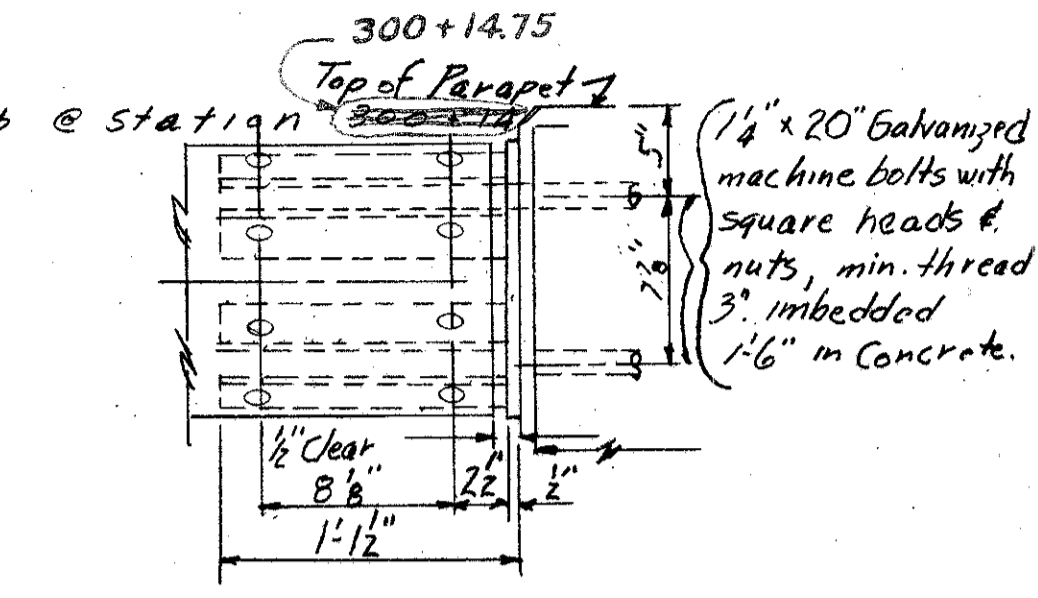
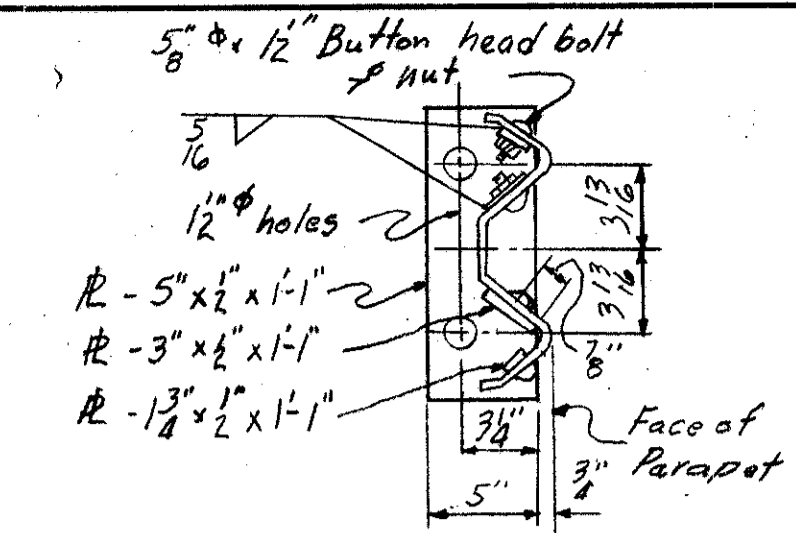
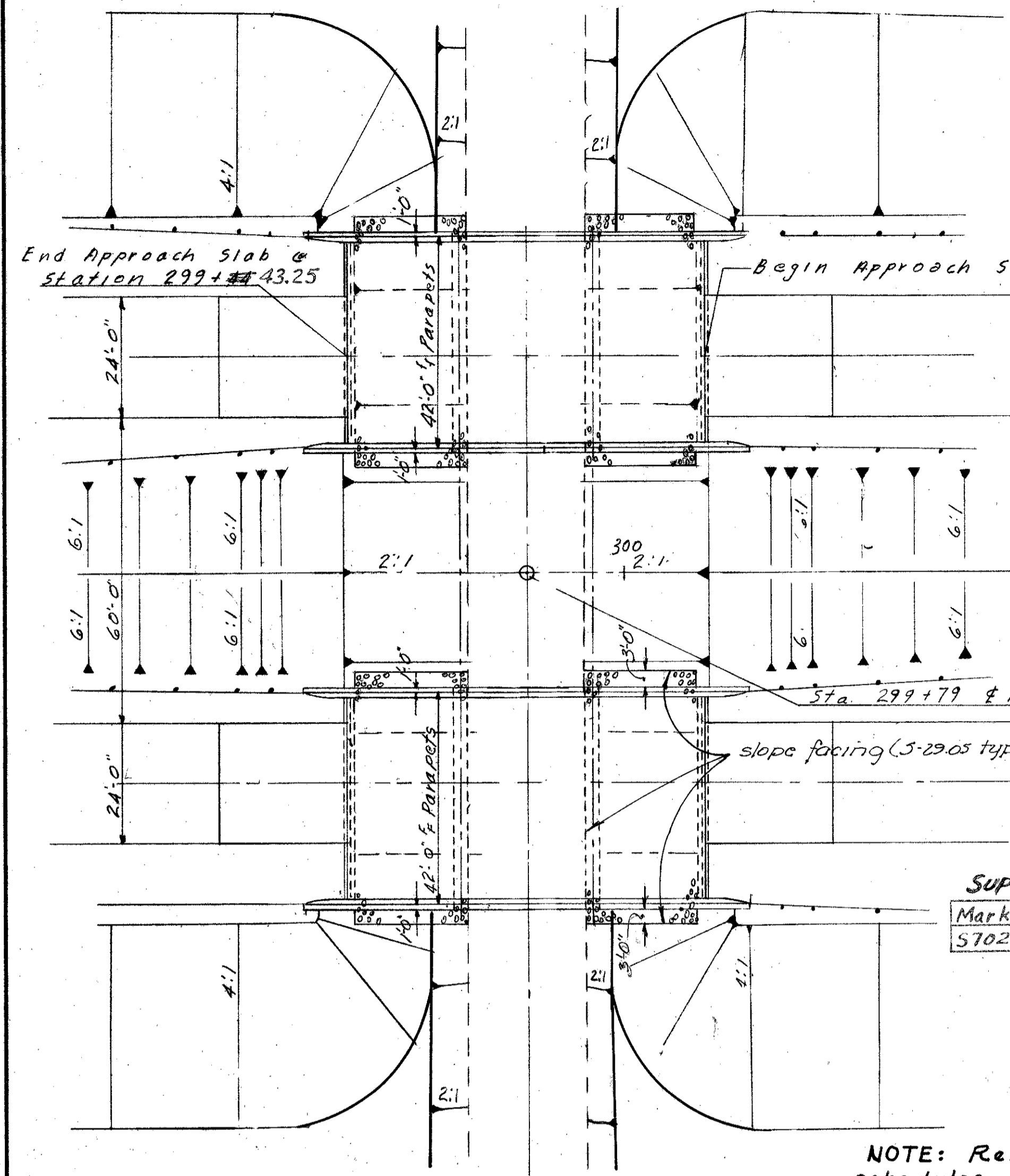


LAKE COUNTY  
SEC. LAK-2-739

MICROFIL  
DEC 5 1986

RVI Sta. 299+75  
E1. 641.72  
LVC. 400



GUARD RAIL DETAIL  
Guard Rail End Assembly shall be galvanized after welding.  
Include with Item 5-1 Superstructure Concrete for Payment.

(1) SUPERSTRUCTURE - BAR SCHEDULE

Mark	No.	Size	Shape	Length	Weight	A	B	C
5501	6	5	Str.	17'-0"	106	(838)		
5502	12	5	Str.	16'-7"	208	(1118)		
5503	7	5	1	4'-8"	(1040)		1'-6"	1'-6"
5504	5	1	2'-8"	(50478)	6"	2'-0"	6"	
5601	42	6	Str.	14'-5"	910	(118)		
5602	21	6	Str.	11'-6"	363			
5603	50	6	Str.	43'-6"	3267	(2249)		
5701	63	7	Str.	43'-6"	5602	(2249)		
5801	38	8	3	22'-2"	(2140)	1'-1"	21'-1"	
5802	42	8	3	19'-1"	(2140)	1'-1"	18'-0"	
5803	8	8	Str.	27'-5"	(2140)			
5804	21	8	Str.	14'-4"	(2140)			
5805	19	8	Str.	14'-8"	(2140)			
5901	10	9	Str.	8'-2"	(1111)			
5902	36	9	Str.	8'-11"	(1214)			
5903	84	9	Str.	21'-6"	6140			
PARAPET BAR SCHEDULE - Include With Item 5-14 For Payment								
R501	138	5	1	1'-6"	6"	6"		
R502	138	5	1	3'-6"	6"	1'-6"		
R503	16	5	Str.	12'-6"	6"	6"		
R504	24	5	Str.	15'-0"	6"	6"		
R505	16	5	Str.	11'-0"	6"	6"		
Total = 36,677								

ADDITIONAL SUPERSTRUCTURE BARS

Mark	No.	Shape	Length	Weight
S702	20	Str.	15'-3"	623

NOTE: Reinforcing Steel Schedules are for (1) Bridge only. Estimated Quantities are for (2) Bridges

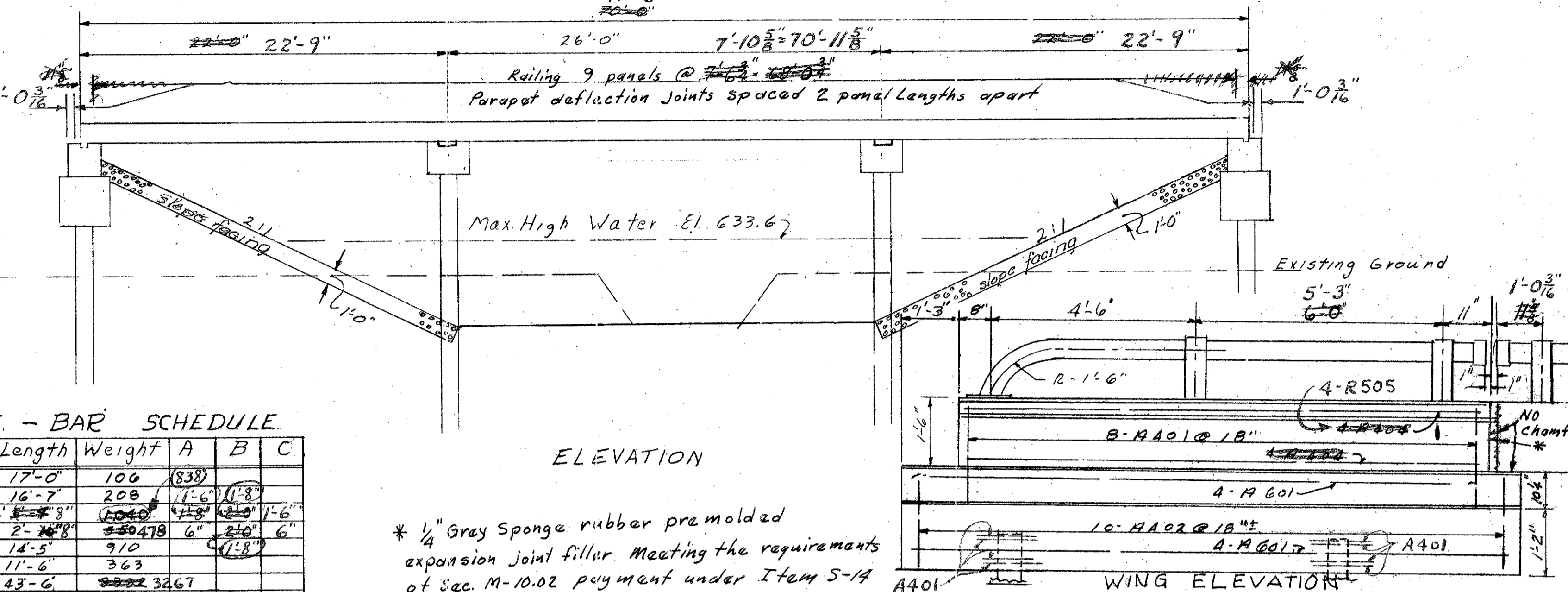
BAR SCHEDULE FOR TWO PIERS

Mark	No.	Size	Shape	Length	Weight	A	B	C
P401	64	4	1	5'-5"	232	1'-11"	1'-9"	1'-11"
P501	4	5	Str.	40'-6"	169			
P502	74	5	2	8'-0"	615	8"	2'-2"	2'-4"
P503	8	5	4	6'-8"	43	53	1'-7"	2'-0"
P901	8	9	Str.	40'-6"	1102			
P1001	8	10	Str.	43'-6"	1497			
Total = 3668								

ESTIMATED QUANTITIES (2) STRUCTURES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUTS	PIERS	GEN.
E-2	250	Cu Yd	Unclassified Excavation				250
E-3	568	Qtz Yds	Channel Excavation				568
5-1	329	Cu Yd	Class "C" Concrete, Superstructure and Pier Caps	296		33	
5-1	84	Cu Yd	Class "E" Concrete, Abutments	(13358)	84	(11096)	
5-2		Lbs	Reinforcing Steel	67458	7346	7336	
5-14	387	Lin Ft	Railing (Aluminum Rails, Supports & Concrete Parapet)	280	107		
5-29	164	Cu Yd	Slope Facing (5-29.05 type)				164
5-29	36	Cu Yd	Porous Backfill		36		
5-16		Lump Sum	First Test Pile				1
5-18	2160	Lin Ft	14" Cast-in-Place Reinforced Concrete Piles		1200	960	
5-29	36	Each	Scuppers, 4" Dia Wrought Iron Pipe or Cast Iron Pipe	36			

Pier pile encasement as shown on Std Dwg No. P-1-54 may be omitted provided that the tapered portion, if any, of all pier piles does not extend above the stream bed of the proposed surface of the ground. If the tapered portion of any pile extends above these limitations the encasement will be required for all pier piles. If the encasement is omitted, the pile casing shall have a thickness of metal not less than 7 gauge, and the painting of the piles shall extend to low water elevation or, if the proposed surface of the ground is above low water, the painting shall extend to at least one foot below the proposed surface of the ground.



\* 1/4" Gray Sponge rubber pre-molded expansion joint filler meeting the requirements of sec. M-10.02 payment under Item 5-14 10 required per bridge.

SLOPE FACING, 12" thick shall extend from the face of the abutment down to Elev. 630 and transversely to 3ft. outside the edge of the superstructure. Material will be in accordance with Sect. 5-29.05.

GENERAL NOTES

Reference shall be made to Standard Drawing P-1-54 revised 12-1-54 and to Supplemental Specification S-114 Aluminum For Bridge Railing, revised 8-1-57, and to Standard Drawing AR-1-57 revised 3-1-58, also CS-2-54 dated 12-1-54. 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.

Excavation Quantities include the removal of fill material required for construction of the abutments.

Piles shall be driven to a minimum bearing capacity of .30 tons per pile.

Procedure: The embankment shall be placed and compacted up to the finished spill thru slope and to the level of the subgrade for a distance of 100 feet back of the abutments, after which piling for the pier foundations shall be driven. All piling for the pier foundations shall be driven before any of the sub-structure concrete is placed.

Backfill behind the abutments shall be made with material meeting the requirements of Sec. I-22 and shall be compacted in accordance with requirements for embankment compaction. Payment for backfill shall be included with Item E-2.

Porous Backfill, 2' thick, full length of abutment and wings shall extend up to the underside of the approach slab or to the finished ground surface. Excavation therefor, in excess of that required for construction of the abutment, shall be considered as paid for in the bid price per cu. yd. paid for porous backfill.

(2) ABUTMENTS - BAR SCHEDULE

Mark	No.	Size	Shape	Length	Weight	A	B	C
A401	96	4	1	5'-8"	305	358	1'-11"	1'-11"
A402	180	4	1	6'-10"	228	221	2'-3"	2'-4"
A403	60	4	1	8'-7"	280	347	3'-3"	3'-3"
A501	24	5	Str.	22'-4"	735	310	(3'-3")	(2'-2")
A502	4	5	Str.	6'-0"	25			
A503	4	5	Str.	12'-6"	52			
A801	16	8	Str.	23'-8"	1000			
A1001	16	10	Str.	23'-8"	1620			
A404	32	4	1	6'-10"	228	130	3'-0"	11'-3'-0"
A601	32	6	Str.	13'-0"	625			
Total Weight = 5548								

PREPARED BY  
CAPITOL ENGINEERING ASSOCIATES, DILLSBURG, PA  
FOR

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

GENERAL PLAN AND ELEVATION  
QUANTITIES & BAR SCHEDULES  
BRIDGE NO. LAK-2-0757  
S.R. 2 OVER NEWELL CREEK  
LAKE COUNTY  
STA 299+79.00

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	REVISED
TEB	TEB	Dup		4-1-59	4-17-59

GENERAL PLAN

