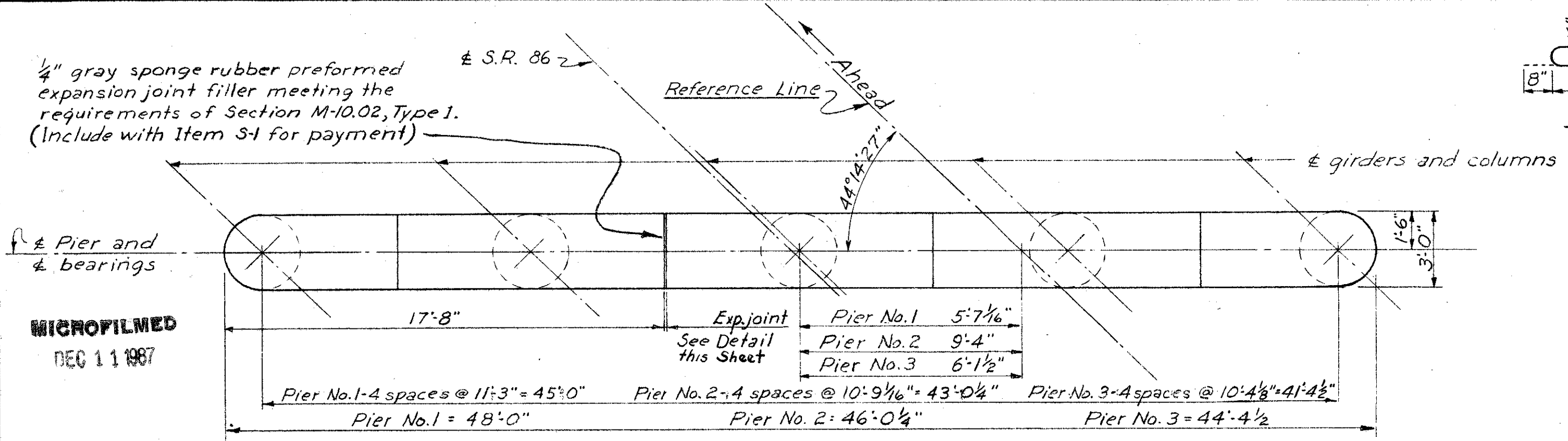


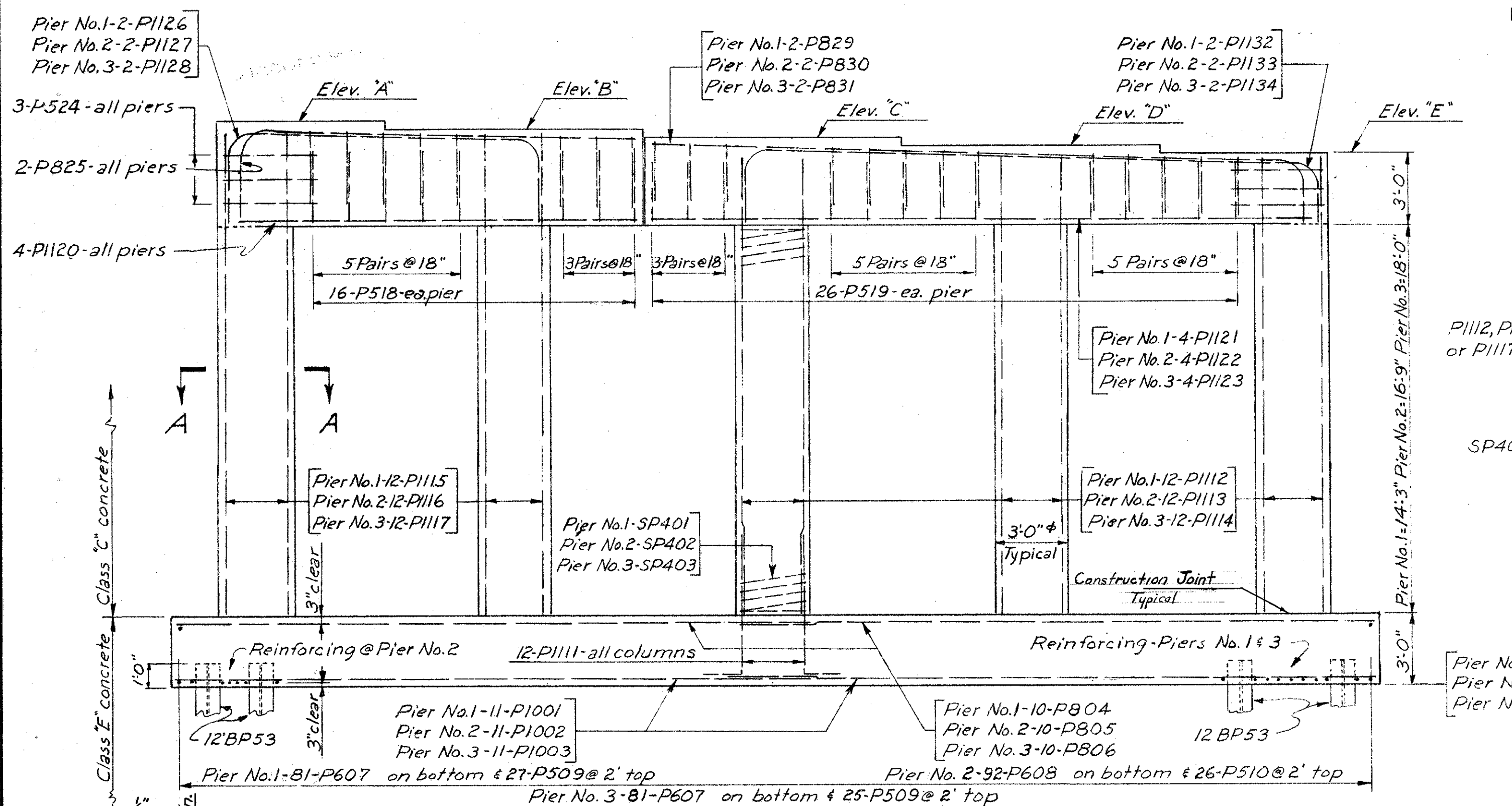
**LAKE COUNTY  
SEC. LAK-I-12.89**

NOTES

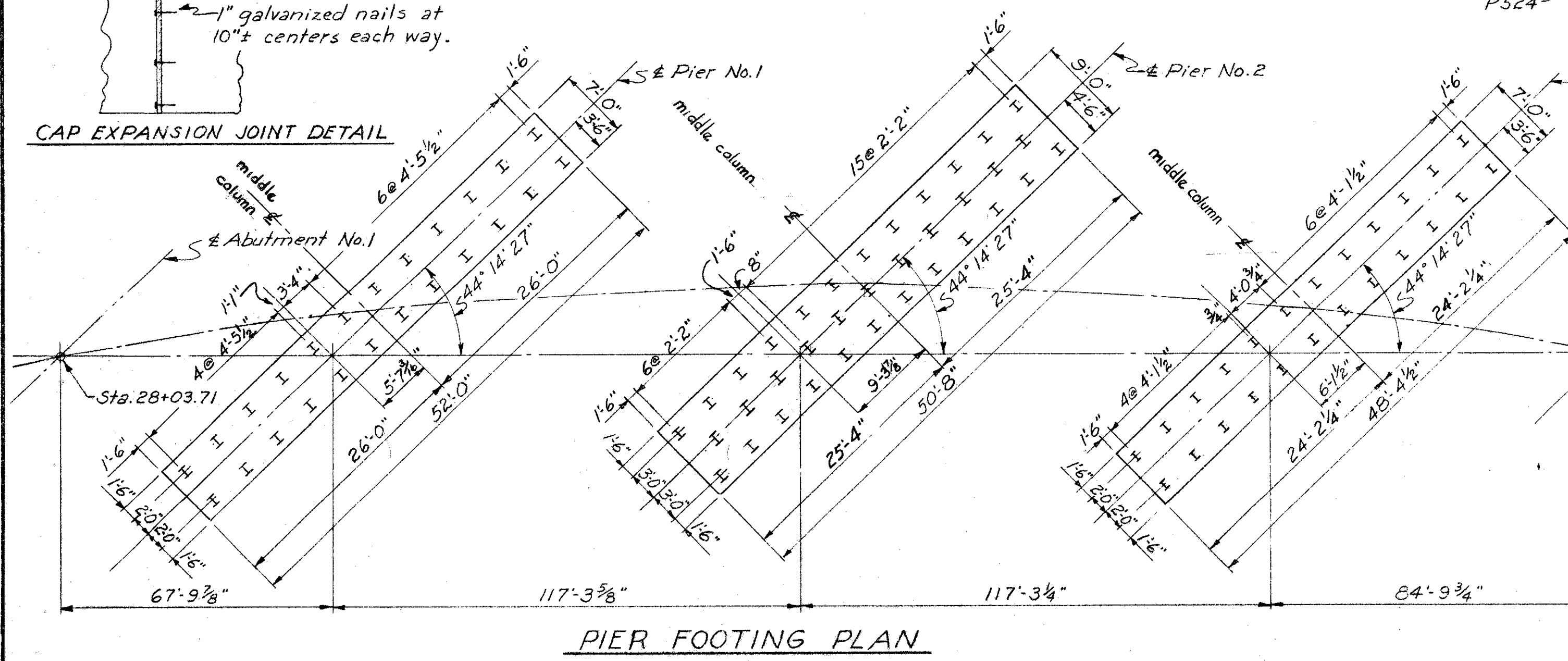
- PILES: The design load is 30 tons per pile for all piers. For additional notes, see General Plan sheet.
- Special care shall be taken in placing reinforcing steel in the bridge seat so that it will not interfere with the drilling of anchor bolt holes.
- SPIRAL REINFORCING BARS: The "Length" shown in the bar list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap. The "No. of Turns" shown is the "Length" divided by the pitch plus 3 turns (total number of closed coils), expressed as the nearest whole number. Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item S-4. 1/2 closed coils shall be provided at the ends of each spiral unit. Four steel channel, tee or angle spacers, weighing approximately 0.68 lbs. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.68 lbs per lineal foot, will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.



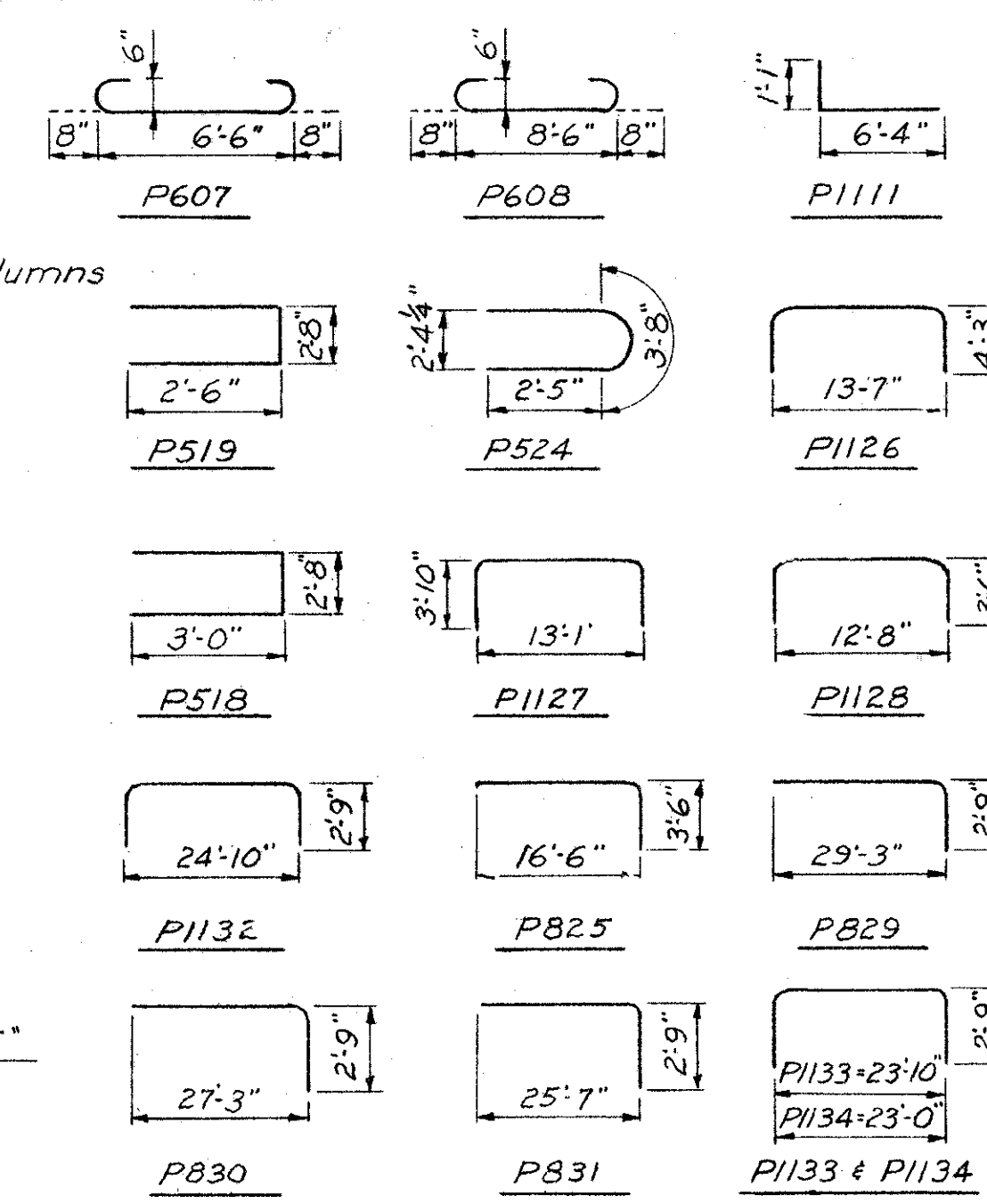
**PIER CAP PLAN**



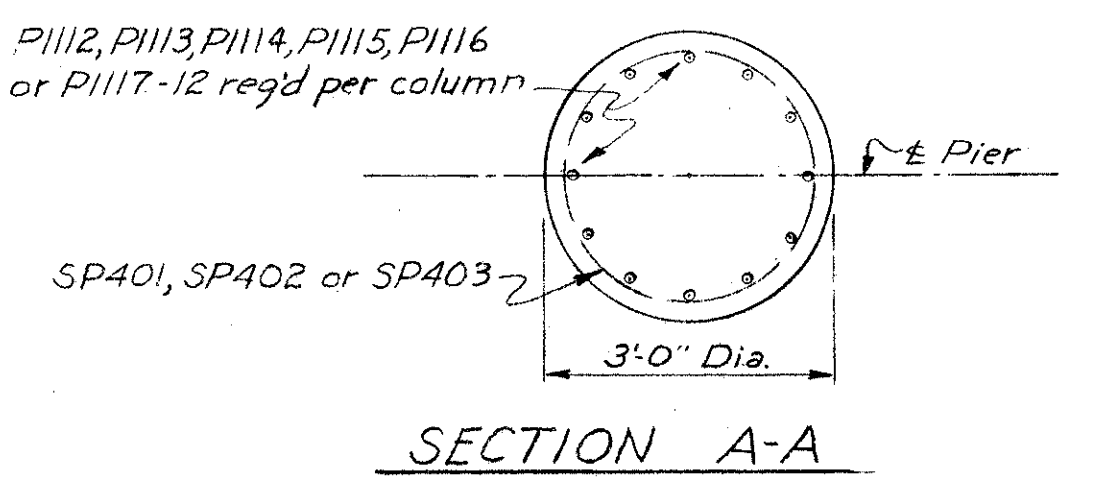
**TYPICAL PIER ELEVATION  
(LOOKING AHEAD)**



**PIER FOOTING PLAN**



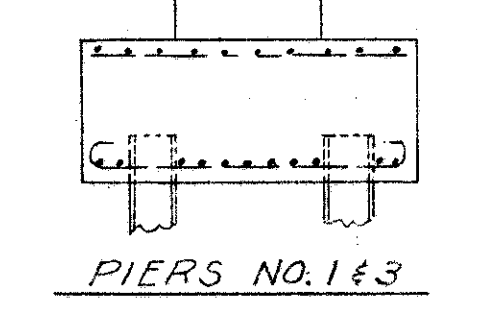
**BAR BEND DETAILS**



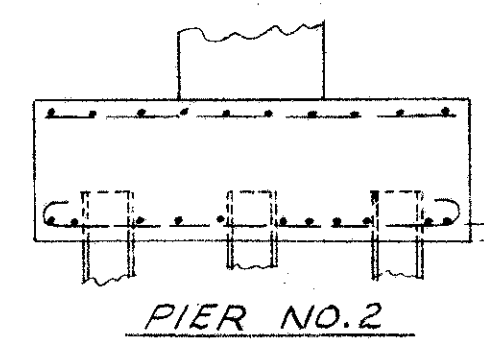
**SECTION A-A**

MARK	NO. REQ'D				SIZE	LENGTH	TYPE	WEIGHT
	PIER 1	PIER 2	PIER 3	TOTAL				
P1001	22	-	-	22	10	27'-4"	Str.	2 587
P1002	-	22	-	22	10	26'-8"	Str.	2 525
P1003	-	-	22	22	10	25'-6"	Str.	2 414
P804	20	-	-	20	8	27'-0"	Str.	1 442
P805	-	20	-	20	8	26'-4"	Str.	1 406
P806	-	-	20	20	8	25'-2"	Str.	1 344
P607	81	-	81	162	6	7'-10"	Bent	1 905
P608	-	92	-	92	6	9'-10"	Bent	1 358
P509	27	-	25	52	5	6'-6"	Str.	3 53
P510	-	26	-	26	5	8'-6"	Str.	2 31
P1111	60	60	60	180	11	7'-2"	Bent	6 857
P1112	36	-	-	36	11	17'-0"	Str.	3 252
P1113	-	36	-	36	11	19'-6"	Str.	3 730
P1114	-	-	36	36	11	20'-9"	Str.	3 949
P1115	24	-	-	24	11	18'-6"	Str.	2 359
P1116	-	24	-	24	11	20'-7"	Str.	2 624
P1117	-	-	24	24	11	21'-6"	Str.	2 742
P518	16	16	16	48	5	8'-5"	Bent	4 22
P519	26	26	26	78	5	7'-5"	Bent	6 04
P1120	4	4	4	12	11	16'-8"	Str.	1 043
P1121	4	-	-	4	11	29'-3"	Str.	6 22
P1122	-	4	-	4	11	27'-4"	Str.	5 81
P1123	-	-	4	4	11	25'-8"	Str.	5 46
P524	6	6	6	18	5	8'-6"	Bent	1 60
P825	2	2	2	6	8	19'-8"	Bent	3 15
P1126	2	-	-	2	11	21'-6"	Bent	2 28
P1127	-	2	-	2	11	20'-2"	Bent	2 14
P1128	-	-	2	2	11	19'-1"	Bent	2 03
P829	2	-	-	2	8	31'-8"	Bent	1 69
P830	-	2	-	2	8	29'-8"	Bent	1 58
P831	-	-	2	2	8	29'-0"	Bent	1 55
P1132	2	-	-	2	11	29'-9"	Bent	3 16
P1133	-	2	-	2	11	28'-9"	Bent	3 06
P1134	-	-	2	2	11	27'-11"	Bent	2 97
TOTAL WEIGHT								51,907

MARK	NO.	SIZE	LENGTH	PITCH	NO. TURNS	CORE DIA.
SP401	5	1/2"	14'-2"	4 1/2"	41	32"
SP402	5	1/2"	16'-8"	4 1/2"	48	32"
SP403	5	1/2"	17'-11"	4 1/2"	51	32"

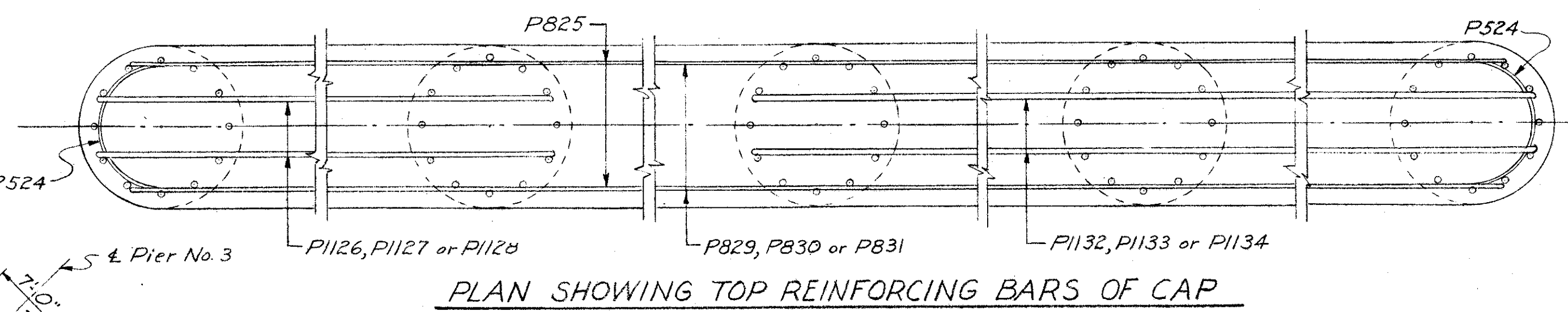


**PIERS NO. 1 & 3**

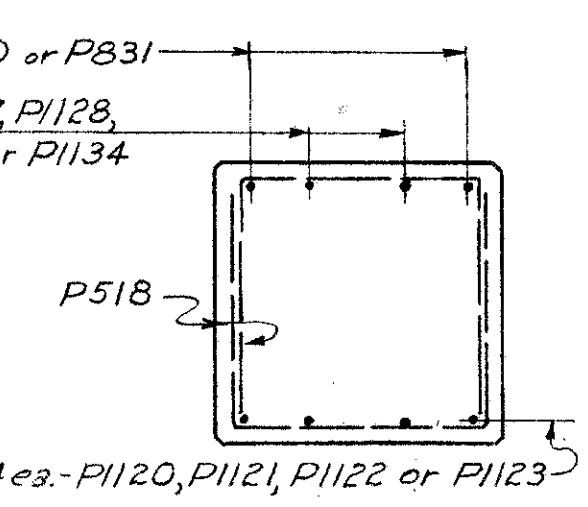


**PIER NO. 2**

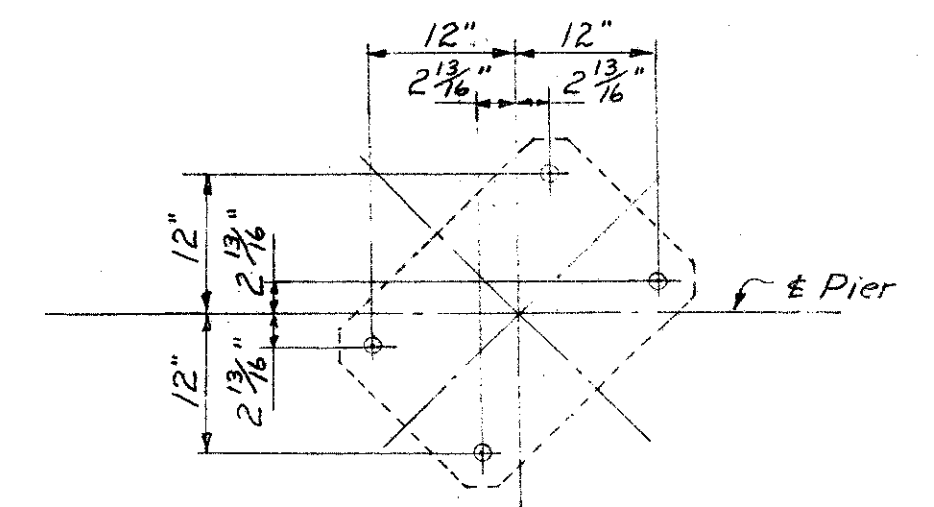
**FOOTING SECTIONS**



**PLAN SHOWING TOP REINFORCING BARS OF CAP**



**CAP SECTION**



**ANCHOR BOLT LAYOUT  
PIER NO. 2**

	A	B	C	D	E
Pier No. 1	854.28	853.80	853.32	852.82	852.32
Pier No. 2	854.88	854.54	854.19	853.83	853.47
Pier No. 3	853.87	853.64	853.40	853.15	852.90

**TABLE OF ELEVATIONS**

SEC. C-32 FED. AID PROJ. NO. ACI-1103(21)

PREPARED BY  
CAPITOL ENGINEERING ASSOCIATES, DILLSBURG, PA.  
FOR  
STATE OF OHIO  
DEPARTMENT OF HIGHWAYS

**PIERS  
BRIDGE NO. LAK-I-1644  
S.R.1 UNDER S.R.86  
LAKE COUNTY**

STA. 513+35.58

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
JFM	JFM					