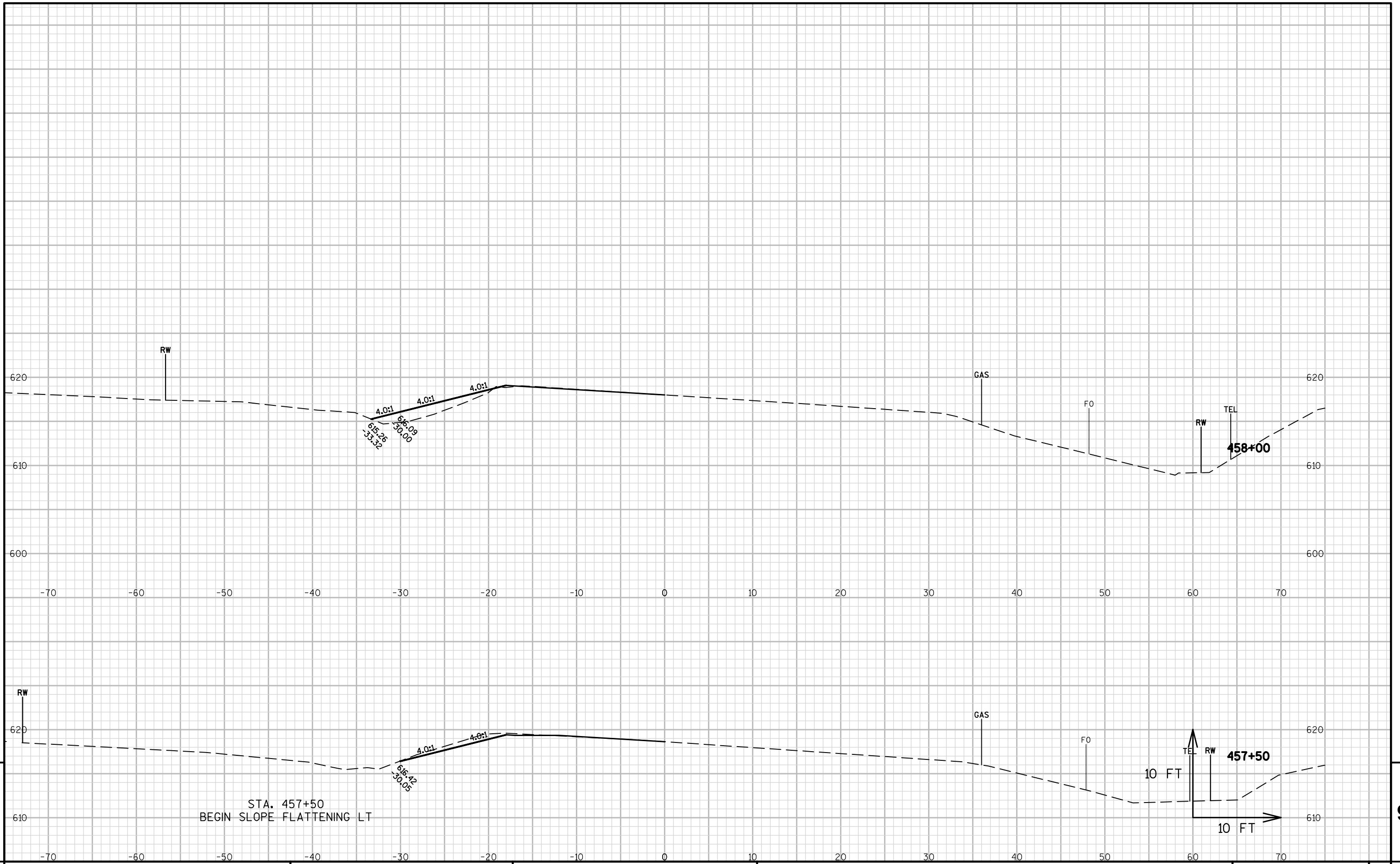
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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: SLOPE FLATTENING SHEET E

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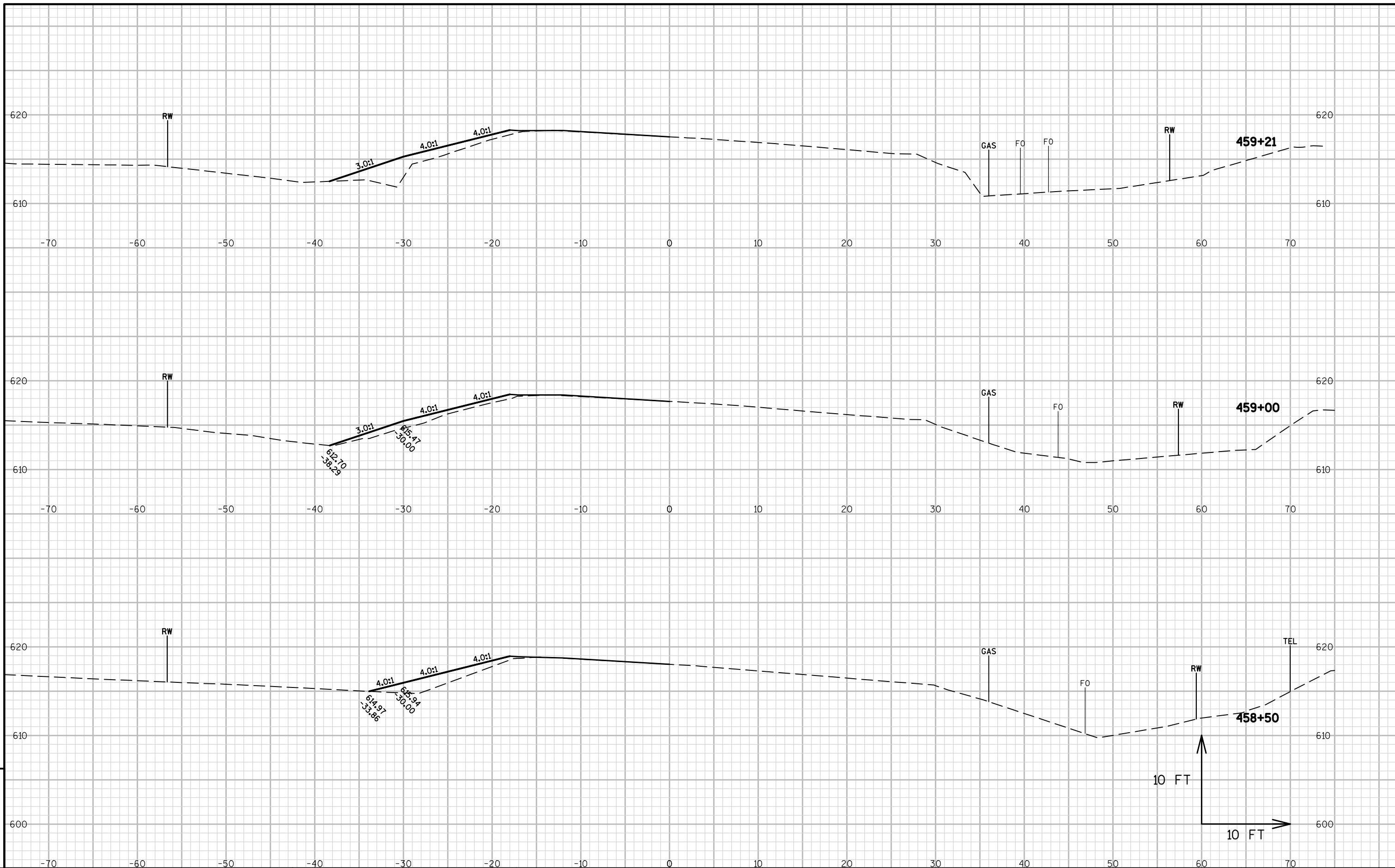
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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: SLOPE FLATTENING SHEET E

FILE NAME : \\NWBESEVER\DRAWINGS\NWBE_PROJECTS\DESIGN\1229 STH13 SUPERIOR AVE - 7TH ST\C3D\SHEETSPLAN\0902016_XS_SLOPE FLATTENING #6050 DWF5.0W05/2016 1:52 PM PLOT BY : USER PLOT NAME : PLOT SCALE : 1 IN:10 FT WISDOT/CADD SHEET 49

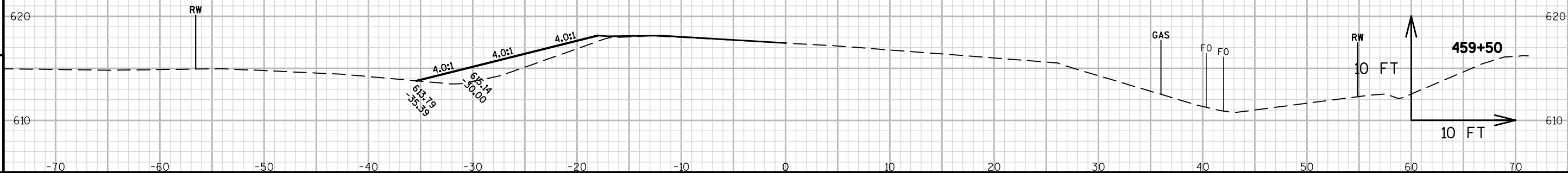
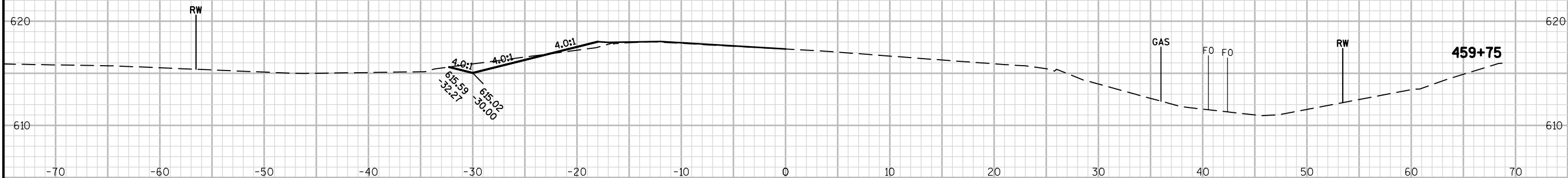
LAYOUT NAME - SLOPE FLATTEN XS- (1)



PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: SLOPE FLATTENING	SHEET	E
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STA. 459+75
END SLOPE FLATTENING - LT



PROJECT NO: 8160-04-64

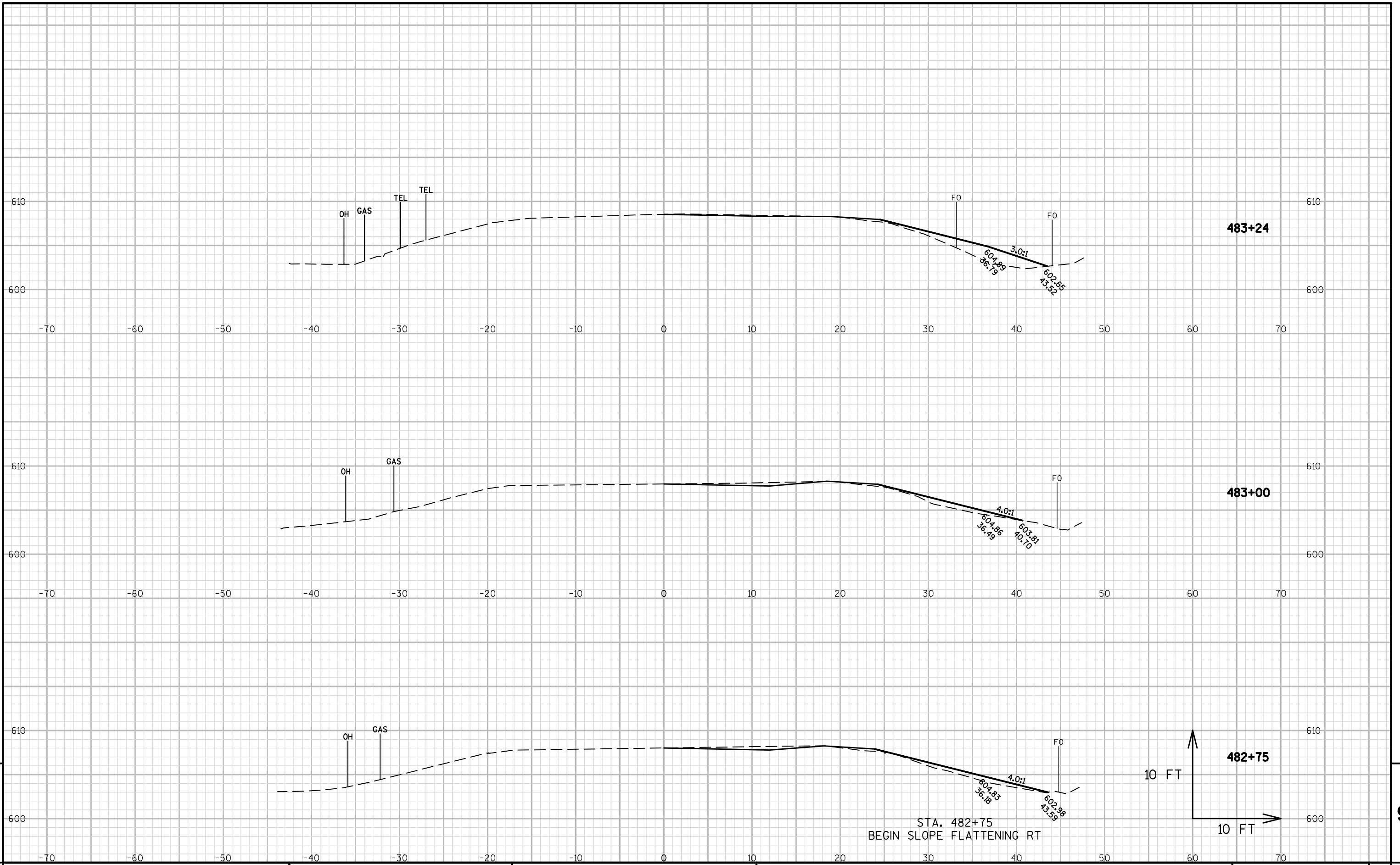
HWY: STH 13

COUNTY: BAYFIELD

CROSS SECTIONS: SLOPE FLATTENING

SHEET

E



PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: SLOPE FLATTENING	SHEET	9
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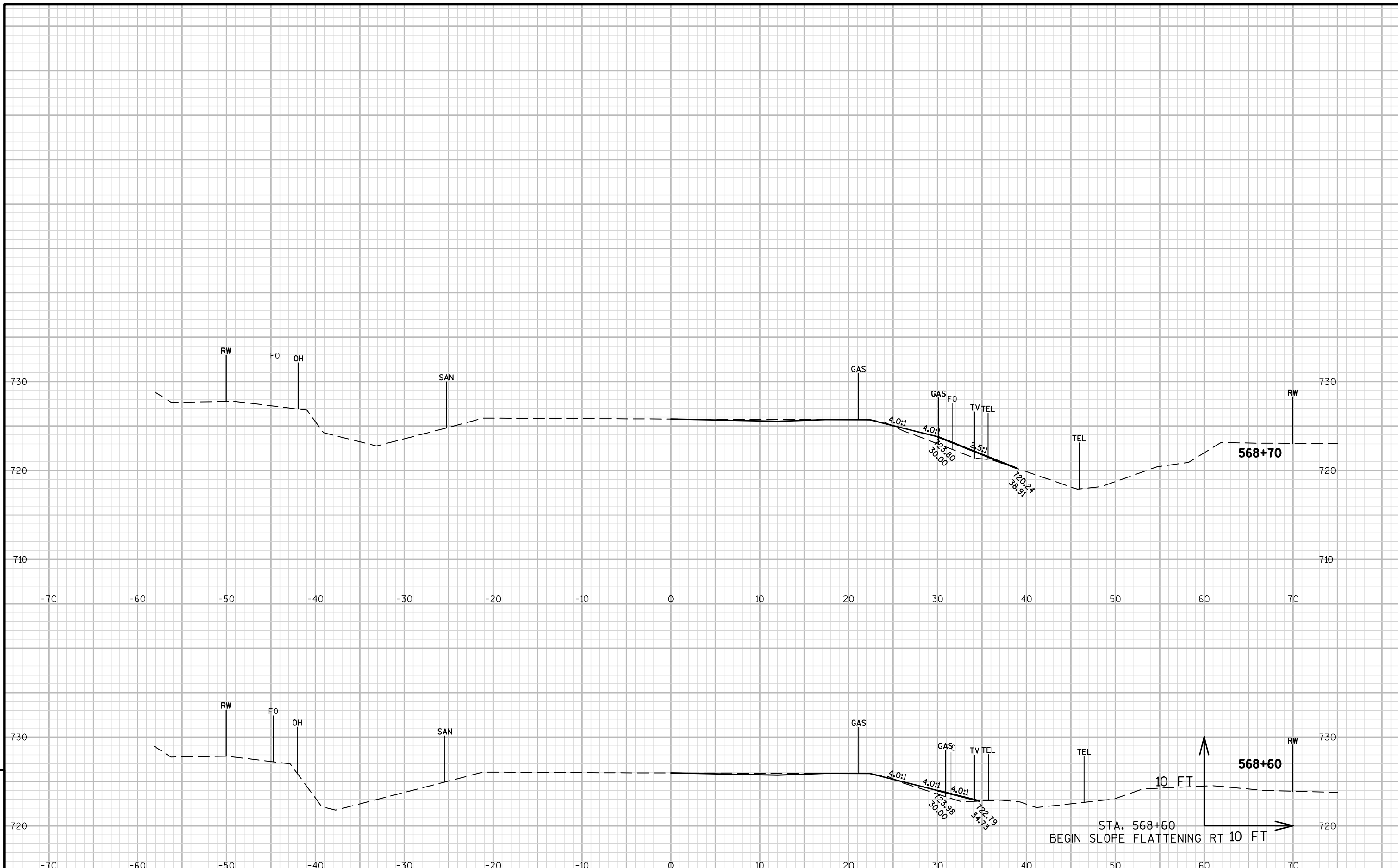
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PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: SLOPE FLATTENING	SHEET	E
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FILE NAME : \\NWESERVER\DRAWINGS\NWBE_PROJECTS\DESIGN\1229 STH13 SUPERIOR AVE - 7TH ST\C3D\SHEETSPLAN\0902017_XS_SLOPE FLATTENING 8160-04-64.dwg 05/25/2016 1:55 PM PLOT BY : USER PLOT NAME : PLOT SCALE : 1 IN:10 FT WISDOT/CADD SHEET 49

LAYOUT NAME - SLOPE FLATTENING XS - (2)



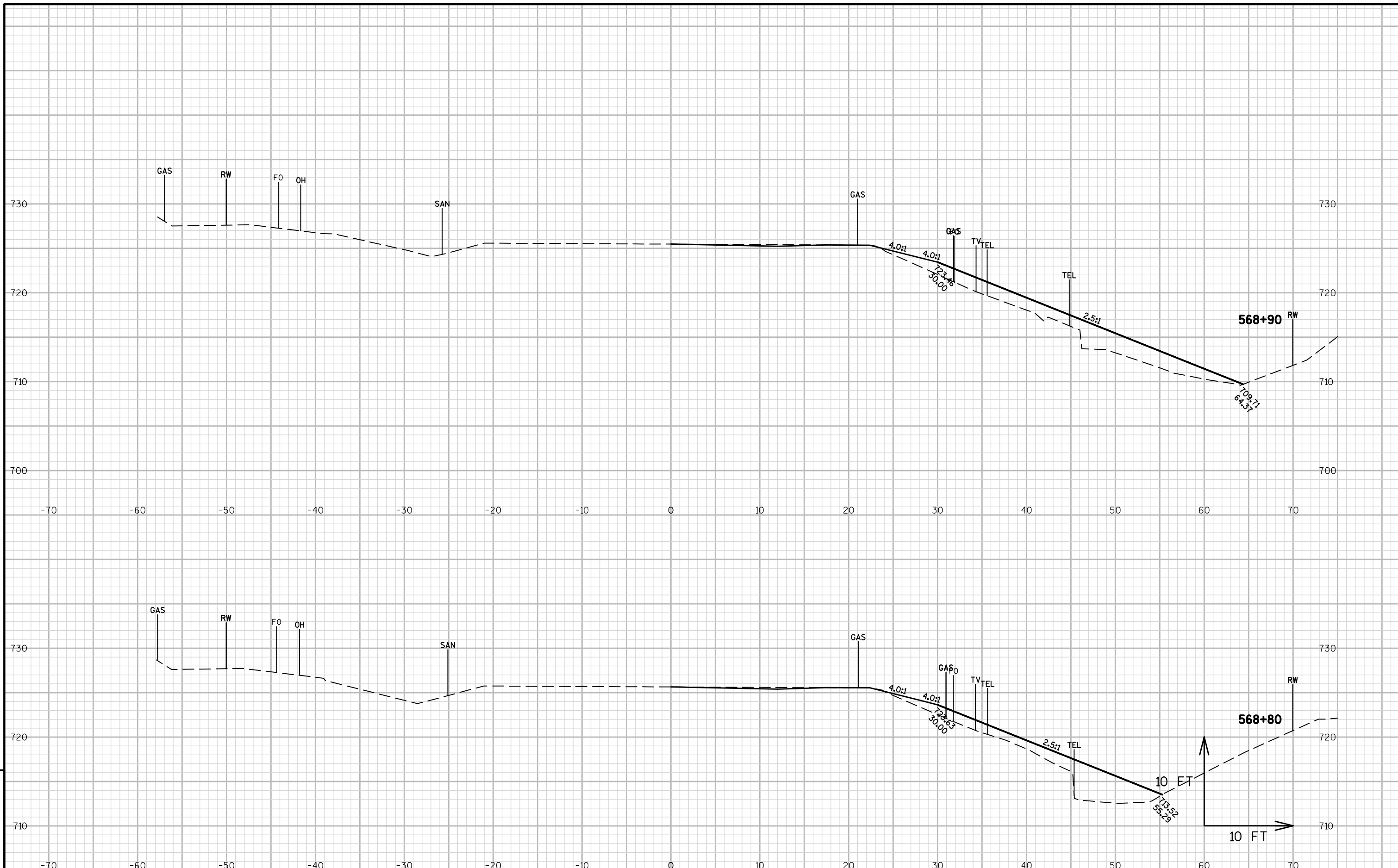
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PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: SLOPE FLATTENING SHEET E

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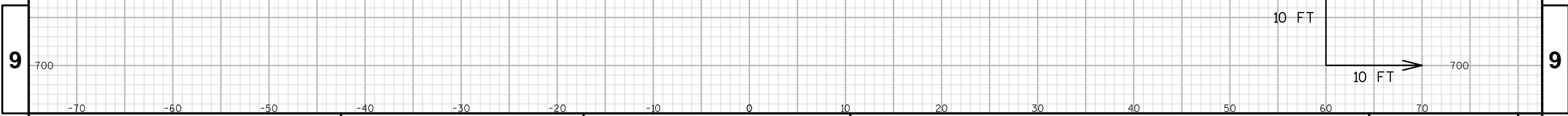
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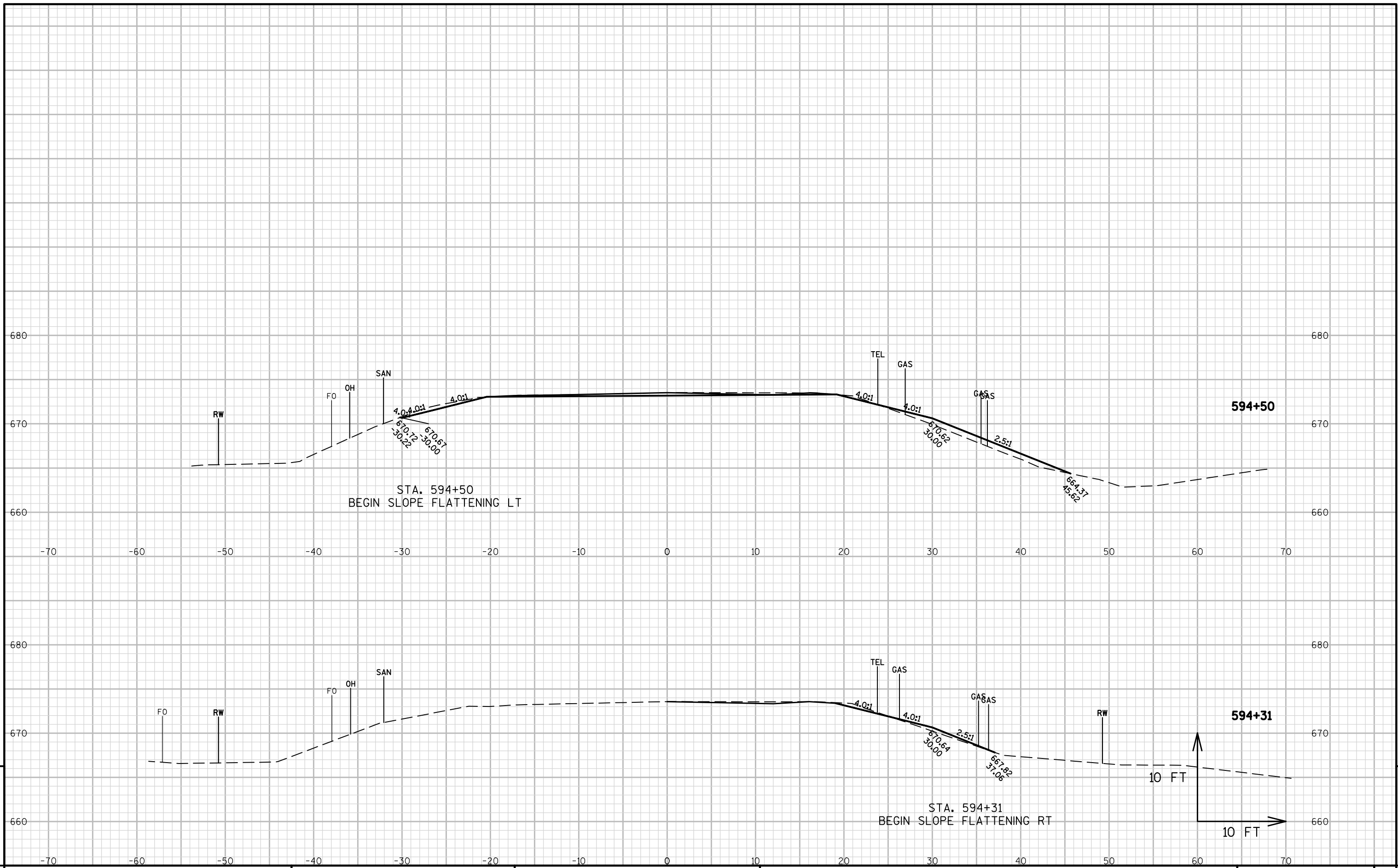


PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: SLOPE FLATTENING SHEET E

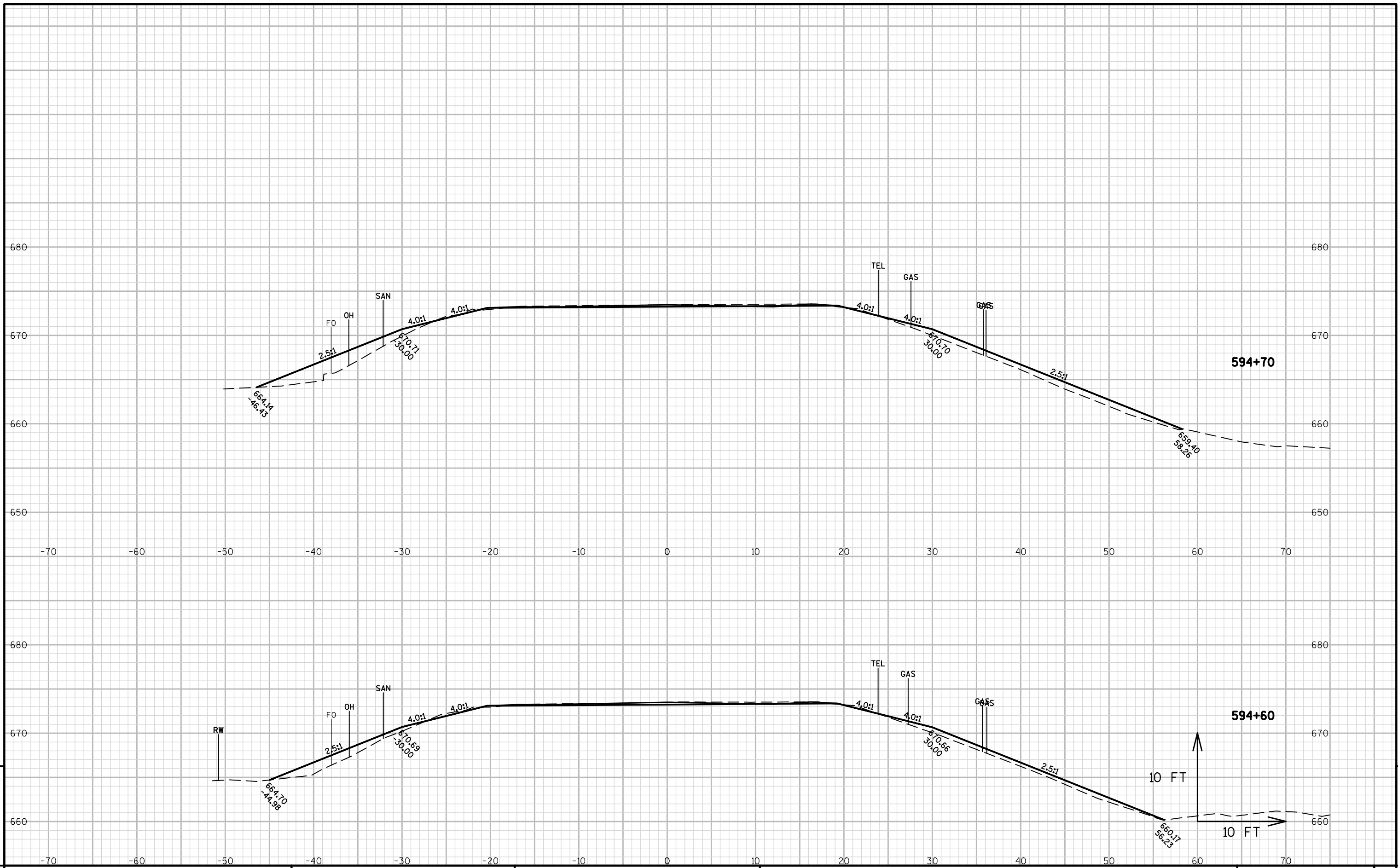


PROJECT NO: 8160-04-64	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: SLOPE FLATTENING	SHEET	E
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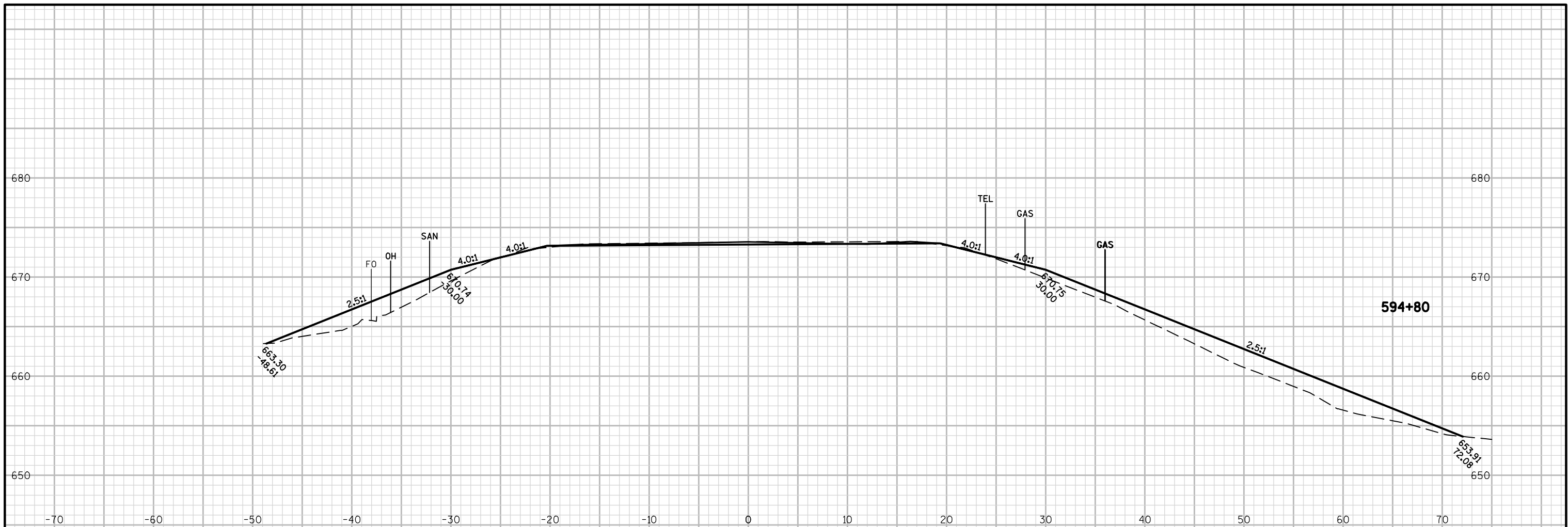




PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: SLOPE FLATTENING SHEET E



PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: SLOPE FLATTENING SHEET E

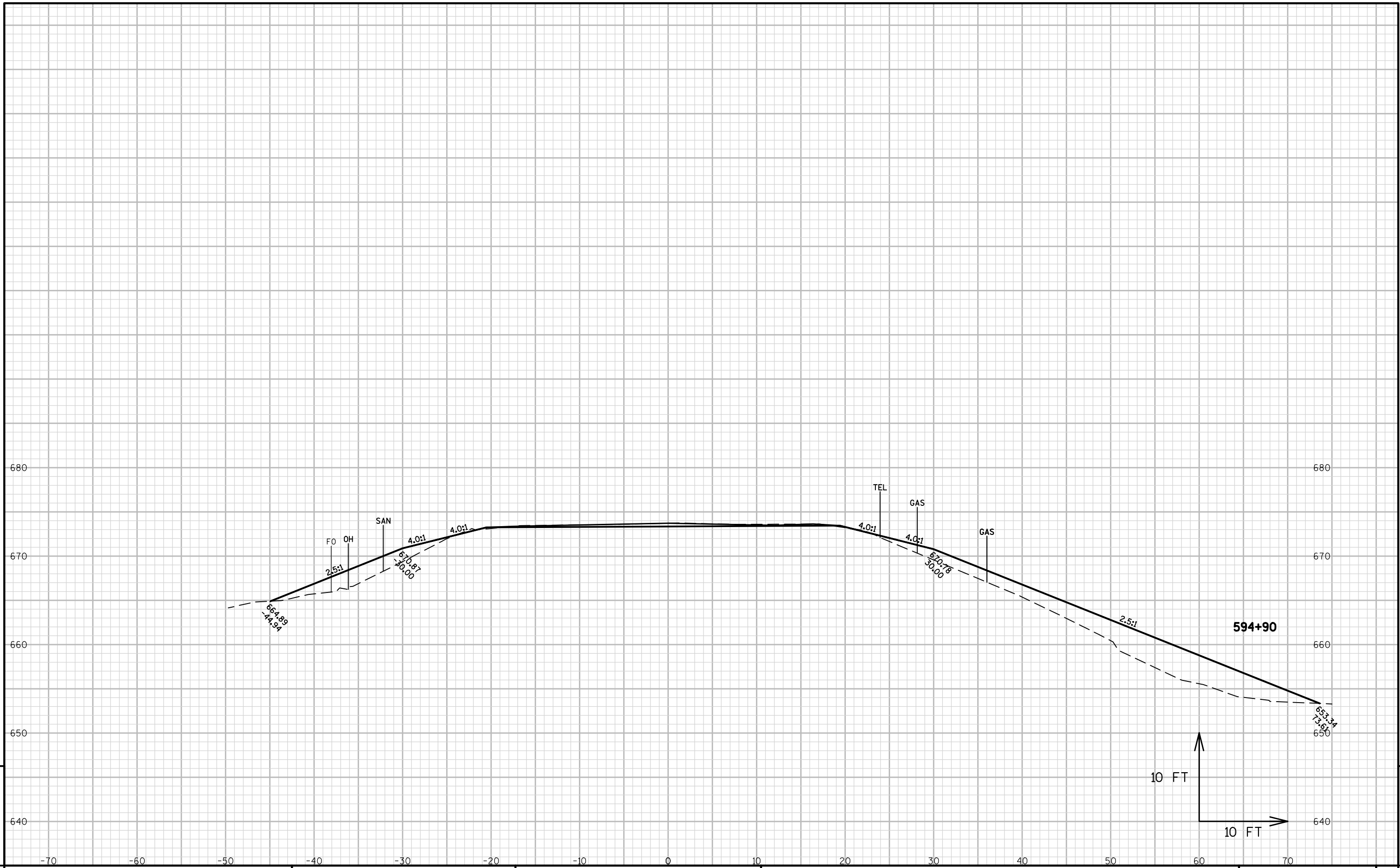


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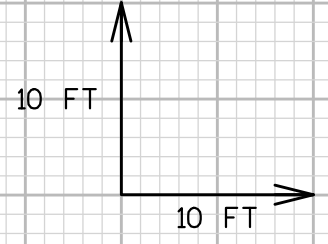
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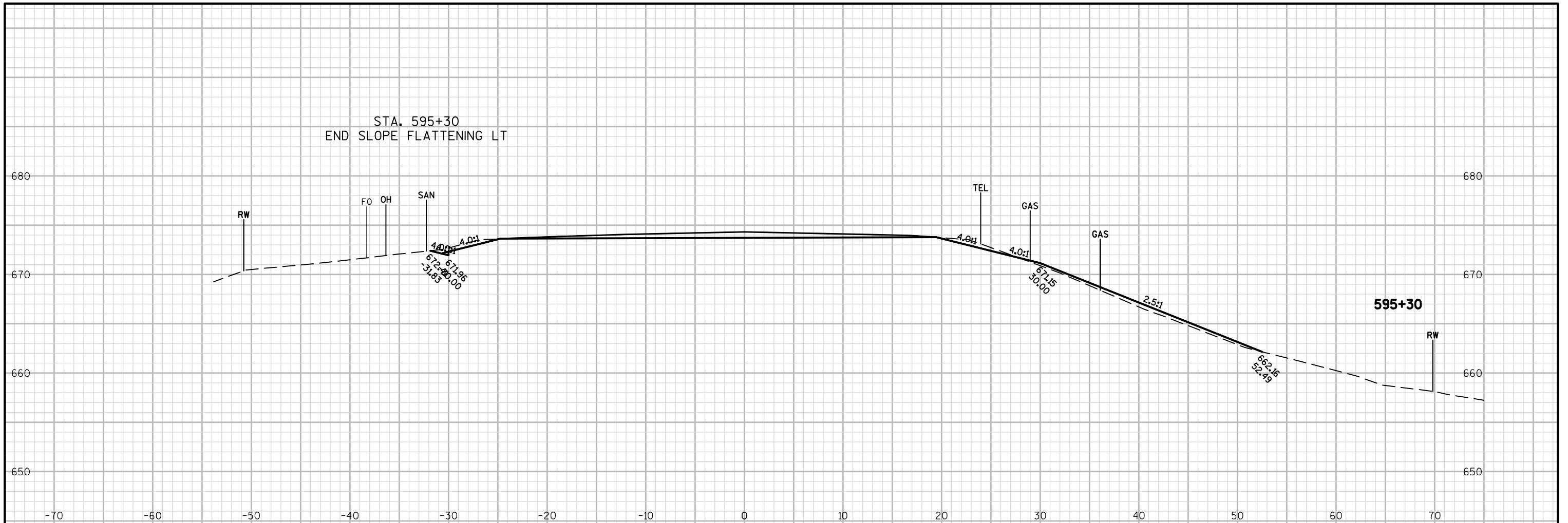
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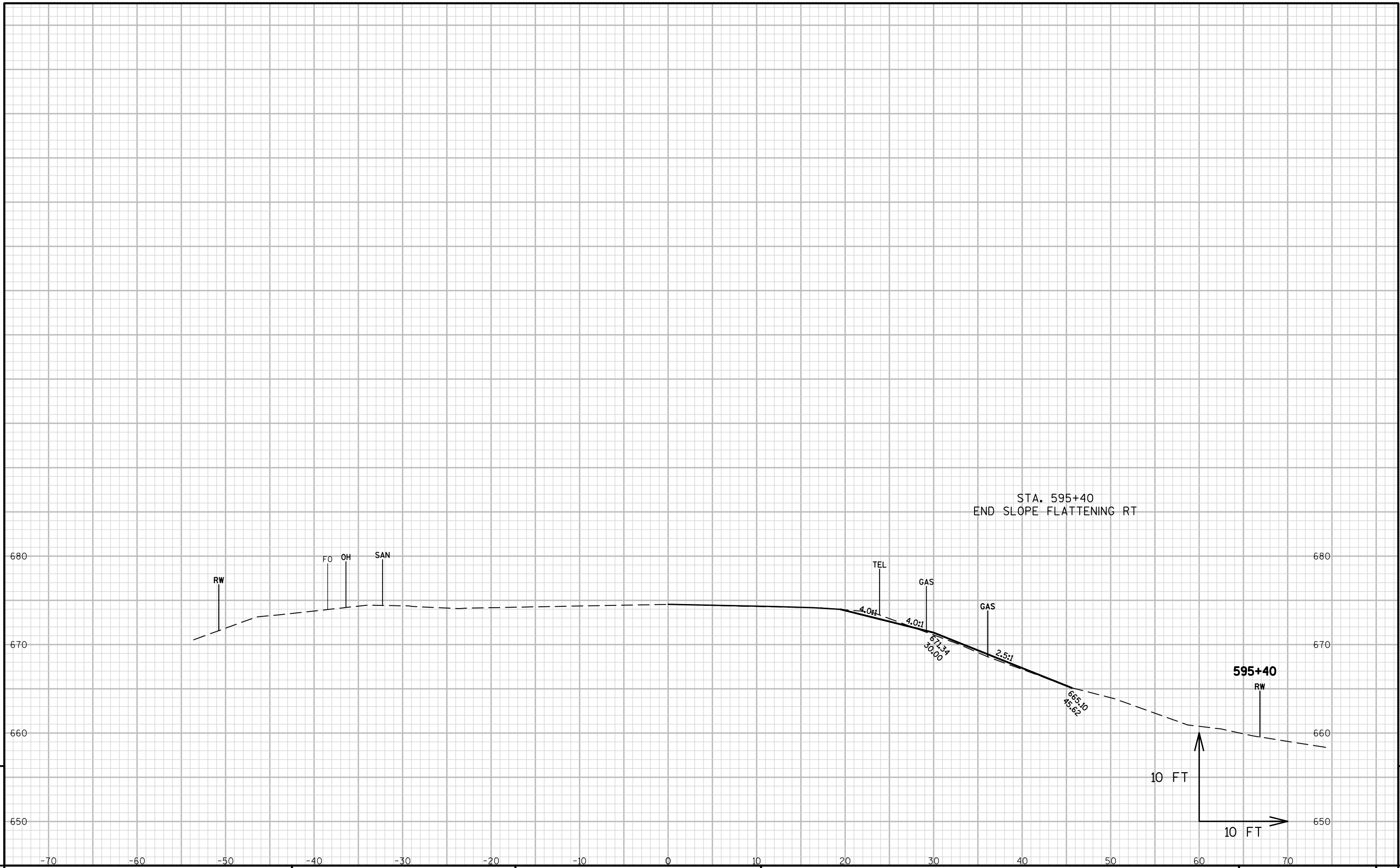
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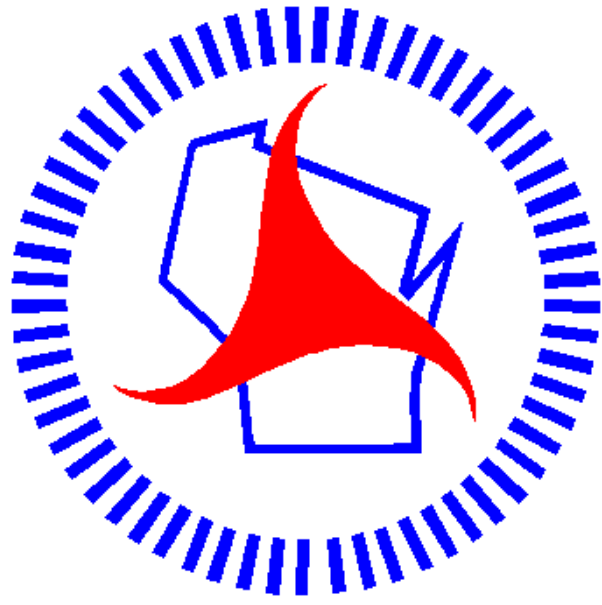


PROJECT NO: 8160-04-64 HWY: STH 13 COUNTY: BAYFIELD CROSS SECTIONS: SLOPE FLATTENING SHEET E



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