

GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

156  
204

LAK-44-3.79

ESTIMATED QUANTITIES									
Item	Total	Unit	Description	Abuts	Wing Wall	Pier	Superst	General	As Built
E-2	Lump	Sum	Cofferdams cribs and sheeting					Lump	
E-2	2100	Cu.Yds.	Unclassified excavation	1020	742	338			
S-1	333	Cu.Yds.	Class C concrete, superstructure				333		
S-1	117	Cu.Yds.	Class C concrete, pier cap and columns				117		
S-1	1238	Cu.Yds.	Class E concrete, walls	1003	235			12	1226
S-1	694	Cu.Yds.	Class E concrete, footings	374	120	200		7	687
S-3	707	Sq.Yds.	Type A waterproofing	497	210				
S-3	45	Sq.Yds.	Type B waterproofing, 36" wide	15	30				
S-103	896	Sq.Yds.	1/4" Asphalt block protective cover				896		
S-103	900	Sq.Yds.	Type "c" membrane waterproofing				900		
Special	91	Gals.	Hot poured joint sealer (Sec. M-10.23)				91		
Special	12	Gals.	Bituminous Plastic Cement (Sec. M-10.08)				12		
S-4	141,992	Lbs.	Reinforcing steel	31053	16656	45783	48500		
S-107	849000	Lbs.	Structural steel				849000	25,993	\$23,007
S-9	849000	Lbs.	Field painting of structural steel				849000	25,993	\$23,007
S-9	645	Sq.Ft.	1" Preformed expansion joint filler	340	305				
Special	147	Sq.Ft.	3/4" Fabreeca pad or approved equal				147		
S-9	32	Sq.Ft.	1/2" Preformed expansion joint filler				32		
S-9	217	Sq.Ft.	1/4" Preformed expansion joint filler				217		
S-9	283	Lin.Ft.	Type "A" copper flashing				283		
S-9	143	Lin.Ft.	Type "B" copper flashing	48	92		3		
S-9	126	Lin.Ft.	Type "C" copper flashing				126		
S-9	164	Lin.Ft.	Type "D" copper flashing	164					
S-14	287.33	Lin.Ft.	Railing (wrought iron pipe)				287.33		
S-29	421	Cu.Yds.	Porous backfill	285	136				
S-29	410	Lin.Ft.	8" Perforated bituminous coated corrugated metal pipe and specials	285	125				
S-29	305	Lin.Ft.	8" Bituminous coated corrugated metal pipe	205			100		
S-15	Lump	Sum	Temporary run-around for Railroad (as per plan)				Lump		
Special	333	each	Water-reducing, set-retarding admixture				333	333	0

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Specifications for Steel Railway Bridges" of the American Railway Engineering Association, 1960 Edition DESIGN DATA: See sheet no. 155.

CONSTRUCTION SPECIFICATIONS: State of Ohio, Department of Highways, Construction and Material Specifications, dated January 1, 1961; Supplemental Specifications No. S-103 revised 2-16-55; and No. S-107, revised 2-16-55.

FOUNDATION BEARING PRESSURE: Structure footings are designed for a maximum bearing pressure of 3 tons per sq. ft.

REINFORCING STEEL: All reinforcing steel shall be deformed bars and shall meet the requirements of Sec. M-71, intermediate grade billet steel.

SURFACE FINISH OF CONCRETE: Form liners or plywood shall be used on all exposed surfaces of abutments, wings, and piers. These surfaces are to be grout cleaned according to Sec. S-122. The rubbing of concrete surfaces will not be permitted.

WELDING shall be Class "A".

RIVETS shall be 7/8" diameter in holes 15/16" φ.

GIRDER SPLICES: Reaming of holes for field and shop splices (if any) shall be done after the girder is assembled as noted on sheet no. 167.

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of deck concrete shall progress up grade (from abutments toward pier). 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 either span.

WATERPROOFING: 3-ply membrane waterproofing, Type "c" with 1/4" preformed asphalt protection blocks shall comply with Supplemental Specification No. S-103.

Type "A" waterproofing shall be used for damp-proofing the back faces of the of the abutments and wingwalls. It shall be applied on all surfaces from the top of the footings to 6" below proposed ground line and on all surfaces of the tie piers.

POROUS BACKFILL, 2ft. thick, shall extend up to the railroad ballast and to the surface of the earth shoulders, and outward to the end of the wingwalls and to the surface of the embankment slopes. The porous backfill shall extend down to the flowline of the 8" diameter drain pipe back of the abutment and wingwalls.

SHEETING AND BRACING: Before construction is begun, eight (8) sets of prints of the plans for all sheeting and bracing for protection of the railroad tracks adjacent to foundation work shall be submitted to the Director for approval by the Department of Highways and the Railroad Company.

RAILROAD AERIAL LINES shall be relocated by the railroad. The Contractor shall use all precautions necessary to see that the lines are not disturbed during the construction stage and shall cooperate with the railroad in the relocation of these lines. The cost of the relocation shall be included in the railroad force account work.

ALIGNING RAILROAD TRACKS: After the contractor has completed all excavation and backfill adjacent to the railroad tracks in compliance with Sec. E-2.04 and Sec. E-2.08 of the Construction and Material Specifications, subject to the supervision of the Railroad Company, nothing in Sec. E-2.04, E-2.08 or G-3.07 of the Specifications shall be construed to hold the Contractor liable for aligning and resurfacing the railroad tracks.

TEMPORARY RUN-AROUND FOR RAILROAD, Item S-15, as per plan. The lump sum price bid for this item shall include the following:

- (1) The construction of the roadbed for the run-around tracks including I-22 subbase and drainage ditches as required.
- (2) A temporary extension to the culvert (Br #156.06) 6'-0" ± at the south end.
- (3) The restoration of the ground to the original condition (after removal of the run-around tracks) by the removal of ballast and fill material.
- (4) Any other phases of this item not herein specified but necessary to carry out this part of the Contract.

SHOP PAINTING STEEL: The surface preparation of all steel, requiring shop painting as per the plans and Specifications, shall be accomplished by blast cleaning or power tool cleaning, except as noted in the Specifications regarding the use of Chromate primers.

\* See Proposal Note

CONSTRUCTION PROCEDURE

CONTRACT WORK

RAILROAD WORK

2. Construct roadbed for temporary railroad runaround tracks.
4. Construct underpass structure complete except the S.W. & S.E. wingwalls including the necessary sheeting and bracing for the protection of railroad traffic.
6. (a) Construct S.W. & S.E. wingwalls.  
(b) Remove ballast and restore ground at runaround location to original condition.
7. Complete all contract items.

1. Furnish all materials for, and make the necessary temporary changes in communication and signal lines.
3. (a) Furnish all materials (including ballast) for and construct detour tracks and install temporary turnouts.  
(b) Operate over runaround tracks.  
(c) Remove tracks at proposed bridge site.
5. (a) Restore tracks, communication and signal lines in permanent location.  
(b) Operate over permanent tracks.  
(c) Remove rails and ties from runaround tracks.  
(d) Remove temporary communication and signal lines.

The above procedure is based on the protection of the tracks adjacent to the foundation excavation with steel sheet piling and bracing. Refer to note in General Notes. Any change in the above procedure shall be approved by the Director of Highways and the Area Engineer of the Railroad Company before that particular phase of the construction is started.

STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES					
GENERAL NOTES, ESTIMATED QUANTITIES, & CONSTRUCTION PROCEDURE					
Bridge No LAK-44-0483					
under N.Y.C. AND ST. L. R.R.					
LAKE COUNTY			Sta 271+64.18		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
MPB	MPB	MKH	WCK	BFG	8-8-61