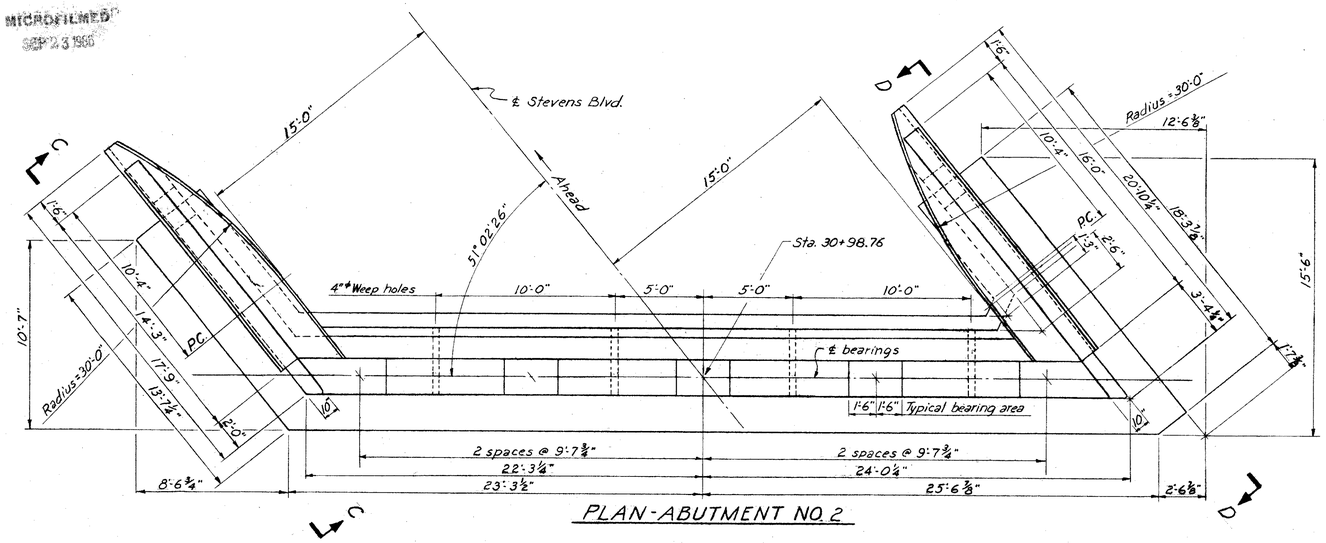
MICROFILMED
SEP 23 1966

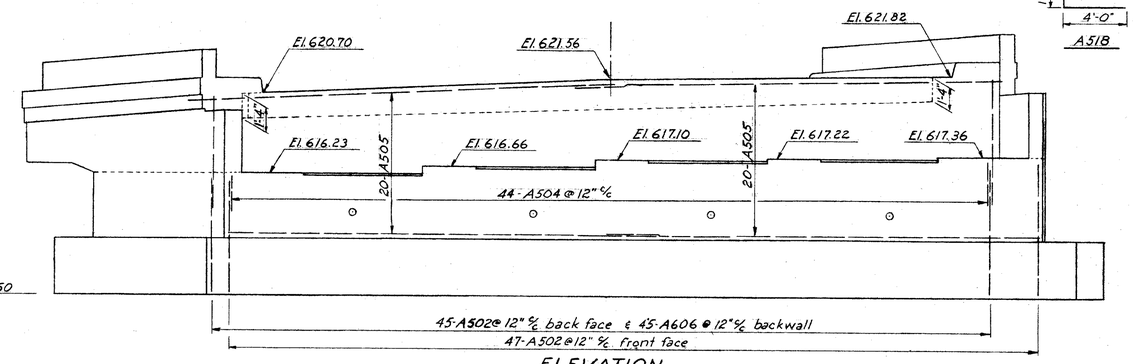
FED RD. DIVISION	STATE	PROJECT	
2	OHIO	F-U-329 (15)	

235
297

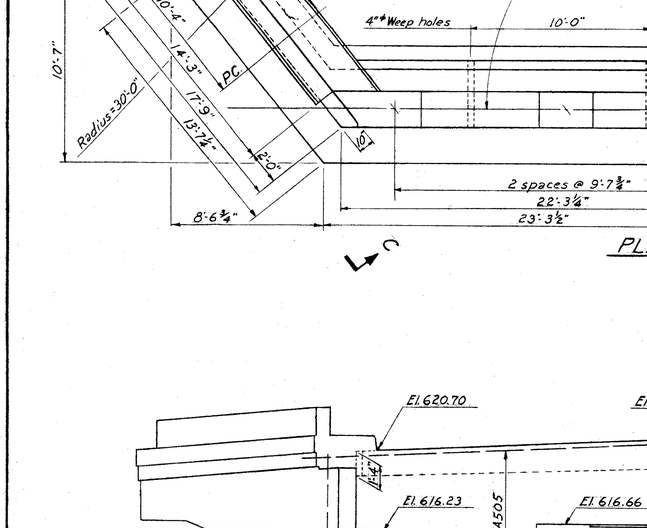
LAKE COUNTY
SEC. LAK-2-4.42



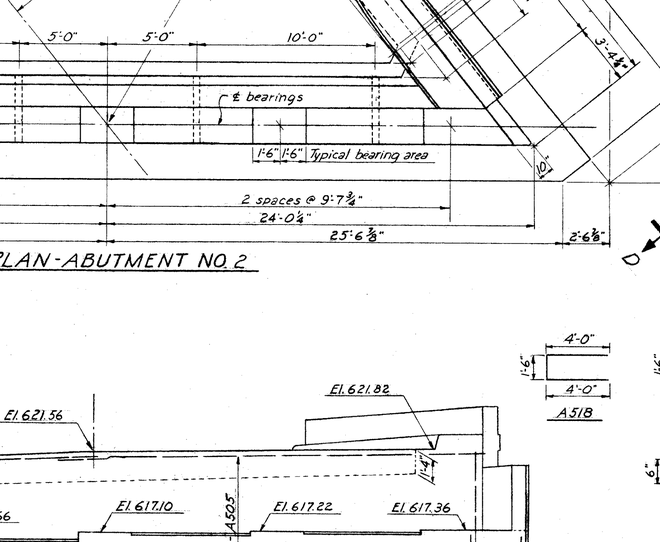
PLAN-ABUTMENT NO. 2



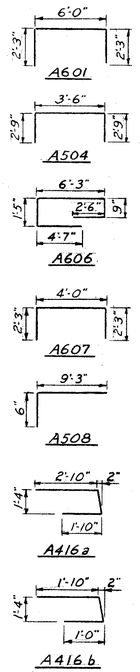
ELEVATION



ELEVATION C-C



ELEVATION D-D

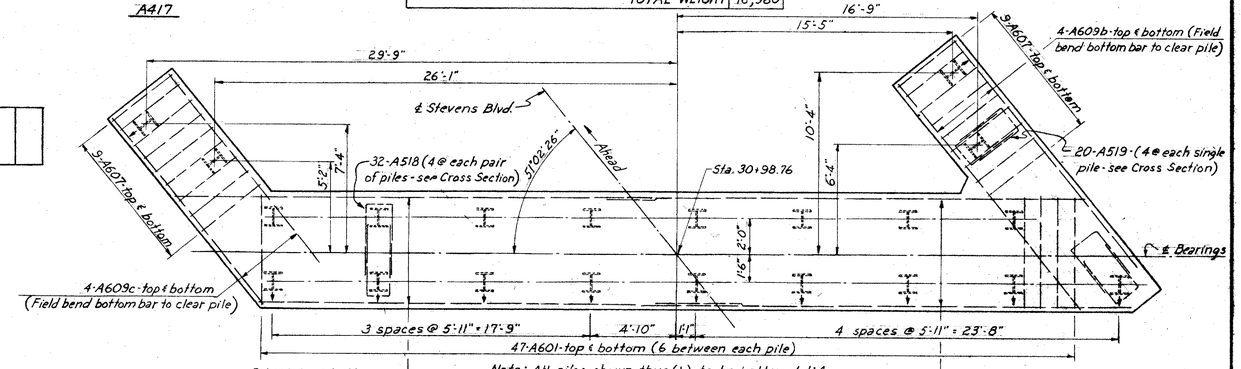


ABUTMENT BAR LIST

MARK	NUMBER REQUIRED ABUT. 1	ABUT. 2	TOTAL	SIZE	LENGTH	TYPE	WEIGHT
A601	94	94	188	6	10'-2"	Bent	2,871
A502	92	92	184	5	6'-4"	Str.	1,215
A603	20	20	40	6	26'-8"	Str.	1,602
A504	44	44	88	5	8'-10"	Bent	811
A505	40	40	80	5	24'-0"	Str.	2,003
A606	45	45	90	6	14'-10"	Bent	2,005
A607	46	36	82	6	8'-2"	Bent	1,006
A508	57	47	104	5	9'-8"	Bent	1,049
A609a	8	-	8	6	18'-0"	Str.	216
A609b	8	8	16	6	16'-0"	Str.	385
A609c	-	8	8	6	13'-4"	Str.	160
A510a	8	-	8	5	16'-4"	Str.	136
A510b	8	8	16	5	13'-4"	Str.	222
A510c	-	8	8	5	11'-6"	Str.	96
A511	10	10	20	5	5'-0"	Str.	104
A512a	4	-	4	5	21'-2"	Str.	88
A512b	4	-	4	5	14'-2"	Str.	59
A512c	4	4	8	5	16'-8"	Str.	139
A512d	4	4	8	5	10'-8"	Str.	89
A512e	-	4	4	5	15'-5"	Str.	64
A512f	-	4	4	5	9'-5"	Str.	39
A513a	26	24	50	5	3'-6"	Str.	183
A513b	52	-	52	5	5'-1"	Str.	276
A513c	-	42	42	5	4'-7"	Str.	201
A514a	8	8	16	5	3'-6"	Str.	58
A514b	8	8	16	5	4'-10"	Str.	81
A415a	7	-	7	4	21'-2"	Str.	99
A415b	7	14	21	4	15'-6"	Str.	217
A416a	28	22	50	4	5'-10"	Bent	194
A416b	12	12	24	4	4'-0"	Bent	64
A417	36	31	67	4	6'-0"	Bent	268
A518	32	32	64	5	9'-4"	Bent	623
A519	24	20	44	5	7'-4"	Bent	337
R418a	4	-	4	4	19'-8"	Str.	Include with railing for payment
R418b	4	4	8	4	15'-8"	Str.	
R418c	-	4	4	4	13'-11"	Str.	
					TOTAL WEIGHT		16,960

NOTES

- POROUS BACKFILL, 2 feet thick, full length of the abutment shall extend up to the underside of the approach slab and outward to the wings. Excavation therefore, in excess of that required for the abutment shall be considered as included in the bid price per cu. yd. for porous backfill.
- All abutment concrete shall be Class "E" except for the railing parapet which shall be Class "C".
- PILES shall be driven with a hammer of not less than 11000 ft. lbs. per blow to firm contact with rock. If the length of penetration is approximately equal to the depth to rock according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in Sec. S-18.05 is not less than the following value for a pile hammer of the indicated energy rating:
  40 tons per pile using a 11,000 ft-lb. hammer
  35 tons per pile using a 15,000 ft-lb. hammer
  If the energy rating of the hammer is between the ratings as shown above, the required formula capacity shall be determined by interpolation. The design load is 30 tons per pile for the abutment piles.



PILE LAYOUT & FOOTING REINFORCING

PREPARED BY
CAPITOL ENGINEERING ASSOCIATES, DILLSBURG, PA.
FOR
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

ABUTMENT NO. 2
BRIDGE NO. LAK-2-0447
S.R.2 UNDER STEVENS BLVD.
LAKE COUNTY
STA. 135 + 96.97

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	REVISED
JFH	JFH				