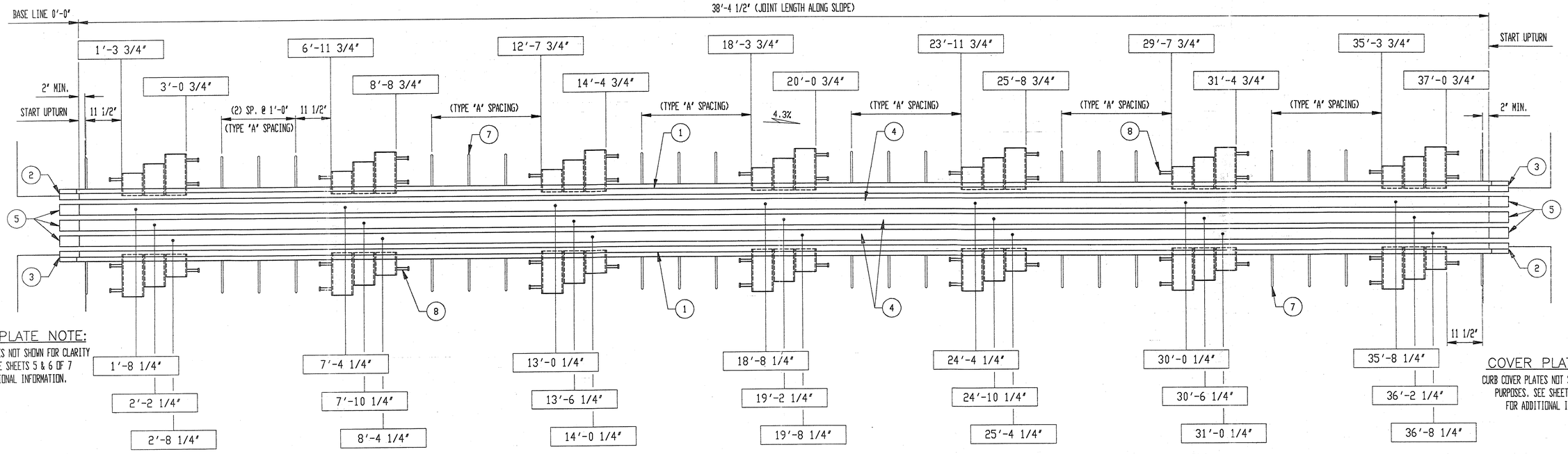
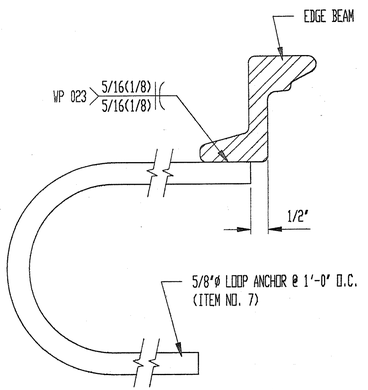


COVER PLATE NOTE:
CURB COVER PLATES NOT SHOWN FOR CLARITY PURPOSES. SEE SHEETS 5 & 6 OF 7 FOR ADDITIONAL INFORMATION.

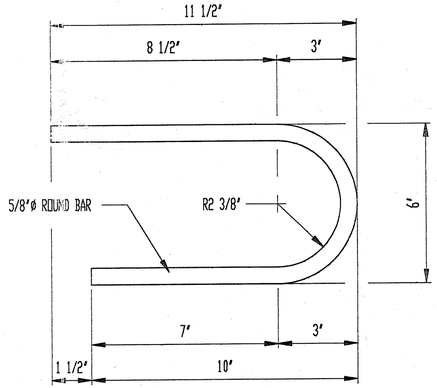
COVER PLATE NOTE:
CURB COVER PLATES NOT SHOWN FOR CLARITY PURPOSES. SEE SHEETS 5 & 6 OF 7 FOR ADDITIONAL INFORMATION.

'D-320' MODULAR EXPANSION JOINT PLAN VIEW

JOINTS "A3" & "A4" (INBOUND & OUTBOUND) INCLUDED
(4) 'D-320' MODULAR JOINTS REQUIRED
JOINTS "A3" & "A4" (OUTBOUND) - LOOKING UPSTATION -
JOINTS "A3" & "A4" (INBOUND) - LOOKING DOWNSTATION -

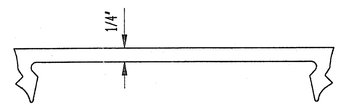


LOOP ANCHOR DETAIL

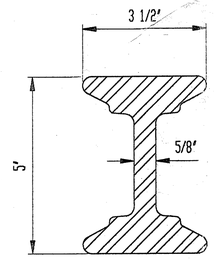


ITEM NO. 7
(160) REQ'D.

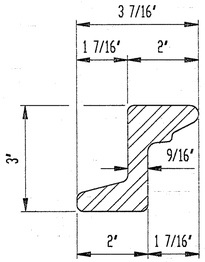
LOOP ANCHOR DETAIL



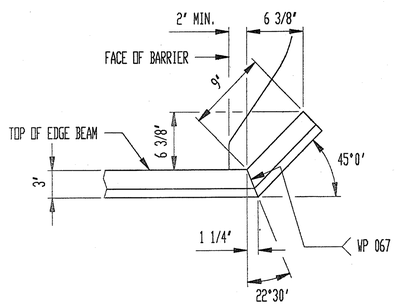
MODULAR JOINT STRIP SEAL



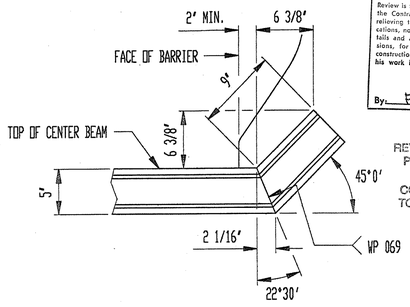
CENTER BEAM DETAIL
A.S.T.M. A588 STEEL
(SEE SHEET 2 OF 7 FOR SEAL CLIP ATTACHMENT)



EDGE BEAM DETAIL
A.S.T.M. A588 STEEL
(SEE SHEET 2 OF 7 FOR SEAL CLIP ATTACHMENT)



UPTURN DETAIL AT EDGE BEAM



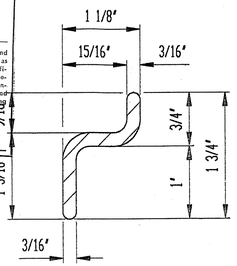
UPTURN DETAIL AT CENTER BEAM

REVIEW
☒ No Exceptions Taken
☐ Note Markings or Corrections
☐ Revise & Resubmit
☐ Comments Attached

Review is for general conformance with the design concept of the project and the Contract Documents. Markings or comments shall not be construed as relieving the Contractor from compliance with the proper plans and specifications, nor departures therefrom. The Contractor remains responsible for dimensions, for selecting fabrication processes, for techniques of assembly and construction, for coordination of the work of all trades, and for performing his work in a safe manner.

YUJI KASAMOTO, INC.
By: EW Date: 12/6/96

REVIEW IS BASED ON CONTRACTOR'S PROPOSED ALTERNATIVE DESIGN, DATED 7/22/96. COMMENTS HEREON ARE SUBJECT TO CHANGE UPON FINAL APPROVAL OF ALTERNATIVE DESIGN.



SEAL CLIP
ITEM NO. 6
(1286 L.F. TOTAL)

☒ NO EXCEPTION TAKEN
☐ REJECTED
☐ MAKE CORRECTIONS NOTED
☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

Checking is only for general conformance with the design concept of the project and general compliance with the information given in the contract documents. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for: dimensions which shall be confirmed and correlated at the job site; fabrication processes and techniques of construction; coordination of his work with that of all other trades; and the satisfactory performance of his work.

T. Y. LIN INTERNATIONAL - SAN FRANCISCO
Date 11/19/96 By JG

SUB. # 1008

OFFICE COPY

D.S. BROWN 96-01939-11685 SHEET 1 OF 7

dsb

AISC MEMBER MODERN STEEL CONSTRUCTION CERTIFIED AISC CATEGORY III APPROVED

DATE	SYM	REVISION	DR	CK

F.A.P. NO.: I-H3-1(68)
STATE PROJ. NO.:
BRIDGE NO: 4
DESIGNER: HAWAII D.O.T.
CONTRACTOR: MARMOLEJO CONTRACTORS, INC.

THE D.S. BROWN COMPANY, INC.
NORTH BALTIMORE, OHIO 45872-0158 U.S.A.

SCALE:
DATE: 10-21-96
DRAWN BY: S. RECTOR

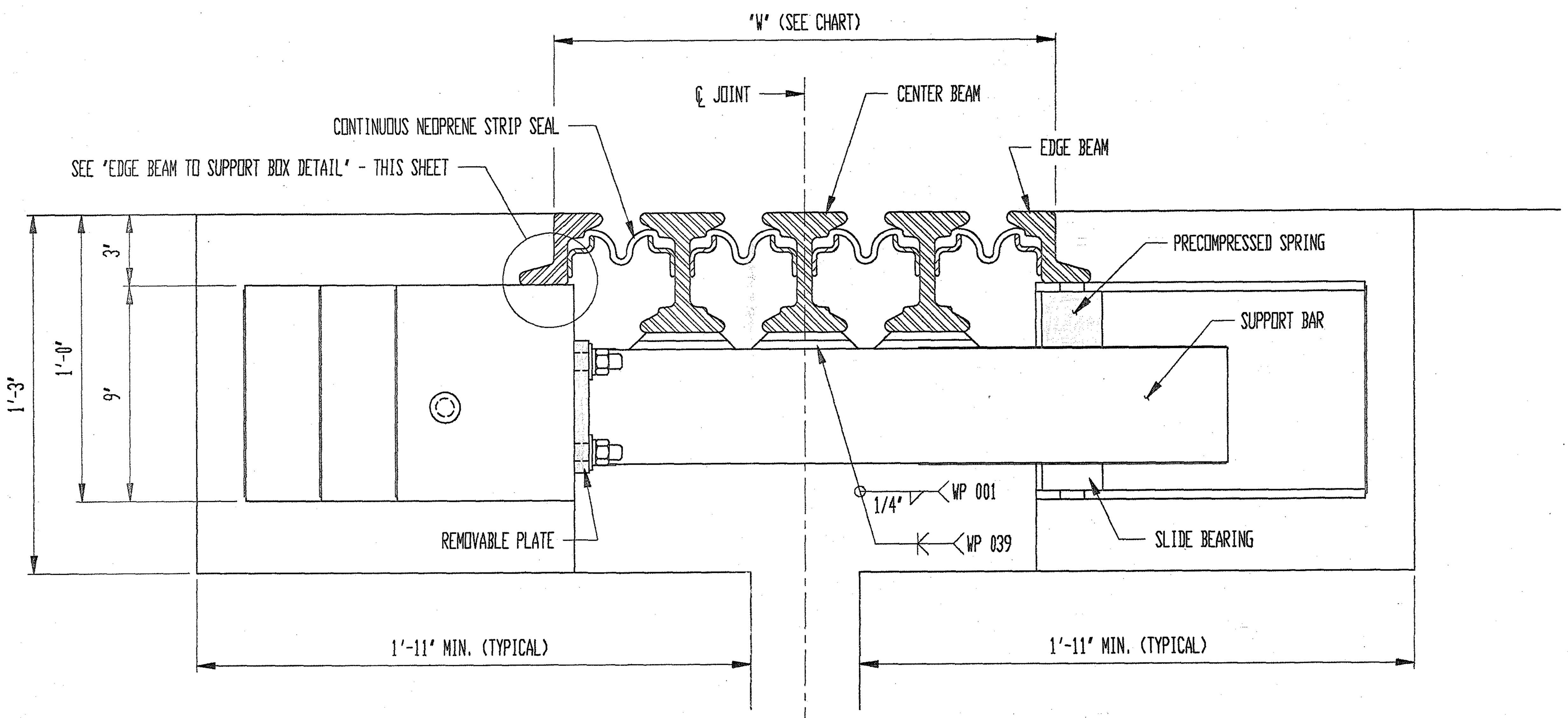
H-3 IN HONOLULU, HI (BRIDGE #4)
LOWER HALAWA, UNIT 1 (PHASE 1B) HAWAII

'D-320' PLAN VIEWS & DETAILS

DRAWING NUMBER 96-01939-15

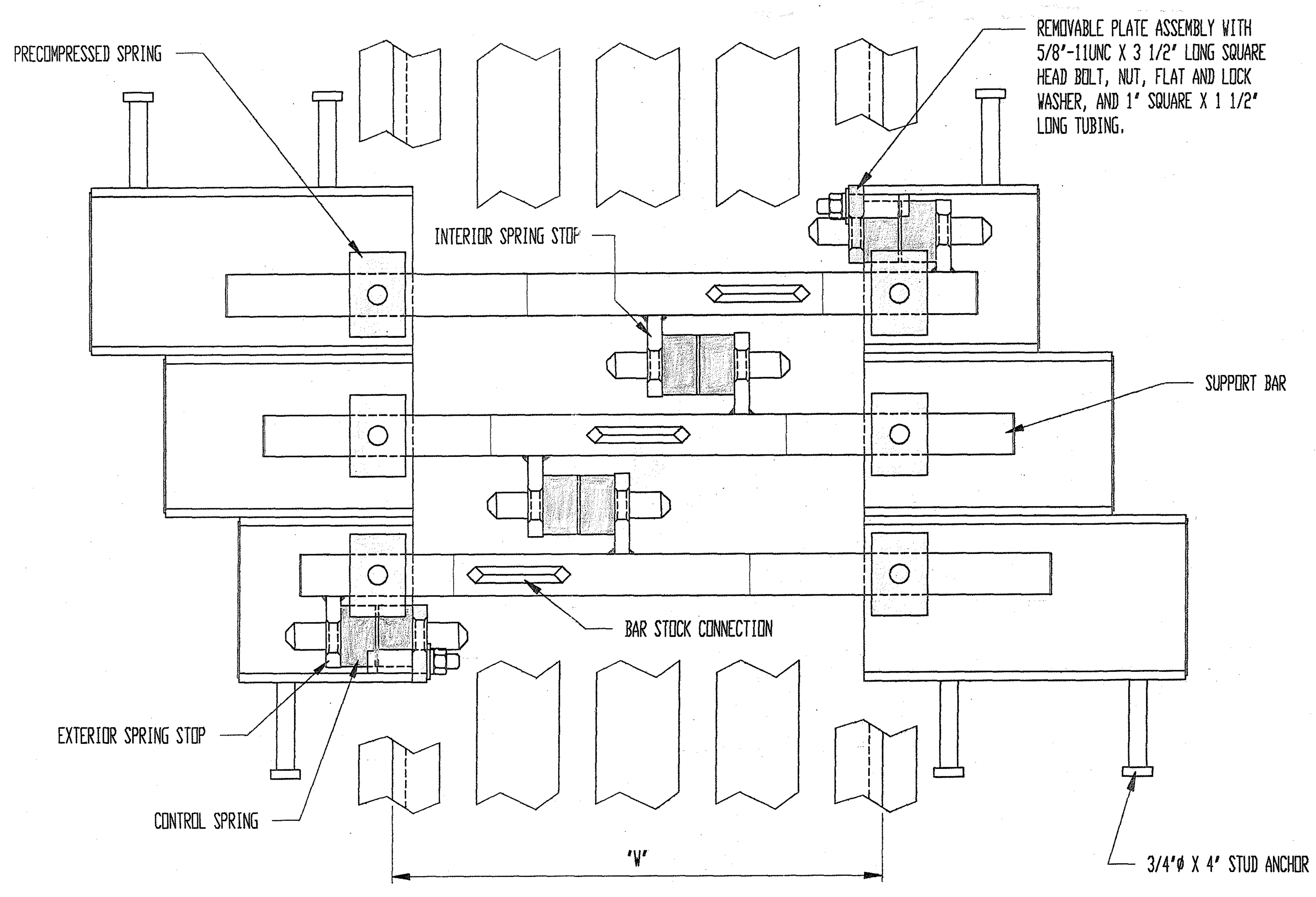
DSB FILE NO: 96-01939\SHT-15

SUB # 1008



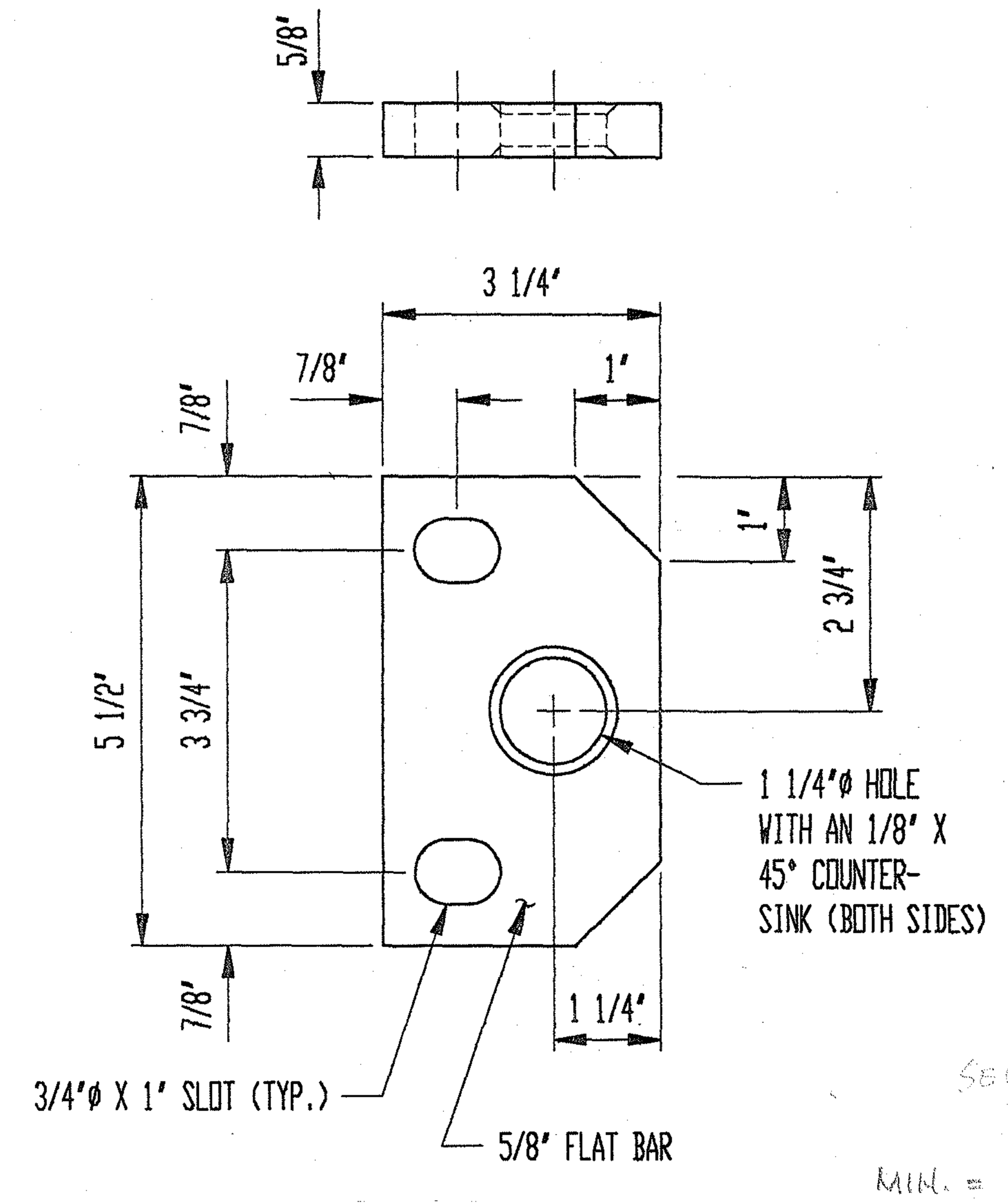
SECTION THRU 'D-320' EXPANSION JOINT @ SUPPORT BOX

SCALE: 1/4"



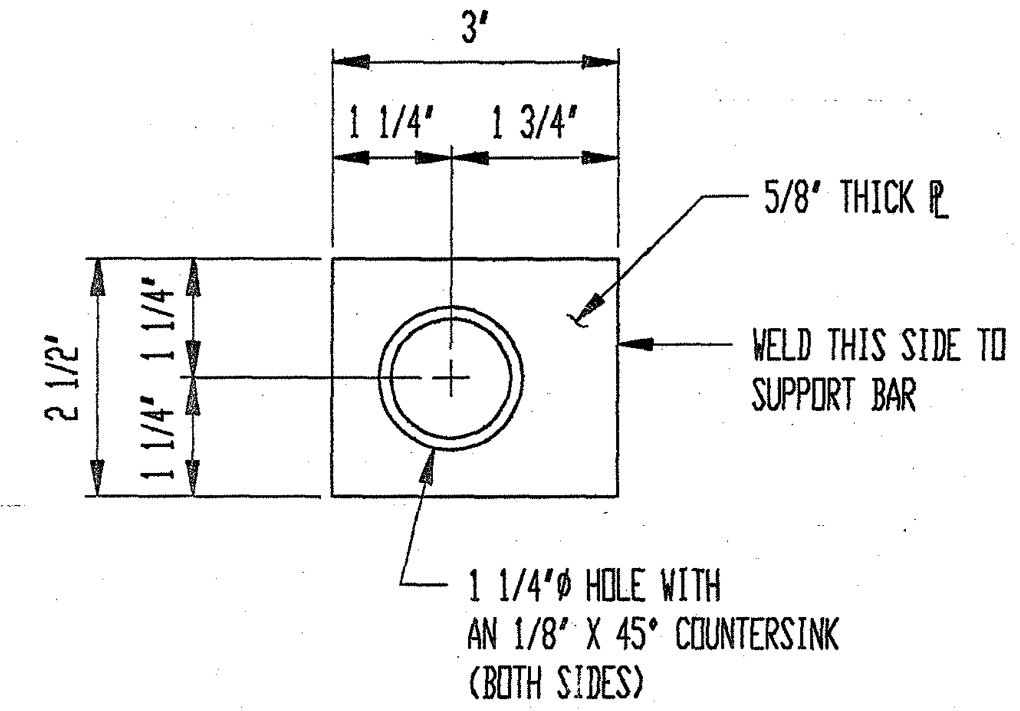
PLAN VIEW OF 'D-320' EXPANSION JOINT @ SUPPORT BOX

SCALE: 1/4"



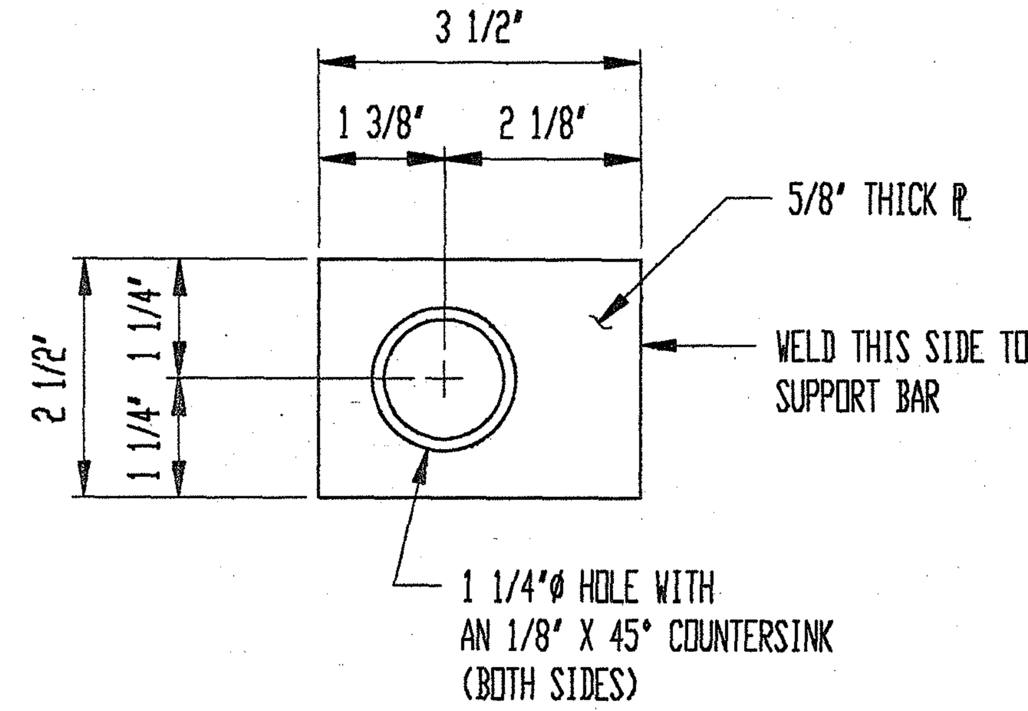
ITEM NO. 22
(56) REQ'D.

REMOVABLE PLATE



ITEM NO. 19
(56) REQ'D.

EXTERIOR SPRING STOP



ITEM NO. 20
(112) REQ'D.

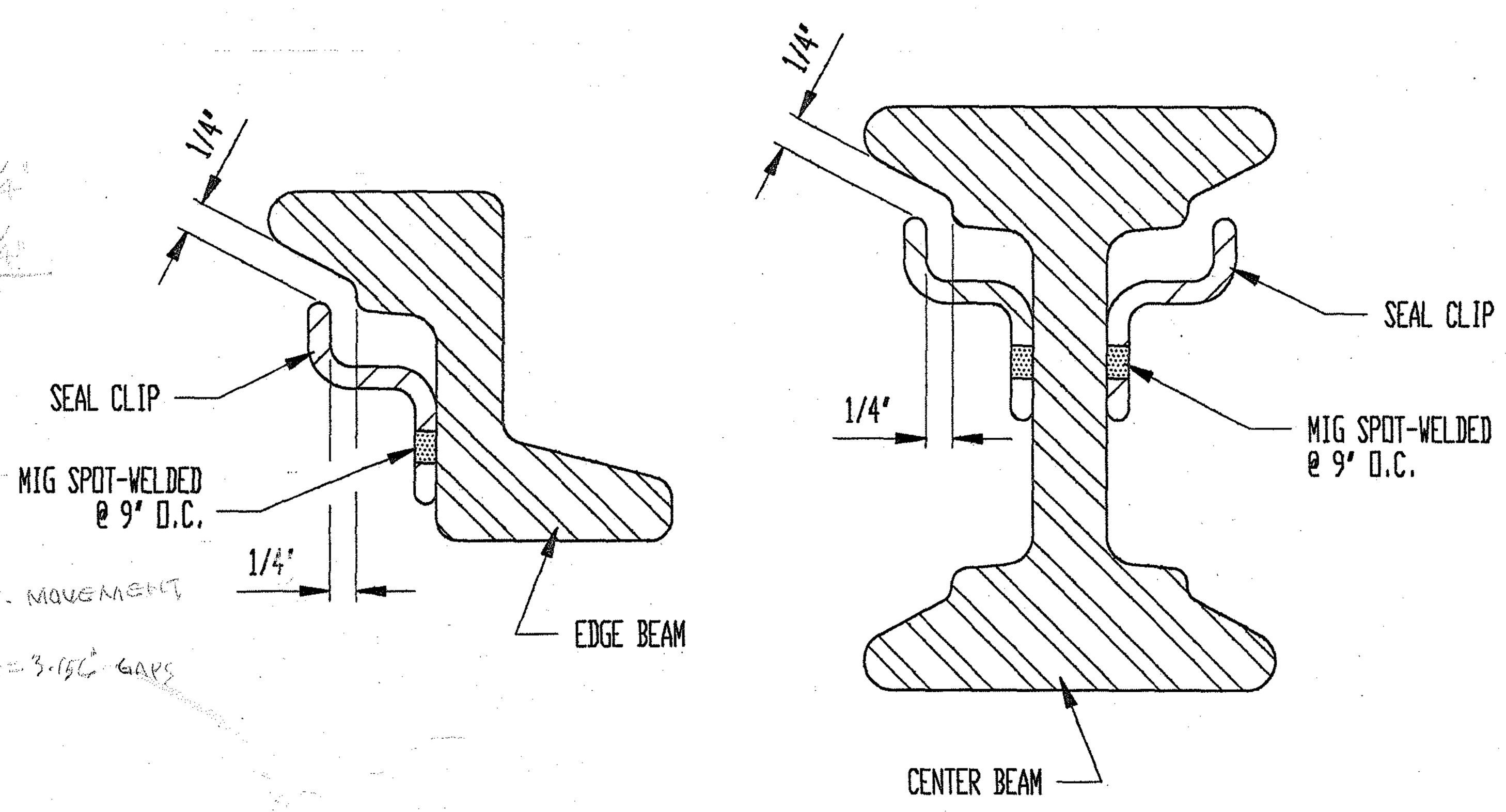
INTERIOR SPRING STOP

MIN. = 2'-3 1/8"
MAX = 1'-2 1/2"
TOTAL MVMT = 12 5/8"

NOTE:
DIMENSIONS GIVEN INCLUDE CREEP & SHRINKAGE. JOINT SETTINGS SHALL BE DETERMINED BY FIELD ENGINEER AT TIME OF JOINT INSTALLATION.

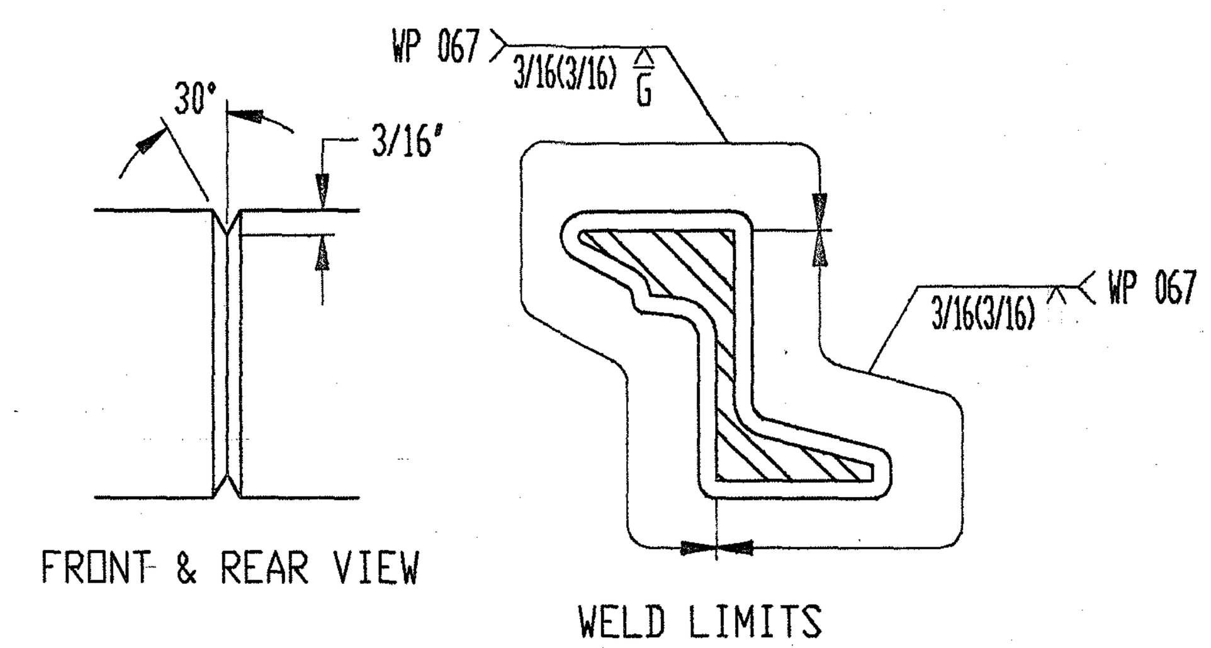
'D-320' INITIAL SET DIMENSIONS	
STRUCT. TEMP.	'W'
MIN.	2'-3 1/8"
@ 57°	1'-7 13/16"
@67°	1'-7 9/16"
MID. @ 77°	1'-7 5/16"
@ 87°	1'-7 1/16"
MAX.	1'-2 1/2"

'D-320' TEMPERATURE ADJUSTMENT CHART

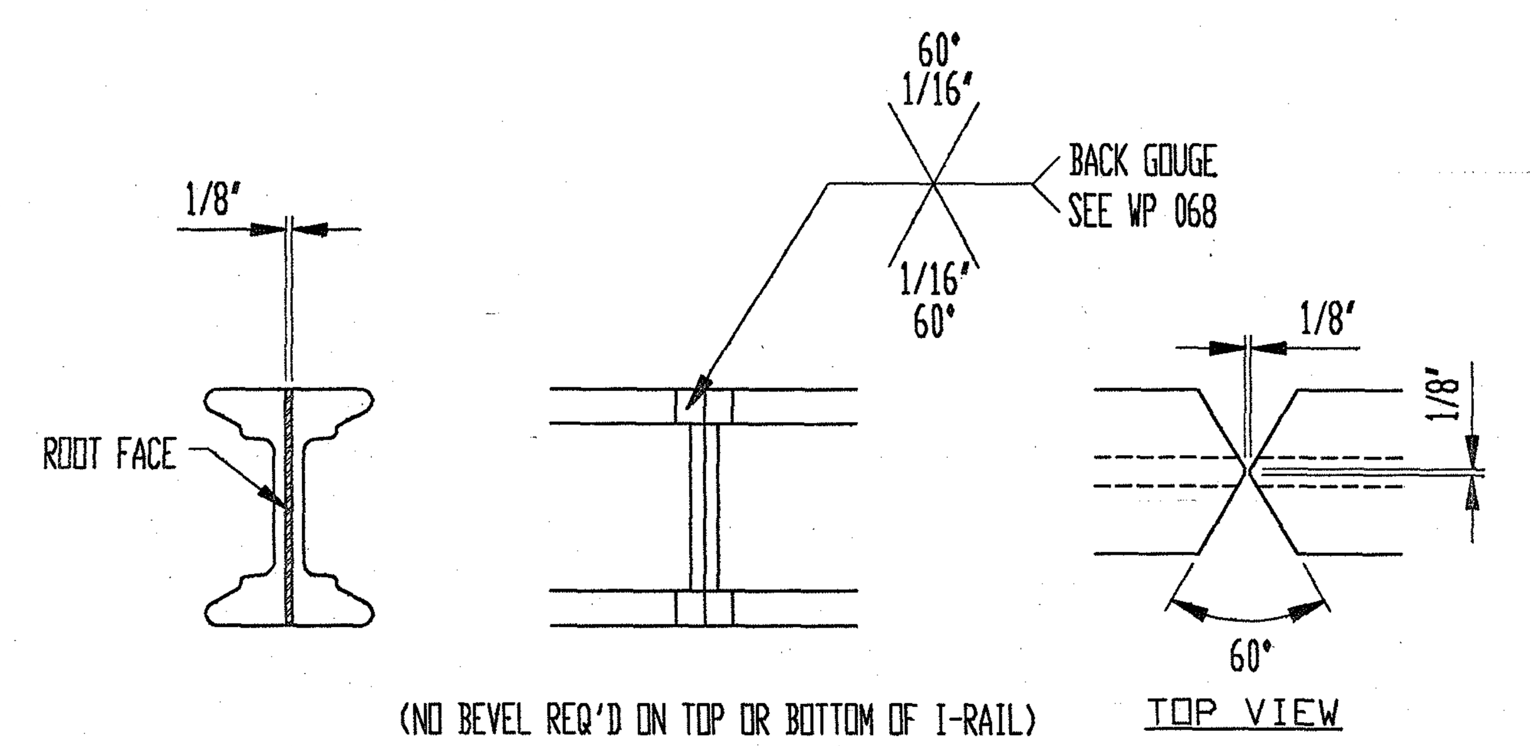


SEAL CLIP ATTACHMENT DETAILS

SCALE: 3/4"



EDGE BEAM SHOP SPLICE DETAIL

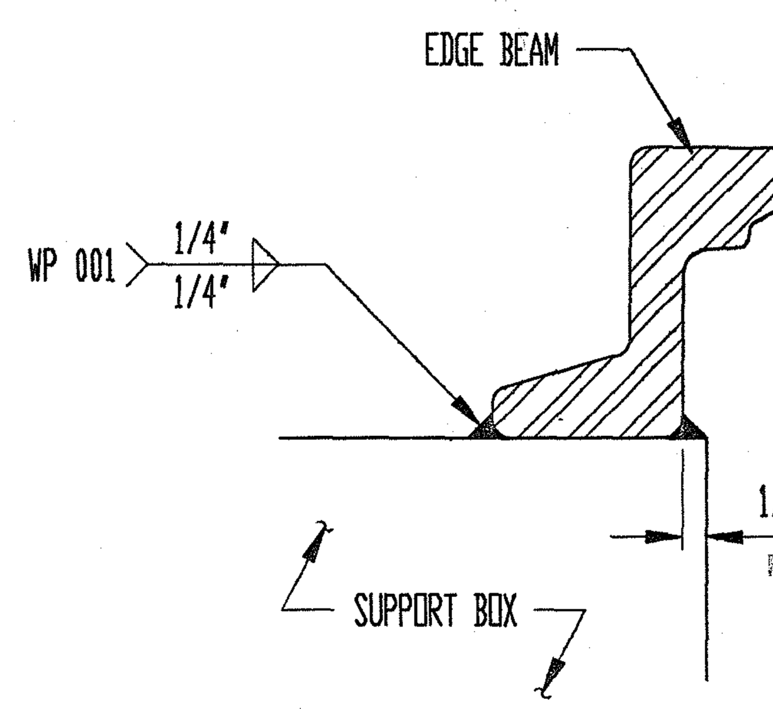


CENTER BEAM SHOP SPLICE DETAIL

COMPLETE PENETRATION WELD

REVIEW
☒ No Exceptions Taken
☐ Note Markings or Corrections
☐ Revise & Resubmit
☐ Comments Attached

YUJI KASAMOTO, INC.
By: EW Date: 12/6/96



EDGE BEAM TO SUPPORT BOX DETAIL

SCALE: 1/2"

REVIEW IS BASED ON CONTRACTOR'S PROPOSED ALTERNATIVE DESIGN, DATED 7/22/96. COMMENTS HEREON ARE SUBJECT TO CHANGE UPON FINAL APPROVAL OF ALTERNATIVE DESIGN.

OFFICE COPY

D.S. BROWN 96-01939-11685 SHEET 2 OF 7

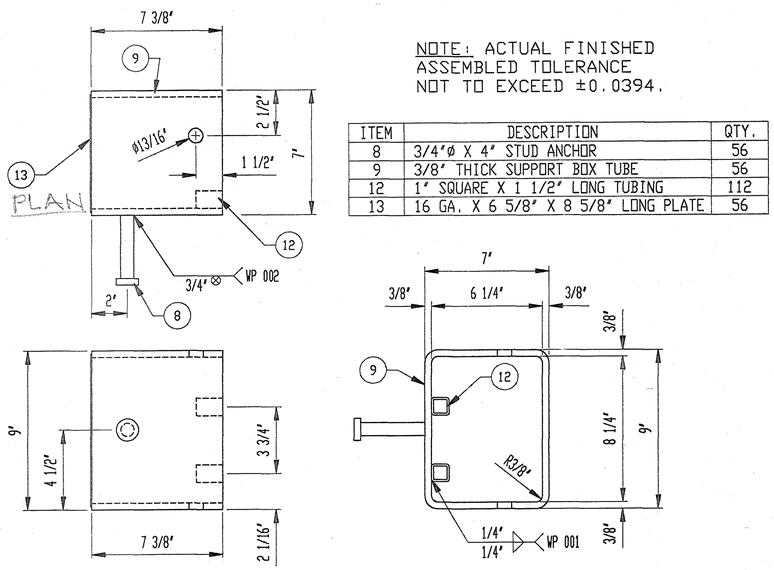
DATE	SYM	REVISION	DR	CK

F.A.P. NO.: I-H3-1(68)
STATE PROJ. NO.:
BRIDGE NO: 4
DESIGNER: HAWAII D.O.T.
CONTRACTOR: KIEWIT PACIFIC COMPANY

THE D.S. BROWN COMPANY, INC.
NORTH BALTIMORE, OHIO 45872-0158 U.S.A.

SCALE:
DATE: 10-21-96
DRAWN BY: R. BASDER
H-3 IN HONOLULU, HI (BRIDGE #4)
LOWER HALAWA, UNIT 1 (PHASE 1B) HAWAII
'D-320' SECTIONS & DETAILS
DRAWING NUMBER 96-01939-16

DSB FILE NO: 96-01939\SHT-16

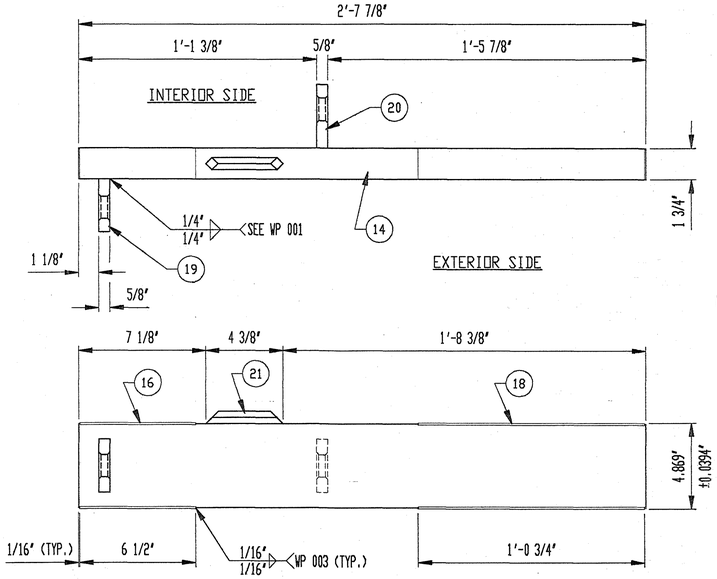


NOTE: ACTUAL FINISHED ASSEMBLED TOLERANCE NOT TO EXCEED ±0.0394.

ITEM	DESCRIPTION	QTY.
8	3/4"Ø X 4" STUD ANCHOR	56
9	3/8" THICK SUPPORT BOX TUBE	56
12	1" SQUARE X 1 1/2" LONG TUBING	112
13	16 GA. X 6 5/8" X 8 5/8" LONG PLATE	56

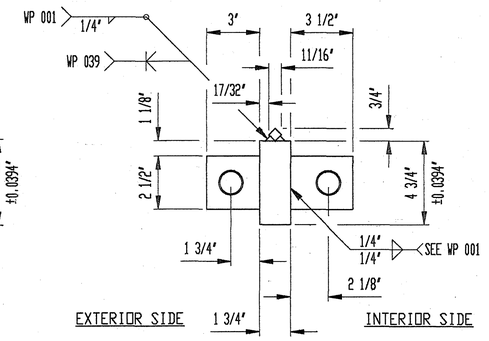
'D-320' SUPPORT BOX DETAILS (SHORT LENGTH)

SCALE: 1/4"

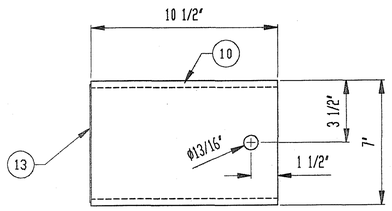


ITEM	DESCRIPTION	QUAN.
14	1 3/4" X 4 3/4" X 2'-7 7/8" BAR	56
16	16GA. x 2 3/8" x 6 1/2" S.S. SHIM	112
18	16GA. x 2 3/8" x 1'-0 3/4" S.S. SHIM	112
19	5/8" X 2 1/2" X 3" FLAT BAR (EXTERIOR)	56
20	5/8" X 2 1/2" X 3 1/2" FLAT BAR (INTERIOR)	56
21	1/2" CONNECTION BAR STOCK	56

NOTE: STAINLESS SHIMS NOT SHOWN IN RIGHT HAND VIEW FOR CLARITY PURPOSES.



'D-320' OUTER SUPPORT BAR DETAILS

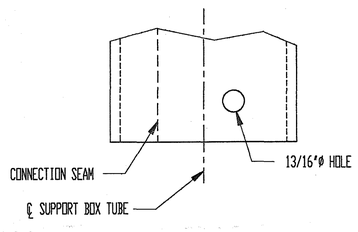


NOTE: ACTUAL FINISHED ASSEMBLED TOLERANCE NOT TO EXCEED ±0.0394.

ITEM	DESCRIPTION	QTY.
10	3/8" THICK SUPPORT BOX TUBE	56
13	16 GA. X 6 5/8" X 8 5/8" LONG PLATE	56

'D-320' INNER SUPPORT BOX PLAN VIEW

SCALE: 1/4"

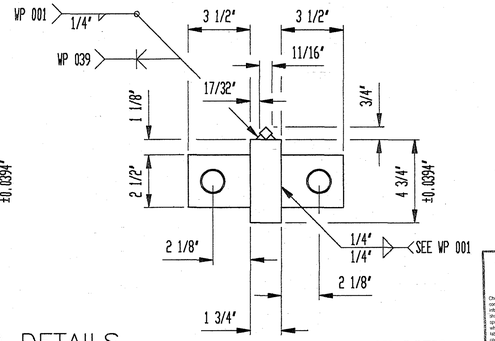


SHOP NOTE:

WHEN DRILLING 13/16"Ø HOLES INTO SUPPORT BOX TUBE, BE SURE THE SEAM OF THE TUBE IS ON THE OPPOSITE SIDE IN RELATIONSHIP TO THE ℄ OF BOX.

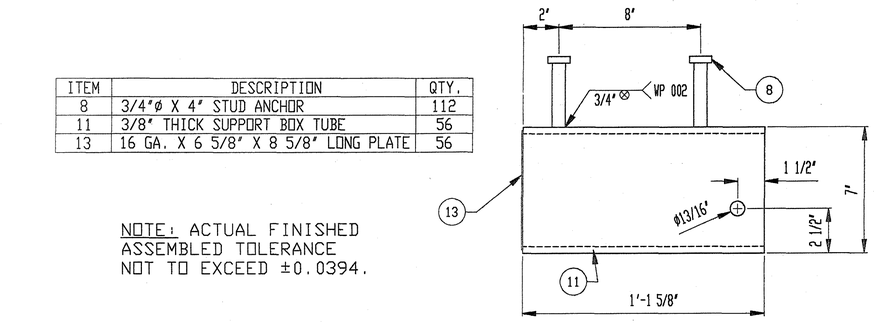
ITEM	DESCRIPTION	QUAN.
15	1 3/4" X 4 3/4" X 2'-7 7/8" BAR	28
17	16GA. x 2 3/8" x 9 5/8" S.S. SHIM	112
20	5/8" X 2 1/2" X 3 1/2" FLAT BAR (INTERIOR)	56
21	1/2" CONNECTION BAR STOCK	28

NOTE: STAINLESS SHIMS NOT SHOWN IN RIGHT HAND VIEW FOR CLARITY PURPOSES.



OFFICE COPY

'D-320' INNER SUPPORT BAR DETAILS

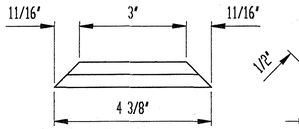


NOTE: ACTUAL FINISHED ASSEMBLED TOLERANCE NOT TO EXCEED ±0.0394.

ITEM	DESCRIPTION	QTY.
8	3/4"Ø X 4" STUD ANCHOR	112
11	3/8" THICK SUPPORT BOX TUBE	56
13	16 GA. X 6 5/8" X 8 5/8" LONG PLATE	56

'D-320' EXTERIOR SUPPORT BOX PLAN VIEW (LONG LENGTH)

SCALE: 1/4"



ITEM NO. 21

(84) REQ'D.

'D-320' RIDER BAR

REVIEW

☒ No Exceptions Taken
☐ Note Markings or Corrections
☐ Revise & Resubmit
☐ Comments Attached

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YUJI KASAMOTO, INC.

By: E.W. Date: 12/6/96

REVIEW IS BASED ON CONTRACTOR'S PROPOSED ALTERNATIVE DESIGN, DATED 7/22/96. COMMENTS HEREON ARE SUBJECT TO CHANGE UPON FINAL APPROVAL OF ALTERNATIVE DESIGN.

NO EXCEPTION TAKEN
REJECTED
MAKE CORRECTIONS NOTED
REVISE AND RESUBMIT
SUBMIT SPECIFIED ITEM

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T. Y. LIN INTERNATIONAL - SAN FRANCISCO

Date 11/13/96 By SG

DSB FILE NO: 96-01939\SHT-17

dsb

A.P. NO.: I-H3-1(68)
STATE PROJ. NO.:
BRIDGE NO: 4
DESIGNER: HAWAII D.O.T.
CONTRACTOR: KIEWIT PACIFIC COMPANY

D.S. BROWN 96-01939-11685 SHEET 3 OF 7

DATE	SYM	REVISION	DR	CK

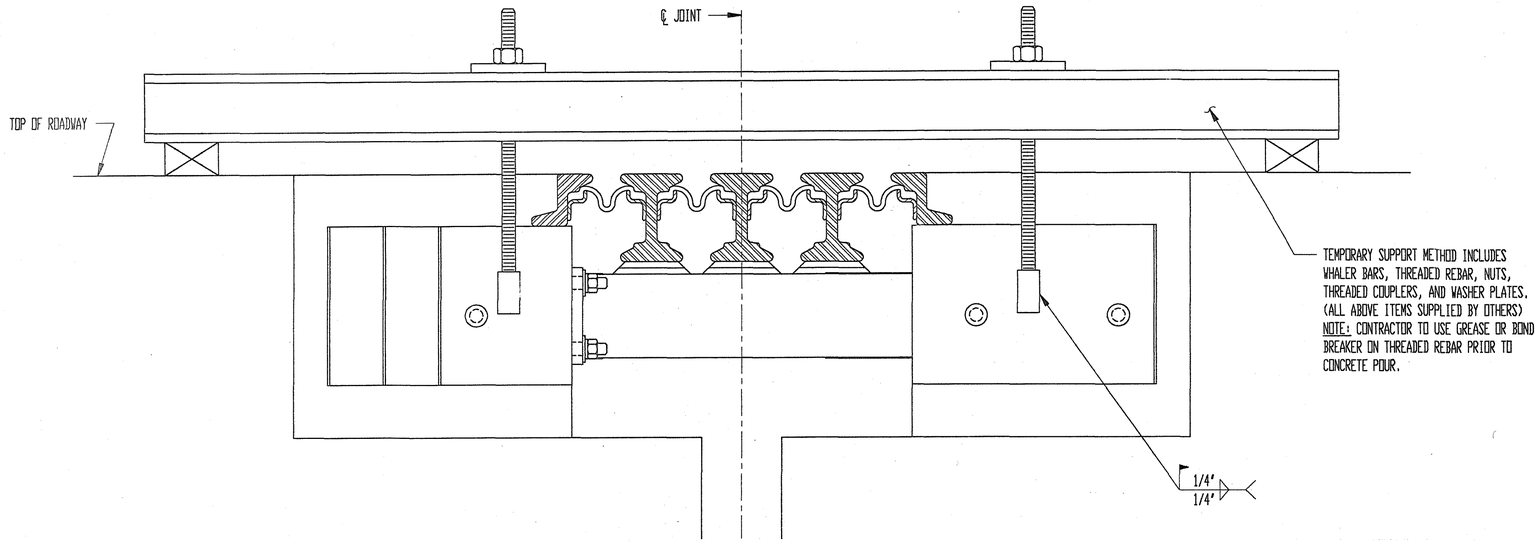
THE D.S. BROWN COMPANY, INC.
NORTH BALTIMORE, OHIO 45872-0158 U.S.A.

SCALE:
DATE: 10-21-96
DRAWN BY: S. SAEGER

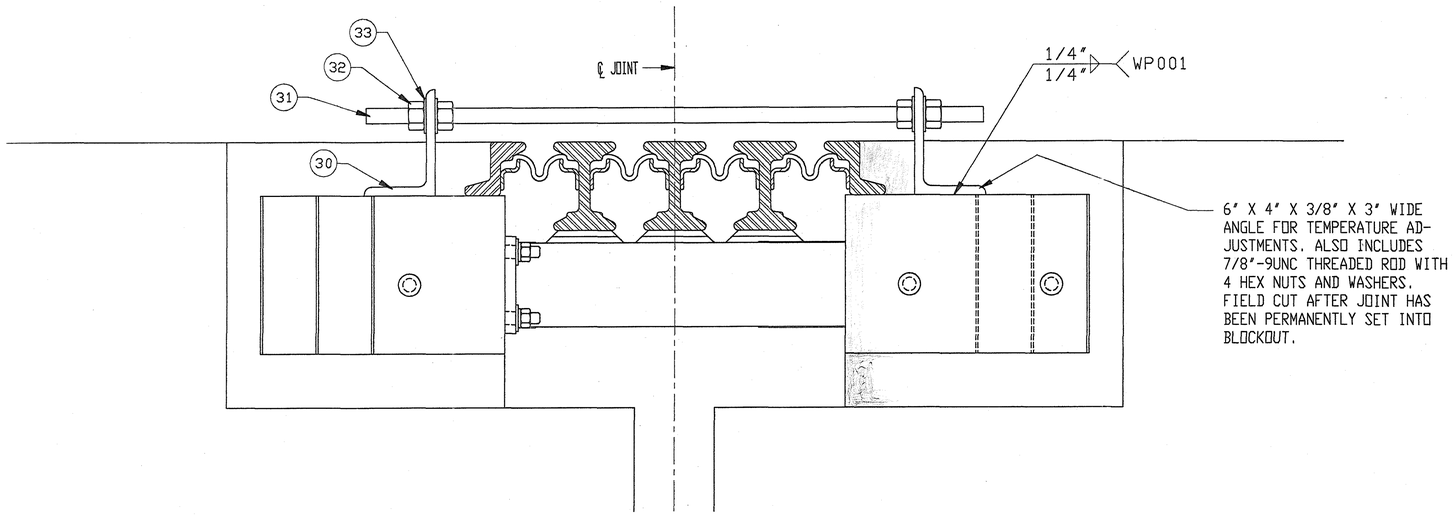
H-3 IN HONOLULU, HI (BRIDGE #4)
LOWER HALAWA, UNIT 1 (PHASE 1B) HAWAII

'D-320' BOXES, BARS & DETAILS

DRAWING NUMBER 96-01939-17



'D-320' TEMPORARY SUPPORT METHOD



'D-320' TEMPERATURE ADJUSTMENT DETAIL

INSTALLATION PROCEDURES

1) FIELD ENGINEER SHALL DETERMINE JOINT OPENING ON DAY OF INSTALLATION.

2) PLACE JOINT IN BLOCKOUT AND PROPERLY ALIGN BOTH HORIZONTALLY AND VERTICALLY. (JOINT MUST FOLLOW ROADWAY GRADE.)

3) BEND OR REMOVE CONFLICTING REBAR AS DIRECTED BY FIELD ENGINEER.

4) AFTER JOINT IS SECURED, REMOVE TEMPORARY ADJUSTMENT DEVICES AS DIRECTED.

5) CONTRACTOR TO PLACE FORMWORK SO THAT NO CONCRETE FLOWS INTO BOXES AND JOINT GAP OPENINGS.

6) APPLY GREASE OR BOND BREAKER TO THREADED REBAR PRIOR TO POUR. (SEE TEMPORARY SUPPORT METHOD - THIS SHEET.)

7) POUR AND VIBRATE CONCRETE INTO BLOCKOUT AND REMOVE FORMWORK AFTER CURE TIME, AS DETERMINED BY FIELD ENGINEER.

REVIEW

☒ No Exceptions Taken
☐ Note Markings or Corrections
☐ Revise & Resubmit
☐ Comments Attached

Review is for general conformance with the design concept of the project and the Contract Documents. Markings or comments shall not be construed as relieving the Contractor from compliance with the project plans and specifications, nor departure therefrom. The Contractor remains responsible for details and accuracy, for performing and correlating all quantities and dimensions, for selecting fabrication processes, for techniques of assembly and construction, for coordination of the work of all trades, and for performing his work in a safe manner.

YUJI KASAMOTO, INC.

By: FW Date: 12/6/96

REVIEW IS BASED ON CONTRACTOR'S PROPOSED ALTERNATIVE DESIGN, DATED 7/22/96. COMMENTS HEREON ARE SUBJECT TO CHANGE UPON FINAL APPROVAL OF ALTERNATIVE DESIGN.

OFFICE COPY

☒ NO EXCEPTION TAKEN
☐ REJECTED
☐ MAKE CORRECTIONS NOTED
☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

Checking is only for general conformance with the design concept of the project and general compliance with the information given in the contract documents. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions which shall be confirmed and corrected at the job site; fabrication processes and techniques of construction; coordination of his work with that of all other trades; and the satisfactory performance of his work.

T. Y. LIN INTERNATIONAL - SAN FRANCISCO

Date 11/13/96 By SG

D.S. BROWN 96-01939-11685 SHEET 4 OF 7

DSB FILE NO: 96-01939\SHT-18

F.A.P. NO.: I-H3-1(68)
STATE PROJ. NO.:
BRIDGE NO: 4
DESIGNER: HAWAII D.O.T.
CONTRACTOR: KIEWIT PACIFIC COMPANY

DATE	SYM	REVISION	DR	CK

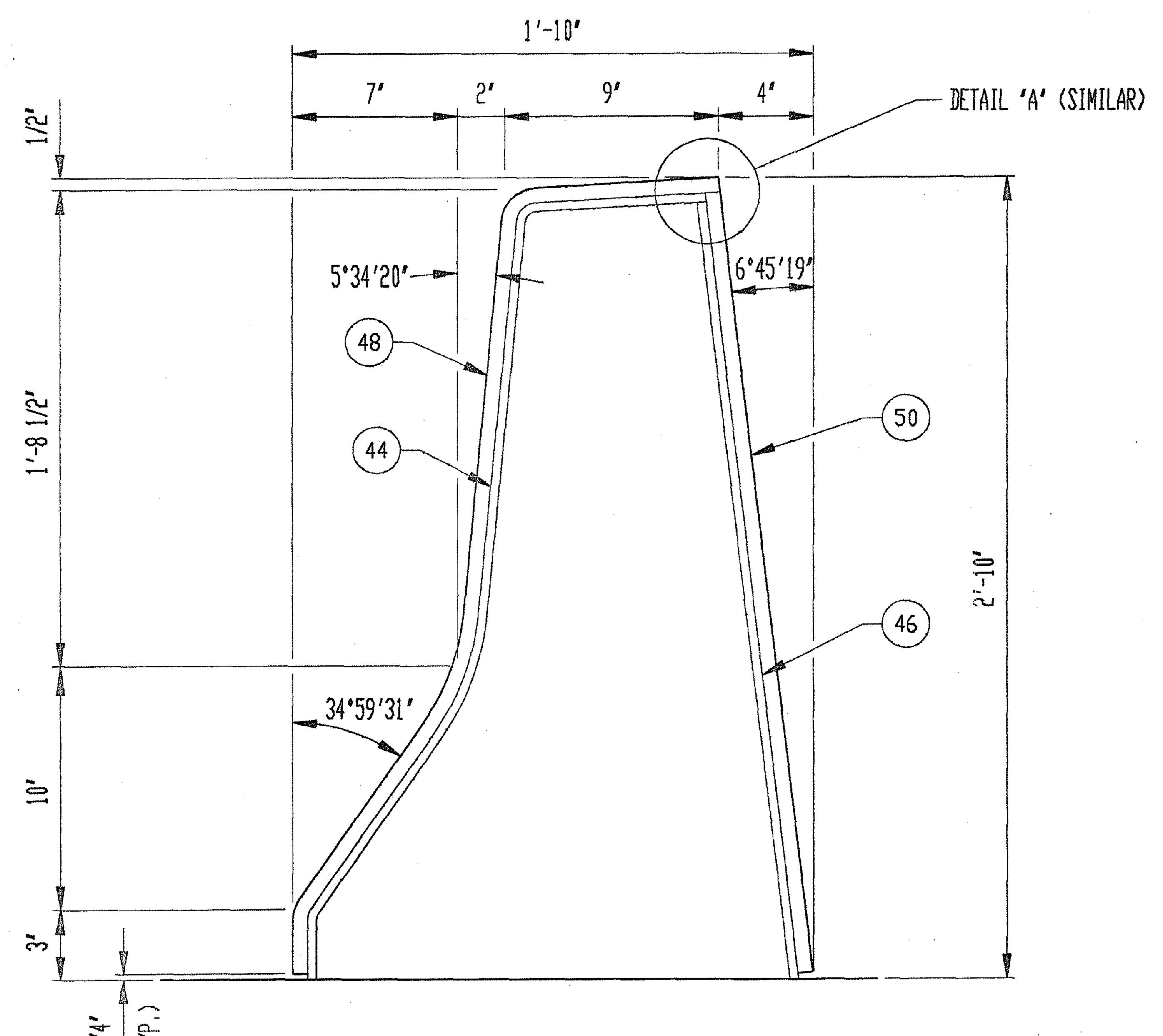
THE D.S. BROWN COMPANY, INC.
NORTH BALTIMORE, OHIO 45872-0158 U.S.A.

SCALE: DRAWN BY: S. RAEDER
DATE: 10-21-96

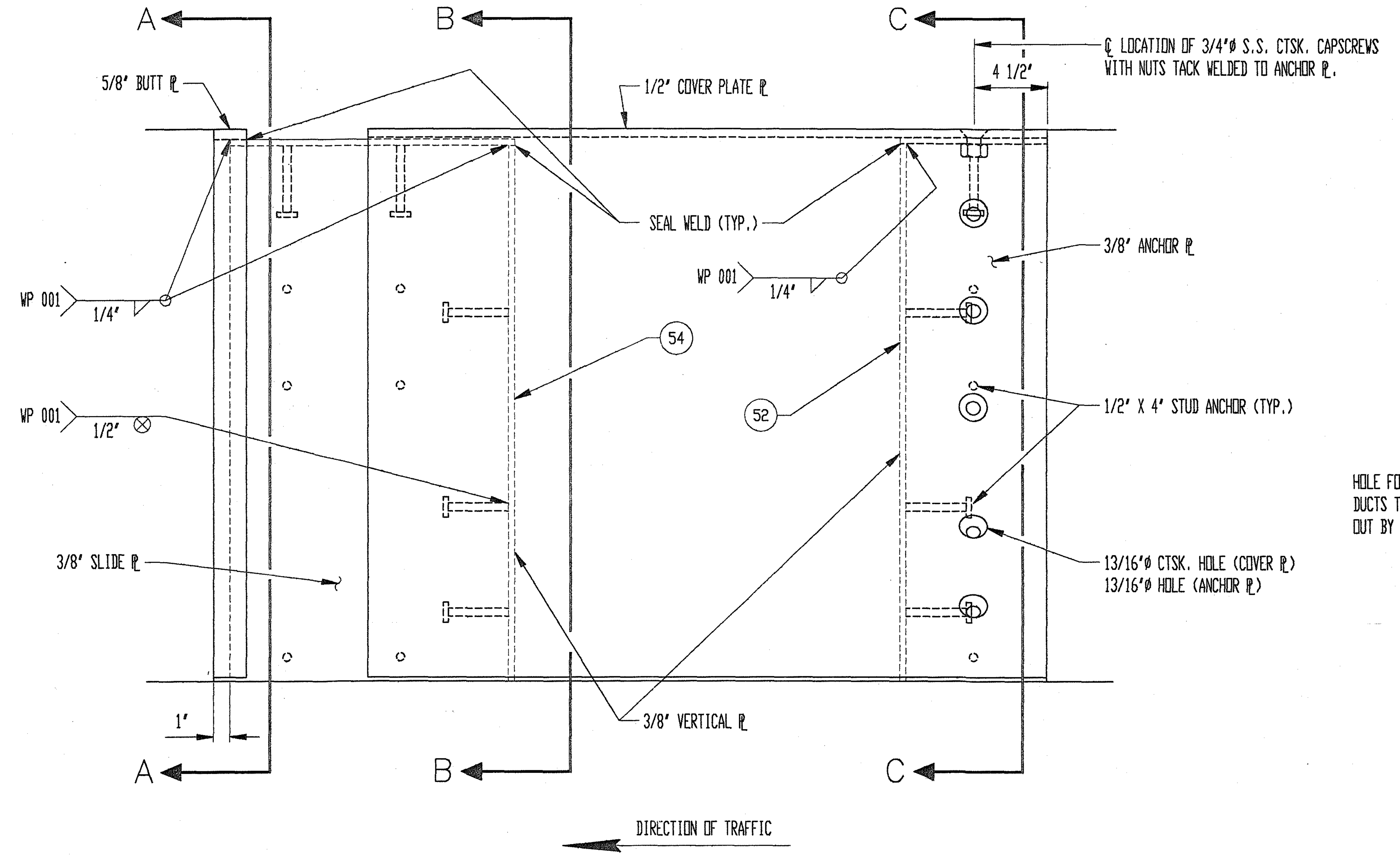
H-3 IN HONOLULU, HI (BRIDGE #4)
LOWER HALAWA, UNIT 1 (PHASE 1B) HAWAII

'D-320' SECTIONS & DETAILS

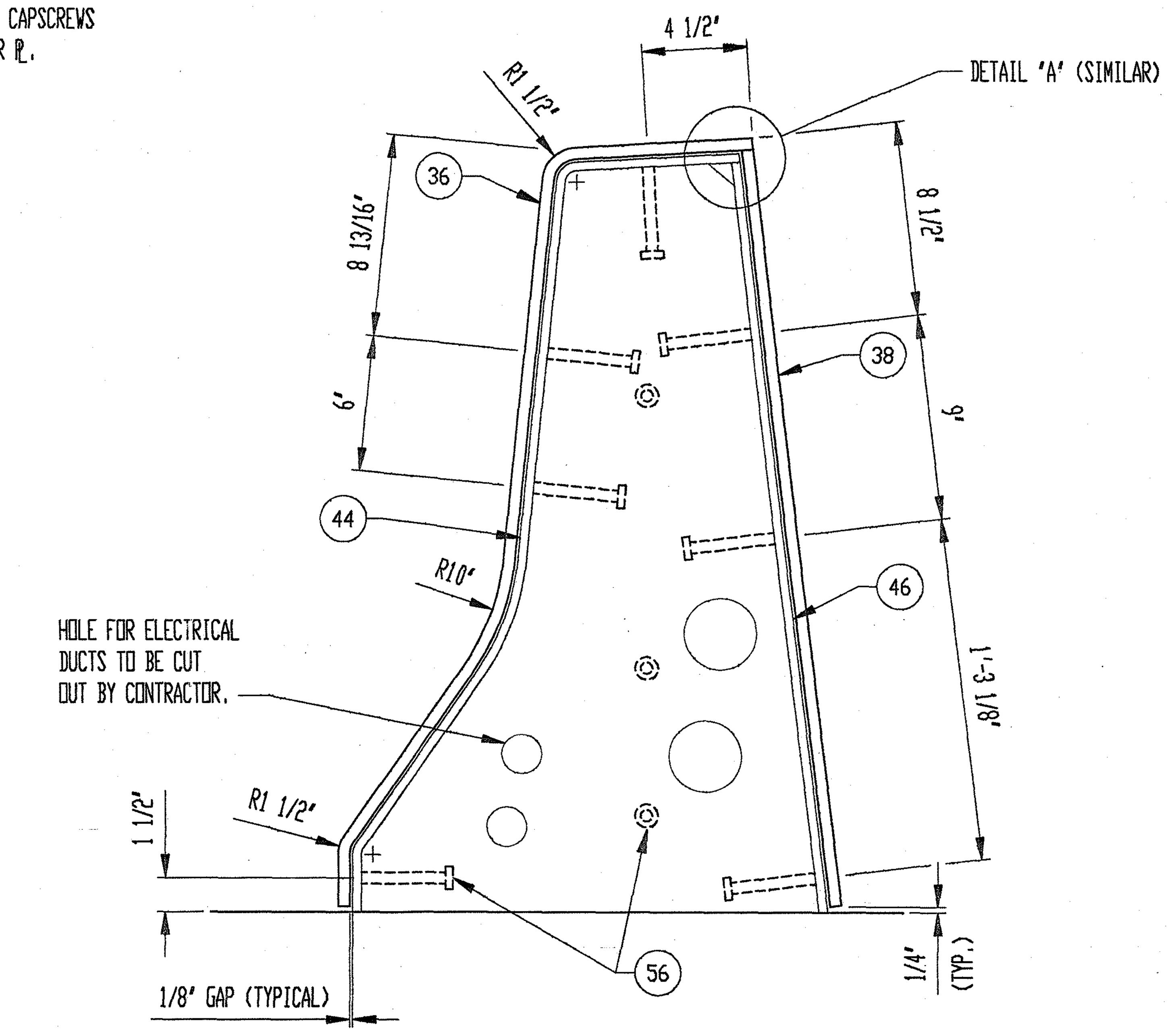
DRAWING NUMBER
96-01939-18



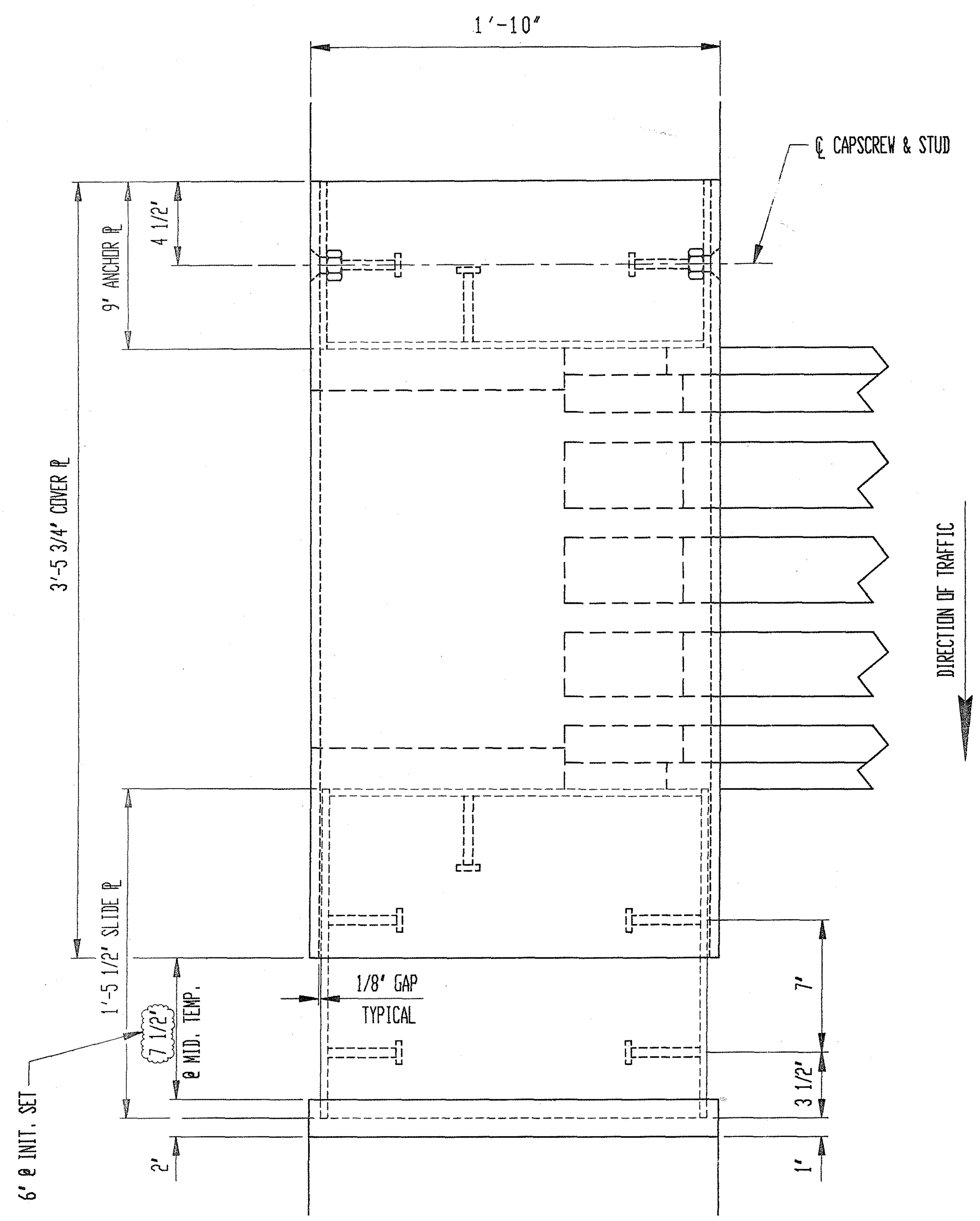
SECTION A–A
SCALE: 3/16"



TYPE I COVER PLATE ELEVATION
(4) ASSEMBLIES REQUIRED



SECTION B–B
SCALE: 3/16"



TYPE I COVER PLATE PLAN VIEW
SCALE: 3/16"

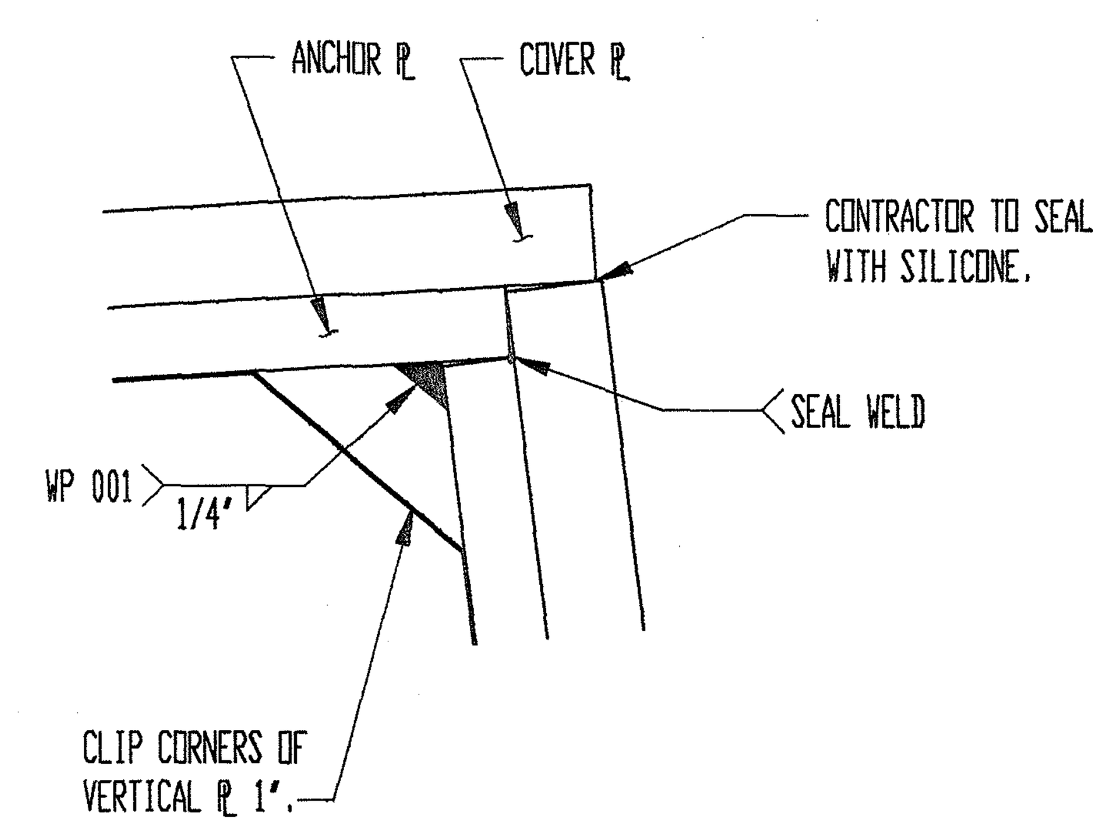
COVER PLATE NOTES

ALL PLATES SHALL BE ASTM-A36 STEEL AND GALVANIZED IN ACCORDANCE WITH ASTM-A123. (AFTER FABRICATION)

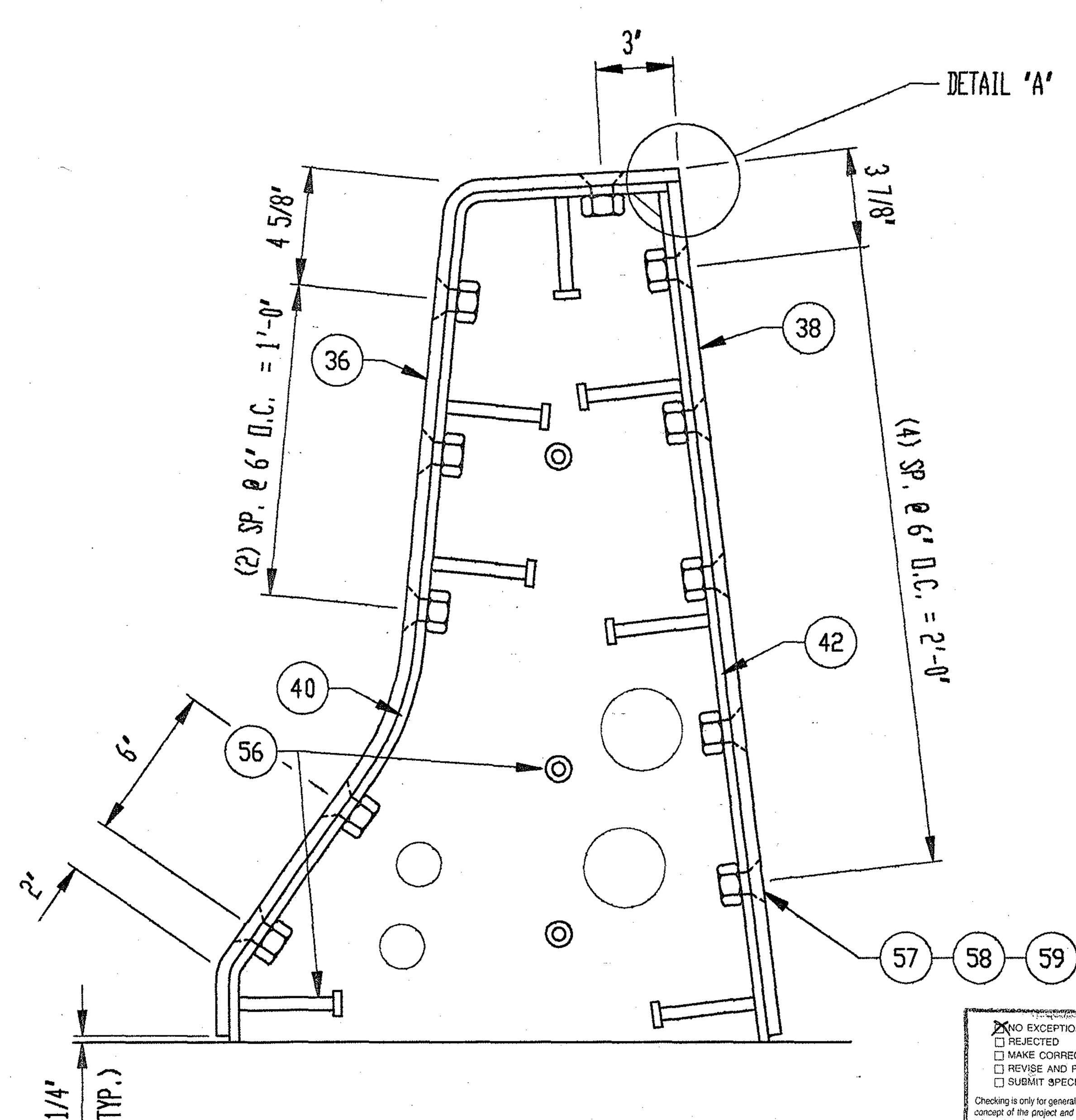
COVER PLATES SHALL BE ATTACHED USING 3/4"ø S.S. CTSK. CAPSCREWS WITH NUTS TACK WELDED TO ANCHOR PLATE.

A PROTECTIVE PLUG SHALL BE UTILIZED ON BACK SIDE OF NUT TO PREVENT CONCRETE FROM ENTERING THREADS.

COVER PLATES SHALL BE MOUNTED TOWARDS ONCOMING TRAFFIC.



DETAIL "A"
SCALE: FULL



SECTION C–C
SCALE: 3/16"

OFFICE COPY

REVIEW IS BASED ON CONTRACTOR'S PROPOSED ALTERNATIVE DESIGN, DATED 7/22/96. COMMENTS HEREON ARE SUBJECT TO CHANGE UPON FINAL APPROVAL OF ALTERNATIVE DESIGN.

REVIEW
☒ No Exceptions Taken
☐ Note Markings or Corrections
☐ Revise & Resubmit
☐ Comments Attached

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YUJI KASAMOTO, INC.
By: EW Date: 12/6/96

DSB FILE NO: 96-01939\SHT-19

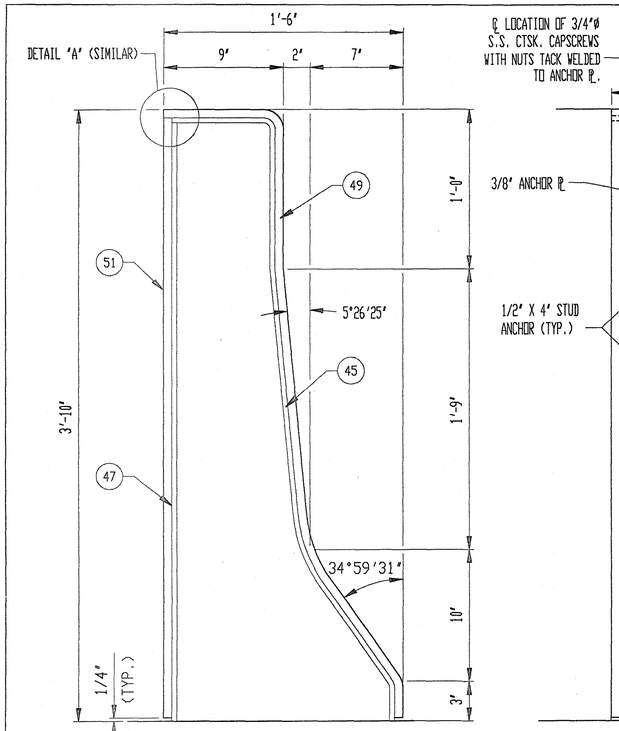
D.S. BROWN 96-01939-11685 SHEET 5 OF 7

DATE	SYM	REVISION	DR	CK

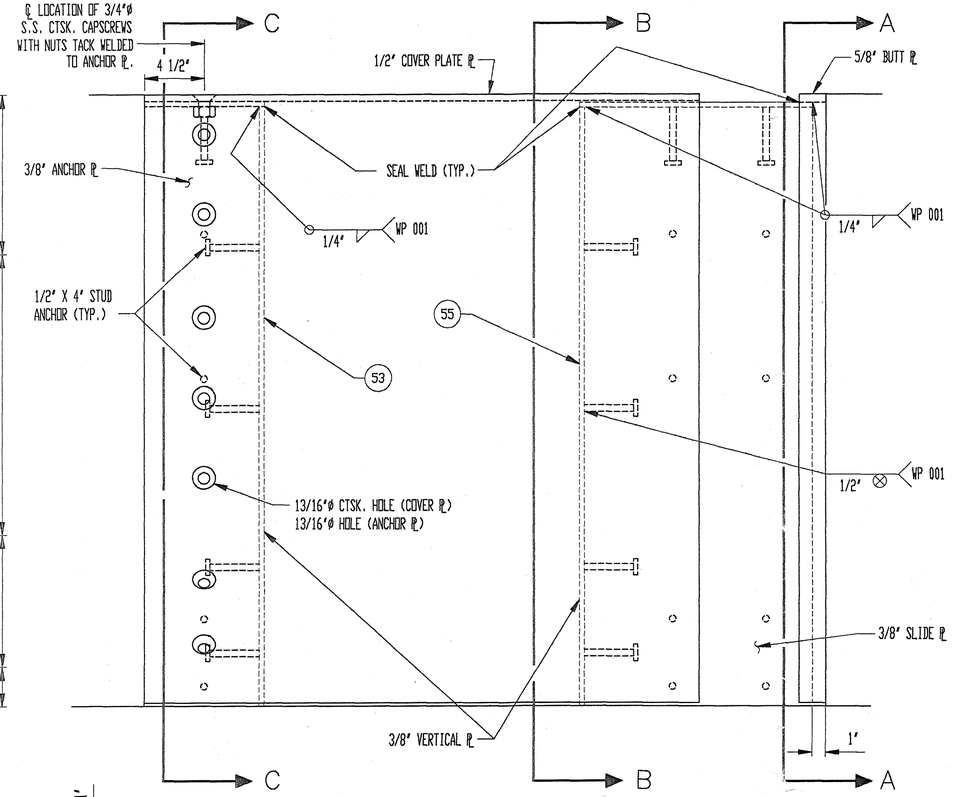
F.A.P. NO.: I-H3-1(68)
STATE PROJ. NO.:
BRIDGE NO: 4
DESIGNER: HAWAII D.O.T.
CONTRACTOR: KIEWIT PACIFIC COMPANY

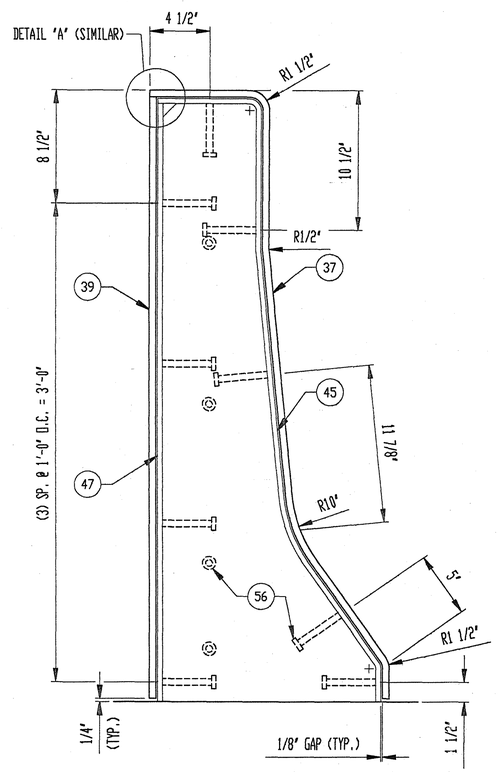
THE D.S. BROWN COMPANY, INC.
NORTH BALTIMORE, OHIO 45872-0158 U.S.A.

SCALE:
DRAWN BY: B. BAEDER
DATE: 10-21-96
H-3 IN HONOLULU, HI (BRIDGE #4)
LOWER HALAWA, UNIT 1 (PHASE 1B) HAWAII
'D-320' COVER PLATE DETAILS
DRAWING NUMBER 96-01939-19

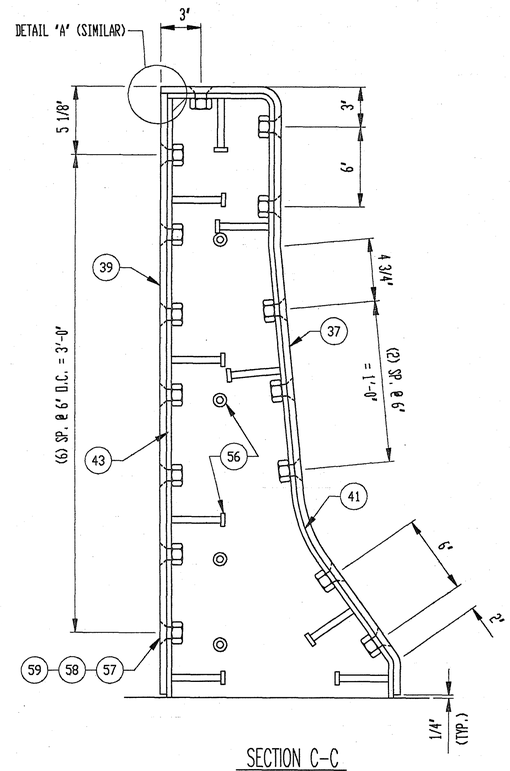


SECTION A-A
SCALE: 3/16"

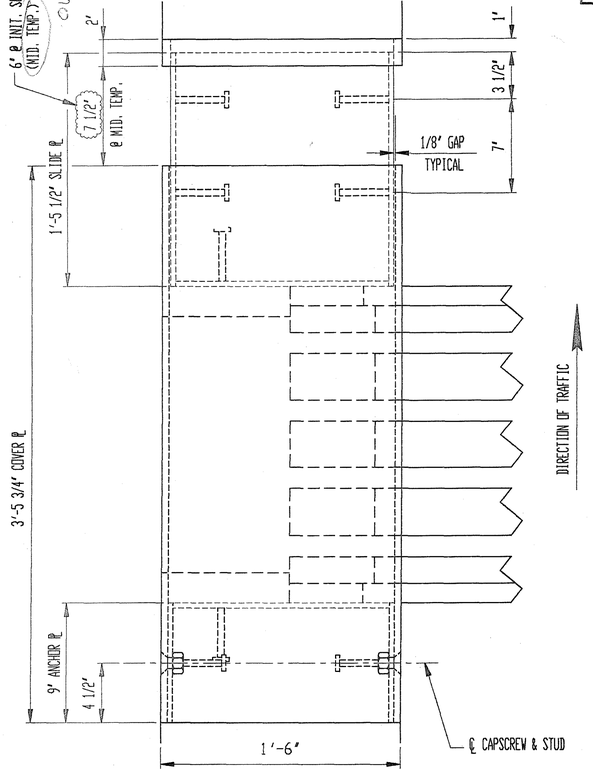




SECTION B-B
SCALE: 3/16"



SECTION C-C
SCALE: 3/16"
(SEE SECTION B-B FOR STUD SPACING)



TYPE II COVER PLATE PLAN VIEW
SCALE: 3/16"

DIRECTION OF TRAFFIC

TYPE II COVER PLATE ELEVATION
(4) ASSEMBLIES REQUIRED
SCALE: 3/16"

COVER PLATE NOTES

ALL PLATES SHALL BE ASTM-A36 STEEL AND GALVANIZED IN ACCORDANCE WITH ASTM-A123. (AFTER FABRICATION)

COVER PLATES SHALL BE ATTACHED USING 3/4"ø S.S. CTSK. CAPSCREWS WITH NUTS TACK WELDED TO ANCHOR PLATE.

A PROTECTIVE PLUG SHALL BE UTILIZED ON BACK SIDE OF NUT TO PREVENT CONCRETE FROM ENTERING THREADS.

COVER PLATES SHALL BE MOUNTED TOWARDS ONCOMING TRAFFIC.

REVIEW
☒ No Exceptions Taken
☐ Note Markings or Corrections
☐ Revise & Resubmit
☐ Comments Attached

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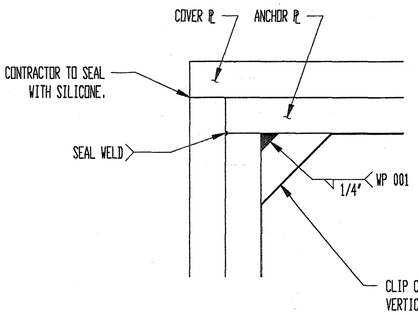
YUJI KASAMOTO, INC.
By: FW Date: 12/6/96

REVIEW IS BASED ON CONTRACTOR'S PROPOSED ALTERNATIVE DESIGN, DATED 7/22/96 COMMENTS HEREON ARE SUBJECT TO CHANGE UPON FINAL APPROVAL OF ALTERNATIVE DESIGN.



DETAIL "A"
SCALE: FULL

OFFICE COPY

NO EXCEPTION TAKEN
☐ REJECTED
☐ MAKE CORRECTIONS NOTED
☐ REVISE AND RESUBMIT
☐ SUBMIT RESPECIFIED ITEM
Checking is only for general conformance with the design concept of the project and general compliance with the information given in the contract documents. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the job site; fabrication processes and techniques of construction; coordination of his work with that of all other trades; and the satisfactory performance of his work.
T.Y. LIN INTERNATIONAL - SAN FRANCISCO
Date 11/19/96 By SG

D.S. BROWN 96-01939-11685 SHEET 6 OF 7

dsb.

F.A.P. NO.: I-H3-1(68)
STATE PROJ. NO.:
BRIDGE NO: 4
DESIGNER: HAWAII D.O.T.
CONTRACTOR: KIEWIT PACIFIC COMPANY

DATE	SYM	REVISION	DR	CK

THE D.S. BROWN COMPANY, INC.
NORTH BALTIMORE, OHIO 45872-0158 U.S.A.

SCALE:
DATE: 10-21-96
DRAWN BY: S. BAECHER

H-3 IN HONOLULU, HI (BRIDGE #4)
LOWER HALAWA, UNIT 1 (PHASE 1B) HAWAII

'D-320' COVER PLATE DETAILS
DRAWING NUMBER 96-01939-20

DSB FILE NO: 96-01939\SHT-20

ITEM NO.	PART NO.	DESCRIPTION	LENGTH FEET	LENGTH INCHES	MATL	FINISH	REMARKS	TOTAL
1	MOD-EB-G	EDGE BEAM	38	7	A588	A123	UPTURN CUT BOTH ENDS	8
2	MOD-EB-G	EDGE BEAM	0	10 1/4	A588	A123	UPTURN PIECE RH	8
3	MOD-EB-G	EDGE BEAM	0	10 1/4	A588	A123	UPTURN PIECE LH	8
4	MOD-CB-G	CENTER BEAM	38	8 5/8	A588	A123	UPTURN CUT BOTH ENDS	12
5	MOD-CB-G	CENTER BEAM	0	11 1/16	A588	A123	UPTURN PIECE	24
6	MOD-CLIP-G	SEAL CLIP	.	.	A588	A123	WELDED TO CENTER & EDGE BEAMS	1286'
7	RD58-A36G	5/8"Ø ROUND BAR	2	0	A36	A123	LOOP ANCHOR	160
8	SD34X4G	3/4"Ø X 4" STUD ANCHOR	0	4	A108	A123	WELDED TO SUPPORT BOXES	168
9	MOD-TUBE-G	7" X 9" X 3/8" TUBE	0	7 3/8	A500	A123	SHORT SUPPORT BOX	56
10	MOD-TUBE-G	7" X 9" X 3/8" TUBE	0	10 1/2	A500	A123	MIDDLE SUPPORT BOX	56
11	MOD-TUBE-G	7" X 9" X 3/8" TUBE	1	1 5/8	A500	A123	LONG SUPPORT BOX	56
12	MOD-PIPE-G	1" SQUARE TUBING	0	1 1/2	A513	A123	SUPPORT BOX ITEM	112
13	MOD-CAP-16GA	16 GA. X 6 5/8" PLATE	0	8 5/8	A36	A123	SUPPORT BOX END CAP	168
14	F1.75X4.75-A588G	1 3/4" X 4 3/4" BAR	2	7 7/8	A588	A123	OUTER SUPPORT BAR	56
15	F1.75X4.75-A588G	1 3/4" X 4 3/4" BAR	2	7 7/8	A588	A123	INNER SUPPORT BAR	28
16	PL16GA-SS	16 GA. X 2 3/8" SHIM	0	6 1/2	A240	2b	TYPE 304	112
17	PL16GA-SS	16 GA. X 2 3/8" SHIM	0	9 5/8	A240	2b	TYPE 304	112
18	PL16GA-SS	16 GA. X 2 3/8" SHIM	1	0 3/4	A240	2b	TYPE 304	112
19	F58X2.5-A36G	5/8" X 2 1/2" FLAT BAR	0	3	A36	A123	EXTERIOR SPRING STOP	56
20	F58X2.5-A36G	5/8" X 2 1/2" FLAT BAR	0	3 1/2	A36	A123	INTERIOR SPRING STOP	112
21	F12X12-A588G	1/2" X 1/2" FLAT BAR	0	4 3/8	A588	A123	CONNECTS CENTER BEAM TO SUPPORT BAR	84
22	F58X3.25-A36G	5/8" X 3 1/4" FLAT BAR	0	5 1/2	A36	A123	REMOVABLE PLATE	56
23	BL58X3.5-A307G	5/8"-11UNC SQUARE HEAD BOLT	0	3 1/2	A307	B695	REMOVABLE PLATE ITEM	112
24	NT58G	5/8"-11UNC HEX NUT	.	.	A563	B695	REMOVABLE PLATE ITEM	112
25	FWA58G	5/8" I.D. FLAT WASHER	.	.	F844	A153	REMOVABLE PLATE ITEM	112
26	LWA58G	5/8" I.D. LOCK WASHER	.	.	F463	A153	REMOVABLE PLATE ITEM	112
27	MA-91	CONTROL SPRING (COMPLETE PART)	.	.	.	.	.	112
28	MA-80	PRECOMPRESSED SPRING	.	.	.	.	.	168
29	MA-81	SLIDE BEARING	.	.	.	.	.	168
30	L6X4X38	6" X 4" X 3/8" ANGLE	0	3	.	.	TEMPERATURE ADJUSTMENT ITEM	56
31	TR78X34	7/8"-9UNC THREADED STUD	2	10	.	.	TEMPERATURE ADJUSTMENT ITEM	28
32	NT78	7/8"-9UNC HEX NUT	.	.	.	.	TEMPERATURE ADJUSTMENT ITEM	112
33	FWA78	7/8" I.D. FLAT WASHER	.	.	.	.	TEMPERATURE ADJUSTMENT ITEM	112
34	NX-77	LUBRICANT/ADHESIVE	.	.	.	.	GALLONS	4
35	MOD-SEAL	MODULAR JOINT STRIP SEAL	40	0	.	.	640' TOTAL	16
36	PL12-A36G	1/2" X 3'-5 3/4" PLATE	3	7 1/8	A36	A123	TYPE I COVER PLATE FRONT	4
37	PL12-A36G	1/2" X 3'-5 3/4" PLATE	4	7 3/8	A36	A123	TYPE II COVER PLATE FRONT	4
38	PL12-A36G	1/2" X 3'-5 3/4" PLATE	2	9 7/16	A36	A123	TYPE I COVER PLATE BACK	4
39	PL12-A36G	1/2" X 3'-5 3/4" PLATE	3	9 1/4	A36	A123	TYPE II COVER PLATE BACK	4
40	PL38-A36G	3/8" X 9" PLATE	3	6 3/16	A36	A123	TYPE I ANCHOR PLATE FRONT	4
41	PL38-A36G	3/8" X 9" PLATE	4	6 7/16	A36	A123	TYPE II ANCHOR PLATE FRONT	4
42	PL38-A36G	3/8" X 9" PLATE	2	9 5/16	A36	A123	TYPE I ANCHOR PLATE BACK	4
43	PL38-A36G	3/8" X 9" PLATE	3	9 1/8	A36	A123	TYPE II ANCHOR PLATE BACK	4
44	PL38-A36G	3/8" X 1'-5 1/2" PLATE	3	5 15/16	A36	A123	TYPE I SLIDE PLATE FRONT	4
45	PL38-A36G	3/8" X 1'-5 1/2" PLATE	4	6 1/8	A36	A123	TYPE II SLIDE PLATE FRONT	4
46	PL38-A36G	3/8" X 1'-5 1/2" PLATE	2	9 3/16	A36	A123	TYPE I SLIDE PLATE BACK	4
47	PL38-A36G	3/8" X 1'-5 1/2" PLATE	3	9	A36	A123	TYPE II SLIDE PLATE BACK	4
48	F58X2.0-A36G	5/8" X 2" FLAT BAR	3	6 7/8	A36	A123	TYPE I BUTT PLATE FRONT	4
49	F58X2.0-A36G	5/8" X 2" FLAT BAR	4	7 1/4	A36	A123	TYPE II BUTT PLATE FRONT	4
50	F58X2.0-A36G	5/8" X 2" FLAT BAR	2	9 5/16	A36	A123	TYPE I BUTT PLATE BACK	4
51	F58X2.0-A36G	5/8" X 2" FLAT BAR	3	9 1/8	A36	A123	TYPE II BUTT PLATE BACK	4
52	PL38-A36G	3/8" X 1'-8 1/4" PLATE	2	9 1/16	A36	A123	TYPE I VERTICAL ℄ UNDER ANCHOR ℄	4
53	PL38-A36G	3/8" X 1'-4 1/4" PLATE	3	9 1/8	A36	A123	TYPE II VERTICAL ℄ UNDER ANCHOR ℄	4
54	PL38-A36G	3/8" X 1'-8" PLATE	2	8 15/16	A36	A123	TYPE I VERTICAL ℄ UNDER SLIDE ℄	4
55	PL38-A36G	3/8" X 1'-4" PLATE	3	9	A36	A123	TYPE II VERTICAL ℄ UNDER SLIDE ℄	4
56	SD12X4G	1/2"Ø X 4" STUD ANCHOR	0	4	A108	A123	COVER PLATE ANCHORAGE	248
57	ACK34-1.625SS	3/4"-10UNC S.S. CTSK. SLOTTED FLATHEAD CAPSCREW	0	1 5/8	F593	GROUP 1	COVER PLATE ANCHORAGE	104
58	NT34G	3/4" -10UNC HEX NUT	.	.	A563	B695	COVER PLATE ANCHORAGE	104
59	NX-49	PLASTIC END CAP	.	.	.	.	APPLIED TO BACK SIDE OF NUT	104

QUANTITIES INDICATED ARE FOR (4) 'D-320' JOINTS.

GENERAL NOTES

EDGE BEAMS, CENTER BEAMS AND SUPPORT BARS SHALL BE ASTM-A588 STEEL.

SUPPORT BOXES SHALL BE ASTM-A500 STEEL.

STAINLESS STEEL SLIDING SURFACES SHALL BE ASTM-A240, TYPE 304, WITH A 2b FINISH.

STUD ANCHORS SHALL BE ASTM-A108 STEEL AND AUTOMATICALLY END WELDED.

ALL STEEL IN THE EXPANSION JOINT DEVICES SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM-A123.

MODULAR JOINTS SHALL BE EQUIPPED WITH TEMPERATURE ADJUSTMENT DEVICES TO ALLOW FOR ADJUSTMENTS PER FIELD ENGINEERS RECOMMENDATIONS.

ALL STEEL SURFACES IN CONTACT WITH THE NEOPRENE SEAL SHALL BE CLEANED PRIOR TO THE INSTALLATION OF THE STRIP SEAL.

CARE SHALL BE TAKEN TO PREVENT DAMAGE DURING MOVING AND SHIPPING OF JOINTS.

MODULAR JOINTS SHALL FOLLOW ROADWAY SLOPE AND GRADE.

A D.S. BROWN REP. SHALL BE PRESENT DURING INSTALLATION OF THE MODULAR JOINTS.

MODULAR JOINTS SHALL BE MARKED SHOWING JOINT TYPE AND PROPER LOCATION. MARKINGS SHALL BE VISIBLE AFTER JOINTS HAVE BEEN COMPLETELY INSTALLED.

REVIEW

☒ No Exceptions Taken
☐ Note Markings or Corrections
☐ Revise & Resubmit
☐ Comments Attached

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YUJI KASAMOTO, INC.

By: FKK Date: 12/6/96

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OFFICE COPY

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☐ REJECTED
☐ MAKE CORRECTIONS NOTED
☐ REVISE AND RESUBMIT
☐ SUBMIT RECORDS ITEM

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T.Y. LIN INTERNATIONAL - SAN FRANCISCO

Date: 11/19/96 By: SG

D.S. BROWN 96-01939-11685 SHEET 7 OF 7

DSB FILE NO: 96-01939\SHT-21

DATE	SYM	REVISION	DR	CK

F.A.P. NO.: I-H3-1(68)
STATE PROJ. NO.:
BRIDGE NO: 4
DESIGNER: HAWAII D.O.T.
CONTRACTOR: KIEWIT PACIFIC COMPANY

THE D.S. BROWN COMPANY, INC.
NORTH BALTIMORE, OHIO 45872-0158 U.S.A.

SCALE:
DRAWN BY: S. SAEGER
DATE: 10-21-96

H-3 IN HONOLULU, HI (BRIDGE #4)
LOWER HALAWA, UNIT 1 (PHASE 1B) HAWAII

B.O.M. & GENERAL NOTES

DRAWING NUMBER 96-01939-21