

MICROFILMED
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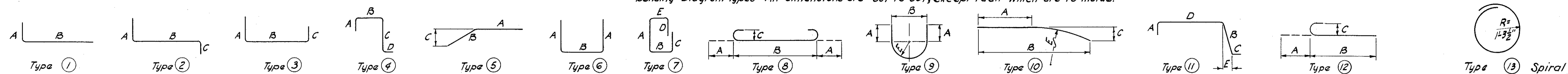
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(20)	

267
333

LAKE COUNTY
LAK-1-4.02

REINFORCING STEEL BAR SCHEDULE

Banding Diagram Types - All dimensions are out to out, except radii which are to inside.



ABUTMENTS										
MARK	TOTAL	SIZE	LENGTH	TYPE	A	B	C	D	E	WEIGHT
A601	164	6	9'-11"	1	4'-8"	5'-5"				2443 Lbs.
A602	178	6	15'-4"	7	6'-0"	1'-5"	4'-10"	2'-9"	11"	4099
A503	24	5	32'-10"	Str.						822
A504	156	5	3'-4"	Str.						542
A505	16	5	6'-0"	Str.						100
A506	54	5	12'-2"	6	5'-8"	1'-2"				685
A507	4	5	16'-4"	Str.						68
A508	2	5	19'-5"	Str.						41
A509	4	5	19'-7"	Str.						82
A510	10	5	16'-0"	Str.						167
A511	84	5	8'-0"	6	2'-7"	3'-2"				701
A512	84	5	32'-1"	Str.						2811
A513	180	5	2'-3"	Str.						422
A514	96	5	3'-4"	6	7-8"	2'-4"				334
A515	52	5	7'-8"	Str.						416
A516	18	5	5'-11"	Str.						-111
A517	40	5	3'-7" to 4'-7"	Str.	Each varies by 3"					170
A518	24	5	3'-6"	Str.						88
A519	12	5	16'-8"	Str.						209
A520	16	5	6'-3"	Str.						104
A521	8	5	12'-9"	Str.						106
A522	8	5	16'-2"	Str.						135
A523	8	5	7'-5"	5	2'-11"	4'-8"	1'-4"			62
A524	24	5	19'-6"	Str.						488
A525	38	5	3'-3"	11	7-8"	1'-4"	0"	1'-7"	3"	129
A526	12	5	3'-2"	11	7-8"	1'-4"	0"	1'-6"	3"	40
A527	12	5	3'-0"	11	7-8"	1'-4"	0"	1'-4"	3"	38
A528	8	5	2'-9"	11	7-8"	1'-4"	0"	1'-1"	3"	23
A529	8	5	2'-5"	11	7-8"	1'-4"	0"	9"	3"	20
A530	38	5	2'-4"	1	7-8"	1'-10"				92
A531	12	5	2'-3"	1	7-8"	1'-9"				28
A532	12	5	2'-1"	1	7-8"	1'-7"				26
A533	8	5	1'-10"	1	7-8"	1'-4"				15
A534	8	5	1'-6"	1	7-8"	1'-0"				13
A535	4	5	2'-1"	11	7-8"	1'-4"	0"	5"	3"	9
A536	4	5	1'-2"	1	7-8"	8"				5
A537	4	5	18'-11"	Str.						79
A538	4	5	18'-10"	Str.						79
A539	2	5	2'-8"	3	7-8"	1'-0"	1'-4"			6
A540	2	5	1'-6"	1	7-8"	1'-0"				3
A541	52	5	7'-6"	Str.						407
A542	14	5	5'-10"	Str.						85
A543	16	5	4'-3"	Str.						71
A544	12	5	14'-8"	Str.						184
A545	4	5	20'-4"	Str.						85
A546	24	5	5'-9"	Str.						142
A447	76	4	3'-3"	1	6-8"	2'-10"				165
A448	76	4	4'-2"	4	1'-4"	8"	2'-0"	6-8"		212
A449	76	4	18'-3"	Str.	Included with railing for payment					
Total Weight										17,162 Lbs.

REPLACEMENT BARS				
MARK	NO.	SIZE	LENGTH	WEIGHT
RE 1101	1	11	7'-6"	Str.
RE 902	1	9	6'-10"	Str.
RE 703	2	7	6'-3"	Str.
RE 604	4	6	5'-11"	Str.
RE 505	1	5	5'-7"	Str.
RE 406	1	4	5'-3"	Str.
RE 407	1	1/2 φ	5'-3"	13

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

SUPERSTRUCTURE										
MARK	TOTAL	SIZE	LENGTH	TYPE	A	B	C	D	E	WEIGHT
S701	287	7	30'-10"	Str.						18,088 Lbs.
S702	205	7	27'-1"	Str.						11,348
S703	82	7	6'-1" to 25'-11"	Str.	Each varies by 5 1/8"					2,682
S704	116	7	6'-0" to 34'-2"	Str.	Each varies by 5 1/8"					4,762
S705	14	7	6'-0"	Str.						172
S606	287	6	30'-8"	Str.						13,220
S607	205	6	26'-11"	Str.						8,288
S608	82	6	5'-11" to 25'-9"	Str.	Each varies by 5 1/8"					1,950
S609	116	6	6'-0" to 34'-2"	Str.	Each varies by 5 1/8"					3,499
S610	14	6	6'-0"	Str.						126
S611	540	6	36'-6"	Str.						29,604
S612	74	6	32'-0"	Str.						3,557
S513	420	5	3'-11"	11	7-8"	1'-3"	7-8"	1'-10"	3"	4,716
S414	420	4	3'-3"	1	6-8"	2'-10"				912
R415	420	4	4'-2"	4	1'-4"	8"	2'-0"	6-8"		1,169
R416	104	4	14'-1"	Str.						included with railing for payment
R417	16	4	11'-5"	Str.						
Total Weight										101,093 Lbs.

PIERS										
MARK	TOTAL	SIZE	LENGTH	TYPE	A	B	C	D	E	WEIGHT
P1101	8	11	38'-7"	1	3'-1"	35'-10"				1,640 Lbs.
P1102	8	11	38'-4"	1	3'-1"	35'-7"				1,620
P1103	8	11	37'-4"	1	3'-1"	34'-7"				1,587
P1104	12	11	10'-0"	Str.						638
P1105	12	11	24'-8"	Str.						1,573
P1106	24	11	29'-4"	12	1'-7"	27'-9"	11"			3,740
P1107	8	11	25'-10"	12	1'-7"	24'-3"	11"			1,098
P1108	12	11	38'-5"	Str.						2,449
P909	60	9	22'-6"	Str.						4,590
P910	60	9	22'-9"	Str.						4,641
P911	120	9	6'-6"	1	1'-3 1/2"	5'-6"				2,652
P612	80	6	8'-0"	8	8"	6'-8"	6"			961
P613	80	6	7'-0"	8	8"	5'-8"	6"			841
P514	12	5	30'-0"	Str.						375
P515	16	5	8'-2"	9	2'-3"	2'-5"		1'-2"		136
P516	88	5	3'-8"	6	7-8"	2'-8"				337
P517	256	5	7'-11"	6	2'-9"	2'-8"				2,114
P518	4	5	3'-2"	6	7-8"	2'-2"				13
P519	4	5	2'-6"	6	7-8"	1'-6"				10
Total Weight										34,599 Lbs.

SPIRAL BARS							
MARK	TOTAL	SIZE	LENGTH	PITCH	NO OF TURNS	CORE DIA.	WEIGHT
SP401	5	1/2 φ	19'-5"	4 1/2"	55	32"	1804
SP402	5	1/2 φ	19'-2"	4 1/2"	54	32"	1771
Total Weight							34,599 Lbs.

SPIRAL NOTES

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.
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 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.

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPERSTR.	ABUTS.	PIERS	GENERAL
E-2	674	Cu.Yd.	Unclassified Excavation		411	263	
E-2	Lump	Sum	Cofferdams, Cribbs and Sheeting				Lump Sum
S-1	362	Cu.Yd.	Class "C" Concrete, Superstructure	362			
S-1	131	Cu.Yd.	Class "C" Concrete, Pier Caps and Columns			131	
S-1	181	Cu.Yd.	Class "E" Concrete, Abutments above footing		181		
S-1	196	Cu.Yd.	Class "E" Concrete, Footings		149	47	
S-4	152,854	Lbs.	Reinforcing Steel	101,093	17,162	34,599	
S-7	444,100	Lbs.	Structural Steel	444,100			
S-8	444,100	Lbs.	Field Painting of Structural Steel	444,100			
S-14	498	Lin.Ft.	Railing (Aluminum Rail and Supports, Concrete Parapet)				498
S-16	Lump	Sum	First Test Pile				Lump Sum
S-18	1,250	Lin.Ft.	Steel Piles, I28P33		1,250		
S-29	66	Cu.Yd.	Porous Backfill		66		
I-10	855	Sq.Yd.	Crushed Aggregate Slope Protection				855
I-127	2	Ea.	Bridge Delineators				2

* FIRST TEST PILE: Payment will be made for only one first test test pile, Item S-16. It may be driven at either Bridge No. LAK-1-0426 (Northbound) or LAK-1-0426 (Southbound).

BAR SIZE

Bar size is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number. For example, A401 is a no. 4 size bar and A1114 is a no. 11 size bar.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

REINFORCING STEEL LIST & ESTIMATED QUANTITIES

NORTH BOUND
BRIDGE NO. LAK-1-0426
OVER STATE ROUTE NO. 174

LAKE COUNTY
N.B. STA. 232 + 41.54
TO STA. 234 + 57.10

Designed	Drawn	Traced	Checked	Reviewed-Date	Revised
D.E.B.	r.b.m.	r.b.m.	D.E.B.	W.R.B.	4-58

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