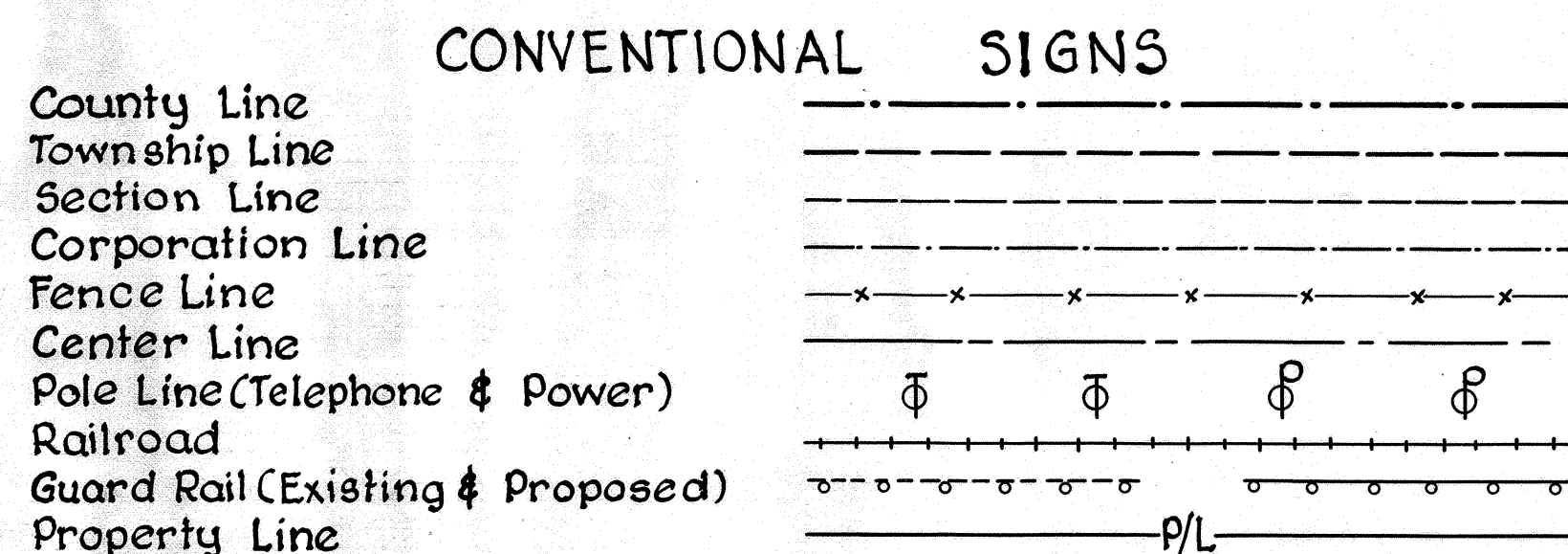


# STATE OF OHIO DEPARTMENT OF HIGHWAYS

## RIC-546-(4.82-5.01)(6.51)

### RICHLAND COUNTY TROY & PERRY TOWNSHIPS

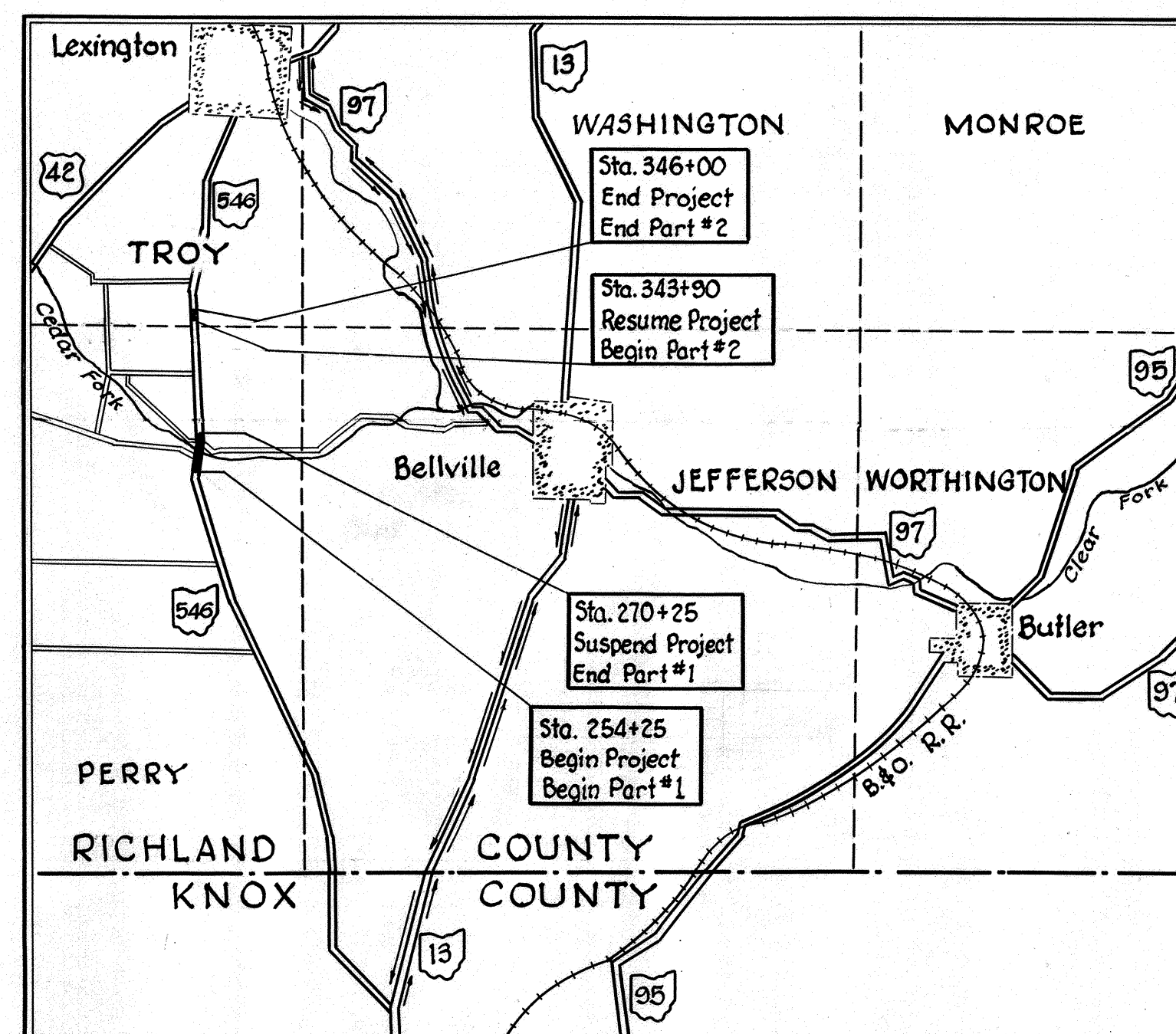


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**LINE DATA**

	WORK	PROJECT
Part #1 Begin	Sta. 254+00	Sta. 254+25
Suspend	Sta. 271+00	Sta. 270+25
Part #2 Resume	Sta. 343+90	Sta. 343+90
End	Sta. 346+00	Sta. 346+00
Johnsville & Bellville Rds.	= 779.39 Lin.Ft.	-0-
Part #1 Net Length	2479.39 Lin.Ft. or 0.469 Mi.	1600 Lin.Ft. or 0.303 Mi.
Part #2 Net Length	210 Lin.Ft. or 0.039 Mi.	
Total Net Length	2689.39 Lin.Ft. or 0.509 Mi.	1810 Lin.Ft. or 0.342 Mi.



Delivery Point = LEXINGTON  
Average Haul = 4.8 Miles Part #1  
Average Haul = 35 Miles Part #2

**LOCATION MAP**  
Scale 1" = 1.7 Mi.

Portion to be Improved  
State Highways  
Other Roads  
Detours Shown Thus

**SCALES**

Plan  
Profile Horizontal  
Profile Vertical  
Cross Sections

1" = 20' or 50'  
1" = 20' or 50'  
1" = 5'  
1" = 5'

CONSTRUCTION BUREAU  
JUN 2 1959  
GROUND PHOTOLAB

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 necessary 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 require the closing to traffic of the Highway and that detours will be provided as indicated on the plans.

- Approved E. S. Dreston  
Date 4/26/56 Division Deputy Director
- Approved John Heier  
Date 5-16-56 Deputy Director of Planning and Programming
- Approved Richard Orthofer  
Date 5/14/56 Engineer of Bridges
- Approved E. S. Dreston  
Date 5-16-56 Engineer of Location and Design
- Approved H. F. Gould  
Date 5-14-56 Deputy Director of Design and Construction
- Approved J. J. Schaublin  
Date 5-17-56 First Assistant Director
- Approved A. J. King  
Date 5-17-56 Director of Highways

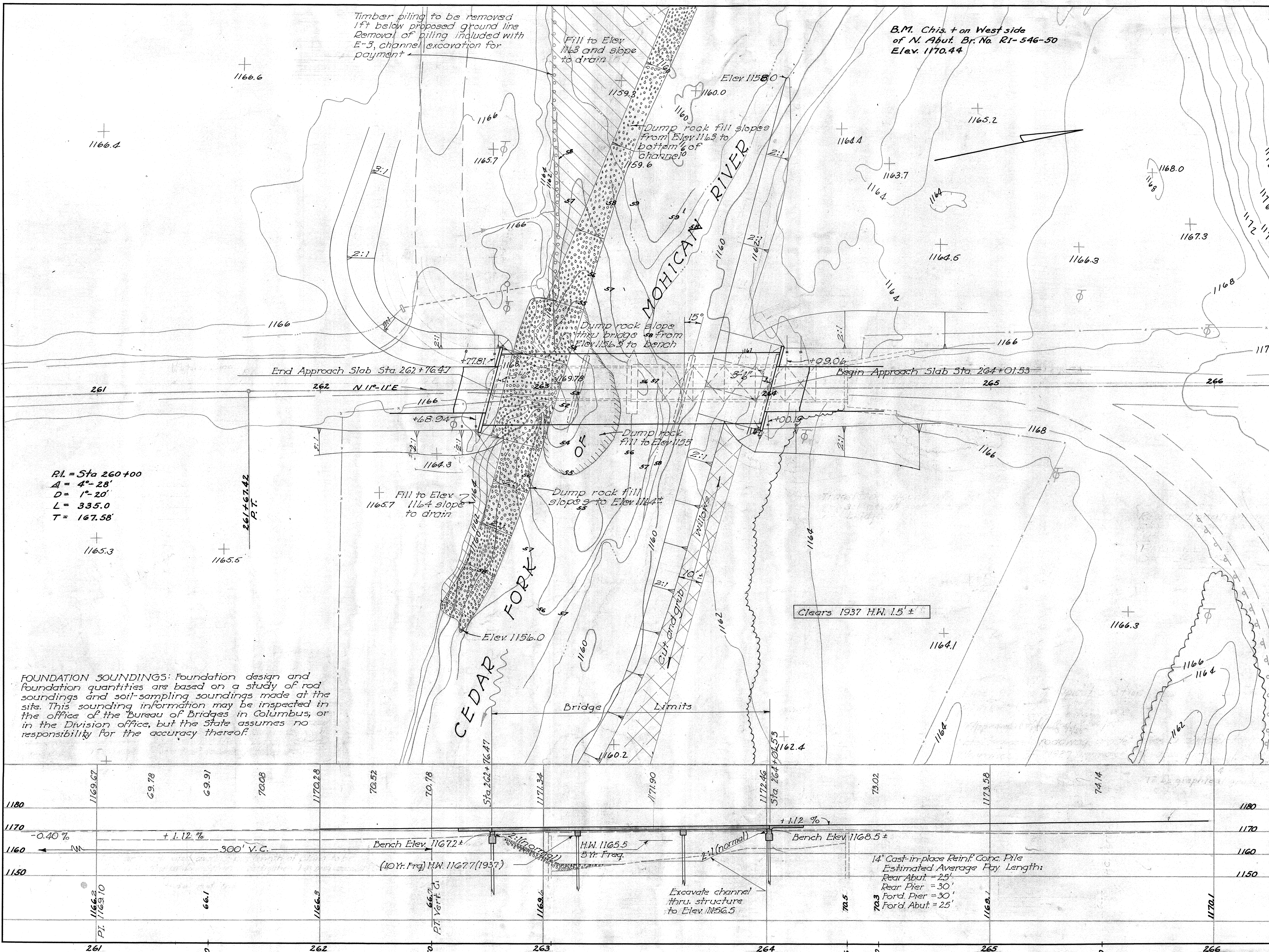
**STANDARD CONSTRUCTION DRAWINGS**

L-1	4-1-50	G-7.07	4-2-56
L-3	4-1-50	I-15 No.1	8-1-55
L-3A	4-1-50	I-15 No.2	12-1-54
S-27 P.C.3	2-20-45	SP-53	7-21-53
I-1,2,3,4 & 5	2-20-45	CS-1-54 (2 Shts)	12-1-54
I-8 C.B. 2-2A & B	5-1-52	A-1-54	12-1-54
T-35	1-2-56	P-1-54	12-1-54
RT-1	1-3-55	SB-1-47	1-20-48
DR-1	1-3-55	AS-1-54	12-1-54

**SUPPLEMENTAL SPECIFICATIONS**

B-119	Rev.	12-14-55
L-209.12		7-17-54

File No. 170-R  
Ric-546-(4.82-5.01)(6.51)  
Date of Letting \_\_\_\_\_  
Contract No. \_\_\_\_\_



**PROPOSED STRUCTURE**

Type: Continuous reinforced concrete slab with capped pile substructure  
 Spans: 38'-47.5"-38' ½ bearings  
 Roadway: 32'-0" w/ guard rails  
 Load Frequency: CF=30(51)  
 Skew: 15° L.F.  
 Wearing Surface: Bituminous  
 Approach Slabs: A3-1-54(15' long)  
 Alignment: Tangent

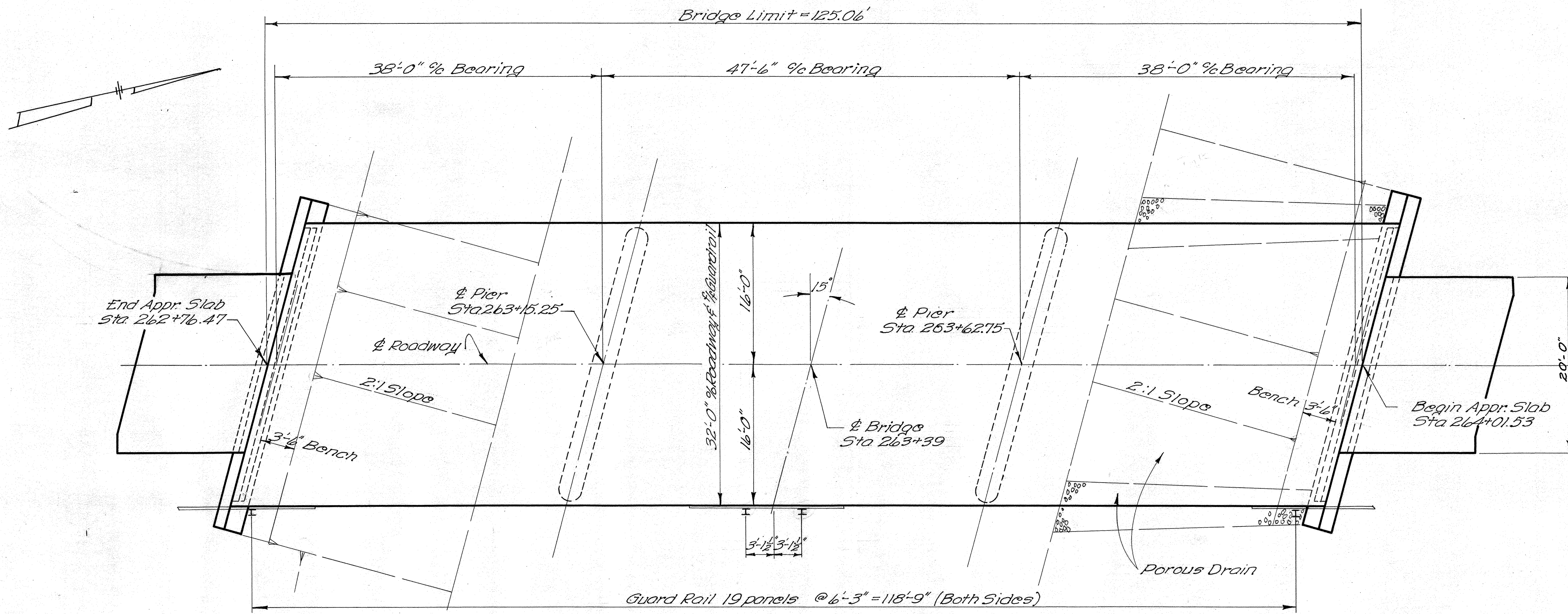
**Existing Bridge Data**

Type: High Truss and Low Truss  
 Spans: 92'-7" and 32'  
 Skew: None  
 Roadway: 14'-0" and 13'-10"  
 Wearing Surf: 3"x6" strip floor  
 Loading: Reduction 55% of legal load 6-26-50  
 Condition: Fair to Poor

Drainage Area 36.0 Sq. Mi.

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES					
<b>SITE PLAN</b>					
BRIDGE NO. RIC-546-0498 OVER CEDAR FORK BRANCH OF MOHICAN RIVER RICHLAND CO. S.R. 546			STA. 262+76.47 264+01.53		
SCALE 1"=20'					
PRESENT TOPOGRAPHY			PROPOSED WORK		
SURVEYED <small>(Revised Survey)</small>	DRAWN <small>(Revised Drawing)</small>	DESIGNED D/C	DRAWN D/C	CHECKED D/H	REVIEWED O.E.D.
BFG			J.P.H. 2-29-56		

RICHLAND COUNTY  
R/C-546-(4.82-5.0)(6.51)



GENERAL PLAN

GENERAL NOTES

REFERENCE shall be made to Standard Drawings CS-1-54, A-1-54, and P-1-54, all revised 12-1-54.

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic, the existing structure shall be removed. The forward abutment shall be removed to 3 feet below proposed grade elevation, and the pier and rear abutment shall be removed to proposed ground line. Suitable waste masonry shall be placed in embankment fill and in channel as shown on the Site Plan. The remainder of the removed materials shall become the property of the contractor.

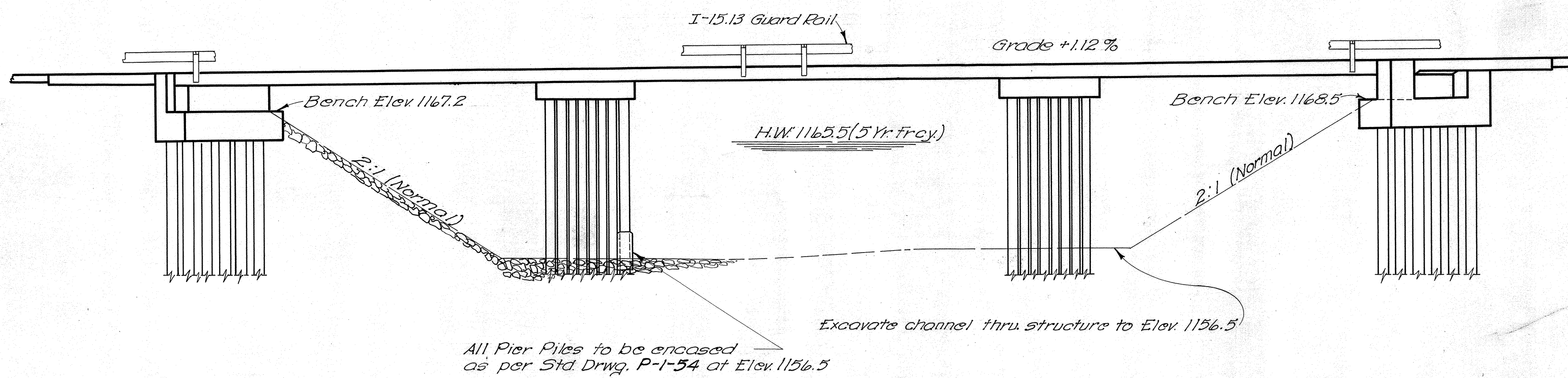
PILES shall be driven to a minimum bearing capacity of 32 tons for the abutments and 36 tons for the piers. The length of penetration of every pile shall be at least 80% of the estimated average penetration of the piles in the pertinent pier or abutment as indicated on the plans unless a lesser penetration is approved by the Director.

POROUS DRAINS, extending from face of abutment to elevation 1156.5, shall be placed at both corners of forward abutment as shown in plans. The drains shall be 3 ft wide at the low end, tapering to 4 ft wide at the face of the abutment, and one foot thick.

GRAVEL, if used as the coarse aggregate, shall be according to Sec. M-3.93 instead of M-3.91 for Class "C" concrete in the superstructure. Gravel meeting the requirements of Sec. M-3.93 also may be used for other concrete in this structure.

ASPHALTIC CONCRETE SURFACE COURSE, Item T-35 laid in two courses, shall be provided.

GALVANIZING of all members which are specified to be galvanized shall be as called for in Sec. M-7.4(d).



ELEVATION

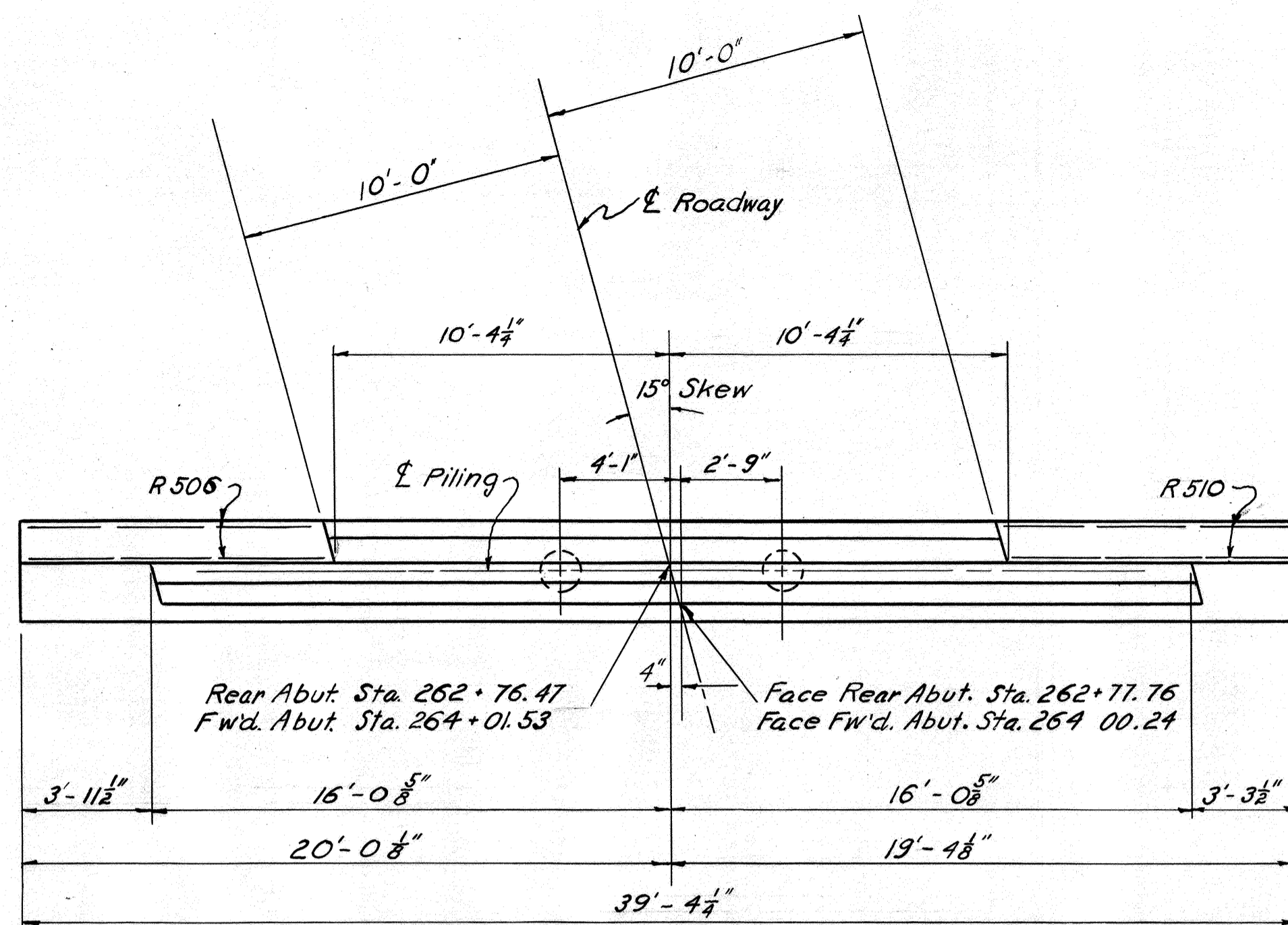
ESTIMATED QUANTITIES									
Item	Total	Unit	Description	Sup'str.	Abut.	Piers	Gen.	As	Built
E-2	61	Cu.Yd.	Unclassified excavation		61				
E-3	2282	Cu.Yd.	Channel excavation				2282		
S-1	227	Cu.Yd.	Class "C" concrete, superstructure & pier caps	215		12			
S-1	39	Cu.Yd.	Class "E" concrete, abutments		39				
S-3	485	Sq.Yd.	Type "C" waterproofing	485					
S-4	55,127	Lb.	Reinforcing steel	47,121	4,315	3,565	126		
S-14	250.12	Lin.Ft.	Roiling (Type I-15.13 with galvanized steel posts and bolts)	250.12					
S-16	Lump	Sum	First test piles.				Lump		
S-18	780	Lin.Ft.	14" Cast-in-place reinforced concrete piles		300	480		C-1, 682	146.2
S-24	Lump	Sum	Removal of existing structure				Lump		
S-29	12	Cu.Yd.	Porous drains on embankment slopes				12	C-1, 108	1.2
S-29	12	Cu.Yd.	Porous backfill		12				
T-10	828	Cu.Yd.	Dumped rockfill (As per plan)				828	C-1, 100	728
T-35	28	Cu.Yd.	Asphaltic concrete surface course Type "A" or "C" (85-100)	28					

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

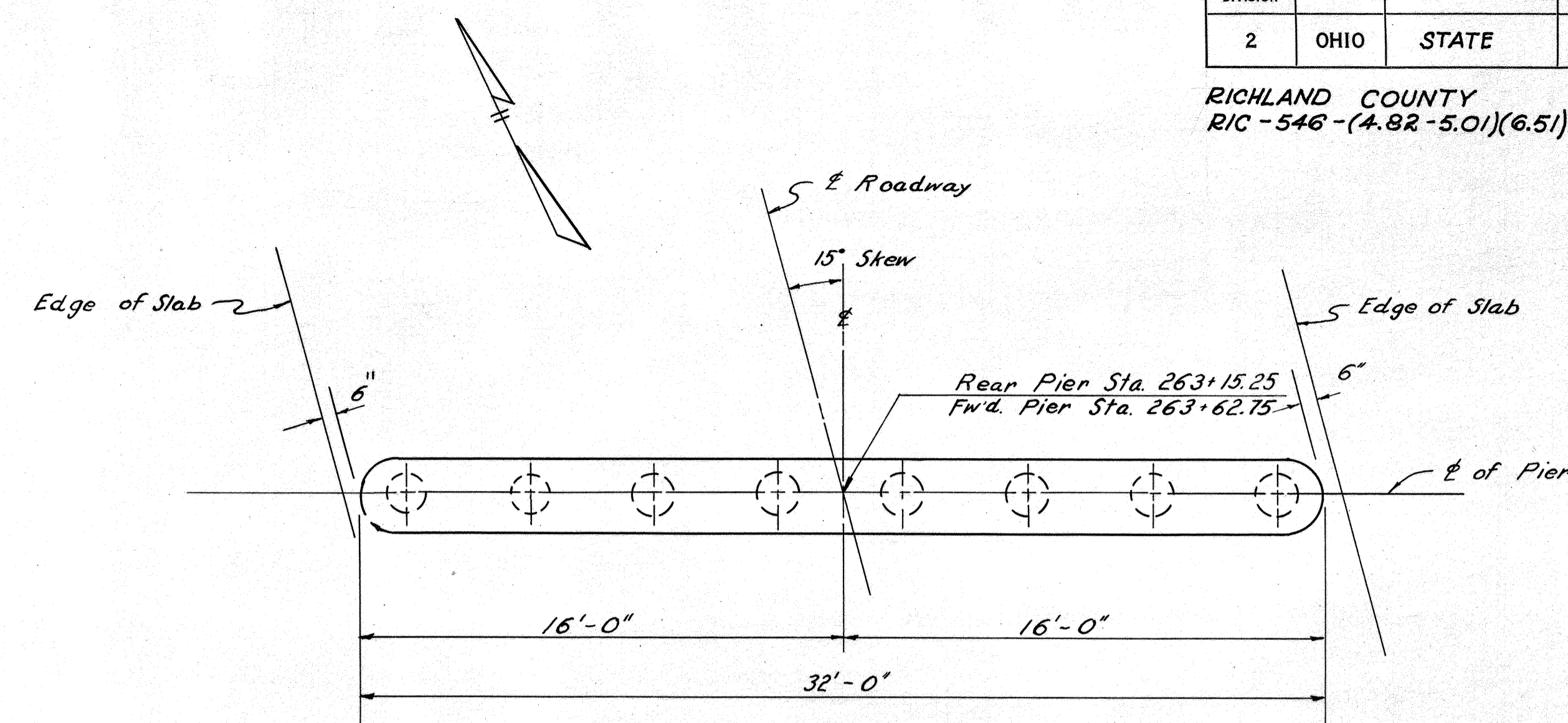
GENERAL PLAN & ELEVATION  
NOTES & ESTIMATED QUANTITIES  
BRIDGE No. RIC-546-0498  
OVER  
CEDAR FORK BRANCH of MOHICAN RIVER  
RICHLAND COUNTY STA. 262+76.47  
STA. 264+01.53

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S.Y.	S.Y.	R.H.B.	R.V.H.	B.F.G.	2-29-56	

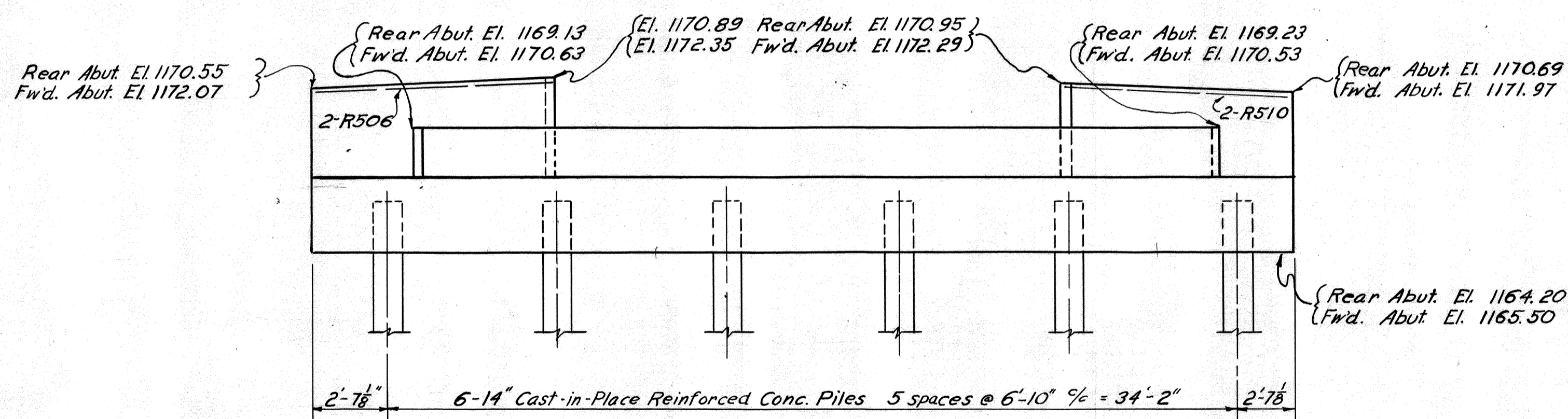
RICHLAND COUNTY  
RIC-546-(4.82-5.01)(6.51)



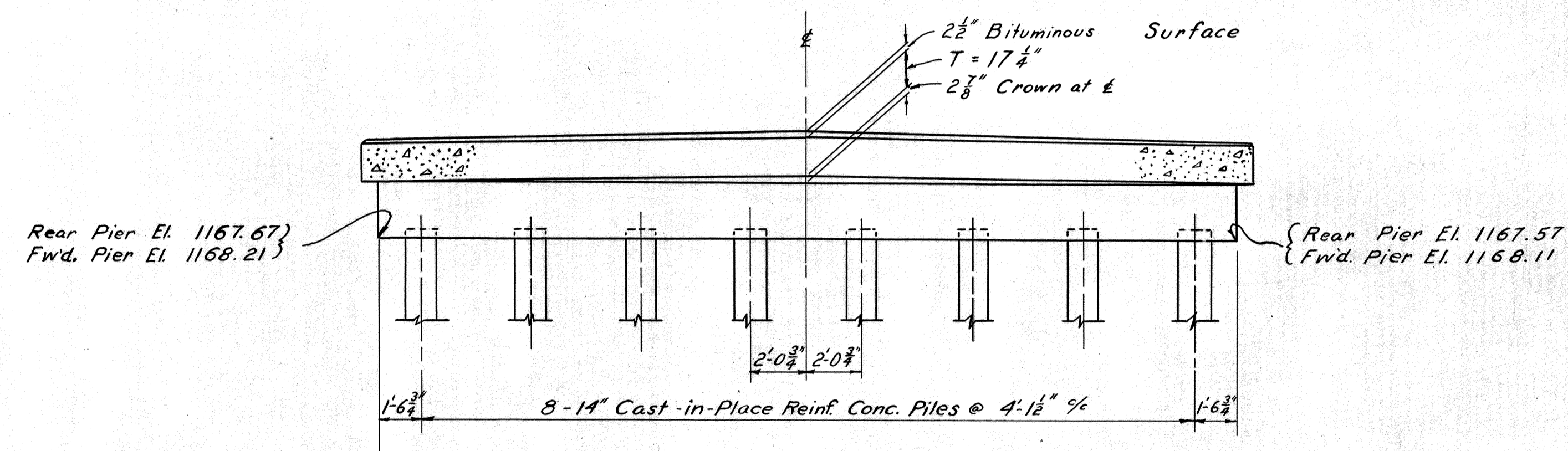
ABUTMENT PLAN



PIER PLAN



ABUTMENT ELEVATION



PIER ELEVATION

REPLACEMENT BARS				
MARK	NO.	LENGTH	WEIGHT	SHIP
RE401	1	5'-3"	4	S
RE501	1	5'-7"	6	S
RE601	1	5'-11"	9	S
RE701	1	6'-2"	13	S
RE801	1	6'-6"	17	S
RE901	2	6'-10"	46	S
RE1001	1	7'-2"	31	S

REINFORCING STEEL LIST												
MARK	NO.	LENGTH	WEIGHT	SHIP	BENDING DIAGRAMS		MARK	NO.	LENGTH	WEIGHT	SHIP	
ABUTMENT												
R401	48	5'-5"	174	B			P503	8	6'-4"	53	B	
R501	16	20'-3"	338	S			P701	96	4'-0"	785	S	
R502	116	6'-7"	797	B			P901	8	29'-6"	802	S	
R503	8	16'-8"	139	S			P1001	8	32'-6"	1119	S	
R504	24	5'-4"	134	S			SUPERSTRUCTURE					
R505	28	7'-11"	231	B			A 911	93	43'-6"	13755	S	
R506	4	9'-0"	38	S			B 911	32	30'-2"	3282	B	
R507	16	5'-1"	85	S			C 911	30	26'-9"	2729	B	
R508	16	6'-8"	111	B			D 911	16	27'-6"	1496	S	
R509	16	8'-5"	141	B			E 911	15	19'-10"	1012	S	
R510	4	8'-8"	36	S	F 1011	68	29'-9"	8705	S			
R801	16	20'-9"	886	S	G 1011	34	16'-8"	2438	S			
PIERS												
P401	64	5'-5"	232	B	H 1011	32	11'-7"	1595	S			
P501	4	29'-6"	123	S	J 601	34	26'-9"	1366	S			
P502	48	9'-0"	451	B	K 601	17	22'-1"	564	S			
					M 601	132	32'-7"	6460	S			
					N 601	76	32'-7"	3719	S			

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

**ABUTMENT & PIER DETAILS  
REINFORCING STEEL LIST**

BRIDGE NO. RIC-546-0498 over  
CEDAR FORK BR. of MOHICAN RIVER  
RICHLAND COUNTY Sta. 262+76.47  
Sta. 264+01.53

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
S. Y.	S. Y.	D.A.S.	R.V.H.	BFG	Q. 7. 2-29-56	