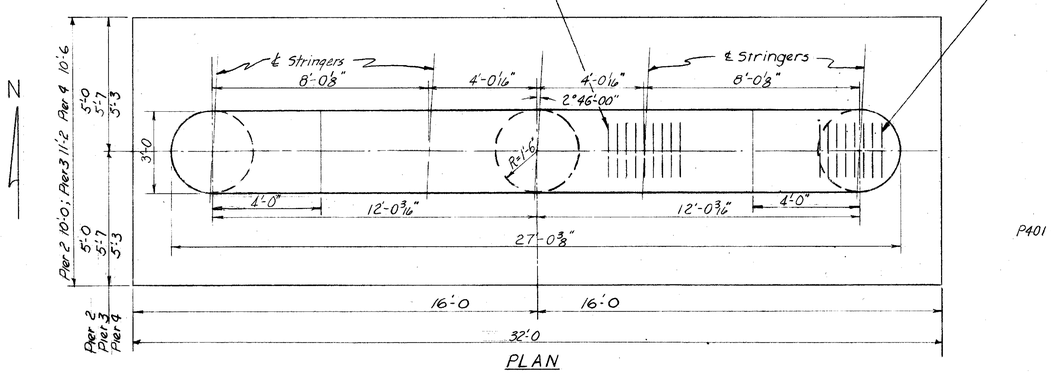
FED. RD DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	I-1103 (15)	

156
176

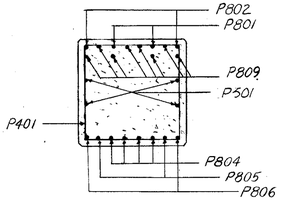
LAKE COUNTY
LAK-I-26.51
ASHTABULA COUNTY
ATB-I-0.00

Note:
P403 @ 4" c.c., 8 under each exterior stringer & 9 under each interior stringer at each pier, space as shown to clear anchor bolts at pier 3. Clear concrete by 2".

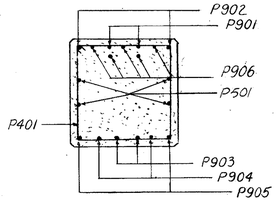


PLAN

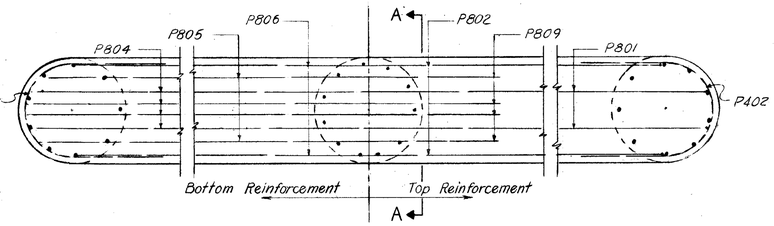
	El. A	El. B	El. C	El. D	El. Bot Ftg.	H
Pier 2	826.25	826.38	826.38	826.26	804.00	16'-3
Pier 3	826.31	826.44	826.44	826.31	797.00	23'-3⅜
Pier 4	825.91	826.03	826.03	825.90	800.00	19'-10 13/16



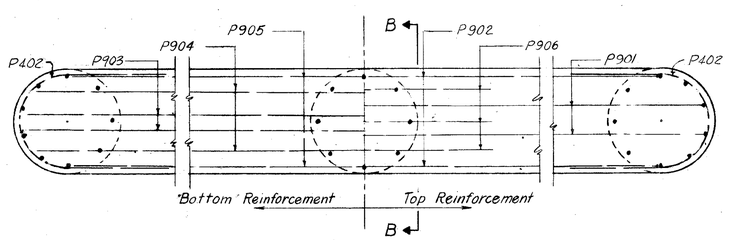
SECTION A-A



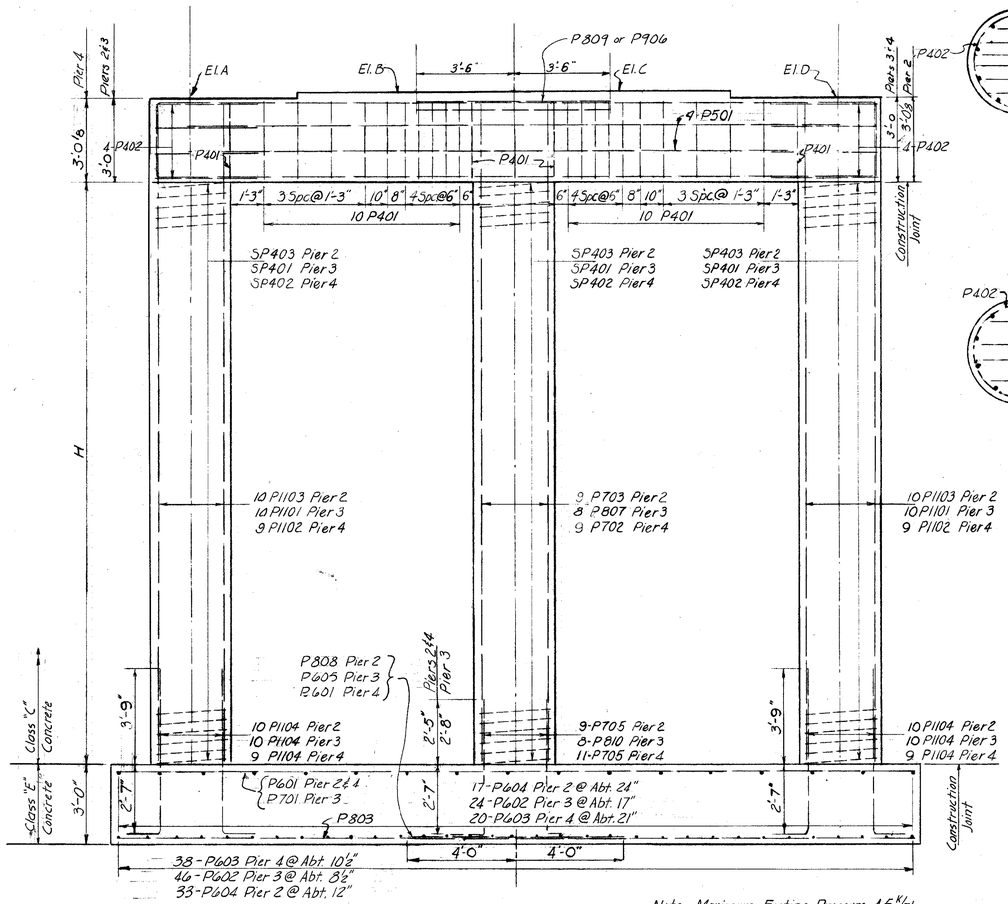
SECTION B-B



CAP PIER 2 OR PIER 4
(PIER 4 COLUMNS SHOWN)

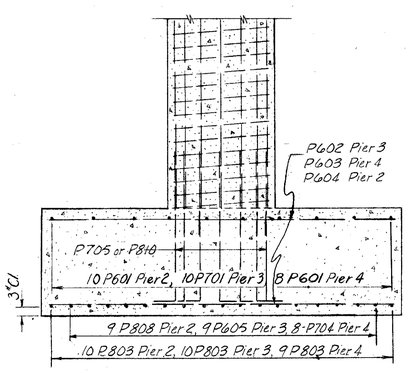


CAP PIER 3

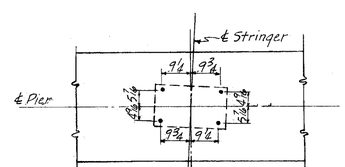


ELEVATION

Note: Maximum Footing Pressure 4.5 K/a'



SECTION THROUGH INTERIOR COLUMN

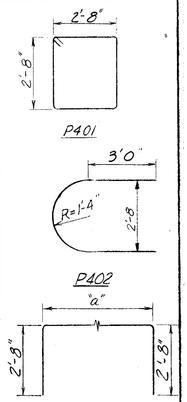


TYPICAL ANCHOR BOLT DETAIL
B175 BOLSTER PIER 3

REINFORCING STEEL LIST
THREE PIERS

MK	Length	Shape	No.	Weight
P401	11'-6	Bent	72	553
P402	10'-2	Bent	24	163
P501	29'-0	Str.	12	300
P601	31'-8	Str.	19	904
P602	10'-10	Str.	70	1139
P603	10'-2	Str.	58	886
P701	31'-8	Str.	10	647
P702	21-7	Str.	9	397
P703	17-11	Str.	9	330
P704	8-0	Str.	8	131
P705	5-5	Bent	20	221
P801	32-0	Bent	4	342
P802	29-4	Bent	4	313
P803	31'-8	Str.	29	2,452
P804	26-8	Str.	8	570
P805	26-0	Str.	4	278
P806	24-0	Str.	4	256
P807	23-0	Str.	8	491
P808	8-0	Str.	9	192
P809	7-0	Str.	16	299
P810	5-9	Bent	8	123
P901	32-0	Bent	2	218
P902	29-4	Bent	2	199
P903	26'-8	Str.	2	272
P904	26-0	Str.	2	177
P905	24-0	Str.	2	163
P906	7-0	Str.	5	119
P1101	23-0	Str.	20	2444
P1102	21-7	Str.	18	2064
P1103	17'-11	Str.	20	1904
P1104	7-1	Bent	58	2183
P403	2'-0	Str.	102	136
P604	9'-8	Str.	50	726
P605	8'-0	Str.	9	108
			Total	21,700

Bending Schedule



SPIRAL REINFORCING LIST

MK	No.	Size	Core Dia.	Length	Pitch	No. of Turns	Weight
SP401	3	½"ϕ	2'-8	23.31	4½"	65	2282
SP402	3	½"ϕ	2'-8	19.90	4½"	56	1103
SP403	3	½"ϕ	2'-8	16.25	4½"	46	906
						Total	4291

Notes:

Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 54.

Four steel channel, tee or angle spacers, weighing approximately 0.68 lb 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 lbs. of these spacers, based on 0.68 lb. per lin. ft. will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

The "Length" shown in the steel 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 in the steel list for the spiral bars is the "Length divided by the Pitch," plus 3 turns (total number of closed coils), expressed as the nearest whole number.

1½ closed coils shall be provided at the ends of each spiral unit.

Reinforcing steel shall clear the face of the concrete by 2" unless otherwise noted.

CHARLES L. BARBER AND ASSOCIATES
HARRY BALKE ENGINEERS
TOLEDO, OHIO

PIER DETAILS

BRIDGE Nº ATB-1-0233
SR 1 UNDER LEFEVER RD.
ASHTABULA CO. SR 1
STA. 123+59.21

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.T.L.	C.T.L.		J.B.	A.C.A.	8/28/57	