FED. RD.	STATE	PROJECT	
	OHIO		

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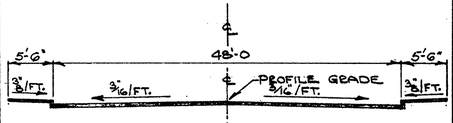
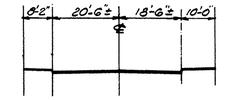
MAH-422-2.30



TYPICAL SECTION
PROPOSED WICK AVE.



TYPICAL SECTION
EXISTING WICK AVE.

FOUNDATION SOUNDINGS

FOUNDATION DESIGN AND FOUNDATION QUANTITIES ARE BASED ON A STUDY OF ROCK SOUNDINGS AND SOIL SAMPLINGS 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 GUARNTEE THE ACCURACY THEREOF.

PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SKEW: 0°-00'-00"
SPANS: 40'-0"-47'-9"-47'-9"-40'-0" ℄ BEARINGS.
ROADWAY: 48'-0" ℄ 5'-0" SIDEWALKS.
WEARING SURFACE: 1" MONOLITHIC
LOAD FREQUENCY: C.F. 2000 (ST)
APPROACH SLABS: 25' LONG
ALIGNMENT: STRAIGHT
SUPERELEVATION: NONE
SLOPE PROTECTION: 601 CRUSHED AGGREGATE
TRAFFIC: ADT (1975) 24,000

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

BEISWENGER, HOCH & ASSOCIATES AND ROBERT J. SCHOMER
CONSULTING ENGINEERS
4 YOUNGSTOWN ROAD — YOUNGSTOWN 14, OHIO

SITE PLAN

BRIDGE Nº MAH-422-0313
UNDER WICK AVENUE
YOUNGSTOWN — MAHONING COUNTY
STA 107+68.61

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
NPW	JWW		CBS	RJSH	9-8-66	

FED. RD.	STATE	PROJECT	
	OHIO		

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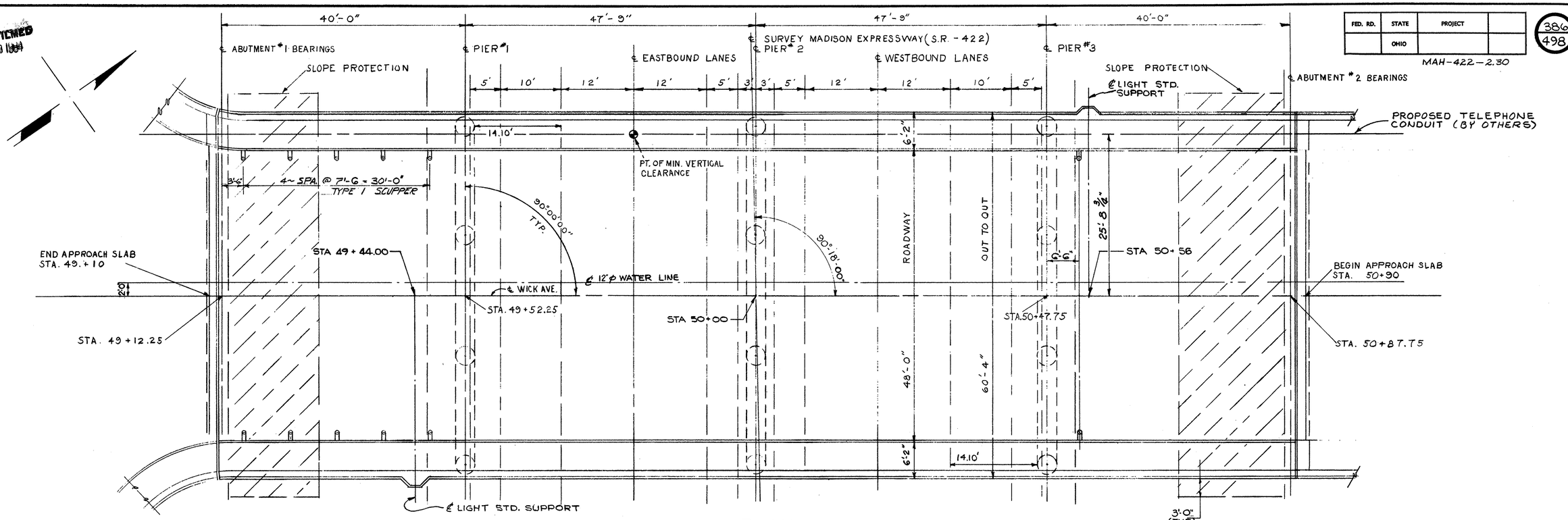
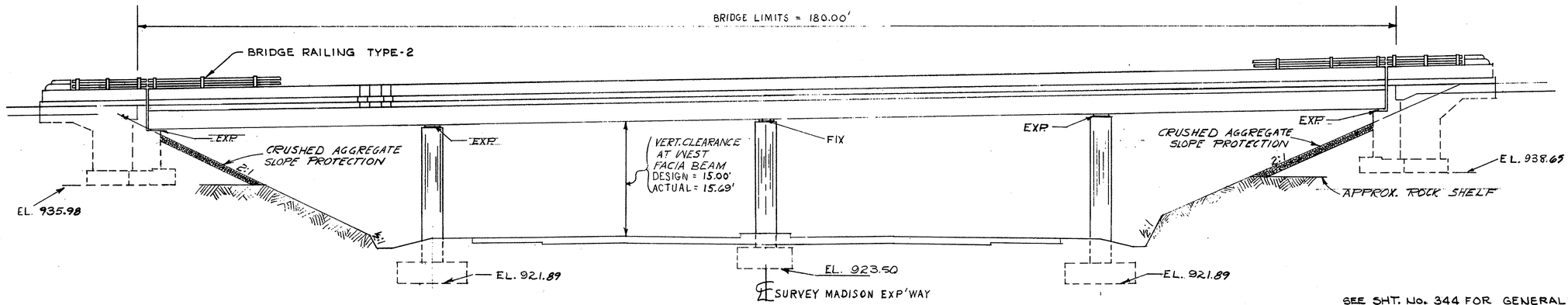
MAH-422-2.30



PLAN



ELEVATION

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT'S	PIERS	GEN
503	350	CU.YDS	UNCLASSIFIED EXCAVATION		350		
503	295	CU.YDS	ROCK EXCAVATION			295	
509	159,200	LBS	REINFORCING STEEL	97,669	11,033	50,498	
511	367	CU.YDS	CLASS "C" CONCRETE SUPERSTRUCTURE	367			
511	155	CU.YDS	CLASS "E" CONCRETE ABUT. ABOVE FOOTINGS		155		
511	122	CU.YDS	CLASS "C" CONCRETE PIERS ABOVE FOOTINGS			122	
511	175	CU.YDS	CLASS "E" CONCRETE PIERS & ABUT. FOOTINGS		68	107	

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT'S	PIERS	GEN
512	24	LIN FT	WATERPROOFING PREMOLDED SEALING STRIP		24		
513	215600	LBS.	*STRUCTURAL STEEL	215600			
514	215600	LBS.	*FIELD PAINTING OF STRUCTURAL STEEL	215600			
517	412.41	LIN.FT.	BRIDGE RAILING TYPE-2	353.70	58.71		
518	61	CU.YDS.	POROUS BACKFILL		61		

ITEM	TOTAL	UNITS	DESCRIPTION	SUPER	ABUT'S	PIERS	GEN
515	12	EACH	SCUPPERS, INCLUDING SUPPORTS	12			
518	107	LIN.FT.	6" PERFORATED HELICAL CMP 707.06 INCLUDING SPECIALS		107		
518	100	LIN.FT.	6" HELICAL CMP 707.06 NON PERFORATED		100		
601	278	SQ YDS	CRUSHED AGGREGATE SLOPE PROTECTION		278		
625			SEE SHEET 283 FOR LIGHTING SUMMARY				
808	367	UNITS	WATER REDUCING, SET RETARDING ADMIXTURE	367			
825	1290	SQ YDS	CONCRETE SURFACE TREATMENT				1290
828	117	LIN FT	JOINT SEALER		117		

SEE SHT. No. 344 FOR GENERAL NOTES.
SEE ROADWAY PLANS SHT. No. 276 FOR WATERLINE QUANTITIES AND DETAILS NOT INCLUDED IN BRIDGE PLANS.
*INCLUDES 1413 POUNDS OF STRUCTURAL STEEL USED FOR SUPPORT OF THE TELEPHONE CONDUITS TO BE PAID FOR BY THE TELEPHONE COMPANY.

STATE OF OHIO
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BUREAU OF BRIDGES

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4 YOUNGSTOWN ROAD YOUNGSTOWN 14, OHIO

GENERAL PLAN & ELEVATION
BRIDGE N° MAH-422-0313
UNDER WICK AVENUE
YOUNGSTOWN MAHONING COUNTY
STA. 107+68.61

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
NPW	JAK.		CES 9-1-66	RDH 9-8-66		

FED. RD.	STATE	PROJECT	
	OHIO		

MAH-422-2.30

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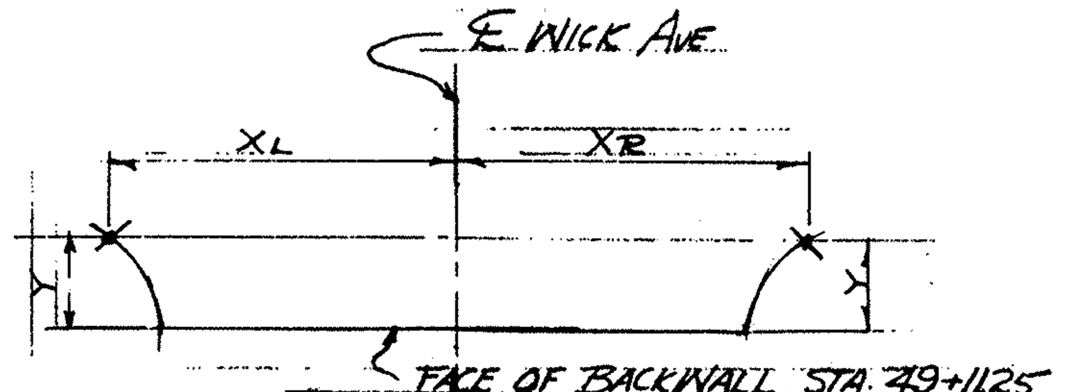
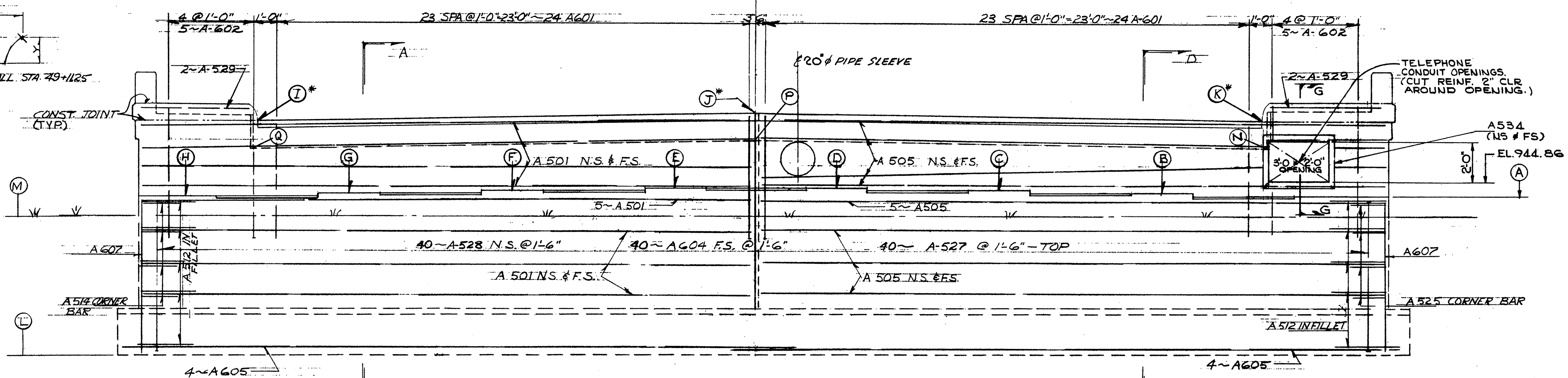
—PLAN—



WING WALL POINTS			
POINT	XL	XR	Y
a	35'-10"		18'-9"
b	38'-5⅝"		14'-6"
c	35'-2¾"		12'-0"
d	31'-11¾		8'-0"
e	30'-1"		4'-0"
f	31'-10⅝		10'-9"
g	28'-9¼"		1'-9"
h	27-10⅜		2'-3"
J	24-3⅜		1'-3"
k	38-6⅞"		13'-9½"
l	34'-7½		8'-7⅜"
m		35'-10"	16'-3"
n		38'-5⅝	12'-0"
p		33-9⅝	8'-0"
q		31'-1⅜	4'-0"
r		32-1½	8'-7"
s		29-5⅝	1'-9"
t		28-7	2'-3"
u		24'-9½	1'-3"
v		38-10⅜	11'-3½
w		34-10⅜	6'-4⅝"



—ELEVATION—

ELEVATION TABLE

	A	B	C	D	E	F	G	H	I*	J*	K*	L	M	N	P	Q
ABUT. #1	944.13	944.25	944.37	944.49	944.49	944.37	944.25	944.13	947.67	947.97	947.67	935.98	943.13	946.30	946.70	946.31

* DENOTES FINISHED PAVEMENT ELEVATIONS AT FACE OF BACKWALL.

STATE OF OHIO
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BUREAU OF BRIDGES

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4 YOUNGSTOWN ROAD YOUNGSTOWN 14, OHIO

ABUTMENT #1 PLAN & ELEVATION
BRIDGE No MAH-422-0313
UNDER WICK AVENUE
YOUNGSTOWN MAHONING COUNTY
STA 107+68.61

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
NPW	NPW		CAS	RDH	9-8-66	

FED. RD.	STATE	PROJECT	
	OHIO		

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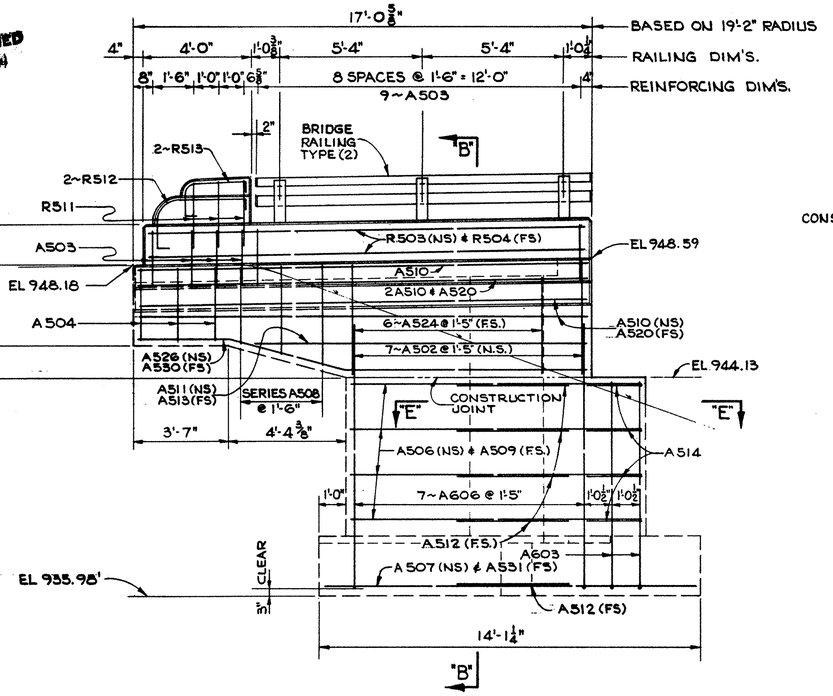
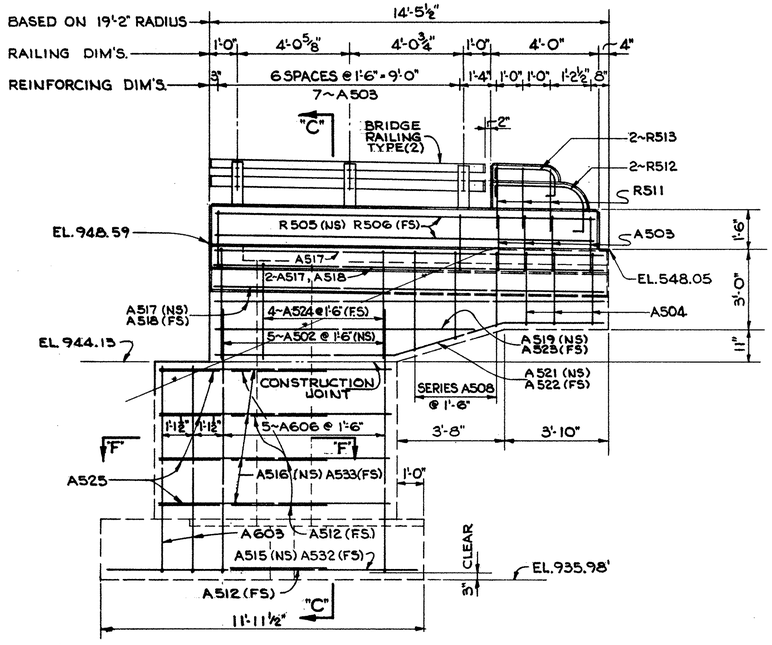
498

MAH 422-2.30



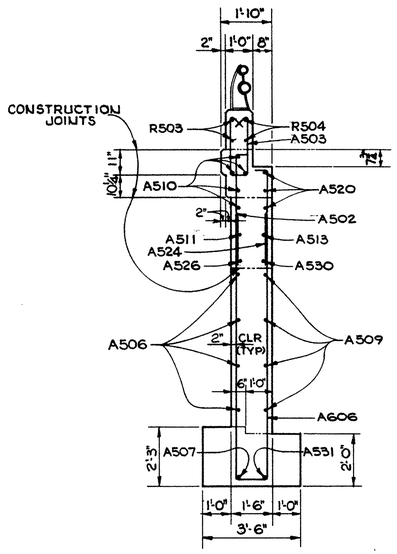
EXPANDED ELEVATION VIEW EAST WING WALL ABUT #1

HORIZONTAL LENGTHS ARE MEASURED ON OUTSIDE FACE OF WALL ~ RADIUS = 19'-2"

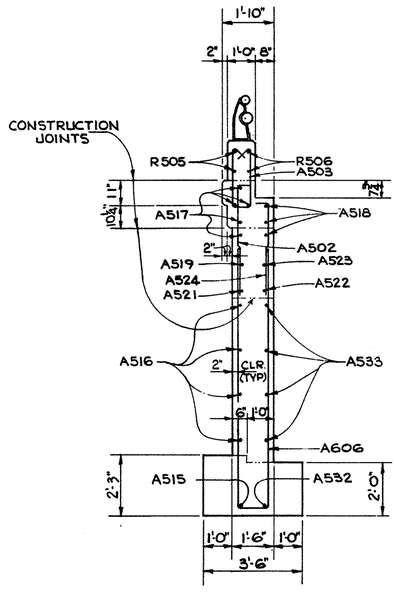


EXPANDED ELEVATION VIEW WEST WALL ABUT #1

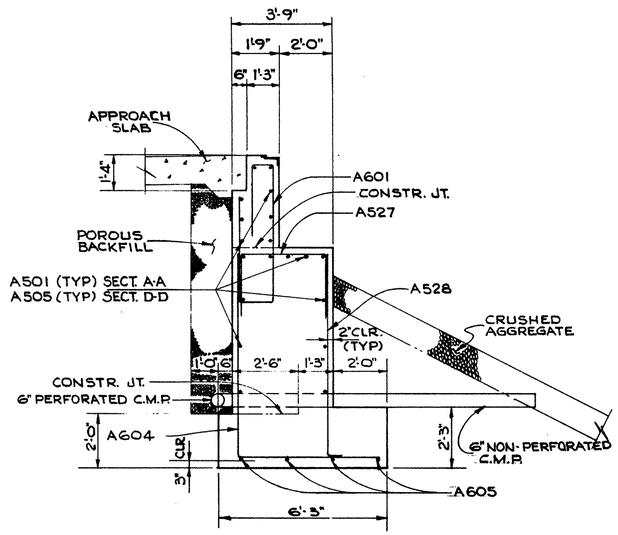
HORIZONTAL LENGTHS ARE MEASURED ON OUTSIDE FACE OF WALL ~ RADIUS = 19'-2"



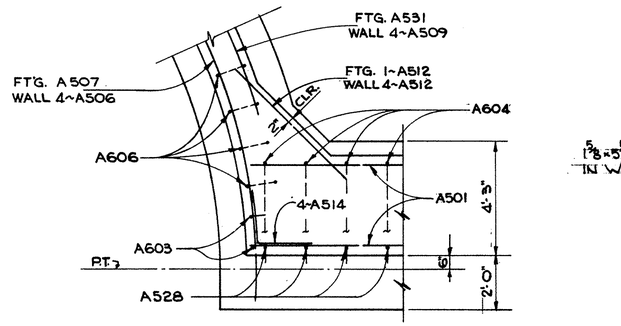
SECTION "B-B"



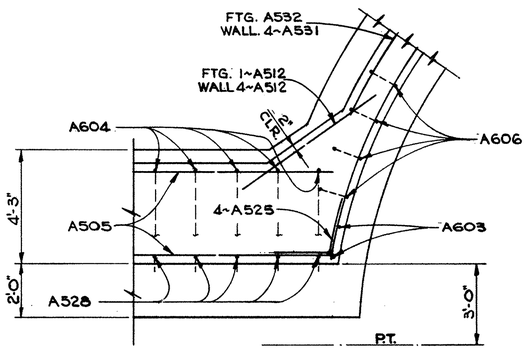
SECTION "C-C"



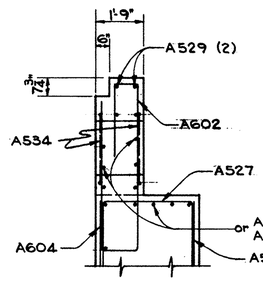
SECTIONS "A-A" & "D-D" (NOTED)



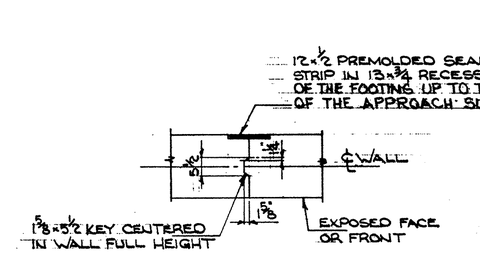
SECTION "E-E"



SECTION "F-F"



SECTION "G-G"



CONTRACTION JOINT DETAIL

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

BEISWENGER, HOCH & ASSOCIATES AND ROBERT J. SCHOMER
CONSULTING ENGINEERS
4 YOUNGSTOWN ROAD YOUNGSTOWN 14, OHIO

ABUTMENT #1 DETAILS

BRIDGE Nº MAH 422-0313
UNDER WICK AVENUE
YOUNGSTOWN MAHONING COUNTY
STA 107 + 62.61

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
NPW	ALH		cla	EOH	9-8-66	

FED. RD.	STATE	℄ PROJECT	
	OHIO		

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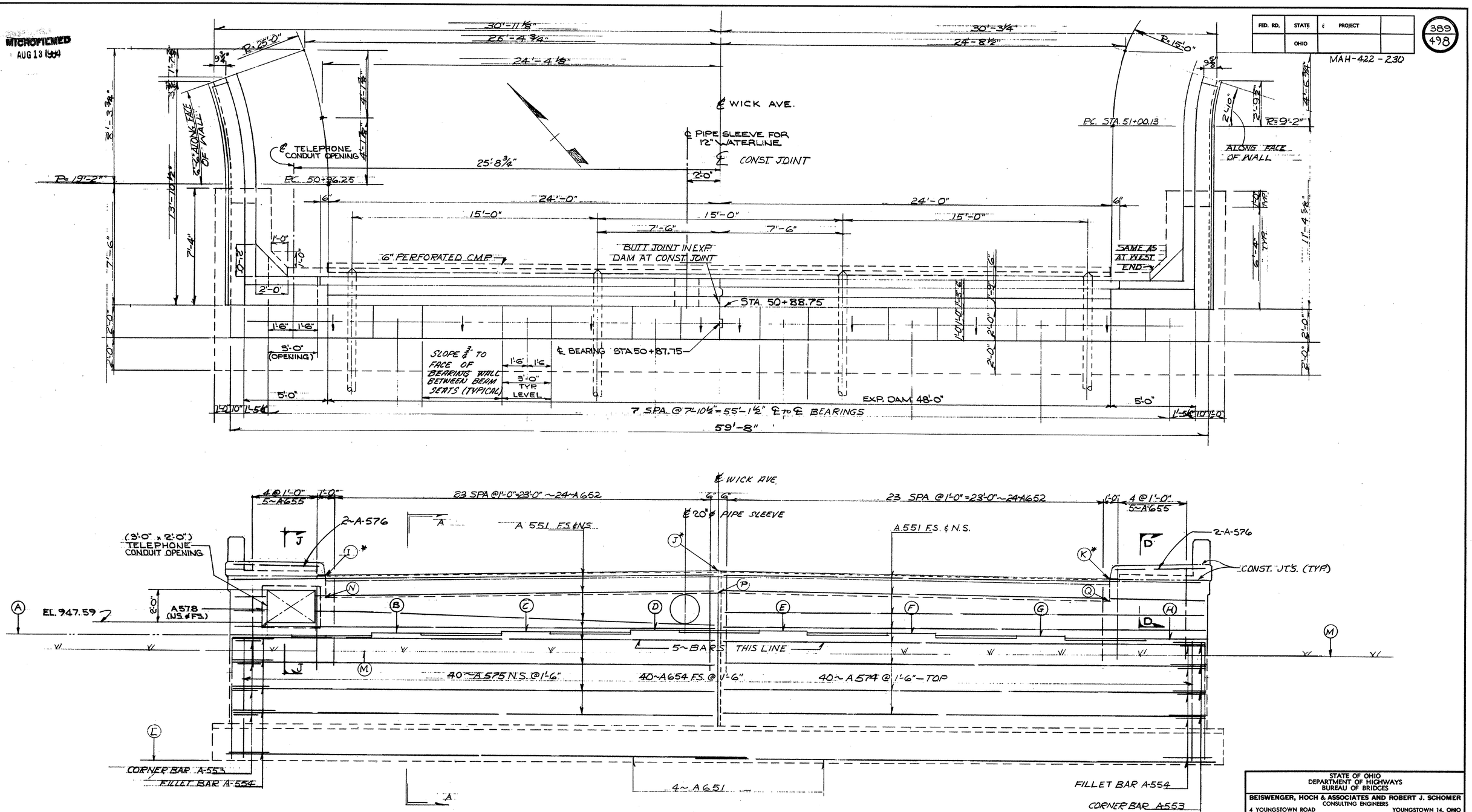
MAH-422-230



ELEVATION TABLE

	A	B	C	D	E	F	G	H	I*	J*	K*	L	M	N	P	Q
ABUT. #2	946.80	946.93	947.05	947.16	947.16	947.05	946.93	946.80	950.38	950.76	950.38	938.65	945.80	949.06	949.44	949.06

* DENOTES FINISHED PAVEMENT ELELATIONS AT FACE OF BACKWALL.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

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4 YOUNGSTOWN ROAD — YOUNGSTOWN 14, OHIO

ABUTMENT #2 PLAN & ELEVATION

BRIDGE NO. MAH-422-0313
UNDER WICK AVENUE
YOUNGSTOWN — MAHONING COUNTY
STA 107+68.61

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
NPW	NPW		CLS	RJH	9-8-64	

FED. RD.	STATE	PROJECT	
	OHIO		

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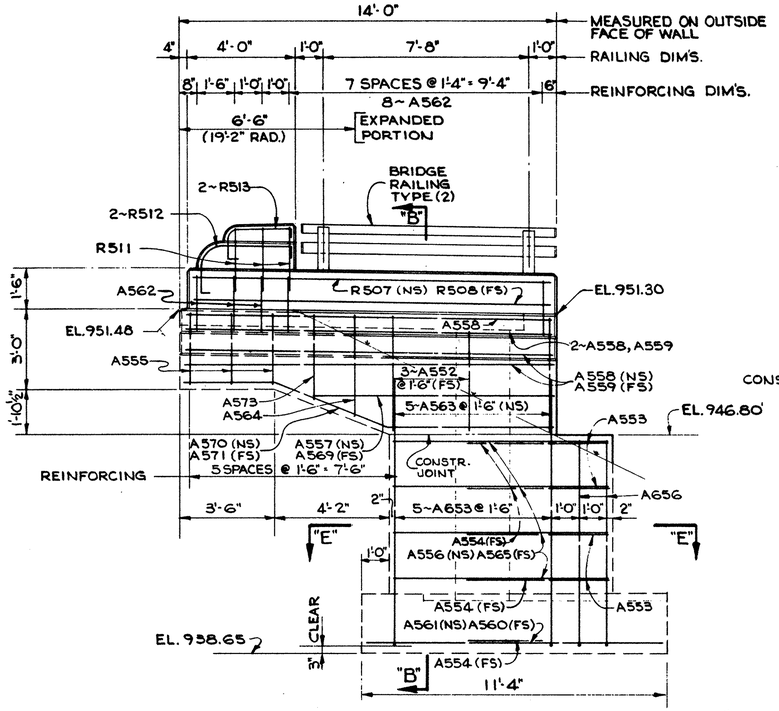
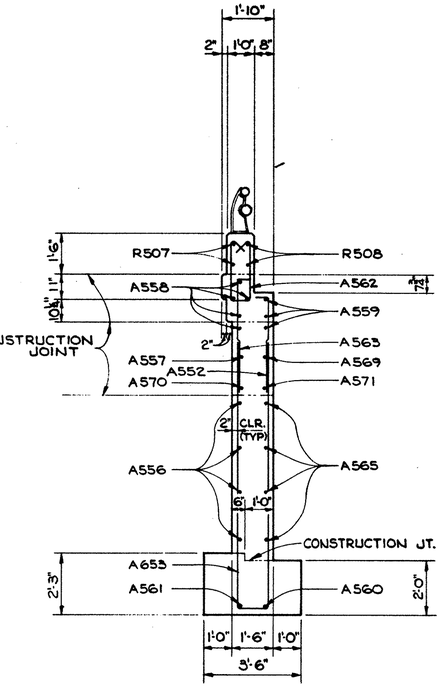
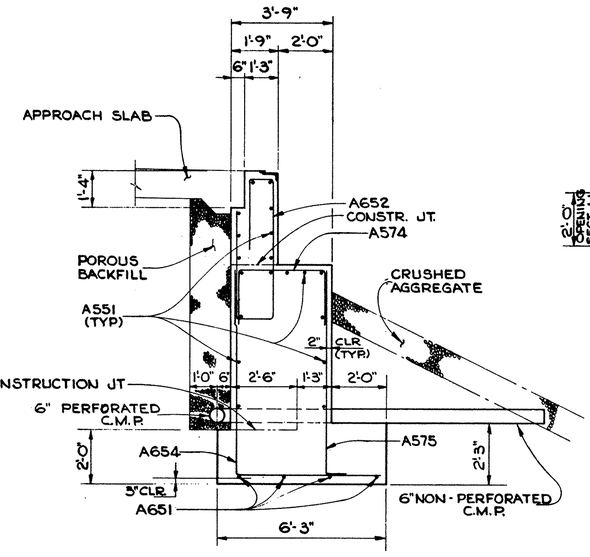


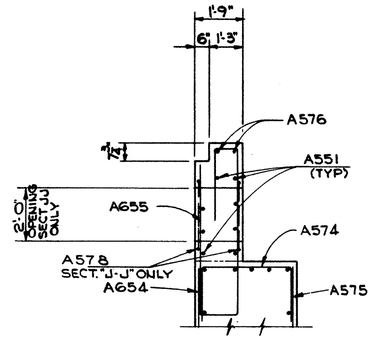
ELEVATION VIEW WEST WING WALL ABUT. #2



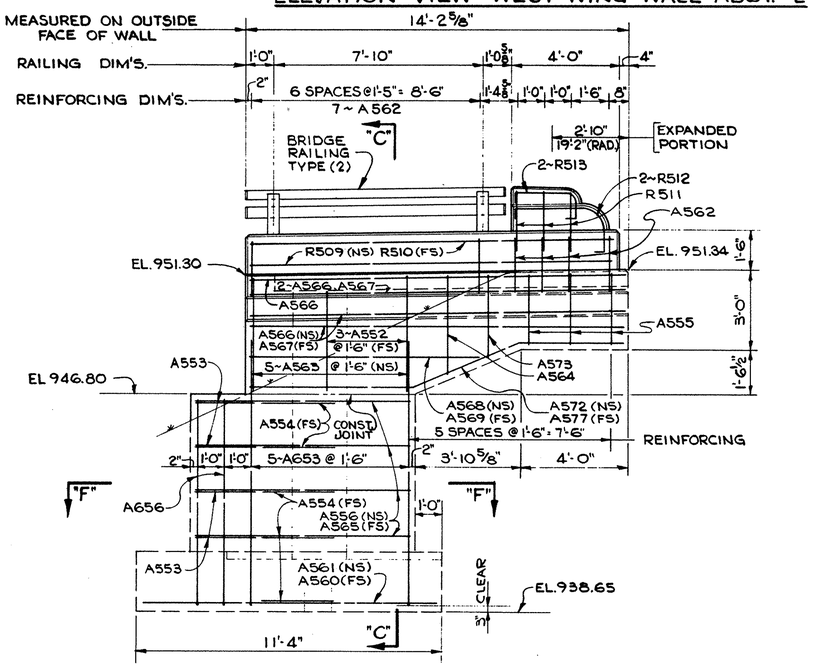
SECTION "B-B"



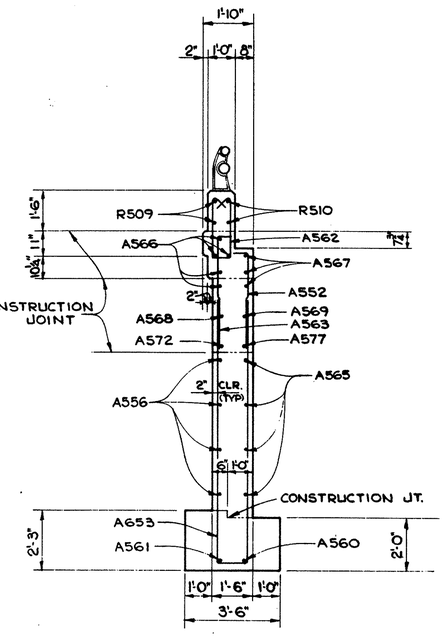
SECTION "A-A"



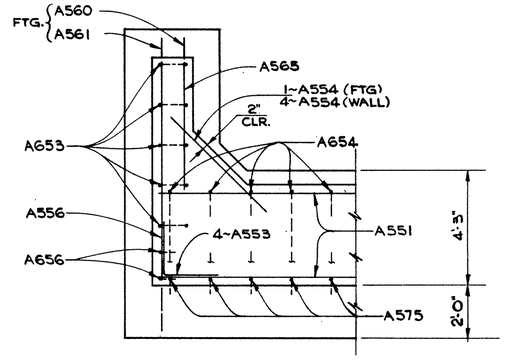
SECTION "D-D" SHOWN
SECTION "J-J" SIMILAR



ELEVATION VIEW EAST WING WALL ABUT. #2



SECTION "C-C"



SECTION "E-E" SHOWN
SECTION "F-F" OPPOSITE HAND

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

BEISWENGER, HOCH & ASSOCIATES AND ROBERT J. SCHOMER
CONSULTING ENGINEERS
4 YOUNGSTOWN ROAD YOUNGSTOWN 14, OHIO

ABUTMENT #2 DETAILS

BRIDGE Nº MAH 422-0313
UNDER WICK AVE.
YOUNGSTOWN MAHONING COUNTY
STA 107 + 62.61

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
NPW	ALH		Cla	RJSH	9-8-66	

FED. RD.	STATE	PROJECT	
	OHIO		

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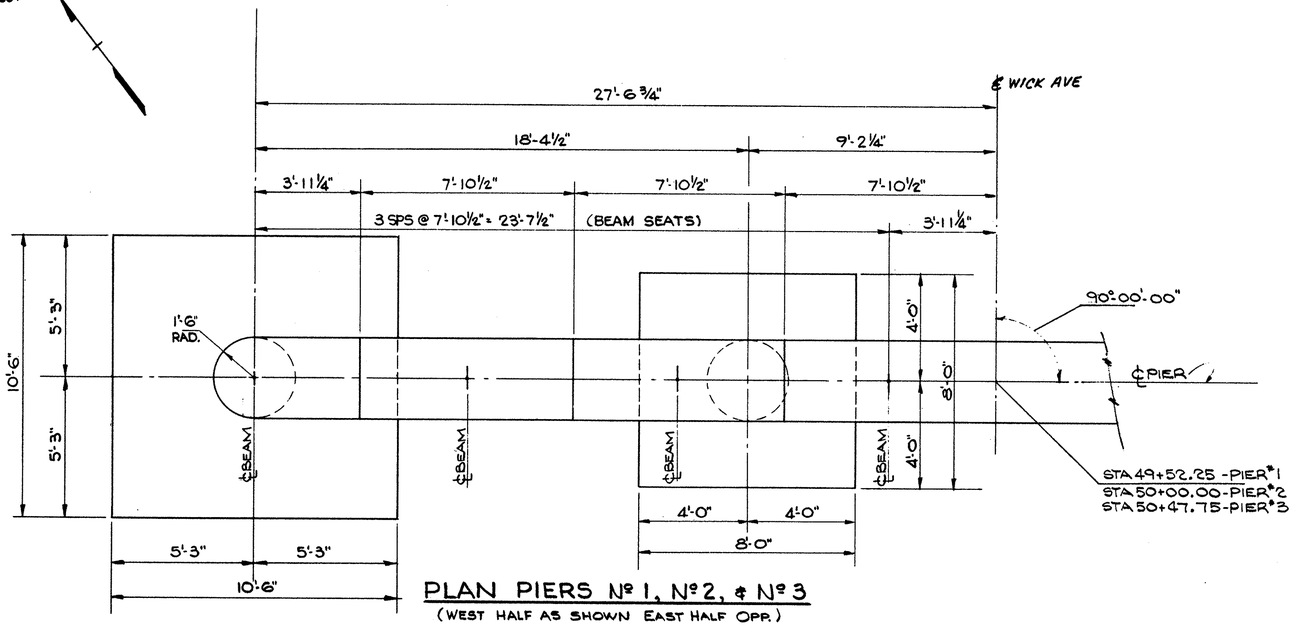
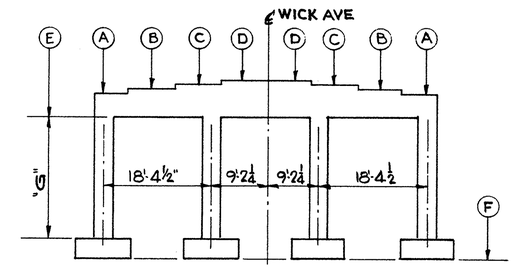
498

MAH 422 - 2.30

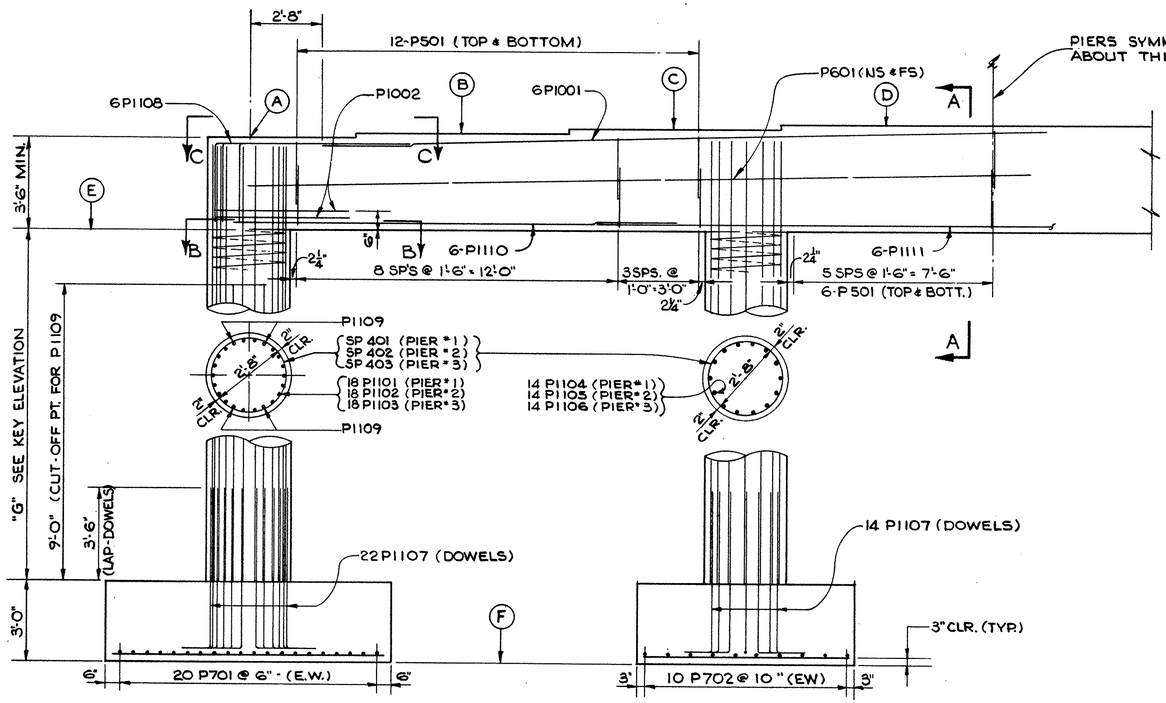


PLAN PIERS Nº 1, Nº 2, & Nº 3
(WEST HALF AS SHOWN EAST HALF OPP.)

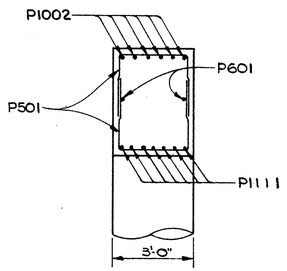


KEY ELEVATION

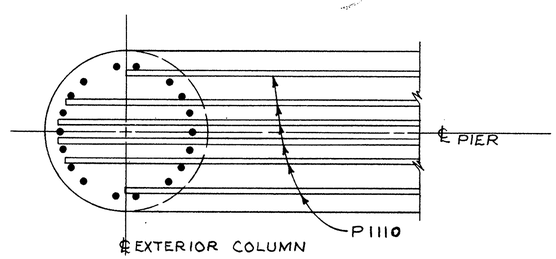
	A	B	C	D	E	F	G
PIER #1 WEST HALF	944.71	944.83	944.96	945.07	941.21	921.89	16'-3⅞"
PIER #1 EAST HALF	944.71	944.83	944.96	945.07	941.21	921.89	16'-3⅞"
PIER #2 WEST HALF	945.54	945.66	945.79	945.90	942.04	923.50	15'-6½"
PIER #2 EAST HALF	945.54	945.66	945.79	945.90	942.04	923.50	15'-6½"
PIER #3 WEST HALF	946.16	946.28	946.41	946.52	942.66	921.89	17'-9¼"
PIER #3 EAST HALF	946.16	946.28	946.41	946.52	942.66	921.89	17'-9¼"



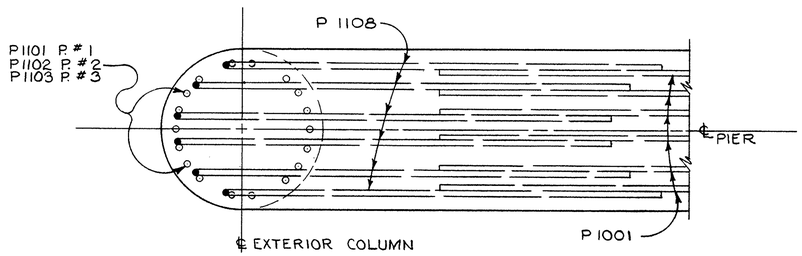
PARTIAL ELEVATION PIERS Nº 1, Nº 2 & Nº 3
(WEST HALF AS SHOWN, EAST HALF OPPOSITE AS SHOWN)



SECTION "A-A"



SECTION "B-B"



VIEW "C-C"

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

BEISWENGER, HOCH & ASSOCIATES AND ROBERT J. SCHOMER
CONSULTING ENGINEERS
4 YOUNGSTOWN ROAD YOUNGSTOWN 14, OHIO

PIERS

BRIDGE Nº MAH-422-0313
UNDER WICK AVENUE
YOUNGSTOWN MAHONING COUNTY
STA 107+62.61

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
NPW	ALH		Clo	RJH	7-8-66	

FED. RD.	STATE	PROJECT
	OHIO	

MAH-422-2.30

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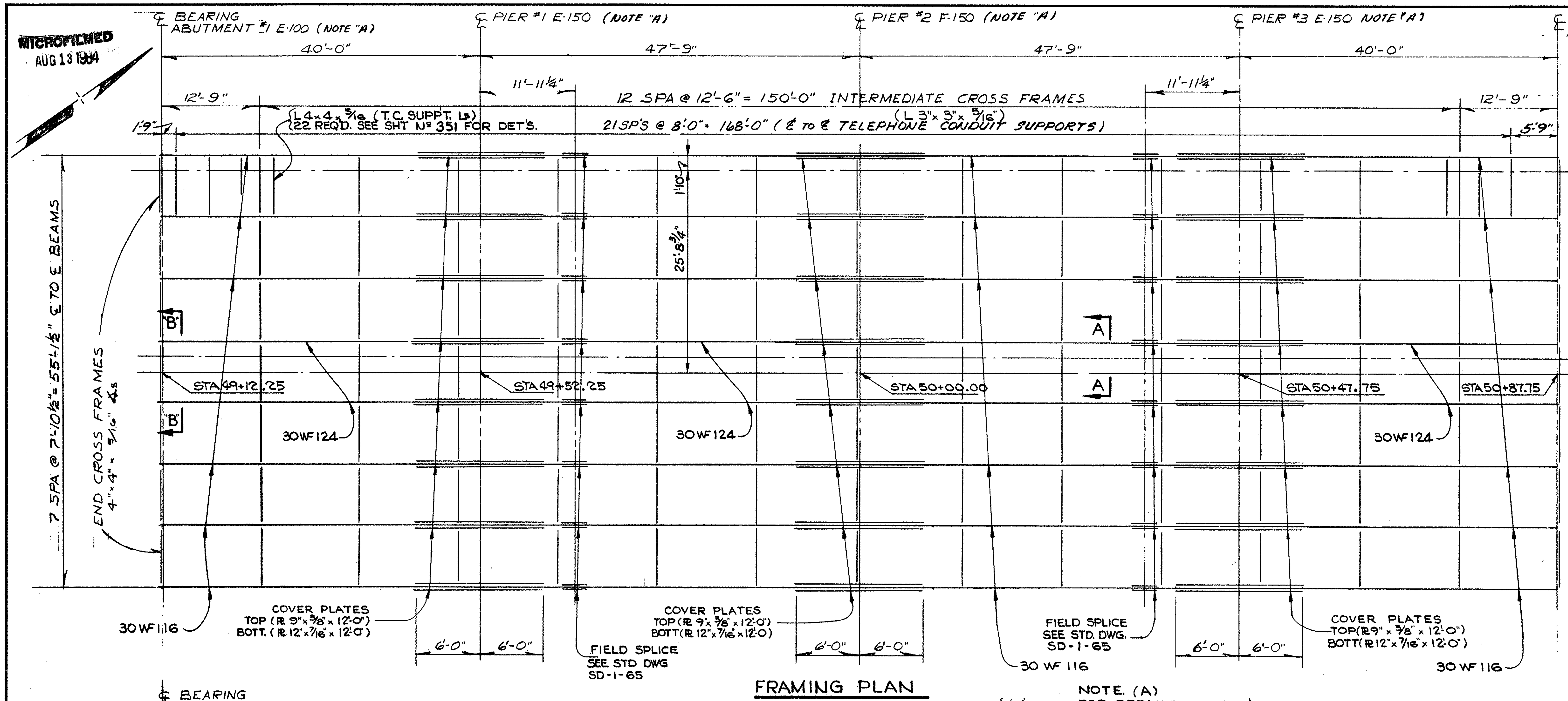
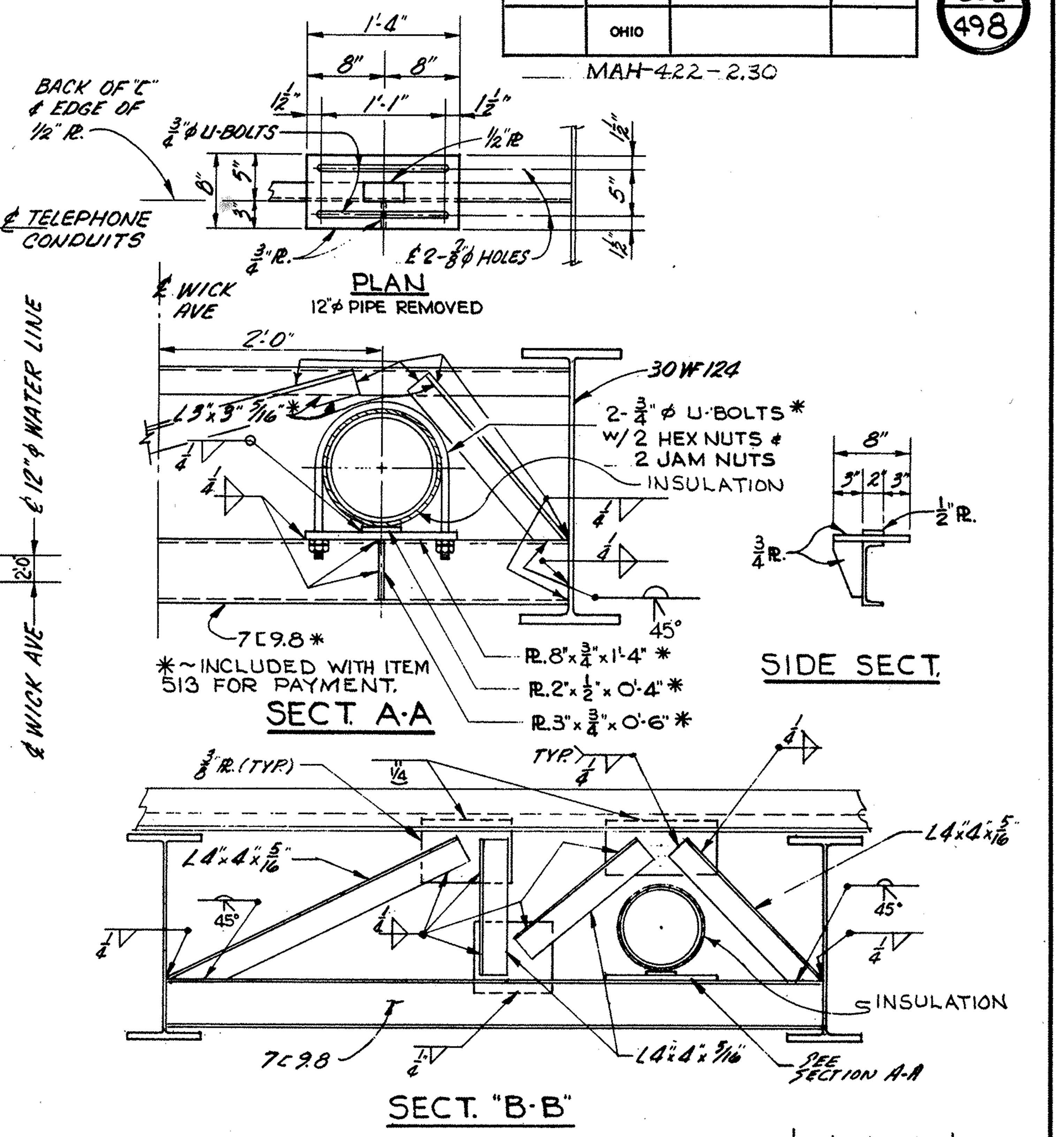
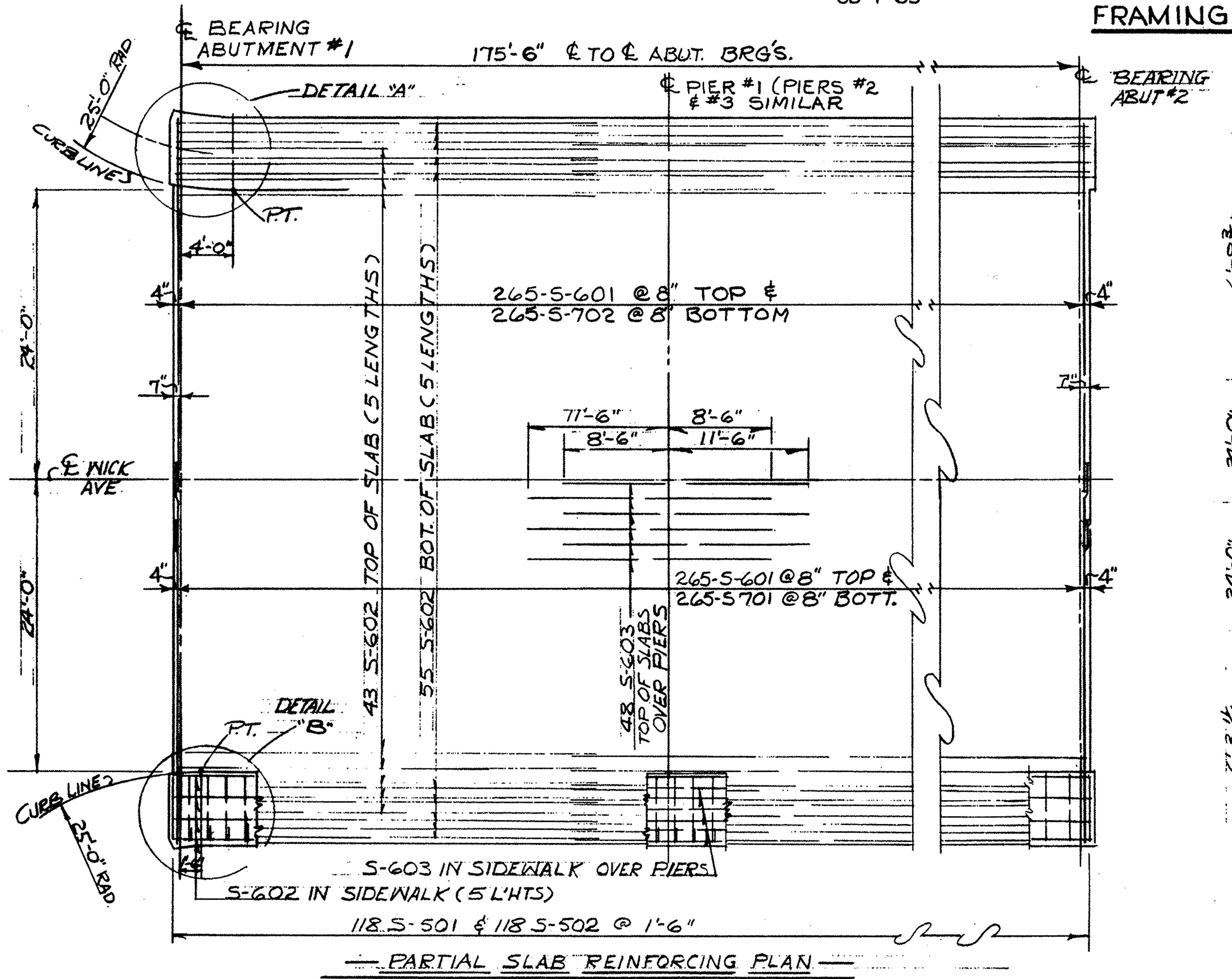
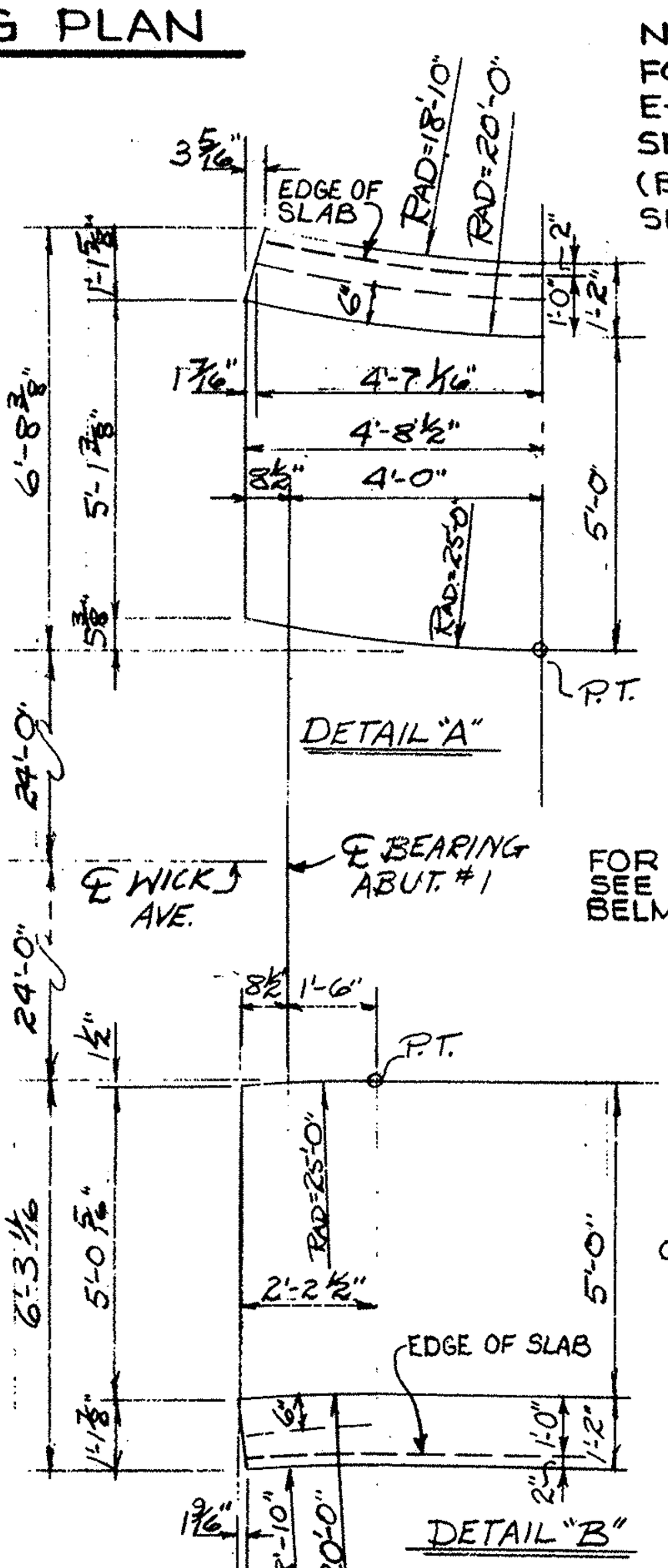
498

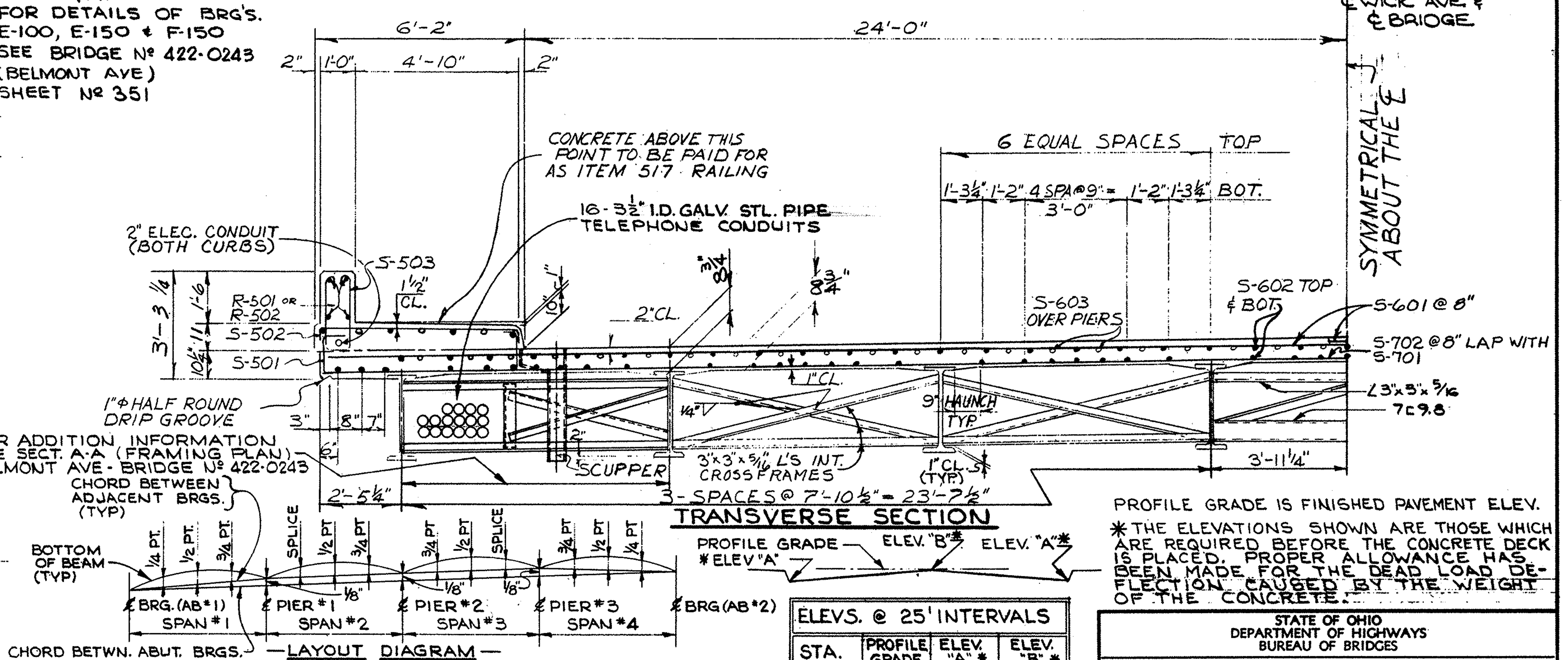








NOTE. (A)
FOR DETAILS OF BRG'S.
E-100, E-150 & F-150
SEE BRIDGE Nº 422-0243
(BELMONT AVE)
SHEET Nº 351



PROFILE GRADE IS FINISHED PAVEMENT ELEV.

* THE ELEVATIONS SHOWN ARE THOSE WHICH ARE REQUIRED BEFORE THE CONCRETE DECK IS PLACED. PROPER ALLOWANCE HAS BEEN MADE FOR THE DEAD LOAD DEFLECTION CAUSED BY THE WEIGHT OF THE CONCRETE.

DEFLECTION & CAMBER

SPAN	SPANS Nº 1 & 4			SPANS Nº 2 & 3		
LOCATION	¼ PT.	½ PT.	¾ PT.	SPLICE POINT	½ PT.	¾ PT.
DEFLECTION DUE TO WEIGHT OF STEEL	.018"	.022"	.010"	.007"	.015"	.007"
DEFLECTION DUE TO REMAINING DEAD LOAD	.138"	.160"	.073"	.051"	.107"	.048"
ADJUSTMENT FOR VERTICAL CURVE	—	—	—	—	—	—
REQUIRED SHOP CAMBER	1/8"	3/16"	1/16"	1/16"	1/8"	1/16"

ELEVS. @ 25' INTERVALS

STA.	PROFILE GRADE	ELEV. "A" *	ELEV. "B" *
49+25	948.28	947.92	948.29
49+50	948.66	948.29	948.66
49+75	949.04	948.68	949.05
50+00	949.42	949.05	949.42
50+25	949.80	949.44	949.81
50+50	950.18	949.81	950.18
50+75	950.56	950.20	950.57

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

BEISWENGER, HOCH & ASSOCIATES AND ROBERT J. SCHOMER
CONSULTING ENGINEERS
4 YOUNGSTOWN ROAD — YOUNGSTOWN 14, OHIO

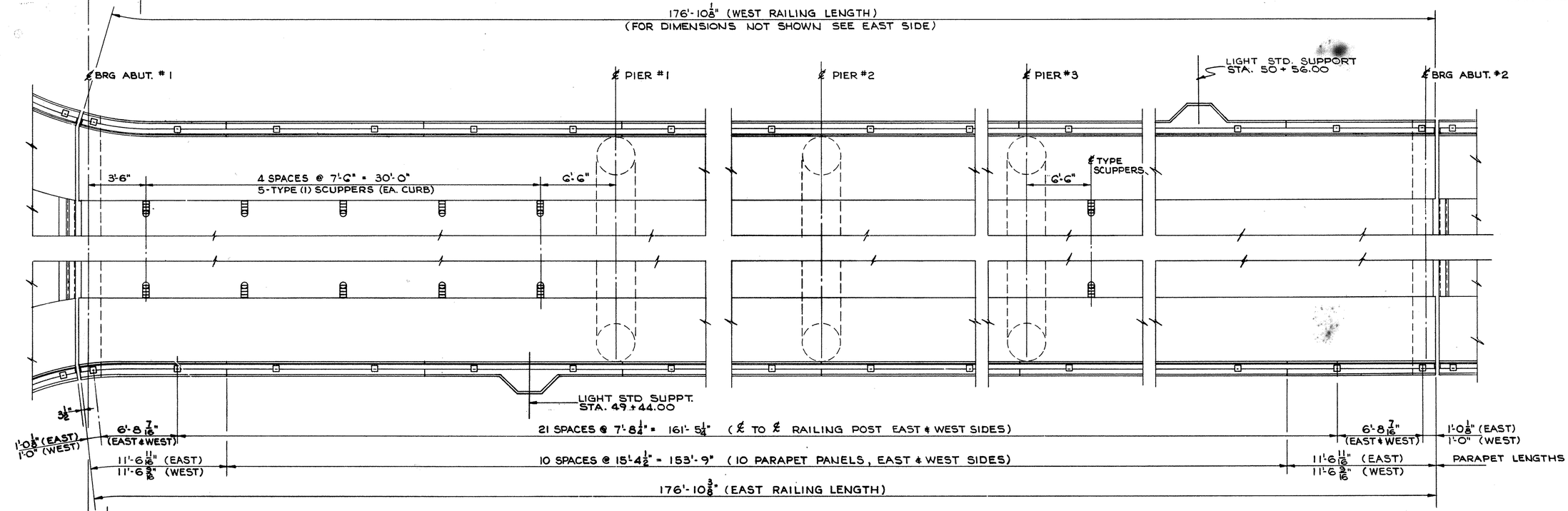
FRAMING PLAN
BRIDGE Nº MAH-422-0313
UNDER WICK AVENUE
YOUNGSTOWN — MAHONING COUNTY
STA 107+68.61

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVIS
NPW	NPW		CES	RDH	9-8-66	

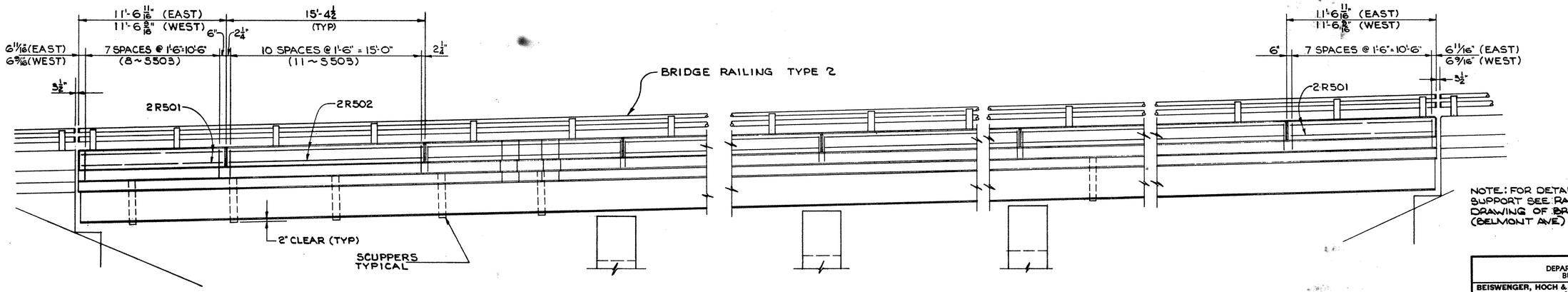
FED. RD.	STATE	PROJECT	
	OHIO		

393
498

MAH 422-2.30



PARTIAL DECK PLAN



ELEVATION

NOTE: FOR DETAILS OF LIGHT STANDARD SUPPORT SEE RAILING AND DRAINAGE DRAWING OF BR. NO. MAH-422-0243 (BELMONT AVE.)

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

BEISWENGER, HOCH & ASSOCIATES AND ROBERT J. SCHOMER
CONSULTING ENGINEERS
4 YOUNGSTOWN ROAD YOUNGSTOWN 14, OHIO

RAILING & DRAINAGE DET'S.

BRIDGE Nº MAH 422-0313
UNDER WICK AVENUE
YOUNGSTOWN MAHONING COUNTY
STA 107 + 68.61

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
NPW	ALH		Clés	JDH	9-8-66	

FED. RD.	STATE	PROJECT	
2	OHIO		

394
498

MAH 422-2.30

ABUTMENT Nº 1

MARK	NO. REQ'D	LENGTH	TYPE	DIMENSIONS A	B	C	D	SERIES INCR.	WEIGHT LBS.
A501	19	29'-6"	ST						585
A502	12	4'-7"	1	6"	4'-2½"				57
A503	24	6'-1"	5	8"	2'-5"	5"			152
A504	6	6'-2"	20	2'-7"	1'-2"	1'-11"	6"		39
A505	19	29'-8"	ST						588
A506	4	10'-9"	17	19'-5"	10'-9"				45
A507	1	13'-9"	18	19'-5"	10'-9"	3'-0"			14
SERIES OF A508	2 SETS OF 3 BARS-6	6'-2" TO 6'-8"	20	3'-7" TO 2'-10"@ 4½" INCR.	1'-2"	2'-1" TO 2'-2"@ 4½" INCR.	6"	9"	46
A509	4	9'-9"	17	20'-5"	9'-9"				41
A510	5	16'-11"	17	19'-5"	16'-11"				88
A511	1	11'-10"	17	19'-5"	11'-10"				12
A512	10	6'-0"	ST						63
A513	1	11'-4"	17	20'-5"	11'-4"				12
A514	4	4'-0"	12	2'-0"	2'-0"	1'-11½"			17
A515	1	11'-8"	18	19'-5"	9'-8"	2'-0"			12
A516	4	8'-8"	17	19'-5"	8'-8"				36
A517	5	14'-7"	17	19'-5"	14'-7"				76
A518	3	13'-7"	17	20'-5"	13'-7"				43
A519	1	9'-8"	17	19'-5"	9'-8"				10
A520	3	15'-11"	17	20'-5"	15'-11"				50
A521	1	14'-8"	11	7'-3"	3'-8"	3'-8"	11"		15
A522	1	13'-1"	11	5'-8"	3'-8"	3'-6"	11"		13
A523	1	9'-2"	17	20'-5"	9'-2"				10
A524	10	3'-11"	1	6"	3'-6½"				41
A525	4	4'-0"	12	2'-0"	2'-0"	1'-11"			17
A526	1	17'-0"	11	3'-4"	4'-6"	8'-11"	1'-0"		18
A527	40	7'-10"	3	3'-5"	2'-4				327
A528	40	8'-3"	1	8"	7'-8"				344
A529	4	5'-8"	ST						24
A530	1	15'-11"	11	3'-4"	4'-6"	7'-10"	1'-0"		16
A531	1	8'-9"	17	20'-5"	8'-9"				9
A532	1	6'-9"	17	20'-5"	6'-9"				7
A533	4	7'-8"	17	20'-5"	7'-8"				32
A534	2	12'-2"	14	3'-6"	2'-6"	4"			26
A601	48	15'-2"	7	3'-8"	1'-5"	5'-0"	11"		946
A602	10	15'-6"	7	5'-2"	1'-5"	5'-10"	11"		234
A603	4	8'-5"	1	7½"	7'-9"				50
A604	40	12'-9"	1	5'-3"	7'-8"				766
A605	8	32'-0"	ST						385
A606	12	20'-9"	3	1'-2"	9'-11"				374

TOTAL ABUTMENT Nº 1=5,640 LBS.

ABUTMENT Nº 2

MARK	NO. REQ'D	LENGTH	TYPE	DIMENSIONS A	B	C	D	SERIES INCR.	WEIGHT LBS.
A551	38	29'-6"	ST.						1169
A552	6	3'-11"	1	6	3'-6½				25
A553	8	3'-11"	1	2'-0"	2'-0"				33
A554	10	5'-0"	ST.						52
A555	6	6'-2"	20	2'-7"	1'-2"	1'-11"	6"		39
A556	8	8'-0"	ST.						67
A557	1	8'-10"	ST.						9
A558	5	13'-11"	18	19'-5"	6'-7"	7'-4"			73
A559	3	11'-3"	18	20'-5"	6'-11"	4'-4"			35
A560	2	5'-5"	ST.						11
A561	2	10'-10"	ST.						23
A562	22	6'-1"	5	8"	2'-5"	5"			140
A563	10	4'-7"	1	6"	4'-2½"				48
A564	2	8'-6"	20	3'-9"	1'-2"	3'-1"	6"		18
A565	8	4'-6"	ST.						38
A566	5	14'-0"	18	19'-5"	2'-9"	11'-3"			73
A567	3	11'-1"	18	20'-5"	2'-10"	8'-5"			35
A568	1	8'-8"	ST.						9
A569	2	5'-10"	ST.						12
A570	1	14'-0"	11	3'-6"	4'-0"	6'-6"	1'-10"		15

SEE CONTINUATION

CONTINUATION ABUTMENT Nº 2

MARK	NO. REQ'D	LENGTH	TYPE	DIMENSIONS A	B	C	D	SERIES INCR.	WEIGHT LBS.
A571	1	11'-1"	11	3'-7"	4'-0"	3'-6"	1'-10"		12
A572	1	14'-2"	11	6'-6"	3'-9	3'-11	1'-6"		15
A573	2	7'-2"	20	3'-1"	1'-2"	2'-5"	6"		15
A574	40	7'-10	3	3'-5"	2'-4"				327
A575	40	8'-3"	1	8"	7'-8"				344
A576	4	5'-8"	ST						24
A577	1	11'-3"	11	3'-6"	3'-9"	4'-0"	1'-6"		12
A578	2	12'-2"	14	3'-6"	2'-6"	4"			26
A651	8	31'-7"	ST.						380
A652	48	13'-2"	7	3'-8"	1'-5"	5'-0"	11"		950
A653	10	21'-0"	3	1'-2"	10'-0"				315
A654	40	12'-9"	1	5'-3"	7'-8"				766
A655	10	15'-6"	7	5'-2"	1'-5"	5'-10"	11"		235
A656	4	8'-3"	1	7½"	7'-9"				50

TOTAL ABUTMENT Nº 2=5,393 LBS.

PIERS Nº 1, 2, 3

MARK	NO. REQ'D	LENGTH	TYPE	DIMENSIONS A	B	C	D	SERIES INCR.	WEIGHT LBS.
P501	210	7'-7"	3	2'-8"	2'-7"				1661
P601	12	29'-2"	ST.						525
P701	240	10'-0"	ST.						4906
P702	120	7'-6"	ST.						1840
P1001	36	26'-9"	ST.						4144
P1002	12	10'-0"	9	3'-2"	3'-8"	1'-1⅞"			516
P1101	36	19'-6"	ST						3750
P1102	36	18'-9"	ST						3586
P1103	36	20'-11"	ST						4001
P1104	14	19'-9"	ST						1469
P1105	14	19'-0"	ST						1413
P1106	14	21'-2"	ST						1575
P1107	216	7'-0"	1	1'-0"	6'-3"				8033
P1108	36	11'-0"	1	3'-2"	8'-1"				2104
P1109	24	9'-0"	ST.						1148
P1110	36	17'-8"	ST.						3379
P1111	18	29'-6"	ST.						2821
				SPIRAL REINFORCING					3647

TOTAL PIERS Nº 1, 2 & 3=50,498 LBS.

SLAB

MARK	NO. REQ'D	LENGTH	TYPE	DIMENSIONS A	B	C	D	SERIES INCR.	WEIGHT LBS.
S501	236	8'-10"	15	1'-3"	5'-6"	6"			2174
S502	236	6'-5"	3	5'-8"	6"				1,579
S503	252	6'-1"	5	8"	2'-5"	5"			1,599
S521	4	10'-8"	19	2'-0"	2'-7"	1'-6"	1'-10½		45
S601	530	31'-0"	ST						24,678
S602	530	36'-9"	ST						29,255
S603	144	20'-0"	ST						4,326
S621	20	6'-0"	ST						180
S622	4	9'-8"	14	2'-10"	2'-0"	4"			59
S701	265	27'-0"	ST.						14,624
S702	265	34'-10"	ST.						18,868

TOTAL SLAB=97,699 LBS.

RAILING ⊗

MARK	NO. REQ'D	LENGTH	TYPE	DIMENSIONS A	B	C	D	SERIES INCR.	WEIGHT LBS.
R501	16	11'-2"	ST						
R502	80	15'-0"	ST						
R503	2	16'-5"	17	19'-3"	16'-5"				
R504	2	16'-10"	17	19'-9"	16'-10"				
R505	2	13'-10"	17	19'-3"	13'-10"				
R506	2	14'-3"	17	19'-9"	14'-3"				
R507	2	13'-4"	18	19'-3"	6'-0"	7'-4"			
R508	2	13'-6"	18	19'-9"	6'-2"	7'-4"			
R509	2	13'-6"	18	19'-3"	2'-4"	11'-2"			
R510	2	13'-7"	18	19'-9"	2'-5"	11'-2"			
R511	12	6'-1"	21						
R512	8	5'-5"	22						
R513	8	4'-2"	23						
R521	4	10'-8"	19	2'-0"	2'-7"	1'-6"	1'-10½		
R522	4	7'-10"	19	2'-0"	8"	2'-6"	6½"		

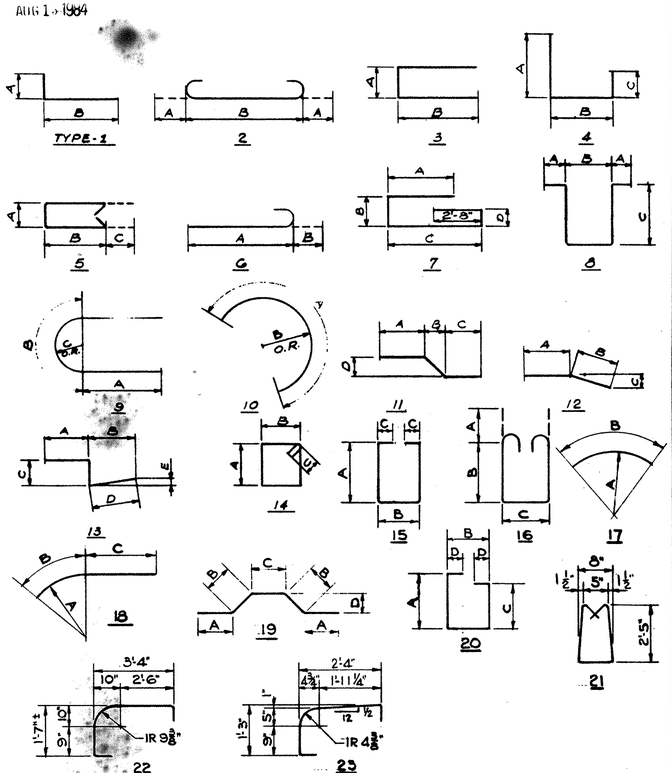
REPLACEMENT BARS

RE-401	0	5'-3"
RE-501	1	5'-6"
RE-601	4	6'-0"
RE-701	2	6'-3"
RE-801	0	6'-6"
RE-901	0	6'-10"
RE-1001	1	7'-3"
RE-1101	2	7'-9"

SPIRAL REINFORCING SCHEDULE

MARK	NO. REQ'D	CORE DIA. OF SPIRAL	LENGTH OF SPIRAL	PITCH	NO. OF TURNS	WEIGHT LBS.
SP 401	4	2'-8"	16'-3⅞"	4½"	47	1212
SP 402	4	2'-8"	15'-6½"	4½"	44	1139
SP 403	4	2'-8"	17'-9⅛"	4½"	50	1296
				TOTAL SPIRALS		3647

GRAND TOTAL 159,200 LBS.



REINFORCING NOTES

THE LENGTH SHOWN IN THE STEEL SCHEDULE FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE BOTTOM OF THE PIER CAP. THE NUMBER OF TURNS SHOWN IN THE STEEL SCHEDULE FOR SPIRAL BARS 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 5-4. ONE AND ONE HALF CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT. FOUR (4) STEEL CHANNEL, TEE OR ANGLE SPACERS WEIGHING APPOX. 0.66 LBS. PER LINEAL FT. OF SPACERS SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF EACH COIL. THE NUMBER OF POUNDS OF THESE SPACERS, BASED ON 0.66 LBS. PER LINEAL FT. WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS.

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED AND THE FIRST TWO DIGITS WHERE FOUR ARE USED INDICATE THE BAR SIZE NUMBER FOR EXAMPLE A-601 IS A NO. 6 SIZE BAR AND P-1001 IS A NO. 10 SIZE BAR.

⊗ RAILING REINFORCEMENT BARS WILL BE INCLUDED AS PART OF ITEM 517 FOR PAYMENT.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

BEISWENGER, HOCH & ASSOCIATES AND ROBERT J. SCHOMER
CONSULTING ENGINEERS
4 YOUNGSTOWN ROAD YOUNGSTOWN 14, OHIO

REINFORCING SCHEDULE

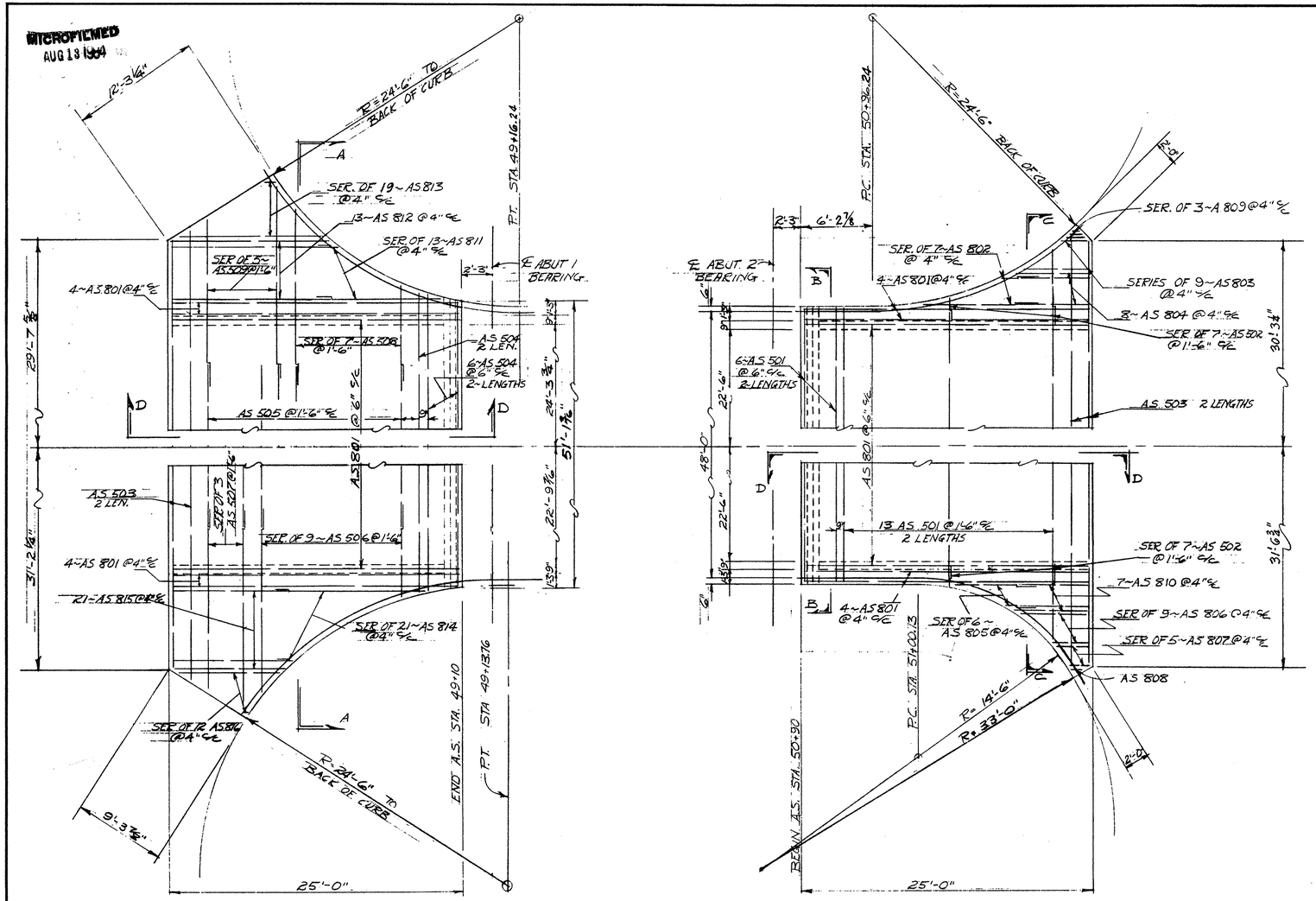
BRIDGE Nº MAH 422-0313
UNDER WICK AVE.
YOUNGSTOWN MAHONING COUNTY
STA. 107 + 68.61

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
NPW	ALH		cla	RDH	3-8-66	

FED. RD.	STATE	PROJECT	
	OHIO		

395/498

MAH-422-2.30



BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, AS 801 IS A No 8 SIZE BAR.

CONCRETE SHALL BE CLASS "C"

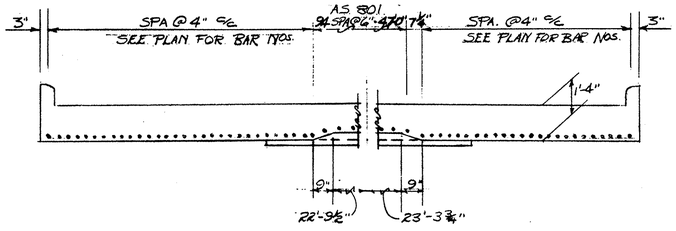
PREFORMED EXPANSION JOINT FILLER & CONST. JOINTS ARE INCLUDED FOR PAYMENT IN THE UNIT PRICE FOR APPROACH SLABS

ITEM 611 REINFORCED CONCRETE APPROACH SLABS 314 SQ. YDS. (SHOWN WITH ROADWAY SLAB)

REINFORCING STEEL LIST

MARK	NUMBER	LENGTH	SHP.	DIMENSION SERIES "A"	DIMENSION SERIES INC.	WT.
AS 501	38	25'-2"	STR			
AS 502	2 SETS OF SER OF 7 BARS	2'-10" TO 7'-4"	STR		9"	
AS 503	4	32'-0"	STR			
AS 504	14	26'-6"	STR			
AS 505	12	30'-0"	STR			
AS 506	SER OF 9 BARS	12'-6" TO 24'-0"	STR		1'-2"	
AS 507	SER OF 3 BARS	19'-3" TO 21'-3"	STR		1'-0"	
AS 508	SER OF 7 BARS	13'-7" TO 21'-7"	STR		1'-4"	
AS 509	SER OF 5 BARS	17'-10" TO 21'-10"			1'-0"	
AS 801	202	25'-7"	B	24'-6"		
AS 802	SER OF 7 BARS	4'-6" TO 11'-6"	STR		1'-2"	
AS 803	SER OF 9 BARS	2'-9" TO 6'-9"	STR		6"	
AS 804	8	7'-3"	STR			
AS 805	SER OF 6 BARS	4'-0" TO 8'-7"	STR		11	
AS 806	SER OF 9 BARS	3'-6" TO 6'-8"	STR		4"	
AS 807	SER OF 5 BARS	2'-3 TO 3-3	STR		3"	
AS 808	1	1'-9"	STR			
AS 809	SER OF 3 BARS	1'-9" TO 3'-9"	STR		1'-0"	
AS 810	7	6'-9"	STR			
AS 811	SER OF 13 BARS	4'-0" TO 12'-6"	STR		8½"	
AS 812	13	15'-0"	STR			
AS 813	SER OF 19 BARS	1'-0" TO 14'-0"	STR		10"	
AS 814	SER OF 21 BARS	3'-6" TO 14'-3"	STR		6½"	
AS 815	21	10'-6"	STR			
AS 816	SER OF 12 BARS	1'-2" TO 10'-4"	STR		10"	
DOWELS	147	1" DIA. × 1'-6" LONG				

BENDING DIAGRAM "B" — DIMENSION "A"



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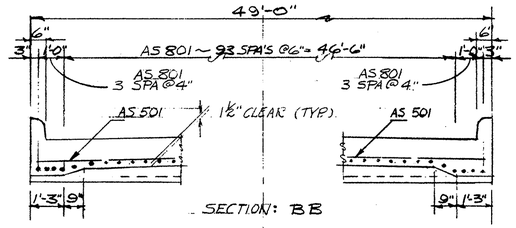

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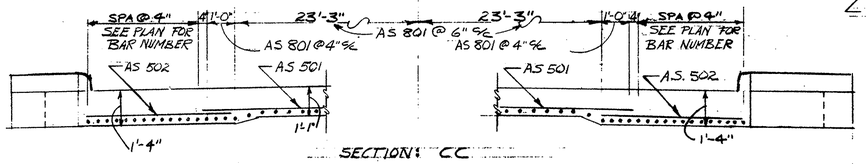

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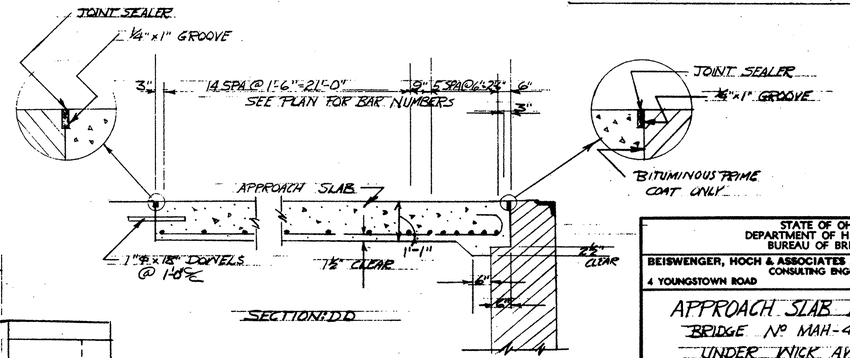


SECTION: DD

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

BEISWENGER, HOCH & ASSOCIATES AND ROBERT J. SCHOMER
CONSULTING ENGINEERS
4 YOUNGSTOWN ROAD YOUNGSTOWN 14, OHIO

APPROACH SLAB DETAIL

BRIDGE No MAH-422-0313
UNDER WICK AVENUE
YOUNGSTOWN MAHONING COUNTY
STA 107+68.81

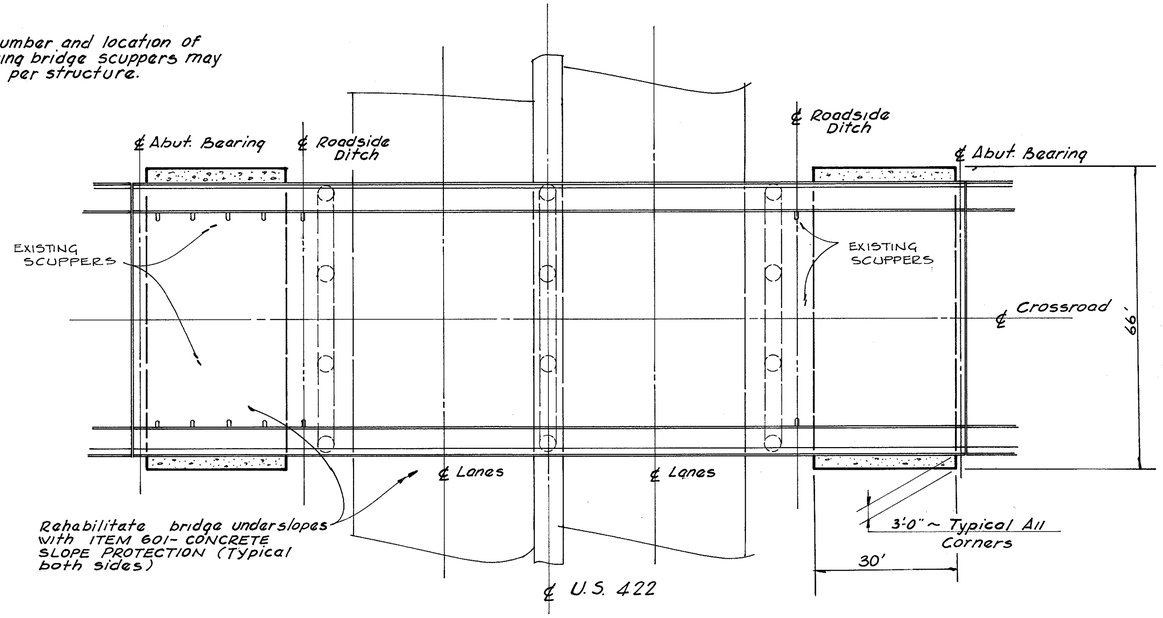
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
NPW	NPW		CBS	RJH	11-1-66	

	BY	DATE
Calculated	CSK	7/87
Checked	WS	8/87

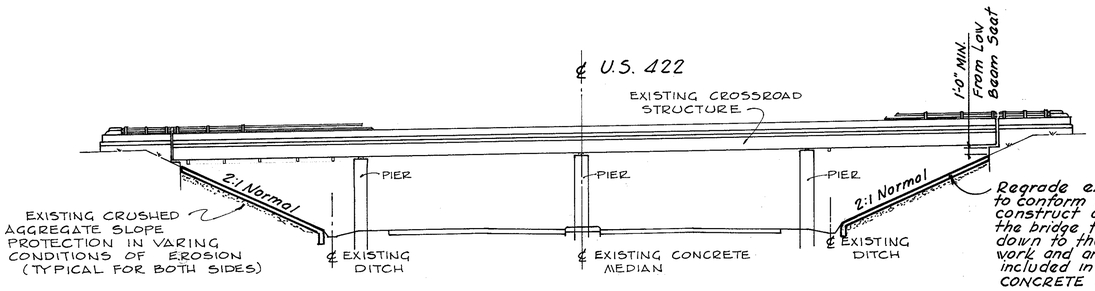
REGION	STATE	PROJECT	
5	OHIO	F-65(53)	

CITY OF YOUNGSTOWN
MAH. 422-1.89
MAH. 62-19.57

NOTE: The number and location of existing bridge scuppers may vary per structure.



PLAN



ELEVATION

Regrade existing aggregate slopes to conform to original grade and construct a 6" thick concrete pad under the bridge from the face of abutment down to the toe of slope. The cost of this work and anyother related items shall be included in the unit bid price of ITEM 601- CONCRETE SLOPE PROTECTION.

NOTE: Any existing 6" non-perforated helical C.M.P. which tarminates at the front slope shall be extanded thru the proposed concrete pad as per details on STD. DWG. A-1-69 Dated 6-12-69 Sheet 3 of 4.

BRIDGE SPILL THROUGH REHABILITATION DETAILS

CROSSROAD STRUCTURE	ITEM 601 CONCRETE SLOPE PROTECTION
Covington Street MAH-422-0217	490 SQ. YD.
Wick Avenue MAH-422-0313	490 SQ. YD.
Total	980 SQ. YD.