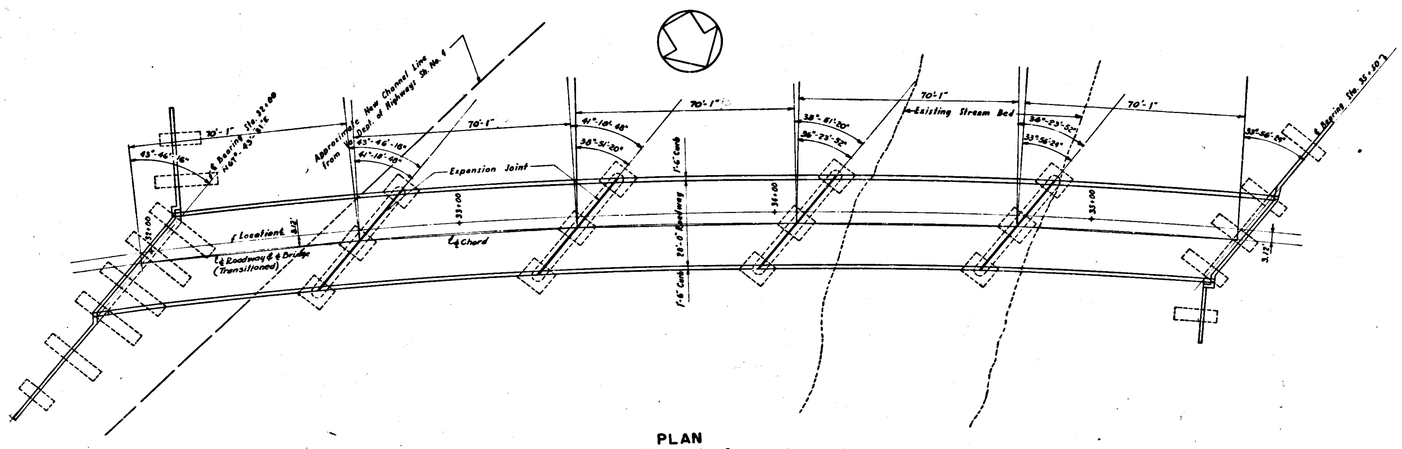
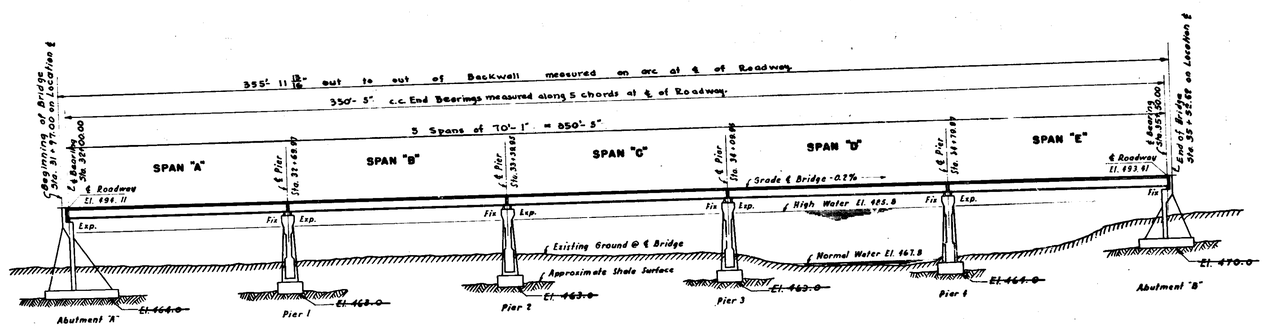
Fed. Rd. Dist. No.	State	P.R.A.		State		Sheet No.	Total Sheets
		Route No.	Proj. No.	Route No.	Proj. No.		
2	VA.		F 339(24)	11	1685-02	5-1	7

Old 389B-B



PLAN
Scale: 1" = 20'

General Notes:
Roadway 28'-0" Clear, 2-1'-6" Safety Walks.
Specifications:
General: Virginia Department of Highways Road and Bridge Specifications 1947.
Concrete Material & Construction: Concrete shall be Class "A" except that curbs and hand rail shall be Class "Y".
Design and Steel Construction: A.A.S.H.O. Specifications for Highway Bridges of 1949.
Live Load: H20-S16-44.
Excavation: Excavation above Elev. 468.0 shall be Class "A", below Class "B".
Bench Marks: 3 Nails in side 30" Elm 105' Lt. Sta. 34+00. El. 475.39. Nail and Cap in base 30" Sycamore 50' Lt. Sta. 34+98. El. 472.82.
Footings of piers and abutments shall extend to solid rock. Elevations of all footings as shown are approximately only and shall be varied as the Engineer may direct in order to obtain good foundations.
Necessary adjustments in masonry shall be made above the footings, depth of footings not to be changed.



SECTION AT CENTER LINE
Scale: 1" = 20'

NOTE:
All Stations on Location ℄
All Abutments & Piers Parallel.

Description		ESTIMATED QUANTITIES						
		Concrete Cu. Yds. Class "A"	Concrete Cu. Yds. Class "Y"	Structural Steel Pounds	Spiral Tie Rods Pounds	Reinforcing Steel Pounds	Excavations Cu. Yds. Class "A"	Excavations Cu. Yds. Class "B"
Superstructure		265.0	51.7	* 348,000	5,500	76,369	—	—
						15,543	—	—
Abutment A	Neat	212.8 ~~10.7~~	—	—	—	1,087	288 ~~207~~	169 ~~160~~
"	Footing	71.9 ~~7.1~~	—	—	—	5,417	—	—
Pier 1	Neat	99.5	—	—	—	1,242	114 ~~100~~	60
"	Footing	28.3	—	—	—	5,342	—	—
Pier 2	Neat	96.3 ~~96.8~~	—	—	—	1,242	39 ~~45~~	63 ~~60~~
"	Footing	26.2 ~~28.5~~	—	—	—	5,219	—	—
Pier 3	Neat	90.7 ~~91.8~~	—	—	—	1,242	67 ~~68~~	50 ~~60~~
"	Footing	26.4 ~~28.5~~	—	—	—	6,021	—	—
Pier 4	Neat	76.3 ~~81.5~~	—	—	—	1,242	12 ~~6~~	24 ~~48~~
"	Footing	26.6 ~~28.5~~	—	—	—	8,935	—	—
Abutment B	Neat	99.8	—	—	—	690	234	—
"	Footing	36.6 ~~36.8~~	—	—	—	~~770~~	~~300~~	~~300~~
Total		~~1163.0~~ 1164.4	51.7	* 348,000	5,500	128,591	814	366

*Lump Sum

Made by L.J.M. & W.R.B.
Traced by W.K.K.
Checked by H.E.
In Charge Karl Wiemann

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF HIGHWAYS

PROPOSED BRIDGE
OVER
CEDAR CREEK

STA. 32+00 ROUTE 11 PROJECT 1685-02
WARREN-SHENANDOAH COUNTIES
FIVE 70'-0" SIMPLE STEEL BEAM SPANS
RICHMOND, VIRGINIA

RECOMMENDED Hardesty & Hanover
HARDESTY & HANOVER, CONSULT'G ENGINEERS

RECOMMENDED FOR APPROVAL
BRIDGE ENGINEER

APPROVED
CHIEF ENGINEER

SEPT., 1950

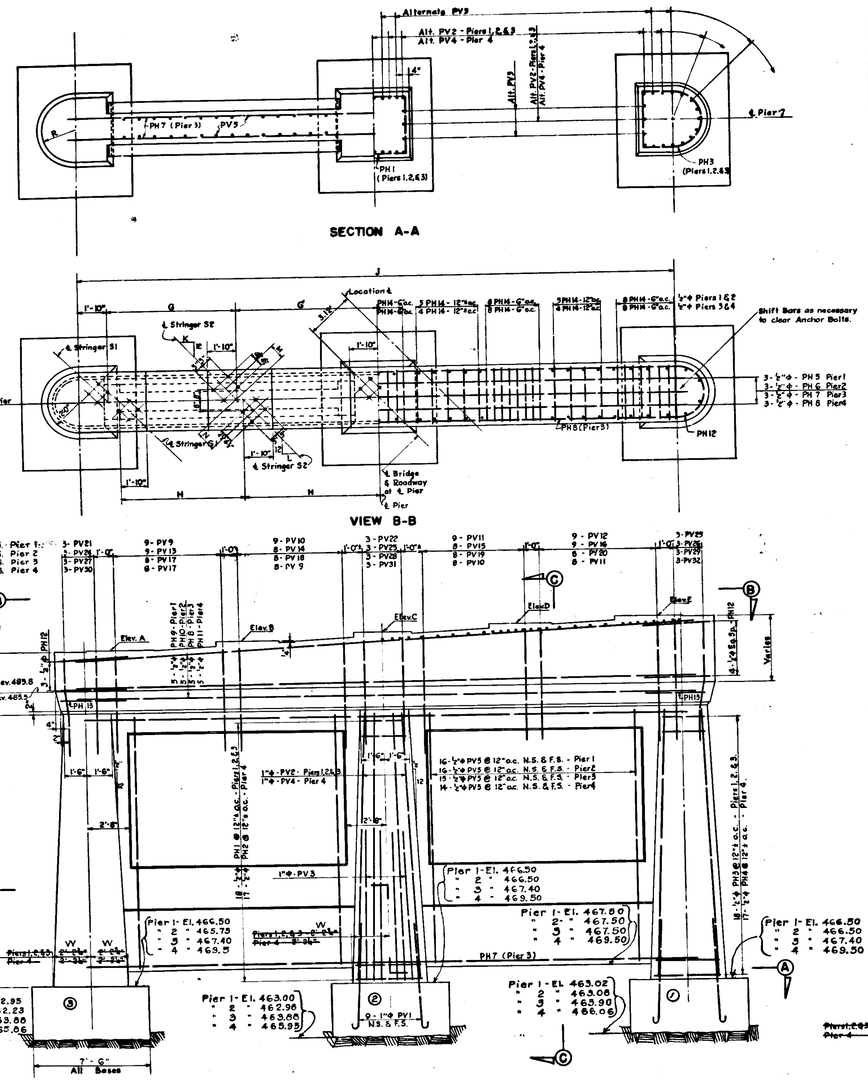
CX-7
Sheet 1 of 7

Finals posted Oct. 10, 1952

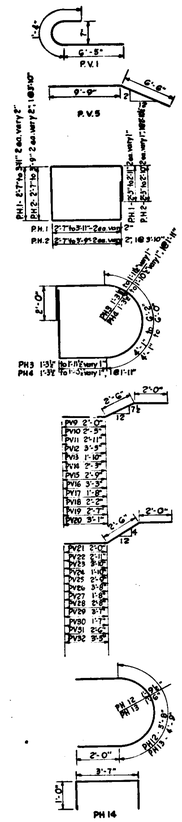
70-0 1 1

Fed. Rd. Dist. No.	State	P.R.A. Route No.	P.R.A. Proj. No.	State Route No.	State Proj. No.	Sheet No.	Total Sheets
2	VA.		7139920	11	1685-02	6-2	7

Old 589B-8



	Pier 1	Pier 2	Pier 3	Pier 4
A	488.06	487.91	487.77	487.63
B	488.52	488.37	488.23	488.09
C	488.98	488.84	488.70	488.55
D	489.44	489.30	489.16	489.02
E	489.90	489.76	489.62	489.48
F	32+69.97	33+39.96	34+09.95	34+19.97
G	9'-4⅝"	8'-11⅝"	8'-8"	8'-4⅝"
H	9'-11⅝"	9'-8"	9'-4⅝"	9'-1⅝"
J	41'-0⅝"	39'-7⅝"	38'-4"	37'-2½"
K	11½"	10⅝"	9 13/16"	8 15/16"
L	10⅝"	9⅝"	8 13/16"	8 1/16"
M	11 1/16"	10 11/16"	10 3/16"	9 15/16"
N	10 11/16"	10⅝"	9 15/16"	9 7/16"



REINFORCING STEEL

Mark	Size	Number Pier 1	Number Pier 2	Number Pier 3	Number Pier 4	Length	Shape	Location
PV1	1"φ	60	60	60	60	7'-9"	Bent	Footing
PV2	1"φ	30	30	30		17'-6"	Straight	Shaft
PV3	1"φ	30	30	30	30	10'-0"	"	"
PV4	1"φ				30	16'-6"	"	"
PV5	½"φ	64	64	60	56	16'-3"	Bent	"
PH1	"	18	18	18		12'-3" to 17'-7" - Vary by 8", 2 ea.	"	"
PH2	"				17	12'-3" to 17'-3" - Vary by 8", 2 ea. Except Largest	"	"
PH3	"	36	36	36		11'-3" to 16'-0" - Vary as detailed, 12 ea.	"	"
PH4	"				34	11'-3" to 15'-8" - Vary as detailed, 4 ea. Except Largest	"	"
PH5	"	37				42'-0"	Straight	"
PH6	"		37			40'-6"	"	"
PH7	"			37		39'-4"	"	"
PH8	"			10	37	38'-3"	"	"
PV9	"	18			16	6'-6"	Bent	Cap
PV10	"	18			16	6'-11"	"	"
PV11	"	18			16	7'-5"	"	"
PV12	"	18				7'-11"	"	"
PV13	"		18			6'-4"	"	"
PV14	"		16			6'-9"	"	"
PV15	"		16			7'-3"	"	"
PV16	"		18			7'-9"	"	"
PV17	"			16	16	6'-2"	"	"
PV18	"			16		6'-8"	"	"
PV19	"			16		7'-1"	"	"
PV20	"			16		7'-7"	"	"
PV21	"	6				5'-7"	"	"
PV22	"	6				6'-6"	"	"
PV23	"	6				7'-5"	"	"
PV24	"		6			5'-5"	"	"
PV25	"		6			6'-4"	"	"
PV26	"		6			7'-3"	"	"
PV27	"			6		5'-3"	"	"
PV28	"			6		6'-3"	"	"
PV29	"			6		7'-2"	"	"
PV30	"				6	5'-2"	"	"
PV31	"				6	6'-1"	"	"
PV32	"				6	7'-0"	"	"
PH9	"	10				41'-0"	Straight	"
PH10	"		10			39'-7"	"	"
PH11	"				10	37'-3"	"	"
PH12	"	7	7	7	7	9'-8	Bent	"
PH13	"	2	2	2	2	8'-0"	"	"
PH14	"	59	59	55	55	5'-7"	"	"

Note: PV6, 7, & 8 not used.
All bar bends are to be made with a radius of 2½ diameters unless otherwise shown.

For General Notes See Sheet No. 1

Concrete Notes:
1. For splicing the bars are to be overlapped 45 diameters, but not less than 2'-0".
2. All dimensions for bars are measured along the center line of the bar.
3. All exposed corners of concrete to be chamfered 1".
4. Areas of bridge seats shall be built up ¼" high and bush hammered or ground to exact elevations.

Maximum Pressure on Footing:
Direct 2.8 Tons per Sq. ft.
Direct + Wind + Longitudinal 3.4 Tons per Sq. ft.

Dimension W	Stem 1	Stem 2	Stem 3
Pier 1	2'-2⅞"	2'-2¾"	2'-2¾"
Pier 2	2'-2¾"	2'-2¾"	2'-3⅛"
Pier 3	2'-2¼"	2'-2¼"	2'-2¼"
Pier 4	2'-1¼"	2'-1¼"	2'-1¼"

Made by L.G.
Traced by J.L.
Checked by H.Z.
In Charge of Karl W. Zimmer

CEDAR CREEK BRIDGE

PIERS 1, 2, 3, & 4

Commonwealth of Virginia
Department of Highways
Richmond, Virginia Sept., 1950

Hardesty & Hanover
Consulting Engineers
New York, N.Y.

Scale: ¼" = 1'-0"

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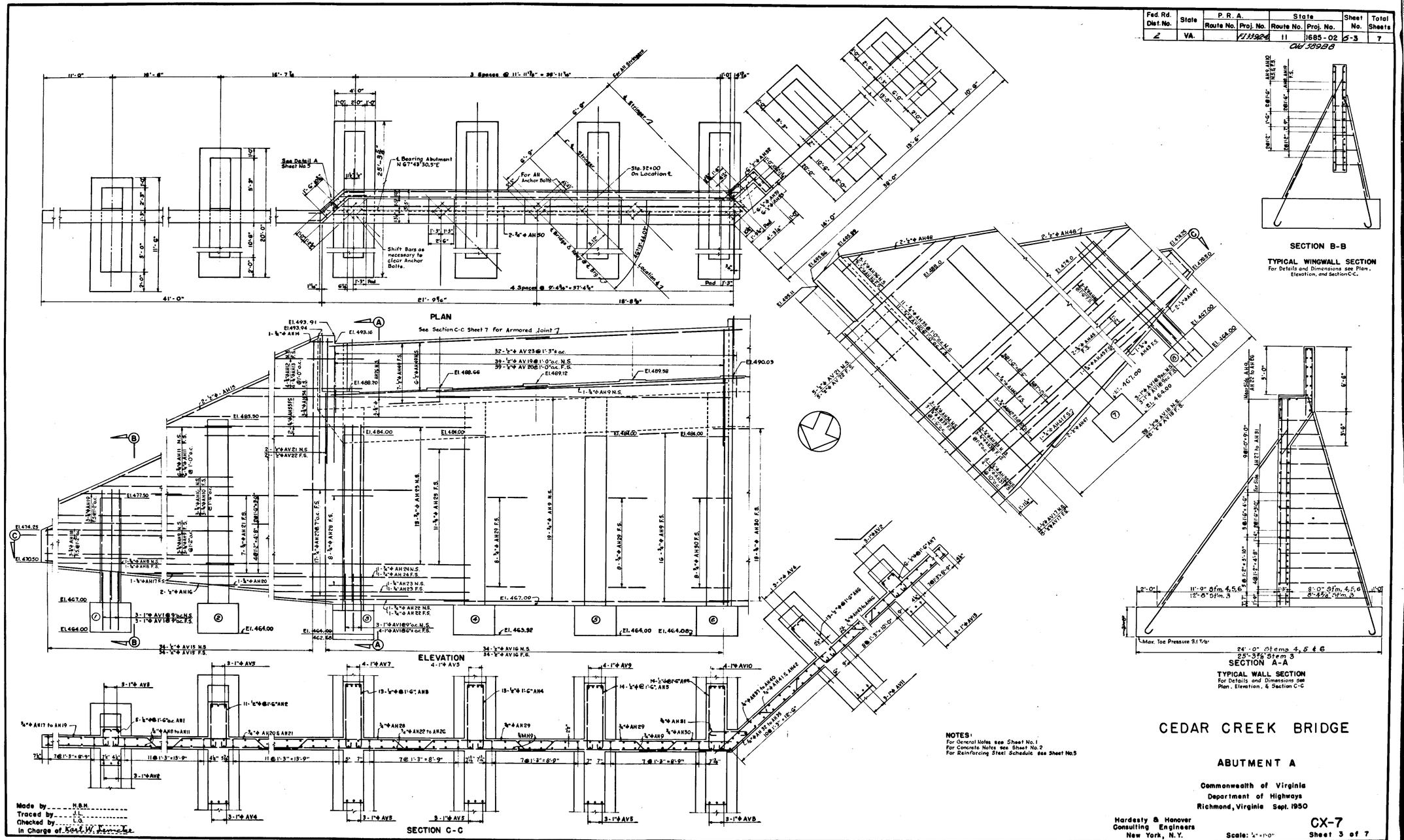
Sheet 2 of 7

02
7 0-0 1

Fed. Rd. Dist. No.	State	P. R. A. Route No.	P. R. A. Proj. No.	State Route No.	State Proj. No.	Sheet No.	Total Sheets
2	VA.		FI 339(24)	11	1685-02	6-3	7

Old 589B8



NOTES:
For General Notes see Sheet No. 1
For Concrete Notes see Sheet No. 2
For Reinforcing Steel Schedule see Sheet No. 5

CEDAR CREEK BRIDGE

ABUTMENT A

Commonwealth of Virginia
Department of Highways
Richmond, Virginia Sept. 1950

Hardesty & Hanover
Consulting Engineers
New York, N.Y.

Scale: 1/4" = 1'-0"

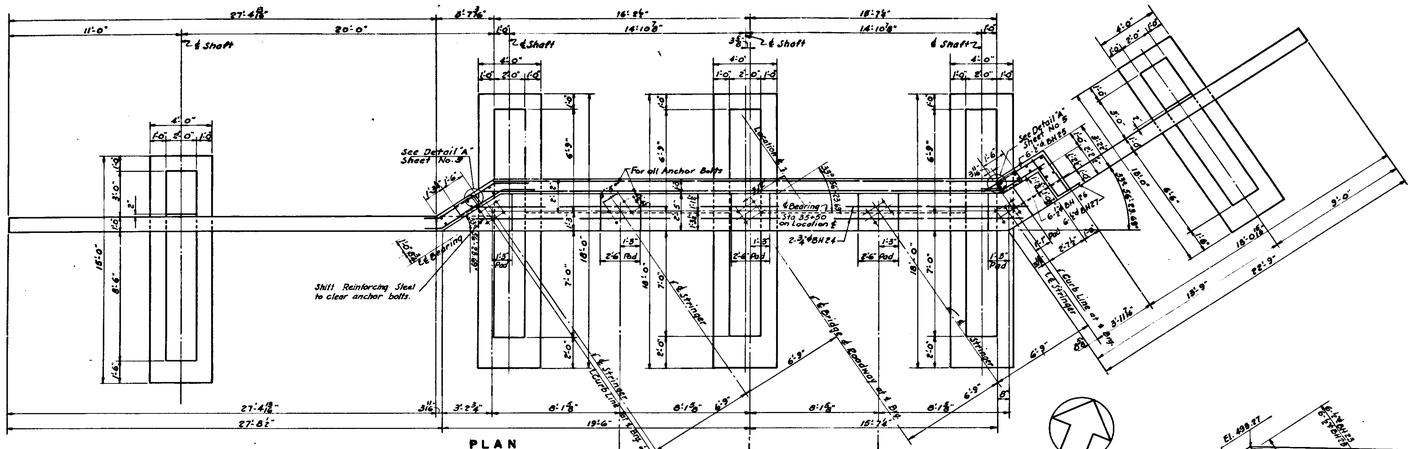
CX-7
Sheet 3 of 7

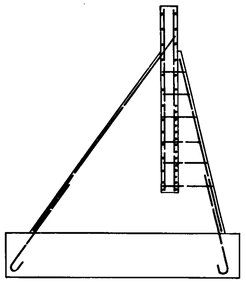
Made by H.B.H.
Traced by J.L.
Checked by L.G.
In Charge of Karl W. Lemcke

11-0-07

Fed. Rd. Dist. No.	State	P. R. A. Route No.	P. R. A. Proj. No.	State Route No.	State Proj. No.	Sheet No.	Total Sheets
2	VA.		F1339(24)	11	1685-02	6-4	7

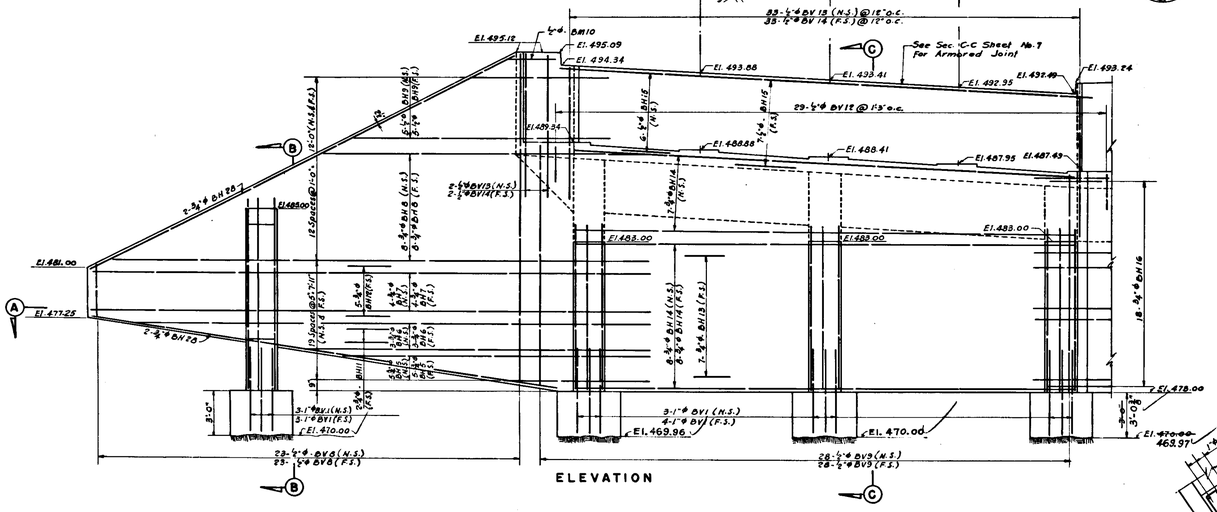
Old 589BB



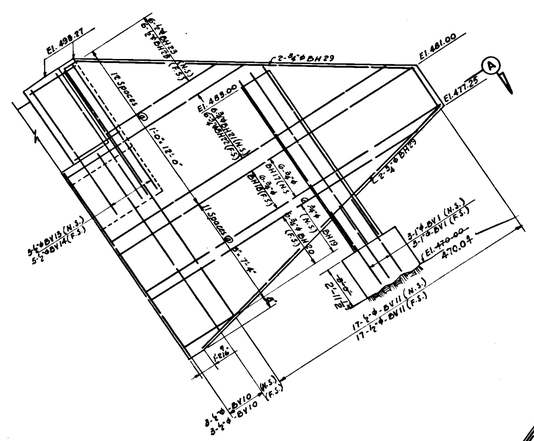


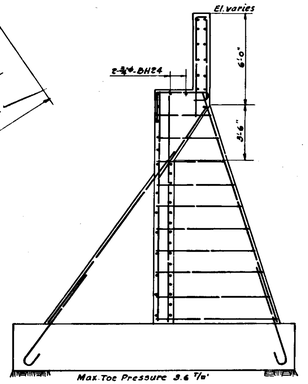
SECTION B-B

Typical Wing Section, for Details & Dimensions see Plan, Elevation & Section A-A



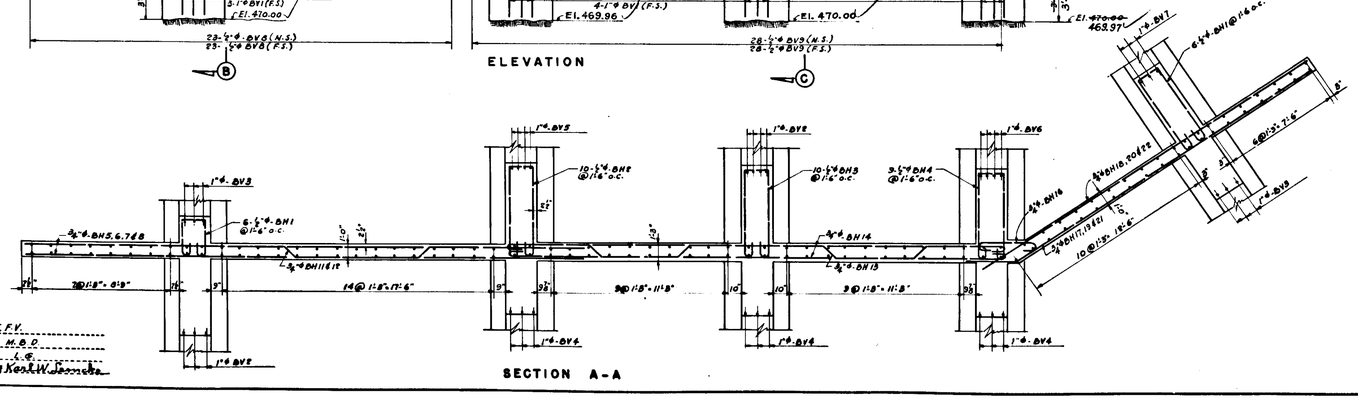
ELEVATION





SECTION C-C

Typical Wall Section, for Details & Dimensions see Plan, Elevation & Section A-A



SECTION A-A

NOTES:

For General Notes see Sheet No. 1
For Concrete Notes see Sheet No. 2
For Reinforcing Steel Schedule see Sheet No. 5

CEDAR CREEK BRIDGE

ABUTMENT B

Commonwealth of Virginia
Department of Highways
Richmond, Virginia Sept. 1950

Hardesty & Hanover
Consulting Engineers
New York, N.Y.

Scale: 1/4" = 1'-0"

CX-7
Sheet 4 of 7

Made by E.F.V.
Traced by M.B.D.
Checked by L.G.
In Charge of Karl W. Lemcke

11-0-07 0 4

Fed. Rd. Dist. No.	State	P. R. A. Route No.	P. R. A. Proj. No.	State Route No.	State Proj. No.	Sheet No.	Total Sheets
2	VA.		711-1-24	11	1685-02	5-5	7

Old 589B-B

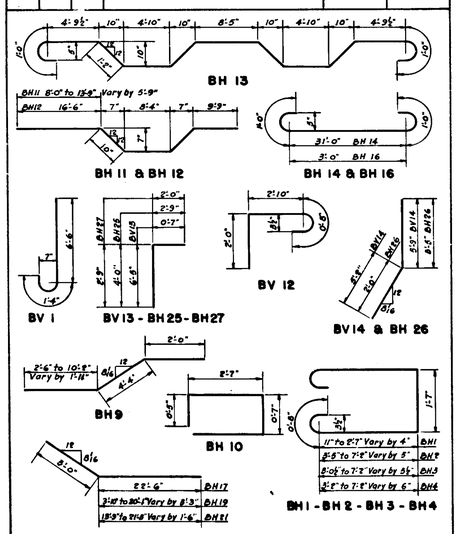
REINFORCING STEEL - ABUTMENT A

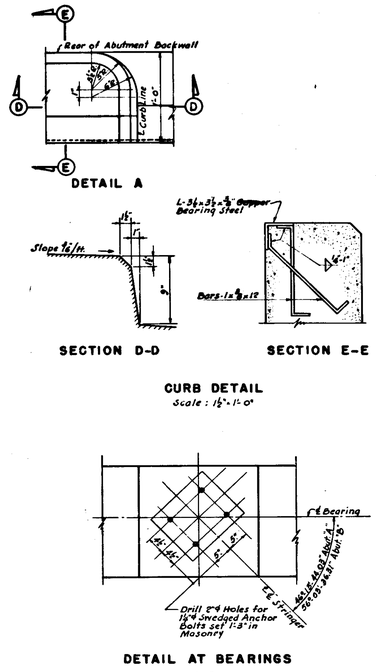
MARK	SIZE	NO.	LENGTH	SHAPE	LOCATION
AV 1	1"ϕ	52	7'-10"	Bent	Footing
AV 2	1"ϕ	6	18'-6"	Straight	Stem
AV 3	1"ϕ	3	18'-8"	"	"
AV 4	1"ϕ	6	28'-0"	"	"
AV 5	1"ϕ	13	22'-0"	"	"
AV 7	1"ϕ	4	21'-6"	"	"
AV 9	1"ϕ	4	22'-6"	"	"
AV 10	1"ϕ	4	23'-0"	"	"
AV 11	1"ϕ	8	24'-6"	"	"
AV 13	1"ϕ	3	15'-0"	"	"
AH 1	5/8"ϕ	5	5'-8" to 7'-7" Vary by 7" (1 each length)	Bent	"
AH 2	5/8"ϕ	11	5'-6" to 15'-10" " " 10" (1 " ")	"	"
AH 3	5/8"ϕ	13	9'-5" to 19'-11" " " 10½" (1 " ")	"	"
AH 4	5/8"ϕ	13	9'-11" to 19'-11" " " 10" (1 " ")	"	"
AH 5	5/8"ϕ	28	9'-3" to 20'-1" " " 10" (2 " ")	"	"
AH 6	5/8"ϕ	13	5'-1" to 14'-1" " " 9" (1 " ")	"	"
AH 7	5/8"ϕ	6	5'-1" to 8'-5" " " 8" (1 " ")	"	"
AV 15	5/8"ϕ	68	3'-4" to 26'-0½" " " 86" (2 " ")	Straight	East Wing
AV 16	5/8"ϕ	66	20'-6" to 22'-6" " " 1½" (4 " ")	"	Main Wall
AV 17	5/8"ϕ	9	22'-2"	"	West Wing
AV 18	5/8"ϕ	56	3'-0" to 27'-9" Vary by 11" (2 each length)	"	" "
AH 8	3/4"ϕ	2	26'-0"	Straight	East Wing
AH 9	3/4"ϕ	42	28'-6"	"	Walls
AH 10	3/4"ϕ	6	19'-1" to 25'-5" Vary by 3'-2" (2 each length)	"	East Wing
AH 11	3/4"ϕ	12	6'-3" to 17'-1" " " 2'-2" (2 " ")	"	" "
AH 12	3/4"ϕ	4	9'-0" to 15'-6" " " 2'-2" (1 " ")	Bent	" "
AH 13	3/4"ϕ	4	8'-8" to 15'-2" " " 2'-2" (1 " ")	"	" "
AH 14	3/4"ϕ	1	8'-8"	"	" "
AH 15	5/8"ϕ	4	23'-3"	Straight	" "
AH 16	5/8"ϕ	4	22'-0"	"	" "
AH 17	3/4"ϕ	1	13'-2"	Bent	" "
AH 18	3/4"ϕ	3	22'-7"	"	" "
AH 19	3/4"ϕ	8	14'-10" to 21'-2" Vary by 3'-8" (1 each length)	"	" "
AH 20	3/4"ϕ	1	14'-9"	"	" "
AH 21	3/4"ϕ	7	23'-10"	"	" "
AH 22	3/4"ϕ	2	17'-0"	Straight	Main Wall
AH 23	3/4"ϕ	2	23'-8"	"	" "
AH 24	3/4"ϕ	2	38'-0"	"	" "
AH 25	3/4"ϕ	24	30'-0"	"	" "
AH 26	3/4"ϕ	3	26'-10" to 31'-2" Vary by 2'-2" (1 each length)	"	" "
AH 27	3/4"ϕ	17	9'-0"	"	" "
AH 28	3/4"ϕ	8	21'-11"	Bent	" "
AH 29	3/4"ϕ	16	20'-0"	"	" "
AH 30	3/4"ϕ	8	12'-2"	"	" "
AH 31	3/4"ϕ	16	5'-8"	"	" "
AH 32	3/4"ϕ	4	12'-3" to 39'-6" Vary by 9'-1" (1 each length)	"	West Wing
AH 33	3/4"ϕ	3	40'-7"	"	" "
AH 34	3/4"ϕ	3	34'-0" to 38'-7" Vary by 2'-3½" (1 each length)	"	" "
AH 35	3/4"ϕ	11	17'-5" to 32'-5" " " 1'-6" (1 " ")	"	" "
AH 36	5/8"ϕ	10	2'-5" to 8'-5" " " 1'-6" (2 " ")	Straight	" "
AH 37	3/4"ϕ	4	11'-8" to 38'-6" " " 9'-1" (1 " ")	"	" "
AH 38	3/4"ϕ	3	38'-0"	"	" "
AH 39	3/4"ϕ	3	31'-11" to 36'-6" Vary by 2'-3½" (1 each length)	"	" "
AH 40	3/4"ϕ	11	18'-4" to 33'-4" " " 1'-6" (1 " ")	"	" "
AH 41	3/4"ϕ	1	16'-6"	Bent	" "
AH 42	3/4"ϕ	8	23'-10"	"	" "
AH 43	3/4"ϕ	1	22'-6"	"	" "
AH 45	3/4"ϕ	2	28'-8"	"	" "
AH 46	3/4"ϕ	3	23'-4" to 27'-8" Vary by 2'-3½" (1 each length)	"	" "
AH 47	5/8"ϕ	4	20'-0"	Straight	" "
AH 48	1/2"ϕ	4	20'-6"	"	" "
AV 19	5/8"ϕ	39	7'-4"	Bent	Main Wall
AV 20	5/8"ϕ	39	11'-5"	"	" "
AV 21	5/8"ϕ	7	8'-1"	"	" "
AV 22	5/8"ϕ	7	12'-2"	"	" "
AV 23	5/8"ϕ	32	5'-6"	"	" "
AH 49	5/8"ϕ	26	21'-0"	Straight	" "
AH 50	3/4"ϕ	2	40'-8"	"	" "
AH 51	5/8"ϕ	6	5'-8"	Bent	West Wing
AH 52	5/8"ϕ	6	6'-4"	"	" "
AH 53	5/8"ϕ	6	4'-4"	"	" "
AH 54	3/4"ϕ	3	12'-0" to 16'-4" Vary by 2'-2" (1 each length)	Straight	East Wing
AH 55	3/4"ϕ	2	12'-0"	"	" "
			Bars not used AV6, AV8, AV12, AV14, AH44		

Made by F.E.V. & H.D.N.
Traced by H.R.O.
Checked by L.O.
In Charge of Karl W. Lorscher

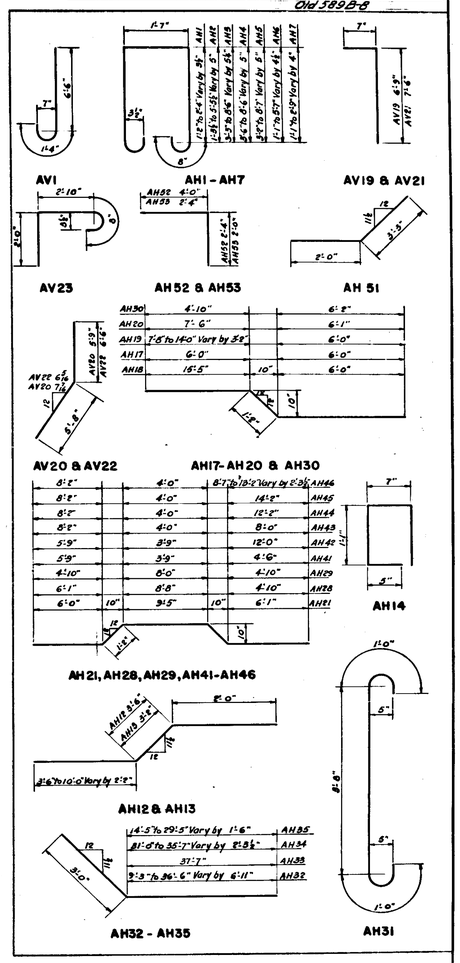
REINFORCING STEEL - ABUTMENT B

MARK	SIZE	NO.	LENGTH	SHAPE	LOCATION
BV 1	1"ϕ	38	7'-10"	Bent	Stem Footing
BV 2	1"ϕ	7	15'-6"	Straight	Stem
BV 3	1"ϕ	6	18'-6"	"	"
BV 4	1"ϕ	9	13'-3"	"	"
BV 5	1"ϕ	4	16'-6"	"	"
BV 6	1"ϕ	4	14'-6"	"	"
BV 7	1"ϕ	3	10'-3"	"	"
BH 1	5/8"ϕ	12	4'-9" to 8'-1" Vary by 8" (2 each length)	Bent	"
BH 2	5/8"ϕ	10	9'-9" to 17'-8" " " 10" (1 " ")	"	"
BH 3	5/8"ϕ	10	9'-0" to 17'-8" " " 11" (1 " ")	"	"
BH 4	5/8"ϕ	9	9'-8" to 17'-8" " " 12" (1 " ")	"	"
BV 8	5/8"ϕ	46	3'-1" to 21'-3" " " 10" (2 " ")	Straight	West Wing
BV 9	5/8"ϕ	56	14'-0" to 15'-7½" " " 1½" (4 " ")	"	Main Wall
BV 10	5/8"ϕ	6	14'-0"	"	East Wing
BV 11	5/8"ϕ	34	3'-2" to 19'-2" Vary by 12" (2 each length)	"	" "
BH 5	3/4"ϕ	10	9'-8" to 21'-4" " " 2'-11" (2 " ")	"	West "
BH 6	3/4"ϕ	6	24'-0" to 33'-6" " " 5'-9" (2 " ")	"	" "
BH 7	3/4"ϕ	8	36'-9"	"	" "
BH 8	3/4"ϕ	16	20'-4" to 35'-9" Vary by 1'-11" (2 each length)	"	" "
BH 9	5/8"ϕ	10	8'-10" to 16'-6" " " 1'-11" (2 " ")	Bent	" "
BH 10	5/8"ϕ	1	6'-8"	"	" "
BH 11	3/4"ϕ	2	27'-9" to 33'-6" Vary by 5'-9" (1 each length)	"	" "
BH 12	3/4"ϕ	5	36'-3"	"	" "
BH 13	5/8"ϕ	7	34'-4"	"	Main Wall
BH 14	3/4"ϕ	23	33'-0"	"	" "
BH 15	5/8"ϕ	18	32'-6"	Straight	" "
BH 16	3/4"ϕ	18	5'-0"	Bent	East Wing
BH 17	3/4"ϕ	6	28'-6"	"	" "
BH 18	3/4"ϕ	6	24'-6"	Straight	" "
BH 19	3/4"ϕ	6	6'-10" to 29'-8" Vary by 5'-3" (1 each length)	Bent	" "
BH 20	3/4"ϕ	6	5'-10" to 22'-1" " " 3'-3" (1 " ")	Straight	" "
BH 21	3/4"ϕ	6	16'-9" to 24'-3" " " 1'-6" (1 " ")	Bent	" "
BH 22	3/4"ϕ	6	15'-9" to 23'-3" " " 1'-6" (1 " ")	Straight	" "
BH 23	5/8"ϕ	12	0'-10" to 8'-4" " " 1'-6" (2 " ")	"	" "
BH 24	3/4"ϕ	2	34'-6"	"	Main Wall
BV 12	5/8"ϕ	29	3'-6"	Bent	" "
BV 13	5/8"ϕ	40	7'-0"	"	" "
BV 14	5/8"ϕ	40	10'-11"	"	" "
BH 25	5/8"ϕ	6	6'-9"	"	East Wing
BH 26	5/8"ϕ	6	5'-5"	"	" "
BH 27	5/8"ϕ	6	4'-9"	"	" "
BH 28	3/4"ϕ	4	30'-5"	Straight	West Wing
BH 29	5/8"ϕ	4	21'-5"	"	East Wing





NOTES: Pads to be ¼" high and Bush Hammered or Ground to exact Elevation.
Red Lead and Canvas to be used under Bearing Plates. See Specifications.
For General Notes see Sheet No. 1
For Concrete Notes see Sheet No. 2



CEDAR CREEK BRIDGE

BAR LISTS AND DETAILS ABUTMENTS A AND B

Commonwealth of Virginia
Department of Highways
Richmond, Virginia Sept. 1950

Hardesty & Hanover
Consulting Engineers
New York, N.Y.

Scale: As Noted

CX-7
Sheet 5 of 7

Fed. Rd. Dist. No.	State	P.R.A. Route No.	P.R.A. Proj. No.	State Route No.	State Proj. No	Sheet No	Total Sheets
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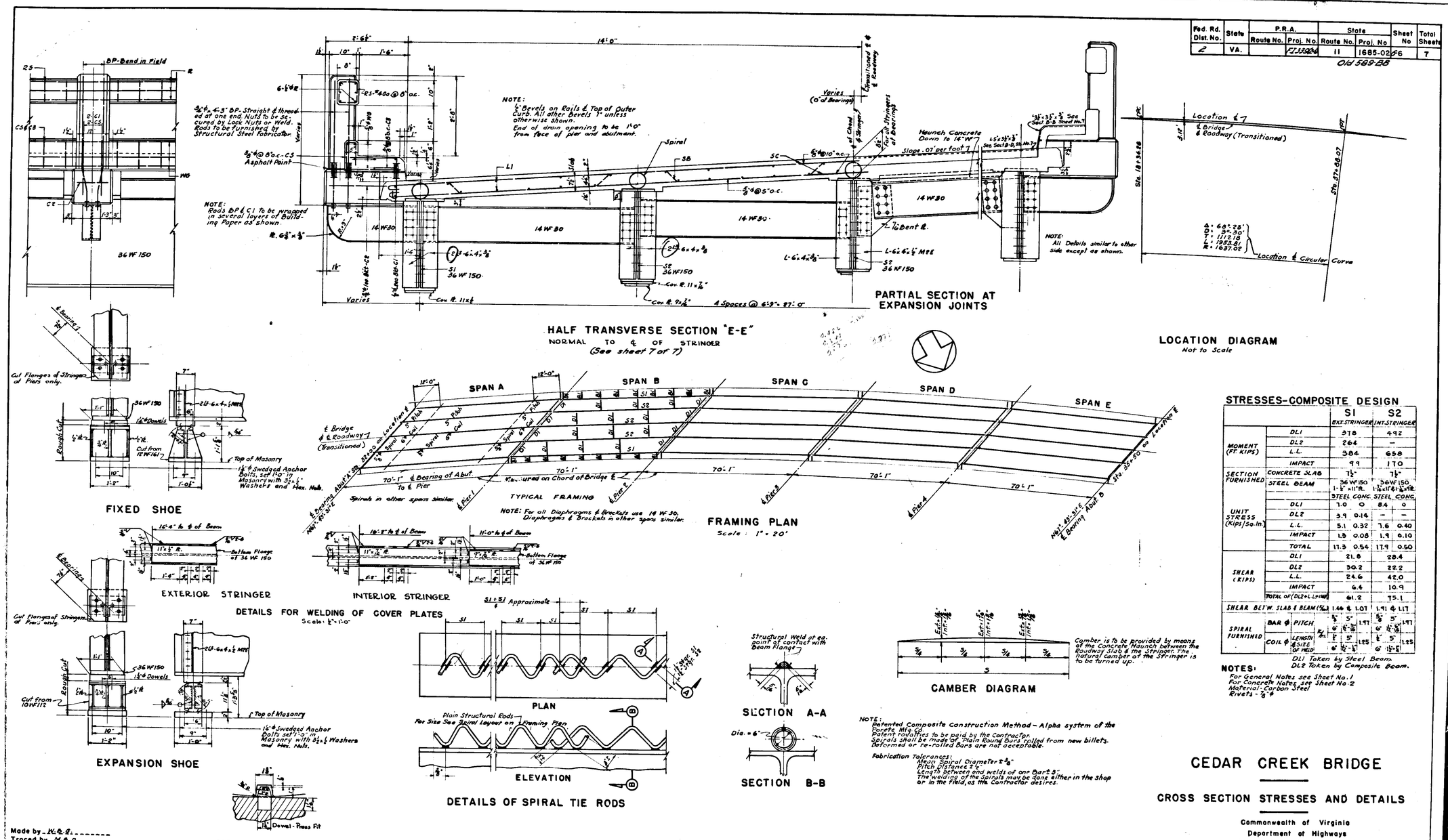
Old 589-BB



STRESSES-COMPOSITE DESIGN

		S1 EXT. STRINGER		S2 INT. STRINGER	
MOMENT (FT. KIPS)	DL1	378		492	
	DL2	264		–	
	L.L.	384		658	
	IMPACT	99		170	
SECTION FURNISHED	CONCRETE SLAB	7½"		7½"	
	STEEL BEAM	36WF150 1-½"x11"Pl.		36WF150 1-1/16"x11"Pl. & 1-½"x14"Pl.	
		STEEL	CONC.	STEEL	CONC.
UNIT STRESS (Kips/Sq.In.)	DL1	1.0	0	8.4	0
	DL2	3.9	0.14	–	–
	L.L.	5.1	0.32	7.6	0.40
	IMPACT	1.9	0.08	1.9	0.10
	TOTAL	11.9	0.54	17.9	0.50
SHEAR (KIPS)	DL1	21.8		28.4	
	DL2	30.2		22.2	
	L.L.	24.6		42.0	
	IMPACT	6.4		10.9	
	TOTAL OF (DL2+L.L+IM)	61.2		75.1	
SHEAR BET'W. SLAB & BEAM (Kips)		1.46 & 1.07		1.91 & 1.17	
SPIRAL FURNISHED	BAR ϕ PITCH	⅝"	5"	⅝"	5"
		1.77		1.77	
	COIL ϕ LENGTH & SIZE OF WELD	⅝"	5"	⅝"	5"
		1.25		1.25	

DL1 Taken by Steel Beam.
DL2 Taken by Composite Beam.

NOTES:
For General Notes see Sheet No. 1
For Concrete Notes see Sheet No. 2
Material - Carbon Steel
Rivets - ⅞ ϕ

NOTE:
Patented Composite Construction Method – Alpha system of the Porete Mfg. Co.
Patent royalties to be paid by the Contractor.
Spirals shall be made of Plain Round Bars rolled from new billets. Deformed or re-rolled Bars are not acceptable.

Fabrication Tolerances:
Mean Spiral Diameter ± ⅛"
Pitch, C Stirrups ± ⅛"
Length between end welds of one Bar ± ⅛"
The welding of the Spirals may be done either in the Shop or in the Field, as the Contractor desires.

CEDAR CREEK BRIDGE

CROSS SECTION STRESSES AND DETAILS

Commonwealth of Virginia
Department of Highways
Richmond, Virginia Sept., 1950

Hardesty & Hanover
Consulting Engineers
New York, N.Y.

CX-7

Scale: ½" = 1'-0" ℄ as Noted Sheet 6 of 7

Made by W.E.S.
Traced by M.P.O.
Checked by J.H.
In Charge of Karl W. Demcke

7-0-11

Fed. Rd. Dist. No.	State	P.R.A. Route No.	P.R.A. Proj. No.	State Route No.	State Proj. No.	Sheet No.	Total Sheets
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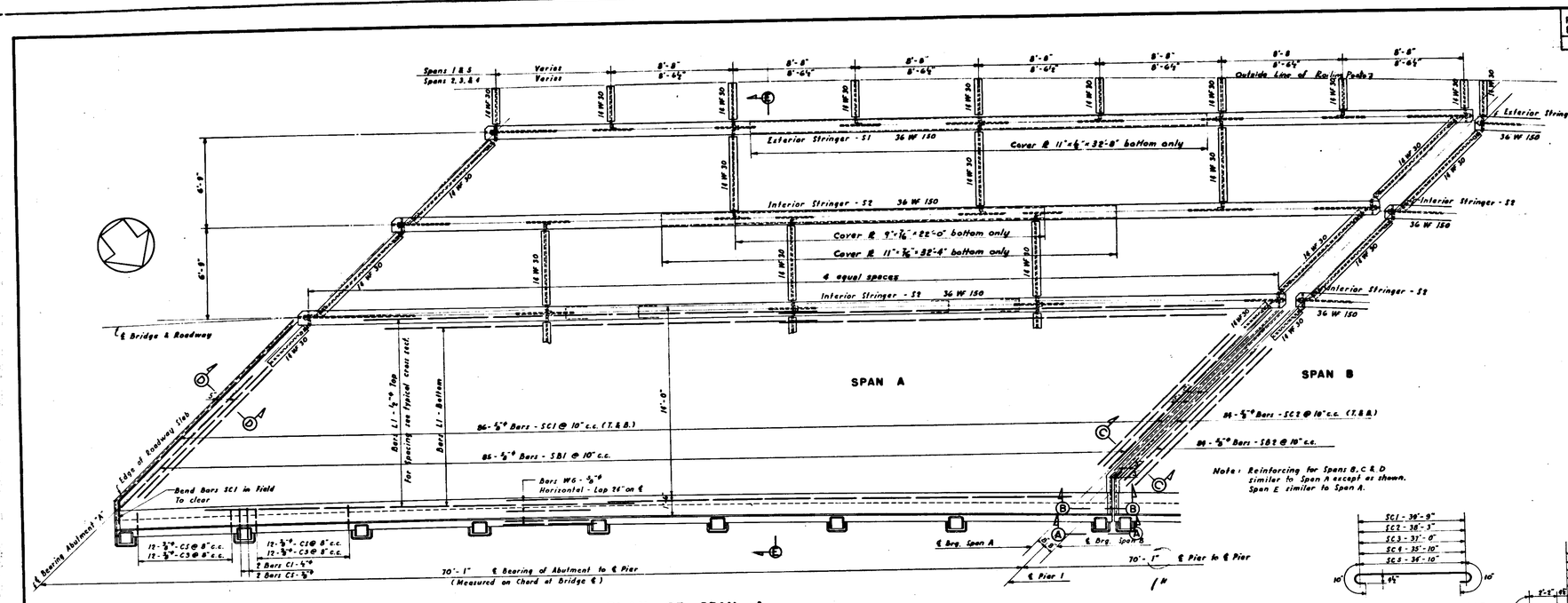
Old 589-08

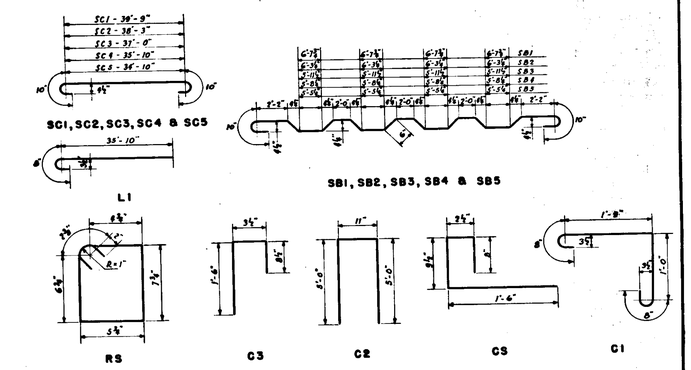


Note: Reinforcing for Spans B, C & D similar to Span A except as shown. Span E similar to Span A.

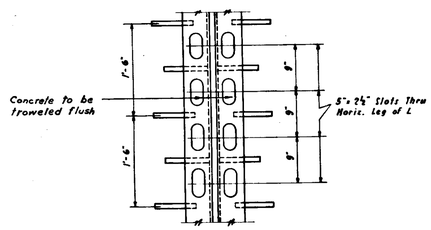
PLAN OF SPAN A

Other Spans Similar

REINFORCING STEEL							
Mark	Size	No.	Length	Shape	Location		
SB1	½"ϕ	85	42'-7"	Bent	Roadway Slab	-	Span A
SB2	½"ϕ	86	41'-1"	-	-	-	Span B
SB3	½"ϕ	86	39'-10"	-	-	-	Span C
SB4	½"ϕ	86	38'-9"	-	-	-	Span D
SB5	½"ϕ	85	37'-9"	-	-	-	Span E
SC1	½"ϕ	172	41'-5"	-	-	-	Span A
SC2	½"ϕ	168	39'-11"	-	-	-	Span B
SC3	½"ϕ	168	38'-8"	-	-	-	Span C
SC4	½"ϕ	168	37'-6"	-	-	-	Span D
SC5	½"ϕ	172	36'-6"	-	-	-	Span E
L1	½"ϕ	450	36'-6"	-	-	-	All Spans
RS	#6 Ga.	960	2'-10"	-	Rail	-	"
R	½"ϕ	120	35'-10"	Straight	-	-	"
WG	⅝"ϕ	160	36'-0"	-	Curb	-	"
CS	⅜"	1140	3'-2"	Bent	-	-	"
C1	½"ϕ	180	8'-1"	-	-	-	"
C2	½"ϕ	90	10'-11"	-	-	-	"
C3	½"ϕ	960	2'-6"	-	-	-	"

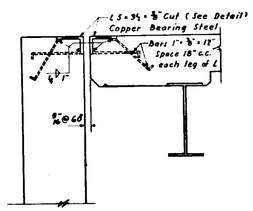


Notes:
For General Notes See Sheet No. 1.
For Concrete Notes See Sheet No. 2.
Material: Carbon Steel
Rivets ⅞"ϕ



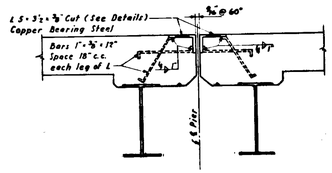
PLAN OF ARMORED JOINT

Scale: 1" = 1'-0"



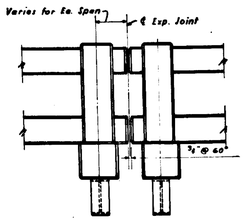
SECTION D-D

Scale: 1" = 1'-0"



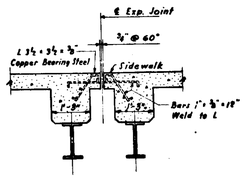
SECTION C-C

Scale: 1" = 1'-0"



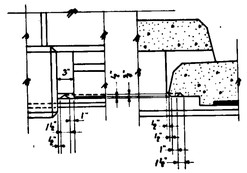
ELEVATION A-A

Scale: ½" = 1'-0"



SECTION B-B

Scale: ½" = 1'-0"



DETAILS OF DRIP BEAD

Scale: 1" = 1'-0"

Made by W.R.G. & A.R.
Traced by W.K.K.
Checked by H.T.
In Charge Karl W. Lemcke

7f of 7

CEDAR CREEK BRIDGE

DECK AND FRAMING PLAN

Commonwealth of Virginia
Department of Highways
Richmond, Virginia Sept., 1950

Hardesty & Hanover
Consulting Engineers
New York, N.Y.

CX-7

Scale: ¼" = 1'-0" & As Noted Sheet 7 of 7