

Plan view of the proposed bridge deck. The diagram shows a horizontal bridge deck with various dimensions and bearings. A north arrow points towards the upper right. The deck is divided into sections by piers and abutments. The following table summarizes the key dimensions and bearings shown in the plan view:

Feature / Dimension	Value
Deck Width (Left Section)	28'-0"
Deck Width (Middle Section)	36'-3"
Deck Width (Right Section)	35'-4"
Section Length 1 (Left)	35'-4"
Section Length 2 (Middle-Left)	106'-0"
Section Length 3 (Middle-Right)	133'-9"
Section Length 4 (Right)	106'-0"
Section Length 5 (Far Right)	35'-4"
Total Deck Length	416'-5"
Bearing (Azimuth)	Az. 326° 52' 00"
Stationing (Left Abutment)	Sta. 82 + 45.05
Stationing (Pier No. 1)	Sta. 82 + 80.38
Stationing (Pier No. 2)	Sta. 83 + 86.38
Stationing (Pier No. 3)	Sta. 85 + 20.13
Stationing (Pier No. 4)	Sta. 86 + 26.13
Stationing (Right Abutment)	Sta. 86 + 61.46

BRIDGE LAYOUT PLAN
 Scale: 1"=20'-0"

The diagram shows a plan view of a bridge with the following dimensions and labels:

- Overall length: 416'-5"
- Segment lengths: 35'-4", 106'-0", 133'-9", 106'-0", 35'-4"
- Labels: existing abutment no. 1, existing pier no. 1, existing pier no. 2, existing pier no. 3, existing pier no. 4, existing abutment no. 2, existing top of deck

8'-6"

4'-3"

4'-3"

Symmetrical About C Roadway

existing top of deck

existing steel girders

TYPICAL CROSS SECTION

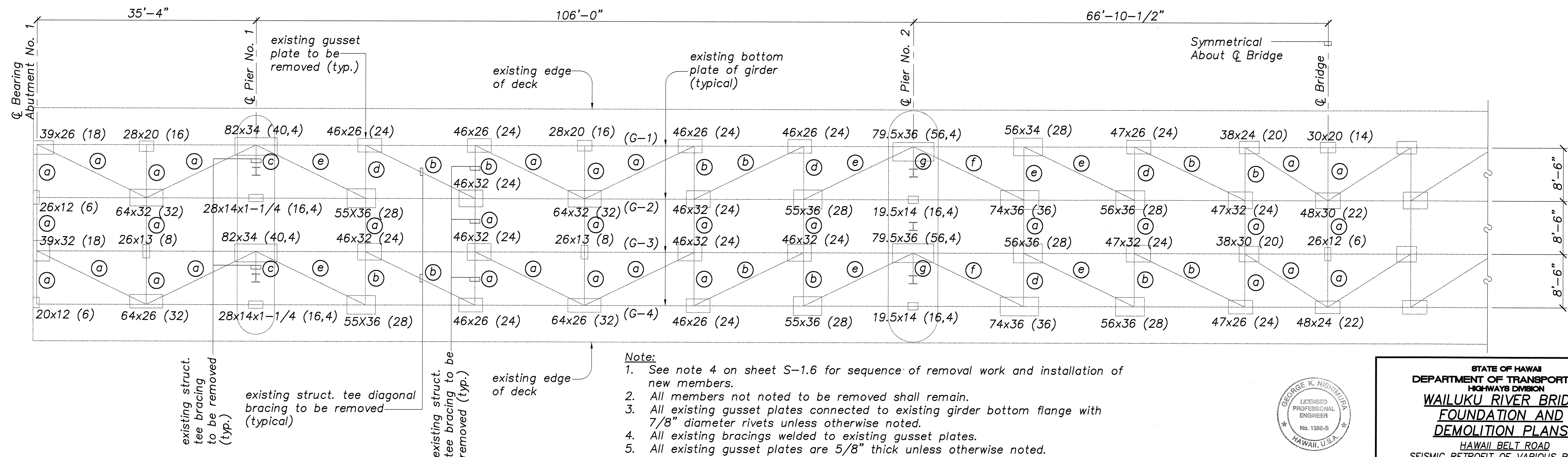
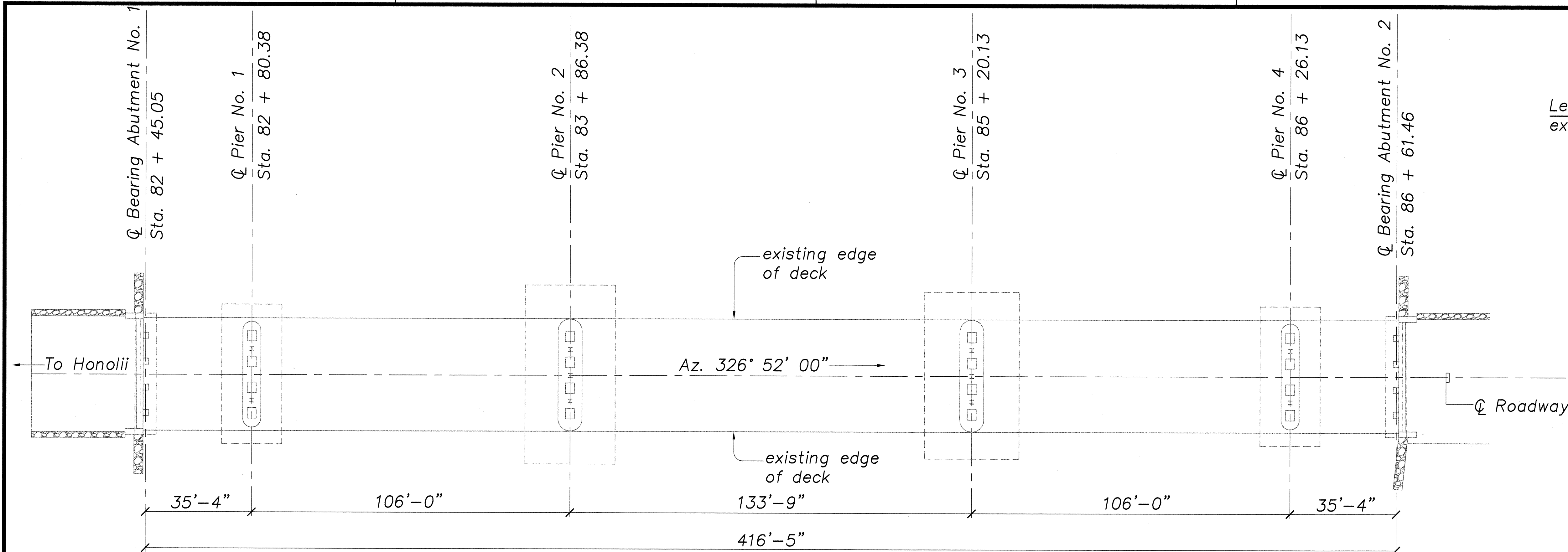
Scale: 1/4"=1'-0"

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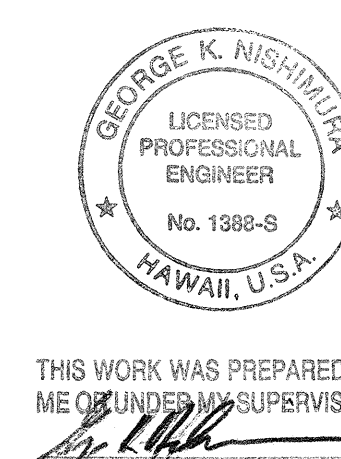
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HAWAII	HAW.	BR-019-2(42)	1999	5	38

Legend
existing gusset plates: 82x34 (40,4)
Denotes approx. size in inches
Approx. no. of 7/8" rivets
Approx. no. of 1-1/4" rivets

MARK	EXISTING MEMBER SIZES
(a)	2-WT4x8.5
(b)	2-WT5x10.5
(c)	2-WT5x27
(d)	2-WT6x15.5
(e)	2-WT6x18
(f)	2-WT6x22.5
(g)	2-WT6x32.5



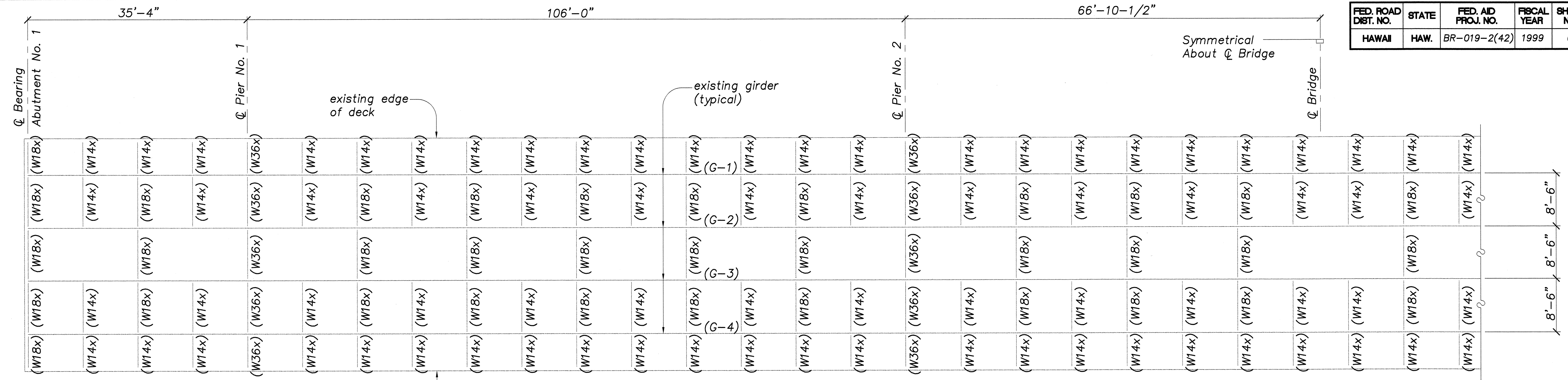
- Note:**
- See note 4 on sheet S-1.6 for sequence of removal work and installation of new members.
 - All members not noted to be removed shall remain.
 - All existing gusset plates connected to existing girder bottom flange with 7/8" diameter rivets unless otherwise noted.
 - All existing bracings welded to existing gusset plates.
 - All existing gusset plates are 5/8" thick unless otherwise noted.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
WAILUKU RIVER BRIDGE
FOUNDATION AND
DEMOLITION PLANS
HAWAII BELT ROAD
SEISMIC RETROFIT OF VARIOUS BRIDGES
VICINITY OF HILO
Federal Aid Project No. BR-019-2(42)
SCALE: AS NOTED DATE: APRIL 1998
SHEET No. S-1.2 OF 38 SHEETS

ORIGINAL PLAN
DATE
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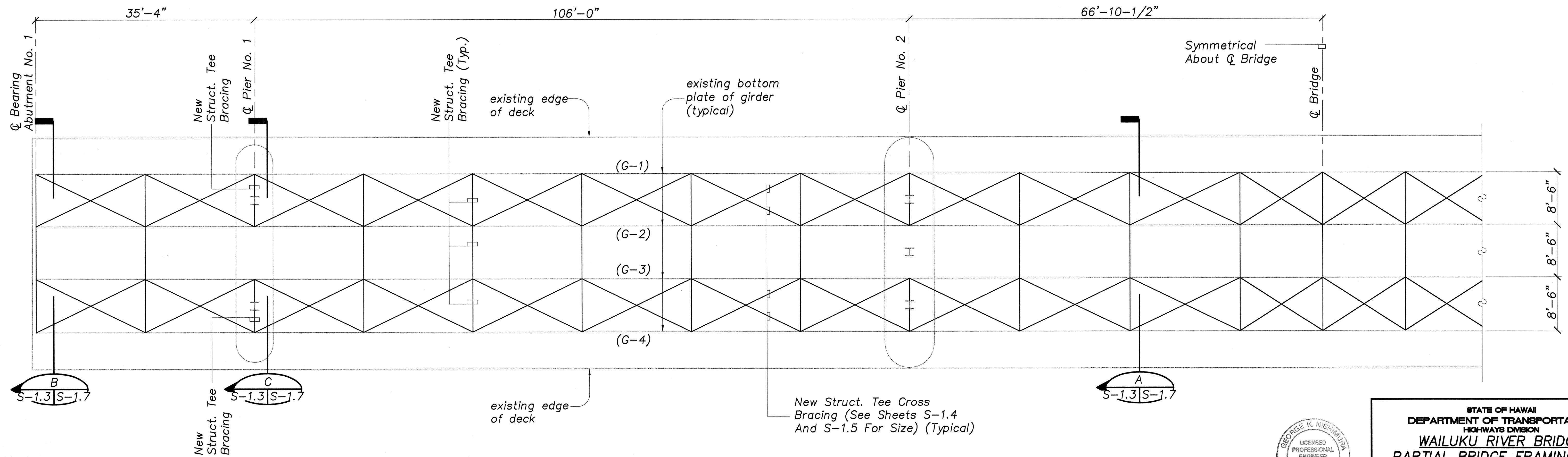
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HAWAII	HAW.	BR-019-2(42)	1999	6	38



Notes:
1. Framing Members In Parenthesis (W14x) Denotes Existing Members.

PARTIAL BRIDGE FRAMING PLAN

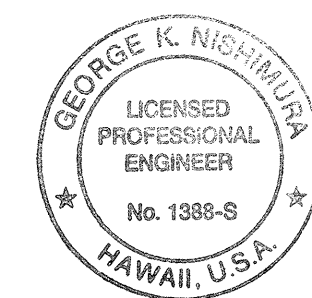
Scale: 1/8"=1'-0"



PARTIAL BOTTOM FLANGE BRACING LAYOUT

Scale: 1/8"=1'-0"

ORIGINAL	DATE
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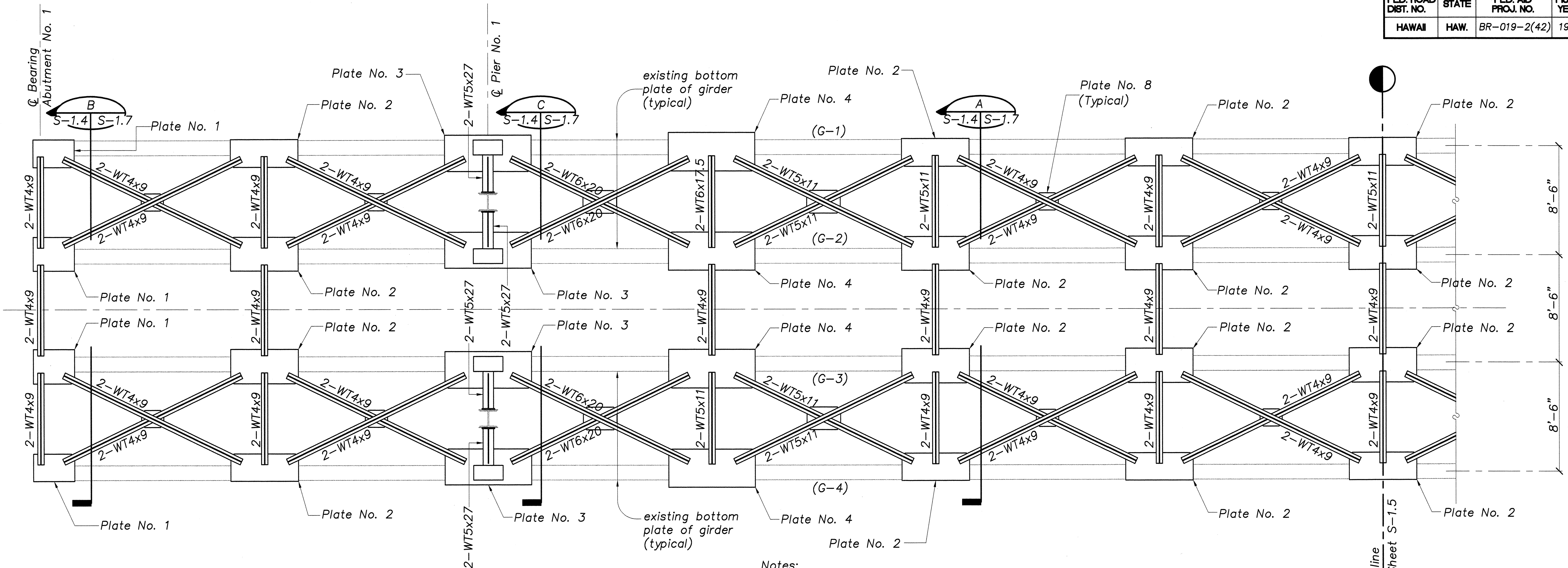
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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
WAILUKU RIVER BRIDGE
PARTIAL BRIDGE FRAMING PLAN

HAWAII BELT ROAD
SEISMIC RETROFIT OF VARIOUS BRIDGES
VICINITY OF HILO
Federal Aid Project No. BR-019-2(42)

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SHEET No. S-1.3 OF 38 SHEETS

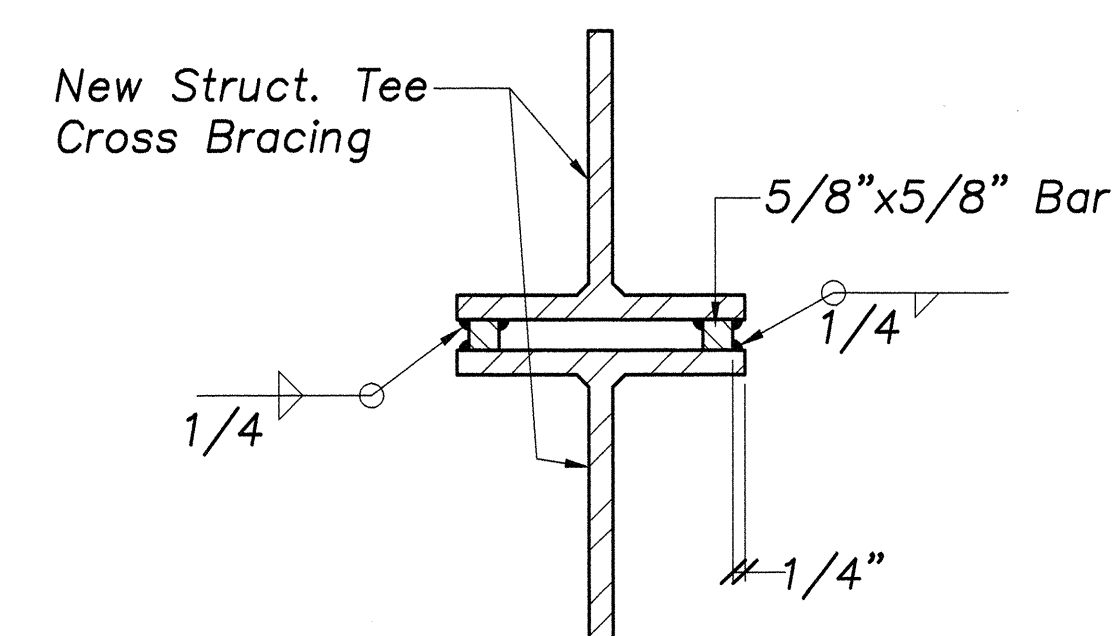
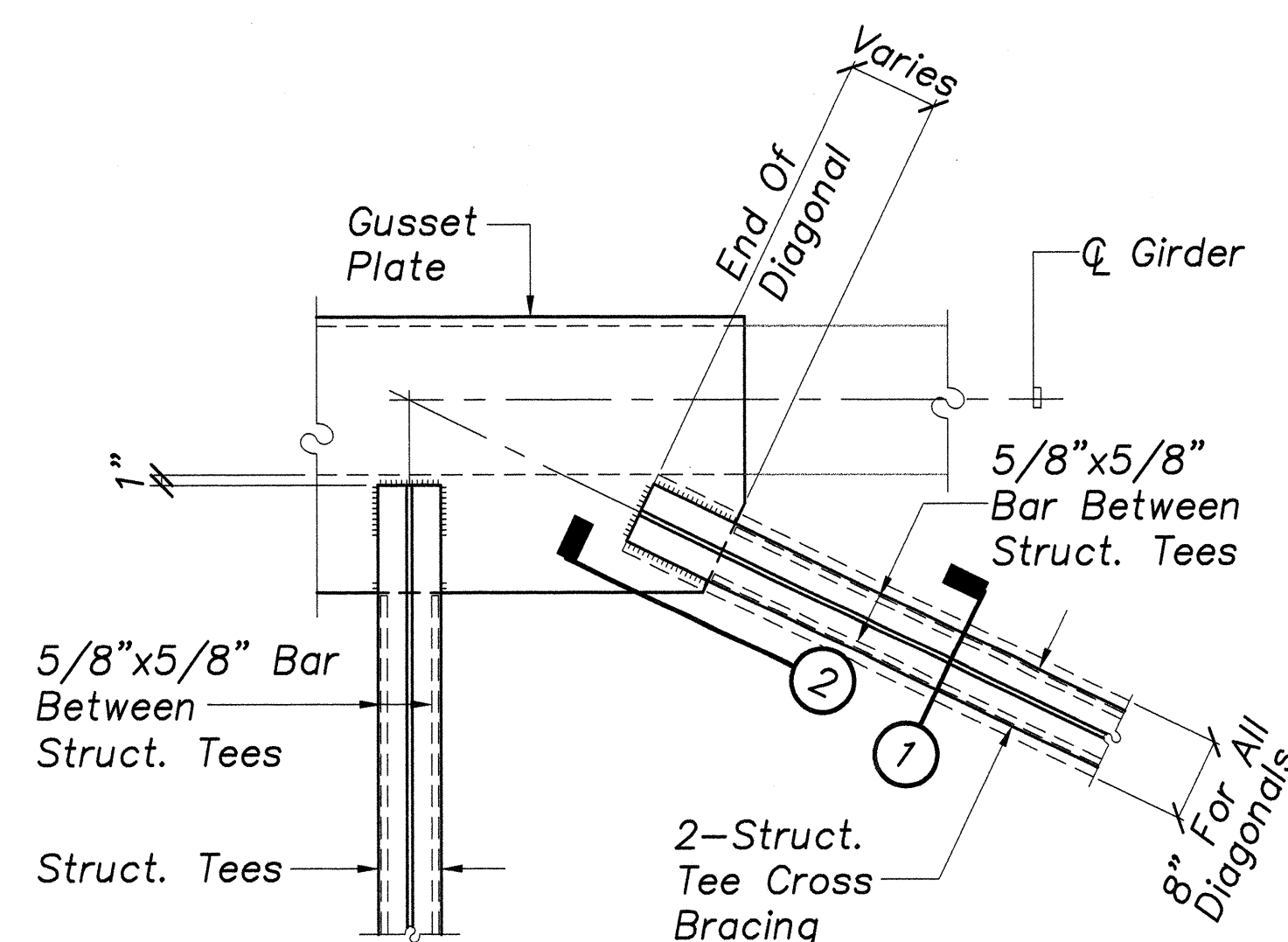
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HAWAII	HAW.	BR-019-2(42)	1999	7	38



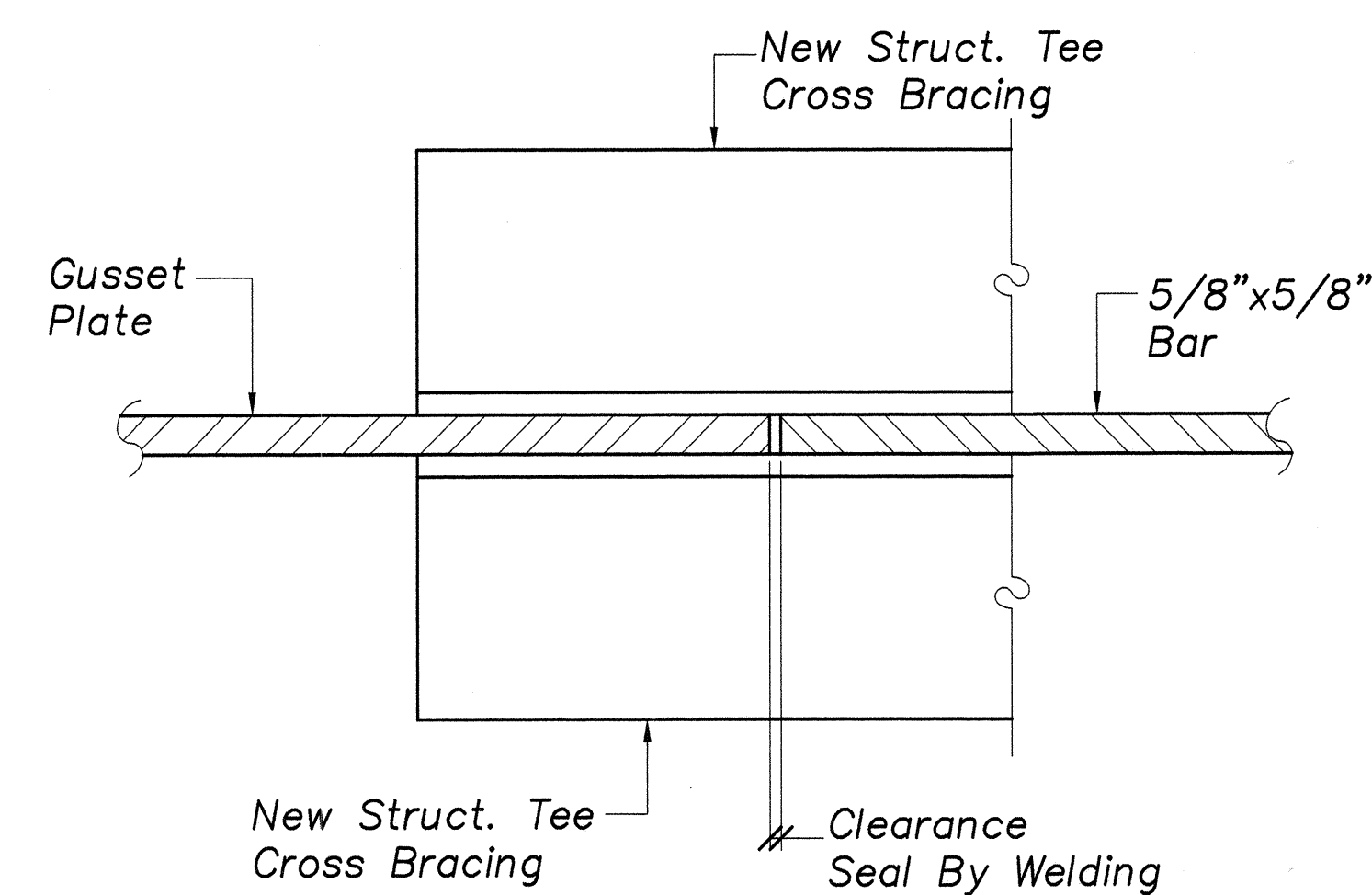
- Notes:
1. See Sheet S-1.5 And S-1.6 For Gusset Plate Details.
 2. For Typical Bracings To Gusset Plate Detail, See A/S-1.4.

PARTIAL REFLECTED BOTTOM FLANGE BRACING LAYOUT

Scale: 1/4"=1'-0"



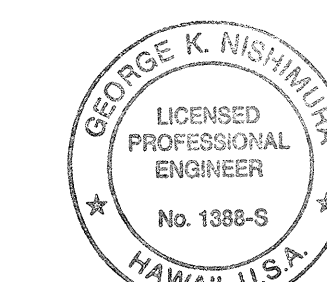
① Section



② Section

BRACING TO GUSSET PLATE LOCATION DETAIL

S-1.5, S-1.4, S-1.4 Scale: 3/4"=1'-0"



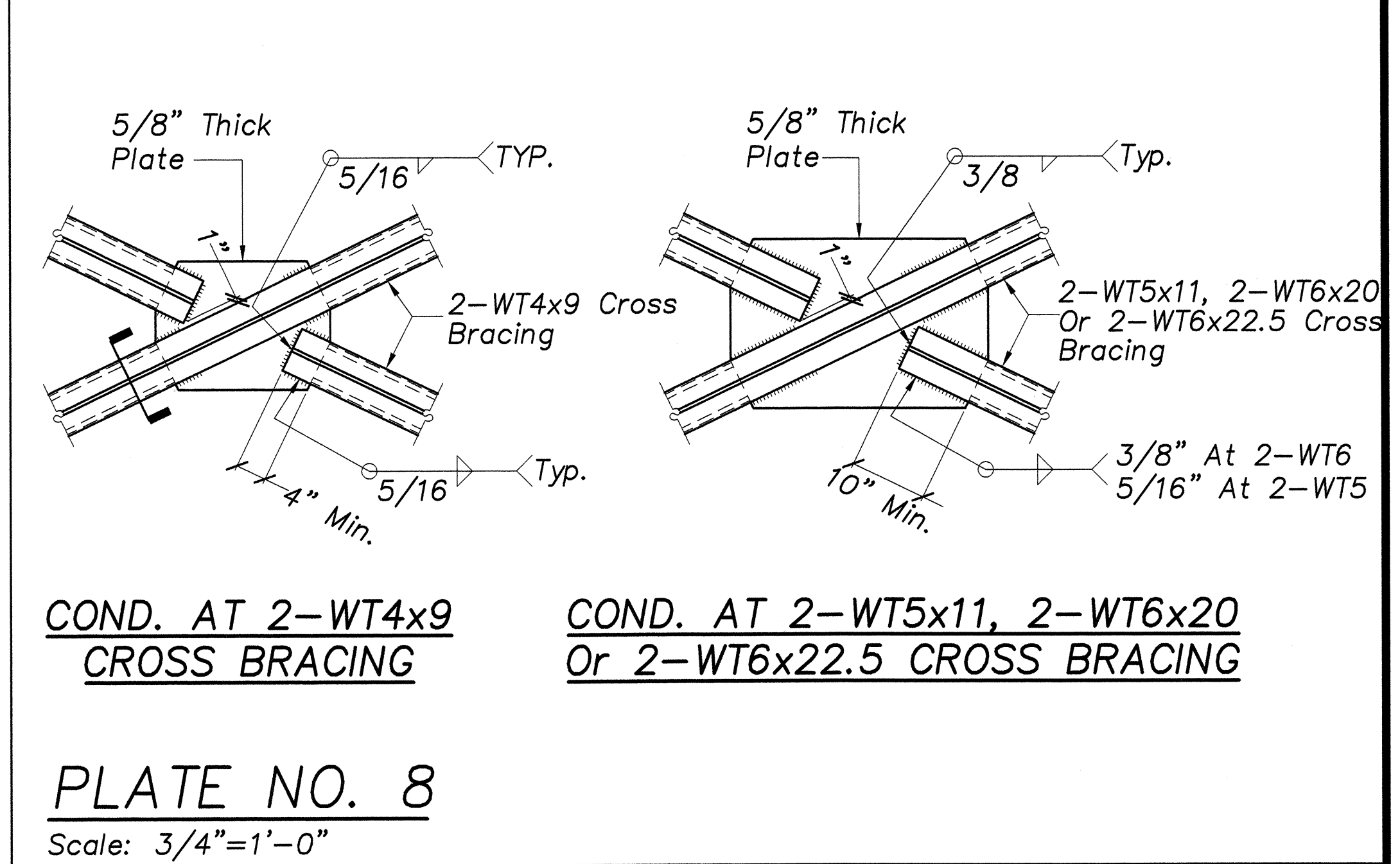
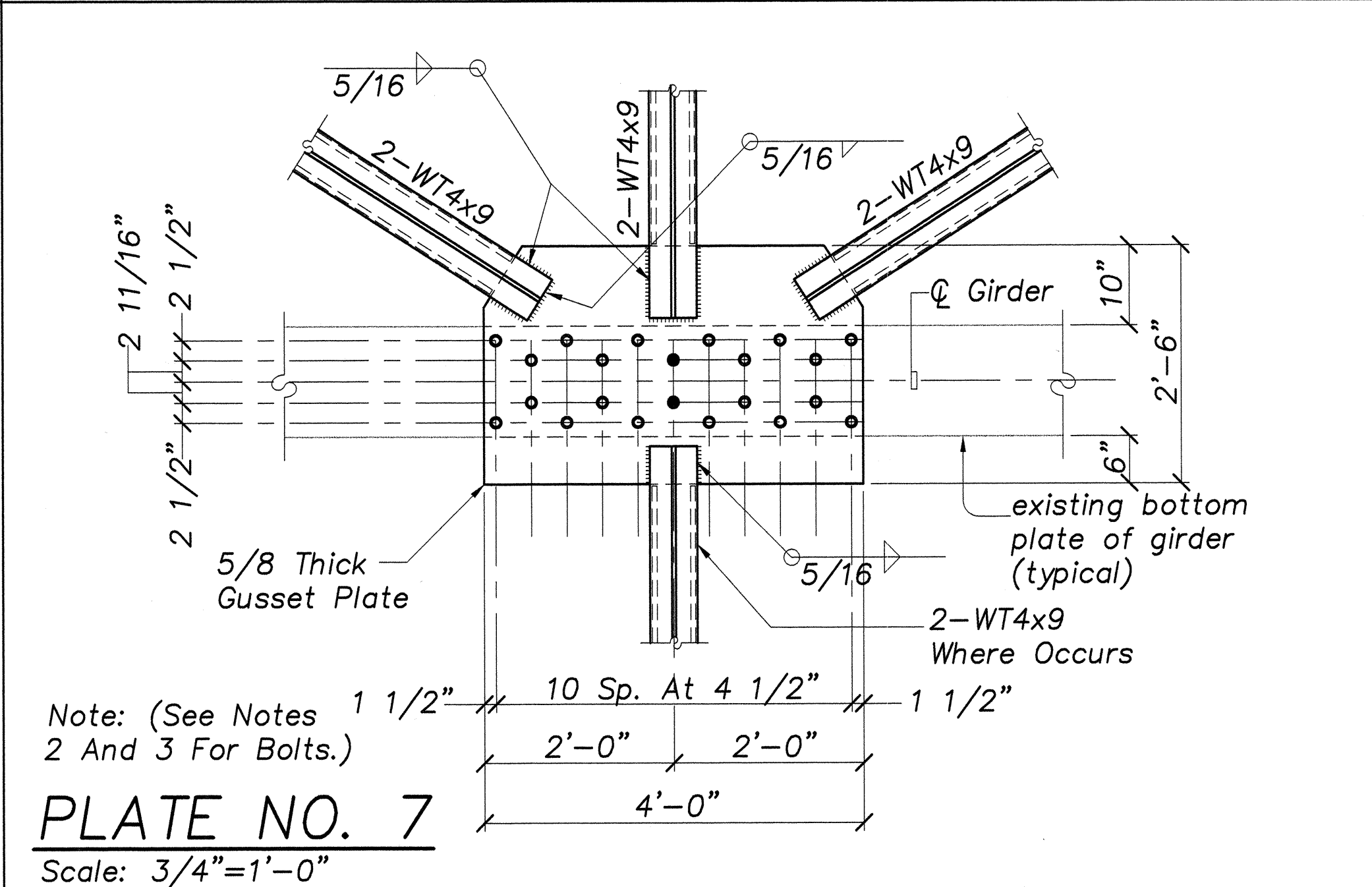
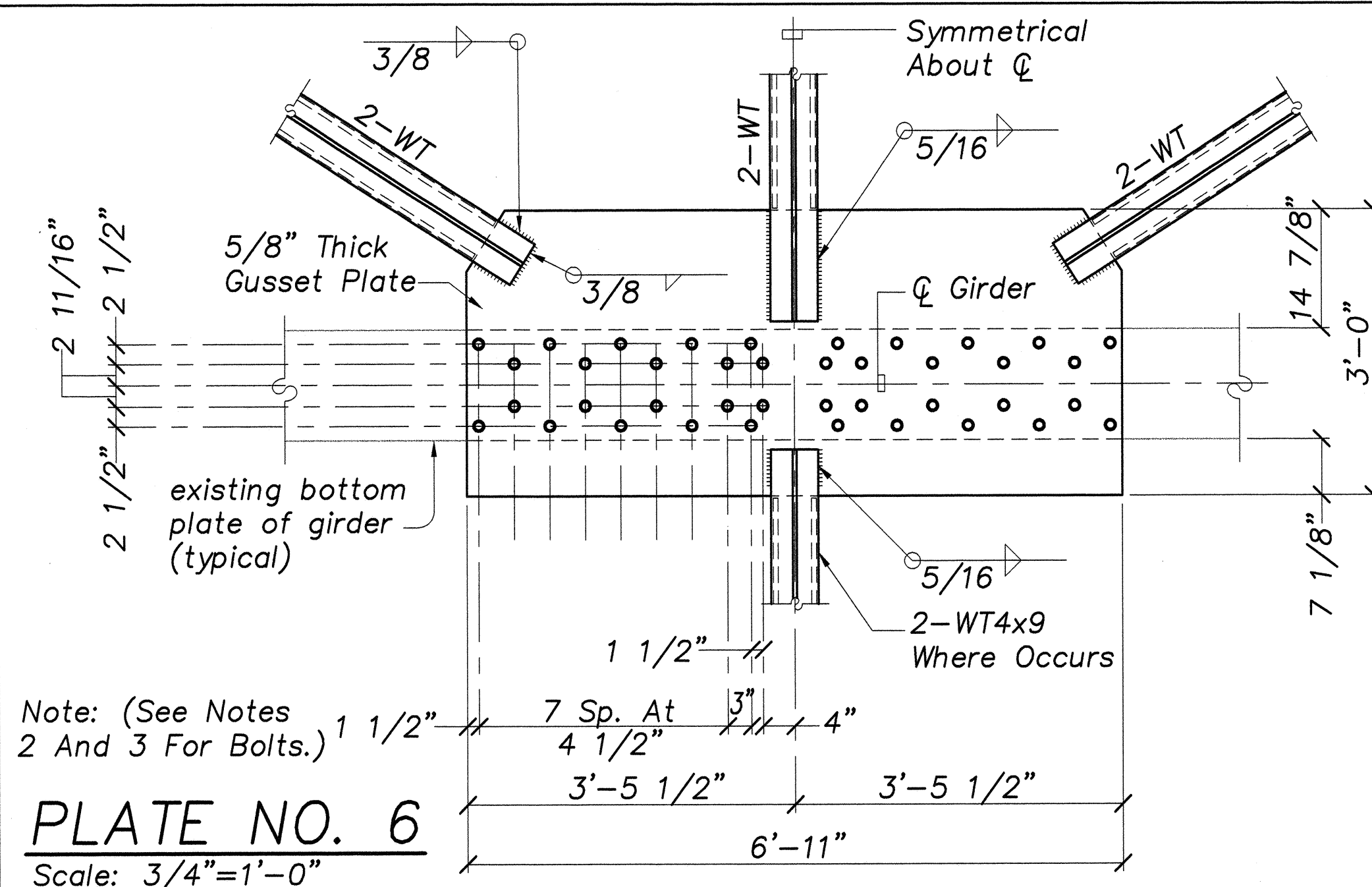
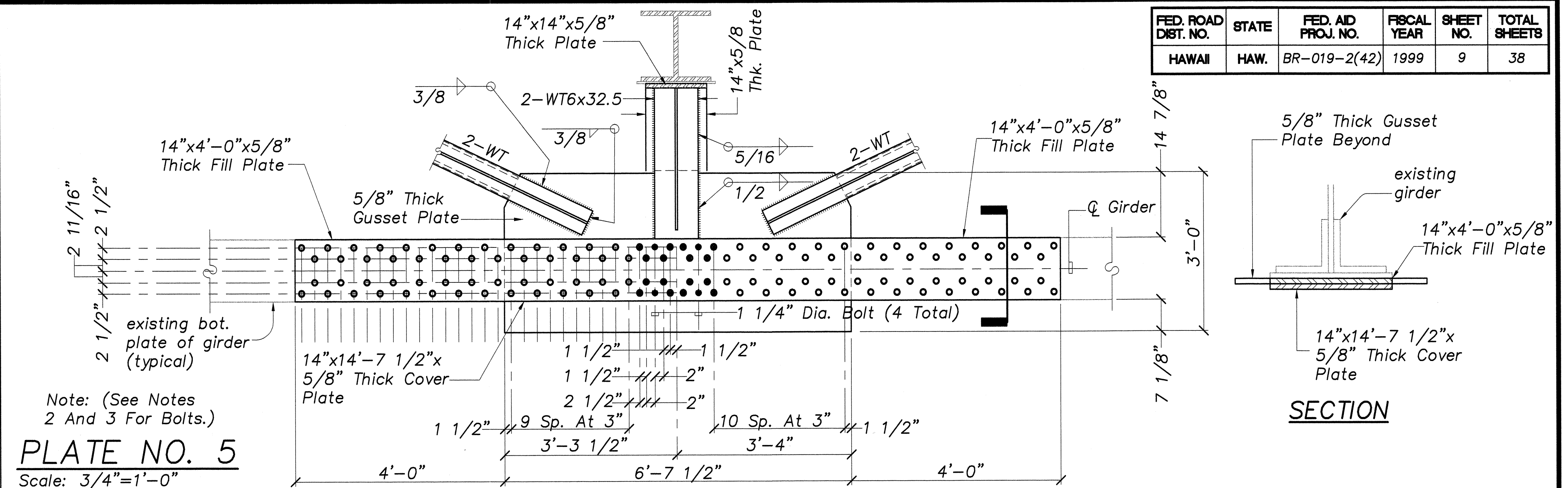
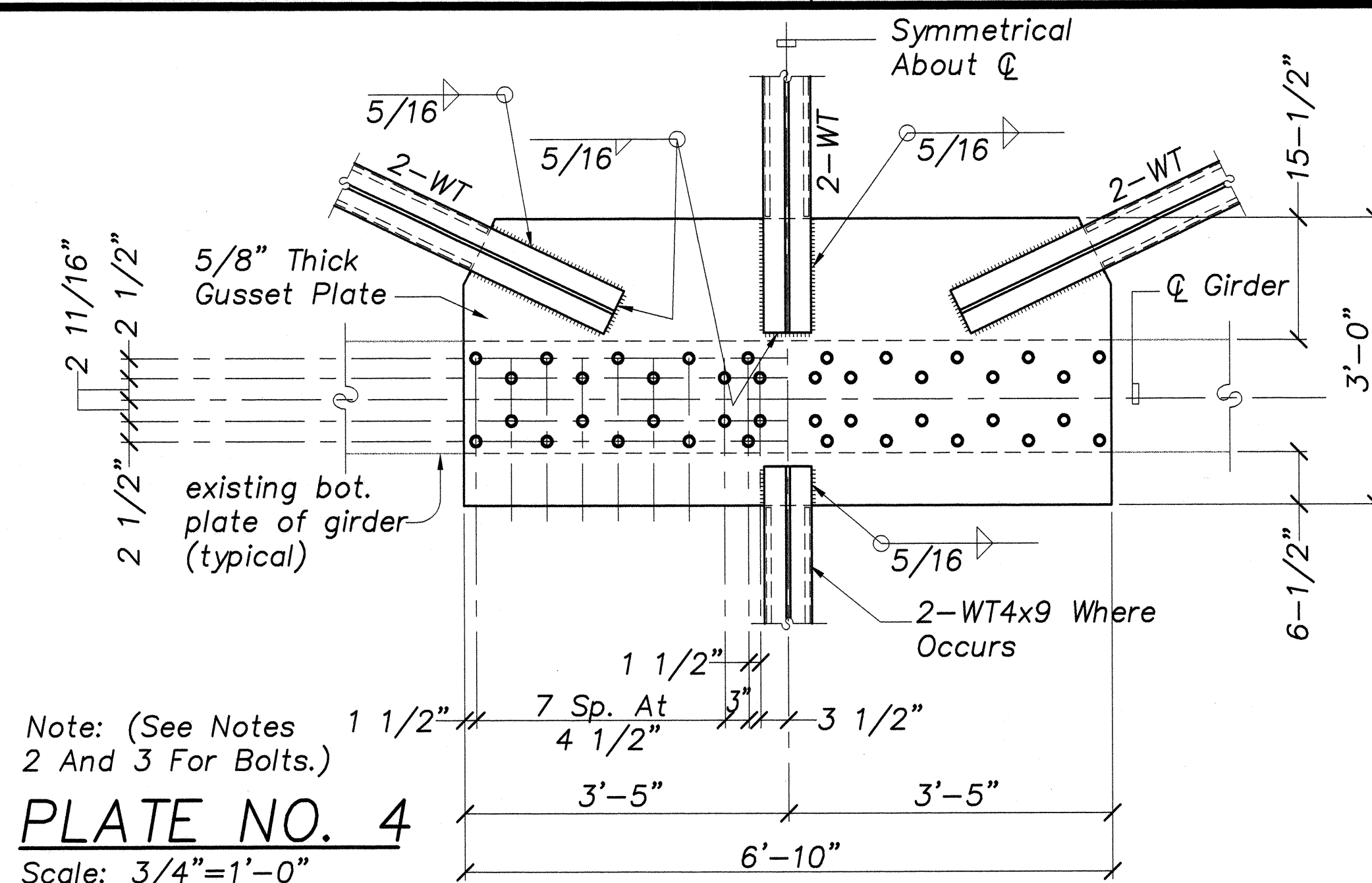
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WAILUKU RIVER BRIDGE
PARTIAL REFLECTED BOTTOM
FLANGE BRACING LAYOUT
HAWAII BELT ROAD
SEISMIC RETROFIT OF VARIOUS BRIDGES
VICINITY OF HILO
Federal Aid Project No. BR-019-2(42)

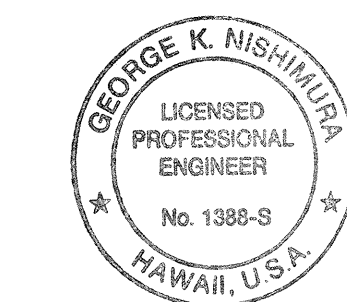
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SHEET No. S-1.4 OF 38 SHEETS

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HAWAII	HAW.	BR-019-2(42)	1999	9	38



- NOTES:**
- WELDED CONNECTION OF BRACING MEMBERS SHALL BE FOR TOP AND BOTTOM OF GUSSET PLATES.
 - ALL BOLTS FOR GUSSET PLATE TO BOTTOM PLATE OF GIRDER CONNECTION SHALL BE ASTM A325 WITH THE SAME DIAMETER AS THE EXISTING RIVETS REMOVED. UNLESS OTHERWISE INDICATED, CONTRACTOR SHALL ASSUME 7/8" DIAMETER BOLTS FOR BIDDING PURPOSES. BOLTS SHALL BE TIGHTENED USING A DIRECT TENSION INDICATOR ACCEPTABLE BY THE ENGINEER.
 - EXISTING BOLT HOLE LOCATIONS IN BOTTOM PLATE OF GIRDER AS SHOWN ON DRAWINGS ARE BASED ON EXISTING PLANS. CONTRACTOR SHALL FIELD VERIFY HOLE LOCATIONS FOR ALL GUSSET PLATES PRIOR TO FABRICATION.
 - CONTRACTOR SHALL SEQUENCE WORK SUCH THAT NO MORE THAN ONE EXISTING GUSSET PLATE PER GIRDER OPPOSITE EACH OTHER IS REMOVED AT ANY TIME. ONLY BRACINGS ATTACHED TO THE REMOVED GUSSET PLATES MAY BE REMOVED. ADJACENT SET OF EXISTING GUSSET PLATES AND BRACINGS MAY BE REMOVED ONLY AFTER NEW GUSSET PLATES AND BRACINGS WITHIN THE PREVIOUSLY REMOVED SET OF MEMBERS HAVE BEEN INSTALLED TO THE FULLEST EXTENT POSSIBLE.



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**WAILUKU RIVER BRIDGE
GUSSET PLATE DETAILS**

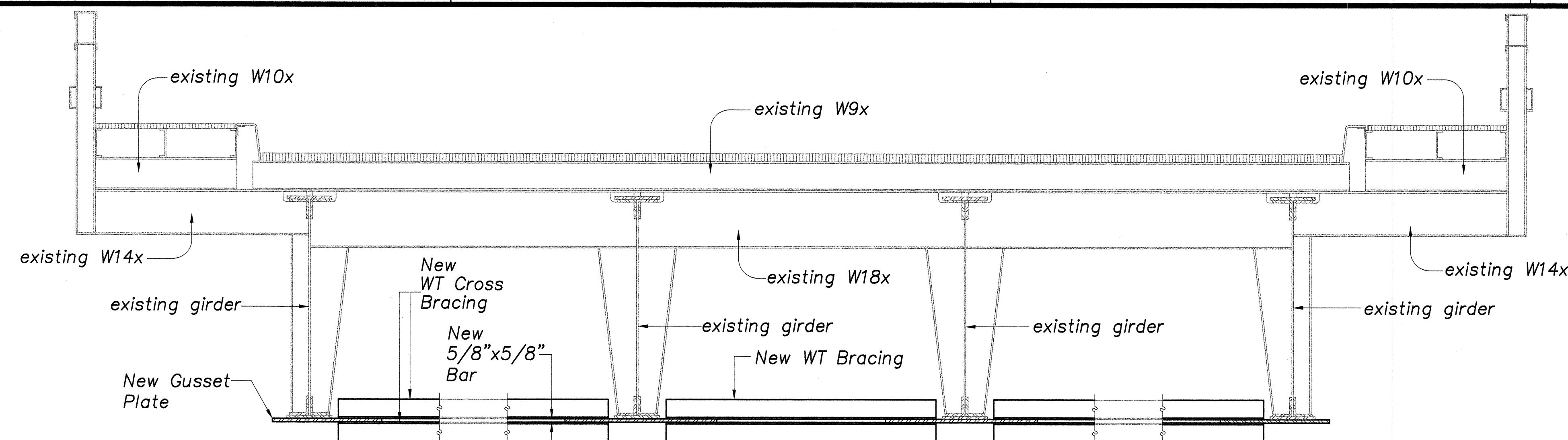
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Federal Aid Project No. BR-019-2(42)

SCALE: AS NOTED DATE: APRIL 1998

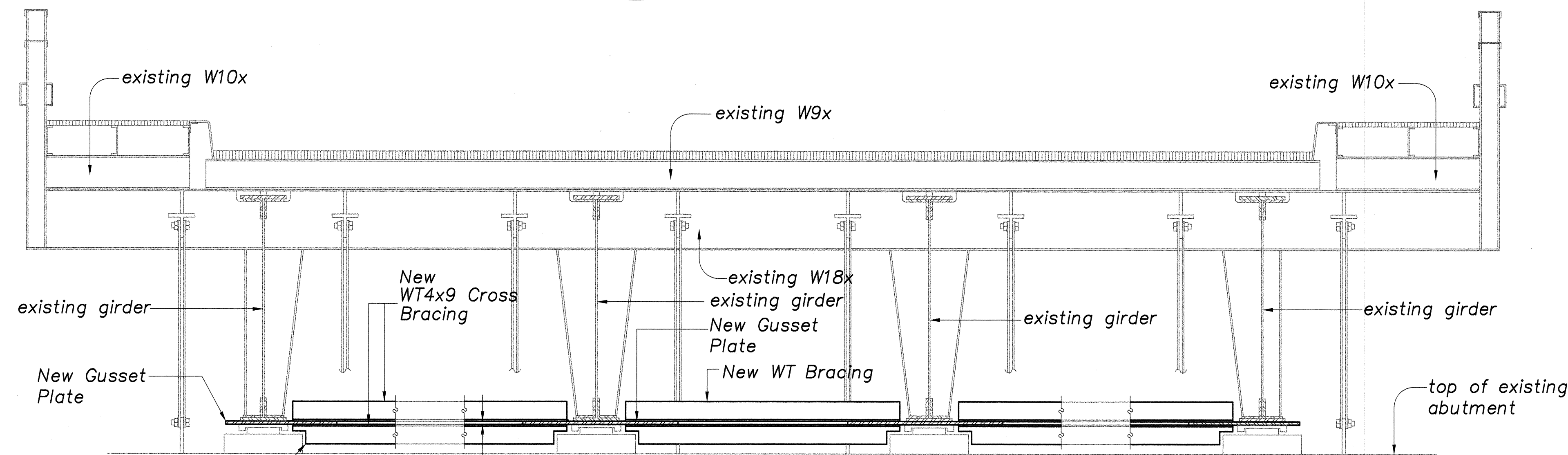
SHEET No. 5-1.6 OF 38 SHEETS

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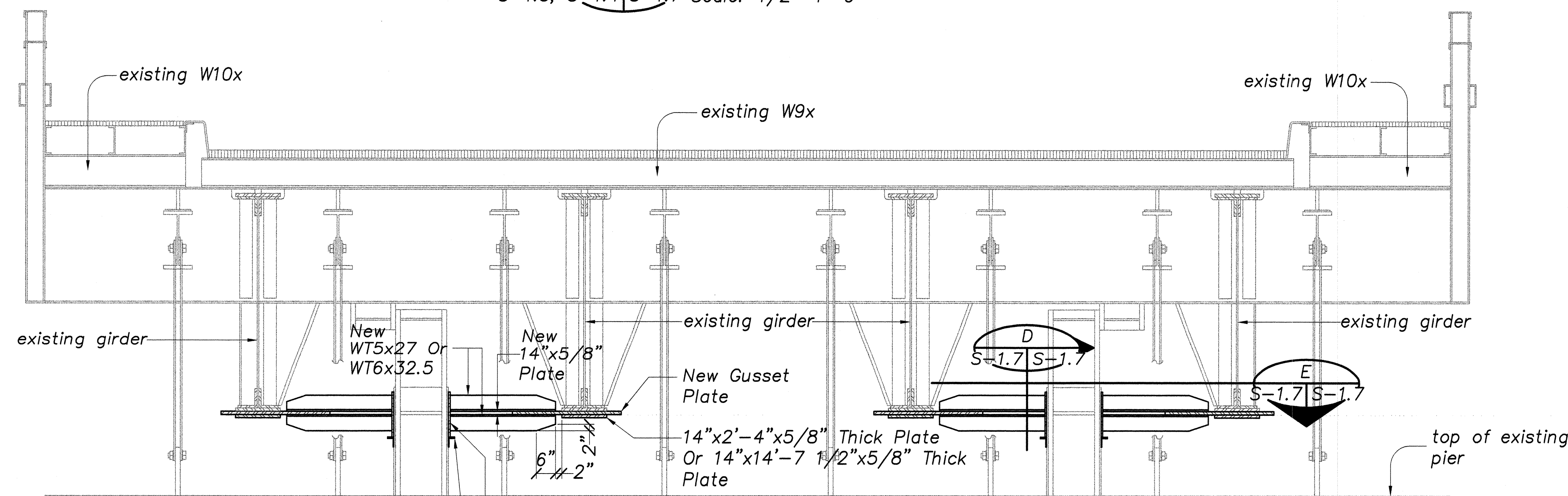
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HAWAII	HAW.	BR-019-2(42)	1999	10	38



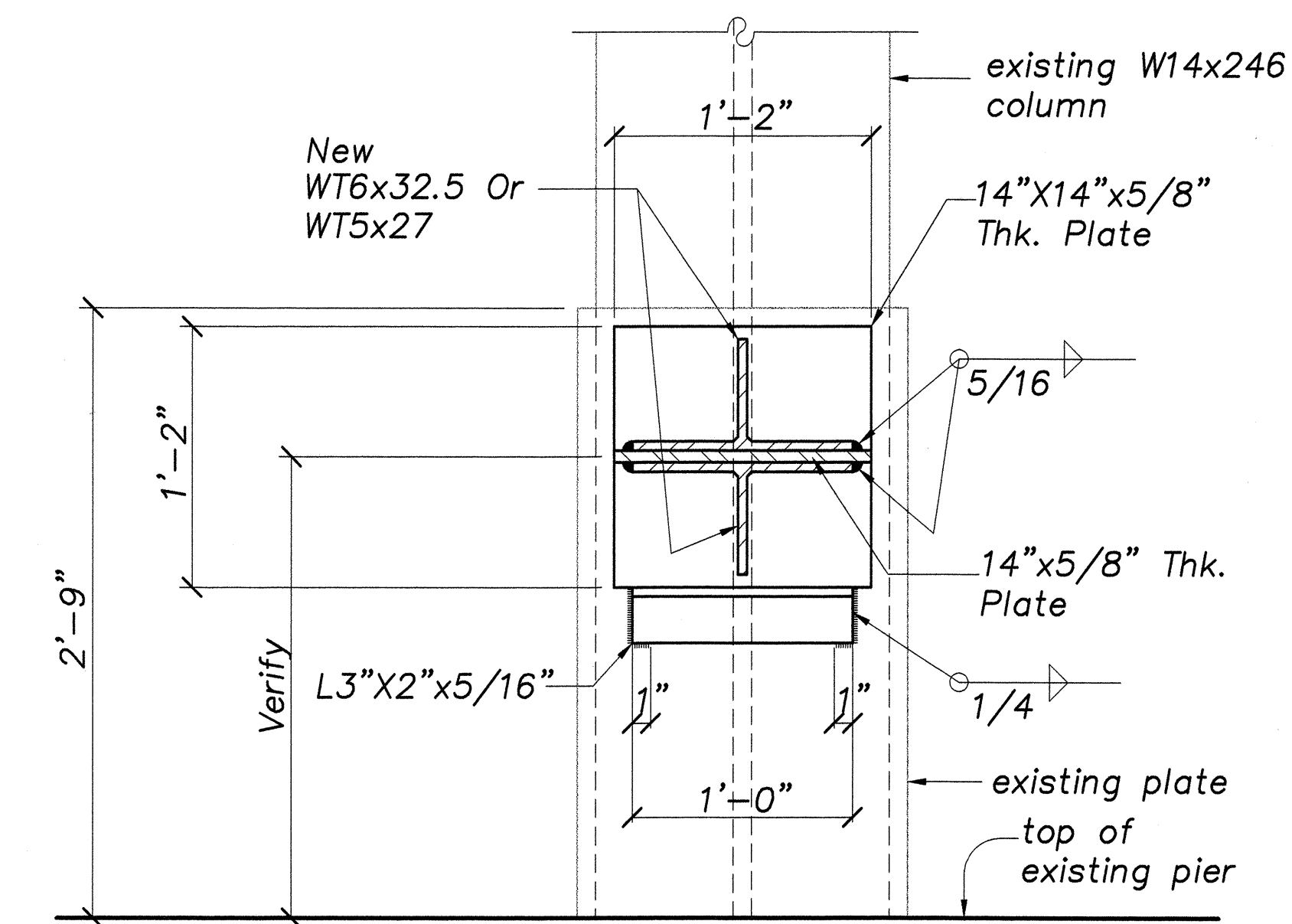
SECTION A
S-1.3, S-1.4, S-1.5, S-1.7 Scale: 1/2"=1'-0"



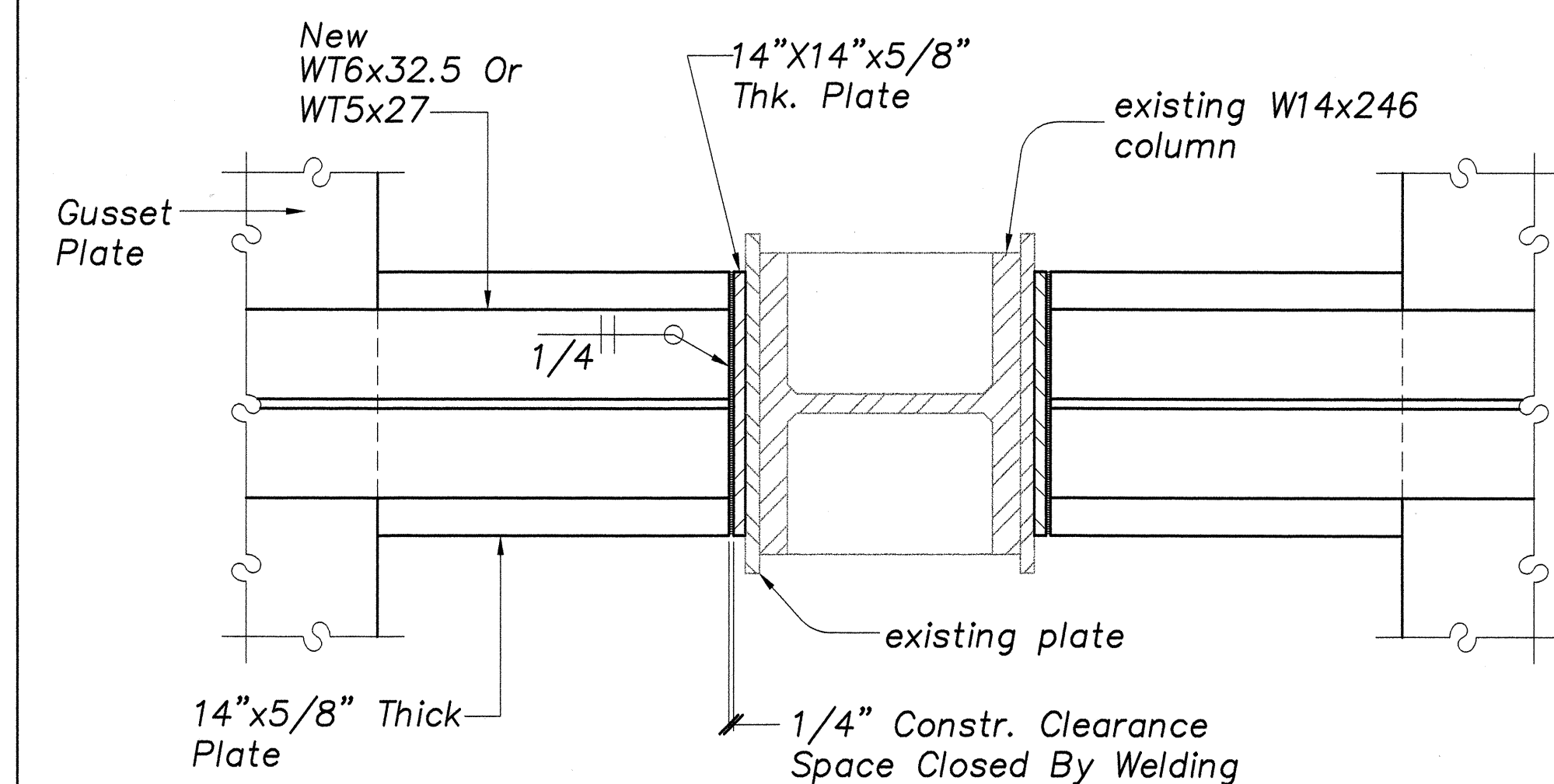
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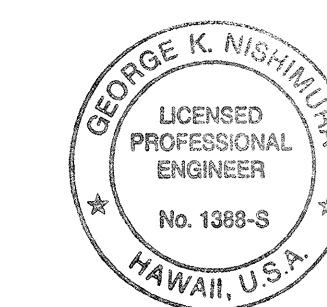
SECTION C
S-1.3, S-1.4, S-1.5, S-1.7 Scale: 1/2"=1'-0"



SECTION D
S-1.7, S-1.7 Scale: 1-1/2"=1'-0"



SECTION E
S-1.7, S-1.7 Scale: 1-1/2"=1'-0"



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WAILUKU RIVER BRIDGE
SECTIONS AND DETAILS

HAWAII BELT ROAD
SEISMIC RETROFIT OF VARIOUS BRIDGES
VICINITY OF HILO
Federal Aid Project No. BR-019-2(42)

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SHEET No. S-1.7 OF 38 SHEETS

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