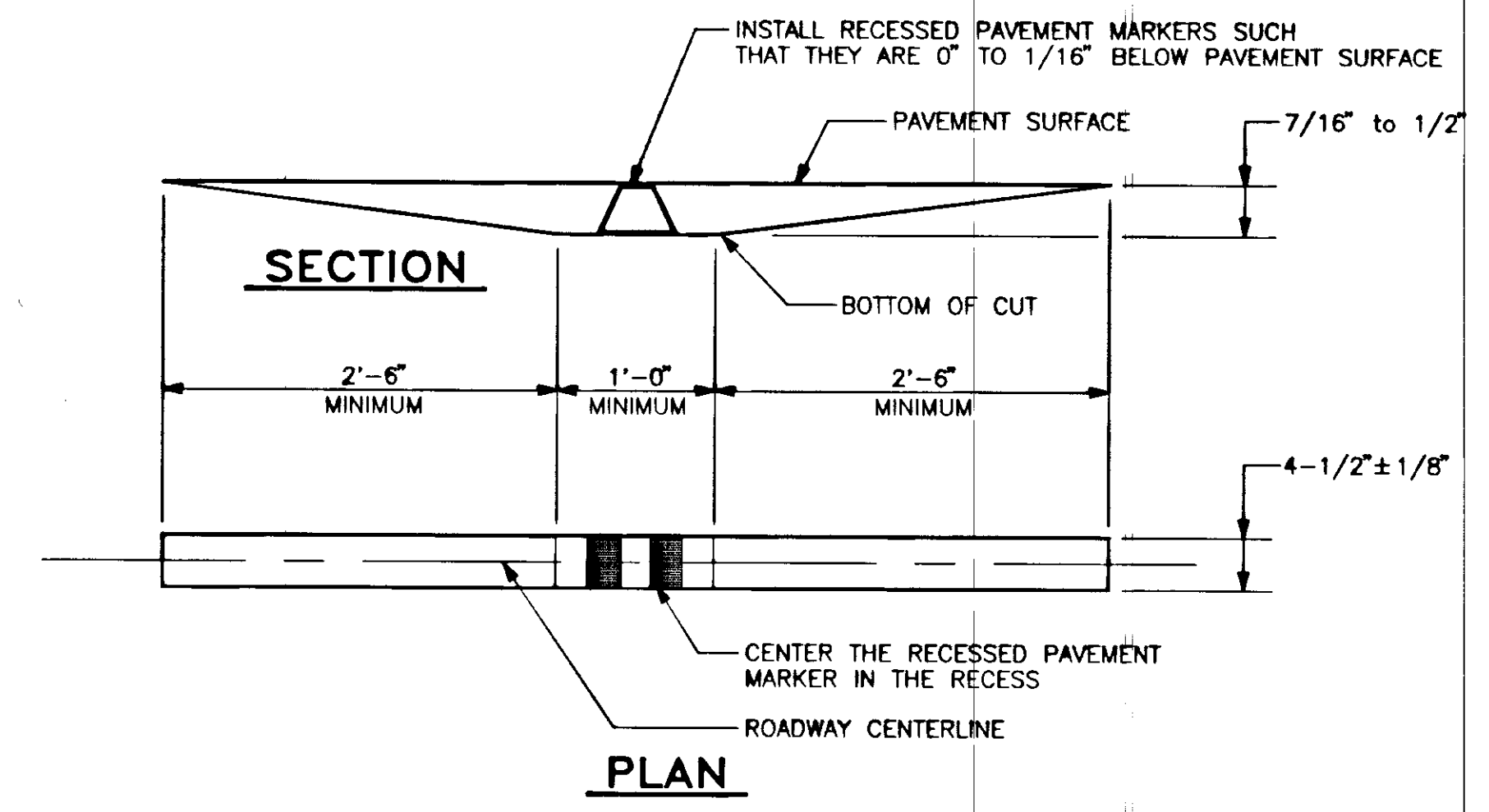


ESTIMATE OF QUANTITIES

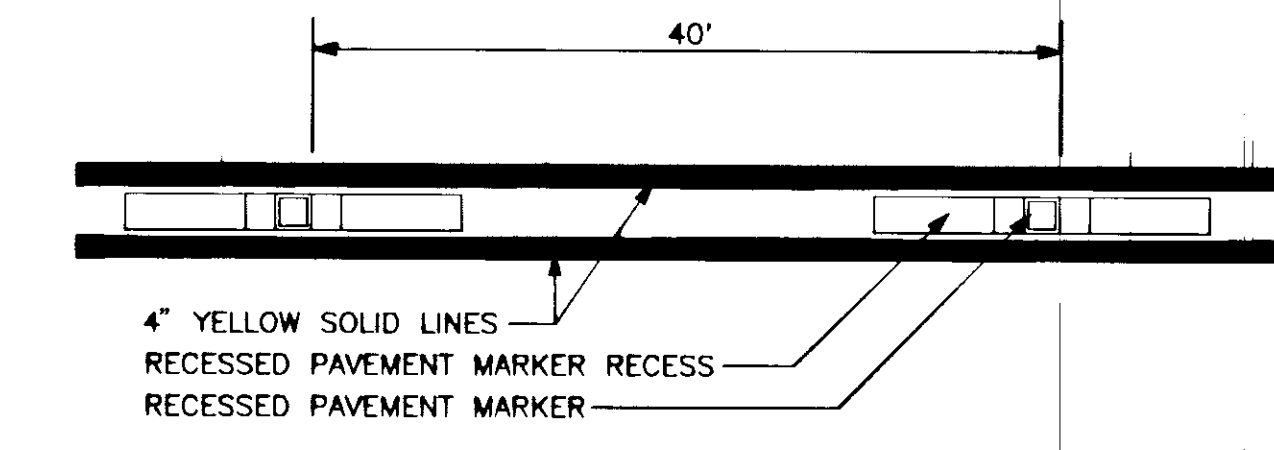
ITEM NUMBER	PAY ITEM	PAY UNIT	TOTAL QUANTITY
120 (1)	DBE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED
504 (3)	EXPANSION JOINT DEVICE	LINEAR FOOT	72
509 (1)	REPLACEMENT OF SHIMS (CO#1)	LUMP SUM	116 REG'D.
509 (1)	LAWSON CREEK BRIDGE REPAIR	LUMP SUM	ALL REQUIRED
510 (1)	DOUGLAS BRIDGE BEARING REPAIR	LUMP SUM	ALL REQUIRED
510 (2)	DOUGLAS BR. SPACER PAD (CO#3)	LUMP SUM	116 REG'D.
511 (1)	DOUGLAS BRIDGE CRACK REPAIR	LINEAR FOOT	183 -50
511 (2)	DOUGLAS BRIDGE MISCELLANEOUS REPAIR	LUMP SUM	ALL REQUIRED
512 (1)	BRIDGE JOINT SYSTEM	LUMP SUM	116 REG'D.
512 (1)	BRIDGE JOINT SYSTEM	LINEAR FOOT	72 -228
640 (1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
641 (1)	TEMPORARY EROSION AND POLLUTION CONTROL (NOT USED)	CONTINGENT SUM	ALL REQUIRED
643 (2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
643 (3)	PERMANENT CONSTRUCTION SIGNING	LUMP SUM	ALL REQUIRED
643 (5)	TYPE II BARRICADE	EACH PER DAY	137 400
643 (15)	Flagging (CO#1)	1 HOUR	
643 (7)	TRAFFIC CONE	EACH PER DAY	4203 2500
662 (1)	DOUGLAS BRIDGE ELECTRICAL IMPROVEMENTS	LUMP SUM	ALL REQUIRED
670 (9)	RECESSED PAVEMENT MARKERS	LUMP SUM	ALL REQUIRED
501 (2A)	Silica Fume Conc. (CO#3)	LUMP SUM	116 REG'D.
501 (2B)	Modified Class A-A Conc. (CO#3)	LUMP SUM	116 REG'D.
501 (32)	Testing Credit (CO#3)	LUMP SUM	116 REG'D.
501 (4)	Misc. Painting (CO#4)	LUMP SUM	116 REG'D.

NOTES

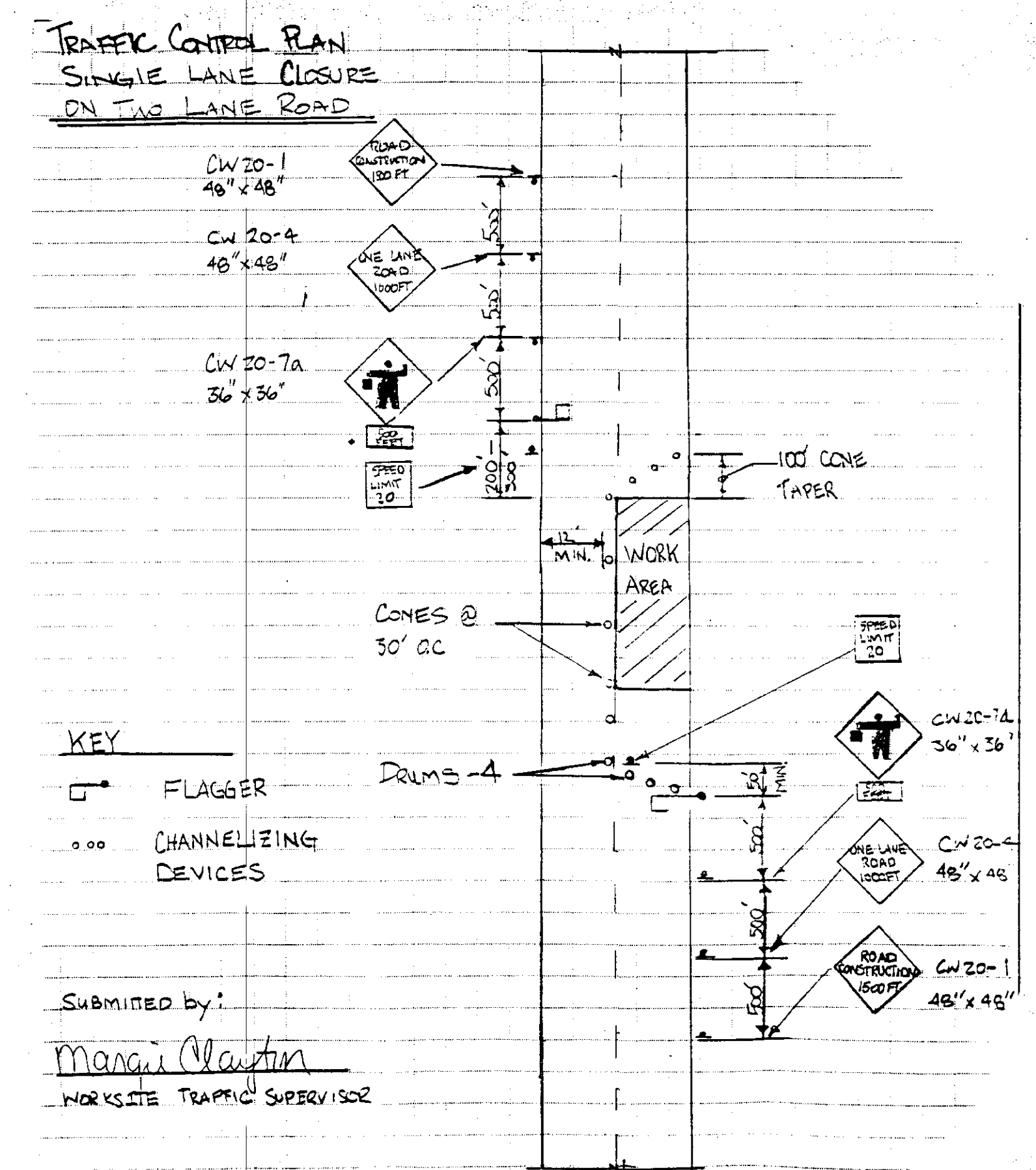
- RECESSED PAVEMENT MARKERS (R.P.M.'s) SHALL BE INSTALLED BETWEEN THE ABUTMENTS OF THE DOUGLAS BRIDGE
- R.P.M.'s SHALL BE SPACED AT 40' ON CENTER
- ON ALL ROADWAY SECTIONS WITH DOUBLE LINES (EITHER BROKEN OR SOLID) R.P.M.'s SHALL BE PLACED BETWEEN THE LINES. ON SECTIONS OF ROADWAY WITH SINGLE BROKEN LINES THE R.P.M.'s SHALL BE PLACED ON THE CENTERLINE BETWEEN THE STRIPES.
- RECESSED PAVEMENT MARKERS SHALL BE TWO SIDED YELLOW



RECESSED PAVEMENT MARKER DETAIL



RECESSED PAVEMENT MARKER INSTALLATION DETAILS



As-Built

NO.	DATE	DESCRIPTION OF CHANGE
1	01/03/1994	DELETED ITEM NUMBER 508 (1)

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND
 PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

DOUGLAS AND LAWSON CREEK
 BRIDGES STRUCTURAL REPAIRS
 STP-0958(9) 71123
ESTIMATE OF QUANTITIES

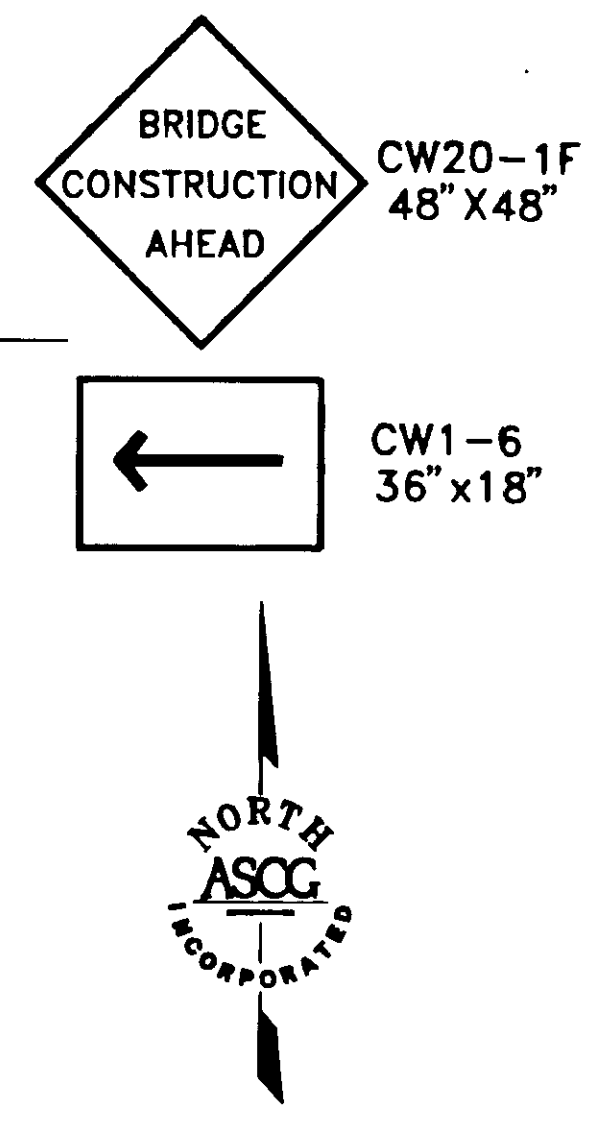
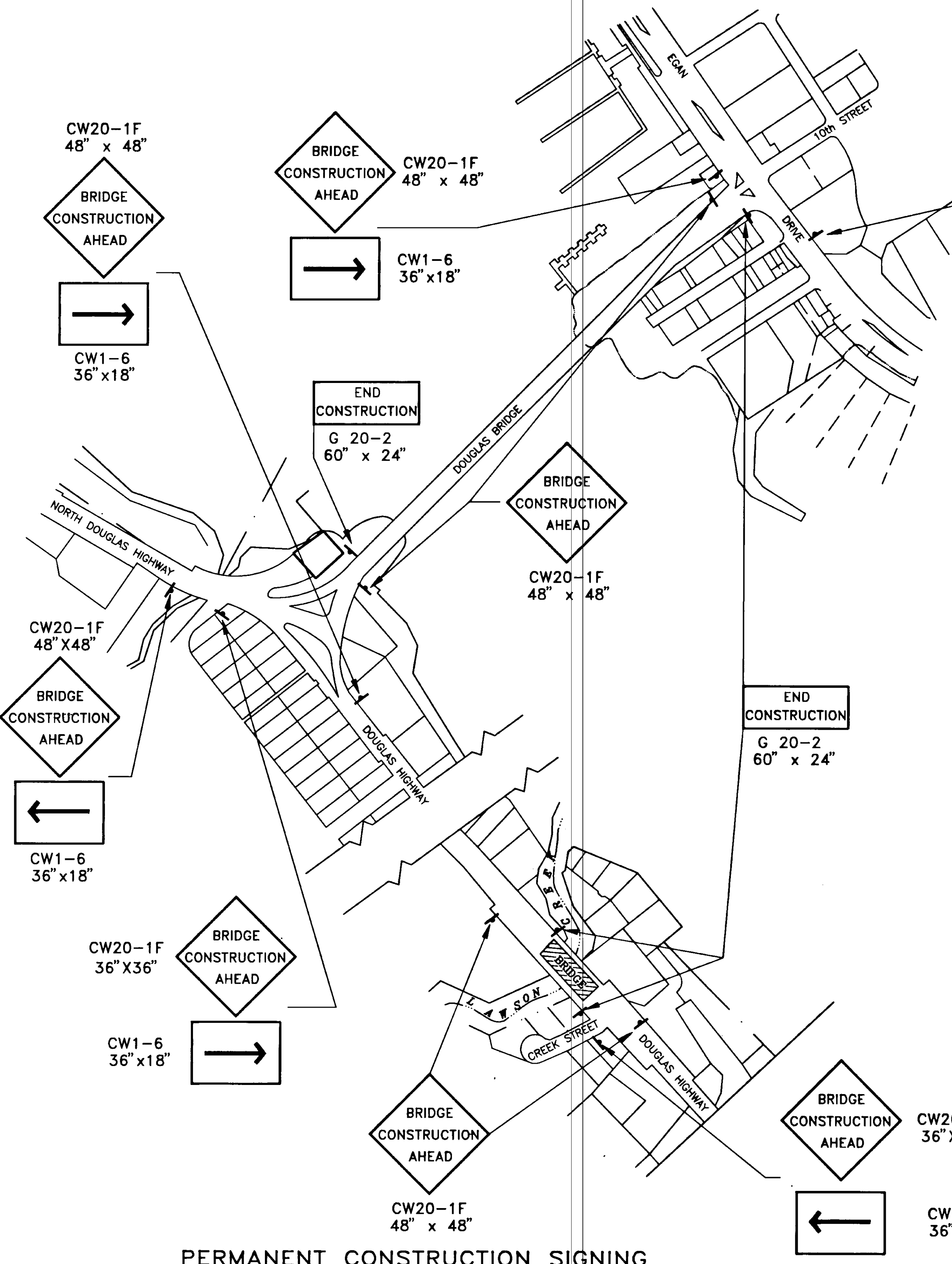
ASCG
 INCORPORATED
 ENGINEERS • ARCHITECTS • SCIENTISTS • SURVEYORS

DESIGNED BY: **D.L.M.**
 DRAWN BY: **C.M.B.**
 CHECKED BY: **D.L.M.**

PROJECT NO:
71123
 DATE:
SEPT. 1993
 SHEET **2** OF **8**



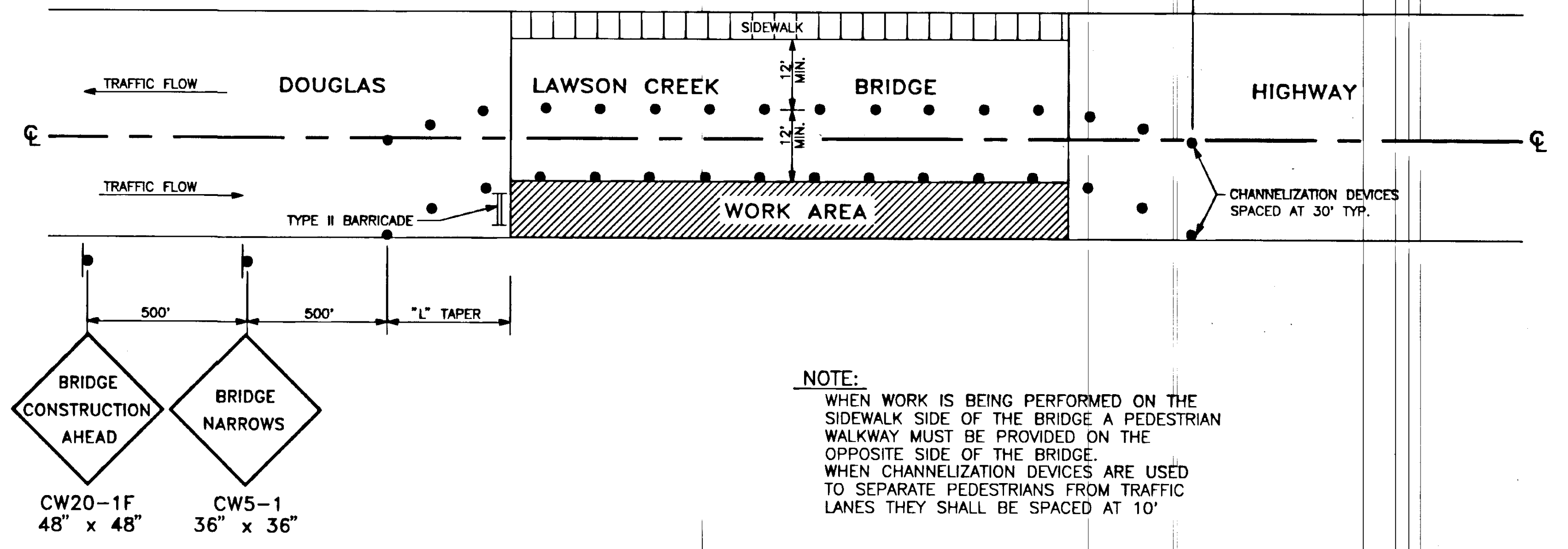
DO NOT SCALE FROM THESE PLANS - USE DIMENSIONS



TRAFFIC CONTROL NOTES

1. A MINIMUM OF ONE LANE SHALL BE MAINTAINED THROUGH WORK AREAS AT ALL TIMES
2. DRIVING LANES SHALL BE A MINIMUM WIDTH OF 12'.
3. SINGLE LANE CLOSURE SHALL BE AS PER STANDARD DRAWING C-03.01

"L" (MINIMUM LENGTH OF TAPER IN FEET = S x W
WHERE W = WIDTH OF OFFSET
AND S = POSTED SPEED LIMIT



NOTE:
WHEN WORK IS BEING PERFORMED ON THE SIDEWALK SIDE OF THE BRIDGE A PEDESTRIAN WALKWAY MUST BE PROVIDED ON THE OPPOSITE SIDE OF THE BRIDGE.
WHEN CHANNELIZATION DEVICES ARE USED TO SEPARATE PEDESTRIANS FROM TRAFFIC LANES THEY SHALL BE SPACED AT 10'

SHOULDER WORK ON LAWSON CREEK BRIDGE

As-Built

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

DOUGLAS AND LAWSON CREEK
BRIDGES STRUCTURAL REPAIRS
STP-0958(9) 71123
TRAFFIC CONTROL PLAN



DESIGNED BY: D.L.M.
DRAWN BY: C.M.B.
CHECKED BY: D.L.M.

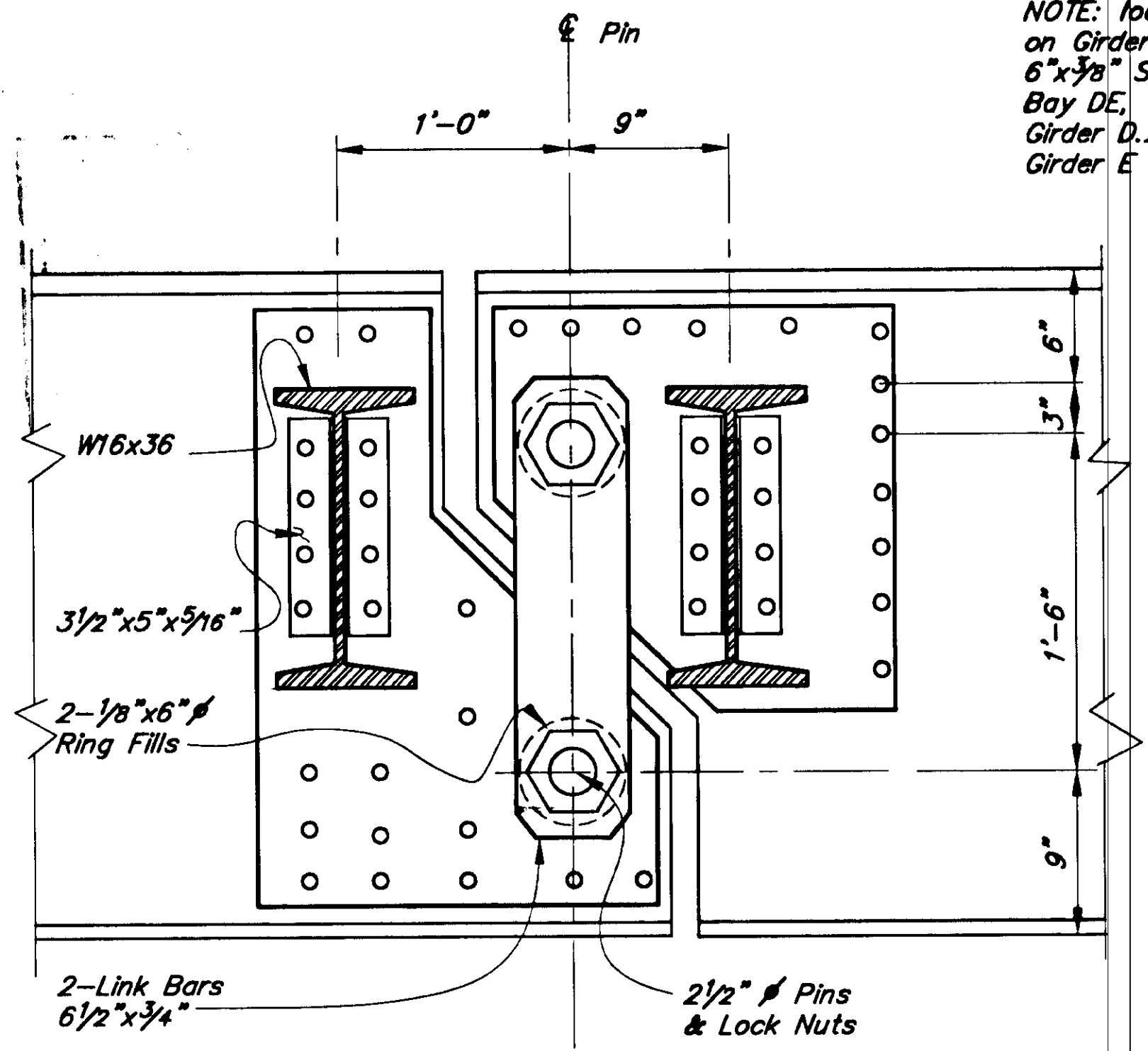
DO NOT SCALE FROM THESE PLANS - USE DIMENSIONS

PATH: C:\ALASKA\STP-0958(9)-03.DWG
DRAWN IN AUTOCAD RELEASE 11
DRAWING PLOT SCALE: 1" = 1'
DRAWING LAST UPDATED: 09/03/1993

PROJECT NO: 71123
DATE: SEPT, 1993
SHEET 3 OF 8

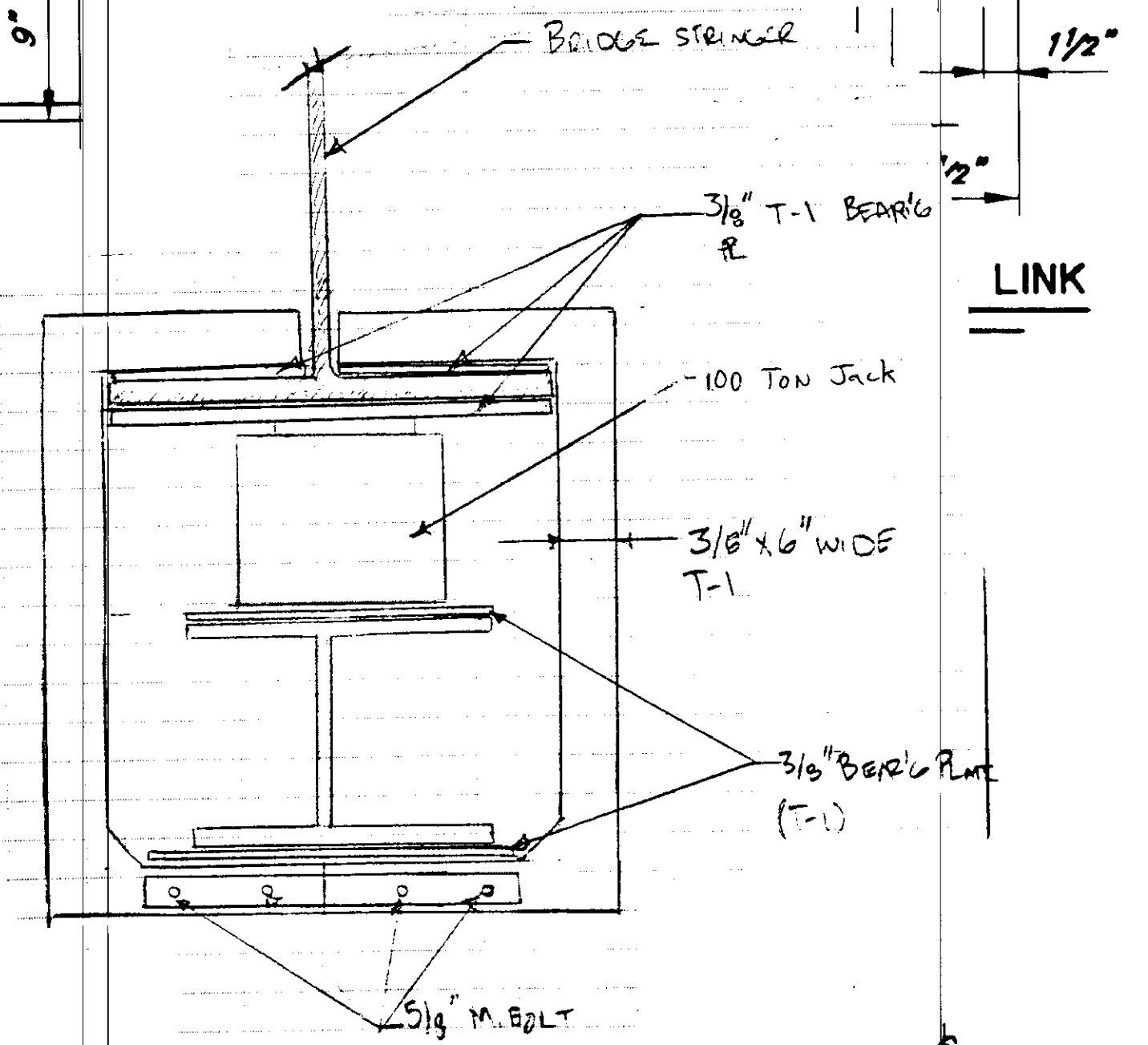
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA				

NOTE: location of W16 diaphragm on Girder D. Modify location of 6"x3/8" Stiff. Plate, Girder E Bay DE, to meet diaphragm from Girder D. Increase size of plate on Girder E accordingly.

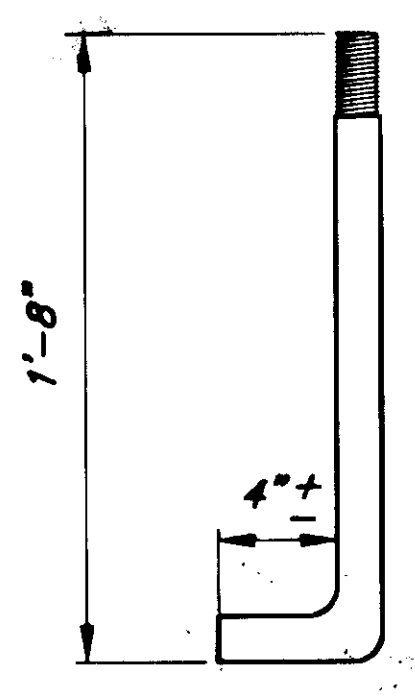


EXISTING PIN & HANGER ASSEMBLY

Left of E Roadway



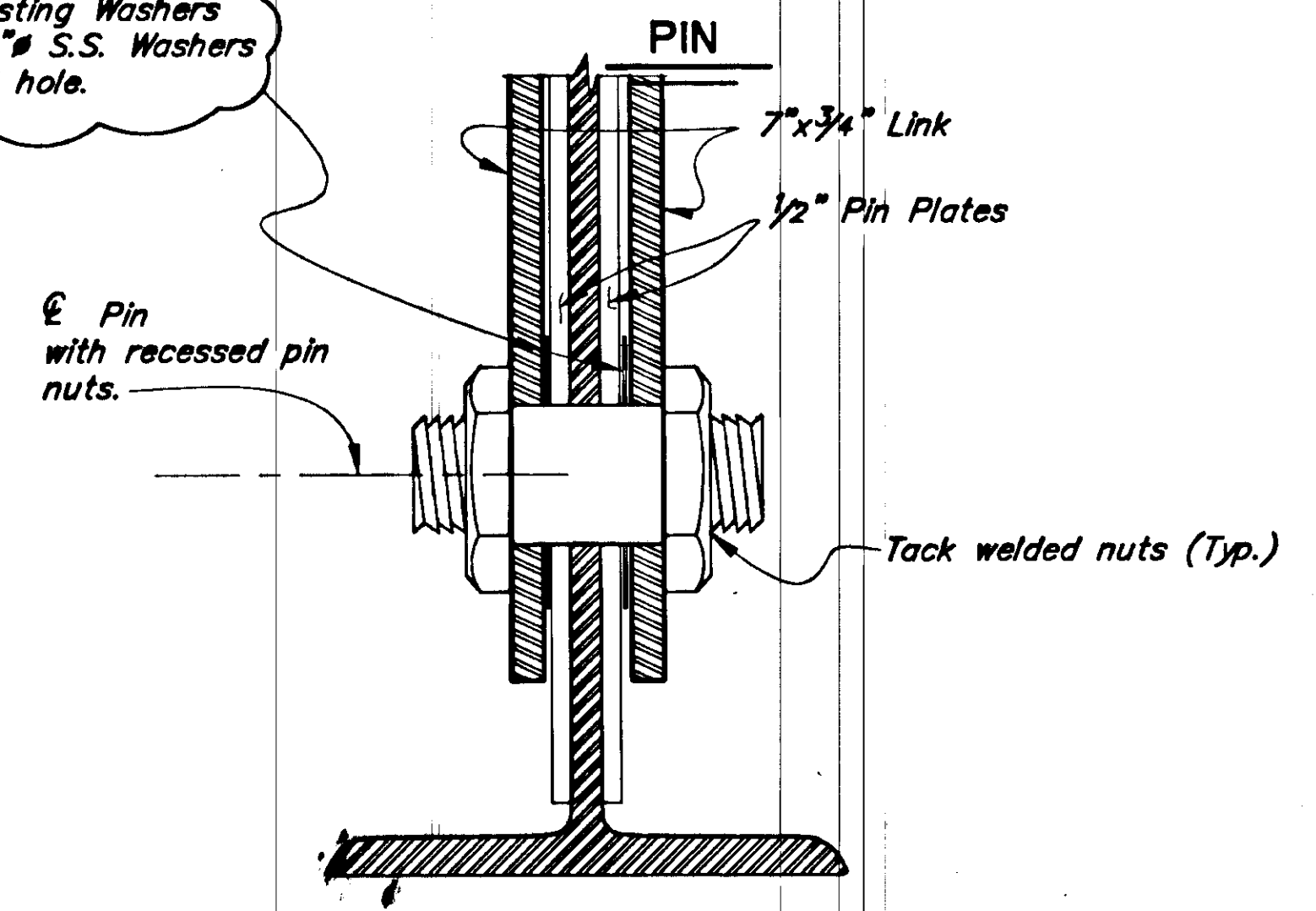
JACKING Plan
CROSS-SECTION AA
HANGER BRACKET



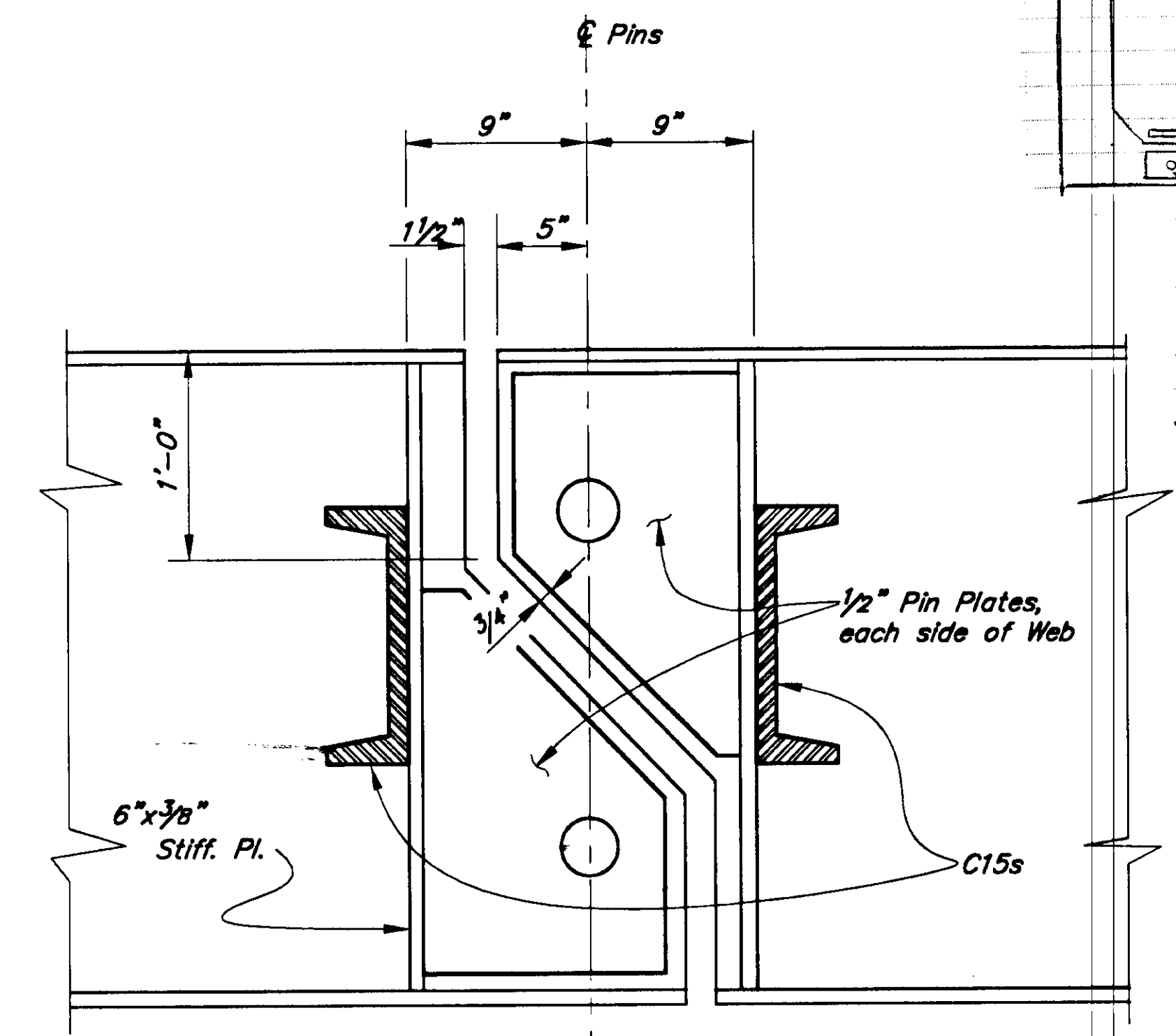
ANCHOR BOLT DETAIL

SEE DRAWING NO. 2 FOR BOLT REPAIR

For This Contract: replace existing Washers with 1/8"x6" S.S. Washers with 3/8" hole.

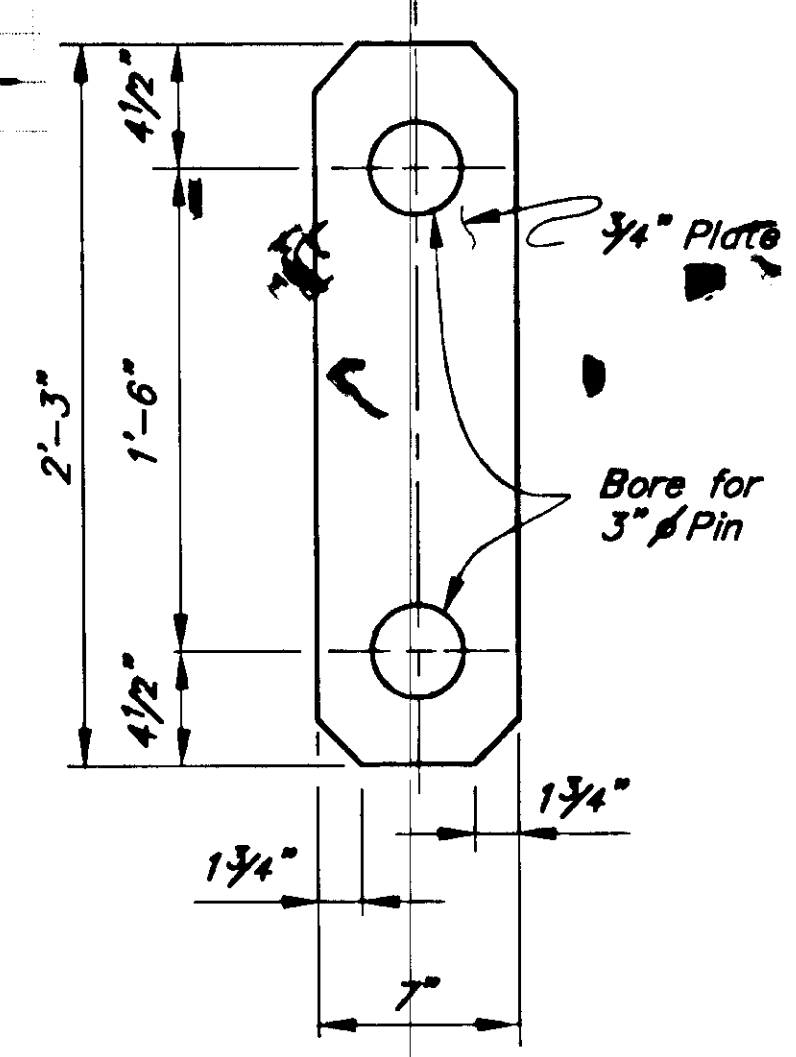


EXISTING PART SECTION ON E PINS

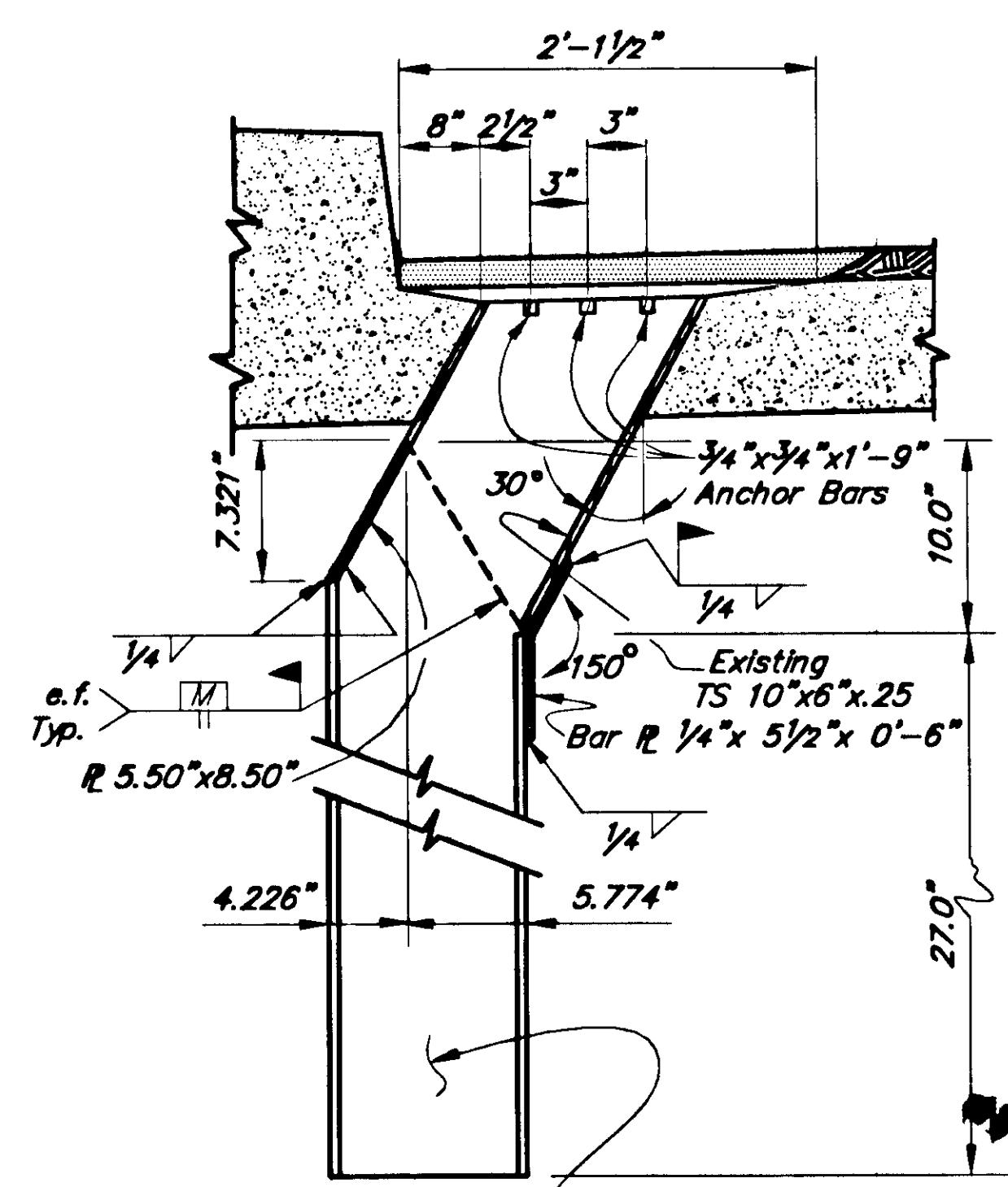


EXISTING PIN & HANGER ASSEMBLY

Right of E Roadway

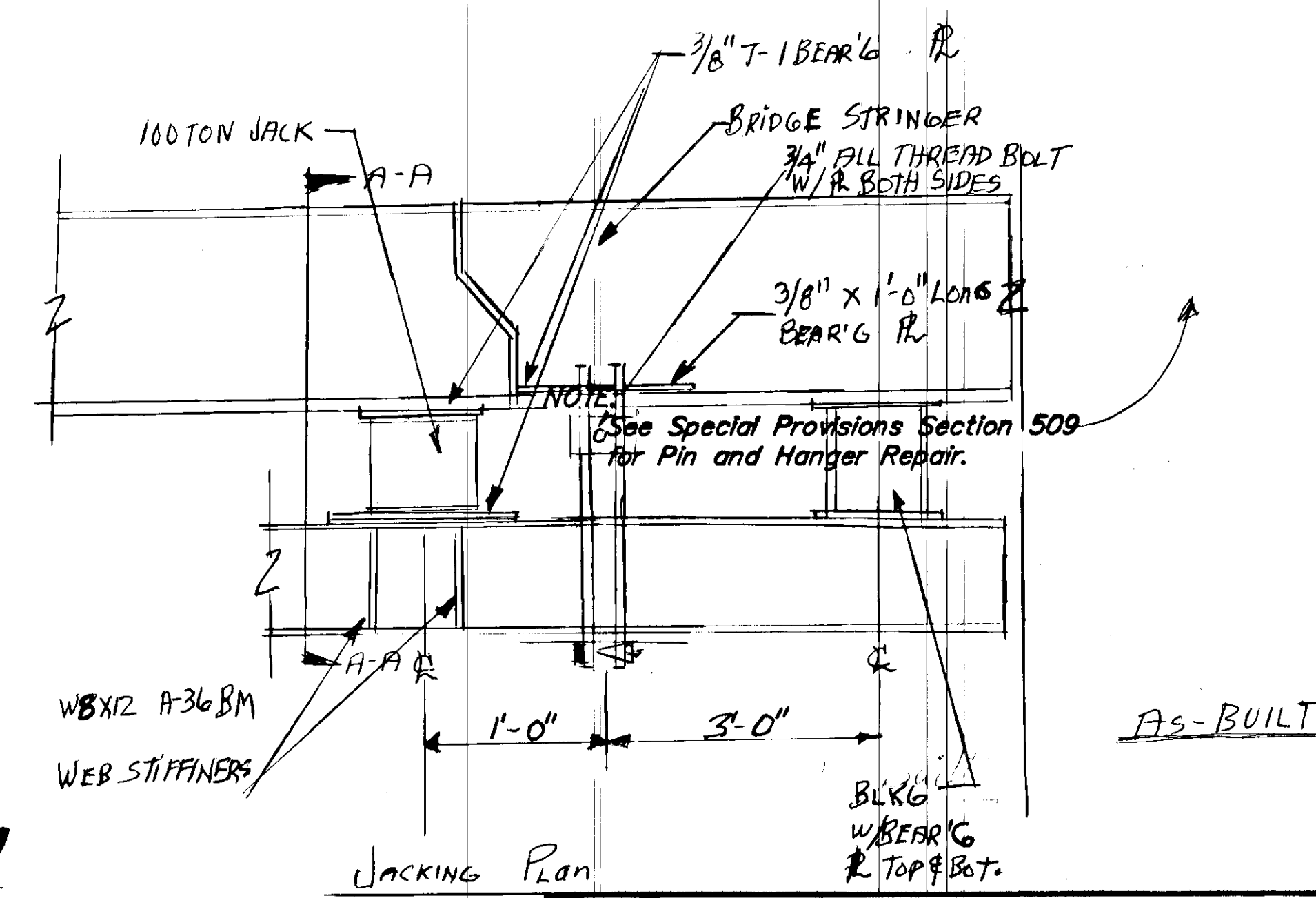


EXISTING LINK



DECK DRAIN EXTENSION

(5 TOTAL)

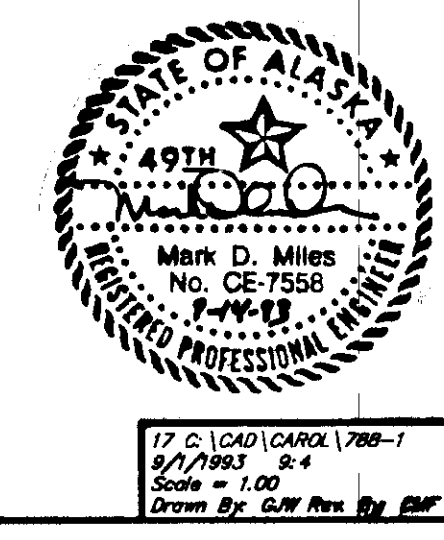


JACKING Plan

As-BUILT

LAWSON CREEK BRIDGE
Route No. F-095
PIN AND HANGER REPAIRS
(No Scale)

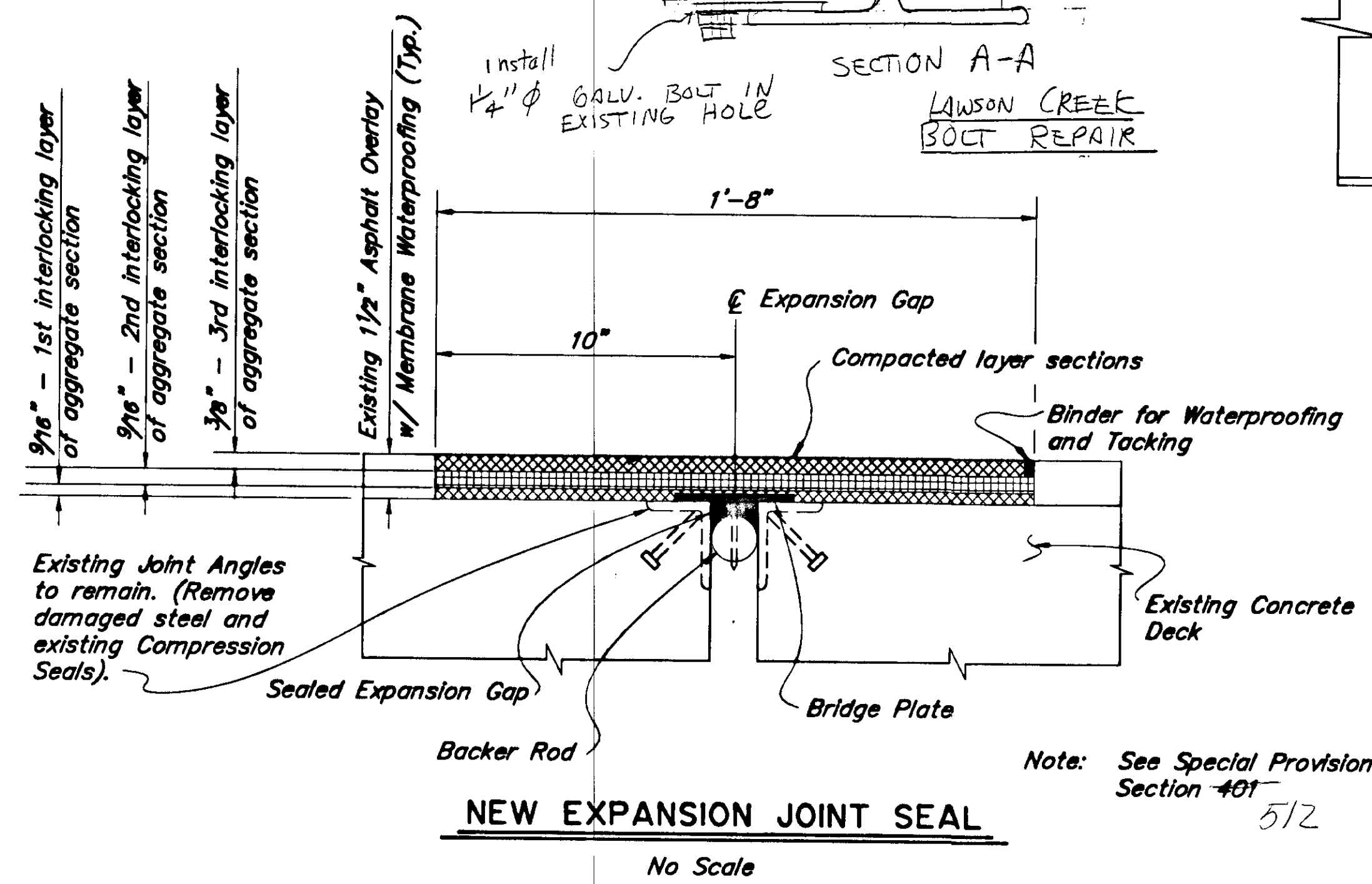
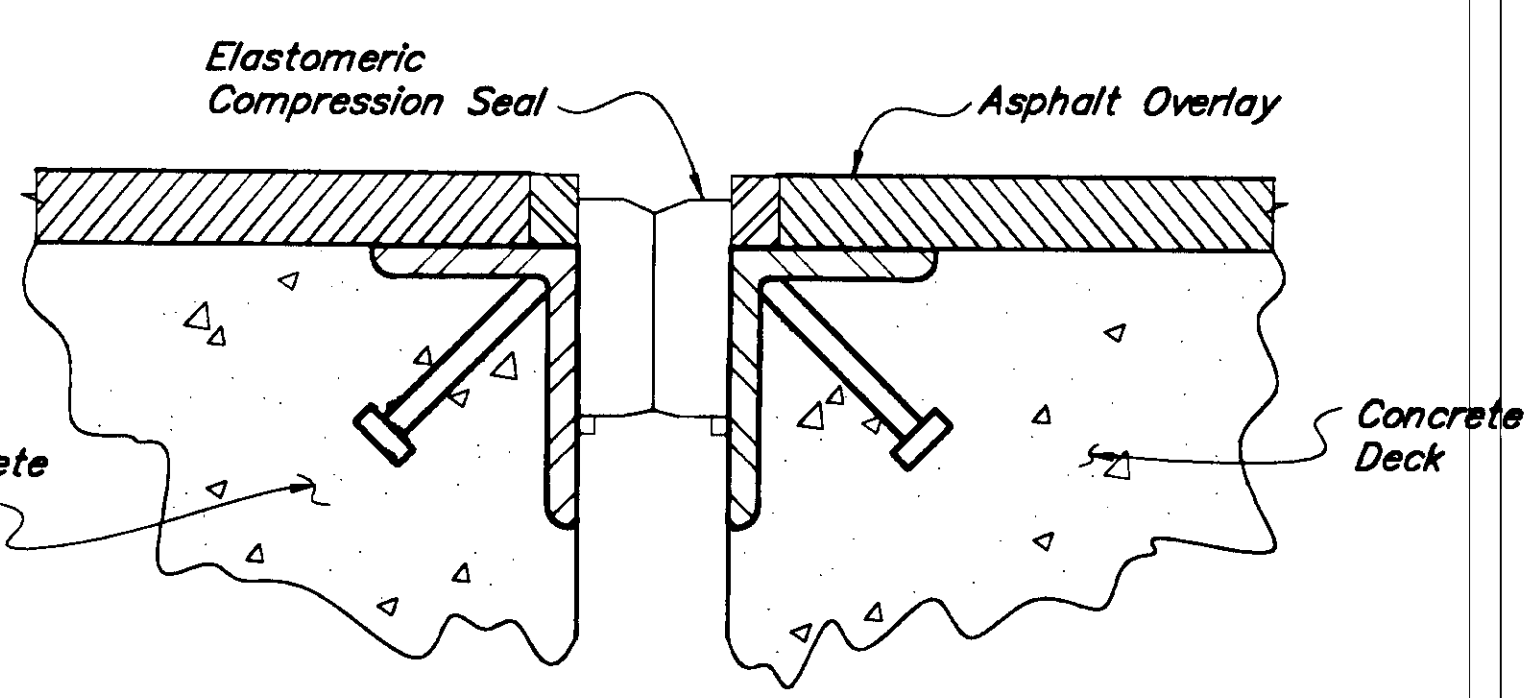
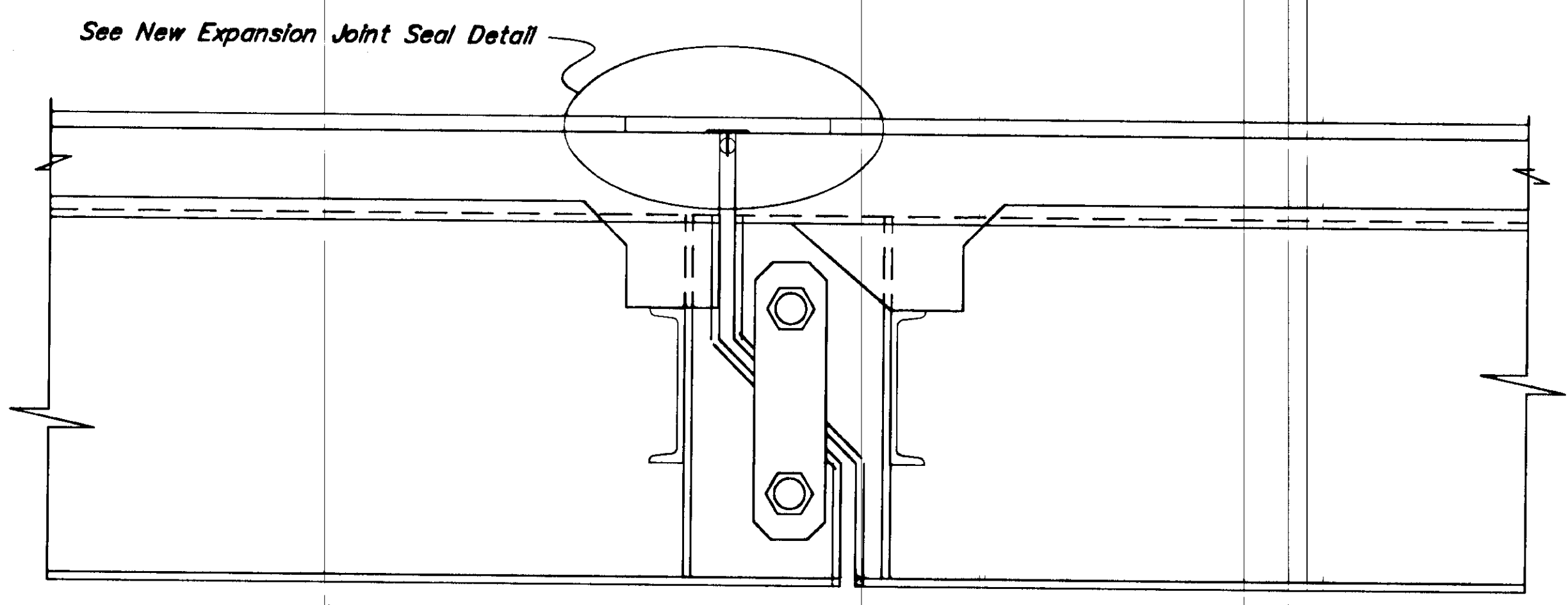
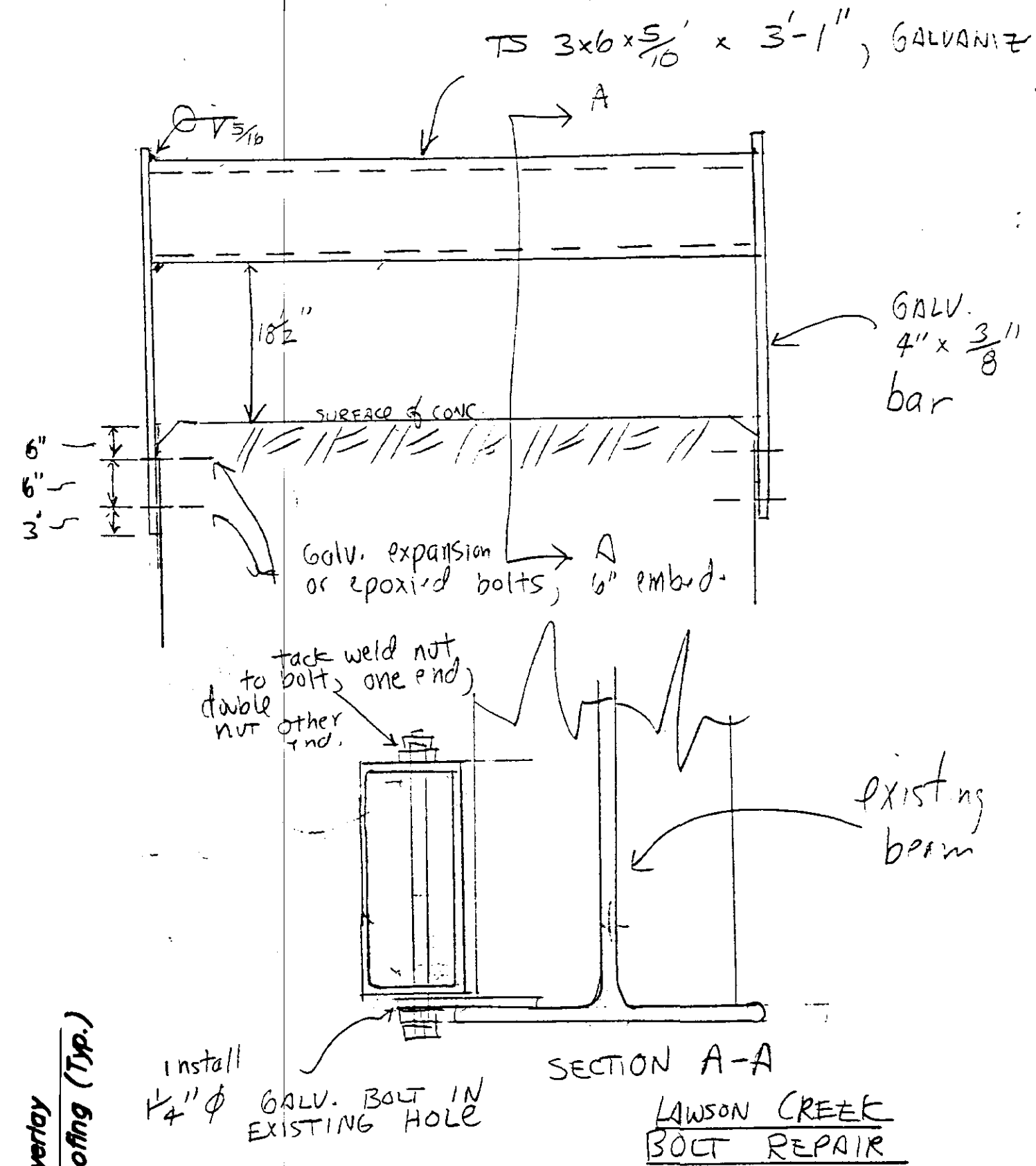
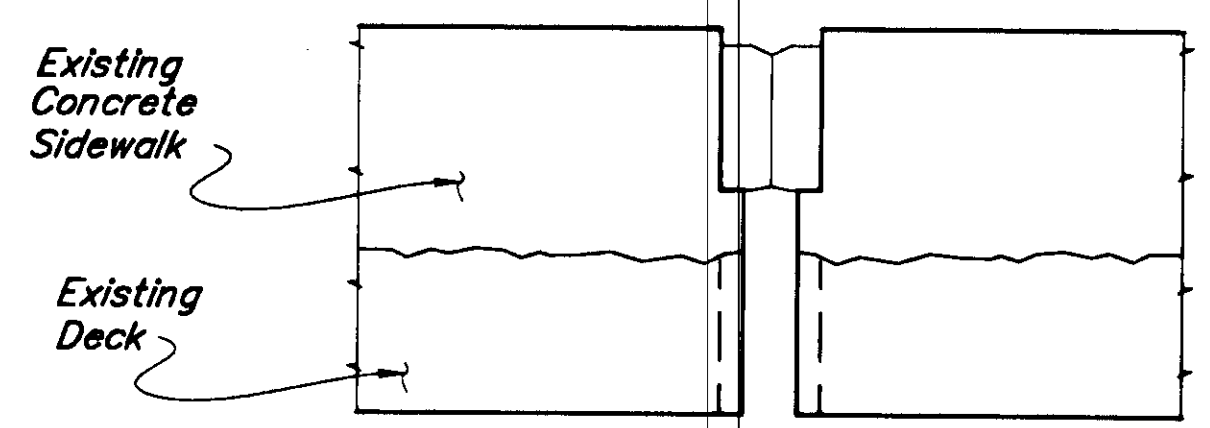
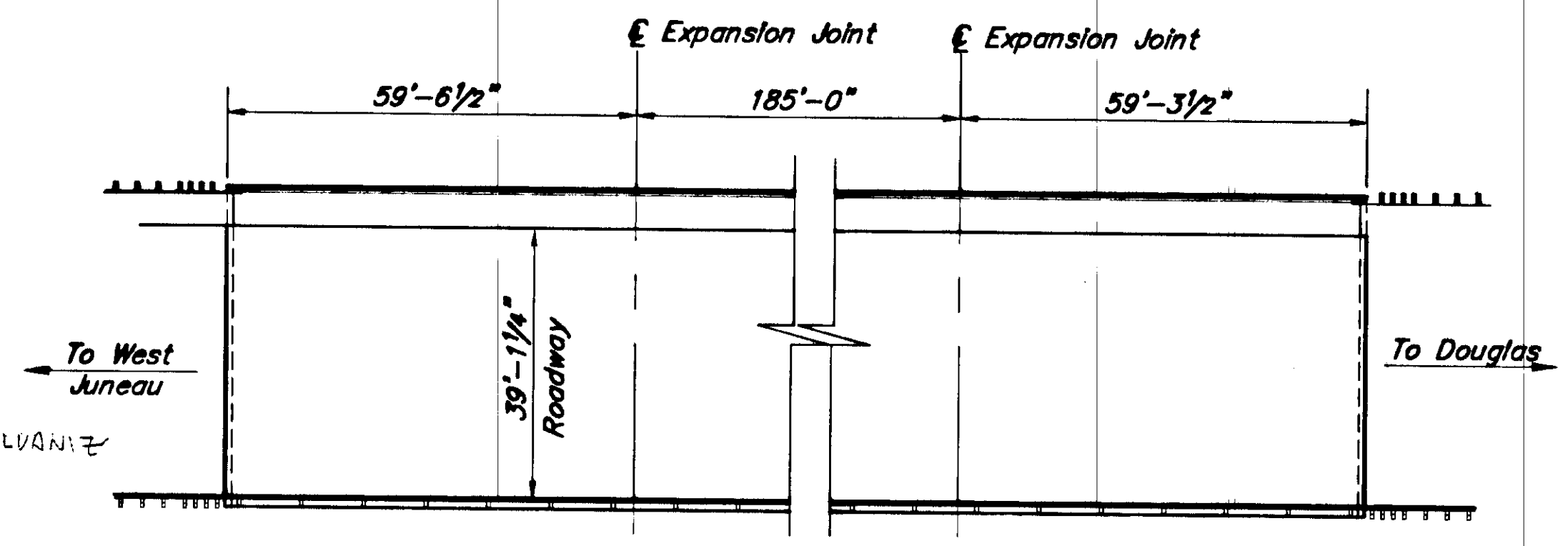
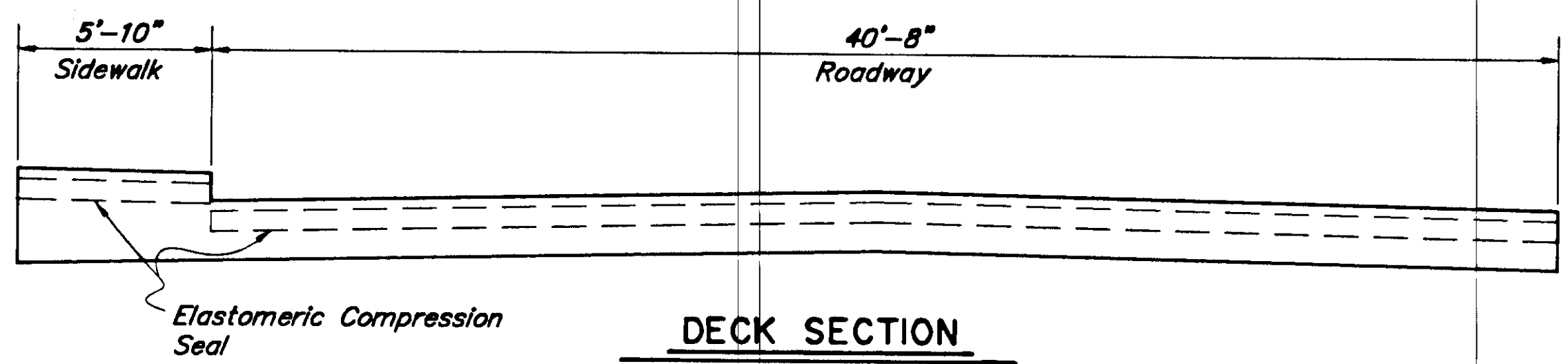
STATE of ALASKA
DEPARTMENT of TRANSPORTATION
and PUBLIC FACILITIES
JUNEAU, ALASKA



BRIDGE NO. 788
DWG. NO. 1

17 C. 1040 (CAROL) 788-1
9/7/93 2:4
Scale = 1/8"
Drawn By: G.W. Rev. By: B.M.

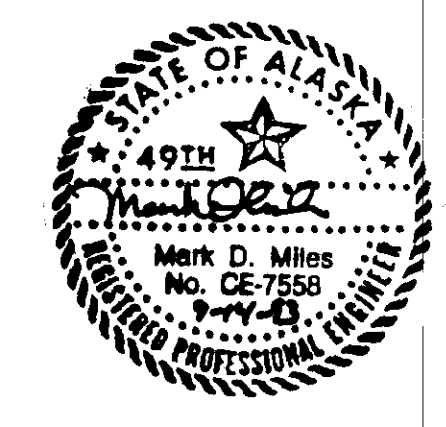
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA				



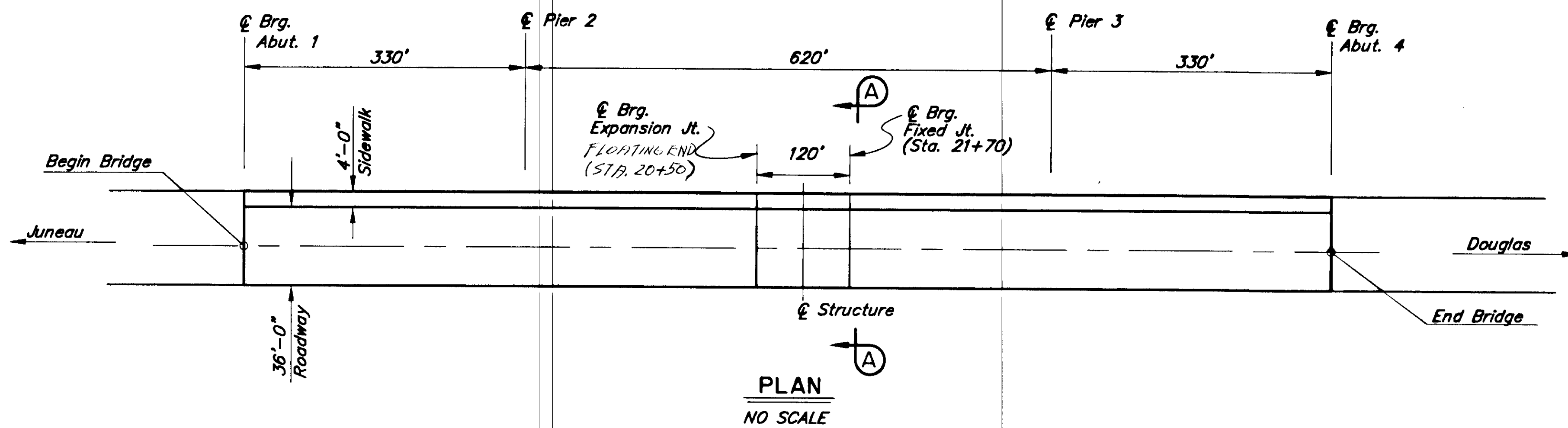
LAWSON CREEK BRIDGE
ROUTE NO. F-095
EXPANSION JOINT REPAIR

STATE of ALASKA
DEPARTMENT of TRANSPORTATION
and PUBLIC FACILITIES
JUNEAU, ALASKA

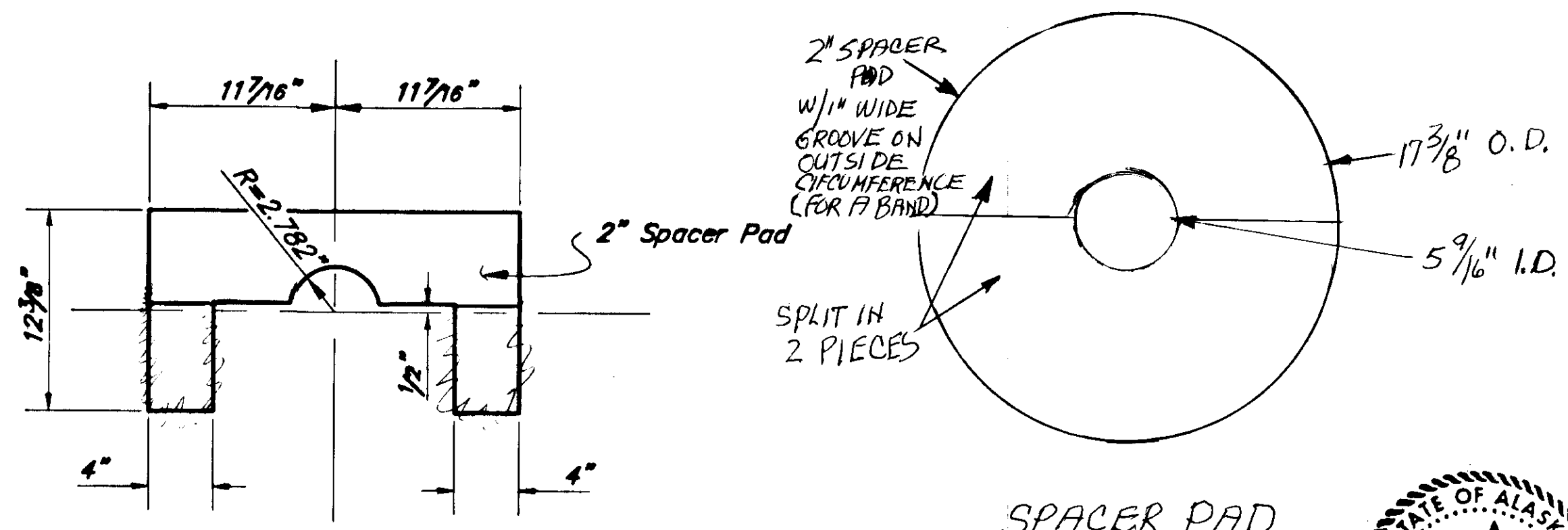
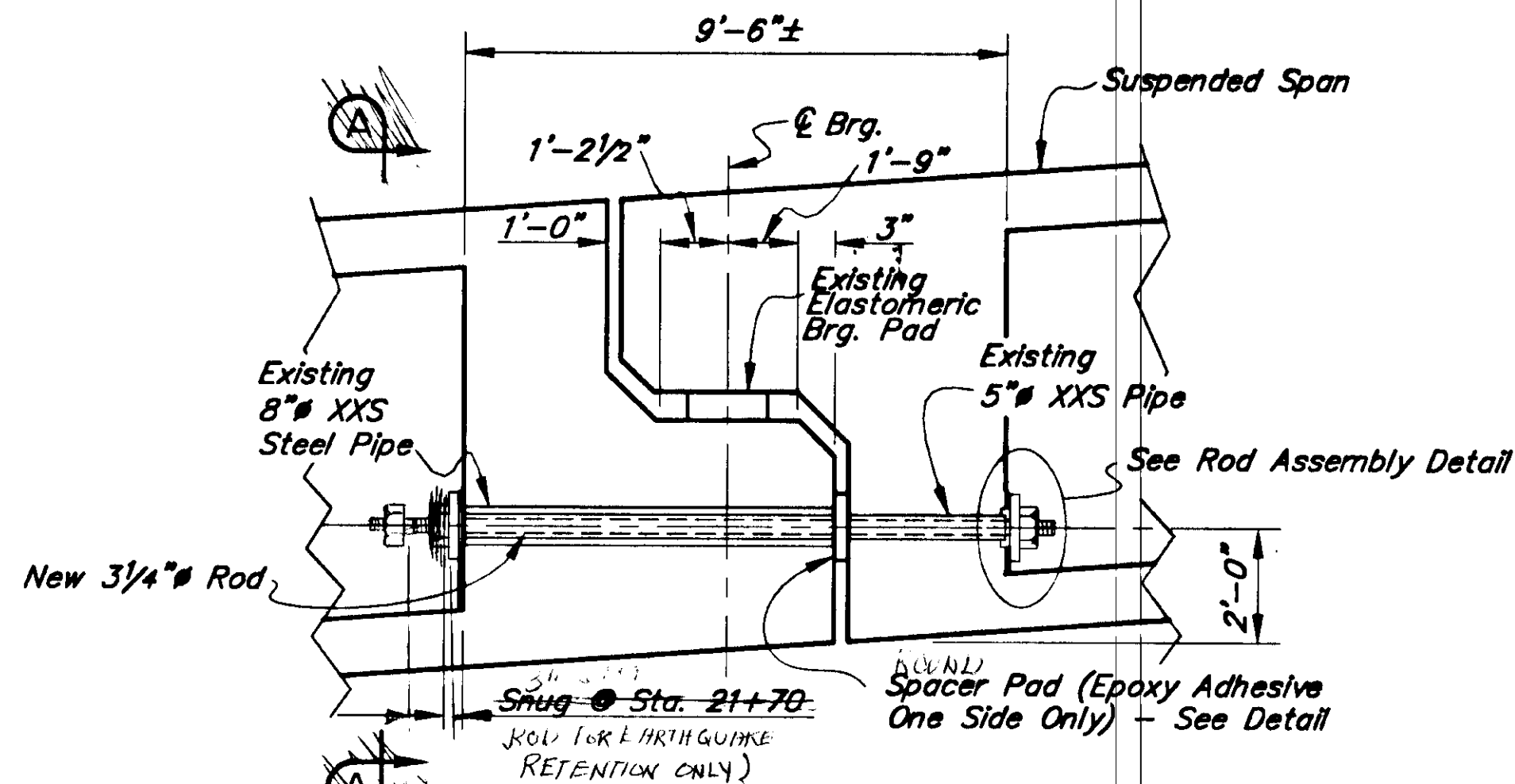
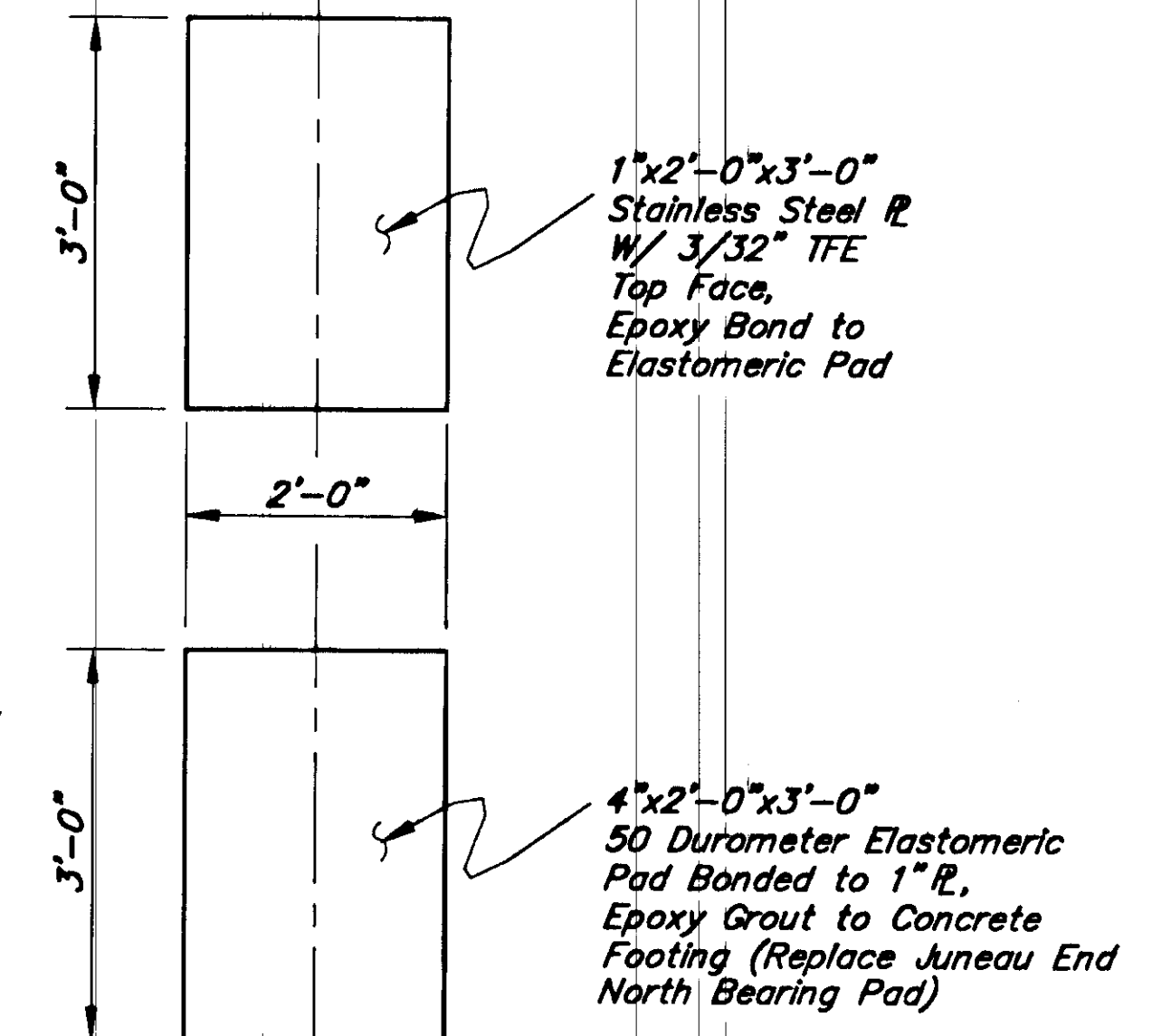
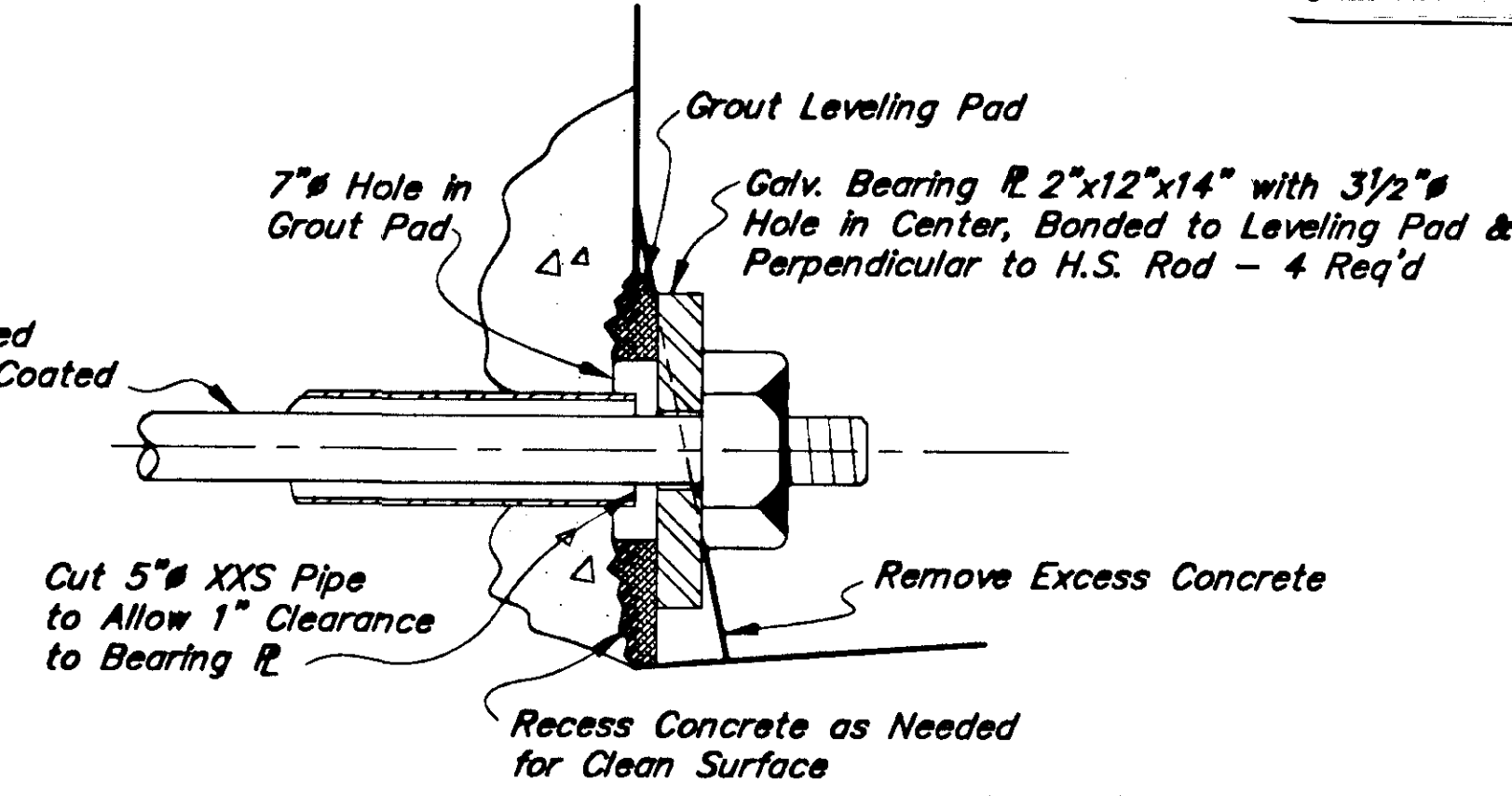
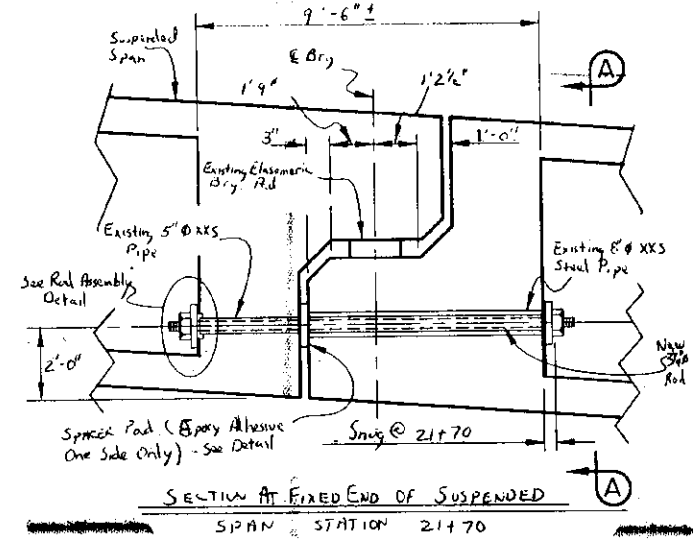
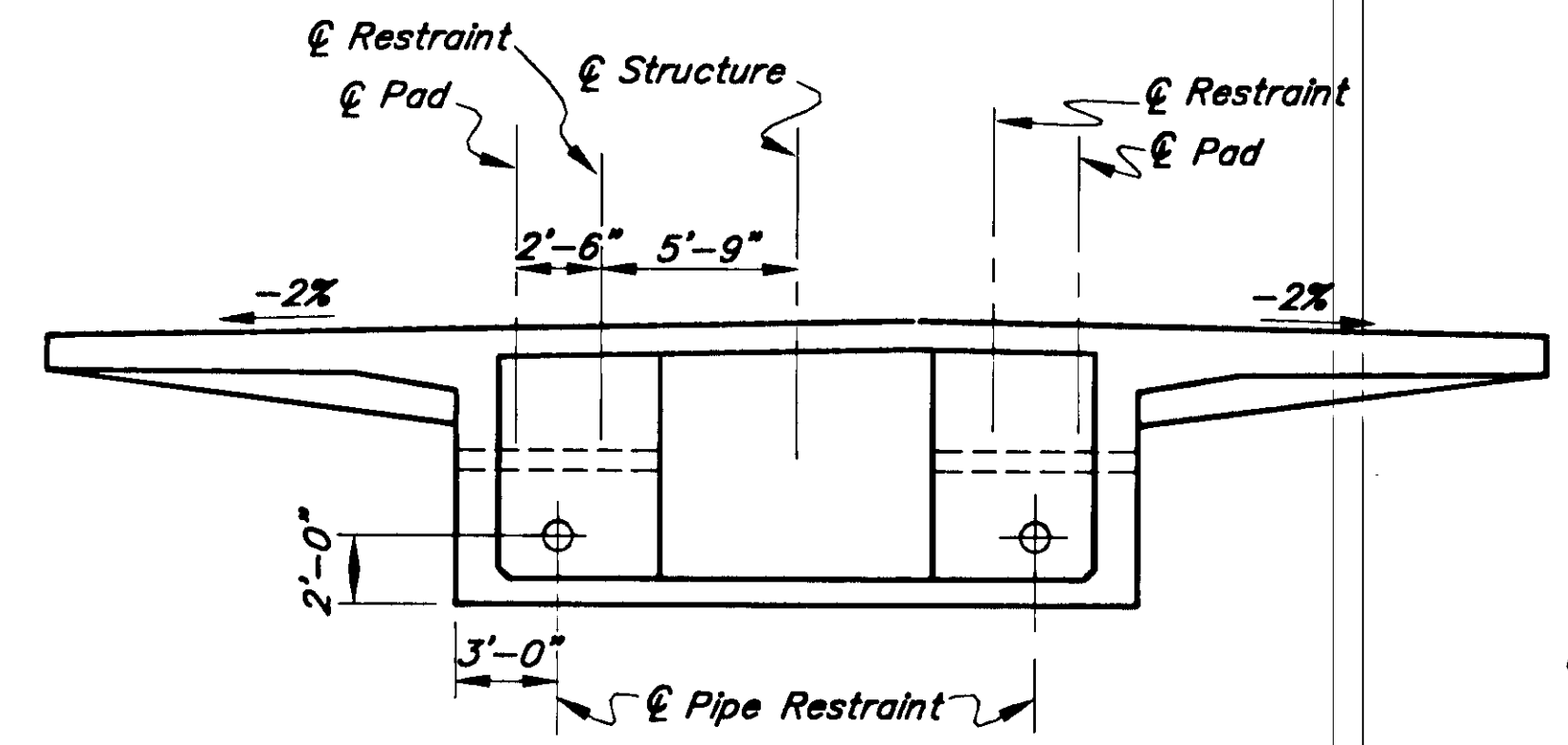
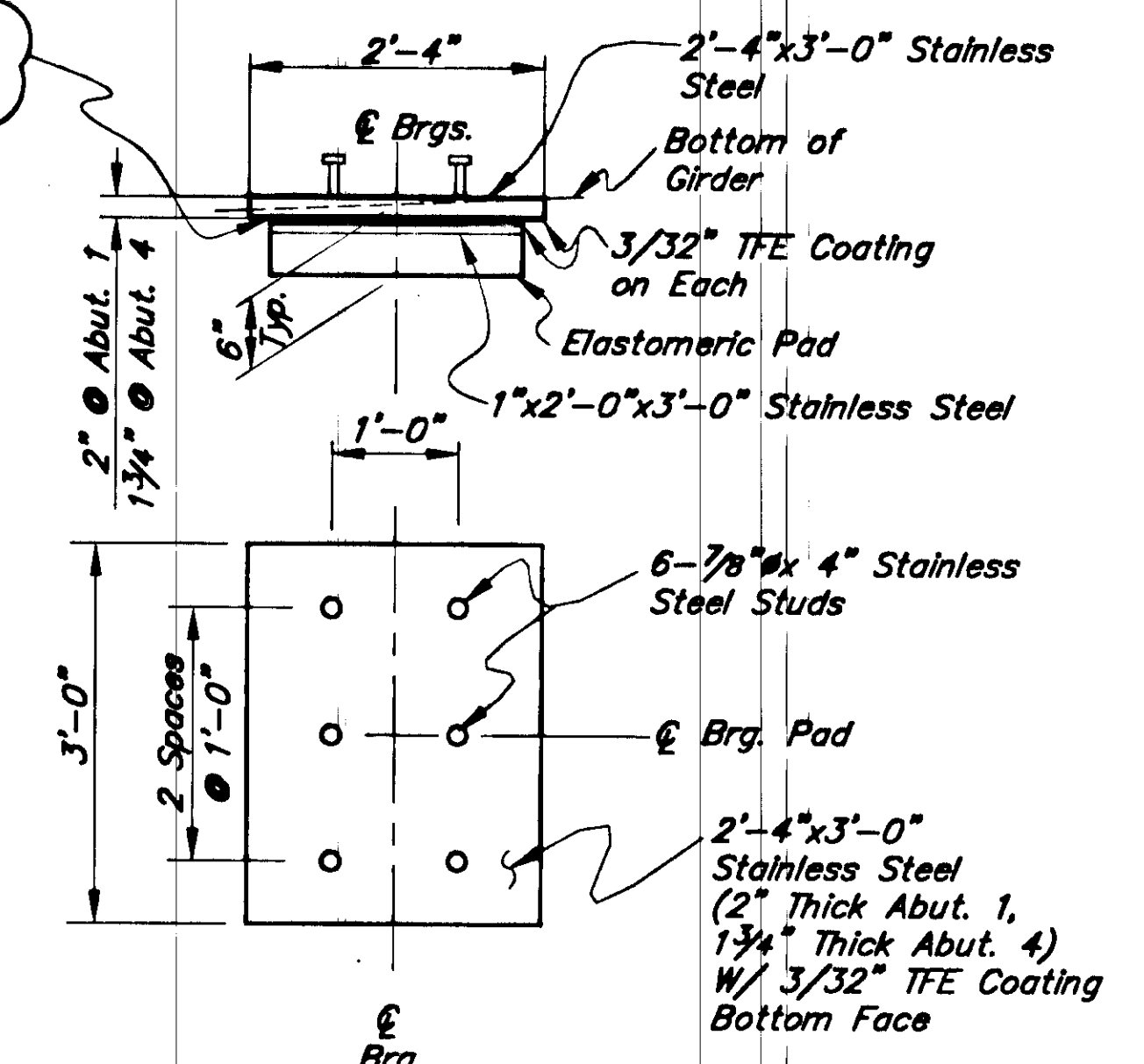
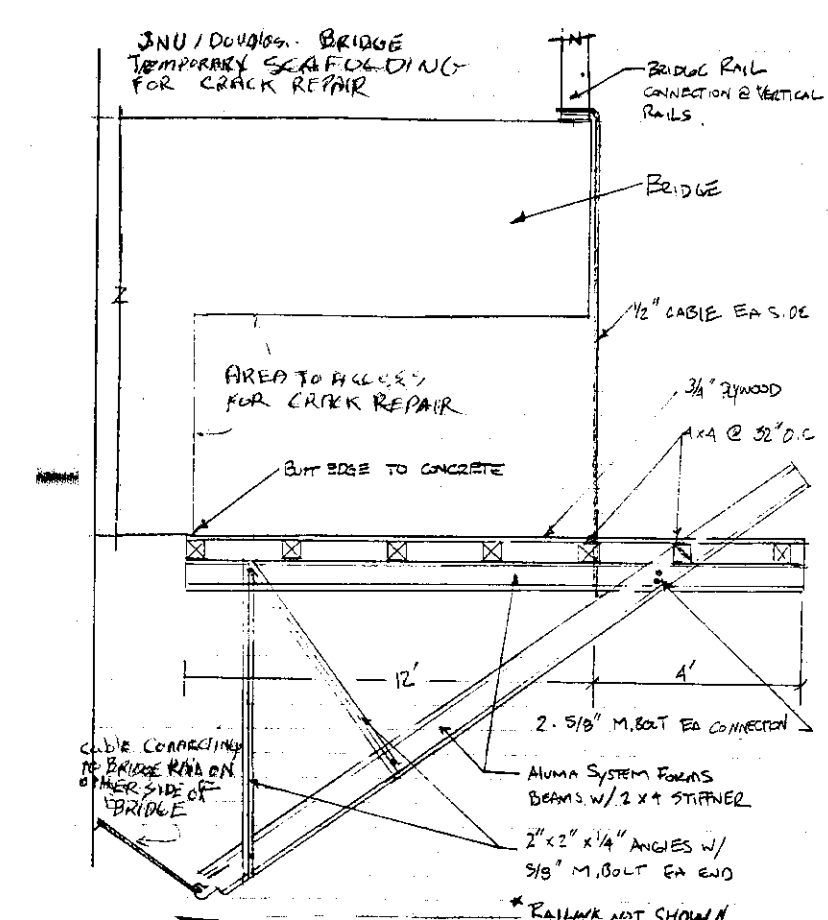
BRIDGE NO. 788
DWG. NO. 2



17 C. (CAD) CAROL 1788-2
8/1/1993 8-4
Scale = 1/8" = 1'-0"
Drawn By: CMF

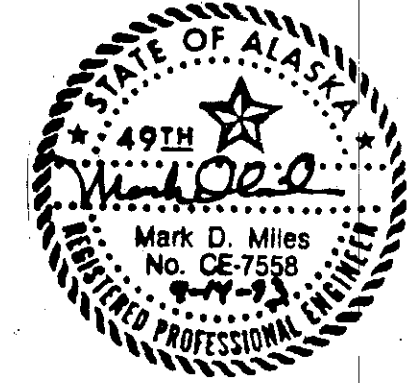


For this Contract: Insert $\frac{1}{8}$ " x 2'-1" x 3'-1" Stainless Steel Between TFE Coatings



SPACER PAD STA. 21+70
(2 Req'd)
NO SCALE

SPACER PAD STA. 20+50
(2 Req'd)
NO SCALE



AS-BUILT

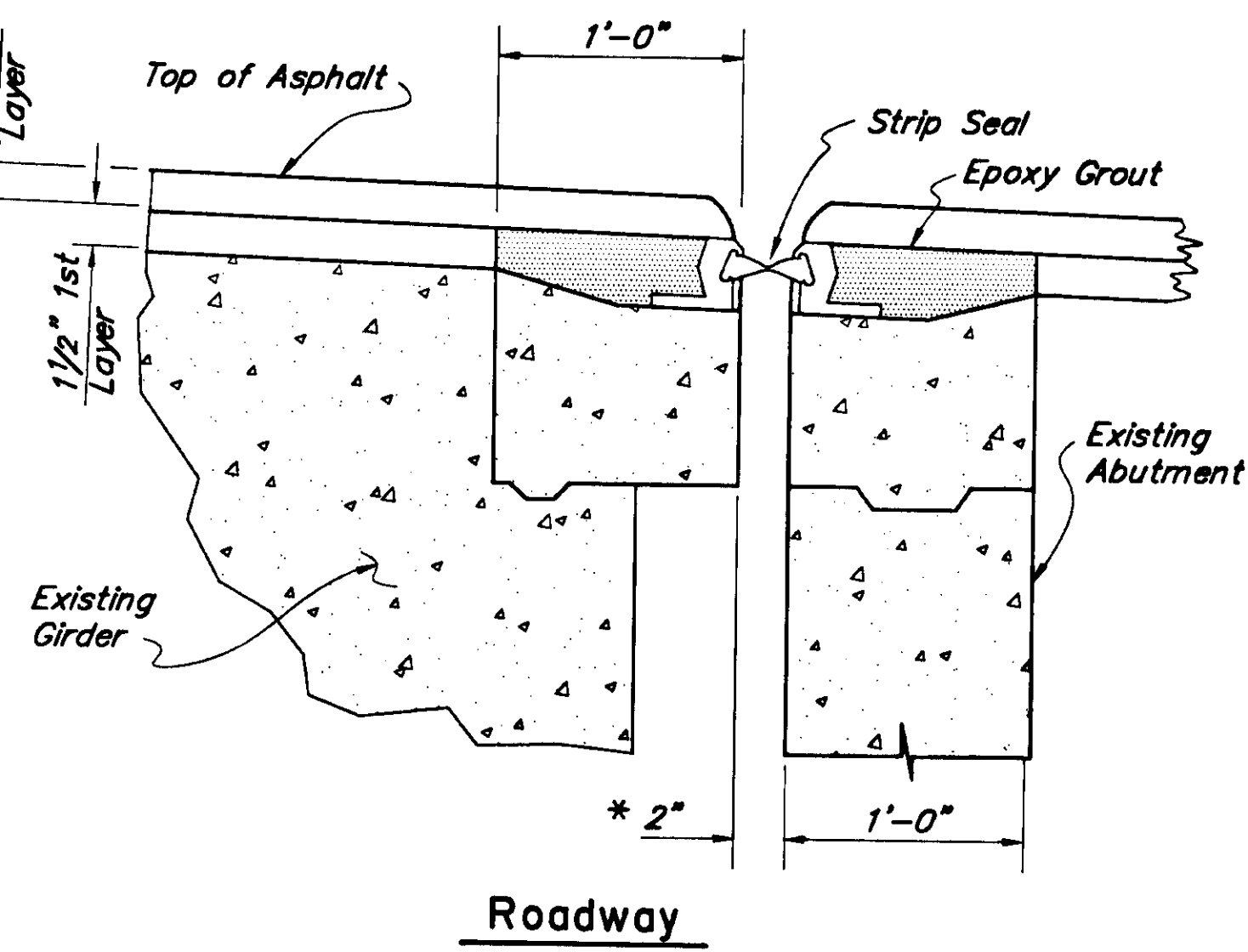
DOUGLAS BRIDGE
ROUTE NO. FAU 958
REPAIR / REHABILITATION

STATE OF ALASKA
DEPARTMENT of TRANSPORTATION
and PUBLIC FACILITIES
JUNEAU, ALASKA

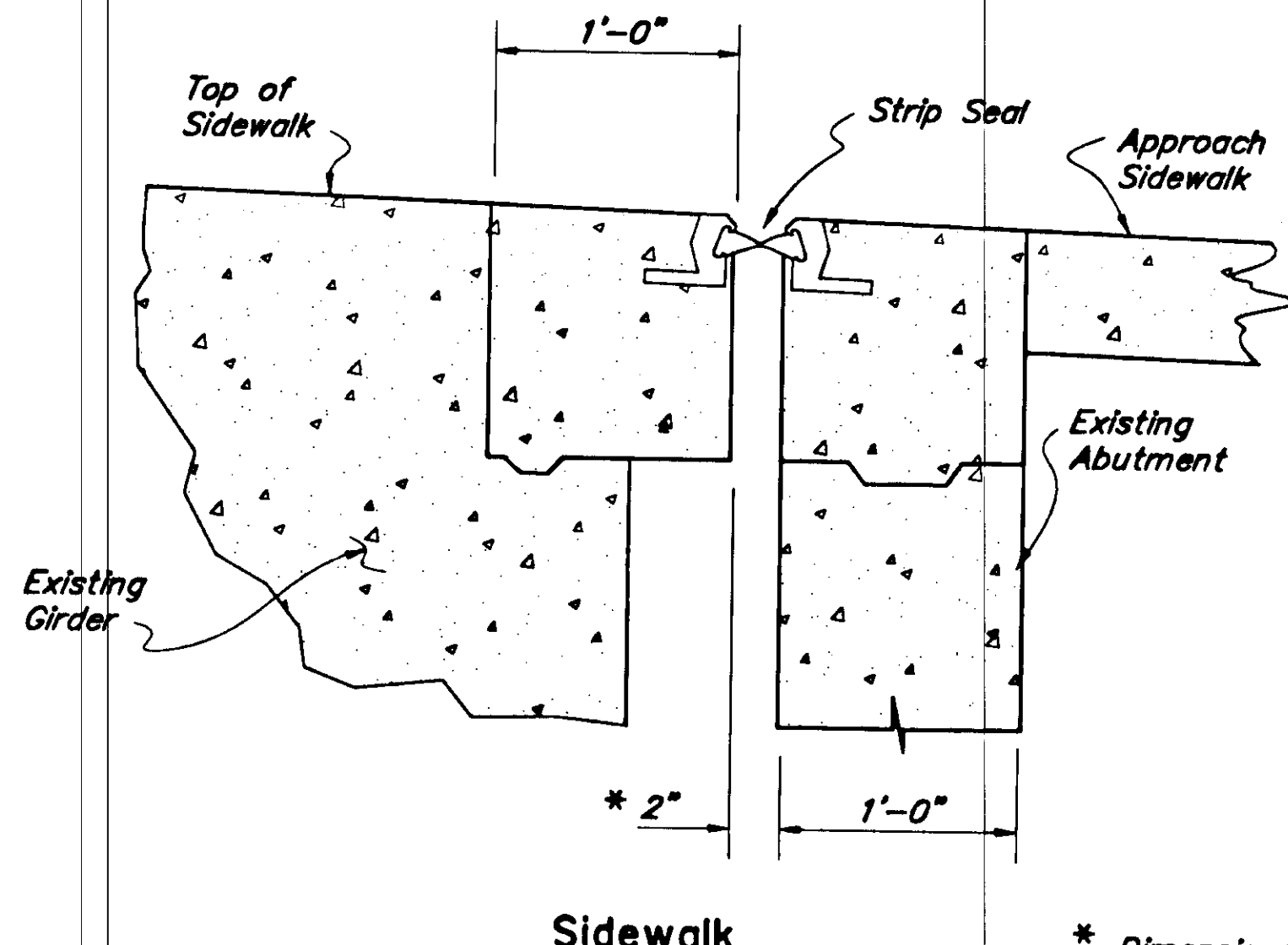
BRIDGE NO. 740
DWG. NO. 1

17-C (CAD) (AR 1740-1)
4/1/2003 8:50
Scale = 2:1
Drawn By: SIS

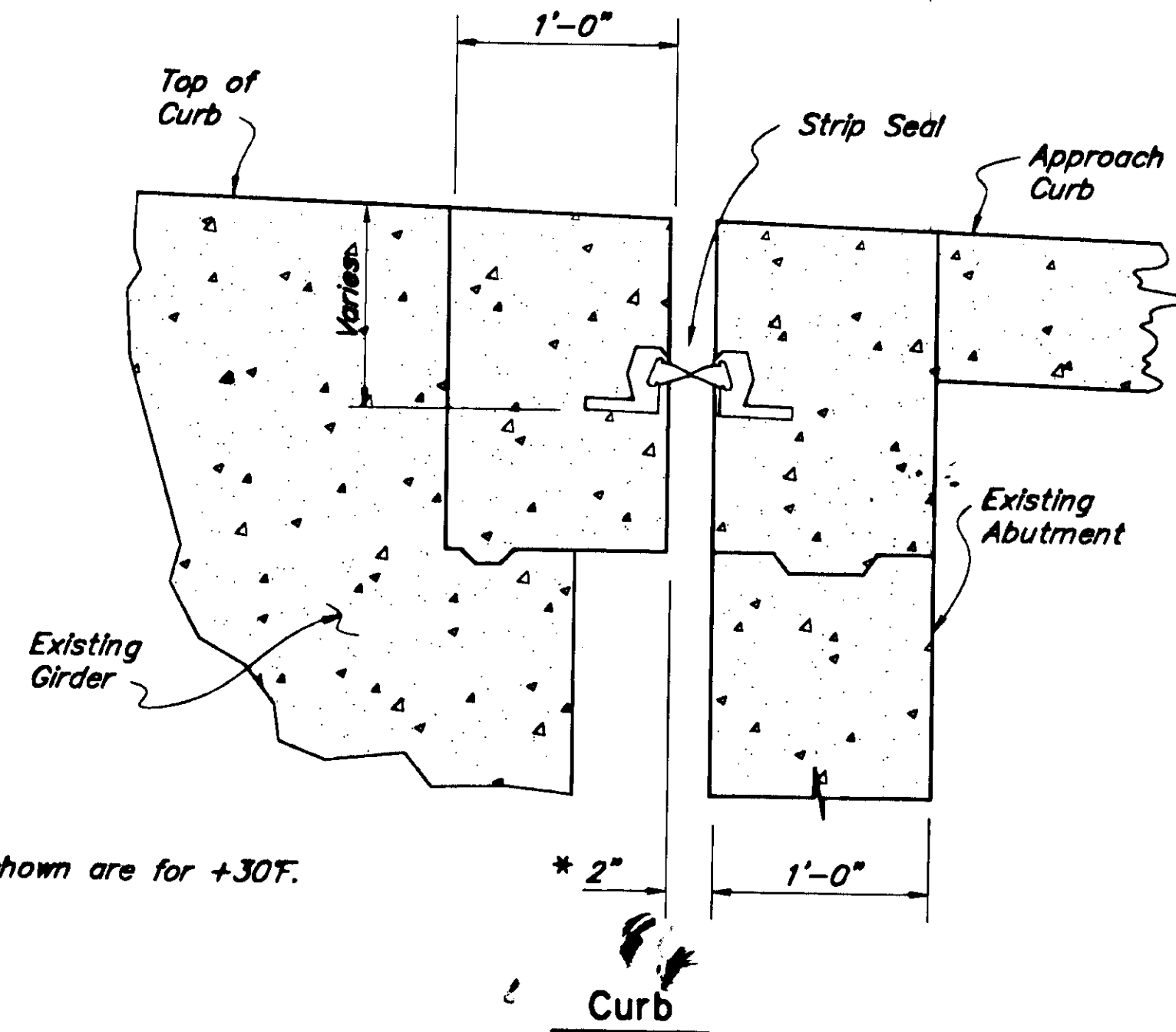
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA				



Roadway



Sidewalk

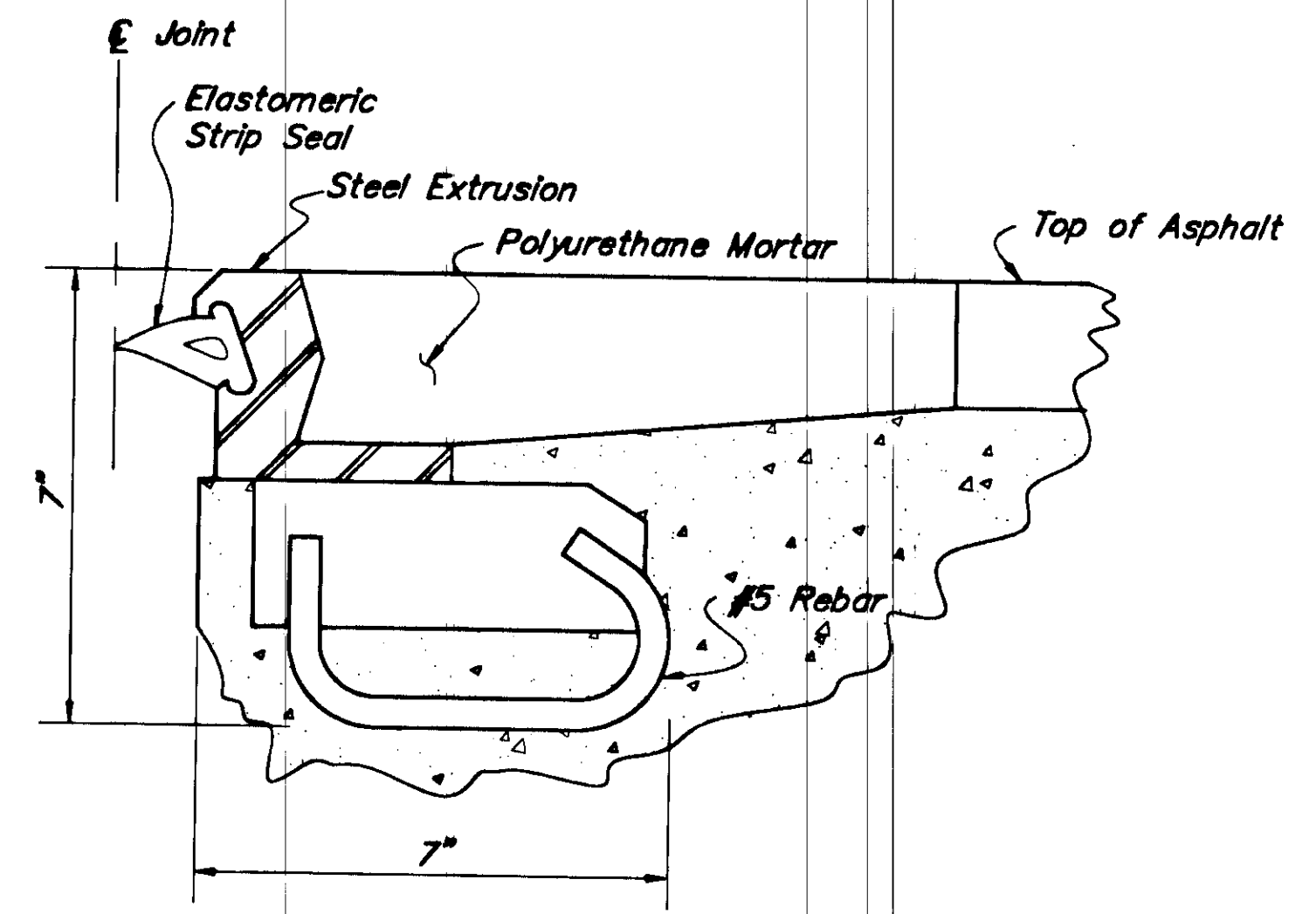


Curb

* Dimensions shown are for +30F.

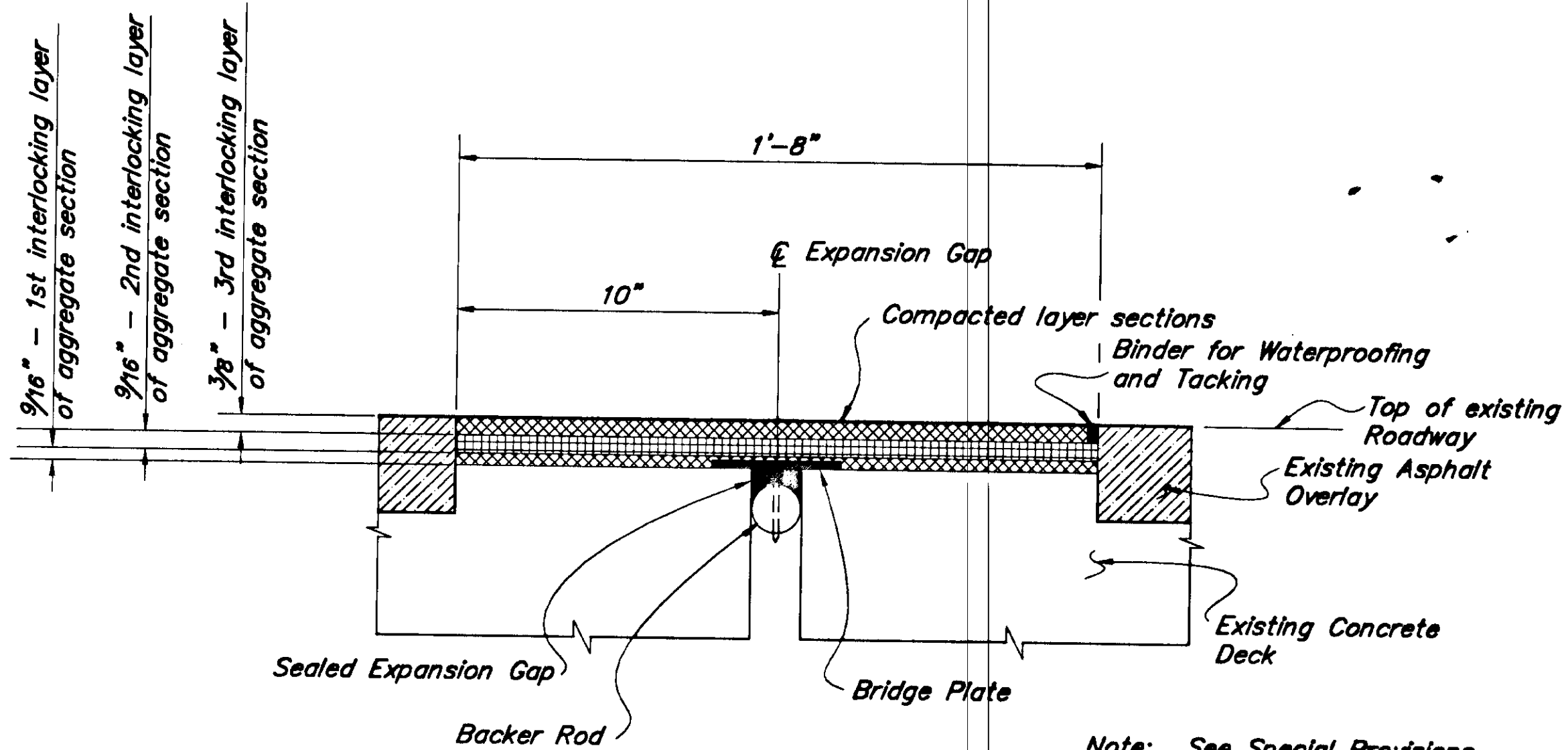
EXISTING SECTIONS

No Scale



EXISTING JOINT SEAL

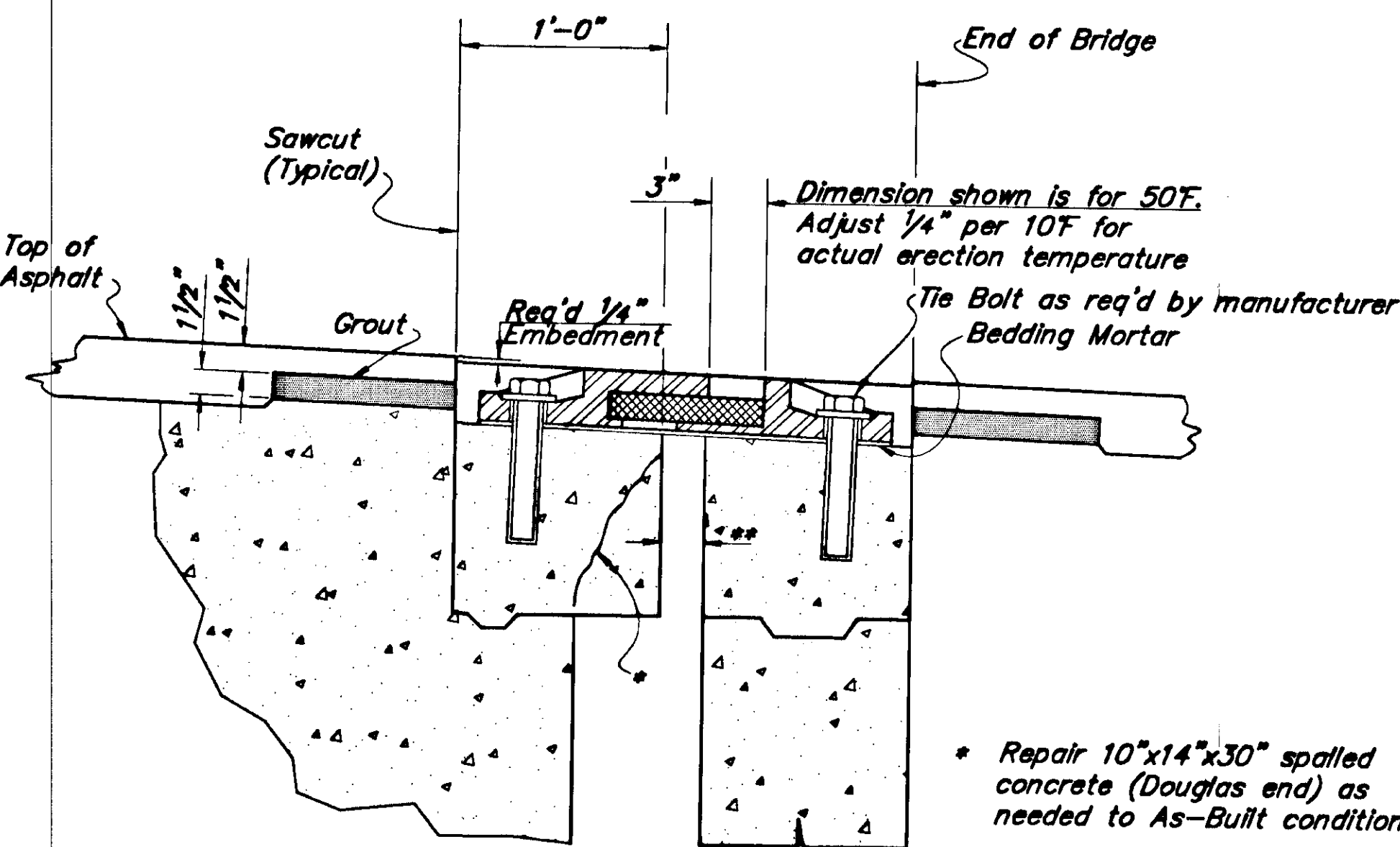
No Scale



**NEW EXPANSION JOINT SEAL
SUSPENDED SPANS**

No Scale

Note: See Special Provisions Section #QT 512

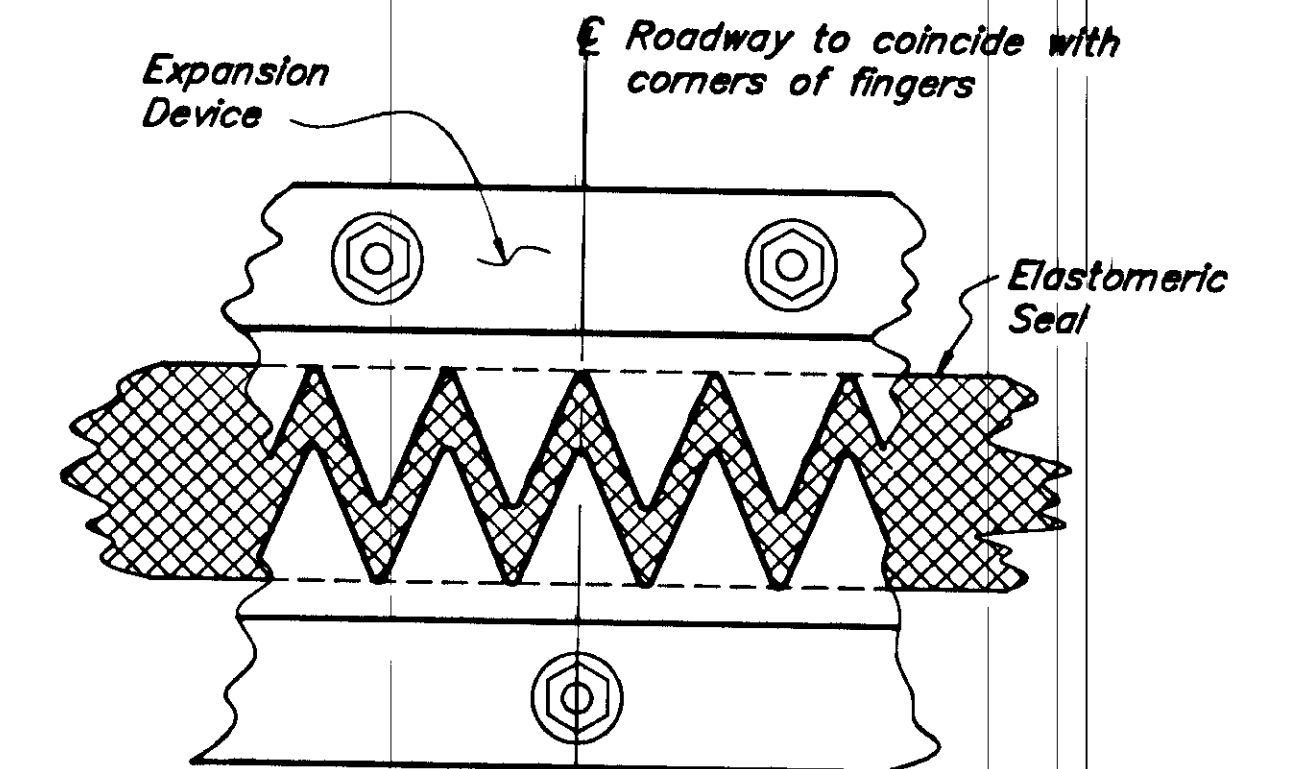


**NEW ROADWAY EXPANSION DEVICE
ABUTMENTS ONLY**

No Scale

* Repair 10"x14"x30" spalled concrete (Douglas end) as needed to As-Built condition

** Expansion Gap per field measurement @ 69F:
Juneau End = 3 1/2"
Douglas End = 1 3/4"



**PLAN VIEW NEW EXPANSION DEVICE
ABUTMENTS**

No Scale

As-Built

DOUGLAS BRIDGE

ROUTE NO. FAU 958

EXPANSION JOINT REPAIR

STATE of ALASKA
DEPARTMENT of TRANSPORTATION
and PUBLIC FACILITIES
JUNEAU, ALASKA



BRIDGE NO. 740

DWG. NO. 2



17 C. LOAD/CARGO 740-2
9/1/2003 2:30
Scale = 1/8"
Drawn By: CMF

ELECTRICAL SPECIFICATION

16010 GENERAL

- A. The electrical drawings are diagrammatic in nature. The plans show the general locations of electrical devices, unless dimensioned thereon. Make minor relocations as required to provide a symmetrical appearance, or to avoid conflict with other structural, architectural, or mechanical features.
- B. Comply with the latest editions of the NEC, and NFPA codes and standards, as well as the applicable Federal, State, and local codes.
- C. Mount devices at heights above the finished floor as follows, unless otherwise noted. Measure heights to the centerline of the boxes.
 - 1. Interior Receptacles 48 inches
 - 2. Wallmounted Luminaires 96 inches
- D. Unless otherwise noted, provide new, high-quality equipment and materials which are standard and current within the industry, and approved by Underwriters' Laboratory.
- E. All products shall be delivered and stored in original containers. Protect all items from dirt, water, chemical, and/or mechanical damage.

16020 SCOPE OF WORK

- A. The purpose of this project is to make minor improvements to the power and lighting systems in the interior of the Gastineau Channel Bridge box girder. The service for the bridge is located on a pole near the sewage lift station on the northwest side of the bridge approach on Douglas Island. Some miscellaneous work as shown on the drawing shall be performed on the service and feeder panel. Two new main disconnects, one for the bridge deck lighting, and the other for the interior lighting and receptacles shall be provided. Several convenience receptacles shall be replaced as shown on the drawing. The existing lighting shall be modified and augmented with nine new luminaires as shown on the drawings. Emergency ballasts shall be provided in both existing and new luminaires and an unswitched conductor shall be pulled to the luminaires with new emergency ballasts as shown.

16110 RACEWAYS

- A. All raceway shall be Intermediate Metallic Conduit (IMC). All IMC and fittings shall meet ANSI requirements.
- B. Install conduit mechanically and electrically continuous from termination to termination. Connect securely to cabinets, junction boxes, and device boxes.
- C. All flexible conduit shall be liquid tight nonmetallic.

16120 WIRE AND CABLE

- A. Utilize 600 volt rated wire insulation where the impressed voltage is less than 600 volts and greater than 100 volts.
- B. Utilize minimum wire sizes as follows, unless otherwise noted:
 - 1. No. 12 AWG for branch circuit wiring.
 - 3. No. 16 AWG for lighting fixture wiring.
- C. Size all conductors according to American Wire Gauge (AWG).
- D. Provide conductors with XHHW insulation, unless otherwise noted.
- E. Provide solderless type connectors for conductors. Utilize preinsulated 'twist-on' type for conductors No. 10 AWG or less in size, or bolt or compression set type with a preformed cover, heat shrink tubing, or tape for insulation.

16130 OUTLET AND JUNCTION BOXES

- A. Provide galvanized steel outlet and junction boxes as required.

16140 SWITCHES AND RECEPTACLES

- A. Provide specification grade, NEMA 5-20R, phenolic receptacles, approved by U.L.
- B. Devices shall be corrosion resistant with galvanized steel plates.

16170 DISCONNECTS

- A. Provide heavy duty type disconnects, rated for 600 volt service. Each shall be horsepower rated with quick-make, quick-break switching.

16180 CIRCUIT BREAKERS

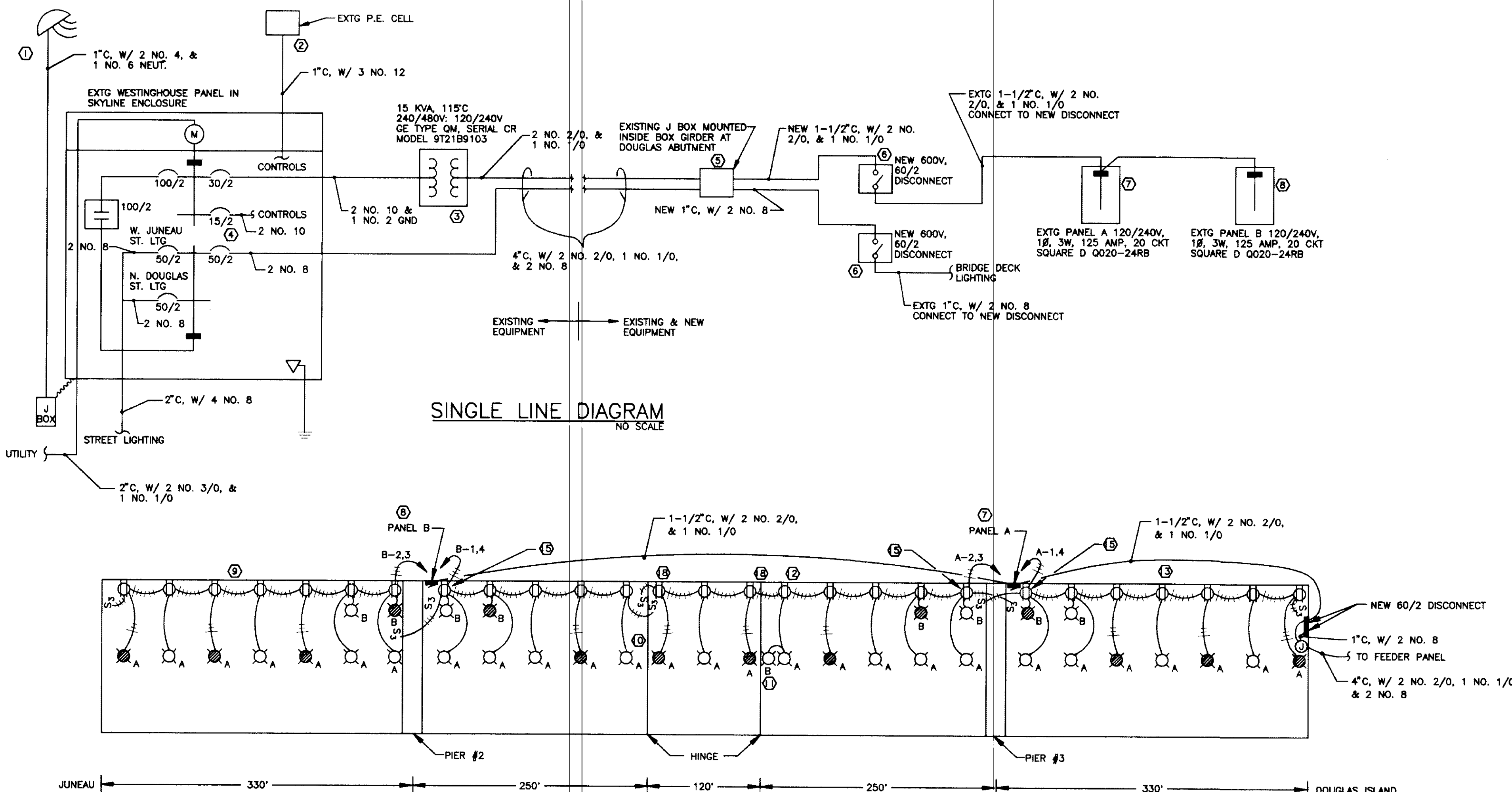
- A. Provide 10,000 ampere symmetrical interrupting capacity minimum, unless otherwise noted. All circuit breakers shall be a bolt-in type.
- B. The notes in the drawings indicate the number of poles and ampere ratings for branch circuits to electrical devices.
- C. Circuit all feeder and branch circuits as shown in the drawings.

16190 SUPPORTING DEVICES

- A. Conduit: Utilize galvanized conduit straps where surface mounted and spring cups and hangers where suspended.
- B. Boxes: Utilize purpose made hangers as required.
- C. Allow for a minimum safety factor of five to one to support equipment loads. Plumber's tape and wire are not approved.

16450 GROUNDING

- A. Connect all non-current carrying electrical equipment, raceways, and enclosures to the service entrance ground bar.



SINGLE LINE DIAGRAM
NO SCALE

BRIDGE GIRDER INTERIOR
NO SCALE

- NOTES:
- ① REMOVE THE EXISTING WEATHER HEAD, CONDUIT, CONDUCTORS, JUNCTION BOX, AND FLEX CONDUIT INTO THE METER/PANEL ENCLOSURE. PROVIDE A GASKETED COVER OVER 4-1/2" DIAMETER OPENING.
 - ② STRAP P.E. CELL AND CONDUIT TO SIDE OF POLE EVERY 3' MIN.
 - ③ PROVIDE A GROUND BUS IN THE TRANSFORMER. CONNECT THE GROUNDING CONDUCTOR, X2, X3, AND NEUTRAL CONDUCTOR TO THE BUS.
 - ④ ONE OF THE NO. 10 CONTROL CONDUCTORS CONNECTED TO THE 15/2 CIRCUIT BREAKER HAS ONLY ELECTRICAL TAPE FOR INSULATION. REPLACE THIS CONDUCTOR.
 - ⑤ BOND THE 1-1/2"C. AND THE 1"C. TO THE 4"C. WITH A NO. 8 MIN. GROUNDING CONDUCTOR.
 - ⑥ PROVIDE TWO NEW LOCKABLE 600V, 60 AMP, TWO POLE HEAVY DUTY DISCONNECTS IN NEMA 3R ENCLOSURES. MOUNT AT 40" AFF ON THE END WALL OF THE GIRDER NEXT TO THE J BOX. RE-ROUTE EXISTING CONDUIT AS REQUIRED.
 - ⑦ BOLT THE INTERIOR OF PANEL A TO THE ENCLOSURE PER THE MANUFACTURER'S ASSEMBLY INSTRUCTIONS. REPLACE THE 30 AMP, SINGLE POLE, CIRCUIT BREAKERS ON CIRCUITS #2, AND #4 WITH 20 AMP, SINGLE POLE, 30 MILLIAMP GROUND FAULT INTERRUPTING CIRCUIT BREAKERS. (QO 120 EPD)
 - ⑧ TIGHTEN THE NUTS SECURING THE INTERIOR OF PANEL B TO THE ENCLOSURE. REPLACE THE 30 AMP, SINGLE POLE, CIRCUIT BREAKERS ON CIRCUITS #2, AND #4 WITH 20 AMP, SINGLE POLE, 30 MILLIAMP GROUND FAULT INTERRUPTING CIRCUIT BREAKERS (QO 120 EPD). PROVIDE A GASKETED COVER TO THE 2" HUB IN THE TOP OF THE PANEL.
 - ⑨ PROVIDE A NEW COVER PLATE ON RECEPTACLE.
 - ⑩ A 1-1/2"C. IS PRESENTLY SUPPORTED BY A PIECE OF ROPE. SECURE TO CEILING WITH PROPER METHOD.
 - ⑪ PROVIDE A TYPE B LUMINAIRE AS SHOWN. MOUNT TO CENTER OF CEILING SIMILAR TO EXISTING TYPE A LUMINAIRES. PROVIDE POWER FROM EXISTING LIGHTING CIRCUIT.
 - ⑫ REPLACE RECEPTACLE
 - ⑬ REPLACE RECEPTACLE AND COVER PLATE
 - ⑭ PROVIDE TYPE B LUMINAIRES AT 96" AFF ABOVE ADJACENT RECEPTACLE WHERE SHOWN. CONNECT TO EXISTING LIGHTING CIRCUIT. PROVIDE WITH EMERGENCY BALLAST WHERE SHOWN. USE BODINE B50 OR AN APPROVED EQUAL. DISCONNECT POWER AND ABANDON ADJACENT EXISTING TYPE A LUMINAIRE.
 - ⑮ REMOVE THE EXISTING PORTABLE STRIP FLUORESCENT LUMINAIRE WITH CORD AND PLUG ASSEMBLY. RETURN TO CONTRACTING OFFICER.
 - ⑯ PROVIDE EMERGENCY BALLASTS IN TYPE A LUMINAIRES WHERE SHOWN. USE BODINE B50 OR AN APPROVED EQUAL.
 - ⑰ PULL AN ADDITIONAL CONDUCTOR TO EACH TYPE A AND B LUMINAIRES AS NECESSARY TO PROVIDE EMERGENCY LIGHTING.
 - ⑱ PROVIDE A NO. 10 GROUNDING JUMPER ACROSS FLEX JOINTS IN ALL CONDUIT CROSSING THE HINGE. BOND THE CONDUCTOR TO THE CONDUIT ON EACH SIDE OF JOINT WITH APPROVED BONDING MEANS. CLEAN CONDUIT OF ALL CORROSION AND FOREIGN MATERIAL PRIOR TO BONDING.

LUMINAIRE SCHEDULE

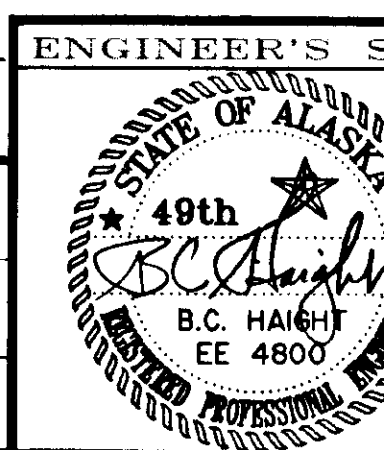
TYPE	DESCRIPTION	MANUFACTURER	LAMPS	REMARKS
A	STRIP FLUORESCENT	EXISTING	(1) F48T12 SUMLINE	PROVIDE WITH EMERGENCY BALLAST WHERE SHOWN. USE BODINE B50 OR AN APPROVED EQUAL.
B	NEW STRIP FLUORESCENT	LITHONIA C140120EL	(1) F40T12	PROVIDE WITH EMERGENCY BALLAST WHERE SHOWN. USE BODINE B50 OR AN APPROVED EQUAL.

LEGEND

- AFF ABOVE FINISHED FLOOR
- ① NOTE #1
- ⊙_A LUMINAIRE, LETTER INDICATES TYPE
- CONDUIT WITH CONDUCTORS SLASHES INDICATE NUMBER IF NOT TWO
- ⊙_A LUMINAIRE WITH EMERGENCY BALLAST
- S₃ THREE WAY SWITCH
- 60/2 AMPS/# OF POLES

115 - BUILT

B.C. HAIGHT - CONSULTING ENGINEERS
418 Harris Street, Juneau, Alaska 99801 (907) 586-9788



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU

**JUNEAU DOUGLAS BRIDGE
ELECTRICAL IMPROVEMENTS**

ALASKA	DESIGNED BY: MGM	PROJECT No. 71123
	DRAWN BY: JLC	DATE: SEPT 15, 1993
	CHECKED BY: BCH	SHEET 1 OF 1

RECORD OF REVISIONS

BY:	DATE:	DESCRIPTION OF CHANGE: