Maintenance Building @
SFOBB Toll Plaza

CONTRACT

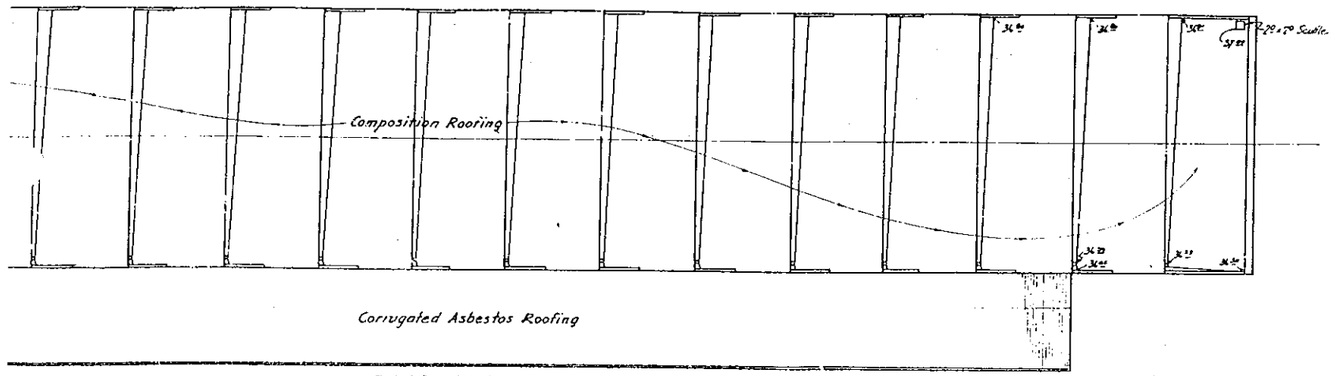
R-8-

S.P. BLDG..

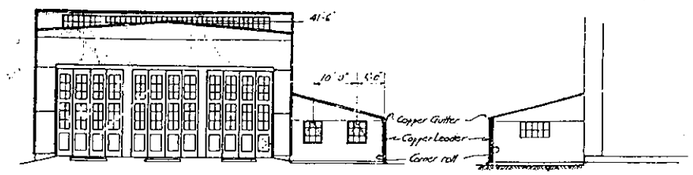
NOW

EAST BAY WAREHOUSE

7/38

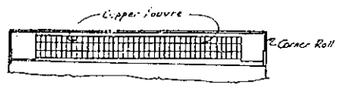


ROOF PLAN

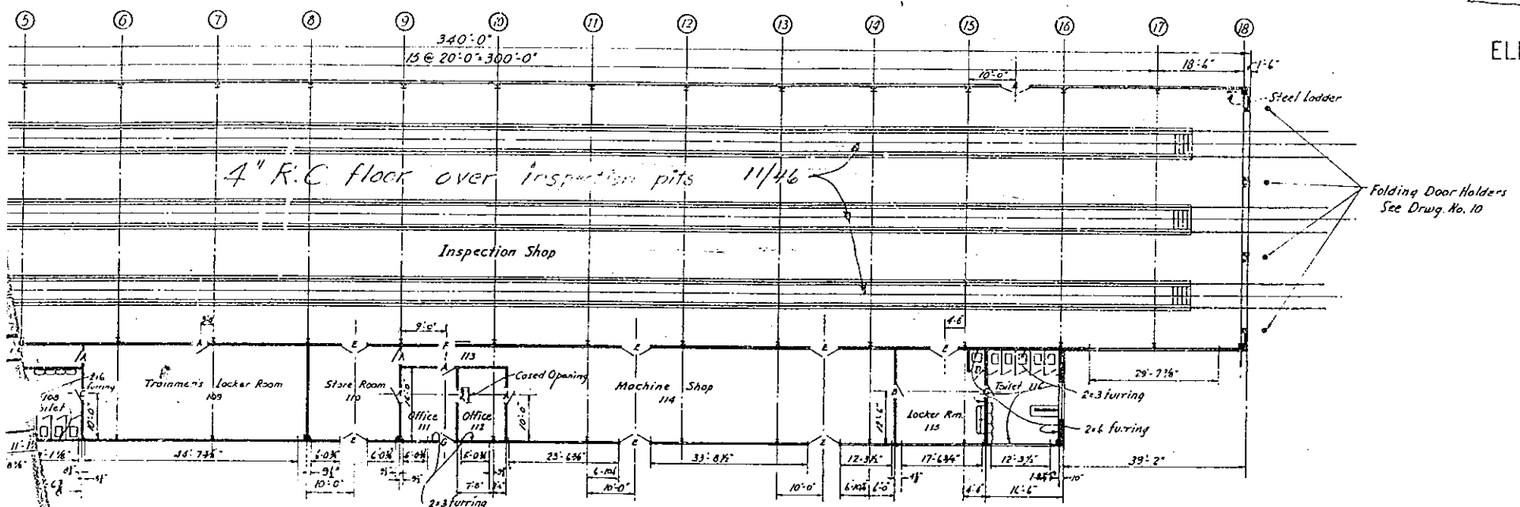


WEST ELEVATION

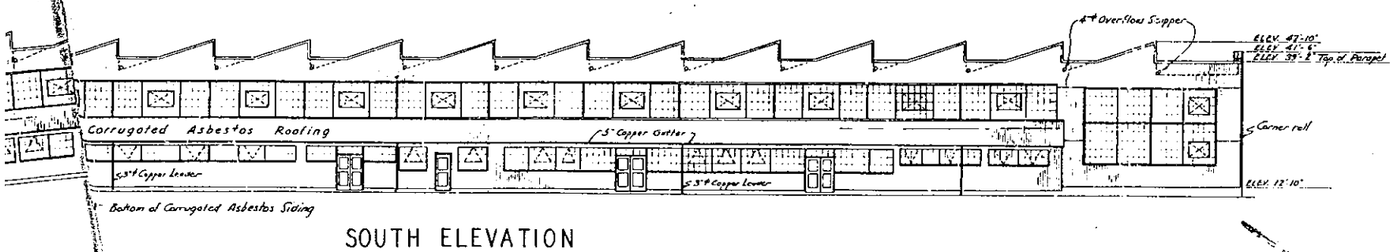
EAST ELEVATION



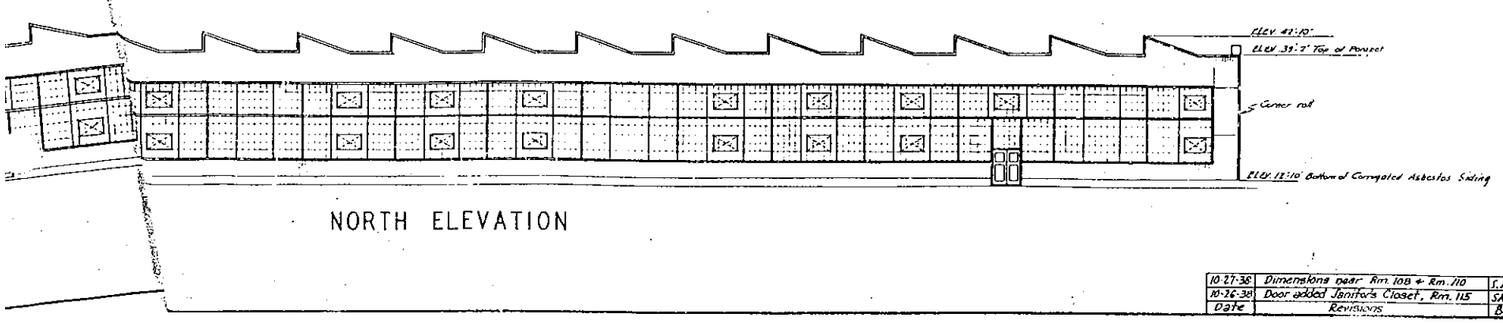
ELEVATION SAWTOOTH



FLOOR PLAN



SOUTH ELEVATION



NORTH ELEVATION

Date	Revisions	By
10-27-38	Dimensions near Rm. 108 & Rm. 110	L.A.F.
10-26-38	Door added Janitor's Closet, Rm. 115	SAS

NOTE:

All studs in partitions shall be 2x4 unless otherwise noted.

Furr around vent stacks as necessary.

Room dimensions outside concrete to center of partition or center to center of partitions unless otherwise noted

Anchor partition and furring plates with 20d Spikes @ 2'-6" ctrs. driven into rawl plugs. Securely anchor at door jamb.

See M-295 B

for Inspection Pits Cover 2/46

STATE OF CALIFORNIA

DEPARTMENT OF PUBLIC WORKS

SAN FRANCISCO-OAKLAND BAY BRIDGE

~~RAILWAY FACILITIES~~

INSPECTION BUILDINGS

~~SOUTHERN PACIFIC INSPECTION BUILDING~~

GENERAL PLAN AND ELEVATIONS

CORRECT:

Engineer of Design

APPROVED:

Bridge Engineer

Chief Engineer

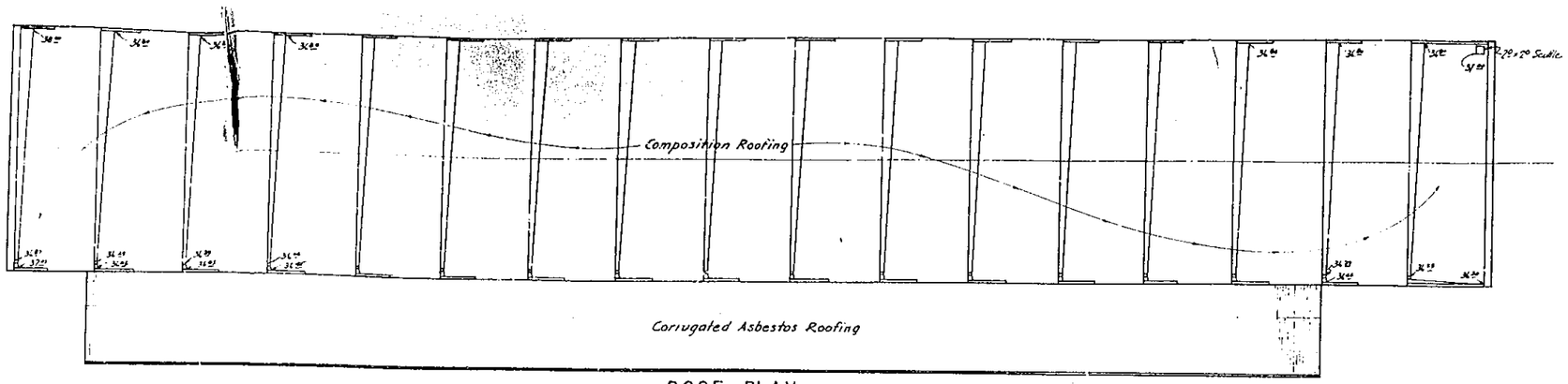
Director of Public Works

SCALE IN FEET 0 10 20 30 40

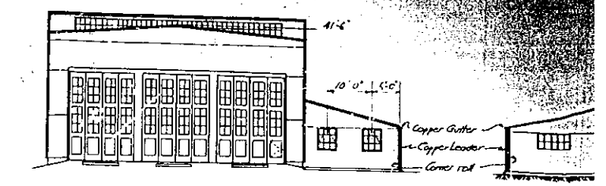
CONTRACT NO. R 8.

SUP. DRAWING NO. 2A

LY 1938

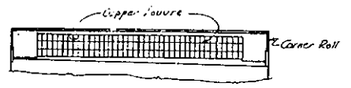


ROOF PLAN

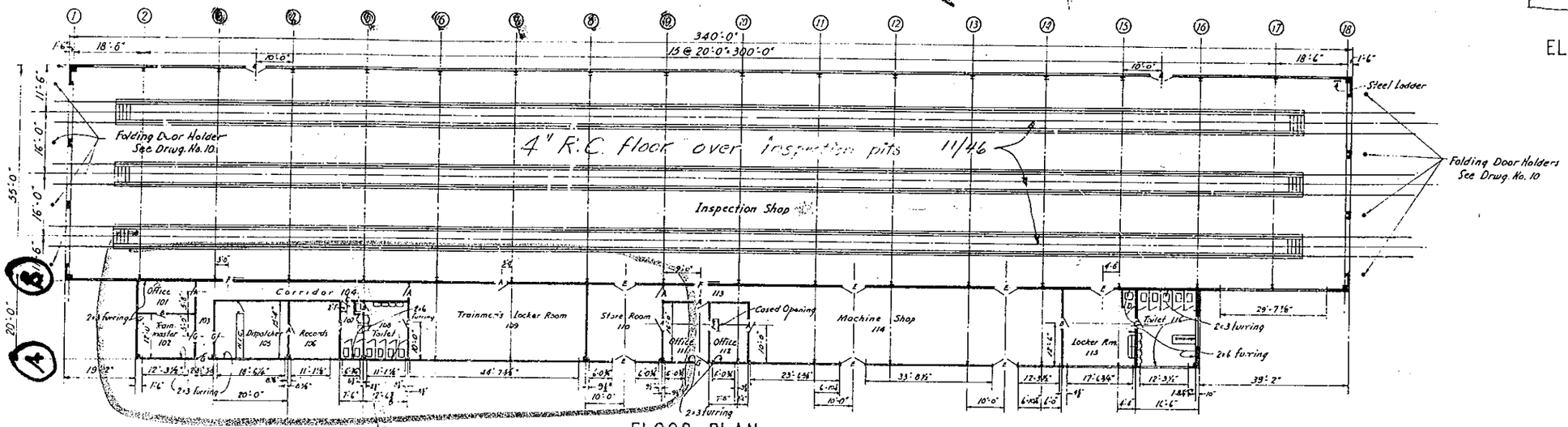


WEST ELEVATION

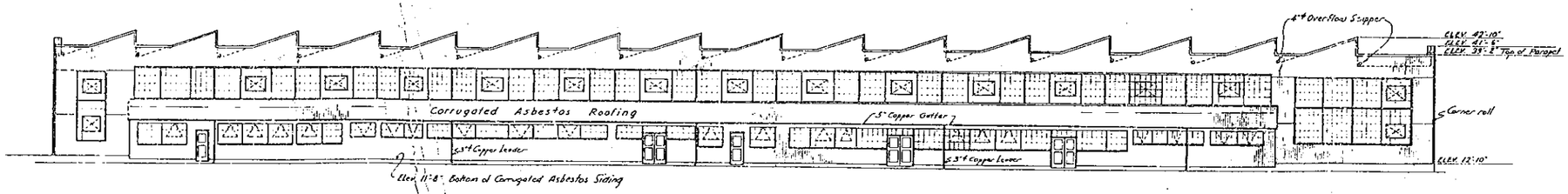
EAST ELE



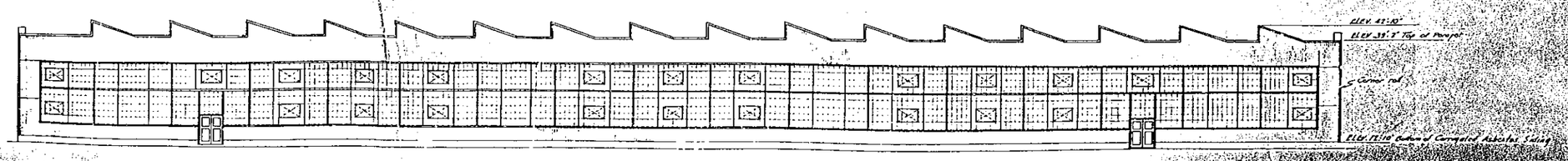
ELEVATION SAWTOOTH



FLOOR PLAN



SOUTH ELEVATION



NORTH ELEVATION

NOTE
All
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Ro
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rowl p

See

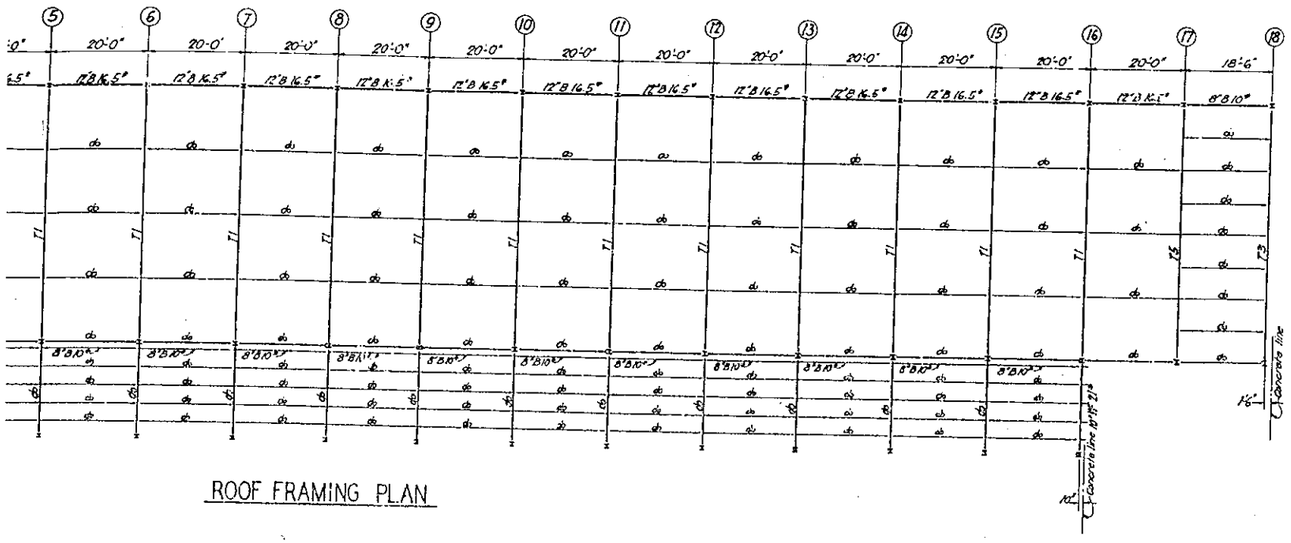
SAN F

CORRECT

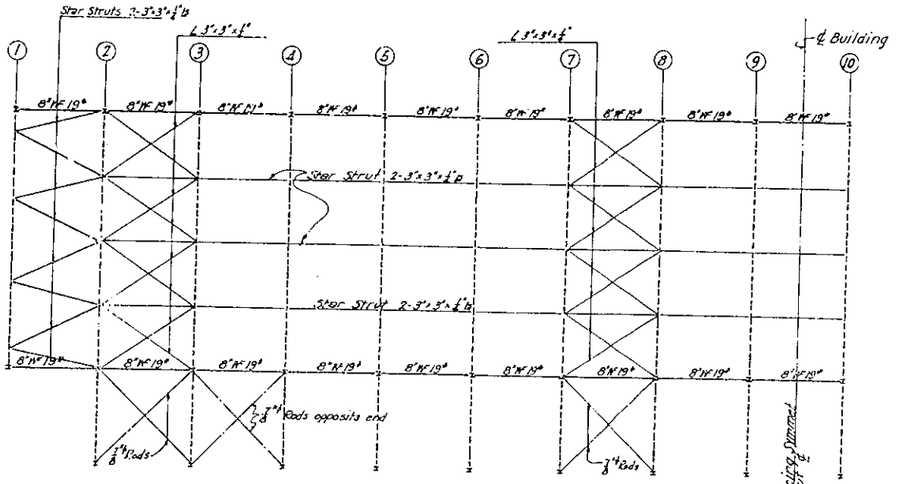
APPROVED

SOUTHE

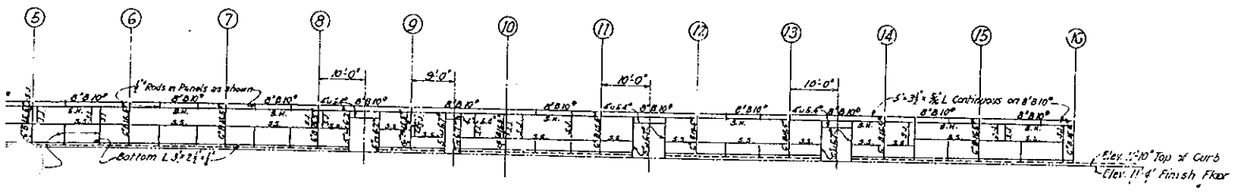
10-27-38	Dimensions: near Rm. 108 & Rm. 110	
10-26-38	Door added: Janitor's Closet Rm. 115	



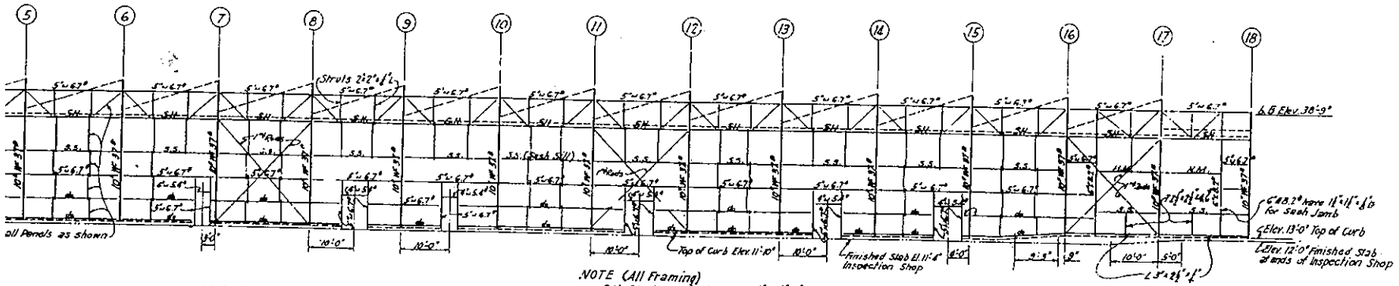
ROOF FRAMING PLAN



HORIZONTAL BRACING IN PLANE OF LOWER CHORD

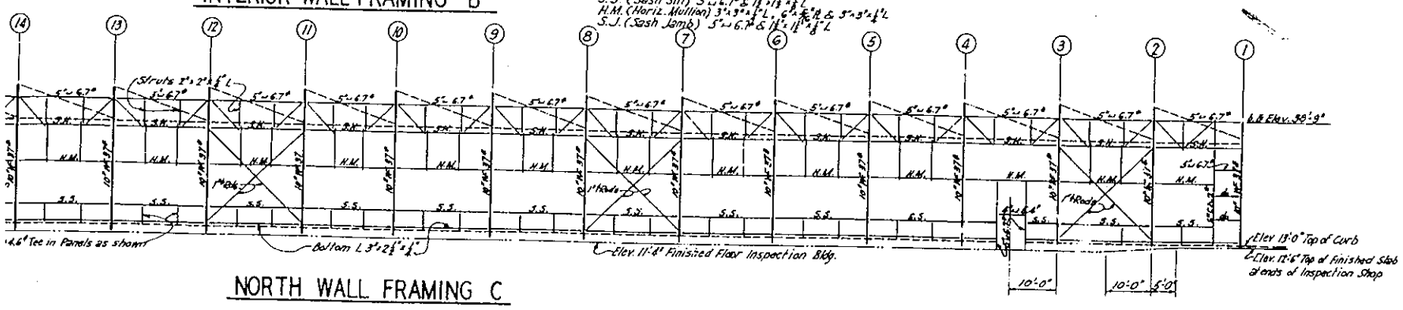


SOUTH WALL FRAMING A

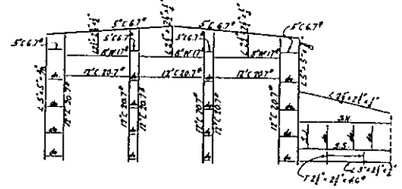


NOTE (All Framing)
S.H. (Sash Head) 5"x6.7"# & 2½"x2½"x¼"L
S.S. (Sash Sill) 5"x6.7"# & 1¼"x1¼"x¼"L
H.M. (Horiz. Mullion) 3"x3"x¼"L, 6"x3"# & 5"x3"x¼"L
S.J. (Sash Jamb) 5"x6.7"# & 1¼"x1¼"x¼"L

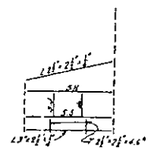
INTERIOR WALL FRAMING B



NORTH WALL FRAMING C



WEST END WALL FRAMING
EAST END WALL SIMILAR



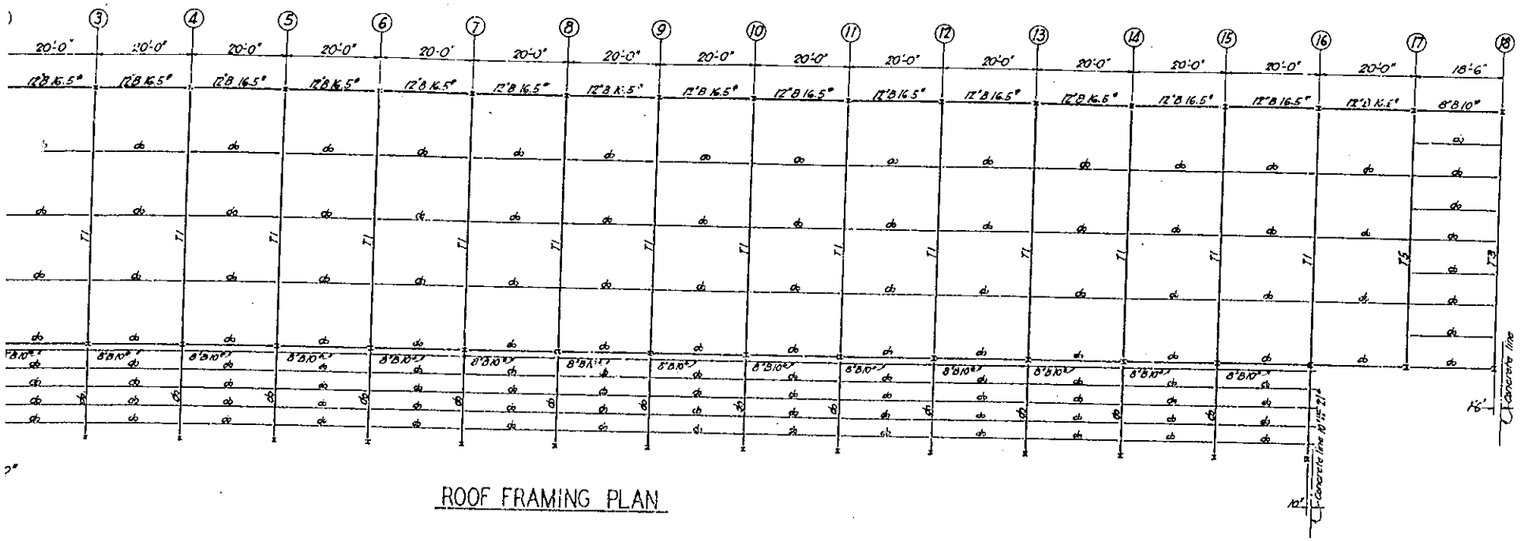
EAST END
OFFICE AISLE

CORRECT:
Engineer of Design

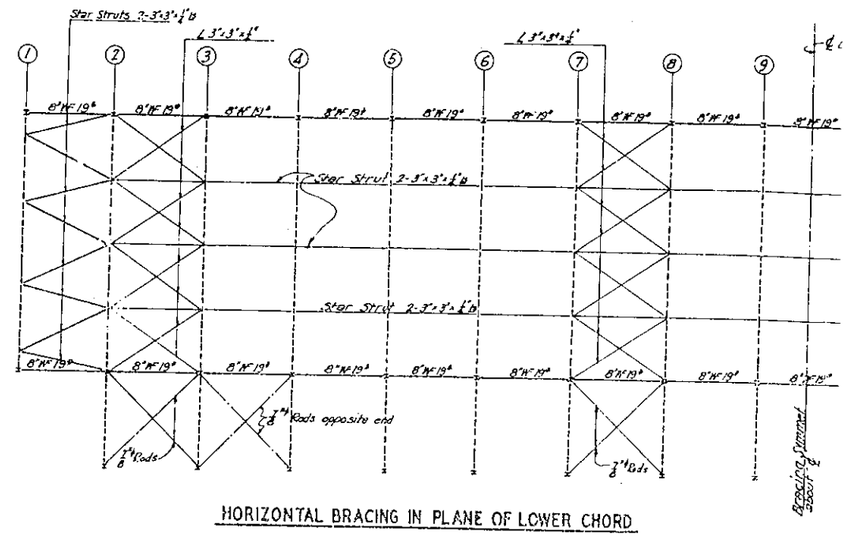
APPROVED:
Bridge Engineer

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
SAN FRANCISCO-OAKLAND BAY BRIDGE
RAILWAY FACILITIES
INSPECTION BUILDINGS
SOUTHERN PACIFIC INSPECTION BUILDING
STRUCTURAL STEEL FRAMING

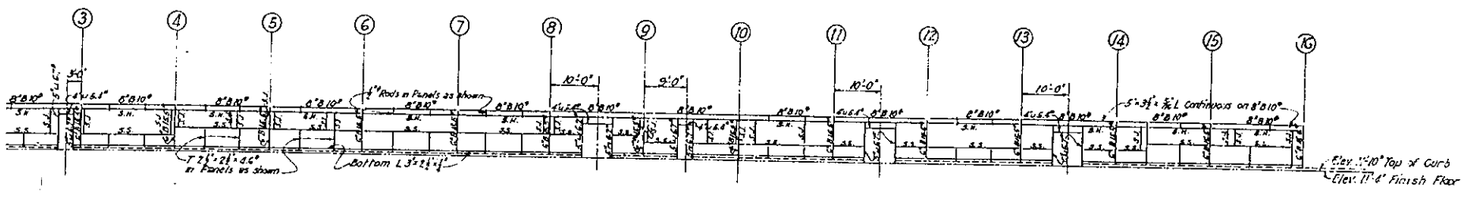
SCALE IN FEET
0 5 10 20 30 40



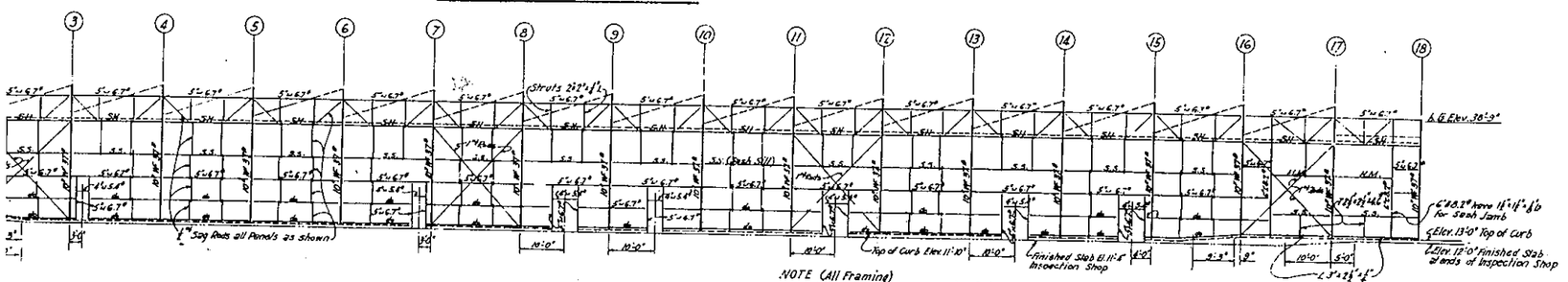
ROOF FRAMING PLAN



HORIZONTAL BRACING IN PLANE OF LOWER CHORD

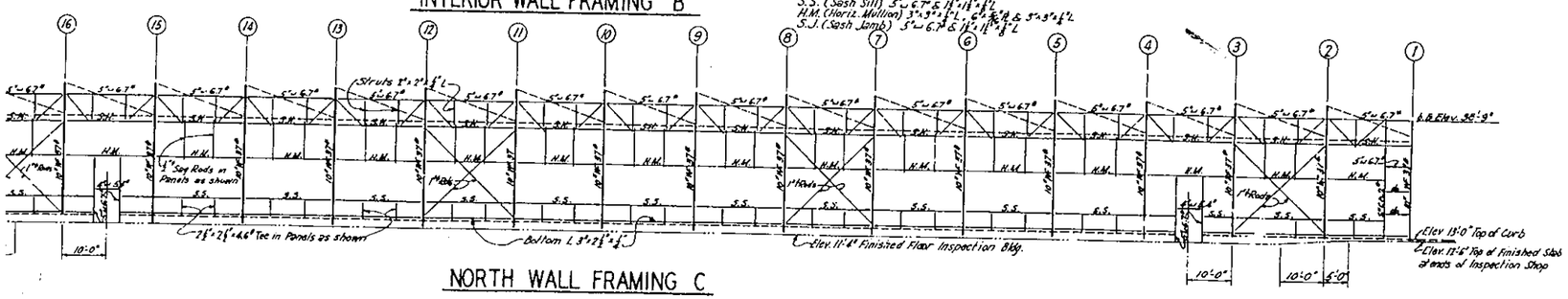


SOUTH WALL FRAMING A

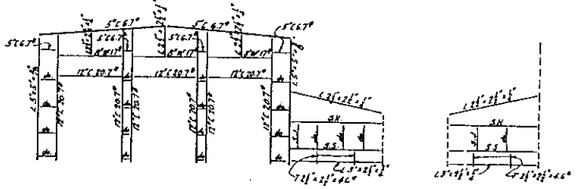


NOTE (All Framing)
S.H. (Sash Head) 5"x6.7# & 2½"x2½"x¼"L
S.S. (Sash Sill) 5"x6.7# & 1¼"x1¼"x⅛"L
H.M. (Horiz. Mullion) 3"x3"x¼"L & ⅝" & ¾" & 3"x3"x¼"L
S.J. (Sash Jamb) 5"x6.7# & 1¼"x1¼"x⅛"L

INTERIOR WALL FRAMING B



NORTH WALL FRAMING C



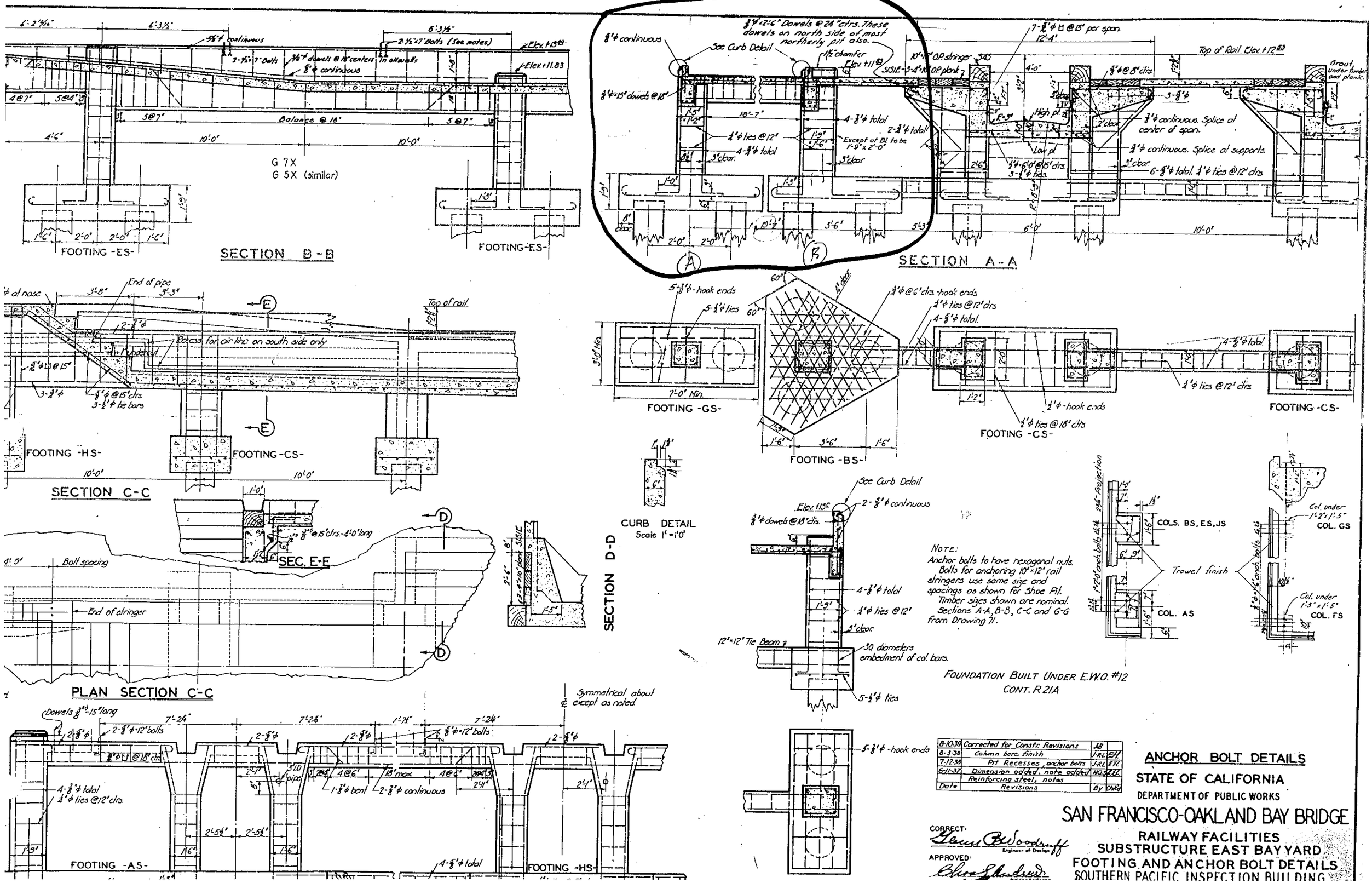
WEST END WALL FRAMING
EAST END WALL SIMILAR

EAST END
OFFICE AISLE

CORRECT:
Engineer of Design

APPROVED:
Bridge Engineer
Chief Engineer

STATE OF CALIFOR
DEPARTMENT OF PUBLIC W
SAN FRANCISCO-OAKLAND
RAILWAY FACILIT
INSPECTION BUILDI
SOUTHERN PACIFIC INSPECTIC
STRUCTURAL STEEL
SCALE IN FEET
0 5 10 20 30
CONTRACT NO. P.B.



NOTE:
Anchor bolts to have hexagonal nuts.
Bolts for anchoring 10"×12" rail stringers use same size and spacings as shown for Shoe Pit.
Timber sizes shown are nominal.
Sections A-A, B-B, C-C and G-G from Drawing 71.

Date	Revisions	By	Chk'd
8-10-39	Corrected for Constr. Revisions	JB	
8-3-38	Column base finish	J.R.L.	EFL
7-12-38	Pit Recesses, anchor bolts	J.R.L.	EFL
6-11-37	Dimension added, note added	HOS	EFL
	Reinforcing steel, notes		

ANCHOR BOLT DETAILS

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

SAN FRANCISCO-OAKLAND BAY BRIDGE

RAILWAY FACILITIES
SUBSTRUCTURE EAST BAY YARD
FOOTING AND ANCHOR BOLT DETAILS
SOUTHERN PACIFIC INSPECTION BUILDING

CORRECT: Glenn B. Woodruff, Engineer of Design
APPROVED: Chas. E. Andrew

G 4

G 7X
G 5X (similar)

Culoff Elev 15°

FOOTING -ES-

SECTION B-B

FOOTING -ES-

SECTION A-A

FOOTING -HS-

FOOTING -CS-

SECTION C-C

SEC. E-E

FOOTING -GS-

FOOTING -CS-

FOOTING -BS-

CURB DETAIL
Scale 1"-1'0"

SECTION D-D

FOOTING -FS-

SECTION F-F

PLAN SECTION C-C

FOOTING -AS-

FOOTING -HS-

ELEVATION G-G

FOOTING -ES-

NOTE:
Anchor bolts to have hexagonal nuts.
Bolts for anchoring 10"×12" rail stringers use same size and spacings as shown for Shoe Pit.
Timber sizes shown are nominal.
Sections A-A, B-B, C-C and G-G from Drawing 71.

FOUNDATION BUILT UNDER E.W.O. CONT. R 21A

Date	Revisions	By
8-10-39	Corrected for Constr. Revisions	AB
8-3-38	Column base, finish	J.R.L.
7-12-38	Pit Recesses, anchor bolts	J.R.L.
6-11-37	Dimension added, note added	H.O.S.
	Reinforcing steel, notes	

SAN FR
SU
FOOT
SOUTH

CORRECT:
Glenn B. Woodruff
Engineer of Design

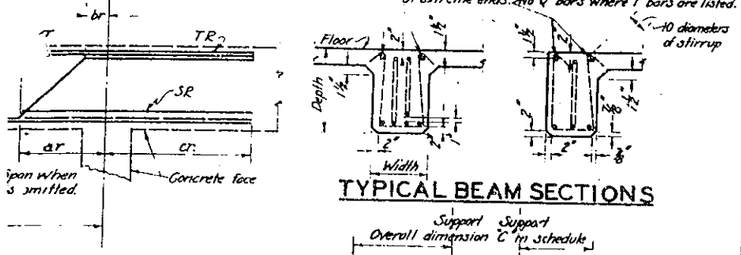
APPROVED:
Chief Engineer
Director of Public Works

nearest right
plan

Girder clearances to be made to suit beam steel.

2-½ø Continuous "Q" bars (Not listed in schedule) spliced only in center of any span with 4" hooks at extreme ends. No "Q" bars where "T" bars are listed.

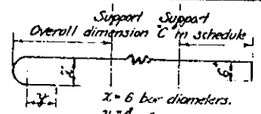
10 diameters of stirrup



TYPICAL BEAM SECTIONS

pan when
s omitted.

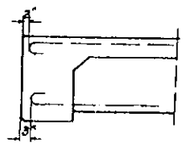
First stirrup located 3" from face for different bars. Unless otherwise noted stirrups @ 18" ctrs. (Not listed in schedule) f beams given in schedule is the minimum hose mark has the suffix "R" have their ends



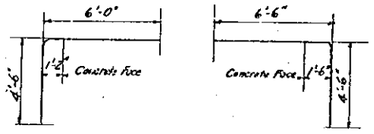
TYPICAL HOOKS

AM SCHEDULE

HOOKS LEFT END	HOOKS RIGHT END	STIRRUPS SIZE & SPACE	STIRRUPS TYPE	SPACING FROM SUPPORTS LEFT END	SPACING FROM SUPPORTS RIGHT END	REMARKS
		8 - ⅝	⊔	3@10	3@10	XL 2-¾" XR 2-⅞ See detail at right
	⊃	12 - ⅝	⊔	3@6, 2@10	3@6, 2@10	
		12 - ⅝	⊔	3@6, 2@10	3@6, 2@10	In Second Layer
		18 - ¾	⊔	3@4, 3@6, 2@12	3@4, 3@6, 2@12	Ditto XL 2-¾" XR 2-⅞
	⊃	18 - ¾	⊔	3@4, 3@6, 2@12	3@4, 3@6, 2@12	Ditto
						Ditto
		13 - ⅝	⊔	3@8, 1@82	3@8, 1@82	
		10 - ⅝	⊔	3@8, 1@82	3@8, 1@82	G2X - cl 3'-6"
		20 - ¾	⊔	2@6, 4@10, 1@85	2@6, 4@R, 1@85	G3R Omit T.R.
		17 - ¾	⊔	6@6.	5@4, 1@7	Top of Beam slopes, See detail
		24 - ⅞	⊔	6@5, 4@9 1@82	6@5, 4@9 1@82	G5X Top of Beam slopes, see detail G5X @ℓ = 4'-9"
		24 - ¾	⊔	6@5, 4@9 1@5.5	6@5, 4@9 1@85	
						At G5 only
		12 - ⅝	⊔	5@7	5@7	G7X Top of Beam slopes, see detail G7X @ℓ = 4'-5" TR. at G4R

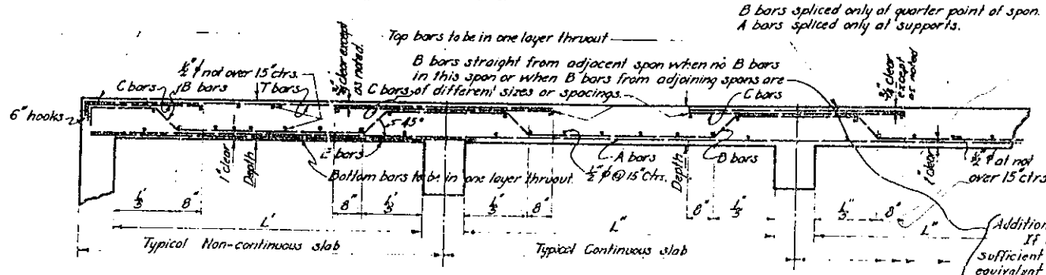


End Clearance on Reinforcement

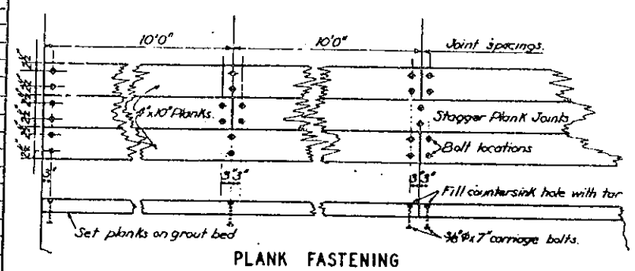


Provide bars in top of slabs of same size as B bars at 10" ctrs. and of same length as C bars. These bars to be over all girders or walls, and extending at right angles to main slab bars. At discontinuous points, such as exterior walls etc., these bars to be provided with 6" hooks on outer end. Tie bars to be ½" ø not over 15" ctrs.

B bars spliced only at quarter point of span.
A bars spliced only at supports.



TYPICAL SLAB DETAILS



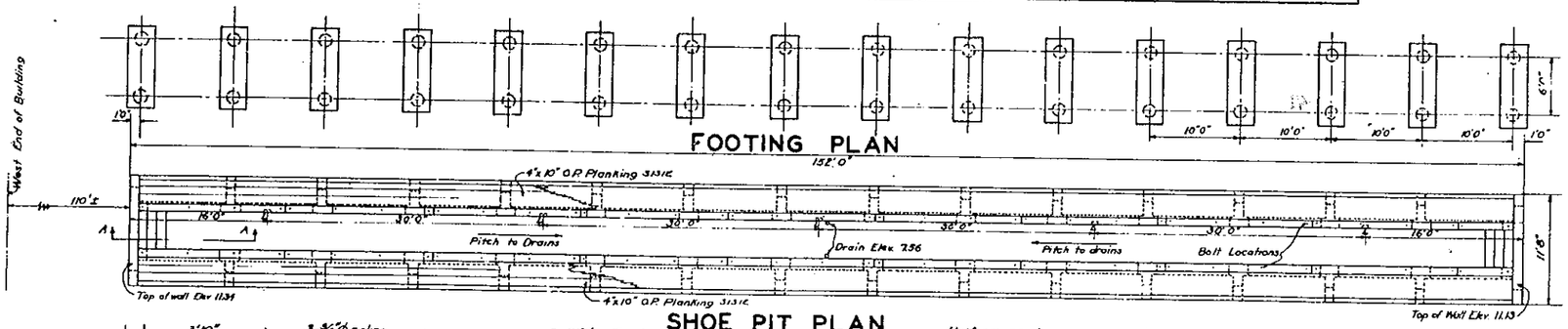
PLANK FASTENING

SLAB SCHEDULE

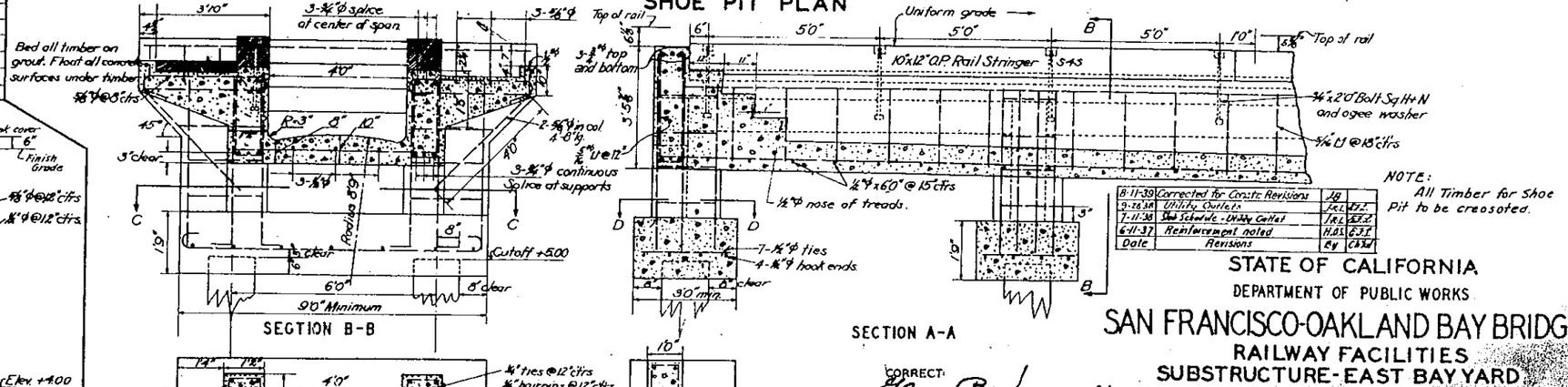
SLABS WHOSE MARKS HAVE A SUFFIX "R" ARE SIMILAR TO SLABS OF THE SAME MARK WITHOUT SUFFIX EXCEPT EXCEPTIONS ARE REVERSED

MARKS	DEPTH	REINFORCING BARS (ROUND UNLESS NOTED) A'	B	C LEFT END	C RIGHT END	E	T	REMARKS
S1	5	½ @ 18	½ @ 18	½ @ 18				Bottom of panels with rough slabs to be lowered one inch.
S2	5	½ @ 18	½ @ 18	½ @ 18				
S3	5	½ @ 13	½ @ 13	½ @ 24				C bars Right End for S3R
S4	5	½ @ 13	½ @ 13	½ @ 13				Top Steel 1¼" clear.
S5	5			½ @ 14		½ @ 7		C bars @ G7x, G7
S6	6			½ @ 14		½ @ 7		C bars @ G4, G5x, G7x
S7	7			½ @ 14		½ @ 7		C bars @ G4.

FOUNDATION BUILT UNDER E.W.O. 38/12
CONT. R21A



FOOTING PLAN



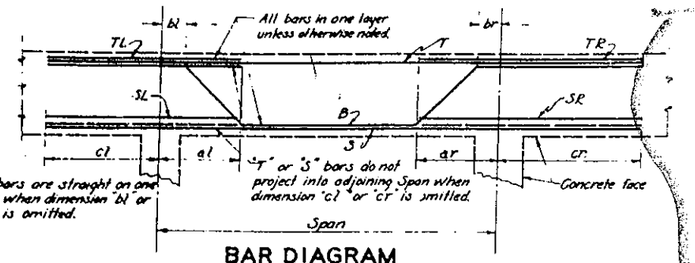
NOTE:
All Timber for Shoe Pit to be creosoted.

Date	Revisions	By	Ch'd
8-11-39	Corrected for Constr. Revisions	JB	
9-16-38	Utility Outlets	J.R.L.	G.F.Z.
7-11-38	Slab Schedule - Utility Outlet	J.R.L.	G.F.Z.
6-11-37	Reinforcement noted	H.A.S.	G.F.

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

SAN FRANCISCO-OAKLAND BAY BRIDGE
RAILWAY FACILITIES
SUBSTRUCTURE-EAST BAY YARD
PIT FRAMING AND SLAB DETAILS

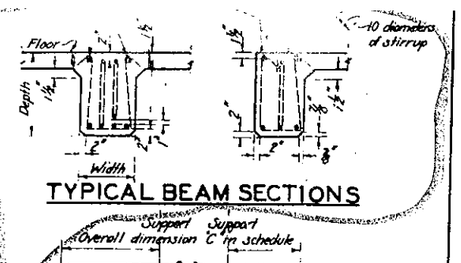
CORRECT: Glenn B. Woodruff



"B" bars are straight on one end, when dimension "bl" or "br" is omitted.

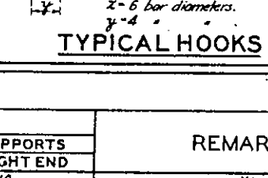
"T" or "S" bars do not project into adjoining Span when dimension "cl" or "cr" is omitted.

BAR DIAGRAM



TYPICAL BEAM SECTIONS

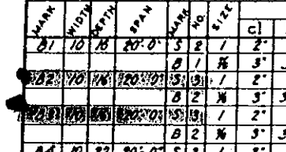
First stirrup located 3" from face of supports. Dimensions a b c are not necessarily the same for different bars. Unless otherwise noted or shown all steel dimensions refer to ℄ of bar. Provide ⅜" ϕ stirrups @ 18" ctrs. (Not listed in schedule) in all beams when none occur near middle of spans. Depth of beams given in schedule is the minimum in any span, the soffit of any beam being in a plane. Beams whose mark has the suffix "R" have their ends the reverse of beams of the same mark without the suffix.



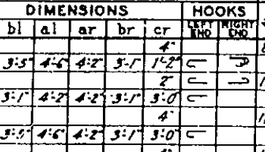
TYPICAL HOOKS

BEAM SCHEDULE

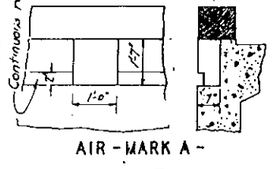
BEAM MARK	WIDTH	DEPTH	SPAN	BARS MARK	NO.	SIZE	DIMENSIONS cl	bl	al	ar	br	cr	HOOKS LEFT END	HOOKS RIGHT END	STIRRUPS NO. SIZE	STIRRUPS TYPE	SPACING FROM SUPPORTS LEFT END	SPACING FROM SUPPORTS RIGHT END	REMARKS
B1	10	18	20'-0"	S	2	1	2"					4"			8 - #4	⊔	3@10	3@10	XL 2-⅜" XR 2-⅛ See detail at right
				B	1	⅝	3"	3'-5"	4'-6"	4'-2"	3'-1"	1'-2"	⊂	⊃					
B2	10	18	20'-0"	S	2	1	2"					2"	⊂	⊃	12 - #4	⊔	3@6, 2@10	3@6, 2@10	In Second Layer
				B	2	⅝	3"	3'-1"	4'-2"	4'-2"	3'-1"	3'-0"	⊂						
B3	10	18	20'-0"	S	2	1	2"					4"			12 - #4	⊔	3@6, 2@10	3@6, 2@10	Ditto XL 2-⅜" XR 2-⅞
				B	2	⅝	3"	3'-5"	4'-6"	4'-2"	3'-1"	3'-0"	⊂						
B4	10	22	20'-0"	S	3	1	2"					4"			18 - #4	⊔	3@4, 3@6, 2@12	3@4, 3@6, 2@12	Ditto XL 2-⅜" XR 2-⅞
				B	2	1	3"	2'-9"	4'-4"	3'-9"	2'-2"	3'-6"	⊂						
B5	10	22	20'-0"	S	3	1	2"					2"	⊂	⊃	18 - #4	⊔	3@4, 3@6, 2@12	3@4, 3@6, 2@12	Ditto
				B	2	1	3"	2'-5"	3'-9"	3'-9"	2'-2"	3'-6"	⊂						
G1	10	18	20'-0"	S	2	1"	7"					1'-0"			13 - ⅜	⊔	3@8, 10@32	4 @ 8, 10@32	
				B	1	1"	8"	2'-9"	4'-0"	4'-6"	3'-3"	5'-6"	⊂						
					½	1"	8"		5'-6"	5'-6"		5'-6"	⊂						
G2	10	18	20'-0"	S	2	⅝	4"					4"			10 - #4	⊔	3@8, 10@32	3@8, 10@32	G2X - cl 3'-6"
				B	1	⅝	5'-6"	3'-3"	4'-6"	4'-6"	3'-3"	5'-6"							
				TR	1	⅝				5'-6"		5'-6"							
G3	10	24	20'-0"	S	2	1"	4"					4"			20 - #4	⊔	2@6, 4@10, 10@35	2@6, 4@10, 10@35	G3R Omit T.R.
				B	1	1"	5'-6"	2'-9"	4'-6"	4'-6"	2'-9"	5'-6"							
				TR	1	⅝				5'-6"		5'-6"							
G4	10	22	18'-8"	S	2	1"	1'-5"					4"							
				B	1	1"	1'-5"	2'-3"	3'-6"	4'-6"	3'-3"	5'-6"	⊂		17 - #4	⊔	6@6,	5@4, 4@7	Top of Beam slopes, See detail
				TR	1	1"				5'-6"		5'-6"							
G5	10	20	20'-0"	S	2	1"	4"					4"			24 - #4	⊔	6@5, 4@9	6@5, 4@9	G5X Top of Beam slopes, see detail
				B	1	1"	5'-6"	3'-1"	4'-6"	4'-6"	3'-1"	5'-6"					1@32	1@32	G5X al = 4'-9"
				TR	1	1"				5'-6"		5'-6"							
G6	10	24	20'-0"	S	2	1½	6"					6"			24 - #4	⊔	6@5, 4@9	6@5, 4@9	
				B	1	1"	5'-6"	2'-8"	4'-6"	4'-6"	2'-9"	5'-6"					1@35	1@33	
				TR	1	1"				5'-6"		5'-6"							At G5 only
G7	8	18	20'-0"	S	1	1"	8"					8"							G7X Top of Beam slopes, see detail
				B	1	1"	5'-6"	2'-9"	4'-0"	4'-0"	2'-9"	5'-6"			12 - ⅛	⊔	5@7	5@7	G7 X al = 4'-5"
				TR	1	1"				5'-6"		5'-6"							TR. at G4R



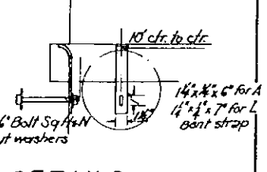
LIGHT - MARK L -



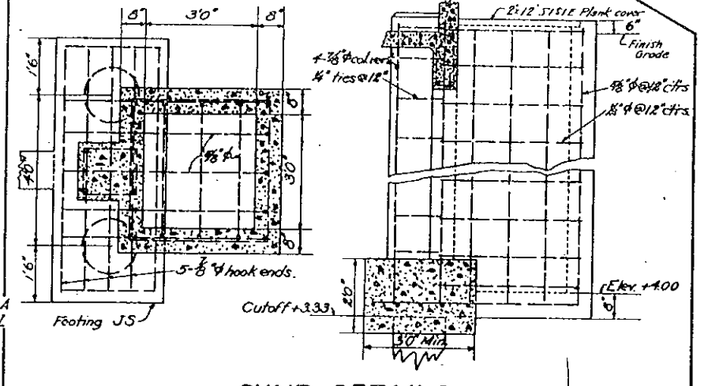
600 VOLT PLUG - MARK P -



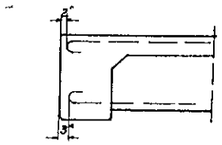
AIR - MARK A -

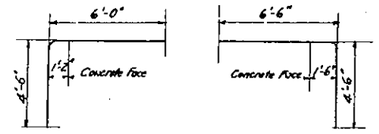


UTILITIES OUTLET DETAILS

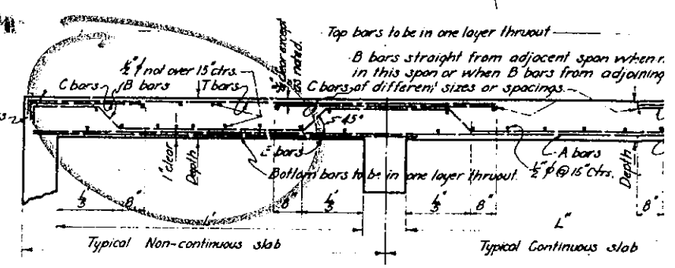


SUMP DETAILS

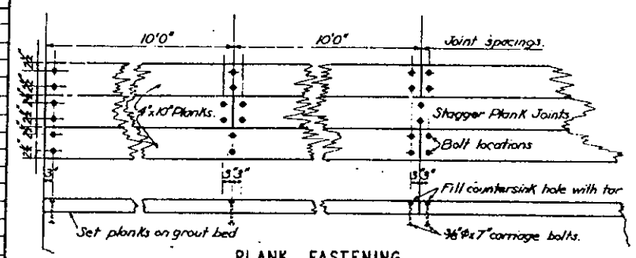




Provide bars in top of slabs of same size as B bars at 10 ctrs. and of same length as C bars. These bars to be over all girders or walls, and extending at right angles to main slab bars. At discontinuous points, such as exterior walls etc., these bars to be provided with 6" hooks on outer end. Tie bars to be ½" ϕ not over 15" ctrs.



TYPICAL SLAB DETAILS

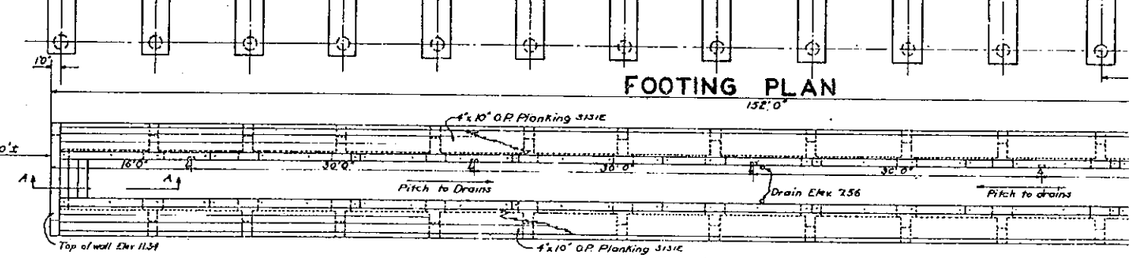


PLANK FASTENING

SLAB SCHEDULE

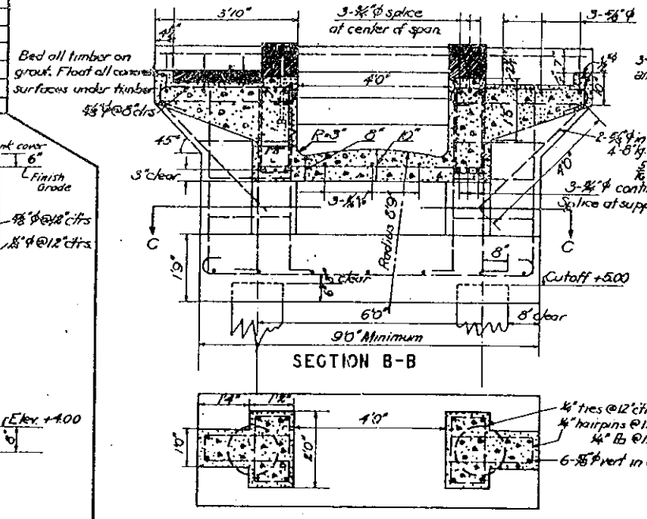
SLABS WHOSE MARKS H TO SLABS OF THE SAME ENDS ARE REVERSED

MARKS	DESIGNED	REINFORCING BARS (ROUND UNLESS NOTED) A	B	C LEFT END	C RIGHT END	E	T	
S1	1	½ @ 18	½ @ 18	½ @ 18				Bars slab.
S2	2	½ @ 18	½ @ 18	½ @ 18				
S3	5	½ @ 13	½ @ 13	½ @ 24				C bar
S4	5	½ @ 13	½ @ 13	½ @ 13				
S5	5			½ @ 14		½ @ 7		C ba
S6	6			½ @ 14		½ @ 7		C ba
S7	7			½ @ 14		½ @ 7		C ba

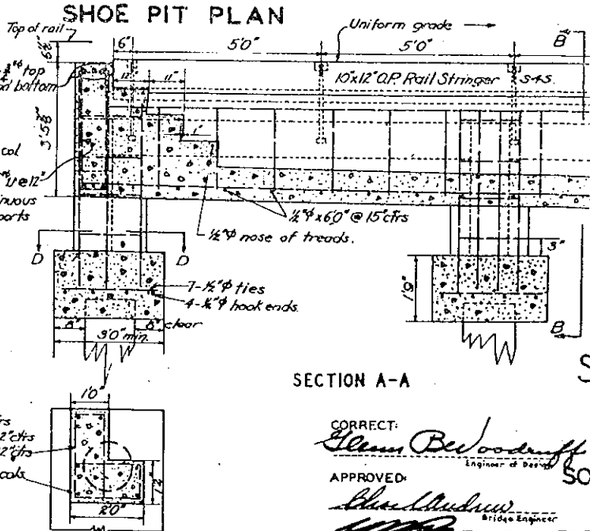


FOOTING PLAN

SHOE PIT PLAN



SECTION B-B



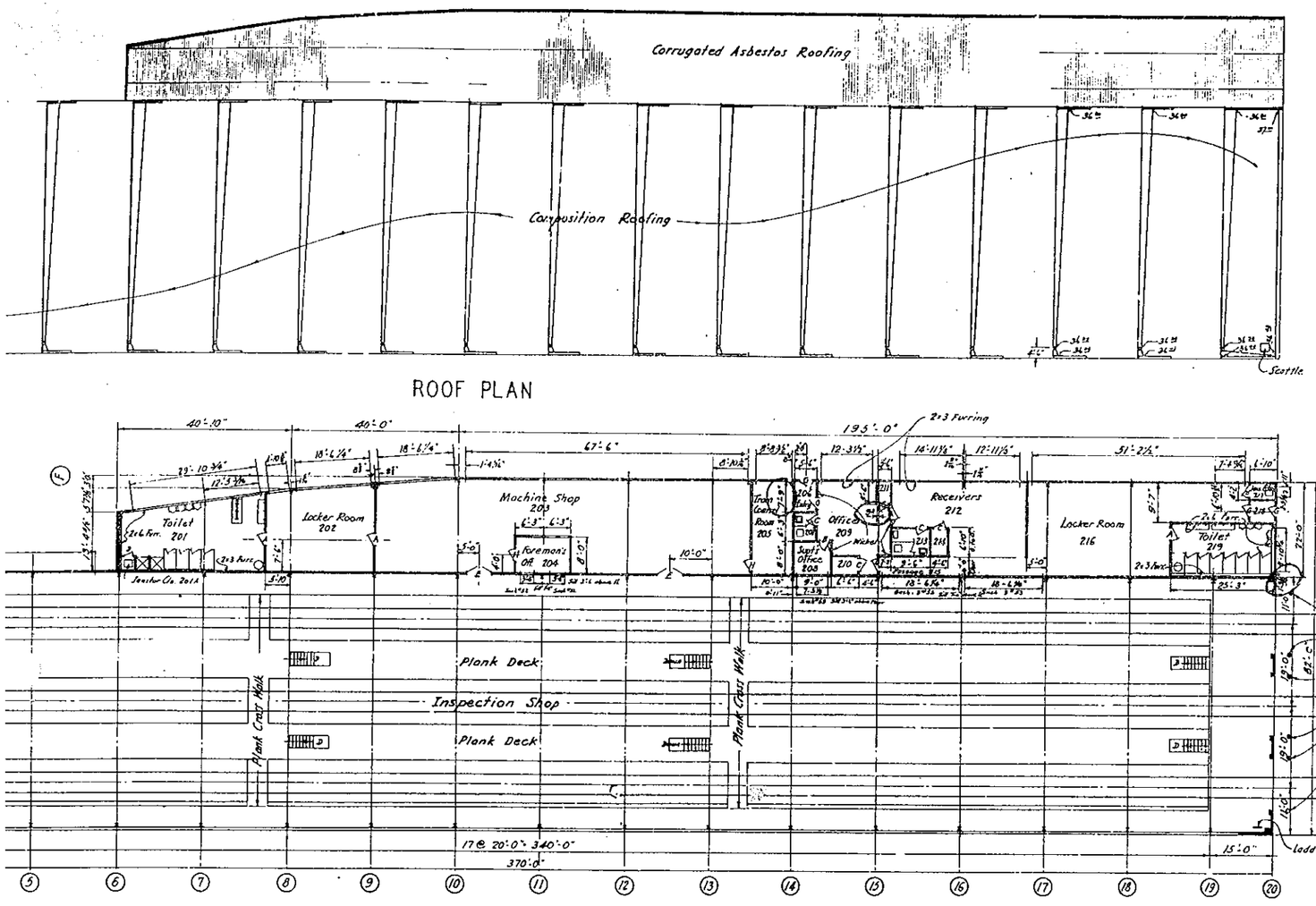
SECTION A-A

SECTION C-C

SECTION D-D

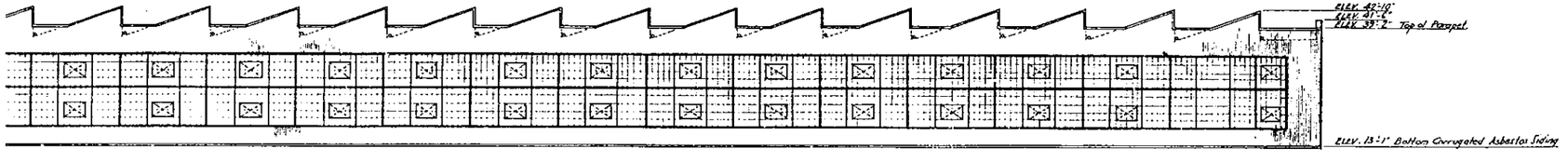
CORRECT:
Glenn Woodruff
Engineer of Design

APPROVED:
Bridge Engineer
Chief Engineer
Director of Operations

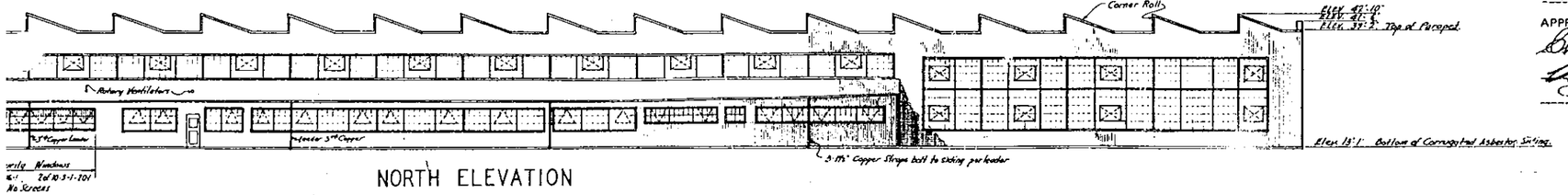


ROOF PLAN

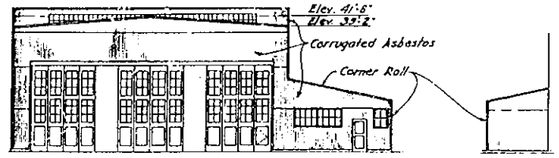
FLOOR PLAN



SOUTH ELEVATION

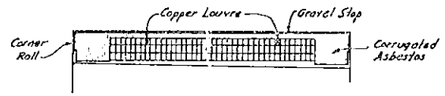


NORTH ELEVATION



EAST ELEVATION
WEST ELEVATION SIMILAR EXCEPT AS NOTED

WEST ELEV.
OFFICE



ELEVATION SAWTOOTH

NOTE:
All Studs in partitions shall be 2x4 unless otherwise noted.
Furr around vent stacks as necessary.
Room dimensions outside concrete to center of partition, or center to center of partitions unless other wise noted.
Anchor partition and furring plates with 20¢ spikes at 2'-6" centers driven into rawl plugs securely anchor at door jambs.

CORRECT:
Engineer of Design

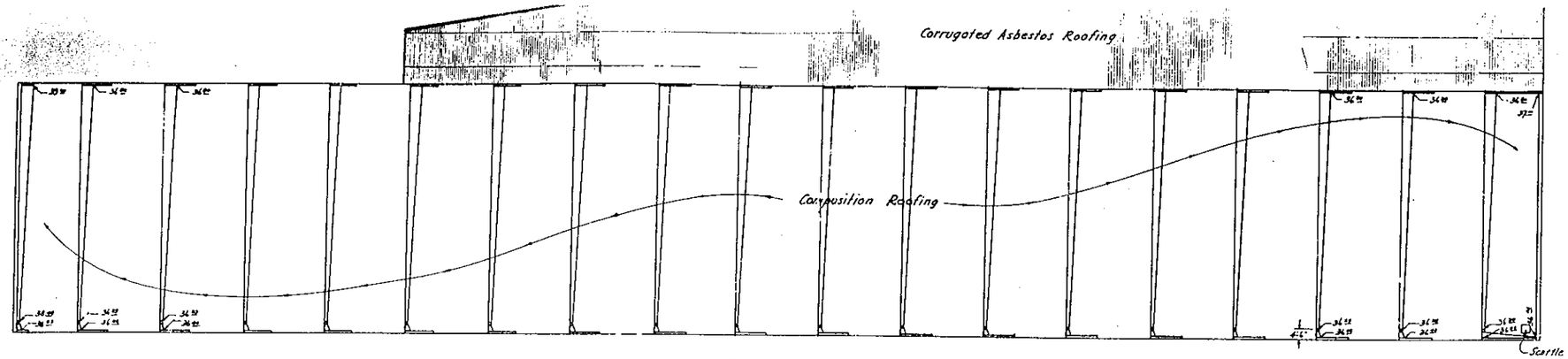
APPROVED:
Bridge Engineer
Chief Engineer
Director of Public Works

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

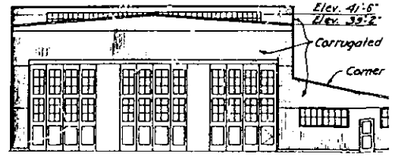
SAN FRANCISCO-OAKLAND BAY BRIDGE

RAILWAY FACILITIES
INSPECTION BUILDINGS
KEY SYSTEM INSPECTION BUILDING
GENERAL PLAN AND ELEVATIONS

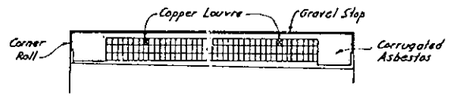
SCALE IN FEET 0 10 20 30 40 50



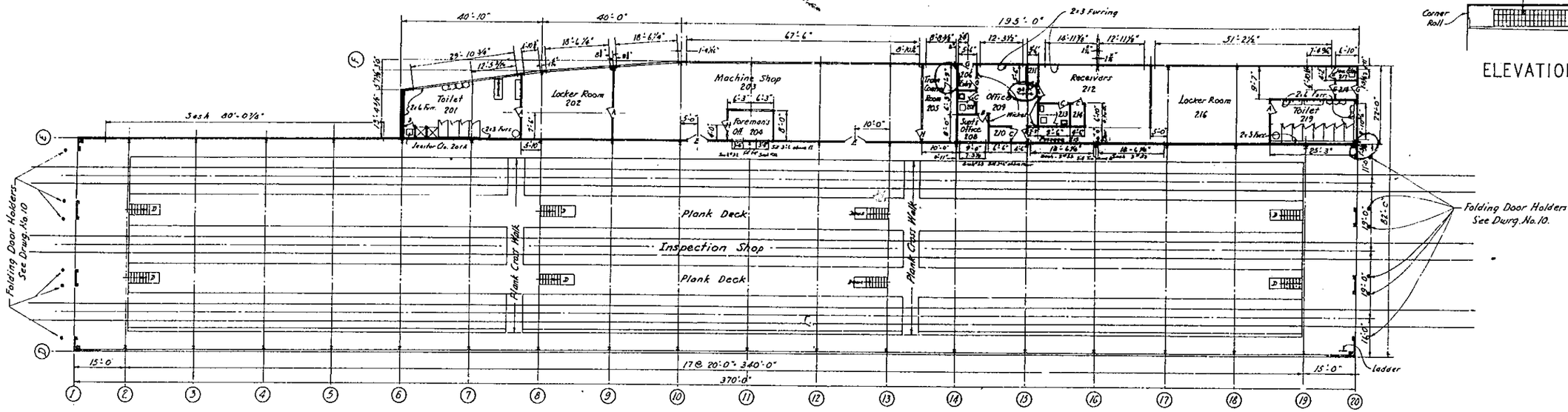
ROOF PLAN



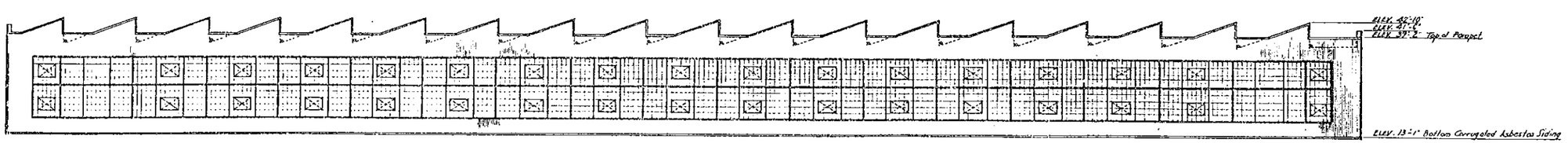
EAST ELEVATION
WEST ELEVATION SIMILAR EXCEPT AS NOTED



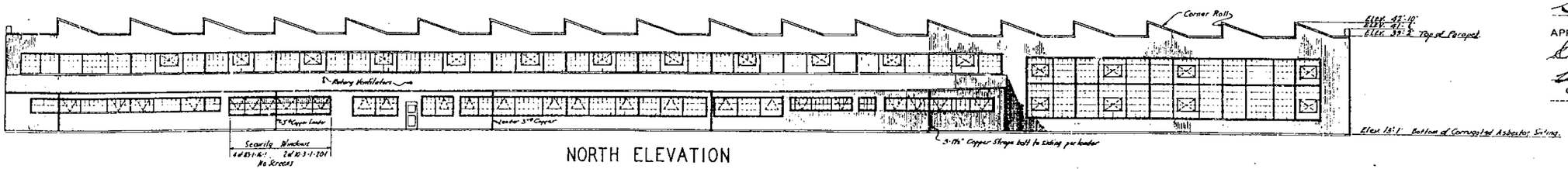
ELEVATION SAWTOOTH



FLOOR PLAN



SOUTH ELEVATION



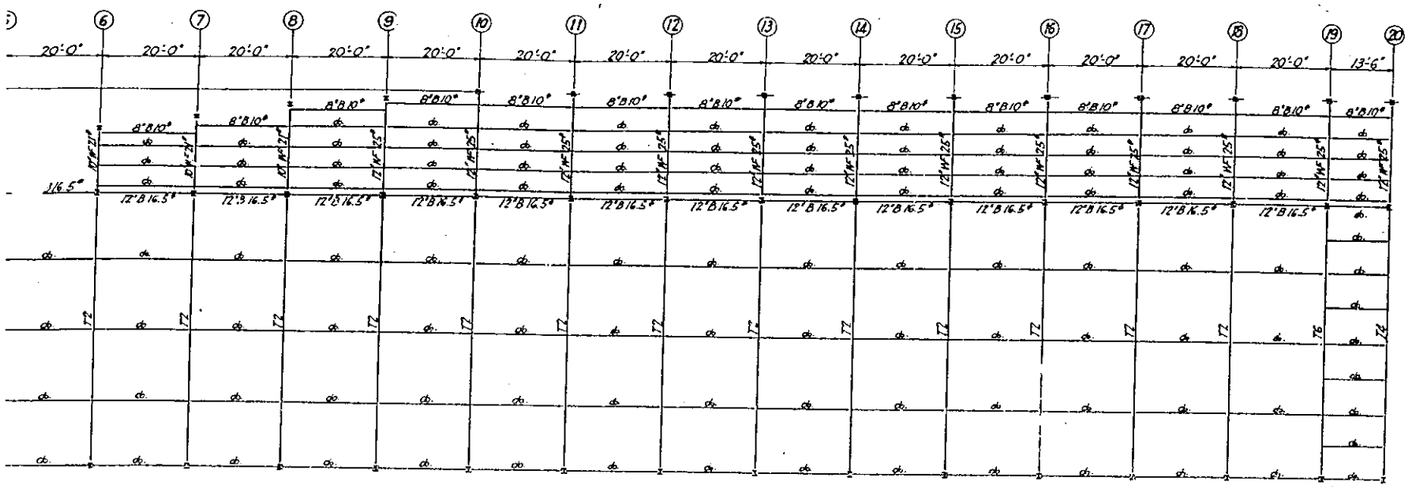
NORTH ELEVATION

CORRECT:
Glenn B. Woodruff
Engineer of Design

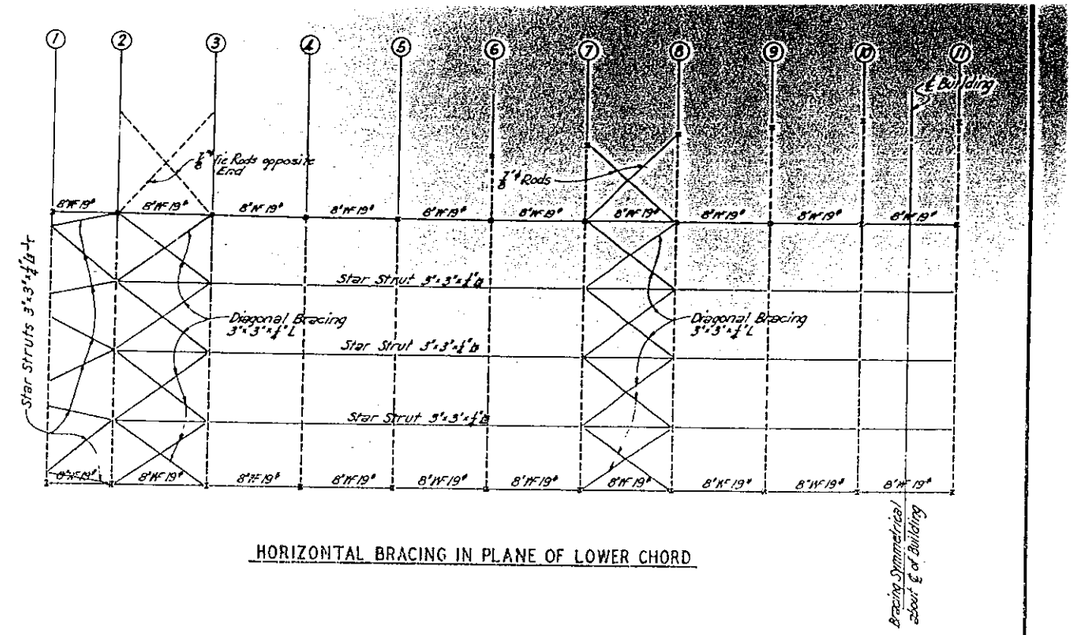
APPROVED:
Chas. L. Andrews
Bridge Engineer
Chief Engineer
Director of Public Works

SA

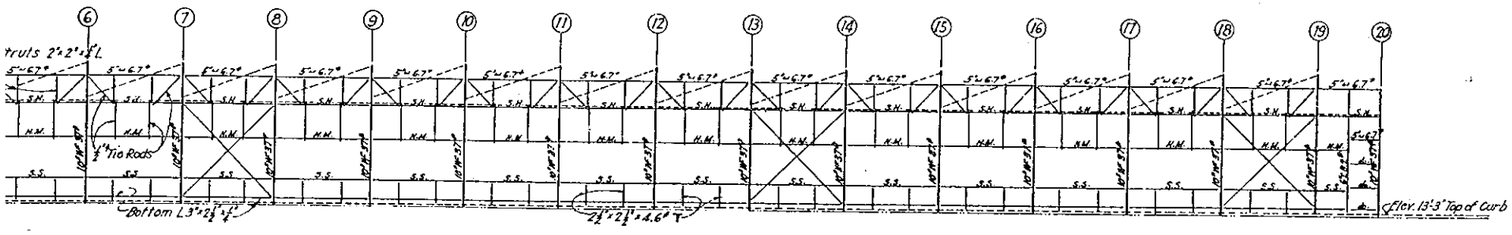
Date	Revisions	By	Chkd
10-26-38	Dimensions near F15, E20, F14	FAI	Wells



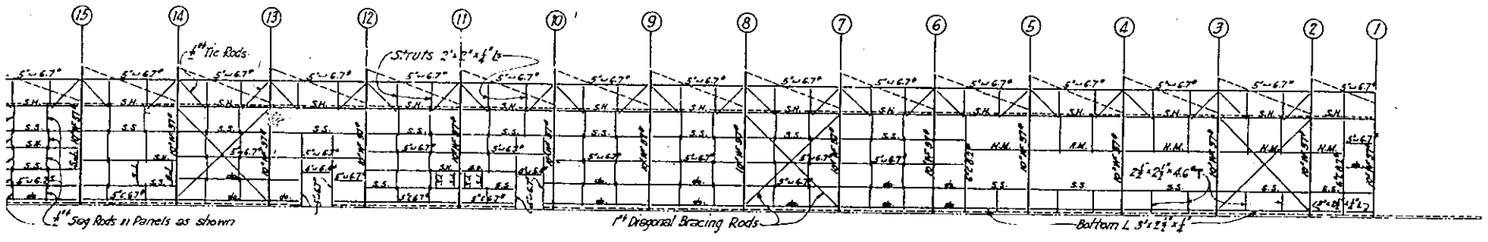
ROOF FRAMING PLAN



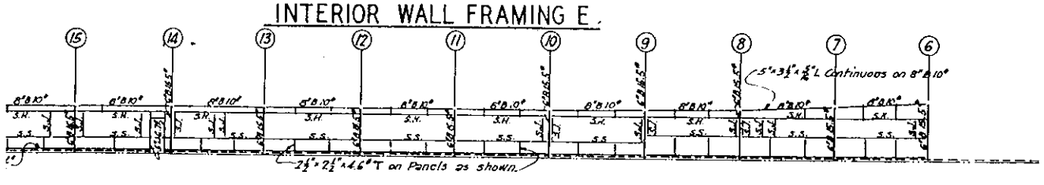
HORIZONTAL BRACING IN PLANE OF LOWER CHORD



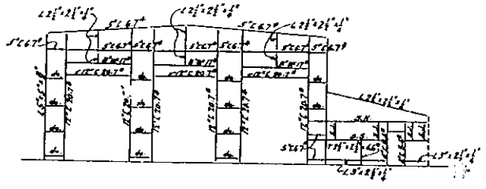
SOUTH WALL FRAMING D



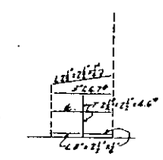
INTERIOR WALL FRAMING E



NORTH WALL FRAMING F



EAST END WALL FRAMING
WEST END WALL SIMILAR



EAST END
OFFICE AISLE

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

SAN FRANCISCO-OAKLAND BAY BRIDGE

RAILWAY FACILITIES
INSPECTION BUILDINGS
KEY SYSTEM INSPECTION BUILDING
STRUCTURAL STEEL FRAMING

SCALE IN FEET
0 5 10 20 30 40

CORRECT:
Engineer of Design

APPROVED:
Bridge Engineer
Chief Engineer
Director of Public Works

CONTRACT NO. R8 DRAWING NO. 5

JULY 1938

ROOF FRAMING PLAN

HORIZONTAL BRACING IN PLANE OI

SOUTH WALL FRAMING D

INTERIOR WALL FRAMING E

NORTH WALL FRAMING F

EAST END WALL FRAMIN
WEST END WALL SIMILAI

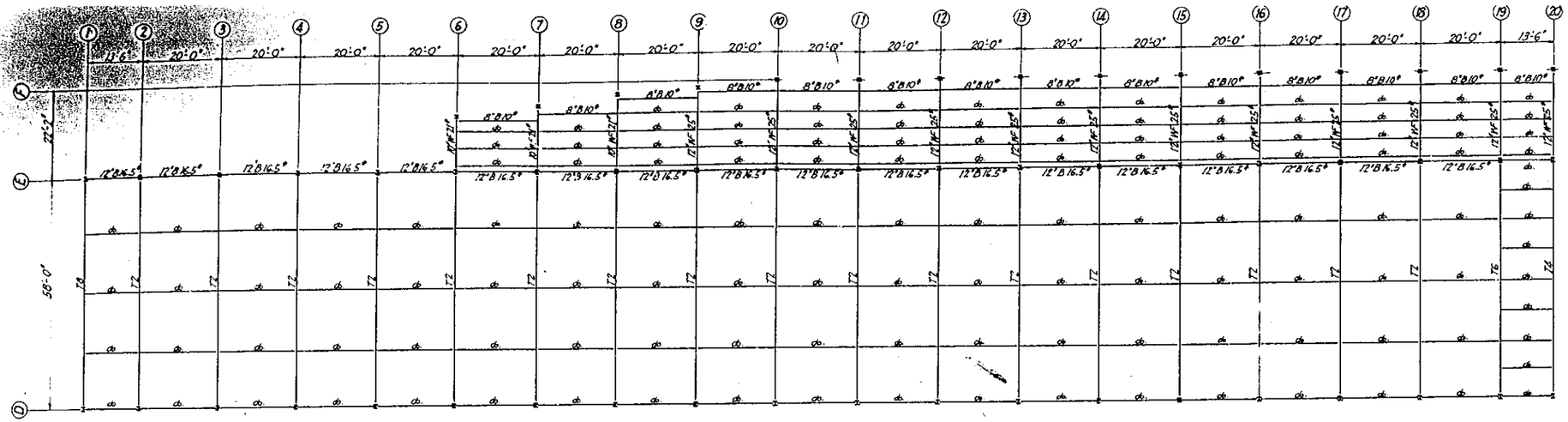
NOTE:
S.H. (Sash Head) = 5"⌴ 6.7#, L 2 1/2"x2 1/2"x1/4".
S.S. (Sash Sill) = 5"⌴ 6.7#, L 1 1/2"x1 1/2"x1/8".
S.J. (Sash Jamb) = 5"⌴ 6.7#, L 1 1/2"x1 1/2"x1/8".
H.M. (Horizontal Mullion) = L 3"x3"x1/4", PL 6"x5/16", L 3"x3"x1/4"

SAN F

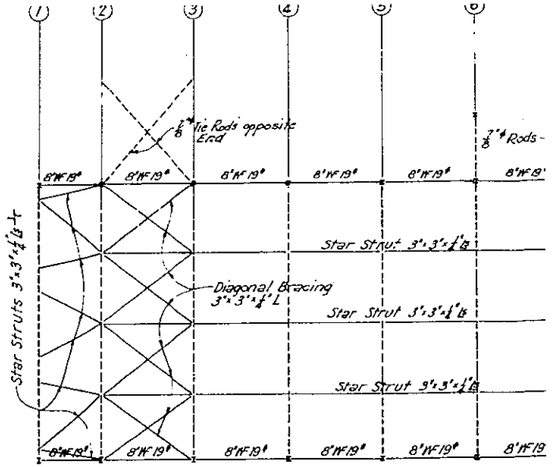
KE

CORRECT:
Engineer of Design

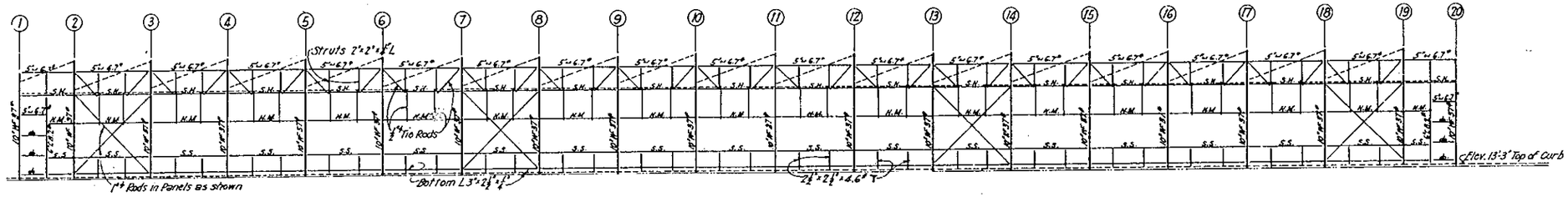
APPROVED:
Bridge Engineer
Chief Engineer
Director of Public Works



ROOF FRAMING PLAN

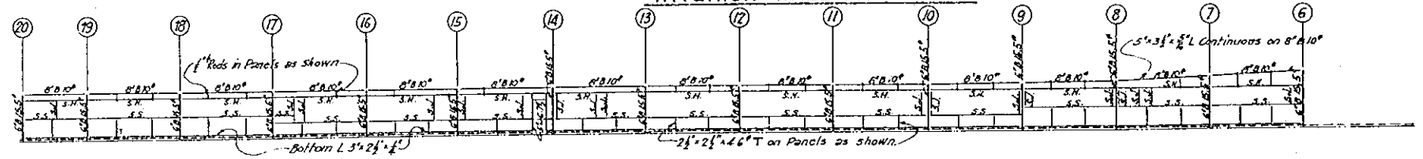


HORIZONTAL BRACING IN PLANE C

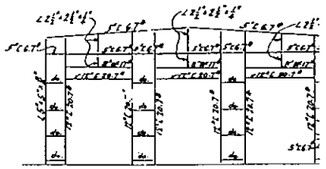


SOUTH WALL FRAMING D

INTERIOR WALL FRAMING E.



NORTH WALL FRAMING F



EAST END WALL FRAMI
WEST END WALL SIMILA

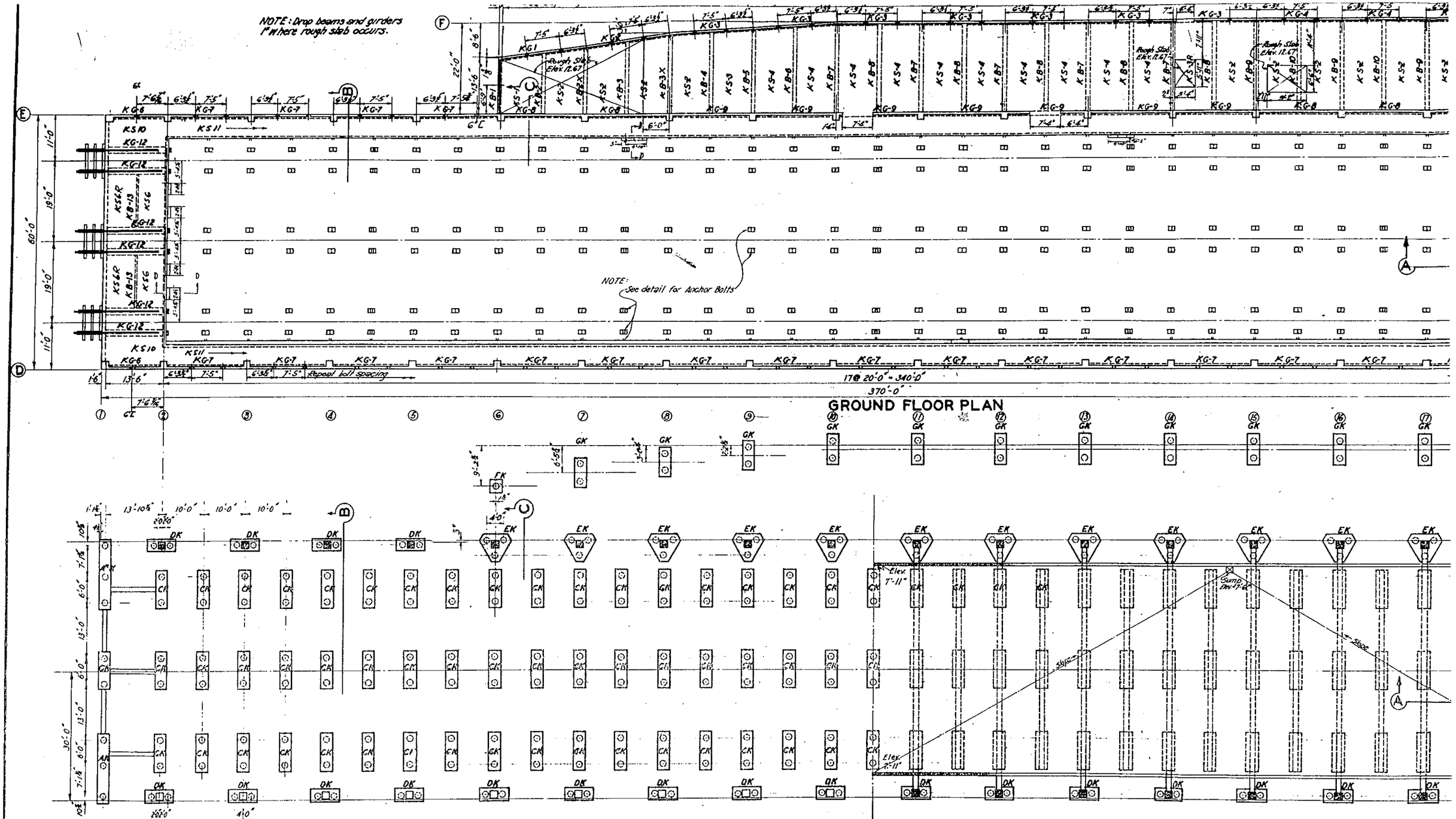
NOTE:
S.H. (Sash Head) = 5"⌐ 6.7# L 2½"x2½"x¼"
S.S. (Sash Sill) = 5"⌐ 6.7# L 1½"x1½"x⅛"
S.J. (Sash Jamb) = 5"⌐ 6.7# L 1½"x1½"x⅛"
H.M. (Horizontal Mullion) = L 3"x3"x¼", 12.6#, ⅝" L 3"x3"x¼"

SAN

CORRECT:
Engineer of Design

KE

APPROVED:
Bridge Engineer
Chief Engineer
Director of Public Works



FOOTING AND PILE PLAN

FOUNDATION DONE UNDER E.W.O. #12
CONT. R21A

Note: Timber Platforms, Rails and Rail sleepers shown on Drawings 68, 69, and 70 are not a part of Contract R14

Elevation Finish Floor Grade 12'-9"
Elevation Top of Curbs and Column Pedestals 13'-3"

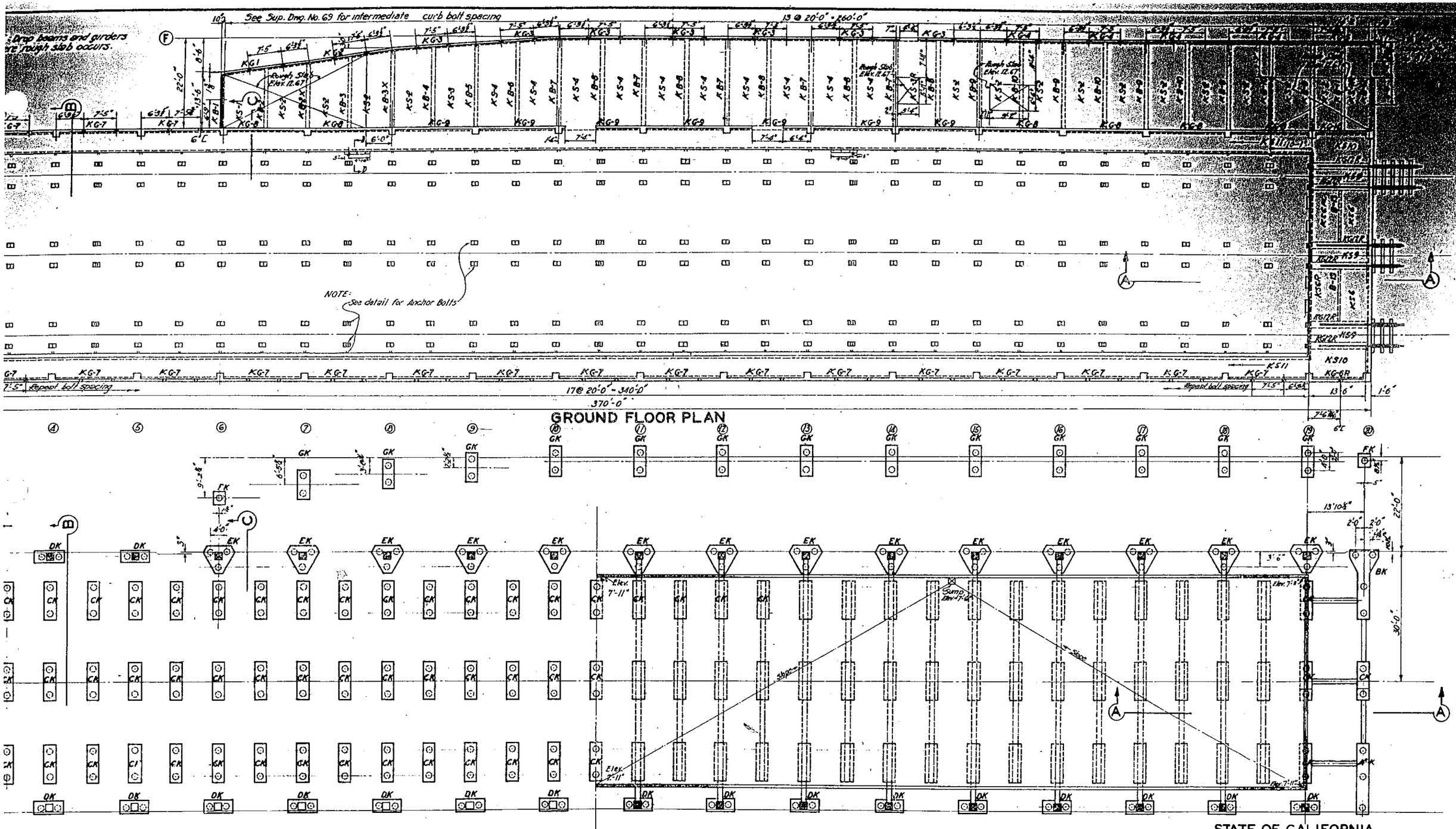
8-10-39	Corrected for Constr. Revisions	[illegible]	
10-27-38	Dimensions to Bldg. Lines on detail at D20	S.A.S.	[illegible]
10-26-38	Dimensions near E-14	S.A.S.	[illegible]
10-20-38	Anchor Bolts - Lines E and F	[illegible]	
9-28-38	Anchor Bolts Detail	J.R.L.	[illegible]
8-3-38	Corbel End Walls of Pit, Curb bolt setting	J.R.L.	[illegible]
7-15-38	Pit slab & Ground Floor Plan Construction	F.A.N.	[illegible]
6-11-38	Dimensions	[illegible]	[illegible]

SAN

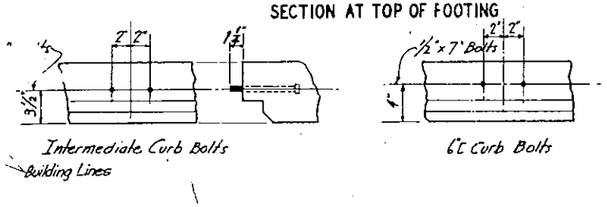
CORRECT: Glenn B. Wandruff, Engineer of Design

APPROVED: [illegible], Bridge Engineer; [illegible], Chief Engineer; [illegible], Director of Public Works

K



SECTION AT TOP OF FOOTING



SECTION AT ELEVATION +9.0

FOOTING AND PILE PLAN

Foundation Done Under E.W.O. #12
Cont. R21A

Note: Timber Platforms, Rails and Rail sleepers shown on Drawings 68, 69, and 70 are not a part of Contract R4

Elevation Finish Floor Grade 12'-9"
Elevation Top of Curbs and Column Pedestals 13'-3"

8-10-39	Corrected for Constr. Revisions	JG	
10-27-38	Dimensions to Bldg. Lines on detail at D20	S.A.S.	HEW
10-26-38	Dimensions near E-14	S.A.S.	HEW
10-20-38	Anchor Bolts - Lines E and F	JKE	
9-28-38	Anchor Bolts Detail	JKL	HCL
8-3-38	Corbel [illegible] Walls of Pot Curb bolt spacing	[illegible]	[illegible]

CORRECT:
Glenn B. Wardrupp
Engineer of Design

APPROVED:
Chas. Andrews
Bridge Engineer

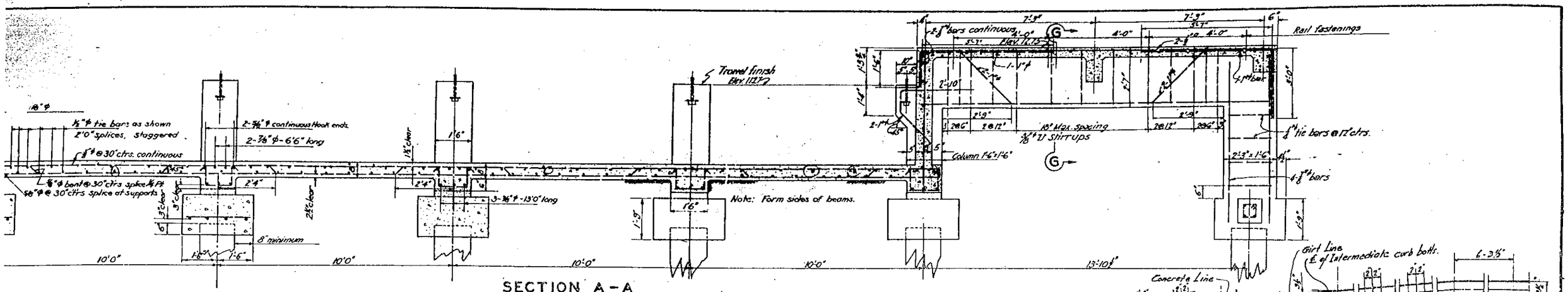
[illegible]
Chief Engineer

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

SAN FRANCISCO-OAKLAND BAY BRIDGE

RAILWAY FACILITIES
SUBSTRUCTURE - EAST BAY YARD
FOUNDATION PLAN - FOOTINGS
KEY ROUTE INSPECTION BUILDING

SCALE IN FEET

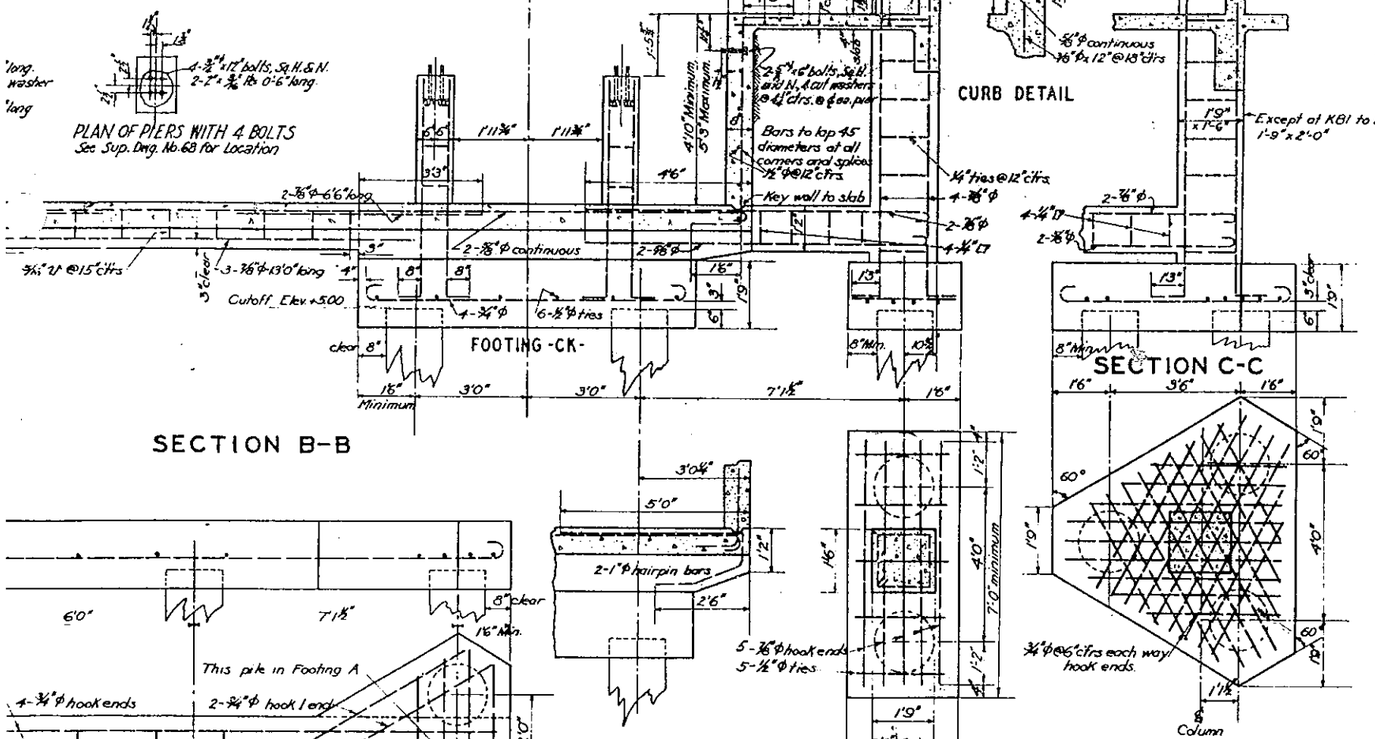


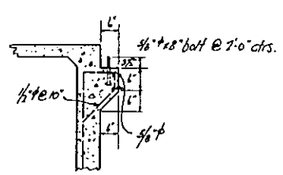
SECTION A-A

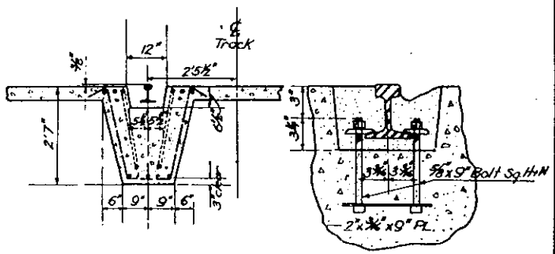
LAYOUT INTERMEDIATE CURB BOLTS
COLUMNS F6 TO F10
NO SCALE.

Footing - Columns

DK. = 1'-6" x 1'-9"
EK = 1'-6" x 1'-9" (except col. 6E) 2'-0" x 1'-9"
GK = 1'-2" x 1'-5"
FK = 1'-5" x 1'-5"







All rails and track clips furnished and set by others.
Maximum aggregate in slabs and walls 6" or less in thickness shall pass a 1" round screen.
Sections A-A, B-B, C-C, and D-D from drawing 68

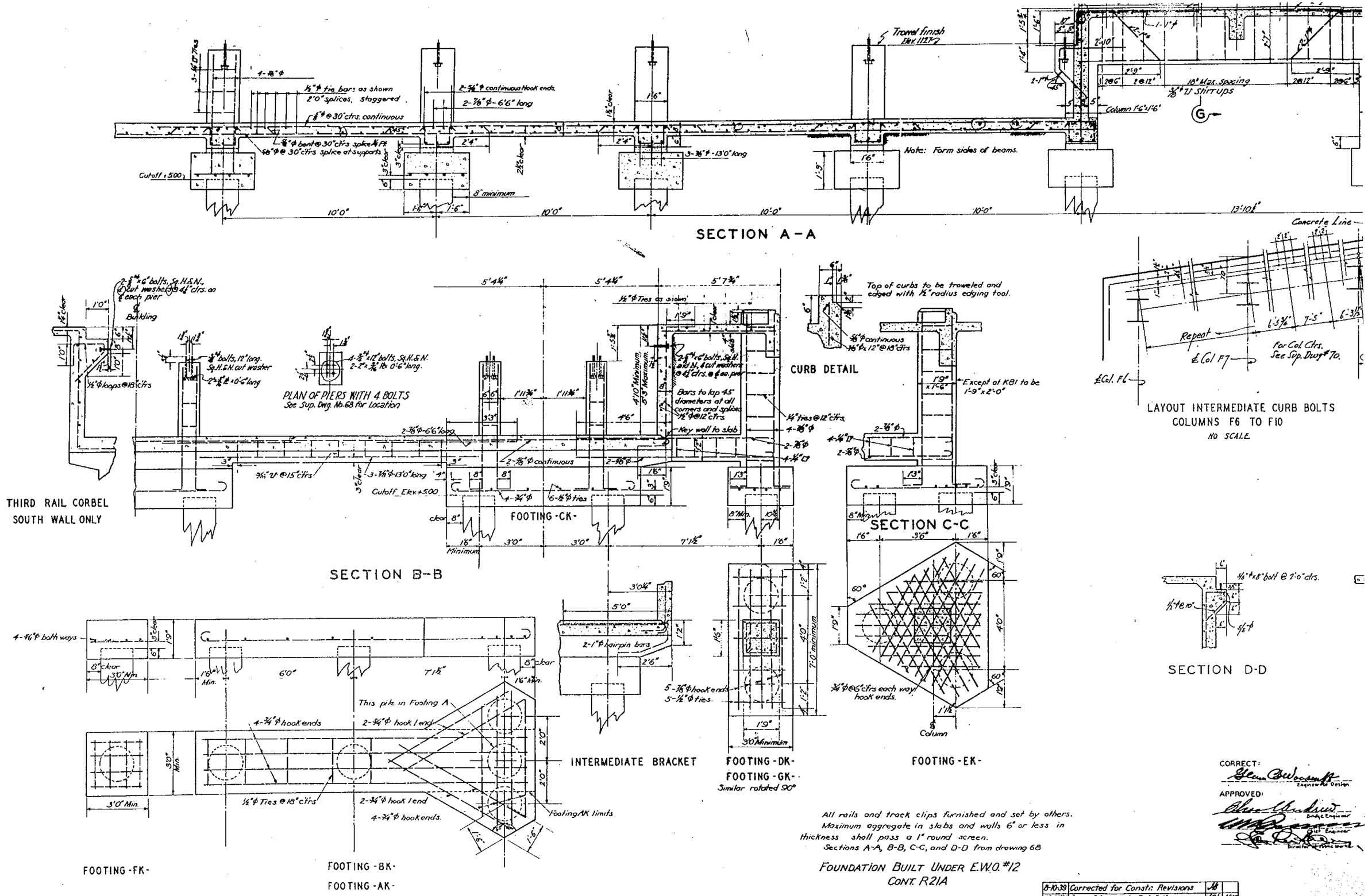
FOUNDATION BUILT UNDER E.W.O. #12
CONT. R21A

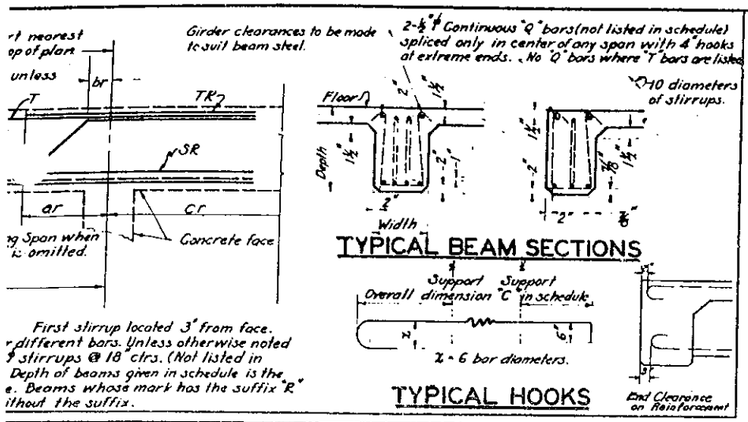
8-10-39	Corrected for Constr. Revisions	M	
10-10-38	Transit Intermediate Curb Bolts	IRL	M.M.

CORRECT:
Glenn B. Woodruff
Engineering Design

APPROVED:
Bridge Engineer
Chief Engineer
Director of Public Works

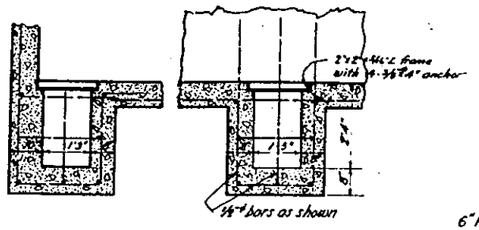
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
SAN FRANCISCO-OAKLAND BAY BRIDGE
RAILWAY FACILITIES
SUBSTRUCTURE - EAST BAY YARD
FOOTING AND ANCHOR BOLT DETAILS
KEY ROUTE INSPECTION BUILDING
SCALE AS NOTED


SECTION A-A
Note: Form sides of beams.
Trowel finish Elev. 112.7
Cutoff +5.00
SECTION B-B
PLAN OF PIERS WITH 4 BOLTS
See Sup. Dwg. No. 68 for Location
THIRD RAIL CORBEL
SOUTH WALL ONLY
FOOTING -CK-
CURB DETAIL
Top of curbs to be troweled and edged with ½" radius edging tool.
SECTION C-C
LAYOUT INTERMEDIATE CURB BOLTS
COLUMNS F6 TO F10
NO SCALE
Concrete Line
Repeat
For Col. Ctrs. See Sup. Dwg. #70.
SECTION D-D
INTERMEDIATE BRACKET
FOOTING -DK-
FOOTING -GK-
Similar rotated 90°
FOOTING -EK-
FOOTING -FK-
FOOTING -BK-
FOOTING -AK-
This pile in Footing A
Footing AK limits
All rails and track clips furnished and set by others.
Maximum aggregate in slabs and walls 6" or less in thickness shall pass a 1" round screen.
Sections A-A, B-B, C-C, and D-D from drawing 68
FOUNDATION BUILT UNDER E.W.O. #12
CONT. R21A
CORRECT:
Engineer of Design
APPROVED:
Bridge Engineer
Chief Engineer
Director of Public Works
8-10-39 Corrected for Constr. Revisions
10-30-36 Layout Intermediate Curb Bolts
7-12-38 Sec. A-A, Sec. B-B Rev. Sec. E-E & F-F Removed
6-11-37 Dimensions added, note Ser. C-C
8-3-38 Elev. top of pit columns, footing Columns
Date Revisions By Chk'd

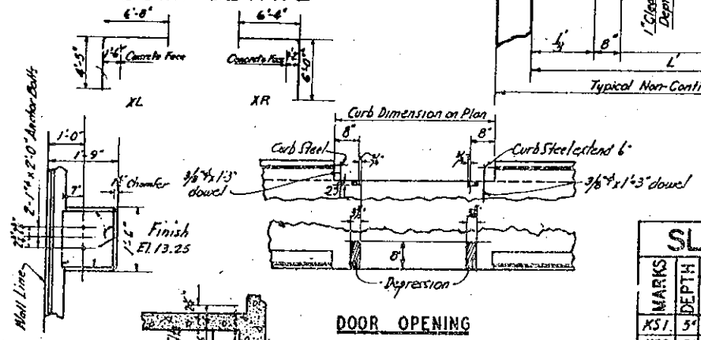


AM SCHEDULE

HOOKS (LEFT END / RIGHT END)	STIRRUPS: NO. & SIZE	TYPE	SPACING FROM SUPPORTS: LEFT END	SPACING FROM SUPPORTS: RIGHT END	REMARKS
	6 - ⅜	⊔	2@6"	2@6"	
	10 - ⅜	⊔	4@6"	4@6"	
	10 - ⅜	⊔	4@6"	4@6"	XL 1-⅞ XR 1-¾ See detail at right.
	14 - ⅜	⊔	6@6	6@6"	In Second Layer
	14 - ⅜	⊔	6@6"	6@6"	XL 2-⅞ XR 2-¾ In Second Layer
	14 - ⅜	⊔	3@6", 3@9"	3@6, 3@9"	In Second Layer
	20 - ⅜	⊔	4@4", 3@6", 2@9"	4@4", 3@6, 2@9"	XL 2-⅞ XR 2-¾ In Second Layer
	24 - ⅜	⊔	6@4", 2@6", 3@9	6@4", 2@6, 3@9"	In Second Layer
	24 - ⅜	⊔	6@4", 2@6, 3@9"	6@4", 2@6", 3@9"	XL 2-⅞ XR 2-¾ In Second Layer
	24 - ⅜	⊔	6@4", 2@6", 3@9"	6@4", 2@6", 3@9"	In Second Layer
	18 - ⅜	⊔	3@5", 6@7"	3@5", 6@7"	XL 2-⅞ XR 2-¾ In Second Layer
	18 - ⅜	⊔	3@5", 6@7"	3@5", 6@7"	In Second Layer
	14 - ⅜	⊔	6@7"	6@7"	In Second Layer
	6 - ⅜	⊔	2@7"	2@7"	XL 2-⅞ XR 2-¾ In Second Layer
	8 - ⅜	⊔	3@8"	3@8"	
	12 - ⅜	⊔	2@8", 1@B2	6@8", 1@B2	
	14 - ⅜	⊔	5@8", 1@B3	5@8", 1@B3	
	26 - ⅜	⊔	3@6, 2@8, 6@10, 1@B4 or B6 or B8	3@6, 2@8, 6@10, 1@B4 or B6 or B8	In Second Layer at Top; In Second Layer at Bottom
	12 - ⅜	⊔	4@8, 1@B10	4@8, 1@B10	" " " " Top
	8 - ⅜	⊔	2@9" 1@B11	2@9" 1@B11	
	10 - ⅜	⊔	4@5"	4@5"	
	10 - ⅜	⊔	4@5"	4@5"	
	20 - ⅜	⊔	2@6, 6@8, 1@B2 or 1@B3 or 1@B10	2@6, 6@8, 1@B2 or 1@B3 or 1@B10	At G8 only
	36 - ⅜	⊔	7@4", 5@6", 4@10" 1@B4 or 1@B6 or 1@B8	7@4", 5@6", 4@10" 1@B4 or 1@B6 or 1@B8	In Second Layer
	14 - ⅜	⊔	1@6", 4@8", 1@B11	1@6", 4@8", 1@B11	

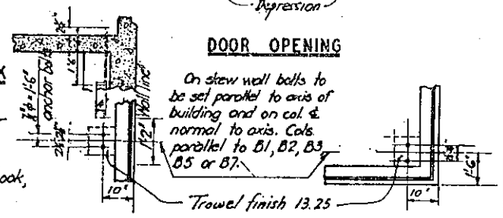


SUMP DETAIL



COLUMNS DK & EK

Note: See drawing 69 for footing column sizes. For GK & FK 4-⅞"ϕ bars - 12' straight hook, ½"ϕ ties @ 12" ctrs



DOOR OPENING

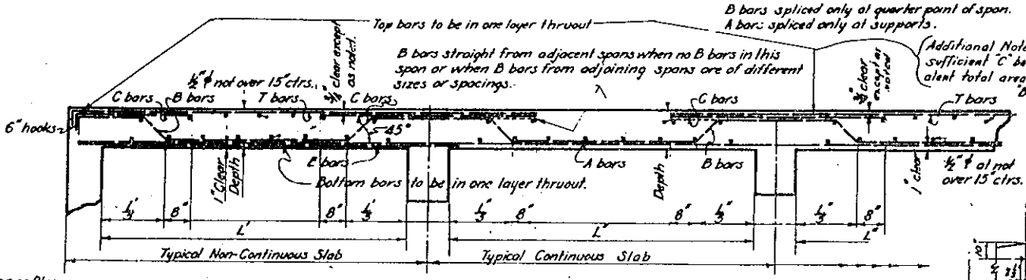
On skew wall bolts to be set parallel to axis of building and on col. & normal to axis. Cols. parallel to B1, B2, B3, B5 or B7.

COLUMN GK

COLUMN FK AT NORTH EAST CORNER

ANCHOR BOLT DETAILS

Provide bars in top of slabs of same size as B bars at 10" ctrs. and of same length as C bars. These bars to be over all girders or walls and extending at right angles to main slab bars. At discontinuous points, such as exterior walls etc., these bars to be provided with 6" hooks on outer end. Tie bars to be ½"ϕ not over 15" ctrs.

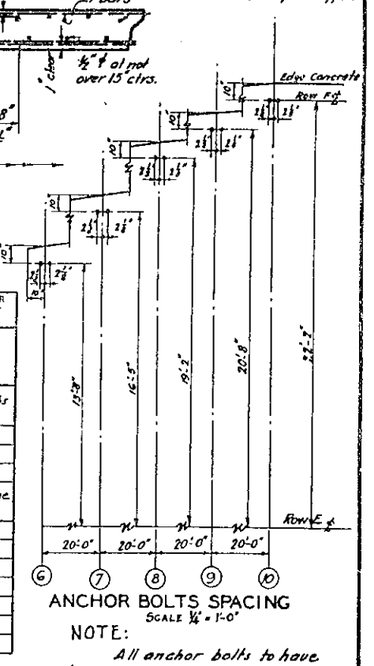


TYPICAL SLAB DETAILS

SLAB SCHEDULE

SLABS WHOSE MARKS HAVE A SUFFIX "R" ARE SIMILAR TO SLABS OF THE SAME MARK WITHOUT SUFFIX EXCEPT ENDS ARE REVERSED

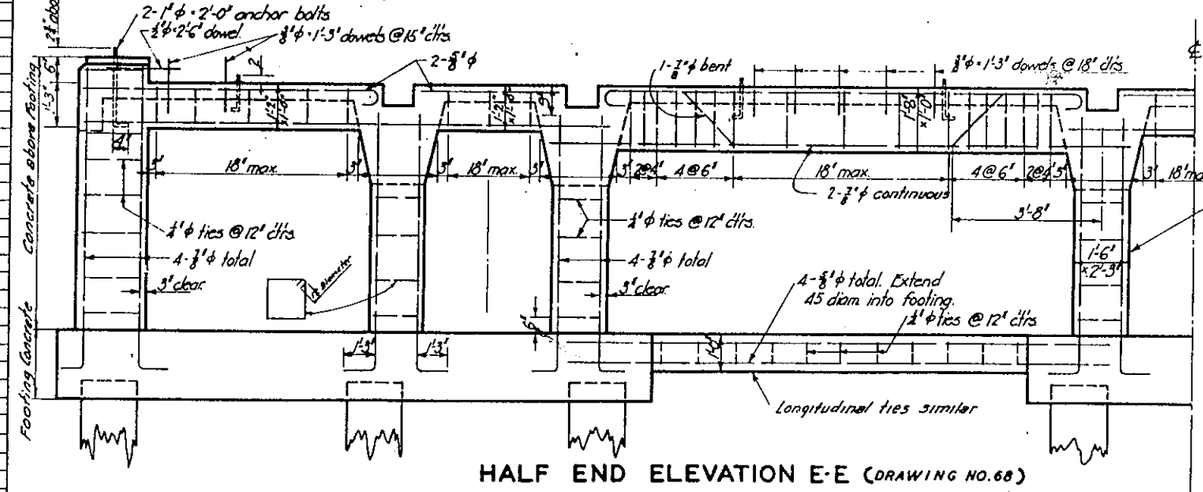
MARKS	DEPTH	REINFORCING BARS (ROUND UNLESS NOTED) A	B	C LEFT END	C RIGHT END	E	T	REMARKS
KS1	5"	½"@18"	½"@18"	½"@18"				Bottom of panels with rough slabs to be lowered one inch
KS2	5"	½"@18"	½"@18"	½"@18"				
KS3	5"	½"@13"	½"@13"	½"@24"	½"@24"			C bars right end for S3R.
KS4	5"	½"@13"	½"@13"	½"@13"				Top steel 1¼" clear.
		"	"	"				" " "
KS6	5"	⅝"@20"	⅝"@20"	⅝"@20"	⅝"@20"			Top steel 1¼" clear. C bars @ one end only for KS6R.
KS8								
KS9	5"					½"@12"		
KS10	5"	⅝"@21"	⅝"@21"	⅝"@21"	⅝"@21"	⅝"@21"		Top steel 1¼" clear.
KS11	4"					⅝"@8"		



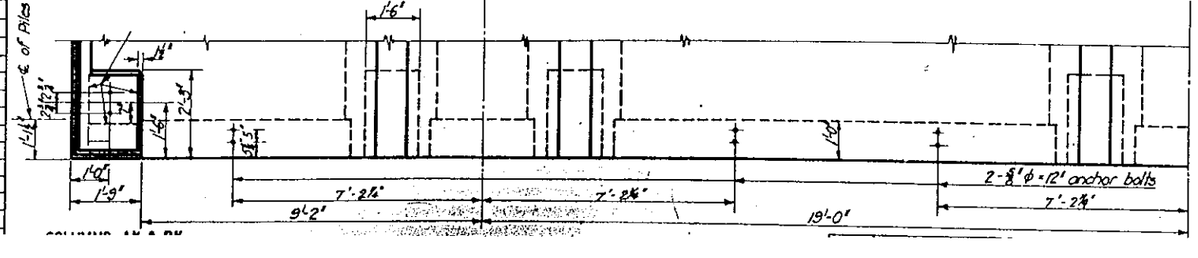
ANCHOR BOLTS SPACING

SCALE ¼" = 1'-0"

NOTE: All anchor bolts to have hexagonal nuts.



HALF END ELEVATION E-E (DRAWING NO. 68)



CORRECT:
Engineer of Design

APPROVED:
Bridge Engineer
Engineer
Director of Public Works

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

SAN FRANCISCO-OAKLAND BAY BRIDGE

RAILWAY FACILITIES
SUBSTRUCTURE-EAST BAY YARD
PIT FRAMING AND SLAB DETAILS
KEY ROUTE INSPECTION BUILDING

SCALE IN FEET

BAR DIAGRAM

First stirrup located 3" from face of supports. Dimensions a.b.c are not necessarily the same for different bars. Unless otherwise noted or shown all steel dimensions refer to ₵ of bar. Provide 5/16" ϕ stirrups @ 18" ctrs. (Not listed in schedule) in all beams when none occur near middle of spans. Depth of beams given in schedule is the minimum in any span, the soffit of any beam being in a plane. Beams whose mark has the suffix "R" have their ends the reverse of beams of the same mark without the suffix.

Girder clearances to be made to suit beam steel. Spliced only in center of span with 4 hooks at extreme ends. No "C" bars where "T" bars are listed.

TYPICAL BEAM SECTIONS

TYPICAL HOOKS

BEAM SCHEDULE

BEAM Mark	Width	Depth	Span	BARS Mark	No.	Size	cl	bl	al	ar	br	cr	HOOKS Left End	HOOKS Right End	STIRRUPS No. & Size	Type	Spacing from Supports Left End	Spacing from Supports Right End	REMARKS
KB1	8	16	13'-6"	S	1	3/4"	2					2			6-5/16	U	2@6"	2@6"	
				B	1	3/4"	2'-3"	1'-6"	2'-6"	2'-6"	1'-6"	6"		⊃					
KB2	8	16	14'-10½	S	1	1"□	2"					2"	⊂	⊃	10-5/16	U	4@6"	4@6"	
				B	1	1"□	3'-0"	1'-6"	2'-6"	2'-6"	1'-6"	3"		⊃					
KB2X	8	16	16'-3"	S	1	1"□	2"					2"			10-5/16	U	4@6"	4@6"	XL 1-7/8 XR 1-3/4
				B	1	1"□	3'-0"	2'-0"	3'-0"	3'-0"	2'-0"	6"		⊃					See detail at right.
KB3	8	16	17'-7½	S	2	1"□	2"					2"	⊂	⊃	14-5/16	U	6@6	6@6"	
				B	1	1"□	3'-0"	2'-8"	3'-6"	3'-6	2'-8"	3"		⊃					In Second Layer
KB3X	8	16	19'-0"	S	2	1"□	2"					2"			14-5/16	U	6@6"	6@6"	XL 2-7/8 XR 2-3/4
				B	1	1"□	3'-0"	3'-2"	4'-0"	4'-0	3'-2"	6"		⊃					In Second Layer
KB4	10	22	19'-9"	S	3	7/8"	2"					2"	⊂	⊃	14-5/16	U	3@6",3@9"	3@6,3@9"	
				B	2	7/8"	2'-9"	2'-4	3'-9"	3'-9"	2'-4"	3"		⊃					In Second Layer
KB5	10	22	20'-6"	S	3	1"	2"					2"			20-5/16	U	4@4", 3@6," 2@9"	4@4",3@6,2@9"	XL 2-7/8 XR 2-3/4
				B	2	1"	3'-0"	2'-8"	4'-0"	4'-0"	2'-8"	6"		⊃					In Second Layer
KB6	10	22	21'-3"	S	3	1"	2"					2"	⊂	⊃	24-5/16	U	6@4",2@6",3@9	6@4",2@6,3@9"	
				B	2	1"	3'-0	2'-2"	3'-6"	3'-6	2'-2"	3"		⊃					In Second Layer
				B	1	1"	3'-0"	4'-5"	5'-9"	5'-9"	4'-5"	3"		⊃					
KB7	10	22	22'-0"	S	3	1"	2"					6"			24-5/16	U	6@4", 2@6,3@9"	6@4",2@6,3@9"	XL 2-7/8 XR 2-3/4
				B	2	1"	3'-0"	2'-2"	3'-6	3'-6	2'-2"	6"		⊃					In Second Layer
				B	1	1"	3'-0"	4'-5"	5'-9"	5'-9"	4'-5"	6"		⊃					
KB8	10	22	22'-0"	S	3	1"	2"					2"	⊂	⊃	24-5/16	U	6@4",2@6",3@9"	6@4",2@6",3@9"	
				B	2	1"	3'-0"	2'-5"	3'-9	3'-9"	2'-5"	3"		⊃					In Second Layer
				B	1	1"	3'-0"	4'-8"	6'-0"	6'-0"	4'-8"	3"		⊃					
KB9	8	18	22'-0"	S	2	1"□	2"					2"			18-5/16	U	3@5",6@7"	3@5",6@7"	XL 2-7/8 XR 2-3/4
				B	2	1"	3'-0"	3'-0"	4'-0"	4'-0"	3'-0"	6"		⊃					In Second Layer
KB10	8	18	22'-0"	S	2	1"□	2"					2"		⊃	18-5/16	U	3@5",6@7"	3@5",6@7"	
				B	2	1"	3'-0"	3'-0"	4'-0"	4'-0"	3'-0"	3"		⊃					In Second Layer
KB11	8	18	22'-0"	S	2	1"	2"					2"		⊃	14-5/16	U	6@7"	6@7"	
				B	2	1"	3'-0"	3'-0"	4'-0"	4'-0"	3'-0"	3"		⊃					In Second Layer
KB12	8	18	22'-0"	S	2	1"	2"					2"			6-5/16	U	2@7"	2@7"	XL 2-7/8 XR 2-3/4
				B	1	7/8"	3'-0"	3'-6"	4'-6"	4'-6"	3'-6"	6"		⊃					In Second Layer
KB13	8	18	12'-0"	S	1	1"	12"					12"			8-5/16	U	3@8"	3@8"	
				B	1	1"	3"	10"	2'-0"	2'-0"	10"	3"	⊂	⊃					
KG1	10	18	20'-2½	S	2	7/8"	8"					2"			12-5/16	U	2@8", 1@B2	6@8", 1@B2	
				B	1	1"	8"	1'-10	3'-0"	5'-0"	3'-10	5'-3"	⊂						
KG2	10	18	20'-2½	S	2	7/8"	2"					2"			14-5/16	U	5@8", 1@B3	5@8", 1@B3	
				B	1	1"	5'-3"	3'-10	5'-0"	5'-0"	3'-10	5'-3"							
				TR	1	7/8"				5'-3"		5'-3"							In Second Layer at Top.
KG3	10	22	20'-0"	S	3	7/8"	1'-0"					1'-0"			26-5/16	U	3@6",2@8",6@10,1@B4 or B6 or B8	3@6,2@8",6@10,1@B4 or B6 or B8	
				B	2	7/8"	5'-3	3'-6"	5'-0"	5'-0"	3'-6"	5'-3"							In Second Layer at Bottom
				TR	1	3/4"				5'-0"		5'-0"							" " " " Top
KG4	10	20	20'-0"	S	2	7/8"	4"					4"			12-5/16	U	4@8, 1@B10	4@8, 1@B10	
				B	1	1"	5'-3"	3'-8"	5'-0"	5'-0"	3'-8"	5'-3"							
KG5	10	20	14'-2"	S	2	7/8"	2"					1'-2"			8-5/16	U	2@9" 1@B11	2@9" 1@B11	
				B	1	7/8"	5'-3"	3'-0"	4'-4"	4'-4"	3'-0"	8"		⊃					
KG6	8	14	13'-6"	S	1	7/8"	1'-2"					2"			10-5/16	U	4@5"	4@5"	
				B	1	7/8"	1'-4"	2'-8"	3'-6	3'-6"	2'-8"	5'-6"							
KG7	8	14	20'-0"	S	1	1"	2"					2"	⊂		10-5/16	U	4@5"	4@5"	
				B	1	7/8"	5'-6"	4'-2"	5'-0"	5'-0"	4'-2"	5'-6"							
				TR	1	3/4"				5'-0"		5'-0"							At G8 only
KG8	10	20	20'-0"	S	2	1"	4"					4"			20-5/16	U	2@6",6@8",1@B2 or 1@B3 or 1@B10	2@6",6@8",1@B2 or 1@B3 or 1@B10	
				B	1	1"	5'-6"	4'-2"	5'-6"	5'-6"	4'-2"	5'-6"							
				TR	1	3/4"				5'-0"		5'-0"							
KG9	10	24	20'-0"	S	3	7/8"	6"					6"			36-5/16	U	7@4",5@6",4@10" 1@B4 or 1@B6 or 1@B8	7@4",5@6",4@10" 1@B4 or 1@B6 or 1@B8	
				B	2	7/8"	5'-6"	3'-6"	5'-3"	5'-3"	3'-6"	5'-6"							In Second Layer
KG10	10	20	13'-6"	S	2	7/8"	2"					1'-2"			14-5/16	U	1@6",4@8",1@B11	1@6",4@8",1@B11	
				B	1	7/8"	5'-6"	3'-4"	3'-9	3'-9	3'-4"	1'-4"		⊃					
KG11	None																		
KG12	Detailed on Drawing 69																		

SUMP DETAIL

COLUMNS DK & EK

Note: See drawing 69 for footing column sizes. For GK & FK 4-3/4"ϕ bars - 12" straight hook, ¼"ϕ ties @ 12" ctrs.

DOOR OPENING

COLUMN GK

COLUMN FK
AT NORTH EAST CORNER

ANCHOR BOLT DETAILS

C bars. These bars to be over all girders or walls and extending at right angles to main slab bars. At discontinuous points, such as exterior walls etc., these bars to be provided with 6" hooks on outer end. Tie bars to be ½"ϕ not over 15" ctrs.

TYPICAL SLAB DETAILS

SLAB SCHEDULE

SLABS WHOSE MARKS HAV... TO SLABS OF THE SAME M... ENDS ARE REVERSED

Marks	Depth	Reinforcing Bars (Round unless noted) A	B	C Left End	C Right End	E	T	
KS1	5"	½"@18"	½"@18"	½"@18"				Both...
KS2	5"	½"@18"	½"@18"	½"@18"				to be...
KS3	5"	½"@13"	½"@13"	½"@24"	½"@24			C ba...
KS4	5"	½"@13"	½"@13"	½"@13"				Top ...
								-
KS6	5"	5/8"@20"	5/8"@20"	5/8"@20"	5/8@20			Top s...
								end...
KS8								
KS9	5"					½"@12"		
KS10	5"	5/8"@21	5/8"@21	5/8@21	5/8@21	5/8@21"		Top s...
KS11	4"					3/8"@8"		

HALF END ELEVATION E-E (DRAWING NO. 68)

COLUMNS AK & BK

HALF END PLAN

Date	Revision	By	Chk'd
10-10-38	End Beam section E-E. Anchor bolts spacing F6 to F10, FK.	JLE	EJL

Date	Revision	By	Chk'd
8-3-38	Column Bases	JRL	EJL
7-11-38	Column bases, Door Opening bolt settings	JRL	EJL
6/11/37	Reinforcement, door bolts	HAS	EJL

NAILING NOTES:
1"x6" Sheathing to have 2-8d. each joist and at ends. Toe nails required to draw tight.
Blocking to have 4-10d. each end of block.

Solid blocking @ intermediate Roof beams and @ ends.
Sash Mullion turned out
2"x8" Joist SIE. 24" ctrs., splices to be alternated
1"x6" T. & G. Sheathing
Sheathing S1S surfaced side down
2"x5" Top Plate
T. & G. Sheathing
Composition Shingles
12'B 16.5#
T-5 & T-6
T1 & T2
T7 & T8
Slope ¼"
3'-3"x3"x¼" ℓs
2'-0"
20'-0"
20'-0" Spans
13'-6" Key System Bldg.
10'-6" Southern Pacific Bldg.

SAWTOOTH ROOF FRAMING SECTION A-A

¾" bolts to L @ 2'-6" ctrs.
2"x5"
1"x6" T & G Sheathing
2"x8" Nailing
PARAPET FRAMING
North and South Walls

Column Row F-20
Col. Row A2, A16, F6
DETAIL EDGE ANGLE AT END OF OFFICES

for other girt connections See Sup. Drawing No. 10A.
CHANNEL GIRT CONNECTION

ANGLE GIRT CONNECTION

NOTE: Neutral axis of all members to intersect

INTERMEDIATE TRUSS
T-1 FOR SOUTHERN PACIFIC T-5 SIMILAR EXCEPT JOIST CONNECT.
T-2 FOR KEY SYSTEM T-6 SIMILAR EXCEPT JOIST CONNECTIONS
Camber Truss 1 inch

SD Bldg. Catenary Supports on Trusses No. 5-9 & 14 16'-0"
Key Bldg. No. 6-11 & 15 19'-0"
Key System
Southern Pacific

SECTION M-M

2 Rivet connections for horiz. tension members at all bays except second bay from each end

KEY SYSTEM INSPECTION BUILDING
First and Second Bay Each End

GENERAL NOTE:
All Rivets ⅞" unless noted otherwise.
Girt Bolts ¾", all others ⅞" unless noted otherwise.
All Gusset Plates ⅜" thick unless noted otherwise.
All holes 1/16" unless noted otherwise.
Dardelet Rivet Bolts may be substituted for Rivets.

End connection similar to Section O-O Dwg. #9 for 12"WF 25#
Slotted hole in Web of Column
Column base
WALL COLUMN BRACING

CORNER CONNECTION

TYPICAL WALL CONNECTIONS
Intersection of End Walls of Office and Interior Longitudinal Walls

SEC. J-J
SEC. K-K
SEC. L-L
SILL SUPPORT POST

6"B15.5# COLUMN BASE
10"WF 37# COLUMN BASE
TYPICAL COLUMN BASE CONNECTIONS

Welds each end similar to U4L1
Welds each end similar to U4L6
ST. 6"WF 12.5#
Key System Bldg.
Southern Pacific Bldg.
Welds each end similar to U4L1

END TRUSS
T-3 FOR SOUTHERN PACIFIC T-7 SIMILAR EXCEPT JOIST CONNECT.

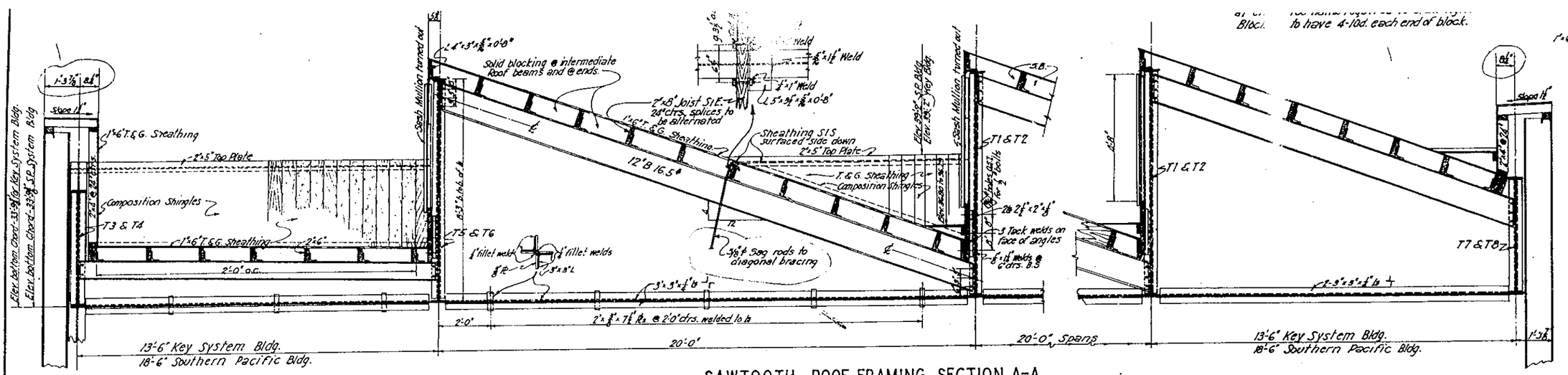
SOUTHERN PACIFIC INSPEC. BLDG.
End Bay, other connections similar to Key System Inspection Building

CORRECT:
Engineer of Design
APPROVED:
Bridge Engineer
Chief Engineer

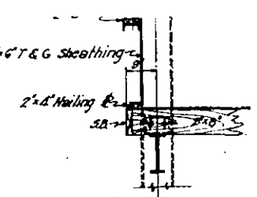
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
SAN FRANCISCO-OAKLAND BAY BRIDGE
RAILWAY FACILITIES
INSPECTION BUILDINGS
TRUSSES AND ROOF FRAMING
WALL DETAILS

SCALE IN FEET

SAWTOOTH ROOF FRAMING SECTION A-A



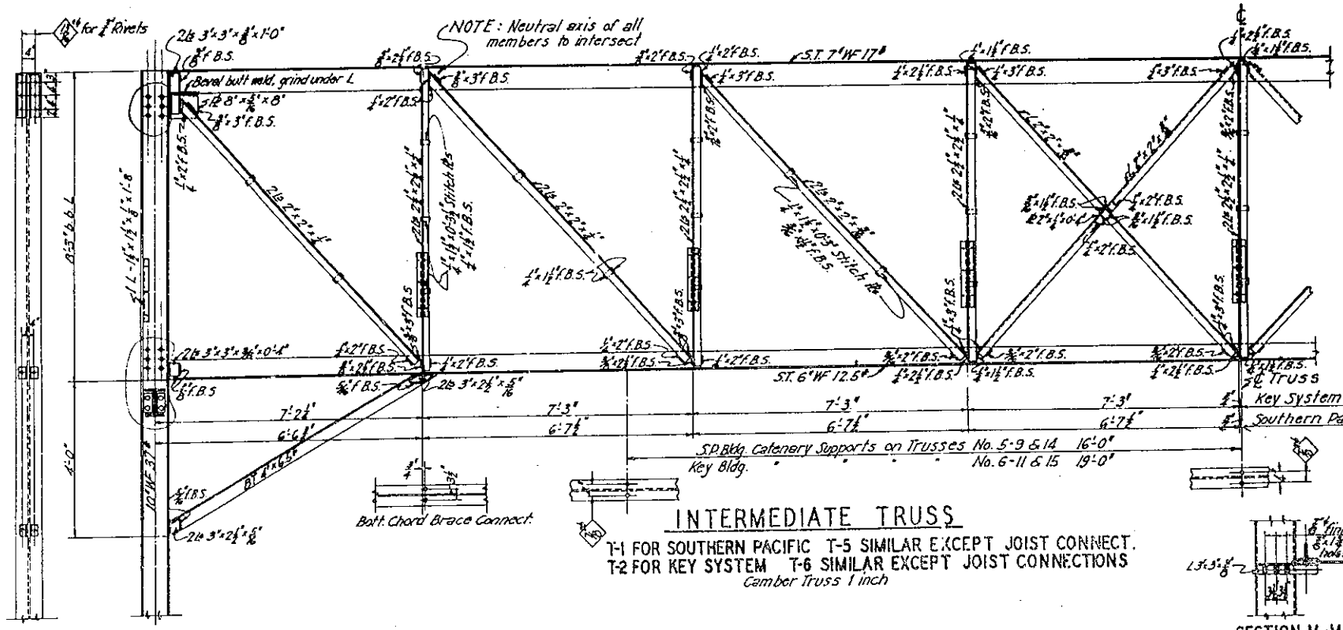
Block. To have 4-10d. each end of block.



PARAPET FRAMING
North and South Walls

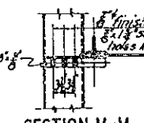
For other purl connections See Sup. Drawing No. 10A.

CHANNEL GIRT CON

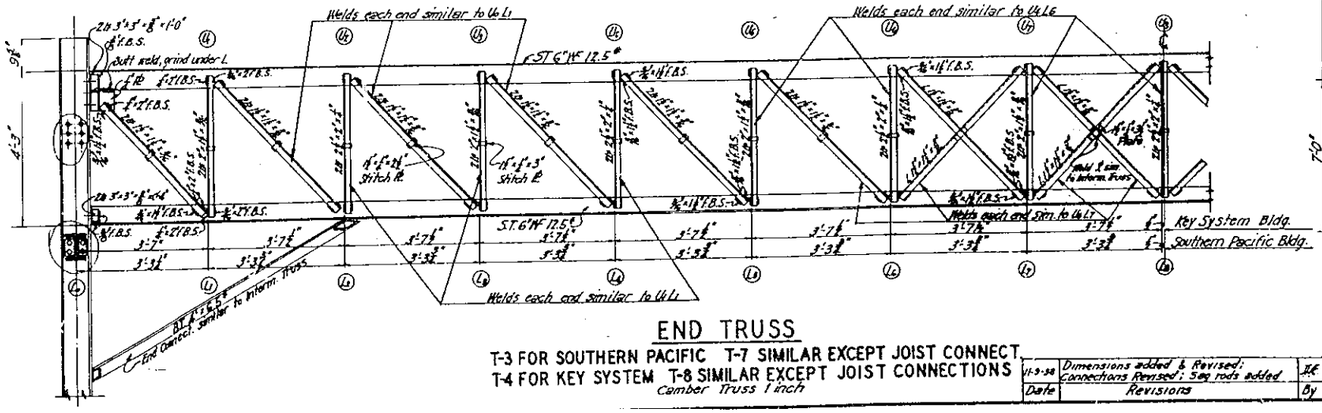


INTERMEDIATE TRUSS

T-1 FOR SOUTHERN PACIFIC T-5 SIMILAR EXCEPT JOIST CONNECT.
T-2 FOR KEY SYSTEM T-6 SIMILAR EXCEPT JOIST CONNECTIONS
Camber Truss 1 inch



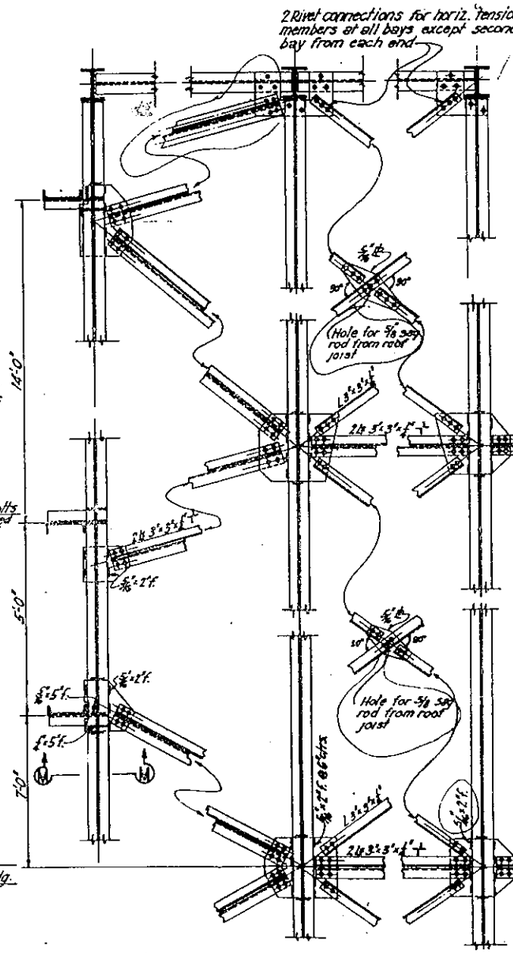
SECTION M-M



END TRUSS

T-3 FOR SOUTHERN PACIFIC T-7 SIMILAR EXCEPT JOIST CONNECT.
T-4 FOR KEY SYSTEM T-8 SIMILAR EXCEPT JOIST CONNECTIONS
Camber Truss 1 inch

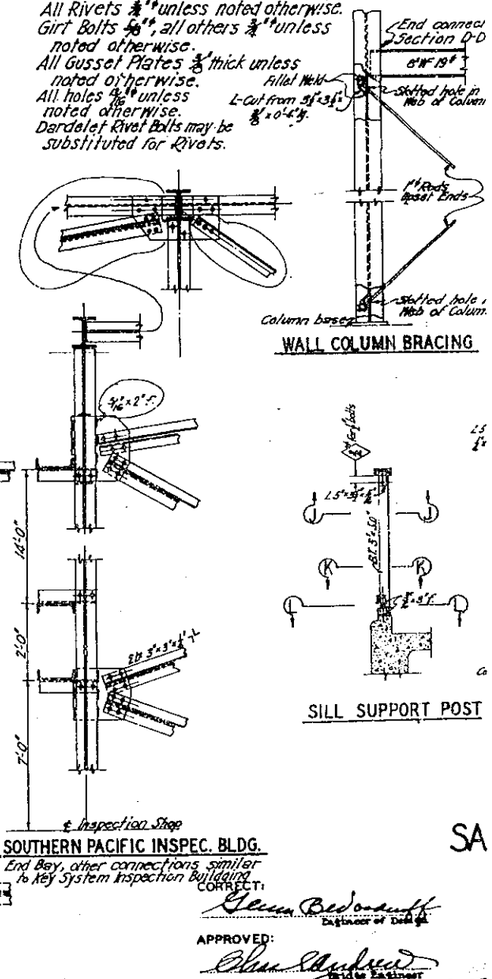
Date	Revisions	By	Chkd
11-9-38	Dimensions added & Revised; Connections Revised; Sag rods added	J.E.	C.J.B.



KEY SYSTEM INSPECTION BUILDING

First and Second Bay Each End

GENERAL NOTE:
All Rivets 3/4" unless noted otherwise.
Girt Bolts 5/8", all others 3/4" unless noted otherwise.
All Gusset Plates 3/8" thick unless noted otherwise.
All holes 13/16" unless noted otherwise.
Dardelet Rivet Bolts may be substituted for Rivets.



WALL COLUMN BRACING

SILL SUPPORT POST

SOUTHERN PACIFIC INSPEC. BLDG.
End Bay, other connections similar to Key System Inspection Building

CORRECT:
Glenn Beckwith
Engineer of Design

APPROVED:
Bridge Engineer
Chief Engineer
Director of Public Works

SA

TYPICAL HORIZONTAL BRACING CONNECTIONS

SECTION G-G
SECTION F-F SIMILAR

SPLICE JOINT

SEC. THRU COLUMN SASH MULLION

HORIZONTAL MULLIONS

SASH SILL

SASH JAMB

TYPICAL SASH FRAMING DETAILS

TYPICAL EXTERIOR DOOR FRAMING

SECTION H-H

SECTION J-J

SECTION K-K

SECTION L-L

SECTION N-N

SECTION M-M

TYPICAL INTERIOR SWING DOOR FRAMING

NOTE: Sill angles should be loose and bolted in the field to allow for sash adjustment to accomodate flashing.

DETAIL SLIDING DOOR FRAMING

SECTION D-D

SECTION E-E

COLUMN ROW E

COLUMN ROW F

COLUMNS B2 & B17

NOTE: Structural Steel Fabricator to check with Corrugated Asbestos Fabricator as to spacing of Roof Beams for proper laps at points shown on Plan & Elevation

CORRECT:

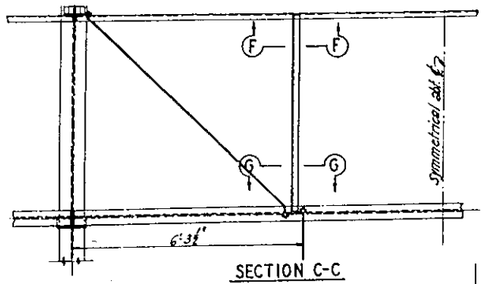
APPROVED:

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

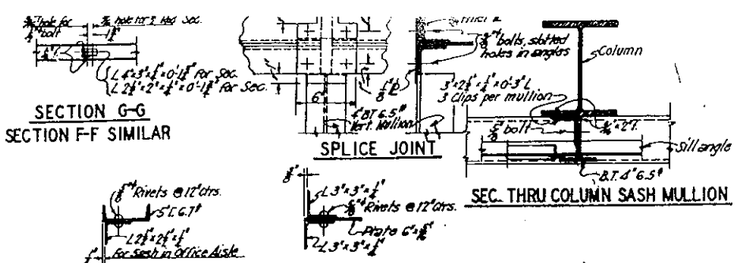
SAN FRANCISCO-OAKLAND BAY BRIDGE

RAILWAY FACILITIES
INSPECTION BUILDINGS
COLUMNS AND WALL DETAILS

SCALE IN FEET



SECTION C-C

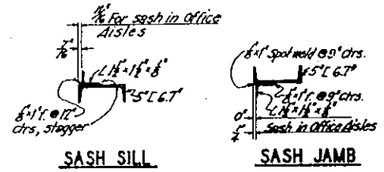


SECTION G-G
SECTION F-F SIMILAR

SPLICE JOINT

SEC. THRU COLUMN SASH MULLION

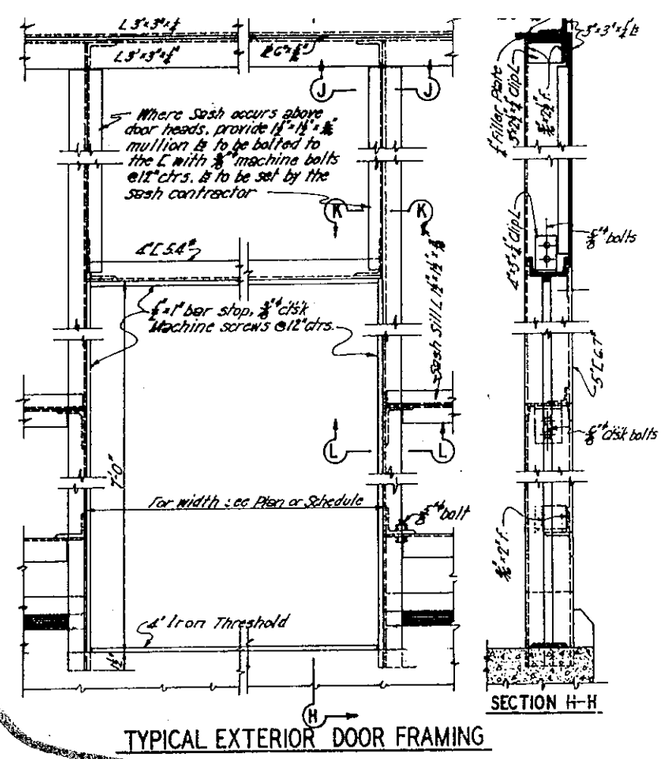
HORIZONTAL MULLIONS



SASH SILL

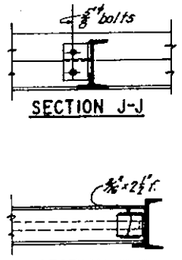
SASH JAMB

TYPICAL SASH FRAMING DETAILS



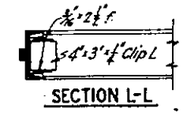
TYPICAL EXTERIOR DOOR FRAMING

SECTION H-H

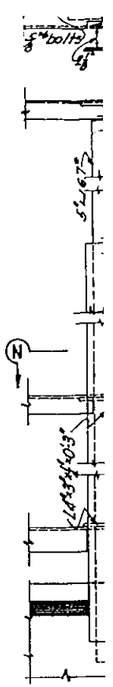


SECTION J-J

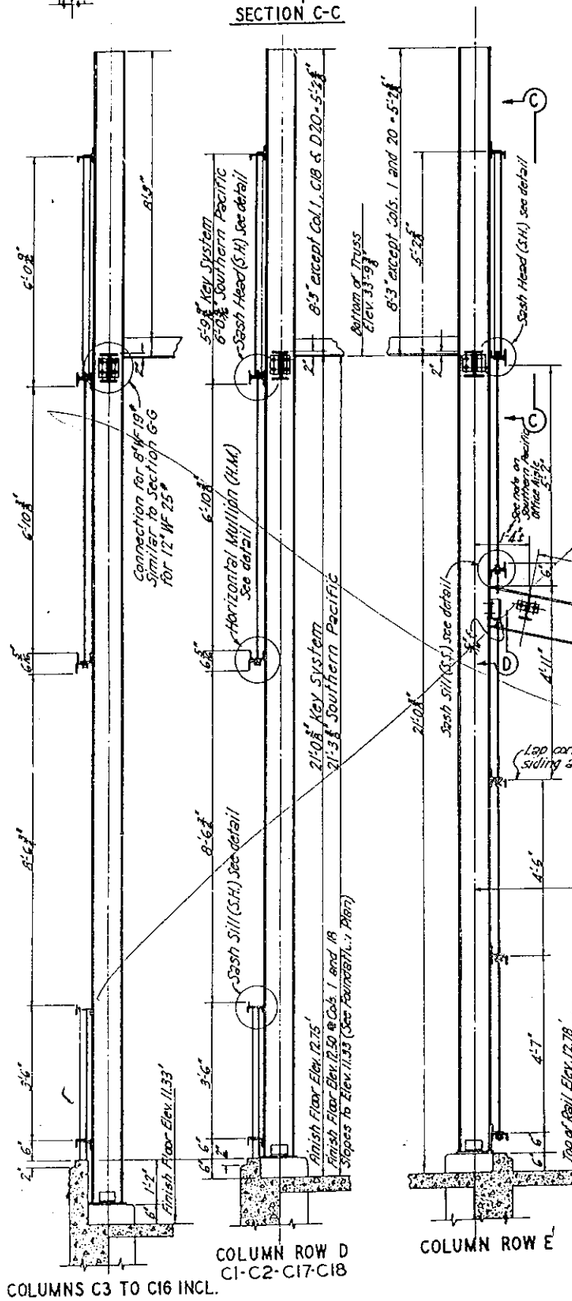
SECTION K-K



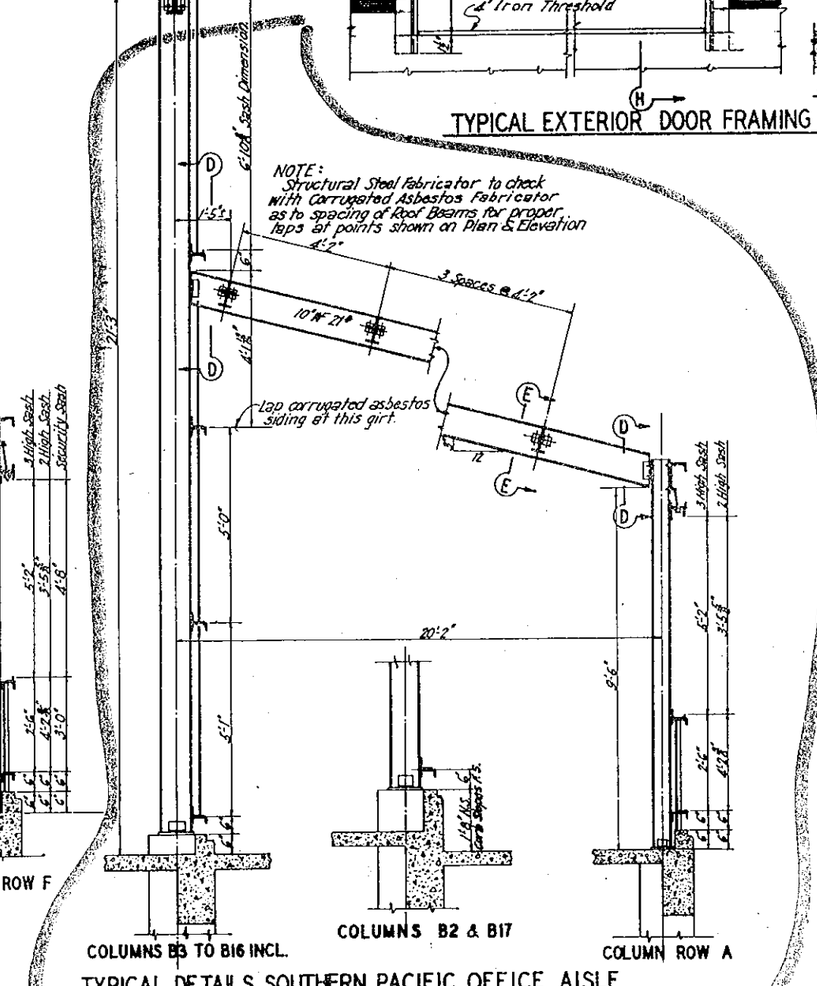
SECTION L-L



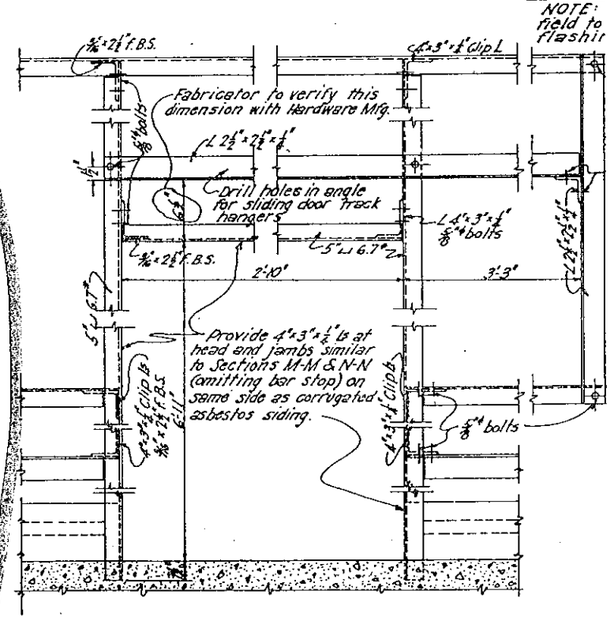
TYPICA
NOTE:
Weld to
flashi



TYPICAL DETAILS KEY SYSTEM OFFICE AISLE



TYPICAL DETAILS SOUTHERN PACIFIC OFFICE AISLE



DETAIL. SLIDING DOOR FRAMING

SA

CORRECT:
Engineer of Design

APPROVED:
Bridge Engineer
Asst. Engineer
Director of Public Works

SECTION C-C

SECTION H-H

SECTION B-B

SECTION G-G

SECTION K-K

TYPICAL SWITCH BOARD FRAMING

SECTION L-L

SECTION D-D

SECTION E-E

SECTION F-F

SOUTHERN PACIFIC
INTERIOR DOOR JAMB

DETAIL FOLDING DOOR HOLDER

NOTE:
See Supplementary Drawing 108 for Breaker Switch supports on End Walls

10-3-38	Framing at Door Head, Dimensions	J.R.L.
DATE	REVISION	BY

TYPICAL END WALL DETAILS

EAST WALL KEY SYSTEM, EXCEPT AS NOTED, SOUTHERN PACIFIC SIMILAR

SECTION J-J

DETAIL NO. 4

DETAIL NO. 5

DETAIL NO. 7

DETAIL NO. 8

DETAIL NO. 9

DETAIL NO. 10

DETAIL NO. 11

DETAIL NO. 12

DETAIL NO. 13

DETAIL NO. 14

DETAIL NO. 15

CORRECT:
Glenn B. Woodruff
Engineer of Design

APPROVED:
Chief Engineer

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

SAN FRANCISCO-OAKLAND BAY BRIDGE

RAILWAY FACILITIES
INSPECTION BUILDINGS
TYPICAL END WALL FRAMING DETAILS

SCALE IN FEET

SECTION A-A

SECTION C-C

SECTION H-H

SECTION B-B

SECTION G-G

SECTION D-D

SECTION E-E

SECTION F-F

SECTION L-L

SECTION J-J

SOUTHERN PACIFIC
INTERIOR DOOR JAMB

DETAIL FOLDING DOOR HOLDER

TYPICA

TYPICAL END WALL DETAILS

EAST WALL KEY SYSTEM, EXCEPT AS NOTED, SOUTHERN PACIFIC SIMILAR

DETAIL NO.1 AT BASE

DETAIL NO.1 AT GIRT

DETAIL NO. 2

DETAIL NO. 3

DETAIL NO. 4

DETAIL NO. 5

DETAIL NO. 6

DETAIL NO. 7

DETAIL NO. 8

DETAIL NO. 9

DETAIL NO. 10

DETAIL NO. 11

DETAIL NO. 12

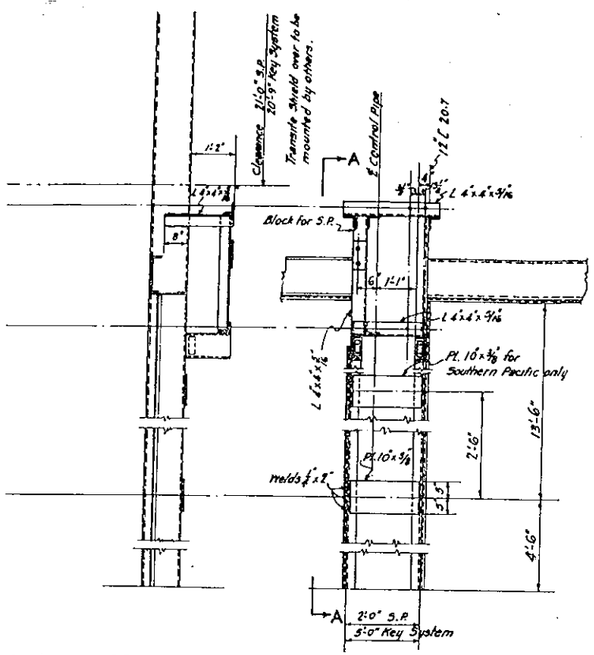
DETAIL NO. 13

DETAIL NO. 14

DETAIL NO. 15

CORRECT:

APPROVED:



SECTION A-A INTERIOR JAMBS

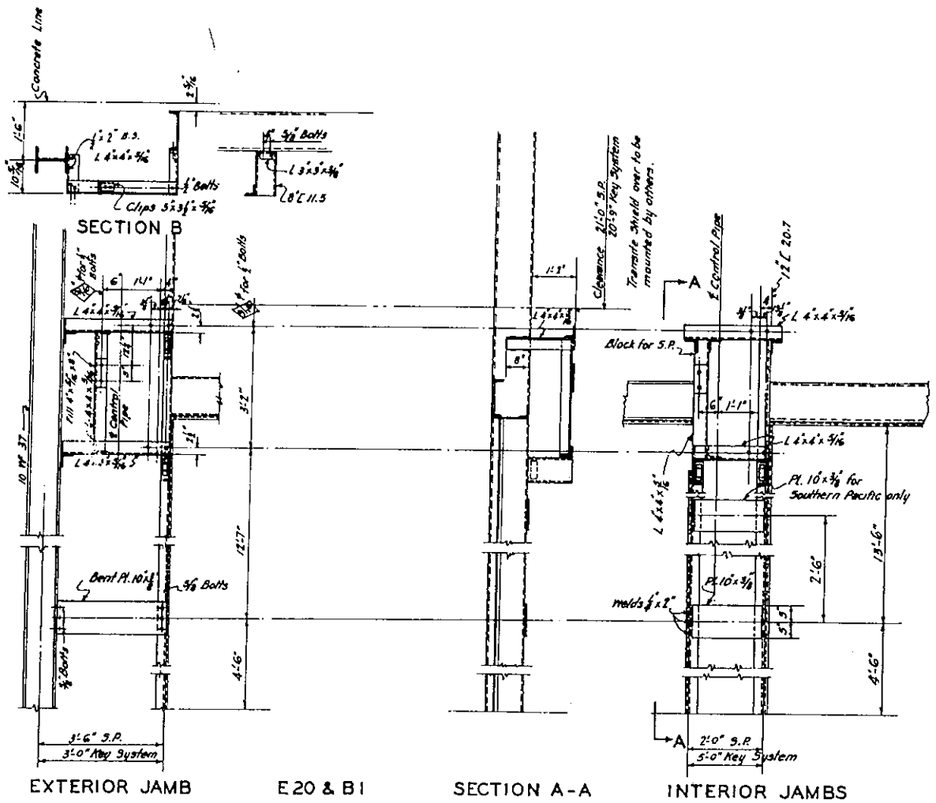
END KEY SYSTEM
END SOUTHERN PACIFIC

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

SAN FRANCISCO OAKLAND BAY BRIDGE

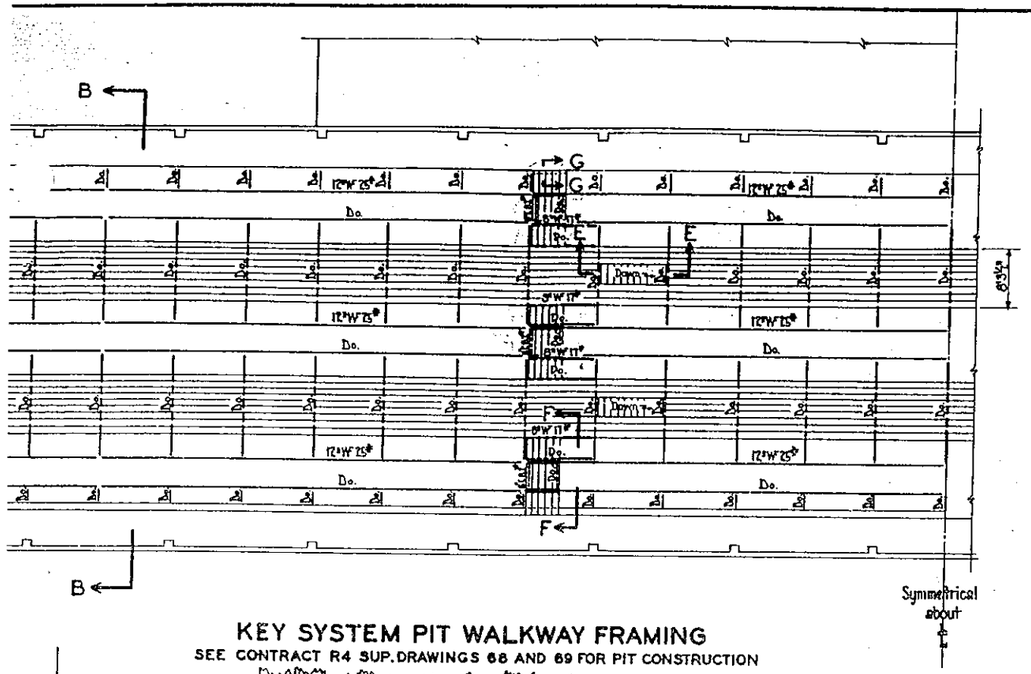
RAILWAY FACILITIES
INSPECTION BUILDINGS
TYPICAL END FRAMING DETAILS

SCALE IN FEET
0 1 2 4



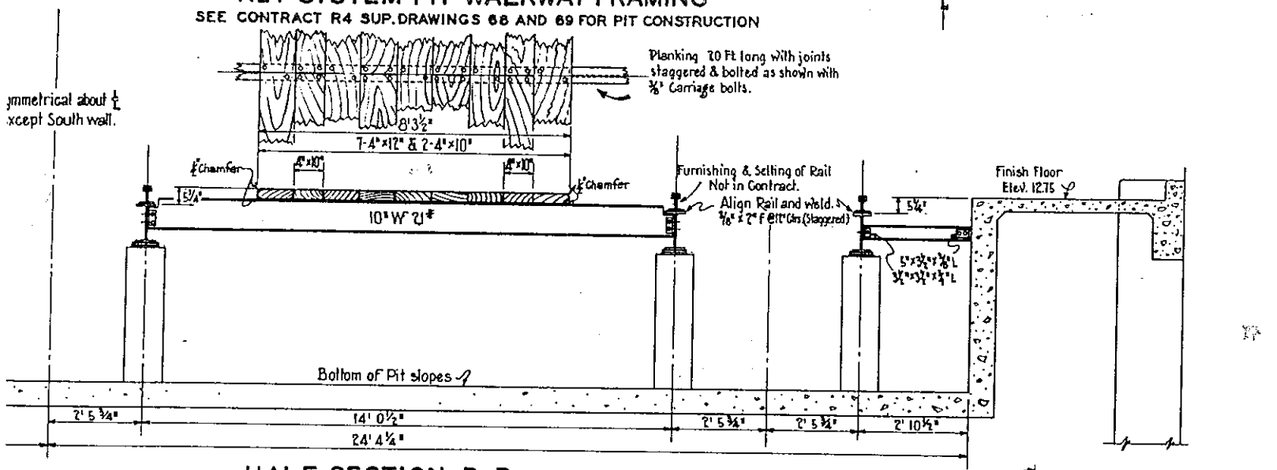
EXTERIOR JAMB E20 & B1 SECTION A-A INTERIOR JAMBS

EAST END KEY SYSTEM
WEST END SOUTHERN PACIFIC

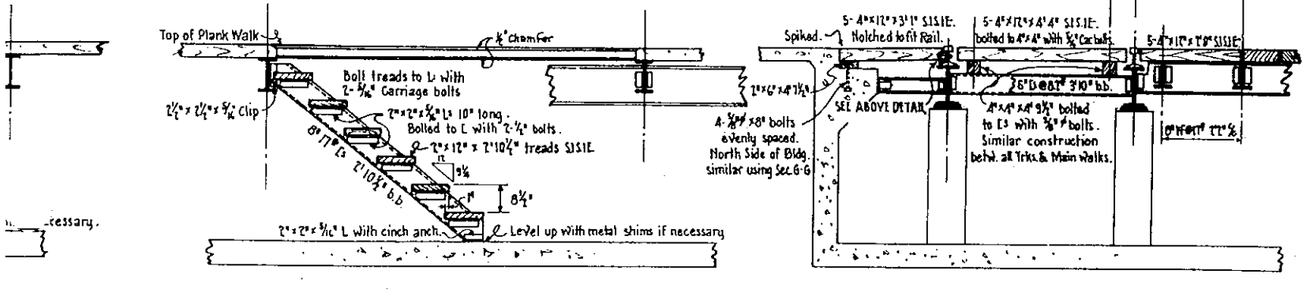


KEY SYSTEM PIT WALKWAY FRAMING

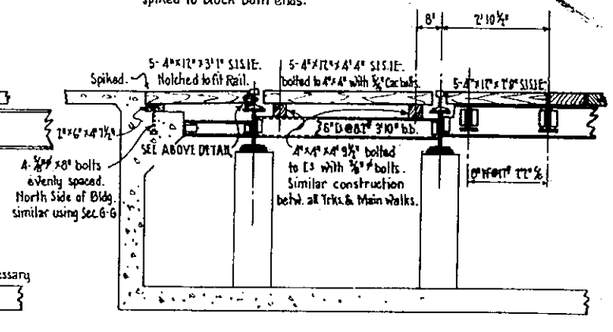
SEE CONTRACT R4 SUP. DRAWINGS 68 AND 69 FOR PIT CONSTRUCTION



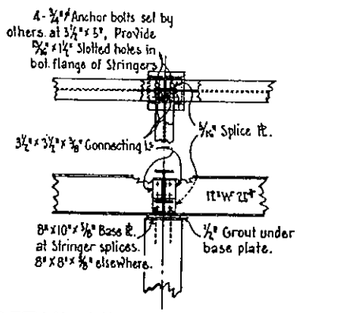
HALF SECTION B-B



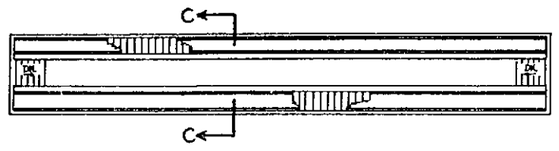
SECTION E-E



SECTION F-F

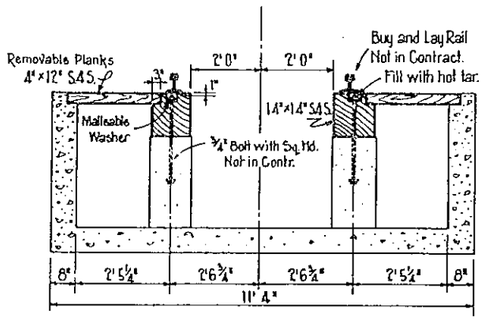


DETAIL OF STRINGER SPLICE

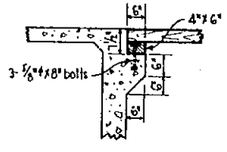


SACRAMENTO NORTHERN INSPECTION PIT

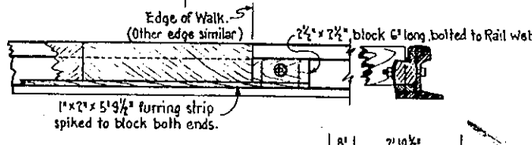
SEE CONTRACT R4 SUP. DRAWINGS 74 FOR PIT CONSTRUCTION



SECTION C-C



SECTION G-G



CORRECT

Engineer of Design

APPROVED

Bridge Engineer

STATE OF CALIFORNIA

DEPARTMENT OF PUBLIC WORKS

SAN FRANCISCO-OAKLAND BAY BRIDGE

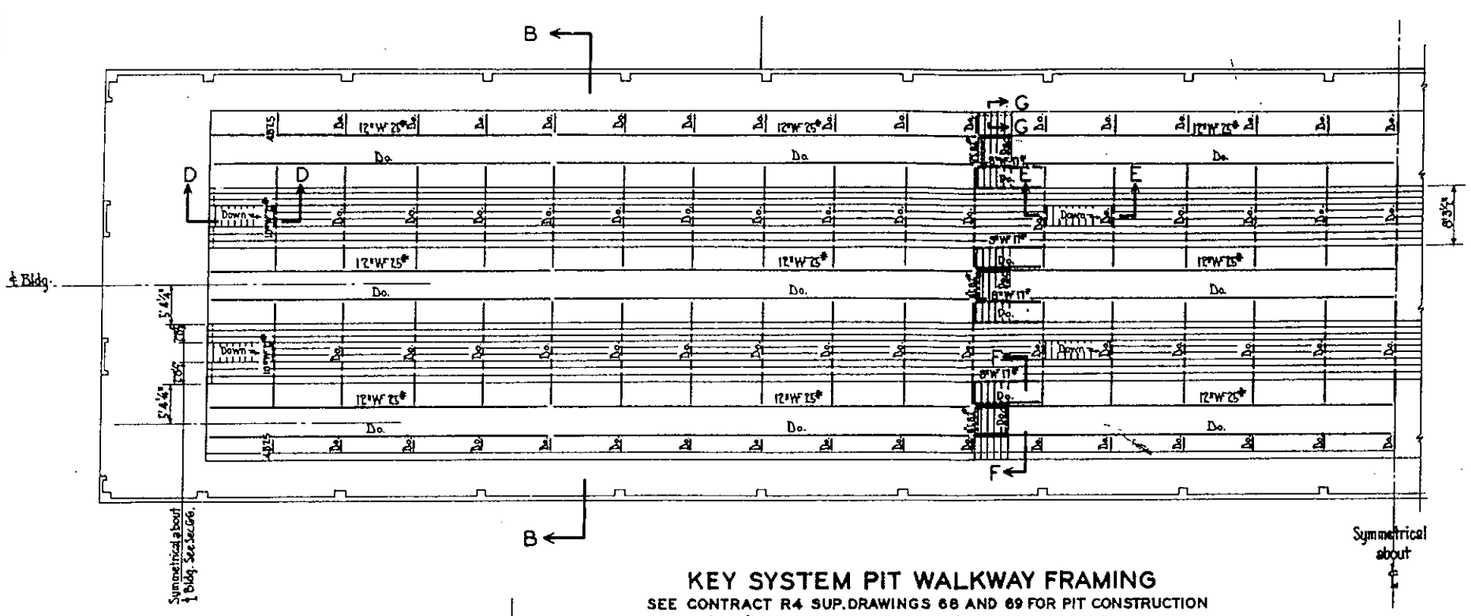
RAILWAY FACILITIES

INSPECTION BUILDINGS

KEY SYSTEM AND SACRAMENTO NORTHERN INSPECTION PIT SUPERSTRUCTURES

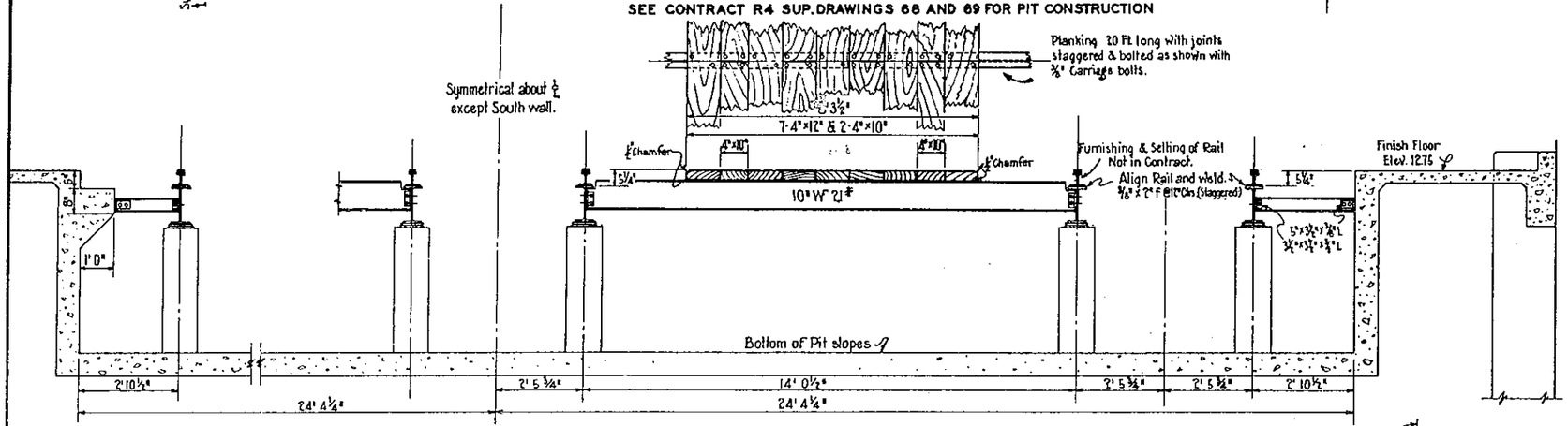
SCALES IN FEET

0 5 10 15 20 25 1 0 1 2 3

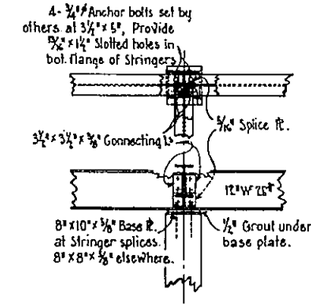


KEY SYSTEM PIT WALKWAY FRAMING

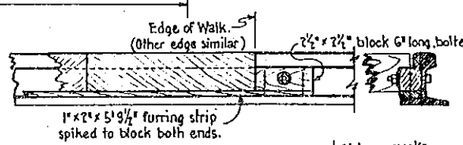
SEE CONTRACT R4 SUP. DRAWINGS 68 AND 69 FOR PIT CONSTRUCTION

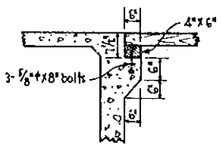


HALF SECTION B-B

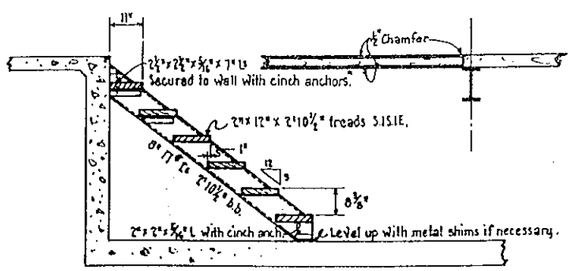


DETAIL OF STRINGER SPLICE

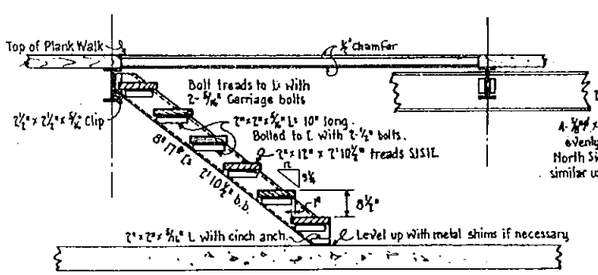




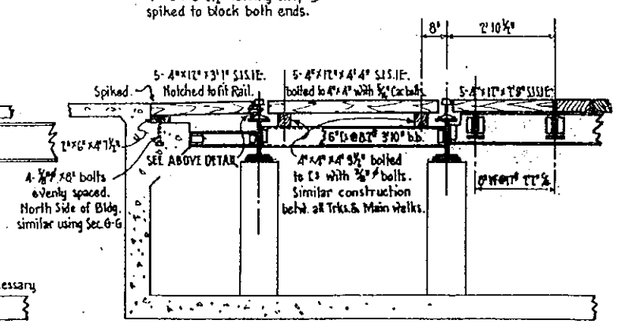
SECTION G-G



SECTION D-D



SECTION E-E



SECTION F-F

CORRECT

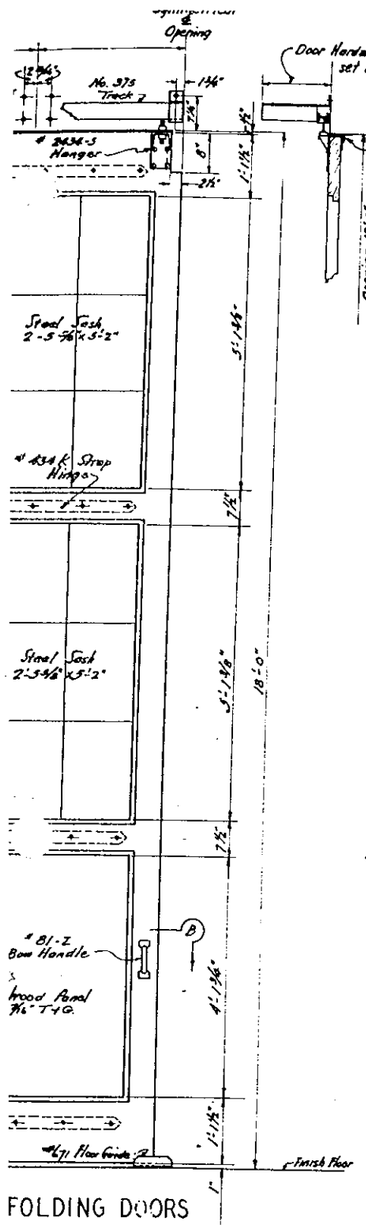
Engineer of Design

APPROVED

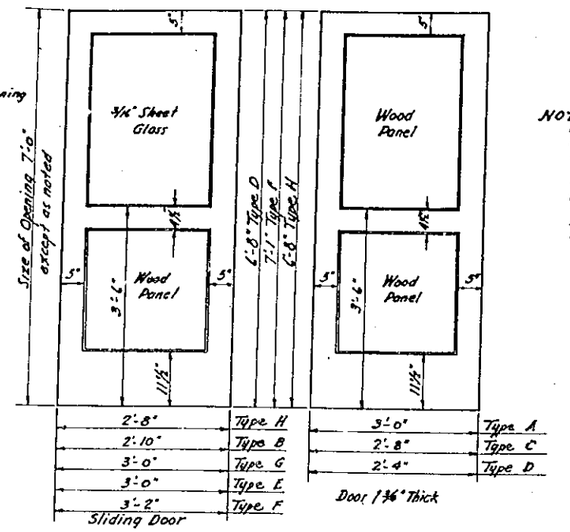
Bridge Engineer

Chief Engineer

Director of Public Works



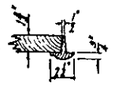
FOLDING DOORS



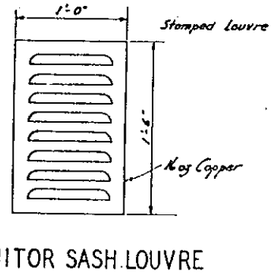
DOOR DETAILS

NOTE.
On E doors provide astragal on inactive leaf.

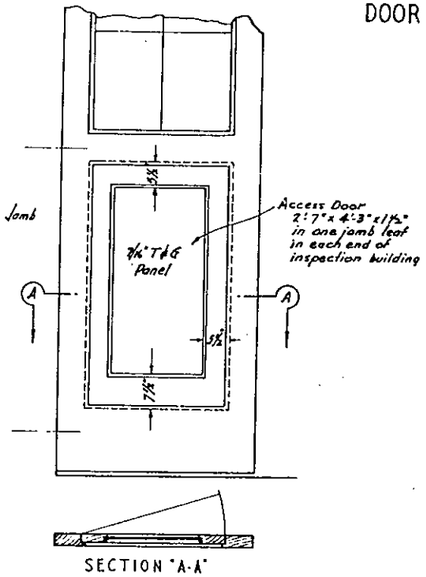
Provide 4" wide iron thresholds at all door openings except for 14'-0" wide folding doors unless otherwise noted.



NOTE:
This contractor places cement floor finish in all rooms with cement base.
Provide pair of hold open latch bars and catches for each folding door opening Richard Wilcox No. 434 Type.

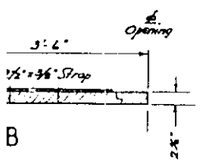


MONITOR SASH LOUVRE

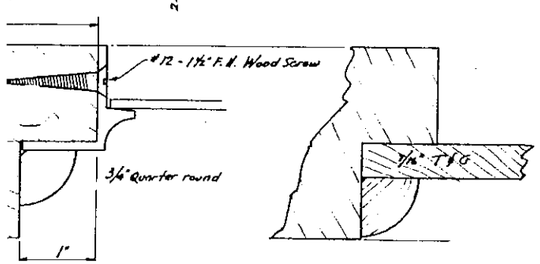


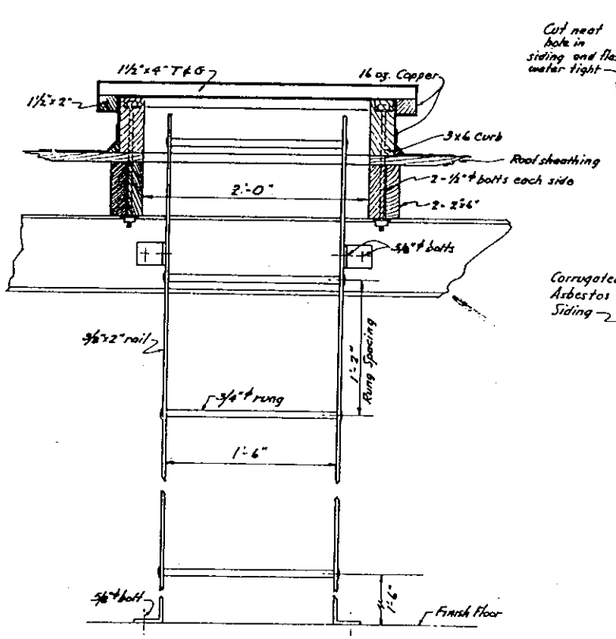
SECTION "A-A"

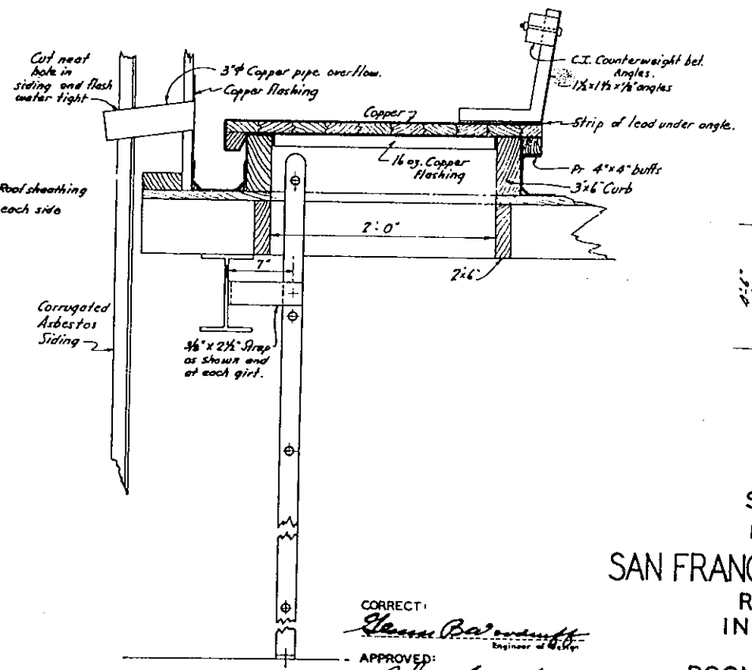
DETAIL OF ACCESS DOOR



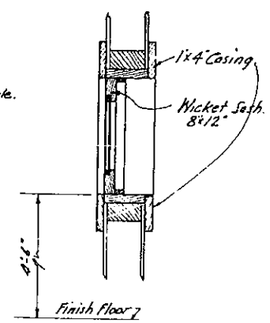
B







SCUTTLE AND LADDER DETAILS



WICKET DETAIL

SCHEDULE OF MATERIALS

	ROOM	RM. No.	FLOORING	BASE	WALLS	CEILING	REMARKS
SOUTHERN PACIFIC	OFFICE	101	MASTIPAVE	WOOD	FIBREBOARD	FIBREBOARD	
	TRAINMASTER	102	"	"	"	"	
	HALL	103	"	"	"	"	
	CORRIDOR	104	"	"	"	"	No furring or trim over corrugated siding
	DISPATCHER	105	"	"	"	"	
	RECORDS	106	CEMENT			"	1x4 T&G on Toilet Wall
	TOILET	107	"	CEMENT	CEMENT PLASTER	"	
	TOILET	108	"	"	"	"	
	JANITOR CLOSET	108A	"	"	"	"	
	LOCKER	109	"				
	STORE	110	"				
	OFFICE	111	MASTIPAVE	WOOD	FIBREBOARD	FIBREBOARD	
	OFFICE	112	"	"	"	"	
	CORRIDOR	113	CEMENT				1x4 T&G to Roof on office wall.
	MACHINE SHOP	114	"				1x4 T&G to Roof on Office and Locker Walls.
	LOCKER ROOM	115	"				1x4 T&G on Janitor Closet and Toilet Walls.
	JANITOR CLOSET	115A	"	CEMENT	CEMENT PLASTER	FIBREBOARD	
	TOILET	116	"	"	"	"	
KEY SYSTEM	TOILET	201	CEMENT	CEMENT	CEMENT PLASTER	FIBREBOARD	Janitor Closet 201A also
	LOCKER	202	MASTIPAVE				1x4 T&G to Roof on Toilet and Shop Walls.
	SHOP	203	CEMENT				1x4 T&G to Roof on Train Control and Shop Office.
	SHOP OFFICE	204	MASTIPAVE	WOOD	Glass-T&G	T&G	
	TRAIN CONTROL	205	CEMENT				
	ENTRY	206	MASTIPAVE	WOOD	FIBREBOARD	FIBREBOARD	
	TOILET	207	CEMENT	CEMENT	CEMENT PLASTER	"	
	SUPERINTENDENT	208	MASTIPAVE	WOOD	FIBREBOARD	"	
	OFFICE	209	"	"	"	"	
	CLOSET	210	CEMENT	"	"	"	
	STORAGE	211	"	"	"	"	
	RECEIVERS	212	MASTIPAVE	"	"	"	
	TOILET	213	CEMENT	CEMENT	CEMENT PLASTER	"	
	CLOSET	214	"	WOOD	FIBREBOARD	"	
	PASSAGEWAY	215	MASTIPAVE	Wood on CONCRETE CURB			1x4 T&G on Receivers Room
	LOCKER ROOM	216	"	"			1x4 T&G on Side of Rms. 213, 217, 218, 219.
	JANITOR CLOSET	217	CEMENT	CEMENT	CEMENT PLASTER	FIBREBOARD	
	ENTRY	219	"	WOOD	FIBREBOARD	"	
	TOILET	219	"	CEMENT	CEMENT PLASTER	"	

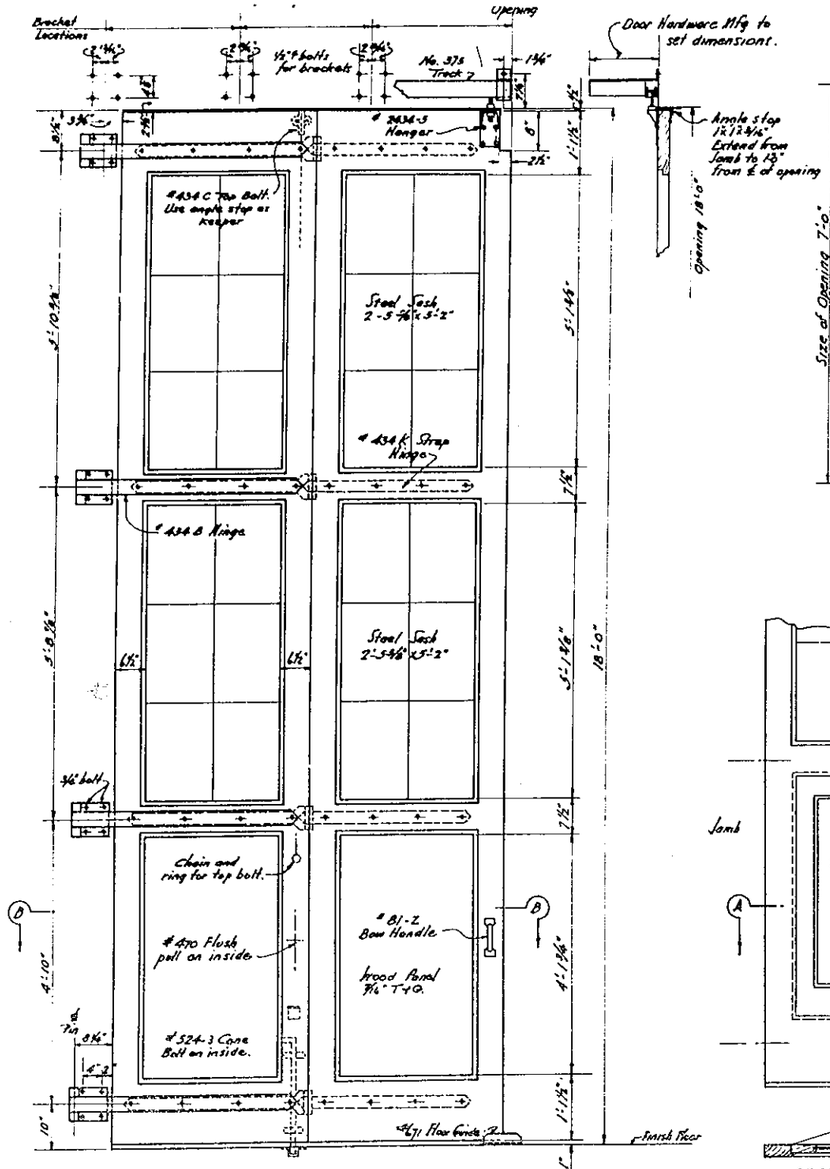
CORRECT:
Engineer of Design

APPROVED:
Bridge Engineer
Chief Engineer

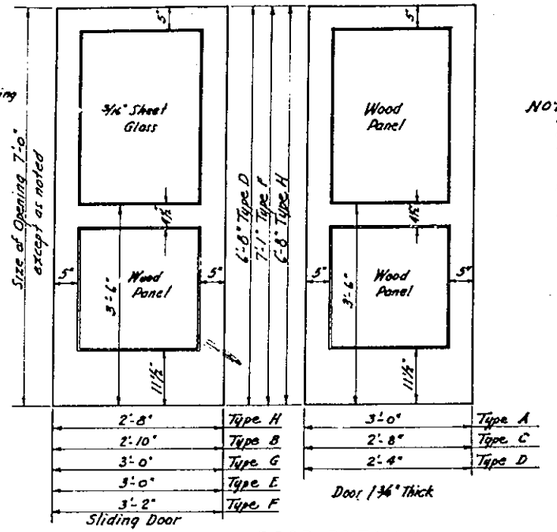
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
SAN FRANCISCO-OAKLAND BAY BRIDGE
RAILWAY FACILITIES
INSPECTION BUILDINGS
DOOR DETAILS
ROOM MATERIAL SCHEDULE

SCALE IN FEET
0 1 2 3 4
0 1 2

CONTRACT NO. D-6



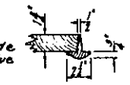
HALF ELEVATION OF FOLDING DOORS



DOOR DETAILS

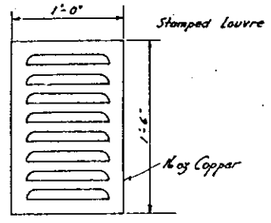
NOTE
On E doors provide astragal on inactive leaf.

Provide 4" wide iron thresholds at all door openings except for 14'-0" wide folding doors unless otherwise noted.

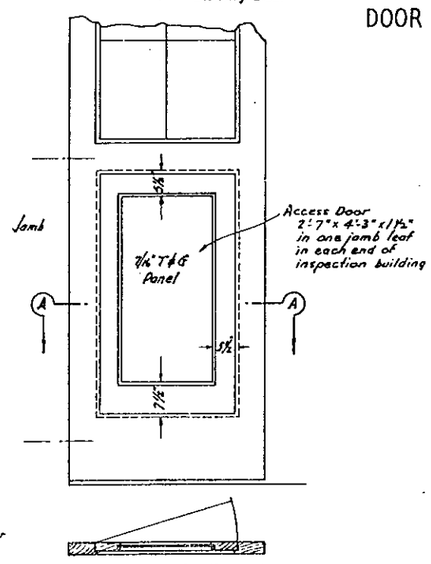


NOTE:
This contractor places cement floor finish in all rooms with cement base.
Provide pair of hold open latch bars and catches for each folding door opening Richard Wilcox No. 434 Type.

SOUTHERN PACIFIC	OFFICE	10
	TRAINMASTER	10
	HALL	10
	CORRIDOR	10
	DISPATCHER	10
	RECORDS	10
	TOILET	10
	TOILET	10
	JANITOR CLOSET	10
	LOCKER	10
	STORE	11
	OFFICE	11
	OFFICE	11
	CORRIDOR	11
	MACHINE SHOP	11
	LOCKER ROOM	11
	JANITOR CLOSET	11
	TOILET	11
KEY SYSTEM	TOILET	2
	LOCKER	2
	SHOP	2
	SHOP OFFICE	2
	TRAIN CONTROL	2
	ENTRY	2
	TOILET	2
	SUPERINTENDENT	2
	OFFICE	2
	CLOSET	2
	STORAGE	2
	RECEIVERS	2
	TOILET	2
	CLOSET	2
	PASSAGEWAY	2
	LOCKER ROOM	2
	JANITOR CLOSET	2
	ENTRY	2
	TOILET	2

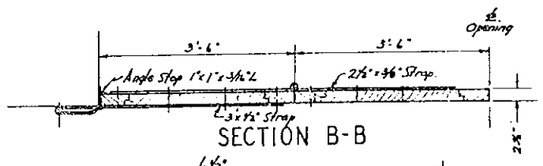


MONITOR SASH LOUVRE

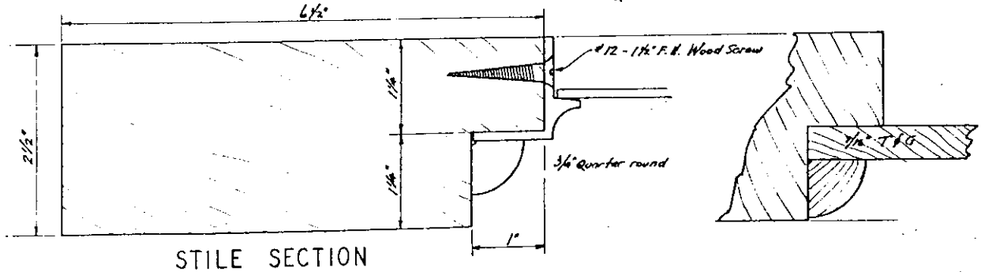


SECTION "A-A"

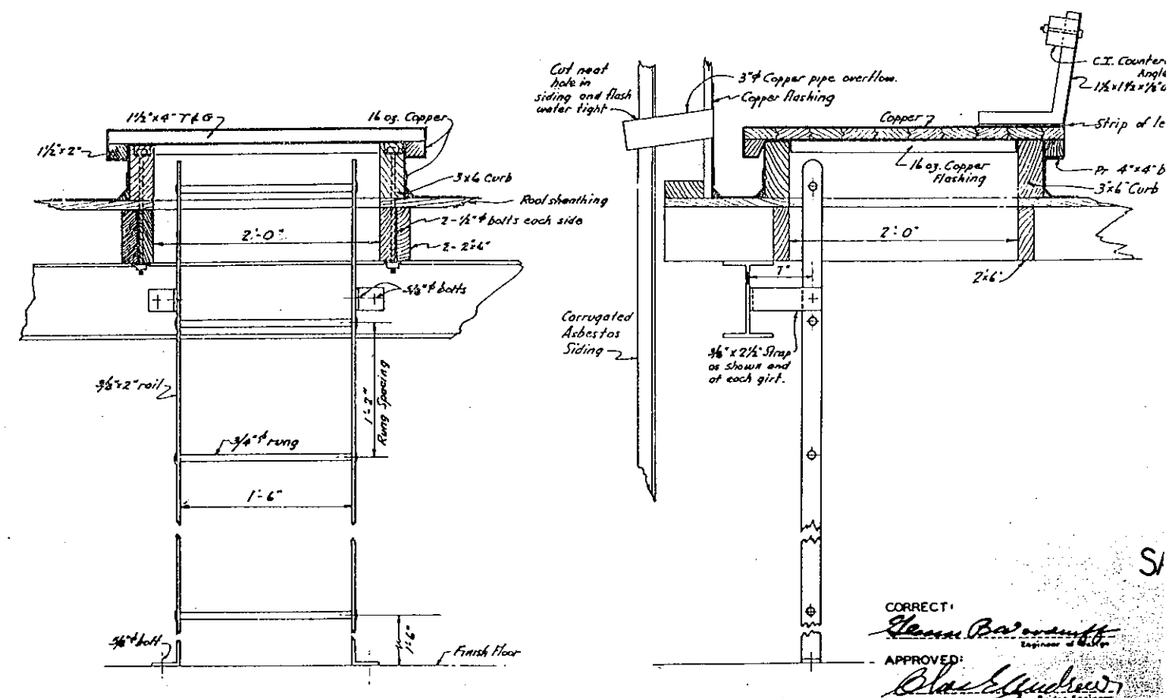
DETAIL OF ACCESS DOOR



SECTION B-B

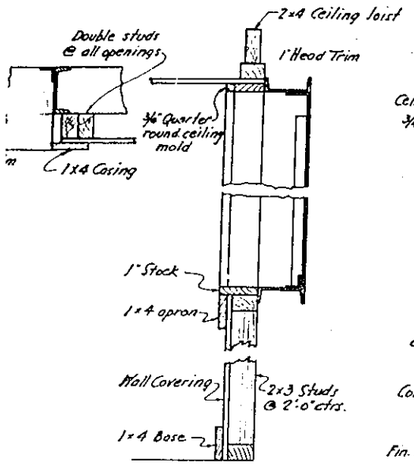


STILE SECTION

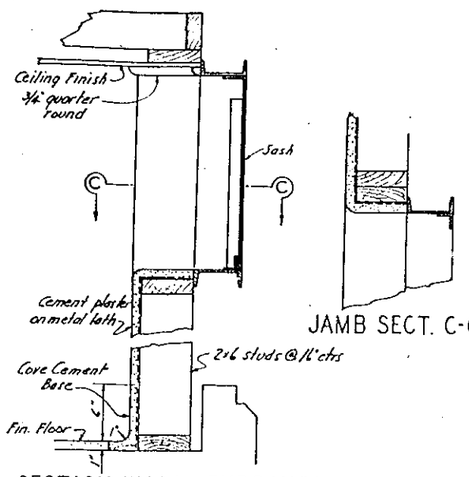


SCUTTLE AND LADDER DETAILS

CORRECT:
Engineer of Design
APPROVED:
Bridge Engineer
Chief Engineer
Director of Public Works

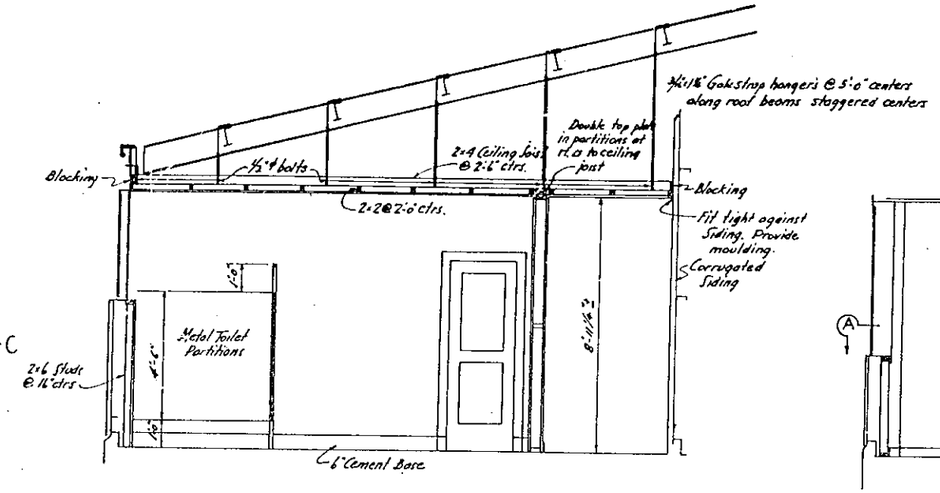


SECTION B-B
WALL FURRING DETAILS IN ALL FINISHED ROOMS EXCEPT TOILETS

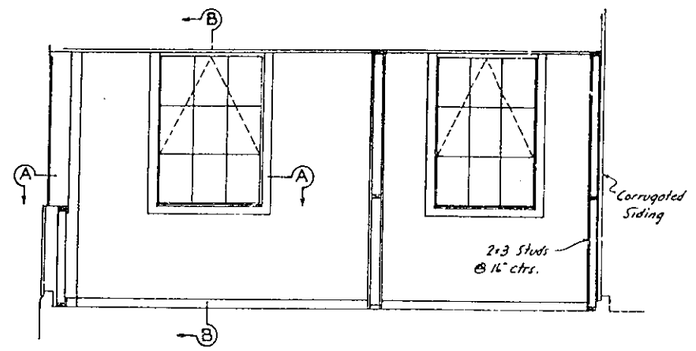


SECTION WALL FURRINGS IN TOILET

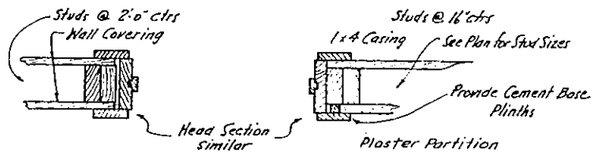
JAMB SECT. C-C



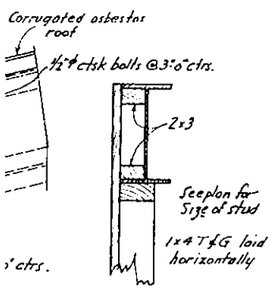
SECTION ROOM 108 AND CORRIDOR 104
SHOWING TYPICAL FURRED CEILING FRAMING



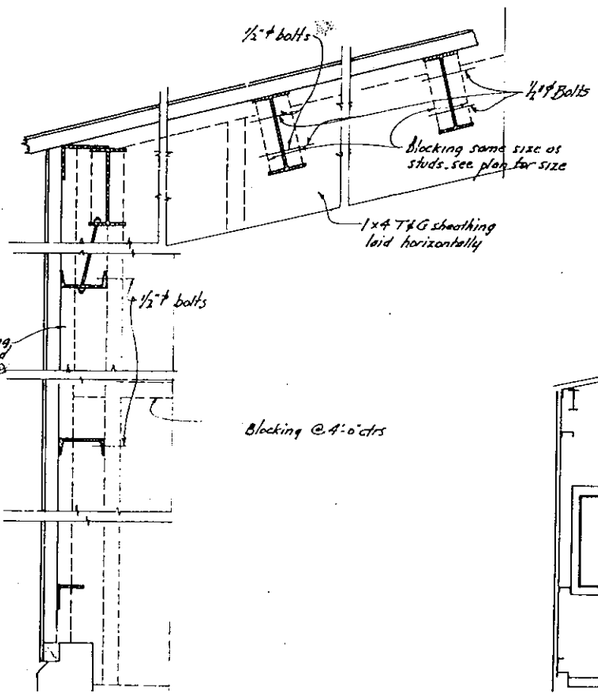
SECTION THRU ROOMS 101-102
SOUTHERN PACIFIC BUILDING

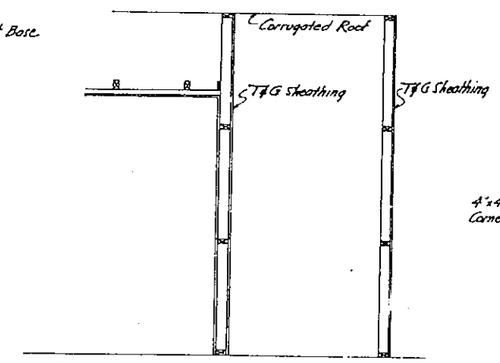


TYPICAL DOOR JAMB SECTION



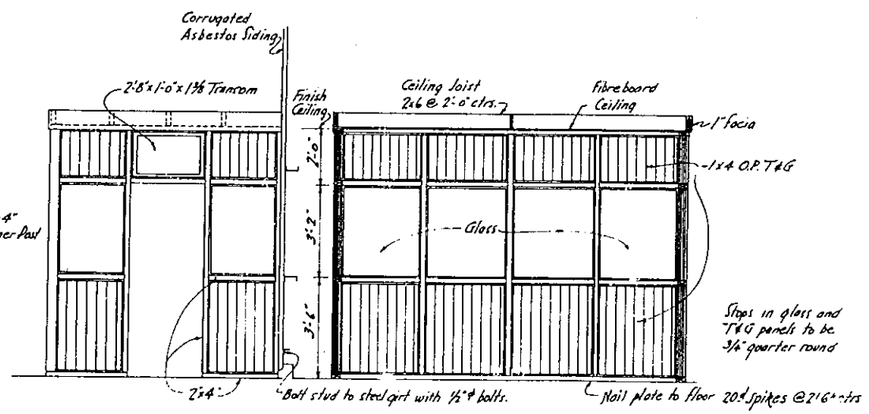
SECTION E-E



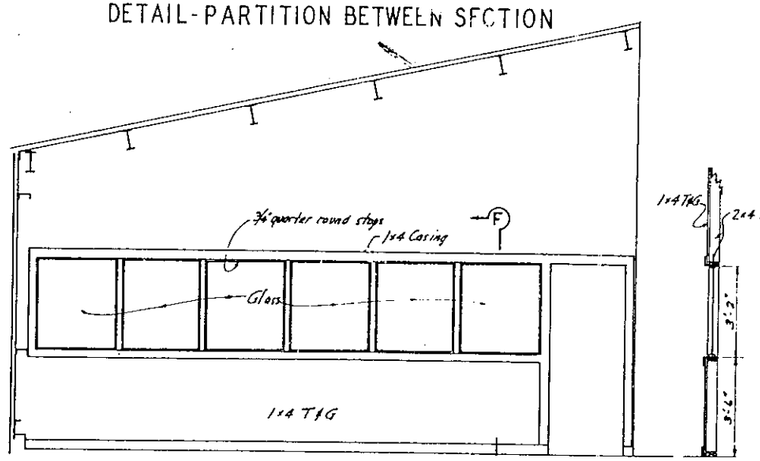


WITH FURRED CEILING WITHOUT FURRED CEILING

DETAIL - PARTITION BETWEEN SECTION



ELEVATIONS OF SHOP FOR FOREMAN'S OFFICE
KEY SYSTEM BUILDING



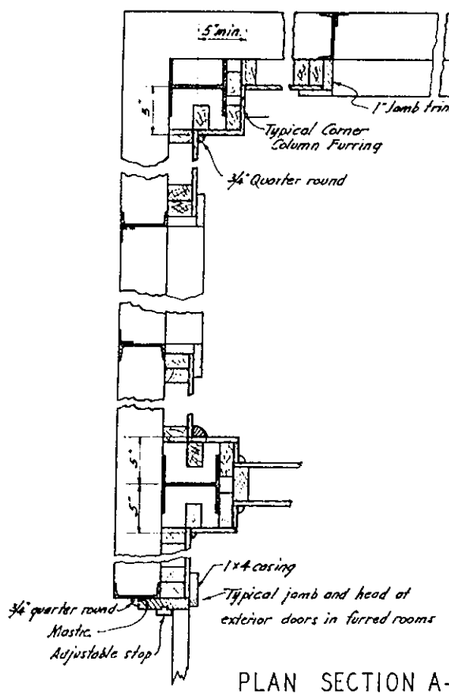
COLUMN

CORRECT:
Engineer of Design

APPROVED:

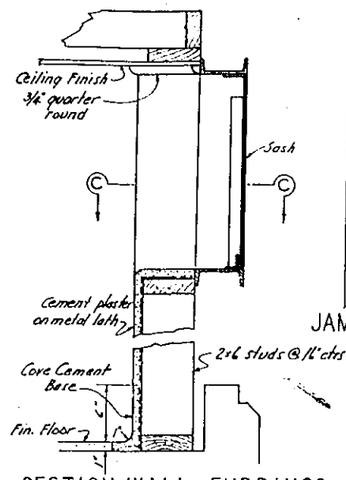
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
SAN FRANCISCO-OAKLAND BAY BRIDGE
RAILWAY FACILITIES
INSPECTION BUILDINGS
PARTITION DETAILS

SCALE IN FEET
0 1 2 3 4 5 6 7 8

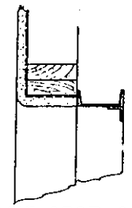


PLAN SECTION A-A

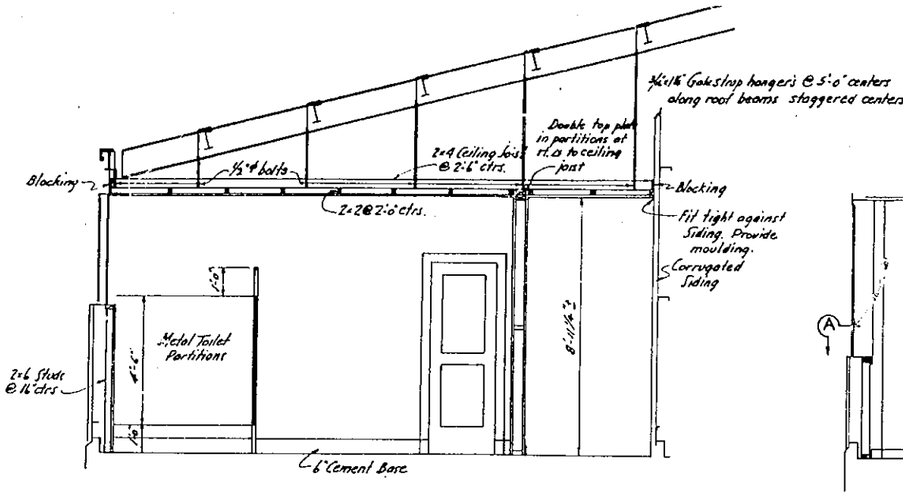
SECTION B-B
WALL FURRING DETAILS IN ALL FINISHED ROOMS EXCEPT TOILETS



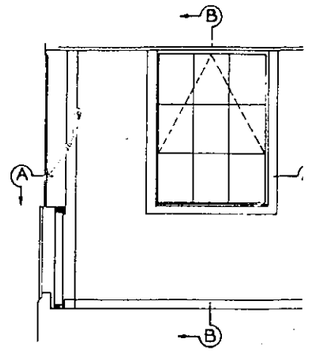
SECTION WALL FURRINGS IN TOILET



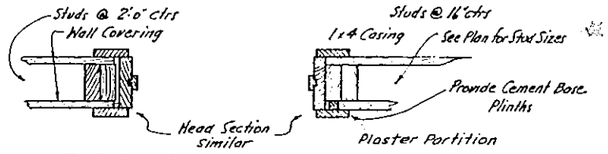
JAMB SECT. C-C



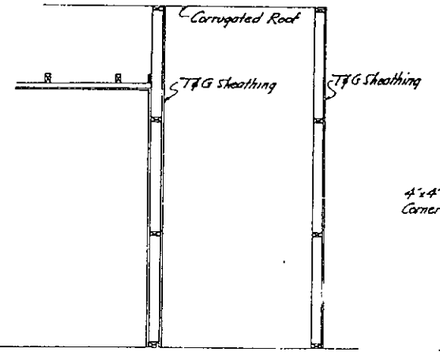
SECTION ROOM 108 AND CORRIDOR 104
SHOWING TYPICAL FURRED CEILING FRAMING



SECTION TH
SOUTHEI
BU

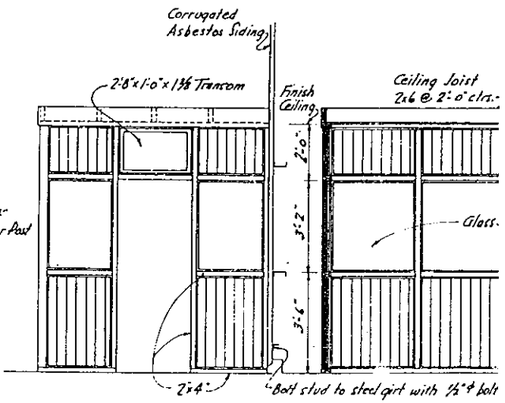


TYPICAL DOOR JAMB SECTION



WITH FURRED CEILING WITHOUT FURRED CEILING

DETAIL - PARTITION BETWEEN SECTION



ELEVATIONS OF SHOP FOR
KEY SYSTEM BUI

DETAIL AT COLUMN

DETAIL BETWEEN COLUMN

SECTION E-E

ELEVATION OF TRAIN CONTROL ROOM PARTITION

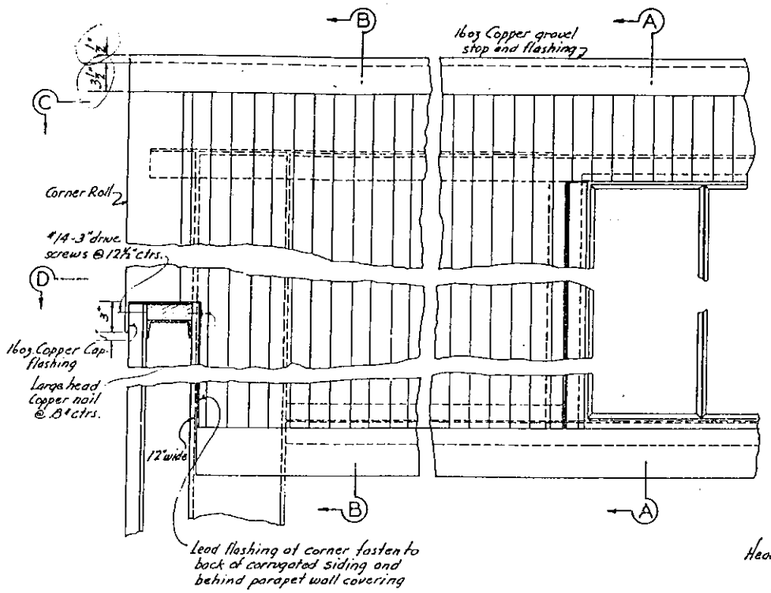
SECT. F-F

11-26-38	Strap hangers revised	ME.	CJB
Date	Revision	Mode	Chkd.

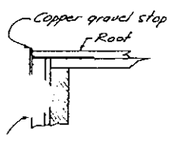
SAI

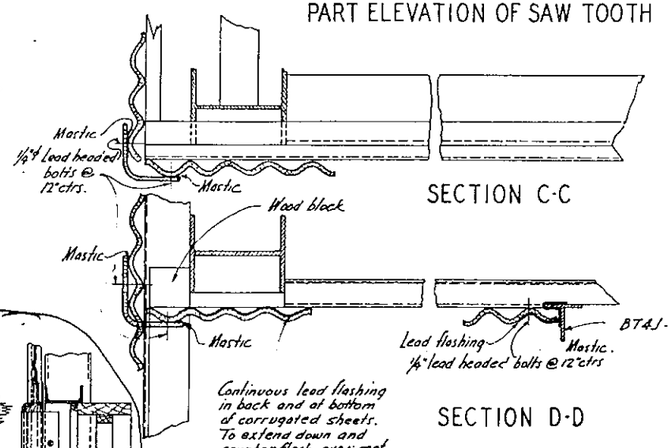
CORRECT:
Engineer of Design

APPROVED:
Bridge Engineer
Chief Engineer
Director of Traffic and Ways



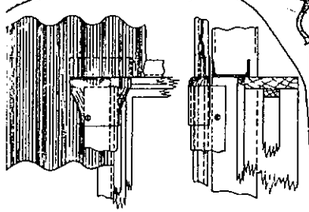
PART ELEVATION OF SAW TOOTH



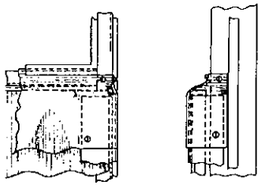


SECTION C-C

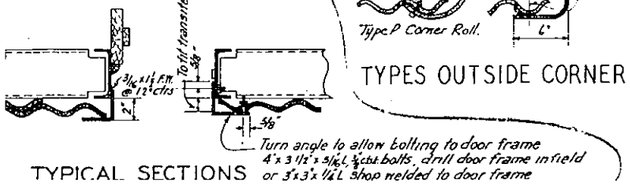
SECTION D-D



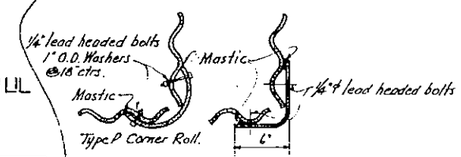
FLASHING AT DOOR HEAD



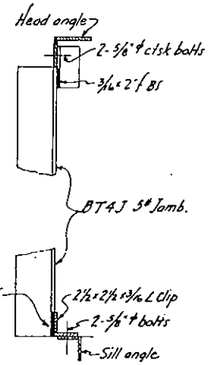
FLASHING AT WINDOW SILL

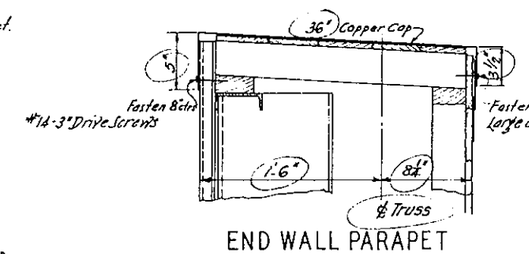


TYPICAL SECTIONS

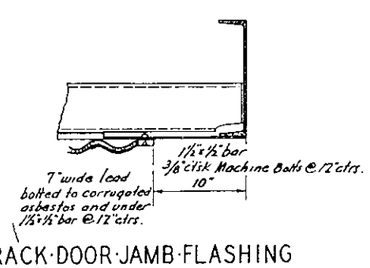


TYPES OUTSIDE CORNER

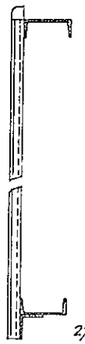


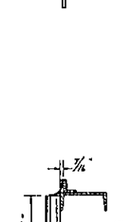


END WALL PARAPET

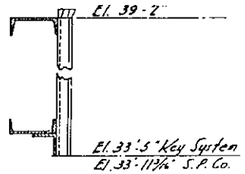


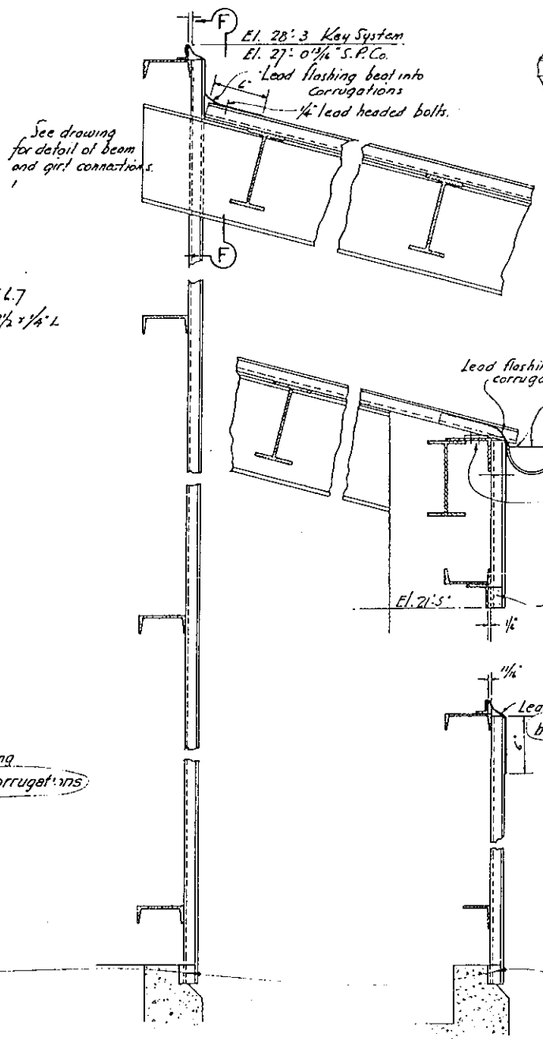
TRACK-DOOR-JAMB-FLASHING





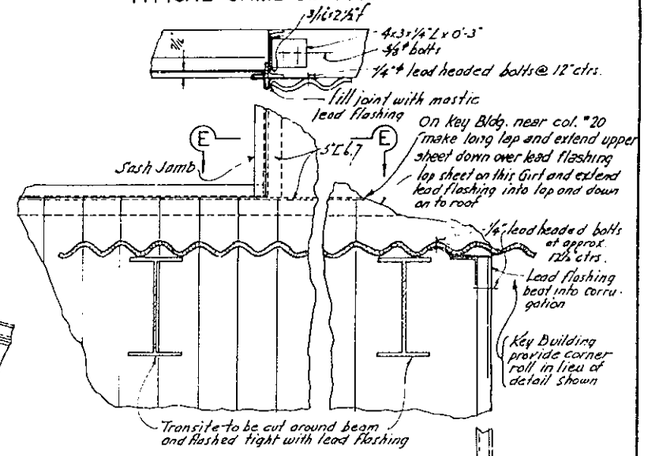
EXTERIOR SIDE WALL PIT SECTION



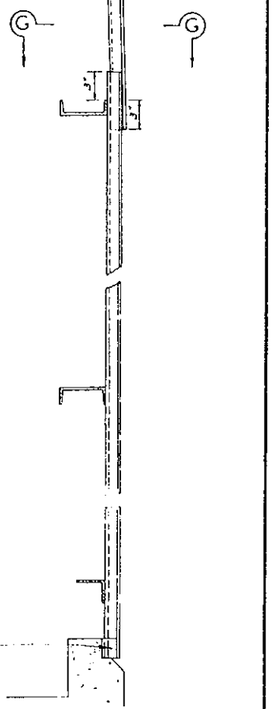


INTERIOR WALL BETWEEN OFFICE AND PITS

SECTION E-E
TYPICAL JAMB SECTION



OFFICE SIDE WALL SECTION THRU SASH



OFFICE END WALL SECTION F-F

11-4-38	Notes added; Dimensions Revised

CORRECT:
Glenn B. Woodruff
Engineer of Bridges

APPROVED:
Chas. H. Purcell
Bridge Engineer
W. W. Wilson
Chief Engineer

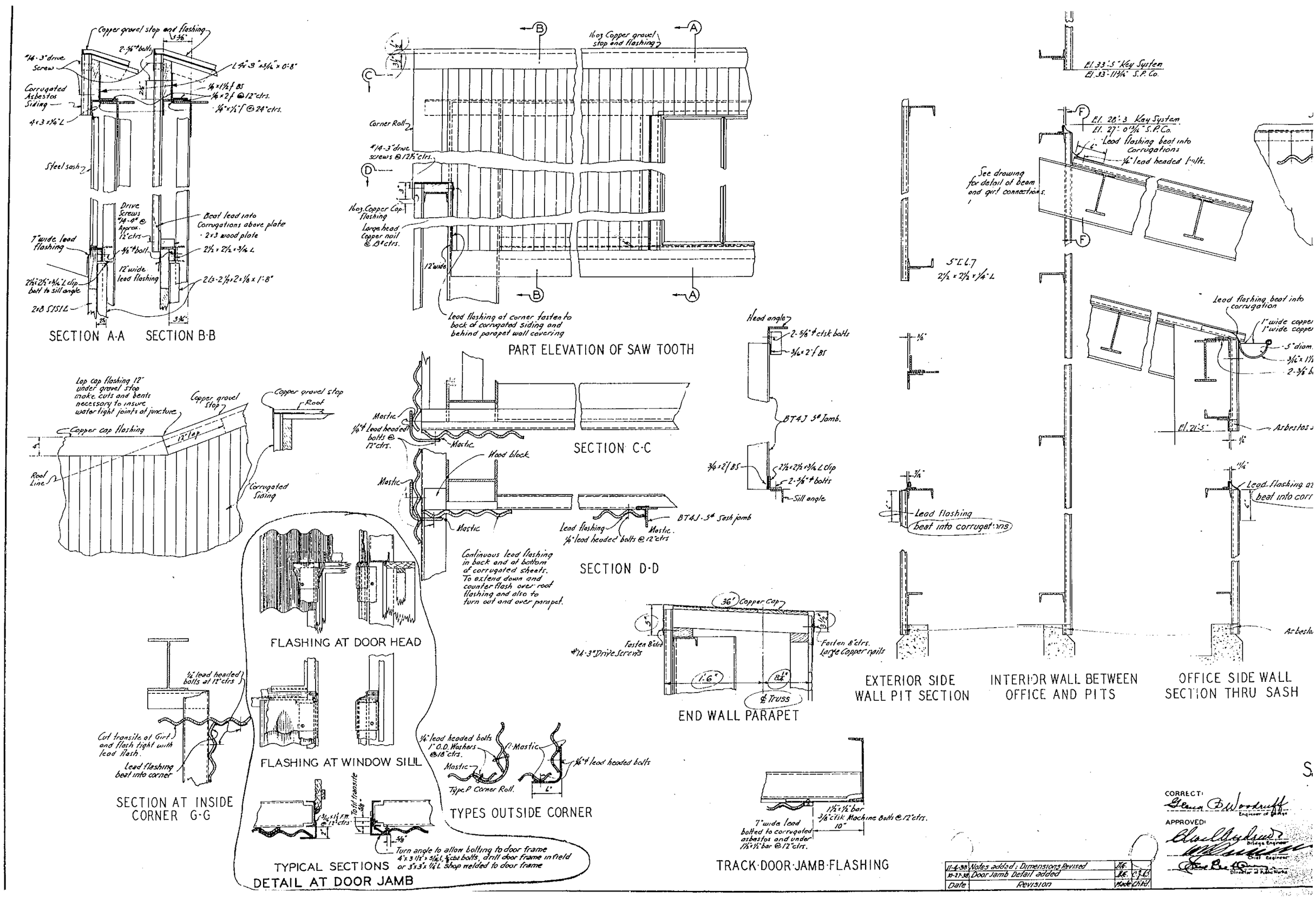
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

SAN FRANCISCO-OAKLAND BAY BRIDGE

RAILWAY FACILITIES
INSPECTION BUILDINGS
CORRUGATED ASBESTOS AND FLASHING DETAILS

SCALE IN FEET 0 1 2

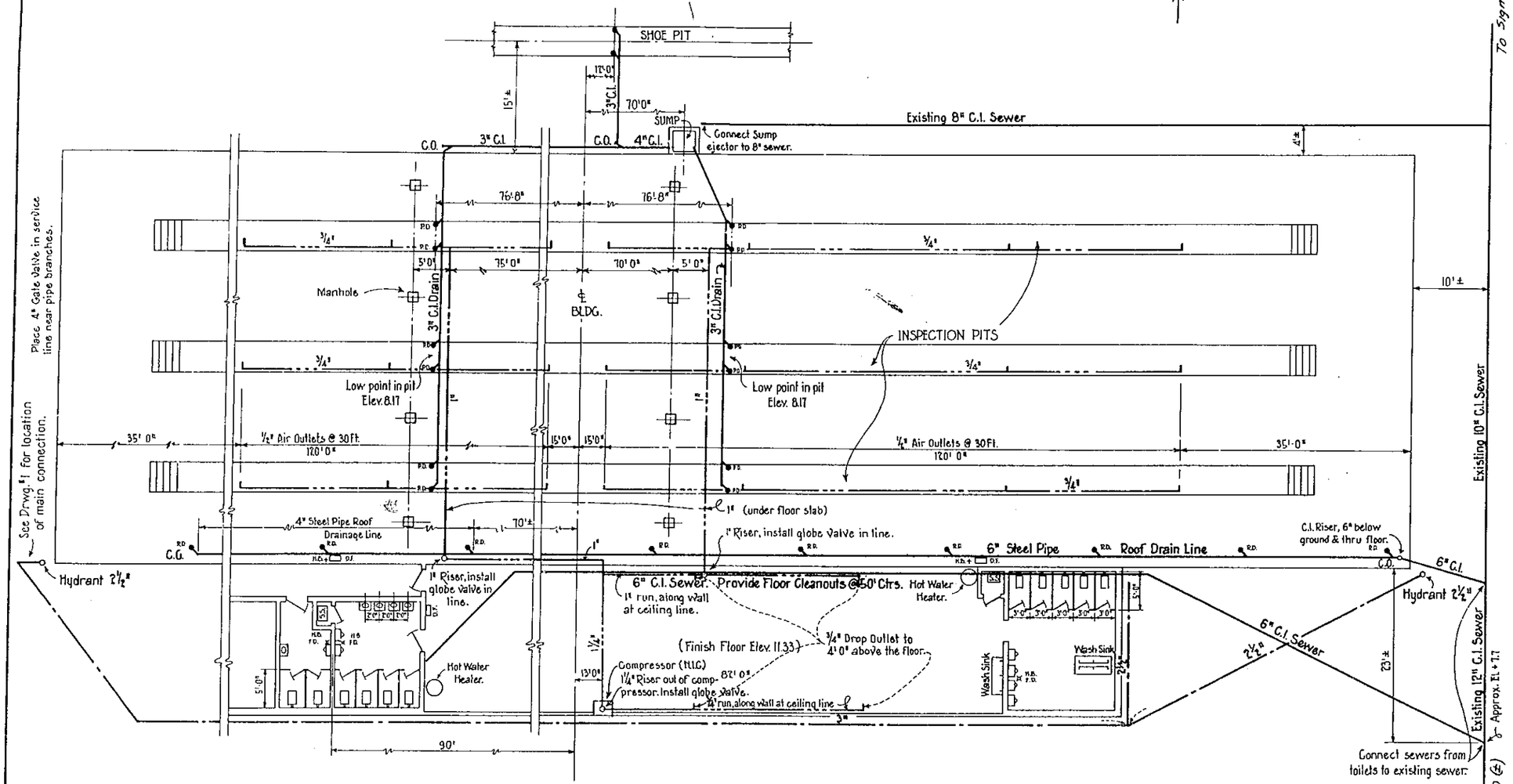
CONTRACT NO. R8. SUP. DRAWING NO. 14 A



Date	Revision	Made	Chk'd
11-4-38	Notes added; Dimensions Revised	J.E.	
10-27-38	Door Jamb Detail added	J.E.	C.J.G.

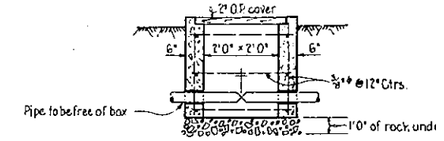
CORRECT: Glenn B. Woodruff, Engineer of Bridge

APPROVED: Bridge Engineer; Chief Engineer; Director of Public Works

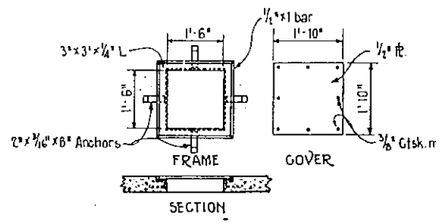


• PLAN VIEW •

Note: All air piping outlets in Pits to consist of a 3/4" T in line, 3/4"-1/2" reducer, 3/4" & 1/2" nipple, 1/2"-90° street L and Crane #305 1/2" brass cock. See Drwg. #18 for method of running pipes between pits.
Plumber to furnish 2" pipe sleeves. See Sup. Drwgs. 11 & 14 Contr. R4 for details of Pit and Air outlet locations.



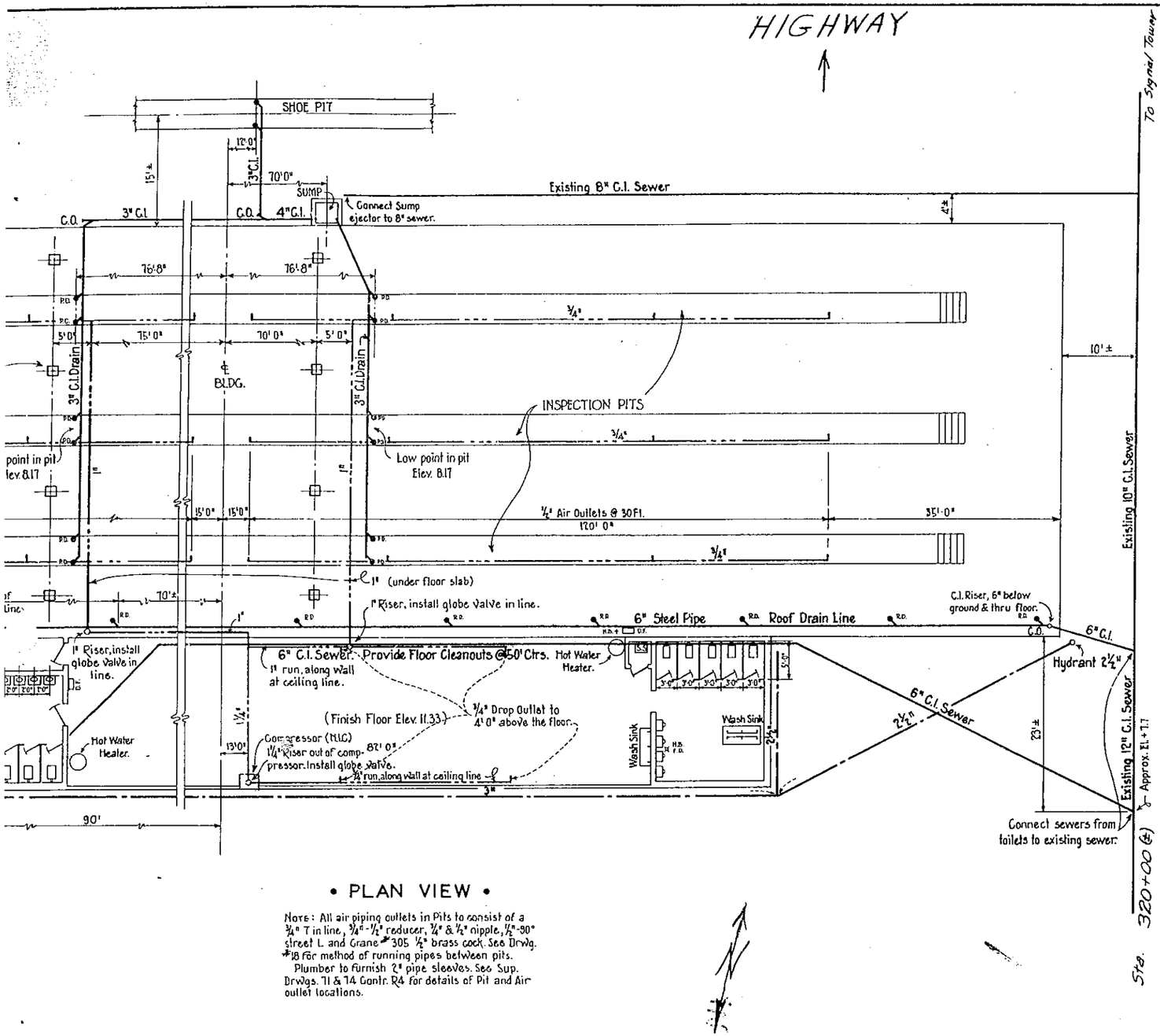
DETAIL OF VALVE BOXES



MANHOLE DETAIL

CORRECT
Glenn B. Woodruff
Engineer of Design

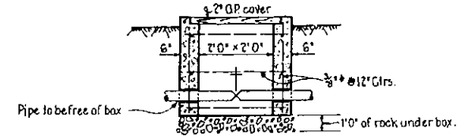
APPROVED
Chas. E. Andrew
Bridge Engineer
Chief Engineer
Director of Public Works



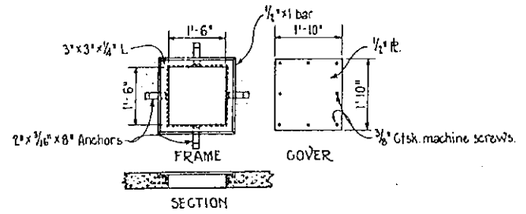
• PLAN VIEW •

Note: All air piping outlets in Pits to consist of a ¾" T in line, ¾"-½" reducer, ¼" & ½" nipple, ½"-90° street L and Grane #305 ½" brass cock. See Drwg. #18 for method of running pipes between pits.

Plumber to furnish 2" pipe sleeves. See Sup. Drwgs. 71 & 74 Contr. R4 for details of Pit and Air outlet locations.



DETAIL OF VALVE BOXES



MANHOLE DETAIL

SCHEDULE OF LOCAL CONNECTIONS				
FIXTURE	WASTE	VENT	COLD WATER	HOT WATER
Water Closet	4"	2"	1"	—
Urinal	2"	1½"	¾"	—
Slop Sink	3"	2"	¾"	½"
Floor Drain	3"	2"	½" H.B.	—
Shower	2"	1½"	½"	½"
Sinks	2"	1½"	¾"	¾"
Lavatory	2"	1½"	½"	½"
Drinking Fountain	2"	1½"	½"	—
Hose Rack	—	—	1½"	—
Hose Bib	—	—	¾" on inside, ½" on outside.	

Unless otherwise shown, hot & cold water branches shall be sized as follows.

Two ½" into ¾"	Two ¾" into 1"
Three ½" " 1"	Two 1" " 1¼"
Two 1¼" " 1½"	Two 1½" " 2"
	Three 1½" " 2½"

PLUMBING SYMBOLS

- Water Closet.
- Slop Sink
- Urinal
- Lavatory
- F.D. Floor Drain
- H.B. Hose Bib
- D.F. Drinking Fountain
- P.D. Pit Drain
- Hose Rack
- Multiple Wash Sink
- C.O. Cleanout
- R.D. Roof drain (3"ϕ inlet to main line, see Roof Plan for location)
- Soil, Waste, Drain or Sewer line.
- Cold water
- Gate Valve.
- Air Piping.
- Hot Water

Plumber to furnish Sump grating 18"x18" built of ¼" x 1⅜" bars on 2" Ctrs. welded to 1½" x 1½" x ⅜" L frame for the sumps in Sacramento Northern & Key System pits. Provide holes for ejector shafts and pipes.

CORRECT
Glenn B. Woodruff
Engineer in Charge

APPROVED
Chas. S. Andrews
Bridge Engineer.
Chief Engineer
Director of Public Works

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

SAN FRANCISCO-OAKLAND BAY BRIDGE

RAILWAY FACILITIES
INSPECTION BUILDINGS
SOUTHERN PACIFIC INSPECTION BUILDING
MECHANICAL

SCALE IN FEET
0 4 8 12 16 20 24