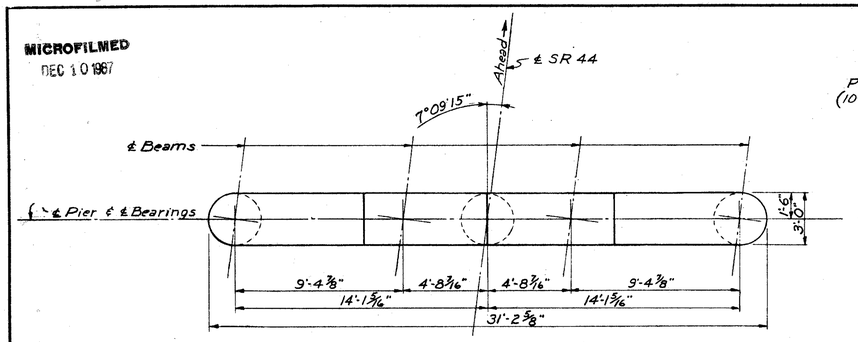
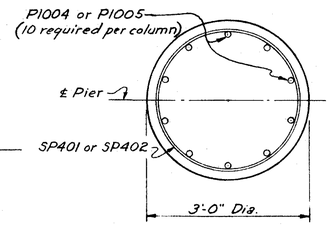
FED. RD. DIVISION	STATE	PROJECT		443 / 488
2	OHIO	ACI-1103(21)		

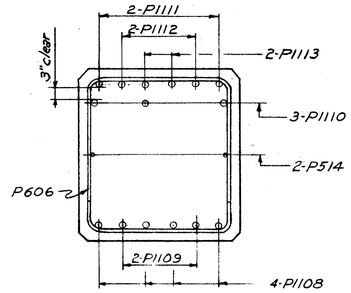
LAKE COUNTY
SEC. LAK-1-12.89



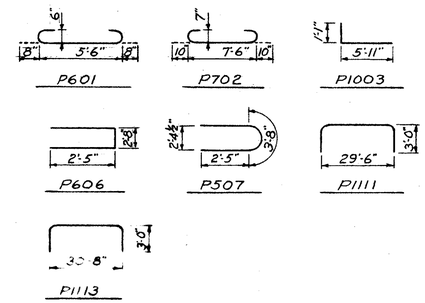
PIER CAP PLAN



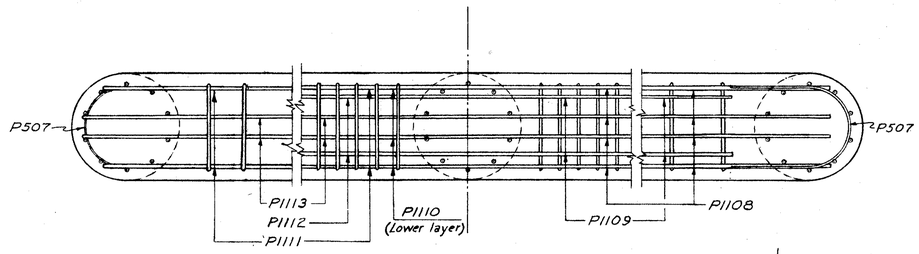
SECTION C-C



SECTION B-B



BAR BEND DETAILS

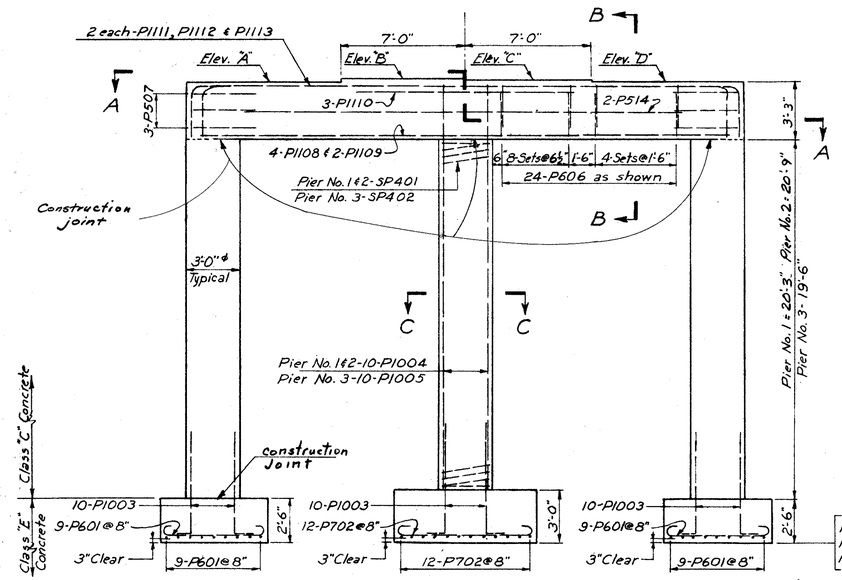


SECTION A-A

PIER BAR LIST

MARK	NO. REQ'D PIER-1	PIER-2	PIER-3	TOTAL	SIZE	LENGTH	TYPE	WEIGHT
P601	54	-	54	108	6	6'-10"	Bent	1108
P702	-	72	-	72	7	9'-2"	Bent	1350
P1003	30	30	30	90	10	6'-9"	Bent	2614
P1004	30	30	-	60	10	23'-3"	Str.	6003
P1005	-	-	30	30	10	22'-6"	Str.	2905
P606	48	48	48	144	6	7'-2"	Bent	1550
P507	6	6	6	18	5	8'-6"	Bent	160
P1108	4	4	4	12	11	29'-5"	Str.	1876
P1109	2	2	2	6	11	24'-0"	Str.	765
P1110	3	3	3	9	11	12'-0"	Str.	574
P1111	2	2	2	6	11	34'-10"	Bent	1110
P1112	2	2	2	6	11	20'-0"	Str.	638
P1113	2	2	2	6	11	36'-0"	Bent	1148
P514	2	2	2	6	5	27'-0"	Str.	169

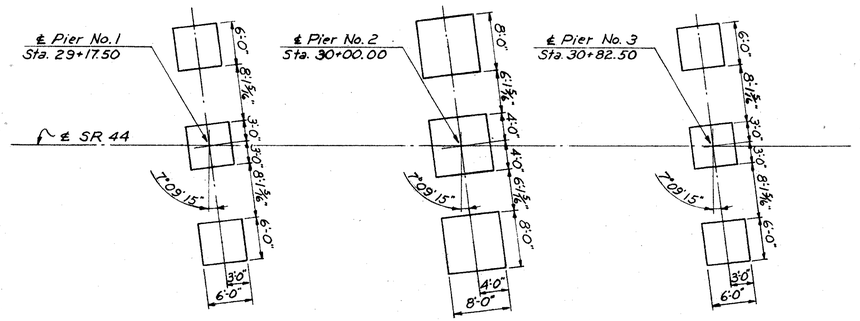
MARK	NO.	SIZE	LENGTH	PITCH	NO. TURNS	CORE DIA.	
SP401	6	4	20'-3"	4½"	57	32"	1915
SP402	3	4	19'-6"	4½"	55	32"	924
					TOTAL WEIGHT		24,809



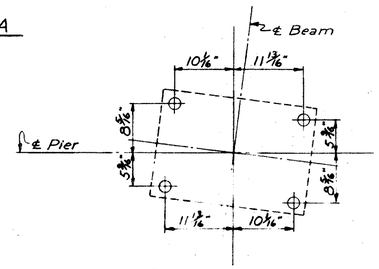
FOOTING PIER NO. 1 — FOOTING PIER NO. 2 — FOOTING PIER NO. 3

TYPICAL PIER ELEVATION
(LOOKING AHEAD)

TABLE OF ELEVATIONS				
	A	B	C	D
Pier No. 1	824.19	824.33	824.33	824.18
Pier No. 2	823.57	823.71	823.19	823.54
Pier No. 3	822.49	822.61	822.59	822.43



PIER FOOTING PLAN



ANCHOR BOLT LAYOUT
PIER NO. 2

NOTES

- FOOTINGS shall extend a minimum of 3" into shale (may be broken) or to the elevation shown, whichever is lower.
- FOUNDATION BEARING PRESSURE: Pier footings are designed for a maximum bearing pressure 5½ tons per sq. ft.
- 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.
- All pier details and reinforcement are symmetrical about the centerline of the pier, unless otherwise noted.
- All columns and footings are similar except as noted.
- 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. 1½ 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 lin. ft, will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

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

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

PIER DETAILS
BRIDGE NO. LAK-1-1493
S.R.1 UNDER EXIST. S.R. 44
LAKE COUNTY
STA. 434 + 55.38

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
JHM	JHM		8			.