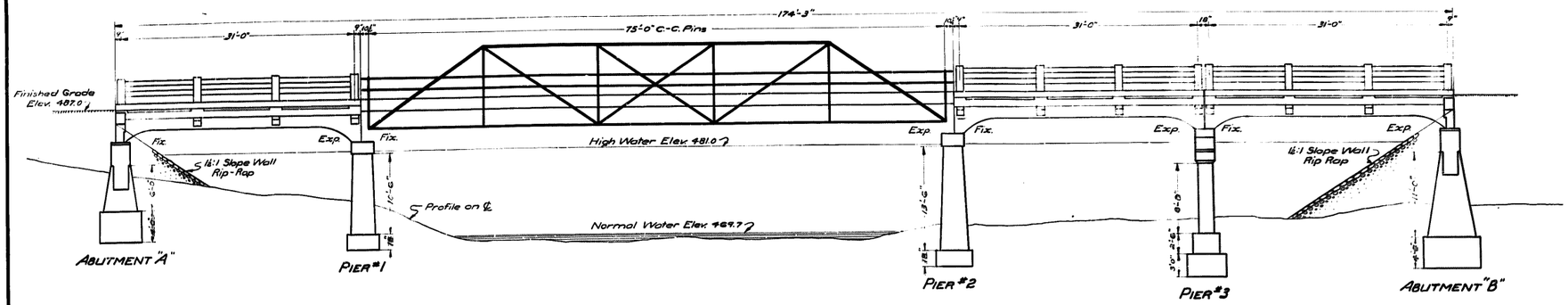
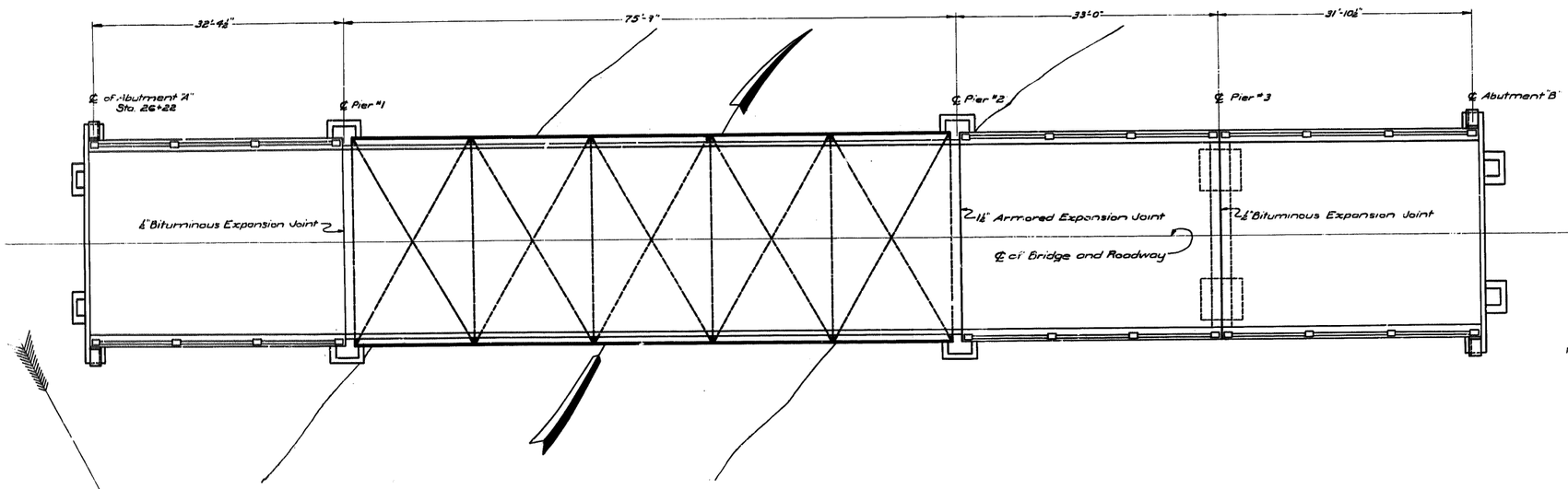
FED ROAD DIST. NO.	STATE	B.P.R. Route No.	B.P.R. Proj. No.	STATE Route No.	STATE Proj. No.	SHEET NO.	TOTAL SHEETS
10	VA.			33	589B1		



SIDE ELEVATION

GENERAL NOTE:-

Roadway 24 feet. Capacity 2-15 ton trucks passing.
Specifications:- Virginia State Highway Commission. 1926.
Footings shall extend to solid rock and Foundations shall be approved by the Engineer.
To provide for variations in elevation of foundation adjustments will be made in stem of Pier #3.
Depth of footings shown for Abutments and Piers #1 and #2 are approximate only and subject to change.
All concrete to be class "A".
Excavation above Elev. 469.7 to be classified as dry-below as wet.
For Further details of Superstructure see Standard Plans C-24-30 and SC-24-75.
B.M. Nail in root of 5' tree 37 Ft. Lt. Sta. 31+35, Elev. 474.58.

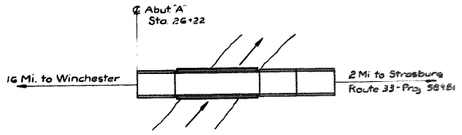


PLAN

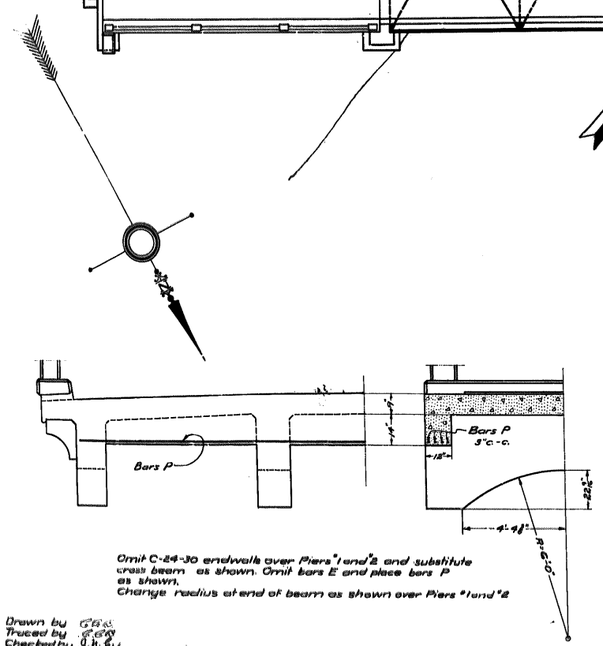
ESTIMATED QUANTITIES

	Concrete Cu. Yds. Class "A"	Structural Steel Lbs.	Reinforcing Steel Lbs.	Excavation Cu. Yds. Dry	Excavation Cu. Yds. Wet
Superstructure	175.0	77,925	36,170		
Abutment "A" - Neat	13.2		2,085		
Abutment "A" - Footing	5.8			29	[illegible]
Pier #1 - Neat	17.5		1,780		
Pier #1 - Footing	3.8			14	6
Pier #2 - Neat	20.3		1,845		
Pier #2 - Footing	2.9			2	15
Pier #3 -	17.1		2,345	5	12
Abutment "B" - Neat	17.2		2,220		
Abutment "B" - Footing	7.9			12	20
Totals:-	280.7	77,925	46,445	62	53

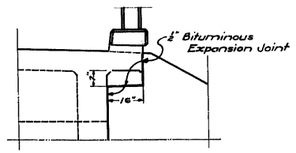
Note:- Concrete boister omitted between slab and stringers on Standard SC-24-75.



Location Sketch

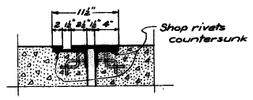


Omit C-24-30 endwalls over Piers #1 and #2 and substitute cross beam as shown. Omit bars E and place bars P as shown.
Change radius at end of beam as shown over Piers #1 and #2

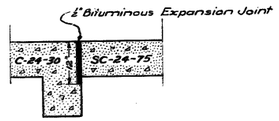


Note:- End post bracket to be changed as shown over Abutments

PART END VIEW OVER ABUTMENTS



ARMORED EXPANSION JOINT OVER PIER #2
(Open Position)
Materials required
PL - 2" x ½" x 22'-11"
PL - 8" x ½" x 22'-11"
∠ - 6" x 4" x ⅜" x 23'-0"
∠ - 4 x 4 x ⅜" x 23'-0"
¾" bent bolts 3 ft. ± c.-c. 9" long.
⅝" shop rivets 12" c.-c.
Plates and angles to be bent to a smooth curve to match Roadway crown.



EXPANSION JOINT OVER PIER #1

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF HIGHWAYS
~~PROPOSED~~ BRIDGE

OVER CEDAR CREEK—2 MI. FROM STRASBURG
STA. 27+10 ROUTE 33—PROJ. 589B1-SHENANDOAH COUNTY
1-75'-0" STEEL TRUSS & 3-30'-0" CONCRETE BEAM SPANS
RICHMOND, VA.

Recommended for Approval:- [signature] Bridge Engineer

Approved:- [signature] Chief Engineer

Drawn by G.B.E.
Traced by G.B.E.
Checked by J.H.E.

Finals checked January 30, 1930.

Scale:- ⅛" x ⅛" = 1'-0"
May 1929.

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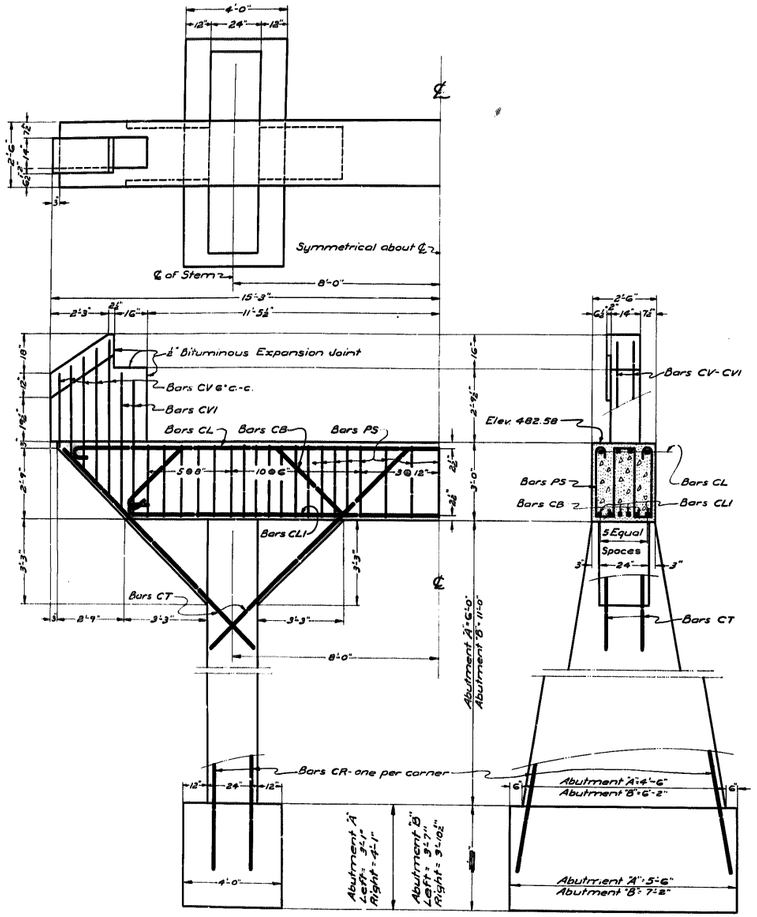
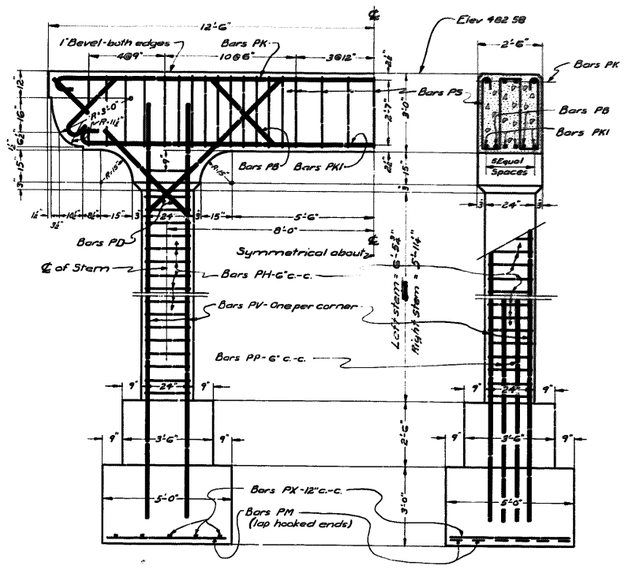
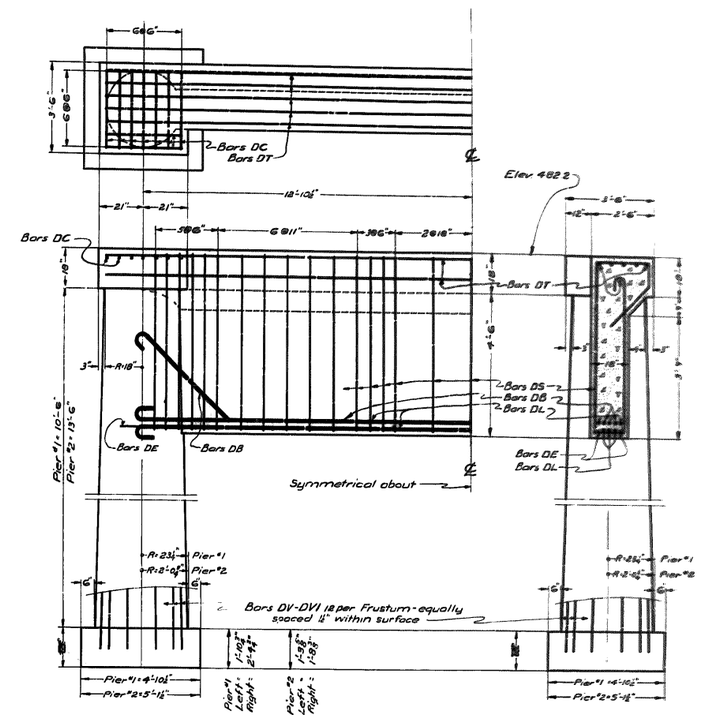
FED ROAD DIST. NO.	STATE	B.P.R. ROUTE NO.	B.P.R. PROJ. NO.	STATE ROUTE NO.	STATE PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	VA			35			



DETAILS OF ABUTMENTS



DETAILS OF PIER #3



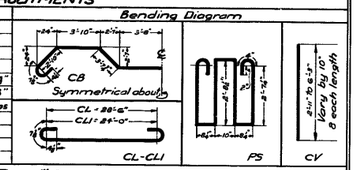
DETAILS OF PIERS #1 AND #2

SCHEDULE OF SUBSTRUCTURE STEEL

STEEL IN ABUTMENTS

Mark	No.	Size	Length	Location
CB	4	1" ▫	29'-11"	Beams
CL	8	1" ▫	30'-6"	Beams
CLI	8	1" ▫	26'-0"	Beams
CT	16	1" ▫	11'-0"	Brackets
CR	8	1" ▫	10'-0"	Stems-Abut. "A"
CRI	8	1" ▫	15'-0"	Stems-Abut. "B"
PS	74	½" ▫	13'-7"	Beam-Stirrups
CV	40	½" ▫	2'-11" to 6'-3"	Wing Walls
CVI	16	½" ▫	5'-4"	Wing Walls

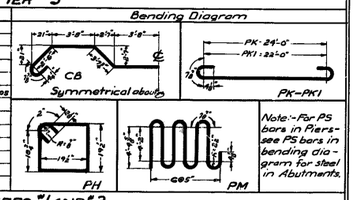
Bending Diagram



STEEL IN PIER #3

Mark	No.	Size	Length	Location
PB	2	1" ▫	28'-11"	Beams
PK	4	1" ▫	26'-0"	Beams
PKI	4	1" ▫	24'-0"	Beams
PP	8	1" ▫	9'-0"	Stems
PV	8	1" ▫	16'-0"	Stems
PS	35	½" ▫	13'-7"	Beam Stirrups
PX	10	½" ▫	4'-6"	Footings
PM	4	½" ▫	29'-6"	"
PH	36	¼" ▫	7'-0"	Stems
PD	8	1" ▫	7'-6"	Brackets

Bending Diagram

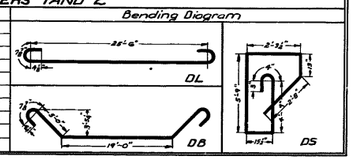


Note:- For PS bars in Piers- see PS bars in bending diagram for steel in Abutments.

STEEL IN PIERS #1 AND #2

Mark	No.	Size	Length	Location
DB	4	1" ▫	31'-0"	Beams
DL	12	1" ▫	27'-6"	Beams
DS	66	½" ▫	10'-3"	Stirrups
DE	4	½" ▫	27'-6"	Beams
DT	12	½" ▫	29'-6"	Beams
DC	36	½" ▫	3'-0"	Top of Pier
DV	24	½" ▫	12'-6"	Frusta - Pier #1
DVI	24	½" ▫	15'-6"	Frusta - Pier #2

Bending Diagram



Bars not shown in bending diagram are straight.
All bends to be made with a radius of 2½ diameters, unless otherwise shown.

CHANGE IN STEEL OF STANDARD SC-24-75

Mark	No.	Size	Length	Location	Bending Diagram
A	91				
AI	91				
B	92				

CHANGE IN STEEL OF STANDARD C-24-30

E	60				

CEDAR CREEK BRIDGE
DETAILS OF SUBSTRUCTURE

Virginia Department of Highways
Office of the Bridge Engineer
Richmond, Va. May 1929.

Drawn by C.C.B.
Traced by C.C.B.
Checked by J.H.C.

Scale:- ⅜"=1'-0"

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3 7-2 4 0 2 E