FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

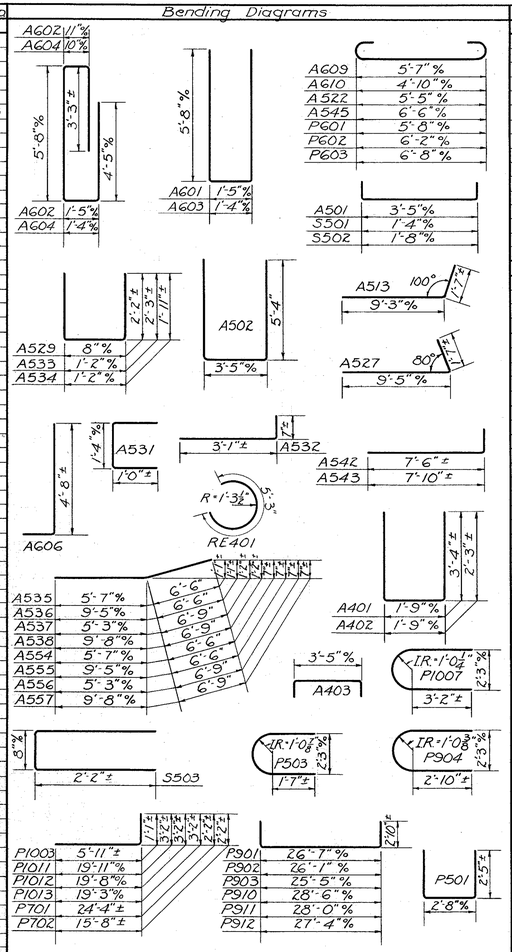
337
394

LAK-2-0.00

REINFORCING STEEL LIST

Mark	No.	Length	Weight	Shp
ABUTMENTS				
AG01	21	12'-5"	392	B
AG02	57	15'-0"	1284	B
AG03	21	12'-4"	389	B
AG04	57	14'-10"	1270	B
AG05	16	30'-0"	721	S
AG06	50	5'-4"	401	B
AG07	6	7'-0"	63	S
AG08	32	19'-6"	937	S
AG09	4	6'-11"	42	B
AG10	4	6'-2"	37	B
AG11	2	6'-9"	20	S
A501	138	4'-5"	636	B
A502	138	13'-10"	1991	B
A503	4	20'-8"	86	S
A504	1	4'-9"	5	S
A505	1	10'-6"	11	S
A506	36	28'-10"	1083	S
A507	1	10'-10"	11	S
A508	1	4'-6"	5	S
A509	2	5'-11"	12	S
A510	2	6'-1"	13	S
A511	1	6'-3"	7	S
A512	1	6'-5"	7	S
A513	4	10'-8"	45	B
A514	4	5'-7"	23	S
A515	12	18'-9"	1408	S
A516	16	4'-5"	74	S
A517	16	3'-5"	57	S
A518	8	15'-11"	133	S
A519	8	12'-2"	102	S
A520	2	6'-6"	14	S
A521	2	6'-0"	13	S
A522	12	6'-7"	82	B
A523	8	16'-4"	136	S
A524	4	6'-2"	26	S
A525	4	5'-8"	24	S
A526	8	12'-1"	101	S
A527	8	10'-10"	90	B
A528	8	5'-6"	46	S
A529	80	4'-9"	396	B
A530	32	14'-2"	473	S
A531	132	3'-1"	424	B
A532	108	3'-7"	404	B
A533	44	5'-5"	249	B
A534	64	4'-9"	317	B
A535	2	12'-1"	25	B
A536	2	15'-11"	33	B
A537	2	12'-0"	25	B
A538	2	16'-5"	34	B
A539	4	10'-0"	42	S
A540	4	6'-7"	27	S
A541	4	6'-6"	27	S
A542	78	8'-0"	651	B
A543	30	8'-4"	261	B
A544	2	6'-10"	14	S
A545	12	7'-8"	96	B
A546	1	6'-11"	7	S
A547	1	16'-8"	17	S
A548	1	22'-2"	22	S
A549	1	2'-11"	3	S
A550	1	4'-6"	5	S
A551	1	29'-6"	30	S
A552	1	24'-1"	24	S
A553	1	10'-7"	11	S
A554	2	12'-1"	24	B
A555	2	15'-11"	32	B
A556	2	12'-0"	24	B
A557	2	16'-5"	34	B
A401	120	8'-2"	655	B
A402	32	6'-0"	128	B
A403	224	4'-3"	636	B

Bending Diagrams



REPLACEMENT BARS: *If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 5-4.02 need not be furnished and replacement bars will not be required.*

Mark	No.	Length	Weight	Shp
SUPERSTRUCTURE				
S701	488	35'-5"	35,327	S
S702	488	29'-4"	29,259	S
S601	488	35'-4"	25,898	S
S602	1100	34'-1"	56,312	S
S603	190	28'-0"	7,991	S
S604	488	29'-3"	21,440	S
S501	872	2'-4"	2122	B
S502	436	2'-8"	1213	B
S503	436	4'-9"	2160	B
R501	32	12'-11"	–	S
R502	128	16'-6"	–	S
R503	32	13'-8"	–	S
PIERS				
P1101	4	10'-9"	228	S
P1102	4	10'-10"	230	S
P1103	4	14'-1"	299	S
P1001	70	21'-0"	6325	S
P1002	70	20'-0"	6024	S
P1003	240	7'-0"	7229	B
P1004	4	10'-1"	174	S
P1005	4	25'-8"	442	S
P1006	4	26'-7"	458	S
P1007	12	9'-9"	503	B
P1008	4	18'-2"	313	S
P1009	50	20'-11"	4500	S
P1010	50	19'-7"	4213	S
P1011	2	22'-9"	196	B
P1012	4	22'-6"	387	B
P1013	4	22'-1"	380	B
P1014	10	11'-0"	473	S
P1015	4	19'-6"	336	S
P1016	4	19'-11"	343	S
P901	2	31'-9"	216	B
P902	4	31'-3"	425	B
P903	4	30'-7"	416	B
P904	16	9'-1"	494	B
P905	8	16'-3"	442	S
P906	8	21'-3"	578	S
P907	4	27'-2"	369	S
P908	4	28'-2"	383	S
P909	4	28'-6"	388	S
P910	2	33'-8"	229	B
P911	4	33'-2"	451	B
P912	4	32'-6"	442	B
P701	10	26'-4"	538	B
P702	10	17'-8"	361	B
PG01	192	7'-0"	2019	B
PG02	200	7'-6"	2253	B
PG03	48	8'-0"	577	B
P501	228	7'-3"	1724	B
P502	4	24'-3"	101	S
P503	14	6'-8"	97	B
P504	8	17'-0"	142	S
P505	4	26'-2"	109	S
P506	4	18'-9"	78	S

To be included with Railing for payment.

REPLACEMENT BARS				
RE1101		7'-6"	–	S
RE1001		7'-2"	–	S
RE901		6'-10"	–	S
RE701		6'-2"	–	S
RE601		5'-11"	–	S
RE501		5'-7"	–	S
RE401		5'-3"	–	B

SPIRAL REINFORCING 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 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 5-4.

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

Four steel channel, tee or angle spacers, weighing approximately 0.68 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 pounds 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

SPIRAL REINFORCING BARS

Mark	No.	Core Dia.	Length	Pitch	No. Turns	Weight
SP401	12	32"	17'-10"	4½"	51	4007
SP402	7	32"	16'-10"	4½"	48	2201
SP403	5	32"	16'-5"	4½"	47	1538

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Superst.	Abuts.	Piers	General
E-2	889	Cu. Yd.	Unclassified excavation, including shale		430	459	
E-2	Lump	Sum	Cofferdam, cribs and sheeting				Lump
5-1	614	Cu. Yd.	Class "C" concrete, superstructure	614			
5-1	201	Cu. Yd.	Class "C" concrete, pier caps and columns			201	
5-1	106	Cu. Yd.	Class "E" concrete, pier footings			106	
5-1	418	Cu. Yd.	Class "E" concrete, abutments		418		
5-4	252,300	Lbs.	Reinforcing steel	181,722	16,947	53,631	
5-7	522,170	Lbs.	Structural steel	522,170			
5-8	522,170	Lbs.	Field painting of structural steel, as per plan	522,170			
5-14	756.67	Lin. Ft.	Railing (Aluminum rail and supports and concrete parapet)	756.67			
5-16	Lump	Sum	First test pile				Lump
5-18	1330	Lin. Ft.	Steel piles, 12BP53		1330		
5-29	96	Cu. Yd.	Porous backfill		96		
I-10	1311	Sq. Yd.	Crushed aggregate slope protection				1311

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

REINFORCING STEEL LIST & ESTIMATED QUANTITIES

BRIDGE NO. LAK-2-0057L&R
OVER RAMP
LAKE COUNTY STA. 129+13.72
130+79.28

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
E.B.L.	E.B.L.	JGW	R.H.N.	DFG	11-19-58	12-3-58