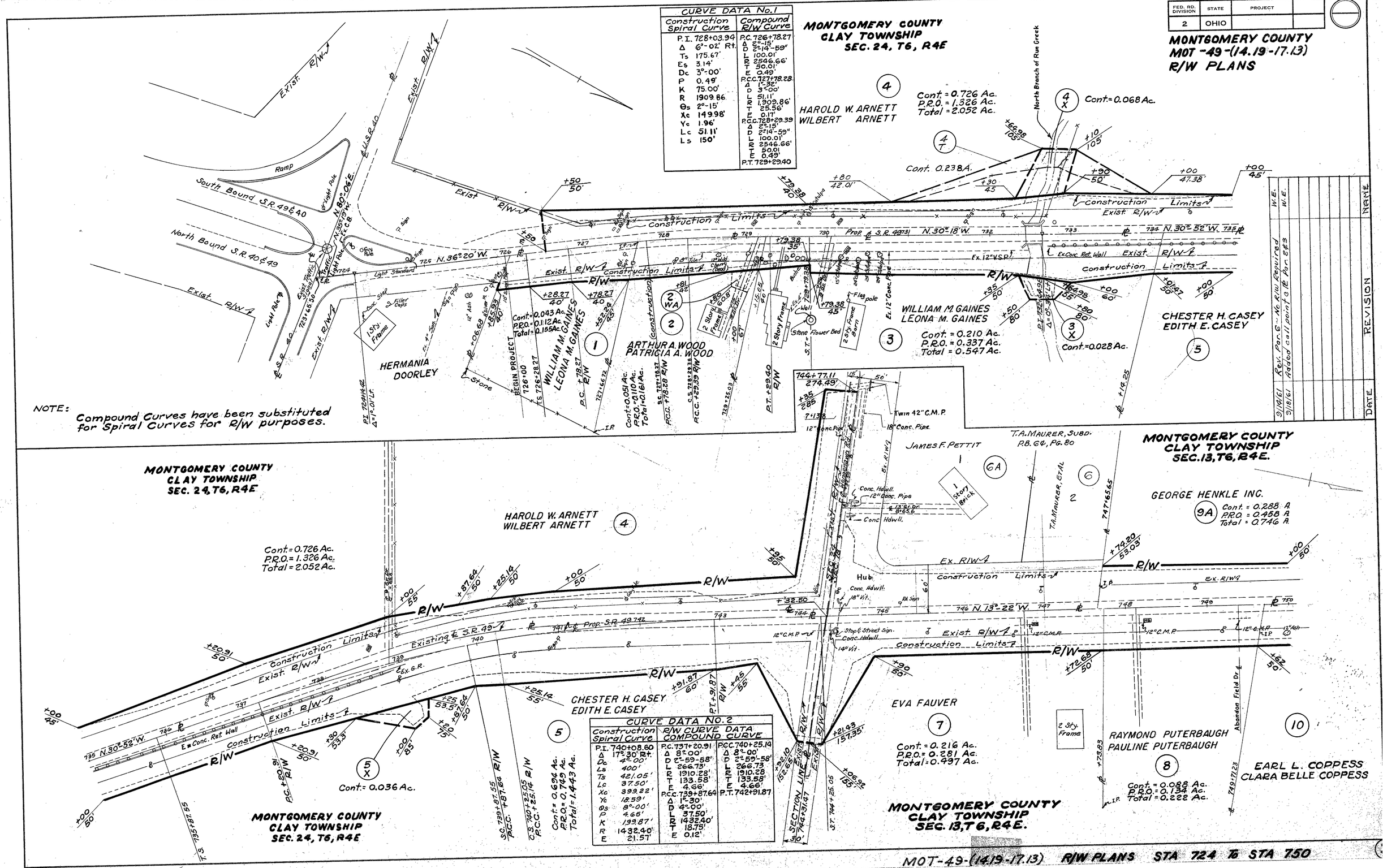
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MONTGOMERY COUNTY
MOT-49-(14.19-17.13)
R/W PLANS



CURVE DATA No. 1	
Construction Spiral Curve	Compound R/W Curve
P.I. 728+03.94	P.C. 726+78.27
Δ 6°-02' Rt.	Δ 2°-15'
Ts 175.67'	D 2°-14'-59"
Es 3.14'	L 100.01'
Dc 3°-00'	R 2546.66'
P 0.49'	T 50.01'
K 75.00'	E 0.49'
R 1909.86	P.C.C. 727+78.28
Θs 2°-15'	Δ 1°-32'
Xc 149.98'	D 3°-00'
Yc 1.96'	L 51.11'
Lc 51.11'	R 1,909.86'
Ls 150'	T 25.56'
	E 0.17'
	P.C.C. 728+29.39
	Δ 2°-15'
	D 2°-14'-59"
	L 100.01'
	R 2546.66'
	T 50.01'
	E 0.49'
	P.T. 729+29.40

CURVE DATA No. 2	
Construction Spiral Curve	R/W CURVE DATA COMPOUND CURVE
P.I. 740+08.60	P.C.C. 737+20.91
Δ 17°-30' Rt.	Δ 8°-00'
Dc 4°-00'	D 2°-59'-58'
Ls 400'	L 266.73'
Ts 421.05'	R 1910.28'
Lc 37.50'	T 133.58'
Xc 399.22'	E 4.66'
Yc 18.59'	P.C.C. 739+87.64
Θs 8°-00'	Δ 1°-30'
P 4.65'	D 4°-00'
K 199.87'	L 37.50'
R 1432.40'	R 1432.40'
E 21.57'	T 18.75'
	E 0.12'
	P.T. 742+91.87

9/14/61	Rev. Par. 6 - No R/W Required	W.E.	
9/8/61	Added call point to ℄ Par. 2 & 3	W.E.	
DATE	REVISION		NAME

NOTE: Compound Curves have been substituted for Spiral Curves for R/W purposes.

MOT-49-(14.19-17.13) R/W PLANS STA 724 To STA 750

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	STATE	

1.
116

MAY 29 1963
GROUND PHOTOLAB

MONTGOMERY COUNTY
MOT-49-(14.19-18.09)

MOT-49-(14.19-18.09)

VILLAGE OF PHILLIPSBURG
CLAY T/W/P.
MONTGOMERY COUNTY

NOTE: Project designation MOT-49-(14.19-17.13) appearing throughout this plan shall be considered to read MOT-49-(14.19-18.09).

12
Red

6000 N.F.D.

CONVENTIONAL SIGNS

Township Line
City or Village Line
Property Line (Fence)
Property Line (No Fence)
Center Line
County Line
State Line
Trees & Stumps to be removed
Trees & Stumps to remain
Pole Lines Guy, Teleph. or Telegh., Power, Light
Railroad
Guard Rail New, Old
Underground Gas Line G
Underground Water Line W
Underground Pipe Line P
Underground Teleph. Cable T
Underground Elect. Cable L
Manholes Adjust or Reconstruct to Grade, Proposed
Inlets or Catch Basins Ditch, Pavement
Culverts Exist. Prop.
Channels Exist. Prop.
Ditches Prop.
Highway Signs
Mail Box M.B.
Water Meter WM
Gas Meter GM
Fire Hydrant
Hedges

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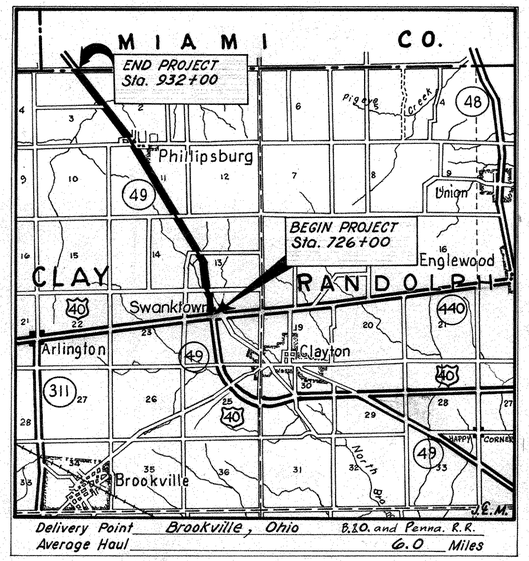


NORTH

LOCATION PLAN

0 1/4 1/2 1 2 3 4 5
Scale in Miles

Portion to be improved
State Highways
Federal Highways
Other Roads
Detours

SCALES

Plan	0	50'	100'
Profile Horizontal	0	50'	100'
Profile Vertical	0	5'	10'
Cross Sections	0	5'	10'

1961 SPECIFICATIONS

The Standard Specifications of the State of Ohio, Department of Highways, including changes and Supplemental Specifications listed in the proposal shall govern this improvement.

The Right of Way for this improvement will be provided by the State of Ohio.

I hereby Approve these plans and declare that the making of this improvement will not require the closing of the highway to traffic and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

Approved: Joseph M. Linger
Date: 8-28-61 Division Deputy Director

Approved: D. H. Overman Ass't
Date: 10-9-61 Engineer of Bridges

Approved: W. Thomson
Date: 10-18-61 Engineer of Location & Design

Approved: C. W. McCarley
Date: 10-19-61 Deputy Director of Design & Construction

Approved: Wm. J. Orr
Date: 10-10-61 Deputy Director of Right-of-Way

Approved: Guy E. Geeser
Date: 10-27-61 Deputy Director of Planning & Programming

Approved: G. A. Berry
Date: 10-27-61 First Assistant Director

Approved: E. S. Preston
Date: 10-27-61 Director of Highways

LINE DATA

Begin Work	Sta. 725+50
Begin Project	Sta. 726+00
S. Corp. Line Phillipsburg	Sta. 843+48.40
N. Corp. Line Phillipsburg	Sta. 879+89.50
End Project	Sta. 932+00
End Work	Sta. 933+60

Length of Project (Municipal)	=		3,641.10 Lin. Ft. or 0.690 Mi.
Length of Work (Municipal)	=		3,641.10 Lin. Ft. or 0.690 Mi.
Length of Project (Rural)	=	11748.40 + 5210.50	= 16,958.90 Lin. Ft. or 3.212 Mi.
Length of Work (Rural)	=	11798.40 + 5370.50	= 17,168.90 Lin. Ft. or 3.251 Mi.
Length of Project (Rural & Municipal)	=	16958.90 + 3641.10	= 20,600.00 Lin. Ft. or 3.902 Mi.
Length of Work (Rural & Municipal)	=	17168.90 + 3641.10	= 20,810.00 Lin. Ft. or 3.941 Mi.

SUPPLEMENTAL PRINTS OF STANDARD CONSTR. DRAWINGS			
HW-E	11-15-60	I-8 C.B. 2-2-A&B	3-2-59
I-1	11-15-60	I-8 C.B. 1-3 & 1-4	1-26-59
I-15 No. 1	11-15-60	I-8 C.B. No. 7	3-11-60
I-15 No. 2-A	8-17-60	I-8 M.H. No. 1	1-26-59
G-7.07	6-1-56	I-8 C.B. 1-2-A&B	1-26-59
T-35	1-2-56	I-8 C.B. 2-3 & 2-4	1-26-59
DR-1	1-3-55	R1-1	7-15-58
I-12	7-1-54	L.J. No. 1	7-1-55
I-14 G	1-22-52	I-8 M.H. No. 1 A	10-2-61
L-1	4-1-50		
L-3	4-1-50		
L-3-A	4-1-50		
AS-1-54	12-1-54		
HW-D	11-15-60		

SUPPLEMENTAL		SPECIFICATIONS
E-105	12-29-59	
I-124	Rev. 3-20-61	

FILE No.	MONTGOMERY COUNTY MOT-49-(14.19-18.09)
	Date of Letting 1961
	Contract No.

DEPARTMENT OF TRANSPORTATION
BUREAU OF PUBLIC ROADS
APPROVED:
DIVISION ENGINEER DATE

MAY 29 1963
GROUND PHOTOLAB

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

98

MONTGOMERY COUNTY
MOT-49-(14.19-18.09)

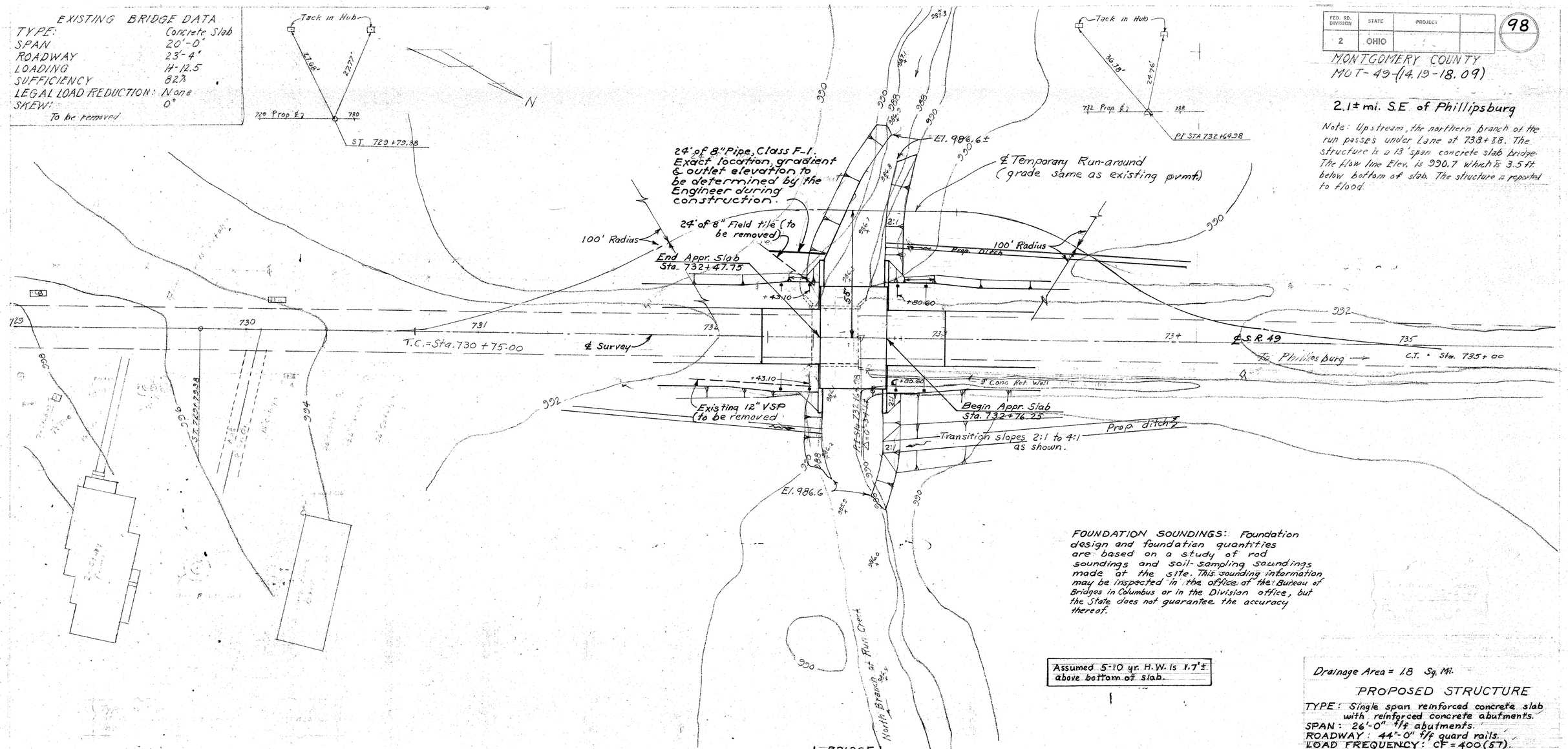
2.1± mi. S.E. of Phillipsburg

Note: Upstream, the northern branch of the run passes under Lane at 738+88. The structure is a 13' span concrete slab bridge. The flow line Elev. is 990.7 which is 3.5 ft. below bottom of slab. The structure is reported to flood.

EXISTING BRIDGE DATA

TYPE:	Concrete Slab
SPAN	20'-0"
ROADWAY	23'-4"
LOADING	H-12.5
SUFFICIENCY	82%
LEGAL LOAD REDUCTION:	None
SKEW:	0°

To be removed



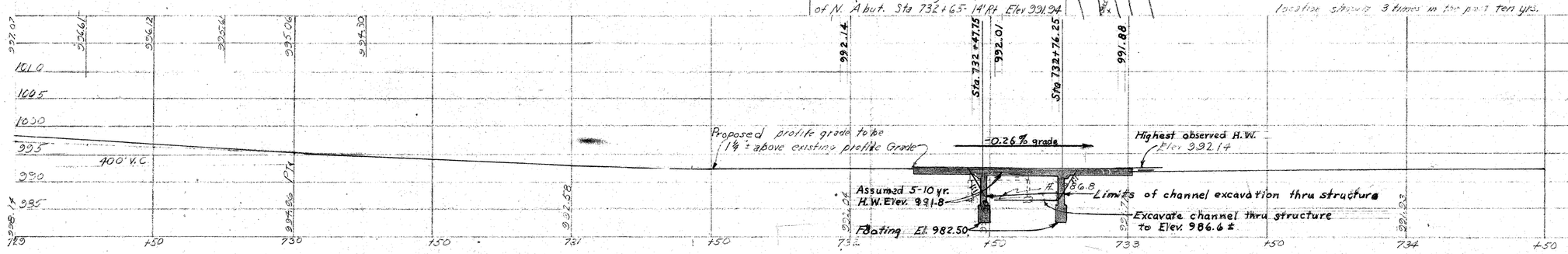
FOUNDATION SOUNDINGS: Foundation design and foundation quantities are based on a study of rod soundings and soil-sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in the Division office, but the State does not guarantee the accuracy thereof.

Assumed 5-10 yr. H.W. is 1.7'± above bottom of slab.

Drainage Area = 1.8 Sq. Mi.

PROPOSED STRUCTURE

TYPE: Single span reinforced concrete slab with reinforced concrete abutments.
SPAN: 26'-0" f/f abutments.
ROADWAY: 44'-0" f/f guard rails.
LOAD FREQUENCY: CF = 400 (57).
SKEW: None.
WEARING SURFACE: 1" monolithic concrete.
APPROACH SLABS: AS-V-54 (25' long).
ALIGNMENT: Tangent.



STATE OF OHIO 1/3

SITE PLAN

STRUCTURE Nº MOT-49-1384
over N. BRANCH RUN CREEK
MONTGOMERY COUNTY S.R. 49

Sta. 732+47.75
732+76.25

2' Contour Intervals

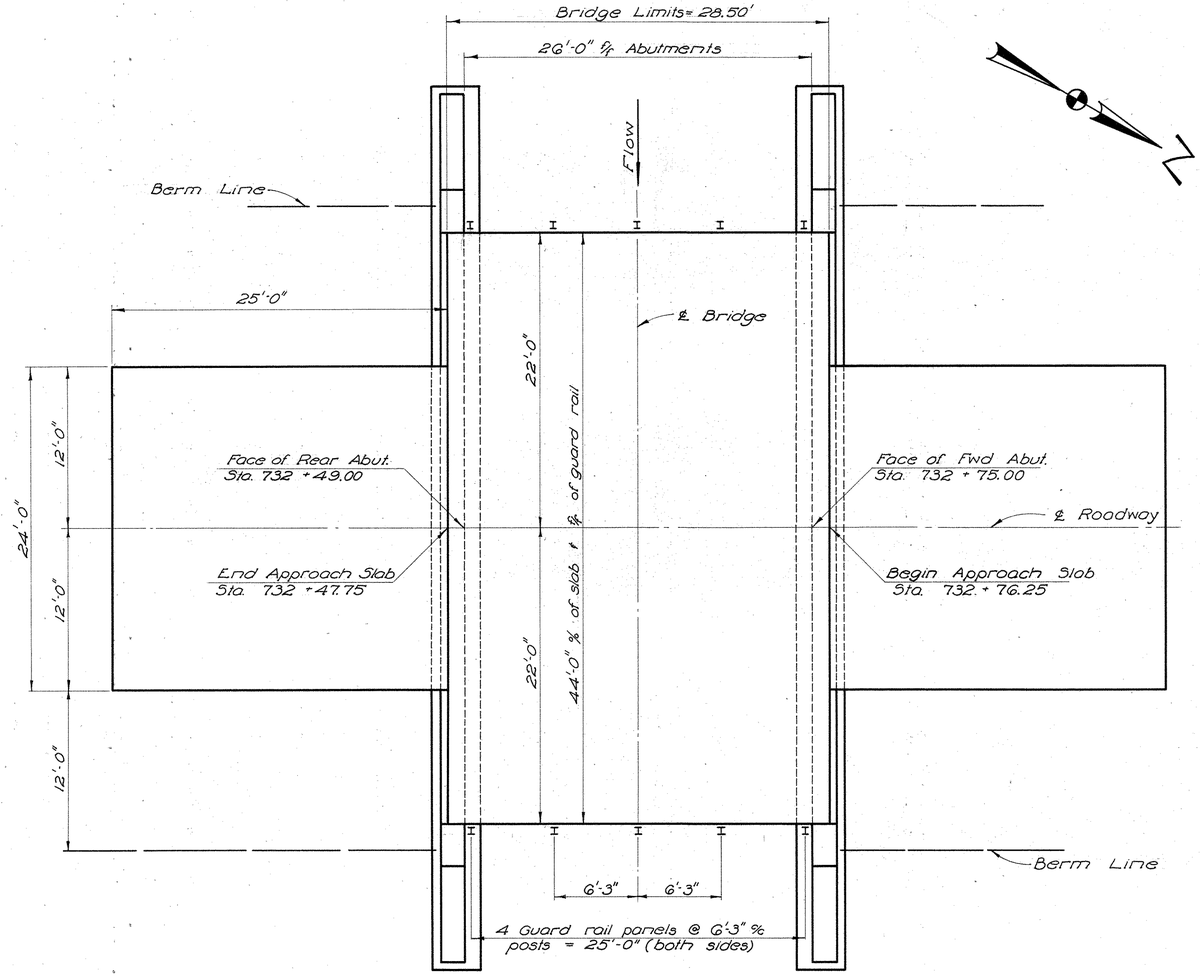
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
P.	R.W.K.	RAK	RAK	J.W.B.	O.E.D.

BFG (01)-08363 9-15-61

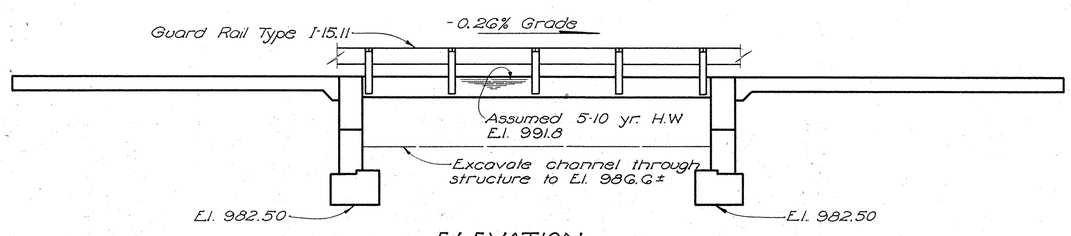
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

99

MOT-49-(14.19-18.09)



GENERAL PLAN



ELEVATION

GENERAL NOTES

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.

TEMPORARY RUN-AROUND BRIDGE AND APPROACHES: Load frequency for bridge, CF = 130, with unit stresses increased 25% as per the provisions for temporary bridges in the Design Specifications for Highway Structures. Bridge width, 24'. Approach width, out to out of shoulders, 30'. Approach pavement shall be Class "B", 24' wide.

EXISTING STRUCTURE: When no longer needed to maintain traffic the existing structure shall be removed.

FOUNDATION BEARING PRESSURE: Abutment footings are designed for a maximum bearing pressure of 3.0 tons per sq. ft.

CONSTRUCTION JOINT: A longitudinal construction joint in the slab, preferably at or near the centerline of the roadway, will be permitted to facilitate construction.

RAILING: Guard rail shall be painted while in accordance with Sec. 1-15.07 of the Construction and Material Specifications.
Galvanized posts and anchor bolts shall not be painted.
The price per linear foot of railing includes payment for guard rail, posts, anchors, connections, galvanizing and painting.

CAMBER of 3/8 inch shall be provided at the centerline of the bridge to allow for dead load deflection. This is the amount of camber required before falsework is released. To obtain this, proper allowance shall be made for the deflection of the falsework members.

POROUS BACKFILL shall extend upward to the approach slab and to the surface of the earth shoulders, and outward to the surface of the embankment slopes. Excavation therefor, in excess of that required for construction of the footing, shall be considered as paid for in the bid price per cu. yd. paid for porous backfill.

* See Proposal Note

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Abuts.	Super.	Gen'l		
E-2	139	Cu. Yds.	Unclassified excavation	139				
E-3	305	Cu. Yds.	Channel excavation			305		
E-2	Lump	Sum	Cofferdams, cribs and sheeting					
S-1	72	Cu. Yds.	Class "C" concrete, superstructure		72			
S-1	45	Cu. Yds.	Class "E" concrete, abutments above footings	45				
S-1	42	Cu. Yds.	Class "E" concrete, footings	42				
S-4	12,741	Lbs.	Reinforcing steel	1,903	10,838			
S-9	10	Sq. Ft.	1/2 Preformed expansion joint filler	10				
S-14	57.00	Lin. Ft.	Railing (Type 1-15.11 with galvanized steel posts and bolts)		57			
S-15	Lump	Sum	Temporary run-around bridge and approaches			Lump		
S-24	Lump	Sum	Removal of existing structure			Lump		
S-29	38	Cu. Yds.	Porous backfill	38				
*Special	72	Each	Water-reducing, set-retarding admixture		72			

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

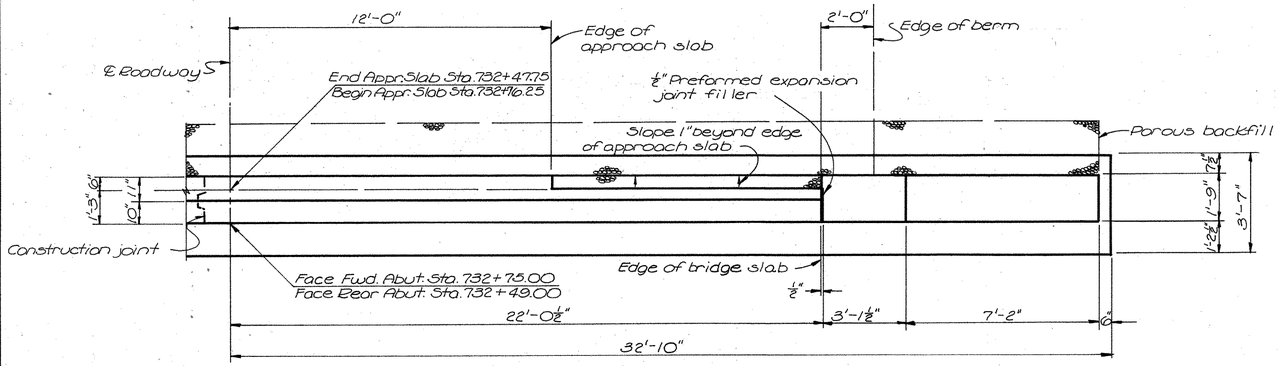
GENERAL PLAN & ELEVATION
NOTES & ESTIMATED QUANTITIES
BRIDGE No. MOT-49-1384
OVER N. BRANCH RUN CREEK
MONTGOMERY COUNTY
STA. 732 + 47.75
STA. 732 + 76.25

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
ADH.	ADH.	G.P.Q.	CPD	BFG G.P.H.	9-15-61	

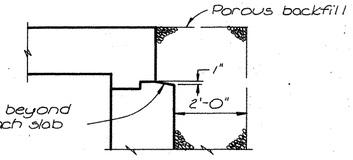
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

100

MOT-49-(14.19-18.09)

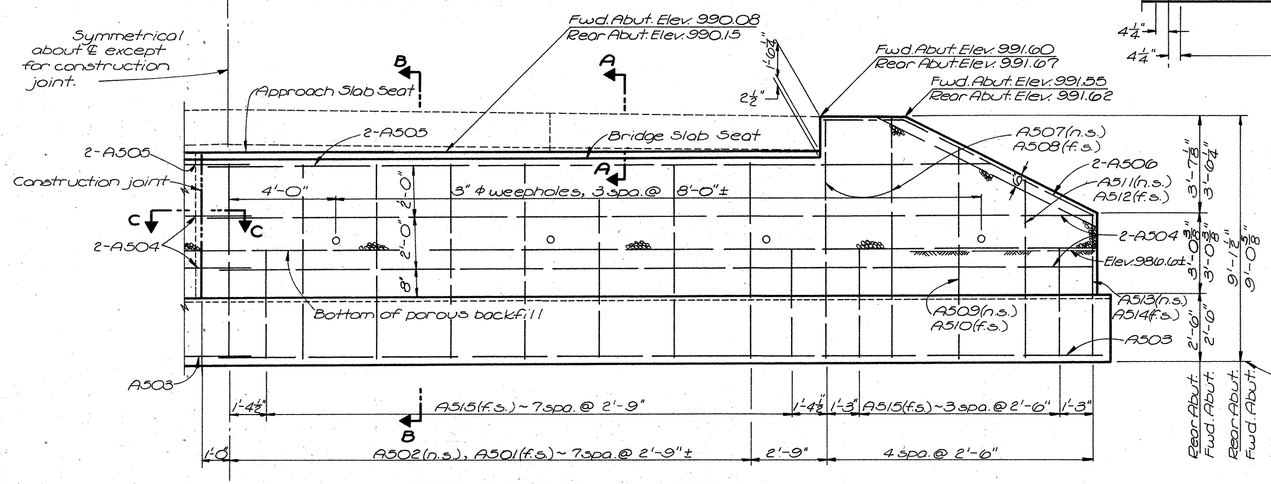


HALF PLAN OF ABUTMENT

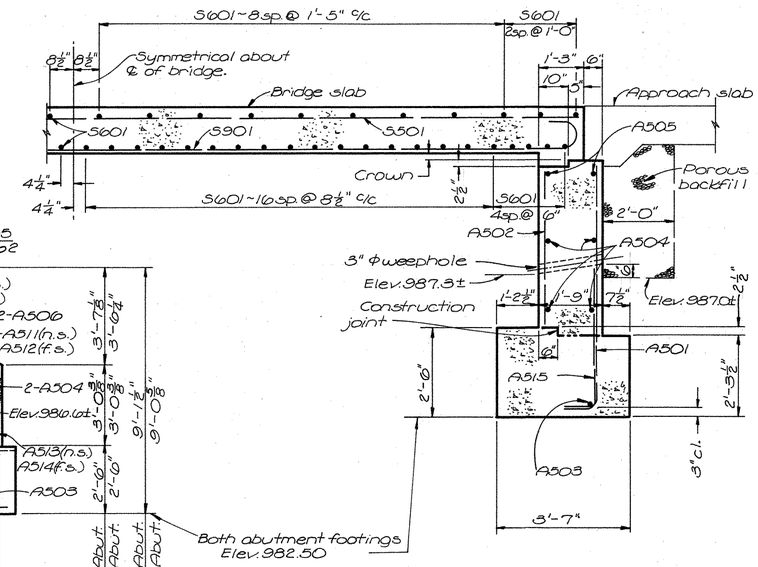


SECTION A-A

NOTE:
n.s. indicates near side
f.s. indicates for side

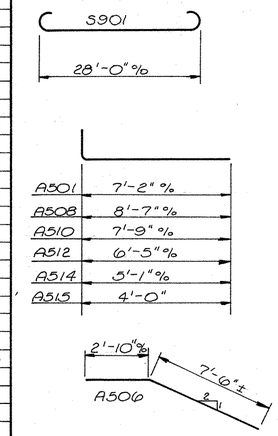


HALF ELEVATION OF ABUTMENT



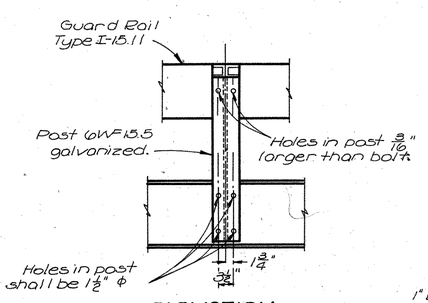
SECTION B-B

REINFORCING STEEL LIST					
MARK	NO.	LENGTH	WEIGHT	SHP.	BENDING DIAGRAMS
SUPERSTRUCTURE					
S901	96	30'-2"	9846	B	
S601	128	22'-9"	437	S	
S501	19	28'-0"	555	S	
ABUTMENTS					
A501	30	7'-8"	240	B	
A502	30	4'-8"	146	S	
A503	4	33'-6"	140	S	
A504	16	33'-0"	551	S	
A505	8	29'-9"	248	S	
A506	8	10'-4"	86	B	
A507	8	6'-4"	53	S	
A508	8	9'-1"	76	B	
A509	4	5'-6"	23	S	
A510	4	8'-3"	34	B	
A511	4	4'-2"	17	S	
A512	4	6'-11"	29	B	
A513	4	2'-10"	12	S	
A514	4	5'-7"	23	B	
A515	48	4'-6"	225	B	
REPLACEMENT BARS					
RE901	1	6'-10"	-	S	
RE601	1	5'-11"	-	S	
RE501	1	5'-7"	-	S	

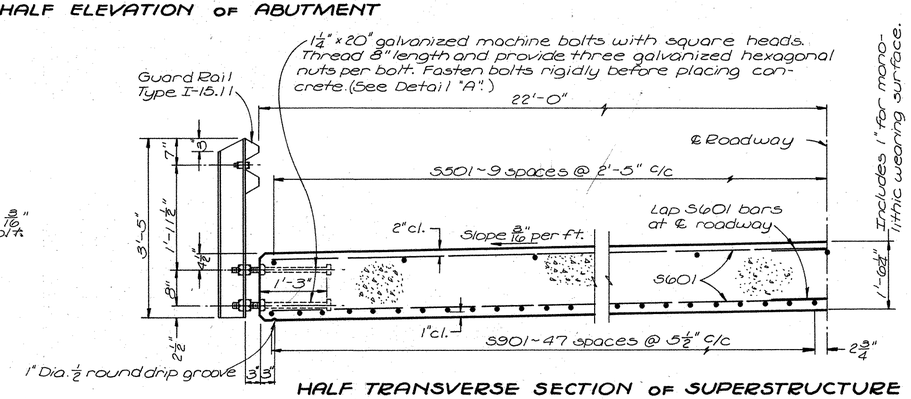


BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number. For example, A700 is a No. 7 size bar and A1014 is a No. 10 size.

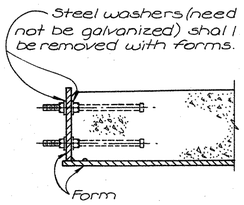
REPLACEMENT BARS: If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. S-4.02 need not be furnished and replacement bars will not be required.



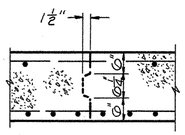
ELEVATION OF RAILING POST



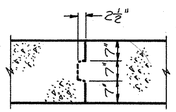
HALF TRANSVERSE SECTION OF SUPERSTRUCTURE



DETAIL "A"



OPTIONAL SLAB CONSTRUCTION JOINT
(See note)



SECTION C-C

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

ABUTMENTS, SUPERSTRUCTURE & REINFORCING STEEL LIST

BRIDGE No. MOT-49-1884
OVER N. BRANCH RUN CREEK
MONTGOMERY COUNTY STA. 732+47.75 STA. 732+76.25

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
ADH.	ADH.	MKH	CPD	BFG	9-15-61	