

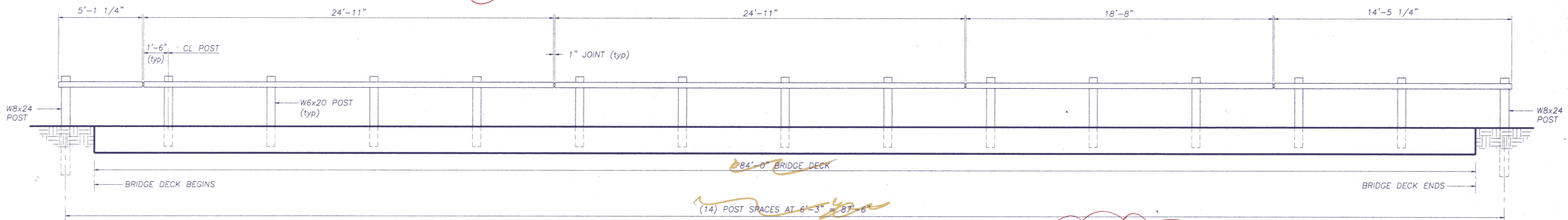
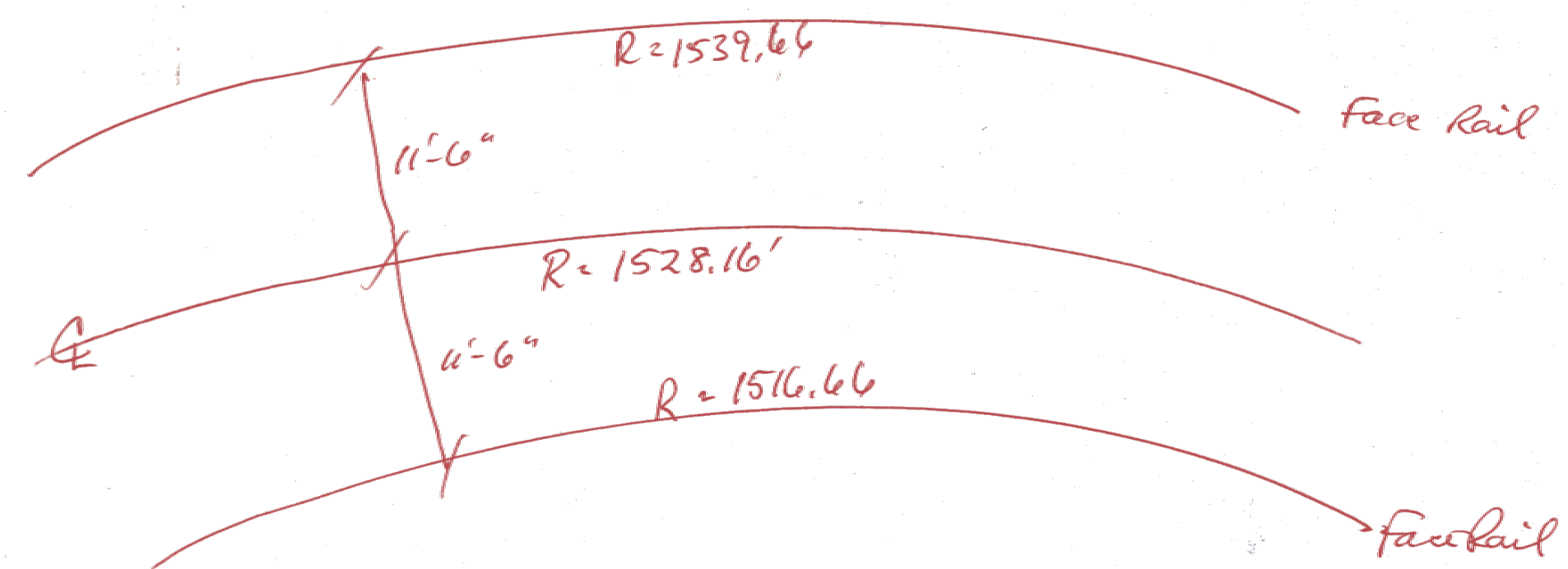
$$R = 1576.66$$

$$b = r - \frac{1}{2} \sqrt{4r^2 - c^2}$$

$$= 1576.66 - \frac{1}{2} \sqrt{4(1576.66)^2 - 24^2}$$

$$= 0.047' \approx \frac{1}{2}''$$

TUBES should be bent on radii



PAY LIMIT FOR ITEM 525.44 - BRIDGE RAILING HEAVY DUTY STEEL BEAM \ FASCIA MOUNTED \ STEEL TUBING

ELEVATION - LOOKING AT RAILING FROM CL OF ROADWAY
TWO SIDES - SIMILAR

NOTE: Tube should be bent to parallel design centerline.

RECEIVED
CHK'D BY *BM* OK'D BY
JUN 12 1998
RESUBMIT BY *Jamie...* APPROVED DATE *6/19/98*

NOTE: STEEL BEAM GUARD RAIL & BLOCKOUTS NOT SHOWN

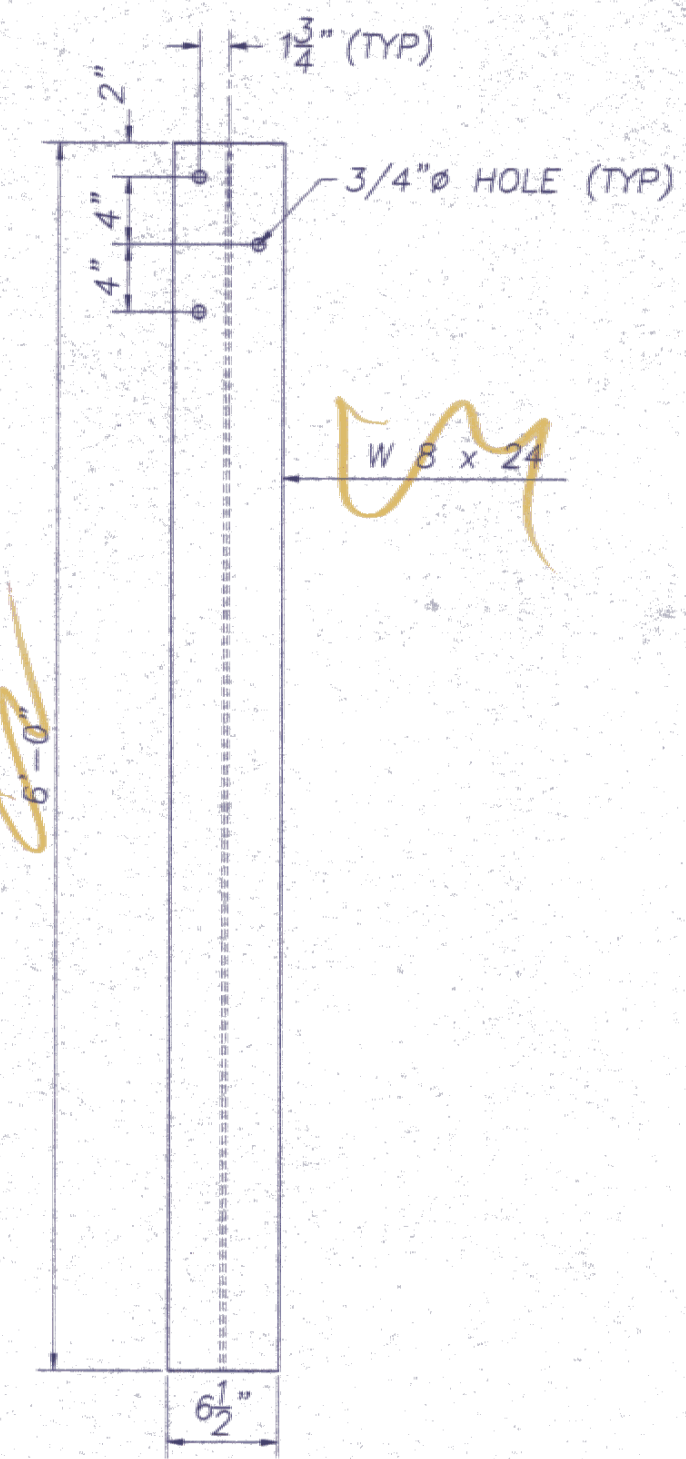
REVISIONS		
No.	Remarks	Date

HIGHWAY SAFETY CORP.
Glastonbury, Connecticut

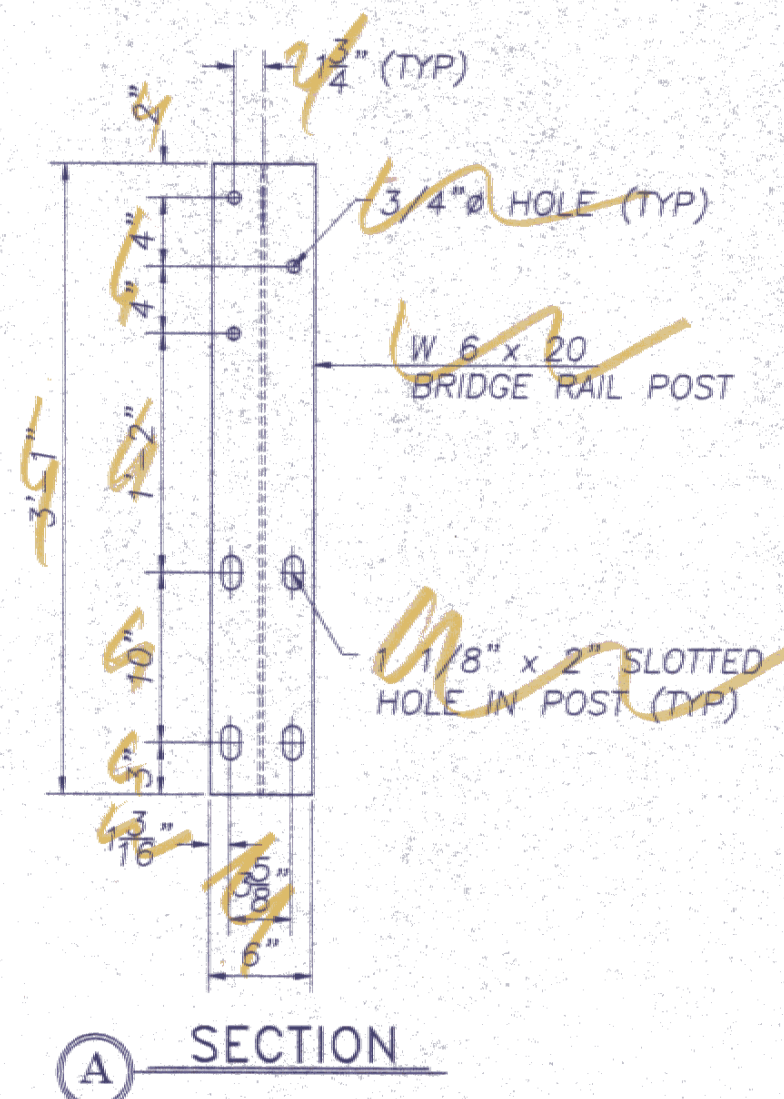
ITEM 525.44 BRIDGE RAILING - HDSB
ESSEX
VT 128 OVER BROWNS RIVER

98510 Bl-3
GENERAL CONTRACTOR
SUB CONTRACTOR F.R. LAFAYETTE, INC.

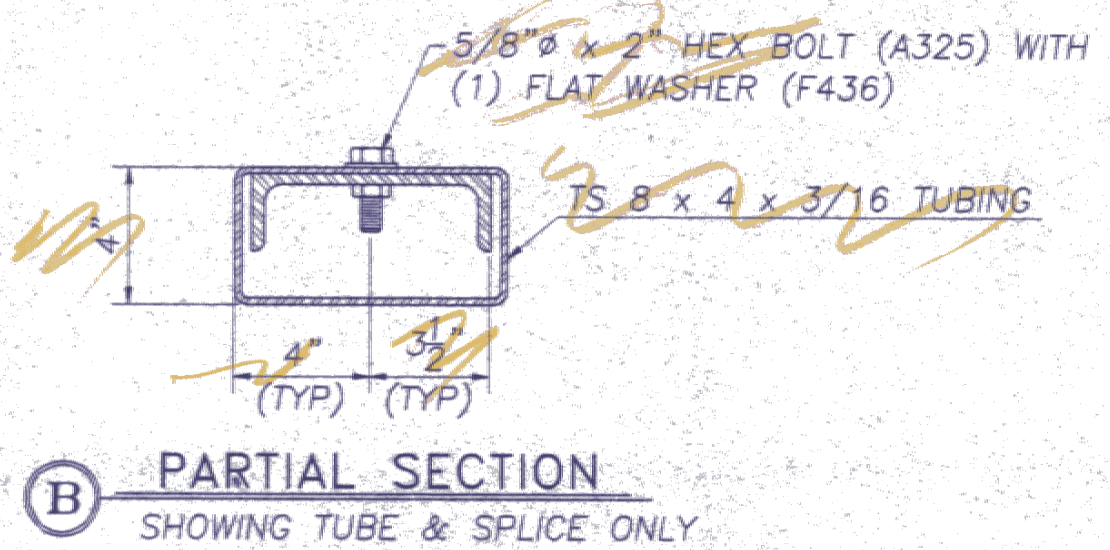
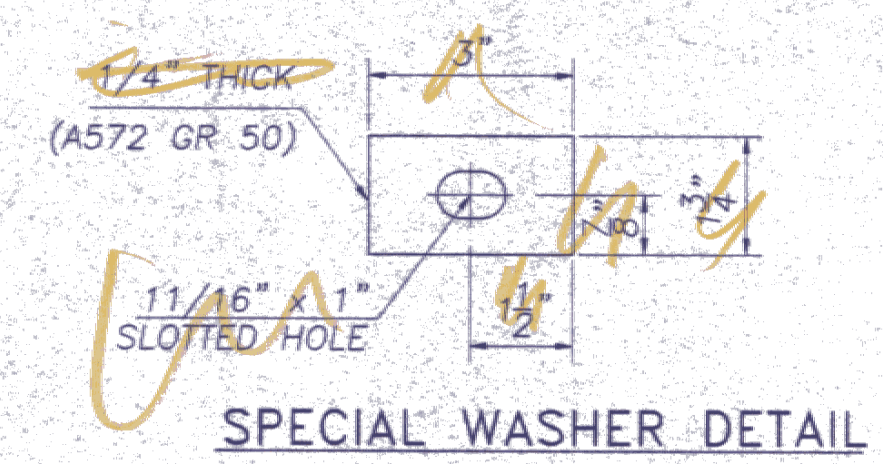
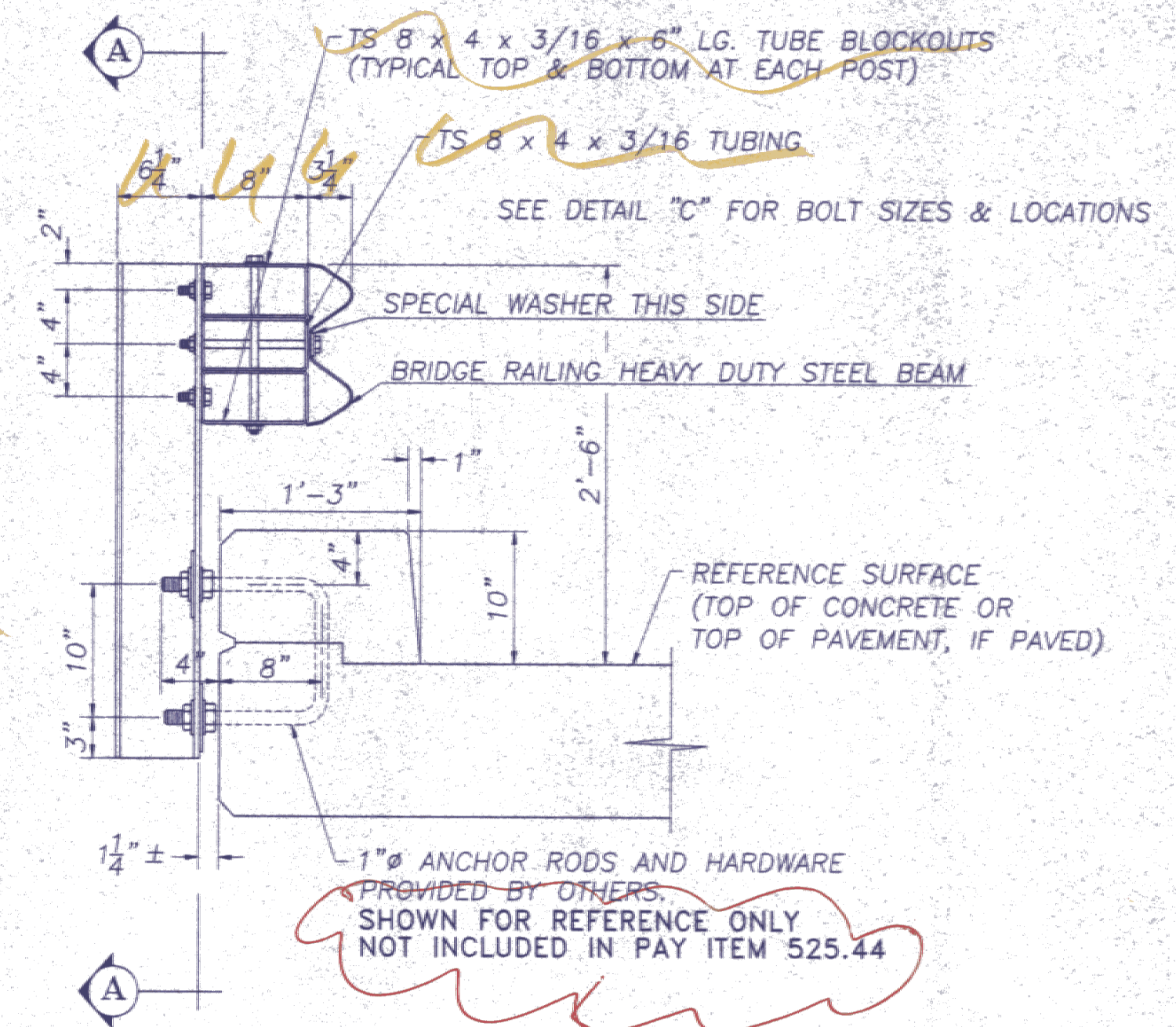
DRAWN	PAR
CHECKED	CMM
DATE	05/29/98
SCALE	3/8" = 1'-0"
REFERENCE NO.	1057
SHEET NO.	1 of 2



W8 x 24 POST
(A572 GR 50)

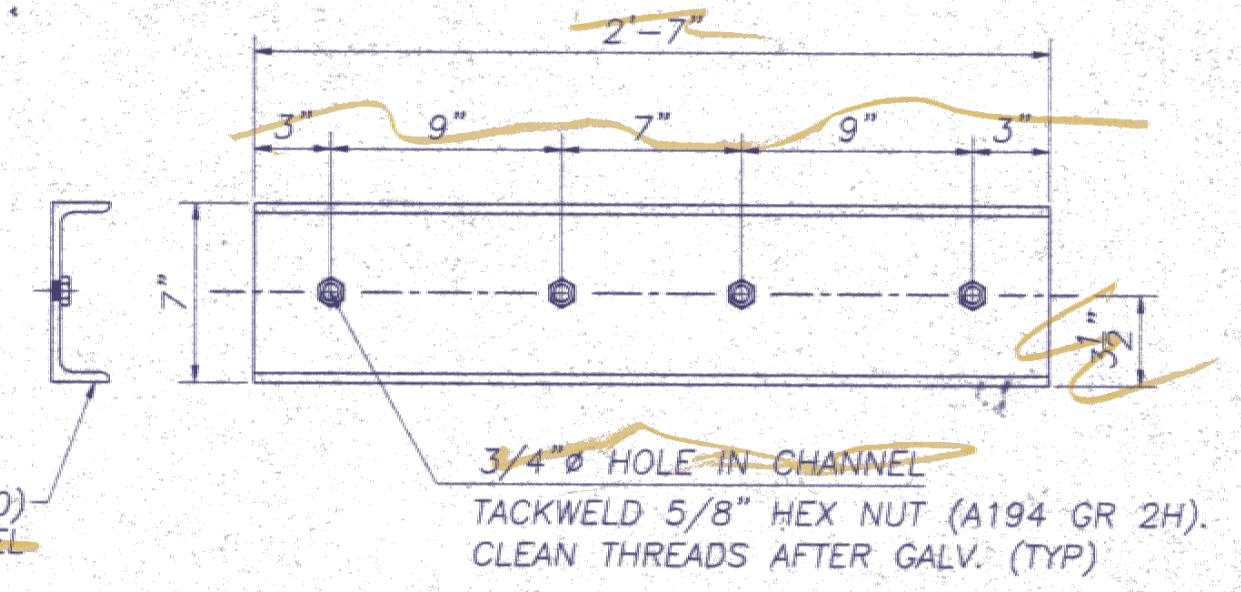


FASCIA MOUNTED POST WITH CURB
(A572 GR 50)

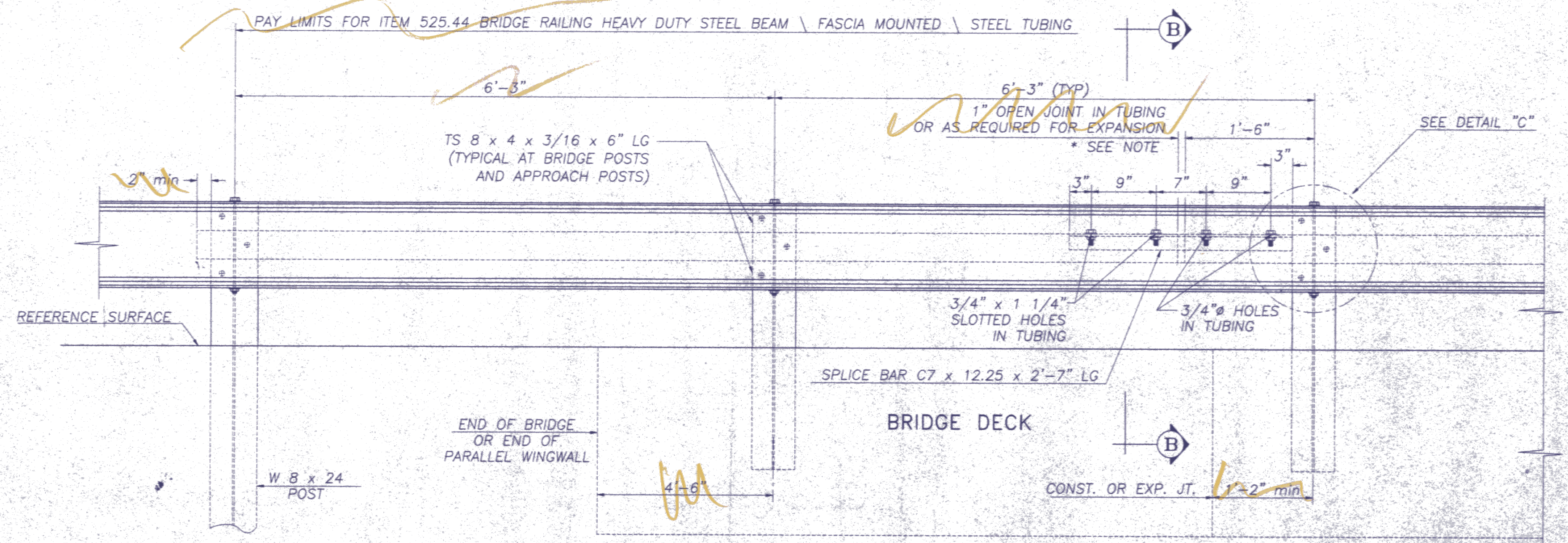


GENERAL ERECTION NOTES

1. Heavy duty steel beam guard rail shall conform to VT specification 732.
2. Structural steel tubing shall conform to VT specification 732 galvanized after fabrication in accordance with AASHTO M 111.
3. Anchor bolts, nuts and washers shall be galvanized in accordance with AASHTO M 232 and shall conform to VT specification 714 unless otherwise noted.
4. Bridge rail posts, special washers, plate washers and splice bars shall conform to AASHTO M 223 & M 223M galvanized after fabrication in accordance with AASHTO M 111.
5. All bolts and related hardware shall conform to AASHTO M 164 type 1 bolts, hot dipped or mechanically galvanized per specification.
6. See standard drawing G-1 and G-1d for additional details concerning guard rail.
7. See standard drawing SB-R6-82 for approach rail details and for information relative to schedule I and schedule II. All approach rail shall be heavy duty steel beam guard rail. Also see Std. Dwg. SB-R6-82 for handrail details (except end details) if hand rail is required.
8. All posts shall be set normal to grade.
9. Splices for the steel beam guard rail shall lap in the direction of traffic.
10. See Standard drawing G-1 for details of delineators. A delineator shall be located at every fifth post. Payment shall be subsidiary to other items.
11. A railing joint splice shall be provided at each superstructure expansion joint.
12. All field cut or drilled areas shall be coated with zinc rich paint.
13. For radii less than 950 feet, the steel tubing shall be shop bent to fit the applicable curve.
14. The drop-weight tear test in section 732 shall not apply to the structural tubing on this standard.

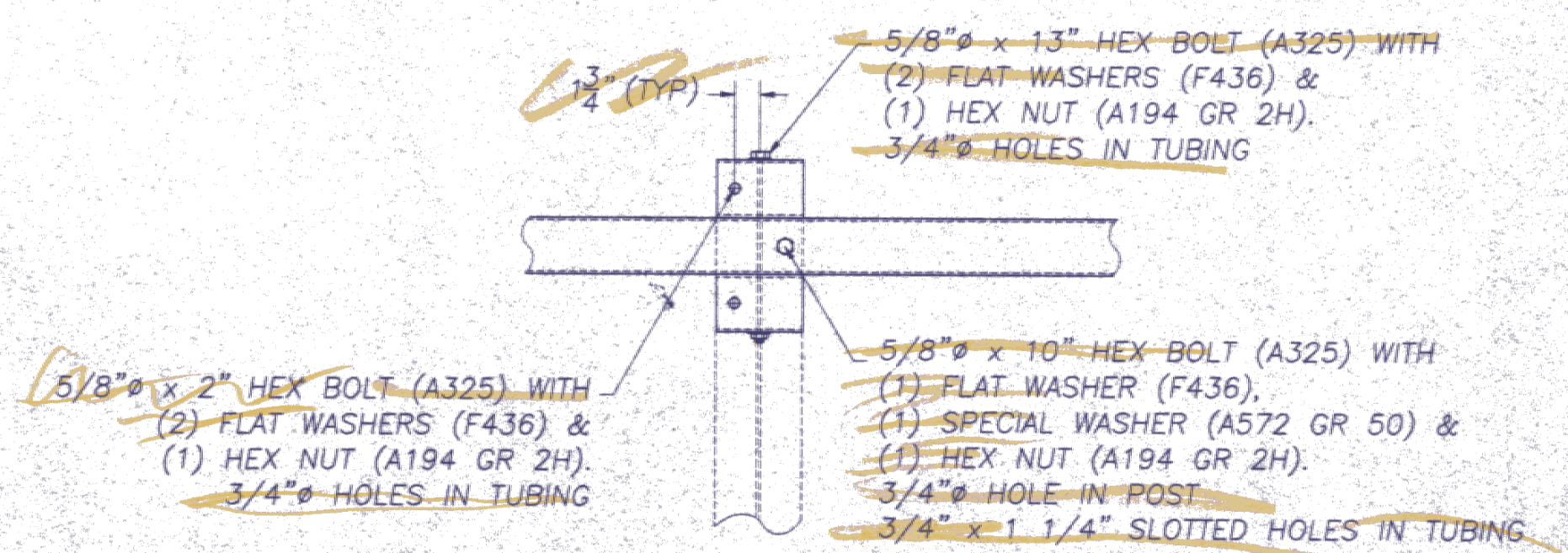


SPlice BAR DETAIL



RAILING ELEVATION VIEW
(SHOWN LOOKING FROM C WITHOUT CURB)

* NOTE 3/4" min. SPlice OPENING WILL VARY DEPENDING ON AMOUNT OF EXPANSION REQUIRED
BOLTS IN SLOTTED HOLES SHALL NOT BE SO TIGHT AS TO PREVENT SLIDING BETWEEN THE TUBING AND THE SPlice CHANNEL



DETAIL VIEW C
STEEL BEAM GUARD RAIL NOT SHOWN

RECEIVED
JUN 12 1998
RESUBMIT APPROVED
BY [Signature] DATE [Signature]

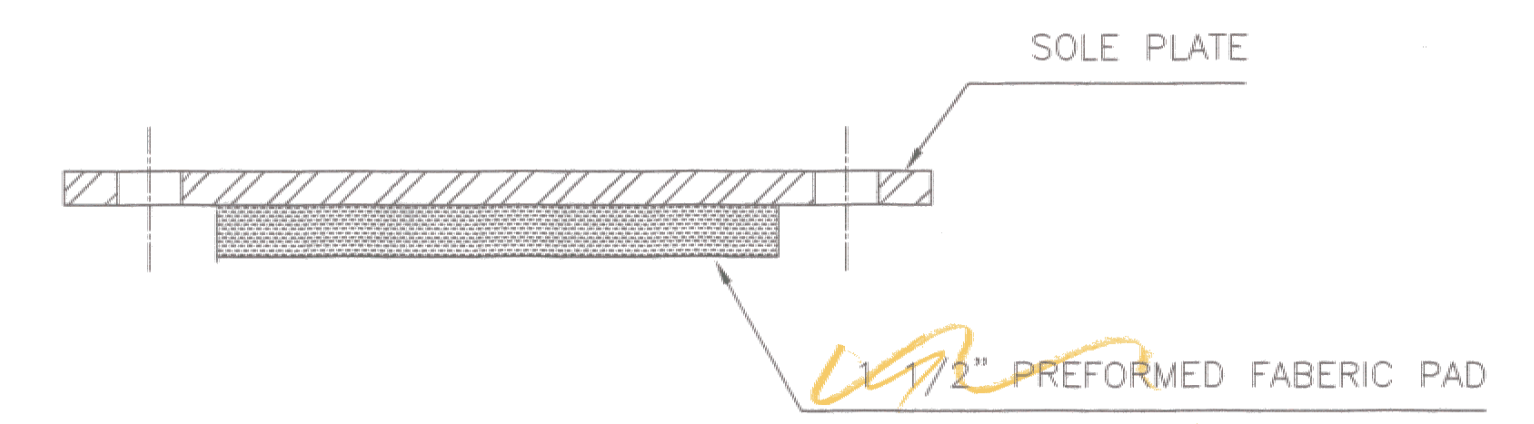
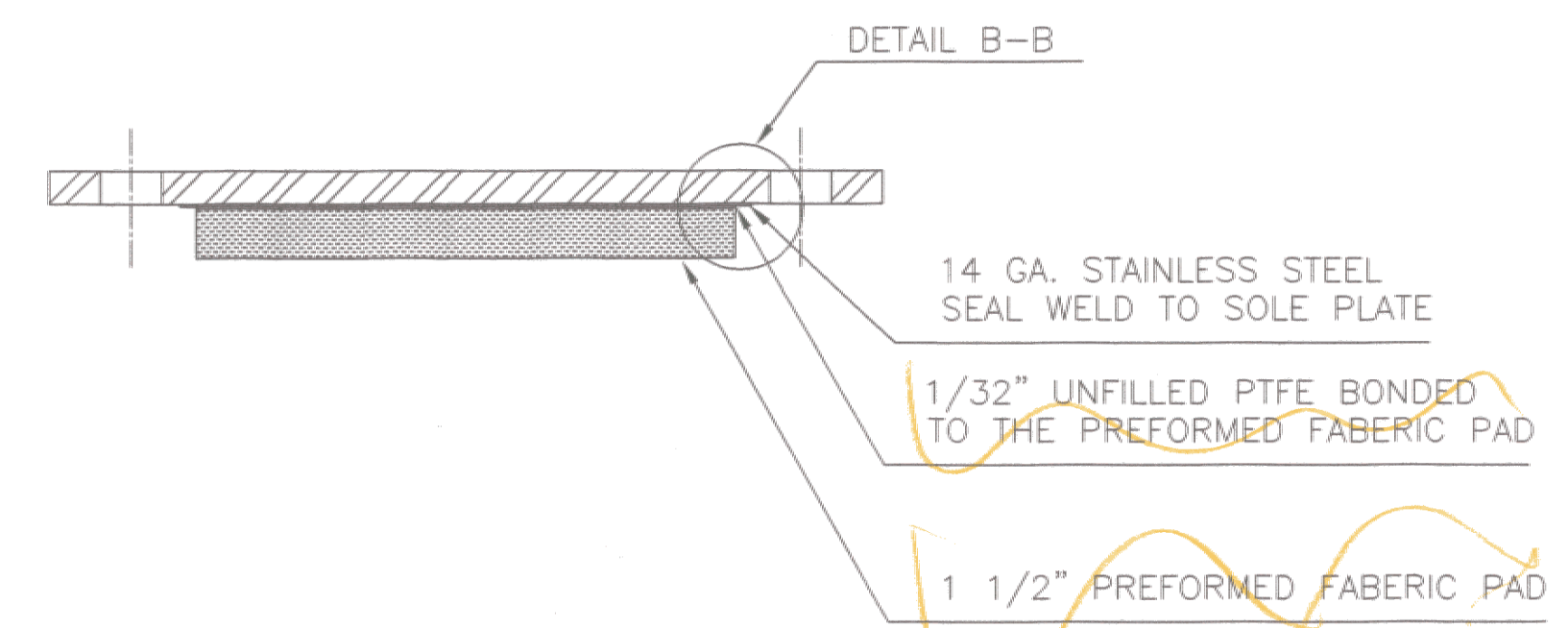
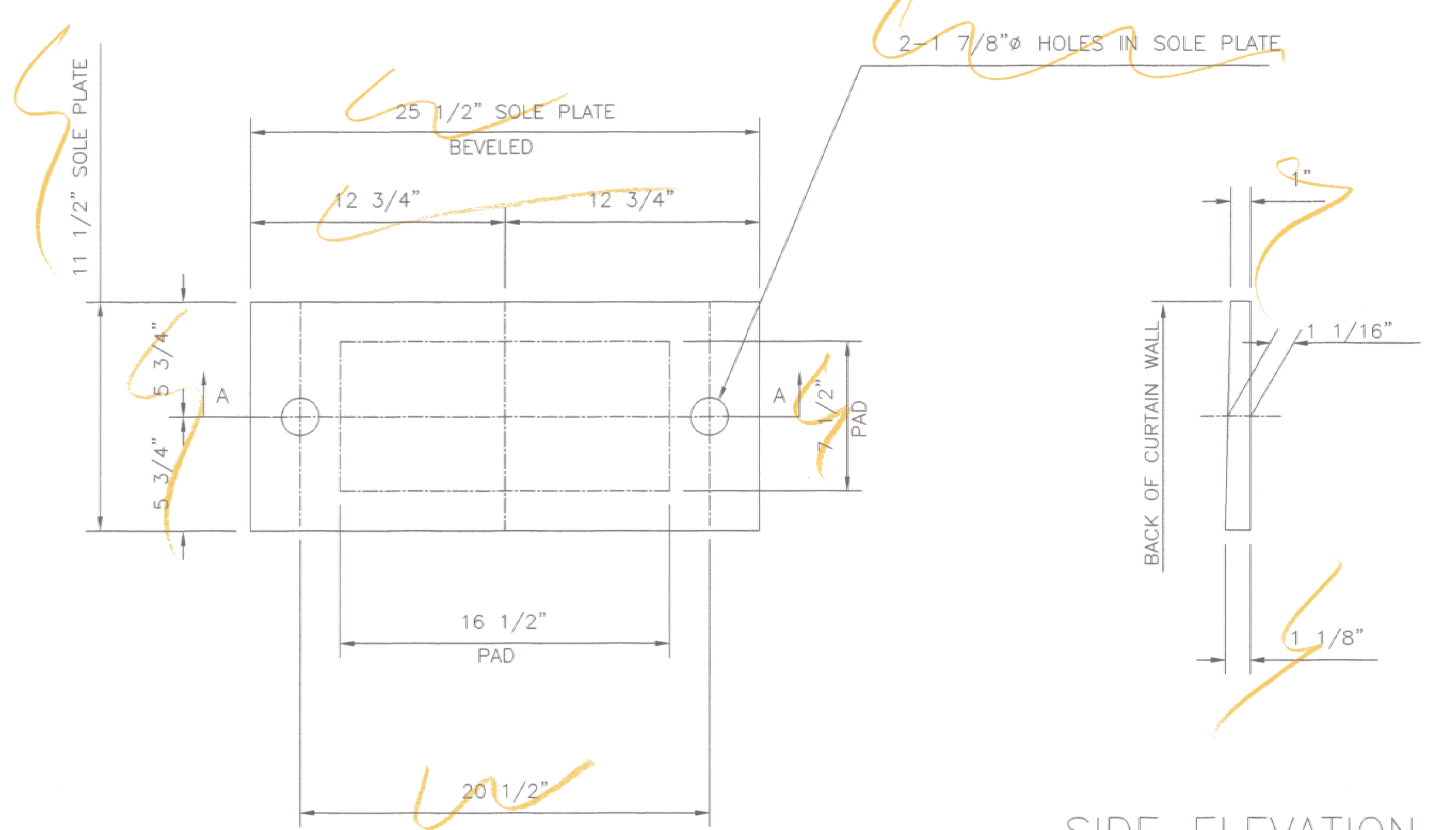
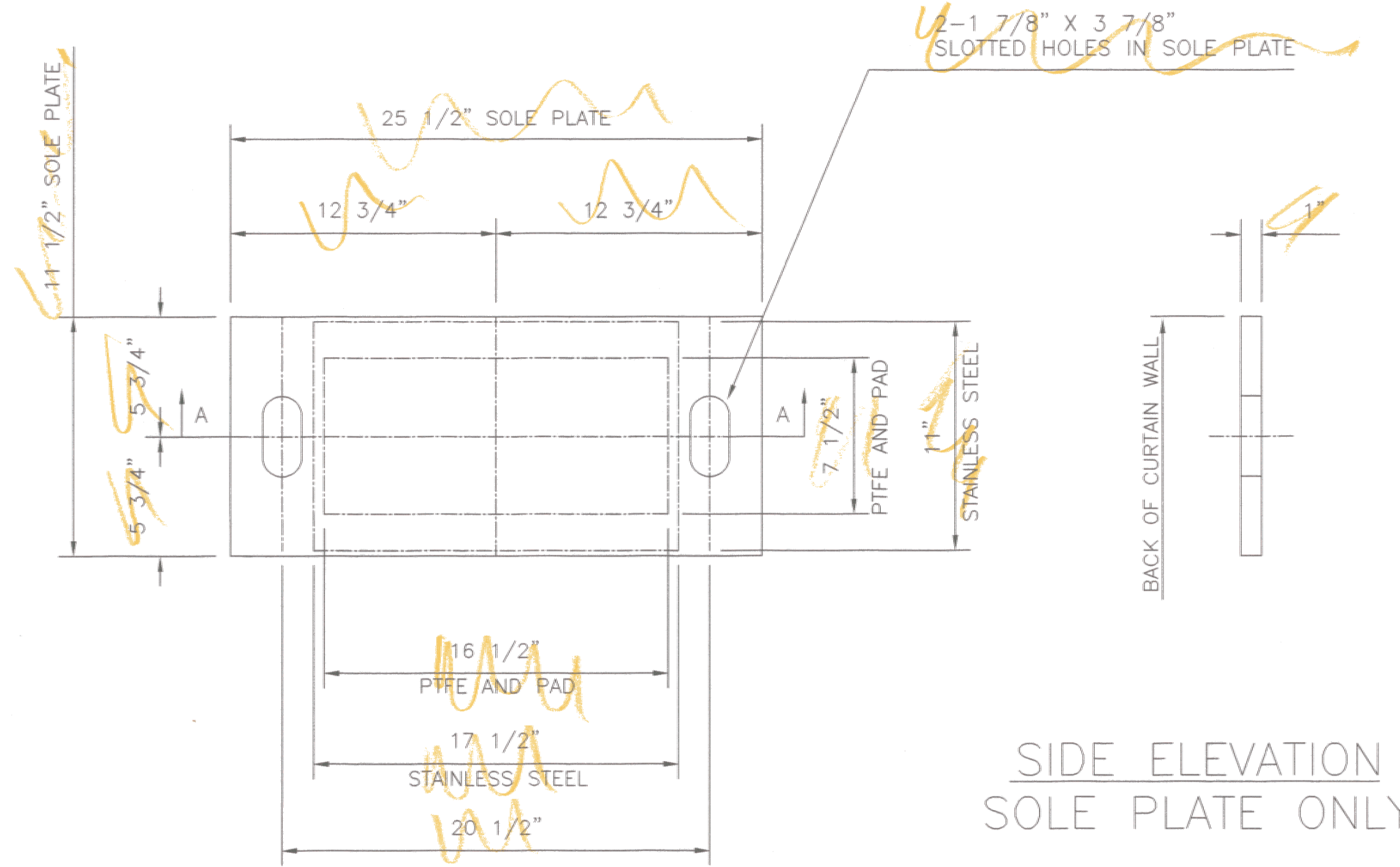
REVISIONS		
No.	Remarks	Date

HIGHWAY SAFETY CORP.
Glastonbury, Connecticut

ITEM 525.44 BRIDGE RAILING - HDSB
ESSEX
VT 128 OVER BROWNS RIVER

DRAWN	PAR
CHECKED	CMM
DATE	05/29/98
SCALE	N.T.S.
REFERENCE NO.	1057
SHEET NO.	2 OF 2

GENERAL CONTRACTOR
SUB CONTRACTOR: F. R. LAFAYETTE, INC.



MATERIALS:

STEEL - ASTM A270 GR.36 WITH GALV. OR MET FINISH

STAINLESS STEEL - ASTM A240 TYPE 304 #8 FINISH

PTFE - ASTM D1457

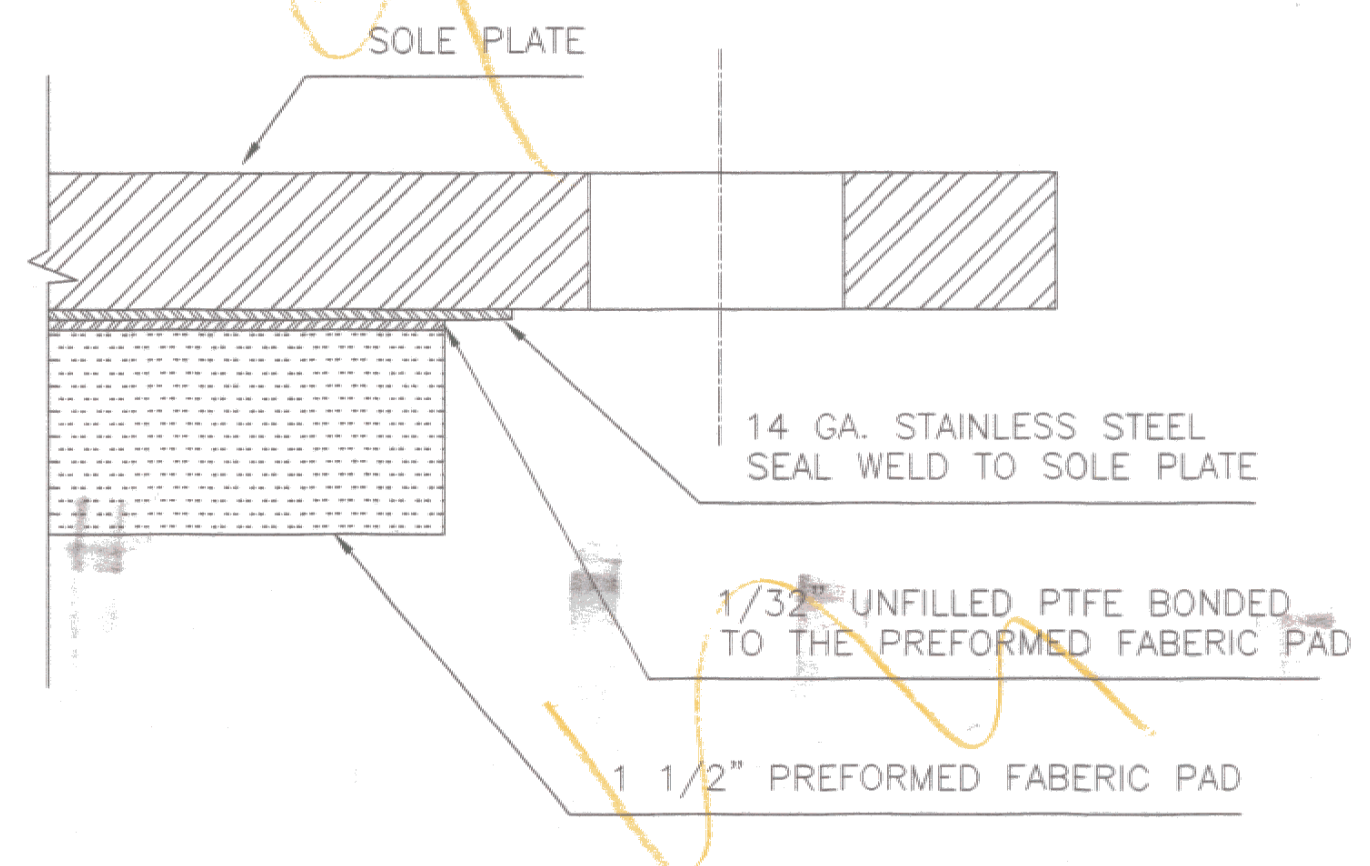
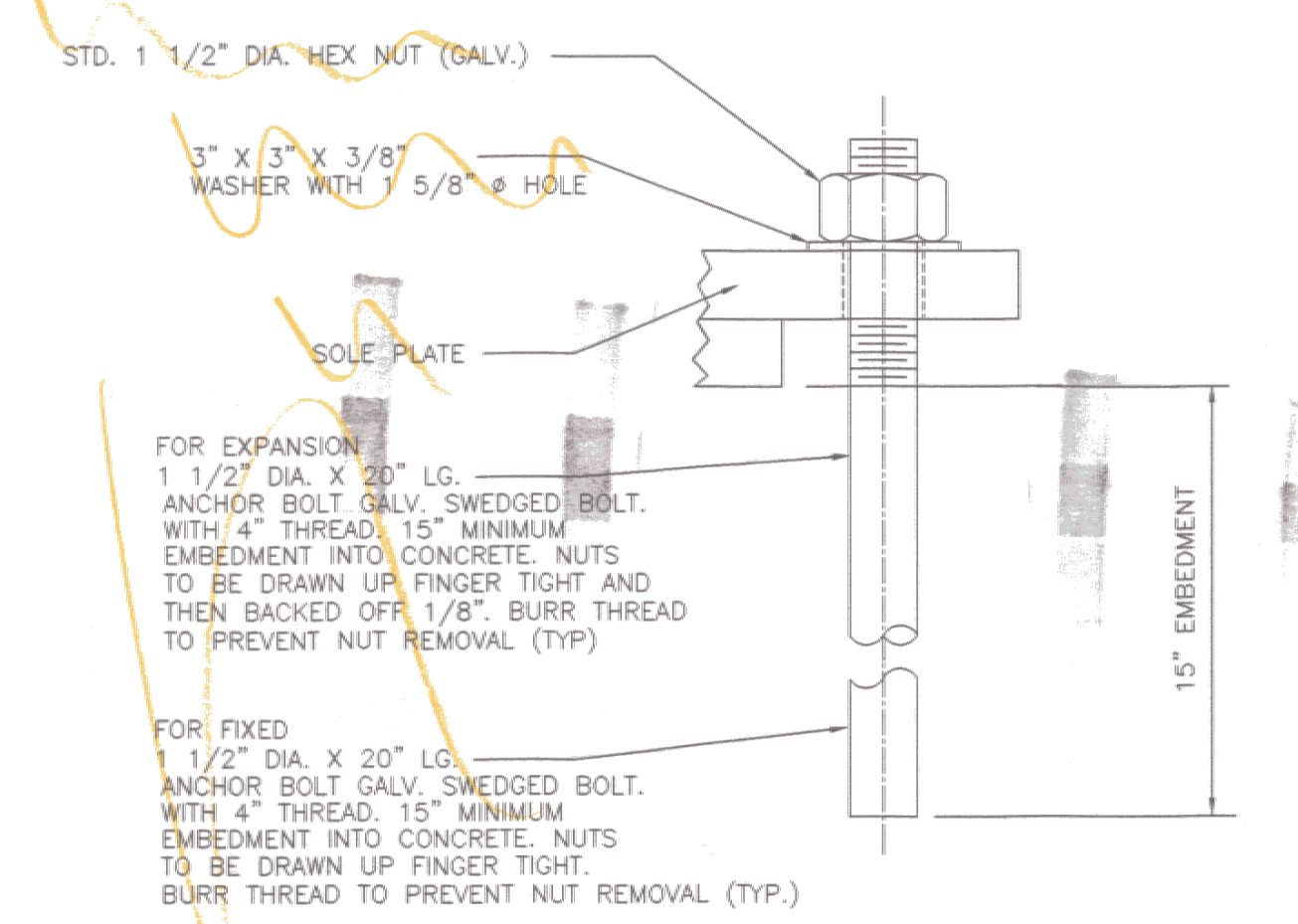
PREFORMED FABERIC PAD - AASHTO DIV. II SEC. 18.10.2

ANCHOR BOLTS - ASTM A36 SWEDGED & GALVANIZED

- NOTES:
1. LOCATION OF FABRICATION PLANT - 70 SOUTH STREET WALPOLE, MA. 02081
 2. COSMEC, INC. REPRESENTATIVE - MR. WILLIAM BURHOE (508) 668-6600

SECTION A-A
EXPANSION ELASTOMERIC BEARING
LOCATION - ABUT. 1 QTY.=4

SECTION A-A
FIXED ELASTOMERIC BEARING
LOCATION - ABUT. QTY.=4



ANCHOR BOLT DETAIL
QTY.=16

DETAIL B-B

RECEIVED
C'D BY: *Jan* O'D BY: *Jan*
JUL 06 1998
RESUBMIT: *Jan* APPROVED: *Jan*
BY: *Jan* DATE: *7/1/98*

STATE OF VERMONT
AGENCY OF TRANSPORTATION

VT 128 OVER THE BROWNS RIVER
TOWN OF ESSEX
BRIDGE #3
LOG STA.-54-89
SURV. STA. 6-75

COSMEC, INC. 70 SOUTH STREET
WALPOLE, MA. 02081

SCALE: 3/16"=1" CHECKED BY: N.H. DRAWN BY: ROB C
DATE: 7-1-98 DATE: 6-20-98

COSMEC ELASTOMERIC BEARINGS

CUSTOMER	S.O. NUMBER	DRAWING NUMBER	REV.
STATE OF VERMONT	58468	2907	

REV.	BY	DATE	C'D	DATE