

SEL

JAN 2017

ORDER OF SHEETS

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

TOTAL SHEETS = 54

PROJECT ID: 3766-00-70
WITH: N/A



DESIGN DESIGNATION

A.A.D.T.	2016	=	7900
A.A.D.T.	2036	=	10600
D.H.V.		=	1067
D.D.		=	59/41
T.		=	5.8
DESIGN SPEED		=	45 MPH
ESALS		=	1,200,000

CONVENTIONAL SYMBOLS

PLAN
CORPORATE LIMITS

PROPERTY LINE

LOT LINE

LIMITED HIGHWAY EASEMENT

EXISTING RIGHT OF WAY

PROPOSED OR NEW R/W LINE

SLOPE INTERCEPT

REFERENCE LINE

EXISTING CULVERT

PROPOSED CULVERT
(Box or Pipe)

COMBUSTIBLE FLUIDS

WETLAND

WOODED OR SHRUB AREA

PROFILE

GRADE LINE

ORIGINAL GROUND

MARSH OR ROCK PROFILE
(To be noted as such)

SPECIAL DITCH

GRADE ELEVATION

CULVERT (Profile View)

UTILITIES

ELECTRIC

FIBER OPTIC

GAS

SANITARY SEWER

STORM SEWER

TELEPHONE

WATER

UTILITY PEDESTAL

POWER POLE

TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CTH E
BRIDGE OVER PIKE RIVER (B-30-0137)
CTH E
KENOSHA COUNTY

STATE PROJECT NUMBER

3766-00-70

END PROJECT

STA. 8+00

Y = 154189.36

X = 613690.81

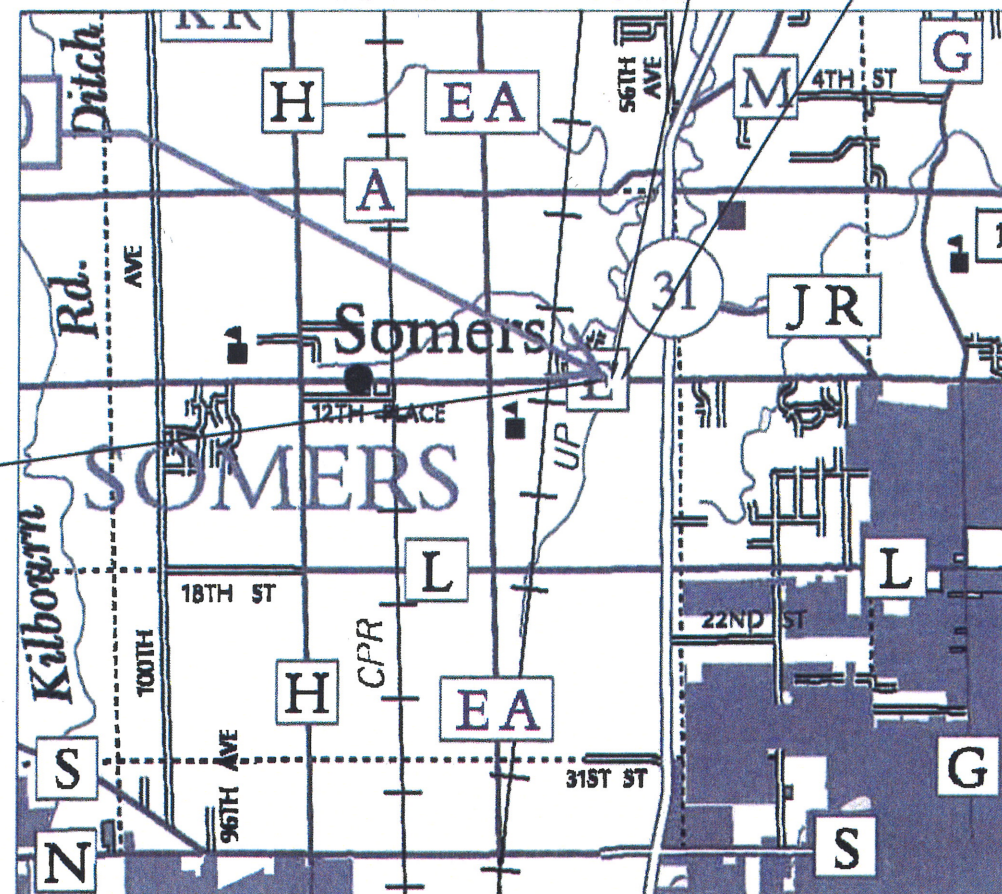
STRUCTURE B-30-0137

BEGIN PROJECT

STA. 2+00

Y = 154198.64

X = 613090.84



LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.114 MI.

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

ELEVATIONS ON THIS PLAN ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)

STATE PROJECT

3766-00-70

FEDERAL PROJECT

PROJECT

WISC 2017006

CONTRACT

1

ACCEPTED FOR
COUNTY OF KENOSHA

8-31-2016
(Date) *Harry Sporn*
(Highway Commissioner)

ORIGINAL PLANS PREPARED BY

JSD Professional Services, Inc.

• Engineers • Surveyors • Planners

MILWAUKEE REGIONAL OFFICE

N22 W22931 NANCYS COURT, SUITE 3

WAUKESHA, WI 53186

262.513.0666 PHONE 262.513.1232 FAX



8-31-16
(Date) *[Signature]*
(Professional Engineer)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor JSD PROFESSIONAL SERVICES

Designer JSD PROFESSIONAL SERVICES

Management Consultant DAAR ENGINEERING, INC.

APPROVED FOR THE DEPARTMENT

DATE: 9/1/16 *[Signature]*
(Management Consultant Signature)

GENERAL NOTES

ALL FOUR QUADRANTS ARE WETLAND AREAS. DO NOT OPERATE MACHINERY OUTSIDE OF THE SLOPE INTERCEPTS.

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, WILL BE FERTILIZED, SEEDED AND MULCHED OR EROSION MAT.

RESTORATION OF EXPOSED SLOPES AND DITCHES SHALL TAKE PLACE IMMEDIATELY AFTER FINISHED GRADING IS COMPLETE.

EXCAVATION BELOW THE SUBGRADE (EBS) SHALL BE MEASURED AND PAID FOR AS EXCAVATION COMMON, THE EXACT LOCATION FOR EBS, AS REQUIRED, WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

CONSTRUCT 6 1/2-INCH PAVEMENT WITH A 2 1/2-INCH UPPER LAYER AND A 4 INCH LOWER LAYER.

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

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR WILL VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN WITH THE ENGINEER.

THE EXACT LOCATIONS AND LIMITS OF FIELD AND PRIVATE ENTRANCES WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. ALL ENTRANCES WILL BE REPLACED IN-KIND, EXCEPT AS NOTED OR AS DIRECTED BY THE ENGINEER.

SAW CUT LOCATIONS SHOWN ON THE PLAN ARE SUBJECTED TO ADJUSTMENT BY THE ENGINEER IN THE FIELD. THE LINE OF SUCH SAW CUTS WILL BE NEATLY DELINEATED THROUGH THE ASPHALT WITHOUT ANY DAMAGE TO THE REMAINING PORTION OF THE EXISTING PAVEMENT.

ELEVATIONS SHOWN ON THE ROADWAY CROSS SECTIONS ARE SUBGRADE ELEVATIONS AT THE CONSTRUCTION REFERENCE LINES.

PROPERTY LINES SHOWN ARE APPROXIMATE.

WISDOT WILL FURNISH A BENCH MARK MONUMENT TO BE SET BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER IN THE FIELD.

THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING MOTORISTS AND PEDESTRIANS THAT MAY ENTER THE WORK ZONE FROM POSSIBLE HAZARDS.

STANDARD ABBREVIATIONS

BM	BENCH MARK	L	LEFT
CL	CENTERLINE	MAX	MAXIMUM
EL	ELEVATION	R/W	RIGHT-OF-WAY
EX	EXISTING	R	RIGHT
HMA	HOT MIX ASPHALT	STA	STATION
K	RATE OF VERTICAL CURVATURE	TYP	TYPICAL

HOT MIX ASPHALT PAVEMENT			
LAYER	THICKNESS	NOMINAL SIZE	MIX TYPE
UPPER LAYER	2 1/2-IN	12.5 MM	4 LT 58-28 S
LOWER LAYER	4-IN	19.0 MM	3 LT 58-28 S

*SEE TABLE 460-2 IN WISDOT FACILITIES DEVELOPMENT MANUAL FOR MIXTURE REQUIREMENTS

UTILITY CONTACTS

AT&T WISCONSIN
2005 PEWAUKEE ROAD
WAUKESHA, WI 53188
ATTENTION: ALPER KOLCU
TELEPHONE: 262-970-8494
EMAIL: alper.kolcu@att.com

TIME WARNER CABLE COMMUNICATIONS
1320 N. MARTIN LUTHER KING JR. DR.
MILWAUKEE, WI 53212
ATTENTION: STEVE CRAMER
TELEPHONE: 414-277-4045
EMAIL: steve.cramer@twcable.com

WE ENERGIES (GAS)

4900 W. RAWSON AVE.
FRANKLIN, WI 53132
ATTENTION: CHRIS DeGRAVE
TELEPHONE: 414-423-5062
EMAIL: chris.degrave@we-energies.com

WE ENERGIES (ELECTRIC)
500 S. 116TH STREET
WEST ALLIS, WI 53214
ATTENTION: PATRICIA FINN
TELEPHONE: 414-944-5760
EMAIL: patricia.finn@we-energies.com

WE ENERGIES
333 W. EVERETT ST. - A299
MILWAUKEE, WI 53203
ATTENTION: LATROY BRUMFIELD
TELEPHONE: 414-221-5617
EMAIL: latroy.brumfield@we-energies.com

TOWN OF SOMERS UTILITY CONTACT
(WATER AND SANITARY)
JERRY SMITH
PUBLIC WORKS SUPERINTENDENT
7511 12TH STREET
P.O. BOX 197
SOMERS, WI 53171
TELEPHONE: 262-859-2822
EMAIL: jsmith@somers.org

VCL	VERTICAL CURVE LENGTH
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION

TOWN OF SOMERS CONTACT

BEN HARBACH
TOWN CHAIR
7511 - 12TH STREET
P.O. BOX 197
SOMERS, WI 53171
TELEPHONE: 262-859-2822
EMAIL: bharbach@somers.org

KENOSHA COUNTY CONTACT

GARY SIPSMA
19600 75TH ST., SUITE 122-1
BRISTOL, WI 53104-9772
TELEPHONE: 262-857-1870
EMAIL: gary.slpsma@kenoshacounty.org

WISCONSIN DEPARTMENT OF NATURAL RESOURCES CONTACT

CRAIG WEBSTER
141 NW BARSTOW ROOM 180
WAUKESHA, WI 53188
TELEPHONE: 262-574-2141
EMAIL: craig.webster@wisconsin.gov

DESIGN CONTACT

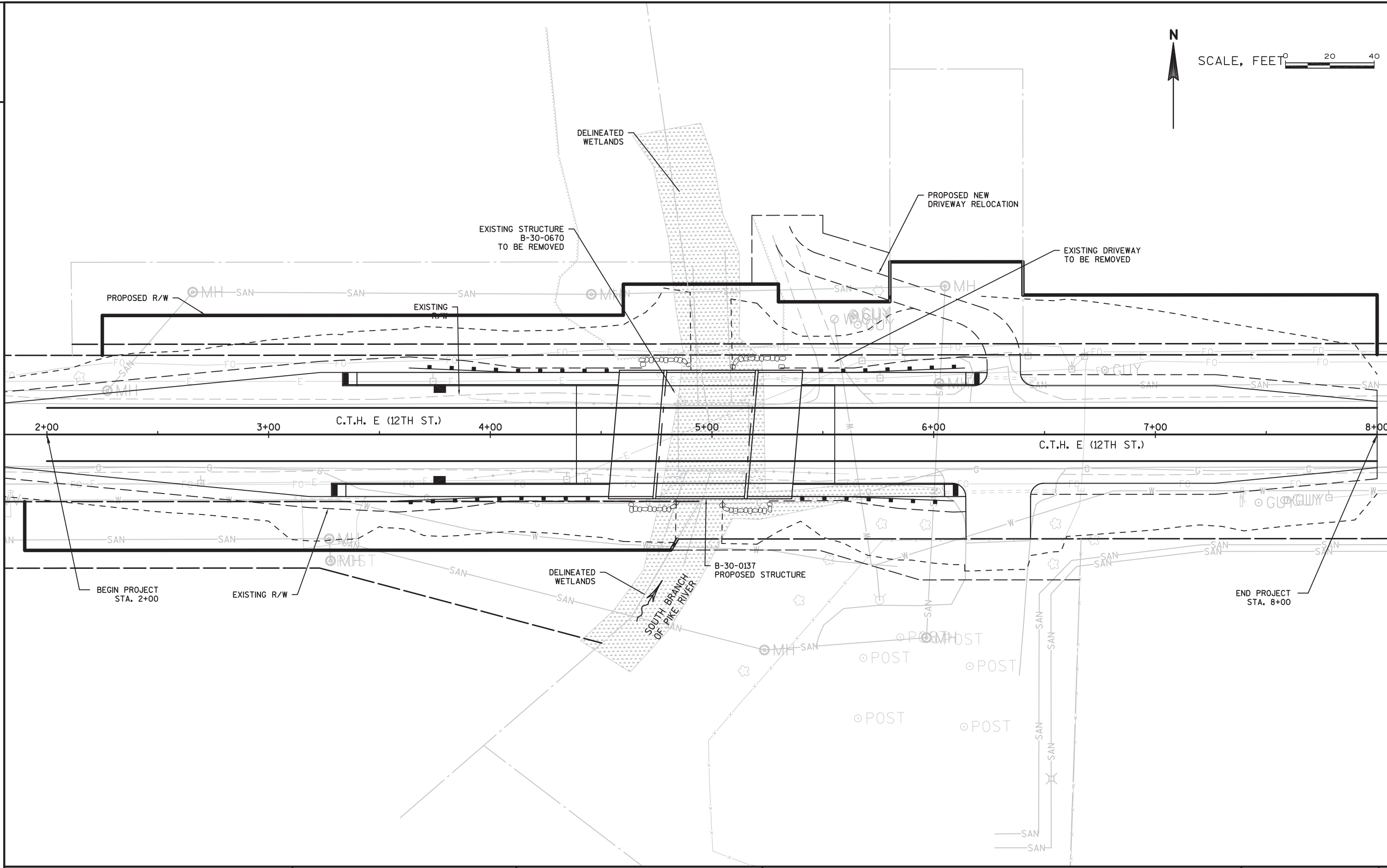
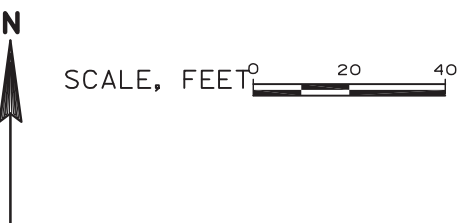
JSD PROFESSIONAL SERVICES, INC.
N22 W22931 NANCYS COURT, SUITE 3
WAUKESHA, WI 53186
ATTN: JUSTIN JOHNSON, P.E.
TELEPHONE: 262-513-0666
EMAIL: JUSTIN.JOHNSON@JSDINC.COM



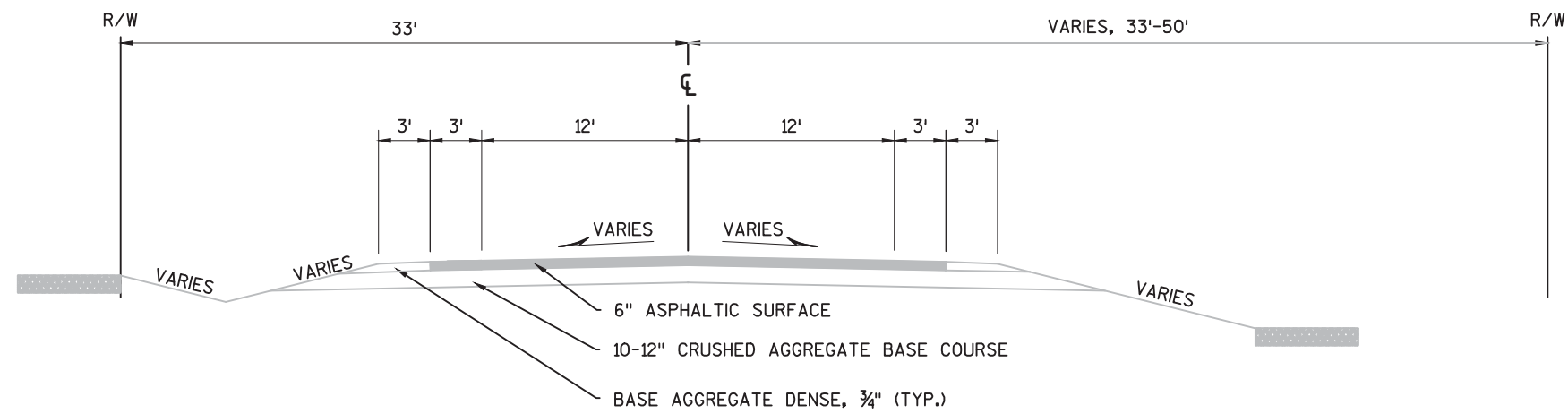
Dial 811 or (800)242-8511

www.DiggersHotline.com

** DENOTES UTILITIES NOT A MEMBER OF DIGGERS HOTLINE



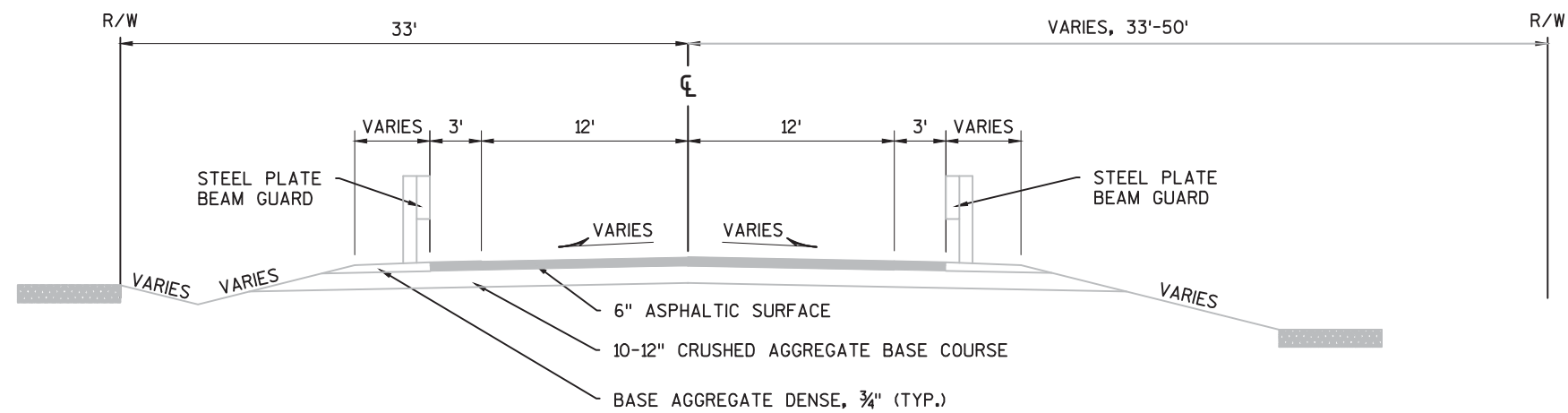
PROJECT NO:3766-00-70	HWY:CTH E	COUNTY:KENOSHA	PROJECT OVERVIEW	SHEET	E
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EXISTING TYPICAL SECTION

CTH E

STA. 2+00 - STA. 3+90
STA. 5+62 - STA. 8+00



EXISTING TYPICAL SECTION

CTH E

STA. 3+90 - STA. 5+62

2



CTH E

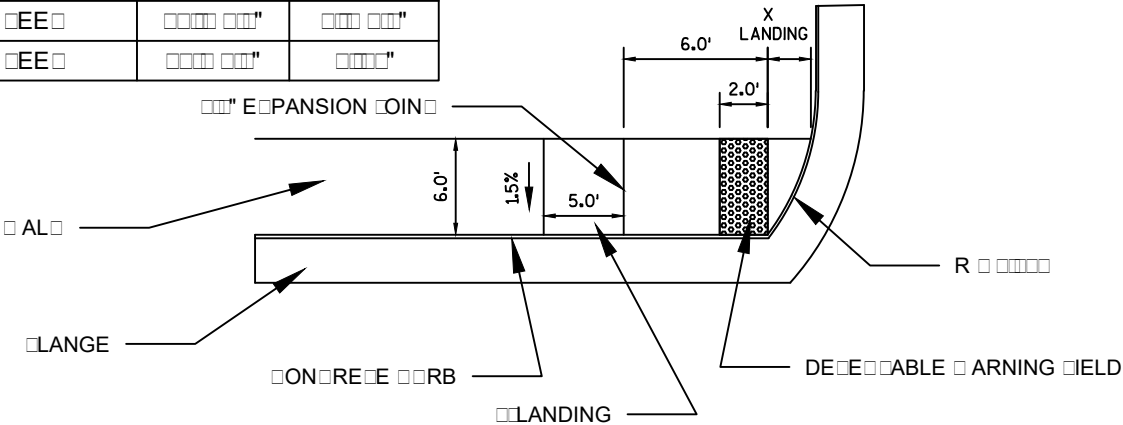
STA. 2+00 - STA. 3+33
STA. 6+55 - STA. 8+00



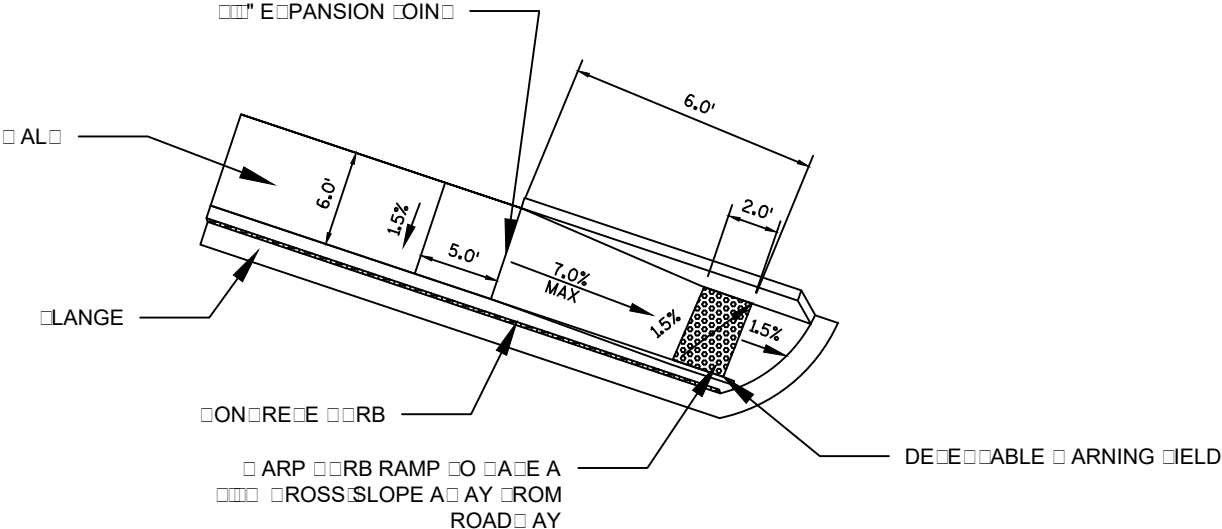
CTH E

STA. 3+33 - STA. 4+75
STA. 5+18 - STA. 6+55

RADIUS AT CURB		Y
10' BIKELANE	10' BIKELANE	10' BIKELANE
10' BIKELANE	10' BIKELANE	10' BIKELANE
10' BIKELANE	10' BIKELANE	10' BIKELANE
10' BIKELANE	10' BIKELANE	10' BIKELANE

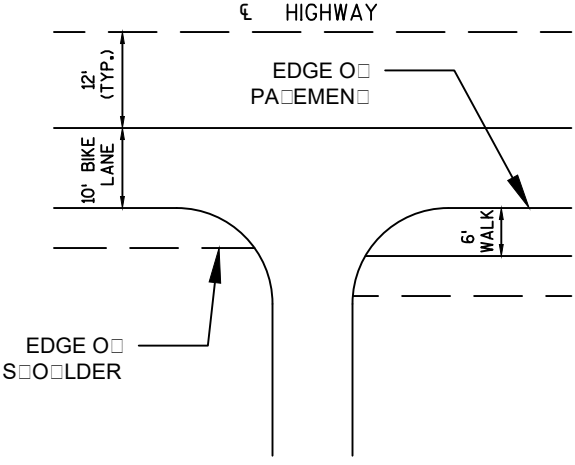


CURB RAMP 4A (MODIFIED) DETAIL
N.T.S.

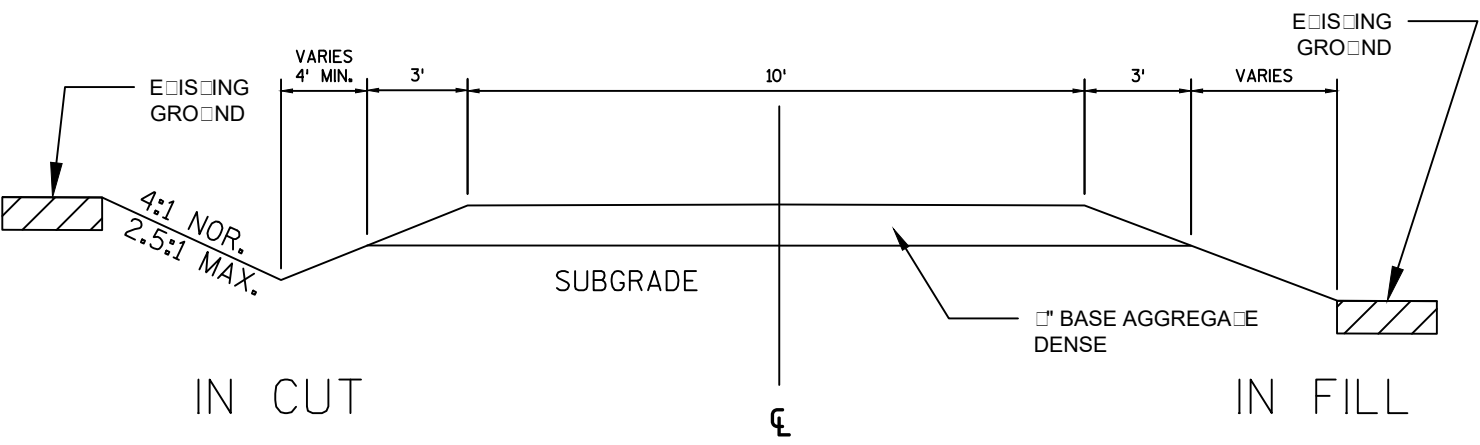


ISOMETRIC VIEW FOR
CURB RAMP 4A (MODIFIED) DETAIL
N.T.S.

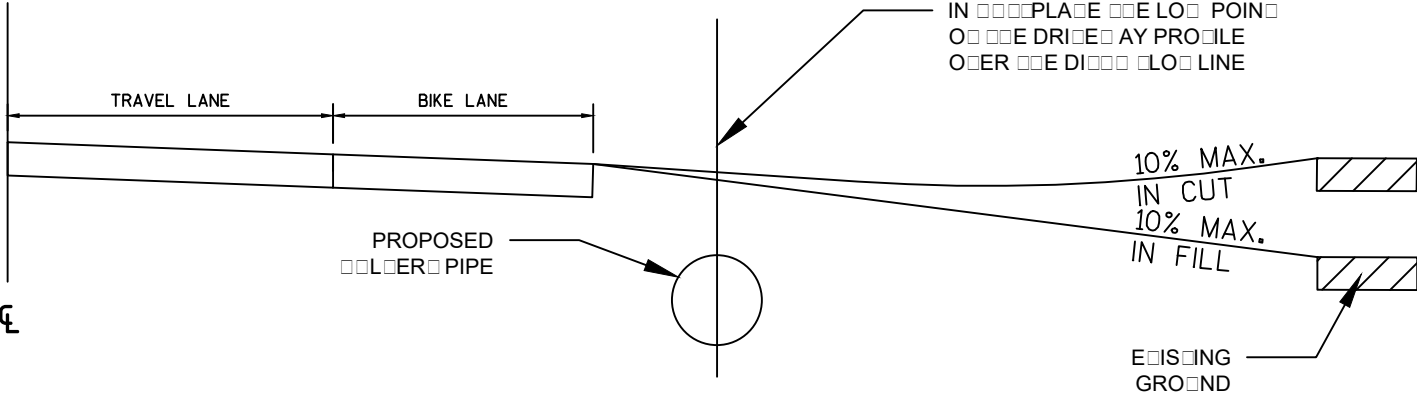
- GENERAL NOTES:
1. DUE TO SMALL RADIUS AT PRIVATE DRIVE, THE LANDING (X) WAS INTERPOLATED TO BE 2'-3/8". THE DISTANCE FROM P.C. (Y) IS SHOWN AT 5 FEET BEHIND THE EXPANSION JOINT.
 2. CURB RAMPS ARE LOCATED AT:
 - a. 3+30, 25.0' RT
 - b. 3+35, 25.0' LT
 - c. 6+10, 25.0' RT
 - d. 6+20, 25.0' LT
 3. ALL DETECTABLE WARNING FIELDS SHALL BE FROM SAME MANUFACTURER.



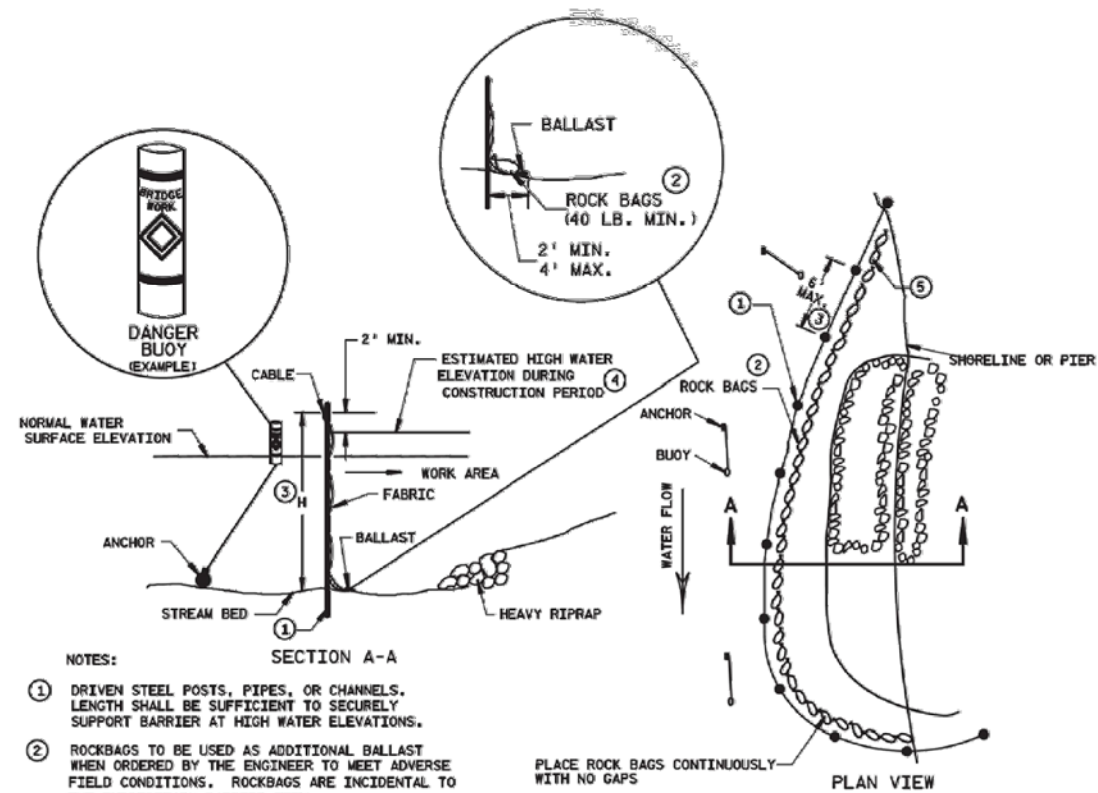
DRIVEWAY DETAIL (PLAN)
N.T.S.

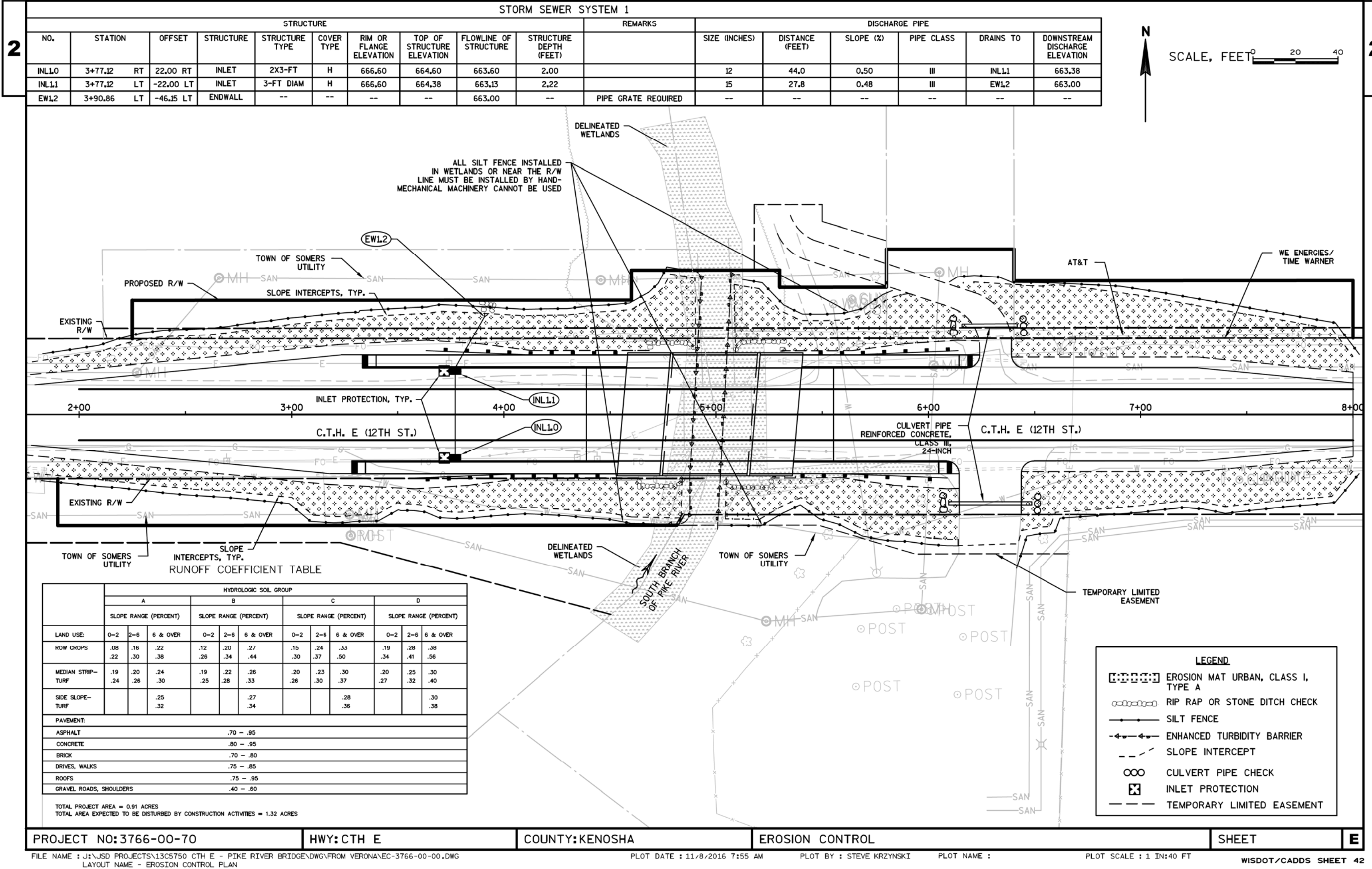


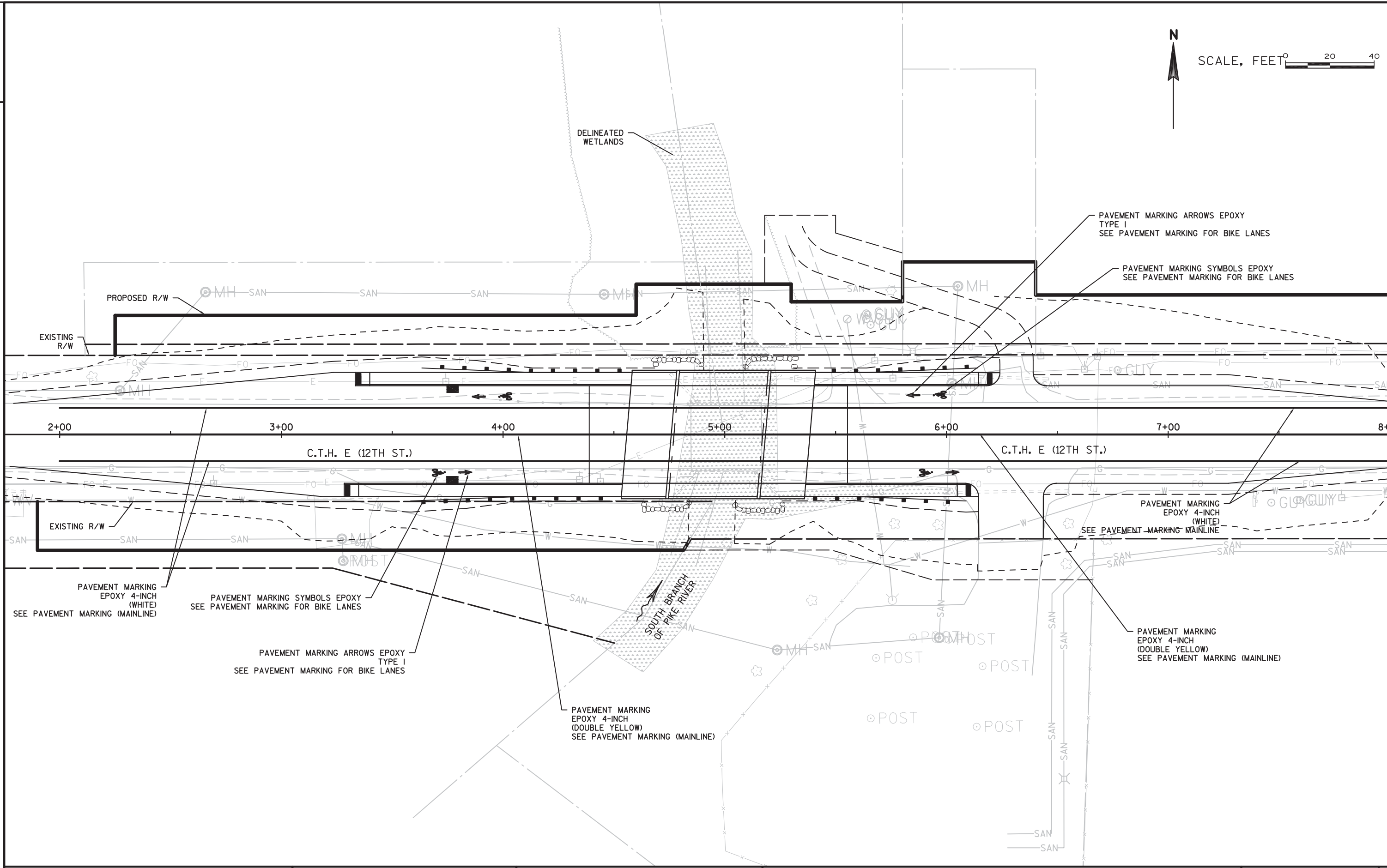
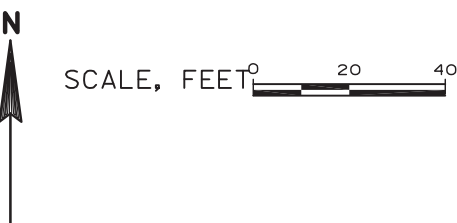
DRIVEWAY DETAIL (CROSS SECTION)
N.T.S.



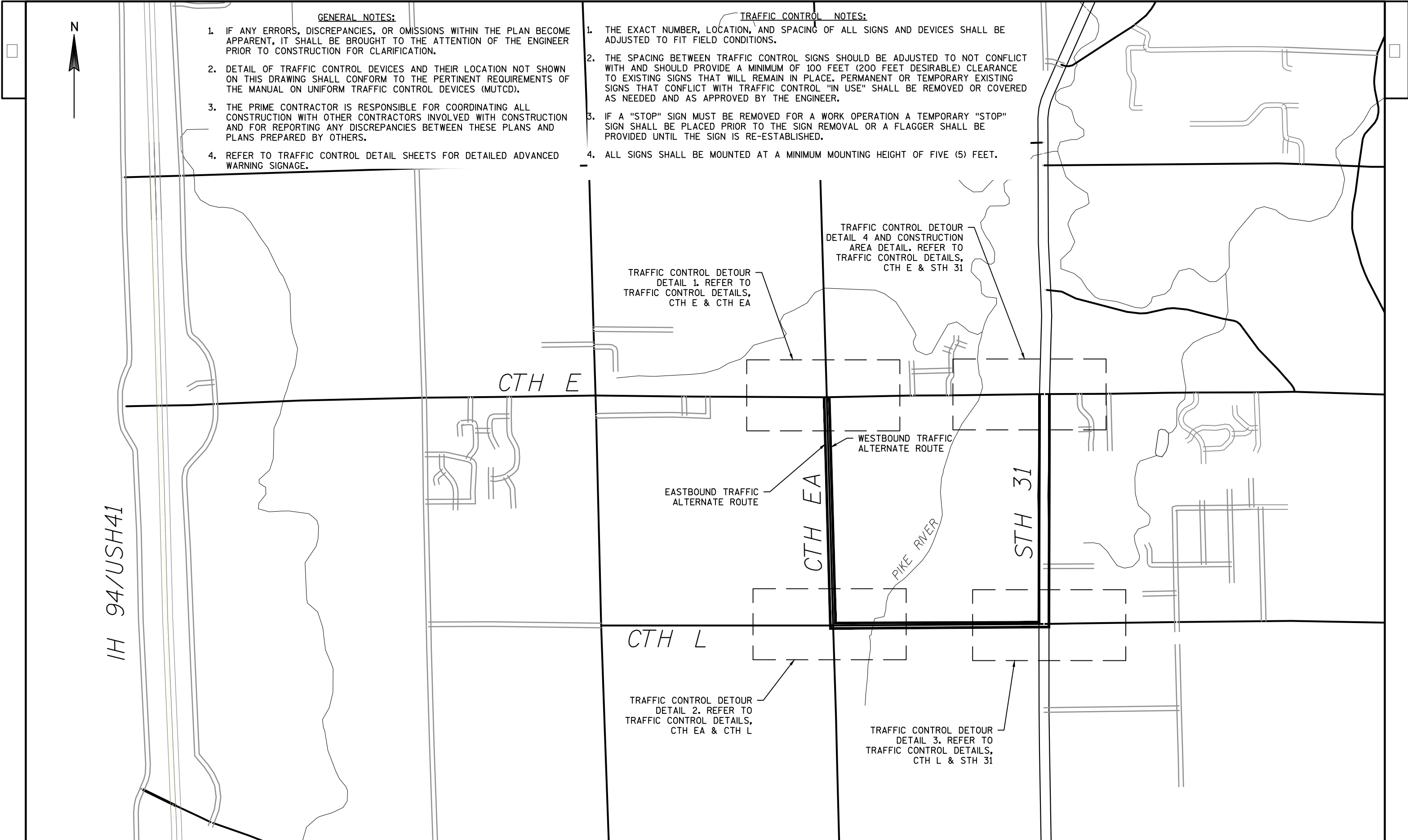
DRIVEWAY DETAIL (PROFILE)
N.T.S.

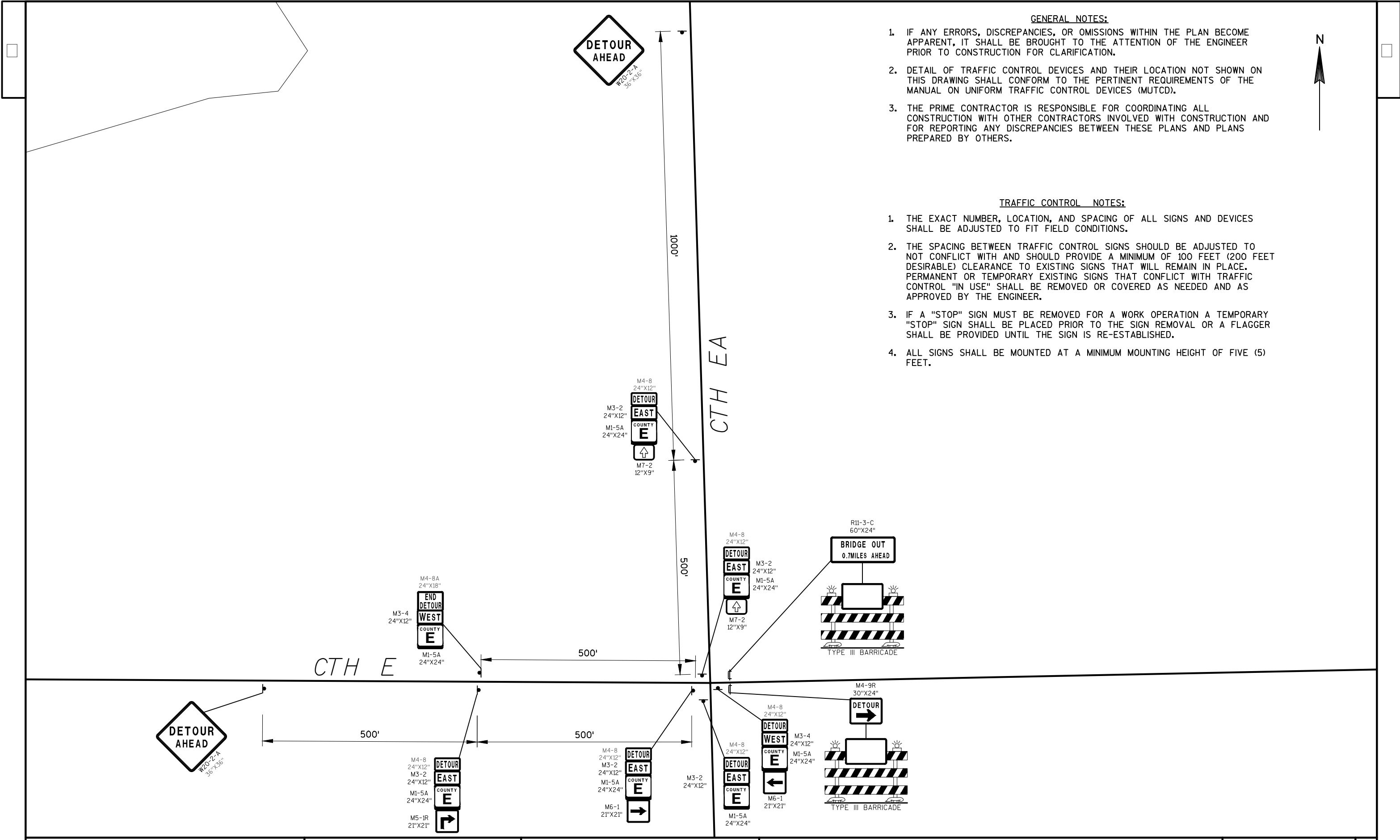






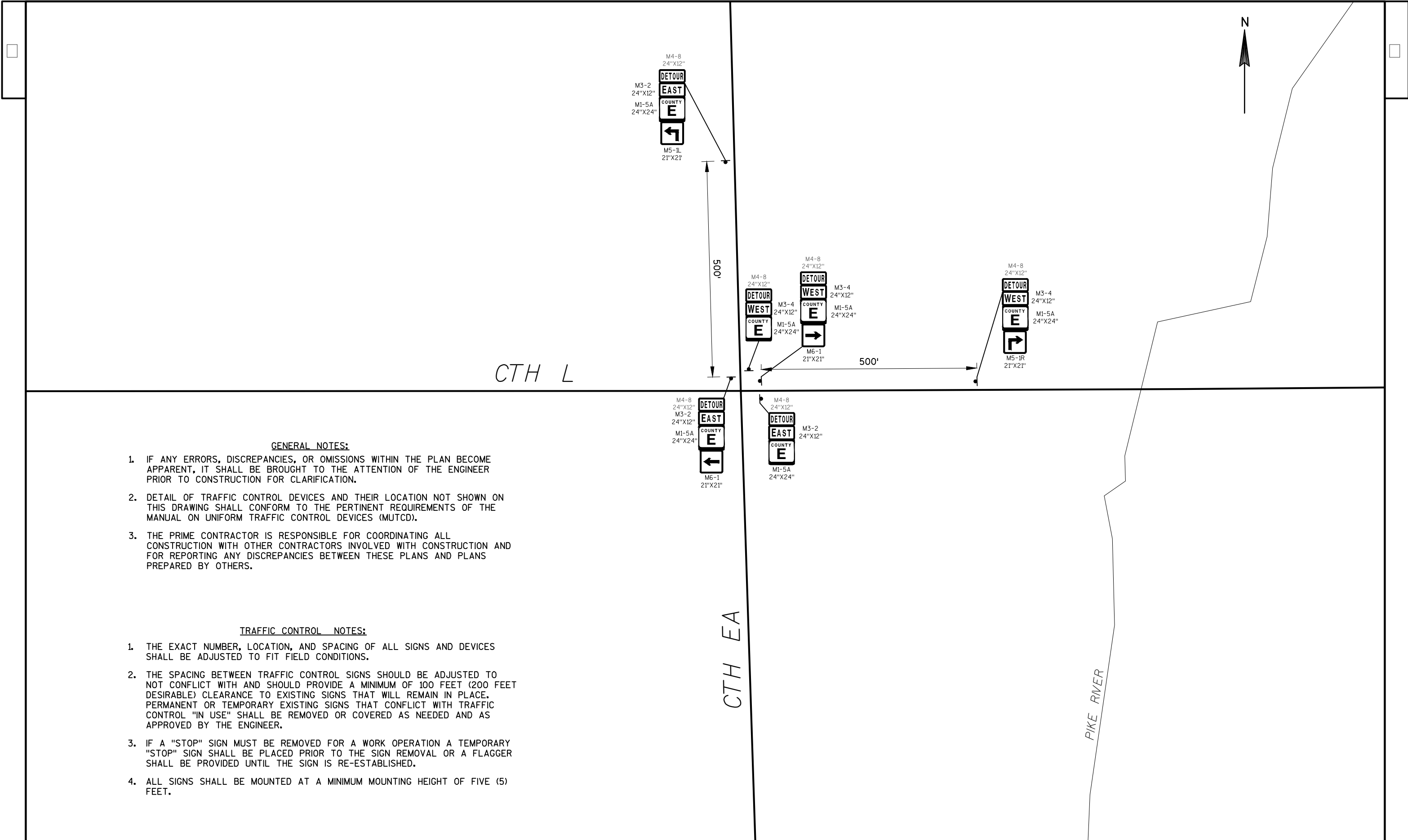
PROJECT NO:3766-00-70	HWY:CTH E	COUNTY:KENOSHA	PAVEMENT MARKING PLAN	SHEET	E
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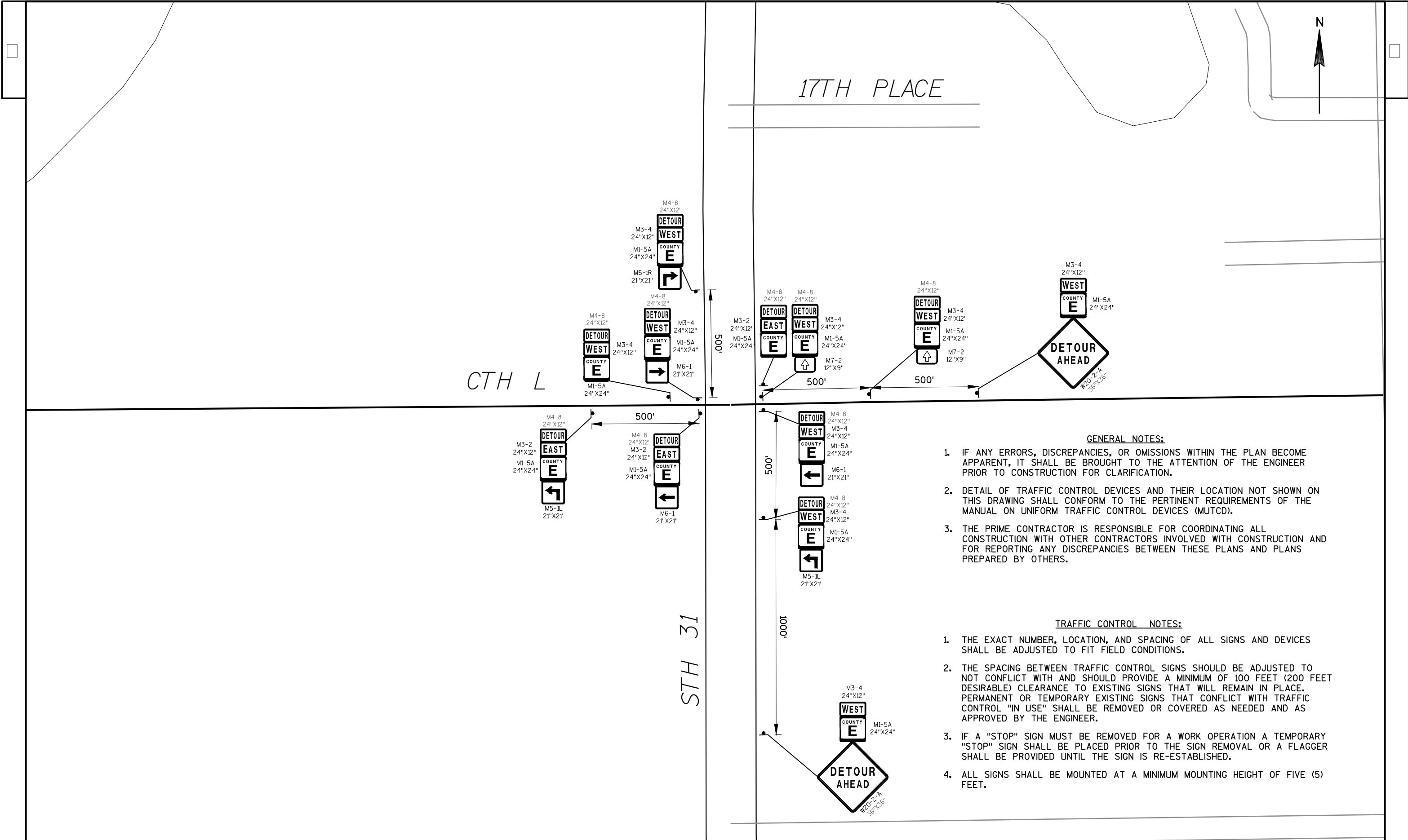




- GENERAL NOTES:**
1. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS WITHIN THE PLAN BECOME APPARENT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION FOR CLARIFICATION.
 2. DETAIL OF TRAFFIC CONTROL DEVICES AND THEIR LOCATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
 3. THE PRIME CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CONSTRUCTION WITH OTHER CONTRACTORS INVOLVED WITH CONSTRUCTION AND FOR REPORTING ANY DISCREPANCIES BETWEEN THESE PLANS AND PLANS PREPARED BY OTHERS.

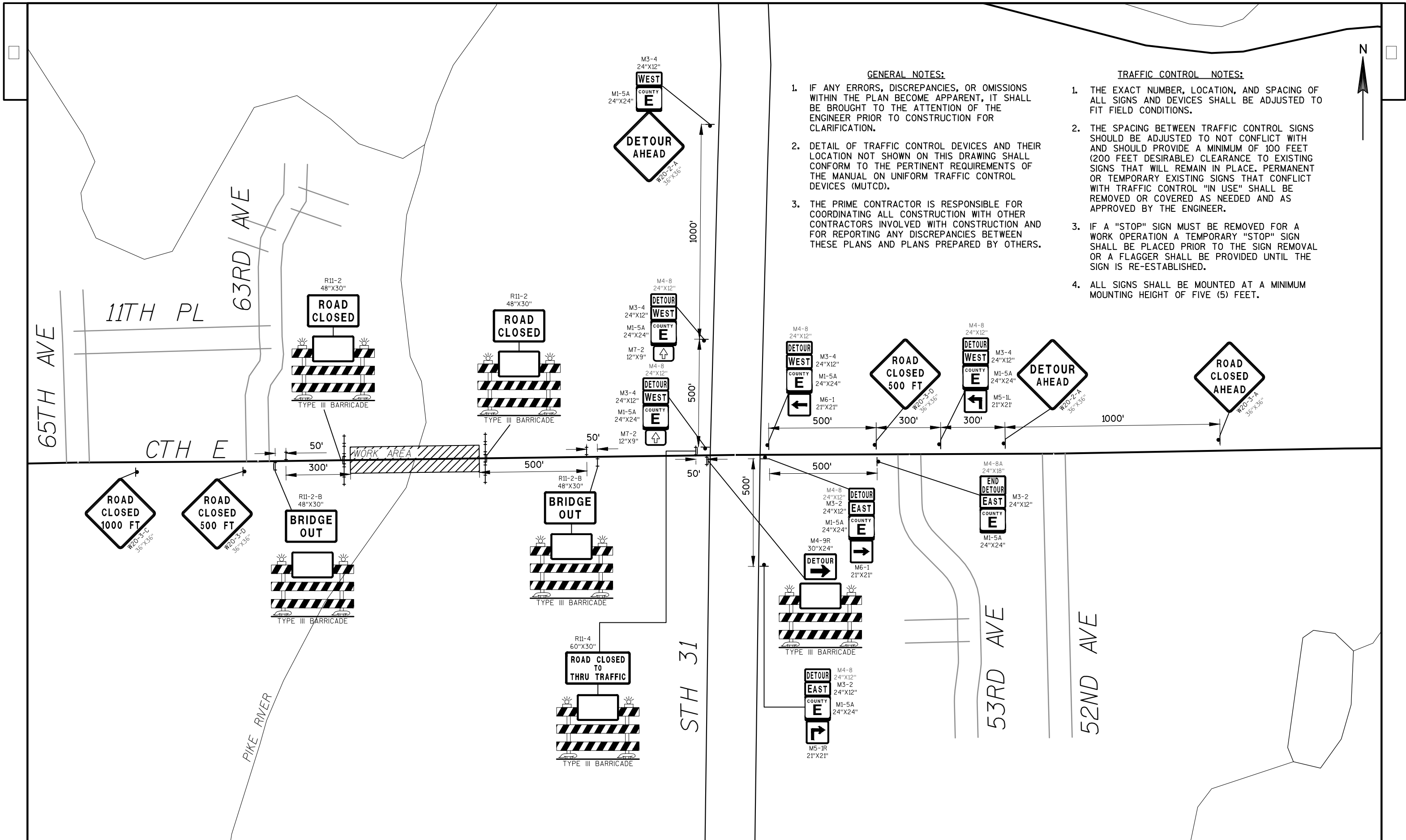
- TRAFFIC CONTROL NOTES:**
1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.
 2. THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 100 FEET (200 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE. PERMANENT OR TEMPORARY EXISTING SIGNS THAT CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.
 3. 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.
 4. ALL SIGNS SHALL BE MOUNTED AT A MINIMUM MOUNTING HEIGHT OF FIVE (5) FEET.





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TRAFFIC CONTROL NOTES:

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.
2. THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 100 FEET (200 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE. PERMANENT OR TEMPORARY EXISTING SIGNS THAT CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.
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4. ALL SIGNS SHALL BE MOUNTED AT A MINIMUM MOUNTING HEIGHT OF FIVE (5) FEET.

PROJECT NO: 3766-00-70

HWY: CTH E

COUNTY: KENOSHA

TRAFFIC CONTROL DETAILS, CTH E AND STH 31

SHEET

Estimate Of Quantities

3766-00-70

Line	Item	Item Description	Unit	Total	Qty
0010	201.0105	Clearing	STA	5.000	5.000
0020	201.0205	Grubbing	STA	5.000	5.000
0030	203.0100	Removing Small Pipe Culverts	EACH	2.000	2.000
0040	203.0210.S	Abatement of Asbestos Containing Material (structure) 01. B-30-0670	LS	1.000	1.000
0050	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 5+00	LS	1.000	1.000
0060	204.0165	Removing Guardrail	LF	276.000	276.000
0070	205.0100	Excavation Common	CY	2,442.000	2,442.000
0080	206.1000	Excavation for Structures Bridges (structure) 01. B-30-0137	LS	1.000	1.000
0090	210.2500	Backfill Structure Type B	TON	960.000	960.000
0100	213.0100	Finishing Roadway (project) 01. 3766-00-70	EACH	1.000	1.000
0110	305.0110	Base Aggregate Dense 3/4-Inch	TON	204.000	204.000
0120	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,870.000	2,870.000
0130	305.0130	Base Aggregate Dense 3-Inch	TON	105.000	105.000
0140	415.0125	Concrete Pavement 12 1/2-Inch	SY	325.000	325.000
0150	415.0410	Concrete Pavement Approach Slab	SY	166.000	166.000
0160	455.0605	Tack Coat	GAL	141.000	141.000
0170	460.2000	Incentive Density HMA Pavement	DOL	580.000	580.000
0180	460.5223	HMA Pavement 3 LT 58-28 S	TON	554.000	554.000
0190	460.5224	HMA Pavement 4 LT 58-28 S	TON	347.000	347.000
0200	502.0100	Concrete Masonry Bridges	CY	481.000	481.000
0210	502.3200	Protective Surface Treatment	SY	452.000	452.000
0220	502.3210	Pigmented Surface Sealer	SY	65.000	65.000
0230	505.0400	Bar Steel Reinforcement HS Structures	LB	7,820.000	7,820.000
0240	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	60,470.000	60,470.000
0250	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	490.000	490.000
0260	513.7016	Railing Steel Type C3 (structure) 01. B-30-0137	LF	160.000	160.000
0270	516.0500	Rubberized Membrane Waterproofing	SY	30.000	30.000
0280	520.1015	Apron Endwalls for Culvert Pipe 15-Inch	EACH	1.000	1.000
0290	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	4.000	4.000
0300	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	65.000	65.000
0310	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	1,040.000	1,040.000
0320	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	558.000	558.000
0330	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	40.000	40.000
0340	606.0300	Riprap Heavy	CY	195.000	195.000
0350	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	44.000	44.000
0360	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	28.000	28.000

Estimate Of Quantities

3766-00-70

Line	Item	Item Description	Unit	Total	Qty
0370	611.0624	Inlet Covers Type H	EACH	2.000	2.000
0380	611.1003	Catch Basins 3-FT Diameter	EACH	1.000	1.000
0390	611.1230	Catch Basins 2x3-FT	EACH	1.000	1.000
0400	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	220.000	220.000
0410	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	4.000	4.000
0420	614.0200	Steel Thrie Beam Structure Approach	LF	42.000	42.000
0430	614.0305	Steel Plate Beam Guard Class A	LF	25.000	25.000
0440	614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH	2.000	2.000
0450	614.2500	MGS Thrie Beam Transition	LF	79.000	79.000
0460	614.2610	MGS Guardrail Terminal EAT	EACH	2.000	2.000
0470	619.1000	Mobilization	EACH	1.000	1.000
0480	624.0100	Water	MGAL	3.000	3.000
0490	625.0100	Topsoil	SY	1,157.000	1,157.000
0500	625.0500	Salvaged Topsoil	SY	1,000.000	1,000.000
0510	627.0200	Mulching	SY	2,157.000	2,157.000
0520	628.1504	Silt Fence	LF	1,190.000	1,190.000
0530	628.1520	Silt Fence Maintenance	LF	1,190.000	1,190.000
0540	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0550	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	6.000
0560	628.2006	Erosion Mat Urban Class I Type A	SY	2,030.000	2,030.000
0570	628.6005	Turbidity Barriers	SY	380.000	380.000
0580	628.7005	Inlet Protection Type A	EACH	2.000	2.000
0590	628.7555	Culvert Pipe Checks	EACH	4.000	4.000
0600	628.7570	Rock Bags	EACH	90.000	90.000
0610	629.0210	Fertilizer Type B	CWT	3.000	3.000
0620	630.0120	Seeding Mixture No. 20	LB	60.000	60.000
0630	630.0200	Seeding Temporary	LB	60.000	60.000
0640	633.5200	Markers Culvert End	EACH	2.000	2.000
0650	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0660	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0670	638.2102	Moving Signs Type II	EACH	1.000	1.000
0680	638.2602	Removing Signs Type II	EACH	4.000	4.000
0690	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0700	642.5001	Field Office Type B	EACH	1.000	1.000
0710	643.0100	Traffic Control (project) 01. 3766-00-70	EACH	1.000	1.000
0720	643.0420	Traffic Control Barricades Type III	DAY	1,620.000	1,620.000
0730	643.0705	Traffic Control Warning Lights Type A	DAY	3,240.000	3,240.000
0740	643.0900	Traffic Control Signs	DAY	900.000	900.000
0750	643.2000	Traffic Control Detour (project) 01. 3766-00-70	EACH	1.000	1.000
0760	643.3000	Traffic Control Detour Signs	DAY	10,710.000	10,710.000

Estimate Of Quantities

3766-00-70

Line	Item	Item Description	Unit	Total	Qty
0770	645.0120	Geotextile Type HR	SY	360.000	360.000
0780	646.0106	Pavement Marking Epoxy 4-Inch	LF	2,400.000	2,400.000
0790	647.0206	Pavement Marking Arrows Bike Lane Epoxy	EACH	4.000	4.000
0800	647.0306	Pavement Marking Symbols Bike Lane Epoxy	EACH	4.000	4.000
0810	650.4000	Construction Staking Storm Sewer	EACH	44.000	44.000
0820	650.4500	Construction Staking Subgrade	LF	600.000	600.000
0830	650.5000	Construction Staking Base	LF	600.000	600.000
0840	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	558.000	558.000
0850	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0860	650.6500	Construction Staking Structure Layout (structure) 01. B-30--0137	LS	1.000	1.000
0870	650.9910	Construction Staking Supplemental Control (project) 01. 3766-00-70	LS	1.000	1.000
0880	650.9920	Construction Staking Slope Stakes	LF	600.000	600.000
0890	690.0150	Sawing Asphalt	LF	60.000	60.000
0900	715.0502	Incentive Strength Concrete Structures	DOL	2,890.000	2,890.000
0910	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0920	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	400.000	400.000

EARTHWORK SUMMARY														
Division	From / To Station	Location	Common Excavation (1)	(item # 205.0100)	Salvaged / Unusable Pavement Material (4)	Available Material (5)	Reduced EBS in Fill (9)	Expanded EBS Backfill (11)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate + / - (14)	Waste	Borrow	Comment:
			Cut (2)	EBS Excavation (3)			Factor	Factor		Factor				
							0.80	1.30		1.25			(item #208.0100)	
1	2+00 to 8+00	CTH E Mainline	1928	514	310	1618	411	668	952	676	941	978		
Division 1 Subtotal			1928	514	310	1618	411	668	952	676	941	978		
Grand Total			1928	514	310	1618	411	668	952	676	941	978	0	
			Total Common Exc	2442										
	1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100													
	2) Salvaged/Unusable Pavement Material is included in Cut.													
	3) EBS Excavation to be backfilled with granular material. Note: Backfill EBS with 1' of 1 1/4" granular material on top of 1' of 3" granular material													
	4) Salvaged/Unusable Pavement Material													
	5) Available Material = Cut - Salvaged/Unusable Pavement Material													
	9) Reduced EBS in Fill - Excavated EBS material is usable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8													
	11) Expanded EBS Backfill - This is to be filled with granular material. EBS Backfill Factor = 1.3. Item number 208.11													
	13) Expanded Fill. Factor = 1.25													
	Depending on selections:				Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor									
				Or	Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor									
				Or	Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor									
				Or	Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor									
	14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.													

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ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

CLEARING AND GRUBBING

STATION	TO	STATION	LOCATION	201.0105	201.0205
				CLEARING STA	GRUBBING STA
2+50	-	7+50	CTH E	5	5
TOTALS				5	5

EXCAVATION COMMON

STATION	TO	STATION	LOCATION	205.0100
				EXCAVATION COMMON CY
2+00	-	8+00	CTH E	2442
TOTALS				2442

BASE AGGREGATE DENSE

STATION	TO	STATION	LOCATION	305.0110	305.0120	305.0130
				3/4 INCH TON	1 1/4 INCH TON	3-INCH TON
2+00	-	8+00	CTH E	204	2870	105
TOTALS				204	2870	105

CONCRETE PAVEMENT

STATION	TO	STATION	LOCATION	415.0125 CONCRETE PAVEMENT 12 1/2-INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY
3+33	-	4+75	CTH E	325	166
TOTALS				325	166

REMOVING CULVERTS

STATION	TO	STATION	LOCATION	203.0100
				REMOVING SMALL PIPE CULVERTS EACH
2+00	-	8+00	CTH E	2
TOTALS				2

REMOVING GUARDRAIL

STATION	TO	STATION	LOCATION	204.0165
				REMOVING GUARDRAIL LF
3+90	-	4+87	WB CTH E	97
5+14	-	5+47	WB CTH E	33
3+89	-	4+87	EB CTH E	98
5+14	-	5+62	EB CTH E	48
TOTALS				276

CURB & GUTTER

STATION	TO	STATION	LOCATION	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D LF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF
3+33	-	4+75	CTH E	284	20
5+18	-	6+55	CTH E	274	20
TOTALS				558	40

HMA PAVEMENT ITEMS

STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	460.2000 INCENTIVE DENSITY HMA PAVEMENT DOL
2+00	-	8+00	CTH E	141	554	347	580
TOTALS				141	554	347	580

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STORM STRUCTURES										
STATION	OFFSET	LOCATION	520.1015 APRON ENDWALL	520.1024 APRON ENDWALL	522.0124 CULVERT PIPE	608.0312 STORM SEWER PIPE	608.0315 STORM SEWER PIPE REINFORCED CONCRETE	611.0624 INLET COVERS	611.1003 CATCH BASINS	611.1230 CATCH BASINS 2X3 FT
			FOR CULVERT PIPE - 15 INCH EACH	FOR CULVERT PIPE - 24 INCH EACH	REINFORCED CONCRETE CLASS III 24-INCH LF	REINFORCED CONCRETE CLASS III-12-INCH LF	CLASS III-15- INCH LF	TYPE H EACH	3-FT DIAMETER EACH	EACH
3+77	22.0' RT	CTH E	--	--	--	44	28	1	--	1
3+77	22.0' LT	CTH E	--	--	--	--	--	1	1	--
3+91	46.2' LT	CTH E	1	--	--	--	--	--	--	--
6+29	42.8' LT	CTH E	--	2	26	--	--	--	--	--
6+29	41.1' RT	CTH E	--	2	39	--	--	--	--	--
TOTALS			1	4	65	44	28	2	1	1

EROSION CONTROL									
LOCATION	628.1504	628.1520	628.1905	628.1910	628.2006	628.6005	628.7005	628.7555	628.7570
	SILT FENCE	SILT FENCE	MOBILIZATIONS	MOBILIZATIONS	EROSION MAT	TURBIDITY	INLET	CULVERT PIPE	ROCK BAGS
		MAINTENANCE	EROSION CONTROL	EMERGENCY EROSION CONTROL	URBAN, CLASS I, TYPE A	BARRIERS	PROTECTION TYPE A	CHECKS	
	LF	LF	EACH	EACH	SY	SY	EACH	EACH	EACH
CTH E	1190	1190	6	6	2030	380	2	4	90
TOTALS	1190	1190	6	6	2030	380	2	4	90

GUARD RAIL STRUCTURES								
STATION	TO	STATION	LOCATION	614.0200 STEEL THRIE BEAM STRUCTURE APPROACH LF	614.0305 STEEL PLATE BEAM GUARD CLASS A LF	614.0370 STEEL PLATE BEAM GUARD EAT EACH	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
3+63	-	6+14	CTH E	42	25	2	79	2
TOTALS				42	25	2	79	2

TOPSOIL, MULCHING, FERTILIZER AND SEED

STATION	TO	STATION	LOCATION	624.0100 WATER	625.0100 TOPSOIL	625.0500 SALVAGED TOPSOIL	627.0200 MULCHING	629.0210 FERTILIZER TYPE B	630.0120 SEEDING MIXTURE NO 20	630.0200 SEEDING TEMPORARY
				MGAL	SY	SY	SY	CWT	LB	LB
2+00	-	8+00	LT	3	1157	1000	2157	3	60	60
TOTALS				3	1157	1000	2157	3	60	60

SIGNING

STATION	TO	STATION	LOCATION	634.0612 POSTS WOOD 4X6-INCH X 12 FT EACH	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.2102 MOVING SIGNS TYPE II EACH	633.5200 MARKERS CULVERT END EACH
2+00	-	8+00	CTH E	4	12	4	4	1	2
TOTAL				4	12	4	4	1	2

PAVEMENT MARKING

STATION	TO	STATION	LOCATION	646.0106 EPOXY 4-INCH YELLOW LF	646.0106 EPOXY 4-INCH WHITE LF	647.0206 PAVEMENT MARKING ARROWS BIKE LANE EPOXY EACH	647.0306 PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY EACH
2+00	-	8+00	CTH E	1200	1200	4	4
SUBTOTAL				1200	1200		
TOTAL					2400	4	4

SAWING PAVEMENT

STATION	LOC.	690.0150 SAWING ASPHALT LF
2+00	CTH E	30
8+00	CTH E	30
TOTAL		60

TRAFFIC CONTROL SUMMARY

LOCATION	643.0100	643.0420	643.0705	643.0900	643.2000	643.3000
	TRAFFIC CONTROL	BARRICADES	WARNING LIGHTS	TRAFFIC CONTROL	TRAFFIC CONTROL	DETOUR
	(PROJECT)	TYPE III	TYPE A	SIGNS	DETOUR	SIGNS
	EACH	DAYS	DAYS	DAYS	EACH	DAYS
CTH E PROJECT	1	1620	3240	900	1	10710
TOTAL	1	1620	3240	900	1	10710

CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.4000	650.4500	650.5000	650.5500	650.6000	650.9910	650.9920
				STORM SEWER	SUBGRADE	BASE	CURB & GUTTER	PIPE CULVERTS	SUPPLEMENTAL	SLOPE
				LF	LF	LF	LF	EACH	LS	STAKES
2+00	-	8+00	CTH E	44	600	600	558	3	1	600
TOTALS				44	600	600	558	3	1	600

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 90 DAYS	643.3000 DETOUR SIGNS DAYS
1	1000' WEST OF CTH E-CTH EA INT.(EB)	W 20-2A	36"x36"	1	90	90
2	500' WEST OF CTH E-CTH EA INT. (EB)	M4-8	24"x12"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M5-1R	21"x15"	1	90	90
3	CTH E-CTH EA INT. (SW QUAD) (EB)	M4-8	24"x12"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-1R	21"x15"	1	90	90
4	1500' NORTH OF CTH E-CTH EA INT.(SB)	W 20-2A	36"x36"	1	90	90
5	500' NORTH OF CTHE-CTH EA INT. (SB)	M4-8	24"x12"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-3	21"x15"	1	90	90
6	CTH E-CTH EA INT. (NW QUAD) (SB)	M4-8	24"x12"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-3	21"x15"	1	90	90
7	CTH E-CTH EA INT. (NE QUAD) TYPE III BARRICADE (EB)	R11-3C	48"x30"	1	90	90
8	CTH E-CTH EA INT. (SE QUAD) TYPE III BARRICADE (EB)	M4-9R	30"x24"	1	90	90
9	CTH E-CTH EA INT. (SW QUAD) (SB)	M4-8	24"x12"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
10	CTH E-CTH EA INT. (SE QUAD) (NB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-1L	21"x15"	1	90	90
11	500' NORTH OF CTH L-CTH EA INT. (SB)	M4-8	24"x12"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M5-1L	21"x15"	1	90	90
12	CTH L-CTH EA INT. (NW QUAD) (SB)	M4-8	24"x12"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-1L	21"x15"	1	90	90
13	CTH L-CTH EA INT. (SE QUAD) (EB)	M4-8	24"x12"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90

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TRAFFIC CONTROL DETOUR SIGN SUMMARY

14	500' EAST OF CTH L-CTH EA INT. (WB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M5-1R	21"x15"	1	90	90
15	CTH L-CTH EA INT. (NE QUAD) (WB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-1R	21"x15"	1	90	90
16	CTH L-CTH EA INT. (NE QUAD) (NB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
17	500' WEST OF CTH L-STH 31 INT. (EB)	M4-8	24"x12"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M5-1L	21"x15"	1	90	90
18	CTH L-STH 31 INT. (SW QUAD) (EB)	M4-8	24"x12"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-1L	21"x15"	1	90	90
19	CTH L-STH 31 INT. (NE QUAD) (NB)	M4-8	24"x12"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
20	1500' SOUTH OF CTH L-STH 31 INT. (NB)	W 20-2A	36"x36"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
21	500' SOUTH OF CTH L-STH 31 INT. (NB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M5-1L	21"x15"	1	90	90
22	CTH L-STH 31 INT. (SE QUAD) (NB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-1L	21"x15"	1	90	90
23	1000' EAST OF CTH L-STH 31 INT. (WB)	W 20-2A	36"x36"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
24	500' EAST OF CTH L-STH 31 INT. (WB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-3	21"x15"	1	90	90
25	CTH L-STH 31 INT. (NE QUAD) (WB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-3	21"x15"	1	90	90

PROJECT NO:3766-00-70

HWY:CTH E

COUNTY:KENOSHA

MISCELLANEOUS QUANTITIES

SHEET

E

TRAFFIC CONTROL DETOUR SIGN SUMMARY

26	500' NORTH OF CTH L-STH 31 INT. (SB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M5-1R	21"x15"	1	90	90
27	CTH L-STH 31 INT. (NW QUAD) (SB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-1R	21"x15"	1	90	90
28	CTH L-STH 31 INT. (NW QUAD) (WB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
29	500' SOUTH OF CTH E-STH 31 INT. (NB)	M4-8	24"x12"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M5-1R	21"x15"	1	90	90
30	CTH E-STH 31 INT. (SE QUAD) (NB)	M4-8	24"x12"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-1R	21"x15"	1	90	90
31	2100' EAST OF CTH E-STH 31 INT. (WB)	W20-3A	36"x36"	1	90	90
32	1100' EAST OF CTH E-STH 31 INT. (WB)	W20-2A	36"x36"	1	90	90
33	800' EAST OF CTH E-STH 31 INT. (WB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M5-1L	21"x15"	1	90	90
34	500' EAST OF CTH E-STH 31 INT. (WB)	W20-3D	36"x36"	1	90	90
35	CTH E-STH 31 INT.(NE QUAD) (WB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-1L	21"x15"	1	90	90
36	1000' NORTH OF CTH E-STH 31 INT. (SB)	W20-2A	36"x36"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
37	500' NORTH OF CTH E-STH 31 INT. (SB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-3	21"x15"	1	90	90
38	STH E-STH 31 INT. (NW QUAD) (SB)	M4-8	24"x12"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
	"	M6-3	21"x15"	1	90	90
39	1000' WEST OF WORK AREA ON CTH E (EB)	W20-3C	36"x36"	1	90	90
40	500' WEST OF WORK AREA ON CTH E (EB)	W20-3D	36"x36"	1	90	90

TRAFFIC CONTROL DETOUR SIGN SUMMARY

41	350' WEST OF WORK AREA ON CTH E (EB) TYPE III BARRICADE	R11-2B	48"x30"	1	90	90
42	300' WEST OF WORK AREA ON CTH E (EB) TYPE III BARRICADE	R11-2B	48"x30"	1	90	90
43	WEST OF WORK AREA ON CTH E (EB) TYPE III BARRICADE	R11-2	48"x30"	5	90	450
44	EAST OF WORK AREA ON CTH E (WB) TYPE III BARRICADE	R11-2	48"x30"	5	90	450
45	500' EAST OF WORK AREA ON CTH E (WB) TYPE III BARRICADE	R11-2B	48"x30"	1	90	90
46	550' EAST OF WORK ARA ON CTH E (WB) TYPE III BARRICADE	R11-2B	48"x30"	1	90	90
47	50' WEST OF CTH E-STH 31 INT. (WB) TYPE III BARRICADE	R11-4	48"x30"	1	90	90
48	CTH E-STH 31 INT. (SW QUAD) (WB) TYPE III BARRICADE	R4-9R	30"x24"	1	90	90
49	500' WEST OF CTH E-CTH EA INT. (WB)	M4-8A	24"x18"	1	90	90
	"	M3-4	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90
50	500' EAST OF CTH E-STH 31 INT. (EB)	M4-8A	24"x18"	1	90	90
	"	M3-2	24"x12"	1	90	90
	"	M1-6	24"x24"	1	90	90

TRANSPORTATION PROJECT PLAT NO: 3766-00-00 - 4.01

PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 2 NORTH, RANGE 22 EAST, AND PART OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 15, TOWNSHIP 2 NORTH, RANGE 22 EAST, TOWN OF SOMERS, KENOSHA COUNTY, WISCONSIN.

COUNTY TRUNK HIGHWAY "E" - SOUTH BRANCH OF PIKE CREEK BRIDGE RECONSTRUCTION

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER CHAPTERS 83.07 AND 83.08, WISCONSIN STATUTES, KENOSHA COUNTY HEREBY ORDERS THAT:

- THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAY OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SHOWN FOR THE ABOVE PROJECT.
- THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE COUNTY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF KENOSHA COUNTY, PURSUANT TO THE PROVISIONS OF CHAPTERS 83.07 AND 83.08, WISCONSIN STATUTES.

COURSE	BEARING	DISTANCE
100-101	N00°53'12"E	18.00'
101-102	S89°08'42"E	235.00'
102-103	N00°53'12"E	14.00'
103-104	S89°08'42"E	69.96'
104-105	S00°53'12"W	8.00'
105-106	S89°08'42"W	50.28'
106-107	N00°51'18"E	18.00'
107-108	S89°08'42"E	60.00'
108-109	S00°51'18"W	15.00'
109-110	S89°08'42"E	159.76'
110-111	S00°53'12"W	27.00'

COURSE	BEARING	DISTANCE
112-113	S31°31'06"W	25.57'
113-114	N89°08'42"E	291.46'
114-115	N00°53'12"E	22.00'

R/W POINT STATION & OFFSET TABLE	R/W POINT STATION & OFFSET TABLE
POINT# STATION OFFSET	POINT# STATION OFFSET
115 1+90.00 30.32'	104 5+29.96 67.88'
114 1+90.00 52.31'	105 5+29.96 59.88'
100 2+25.00 35.71'	106 5+80.24 59.90'
101 2+25.00 53.71'	107 5+80.23 77.90'
102 4+60.00 53.84'	108 6+40.23 77.94'
103 4+60.00 67.84'	109 6+40.24 62.94'
113 4+81.46 52.15'	110 8+00.00 63.03'
112 4+94.48 30.15'	111 8+00.00 36.02'

R/W POINT STATION & OFFSET TABLE	R/W POINT STATION & OFFSET TABLE
POINT# STATION OFFSET	POINT# STATION OFFSET
115 1+90.00 30.32'	104 5+29.96 67.88'
114 1+90.00 52.31'	105 5+29.96 59.88'
100 2+25.00 35.71'	106 5+80.24 59.90'
101 2+25.00 53.71'	107 5+80.23 77.90'
102 4+60.00 53.84'	108 6+40.23 77.94'
103 4+60.00 67.84'	109 6+40.24 62.94'
113 4+81.46 52.15'	110 8+00.00 63.03'
112 4+94.48 30.15'	111 8+00.00 36.02'

TLE POINT STATION & OFFSET TABLE	TLE POINT STATION & OFFSET TABLE
POINT# STATION OFFSET	POINT# STATION OFFSET
TLE200 5+18.00 67.87'	TLE206 6+66.49 47.05'
TLE201 5+18.00 98.87'	TLE207 6+65.88 65.58'
TLE202 5+50.00 98.89'	TLE208 5+93.74 65.62'
TLE203 5+50.00 90.89'	TLE209 5+48.08 52.11'
TLE204 5+80.23 81.90'	

TLE POINT STATION & OFFSET TABLE	TLE POINT STATION & OFFSET TABLE
POINT# STATION OFFSET	POINT# STATION OFFSET
TLE200 5+18.00 67.87'	TLE206 6+66.49 47.05'
TLE201 5+18.00 98.87'	TLE207 6+65.88 65.58'
TLE202 5+50.00 98.89'	TLE208 5+93.74 65.62'
TLE203 5+50.00 90.89'	TLE209 5+48.08 52.11'
TLE204 5+80.23 81.90'	

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED	TLE ACRES
1	TOWN OF SOMERS UTILITY DISTRICT #1	FEE	0.120	0.000
2	THE SANDRA M. HALMO REVOCABLE TRUST	FEE/TLE	0.056	0.063
3	TOWN OF SOMERS UTILITY DISTRICT #1	FEE	0.058	0.000
4	FAB FIVE FARMERS LLC.	FEE	0.099	0.121
5	IVER C. IVERSON AND DEETTA F. IVERSON HUSBAND AND WIFE	FEE	0.151	0.000
6	TOWN OF SOMERS	TLE	--	--
7	TOWN OF SOMERS	TLE	--	0.051

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED.

UTILITY SCHEDULE & INTERESTS REQUIRED

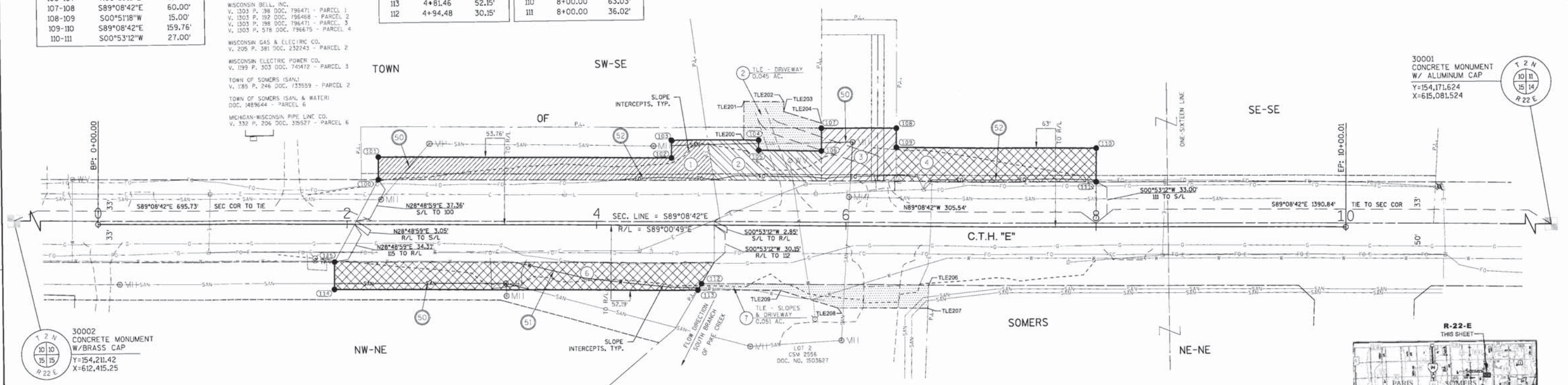
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
50	TOWN OF SOMERS (SANITARY)	RELEASE OF RIGHTS
51	TOWN OF SOMERS (WATER)	RELEASE OF RIGHTS
52	AT&T	RELEASE OF RIGHTS

Map # 20139

DOCUMENT
1765936

RECORDED
At Kenosha County, Kenosha WI 53140
JoEllen E. Storz, Register of Deeds
February 11, 2015 10:42 AM
255.88
Page 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3766-00-00-4.01
AMENDMENT NO:...



CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
ALUMINUM	ALUM	PROPERTY LINE	PL
AND OTHERS	ET AL	RECORDED AS	(100')
BACK	BK	REFERENCE LINE	REM
BLOCK	BLK	REMAINING	RT
CENTERLINE	C/L	RIGHT OF WAY	R/W
CERTIFIED SURVEY MAP	CSM	SECTION	SECV
CONCRETE	CO	SEPTIC VENT	SV
COUNTY	CO	STATE TRUNK HIGHWAY	STH
COUNTY TRUNK HIGHWAY	CTH	SQUARE FEET	SF
DISTANCE	DIS	STATION	STA
CORNER	COR	SUBDIVISION	SUBO
DOCUMENT NUMBER	DOC	TANGENT	TAN
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
CAS VALVE	CV	TRANSPORTATION PROJECT	TPP
GRID NORTH	GN	PLAT	PLAT
HIGHWAY EASEMENT	HE	UNITED STATES HIGHWAY	USH
IDENTIFICATION	ID	VOLUME	V
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLET	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	PGB		
POINT OF CURVATURE	PC		

CONVENTIONAL SYMBOLS

SECTION LINE	SECTION CORNER	R/W MONUMENT	NON-MONUMENTED
QUARTER LINE	NOTATION FOR COMBUSTIBLE FLUIDS	FOUND IRON PIN	R/W POINT
SIXTEENTH LINE	NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES	VALVE (GAS, WATER, ETC.)	IP
NEW REFERENCE LINE	ELECTRIC POLE	SIGN	OFF-PREMISE SIGN
NEW R/W LINE	TELEPHONE POLE	COMPENSABLE	NON-COMPENSABLE
EXISTING R/W LINE	PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		
PROPERTY LINE			
LOT, TIE & OTHER MINOR LINES			
CORPORATE LIMITS			
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)			
FEE ACQUISITION AREA (BATCHING VARIES BY OWNER)			
TEMPORARY LIMITED EASEMENT AREA			
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)			
TRANSMISSION STRUCTURES			
BUILDING			
NATIONAL GEODETIC SURVEY MONUMENT			
SIXTEENTH CORNER MONUMENT			

CURVE DATA

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

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, KENOSHA COUNTY, NAD 83(1993) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

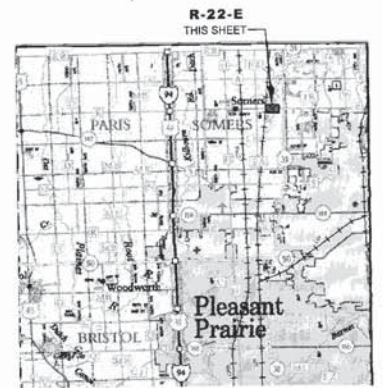
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPANCY LINES. EXCLUDING RIGHT-OF-WAY LINES, THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND, SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION REGIONAL OFFICE IN MADISON.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING CENTERLINE OF PAVEMENT AND CSM# 2556.

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

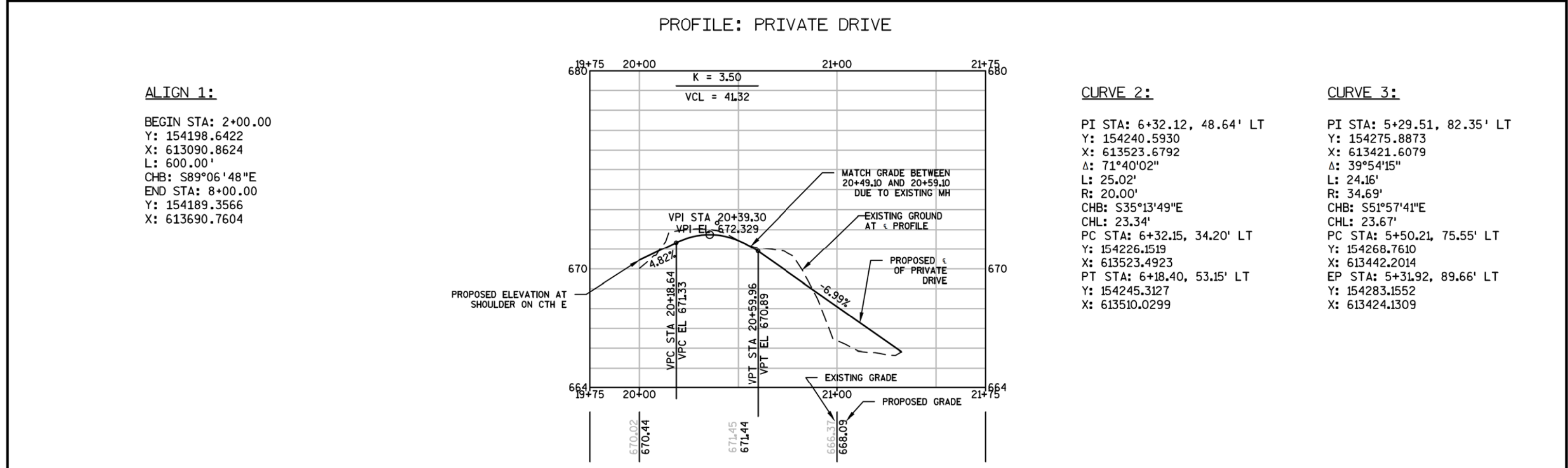
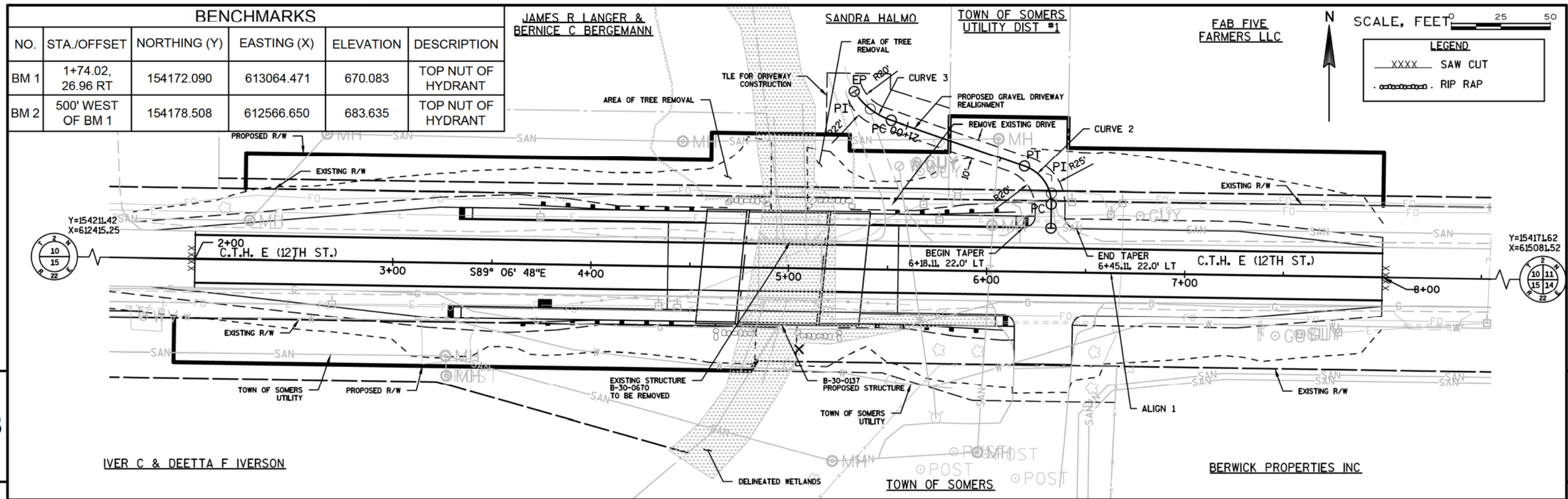


VICINITY MAP
NOT TO SCALE

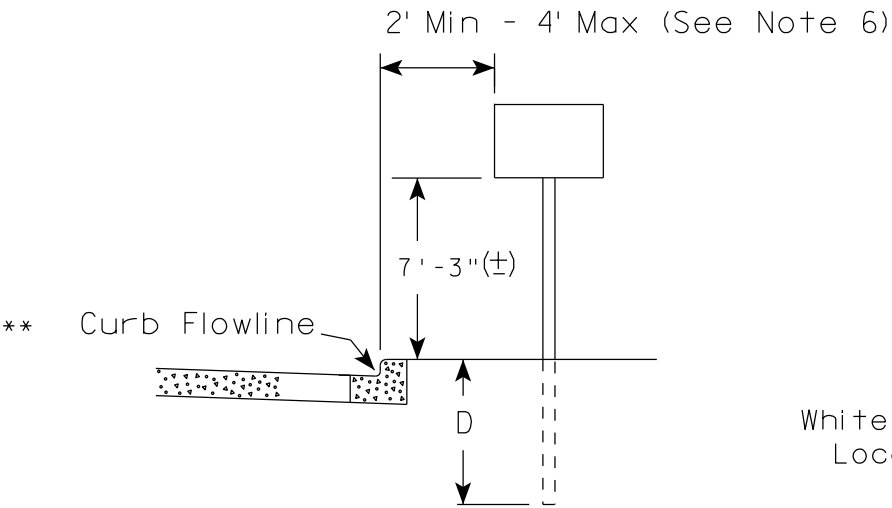
JSD Professional Services, Inc.
• Engineers • Surveyors • Planners

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE COUNTY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 3766-00-00 - 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

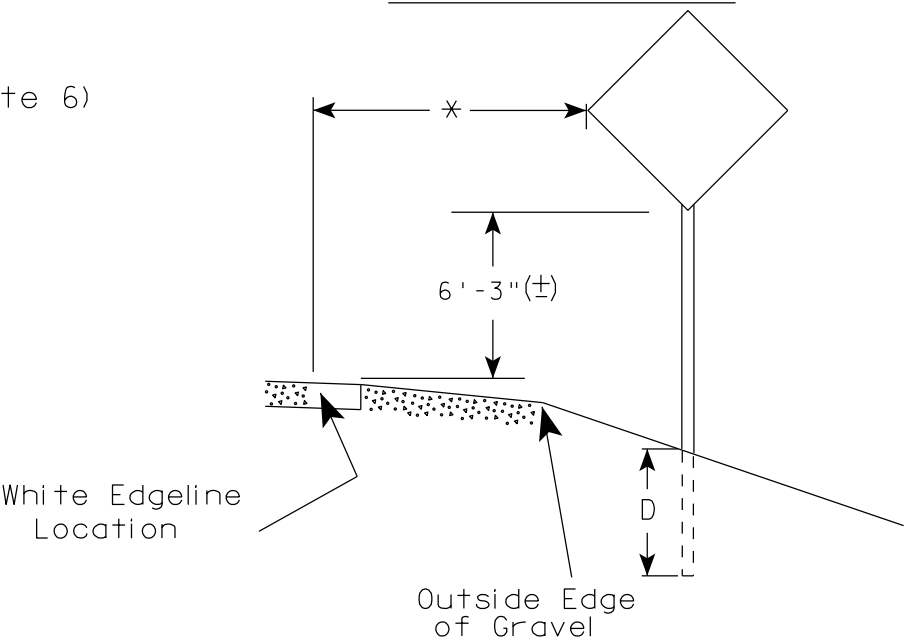
(SIGNATURE) *Michael J. Piering* DATE 2/04/16
(PRINTED NAME) Michael J. Piering
(REGISTRATION NUMBER) S-2521
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR KENOSHA COUNTY
(SIGNATURE) *Carol Sipma*
(PRINTED NAME) Carol Sipma



URBAN AREA

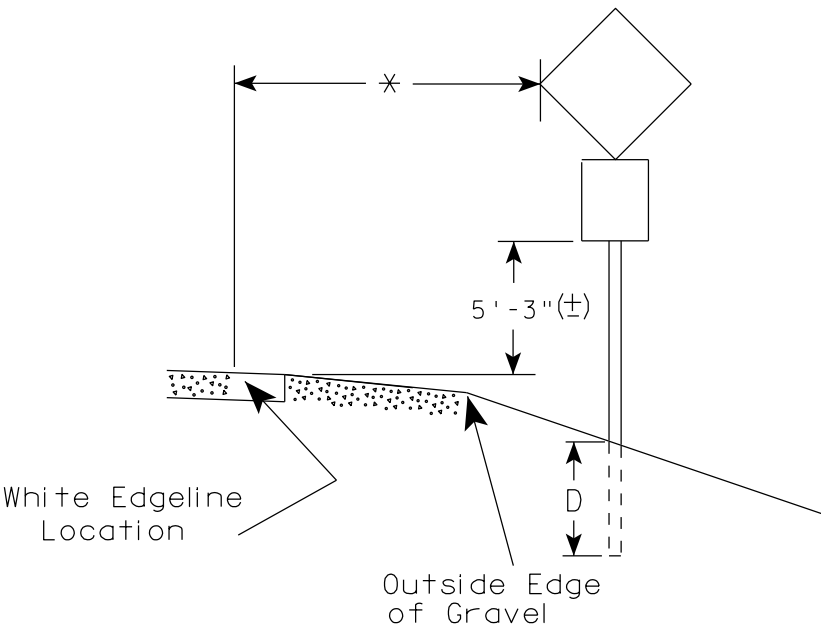
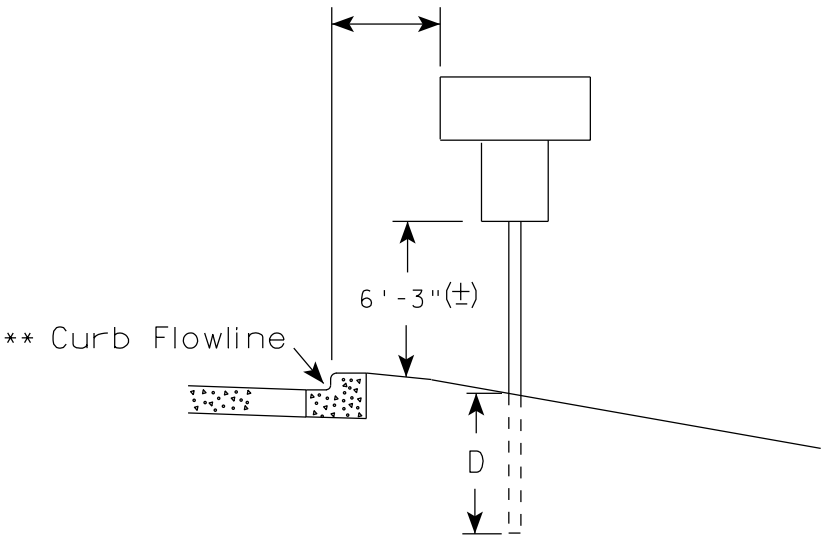


RURAL AREA (See Note 2)



- GENERAL NOTES
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
 2. If signs are mounted on barrier wall, see A4-10 sign plate.
 3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
 4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
 7. The (±) tolerance for mounting height is 3 inches.
 8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
 9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

2' Min - 4' Max (See Note 6)



POST EMBEDMENT DEPTH

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

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

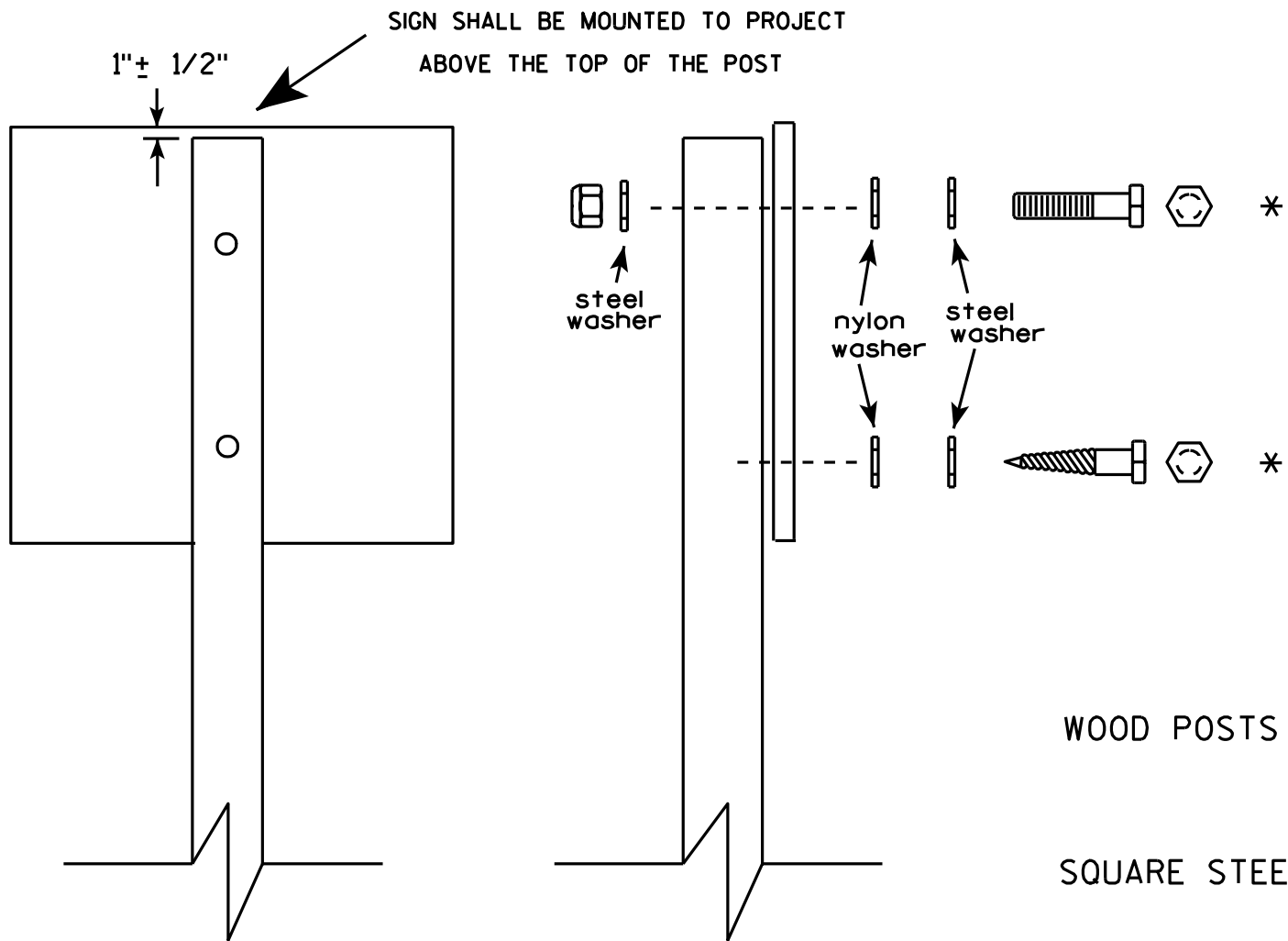
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

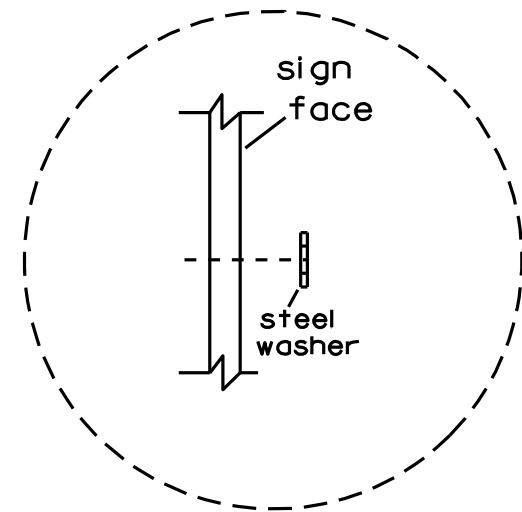


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- 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.

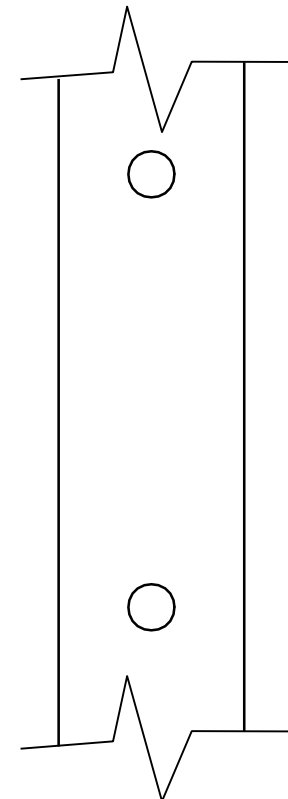
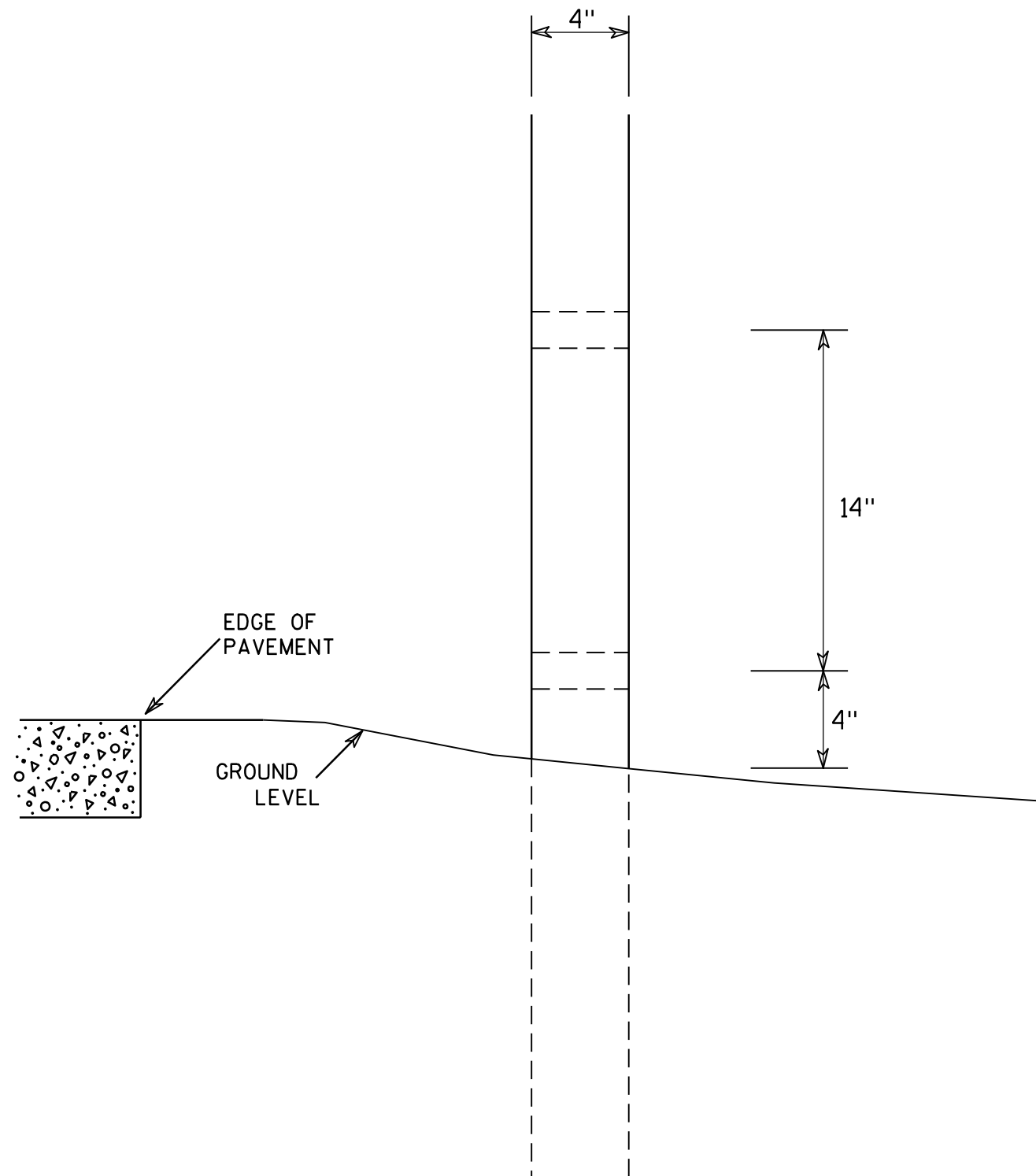
- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - $\frac{3}{8}$ " X 3"
MACHINE BOLTS - $\frac{5}{16}$ " X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts
RIVETS - $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D.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



SIDE VIEW

GENERAL NOTES

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

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO: 3766-00-70

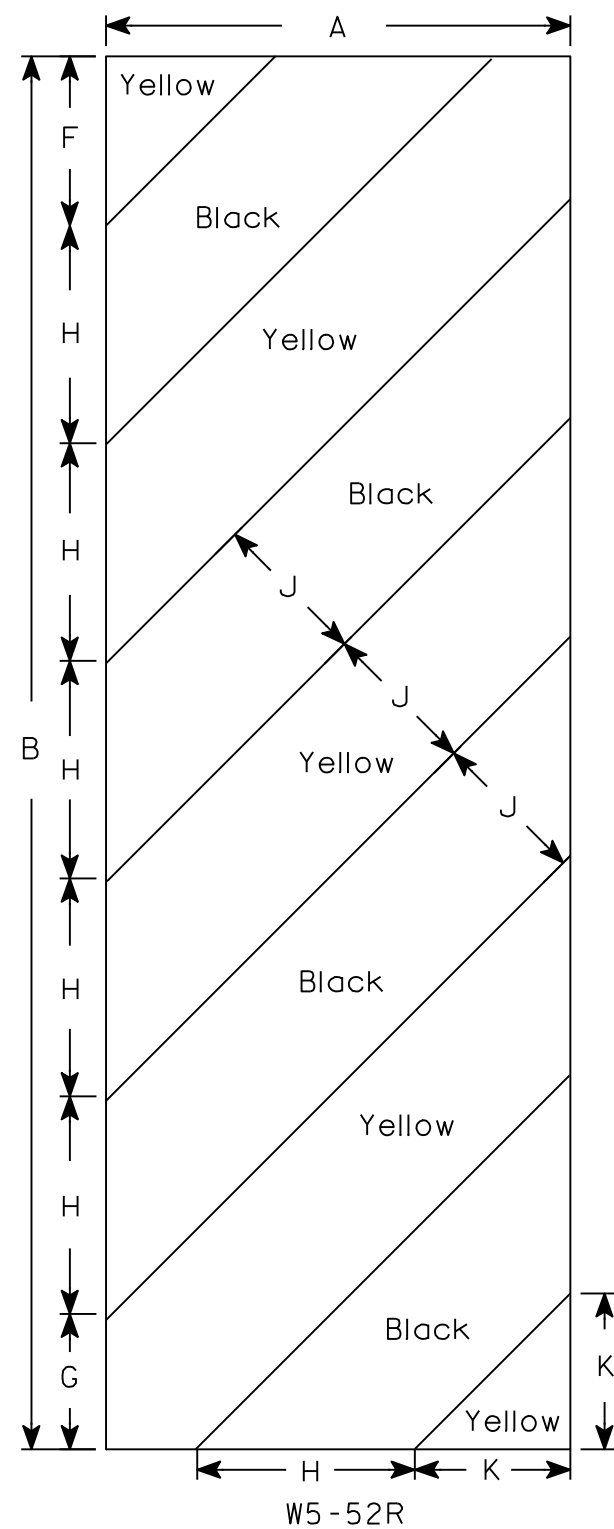
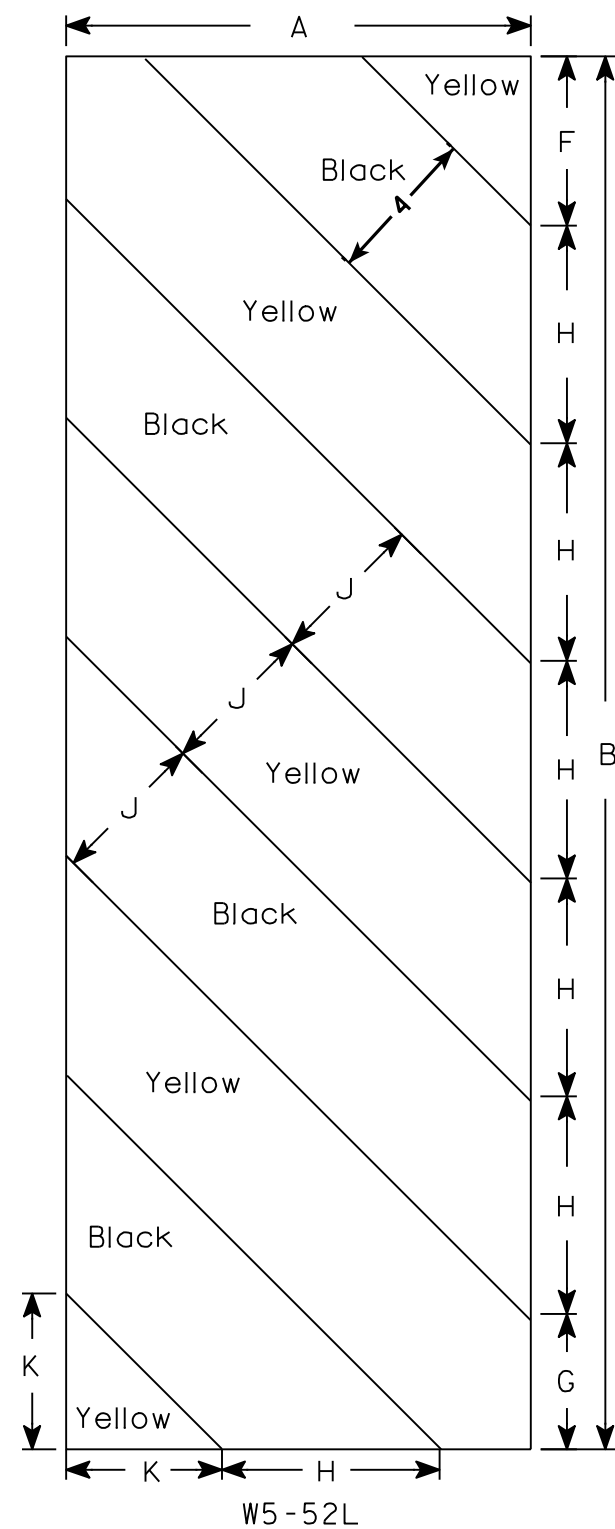
HWY: CTH E

COUNTY: KENOSHA

SIGN PLATE DETAILS

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. Alternate colors of stripes as shown.

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	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 5/6																6.75
4																											
5																											

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

DESIGN DATA

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

LIVE LOAD:
DESIGN LOADING _____ HL-93
INVENTORY RATING FACTOR _____ RF = 1.17
OPERATING RATING FACTOR _____ RF = 1.52
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) 250 KIPS

ULTIMATE DESIGN STRESSES:
CONCRETE MASONRY _____
SLAB _____ f'c = 4,000 PSI
ALL OTHER _____ f'c = 3,500 PSI
BAR STEEL REINFORCEMENT, GRADE 60 _____ fy = 60,000 PSI

HYDRAULIC DATA

100 YEAR FREQUENCY
DRAINAGE AREA _____ 12.8 SQ. MILES
Q₁₀₀ TOTAL _____ 424 CFS
THRU STRUCTURE _____ 424 CFS
VELOCITY - THRU STRUCTURE _____ 3.07 FPS
WATERWAY AREA THRU STRUCTURE _____ 138 SQ. FT
HIGH WATER₁₀₀ ELEVATION _____ 660.39 FT
SCOUR CRITICAL CODE = 5
2 YEAR FREQUENCY
Q₂ TOTAL _____ 168 CFS
HIGH WATER₂ ELEVATION _____ 657.86 FT
Q_{REG} TOTAL _____ 1410 CFS
HIGH WATER_{REG} ELEVATION _____ 663.83 FT

TRAFFIC DATA

AADT (2016) _____ 7900
AADT (2036) _____ 10600
DESIGN SPEED _____ 45 MPH

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10x42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ± PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED LENGTH 60' W ABUTMENT ESTIMATED LENGTH 70' E ABUTMENT

± THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

BENCHMARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEVATION
1	1+74.02 26.96 RT.	TOP NUT OF HYDRANT	670.083
2	500' WEST OF BM #1	TOP NUT OF HYDRANT	683.635

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION QUANTITIES & DETAILS
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. EAST ABUTMENT
6. ABUTMENT DETAILS
7. SUPERSTRUCTURE
8. SUPERSTRUCTURE SECTION & DETAILS
9. STRUCTURAL APPROACH SLAB
10. COMBINATION RAILING TYPE 'C3'
11. COMBINATION RAILING TYPE 'C3' DETAILS

BRIDGE OFFICE CONTACT
WILLIAM DREHER
(608) 266-8499

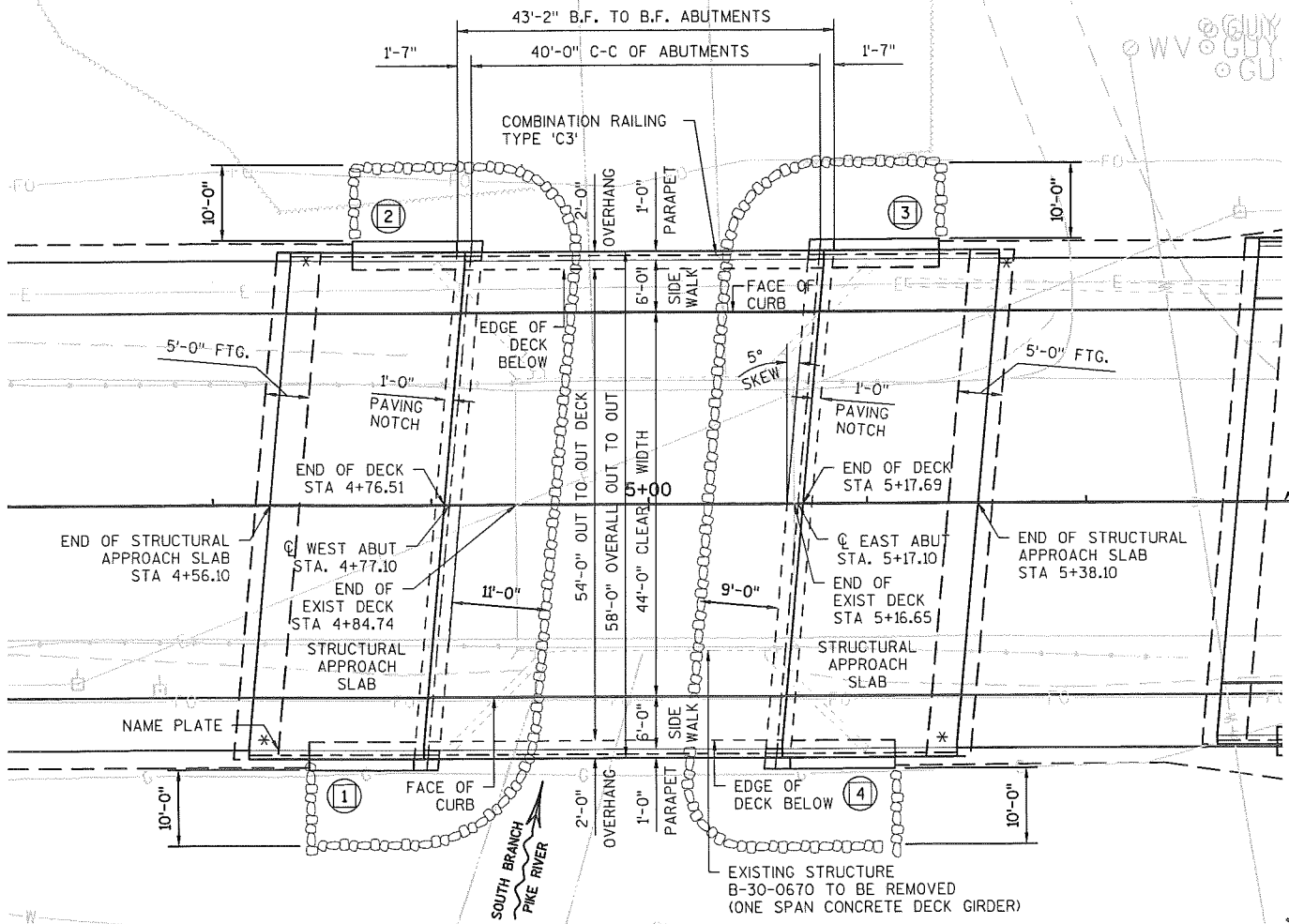
CONSULTANT CONTACT
TROY L. PETERSON
(715) 235-9081

NO.	DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY			
Cedar corporation			
MENOMONIE - MADISON - GREEN BAY www.cedarcorp.com 800-472-7372			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED <i>William C. Dreher</i> SR		08/05/16	
CHIEF STRUCTURES DESIGN ENGINEER		DATE	
STRUCTURE B-30-0137			
CTH E OVER SOUTH BRANCH PIKE RIVER			
COUNTY	TOWN/CITY/VILLAGE		
KENOSHA	SOMERS		
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
ATA	TLP	NJT	TLP
GENERAL PLAN			SHEET 1 OF 11

I.D.

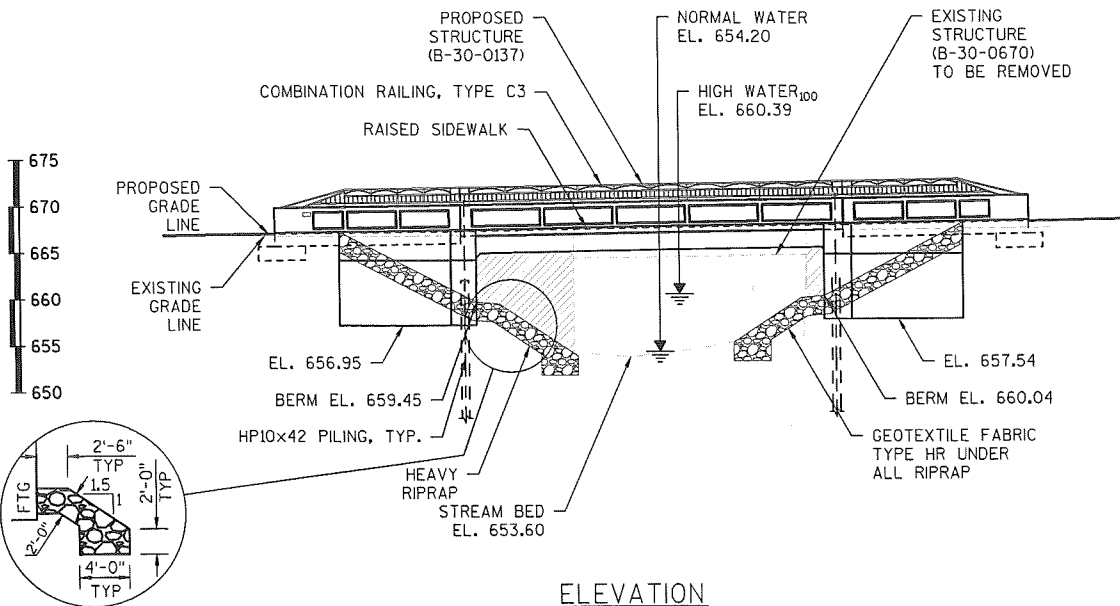
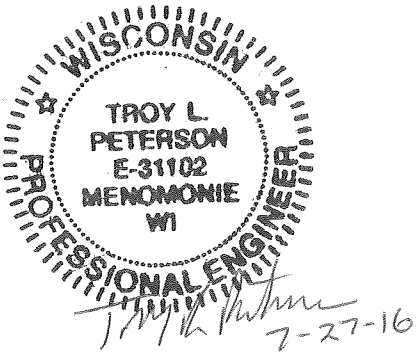
DATE:

* ANCHOR ASSEMBLY FOR THRIE BEAM GUARD



PLAN B-30-0137
(SINGLE SPAN REINFORCED CONCRETE SLAB)

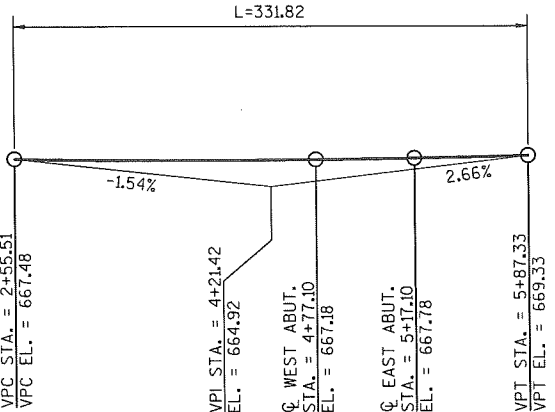
INDICATES WING NUMBER



ELEVATION

(NORMAL TO C SOUTH BRANCH PIKE RIVER FLOOD FLOWS)
SCALE: 1" = 20'

EXCAVATION IN THESE AREAS SHALL BE INCLUDED IN EXCAVATION FOR STRUCTURE (TYP)



PROPOSED GRADE ON CTH E
NOT TO SCALE

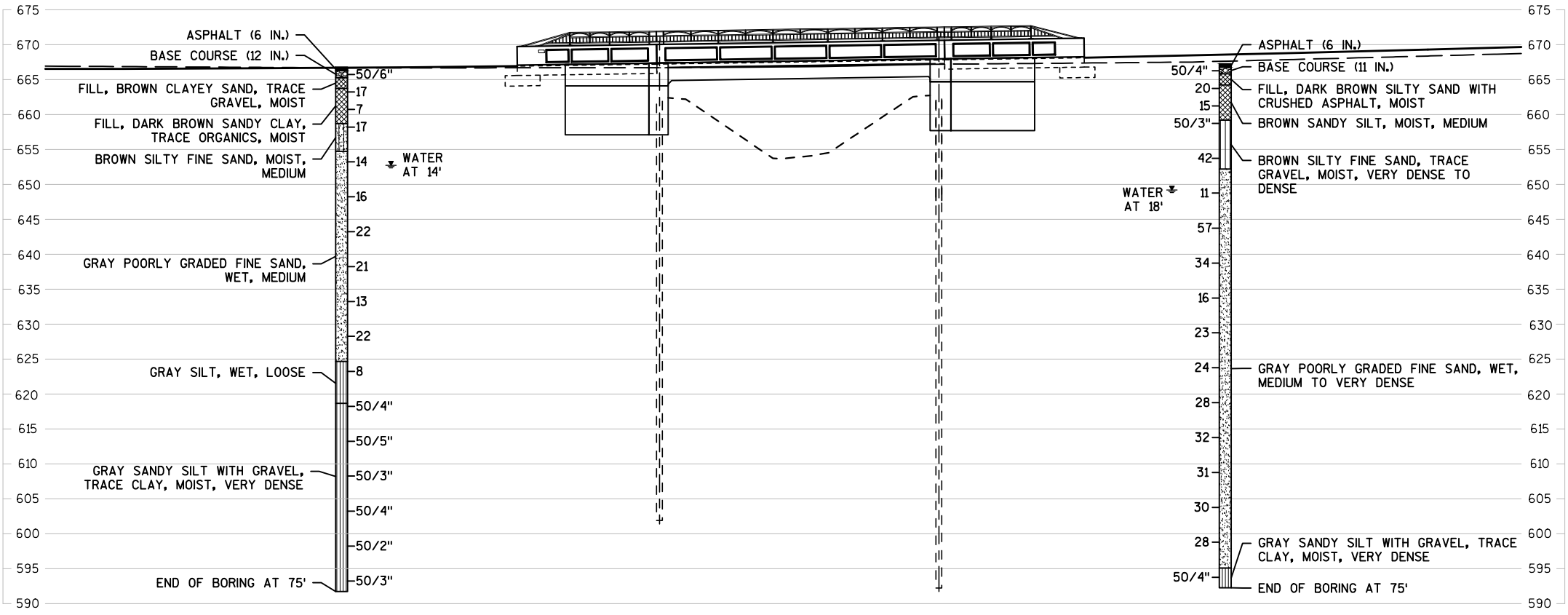
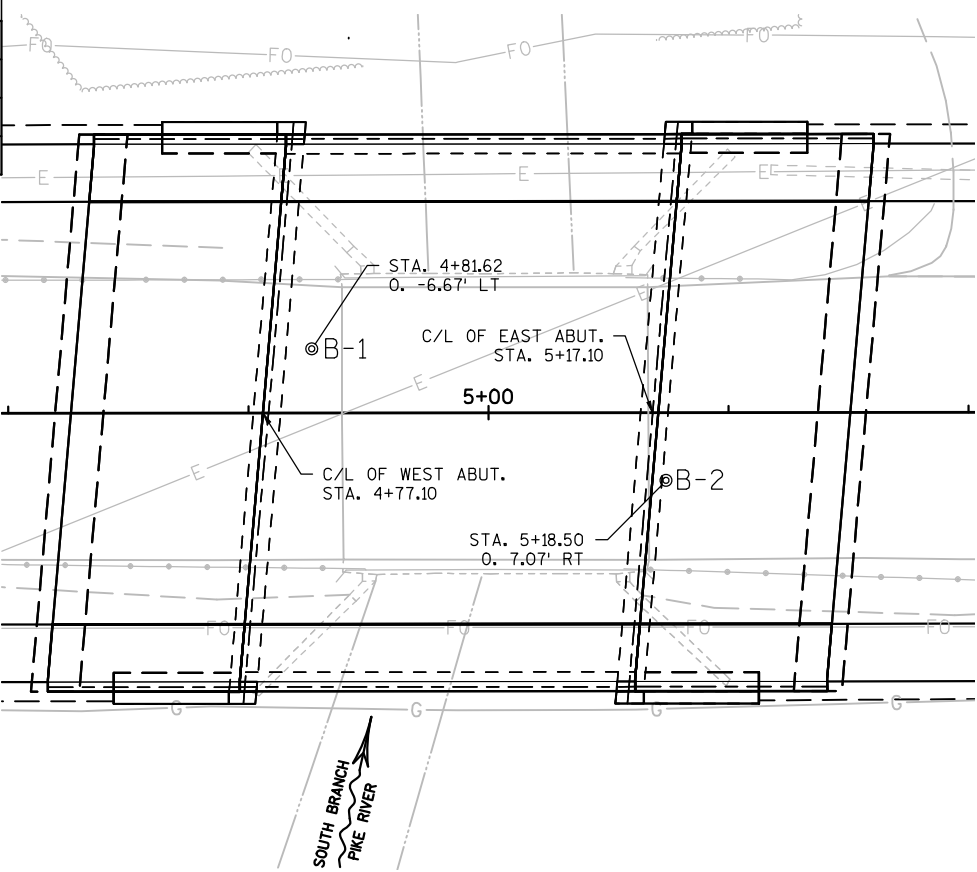


QUANTITIES & DETAILS	
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BORING NO.	DATE COMPLETED	NORTHING	EASTING
1	3/6/2014	154200.081	613372.542
2	3/3/2014	154185.738	613409.193
BORINGS COMPLETED BY: PROFESSIONAL SERVICE INDUSTRIES, INC.			
REPORT COMPLETED BY: PROFESSIONAL SERVICE INDUSTRIES, INC.			

SUBSURFACE NOTES

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT AND SOIL BORING LOGS FOR ADDITIONAL SURFACE INFORMATION



STATE PROJECT NUMBER
3766-00-70

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/META

LEGEND OF BORING

ST BORING #/EL. STA. OFFSET

ground water elevation
▽ at time of drilling
▽ end of drilling
▽ after drilling

F-C COBBLE OR BOULDER
WEATHERED LIMESTONE
CORE RUN #1 - 24'-29'
REC=80%, RQD=72%

⁽¹⁾ UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)
⁽²⁾ UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

ABBREVIATIONS
F-Fine M-Medium C-Coarse st-shelby tube

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

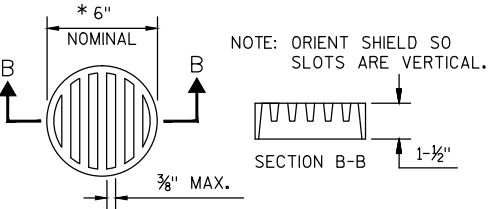
BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY			
Cedar corporation			
MENOMONIE - MADISON - GREEN BAY www.cedarcorp.com 800-472-7372			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-30-0137			
DRAWN BY NJT		PLANS CKD. TLP	
SUBSURFACE EXPLORATION		SHEET 3 OF 11	

SCALE =

LEGEND

- ⊙ INDICATES WING NUMBER
- ▽ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ & VERT JOINTS ON BACKFACE
- 3/4" 'V' GROOVE ON FF OF WING WALL/ ABUT - NOT REQUIRED IF CONSTRUCTION JOINT IS NOT USED
- OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" x 6"
- ☆ KEYED CONSTRUCTION JOINT FORMED BEVELED 2" x 6"
- 1/2" FILLER-TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. FILLER INCLUDED IN WING LENGTH.
- SEAL ALL EXPOSED HORIZ & VERT SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)
- ⊗ PIPE UNDER DRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDER DRAIN WRAPPED 6-INCH". OUTLET INVERT EL. 660.40
- ** VERTICAL CONSTRUCTION JOINT RUN BAR STEEL THRU JOINT AND SEAL JOINT WITH 18" RUBBERIZED WATERPROOFING. KEYWAY FORMED BY BEVELED 2" X 8".



RODENT SHIELD DETAIL

* DIMENSION IS APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

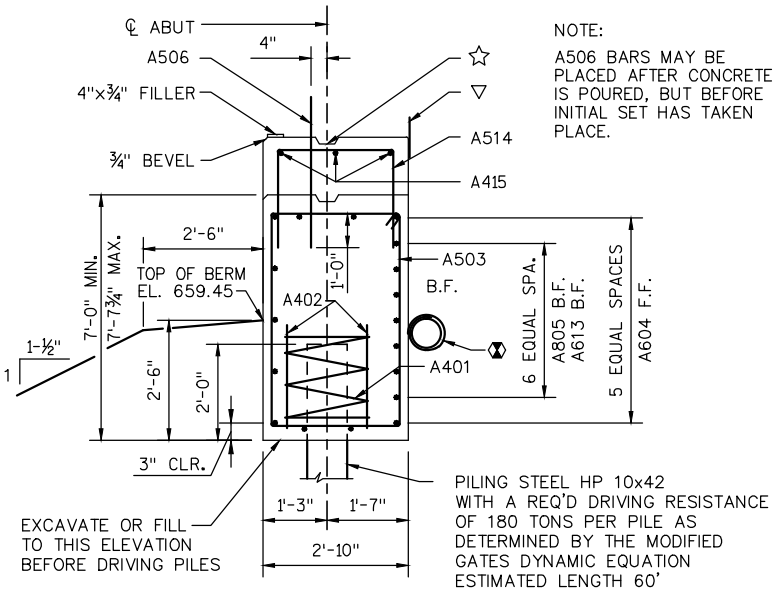
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

BILL OF BARS

3910# UNCOATED 1840# COATED

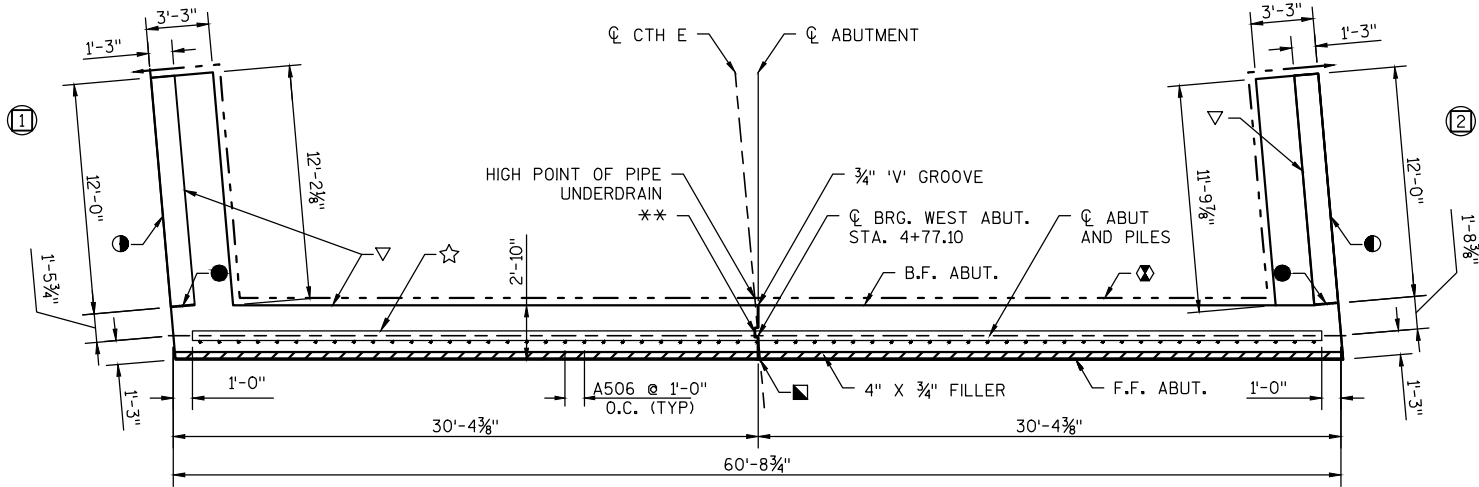
BAR MARK	COAT	NO. REQUIRED	LENGTH	BENT	BAR SERIES	LOCATION
A401		8	28'-0"	X		BODY - ONE PER PILE
A402		16	2'-3"			BODY - TWO PER PILE
A503		75	18'-4"	X		BODY - STIRRUPS
A604		24	31'-8"			BODY - HORIZ.
A805		14	12'-0"			BODY - HORIZ. BF
A506	X	59	2'-0"			BODY - VERT DOWELS
A607	X	4	11'-8"			WING 1 & 2 - HORIZ TOP
A408	X	14	11'-8"			WING 1 & 2 - HORIZ
A509	X	34	11'-4"	X		WING 1 & 2 - VERT TOP
A510	X	26	19'-7"	X		WING 1 & 2 - VERT BASE
A511	X	16	13'-7"			WING 1 & 2 BASE HORIZ FF
A612	X	18	13'-11"			WING 1 & 2 BASE HORIZ BF
A613		14	22'-7"			BODY - HORIZONTAL BACK FACE
A514	X	31	5'-7"			BODY - VERTICAL STIRRUPS
A415		3	30'-0"			BODY - HORIZONTAL

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

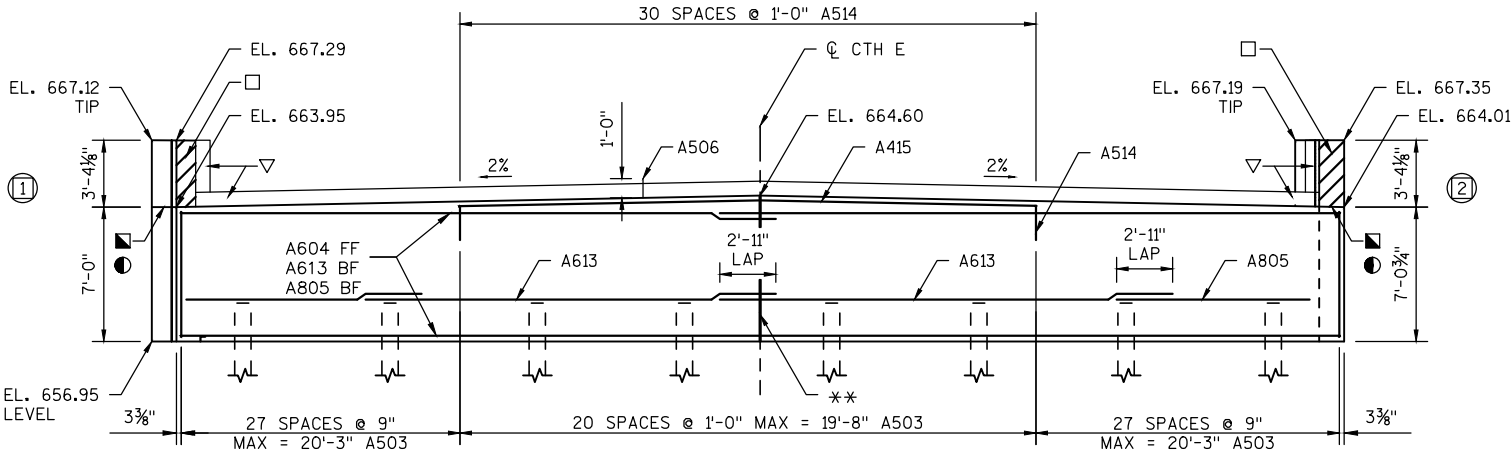


SECTION THRU BODY

ALL HORIZ BARS ARE A604 UNLESS OTHERWISE SPECIFIED

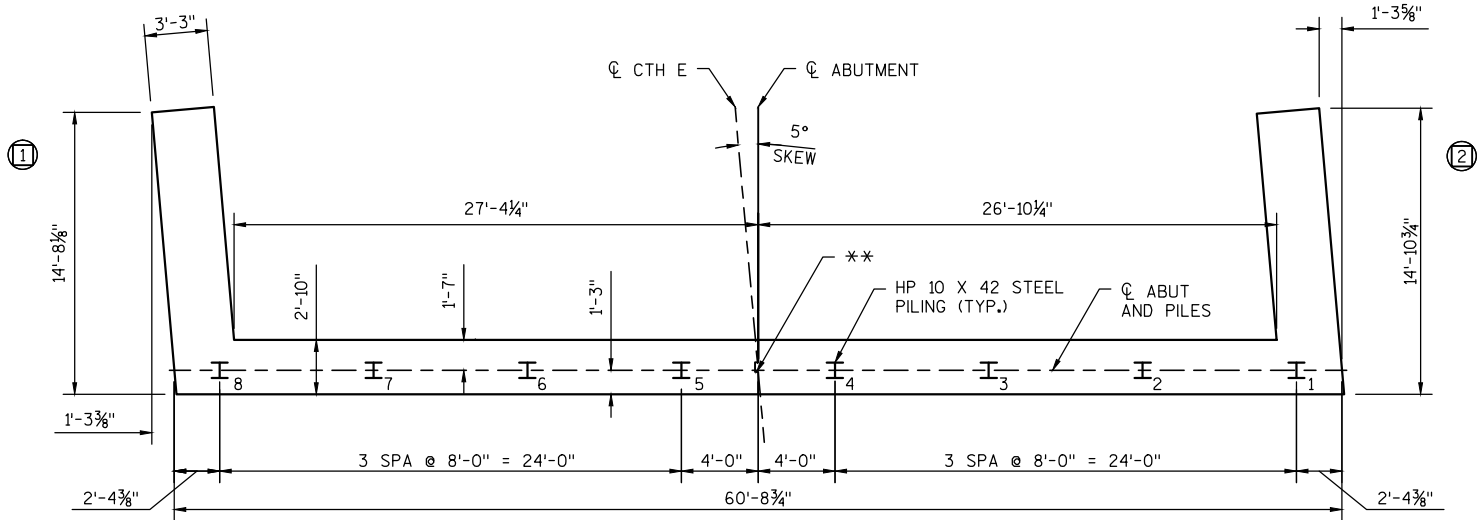


PLAN



ELEVATION (LOOKING WEST)

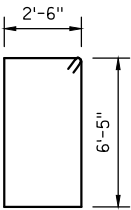
NOTE: DISPLACE A503 BARS INTERFERING WITH PILING



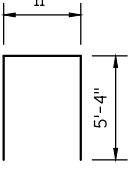
PILE PLAN



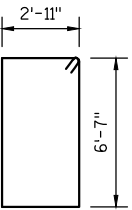
A401



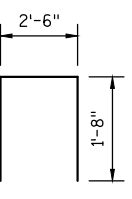
A503



A509



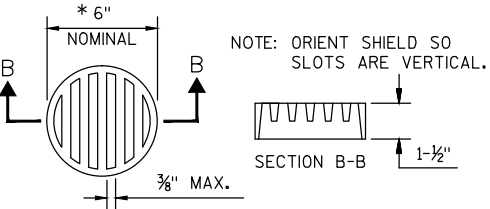
A510



A514

LEGEND

- ⊙ INDICATES WING NUMBER
- ▽ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ & VERT JOINTS ON BACKFACE
- 3/4" 'V' GROOVE ON FF OF WING WALL/ ABUT - NOT REQUIRED IF CONSTRUCTION JOINT IS NOT USED
- OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" x 6"
- ☆ KEYED CONSTRUCTION JOINT FORMED BEVELED 2" x 6"
- 1/2" FILLER-TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. FILLER INCLUDED IN WING LENGTH.
- SEAL ALL EXPOSED HORIZ & VERT SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)
- ⊗ PIPE UNDER DRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDER DRAIN WRAPPED 6-INCH". OUTLET INVERT EL. 660.40
- ** VERTICAL CONSTRUCTION JOINT RUN BAR STEEL THRU JOINT AND SEAL JOINT WITH 18" RUBBERIZED WATERPROOFING. KEYWAY FORMED BY BEVELED 2" X 8".



RODENT SHIELD DETAIL

* DIMENSION IS APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

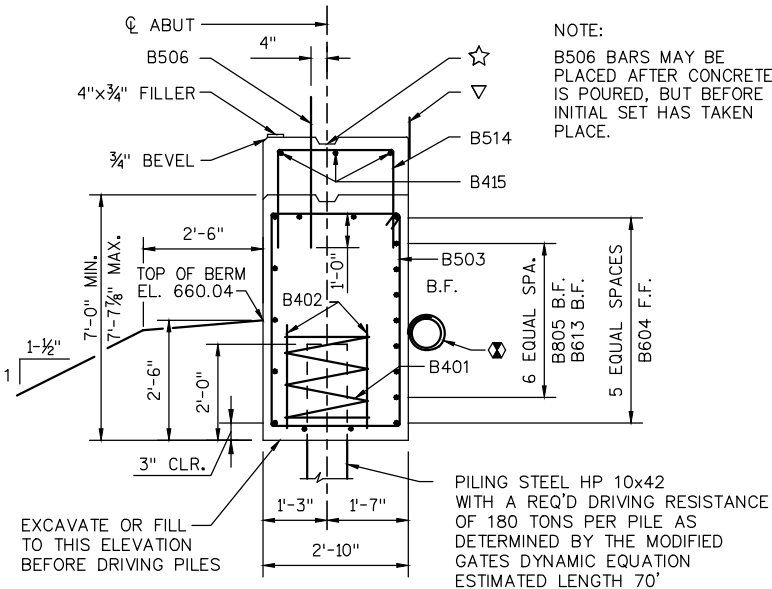
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

BILL OF BARS

3910# UNCOATED 1840# COATED

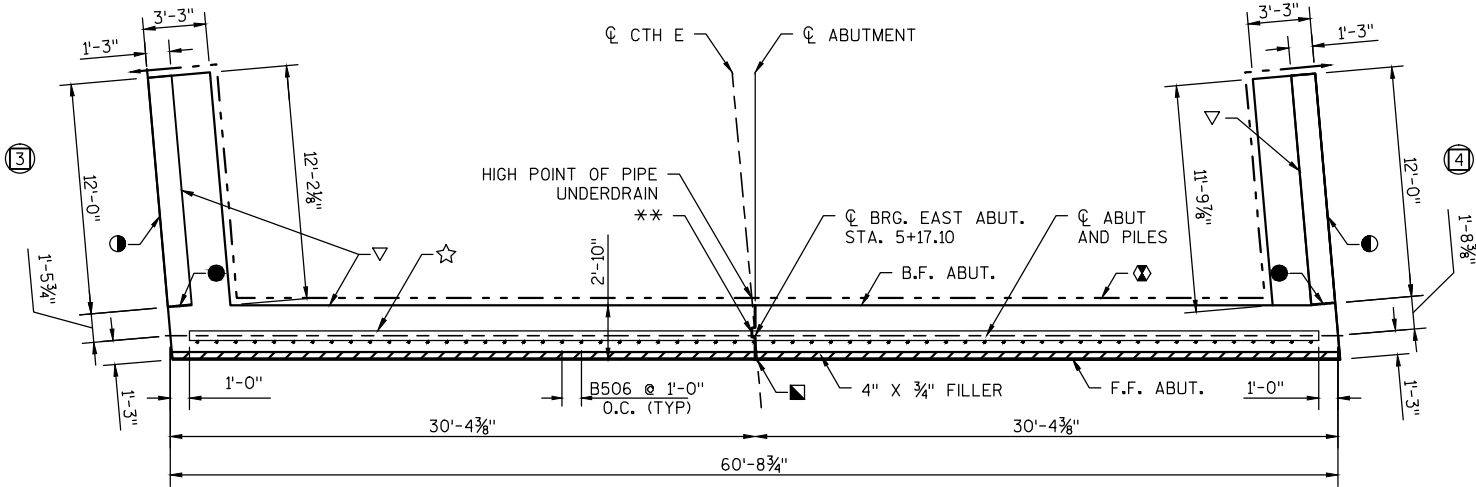
BAR MARK	COAT	NO. REQUIRED	LENGTH	BENT	BAR SERIES	LOCATION
B401		8	28'-0"	X		BODY - ONE PER PILE
B402		16	2'-3"			BODY - TWO PER PILE
B503		75	18'-4"	X		BODY - STIRRUPS
B604		24	31'-8"			BODY - HORIZ.
B805		14	12'-0"			BODY - HORIZ. BF
B506	X	59	2'-0"			BODY - VERT DOWELS
B607	X	4	11'-8"			WING 3 & 4 - HORIZ TOP
B408	X	14	11'-8"			WING 3 & 4 - HORIZ
B509	X	34	11'-4"	X		WING 3 & 4 - VERT TOP
B510	X	26	19'-7"	X		WING 3 & 4 - VERT BASE
B511	X	16	13'-7"			WING 3 & 4 BASE HORIZ FF
B612	X	18	13'-11"			WING 3 & 4 BASE HORIZ FF
B613		14	22'-7"			BODY - HORIZONTAL BACK FACE
B514	X	31	5'-7"			BODY - VERTICAL STIRRUPS
B415		3	30'-0"			BODY - HORIZONTAL

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

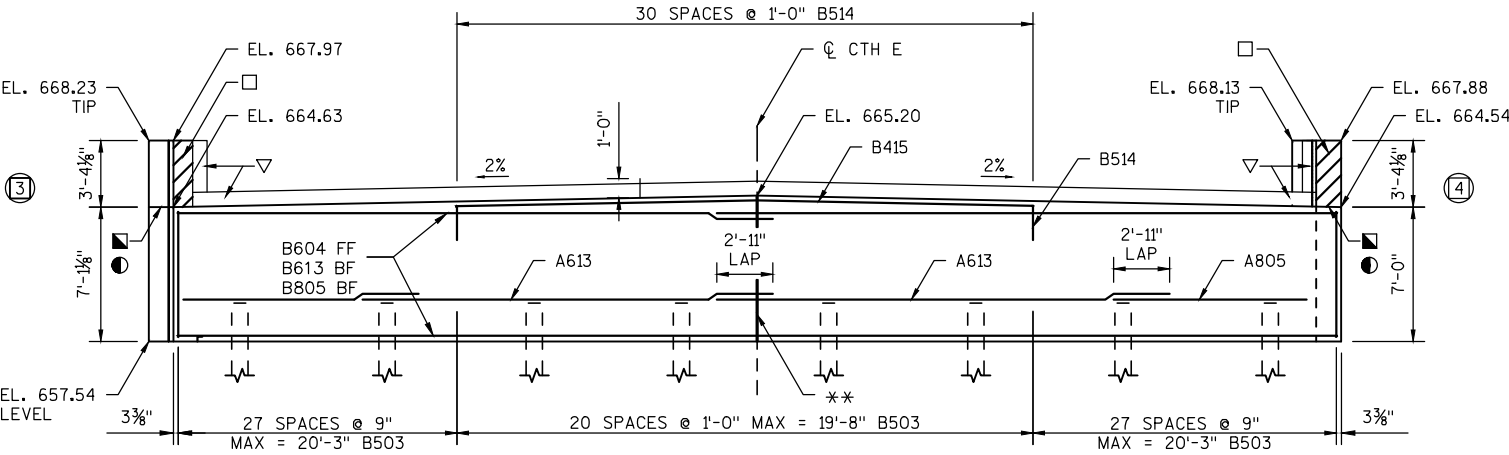


SECTION THRU BODY

ALL HORIZ BARS ARE B604 UNLESS OTHERWISE SPECIFIED

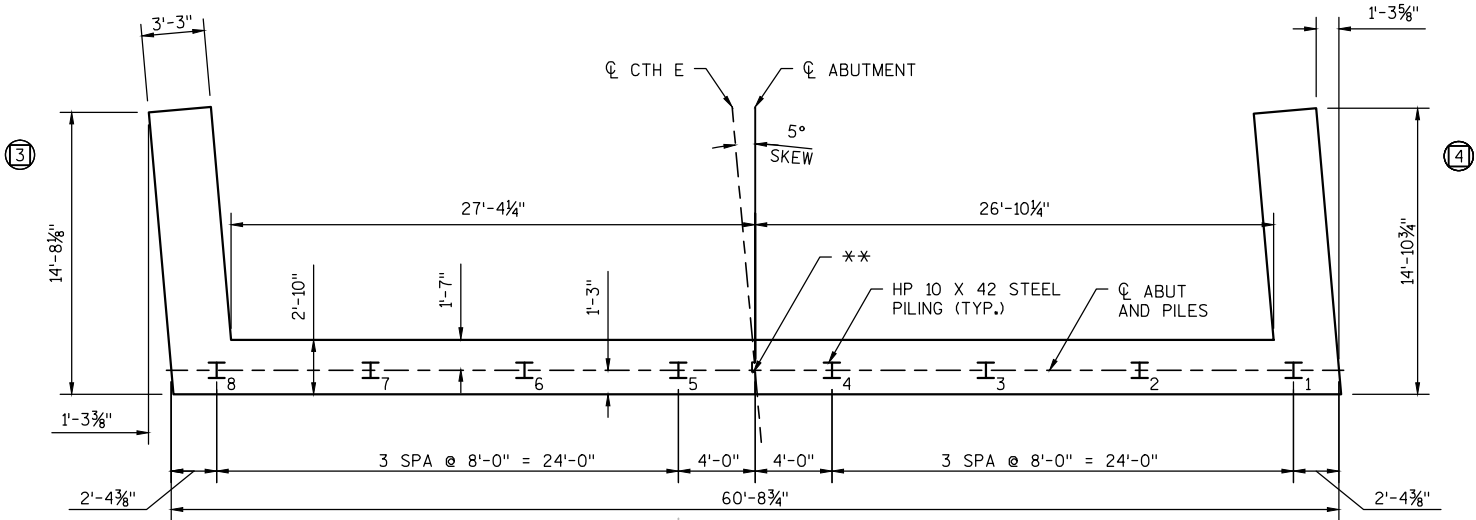


PLAN

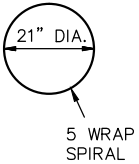


ELEVATION
(LOOKING EAST)

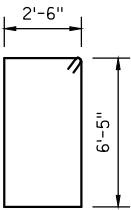
NOTE: DISPLACE B503 BARS INTERFERING WITH PILING



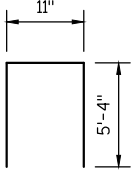
PILE PLAN



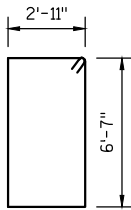
B401



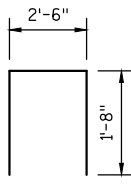
B503



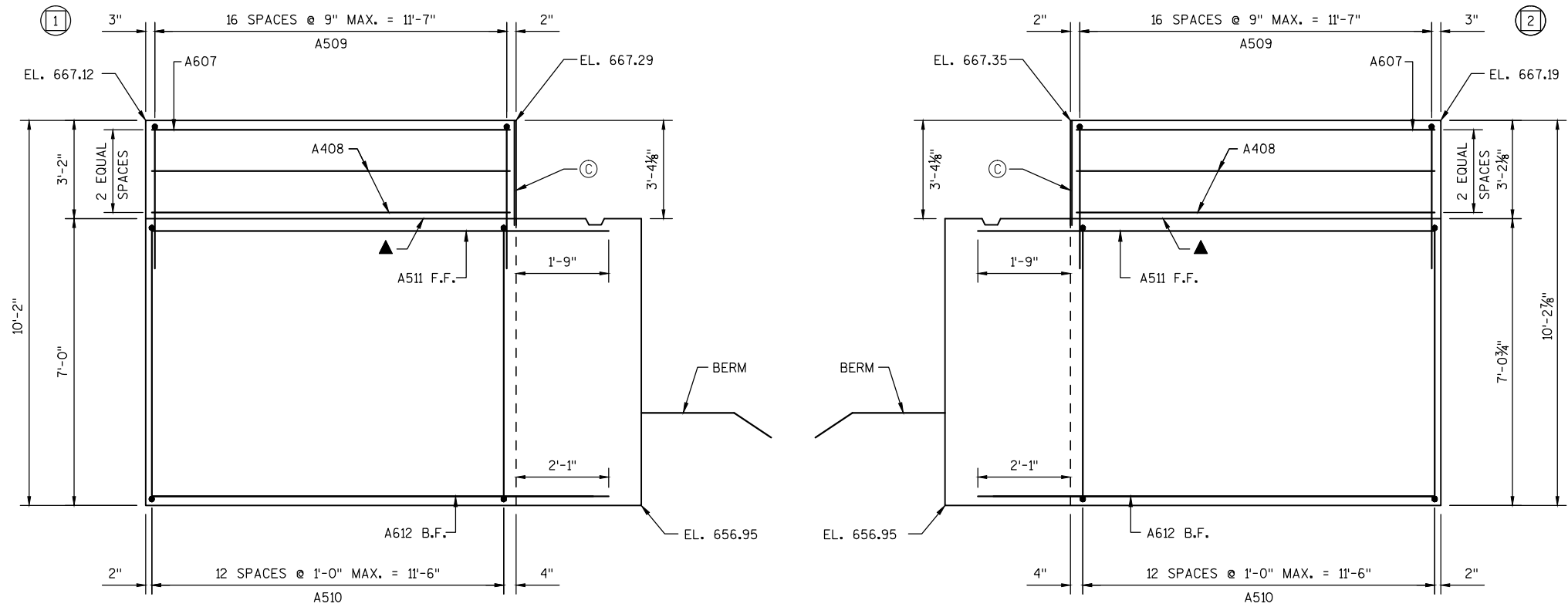
B509



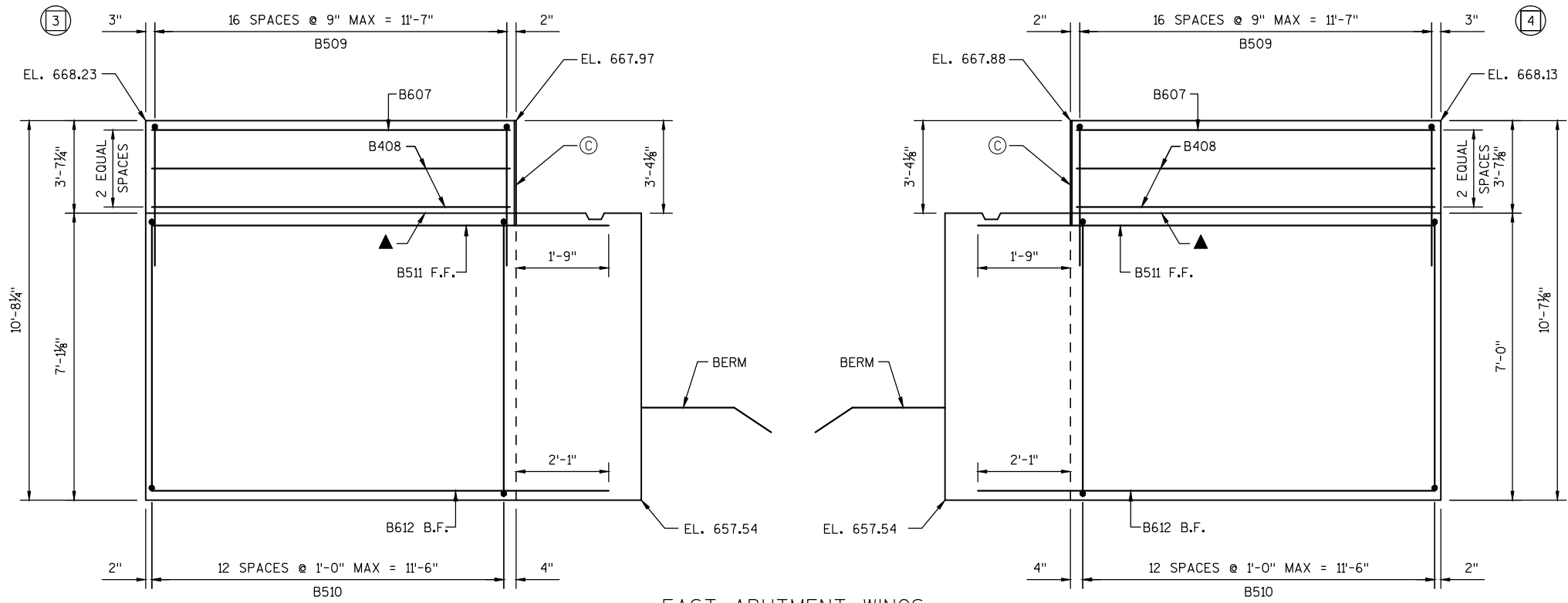
B510



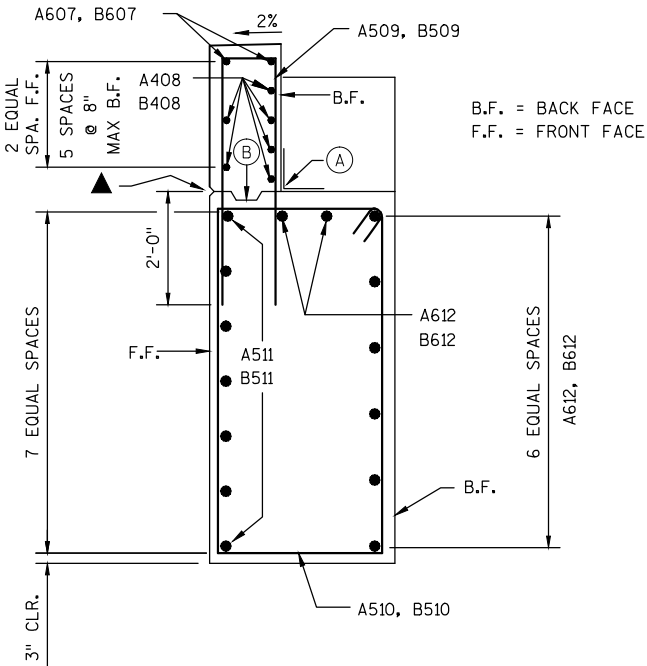
B514



WEST ABUTMENT WINGS



EAST ABUTMENT WINGS



TYPICAL SECTION THRU WING

LEGEND

- Ⓜ INDICATES WING NUMBER
- Ⓐ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL & VERTICAL JOINTS ON BACK FACE.
- Ⓑ OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" x 6" KEY WAY WITH MEMBRANE ON BACK FACE.
- Ⓒ 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).
- ▲ 3/4" 'V' GROOVE ON FRONT FACE OF WING WALL.

NO.		DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY				
Cedar corporation				
MENOMONIE - MADISON - GREEN BAY www.cedarcorp.com 800-472-7372				
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION				
STRUCTURE B-30-0137				
DRAWN BY NJT			PLANS CK'D. TLP	
ABUTMENT DETAILS				SHEET 6 OF 11

SCALE =

GENERAL NOTES

TOP TRANSVERSE BARS BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS TO BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

TRANSVERSE BARS SHALL BE PLACED PARALLEL TO THE ϕ OF SUBSTRUCTURE UNITS.

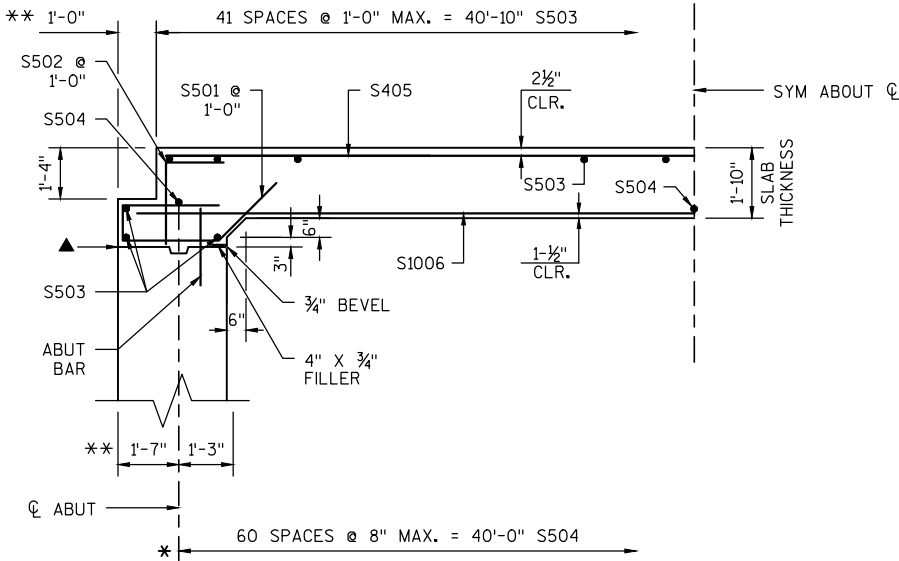
THE SLAB THICKNESS DIMENSION IS MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

CAMBER SPAN AS SHOWN TO PROVIDE FOR DEADLOAD DEFLECTION & FUTURE FORM SETTLEMENT. DEADLOAD DEFLECTIONS ONLY EQUAL APPROXIMATELY $\frac{1}{2}$ OF CAMBER VALUES SHOWN.

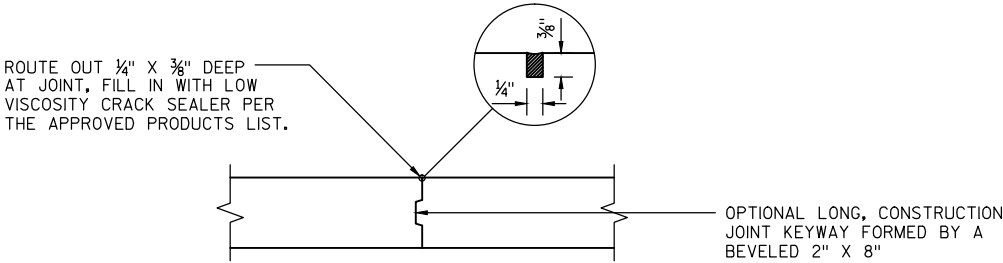
PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE ϕ OF ABUTMENTS, THE ϕ OF THE PIERS AND AT THE $\frac{5}{10}$ PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR ϕ .

LEGEND

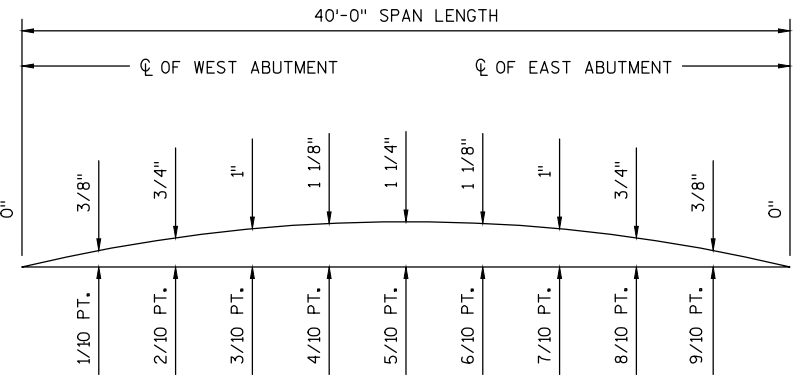
- * DIMENSIONS MEASURED ALONG ϕ OF BRIDGE
- ** DIMENSIONS MEASURED NORMAL TO ϕ OF SUBSTRUCTURE
- ▲ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.



LONGITUDINAL SECTION THRU RDWY

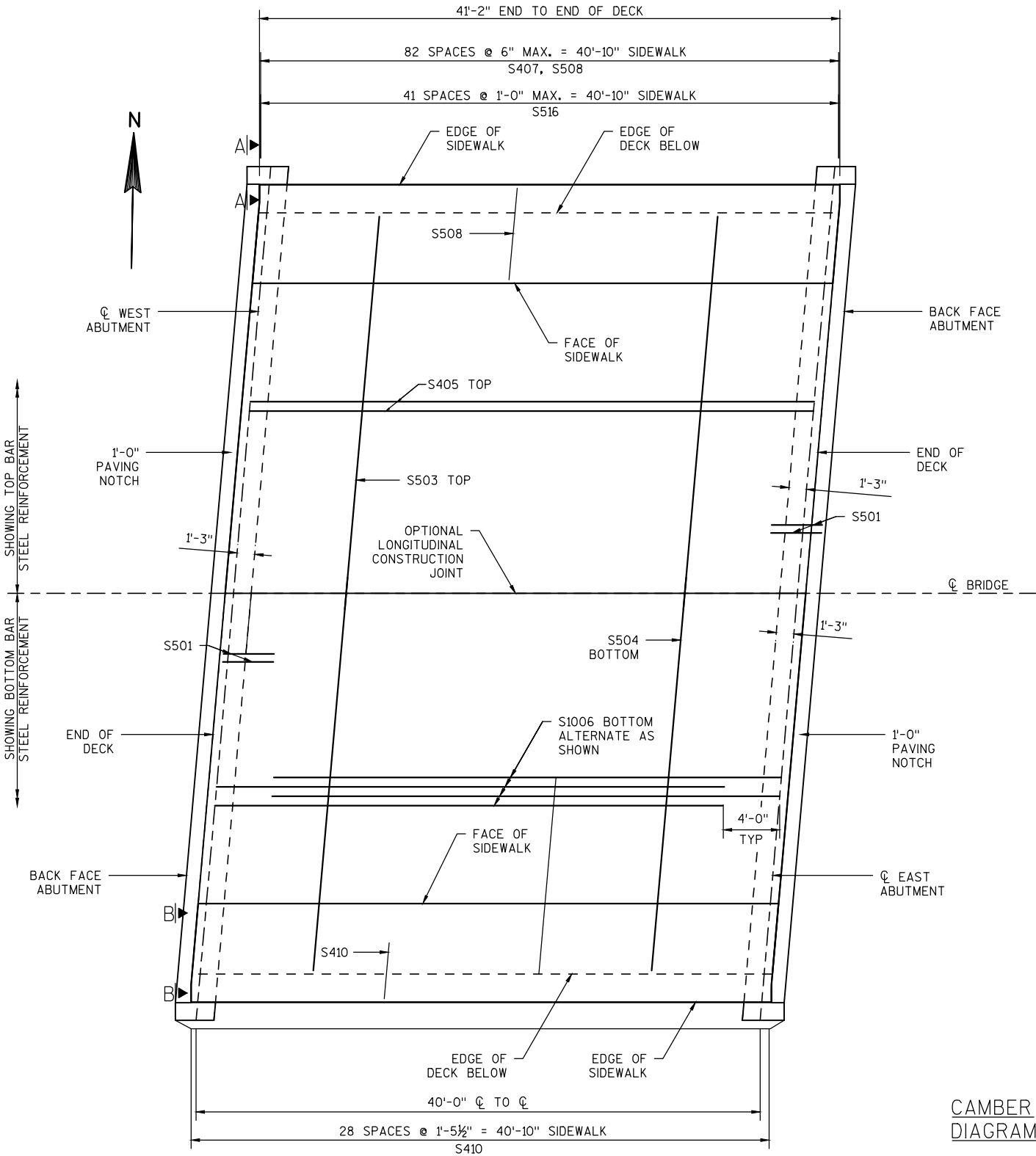


OPTIONAL LONGITUDINAL CONSTRUCTION JOINT



CAMBER DIAGRAM

TOP OF DECK ELEVATIONS	WEST ABUT	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	EAST ABUT
LEFT EDGE DECK	666.67'	666.72'	666.77'	666.83'	666.89'	666.95'	667.01'	667.08'	667.14'	667.21'	667.28'
ϕ BRIDGE DECK	667.18'	667.23'	667.28'	667.34'	667.39'	667.45'	667.52'	667.58'	667.64'	667.71'	667.78'
RIGHT EDGE DECK	666.61'	666.66'	666.71'	666.76'	666.82'	666.88'	666.94'	667.00'	667.07'	667.13'	667.20'



PLAN

NO. DATE REVISION BY

ORIGINAL PLANS PREPARED BY
Cedar corporation
MENOMONIE - MADISON - GREEN BAY
www.cedarcorp.com 800-472-7372

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-30-0137

DRAWN BY NJT PLANS CK'D. TLP

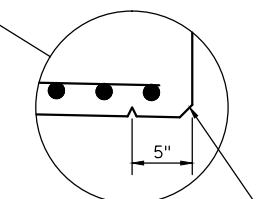
SHEET 7 OF 11

SUPERSTRUCTURE

BILL OF BARS

BAR MARK	COAT	NO. REQD.	LENGTH	BENT	BAR BUNDLE	LOCATION
S501	X	108	7'-8"	X		AT END OF DECK
S502	X	108	3'-7"	X		AT END OF DECK
S503	X	48	53'-10"			SLAB, TOP, TRANSVERSE
S504	X	61	53'-10"			SLAB, BOTTOM, TRANSVERSE
S405	X	60	40'-8"			SLAB, TOP, LONGITUDINAL
S1006	X	111	36'-6"			SLAB, BOTTOM, LONGITUDINAL
S407	X	332	3'-10"	X		SLAB, SIDEWALK
S508	X	166	7'-3"	X		SIDEWALK TOP TRANSVERSE
S409	X	26	40'-10"			SIDEWALK TOP & BOTTOM LONG
S410	X	58	3'-0"			SIDEWALK BOTTOM TRANSVERSE
S511	X	16	7'-4"	X		AT END OF DECK AT SIDEWALK
S512	X	12	8'-0"	X		AT END OF DECK AT SIDEWALK
S513	X	32	2'-11"			AT END OF DECK AT SIDEWALK
S514	X	8	11'-4"	X		AT END OF DECK AT WING WALL
S515	X	8	0'-11"			AT END OF DECK AT WING WALL
S516	X	84	6'-8"	X		PARAPET VERTICAL
S417	X	12	40'-10"			PARAPET HORIZONTAL

- * DIMENSIONS MEASURED ALONG $\mathcal{C}$ OF BRIDGE
- ** DIMENSIONS MEASURED NORMAL TO $\mathcal{C}$ OF SUBSTRUCTURE
- ▽ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- ☐ CONSTRUCTION JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH FOR DECK POUR, MATCH BRIDGE CROSS SLOPE.



Technical drawing of a rectangular structure, likely a cross-section of a wall or foundation. The drawing includes the following labels and dimensions:

- S515**: Points to the top corners of the structure.
- S514**: Points to the right side of the structure.
- S513**: Points to the bottom corners of the structure.
- ¾" BEVEL**: Points to the bottom edge of the structure.
- 4" X ¾" FILLER**: Points to the bottom edge of the structure.
- S511 @ 1'-0"**: Points to the bottom edge of the structure.

Technical drawing showing a cross-section of a concrete wall and floor assembly. The drawing includes the following components and labels:

- S511 @ 1'-0"**: Vertical reinforcement bar in the wall.
- S512 @ 1'-0"**: Horizontal reinforcement bar in the floor slab.
- S513**: Vertical reinforcement bar in the wall.
- 3/4" BEVEL**: Bevel detail on the floor slab.
- 4" X 3/4" FILLER**: Filler material in the joint between the wall and the floor slab.

[illegible]

S501

2'-6"

1"

2'-6"

1'-6"

45°

S502

1'-6"

2'-3"

S407

1'-0"

2'-0"

S508

6'-8"

5"

(STD 180° HOOKS)

S514

2'-11"

2'-8"

1'-6"

NOTES:

- TRANSVERSE BAR STEEL REINFORCEMENT IN THE STRUCTURAL APPROACH SLAB SHALL BE PLACED ON THE SKEW.
- ELEVATIONS GIVEN ARE AT TOP OF STRUCTURAL APPROACH SLAB.
- ELEVATIONS AT EDGE OF STRUCTURAL APPROACH SLAB ARE SAME AS ELEVATIONS GIVEN AT CORRESPONDING TRAFFIC FACE OF PARAPET.
- FOR DETAILS OF COMBINATION RAIL 'C3' ON BRIDGE, SEE SHEET 10 & 11.

LEGEND

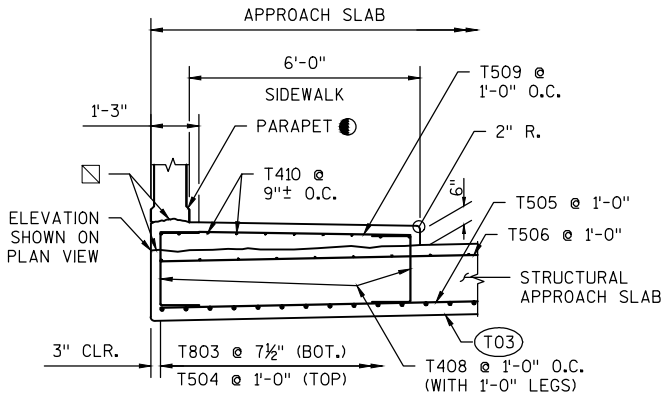
- (T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THICKNESS) OF POLYETHYLENE SHEETS OVER ENTIRE TOP OF FOOTING.
- (T03) PLACE MULTIPLE LAYERS (0.03" MIN TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.
- △ 1½" EXPANSION FILLER.
- ▲ ½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅜" BELOW SURFACE OF CONCRETE).
- △ 4" X ¾" PREFORMED JOINT FILLER. EXTEND FULL LENGTH OF PAVING NOTCH.
- SEE PARAPET STANDARD DETAILS FOR REINFORCEMENT, LOCATION OF NAME PLATE AND BENCH MARK WITH RESPECT TO THE END OF PARAPET, ETC.
- ▣ CONST. JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR MATCH BRIDGE X-SLOPE.
- ◊ DIMENSION IS TAKEN NORMAL TO C OF SUBSTRUCTURE UNITS.
- SLOPE TOP OF WING WITH ⅜" DROP FROM B.F. TO F.F.

BILL OF BARS

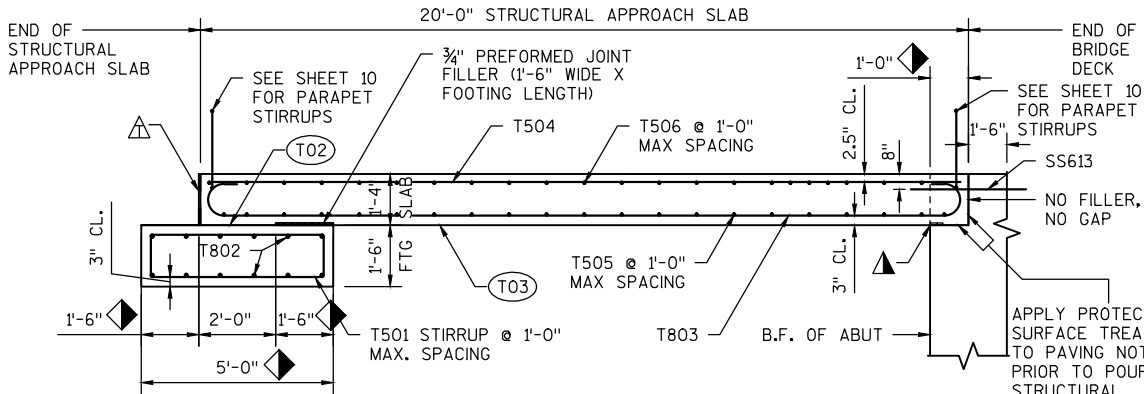
26070* COATED		490* STAINLESS STEEL				LOCATION
BAR MARK	COAT	NO. REQD.	LENGTH	BENT	BAR SERIES	
T501	X	118	12-0	X		APPROACH SLAB FTG - STIRRUP
T802	X	24	57-10			APPROACH SLAB FTG - TRANS
T803	X	186	21-5	X		APPROACH SLAB - LONG - BOTTOM
T504	X	118	19-7			APPROACH SLAB - LONG - TOP
T505	X	42	57-10			APPROACH SLAB - TRANS - BOTTOM
T506	X	42	57-10			APPROACH SLAB - TRANS - TOP
T507	X	80	4-1	X		APPROACH SLAB - TRANS - TOP WING
T408	X	168	3-4	X		APPROACH SLAB - TRANS
T509	X	80	6-8			SIDEWALK TOP - TRANS
T410	X	40	19-6			SIDEWALK TOP - LONG
T511	X	96	6-8	X		PARAPET VERT
T412	X	24	19-6			PARAPET LONG
SS613		108	3-0			STRUCTURE SLAB TO APPROACH SLAB

PLAN - WEST STRUCTURAL APPROACH SLAB
(SHOWING BOTTOM SLAB STEEL REINFORCEMENT)

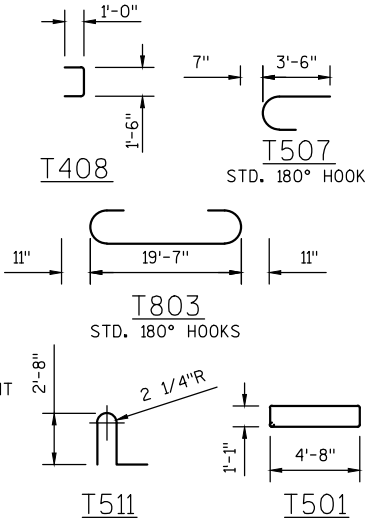
PLAN - EAST STRUCTURAL APPROACH SLAB
(SHOWING TOP SLAB STEEL REINFORCEMENT)



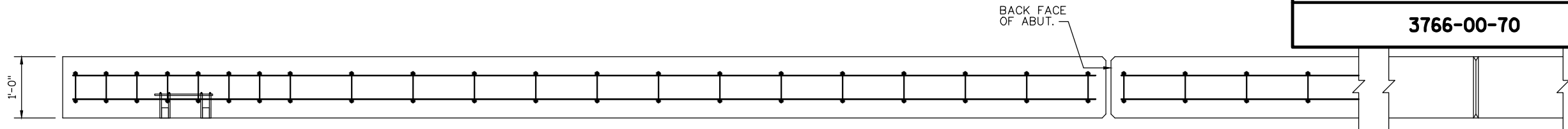
SECTION B-B THRU EDGE OF STRUCTURAL APPROACH SLAB



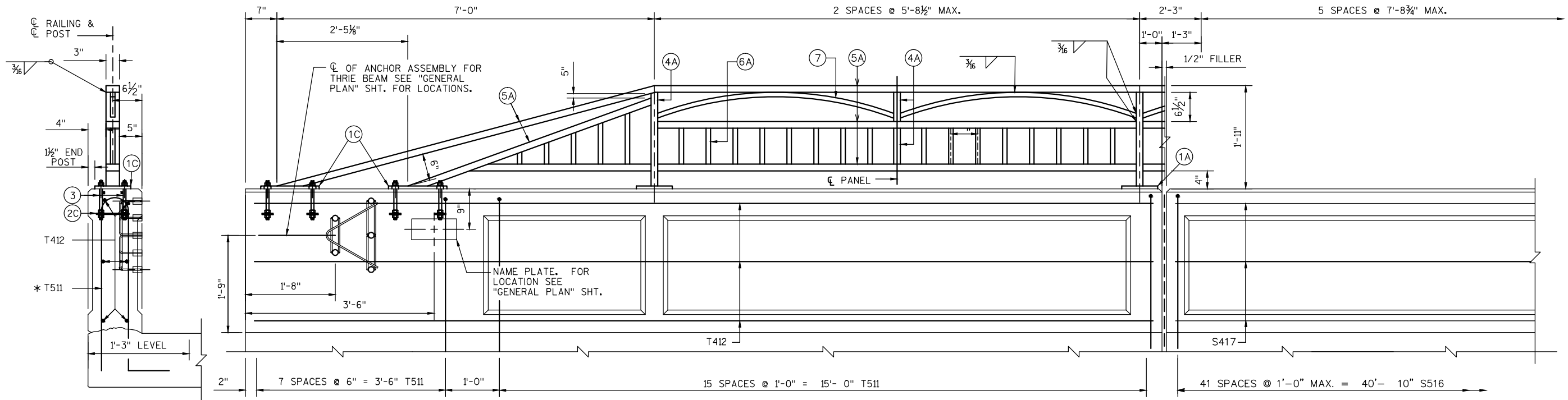
ELEVATION - STRUCTURAL APPROACH SLAB



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STRUCTURE B-30-0137			
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STRUCTURAL APPROACH SLAB		SHEET 9 OF 11	

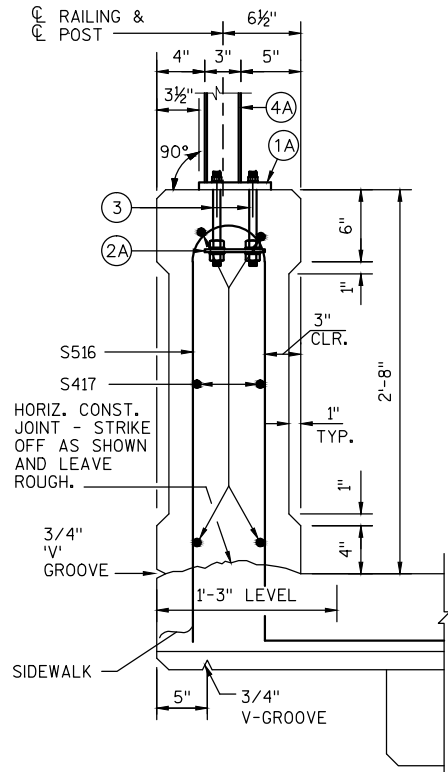


PLAN



ELEVATION OF PARAPET

SECTION THRU PARAPET ON APPROACH SLAB

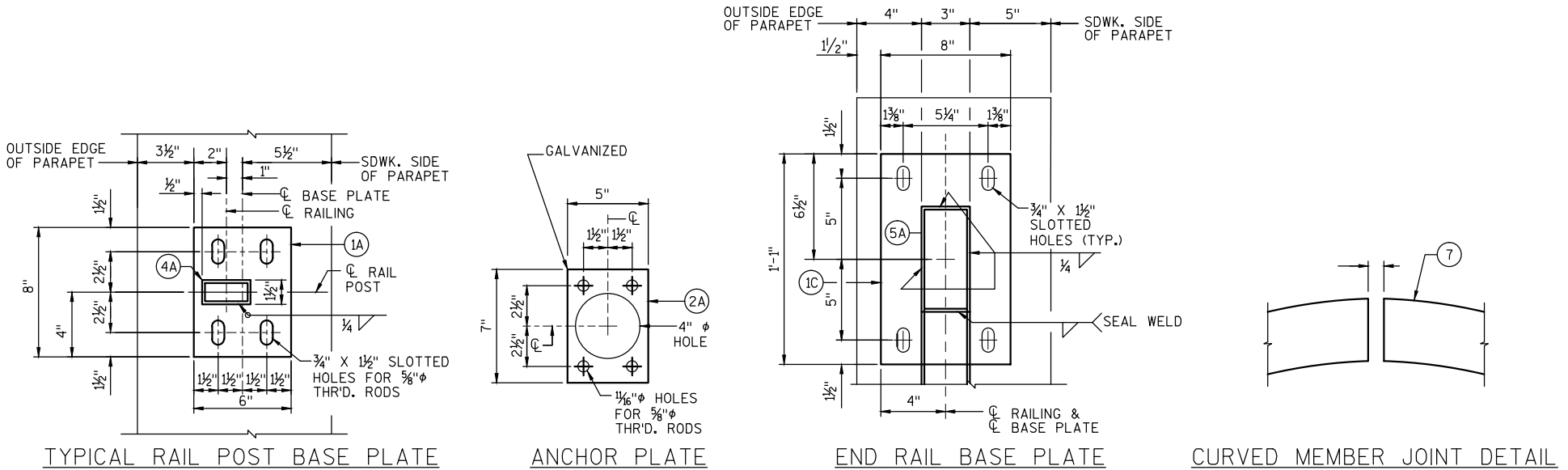


SECTION THRU PARAPET ON BRIDGE

* ADJUST LOCATIONS OF BARS TO ALLOW PLACEMENT OF ANCHOR ASSEMBLY FOR RAILING AND BEAM GUARD.

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COMBINATION RAILING TYPE 'C3'		SHEET 10 OF 11	

SCALE =



LEGEND

- 1A PLATE 5/8" X 6" X 8" WITH 3/4" X 1 1/2" SLOTTED HOLES.
- 1C PLATE 5/8" X 8" X 1'-1" WITH 3/4" X 1 1/2" SLOTTED HOLES.
- 2A 3/4" X 5" X 7" ANCHOR PLATE WITH 1/16" ϕ HOLES FOR THR'D. RODS NO. 3.
- 2C 3/4" X 2 1/2" X 7 1/4" ANCHOR PLATE WITH 1/16" ϕ HOLES FOR THR'D. RODS NO. 3.
- 3 5/8" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE: 4 EQUIVALENT STAINLESS STEEL CONCRETE MASONRY ANCHORS TYPE S 5/8-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. EMBED 5" IN CONCRETE FOR END RAILS.)
- 4A STRUCTURAL TUBING 3" X 1 1/2" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.
- 5A STRUCTURAL TUBING 3" X 1 1/2" X 3/16" RAILS. WELD TO NO. 1 & NO. 4 INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.
- 6A BAR 1" X 1" PICKETS. WELD TO NO. 5 PLACE VERTICAL. (SPACE AT 6" MAX. ϕ TO ϕ SPACING.)
- 7 BAR 1" X 1". BEND TO REQUIRED RADIUS. WELD TO NO. 4 & 5.
- 9A RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".
- 10A RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ STRIP SEAL EXP. JTS.)

RAILING NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE 'C3' B-30-0137", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B. ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

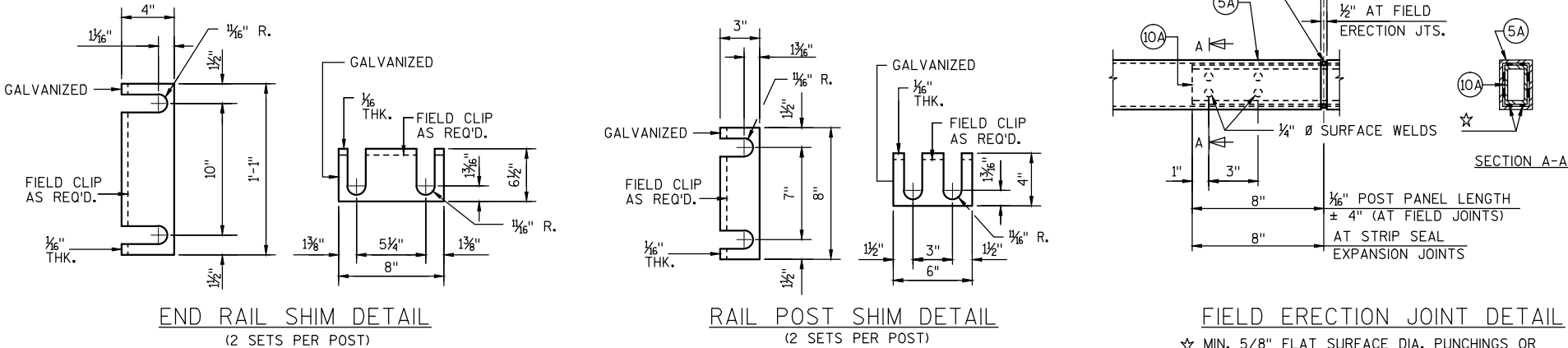
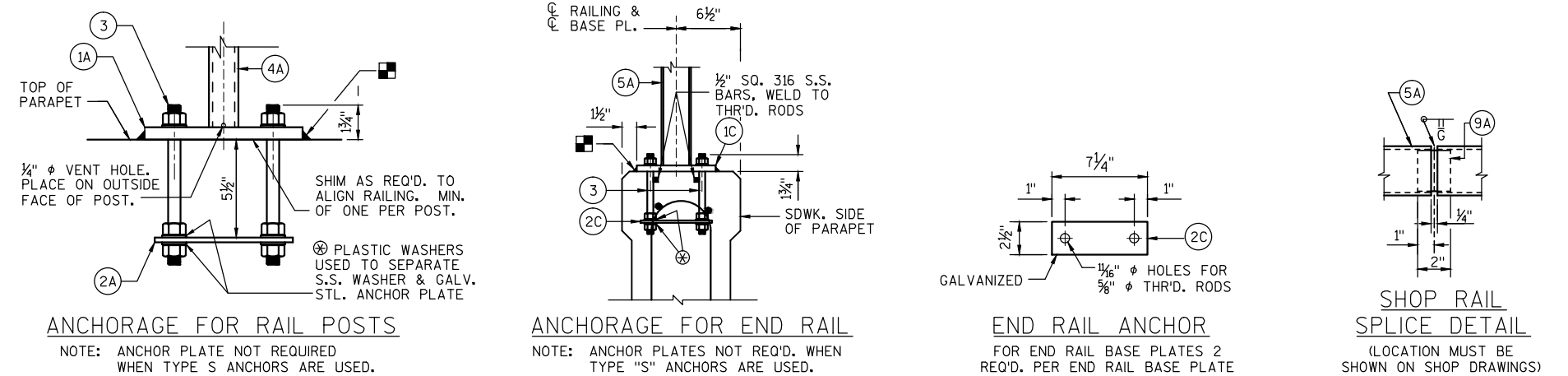
ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE "BRIDGE SPECIAL PROVISIONS". THE RAILING SHALL BE PAINTED FEDERAL COLOR NO. 27038, BLACK.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

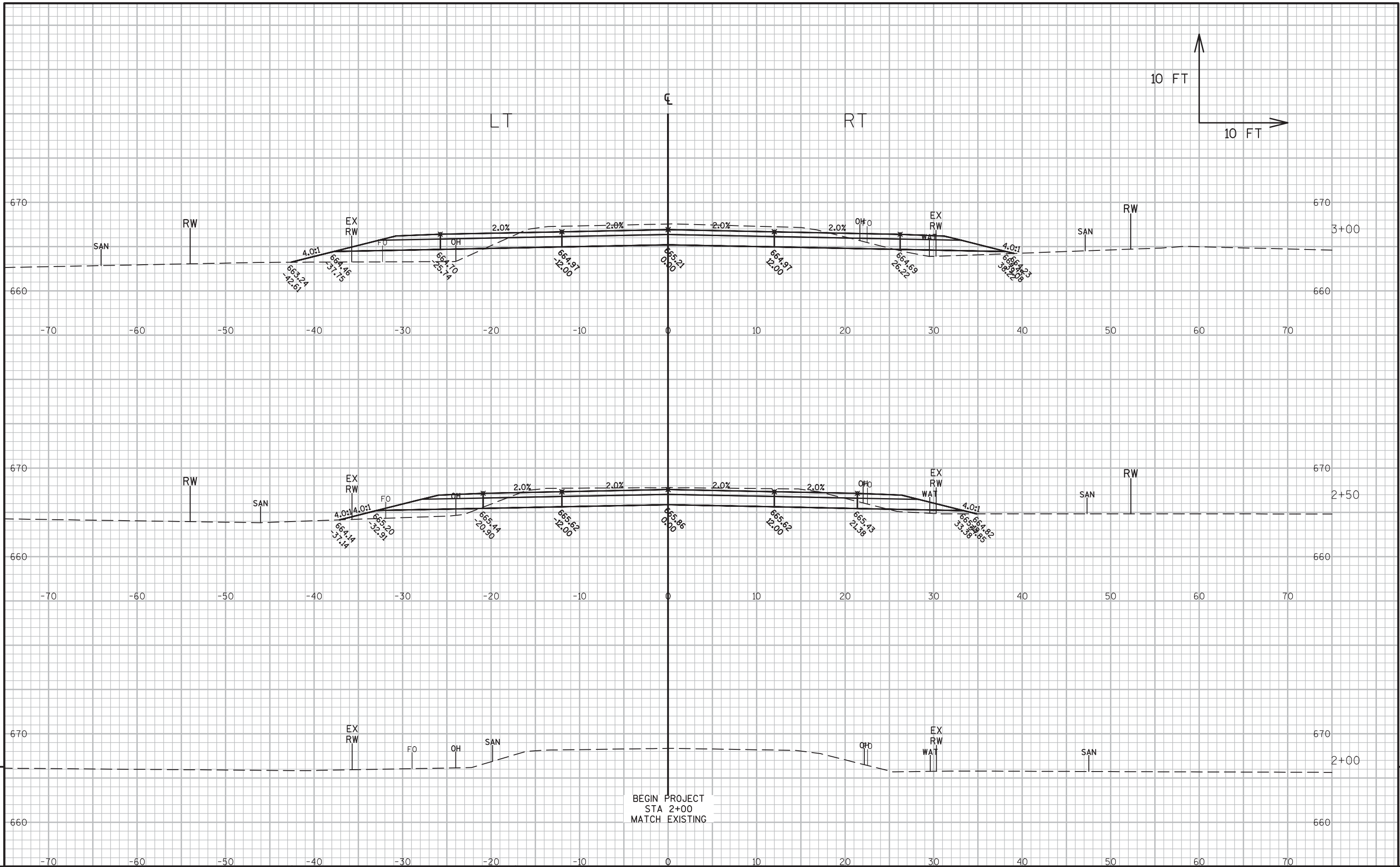
RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

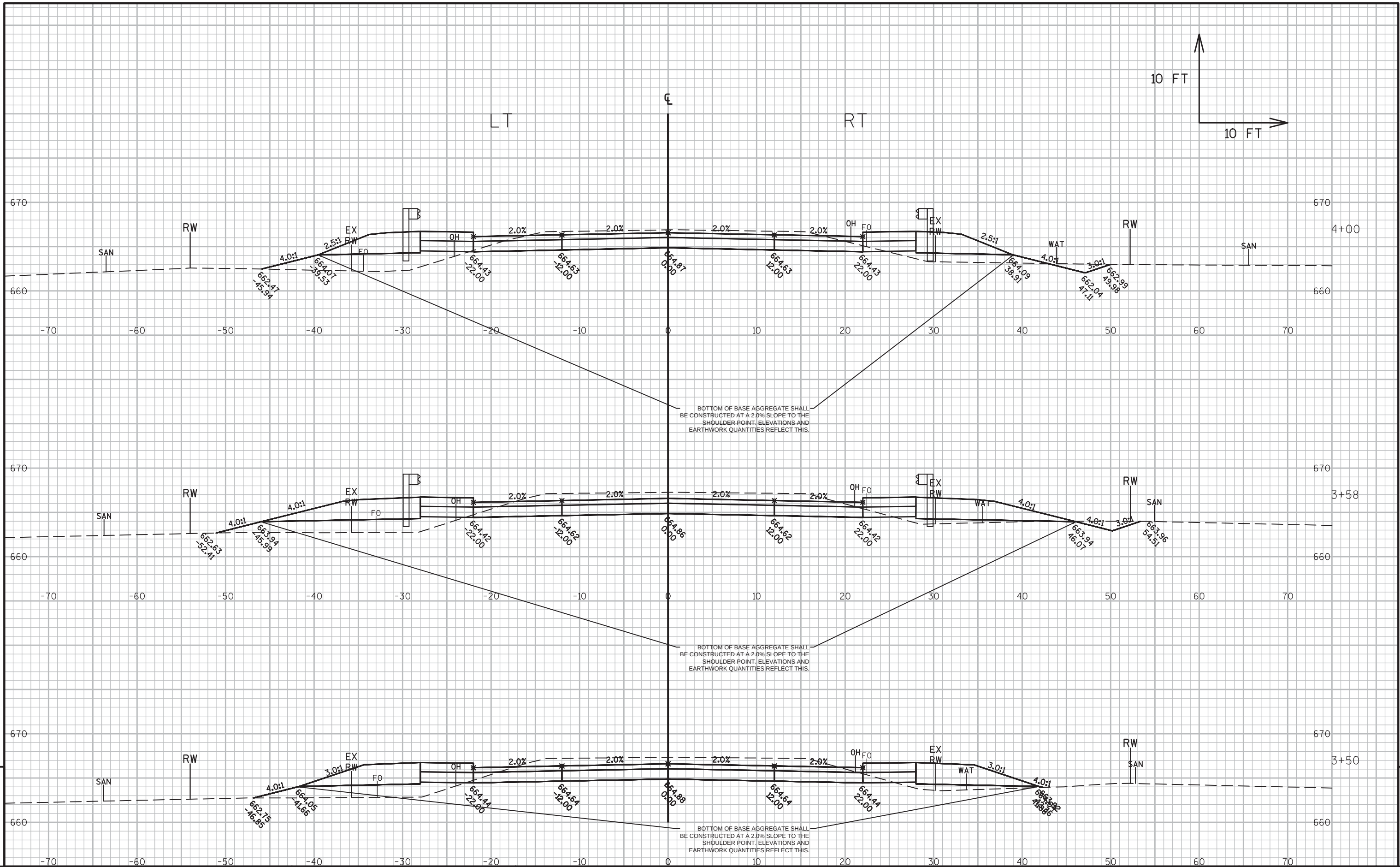
TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

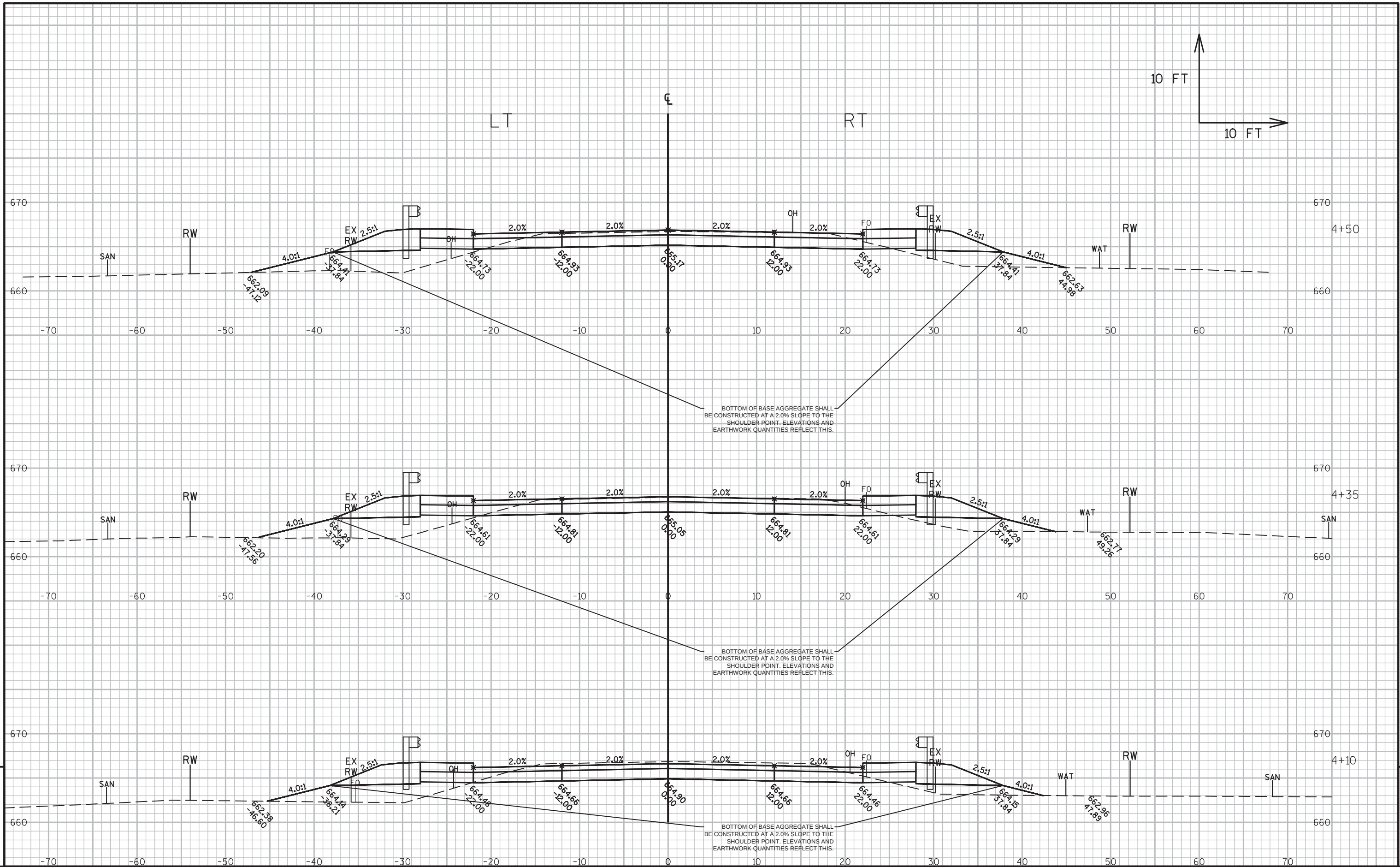


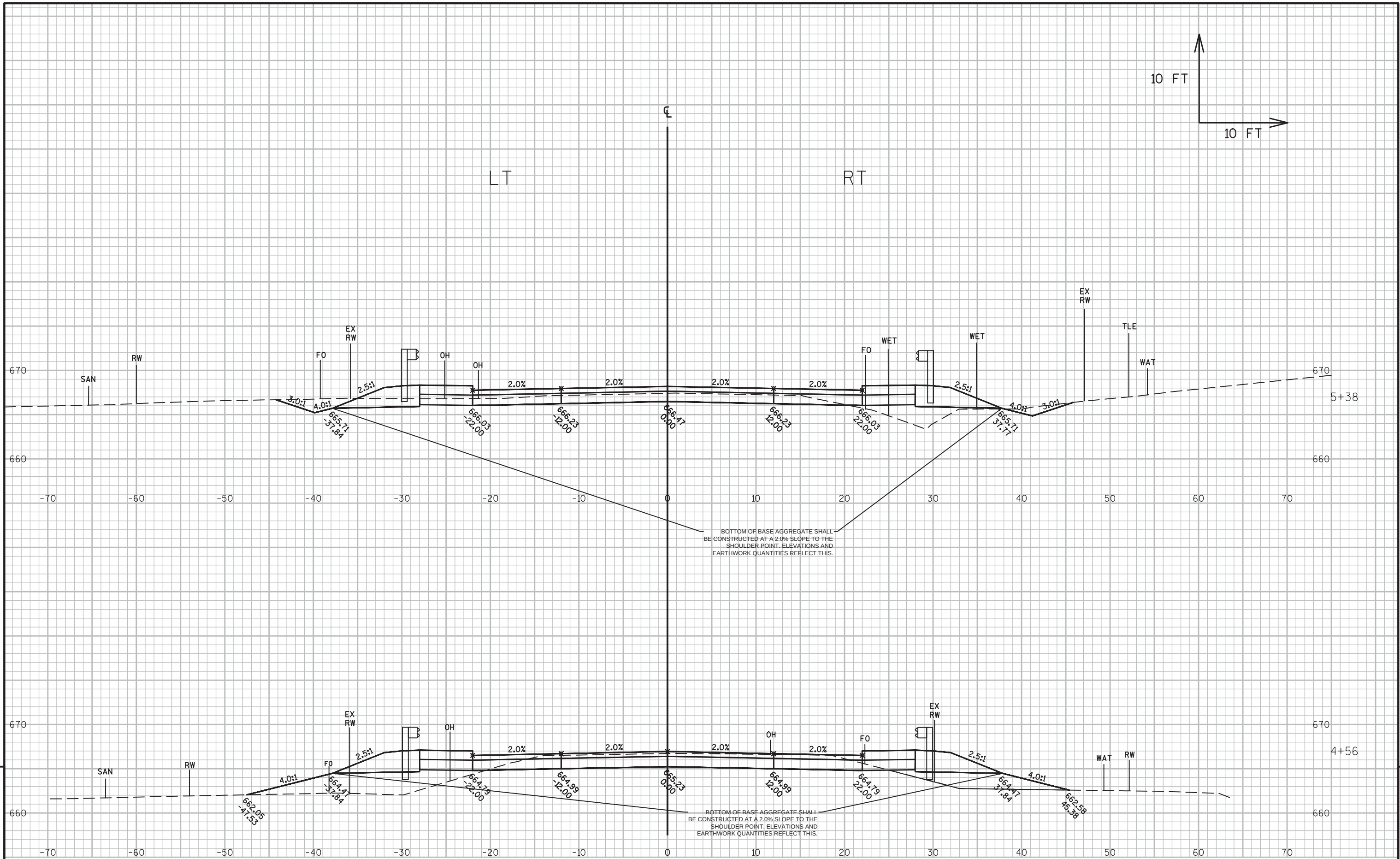
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COMBINATION RAILING TYPE 'C3' DETAILS			SHEET 11 OF 11

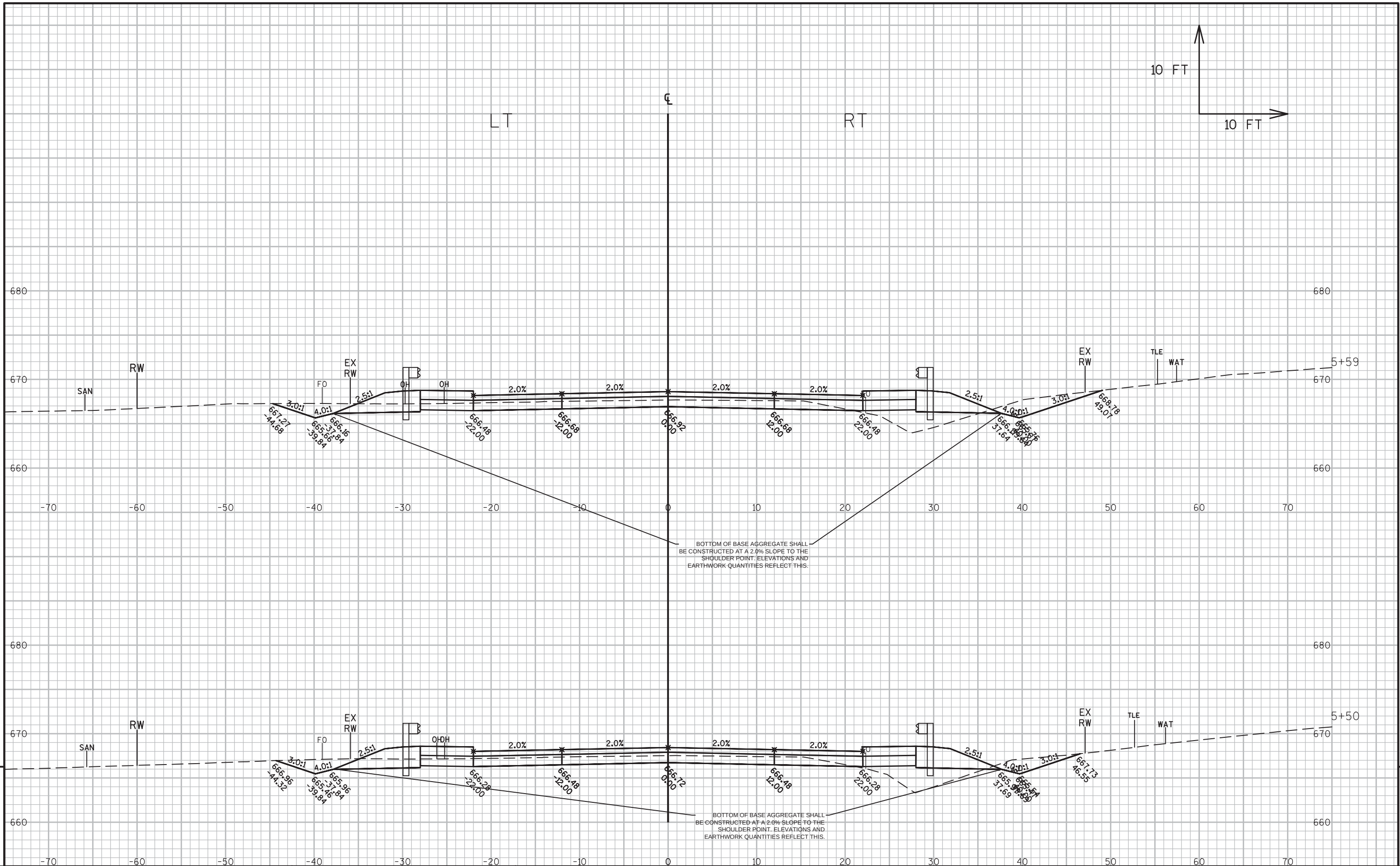
			AREA (SF)				Incremental Vol (CY) (Unadjusted)					Cumulative Vol (CY)			
													Expanded EBS	Reduced EBS	
	Real Station		Cut	Salvaged / Unusable	Fill	EBS	Cut	Salvaged / Unusable	Fill	EBS	Cut	Expanded Fill	Backfill	In Fill	Mass Ordinate
STATION		Distance		Pavement Material				Pavement Material			1.00	1.25		1.30	
							Note 1	Note 2	Note 3	Note 7	Note 1		Note 4	Note 5	Note 6
2+00	200		0	0	0	0	0	0	0	0	0.00	0.00	0	0	0.00
2+50	250	50	77.96	1421	44.13	0	72.19	26.31	40.86	0	72.19	51.08	0	0	-5.21
3+00	300	50	88.21	1425	74.51	0	153.86	26.39	109.85	0	226.05	188.39	0	0	-15.05
3+50	350	50	97.91	1440	81.29	0	172.33	26.67	144.26	0	398.38	368.72	0	0	-49.71
3+58	358	8	100.05	237	98.38	0	29.33	4.39	26.62	0	427.71	401.99	0	0	-58.04
4+00	400	42	83.01	1228	84.07	0	142.38	22.74	141.91	0	570.09	579.37	0	0	-115.78
4+10.44	410	10	75.68	294	77.73	0	30.68	5.44	31.28	0	600.77	618.47	0	0	-129.65
4+35.29	435	25	66.92	745	86.76	0	65.62	13.80	75.70	0	666.39	713.09	0	0	-172.44
4+50	450	15	61.92	445	94.64	0	35.10	8.24	49.41	0	701.49	774.86	0	0	-207.35
4+56.10	456	6	60.30	175	97.55	0	13.58	3.24	21.35	0	715.07	801.55	0	0	-223.71
						1950									
5+38.10	538	12	60.20	0	39.47	0	26.76	0.00	17.54	433	741.82	801.55	563	347	0.00
5+50	550	12	64.14	352	41.69	76	27.63	6.52	18.04	17	769.45	807.21	585	360	15.46
5+58.92	559	9	66.39	263	38.69	35	21.56	4.87	13.28	18	791.01	805.47	609	375	33.89
5+83.94	584	25	127.57	733	29.47	38	89.87	13.57	31.58	34	880.88	811.12	653	402	104.53
6+00	600	16	137.45	474	56.84	0	78.82	8.78	25.67	11	959.70	831.91	668	411	153.78
6+08.94	609	9	211.77	336	63.50	0	57.82	6.22	19.92	0	1017.52	856.81	668	411	180.47
6+50	650	41	186.28	2702	22.60	0	302.67	50.04	65.47	0	1320.18	938.65	668	411	351.27
7+00	700	50	129.35	1540	27.40	0	292.25	28.52	46.30	0	1612.43	996.45	668	411	557.19
7+50	750	50	105.70	1477	25.71	0	217.64	27.35	49.18	0	1830.07	1057.86	668	411	686.08
8+00	800	50	0	1470	0.00	0	97.87	27.22	23.81	0	1927.94	1087.61	668	411	726.97
						Column totals	1928	310	952	514					
				Notes:											
				1. Cut		Cut includes salvaged/unusable pavement material									
				2. Salvaged/Unusable Pavement Material		This does not show up in the cross-sections									
				3. Fill		Does not included unusable pavement exc volume									
				4. Expanded EBS		Will be backfilled with granular backfill (or cut or borrow)									
				5. Reduced EBS in Fill		Reduced EBS excavation that can be used in fill									
				6. Mass Ordinate		If Marsh or EBS to be backfilled with Cut or Borrow: [(Cut + Marsh Exc + EBS) - ((Fill - Reduced Marsh in Fill) - (Reduced EBS in Fill) - Expanded Rock) * Fill Factor]]									
				6. Mass Ordinate		If Marsh and EBS to be backfilled with Granular: [(Cut + EBS + Marsh Exc) - ((Fill - (Reduced Marsh in Fill) - (Reduced EBS in Fill) - (Expanded Rock)) * Fill Factor))]									
				6. Mass Ordinate		If Marsh and EBS to be backfilled with Granular: [(Cut) - ((Fill - Expanded Rock) * Fill Factor))]									
				6. Mass Ordinate		If Marsh and EBS to be backfilled with Cut or Borrow: [(Cut) - ((Fill - Expanded Rock) * Fill Factor))]									
				7. EBS		EBS is Only Estimated to be Required Where Wetlands are Present near the Proposed Bridge [Between STA 4+56.10 and 5+83.94]									

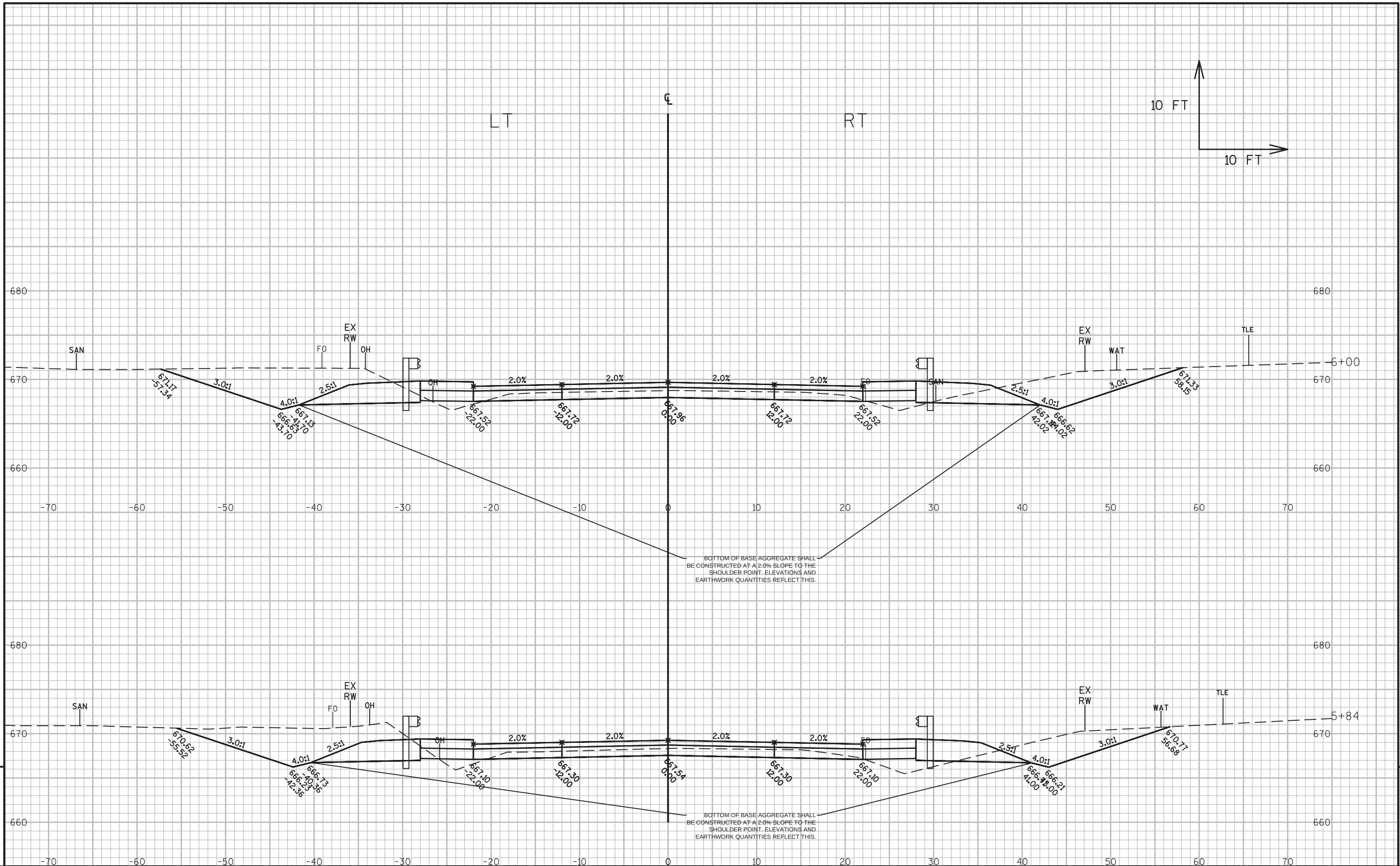


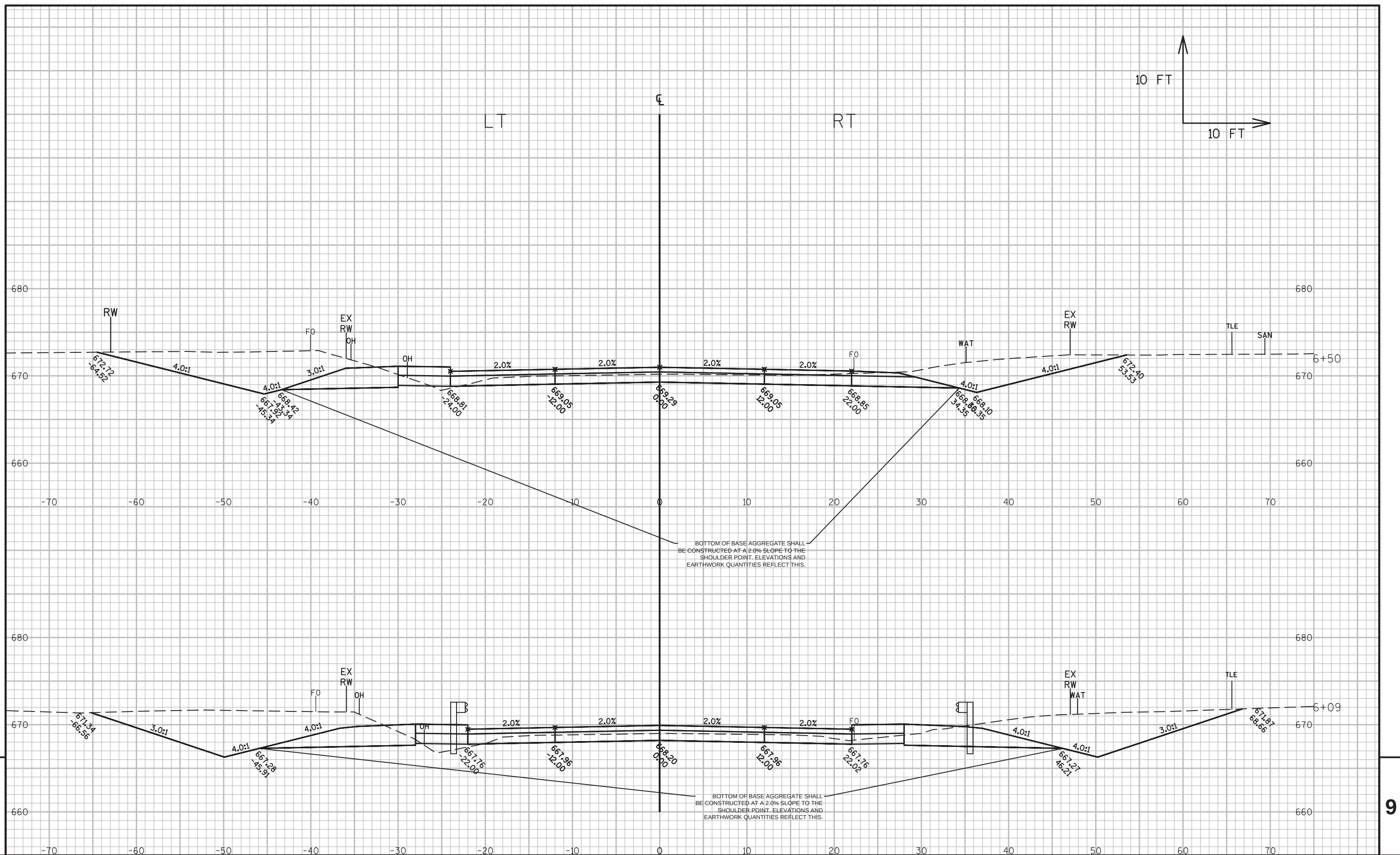


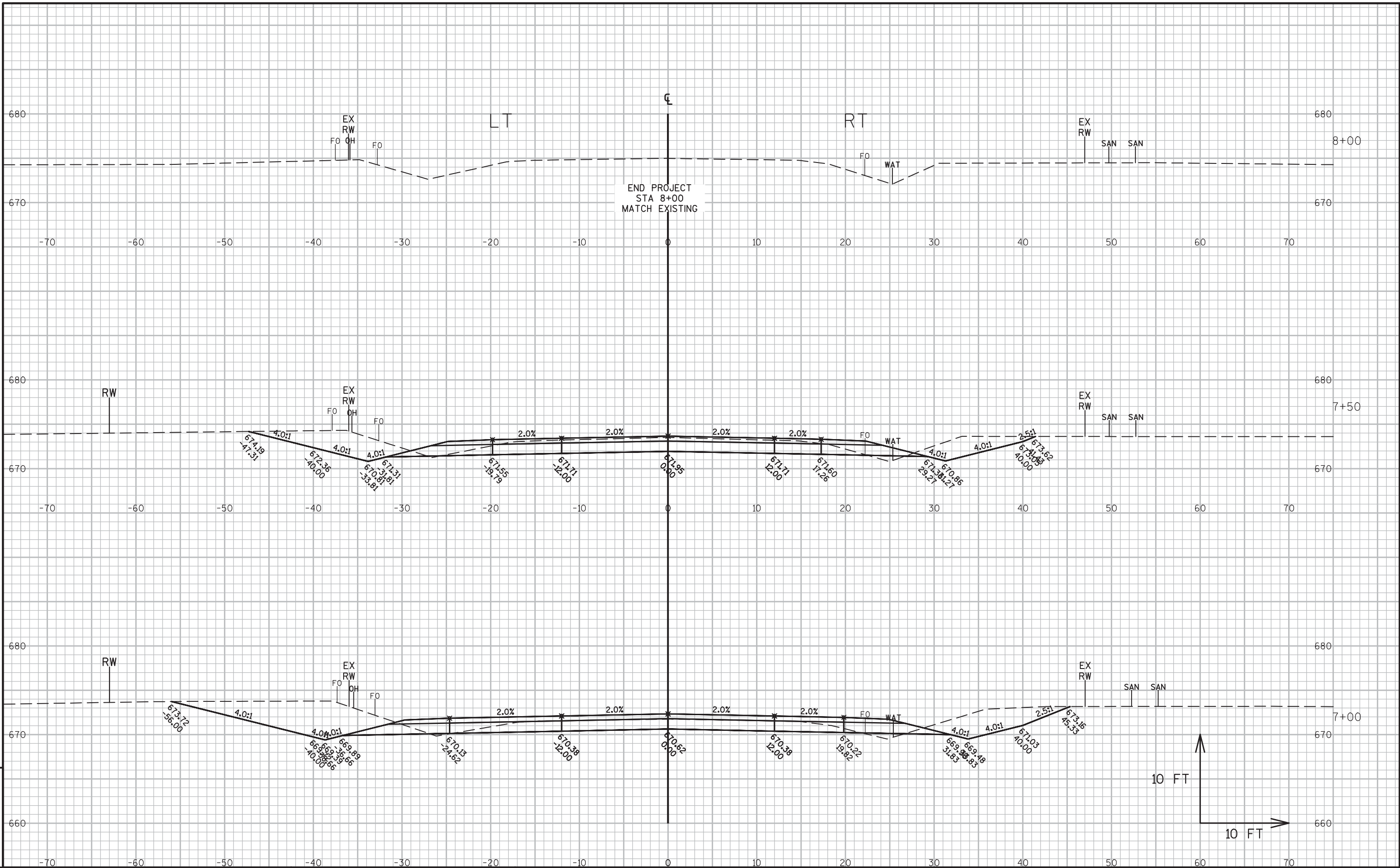


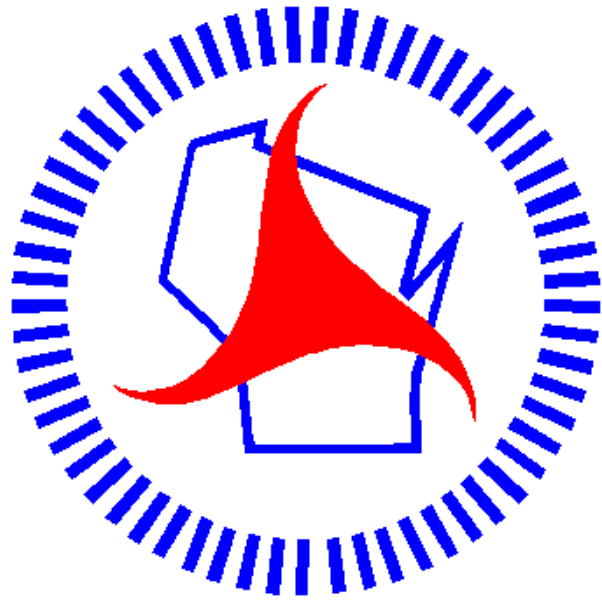












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