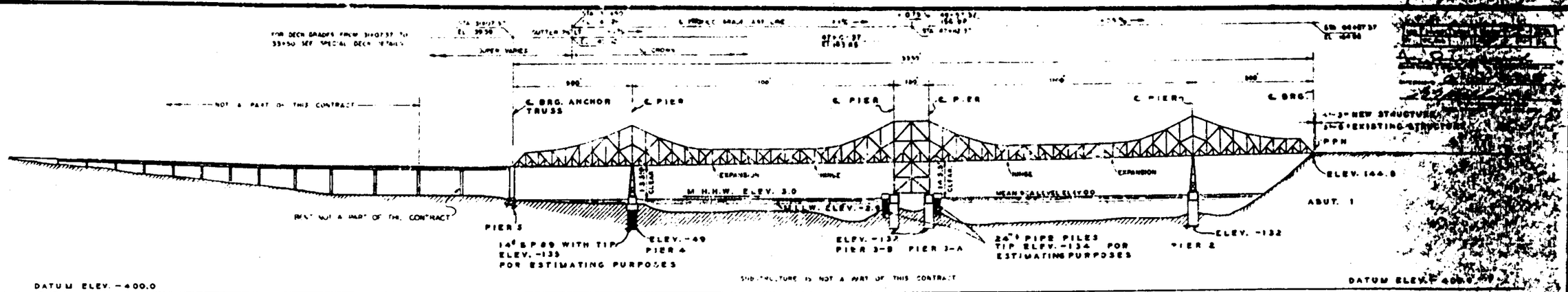


ELEVATION

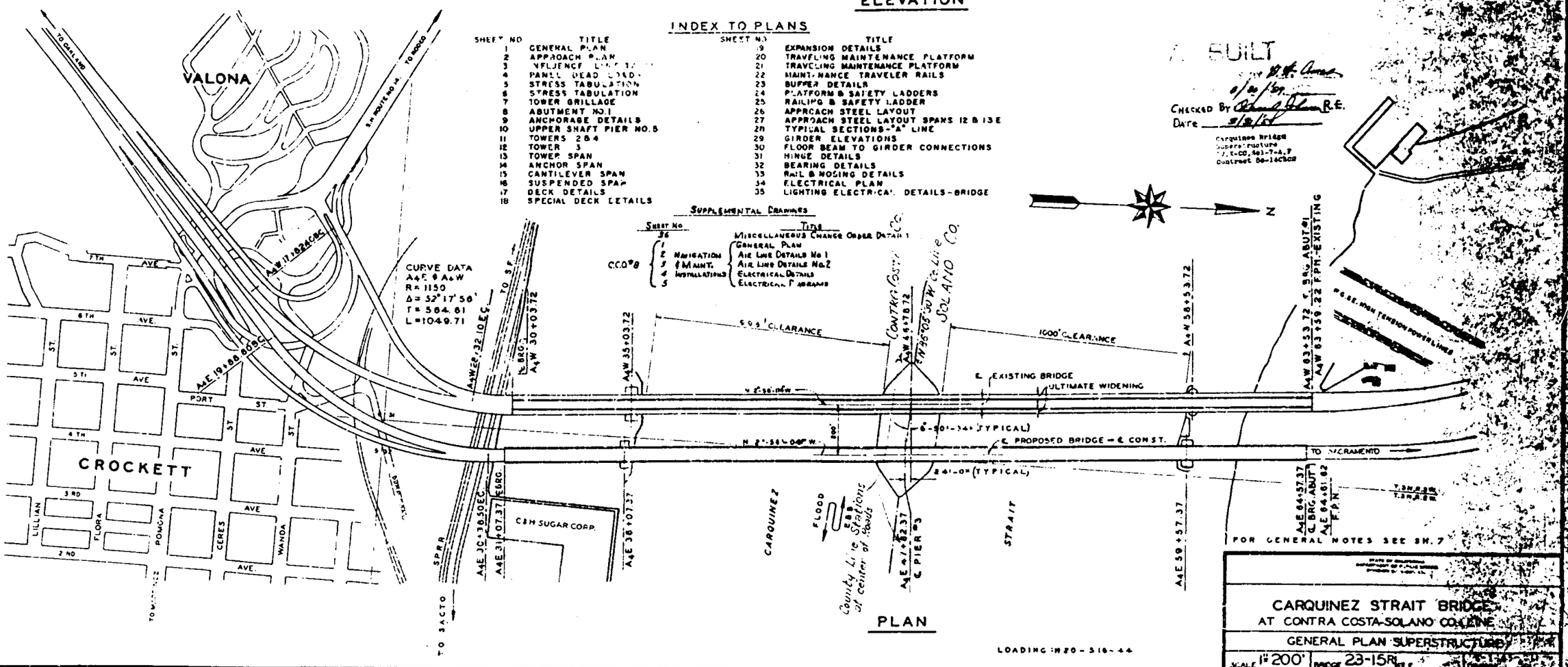
INDEX TO PLANS

SHEET NO	TITLE	SHEET NO	TITLE
1	GENERAL PLAN	19	EXPANSION DETAILS
2	APPROACH PLAN	20	TRAVELING MAINTENANCE PLATFORM
3	INFLUENCE LINE [illegible]	21	TRAVELING MAINTENANCE PLATFORM
4	PANEL DEAD LOADS	22	MAINTENANCE TRAVELER RAILS
5	STRESS TABULATION	23	BUFFER DETAILS
6	STRESS TABULATION	24	PLATFORM & SAFETY LADDERS
7	TOWER GRILLAGE	25	RAILING & SAFETY LADDER
8	ABUTMENT NO.1	26	APPROACH STEEL LAYOUT
9	ANCHORAGE DETAILS	27	APPROACH STEEL LAYOUT SPANS 12 & 13 E
10	UPPER SHAFT PIER NO.5	28	TYPICAL SECTIONS-"A" LINE
11	TOWERS 2 & 4	29	GIRDER ELEVATIONS
12	TOWER 3	30	FLOOR BEAM TO GIRDER CONNECTIONS
13	TOWER SPAN	31	HINGE DETAILS
14	ANCHOR SPAN	32	BEARING DETAILS
15	CANTILEVER SPAN	33	RAIL & NOSING DETAILS
16	SUSPENDED SPAN	34	ELECTRICAL PLAN
17	DECK DETAILS	35	LIGHTING ELECTRICAL DETAILS-BRIDGE
18	SPECIAL DECK DETAILS		

SUPPLEMENTAL DRAWINGS

SHEET NO		TITLE
36		MISCELLANEOUS CHANGE ORDER DETAILS
C.C.O.#8	1	GENERAL PLAN
	2	NAVIGATION & MAINT. INSTALLATIONS — AIR LINE DETAILS NO 1
	3	AIR LINE DETAILS NO.2
	4	ELECTRICAL DETAILS
	5	ELECTRICAL DIAGRAMS

A. BUILT
[illegible] 8/20/59
CHECKED BY [illegible] R.E.
DATE 8/20/59
Carquinez Bridge Superstructure
[illegible]
Contract 56-14CBC2



PLAN

LOADING: H20-S16-44

CARQUINEZ STRAIT BRIDGE
AT CONTRA COSTA-SOLANO CO. LINE
GENERAL PLAN SUPERSTRUCTURE
SCALE 1" = 200' BRIDGE 23-15R FILE

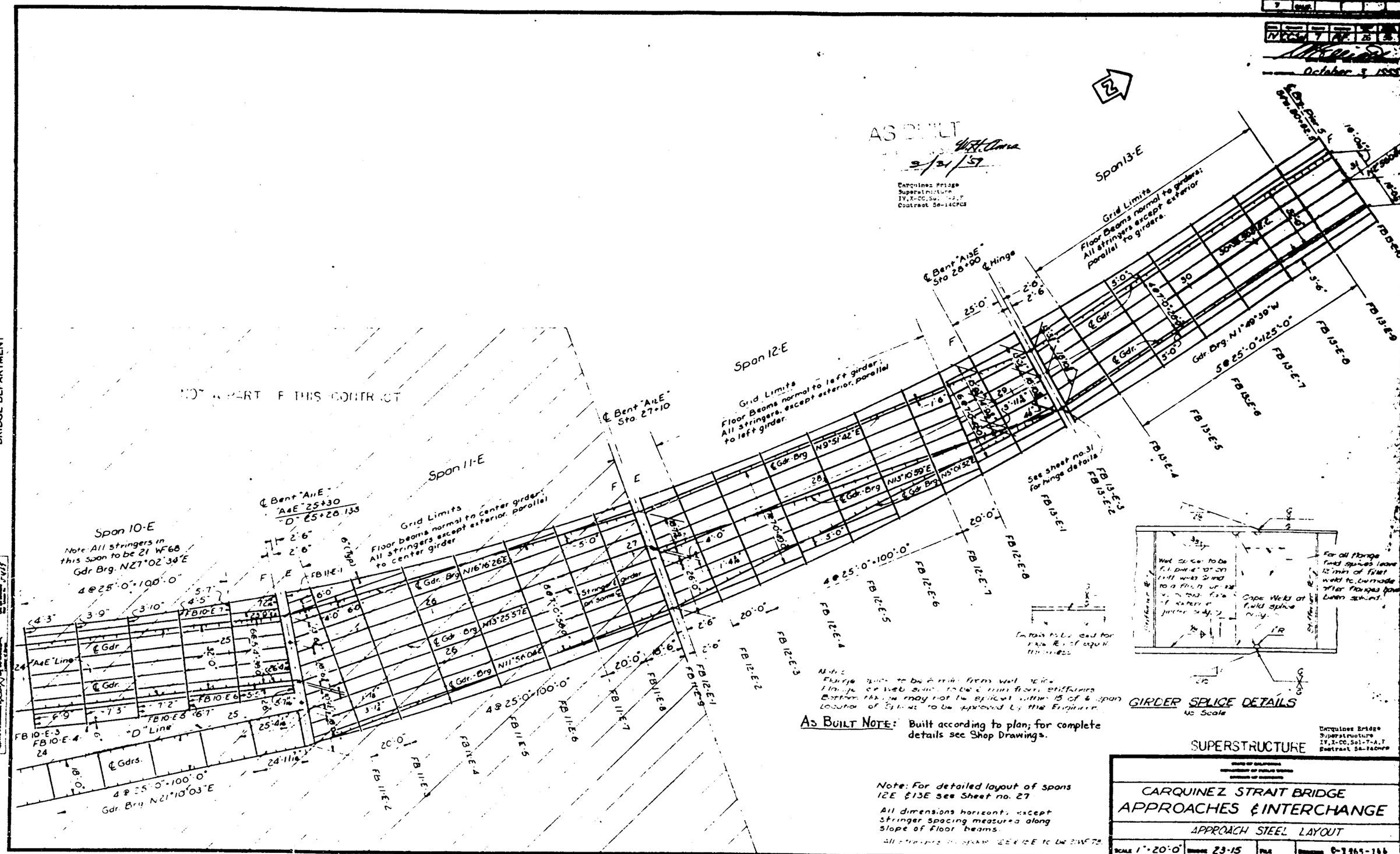
BRIDGE DEPARTMENT

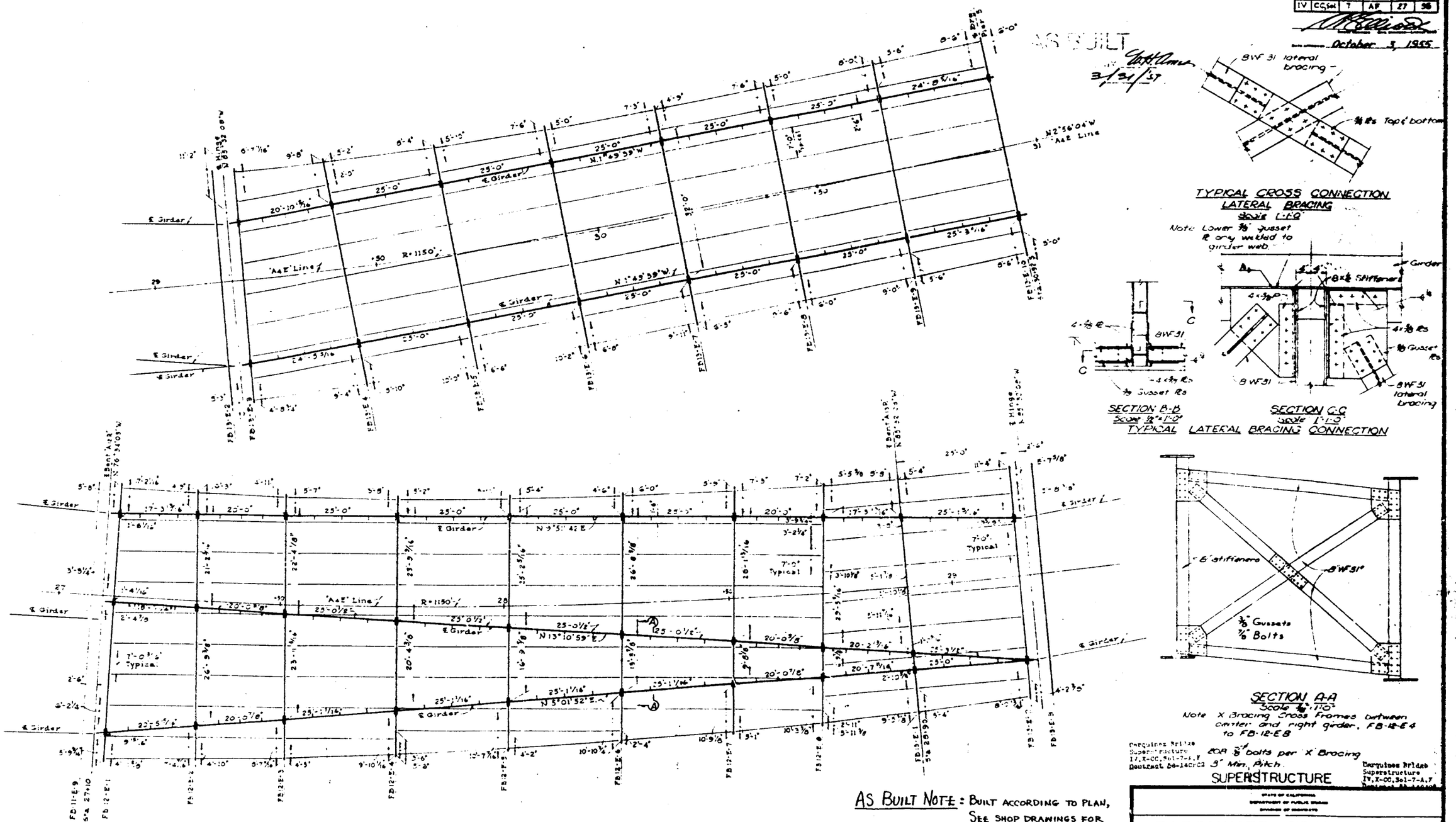
DESIGN 3 SECTION

Squad 4

AS BUILT CONTRACT NO. 56-14CBC2

BRIDGE DEPARTMENT





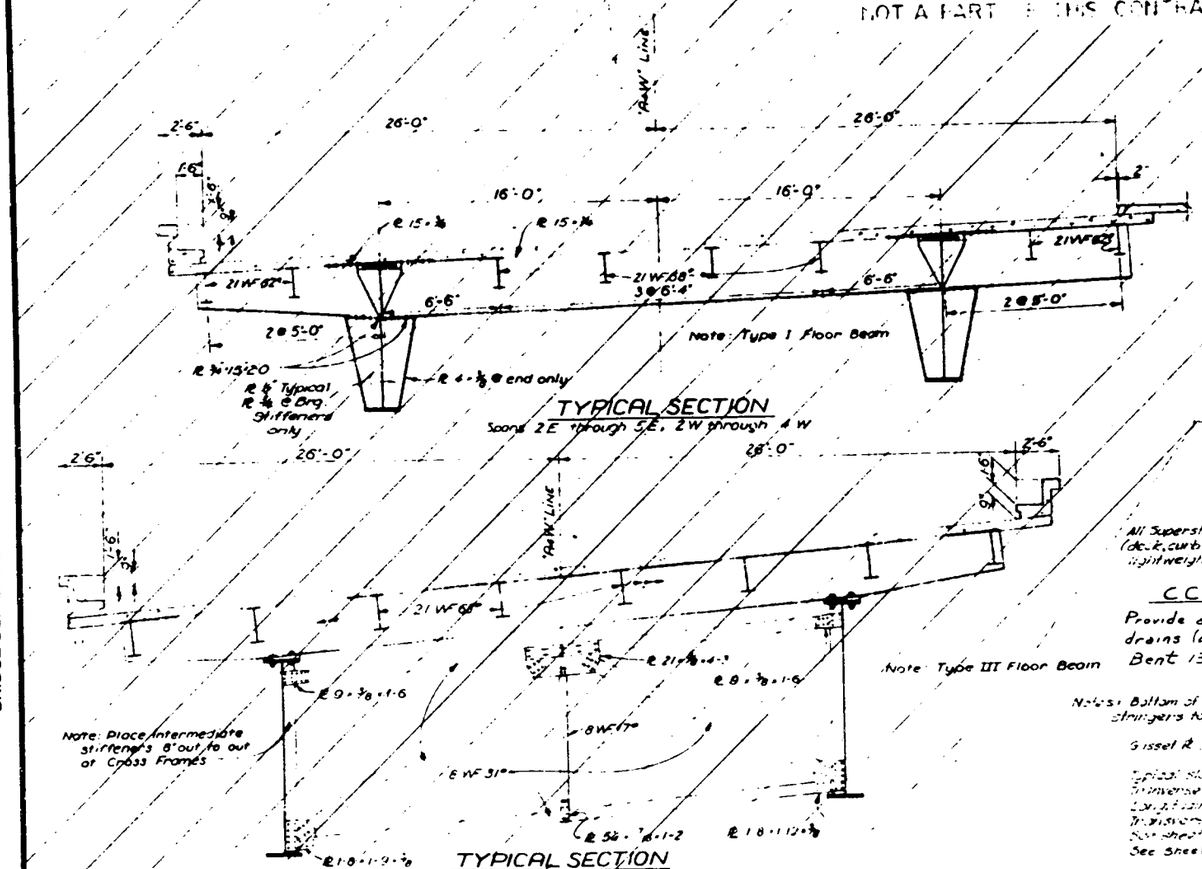
AS BUILT
3/31/57
October 3, 1955
8WF 31 lateral bracing
TYPICAL CROSS CONNECTION LATERAL BRACING
Scale 1"=1'0"
Note Lower 3/8" gusset R only welded to girder web.
SECTION B-B
Scale 1/2"=1'-0"
SECTION C-C
Scale 1"=1'-0"
TYPICAL LATERAL BRACING CONNECTION
8WF31
3/8" Gusset Rs
8WF31 lateral bracing
SECTION A-A
Scale 3/8"=1'-0"
Note X Bracing Cross Frames between center and right girder, FB-12-E4 to FB-12-E8
208 3/8" bolts per X Bracing
3" Min. Pitch
SUPERSTRUCTURE
Carquinez Bridge Superstructure IV,X-CC,Sol-7-A,F
AS BUILT NOTE: BUILT ACCORDING TO PLAN, SEE SHOP DRAWINGS FOR COMPLETE DETAILS.
CARQUINEZ STRAIT BRIDGE
APPROACHES & INTERCHANGE
Approach Steel Layout, Spans 12&13E
1"=10'0" except as shown
BRIDGE 23-15
DRAWING 1165-147
PREL. DRAWING NO. P-1165
BRIDGE DEPARTMENT
DESIGN 3 SECTION

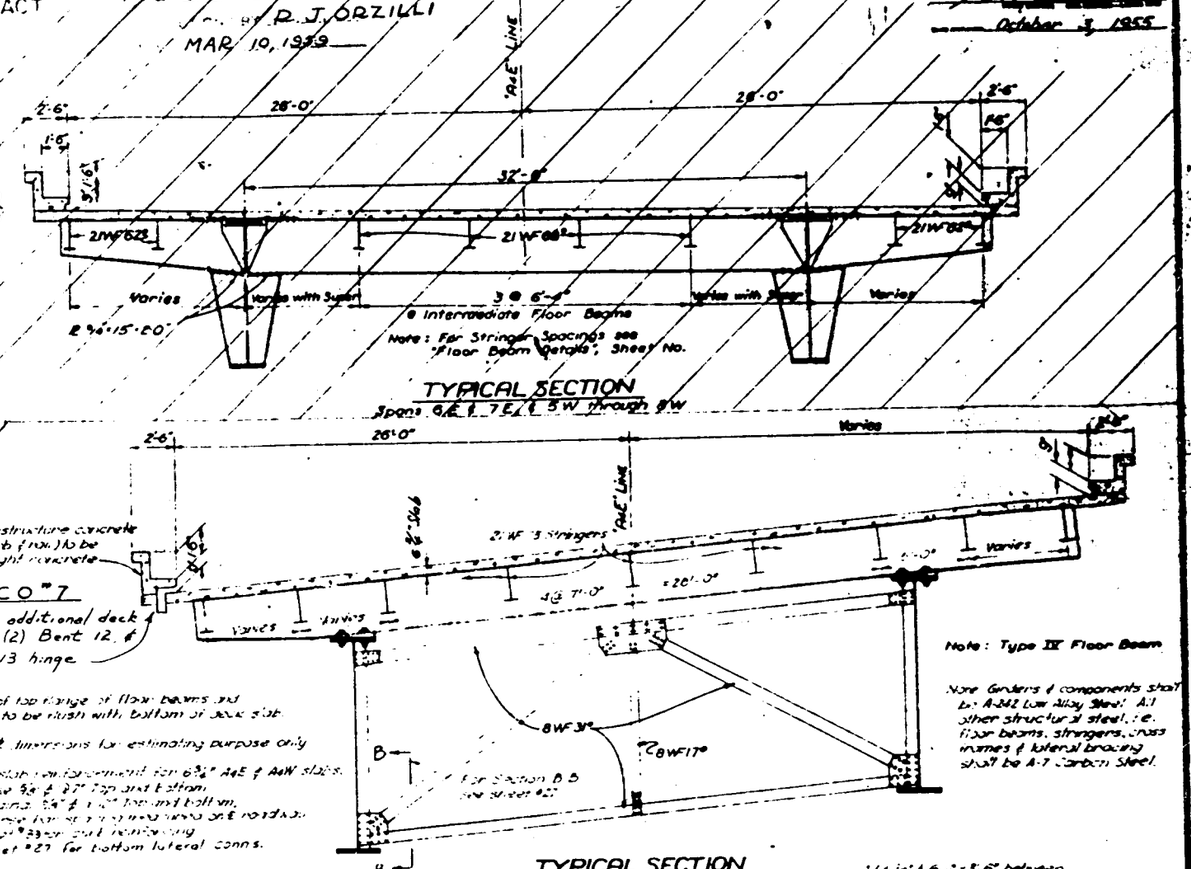
BRIDGE DEPARTMENT

NOT A PART OF THIS CONTRACT

AS BUILT
R. J. ORZILLI
MAR. 10, 1959

October 3, 1955





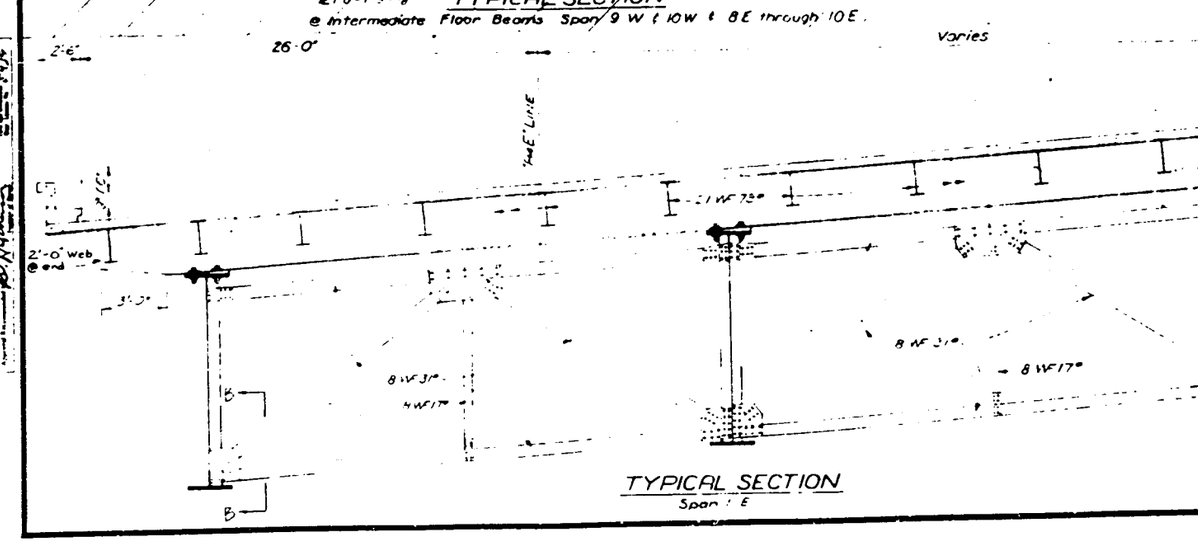
All Superstructure concrete (deck, curb & rail) to be lightweight concrete

CCO #7
Provide additional deck drains (2) Bent 12, & Bent 13 hinge

Notes: Bottom of top flange of floor beams and stringers to be flush with bottom of deck slab

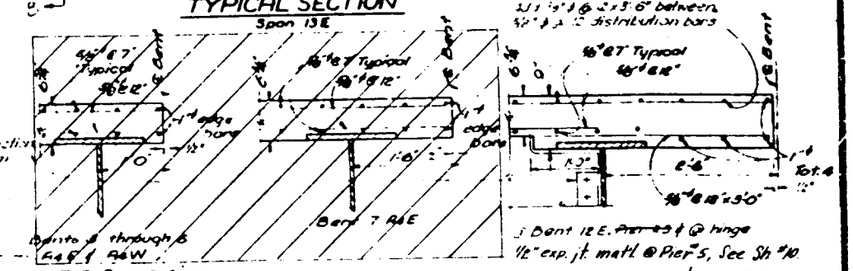
Gusset & dimensions for estimating purpose only

Typical slab reinforcement for 6½" A&E & A&W slabs.
Transverse ⅝ @ 27" top and bottom
Longitudinal ⅝" @ 1'-0" top and bottom
Transverse top steel required only at hinges
See Sheet #33 for cut reinforcing
See Sheet #27 for bottom lateral conns.



Note: Type V Floor Beam

Typical stringer connection A1307 Skewback from Span 4 W with ⅞" ϕ HS bolts.



AS BUILT NOTE: SEE SHOP DRAWINGS FOR COMPLETE STRUCTURAL STEEL DETAILS.

SLAB OVERHANGS @ END FLOOR BEAMS & HINGE

SUPERSTRUCTURE

Note
All girder webs [illegible] 52" at Span 13-E

B. Maines Bridge
Superstructure
IV, X-CC, 5, 6-7-A, 7
Contract 46-140

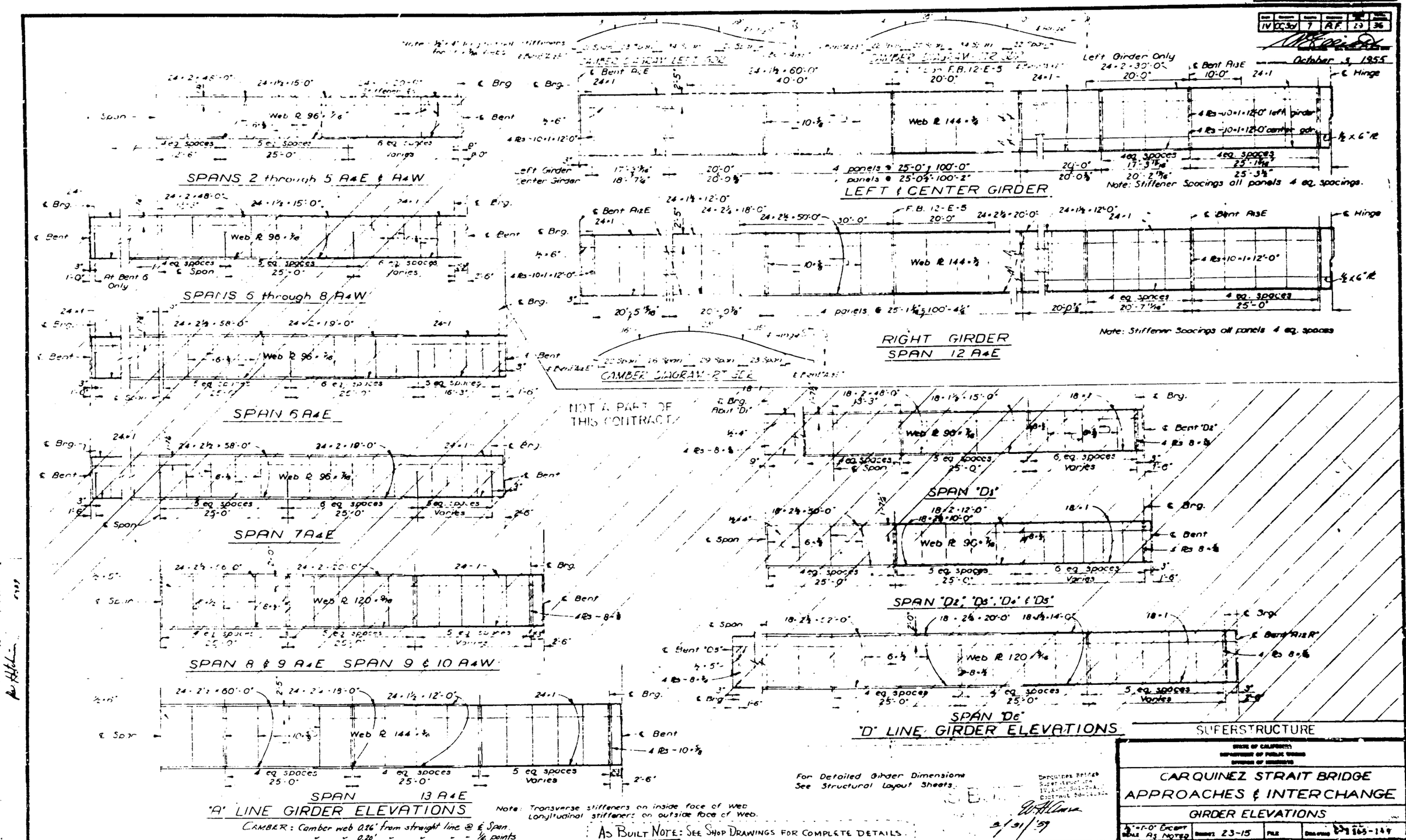
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

CARQUINEZ STRAIT BRIDGE
APPROACHES AND INTERCHANGE
TYPICAL SECTIONS - "A" LINE

SCALE 4"=1'-0" | BRIDGE 23-15 | FILE | DRAWING 0-1265-148

PREL. DRAWING NO. P-1165

DESIGN 3 SECTION

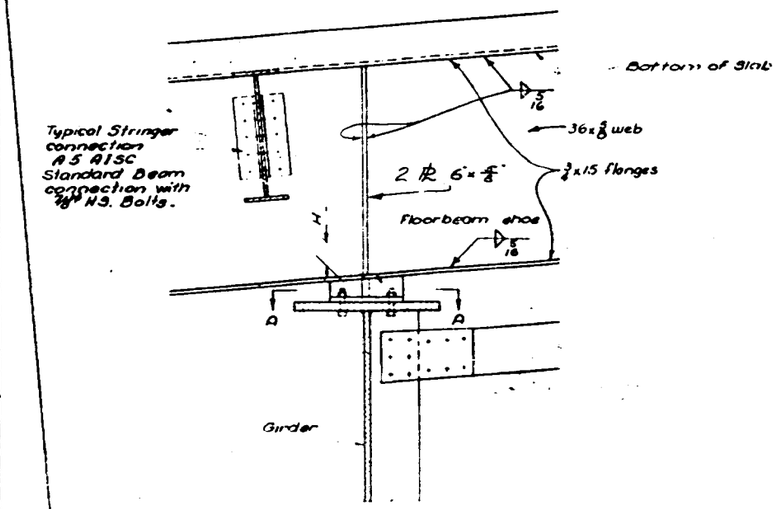

SPANS 2 through 5 A4E & A4W
SPANS 6 through 8 A4W
SPAN 6 A4E
SPAN 7 A4E
SPAN 8 & 9 A4E SPAN 9 & 10 A4W
SPAN 13 A4E
"A" LINE GIRDER ELEVATIONS
CAMBER DIAGRAM LEFT SIDE
CAMBER DIAGRAM RT SIDE
LEFT & CENTER GIRDER
RIGHT GIRDER
SPAN 12 A4E
Left Girder Only
Note: Stiffener Spacings all panels 4 eq. spacings.
Note: Stiffener Spacings all panels 4 eq. spaces
NOT A PART OF THIS CONTRACT
SPAN "D1"
SPAN "D2", "D3", "D4" & "D5"
SPAN "D6"
"D" LINE GIRDER ELEVATIONS
SUPERSTRUCTURE
For Detailed Girder Dimensions See Structural Layout Sheets.
Note: Transverse stiffeners on inside face of web. Longitudinal stiffeners on outside face of web.
CAMBER: Camber web 0.26' from straight line @ ℄ Span. " " 0.20' " " " ¼ points
AS BUILT NOTE: SEE SHOP DRAWINGS FOR COMPLETE DETAILS.
CARQUINEZ STRAIT BRIDGE
APPROACHES & INTERCHANGE
GIRDER ELEVATIONS
October 3, 1955
3/31/59
29.7.36

A4W				
Floor Beam	Type	Slope	Left H	Right H
Spans 2&3				
1W6	I	1.50%	.333	.333
3W3	"	"	.292	.292
3W4	"	"	.250	.250
4W1	I	.150	0.254	0.298
4W2	"	.150	0.300	0.279
4W3	"	.135	0.341	0.260
4W4	"	.120	0.350	0.281
4W5	"	.114	0.326	0.286
4W6	"	.261	0.257	0.298
5W1	"	.286	0.337	0.334
5W2	"	.324	0.302	0.290
5W3	"	.394	0.258	0.256
5W4	"	.463	0.256	0.254
5W5	"	.533	0.295	0.293
5W6	"	.591	0.337	0.333
6W1	"	.597	0.377	0.409
6W2	"	.654	0.465	0.361
6W3	"	.729	0.293	0.272
6W4	"	.802	0.250	0.250
6W5	"	.857	0.364	0.338
6W6	II	.876	0.367	0.289
7W1	"	.882	0.313	0.281
7W2	"	.890	0.344	0.345
7W3	"	.900	0.250	0.250
7W4	"	.904	0.276	0.261
7W5	"	.907	0.304	0.352
7W6	"	.902	0.321	0.264
8W1	"	.902	0.246	0.270
8W2	"	.896	0.250	0.319
8W3	"	.900	0.255	0.255
8W4	"	.904	0.270	0.270
8W5	"	.907	0.313	0.313
8W6	"	.902	0.265	0.271
9W1	III	.903	0.335	0.391
9W2	"	.894	0.407	0.461
9W3	"	.901	0.267	0.271
9W4	"	.903	0.250	0.250
9W5	"	.907	0.264	0.268
9W6	"	.910	0.468	0.465
9W7	"	.902	0.307	0.393
10W1	"	.902	0.356	0.319
10W2	"	.893	0.342	0.325
10W3	"	.898	0.281	0.288
10W4	"	.894	0.250	0.250
10W5	"	.892	0.285	0.284
10W6	"	.886	0.340	0.328
10W7	"	.871	0.335	0.317

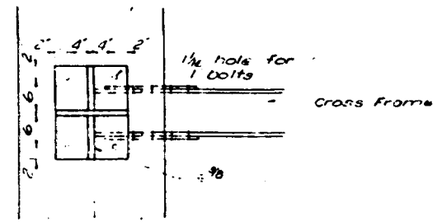
NOT A PART OF THIS CONTRACT

A4E				
Floor Beam	Type	Slope	Left H	Right H
Spans 2&4				
1E6	I	-1.50%	.333	.333
2E5	"	"	.292	.292
3E4	"	"	.250	.250
5E1	I	-.150	0.372	0.519
5E2	"	-.140	0.306	0.299
5E3	"	-.132	0.250	0.257
5E4	"	-.096	0.260	0.250
5E5	"	-.046	0.303	0.366
5E6	"	.011	0.370	0.324
6E1	"	.016	0.379	0.382
6E2	"	.081	0.378	0.380
6E3	"	.129	0.252	0.252
6E4	"	.200	0.250	0.250
6E5	"	.268	0.254	0.253
6E6	"	.337	0.375	0.375
6E7	"	.383	0.379	0.382
7E1	"	.391	0.420	0.442
7E2	"	.437	0.428	0.410
7E3	"	.504	0.280	0.280
7E4	"	.573	0.260	0.255
7E5	II	.644	0.250	0.250
7E6	"	.713	0.405	0.399
7E7	"	.754	0.215	0.272
8E1	III	.766	0.330	0.391
8E2	"	.813	0.463	0.497
8E3	"	.859	0.281	0.309
8E4	"	.889	0.250	0.288
8E5	"	.900	0.269	0.250
8E6	"	.905	0.428	0.347
8E7	"	.899	0.317	0.[illegible]
9E1	"	.899	0.407	0.412
9E2	"	.891	0.491	0.489
9E3	"	.892	0.281	0.274
9E4	"	.898	0.250	0.250
9E5	"	.902	0.261	0.262
9E6	"	.904	0.461	0.458
9E7	"	.895	0.412	0.413
10E1	"	.899	0.615	0.579
10E2	"	.889	0.394	0.352
10E3	"	.896	0.344	0.327
10E4	"	.900	0.250	0.250
10E5	"	.902	0.254	0.265
10E6	"	.903	0.364	0.404
10E7	"	.903	0.621	0.625
10E8	"	.873	0.616	0.330
				Center H
11E1	V	.871	0.628	0.548	0.559
11E2	"	.866	0.700	0.612	0.657
11E3	"	.879	0.509	0.468	0.489
11E4	"	.890	0.310	0.290	0.297
11E5	"	.901	0.250	0.250	0.250
11E6	"	.909	0.274	0.274	0.273
11E7	"	.913	0.462	0.435	0.446
11E8	"	.916	0.744	0.597	0.616
11E9	"	.917	0.525	0.548	0.581
12E1	"	.918	0.642	0.636	0.633
12E2	"	.915	0.660	0.649	0.666
12E3	"	.915	0.445	0.479	0.537
12E4	"	.912	0.309	0.290	0.391
12E5	"	.906	0.250	0.250	0.358
12E6	"	.896	0.300	0.291	0.427
12E7	"	.878	0.390	0.424	0.508
12E8	"	.858	0.420	0.553	0.595
13E1	"	.843	0.547	0.669	0.699
13E2	"	.811	0.661	0.658	0.662
13E3	II	.800	0.659	0.645	
13E4	"	.766	0.682	0.702	
13E5	"	.719	0.452	0.515	
13E6	"	.661	0.383	0.455	
13E7	"	.599	0.391	0.456	
13E8	"	.531	0.449	0.491	
13E9	"	.462	0.502	0.606	
13E10	"	.394	0.425	0.415	

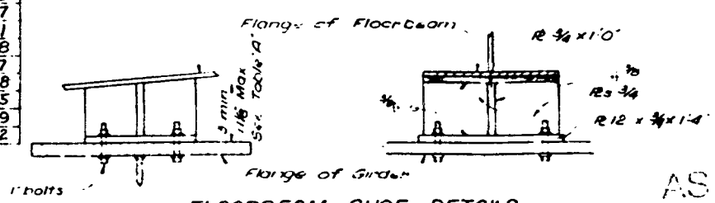
NOTE: CORRECT VALUES ARE SHOWN FOR THIS CONTRACT



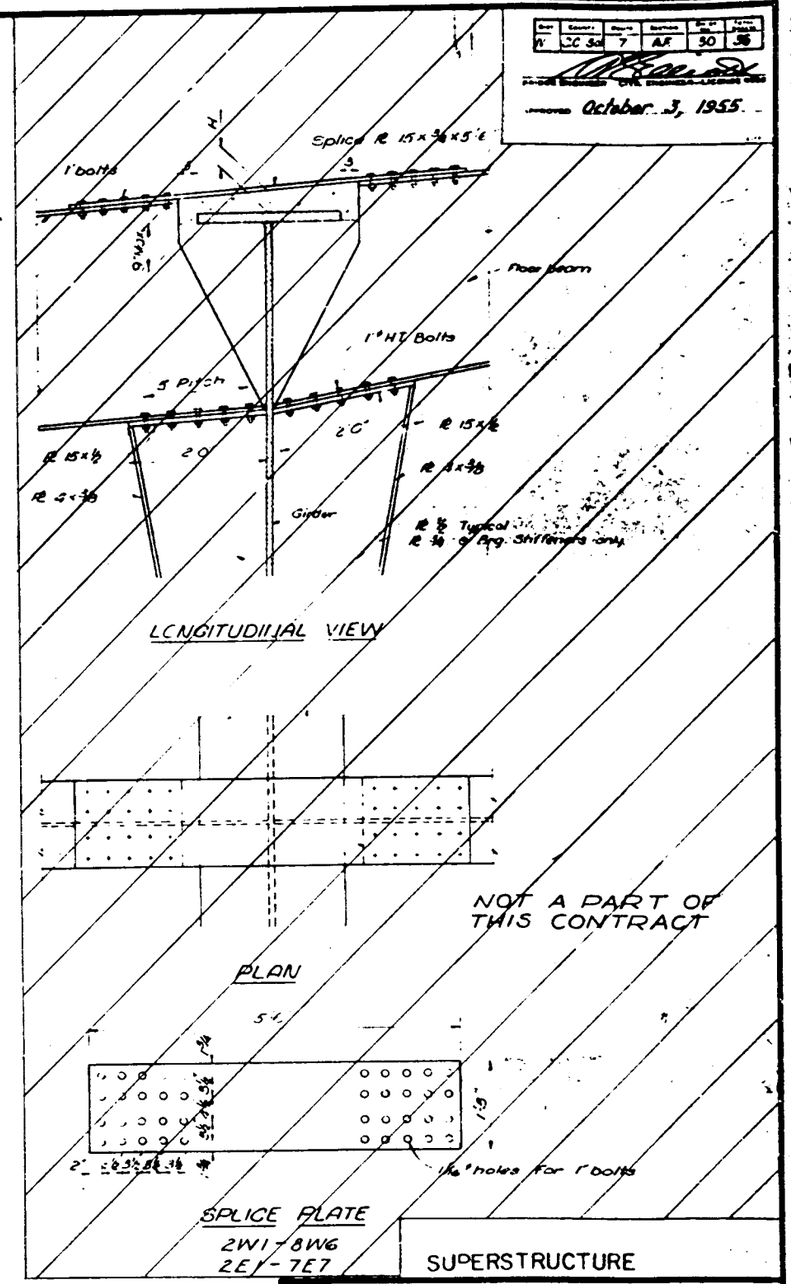
LONGITUDINAL VIEW



PLAN-SECTION A-A



FLOORBEAM SHOE DETAILS
Scale: 1 1/2" = 1'0"
12E1 - 13E10



SUPERSTRUCTURE

AS BUILT
Carquinez Bridge
Superstructure
Contract Specifications
R.J. ORZILLI
MAR 10, 1959

As Built Note: See Shop Drawings for complete details.

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

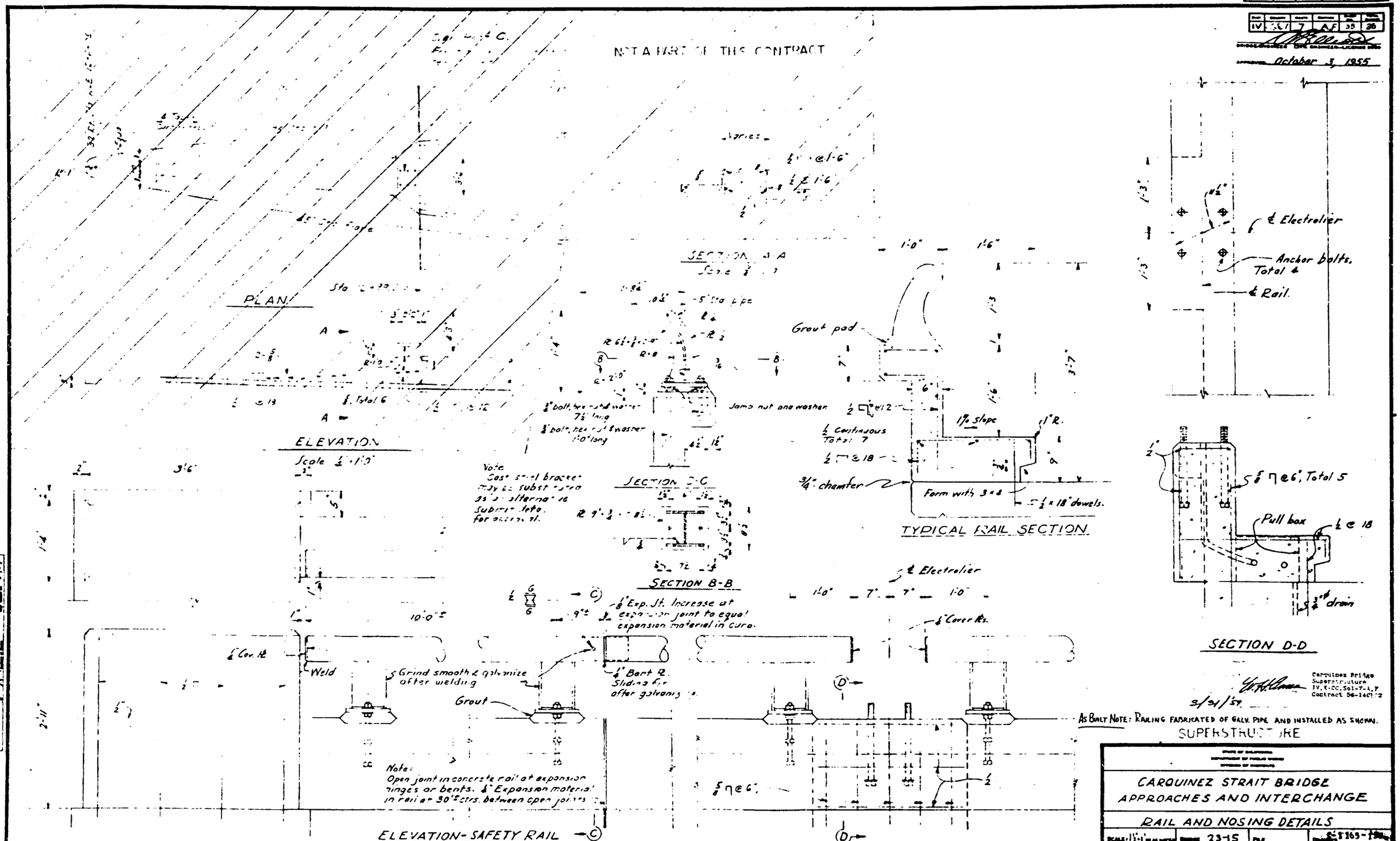
CARQUINEZ STRAIT BRIDGE
APPROACHES & INTERCHANGE
FLOORBEAM to GIRDER CONNECTION

Scale	Bridge	File	Drawing
1" = 0 Except As Noted	29-15		165-150

PREL. DRAWING NO. P-1165

BRIDGE DEPARTMENT

DIVISION 3



BRIDGE DEPARTMENT

DESIGN 3 SECTION

October 3, 1955

Carquinez Bridge Superstructure IV, X-CC, Sol-7-A, F Contract 56-14C[illegible]

3/31/59

As Built Note: Railing fabricated of galv. pipe and installed as shown.

SUPERSTRUCTURE

CARQUINEZ STRAIT BRIDGE
APPROACHES AND INTERCHANGE

RAIL AND NOSING DETAILS

Scale: 1 1/2" = 1' | Bridge 23-15 | File | Drawing 1165-[illegible]

Prel. Drawing No. P-1165