

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

NEW WOOD RIVER BRIDGE AND APPROACHES

TESCH ROAD
TOWN ROAD
LINCOLN COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9853-02-70		

INDEX OF SHEETS

Sheet No. 1	Title
Sheet No.	Typical Sections and Details
Sheet No.	Estimate of Quantities
Sheet No.	Miscellaneous Quantities
Sheet No.	Right of Way Plat
Sheet No.	Plan and Profile
Sheet No.	Standard Detail Drawings
Sheet No.	Sign Plates
Sheet No.	Structure Plans
Sheet No.	Computer Earthwork Data
Sheet No.	Cross Sections

TOTAL SHEETS =

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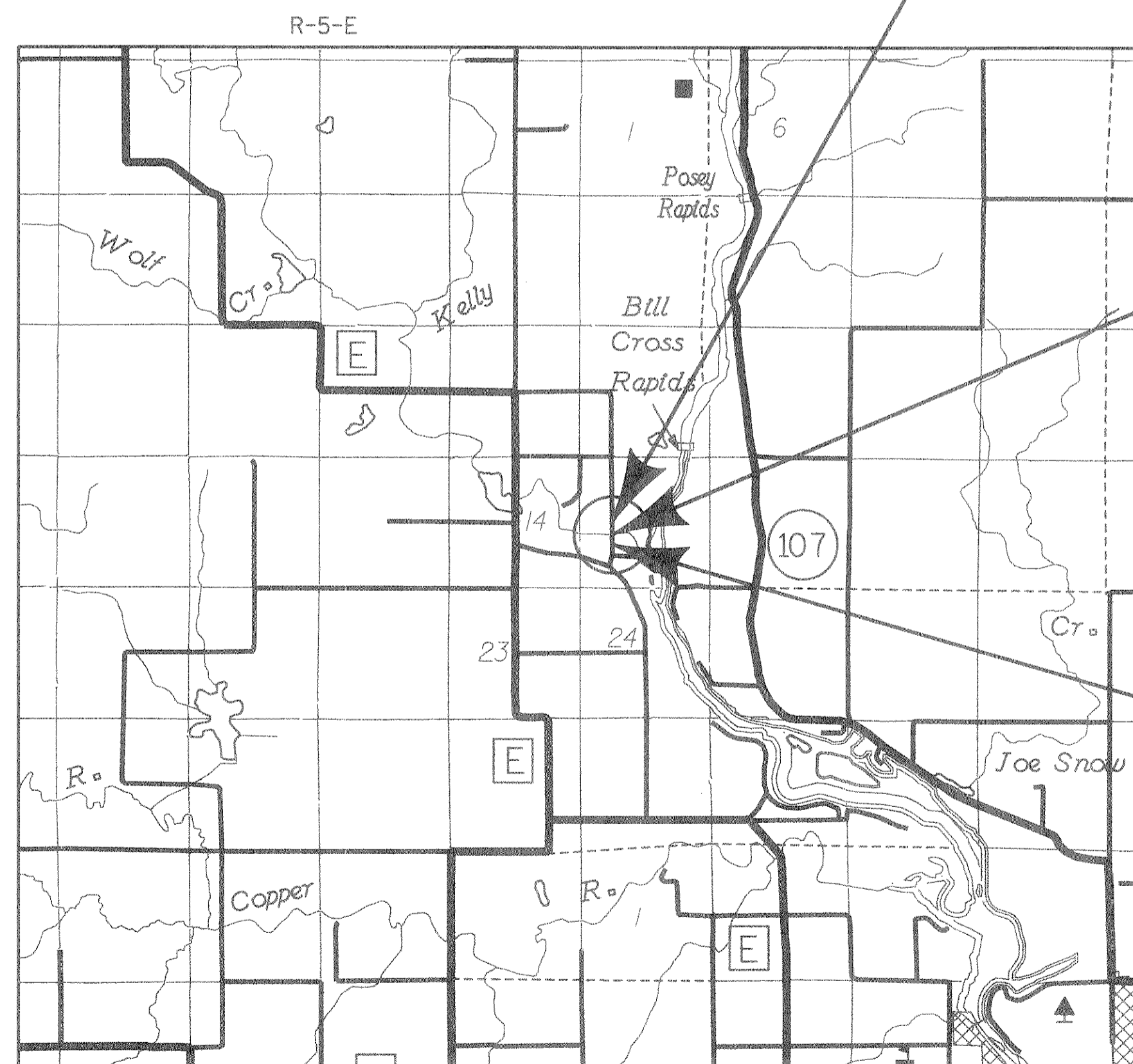


N

STATE PROJECT NUMBER
9853-02-70



END PROJECT
STA. 12+00



B-35-125

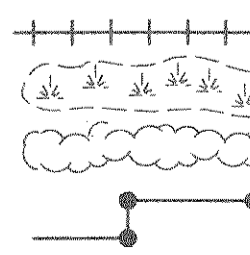
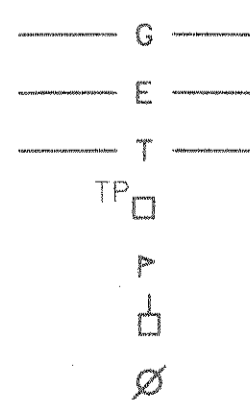
BEGIN PROJECT
STA. 8+50
X = 2,048,400 (± 100')
Y = 513,700 (± 100')

DESIGN DESIGNATION

A.D.T. (1994)	=	40
A.D.T. (2014)	=	55
D.H.V.	=	6
D.	=	50/50
T.	=	15%
V.	=	25 M.P.H.
ESALS	=	N/A

CONVENTIONAL SIGNS

COUNTY LINE		COMBUSTIBLE FLUIDS (UNDER PRESSURE)	
CORPORATE LIMITS		UNDERGROUND UTILITIES	
PROPERTY LINE		GAS	
LOT LINE		ELECTRIC	
LIMITED HIGHWAY EASEMENT		TELEPHONE	
EXISTING RIGHT OF WAY		SERVICE PEDESTAL	
NEW RIGHT OF WAY		CABLE MARKER	
REFERENCE LINE		POWER POLE	
SLOPE INTERCEPT		TELEPHONE POLE	
ORIGINAL GROUND		RAILROADS	
MARSH OR ROCK PROFILE		MARSH	
CULVERT IN PLACE		WOODED AREA	
CULVERT REQUIRED		RIGHT-OF-WAY MARKERS	
CULVERT REQUIRED (Profile)			



LAYOUT
SCALE 0 1 MI.



TOTAL NET LENGTH OF CENTERLINE = 0.066 MI.

REVIEW COPY
NOT FOR BIDDING OR
CONSTRUCTION PURPOSES

DATE JAN 21 1994

THE COORDINATES SHOWN ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM, CENTRAL ZONE, SCALED FROM U.S.G.S. TOPOGRAPHIC MAP ALEXANDER LAKE, WI QUAD. FOR IDENTIFICATION ONLY.

ACCEPTED FOR
TOWN OF HARDING

DATE _____ TOWN CHAIRMAN _____

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES Engineers/Architects
Planners/Surveyors
Owen Ayres & Associates Inc.
Eau Claire, Wisconsin

DATE _____
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
 Surveyor O. A. & A.
 Designer O. A. & A.
 District Examiner DANIEL T. KUHN
 District Supervisor ALLAN J. PETERSON
 Proj. Dev. Engineer _____
 C.O. Examiner _____

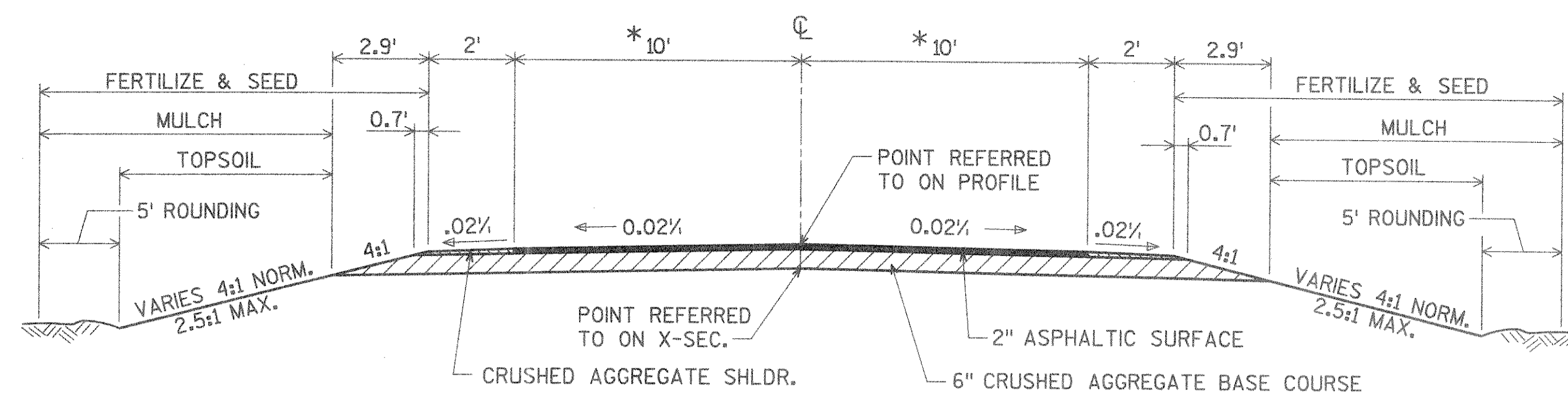
APPROVED FOR DISTRICT OFFICE

DATE: _____ (Signature)

CHECKED BY: _____
 BACK CHECKED BY: _____
 DATE: _____
 CORRECTED BY: _____
 DATE: _____

CH:\proj\ref ON = 1-13-94-57-59-63

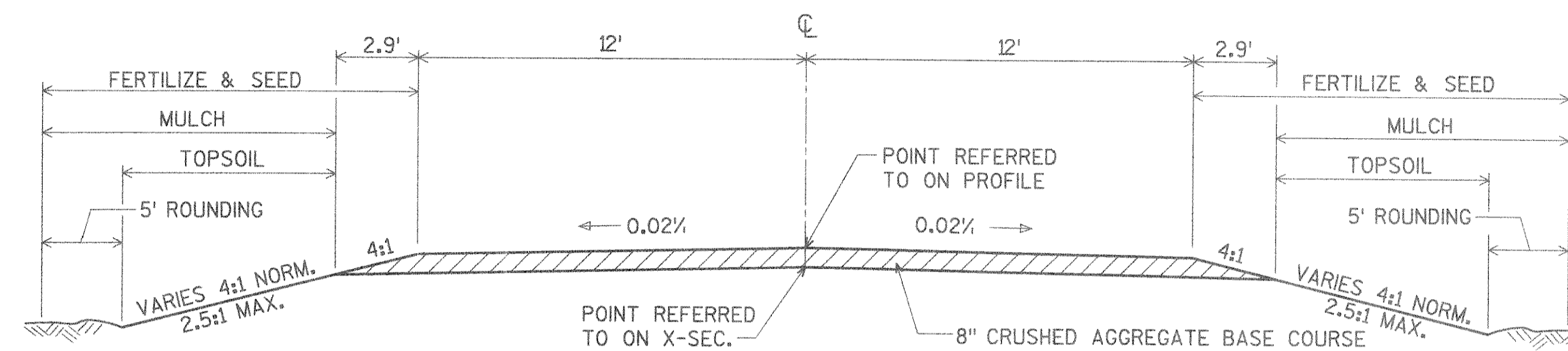
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TYPICAL SECTION

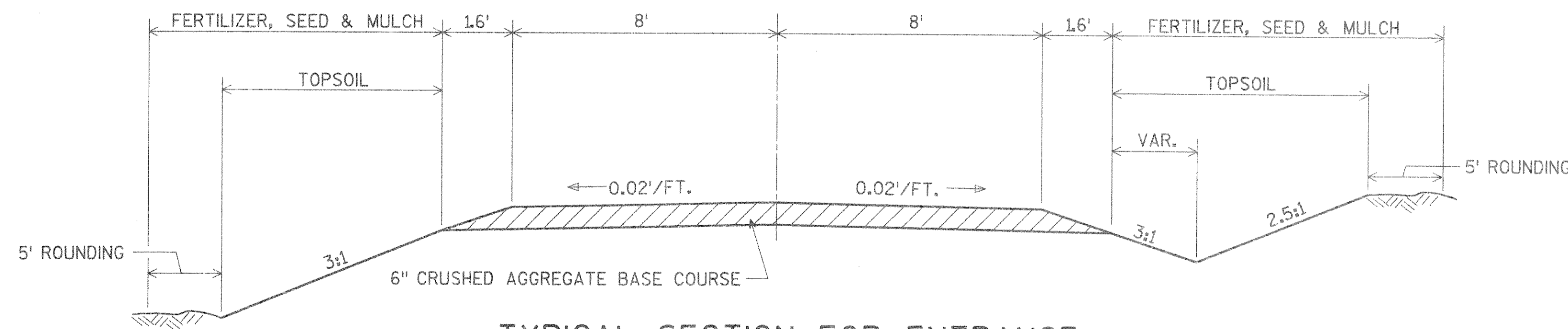
(STA. 9+14 - STA. 9+64)
(STA. 10+36 - STA. 10+86)

* THE ASPHALTIC SURFACE SHALL TAPER FROM 26 FEET WIDE AT THE ENDS OF THE BRIDGE TO 20 FEET WIDE AT 50 FEET FROM THE ENDS OF THE BRIDGE.



TYPICAL SECTION

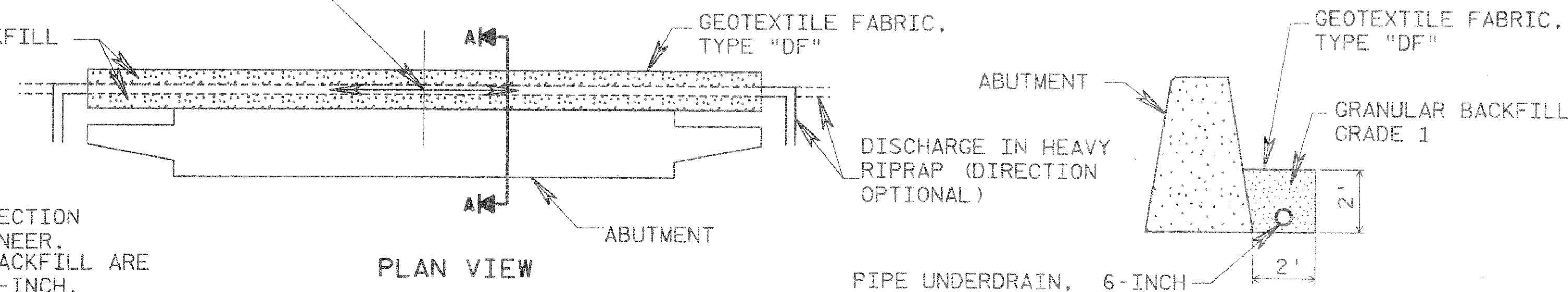
(STA. 8+50 - STA. 9+14)
(STA. 10+86 - STA. 12+00)



TYPICAL SECTION FOR ENTRANCE

SLOPE PIPE UNDERDRAIN, 6 INCH
0.05'/FT. TO DRAIN

GRANULAR BACKFILL
GRADE 1



PLAN VIEW

SECTION A-A

NOTE:
DISCHARGE SHALL HAVE RODENT PROTECTION PROVIDED AS DIRECTED BY THE ENGINEER. RODENT PROTECTION AND GRANULAR BACKFILL ARE INCIDENTAL TO PIPE UNDERDRAIN, 6-INCH.

DETAIL FOR PIPE UNDERDRAIN AT ABUTMENT

GENERAL NOTES

EROSION CONTROL ITEMS TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

NÓ TREES ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

EXCAVATION FOR STRUCTURES SHALL INCLUDE FURNISHING, PLACEMENT AND COMPACTION OF ANY FILL MATERIAL REQUIRED TO PROVIDE A SUITABLE FOUNDATION FOR SUBSTRUCTURE UNITS.

THE DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR WITH A MONUMENT TO BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

TOPSOIL SHALL BE PLACED ON THE SLOPES, TO THE POINT OF INTERCEPT WITH THE ORIGINAL GROUND SHOWN ON THE CROSS SECTION.

STANDARD DETAIL DRAWINGS

- 8E7-1 EROSION MAT
- 8E9-3 SILT FENCE
- 12A3-4 NAME PLATE - STRUCTURES
- 15C2-2 BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES
- 15C6-3 TRAFFIC CONTROL DEVICES FOR TWO LANE BRIDGES

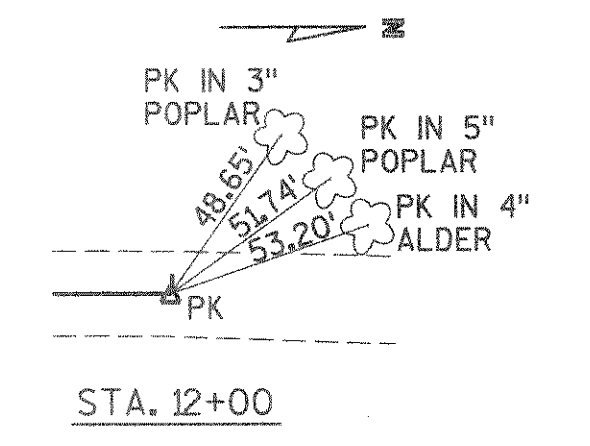
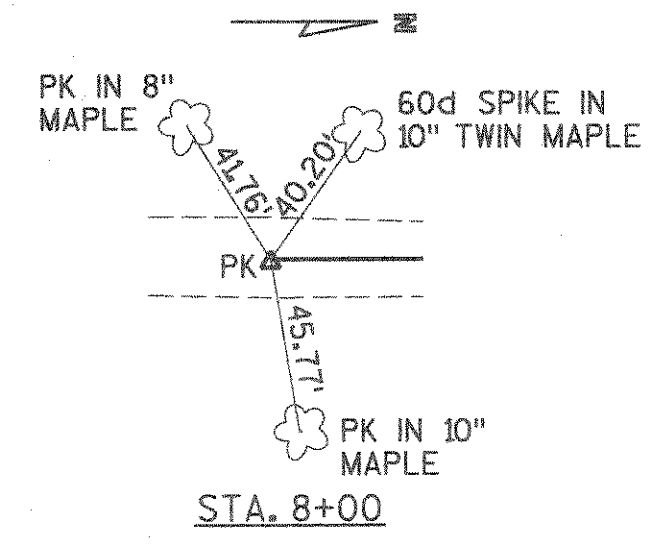
UTILITIES

* DIGGERS HOTLINE 1-800-242-8511

DETAILED SUMMARY OF MISCELLANEOUS QUANTITIES

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 DGN LEVELS ON = 1-63

<u>CLEARING</u>			<u>EROSION MAT</u>				<u>GEOTEXTILE FABRIC, TYPE DF</u>	
<u>LOCATION</u>	<u>STA.</u>		<u>LOCATION</u>	<u>DELIVERED SQ. YD.</u>	<u>INSTALLED SQ. YD.</u>	<u>LOCATION</u>	<u>SQ. YD.</u>	
STA. 9+00 TO STA. 12+00	3		STA. 9+00 TO STA. 9+49 LT. STA. 9+00 TO STA. 9+59 RT. STA. 10+41 TO STA. 10+50 RT. STA. 10+41 TO STA. 11+00 LT.	30 30 20 100	30 30 20 100	SOUTH ABUTMENT NORTH ABUTMENT	45 45	
<u>GRUBBING</u>			<u>SILT FENCE (FOR SILTY SOIL)</u>				<u>PIPE UNDERDRAIN, 6 INCH</u>	
STA. 9+00 TO STA. 12+00	3		<u>LOCATION</u>	<u>DELIVERED LIN. FT.</u>	<u>INSTALLED LIN. FT.</u>	<u>MAINTENANCE LIN. FT.</u>	<u>LOCATION</u>	<u>LIN. FT.</u>
<u>CRUSHED AGGREGATE BASE COURSE</u>			STA. 9+30 - SOUTH ABUTMENT	150	150	300	SOUTH ABUTMENT	55
<u>LOCATION</u>	<u>CU. YD.</u>	<u>SHLDRS CU. YD.</u>	NORTH ABUTMENT - STA. 11+00	200	200	400	NORTH ABUTMENT	55
MAINLINE, STA. 8+50 TO STA. 9+14	60	---		350	350	700		110
MAINLINE, STA. 9+14 TO STA. 9+64	35	2	<u>SEEDING</u>					
MAINLINE, STA. 10+36 TO STA. 10+86	35	2	<u>LOCATION</u>	<u>MIX*</u>	<u>LBS./1000 SQ. FT.</u>	<u>LB.</u>		
MAINLINE, STA. 10+86 TO STA. 12+00	104	---	STA. 8+50 TO STA. 12+00	20	3	23		
P.E. @ STA. 8+89 RT.	10	---	BORROW PIT	20	3	15		
P.E. @ STA. 11+18 RT.	12	---				38		
	256	4	<u>FERTILIZER, TYPE B</u>					
<u>ASPHALTIC SURFACE</u>			<u>LOCATION</u>	<u>CWT</u>				
<u>LOCATION</u>	<u>SQ. YD.</u>		STA. 8+50 TO STA. 12+00	0.6				
MAINLINE, STA. 9+14 TO STA. 9+64	130		BORROW PIT	0.4				
MAINLINE, STA. 10+36 TO STA. 10+86	130			1.0				
	260		<u>MULCHING</u>					
<u>WOOD POSTS, 4 x 4 - INCH x 10 FT.</u>			<u>LOCATION</u>	<u>SQ. YD.</u>				
<u>LOCATION</u>	<u>EACH</u>		STA. 8+50 TO STA. 12+00	660				
STA. 9+64 LT.	1		BORROW PIT	500				
STA. 9+64 RT.	1			1160				
STA. 10+36 LT.	1		<u>TOPSOIL</u>					
STA. 10+36 RT.	1		<u>LOCATION</u>	<u>SQ. YD.</u>				
	4		STA. 8+50 TO STA. 12+00	480				
<u>SIGNS, TYPE II, REFLECTIVE</u>								
<u>LOCATION</u>	<u>SQ. FT.</u>							
STA. 9+64 LT. (W5-52L)	3							
STA. 9+64 RT. (W5-52R)	3							
STA. 10+36 LT. (W5-52L)	3							
STA. 10+36 RT. (W5-52R)	3							
	12							



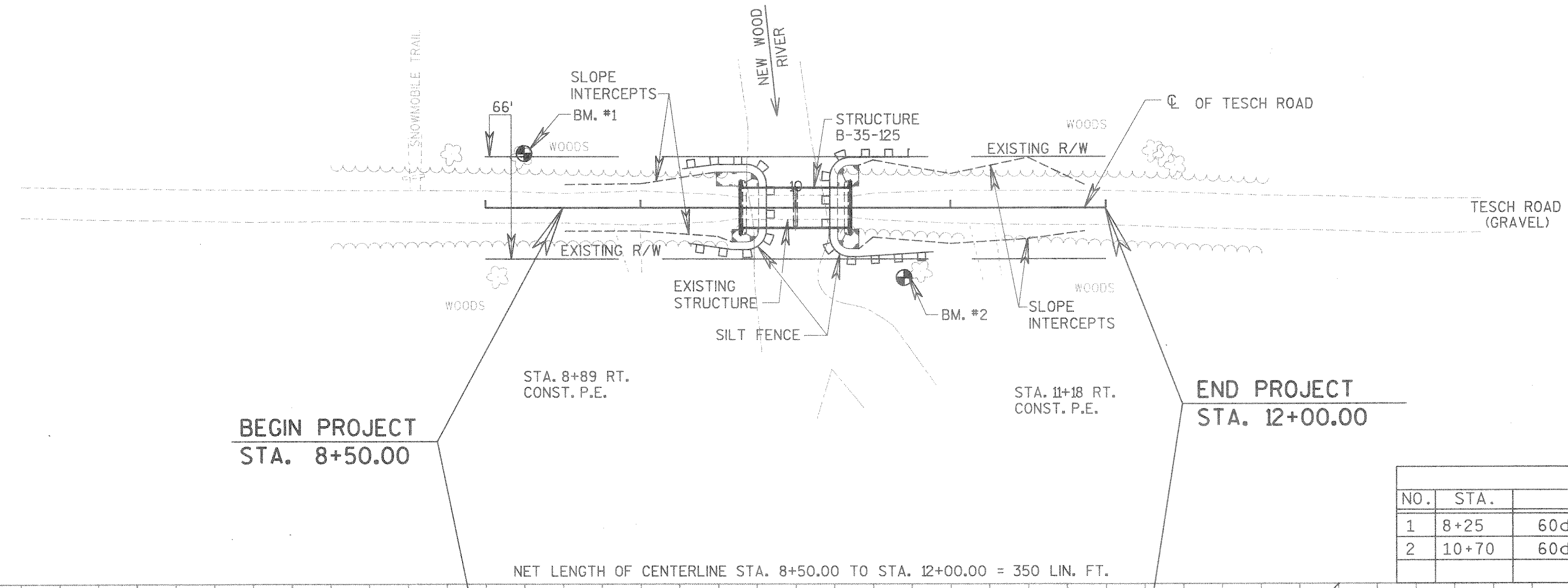
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5020dt.dgn ON = 1-63

5020c.dgn ON = 1-63

5020t.dgn ON = 1-63

PROJ. NO. DATE:
OFFICE: EAU SURVEY PLOT: DATE:
PREL: DATE:
FINAL: DATE:



ORIGIN OF LEVELS
SPOT ELEVATION AT
STA. 8+00.00
ELEV. 1289.80

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
1	8+25	60d SPIKE IN 10" TWIN MAPLE, 35' LT	1289.27
2	10+70	60d SPIKE IN 10" BASSWOOD, 45' RT.	1285.27

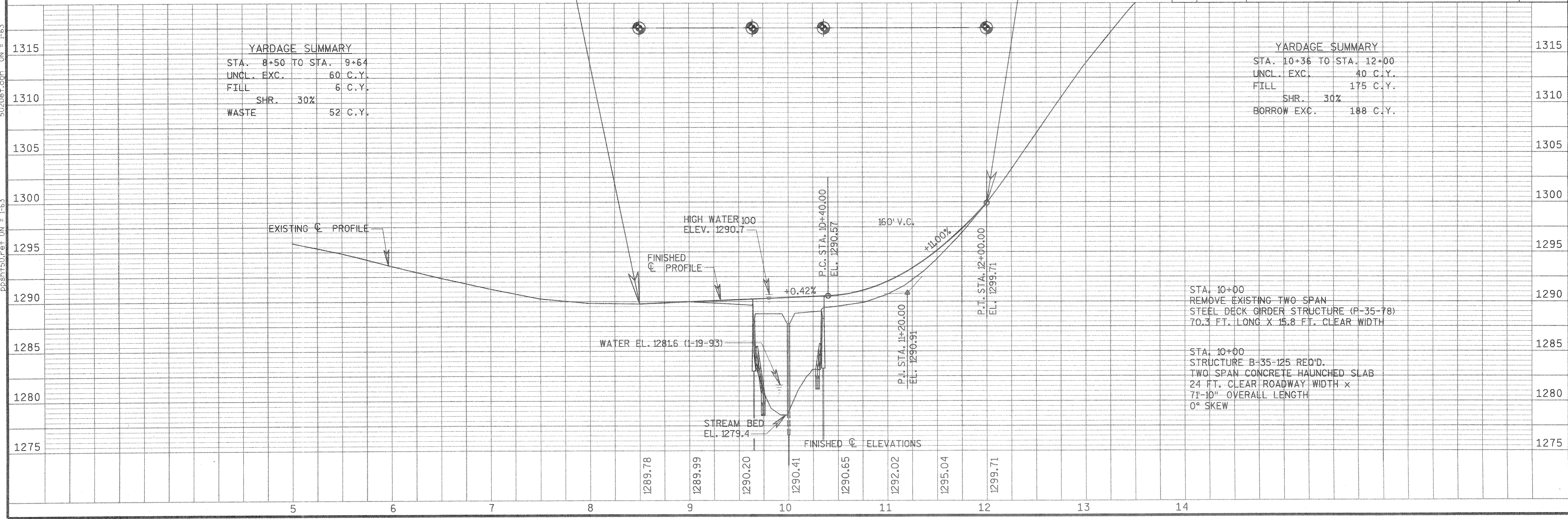
NET LENGTH OF CENTERLINE STA. 8+50.00 TO STA. 12+00.00 = 350 LIN. FT.

YARDAGE SUMMARY

STA. 8+50 TO STA. 9+64	
UNCL. EXC.	60 C.Y.
FILL	6 C.Y.
SHR. 30%	
WASTE	52 C.Y.

YARDAGE SUMMARY

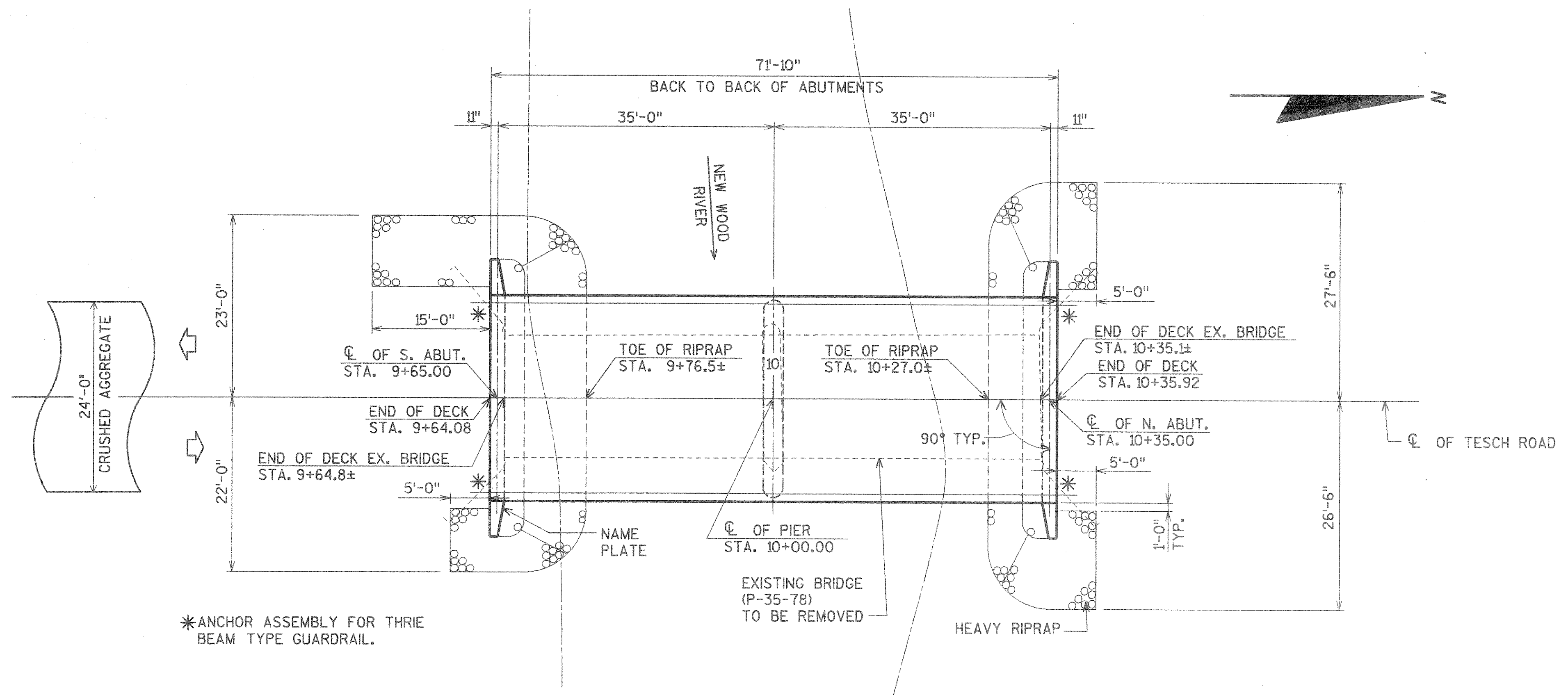
STA. 10+36 TO STA. 12+00	
UNCL. EXC.	40 C.Y.
FILL	175 C.Y.
SHR. 30%	
BORROW EXC.	188 C.Y.



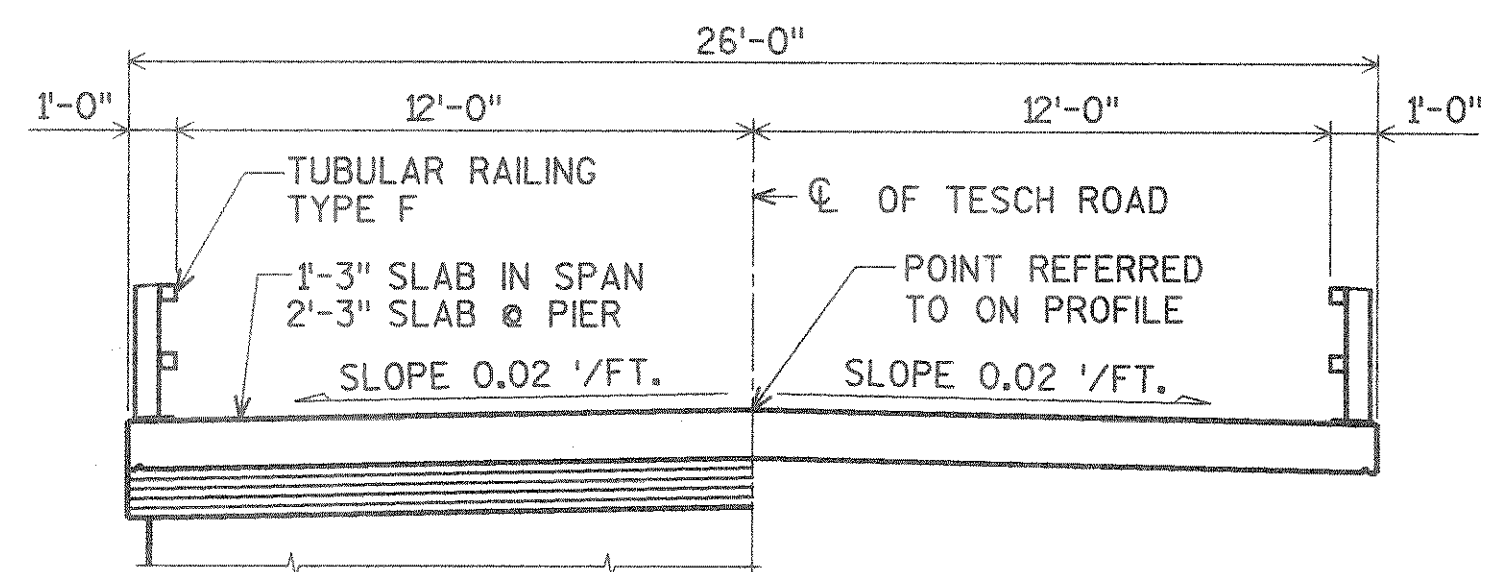
STA. 10+00
REMOVE EXISTING TWO SPAN
STEEL DECK GIRDER STRUCTURE (P-35-78)
70.3 FT. LONG X 15.8 FT. CLEAR WIDTH

STA. 10+00
STRUCTURE B-35-125 REQ'D.
TWO SPAN CONCRETE HAUNCHED SLAB
24 FT. CLEAR ROADWAY WIDTH X
71'-10" OVERALL LENGTH
0° SKEW

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 DESIGN FILE IS /usr/work/tr/bridge/5020gp.dgn
 DGN LEVELS ON = 1-63



PLAN
 2 SPAN CONCRETE HAUNCHED SLAB



CROSS SECTION THRU ROADWAY

DESIGN DATA

LIVE LOAD: HS-20 (STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20#/S.F.)
RATINGS: INVENTORY = HS-24 OPERATING = HS-40
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 220 KIPS
ULTIMATE DESIGN STRESSES:
 CONCRETE MASONRY SLAB $f'_c = 4,000$ p.s.i.
 ALL OTHER $f'_c = 3,500$ p.s.i.
 HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) $f_y = 60,000$ p.s.i.

HYDRAULIC DATA:

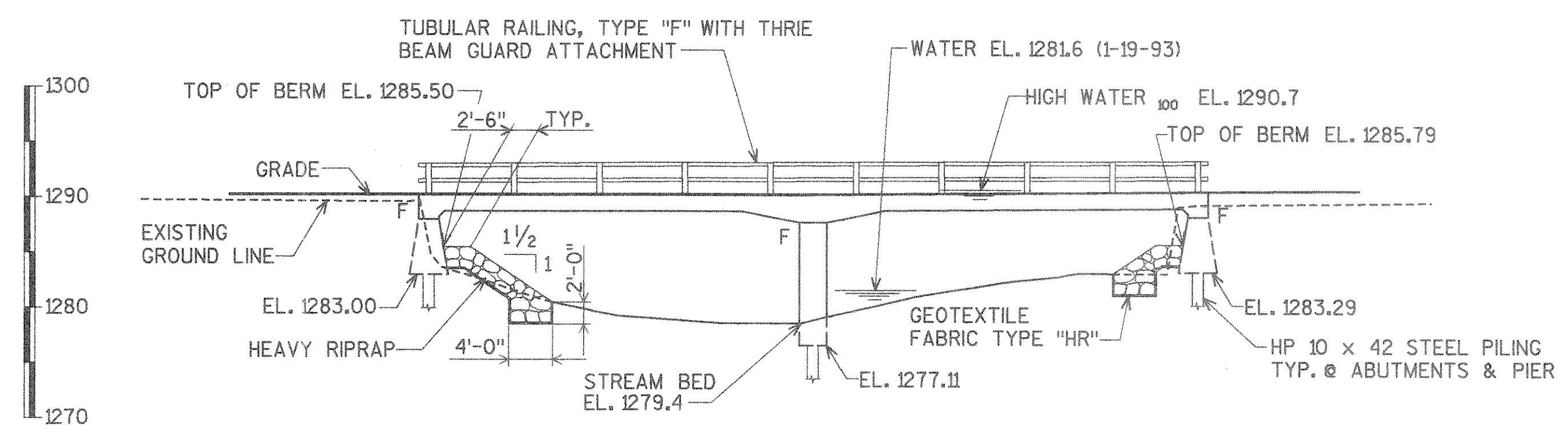
100 YEAR FLOOD
 DRAINAGE AREA = 85.9 sq. mi.
 WATERWAY AREA = 453 sq. ft.
 V = 8.5 f.p.s.
 Q₁₀₀ = 4570 c.f.s. (BRIDGE = 3840 c.f.s., OVERFLOW = 730 c.f.s.)
FREQUENCY OF OVERTOPPING
 Q₄₀ = 3650 c.f.s.
 WATER SURFACE EL. 1289.8
 HIGH WATER₁₀₀ EL. 1290.7
 SCOUR CRITICAL CODE = 5

FOUNDATION DATA:

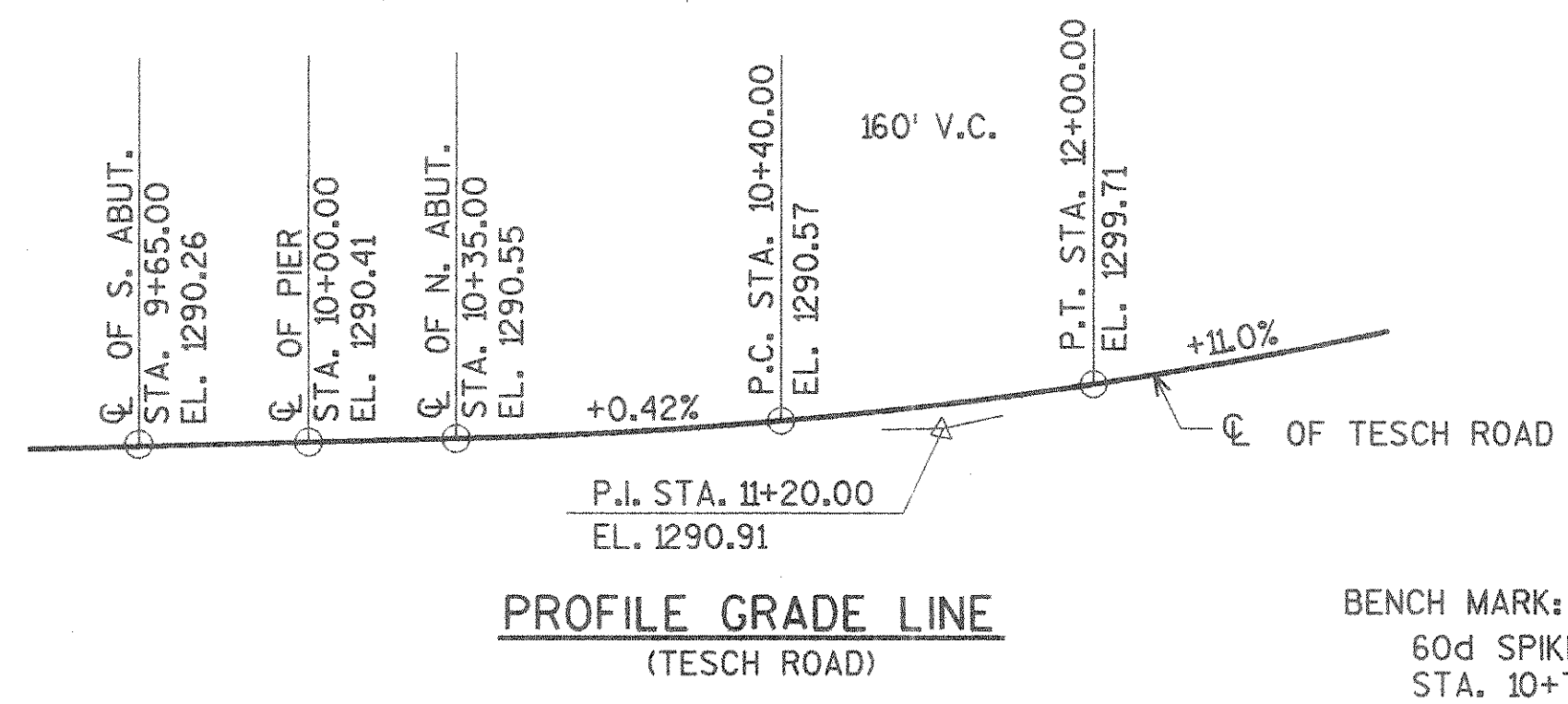
PLACE ABUTMENTS ON HP 10 x 42 STEEL PILING DRIVEN TO 35 TONS/PILE MINIMUM BEARING VALUE. ESTIMATED LENGTH 40'-0".
 PLACE PIER ON HP 10 x 42 STEEL PILING DRIVEN TO 50 TONS/PILE MINIMUM BEARING VALUE. ESTIMATED LENGTH 45'-0".

TRAFFIC DATA:

A.D.T. = 40 (1994)
 A.D.T. = 55 (2014)
 R.D.S. = 25 M.P.H.



ELEVATION

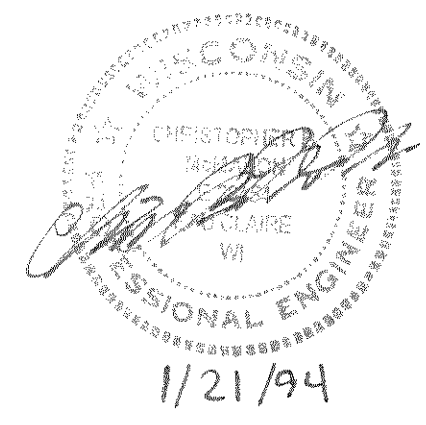


PROFILE GRADE LINE
 (TESCH ROAD)

BENCH MARK:
 60d SPIKE IN 10" BASSWOOD
 STA. 10+70.00, 45' RT.
 EL. 1285.27

LIST OF DRAWINGS

1. GENERAL PLAN
2. QUANTITIES & NOTES
3. SUBSURFACE EXPLORATION
4. ABUTMENTS
5. PIER
6. SUPERSTRUCTURE
7. TUBULAR RAILING TYPE "F"



BRIDGE OFFICE CONTACT:
 C. RAY
 (608) 266-8486

No.	Date	Revision	By
PLANS PREPARED BY			
AYRES ASSOCIATES Engineers/Architects Planners/Surveyors Owen Ayres & Associates Inc. Eau Claire, Wisconsin			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-125			
TESCH ROAD OVER NEW WOOD RIVER			
County	LINCOLN	Town	HARDING
Design Spec.	A.A.S.H.T.O. '92	Load	HS-20
Designed By	BAO	Const. Spec.	1989
Design Checked	MJT	Drawn By	CLS
Plans Checked	C.B.M.		
Approved		Date	
State Bridge Engineer			
GENERAL PLAN			SHEET 1 OF 7

REFERENCE FILES
 STONMAREF ON = 1-63
 SHTOPREF ON = 13-56-09-63

CHECKED BY:
 BACK CHECKED BY:
 CORRECTED BY:

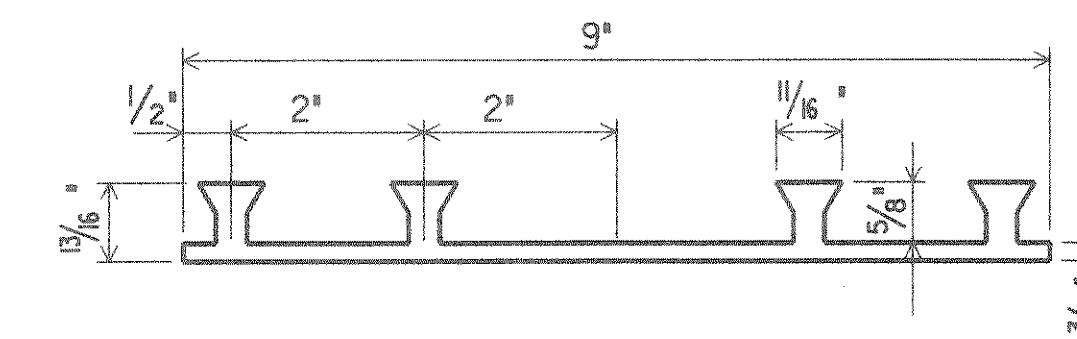
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 DGN LEVELS ON = 1-63

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	S. ABUT.	PIER	N. ABUT.	SUPER.	TOTAL
REMOVING OLD BRIDGE, STA. 10+00	L.S.	-----	-----	-----	-----	1
EXCAVATION FOR STRUCTURES, BRIDGES B-35-125	L.S.	-----	-----	-----	-----	1
CONCRETE MASONRY, BRIDGES	C.Y.	16.1	24.1	16.1	96.7	153
PROTECTIVE SURFACE TREATMENT	GAL.	-----	-----	-----	13	13
HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	1,440	1,170	1,440	13,440	17,490
COATED HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	-----	-----	-----	6,900	6,900
STEEL PILING, DELIVERED AND DRIVEN, HP 10-INCH 42 POUND	L.F.	160	270	160	-----	590
TUBULAR RAILING, TYPE F, STRUCTURE B-35-125	L.S.	-----	-----	-----	-----	1
HEAVY RIPRAP	C.Y.	60	-----	45	-----	105
GEOTEXTILE FABRIC, TYPE HR	S.Y.	100	-----	85	-----	185
NON-BID ITEMS						
FILLER	SIZE	-----	-----	-----	-----	1/2" & 3/4"
POLYVINYL CHLORIDE WATERSTOP	L.F.	30	-----	30	-----	60

GENERAL NOTES

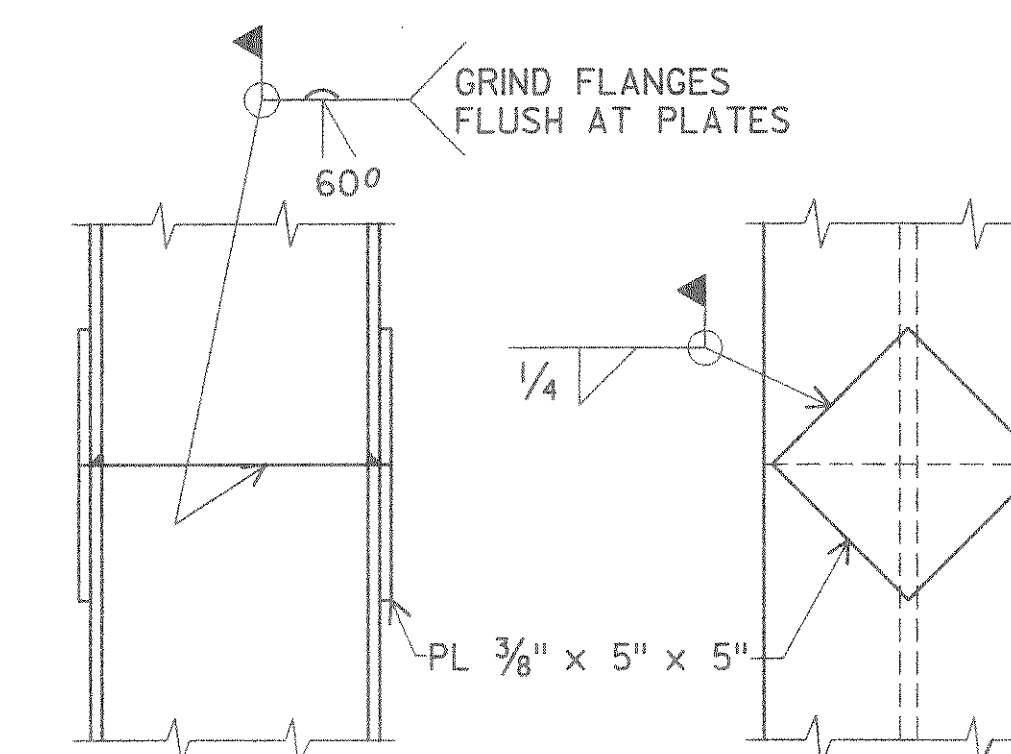
DRAWINGS SHALL NOT BE SCALED.
 BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
 THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.
 JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.
 THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP TO THE EXTENT SHOWN ON THE GENERAL PLAN SHEET AND IN THE ABUTMENT DETAILS.
 SLAB FALSEWORK SHALL BE SUPPORTED ON PILES UNLESS OTHERWISE APPROVED BY THE ENGINEER.
 PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE TOP OF DECK.
 THE EXISTING BRIDGE, P-35-78, IS A TWO SPAN STEEL DECK GIRDER STRUCTURE 70.3 FT. LONG WITH A 15.8 FT. CLEAR WIDTH.



POLYVINYL CHLORIDE WATERSTOP DETAIL

(P.C.W.)

NOTE: WATERSTOP SHALL BE FASTENED TO FORMS BY NAILING OUTSIDE OF OUTSIDE TABS.



HP 10 x 42 SPLICE DETAIL

REFERENCE FILES

DATE: DATE: DATE:

CHECKED BY: BACK CHECKED BY: CORRECTED BY:

No.	Date	Revision	By
PLANS PREPARED BY			
AYRES ASSOCIATES Engineers/Architects Planners/Surveyors Owen Ayres & Associates Inc. Eau Claire, Wisconsin			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-125			
Const. Spec.	1989	Drawn By	CLS
		Plans Checked	C.B.M.
QUANTITIES & NOTES			SHEET 2 OF 7

PEN TABLE = collgbr.tbl
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STANDARD REF ON = 1-63

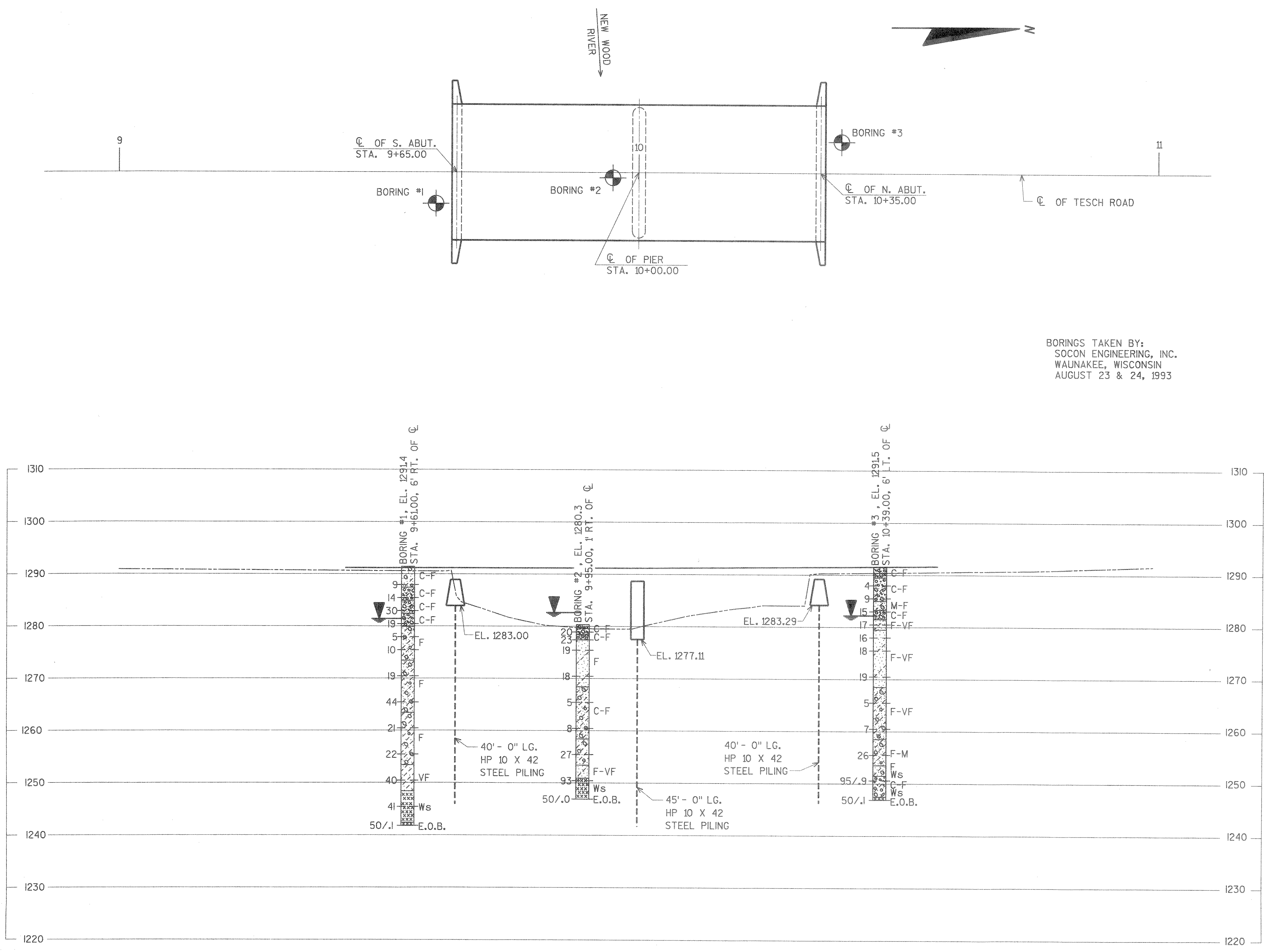
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ON = 13-56-85-83

SHEET REF

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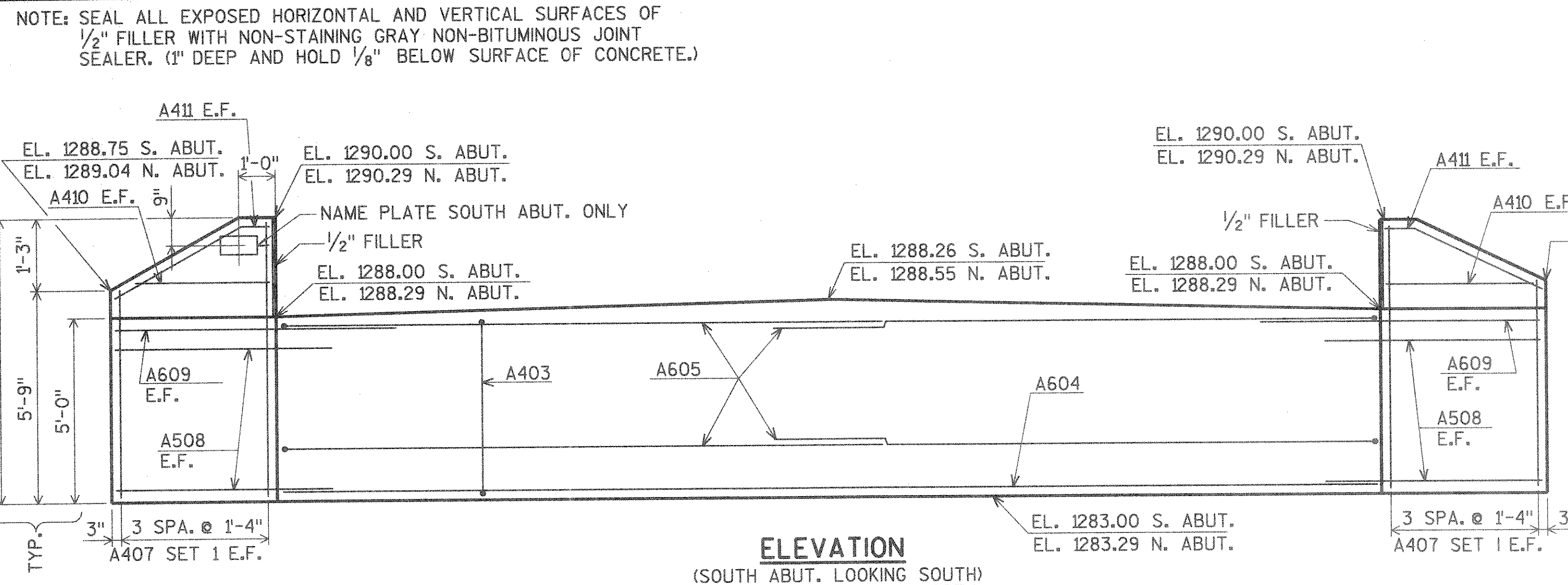
STATE PROJECT NUMBER	SHEET NO.								
9853-02-70									
ABBREVIATIONS									
F --- Fine Ws --- Weathered	M --- Medium So --- Sound								
C --- Coarse									
MATERIAL SYMBOLS									
Topsoil	Silt	Sandstone							
Sand	Peat	Limestone							
Gravel	Clay	Igneous Rock							
LEGEND OF PROBING									
Probing No., Station, Elevation 95/6 = 95 Blows for 6' Penetration Probing taken with a 350# wt. Falling 18" on a 2' O.D. Point. Refusal 95/6									
LEGEND OF BORING									
Boring No., Elev. Sta. & Offset Unconfined Strength → 7.7 Blows Per Foot Using 140# Wt. Falling 30". Wash Sample Shelby Tube — S.T. Ground Water Elevation No Ground Water Observed Above This Elevation Sandy Gravel Boulders or Cobbles Sand Silty Clay Limestone									
Unless otherwise specified, the blows per foot at the locations indicated are based on driving a 2' O.D. x 1.4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". 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.									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Date</th> <th>Revision</th> <th>By</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		No.	Date	Revision	By				
No.	Date	Revision	By						
PLANS PREPARED BY AYRES ASSOCIATES Engineers/Architects Planners/Surveyors Owen Ayres & Associates Inc. Eau Claire, Wisconsin									
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURE B-35-125									
Const. Spec. 1989	Drawn By CLS	Plans Checked C.B.M.							
SUBSURFACE EXPLORATION		SHEET 3 OF 7							



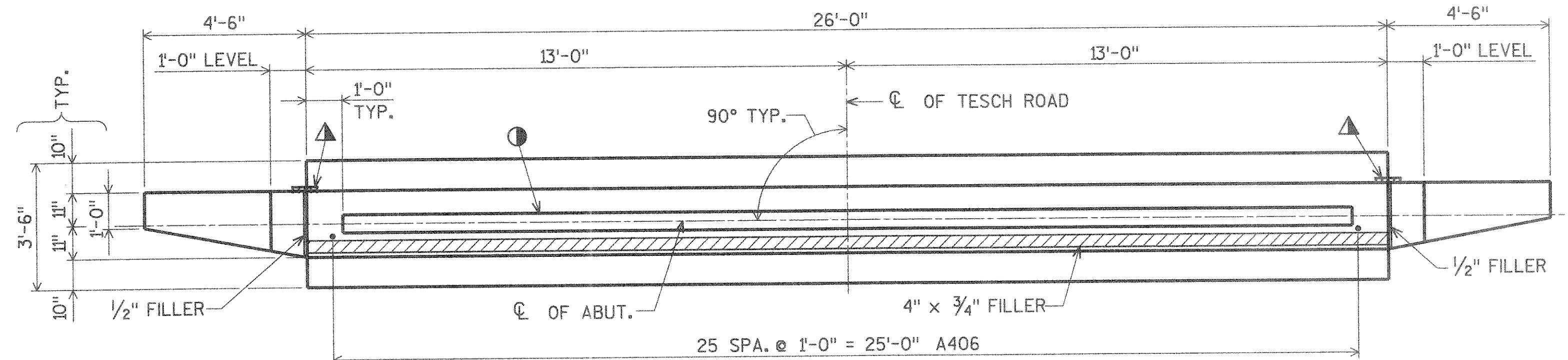
BILL OF BARS (FOR ONE ABUTMENT ONLY)

BAR NO.	NO. REQ'D.	LENGTH	BENT BAR	COATED BAR	CUT-DIAGR.	1,440# UNCOATED	
						LOCATION	
A401	4	28'-0"	X			BODY @ PILES	
A402	8	2'-3"				BODY @ PILES	
A403	58	8'-1"	X			BODY VERT.	
A604	4	25'-8"				BODY HORIZ.	
A605	26	15'-2"	X			BODY HORIZ.	
A406	26	2'-0"				BODY DOWELS	
A407	8	12'-0"		X		WINGS VERT. E.F. SET 1	
A508	20	5'-10"				WINGS HORIZ. E.F.	
A609	4	7'-7"				WINGS HORIZ. E.F.	
A410	4	4'-1"				WINGS HORIZ. E.F.	
A411	4	4'-6"	X			WINGS DIAG. E.F.	

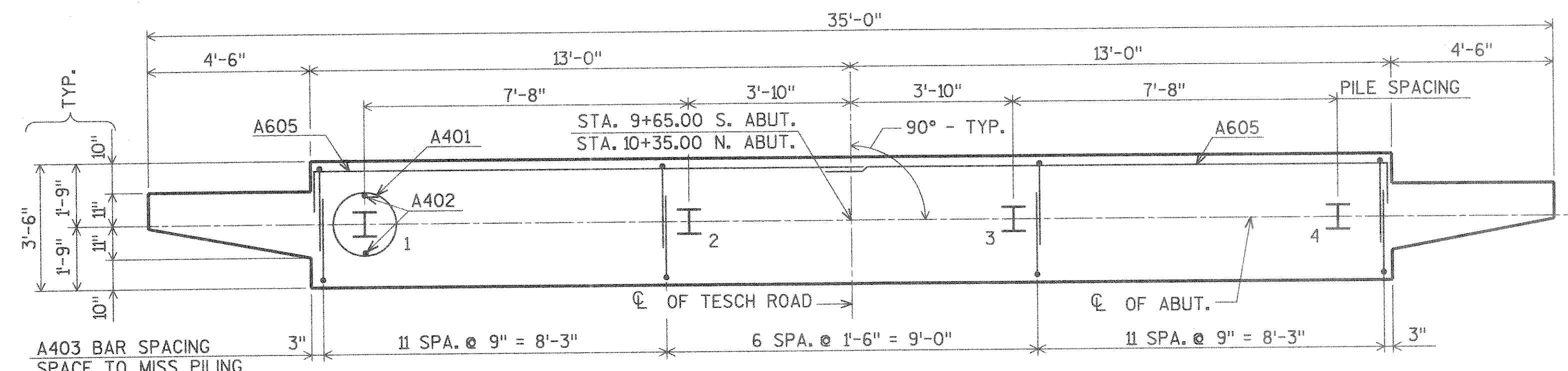
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.
E.F. DENOTES EACH FACE.
F.F. DENOTES FRONT FACE.



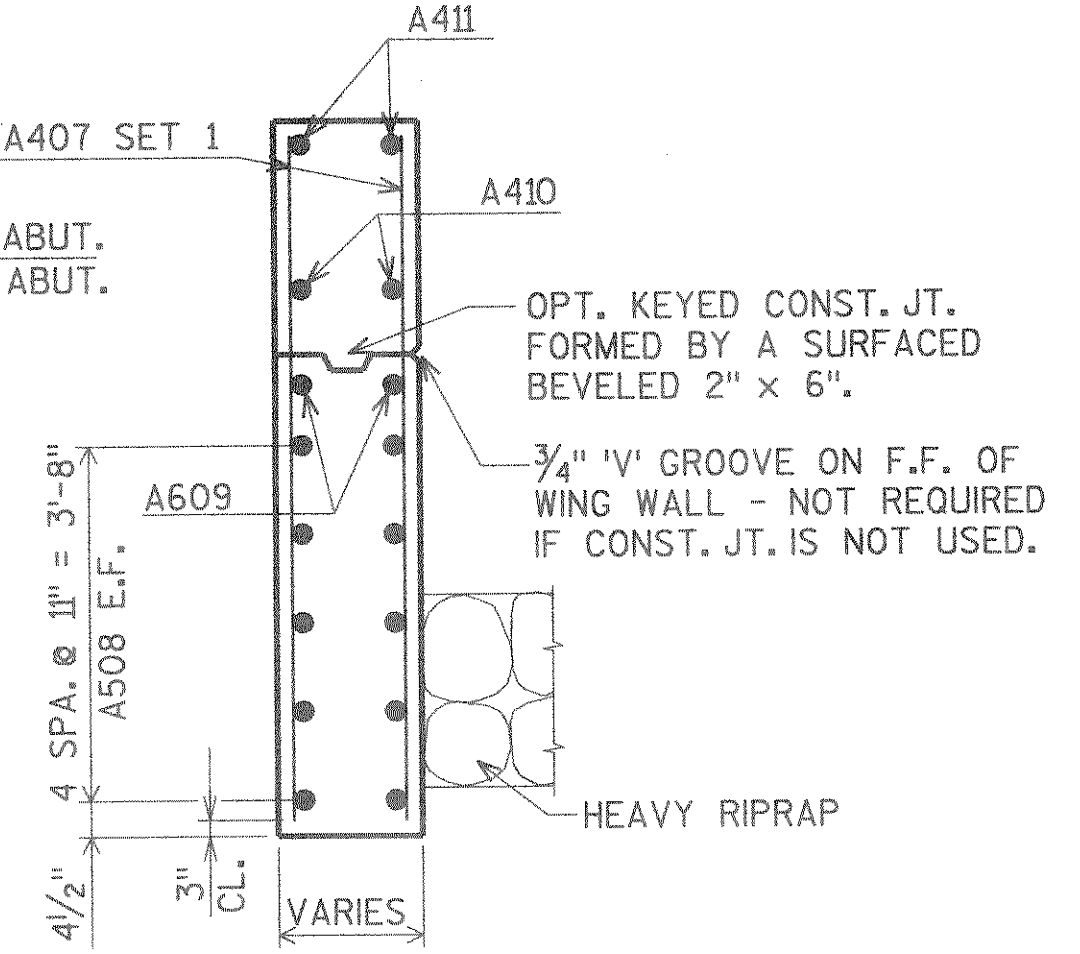
ELEVATION
(SOUTH ABUT. LOOKING SOUTH)
(NORTH ABUT. LOOKING NORTH)



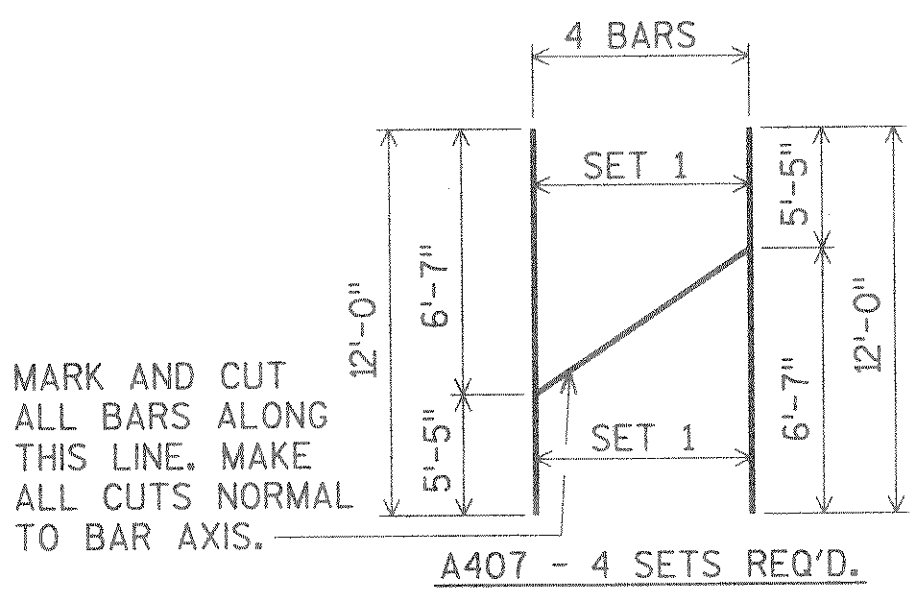
PLAN



PILE LAYOUT

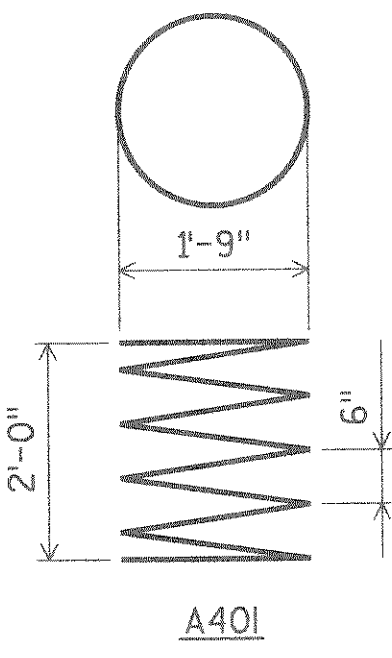


TYP. SECTION THRU WING

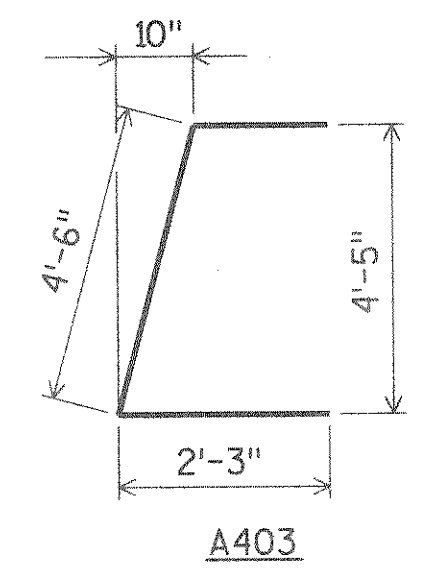


MARK AND CUT ALL BARS ALONG THIS LINE. MAKE ALL CUTS NORMAL TO BAR AXIS.

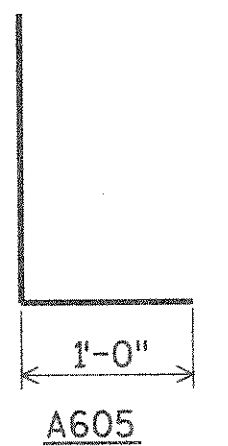
CUTTING DIAGRAM



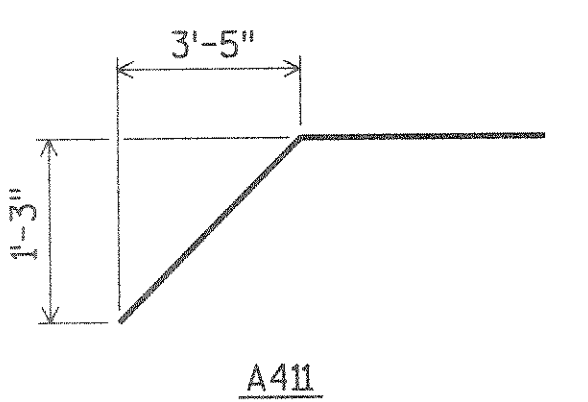
A401



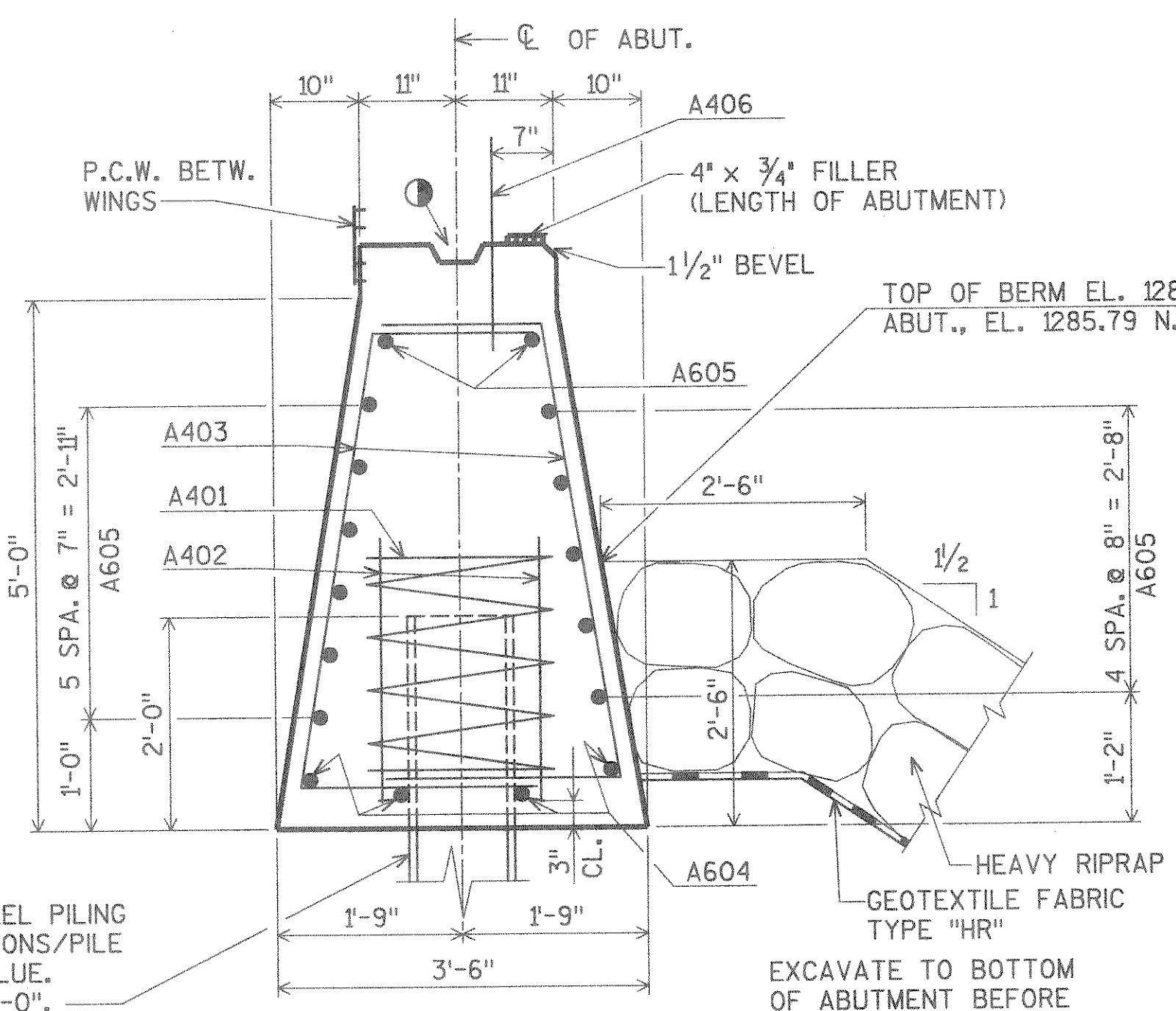
A403



A605



A411



SECTION THRU BODY

HP 10 X 42 STEEL PILING DRIVEN TO 35 TONS/PILE MIN. BEARING VALUE. EST. LENGTH 40'-0".

EXCAVATE TO BOTTOM OF ABUTMENT BEFORE DRIVING PILES.

- KEYED CONST. JOINT - FORMED BY A SURFACED BEVELED 2" x 6".
- VERT. P.C.W. TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. SPLICE AT JUNCTION WITH HORIZ. WATERSTOP BY USING A HEATED SPLICING IRON. HOLD P.C.W. FLUSH WITH CONCRETE.
- P.C.W. DENOTES POLYVINYL CHLORIDE WATERSTOP. SEE SHEET 2 FOR DETAILS.
- FOR PILE SPLICE DETAIL SEE SHEET 2.
- SEAL ALL VERTICAL ENDS OF P.C.W. WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

A406 BARS MAY BE PLACED AFTER ABUT. IS POURED BUT BEFORE CONC. HAS SET. IMBED BARS 1'-0".

PEN TABLE = collgbr.tbl
DATE OF PLOT = 01/21/94
DESIGN FILE IS /usr/work/ttbrldge/5020abut.dgn
DGN LEVELS ON = 1-63

REF NC
REFLNC

REFERENCE FILES
REF NB
REFLNB

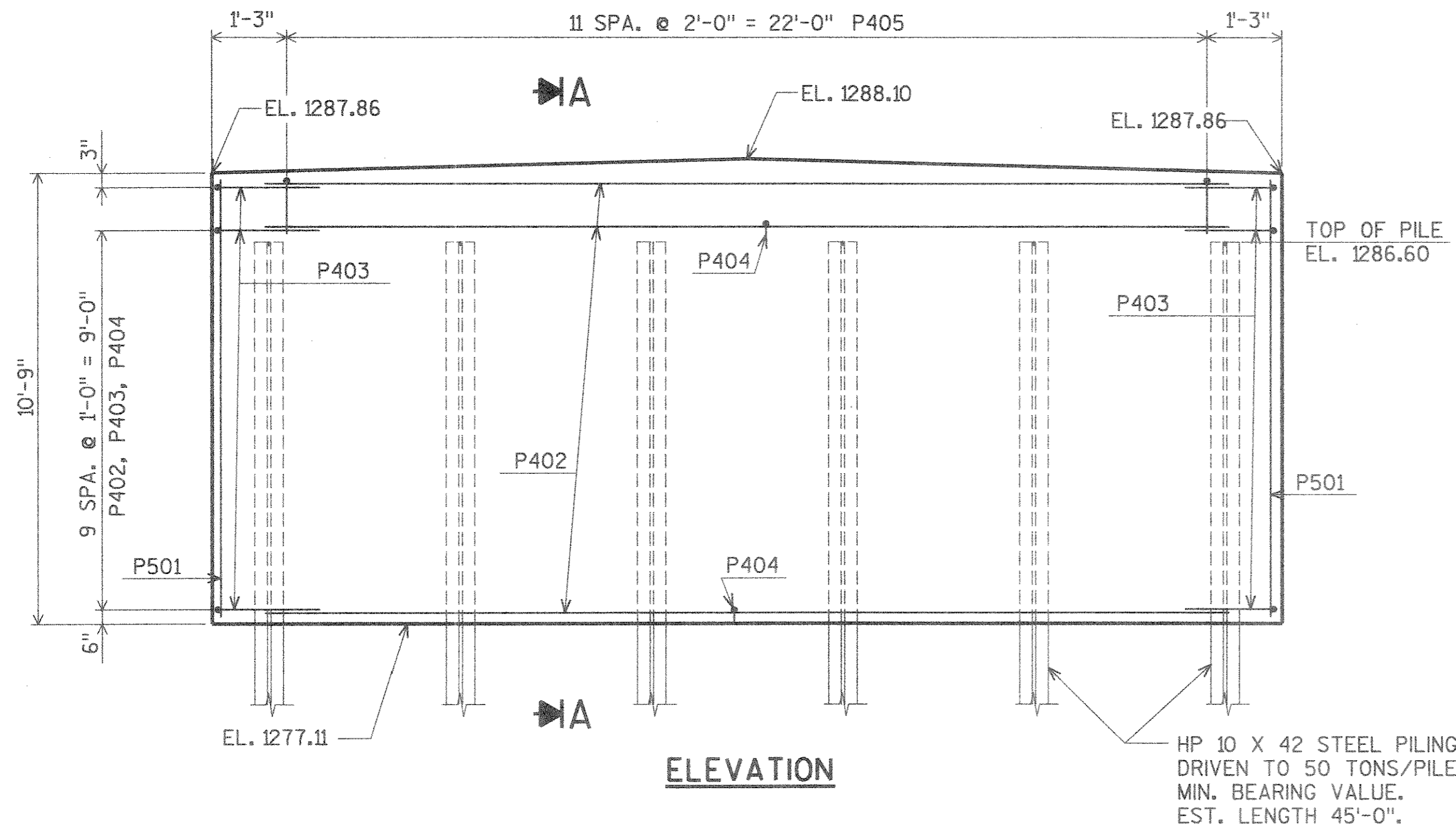
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DATE:
DATE:
DATE:

CHECKED BY:
BACK CHECKED BY:
CORRECTED BY:

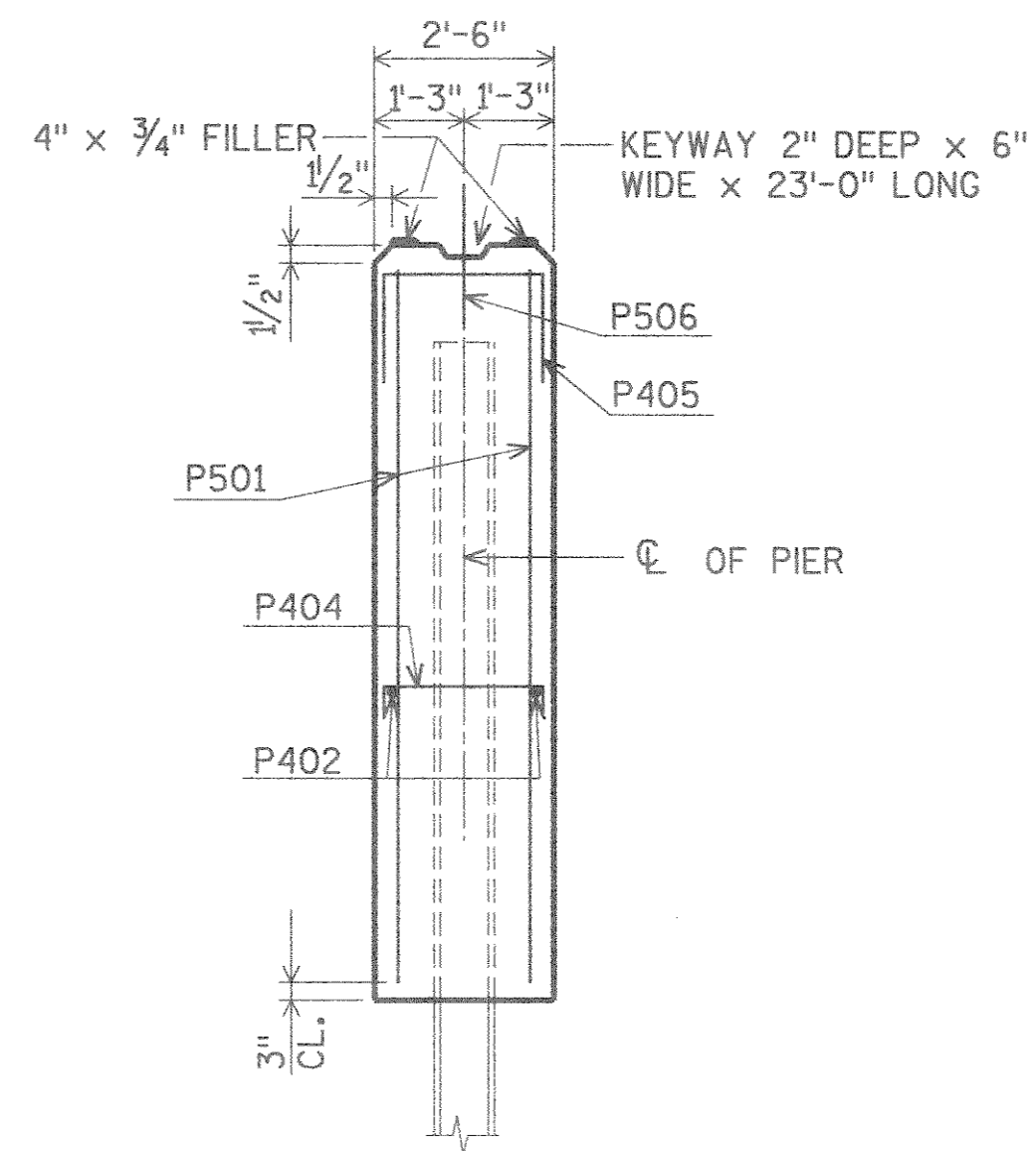
No.	Date	Revision	By
PLANS PREPARED BY			
AYRES ASSOCIATES Engineers/Architects Planners/Surveyors Owen Ayres & Associates Inc. Eau Claire, Wisconsin			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-125			
Const. Spec.	1989	Drawn By	CLS
		Plans Checked	C.B.M.
ABUTMENTS			SHEET 4 OF 7

PEN TABLE = collgbr.tbl
 DATE OF PLOT = 01/21/94
 DESIGN FILE IS /usr/work/trbrldge/5020pier.dgn
 DGN LEVELS ON = 1-63



ELEVATION

P506 BARS MAY BE PLACED AFTER PIER IS POURED BUT BEFORE CONC. HAS SET. IMBED BARS 1'-0".

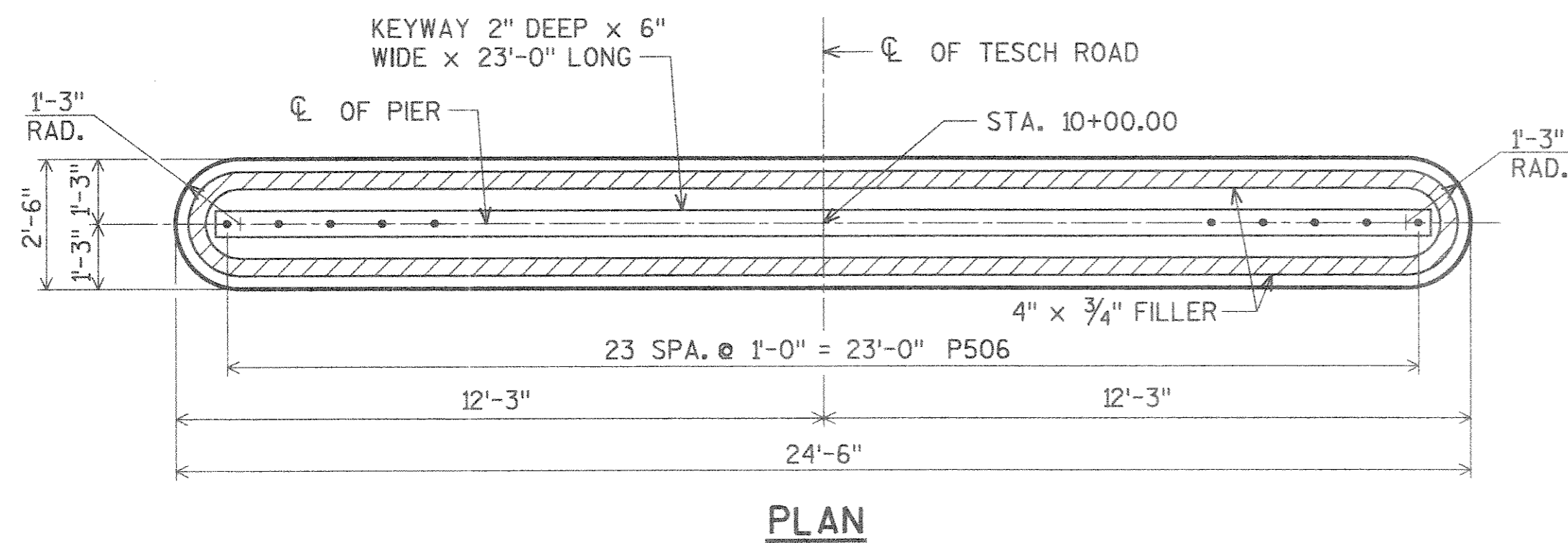


SECTION A

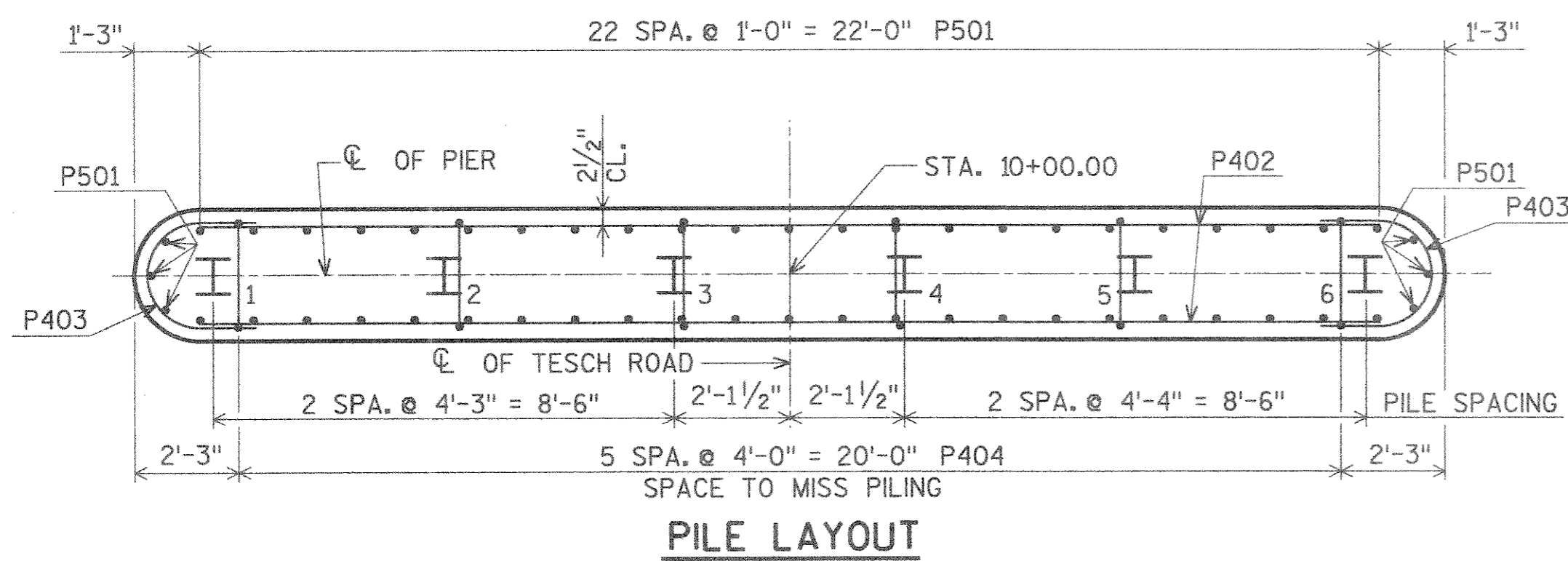
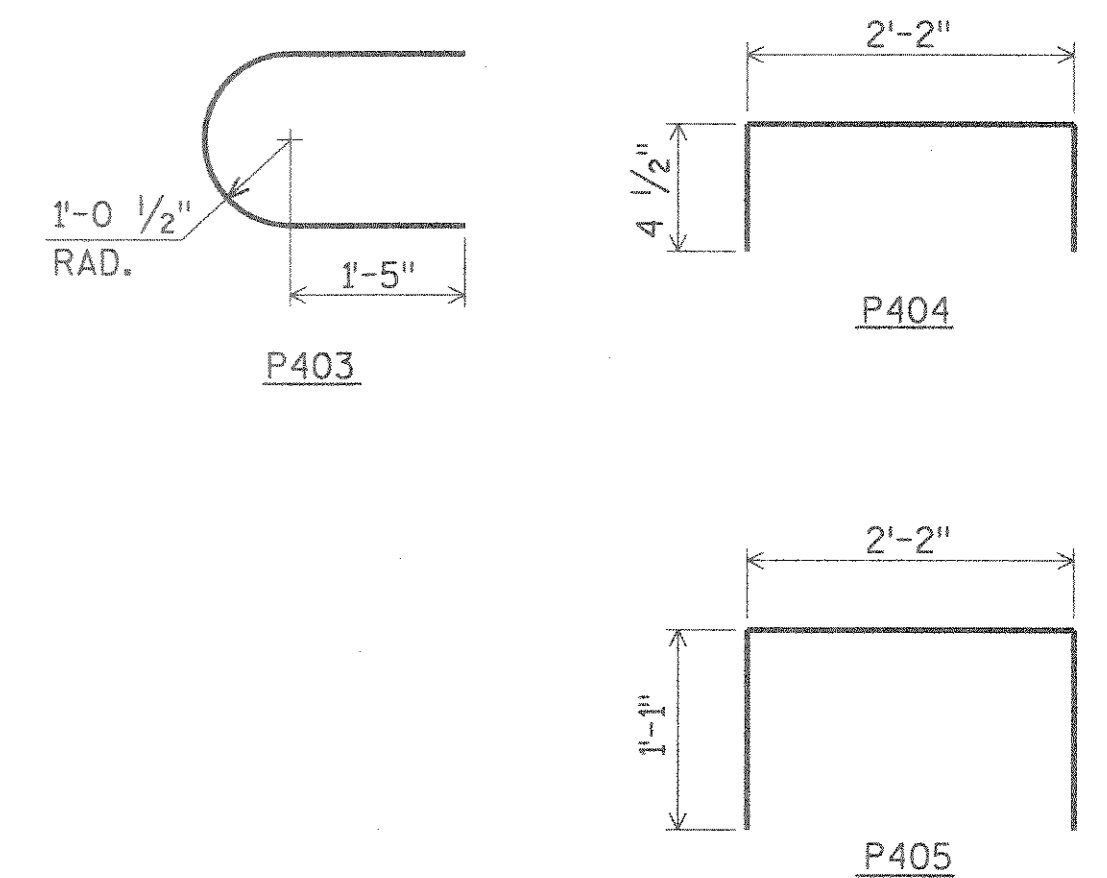
BILL OF BARS

BAR NO.	NO. REQ'D.	LENGTH	BENT BAR	COATED BAR	CUT. DIAGR.	1,170* UNCOATED
						LOCATION
P501	52	10-4				COLUMN VERTICAL
P402	22	22-0				COLUMN HORIZONTAL
P403	22	6-1	X			COLUMN HORIZONTAL
P404	60	2-9	X			COLUMN TIES
P405	12	4-2	X			COLUMN TOP
P506	24	2-0				COLUMN DOWELS

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



PLAN



PILE LAYOUT

REF NC
REFLNC

REFERENCE FILES
REF NB
REFLN

REF NA
REFLNA

DATE:

CHECKED BY:
BACK CHECKED BY:
CORRECTED BY:

No.	Date	Revision	By
PLANS PREPARED BY			
AYRES Engineers/Architects Planners/Surveyors Owen Ayres & Associates Inc. Eau Claire, Wisconsin			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-I25			
Const. Spec.	1989	Drawn By CLS	Plans Checked C.B.M.
PIER			SHEET 5 OF 7

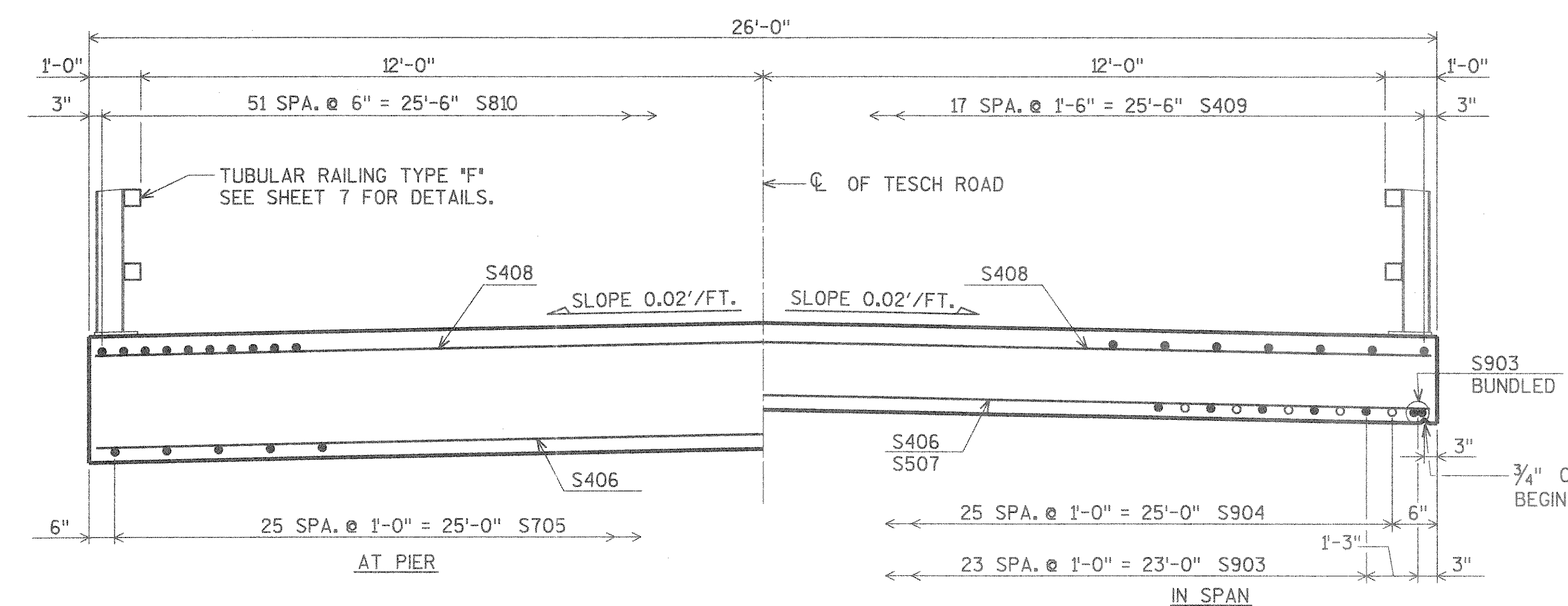
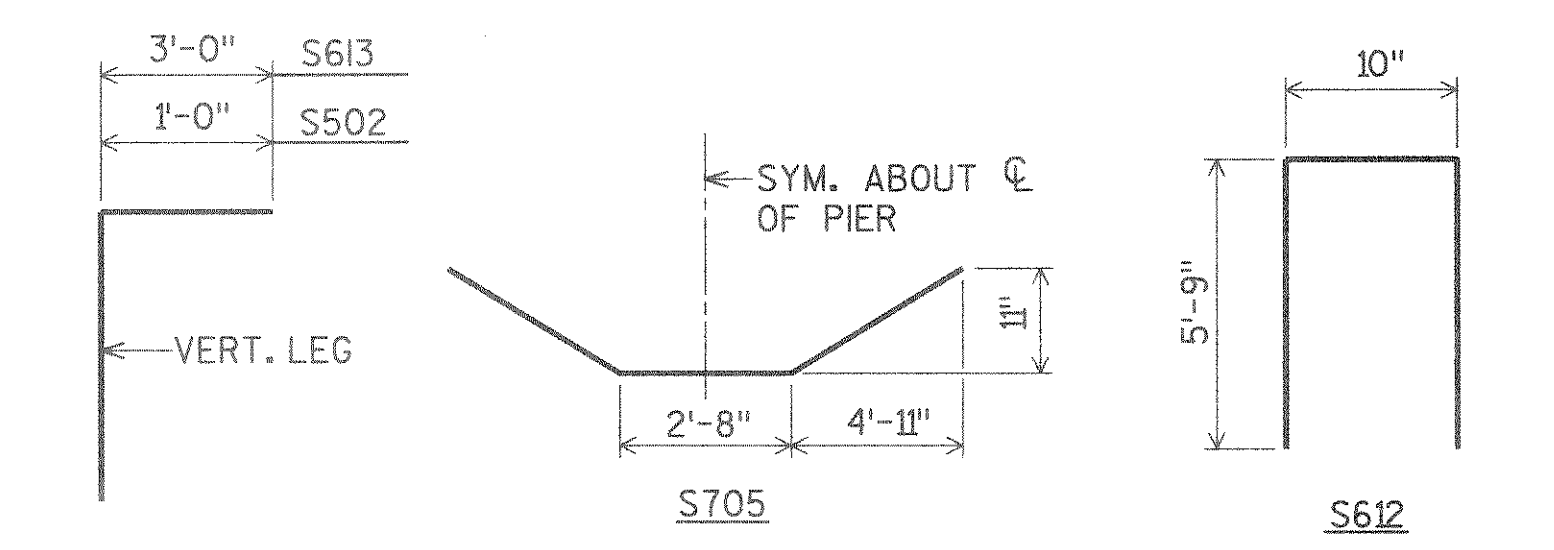
ALTERNATE TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

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

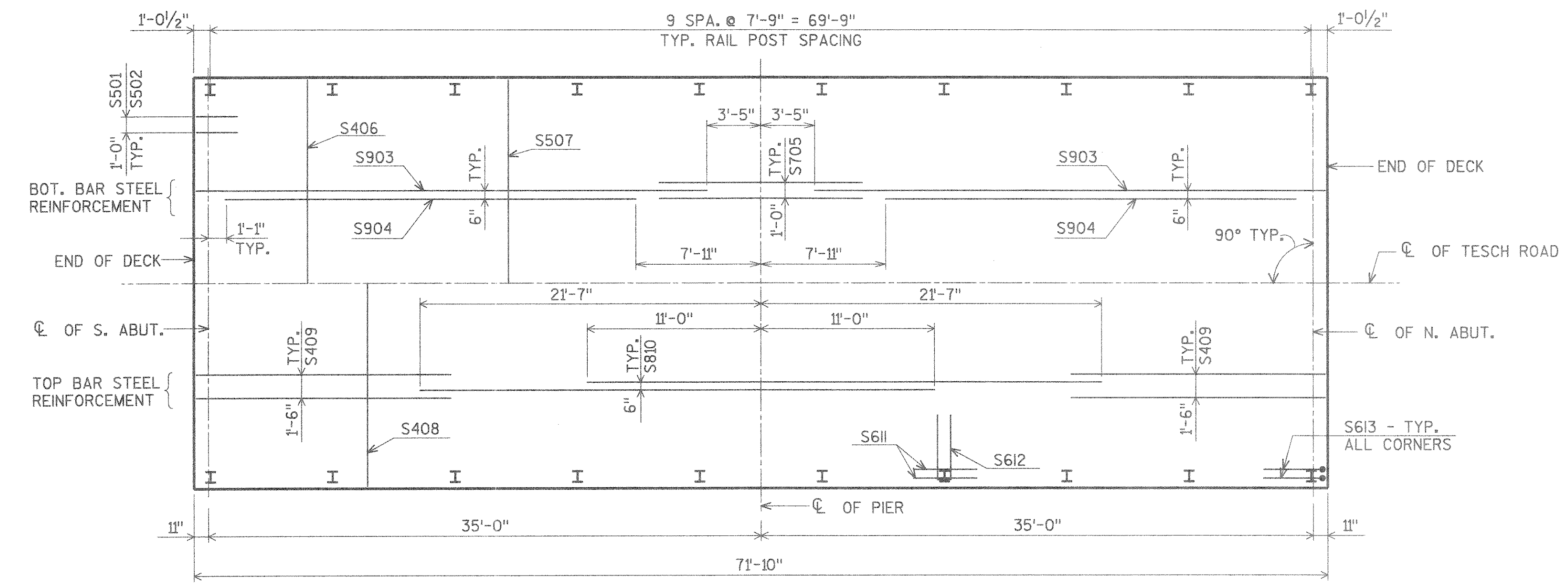
BILL OF BARS

BAR. NO.	NO. REQ'D.	LENGTH	BENT BAR	COATED BAR	CUT. DIAGR.	6,900# COATED 13,440# UNCOATED
						LOCATION
S501	52	5-3	X			SLAB @ ABUT.
S502	52	2-6	X	X		SLAB @ ABUT.
S903	56	32-4				SLAB LONG. BOT. IN SPAN
S904	52	26-0				SLAB LONG. BOT. IN SPAN
S705	26	12-6	X			SLAB LONG. BOT. @ PIER
S406	42	25-8				SLAB TRANS. BOT.
S507	38	25-8				SLAB TRANS. BOT.
S408	73	25-8	X			SLAB TRANS. TOP
S409	36	16-1	X			SLAB LONG. TOP IN SPAN
S810	52	32-7	X			SLAB LONG. TOP @ PIER
S611	32	4-0	X			SLAB @ INT. RAIL POSTS
S612	20	12-0	X	X		SLAB @ RAIL POSTS
S613	8	4-0	X	X		SLAB @ EXT. RAIL POSTS

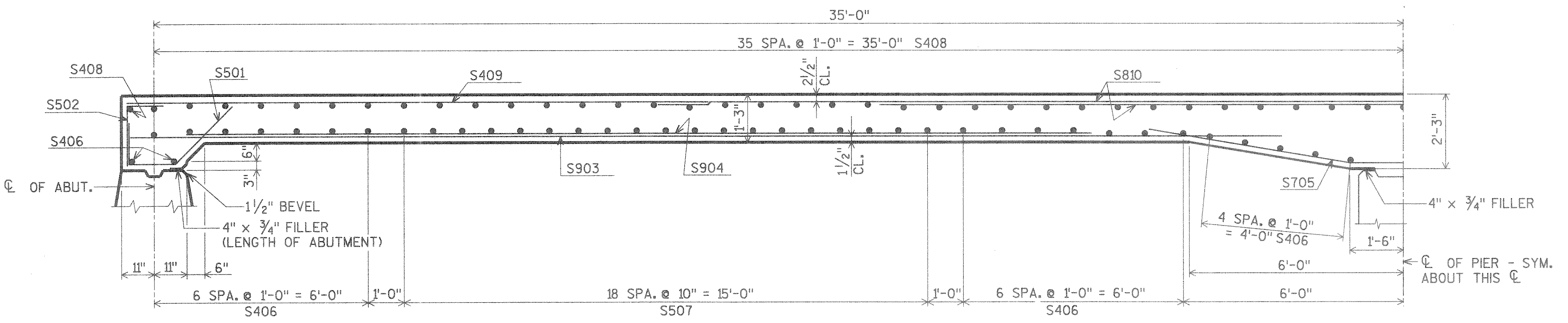
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



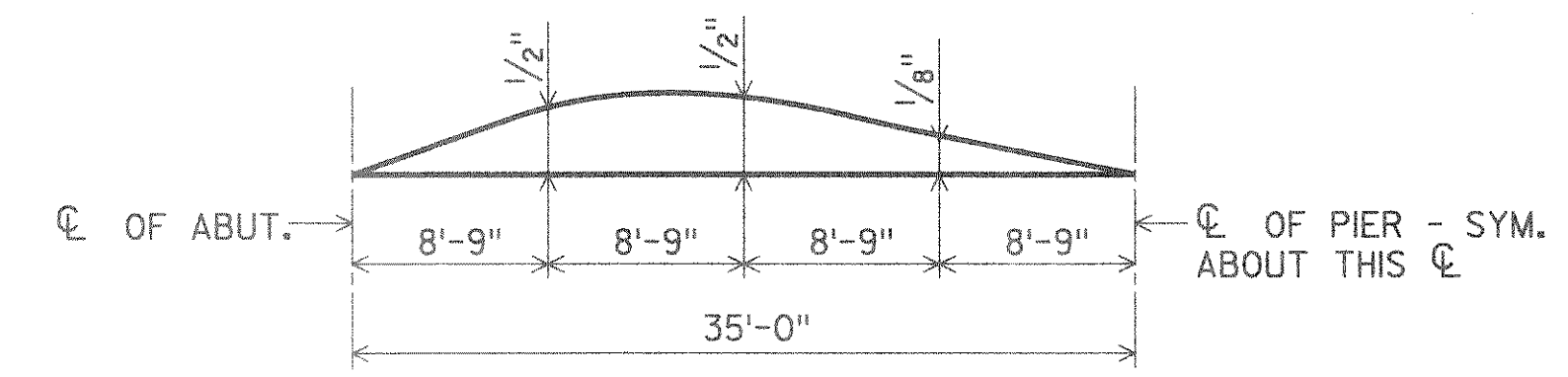
CROSS SECTION THRU ROADWAY



PLAN



PART LONGITUDINAL SECTION



CAMBER DIAGRAM

CAMBER SPANS AS SHOWN TO PROVIDE FOR DEADLOAD DEFLECTION & FUTURE PLASTIC FLOW. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

PEN TABLE = collgbr.tbl
DATE OF PLOT = 01/21/94
DESIGN FILE IS /usr/work/ttbrldge/5020sup.dgn
DGN LEVELS ON = 1-63

REFERENCE FILES
REF NC REFLNC
REF NB REFLNB
REF NA REFLNA

CHECKED BY: DATE:
BACK CHECKED BY: DATE:
CORRECTED BY: DATE:

No.	Date	Revision	By
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STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-I25			
Const. Spec.	1989	Drawn By	CLS
		Plans Checked	C.B.M.
SUPERSTRUCTURE			SHEET 6 OF 7

LEGEND

- ① W6X25 WITH 1/4" ϕ HOLES ON EACH SIDE OF POST FOR STUD NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.
- ② PLATE 1" X 9/2" X 0'-10", WITH 1/16" X 1/2" SLOTTED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN.
- ③ A325 - 7/8" ϕ HEX BOLTS (GALVANIZED) WITH A325 NUT AND WASHER. 4 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 1'-2" LONG AT END POSTS AND 1'-0" LONG AT ALL OTHER POST LOCATIONS.
- ④ 1/4" X 8" X 8" FLAT BAR, WITH 15/16" ϕ HOLES FOR ANCHOR BOLTS NO. 3.
- ⑤ TS 4X4X.25 STRUCTURAL TUBING, CONFORMING TO A.S.T.M. DESIGNATION A501 OR A500 GRADE B. ATTACH TO NO. 1 WITH STUDS NO. 6.
- ⑥ 5/8" ϕ X 1/2" LONG SHOP WELDED STUDS, WITH HEX. NUT AND 2" WASHERS. FOUR PER POST REQ'D. (TWO REQ'D. AT EACH LOCATION).
- ⑦ PLATE 3/8" X 1'-4" X 1'-8". BOLT TO RAIL AS SHOWN IN DETAIL. REQ'D. AT THREE BEAM ATTACHMENTS ONLY. PLACE SYMETRICALLY ABOUT TUBES NO. 5.
- ⑧ 1" ϕ HOLES IN PLATE NO. 7 AND TUBES NO. 5 FOR 7/8" ϕ A325 BOLTS WITH HEX NUTS AND WASHERS.
- ⑨ SQUARE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT" WITH A MINIMUM OUT TO OUT DIMENSION OF 3 5/8" .
- ⑩ TS 3 X 3 X .25 X 1'-10" LONG. PROVIDE 1/2" ϕ SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 5. PROVIDE 3/8" ϕ X 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

GENERAL NOTES

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

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS. POSTS BASE PLATES, NO. 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.

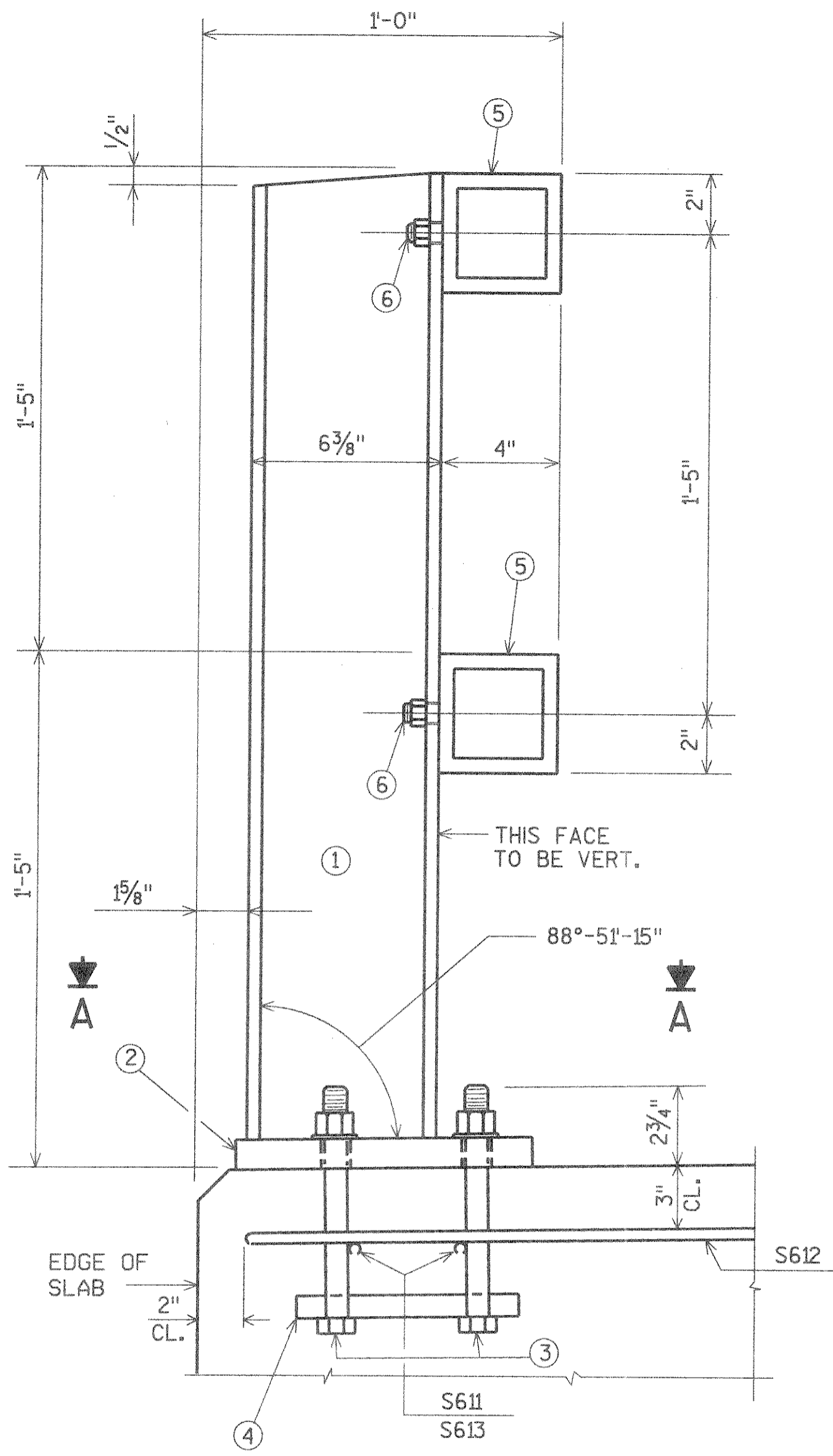
ALL MEMBERS EXCEPT ANCHORAGE DETAIL (NO. 3 & 4) SHALL BE GALVANIZED AFTER FABRICATION. GALVANIZING OF NO. 4 IS NOT REQUIRED.

FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

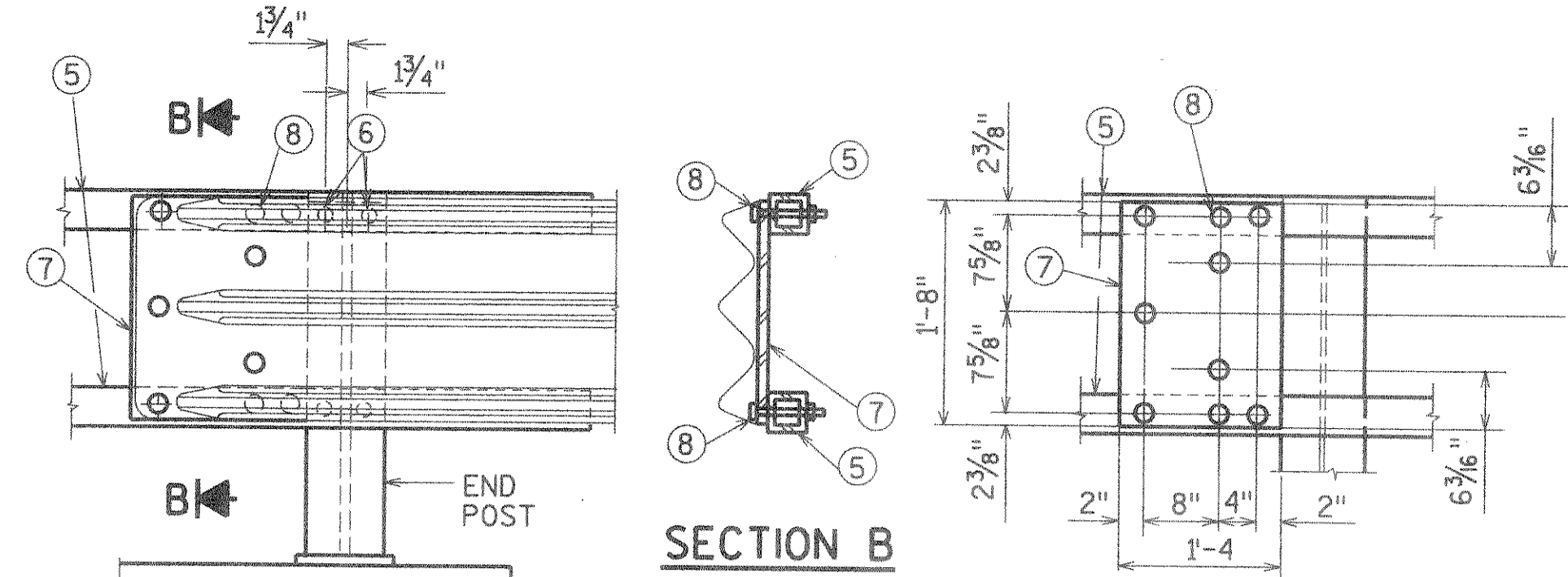
ALL MATERIALS USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO A.S.T.M. DESIGNATION A709 GRADE 36 UNLESS NOTED OTHERWISE.

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

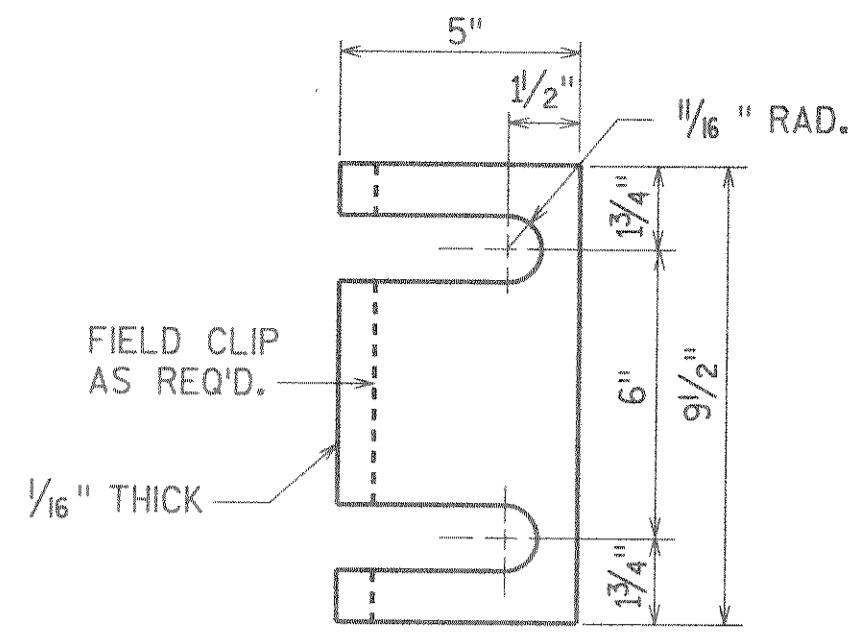
PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.



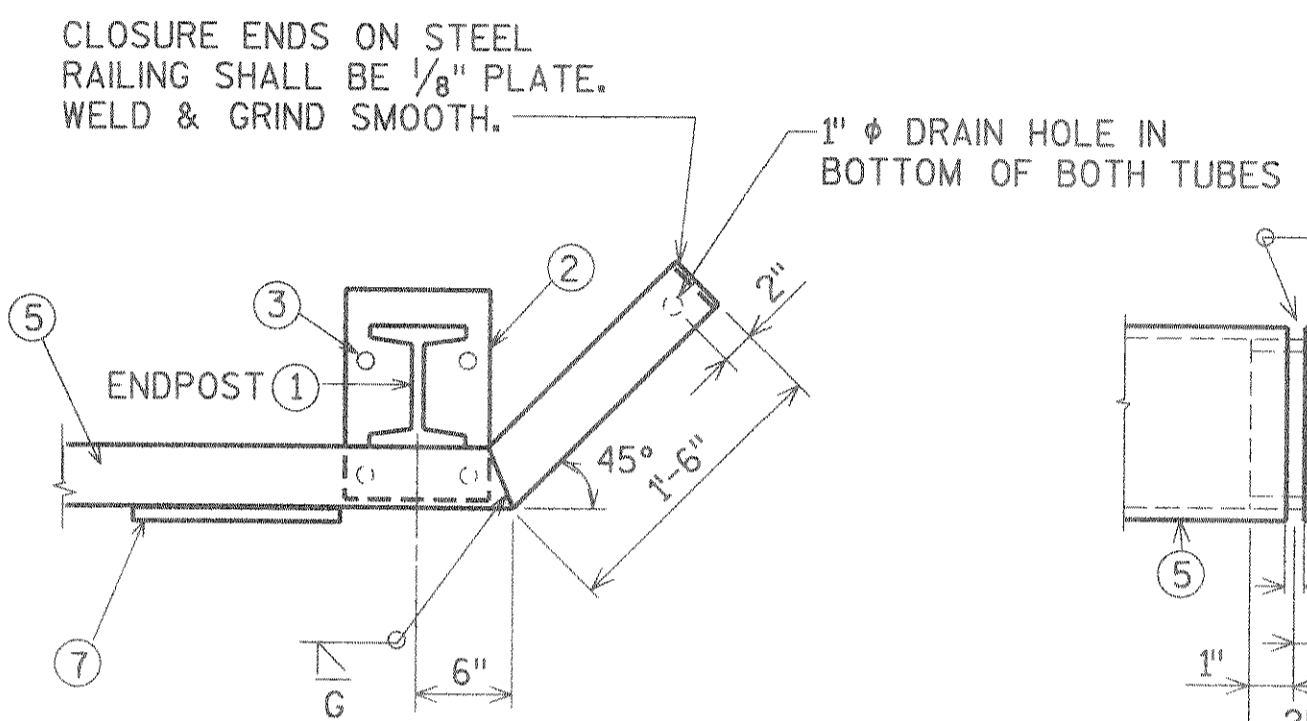
SECTION THRU RAILING



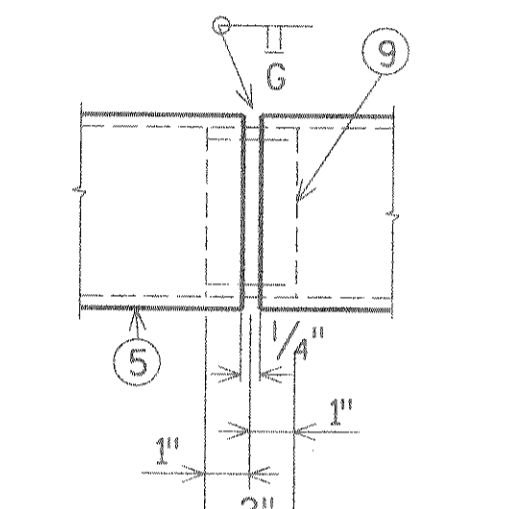
**DETAIL AT END POST
(THREE BEAM RAIL ATTACHMENT)**



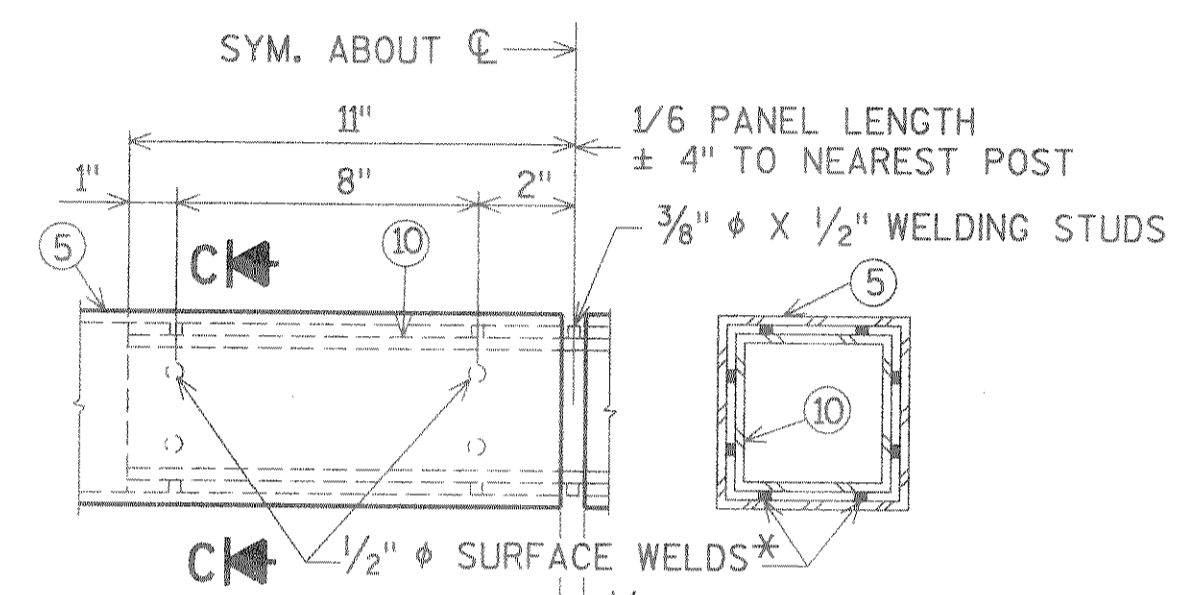
**POST SHIM DETAIL
(4 PER POST)**



DETAIL FOR END POSTS

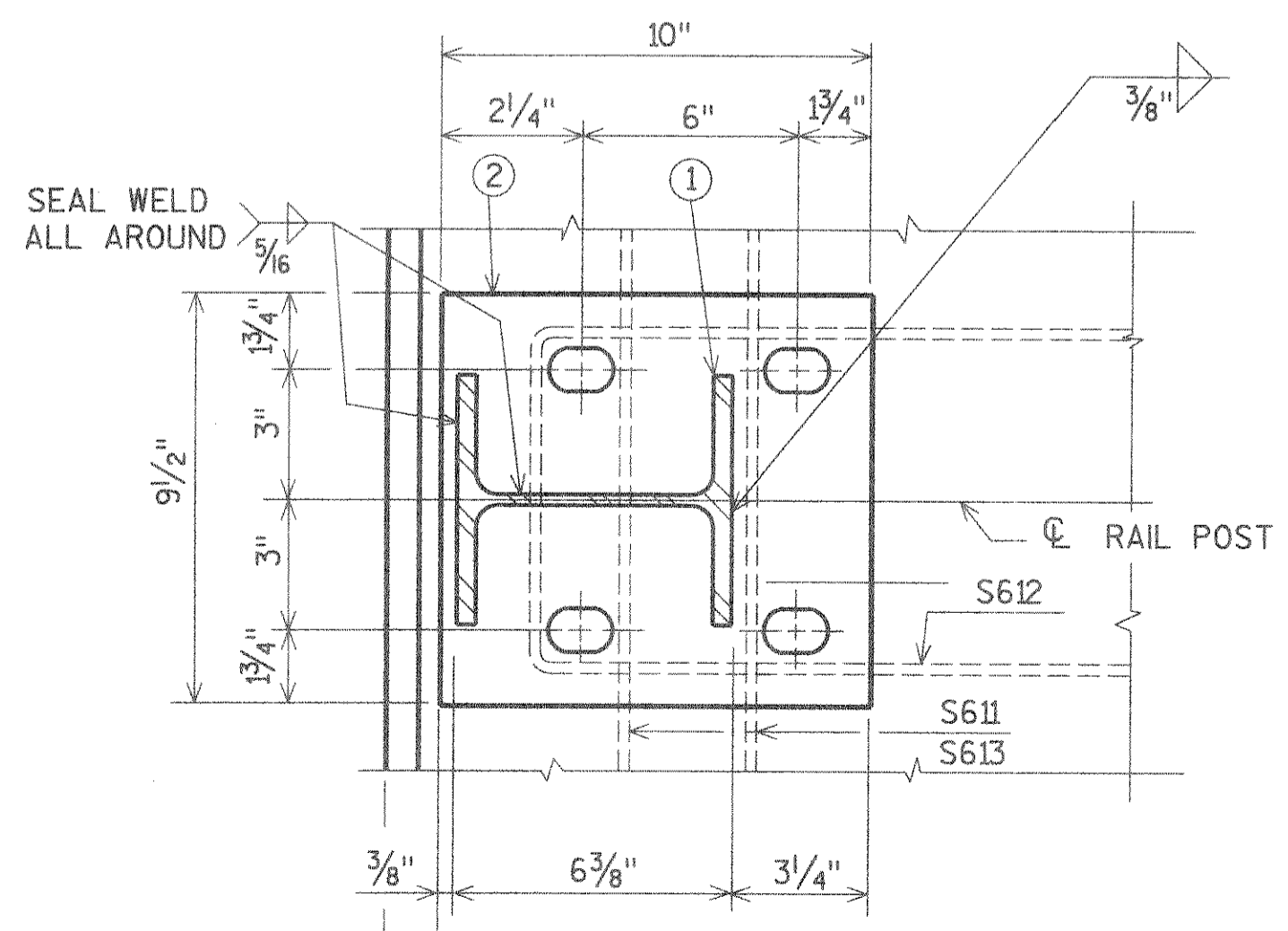


**SHOP RAIL
SPLICE DETAIL
(LOCATION MUST BE SHOWN
ON THE SHOP DRAWINGS)**

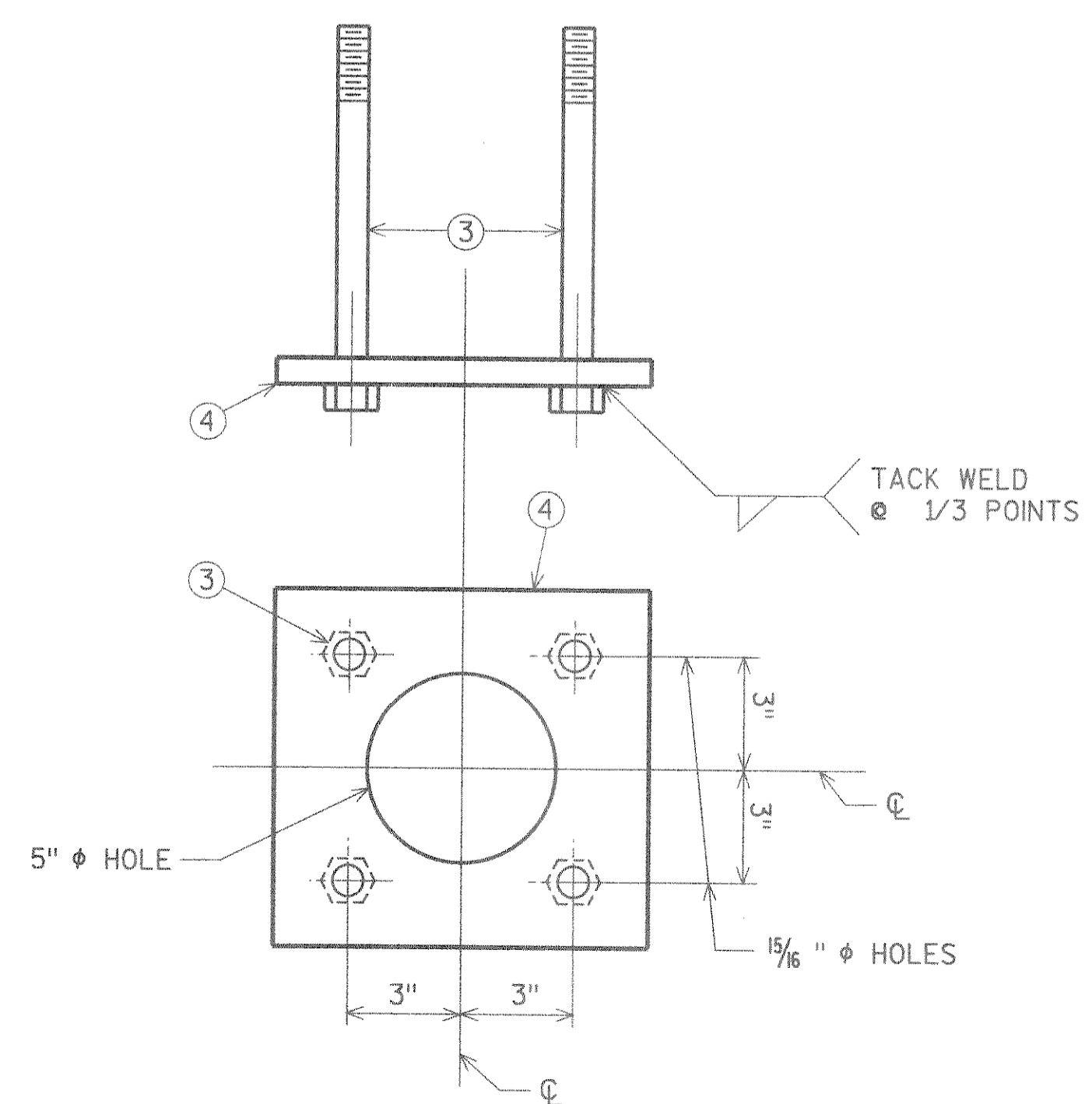


**FIELD ERECTION
JOINT DETAIL**

*MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



SECTION A



ANCHORAGE DETAIL

PEN TABLE = collgbr.tbl
 DATE OF PLOT = 01/21/94
 DESIGN FILE IS /usr/work/ttbrldge/5020sup.dgn
 DGN LEVELS ON = 1-63
 REF NC
 REFLNC
 REF NB
 REFLNB
 REF NA
 REFLNA
 CHECKED BY:
 BACK CHECKED BY:
 CORRECTED BY:

No.	Date	Revision	By
PLANS PREPARED BY			
AYRES ASSOCIATES Engineers/Architects Planners/Surveyors Owen Ayres & Associates Inc. Eau Claire, Wisconsin			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-125			
Const. Spec.	1989	Drawn By CLS	Plans Checked C.B.M.
TUBULAR RAILING TYPE 'F'			SHEET 7 OF 7