DESIGN DESIGNATION	
CURRENT A.D.T. (1972)	19,800
DESIGN YEAR A.D.T. (1990)	37,610
D.H.V.	3,385
D (DIRECTIONAL DISTRIBUTION)	40%-60%
T (PERCENT B.H.C. TRUCKS	30%
V (DESIGN SPEED)	70 MPH

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

RIC-30-3.74 RIC-CH. 135

VILLAGE OF ONTARIO

SPRINGFIELD TWP.

CITY OF MANSFIELD RICHLAND COUNTY

NOTE: Project designation RIC-30-3.92 appearing throughout this plan shall be considered to read RIC-30-3.74.

FHWA REGION	STATE	PROJECT	
5	OHIO	RF-U-600(19) M-2N00(I) & ISSUE-I	

1/618

RIC-30-3.74
RIC-CH. 135

RF-U-600 (19)
M-2N00 (I) & ISSUE NO. I

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 TRANSPORTATION IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE REVISED CODE OF OHIO.

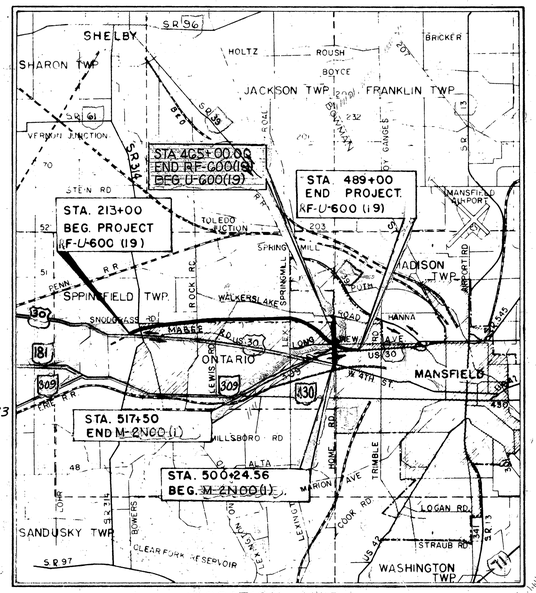
Sheets 438, 439, 451, 459, 467, 468, 478, 486, 490, 494, 503 revised 9-9-76 EBL
Sheets 439, 451, 468, 477, 478, 495 revised 9-20-76 EBL
Sheets 434 & 442 revised 7-21-77 EBL

CONVENTIONAL SIGNS

COUNTY LINE	LIMITED ACCESS (ONLY) — LA —
TOWNSHIP LINE	RIGHT OF WAY (ONLY) — RW —
SECTION LINE	LIMITED ACCESS & RIGHT OF WAY — LA&RW —
CORPORATION LINE	EXISTING RIGHT OF WAY
FENCE LINE (EXISTING) (PROPOSED)	PROPERTY LINE —℄— (IN EXISTING FENCE) —℄—
CENTER LINE 210 211	RAILROAD
TREES (STUMPS R (TO BE REMOVED) X R	GUARD RAIL (EXISTING) (PROPOSED)
UTILITY POLES: TELEPHONE T POWER P LIGHT ℓ	

INDEX OF SHEETS

SHEET Nos 555, 425, 508, 509, 510, 511, 531, 532, 537, 539, 540, 571, 572, 573 OMITTED FROM PLAN



LOCATION MAP
SCALE OF MILES
0 1 2 3

PORTION TO BE IMPROVED
STATE HIGHWAY
OTHER STREETS
DETOUR (SR. 314)

SCALES

PLAN	1"=50'	100'
PROFILE - HORIZONTAL	1"=50'	100'
PROFILE - VERTICAL	1"=5'	10'
CROSS SECTIONS	1"=10'	100'
RIGHT OF WAY	1"=50	100'
OTHERS	AS SHOWN	

1975 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

THE RIGHT OF WAY FOR THIS IMPROVEMENT WILL BE PROVIDED FOR 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 THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED: H. H. Reader
DATE: 3-3-75 DISTRICT DEPUTY DIRECTOR OF TRANSPORTATION

APPROVED: Robert B. [illegible]
DATE: 4-9-76 ENGINEER, BUREAU OF BRIDGES

APPROVED: E. J. Schaefer
DATE: 4-8-76 ENGINEER, BUREAU OF ROADWAY DESIGN

APPROVED:
DATE: ASSISTANT DEPUTY DIRECTOR OF HIGHWAY DESIGN

APPROVED: Lew Billingsley
DATE: 4/12/76 ASSISTANT DEPUTY DIRECTOR FOR REAL ESTATE

APPROVED: Howard E. [illegible]
DATE: 4-12-76 ASSIST DEP DIRECTOR FOR PROGRAM DEVELOPMENT

APPROVED: R. E. Bathin
DATE: 4-12-76 CHIEF ENGINEER, DESIGN

APPROVED:
DATE: CHIEF ENGINEER, CONSTRUCTION

APPROVED:
DATE: CHIEF ENGINEER, OPERATIONS

APPROVED: David L. Weir
DATE: 4-12-76 ASSIST. DIRECTOR, DEPARTMENT OF TRANSPORTATION

APPROVED: Richard D. Jackson
DATE: 4-12-76 DIRECTOR, DEPARTMENT OF TRANSPORTATION

LINE DATA

	RF-600(19) PROJECT	RF-600(19) WORK	U-600(19) PROJECT	U-600(19) WORK	M-2N00(I) PROJECT	M-2N00(I) WORK
					HOME RD.	
BEGIN	213+00.00	203+00.00	463+00.00	463+00.00	500+24.56	500+24.56
END	463+00.00	463+00.00	489+00.00	526+40.31	517+50.00	517+50.00
GROSS	25,200.00	26,200.00	2400.00	6140.31	1725.44	1725.44
STATION EQUATION (436+12.46 BACK= 434+97.99 AHEAD)	114.47	114.47				
ADDITIONS, REFER TO SHT 10		14,710.80				688.00
NET LENGTH	25,314.47 L.F.	41,025.27 L.F.	2400.00	6140.31	1725.44 L.F.	2413.44 L.F.

TOTAL NET LENGTH OF PROJECT RF-U-600(19)+M-2N00(I) = 29,439.91 L.F. OR 5.575 MI.

TOTAL NET LENGTH OF WORK RF-U-600(19)+M-2N00(I) = 49,579.02 OR 9.389 MI.

PROJECT RIC-30-3.74 RIC-C.H. 135

DATE OF LETTING ____ 19 ____ CONTRACT NO. ____

PREPARED AND RECOMMENDED BY
PARRETT & MC CARTNEY
CONSULTING ENGINEERS
MANSFIELD OHIO

SEAL

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

BP-1	6-1-65	CB-8	9-1-69	GR-4	11-9-71	MC-1	6-13-69
BP-2	12-1-68	F-2	1-1-71	GR-5	1-1-71	MC-3	6-1-73
BP-3	1-1-71	F-3	3-10-69	BR-2-67	10-15-71	MC-4	6-13-69
BP-4	1-1-71	F-5	3-10-69	GR-6	1-1-71	MC-5	6-12-75
BP-5	8-11-75	F-6	6-12-75	BR-1-67 Sh 1 of 3	10-15-71	MC-6	6-1-65
BP-6	6-1-65	HL-10	9-6-73	RB-1-55	2-2-59	MC-7	10-1-68
BP-7	1-1-66	HL-12, HL-15, 11	4-6-73	HL-1, HL-4, 6	9-6-73	MC-8	6-12-75
CB-2-2A & B	6-1-65	BP-9	1-1-71	HL-2, HL-3	7-27-73	MH-1,	10-1-68
CB-3	1-1-76	F-1	6-1-72	HL-5, HL-7	9-6-73	TC-51.10; TC-51.11	6-2-75
CB-3A	1-1-76			HL-8, HL-9	9-6-73	AS-1-72	6-30-72
CB-4	9-1-69	GR-2A	1-1-71	L-1	6-1-73	SD-1-63 Sh 1 of 6	6-12-69
CB-5	9-1-69	GR-2B	11-9-71	HW-4	1-1-70	TC-7.65; TC-12.30	10-1-74
CB-6	6-1-65	GR-3	11-9-71	MH-1A	10-1-68	TC-21.10, TC-22.10	10-1-74
						TC-61.10	12-1-75

SUPPLEMENTAL SPECIFICATION

808	1-1-71
839	11-25-70
814	1-1-69
832 TC-51.11	3-8-71
844	11-8-74
836	3-12-75
941	11-28-73
948	2-19-74
S 625	1-11-74
S 713	1-14-74
1001	9-20-72

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINSTRATION

APPROVED:

DIVISION ADMINISTATOR DATE

Rev. 5-4-76

FED. RD. DIVISION	STATE	PROJECT	

2B / 618

RIC-30-3.92
RIC-CH-135

BEGIN WORK STA. 0+12

WALKER LAKE RD.

STANDER ACCESS DR.

END WORK STA. 8+20

SECTION 12

SECTION 13

SECTION 18

SECTION 13

SINCLAIR PIPE LINE CO. ℄ LINE

STANDARD U-TURN
STA. 450+50

END WORK STA. 530+00

℄ C.H. 142
½ SECTION LINE

N 00° 01' 29" W

STA. 527+75 HOME RD. =
STA. 0+00 RELOC. LONGVIEW AVE. (E)

S 45° 07' 29" E

BEG. WORK STA. 0+12.77

C.H. 135

RELOC. C.H. 142

N 88° 50' 31" E

END WORK STA. 6+00

STA. 464+36.00 US 30 =
STA. 522+49.25 C.H. 135

BRIDGE NO.
RIC-30-0880

HOME RD.

STA. 518+50 HOME RD. =
STA. 15+00 RELOC. LONGVIEW AVE. (W)

END WORK STA. 14+87.23

RELOC. C.H. 142

℄ LONGVIEW AVE. (W)

S 29° 37' 11" E

BEGIN WORK STA. 4+50

PROJECT NO. RF-U-600 (19) STA. 517+50

END PROJECT STA. 517+50

M-2N00 (1)

CITY OF MANSFIELD

CORP. LINE

VILLAGE OF ONTARIO

N 89° 13' 31" E

N 88° 56' 11" E

CURVE DATA
P.I. STA. 416+11.25
Δ = 53° 11' 48" RT.
D = 1° 28'
T = 1956.10'
E = 462.37'
R = 3906.53'
L = 3627.045'
P.C. STA. 396+55.15
P.T. STA. 432+82.20

STA. 436+12.46 BACK =
STA. 434+97.99 AHEAD

S 44° 58' 25" E

420 425 430 435 440 445 450 455 460 465

END RF-600 (19) SECTION

BEGIN U-600 (19) SECTION

STA. 465+00

SECT. 13
SECT. 18

PROJECT NO. RF-U-600 (19) STA. 517+50

M-2N00 (1)

END PROJECT STA. 517+50

VILLAGE OF ONTARIO
CITY OF MANSFIELD

STA. 514+83.35 HOME RD.
STA. 1541+88.90 Exist. U.S. 30
(Prop. S.R. 309)

60'

473+52.93 BEGIN MEDIAN TRANSITION

484+25.92 END MEDIAN TRANSITION

DIRECTIONAL ROADWAY
(Prop. W.B. S.R. 309)

BRIDGE NO.
RIC-30-0894

44'

℄ EXIST. U.S. 30 (Proposed S.R. 309)

470 475 480 485 490 495 500 505 510 515 520

N 89° 00' 25" E

ENTRANCE TERMINAL

END PROJECT
STA. 489+00
S.L.M. = 9.17
RF-U-600 (19)

BRIDGE NO
RIC-30-0877 (Exist.)
RIC-309-0872 (Prop.)

CH. 135

CORP. LINE

LINDAIRE LANE

HOME RD.

N 00° 01' 29" W

BEG. PROJECT STA. 500+24.56

M-2N00 (1)

STA. 505+51.12 HOME RD.
0+00 RHODES ACCESS RD.

STA 500+00 ℄ W. FOURTH ST.

END WORK STA. 7+00

CURVE DATA
P.I. STA. 474+33.66 = 1611+81.90 Exist. 30
Δ = 48° 55' 10" LT.
D_c = 2°
L_s = 300'
R = 2864.789'
T_s = 1453.709'
E_s = 283.885'
L_c = 2145.97'
p = 1.30'
k = 149.99'
X_c = 299.92'
θ_c = 5.24'
θ_s = 3°
L.T. = 200.03'
S.T. = 100.03'
Δ_c = 42° 55' 10"
T.S. STA. 459+79.95
S.C. STA. 462+79.95
C.S. STA. 484+25.92

ST. STA. 487+25.92

END WORK STA. 526+40.31 RIC-30-3.92 =
STA. 215+50 EXIST. 30.

520 525 220

SCALE
0 200 400 600 800 1000

QUANTITIES	INIT.	DATE
CALCULATED	AW	8/10
CHECKED		10/10
REVISED		

SCHEMATIC LAYOUT PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

489
618

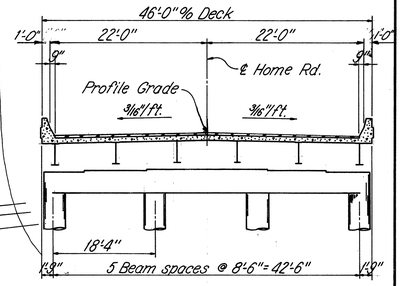
RIC-30-3.92
RIC. C.H. 135

BM-RR Spike in 8" Cherry
S.E. Corner Home & Longview
El. 1327.16

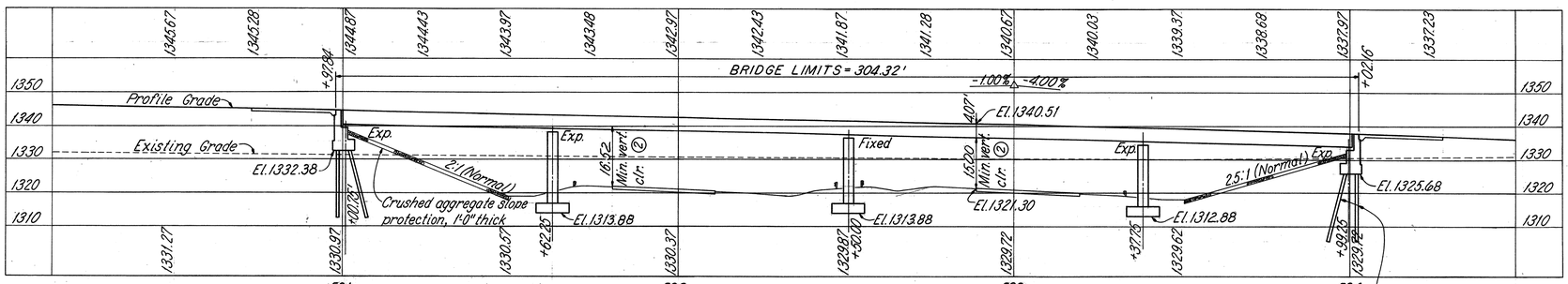
MICROFILMED
OCT 14 1982

CURVE DATA - U.S.R. 30
P.I. Sta. 474 + 33.66
S.C. Sta. 462 + 79.95
C.S. Sta. 484 + 25.92
Δc = 42°55'10"
Dc = 2°00'00"
R = 2864.79'
Ls = 300.00'
Lc = 2145.97'
Superelevation = 0.064'/1.0'

Rock channel protection
Jute matting
End Approach Slab
Sta. 520 + 97.84
Top of Slope El. 1338.60
39°20'00" (typ.)
℄ Survey-Home Road
N. 00°07'29" W.
T/S El. 1339.26
T/S El. 1331.50
T/S El. 1332.50
39°20'00" Tangent to curve
Point of minimum vertical clearance
Begin Approach Slab
Sta. 524 + 02.16
3'-0" (Typ.)
Crushed aggregate slope protection
Special berm and slope protection
46'-0" % Deck
℄ Survey-U.S.R. 30
℄ Eastbound Lanes
℄ Westbound Lanes
℄ U.S.R. 30 - Sta. 464 + 36.00
℄ Home Road - Sta. 522 + 49.25
2.5:1
3:1
2:1
8:1
6:1



TRANSVERSE SECTION



① Actual minimum horizontal clearance shown. Minimum required horizontal clearance 12'-0".
② Actual minimum vertical clearance shown. Minimum required vertical clearance 15'-0".

P.V.I. Sta. 523 + 00
P.V.I. El. 1343.48
L.V.C. = 750'
Correction = 2.81'

EARTHWORK limits shown are schematic. Actual slopes shall conform to plan cross-sections.

PROPOSED STRUCTURE

TYPE: Continuous steel beam bridge with reinforced concrete deck and substructure.
SPANS: 61'-6"; 87'-9"; 87'-9"; 61'-6" % Bearings
ROADWAY: 44'-0" f/f Parapets
LOADING: HS 20-44
SKEW: 39°20'-00" L.F.
SURFACE COURSE: 1½" Asphalt concrete
APPROACH SLABS: AS-1-72 (25'-0" long) Modified
ALIGNMENT: Tangent
AVERAGE DAILY TRAFFIC: 3294 (1990)

FOUNDATION INVESTIGATION LEGEND
Indicates core boring location.
Indicates rod sounding location.

PARRETT & McCARTNEY
CONSULTING ENGINEERS
MANSFIELD OHIO

1 / 9

SITE PLAN

BRIDGE No. RIC - 30 - 0880 UNDER HOME ROAD

RICHLAND COUNTY U.S.R. 30
STA 464 + 41.56

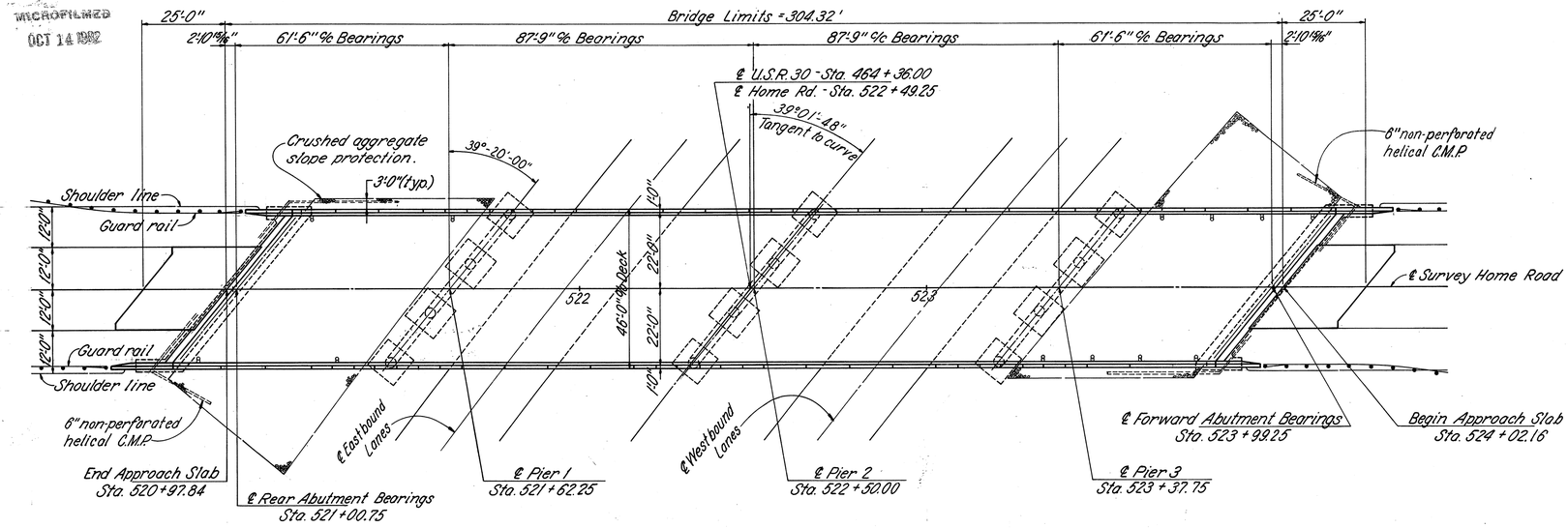
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.H.T.	J.S.	J.S.	GSB	DHT	4/14/71	

MICROFILMED
OCT 14 1982

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

490
C18

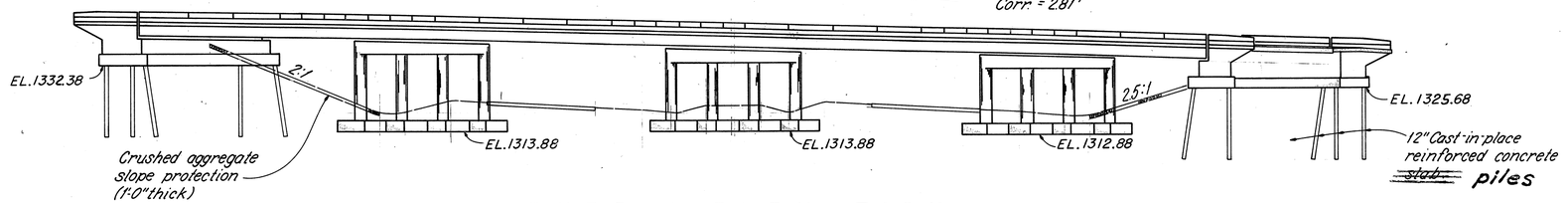
RIC-30-3.92
RIC. C.H. 135



GENERAL PLAN

P.V.I. Sta. 523+00
P.V.I. El. 1343.48
L.V.C. = 750'
Corr. = 2.81'

-1.00% \ -4.00%



GENERAL ELEVATION

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUTS.	PIERS	GEN'L		
503	729	Cu. Yds.	Unclassified excavation		324	405			
503	Lump	Sum	Cofferdams, cribs and sheeting				Lump		
404	40	Cu. Yds.	Asphalt concrete, AC-20	40					
505	Lump	Sum	Test pile				Lump		
507	640	Lin. ft.	12" Cast-in-place reinforced concrete piles		640				
509	183,381	Lbs.	Reinforcing steel	119,193	16,546	47,642			
511	449	Cu. Yds.	Class "C" concrete superstructure (See Prop. Note)	449					
511	125	Cu. Yds.	Class "C" concrete, pier caps and columns			125			
511	128	Cu. Yds.	Class "C" concrete, abutments above footings		128				
511	227	Cu. Yds.	Class "C" concrete, footings		97	130			
513	440,750	Lbs.	Structural steel	440,750					
514	440,750	Lbs.	Field painting of structural steel	440,750					
518	12	Each	Scupper, including supports	12					
518	72	Cu. Yds.	Porous backfill		72				
518	100	Lin. ft.	6" Perforated helical CMP, 707.01		100				
518	105	Lin. ft.	6" Non-perforated helical CMP, including specials, 707.01		105				
518	56	Each	Subdrainage for wearing course, as per plan	56					
Special	20	Cu Yds	Asphaltic protective course (See Proposal Note)	20					
601	746	Sq. Yds.	Crushed aggregate slope protection		746				
Special	1417	Sq. Yds.	Membrane Waterproofing, Cold applied liquid (See Proposal Note)	1417					
808	449	Units	Chemical admixture for concrete, type A, B or D	449					

GENERAL NOTES

REFERENCE shall be made to Standard Drawings AS-1-72 dated 6-30-72 ; SD-1-69, sheets 1 thru 4 (dated 6-12-69); BR-1-67, sheet 1 of 3 (revised 10-15-71); RB-1-55 (revised 2-2-59); and to Supplemental Specifications 808 (revised 1-1-71) and 836 (revised 3-12-75.

DESIGN SPECIFICATIONS: This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, 1969, including the Ohio "Supplement" to these specifications.

DESIGN DATA:
Design Loading - HS20-44
Concrete Class C - unit stress 1200 p.s.i. for superstructure
unit stress 1333 p.s.i. for substructure
Structural Steel - ASTM A36 - unit stress 20,000 p.s.i.
Reinforcing Steel - ASTM A615, A616 or A617 - unit stress 20,000 p.s.i.
Spiral reinforcement may be plain bars ASTM A82 or A615.

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

PILES shall be driven to a minimun bearing capacity of 35 tons per pile for abutments.

FOUNDATION BEARING PRESSURE: Pier footings are designed for a maximun bearing pressure of 2.5 tons per square foot.

QUANTITIES	INIT.	DATE
CALCULATED	RAR	11-16-70
CHECKED	GSB	12-4-70
REVISED	WTF	1-2-75

PARRETT & McCARTNEY
CONSULTING ENGINEERS
MANSFIELD OHIO

2/9

GENERAL PLAN, GENERAL NOTES AND ESTIMATED QUANTITIES
BRIDGE NO. RIC - 30 - 0880
UNDER HOME ROAD
RICHLAND COUNTY U.S.R. 30
STA. 464 + 41.56

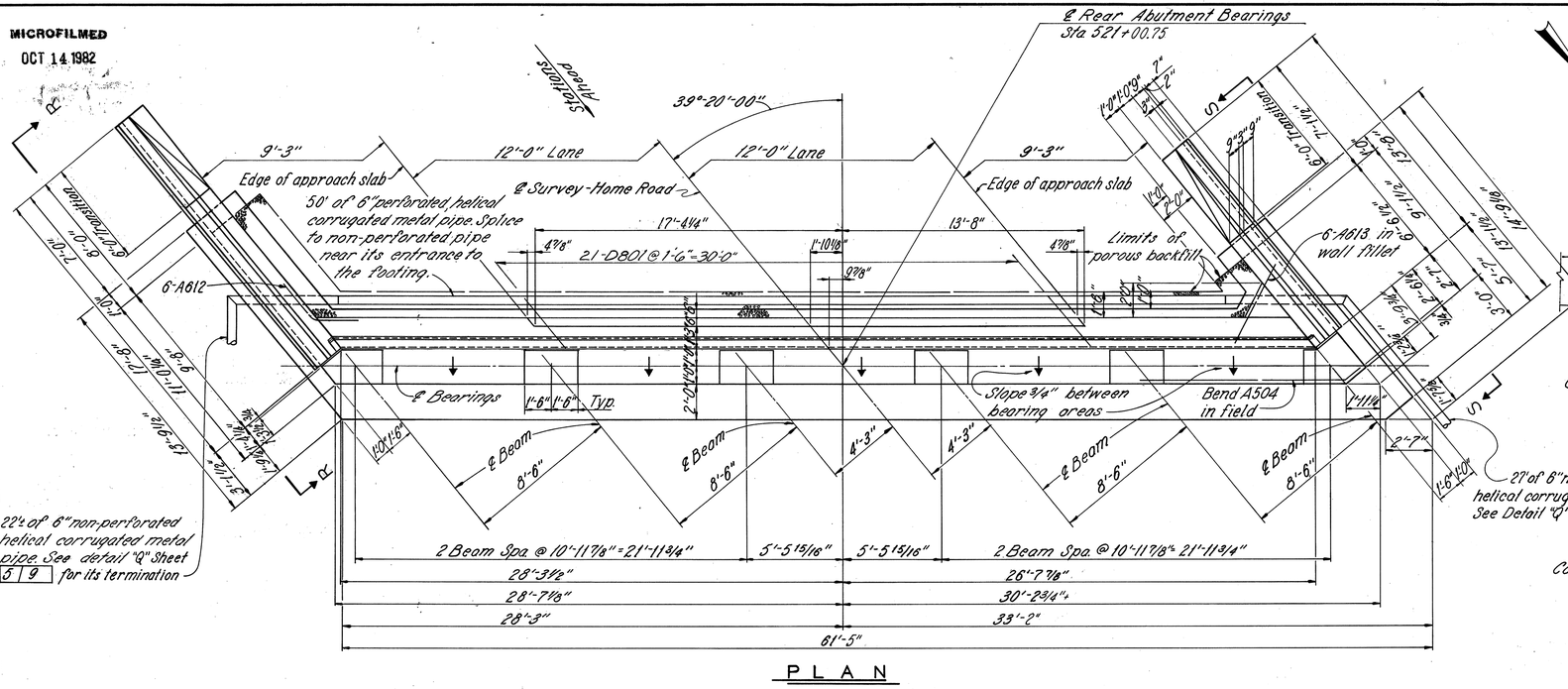
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.H.T.	U.S.	H.V.	GSB	DHT	4/14/71	1-14-72 9-9-76

MICROFILMED
OCT 14 1982

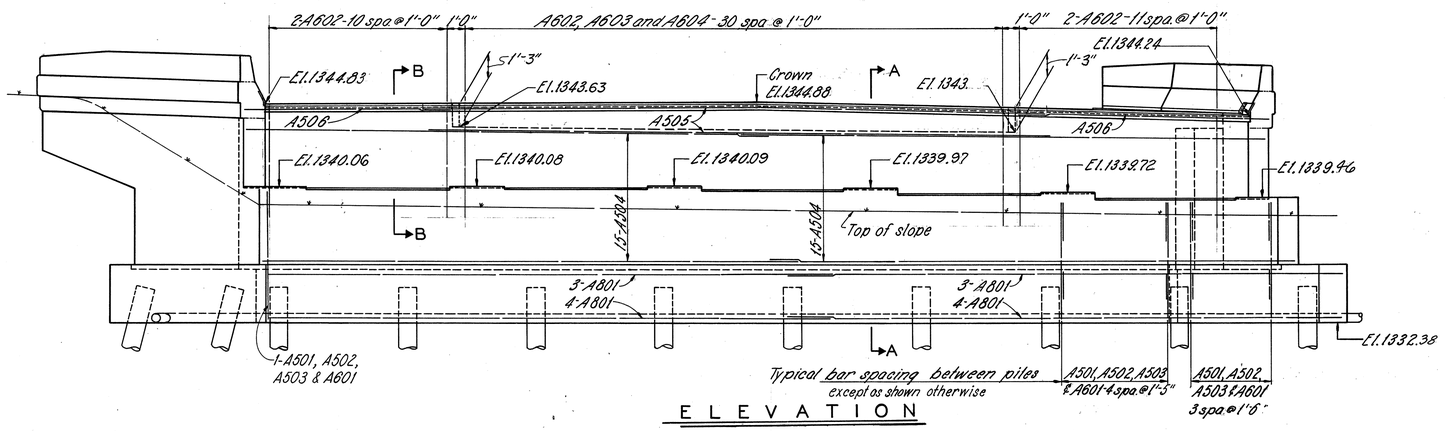
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

RIC-30-3.92
RIC. C.H.135

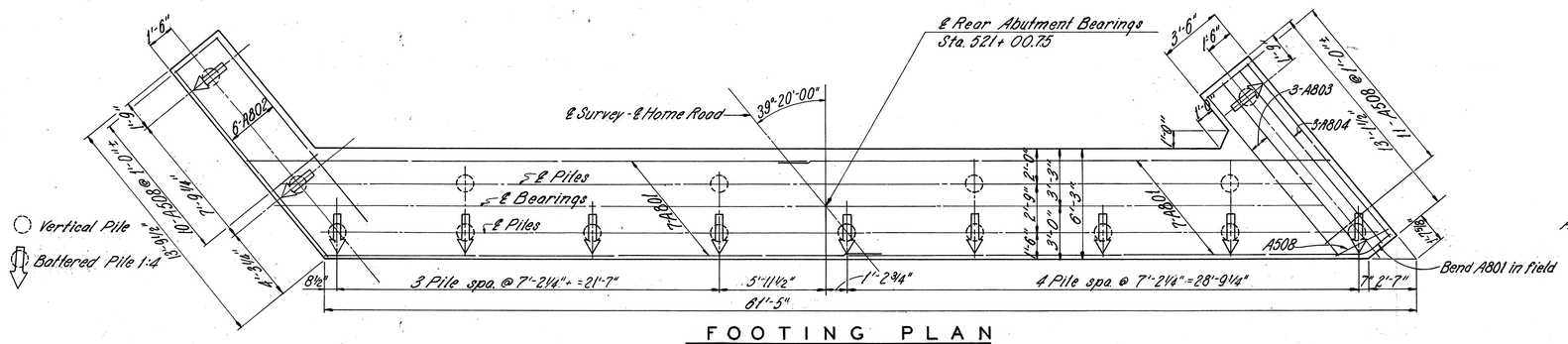
491
618



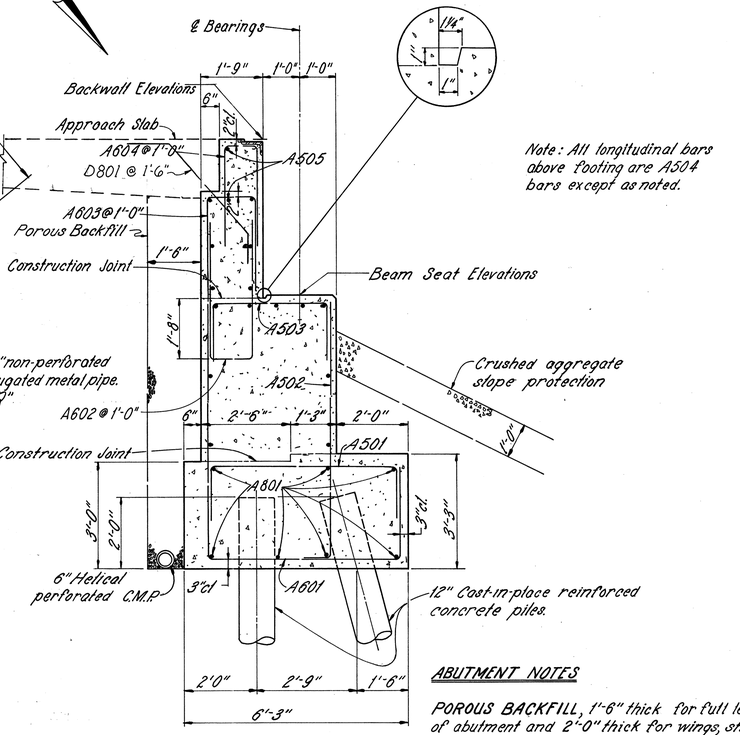
PLAN



ELEVATION



FOOTING PLAN



SECTION A-A

Note: All longitudinal bars above footing are A504 bars except as noted.

ABUTMENT NOTES

POROUS BACKFILL, 1'-6" thick for full lenght of abutment and 2'-0" thick for wings, shall extend up to the approach slab, subgrade and finished ground surface.

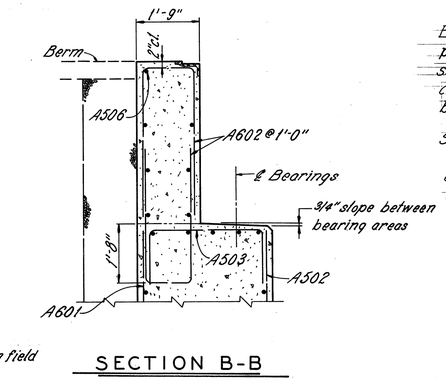
NOTATION: E.F.-each face, R.F.-rear face, F.F.-front face, R.A.-rear abutment, F.A.-forward abutment.

GENERAL NOTES: see sheet 2 | 9

ABUTMENT DETAILS: see sheet 5 | 9

Backwall Concrete: In addition to the provisions of 511.08, backwall concrete shall not be placed until after the deck concrete in the span adjacent to the backwall has been placed.

Standard Drawing BS-1-72 modified as follows
1.) Dimension W = 24'-0"
2.) Change 2" clearance to 3" clearance for top reinforcing steel.



SECTION B-B

PARRETT & McCARTNEY
CONSULTING ENGINEERS
MANSFIELD OHIO

3 | 9

REAR ABUTMENT
BRIDGE NO. RIC-30-0880
UNDER HOME ROAD

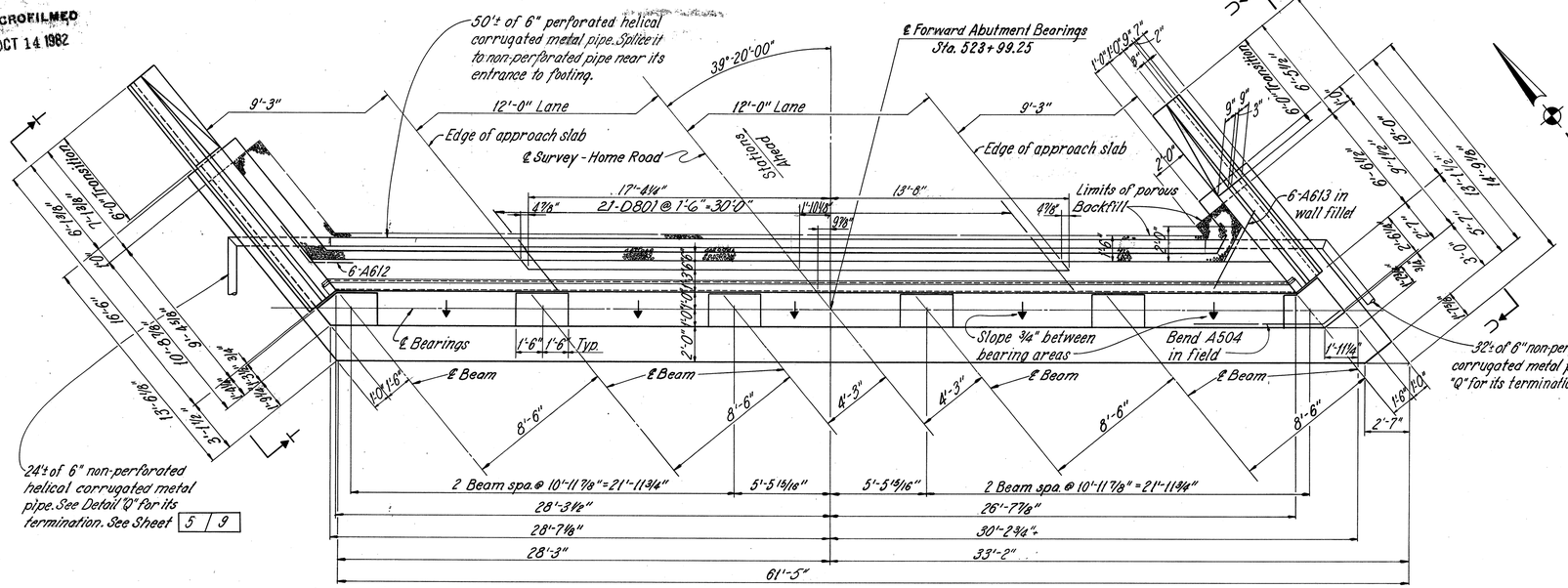
RICHLAND COUNTY U.S.R. 30
STA. 464+41.56

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.H.T.	J.S.	H.V.	G.S.B.	D.H.T.	4/14/71	

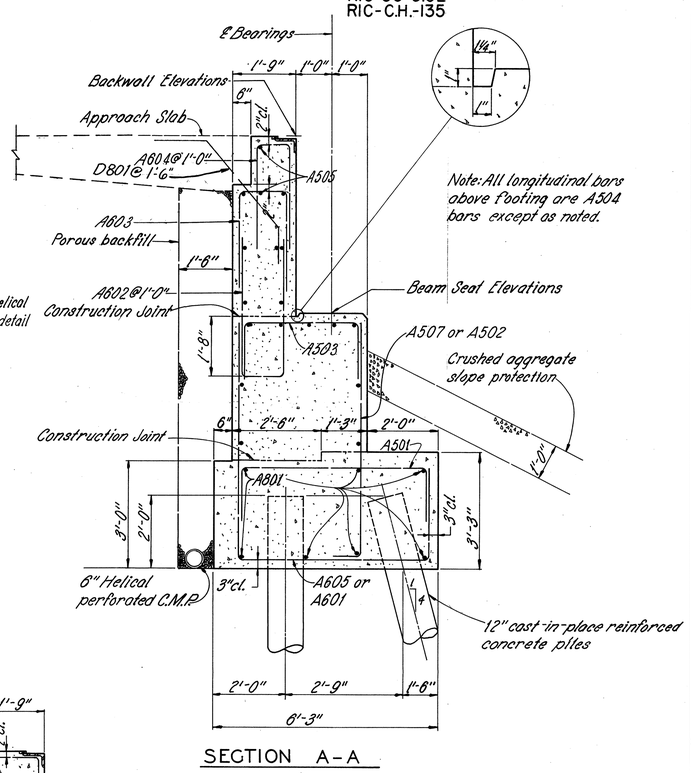
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

492
618

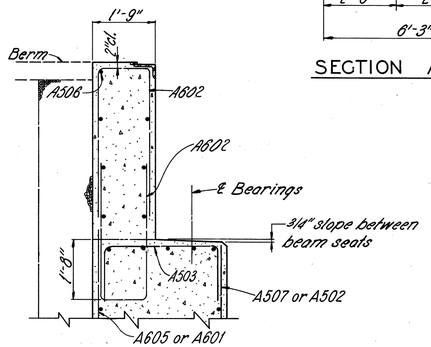
RIC-30-3.92
RIC-C.H.-135



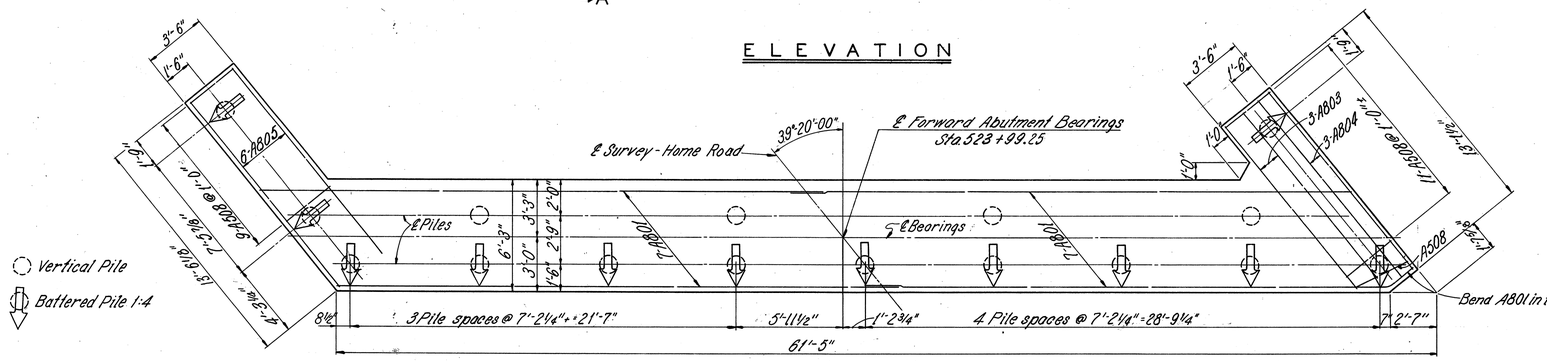
PLAN



SECTION A-A



SECTION B-B



ELEVATION

FOOTING PLAN

Abutment Notes: See sheet 3 9

PARRETT & McCARTNEY 4 9
CONSULTING ENGINEERS
MANSFIELD OHIO

FORWARD ABUTMENT
BRIDGE NO. RIC-30-0880
UNDER HOME ROAD
RICHLAND COUNTY U.S.R 30
STA. 464+41.56

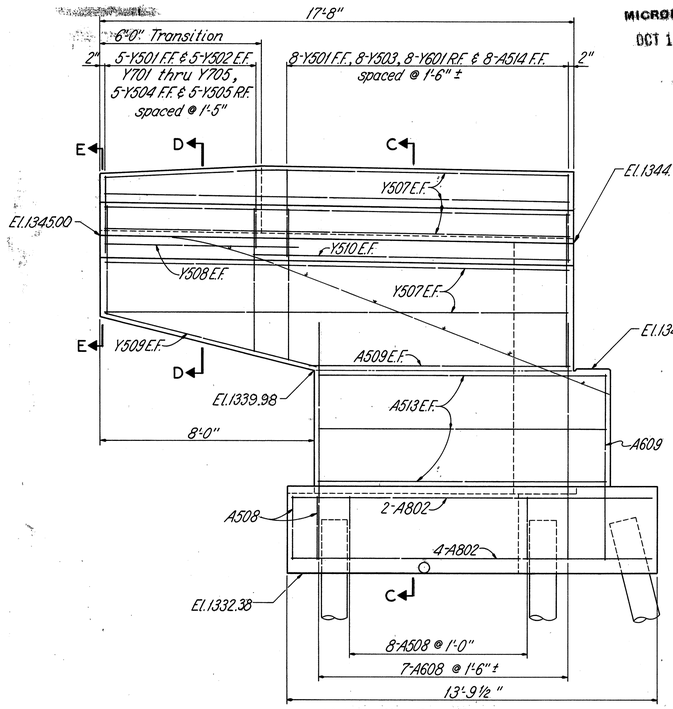
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.S	J.S.	H.V.	G.S.B.	DHT	4/14/71	

MICROFILMED
OCT 14 1982

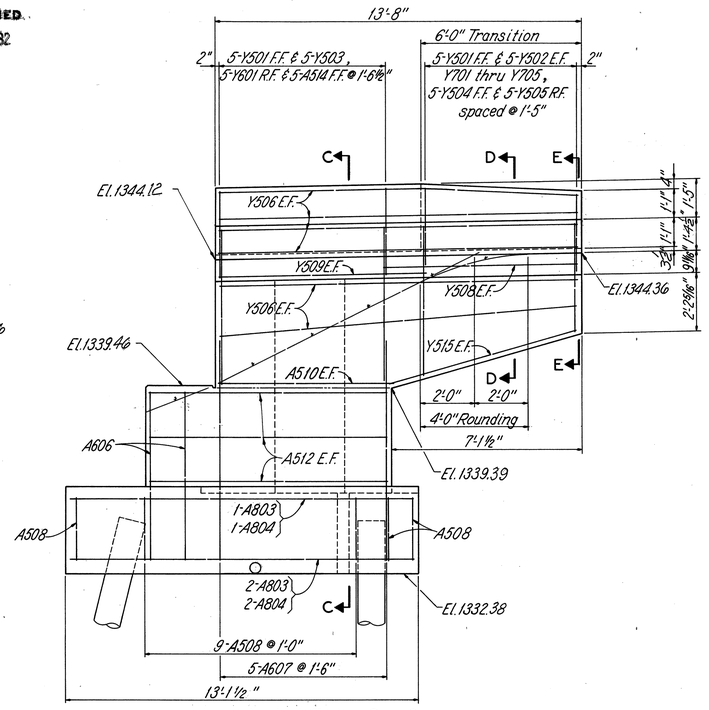
FED. RD. DIVISION	STATE	PROJECT	

493
C18

RIC-30-3.92
RIC. C.H. 135

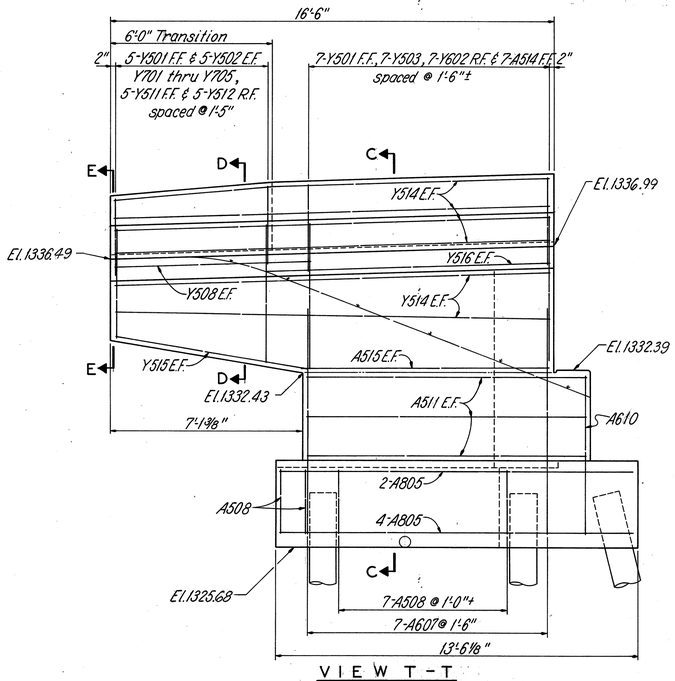


VIEW R-R

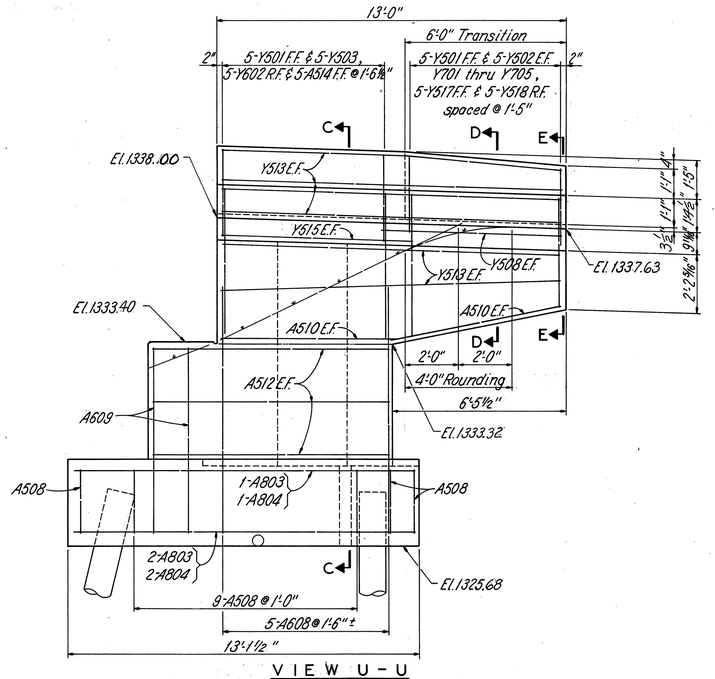


VIEW S-S

REAR ABUTMENT WINGWALLS

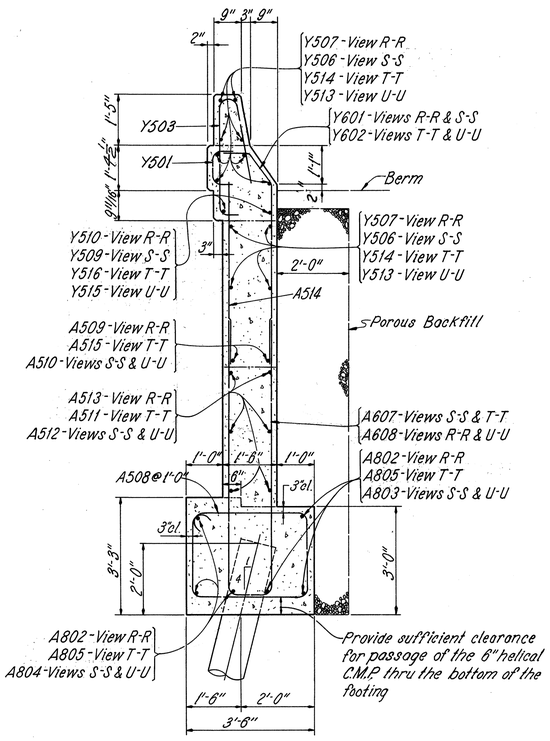


VIEW T-T

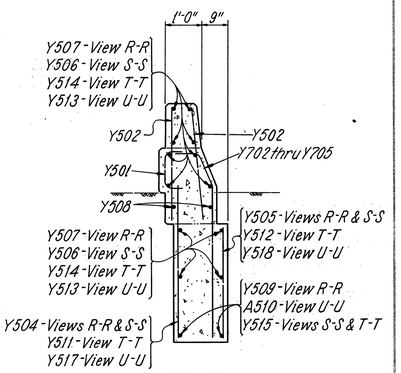


VIEW U-U

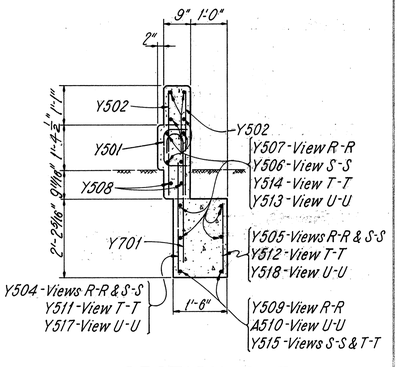
FORWARD ABUTMENT WINGWALLS



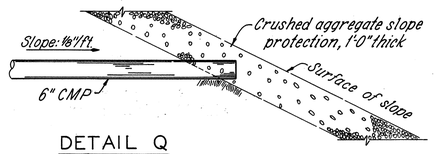
SECTION C-C



SECTION D-D



SECTION E-E



DETAIL Q

PARRETT & McCARTNEY
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MANSFIELD OHIO

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ABUTMENT DETAILS

BRIDGE NO. RIC-30-0880
UNDER HOME ROAD

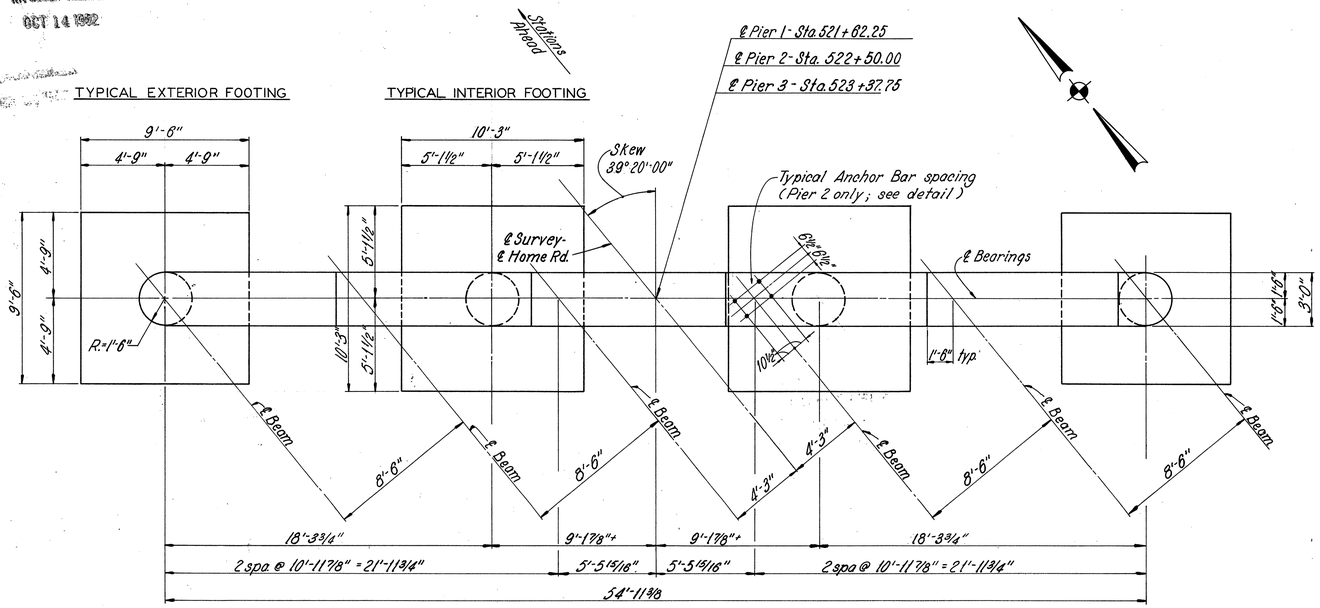
RICHLAND COUNTY U.S.R. 30
STA. 464 + 41.56

DESIGED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.S.	J.S.	H.A.V.	G.S.B.	D.H.T	4/14/71	

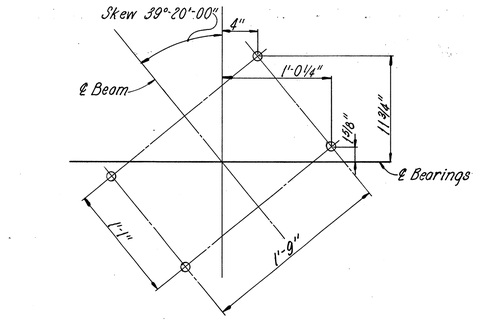
FED. RD. DIVISION	STATE	PROJECT	

494
G 1 8

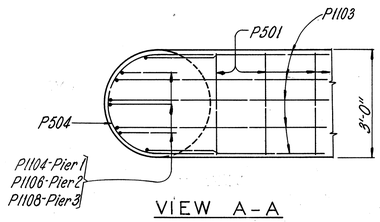
RIC-30-3.92
RIC-C.H.135



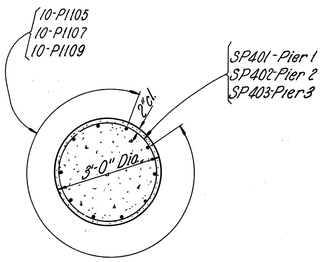
PLAN



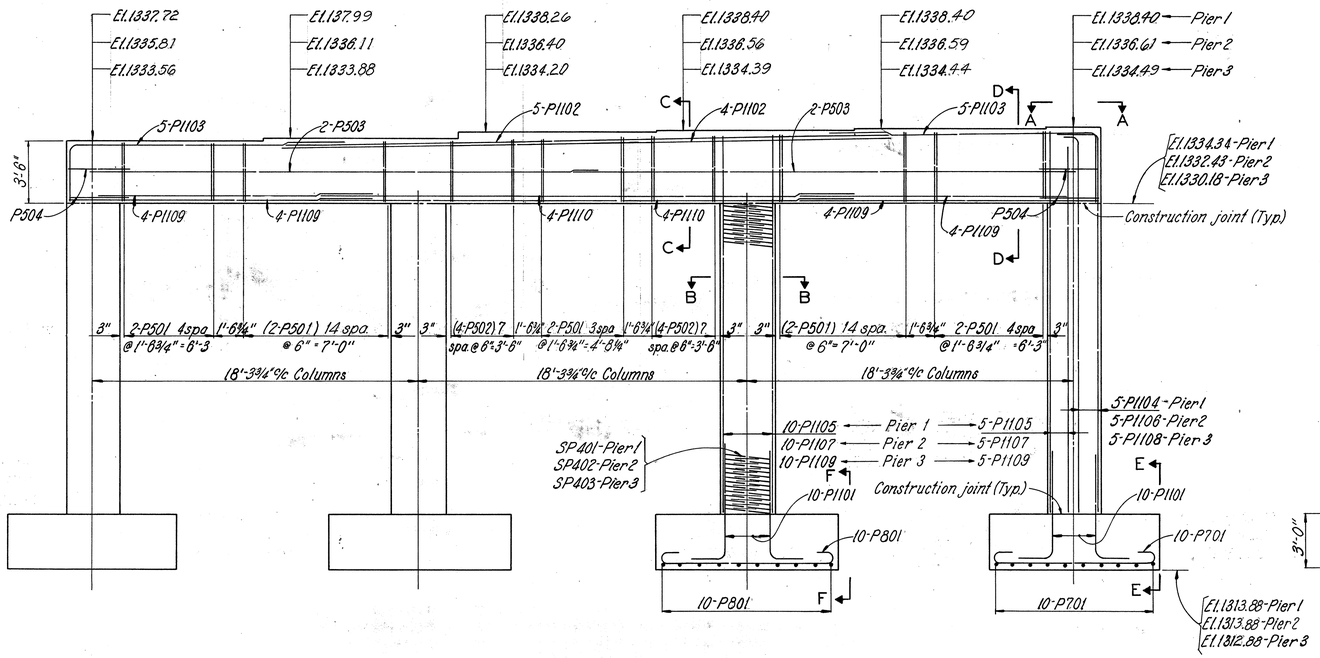
ANCHOR BAR LAYOUT
SHOE B-175 PIER 2 ONLY



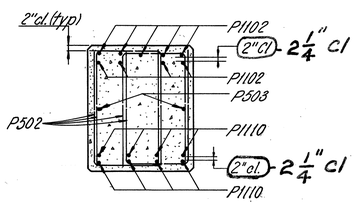
VIEW A-A



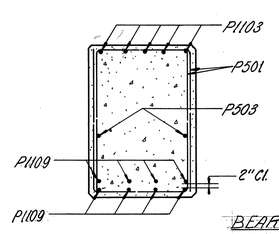
SECTION B-B



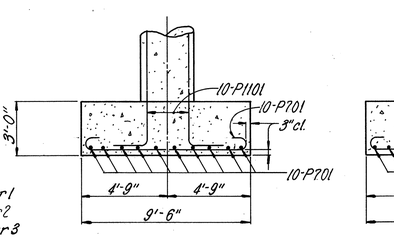
ELEVATION



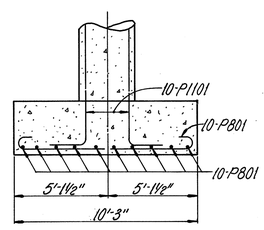
SECTION C-C



SECTION D-D



SECTION E-E



SECTION F-F

BEARING ANCHORS: At the option of the Contractor, bearing anchors (or formed holes), located and supported by templates, may be cast in place.

BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of bearing anchor holes or the pre-setting of bearing anchors.

GENERAL NOTES: See Sheet 2 | 9

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CONSULTING ENGINEERS
MANSFIELD OHIO

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PIERS

BRIDGE NO. RIC-30-0880
UNDER HOME ROAD
RICHLAND COUNTY U.S.R. 30
STA. 464 + 41.56

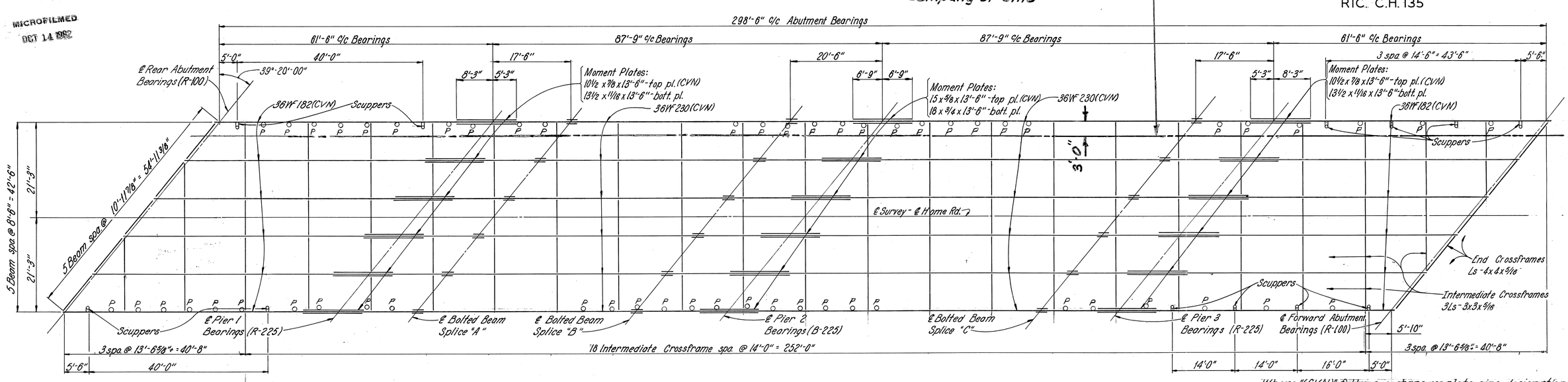
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.S.B.	H.A.V.	H.A.V.	D.H.T.	VL	4/14/71	9-9-76

FED. RD DIVISION	STATE	PROJECT	
2	OHIO		

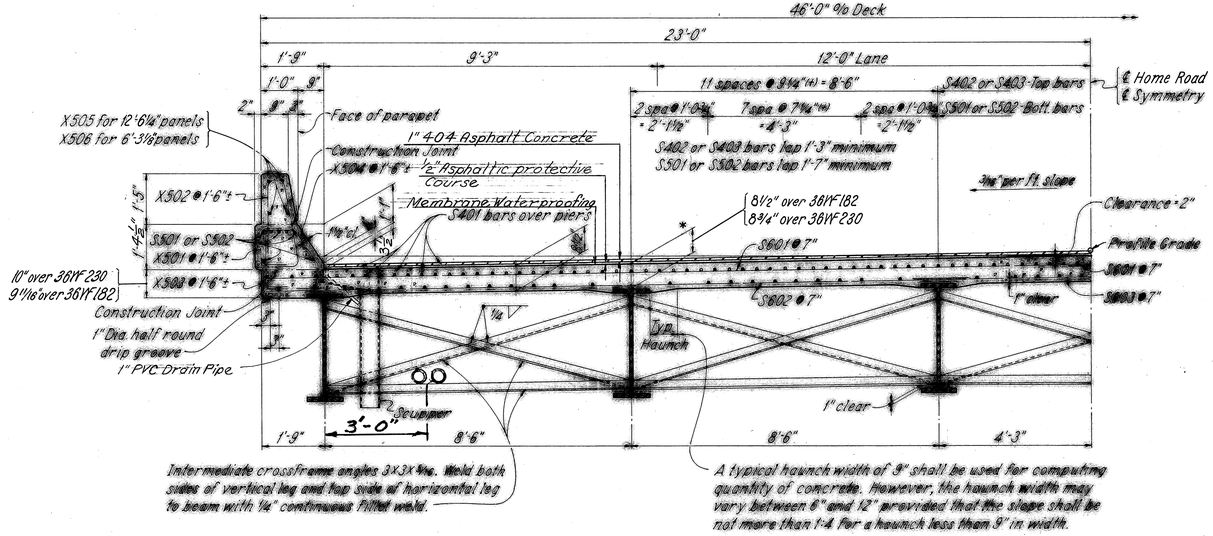
495
G18

RIC-30-3.92
RIC. C.H. 135

℄ of 2-4" conduits
Materials and labor to be supplied by United Telephone Company of Ohio



FRAMING PLAN



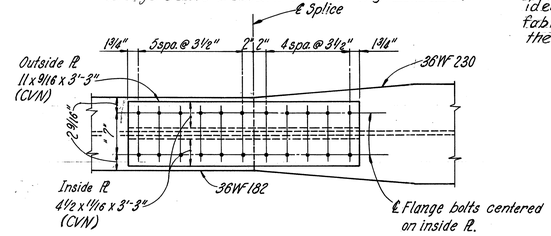
Intermediate crossframe angles 3 x 3 x ⅝. Weld both sides of vertical leg and top side of horizontal leg to beam with ¼" continuous fillet weld.

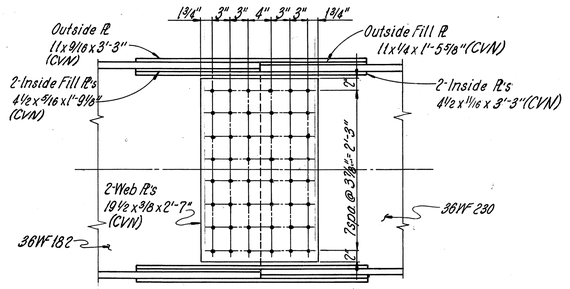
A typical haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

* The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it 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.

HALF TRANSVERSE SECTION

STEEL ERECTION: During the erection of end dams and crossframes care shall be taken to insure that stringers, bearing parts and bridge seats remain in bearing contact.





BOLTED BEAM SPLICE "A" AND "C"

Notes: For additional details, notes and for Bolted Beam Splice "B", see Standard Drawings SD-1-69, Sheet 4 of 4.

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

Where "(CVN)" follows a shape or plate size designation, the material shall meet specified minimum notch toughness requirements. The Fabricator shall submit to the Director a procedure designed for positive identification of material through all phases of fabrication. No material shall be fabricated until the Director has approved the procedure.

END CROSSFRAMES, END DAMS, SCUPPERS, CURB PLATES, MOMENT PLATE WELDING AND BOLTED BEAM SPLICE: See Standard Drawing SD-1-69, Sheets 1 thru 4 of 4.

PARAPET: See Standard Drawing BR-1-67, Sheet 1 of 3.

BEARINGS: See Standard Drawing RB-1-55 for the following: R-100 for Abutments, R-225 for Pier 1 & 3 and B-225 for Pier 2.

GENERAL NOTES: See Sheet 2 | 8

PREFORMED EXPANSION JOINT FILLER: See Standard Drawing BR-1-67, Sheet 1 of 3.

For Subdrainage Details, Scuppers box dimensions and Vertical location of Scuppers with respect to the top of asphalt, See sheet 506A, Deck Drainage Details.

SUBDRAINAGE PIPE locations are indicated ⊕. See sheet 506A for additional location restrictions.

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MANSFIELD OHIO

SUPERSTRUCTURE-1
BRIDGE NO. RIC-30-0880
UNDER HOME ROAD

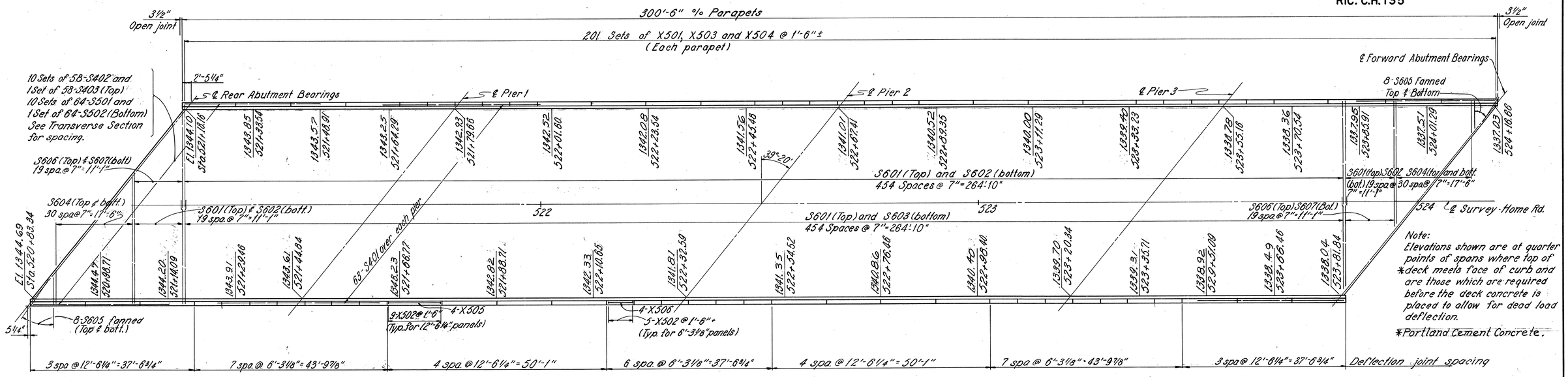
RICHLAND COUNTY U.S.R. 30
STA. 464+41.56

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.H.T.	H.A.V.	H.V.	G.S.B.	DHT	4/14/71	9-20-76

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

RIC-30-3.92
RIC. C.H. 135

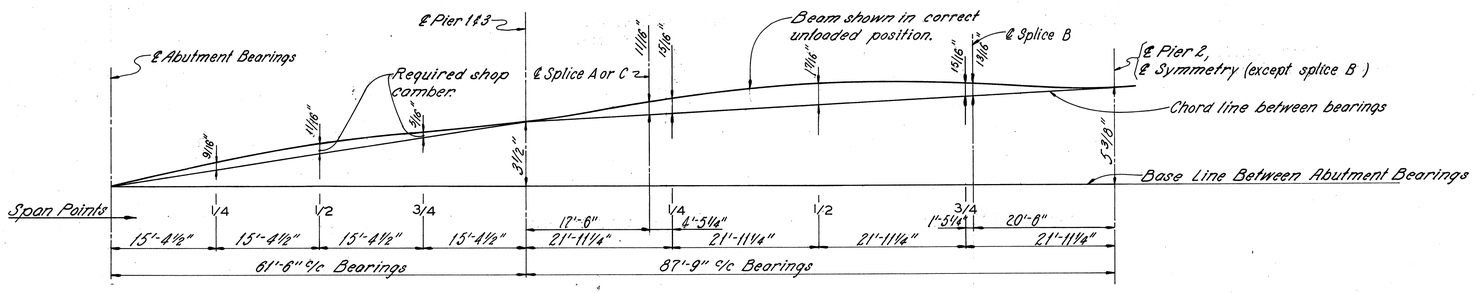
496
618



Note:
Elevations shown are at quarter points of spans where top of *deck meets face of curb and are those which are required before the deck concrete is placed to allow for dead load deflection.

*Portland Cement Concrete.

SLAB PLAN

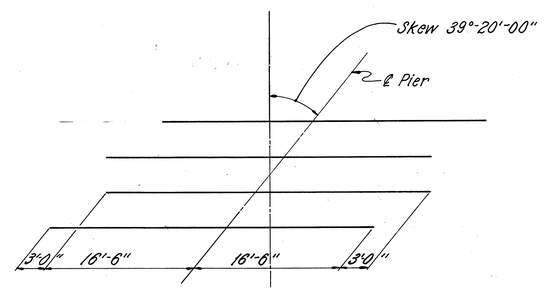


HALF BEAM LAYOUT DIAGRAM

CAMBERING of beams is required in accordance with the following table:

DEFLECTION AND CAMBER - ALL BEAMS								
	SPAN 1 OR 4			SPAN 2 OR 3				
SPAN POINTS	¼	½	¾	SPLICE A OR C	¼	½	¾	SPLICE B
Deflection due to weight of steel	1/16"	1/16"	0	1/16"	1/16"	1/8"	1/16"	1/16"
Deflection due to remaining dead load	5/16"	3/8"	1/8"	3/8"	1/2"	7/8"	1/2"	7/16"
Adjustment required for vertical curve	3/16"	1/4"	3/16"	1/4"	3/8"	7/16"	3/8"	5/16"
Required shop chamber	9/16"	11/16"	5/16"	11/16"	15/16"	1 7/16"	15/16"	13/16"

Note: Deflection and Camber symmetrical about ℄ Pier 2 except bolted field splice "B"



STAGGER OF S401 BARS OVER PIERS

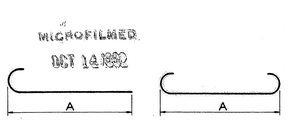
PARRETT & McCARTNEY
CONSULTING ENGINEERS
MANSFIELD OHIO

8 | 9

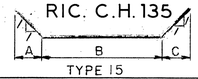
SUPERSTRUCTURE-2

BRIDGE NO. RIC-30-0880
UNDER HOME ROAD
RICHLAND COUNTY U.S.R. 30
STA. 464 + 41.56

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.H.T.	H.A.V.	H.A.V.	G.S.B.	DHT	4/14/71	



TYPE 1 TYPE 2 TYPE 3 TYPE 4 TYPE 5 TYPE 6 TYPE 7 TYPE 8 TYPE 9 TYPE 10 TYPE 11 TYPE 12 TYPE 13 TYPE 14



TYPE 15

FED. RD DIVISION	STATE	PROJECT	
2	OHIO		

497
618

RIC-30-3.92
RIC. C.H. 135

ABUTMENTS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
A501	80	8'-5"	3	1'-8"	5'-4"	1'-8"			702
A502	64	7'-4"	3	6'-8"	10"	0			490
A503	80	7'-6"	3	2'-2"	3'-5"	2'-2"			626
A504	60	30'-0"	Str.						1,807
A505	4	35'-0"	Str.						146
A506	4	12'-6"	Str.						52
A507	16	7'-0"	3	6'-3"	10"	0			117
A508	43	10'-11"	6	2'-2"	3'-0"				490
A509	2	9'-9"	Str.						20
A510	6	6'-6"	Str.						41
A511	6	10'-4"	Str.						65
A512	12	8'-9"	Str.						110
A513	6	10'-8"	Str.						67
A514	25	5'-3"	Str.						137
A515	2	9'-0"	Str.						19
A601	64	14'-3"	3	6'-8"	5'-4"	2'-7"			1,370
A602	154	9'-2"	3	4'-0"	1'-5"	4'-0"			2,120
A603	62	6'-5"	3	2'-8"	1'-5"	2'-8"			598
A604	62	6'-11"	3	3'-2"	11"	3'-2"			644
A605	16	13'-10"	3	6'-3"	5'-4"	2'-7"			332
A606	2	6'-3"	Str.						19
A607	12	17'-8"	3	8'-4"	1'-2"	8'-4"			315
A608	12	18'-10"	3	9'-0"	1'-2"	9'-0"			339
A609	3	6'-10	Str.						31
A610	1	5'-11	Str.						9
A801	28	31'-10"	Str.						2,380
A802	6	13'-5"	Str.						215
A803	6	11'-6"	Str.						184
A804	6	12'-9"	Str.						204
A805	6	13'-2"	Str.						211
Y501	45	2'-0"	3	7½"	1'-0"	7½"			94
Y502	40	2'-10"	Str.						118
Y503	25	6'-6"	14	3'-1"	2'-10"				169
Y504	10	Varies	Str.	1'-10"	to 3'-3"	2sets of 5	Vary each		27
Y505	10	Varies	Str.	3'-1"	to 4'-6"	2sets of 5	by 4¼"		40
Y506	12	13'-4"	Str.						167
Y507	12	17'-4"	Str.						217
Y508	8	7'-3"	Str.						60
Y509	4	7'-8"	Str.						32
Y510	2	11'-8"	Str.						24
Y511	5	Varies	Str.	1'-10"	to 2'-11"	1set of 5	Vary each by		12
Y512	5	Varies	Str.	3'-1"	to 4'-2"	1set of 5	3 1/4"		19
Y513	12	12'-8"	Str.						159
Y514	12	16'-2"	Str.						202
Y515	6	7'-3"	Str.						45
Y516	2	10'-6"	Str.						22
Y517	5	Varies	Str.	1'-10"	to 3'-1"	1set of 5	Vary each		13
Y518	5	Varies	Str.	3'-1"	to 4'-4"	1set of 5	by 3¾"		19
Y601	13	6'-8"	11	9"	4'-10"				130
Y602	12	6'-4	11	9"	4'-6"				114
D801	42	6'-7"	15	1'-1"	4'-6"	6"			738
Y701	4	4'-4"	1	3'-6"					35
Y702	4	4'-9"	11	2¼"	3'-2"				39
Y703	4	4'-10"	11	4"	3'-2"				40
Y704	4	4'-11	11	6"	3'-2"				40
Y705	4	5'-0"	11	9"	3'-2"				41
									Total Weight 16,546

PIERS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
SP401	4	17'-4"	8	4½"	40	2'-8"			1,307
SP402	4	15'-5"	8	4½"	44	2'-8"			1,170
SP403	4	14'-2"	8	4½"	41	2'-8"			1,081
P501	264	8'-9"	3	3'-2"	2'-8"	3'-2"			2,409
P502	192	7'-11"	3	3'-2"	1'-10"	3'-2"			1,585
P503	12	28'-4"	Str.						355
P504	12	7'-6"	5	1'-8"	4'-2"	2'-8"			94
P701	120	10'-8"	2	9'-0"					2,616
P801	120	11'-11"	2	9'-9"					3,818
P1101	120	7'-11"	3	6'-3"	2'-0"	0			5,047
P1102	27	36'-0"	Str.						5,164
P1103	30	17'-0"	3	14'-4"	3'-0	0			2,710
P1104	10	22'-2"	3	20'-6"	2'-0"	0			1,178
P1105	30	20'-4"	Str.						3,241
P1106	10	20'-3"	3	18'-7	2'-0"	0			1,076
P1107	30	18'-5"	Str.						2,935
P1108	10	19'-0"	3	17'-4"	2'-0"	0			1,009
P1109	78	17'-3"	Str.						7,149
P1110	24	29'-0"	Str.						3,698
									Total Weight 47,642

SUPERSTRUCTURE

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	WEIGHT
X501	402	2'-0"	3	7½	1'-0"	7½"			839
X502	452	5'-4"	13		2'-2"				2,514
X503	402	2'-1"	3	0	1'-7"	7½"			873
X504	402	3'-1"	12	9"					1,293
X505	112	12'-2"	Str.						1,421
X506	160	5'-11"	Str.						987
S401	189	36'-0"	Str.						4,545
S402	580	30'-0	Str.						11,623
S403	38	12'-0"	Str.						465
S501	640	30'-0"	Str.						20,026
S502	64	15'-4"	Str.						1,024
S601	950	23'-10"	Str.						34,008
S602	495	19'-7"	Str.						14,560
S603	455	28'-0"	Str.						19,135
S604	124	Varies	Str.	8'-0" to	29'-3"	4 sets of	31 vary each by 8½"		3,469
S605	32	7'-3"	Str.						348
S606	40	Varies	Str.	8'-4" to	21'-9½"	2 sets of	20 vary each by 8½"		905
S607	40	Varies	Str.	12'-6½"	to 26'-0"	2 sets of	20 vary each by 8½"		1158
									Total Weight 119,193

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. Spiral reinforcing bars shall not have deformation but shall in other respects conform to Item 509. 1½ 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.

Refer to CMS Sections 106.03, 700, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

PARRETT & McCARTNEY
CONSULTING ENGINEERS
MANSFIELD, OHIO

9 | 9

REINFORCING STEEL

BRIDGE NO. RIC-30-0880
UNDER HOME ROAD
RICHLAND COUNTY U.S.R. 30
STA. 464 + 41.56

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.S.B.	H.A.V.	H.V.	D.H.T.	W.	4/14/11	