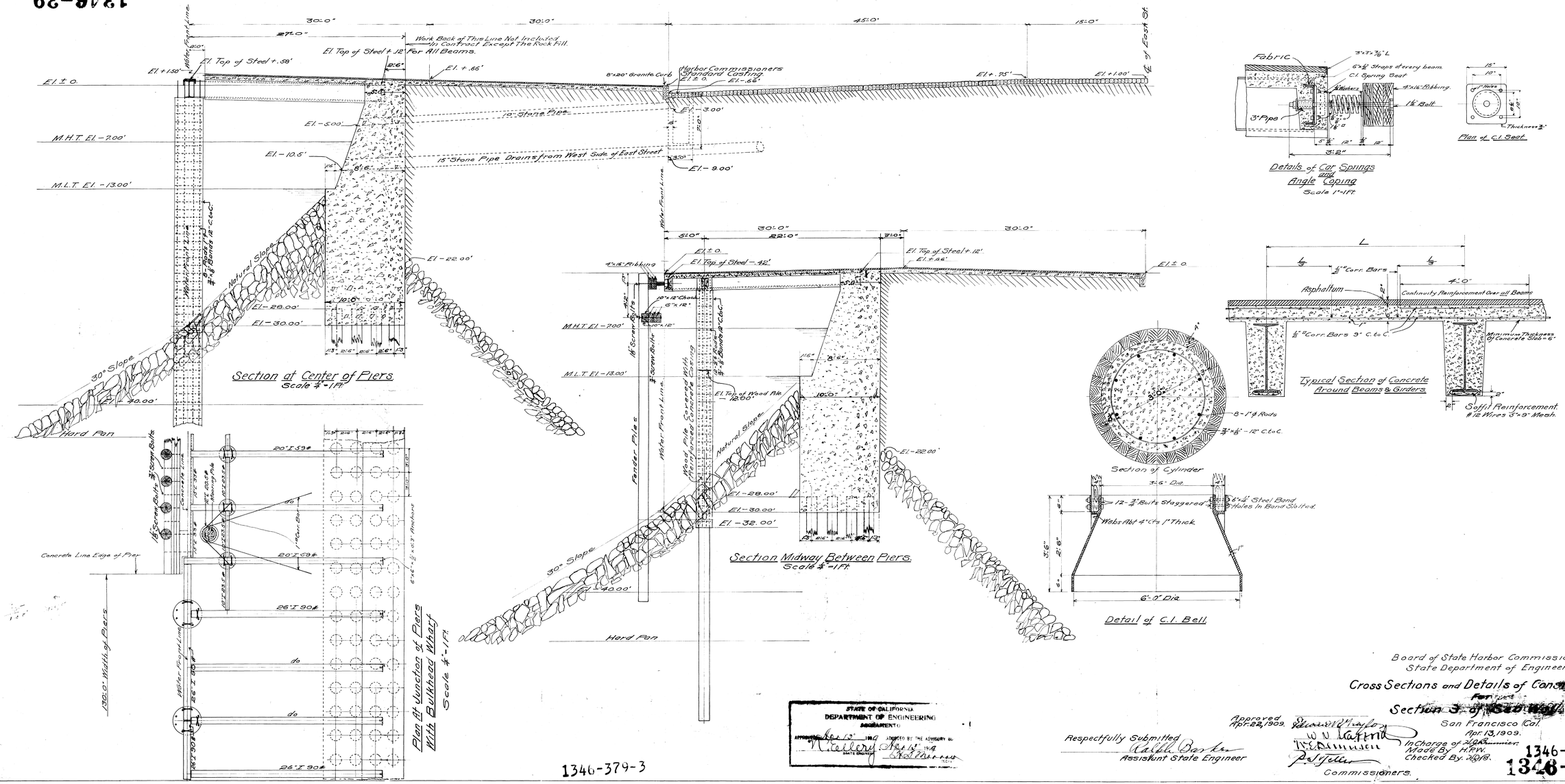


Board of State Harbor Commissioners.
State Department of Engineering.

Cross Sections and Details of Cons[redacted]
For
Section 3 of [redacted]
San Francisco Cal.
Apr. 13, 1909.

In Charge of [illegible]
Made By H.P.W.
Checked By [illegible]

Approved Apr. 22, 1909.
[signature]
W. V. [illegible]
[signature]
P. S. Teller
Commissioners.

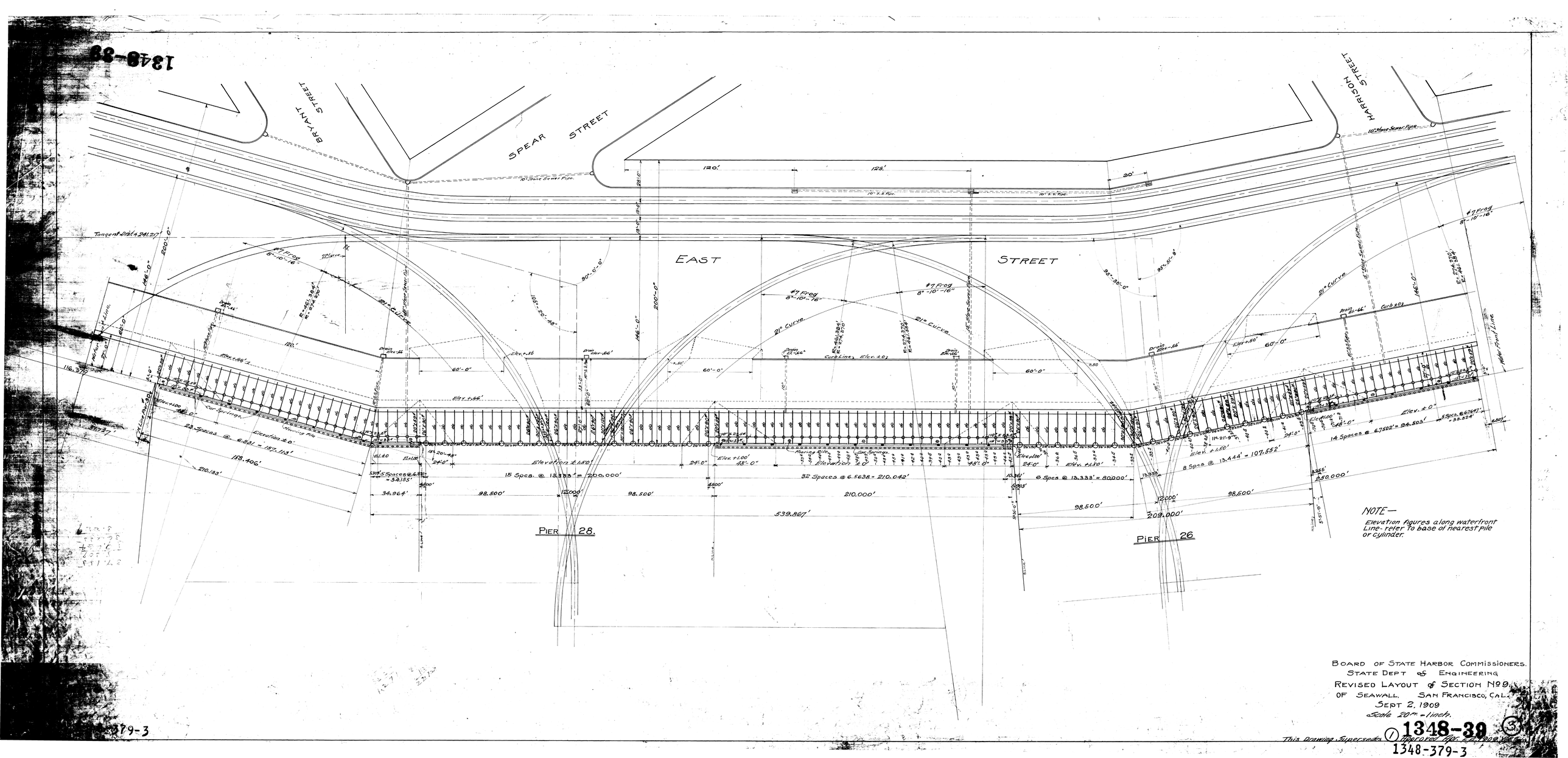
Respectfully Submitted
Ralph Barker
Assistant State Engineer

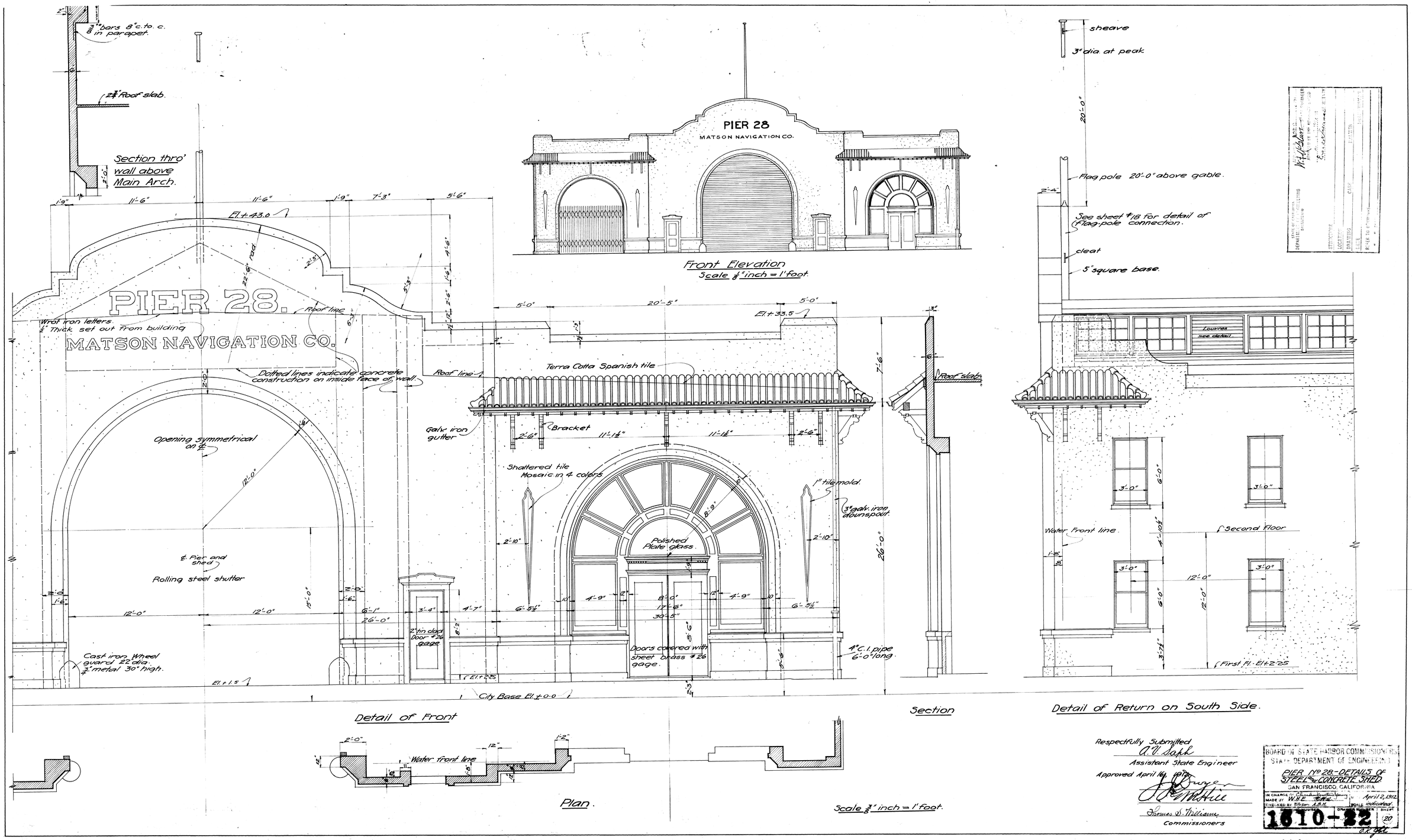
STATE OF CALIFORNIA
DEPARTMENT OF ENGINEERING
SACRAMENTO
APPROVED Apr. 13 1909 ADOPTED BY THE ADVISORY BD.
N. Tellery Apr. 13 1909
STATE ENGINEER
[signature]

1346-379-3

1346-39

2


1348-39
BRYANT STREET
SPEAR STREET
HARRISON STREET
EAST STREET
PIER 28.
PIER 26
NOTE—
Elevation figures along waterfront Line- refer to base of nearest pile or cylinder.
BOARD OF STATE HARBOR COMMISSIONERS.
STATE DEPT of ENGINEERING
REVISED LAYOUT of SECTION No 9.
OF SEAWALL. SAN FRANCISCO, CAL.
SEPT 2, 1909
Scale 20 ft. = 1 inch.
This Drawing Supersedes 1 Approved Apr. 22, 1909
1348-39
1348-379-3

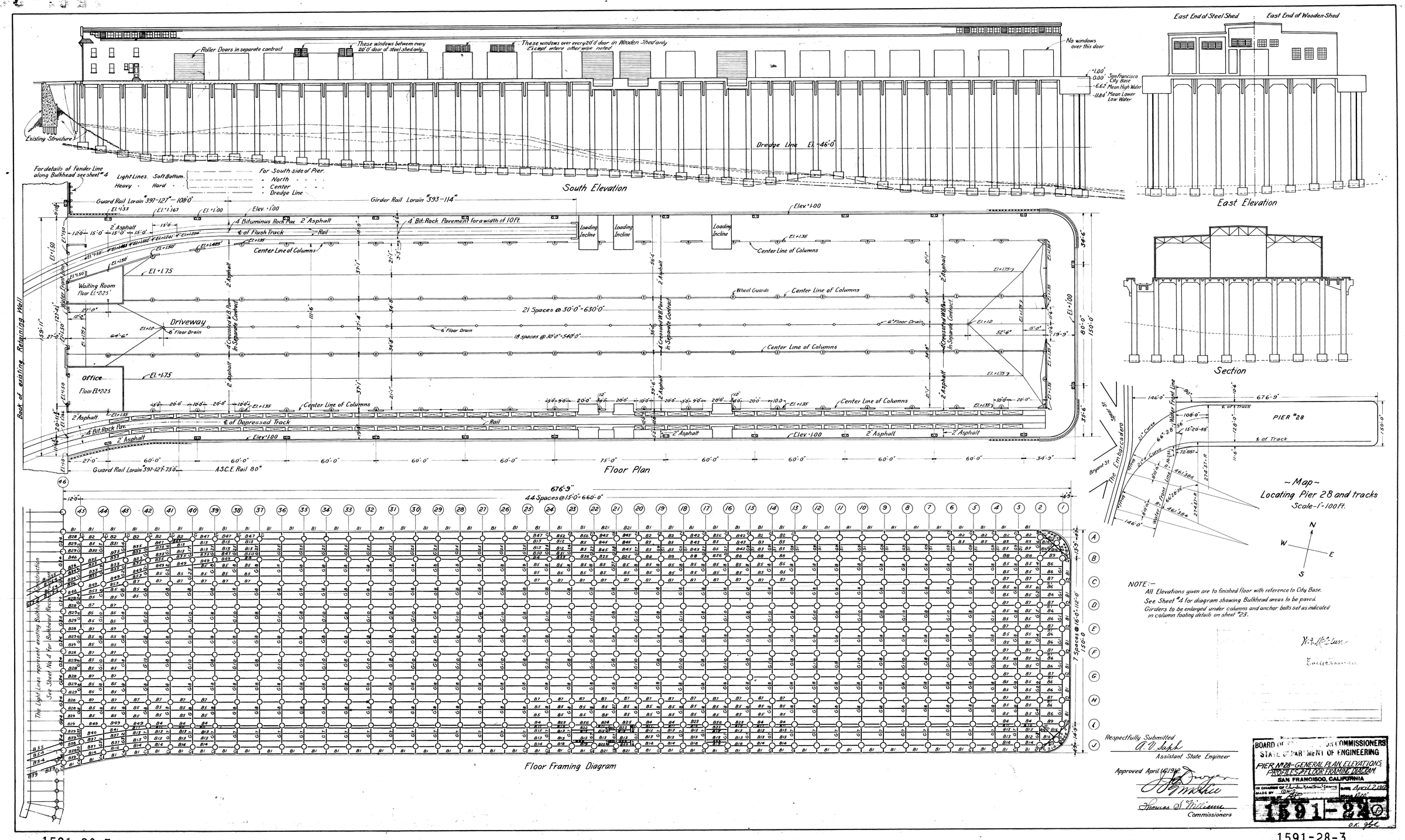


Respectfully Submitted
A. V. Saph
Assistant State Engineer
Approved April 16, 1912
J. P. McHill
Thomas D. Williams
Commissioners

BOARD OF STATE HARBOR COMMISSIONERS
STATE DEPARTMENT OF ENGINEERING
PIER No 28.-DETAILS OF STEEL and CONCRETE SHED
SAN FRANCISCO, CALIFORNIA
IN CHARGE OF Chas. Hunter Young
MADE BY W.H.E. H.H.H.
CHECKED BY Ellison A.B.H.
DATE April 2, 1912
SCALE indicated
DRAWING NUMBER 1610-22
SHEET 20

1610-28-3

1610-28-3



NOTE:-
All Elevations given are to finished floor with reference to City Base.
See Sheet #4 for diagram showing Bulkhead areas to be paved.
Girders to be enlarged under columns and anchor bolts set as indicated in column footing details on sheet #23.

Respectfully Submitted
A. V. Saph
Assistant State Engineer

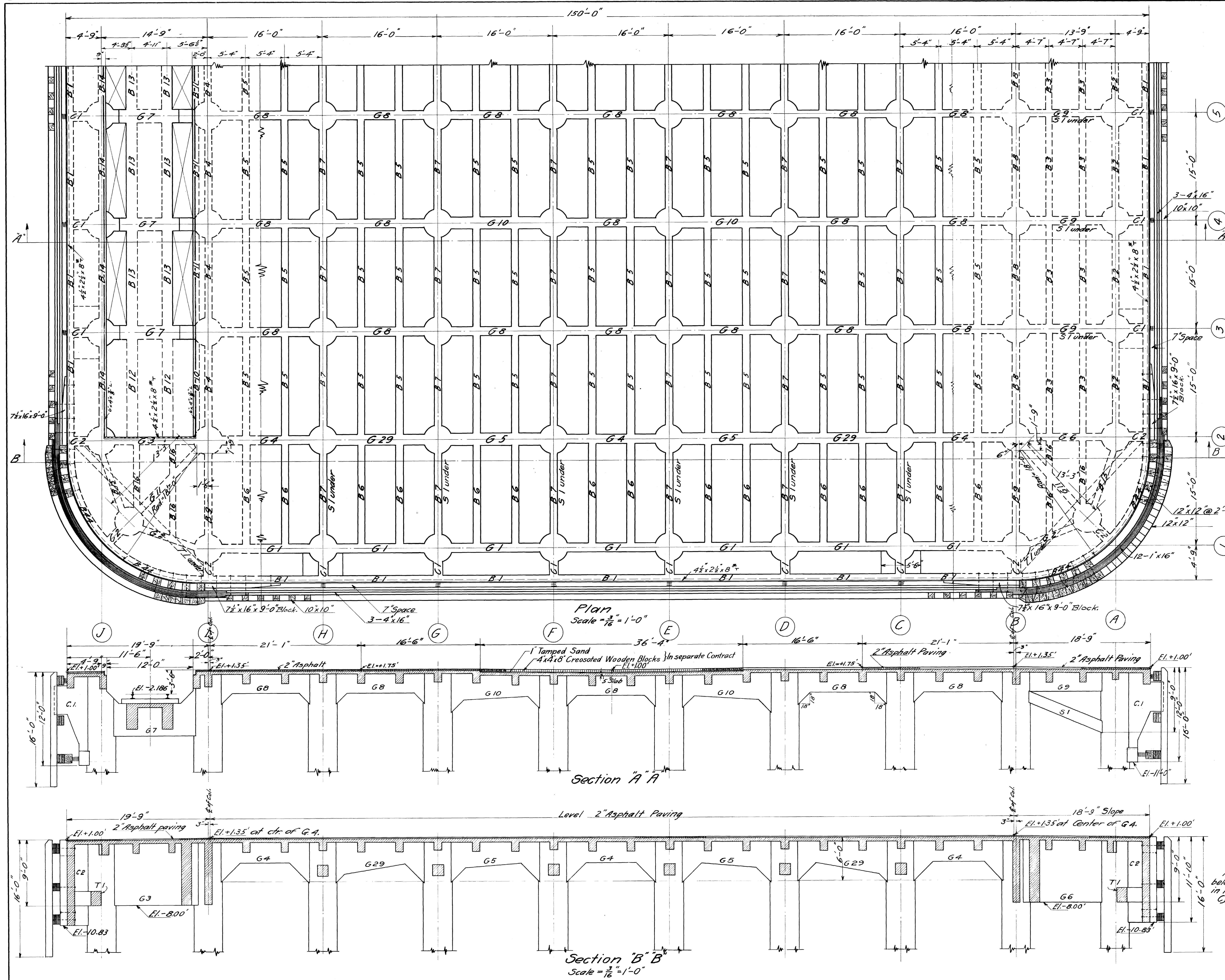
Approved April 16, 1912
[signature]
Thomas S. Williams
Commissioners

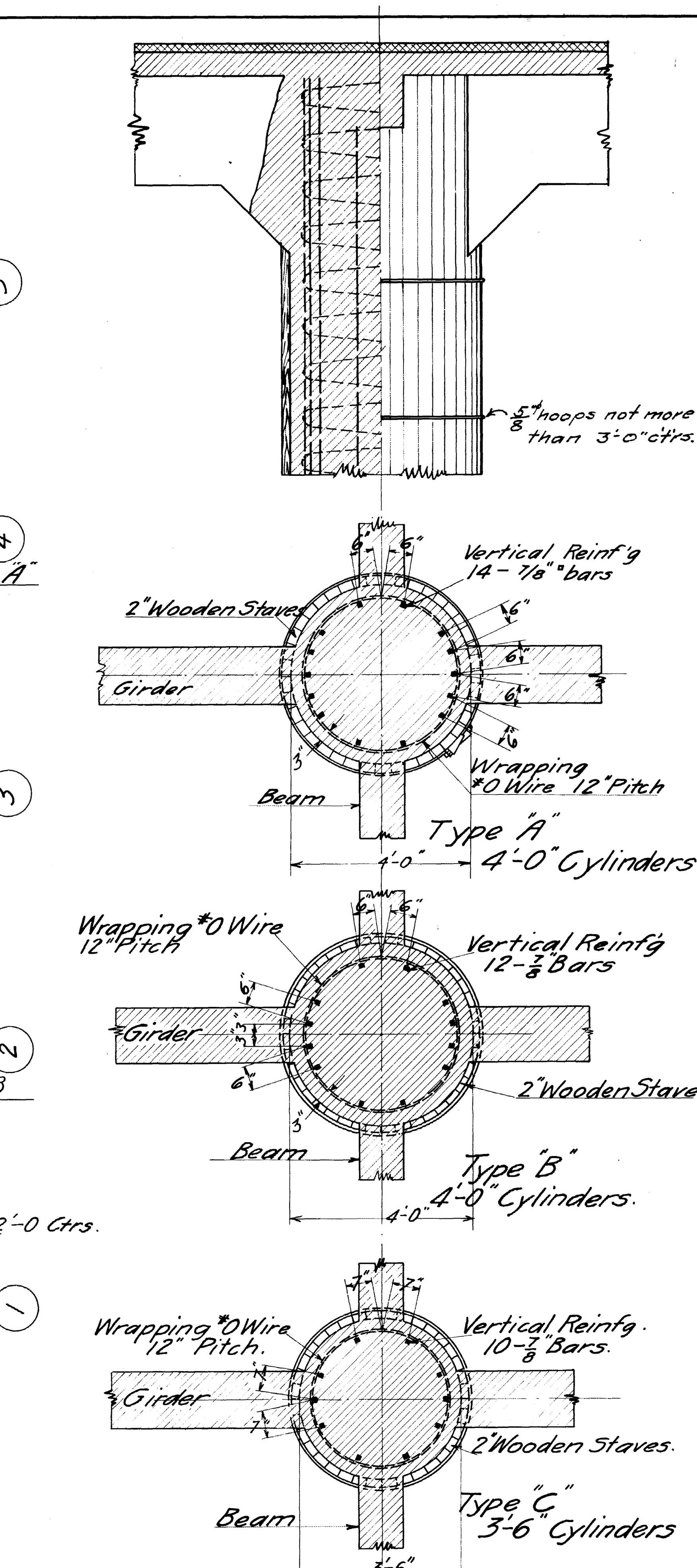
BOARD OF [illegible] COMMISSIONERS
STATE DEPARTMENT OF ENGINEERING
PIER No. 28 - GENERAL PLAN, ELEVATIONS, PROFILES & FLOOR FRAMING DIAGRAM.
SAN FRANCISCO, CALIFORNIA
IN CHARGE OF [illegible]
MADE BY [illegible]
CHECKED BY [illegible]
DATE April 2, 1912
SCALE 1"=20'
1591-28

1591-28-3

1591-28-3

1592-22



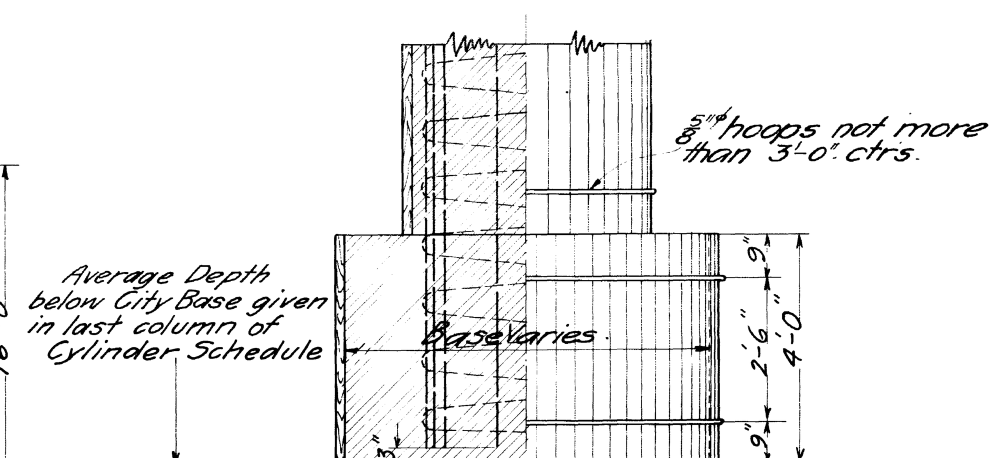


Note:
For the Spiral Reinforcement in Cylinders, riveted or welded Steel or Wrought Iron Bands of equivalent net section may be substituted, spaced not more than 12" c'trs. The riveting or welding to develop the full strength of the net section and be satisfactory to the engineer.

CYLINDER SCHEDULE

	Mark	Type	Dia. of Cyl.	Dia. of Base	Aver'g Bott. D.
A	A 1		4'-0"	5'-3"	El.-76.0
	A 2 to 20 inclusive		4'-0"	5'-6"	70.5
	A 21 to 23 "		4'-0"	5'-3"	62.5
	A 24 to 41 "		3'-6"	5'-9"	56.0
	A 42-43		3'-6"	5'-3"	50.0
	A 44		3'-6"	5'-0"	50.0
	A 45		3'-6"	5'-0"	49.5
B	B 1		4'-0"	5'-9"	76.5
	B 2		4'-0"	6'-3"	74.5
	B 3-5-7-9-11		4'-0"	6'-0"	73.7
	B 4-6-8		4'-0"	6'-9"	74.3
	B 10-12-14-16-18-20-22		4'-0"	6'-6"	68.2
	B 13-15-17-19-21-23		4'-0"	5'-9"	66.1
	B 24-26-28-30-32-34-36-38-41-44		3'-6"	6'-6"	55.8
	B 25-27-29-31-33-35-37-39		3'-6"	5'-9"	56.8
	B 40		3'-6"	6'-3"	52.0
	B 42		3'-6"	7'-0"	51.0
	B 43		3'-6"	6'-9"	50.5
	B 45		3'-6"	6'-0"	50.0
C	C 1		4'-0"	5'-9"	77.5
	C 2		4'-0"	6'-6"	75.5
	C 3 to 18 inclusive		4'-0"	6'-0"	72.5
	C 19 " 23 "		4'-0"	5'-9"	62.9
	C 24 " 37 " 40-41-45		3'-6"	5'-6"	56.4
	C 38-39		3'-6"	5'-3"	53.5
	C 42-43		3'-6"	5'-9"	51.0
	C 44		3'-6"	6'-0"	51.0
D	D 1		4'-0"	5'-9"	79.0
	D 2		4'-0"	6'-6"	77.0
	D 3-5-7-9-11-13-15-17		4'-0"	6'-0"	73.8
	D 4-6-8-10-12-14-16		4'-0"	6'-6"	75.0
	D 18-20-22		4'-0"	6'-3"	64.1
	D 19-21-23		4'-0"	5'-9"	62.5
	D 24-26-28-30-32-34-36-38		3'-6"	6'-0"	57.2
	D 25-27-29-31-33-35-37		3'-6"	5'-6"	57.5
	D 39-41-43-45		3'-6"	5'-3"	52.5
	D 40-42-44		3'-6"	5'-9"	52.3
E	E 1		4'-0"	5'-9"	79.5
	E 2-4-6-8-10-12-14-16		4'-0"	6'-3"	74.8
	E 3-5-7-9-11-13-15-17-18-20-22		4'-0"	6'-0"	71.5
	E 19-21-23		4'-0"	5'-9"	63.1
	E 24-26-28-30-32-34-36-38		3'-6"	5'-9"	57.7
	E 25-27-29-31-33-35-37-40-42-44		3'-6"	5'-6"	56.3
	E 39-41-43-45		3'-6"	5'-3"	52.5
F	F 1		4'-0"	5'-9"	81.0
	F 2-3-4-6-8-10-12-14-16-18		4'-0"	6'-3"	74.9
	F 5-7-9-11-13-15-17-20-22		4'-0"	6'-0"	71.5
	F 19-21-23		4'-0"	5'-9"	63.8
	F 24-26-28-30-32-34-36-38		3'-6"	5'-9"	58.3
	F 25-27-29-31-33-35-37-40-42-44		3'-6"	5'-6"	56.6
	F 39-41-43-45		3'-6"	5'-3"	52.5
G	G 1		4'-0"	5'-9"	81.5
	G 2		4'-0"	6'-9"	80.5
	G 3		4'-0"	6'-3"	80.0
	G 4-6-8-10-12-14-16		4'-0"	6'-6"	75.0
	G 5-7-9-11-13-15-17		4'-0"	6'-0"	74.4
	G 18-20-22		4'-0"	6'-3"	65.5
	G 19-21-23		4'-0"	5'-9"	64.3
	G 24-26-28-30-32-34-36-38		3'-6"	6'-0"	58.8
	G 25-27-29-31-33-35-37		3'-6"	5'-6"	58.7
	G 39-41-43-45		3'-6"	5'-3"	53.1
	G 40-42-44		3'-6"	5'-9"	53.1
H	H 1-20-21-22-23		4'-0"	5'-9"	67.6
	H 2		4'-0"	6'-6"	80.0
	H 3-4		4'-0"	6'-3"	79.2
	H 5 to 19 inclusive		4'-0"	6'-0"	73.7
	H 24 " 38 "		3'-6"	5'-6"	59.1
	H 39 " 45 "		3'-6"	5'-3"	53.3
I	I 1		4-0"	5'-9"	81.0
	I 2		4'-0"	6'-9"	79.5
	I 3-5		4'-0"	6'-6"	79.0
	I 4-6-8-10-12-14-16		4'-0"	7'-0"	75.7
	I 7-9-11-13-15-17-19-21-23		4'-0"	6'-3"	71.1
	I 18-20-22		4'-0"	6'-9"	66.3
	I 24-26-28-30-32-34-36-38-40		3'-6"	6'-6"	58.8
	I 25-27-29-31-33-35-37-39-41		3'-6"	5'-9"	58.2
	I 42		3'-6"	6'-9"	54.0
	I 43		3'-6"	6'-3"	53.5
	I 44		3'-6"	7'-0"	53.0
	I 45		3'-6"	5'-3"	53.0
J	J 1		4'-0"	5'-6"	80.5
	J 2-3-4-5-6-7		4'-0"	6'-3"	78.8
	J 8 to 21 inclusive		4'-0"	6'-0"	72.2
	J 22-23		4'-0"	5'-9"	64.7
	J 24 to 46 inclusive		3'-6"	5'-6"	57.8
IJ	IJ 45		3'-6"	6'-6"	52.0

Type (written across the Type column): Cylinders in lines 1 to 14 inclusive to be Type "A" / " " " 15 " 23 " " " "B" / All 3'-6" Dia. Cylinders to be Type "C"



Respectfully Submitted
A. V. Saph
Assistant State Engineer

Approved April 16, 1912.
J. J. Dwyer
J. J. McHill
Thomas S. Williams
Commissioners

PIER No 28-FLOOR FRAMING PLAN of OUTER END; SECTIONS; CYLINDERS.

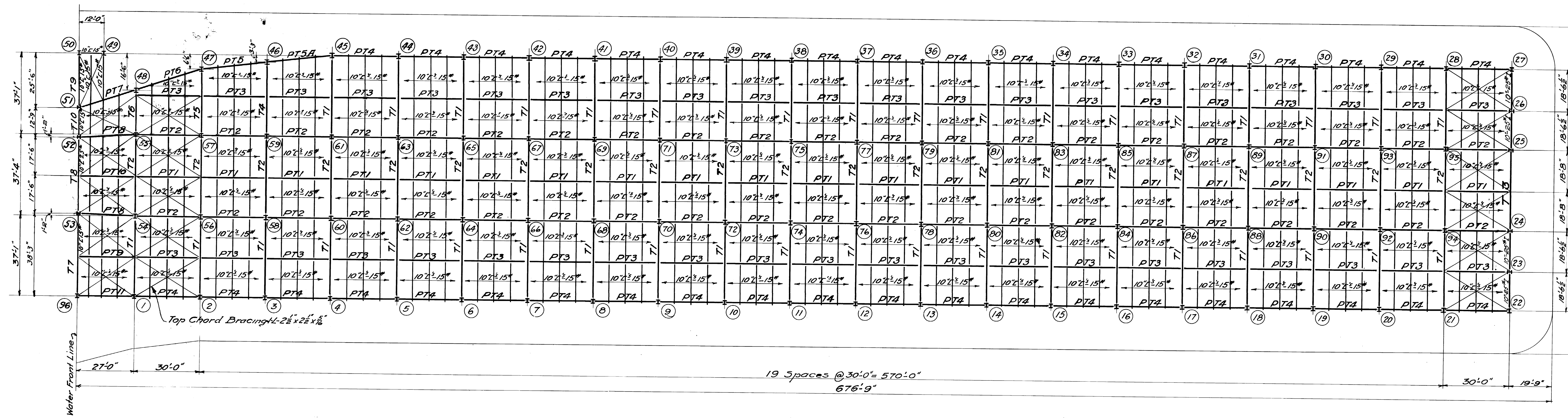
Charles Newton Young
K.H.S. E.F.L, L.F.C., W.G.W.
A.W.P.
April 2, 1912
Scale 3/16" & 1/2" = 1'-0"

1592-22 2

O.K. [illegible]

1592-28-3

1592-28-3

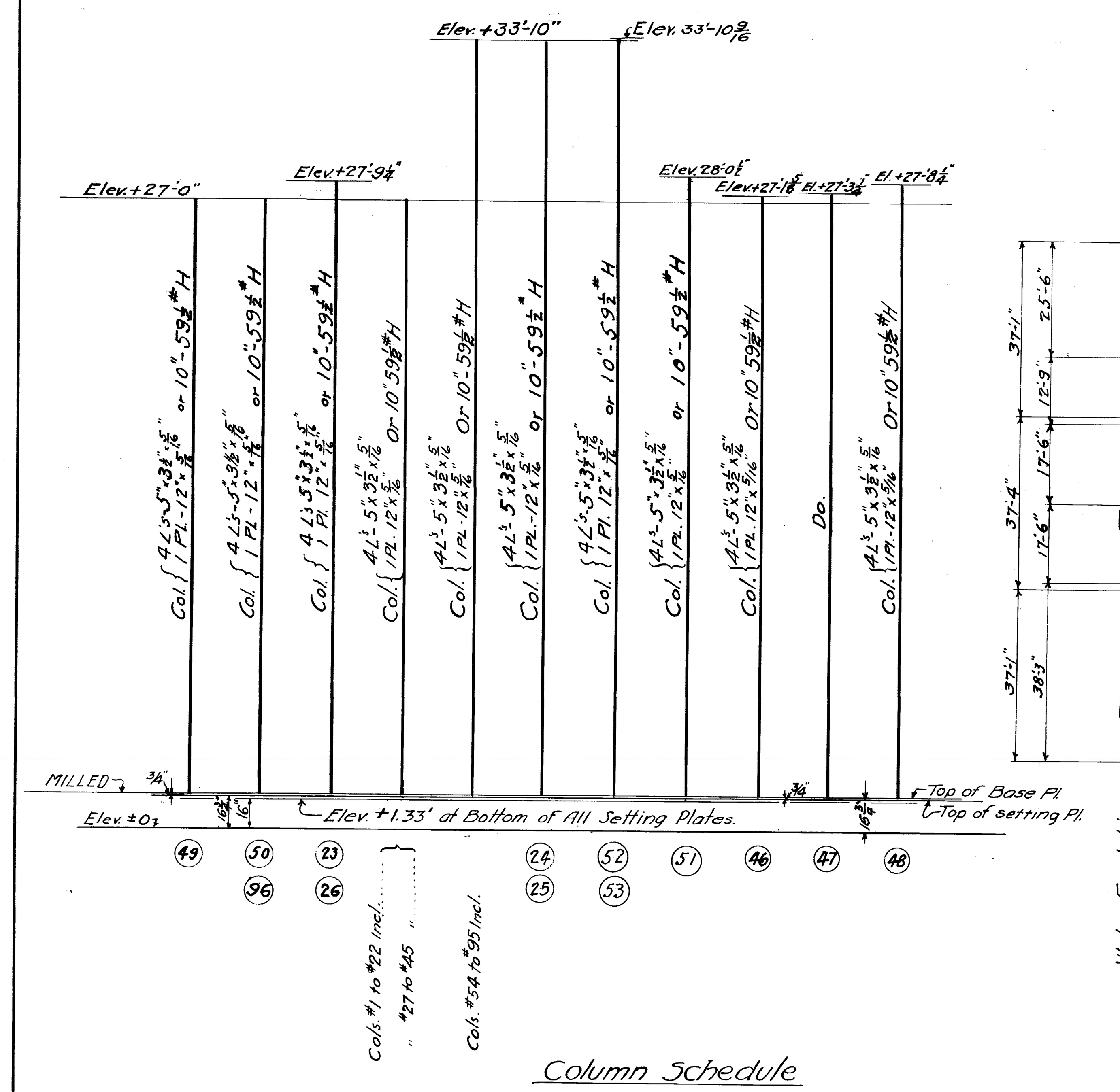


ROOF FRAMING PLAN
FOR STEEL SHED

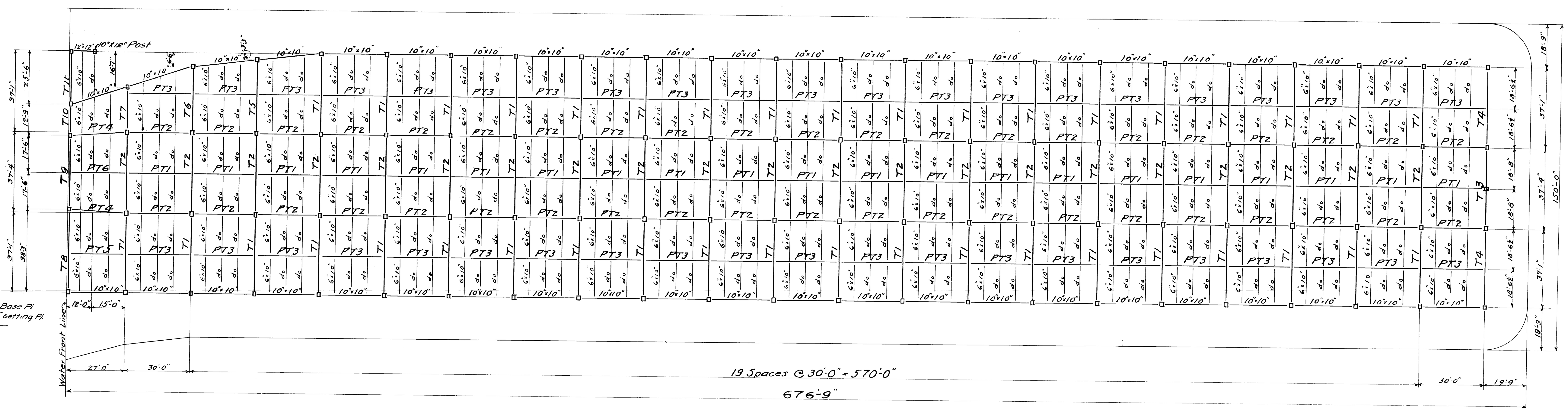
Schedule of Purlin Trusses			Schedule of Trusses		
Mark	Span	Required	Mark	Span	Required
PT-1	30'-0"	21	T-1	37'-1"	39
PT-2	30'-0"	42	T-2	37'-4"	21
PT-3	30'-0"	42	T-3	37'-4"	1
PT-4	30'-0"	39	T-4	33'-10"	1
PT-5	See Detail	1	T-5	30'-7"	1
PT-5A	" "	1	T-6	20'-7"	1
PT-6	" "	1	T-7	38'-3"	1
PT-7	" "	1	T8	35'-0"	1
PT-8	" "	2	T-9	25'-6"	1
PT-9	" "	1	T-10	12'-9	1
PT-10	" "	1			
PT-11	" "	1			

TRUSS AND PURLIN SCHEDULE
FOR STEEL SHED

Span of Trusses given to ℄ Columns
Span of Purlin Trusses given to ℄ Columns and Main Trusses.



Column Schedule
FOR STEEL SHED



ROOF FRAMING PLAN
FOR WOODEN SHED

Note:
All Columns for Wooden Shed to be 10"x16" unless otherwise noted.
Bottom of all bed plates for wooden columns to be set at El.+1.33.

Respectfully Submitted
A. V. Saph
Assistant State Engineer

Approved April 10, 1912
J. J. Dwyer
J. McHill
Thomas S. Williams
Commissioners.

BOARD OF STATE HARBOR COMMISSIONERS
STATE DEPARTMENT OF ENGINEERING
PIER No 28 - ROOF FRAMING PLANS
FOR STEEL AND WOODEN SHEDS
SAN FRANCISCO, CALIFORNIA

IN CHARGE OF Charles Newton Young
MADE BY T.T.
CHECKED BY A.A.B.
DATE April 2, 1912
SCALE 1" = 20'-0
DRAWING NUMBER 1603-22

O.K.

1603-28-3

Elevation.
Wire Glass
Plan through Windows
Scale 1/2"=1'-0"
4-3/8" □ bars
15"
10"[-15#
8"[-11.25#
30'-0"
Metal frames of #24 gauge or approved metal covered frames for windows and louvres on steel shed only. Wood Frames and Sash for Wood Shed.
10"[-15#
Section through louvres
Typical Purlin Connection.
1 Pl. 4"x3/8"x0'-6"
Two Plates on each Purlin- one at each 1/3 Point.
Top Chord of Truss
6"x4"x3/8"L 0'-11" long
P.T.1 and P.T.10 Purlin Connection.
10"-15# [s
1 Pl. 4"x3/8"x0'-6"
Two Plates on each Purlin- one at each 1/3 point.
6"x4"x3/8"L-0'-11" long.
Elev.+33.833'
2 3/4" Slab
Five Ply Roofing
2L's 4"x3"x3/8"
All Gussets 3/8" Thick
PT1
T2
2L's-3 1/2"x2 1/2"x3/8"
Elev.28.292
12'-5 1/2"
6'-2 1/2"
Ridge 1 1/2" high to deflect Water to downspout
All gusset Pls. shall extend 3/4" above top chord of all trusses
2 3/4" Concrete Slab Reinforced With Wire Fabric #3 & #8 Wire 3"x12" Mesh
Five Ply Roofing
PT4
PT3
PT2
T1
2L's-5"x3 1/2"x1/2"
2L's 3 1/2"x3"x3/8"
12'-4 1/2"
12'-4 1/2"
6'-2"
5"x3 1/2"x5/16" L.
2-3x3x5/16 Ls
4 L's 5"x3 1/2"x5/16" 1 Pl. 12"x5/16"
37'-1"
18'-8"
34'-8"
℄ of shed, Symmetrical about ℄
22'-5"
18'-5"
P.T.4
6"x4"x3/8" L
#12-Wire
Metal frames of #24 gauge or approved metal-covered frames.
Wire glass
Windows covered with galv. wire netting #10 wire 1" mesh.
3/8" Bars 8" ctrs
2-6"x4"x3/8" Ls
3/4" dia. Expansion Bolts 12" Long.
Cyl.
Elevation
Down spout at every Column along sides - see detail
3/8" Bars 8" ctrs.
20'-0" opening
10'-0"
20'-0" opening
Plan of Panels Between Doors Showing Reinforcement
Concrete Guard Sheathed with steel 1/8" thick on all Side and End Cols. tied well into wall.
Elev. + 1.18 top of Concrete at ℄ of Col.
3/4" Dia. Expansion Bolts 12" Long
Elev.± 0.00'
℄ Cylinder
Elev. +1.583. top of Concrete.
2" Asphalt.
TYPICAL BAY
Scale-Diagram 1/2"=1'-0"
Details 3/4"=1'-0"
Concrete Guard Sheathed with Steel 1/8" thick On All Center Cols.
Elev. top of Concrete +1.23
6"x4"x3/8" L's
4" Creosoted Wooden blocks and 1" sand in separate contract.
4-1" dia. bolts 3'-6" lg.
4"x4"x1/2" washers
Girder
1"φ Anchor Bolts.
12"x3/4"x21" Base Pl.
12"x3/4"x21" Setting Pl.
Elev.+1.23'
Elev. top of Concrete+0.583
1" Sand
6"x4"x3/8" Ls
3 1/2"x3"x3/8" L's
Stiffner L's to be Milled Each End.
Beam
Section A-A
TYPICAL COLUMN FOOTING
for all columns except #50-51-52-53-96
Flashing Around. Strainer Cap
#22 Galv. Iron D.S. 4" Dia.
Detail of Down Spout. One at Each Col Along Sides.
4" G.I. Pipe
4" W.I. Pipe
Elbow of Down Spout to Project 6" Outside Cylinders and Girders
℄ Col.
℄ Cylinder
Note:
Depth of Trusses given at ℄ of columns.
Depth of Purlin Trusses given at ℄ columns and ℄ main trusses.
All rivets 3/4"
All gusset plates 3/8"
LOCATION
DRAWING
DATE
REFER TO DRAWINGS
Respectfully Submitted
A. V. Saph
Assistant State Engineer
Approved April 16, 1912
Thomas S. Williams
Commissioners
PIER No 28 - DETAILS OF STEEL AND CONCRETE SHED
April 2-1912
T.T.
A.A.B.
1/2" 3/4" = 1'-0"
1604-28

1604-28-3