

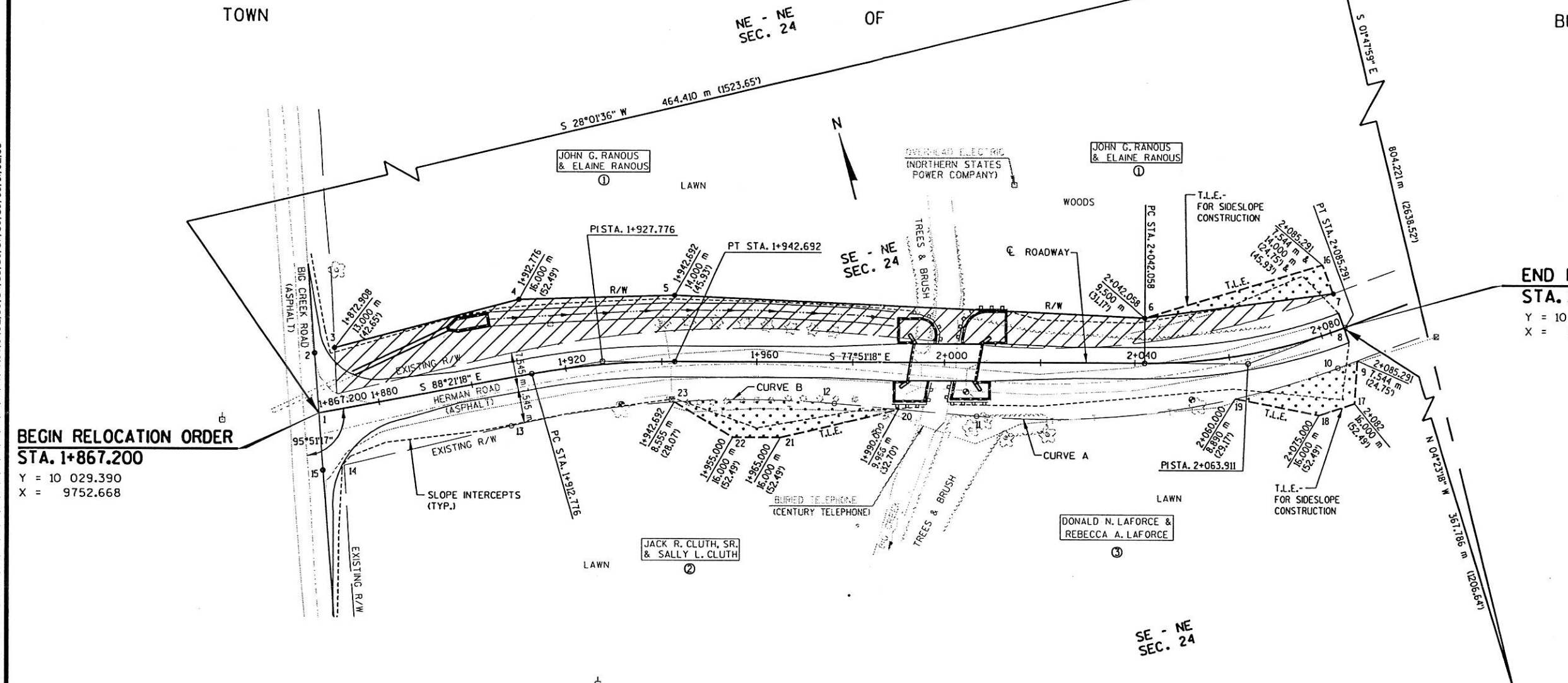
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 REV. DATE: 10-20-97
 PLOT NAME: 939659RW.DGN
 PLOT SCALE: 1:500

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TOTAL AREA	R/W AREA REQUIRED			TOTAL REMAINING AREA	T.L.E. AREA
				NEW	EXISTING	TOTAL		
1	JOHN G. RANOUS & ELAINE RANOUS	FEE & TLE	1.987 HECTARE (4.91 ACRES)	0.148 HECTARE (0.37 ACRE)	0.170 HECTARE (0.42 ACRE)	0.318 HECTARE (0.79 ACRES)	1.669 HECTARE (4.12 ACRES)	0.013 HECTARE (0.03 ACRE)
2	JACK R. CLUTH, SR. & SALLY L. CLUTH	TLE	--	--	--	--	--	0.023 HECTARE (0.06 ACRE)
3	DONALD N. LAFORCE & REBECCA A. LAFORCE	TLE	--	--	--	--	--	0.015 HECTARE (0.04 ACRE)
4	CENTURY TELEPHONE	RELEASE OF RIGHTS	--	--	--	--	--	--
5	NORTHERN STATES POWER COMPANY	RELEASE OF RIGHTS	--	--	--	--	--	--

☺ CURVE #1 DATA P.I. = STA. 1+927.776 Y = 10 027.651 X = 9813.219 DELTA = 10°30'00" R = 163.244 m T = 15.000 m L = 29.916 m P.C. = STA. 1+912.776 Y = 10 028.082 X = 9798.225 P.T. = STA. 1+942.692 Y = 10 024.495 X = 9827.883	☺ CURVE #2 DATA P.I. = STA. 2+063.911 Y = 9998.992 X = 9946.389 DELTA = 20°38'32" LT. R = 120.000 m T = 21.853 m L = 43.233 m P.C. = STA. 2+042.058 Y = 10 003.590 X = 9925.020 P.T. = STA. 2+085.291 Y = 10 002.222 X = 9968.003
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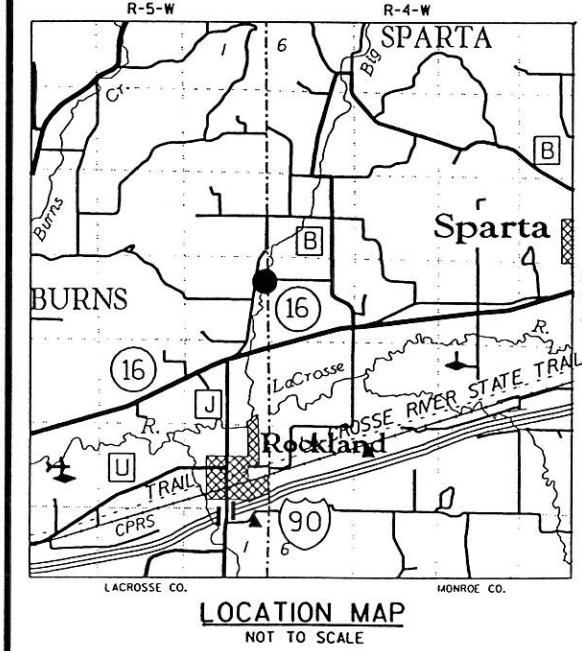
R/W PROJECT NUMBER	7266-07-21	SHEET NUMBER	4.0	TOTAL SHEETS	
PLAT OF RIGHT OF WAY REQUIRED FOR BIG CREEK BRIDGE & APPROACHES (HERMAN ROAD)					
TOWN ROAD	LACROSSE COUNTY				
CONSTRUCTION PROJECT NUMBER					

POINT	Y	X
1	10 029.390	9752.668
2	10 042.016	9754.330
3	10 042.221	9758.747
4	10 044.075	9798.685
5	10 038.182	9830.829
6	10 012.877	9927.024
7	10 009.683	9966.888
8	10 002.222	9968.003
9	9994.760	9969.118
10	9994.126	9964.733
11	9999.884	9888.098
12	10 008.878	9858.736
13	10 018.176	9791.789
14	10 017.408	9755.579
15	10 017.313	9751.078
16	10 016.068	9965.934
17	9985.897	9966.671
18	9985.170	9958.773
19	9992.266	9942.227
20	10 004.804	9872.037
21	10 004.160	9846.326
22	10 006.264	9836.550
23	10 016.132	9826.084



BEGIN RELOCATION ORDER
STA. 1+867.200
 Y = 10 029.390
 X = 9752.668

END RELOCATION ORDER
STA. 2+085.291
 Y = 10 002.222
 X = 9968.003



R/W COURSE DATA		
COURSE	BEARING	DISTANCE
1-2	N 07°29'59" E	12.735 m (41.78')
2-3	N 87°20'30" E	4.421 m (14.50')
3-4	N 87°20'30" E	39.981 m (131.17')
4-5	S 79°36'40" E	32.680 m (107.22')
5-6	S 75°15'43" E	99.468 m (326.34')
6-7	S 85°25'06" E	39.992 m (131.21')
7-8	S 08°29'50" E	7.544 m (24.75')
8-9	S 08°29'50" E	7.544 m (24.75')
9-10	S 81°46'04" W	4.431 m (14.54')
11-12	N 72°58'10" W	30.709 m (100.75')
13-14	S 88°47'06" W	36.218 m (118.83')
14-15	S 88°47'06" W	4.502 m (14.77')
15-1	N 07°29'59" E	12.182 m (39.97')

T.L.E. COURSE DATA		
COURSE	BEARING	DISTANCE
6-16	N 85°18'45" E	39.041 m (128.09')
16-7	S 08°29'50" E	6.456 m (21.18')
7-6	N 85°25'06" W	39.992 m (131.21')
9-17	S 15°25'47" W	9.195 m (30.17')
17-18	S 84°44'42" W	7.932 m (26.02')
18-19	N 66°47'18" W	18.002 m (59.06')
10-9	N 81°46'04" E	4.431 m (14.54')
11-20	N 72°58'10" W	16.798 m (55.11')
20-21	S 88°33'57" W	25.719 m (84.38')
21-22	N 77°51'18" W	10.000 m (32.81')
22-23	N 46°41'08" W	14.385 m (47.19')
12-20	S 72°58'10" E	13.911 m (45.64')

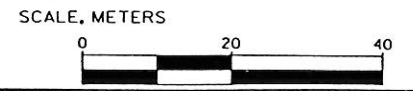
BEARING ORIENTATION
 BEARINGS ARE REFERENCED TO THE LINE BETWEEN THE NORTHEAST CORNER AND THE EAST QUARTER CORNER OF SECTION 24, T17N, R5W, WITH A BEARING OF S 01°47'59" E.

NOTE:
 COORDINATES SHOWN ON THIS PLAY ARE ORIENTED TO A LOCAL COORDINATE SYSTEM.

THE AREAS SHOWN IN THE TOTAL AREAS COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC RECORD. OTHER INFORMATION IS PROVIDED TO SUPPLEMENT THE BASIC PERIMETER DESCRIPTION AND SHALL NOT BE CONSTRUED TO PREVAIL OVER THE PERIMETER DESCRIPTION.

R/W CURVE DATA					
CURVE NUMBER	COURSE	LONG CHORD BEARING	LONG CHORD DISTANCE	CURVE RADIUS	CURVE LENGTH
A	10-11	N 85°42'11" W	76.851 m (252.14')	174.281 m (571.79')	77.488 m (254.23')
B	12-13	N 82°05'35" W	67.590 m (221.75')	213.363 m (700.00')	67.876 m (222.69')
A	19-10	N 85°16'27" E	22.582 m (74.09')	174.281 m (571.79')	22.598 m (74.14')
B	23-12	S 77°28'31" E	33.449 m (109.74')	213.363 m (700.00')	33.483 m (109.85')



ACCEPTED FOR TOWN OF BURNS

DATE _____ CHAIRMAN _____

ORIGINAL PLAT PREPARED BY

MSA PROFESSIONAL SERVICES

TRANSPORTATION • MUNICIPAL • REHABILITATION
DEVELOPMENT • ENVIRONMENTAL

1330 South Boulevard, Burnsville, WI 53015
608-886-8771 • 1-800-363-6266 • Fax: 608-886-2778

DATE _____ CHAIRMAN _____

M

LACROSSE

7266-07-71

INDEX OF SHEETS

Sheet No. 1	Title
Sheet No.	Typical Section Sheet
Sheet No.	Estimate of Quantities
Sheet No.	Miscellaneous Quantities
Sheet No.	Right of Way Plan
Sheet No.	Plan & Profile (includes Erosion Control Plan)
Sheet No.	Standard Detail Drawings
Sheet No.	Sign Plates
Sheet No.	Structure Plans
Sheet No.	Computer Earthwork Data
Sheet No.	Cross Sections

TOTAL SHEETS =

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

HERMAN ROAD (BIG CREEK BRIDGE & APPROACHES) TOWN ROAD LACROSSE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7266-07-71		

STATE PROJECT NUMBER
7266-07-71

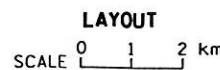
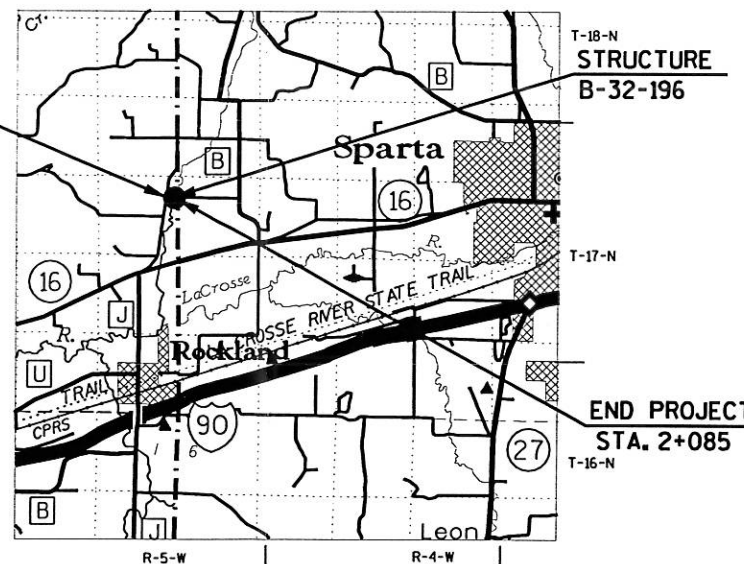


DESIGN DESIGNATION

A.D.T. (1998)	=	40
A.D.T. (2018)	=	60
D.H.V. (2018)	=	5
D.	=	60/40
T.	=	8%
DESIGN SPEED	=	50 km/h
ESALS	=	N/A

Conventional Symbols

County Line	---	Combustible Fluids	CAUTION
Town or Range Line	---	Railroad	—+—+—+—+—
Section Line	---	Fence	X—X—
Corporate Limits	---	Culvert (In Place)	— — — — —
Property Line	---	Culvert (Required)	— — — — —
Lot Line	---	Power Pole	⊞
Existing Right of Way Line	---	Telephone Pole	⊞
New Right of Way Line	---	Telephone Pedestal	⊞
Reference Line	---	Right of Way Monument (Type)	● (Type)
Slope Intercept	---	Marsh	—▲—▲—▲—▲—
Existing Roadway or	---	Edge of Stream	—▲—▲—▲—▲—
Private Entrance	---	Wooded or Shrub Area	—▲—▲—▲—▲—
Limited Easement	---	Grade Line Elevation	—▲—▲—▲—▲—
Right of Way Point	○	Water	—(S)z—(S)z—(S)z—(S)z—
Silt Fence	— — — — —	Gas	—(S)z—(S)z—(S)z—(S)z—
Silt Screen	— — — — —	Telephone	—T—T—T—T—
Erosion Bales	— — — — —	Electric	—E—E—E—E—
Sod	— — — — —	Cable Television	—TV—TV—TV—TV—
Ditch Dike	— — — — —	Fiber Optic	—FO—FO—FO—FO—
Intercepting Embankment	— — — — —	Sanitary Sewer	—(S)z—(S)z—(S)z—(S)z—
Riprap	— — — — —	Storm Sewer	—(S)z—(S)z—(S)z—(S)z—
Erosion Mat	— — — — —		



TOTAL NET LENGTH OF CENTERLINE = 0.218 km (RURAL)

COORDINATES ARE SCALED FROM THE U.S.G.S. TOPOGRAPHIC MAP BANGOR, WISCONSIN QUADRANGLE, FOR IDENTIFICATION ONLY.

ACCEPTED FOR TOWN OF BURNS

DATE _____ CHAIRMAN _____

ACCEPTED FOR COUNTY OF LACROSSE

DATE _____ COMMISSIONER _____

ORIGINAL PLANS PREPARED BY:
MSA PROFESSIONAL SERVICES, INC.
TRANSPORTATION • MUNICIPAL • REMEDIATION
DEVELOPMENT • ENVIRONMENTAL
1200 South Boulevard, Bangor, WI 53913
608-566-2771 1-800-362-4506 Fax: 608-566-4770

Date _____ Signature _____

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor MSA PROFESSIONAL SERVICES, INC.
Designer MSA PROFESSIONAL SERVICES, INC.
District Examiner _____
District Supervisor _____
Proj. Dev. Engineer _____
C.O. Examiner _____

APPROVED FOR DISTRICT OFFICE

DATE: _____ (Signature) _____

MISCELLANEOUS QUANTITIES

CLEARING AND GRUBBING

STATION TO STATION	40 m
1+910 - 2+070	4

EARTHWORK

STATION TO STATION	UNCL. EXC.	*FILL	BORROW
	m ³	m ³	m ³
1+867 - 1+993	109	1950	2426
2+007 - 2+085	432	318	(19)▲
TOTALS	541	2268	2407

* NOT A BID ITEM. FOR INFORMATION ONLY. FILL EXPANSION 30%.
▲ UTILIZE WASTE.

CRUSHED AGGREGATE BASE COURSE

STATION TO STATION	BASE	SHOULDERS
	m ³	m ³
1+867 - 1+993	310	40
2+007 - 2+085	160	20
TOTALS	470	60

BREAKER RUN STONE

STATION TO STATION	m ³
1+867 - 1+993	250
2+007 - 2+085	130
TOTAL	380

ASPHALTIC MATERIAL FOR TACK COAT

STATION TO STATION	L
1+867 - 1+993	120
2+007 - 2+085	60
TOTAL	180

ASPHALTIC SURFACE

STATION - STATION	Mg
1+867 - 1+993	200**
2+007 - 2+085	100**
TOTAL	300

** INCLUDES TAPERS OFF BRIDGE ENDS AND AT TYPE 'C' INTERSECTION.

CORRUGATED STEEL CULVERT PIPE, 900 mm

STATION TO STATION	LOCATION	LENGTH	APRON	ENDWALLS
		m	EACH	EACH
1+877 - 1+897	LT.	21	1	1

HEAVY RIPRAP & GEOTEXTILE FABRIC, TYPE HR

STATION TO STATION	LOCATION	HEAVY RIPRAP	GEOTEXTILE FABRIC, TYPE HR
		m ³	m ²
1+897 - 1+906	LT.	21	44

MARKER POSTS FOR RIGHT-OF-WAY

STATION	LOCATION	EACH
1+872.908	13.000 m LT.	1
1+912.776	16.000 m LT.	1
1+942.692	14.000 m LT.	1
2+042.058	9.500 m LT.	1
2+085.291	7.544 m LT.	1
TOTAL		5

TOPSOIL, MULCHING, FERTILIZE & SEEDING

STATION TO STATION	SALV. TOPSOIL	MULCHING	TYPE B FERT.	SEEDING MIXTURE #40	SEEDING TEMPORARY	SEEDING BORROW PIT MIXTURE	PREPARATION FOR LAWN TYPE TURF
	m ²	m ²	kg	kg	kg	kg	m ²
1+867 - 1+993	1750	1800	80	25	3⊗	-	1750
2+007 - 2+085	810	600	40	10	3⊗	-	810
BORROW PIT	-	1280	45	-	-	10	-
UNDISTRIBUTED	380	600	25	5	1	-	380
TOTALS	2940	4280	190	40	7	10	2940

⊗ - UTILIZE IN AREAS OF SLOPE GREATER THAN 1:3 AT A RATE OF 0.5 kg PER 100 m².

EROSION BALES

LOCATION	DELIVERED EACH	INSTALLED EACH
UNDISTRIBUTED	20	20

SILT FENCE, SILTY SOIL

LOCATION	DELIVERED	INSTALLED	MAINTENANCE
	m	m	m
WEST BANK	30	30	60
EAST BANK	35	35	70
UNDISTRIBUTED	20	20	40
TOTALS	85	85	170

EROSION MAT, CLASS I, TYPE B

LOCATION	DELIVERED	INSTALLED
	m ²	m ²
STA. 1+880 - 1+940, RT.	120	120
STA. 1+906 - 1+990, LT.	260	260
UNDISTRIBUTED	20	20
TOTAL	400	400

WOOD POSTS, 100 mm X 100 mm X 3 m

LOCATION	EACH
1+993 LT.	1
1+992, RT.	1
2+008, LT.	1
2+007, RT.	1
TOTAL	4

SIGNS, TYPE II, REFLECTIVE

LOCATION	m ²	REMARKS
1+993 LT.	0.28	W5-52L
1+992, RT.	0.28	W5-52R
2+008, LT.	0.28	W5-52R
2+007, RT.	0.28	W5-52L
TOTAL	1.12	

SAWING EXISTING PAVEMENT

STATION	m ²
1+867	25
2+085	5
TOTAL	30

PLOT SCALE:

PLOT NAME:

REV. DATE: 11-4-97

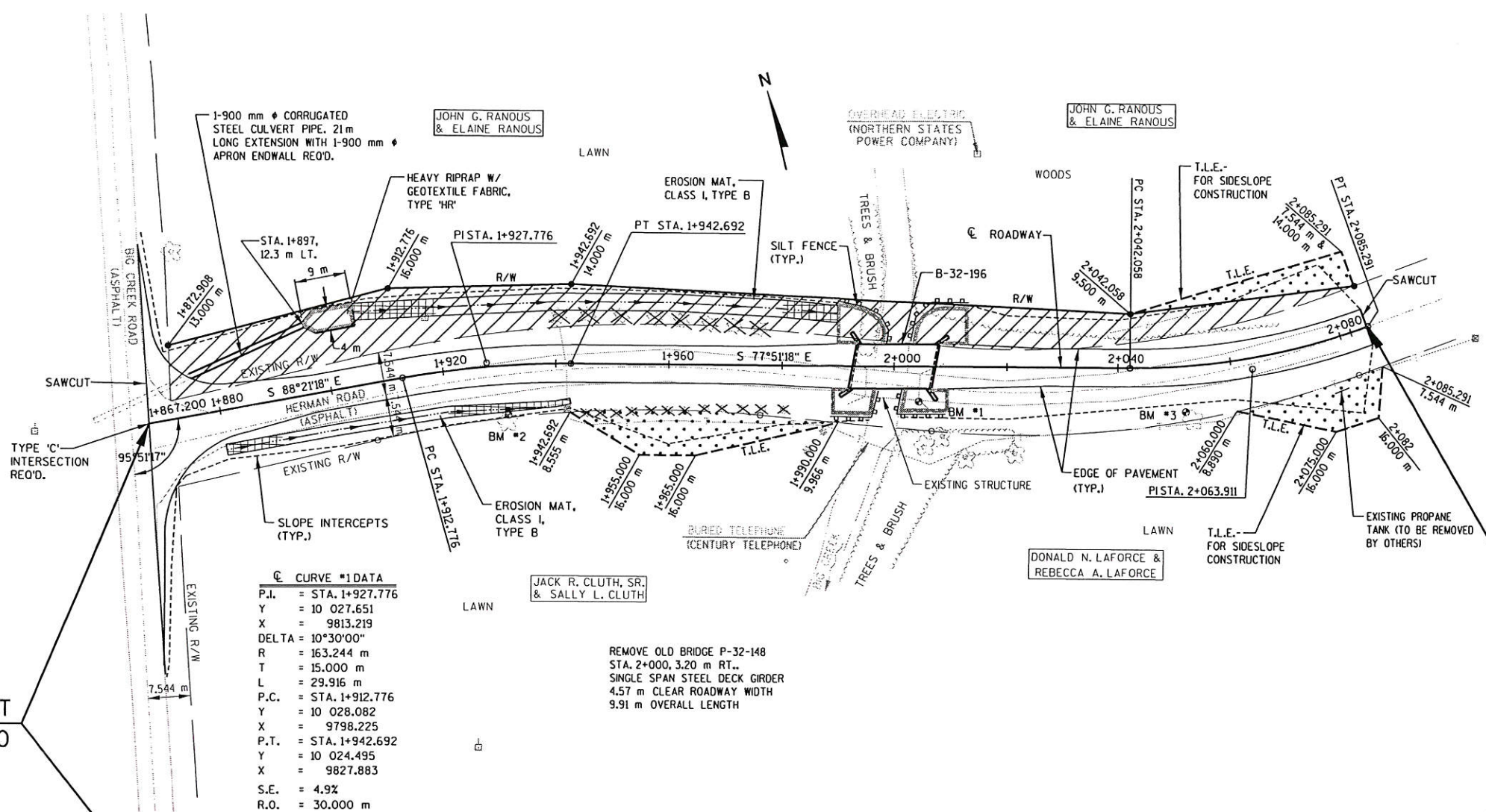
ORIGINATOR: MMR

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ORIGINATOR: MMR
 LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63
 REV. DATE: 11-4-97
 FILE NAME: RCP01002.DGN
 PLOT SCALE: 1:1000

BENCHMARKS			
NO.	STATION	DESCRIPTION	ELEV.
1	2+004.5	CHISELED CROSS ON TOP OF 6.3 m RT.	233.538
2	1+930.7	DBL. 20d. NAIL IN NORTH FACE OF 6.8 m RT.	235.705
3	2+052.3	DBL. 20d. NAIL IN NORTH FACE OF 250 mm Ø TREE	234.535

C CURVE #2 DATA	
P.I.	= STA. 2+063.911
Y	= 9998.992
X	= 9946.389
DELTA	= 20°38'32" LT.
R	= 120.000 m
T	= 21.853 m
L	= 43.233 m
P.C.	= STA. 2+042.058
Y	= 10 003.590
X	= 9925.025
P.T.	= STA. 2+085.291
Y	= 10 002.222
X	= 9968.003
S.E.	= 5.5%
R.O.	= 30.000 m NORMAL, FULL 5.50% S.E. STA. 2+052.058 TO STA. 2+060.000 LINEAR TRANSITION @ PROJECT END

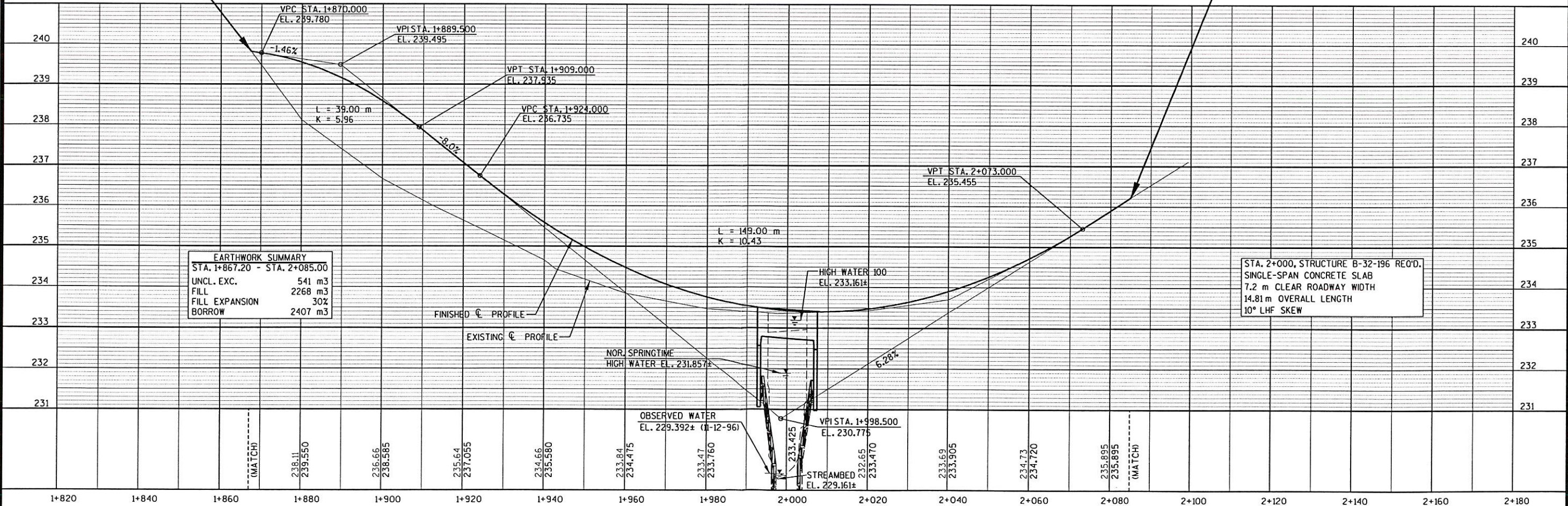


C CURVE #1 DATA	
P.I.	= STA. 1+927.776
Y	= 10 027.651
X	= 9813.219
DELTA	= 10°30'00"
R	= 163.244 m
T	= 15.000 m
L	= 29.916 m
P.C.	= STA. 1+912.776
Y	= 10 028.082
X	= 9798.225
P.T.	= STA. 1+942.692
Y	= 10 024.495
X	= 9827.883
S.E.	= 4.9%
R.O.	= 30.000 m

REMOVE OLD BRIDGE P-32-148
 STA. 2+000, 3.20 m RT.,
 SINGLE SPAN STEEL DECK GIRDER
 4.57 m CLEAR ROADWAY WIDTH
 9.91 m OVERALL LENGTH

BEGIN PROJECT
 STA. 1+867.200

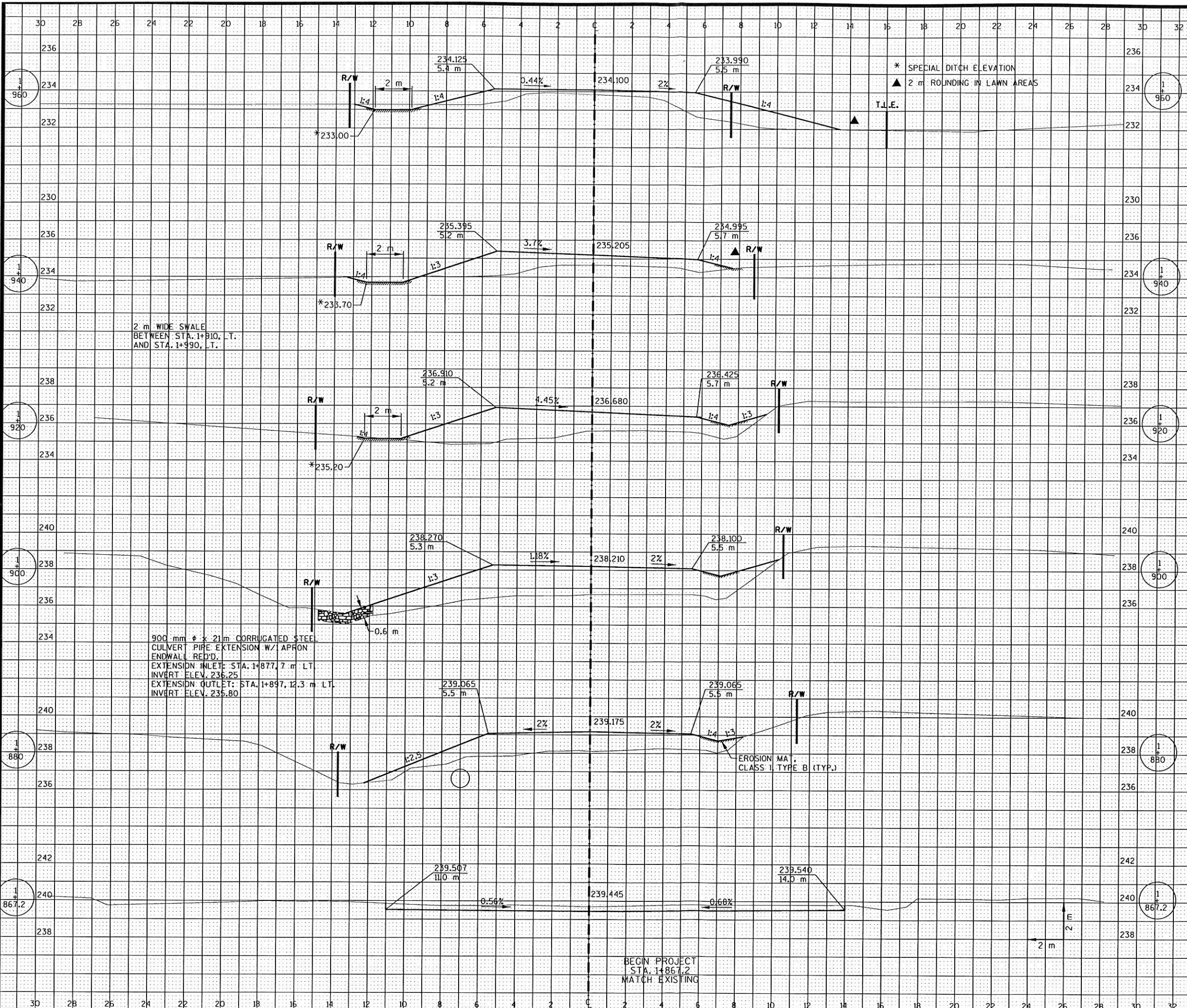
END PROJECT
 STA. 2+085



EARTHWORK SUMMARY	
STA. 1+867.20 - STA. 2+085.00	
UNCL. EXC.	541 m ³
FILL	2268 m ³
FILL EXPANSION	30%
BORROW	2407 m ³

STA. 2+000, STRUCTURE B-32-196 REO'D.
 SINGLE-SPAN CONCRETE SLAB
 7.2 m CLEAR ROADWAY WIDTH
 14.81 m OVERALL LENGTH
 10° LHF SKEW

ORIGINATOR: MVR
 LEVELS ON 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63
 REV. DATE: 11-4-97
 PLOT NAME: RCO01002
 PLOT SCALE: 1:400



STATION	DISTANCE	VOLUME		
		EXCAVATION		FILL
		UNCL.		
1 + 867.2	12.8	48	115	
1 + 880	20	0	480	
1 + 900	20	0	516	
1 + 920	20	9	344	
1 + 940	20	18	264	
1 + 960	20	20	178	
1 + 980				
SHEET TOTAL	95		1897	

PLOT SCALE: 1:50

MSA #: 93965901

REV. DATE: 10-29-97

ORIGINATOR: RLR
LEVELS ON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

STATE PROJECT NUMBER		SHEET NO.	
7266-07-71			
BENCHMARKS			
NO.	STATION	DESCRIPTION	ELEV.
1	2+004.5	CHISELED CROSS ON TOP OF SOUTH EAST WING WALL	233.538
2	1+930.7	DBL. 20d. NAIL IN NORTH FACE OF 460 mm ϕ OAK	235.705
3	2+052.3	DBL. 20d. NAIL IN NORTH FACE OF 250 mm ϕ TREE	234.535

DESIGN DATA

LIVELOAD
 DESIGN RATING : MS-18
 INVENTORY RATING : MS-20
 OPERATIONAL RATING : MS-34
 MAX. STD. PERMIT VEHICLE LOAD = 1000 kN
 STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 1.0 kN PER SQUARE METER.

TRAFFIC DATA:
 A.D.T. (1998) = 40
 A.D.T. (2018) = 60

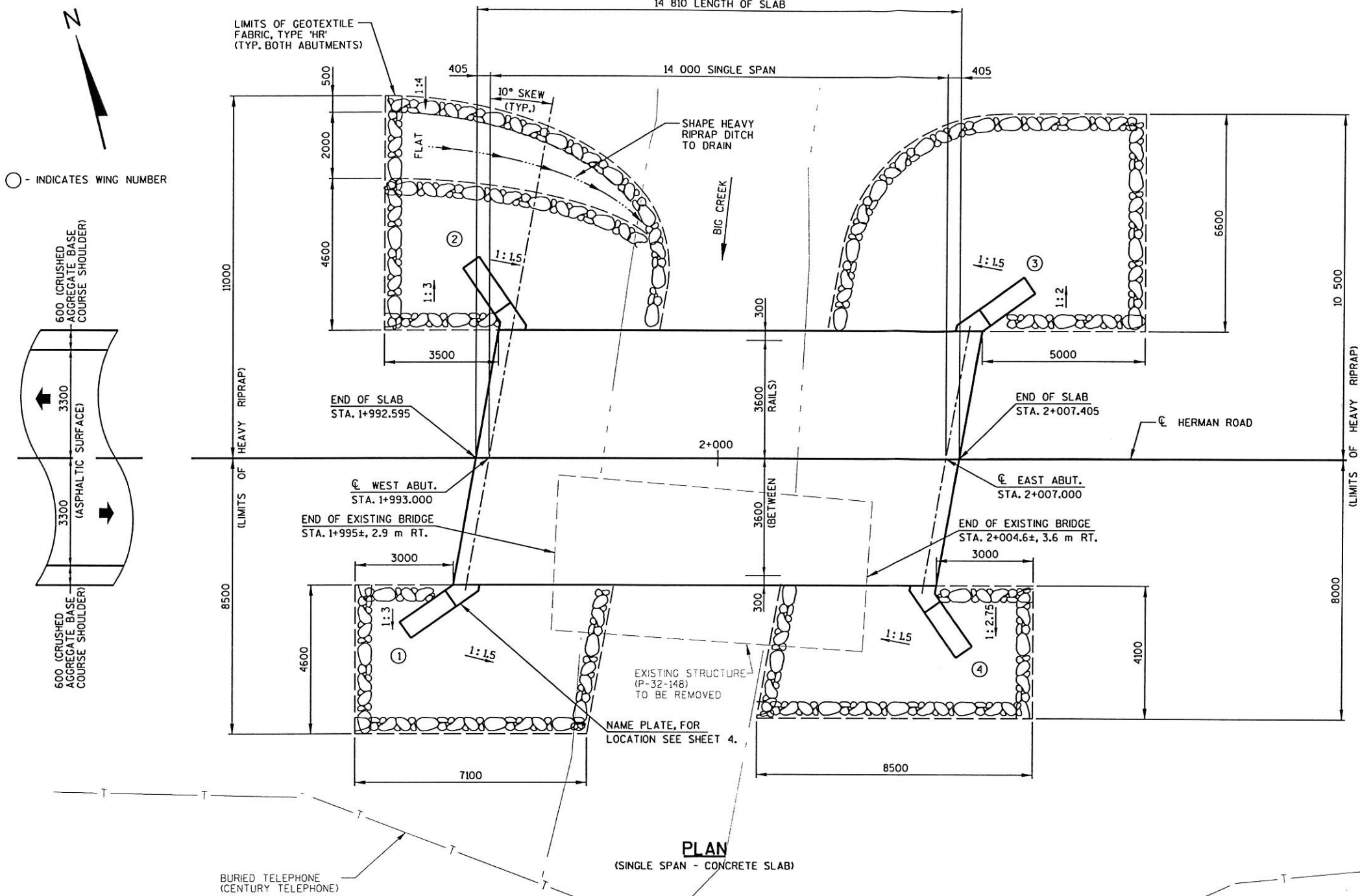
ULTIMATE DESIGN STRESSES:
 CONCRETE MASONRY - SLAB $f_c' = 28$ MPa
 - ALL OTHER $f_c' = 24$ MPa
 HIGH STRENGTH AND COATED HIGH STRENGTH
 BAR STEEL REINFORCEMENT, GRADE 420 $f_y = 420$ MPa

FOUNDATION DATA:
 ABUTMENTS AND SHALL BE SUPPORTED ON 273 mm ϕ C.I.P. CONCRETE PILING DRIVEN TO A MINIMUM BEARING VALUE OF 490 kN PER PILE. ESTIMATED PILE LENGTHS ARE 20 m AT BOTH ABUTMENTS

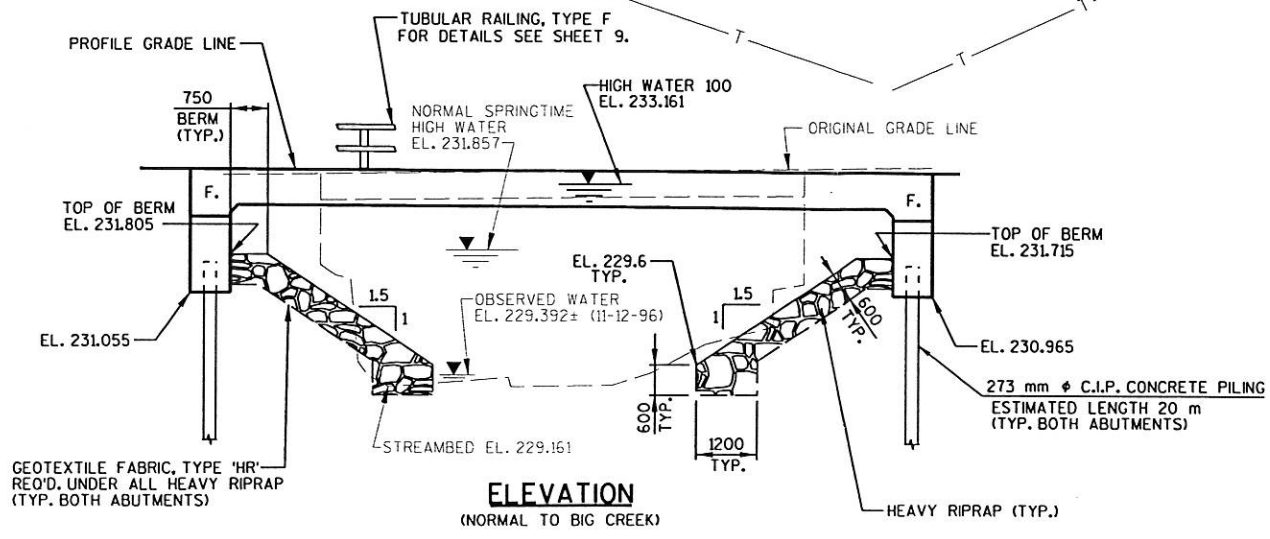
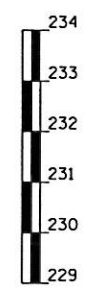
HYDRAULIC DATA:
 100 YEAR FREQUENCY
 DRAINAGE AREA = 44.3 km²
 Q₁₀₀ = 79.3 m³/s
 VELOCITY = 2.5 m/s
 WATERWAY AREA = 31.5 m²
 HIGH WATER₁₀₀ ELEVATION = 233.161
 SCOUR CRITICAL CODE = 8
 ROADWAY OVERFLOW DESIGN FREQUENCY = N/A

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. EAST ABUTMENT
7. EAST ABUTMENT DETAILS
8. SUPERSTRUCTURE
9. TUBULAR STEEL RAILING TYPE 'F'



PLAN
(SINGLE SPAN - CONCRETE SLAB)

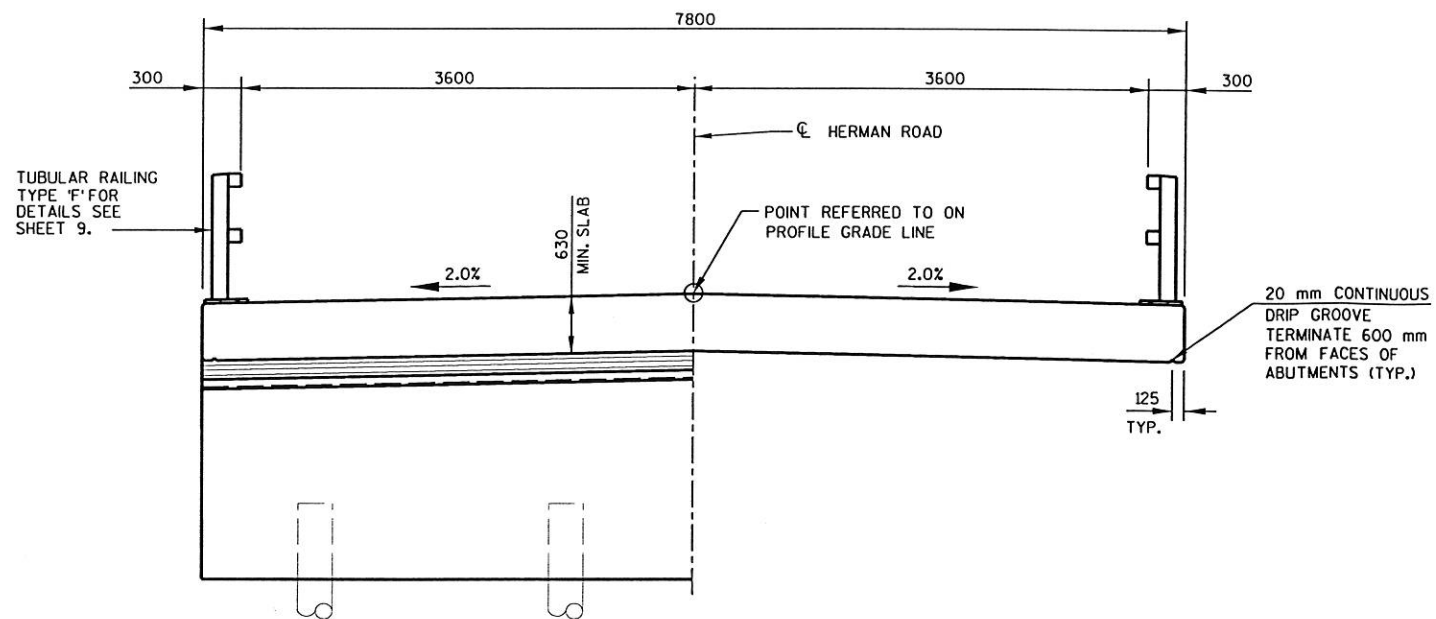


ELEVATION
(NORMAL TO BIG CREEK)



BRIDGE OFFICE CONTACT:
GERALD ANDERSON
608-266-8488

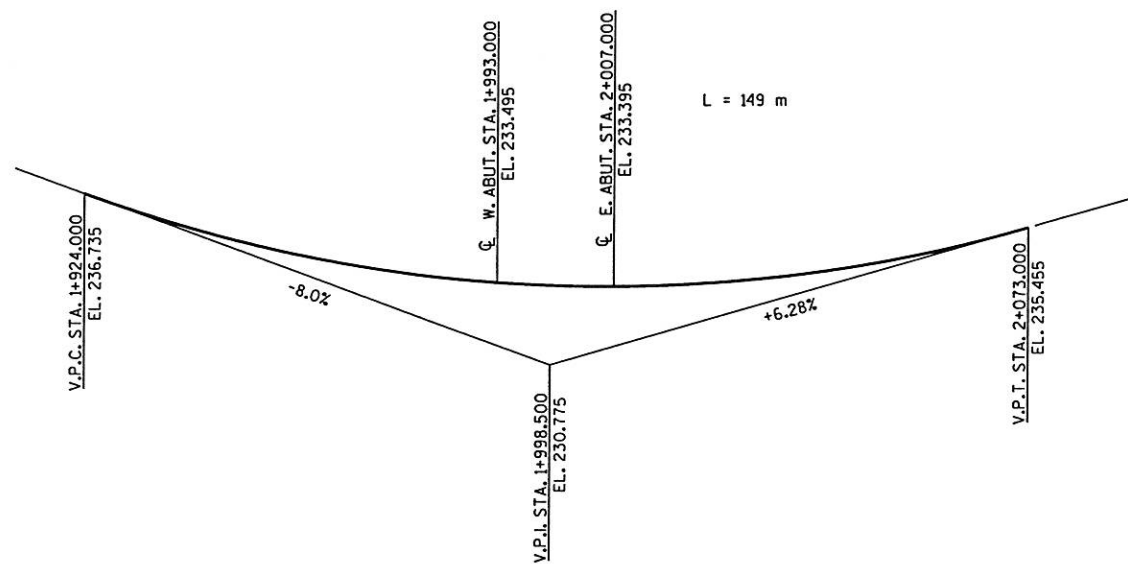
No.	Date	Revision	By
TRANSPORTATION • MUNICIPAL • REMEDIATION DEVELOPMENT • ENVIRONMENTAL 1230 South Boulevard Baraboo, WI 53913 608-356-2771 1-800-363-4505 Fax: 608-356-2770			
STATE OF WISCONSIN			
DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-32-196			
HERMAN ROAD OVER BIG CREEK			
County	LaCROSSE	Town/Village	BURNS
Design Spec.	AASHTO 1996	Load	MS-18
Designed By	ORR	Checked	JMB
Drawn	RLR	Plans Checked	QRK
Approved	Chief Structural Design Engineer		Date
GENERAL PLAN			SHEET 1 OF 9



AT ABUTMENT

IN SPAN

CROSS SECTION THRU BRIDGE
(LOOKING EAST)



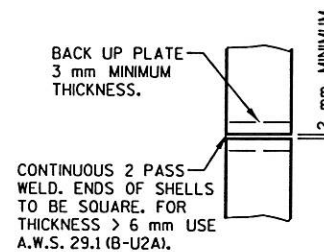
PROFILE GRADE LINE - HERMAN ROAD

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	WEST ABUT.	EAST ABUT.	SUPER	TOTAL
REMOVING OLD BRIDGE, STATION 2+000, 3.3 m RT.	LS	-	-	-	1
EXCAVATION FOR STRUCTURES, BRIDGES B-32-196	LS	-	-	-	1
STRUCTURE BACKFILL	m3	70	70	-	140
CONCRETE MASONRY, BRIDGES	m3	16.3	15.6	76.1	108
PROTECTIVE SURFACE TREATMENT	m2	-	-	116	116
HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	kg	740	730	5425	6895
COATED HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	kg	-	-	940	940
CAST-IN-PLACE CONCRETE PILING, DELIVERED & DRIVEN, 273 mm	m	80	80	-	160
TUBULAR RAILING, TYPE F, STRUCTURE B-32-196	LS	-	-	-	1
RUBBERIZED MEMBRANE WATERPROOFING	m2	5	5	-	10
HEAVY RIPRAP	m3	90	95	-	185
GEOTEXTILE FABRIC, TYPE HR	m2	150	160	-	310
NON-BID ITEMS					
FILLER	SIZE	-	-	-	13 & 19

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
 ALL MEASUREMENTS ARE IN MILLIMETERS EXCEPT AS SHOWN.
 ALL ELEVATIONS AND STATIONS ARE IN METERS.
 BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
 THE FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.
 THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE FABRIC, TYPE HR AS SHOWN ON SHEET 1 AND THE ABUTMENT SHEETS OR AS DIRECTED BY THE ENGINEER.
 THE PROPOSED SUBGRADE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" FOR THE ABUTMENTS.
 AT THE ABUTMENTS ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL. THE UPPER LIMITS OF STRUCTURE BACKFILL ALONG THE ABUTMENT BODY SHALL BE THE ELEVATION OF THE ABUTMENT TOP. BACKFILL ABOVE THE ABUTMENT TOP TO THE SUBGRADE SHALL BE BREAKER RUN STONE, MEASURED AND PAID FOR WITH THE ROAD PLAN QUANTITIES. THE STRUCTURE BACKFILL ESTIMATED QUANTITIES ASSUMED A 1:1.5 EXCAVATION SLOPE.
 THIS STRUCTURE WILL REPLACE EXISTING STRUCTURE P-32-148, A 9910 mm SINGLE SPAN STEEL DECK GIRDER BRIDGE WITH FULL RETAINING CONCRETE ABUTMENTS.
 SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.



PILE SPLICE DETAILS

PLOT SCALE:

MSA #: 93965902

REV. DATE: 10-29-97

ORIGINATOR: RLR

LEVELS ON + 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-32-196			
Const. Spec.	WI "96"	Drawn By RLR	Plans Checked QRV
CROSS-SECTION & QUANTITIES			SHEET 2 OF 9

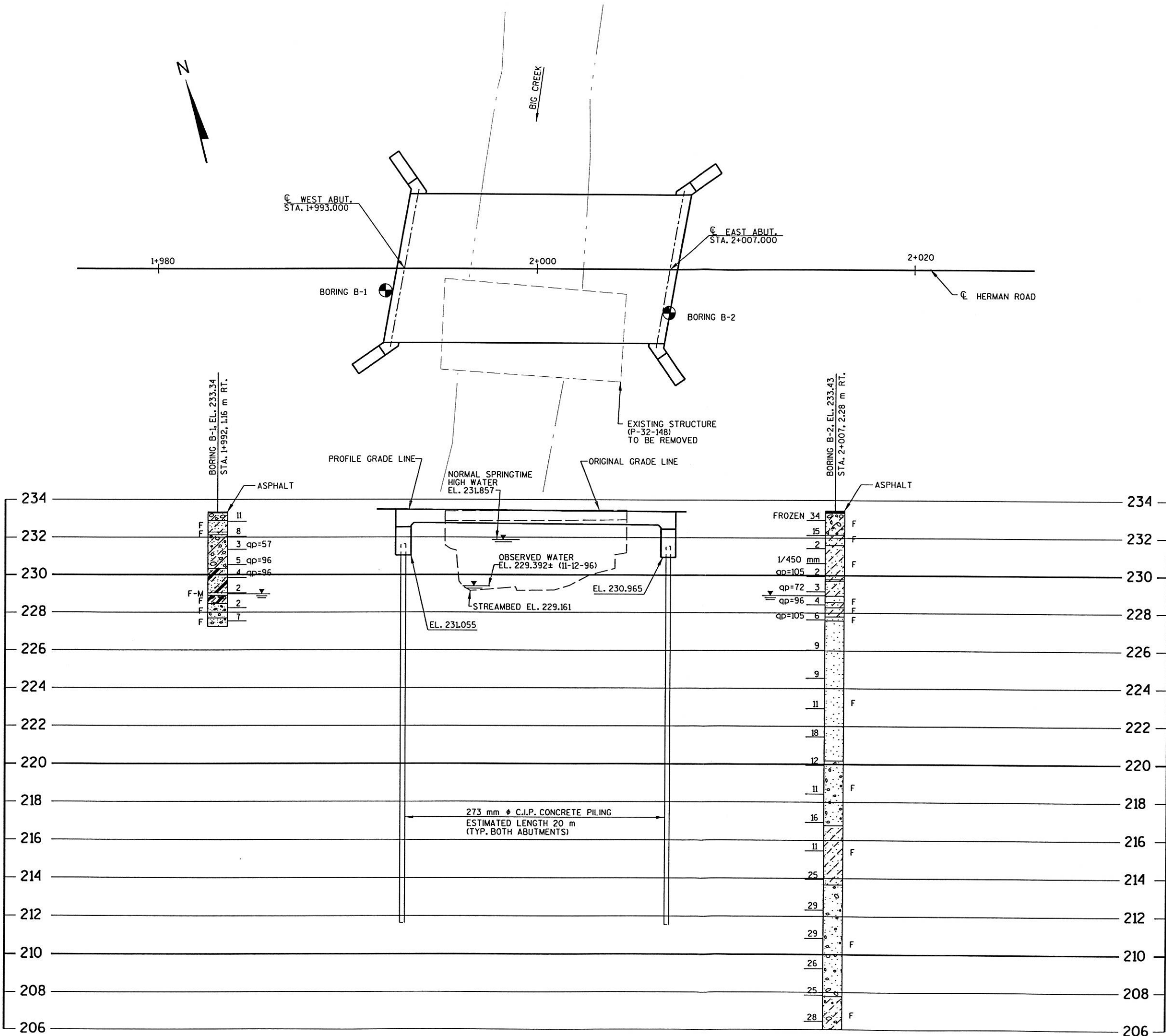
PLOT SCALE: 1 : 200

MSA #: 93965903

REV. DATE: 10-28-97

9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 62, 63

ORIGINATOR: RLR



ABBREVIATIONS

F - Fine M - Medium C - Coarse
 Ws - Weathered So - Sound

MATERIAL SYMBOLS

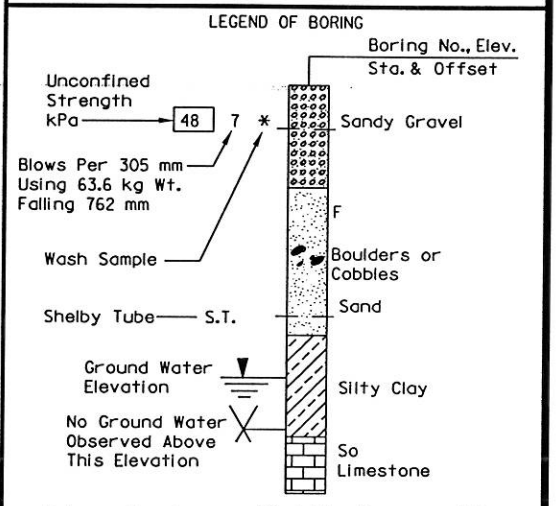
LEGEND OF PROBING

qp - Pocket penetrometer (kPa)

95/152=95 Blows for 152 mm Penetration Probing taken with a 159.1Kg wt. Falling 457 mm on a 51mm O.D. Point.

7 Average Blows Per 305 mm

Refusal 95/152 mm



Unless otherwise specified, the blows per 305 mm at the locations indicated are based on driving a 51mm O.D. x 35 mm I.D. split spoon sampler with a 63.6 kg hammer having a free fall of 762 mm. The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

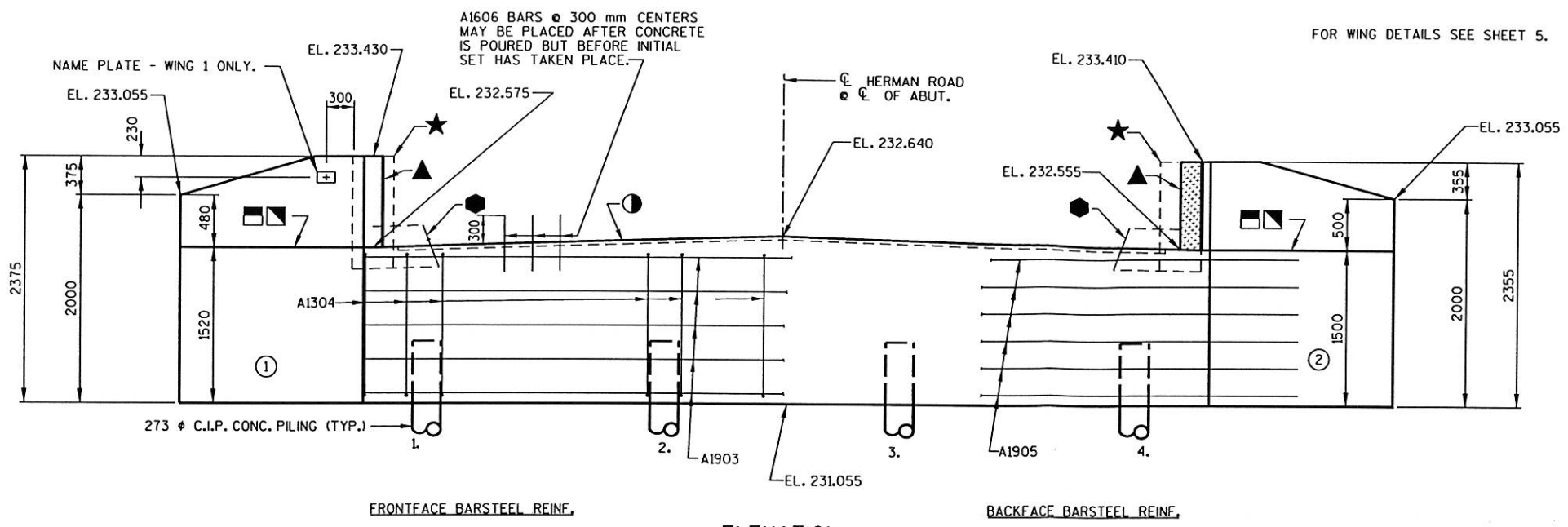
To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the DEPT. OF TRANSPORTATION does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.

BORINGS TAKEN BY:
 ENVIRONMENTAL & FOUNDATION DRILLING, INC.
 WAUNAKEE, WISCONSIN
 BORINGS TAKEN ON 3-19-97

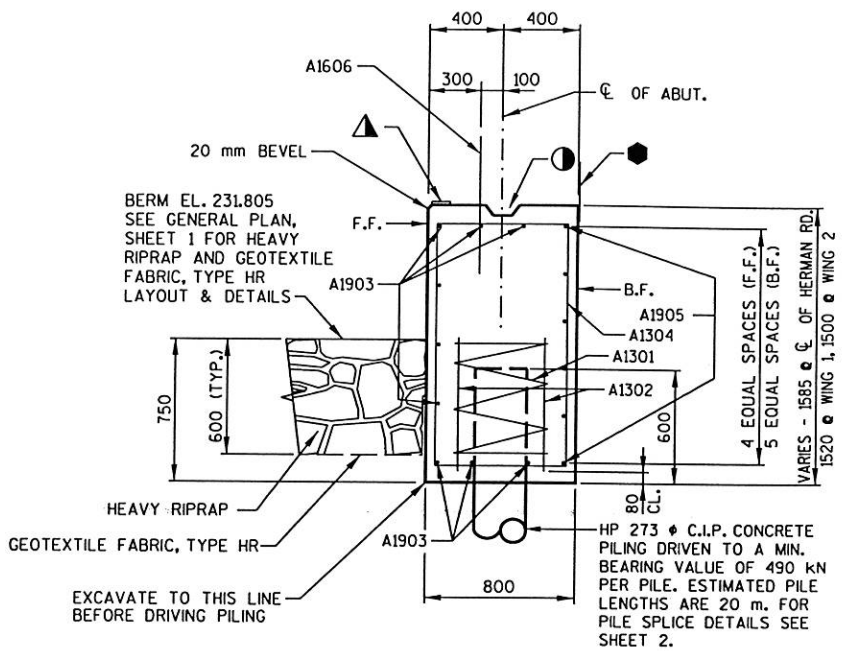
SUBSURFACE REPORT PREPARED BY:
 GEO MATRIX ENGINEERING, INC.
 MADISON, WISCONSIN

PLANS PREPARED BY:
 MSA PROFESSIONAL SERVICES, INC.
 BARABOO, WISCONSIN

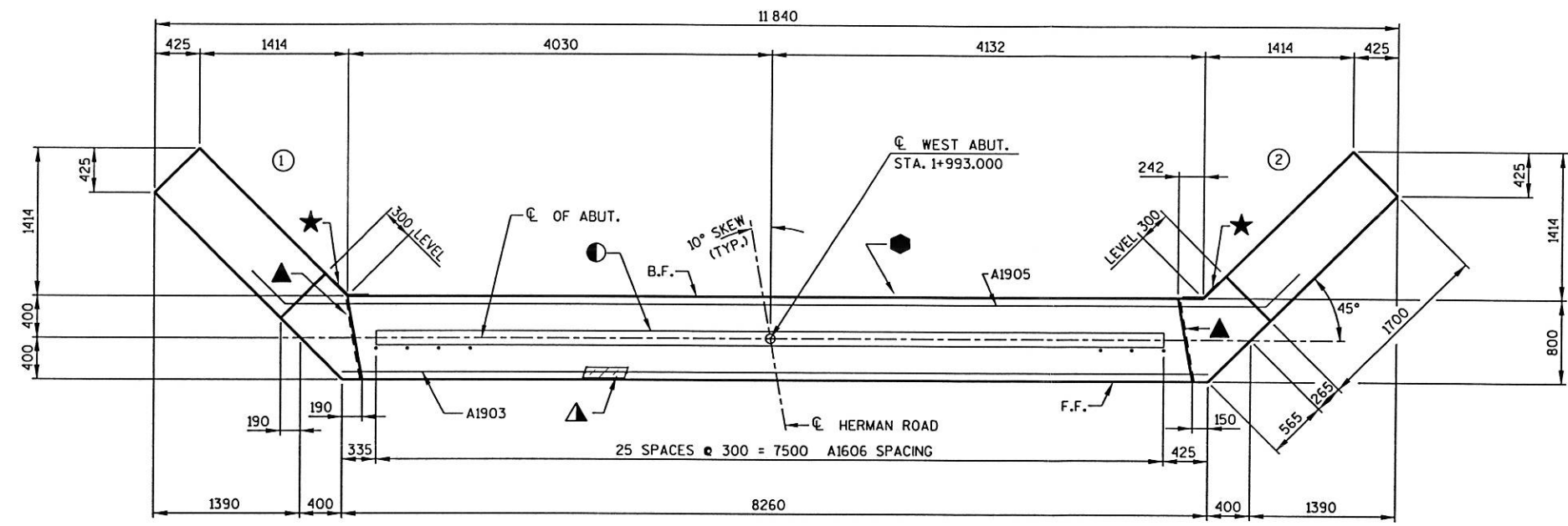
No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-32-196			
Const. Spec.	WI "96"	Drawn By	RLR
		Plans Checked	QRK
SUBSURFACE EXPLORATION			SHEET 3 OF 9



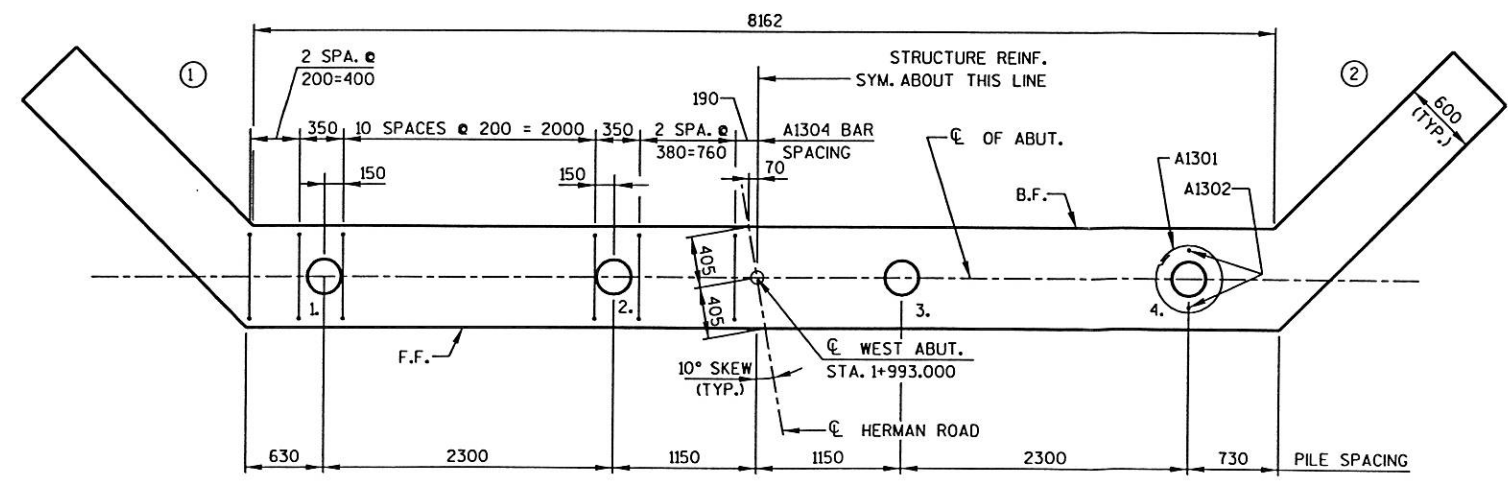
ELEVATION (LOOKING WEST)



TYPICAL SECTION THRU ABUTMENT



PLAN



PILE PLAN

LEGEND

- - DENOTES WING NUMBER.
- - KEYED CONSTRUCTION JOINT FORMED BY BEVELED 38 mm x 140 mm.
- ▲ - 100 mm x 19 mm FILLER, EXTEND FULL LENGTH OF ABUTMENT BETWEEN OUTSIDE EDGES OF SLAB.
- ▲ - 13 mm FILLER, EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER, (25 mm DEEP & HOLD 3 mm BELOW SURFACE OF CONCRETE).
- ▣ - 20 mm "V" GROOVE ON FRONT FACE OF WING WALL AT CONSTRUCTION JOINT.
- ▣ - OPTIONAL KEYED CONSTRUCTION JOINT ON WING FORMED BY BEVELED 38 mm x 140 mm. IF JOINT IS USED, POUR CONCRETE ABOVE THE JOINT AFTER DECK IS IN PLACE.
- ★ - VERTICAL 457 mm WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND FROM 230 mm BELOW BRIDGE SEAT TO TOP OF WINGS.
- - HORIZONTAL 457 mm WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND BETWEEN WINGS.
- SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- F.F. - FRONT FACE
- B.F. - BACK FACE
- CL. - CLEAR

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-32-196			
Const. Spec.	WI "96"	Drawn By RLR	Plans Checked QRK
WEST ABUTMENT			SHEET 4 OF 9

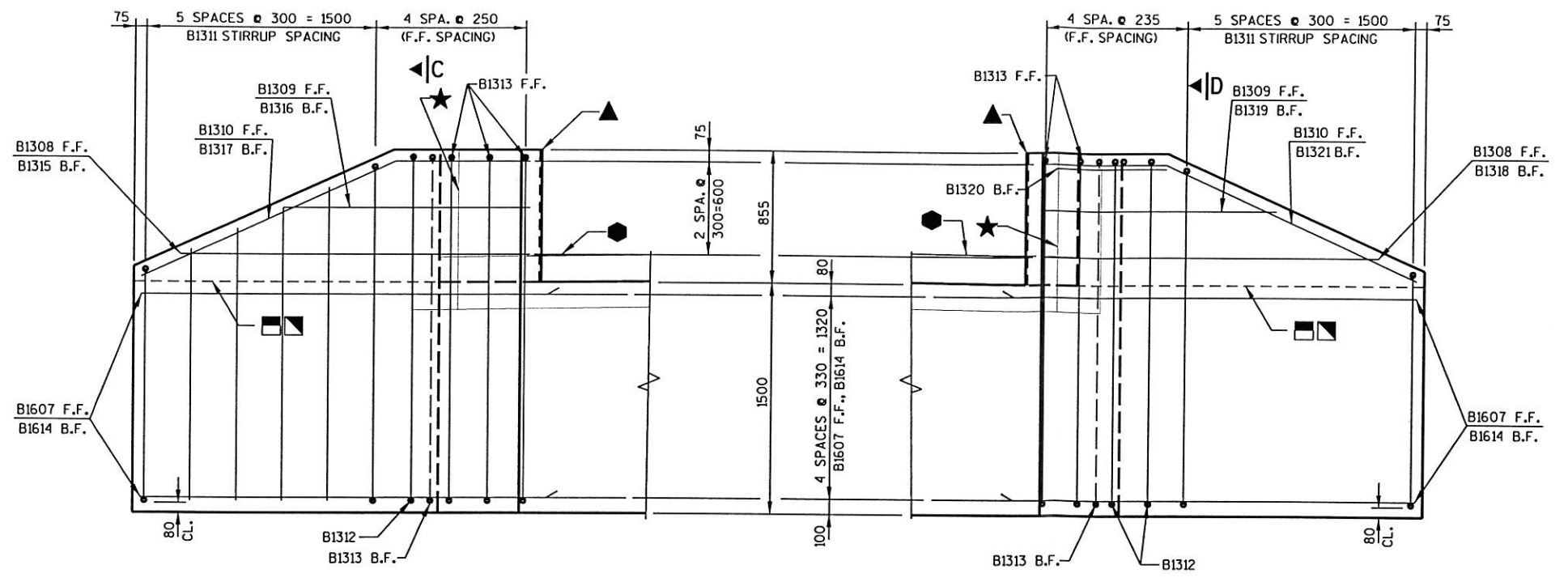
ORIGINATOR: RLR
 LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63
 MSA #: 93965904
 REV. DATE: 10-28-97
 PLOT SCALE:

730 kg

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
B1301	4	8600	X		AT BODY PILES - 1 PER PILE 5 SPIRAL WRAPS
B1302	8	700			" " " - 2 " " - VERT.
B1903	9	8250			BODY - F.F., TOP & BOTTOM - HORIZ.
B1304	34	4400	X		" - STIRRUPS - VERT.
B1905	6	10 250	X		" - B.F. & WINGS - HORIZ.
B1606	26	600			" - TOP DOWELS - VERT.
B1607	10	2850	X		WINGS 3 & 4 - F.F. - HORIZ.
B1308	2	2250			" " " " - " - "
B1309	2	1500			" " " " - " - "
B1310	2	2650			" " " " - TOP - "
B1311	12	4850	X	⊗	" " " " - STIRRUPS - VERT.
B1312	3	5650	X		" " " " - " - "
B1313	7	3250	X		" " " " - " - "
B1614	10	3300	X		" " " " - B.F. - HORIZ.
B1315	1	1700			WING 3 - B.F. - "
B1316	1	1000			" " " " - " - "
B1317	1	2100	X		" " " " - TOP - "
B1318	1	1900	X		WING 4 - B.F. - "
B1319	1	1250	X		" " " " - " - "
B1320	1	500	X		" " " " - TOP - "
B1321	1	2350	X		" " " " - " - "

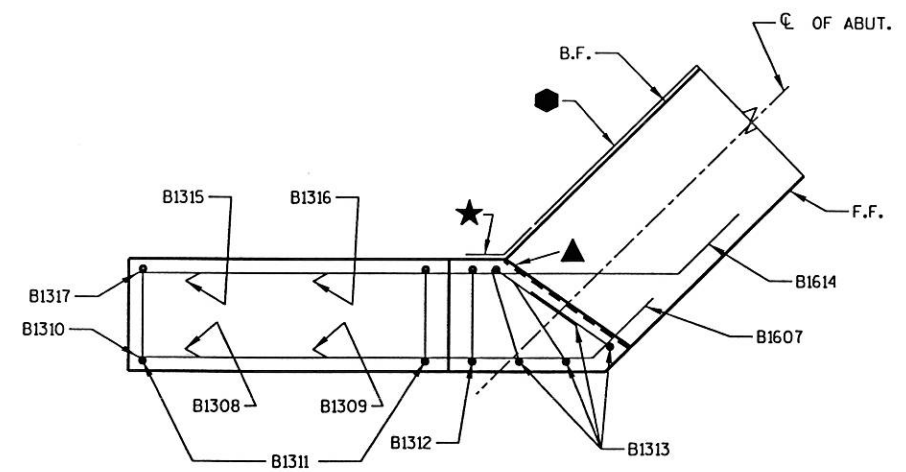
⊗ - LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS. BENT BARS USED IN BAR SERIES TABLE SHALL BE BENT AFTER CUTTING. DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

ORIGINATOR: RLR
 LEVELS ON 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63
 MSA #: 933965907
 REV. DATE: 10-28-97
 PLOT SCALE: 1:40

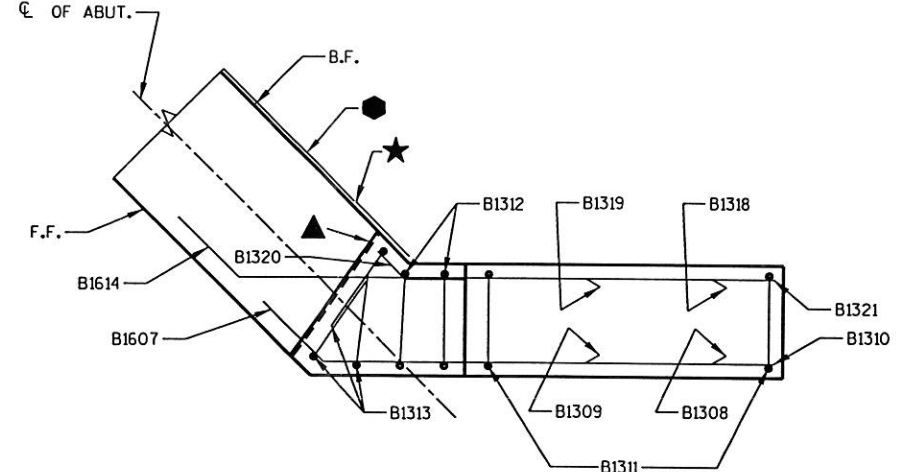


ELEVATION - WING 3
(LOOKING AT F.F. OF WING)

ELEVATION - WING 4
(LOOKING AT F.F. OF WING)

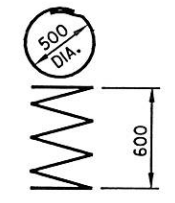


PLAN - WING 3

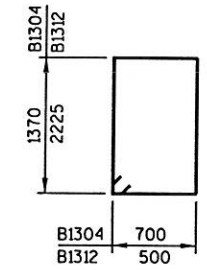


PLAN - WING 4

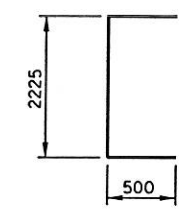
SEE SHEET 6 FOR LEGEND OF



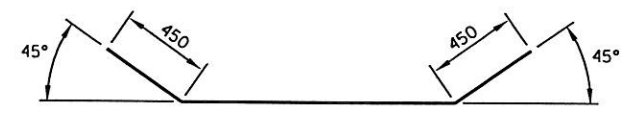
B1301



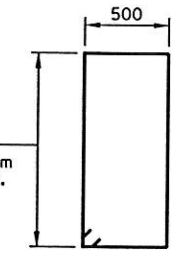
B1304, B1312



B1313



B1905



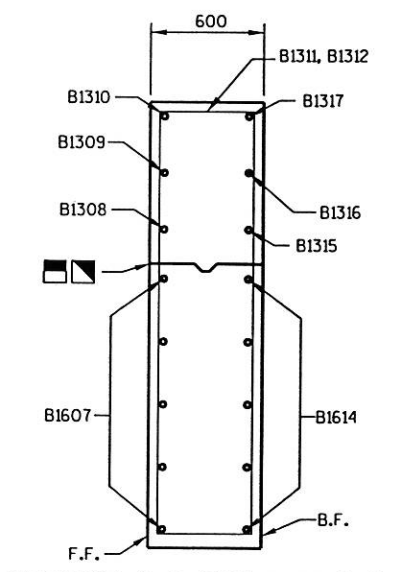
B1311

B1311 VARIES IN INCREMENTS OF 130 mm 1500 MIN. - 2150 MAX.

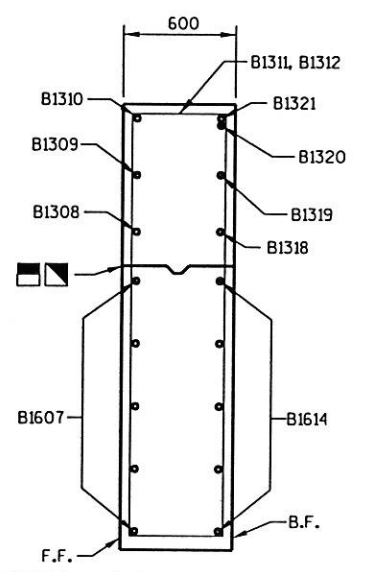
MARK	A	B
B1607 B1614	450	45°
B1310	850	24°
B1317	300	24°
B1318 B1319 B1320	210	45°
B1321	550	24°

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
B1311	1 SERIES OF 6	4200 TO 5500



SECTION C-C THRU WING 3



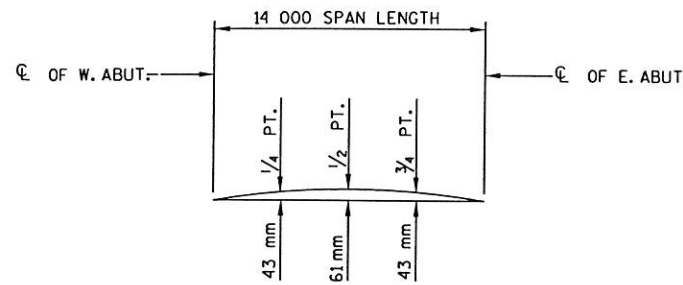
SECTION D-D THRU WING 4

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-32-196			
Const. Spec.	WI "96"	Drawn By RLR	Plans Checked QRK
EAST ABUTMENT DETAILS			SHEET 7 OF 9

BILL OF BARS **COATED 940 kg**
UNCOATED 5425 kg

MARK	NO. REQ'D.		LENGTH	BENT	LOCATION
	COATED	UN-COATED			
S1601		52	1300	X	DIAPHRAGM @ ABUTS. - LONGIT.
S1602	52		1100	X	" " " " - VERT.
S3203		28	14 700		SLAB BOTTOM - LONGIT.
S3204		27	11 400		" " " " - LONGIT.
S1605		55	7800		" " " " - TRANS.
S1306		6	7800		" " @ ABUT. - "
S1307	50		7800		" " TOP " "
S1308	36		7700		" " " " - LONGIT.
S1909	12		3650	X	" @ RAIL POST, ONE PER POST
S1910	20		1200		" " " " , TWO " "
S1911	8		1200	X	" " " " CORNER POSTS AS NOTED
S1912	2		3650	X	" " " " " " " "

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.



CAMBER DIAGRAM

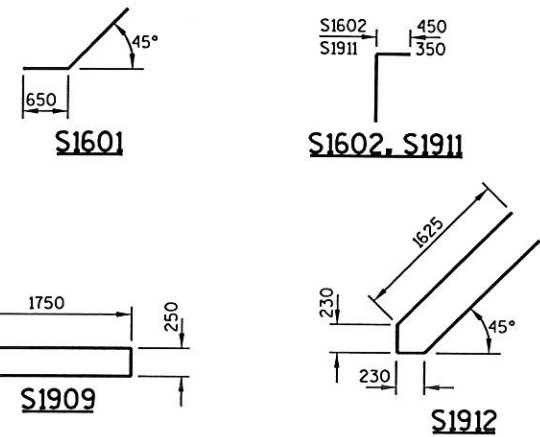
CAMBER SPANS AS SHOWN TO PROVIDE FOR DEADLOAD DEFLECTION AND FUTURE PLASTIC FLOW. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT. DEADLOAD DEFLECTION ONLY APPROXIMATELY 1/4 OF CAMBER VALUES SHOWN.

GENERAL NOTES

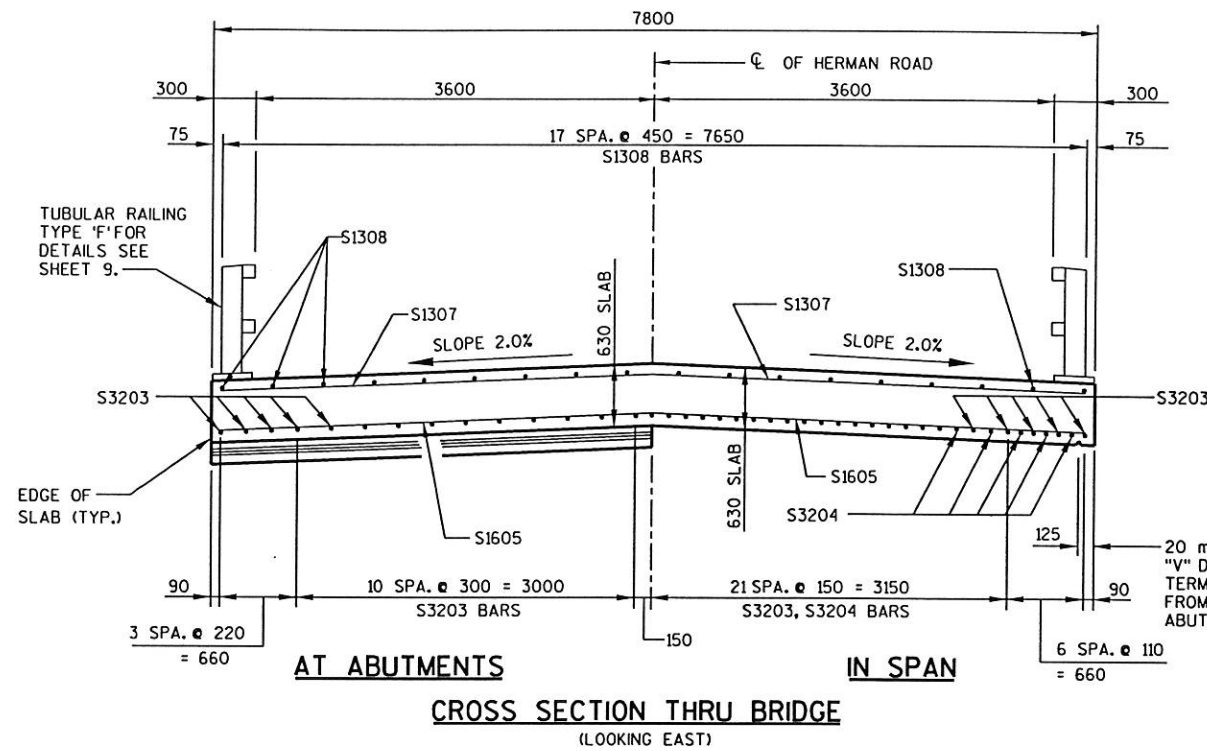
ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 900 mm CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 1200 mm CENTERS.

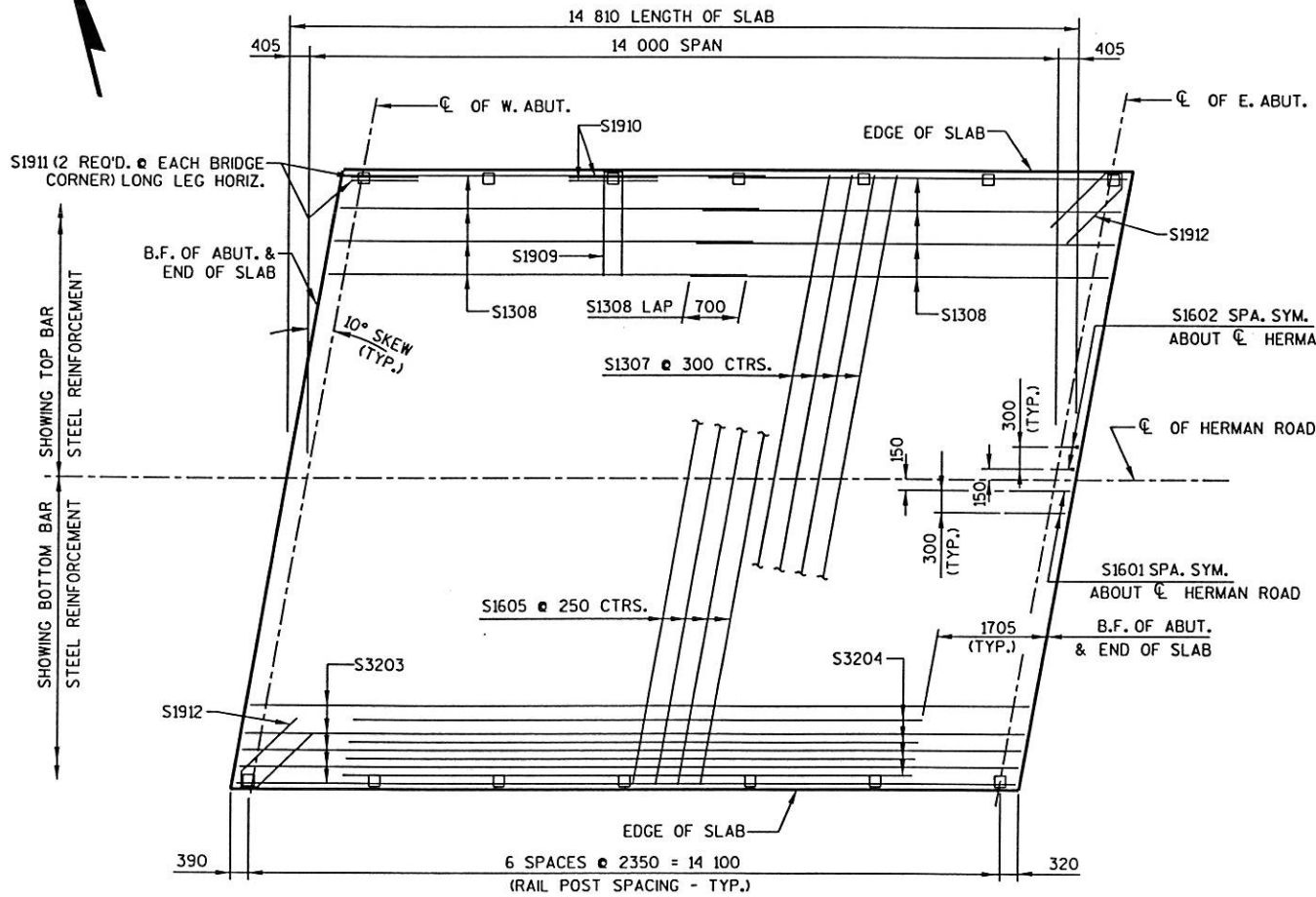
TRANSVERSE BARS SHALL BE PLACED ON THE SKEW.



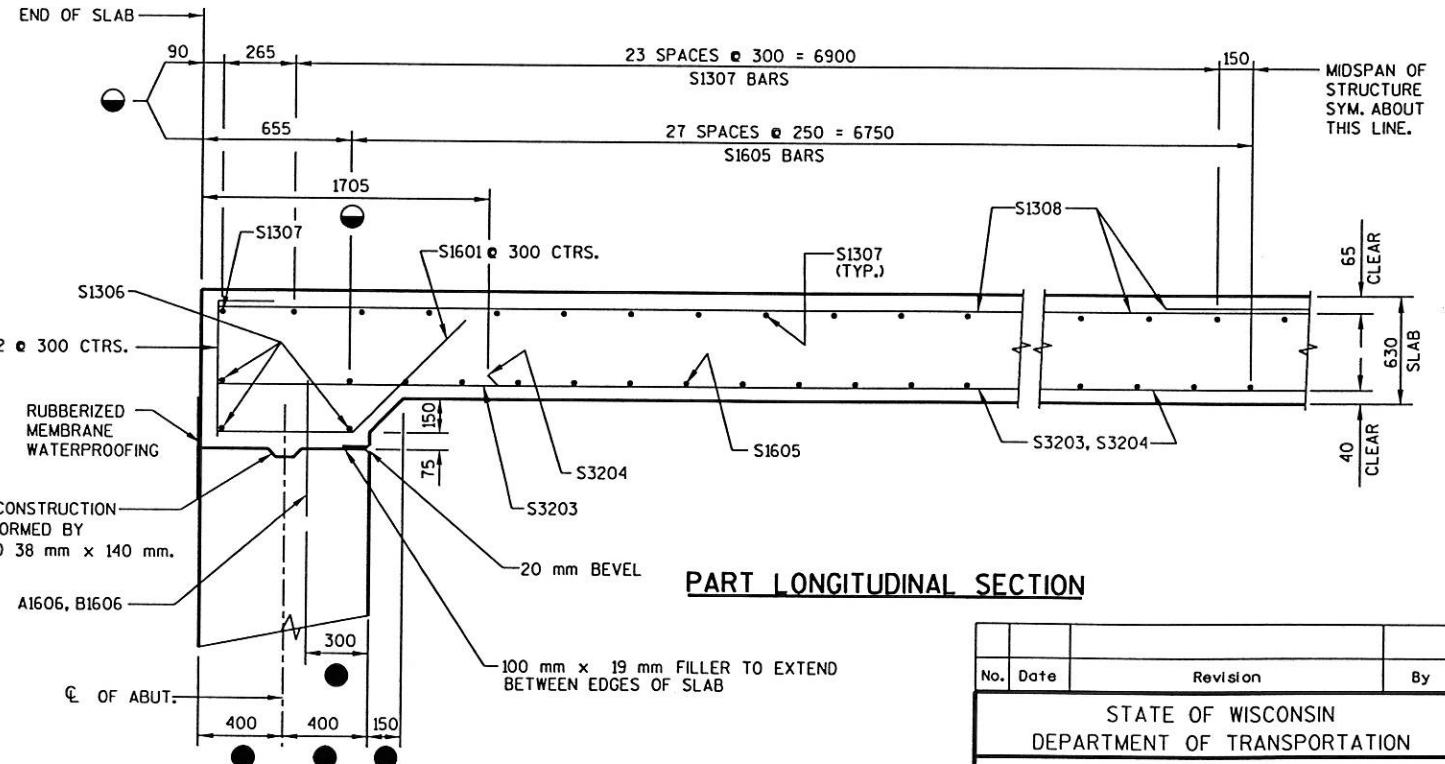
PLOT SCALE: MSA #: 93965908 REV. DATE: 10-28-97 ORIGINAL: RLR LEVELS ON 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



CROSS SECTION THRU BRIDGE
(LOOKING EAST)



PLAN



PART LONGITUDINAL SECTION

- - DIMENSIONS ARE GIVEN PARALLEL TO THE CL HERMAN ROAD.
- - DIMENSIONS ARE GIVEN NORMAL TO THE CL OF ABUTMENTS.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-32-196			
Const. Spec.	WI "96"	Drawn By RLR	Plans Checked ORV
SUPERSTRUCTURE			SHEET 8 OF 9

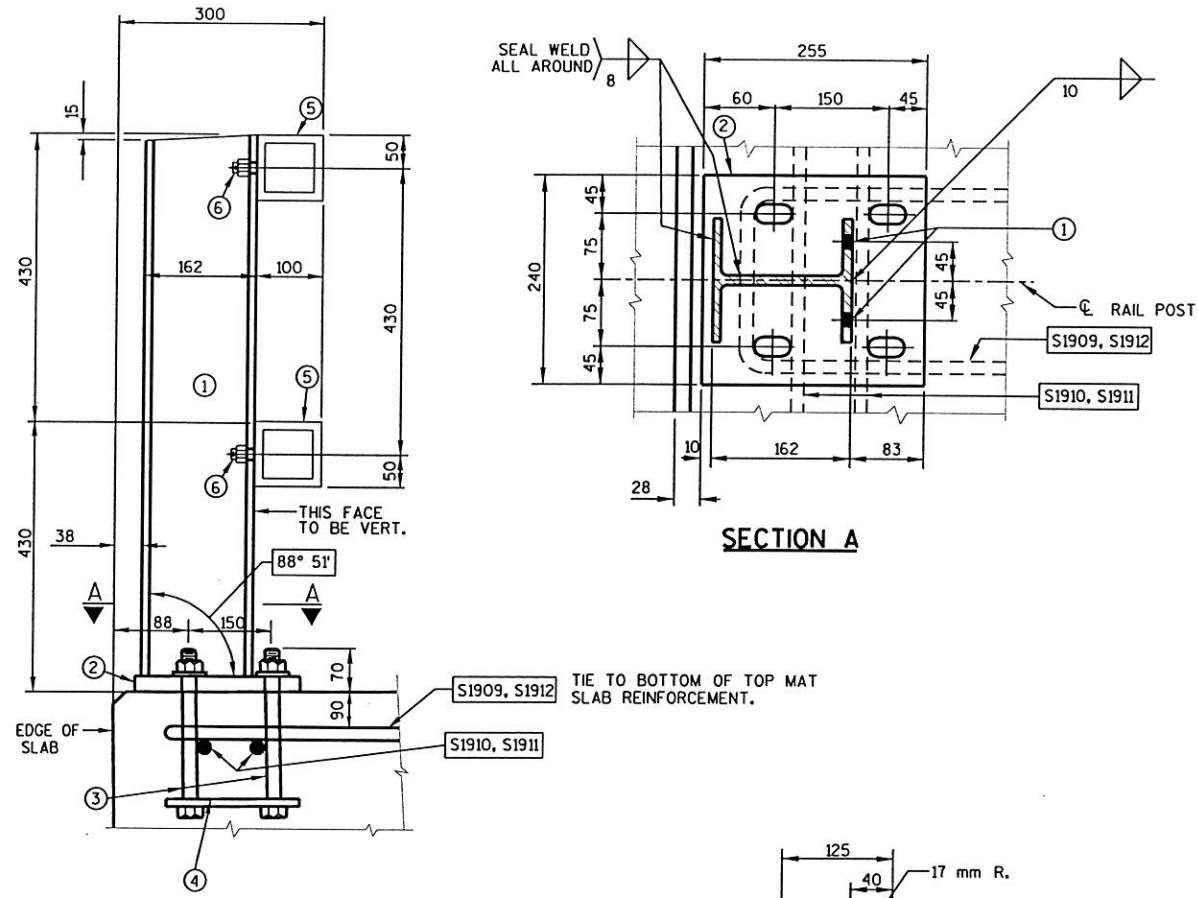
PLOT SCALE:

MSA #: 93965909

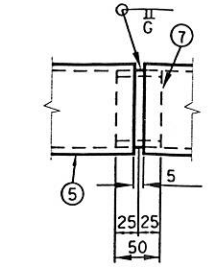
REV. DATE: 10-28-97

ORIGINATOR: RLR

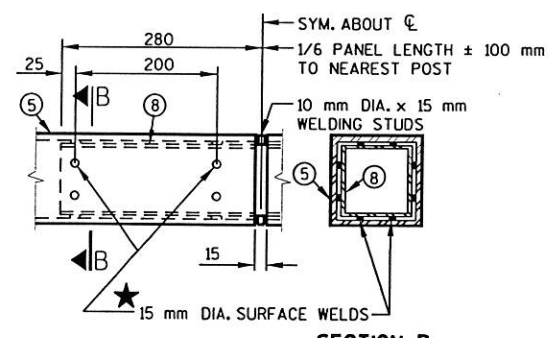
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60.



SECTION A



SHOP RAIL SPLICE DETAIL



FIELD ERECTION JOINT DETAIL

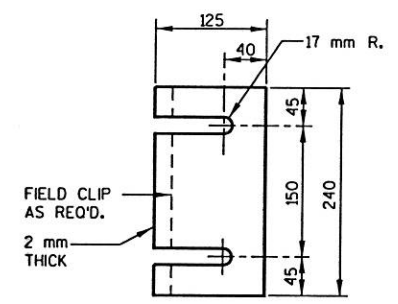
LEGEND

- ① W150x37 WITH 35 mm DIA. HOLES ON EACH SIDE OF POST FLANGE FOR STUD ⑥. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POST NORMAL TO GRADE LINE.
- ② PLATE 25 mm x 240 mm x 255 mm WITH 27 mm x 40 mm SLOTTED HOLES FOR ANCHOR BOLTS ③. WELD TO ① AS SHOWN.
- ③ A325M- M22 x 300 mm LONG HEX BOLT (ZINC COATED) WITH A325M NUT AND WASHER, 4 REQUIRED PER POST. THREAD 75 mm AND PLACE NORMAL TO PLATE ②. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 360 mm LONG AT BRIDGE END POSTS.
- ④ 6 mm x 200 mm x 200 mm FLAT BAR, WITH 25 mm DIA. HOLES FOR ANCHOR BOLTS ③.
- ⑤ TS 102 x 102 x 6.4 STRUCTURAL TUBING, CONFORMING TO A.S.T.M. DESIGNATION A501OR A500 GRADE B. ATTACH TO ① WITH STUDS ⑥.
- ⑥ 16 mm DIA. x 40 mm LONG SHOP WELDED STUDS WITH HEX. NUT AND 50 mm WASHERS, 4 PER POST REQ'D. (2 REQ'D AT EACH RAIL TO POST LOCATION.)
- ⑦ SQUARE SLEEVE FABRICATED FROM 6 mm PLATE. PROVIDE 'SLIDING FIT' WITH A MINIMUM OUT TO OUT DIMENSION OF 87 mm.
- ⑧ TS 76 x 76 x 6.4 x 560 mm LONG. PROVIDE 15 mm DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF ⑤. PROVIDE 10 mm DIA. x 15 mm WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

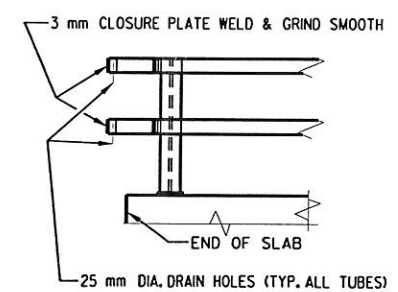
SECTION C THRU RAILING

THIS FACE TO BE VERT.

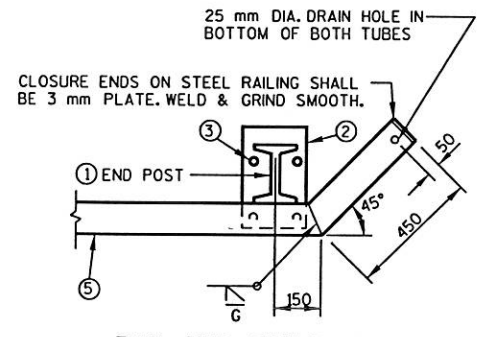
TIE TO BOTTOM OF TOP MAT SLAB REINFORCEMENT.



POST SHIM DETAIL (4 PER POST)



PART ELEVATION OF RAILING



RAIL END DETAIL

GENERAL NOTES

BID ITEM SHALL BE " TUBULAR RAILING TYPE 'F', WHICH INCLUDES ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN 2 PANEL LENGTHS PER SIDE.

POSTS BASE PLATES, ② 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 CUT.

ALL MATERIAL, EXCEPT ANCHORAGE DETAIL (NO. ③ & ④) SHALL BE ZINC COATED AFTER FABRICATION. ZINC COATING OF ④ IS NOT REQUIRED.

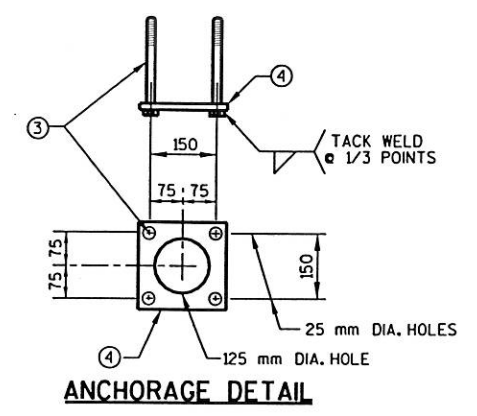
FILL EXPOSED OPENINGS BETWEEN SHIMS AND POST ANCHOR BOLT HOLES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. SEAL BOTTOM EDGES OF PLATE ② TO DECK.

ALL MATERIALS USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO A.S.T.M. DESIGNATION A709M GRADE 250 UNLESS NOTED OTHERWISE.

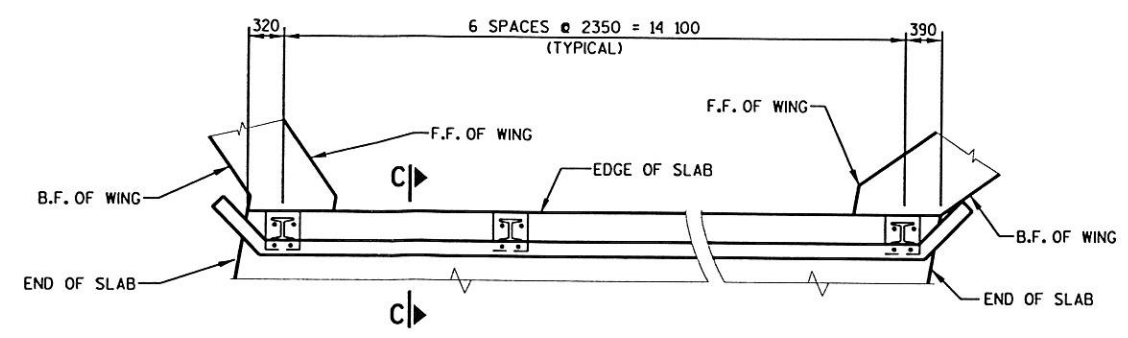
STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.

PRIOR TO ZINC COATING, ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG CENTERLINE OF POST BASE AT EDGE OF SLAB OR WING.



ANCHORAGE DETAIL



WINGS 2&4

PLAN OF RAILING

WINGS 1&3

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-32-196			
Const. Spec.	WI "96"	Drawn By RLR	Plans Checked GAK
TUBULAR STEEL RAILING TYPE 'F'			SHEET 9 OF 9