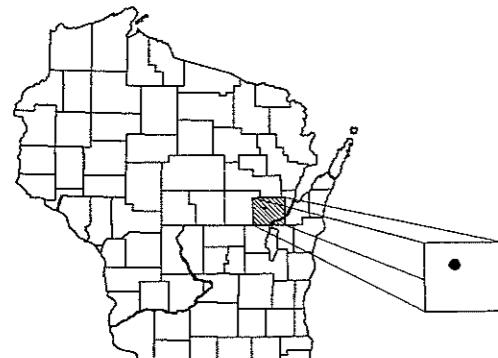


INDEX OF SHEETS

Sheet No.	1	Title
Sheet No.		Typical Sections and Details
Sheet No.		Estimate of Quantities
Sheet No.		Miscellaneous Quantities
Sheet No.		Plan and Profile
Sheet No.		Standard Detail Drawings
Sheet No.		Sign Plates
Sheet No.		Structure Plans

TOTAL SHEETS =



OUTAGAMIE COUNTY

HIGHWAY DEPARTMENT

REHABILITATION - MAINTENANCE PROJECT

STH 187 TO STH 54 ROAD

(SHIOC RIVER BRIDGE AND APPROACHES)

CTH P

OUTAGAMIE COUNTY

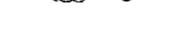
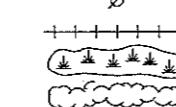
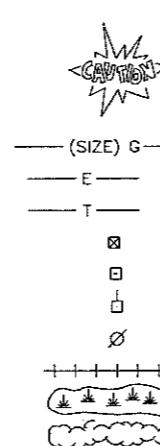
MAP 22001
MAY 22 2001

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)
UNDERGROUND UTILITIES
GAS
ELECTRIC
TELEPHONE
SERVICE PEDESTAL
CABLE MARKER
POWER POLE
TELEPHONE POLE
RAILROADS
MARSH(WETLANDS)
WOODED AREA

(SIZE) G
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GENERAL NOTES

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

WHEN PORTIONS OF EXISTING PAVEMENTS ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAWCUT JOINT THROUGH THE ASPHALT SO THAT REMOVAL OF THE PAVEMENT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS.

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

STEEL THRIE BEAM STRUCTURE APPROACH

STA. TO STA.	LOCATION	L.F.
9+54 - 9+87	RT.	33
11+32 - 11+65	RT.	33
11+42 - 11+75	LT.	33
TOTAL		99

STEEL PLATE BEAM GUARD

ENERGY ABSORBING TERMINAL

STA. TO STA.	LOCATION	EACH
9+04 - 9+54	RT.	1
11+77 - 12+27	RT.	1
12+12.5 - 12+62.5	LT.	1
TOTAL		3

ANCHORAGES FOR STEEL

PLATE BEAM GUARD, TYPE 2

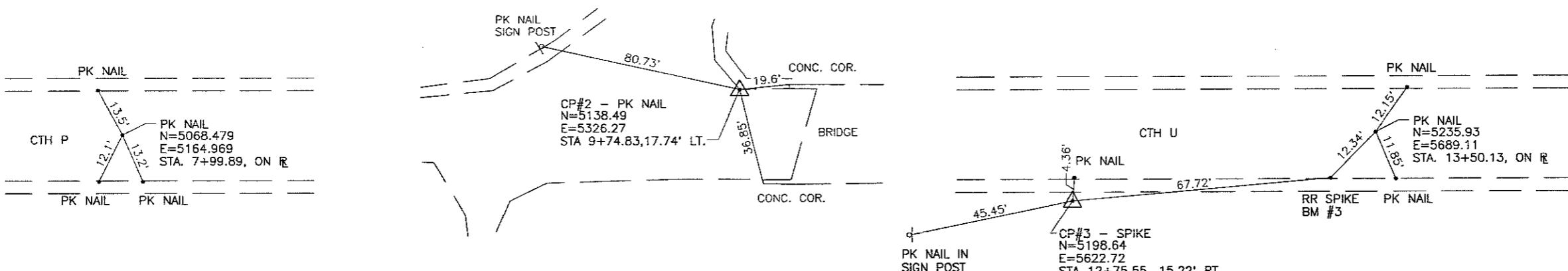
STATION	LOCATION	EACH
9+70	LT.	1
TOTAL		1

STEEL PLATE BEAM GUARD, CLASS A

STA. TO STA.	LOCATION	L.F.
9+70 - 9+97	LT.	37.5
11+65 - 11+77	RT.	12.0
11+75 - 12+12.5	LT.	37.5
TOTAL		87.0

REMOVING GUARDRAIL

STA. TO STA.	LOCATION	L.F.
9+07 - 9+83	RT.	76
11+33 - 12+32	RT.	99
11+43 - 12+65	LT.	122
TOTAL		297



CONTROL POINT TIES

STANDARD ABBREVIATIONS

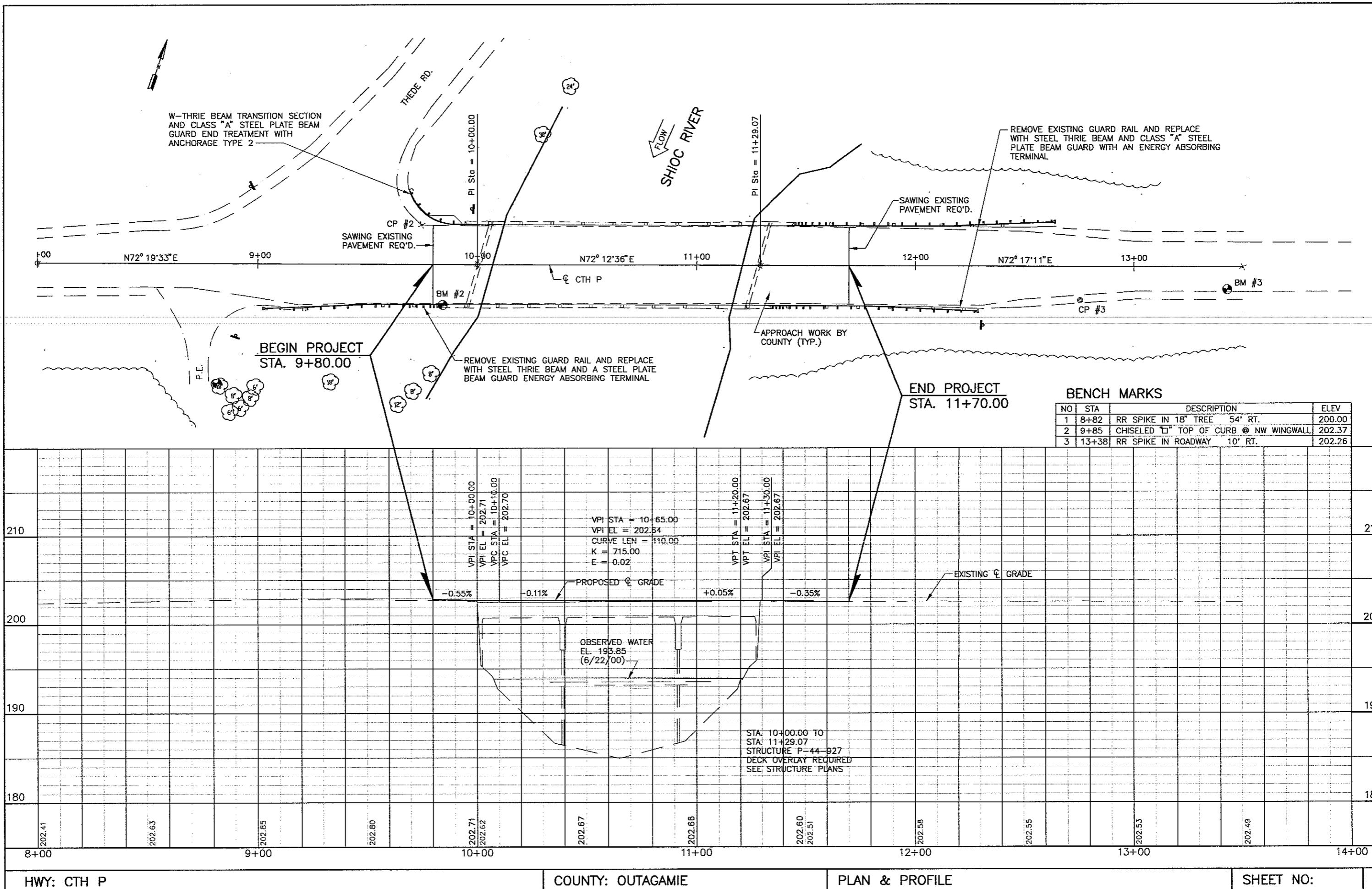
ADT	AVERAGE DAILY TRAFFIC	PE	PRIVATE ENTRANCE
ASPH	ASPHALT	PVC	POINT OF VERTICAL CURVATURE
BLDG	BUILDING	PVI	POINT OF VERTICAL INTERSECTION
CE	COMMERCIAL ENTRANCE	PVT	POINT OF VERTICAL TANGENCY
CONC	CONCRETE	R	RANGE
CP	CULVERT PIPE	RT	RIGHT
CWT	HUNDREDWEIGHT	R/W	RIGHT OF WAY
CY	CUBIC YARD	REQ'D	REQUIRED
E	EAST	SHLDR	SHOULDER
ELEV	ELEVATION	S	SOUTH
FE	FIELD ENTRANCE	SY	SQUARE YARD
FT	FOOT	SF	SQUARE FOOT
GRAV	GRAVEL	STA	STATION
HW 100	HUNDRED YEAR HIGH WATER	SE	SUPERELEVATION
LF	LINEAR FOOT	TYP	TYPICAL
LT	LEFT	UNCL	UNCLASSIFIED
MAX	MAXIMUM	VAR	VARIABLE
MI	MILE	VC	VERTICAL CURVE
MIN	MINIMUM	W	WEST
N	NORTH	X	EAST GRID COORDINATE
NOR	NORMAL	Y	NORTH GRID COORDINATE



DESIGN CONTACTS

ROMENESKO ENGINEERING, LLC
213 JACKSON ST.
SAUK CITY, WI 53583

ATTN: VICKI ROMENESKO
(608) 644-1502
FAX (608) 644-1602
romenesko@charter.net



GENERAL NOTES

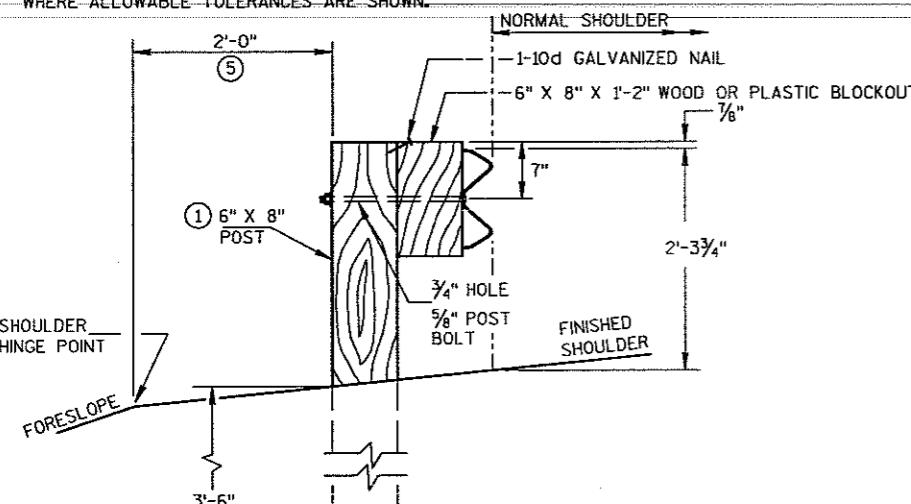
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, AND THE APPLICABLE SPECIAL PROVISIONS.

- ① W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.
- ② USE STRUCTURAL STEEL POSTS CONFORMING TO AASHTO M183. GALVANIZE ACCORDING TO AASHTO M111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPelter COATING ON GALVANIZED POSTS.
- ③ INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ④ USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.
- ⑤ WHEN SPECIFIED IN THE PLANS, THE 2-FOOT MINIMUM TO HINGE POINT MAY BE REDUCED OR ELIMINATED IF EXISTING CONDITIONS DO NOT PERMIT THE DESIRABLE EARTHWORK.
- ⑥ IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.

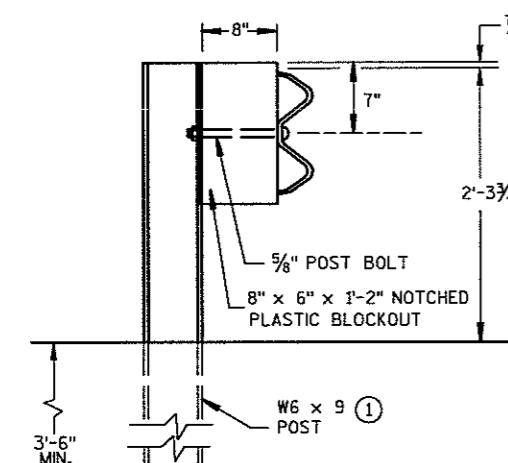
INCREASE POST LENGTH TO PROVIDE A MINIMUM EMBEDMENT OF 3'-6" IF THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.

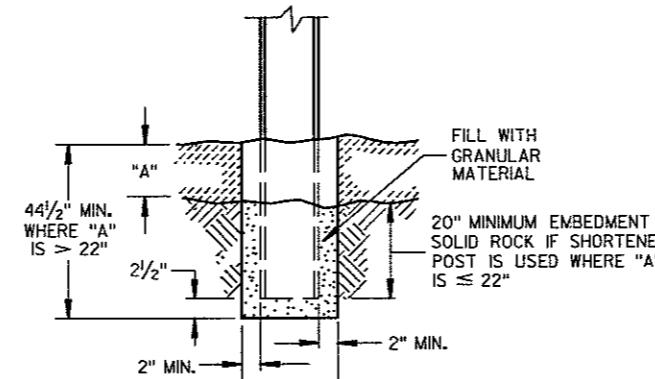


END VIEW
LOCATED ALONG A ROADWAY SHOULDER

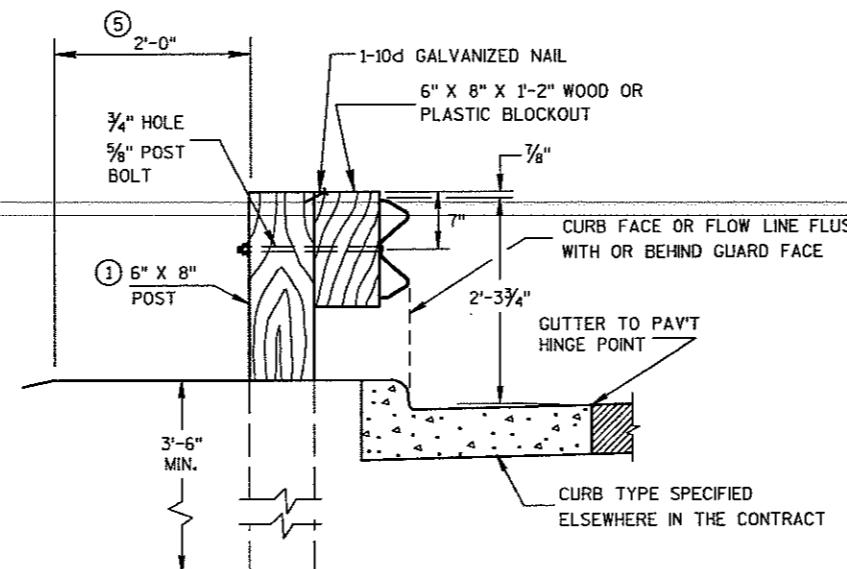


END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE

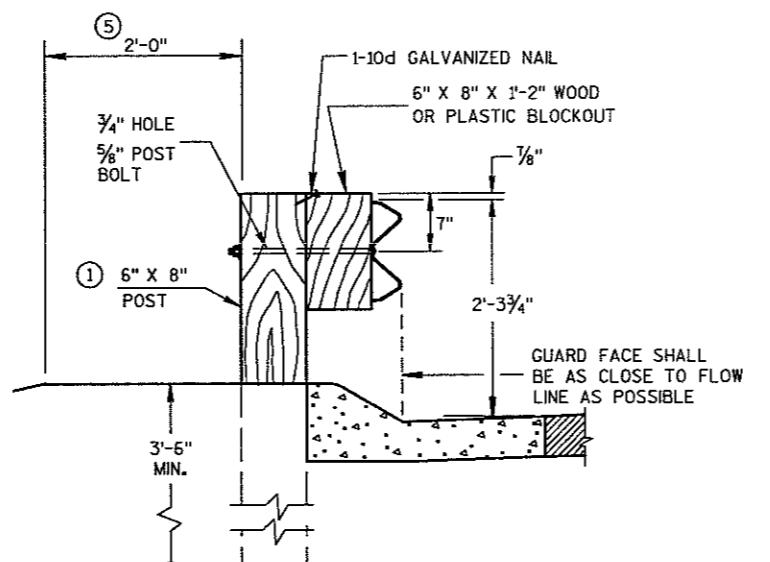
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD



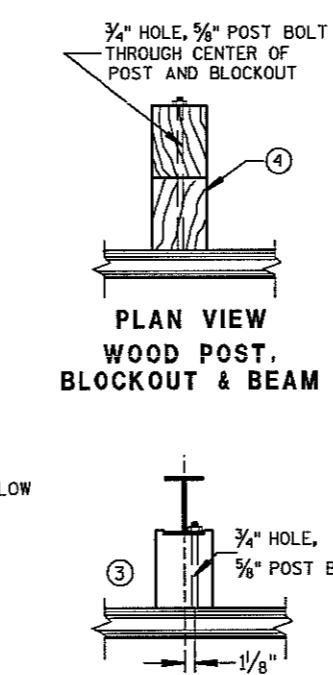
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ⑥



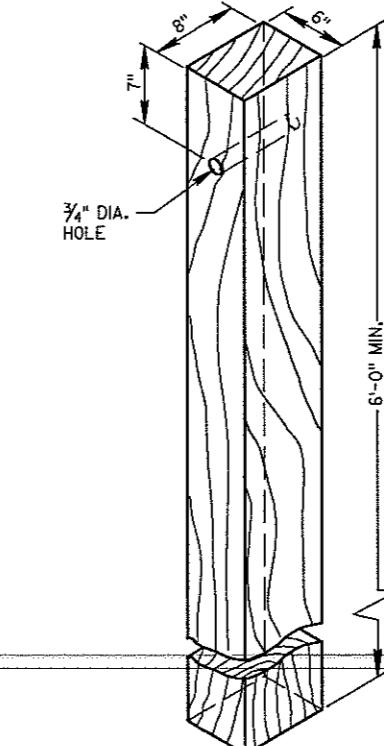
END VIEW
LOCATED ALONG A CURBED ROADWAY



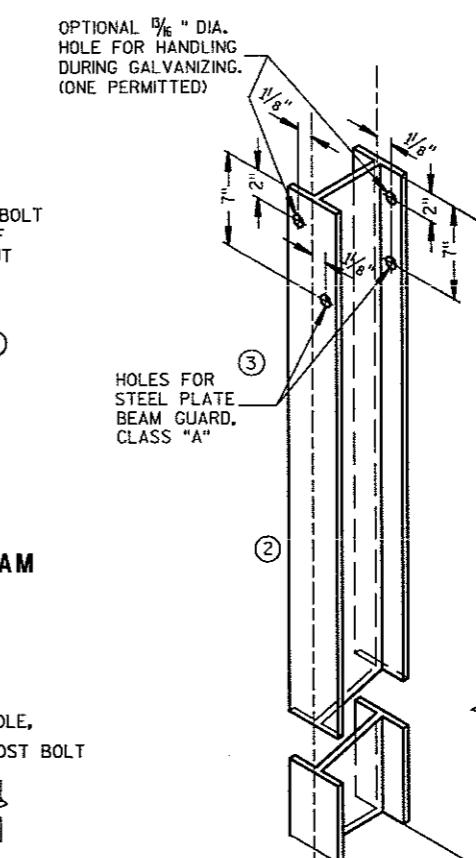
END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY



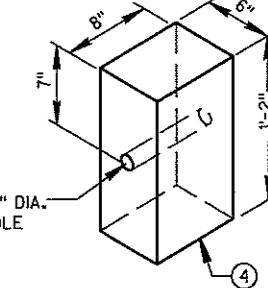
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



WOOD POST
(6" X 8") NOMINAL



NOTCHED PLASTIC BLOCKOUT
FOR STEEL POSTS

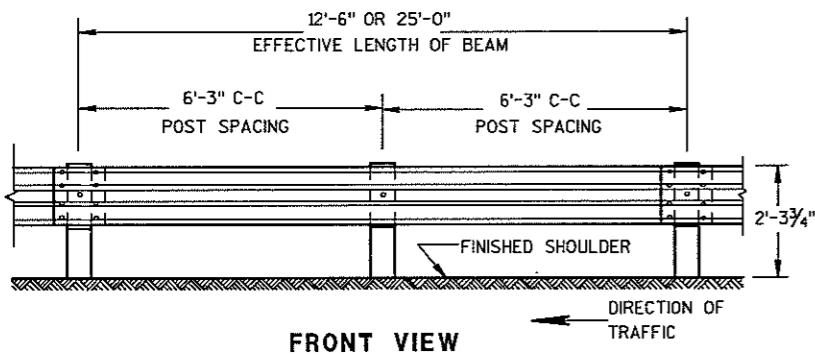


WOOD OR PLASTIC
BLOCKOUT FOR WOOD POSTS

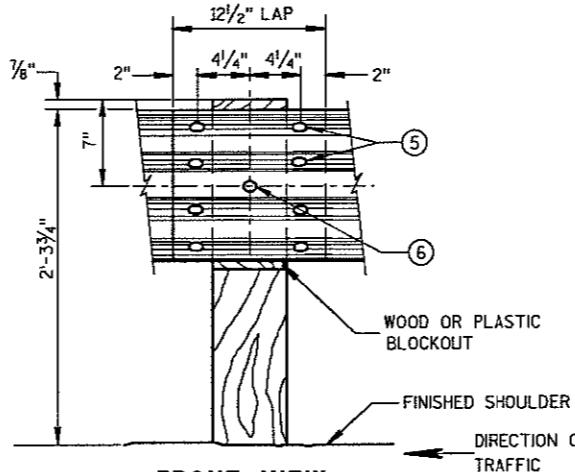
STEEL PLATE BEAM GUARD,
CLASS 'A'
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

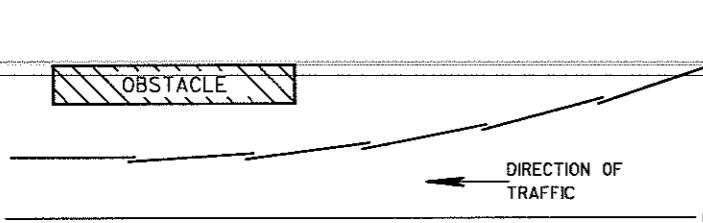
ALL HOLES $\frac{5}{8}$ " DIAMETER EXCEPT AS NOTED



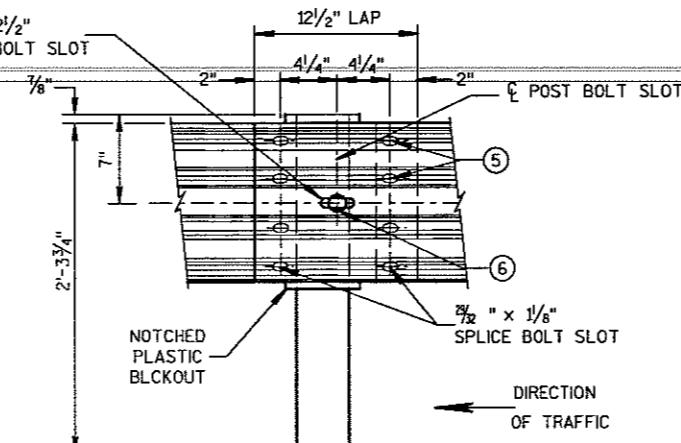
FRONT VIEW



FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL



PLAN VIEW
BEAM LAPPING DETAIL

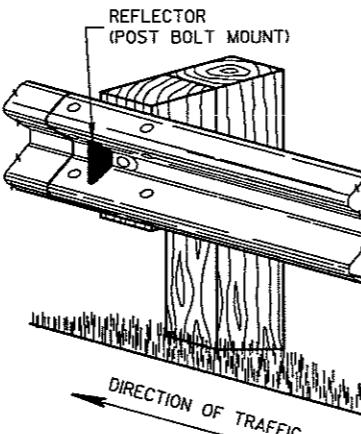


FRONT VIEW
BEAM SPLICE AT STEEL POST

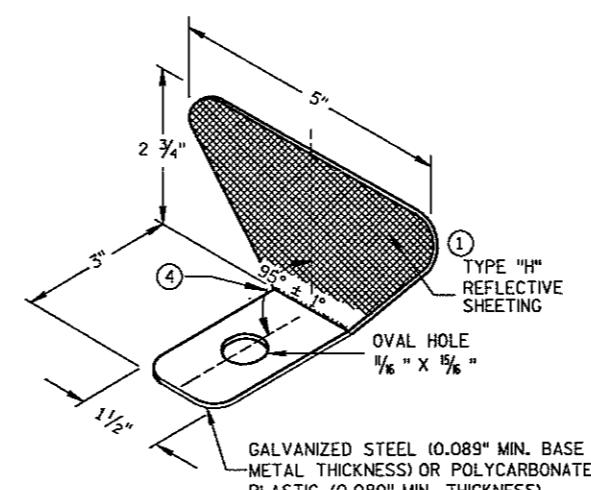
TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

REFLECTOR SPACING⁽²⁾

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 (3) 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 (4) 2	3



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

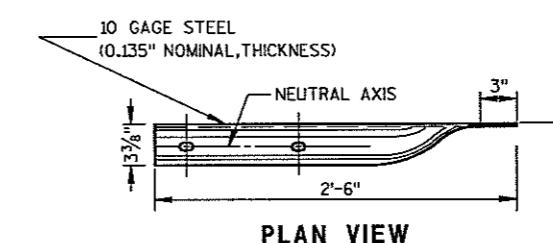


W BEAM TERMINAL CONNECTOR

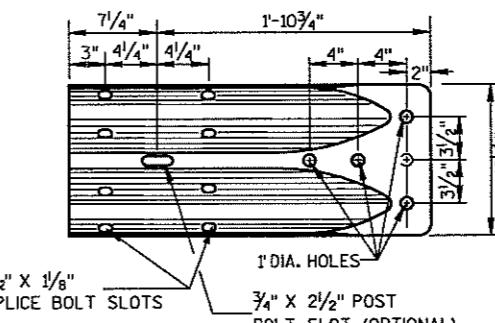
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

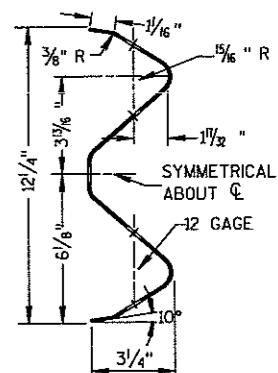
- ① PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
- ② DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- ③ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- ④ PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
- ⑤ 8 - $5/8"$ ϕ X $1\frac{1}{4}$ " BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
- ⑥ $5/8"$ ϕ X $1\frac{1}{2}$ " BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.



PLAN VIEW



FRONT VIEW



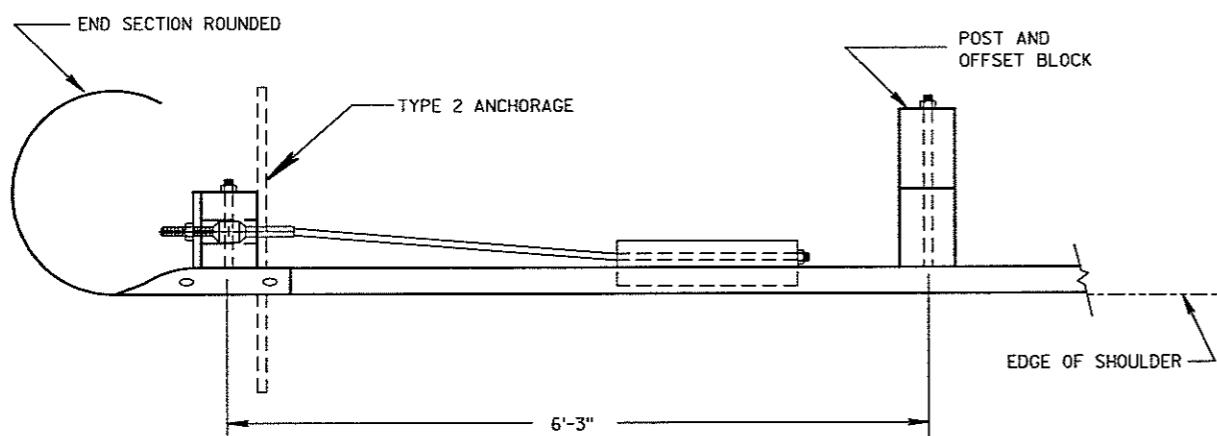
SECTION THRU W BEAM

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

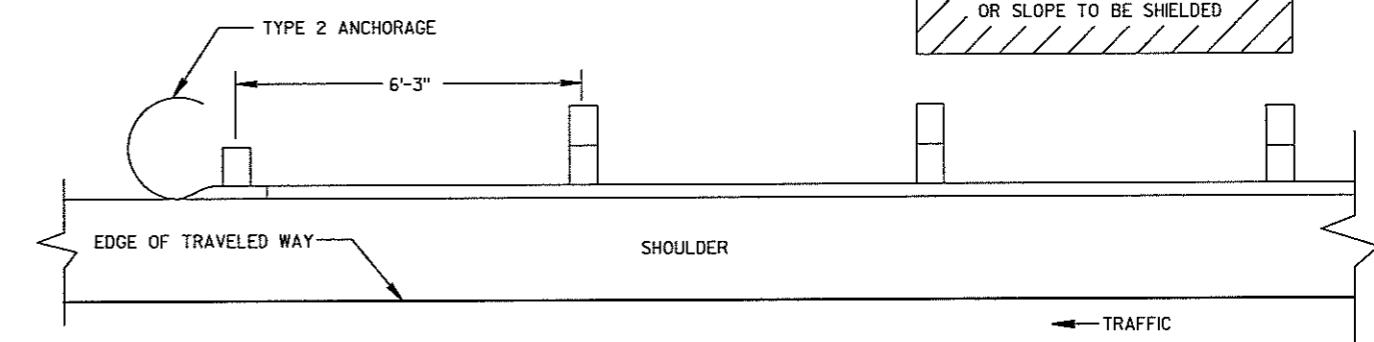
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE CHIEF ROADWAY DEVELOPMENT ENG

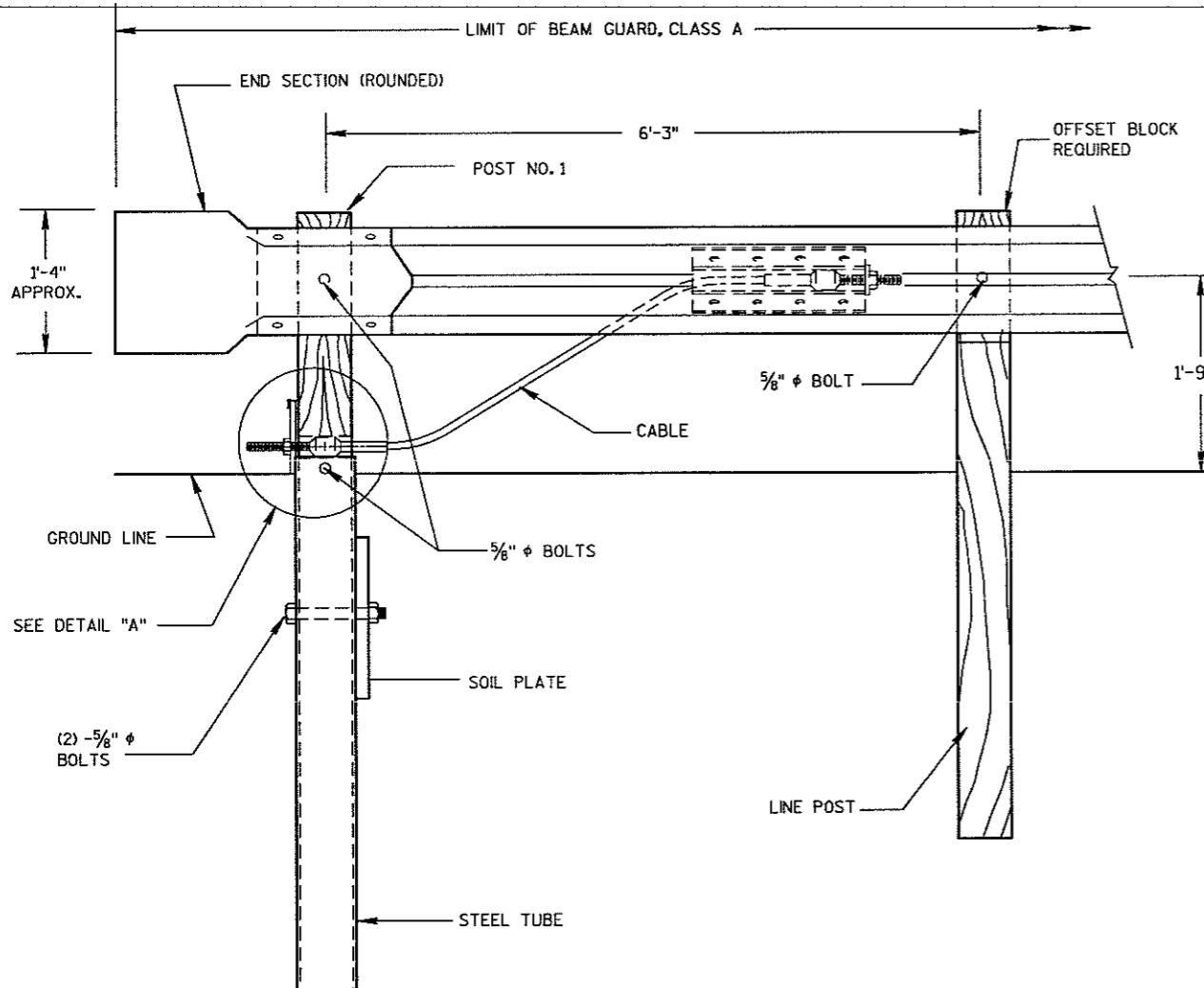


PLAN VIEW

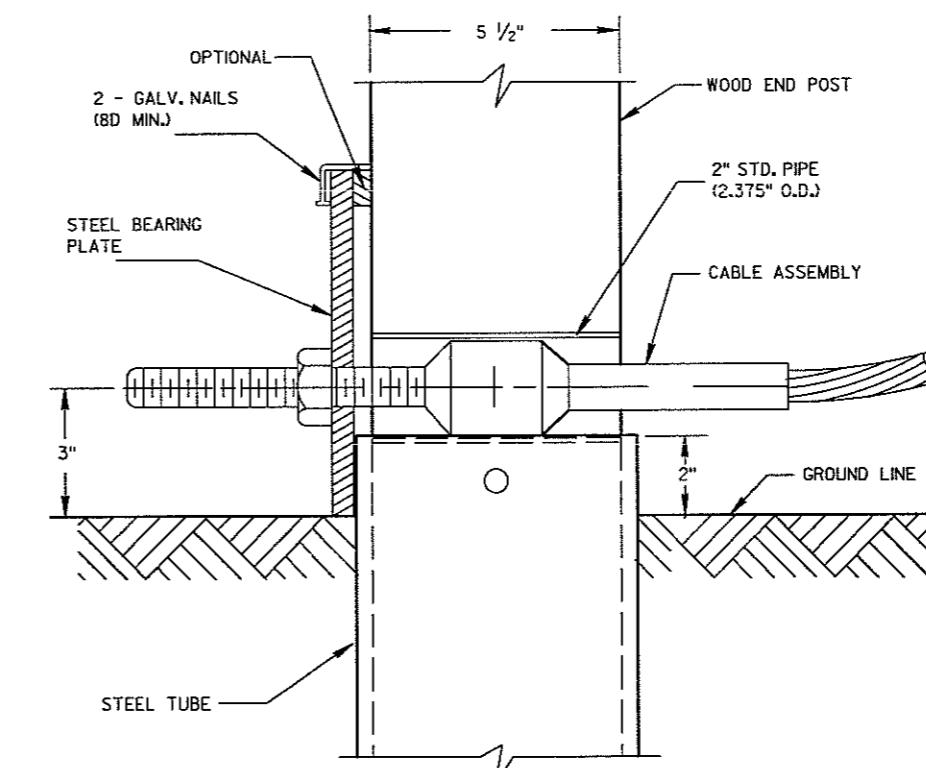


PLAN VIEW

**BEAM GUARD WITH TYPE 2 ANCHORAGE
EXIT END - ONE WAY TRAFFIC**

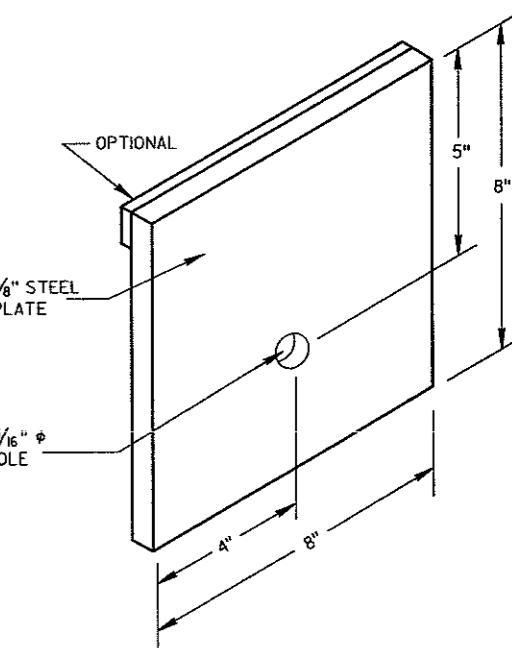


FRONT VIEW
END TREATMENT WITH TYPE 2 ANCHORAGE
(USE ON ONE-WAY ROADWAYS ONLY - DEPARTING END)



DETAIL "A"

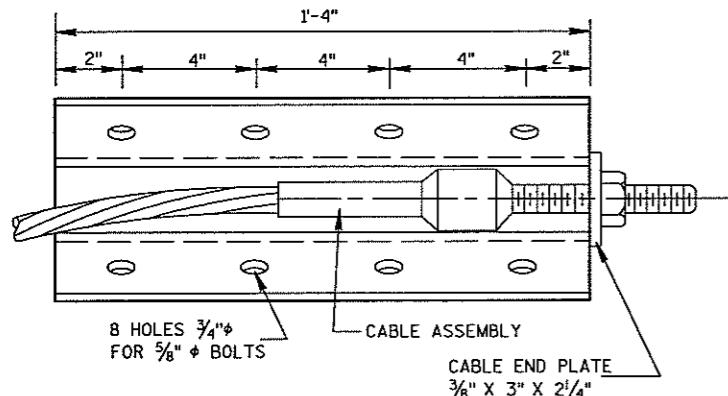
POST NO. 1



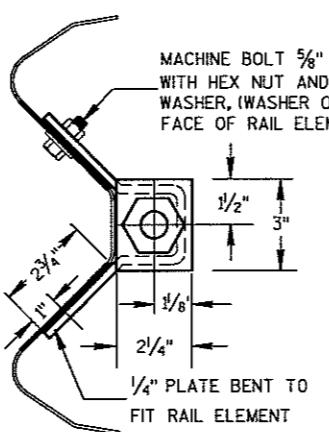
STEEL BEARING PLATE

CLASS 'A' STEEL PLATE BEAM GUARD
END TREATMENT WITH ANCHORAGE
TYPE 2

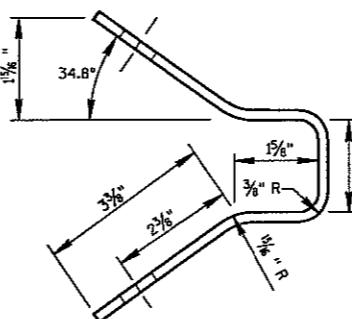
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



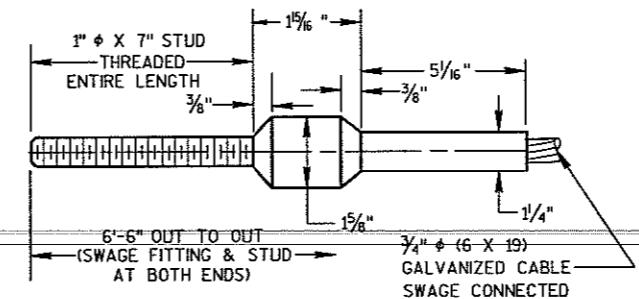
FRONT VIEW



END VIEW

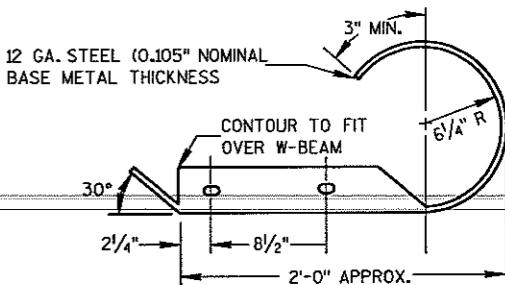


END VIEW OF BRACKET

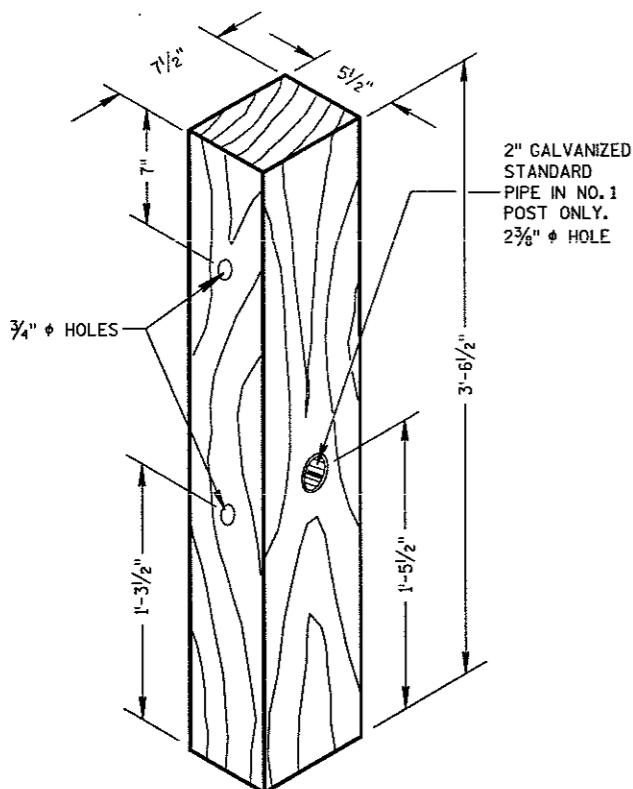


CABLE ASSEMBLY

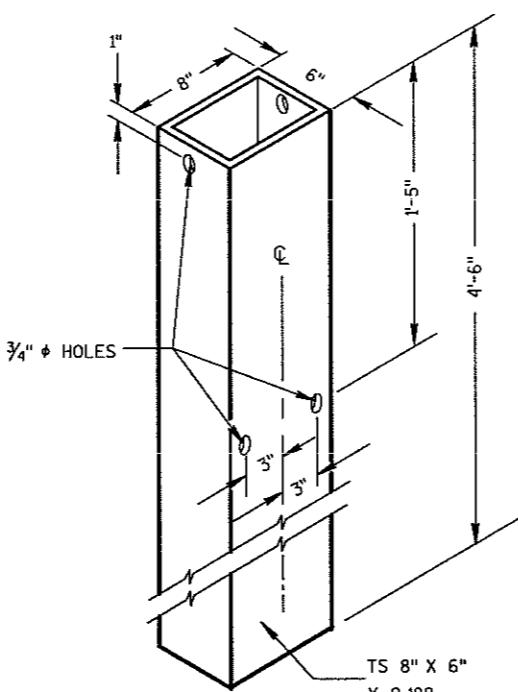
CABLE, SWAGE FITTING, STUD AND NUT SHALL DEVELOP
A MINIMUM BREAKING STRENGTH OF 40,000 LB
(TIGHTEN UNTIL TAUT)



PLAN VIEW

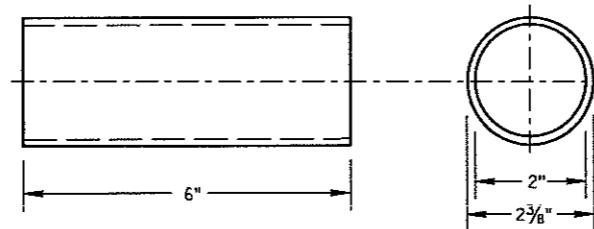


WOOD BREAKAWAY POST



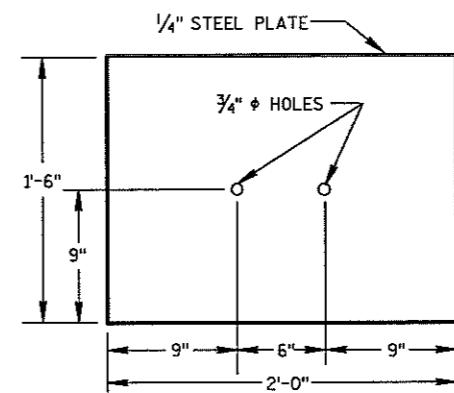
STEEL TUBE

STEEL TUBE SHALL CONFORM TO
REQUIREMENTS OF ASTM A500



BREAKAWAY TERMINAL POST SLEEVE

GALVANIZED STANDARD STRENGTH STEEL PIPE, ASTM 53 GRADE "B"



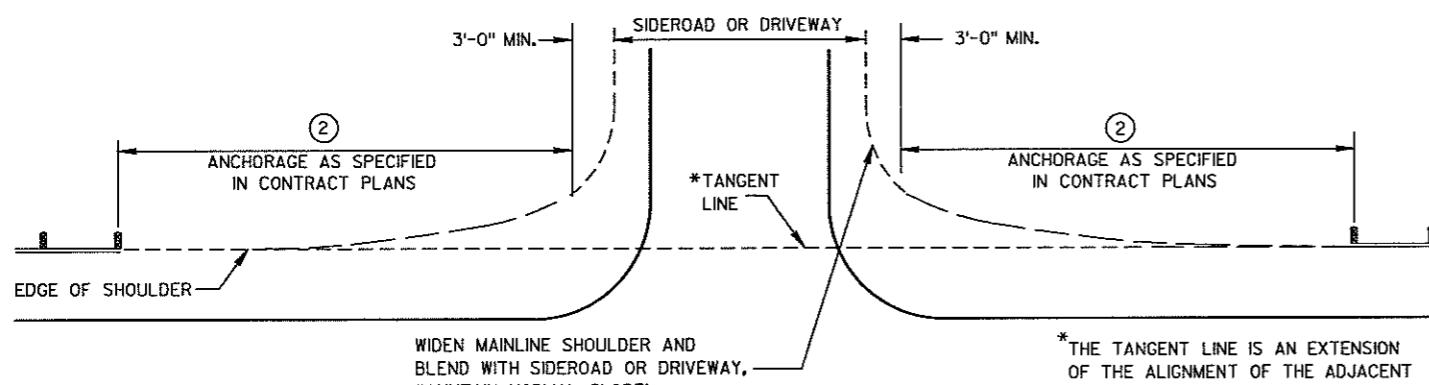
SOIL PLATE

CLASS "A" STEEL PLATE BEAM GUARANTEE
END TREATMENT WITH ANCHORAGE
TYPE 2

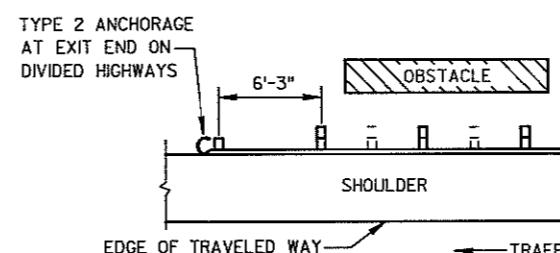
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

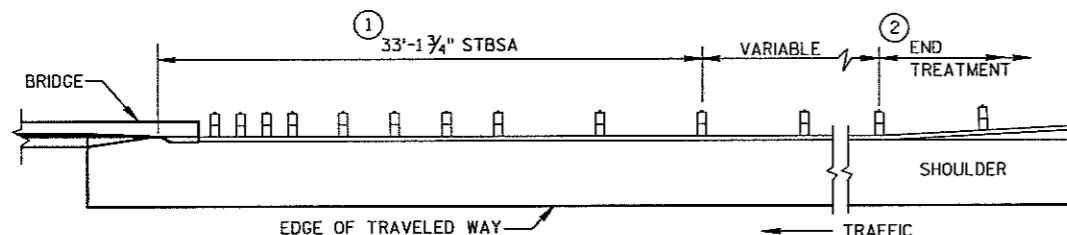
CHIEF ROADWAY DEVELOPMENT ENGINEER



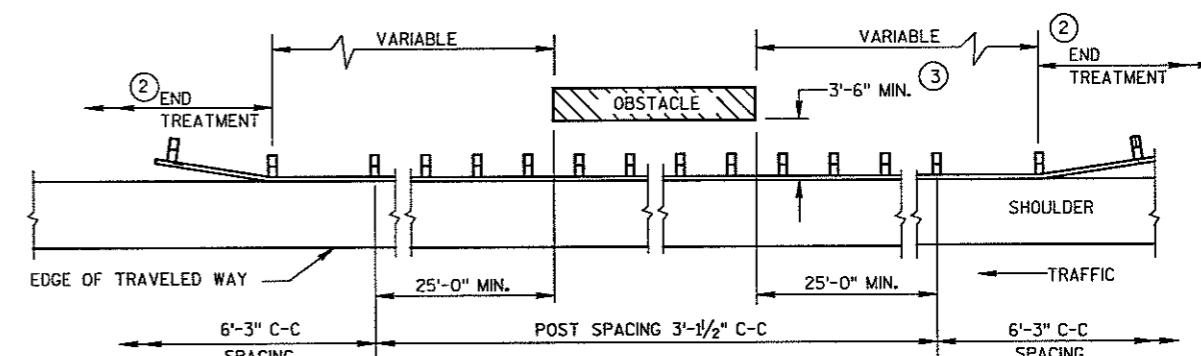
BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES
EXIT END - ONE WAY TRAFFIC

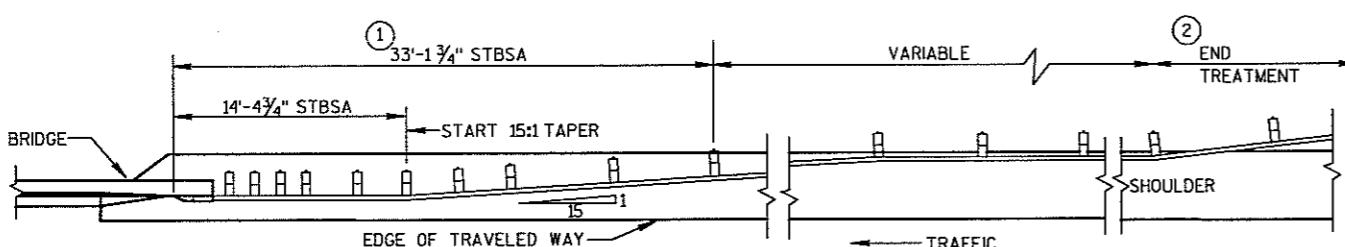


BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")



BEAM GUARD AT NARROW BRIDGES
(FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

GENERAL NOTES

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

W6 X 9 OR W6 X 8.5 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

- ① USE STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA).
- ② USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

③ DESIGN DEFLECTION OF W-BEAM BARRIER SYSTEM

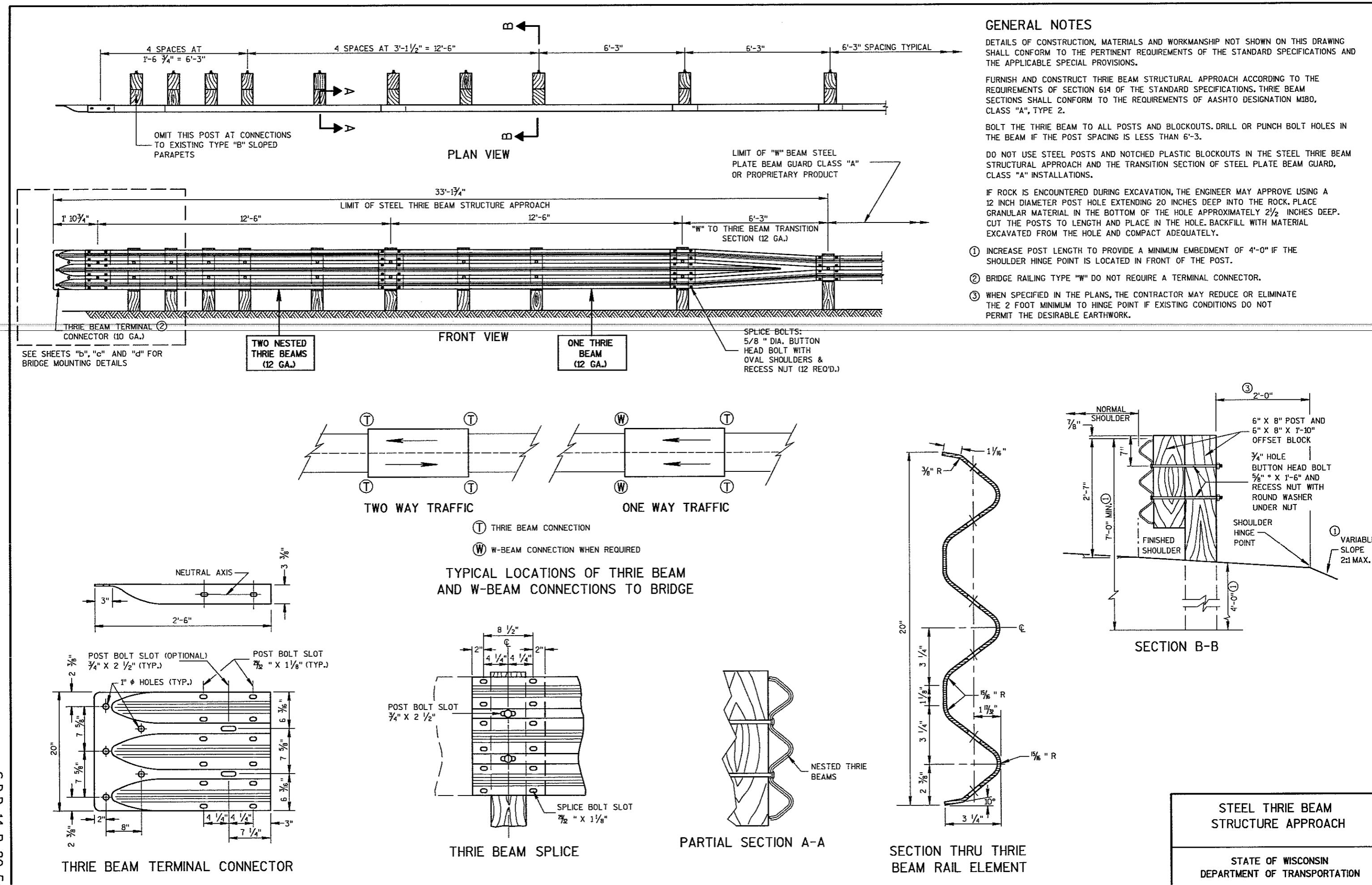
LATERAL DISTANCE TO FIXED OBJECT	POST SPACING
3'-6" TO 4'-6"	3' - 1 1/2"
4'-6" AND OVER	6' - 3"

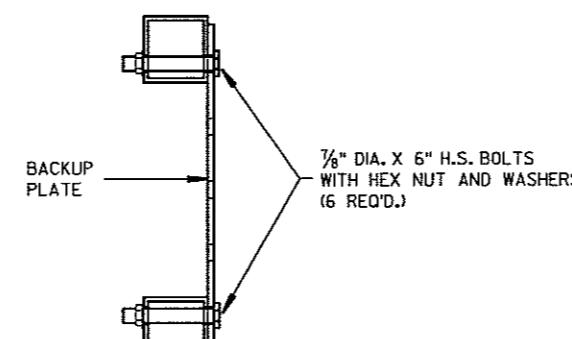
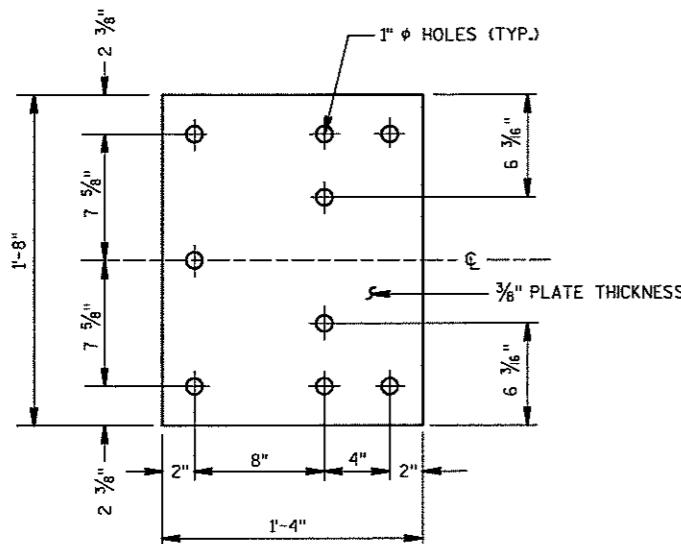
STEEL PLATE BEAM GUARD,
CLASS "A"
(AT BRIDGES, OBSTACLES
AND SIDEROADS/DRIVEWAYS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

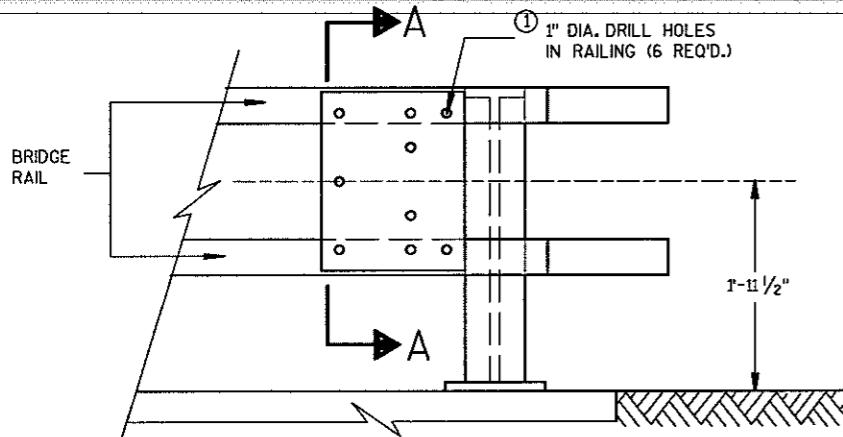
DATE CHIEF ROADWAY DEVELOPMENT ENGINE
FHWA



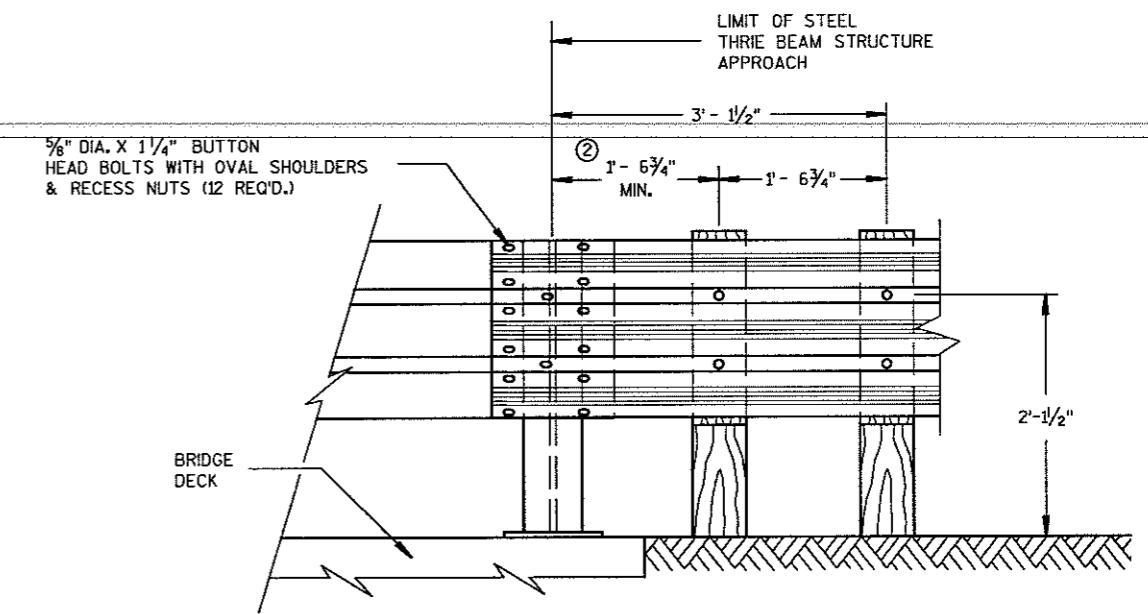


SECTION A-A

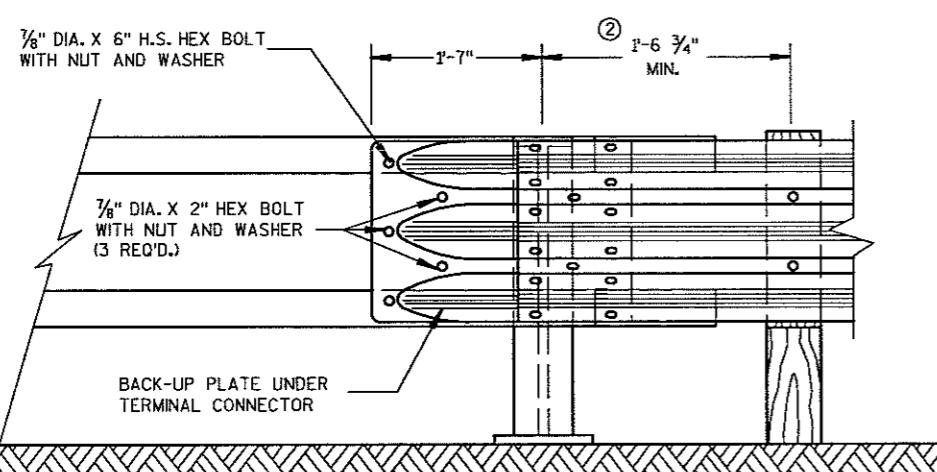
BACK-UP PLATE DETAIL



BACK-UP PLATE MOUNTING
ONTO BRIDGE RAILING

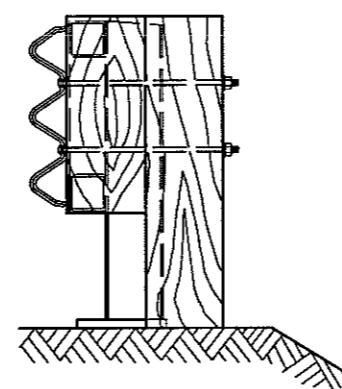


FRONT VIEW
TRIBEAM CONNECTION TO
STEEL RAILING TYPE "W"



FRONT VIEW

TRIBEAM CONNECTION TO
TUBULAR RAILING TYPE "F"



END VIEW

STEEL TRIBEAM STRUCTURE
APPROACH, CONNECTION TO BRIDGE
RAILING TYPES "F" AND "W"

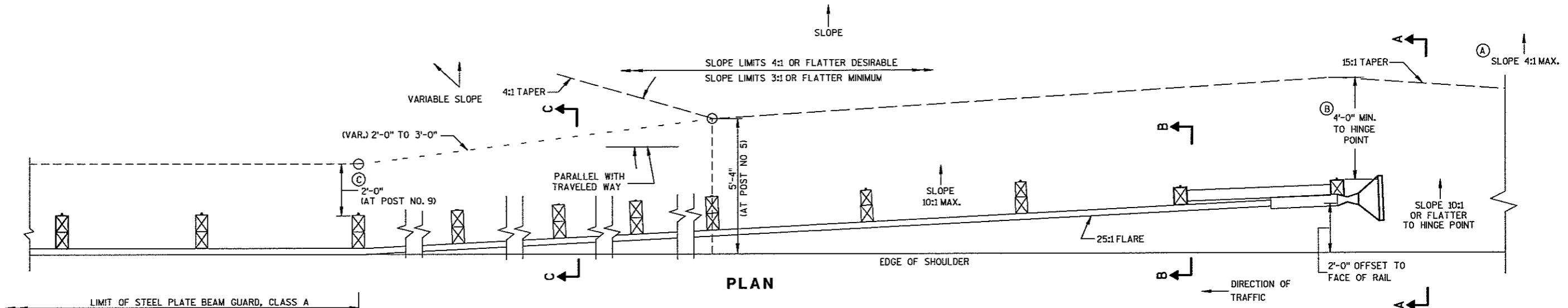
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE

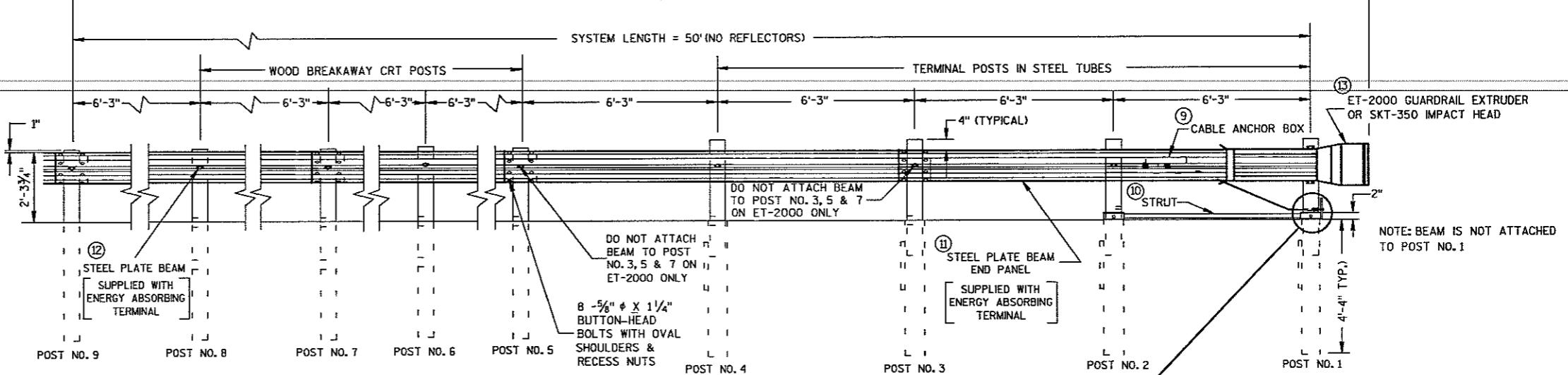
CHIEF ROADWAY DEVELOPMENT ENGINE

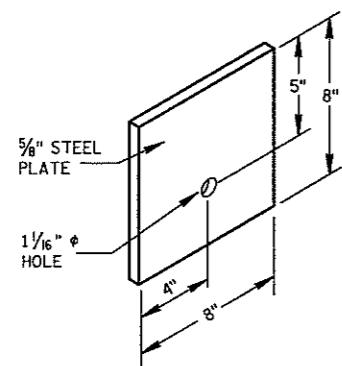
FHWA



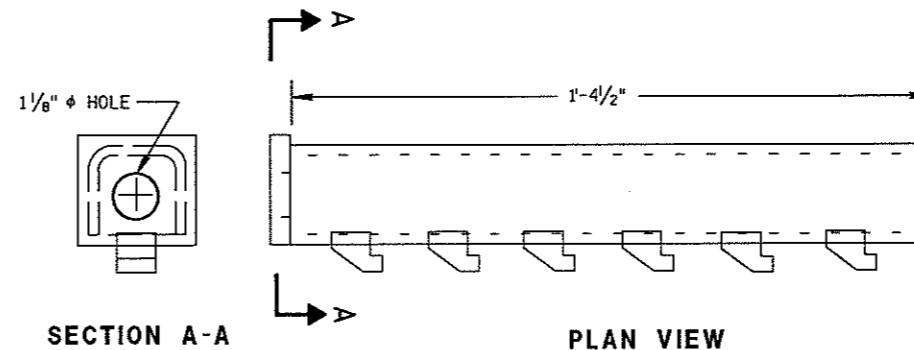
BILL OF MATERIALS

NOTE NO.	QTY.	DESCRIPTION
①	4	WOOD BREAKAWAY TERMINAL POST: 5 1/2" X 7 1/2" X 3'-9"
②	4	STEEL TUBE: TS 8" X 6" X 0.188", 4'-6" LONG
③	4	SOIL PLATE: 2'-0" X 1'-6" X 1/4"
④	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	6	WOOD OFFSET BLOCKS: 6" X 8" X 1'-2"
⑥	1	PIPE SLEEVE: 2" X 5 1/2" STANDARD PIPE
⑦	1	BEARING PLATE
⑧	1	BCT CABLE ASSEMBLY
⑨	1	CABLE ANCHOR BOX
⑩	1	STRUT & YOKE
⑪	1	STEEL PLATE BEAM, END PANEL 12 GA. 13'-6 1/2" LONG FOR SKT-350 & ET-2000
⑫	3	STEEL PLATE BEAM: 12 GA. 13'-6 1/2"
⑬	1	ET-2000 GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
⑭	1	REFLECTIVE SHEETING: 18" X 18"

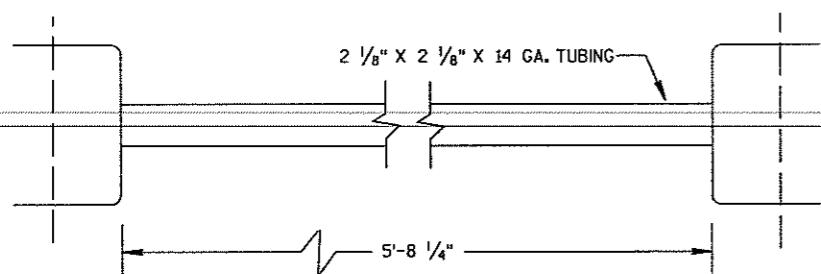




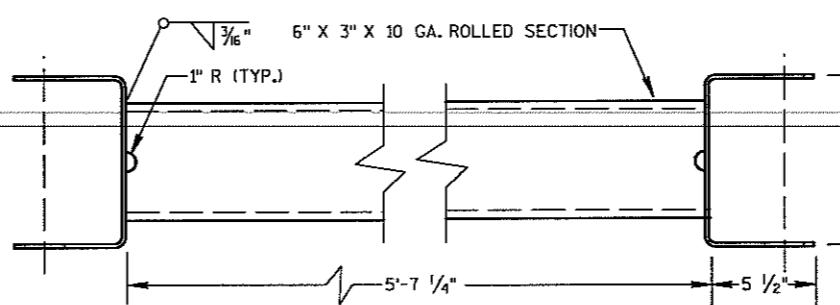
STEEL BEARING PLATE (SKT-350)



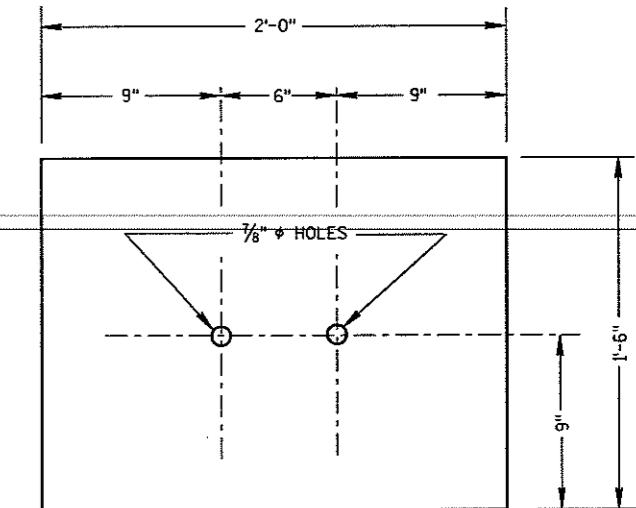
CABLE ANCHOR BOX (ET-2000)



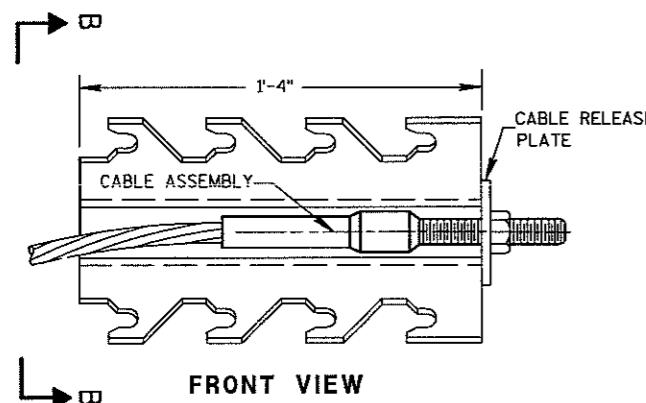
STRUT DETAIL (SKT-350)



STRUT DETAIL (ET-2000)

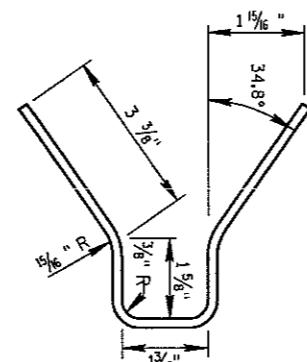


SOIL PLATE (SKT-350 & ET-2000)

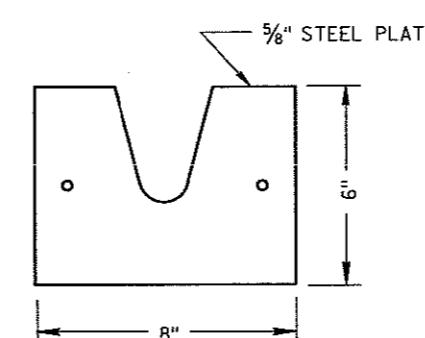


CABLE ANCHOR BOX (SKT-350)

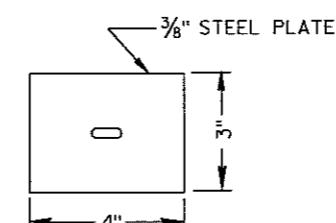
(SKT-350)



SECTION B-B



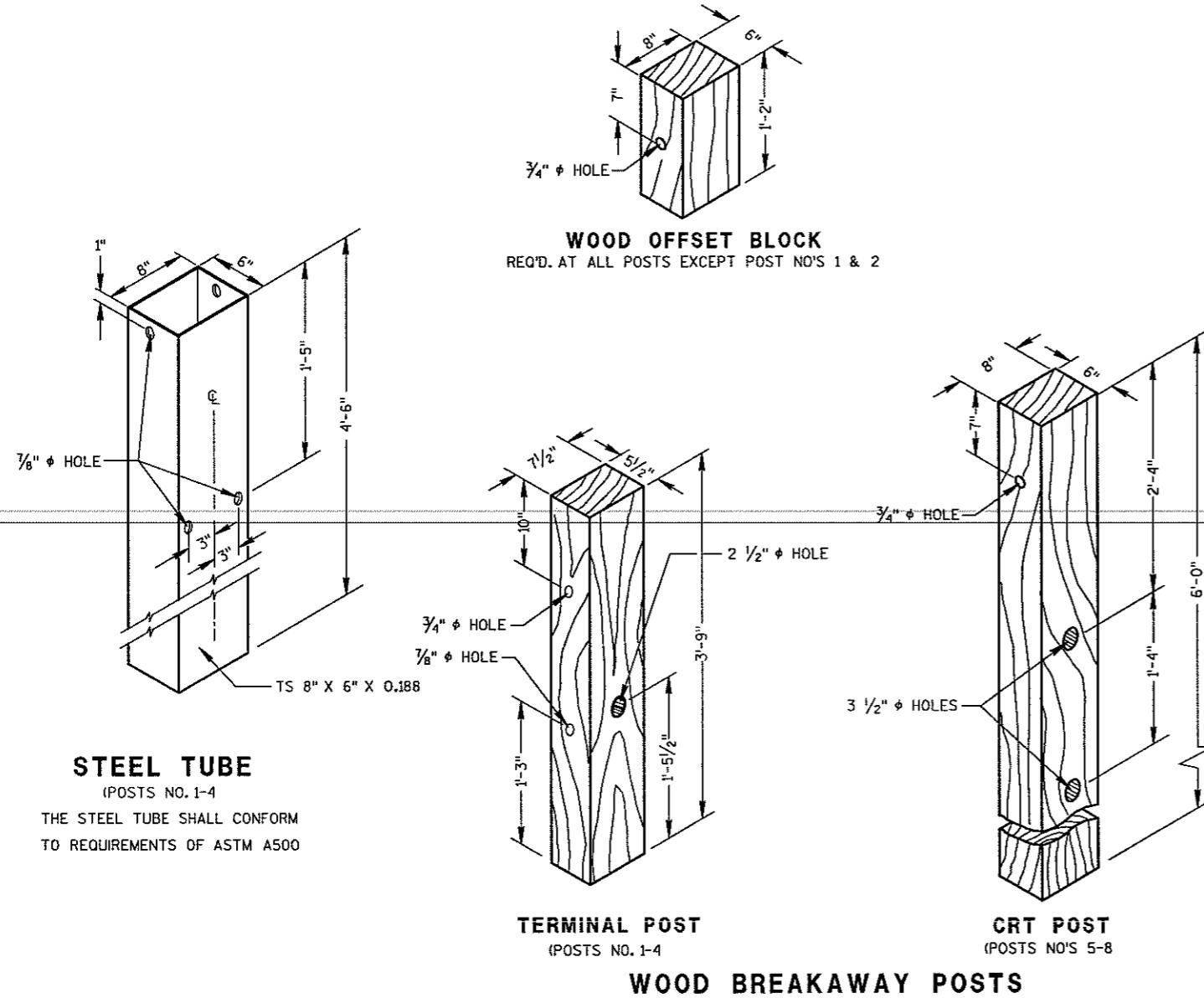
STEEL BEARING PLATE (ET-2000)



BEARING PLATE WASHER ET-2000)
(ET-2000)

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



GENERAL NOTES

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

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL SHALL BE EITHER THE EXTRUDER TERMINAL (ET-2000), OR THE SEQUENTIAL KINKING TERMINAL (SKT-350). THE CONTRACTOR SHALL NOT INTERMIX PROPRIETARY PRODUCT MATERIALS.

THE "ET-2000" IS AVAILABLE FROM SYRO, INC., 2524 N. STEMMONS FREEWAY, DALLAS TEXAS 75207. TELEPHONE 1-800-835-6086 OR 1-800-644-7976

THE "SKT-350" IS AVAILABLE FROM ROAD SYSTEMS, INC., 7631 NEW CASTLE DRIVE, FRANKFORT, ILLINOIS 60423. TELEPHONE (815) 464-5917

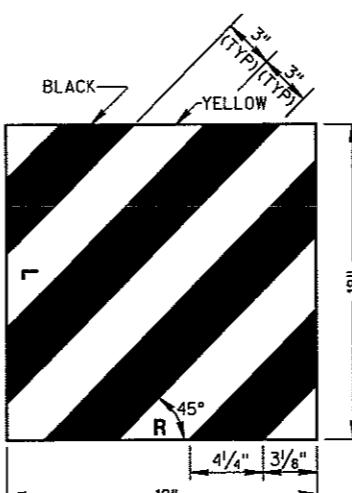
THE ET-2000, AND SKT-350 END TERMINALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, WHICH SHALL INCLUDE HARDWARE, STEEL PLATE BEAM GUARD, POSTS, REFLECTIVE SHEETING AND INSTALLATION AS SHOWN.

REFLECTIVE SHEETING - SHALL CONFORM TO ASTM SPECIFICATION D4956-93b.

REFLECTIVE SHEETING TYPE III, BACKING CLASS 4, PERFORMANCE REQUIREMENT TYPE III. THE MESSAGE AND LINES SHALL BE APPLIED TO THE SIGNS BY THE SILK SCREEN STENCIL PROCESS USING A BLACK OR DARK STENCIL PASTE AS A TYPE APPROVED BY THE MANUFACTURER OF THE FACE MATERIAL TO WHICH IT IS TO BE APPLIED. MESSAGE UNITS CUT FROM NONREFLECTIVE SHEETING AND APPLIED TO THE SIGN FACE ARE NOT ACCEPTABLE. AFTER THE APPROACH END OF THE STEEL PLATE BEAM GUARD INSTALLATION IS COMPLETE, CLEAN THE AREA WHERE THE REFLECTIVE SHEETING WILL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. ONCE CLEAN, APPLY REFLECTIVE SHEETING DIRECTLY TO THE STEEL PLATE BEAM GUARD AS SHOWN. THE CONTRACTOR SHALL TURN OVER THE MANUFACTURER'S WARRANTY FOR THE REFLECTIVE SHEETING TO THE DEPARTMENT FOR POTENTIAL DEALING WITH THE MANUFACTURER. PAYMENT OF REFLECTIVE SHEETING IS INCIDENTAL TO STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL.

WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPAKTED MATERIAL EXCAVATED FROM THE HOLE.



REFLECTIVE SHEETING DETAIL

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE
FHWA

CHIEF ROADWAY DEVELOPMENT ENGINEER

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS AND CONTRACT.

SIGN AND BARRICADE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER. ALL "STOP" OR OTHER REGULATORY SIGNS ON THE SIDE ROADS SHALL NOT BE DISTURBED, EXCEPT WHEN NECESSARY TO COMPLETE THE WORK. THE SIGNS MUST THEN BE IMMEDIATELY REESTABLISHED.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL FOR FULL ROAD CLOSURES. TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE ROAD CLOSED SIGN (R11-2), ROAD CLOSED ____ MILES AHEAD SIGN (R11-3) AND THE ROAD CLOSED TO THRU TRAFFIC SIGN (R11-4) SHALL BE ATTACHED ONLY TO THE TOP RAIL OF THE TYPE III BARRICADE. THE SIGNS SHALL NOT COVER MIDDLE RAIL.

TYPE "H" REFLECTIVE SHEETING SHALL BE USED ON ALL BARRICADES, TYPE I, II AND III, AND ON ALL R11-2, R11-3 AND R11-4 SIGNS.

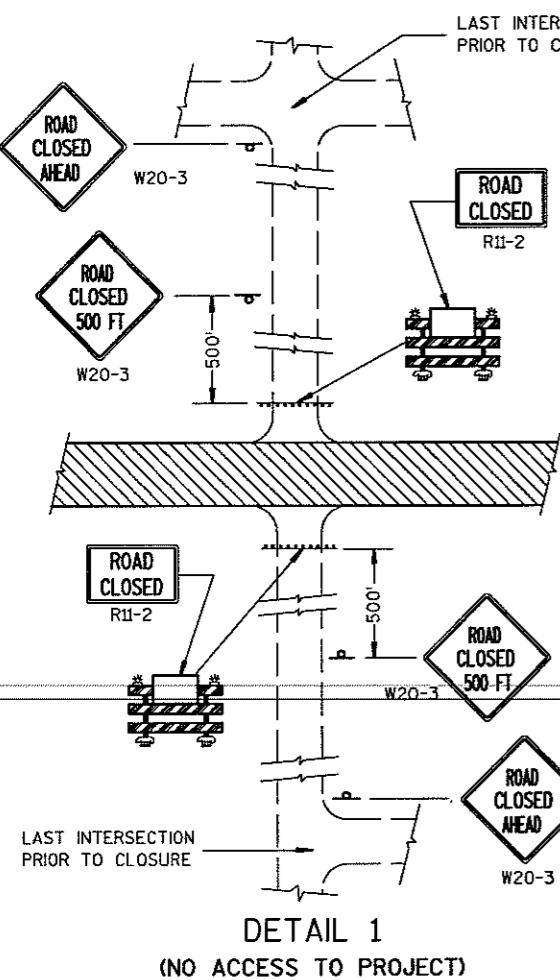
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2, "ROAD CLOSED" SIGNS SHALL BE 48" X 30".

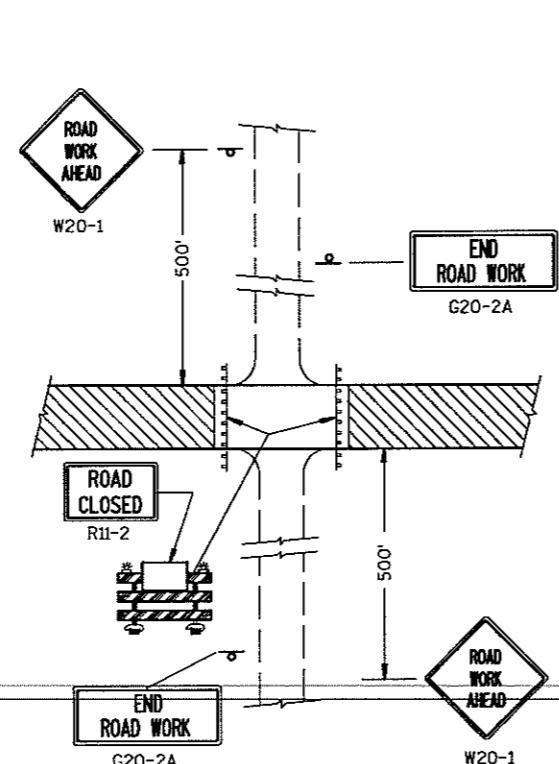
R11-3, AND R11-4 SIGNS SHALL BE 60" X 30".

G20-2A SIGNS SHALL BE 48" X 24".

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND AT LEAST ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN.
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- ③ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT. SEE LANE CLOSURE BARRICADE DETAIL.
- ④ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT. SEE ROAD CLOSURE BARRICADE DETAIL.
- ⑤ ONE-WAY LIGHTS SHALL BE PROVIDED ON ALL ADVANCE WARNING SIGNS. THE UNIT SHALL BE POSITIONED SUCH THAT THE LIGHT SOURCE IS OUTSIDE THE SIGN FACE AND AT THE TOP OF THE SIGN.

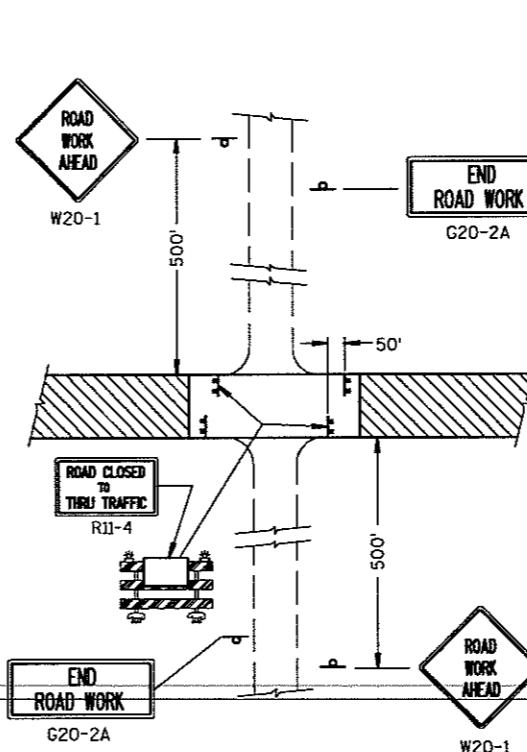


DETAIL 1
(NO ACCESS TO PROJECT)



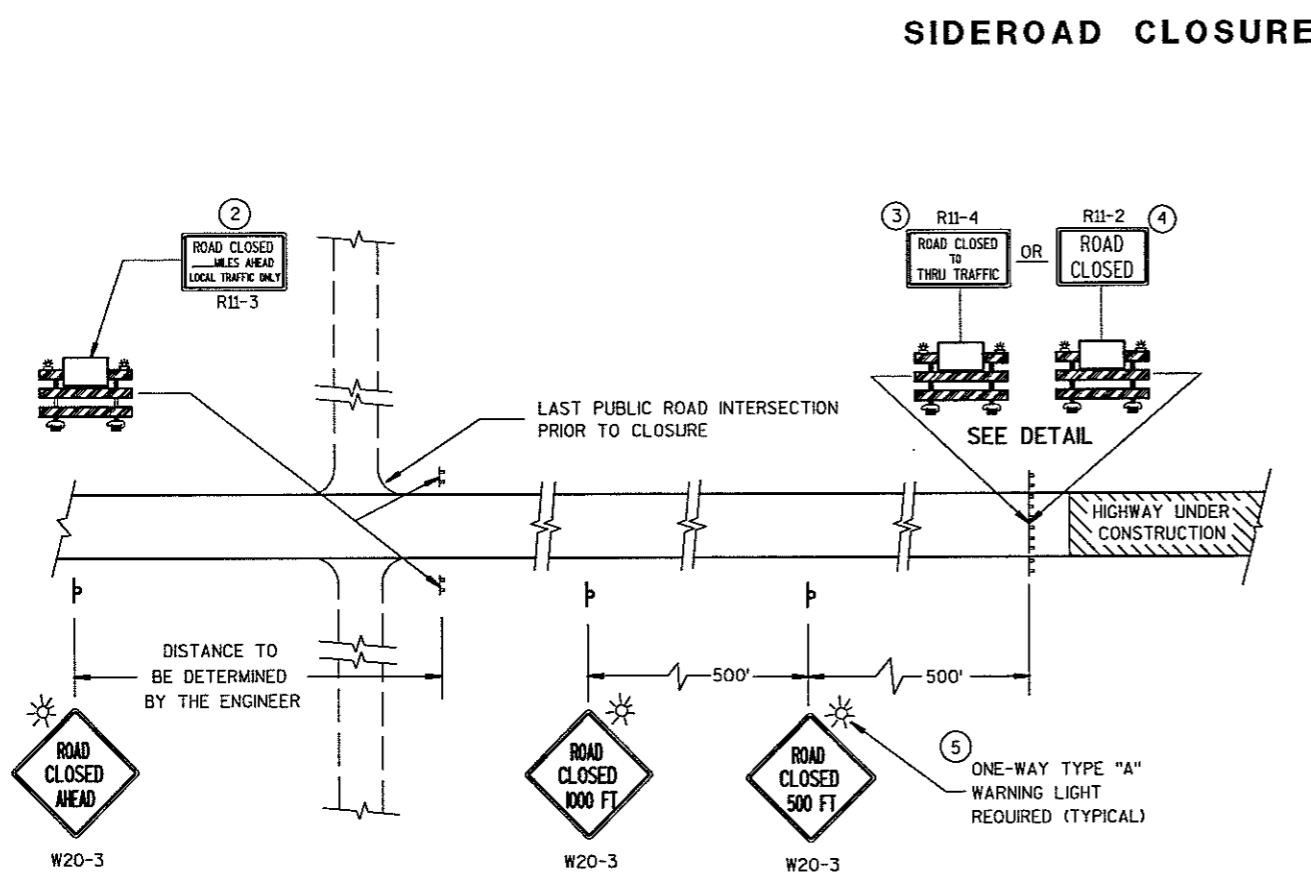
DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).

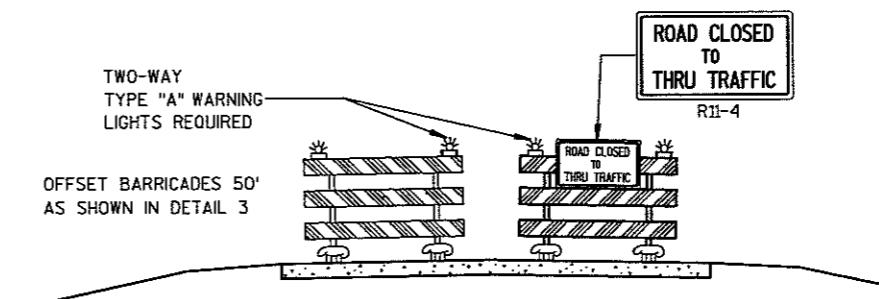
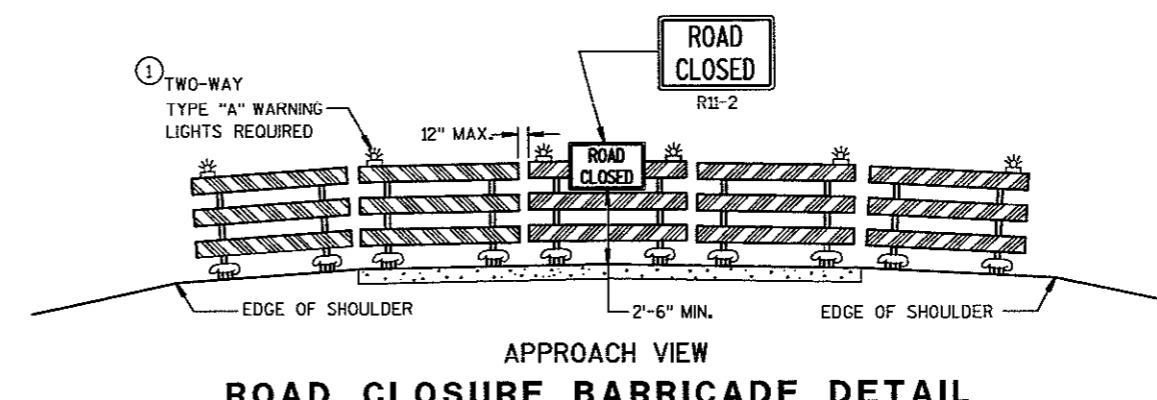


DETAIL 3

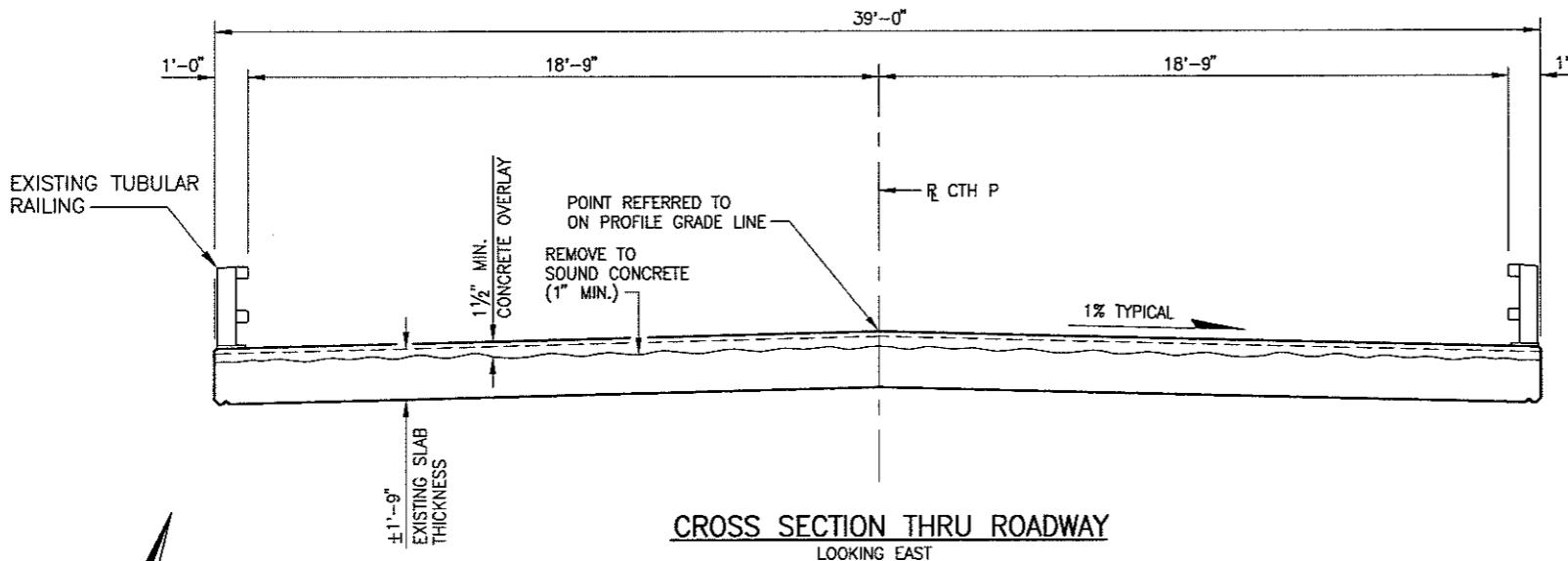
(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR,
LOCAL BUSINESS AND RESIDENT ACCESS).



MAINLINE CLOSURE



BARRICADES AND SIGNS
FOR
ROAD CLOSURES
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
APPROVED
DATE DIRECTOR, OFFICE OF TRAFFIC
FHWA



CROSS SECTION THRU ROADWAY
LOOKING EAST

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON FIELD MEASUREMENTS.

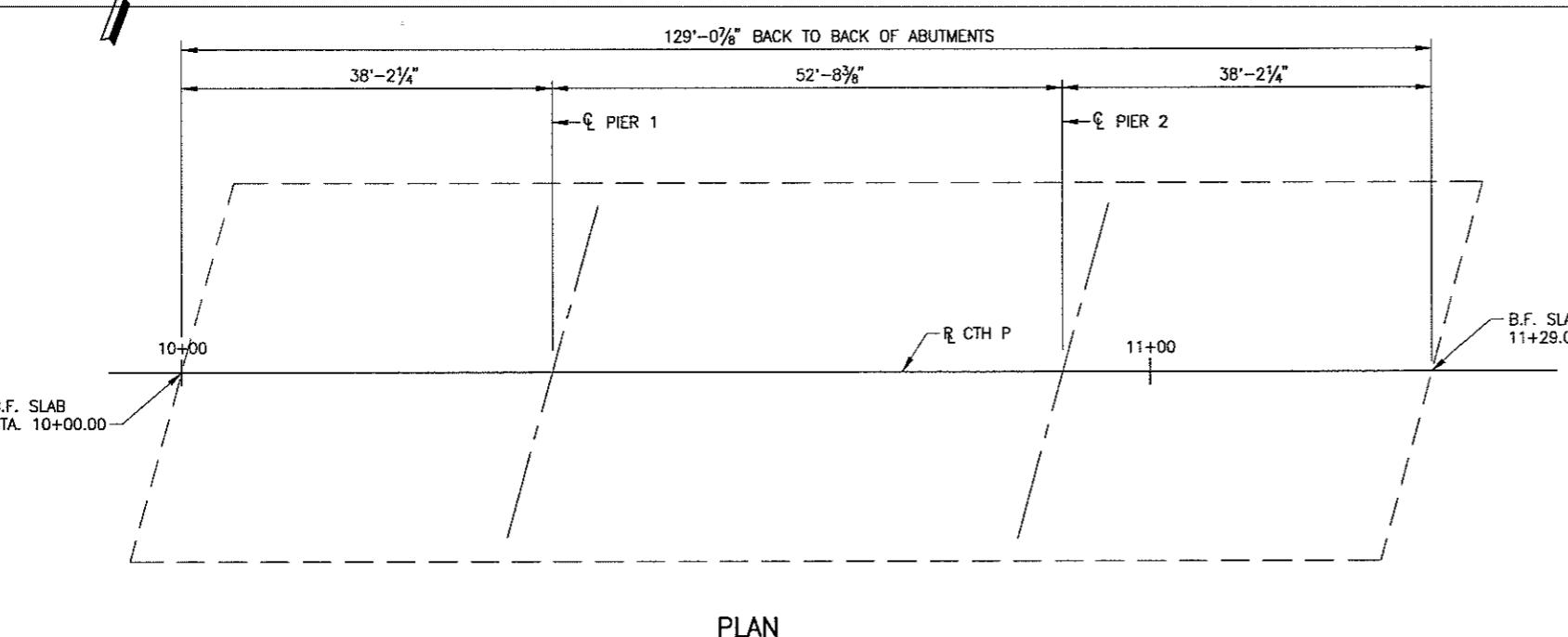
THE CONCRETE OVERLAY THICKNESS SHALL BE $1\frac{1}{2}$ " MINIMUM AND $3\frac{1}{2}$ " MAXIMUM. ADJUST 1% CROSS SLOPE TO MAINTAIN THIS RANGE OF DEPTH IF NECESSARY.

ALL CONCRETE REMOVAL NOT COVERED BY CONCRETE OVERLAY
SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT.

DESIGN DATA

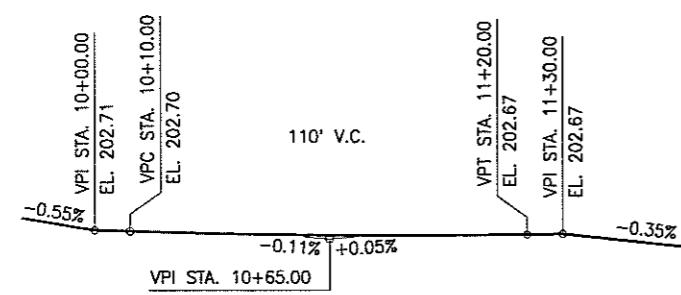
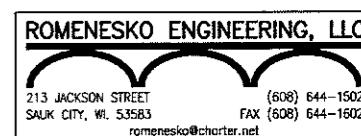
ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SUPERSTRUCTURE $f'_c = 4,000$ P.S.I.



TOTAL ESTIMATED QUANTITIES

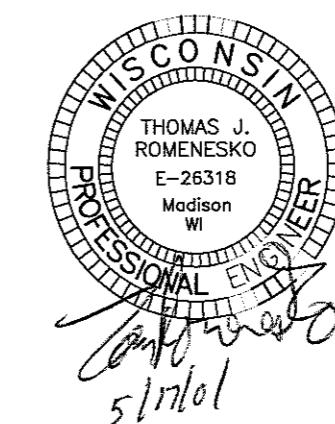
BID ITEMS	UNIT	TOTAL
CONCRETE MASONRY, OVERLAY, DECKS	C.Y.	32
CLEANING, DECKS	S.Y.	560
PREPARATION, DECKS, TYPE 1	S.Y.	125
PREPARATION, DECKS, TYPE 2	S.Y.	42
PROTECTIVE SURFACE TREATMENT	S.Y.	560
CONCRETE SURFACE REPAIR	S.F.	500
PAINTING, EPOXY SYSTEM, STRUCTURE P-44-927	L.S.	1



PROFILE GRADE LINE

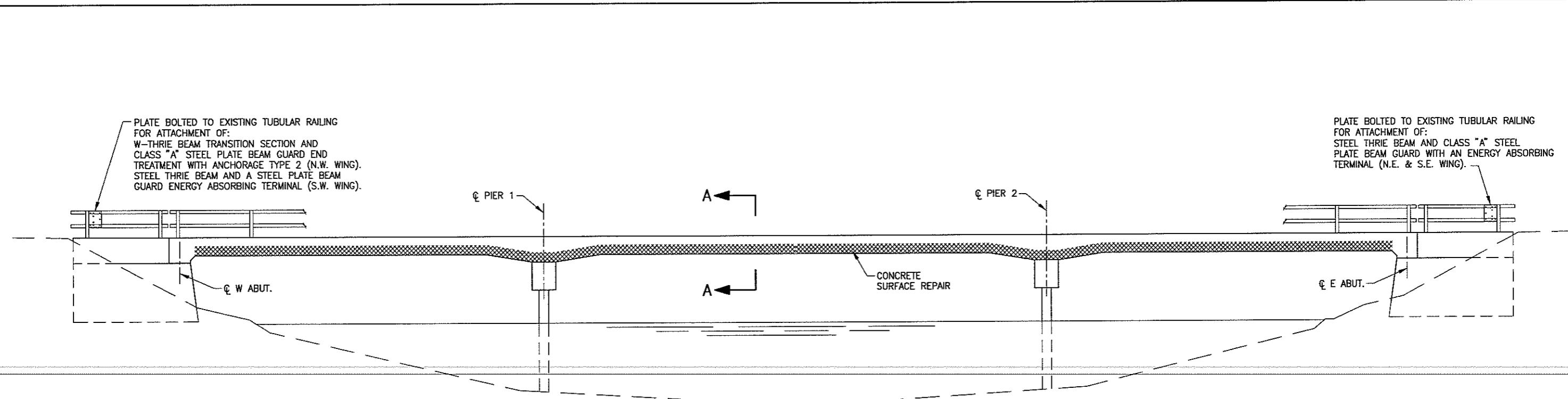
BENCH MARKS

NO	STA	DESCRIPTION	ELEV
1	8+82	RR SPIKE IN 18" TREE 54' RT.	200.0
2	9+85	CHISELED "T" TOP OF CURB @ NW WINGWALL	202.3
3	13+38	RR SPIKE IN ROADWAY 10' RT.	202.2

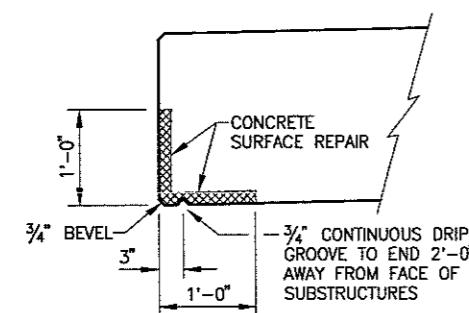


No.	Date.	Revision			By
Designed By	TR	Design Ck'd.	VR	Drawn By	TL
GENERAL PLAN					Plans Checked TR
					SHEET 1 OF 2

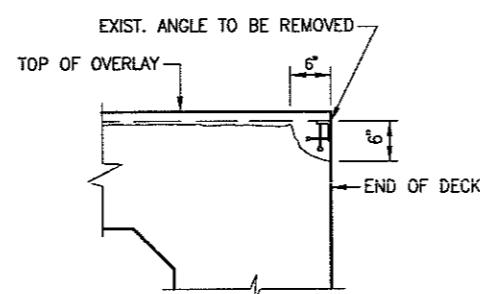
GENERAL PLAN



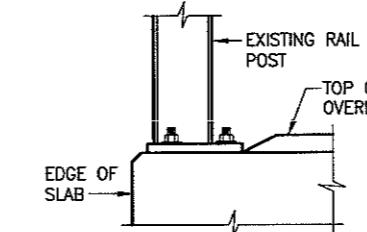
ELEVATION



PARTIAL VIEW A-A
(TYPICAL EACH SIDE OF DECK)



SECTION AT END OF SLAB
CONCRETE OVERLAY



SECTION THROUGH RAILING

No.	Date.	Revision	B
Designed By	Design Ck'd.	Drawn By	Plans Checked
TR	VR	TL	TL
DETAILS			SHEET 2 OF 2