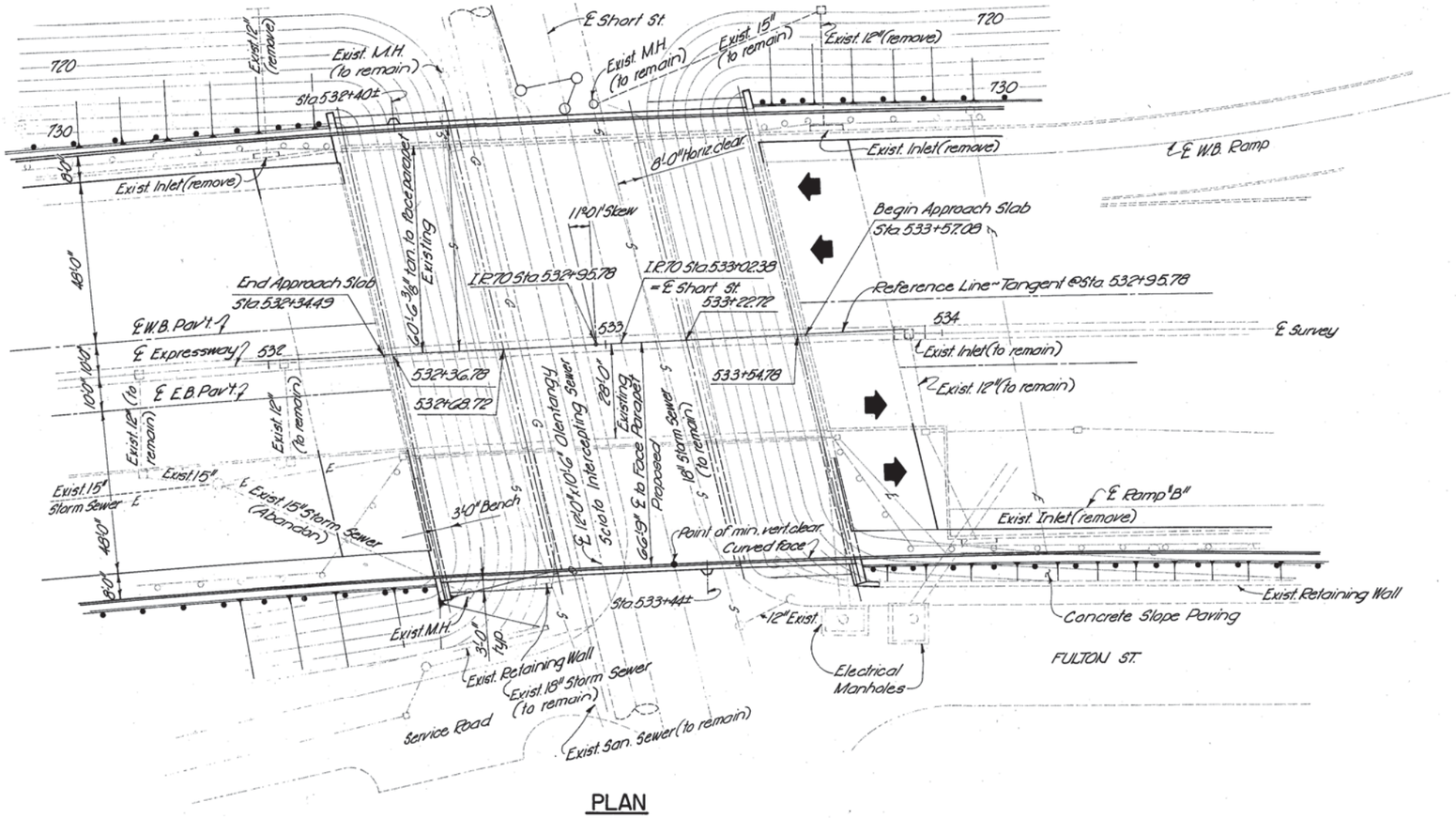
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

922

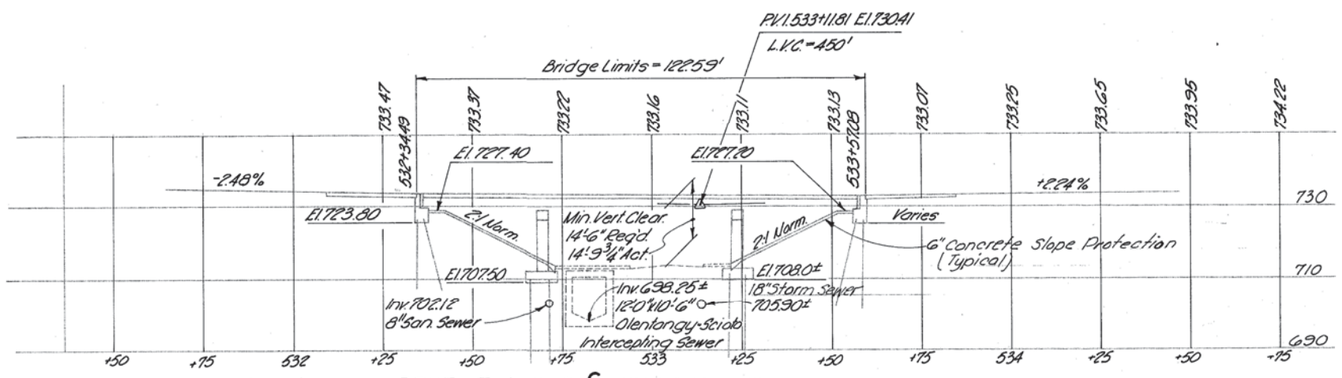
FRANKLIN COUNTY
FRA-70-12.31 S

I-70 ℄
CURVE DATA
P.I. Sta. 533+74.88
Δ = 20°-04'-18" Rt.
Dc = 1°-20'
R = 4297.18'
L = 1505.38'
E = 66.77'



PLAN

1986 DHV
8160 W.B.
8160 E.B.



PROFILE ALONG ℄ SURVEY I-70

Earthwork limits shown are schematic. Actual slopes shall conform to plan cross-sections.
Pier piling to be 12"ϕ Cast-in-place reinforced concrete. Estimated average pay length is 30' for both piers.
Abutment piling to be H.P 10x42. Estimated average pay length is 45' for West Abutment and 50' for East Abutment.
All piling shall be pre-bored to elevation 696.0

PROPOSED STRUCTURE

TYPE: Continuous Steel Beams with Reinf. Concrete Deck and Substructure.

SPANS: 320'; 540'; 320' ℄ Brgs. (Along Tangent).

ROADWAY: 66'-9" ℄ to face parapet Rt., 66'-9" tan. to face parapet, 3'-0" Barrier Median.

LOADING: GF 2000 (Adequate for Interstate All.)

WEARING SURFACE: 2½" Asphaltic Concrete.

SKEW: 11°01' Rt. Fwd.

ALIGNMENT: 1°20' Curve Rt. ℄ Parallel to Tangent.

SUPERELEVATION: 0.023 ft/ft.

APPROACH SLABS: 25' Long.

EXISTING STRUCTURE

Same as above except Roadway 88'-0" ℄ to face of 1°20' Curb Rt., and 53'-4¾" to face of 1°-2" Curb Lt., 3'-0" Barrier Median and Aluminum Railing with Conc. Parapets.

E. S. PRESTON & ASSOCIATES, LIMITED
ENGINEERS
COLUMBUS, OHIO

1 / 9

SITE PLAN
BRIDGE NO. FRA-70-1379 S
I-70 OVER SHORT ST.
FRANKLIN COUNTY
STA. 532+34.49
STA. 533+57.08

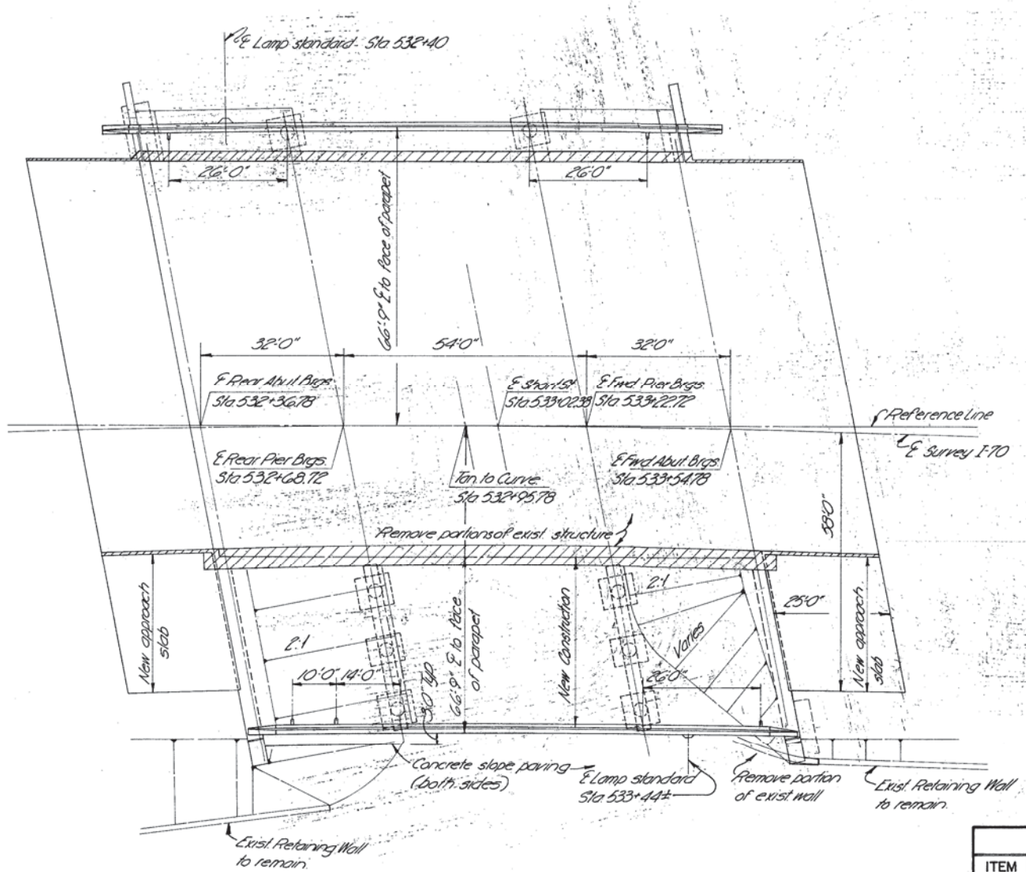
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
N.N.	N.N.	J.L.	A.S.B.	N.N. 11/5/70	

E. E. ELLIOTT CO., Cleveland

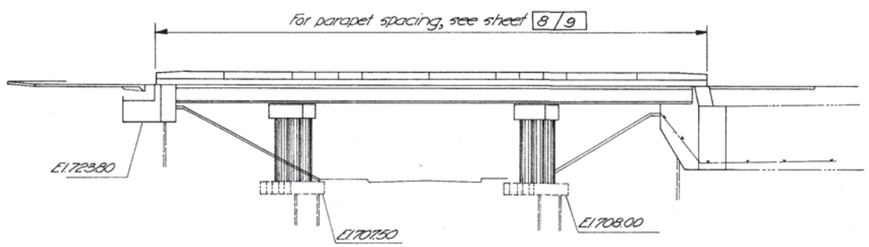
FRANKLIN COUNTY
FRA.-70-12.31 S

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

923



PLAN



ELEVATION

SOUTH SIDE OF NEW CONSTRUCTION

REFERENCE shall be made to Std. Dwg. SD-1-69, shts. 1, 3 and 4 dated 6/1/69; BR-1-67 revised 10-15-71; A34-67 revised 6/1/69; and to Supplemental Specifications 836 dated 1-1-71, 808 dated 1-1-71, and 837 dated 12-31-70, and 944 dated 4-5-72.

DESIGN SPECIFICATIONS: The modifications to the structure conform to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, 1969 including the Ohio "Supplement" to these Specifications, except that the loading conforms to "Design Specifications for Highway Structures" State of Ohio Department of Highways dated Sept 1, 1957.

DESIGN DATA:

Design Loading: CF 2000 (1957 Specs, adequate for Interstate alternate loading)

Class C concrete: unit stress 1200 p.s.i. for Superstructure. unit stress 1333 p.s.i. for Substructure.

Structural Steel: ASTM A-36 unit stress 20,000 p.s.i.

* Reinforcing Steel: ASTM A615, A616, A617 - unit stress 20,000 p.s.i. If bars in accordance with ASTM A616 are provided, they shall be subject to bend Tests as per AASHO Designation M42-70

PROCEDURE: The existing bridge shall be cut 1'-6" in from the curb line as shown on 6 | 9, the portion of the retaining wall removed to the first contraction joint as shown on these plans. The Abutments and Piers shall be added on to or extended as shown, and the new structural steel is erected and the slab and parapets completed. The existing curbs on the approach slabs shall be leveled to the concrete surface, and the new approach slabs added on the south side. The wearing surface shall then be applied to all portions of the structure and approach slabs.

PAINT for existing structure shall conform to 708.

PRIOR TO BEGINNING any work all dimensions on the existing structure shall be verified in the field. Plans of the original structure and subsequent modifications may be examined in the Division office or at the Bureau of Bridges in Columbus.

PILES shall be driven to a minimum bearing capacity of 40 tons per pile for the piers and 35 tons per pile for abutments. All piles shall be driven in holes prebored to elevation 696.0 because of the many utilities in the area.

MAINTENANCE OF TRAFFIC: Two lanes of traffic with a minimum horizontal width of 26'-0" in each direction shall be maintained on I-70 at all times, and 2 lanes of traffic with a minimum width of 24'-0" and a minimum vertical clearance of 12'9" shall be maintained on Short Street at all times.

ITEM SPECIAL = BRIDGE DECK WATERPROOFING (See Proposal)

A. Description: This work shall consist of the preparation and waterproofing of all surfaces of concrete, steel, or other materials which are to be in contact with the surface course, by cleaning the surface and applying two coats of sealing compound in accordance with this specification.

B. Materials: The materials shall be: 1) Sealing Compound - Firestone Tire & Rubber Co. No. 520, or as specified in Section E. below. 2) Solvent - Firestone Tire & Rubber Co. No. 601, or as specified in Section E below.

C. Preparation of Existing Surface: Prior to placing the sealing compound, the bridge deck surface shall be cleaned of foreign material and loose concrete and etched by applying acid or sandblasting. Where acid is used, the application shall be preceded by further cleaning using water and a detergent designed for removing oil deposits from concrete surfaces together with push or power broom scrubbing. The residue and detergent shall be thoroughly flushed from the surface. While the surface is wet, commercial hydrochloric acid shall be applied uniformly at the rate of one gallon per 100 square feet. Immediately after the acid stops foaming, the residue shall be removed by thorough brooming & flushing with water.

Where sandblasting is used, the deck surface shall be treated uniformly in such a manner that the surface glaze & laitance is removed.

D. Application of the sealing compound: The bridge deck surfaces shall be dry and free of dust at the time of application of the sealing compound and the air temperature shall not be less than 60°F Farenheit. The sealing compound shall not be heated and precautions shall be taken to avoid fire hazards. The sealing compound shall be applied in two coats as follows:

a. First coat: For the first coat, the sealing compound shall be mixed with equal parts of solvent. This mixture shall be applied to the prepared surfaces and spread, using suitable brushes, at the rate of 0.10 gallon per square yard. This coating shall be permitted to cure for a period of two hours or until there is no tendency to adhere to workmen's shoes before the application of the second coat.

b. Second coat: For the second coat the sealing compound shall be applied undiluted and spread, using suitable brushes, at the rate of 0.15 gallon per square yard. No further work or traffic shall be permitted on the surface until the second coat has cured overnight.

E. Alternate Materials: In lieu of the above, United States Steel Nexus System or Thiokol Chemical Corp. 411-M or 411H may be used in accordance with manufacturer's recommendations.

F. Method of Measurement: The quantity of waterproofing shall be the number of square yards of surface covered.

G. Basis of Payment: Payment for the accepted quantity will be made at the contract price for:

Item	Unit	Description
Special	Sq. Yds.	Waterproofing Bridge Deck

* Spiral Reinforcement may be plain bars ASTM A82, A306, A199, or A615.

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	PIER	ABUT.	GEN'L.	
202	Lump	Sum	Portions of existing structure removed				Lump	
503	Lump	Sum	Cofferdams, cribs, and sheeling				Lump	
503	458	Cu. Yds.	Unclassified excavation		181	277		
505	Lump	Sum	Test pile				Lump	
507	1080	Lin. Ft.	12"ø C.I.P. reinforced concrete piles		1080			
507	1020	Lin. Ft.	Prebored holes		410	610		
509	80,798	Lbs.	Reinforcing steel	58,817	14,405	7,576		
511	212	Cu. Yd.	Class C concrete, superstructure	212				
511	36	Cu. Yd.	Class C concrete, pier footings		36			
511	50	Cu. Yd.	Class C concrete, piers above footings		50			
511	127	Cu. Yd.	Class C concrete, abutments			127		
512	11	Sq. Yds.	Type B Waterproofing	11				
512	107	Lin. Ft.	Premolded sealing strip			107		
513	137,617	Lbs.	Structural Steel	137,617				
514	137,617	Lbs.	Field Painting of new structural steel	137,617				
837	Lump	Sum	Cleaning and painting exist. structural steel	Lump				
516	228	Sq. Ft.	½" Preformed Expansion Jt. Filler	61		167		
516	125	Sq. Ft.	1" Preformed Expansion Jt. Filler			125		
403	49	Cu. Yd.	Asphalt concrete. (60-70 or AC 20)	49				
404	49	Cu. Yd.	Asphalt concrete (60-70 or AC 20)	49				
518	5	Each	Scuppers, including supports	5				
601	345	Sq. Yd.	Concrete slope protection				345	
625			See sheet 527 for lighting summary					
518	41	Cu. Yds.	Porous backfill			41		
507	755	Lin. Ft.	Steel piles, HP 10x42			755		
808	212	Units	Chemical Admixture for Concrete Type A, B, or D	212				
Special	1749	Sq. Yds.	Bridge Deck Waterproofing Including Sand-Asphalt Cover (See Proposal)				1749	
Special	135	Sq. Yds.	Patching Concrete Structure, Type A. (See Proposal)				135	

ESTIMATED QUANTITIES (CONT.)

ITEM	TOTAL	UNIT	DESCRIPTION
518	244	Lin. Ft.	SUBDRAINAGE FOR WEARING SURFACE COURSE, AS PER PLAN
SPECIAL	180	Sq. Ft.	PATCHING CONCRETE STRUCTURES, TYPE C (SEE PROPOSAL)
SPECIAL	135	Sq. Ft.	PATCHING CONCRETE STRUCTURES TYPE B (SEE PROPOSAL)

E. S. PRESTON ASSOCIATES, INC. 2 | 9
ENGINEERS
COLUMBUS, OHIO

GENERAL PLAN & ELEVATION, NOTES, AND ESTIMATED QUANTITIES

BRIDGE NO. FRA-70-1379S
I-70 OVER SHORT ST.

FRANKLIN COUNTY — STA. 532+34.49 — STA. 533+57.08

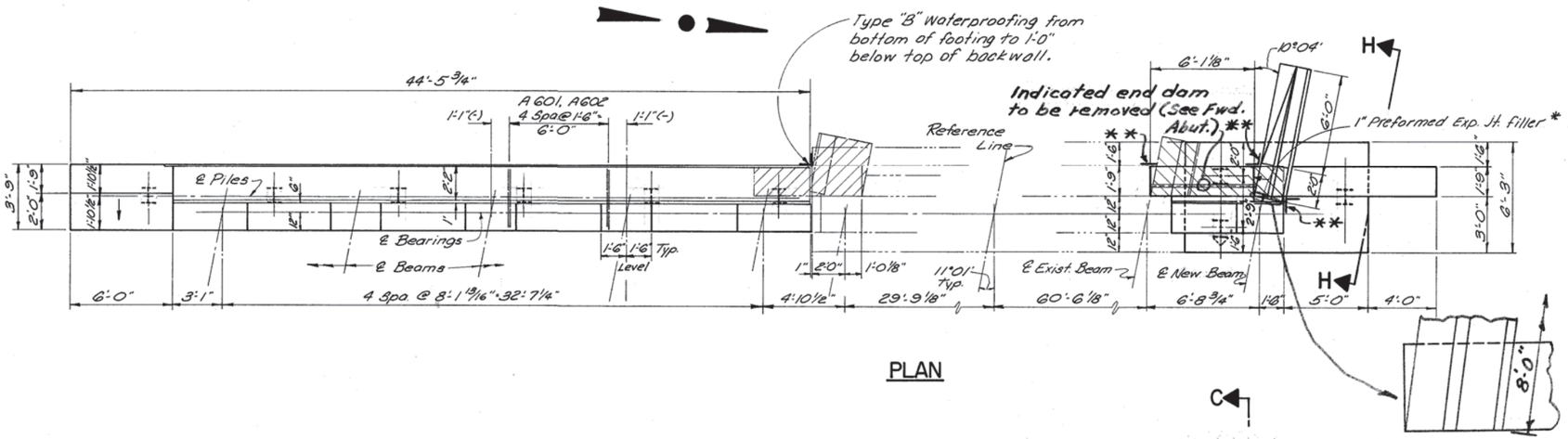
Designed	Drawn	Traced	Checked	Reviewed Date	Revised
RJ	RJ	JL/RJB	MH	N N 1/5/70	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

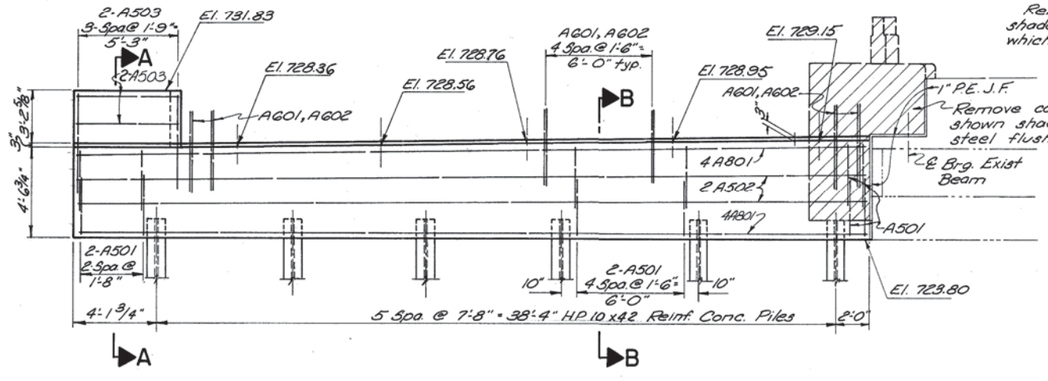
924

FRANKLIN COUNTY
FRA.-70-12.31 S

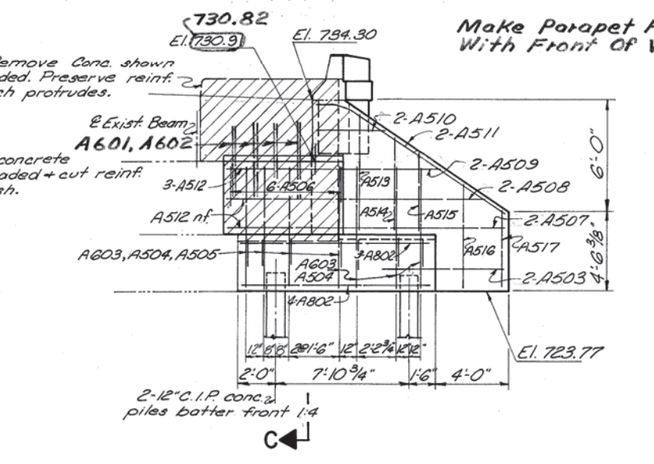
NOTE:
For integral abutment on North Side see sheet 8/9



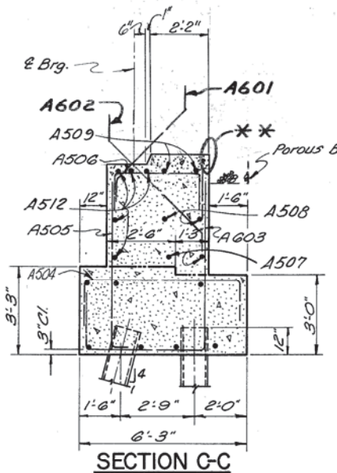
PLAN



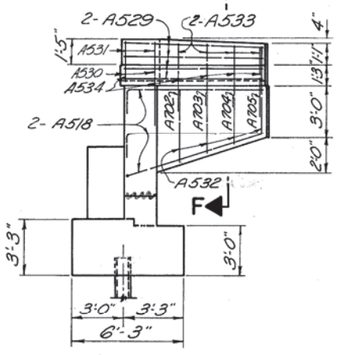
ELEVATION



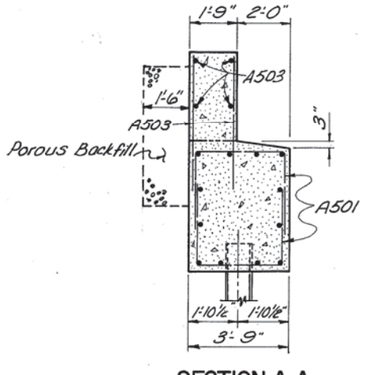
** ADD WATERPROOFING



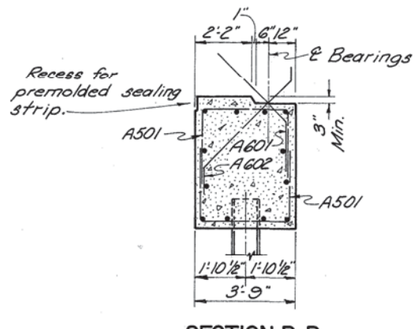
SECTION C-C



VIEW H-H



SECTION A-A

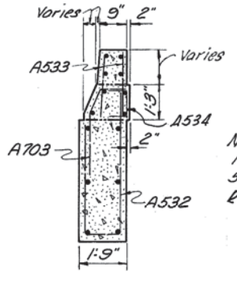


SECTION B-B

NOTE: Remove backwall of exist. abutment to a depth of 1'-4" below roadway surface on the North side between the end of the exist. approach slab and proposed extension. Pour new concrete to provide 1'-4" deep by 6" wide approach slab seat.

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 slope. The bottom shall match existing backfill and slope at a minimum of 1/8"/l.f. down toward the out side of the abutment.

* NOTE : A 1" opening shall exist between the superstructure and the vertical faces indicated above.



SECTION F-F

Note: For additional Parapet details see Std. Dwg. BR-1-67 Revised 10-15-71.

E. S. PRESTON ASSOCIATES, INC.
ENGINEERS
COLUMBUS, OHIO

3/9

REAR ABUTMENT DETAILS
BRIDGE NO. FRA-70-1379S
I-70 OVER SHORT ST.
FRANKLIN COUNTY
STA. 532+34.49
STA. 533+57.08

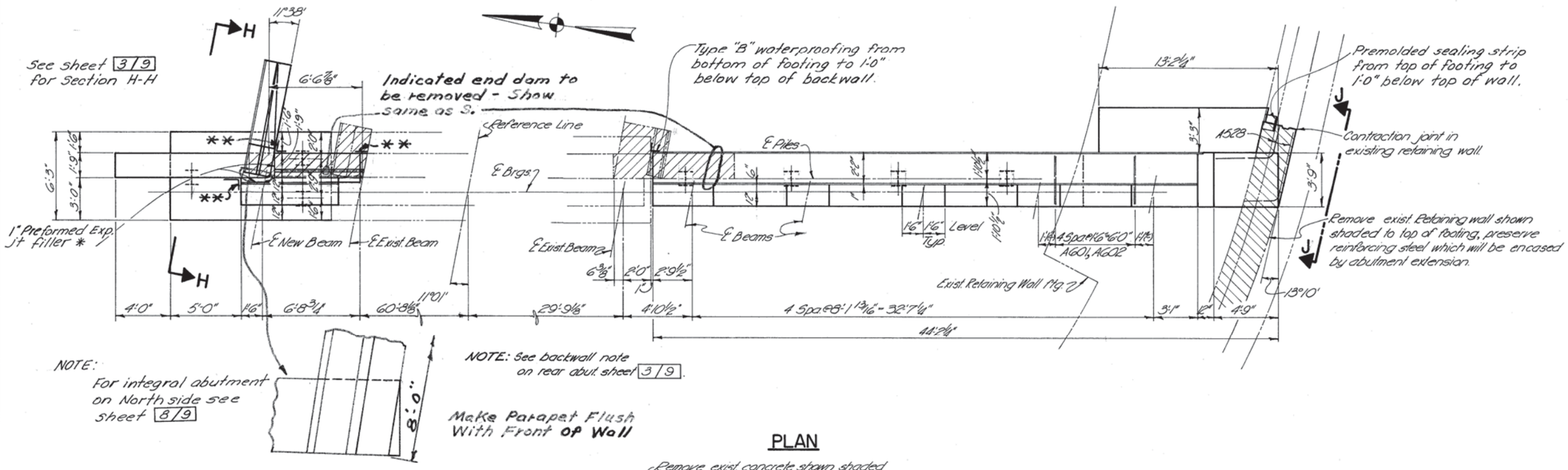
Designed	Drawn	Traced	Checked	Reviewed Date	Revised
R.J.	R.J.	R.J.B.	N.H.	N 1/5/70	5-30-73

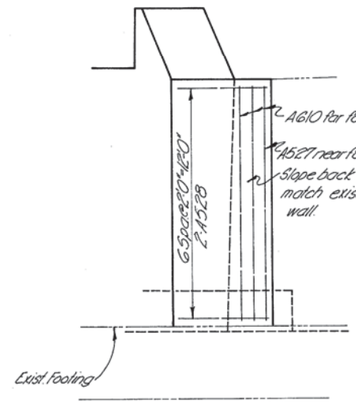
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

925

FRANKLIN COUNTY
FRA.-70-12.31 S

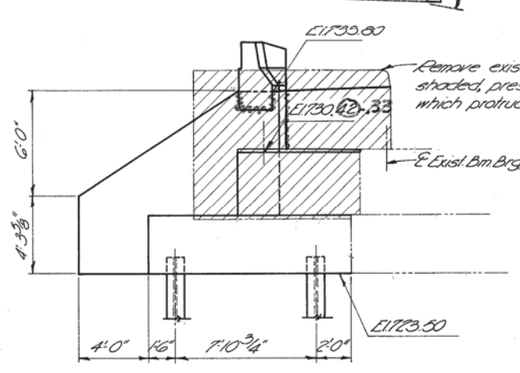
** ADD WATERPROOFING

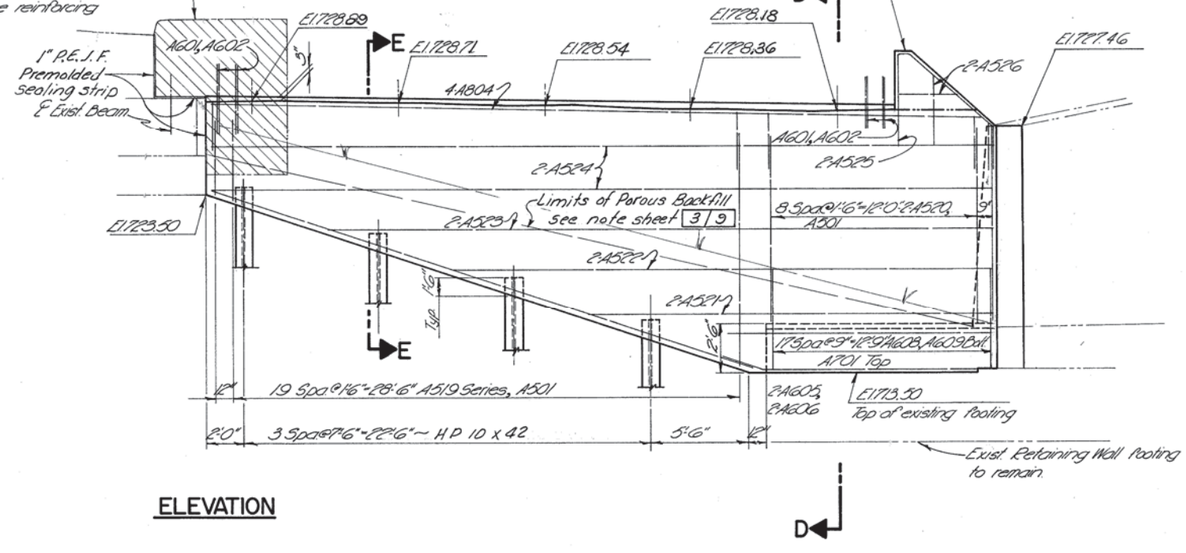




VIEW J-J

PLAN





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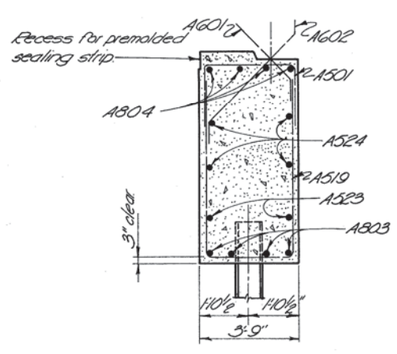
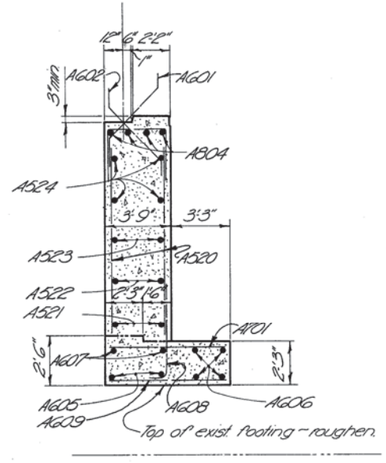


SECTION E-E



SECTION D-D

E. S. PRESTON ASSOCIATES, INC. 4/9
ENGINEERS
COLUMBUS, OHIO

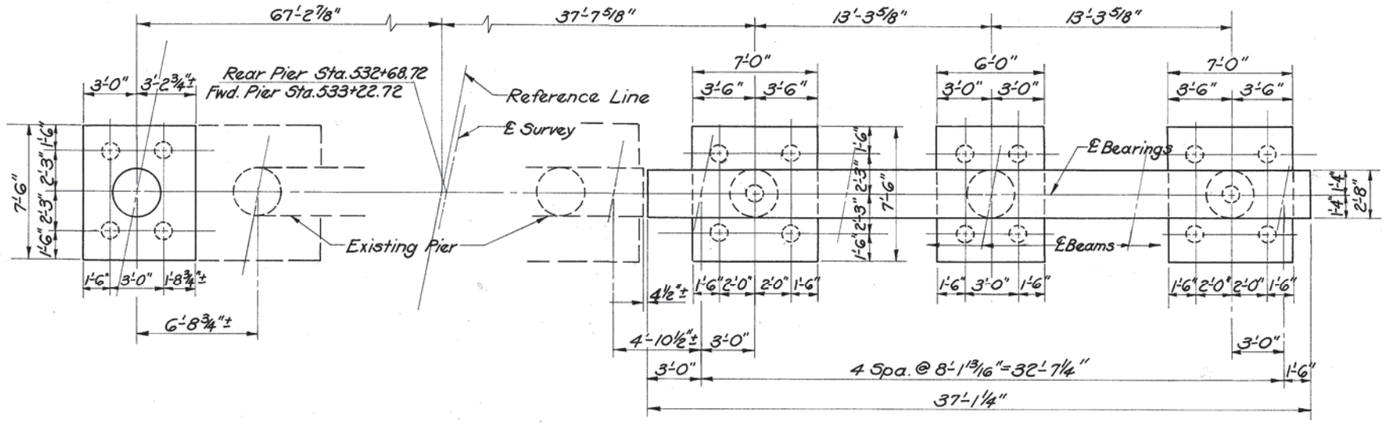
FORWARD ABUTMENT DETAILS
BRIDGE NO. FRA-70-1379S
I-70 OVER SHORT ST.
FRANKLIN COUNTY STA. 532+34.49 STA. 533+57.08

Designed	Drawn	Traced	Checked	Reviewed Date	Revised
R.J.	R.J.	J.L.	N.H.	N.N. 1/5/70	5-30-73

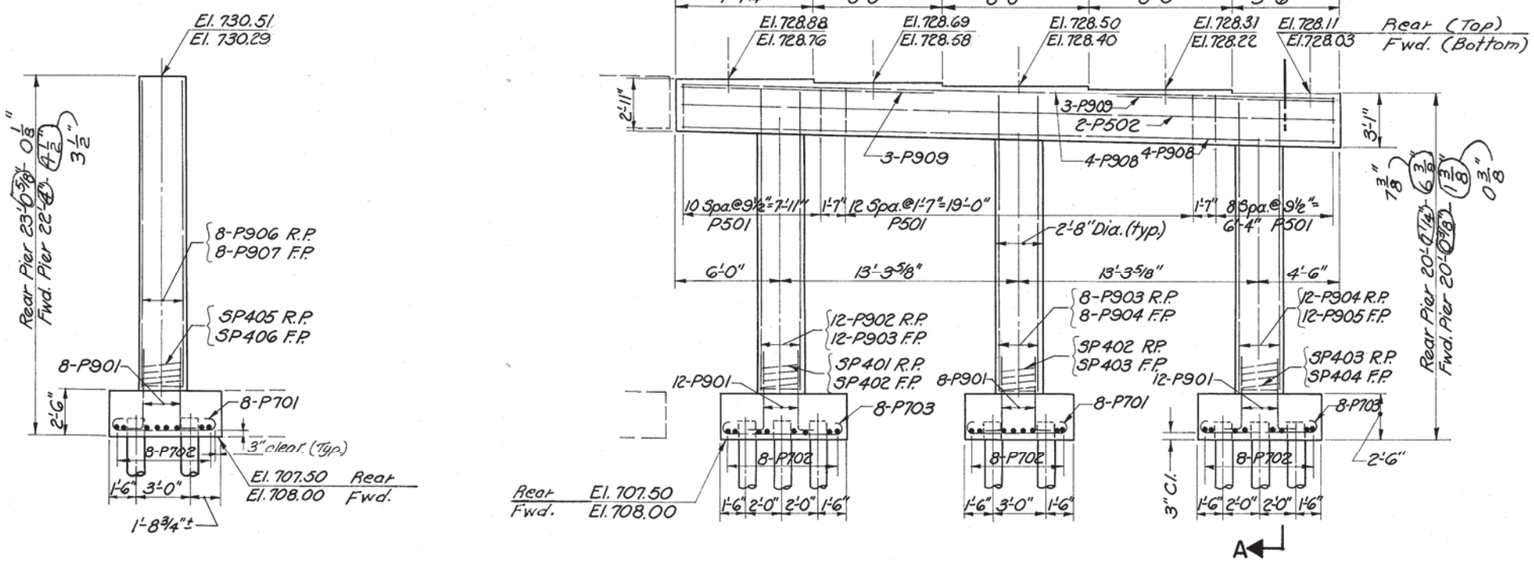
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

926

FRANKLIN COUNTY
FRA.-70-12.31S



PLAN



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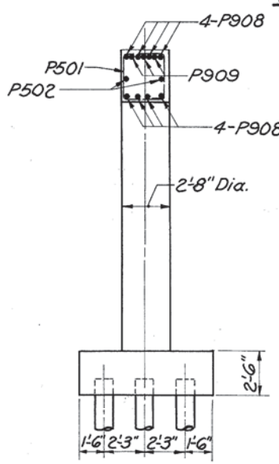


NOTES:

SPECIAL CARE shall be taken in placing the reinforcing steel in the vicinity of the beam seat so as not to interfere with the drilling of the anchor bar holes.

WHERE two elevations are given the upper one is for the Rear Pier, the lower for the Forward Pier.

E. S. PRESTON ASSOCIATES, INC.
ENGINEERS
COLUMBUS, OHIO

5/9

PIER DETAILS

BRIDGE NO. FRA.-70-1379 S

I-70 OVER SHORT ST.

FRANKLIN COUNTY

STA. 532+34.49
STA. 533+57.08

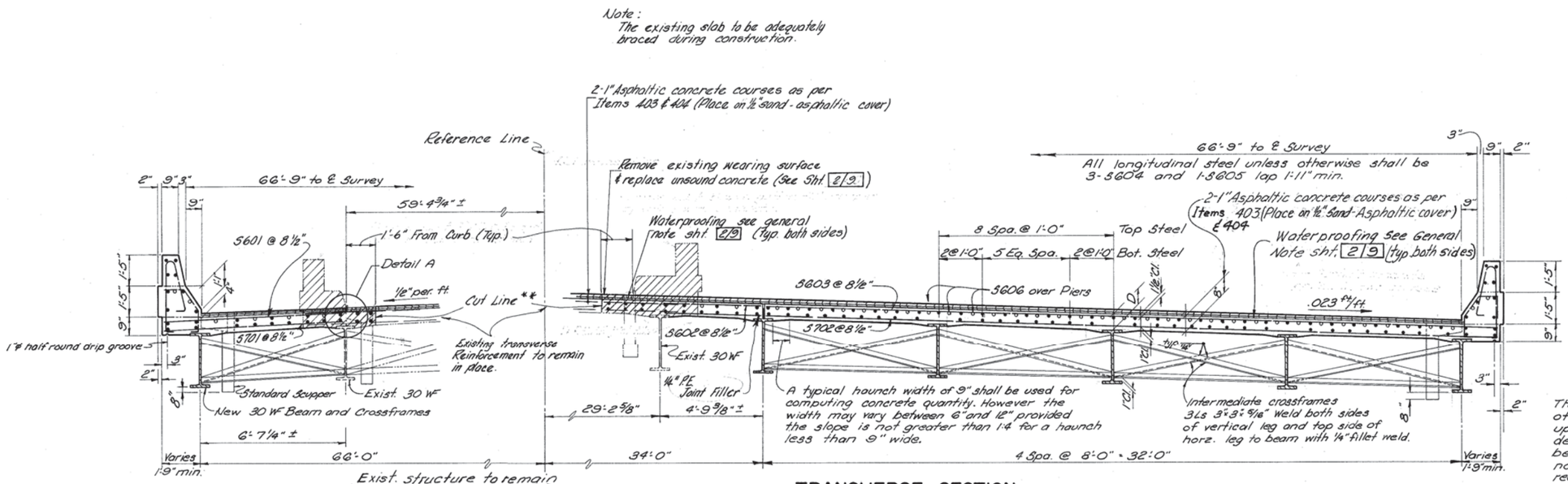
Designed	Drawn	Traced	Checked	Reviewed Date	Revised
R.J.	R.J.	M.L.S.	N.H.	11/5/70	6-29-73 9-3-73

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

927

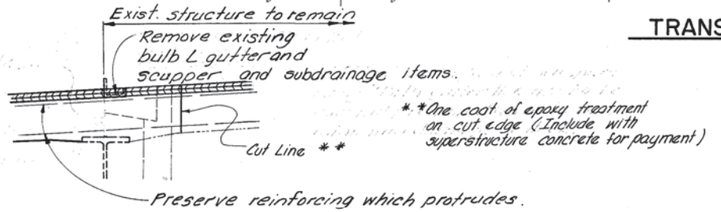
FRANKLIN COUNTY
FRA-70-12.31 S

Note:
The existing slab to be adequately braced during construction.



TRANSVERSE SECTION

FOR SUBDRAINAGE DETAILS SEE SHEET 814



** One coat of epoxy treatment on cut edge (Include with superstructure concrete for payment)

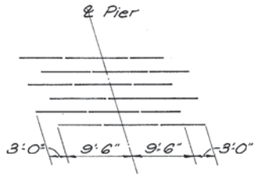
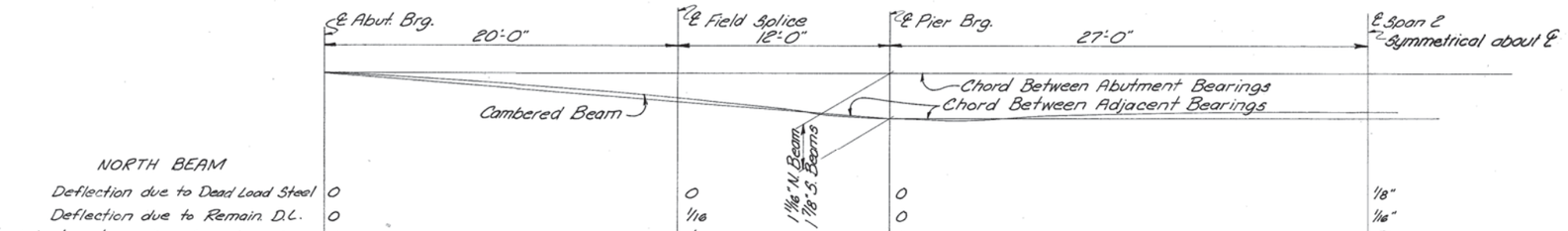


DIAGRAM SHOWING STAGGER OF S606 BARS

Dimension "D"

30 WF 172	8½"
30 WF 99	8 5/8"

These are nominal dimensions. The quantity of concrete to be paid for shall be based upon these dimensions even though deviation from them may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade, or the bearing elevations calculated may not provide a continuous pavement surface from the existing structure to the new construction.



NORTH BEAM				
Deflection due to Dead Load Steel	0	0	0	1/8"
Deflection due to Remain. D.L.	0	1/16	0	1/16"
Adjustment req. for V.C. & Horz. Cl.	0	-1/8	0	-3/16"
Sum - Required Camber	0	-1/16	0	3/16"
SOUTH BEAMS				
Deflection due to Dead Load Steel	0	0	0	1/8"
Deflection due to Remain. D.L.	0	1/16	0	5/8"
Adjustment req. for V.C. & Horz. Cl.	0	-5/16"	0	-1/2"
Sum - Required Camber	0	-1/8	0	1/4"

CAMBER DATA

E. S. PRESTON ASSOCIATES, INC. 6/9
ENGINEERS
COLUMBUS, OHIO

SUPERSTRUCTURE DETAILS

BRIDGE NO. FRA-70-1379S
I-70 OVER SHORT ST.

FRANKLIN COUNTY
STA. 532+34.49
STA. 533+57.08

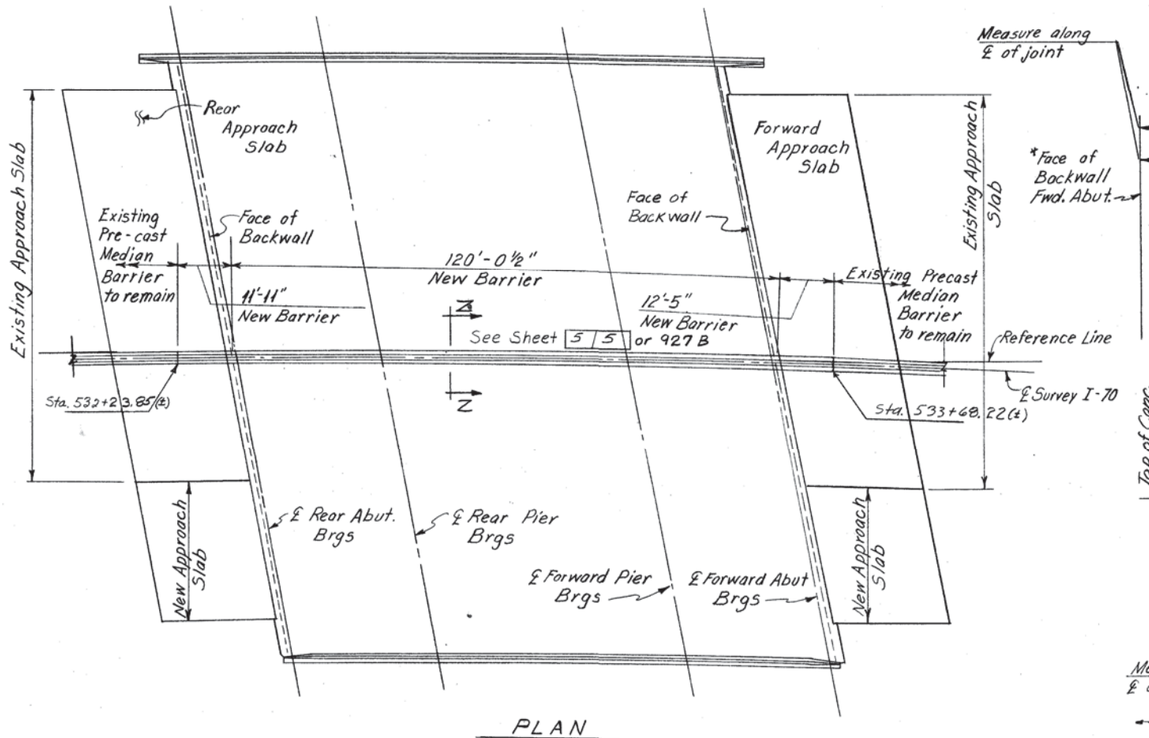
Designed	Drawn	Traced	Checked	Reviewed Date	Revised
R.J.	R.J.	R.J.B.	N.H.	N 1/5/70	

REV. 10-3-72 D.L.M.

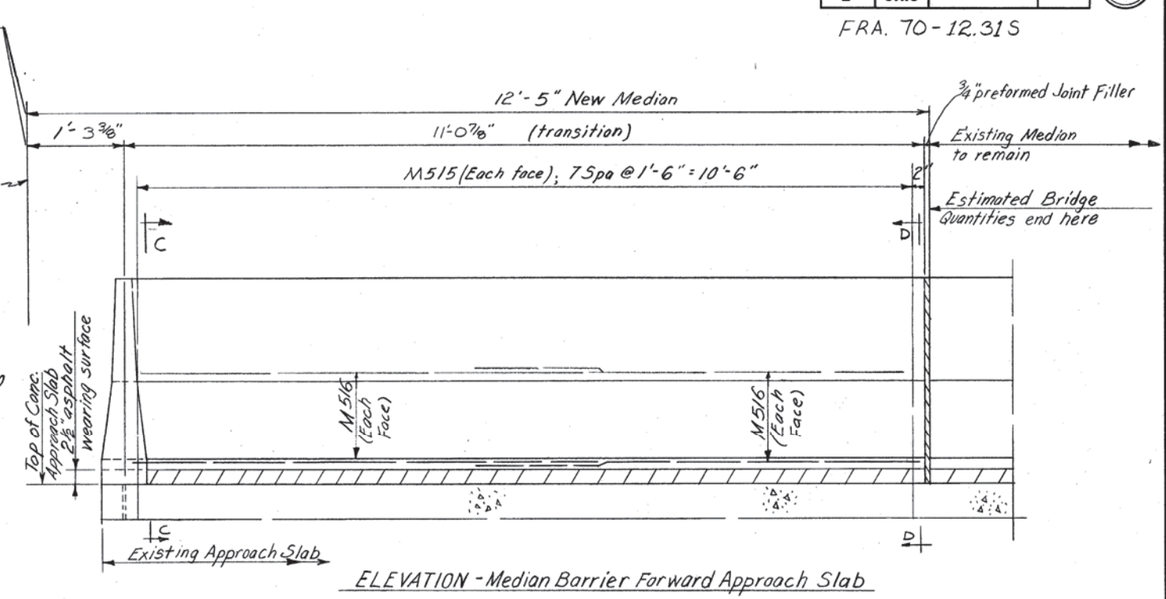
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

9274
992

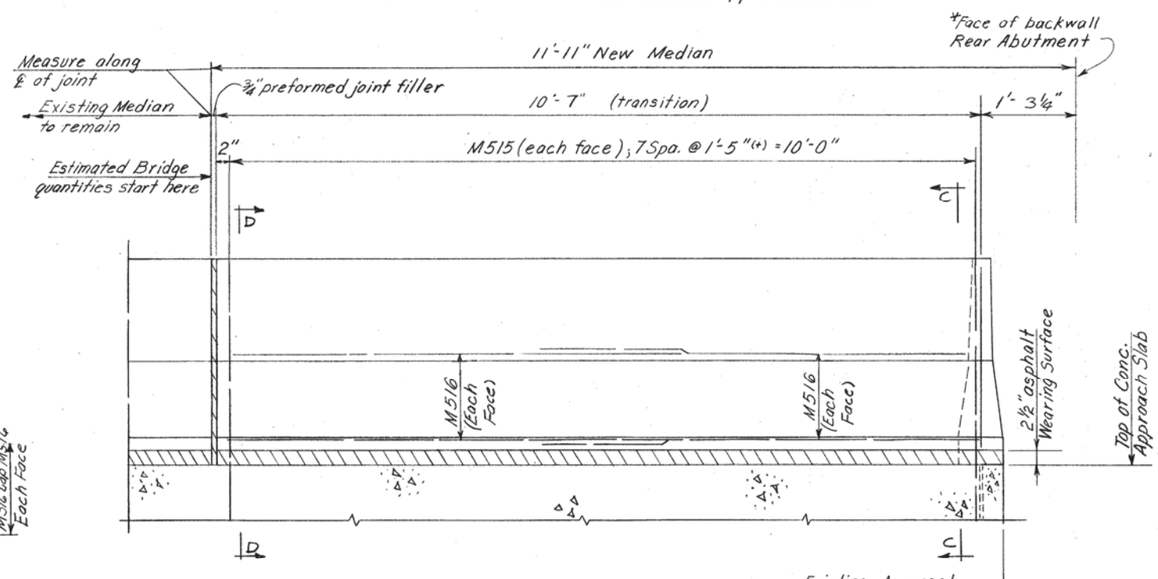
FRA. 70-12.31S



PLAN

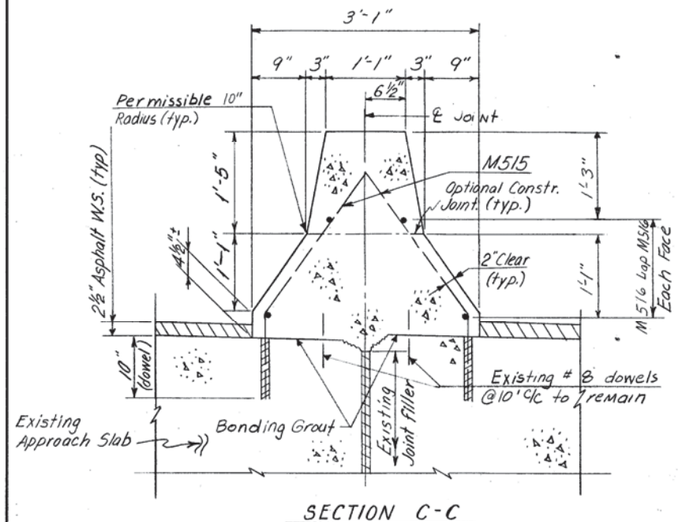


ELEVATION - Median Barrier Forward Approach Slab

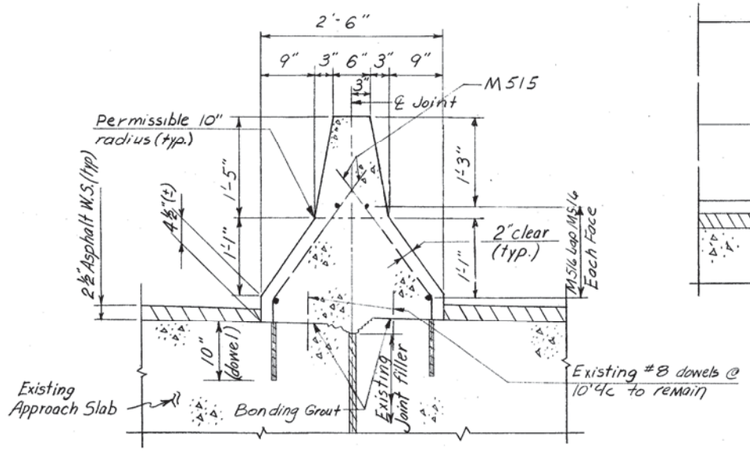


ELEVATION - Median Barrier Rear Approach Slab

* See Sheet 5 5 for Backwall Details or 927B



SECTION C-C



SECTION D-D

For General Notes, Estimated Quantities, Reinforcing Steel List See Sheet 913B.

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

4 5

PLAN, APPROACH SLAB, MEDIAN DETAILS

BRIDGE NO. FRA. 70-1379 S
I-70 OVER SHORT ST.

FRANKLIN COUNTY

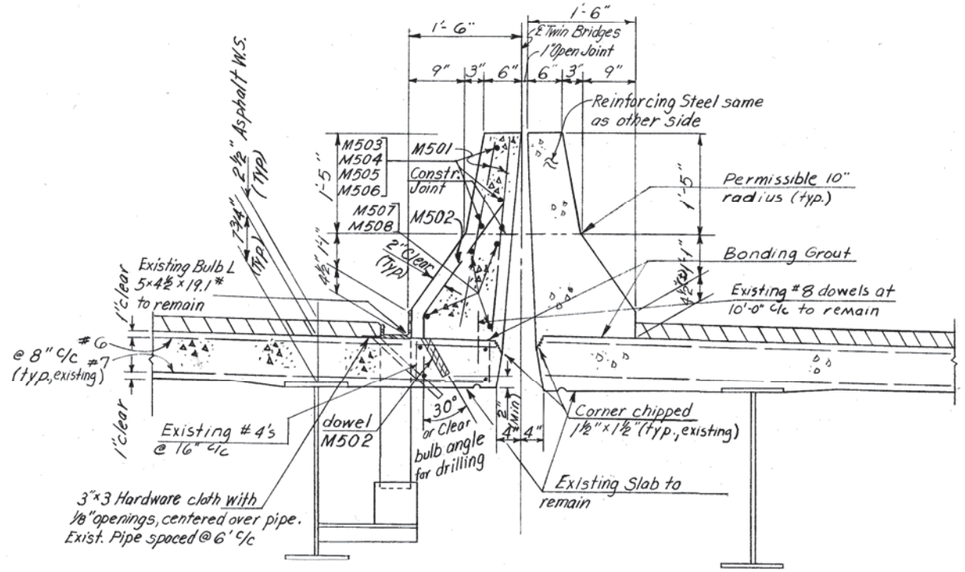
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.A.M.	S.K.E.		FFE			

Sheet Added 2-20-95 J.A.M.

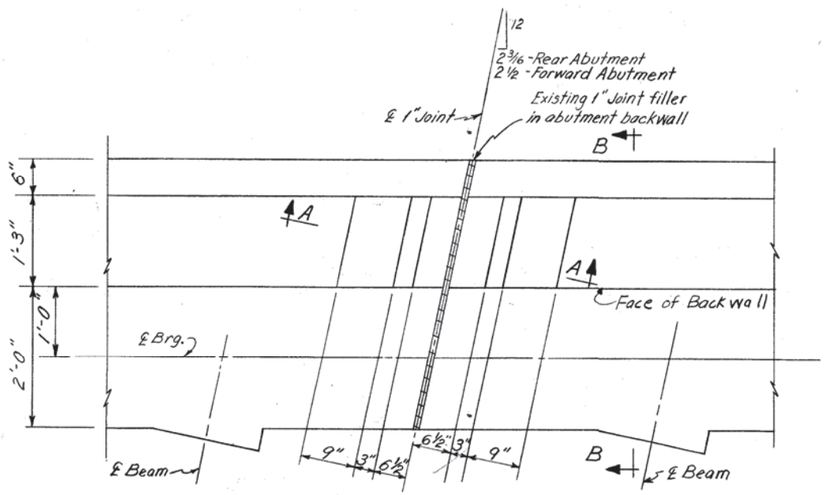
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

927B / 992

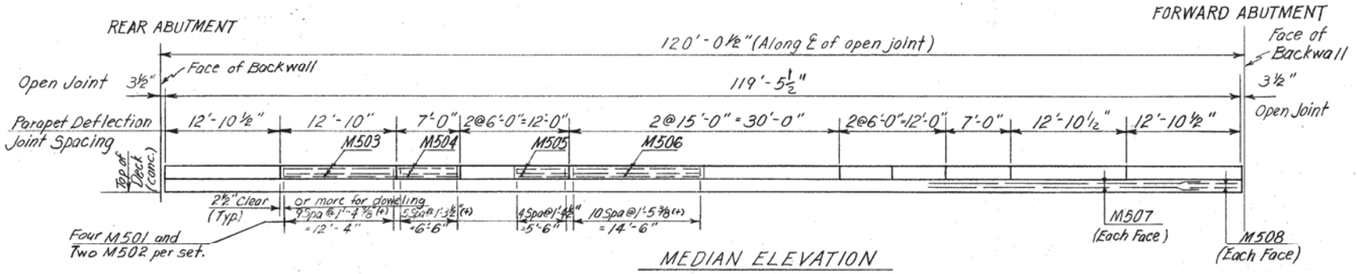
FRA. 70-12.31S



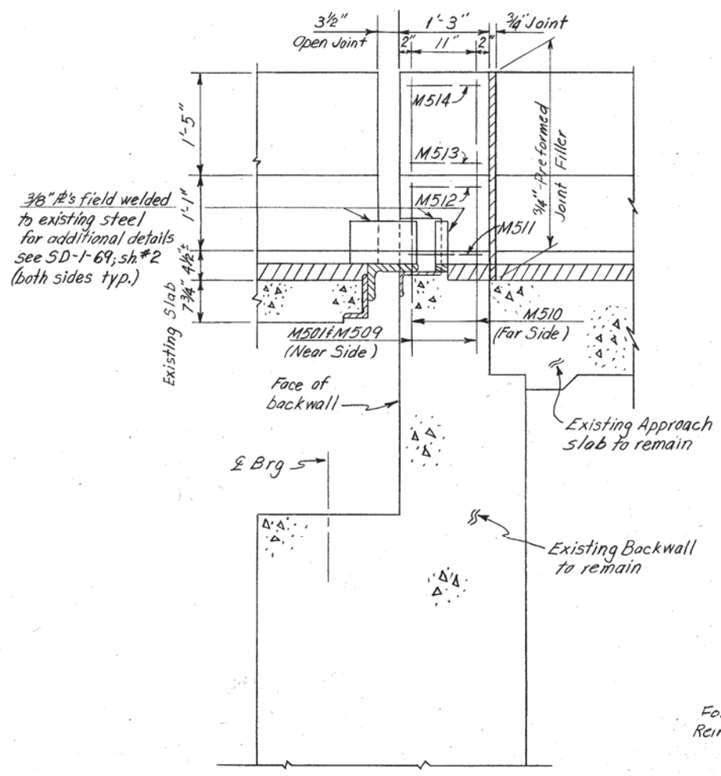
TYPICAL SECTION ON BRIDGE
(Bridge No. FRA 70-1379 S)(Section Z-Z)
For Location See Sheet 4 5 or 927 A



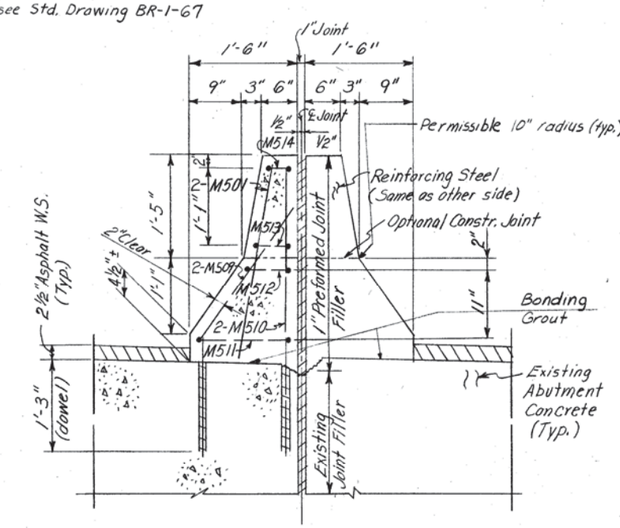
TYPICAL PLAN AT EACH ABUTMENT
(Approach slab and Bridge Deck not shown)



MEDIAN ELEVATION
Bridge No Fra 70-1379 S
(Exp. over short street)
For additional details see Std. Drawing BR-1-67



SECTION B-B



SECTION A-A
(Note: Field alignment adjustment needed at deck to abutment sections.)

For General Notes, Estimated Quantities, Reinforcing Steel List see Sheet 913B

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

5 5

MEDIAN DETAILS
BRIDGE NO. FRA 70-1379 S
I-70 OVER SHORT ST.
FRANKLIN COUNTY

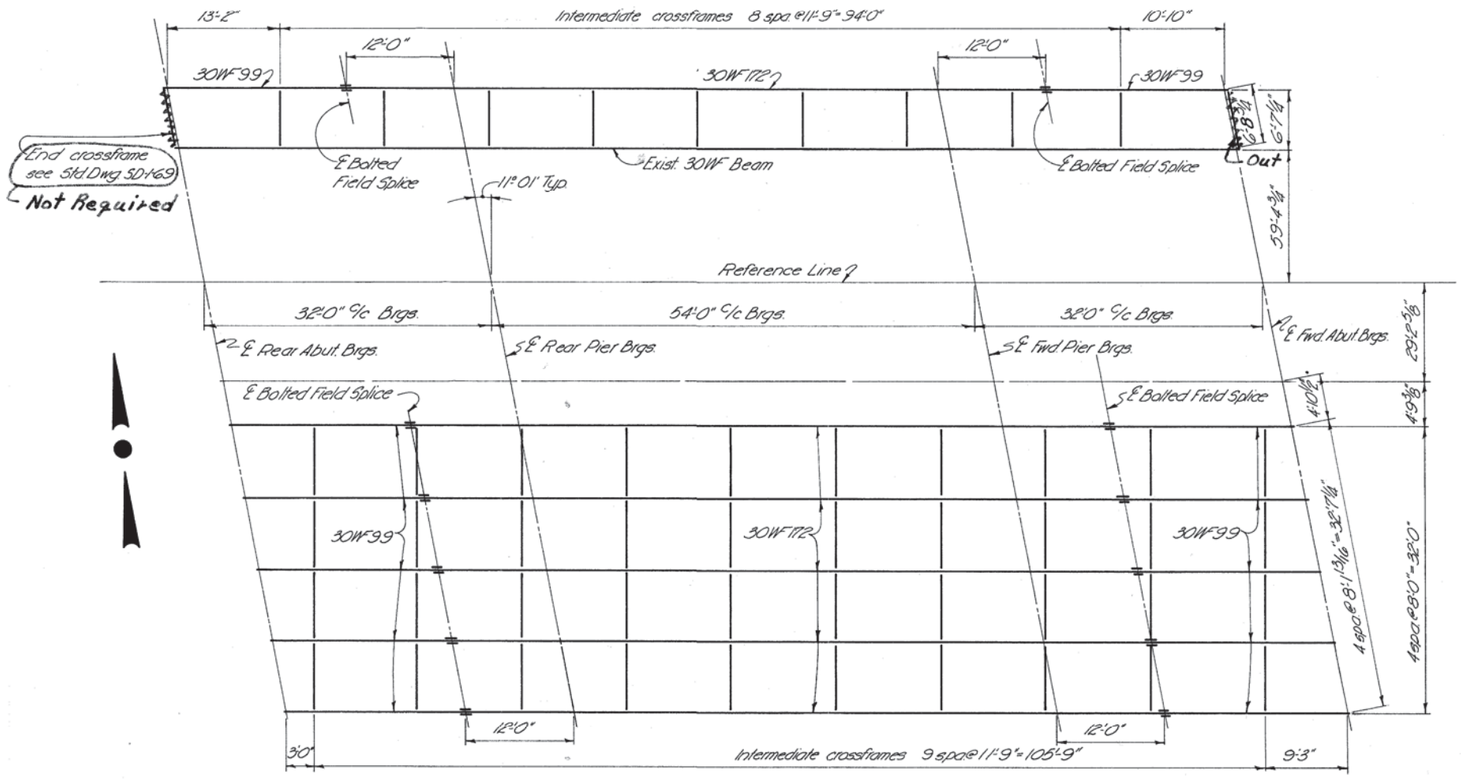
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.A.M.	S.K.E.		FFE			

Sheet Added 2-20-75 J.A.M.

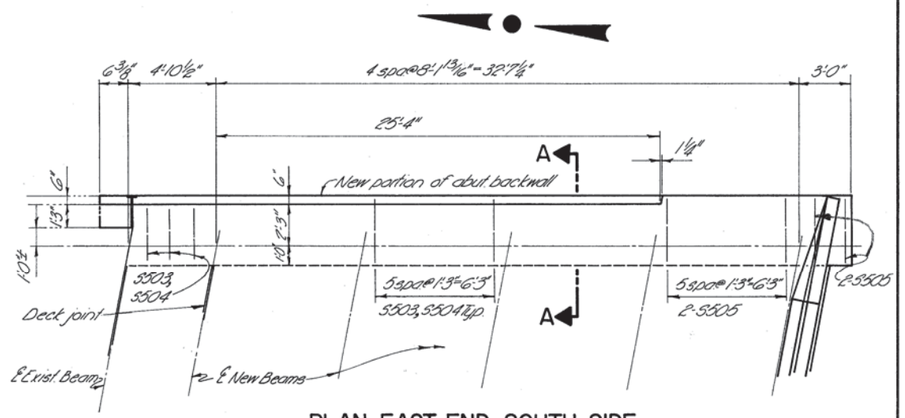
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

928

FRANKLIN COUNTY
FRA.-70-12.31 S

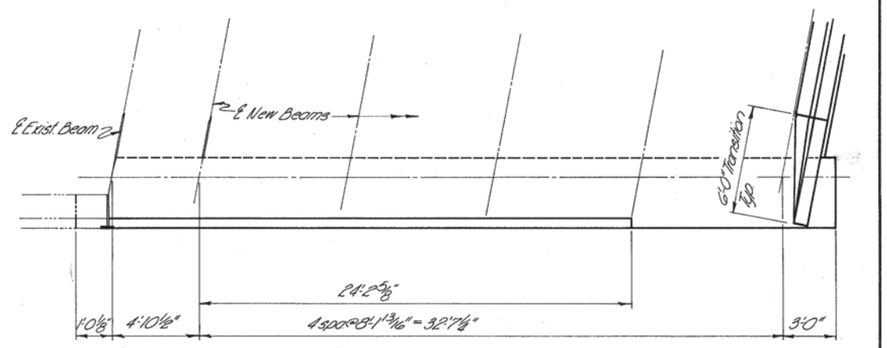


STEEL FRAMING PLAN



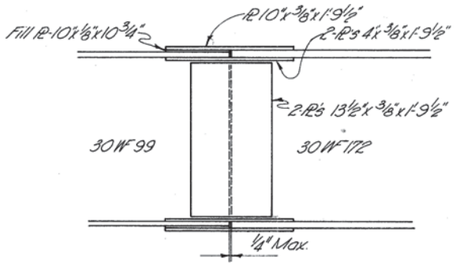
PLAN EAST END SOUTH SIDE

3801 bars not shown



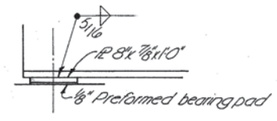
PLAN WEST END SOUTH SIDE

3801 bars not shown

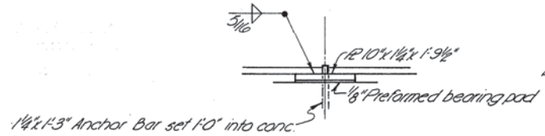


BOLTED FIELD SPLICE

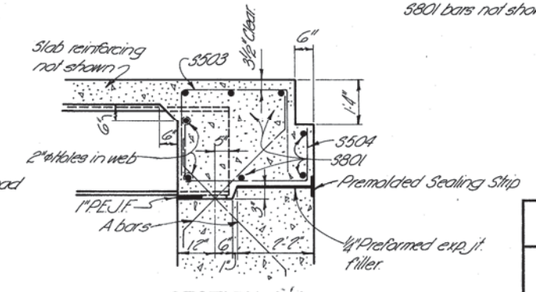
For additional details see Std Dwg SD-1-69



ABUTMENT BEARING PLATES



PIER BEARINGS



SECTION A-A

See Sheet 8/9 for treatment of North Side
See Sheet 8/9 for new kickers on existing beams

E. S. PRESTON ASSOCIATES, INC. 7/9
ENGINEERS
COLUMBUS, OHIO

SUPERSTRUCTURE DETAILS

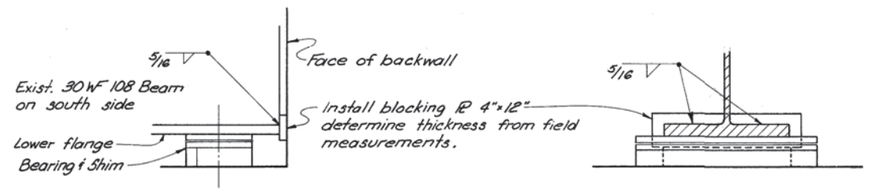
BRIDGE NO. FRA-70-1379S
I-70 OVER SHORT ST.
FRANKLIN COUNTY
STA. 532+34.49
STA. 533+57.08

Designed	Drawn	Traced	Checked	Reviewed Date	Revised
A.J.	A.J.	J.L.	N.H.	N 1/5/70	5-20-75

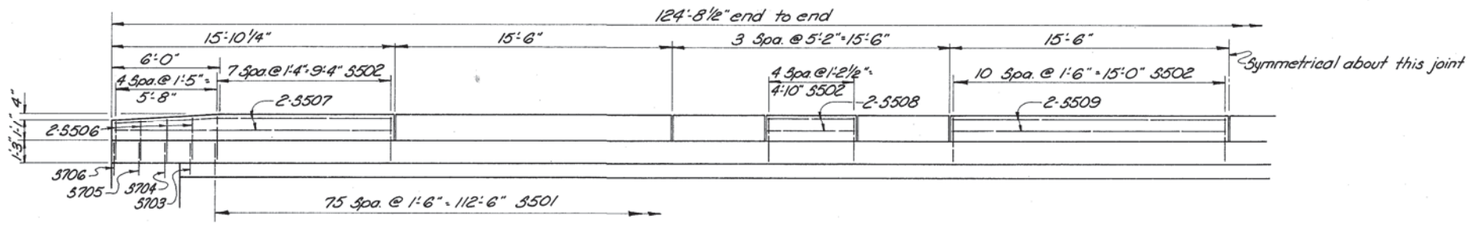
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

929

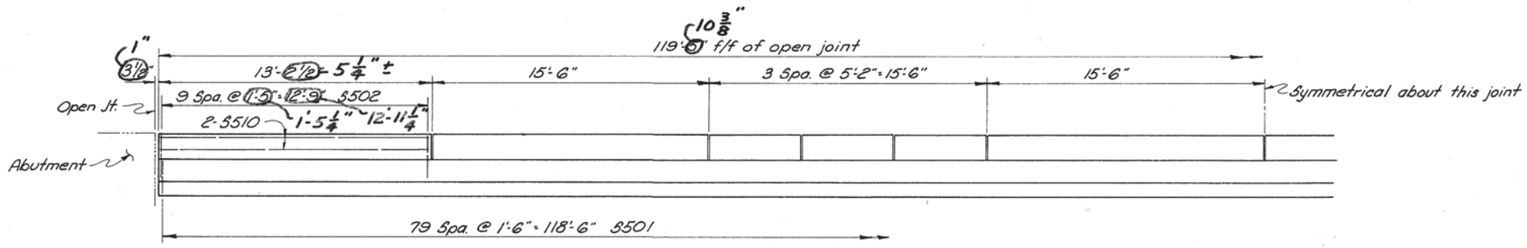
FRANKLIN COUNTY
FRA.-70-12.31 S



BLOCKING DETAIL FOR BOTH ABUTMENTS
(FOUR EXISTING BEAMS SOUTH SIDE)

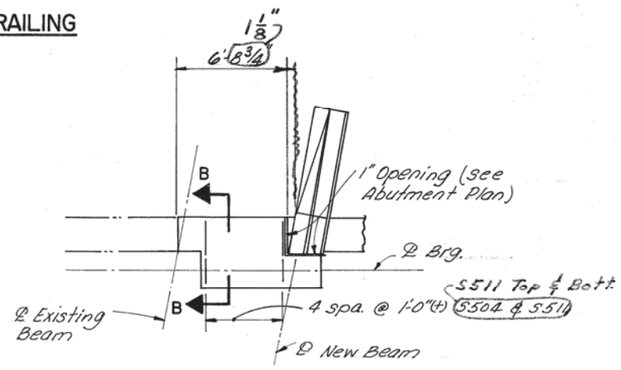


SOUTH RAILING



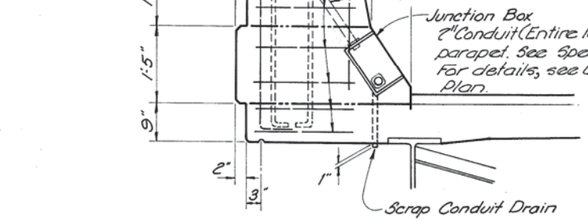
PREFORMED EXPANSION JOINT FILLER in the parapet deflection joints may be either ¼" gray sponge rubber or ¼" gray cellular polyvinyl chloride (PVC) sponge. Either material shall meet the requirements of AASHO M153, type 1, except the density of the PVC sponge shall be not less than 20 lbs. per cu. ft.

NORTH RAILING

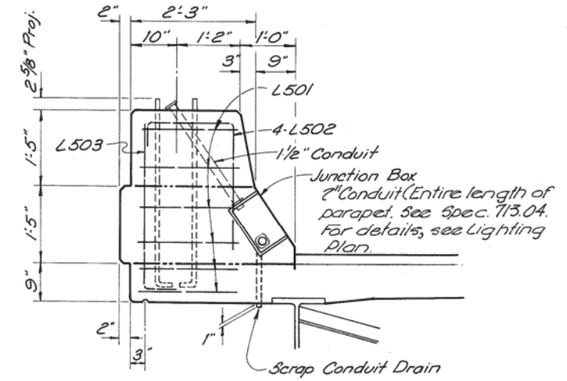


PLAN NORTH SIDE ABUTMENT EXTENSION

West side shown, East side opposite hand
S802 bars not shown.



PLAN

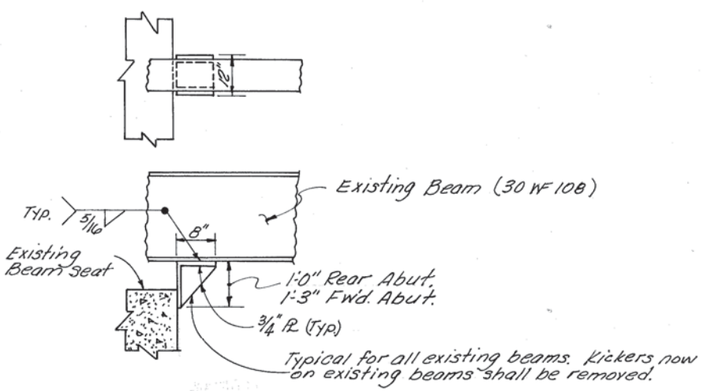


SECTION A-A

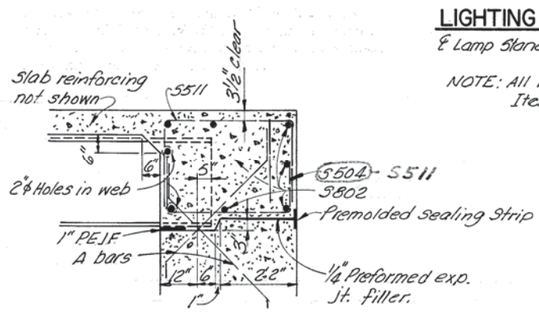
LIGHTING PILASTER DETAIL

℄ Lamp Standard is to clear parapet joint 3'-6" min.

NOTE: All lighting to be included with Item 625 for payment.



KICKER DETAIL FOR EXISTING BEAMS



SECTION B-B

E. S. PRESTON ASSOCIATES, INC. 8/9
ENGINEERS
COLUMBUS, OHIO

SUPERSTRUCTURE DETAILS

BRIDGE NO. FRA-70-1379S

I-70 OVER SHORT ST.

FRANKLIN COUNTY — STA. 532+34.49 / STA. 533+57.08

Designed	Drawn	Traced	Checked	Reviewed Date	Revised
K.J.	K.J.	K.J.S.	M.H.	N 11/5/70	5-30-73

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

930

FRANKLIN COUNTY
FRA-70-12.31 S

REINFORCING STEEL LIST

SUPERSTRUCTURE

MARK	NO.	LENGTH	WEIGHT	SHP.
S801	16	40'-0"	1709	S
S802	16	5'-10"	248	S
S701	169	9'-6"	3281	S
S702	169	34'-0"	11745	S
S703	2	5'-3"	27	B
S704	2	5'-2"	27	B
S705	2	5'-7"	27	B
S706	2	5'-0"	20	B
S601	169	9'-6"	2414	S
S602	338	6'-3"	3173	S
S603	169	34'-0"	8630	S
S604	336	30'-0"	15,140	S
S605	112	34'-7"	5817	S
S606	84	22'-0"	2776	S
S501	156	5'-3"	854	B
S502	184	5'-4"	1023	B
S503	47	7'-4"	30 321	B
S504	42	6'-0"	263	B
S505	32	7'-10"	261	B
S506	16	2'-2"	36	S
S507	8	15'-6"	129	S
S508	48	4'-8"	234	S
S509	32	15'-2"	506	S
S510	8	12'-10"	107	S
S511	20	63 7'-8"	33 160	B

PIERS

P301	80	6'-2"	1677	B
P302	12	18'-6	755	S
P303	20	17'-11"	1218	S
P304	20	17'-7"	1196	S
P305	12	17'-0"	694	S
P306	8	20'-4"	553	S
P307	8	19'-7"	533	S
P308	16	36'-9"	1999	S
P309	12	14'-0"	571	S
P701	32	7'-7"	469	B
P702	64	8'-8"	1134	B
P703	32	8'-2"	534	B
P501	66	10'-2"	700	B
P502	4	36'-9"	153	S

✝ SPIRALS O.D. 28" PITCH = 4½"

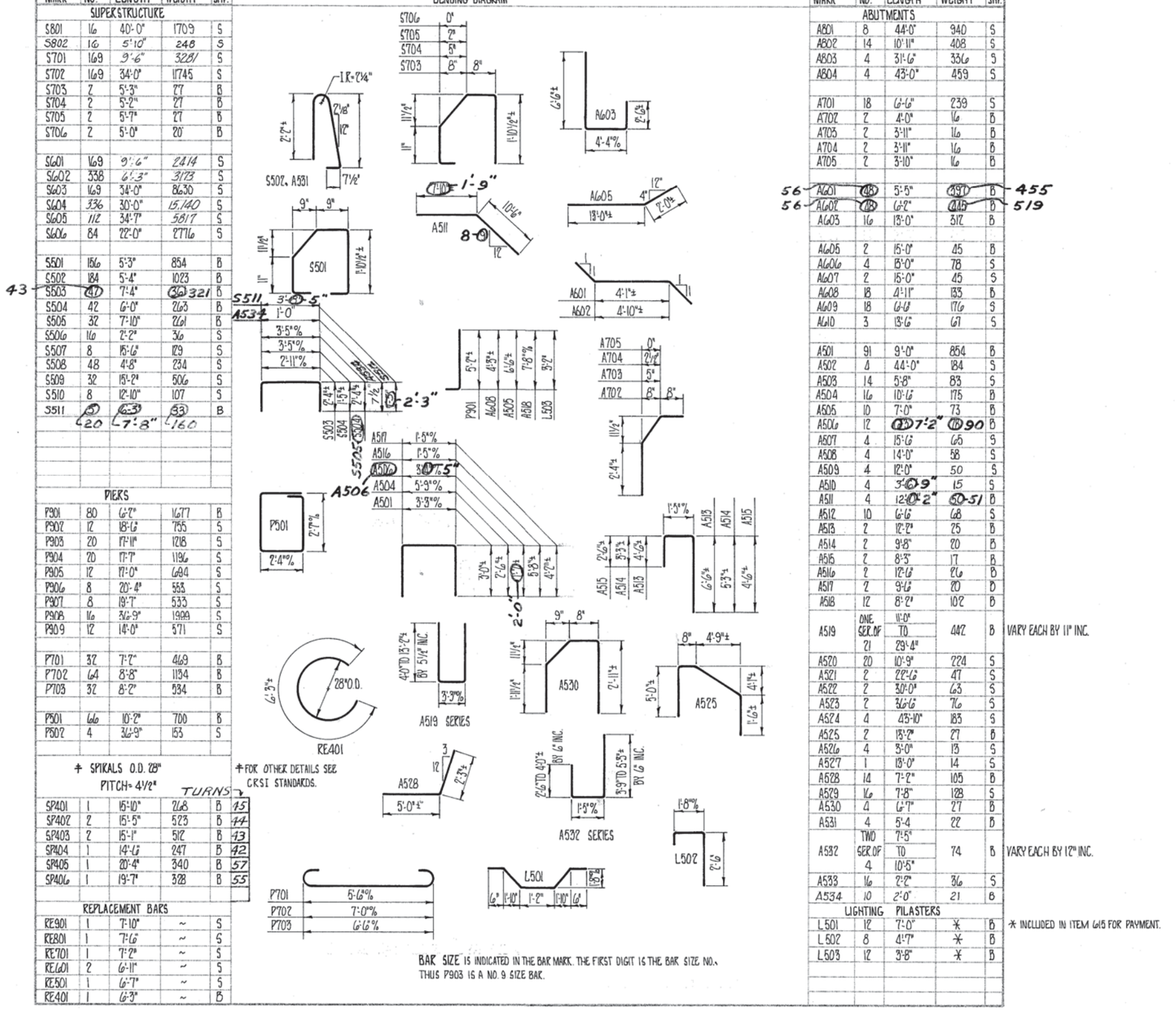
					TURNS
SP401	1	15'-10"	268	B	15
SP402	2	15'-5"	523	B	14
SP403	2	15'-1"	512	B	13
SP404	1	14'-6	247	B	12
SP405	1	20'-4"	340	B	17
SP406	1	19'-7"	328	B	15

REPLACEMENT BARS

RE901	1	7'-10"	~	S
RE801	1	7'-6	~	S
RE701	1	7'-2"	~	S
RE601	2	6'-11"	~	S
RE501	1	6'-7"	~	S
RE401	1	6'-3"	~	B

✝ FOR OTHER DETAILS SEE CRSI STANDARDS.

BENDING DIAGRAM



BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT IS THE BAR SIZE NO., THUS P903 IS A NO. 9 SIZE BAR.

ABUTMENTS

MARK	NO.	LENGTH	WEIGHT	SHP.	
A801	8	44'-0"	940	S	
A802	14	10'-11"	408	S	
A803	4	31'-6"	336	S	
A804	4	43'-0"	459	S	
A701	18	6'-6"	239	S	
A702	2	4'-0"	16	B	
A705	2	3'-11"	16	B	
A704	2	3'-11"	16	B	
A705	2	3'-10"	16	B	
A601	48	5'-5"	491	B	56 — 455
A602	48	6'-2"	446	B	56 — 519
A603	16	13'-0"	312	B	
A605	2	15'-0"	45	B	
A606	4	13'-0"	78	S	
A607	2	15'-0"	45	S	
A608	18	4'-11"	133	B	
A609	18	6'-8	176	S	
A610	3	13'-6	61	S	
A501	91	9'-0"	854	B	
A502	4	44'-0"	184	S	
A503	14	5'-8"	83	S	
A504	16	10'-6	175	B	
A505	10	7'-0"	73	B	
A506	12	45 7'-2"	46 90	B	
A507	4	15'-6	65	S	
A508	4	14'-0"	58	S	
A509	4	12'-0"	50	S	
A510	4	3'-09"	15	S	
A511	4	12'-0" 2"	50-51	B	
A512	10	6'-6	68	S	
A513	2	12'-7"	25	B	
A514	2	9'-8"	20	B	
A515	2	8'-3"	17	B	
A516	2	12'-6	26	B	
A517	2	9'-6	20	B	
A518	12	8'-2"	102	B	
A519	ONE SER. OF 21	11'-0" TO 29'-4"	447	B	VARY EACH BY 11" INC.
A520	20	10'-9"	224	S	
A521	2	22'-6	47	S	
A522	2	30'-0"	63	S	
A523	2	36'-6	76	S	
A524	4	43'-10"	183	S	
A525	2	13'-2"	27	B	
A526	4	3'-0"	13	S	
A527	1	13'-0"	14	S	
A528	14	7'-2"	105	B	
A529	16	7'-8"	128	S	
A530	4	6'-7"	27	B	
A531	4	5'-4	22	B	
A532	TWO SER. OF 4	7'-5" TO 10'-5"	74	B	VARY EACH BY 12" INC.
A533	16	2'-2"	36	S	
A534	10	2'-0"	21	B	

LIGHTING PILASTERS

L501	12	7'-0"	*	B	* INCLUDED IN ITEM 615 FOR PAYMENT.
L502	8	4'-7"	*	B	
L503	12	3'-8"	*	B	

required

SPIRAL REINFORCING BARS: The "Length shown in the steel list for the spiral is the distance from the top of footing to the bottom of the pier cap. The "No. of Turns" shown is the "Length" divided by pitch, plus 3 turns (total number of closed coils), expressed as the nearest whole number.

One and one half closed coils shall be provided at the ends of each spiral unit.
Four steel angle spacers 1"x1"x⅛" weighing .80 lbs. per lin. ft. of spacer 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 80 lbs. per lin. ft. will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

.80

E. S. PRESTON ASSOCIATES, INC.
ENGINEERS
COLUMBUS, OHIO

9/9

REINFORCING STEEL LIST

BRIDGE NO. FRA-70-1379S

I-70 OVER SHORT ST.

FRANKLIN COUNTY

STA. 532+34.49
STA. 533+57.08

Designed	Drawn	Traced	Checked	Reviewed Date	Revised
R.J.	R.J.	J.L.	M.H.	N 1/5/70	5-30-73 6-28-73