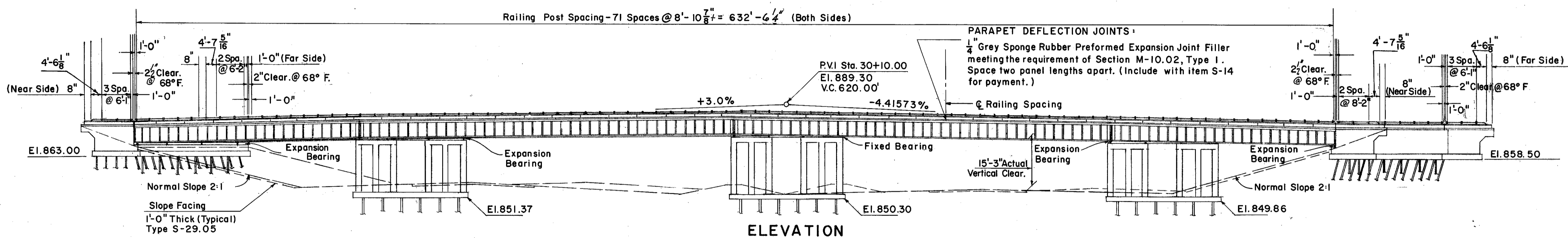
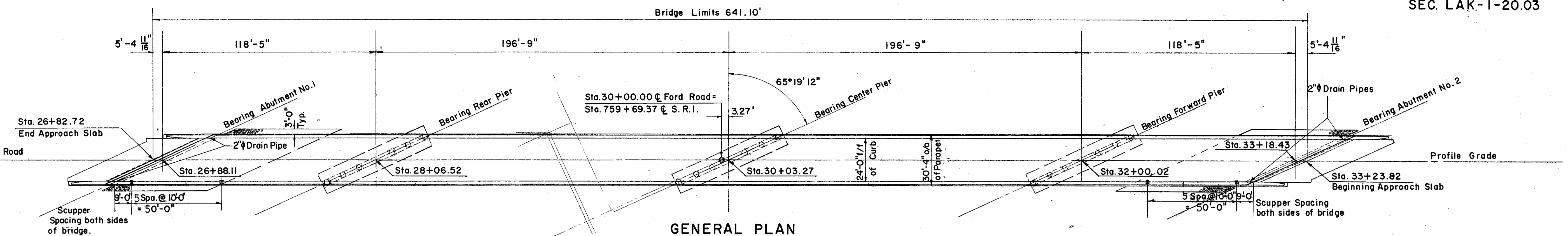
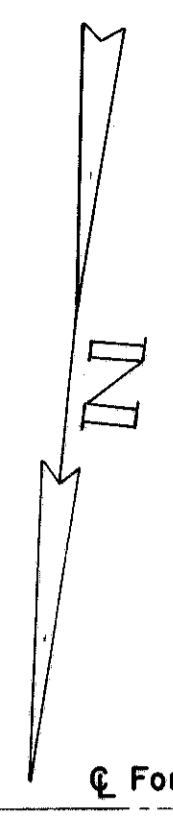


LAKE COUNTY
SEC. LAK-1-20.03



GENERAL NOTES

DESIGN SPECIFICATION: This structure conforms to the requirements of Design Specifications for Highway Structures of the State of Ohio, Department of Highways, dated 9-1-57, together with revisions thereof dated 2-21-58.

REFERENCE: shall be made to Standard Drawings RB-1-55, dated 3-1-55, CSB-2-56, sheets 2 & 3 of 6, revised 3-1-58, to AR-1-57, revised 3-1-58, to Supplemental Specification S-114 revised 8-1-57.

PROCEDURE: The embankment shall be placed and compacted up to finish spill-thru slope and to level of subgrade for a distance of 100 feet back of the Abutments, after which excavation shall be made for the Abutments.

EXCAVATION QUANTITIES includes the removal of fill material between the bottom of the abutments and the surface of the proposed embankment.

SLOPE FACING: (S-29.05) one foot thick, extending from the face of the Abutments down to the toe of the slopes and transversely three feet beyond the fascia of the structure on each side, shall be provided.

POROUS BACKFILL: 2 feet thick full length of the abutments shall extend up to the under side of the Approach Slab and out ward to the wings. Excavation therefore, in excess of that required for the abutments shall be considered as included in the bid price per cu. yd. for porous backfill.

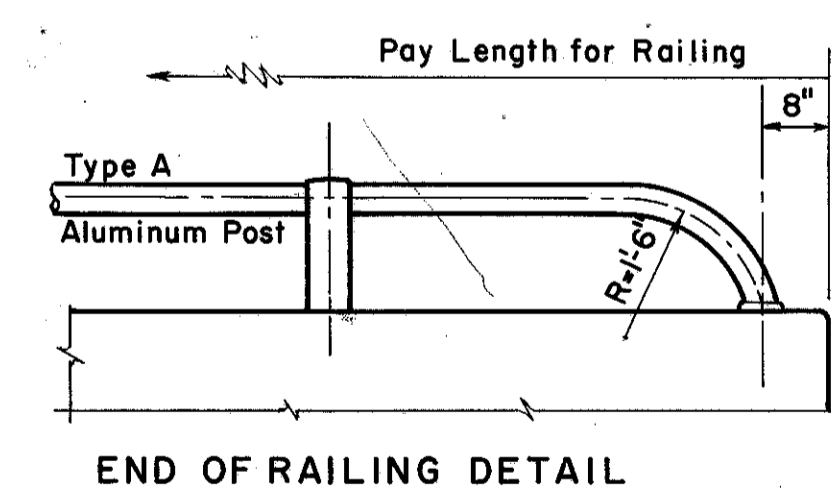
BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number. For example, A 700 is a No. 7 size bar & A1014 is a No. 10 size.

Piles shall be driven to firm contact with shale. If the length of penetration is approximately equal to the depth to shale according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in Sec. 18.05 is not less than the following value for a pile hammer of the indicated energy rating:

PIERS		ABUT.	
35	35 tons per pile using a 7,000 ft. lb. hammer	35	35 tons per pile using a 7,000 ft. lb. hammer
50	50 tons per pile using a 11,000 ft. lb. hammer	50	50 tons per pile using a 11,000 ft. lb. hammer
43	43 tons per pile using a 15,000 ft. lb. or greater hammer	43	43 tons per pile using a 15,000 ft. lb. or greater hammer

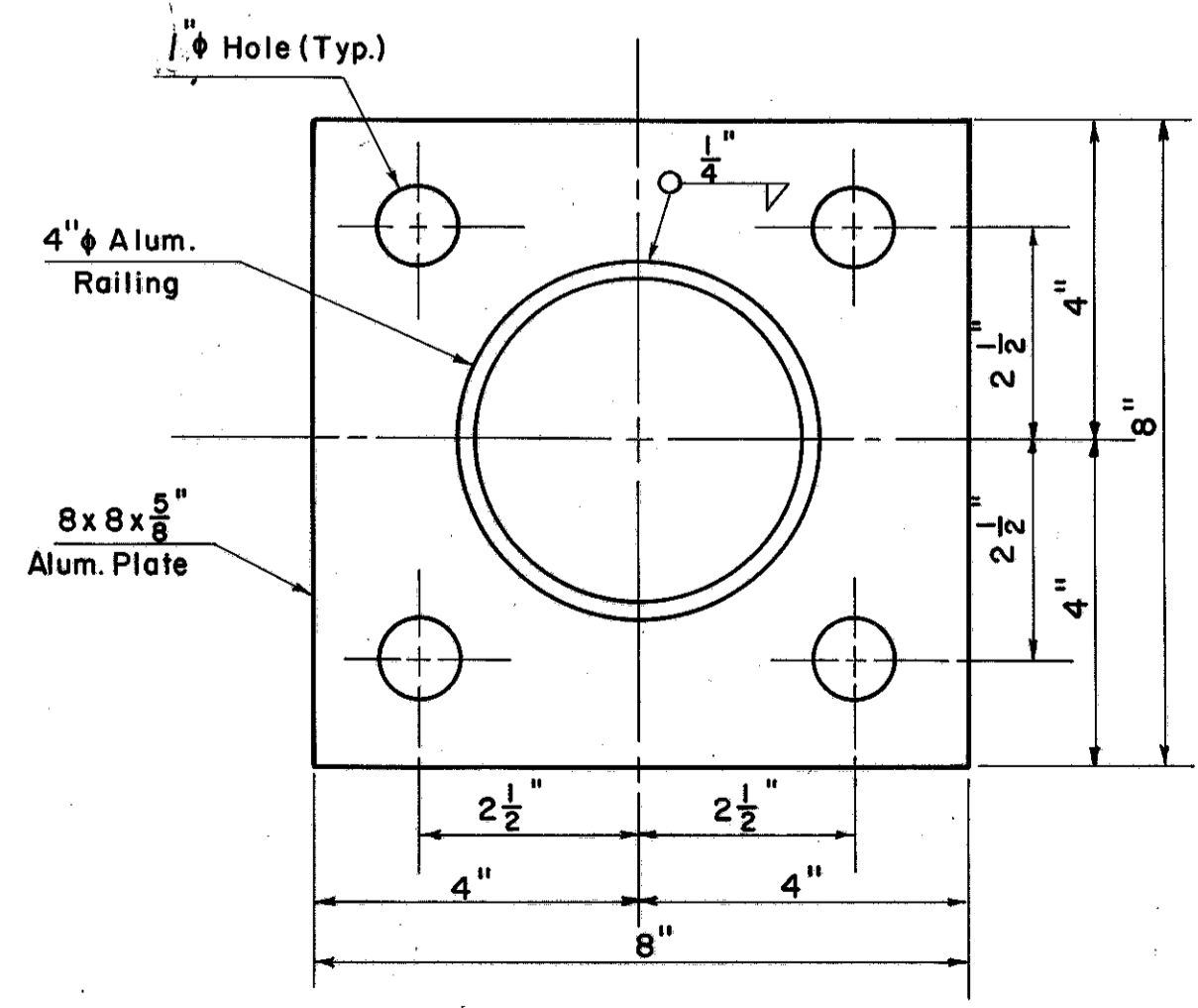
If the energy rating of the hammer is between the ratings as shown above, the required formula capacity shall be determined by interpolation. The design load is 30 tons per pile for the abutment piles, 32 tons per pile for the center pier piles, 32 1/2 tons per pile for the forward and rear pier piles.

ESTIMATED QUANTITIES						
ITEM	TOTAL	UNIT	DESCRIPTION	SUPERSTR.	ABUTS.	PIERS GENERAL
E-2	1060	Cu. Yd.	Unclassified Excavation		440	620
S-1	578	Cu. Yd.	Class "C" Concrete, Superstructure	578		
S-1	113	Cu. Yd.	Class "C" Concrete, Pier Caps & Columns			113
S-1	290	Cu. Yd.	Class "E" Concrete, Abutments above Footings		290	
S-1	483	Cu. Yd.	Class "E" Concrete, Footings		148	335
	<u>325,319</u>			<u>192,607</u>		
S-4		Lbs.	Reinforcing Steel		34,192	98,520
S-7	1,351,672	Lbs.	Structural Steel	1,351,672		
S-8	1,351,672	Lbs.	Painting of Structural Steel	1,351,672		
S-16	Lump	Sum	First test Pile			Lump
S-14	1,359	Lin. Ft.	Railing (Aluminum Rail & Supports & Concrete Parapets)	1,269	90	
S-18	4048	Lin. Ft.	Steel Piles (12 BP 53)		1556	2492
S-29	104	Cu. Yd.	Porous Backfill		104	
S-29	160	Cu. Yd.	Slope Facing (S-29.05 Type)		160	



REPLACEMENT BARS					
MARK	NO.	SIZE	LENGTH	TYPE	WEIGHT
RP 4	2	4	5'-3"	Str.	
RP 5	4	5	5'-7"	Str.	
RP 6	4	6	5'-11"	Str.	
RP 7	4	7	6'-3"	Str.	
RP 8	2	8	6'-6"	Str.	
RP 9	2	9	6'-10"	Str.	
RP 11	4	11	7'-7"	Str.	
RP 1a	1	4	5'-3"	B.	

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. 4.02 need not be furnished and replacement bars will not be required.



ANCHOR PLATE FOR ABUTMENT RAILING
4 REQUIRED
Include with Item S-14 for payment

SEC. C-34 FED. AID PROJ. NO. ACI-1103(28)

PREPARED BY
CAPITOL ENGINEERING ASSOCIATES, DILLSBURG, PA.
FOR
STATE OF OHIO
DEPARTMENT OF HIGHWAYS

GENERAL PLAN
BRIDGE NO LAK-1-2111
S.R.I. UNDER FORD ROAD
LAKE COUNTY
STA. 759 + 69.37

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	REVISED
	WJH		JRC		3-19-59