STATE OF OHIO
DEPARTMENT OF HIGHWAYS

F-606(9)

JUL 1 1963
GROUND PHOTOLAB

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-606(9)	

1
421

ROSS COUNTY
JACKSON COUNTY
ROS-35-(34.38-35.11)
JAC-35- 0.00

Note: Total sheet No. 403 appearing elsewhere in these plans shall be considered to be No. 421.

ROS-35-(34.38-35.11)-JAC-35- 0.00

JEFFERSON & JACKSON TOWNSHIPS

ROSS COUNTY - JACKSON COUNTY

LIMITED ACCESS

This improvement is especially designed for through traffic and has been declared a limited access highway or freeway by action of the Director of Highways in accordance with the provisions of Section 5511.02 of the Revised Code of Ohio.

CONVENTIONAL SIGNS

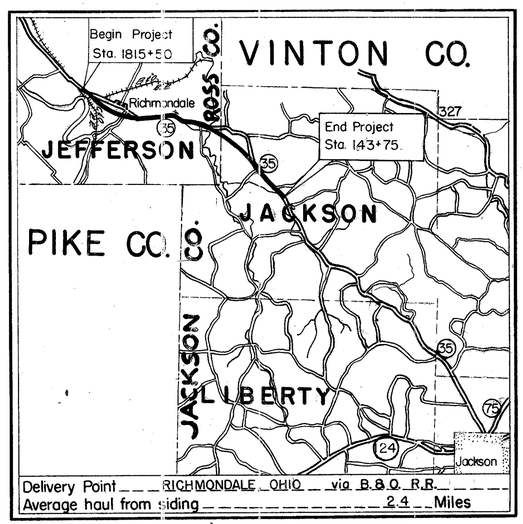
State Line
County Line
Township Line
Section Line
Center Line
Corporation Line
Fence Line
Guard Rail (existing)
Guard Rail (proposed)
Steam Railroad
Power Poles
Telephone Poles
Trees or Stumps (existing)
Trees or Stumps (to be removed)

INDEX OF SHEETS

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Roadside Rest Area Details	406-421

LINE DATA

Begin Project	Sta. 1815+50	
Equation	Sta. 2004+66.89 Back Ross Co. = 0+00 Ahead Jackson Co.	
Gross Length of Proj. in Ross Co.	18,916.89 Lin. Ft.	
Equation	Sta. 0+00 Ahead Jackson Co.	
End Project	Sta. 143+75 in Jackson Co.	
Gross Length of Proj. in Jac. Co.	14,375 Lin. Ft.	
Total Gross Length of Project	33,291.89 Lin. Ft.	
Deduct for Equation		
Sta. 1883+05.40 Back = 1883+55.40 Ahead	50.00 Lin. Ft.	
Net Length of Project	33,241.89 Lin. Ft.	or 6.295 Miles
Add for Approaches		
Sta. 1814+90 - 1815+50 (Work Length)	60.00 Lin. Ft.	
Sta. 143+75 - 149+29.75 (Work Length)	554.75 Lin. Ft.	
Lt. & Rt. ℄ 1860+46	763.63 Lin. Ft.	
Lt. & Rt. ℄ 1976+43.98	647.78 Lin. Ft.	
Net Length of Work	35,268.05 Lin. Ft.	or 6.679 Miles



LOCATION MAP

SCALE OF MILES

0 1 2 3 4 5 6 7

Portion to be improved
State Roads
Other Roads

SCALES

Plan	1"=50'
Profile: Horizontal	1"=50'
Profile: Vertical	1"=10'
Cross Sections	1"=10'

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 to traffic of the highway and that provisions for maintenance and safety of traffic will be as set forth on these plans and estimates.

Approved Paul M. Miller P.E. 11116
Date 6-25-58 Division Deputy Director

Approved E. H. Makemeyer
Date 8-28-58 Deputy Director of Planning & Programming

Approved D. A. Brennan
Date 8-22-58 Engineer of Bridges

Approved R. E. Shultz
Date 8-25-58 Engineer of Location & Design

Approved R. E. Mashuda
Date 8-25-58 Deputy Director of Design & Construction

Approved George J. Thompson
Date 8-28-58 First Assistant Director

Approved W. M. Mill
Date 8/28/58 Director of Highways

Revised cross section Sheet No. 232. 12-10-58 R.E.C.

Revised Sheets No. 361 & No. 362 5-26-59 R.L.D.

File No.	ROSS & JACKSON COUNTIES	ROS-35-(34.38-35.11) JAC-35-0.00
	Date of Letting	19
	Contract No.	

Supplemental Prints of Standard Construction Drawings

I-8 C.B. 2-2-ABB	8-1-56	B-T-50-70-71E No. 1	10-1-47	L-1	4-1-50	S-27 P.C. 3	2-20-45	R.R.A. No. 1	1-20-58
I-8 M.H. No. 1	5-1-52	B-T-71R	3-2-53	L-3	4-1-50	S-27 P.C. 4	1-4-54	R.R.A. No. 2	1-20-58
I-8C.B. No. 5	7-1-58	DR-1	1-3-55	L-3-A	4-1-50	I-15 No. 1	8-1-55	R.R.A. No. 3	1-20-56
SP-53	7-21-53	G-7.07	6-1-56	RI-1	7-15-58	I-15 No. 2A	6-1-57	R.R.A. No. 4A	1-20-58
CSB-2-56 Sheets I, 2, 3 & 8	8-1-58	I-1, 2, 3, 4 & 5	4-24-58	T-35	1-2-56	S-27 P.C. 1	5-1-52	R.R.A. No. 4B	1-20-58
AS-1-54	12-1-54	I-146	1-22-52	T.J.	5-1-56	S-27 P.C. 2	3-15-48	R.R.A. No. 4C	4-24-58
RB-1-55	3-1-55	F-1	4-1-57	L.J. No. 1	7-1-55	I-8 C.B. No. 3	5-1-52	I-12	7-1-54

Supplemental Specifications

b-119	Rev. 8-11-57
E-101	1-1-57
5	6-8-55
18	Rev 2-6-57
9	6-24-58
M-106.6 (d)	Rev. 4-1-58
M-208.6 (b)	5-25-56

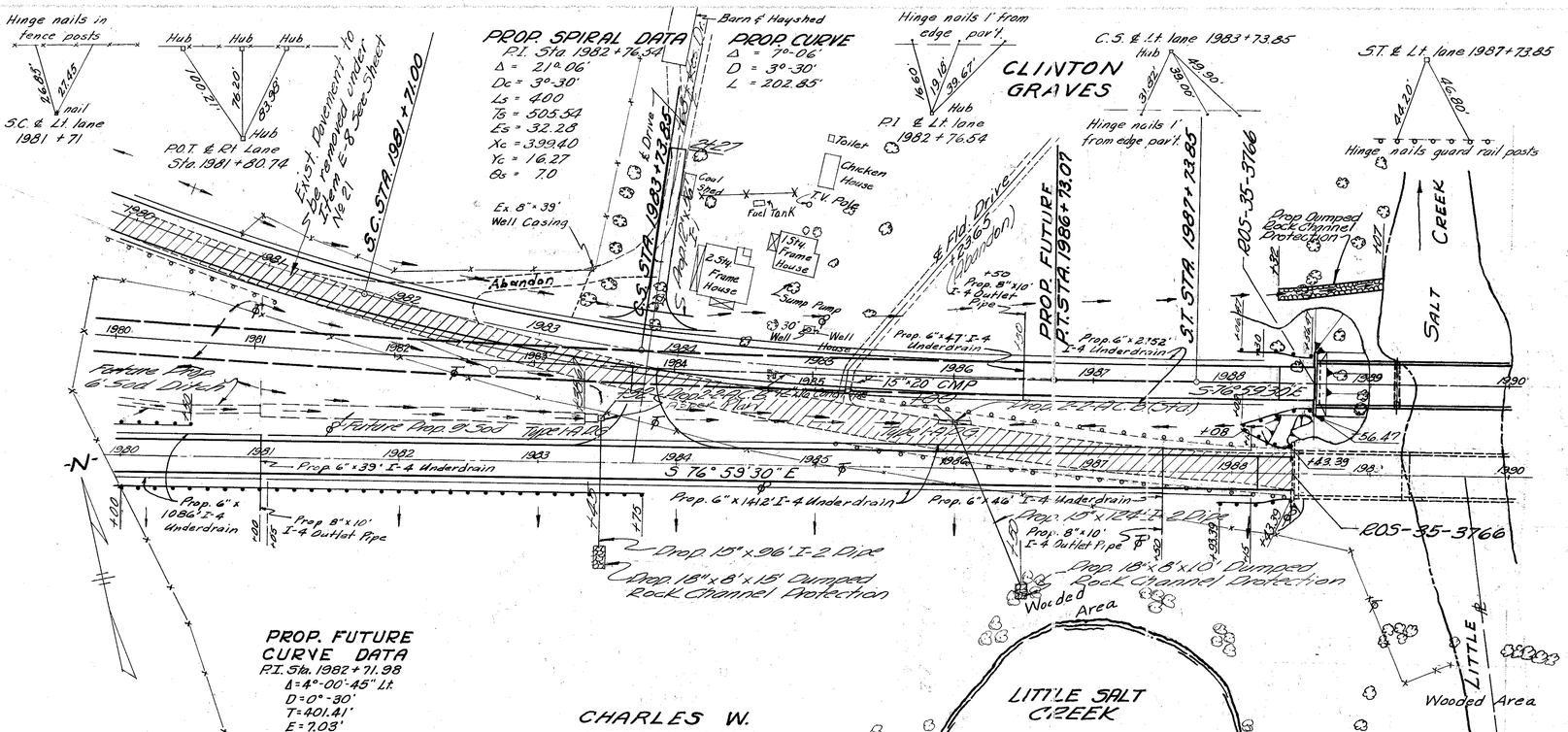
JUL 1 1963
GROUND PHOTOLAB

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:

DIVISION ENGINEER DATE

ROSS-JACKSON-COUNTIES
ROS-35-(39-38-35-11)
JAC-35-(0-00)

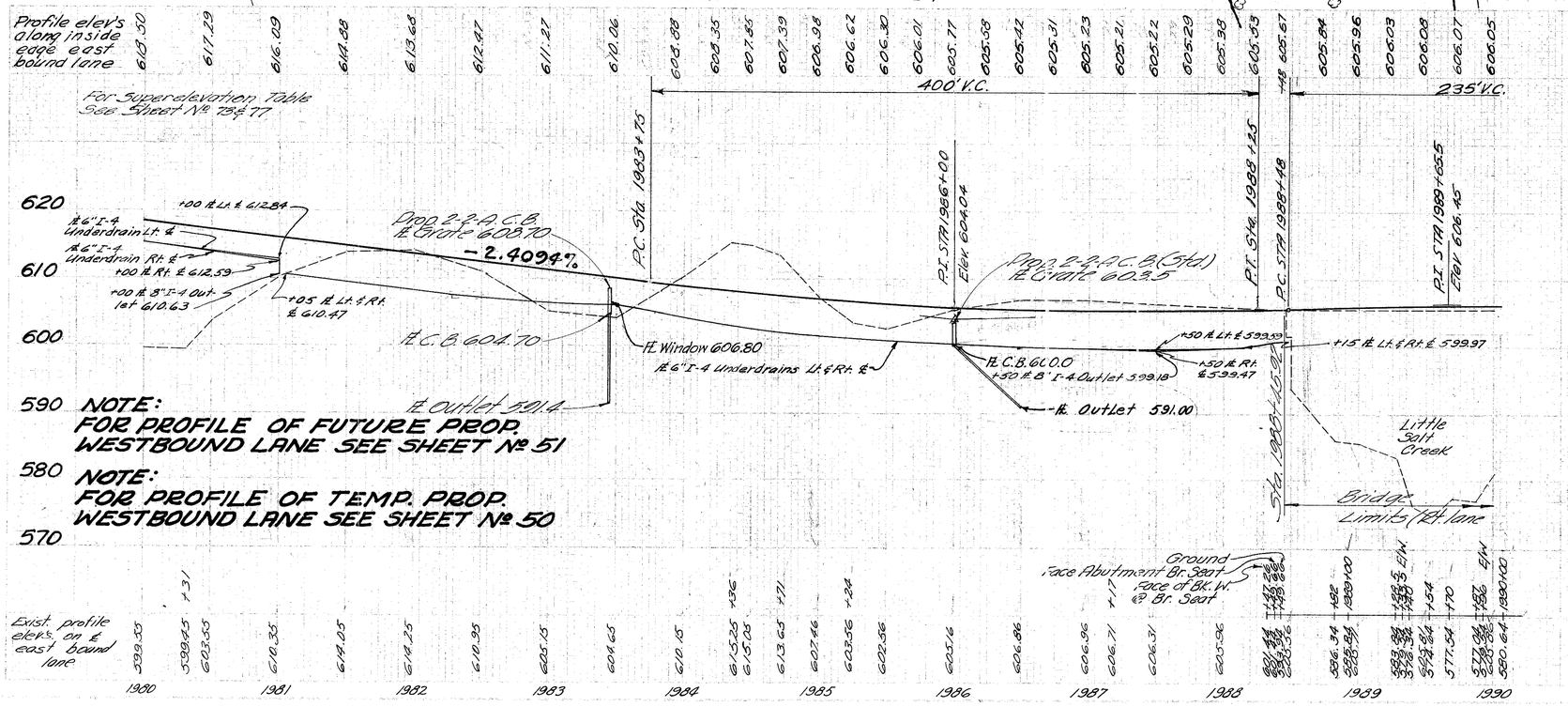


EXISTING STRUCTURE DATA

Bridge No.	ROS-35-3765
Type	Steel Beam
Clear Spans	2@15'-0" I@74'-0"
Roadway	29'-3"
Condition	Fair
Skew	2° L.C.
Loading	S-141-46
Suff. Rating	99

PROPOSED STRUCTURE

TYPE: New Bridge - Continuous Steal Beam with Reinforced Concrete Deck, T-type Piers, and Capped Pile Abutment. Existing Bridge - New Reinforced Concrete Deck on Existing Steel Beams & Substructure.
SPANS: New Bridge - 64'-80'-64' ℄ Brgs.
Existing Bridge - 77.5'-77.5'-76.5' ℄ Brgs.
ROADWAY: 2@30'-0" ℄ 2' Nom. Safety Curbs.
LOAD FREQUENCY: CF = 2000(57)
WEARING SURFACE: 1" Monolithic Concrete
SKEW: None
APPROACH SLABS: AS-1-54 (25' Long)
ALIGNMENT: Tangent



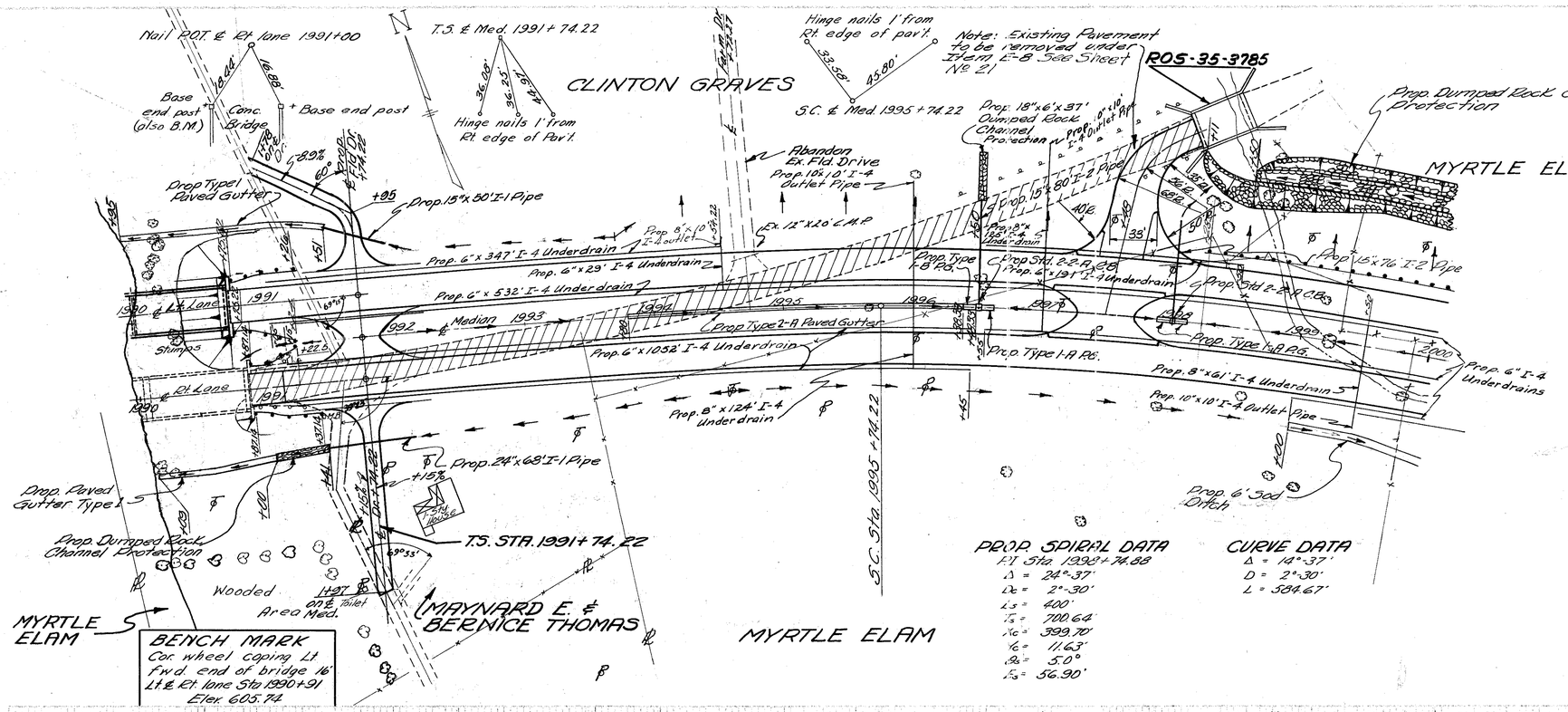
NOTE:
FOR PROFILE OF FUTURE PROP. WESTBOUND LANE SEE SHEET No 51

NOTE:
FOR PROFILE OF TEMP. PROP. WESTBOUND LANE SEE SHEET No 50

FOR ESTIMATED QUANTITIES SEE SHEETS No 13-24

STA. 1980+00 TO STA. 1990+00

ROSS-JACKSON COUNTIES
ROS-35-(34.38-35.11)
JAC-35-(0.00)



BENCH MARK
Cor. wheel coping Lt. Fwd. end of bridge 16' Lt. ℄ Rt. lane Sta. 1990+91
Elev. 605.74

PROP. SPIRAL DATA
P.I. Sta. 1993+74.88
Δ = 24°-37'
Δ1 = 2°-30'
Ls = 400'
Ts = 700.64'
Xc = 399.70'
Yc = 11.63'
Θs = 5.0°
Ls = 56.90'

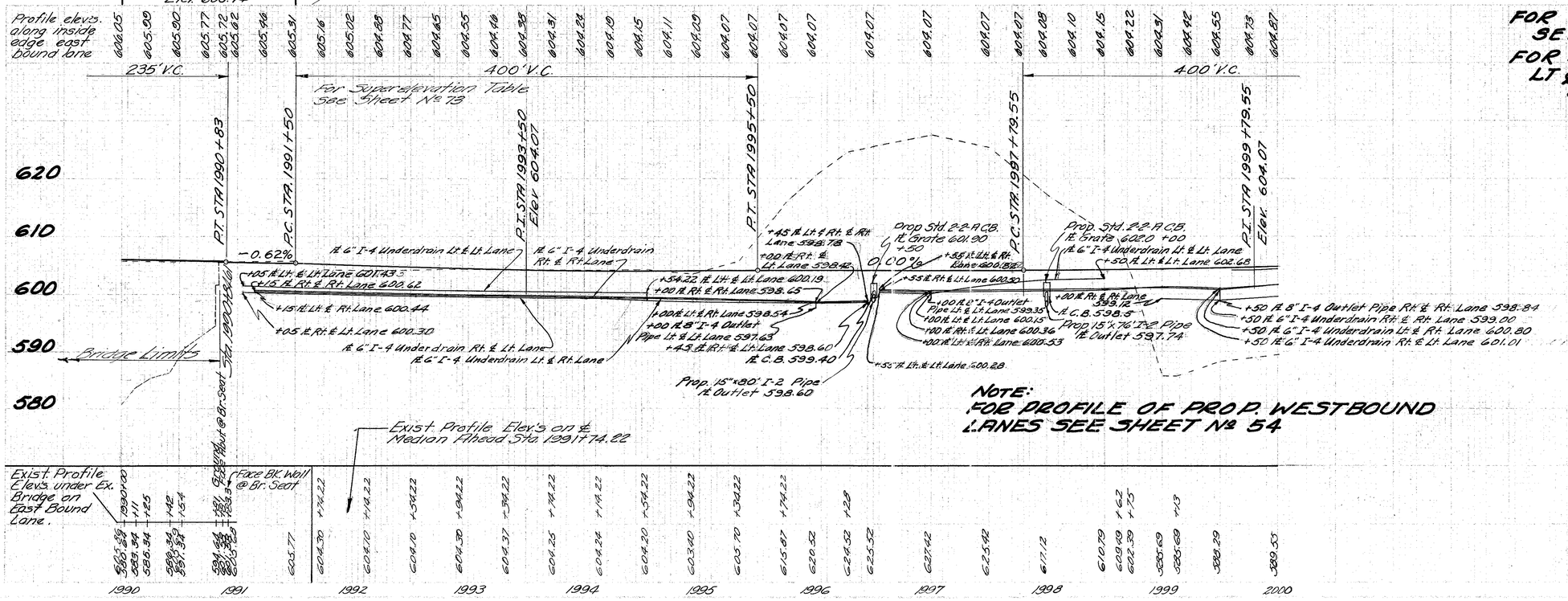
CURVE DATA
Δ = 14°-37'
D = 2°-30'
L = 584.67'

EXISTING STRUCTURE DATA

Bridge No.	ROS-35-3785
Type	Conc. Beam
Clear Span	40'-0"
Roadway	29'-0"
Condition	Good
Skew	None
Loading	S-11-46
Suff. Rating	95

FOR ESTIMATED QUANTITIES SEE SHEETS 13-24

FOR DETAIL OF CONNECTION LT ℄ STA. 1997+48 SEE SHEETS 321



NOTE:
FOR PROFILE OF PROP. WESTBOUND LANES SEE SHEET No. 54

STA. 1990+00 TO STA. 2000+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

366
403

ROSS JACKSON COUNTIES
ROS-35-(34.38-35.11)
JAC-35-(0.00)
2.8 Miles ± Southeast of Richmondale

WEST BOUND LANES
SPIRAL CURVE
P.I. STA. 1982+76.54
Δ=21°-06' Lt. Δ=7°-06'
D=3°-30' D=3°-30'
Ls=400' L=202.85'
Ts=505.54'
Es=32.28'
Xc=399.40'
Yc=16.27'
Qs=7.0'

S.T. & Lt. lane 1987+73.85
44.20' 49.80'
Hinge nails guard rail posts

S.T.=1987+73.85

T.S. & Med. 1991+74.22
36.08' 36.35' 48.74'
Hinge nails 1' from Rt. edge of Pavt.

N

LITTLE SALT CREEK

End Approach Slab
Sta. 1988+59.75

End Approach Slab
Sta. 1988+45.93

Begin Appro. Slab
Sta. 1990+72.25

Begin Approach Slab
Sta. 1990+84.61

℄ West Bound Lanes ℄

℄ East Bound Lanes ℄

℄ Prop. Median ℄

4:1 Transition

2:1

+56.47

+75.22

+43.39

+87.14

4'

24'

64'

20'

No Bench Required

+599.4

Sta. 1988+59.75

BRIDGE LIMITS

Sta. 1990+72.25

Clears assumed 5-10 year H.W. 9.3'±

B.M. COR. WHEEL COPING LT. FWD. END OF BRIDGE. ELEV. 605.74

PROFILE GRADE elevations shown are on inside edges of pavements.

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.

SPIRAL CURVE
P.I. STA. 1998+74.88
Δ=24°-37' Rt. Δ=14°-37'
D=2°-30' D=2°-30'
Ls=400' L=584.67'
Ts=700.64'
Es=56.90'
Xc=399.70'
Yc=11.63'
Qs=5.0'

EAST BOUND
WEST BOUND

E.B. P.T. Sta. 1987+98.93
E.B. P.C. Sta. 1988+48.00
W.B. Profile Grade -0.28%
Bench El. 599.5 ±
P.I. Sta. 1989+85.5
El. 606.45 E.B.
+0.64% -0.62%
Bench El. 598.9 ±
E.B. P.T. Sta. 1990+83.00
E.B. P.C. 1991+50.00

Highest Water Elev. 601.0 ℄
235' V.C. East Bound
Assumed 5-10 yr. H.W. El. 592.5 ℄
2:1 Slope
5-5 yr. High Water Elev. 587.6 ℄
Normal Water Elev. 579.6 ℄
400' V.C. East Bound
400' V.C. East Bound
El. 570.0
El. 570.0

NOTE:
Existing Profile Elevations are on ℄ of East Bound Lanes

All piles shall be 12" Cast-in-place reinforced concrete. Estimated average pay lengths are as follows:
Rear Abut. = 45' Fwd. Pier = 37'
Rear Pier = 37' Fwd. Abut. = 45'

Proposed new structure (West Bound) only shown in profile

EXISTING BRIDGE DATA

Bridge No.	ROS-35-3765
Type	Steel Beam
Span	2@75'-0" 1@74'-0"
Roadway	29'-3"
Condition	Fair
Skew	2° L.C.
Loading	5-14.1-46
Suff. Rating	99
Ht. Gr. to Pt.	45'
Ht. Gr. to H.W.	6'-3"

DRAINAGE AREA = 133. Sq. Mi.

PROPOSED STRUCTURES

TYPE: E. Bound (Existing Bridge) New reinf. conc. deck on existing steel beams & exist. sub str.
W. Bound (New Structure) Cont. Steel beam with reinf. conc. deck, T type piers & capped pile abuts.
SPANS: E. Bound 77.5'-77.5'-76.5' ℄ brgs.
W. Bound 64'-80'-64' ℄ brgs.
ROADWAY: 2 @ 30'-0" & 2 Nom. Safety Curbs
LOAD FREQUENCY: CF = 2000(57)
WEARING SURFACE: 1" Monolithic Concrete
SKEW: None
APPROACH SLABS: AS-1-54 (25' Long)
ALIGNMENT: Tangent

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN

BRIDGE NO. ROS-35-3765
OVER LITTLE SALT CREEK
ROSS CO. US-35
SEC.
STA. 1988+59.75
1990+72.25
SCALE 1" = 20'

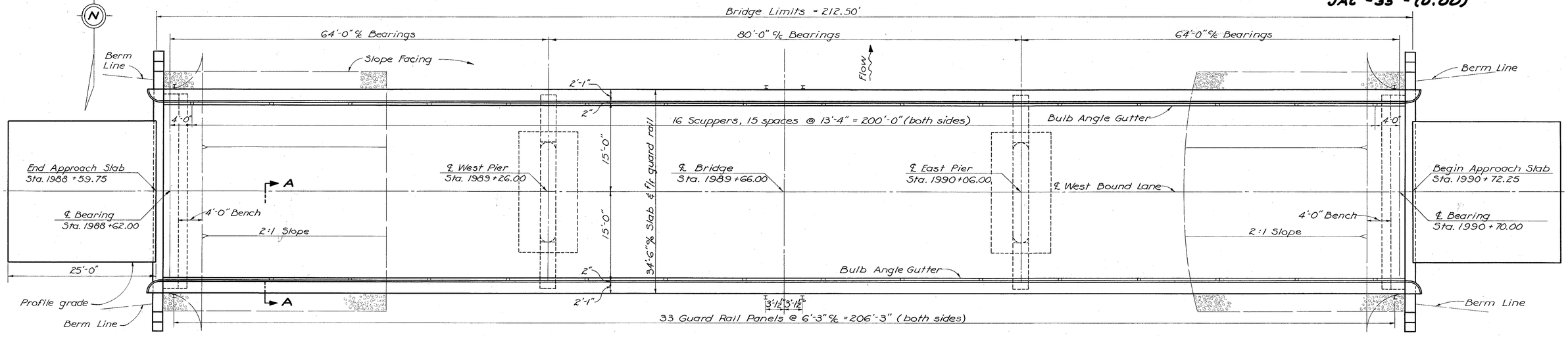
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
Aerial Survey	Aerial Survey	L.J.E.	L.J.E. D.H.S.	J.H.D.	R.E.S.

BFG 9. J. S. 3-20-58

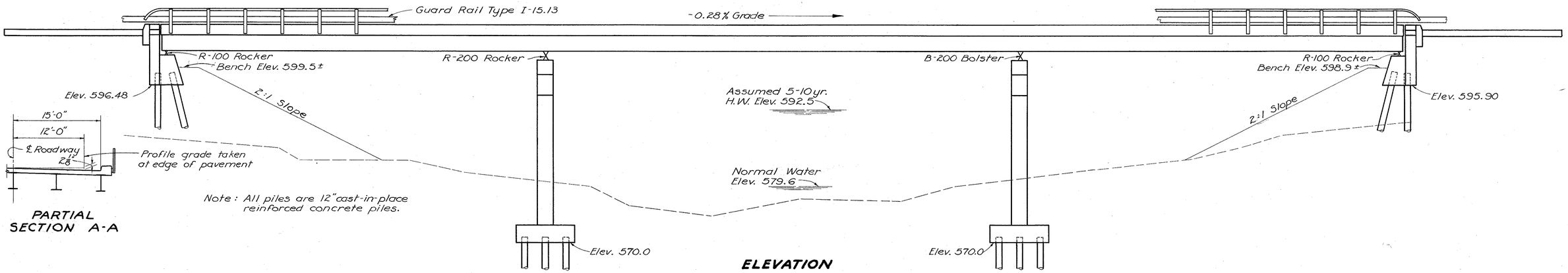
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

367
403

ROSS - JACKSON COUNTIES
ROSS - 35 - (34.38 - 35.11)
JAC - 35 - (0.00)



GENERAL PLAN



PARTIAL SECTION A-A

ELEVATION

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Superst.	Abuts.	Piers	General
E-2	Lump	Sum	Cofferdams, cribs and sheeting				Lump
E-2	278	Cu. Yds.	Unclassified excavation		73	205	
S-1	227	Cu. Yds.	Class "C" concrete, superstructure	227			
S-1	98	Cu. Yds.	Class "C" concrete, piers above footings			98	
S-1	97	Cu. Yds.	Class "E" concrete, abutments		97		
S-1	45	Cu. Yds.	Class "E" concrete, pier footings			45	
S-4	75,481	Lbs.	Reinforcing steel	60,564	5703	9214	
S-7	274,800	Lbs.	Structural steel	274,800			
S-8	274,800	Lbs.	Field painting of structural steel	274,800			
S-14	425.00	Lin. Ft.	Railing (Type I-15.13 with handrail and galvanized steel posts & bolts)	425.00			
S-16	Lump	Sum	First test pile				Lump
S-18	2230	Lin. Ft.	12" cast-in-place reinforced concrete piles		900	1330	
S-29	24	Cu. Yds.	Porous backfill		24		
S-29	117	Cu. Yds.	Slope facing (S-29.05 Type)				117

GENERAL NOTES

REFERENCE shall be made to Standard Drawings CSB-2-56, sheets 1, 2, 3 and 6, revised 3-1-58 and to Standard Drawing RB-1-55, dated March 1, 1955.

PILES shall be driven to a minimum bearing capacity of 27 tons per pile for the abutments and 40 tons per pile for the piers.

WELDED STEEL: The steel for the 33WF220 beams shall conform to ASTM Designation A-373. All other structural steel shall conform to either ASTM A-7 (as per Sec. M-7.4(a) of the Construction and Material Specifications) or to A-373.

SLOPE FACING shall be provided under the structure at both abutments. The slope facing shall be 12" thick and shall extend from the face of the abutment down to Elev. 584.0 and transversely to 3ft. outside the edges of the superstructure.

CAMBER: No camber of beams will be required.

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

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

GENERAL PLAN, ELEVATION, NOTES & ESTIMATED QUANTITIES

BRIDGE NO. ROS-35-3765

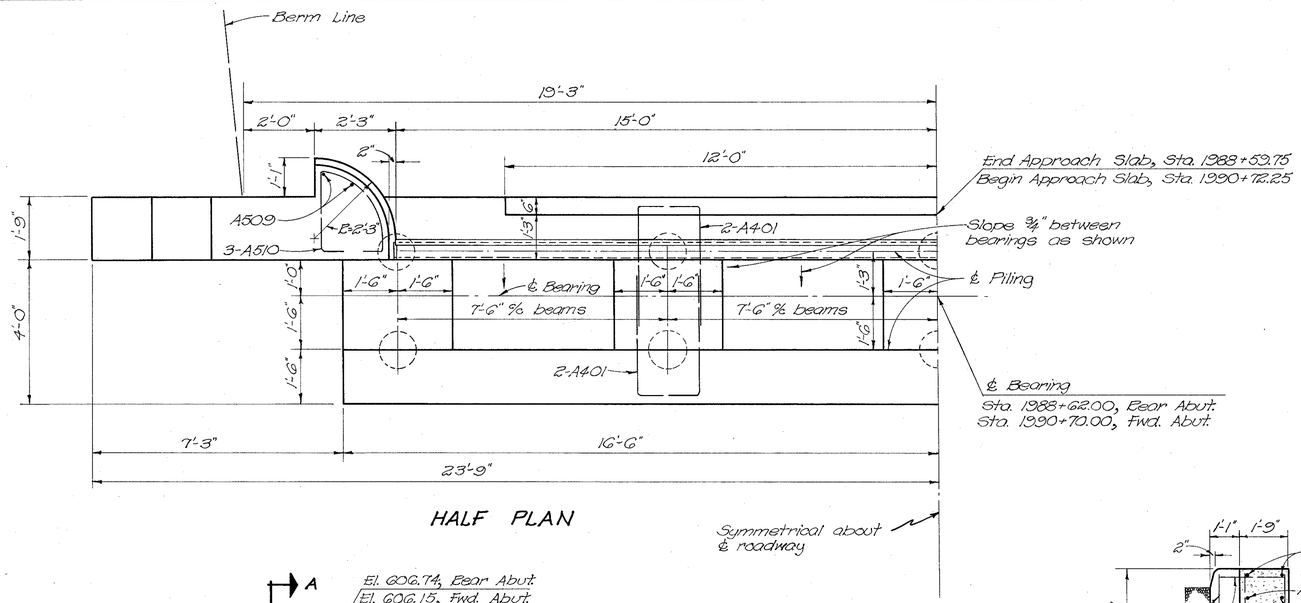
WEST BOUND LANES
OVER LITTLE SALT CREEK
ROSS COUNTY STA. 1988 + 59.75
1990 + 72.25

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
OPM H.L.C.	H.L.C.	J.G.W.	E.B.L.	BFG	3-20-58	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

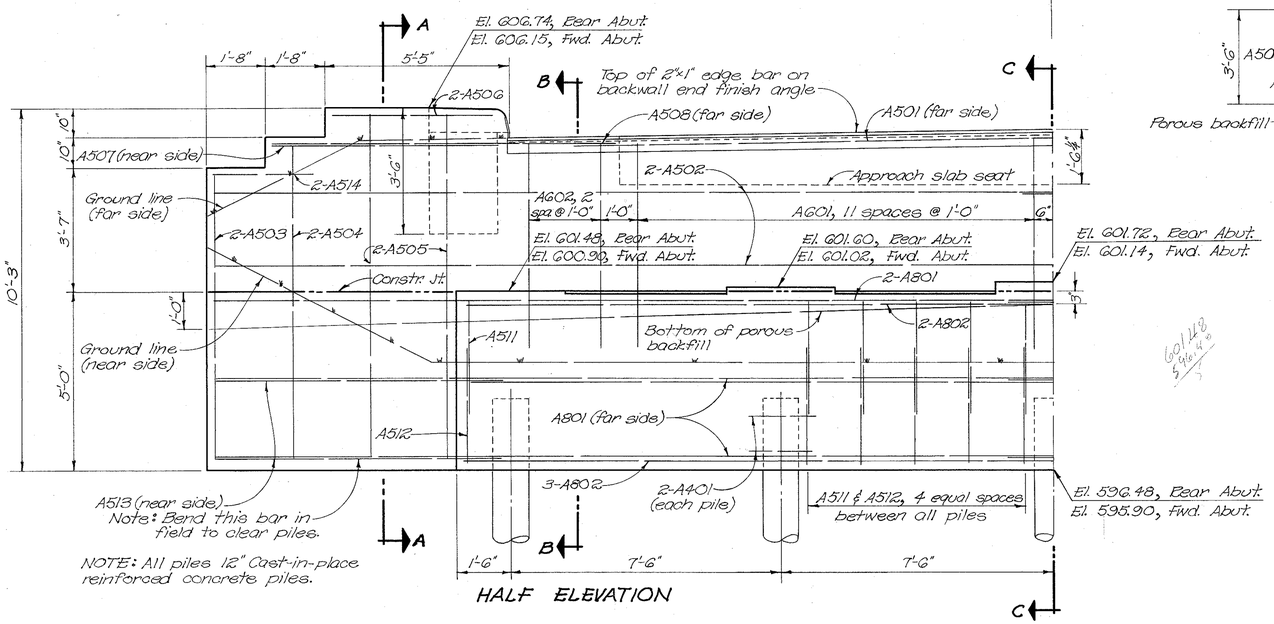
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403

ROSS - JACKSON COUNTIES
ROS - 35 - (34.38 - 35.11)
JAC - 35 - 0.00



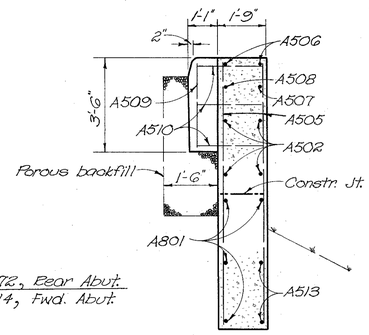
HALF PLAN

Symmetrical about ℄ roadway

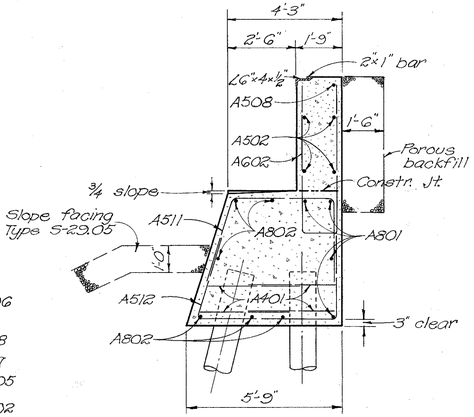


NOTE: All piles 12" Cast-in-place reinforced concrete piles.

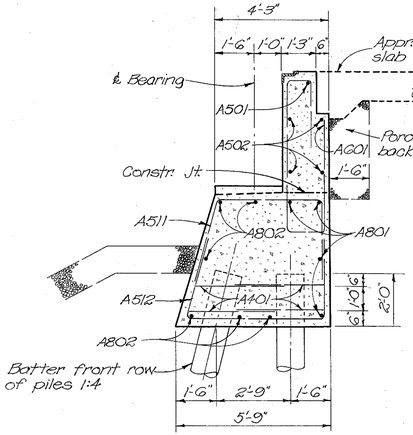
HALF ELEVATION



SECTION A-A



SECTION B-B



SECTION C-C

CONCRETE: Payment for concrete shall be on the basis of Class "E", but Class "C" concrete may be used for any or all parts of the abutment.

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 abutments, shall be considered as paid for in the bid price per cu. yd. paid for porous backfill.

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

ABUTMENT DETAILS
BRIDGE No. ROS-35-37.65
WEST BOUND LANES
OVER LITTLE SALT CREEK

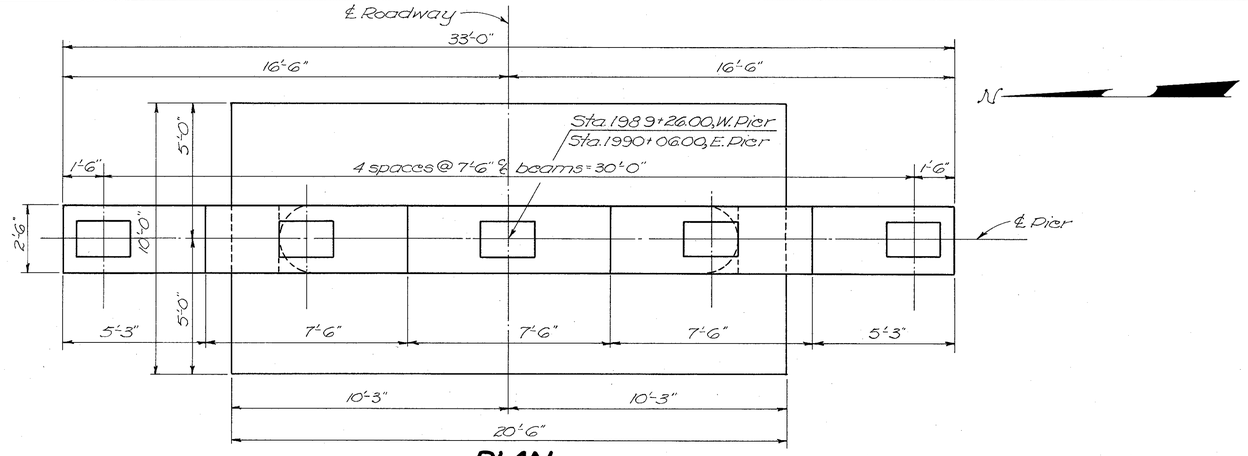
ROSS COUNTY STA. 1988 + 59.75
1990 + 72.25

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
OPM H.L.C.	OPM	E.D.M.	E.B.L.	BFG	3-20-58	

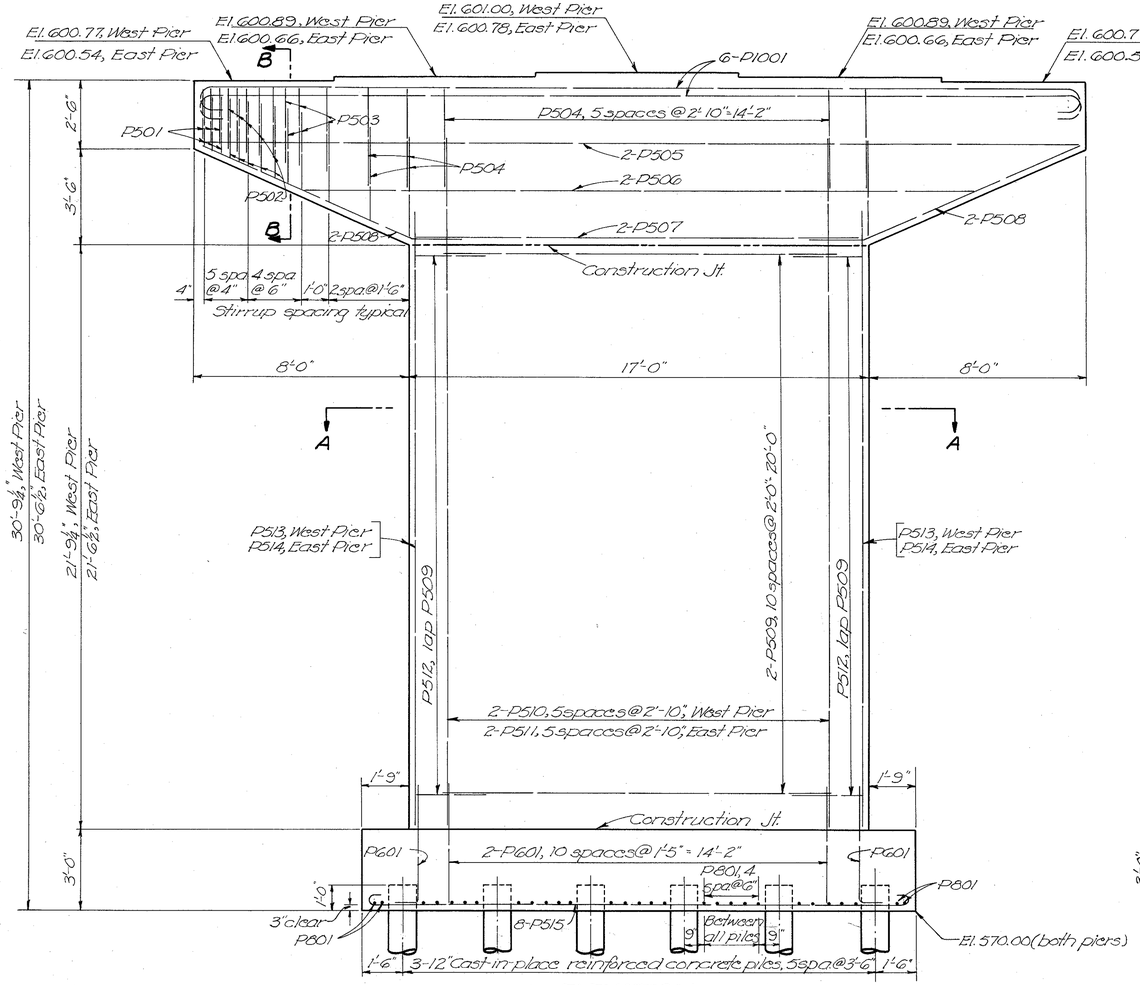
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

369
403

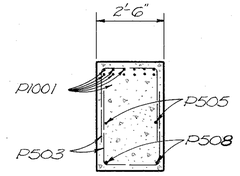
ROSS - JACKSON COUNTIES
ROS - 35 - (34.38 - 35.11)
JAC - 35 - 0.00



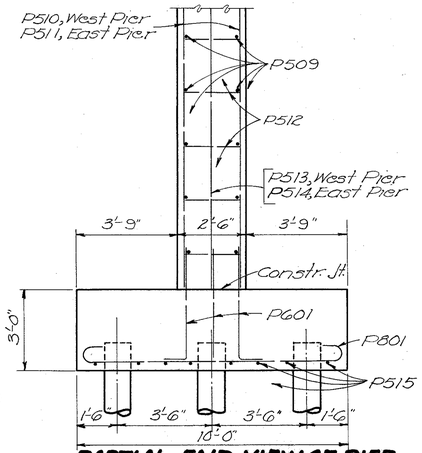
PLAN



ELEVATION



SECTION B-B

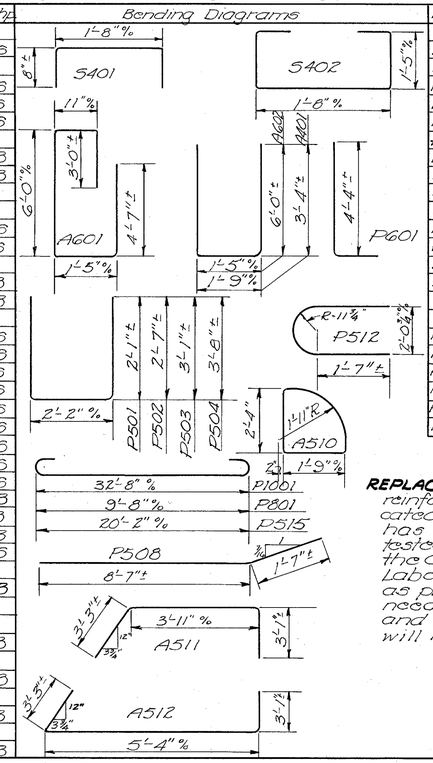


PARTIAL END VIEW OF PIER

REINFORCING STEEL LIST

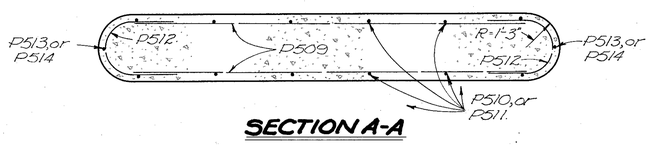
Mark	No.	Length	Weight	Shp
Superstructure				
S701	314	34'-2"	21929	S
S601	314	34'-2"	16114	S
S602	342	36'-6"	18749	S
S603	48	32'-0"	2307	S
S401	280	2'-9"	514	B
S402	280	5'-1"	951	B
Abutments				
A801	16	24'-10"	1061	S
A802	12	32'-8"	1047	S
A601	48	15'-3"	1099	B
A602	12	13'-1"	236	B
A501	2	26'-6"	55	S
A502	16	24'-5"	407	S
A503	8	8'-3"	69	S
A504	8	9'-0"	75	S
A505	16	9'-11"	165	S
A506	8	4'-11"	41	S
A507	4	6'-9"	28	S
A508	4	9'-9"	41	S
A509	8	3'-2"	26	S
A510	12	6'-6"	81	B
A511	44	10'-0"	459	B
A512	44	11'-5"	524	B
A513	8	8'-6"	71	S
A401	40	8'-2"	218	B
Piers				
P1001	24	35'-6"	3666	B
P801	58	11'-10"	1833	B
P601	48	5'-0"	360	B
P501	24	6'-1"	152	B

Bending Diagrams



Mark	No.	Length	Weight	Shp
Piers (cont'd)				
P502	40	7'-1"	296	B
P503	24	8'-1"	202	B
P504	28	9'-3"	270	B
P505	4	32'-8"	136	S
P506	4	24'-10"	104	S
P507	4	16'-10"	70	S
P508	8	10'-2"	85	B
P509	44	14'-6"	665	S
P510	12	25'-7"	320	S
P511	12	25'-4"	317	S
P512	44	6'-3"	287	B
P513	2	22'-11"	48	S
P514	2	22'-8"	47	S
P515	16	21'-4"	356	B
Replacement Bars				
RE1001	1	7'-2"	—	S
RE801	1	6'-6"	—	S
RE701	2	6'-2"	—	S
RE601	2	5'-11"	—	S
RE501	1	5'-7"	—	S
RE401	1	5'-3"	—	S

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.



SECTION A-A

CONCRETE shall be Class "C" for pier walls and Class "E" for all pier footings.

REINFORCING STEEL in the bridge seat shall be spaced to clear anchor bolts for bolsters.

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

PIER DETAILS AND REINFORCING STEEL LIST
BRIDGE NO. ROS-35-37.65
WEST BOUND LANES OVER LITTLE SALT CREEK
ROSS COUNTY STA. 1988+59.75
1990+72.25

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
OPM	OPM	[illegible]	E.B.L.	BFG	3-20-58	