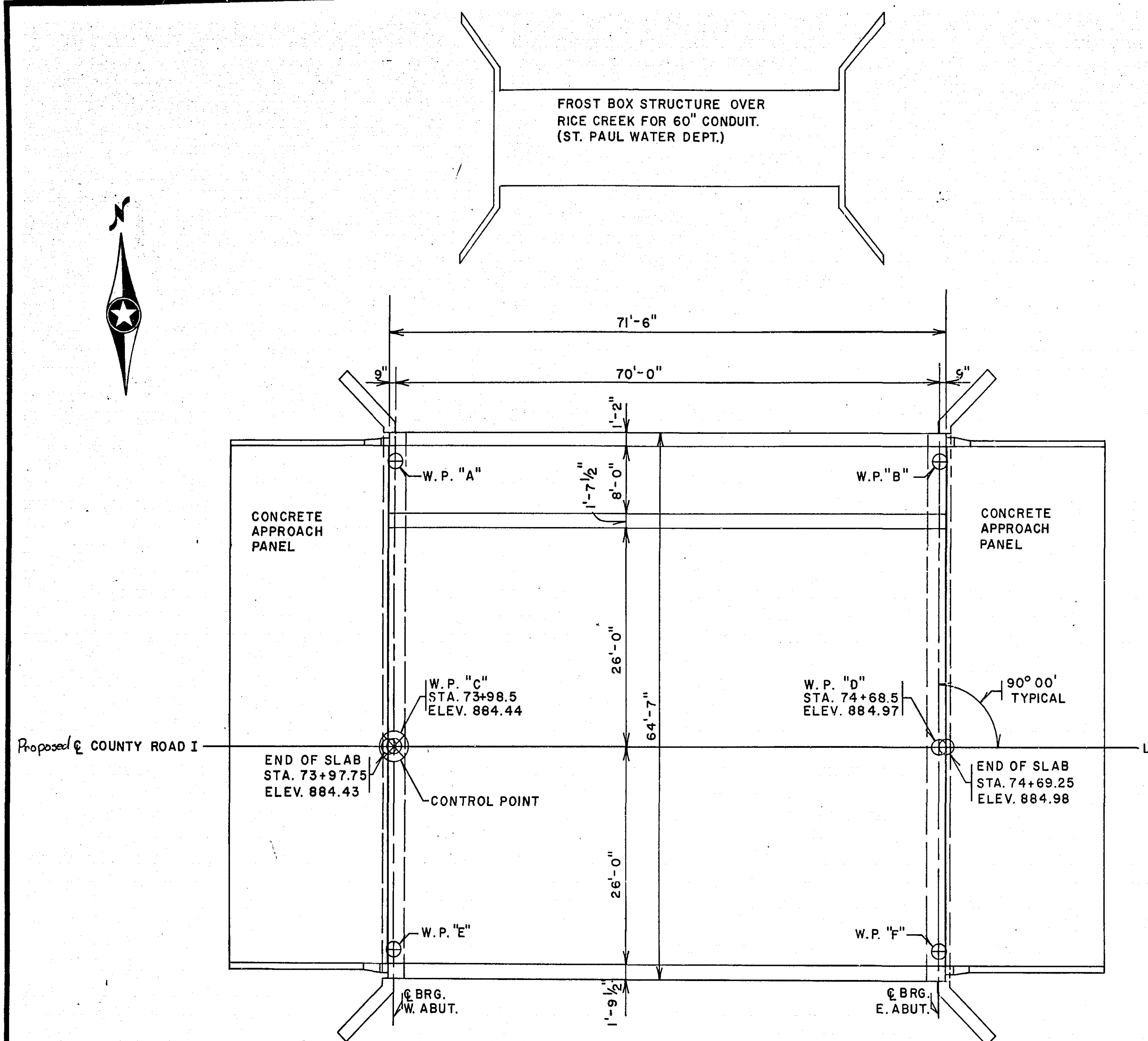


DESIGN DATA

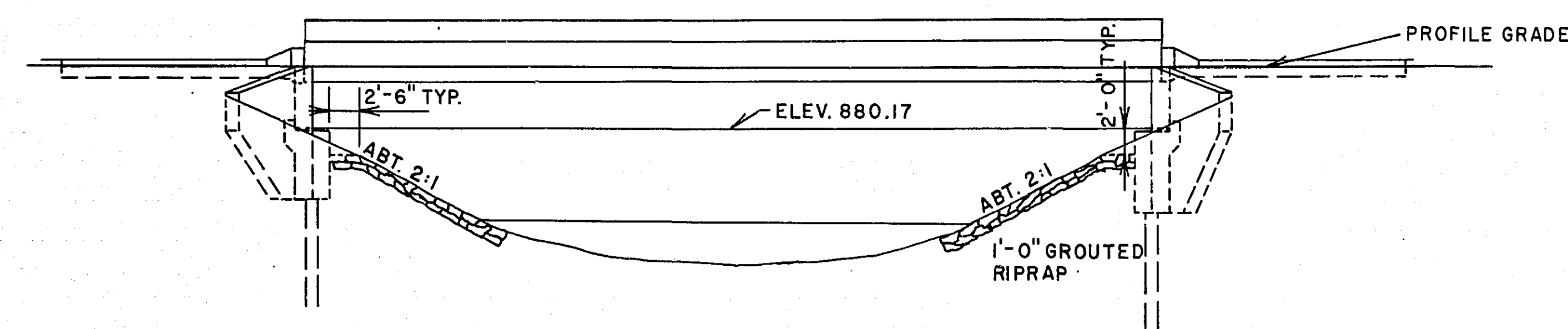
LIST OF SHEETS

[illegible]

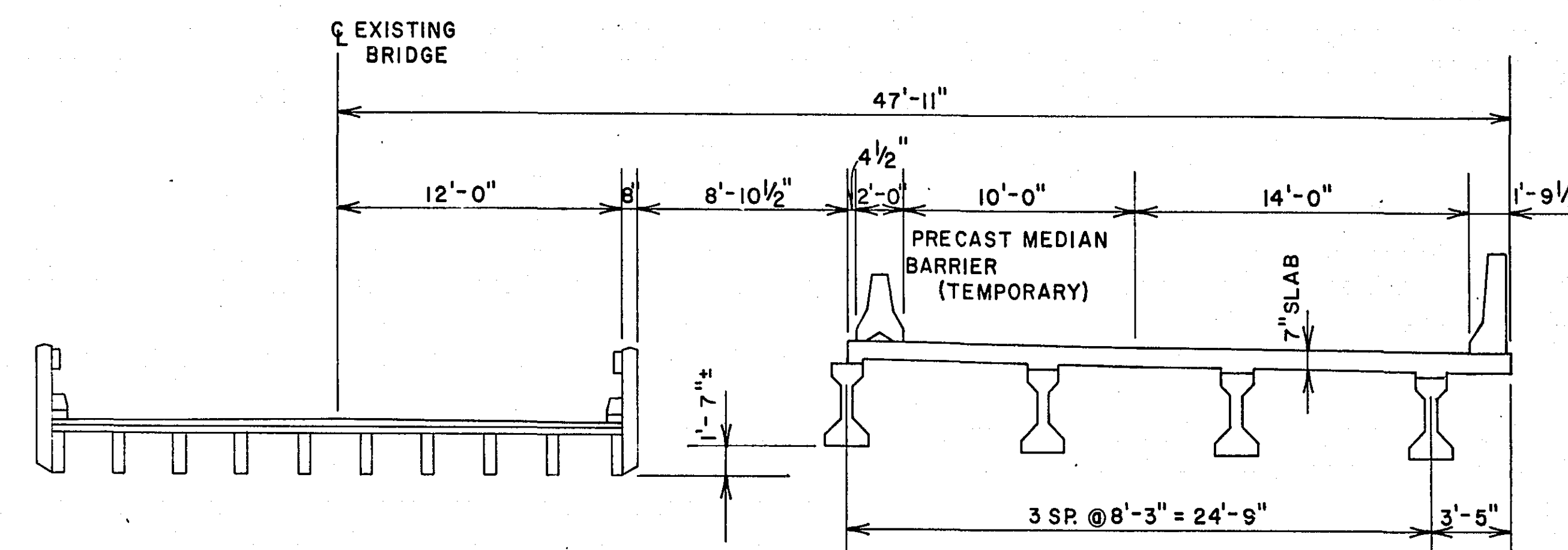
THE FIRST DIGIT OR THE FIRST TWO DIGITS OF EACH BAR MARK
INDICATE THE BAR SIZE.



PLAN
3/32"=1'

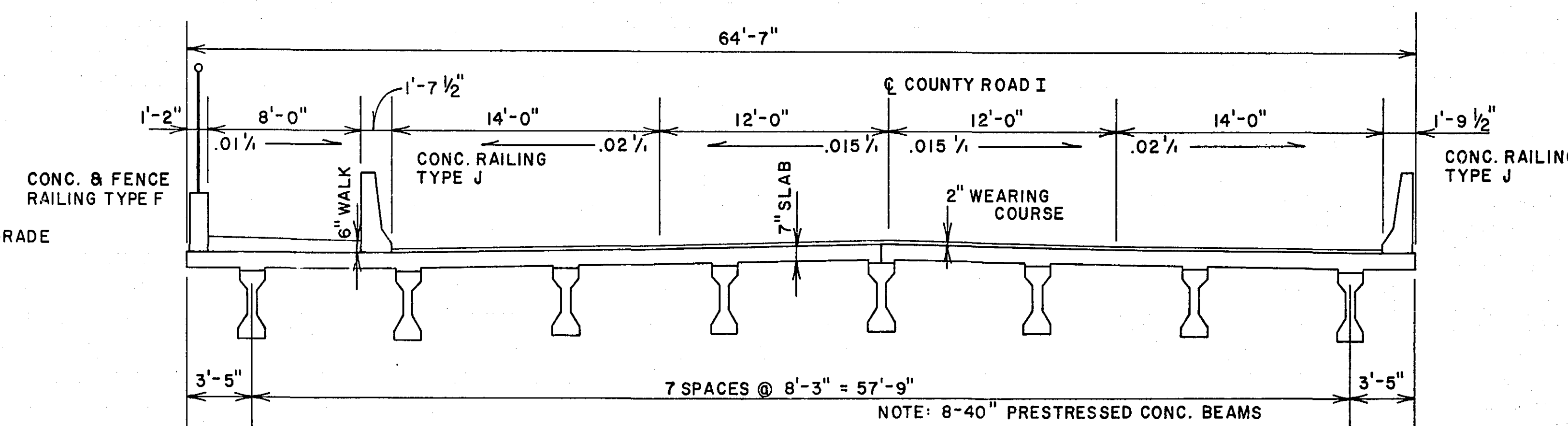


ELEVATION
 $\frac{3}{32}'' = 1'$



SECTION DURING CONSTRUCTION

60 Scale



TYPICAL SECTION
1" = 64'

B. M. ELEV (M.S.L. 19..... ADJ.

GENERAL PLAN AND ELEVATION

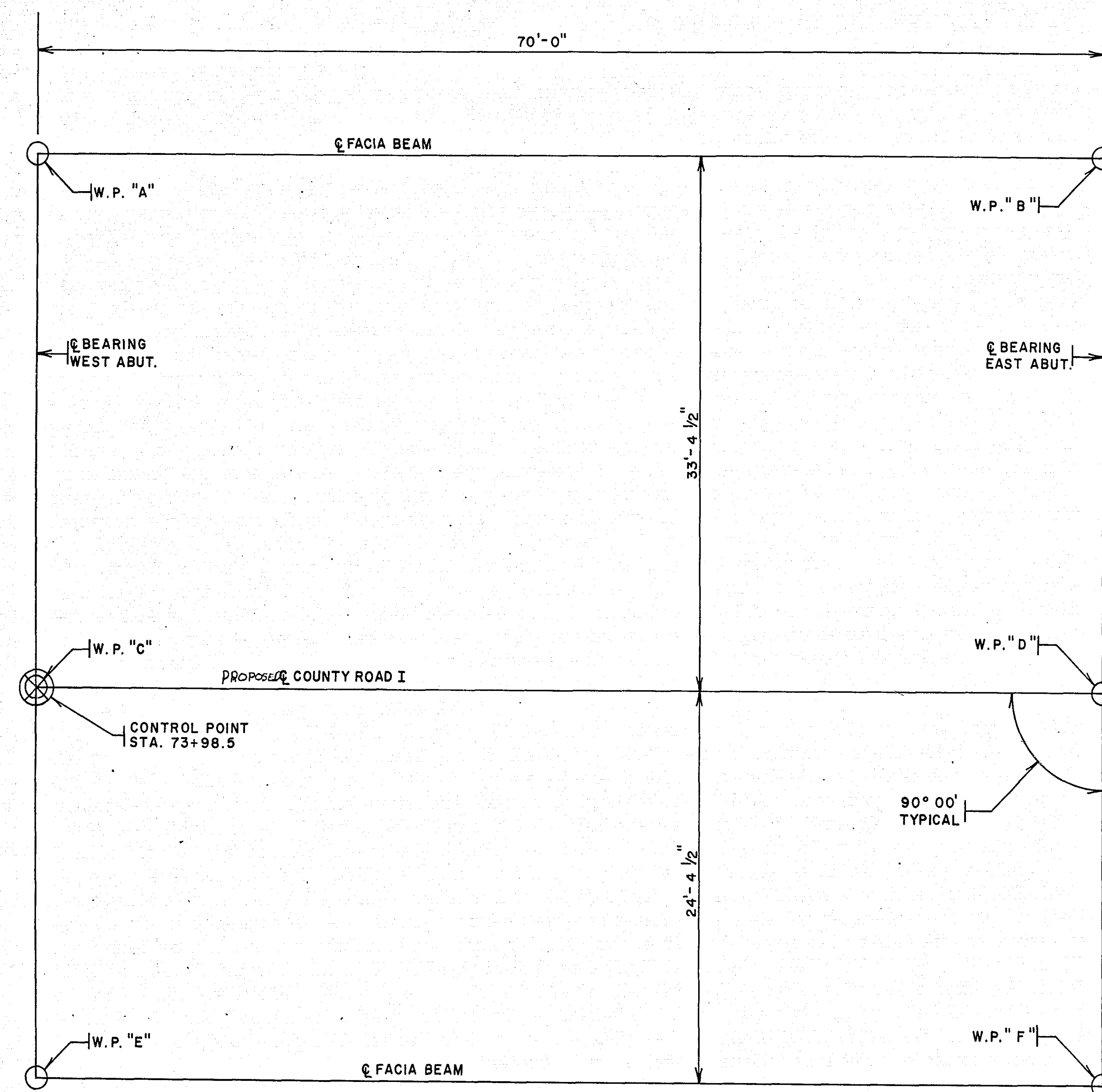
BRIDGE ENGINEER 11-30-78 Ver 3100

DES.	DR.	
CNK	CNK.	

[illegible]

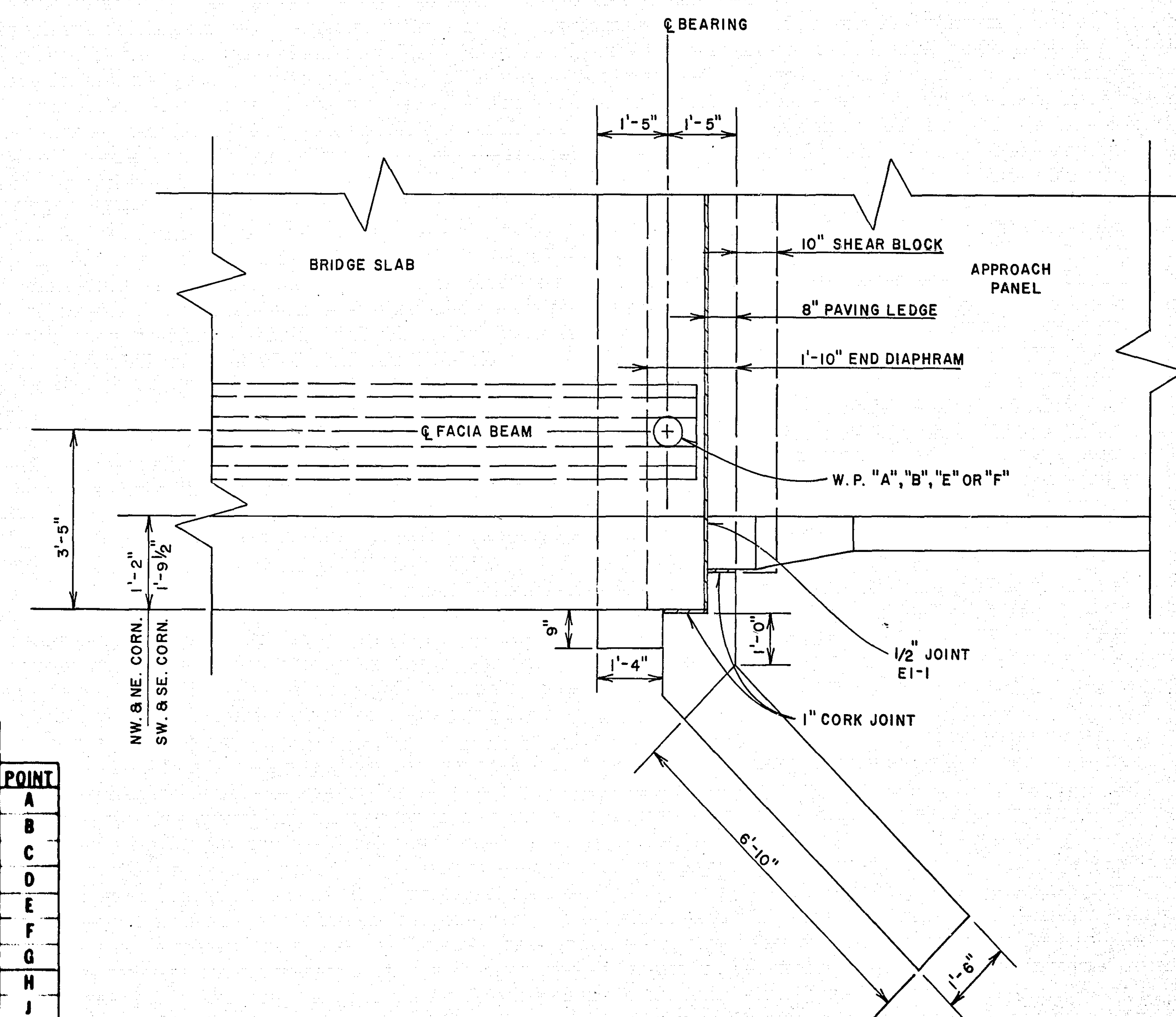
Area No. Job No. Design Group _____ State Proj. No. _____ Sheet No. _____ of _____ Sheets

1.5-1.57



FRAMING PLAN
1" = 6'

POINT	STATION	DIMENSIONS BETWEEN WORKING POINTS																ELEVATIONS			POINT
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOP OF RDWY.	TO OF RDWY. TO BR. SEAT	BRIDGE SEAT	
A	73 + 98.5																	883.98			A
B	74 + 68.5	70.00																884.50			B
C	73 + 98.5	33.34																884.44			C
D	74 + 68.5	77.55	33.38	70.00														884.97			D
E	73 + 98.5		90.75	24.38														884.01			E
F	74 + 68.5	90.75		74.12	24.38	70.00												884.53			F
G																					G
H																					H
I																					I
J																					J
K																					K
L																					L
M																					M
N																					N
O																					O
P																					P
Q																					Q
R																					R
S																					S
T																					T
U																					U
V																					V
W																					W

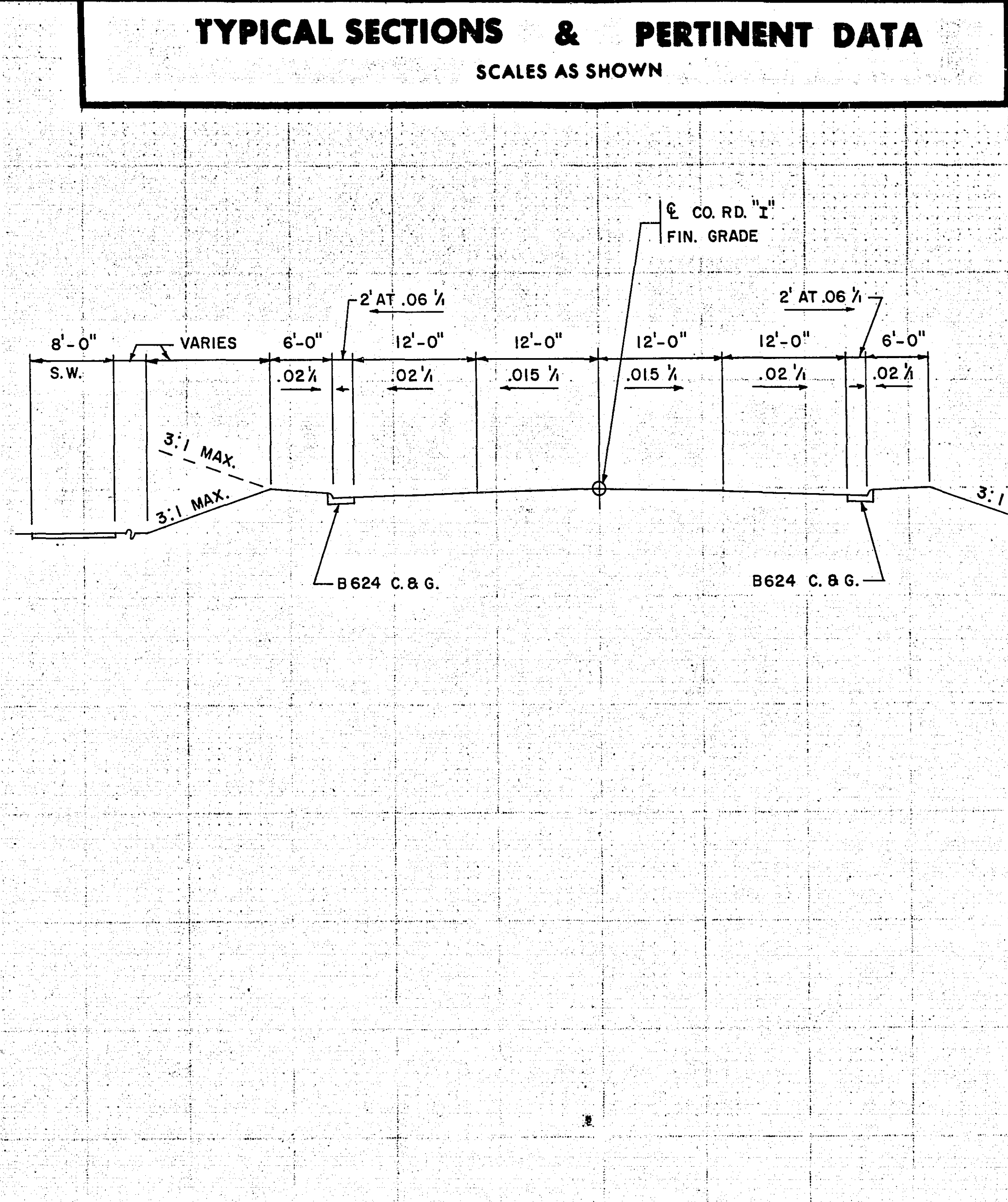
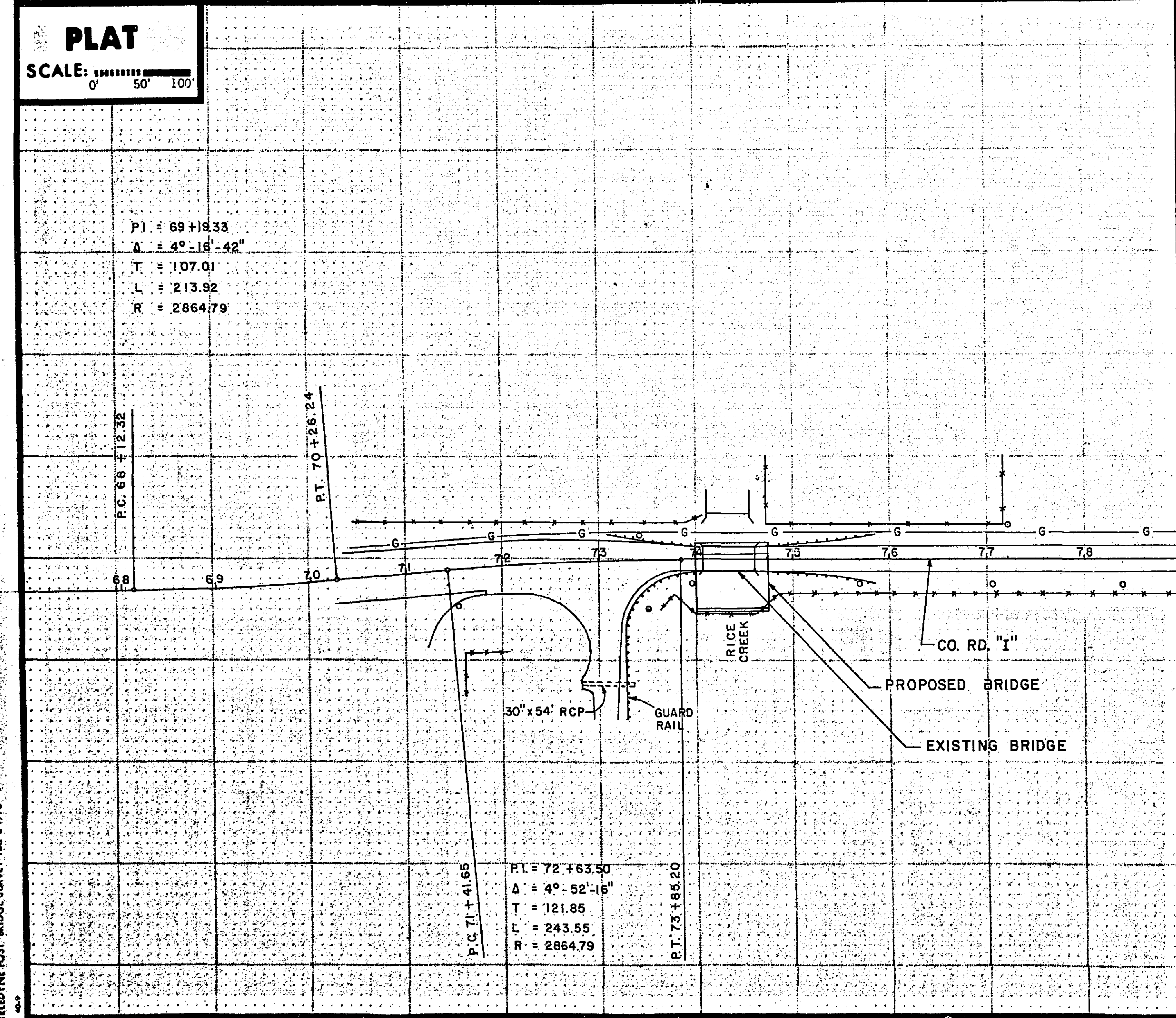
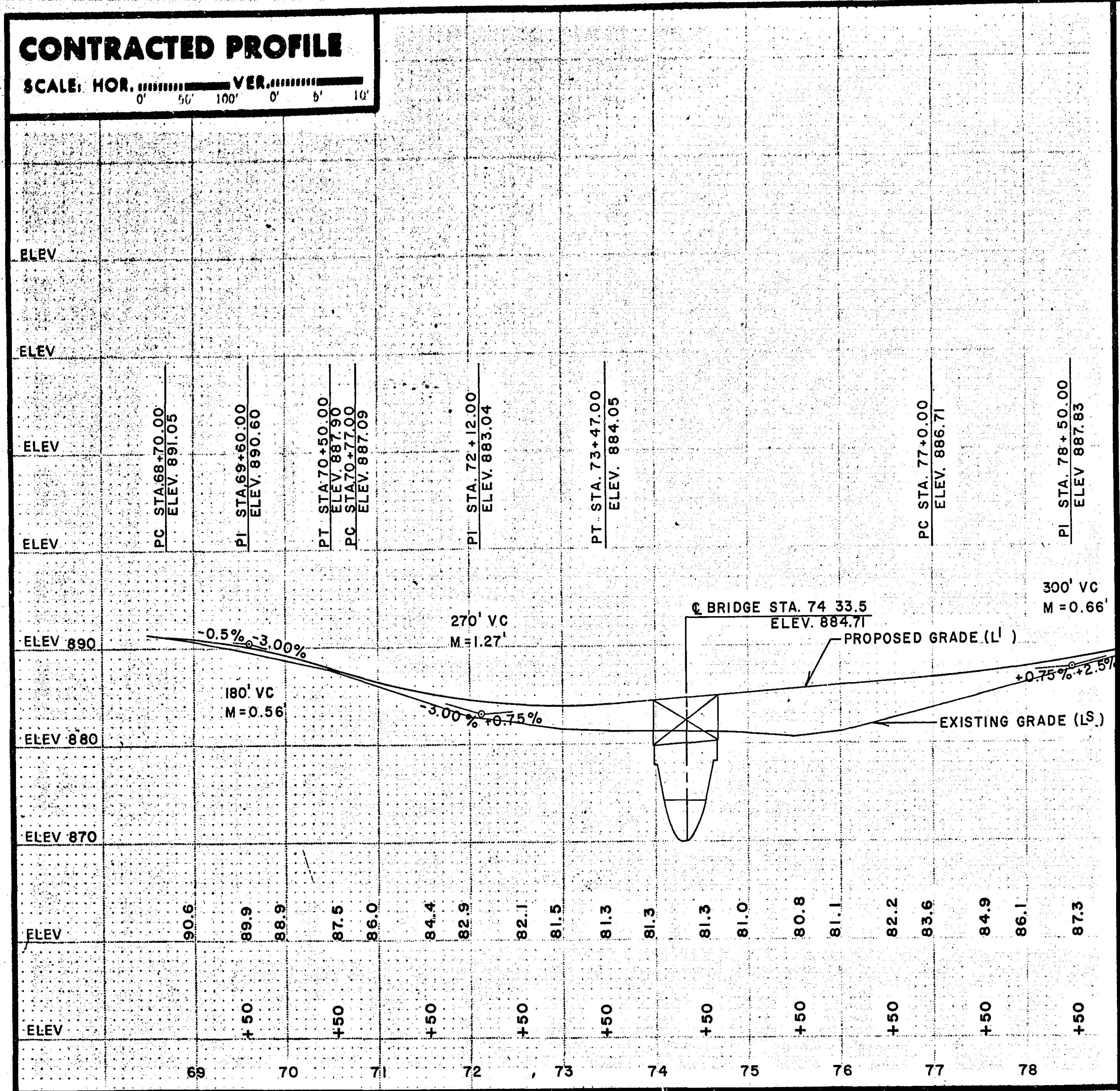


ALL CORNERS
1" = 2'

MICROFILMED
RAMSEY CO. ENGR.

Fig. 5-397.001
Revised: January 23, 1978

TITLE: BRIDGE LAYOUT	DES:	DR:	APPROVED:	Bridge No.
	CHK:	CHK:		
Sheet No. of Sheets				



Fed. Proj. No.

LOCATION ENGINEER'S OBSERVATIONS AT BRIDGE SITE

1. Special Features: Waterfalls, dams, floods, ice, debris, sliding banks, recreational boating.

2. Other bridges or culverts over the same stream (particularly structures which carry high water without overflow of roadway): Given location, type, length, height above high water, cross-sectional area etc.

3. Apparent highwater elevation..... Obtained from.....

4. Other data: Approx. velocity of water at time of survey.....

HYDRAULIC ENGINEERS RECOMMENDATION

DATE

Stream or ditch designation

Drainage area

Max. flood on record Design flood (..... yr. freq.) C.F.S.

Max. observed highwater elevation Design highwater elevation

Design mean velocity through structure F.P.S.

Low superstructure at or above elevation

Flowline elevation Skew angle

Waterway area req'd. below elevation = ... Sq. Ft. at Rt. angles to channel

In the interest of flood plain zoning the regional flood (100 yr. freq.) is C.F.S. at stage and mean velocity of F.P.S. with Ft. swellhead.

The above recommendation will provide a structure of adequate waterway to pass the regional flood within criteria established by the Dept. of Natural Resources.

FOUNDATION ENGINEERS RECOMMENDATION

DATE

Bridge survey sheets made from: **SHORT ELLIOTT HENDRICKSON, INC.**
SURVEY NOTES DATED 7-19-78.

Bench mark elevation: 912.96 (M.S.L. 1929 Adj.)
Location: M.H.D. MON'T. 6482.0 S.E. COR. BRIDGE NO. 9603
RAMSEY CO. RD. 'I' OVER RICE CREEK.

MINNESOTA
DEPARTMENT OF TRANSPORTATION

BRIDGE SURVEY

AT MILE POINT..... ON C.S.A.H. 3 ("x")
(T.H. C.S.A.H. C.R. etc.)

PROPOSED BRIDGE LOCATED 1/8 MILES EAST OF

35/W OVER RICE CREEK.

SEC. 9 TWP. 30 R. 23

CITY ARDEN HILLS COUNTY RAMSEY

BRIDGE NO. MICROFILMED
RAMSEY CO. ENGR.

Area No. Job No. State Proj. No. Sheet No. of Sheets

15-152



73

T-1

℄ CO. RD. "1"

CONTROL POINT
℄ BRG. W. ABUT.
AND L' 73 + 98.5

74

90°

℄ BRG.

WEST ABUTMENT

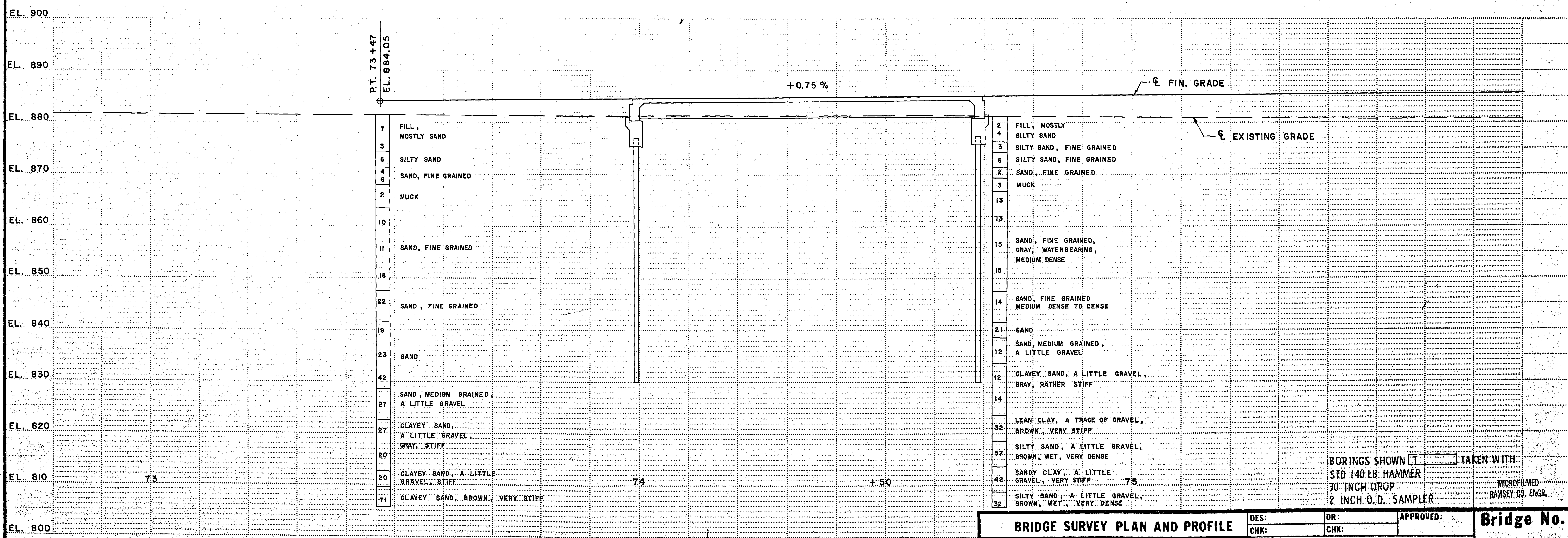
T-2

75

90°

℄ BRG.

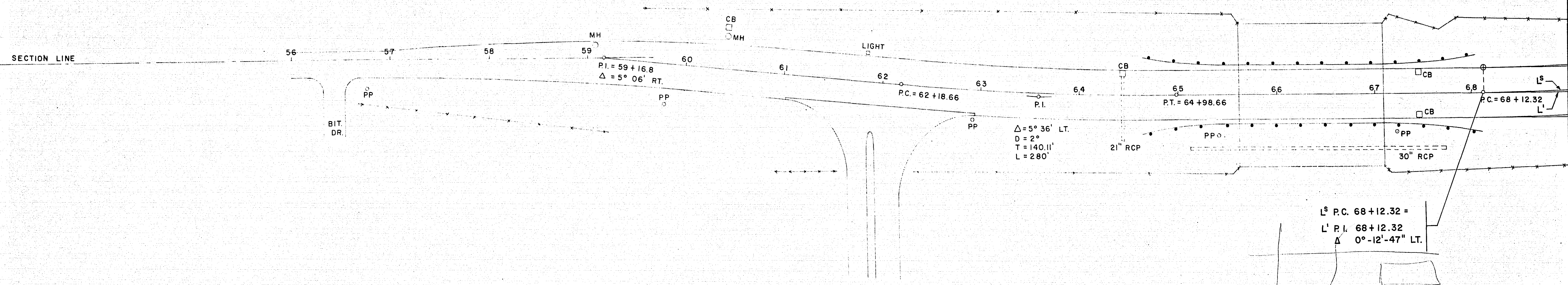
EAST ABUTMENT



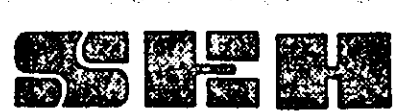
BRIDGE SURVEY PLAN AND PROFILE		DES:	DR:	APPROVED:	Bridge No.
State Proj. No.		CHK:	CHK:		
Sheet No. of Sheets		BORINGS SHOWN TAKEN WITH STD 140 LB. HAMMER 30" INCH DROP 2 INCH O.D. SAMPLER MICROFILMED RAMSEY CO. ENGR.			



35 W (OVER)

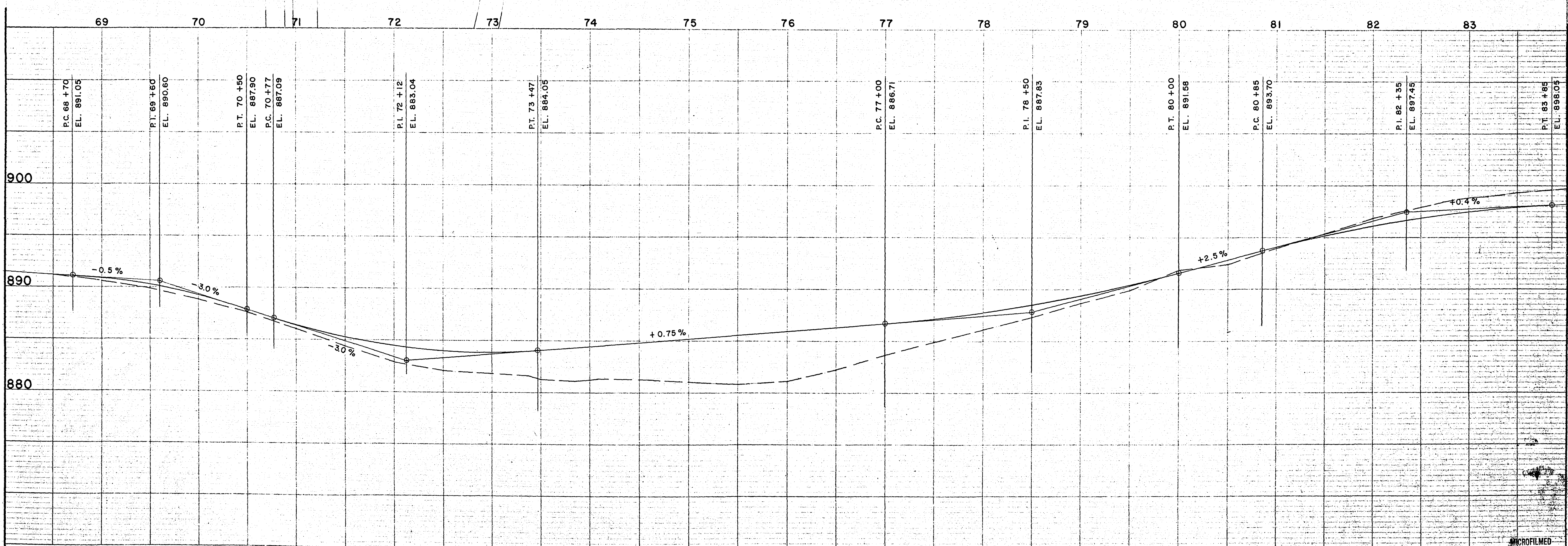
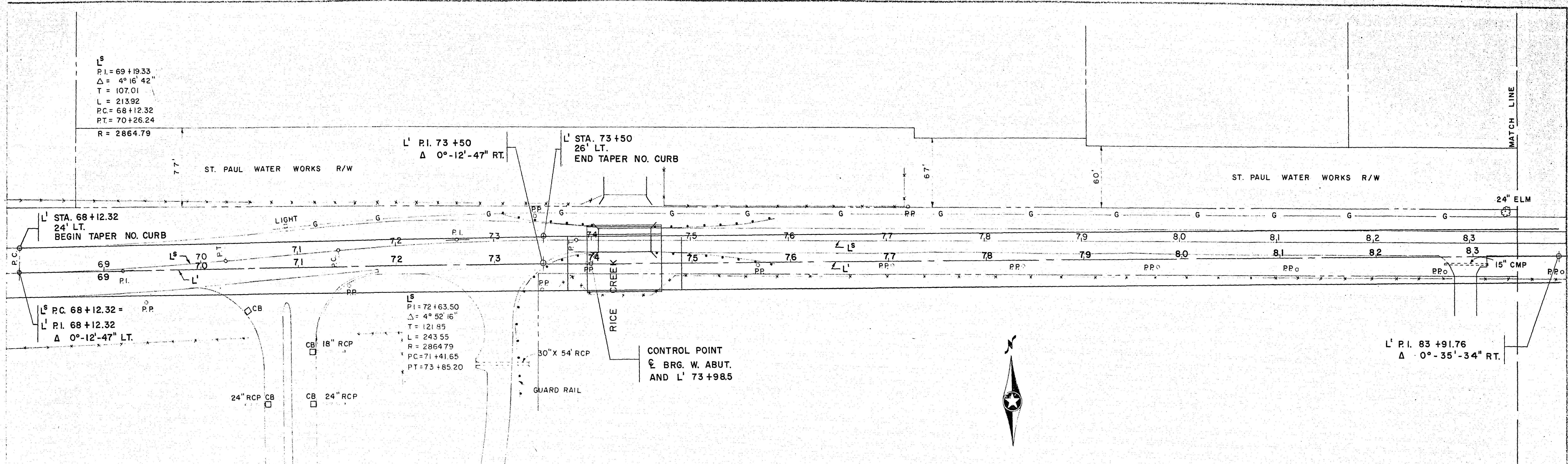


	56	57	58	59	60	61	62	63	64	65	66	67	68
910													
900													
890													
880													

SURVEY: J. S.	SCALE: 1" = 50' - 0"	NO.	DATE	REVISIONS	I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota. Date _____ Reg. No. _____	 SHORT - ELLIOTT - HENDRICKSON, INC. Saint Paul, Minnesota • Chippewa Falls, Wisconsin	RAMSEY COUNTY	CO. ROAD I RICE CREEK TO FAIRVIEW AVE	FILE NO.: 78064
DESIGN:				DATE: 10/6/78					
DRAWN: B. T.									

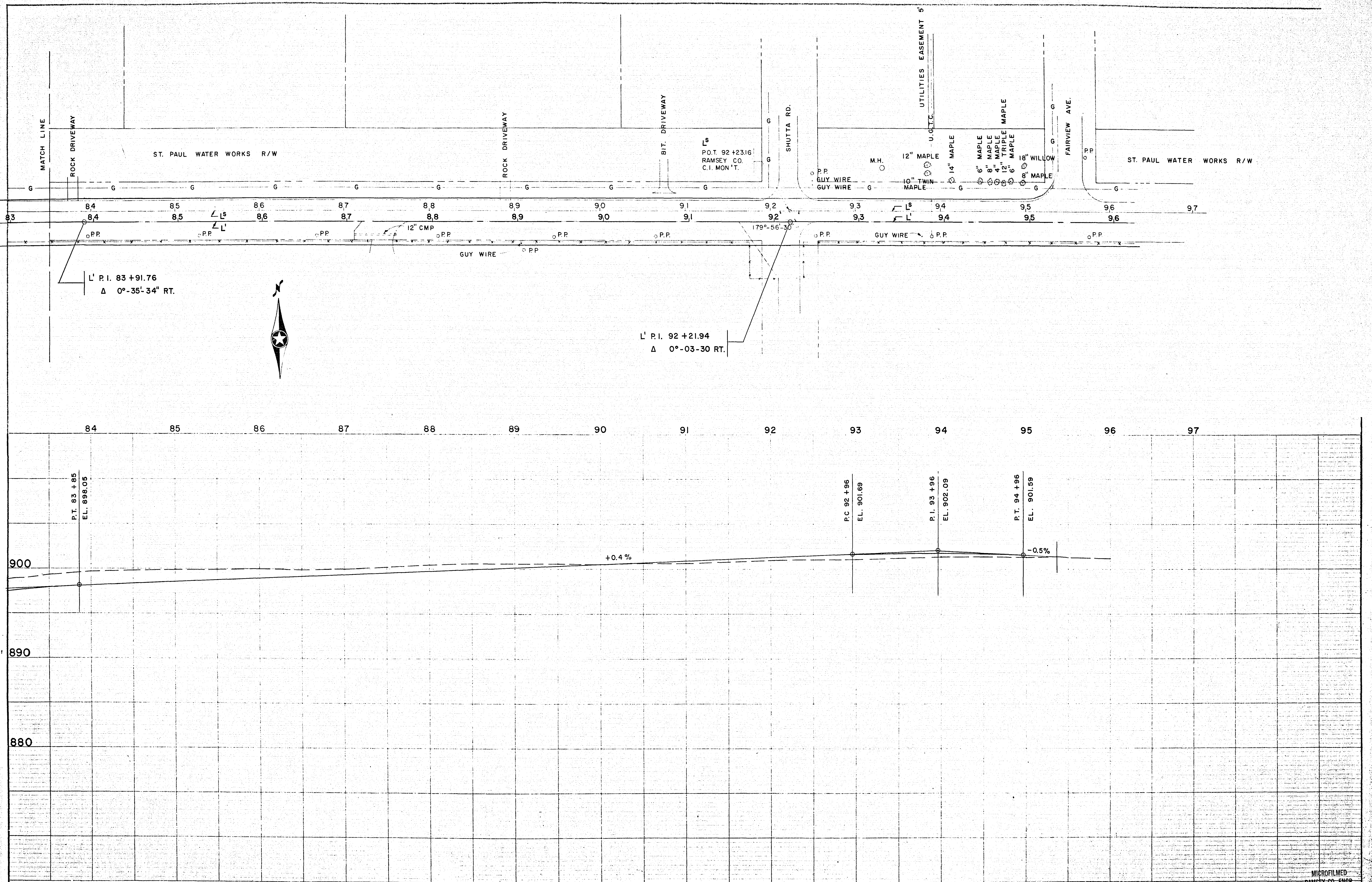
Rec'd 11-30-78 version

15-152



SURVEY: J. S. DESIGN: DRAWN: B. T.	SCALE: 1" = 50'-0"	NO.	DATE	REVISIONS	I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota. Date _____ Reg. No. _____	SHORT - ELLIOTT - HENDRICKSON, INC. Saint Paul, Minnesota • Chippewa Falls, Wisconsin	RAMSEY COUNTY	COUNTY ROAD "I" FROM RICE CREEK TO FAIRVIEW AVE.	FILE NO.: 78064 DATE: 8/17/78	1 2
									MICROFILMED RAMSEY CO. ENGR.	

15-152



SURVEY: J. S. DESIGN: DRAWN: B. T.	SCALE: 1" = 50' - 0"	NO.	DATE	REVISIONS	I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota. Date _____ Reg. No. _____		SHORT - ELLIOTT - HENDRICKSON, INC. Saint Paul, Minnesota • Chippewa Falls, Wisconsin	RAMSEY COUNTY	COUNTY ROAD "I" FROM RICE CREEK TO FAIRVIEW AVE.	FILE NO.: 78064	2
										DATE: 8/17/78	2

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