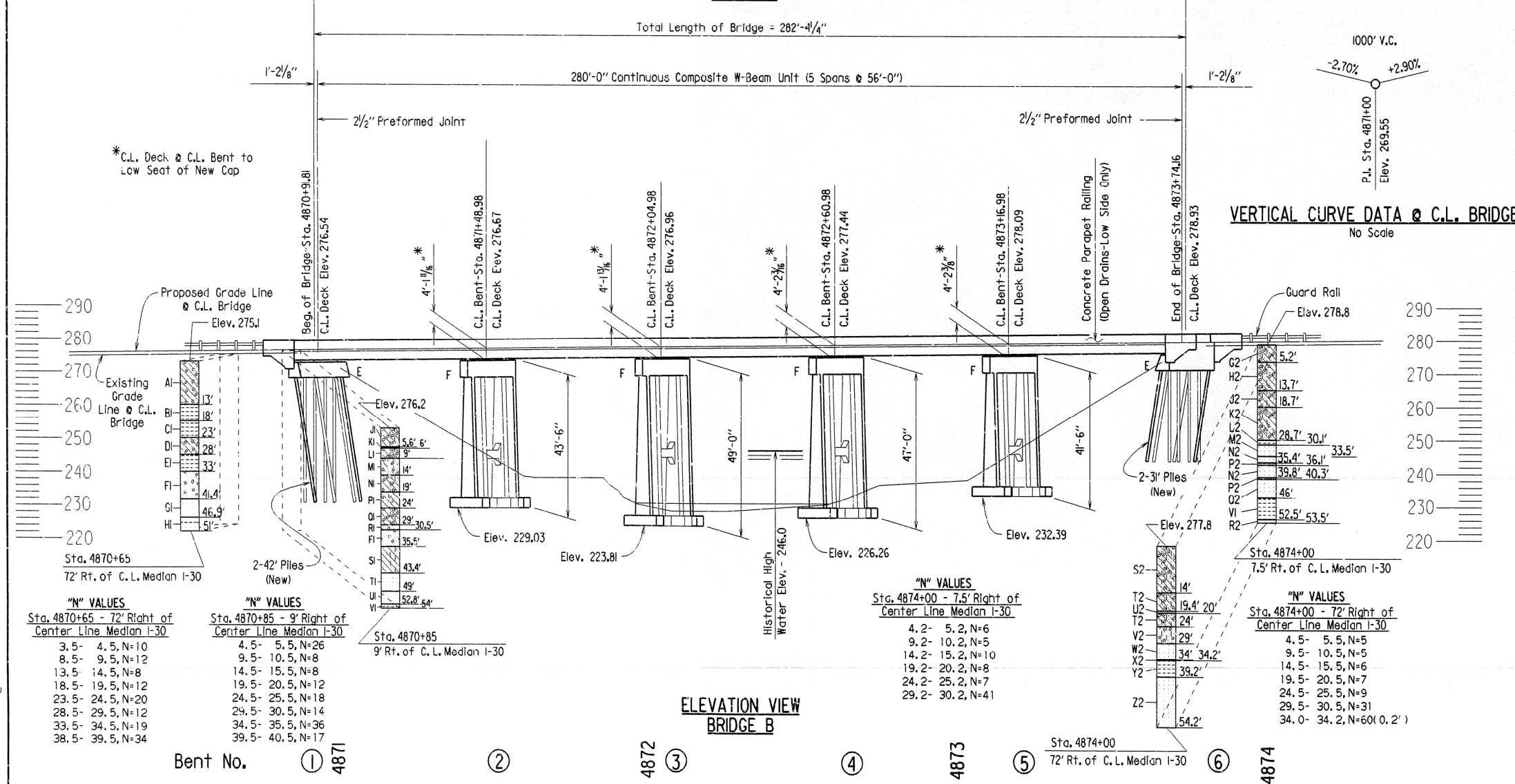
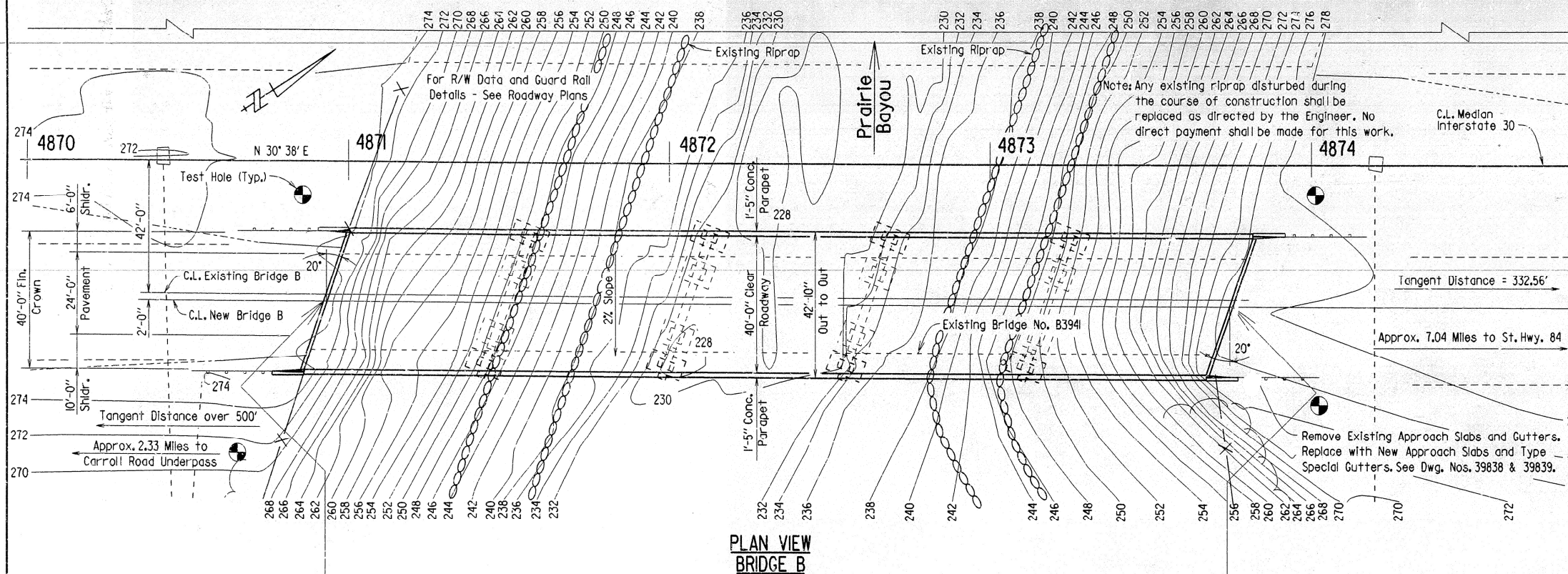


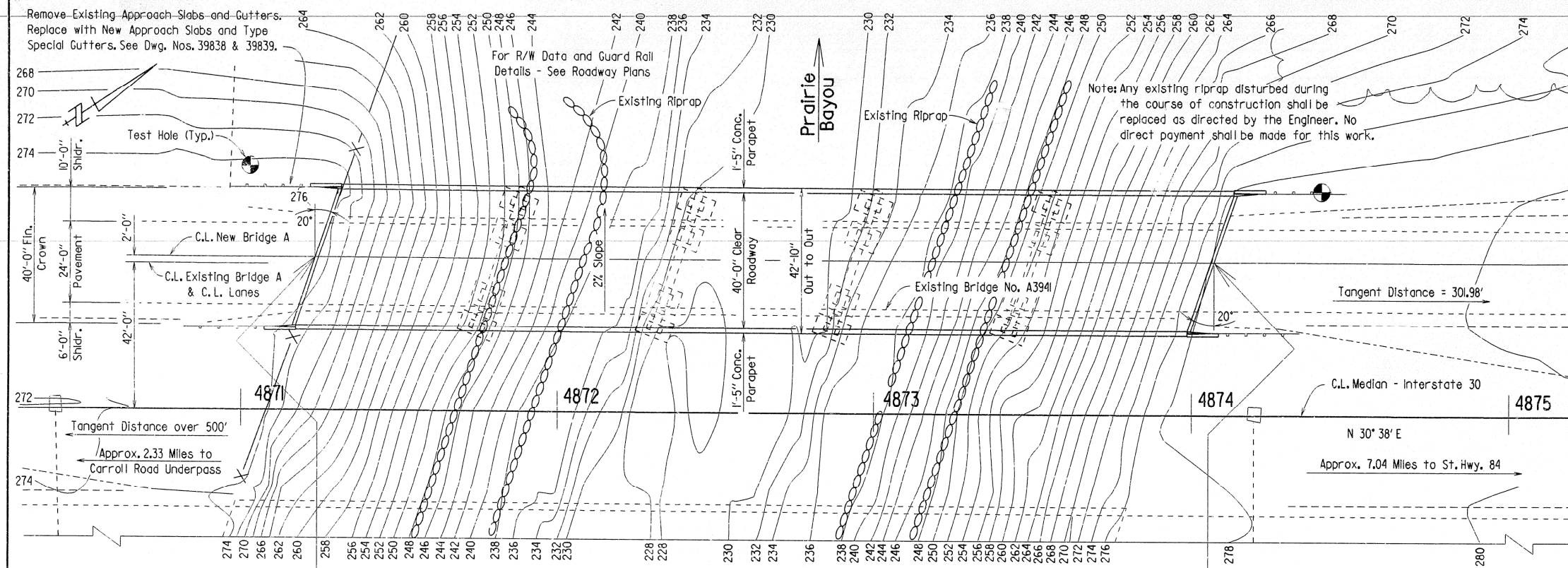
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				6	ARK.	B60115	120	
				JOB NO.		R60045	64	118
				83941	LAYOUT		39810	



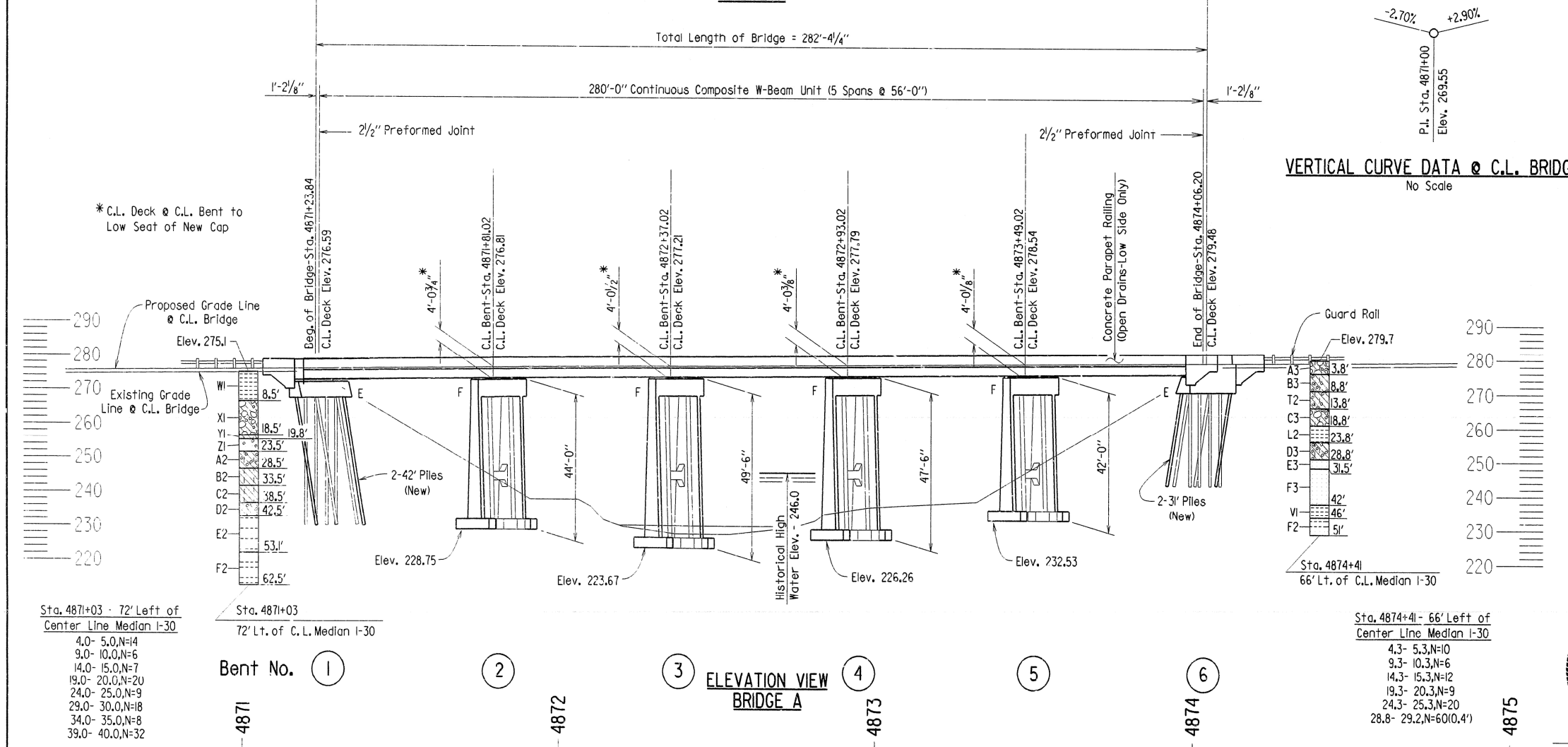
(SHEET 2 OF 2)  
LAYOUT OF  
BRIDGES OVER PRAIRIE BAYOU  
SOCIAL HILL-WEST (RESURFACING) (F)  
HOT SPRING COUNTY  
ROUTE 30 SEC. 21  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

DRAWN BY: MJT DATE: 02-17-99 FILENAME: BR60045X1.L  
CHECKED BY: JWB DATE: 6-7-99 SCALE: 1" = 20'-0"  
DESIGNED BY: AMS DATE: 10-10-98  
BRIDGE NO. B3941 DRAWING NO. 39810

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	B60115	120	
				JOB NO.		R60045	63	H18
				A394I	LAYOUT		39809	

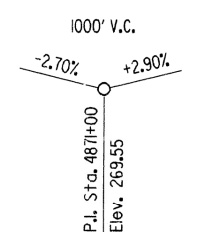


PLAN VIEW  
BRIDGE A



ELEVATION VIEW  
BRIDGE A

VERTICAL CURVE DATA @ C.L. BRIDGE



GENERAL NOTES

BENCH MARK: Chiseled square in NE Corner of existing bridge No. A394I, 23' Left of C.L. Median, Elevation 279.21.

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (1996 edition) with applicable supplemental specifications and special provisions. Unless otherwise noted, section and subsection numbers in the plans refer to the Construction Specifications.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges (1996 edition) with current interim specifications.

LIVE LOADING: HS20 METHOD OF DESIGN: Load Factor

SEISMIC PERFORMANCE CATEGORY: A

MATERIALS AND STRENGTHS:  
Class (S)AE Concrete (superstructure)  $f'_c = 4,000$  psi  
Class S Concrete (substructure)  $f'_c = 3,500$  psi  
Reinforcing Steel (AASHTO M31 or M53, Gr. 60)  $F_y = 60,000$  psi  
Structural Steel (AASHTO M270, Gr. 36)  $F_y = 36,000$  psi  
Structural Steel (AASHTO M270, Gr. 50W)  $F_y = 50,000$  psi

BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division.

STEEL PILING: Piling in End Bents 1 and 6 shall be HP 12 x 53 and shall be driven with an approved air, steam or diesel hammer to a minimum safe bearing capacity of 55 tons per pile and into the material designated as hard sandstone or shale on the boring legend. Lengths shown are for estimating quantities and for use in determining payment for cut-off and build-up in accordance with the specifications. Piles in end bents to be driven after embankment to bottom of cap is in place. On all piles the Contractor shall use approved steel H-File driving points.

NEW FOOTINGS: New footings shall be set at or below the existing footings and a minimum of 1'-6" into material designated as hard sandstone or shale on the boring legend. The top of the intermediate bent footings shall be set at or below the channel bottom. Foundations for footings shall be prepared in accordance with Section 80L04.

BRIDGE DECK: The concrete bridge deck shall be given a fine finish as specified for final finishing in subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

DETAIL DRAWINGS: DRAWING NO.  
End Bents 39812 - 39814  
Intermediate Bents 39815 - 39816  
280' Cont. Comp. W-Beam Unit 39817 - 39821

EXISTING BRIDGE: Existing Bridges A394I and B394I are 28' wide and 282' long and consist of a concrete deck with an I-beam superstructure. The substructures consist of pile supported end bents and concrete column interior bents on spread footings.

Plans for the existing structures will be made available to the Contractor upon request to the Programs and Contracts Division. Existing Dwg. Nos. 13093, 13099-13101, and 15036.

THE PROPOSED WORK CONSISTS OF: Widening the existing bridges on both sides of the roadway, replacing the existing superstructures, and modifying and repairing the existing intermediate bents and end bents. For requirements in conducting the work, see Section 82L.

VERIFICATION: Components of Existing Bridges are to be retained and joined to the proposed work. The Contractor is to strictly adhere to the requirements for verification of the geometry of the Existing Bridges and its relationship to the proposed work described in Section 82L02.

REMOVAL AND SALVAGE: All material removed from the existing bridges under Item 82L shall be disposed of according to Section 205. All material from the existing bridges shall become the property of the Contractor with the exception of the aluminum bridge rails and posts which shall remain the property of the State.

MAINTENANCE OF TRAFFIC: See Roadway Plans for maintenance of traffic.



(SHEET 1 OF 2)  
LAYOUT OF  
BRIDGES OVER PRAIRIE BAYOU  
SOCIAL HILL-WEST (RESURFACING) (F)  
HOT SPRING COUNTY  
ROUTE 30 SEC. 21  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

DRAWN BY: MJT DATE: 10-12-98 FILENAME: BR60045X1.LLI  
CHECKED BY: JWB DATE: 6-7-99 SCALE: 1"=20'-0"  
DESIGNED BY: AMS DATE: 10-10-98  
BRIDGE NO. A394I DRAWING NO. 39809

MICROFILMED  
JUN 9 2000

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	B60115	120	
				JOB NO.		R60045	76	118
				A5025	LAYOUT		39822	

GENERAL NOTES

BENCH MARK: Chiseled square in SW Corner of existing bridge no. B5025, 24' Right of C.L. Median, Elevation 270.79.

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (1996 edition) with applicable supplemental specifications and special provisions. Unless otherwise noted, section and subsection numbers in the plans refer to the Construction Specifications.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges (1996 edition) with current Interim specifications.

LIVE LOADING: HS20 METHOD OF DESIGN: Load Factor

SEISMIC PERFORMANCE CATEGORY: A

MATERIALS AND STRENGTHS:  
 Class (S/AE) Concrete (superstructure)  $f'_c = 4,000$  psi  
 Class S Concrete (substructure)  $f'_c = 3,500$  psi  
 Reinforcing Steel (AASHTO M31 or M53, Gr. 60)  $F_y = 60,000$  psi  
 Structural Steel (AASHTO M270, Gr. 36)  $F_y = 36,000$  psi  
 Structural Steel (AASHTO M270, Gr. 50W)  $F_y = 50,000$  psi

BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division.

STEEL PILING: Piling in Bents 1, 6 and 7 shall be HP 12 x 53 and shall be driven with an approved air, steam or diesel hammer to a minimum safe bearing capacity of 55 tons per pile and into the material designated as hard shale on the boring legend. Lengths shown are for estimating quantities and for use in determining payment for cut-off and build-up in accordance with the specifications. Piles in end bents to be driven after embankment to bottom of cap is in place. On all piles the Contractor shall use steel H-Pile driving points.

PILE ENCASEMENT: Pile Encasement shall extend from 2' above natural ground to 3' below natural ground at Bent 6.

NEW FOOTINGS: New footings shall be set at or below the existing footings and a minimum of 1'-6" into material designated as hard shale on the boring legend. The top of the intermediate bent footings shall be set at or below the channel bottom. Foundations for footings shall be prepared in accordance with Section 801.04.

BRIDGE DECK: The concrete bridge deck shall be given a fine finish as specified for final finishing in subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

DETAIL DRAWINGS: DRAWING NO.  
 End Bents 39825 - 39827  
 Intermediate Bents 39828 - 39832  
 141' Cont. Comp. W-Beam Unit 39833 - 39837

EXISTING BRIDGE: Existing Bridges A5025 and B5025 are 28' wide and 284' long and consist of a concrete deck with an I-Beam superstructure. The substructures consist of a combination of pile supported and column supported bents.

Plans for the existing structures will be made available to the Contractor upon request to the Programs and Contracts Division, Existing Dwg. Nos. 13492, 13497-13500.

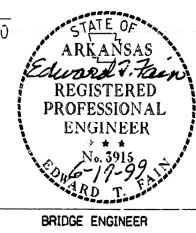
THE PROPOSED WORK CONSISTS OF: Widening the existing bridges on both sides of the roadway, replacing the existing superstructures and modifying and repairing the existing intermediate bents and end bents. For requirements in conducting the work, see Section 821.

VERIFICATION: Components of Existing Bridges are to be retained and joined to the proposed work. The Contractor is to strictly adhere to the requirements for verification of the geometry of the existing bridges and their relationship to the to the proposed work described in Section 821.02.

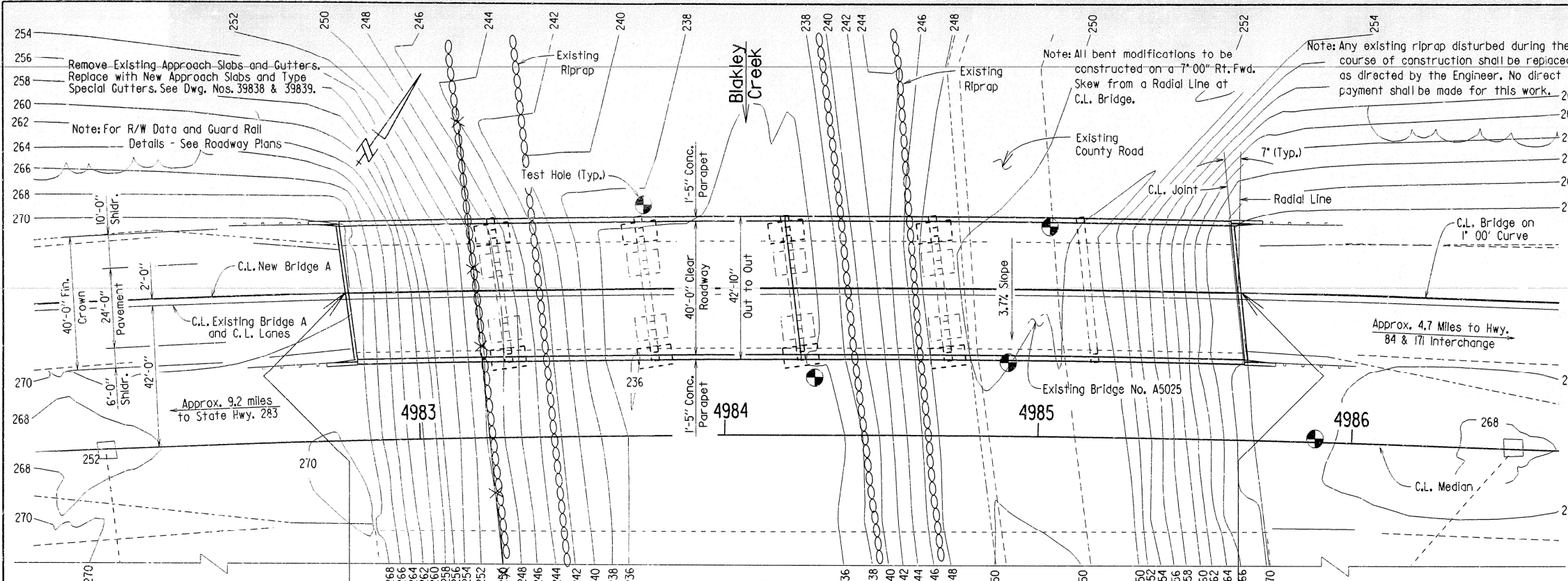
REMOVAL AND SALVAGE: All material removed from the existing bridges under Item 821 shall be disposed of according to Section 205. All material from the existing bridges shall become the property of the Contractor with the exception of the aluminum bridge rails and posts which shall remain the property of the State.

MAINTENANCE OF TRAFFIC: See Roadway Plans for maintenance of traffic.

(SHEET 1 OF 2)  
 LAYOUT OF  
 BRIDGES OVER BLAKLEY CREEK  
 SOCIAL HILL-WEST (RESURFACING) (F)  
 HOT SPRING COUNTY  
 ROUTE 30 SEC. 21  
 ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.



DRAWN BY: MJT DATE: 2-19-99 FILENAME: BR60045X2.L1  
 CHECKED BY: JWB DATE: 6-7-99 SCALE: 1"=20'-0"  
 DESIGNED BY: AMS DATE: 11-19-98  
 BRIDGE NO. A5025 DRAWING NO. 39822



PLAN VIEW  
BRIDGE A

HORIZONTAL CURVE DATA @ C.L. MEDIAN

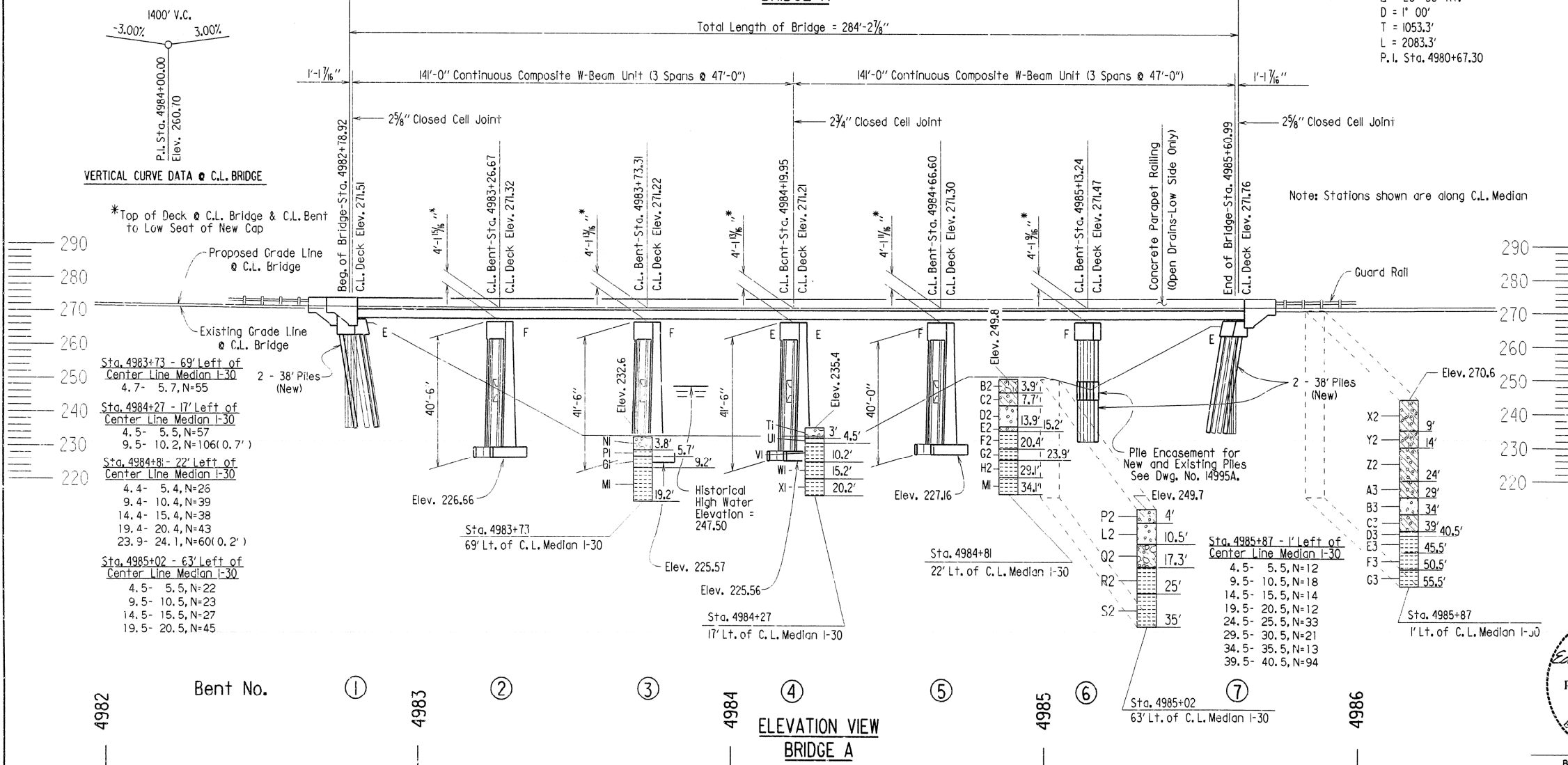
$\Delta = 20^\circ 50'$  Rt.  
 $D = 1' 00''$   
 $T = 1053.3'$   
 $L = 2083.3'$   
 P.I. Sta. 4980+67.30

Total Length of Bridge = 284'-2 1/8"

VERTICAL CURVE DATA @ C.L. BRIDGE

\*Top of Deck @ C.L. Bridge & C.L. Bent to Low Seat of New Cap

Sta. 4983+73 - 69' Left of Center Line Median I-30  
 4.7- 5.7, N=55  
 2 - 38' Piles (New)  
 Sta. 4984+27 - 17' Left of Center Line Median I-30  
 4.5- 5.5, N=57  
 9.5- 10.2, N=106(0.7')  
 Sta. 4984+81 - 22' Left of Center Line Median I-30  
 4.4- 5.4, N=26  
 9.4- 10.4, N=39  
 14.4- 15.4, N=38  
 19.4- 20.4, N=43  
 23.9- 24.1, N=60(0.2')  
 Sta. 4985+02 - 63' Left of Center Line Median I-30  
 4.5- 5.5, N=22  
 9.5- 10.5, N=23  
 14.5- 15.5, N=27  
 19.5- 20.5, N=45



ELEVATION VIEW  
BRIDGE A

Bent No.

①

②

③

④

⑤

⑥

⑦

⑧

DRAWN BY: MJT DATE: 2-19-99 FILENAME: BR60045X2.L1  
 CHECKED BY: JWB DATE: 6-7-99 SCALE: 1"=20'-0"  
 DESIGNED BY: AMS DATE: 11-19-98  
 BRIDGE NO. A5025 DRAWING NO. 39822

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	B60115	120	
				JOB NO.		R60045	77	118
				B5025	LAYOUT		39823	

# BORING LEGEND

- Al-Moist, Medium Stiff, Brown Sandy Clay with Gravel
- Bl-Moist, Stiff, Brown and Gray Sandy, Silty Clay with some Gravel
- Cl-Moist, Stiff, Brown and Gray Silty Clay with some Gravel and Highly Weathered Shale
- Dr-Moist, Stiff, Brown and Gray Silty Clay with Gravel and some Highly Weathered Shale
- El-Moist, Very Stiff, Gray and Brown Sandy, Silty Clay with Gravel and some Highly
- Fl-Moist, Dense, Brown and Gray Sand with Clay Seams and Gravel
- Gl-Hard, Gray and Brown Sandstone
- Hi-Moist, Hard, Gray and Brown Sandy Clay
- Jl-Soft, Gray and Brown Highly Weathered Shale
- Kl-Hard, Dark Gray and Brown Shale with Weathered Shale Seams
- Ll-Hard, Dark Gray Fractured Shale with Weathered Shale and some Calcite Seams
- Ml-Hard, Dark Gray Shale
- Nl-Wet, Dense, Brown and Gray Sand, Gravel, Cobbles and Boulders
- Pl-Soft, Brown and Gray Weathered Shale
- Ql-Medium Hard, Brown and Gray Weathered Shale
- Rl-Wet, Medium Dense, Brown and Gray Sand and Gravel
- Sl-Hard, Dark Gray Shale with Sandstone Seams
- Tl-Wet, Dense, Brown and Gray Sand, Gravel and Cobbles
- Ul-Soft, Brown and Gray Highly Weathered Shale
- Vi-Soft to Medium Hard, Brown and Gray Weathered Shale
- Wl-Hard, Dark Gray Fractured Shale
- Xi-Hard, Dark Gray Shale with some Fractured Seams
- Yl-Wet, Dense, Brown and Gray Sand and Gravel
- Zl-Medium Hard, Brown and Gray to Dark Gray Weathered Shale
- A2-Hard, Dark Gray Fractured Shale with Weathered Shale Seams
- B2-Moist, Stiff, Brown Sandy, Silty Clay with Gravel and Cobbles
- C2-Moist, Very Stiff, Brown and Gray Sandy Clay with Gravel
- D2-Moist, Dense, Brown and Gray Sand and Novaculite Fragments and Seams with some Clay
- E2-Moist, Hard, Brown and Gray Sandy Clay with Sandstone Fragments
- F2-Soft, Brown and Gray Highly Weathered Shale
- G2-Medium Hard, Gray Weathered Shale
- H2-Medium Hard, Dark Gray Fractured Shale
- J2-Moist, Medium Dense, Brown and Gray Sand with Clay Seams and Gravel
- K2-Moist, Medium Dense, Brown and Gray Sand with Clay Seams, Gravel and Cobbles
- L2-Moist, Medium Dense, Brown Sand and Gravel with some Clay
- M2-Moist, Very Stiff, Brown and Gray Sandy Clay with Gravel and Cobbles
- N2-Soft, Gray Weathered Shale
- P2-Moist, Medium Dense, Brown Sand with Clay Seams and Gravel
- Q2-Moist, Medium Dense, Brown to Brown and Gray Sand with Clay Seams, Gravel and Cobbles
- R2-Soft, Gray and Brown Weathered Shale
- S2-Hard, Dark Gray Fractured Shale
- T2-Moist, Stiff, Brown Sandy Clay with Gravel and Cobbles
- U2-Moist, Very Stiff, Brown Sandy Clay with Gravel
- V2-Moist, Medium Dense, Brown Sand and Gravel with some Clay and Cobbles
- W2-Wet, Medium Dense, Brown Sand with Clay Seams, Gravel and some Cobbles
- X2-Moist, Stiff, Reddish Brown Silty Clay with Gravel
- Y2-Moist, Very Stiff, Reddish Brown Silty Clay with Gravel
- Z2-Moist, Stiff, Brown Sandy Clay with Gravel
- A3-Moist, Hard, Brown Sandy Clay with Gravel
- B3-Moist, Medium Dense, Brown Sand and Gravel
- C3-Moist, Stiff, Brown Sandy Clay with Gravel and some Shale Fragments
- D3-Medium Hard, Gray Highly Weathered Shale
- E3-Hard, Dark Gray and Brown Shale with Weathered Shale Seams
- F3-Hard, Dark Gray Fractured Shale
- G3-Hard, Dark Gray Shale with some Fractured Seams

## HORIZONTAL CURVE DATA @ C.L. MEDIAN

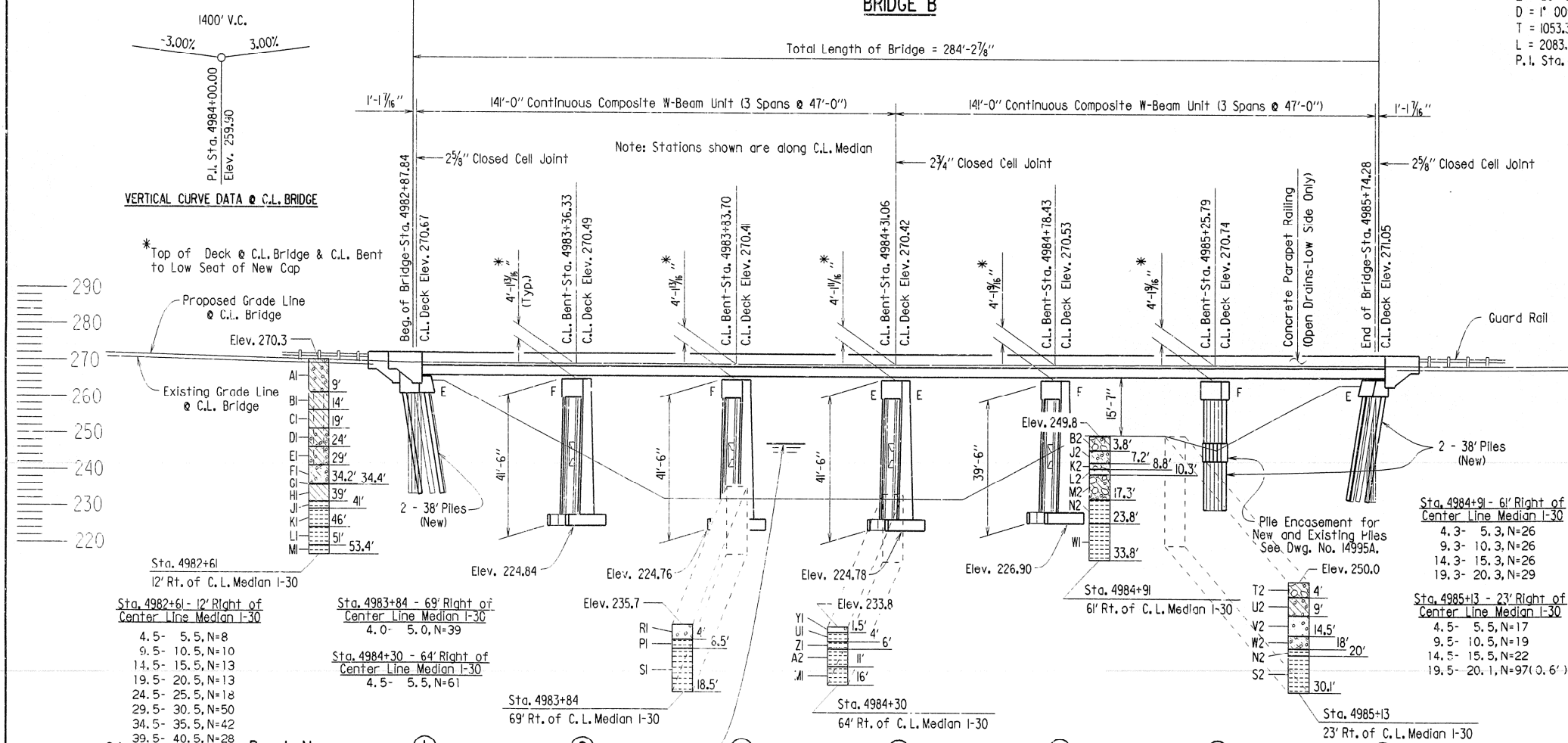
$\Delta = 20^\circ 50' \text{ Rt.}$   
 $D = 1' 00'$   
 $T = 1053.3'$   
 $L = 2083.3'$   
 $P.I. \text{ Sta. } 4980+67.30$

## PLAN VIEW BRIDGE B

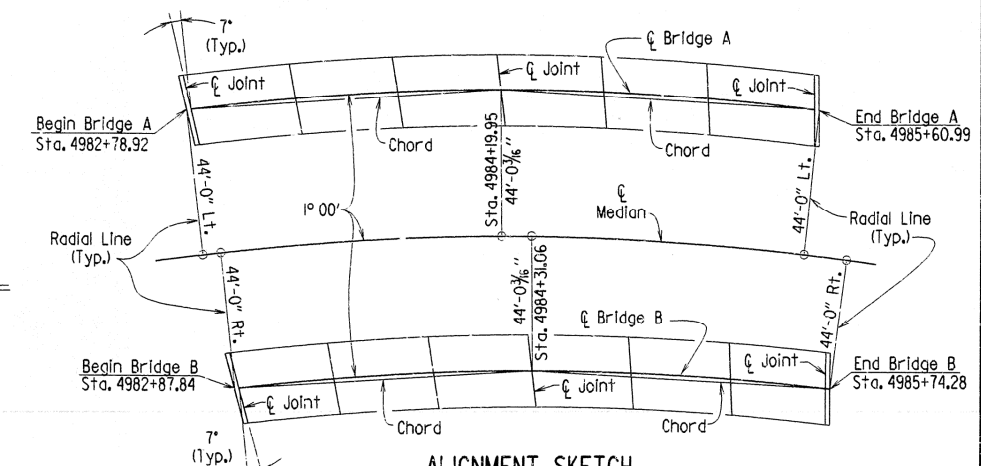
Total Length of Bridge = 284'-2 7/8"

1400' V.C.  
 -3.00%      3.00%  
 P.I. Sta. 4984+00.00  
 Elev. 259.30  
**VERTICAL CURVE DATA @ C.L. BRIDGE**

\* Top of Deck @ C.L. Bridge & C.L. Bent to Low Seat of New Cap  
 Elev. 270.3  
 Proposed Grade Line @ C.L. Bridge  
 Existing Grade Line @ C.L. Bridge

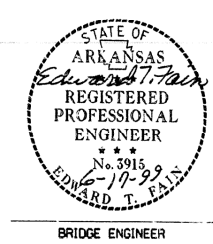


## ELEVATION VIEW BRIDGE B



## ALIGNMENT SKETCH

Notes: Stations are measured along C.L. Median.  
 Chords are placed from C.L. Joint @ C.L. Bridge to C.L. Joint @ C.L. Bridge.



(SHEET 2 OF 2)  
 LAYOUT OF  
 BRIDGES OVER BLAKLEY CREEK  
 SOCIAL HILL-WEST (RESURFACING) (F)  
 HOT SPRING COUNTY  
 ROUTE 30 SEC. 21  
 ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.  
 DRAWN BY: MJT DATE: 2-19-99 FILENAME: BR60045X2.LI  
 CHECKED BY: JWB DATE: 6-7-99 SCALE: 1"=20'-0"  
 DESIGNED BY: AMS DATE: 11-19-98  
 BRIDGE NO. B5025 DRAWING NO. 39823

MICROFILMED  
 JUN 08 2000