

STATE OF OHIO DEPARTMENT OF HIGHWAYS

ERI - 2 - 22.24

GRADE SEPARATION WITH NORFOLK AND WESTERN RAILWAY

ERI COUNTY

BERLIN AND VERMILION TOWNSHIPS

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, REVISED CODE OF OHIO.

1971 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 THESE PLANS AND ESTIMATES.

APPROVED: H. A. Reader
DATE: 7/9/69 DIVISION DEPUTY DIRECTOR

APPROVED: C. H. Abwater
DATE: 9-9-71 ENGINEER OF BRIDGES

APPROVED: E. J. Schaper
DATE: 9-10-71 ENGINEER OF LOCATION AND DESIGN

APPROVED: H. Krause
DATE: 9/13/71 DEPUTY DIRECTOR OF DESIGN AND CONSTRUCTION

APPROVED: R. E. Neudinger
DATE: 10/6/71 DEPUTY DIRECTOR OF RIGHT-OF-WAY

APPROVED: William Sunkley
DATE: 10-29-71 DEPUTY DIRECTOR OF PLANNING AND PROGRAMMING

APPROVED: William P. McKenna
DATE: 11-2-71 FIRST ASSISTANT DIRECTOR

APPROVED: Philip D. Dwyer
DATE: 11/2/71 DIRECTOR OF HIGHWAYS

MICROFILMED
APR 1 1979
REPRODUCTION
APERTURE
CAP

MICROFILMED
APR 10 1979
REPRODUCTION
ROLL FILM

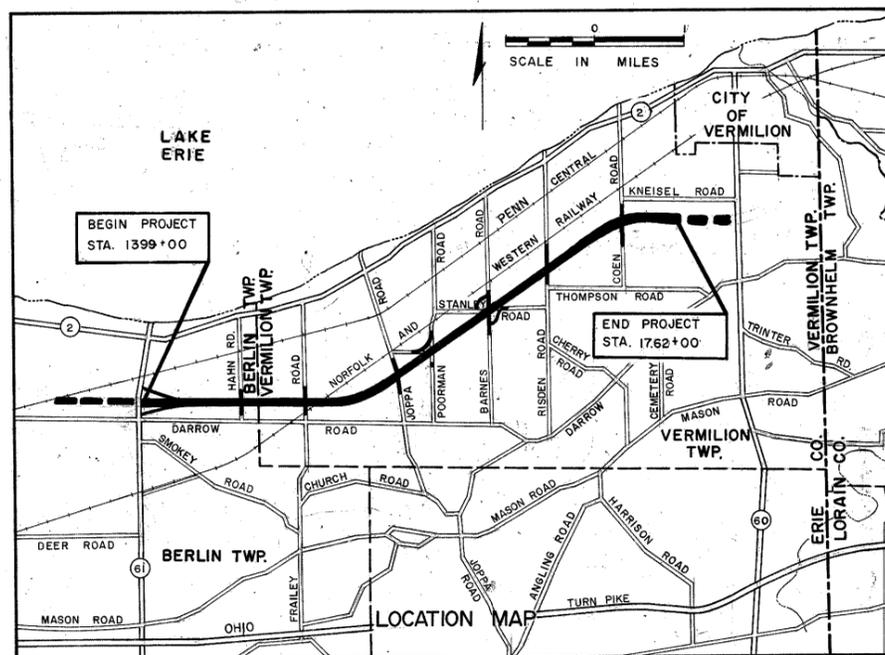
CONVENTIONAL SIGNS

COUNTY LINE	-----
TOWNSHIP LINE & CORPORATION LINE	-----
SECTION LINE	-----
CENTER LINE	-----
PROPERTY LINE	----- R ----- R -----
EXISTING RIGHT-OF-WAY	----- R/W -----
RIGHT-OF-WAY LINE	----- LA -----
LIMITED ACCESS LINE	----- LA-R/W -----
LIMITED ACCESS & RIGHT-OF-WAY LINE	-----
TEMPORARY & CHANNEL EASEMENTS	-----
WORK LIMITS	-----
FENCE LINE (EXISTING, PROPOSED)	----- x ----- x -----
EXISTING GUARD RAIL	----- o ----- o -----
GUARD RAIL	-----
POLE LINE (POWER, TELEPHONE, TELEGRAPH)	----- s ----- s -----
UNDERGROUND UTILITIES (GAS, WATER, TEL)	----- - - - - -
EXISTING TREES, STUMPS	-----
TILE & DRAIN PIPES	----- - - - - -

INDEX OF SHEETS

Title Sheet	1
General Plan	2
Schematic Plan & Design Designation	3-5
Typical Sections	6-11, 11A
Miscellaneous Details	12-13
Superelevation Table	14
General Notes	15-18
Calculations & Culvert Sub-Summary	19
Sub-Summary	20-21
General Summary	22-27
S.R. 2 Plan & Profile and Cross Sections	28-160
S.R. 61 Interchange & Pavement Details	161-169
S.R. 61	170-172
Hahn Road	173, 173A-173G
Frailey Road	174-179, 176A
Joppa Road	180-187
Ashmont-Poorman Road	188-192
Poorman Road	193
Barnes Road	194-200
Stanley Road West	201-203
Stanley Road East	204-206
Risden Road	207-214
Coen Road	215-222
Access Road	224, 226
Culvert Details	227-248
Channel & Railroad Cross Sections	249-253
Traffic Control	254-271, 264A, 264B
Lighting	272-279
Bridge Structures	279A-279G, 280-346
& Survey Plat	347-350
Right of Way	351-394, 394A, 395

NOTE: Sheets no. 223 and 225 have been deleted.



PORTION TO BE IMPROVED
STATE HIGHWAYS
OTHER ROADS

SCALES

PLAN	0" = 50'
PROFILE-HORIZONTAL	0" = 50'
PROFILE-VERTICAL	0" = 5'
CROSS SECTIONS	0" = 10'

LINE	PROJECT LENGTH	WORK LENGTH	
S.R. 2	1399+00 to 1762+00	1397+40 to 1762+00	36460 Lin. Ft.
Hahn Road		16+00 to 36+00	2000 Lin. Ft.
Frailey Road		16+50 to 31+50	1500 Lin. Ft.
Joppa Road		17+00 to 34+20	1720 Lin. Ft.
Ashmont-Poorman Road & Poorman Road		19+00 to 31+20 & 21+00 to 22+58	1378 Lin. Ft.
Access Road		26+85 to 29+90	305 Lin. Ft.
Barnes Road		17+00 to 34+00	1700 Lin. Ft.
Stanley Road West		1+75 to 11+17.45	942.45 Lin. Ft.
Stanley Road East		8+54.69 to 18+70	1015.31 Lin. Ft.
Risden Road		16+50 to 34+50	1800 Lin. Ft.
Coen Road		15+80 to 34+70	1890 Lin. Ft.
Net Length			50,710.76 Lin. Ft.
			9.604 Miles

PREPARED AND RECOMMENDED BY
FRANKLIN ENGINEERING, LIMITED
CONSULTING ENGINEERS
COLUMBUS, OHIO

FILE NO.	ERI COUNTY ERI-2-22.24 DATE OF LETTING CONTRACT NO.
----------	--

STANDARD CONSTRUCTION DRAWINGS							
DRAWING NO.	DATE	DRAWING NO.	DATE	DRAWING NO.	DATE	DRAWING NO.	DATE
BP-1	6-1-65	GB-4	9-1-69	GR-2A	1-1-71	HL-1	11-1-65
BP-2	12-1-68			GR-2B	11-9-71	HL-2	11-1-65
BP-3	1-1-71	HW-E	6-1-65	GR-5	1-1-71	HL-3	11-1-65
BP-4	1-1-71	JP-53	6-30-61	GR-6	1-1-71	HL-4	1-1-66
BP-5	1-1-71	MC-1	6-13-69	MH-1	10-1-68	AS-1-67	6-12-69
BP-6	6-1-65	MC-3	6-20-69	F-2	1-1-71	FACI-1	4-20-71
BP-7	1-1-66	MC-4	6-13-69	F-3	3-10-69	FACI-2	4-20-71
BP-8	5-20-70	MC-7	10-1-68	F-5	3-10-69	L-1	6-1-65
CB-2-2A & B	6-1-65	MC-8	12-1-67	F-6	10-1-66	MH-1A	10-1-68
				BR-1-67	10-15-71	RB-1-55	2-2-59
GR-3	11-9-71	GR-4	11-9-71	SD-1-69			6-12-69

SUPPLEMENTAL SPECIFICATIONS			
SPECIFICATION NO.	DATE	SPECIFICATION NO.	DATE
		801	1-1-69
		941	11-25-70
		808	1-1-71
		836	6-12-69
		839	11-25-70
		815	1-1-69
		816	1-1-69
		1001	1-1-69

Rev. 2-4-72
Rev. 12-2-71

Rev. 4-27-72

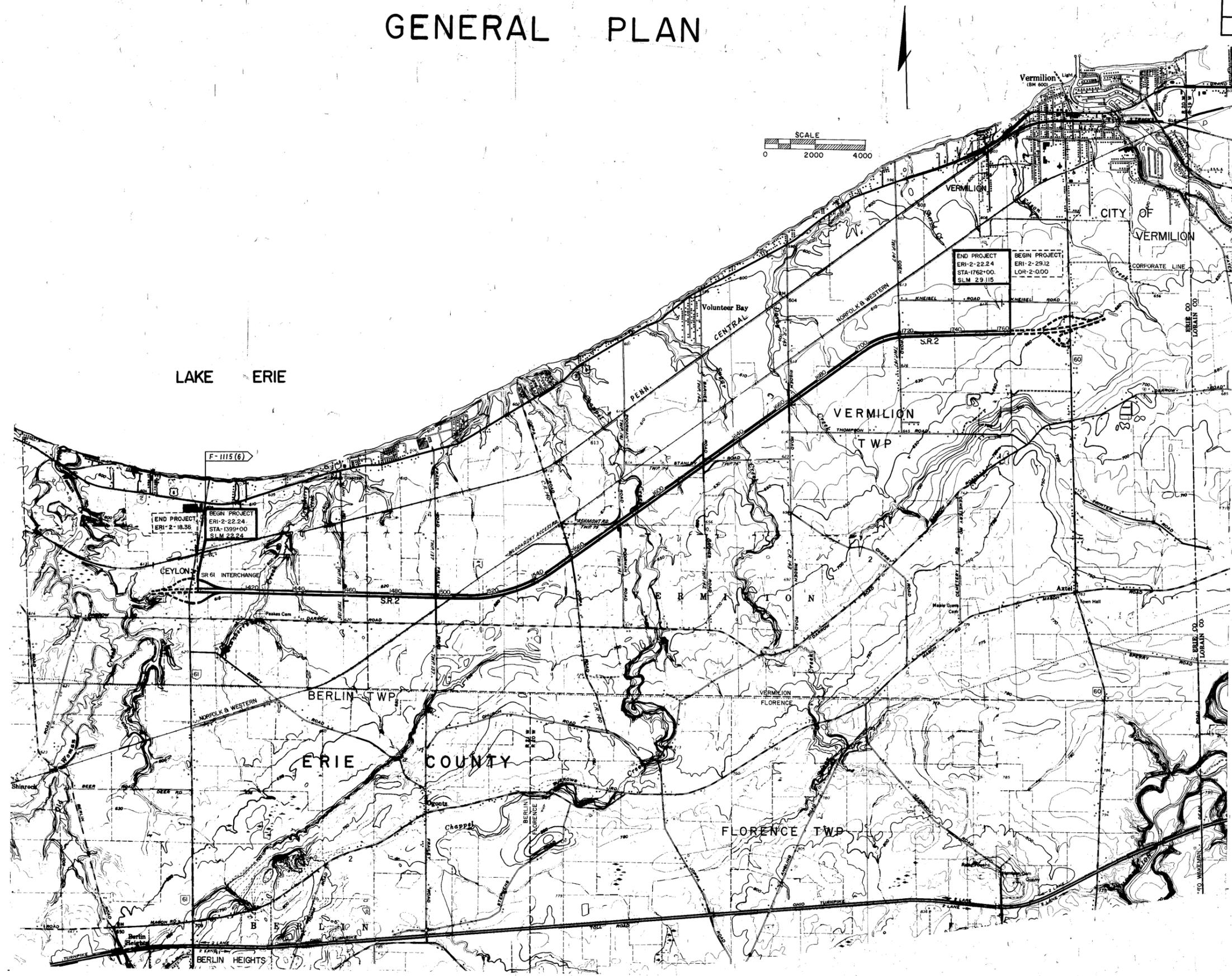
RECORDED
APR 14 1979
ERIE COUNTY

GENERAL PLAN

--	--	--	--

2
395

ERIE COUNTY
ERI-2-22.24





ERIE COUNTY
ERI-2-22.24

TRAFFIC FACTOR
 Design Year 1988
 Present Year 1967
 Percent truck during DHV - 5%
 Directional distribution factor - 0.55
 1988 to 1967 projection factor - 0.42

NOTE: Traffic volumes shown were supplied by Ohio Department of Highways by letter October 11, 1967. Distribution, truck and present year factors were forwarded by letter July 28, 1966.

DESIGN DESIGNATION

1967 ADT	7,576
1988 ADT	18,039
DHV	1,515
D (Dir. Dist.)	0.55
T (% Trucks)	5%
V (Design Speed)	70mph

DESIGN DESIGNATION

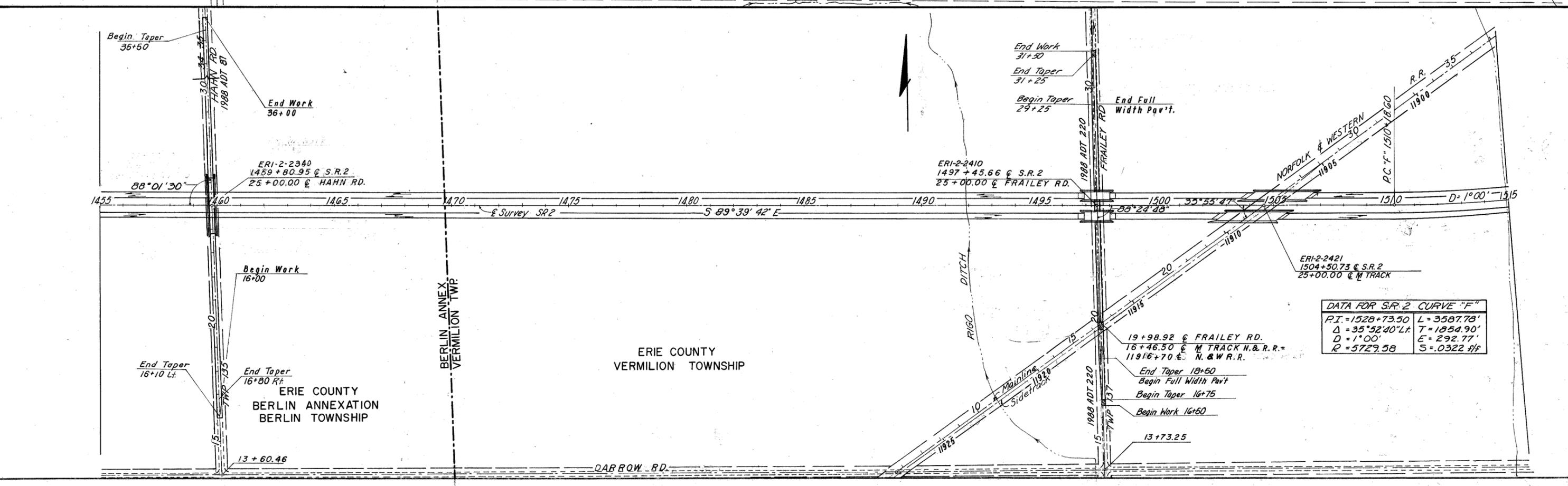
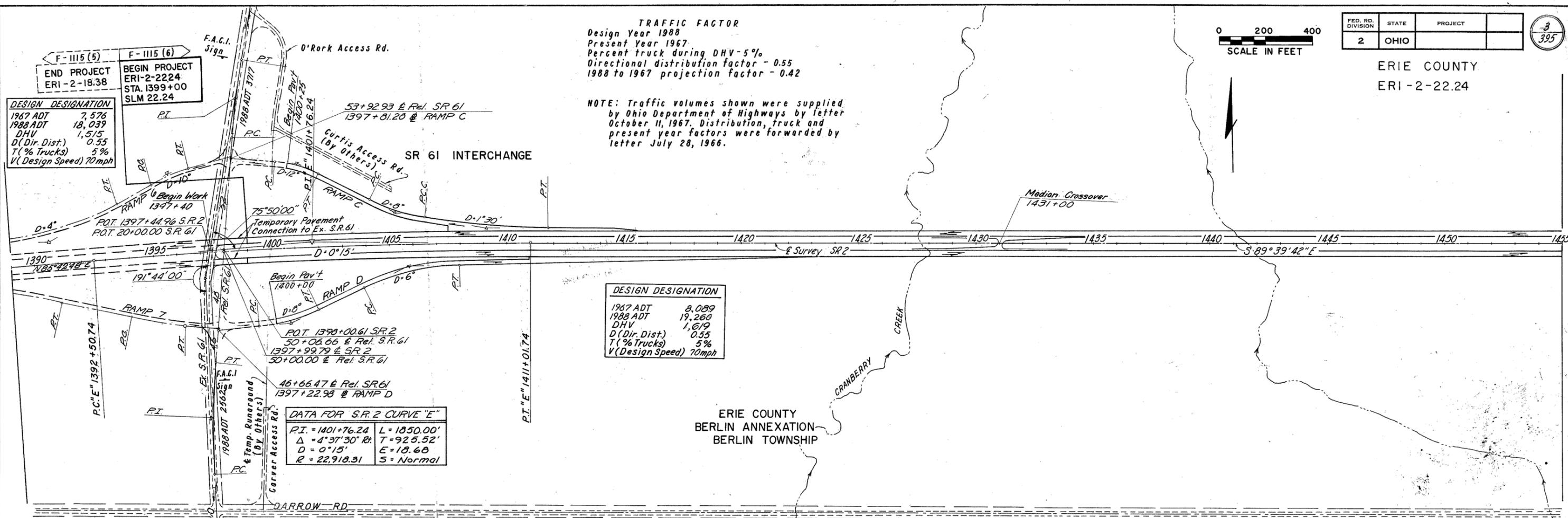
1967 ADT	8,089
1988 ADT	19,260
DHV	1,619
D (Dir. Dist.)	0.55
T (% Trucks)	5%
V (Design Speed)	70mph

DATA FOR S.R. 2 CURVE "E"

P.I.	= 1401+76.24	L	= 1050.00'
Δ	= 4°37'30" Rt	T	= 925.52'
D	= 0°15'	E	= 18.68
R	= 22,918.31	S	= Normal

DATA FOR S.R. 2 CURVE "F"

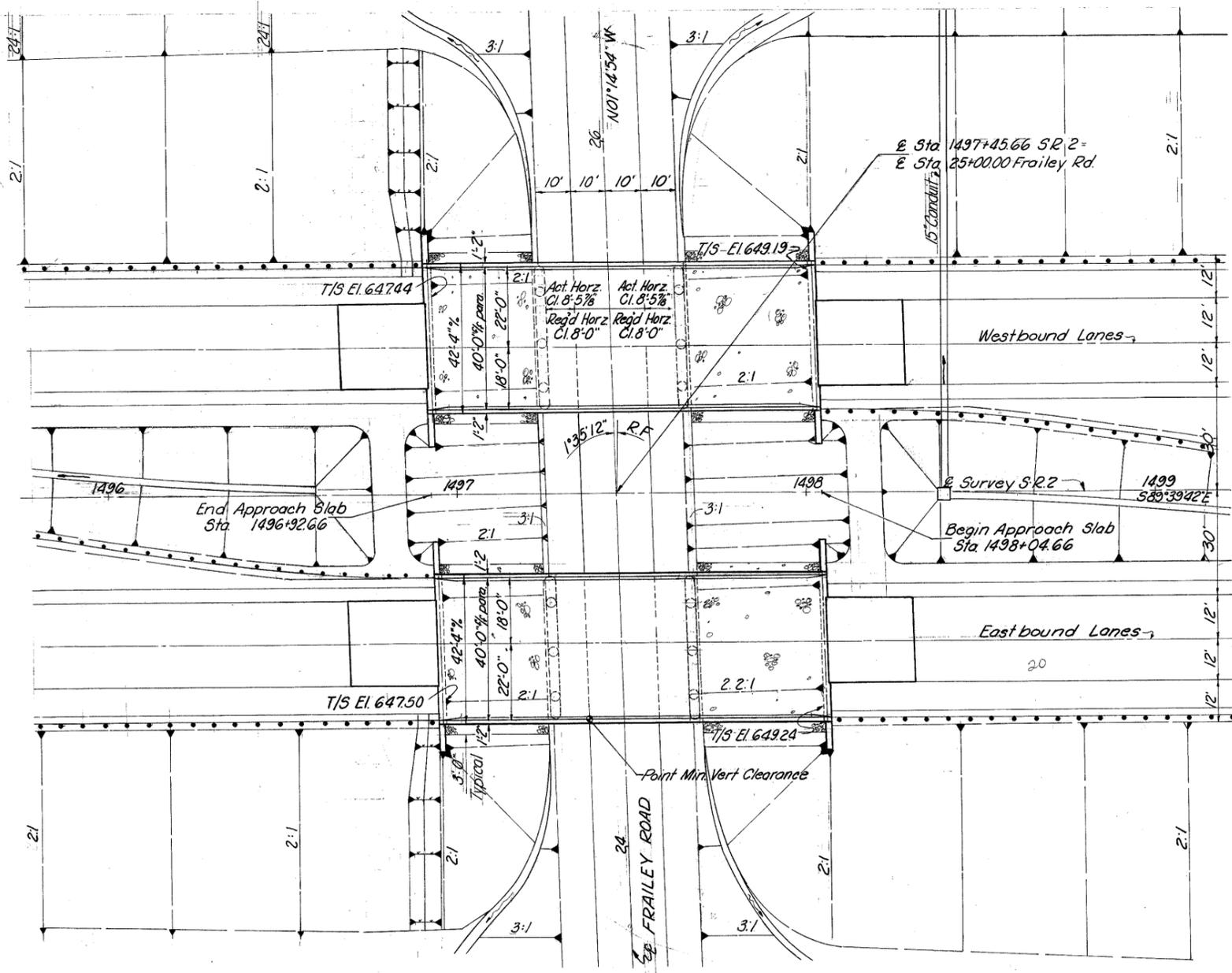
P.I.	= 1528+73.50	L	= 3587.78'
Δ	= 35°52'40" Lt	T	= 1854.90'
D	= 1°00'	E	= 292.77'
R	= 5729.58	S	= .0322 H/F



MICROFILMED
APR 12 1979
REPRODUCTION

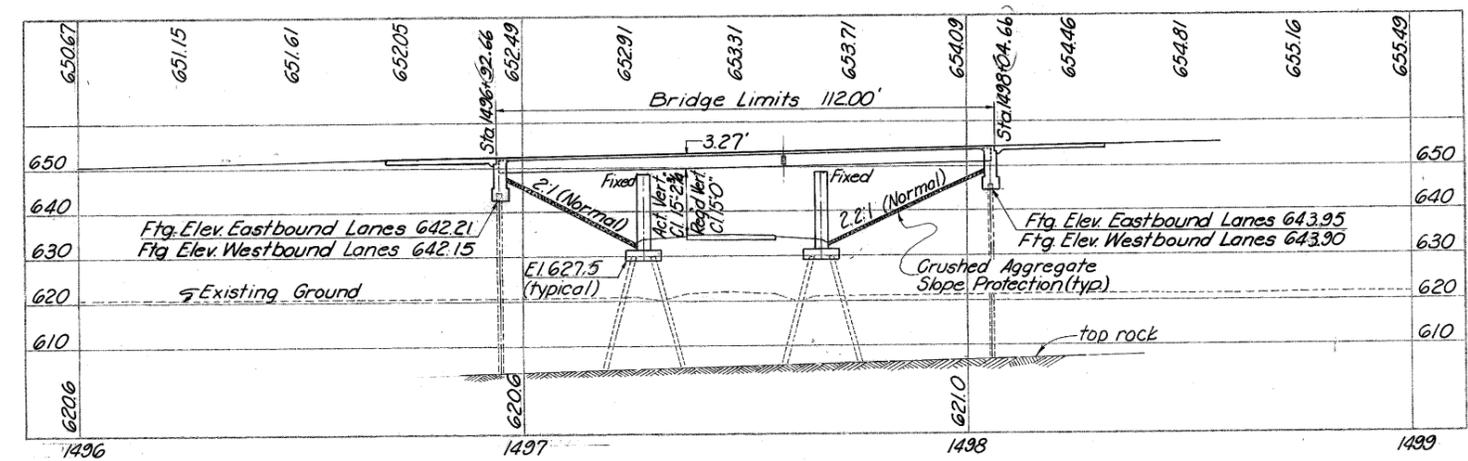
FED. RD. DIVISION	STATE	PROJECT	280 395
2	OHIO		

ERI. 2-22.24



PLAN

NOTE: Earthwork limits shown are schematic.
Actual slopes shall conform to plan cross-sections.



PROFILE EASTBOUND LANES

VERTICAL CURVE DATA
PVI Sta 1505+00.00
Length 1900'
G1 = +2.00%
G2 = -1.78%
PVI Elev. = 668.71
Vert. Corr. 8.98'

Abutment Piles: 10BP42, est. average pay length 35'.
Pier Piles: 12BP53, est. average pay length 22'.

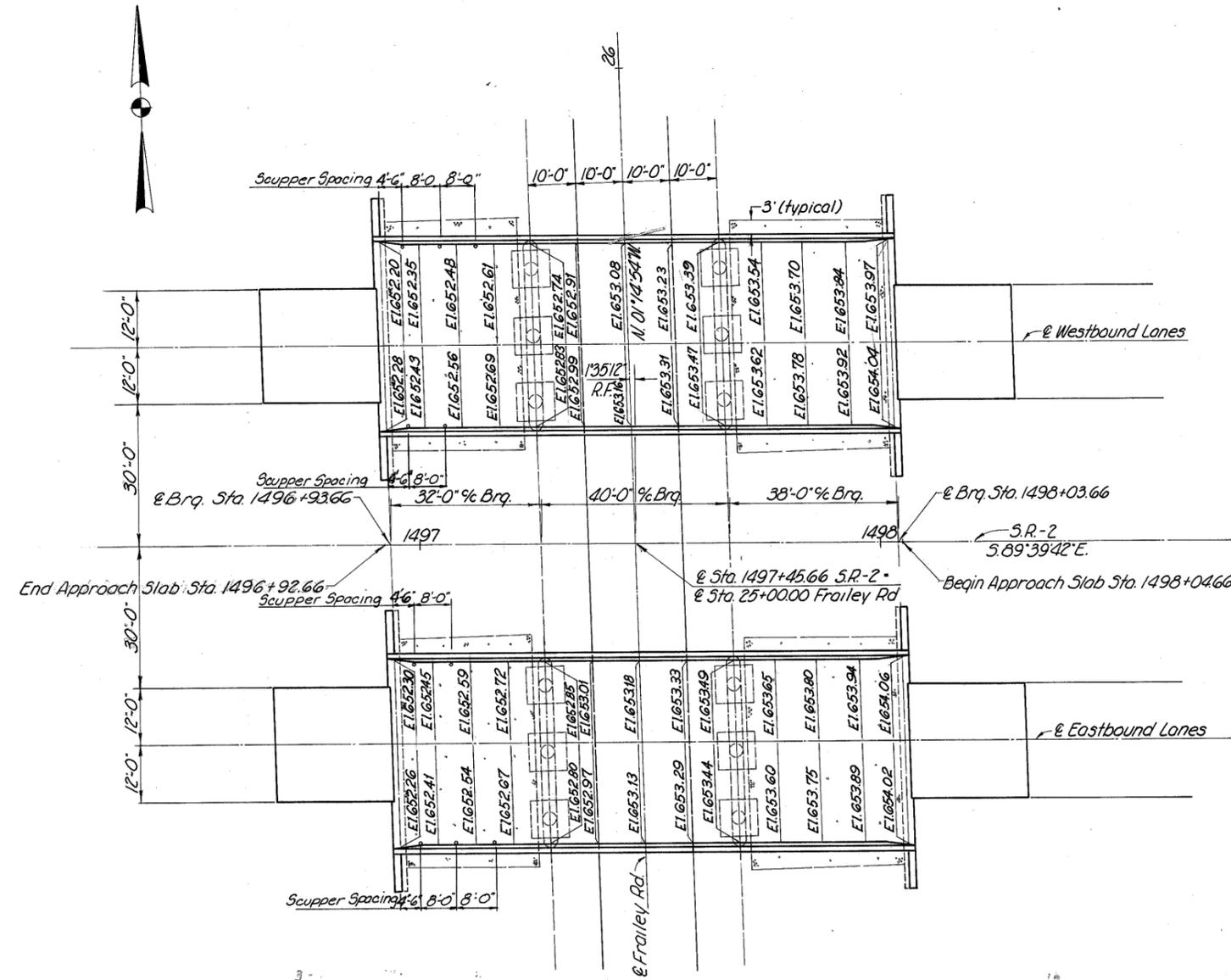
PROPOSED STRUCTURE					
TYPE: Continuous Steel Beam Bridge with Reinforced Concrete Deck & Substructure					
SPANS: 32'-0"; 40'-0"; 38'-0" % Brgs.					
ROADWAY: 40'-0" w/ parapets					
LOAD FREQUENCY: HS 20-44					
WEARING SURFACE: 1" monolithic concrete					
SKEW: 1°35'12" R.F.					
APPROACH SLAB: 45'-1-67" (25'-0" long)					
ALIGNMENT: tangent					
SUPERELEVATION: none					
AVERAGE DAILY TRAFFIC: 21,623 (1988)					
FRANKLIN ENGINEERING, LIMITED					
Consulting Engineers OHIO					
SITE PLAN					
BRIDGE NO ERI-2-2410L&R over FRAILEY ROAD					
ERIE COUNTY				SR-2	
Sta. 1497+45.66					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
HM	J		JBG	JF	1/15-67

MICROFILMED
APR 13 1979
REPRODUCTION

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

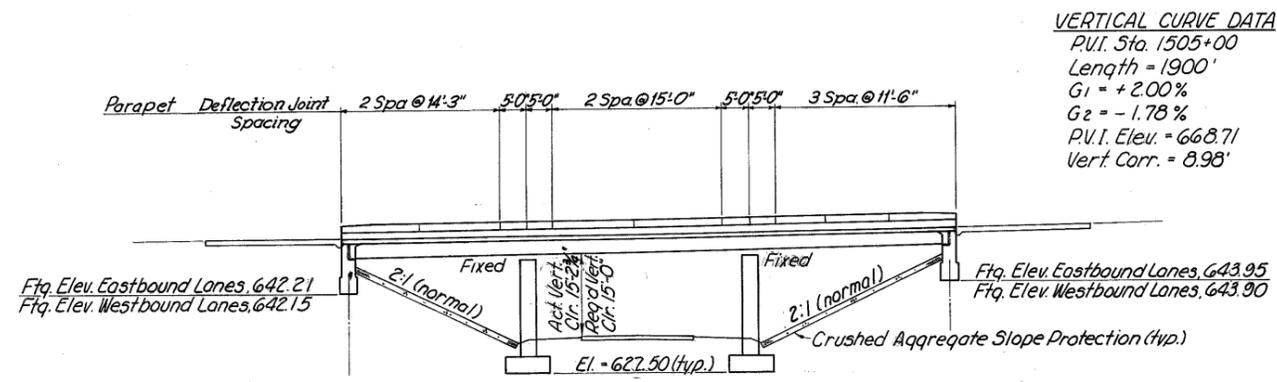
201
395

ERI-2-22.24



GENERAL PLAN

NOTE: Elevation shown at Gutter Lines are Screed Elevations at Quarter Points of Span and include concrete dead load deflections.



ELEVATION

VERTICAL CURVE DATA
P.V.I. Sta. 1505+00
Length = 1900'
G₁ = +2.00%
G₂ = -1.78%
P.V.I. Elev. = 668.71
Vert. Corr. = 8.98'

REFERENCE shall be made to Standard Drawing AS-1-67 (rev. 6-12-69, BR-1-67, (REV/Q-15-71), SD-1-69 (dated 6-12-69 sheets 1, 2, 3 & 4, and Supplemental Specifications 808 dated 1-1-71 and 836 dated 1-1-71.

DESIGN SPECIFICATIONS: This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, 1965, including the Ohio Supplement to these specifications.

DESIGN DATA:
Design Loading H5-20-44
Concrete Class C Unit Stress 1200 psi for Superstructure
Unit Stress 1333 psi for Substructure
Structural Steel ASTM A36 - Unit Stress 20,000 psi
Reinforcing Steel ASTM A615, A616 or A617 - Unit Stress 20,000 psi.
Spiral reinforcement may be plain bars ASTM A82, A306, A499, or A615

EMBANKMENT CONSTRUCTION: The embankments shall be constructed to the subgrade for a minimum distance of 200 feet back of the abutments. Excavation shall then be made for the abutment and piers.

ABUTMENT EXCAVATION QUANTITY in addition to 503.11, includes the removal of fill material required for construction of the abutments.

PILES shall be driven with a hammer of not less than 11,000 ft. lbs. per blow to firm contact with bedrock. If the length of penetration is approximately equal to the depth of bedrock according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in 507.05 is not less than the following value for a pile hammer of the indicated energy rating:
For the abutment piles:
41 tons per pile using an 11,000 ft. lb hammer
36 tons per pile using a 15,000 ft lb or greater hammer
For the pier piles:
63 tons per pile using an 11,000 ft lb hammer
56 tons per pile using a 15,000-ft lb. or greater hammer
If the energy rating of the hammer is between the rating as shown above, the required formula capacity shall be determined by interpolation. The design load is 35 tons per pile for abutment piles and 40 tons per pile for pier piles.

UTILITY LINES: All expense involved in relocating the affected utility lines shall be borne by the Owner. The Contractor and Owner are requested to cooperate by arranging their work in such a manner that inconvenience to either would be held to a minimum.

WELDS on non-stress carrying members are shown thus:

WELD ATTACHMENTS: No attachments shall be made by field welding to the top flanges of continuous beams within a distance of 0.10 of the span length on either side of the interior supports. Welding for attachments to the top flanges of other part of the spans shall be kept at least 2" from edge of flange.

SCUPPERS shall be in accordance with Std. Dwg. SD-1-69 except that scupper pipes shall extend 8" below the bottom of the beams instead of 2".

If bars in accordance with ASTM A616 are provided they shall be subject to bend tests as per AASHTO Designation M42-70.

FRANKLIN ENGINEERING, LIMITED Consulting Engineers COLUMBUS, OHIO				
GENERAL PLAN and GENERAL NOTES				
BRIDGE NO ERI-2-2410 L&R over FRAILEY ROAD				
ERIE COUNTY				SR-2
DESIGNED H7	DRAWN JAD	TRACED	CHECKED JAD	REVIEWED JAD DATE 11/21/68 REVISED

Rev. 1-4-72

RECEIVED
APR 1 1968

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

282
395

ERI-2-22.24

ESTIMATED QUANTITIES - TWO BRIDGES													
ITEM	TOTAL BOTH BR.	TOTALS		UNIT	DESCRIPTION	SUPERSTR.		ABUTMENTS		PIERS		GENERAL	
		Left Br.	Right Br.			Left Br.	Right Br.	Left Br.	Right Br.	Left Br.	Right Br.		
503	498	242	256	Cu.Yds.	Unclassified Excavation			128	128	114	128		
505	Lump Sum	Lump		Sum	Test Pile							Lump	
507	1240	620	620	Lin.Ft	Steel Piles HP12x53*					620	620		
507	1120	560	560	Lin.Ft	Steel Piles HP10x42*			560	560				
509	144,482	72,241	72,241	Lbs	Reinforcing Steel	44,902	44,902	10,198	10,198	17,141	17,141		
511	174	87	87	Cu.Yds	Class "C" Concrete, Abutments			87	87				
511	102	51	51	Cu.Yds	Class "C" Concrete, Piers above Footings					51	51		
511	96	48	48	Cu.Yds	Class "C" Concrete, Pier Footings					48	48		
511	346	173	173	Cu.Yds	Class "C" Concrete, Superstructure	173	173						
512	176	88	88	Lin.Ft	Premolding Sealing Strip			88	88				
513	131040	65520	65520	Lbs.	Structural Steel	65520	65520						
514	131040	65520	65520	Lbs.	Field Painting of Structural Steel	65520	65520						
516	168	84	84	Sq.Ft.	1/2" Preformed expan. joint filler			84	84				
516	170	85	85	Sq.Ft.	1" Preformed expan. joint filler			85	85				
518	10	5	5	Each	Scuppers, including supports	5	5						
518	82	41	41	Cu.Yds.	Porous Backfill			41	41				
518	232	116	116	Lin.Ft.	6" Perf. Helical Corrugated Metal Pipe, including Specials (707.01)			116	116				
518	96	48	48	Lin.Ft.	6" Non-Perf. Helical Corrugated Metal Pipe (707.01)			48	48				
601	726	363	363	Sq.Yds.	Crushed Aggregate Slope Protection							363	363
808	346	173	173	Units	Chemical admixture for concrete, Type A, Bor D	173	173						
516	20	10	10	Each	Bearing Devices					10	10		

* HP 12x53 piles formerly designated 12 BP 53
HP 10x42 piles formerly designated 10 BP 42

3/8

FRANKLIN ENGINEERING, LIMITED Consulting Engineers COLUMBUS, OHIO						
ESTIMATED QUANTITIES BRIDGE No ERI-2-2-2410L&R over FRAILEY ROAD ERIE COUNTY SR2						
DESIGNED HM	DRAWN	TRACED F.S.	CHECKED J.A.D. 10/10/68	REVIEWED J.F.	DATE 10/20/68	REVISED

Rev. 1-4-72

MICROFILMED
APR 1 1979
REPRODUCTION

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	ERI-2-22.24

285
395

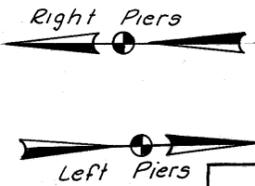
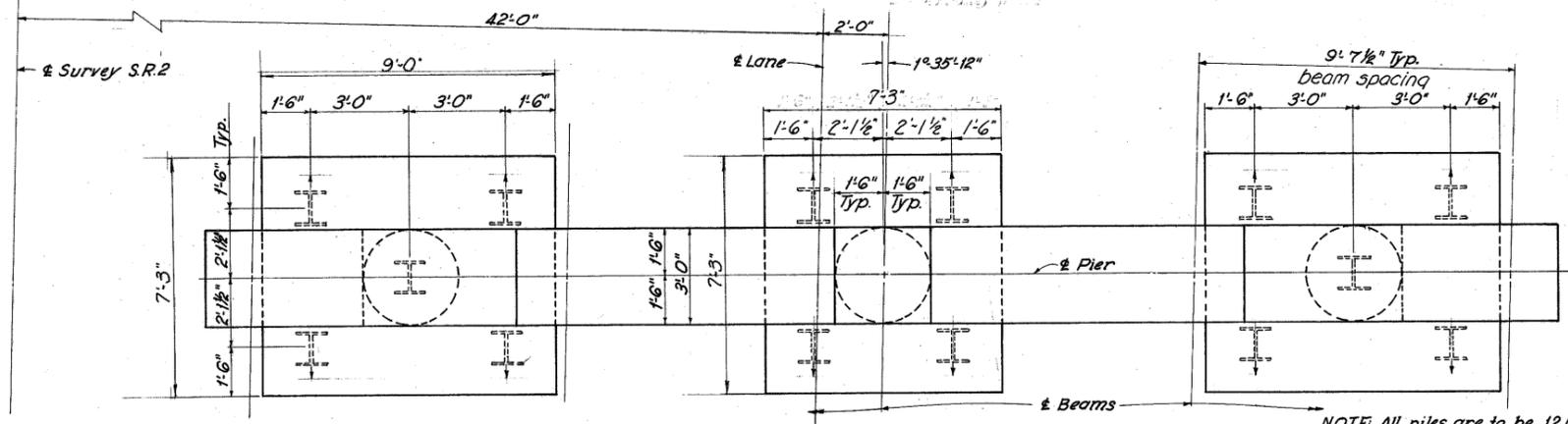
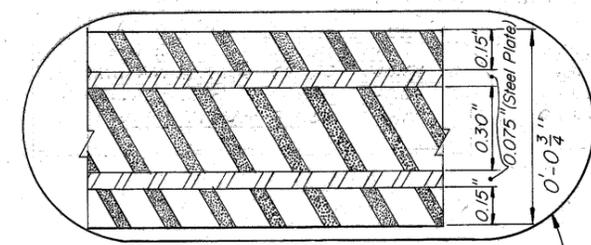


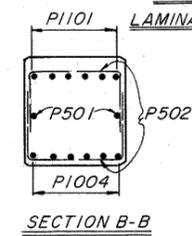
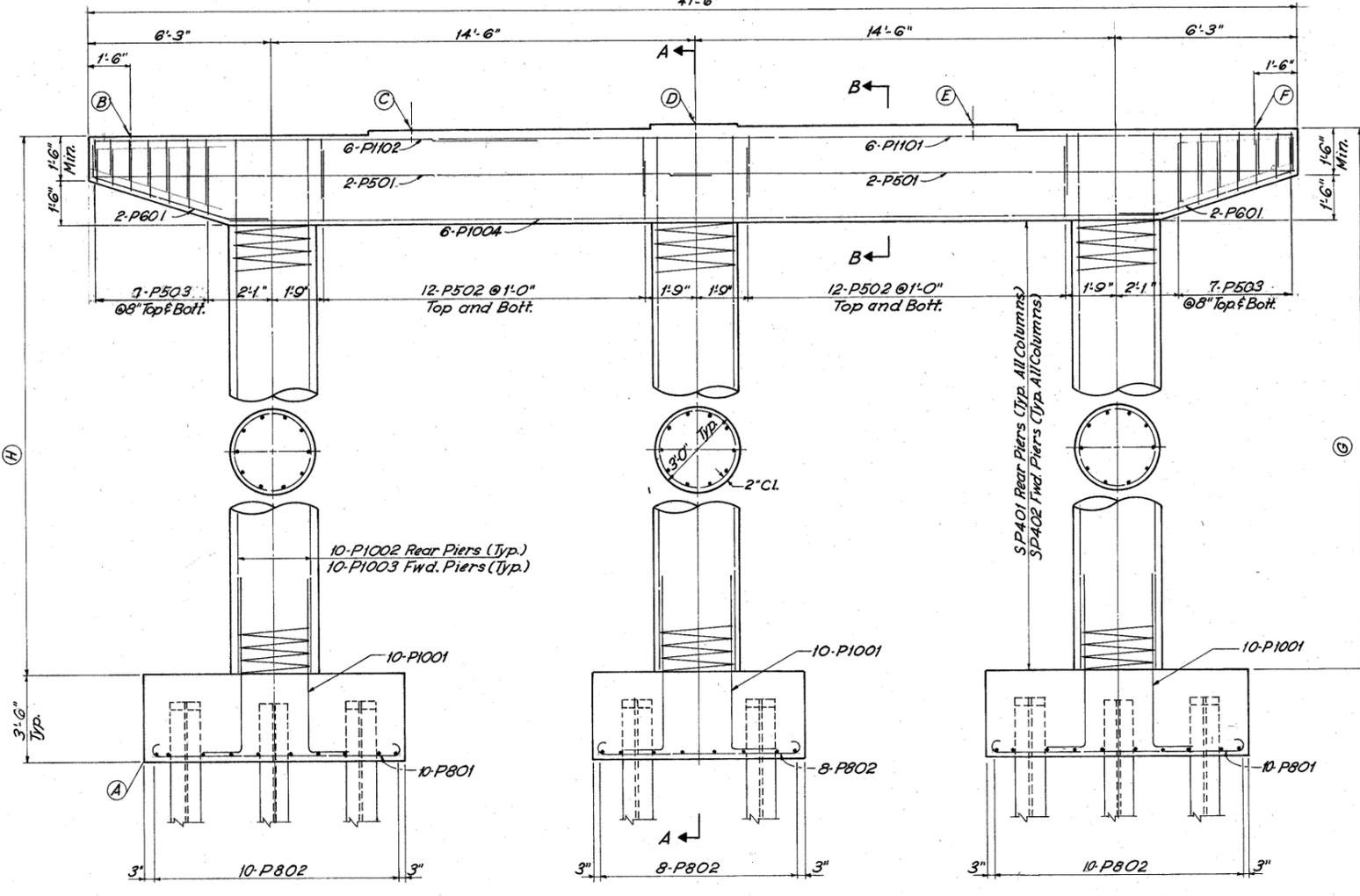
TABLE OF ELEVATIONS

LOCATION	A	B	C	D	E	F	G	H
Rear Pier-Lt. Bridge	627.50	649.31	649.47	649.62	649.51	649.40	18'-4 3/4"	18'-3 3/4"
Rear Pier-Rt. Bridge	627.50	649.42	649.57	649.67	649.52	649.37	18'-4 3/4"	18'-5"
Fwd. Pier-Lt. Bridge	627.50	649.95	650.10	650.26	650.17	650.03	19'-0 1/4"	18'-11 3/4"
Fwd. Pier-Rt. Bridge	627.50	650.05	650.20	650.29	650.15	650.80	18'-11 3/4"	19'-0 1/2"

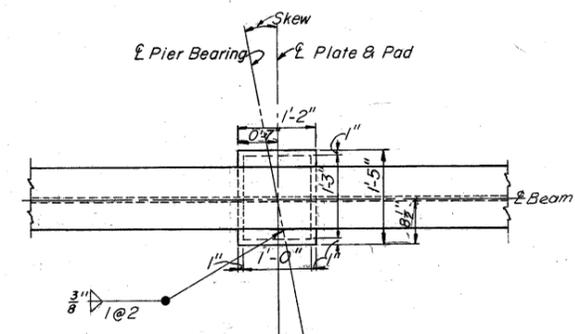


* The bearing pad shall be a 50 Durometer Neoprene Steel Laminated Bearing Pad and shall be bonded to the beveled $\# 14 \times (2 \frac{1}{8} - 2 \frac{3}{8}) \times 1'-5"$. The beveled $\# 14$, shall be included with Item 516. Bearing Devices for payment.

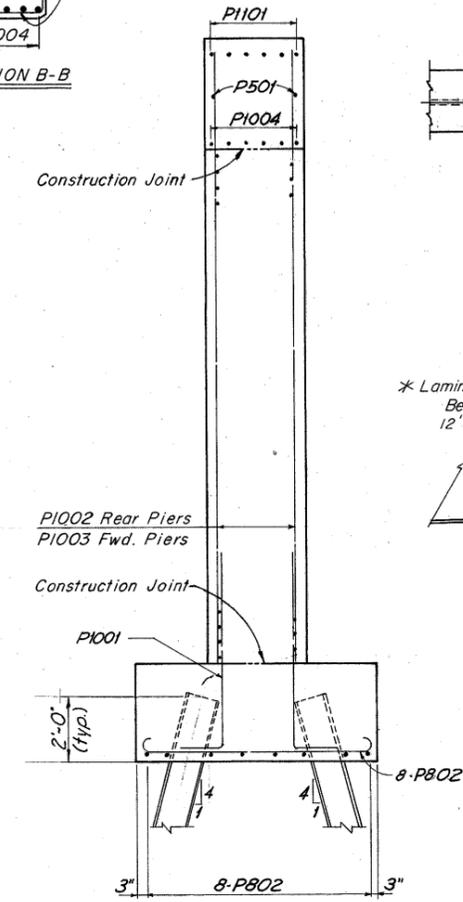
PLAN
Right Bridge Shown
Left Bridge Opposite Hand



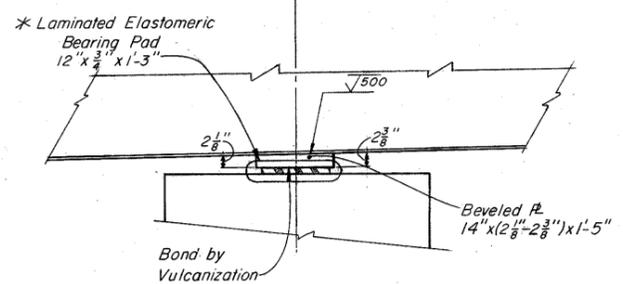
SECTION B-B



PLAN AT PIER BEARING



SECTION A-A



ELEVATION AT PIER BEARING

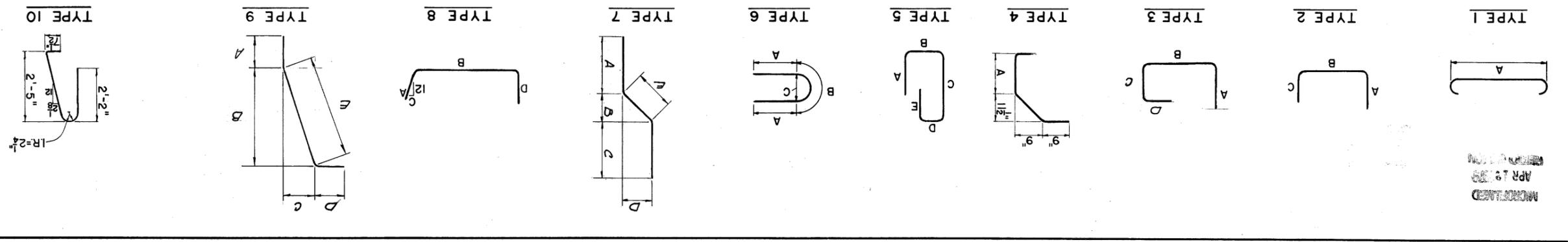
ELEVATION
Right Bridge Shown
Left Bridge Opposite Hand

FRANKLIN ENGINEERING, LIMITED
Consulting Engineers
COLUMBUS, OHIO

PIERS
BRIDGE NO. ERI-2-2410L&R
over FRAILEY ROAD
ERIE COUNTY

DESIGNED: HM
DRAWN: BS
TRACED: BS
CHECKED: J.A.D.
REVIEWED: J.F.
DATE: 11/6/48
REVISED: 11/6/48

APR 19 1958
RECORDED



ABUTMENTS										PIERS										SUPERSTRUCTURES									
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT	MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT	MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
A501	352	6'-7"	Str.	2'-1"	2'-8"	2'-1"				P1001	120	7'-7"	Str.	2	6'-6"	1'-4 1/2"	0			S501	268	5'-4"	10						1,491
A502	176	19'-5"	Str.	2	6'-3"	2'-2"	6'-3"			P1002	60	17'-11"	Str.							S502	268	2'-0"	2	7 1/2"	1'-0"	7 1/2"	0		559
A503	176	5'-9"	Str.	2	1'-11"	2'-2"	1'-11"			P1003	24	32'-0"	Str.							S503	268	2'-0"	2	1'-6"	7 1/2"	0		559	
A504	368	5'-6"	Str.	7	1'-7"	1'-8"	1'-7"			P1004	24	32'-0"	Str.							S504	268	3'-3"	4	9"				308	
A505	184	6'-7"	Str.	3	1'-11"	2'-2"	1'-11"			P801	80	10'-10"	Str.	1	8'-8"					S505	268	13'-11"	32					464	
A506	184	5'-9"	Str.	2	2'-2"	1'-8"	2'-2"			P802	144	9'-1"	Str.	1	6'-11"					S506	268	7'-8"	64					312	
A507	16	4'-3"	Str.							P501	16	21'-5"	Str.							S507	32	14'-8"	32					490	
A508	16	3'-9"	Str.							P502	192	6'-11"	Str.	2	2'-3"	2'-8"	2'-3"			S508	32	11'-2"	32					373	
A509	16	3'-0"	Str.							P503	16	21'-5"	Str.							S509	32	3'-10"	2	3'-4"	7 1/2"	0		128	
A510	16	2'-3"	Str.							PC01	16	7'-6"	Str.	9	1'-6"	4'-7"	1'-6"	1'-4"	4'-10"	S510	48	3'-5"	2	2'-11"	7 1/2"	0		171	
A511	16	6'-3"	Str.																S511	40	2'-5"	2	10"	1'-0"	10"		101		
A512	16	3'-6"	Str.																S512	48	3'-5"	2	10"	1'-0"	10"		101		
A513	16	7'-6"	Str.																S513	48	3'-5"	2	10"	1'-0"	10"		101		
Total																												20,396	

REPLACEMENT BARS										
RE1101	1	8'-7"	Str.							34,281
RE1001	1	8'-3"	Str.							
RE801	1	7'-6"	Str.							
RE601	5	6'-11"	Str.							
RE501	1	6'-7"	Str.							
RE401	1	6'-3"	Str.							
Total										34,281
SP401	6	15'-5"	Str.	13	4 1/2"	44	2'-8"			1755
SP402	6	16'-0"	Str.	13	4 1/2"	46	2'-8"			1818
* A Varies from 2'-3" to 1'-0" in increments of 2 1/2"										
* B Varies from 6'-11" to 4'-5" in increments of 5"										
P501	16	21'-5"	Str.	2	2'-3"	2'-8"	2'-3"			357
P502	192	6'-11"	Str.	2	2'-3"	2'-8"	2'-3"			1385
P503	16	21'-5"	Str.	2	2'-3"	2'-8"	2'-3"			662
Total										89,804

NOTES:
 SPIRAL REINFORCING BARS: The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap. The "No. of Turns" shown is the "Length" divided by the pitch, plus three turns (total number of closed coils), expressed as the nearest whole number.
 1/2 closed coils shall be provided at the ends of each spiral unit. Four steel channels, tee or angle spacers, weighing approximately 0.80 lbs per lin ft of spacers, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.80 lbs per lin ft, will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
 BAR SIZE: The bar size is indicated in the bar mark. The first digit where three digits are used, the first two digits where four are used, indicate the bar size number. For example: A506 is a No. 5 size bar and P101 is a No. 11 size bar.

FRANKLIN ENGINEERING, LIMITED
 Consulting Engineers
 COLUMBUS, OHIO

BRIDGE NO. ERI-2-2410LAR
 over FRAILEY ROAD
 ERIE COUNTY
 SR-2

DESIGNED DRAWN TRACED CHECKED REVIEWED DATE REVISED
 H1 JC
 2-2-58 2-2-58
 REV 1-4-58

8/8

2 OHIO
 DIVISION STATE
 PROJECT

ERI-2-22-24

287 395