

LAKE COUNTY
LAK-2-14.22

First Test Pile: Payment will be made for only one first test pile. It may be driven for either the Right or Left bridge.

*Items S-17, First and Subsequent Pile Test Loads, shall be applied if and where directed by the Engineer.

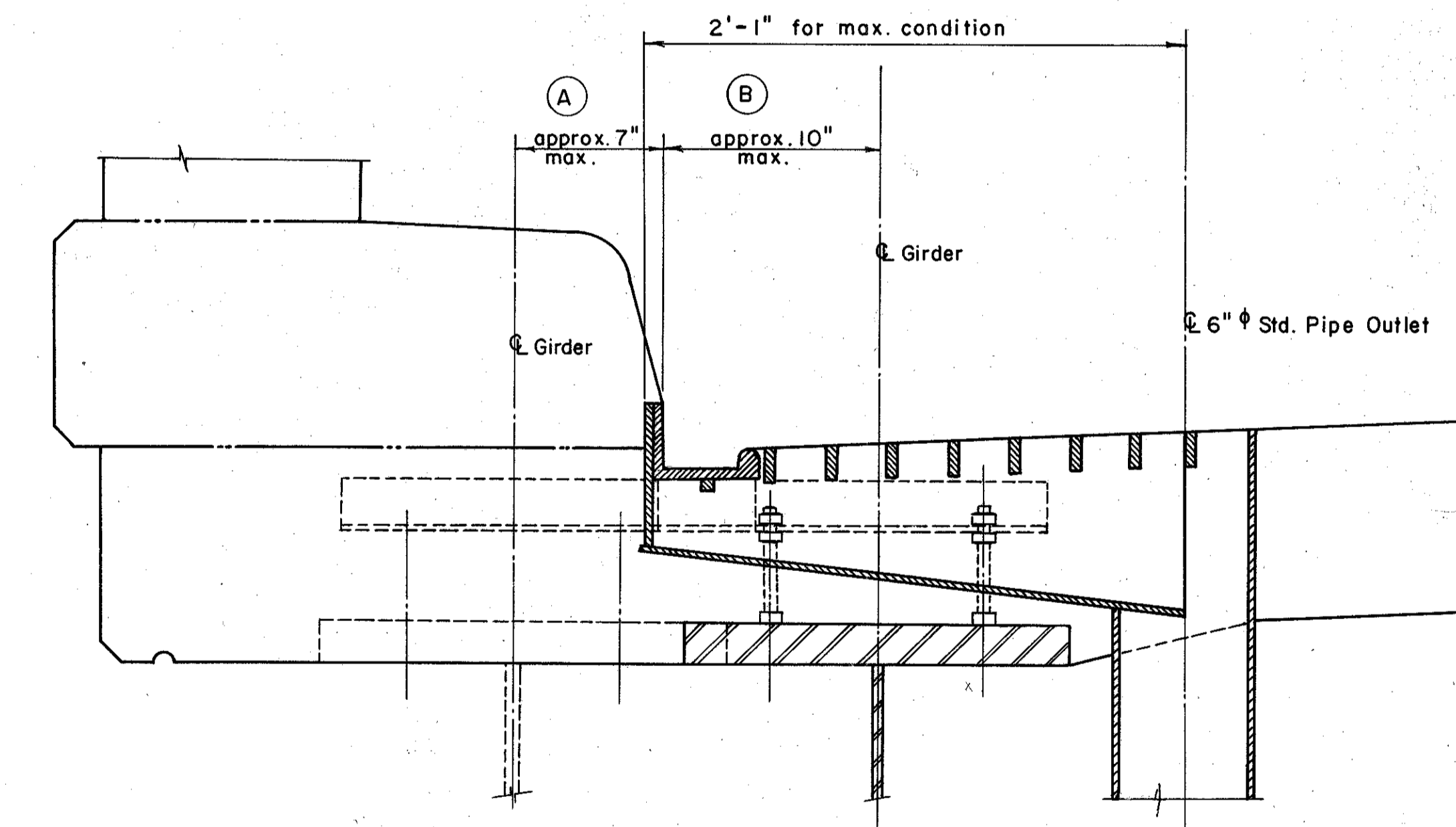
Item S-25 Electrical Lighting System includes standards, arms, anchor bolts, grounds, and pull boxes.

**Includes protection for scupper discharge areas in span No. 3, listed under superstructure.

ELECTRICAL GROUNDS: A solid No. 0 gage bare copper wire electrical ground shall be embedded in the outside column on each side of the structure at pier No. 2. The lower ends of the wires shall be brazed to the steel H piles and the upper ends shall extend sufficiently above the top of the concrete to provide for a suitable splice and extension for connection to the superstructure. The connection to the superstructure shall be a No. 6 gage, bare, stranded, tinned copper wire brazed or bolted to a girder flange and to the solid copper wire in the pier shaft. At the base of the lamp standards there shall be a tinned No. 6 gage copper wire brazed to one anchor bolt and the other end brazed or bolted to the outside girder flange. Payment for electrical grounds is included in the lump sum bid for Item S-25, "Electric lighting system".

- (1) East of Pier No. 3
- (2) West of Pier No. 3
- (3) 100% city participation
- (4) No federal participation

ESTIMATED QUANTITIES																
ITEM	TOTAL	UNIT	DESCRIPTION	LEFT BRIDGE				RIGHT BRIDGE				FEDERAL BREAK-DOWN				
				SUPER.	ABUTS.	PIERS	GEN'L.	SUPER.	ABUTS.	PIERS	GEN'L.	As Bld	FG-329(18)	U-329(18)		
E-2	1,924	Cu. Yds.	Unclassified Excavation		390	660			330	544						
E-2	Lump	Sum	Cofferdams, Cribbs and Sheeting Piers 1 & 2				Lump									
E-2	Lump	Sum	Cofferdams, Cribbs and Sheeting Piers 3 & 4				Lump									
S-1	1,520	Cu. Yds.	Class "C" Concrete, Superstructure	820				700							960	560
S-1	210	Cu. Yds.	Class "C" Concrete, Pier Caps and Columns			117				93						210
S-1	302	Cu. Yds.	Class "E" Concrete, Abutments above Footings		166				136					151		151
S-1	705	Cu. Yds.	Class "E" Concrete, Footings		99	288			86	232				92	267	346
S-1	401	Cu. Yds.	Class "C" Concrete, "T" Type Pier Walls above Footings			222				179					401	
S-4	607,017	Lbs.	Reinforcing Steel	228,772	21,381	82,040		191,124	19,603	64,097				20,400	370,742	215,875
S-7	1,900,800	Lbs.	Structural Steel	1,025,000				875,800							1,201,000	699,800
S-8	1,900,800	Lbs.	Field Painting of Structural Steel	1,025,000				875,800							1,201,000	699,800
S-14	2,108	Lin. Ft.	Railing (Aluminum Rail and Supports, Concrete Parapets)	983	71			983	71					71	1,240	797
S-16	Lump	Sum	First Test Pile				Lump									
S-17	Lump	Sum	First Pile Test Load *				Lump									
S-17	Lump	Sum	Subsequent Pile Test Load *				Lump									
S-18	11,770	Lin. Ft.	Steel Piles I2-BP-53		1,980	4,400			1,800	3,590				1,890	4,750	5,130
S-25	1056	Lin. Ft.	Electric Conduit for Lighting	492	36			492	36					36	622	398
S-25	Lump	Sum	Electric Lighting System (1)				Lump									
S-25	Lump	Sum	Electric Lighting System (2)				Lump									
S-25	484	Lin. Ft.	Wiring (3)	220	20			224	20							
S-25	795	Lin. Ft.	Wiring (4)	353	20			402	20							
S-25	2	Each	Luminaires Including Ballasts (3)	1				1								
S-25	3	Each	Luminaires Including Ballasts (4)	1				2								
S-29	98	Cu. Yds.	Porous Backfill		54				44					49		49
S-29	35-61	Each	Scuppers	13-30				17-31						10-36		25
I-10	1002	Sq. Yds.	Crushed Aggregate Slope Protection **	40	490			62	410					900	102	910
I-10	910	Sq. Yds.	6" Concrete Slope Protection		495				415							910



NOTES:
Locations of girder centerline in relationship to curbline are shown for extreme points, centerline of girder being approx. 7" and 10" away from curb.
For location of centerline of girder in area A use standard gutter details according to CSB-2-56, revised 2-2-59, extending gutter support L 2 1/2 x 2 1/2 x 1/4 under bulb L gutter.
For location of centerline of girder in area B increase width of scupper inlet so that scupper pipe will clear girder flange by a minimum of 2".
For details not shown see CSB-2-56 revised 2-2-59.

SCUPPER DETAILS

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

QUANTITIES
BRIDGE NO. LAK-2-1471 L & R
RELOC. S. R. 2 OVER B. & O. R.R. - S. R. 283
LAKE COUNTY
STA. 680 + 56.97

DESIGNED KCM	DRAWN HMS	TRACED ZCC	CHECKED KCM DRT	REVIEWED DATE	REVISED 6-2-61
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