



GENERAL NOTES

CROSS SLOPES AS SHOWN ON THE TYPICAL SECTION WILL VARY AT URBAN INTERSECTIONS.

ALL RADII ARE MEASURED TO THE EDGE OF PAVEMENT (FLAG OF CURB) UNLESS OTHERWISE NOTED.

REMOVE ASPHALTIC SURFACE TO THE NEAREST JOINT OR A SAWED EDGE AS DIRECTED BY THE ENGINEER.

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

RESHAPE AND SEED ANY PREVIOUSLY GRASSED AREAS THAT ARE DISTURBED BY OPERATIONS OUTSIDE THE NORMAL CONSTRUCTION LIMITS.

THE QUANTITY OF THE ITEMS FOR EROSION PROTECTION INCLUDES AN UNDISTRIBUTED AMOUNT FOR PROTECTION, CONTROL AND ABATEMENT OF WATER POLLUTION RESULTING FROM SOIL EROSION. THE DISTRIBUTION AND LOCATION OF THESE MATERIALS ARE TO BE DETERMINED BY THE ENGINEER.

MULCH ALL SEED AND FERTILIZED AREAS, IN THE PERFORMANCE OF THE WORK UNDER THE ITEM MULCHING AS DIRECTED BY THE ENGINEER.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON OTHER PLAN SHEETS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT THAT ARE NOT SHOWN.

LOCATIONS OF PAVEMENT MARKINGS AND PERMANENT SIGNING IN THE FIELD ARE DETERMINED BY THE MUTCD & WISCONSIN SUPPLEMENT AND STANDARD DETAIL DRAWINGS. STATION AND OFFSETS PROVIDED IN THE MISCELLANEOUS QUANTITIES OR PLAN SHEETS ARE ONLY PROVIDED FOR APPROXIMATE LOCATING AND CONTRACT ADMINISTRATION. INSTALL W14-3 SIGNS AFTER LOCATING NO-PASSING ZONES IS COMPLETE.

DESIGN CONTACT

8620-07-03,73 ROADWAY DESIGN

WISCONSIN DEPT. OF TRANSPORTATION  
NW REGION - EAU CLAIRE OFFICE  
718 W. CLAIREMONT AVENUE  
EAU CLAIRE, WI 54701  
715-836-2891

COUNTY CONTACTS

CHIPPEWA COUNTY

HIGHWAY COMMISSIONER  
BRUCE STELZNER  
801 EAST GRAND AVENUE  
CHIPPEWA FALLS, WI 54729  
715-726-7914  
bstelzner@co.chippewa.wi.us

ENVIRONMENTAL CONTACTS

DEPT. OF NATURAL RESOURCES

WISCONSIN DNR WEST CENTRAL REGION  
CHRIS WILLGER  
ENVIRONMENTAL ANALYSIS AND REVIEW SPECIALIST  
1300 W. CLAIREMONT AVENUE  
PO BOX 4001  
EAU CLAIRE, WI 54702-4001  
715-839-1609  
christopher.j.willger@wisconsin.gov

24 HOUR SPILLS HOTLINE  
800-943-0003

UTILITY CONTACTS

WE ENERGIES -  
GAS/PETROLEUM  
\*EMERGENCY CONTACT\*  
1-800-261-5325  
SEND ALL CORRESPONDENCE TO:  
LATROY BRUMFIELD  
333 WEST EVERETT ST  
MILWAUKEE, WI 53203  
(414) 221-5617  
LaTroy.Brumfield@we-energies.com  
CONSTRUCTION FIELD CONTACT:  
LEWIS KNAPP  
1921 8TH ST SOUTH  
WISCONSIN RAPIDS, WI 54494  
715-421-7259

XCEL ENERGY  
SEND ALL CORRESPONDENCE TO:  
DAWN SCHULTZ  
1414 W HAMILTON AVE  
PO BOX 8  
EAU CLAIRE, WI 54702-0008  
715-737-2482  
dawn.schultz@xcelenergy.com

ELECTRICITY - DISTRIBUTION  
STACY HAUGEN  
2911 S PIONEER AVE  
RICE LAKE, WI 54868  
OFFICE 715-236-5721  
MOBILE 715-579-9710

BLOOMER TELEPHONE COMPANY -  
COMMUNICATION LINE  
STEVE HEBERT  
1120 15TH AVENUE  
BLOOMER, WI 54724  
715-568-4830  
blmr@telc@bloomer.net

LIST OF STANDARD ABBREVIATIONS

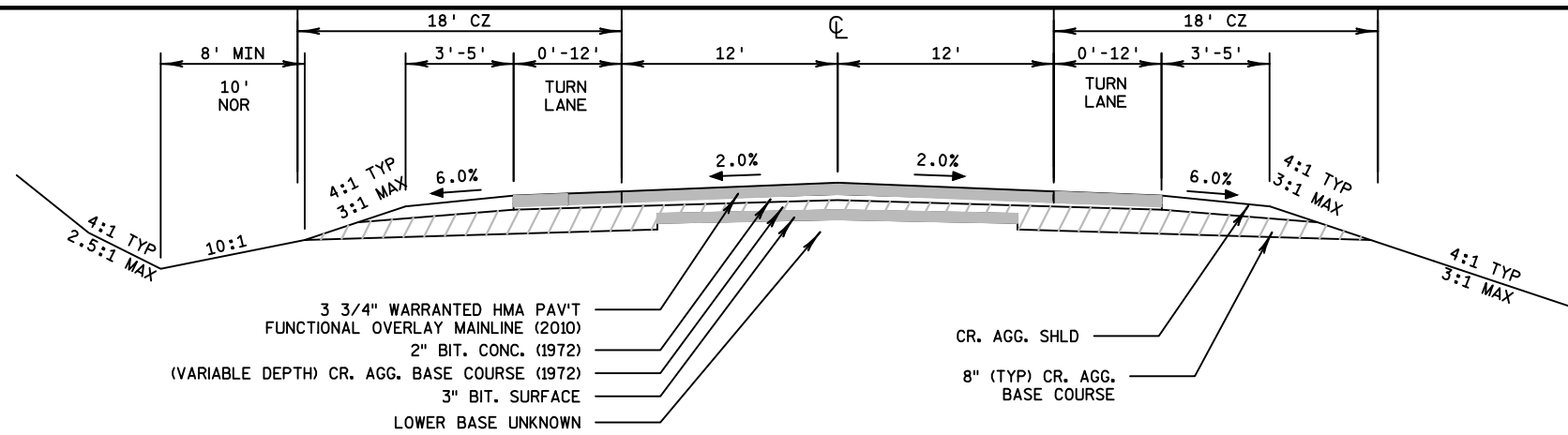
ABUT	ABUTMENT
AC	ACRE
AGG	AGGREGATE
AH	AHEAD
ASPH	ASPHALTIC
AADT	ANNUAL AVERAGE DAILY TRAFFIC
BK.	BACK
BM	BENCH MARK
BR	BRANCH
CONC	CONCRETE
CACP	CORRUGATED ALUMINUM CULVERT PIPE
CSCP	CORRUGATED STEEL CULVERT PIPE
CTH	COUNTY TRUNK HIGHWAY
CR	CREEK
CR	CRUSHED
CY or CUYD	CUBIC YARD
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DD	DIRECTIONAL DISTRIBUTION
DL	DITCH LINE / TOE OF SLOPE
EB	EASTBOUND
EL or ELEV	ELEVATION
EMB	EMBANKMENT
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
EXP	EXPANSION
FE	FIELD ENTRANCE
HES	HIGH EARLY STRENGTH
CWT	HUNDRED WEIGHT
LT	LEFT
LHF	LEFT HAND FORWARD
LF	LINEAR FOOT
LS	LUMP SUM
MH	MANHOLE
NC	NORMAL CROWN
PAVT	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
PT	POINT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
POC	POINT ON CURVE
POT	POINT ON TANGENT
PE	PRIVATE ENTRANCE
PL	PROPERTY LINE
R	RADIUS
RP	RADIUS POINT
R	RANGE
REBAR	REINFORCEMENT BAR
REQD	REQUIRED
RT	RIGHT
RHF	RIGHT-HAND-FORWARD
R/W	RIGHT-OF-WAY
R	RIVER
RD	ROAD
SALV	SALVAGED
SEC	SECTION
SF	SQUARE FEET
SI	SLOPE INTERCEPT
SY	SQUARE YARD
SS	SLOPED SECTION
STH	STATE TRUNK HIGHWAY
STA	STATION
SE	SUPERELEVATION
T	TANGENT
TEL	TELEPHONE
TEMP	TEMPORARY
TC	TOP OF CURB
T or TN	TOWN
T	TRUCKS (PERCENT OF)
TYP	TYPICAL
UG	UNDERGROUND
USH	UNITED STATES HIGHWAY
VAR	VARIABLE
V	VELOCITY or DESIGN SPEED
VERT	VERTICAL
VC	VERTICAL CURVE
VPC	VERTICAL POINT OF CURVE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VAR	VARIABLE
WB	WESTBOUND

DIGGERSHOTLINE

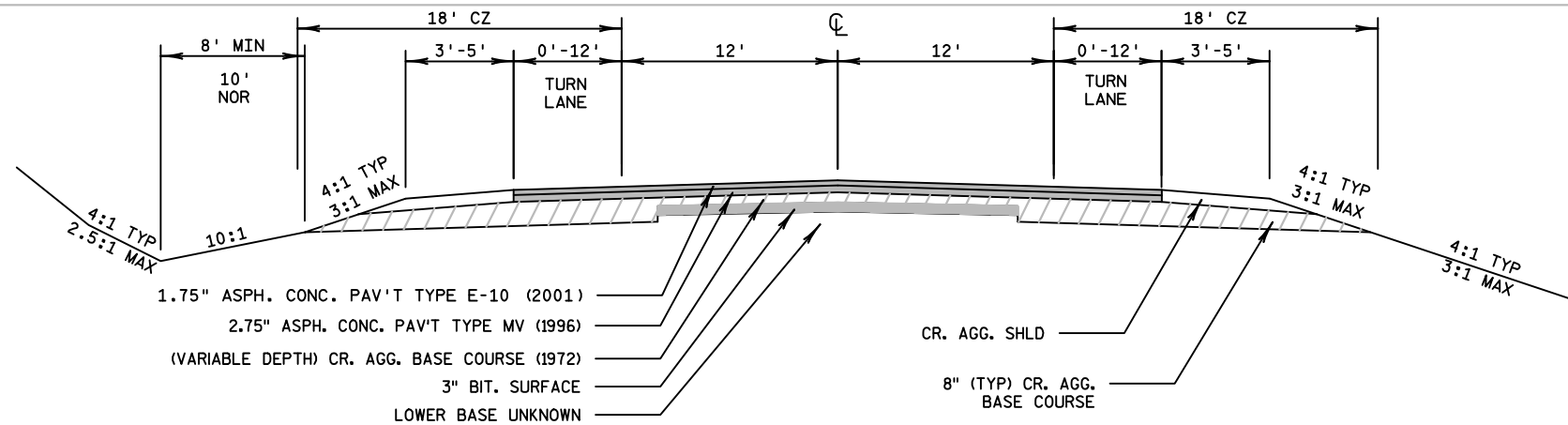
Dial 811 or (800)242-8511



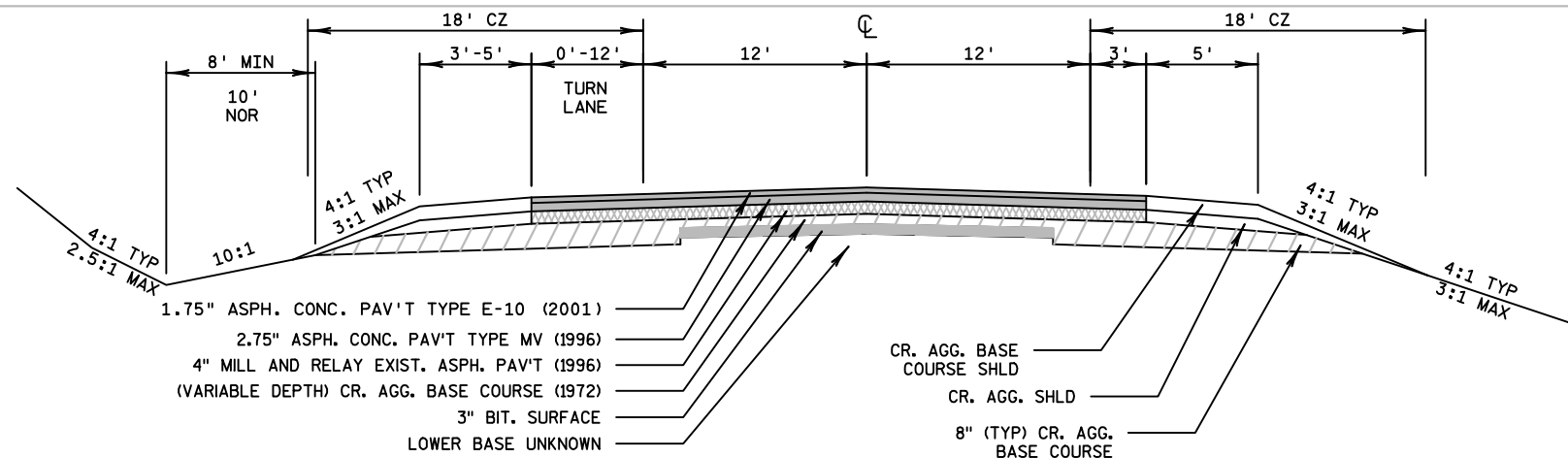
www.DiggersHotline.com



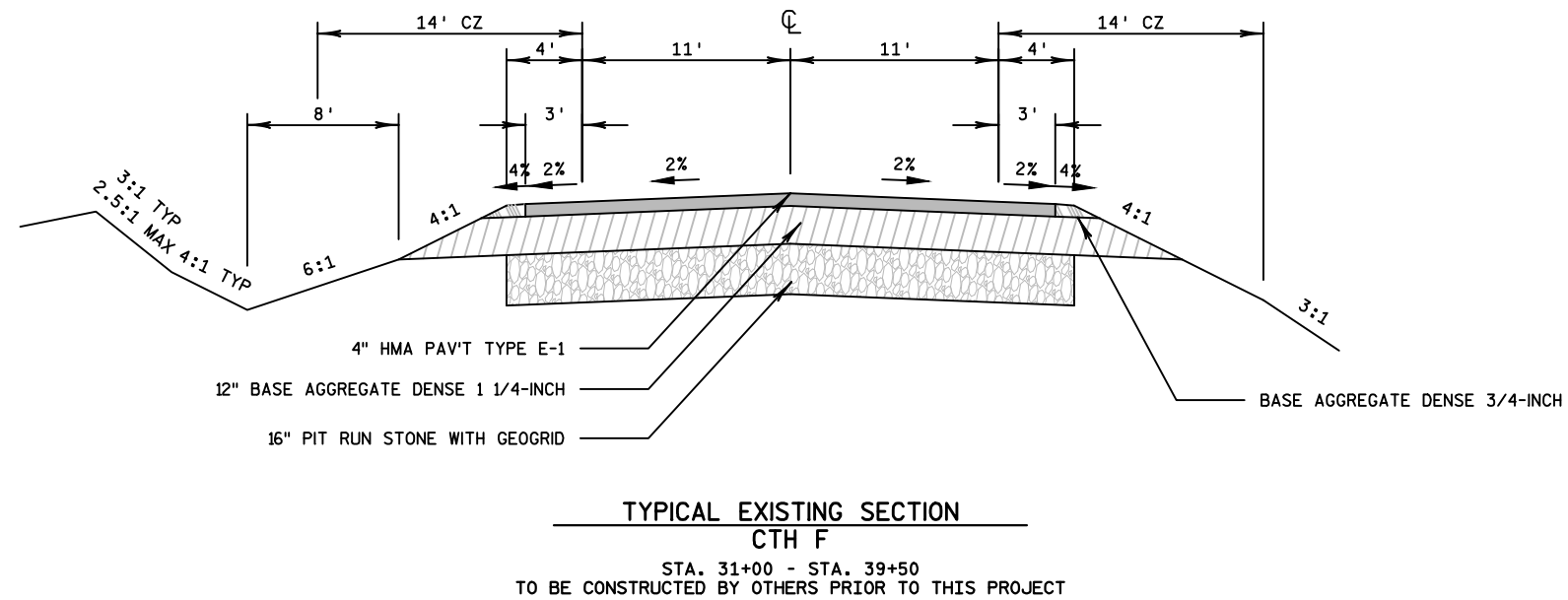
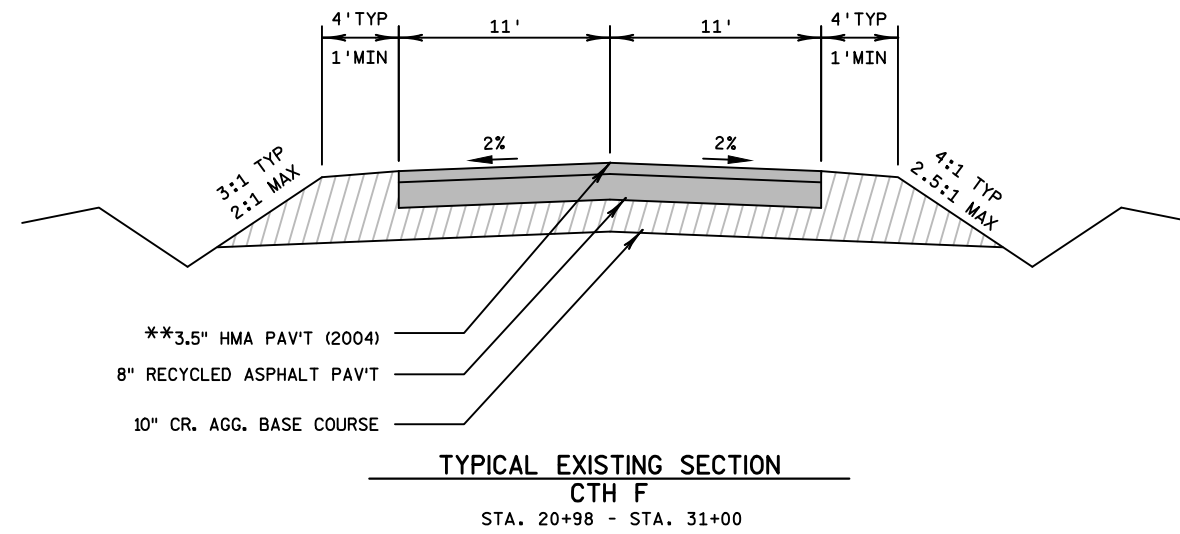
TYPICAL EXISTING SECTION  
STH 64  
STA. 4+06'STH 64' - STA. 8+37.44'STH 64'



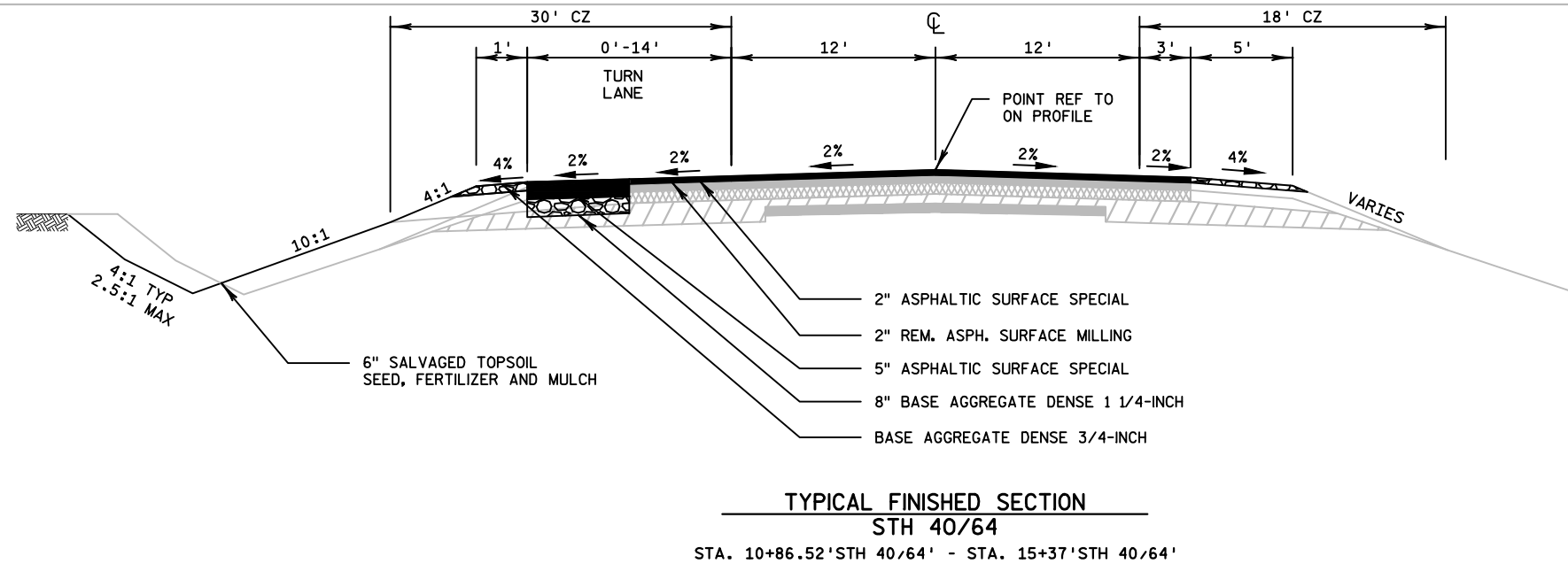
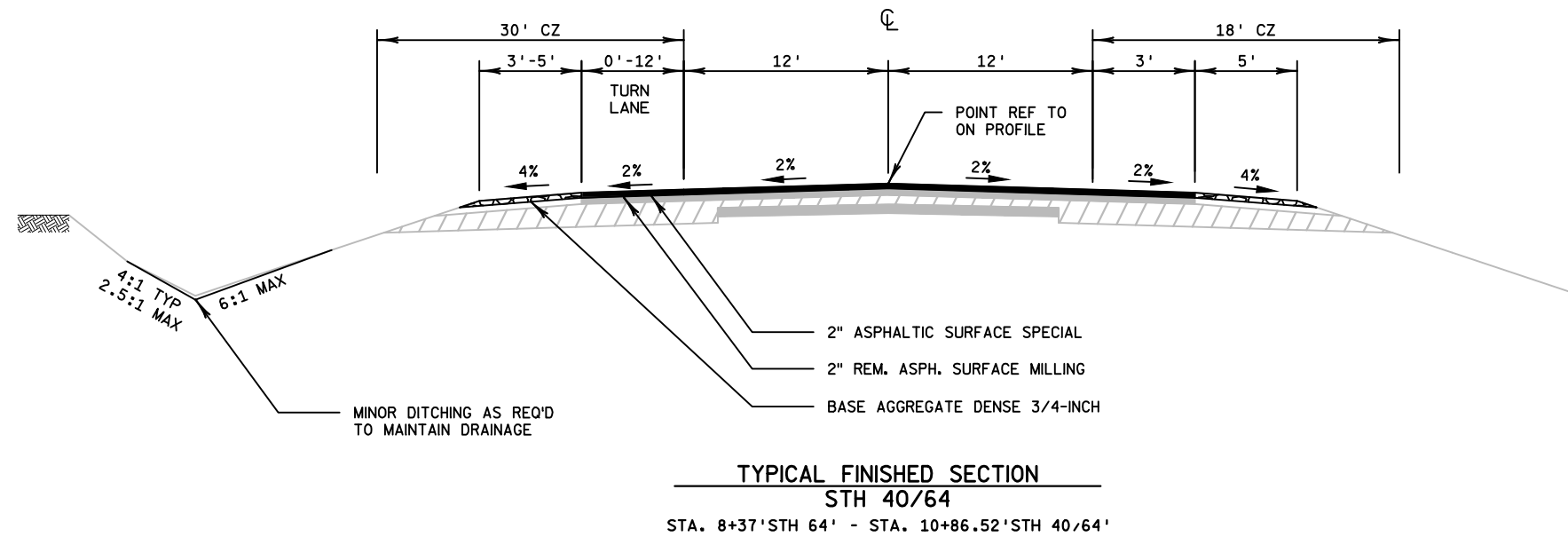
TYPICAL EXISTING SECTION  
STH 40/64  
STA. 8+37.44'STH 40/64' - STA. 12+00.00'STH 40/64'



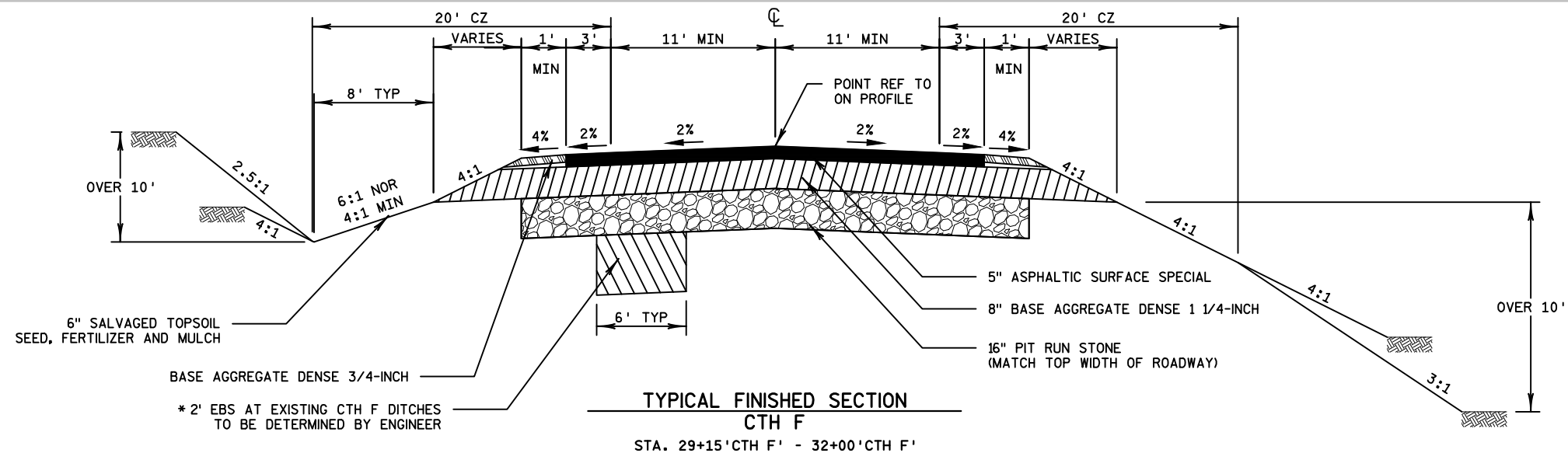
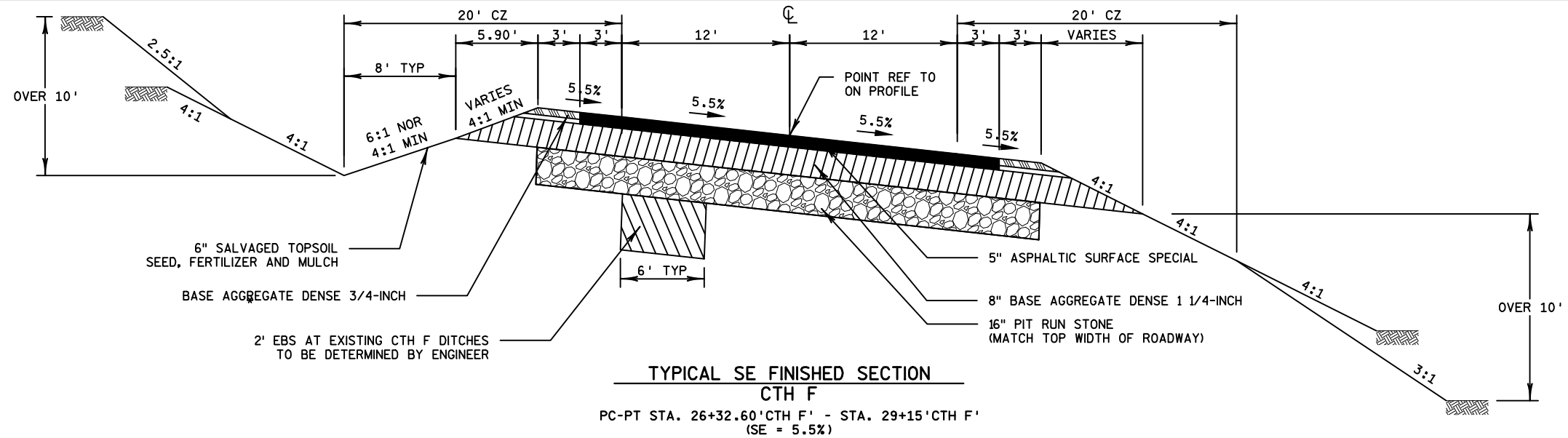
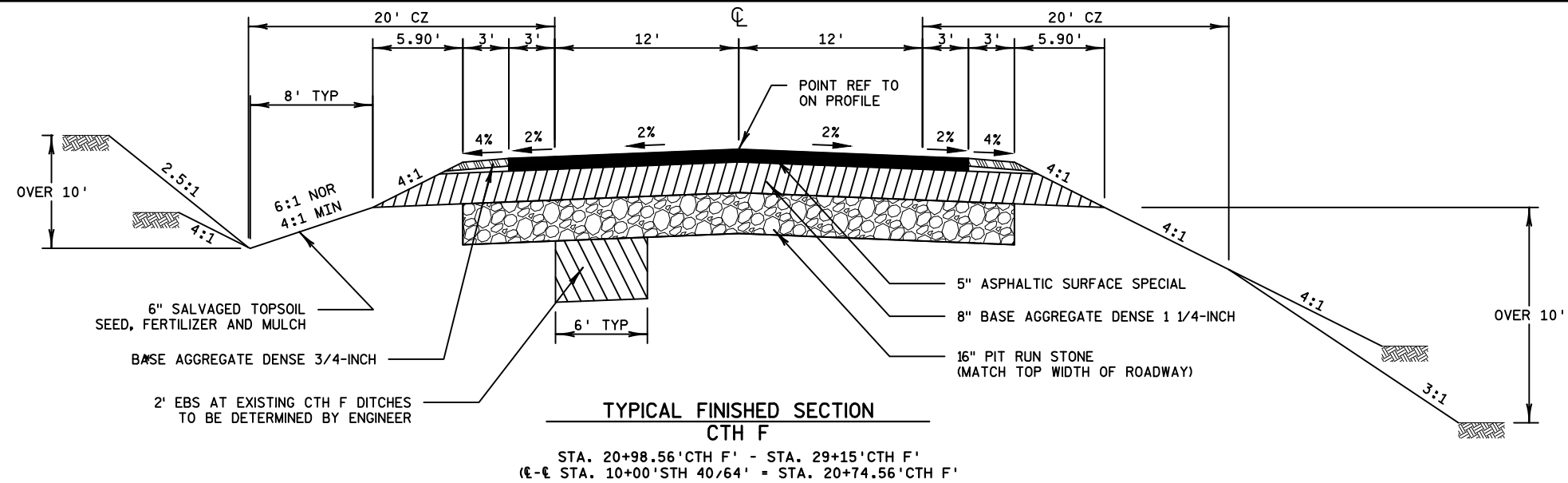
TYPICAL EXISTING SECTION  
STH 40/64  
STA. 12+00'STH 40/64' - STA. 16+00.00'STH 40/64'

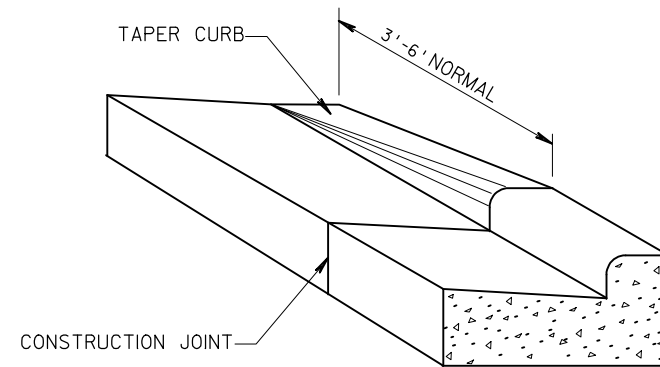




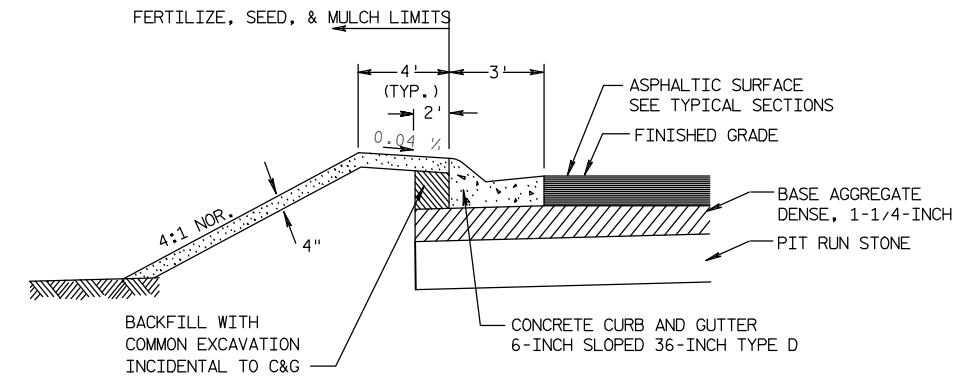


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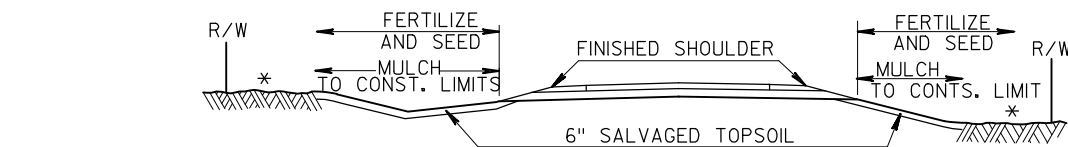




DETAIL OF CURB & GUTTER TERMINI

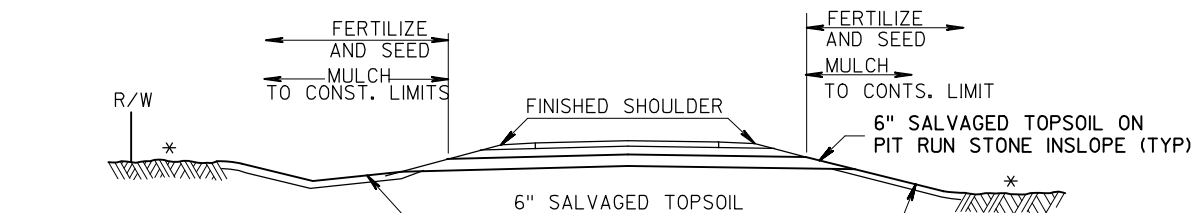


BERM DETAIL BEHIND 36-INCH SLOPED CURB & GUTTER



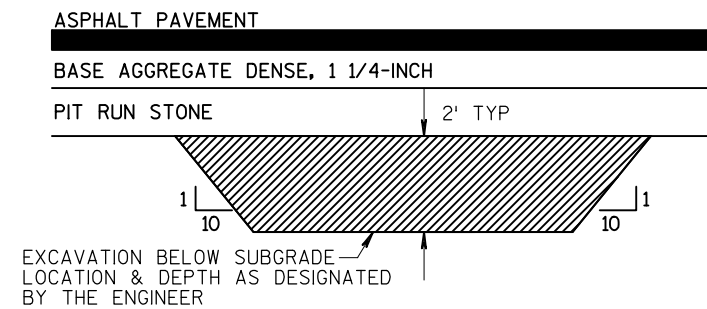
\* DISTURBED AREAS TO BE  
FERTILIZED, SEEDED, & MULCHED

ROADWAYS WITHOUT SUBGRADE TREATMENT  
DETAIL FOR FINISHING ITEMS

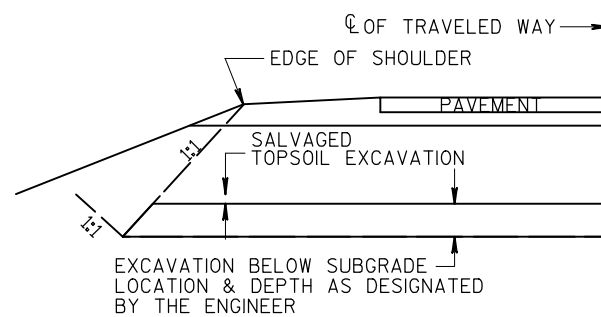


\* DISTURBED AREAS TO BE  
FERTILIZED, SEEDED, & MULCHED

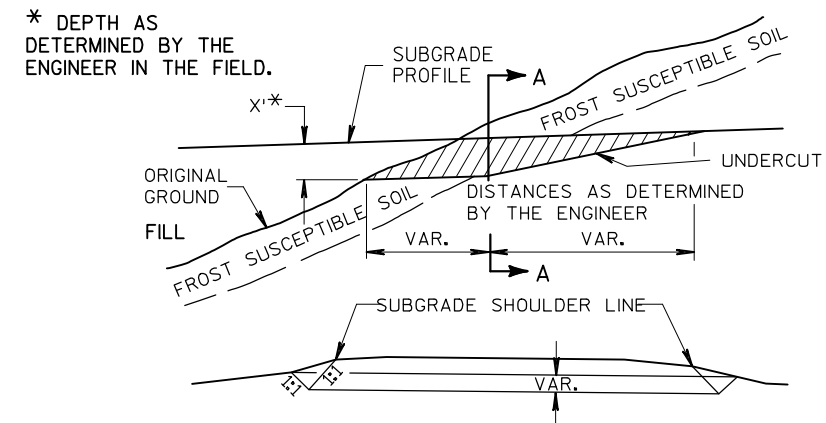
ROADWAYS WITH SUBGRADE TREATMENT  
DETAIL FOR FINISHING ITEMS



PROFILE VIEW



CROSS SECTION VIEW

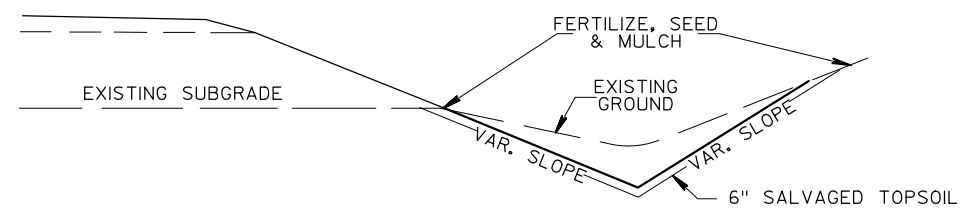
DETAIL FOR EXCAVATION BELOW SUBGRADESECTION A-A  
CROSS SECTION SHOWING UNDERCUT

NOTE: EXACT LOCATIONS AND EXTENT OF E.B.S. SECTIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

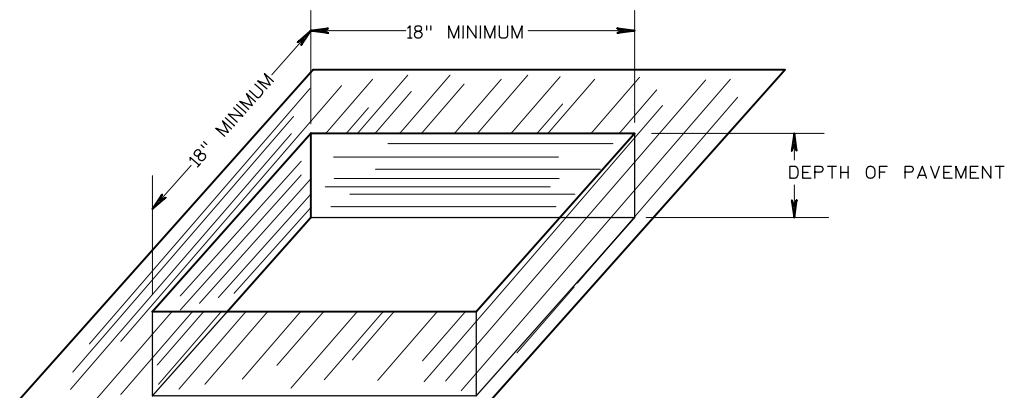
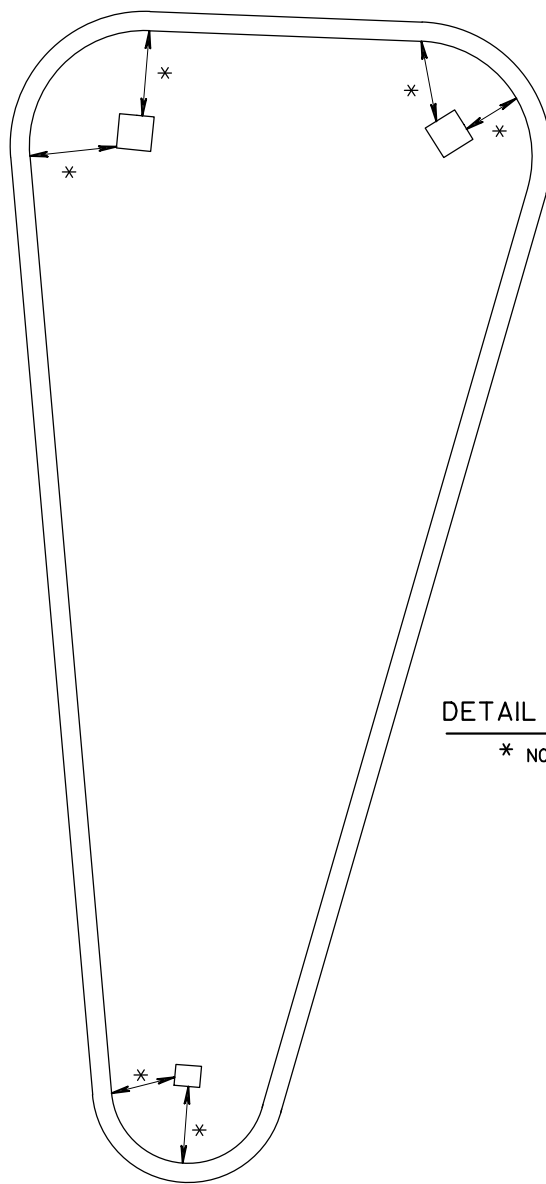
E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER

BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.

THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED.

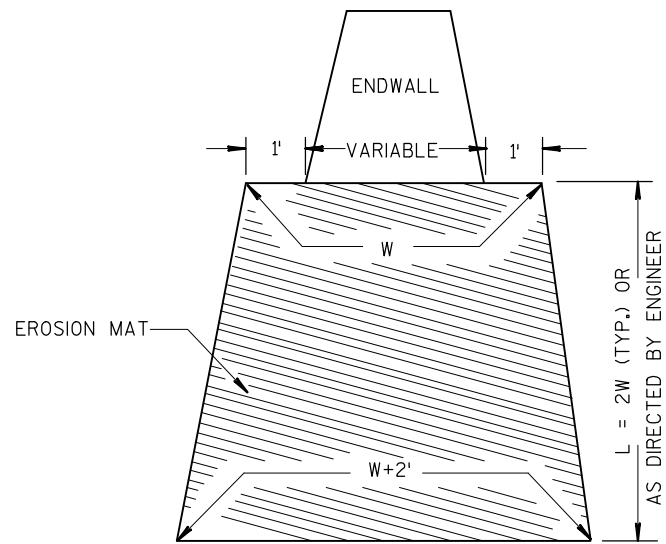
DETAIL FOR EXCAVATION BELOW SUBGRADEGRADING & SHAPING EXISTING DITCH



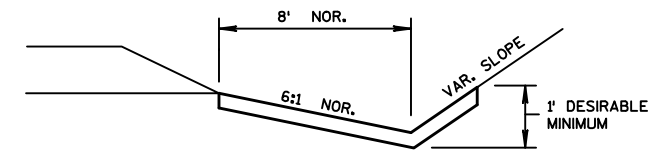


#### DETAIL OF OPENINGS IN ISLAND FOR SIGN PLACEMENT

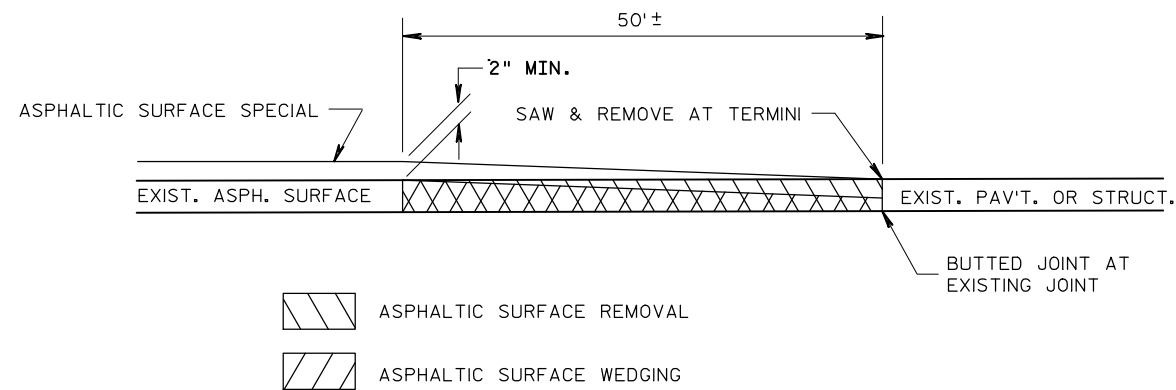
\* NOTE: ALL SQUARED OPENINGS IN ISLAND FOR SIGN PLACEMENTS SHALL BE DETERMINED BY SIGN SIZE AND NUMBER. A 2" MINIMUM FROM BACK OF CURB IS REQUIRED.



EROSION MAT TREATMENT AT CULVERTS



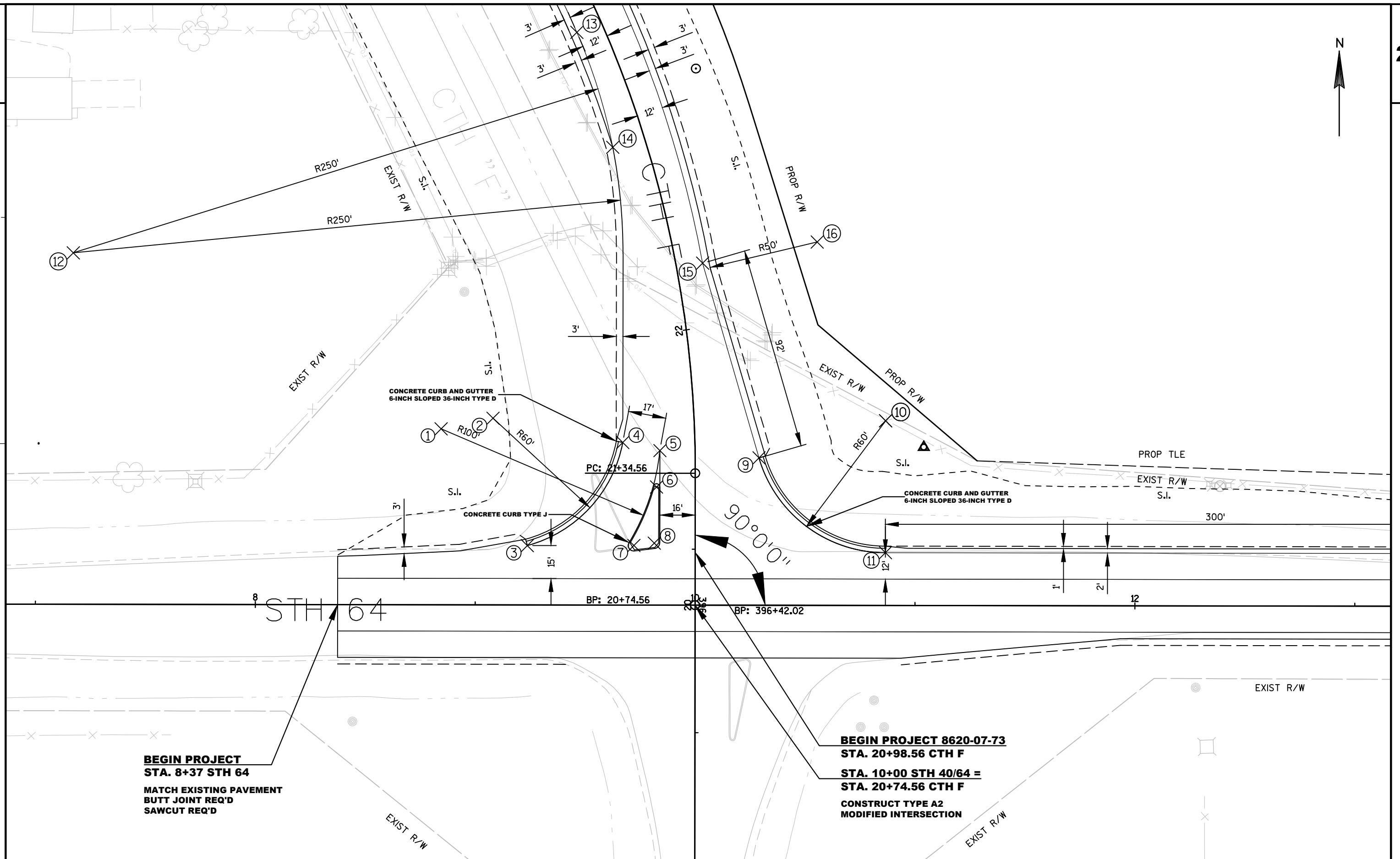
EROSION MAT DETAIL FOR DITCHES



OVERLAP JOINT, BUTTED DETAIL

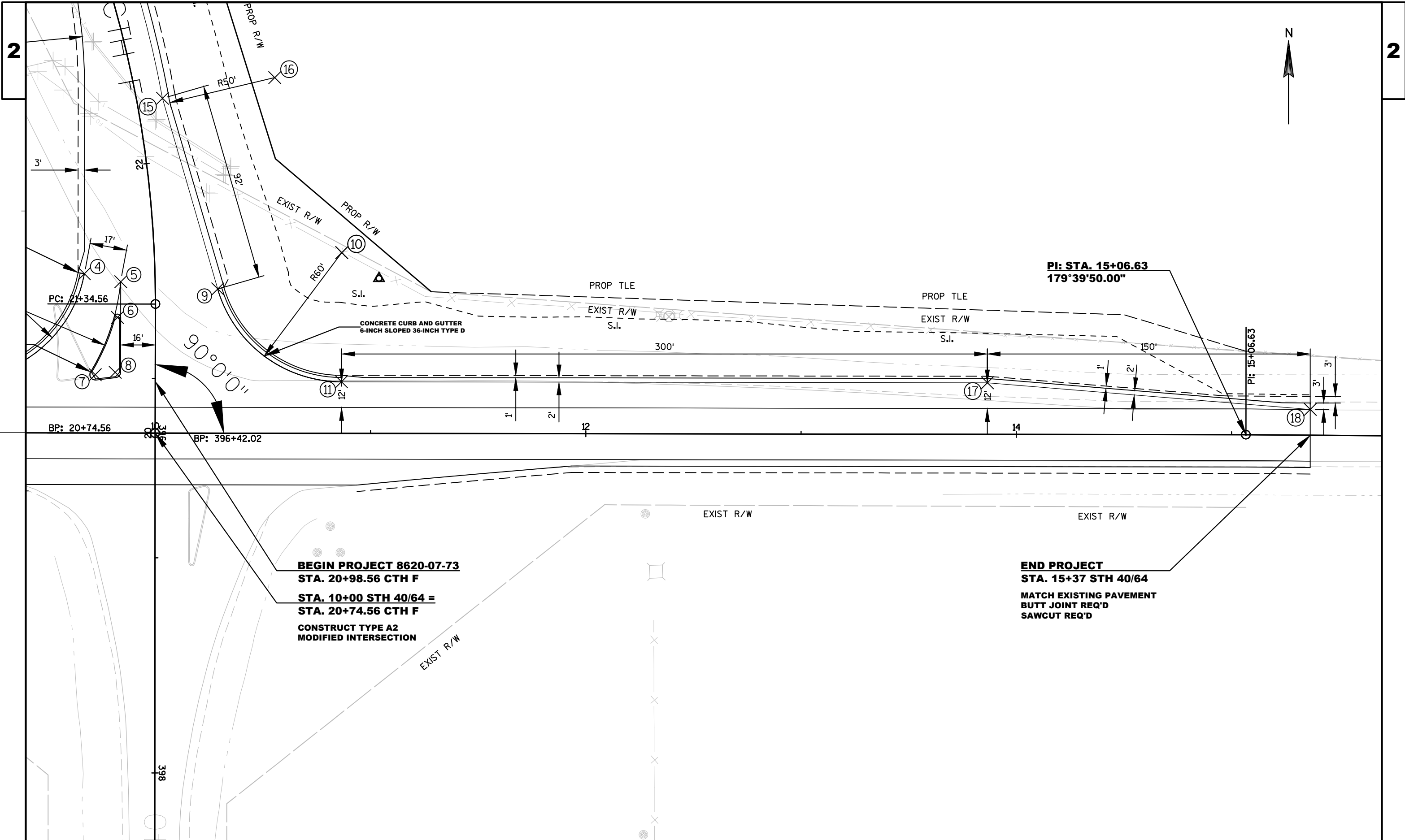
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2 |



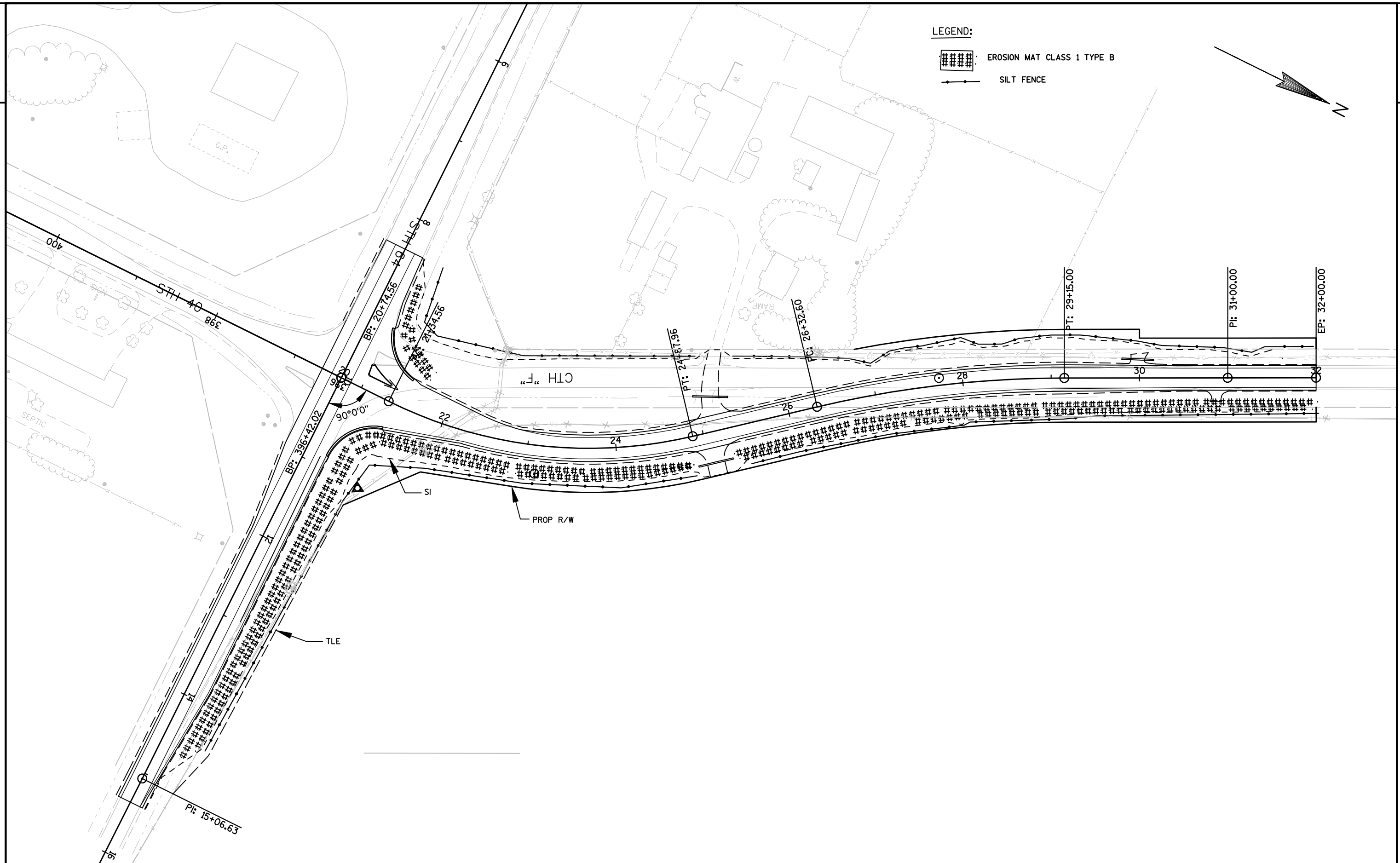
PROJECT NO: 8620-07-73	HWY: STH 40	COUNTY: CHIPPEWA	INTERSECTION DETAILS: CTH F	SHEET	<b>E</b>
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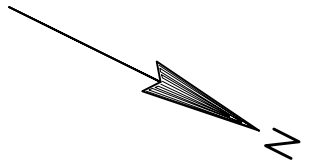


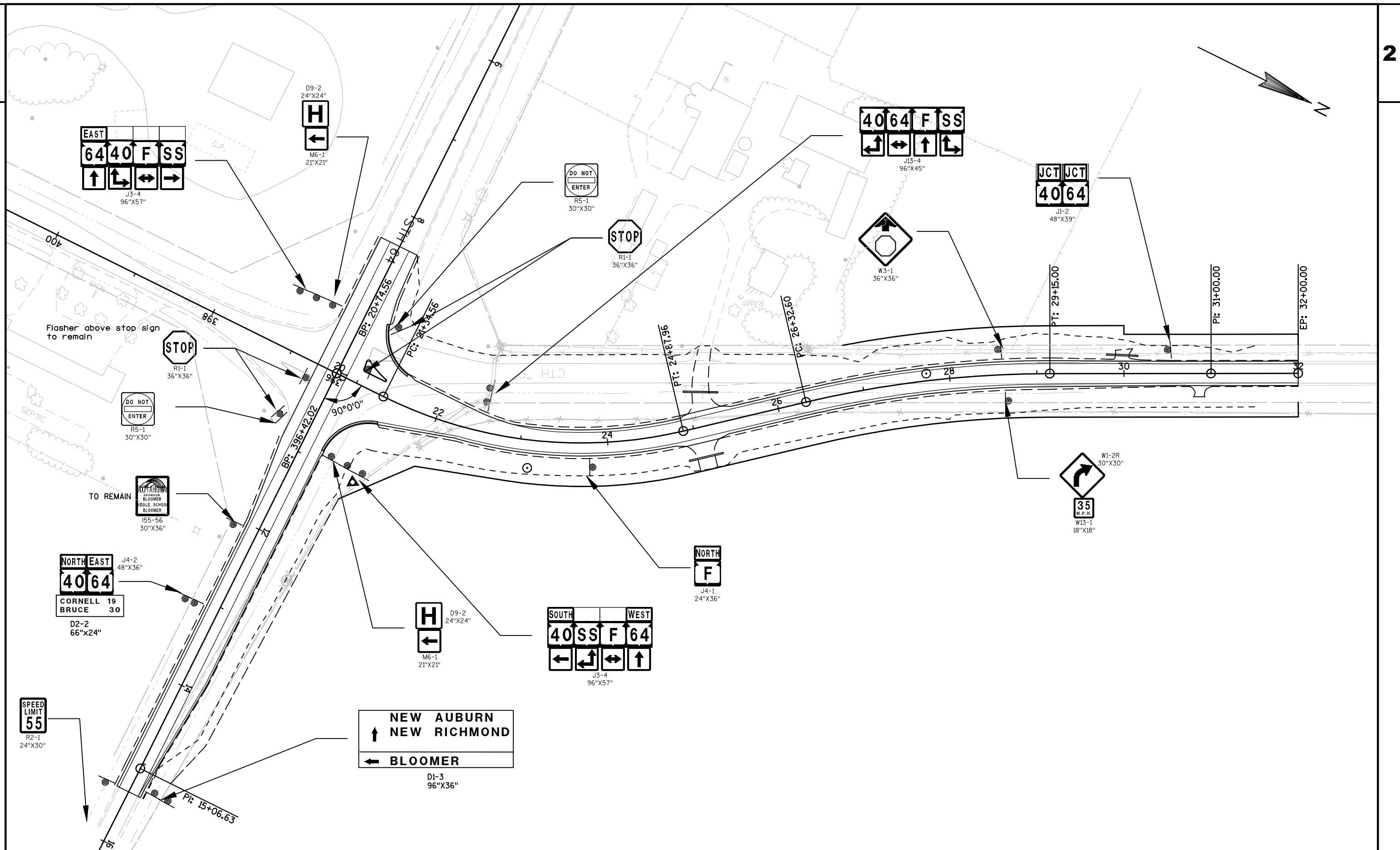
PROJECT NO:8620-07-73	HWY:STH 40	COUNTY:CHIPPEWA	INTERSECTION DETAILS: CTH F	SHEET	E
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POINT	CTH F STATION	OFFSET (FT)	LT/RT	STH 64 STATION	OFFSET (FT)	LT/RT	NORTHING	EASTING	RADIUS
1	21+60.50	115.12	LT	8+84.37	80.08	LT	196744.640	146682.817	100.0'
2	21+64.92	91.26	LT	9+08.00	84.92	LT	196749.444	146706.456	60.0'
3	21+01.56	76.32	LT	9+23.68	27.00	LT	196691.506	146722.047	
4	21+49.52	32.79	LT	9+67.00	74.00	LT	196738.439	146765.438	
5	21+45.19	16.00	LT	9+83.89	70.30	LT	196734.713	146782.323	
6	21+28.29	17.61	LT	9+82.39	53.73	LT	196718.144	146780.798	1.5'
7	21+01.67	27.87	LT	9+72.13	27.11	LT	196691.542	146770.492	2.5'
8	21+02.78	18.61	LT	9+81.39	28.22	LT	196692.636	146779.759	2.5'
9	21+41.23	29.01	RT	10+28.96	67.05	LT	196731.394	146827.387	
10	21+55.07	87.00	RT	10+86.52	84.00	LT	196748.256	146884.969	60.0'
11	20+98.56	86.52	RT	10+86.52	24.00	LT	196688.256	146884.877	
12	23+45.94	262.00	LT	7+17.00	159.87	LT	196824.695	146515.570	250.0'
13	23+45.94	12.00	LT	9+45.83	260.55	LT	196925.021	146744.556	
14	22+89.71	15.00	LT	9+62.27	208.27	LT	196872.720	146760.914	
15	22+28.50	12.00	RT	10+03.17	155.61	LT	196819.994	146801.731	
16	22+28.50	65.00	RT	10+55.27	165.32	LT	196829.621	146853.849	50.0'
17	20+98.56	386.52	RT	13+86.52	24.00	LT	196687.795	147184.877	
18	20+86.38	536.52	RT	15+36.45	12.00	LT	196675.390	147334.858	



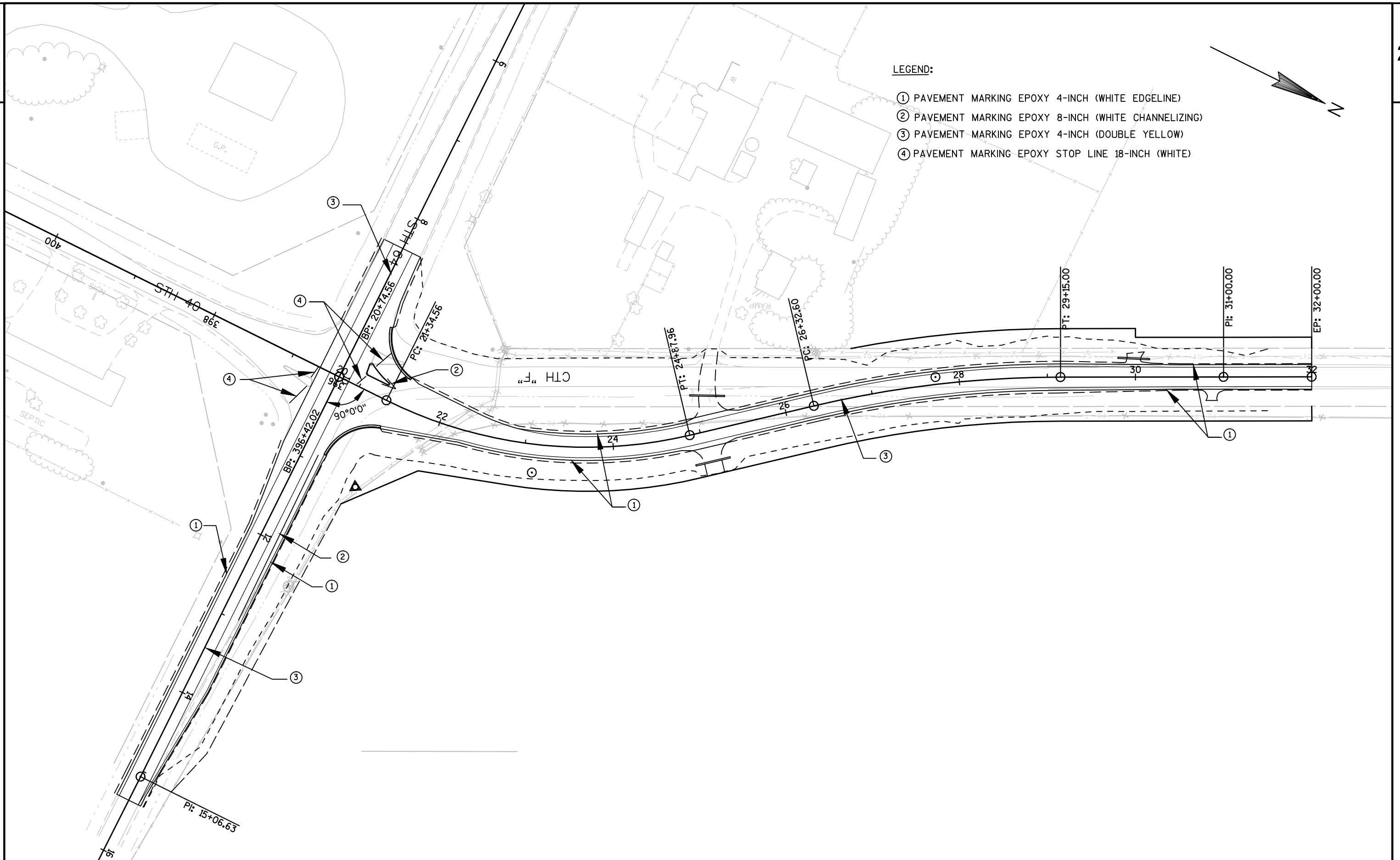
PROJECT NO: 8620-07-73	HWY: STH 40	COUNTY: CHIPPEWA	PLAN: EROSION CONTROL	SHEET	E
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## LEGEND:

- ① PAVEMENT MARKING EPOXY 4-INCH (WHITE EDGELINE)
- ② PAVEMENT MARKING EPOXY 8-INCH (WHITE CHANNELIZING)
- ③ PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)
- ④ PAVEMENT MARKING EPOXY STOP LINE 18-INCH (WHITE)



PROJECT NO:8620-07-73

HWY:STH 40

COUNTY:CHIPPEWA

PLAN: PAVEMENT MARKING

SHEET

E

FILE NAME : N:\PDS\C3D\86200703\SHEETPLAN\024501\_PM.DWG  
LAYOUT NAME - 024501\_pm

PLOT DATE : 2/26/2015 2:32 PM

PLOT BY : MOUNIR, MOHAMED A

PLOT NAME :

PLOT SCALE : 1 IN:10 FT

WISDOT/CADDs SHEET 42

## WORK ZONE TRAFFIC CONTROL LEGEND

- TRAFFIC CONTROL DRUM
- ▨ WORK ZONE
- ➔ DIRECTION OF TRAFFIC
- ⊥ BARRICADE TYPE III

## TRAFFIC CONTROL

CONTROL TRAFFIC WITH FLAGGERS SEE SDD FOR TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

SEE SDD FOR TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC FOR PLACEMENT OF ADVANCED WORK ZONE SIGNING

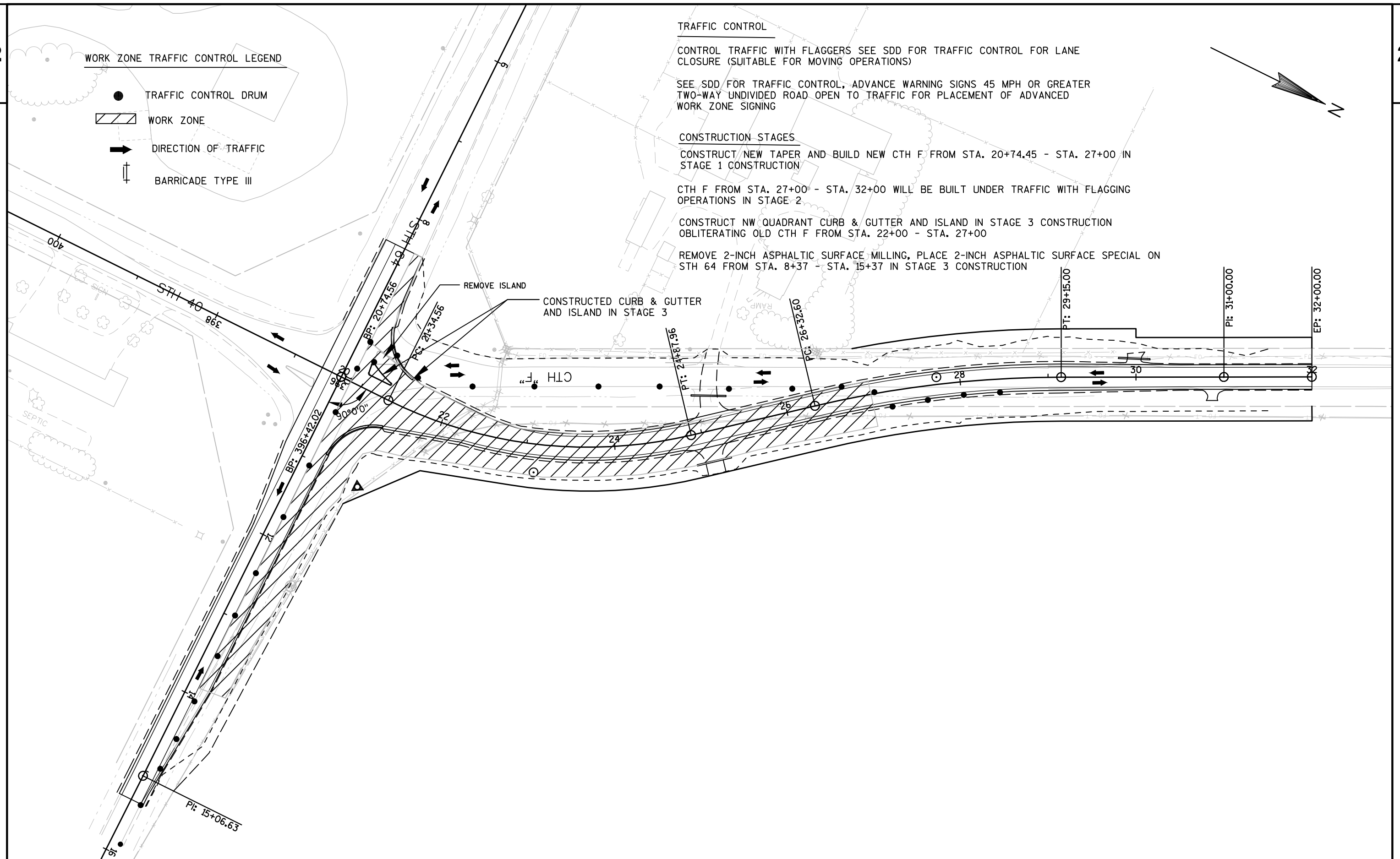
## CONSTRUCTION STAGES

CONSTRUCT NEW TAPER AND BUILD NEW CTH F FROM STA. 20+74.45 - STA. 27+00 IN STAGE 1 CONSTRUCTION

CTH F FROM STA. 27+00 - STA. 32+00 WILL BE BUILT UNDER TRAFFIC WITH FLAGGING OPERATIONS IN STAGE 2

CONSTRUCT NW QUADRANT CURB & GUTTER AND ISLAND IN STAGE 3 CONSTRUCTION OBLITERATING OLD CTH F FROM STA. 22+00 - STA. 27+00

REMOVE 2-INCH ASPHALTIC SURFACE MILLING, PLACE 2-INCH ASPHALTIC SURFACE SPECIAL ON STH 64 FROM STA. 8+37 - STA. 15+37 IN STAGE 3 CONSTRUCTION



## WORK ZONE TRAFFIC CONTROL LEGEND

- TRAFFIC CONTROL DRUM
- ▨ WORK ZONE
- ➔ DIRECTION OF TRAFFIC
- || BARRICADE TYPE III

## TRAFFIC CONTROL

CONTROL TRAFFIC WITH FLAGGERS SEE SDD FOR TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

SEE SDD FOR TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC FOR PLACEMENT OF ADVANCED WORK ZONE SIGNING

## CONSTRUCTION STAGES

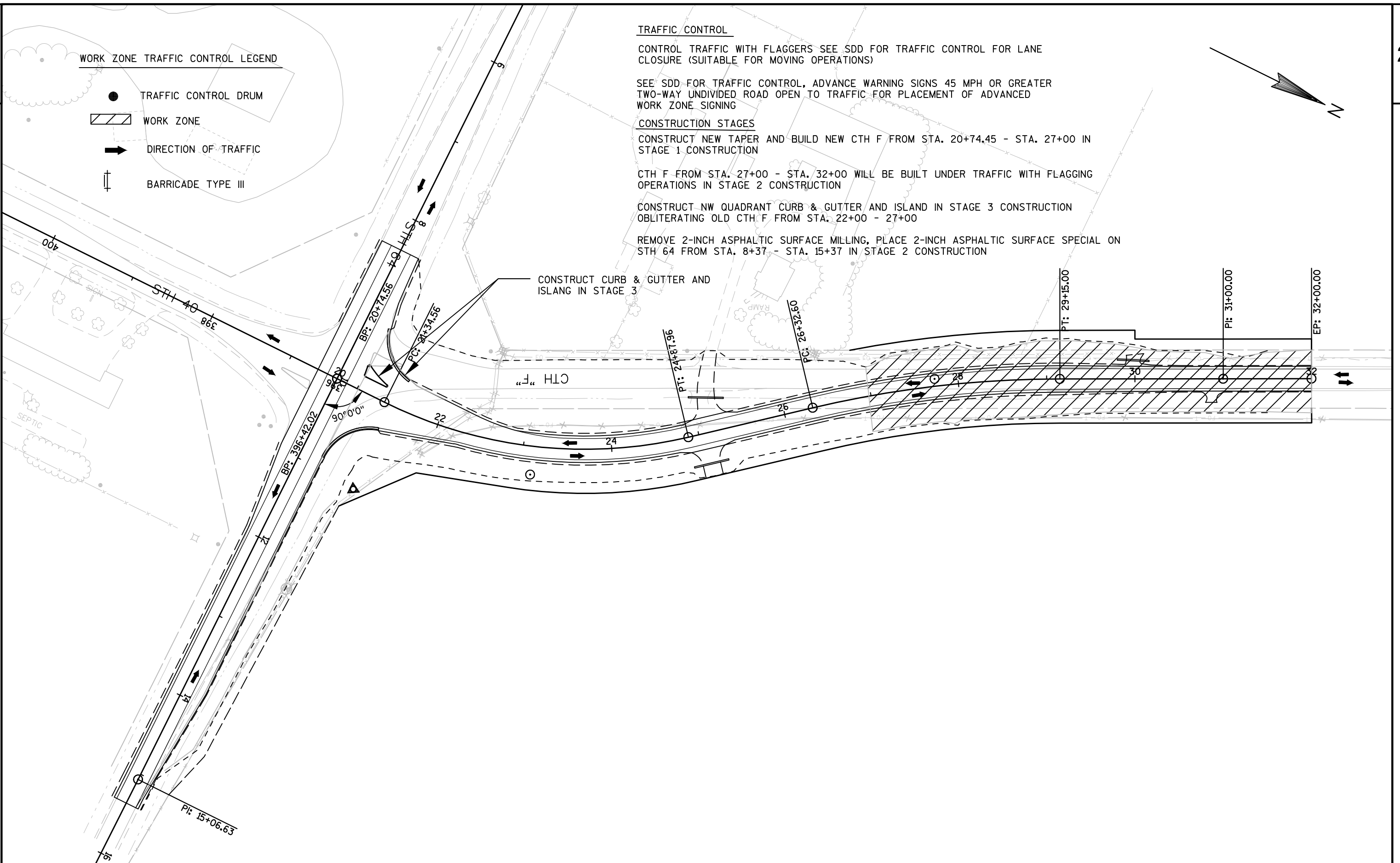
CONSTRUCT NEW TAPER AND BUILD NEW CTH F FROM STA. 20+74.45 - STA. 27+00 IN STAGE 1 CONSTRUCTION

CTH F FROM STA. 27+00 - STA. 32+00 WILL BE BUILT UNDER TRAFFIC WITH FLAGGING OPERATIONS IN STAGE 2 CONSTRUCTION

CONSTRUCT NW QUADRANT CURB & GUTTER AND ISLAND IN STAGE 3 CONSTRUCTION OBLITERATING OLD CTH F FROM STA. 22+00 - 27+00

REMOVE 2-INCH ASPHALTIC SURFACE MILLING, PLACE 2-INCH ASPHALTIC SURFACE SPECIAL ON STH 64 FROM STA. 8+37 - STA. 15+37 IN STAGE 2 CONSTRUCTION

CONSTRUCT CURB & GUTTER AND ISLAND IN STAGE 3





## WORK ZONE TRAFFIC CONTROL LEGEND

- TRAFFIC CONTROL DRUM
- ▨ WORK ZONE
- ➔ DIRECTION OF TRAFFIC
- ⊥ BARRICADE TYPE III

## TRAFFIC CONTROL

CONTROL TRAFFIC WITH FLAGGERS SEE SDD FOR TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

SEE SDD FOR TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC FOR PLACEMENT OF ADVANCED WORK ZONE SIGNING

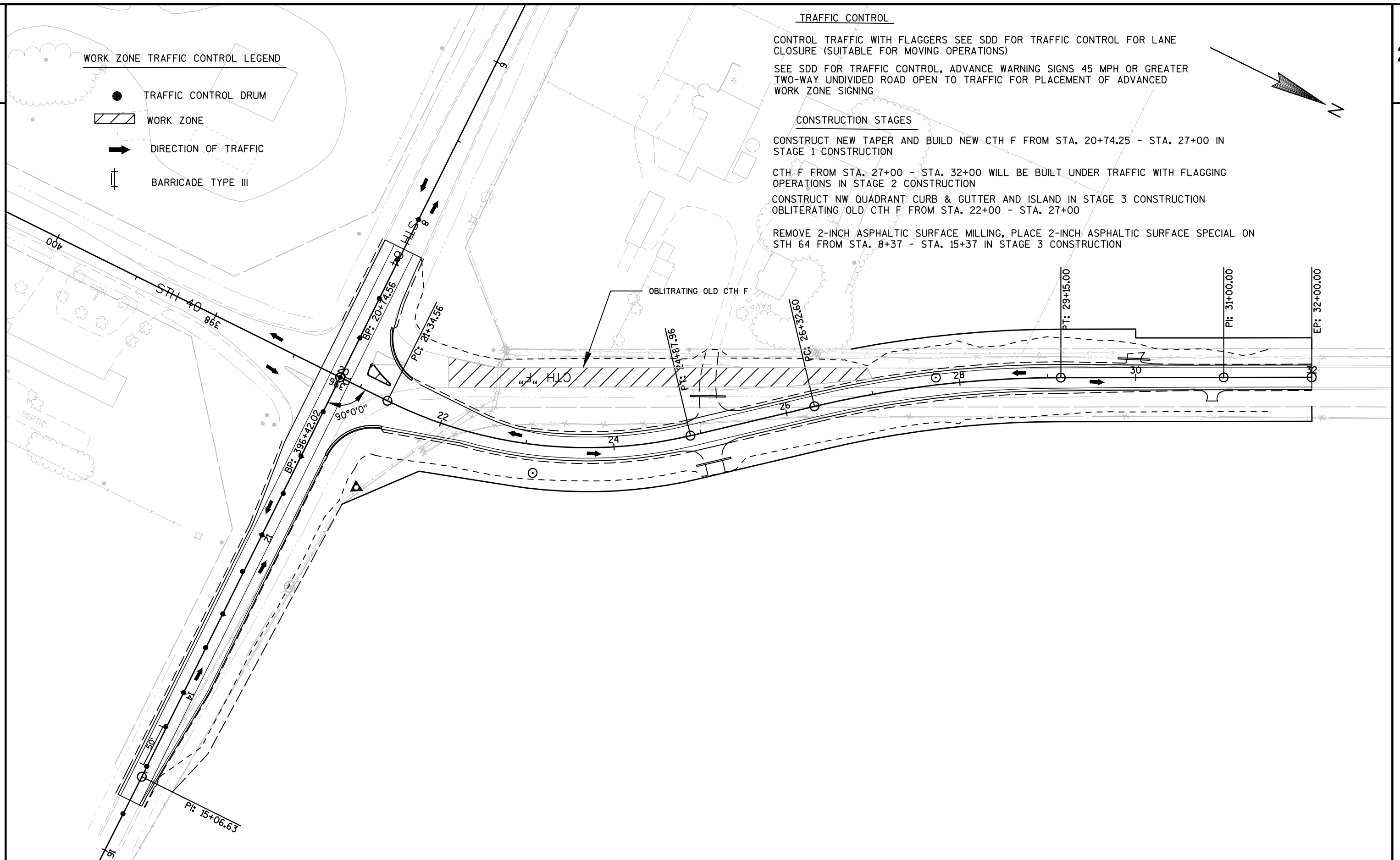
## CONSTRUCTION STAGES

CONSTRUCT NEW TAPER AND BUILD NEW CTH F FROM STA. 20+74.25 - STA. 27+00 IN STAGE 1 CONSTRUCTION

CTH F FROM STA. 27+00 - STA. 32+00 WILL BE BUILT UNDER TRAFFIC WITH FLAGGING OPERATIONS IN STAGE 2 CONSTRUCTION

CONSTRUCT NW QUADRANT CURB & GUTTER AND ISLAND IN STAGE 3 CONSTRUCTION OBLITERATING OLD CTH F FROM STA. 22+00 - STA. 27+00

REMOVE 2-INCH ASPHALTIC SURFACE MILLING, PLACE 2-INCH ASPHALTIC SURFACE SPECIAL ON STH 64 FROM STA. 8+37 - STA. 15+37 IN STAGE 3 CONSTRUCTION





Alignment: CTH F				Alignment: CTH F Continued			
Tangent Data				Curve Point Data			
Description	PT Station	Northing	Easting	Description	Station	Northing	Easting
Start:	20+74.558	196664.388	146798.323	PC:	26+32.602	197161.784	146589.065
End:	21+34.558	196724.388	146798.415	RP:		197939.687	147528.888
Tangent Data				PT:	29+15.000	197398.138	146435.67
Parameter	Value	Parameter	Value	Circular Curve Data			
Length:	60	Course:	N 00° 05' 16.5553" E	Parameter	Value	Parameter	Value
				Delta:	13° 15' 44.9542"	Type:	RIGHT
Curve Point Data				Radius:	1220		
Description	Station	Northing	Easting	Length:	282.398	Tangent:	141.833
PC:	21+34.558	196724.388	146798.415	Mid-Ord:	8.162	External:	8.217
RP:		196725.171	146288.415	Chord:	281.768	Course:	N 32° 59' 01.5106" W
PT:	24+87.960	197050.36	146681.292	Tangent Data			
Circular Curve Data				Description	PT Station	Northing	Easting
Parameter	Value	Parameter	Value	Start:	29+15.000	197398.138	146435.67
Delta:	39° 42' 10.5430"	Type:	LEFT	End:	31+00.000	197563.913	146353.55
Radius:	510			Tangent Data			
Length:	353.403	Tangent:	184.129	Parameter	Value	Parameter	Value
Mid-Ord:	30.306	External:	32.221	Length:	185	Course:	N 26° 21' 09.0335" W
Chord:	346.375	Course:	N 19° 45' 48.7162" W				
				Tangent Data			
Tangent Data				Description	PT Station	Northing	Easting
Description	PT Station	Northing	Easting	Start:	31+00.000	197563.913	146353.55
Start:	24+87.960	197050.36	146681.292	End:	32+00.000	197653.521	146309.161
End:	26+32.602	197161.784	146589.065	Tangent Data			
Tangent Data				Parameter	Value	Parameter	Value
Parameter	Value	Parameter	Value	Length:	100	Course:	N 26° 21' 09.0335" W
Length:	144.641	Course:	N 39° 36' 53.9876" W				



Superelevation Data: CTH F Curve 2					
Station	Description	Left Outside Shoulder	Left Outside Lane	Right Outside Lane	Right Outside Shoulder
20+74.56	Begin Alignment	-4.00%	-2.00%	-2.00%	-4.00%
24+50.00	End Normal Shoulder	-4.00%	-2.00%	-2.00%	-4.00%
24+96.60	End Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%
25+44.60	Level Crown	0.00%	0.00%	-2.00%	-4.00%
25+92.60	Reverse Crown	2.00%	2.00%	-2.00%	-4.00%
26+40.60	Low Shoulder Match	4.00%	4.00%	-4.00%	-4.00%
26+76.60	Begin Full Super	5.50%	5.50%	-5.50%	-5.50%
28+71.00	End Full Super	5.50%	5.50%	-5.50%	-5.50%
29+07.00	Low Shoulder Match	4.00%	4.00%	-4.00%	-4.00%
29+55.00	Reverse Crown	2.00%	2.00%	-2.00%	-4.00%
30+03.00	Level Crown	0.00%	0.00%	-2.00%	-4.00%
30+51.00	Begin Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%
31+00.00	Begin Normal Shoulder	-4.00%	-2.00%	-2.00%	-4.00%
32+00.00	End Alignment	-4.00%	-2.00%	-2.00%	-4.00%

Alignment: STH 40				Alignment: STH 64			
Tangent Data				Tangent Data			
Description	PT Station	Northing	Easting	Description	PT Station	Northing	Easting
Start:	396+42.020	196664.388	146798.323	Start:	0+000.000	196665.923	145798.324
End:	404+61.190	195845.219	146797.304	End:	15+06.630	196663.611	147304.952
Tangent Data				Tangent Data			
Parameter	Value	Parameter	Value	Parameter	Value	Parameter	Value
Length:	819.17	Course:	S 00° 04' 16.5553" W	Length:	1506.63	Course:	S 89° 54' 43.4447" E
Tangent Data				Tangent Data			
Description	PT Station	Northing	Easting	Description	PT Station	Northing	Easting
Start:	404+61.190	195845.219	146797.304	Start:	15+06.630	196663.611	147304.952
End:	409+00.000	195406.409	146796.758	End:	23+00.000	196657.739	148098.3
Tangent Data				Tangent Data			
Parameter	Value	Parameter	Value	Parameter	Value	Parameter	Value
Length:	438.81	Course:	S 00° 04' 16.5553" W	Length:	793.37	Course:	S 89° 34' 33.4447" E

Alignment: flag-ne					
Description:					
Layer: P_ALI-Base					
Arc					
	PC N	196688.3 E	146884.9	Station	00+00
	CC N	196748.3 E	146885		
	PI N	196688.3 E	146840	Station	00+44.88
		TAN	44.878'		
		DB	N 89° 54' 43.45 W'''		
		DA	N 16° 19' 17.01 W'''		
		LChord Di	71.875'	Bearing	N 53° 7' 0.23 W"
		External D	14.927'		
		Middle Or	11.953'		
		Radius	60.000'		
		DEG	95° 29' 34.68'''		
		DELTA	73° 35' 26.44'''		
		LENGTH	77.064'		
	PT N	196731.4 E	146827.4	Station	00+77.06
End	N	196731.4 E	146827.4 Z	Station	00+77.06
Alignment Length = 77.06'					

Alignment: flag-nw					
Description:					
Layer: P_ALI-Base					
Arc					
	PC N	196691.5 E	146722	Station	00+00
	CC N	196749.4 E	146706.5		
	PI N	196701.3 E	146758.5	Station	00+37.76
		TAN	37.761'		
		DB	N 74° 56' 18.09 E'''		
		DA	N 10° 34' 9.01 E'''		
		LChord Di	63.918'	Bearing	N 42° 45' 13.55 E"
		External D	10.894'		
		Middle Or	9.220'		
		Radius	60.000'		
		DEG	95° 29' 34.68'''		
		DELTA	64° 22' 9.08'''		
		LENGTH	67.407'		
	PT N	196738.4 E	146765.4	Station	00+67.41
End	N	196738.4 E	146765.4 Z	Station	00+67.41
Alignment Length = 67.41'					

DATE 27FEB15		E S T I M A T E O F Q U A N T I T I E S			
LINE				8620-07-73	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	203.0100	Removing Small Pipe Culverts	EACH	3.000	3.000
0020	204.0115	Removing Asphaltic Surface Butt Joints	SY	266.000	266.000
0030	204.0120	Removing Asphaltic Surface Milling	SY	2,446.000	2,446.000
0040	204.0130	Removi ng Curb	LF	88.000	88.000
0050	204.0170	Removi ng Fence	LF	388.000	388.000
0060	205.0100	Excavation Common	CY	3,719.000	3,719.000
0070	208.1100	Select Borrow	CY	2,899.000	2,899.000
0080	213.0100	Finishing Roadway (project) 01. 8620-07-73	EACH	1.000	1.000
0090	214.0100	Obliterating Old Road	STA	5.000	5.000
0100	305.0110	Base Aggregate Dense 3/4-Inch	TON	359.000	359.000
0110	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,851.000	2,851.000
0120	305.0500	Shapi ng Shoul ders	STA	14.000	14.000
0130	313.0110	Pi t Run	TON	3,085.000	3,085.000
0140	455.0605	Tack Coat	GAL	469.000	469.000
0150	465.0305	Asphal tic Surface Safety Islands	TON	3.000	3.000
0160	465.0315	Asphal tic Flumes	SY	21.000	21.000
0170	521.1518	Apron Endwalls for Culvert Pipe Sloped	EACH	6.000	6.000
0180	528.0118	Side Drains Steel 18-Inch 6 to 1			
0180	528.0118	Culvert Pipe Corrugated Steel Polymer Coated 18-Inch	LF	120.000	120.000
0190	601.0120	Concrete Curb Type J	LF	78.000	78.000
0200	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	144.000	144.000
0210	618.0100	Maintenance And Repair of Haul Roads (project) 01. 8620-07-73	EACH	1.000	1.000
0220	619.1000	Mobilization	EACH	1.000	1.000
0230	625.0500	Salvaged Topsoil	SY	8,300.000	8,300.000
0240	627.0200	Mulching	SY	5,540.000	5,540.000
0250	628.1504	Silt Fence	LF	2,745.000	2,745.000
0260	628.1520	Silt Fence Maintenance	LF	2,745.000	2,745.000
0270	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0280	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0290	628.2004	Erosion Mat Class I Type B	SY	2,760.000	2,760.000
0300	628.7504	Temporary Ditch Checks	LF	184.000	184.000
0310	629.0210	Fertilizer Type B	CWT	7.000	7.000
0320	630.0130	Seeding Mixture No. 30	LB	700.000	700.000
0330	630.0200	Seeding Temporary	LB	400.000	400.000
0340	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	22.000	22.000
0350	637.2210	Signs Type II Reflective H	SF	257.120	257.120
0360	638.2602	Removing Signs Type II	EACH	50.000	50.000
0370	638.3000	Removing Small Sign Supports	EACH	22.000	22.000
0380	642.5201	Field Office Type C	EACH	1.000	1.000
0390	643.0100	Traffic Control (project) 01. 8620-07-73	EACH	1.000	1.000
0400	643.0300	Traffic Control Drums	DAY	3,060.000	3,060.000
0410	643.0420	Traffic Control Barricades Type III	DAY	272.000	272.000
0420	643.0705	Traffic Control Warning Lights Type A	DAY	680.000	680.000
0430	643.0715	Traffic Control Warning Lights Type C	DAY	1,088.000	1,088.000
0440	643.0900	Traffic Control Signs	DAY	1,564.000	1,564.000
0450	646.0106	Pavement Marking Epoxy 4-Inch	LF	5,808.000	5,808.000
0460	646.0126	Pavement Marking Epoxy 8-Inch	LF	280.000	280.000
0470	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	1,400.000	1,400.000
0480	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	85.000	85.000
0490	648.0100	Locating No-Passing Zones	MI	0.330	0.330
0500	650.4500	Construction Staking Subgrade	LF	1,102.000	1,102.000

DATE 27FEB15		E S T I M A T E O F Q U A N T I T I E S			
LINE		8620-07-73			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0510	650.5000	Construction Staking Base	LF	1,102.000	1,102.000
0520	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	144.000	144.000
0530	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0540	650.9910	Construction Staking Supplemental Control (project) 01. 8620-07-73	LS	1.000	1.000
0550	650.9920	Construction Staking Slope Stakes	LF	1,102.000	1,102.000
0560	690.0150	Sawing Asphalt	LF	370.000	370.000
0570	SPV.0090	Special 01. Cure And Seal Treatment Concrete Curb And Gutter	LF	144.000	144.000
0580	SPV.0195	Special 01. Asphaltic Surface Special	TON	1,470.000	1,470.000

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	203. 0100 EACH	REMARKS
0010	25+12	CTH F	1	DRI VEWAY
0010	30+00	CTH F	2	FE
TOTAL 0010			3	

REMOVING FENCE

CATEGORY	STATION TO STATION	LOCATION	204. 0170 LF	REMARKS
0010	10+25	STH 64	388	RT
TOTAL 0010			388	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	STATION TO STATION	LOCATION	204. 0115 SY	REMARKS
0010	8+37 - 8+87	STH 64	133	MAI NLI NE
0010	14+87 - 15+37	STH 64	133	MAI NLI NE
TOTAL 0010			266	

EXCAVATION COMMON

CATEGORY	STATION TO STATION	LOCATION	205. 0100 CY	REMARKS
0010	20+98 - 32+00	CTH F	1246	SEE EARTHWORK SPREADSHEET
0010	11+00 - 14+00	STH 64	2073	SEE EARTHWORK SPREADSHEET
		CTH F	400	UNDI STRI BUTED
TOTAL 0010			3719	

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STATION TO STATION	LOCATION	204. 0120 SY	REMARKS
0010	8+37 - 12+00	STH 64	242	TAPER
0010	8+37 - 12+00	STH 64	968	MAI NLI NE
0010	12+00 - 15+37	STH 64	225	TAPER
0010	12+00 - 15+37	STH 64	1011	MAI NLI NE
TOTAL 0010			2446	

SELECT BORROW

CATEGORY	STATION TO STATION	LOCATION	208. 1100 CY	REMARKS
0010	20+98 - 32+00	CTH F	2899	SEE EARTHWORK SPREADSHEET
TOTAL 0010			2899	

REMOVING CURB

CATEGORY	STATION	LOCATI ON	204. 0130 LF	REMARKS
0010	21+00	CTH F	88	LT
TOTAL 0010			88	

FINISHING ROADWAY (01. 8620-07-73)

CATEGORY	LOCATION	213. 0100 EACH	REMARKS
0010	CTH F\STH 64	1	PROJECT
TOTAL 0010		1	



OBLITERATING OLD ROAD					TACK COAT				
CATEGORY	STATION TO STATION	LOCATION	214. 0100 STA	REMARKS	CATEGORY	STATION TO STATION	LOCATION	455. 0605 GAL	REMARKS
0010	22+00 - 27+00	CTH F	5	OLD CTH F	0010	8+37 - 15+37	STH 64	212	MAINLINE (RATE .07)
					0010	20+98 - 32+00	CTH F	257	MAINLINE (RATE .07)
		TOTAL 0010	5				TOTAL 0010	469	
BASE AGGREGATE DENSE 3/4-INCH									
CATEGORY	STATION TO STATION	LOCATION	305. 0110 TON	REMARKS	ASPHALTIC SURFACE SAFETY ISLANDS				
0010	8+37 - 15+37	STH 64	87	SHOULDER					
0010	20+98 - 32+00	CTH F	272	SHOULDER					
		TOTAL 0010	359						
BASE AGGREGATE DENSE 1 1/4-INCH									
CATEGORY	STATION TO STATION	LOCATION	305. 0120 TON	REMARKS	ASPHALTIC FLUMES				
0010	20+98 - 32+00	CTH F	2601	MAINLINE					
0010	10+86 - 15+37	STH 64	250	TAPER					
		TOTAL 0010	2851						
SHAPING SHOULDERS									
CATEGORY	STATION TO STATION	LOCATION	305. 0500 STA	REMARKS	APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 6 TO 1				
0010	8+37 - 15+37	STH 64	14	LT, RT					
		TOTAL 0010	14						
PIT RUN									
CATEGORY	STATION TO STATION	LOCATION	313. 0110 TON	REMARKS	CATEGORY	STATION	LOCATION	521. 1518 EACH	REMARKS
0010	20+98 - 32+00	CTH F	3085	MAINLINE	0010	25+12	CTH F	4	DRIVEWAY AND FE
		TOTAL 0010	3085		0010	30+00	CTH F	2	FE
							TOTAL 0010	6	

CULVERT PIPE CORRUGATED STEEL POLYMER COATED 18-INCH

CATEGORY	STATION	LOCATION	THI CKNESS	528. 0118 LF	REMARKS
0010	25+12	CTH F	. 064	80	DRI VEWAY AND FE
0010	30+00	CTH F	. 064	40	FE
TOTAL 0010				120	

CONCRETE CURB TYPE J

CATEGORY	STATION	LOCATION	601. 0120 LF	REMARKS
0010	21+01	CTH F	78	I SLAND
TOTAL 0010			78	

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

CATEGORY	STATION TO STATION	LOCATION	601. 0557 LF	REMARKS
0010	0+00 - 0+77	CTH F - NE FLAG	77	RT
0010	0+00 - 0+67	CTH F - NW FLAG	67	LT
TOTAL 0010			144	

MAINTENANCE AND REPAIR OF HAUL ROADS (01. 8620-07-73)

CATEGORY	LOCATION	618. 0100 EACH	REMARKS
0010	CTH F\STH 64	1	PROJECT
TOTAL 0010		1	

MOBI LI ZATI ON

CATEGORY	STATION TO STATION	LOCATI ON	619. 1000 EACH	REMARKS
0010	20+98 - 32+00	CTH F\STH 64	1	PROJECT
TOTAL 0010			1	

SALVAGED TOPSOI L

CATEGORY	TO STATION	LOCATI ON	625. 0500 SY	REMARKS
0010	- 32+00	CTH F	6900	LT, RT
0010	- 15+37	STH 64	1400	LT
TOTAL 0010			8300	

MULCHI NG

CATEGORY	STATION TO STATION	LOCATION	627. 0200 SY	REMARKS
0010	20+98 - 32+00	CTH F	4940	DIRECT BY ENGINEER
0010	10+86 - 15+37	STH 64	600	DIRECT BY ENGINEER
TOTAL 0010			5540	

SI LT FENCE

CATEGORY	STATION TO STATION	LOCATION	628. 1504 LF	REMARKS
0010	21+50 - 32+00	CTH F	2294	DIRECT BY ENGINEER
0010	10+86 - 15+37	STH 64	451	DIRECT BY ENGINEER
TOTAL 0010			2745	

SILT FENCE MAINTENANCE

CATEGORY	STATION TO STATION	LOCATION	628. 1520 LF	REMARKS
0010	21+50 - 32+00	CTH F	2294	DIRECT BY ENGINEER
0010	10+86 - 15+37	STH 64	451	DIRECT BY ENGINEER
TOTAL 0010			2745	

MOBILIZATIONS EROSION CONTROL

CATEGORY	STATION TO STATION	LOCATION	628. 1905 EACH	REMARKS
0010	20+98 - 32+00	CTH F\STH 64	2	PROJECT
TOTAL 0010			2	

MOBILIZATIONS EMERGENCY EROSION CONTROL

CATEGORY	STATION TO STATION	LOCATION	628. 1910 EACH	REMARKS
0010	20+98 - 32+00	CTH F\STH 64	4	PROJECT
TOTAL 0010			4	

EROSION MAT CLASS I TYPE B

CATEGORY	STATION TO STATION	LOCATION	628. 2004 SY	REMARKS
0010	20+98 - 32+00	CTH F	1960	DITCH. DIRECT BY ENGINEER
0010	10+86 - 15+37	STH 64	800	DITCH. DIRECT BY ENGINEER
TOTAL 0010			2760	

TEMPORARY DITCH CHECKS

CATEGORY	STATION TO STATION	LOCATION	628. 7504 LF	REMARKS
0010	21+00 - 32+00	CTH F	132	DITCH, DIRECT BY ENGINEER
0010	11+00 - 15+37	STH 64	52	DITCH, DIRECT BY ENGINEER
TOTAL 0010			184	

FERTILIZER TYPE B

CATEGORY	STATION TO STATION	LOCATION	629. 0210 CWT	REMARKS
0010	20+98 - 32+00	CTH F	5. 5	LT, RT
0010	8+37 - 15+37	STH 64	1. 5	LT
TOTAL 0010			7. 0	

SEEDING MIXTURE NO. 30

CATEGORY	STATION TO STATION	LOCATION	630. 0130 LB	REMARKS
0010	20+98 - 32+00	CTH F	600	LT, RT
0010	10+86 - 15+37	STH 64	100	LT
TOTAL 0010			700	

SEEDING TEMPORARY

CATEGORY	STATION TO STATION	LOCATION	630. 0200 LB	REMARKS
0010	20+98 - 32+00	CTH F	300	LT, RT
0010	10+86 - 15+37	STH 64	100	LT
TOTAL 0010			400	

SIGNS REFLECIVE TYPE II AND SUPPORTS  
REMOVING SIGNS TYPE II AND SMALL SIGNS SUPPORTS

						637.2210	634.0616	638.2602	638.3000
STATION	LOCATION	Code	Code Description	Size Width	Size Height	SIGNS REFLECTIVE TYPE II (SF)	POSTS WOOD 4X6X16-FT (EACH)	REMOVING SIGNS TYPE II (EACH)	REMOVING SMALL SIGNS SUPPORTS (EACH)
15+17	STH 64, LT	D1-3	Triple Destination/Arrow, NEW AUBURN, NEW RICHMOND, BLOOMER	96 in	36 in	24.00	2	1	2
11+00	STH 64, LT	D9-2	HOSPITAL	24 in	24 in	4.00	1	1	1
11+00	STH 64, LT	M6-1	Arrow - RIGHT, LEFT, OR AHEAD	21	21	3.06		1	
11+00	STH 64, LT	J3-4	Directional Assembly ( 4 Headed Route Panel), WEST 64, F, SS, SOUTH 40	96	57	38.00	2	10	2
	CROSSROAD, LT	R1-1	STOP	36	36	9.00	1	1	1
	CROSSROAD, LT	R1-1	STOP	36	36	9.00	1	1	1
	CROSSROAD, RT	R1-1	STOP	36	36	9.00	1	1	1
	CROSSROAD, RT	R1-1	STOP	36	36	9.00			
	CROSSROAD, LT	R5-1	Do Not Enter	30	30	6.25	1	1	1
	CROSSROAD, RT	R5-1	Do Not Enter	30	30	6.25	1	1	1
15+17	STH 64, RT	R2-1	SPEED LIMIT 55 MPH	24	30	5.00	1	1	1
13+00	STH 64, RT	D2-2	CORNELL 19, BRUCE 30	66	24	11.00	2	1	2
13+00	STH 64, RT	J4-2	NORTH 40, EAST 64	48	36	12.00		4	
6+60	STH 64, RT	J3-4	Directional Assembly ( 4 Headed Route Panel), SS, F, 40, EAST 64	96	57	38.00	2	9	2
6+60	STH 64, RT	D9-2	HOSPITAL	24	24	4.00	1	1	1
6+60	STH 64, RT	M6-1	Arrow - RIGHT, LEFT, OR AHEAD	21	21	3.06		1	
23+75	CTH F, RT	J4-1	NORTH, CTH F	24	36	6.00	1	1	1
28+70	CTH F, RT	W13-1	35 MPH	18	18	2.25	1	1	1
28+70	CTH F, RT	W1-2R	ARROW CURVE	30	30	6.25		1	
22+50	CTH F, LT	J13-4	Directional Assembly ( 4 Headed Route Panel), 40, 64, F, SS	96	45	30.00	2	8	2
28+50	CTH F, LT	W3-1	STOP AHEAD	36	36	9.00	1	1	1
30+50	CTH F, LT	J1-2	JCT 40, 64	48	39	13.00	1	3	1
				PROJECT TOTAL		257.12	22.00	50.00	22.00

FIELD OFFICE TYPE C

CATEGORY	STATION TO STATION	LOCATION	642. 5201 EACH	REMARKS
0010	20+98 - 32+00	CTH F/STH 64	1	PROJECT
TOTAL 0010			1	

TRAFFIC CONTROL (01. 8620-07-73)

CATEGORY	STATION TO STATION	LOCATION	643. 0100 EACH	REMARKS
0010	20+98 - 32+00	CTH F/STH 64	1	PROJECT
TOTAL 0010			1	

TRAFFIC CONTROL DRUMS

CATEGORY	LOCATION	643. 0300 DAY	REMARKS
0010	PROJECT	3060	45 DRUMS X 68 DAYS
TOTAL 0010		3060	

TRAFFIC CONTROL BARRICADES TYPE III

CATEGORY	LOCATION	643. 0420 DAY	REMARKS
0010	CTH F/STH 64	272	4 BARRICADE X 68 DAYS
TOTAL 0010		272	

TRAFFIC CONTROL WARNING LIGHTS TYPE A

CATEGORY	LOCATION	643. 0705 DAY	REMARKS
0010	CTH F/STH 64	680	10 LIGHTS X 68 DAYS
TOTAL 0010		680	

TRAFFIC CONTROL WARNING LIGHTS TYPE C

CATEGORY	LOCATION	643. 0715 DAY	REMARKS
0010	CTH F/STH 64	1088	16 LIGHT X 68 DAYS
TOTAL 0010		1088	

TRAFFIC CONTROL SIGNS

CATEGORY	LOCATION	643. 0900 DAY	REMARKS
0010	CTH F/STH 64	1564	23 SIGNS X 68 DAYS
TOTAL 0010		1564	

PAVEMENT MARKING EPOXY 4-INCH

CATEGORY	STATION TO STATION	LOCATION	646. 0106 LF	REMARKS
0010	8+37 - 15+37	STH 64	1400	WHITE EDGELINE LT, RT
0010	20+98 - 32+00	CTH F	2204	WHITE EDGELINE LT, RT
0010	20+98 32+00	CTH F	2204	DOUBLE YELLOW C/L
TOTAL 0010			5808	

PAVEMENT MARKING EPOXY 8-INCH

CATEGORY	LOCATION	646. 0126 LF	REMARKS
0010	STH 64	250	TURN LANE, RT
0010	CTH F	30	I SLAND GORE
TOTAL 0010		280	

PAVEMENT MARKING SAM DAY EPOXY 4-INCH

CATEGORY	STATION TO STATION	LOCATION	646. 0406 LF	REMARKS
0010	8+37 - 15+37	STH 64	1400	DOUBLE YELLOW C/L
TOTAL 0010			1400	

PAVEMENT MARKING STOP LINE EPOXY 18-INCH

CATEGORY	STATION	LOCATION	647. 0566 LF	REMARKS
0010	21+01	CTH F	42	LT
0010	396+70	STH 40	43	RT
TOTAL 0010			85	

LOCATING NO-PASSING ZONES

CATEGORY	STATION TO STATION	LOCATION	648. 0100 MI	REMARKS
0010		CTH F/STH 64	0. 33	PROJECT
TOTAL 0010			0. 33	

CONSTRUCTION STAKING SUBGRADE

CATEGORY	STATION TO STATION	LOCATION	650. 4500 LF	REMARKS
0010	20+98 - 32+00	CTH F	1102	PROJECT
TOTAL 0010			1102	

CONSTRUCTION STAKING BASE

CATEGORY	STATION TO STATION	LOCATION	650. 5000 LF	REMARKS
0010	20+98 - 32+00	CTH F	1102	PROJECT
TOTAL 0010			1102	

CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

CATEGORY	STATION TO STATION	LOCATION	650. 5500 LF	REMARKS
0010	0+00 - 0+77	CTH F	77	NE, RT
0010	0+00 - 0+67	CTH F	67	NW, LT
TOTAL 0010			144	

CONSTRUCTION STAKING PIPE CULVERTS

CATEGORY	STATION TO STATION	LOCATION	650. 6000 EACH	REMARKS
0010	25+12	CTH F	2	DRI VEWAY AND FE
0010	30+00	CTH F	1	FE
TOTAL 0010			3	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (01. 8620-07-73)

CATEGORY	LOCATION	650. 9910 LS	REMARKS
0010	CTH F/STH 64	1	PROJECT
TOTAL 0010		1	

SPECIAL (01. ASPHALTIC SURFACE SPECIAL)

CATEGORY	STATION TO STATION	LOCATION	SPV. 0195. 01 TON	REMARKS
0010	20+98 - 32+00	CTH F	1100	MAINLINE
0010	8+37 - 15+37	STH 64	350	MAINLINE
0010		CTH F	20	DRIVEWAY
TOTAL 0010			1470	

CONSTRUCTION STAKING SLOPE STAKES

CATEGORY	STATION TO STATION	LOCATION	650. 9920 LF	REMARKS
0010	20+98 - 32+00	CTH F/STH 64	1102	MAINLINE
TOTAL 0010			1102	

SAWING ASPHALT

CATEGORY	STATION	LOCATION	690. 0150 LF	REMARKS
0010	32+00	CTH F	22	END PROJECT
0010	10+86	STH 64	300	TURN LANE, LT
0010	8+37	STH 64	24	MAINLINE
0010	15+37	STH 64	24	MAINLINE
TOTAL 0010			370	

CURE AND SEAL TREATMENT CONCRETE CURB AND GUTTER

CATEGORY	STATION TO STATION	LOCATION	SPV. 0090. 01 LF	REMARKS
0010	0+00 - 0+77	CTH F	77	NE, RT
0010	0+00 - 0+67	CTH F	67	NW, LT
TOTAL 0010			144	

## TRANSPORTATION PROJECT PLAT NO: 8620-07-23 - 4.01

LOCATED IN PART OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 IN SECTION 33, TOWNSHIP 31 NORTH, RANGE 9 WEST, TOWN OF BLOOMER, CHIPPEWA COUNTY, WISCONSIN

RELOCATION ORDER STH 40 BLOOMER - BRUCE (STH 64/CTH F WEST JCT INTERSECTION) CHIPPEWA COUNTY

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

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

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

SCHEDULE OF LANDS AND INTERESTS REQUIRED		OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT				
PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W AC. REQUIRED			TLE AC. REQUIRED
			NEW	EXISTING	TOTAL	
1	A. KENNETH & ESTHER R. STELTER	FEE, TLE	1.30	-	1.30	0.06

UTILITY EASEMENT INFORMATION		
PARCEL #	COMPANY NAME	RECORDING DATA
1	BLOOMER TELEPHONE COMPANY	V. 210, PG. 578
1	BLOOMER TELEPHONE COMPANY	V. 508, PG. 9-10

UTILITY INTERESTS REQUIRED		
UTILITY #	OWNER(S)	INTEREST REQUIRED
20	BLOOMER TELEPHONE COMPANY	RELEASE OF RIGHTS

## CONVENTIONAL UTILITY SYMBOLS

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

POWER POLE	—P—
TELEPHONE POLE	—T—
TELEPHONE PEDESTAL	—PE—
ELECTRIC TOWER	—E—

## CONVENTIONAL ABBREVIATIONS

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

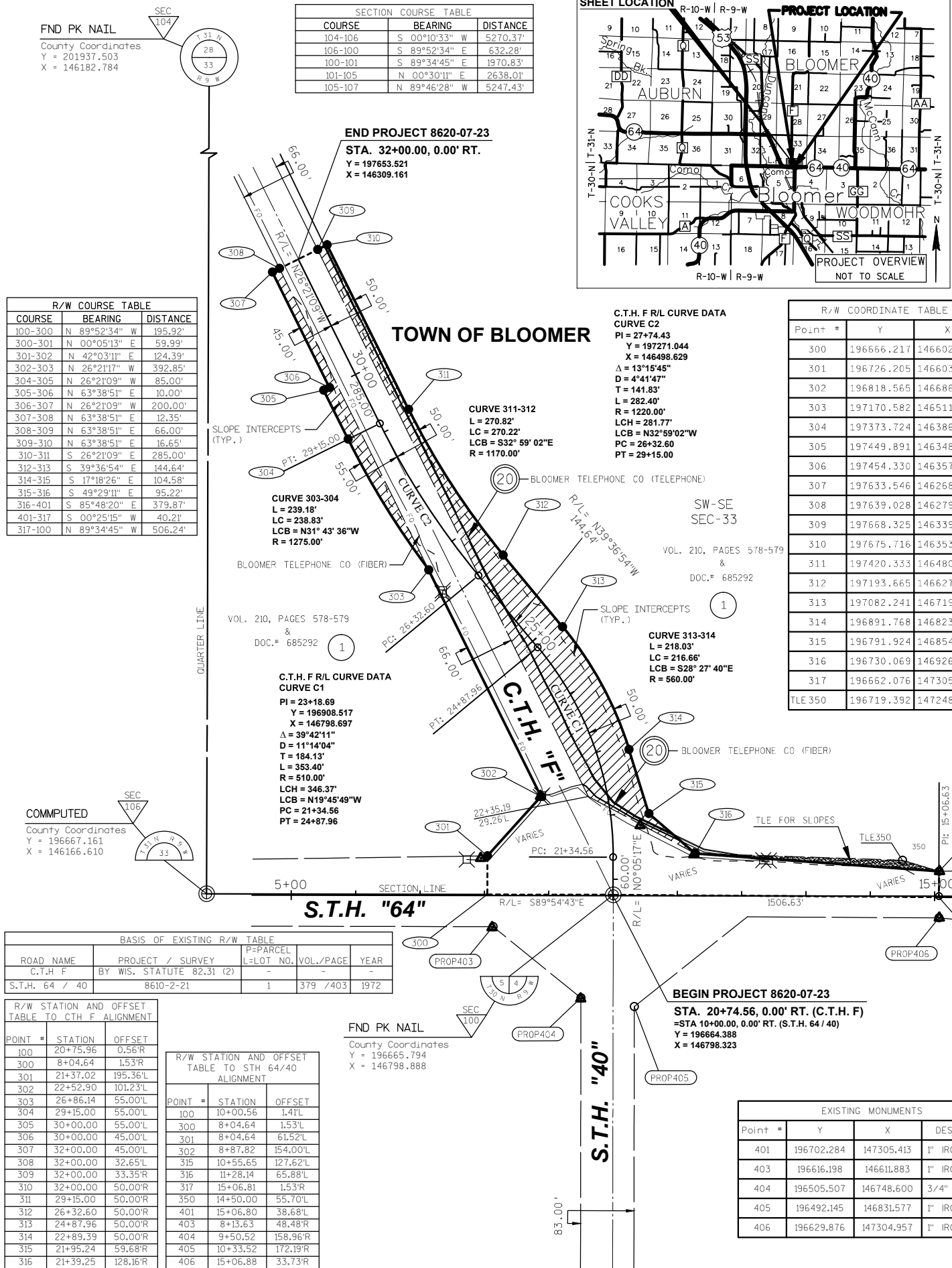
## CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	(1" UNLESS NOTED)	BUILDING	—B—
R/W MONUMENT SET	(1" I.D. X 24" IRON PIPE SET)	PROPOSED R/W LINE	—P—
FOUND R/W GUARD POST	—GP—	EXISTING H.E. LINE	—E—
SIGN	—S—	PROPERTY LINE	—P—
SECTION CORNER MONUMENT	—SCM—	LOT & TIE LINES	—L—
SECTION CORNER SYMBOL	—SCS—	SLOPE INTERCEPTS	—SI—
FEE (HATCH VARIES)	—F—	CORPORATE LIMITS	—CL—
TEMPORARY LIMITED EASEMENT	—TLE—	NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	—NA—
PERMANENT LIMITED EASEMENT	—PLE—	ACCESS RESTRICTED (BY ACQUISITION)	—AR—
EXISTING MONUMENT NUMBER	—EMN—	NO ACCESS (BY STATUTORY AUTHORITY)	—NA—
R/W BOUNDARY POINT NUMBER	—RWBPN—	SECTION LINE	—SL—
PARCEL NUMBER	—PN—	QUARTER LINE	—QL—
UTILITY INTEREST	—UI—	SIXTEENTH LINE	—SL—
SIGN NUMBER (OFF PREMISE)	—SN—	EXISTING CENTERLINE	—CL—
		PROPOSED REFERENCE LINE	—PRL—
		PARALLEL OFFSET	—PO—

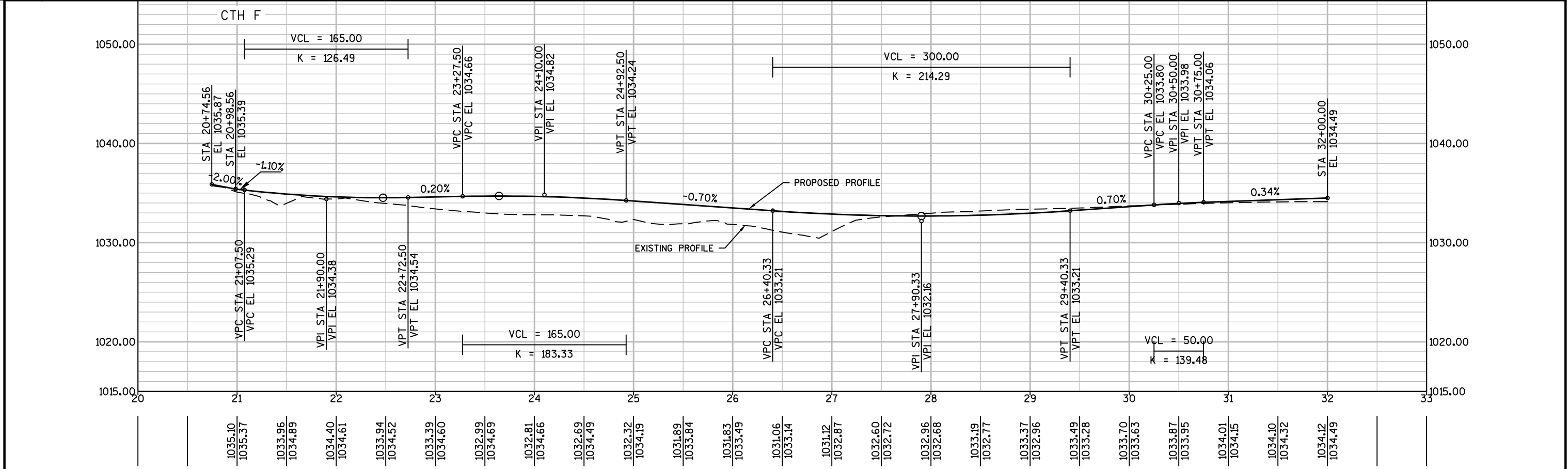
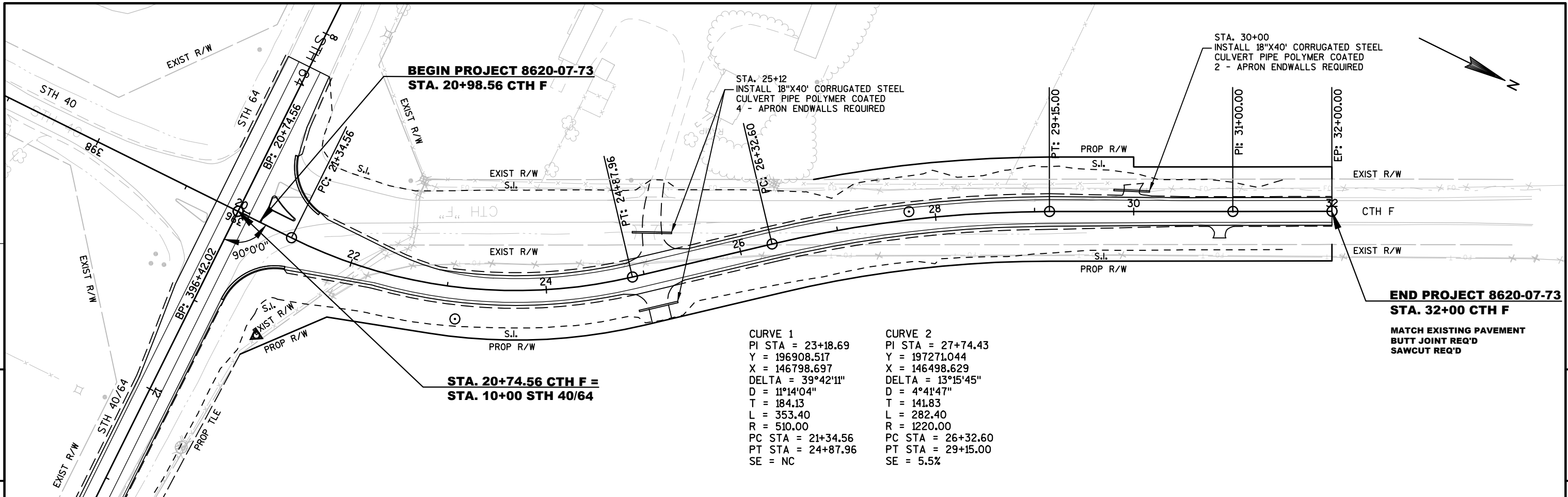
**QUEST**  
Civil Engineers, LLC2811 8th Street South, Suite 8  
Wisconsin Rapids, WI 54494  
Office: 715-423-3526  
Fax: 715-423-3597

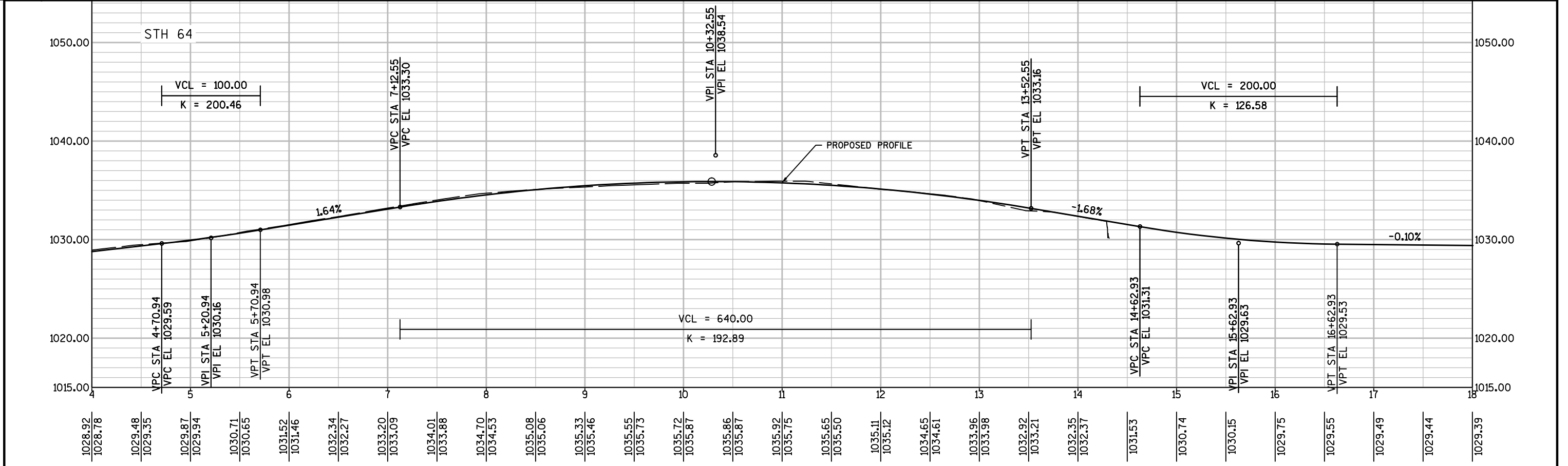
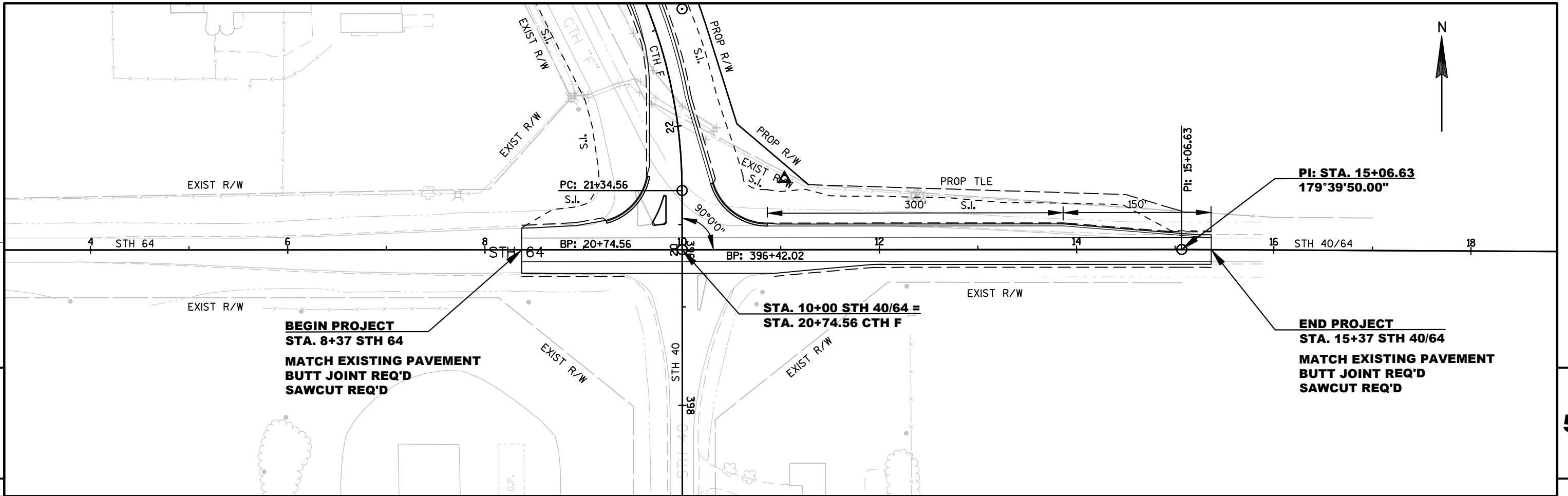
I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

KOLBY SCHERTZ	<i>Kolby Schertz</i>	09/08/2014
PRINTED NAME	SIGNATURE	DATE
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION		
MICHAEL PILLER	<i>Michael Piller</i>	09/08/2014
PRINTED NAME	SIGNATURE	DATE



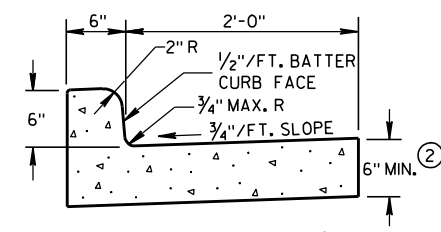




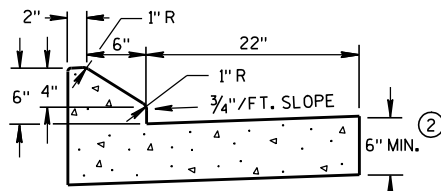


Standard Detail Drawing List

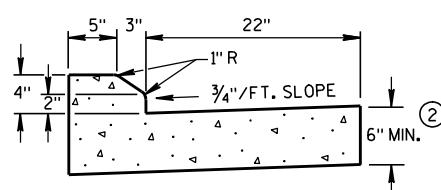
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY



TYPES A & D ①



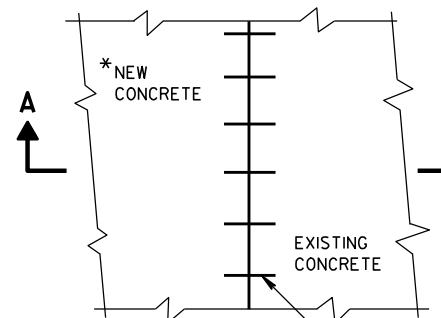
6" SLOPED CURB TYPES G & J ①



4" SLOPED CURB TYPES G & J ①

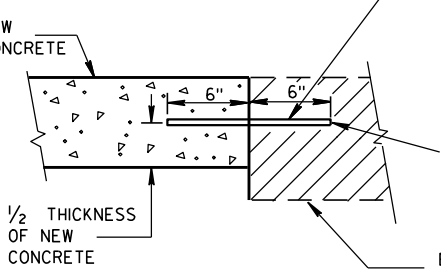
CONCRETE CURB & GUTTER 30"

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

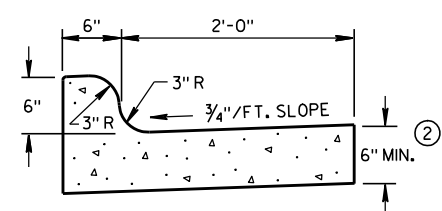


PLAN VIEW

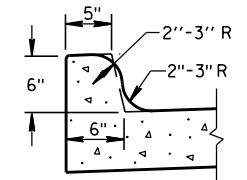
NO. 6 TIE BARS SPACED 2'-6" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT.



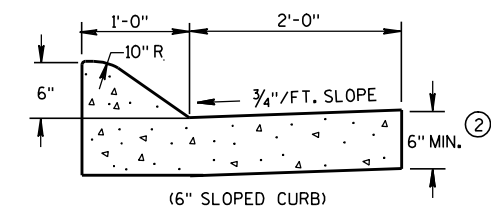
SECTION A-A  
TIE BARS DRILLED  
INTO EXISTING PAVEMENT



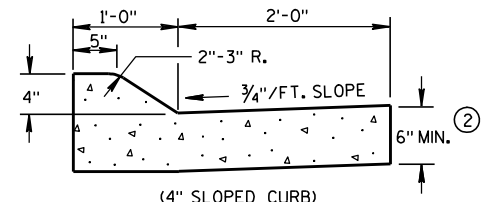
TYPES K & L ①



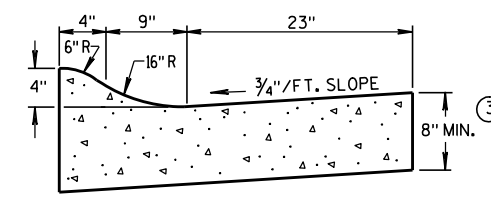
OPTIONAL CURB SHAPE  
FOR TYPES K & L ①



(6" SLOPED CURB)

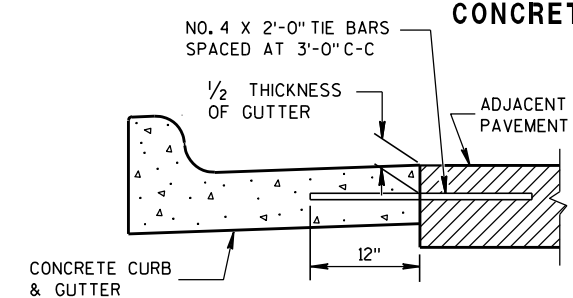


(4" SLOPED CURB)

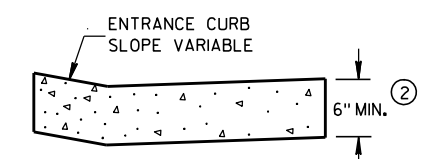


4" SLOPED CURB TYPES R & T ① ④

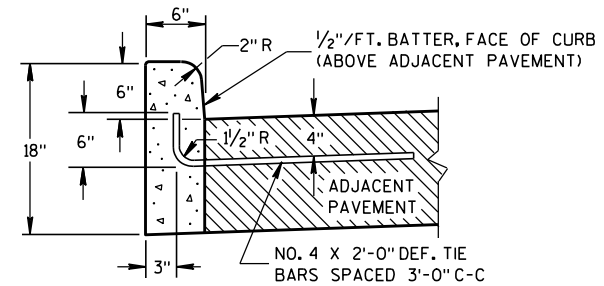
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

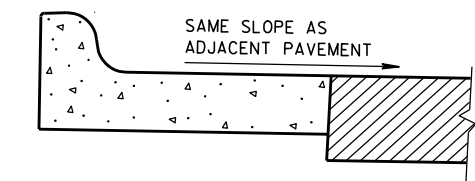


DRIVEWAY ENTRANCE CURB  
(WHEN DIRECTED BY THE ENGINEER)

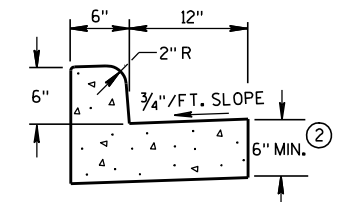


TYPES A & D ①

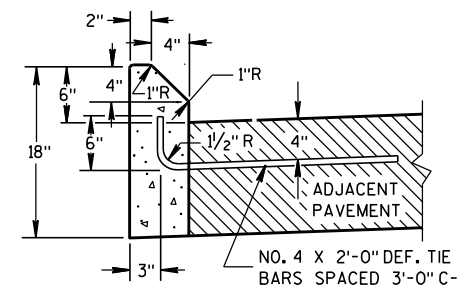
CONCRETE CURB



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



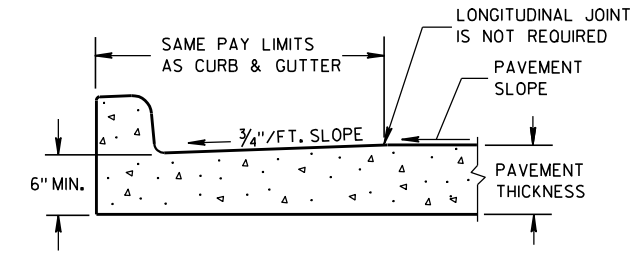
TYPES A & D  
CONCRETE CURB & GUTTER 18"



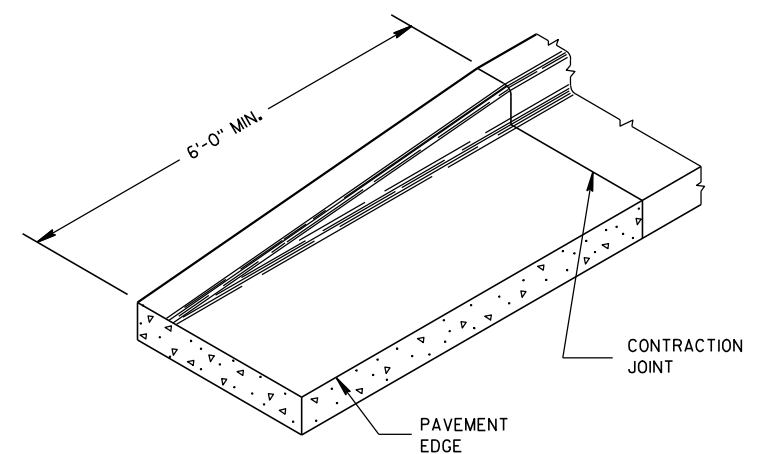
TYPES G & J ①

GENERAL NOTES

- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
- PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.
- INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.
- WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.
- UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.
  - ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
  - ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
  - ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
  - ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



PARTIAL SECTION OF PAVEMENT  
WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

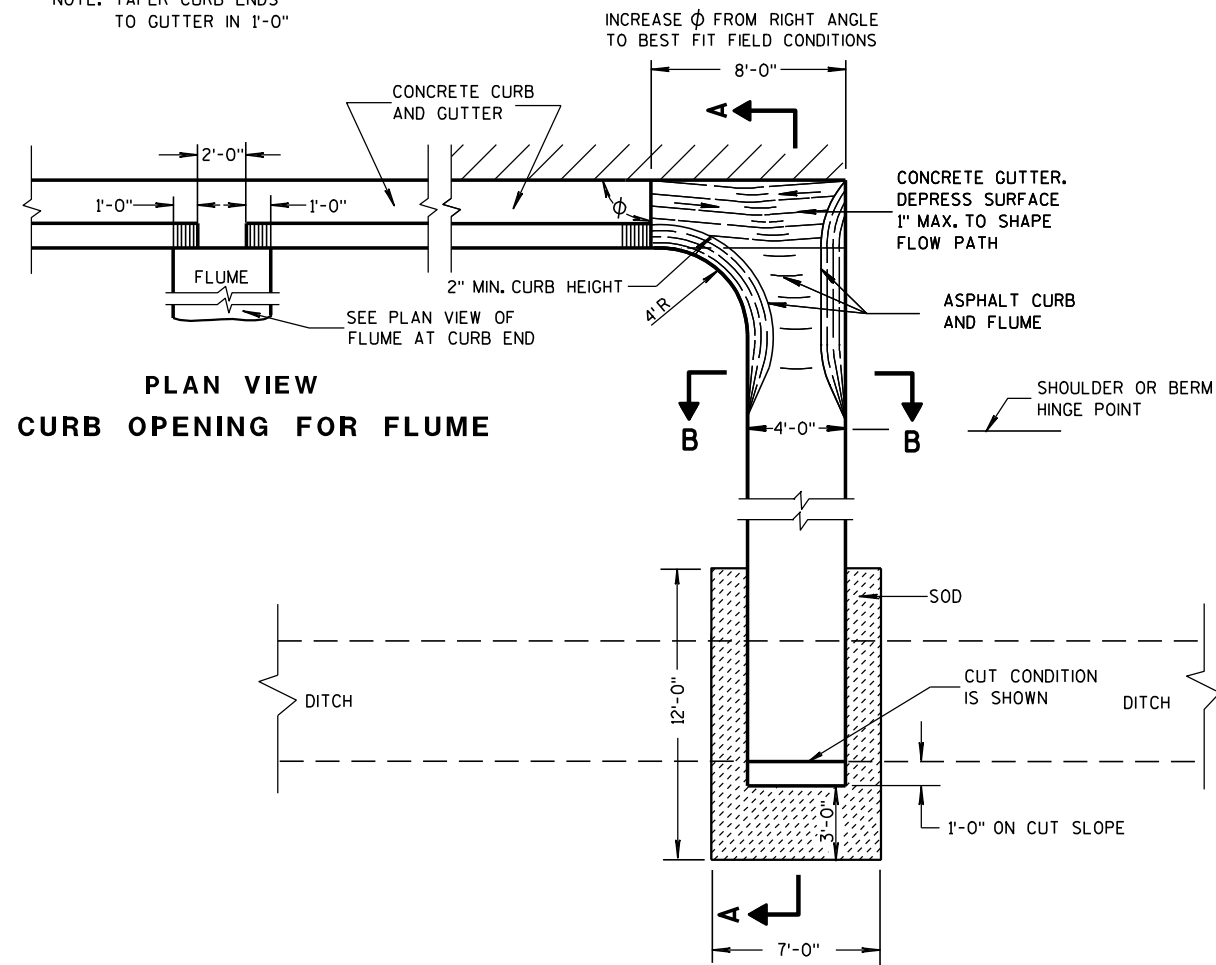
CONCRETE CURB, CONCRETE  
CURB & GUTTER AND TIES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
9/4/08 /S/ Jerry H. Zogg  
DATE ROADWAY STANDARDS DEVELOPMENT  
ENGINEER  
FHWA

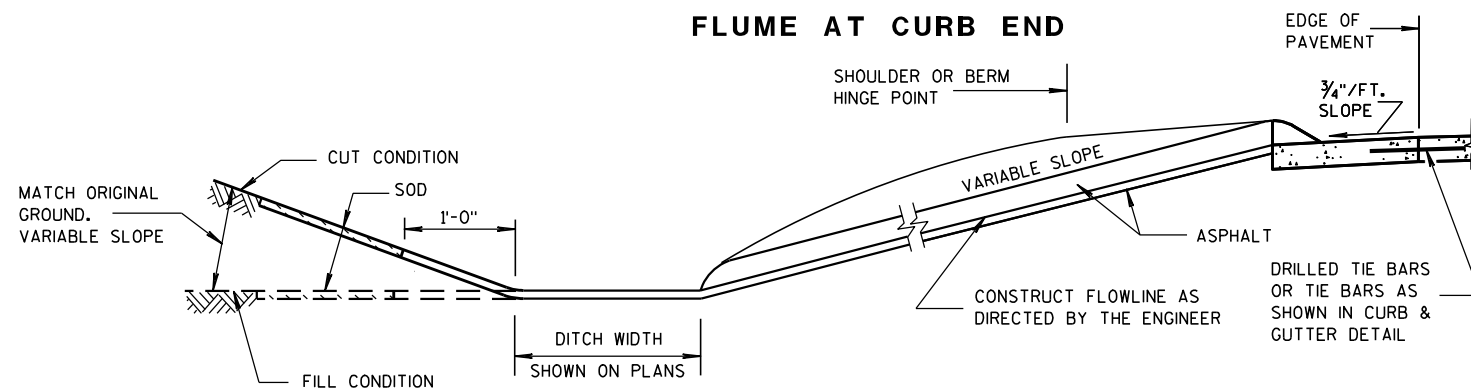
## ASPHALTIC FLUME

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

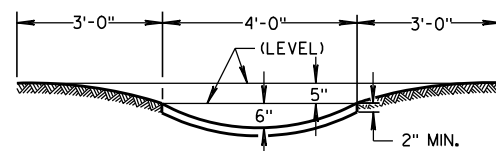


PLAN VIEW  
CURB OPENING FOR FLUME

PLAN VIEW  
FLUME AT CURB END



SECTION A-A



SECTION B-B

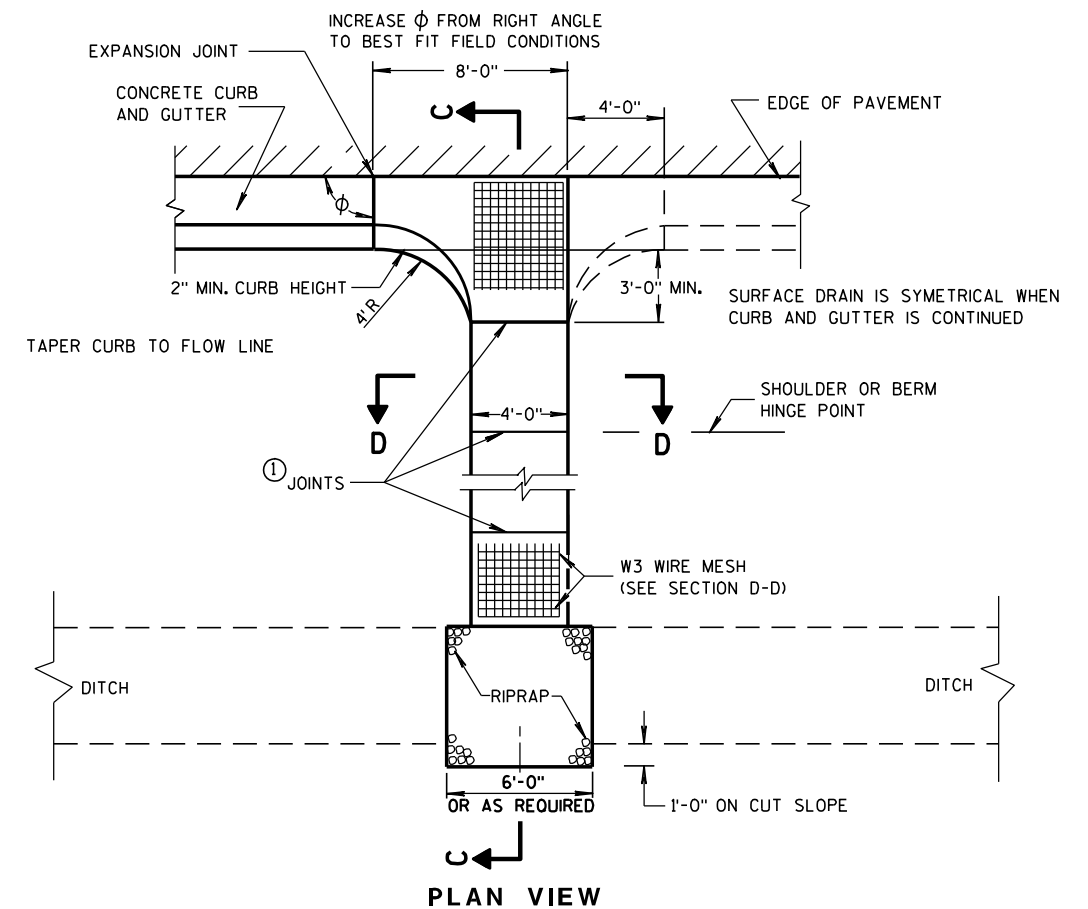
## GENERAL NOTES

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

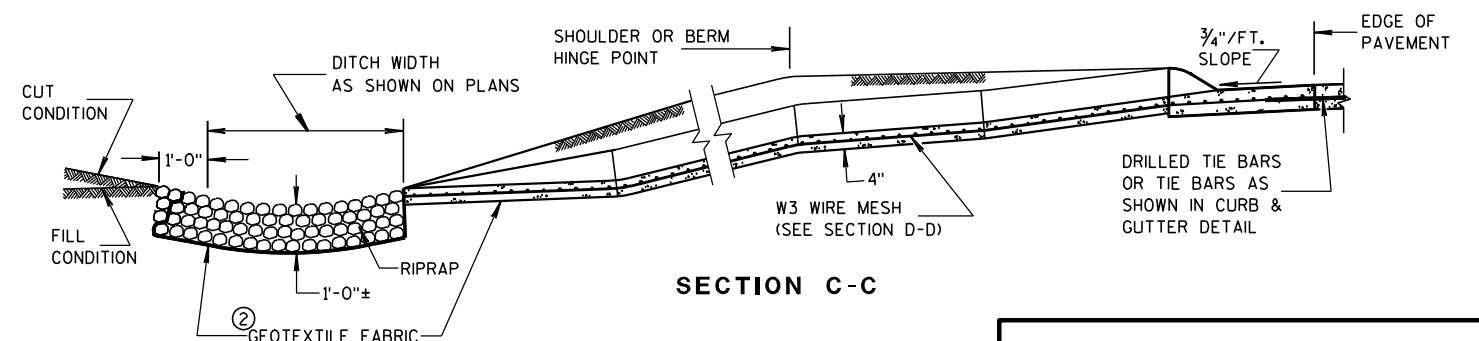
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

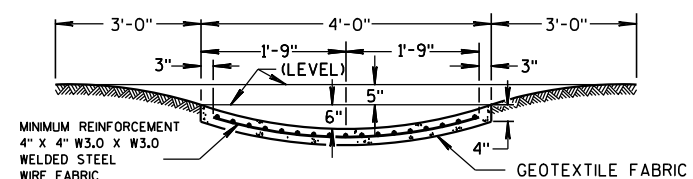
## ③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

## CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

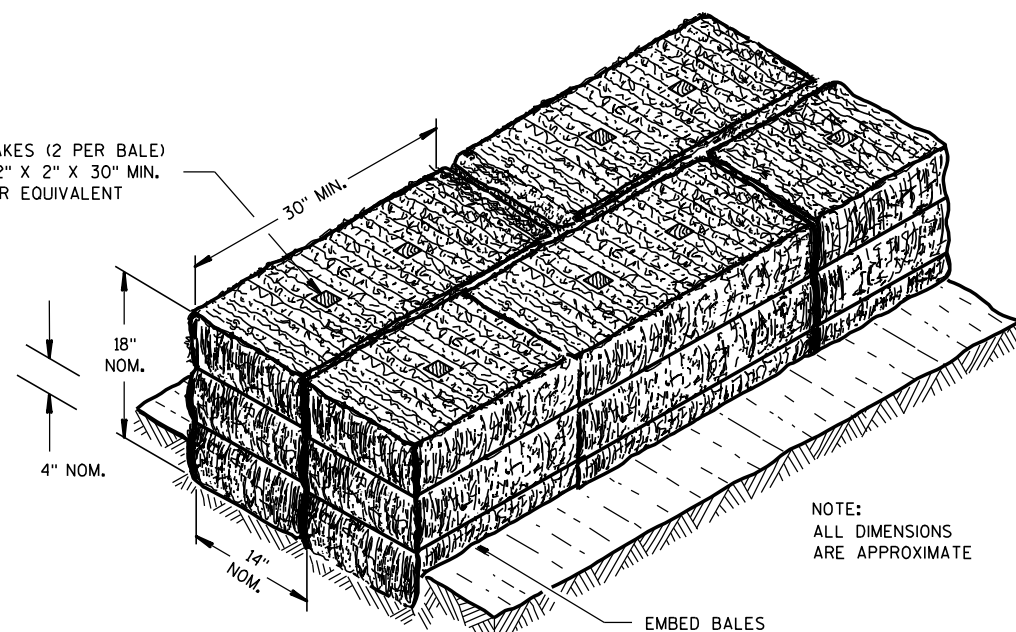
9-4-08

DATE

FHWA

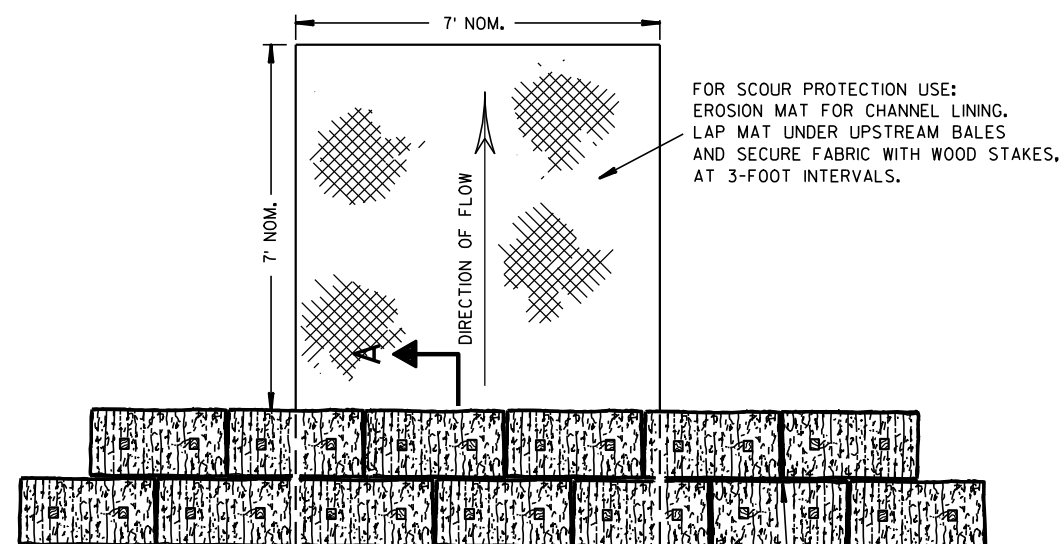
/S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER

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

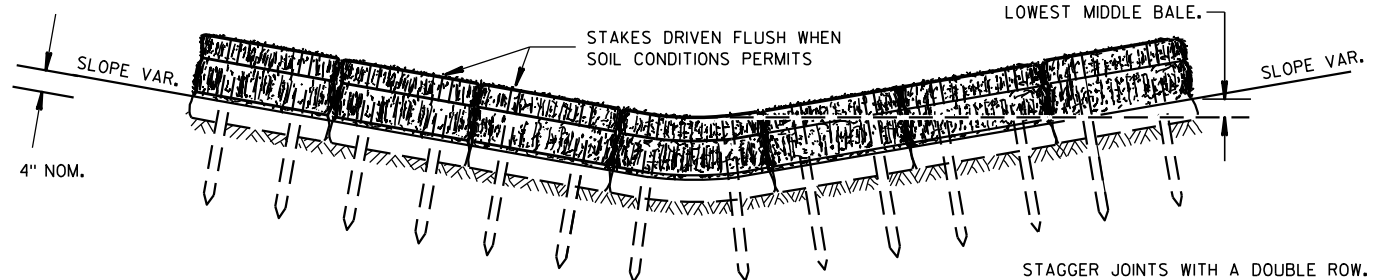


NOTE:  
ALL DIMENSIONS  
ARE APPROXIMATE

SECTION A-A



PLAN VIEW



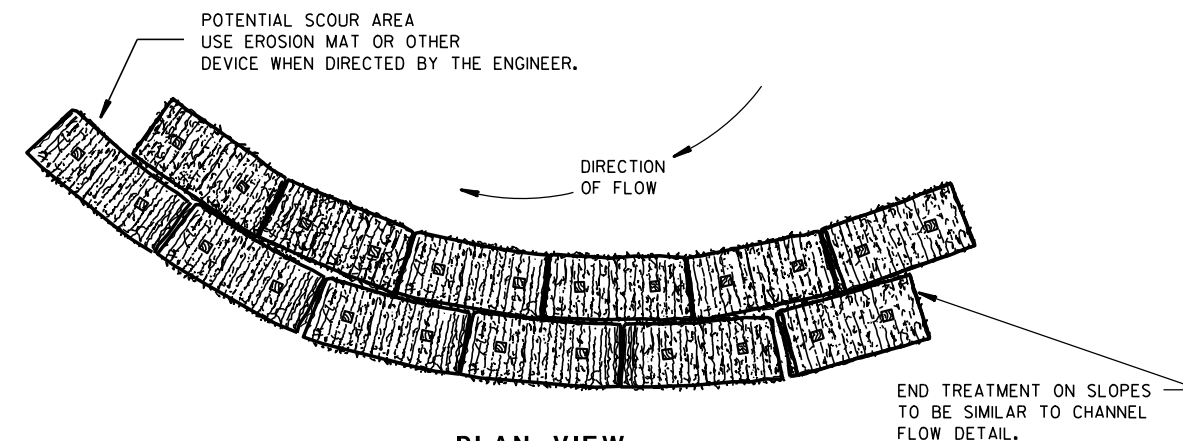
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

## GENERAL NOTES

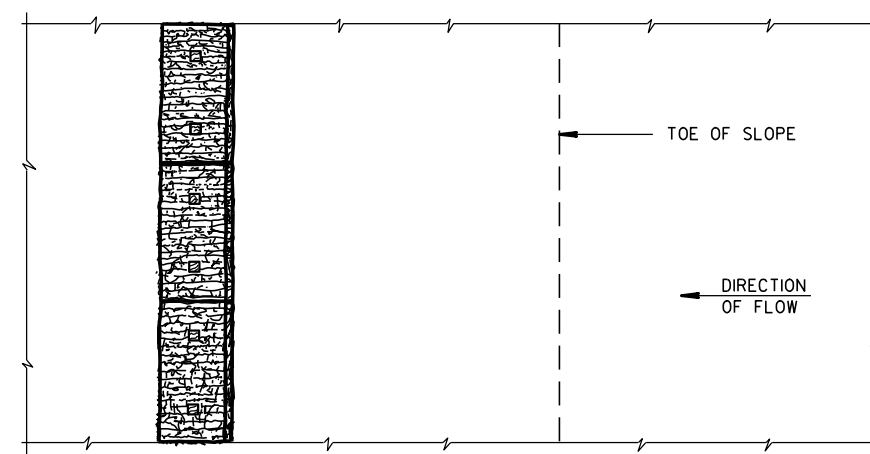
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

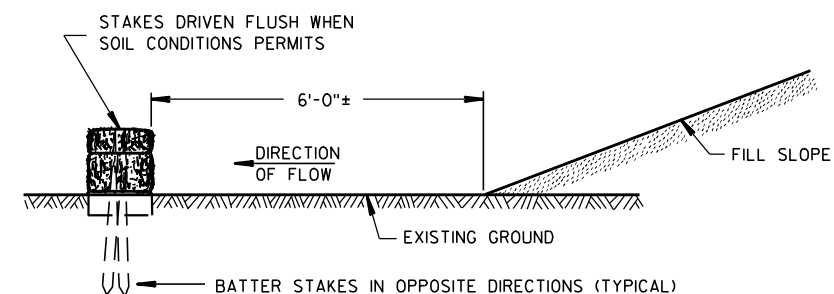


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

## TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02  
DATE

FHWA

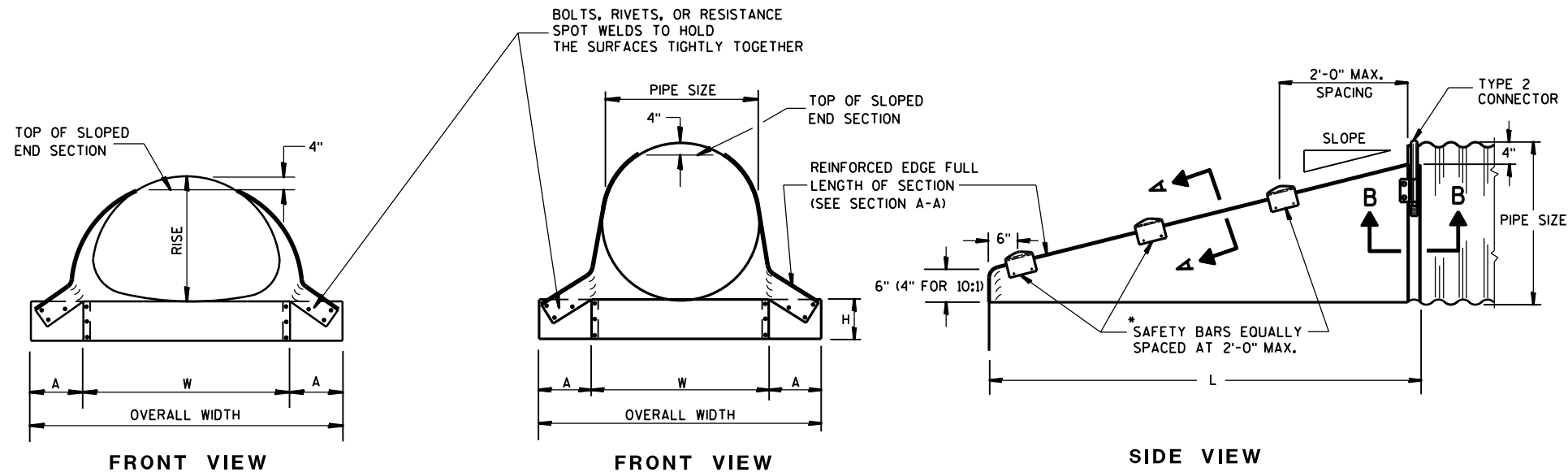
/S/ Beth Canestra  
CHIEF ROADWAY DEVELOPMENT ENGINEER



- 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 1½" X 1½" 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.



<p style="text-align: center;"><b>SILT FENCE</b></p>	
<p style="text-align: center;"><b>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</b></p>	
<p><b>APPROVED</b></p> <p><u>4-29-05</u></p> <p><b>DATE</b></p>	<p><u>/S/ Beth Cannestra</u></p> <p><b>CHIEF ROADWAY DEVELOPMENT ENGINEER</b></p>
<p><b>FHWA</b></p>	



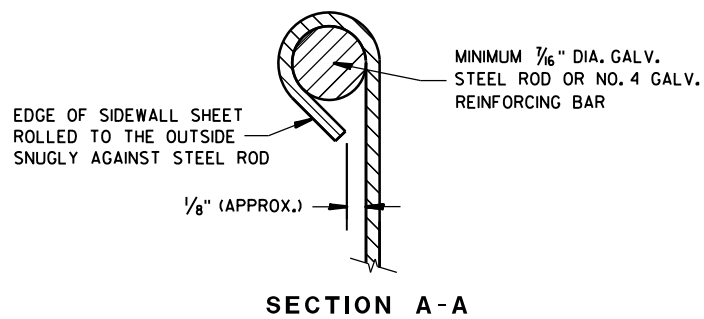
### GENERAL NOTES

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.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

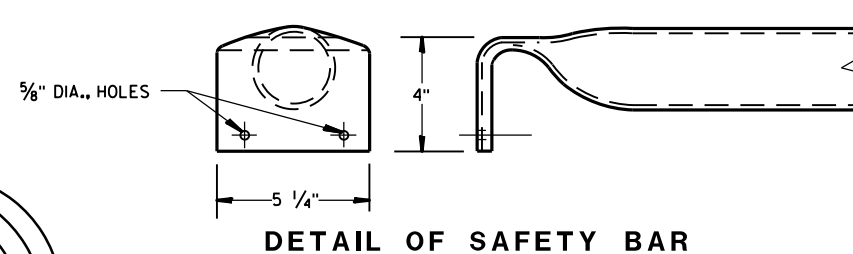
SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	—	—
48	.109	16	12	54	86	4:1	152	6:1	228	—	—
54	.109	16	12	60	92	4:1	176	6:1	264	—	—
60	.109	16	12	66	98	4:1	200	6:1	300	—	—



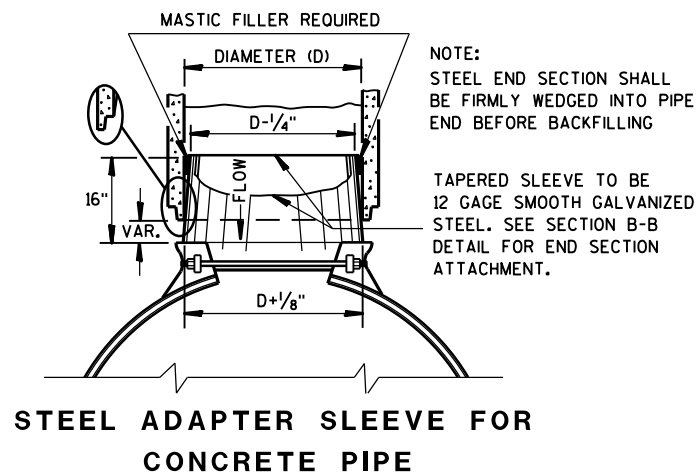
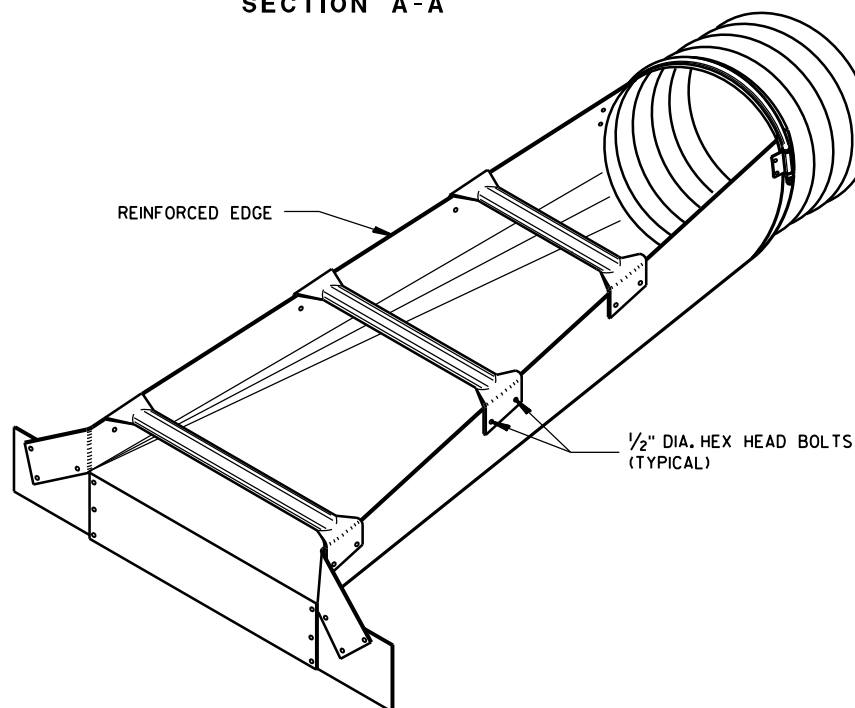
\*NOTE:  
THREE SAFETY BARS ARE SHOWN.  
ACTUAL NUMBER OF BARS REQUIRED AT  
A 2'-0" C-C MAX. SPACING WILL VARY  
DEPENDING ON THE LENGTH OF THE  
END SECTION.

3" GALVANIZED PIPE, FLATTEN  
ENDS, THEN BEND OUTSIDE 4"  
TO MATCH END SECTION SIDES.



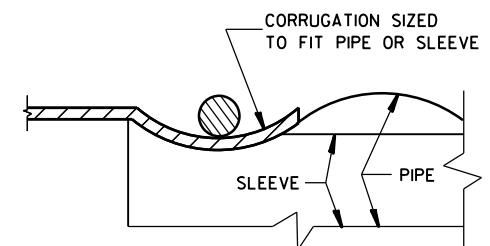
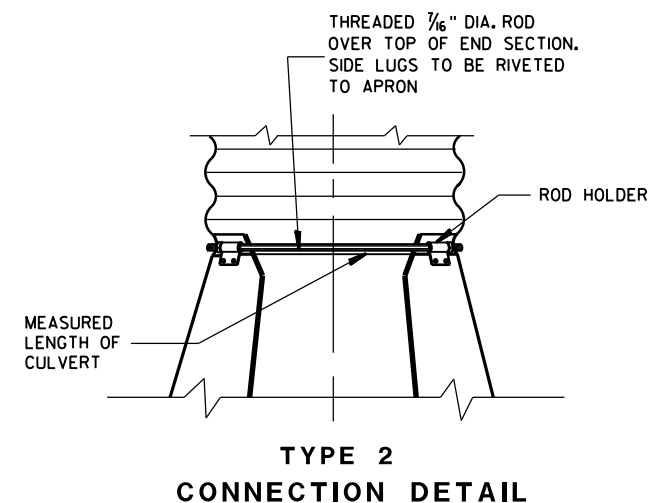
STEEL APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS											
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches) ①	DIMENSIONS (Inches)				L DIMENSIONS			
	SPAN	RISE		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114
42	49	33	.109	16	12	55	87	4:1	92	6:1	138
48	57	38	.109	16	12	63	95	4:1	112	6:1	168
54	64	43	.109	16	12	70	102	4:1	132	6:1	198

- ① \* MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".  
② ACTUAL SLOPE GREATER THAN 10:1.



NOTE:  
STEEL END SECTION SHALL  
BE FIRMLY WEDGED INTO PIPE  
END BEFORE BACKFILLING

TAPERED SLEEVE TO BE  
12 GAGE SMOOTH GALVANIZED  
STEEL. SEE SECTION B-B  
DETAIL FOR END SECTION  
ATTACHMENT.



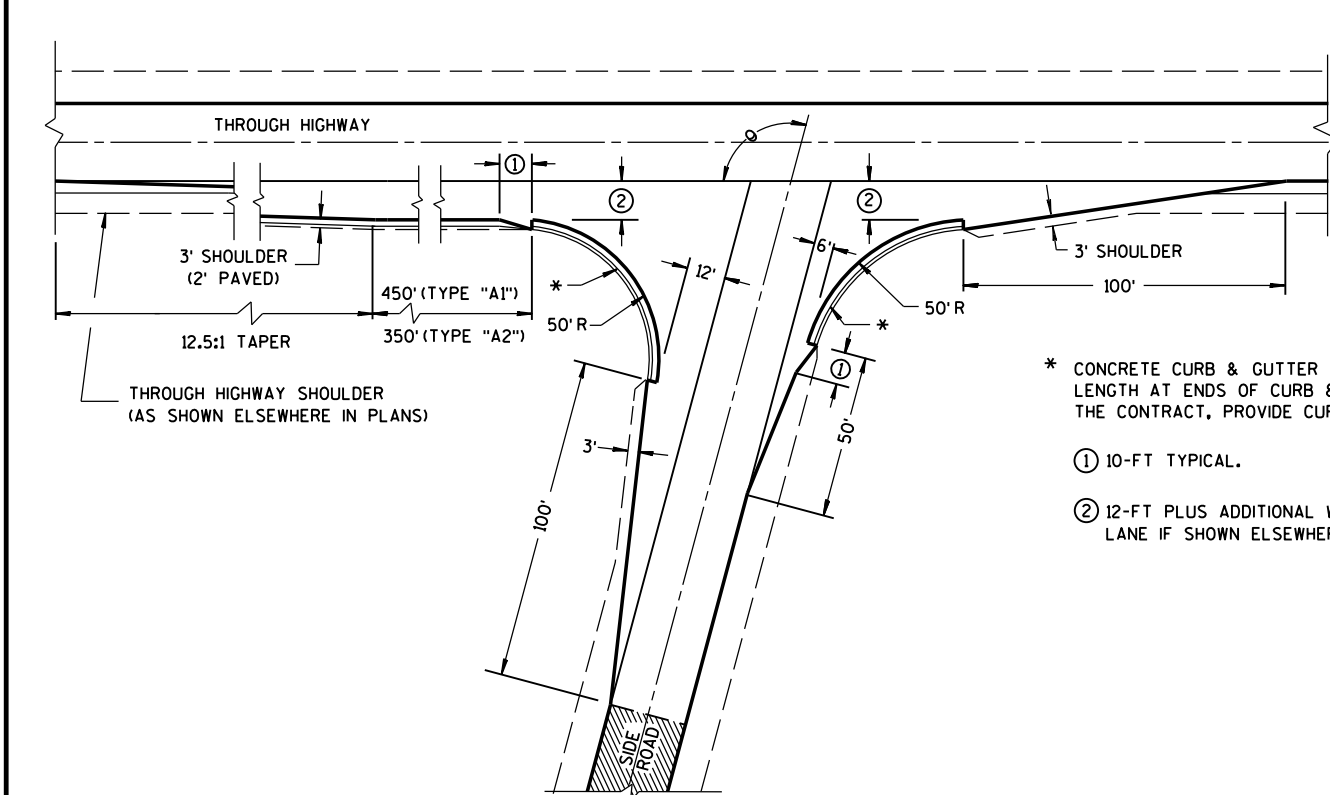
### STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
9/14/2012 /S/ Jerry H. Zogg  
DATE ROADWAY STANDARDS DEVELOPMENT  
ENGINEER  
FHWA



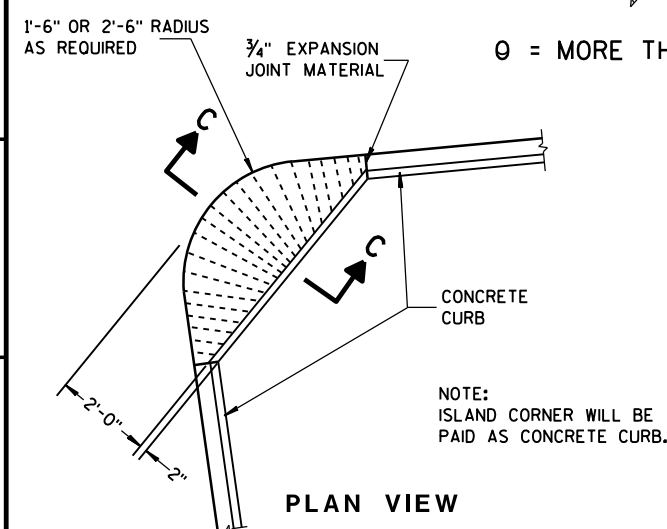




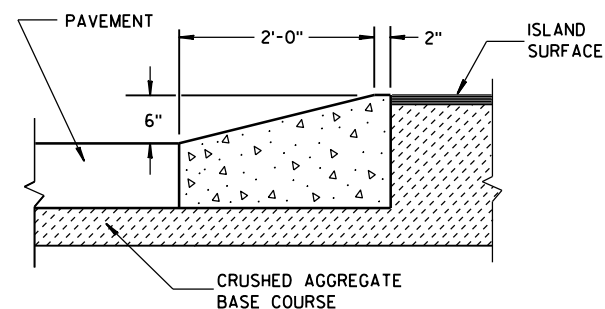
\* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.



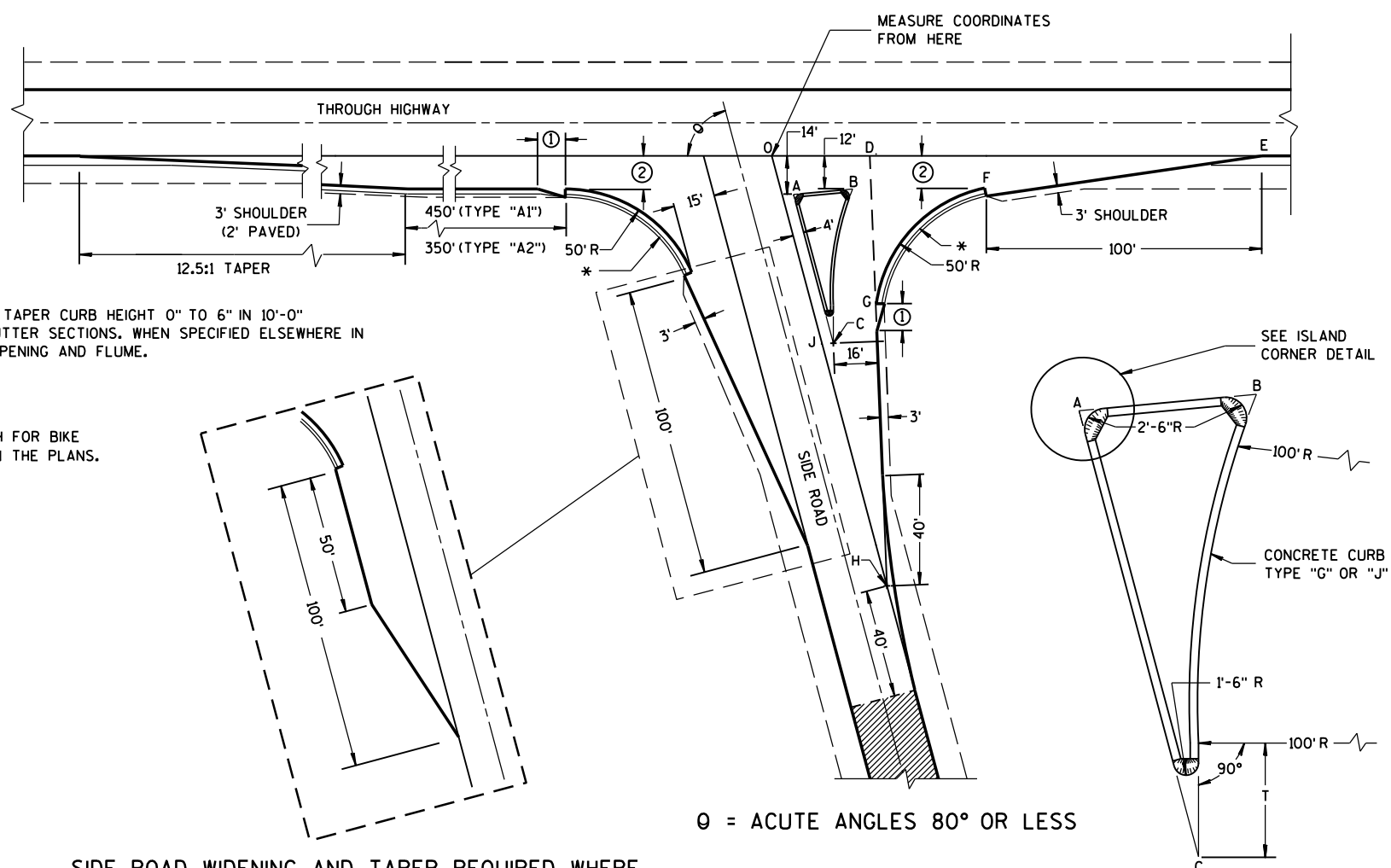
PLAN VIEW



SECTION C-C

### ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)



SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC  
 $\theta$  = ACUTE ANGLES 70° OR LESS

TABLE OF DIMENSIONS FOR  
VARIABLE SIDE ROAD INTERSECTION ANGLES

(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE $\theta$ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O")								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7	44.9	46.4	41.9	205.0	104.6	64.0	85.0	32.3	67.4	4.9	85.9	169.9
	-14.0	-12.0	-72.4	0.0	0.0	-12.0	-75.5	-147.1					
65	10.9	39.0	37.8	39.4	196.1	95.7	54.1	70.5	28.2	63.6	8.5	80.9	166.9
	-14.0	-12.0	-71.6	0.0	0.0	-12.0	-71.5	-151.3					
70	9.4	33.9	29.8	37.4	188.3	87.8	45.6	56.1	24.6	59.7	11.5	76.1	164.1
	-14.0	-12.0	-70.1	0.0	0.0	-12.0	-67.5	-154.2					
75	7.9	29.3	22.3	35.7	181.2	80.7	38.2	41.8	21.5	55.8	13.8	71.4	161.4
	-14.0	-12.0	-67.9	0.0	0.0	-12.0	-63.4	-155.9					
80	6.5	25.4	15.6	34.4	174.8	74.4	31.8	27.6	18.9	52.0	15.6	66.9	158.9
	-14.0	-12.0	-65.2	0.0	0.0	-12.0	-59.3	-156.5					

### TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

AT-GRADE SIDE ROAD  
INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

12/18/12

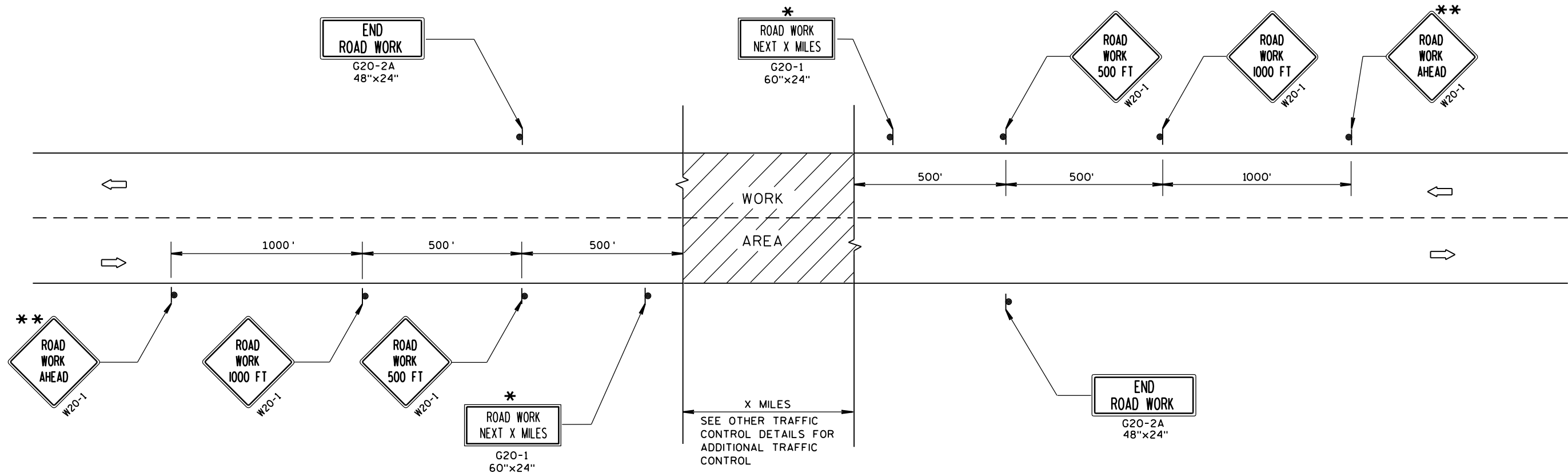
DATE

FHWA

/S/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT

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.

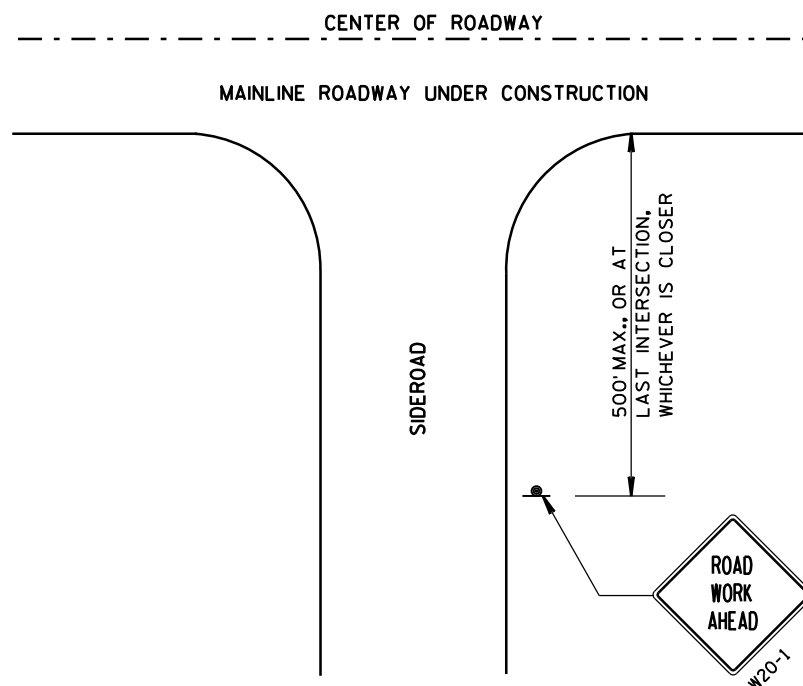
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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.

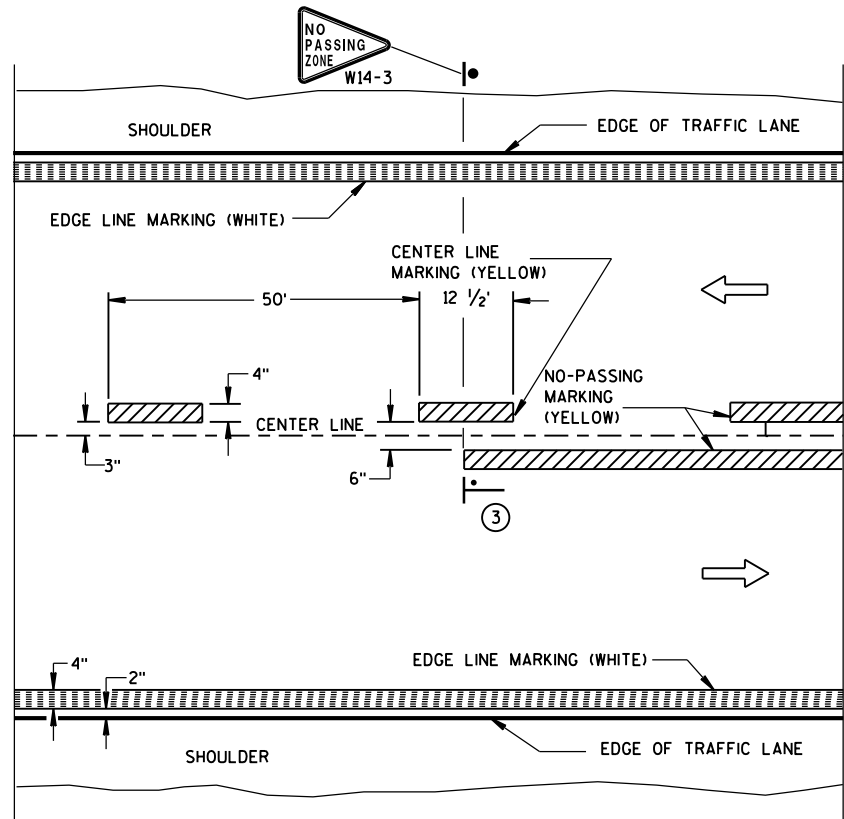
\*\* PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



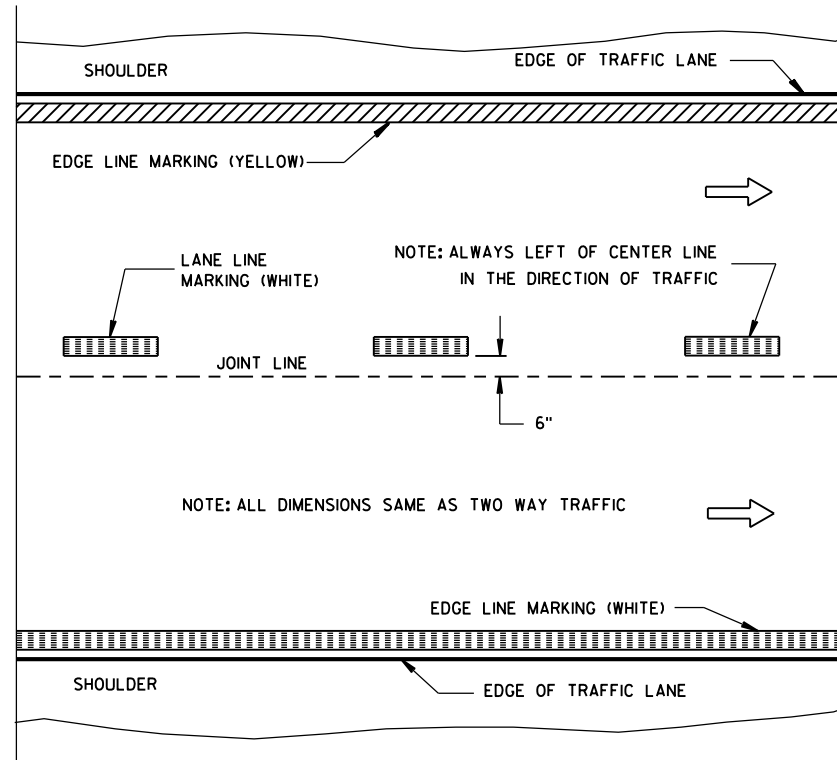
## LEGEND

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

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

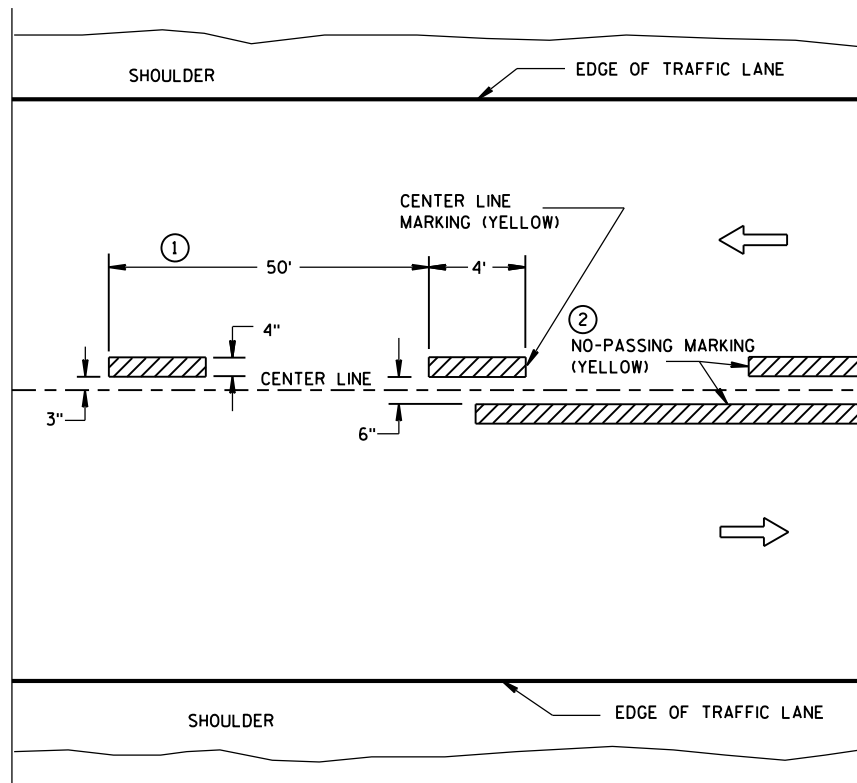


TWO WAY TRAFFIC

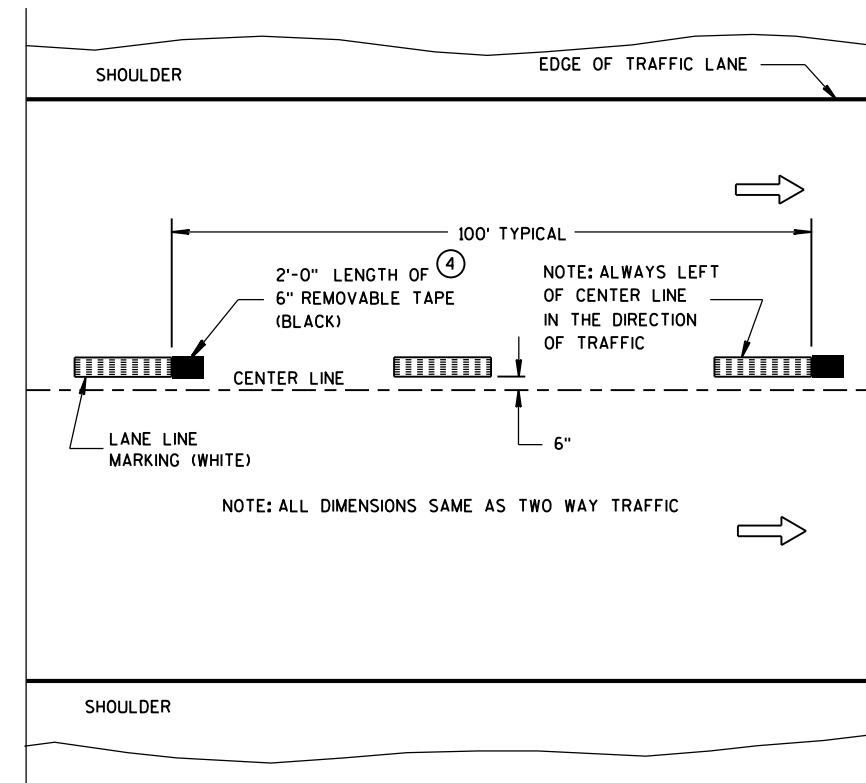


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

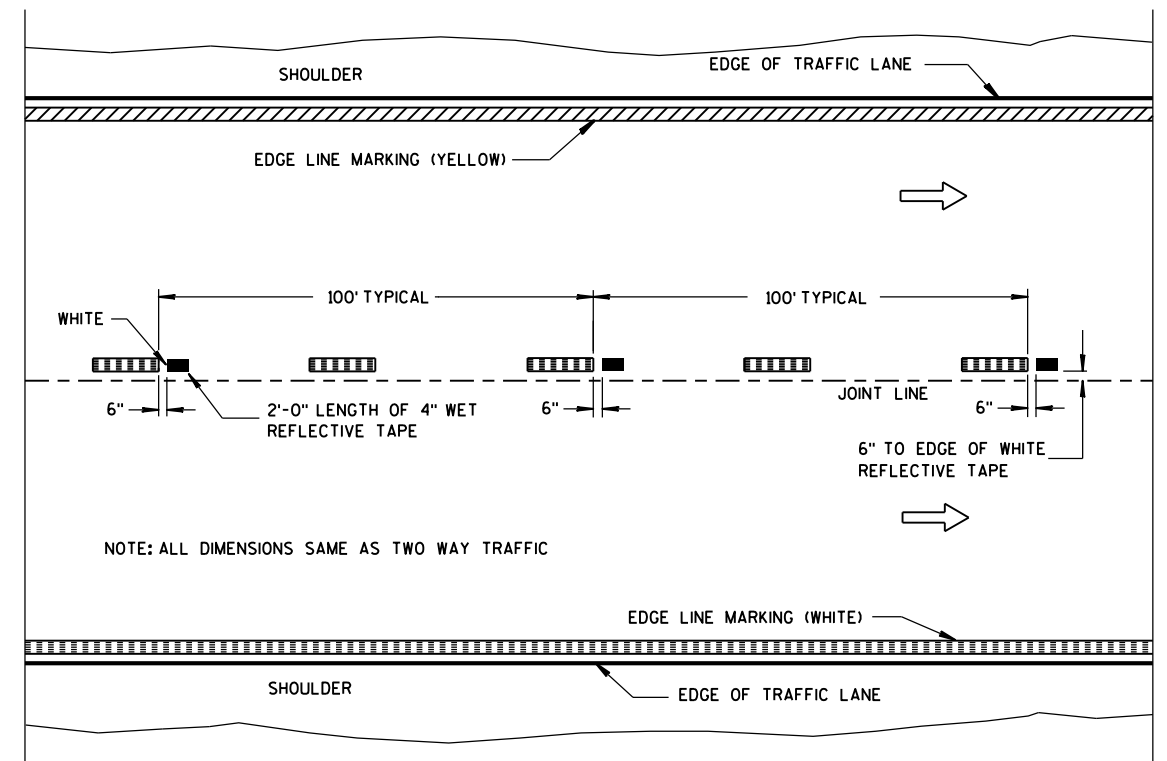
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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

LEGEND

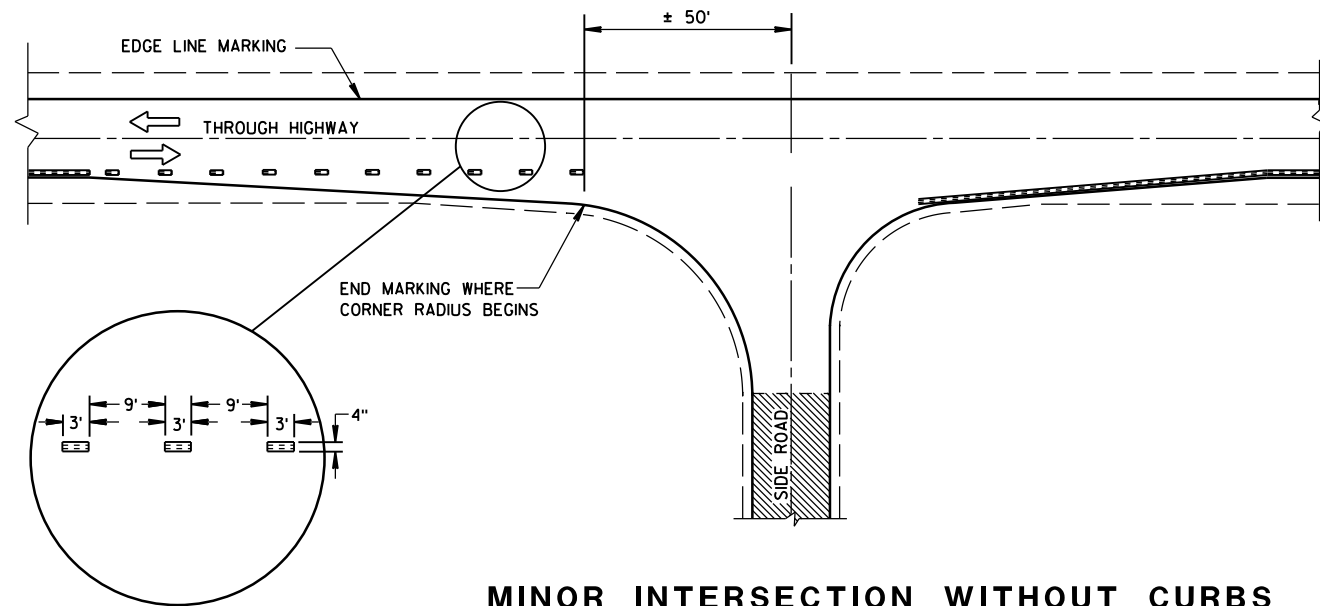
- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING  
(MAINLINE)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
5-13-2013  
DATE  
FHWA

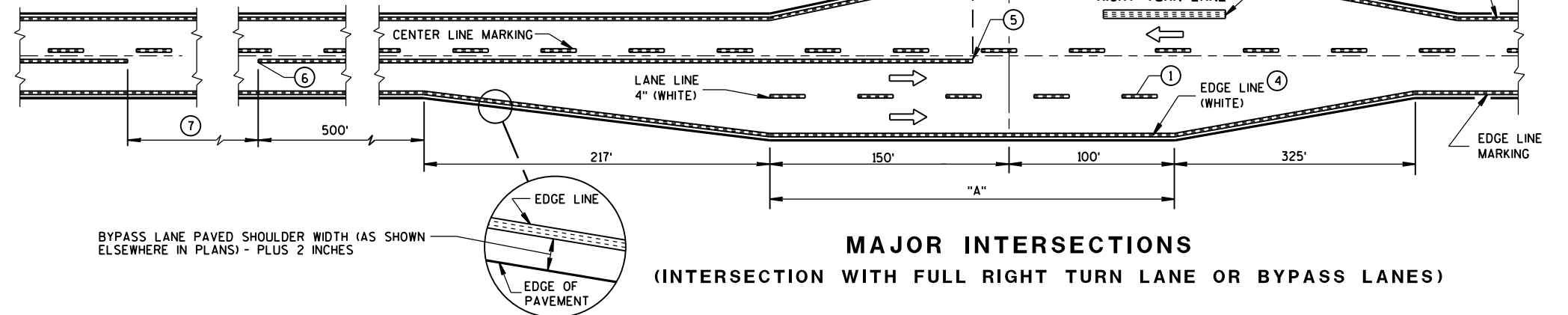
/S/ Travis Feltes  
STATE TRAFFIC ENGINEER



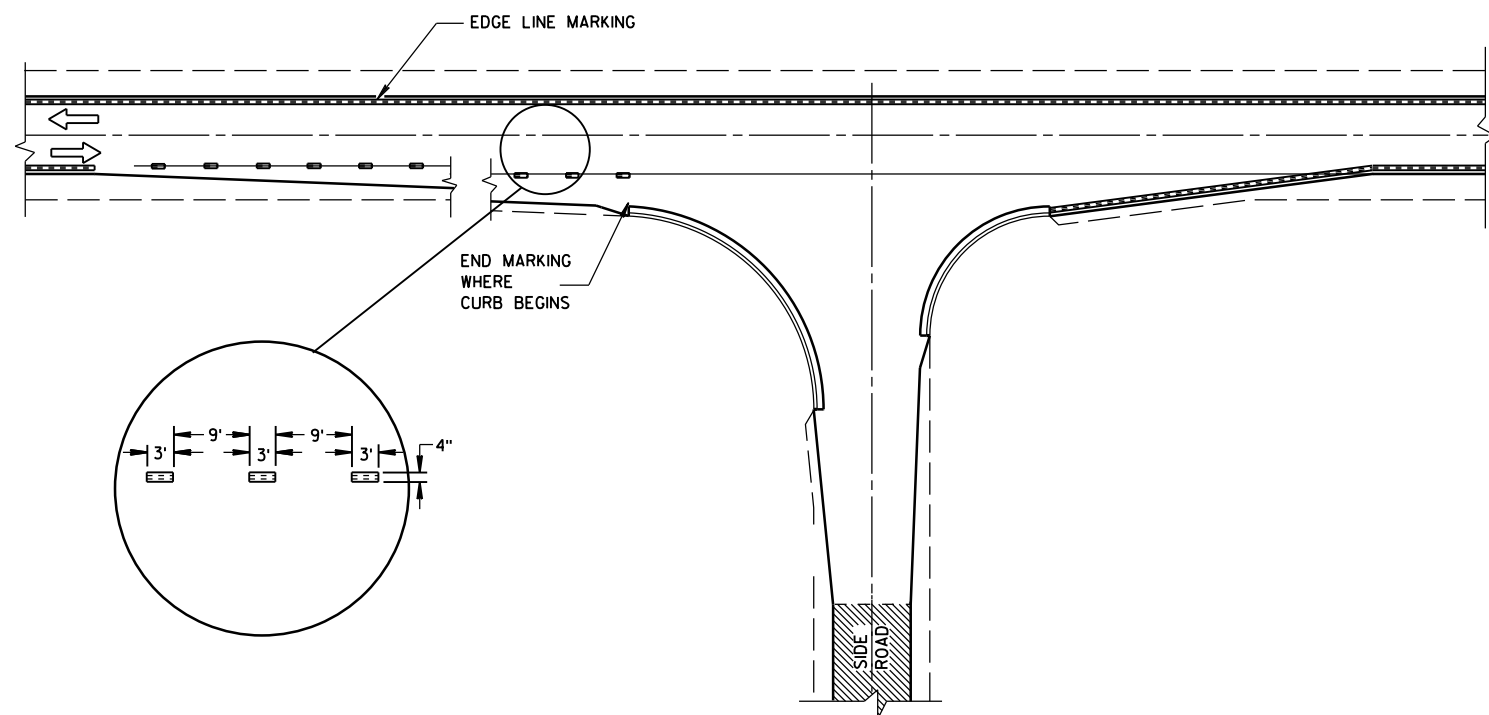
**MINOR INTERSECTION WITHOUT CURBS**

⑦

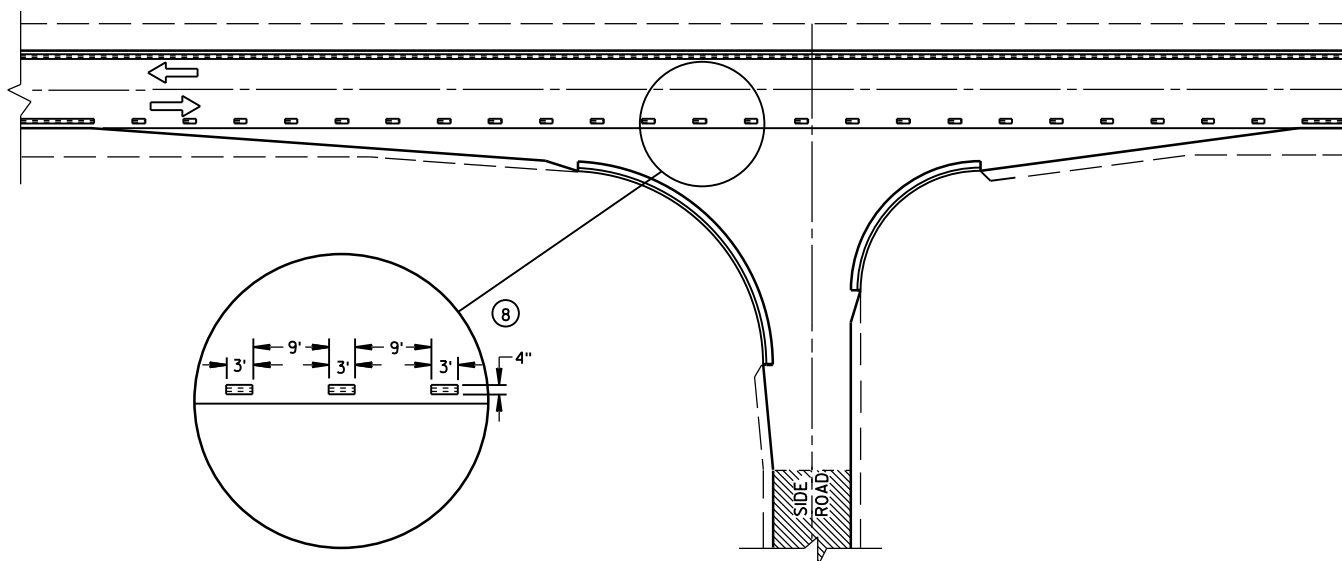
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



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



**MINOR INTERSECTION WITH CURBS**  
(TYPICAL MARKING)



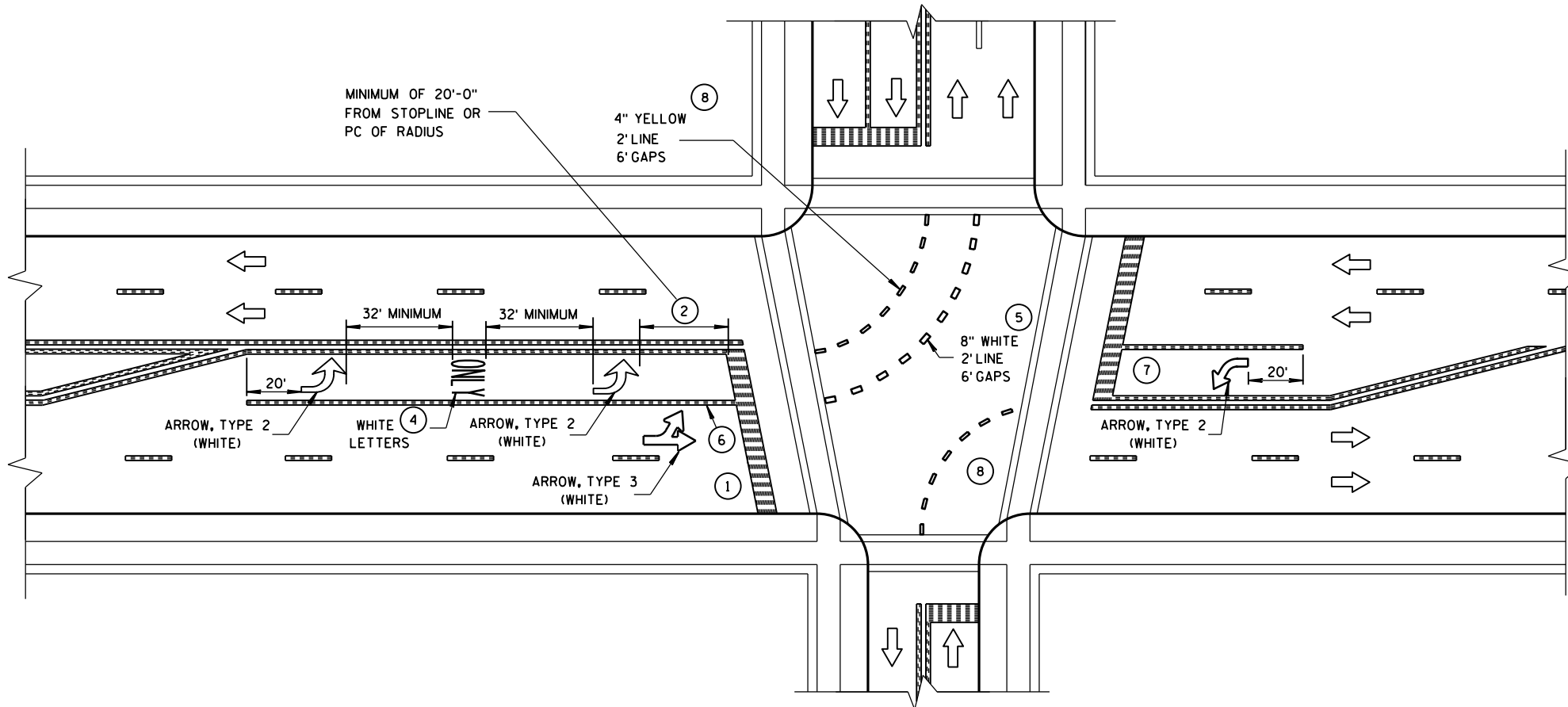
**MINOR INTERSECTION WITH CURBS**  
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

## GENERAL NOTES

- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
  - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
  - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
  - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
  - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
  - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
  - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
  - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL ( → ) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING  
(INTERSECTIONS)

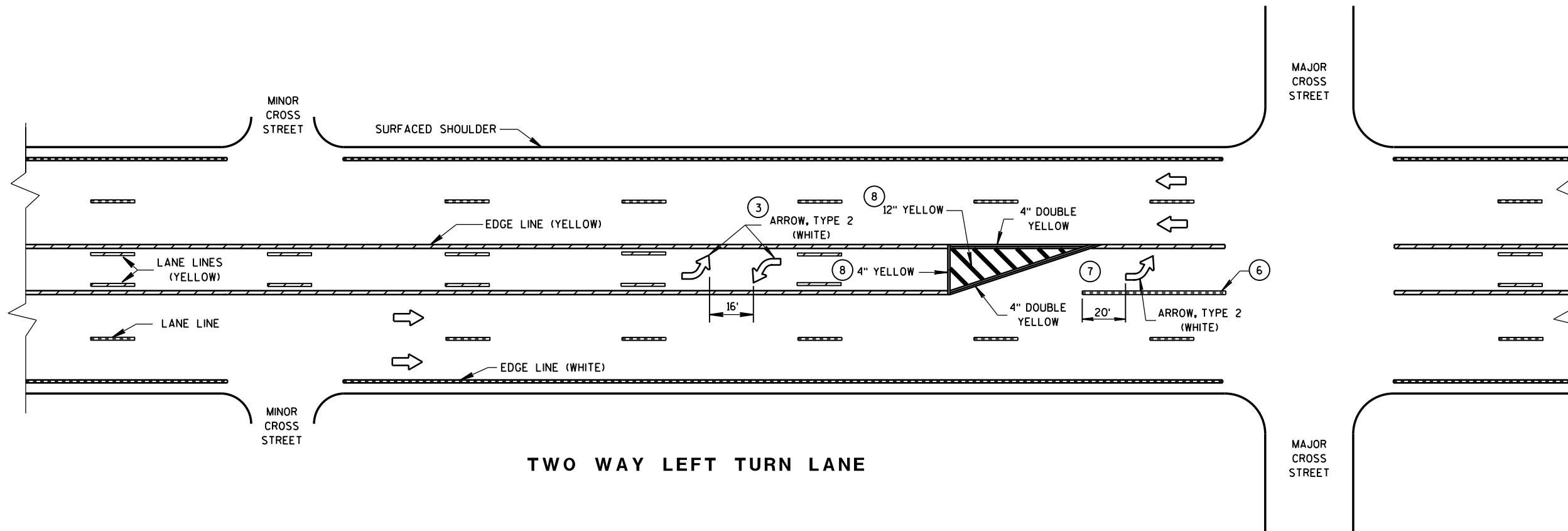
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



# GENERAL NOTES

- 1 STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- 2 DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
- 3 A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- 4 ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
- 5 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
- 6 8" WHITE
- 7 ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
- 8 REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.





NOTE:  
ARROW SYMBOL (➡)  
SHOWS DIRECTION OF TRAVEL



PAVEMENT MARKING  
(LEFT TURN LANE)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

LEGEND

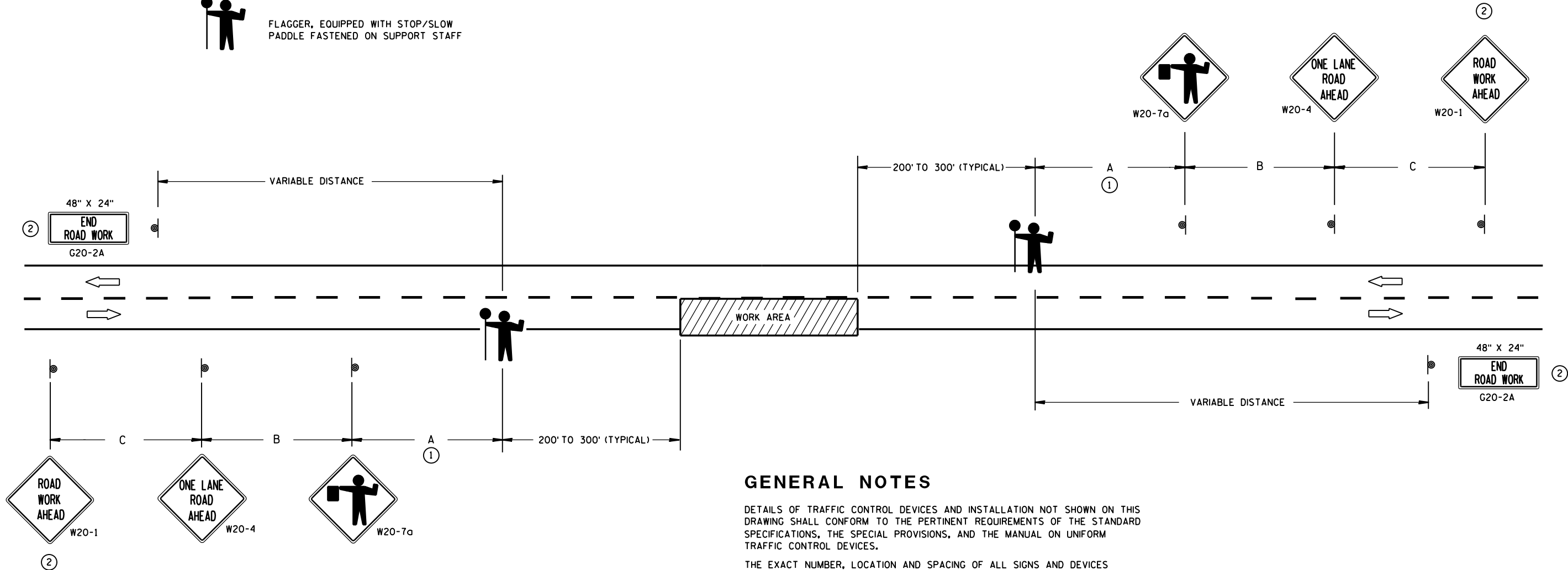
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

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.



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

GENERAL NOTES

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

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

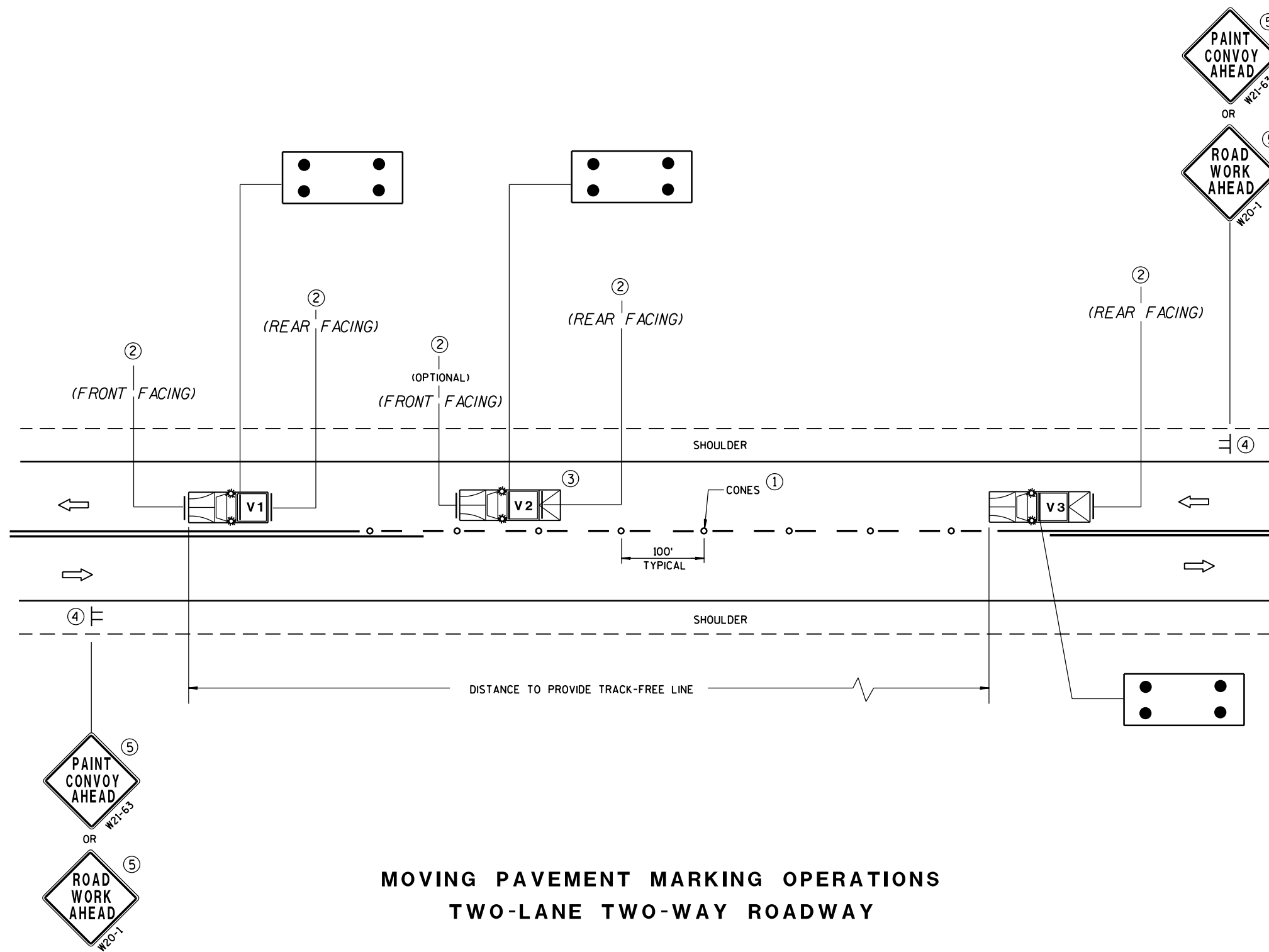
THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

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

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

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



## MOVING PAVEMENT MARKING OPERATIONS TWO-LANE TWO-WAY ROADWAY

### GENERAL NOTES

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

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

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

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

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

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

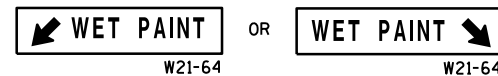
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGE LINE MARKING.

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

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

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

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

### LEGEND

**V1** LEAD VEHICLE

**V2** SHADOW VEHICLE

**V3** TRAIL VEHICLE WITH TMA

**TMA** TRUCK-MOUNTED ATTENUATOR

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

CONES

FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING  
OPERATION  
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

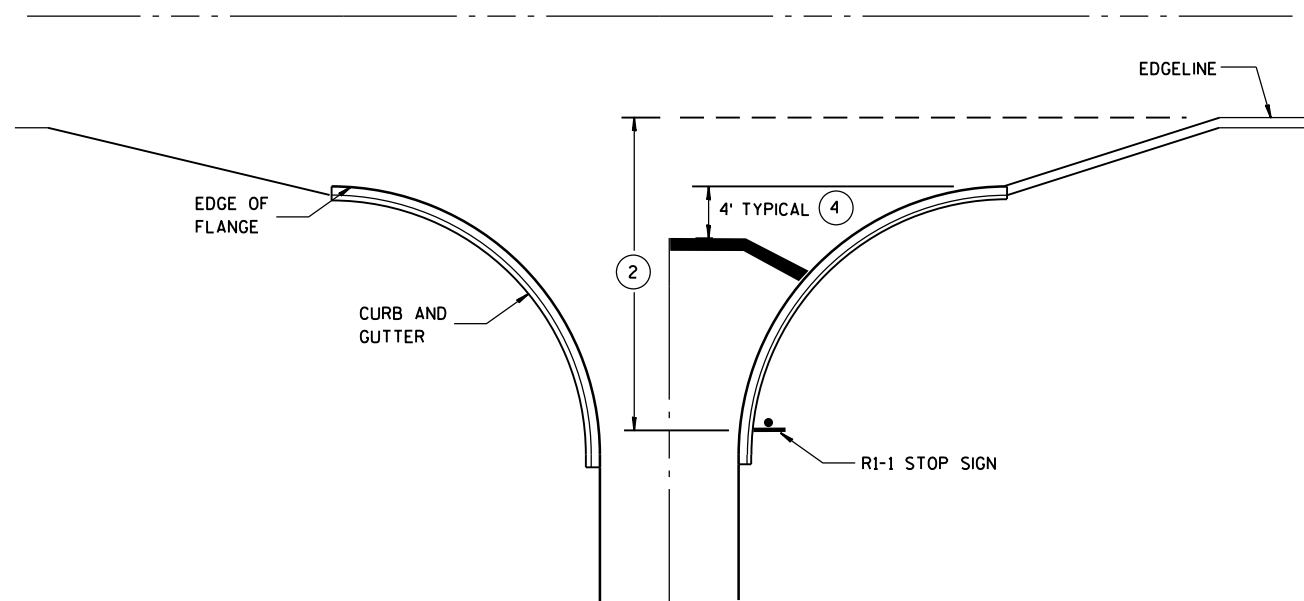
APPROVED

5/3/2013  
DATE

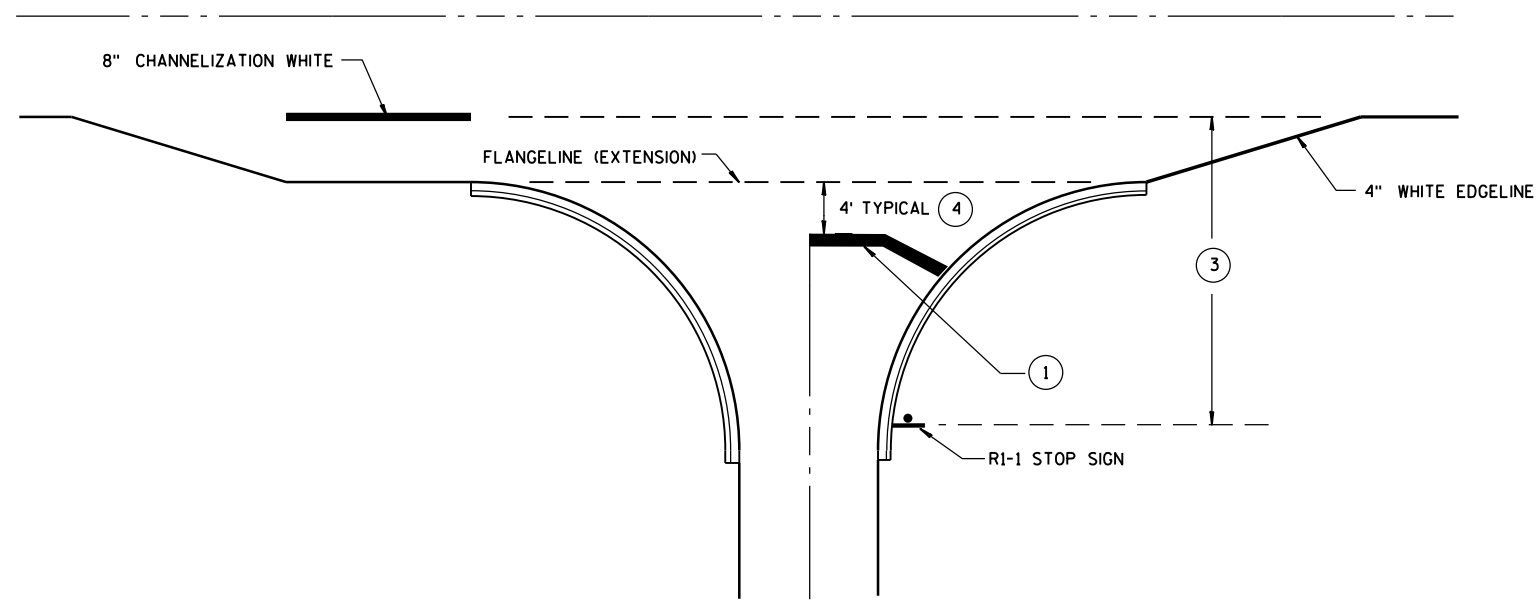
FHWA

/S/ Travis Feltes  
STATE TRAFFIC ENGINEER

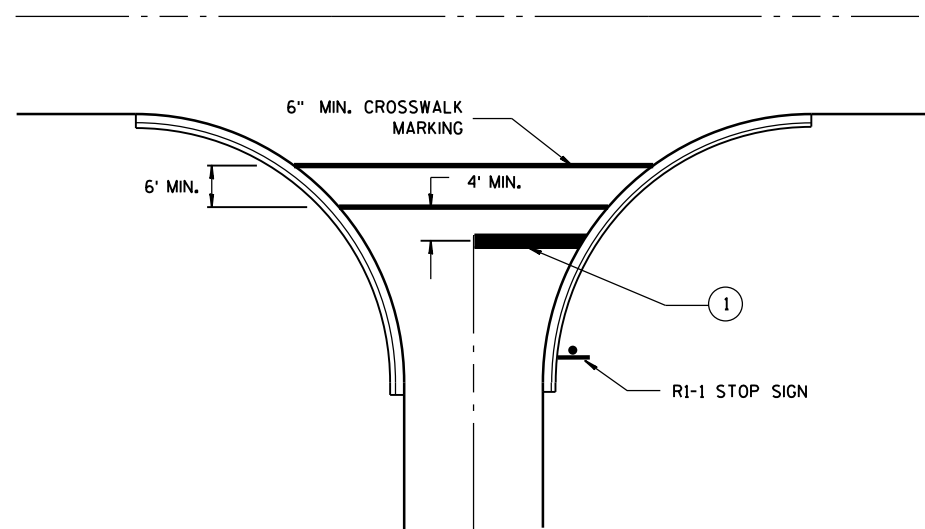




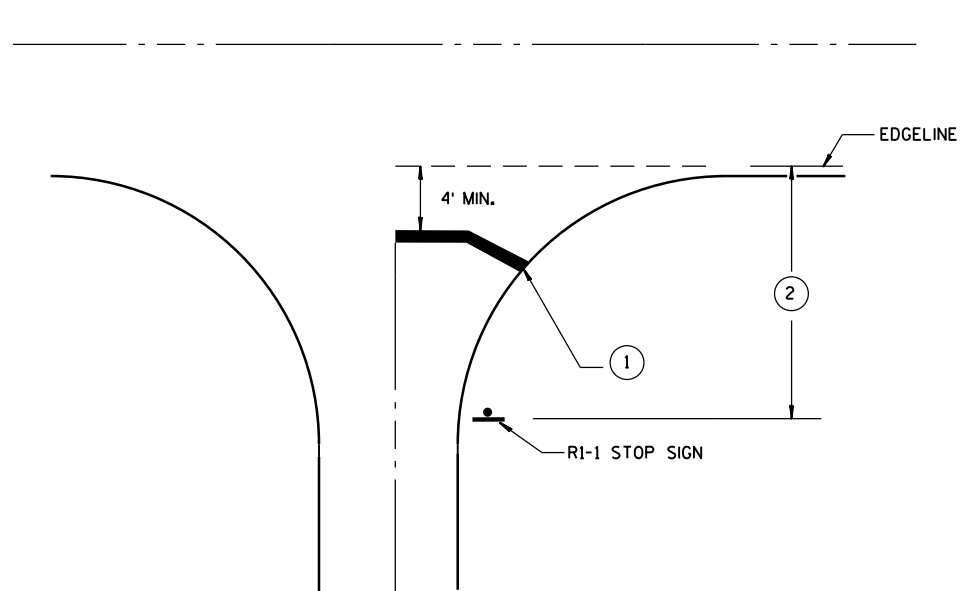
**TYPICAL STOP LINE PAVEMENT MARKING  
WITH CURB AND GUTTER**



**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 EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

### STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013  
DATE

FHWA

/S/ Travis Feltz  
STATE TRAFFIC ENGINEER

GENERAL NOTES

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

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

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

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

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

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

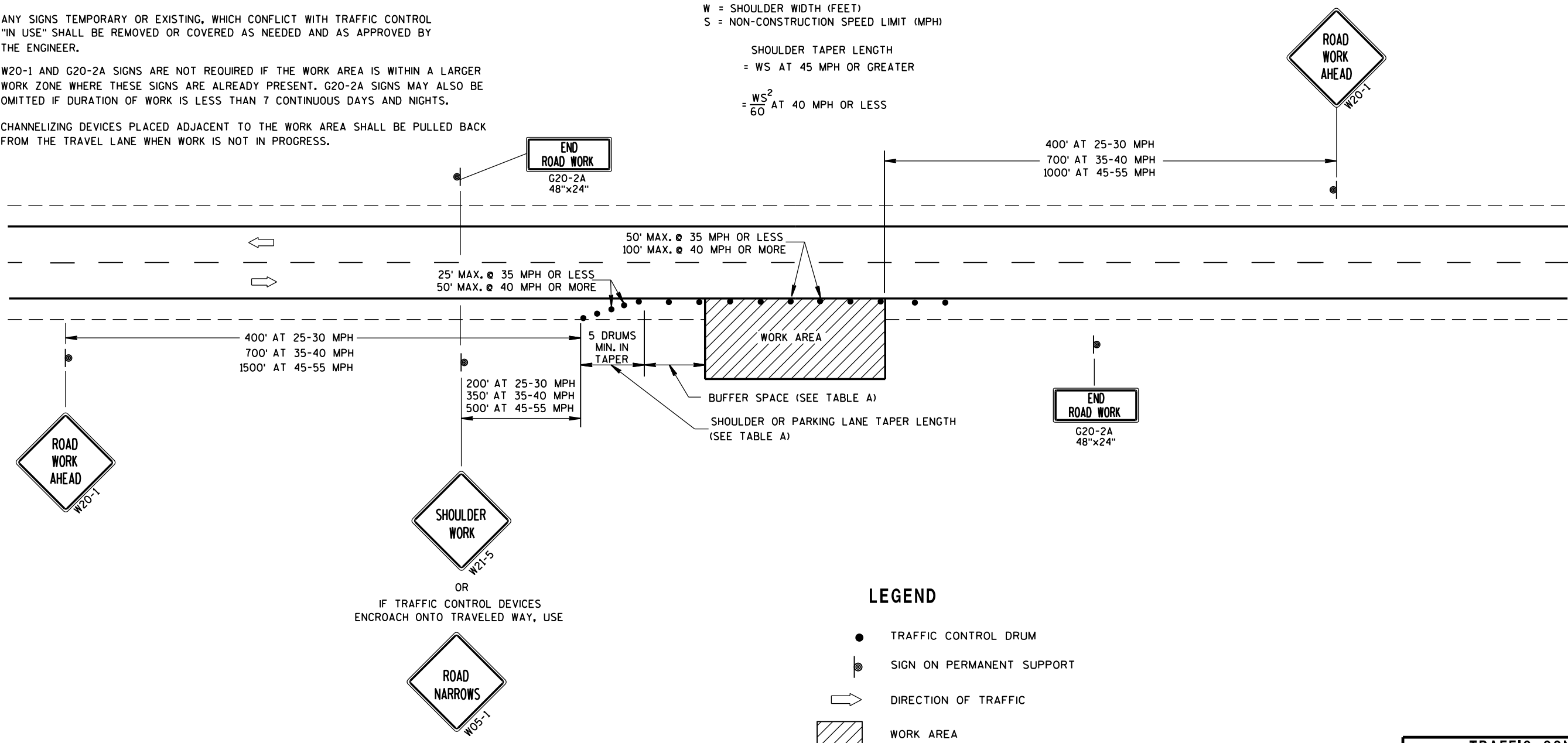
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

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

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

SHOULDER TAPER LENGTH  
= WS AT 45 MPH OR GREATER  
  
=  $\frac{WS^2}{60}$  AT 40 MPH OR LESS



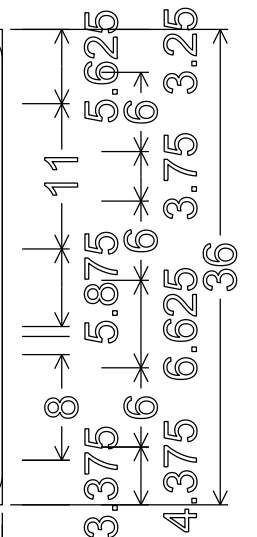
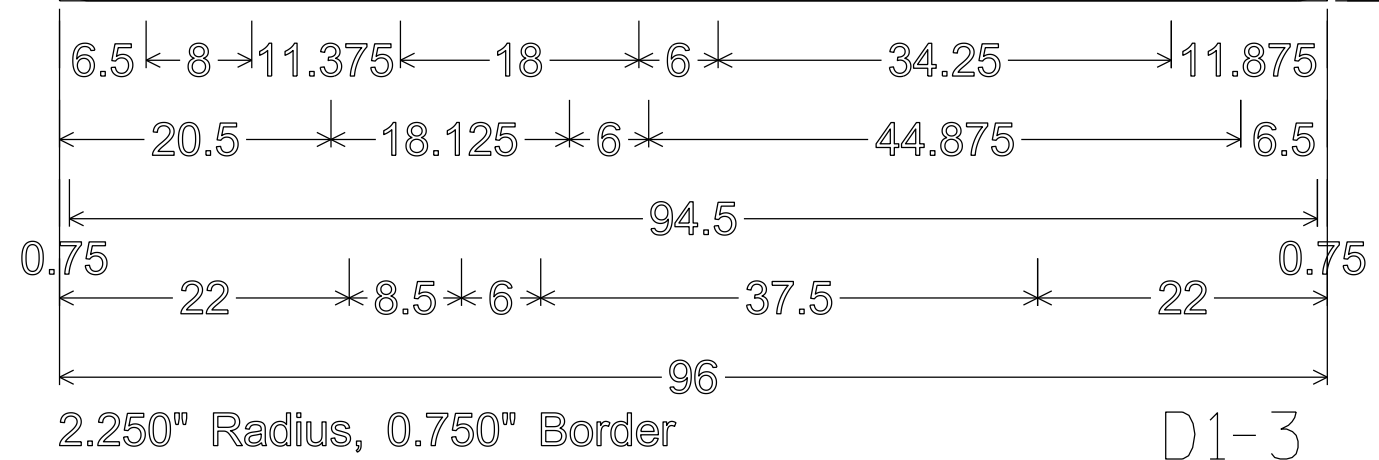
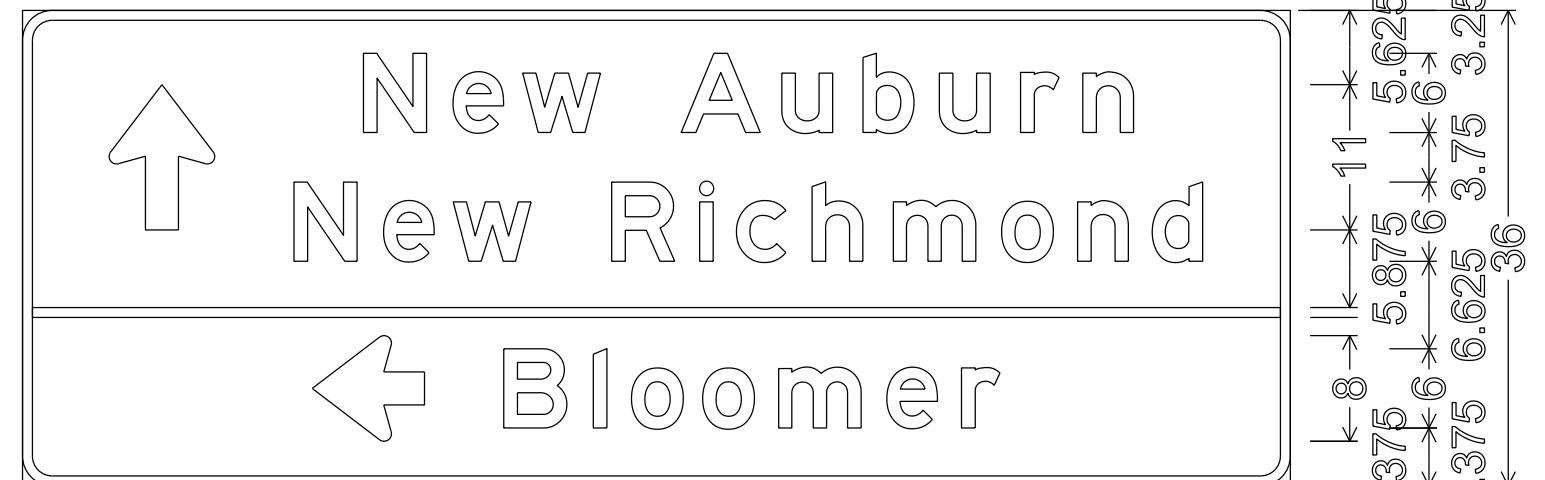
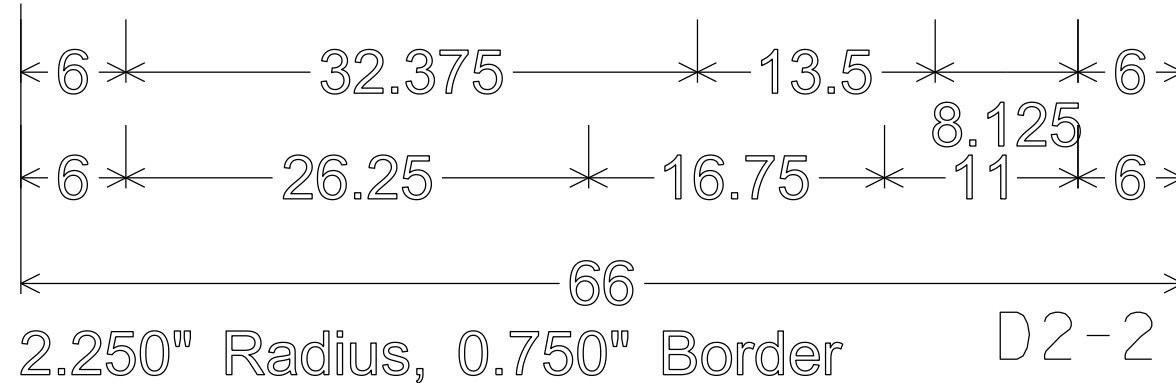
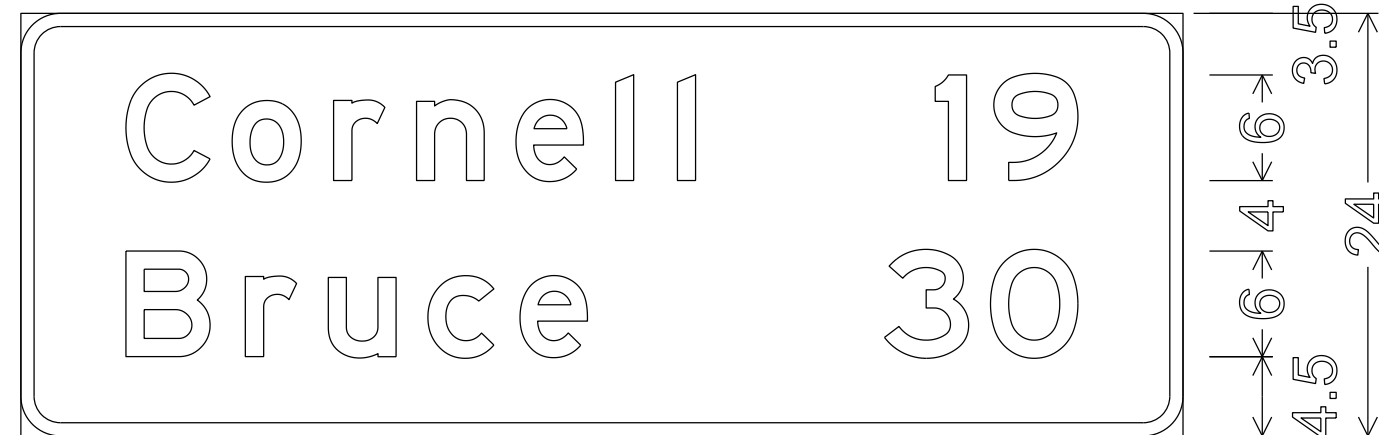
LEGEND

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

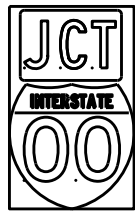
TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

NOTES

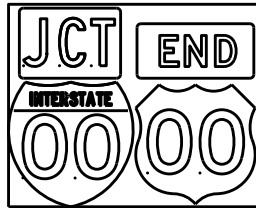
1. Sign is Type II - Type H Reflective
2. Color:  
Background - Green  
Message - White
3. Message Series - E



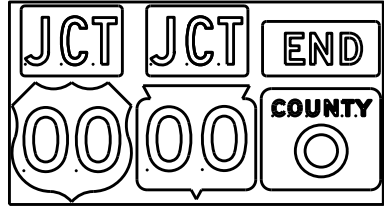
TYPICAL ASSEMBLIES



J1-1



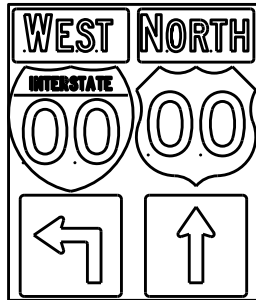
J1-2



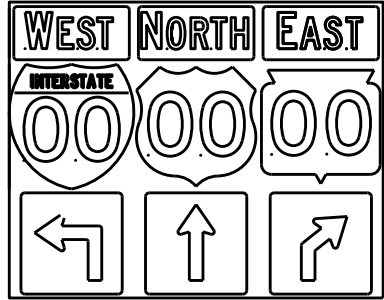
J1-3



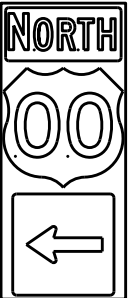
J2-1



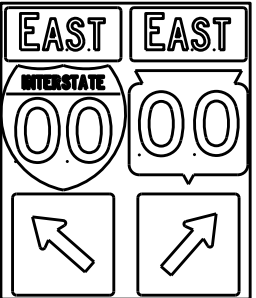
J2-2



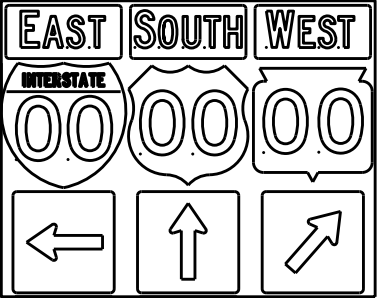
J2-3



J3-1



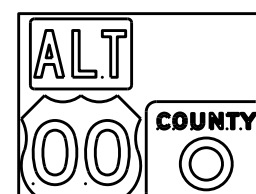
J3-2



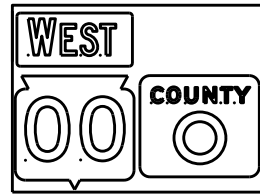
J3-3



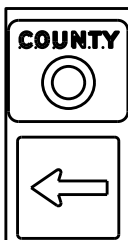
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

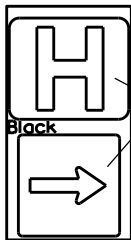


J22-1



JV

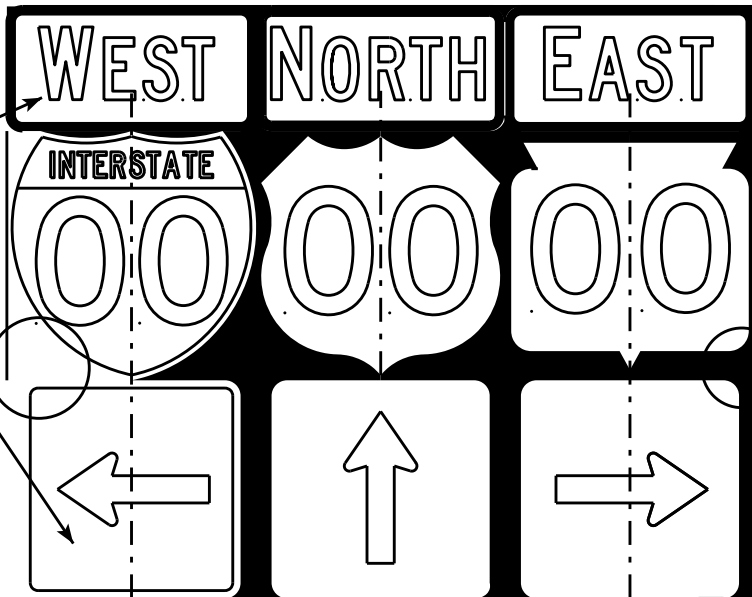
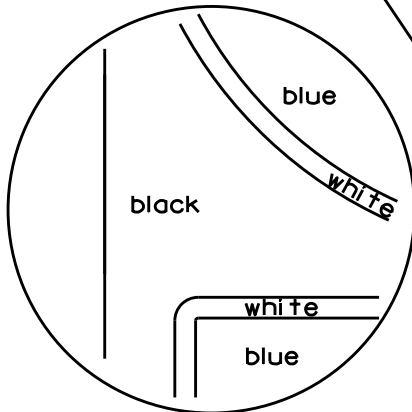
( Typical Vertical J-Assembly  
See Note 10 and 11)



JH-1

Blue Background

[blue background  
with interstate]



[black background]

ROUTE MARKERS & COMPONENTS  
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

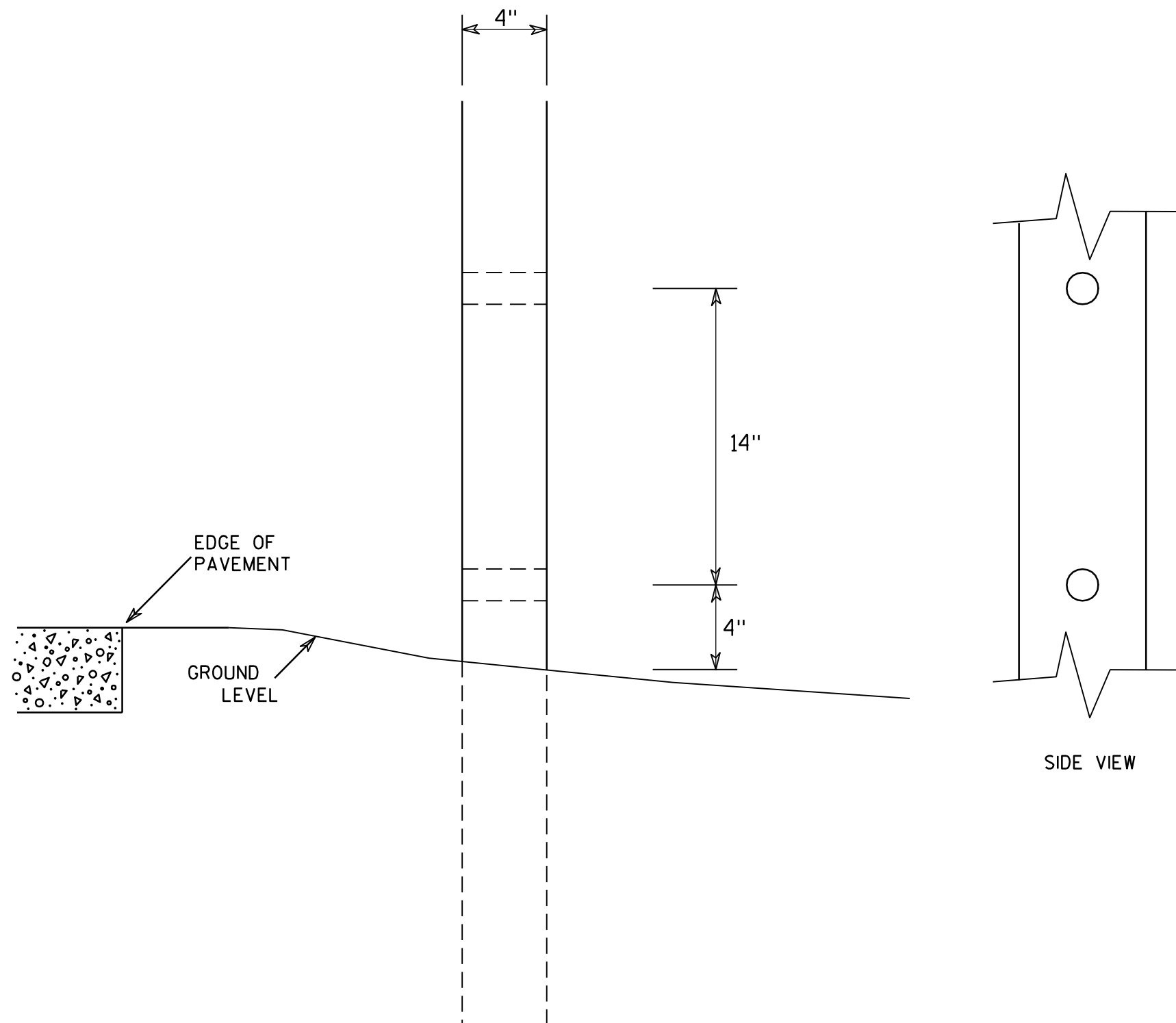
APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

DATE 2/06/14 PLATE NO. A2-1S.8

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - Black Non-reflective  
Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

7



### 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

## 4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

*Chester J. Spang*  
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

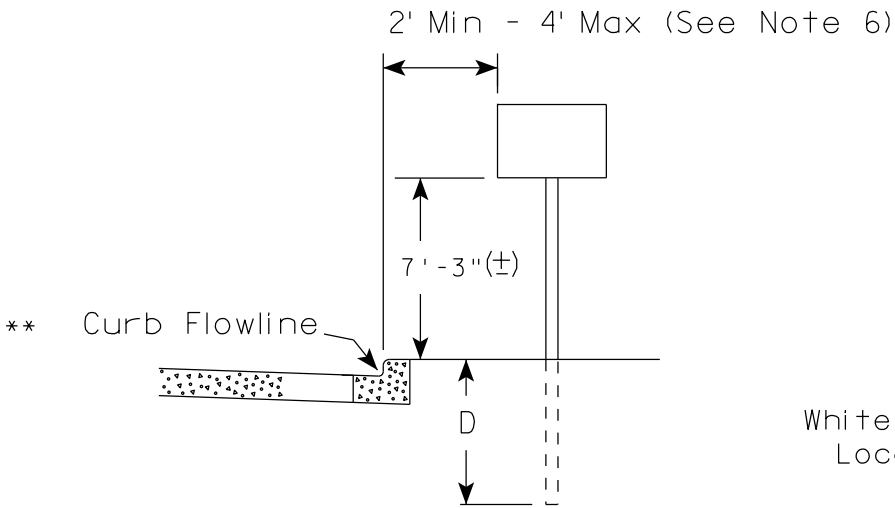
HWY:

COUNTY:

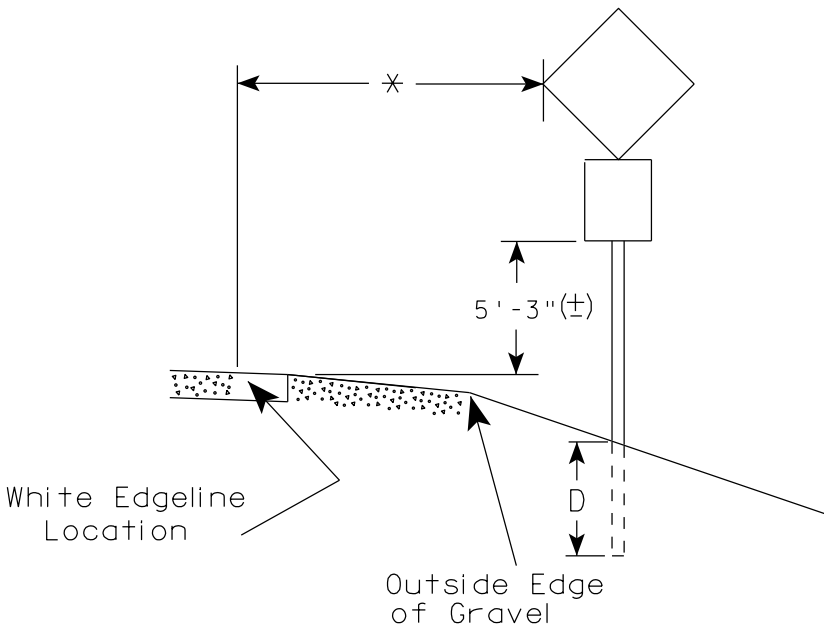
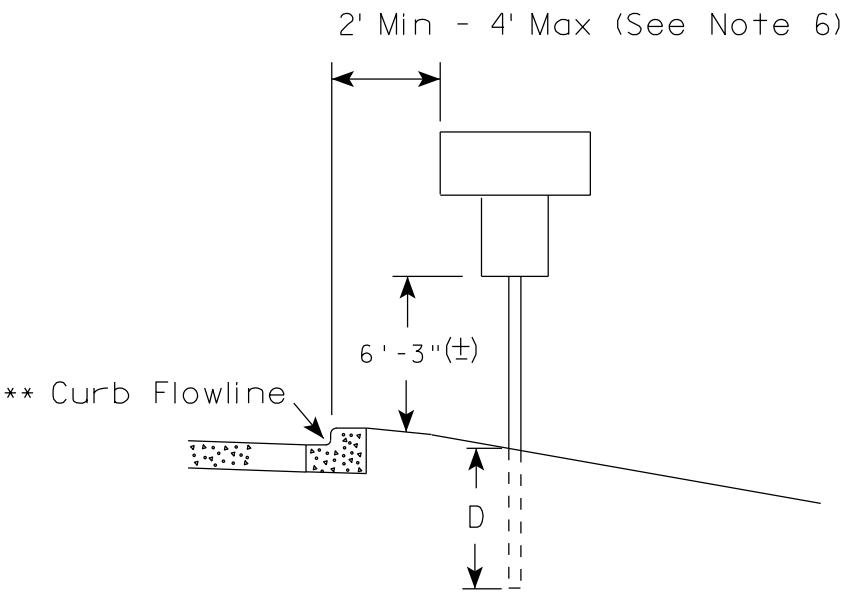
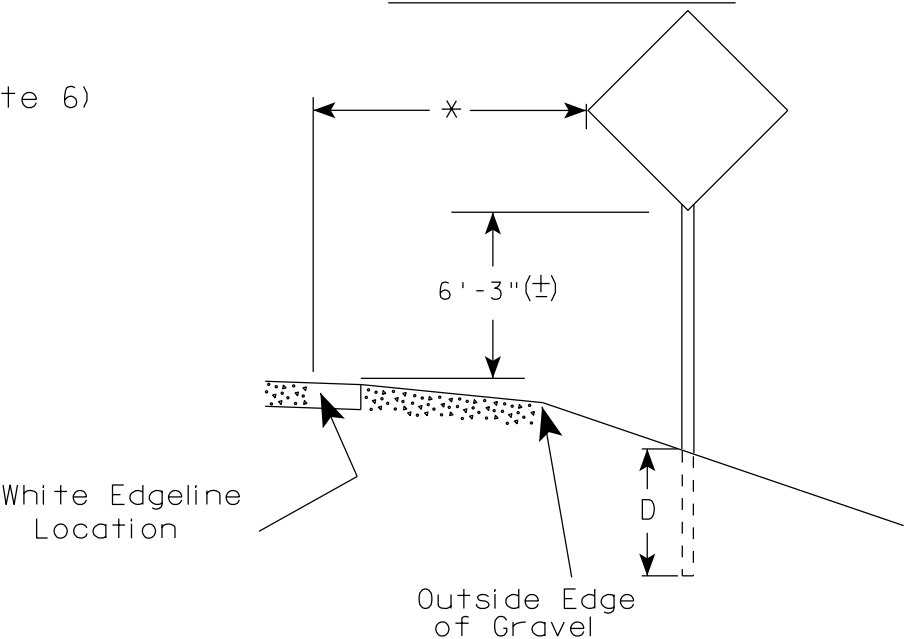
SHEET NO:

E

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

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

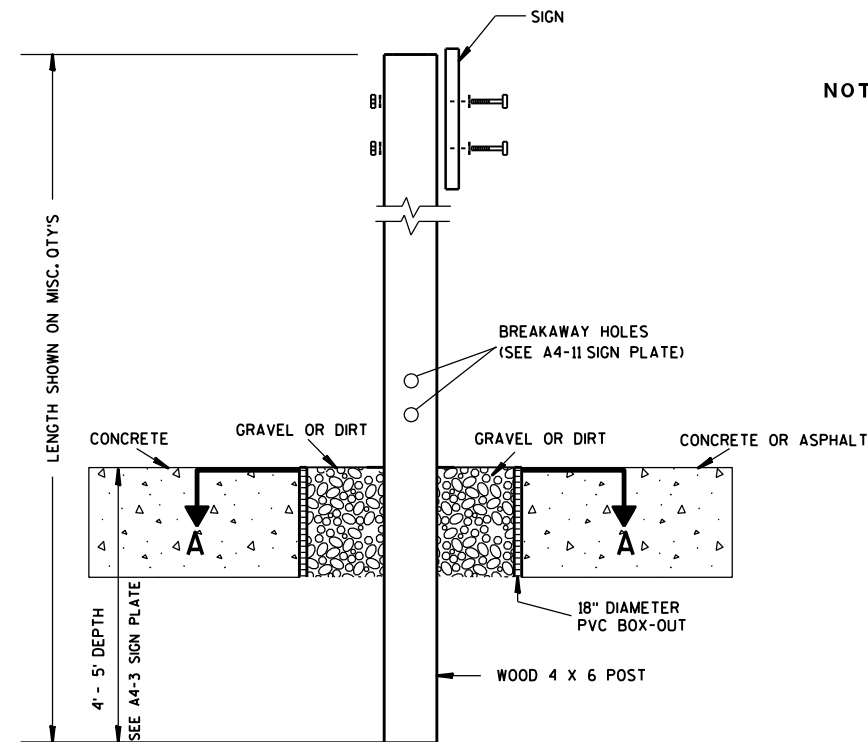
\* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION  
OF PERMANENT TYPE II  
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

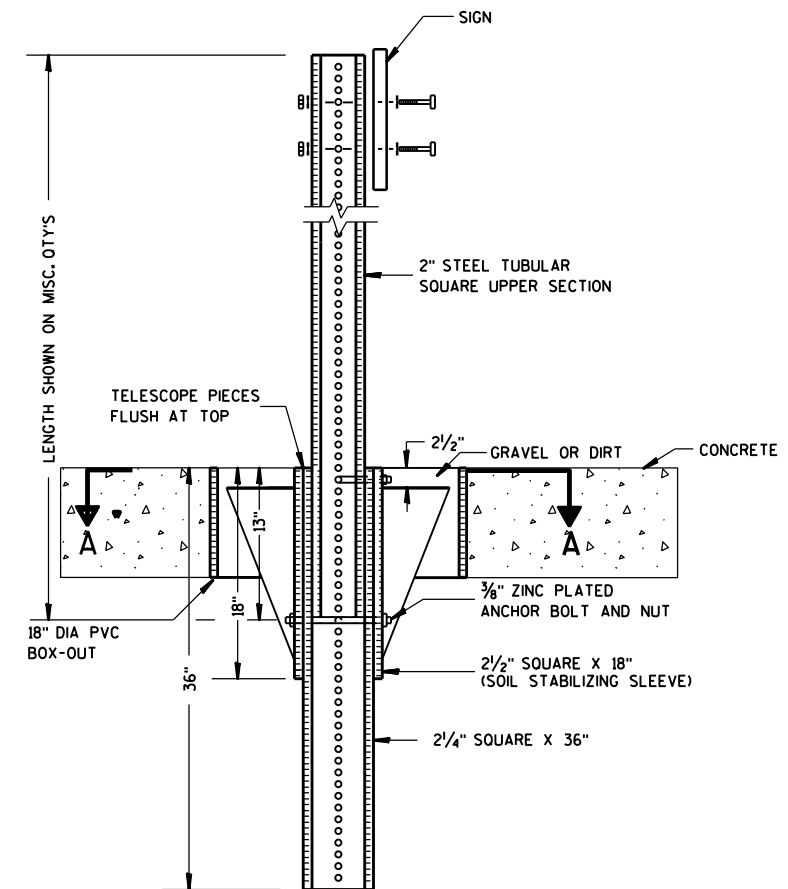
DATE 11/12/14 PLATE NO. A4-3.19



### ELEVATION VIEW

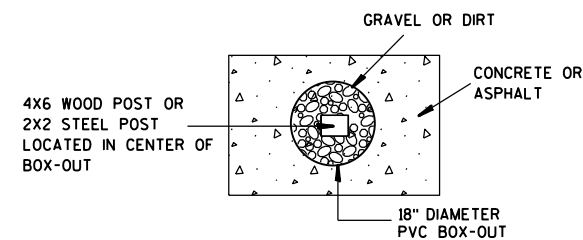
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



### ELEVATION VIEW

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



### PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST  
BOX-OUTS  
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

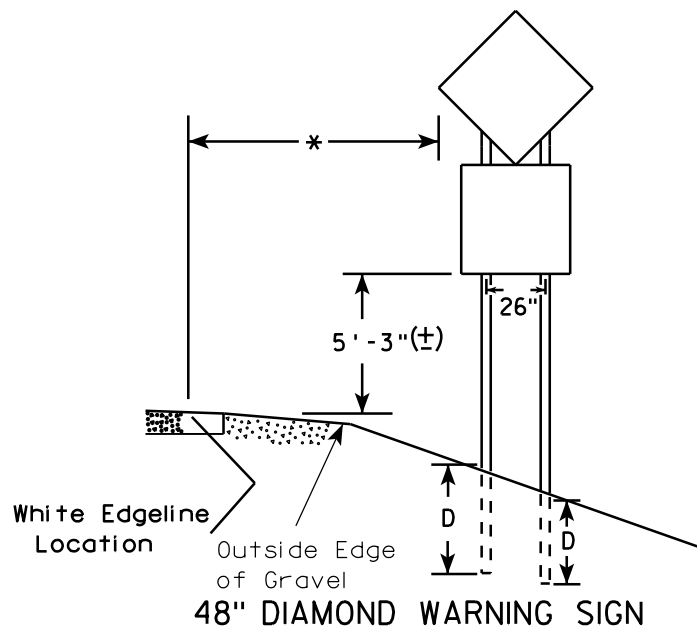
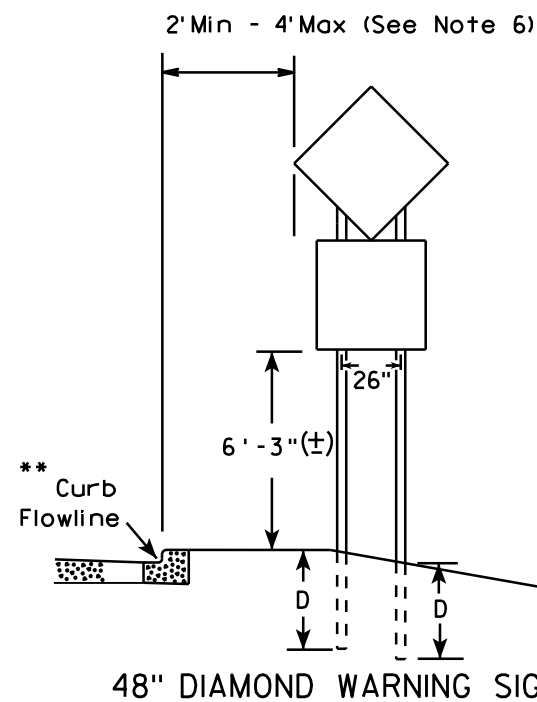
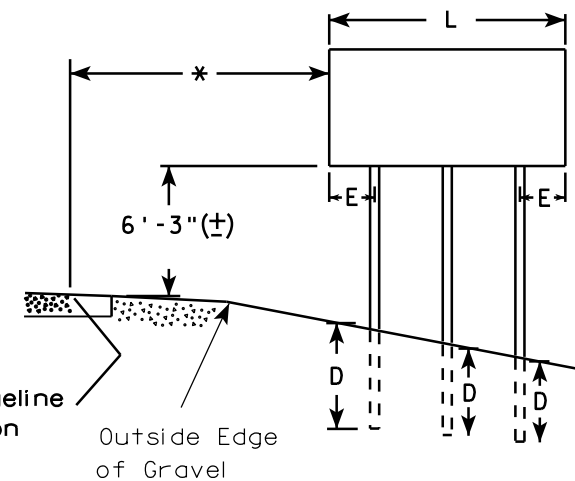
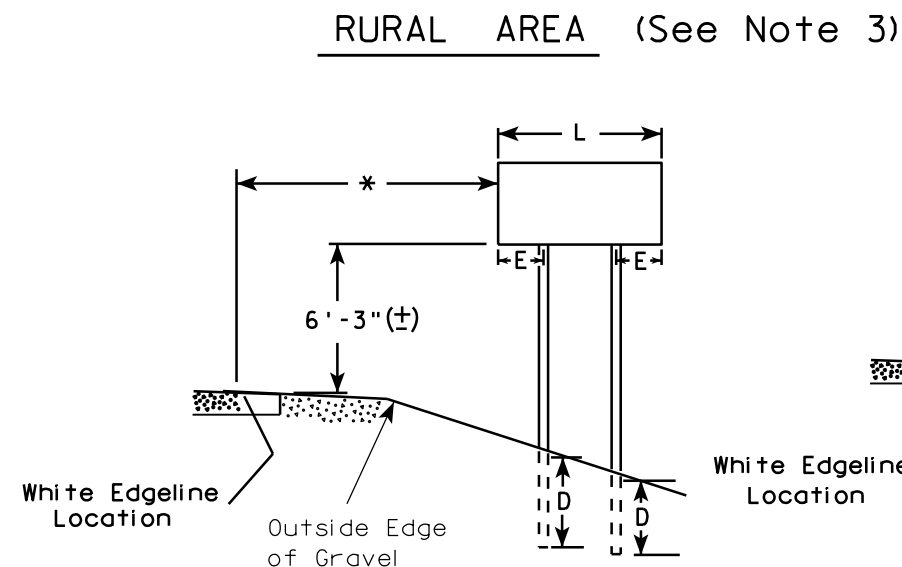
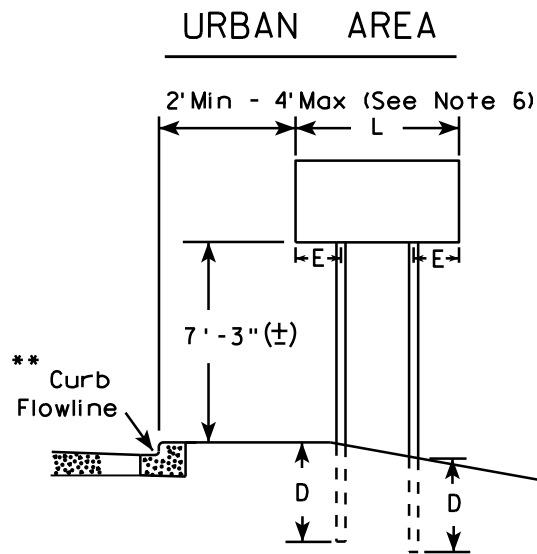
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



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

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

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

\*\*\* See A4-3 sign plate for signs 4' or less in width or 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'

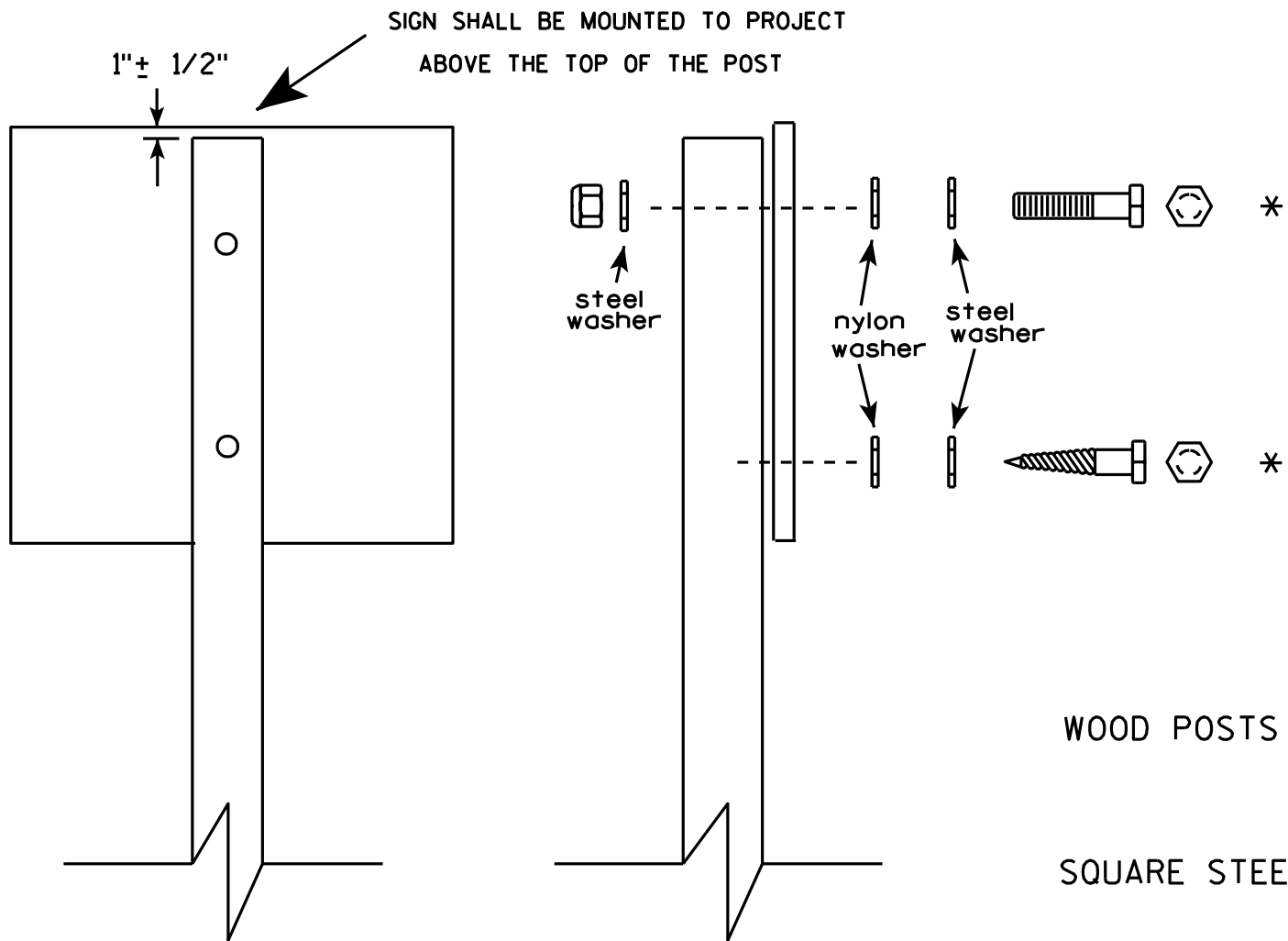
TYPICAL INSTALLATION  
OF TYPE II SIGNS  
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-4.13



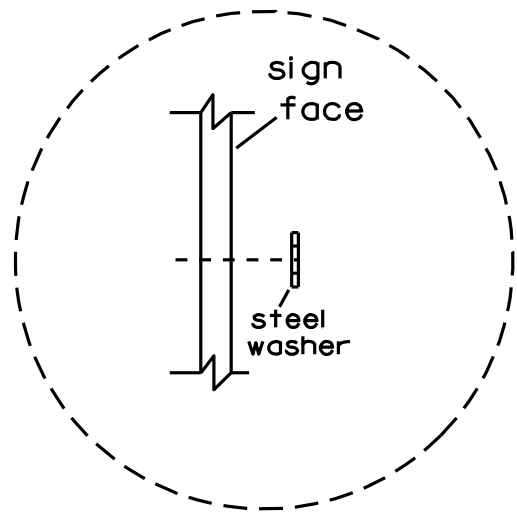


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

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

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

- WOOD POSTS (4" x 4" or 4" x 6")  
LAG SCREWS - 3/8" X 3"  
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")  
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts  
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL  
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -  
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL  
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.

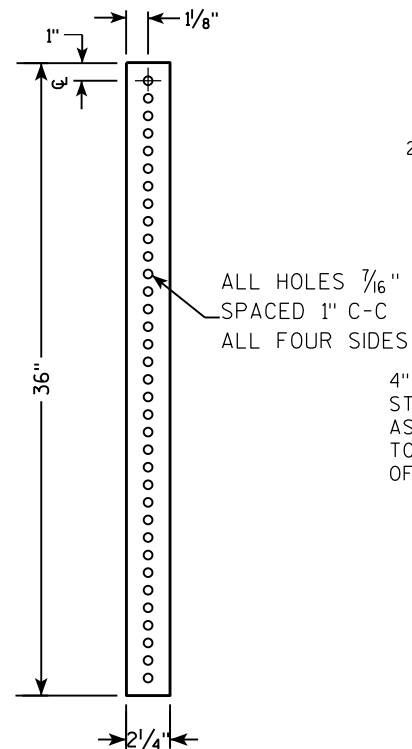


Washer Placement when Sign Has Other Than Type H or Type F Face

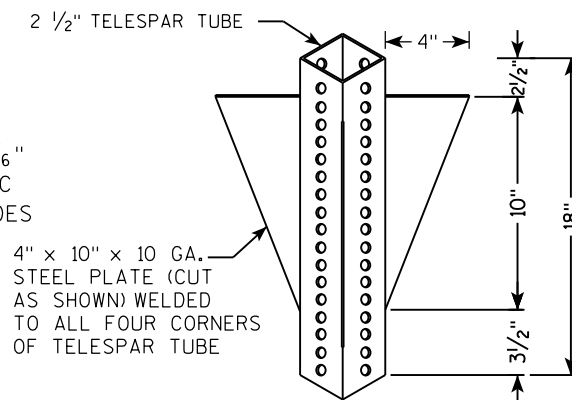
\* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7

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



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



LENGTH SHOWN ON MISC. QTY'S  
 18" DIA SCHEDULE 40 PVC BOX-OUT  
 TELESCOPE PIECES FLUSH AT TOP  
 36"  
 18"  
 13"  
 2 1/2"  
 2 1/4" SQUARE X 36"  
 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)  
 3/8" ZINC PLATED ANCHOR BOLT AND NUT  
 2 1/2" GRAVEL OR DIRT  
 3/8" ZINC PLATED ANCHOR BOLT AND NUT  
 ALL HOLES 7/16" SPACED 1" C-C ALL FOUR SIDES  
 2" STEEL TUBULAR SQUARE UPPER SECTION  
 SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL  
 SIGN

LENGTH SHOWN ON MISC. QTY'S

SIGN

SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL

2" STEEL TUBULAR SQUARE UPPER SECTION

ALL HOLES  $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES

$\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT

TELESCOPE PIECES FLUSH AT TOP

1"

$\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT

2 $\frac{1}{2}$ " SQUARE X 18" (SOIL STABILIZING SLEEVE)

2 $\frac{1}{4}$ " SQUARE X 36"

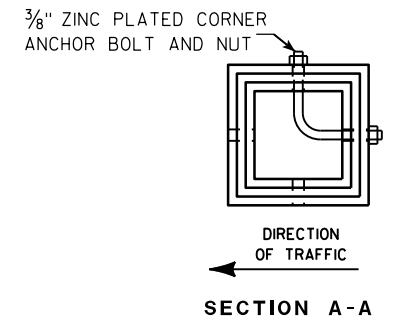
36"

18"

12"

A

B



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

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

7

Metric equivalent  
for this sign is:

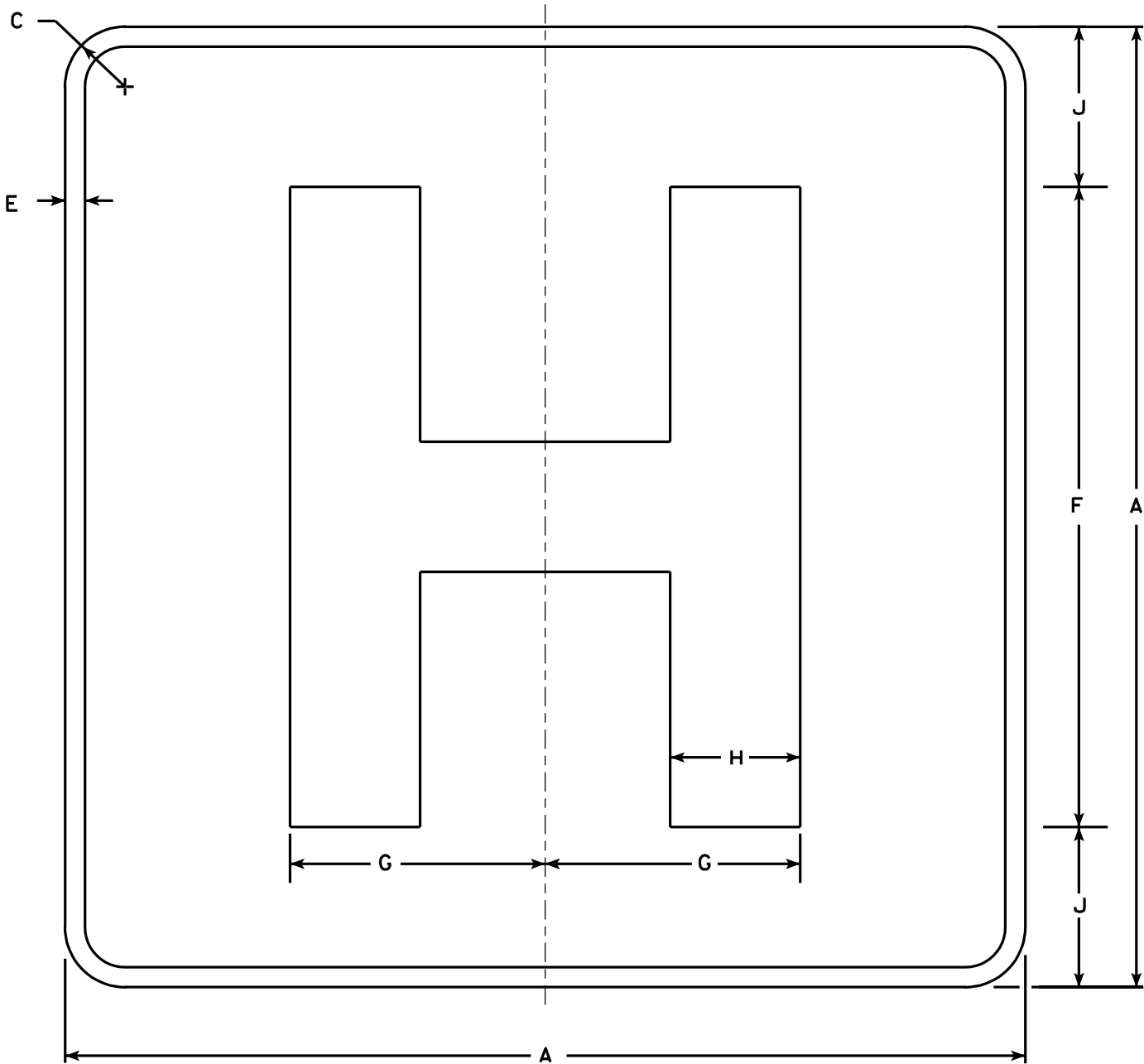
SIZE	
1	450 mmX 450 mm
2	600 mmX 600 mm
3	900 mmX 900 mm
4	X
5	X

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		1/2	12	4 3/4	2 3/8		3																	4.0
2	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

PROJECT NO:

SHEET NO:

E



D9-2

NOTES

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

STANDARD SIGN  
D9-2

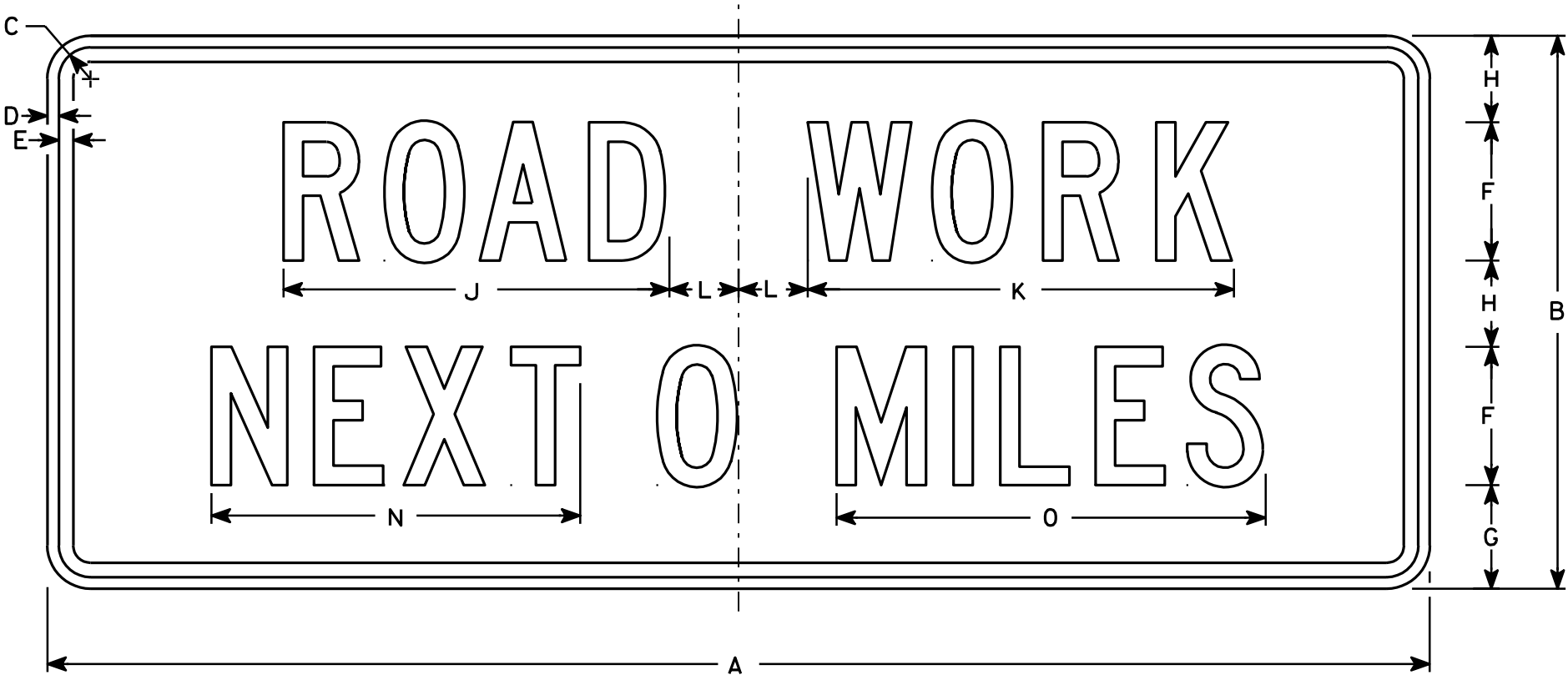
WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Chester J. Spang*  
for State Traffic Engineer

DATE 1/15/02 PLATE NO. D9-2.4

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:  
Background - Orange  
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance



G20-1

Metric equivalent  
for this sign is:

SIZE	
1	
2	1500 mm X 600 mm
3	
4	1500 mm X 600 mm
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m <sup>2</sup>
1																												
2	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10	.90
3																												
4	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10	.90
5																												

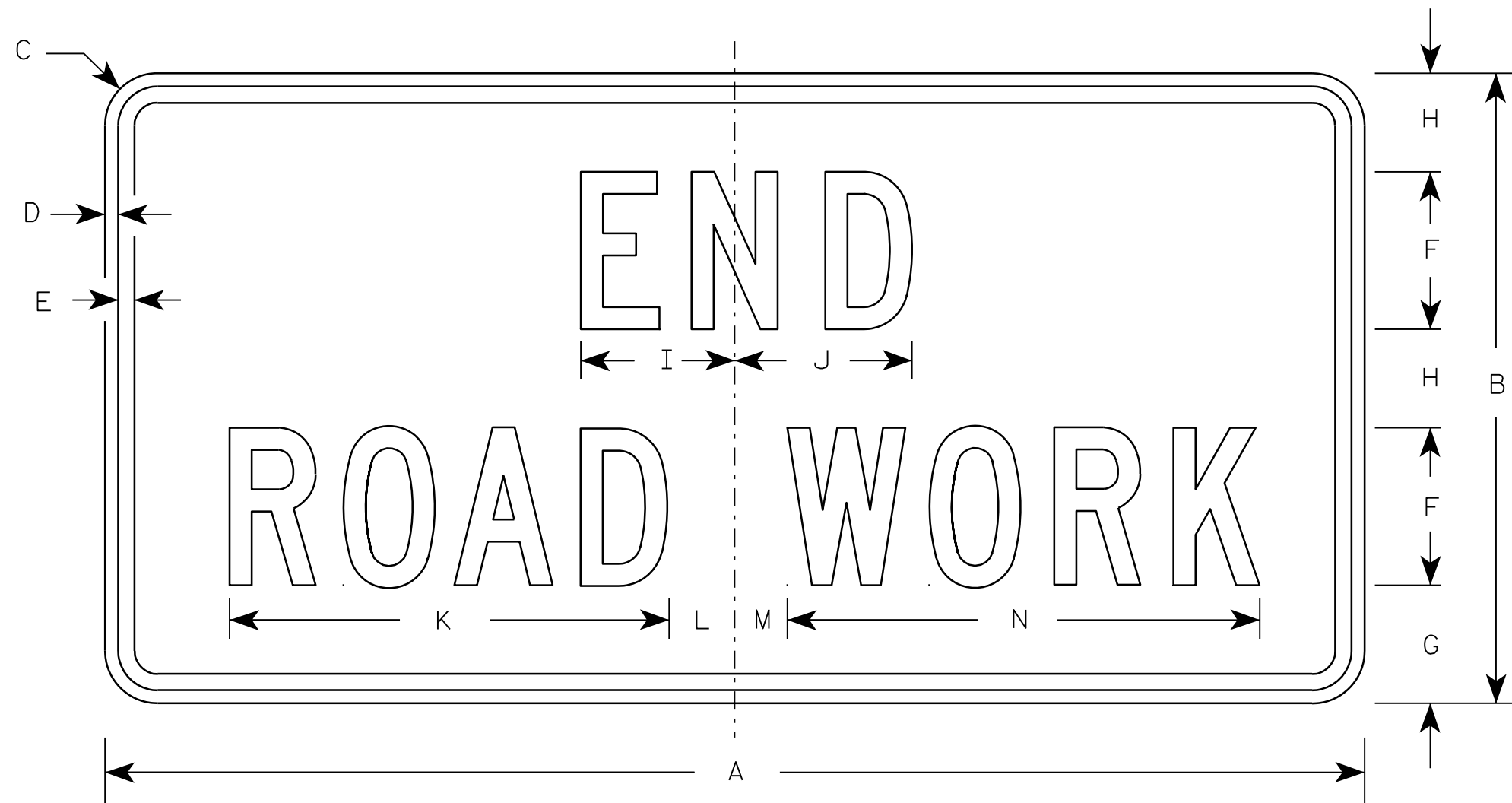
STANDARD SIGN  
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Chris J. Spay*  
State Traffic Engineer  
DATE 4/8/97 PLATE NO. G20-1.7

PROJECT NO: HWY: COUNTY: SHEET NO: E

7



G20-2A

NOTES

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

Metric equivalent  
for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m <sup>2</sup>
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN  
G20-2A

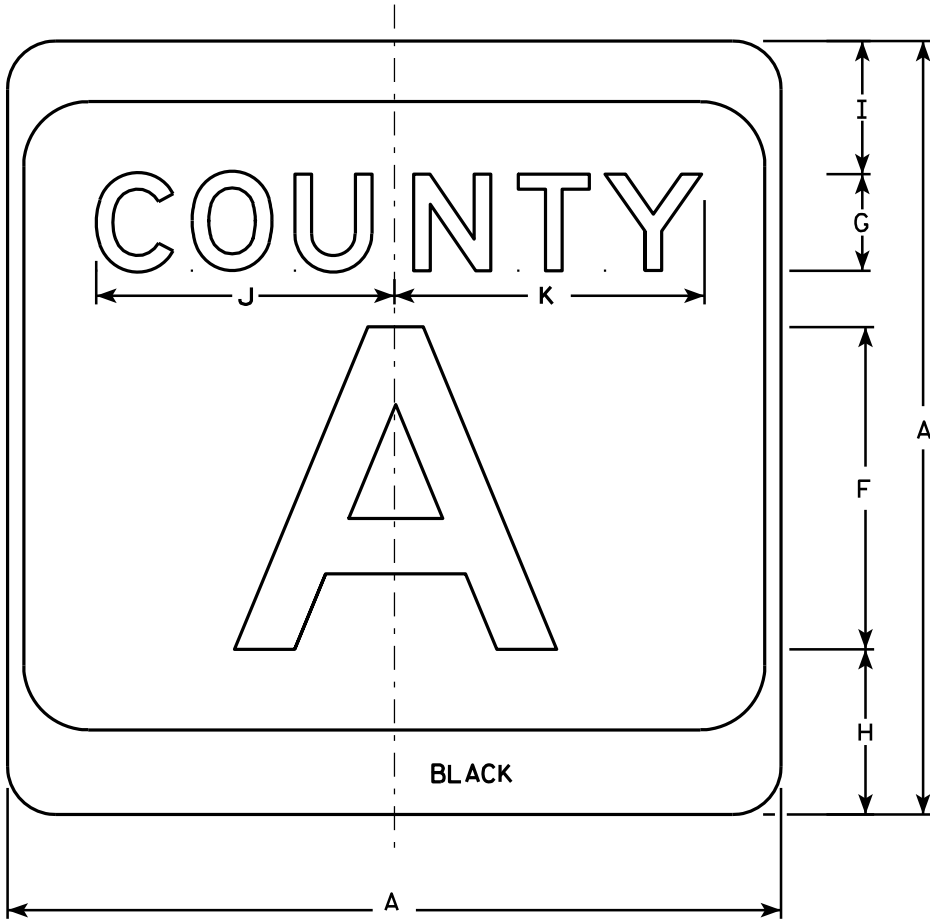
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

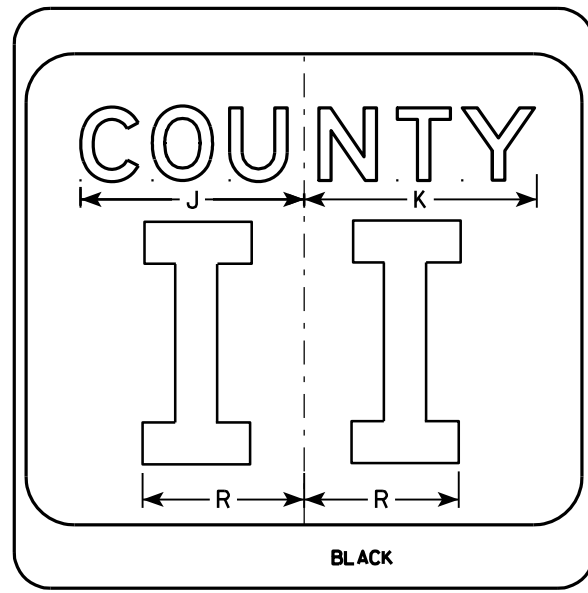
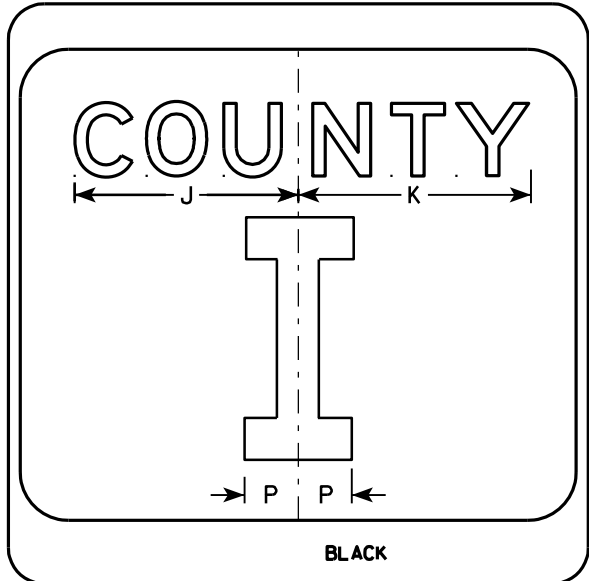
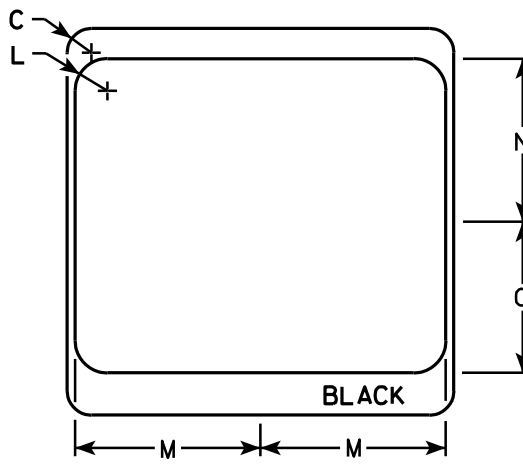
DATE 9/30/09 PLATE NO. G20-2A.8

7

7



M1-5A



NOTES

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

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		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

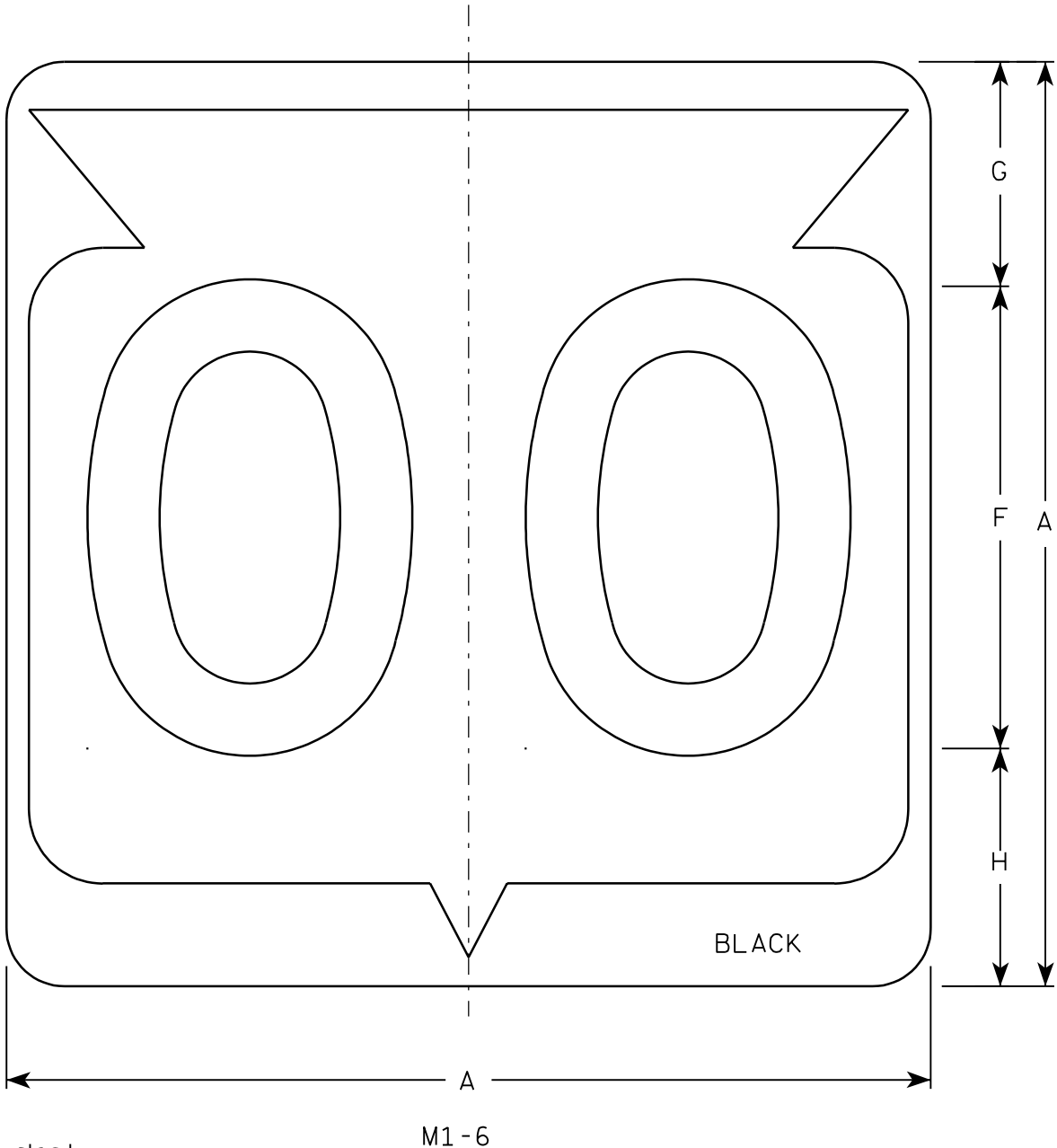
CTH MARKER  
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

7



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 <sup>2</sup>
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

PROJECT NO:

HWY:

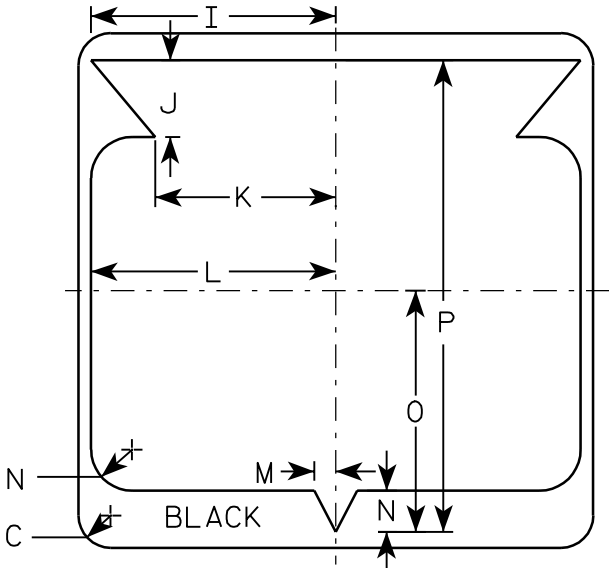
COUNTY:

SHEET NO:

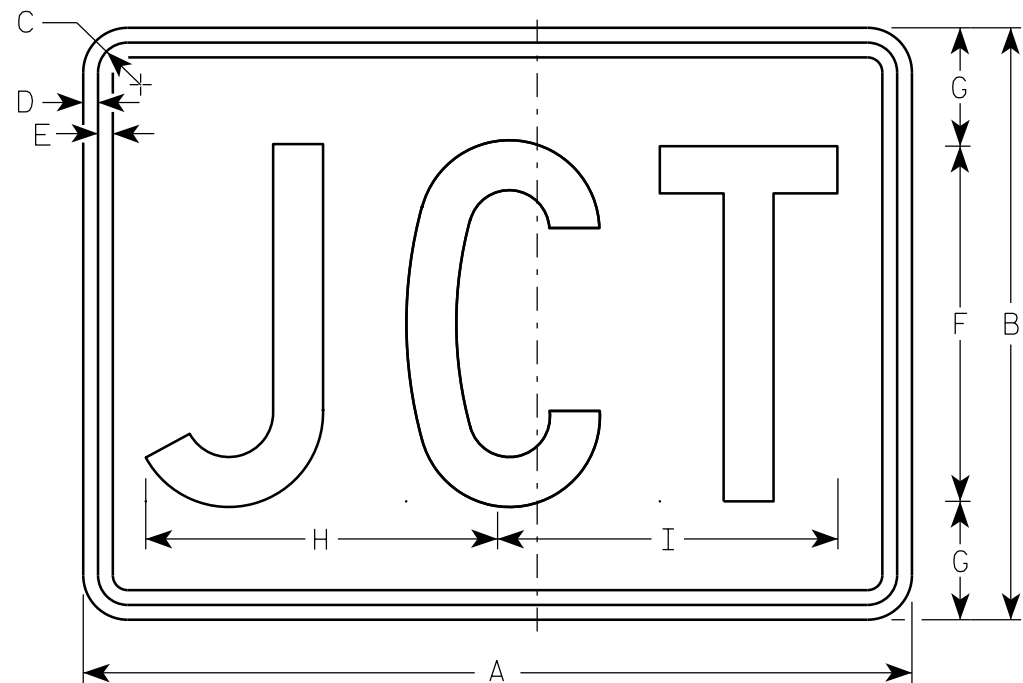
E

NOTES

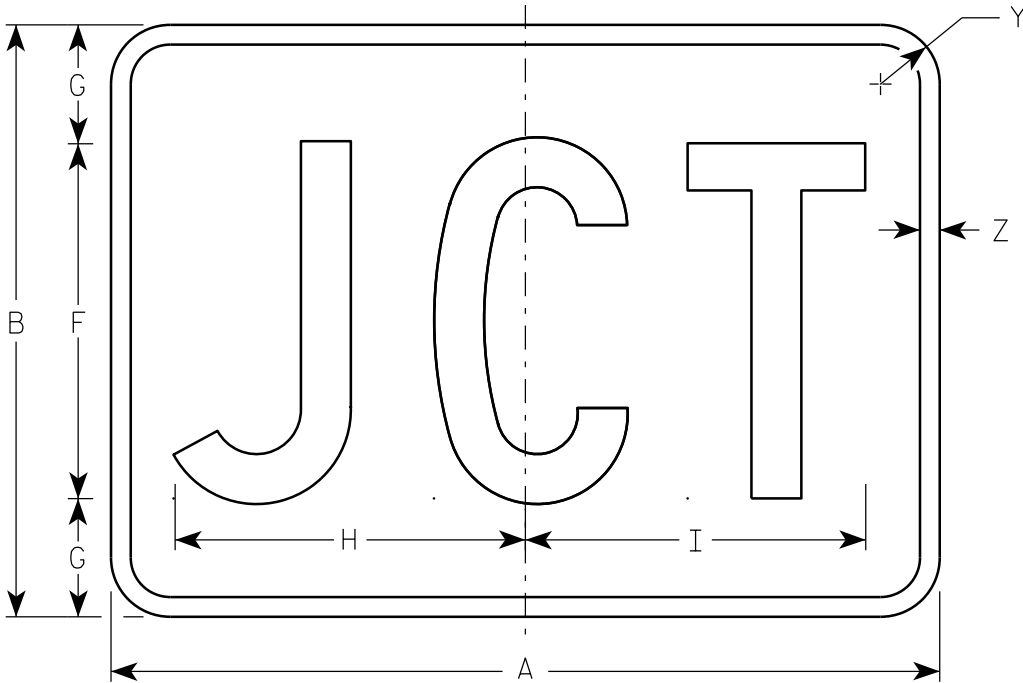
- Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:  
Background - White & Black - See Note 6  
Message - Black
- Message Series - See note 5
- Corners may be square or rounded when base material is plywood but borders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



7



M2-1  
MK2-1  
MM2-1  
MN2-1  
MR2-1



MB2-1

NOTES

- 1. Sign is Type II - Type H
- 2. Color:
  - Background - See note 5
  - Message - See note 5
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. M2-1 Background - White  
    Message - Black  
    MB2-1 Background - Blue  
    Message - White  
    MK2-1 Background - Green  
    Message - White  
    MM2-1 Background - White  
    Message - Green  
    MN2-1 Background - Brown  
    Message - White  
    MR2-1 Background - Brown  
    Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

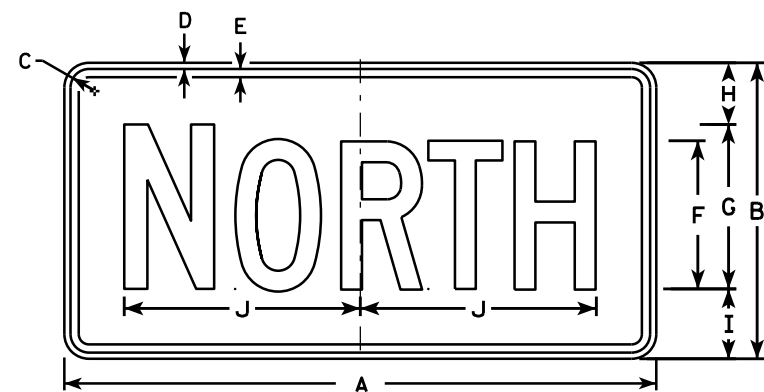
STANDARD SIGN  
M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
For State Traffic Engineer

DATE 6/30/14 PLATE NO. M2-1.11

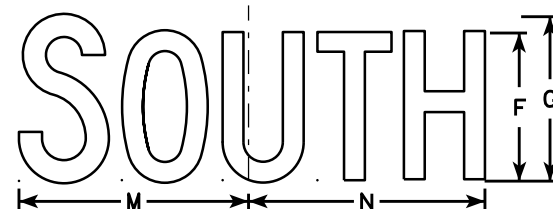




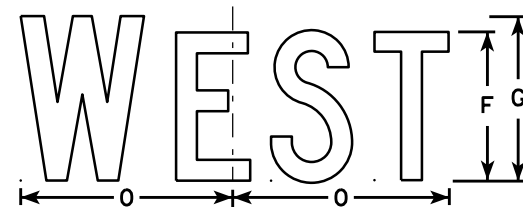
M3-1  
MK3-1  
MM3-1  
MN3-1



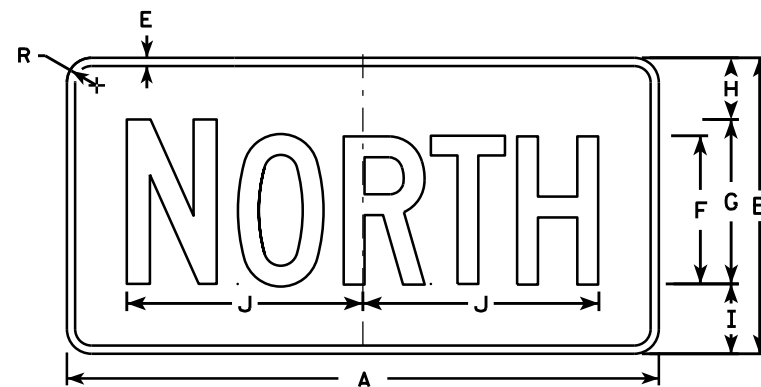
M3-2  
MK3-2  
MM3-2  
MN3-2



M3-3  
MK3-3  
MM3-3  
MN3-3



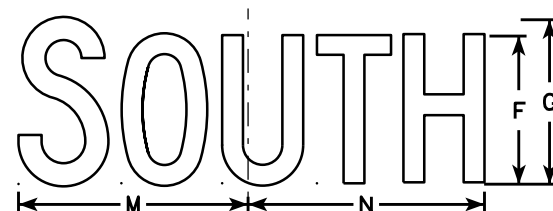
M3-4  
MK3-4  
MM3-4  
MN3-4



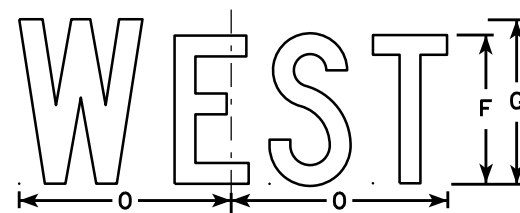
MB3-1



MB3-2



MB3-3



MB3-4

## NOTES

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

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

STANDARD SIGNS  
M3-1 thru M3-4  
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

DATE 6/30/14 PLATE NO. M3-1.13

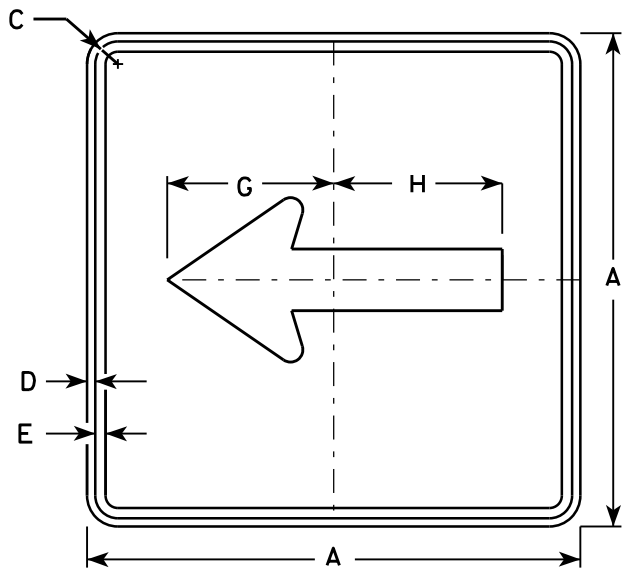
PROJECT NO:

HWY:

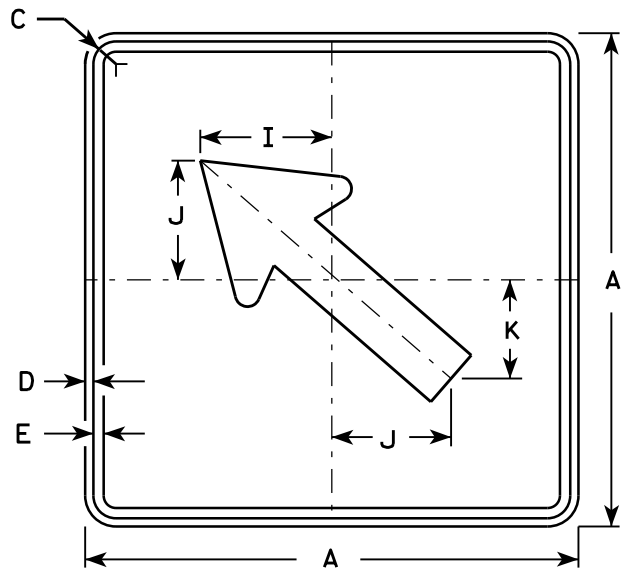
COUNTY:

SHEET NO:

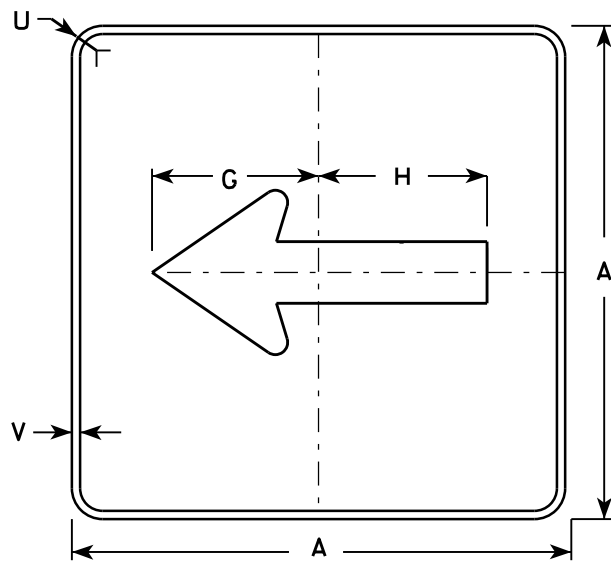
E



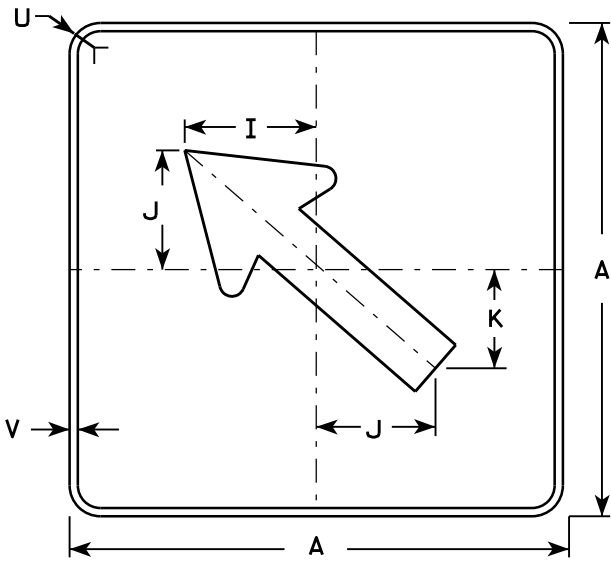
M6 - 1  
MK6 - 1  
MM6 - 1  
MN6 - 1  
M06 - 1  
MP6 - 1  
MR6 - 1



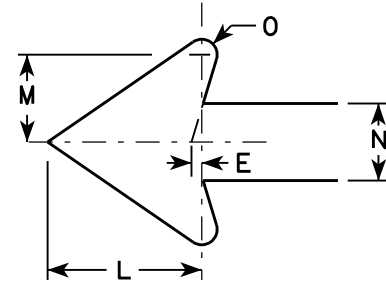
M6 - 2  
MK6 - 2  
MM6 - 2  
MN6 - 2  
M06 - 2  
MP6 - 2  
MR6 - 2



MB6 - 1



MB6 - 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  
MG6-1 and MG6-2 Background - Green  
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

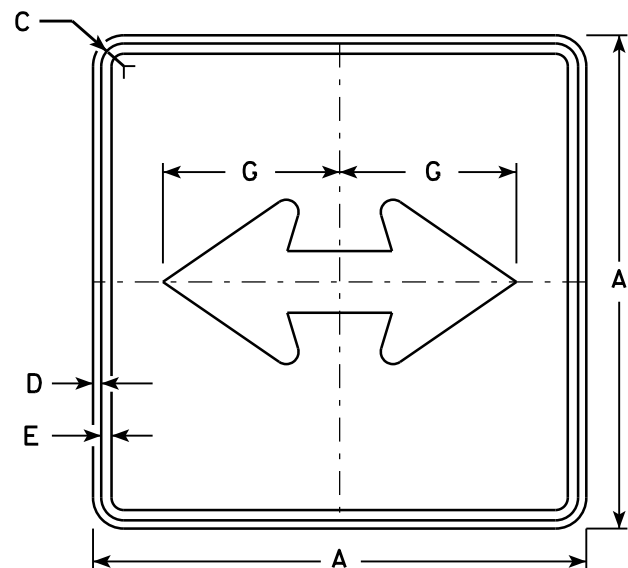
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10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

STANDARD SIGN  
M6 - 1 & M6 - 2  
SERIES

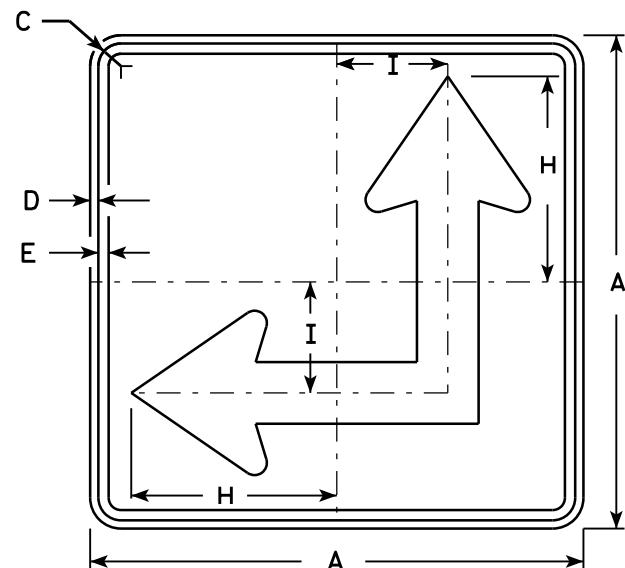
WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

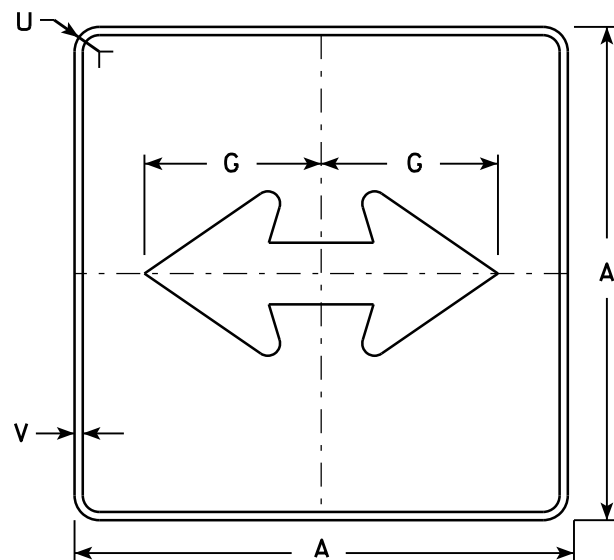
DATE 7/03/14 PLATE NO. M6-1.14



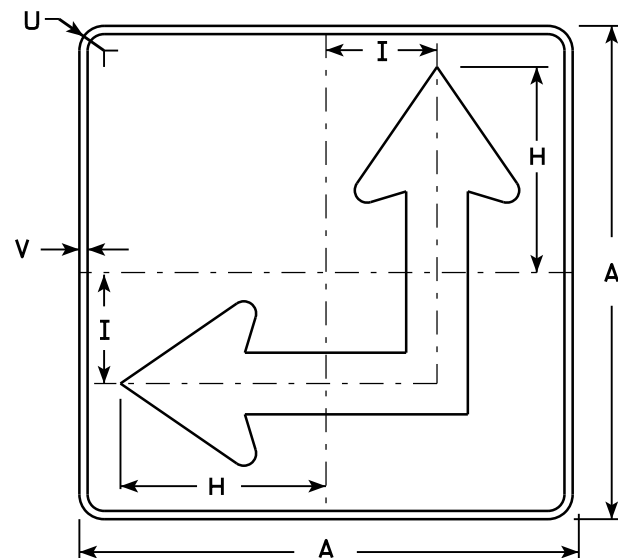
M6 - 4  
MK6 - 4  
MM6 - 4  
MN6 - 4  
MO6 - 4  
MP6 - 4  
MR6 - 4



M6 - 6  
MK6 - 6  
MM6 - 6  
MN6 - 6  
MO6 - 6  
MP6 - 6  
MR6 - 6



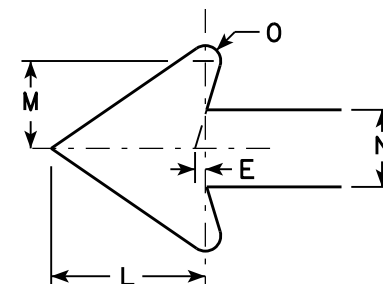
MB6 - 4



MB6 - 6

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.
- M6-4 and M6-6 Background - White  
Message - Black  
MB6-4 and MB6-6 Background - Blue  
Message - White  
MK6-4 and MK6-6 Background - Green  
Message - White  
MM6-4 and MM6-6 Background - White  
Message - Green  
MN6-4 and MN6-6 Background - Brown  
Message - White  
MO6-4 and MO6-6 Background - Orange - Type F Reflective  
Message - Black  
MP6-4 and MP6-6 Background - White  
Message - Blue  
MR6-4 and MR6-6 Background - Brown  
Message - Yellow
- M6-6R same as M6-6L except arrow points ahead and right.



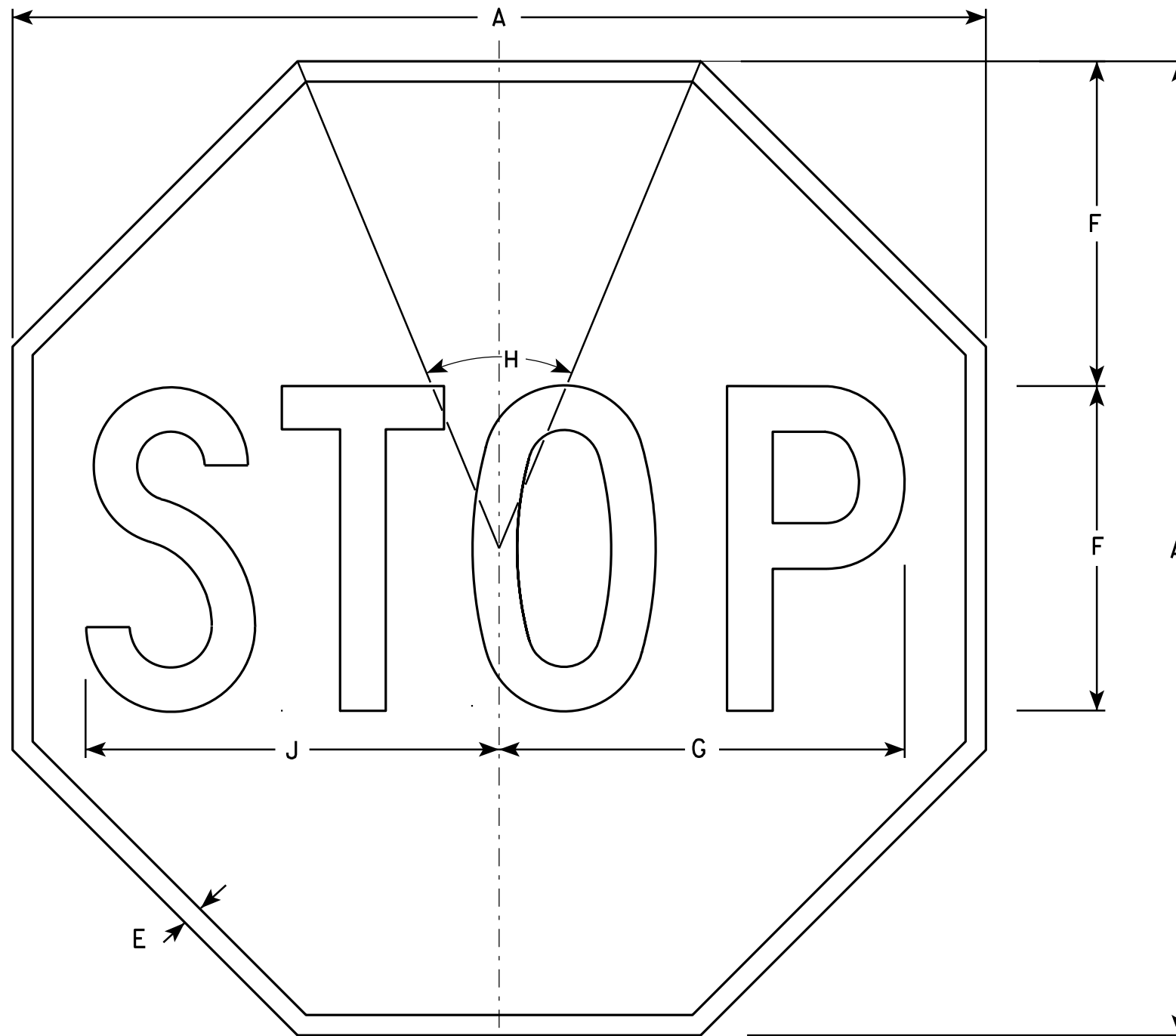
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12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

STANDARD SIGN  
M6 - 4 & M6 - 6  
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

DATE 7/03/14 PLATE NO. M6-4.9



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:  
Background - Red  
Message - White
- 3. Message Series - C

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	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN  
R1-1

WISCONSIN DEPT OF TRANSPORTATION

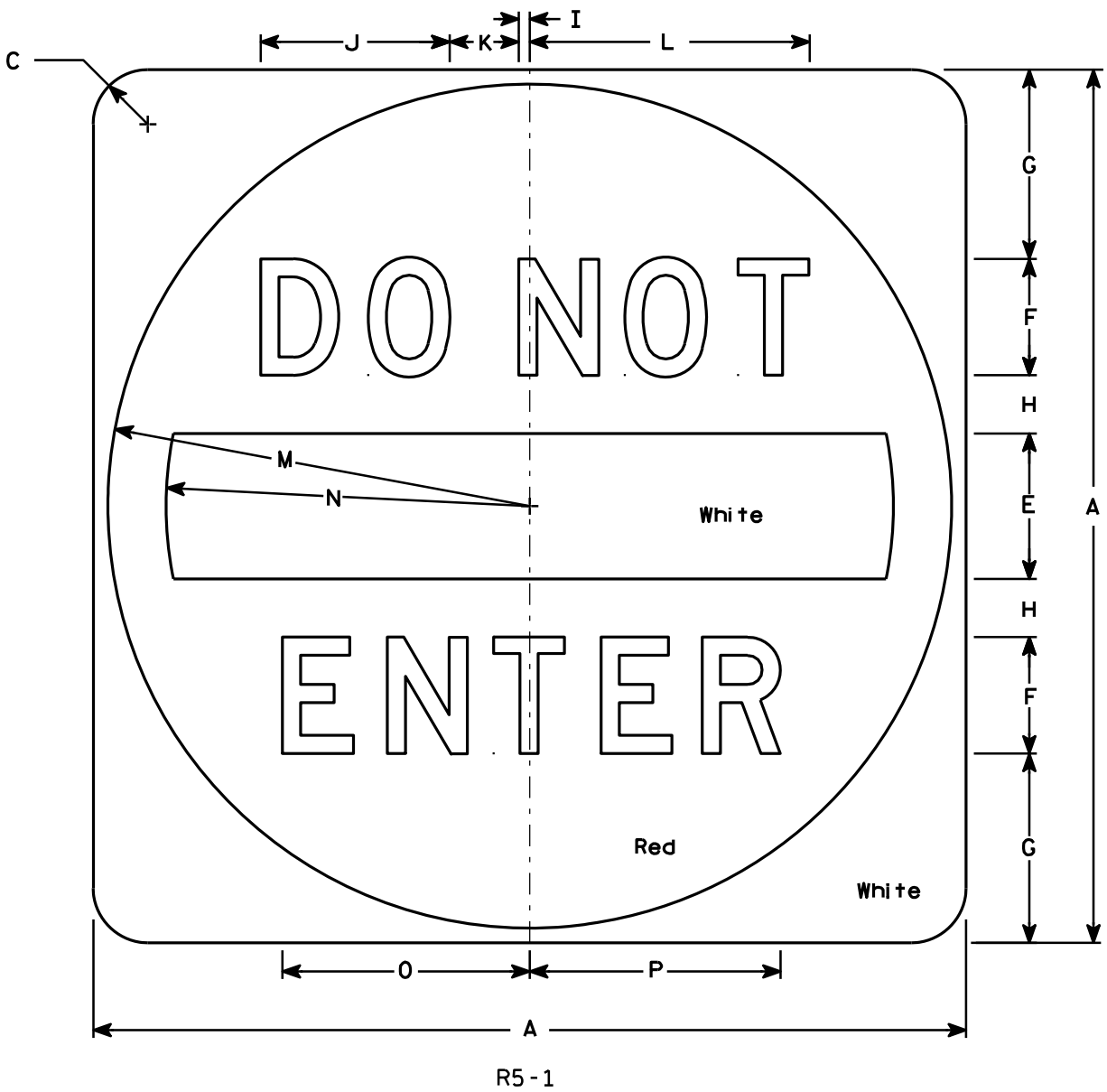
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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NOTES

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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7⁄8		5	4	6 1⁄2	2	3⁄8	6 1⁄2	2 3⁄8	9 5⁄8	14 1⁄2	12 1⁄2	8 1⁄2	8 5⁄8											6.26
2M	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
3	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
4	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
5	48		3		8	6	11	3	5⁄8	9 3⁄4	3 5⁄8	14 1⁄2	23 1⁄2	20	12 3⁄4	12 7⁄8											16.0

STANDARD SIGN

R5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO:

HWY:

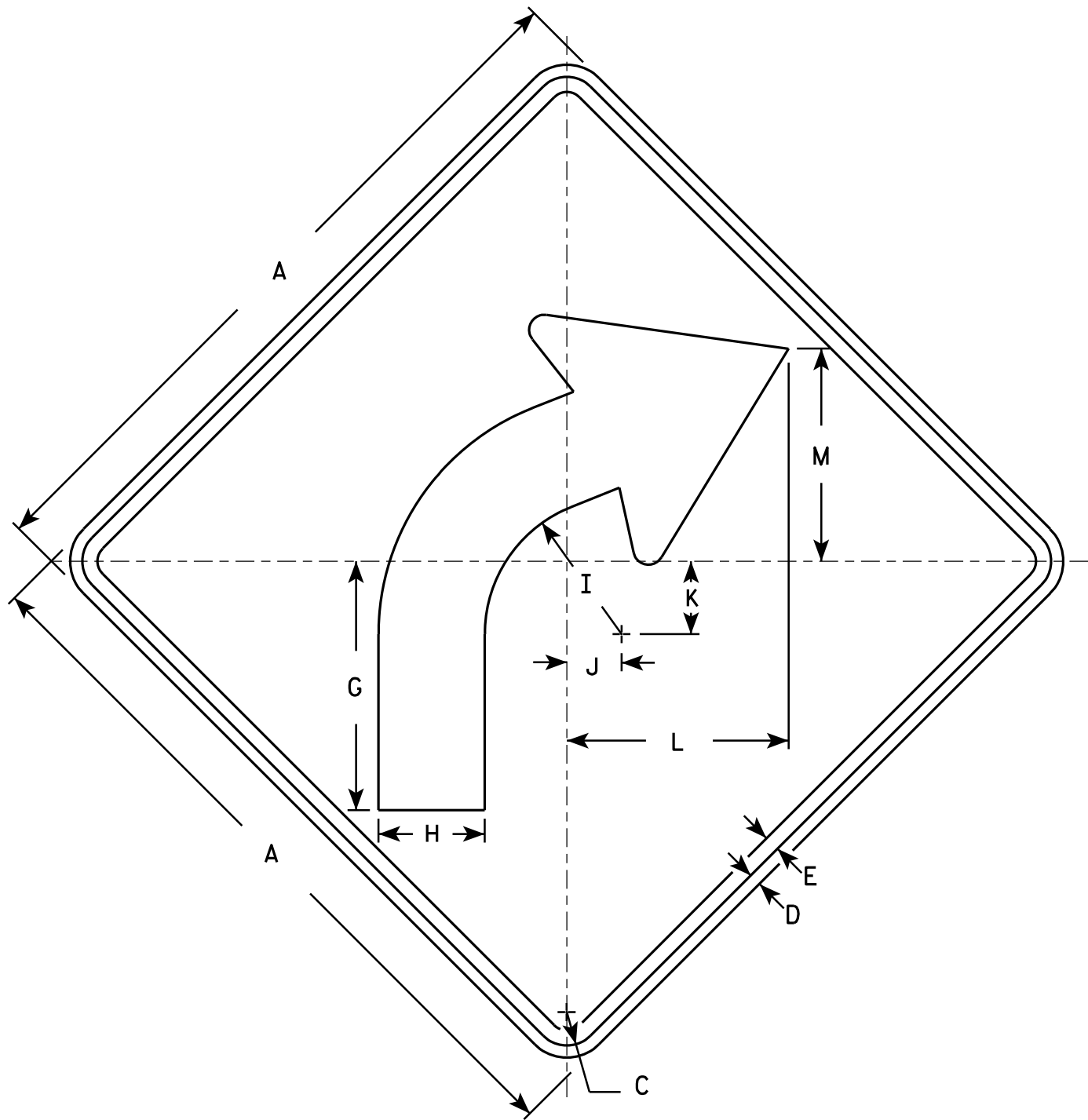
COUNTY:

SHEET NO:

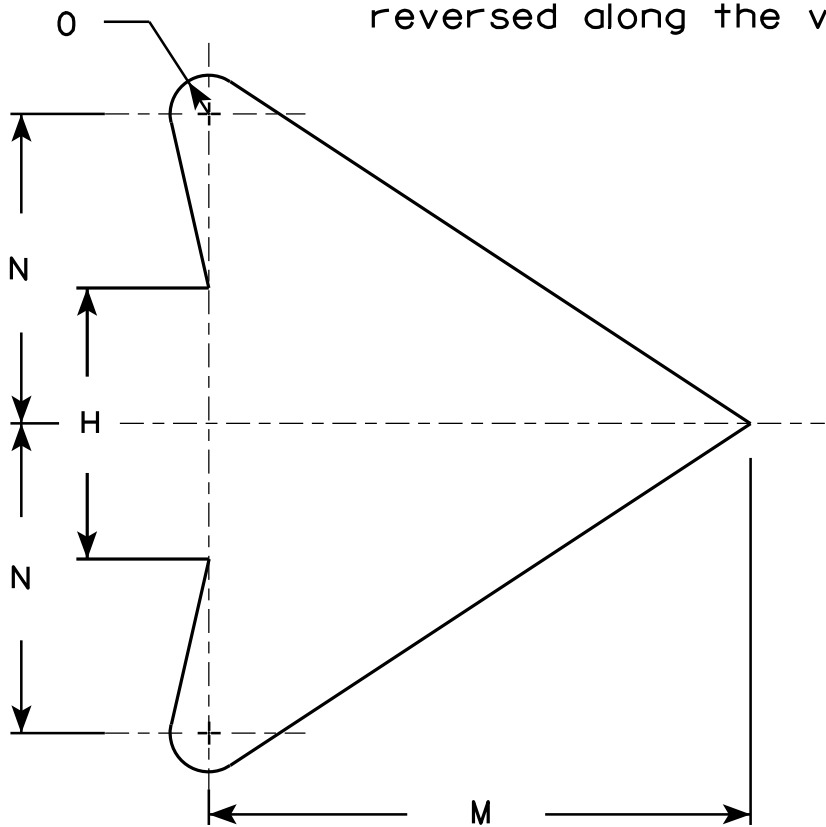
E

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

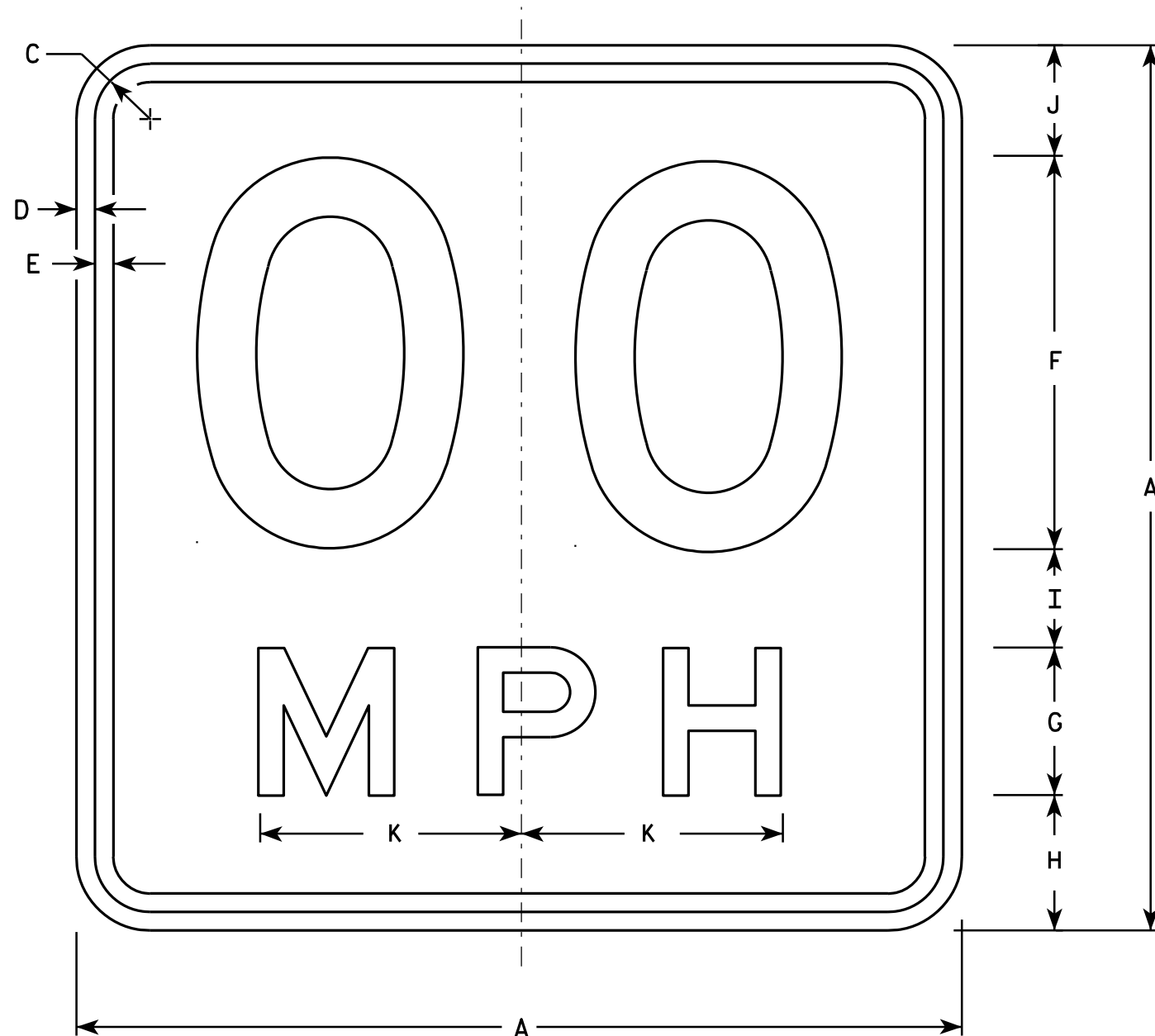
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6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

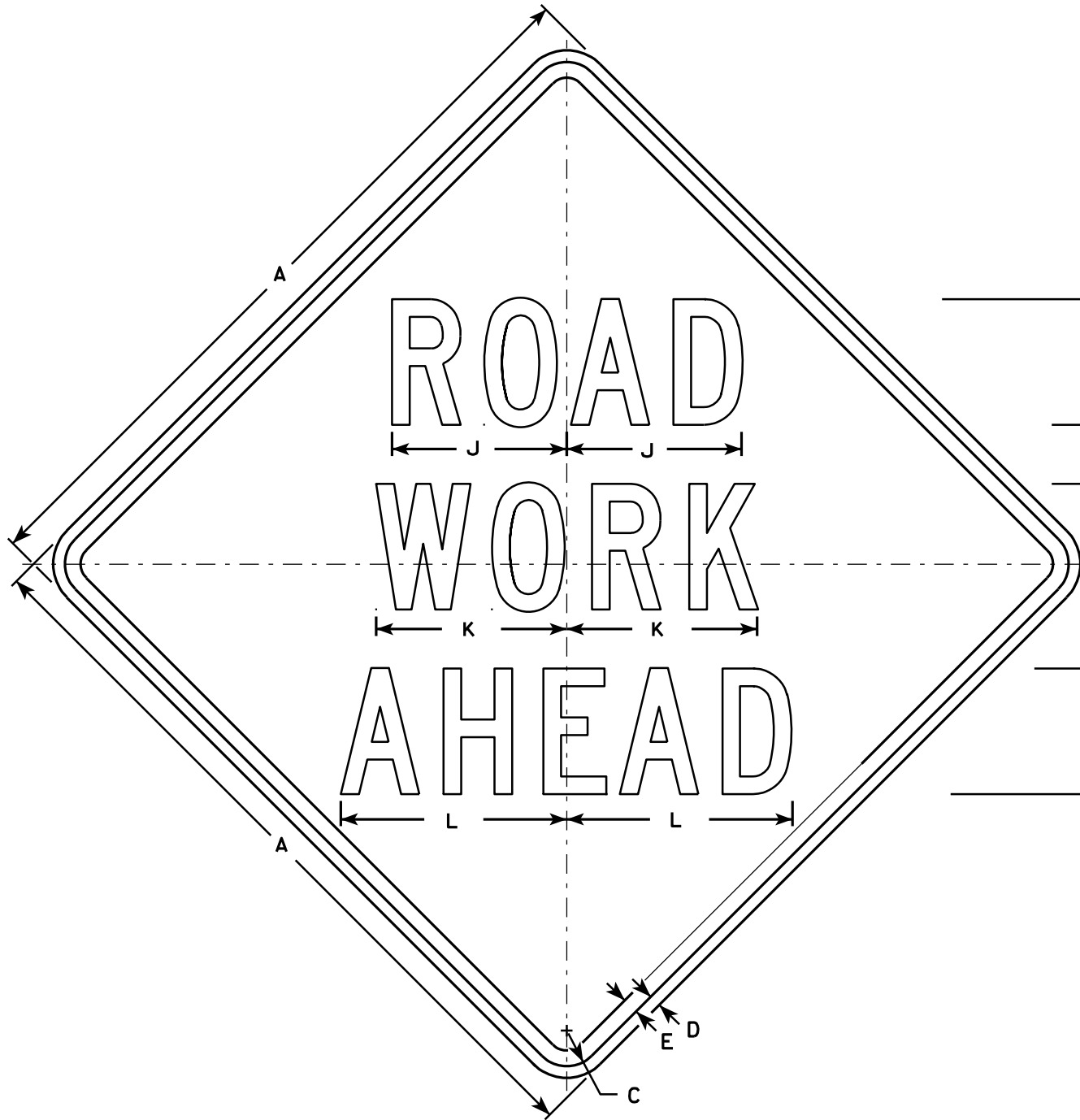
PROJECT NO:

HWY:

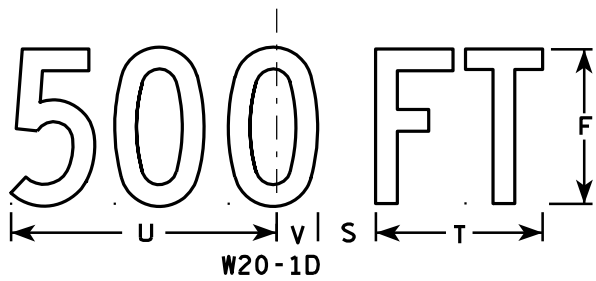
COUNTY:

SHEET NO:

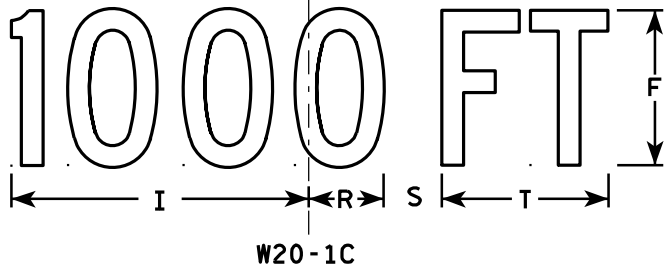
E



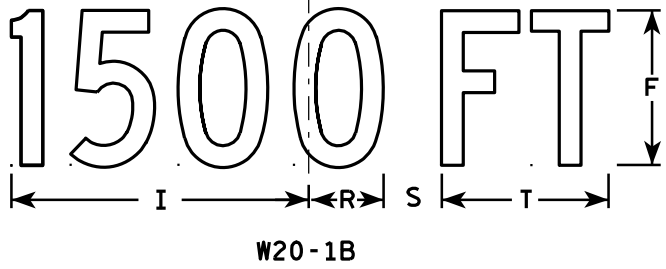
W20-1A



W20-1D



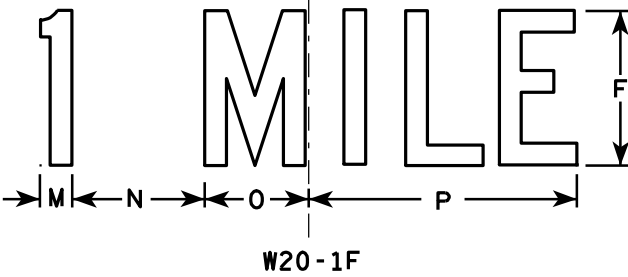
W20-1C



W20-1B



W20-1G



W20-1F

NOTES

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

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	1 7/8	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		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		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		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		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		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

PROJECT NO:

SHEET NO:

E

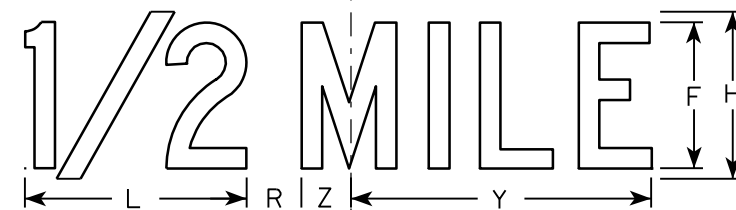
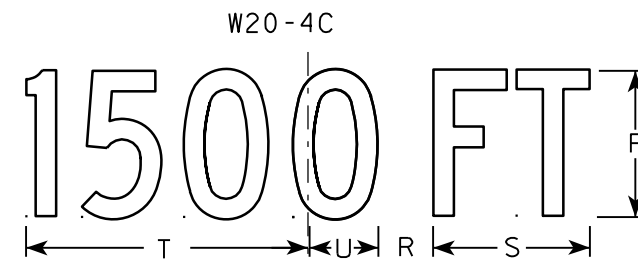
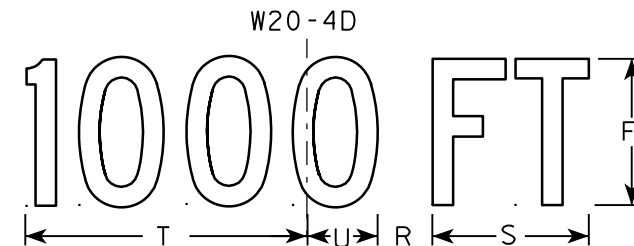
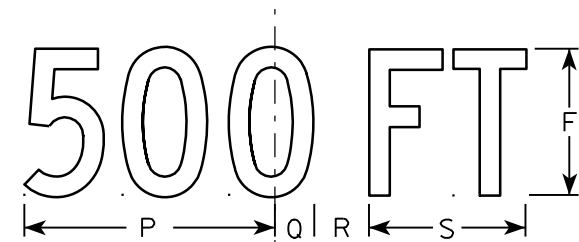
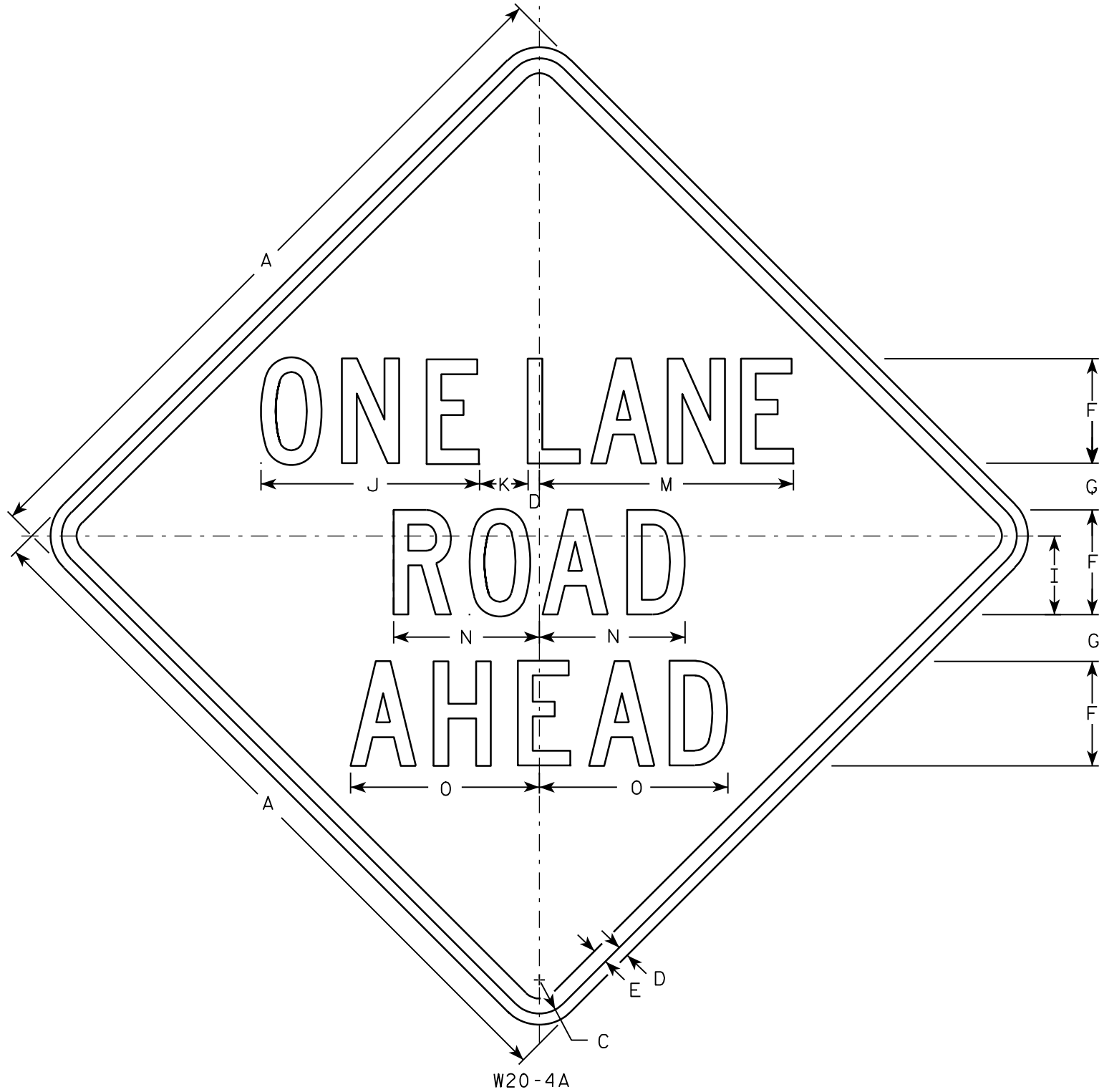
STANDARD SIGN  
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
For State Traffic Engineer

DATE 3/18/11  
PLATE NO. W20-1.9



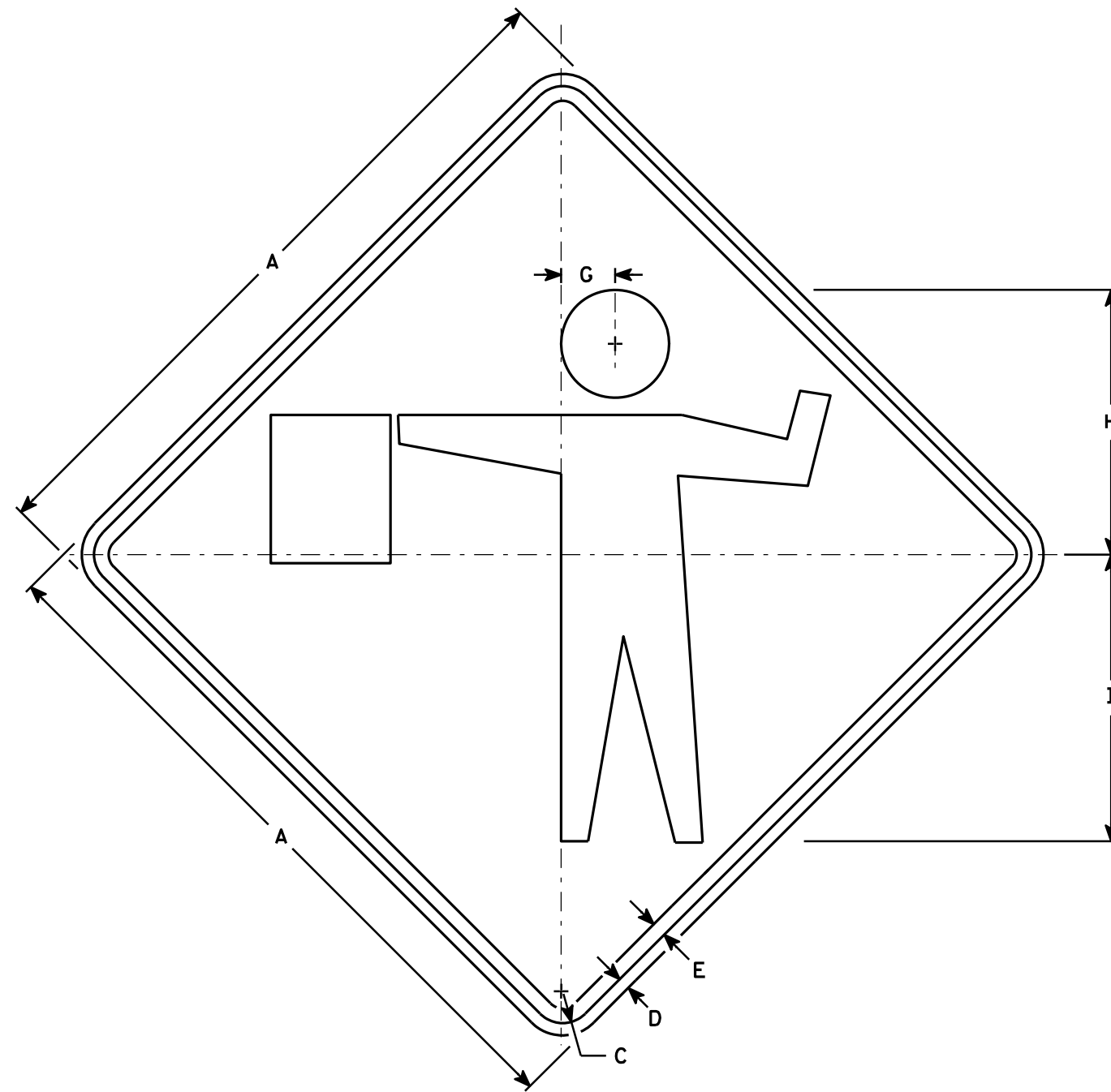


NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 3/8	6	3 3/4	10 3/8	2 3/8	8	13 1/2	7	8 7/8	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	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN	
W20-4A, B, C, D, F & G	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/18/11	PLATE NO. W20-4.9



W20-7A

### NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		2 3/4	13 1/2	14 5/8																		9.00
2S	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
2M	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
3	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
4	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
5	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00

### STANDARD SIGN W20-7A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-7A.5

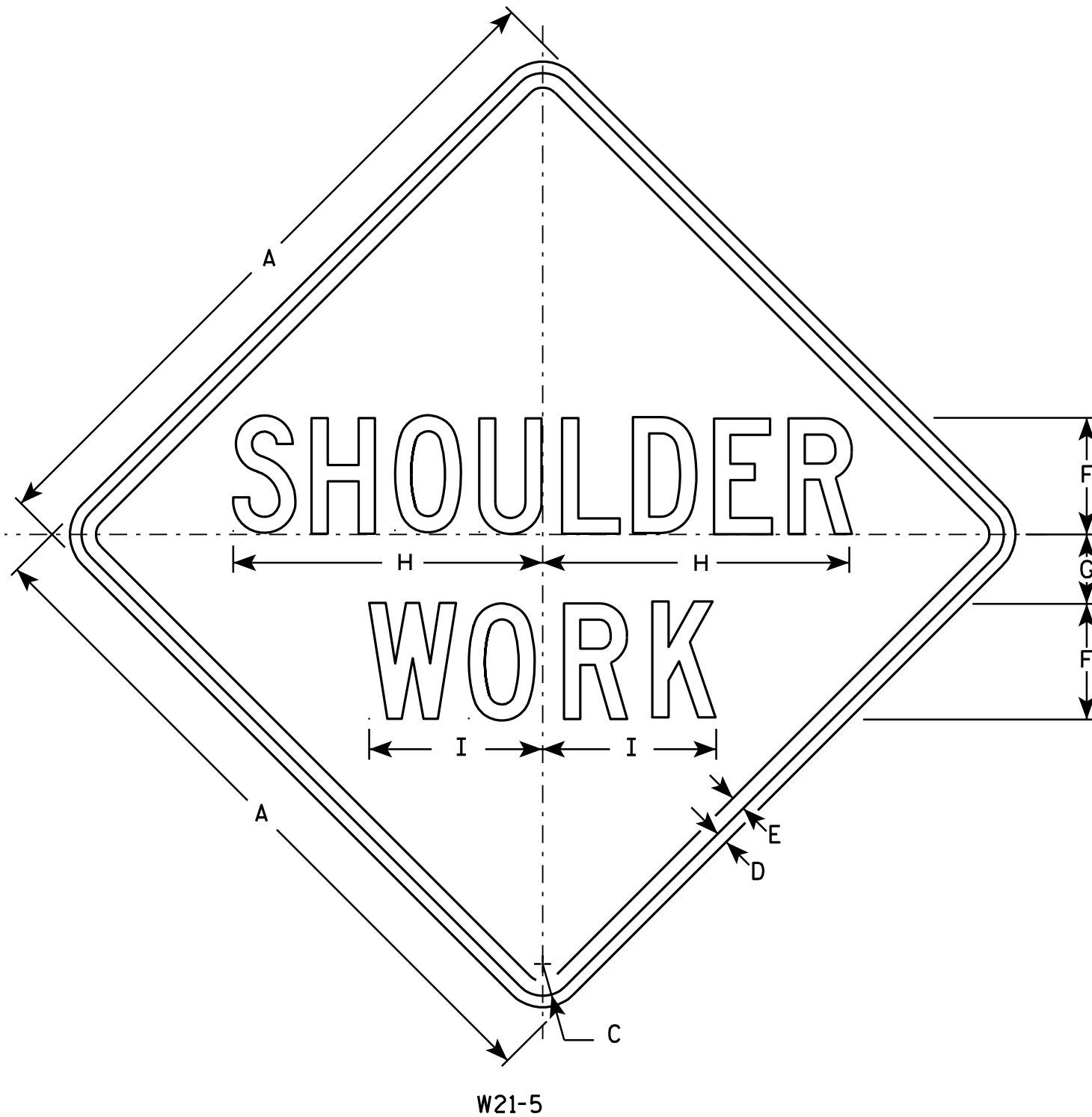
PROJECT NO:

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 - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

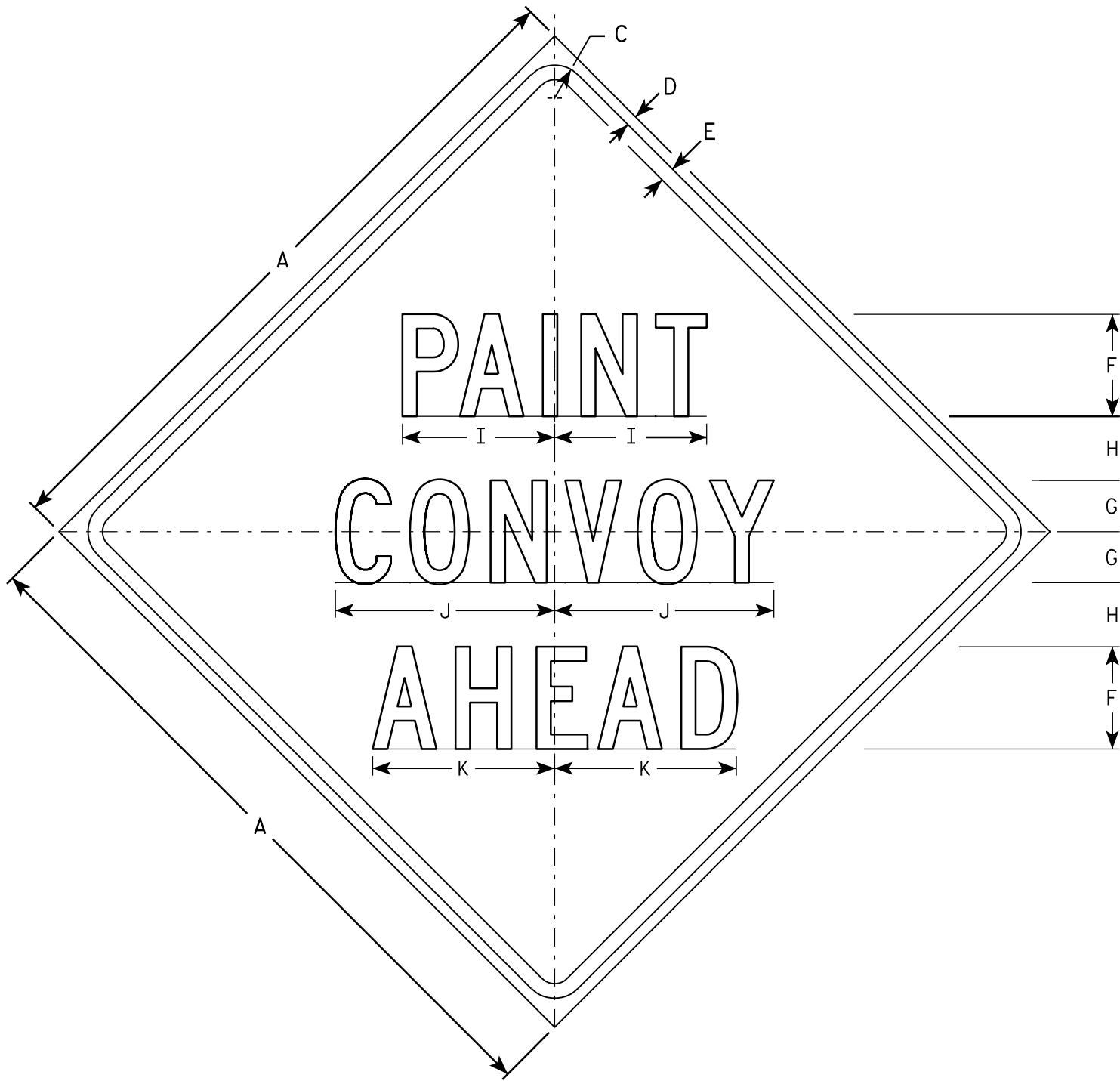
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2 1/2	10 3/4	6																		4.0
2S	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3 1/2	16	9																		9.0
4	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0

### STANDARD SIGN W21-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer  
DATE 3/21/11 PLATE NO. W21-5.5

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 - 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.

W21-63

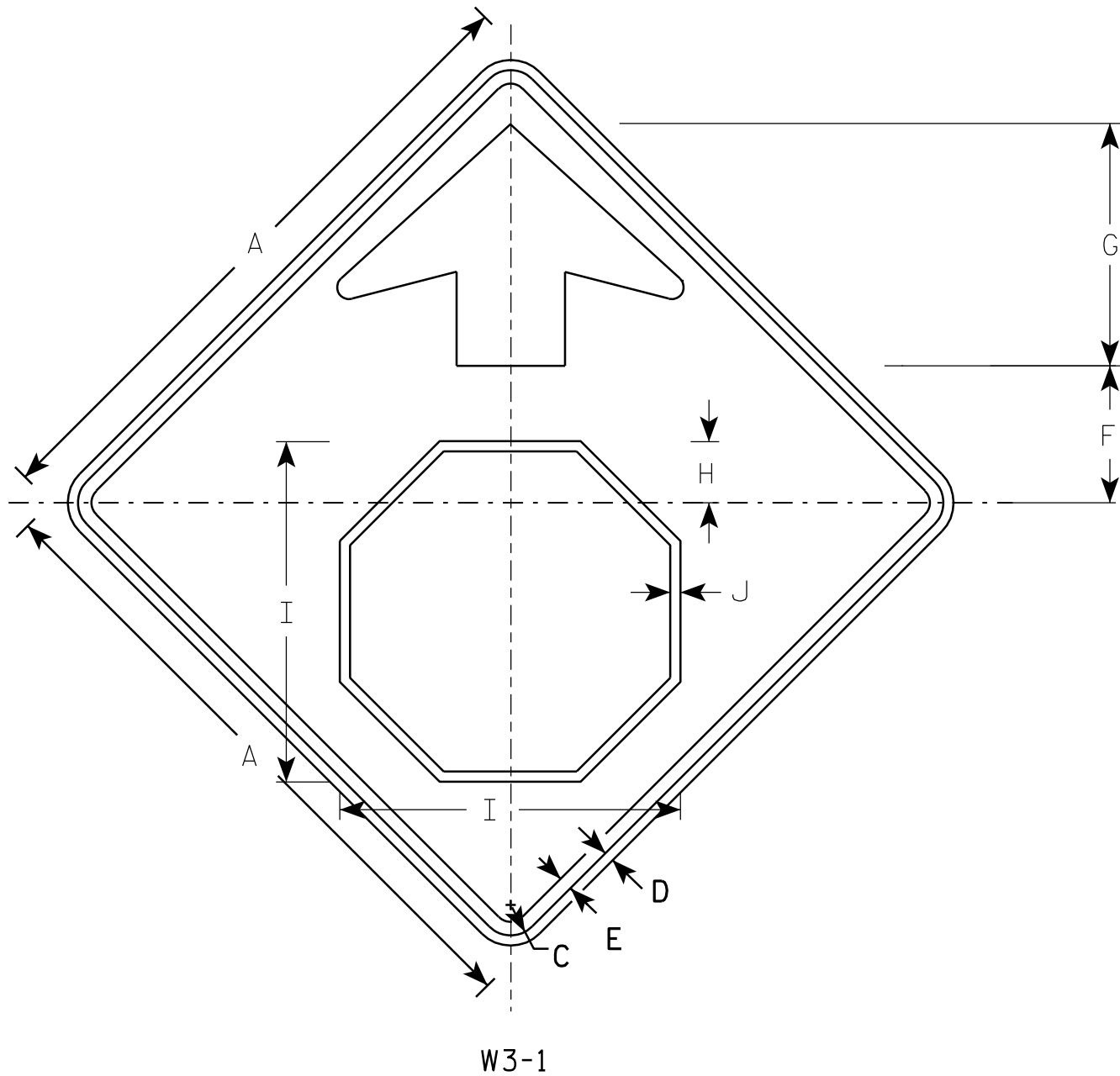
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	3/4	1	7	3 1/2	4 1/2	10 3/8	15	12 1/2																16.0
2M	48		2 1/4	3/4	1	7	3 1/2	4 1/2	10 3/8	15	12 1/2																16.0
3	48		2 1/4	3/4	1	7	3 1/2	4 1/2	10 3/8	15	12 1/2																16.0
4	48		2 1/4	3/4	1	7	3 1/2	4 1/2	10 3/8	15	12 1/2																16.0
5	48		2 1/4	3/4	1	7	3 1/2	4 1/2	10 3/8	15	12 1/2																16.0

STANDARD SIGN  
W21-63

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

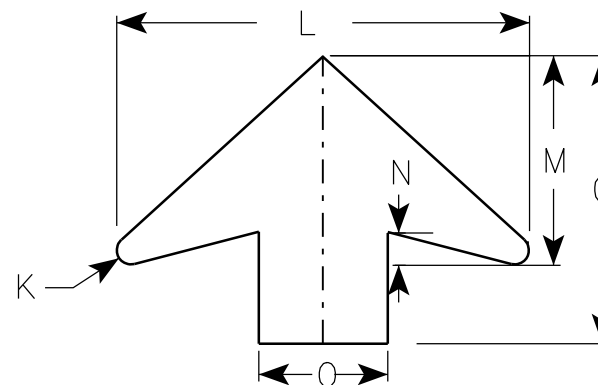
DATE 3/21/11 PLATE NO. W21-63.3



W3-1

### NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - YELLOW  
Arrow & Border - BLACK  
Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	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

PROJECT NO:

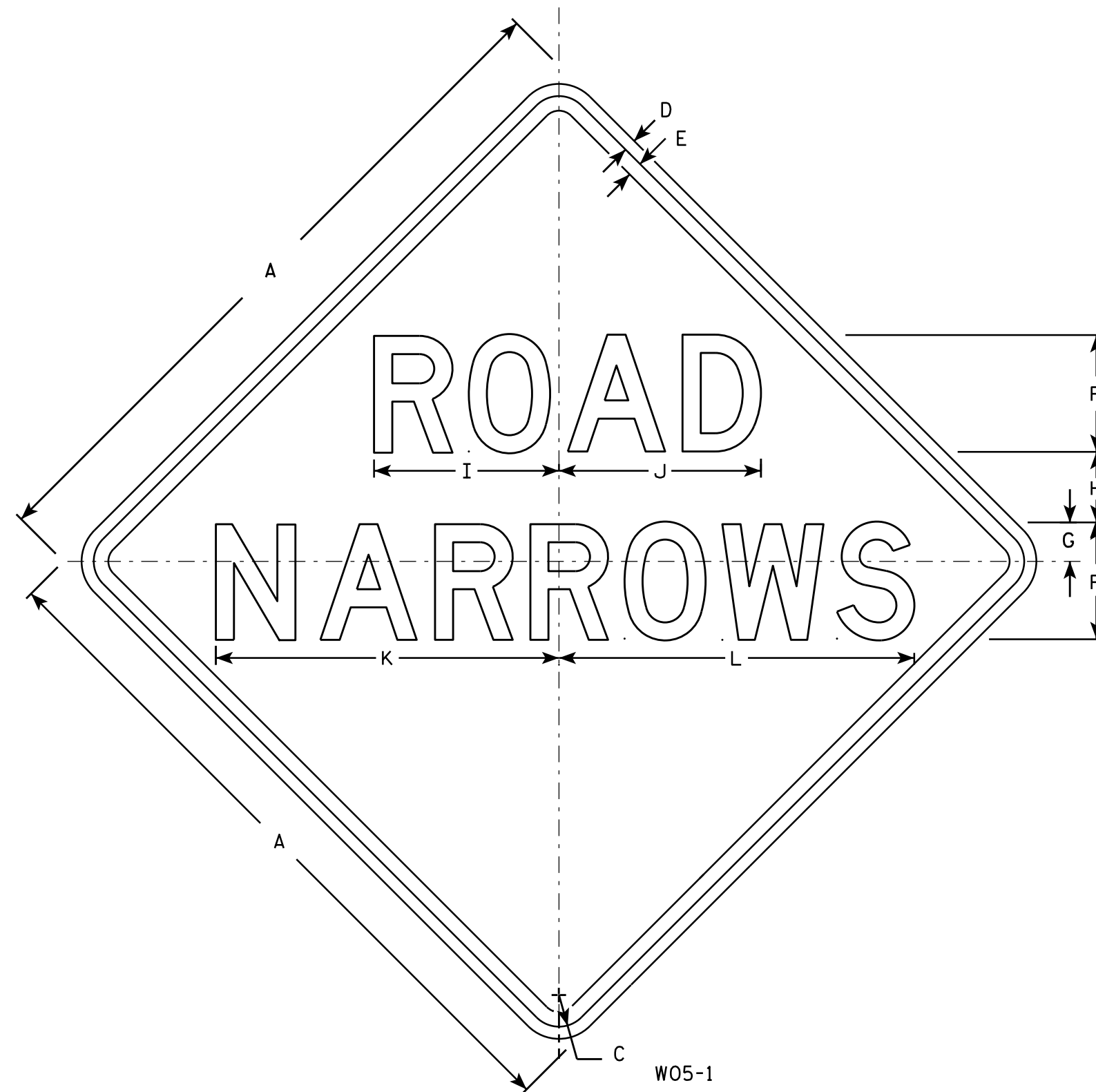
STANDARD SIGN  
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer  
DATE 6/7/10 PLATE NO. W3-1.12

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.

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	2	3 1/2	9 1/2	10 3/8	17 5/8	18 1/4															9.0
2S	48		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
2M	48		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
3	48		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
4	48		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
5	48		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0

### STANDARD SIGN W05-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

*Matthew R. Rauch*  
for State Traffic Engineer

DATE 11/20/13

PLATE NO. W05-1.1

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

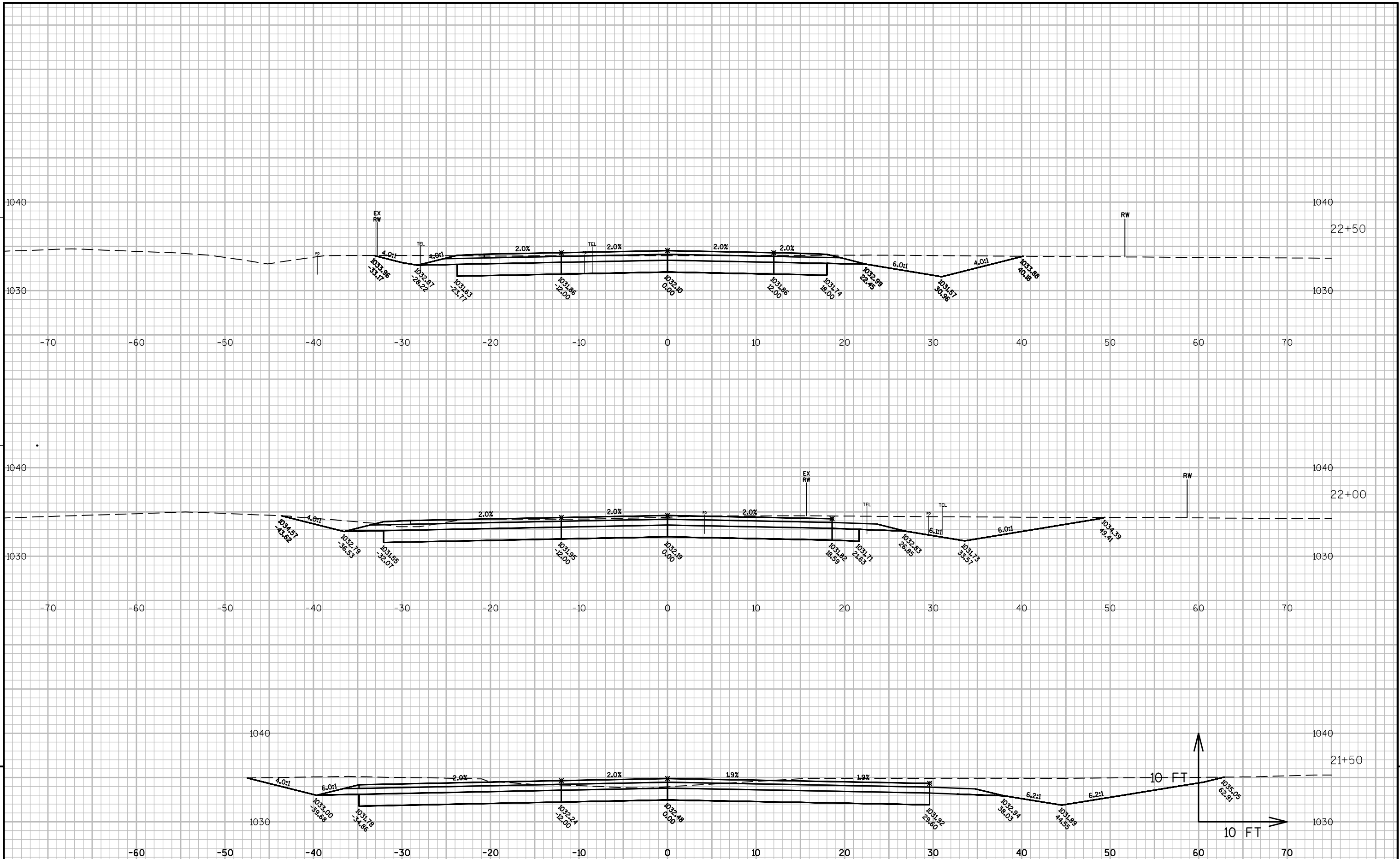


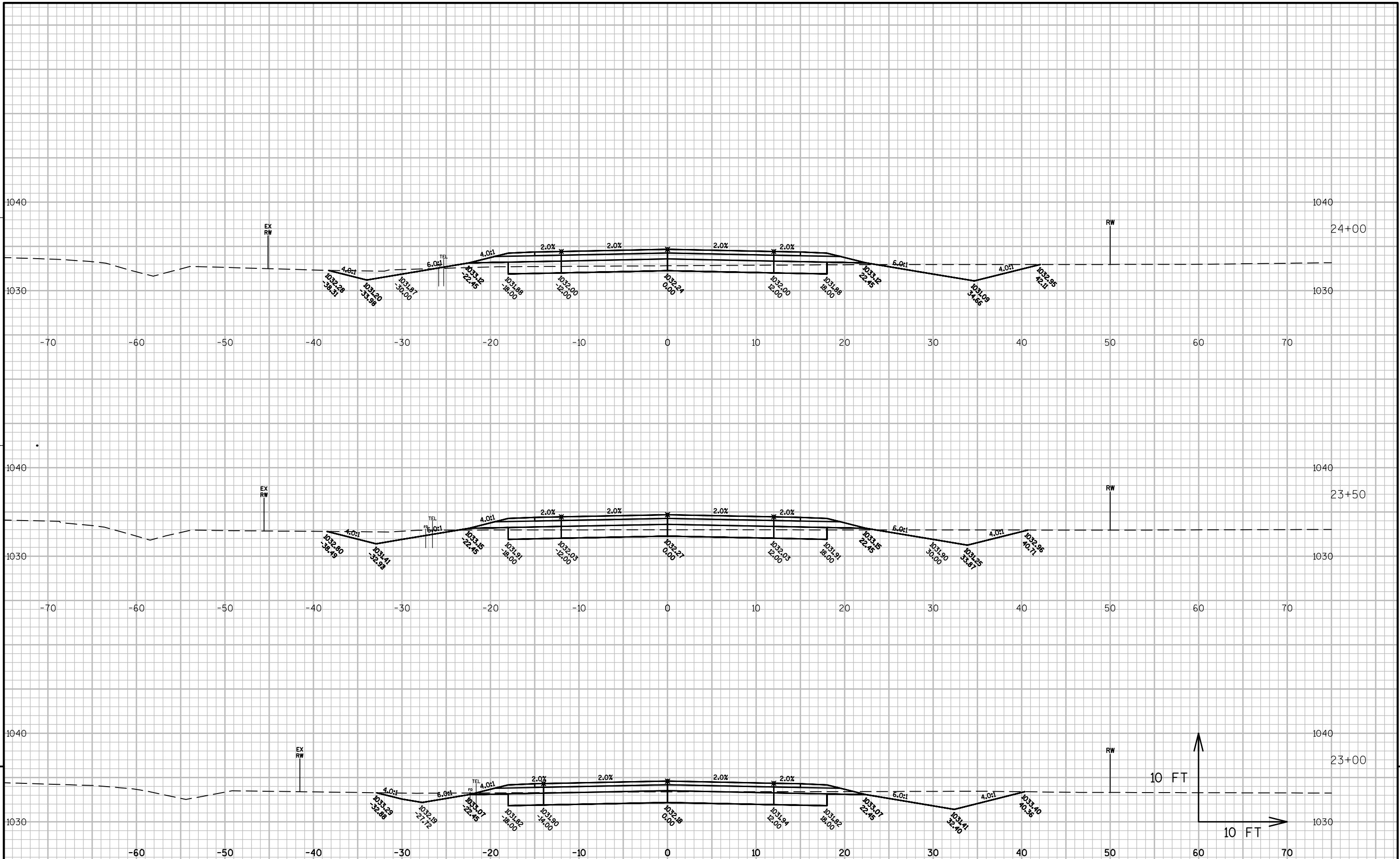
EARTHWORK SUMMARY												
CTH F												
STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)				Mass Ordinate
		Cut	Fill	EBS	Cut	Fill	EBS	Cut	Fill	Expanded Fill	Expanded EBS	
											Backfill	
											1.25	
					Note 1, 3		Note 1, 4	Note 1, 3		Note 8	Note 7	Note 9
20+74.558	0.00	0.00	0	24.00	0	0.00	0	0	0.00	0	0	0
21+00.000	25.44	0.03	1.29	24.00	0.01	0.61	23	0	1	1	28	-29
21+34.558	34.56	48.58	19.43	24.00	31.1	13.26	31	31	14	17	67	-53
21+50.000	15.44	61.70	17.31	24.00	33.42	10.51	14	65	24	30	84	-50
22+00.000	50.00	14.63	8.09	24.00	72.07	23.52	44	137	48	60	139	-63
22+50.000	50.00	13.04	15.07	24.00	25.39	21.44	44	162	69	87	195	-120
23+00.000	50.00	4.20	40.36	24.00	15.5	51.32	44	177	121	151	250	-224
23+50.000	50.00	0.11	61.56	24.00	3.88	94.37	44	181	215	269	306	-393
24+00.000	50.00	0.06	68.49	24.00	0.16	120.42	44	182	335	419	362	-599
24+50.000	50.00	0.00	67.15	24.00	0.06	125.59	44	182	461	576	417	-812
24+87.960	37.96	0.00	81.77	24.00	0	104.69	34	182	566	707	459	-985
24+96.597	8.64	0.00	79.93	24.00	0	25.86	8	182	592	739	469	-1,027
25+00.000	3.40	0.00	79.66	24.00	0	10.06	3	182	602	752	473	-1,043
25+44.597	44.60	0.02	81.48	24.00	0.01	133.08	40	182	735	918	522	-1,259
25+50.000	5.40	0.04	79.51	24.00	0	16.11	5	182	751	939	528	-1,285
25+92.597	42.60	0.55	76.36	24.00	0.46	122.96	38	182	874	1,092	576	-1,486
26+00.000	7.40	0.71	77.24	24.00	0.17	21.06	7	182	895	1,119	584	-1,520
26+32.602	32.60	1.26	73.09	24.00	1.19	90.76	29	183	986	1,232	620	-1,669
26+40.597	8.00	1.50	71.18	24.00	0.41	21.36	7	184	1,007	1,259	629	-1,704
26+50.000	9.40	1.83	68.03	24.00	0.58	24.24	8	184	1,031	1,289	639	-1,744
26+76.597	26.60	2.73	58.45	24.00	2.2	62.30	24	187	1,094	1,367	669	-1,849
27+00.000	23.40	1.63	49	24.00	1.85	46.57	21	188	1,140	1,425	695	-1,932
27+50.000	50.00	0.96	29.29	24.00	2.36	72.49	44	191	1,213	1,516	750	-2,075
28+00.000	50.00	4.96	19.75	24.00	5.45	45.41	44	196	1,258	1,572	806	-2,182
28+50.000	50.00	9.54	25.54	24.00	13.36	41.94	44	210	1,300	1,625	862	-2,277
28+71.004	21.00	10.76	27.76	24.00	7.9	20.73	19	218	1,321	1,651	885	-2,318
29+00.000	29.00	8.86	29.48	24.00	10.47	30.74	26	228	1,351	1,689	917	-2,378
29+07.004	7.00	8.15	29.04	24.00	2.21	7.59	6	230	1,359	1,699	925	-2,393
29+15.000	8.00	7.22	28.43	24.00	2.28	8.51	7	232	1,367	1,709	934	-2,411
29+50.000	35.00	3.11	24.82	24.00	6.7	34.51	31	239	1,402	1,752	973	-2,486
29+55.004	5.00	2.68	24.35	24.00	0.54	4.56	4	240	1,407	1,758	978	-2,497
30+00.000	45.00	2.19	7.08	24.00	4.06	26.19	40	244	1,433	1,791	1,028	-2,575
30+03.004	3.00	1.97	6.91	24.00	0.23	0.78	3	244	1,434	1,792	1,032	-2,579
30+50.000	47.00	0.00	13.2	24.00	1.72	17.50	42	246	1,451	1,814	1,084	-2,652
30+51.004	1.00	0.00	13.17	24.00	0	0.49	1	246	1,452	1,814	1,085	-2,654
31+00.000	49.00	0.06	11.21	24.00	0.05	22.12	44	246	1,474	1,842	1,139	-2,736
31+50.000	50.00	0.00	16.98	24.00	0.05	26.10	44	246	1,500	1,875	1,195	-2,824
32+00.000	50.00	0.00	0	24.00	0	15.72	44	246	1,515	1,894	1,250	-2,899

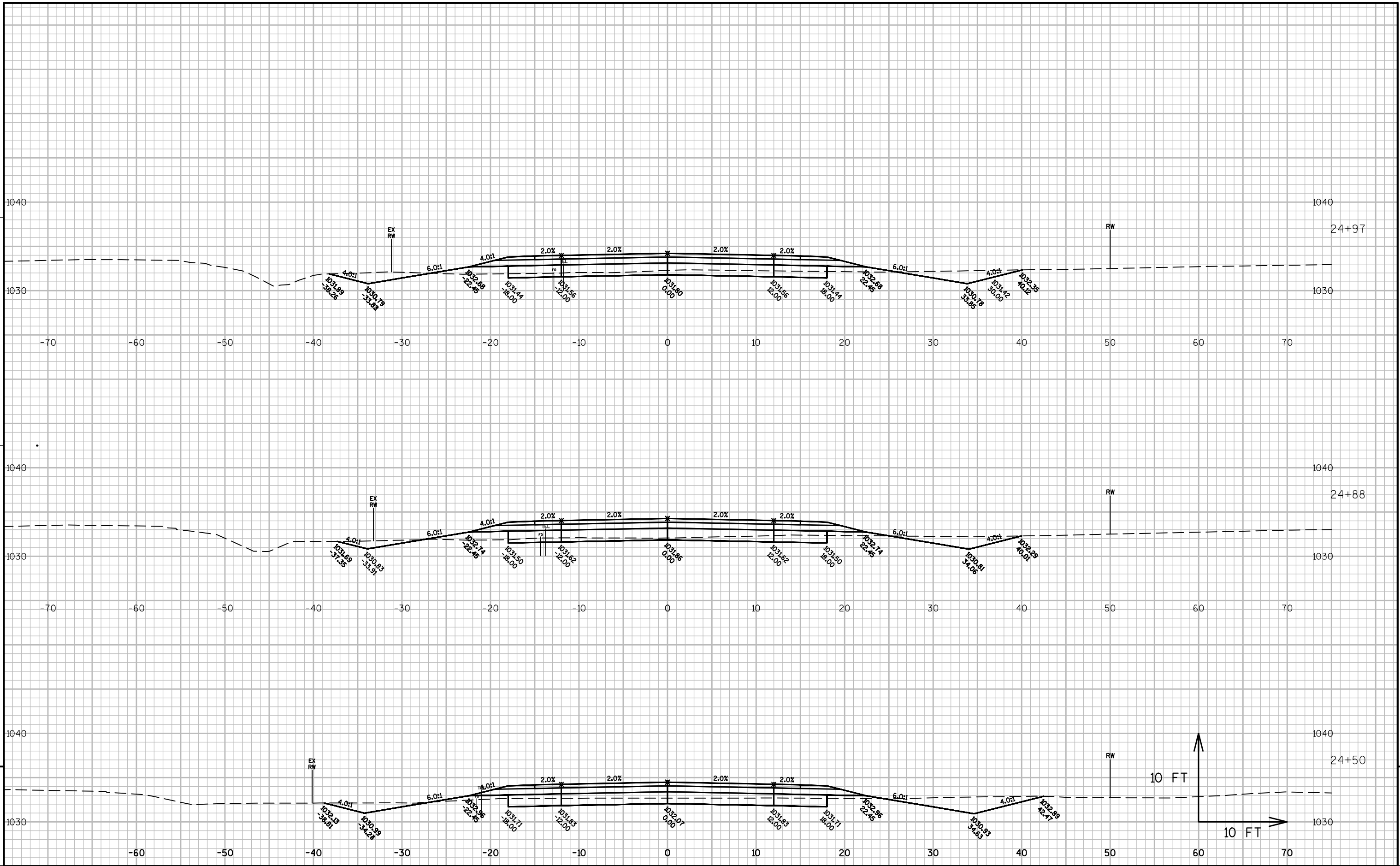
					EARTHWORK SUMMARY							
					STH 40/64							
		AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)				
										Expanded EBS		
STATION	Distance	Cut	Fill	EBS	Cut	Fill	EBS	Cut	Fill	Expanded Fill	Backfill	Mass Ordinate
								1.00		1.25	1.25	
					Note 1, 3		Note 1, 4	Note 1, 3		Note 8	Note 7	Note 9
11+00.000	0.00	60.53	0.29	0.00	0	0.00	0	0	0.00	0	0	0
11+50.000	50.00	52.46	0.05	0.00	104.62	0.31	0	105	0	0	0	104
12+00.000	50.00	42.61	0	0.00	192.65	0.05	0	297	0	0	0	297
12+50.000	50.00	35.39	0	0.00	264.86	0.00	0	562	0	0	0	562
13+00.000	50.00	28.84	0.18	0.00	324.34	0.17	0	886	1	1	0	886
13+50.000	50.00	21.64	2.48	0.00	371.08	2.46	0	1,258	3	4	0	1,254
13+86.517	36.52	23.82	0.16	0.00	401.83	1.79	0	1,659	5	6	0	1,653
14+00.000	13.48	22.47	0.36	0.00	413.39	0.13	0	2,073	5	6	0	2,067

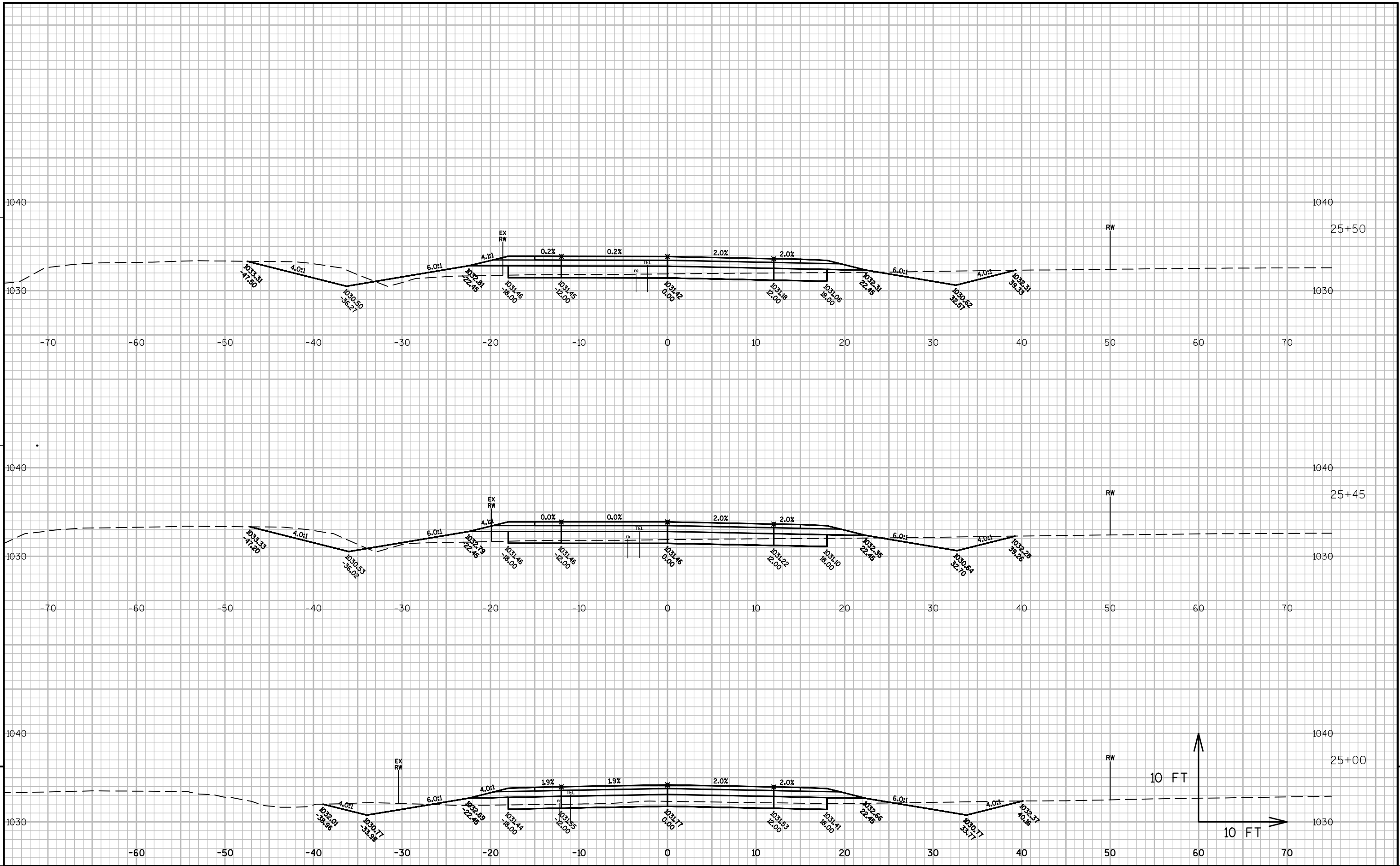


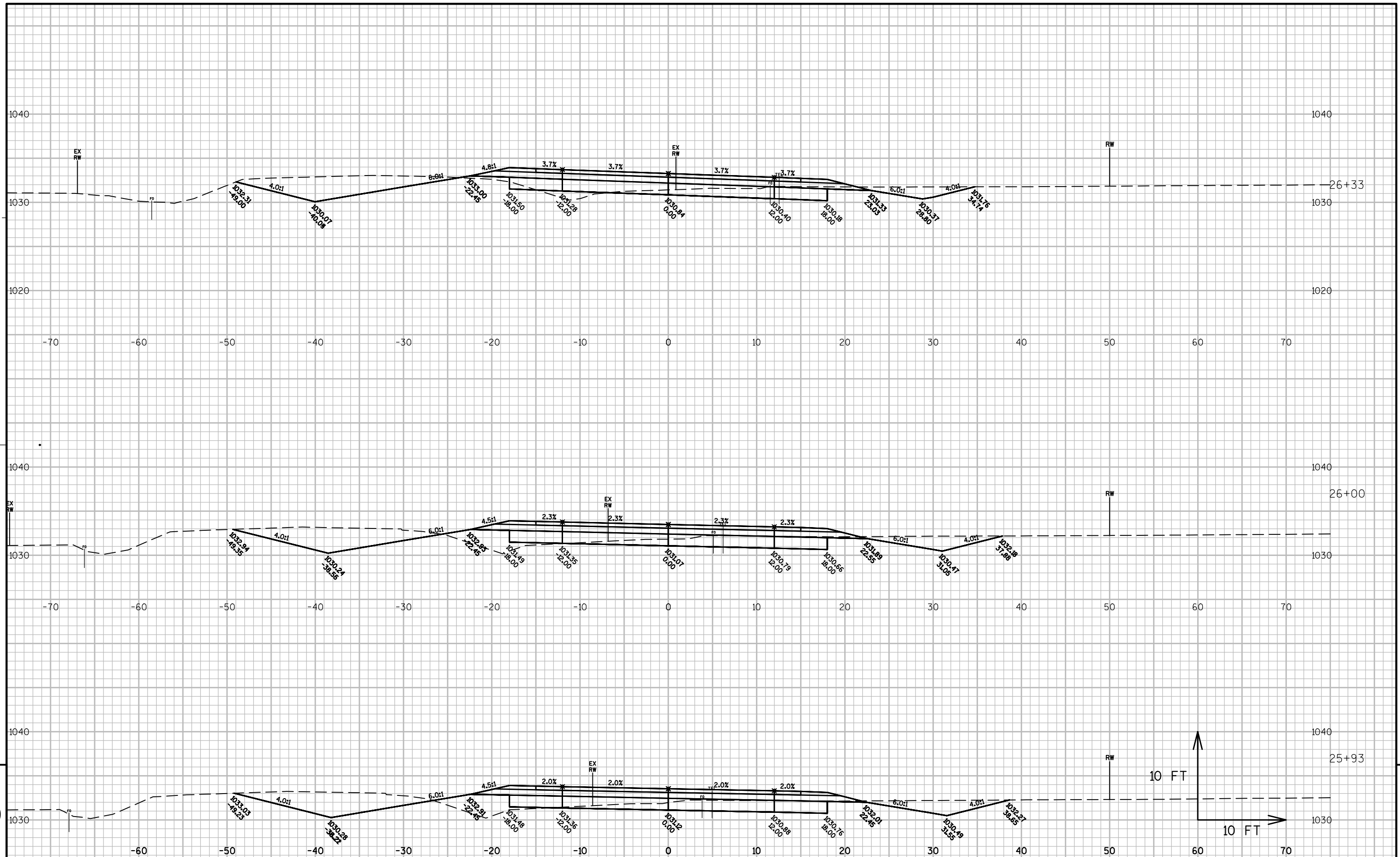
EARTHWORK SUMMARY												
CTH F												
Division	From/To Station	Location	BID ITEM 205.0100 Common Excavation (2)		Salvaged/ Unusable Pavement Material (5)	Available Material (6)	Expanded EBS Backfill (7)	Unexpanded Fill	Expanded Fill (8)	Mass Ordinate +/- (8)	BID ITEM 208.1100 Select Borrow	Comments:
			Cut (3)	EBS Excavation (4)			Factor 1.25		Factor 1.25			
DIVISION 1 - CTH F STAGE 1	20+74.558 - 32+00	CTH F	246	1,000	0	246	1,250	1,515	1,894	-2,899	-2,899	
DIVISON 1 SUBTOTAL			246	1,000	0	246	1,250	1,515	1,894	-2,899	-2,899	
DIVISION 2 - STH 40/64 STAGE 1	8+37 - 15+37	STH 40/64	2,073	0	0	2,073	0	5	6	2,067	0	
DIVISON 2 SUBTOTAL			2,073	0	0	2,073	0	5	6	2,067	0	
GRAND TOTAL			2,319	1,000	0	246	1,250	1,515	1,894	-2,899	-2,899	
TOTAL COMMON EXCAVATION, 205.0100			3,319		TOTAL SELECT BORROW, 208.1100			2,899				
1) Common Excavation, Item Number 205.0100												
2) Common Excavation is the sum of the Cut and EBS Excavation columns. Item Number 205.0100												
3) Salvaged/Unsuable Pavement Material is included in Cut.												
4) EBS Excavation to be backfilled with Select Borrow material. Item Number 208.1100												
5) Salvaged/Unusable Pavement Material												
6) Available Material = Cut - Salvaged/Unusuable Pavement Material												
7) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.25. Item Number 208.1100												
8) Expanded Fill. Factor = 1.25                      Expanded Fill = Unexpanded Fill * Fill Factor												
9) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.												

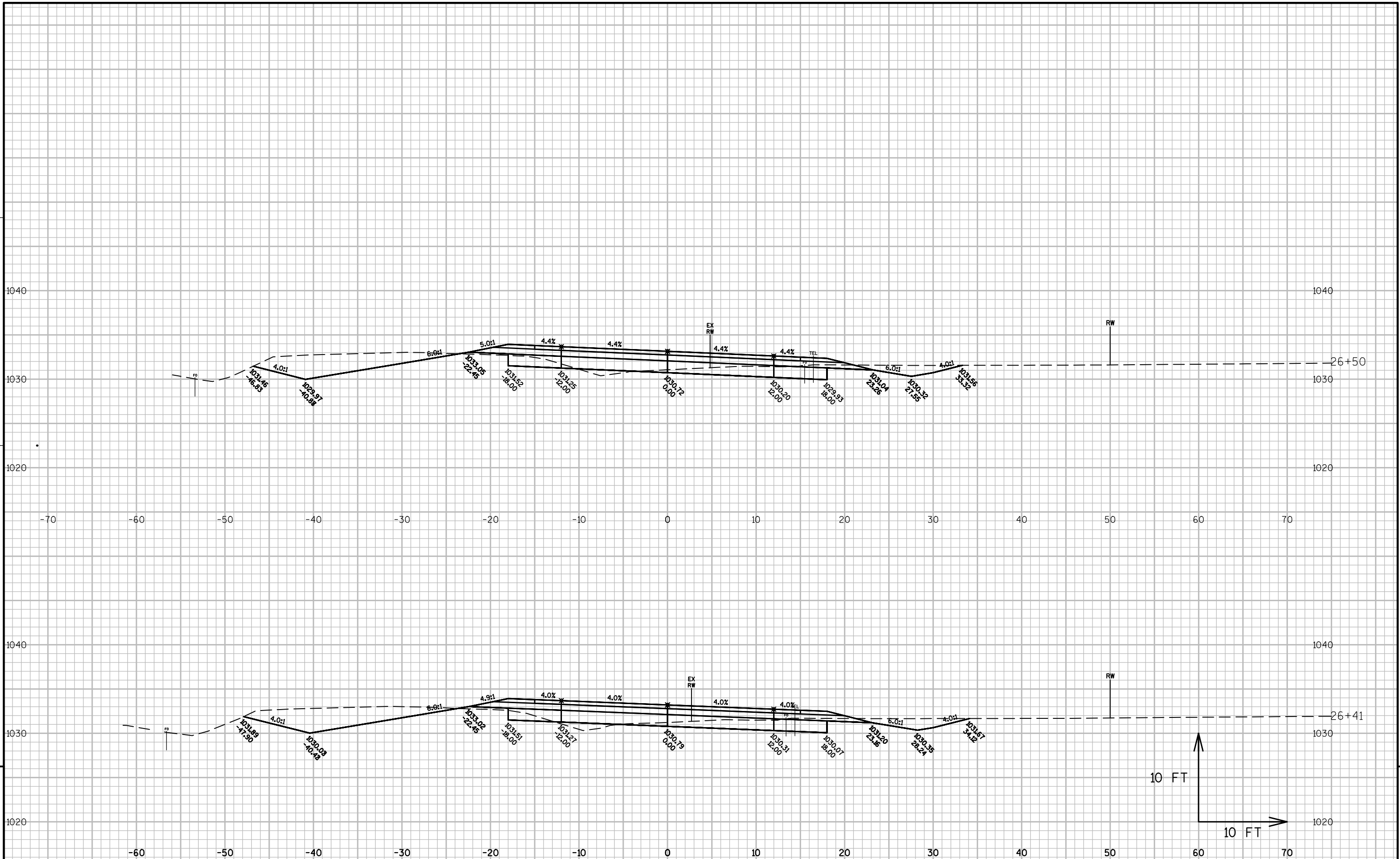










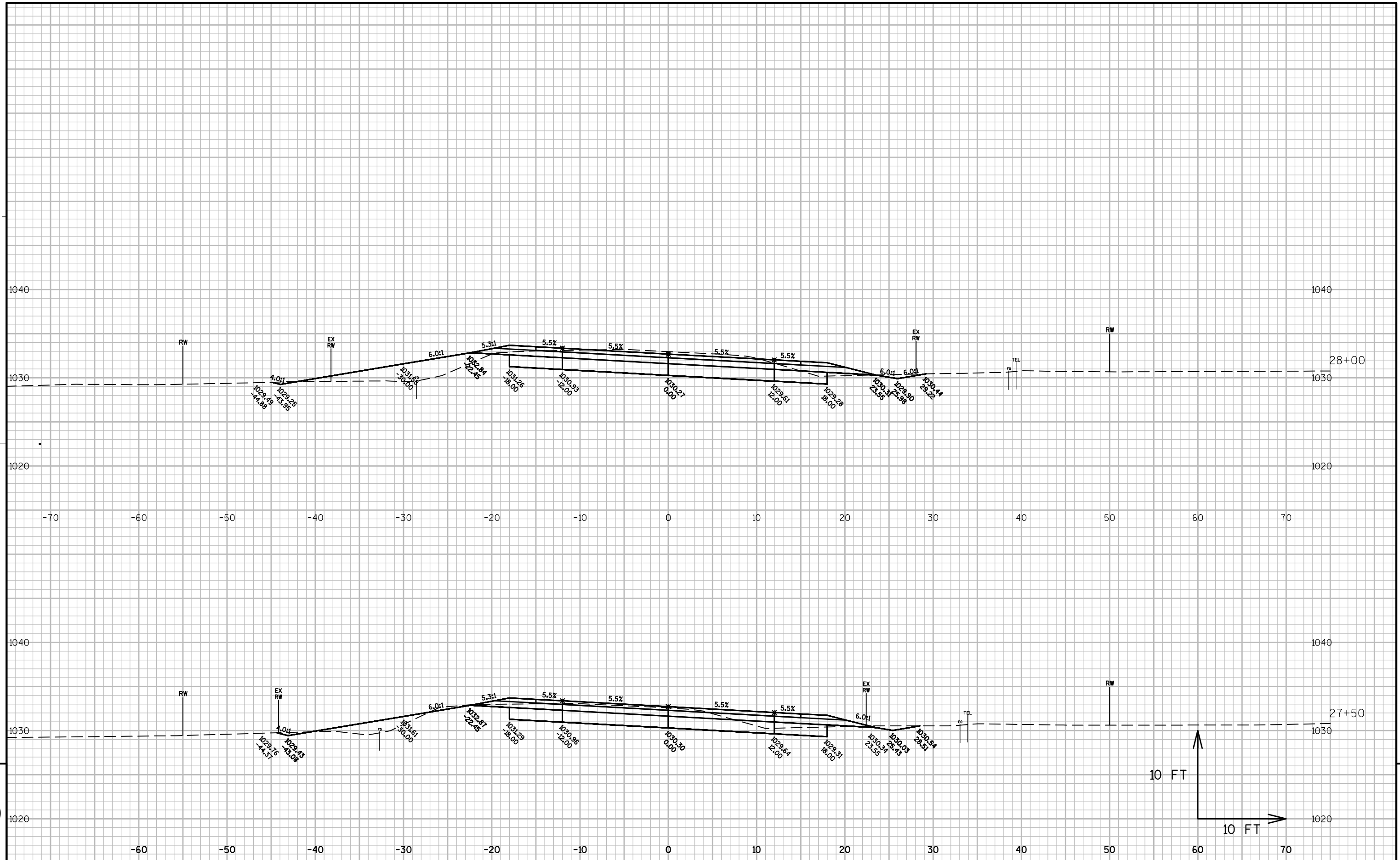


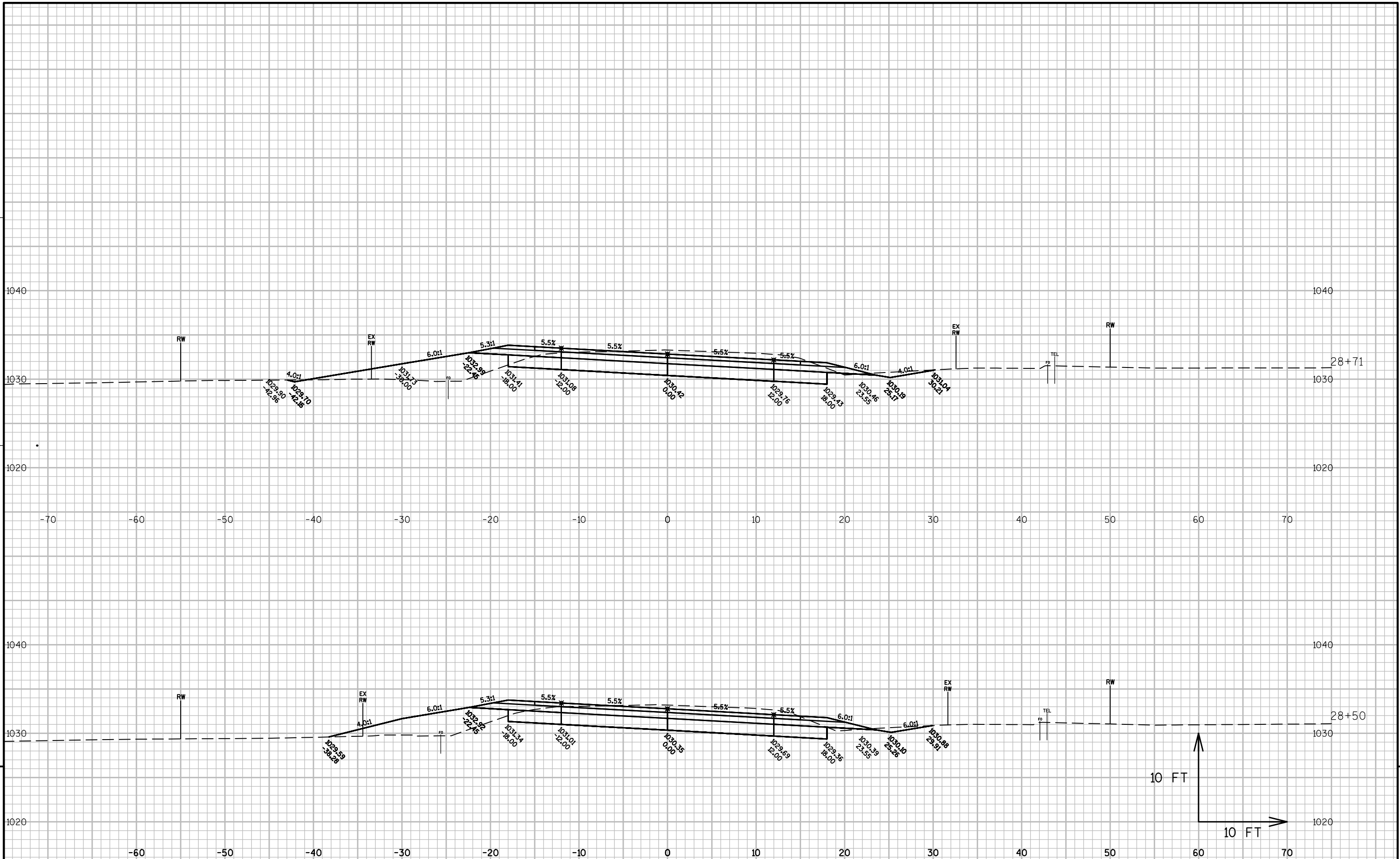
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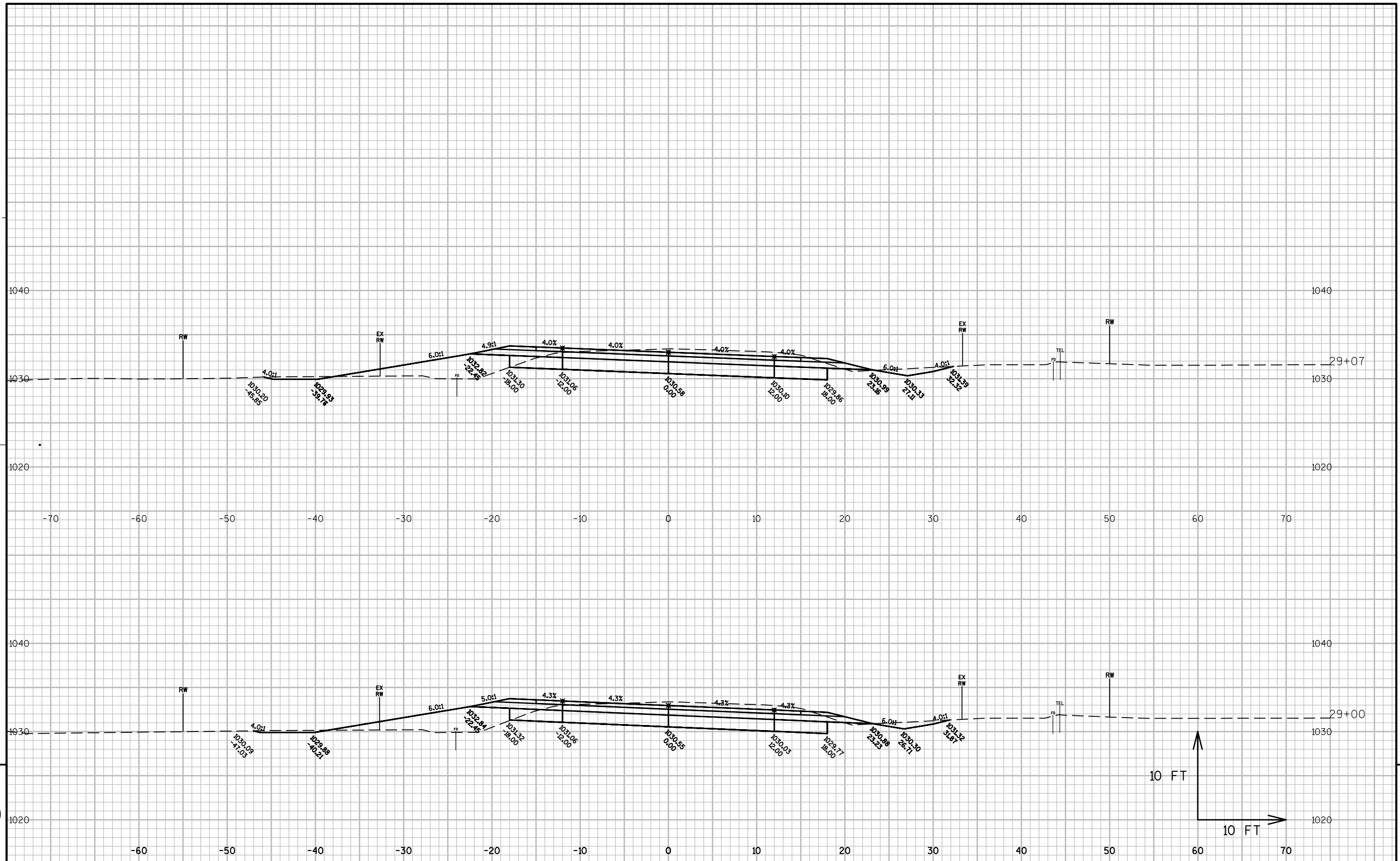
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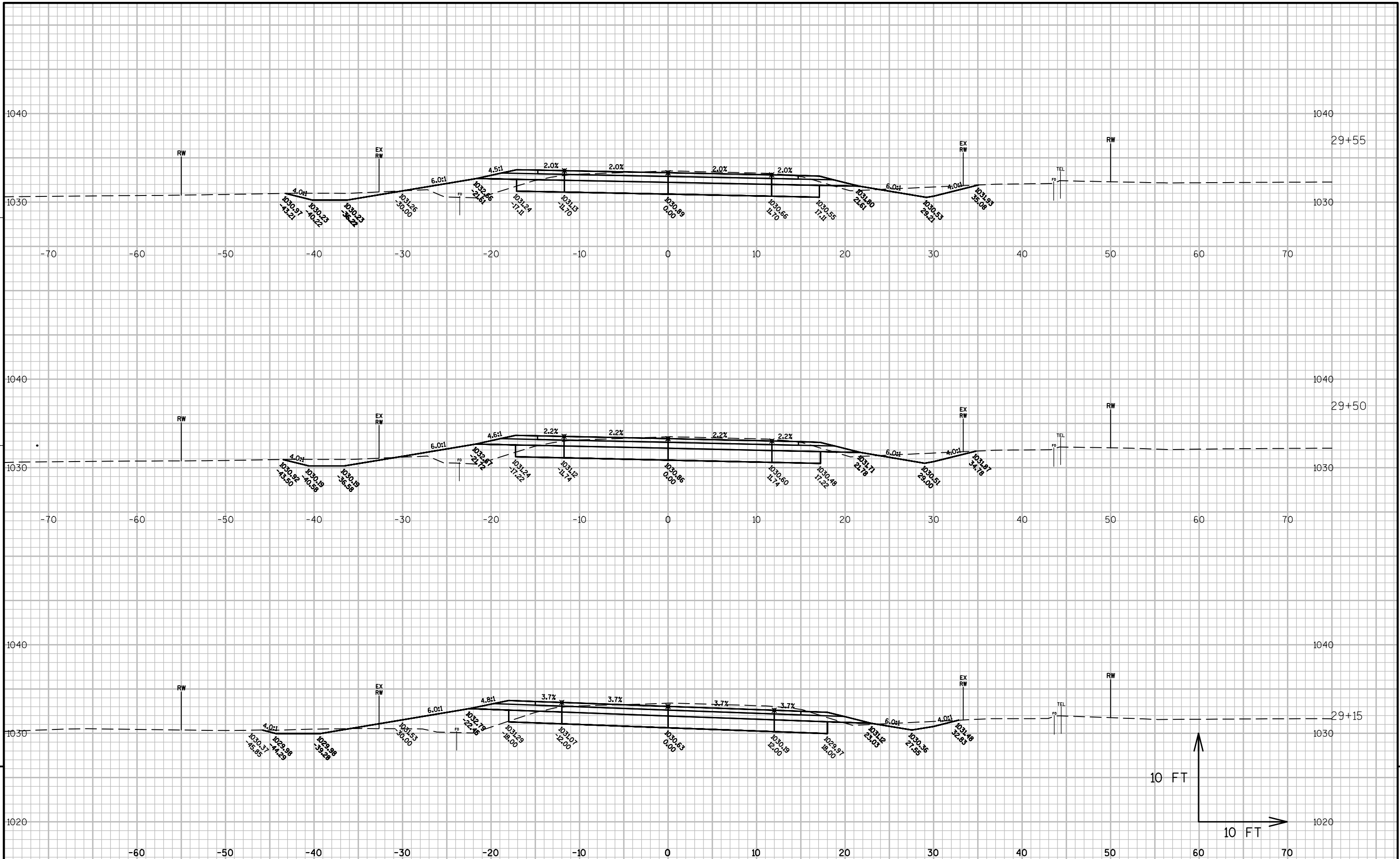


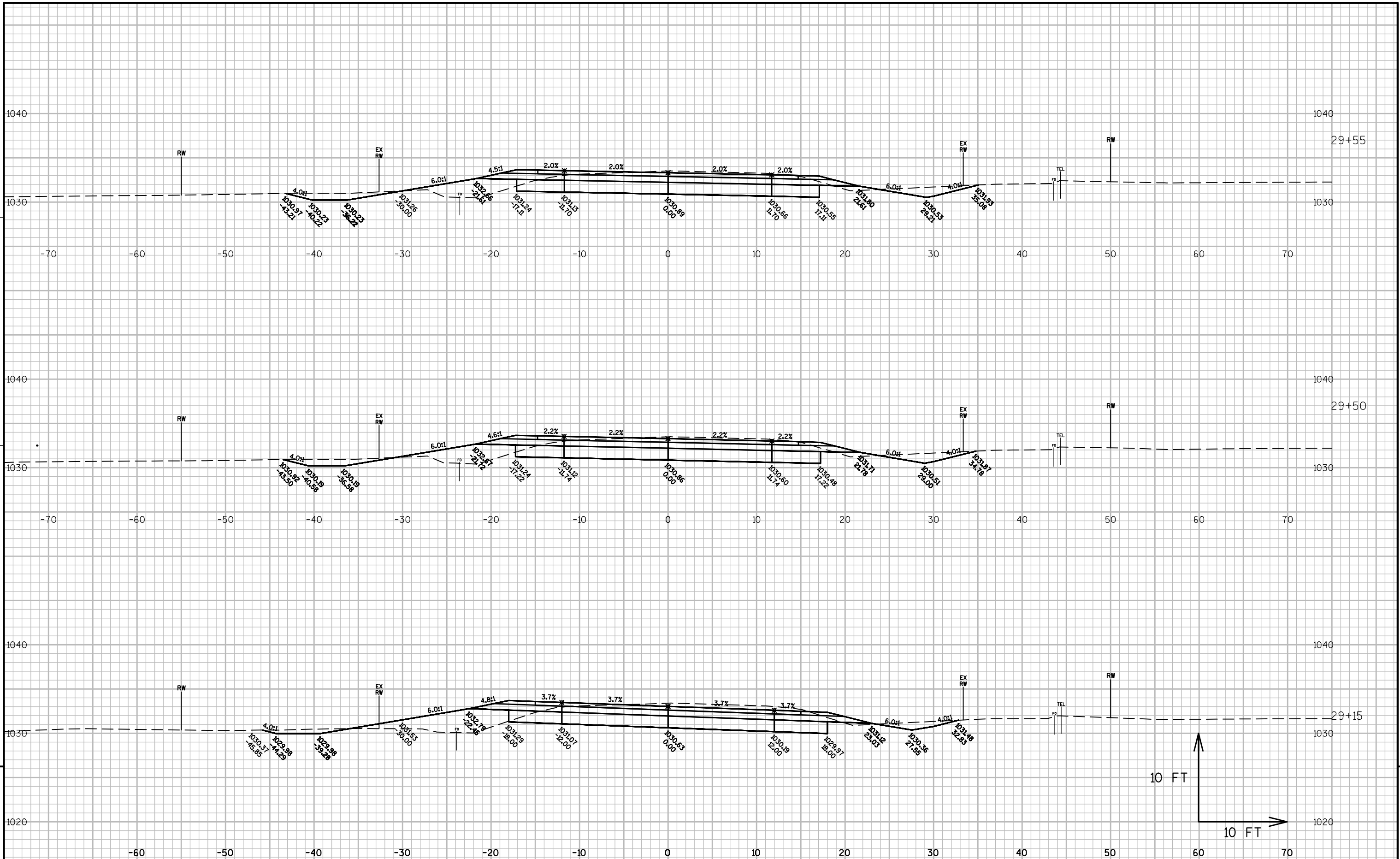


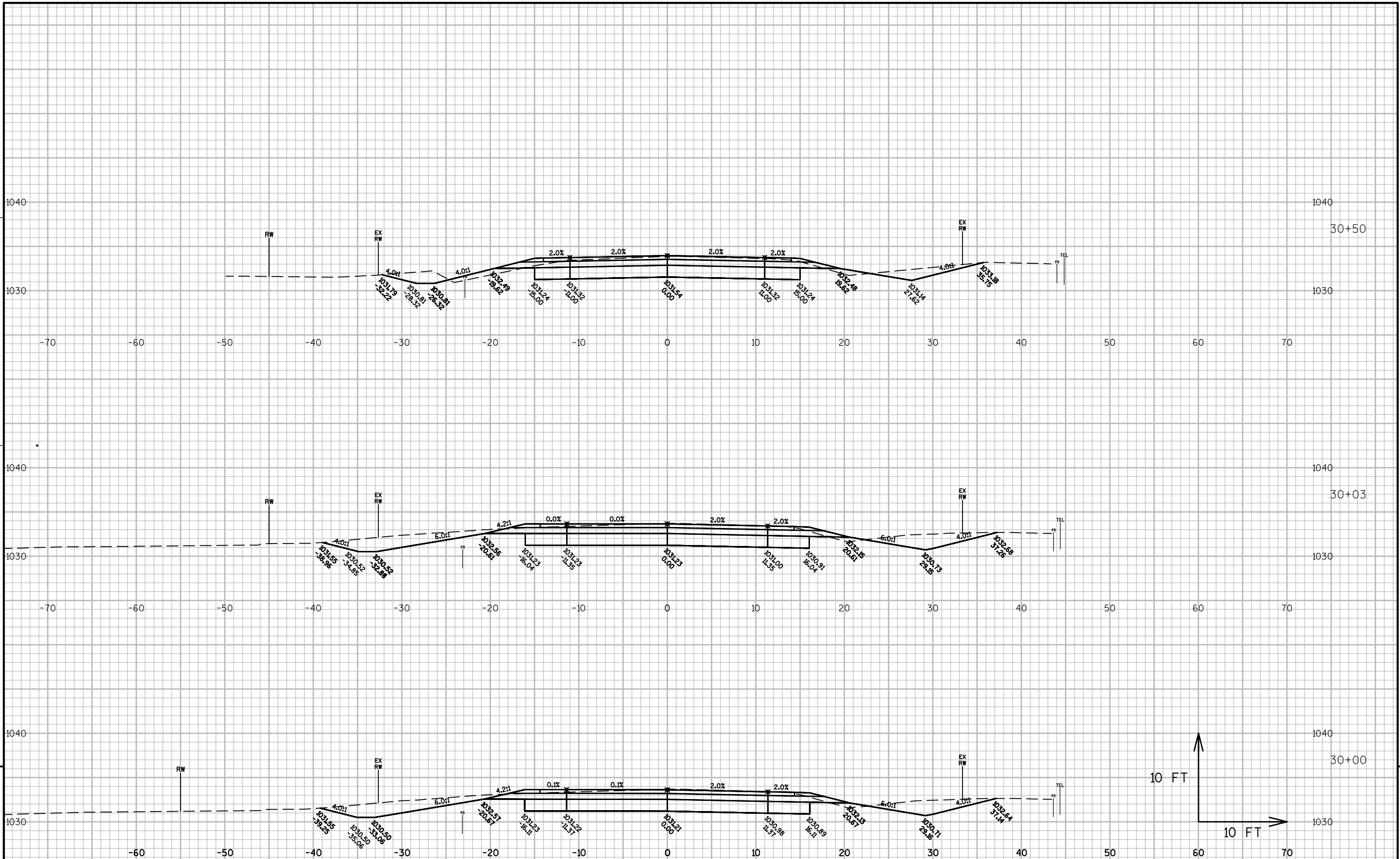


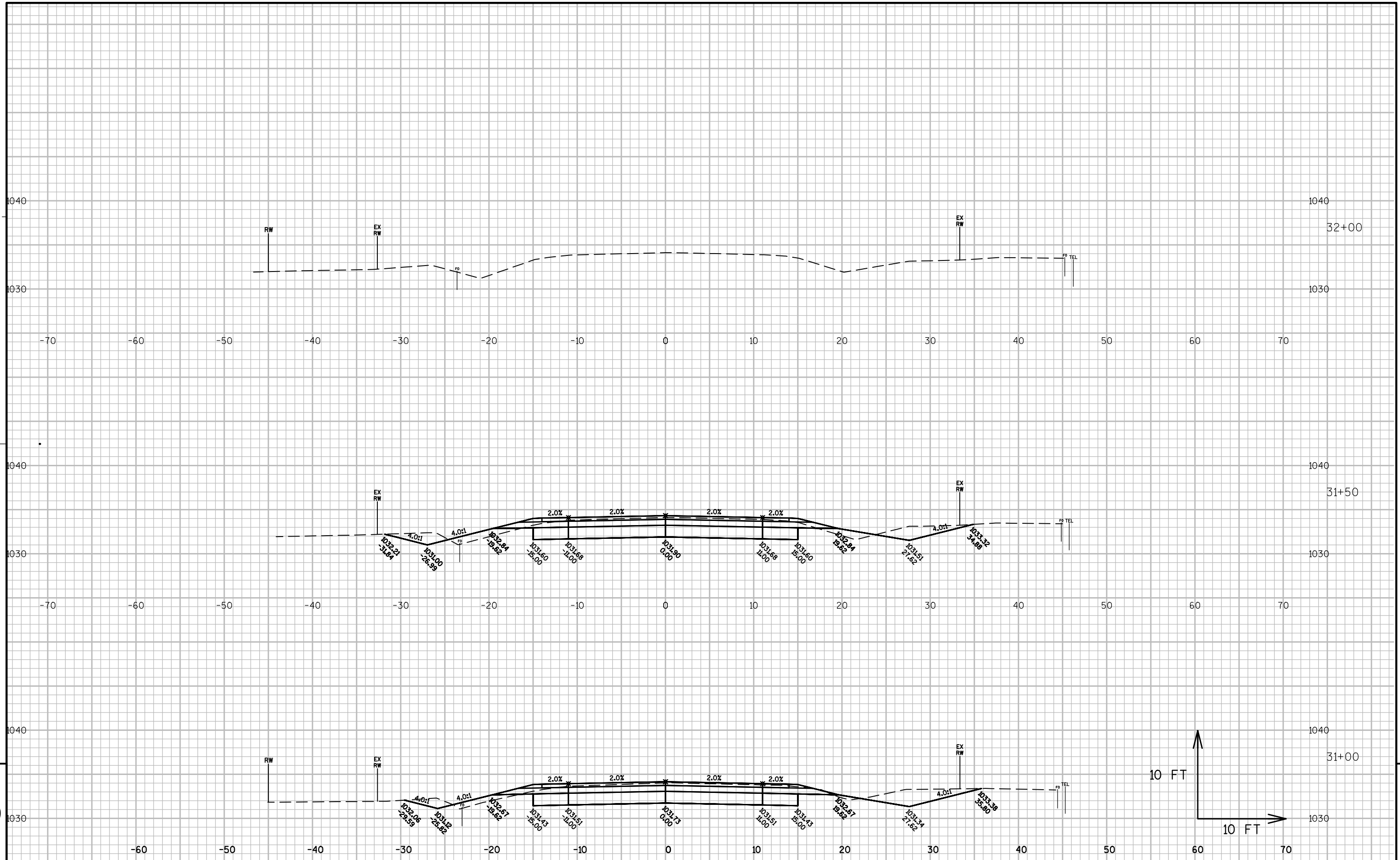


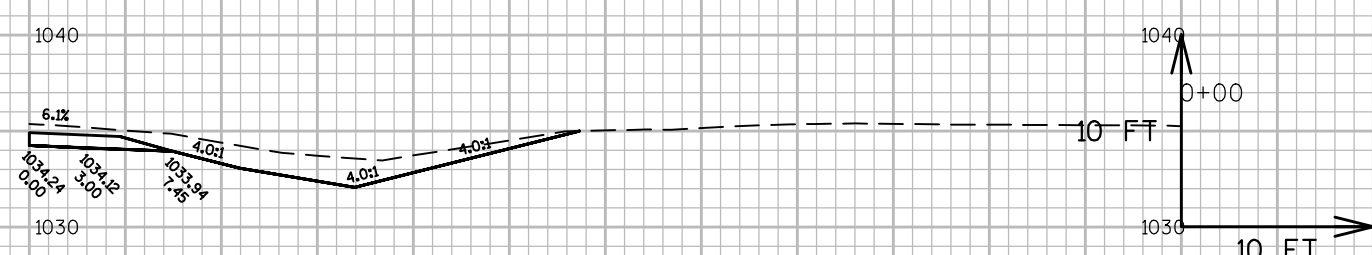
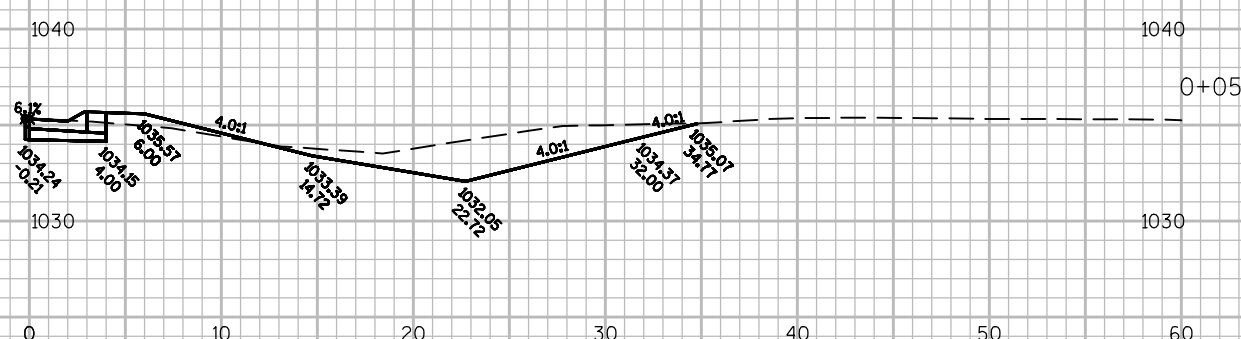




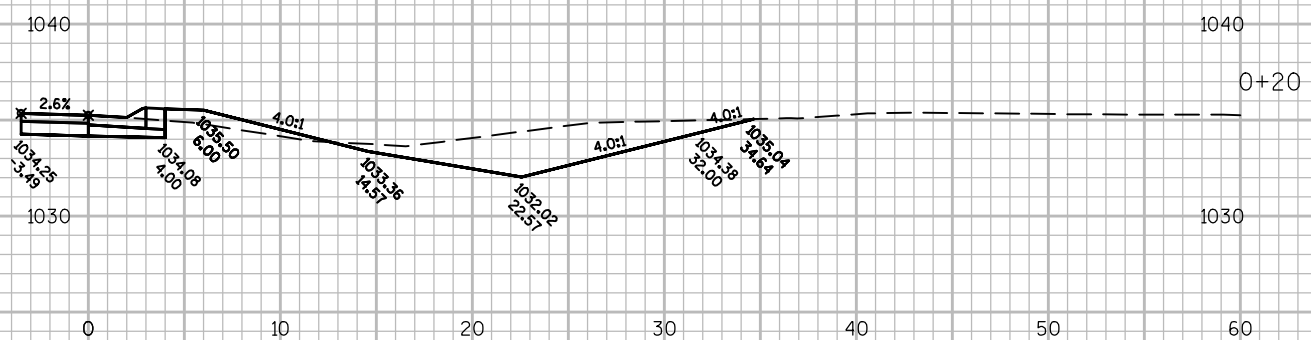
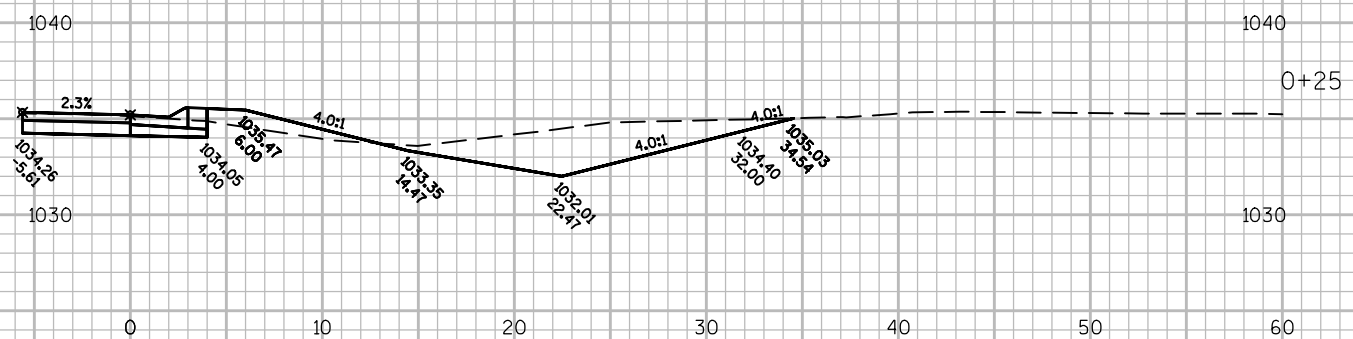


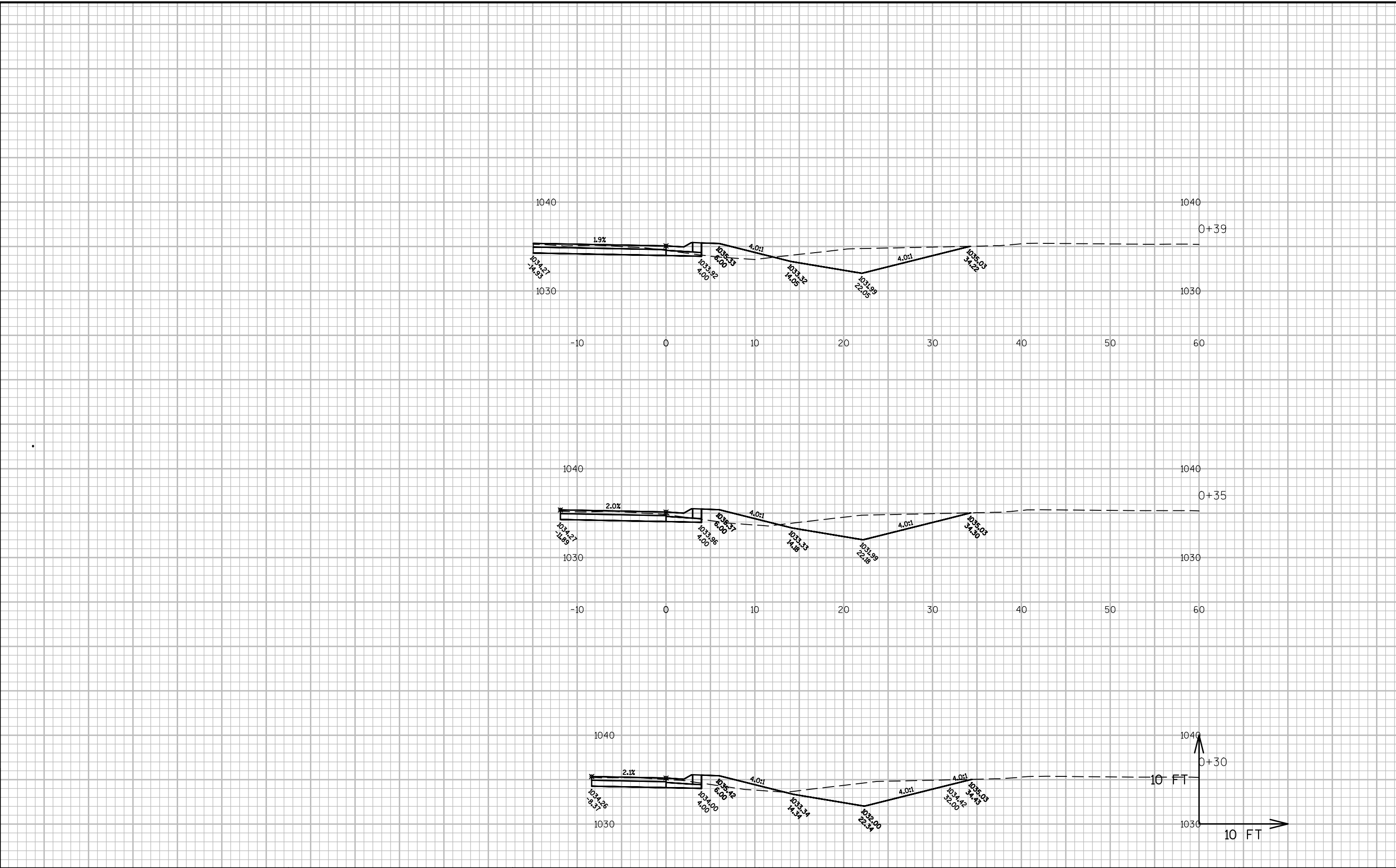












PROJECT NO:8620-07-73

HWY:STH 40

COUNTY:CHIPPEWA

CROSS SECTIONS: NE CTH F

SHEET

E

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LAYOUT NAME - NE-3

PLOT DATE : 2/26/2015 2:36 PM

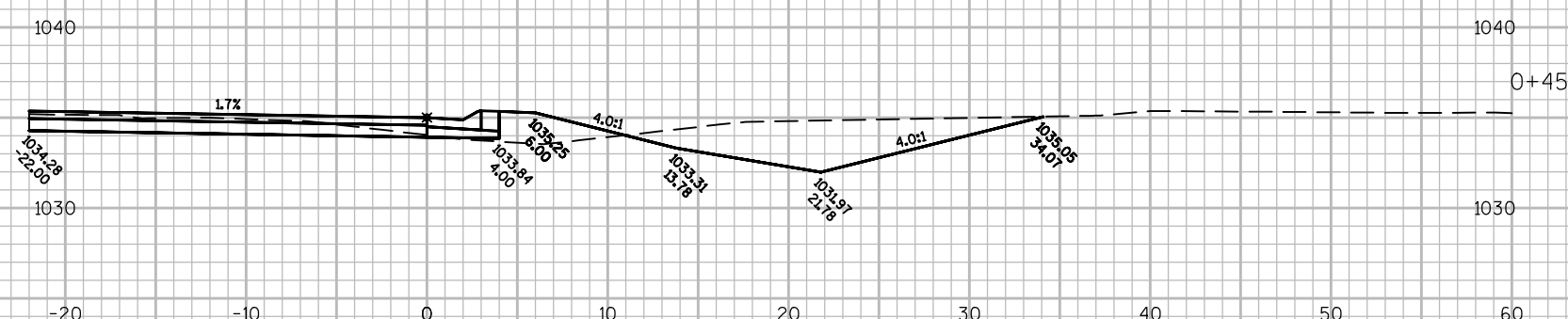
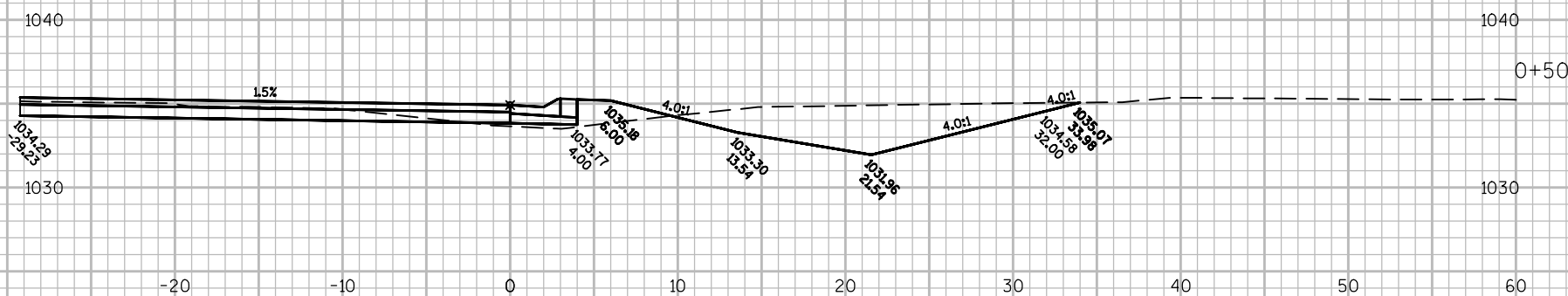
PLOT BY : MOUNIR, MOHAMED A

PLOT NAME :

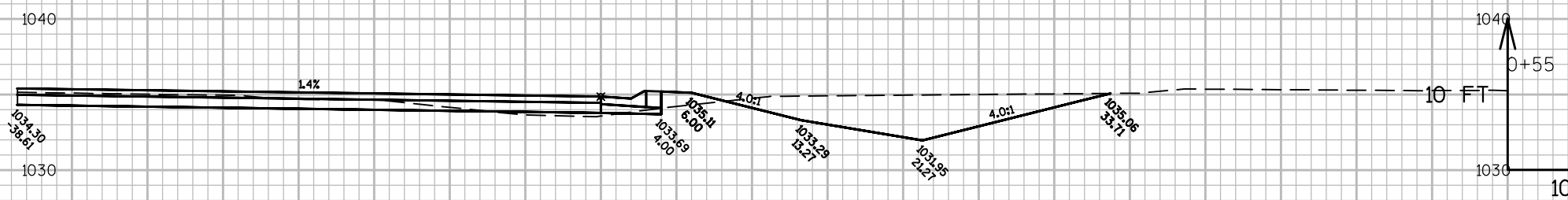
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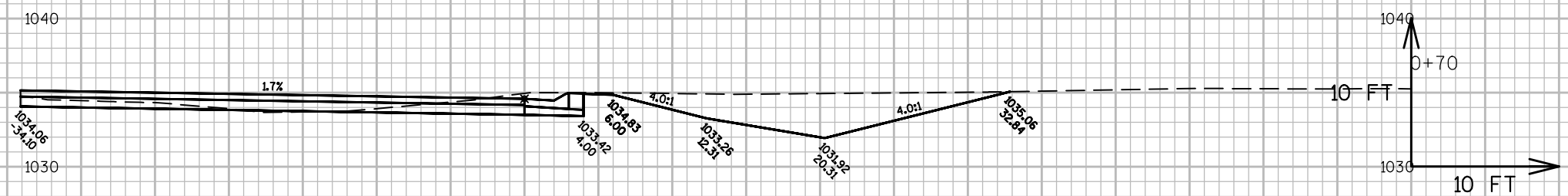
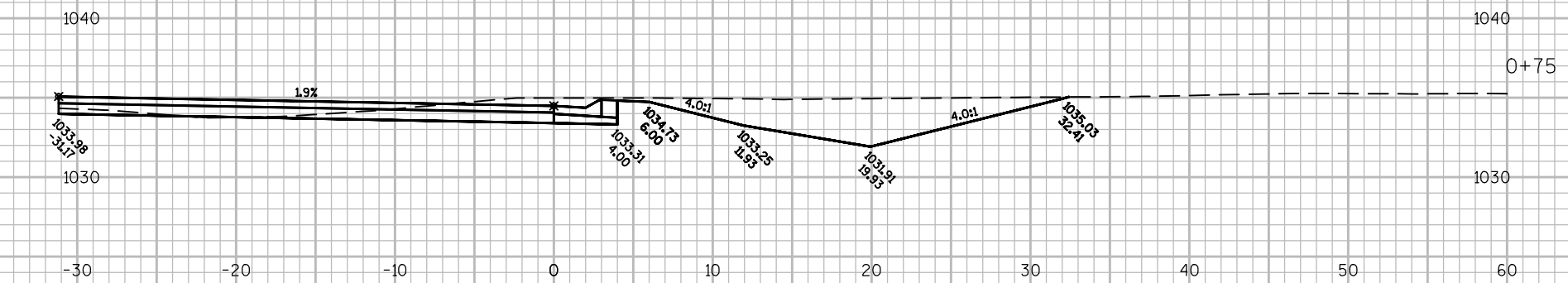
WISDOT/CADDs SHEET 49

9



9





PROJECT NO:8620-07-73

HWY: STH 40

COUNTY: CHIPPEWA

CROSS SECTIONS: NE CTH F

SHEET

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LAYOUT NAME - NE-6

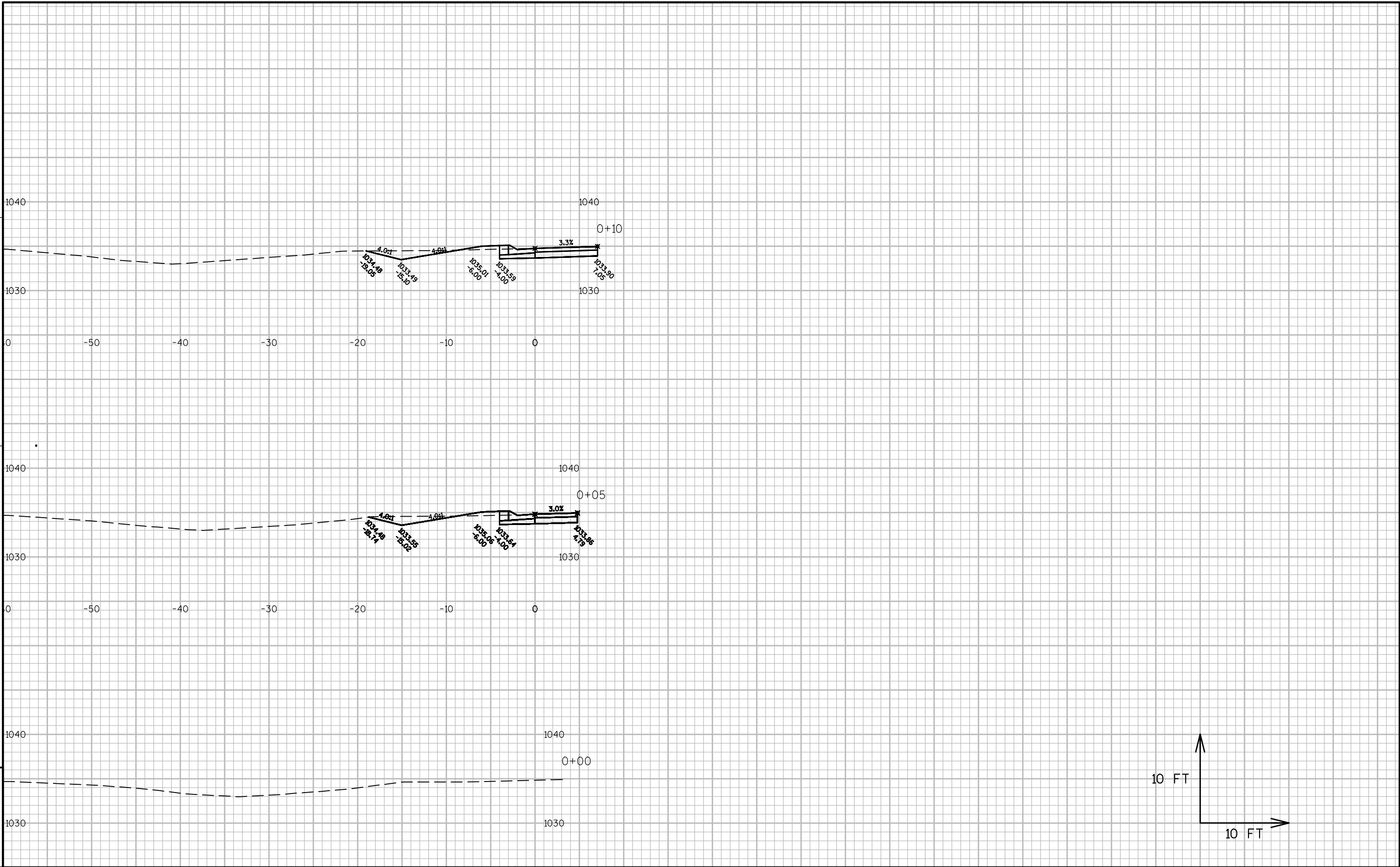
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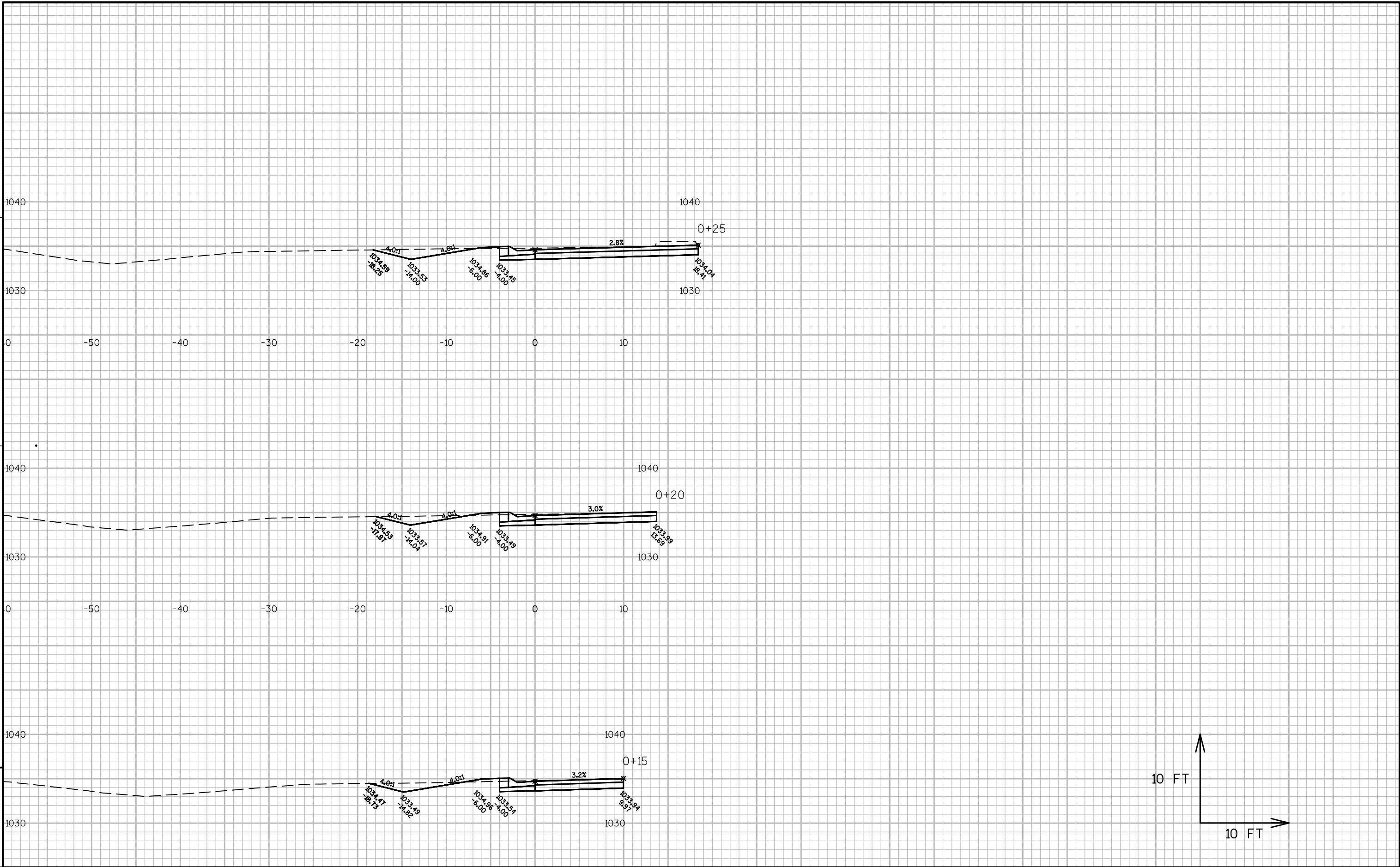
PLOT BY : MOUNIR, MOHAMED A

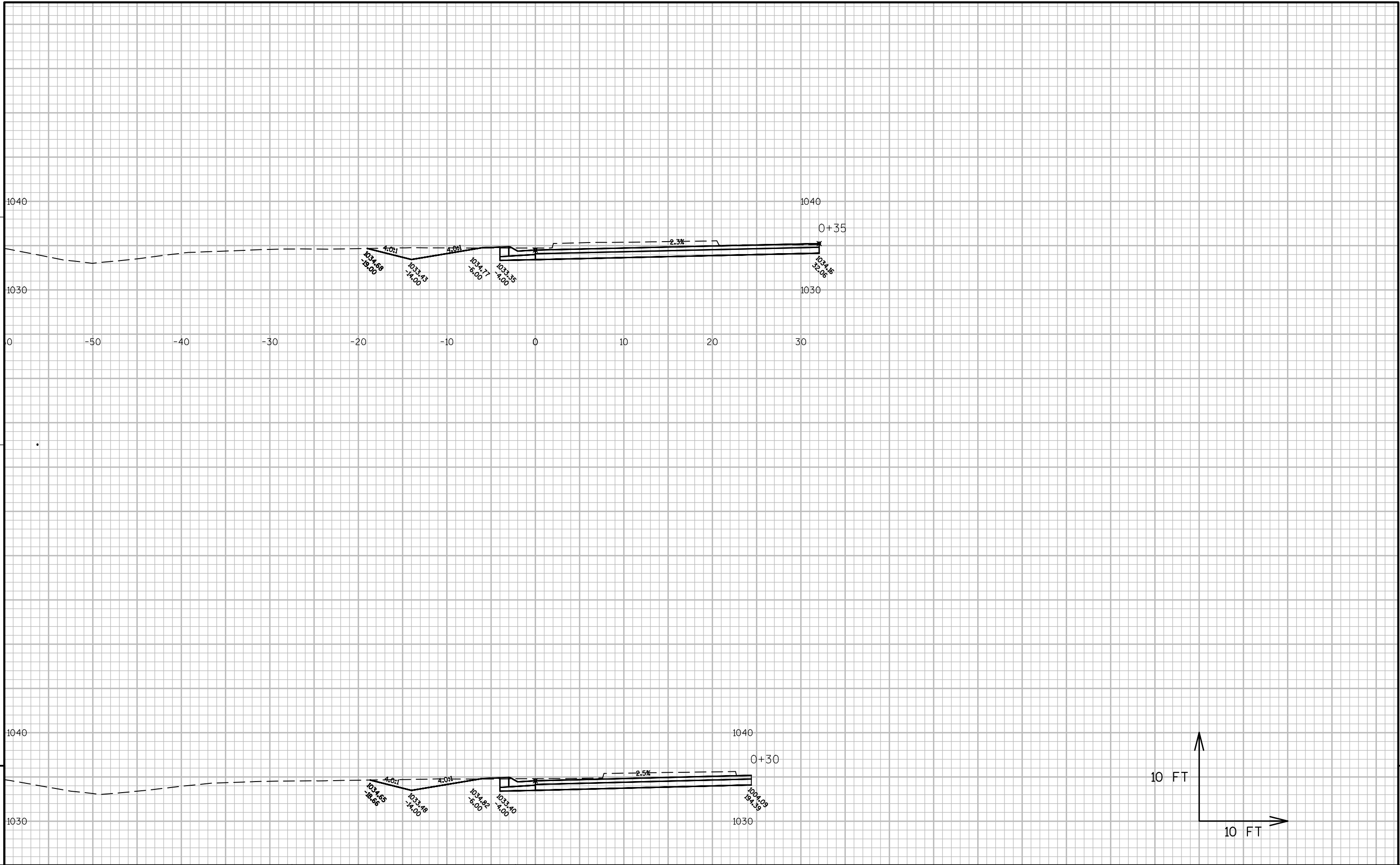
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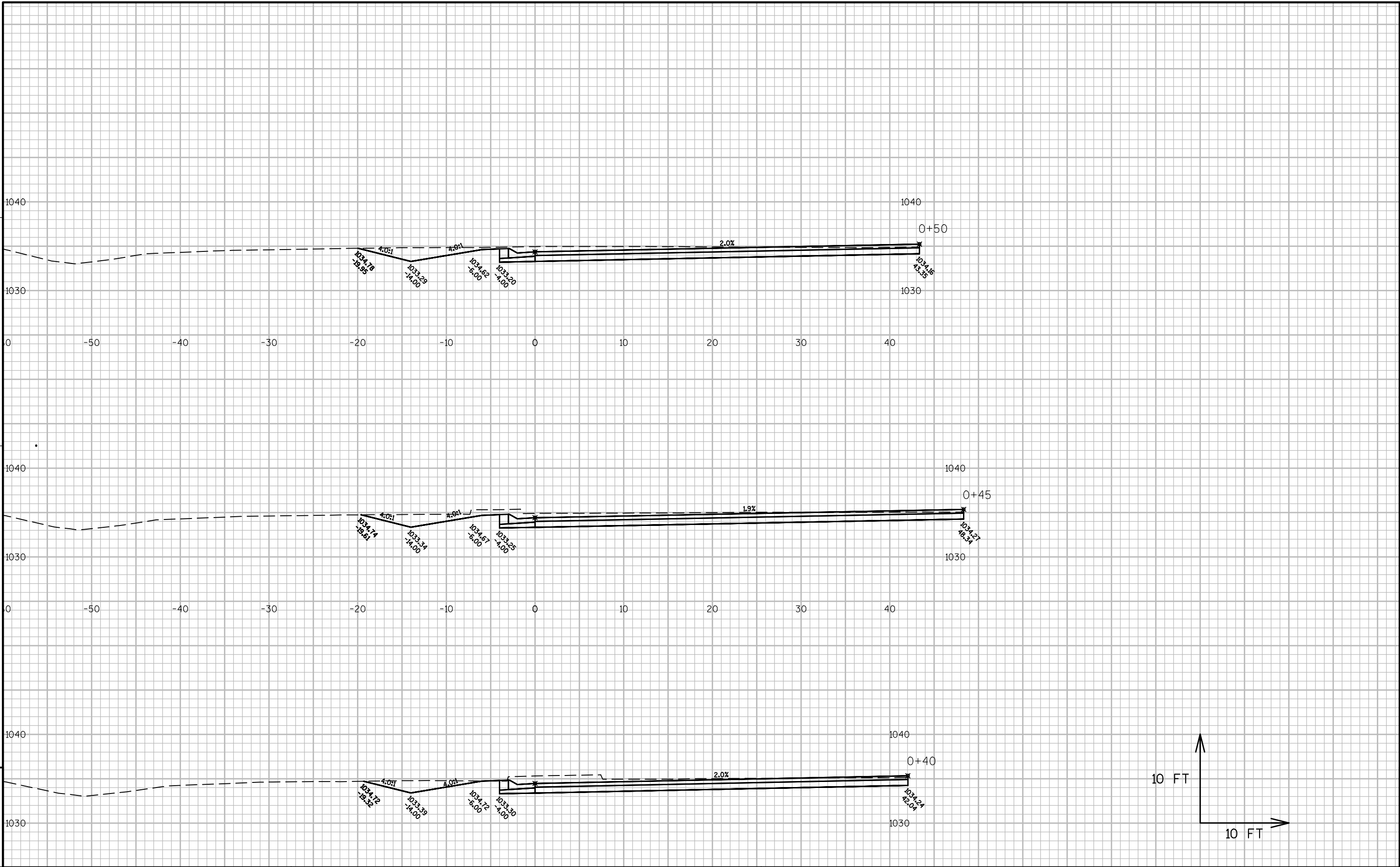
WISDOT/CADDS SHEET 49

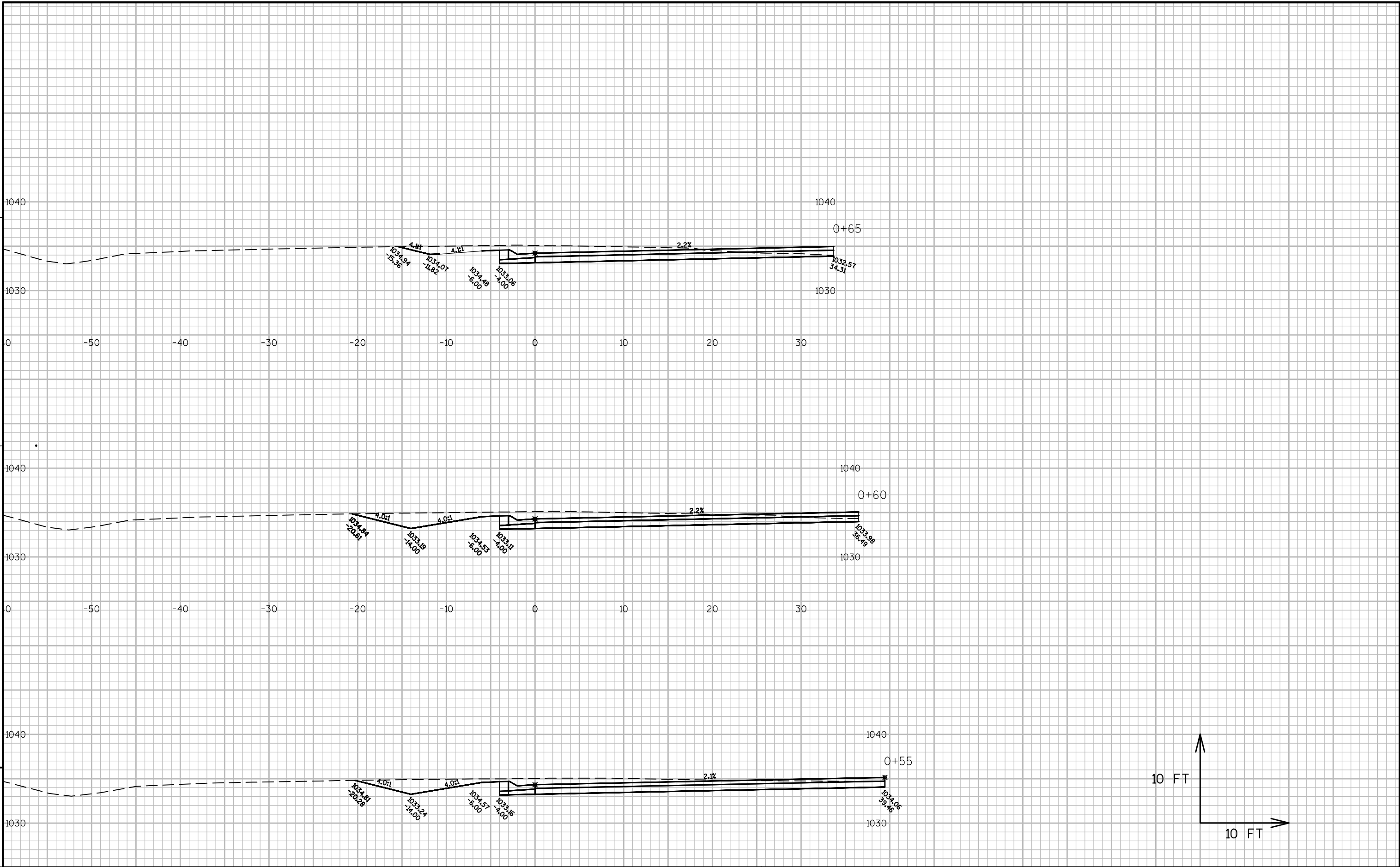


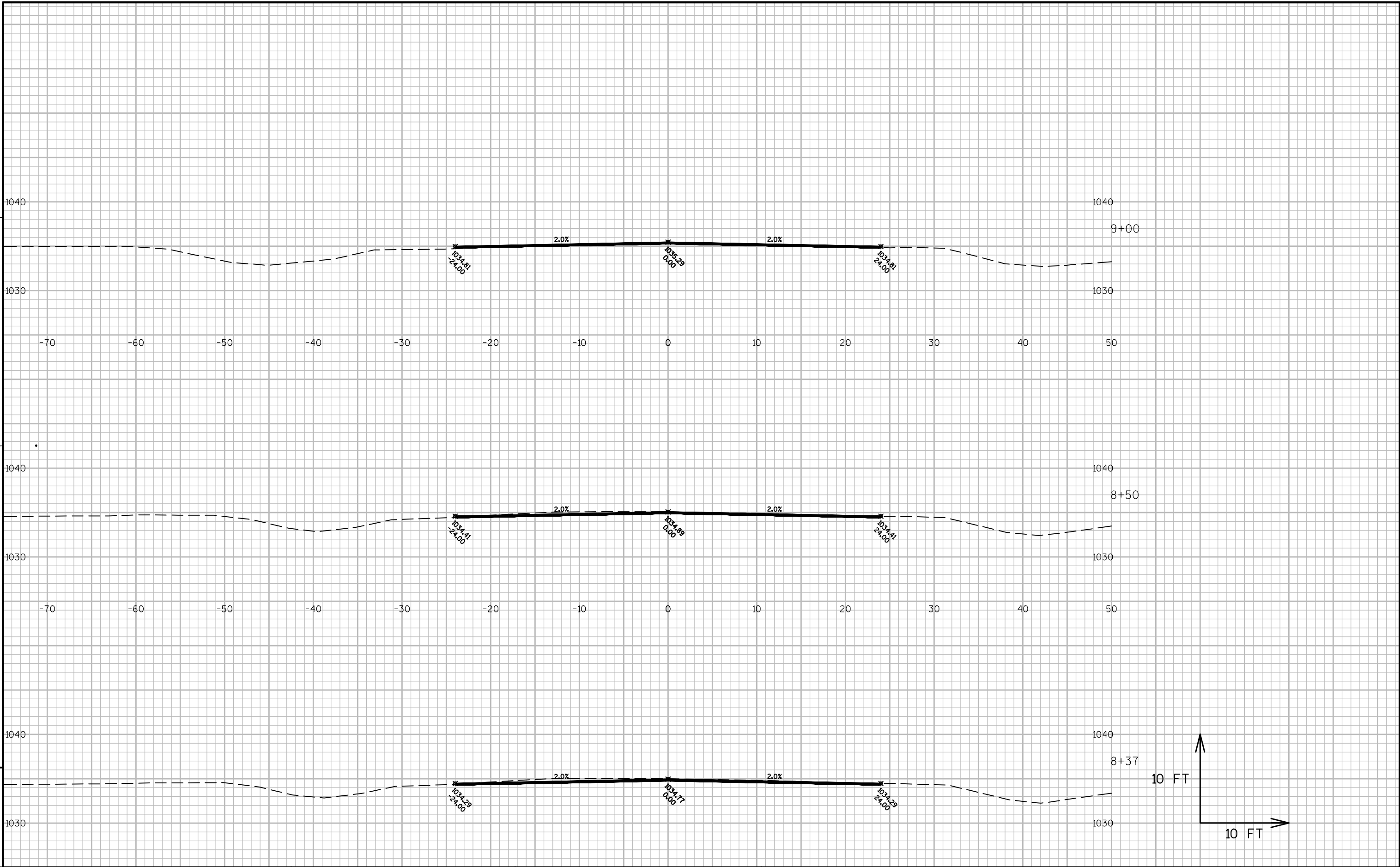


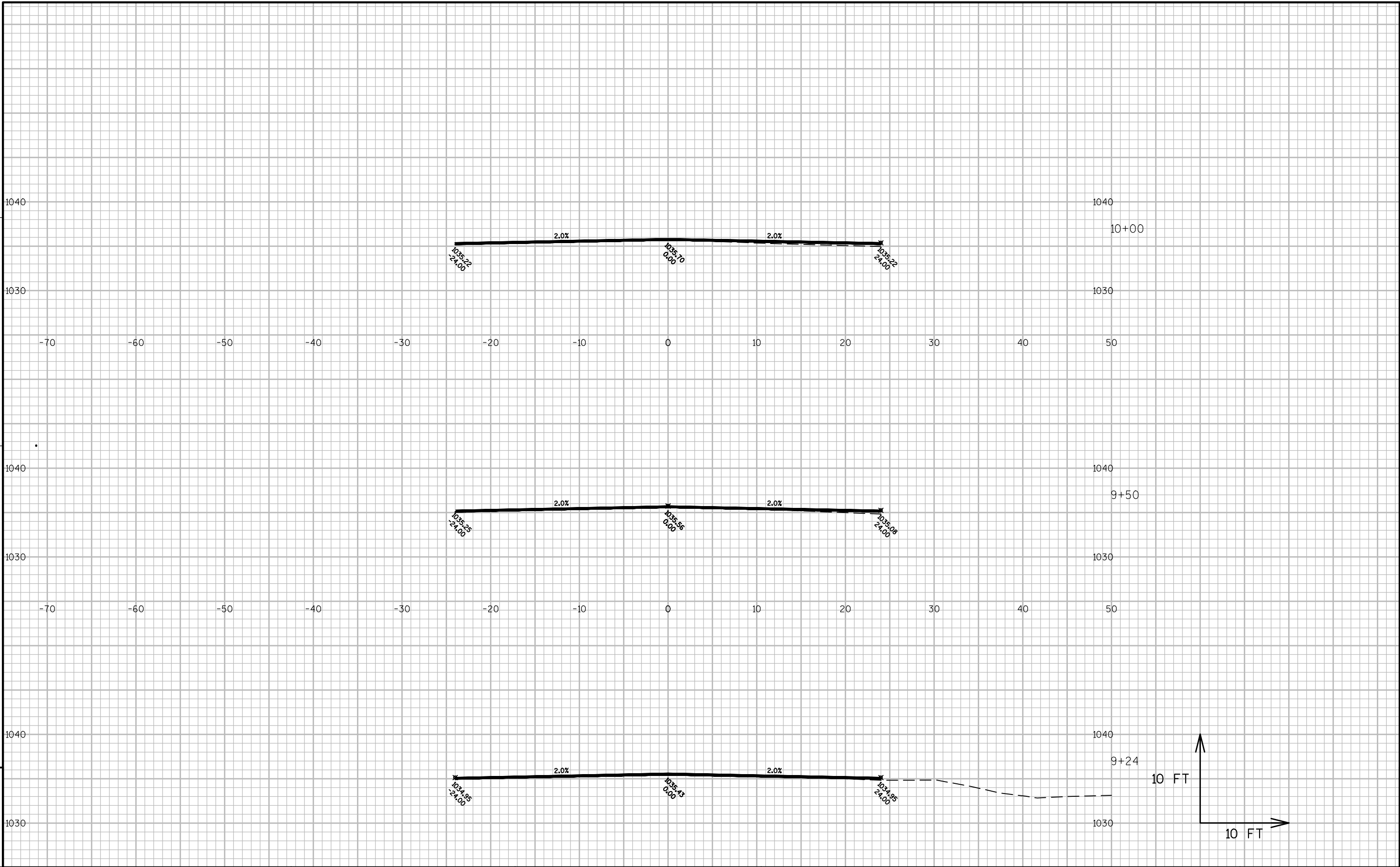


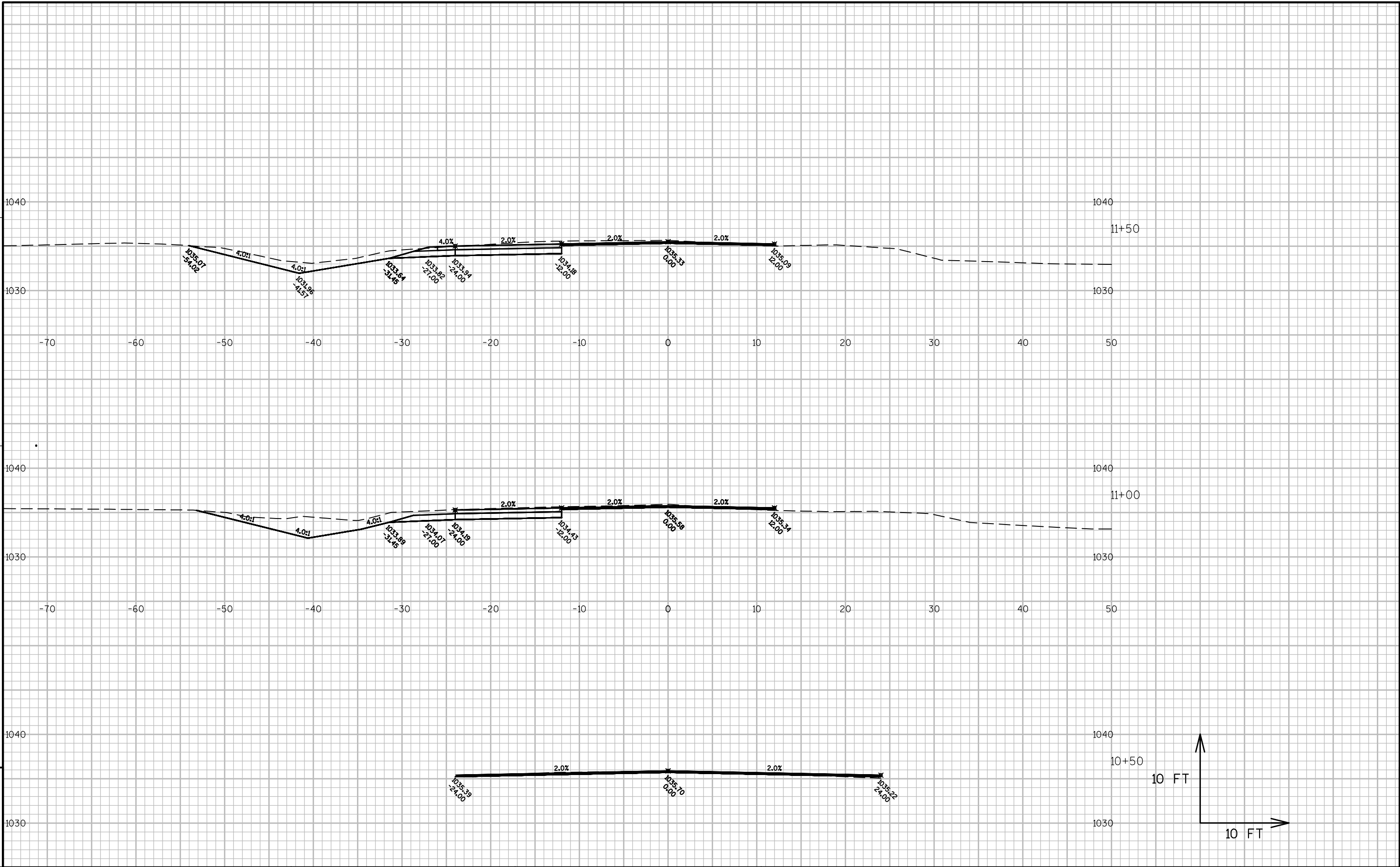


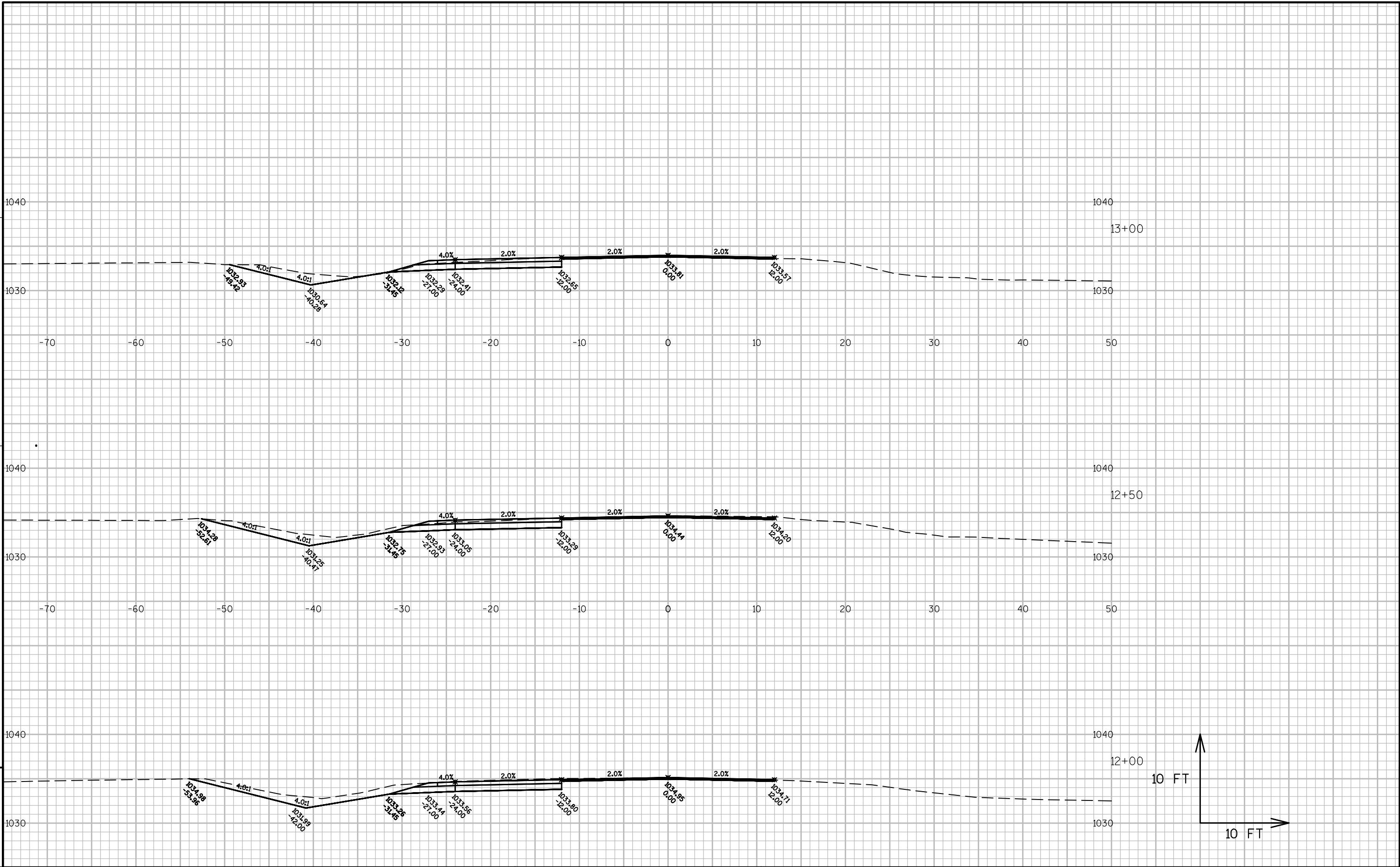


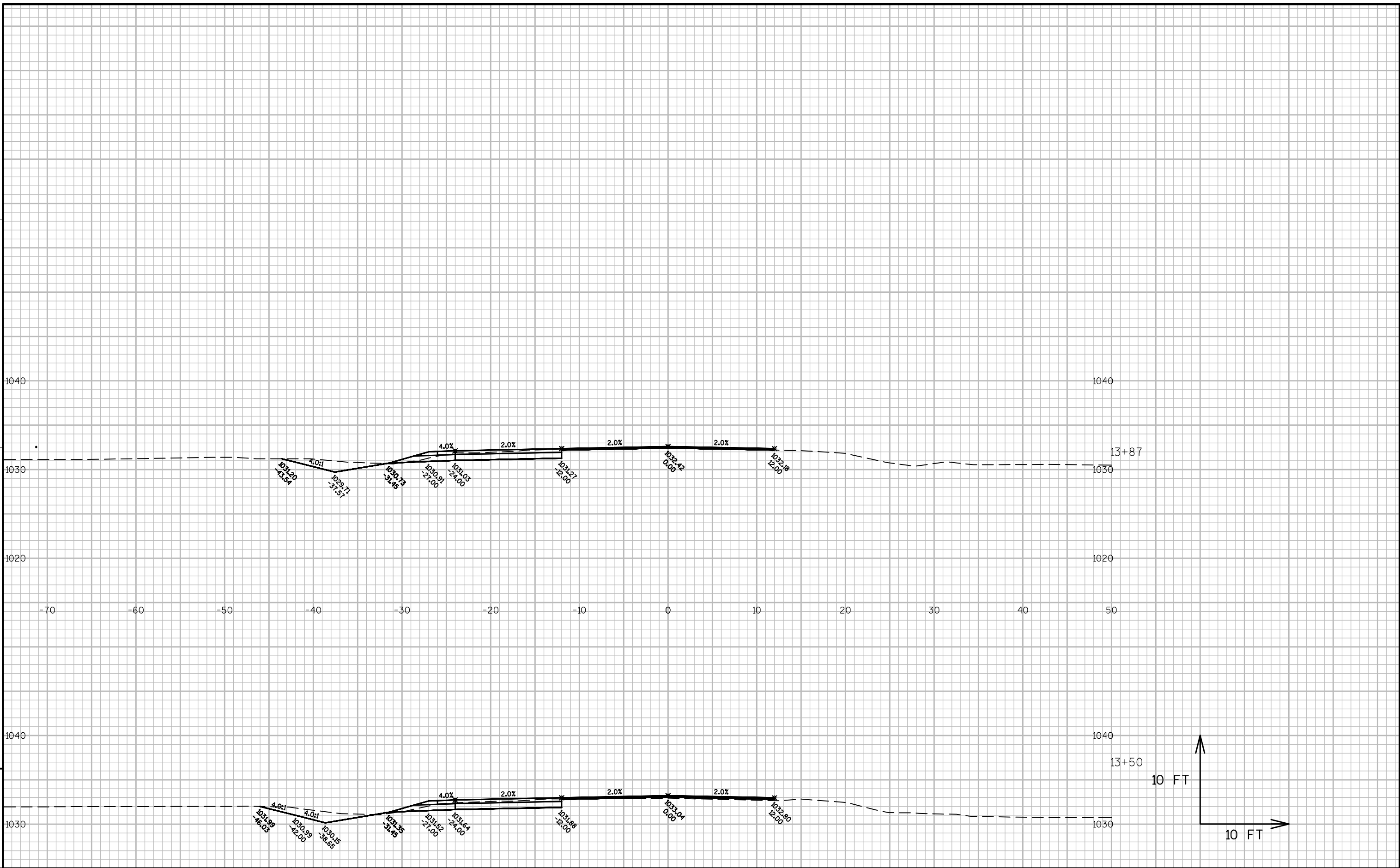


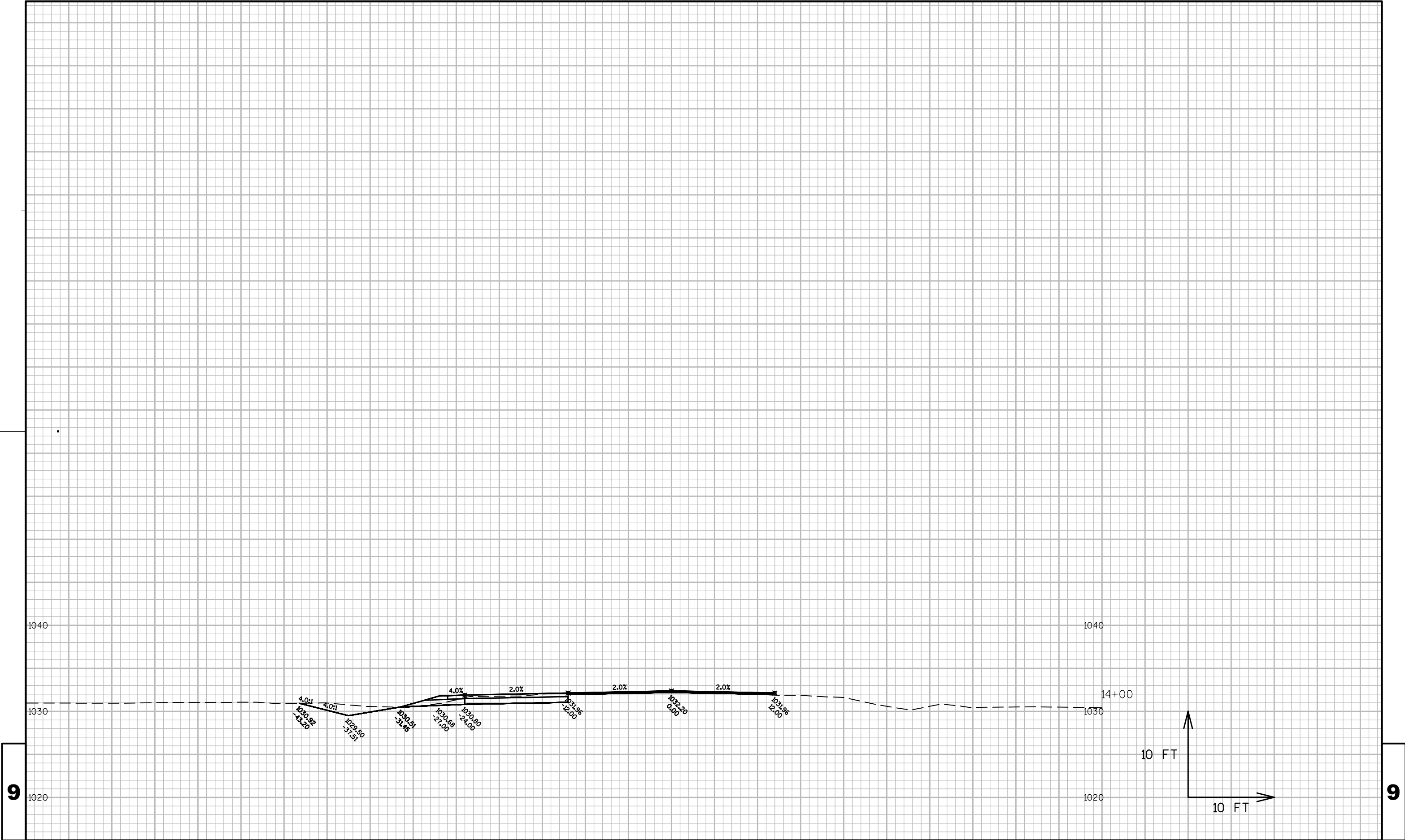












PROJECT NO:8620-07-73

HWY:STH 40

COUNTY:CHIPPEWA

CROSS SECTIONS: CTH F

SHEET

E

FILE NAME : N:\PDS\C3D\86200703\SHEETSP\AN\090200\_XS.DWG  
LAYOUT NAME - STH 64 - (6)

PLOT DATE : 2/26/2015 2:37 PM

PLOT BY : MOUNIR, MOHAMED A PLOT NAME :

PLOT SCALE : 1 IN:10 FT

WISDOT/CADDs SHEET 49



## Notes



## *Wisconsin Department of Transportation*

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