

MICROFILMED
MAR 3 0 1994

FED. RD. DIVISION	STATE	PROJECT	271 313
2	OHIO		

LAKE COUNTY
LAK-2-16.49

GENERAL NOTES

REFERENCE shall be made to Standard Drawings CSB-2-56, sheets No. 2 and No. 3 of 6 revised 2-2-59, FSB-1-62 revised 1-15-63, AR-1-57 revised 4-2-62, AS-1-54 revised 7-5-62, and to Supplemental Specifications S-101 dated 7-12-62 and S-307 dated 8-23-60.

DESIGN SPECIFICATIONS: 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 current revisions thereof.

PROCEDURE: The embankment shall be placed and compacted up to finished spill thru slope and to the level of subgrade for a distance of 200' back of abutments after which piers may be constructed. A waiting period of 90 days after compaction of the embankment is required before the construction for the abutments is begun.

MAINTENANCE AND PROTECTION OF TRAFFIC: Two lanes of traffic with a minimum horizontal width of 22' shall be maintained on Bacon Road at all times. The Contractor shall safeguard the traveling public by providing platforms, nets or other suitable protection above the traveled lanes. A minimum clearance of 12'-9" shall be provided at all times.

EXCAVATION QUANTITY includes the removal of fill material required for construction of the abutments.

PILES shall be driven to a minimum bearing capacity of 32 tons per pile for the abutments and 32 tons per pile for the piers.

ALL STRUCTURAL STEEL: ASTM A 36

DESIGN LOADING: CF 2,000 (57)

WELDING of structural steel shall be Class "A" except as otherwise shown. Welds shown as field welds may, at the option of the Contractor, be made in the shop.

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress up grade. The slab may be placed in sections, between transverse construction joints which are parallel to transverse reinforcing steel and are located near the center of any span.

SURFACE FINISH OF CONCRETE: The requirements of Section S-1.22, Rubbed Finish, shall apply to:

- (a) The entire superstructure except the top and bottom surfaces of curbs and roadways.
- (b) The entire surface of piers and abutments except bridge seats, back walls and face of abutments between outside beams.

MACHINE FINISH: The concrete bridge deck shall be finished by the use of a finishing machine.

CONTINUOUS BEAM SHOP ASSEMBLY: Reference paragraph 4, Sec. S-7.12 of the Construction and Material Specifications, for the purpose of checking the fit-up of weld joint preparation, only two adjacent beams need be shop assembled at a time in their correct, unloaded positions. All beams shall be assembled and match marked.

BASIC UNIT WORKING STRESSES:

Concrete, Class C:	1,333 p.s.i.
Concrete, Class E:	1,133 p.s.i.
Structural Steel, ASTM A 36 (EXCEPT PILING):	20,000 p.s.i.
Reinforcing Steel, ASTM A 15, A 16 & A 160 Deformed, Intermediate or Hard Grade:	20,000 p.s.i.
Spiral Reinforcement, Plain, Structural Grade:	18,000 p.s.i.

ESTIMATED QUANTITIES

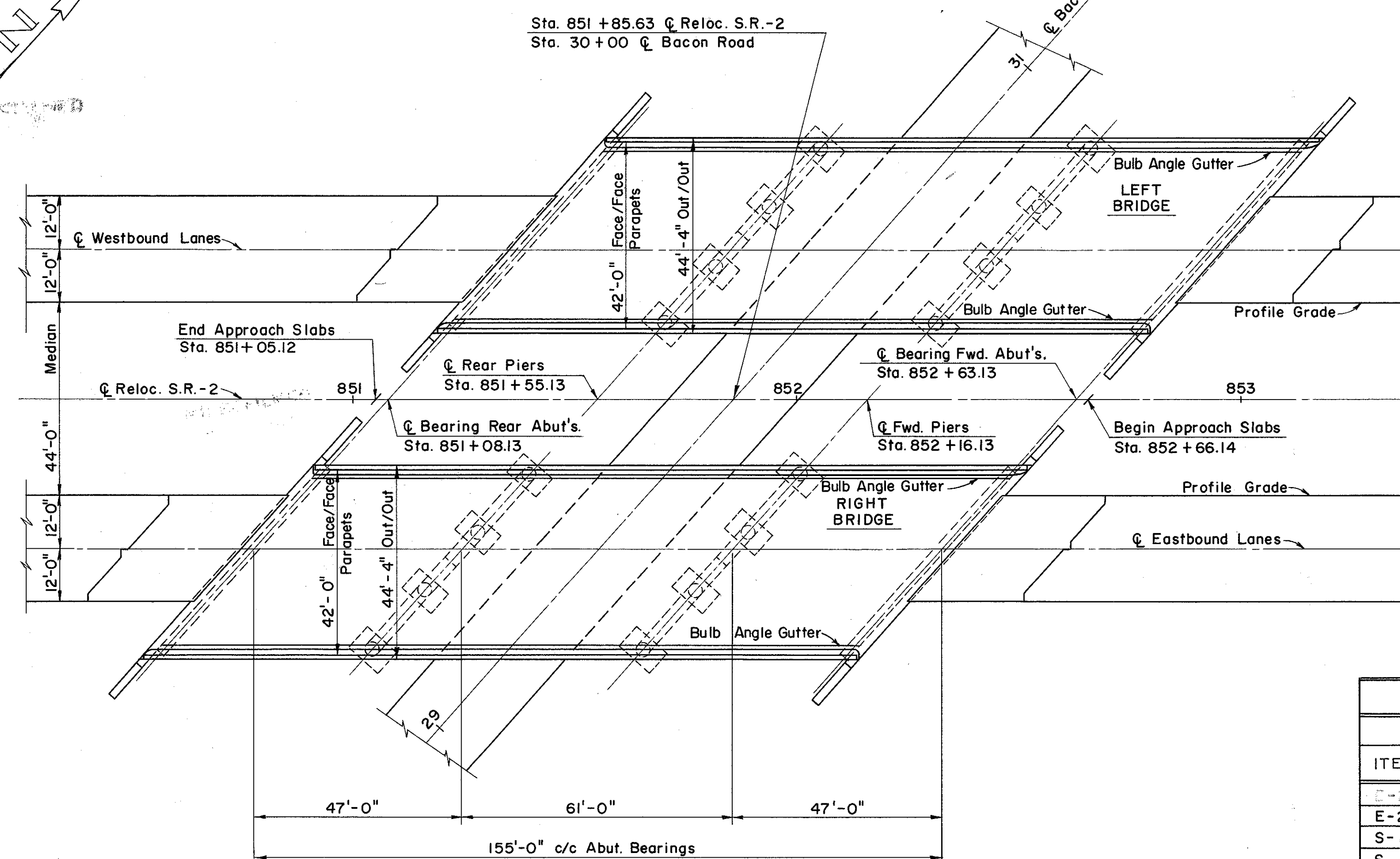
ITEM	TOTAL	UNIT	DESCRIPTION	LEFT BRIDGE				RIGHT BRIDGE			
				SUPER	ABUTS	PIERS	GEN'L	SUPER	ABUTS	PIERS	GEN'L
E-2	743	Cu. Yds.	Unclassified Excavation		238	124			238	143	
S-1	460	Cu. Yds.	Class C Concrete, Superstructure	230				230			
S-1	154	Cu. Yds.	Class C Concrete, Pier caps and columns			78				76	
S-1	230	Cu. Yds.	Class E Concrete, Abut. above Footings		116				114		
S-1	284	Cu. Yds.	Class E Concrete, Footings		94	48			94	48	
S-4	190,480	Lbs.	Reinforcing Steel	60,920	13,144	21,176		60,920	13,144	21,176	
S-7	334,000	Lbs.	Structural Steel	167,000				167,000			
S-8	334,000	Lbs.	Field Painting of Structural Steel	167,000				167,000			
S-14	626.50	Lin. Ft.	Railing (Aluminum Railing & Type A Posts w/Conc. Parapets)	313.25				313.25			
S-18	6,120	Lin. Ft.	10 BP 42 Piles		1,460	1,600			1,460	1,600	
S-29	96	Cu. Yds.	Porous Backfill		48				48		
S-29	32	Each	Scuppers, Including Supports	16				16			
S-101	460	Each	Water-reducing, Set-retarding Admixtures	230				230			
I-10	1,460	Sq. Yds.	Crushed Aggregate Slope Protection				730			730	
S-16	Lump	Sum	First Test Pile *				Lump				

* Payment will be made for only first test pile. It may be driven for either the Left or Right Bridge.

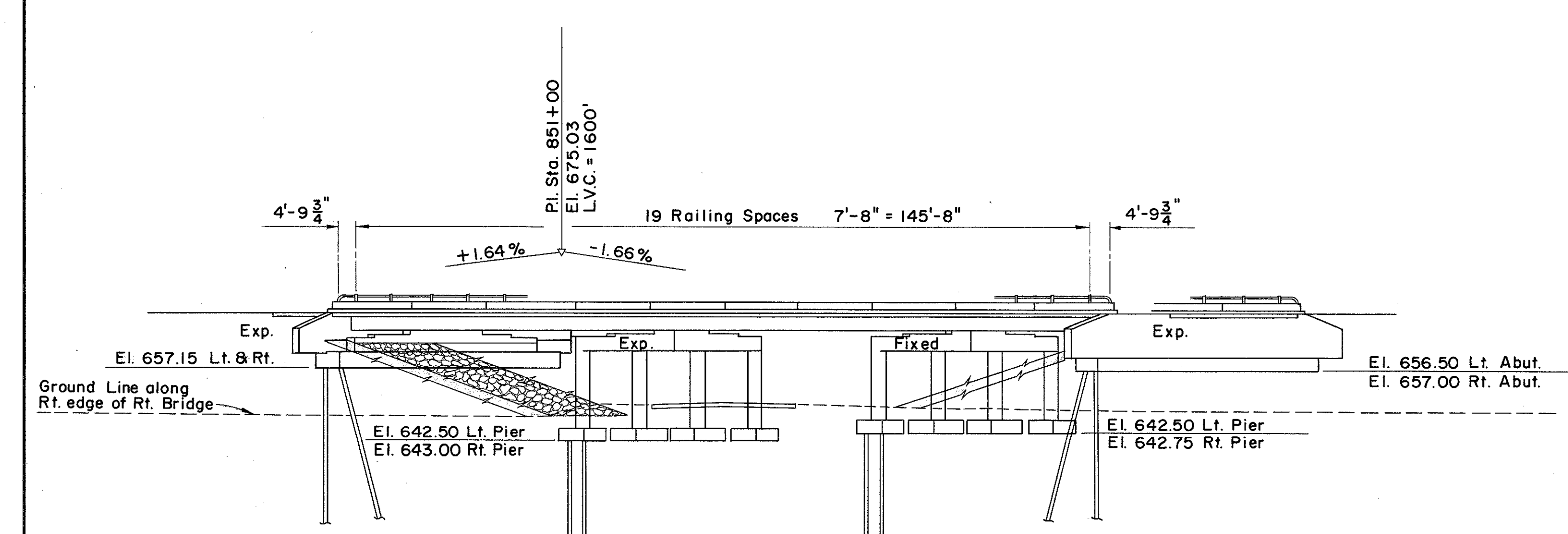
SETTLEMENT HUBS:

Hubs shall be driven in the compacted embankment at location shown in table below. If elevations of the tops of hubs as determined at approx. one week intervals, indicate that all settlement has ceased before the end of the waiting period, construction of the Abutments may proceed after approval from the Director.

LOCATION FOR WOODEN HUBS	
STATION	FROM \bar{C} RELOC. S.R. 2
850+70	34' Right
851+30	34' Left
852+40	34' Right
853+00	34' Left



PLAN



ELEVATION

PREPARED BY
CAPITOL ENGINEERING ASSOCIATES, DILLSBURG, PA.
FOR

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

GENERAL PLAN
BRIDGE NO. LAK-2-1801 L & R
RELOC. SR. 2 OVER BACON ROAD
LAKE COUNTY
STA. 851 + 05.12
STA. 852 + 66.14

DESIGNED M.J.F. L.L.D.	DRAWN M.J.F.	TRACED J.S.	CHECKED L.L.D. M.J.F.	REVIEWED G.S.W. M.C.P.	DATE	REVISED
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