FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-80S-G(1)171	19

1
397

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
MED-224-15.75 SUM-224-0.00
WESTFIELD, GUILFORD & WADSWORTH TOWNSHIPS & CITY OF WADSWORTH, MEDINA COUNTY AND VILLAGE OF NORTON, SUMMIT COUNTY

LIMITED ACCESS
This improvement 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, and is especially designed for through traffic.

Sheets 21, 24, 376, 381 and 390 Revised 3-12-63 REC

Sheets 325, 332, 338, 345, 348, 352, 353, 359, 362, 364, 365, 370, and 371 Revised 1-25-63.

Sheets 326, 333, 339, 346, 348, 352, 353, 362, 366, & 372 Revised 5-10-63.

Sheets 16 and 21 Revised 7-12-63 C.E.H.

I-80S-G(1) 171 (New)
I-271-7(2)210 (Old)

CONVENTIONAL SIGNS

State Line
County Line
Township Line
Section Line
Center Line
Corporation Line
Limited Access and Right-of-Way
Limited Access Only — LA
Right-of-Way Only — RW
Existing Right-of-Way
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

LINE DATA

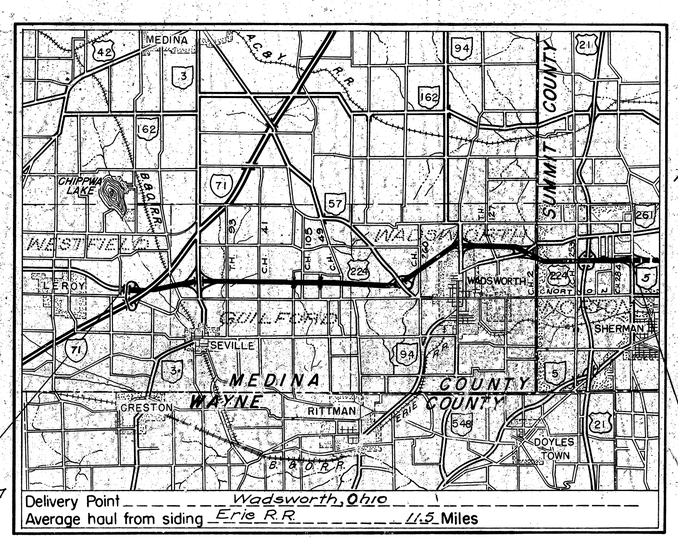
Begin Project - Sta. 84+48.46
MEDINA CO. Sta. 1455+70.03 = SUMMIT CO. Sta. 0+00
End Project - Sta. 137+15

TOTAL LENGTH OF PROJECT = 7,136.57 Lin. Ft. or 14.230 Miles

Side Road Approach Work:

T.H. 93	Sta. 8+30	To Sta. 25+86	1,756 Lin. Ft.
C.H. 41	Sta. 7+60	To Sta. 25+15	1,755 Lin. Ft.
C.H. 105	Sta. 16+85	To Sta. 32+15	1,530 Lin. Ft.
C.H. 260	Sta. 12+85	To Sta. 28+10	1,525 Lin. Ft.
T.H. 127	Sta. 7+80	To Sta. 27+50	1,970 Lin. Ft.
C.H. 2	Sta. 13+35	To Sta. 33+00	1,965 Lin. Ft.
C.H. 253	Sta. 9+25	To Sta. 27+50	1,825 Lin. Ft.
C.H. 284	Sta. 10+49	To Sta. 28+40	1,791 Lin. Ft.
OSER RD.	Sta. 0+10	To Sta. 3+30	320 Lin. Ft.
WORK FOR TRAFFIC SIGNS FROM Sh. 20			4,780 Lin. Ft.

TOTAL LENGTH OF WORK = 94,353.57 Lin. Ft. or 17.869 Miles



Delivery Point: Wadsworth, Ohio
Average haul from siding Erie R.R. 11.5 Miles

LOCATION MAP

SCALE OF MILES

0 1 2 3 4 5 6

Portion to be improved
State Roads
Other Roads

BEGIN PROJECT U.S.R. 224 Sta. 84/1+48.46

END PROJECT U.S.R. 224 Sta. 137+15

SCALE

Plan — 1" = 50' & 1" = 200'
Profile: Horizontal — 1" = 50' & 1" = 200'
Profile: Vertical — 1" = 5' & 1" = 40' & 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 the maintenance and safety of traffic will be as set forth on these plans and estimates.

Approved C. P. Johnson
Date 10-9-62 Division Deputy Director

Approved D. H. Berman
Date 10-19-62 Engineer of Bridges

Approved L. J. Freeman
Date 10-25-62 Engineer of Location and Design

Approved C. W. McCaughey
Date 10-25-62 Deputy Director of Design and Construction

Approved W. J. Sam
Date 10-25-62 Deputy Director of Right of Way

Approved Lloyd Weesner
Date 10-25-62 Deputy Director of Planning and Programming

Approved John Berry
Date 10-25-62 First Assistant Director

Approved E. L. Preston
Date 10-25-62 Director of Highways

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:

DIVISION ENGINEER DATE

File No.	MEDINA COUNTY & SUMMIT COUNTY	MED-224-15.75 SUM-224-0.00
243-M	Date of Letting	196
	Contract No.	

243 = 1

CS-1-54 Sh. 1 & 2 7-16-56		Supplemental Prints of Standard Construction Drawings						A-1-54	12-1-54	Supplemental Specifications			
FACT-1	12-27-61	R.R.A. No. 5	11-3-58	L.J. No. 1	7-1-55	I-8 C.B. 2-3 & 2-4	1-26-59	I-15 No. 6	7-1-59	I-128	7-31-59	C.E-101.04	5-22-56
FACT-2	12-27-61	T-35	1-2-56	T.J.	9-12-60	I-8 C.B. No. 6	1-26-59	I-21-23	8-1-56	I-129	Rev. 4-5-61	B-112	8-21-61
F-1	9-1-59	L-1	4-1-50	HW-A & B	7-15-57	I-8 C.B. No. 8	3-15-60	G-7.07	6-1-56	M-107.18	Rev. 4-3-61	S-102	6-15-49
DR-1	1-3-55	L-2	4-1-50	HW-C	7-15-57	I-12	7-1-54	B-T-70-71	11-15-60	M-109.28	Rev. 8-12-59	M-106.6(a)	2-17-59
RI-1	7-15-58	L-3	4-1-50	HW-E	11-15-60	I-14G	1-22-52	SP-53	6-30-61	I-125	Rev. 6-26-61		
R.R.A. No. 1	1-20-58	L-3-A	4-1-50	I-1	11-15-60	I-15 No. 1	11-15-60	AS-1-54	12-1-54	I-127	Rev. 1-15-62	L-120	Rev. 1-2-62
R.R.A. No. 2	1-20-58	B-T-71R	3-2-53	I-8 C.B. 22A & B	3-2-59	I-15 No. 2-A	8-17-60	AR-1-57	4-2-62	18	Rev. 6-15-59		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MED-224-15.75
SUM-224-0.00

316

GRAVEL PIT AREA

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.

Elev. 1030.2±

Fill to Elev. 1032.0± and slope to drain

Place Item 1007 "Dumped Rock Channel Protection" from flow line to El. 1038.0± (2' thick

Item I-1007 "Dumped Rock Channel Protection"

Flow

Sta. 977+00 = S.L.M. 18.32

End Appr. Slab
Sta. 978 + 20.75

Begin Appr. Slab
Sta. 979 + 19.75

CREEK

℄ Proposed Construction

Westbound Lanes

Eastbound Lanes

℄ Survey

976 S-87°-52'-39"-E 977 Existing Pavement 978 979 980 981

Cross-hatched area indicates Dumped Rock Fill which is already in place.

B.M. Spike in 18" Sycamore
210' Rt. Sta. 979+30
Elev. 1038.302

Clears Projected 1913 H.W. 9.7±

BRIDGE LIMITS

HUBBARD

Projected 1913 High Water El. 1038.0±

800' V.C.

Bench Elev. 1045.7±

Bench El. 1046.9±

-2.80% +2.26% +2.26%

P.I. Sta 976+25
Elev. 1043.70

All piling steel "H" bearing 10BP42
The estimated average pay length:
Rear Abutment-30'
Forward Abutment-35'
Piers -25'

Normal Water El. 1031.0±

El. 1026.0

El. 1026.0

Excavate channel thru structure to El. 1030.2±

PROFILE ON PROPOSED CENTER LINE OF CONSTRUCTION

EXISTING BRIDGE DATA
Bridge No. MED-224-1834 R

TYPE: Continuous reinf. conc. slab with capped pile abuts. & cap & column piers.
SPANS: 30'-37.5'-30' c/c brgs.
ROADWAY: 44'-0" f/f Guard Rails
LOAD FREQUENCY: CF = 2000 (51)
SKEW: None
WEARING SURFACE: 1" Monolithic Concrete
APPROACH SLABS: AS-1-54 (25' Long)
ALIGNMENT: Tangent

PROPOSED STRUCTURE
TYPE: Continuous reinforced concrete slab with capped pile abutments and cap and column piers
SPANS: 30'-37.5'-30' c/c bearings
ROADWAY: 40'-0" f/f guardrails
LOAD FREQUENCY: CF = 2000 (57)
SKEW: None
WEARING SURFACE: 1" monolithic
APPROACH SLABS: AS-1-54 (25' long)
ALIGNMENT: Tangent

Drainage Area = 6.04 Sq. Mi.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN
76-0299L

BRIDGE NO. MED-224-1834 R
OVER HUBBARD CREEK
MEDINA CO. S.R. 224
SEC. STA. 978 + 20.75
SCALE: 1" = 20' 979 + 19.75

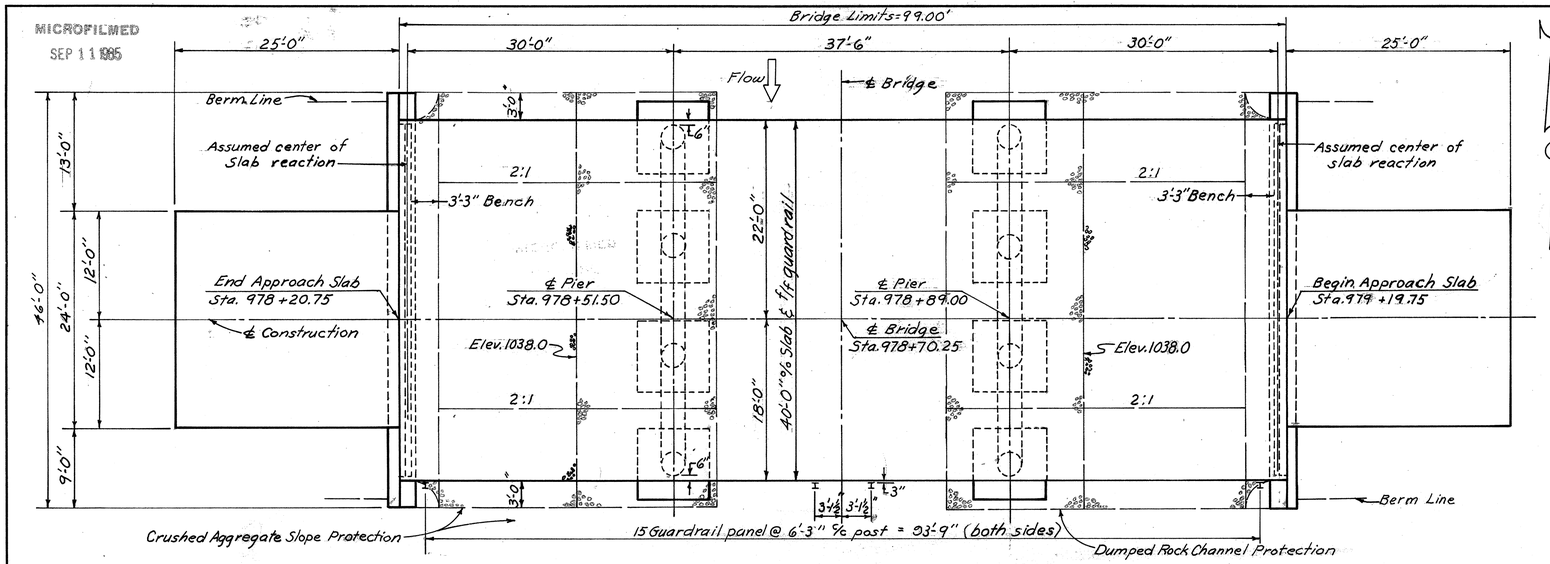
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
		D.G.M.	D.G.M.	B.D.H.	P.E.S.

BFG 8-21-61

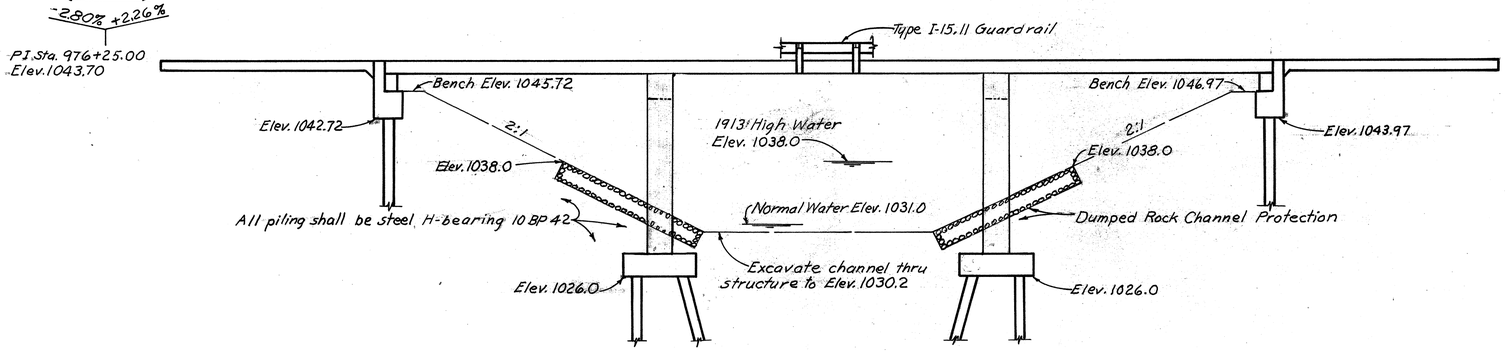
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

317

MED-224-15.75
SUM-224-0.00



GENERAL PLAN



ELEVATION

GENERAL NOTES

REFERENCE shall be made to Standard Drawings CS-1-54 and A-1-54 revised 7-16-56 and 12-1-54, respectively.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with current revisions thereof.

EXCAVATION QUANTITY includes the removal of fill material required for construction of the piers and abutments.

PILES shall be driven to a minimum bearing capacity of 27 tons per pile for the abutments and 30 tons per pile for the piers.

PROCEDURE: The embankment shall be placed and compacted up to the level of the earth bench after which excavation shall be made for constructing the piers and abutments.

MACHINE FINISH: At the Contractor's option, the concrete bridge deck may be finished by the use of a finishing machine.

SLAB THICKNESS is 1'-4¾" which includes 1" for monolithic wearing surface.

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Super.	Abut.	Piers	Gen'l.
E-2	Lump	Sum	Cofferdams, cribs and sheeting				Lump
E-2	220	Cu. yds.	Unclassified excavation		53	167	
E-3	284	Cu. yds.	Channel excavation				284
S-1	207	Cu. yds.	Class "C" concrete, superstructure	207			
S-1	48	Cu. yds.	Class "C" concrete, pier caps and columns			48	
S-1	47	Cu. yds.	Class "E" concrete, pier footings			47	
S-1	47	Cu. yds.	Class "E" concrete, abutments		47		
S-4	64598	Lbs.	Reinforcing steel	45,372	5081	14,145	
S-14	198.00	Lin. ft.	Railing (Type I-15.11 with galvanized steel posts and bolts)	198.00			
S-16	Lump	Sum	First test pile				Lump
S-18	1260	Lin. ft.	Steel piles, 10BP42		460	800	
S-29	16	Cu. yds.	Porous backfill		16		
I-10	219	Sq. yds.	Crushed aggregate slope protection		219		
I-10	273	Cu. yds.	Dumped rock channel protection				273
*Special	207	Each	Water-reducing, set-retarding admixture	207			

*See Proposal Note

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

GENERAL PLAN ELEVATION ESTIMATED QUANTITIES & NOTES

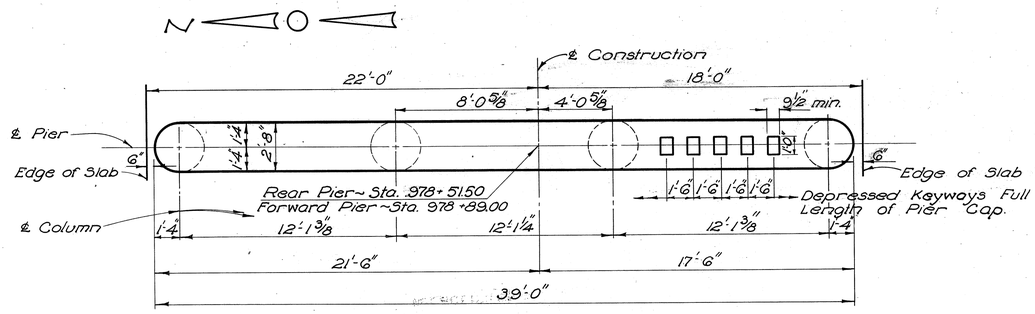
BRIDGE No. MED-224-1834 L
over HUBBARD CREEK
MEDINA COUNTY
STA. 978+20.75
979+19.75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.E.F.	J.E.F.	N.L.D.	K.L.H.	BFG G.J.K.	8-21-61	

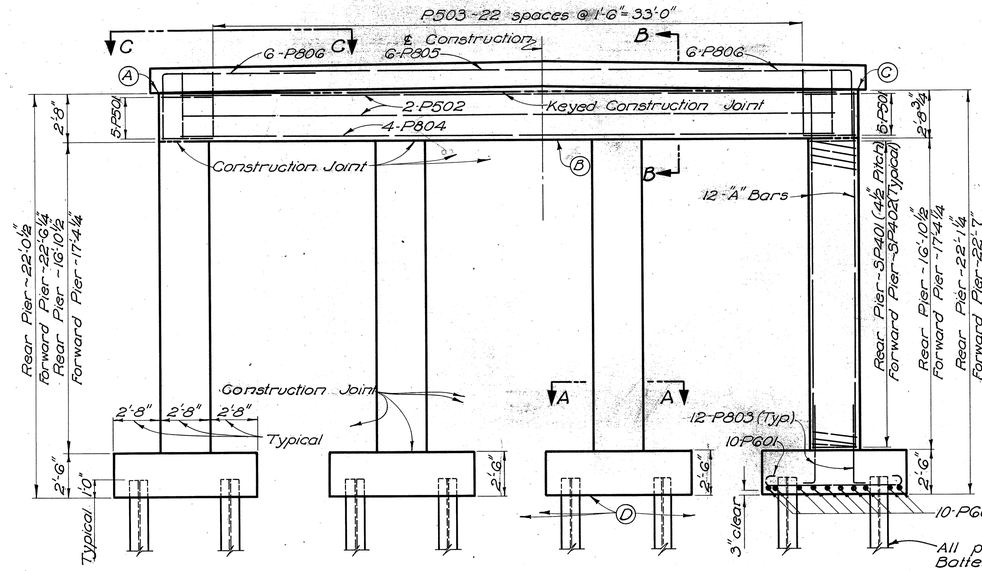
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

318

MED-224-15.75
SUM-224-0.00

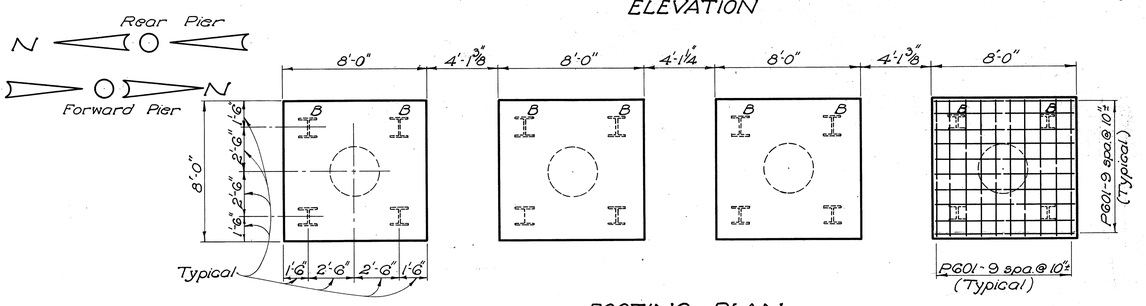


CAP PLAN

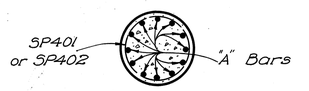


ELEVATION

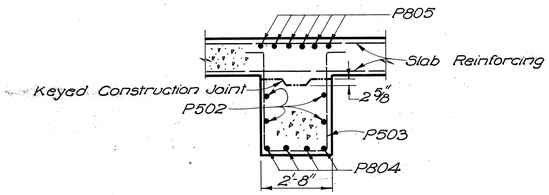
"A" Bars
Rear Pier - P801
Forward Pier - P802



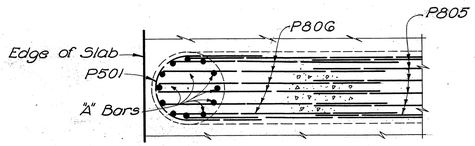
FOOTING PLAN



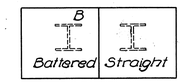
SECTION A-A



SECTION B-B



SECTION C-C



PILE LEGEND

NOTES:

CONCRETE shall be Class "C" for piers above footing and Class "E" for pier footing.

FOOTINGS: All pier footings are identical and all footing reinforcement shall have the same spacing in both directions unless otherwise noted.

FALSEWORK for pier cap shall remain in place until deck is poured and cured.

Location	A	B	C	D
Rear Pier	1048.04	1045.37	1048.10	1026.00
Forward Pier	1048.52	1045.85	1048.58	1026.00

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

PIER DETAILS

BRIDGE NO. MED-224-1834 L
OVER HUBBARD CREEK

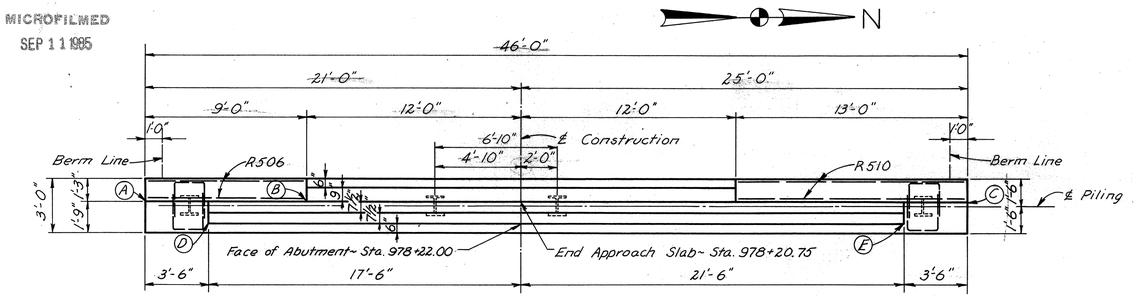
MEDINA COUNTY STA. 978 + 20.75
STA. 979 + 19.75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J E F	J E F	G.P.G.	K.L.H.	BFG	8-21-61	

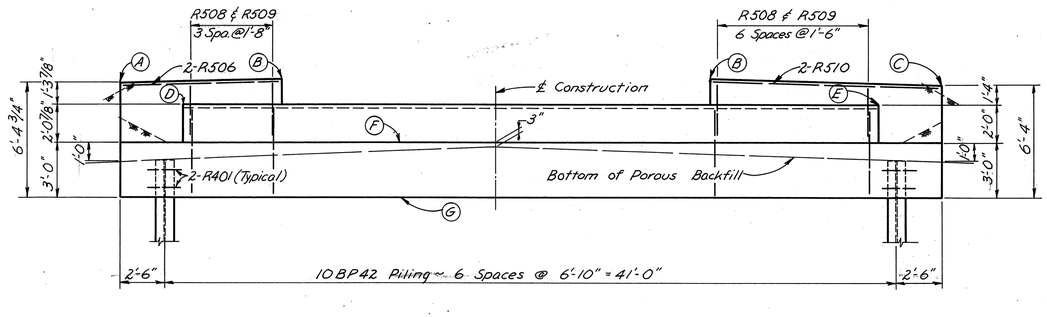
FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

310

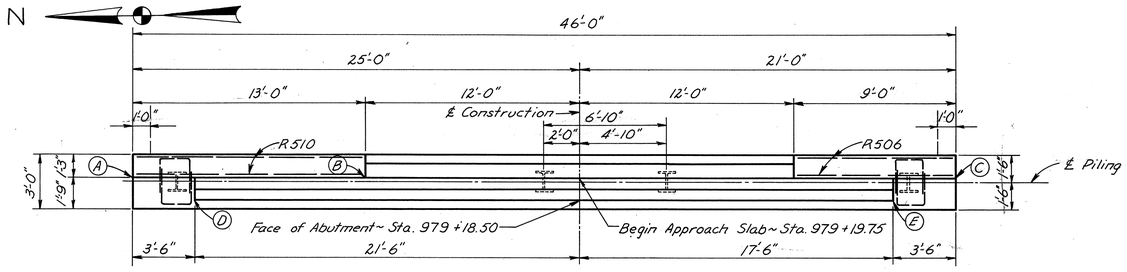
MED-224-15.75
SUM-224-0.00



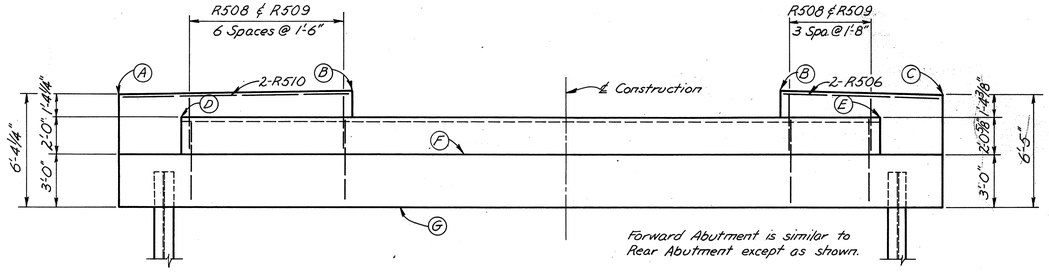
PLAN
(Rear Abutment)



ELEVATION
(Rear Abutment)



PLAN
(Forward Abutment)



ELEVATION
(Forward Abutment)

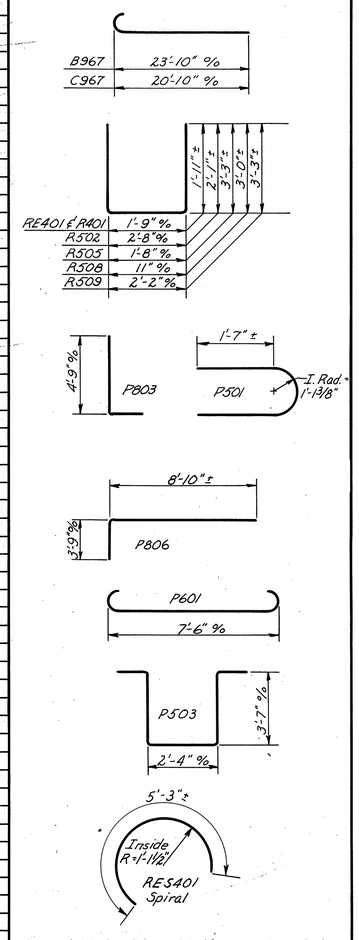
REINFORCING STEEL LIST

Mark	No.	Length	Weight	Shp
Superstructure				
F1067	72	27'-2"	8417	S
G1067	34	12'-11"	1890	S
H1067	36	8'-10"	1368	S
A967	120	34'-10"	14,212	S
B967	38	24'-11"	3219	B
C967	40	21'-11"	2981	B
D967	19	23'-4"	1507	S
E967	20	18'-2"	1235	S
J601	36	18'-4"	991	S
K601	18	15'-4"	415	S
M601	91	39'-6"	5399	S
N601	63	39'-6"	3738	S
Abutments				
R1001	16	20'-11"	1440	S
R801	16	24'-1"	1029	S
R501	16	23'-7"	394	S
R502	136	6'-7"	934	B
R503	8	20'-1"	167	S
R504	24	5'-4"	133	S
R505	32	7'-11"	264	B
R506	4	8'-8"	36	S
R507	16	4'-11"	82	S
R508	22	6'-8"	153	B
R509	22	8'-5"	193	B
R510	4	12'-8"	53	S
R401	56	5'-5"	203	B
Piers				
P801	48	19'-6"	2499	S
P802	48	20'-0"	2563	S
P803	96	5'-8"	1453	B
P804	8	36'-4"	776	S
P805	12	25'-10"	828	S
P806	24	12'-5"	796	B
P601	160	8'-10"	2123	B
P501	20	6'-10"	143	B
P502	8	36'-4"	303	S
P503	46	10'-3"	492	B
Replacement Bars				
RE1001	1	7'-2"	——	S
RE901	2	6'-10"	——	S
RE801	1	6'-6"	——	S
RE601	1	5'-11"	——	S
RE501	1	5'-7"	——	S
RE401	1	5'-5"	——	B
RES401	1	5'-3"	——	B

Spiral Reinforcement

Mark	No.	Length	Pitch	Core Dia. to Spirals	No. of Turns	Weight
SP401	4	16'-11"	4½"	28"	48	1073
SP402	4	17'-5"	4½"	28"	49	1096

Bending Diagrams



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 deformations but shall in other respects conform to Item S-4. 1½ closed coils shall be provided at the ends of each spiral unit.
Three steel channel, tee or angle spacers, weighting approximately 0.68 lb. 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 0.68 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

Location	A	B	C	D	E	F	G
Rear Abutment	1049.12	1049.26	1049.05	1047.79	1047.72	1045.72	1042.72
Forward Abutment	1050.32	1050.52	1050.38	1048.97	1049.02	1046.97	1043.97

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

3

ABUTMENT DETAILS & REINFORCING STEEL LIST

BRIDGE No. MED-224-1834 L
OVER HUBBARD CREEK

MEDINA COUNTY
STA. 978+20.75
STA. 979+19.75

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.E.F.	J.E.F.	A.A.K.	K.L.H.	BFG	8-21-61	