

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	S 578 (4)			

STATE OF IOWA
STATE HIGHWAY COMMISSION
 DESIGN FOR
150'x20' CONTINUOUS I-BEAM BRIDGE
SECONDARY ROAD SYSTEM PROJ. S-578 (4)
CRAWFORD COUNTY
 MARCH 1953

126560

DESIGN 52-1 NISHNABOTNY TWP. CRAWFORD COUNTY I.H.C. Des 753
SEC. 33-34 STA 15+00.0 OVER NISHNABOTNY RIVER

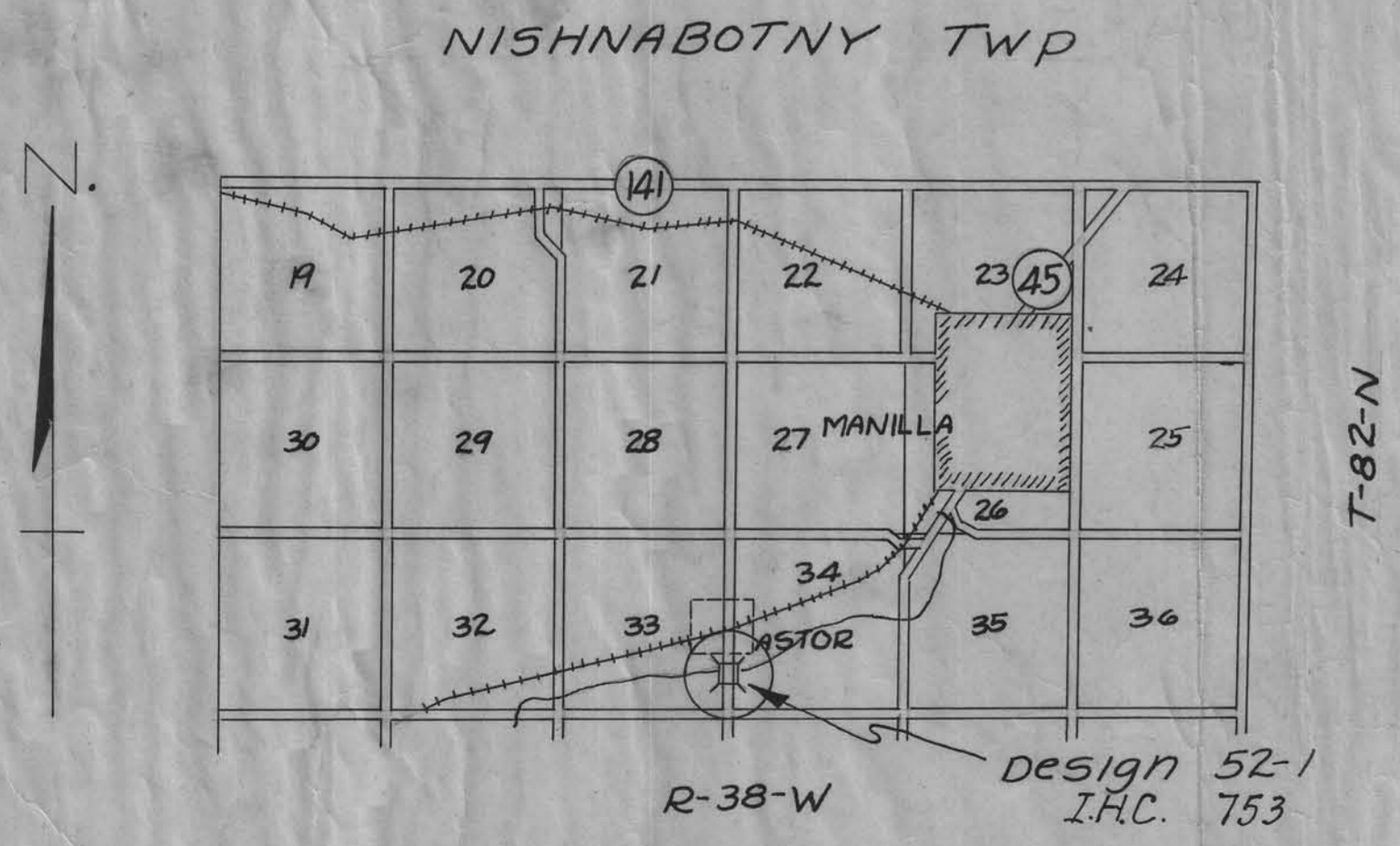
150'x20' CONTINUOUS I-BEAM

DESCRIPTION	PIERS	ABUTS.	SUP'STRUCT	TOTAL
CL. 10 EXCAVATION " "				70 C.Y.
Concrete Class "A"	70.60 C.Y.	75.10	899 C.Y.	235.60 C.Y.
Reinforcing steel	7262 Lbs.	6199 Lbs.	16,150 Lbs.	29,611 Lbs.
structural steel			56,915 Lbs.	56,915 Lbs.
untreated Piling	32 @ 25' = 800 L.F.	20 @ 25' = 500 L.F.		1300 L.F.
Creosoted Piling		10 @ 40' = 400 L.F.		400 L.F.
Excavation Class 20	20 C.Y.	337 C.Y.		357 C.Y.
" Class 21	125 C.Y.	79 C.Y.		204 C.Y.
" Class 24				
Handrail.			300 L.F.	300 L.F.
Removal of old structure				Lump sum

In letting of May 5, 1953

Mileage Summary: = 154'-0" = 0.0291 miles
 * Include 1.6 c.y. cl. c. concrete

Specifications:
 Design: A.A.S.H.O.-1949 with exceptions.
 Construction: Standard Specifications
 Iowa State Highway Commission, Series of 1952.
 and Spec. Prov.



SCALE: 1" = 1 MILE

APPROVED

[Redacted Signature]

[Redacted Signature]

[Redacted Signature]

BOARD OF SUPERVISORS DATE

APPROVED

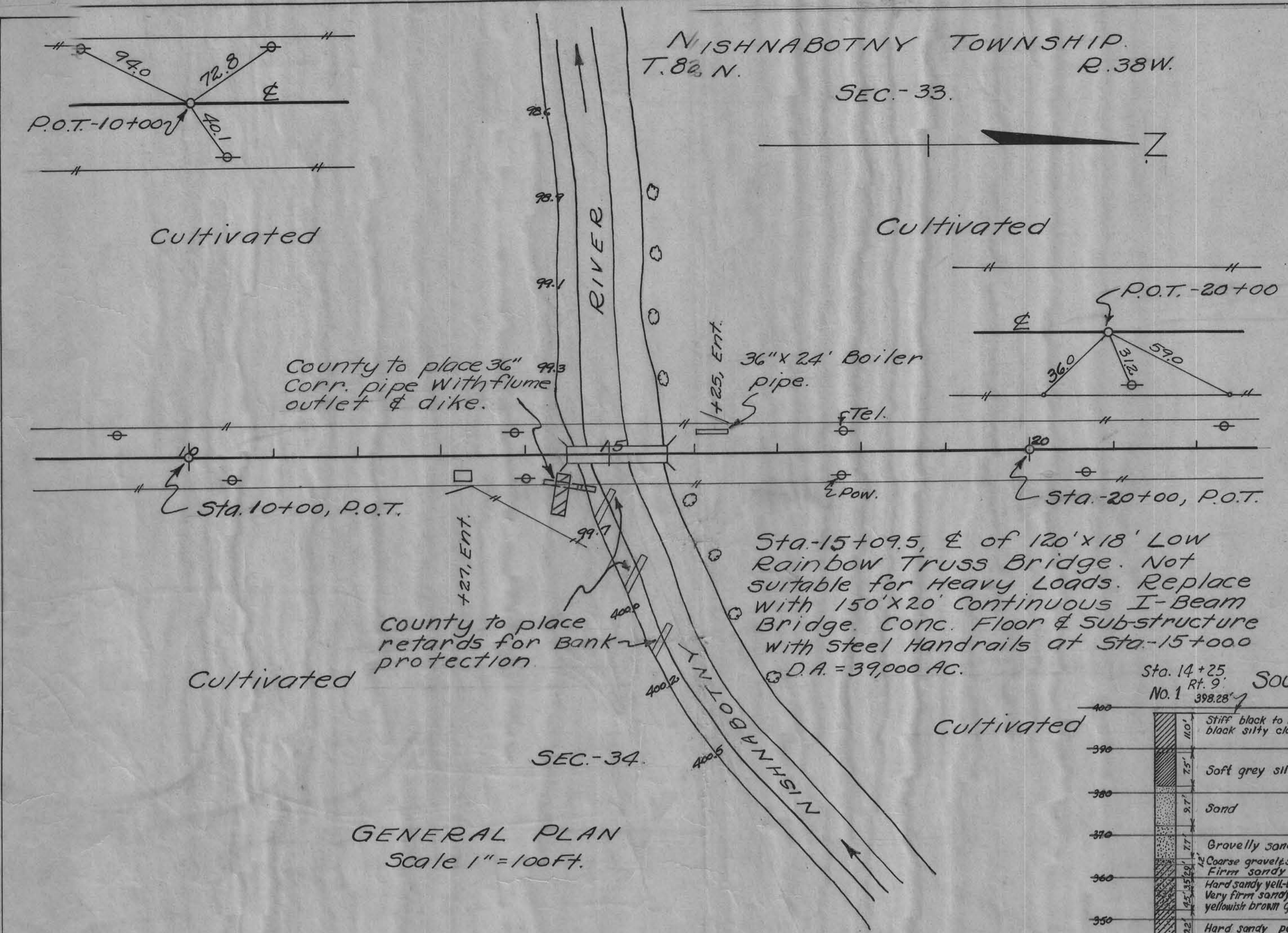
CHIEF ENGINEER DATE
 IOWA HIGHWAY COMMISSION.

DEPARTMENT OF COMMERCE
 BUREAU OF PUBLIC ROADS
 RECOMMENDED FOR APPROVAL

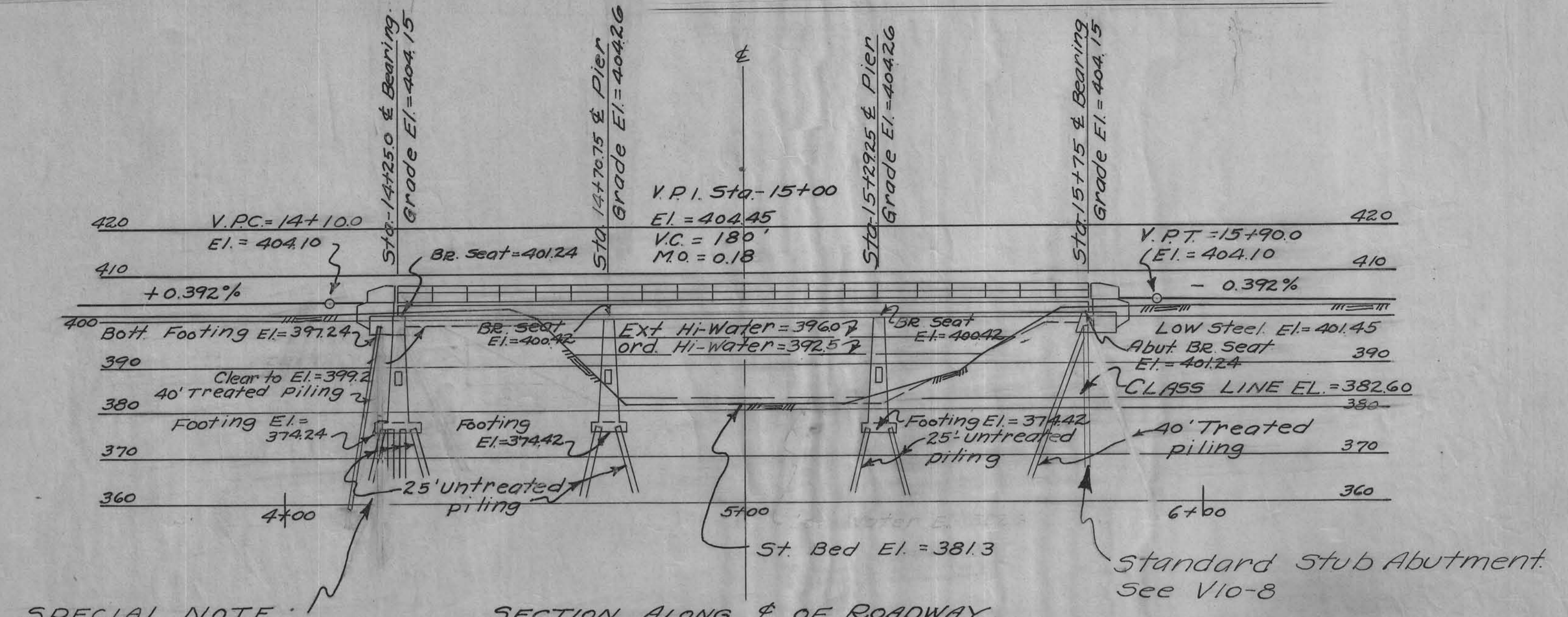
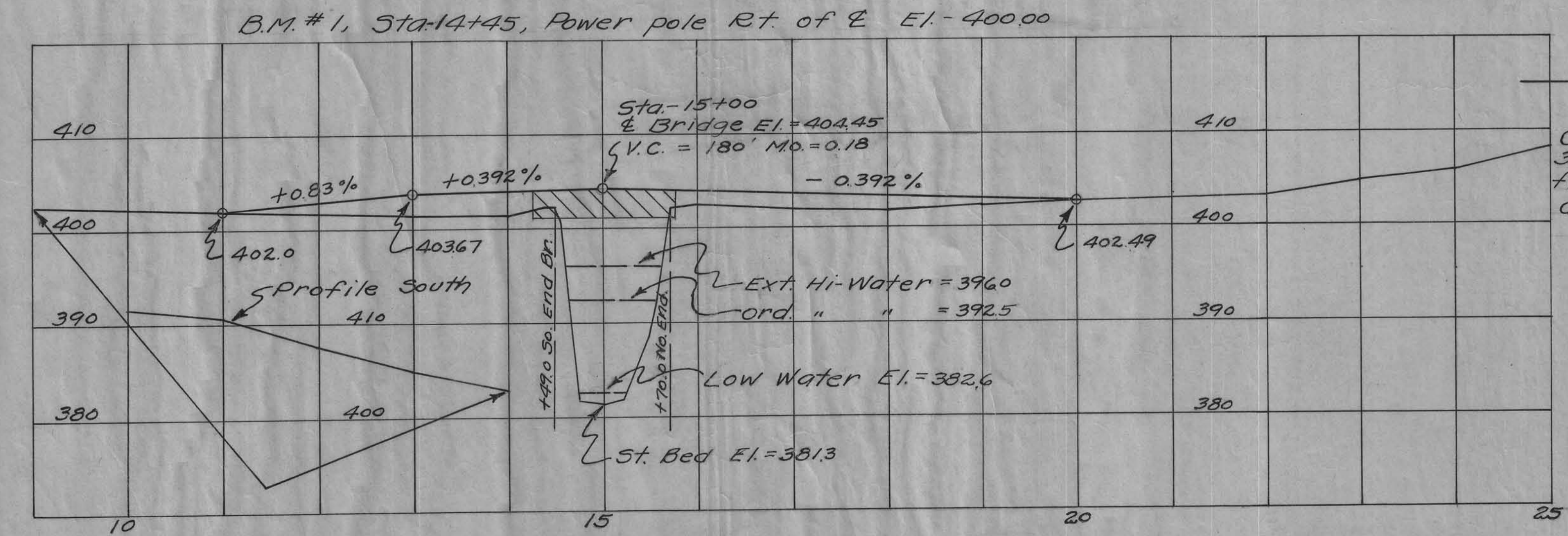
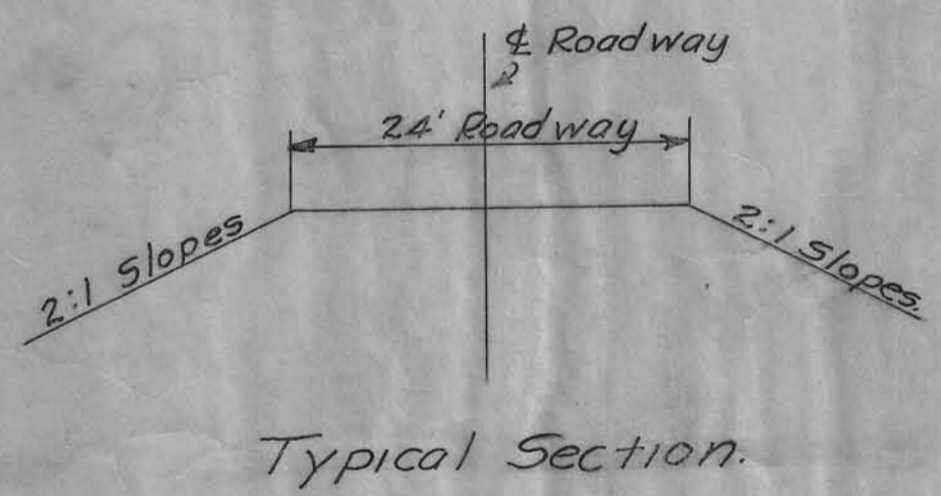
DISTRICT ENGINEER DATE

APPROVED
 DIVISION ENGINEER DATE

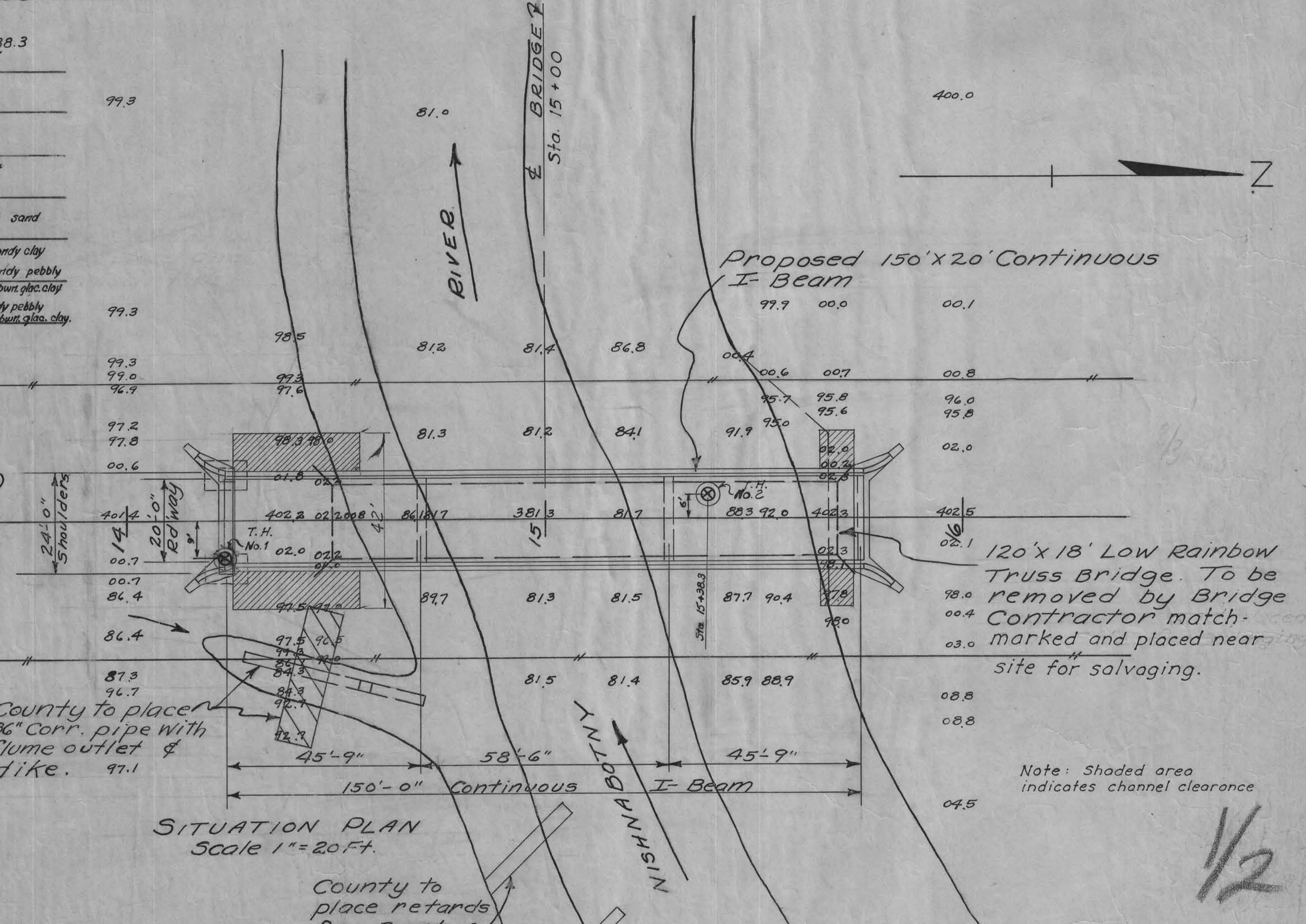
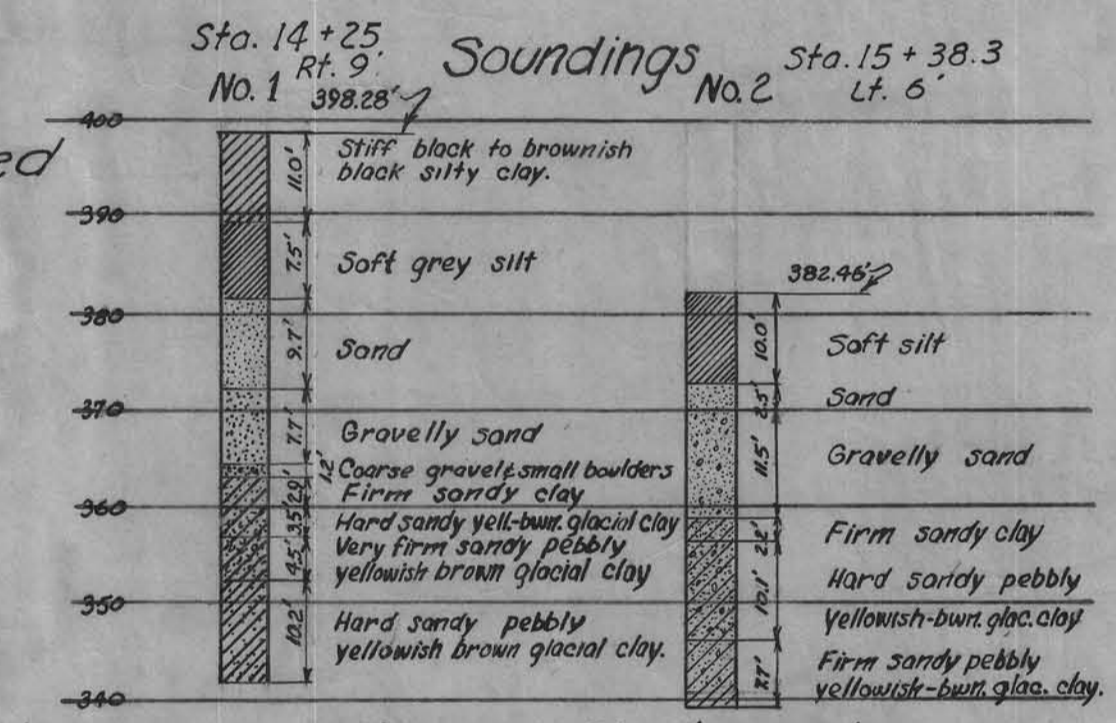




GENERAL NOTES.
 All concrete to be Class "A" except wing posts on Abutments.
 All reinforcing to be securely wired in place before concrete is placed. Minimum edge distance to center of any bar to be 2" unless otherwise shown. All exposed corners 90° or sharper shall be filleted 3/4". Design: A.A.S.H.O. H-15 loading (Single Lane).
 Superstructure details and notes are same as Standard V10-2, 150' x 20' Continuous I-Beam. North Abutment details (Standard V10-8) South Abutment (See sheet-3) Pier details are same as Standard P-6 using piers recommended for 120' Span with H = 26'-0"
 All construction to be in accordance with the Iowa Highway Commission Standard Specifications, Series of 1952

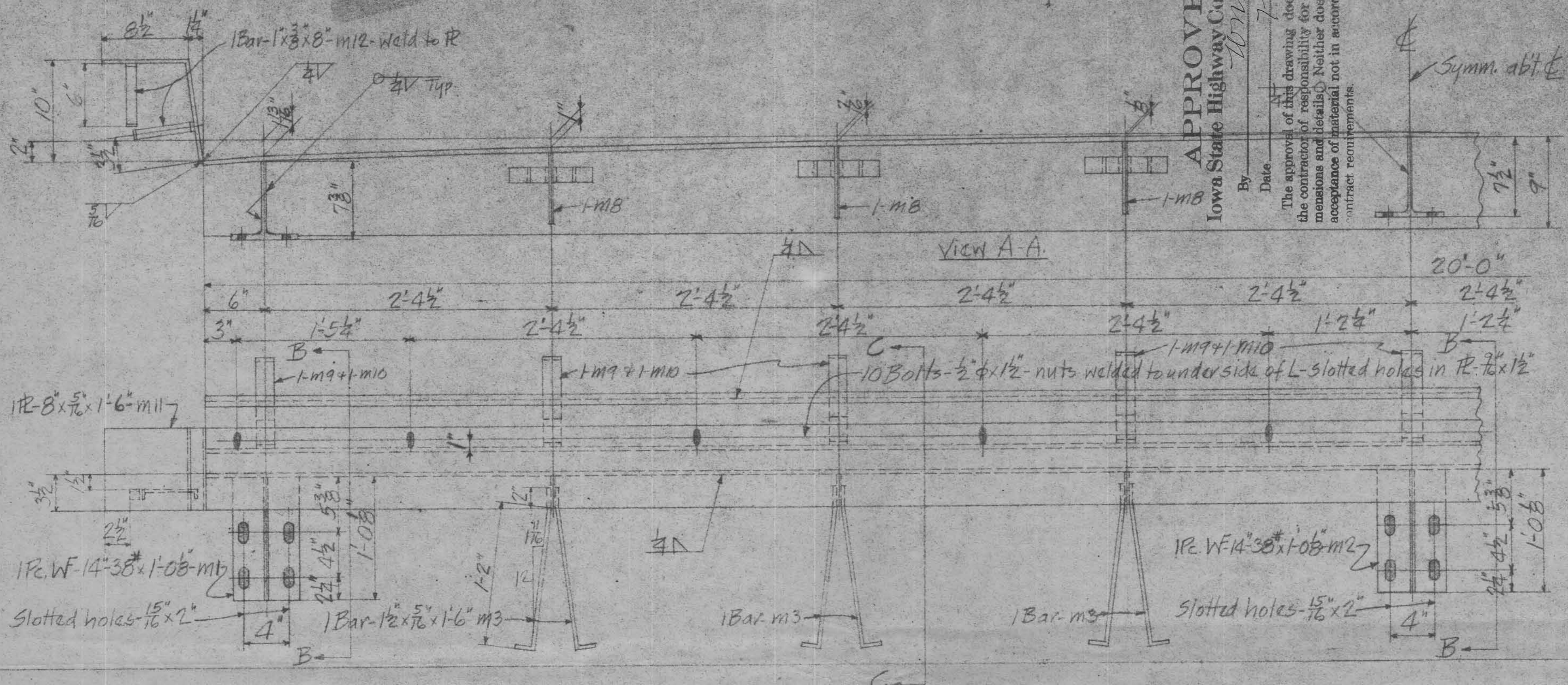


SPECIAL NOTE:
 End Pier to be used at South End in place of Stub Abutment.



Location:
 Section 33-34
 Nishnabotny Twp.
 T. 82 N. R. 38 W.

PRELIMINARY PLAN FOR
 150' x 20' CONTINUOUS I-BEAM BRIDGE
 CONCRETE FLOOR - STEEL HANDRAIL
 STA. 15+00.0
 PROJECT No. 5-578(4)
 CRAWFORD COUNTY, IOWA
 Sheet No. 2 of 3.



APPROVED
Iowa State Highway Commission
By W. J. Adams 7-23-53
Date

The approval of this drawing does not relieve the contractor of responsibility for errors in dimensions and details. Neither does it constitute acceptance of material not in accordance with contract requirements.

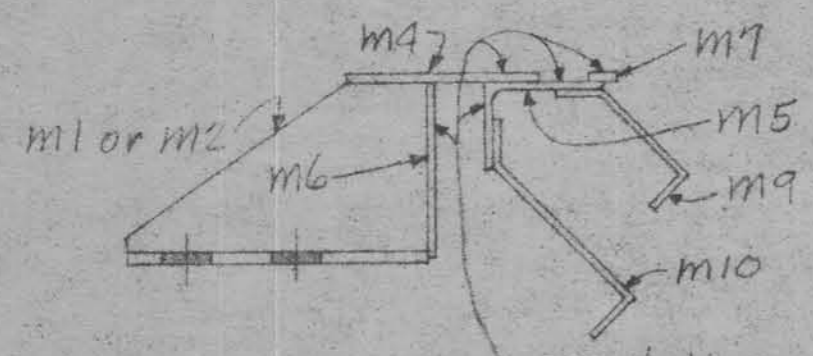
B-144
B-101
B-171

DES MOINES STEEL CO.
Des Moines, Iowa
150' x 20' Cont. I-Beam Bridge
Manilla, Iowa
Iowa State Highway Comm.
Revised: Graves Bros.
Made by: WBS-1453
Sheet No. B-170

RECORD	FILED	NO.	DATE

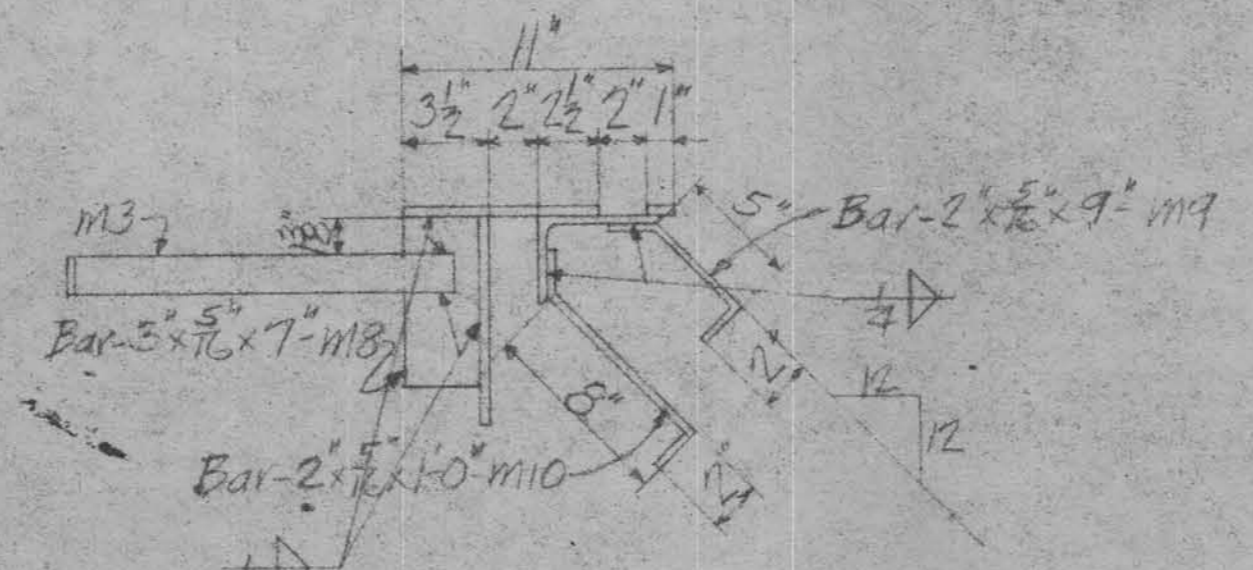
FOR APPROVAL
DES MOINES STEEL CO.
DES MOINES IOWA U.S.A.
JUL 18 1953
PLEASE RETURN WITH YOUR WRITTEN APPROVAL OR CORRECTIONS DESIRED NOTED HEREIN.

- 1R-8" x 1/2" x 20'-0" m4
- 1L-5" x 3 1/2" x 3" x 20'-0" m5
- 1R-9" x 3/8" x 20'-0" m6
- 1Bar-1" x 2" x 20'-0" m7



Paint these surfaces
3 coats zinc chromate
in shop. Do not paint
other surfaces

Sect. B-B
(also paint notes)

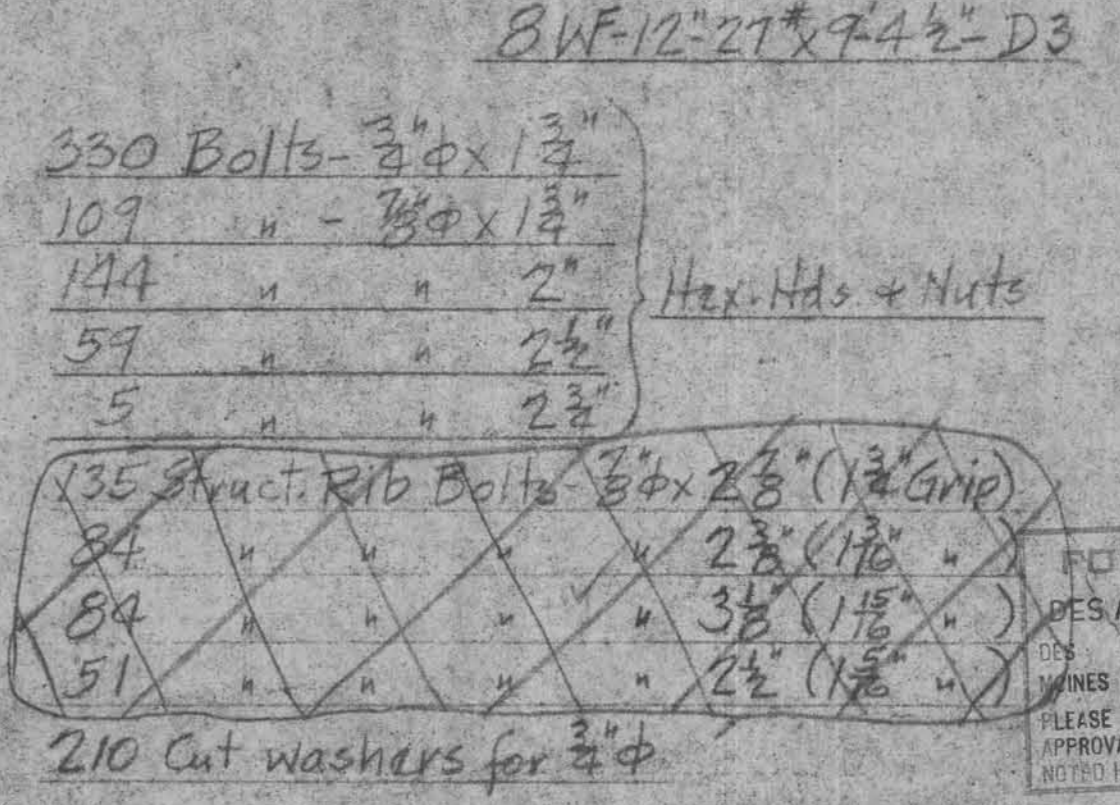
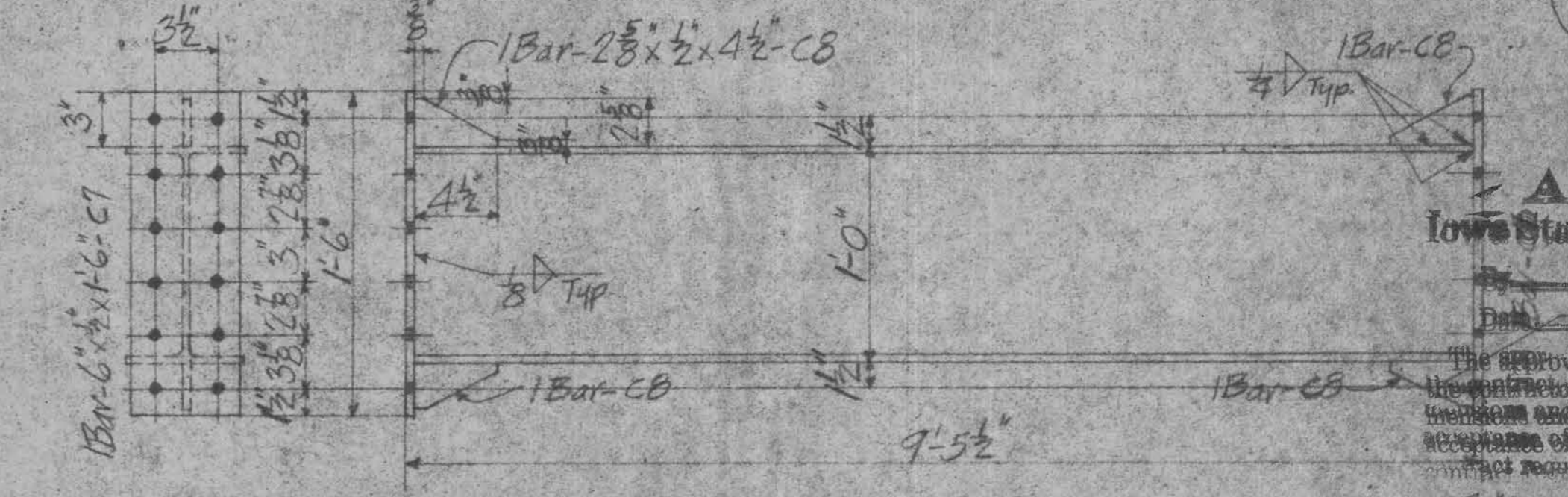
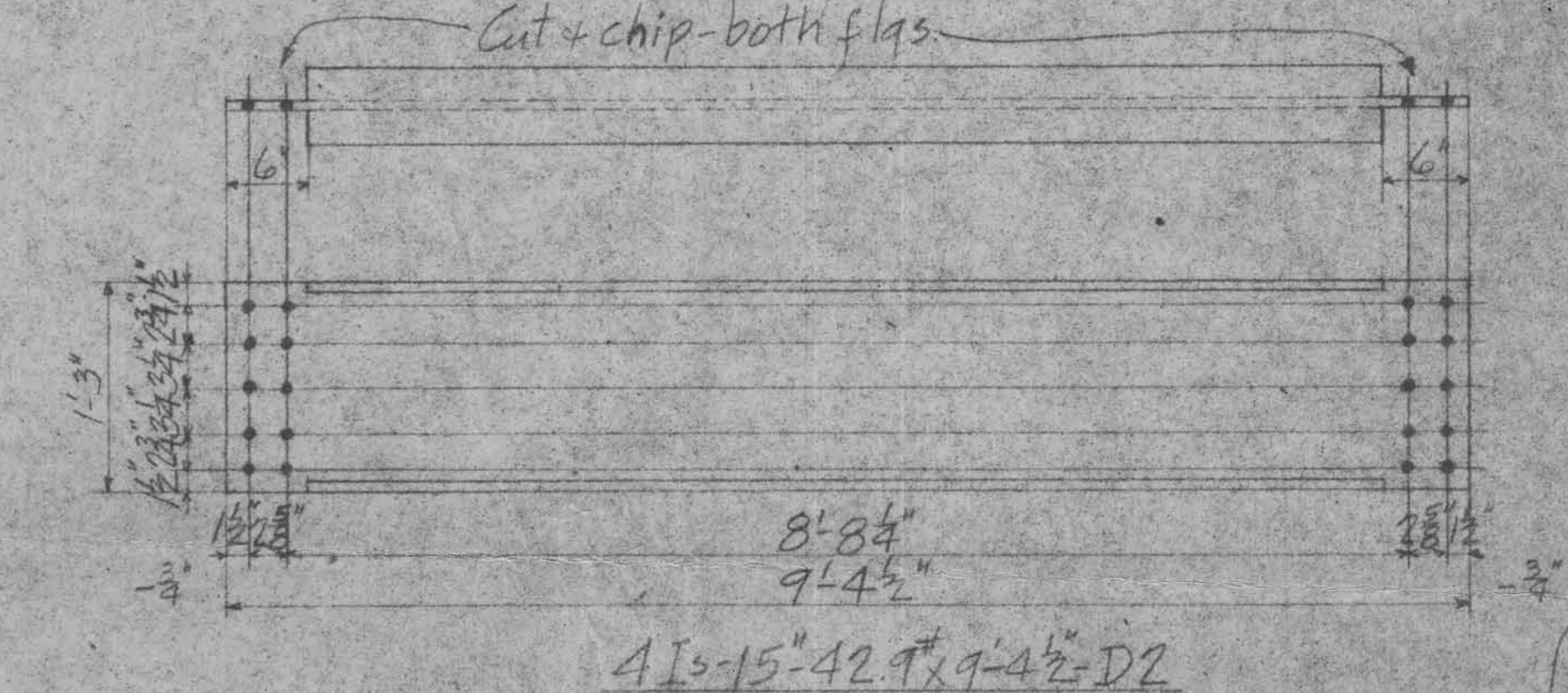
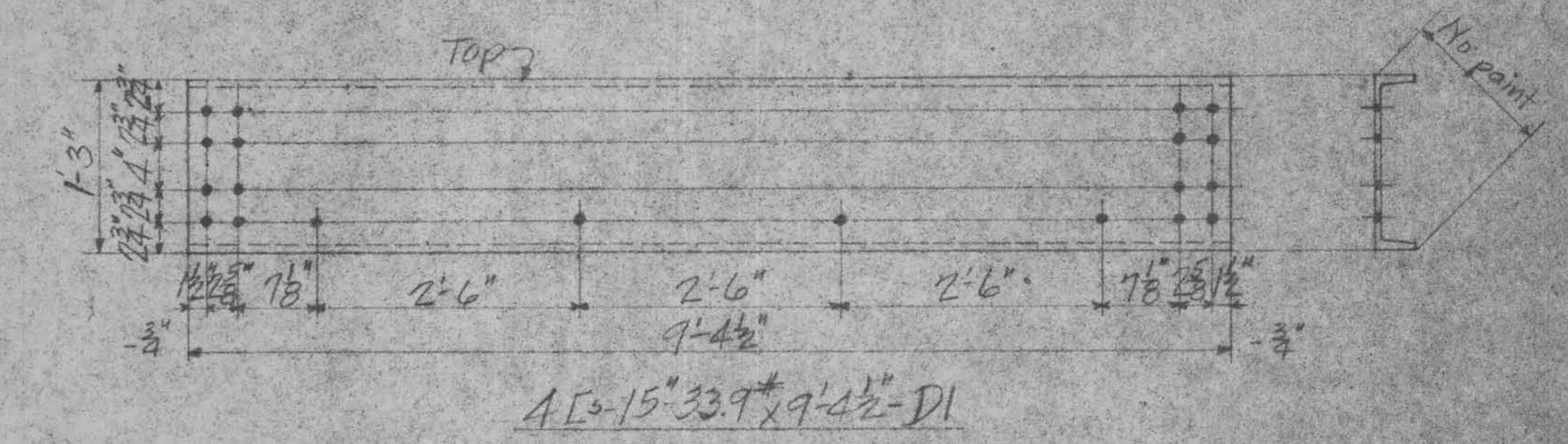
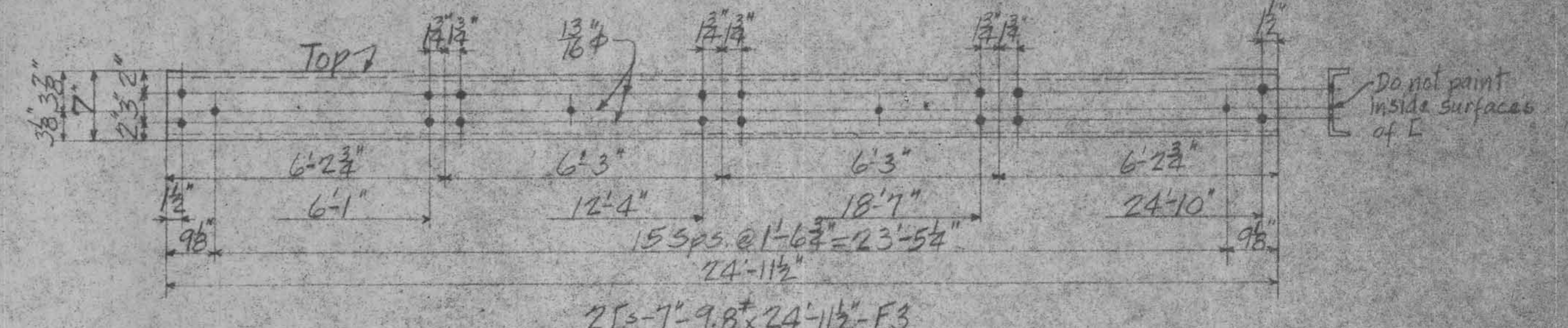
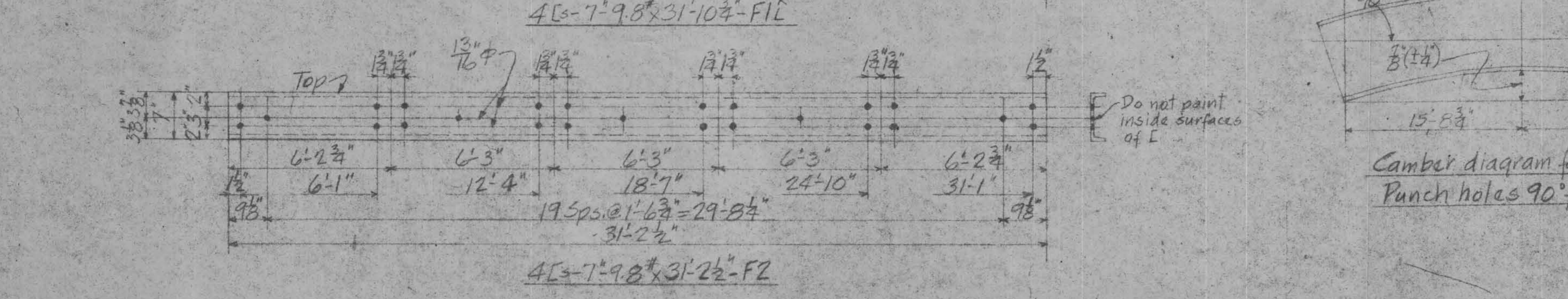
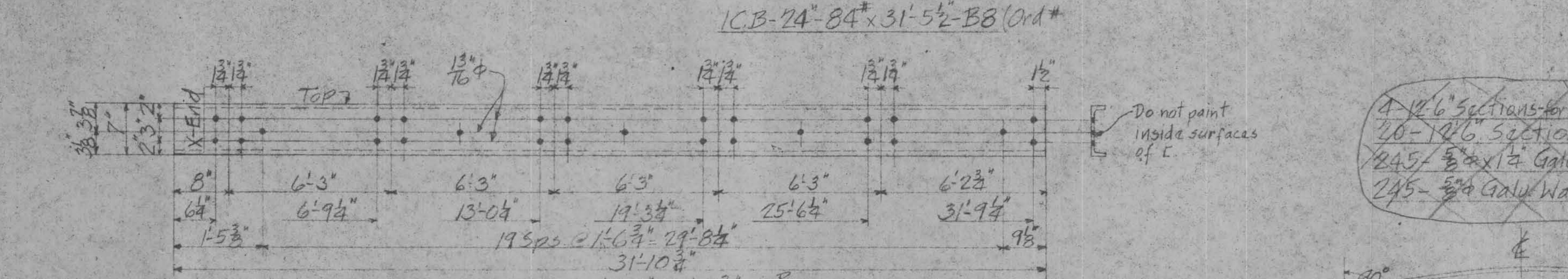
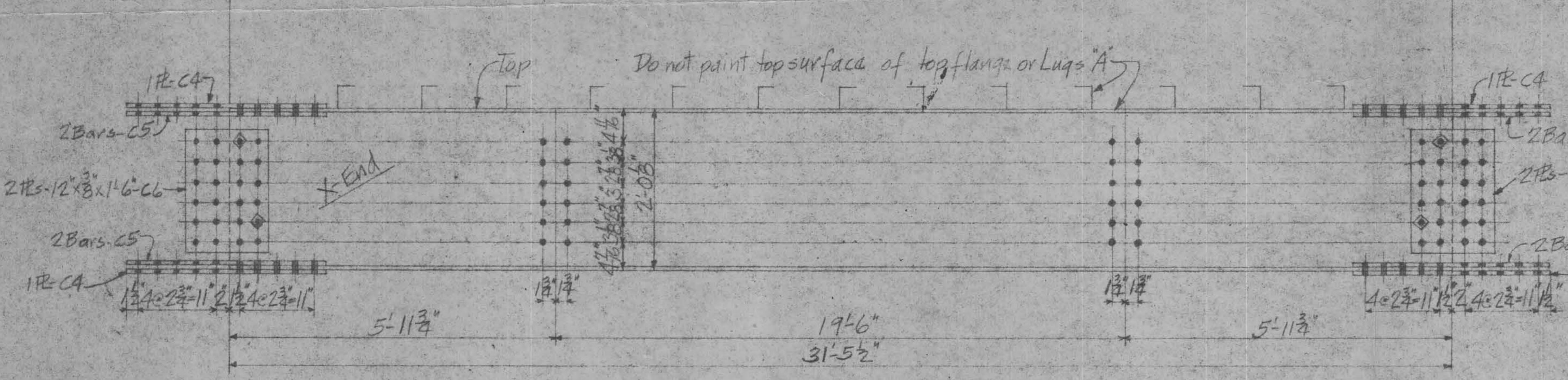
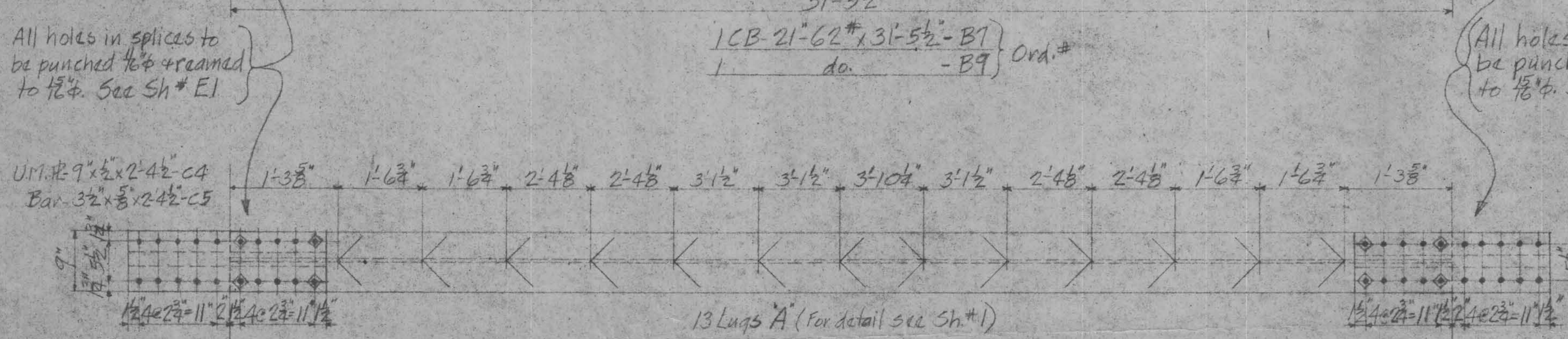
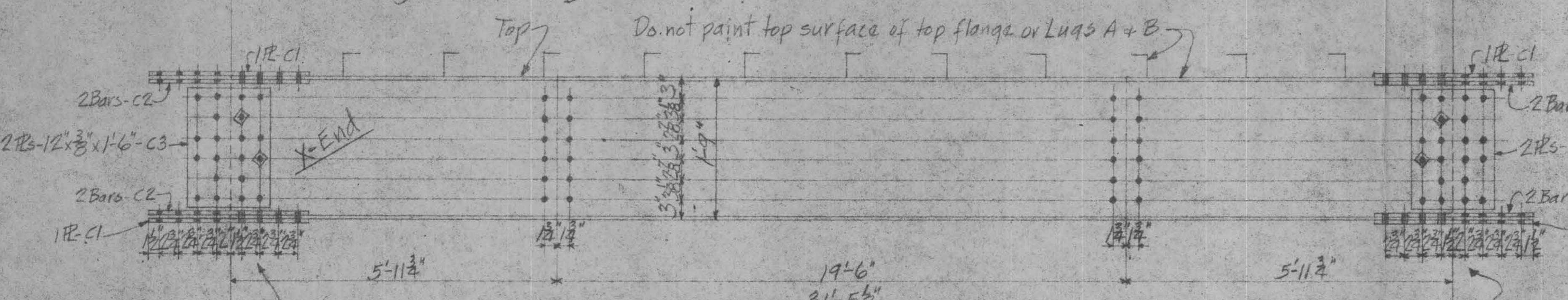
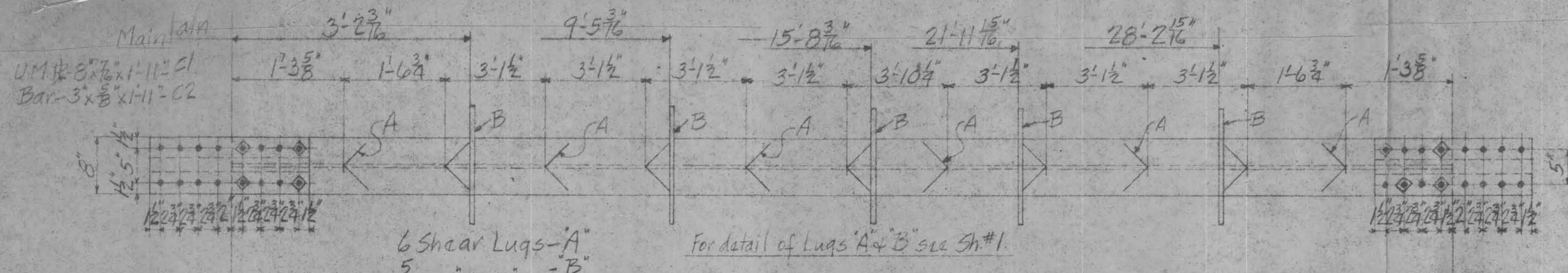


Sect. C-C

1 Complete Expansion R-EPI

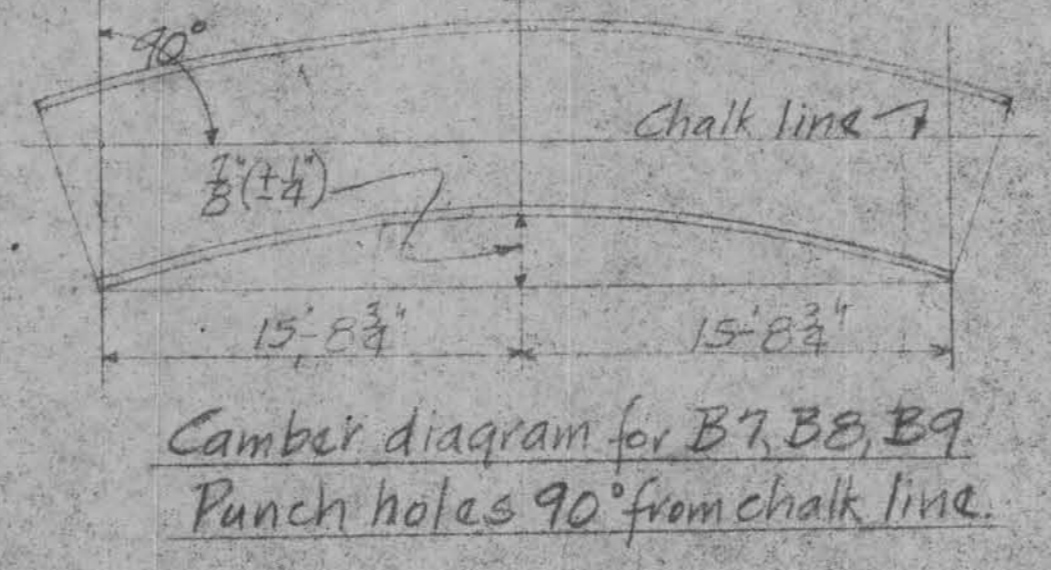
Over Nishnabotna River
Sections 33-34
Township Nishnabotna
County Crawford
Design # 753
Project No. S-578(4)

Rivets Bolts Noted Open Holes Noted Unless Noted
Paint Iowa H.C. Zinc Chromate except noted File Box
DO NOT PAINT CONTACT SURFACES
Approved: W. J. Adams
Checked: W. J. Adams
Date: 7-23-53



- 84 Bolts - 3/4" x 1 3/4" High Tensile Steel.
- 51 " " 3" ASTM A-325-51T
- 135 " " 3 1/2" A.S.A. B18.2
- 84 " " 3 1/2" Hex. H. + N.
- 708 Washers - 2 1/2" O.D. x 1 1/2" I.D. x 1.65 Th. Flat + Smooth-carburized or quenched + tempered.

~~4 - 12'6" Sections for short lap~~
~~20 - 12'6" Sections~~
~~245 - 3/4" x 1 1/2" Galv. Bolts~~
~~245 - 3/4" Galv. Washers~~
 Arundo Rail + Access
 Ord. #



Work this sheet with Sh. #1

Rivets	Bolts	Open Holes	1 1/2" Unless Noted
Paint Iowa H.C. Zinc Chromate	noted	File Box	
DO NOT PAINT CONTACT SURFACES			
Billed by			

DES MOINES STEEL CO. Des Moines, Iowa V10

150' x 20' Cont. I-Beam Bridge
 Manilla, Iowa

Jones State Highway Comm.
 Graves Bros.
 WEBB-T-13-53
 B-170

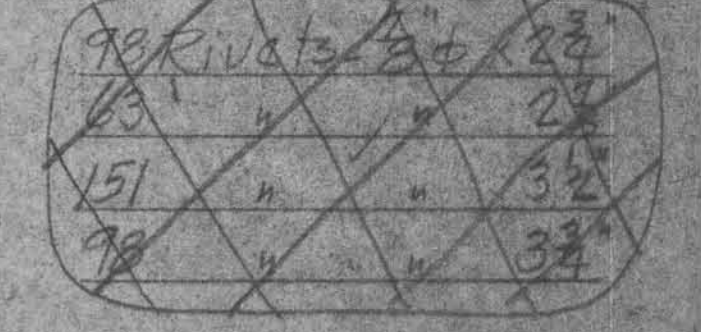
DES MOINES STEEL CO. PROJECT NO. 5-578(4)

DESIGNER: W. J. WILSON
 CHECKER: J. H. WILSON
 DATE: JUL 18 1953

APPROVED
 Iowa State Highway Commission
 W. J. Wilson
 7-23-53

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Over Nishnabotna River
 Sections 33-34
 Township Nishnabotna
 County Crawford
 Design # 753

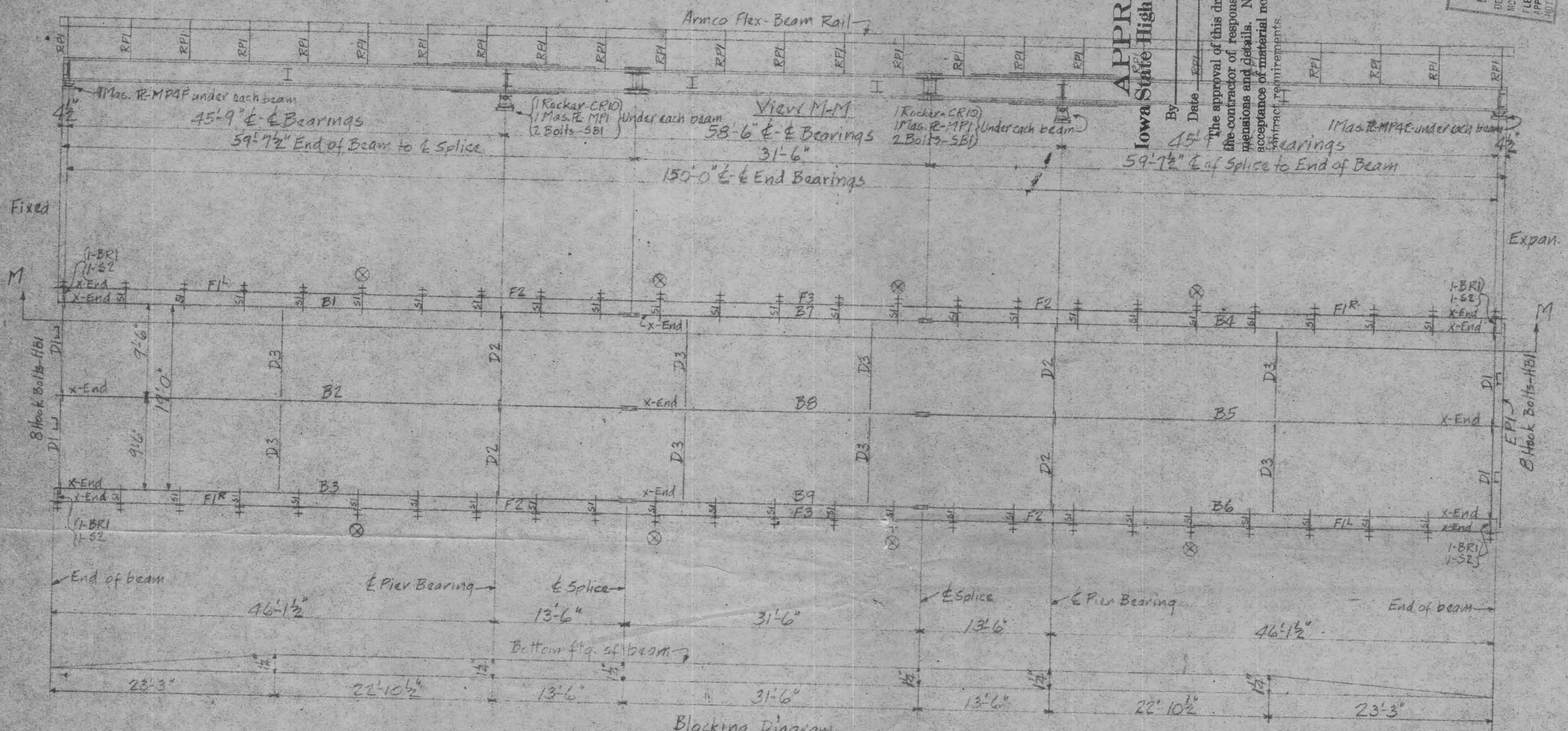


APPROVED
Iowa State Highway Commission
By *L. W. Adams*
Date *7-23-53*

The approval of this drawing does not relieve the contractor of responsibility for errors in dimensions and details. Neither does it constitute acceptance of material not in accordance with contract requirements.

FOR APPROVAL FROM
DES MOINES STEEL CO.
DES MOINES IOWA
JUL 18 1953
PLEASE RETURN WITH YOUR WRITTEN APPROVAL OR CORRECTIONS DESIRED HEREON.

DES MOINES STEEL CO. V10
Des Moines, Iowa
150 x 30' Cont. I-Beam Bridge
Manilla, Iowa
Erected by
Iowa State Highway Comm.
Builder
GRAVES BROS.
Made by
W.P.P. 7-14-53
Sheet No. B-170



Blocking Diagram
Shop to assemble beams to above diagram + ream + match mark splices with splice Rs + splice bars bolted in position.

Erection Diagram

Beam splices to be bolted with high tensile steel bolts - all other connections to be bolted with machine bolts except rail, which will be bolted with special bolts furnished by Armco.

Note: ⊗ indicates splice points for fascia (7" Cs)

Over Nishnabotna River
Sections 33-34
Township Nishnabotna
County Crawford
Design # 753
Project No. S-578(4)

Paint
Bolts
Open Holes
Unless Noted

DO NOT PAINT CONTACT SURFACES

Billed by

