

LINCOLN COUNTY

9857-05-00

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR:

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9857-05-70		

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CAIN CREEK BRIDGE AND APPROACHES

(COUNTY LINE ROAD)

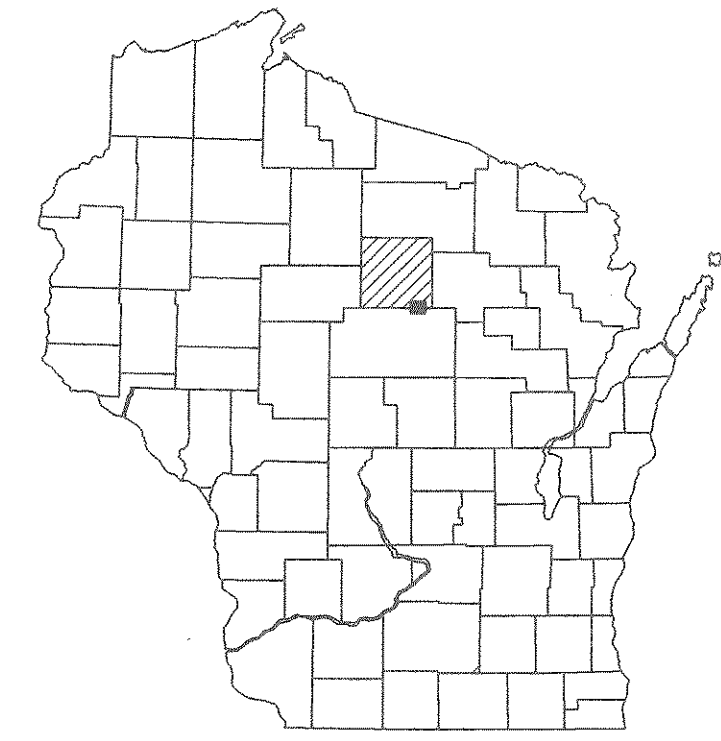
TOWN ROAD
LINCOLN COUNTY

STATE PROJECT NUMBER
9857-05-70

INDEX OF SHEETS

Sheet No. 1	Title
Sheet No.	Typical Sections and Details
Sheet No.	Estimate of Quantities
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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 =



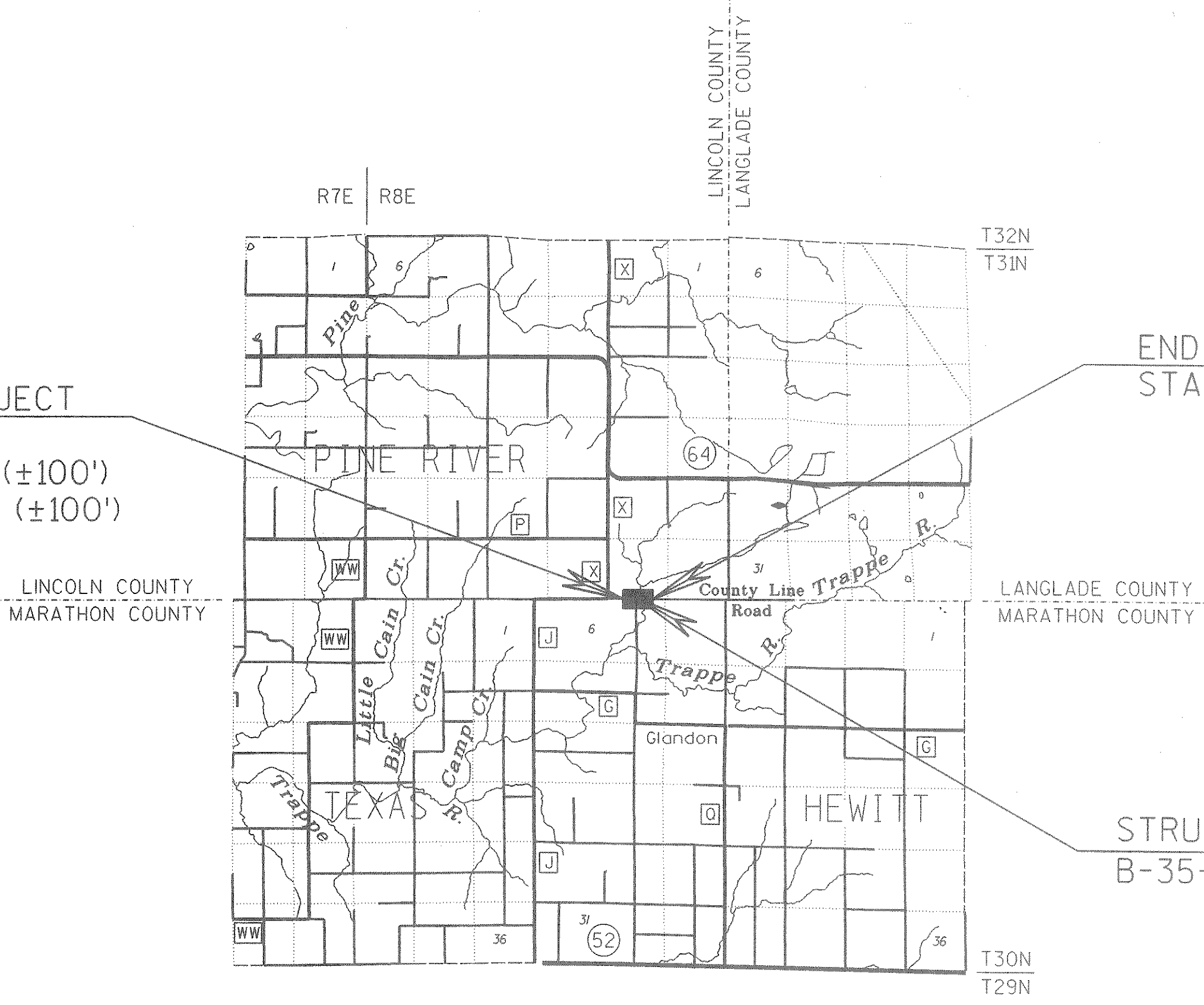
DESIGN DESIGNATION

A.D.T. (1994)	=	40
A.D.T. (2014)	=	60
D.H.V. (2014)	=	11
D.	=	60-40
T. (% ADT)	=	9%
V. (MPH)	=	55
ESALS	=	N/A

CONVENTIONAL SIGNS

COUNTY LINE	---
CORPORATE LIMITS	////
PROPERTY LINE	----
LOT LINE	----
LIMITED HIGHWAY EASEMENT	----
EXISTING RIGHT OF WAY	----
NEW RIGHT OF WAY	----
REFERENCE LINE	----
SLOPE INTERCEPT	----
ORIGINAL GROUND	----
MARSH OR ROCK PROFILE	----
CULVERT IN PLACE	----
CULVERT REQUIRED	----
CULVERT REQUIRED (Profile)	----

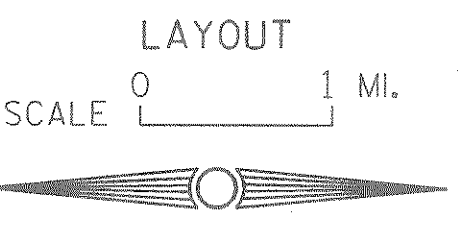
COMBUSTIBLE FLUIDS (UNDER PRESSURE)	CAUTION
UNDERGROUND UTILITIES	
GAS	G
ELECTRIC	E
TELEPHONE	T
SERVICE PEDESTAL	☒
CABLE MARKER	P
POWER POLE	□
TELEPHONE POLE	□
RAILROADS	+
MARSH	~
WOODED AREA	~
RIGHT OF WAY MARKER	+



BEGIN PROJECT
STA 9+25
Y=469350 (±100')
X=2140350 (±100')

END PROJECT
STA 11+00

STRUCTURE
B-35-129

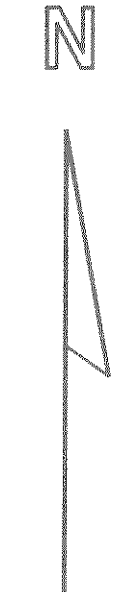


TOTAL NET LENGTH OF CENTERLINE = 0.033 MI. RURAL

COORDINATES SHOWN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM CENTRAL ZONE AND SCALED FROM THE KALINKE, WISCONSIN QUADRANGLE FOR IDENTIFICATION PURPOSES ONLY.

ORIGIN OF LEVELS

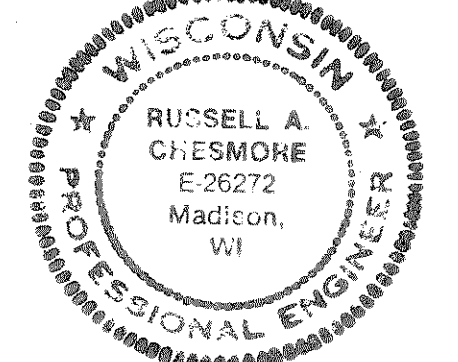
ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO BENCHMARK UE 83 T B, 2.1 MILES N. OF TABLET; ALONG GRAVEL ROAD, NEAR CENTER OF N. 1/2 SEC. 13, T. 30 N., R. 8 E.; AT CONCRETE BRIDGE OVER TRAPPE RIVER, 14 FEET NORMAL AND ON E. SIDE OF ROAD, 0.6 FEET HIGHER THAN CENTER OF BRIDGE; ON NE. CONCRETE WINGWALL OF BRIDGE; CHISELED SQUARE. EL. 1328.420 FT.



APPROVED FOR
LINCOLN COUNTY

DATE: _____
COUNTY HIGHWAY COMMISSIONER

ORIGINAL PLANS PREPARED BY
MEAD & HUNT, INC.
CONSULTING ENGINEERS
MADISON, WISCONSIN



1/28/97 (Date)
Russell A. Chesmore (Signature)

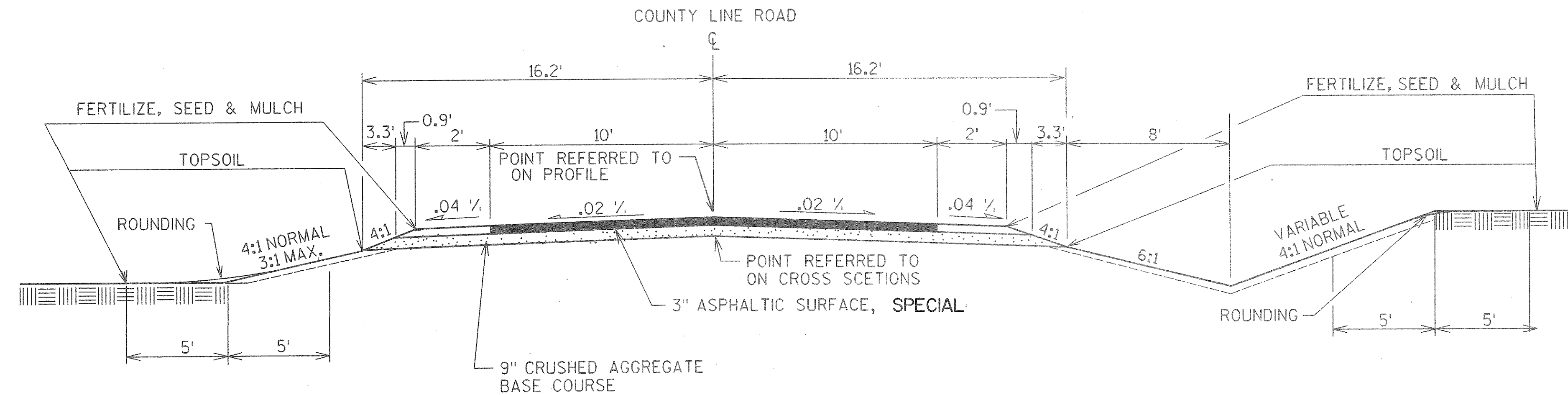
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	M & H
Designer	M & H
District Examiner	DANIEL T. KUHN
District Supervisor	ALLAN J. PETERSON
Proj. Dev. Engineer	
C.O. Examiner	

APPROVED FOR DISTRICT OFFICE

DATE: _____
(Signature)



TYPICAL ROADWAY CROSS SECTION
STA. 9+25 - 11+00

STANDARD ABBREVIATIONS

ASPH.	ASPHALTIC	NO.	NUMBER
B.M.	BENCHMARK	PL.	PROPERTY LINE
CL	CENTERLINE	R.H.F.	RIGHT HAND FORWARD
CU. YD.	CUBIC YARD	RT.	RIGHT
CWT	HUNDRED WEIGHT	R/W	RIGHT OF WAY
EL.	ELEVATION	SQ. FT.	SQUARE FEET
EXC.	EXCAVATION	SQ. YD.	SQUARE YARD
L.H.F.	LEFT HAND FORWARD	STA.	STATION
LIN. FT.	LINEAR FEET	T	TRANSIT LINE
LT.	LEFT	UNCL.	UNCLASSIFIED
LBS	POUNDS	T.L.E.	TEMPORARY LIMITED EASEMENT
MIN.	MINIMUM	VC.	VERTICAL CURVE
MAX.	MAXIMUM		

STANDARD DETAIL DRAWINGS

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

GENERAL NOTES

NO TREES (AND/OR SHRUBS) ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

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

SILT FENCE FOR SILTY SOILS SHALL BE USED AND PLACED AS PER PLAN OR AS DETERMINED BY THE ENGINEER. SILT FENCE SHALL BE PLACED PRIOR TO CONSTRUCTION.

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

BEARINGS ARE TRUE BEARINGS TO THE NEAREST SECOND.

THE CONTROL SURVEY CONDUCTED FOR THIS PROJECT MET THIRD ORDER CONTROL SURVEY SPECIFICATIONS.

THE ASPHALTIC SURFACE SHALL BE TAPERED FROM 26 FEET AT THE BRIDGE TO 20 FEET IN WIDTH, 50-FEET FROM THE BRIDGE.

THE CONTRACTOR MAY USE SUITABLE TOPSOIL MATERIAL FOUND INSIDE THE CONSTRUCTION LIMITS FOR PLACEMENT ON FINISHED SLOPES AS PERMITTED BY THE ENGINEER.

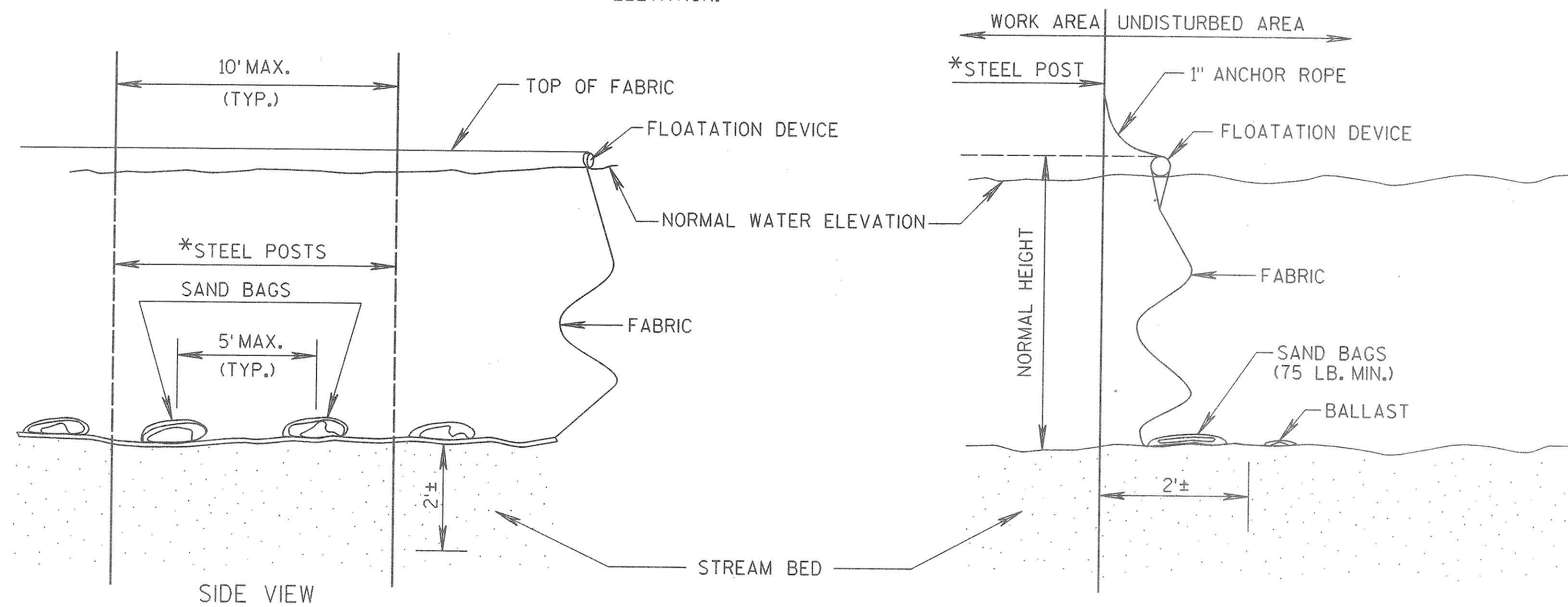
UTILITIES

GTE NORTH, INC.
202 CALLON STREET
WAUSAU, WI 54401
ATTN: MR. DENNIS KNOTT
(715) 847-1531

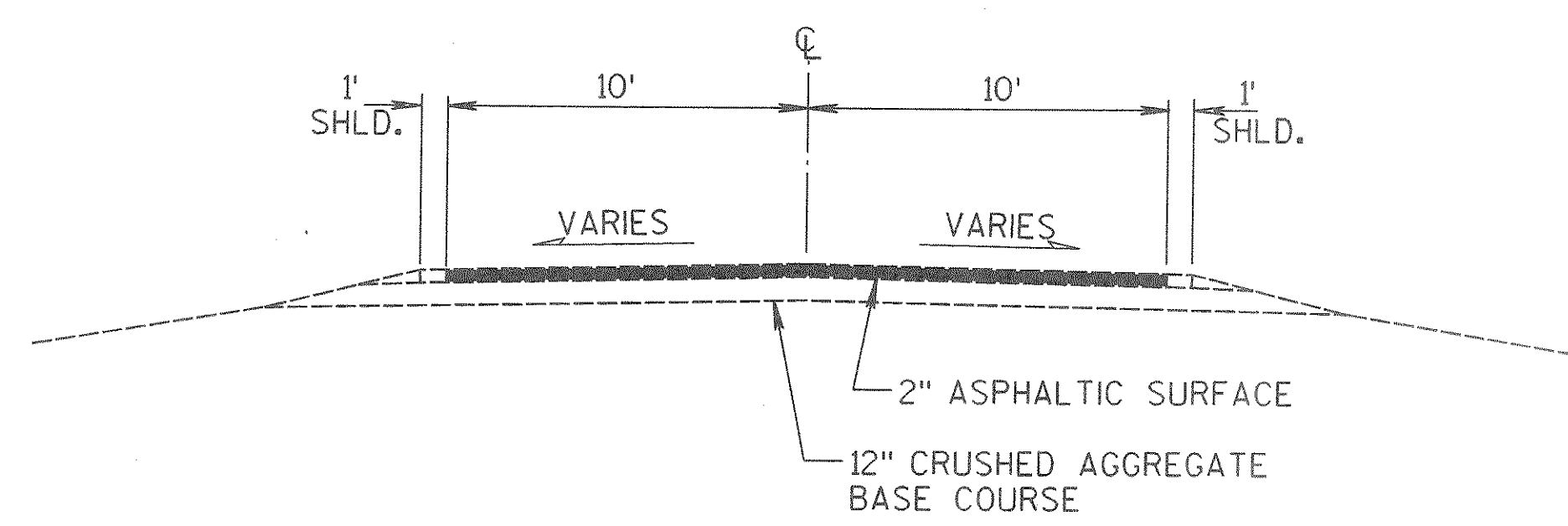
WISCONSIN PUBLIC SERVICE CORP.
3200 EAST MAIN STREET
MERRILL, WI 54452
ATTN: MR. ROGER WEEGE
(715) 536-5541

DIGGERS HOTLINE
1-800-242-8511

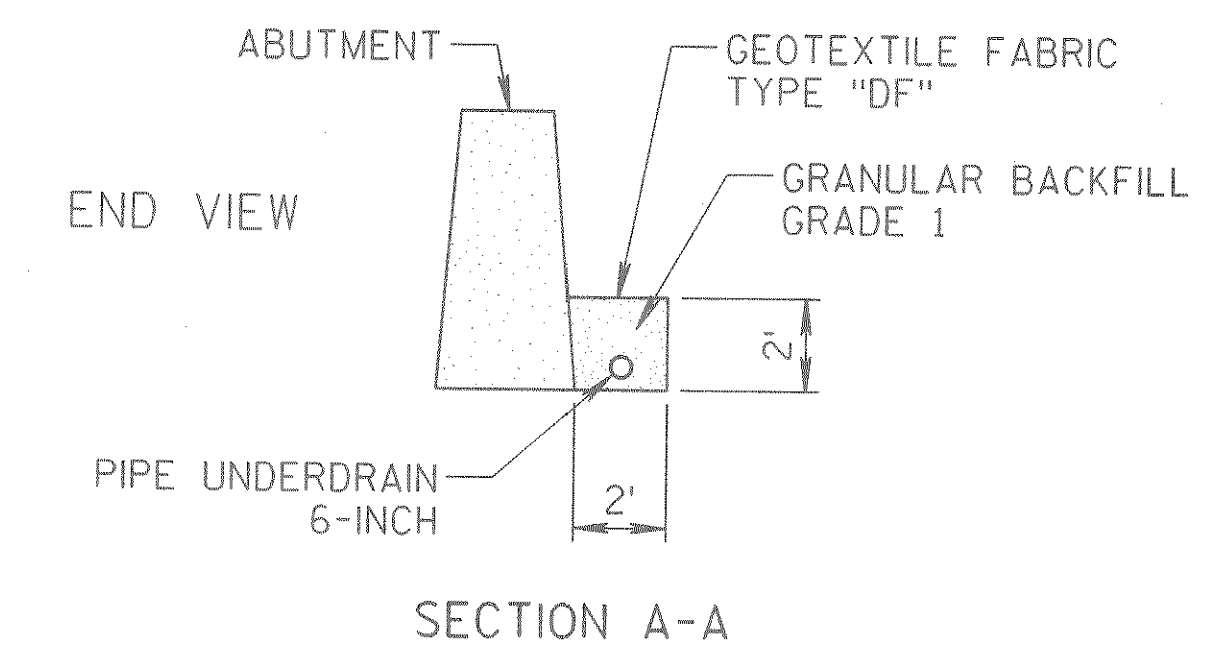
*POST LENGTH SUFFICIENT TO SECURELY ANCHOR AND MAINTAIN BARRIER POSITION AT HIGH WATER ELEVATION.



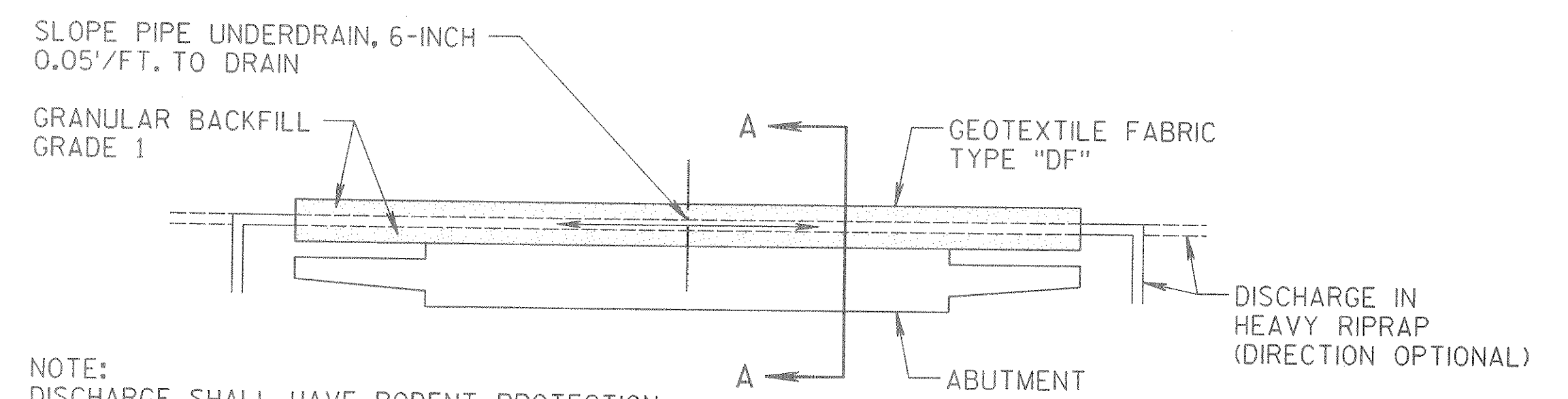
TURBIDITY BARRIER



EXISTING ROADWAY SECTION



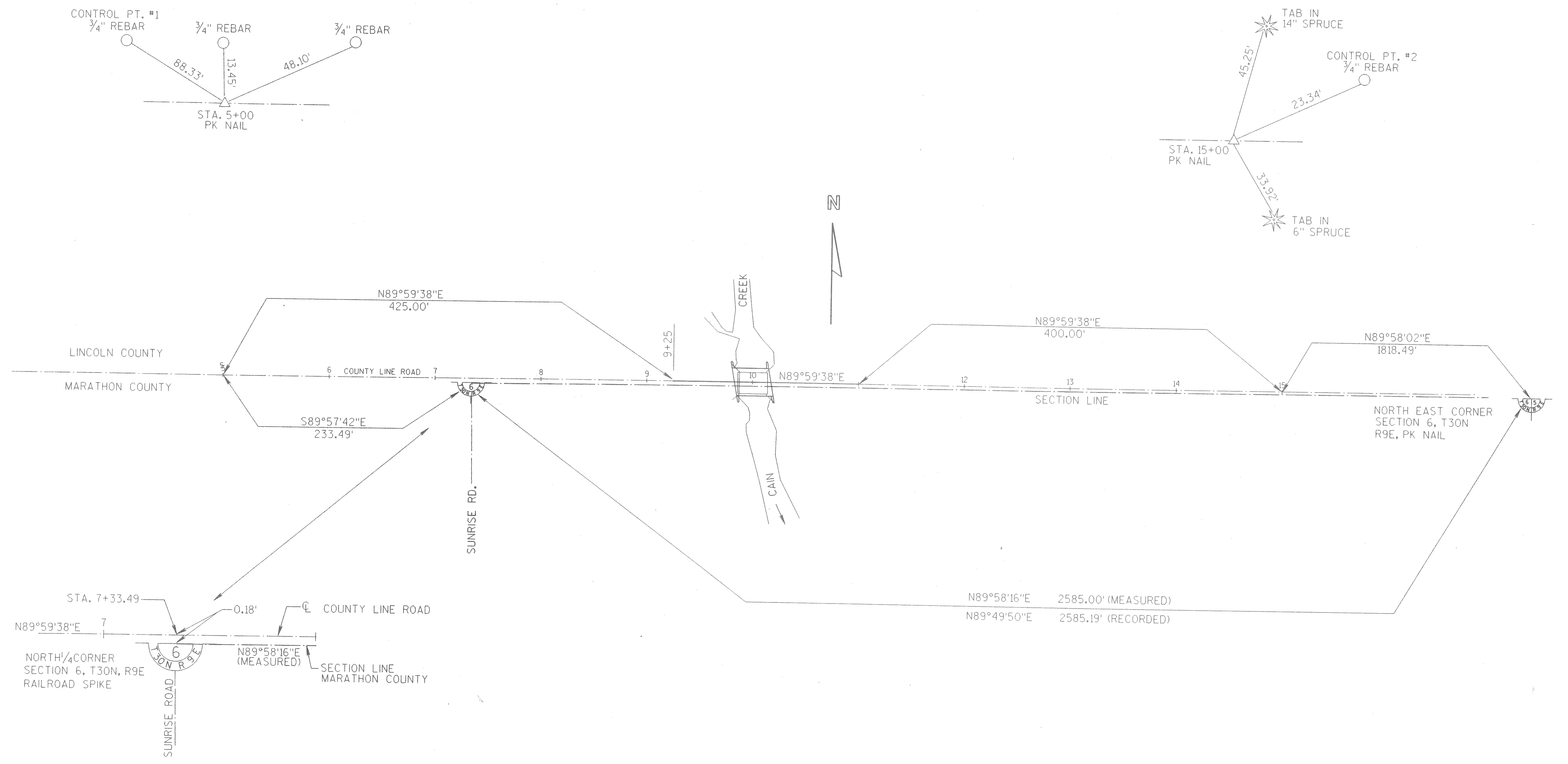
SECTION A-A



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

PLAN VIEW
DETAIL FOR PIPE UNDERDRAIN AT ABUTMENT

ALIGNMENT DIAGRAM
 COUNTY LINE ROAD LINCOLN COUNTY



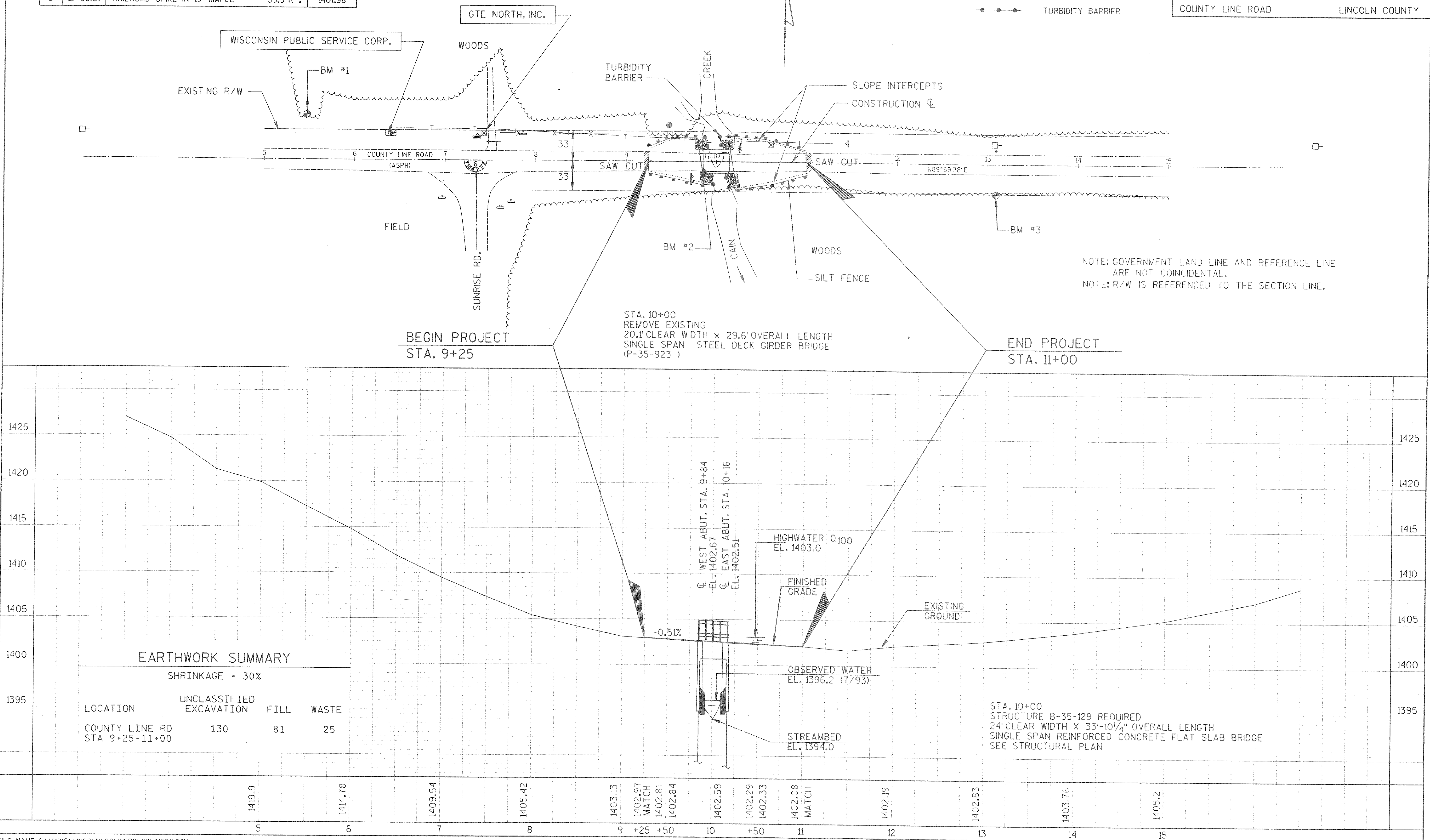
⊕ BENCH MARKS

NO.	STATION	DESCRIPTION	ELEVATION
1	5+46.86	RAILROAD SPIKE IN 1" ASPEN	49.8'L.T. 1418.07
2	9+85.73	CHISELED "□" ON SW WING WALL	12.2'RT. 1401.88
3	13+09.31	RAILROAD SPIKE IN 15" MAPLE	33.5'RT. 1401.98

STATE PROJECT NUMBER	SHEET NO.
9857-05-70	
PLAN AND PROFILE	
COUNTY LINE ROAD	LINCOLN COUNTY

LEGEND

- RIPRAP
- SILT FENCE
- TURBIDITY BARRIER



GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
 BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
 SLAB FALSEWORK SHALL BE SUPPORTED ON PILES, UNLESS ALTERNATE METHOD IS APPROVED BY THE ENGINEER.
 THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP TO THE EXTENT SHOWN ON THIS SHEET AND IN THE ABUTMENT DETAILS.
 THE EXISTING STRUCTURE IS A 29.6' LONG BY 20.1' CLEAR WIDTH, SINGLE SPAN STEEL DECK GIRDER BRIDGE. (P-35-923)
 FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION: M153, TYPE I, II, OR III OR A.A.S.H.T.O. DESIGNATION: M213.
 FASTEN P.C.W. TO FORMS BY NAILING OUTSIDE OF OUTSIDE TABS.

DESIGN DATA

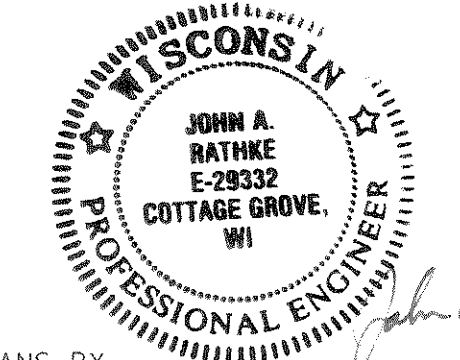
STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20" / FT.²
 LIVE LOAD:
 DESIGN RATING _____ HS20
 INVENTORY RATING _____ HS25
 OPERATING RATING _____ HS42
 MAXIMUM STANDARD PERMIT VEHICLE LOAD= 220 KIPS
 ALLOWABLE DESIGN STRESSES:
 CONCRETE MASONRY SLAB _____ f'c = 4,000 psi
 ALL OTHER _____ f'c = 3,500 psi
 HIGH STRENGTH BAR
 STEEL REINFORCEMENT _____ fy = 60,000 psi

TRAFFIC DATA

ADT= 40 (1994)
 = 60 (2014)

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 STEEL PILING DRIVEN TO A MINIMUM BEARING VALUE OF 55 TONS PER PILE, ESTIMATED 20'-0" LONG AT THE WEST AND 15'-0" LONG AT THE EAST ABUTMENT. PILE POINTS REQUIRED.



PLANS BY
MEAD & HUNT, INC.
 MADISON, WISCONSIN
 1/7/94

HYDRAULIC DATA

Q₁₀₀ _____ 1750 C.F.S.
 Q₁₀₀ _____ 1126 C.F.S. (THROUGH BRIDGE)
 Q₁₀₀ _____ 624 C.F.S. (OVER ROAD)
 VELOCITY _____ 7.7 F.P.S.
 HIGH WATER _____ EL. 1403.0
 WATERWAY AREA — 146 S.F.
 DRAINAGE AREA — 9.2 SQ. MILES
 SCOUR CRITICAL CODE — 8
 ROADWAY OVERTOPPING
 (25 YEAR)
 Q₂₅ _____ 1126 C.F.S.

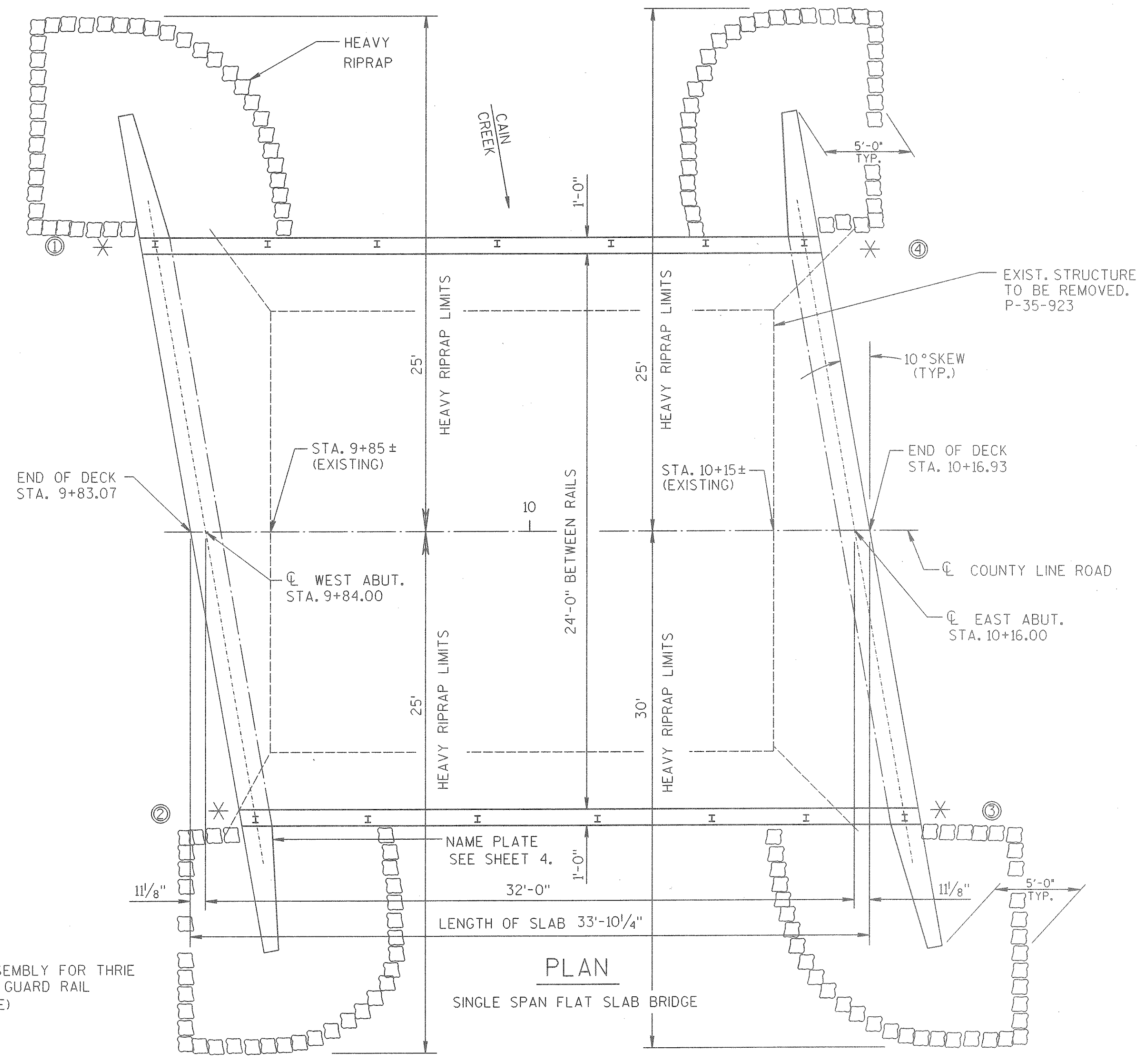
LIST OF DRAWINGS

1. GENERAL PLAN
2. GENERAL PLAN
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. EAST ABUTMENT
6. SUPERSTRUCTURE
7. TUBULAR RAILING, TYPE F

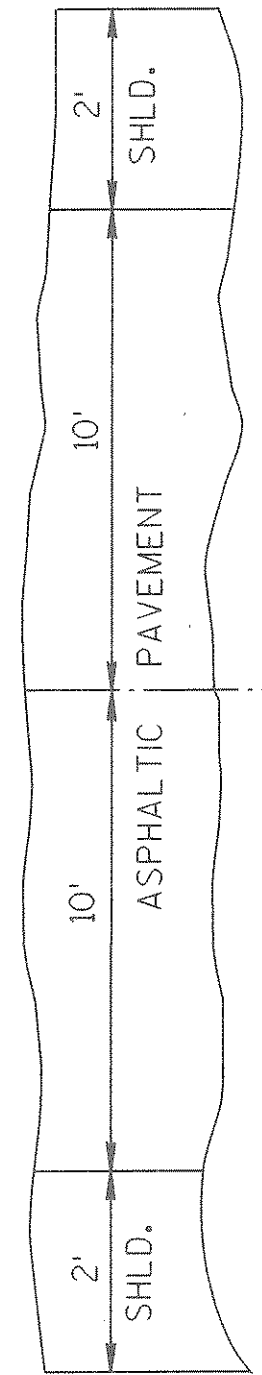
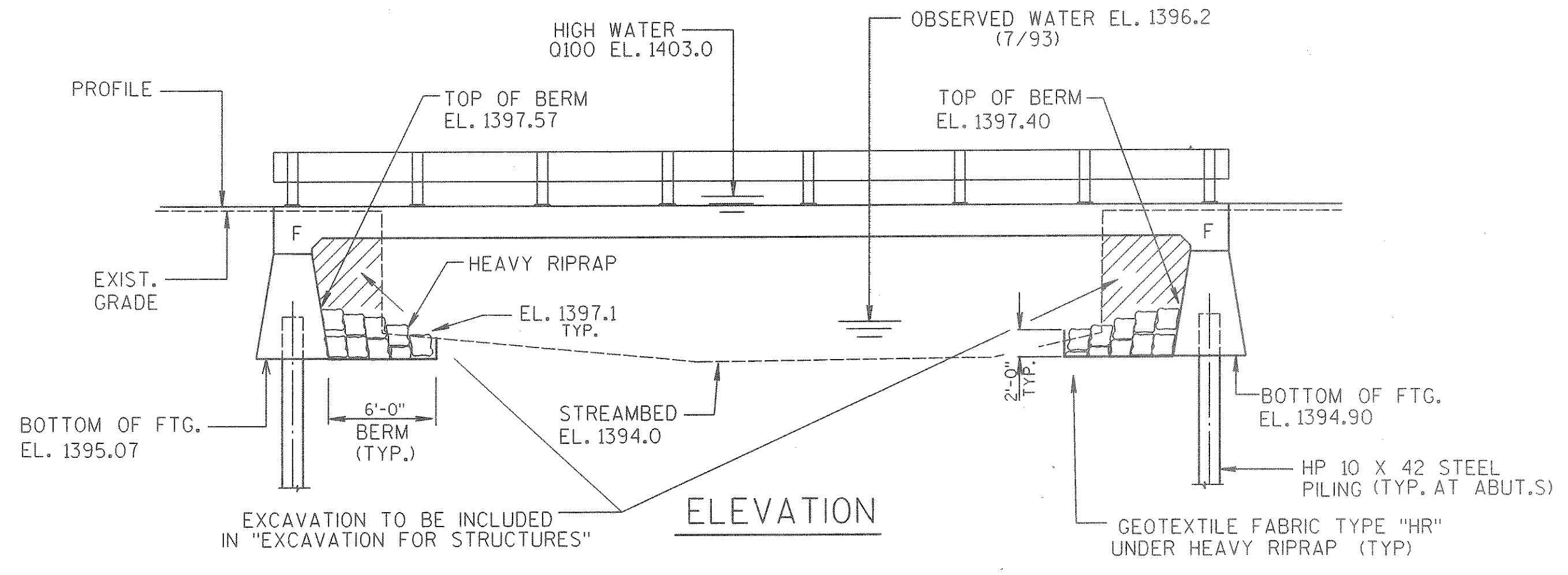
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1	5+46.86	RAILROAD SPIKE IN 11" ASPEN	49.8' LT. 1418.07
3	13+09.31	RAILROAD SPIKE IN 15" MAPLE	33.5' RT. 1401.98

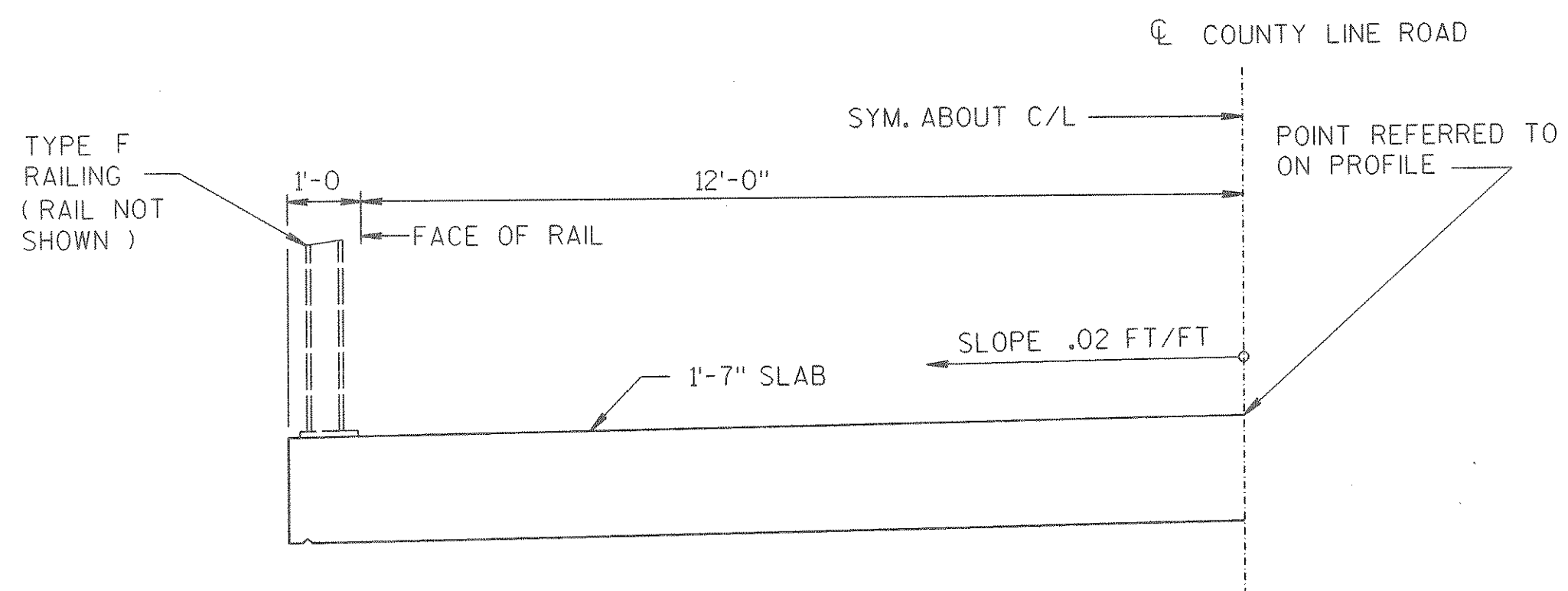
BRIDGE OFFICE CONTACT
 D. BABLER 608-264-9425



* ANCHOR ASSEMBLY FOR THRIE BEAM TYPE GUARD RAIL (FUTURE USE)



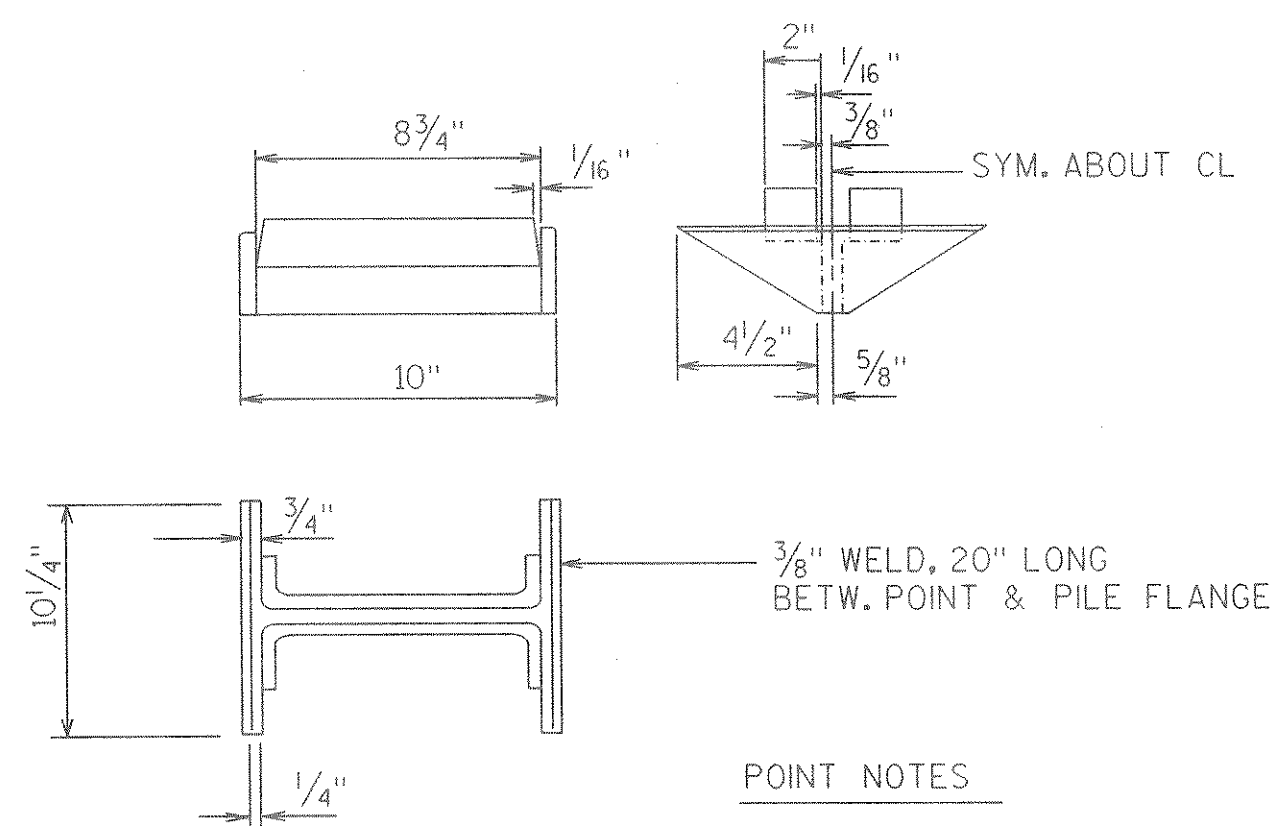
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-129			
COUNTY LINE ROAD OVER CAIN CREEK			
COUNTY	LINCOLN	TOWN/CITY/VILLAGE	PINE RIVER
DESIGN SPEC.	AASHTO '92	LOAD	HS20
DESIGNED BY	CJB	DESIGN CK'D.	JAR
DRAWN BY	RRO	PLANS CK'D.	CJB
APPROVED		STATE BRIDGE ENGINEER	DATE
GENERAL PLAN			SHEET 1 OF 7



CROSS SECT. THRU RDWY.
LOOKING EAST



PROFILE



- POINT NOTES
1. MATERIAL = CAST STEEL (ASTM A-27-84-65-35)
 2. ALL FILLETS = 3/8"
 3. ALL WELDS BETW. PILE & POINT TO BE IN ACCORDANCE WITH AWS SPEC'S. WELD FLANGES TO FITTING ON OUTSIDE FACES.
 4. CONTRACTOR MAY USE AN ALTERNATE DESIGN UPON APPROVAL OF THE ENGINEER

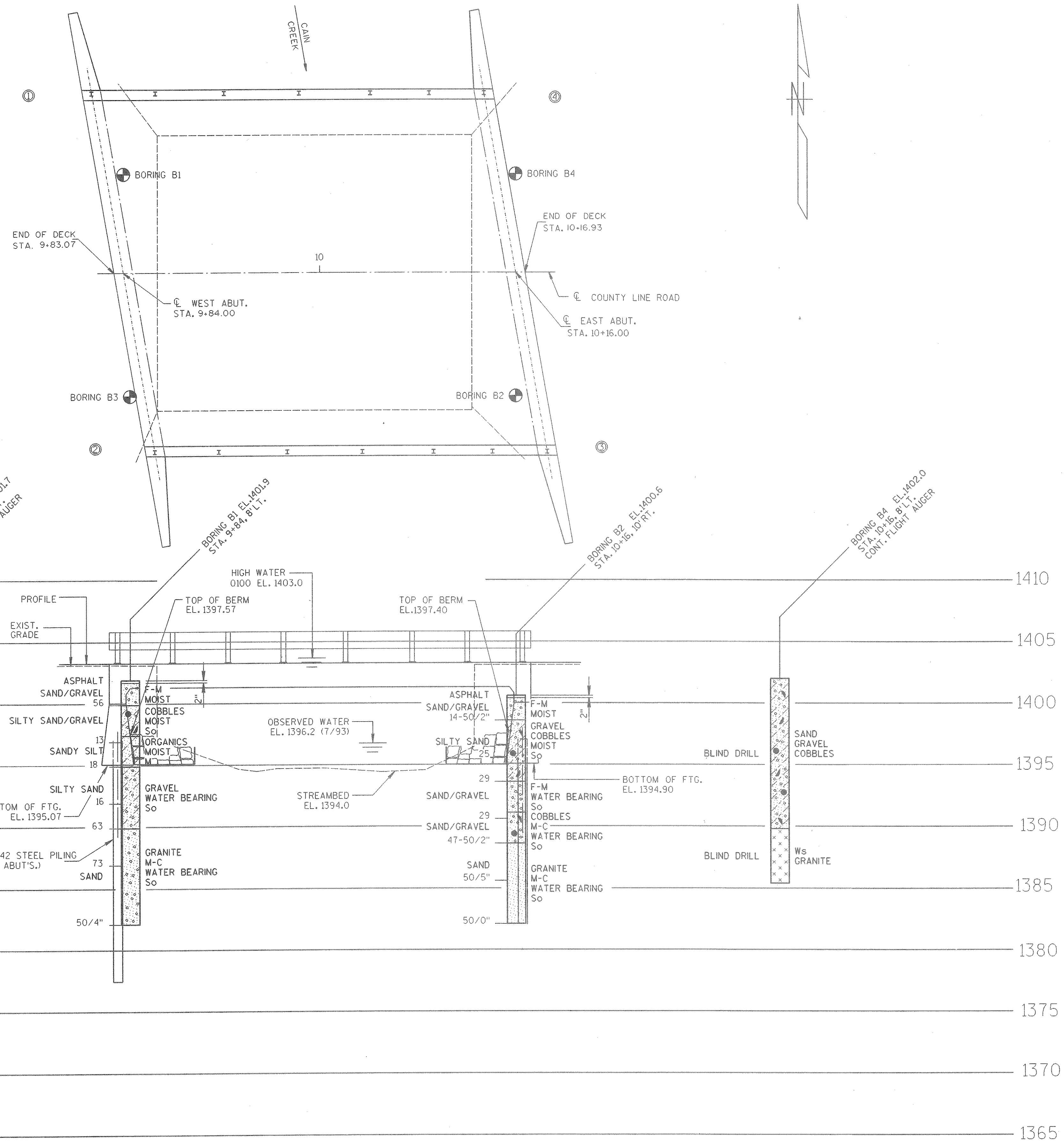
PILE POINT DETAIL

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	WEST ABUT.	EAST ABUT.	SUPER.	TOTALS
REMOVING OLD BRIDGE, STA. 10+00	L.S.	—	—	—	1
EXCAVATION FOR STRUCTURES, BRIDGES B-35-129	L.S.	—	—	—	1
CONCRETE MASONRY, BRIDGES	C.Y.	19	19	55	93
PROTECTIVE SURFACE TREATMENT	GAL.	—	—	4	4
HIGH STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	1290	1290	7260	9840
COATED HIGH STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	—	—	1950	1950
STEEL PILING, DELIVERED & DRIVEN, HP 10-INCH 42 POUND	L.F.	80	60	—	140
HEAVY RIPRAP	C.Y.	34	39	—	73
TUBULAR RAILING, TYPE F, STRUCTURE B-35-129	L.S.	—	—	—	1
GEOTEXTILE FABRIC, TYPE 'HR'	S.Y.	46	52	—	98
PILE POINTS	EACH	4	4	—	8
NON-BID ITEMS					
FILLER	SIZE	—	—	—	1/2", 3/4"
POLYVINYL CHLORIDE WATERSTOP	L.F.	31	31	—	62

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-129			
CONST. SPEC.	1989	DRAWN BY NJA	PLANS CK'D. CJB
GENERAL PLAN			SHEET 2 OF 7

BORINGS BY
TWIN CITY TESTING
APPLETON, WISCONSIN
ON 10-5-93



STATE PROJECT NUMBER	SHEET NO.
9857-05-70	
ABBREVIATIONS	
F---FINE Ws---WEATHERED	M---MEDIUM So---SOUND
C---COARSE	

MATERIAL SYMBOLS		
Topsoil	Silt	Sandstone
Sand	Peat	Limestone
Gravel	Clay	Igneous Rock

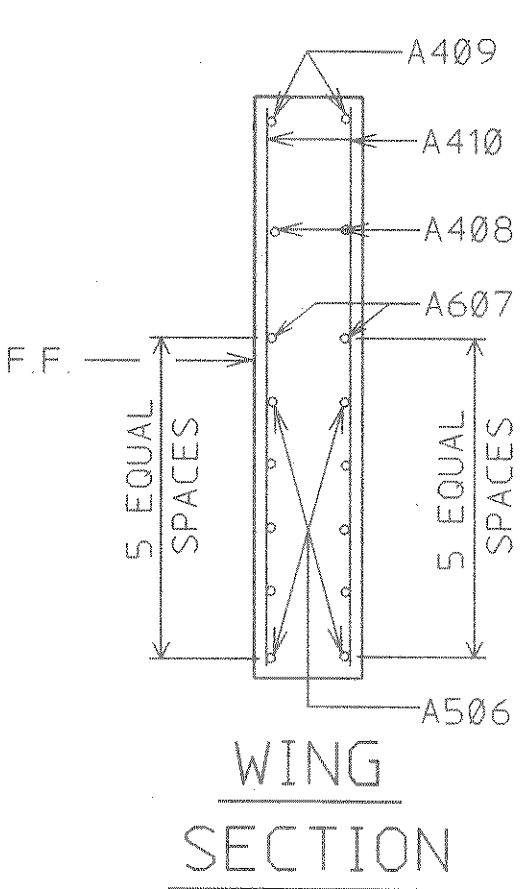
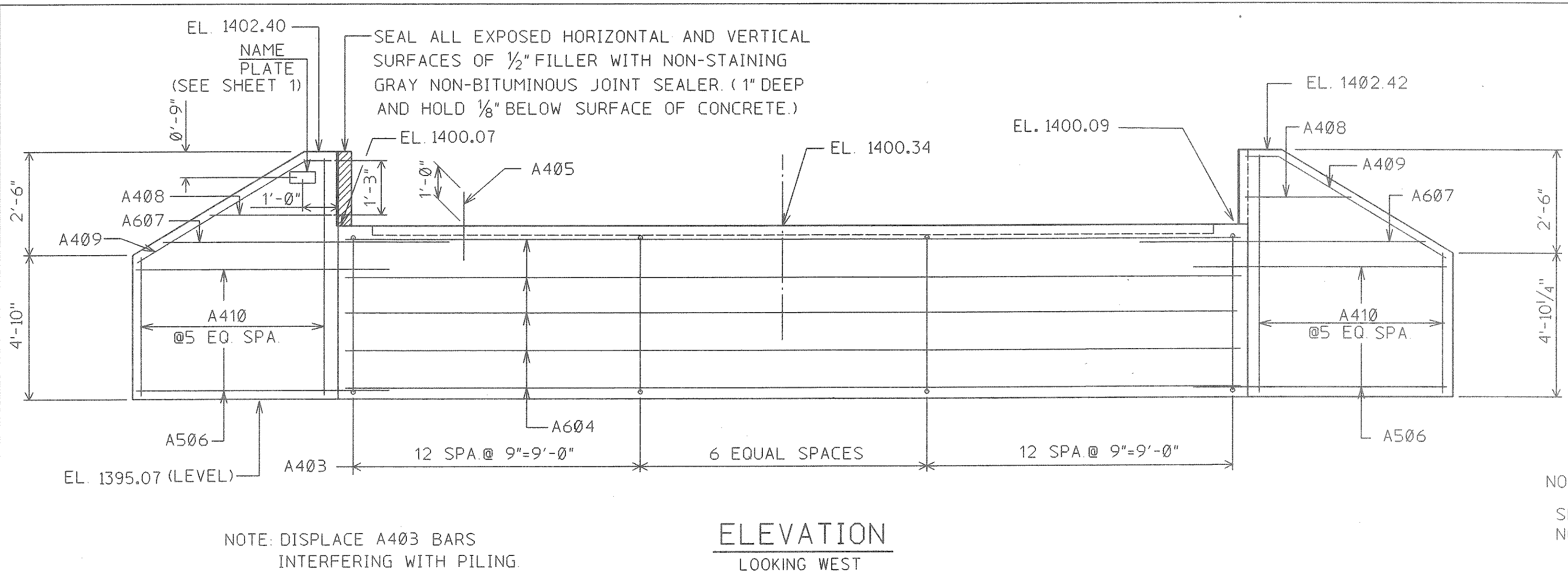
LEGEND OF PROBING	
95/6=95 Blows for 6' Penetration Probing taken with a 350# wt. Falling 18" on a 2" O.D. Point	Probing No. Sta Elevation 7 Average blows per foot Refusal 95/6

LEGEND OF BORING	
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	Boring No. Sta Elevation Sandy Gravel F Boulders or Cobbles Sand Silty Clay So Limestone
<p>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.</p>	

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 Division of Highways 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.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-129			
CONST. SPEC.	1989	DRAWN BY	NJA
		PLANS CK'D	CJB
SUBSURFACE EXPLORATION			SHEET 3 OF 7

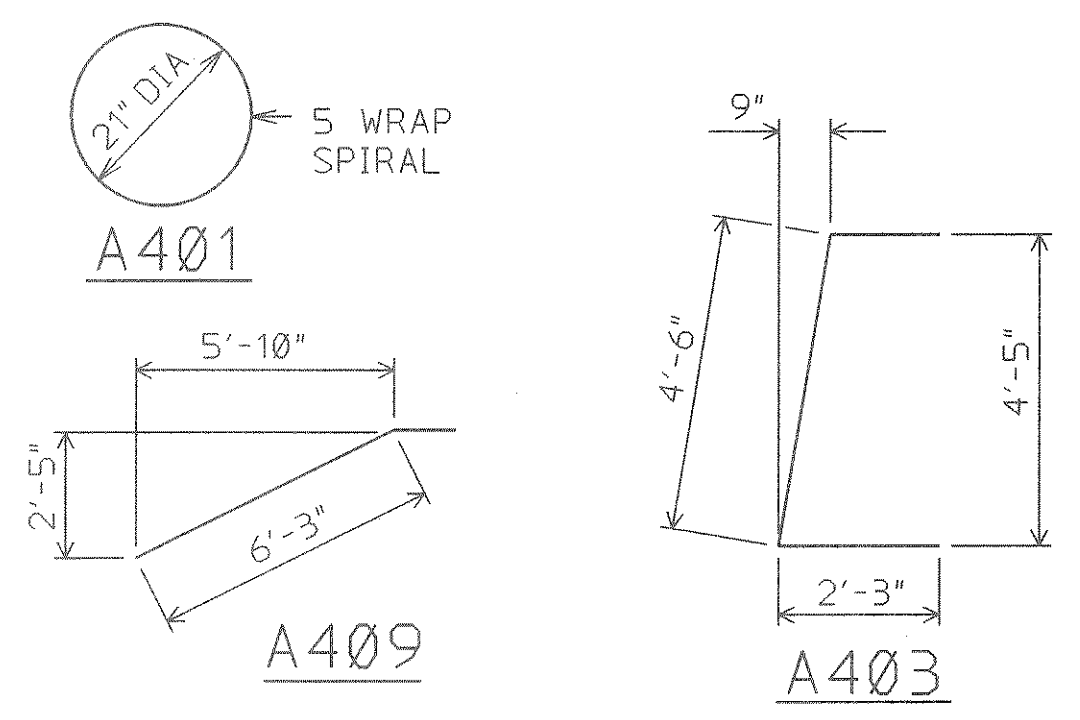
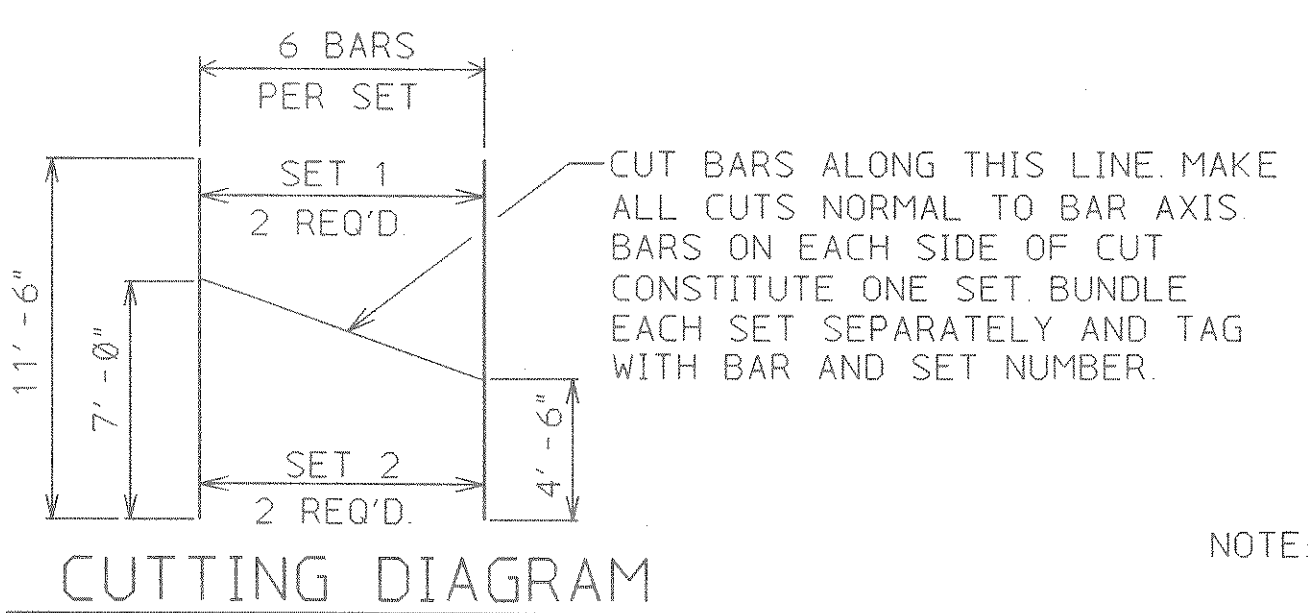
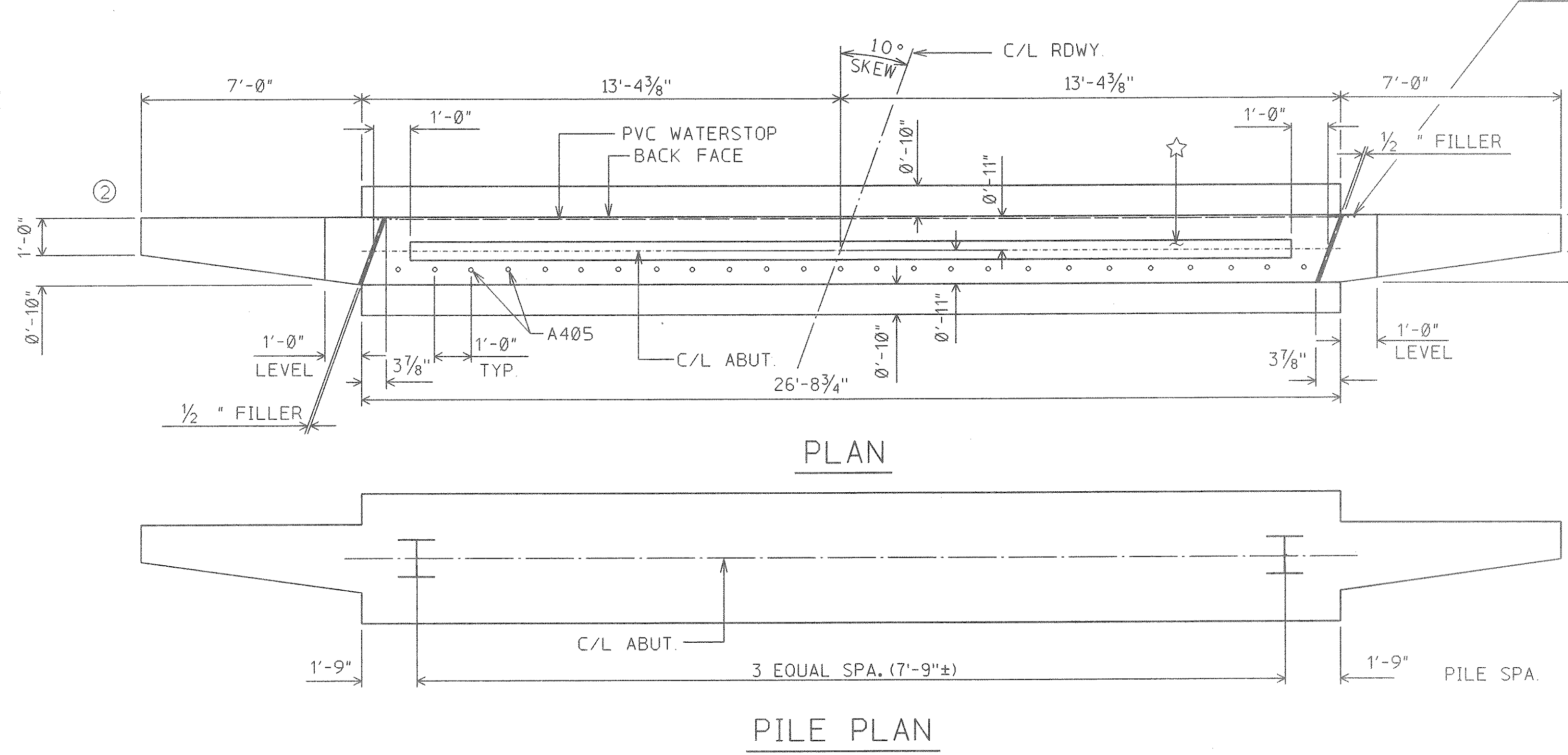


NOTE: HOLD P.C.W. FLUSH WITH CONCRETE. SEAL ALL VERT. ENDS OF P.C.W. WITH NON-STAINING NON-BITUMINOUS JOINT SEALER.

BILL OF BARS

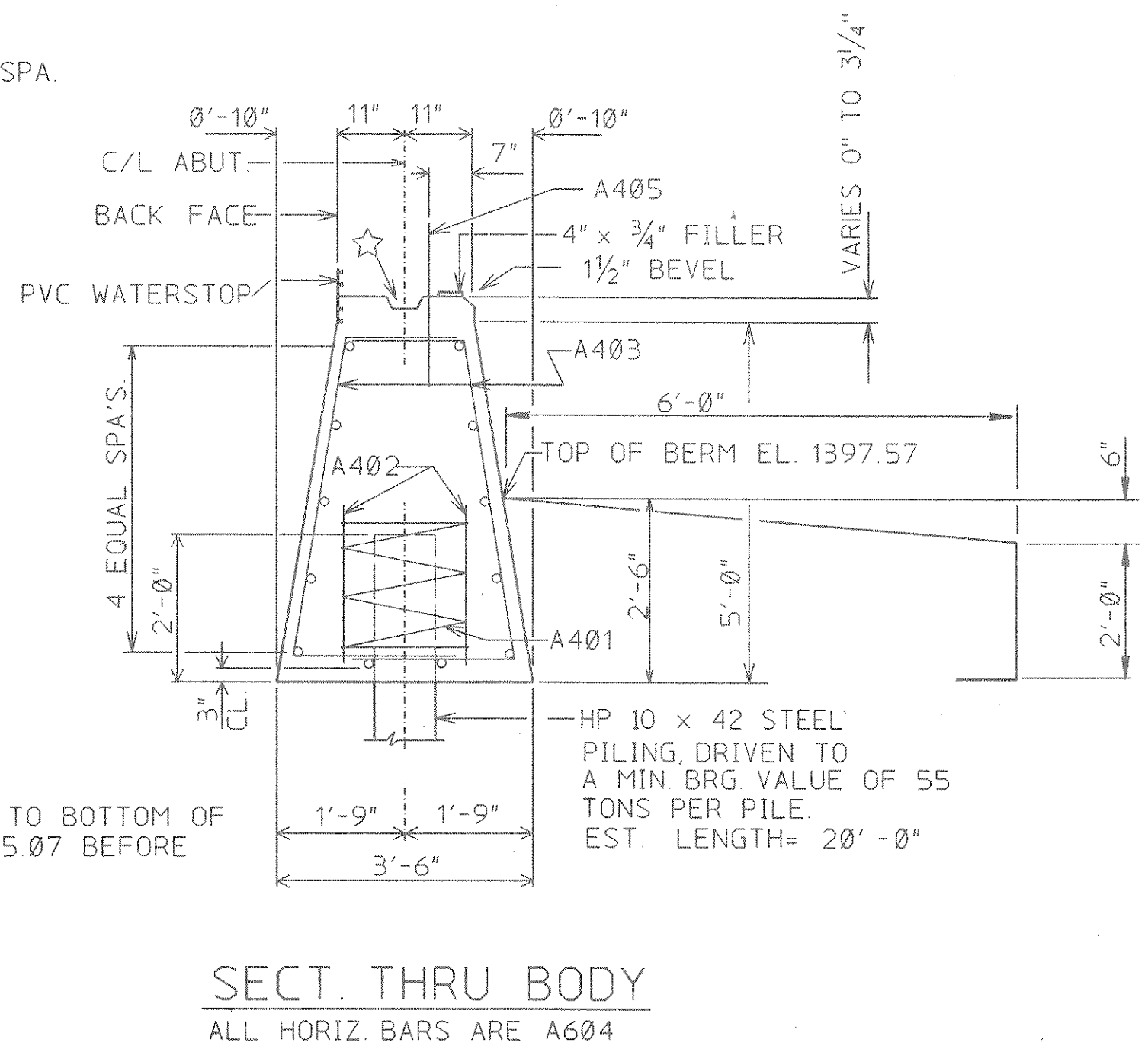
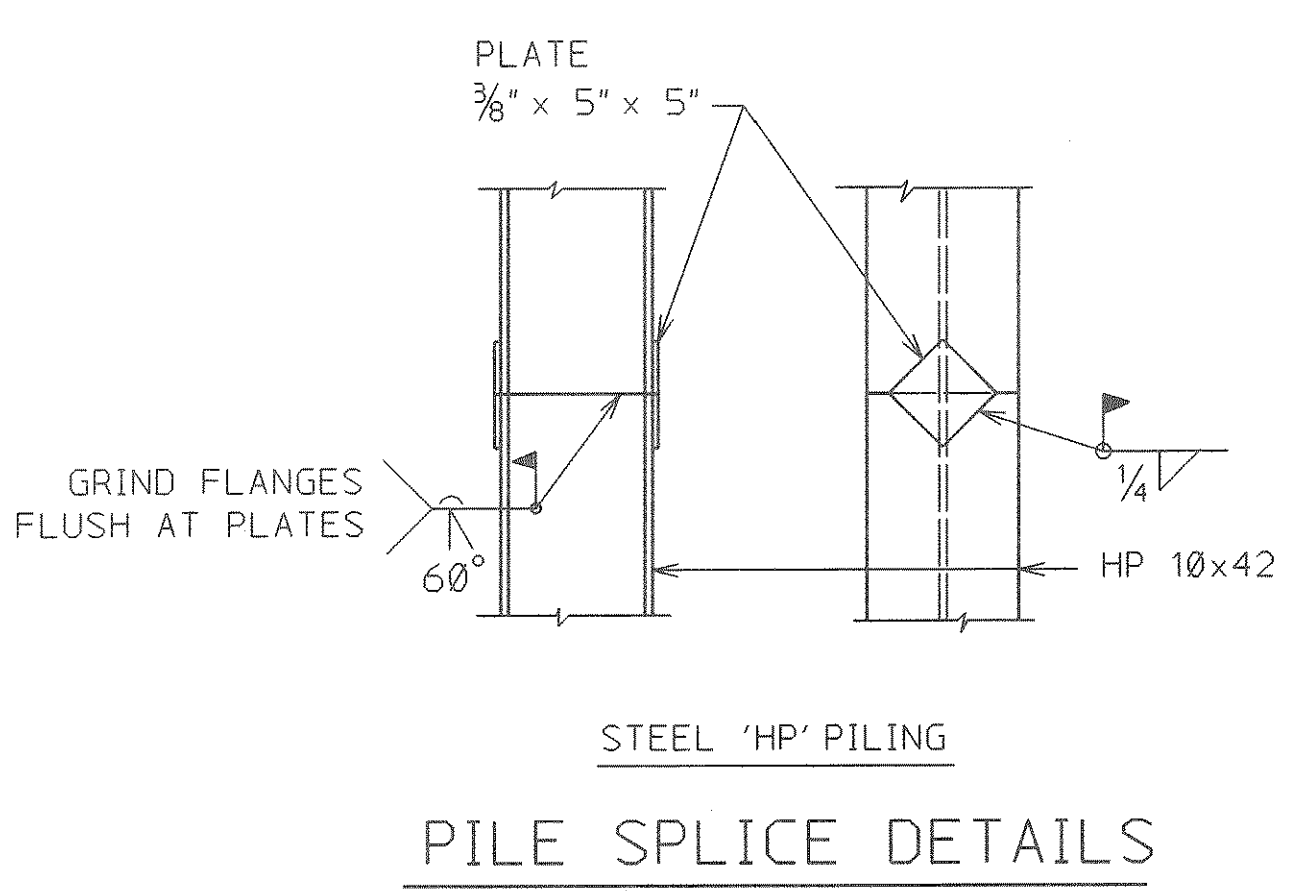
NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	CUT. DIAG.	LOCATION
A401		4	28-0	X		BODY - ONE PER PILE
A402		8	2-3			BODY - TWO PER PILE
A403		62	8-2	X		BODY - STIRRUPS
A604		12	26-4			BODY - HORIZ.
A405		26	2-0			BODY - VERT. - DOWELS
A506		20	8-4			WINGS - HORIZ.
A607		4	10-1			WINGS - HORIZ.
A408		4	3-10			WINGS - HORIZ.
A409		4	7-0	X		WINGS - TOP
A410		12	11-6		X	WINGS - VERT.

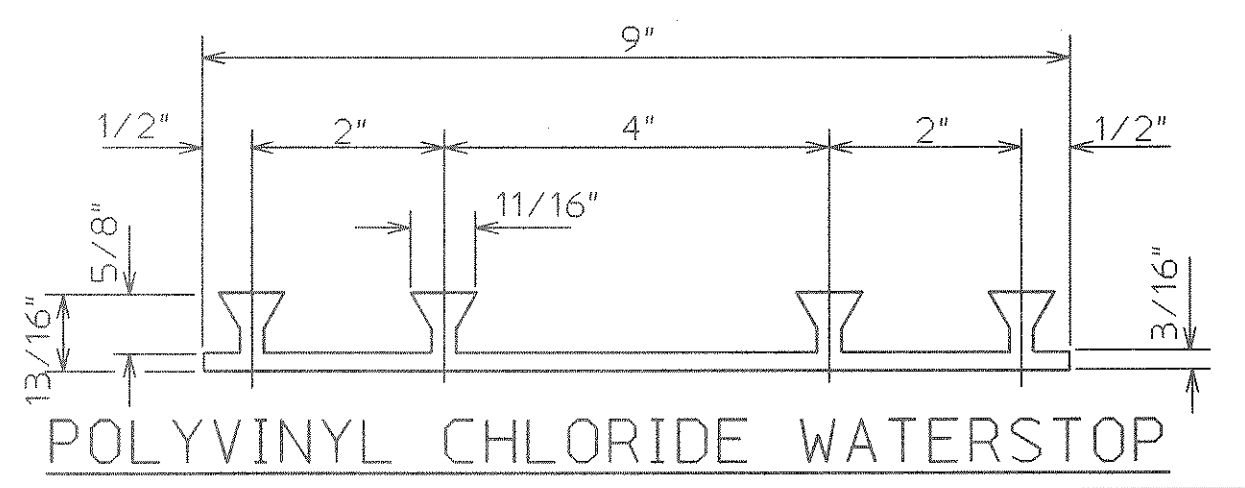


NOTE: A405 BARS MAY BE PLACED AFTER CONC IS POURED, BUT BEFORE INITIAL SET HAS OCCURED.

☆ CONST. JOINT KEYWAY FORMED WITH A SURFACED, BEVELED 2"x 6".



NOTE: FILL/EXCAVATE TO BOTTOM OF FOOTING EL. 1395.07 BEFORE DRIVING PILING.



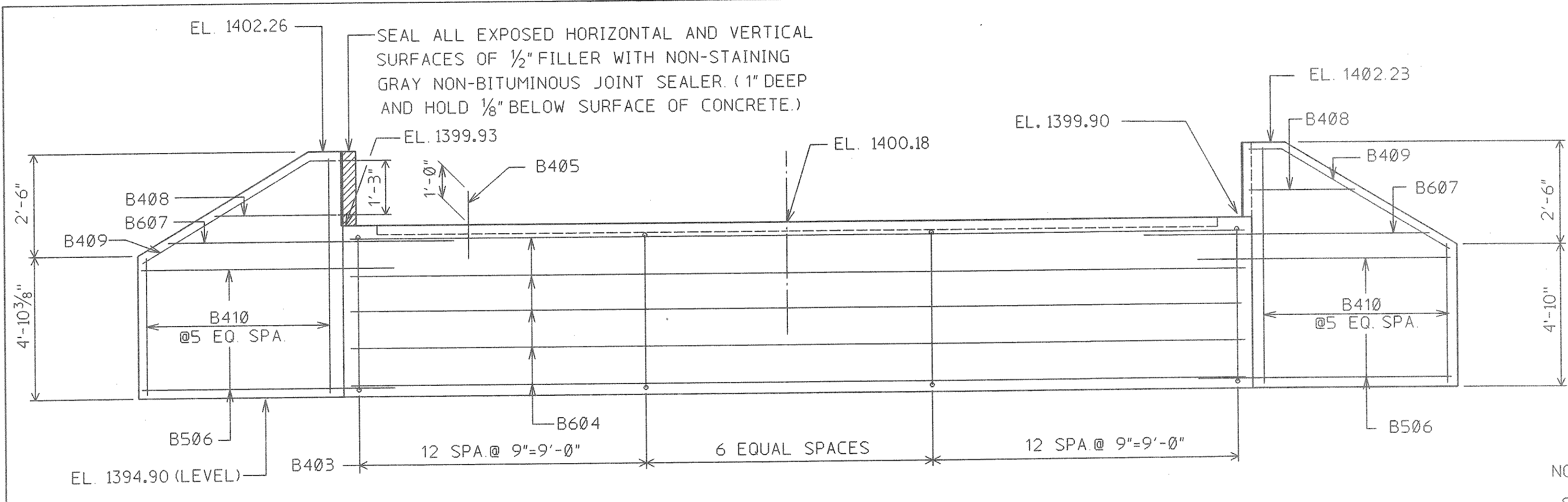
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-129			
CONST. SPEC.	1989	DRAWN BY	NJA
		PLANS CK'D.	CJB
WEST ABUTMENT			SHEET 4 OF 7

BILL OF BARS

(BAR TABLE APPLIES TO THIS ABUT ONLY)

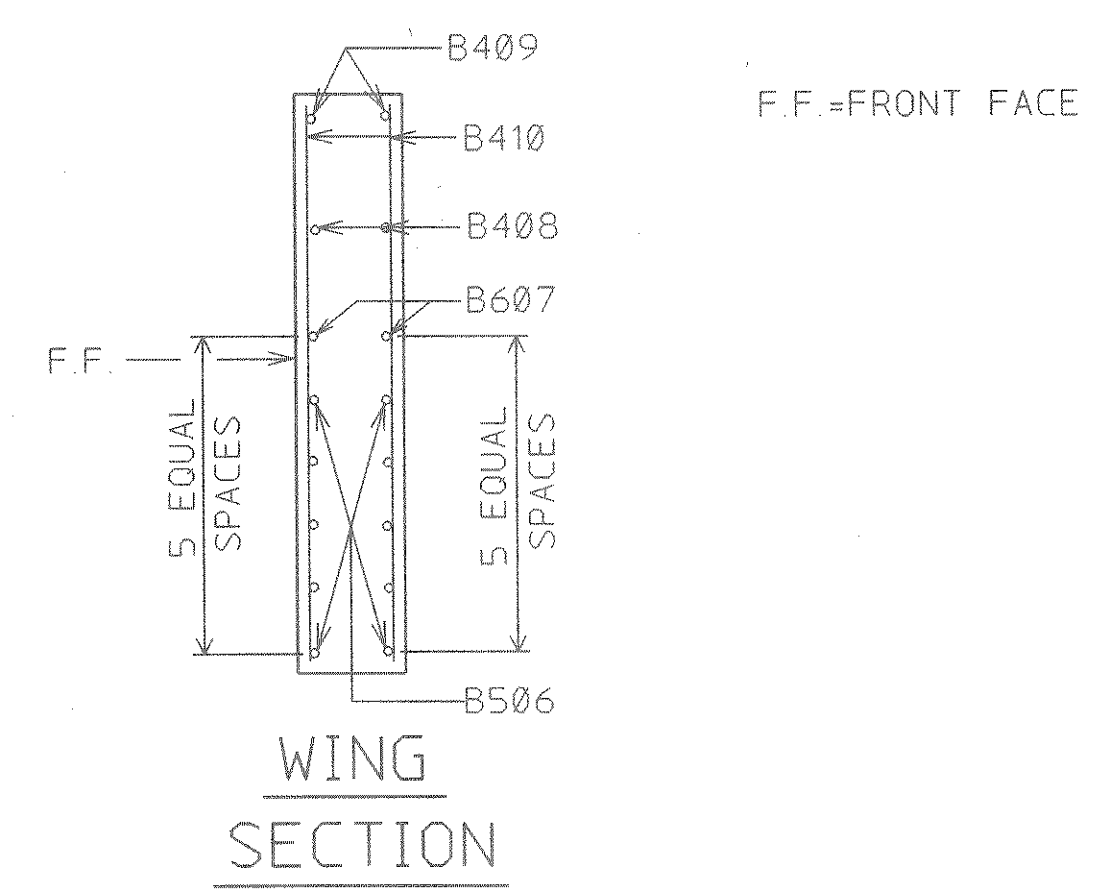
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	CUT DIAG	LOCATION
B401		4	28-0	X		BODY - ONE PER PILE
B402		8	2-3			BODY - TWO PER PILE
B403		62	8-2	X		BODY - STIRRUPS
B604		12	26-4			BODY - HORIZ.
B405		26	2-0			BODY - VERT. - DOWELS
B506		20	8-4			WINGS - HORIZ
B607		4	10-1			WINGS - HORIZ
B408		4	3-10			WINGS - HORIZ
B409		4	7-0	X		WINGS - TOP
B410		12	11-6		X	WINGS - VERT.

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE



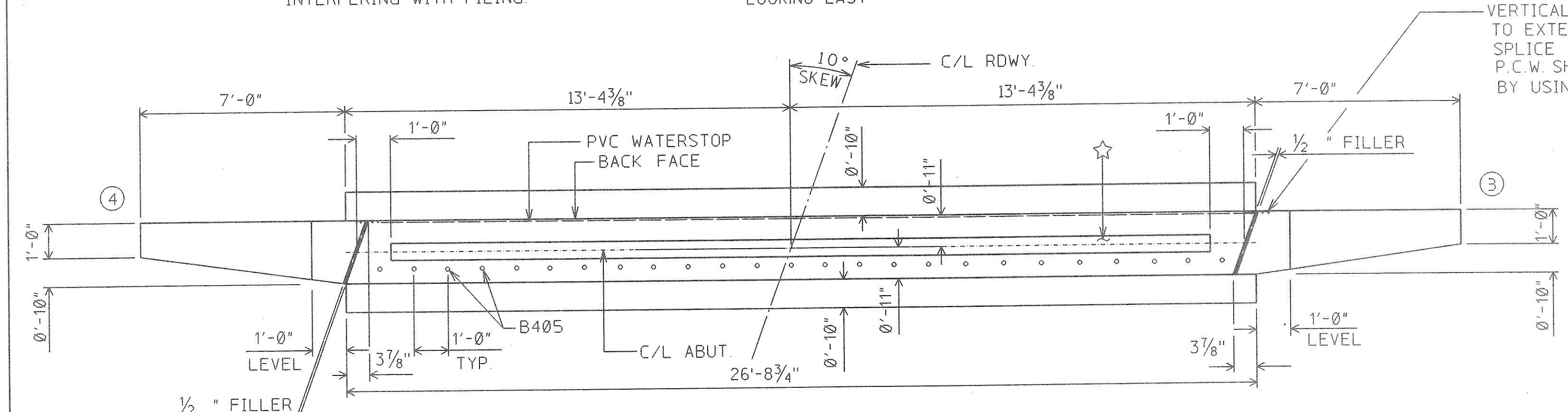
ELEVATION
LOOKING EAST

NOTE: DISPLACE B403 BARS INTERFERING WITH PILING.

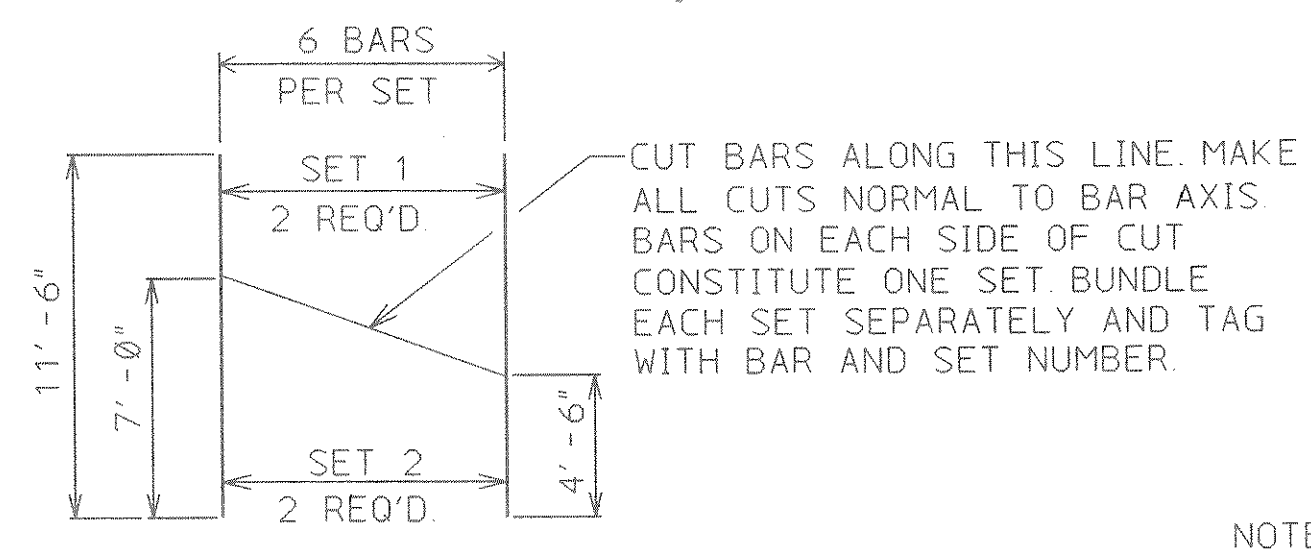


WING SECTION

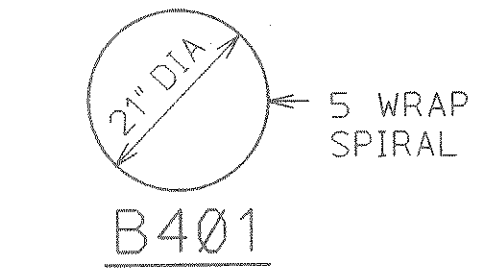
NOTE: HOLD P.C.W FLUSH WITH CONCRETE. SEAL ALL VERT ENDS OF P.C.W WITH NON-STAINING NON-BITUMINOUS JOINT SEALER



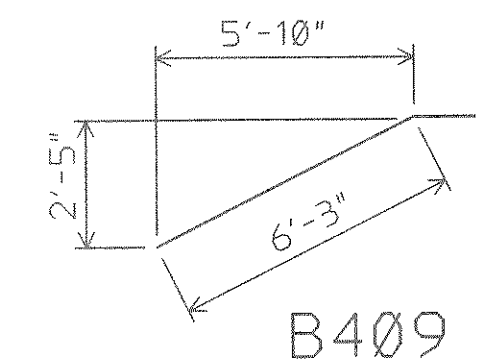
PLAN



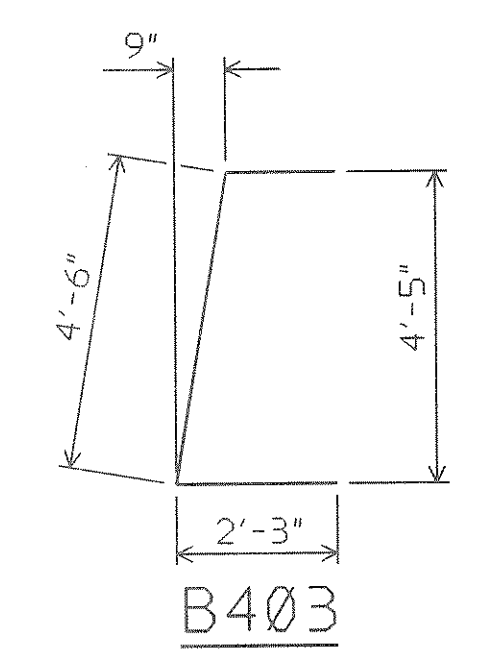
CUTTING DIAGRAM



B401



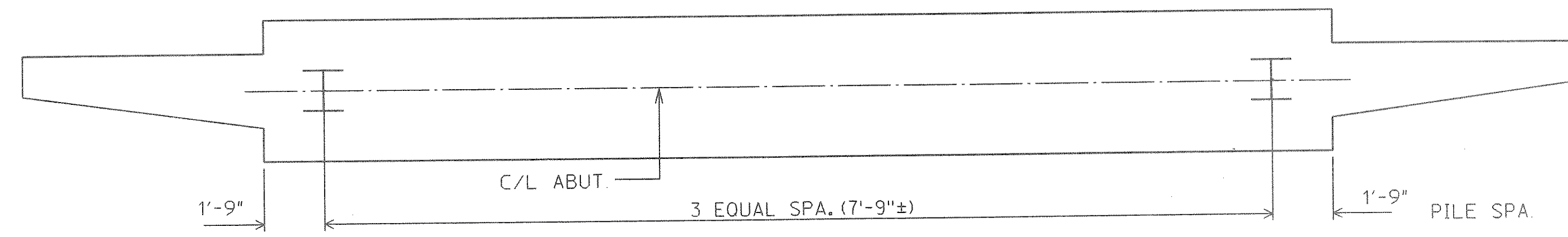
B409



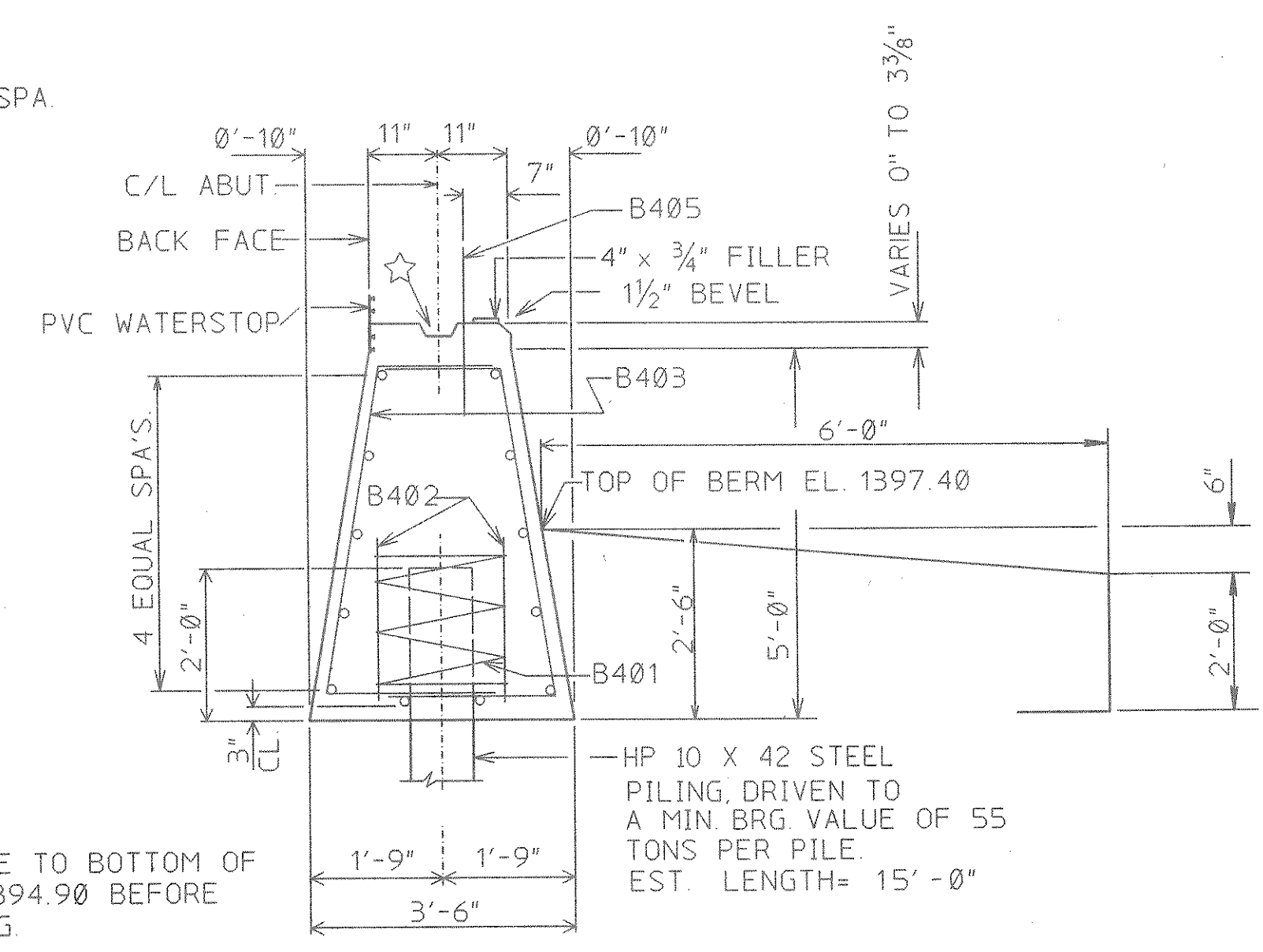
B403

NOTE: B405 BARS MAY BE PLACED AFTER CONC IS POURED, BUT BEFORE INITIAL SET HAS OCCURED.

☆ CONST JOINT KEYWAY FORMED WITH A SURFACED. BEVELED 2"x 6".

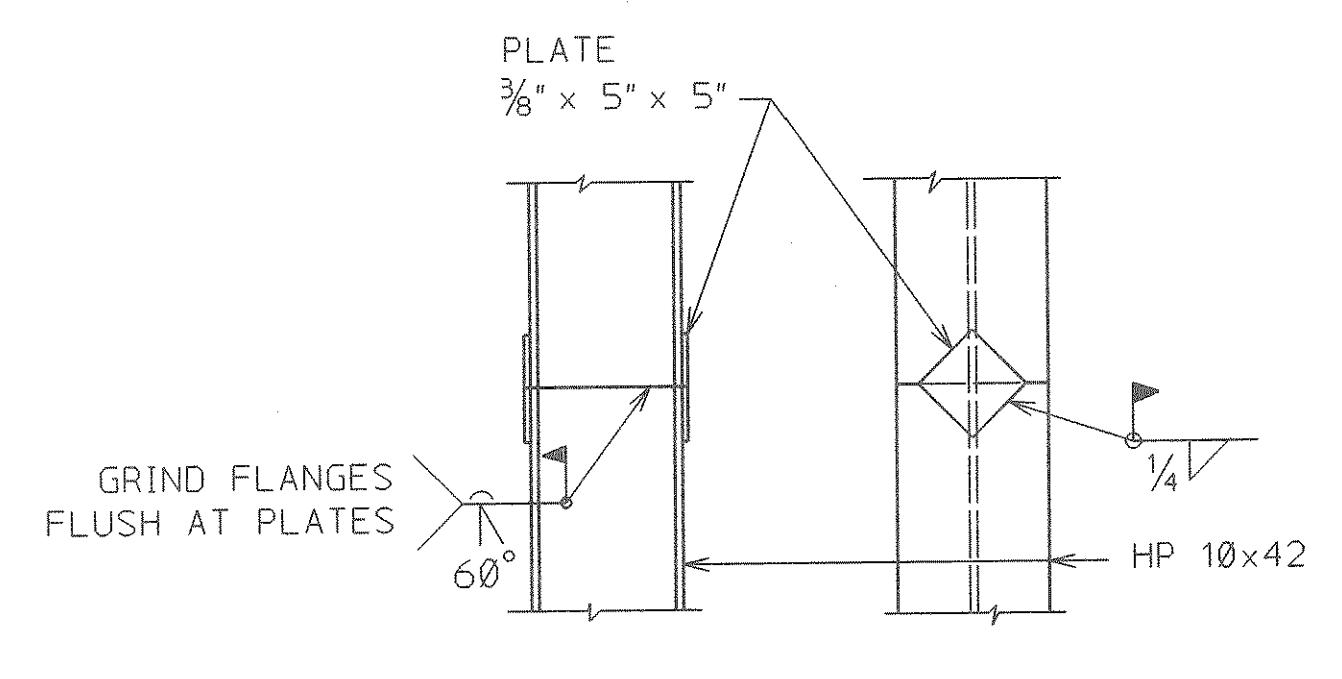


PILE PLAN

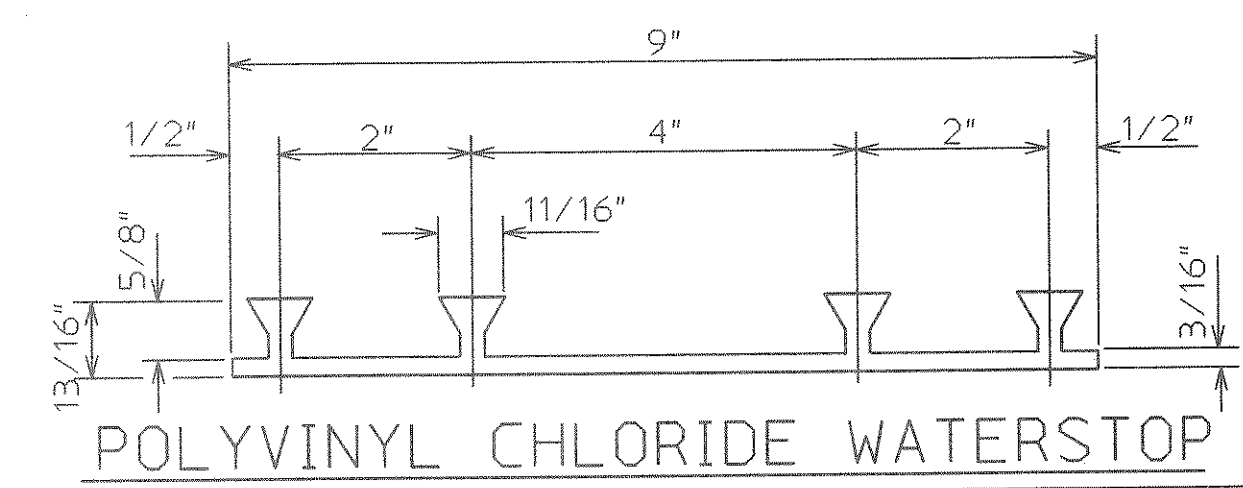


SECT. THRU BODY
ALL HORIZ. BARS ARE B604

NOTE: FILL/EXCAVATE TO BOTTOM OF FOOTING EL. 1394.90 BEFORE DRIVING PILING.

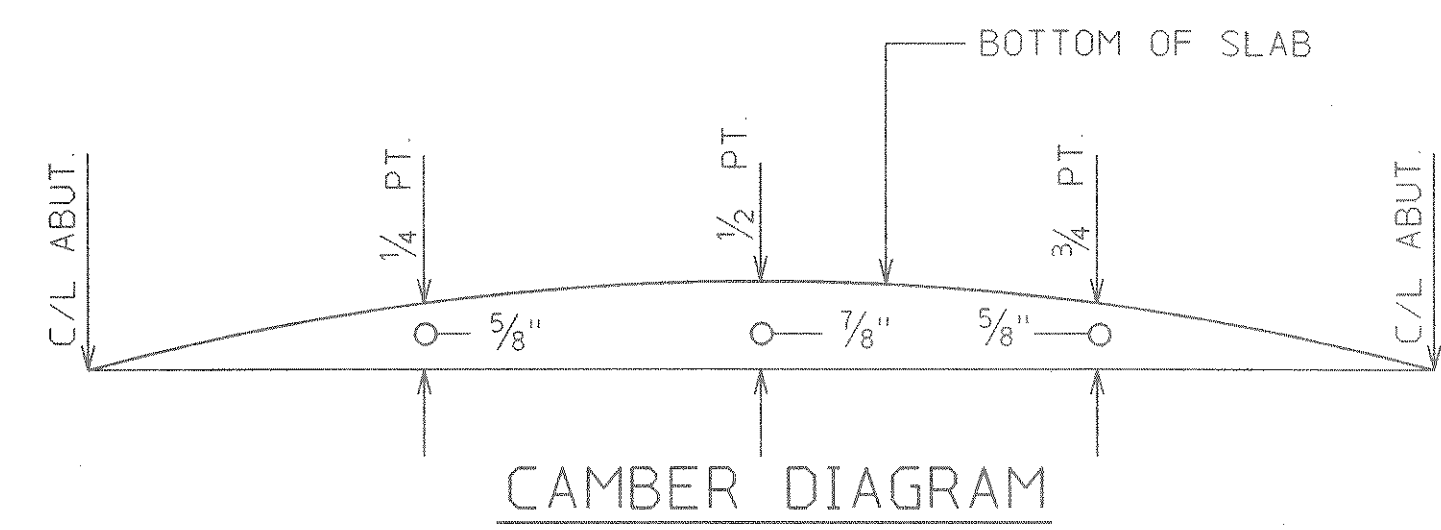
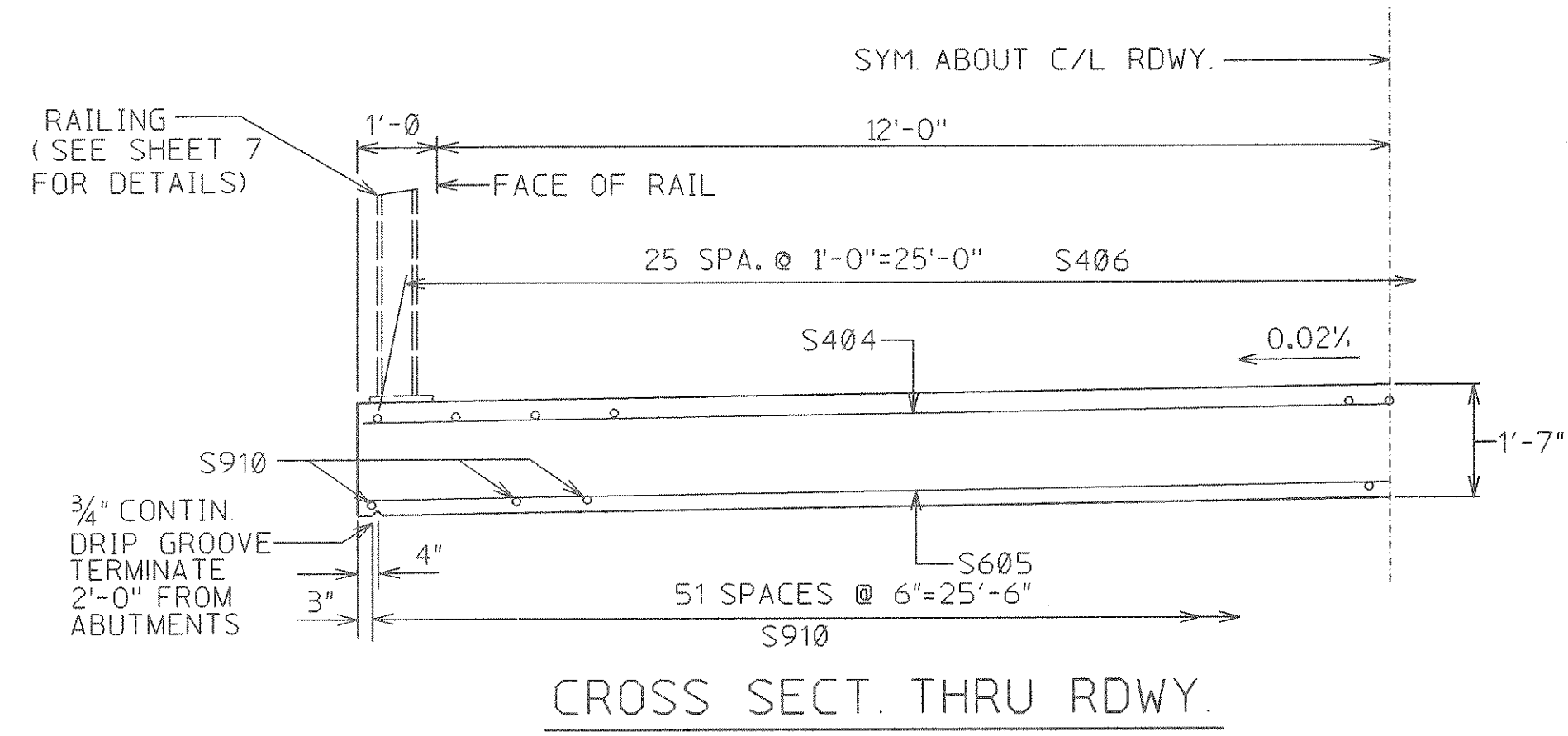


STEEL 'HP' PILING
PILE SPLICE DETAILS



POLYVINYL CHLORIDE WATERSTOP

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-129			
CONST. SPEC.	1989	DRAWN BY NJA	PLANS CK'D. CJB
EAST ABUTMENT			SHEET 5 OF 7



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

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.

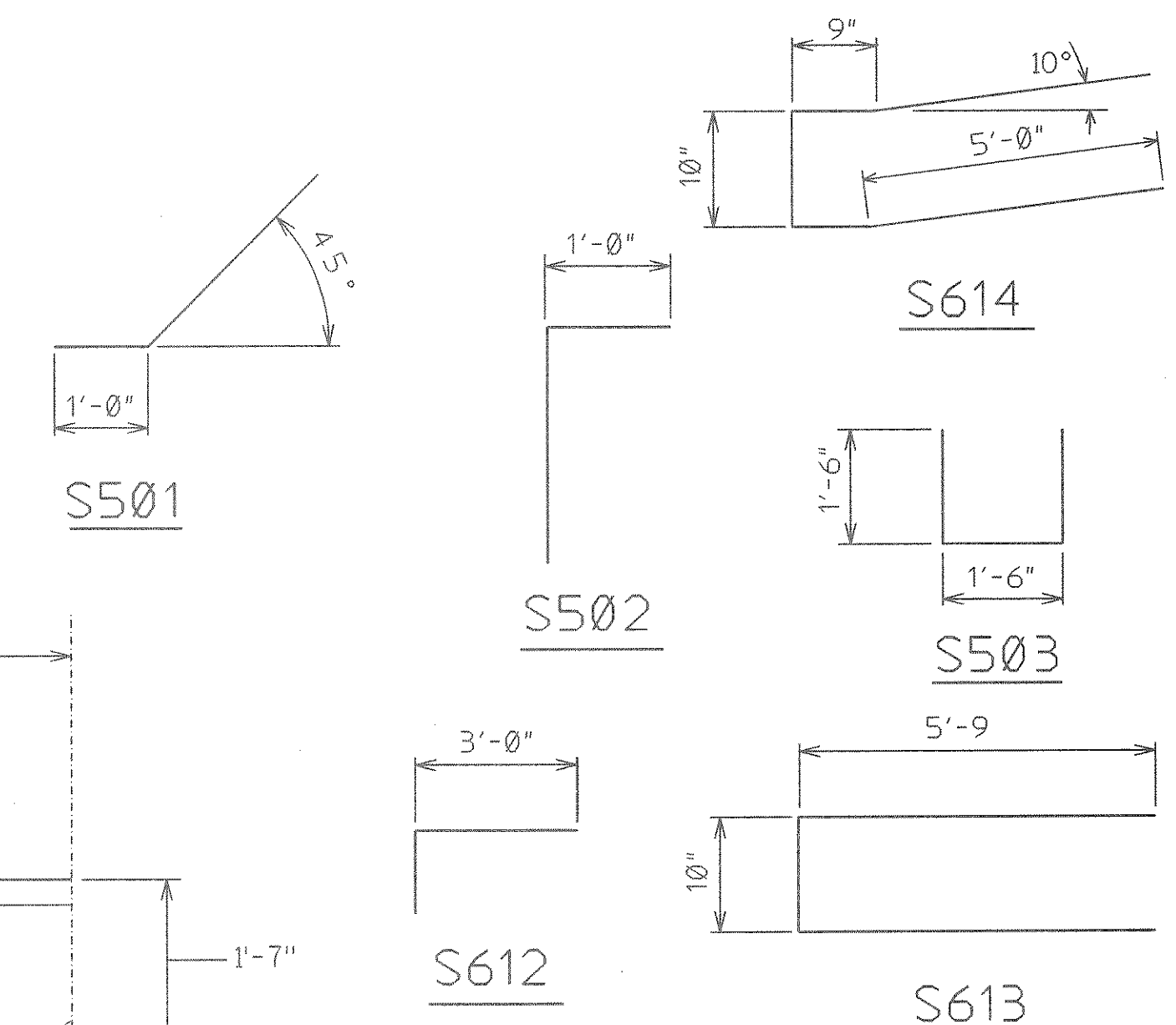
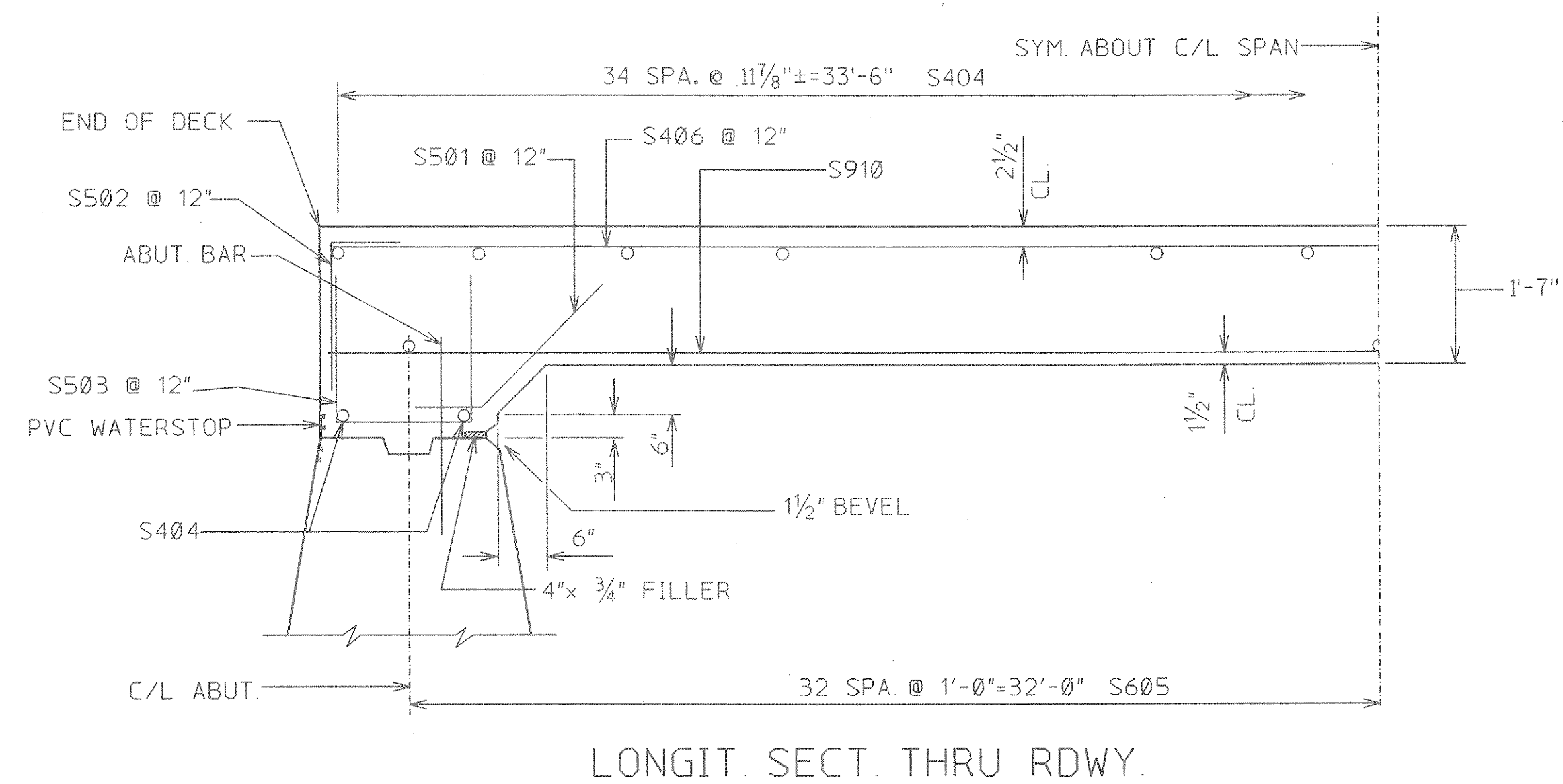
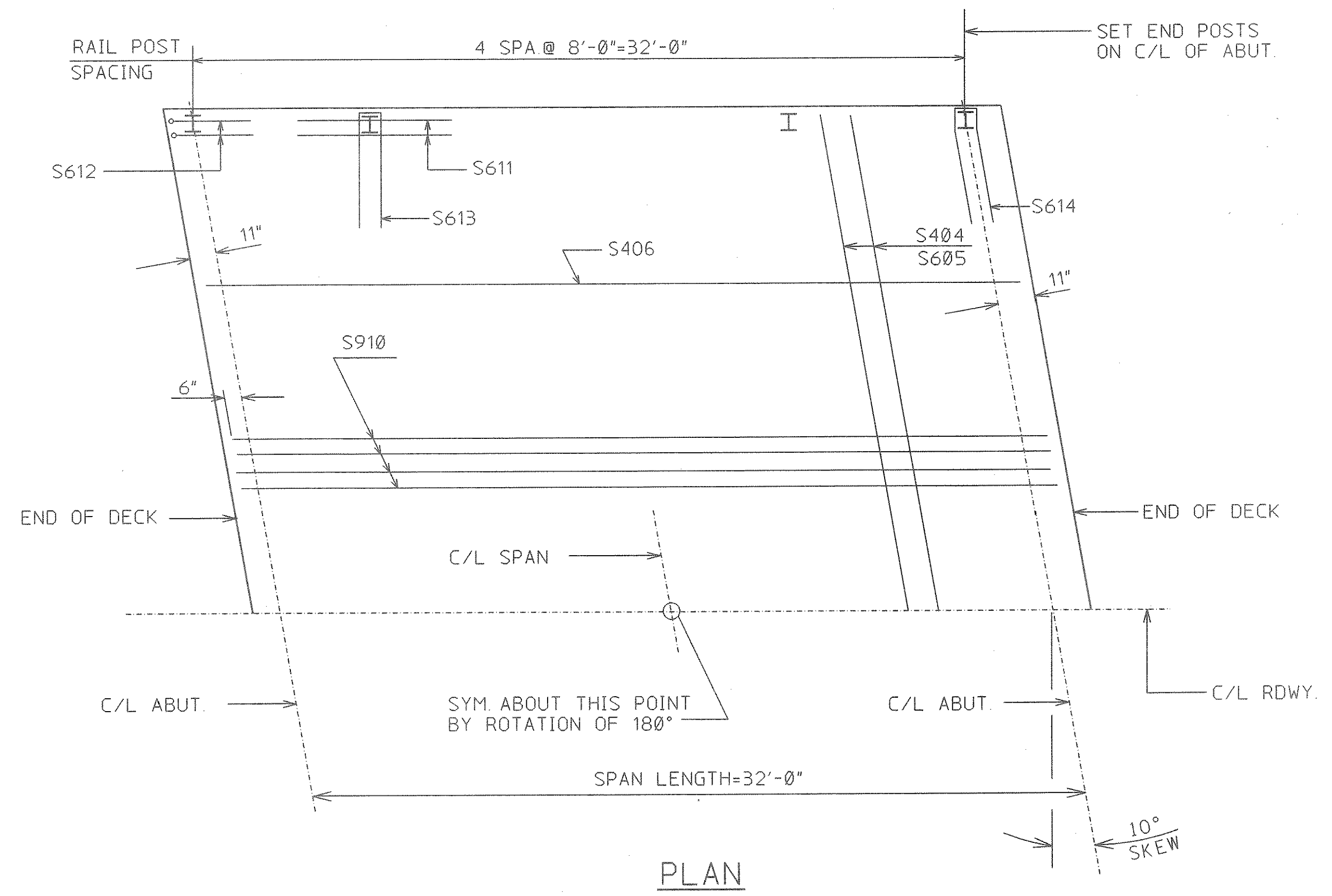
TRANSVERSE BARS SHALL BE PLACED PARALLEL TO THE C/L OF SUBSTRUCTURE UNITS.

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

BILL OF BARS

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

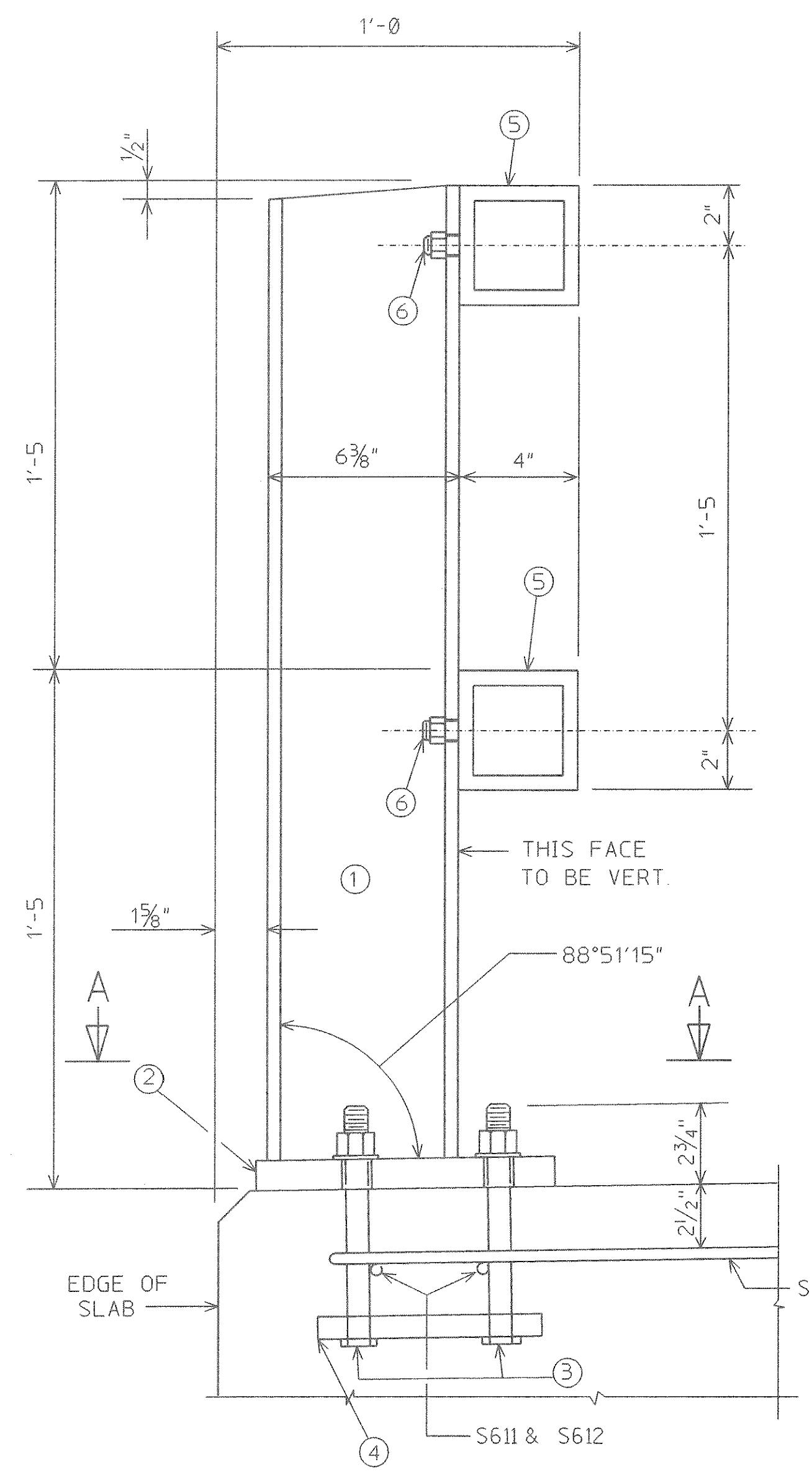
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	LOCATION
S501		54	2-11	X	AT END OF DECK
S502	X	54	2-7	X	AT END OF DECK
S503	X	54	4-3	X	AT END OF DECK
S404	X	39	26-0		SLAB, TOP, TRANSVERSE
S605		33	26-0		SLAB, BOTTOM, TRANSVERSE
S406	X	26	33-6		SLAB, TOP, LONGIT.
S910		52	32-10		SLAB, BOTTOM, LONGIT.
S611	X	12	4-0		AT INTERIOR RAIL POSTS
S612	X	8	4-0	X	AT END RAIL POSTS
S613	X	6	12-0	X	AT RAIL POSTS
S614	X	4	12-0	X	AT END RAIL POSTS



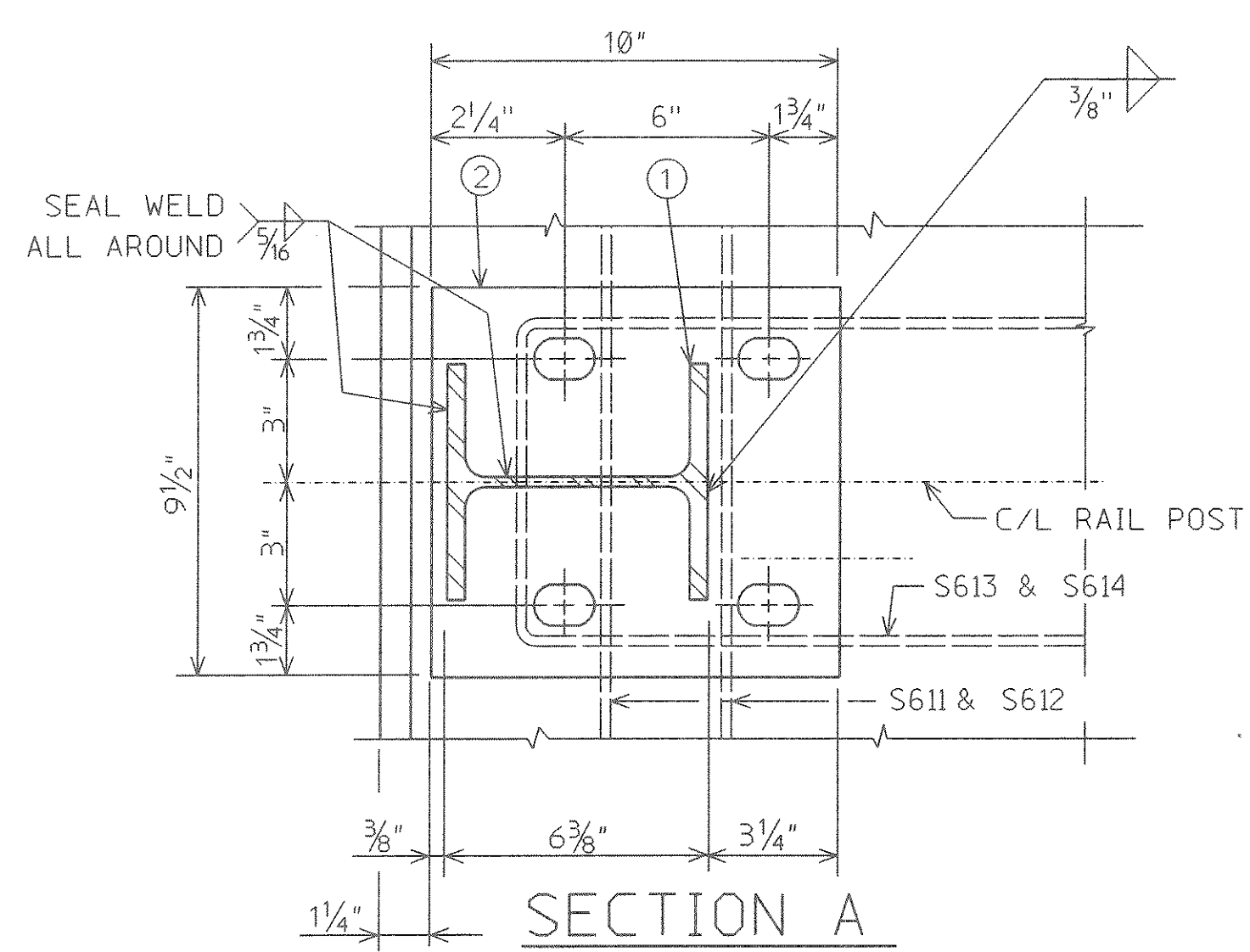
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-129			
CONST. SPEC.	1989	DRAWN BY	NJA
		PLANS CK'D.	CJB
SUPERSTRUCTURE			SHEET 6 OF 7

LEGEND

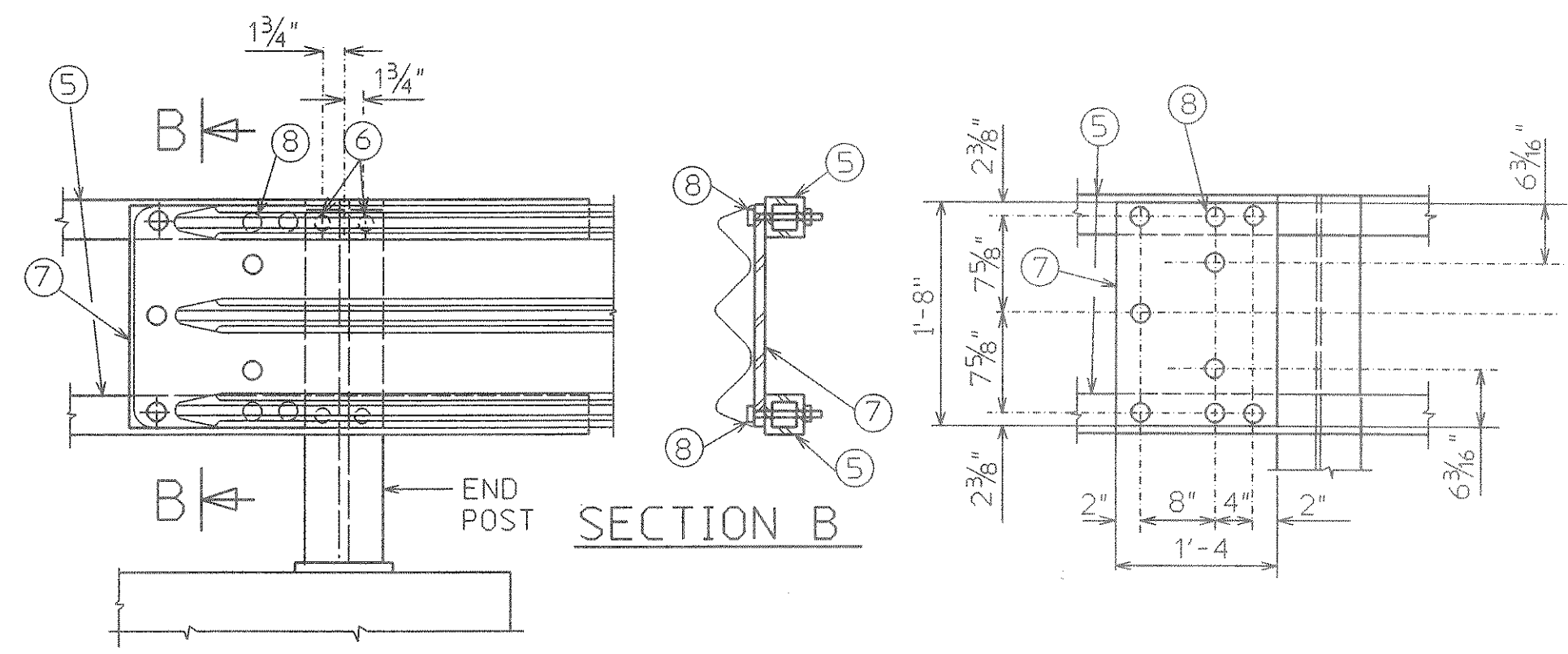
- ① W6x25 WITH 1/4" DIA HOLES ON EACH SIDE OF POST FLANGE FOR STUD NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL PLACE POSTS NORMAL TO GRADE LINE.
- ② PLATE 1"x9 1/2"x0'-10", WITH 1/16" x 1 1/2" SLOTTED HOLES FOR ANCHOR BOLTS NO 3 WELD TO NO 1 AS SHOWN.
- ③ A325 - 7/8" DIA. 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
- ④ 1/4" X 8" X 8" FLAT PLATE WITH 5/16" DIA. HOLES FOR ANCHOR BOLTS NO. 3. AND 5" DIA. CENTER PUNCHED HOLE.
- 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" DIA x 1 1/2" LG SHOP WELDED STUDS, WITH HEX NUT AND 2" WASHERS 4 PER POST REQ'D (2 REQ'D. AT EACH LOCATION)
- ⑦ PLATE 3/4"x1'-4"x1'-8". REQUIRED AT THRIE BEAM ATTACHMENTS ONLY.
- ⑧ 1" DIA HOLES IN PLATE NO. 7 AND TUBES FOR 7/8" DIA A325 BOLTS W/HEX NUTS AND WASHERS.
- ⑨ SQUARE SLEEVE FABRICATED FROM 1/4" PLATE PROVIDE "SLIDING FIT" WITH A MINIMUM OUT TO OUT DIMENSION OF 3 13/32".
- ⑩ TS 3x3x 25x(2'-4" AT ABUT.) & (1'-10" AT FIELD JOINTS) LONG PROVIDE 1/2" DIA SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 5. PROVIDE 3/8" DIA x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.



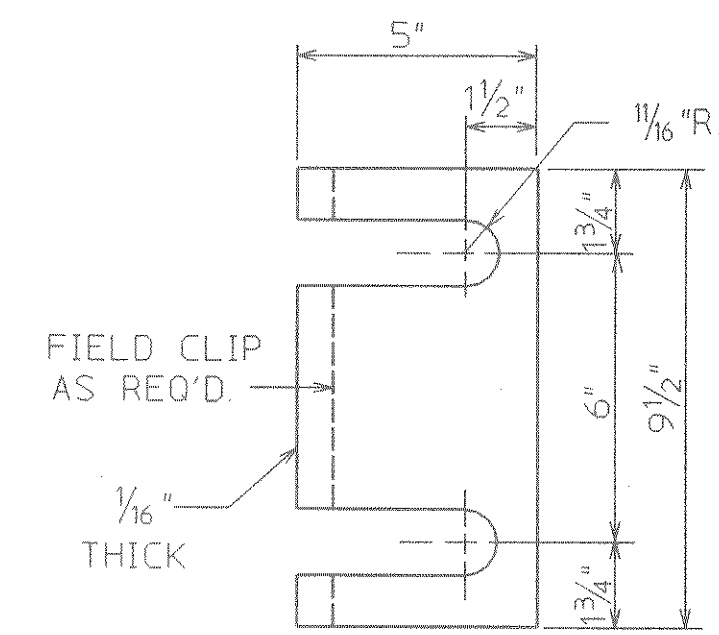
SECTION THRU RAILING



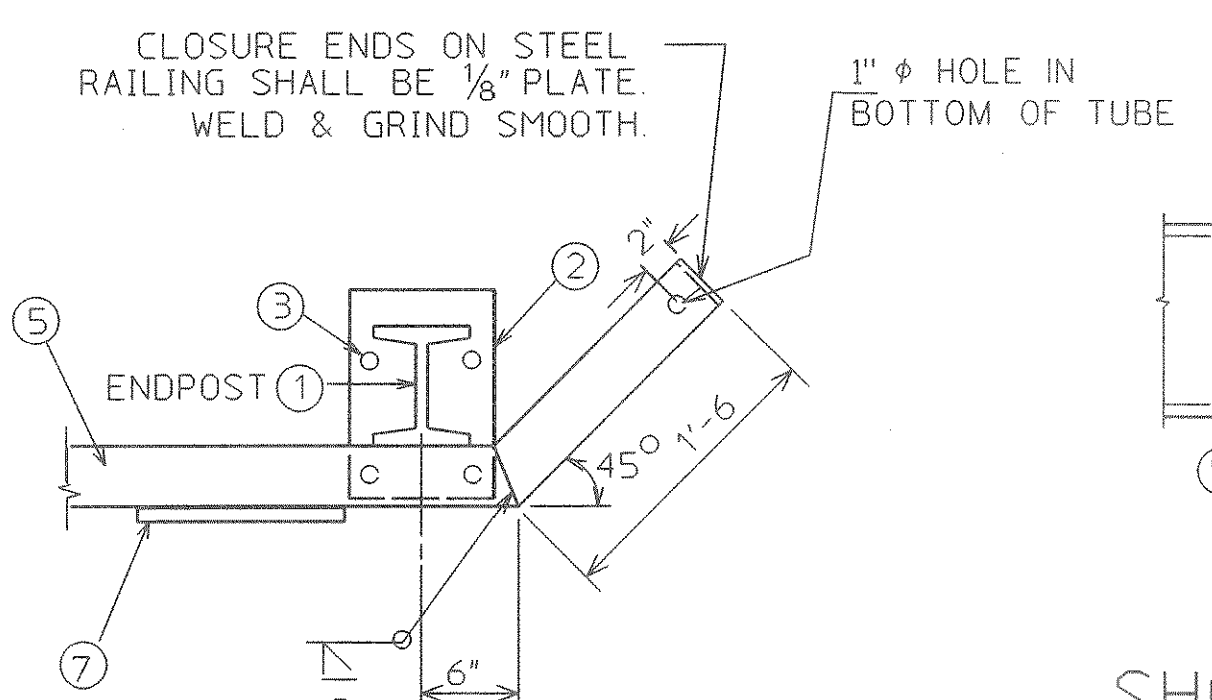
SECTION A



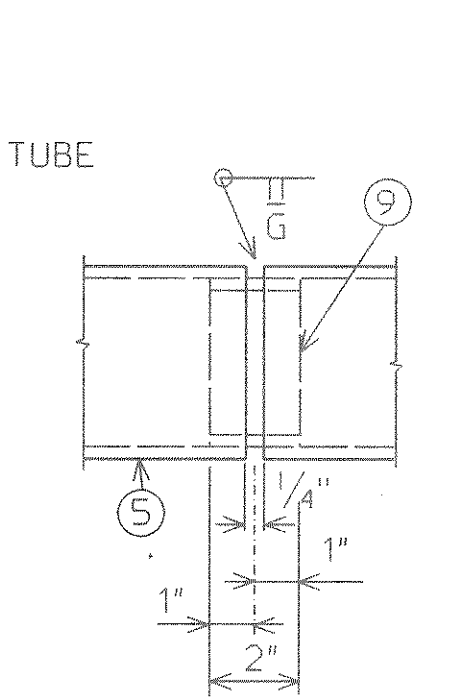
DETAIL AT END POST
(THRIE BEAM RAIL ATTACHMENT)



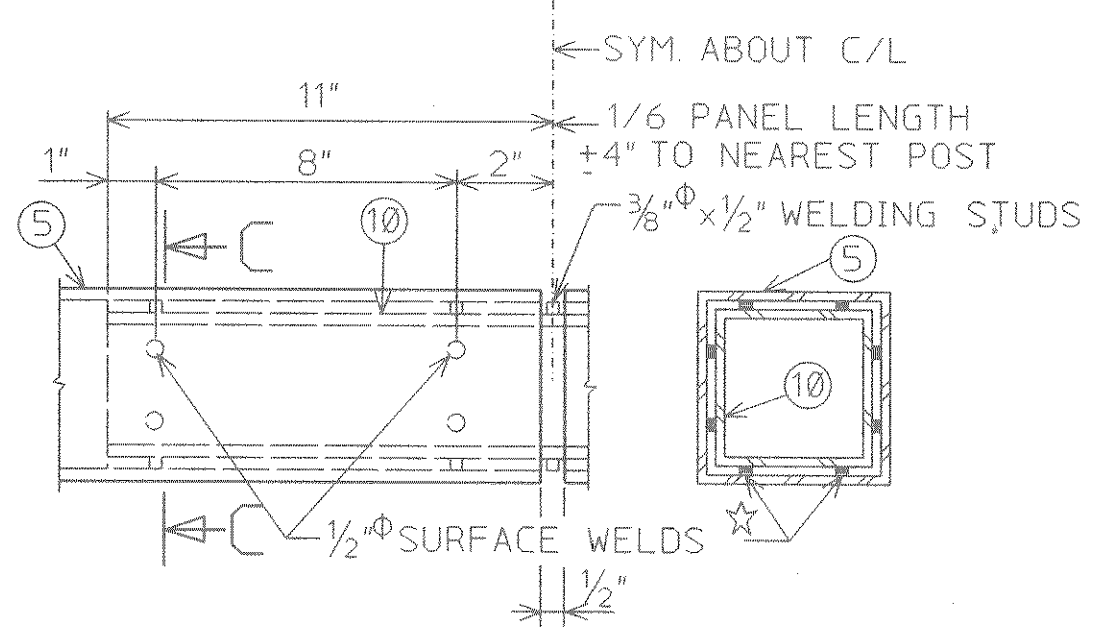
POST SHIM DETAIL
(4 PER POST)



END DETAIL

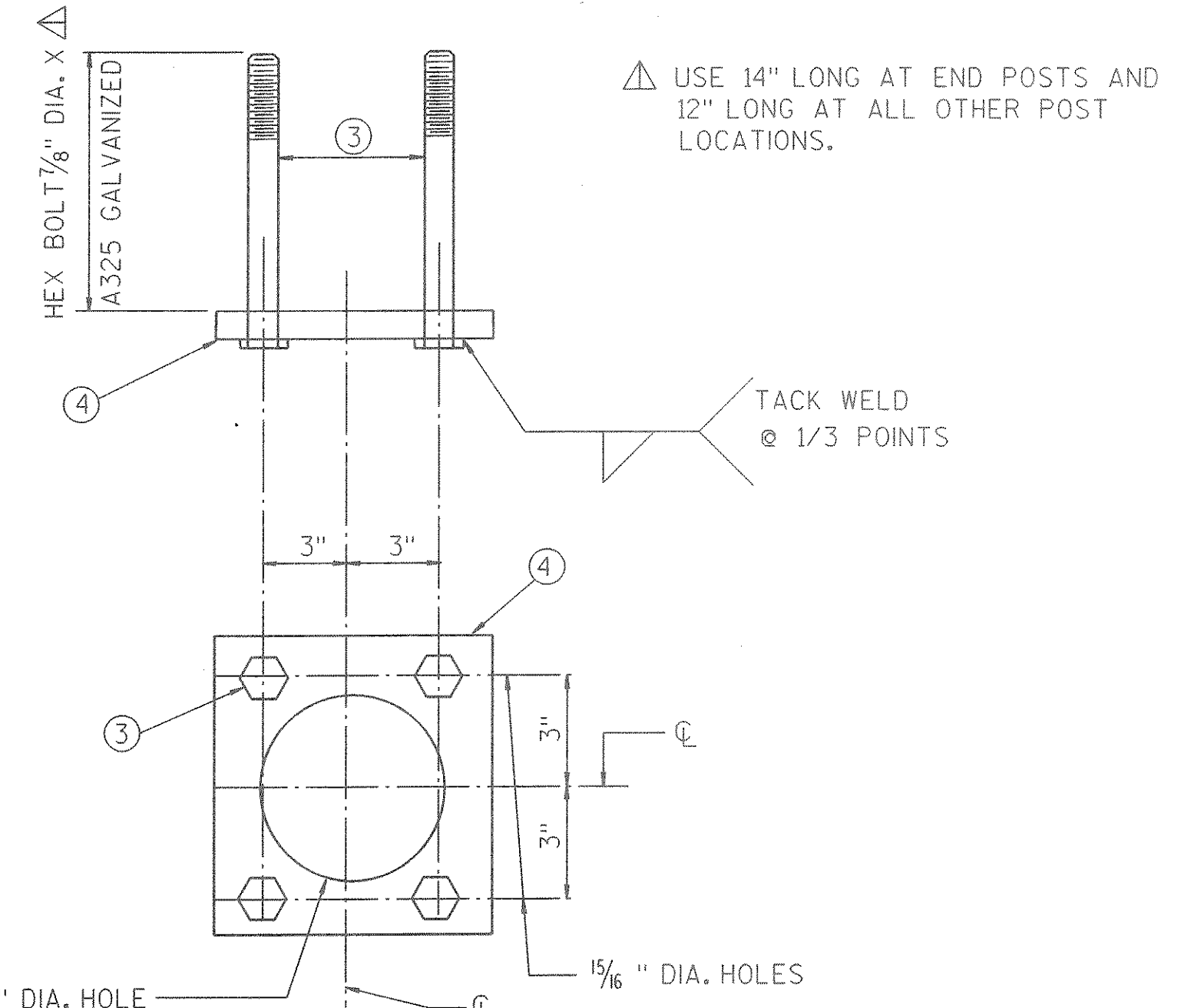


SHOP RAIL SPLICE DETAIL
(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



FIELD ERECTION JOINT DETAIL

SECTION C



ANCHORAGE DETAIL

GENERAL NOTES

- BID ITEM SHALL BE "TUBULAR RAILING TYPE 'F'", WHICH INCLUDES ALL ITEMS SHOWN.
- RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.
- 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 INCLUDING ANCHORAGE ASSEMBLIES SHALL BE GALVANIZED AFTER FABRICATION.
- 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 A36 UNLESS NOTED OTHERWISE.
- STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
- PRIOR TO GALVANIZING, ALL STEEL RAILING MEMBERS SHALL BE GIVEN A NO 6 COMMERCIAL BLAST CLEANING BY S.S.P.C. SPECIFICATIONS. BLAST CLEANING IS NOT REQUIRED FOR COLD FORMED TUBING (5), EXCEPT TO REMOVE WELDING SLAG AND IMPERVIOUS SUBSTANCES.

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STRUCTURE B-35-129			
CONST. SPEC.	1989	DRAWN BY NJA	PLANS CK'D CJB
TUBULAR RAILING TYPE 'F'			SHEET 7 OF 7