FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA. - 21 - 10.23

1/169

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
STA.-21-10.23
STARK COUNTY
CITY OF MASSILLON
GRADE SEPARATIONS WITH PENNSYLVANIA R.R. AND NEW YORK, CHICAGO & ST. LOUIS R.R.

APR 15 1964
GROUND PHOTOLAB

U-UG-1010(5)

LIMITED ACCESS

This improvement is especially designed for Thru Traffic and has been declared a limited access highway or freeway by action of the Director of Highways, in accordance with provisions of Section 5511.02 of the revised Code of Ohio

1959 SPECIFICATIONS

The Standard Specifications of The State of Ohio, Department of Highways, including changes and Supplemental Specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare the making of this improvement will not require the closing of the highway to traffic and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

The right of way for this improvement will be provided by the State of Ohio.

Approved Paul Kostyshak
Date 4/4/60 Division Deputy Director

3-29-61

Approved Henry E. Hoppes
Date 3-29-61 Deputy Director of Planning and Programming

Approved D.H. Waterman
Date 2-27-61 Engineer of Bridges

Approved W. J. Creamean
Date 3-15-61 Engineer of Location and Design

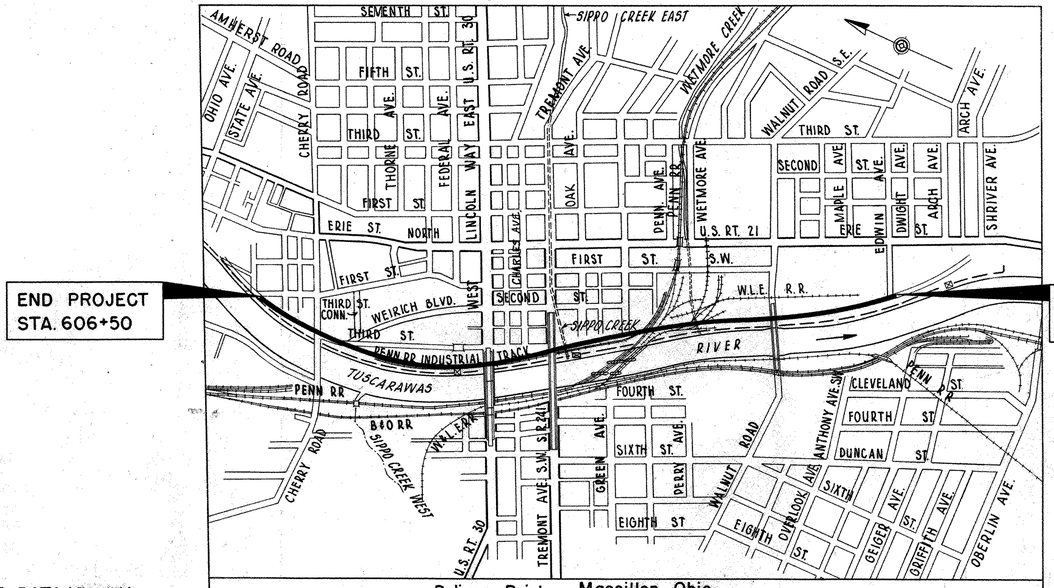
Approved C.W. McCaughey
Date 3-16-61 Deputy Director of Design and Construction

Approved W.M. Dun
Date 3-1-61 Deputy Director of Right-of-Way

Approved Gill Berry
Date 3-28-61 First Assistant Director

Approved C.P. Foster
Date 3-28-61 Director of Highways.

Approved Harry M. Lyon
Date 4-1-60 City Engineer



END PROJECT STA. 606+50

BEGIN PROJECT STA. 539+75

Delivery Point Massillon, Ohio
Average Haul From Siding 0.5 Mile

LOCATION PLAN
Location of Project
Other Roads

SCALES

Location Plan	800 400 0 800 1600 Scale of Feet
Plan	1" = 50' & 1" = 20'
Profile Horizontal	1" = 50' & 1" = 20'
Profile Vertical	1" = 10' & 1" = 5'
Cross Sections	1" = 5'
Intersection Details	1" = 20'

APR 15 1964
GROUND PHOTOLAB

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED

DIVISION ENGINEER DATE

CONVENTIONAL SIGNS

Center Line of Road	
Street Line	
Property Line	℄
Limited Access & Right of Way	
Limited Access Only	LA
Right of Way Only	RW
Corporation Line	
Limits of Cut or Fill	
Work Agreement	WA
Slope Easement	SL
Building	
Tree	
River	
Guard Rail	
Power Pole	
Telephone Pole	
Fire Hydrant	
Fence Line	
Valve	

PROPOSED WORK

Item E-8 Removal

INDEX OF SHEETS

Title Sheet	1
Schematic Plan	2
Typical Sections	3-4
Miscellaneous Details	5
Superelevation Tables	6-8
General Notes	9-10
General Summary	11-12
Calculations	13-15
Plan & Profile	16-36
Cross Sections	37-81
Intersection Details	82-84
Storm Sewer Profiles & Culvert Details	85-92
Relocation Sanitary Sewer	93-94
Alteration Wetmore Creek Pressure Conduit	95-96
Alteration Sippo Creek Pump Station	97-105
Relocation Federal Ave. Pump Station	106-108
Retaining Wall	109
Barrier Curb Details	110-113
Alteration Tremont Ave. Siphon	114-115
Relocation Cherry Rd. Siphon	116-118
Structures Over 20' Span	119-145
Building Removals	146
Right of Way	147-169
Notes for Special Drainage Structures	*118-A*
Railroad Force Account Work	*120, 141*

LINE DATA
U-1010(5) Portion

Begin Project	Sta. 539+75
Suspend Project	Sta. 563+58
Resume Project	Sta. 568+16
End Project	Sta. 606+50

Total Length of Project "U" = 6217.00 Lin. Ft. or 1.177 Mi.

Begin Work	Sta. 533+10
Suspend Work	Sta. 563+58
Resume Work	Sta. 568+16
End Work	Sta. 607+14

Net Length = 6946.00 Lin. Ft.

Add For Edwin Ave.
Sta. 0+15 to Sta. 5+73.2 = 558.2 Lin. Ft.
Third St. Conn.
Sta. 0+25 to Sta. 6+86 = 711.00 Lin. Ft.
Total Length of Work "U" = 8215.2 Lin. Ft. or 1.555 Mi.

LINE DATA (Cont'd.)
UG-1010(5) Portion

Begin Project & Work	Sta. 563+58
End Project & Work	Sta. 568+16

Total Length of Project & Work "UG" = 458.00 Lin. Ft. or 0.086 Mi.

Total Length of Project (U-1010(5) & UG-1010(5)) 6675.00 Lin. Ft. or 1.264 Mi.

Total Length of Work (U-1010(5) & UG-1010(5)) 8673.2 Lin. Ft. or 1.642 Mi.

STANDARD DRAWINGS

I-1,2,3,4 & 5	4-24-58	S-27 P.C. 3	2-20-45	I-21-23	8-1-56	DR-1	1-3-55
I-8 I. No. 2-A	4-23-59	S-27 P.C. 4	1-4-54	F-1	9-1-59	I-8 C.B. No. 3-A	1-26-59
I-8 C.B. 2-2A & B	3-2-59	RI-1	7-15-58	F-3	9-1-59		
I-8 C.B. No. 3	1-26-59	B.T. 50-70-71 E No. I	10-1-47	L-1	4-1-50		
I-8 C.B. No. 7	3-11-60	B.T. 71 R	3-2-53	L-3	4-1-50		
I-8 I. No. 2	4-23-59	G-7.07	6-1-56	L-3A	4-1-50		
I-8 M.H. No. 1	1-26-59	I-12	7-1-54	L.J. No. 1	7-1-55		
I-8 M.H. No. 1-A	2-1-61	I-15 No. 1	5-21-59	T-35	1-2-56		
I-8 M.H. No. 2	1-26-59	I-15 No. 2 A	8-17-60	T.J.	9-12-60		
I-14 G	1-22-52	I-15 No. 6	7-1-59				

SUPPLEMENTAL SPECIFICATION

18	Rev. 6-15-59
B-219	Rev. 3-12-59
S-103	Rev. 2-16-55
S-107	Rev. 2-16-55
S-101	12-2-59
S-307	8-23-60

DESIGNED BY
MICHAEL BAKER, JR.
Consulting Engineers
Baker Building
Rochester Penna.
REG. PROF. ENGR.
Ohio 9065
March 11, 1960
Date

STATE OF OHIO
MICHAEL BAKER, Jr.
9065
REGISTERED
PROFESSIONAL ENGINEER

FILE NO.	STA.-21-10.23
	Date of Letting 196
	Contract No.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

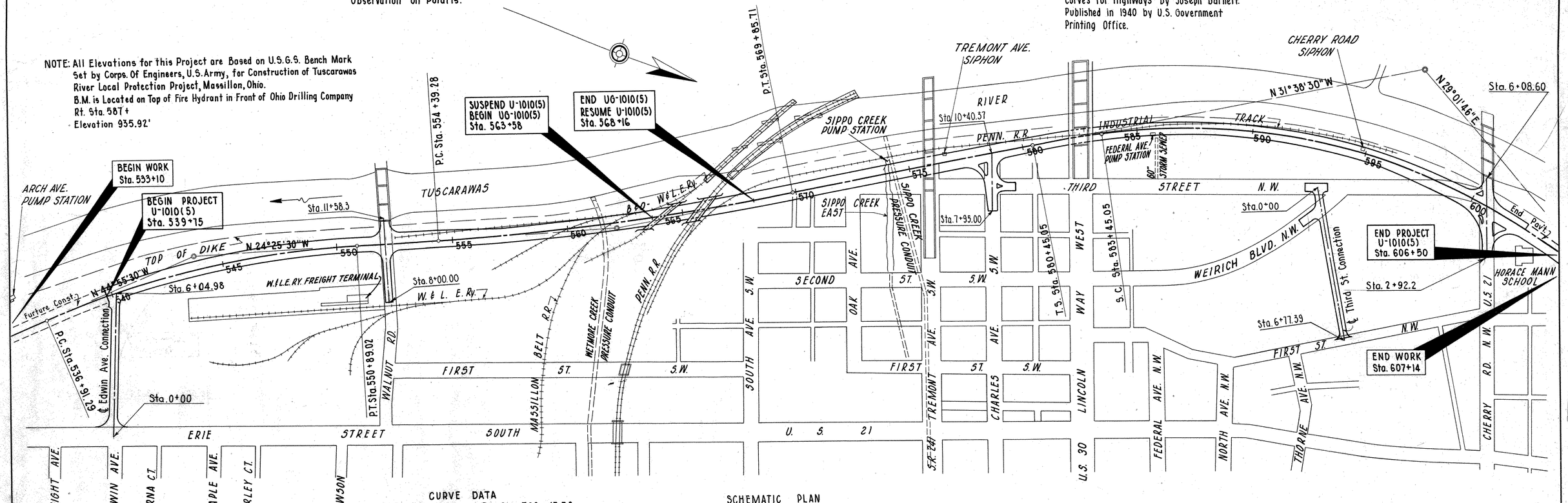
STA. - 21 - 10.23

2

NOTE: True Bearings Established From Observation on Polaris.

NOTE: All Elevations for this Project are Based on U.S.G.S. Bench Mark Set by Corps. Of Engineers, U.S. Army, for Construction of Tuscarawas River Local Protection Project, Massillon, Ohio.
B.M. is Located on Top of Fire Hydrant in Front of Ohio Drilling Company Rt. Sta. 587+
Elevation 935.92'

NOTE: Spiralled Curves indicated on this Plan are Developed as outlined in "Transition Curves For Highways" by Joseph Barnett. Published in 1940 by U.S. Government Printing Office.



CURVE DATA

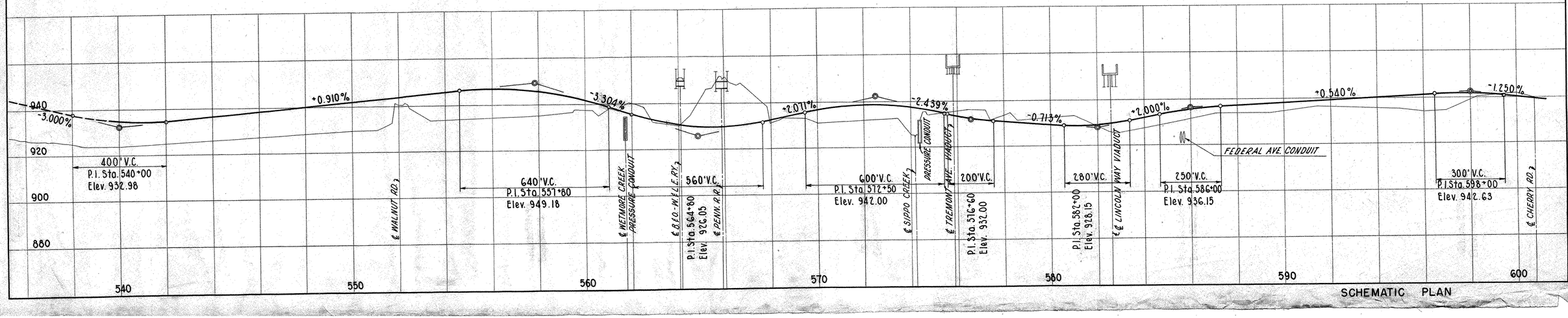
P.I. Sta. 543+97.71	P.I. Sta. 562+13.52
Δ - 20°30'00" Rt.	Δ - 7°13'00" Lt.
D - 1°28'00"	D - 0°28'00"
R - 3906.53'	R - 12277.70'
T - 706.42'	T - 774.24'
L - 1397.73'	L - 1546.43'
Ex - 63.36'	Ex - 24.39'

SCHEMATIC PLAN

Scale: Hor. 1" = 200'
Vert. 1" = 20'

SPIRAL CURVE DATA

P.I. Sta. 597+73.67	Yc - 5.57'
Δ - 60°40'16" Rt.	K - 149.99'
D - 2°07'30"	L.T. - 200.03'
L.S. - 300.00'	S.T. - 100.03'
R - 2696.27'	Lc - 2555.11'
θs - 3°11'15"	Ts - 1728.62'
p - 1.39'	Es - 429.34'
Xc - 299.91'	



SCHEMATIC PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.-21-10.23

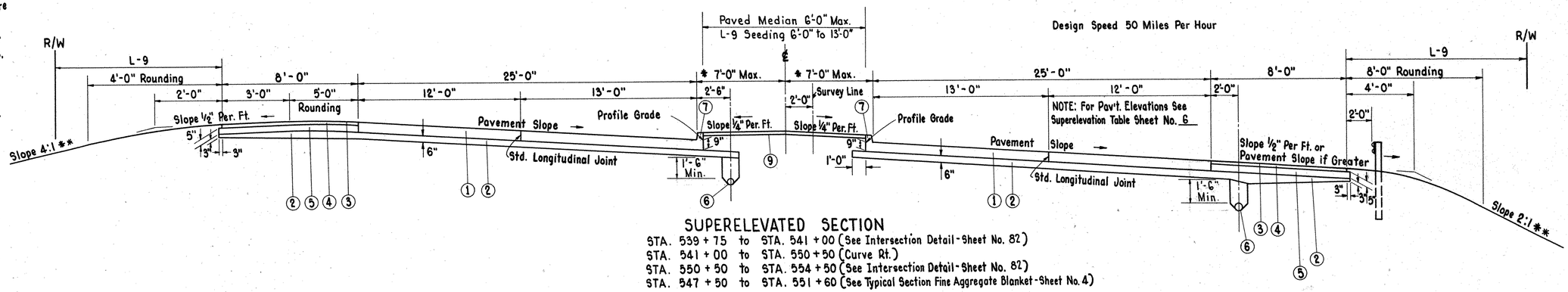
3

TYPICAL SECTIONS

TYPE T-71
Scale : 1/4"= 1'-0"

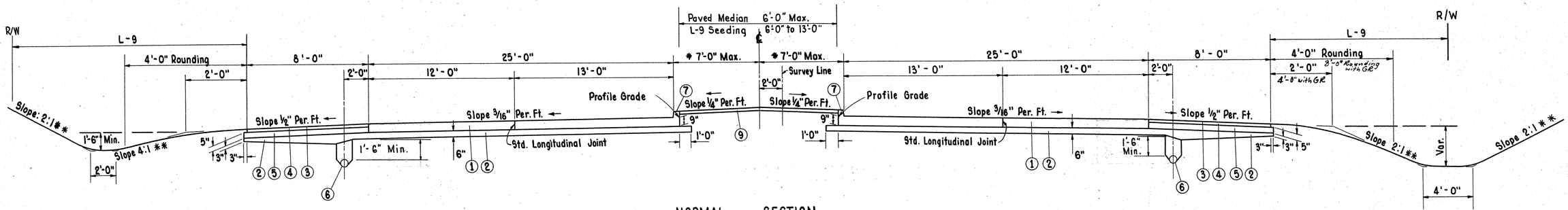
LEGEND

1. T-71 9" Reinforced Portland Cement Concrete Pavement.
2. I-22 Subbase, Grading "A or "B", as per plan
3. T-31 Bituminous Surface Treatment, Using 0.008 Cubic Yard No.6 Aggregate and 0.25 Gallon Bituminous Material Per Square Yard (See Note in Proposal).
4. B-219 3" Waterproofed Aggregate Base Course.
5. I-18 5" Stabilized Crushed Aggregate Shoulders.
6. I- 4 6" Underdrain.
7. I-12 Concrete Curb Standard Type 2A.
8. I-12 Combination Curb and Gutter, Std. Type 2.
9. I-21 4" Portland Cement Concrete Median Pavement Standard Type 1.
10. I-13 4" Portland Cement Concrete Sidewalk



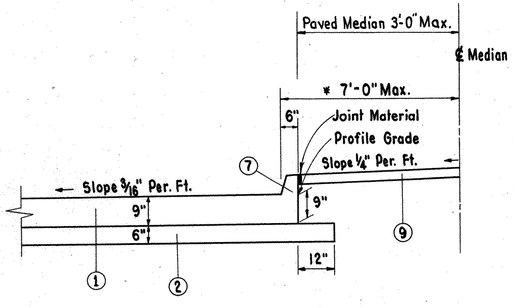
SUPERELEVATED SECTION

STA. 539 + 75 to STA. 541 + 00 (See Intersection Detail - Sheet No. 82)
STA. 541 + 00 to STA. 550 + 50 (Curve Rt.)
STA. 550 + 50 to STA. 554 + 50 (See Intersection Detail - Sheet No. 82)
STA. 547 + 50 to STA. 551 + 60 (See Typical Section Fine Aggregate Blanket - Sheet No. 4)

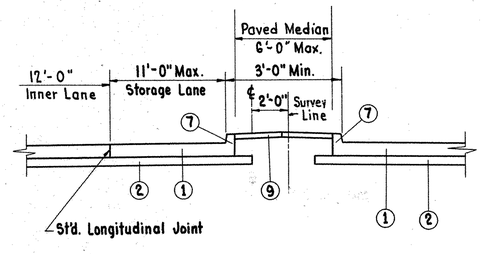


NORMAL SECTION

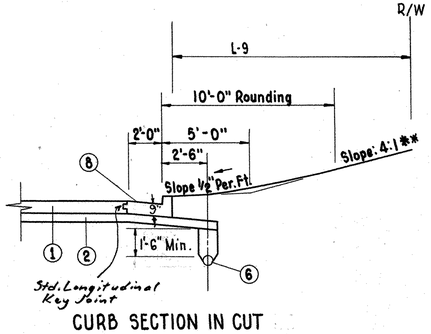
STA. 554+50 to STA. 576 +75
STA. 576 +75 to STA. 579 + 25 (See Intersection Detail - Sheet No. 84)
STA. 579+25 to STA. 580 + 17.05



DETAIL OF PAVEMENT AT THE MEDIAN EDGE
Scale: 1/2"= 1'-0"

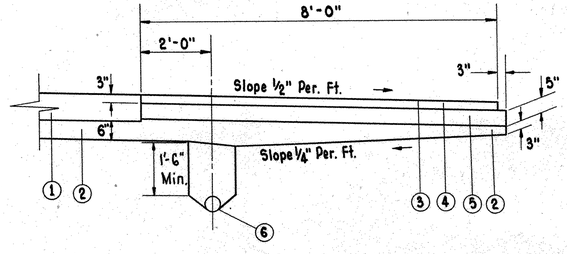


* DETAIL OF STAND-BY LANE
(See Plan for Station Limits)



CURB SECTION IN CUT
STA. 573 + 75 to STA. 580 + 17.05

** NOTE: Or as Shown on Cross Sections.



DETAIL OF PAVED SHOULDER OUTSIDE EDGE
Scale: 1/2"= 1'-0"

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

4

STA.-21-10.23

TYPICAL SECTIONS

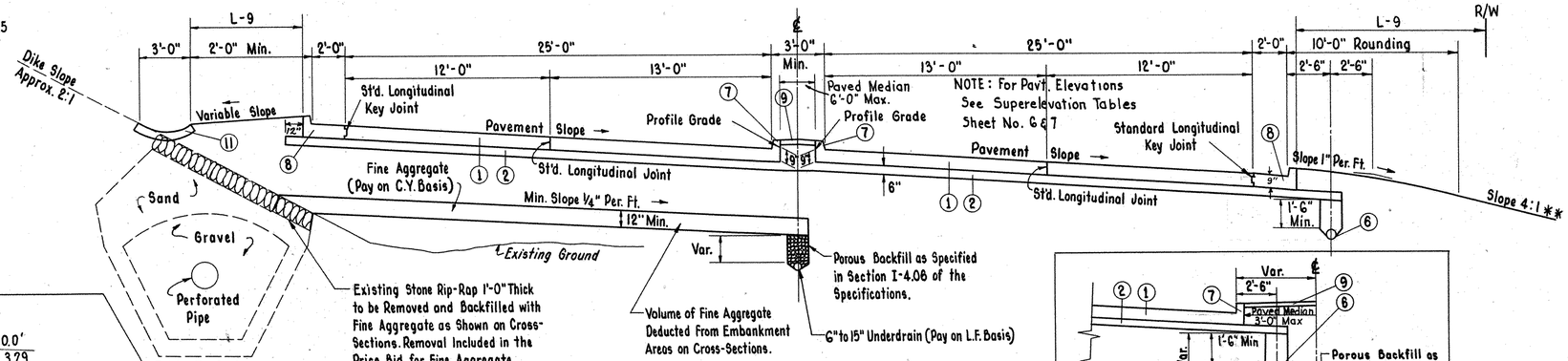
TYPE T-71

Scale : 1/4"= 1'-0"

Design Speed 50 Miles Per. Hour

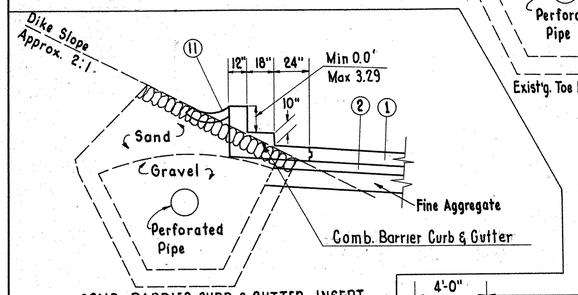
LEGEND

① T-71 9" Reinforced Portland Cement Concrete Pavement.
② I-22 Subbase, Grading "A" or "B", as per plan
③ T-31 Bituminous Surface Treatment, Using 0.008 Cubic Yard No.6 Aggregate and 0.25 Gallon Bituminous Material Per Square Yard (See Note in Proposal).
④ B-219 3" Waterproofed Aggregate Base Course
⑤ I-18 5" Stabilized Crushed Aggregate Shoulders
⑥ I-4 6" Underdrain.
⑦ I-12 Concrete Curb Standard Type 2A.
⑧ I-12 Combination Curb and Gutter, Std. Type 2.
⑨ I-21 4" Portland Cement Concrete Median Pavement Standard Type 1.
⑩ I-13 4" Portland Cement Concrete Sidewalk.
⑪ I-14 Paved Gutter, Standard Type 2.



TYPICAL SECTION OF FINE AGGREGATE BLANKET AND 6" to 15" UNDERDRAIN

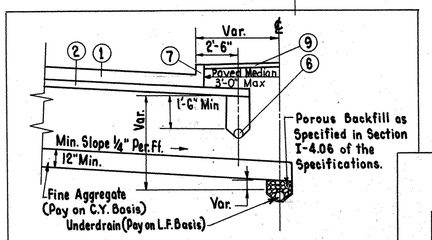
FINE AGGREGATE BLANKET STATIONS
STA. 547+50 to STA. 551+50
STA. 581+50 to STA. 594+75
STA. 596+43 to STA. 599+40



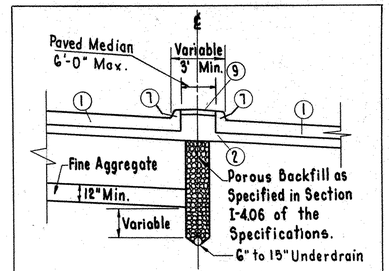
COMB. BARRIER CURB & GUTTER INSERT
STA.580+50 to STA.585+00(Lt. Side)
(See Details Sheet No's. 110 to 113)

SUPERELEVATED SECTION

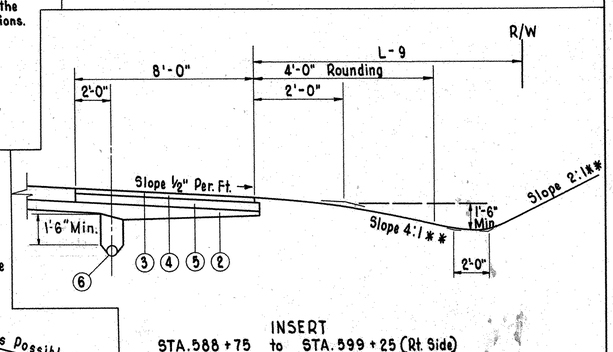
STA. 580+17.05 to STA. 599+25 (Curve Rt.)
STA. 599+25 to STA. 602+53 (See Intersection Detail-Sheet No. 84)
(See Inserts This Sheet)



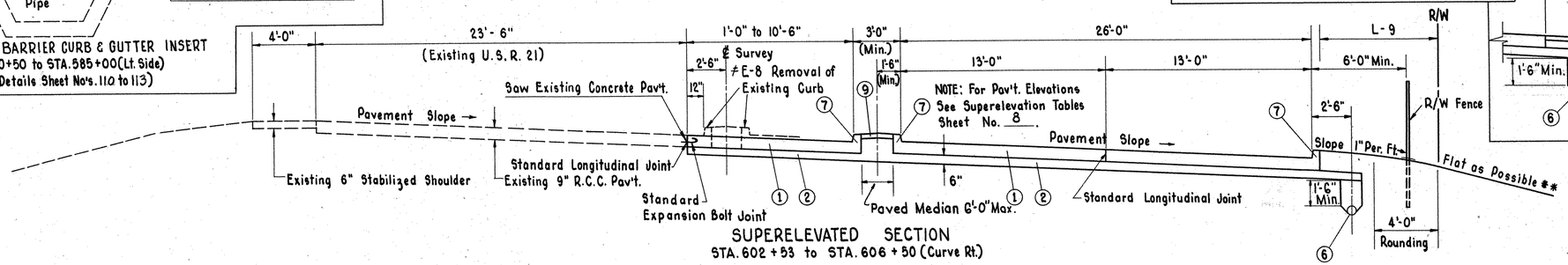
INSERT
STA 547+50 To STA 551+50 Lt.



INSERT
STA. 581+50 to STA 594+75



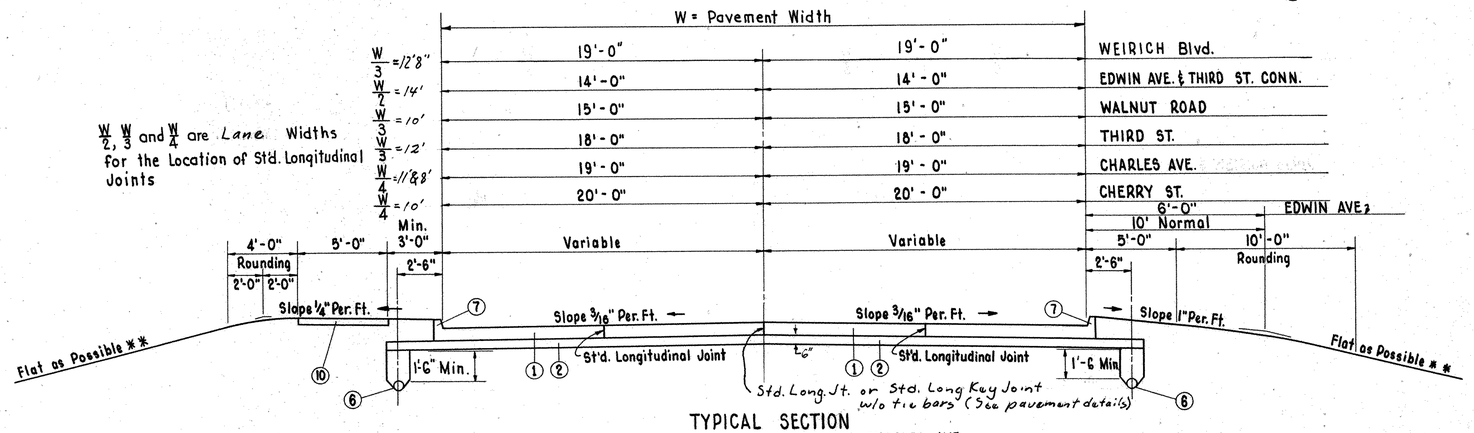
INSERT
STA.588+75 to STA.599+25 (Rt. Side)



SUPERELEVATED SECTION

STA. 602+53 to STA. 606+50 (Curve Rt.)

$\frac{W}{2}, \frac{W}{3}$ and $\frac{W}{4}$ are *Lane* Widths for the Location of Std. Longitudinal Joints



TYPICAL SECTION

NOTE: See Plan for Location of Sidewalk.

EDWIN AVE.
STA.0+23.90 to STA.1+00 (See Intersection Detail Sheet No. 82)
STA.1+00 to STA.5+00
STA.5+00 to STA.5+73.20 (See Intersection Detail Sheet No. 82)
WALNUT ROAD
STA.8+00 to STA.11+58.3 (See Intersection Detail Sheet No. 82)

CHARLES AVE.
STA.7+95 to STA.10+40.37 (See Intersection Detail Sheet No. 84)
THIRD ST.
STA.23+30 to STA.24+54 (See Intersection Detail Sheet No. 83)
RELOC. THIRD ST.
STA.0+19 to STA.6+63.5 (See Intersection Detail Sheet No. 83)

WEIRICH BLVD.
STA.4+16 to STA.6+00 (See Intersection Detail Sheet No. 83)
CHERRY RD.
STA.2+92.20 to STA.6+08.60 (See Intersection Detail Sheet No. 84)

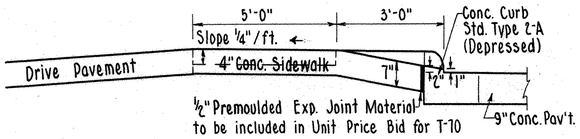
** NOTE: Or as shown on cross sections

† NOTE: Removal of integral curbs in E-8 pavement removal areas shall be included for payment in the unit price bid for pavement removal per Sec. E-8.03.

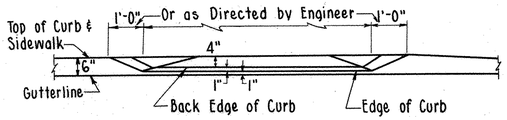
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA. 21-10.23

5

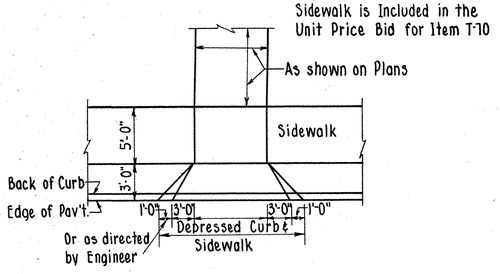


DETAIL OF CURB & SIDEWALK AT DRIVES
No Scale

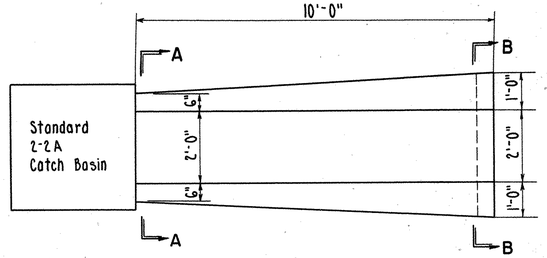


ELEVATION OF CURB AT DRIVEWAYS
No Scale

NOTE: Payment for Curb Section on T-10 Pavement between edge of through Pavement & Sidewalk is Included in the Unit Price Bid for Item T-10

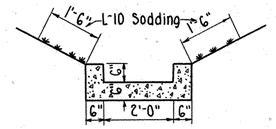


DETAIL OF PRIVATE DRIVES
No Scale

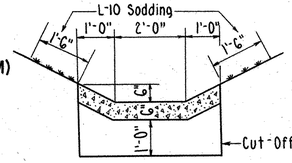


STANDARD PAVED GUTTER
TYPE I MODIFIED AS PER PLAN (2' WIDTH BOTTOM)
Scale: 1/2" = 1'-0"

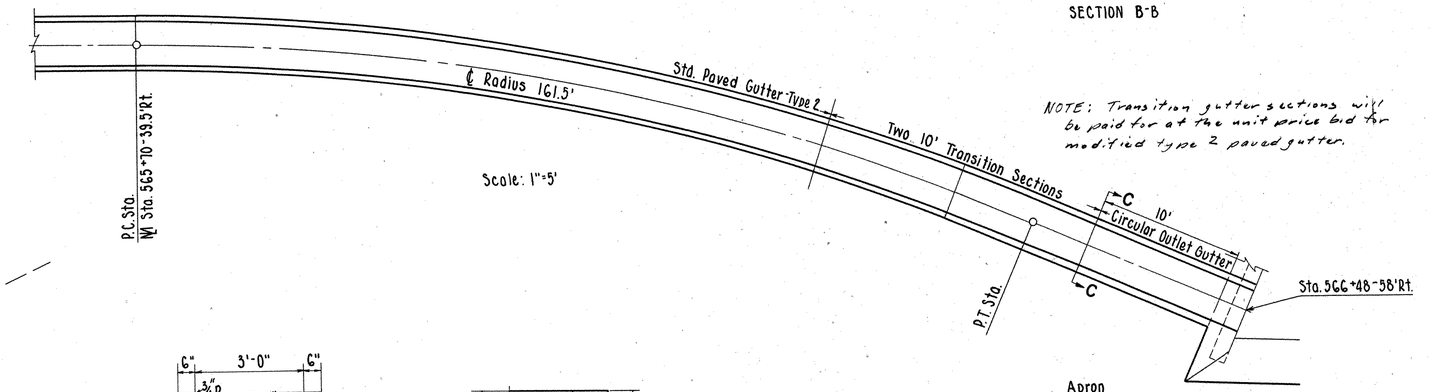
NOTE: For Details and Notes not shown Refer to Std. Const. Dwg. 1-14 G

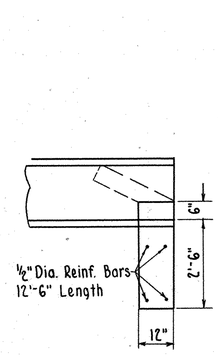


SECTION A-A

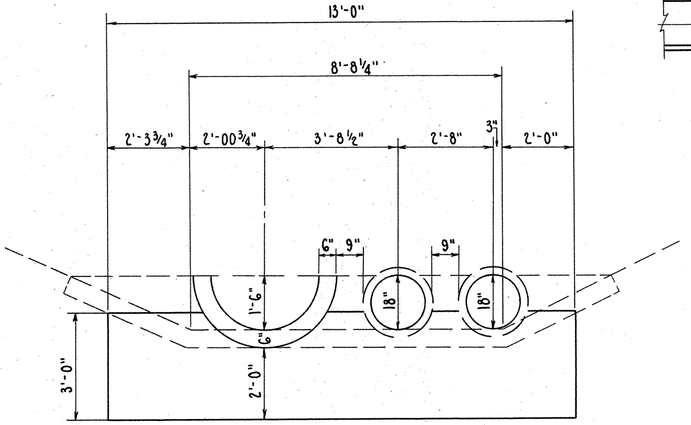


SECTION B-B

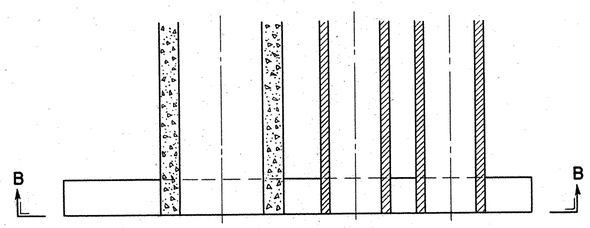




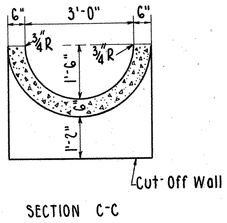
SIDE VIEW



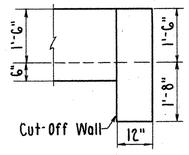
SECTION B-B
END VIEW
DETAIL SPECIAL ENDWALL



PLAN VIEW
DETAIL SPECIAL ENDWALL
See Plan Sheet No. 24

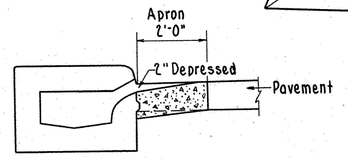


SECTION C-C

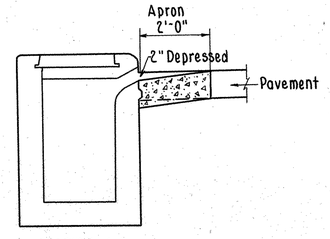


SIDE VIEW

PAVED GUTTER STD. TYPE 2 (MODIFIED) AS PER PLAN
CIRCULAR OUTLET GUTTER
Scale: 1"=2'



SECTION B-B



SECTION A-A

PAVED SHOULDER INLET
STANDARD NO. 2 (MODIFIED)
To be Used with 1-12 Combination Curb & Gutter Std. Type 2
(See Standard Construction Drawing 1-8 Inlet No. 2A)

Scale: 1/2" = 1'-0"

SUPERELEVATION TABLES - ABOUT CENTER LINE

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA. 21-10.23

6

LEFT OF ℄								SURVEY ℄ STATION	RIGHT OF ℄								REMARKS
Speed Change Lane		Outside Edge Pav't.		Inside Edge Pav't.		Storage Lane			Storage Lane		Inside Edge Pav't.		Outside Edge Pav't.		Speed Change Lane		
Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	Elevation	Dist.		Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	
		For Pav't. Elevations from Sta. 539+75 to Sta. 541+00					See Intersection Detail Sheet No. 82										
		935.27	34.0'	934.67	10.0'			541+00	934.38	1.5'	934.38	4.5'	933.74	30.0'			Full Superelevation 0.025 Ft. Per Ft.
		935.28		934.68	10.0'			541+25	934.39	1.5'	934.39		933.75				
		935.36		934.76	10.0'			541+50	934.47	1.5'	934.47		933.83				
		935.49		934.89	10.0'			541+75	934.60	1.5'	934.60		933.96				
		935.69		935.09	10.0'			542+00	934.80	1.5'	934.80		934.16				P.V.T.
		936.15		935.55	10.0'			542+50	935.26	1.5'	935.26		934.62				
		936.56		935.96	10.0'			543+00	935.71	0.0'	935.71		935.07				
		936.94		936.36	10.0'	936.17	2.5'	543+50			936.17		935.53				
		937.30		936.67	9.0'	936.62	7.0'	544+00			936.62		935.98				
		937.72		937.08	8.5'			544+50			937.08		936.44				
		938.17		937.53				545+00			937.53		936.89				
		938.63		937.99				545+50			937.99		937.35				
		939.08		938.44				546+00			938.44		937.80				
		939.54		938.90				546+50			938.90		938.26				
		939.99		939.35				547+00			939.35		938.71				
		940.45		939.81				547+50			939.81	4.5'	939.17				
		940.90		940.26				548+00	940.26	3.5'	940.20	6.0'	939.59				
		941.36		940.72				548+50	940.72	0.5'	940.58		939.98				
		941.81		941.17		941.17	4.5'	549+00			940.91		940.30				
		942.27		941.63		941.63	5.5'	549+50			941.34		940.74				
		942.72	34.0'	942.08	8.5'	942.08	5.5'	550+00			941.79	6.0'	941.19	30.0'			
		For Pavement Elevations from Sta. 550+50 to Sta. 554+50					See Intersection Detail Sheet No. 82										
		929.18	34.0'	928.48	10.0'			580+00	929.58	0.5'	929.58	2.5'	929.18	28.0'			
		929.05 928.97	34.0' 33.9'	929.35 929.25	10.0' 9.9'			580+17.05 580+35.05	929.45 929.33	0.5' 0.5'	929.45 929.33	2.5' 2.5'	929.05 928.93	28.0' 28.0'			Begin Transition Lt. Lane
		928.92	33.8'	929.21	9.8'			580+45.05	929.25	0.5'	929.25	2.5'	928.85	28.0'			T.S.
		928.85	33.7'	929.08	9.7'			580+60	929.15	0.5'	929.15	2.5'	928.75	28.0'			P.V.C.
		928.75	33.2'	928.91	9.2'			580+95.05	928.96	0.5	928.96	2.5'	928.56	28.0'			
		928.75	32.6'	928.84	8.6'			581+25	928.88	0.0'	928.88	2.5'	928.48	28.0'			
		928.78 928.86	32.4' 31.9'	928.85 928.90	8.4' 7.9'	928.89 928.91	0.2' 1.5'	+35 581+55.05			928.88 928.91	2.5' 2.5'	928.48 928.49	28.0' 27.8'			
		928.96	31.6'	928.97	7.6'	928.97	4.0'	581+75			928.97	2.1'	928.49	27.6'			Sta. 581+60 Begin Transition Rt. Lane
		929.21	30.9'	929.11	6.9'	929.10	5.1'	582+00			929.10	2.0'	928.50	27.5'			P.V.I.
		929.52	30.3'	929.29	4.8'			582+25			929.29	1.8'	928.56	27.3'			Sta. 582+48 Rt. Begin Full Superelevation 0.033 Ft. Per Ft.
		929.98	29.5'	929.60	4.0'			582+55.05			929.60	1.6'	928.78	27.1'			
		930.30 930.33	29.1' 29.1'	929.83 929.85	3.6' 3.6'			+73 582+75			929.85 929.85	1.5' 1.5'	928.99 929.01	27.0' 27.0'			
		930.84	28.5'	930.23	3.0'			583+00			930.23	1.3'	929.39	26.8'			
		931.22	28.2'	930.52	2.7'			583+17.30			930.52	1.2'	929.68	26.7'			
		931.63	27.9'	930.85	2.4'			583+35.05			930.85	1.1'	930.01	26.6'			
		931.74	27.8'	930.95	2.3'			583+40			930.95	1.0'	930.11	26.5'			P.V.T.
		931.86	27.7'	931.05	2.2'			583+45.05			931.05		930.21				S.C. Begin Full Superelevation 0.033 Ft. Per Ft. Lt.
		932.39	27.2'	931.55	1.7'			583+70			931.55		930.71				
		932.99	26.7'	932.15	1.2'			584+00			932.15		931.31				
		933.35	26.6'	932.51	1.1'			584+18			932.51		931.67				
		933.99	26.5'	933.15	1.0'			584+50			933.15		932.31				
		934.49		933.65				584+75			933.65		932.81				P.V.C.
		934.78		933.94				584+90			933.94		933.10				
		935.42		934.58				585+25			934.58		933.74				
		935.83		934.99				585+50			934.99		934.15				
		936.20		935.36				585+75			935.36		934.52				
		936.40		935.56				585+90			935.56		934.72				
		936.53		935.69				586+00			935.69		934.85				P.V.I.
		936.84		936.00				586+25			936.00		935.16				
		937.00		936.16				586+40			936.16		935.32				
		937.10	26.5'	936.26	1.0			586+50			936.26	1.0'	935.42	26.5'			

SUPERELEVATION TABLES - ABOUT CENTER LINE

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA. 21-10.23

7

LEFT OF ℄								SURVEY ℄ STATION	RIGHT OF ℄								REMARKS
Speed Change Lane		Outside Edge Pav't.		Inside Edge Pav't.		Storage Lane			Storage Lane		Inside Edge Pav't.		Outside Edge Pav't.		Speed Change Lane		
Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	Elevation	Dist.		Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	
		937.33	26.5'	936.49	1.0'			586+75			936.49	1.0'	935.65	26.5'			
		937.44		936.60				586+90			936.60		935.76				
		937.51		936.67				587+00			936.67		935.83				
		937.67		936.83				587+25			936.83		935.99				P.V.T.
		937.75		936.91				587+40			936.91		936.07				
		937.80		936.96				587+50			936.96		936.12				
		938.02		937.18				587+90			937.18		936.34				
		938.07		937.23				588+00			937.23		936.39				
		938.29		937.45				+40			937.45		936.61				
		938.34		937.50				+50			937.50		936.66	26.5'			
		938.48		937.64				+75			937.64	1.0'	936.80	26.5'			Begin Median Transition Rt.
		938.56		937.72				+90			937.72	1.2'	936.88	26.7'			
		938.61		937.77				589+00			937.77	1.4'	936.93	26.9'			
		938.83		937.99				+40			937.99	2.0'	937.15	27.5'			
		938.88		938.04				+50			938.04	2.2'	937.20	27.7'			
		939.10		938.26				+90			938.26	2.8'	937.42	28.3'			
		939.15		938.31				590+00			938.31	3.0'	937.47	28.5'			
		939.37		938.53				+40			938.53	3.6'	937.69	29.1'			
		939.42		938.58				+50			938.58	3.8'	937.74	29.3'			
		939.64		938.80				+90			938.80	4.4'	937.96	29.9'			
		939.69		938.85				591+00			938.85	4.6'	938.01	30.1'			
		939.91		939.07				+40			939.07	5.2'	938.23	30.7'			
		939.96		939.12				+50			939.12	5.4'	938.28	30.9'			
		940.18		939.34				+90			939.34	6.0'	938.50	31.5'			
		940.23		939.39				592+00			939.39	6.2'	938.55	31.7'			
		940.45		939.61				+40			939.61	6.8'	938.77	32.3'			
		940.50		939.66				+50			939.66	7.0'	938.82	32.5'			
		940.72		939.88				+90			939.88	7.6'	939.04	33.1'			
		940.77		939.93				593+00			939.93	7.8'	939.09	33.3'			
		941.04		940.20				+50			940.20	8.6'	939.36	34.1'			
		941.31		940.47				594+00			940.47	9.4'	939.63	34.9'			
		941.58		940.74				+50			940.74	10.2'	939.90	35.7'			
		941.85		941.01				595+00			941.01	11.0'	940.17	36.5'			End Median Transition Rt.
		942.12		941.28				+50			941.28	11.0'	940.44				
		942.39		941.55				596+00	941.55	11.0'	941.55	11.0'	940.71		940.71	36.5'	Sta. 596+25 Begin Transition Rt. Lane
		942.66		941.82				+50	941.82	9.5'	941.76	12.5'	940.92		940.87	38.8'	P.V.C.
		942.78		941.94				+75	941.94	8.0'	941.81		940.99		940.88	40.1'	
		942.86		942.02				597+00	942.02	6.0'	941.83		941.01		940.85	41.3'	
		942.90		942.06				+25	942.06	3.5'	941.81		941.00		940.78	42.6'	
		942.90		942.06				+50	942.06	2.2'	941.74		940.94		940.67	43.9'	
		942.87		942.03				+75	942.03	1.2'	941.66		940.87		940.56	45.2'	End Transition Rt. Lane
		942.80		941.96				598+00	941.96	1.0'	941.58		940.79		940.46	46.5'	P.V.I.
		942.69		941.85				+25	941.85		941.47		940.67		940.35		
		942.54		941.70				+50	941.70		941.31		940.52		940.19		
		942.51		941.67				+54	941.67		941.28		940.49		940.16		Begin Transition Lt. Lane
		942.38		941.52				+75	941.52		941.12		940.33		940.01		
		942.19	26.5'	941.31	1.0'			599+00	941.31	1.0'	940.91	12.5'	940.12	36.5'	939.79	46.5'	
				For Pav't. Elevations from		Sta. 599+25		to Sta. 602+53		See	Intersection	Detail	Sheet No. 84				

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA. 21-10.23

8

SUPERELEVATION TABLES - ABOUT CENTER LINE

LEFT OF ℄								SURVEY ℄ STATION	RIGHT OF ℄								REMARKS
Speed Change Lane		Outside Edge Pav't		Inside Edge Pav't		Storage Lane			Storage Lane		Inside Edge Pav't		Outside Edge Pav't		Speed Change Lane		
Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	Elevation	Dist.		Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	
		940.76	Existing	939.56	Existing Profile Grade			602+53	939.02	8.5'	939.02	10.5'	937.67	37.0'			Full Superelevation 0.050 Ft. Per Ft.
								+75	939.29		939.29		937.94				
		941.35		940.08				603+00	939.60		939.60		938.25				
								+25	939.90		939.90		938.55				
		941.89		940.64				+46	940.16		940.16		938.81				
								+50	940.21		940.21		938.86				P.V.C.
								+75	940.45		940.45		939.14				
		942.44		941.20				604+00	940.73		940.73		939.38				
								+25	940.91		940.91		939.56				
								+50	941.03	8.5'	941.03		939.68				
								+75	941.13	8.2'	941.13		939.78				P.V.I.
		942.85		941.60				605+00	941.21	7.8'	941.21		939.86				
								+25	941.28	6.0'	941.28		939.93				
								+50	941.28	4.0'	941.28		939.93				
								+75	941.22	1.6'	941.22		939.87				
		942.40		941.32		941.14	0.5'	606+00			941.14		939.79				P.V.T.
						940.99	1.0'	+25			940.99		939.64				
						940.80	1.0'	+50			940.80	10.5'	939.45	37.0'			End Work
					Existing Profile Grade			+75									
		941.54	Existing	940.36				607+00									

GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT		9
2	OHIO	U-UG-1010(5)		

STA. 21-10.23

DESIGN SPEED

The geometrics for this project have been planned for a design speed of 50 miles per hour.

FIELD OFFICE

The Contractor shall provide a suitable "Field Office" in accordance with Section S-0.01(b) having a minimum of 500 square feet of floor space. The Contractor shall have a telephone installed and maintained in this field office during construction of the project.

MONUMENT ASSEMBLY ITEM I-8

See Standard Drawing R1-1 for details of Standard Monument Assembly.

MAINTENANCE OF TRAFFIC

Local traffic detours shall be as directed by the City of Massillon.
WALNUT ROAD, CHERRY ROAD, *and U.S.R. 21 north of CHERRY ROAD*
Two Way Vehicular and Pedestrian Traffic shall be Maintained at all times.
PEDESTRIAN TRAFFIC-
Where temporary walks are required they shall be at least 5 feet wide within the limits of the work and have an aggregate surface (4" Minimum thickness) or equal.

The Contractor shall furnish all lights, flagmen, watchmen and all other items necessary to expedite movement of traffic in accordance with Sections G-7.07 and G-4.05. Quantities of T-10, M-10, I-15 Temporary Guard Rail and "T-35 for Maintaining Traffic" to be placed if and as directed by the Engineer, have been carried in the General Summary.

Payment for construction, maintenance, and subsequent removal, wherever required, of temporary roadways and walks except for furnishing and placing items T-10, M-10, I-15 temporary Guard Rail and "T-35 for Maintaining Traffic" is included in the Lump Sum bid for "Maintaining Traffic."

REMOVAL OF TREES AND STUMPS

Sizes - 12" to 18" - 10	Sizes - 30" to 36" - 2
18" to 24" - 4	36" to 42" - 3
24" to 30" - 3	42" to 48" - 2

Payment for removal of trees and stumps shall be included in the lump sum bid for Item E-9, Removal of trees and stumps. Approximately 24 trees and stumps, as tabulated above, are to be removed. No tree shall be removed until specifically marked for removal by the Engineer. The State of Ohio reserves the right to order the removal of additional trees and stumps, even though these trees or stumps are not indicated on the plans. Payment for removal of these additional trees or stumps is included in the lump sum bid for the removal of trees and stumps.

MISCELLANEOUS PAVEMENT REMOVAL

Removal of all private drives, steps, sidewalks, and patios on this project shall be considered miscellaneous removals per Sec. E-1.03(c) unless otherwise specified on these plans.

NON-RIGID PAVEMENT REMOVAL

Removal and disposal of existing non-rigid pavement, unless otherwise indicated on these plans, shall be measured and paid for as Item E-1 Roadway Excavation.

DRIVEWAYS

Wherever new Roadway or Sidewalk disturbs existing bituminous or concrete drives and parking areas, the area between the back edge of the new sidewalk and edge of the existing surface will be replaced in kind at locations shown by the plans or as designated by the Engineer. Payment shall be at the unit prices bid for the various payment items required.

COMPACTION FOR DRIVES

The subgrade for new drives or drives being reconstructed shall be compacted for a depth of six (6) inches to the density requirements of Table III, Item E-1, Payment for subgrade compaction, as specified above, shall be included in the unit price bid for Item E-1, Roadway Excavation.

EXPANSION JOINTS

Although specific locations of certain expansion joints have been detailed on this plan, no waiver of the specifications is intended and expansion joints shall be provided at all major structures as required by Standard Construction Drawing T.J.

CONTRACTION JOINTS

In addition to the joints indicated on plan details, the maximum distance between Contraction Joints shall in all cases be in accordance with Standard Construction Drawing T.J.

HEAVY EQUIPMENT

The Contractor shall exercise care in the use of heavy equipment over finished work and will be required to remove and replace any completed work destroyed thereby. Culverts shall be backfilled to a height of four feet before loaded earth-moving equipment is permitted to cross the trench. Any additional fill and subsequent excavation required to provide this minimum cover shall be made at no additional cost to the State. Heavy equipment shall not be operated over any completed layer of embankment, compacted subgrade, or subbase, if such operation tends to destroy the soil structure or pipe underdrains; however, if such operation cannot be avoided, the Contractor will be required to reduce the size of loads to an extent that damage does not occur.

BERMS AND SLOPES

Berms, slopes and rounding shall be finished in accordance with Standard Drawing R1-1 except where otherwise shown on the cross sections. All slopes in transitions from cut to fill shall be made in a manner to blend with the surrounding terrain as directed by the Engineer.

The grading tolerances as noted in Section E-1.10 of the Specifications shall be modified as follows: The finished graded and seeded section in the areas of lawns or residences shall not deviate more than one inch vertically below the grade and lines as shown in these plans. These areas are to be in smooth contour and free from sticks, stones and other debris. Care shall be exercised, as directed by the Engineer, to assure that proper surface drainage is obtained in the areas involved as well as adjacent to or across any driveways that may be located in the areas. Payment for any additional tools, labor including handraking if necessary, incidentals and operations necessary to accomplish this shall be included in the price bid for Item E-1 Roadway Excavation.

The above note shall be considered to be particularly applicable in the following areas:

Edwin Ave.	Sta. 0+24 to Sta. 1+80 Lt.& Rt.
Mainline	Sta. 570+50 to Sta. 573+55 Rt.
	Sta. 578+60 to Sta. 584+50 Rt.
	Sta. 597+90 to Sta. 603+60 Rt.

ITEM SPECIAL- FINE AGGREGATE, AS PER PLAN

This item shall *consist of furnishing & placing a fine* aggregate blanket as shown on sheet no. 4 and on the cross sections. Fine Aggregate shall meet the requirements as designated in Section M-2.1 of the Construction and Material Specifications of the State of Ohio.

Quantity to be paid for shall be the number of cubic yards compacted in place in conformity with the lines and grades as shown on the cross sections. *Construction shall conform essentially* with Sec. 1-22.03 of the Construction and Material Specifications.

The yardage measured as provided above shall be paid for at the contract unit price bid for "Item Special, Fine Aggregate As Per Plan" which price and payment shall constitute full compensation for compacting the subgrade, furnishing, hauling, placing and compacting the aggregate and for all labor, equipment, tools and incidentals necessary to complete this item except excavation which is paid under Item E-1 Roadway Excavation.

SPECIAL ABANDONING OF EXISTING 48" SEGMENTAL BLOCK AND 54" TWO-RING BRICK SANITARY SEWER

The existing sewer and manholes within the limits of Sta. 542+06 to the manhole opposite Sta. 552+15 shall be *uncovered, the portions above the sewer spring line removed and/or broken down, and the trench backfilled in accordance with Sec. E-12.04. Payment for the above, including removal of manholes, shall be included in the unit price bid for Item E-12, Abandoning 48" and 54" Sewer.*

Between Stations 552+15 and 558+47.5 and between Stations 567+69.5 and 575+47, the existing 48 inch sewer shall be abandoned in place. In these areas, the existing manholes shall be abandoned under Item I-16 and bulkheads shall be provided in the sewer at the locations shown on the plans. The bulkheads shall consist of brick masonry as specified in Sec. I-8.05 with a minimum thickness of 12 inches.

Each of these bulkheads in place, completed and accepted, shall be paid for at the contract unit price bid for "Item Special, 48" in Bulkheads," which price and payment shall constitute full compensation for all labor, furnishing and placing all materials, tools, equipment, excavation, backfill, disposal of materials and incidentals necessary to complete this item.

MANHOLE RECONSTRUCTED TO GRADE USING SALVAGED CASTING ITEM I-8

The Contractor shall remove existing casting and reconstruct existing manhole to grade using materials designated in Section I-8.02 of the specifications. The salvaged casting shall be cleaned of all concrete, etc. and placed on the manhole. Reconstruction shall conform, as nearly as practicable, to the existing type of construction.

Payment for this item shall be at the contract unit price "Each" for Item I-8, Manhole Reconstructed to Grade Using Salvaged Casting As Per Plan. *Extent of removal and reconstruction shall be at least down to the existing spring line.*

MANHOLE ADJUSTMENTS

It is the intent of this plan that any manhole adjustment not specifically detailed for which the grade is raised more than 12 inches or lowered more than 6 inches shall be considered as "Reconstructed to Grade." Any adjustment falling within the above limits shall be considered as "Adjusted to Grade."

TILE FOR SUBGRADE DRAINAGE

Drain Tile, Sec. M-6.7(b), shall be furnished and placed by the contractor, in manholes, catch basins and inlets for subgrade drainage, where, and as directed by the Engineer. Payment for same shall be included in the price bid per "Each" for manholes, catch basins and inlets.

ESTIMATED QUANTITIES

The following estimated quantities of class "B" Storm Sewers and No. 7 Catch Basins have been provided in the General Summary for replacement *and* reconstruction, *as directed by the Engineer.*

6"- 100 Lin. Ft. 8"- 100 Lin. Ft 2 each I-8 C.B. No. 7

Specific location and usage of estimated quantities set up on this plan to be used "as directed by the Engineer," shall be made a matter of record by incorporation into the final change order governing construction on this project.

SANITARY SEWER RELOCATION

The Contractor will be required to keep properly functioning existing sanitary sewers affected by the construction of this project, until the proper connections and relocations are made as shown *on the* Plans.

M-6.6(b) or M-6.6(c) Pipe *used in I-2 Storm Sewers (Sanitary)* shall be factory lined with *two (2)* coats of Bitumastic Super Service Black, as manufactured by the Tar Products Division of the Koppers Company, Inc., Pittsburgh 12, Pa., or approved equal.

The entire interior of the Pipe, the interior and end of the bell and outside and end of the tongue shall be coated.

Joints in the concrete pipe shall be *sealed with "Hexseal" rubber gaskets,* or approved *equal, installed* in accordance with the manufacturer's recommendations *and as directed by the Engineer.*

Payment *for all the above shall be included in* the contract Unit Price per linear foot bid for "Item I-2 *Sec.* M-6.6(b) or M-6.6(c) *Storm Sewers (Sanitary).*

REMOVAL OF EXISTING HOUSE DRAINS

The removal of all existing house connections, which includes sanitary, yard, roof, basement and other similar pipe drains within the roadway construction limits shall be classified and paid for as Item E-1, Roadway Excavation, unless otherwise itemized for payment in the plans.

CONNECTIONS TO EXISTING SEWERS

At places where the plan provides for proposed drainage pipe to be connected to existing pipes, it shall be the responsibility of the Contractor to locate the existing pipe both as to line and grade before he starts to lay the proposed sewer. The cost of this operation and the provision of suitable connections to the existing sewers shall be included in the unit price bid for the pertinent Item I-2 Storm Sewer.

PLUGGING OF EXISTING STORM AND SANITARY SEWERS

The contractor shall plug the existing sewers at locations designated on plans. Construction methods and materials for this work shall be in accordance with Section I-16.03 of the Construction and Material Specifications. Cost of this work will be included under E-1, Roadway Excavation, and no additional compensation shall be allowed.

CASTINGS

All castings from abandoned manholes, inlets and catch basins shall be carefully removed and stockpiled along the Right of Way. The City of Massillon shall have the choice of selecting the casting they can use. The balance of the castings, if any, shall become the property of the contractor and shall be removed from the site by him.

Continued On Sheet No. 10

GENERAL NOTES

FLOOD PROTECTION

The flood wall parallel to this project is for the protection of the City of Massillon. The Contractor shall be required to schedule his work on the Alterations to "Sippo Creek Conduit and Pumping Station" and "Federal Avenue Pump Station Relocation," so that the City of Massillon will have maximum flood protection at all times.

Payment for this Flood Protection and furnishing and maintaining stand-by pumps, temporary drainage and special schedule or sequence of Construction, wherever required, shall be included in the lump sum bid for "Alterations Sippo Creek Conduit & Pumping Station" and/or "Relocation Federal Avenue Pump Station" and no additional compensation shall be allowed.

PROTECTION OF EXISTING LEVEE AND TOE DRAIN

The Contractor is hereby instructed that all construction work adjacent to or on existing levee, that may disturb existing toe drain, must be protected by shoring or other suitable methods acceptable to the Corps of Engineers.

This protection shall be done at no additional cost to the State.

PUBLIC UTILITIES AFFECTED

East Ohio Gas Company
Ohio Water Service Company
Ohio Bell Telephone Company
Ohio Edison Power Company
City of Massillon Storm & Sanitary Sewers
Pennsylvania Railroad Company
Wheeling & Lake Erie Railroad Company (N.K.P.)
Baltimore & Ohio Railroad Company
Western Union Telegraph Company

UTILITY NOTE

Any and all work required for removing, relocating, and construction of new facilities for private or public utilities will be done by and at the expense of the respective owners unless otherwise noted on the plans.

UNDERGROUND UTILITIES

The locations of the underground utilities shown on the plans have been obtained by diligent field checks and searches of available records. It is believed they are essentially correct, but the State of Ohio makes no guarantees as to their accuracy or completeness.

FILLING BASEMENTS

All basements or portions thereof within the right of way but beyond the normal slope lines shall be filled to surrounding ground elevation as directed by the Engineer. Prior to filling within this area, the basement floors and walls shall be broken up or removed as provided under Sec. E-1.03(c) and all house drains not removed shall be plugged as described in note entitled "Plugging of Existing Storm and Sanitary Sewers" on Sheet 9.

Where basements, drives, garage floors and other masonry extend beyond the right of way line, but are within slope easement or work agreement lines, they shall be removed and filled to the elevation of the surrounding ground as directed by the Engineer but the requirements of Sec. E-1.03(c) shall be waived for those portions extending beyond the right of way line.

Payment for all of the above is included in the unit price bid for Roadway Excavation, Item E-1.

SEEDING ITEM L-9

Item L-9 Seeding quantities shall include all soil areas between the Right-Of-Way lines excepting areas to be sodded.

The seeding mixture for the entire project shall be as follows:

25%	Kentucky Bluegrass
60%	Kentucky 31 Fescue
10%	Red Top
5%	Alsike Clover

SODDING ITEM L-10

Areas to be sodded shall be loosened to a depth of 2" just prior to laying the sod. This work shall be included for payment in the price bid per sq. yd. of sodding.

PLACING SOD IN DITCHES

All sod placed in ditches shall be laid with the long edges of the strips perpendicular to the flow line of the ditch. Successive strips shall be neatly matched and all joints staggered or broken. The sod shall be staked securely with stakes placed on maximum two (2) foot centers in rows not more than two (2) feet apart. Stakes in adjacent rows shall be staggered. The stakes shall be wood from ½" x ¾" x 12" to 1" x 1" x 24", as required to hold the sod, and shall be driven flush with the top of the sod.

CONSTRUCTION LAYOUT STAKES

See note in proposal describing the work included in this lump sum pay item.

RIPRAP, USING 6" REINFORCED CONCRETE SLAB, AS PER PLAN

In addition to meeting the general requirements of Sections I-10.03 and I-10.05, the riprap furnished for this item shall be a 6-inch reinforced concrete slab, reinforced with bars or fabricated reinforcement equivalent to 3/8-inch round bars spaced at two-foot centers, two directions, and placed approximately midway between the top and bottom of the slab. Formed construction joints may be used subject to the approval of the Engineer. Reinforcement shall extend through all construction joints.

The requirements of Sec. I-10.05 for depressed grooves and thickened bottom edges in this item shall be waived. In lieu thereof cut-off walls and impressed contraction joints, as noted on Standard Construction Drawing I-14G, shall be provided and payment therefor shall be included in the unit price bid for this item.

APPROVALS BY THE CORPS OF ENGINEERS, U.S. ARMY

Where these plans indicate that approval of the Contractor's construction methods and procedures and/or construction sequence will be required of the U.S. Army Corps of Engineers, the necessary submissions to the Corps of Engineers shall be made through the Project Engineer who will coordinate the proposed work and advise the Contractor when the approval has been obtained.

SUBBASE, GRADING "A" or "B", AS PER PLAN

The material furnished for this item shall meet the requirements of Grading A or B of Sec. I-22.02 except that, for either grading, no more than 10 percent of the material shall pass a No. 200 sieve.

GUARD RAIL POST ANCHORS

Where existing or proposed culvert or pier construction interferes with proposed guard rail construction and sufficient post depth is not available, anchors as detailed on Standard Construction Drawing I-15 No. 6 or an equal approved by the Engineer, shall be provided. Payment for these anchors shall be included in the unit price bid for Item I-15 Guard Rail.

REFERENCES TO CITY PARTICIPATION

References to percentage city participation, other than 100% City Participation items, appearing throughout these plans shall be disregarded except for purposes of identification of the proposed work area in relation to the north curb line of Cherry Road.

Quantities indicated as "1.58% City" in the sub-summaries involve work north of said curb line. Quantities indicated as "5% City" involve work south of said curb line.

GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

11

STA - 21 - 10.23

TYPE CODE 7221

ITEM	U-1010(5) FULL PROJECT PARTICIPATION - SOUTH OF CHERRY ROAD																					SUB TOTAL	U-1010(5) FULL PROJECT PARTICIPATION NORTH OF CHERRY ROAD						SUB TOTAL	100% CITY			SUB TOTAL	FED. PARTIC SUB TOTAL	TOTAL	UG-1010(5) FULL PROJECT PARTICIPATION - SOUTH OF CHERRY RD.							TOTAL	GRAND TOTAL ITEM	QUANT.	UNIT	DESCRIPTION
	9	13	14	15	17	18	19	20	21	22	24	25	26	27	28	29	30	31	32	35	36		9	13	14	15	32	34		13	14	35					9	13	14	15	23	24	95				
																																														ROADWAY
E-1			33084			1			14			98									8	33205			979				979		195	3		198	34184	34382			25009						25009	E-1	59391	Cu.Yds.	Roadway Excavation, Method B, as per plan
E-1			52108																			52108			2673				2673		428			428	54781	55209			3356						3356	E-1	58565	Sq.Yds.	Compacted Subgrade
E-4			92256																			92256													92256	92256										E-4	92256	Cu.Yds.	Borrow
E-8						622			1488			520		675				844	1037	500	390	6076													6076	6076										E-8	6076	Sq.Ft.	Removal and Disposal of Existing Sidewalk
E-8						106			353					267				18	68	272	78	1162													1162	1162										E-8	1162	Lin.Ft.	Removal and Disp. of Exist. Curb, Curb & Gutter, or Header Curb
E-8						8			107										1898			2013					1378	67	1445						3458	3458										E-8	3458	Sq.Yds.	Removal and Disposal of Existing Pavement (Rigid)
E-9	L.S.																					L.S.	L.S.						L.S.					L.S.	L.S.	L.S.									L.S.	E-9	L.S.	Lump Sum	Removal of Trees & Stumps
E-11			838																			838			6				6		1		1	844	845			6						6	E-11	851	M. Gal.	Water
I-8			10																			10												10	10										I-8	10	Each	Standard Monument Assemblies
I-13			10691																			10691												10691	10691										I-13	10691	Sq.Ft.	4" Concrete Sidewalk
I-15					1550			1687.5			1012.5	550	125		662.5			25				5612.5													5612.5	5612.5					62.5				62.5	I-15	5615	Lin.Ft.	Guard Rail, Steel Beam Standard Type (Deep)
I-15					487.5																	487.5													487.5	487.5										I-15	487.5	Lin.Ft.	Temporary Guard Rail
L-9		61910																				61910		1723					1723	157			157	63633	63790		3518							3518	L-9	67308	Sq.Yds.	Seeding & Protecting, As per Plan
L-9		5.63																				5.63		0.16					0.16	0.02			0.02	5.79	5.81		0.32							0.32	L-9	6.13	Tons	Commercial Fertilizer (12-12-12)
L-9		28.15																				28.15		0.78					0.78	0.07			0.07	2893	29.00		1.58							1.58	L-9	30.58	Tons	Agricultural Liming Materials
L-10		638																				638												638	638										L-10	638	Sq.Yds.	Sodding, As per Plan
SS-18		6090																				6090		210					210					6300	6300		210							210	SS-18	6510	Lin.Ft.	Fence, Type "C"
SS-18		2																				2												2	2										SS-18	2	Each	Fence Gates, Type C
T-10	250																					250	250						250					500	500										T-10	500	Cu.Yds.	Traffic Compacted Surface Course for Maintaining Traffic
M-10	5																					5	5						5					10	10										M-10	10	Tons	Calcium Chloride, Furnished and Applied for Maintaining Traffic
T-35	50																					50	50						50					100	100										T-35	100	Cu.Yds.	Asphaltic Concrete Surface Course or an Approved Bituminous Pre-mixed Surface Course for Maintaining Traffic
Special								1		3	4	4	1									13												13	13										Special	13	Each	48" diameter Bulkheads
I-4				605																		605												605	605										I-4	605	Lin.Ft.	6" Underdrains, Sec. M-6.4 (b)(c)
I-4				40																		40												40	40										I-4	40	Lin.Ft.	6" Pipe Outlets for Underdrains, Sec. M-6.4 (b)(c) without perforations
I-5				3																		3												3	3										I-5	3	Each	6" Pipe Specials for Underdrains, Sec. M-6.4 (b)(c)
E-12					345		507	216														1068												1068	1068										E-12	1068	Lin.Ft.	Abandoning Existing 48" & 54" Segmental Block or Two Ring Brick San. Sewer
E-2						75	1	133								1	1	1				212						1	1					213	213				1	1	280			282	E-2	495	Cu.Yds.	Excavation for Structures as per plan
E-12															96					28		124					89		89					213	213										E-12	213	Lin.Ft.	Pipe Removed, 15" and Under
E-12												410	260	278								948												948	948										E-12	948	Lin.Ft.	Pipe Removed, Over 15"
I-2																34						34												34	34										I-2	34	Lin.Ft.	12" Class A Storm Sewers
I-2																		12				12												12	12										I-2	12	Lin.Ft.	15" Class A Storm Sewers
I-2	75																					75												75	75	25									I-2	100	Lin.Ft.	6" Class B Storm Sewers
I-2	75														54							129												129	129	25									I-2	154	Lin.Ft.	8" Class B Storm Sewers
I-2						64						10		40				6				120												120	120										I-2	120	Lin.Ft.	12" Class B Storm Sewers
I-2								92				72										164												164	164										I-2	164	Lin.Ft.	15" Class B Storm Sewers
I-2																254						254												254	254										I-2	254	Lin.Ft.	18" Class B Storm Sewers
I-2												74										74												74	74										I-2	74	Lin.Ft.	24" Class B Storm Sewers
I-2												106										106												106	106										I-2	106	Lin.Ft.	30" Class B Storm Sewers
I-2															178	70						248												248	248										I-2	248	Lin.Ft.	36" Class B Storm Sewers
I-2					126	142	60					234			214	70	56		158	352	114	1526					118	6	124					1650	1650				274	152			426	I-2	2076	Lin.Ft.	12" Class B Storm Sewers Under Pavement or Approaches
I-2								100				192	40									332												332	332				136				136	I-2	468	Lin.Ft.	15" Class B Storm Sewers Under Pavement or Approaches
I-2														104	80							184												184	184				208	130			338	I-2	522	Lin.Ft.	18" Class B Storm Sewers Under Pavement or Approaches
I-2												92				64						156												156	156										I-2	156	Lin.Ft.	24" Class B Storm Sewers Under Pavement or Approaches
I-2															264							264												264	264										I-2	264	Lin.Ft.	36" Class B Storm Sewers Under Pavement or Approaches
I-2																28						28												28	28										I-2	28	Lin.Ft.	24" Storm Sewers Sec. M-6.6 (b) or Sec. M-6.8 (b)
I-2					390		396			452	464	135	85									1922												1922	1922										I-2	1922	Lin.Ft.	48" Storm Sewers (Sanitary) Sec. M-6.6 (b) As per Plan
I-2								400														400												400	400										I-2	400	Lin.Ft.	48" Storm Sewers (Sanitary) Sec. M-6.6 (c) As per Plan
I-2													84									84												84	84										I-2	84	Lin.Ft.	8" Storm Sewers (Sanitary) Sec. M-6.8 (b)
I-4			12438																			12438			591				591					13029	13029				765				765	I-4	13,794	Lin.Ft.	6" Underdrains
I-4			683																			683												683	683										I-4	683	Lin.Ft.	8" Underdrains, Sec. M-6.4 (f)
I-4			600																			600												600	600										I-4	600	Lin.Ft.	12" Underdrains, Sec. M-6.4 (f)
I-4			250																			250												250	250										I-4	250	Lin.Ft.	15" Underdrains, Sec. M-6.4 (f)
I-4			728																			728						12	12					740	740				46				46	I-4	786	Lin.Ft.	6" Pipe Outlets for Underdrains Sec. M-6.4 (h) Without Perforations
I-4			162																			162												162	162										I-4	162	Lin.Ft.	8" Pipe Outlets for Underdrains Sec. M-6.4 (c)
I-4			42																			42												42	42										I-4	42	Lin.Ft.	15" Pipe Outlets for Underdrains Sec. M-6.4 (c)
I-5			39																			39			1				1					40	40				3				3	I-5	43	Each	6" Pipe Specials for Underdrains
I-5			2																			2												2	2										I-5	2	Each	8" Pipe Specials for Underdrains, Sec. M-6.4 (f)
I-5			1																			1												1	1										I-5	1	Each	15" Pipe Special for Underdrains, Sec. M-6.4 (f)
I-5															2							2												2	2										I-5	2	Each	8" Pipe Specials for Class B Storm Sewers
I-5												1										1												1	1										I-5	1	Each	24" Pipe Special for Class B Storm Sewers
I-5															2							2												2	2										I-5	2	Each	36" Pipe Specials for Class B Storm Sewers under Pavement or Approaches
I-8																																						1				1	I-8	1	Each	Catch Basin, Standard No. 2-2B
I-8												2		2	1			1				6												6	6				2	2			4	I-8	10	Each	Catch Basins, Standard No. 2-2A
I-8					1	2			2			2		2						4	2	15												15	15										I-8	15	Each	Catch Basins, Standard No. 3
I-8						4														5		9												9	9										I-8	9	Each	Catch Basins, Standard No. 3A
I-8	1																					1												1	1	1								1	I-8	2	Each	Catch Basins, Standard No. 7 Side Ditch
I-8																			1			1												1	1										I-8	1	Each	Median Inlet, Standard No. 2-6
I-8															1	1	1					3					1		1					4	4										I-8	4	Each	Median Inlets, Standard No. 2-8
I-2																		144				144												144	144										I-2	144	Lin.Ft.	18" Class B Storm Sewers Under Pavement or Approaches, Sec M-6.6 (b) or Sec. M-6.8 (b)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

12

STA - 21 - 10.23

GENERAL SUMMARY

TYPE CODE 7221

ITEM	U-1010(5) FULL PROJECT PARTICIPATION - SOUTH OF CHERRY ROAD																		SUB TOTAL	97	106	109	115	116	FULL PROJECT PARTICIPATION - N. OF CHERRY RD.					SUB TOTAL	FED PARTIC SUB TOTAL	TOTAL	100% CITY						SUB TOTAL	FED PARTIC SUB TOTAL	TOTAL	UG-1010(5) FULL PROJECT PARTICIPATION - SOUTH OF CHERRY RD.					TOTAL	GRAND TOTAL ITEM	QUANT.	UNIT	DESCRIPTION
	13	14	17	18	19	20	21	22	24	25	26	27	28	29	30	31	32	35	36							34	13	14	32																	

CALCULATIONS

T-71 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

STATION TO STATION		LENGTH	AV. WIDTH	SQ.YDS.	REMARKS
CODE U-1010(5) 5% CITY					
MAIN LINE					
539+75	540+50	75.00	64.0	533.33	Lt. & Rt.
540+50	542+50	200.00	35.5	788.89	Lt.
540+50	547+64	714.00	25.5	2,023.00	Rt.
542+50	544+50	200.00	30.5	677.78	Lt.
544+50	551+62	712.00	25.5	2,017.33	Lt.
547+64	549+40	176.00	30.5	596.44	Rt.
549+40	551+62	222.00	35.5	875.67	Rt.
551+62	552+62	100.00	64.0	711.11	Lt. & Rt.
552+62	554+60	198.00	47.5	1,045.00	Lt.
552+62	563+58	1,096.00	25.5	3,105.33	Rt.
554+60	555+00	40.00	46.5	206.67	Lt.
555+00	556+00	100.00	39.5	438.89	Lt.
556+00	557+04	104.00	29.5	340.89	Lt.
557+04	563+58	654.00	25.5	1,853.00	Lt.
568+16	575+54	738.00	25.5	2,091.00	Rt.
568+16	577+85	969.00	25.5	2,745.50	Lt.
575+54	577+33	179.00	35.5	706.06	Rt.
577+33	579+34	(By Planimeter 17.24" x 400)		766.22	Rt.
577+85	578+96	(By Planimeter 8.74" x 400)		388.44	Lt.
578+96	581+20	224.00	34.5	858.67	Lt.
579+34	596+00	1,666.00	25.5	4,720.33	Rt.
581+20	582+00	80.00	30.0	266.67	Lt.
582+00	600+00	1,800.00	25.5	5,100.00	Lt.
596+00	597+00	100.00	31.5	350.00	Rt.
597+00	598+00	100.00	41.5	461.11	Rt.
598+00	600+00	200.00	45.5	1,011.11	Rt.
600+00	600+86	86.00	26.5	253.22	Lt.
600+00	600+35	35.00	46.5	180.83	Rt.
600+35	600+69	34.00	42.5	160.56	Rt.
600+69	601+00	31.00	39.5	136.06	Rt.
600+86	601+00	34.00	13.25	50.06	Lt.
601+00	601+22	22.00	13.25	48.28	Rt.
Main Line Total				35,507.45	
EDWIN AVE. CONNECTION					
0+23.9	0+75	(By Planimeter 6.20" x 400)		275.56	
0+75	5+00	425.00	29.0	1,369.44	
5+00	5+73	(By Planimeter 7.80" x 400		346.67	
Edwin Ave. Conn. Total				1,991.67	
WALNUT ROAD					
8+00	9+67	167.00	31.0	575.22	
9+67	10+19	(By Planimeter 7.62" x 400)		338.67	
10+84	11+58.3	(By Planimeter 10.77" x 400)		478.67	
Walnut Road Total				1,392.56	
NICKLE PLATE DRIVE (Lt. of Walnut Rd. Sta. 8+64)					
0+15.5	0+40	(By Planimeter 2.12" x 400)		94.22	
Nickle Plate Drive Total				94.22	
CHARLES AVE.					
8+40	10+04	(By Planimeter 7.56" x 400)		336.00	Lt.
8+40	10+04	(By Planimeter 9.06" x 400)		402.67	Rt.
Deceleration Lane		(By Planimeter 6.52" x 400)		289.78	Lt.
7+95	8+40	38.5 x 45		192.50	
Charles Ave. Total				1,220.95	
THIRD STREET (At Charles Ave.)					
10+21	11+00	(By Planimeter 8.72" x 400)		387.56	
Third St. Total (At Charles Ave.)				387.56	
THIRD STREET CONNECTION					
0+19	0+79	(By Planimeter 6.56" x 400)		291.56	
0+79	6+38	559.00	29.0	1,801.22	
6+38	6+63.5	(By Planimeter 2.43" x 400)		108.00	
Third St. Conn. Total				2,200.78	
WEIRICH BLVD.					
5+18	6+00	(By Planimeter 9.64" x 400)		428.44	
Weirich Blvd. Total				428.44	

T-71 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT (Continued)

STATION TO STATION		LENGTH	AV. WIDTH	SQ.YDS.	REMARKS
CODE U-1010(5) 5% CITY (Continued)					
CHERRY ROAD					
2+92.20	4+51	(By Planimeter 17.02" x 400)		756.44	
Deceleration Lane		(By Planimeter 6.95" x 400)		308.89	Lt.
5+25	6+08.6	(By Planimeter 14.41" Minus for Island 0.58" = 13.83" x 400)		614.67	
Acceleration Lane		(By Planimeter 4.64" x 400)		206.22	
Cherry Rd. Total				1,886.22	
TOTAL CODE U-1010(5) 5% CITY				45,109.85	
USE 45,110 SQ.YDS.					
CODE U-1010(5) 1.58% CITY					
MAIN LINE					
600+86	601+00	34.00	13.25	50.06	Lt. & ℄
601+00	601+22	22.00	13.25	48.28	℄ & Rt.
601+00	602+53	153.00	26.5	450.50	Lt.
601+22	601+66	44.00	39.5	193.11	Rt.
601+66	602+53	87.00	9.0	87.00	Stand-by Lane
601+66	602+40	74.00	28.5	234.33	Rt.
602+40	606+50	410.00	27.0	1,230.00	Rt.
602+53	604+50	197.00	11.0	240.78	Stand-By Lane
604+50	605+00	50.00	10.5	58.33	Stand-By Lane
605+00	606+00	100.00	6.25	69.44	Stand-By Lane
606+00	606+50	50.00	2.0	11.11	Stand-By Lane
TOTAL CODE U-1010(5) 1.58% CITY				2,672.94	
USE 2,673 SQ.YDS.					
CODE U-1010(5) 100% CITY					
THIRD STREET (At Third St. Conn.)					
23+50	24+54	104.00	37.0	427.56	
TOTAL CODE U-1010(5) 100% CITY				427.56	
USE 428 SQ.YDS.					
CODE UG-1010(5) 5% CITY					
563+58	568+16	458.00	25.5	1,297.67	Lt.
563+58	568+16	458.00	25.5	1,297.67	Rt.
TOTAL CODE UG-1010(5) 5% CITY				2,595.34	
USE 2,596 SQ.YDS.					

ITEM I-22 SUBBASE

CODE U-1010(5) 5% CITY

		CU. YDS.
MAIN LINE	(See Engr's Comp.)	
Sta. 539+75 to Sta. 563+58 Sta. 568+16 to Sta. 601+22		7,535.51
EDWIN AVE.		391.93
WALNUT ROAD		260.54
NICKLE PLATE DRIVE (At Walnut Rd.)		19.48
CHARLES AVE.		208.75
THIRD ST. (At. Charles Ave.)		76.30
THIRD ST. CONNECTION		420.84
WEIRICH BLVD.		83.93
CHERRY ROAD		372.30
TOTAL CODE U-1010(5) 5% CITY		9,367.58
USE 9,368 CU. YDS.		

CODE U-1010(5) 1.58% CITY

600+86	606+50		570.61
TOTAL CODE U-1010(5) 1.58% CITY			570.61
USE 571 CU. YDS.			

CODE U-1010(5) 100% CITY

THIRD ST. (At Third St. Conn.)		75.50
TOTAL CODE U-1010(5) 100% CITY		75.50
USE 76 CU. YDS.		

CODE UG-1010(5) 5% CITY

563+58	568+16	551.30
TOTAL CODE UG-1010(5) 5% CITY		551.30
USE 552 CU. YDS.		

ITEM SS-18 FENCE, TYPE C

STATION TO STATION		SIDE	LIN. FT.	REMARKS
CODE U-1010(5) 5% CITY				
540+51	551+82	Rt.	1150	
552+50.5	562+36±	Rt.	990	(Approx.)
568+16	574+14	Rt.	620	
574+30	577+97	Rt.	380	
579+22	582+10	Rt.	350	
582+85	583+49.5	Rt.	70	
584+44	601+03.5	Rt.	1650	
EDWIN AVE. CONN.				
0+40	4+61.5	Lt.	430	
0+40	4+88	Rt.	450	
TOTAL CODE U-1010(5) 5% CITY			6,090 LIN. FT.	

CODE U-1010(5) 1.58% CITY

601+87	603+67.5	Rt.	210
TOTAL CODE U-1010(5) 1.58% CITY			210 LIN. FT.

CODE UG-1010(5) 5% CITY

566+06	568+16	Rt.	210
TOTAL CODE UG-1010(5) 5% CITY			210 LIN. FT.

ITEM SS-18 FENCE GATES, TYPE C

STATION TO STATION		SIDE	GATES
CODE U-1010(5) 5% CITY			
574+57	574+71	Rt.	1
585+28		Rt.	1
TOTAL CODE U-1010(5) 5% CITY			2

ITEM L-10 SODDING

STATION TO STATION		SIDE	LIN. FT.	WIDTH	SQ. FT.
CODE U-1010(5) 5% CITY					
547+75	551+06	Rt.	331	9.5	3145
577+40	9+37 Lt. Charles St.	Rt.	50	4.5	225
595+55	595+75	Rt.	20	8.5	170
EDWIN AVE.					
3+00	5+00	Rt.	200	11.0	2200
TOTAL CODE U-1010(5) 5% CITY					5,740 S.F.

5,740 S.F. ÷ 9 = 638 SQ.YDS.

ITEM L-9 SEEDING & PROTECTING, AS PER PLAN

	CODE U-1010(5)			CODE UG-1010(5)
	5% CITY	1.58% CITY	100% CITY	5% CITY
	S.Y.	S.Y.	S.Y.	S.Y.
Tabulation from Item E-1 (Roadway Exc.)	62,548	1,723	157	3,518
Subtract L-10 Sodding	638	—	—	—
TOTALS	61,910	1,723	157	3,518

ITEM L-9 COMMERCIAL FERTILIZER 12-12-12

(S.Y. x 9 x $\frac{20}{1000}$ ÷ 2000 = Tons

	CODE U-1010(5)						CODE UG-1010(5)	
	5% CITY		1.58% CITY		100% CITY		5% CITY	
	S.Y.	TONS	S.Y.	TONS	S.Y.	TONS	S.Y.	TONS
Tabulation from Item L-9 Seeding	61,910	—	1723	—	157	—	3,518	—
Item L-10 Sodding	638	—	—	—	—	—	—	—
TOTAL TONS	62,548	5.63	—	0.16	—	0.02	—	0.32

ITEM L-9 AGRICULTURAL LIMING MATERIALS

(S.Y. x 9 x $\frac{100}{1000}$ ÷ 2000 = Tons)

	CODE U-1010(5)						CODE UG-1010(5)	
	5% CITY		1.58% CITY		100% CITY		5% CITY	
	S.Y.	TONS	S.Y.	TONS	S.Y.	TONS	S.Y.	TONS
Tabulation from Item L-9 Seeding & Item L-10 Sodding	62,548	—	1723	—	157	—	3,518	—
TOTAL TONS	—	28.15	—	0.78	—	0.07	—	1.58

ITEM I-12 COMBINATION CURB & GUTTER, TYPE 2

STATION TO STATION		SIDE	LIN. FT.	REMARKS
CODE U-1010(5) 5% CITY				
573+75	580+50	Lt.	654	
575+54	577+33	Rt.	170	
579+22	588+75	Rt.	928	
585+00	588+25	Lt.	326	
TOTAL CODE U-1010(5) 5% CITY			2,078 LIN. FT.	

ITEM I-12 CONCRETE CURB, TYPE 6

STATION TO STATION		SIDE	LIN. FT.	REMARKS
CODE U-1010(5) 5% CITY				
540+62	540+72	Rt.	12	
551+40	551+50	Lt.	12	
552+78	552+88	Rt.	12	
588+25	588+75	Lt.	50	
599+50	599+60	Lt.	12	
TOTAL CODE U-1010(5) 5% CITY			98 LIN. FT.	

ITEM I-12 CONCRETE CURB, TYPE 2-A

STATION TO STATION		SIDE	LIN. FT.	REMARKS
CODE U-1010(5) 5% CITY				
540+50	551+64	Median	2,198	
552+60	563+58	Median	2,200	
568+16	578+36	Median	2,044	
578+94	600+00	Median	4,224	
EDWIN AVE. CONN.				
0+23.9	5+88	Rt.	584	
0+23.9	5+34	Lt.	520	
WALNUT ROAD				
8+00	10+18	Rt.	248	
8+00	10+12	Lt.	220	
10+84	11+58.3	Lt.	104	
11+06	11+58.3	Rt.	82	
CHARLES AVE.				
7+95	M 577+33	Lt.	212	
8+40	8+66	Rt.	14	
8+79	9+94	Median	234	
8+95	9+19	Rt.	86	Island
9+38	9+99	Lt.	170	Island
9+58	10+22	Rt.	86	
THIRD ST. (At Charles Ave.)				
10+21	11+00	Lt. & Rt.	156	
THIRD ST. CONN.				
0+04	1+70	Rt.	182	
0+26	6+63.5	Lt.	642	
2+82	6+63.5	Rt.	398	
WEIRICH BLVD.				
4+74	6+00	Rt.	132	
5+74	6+00	Lt.	26	
CHERRY ROAD				
2+92.2	599+54 M	Lt.	244	
2+92.2	602+53 M	Rt.	174	
3+74	4+39	Rt.	192	Island
4+16	4+65	Lt.	152	Island
4+89	5+96	Rt	124	
5+45	5+66	Lt.	76	Island
599+60 M	6+08.60	Lt.	100	
TOTAL CODE U-1010(5) 5% CITY			15,824 LIN. FT.	

CODE U-1010(5) 1.58% CITY

601+66	606+50	Median	968	
602+53	606+50	Rt.	390	
TOTAL CODE U-1010(5) 1.58% CITY			1,358 LIN. FT.	

CODE U-1010(5) 100% CITY

THIRD ST. (At Third St. Conn.)				
23+30	24+54	Lt.	108	
TOTAL CODE U-1010(5) 100% CITY			108 LIN. FT.	

CODE UG-1010(5) 5% CITY

563+58	568+16	Median	916	
TOTAL CODE UG-1010(5) 5% CITY			916 LIN. FT.	

CALCULATIONS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

14

STA. 21-10.23

ITEM I-13 4" CONCRETE SIDEWALK

STATION	TO STATION	AV. LENGTH	AV. WIDTH	SIDE	SQ. FT.
		CODE U-1010(5)	5% CITY		
EDWIN AVE. CONN.					
0+31	—	25	5.0	Lt.	125.00
0+31	—	17	5.0	Rt.	85.00
WALNUT ROAD					
8+00	8+43	40	5.0	Lt.	200.00
8+00	10+14	220	5.0	Rt.	1,100.00
8+84	10+10	131	5.0	Lt.	655.00
10+87	11+48	71	5.0	Lt.	355.00
11+08	11+58.3	57	5.0	Rt.	285.00
11+48	11+58.3	10.3	5.0	Lt.	51.50
CHARLES AVE.					
8+40	8+80	42	4.0	Lt.	168.00
8+40	8+75	34	4.0	Rt.	136.00
THIRD ST. (At Charles Ave.)					
10+75	10+80	7	5.0	Lt.	35.00
THIRD ST. CONN.					
0+31	6+63.5	656	5.0	Lt.	3,280.00
0+07	2+07	225	5.0	Rt.	1,125.00
6+60	—	11	5.0	Rt.	55.00
WEIRICH BLVD.					
4+97	5+25	25	4.0	Rt.	100.00
MAIN LINE					
597+86 Rt.	3+22 Lt. Cherry Rd.	368	5.0	Rt. & Lt.	1,840.00
CHERRY ROAD					
2+92.2	3+45	47	5.0	Rt.	235.00
3+74	4+35	58	5.0	Rt.	290.00
4+93	5+95	114	5.0	Rt.	570.00
TOTAL CODE U-1010(5) 5% CITY					10,690.50

USE 10,691 SQ. FT.

ITEM I-21 PORTLAND CEMENT CONCRETE MEDIAN PAV'T., TYPE 1

STATION	TO STATION	SIDE	SQ. FT.
		CODE U-1010(5) 5% CITY	
540+50	543+32	Median	969.00
548+82	551+64	Median	948.00
552+60	555+42	Median	969.00
578+25	578+36	Median	45.00
578+94	591+35	Median	5,362.50
597+10	600+00	Median	760.00
CHARLES AVE.			
8+79.5	9+93.5	Median	228.00
8+95	9+19	Island Rt.	336.00
9+38	9+99	Island Lt.	1,120.00
CHERRY ROAD			
4+16	4+65	Island Lt.	820.00
5+45	5+66	Island Lt.	232.00
TOTAL CODE U-1010(5) 5% CITY		11,789.50 S.F. ÷ 9 = 1309.94 S.Y.	

USE 1310 SQ. YDS.

CODE U-1010(5) 1.58% CITY

601+66	605+48	Median	904.00
TOTAL CODE U-1010(5) 1.58% CITY			

USE 101 SQ. YDS.

GRADING ANALYSIS - TOTAL PROJECT

	EMBANKMENT	EMBANKMENT + 22%
CODE U-1010(5) 5% CITY (Roadway)	122,997 C.Y.	150,057 C.Y.
CODE U-1010(5) 5% CITY (Basements)	700 C.Y.	854 C.Y.
CODE U-1010(5) 1.58% CITY (Roadway)	228 C.Y.	278 C.Y.
CODE U-1010(5) 100% CITY (Roadway)	10 C.Y.	12 C.Y.
CODE UG-1010(5) 5% CITY (Roadway)	18 C.Y.	22 C.Y.
TOTAL CODE U-UG 1010(5)	123,953 C.Y.	151,223 C.Y.

EXCAVATION EMBANKMENT AND SEEDING

STATION	TO STATION	ITEM E-1 ROADWAY EXCAVATION METHOD B CU. YDS.	ITEM E-1 ROADWAY EMBANKMENT CU. YDS.	ITEM L-9 SEEDING & PROTECTING AS PER PLAN SQ. YDS.
		CODE U-1010(5) 5% CITY		
533+10	538+78	2,212	0	1,370
538+78	545+00	1,005	19,810	7,857
545+00	550+00	1,070	21,852	5,867
550+00	555+00	749	21,198	4,304
555+00	563+58	4,850	23,115	8,242
568+16	575+00	5,954	11,741	9,096
575+00	580+00	5,389	241	3,945
580+00	584+90	2,924	970	1,516
584+90	589+90	411	3,570	1,991
589+90	595+00	374	4,291	2,705
595+00	601+00	1,439	8,474	3,755
Add Seeding for Work Agreement Areas				1,612
540+00 ±	550+00 ±	2,000	2,000	(Rubbish piles, etc. Estimated Quantity)
EDWIN AVE.				
0+23.9	5+50	1,762	3,705	6,142
WALNUT ROAD				
8+00	11+58.3	191	1,645	1,238
CHARLES AVE.				
7+95	9+75	528	16	489
THIRD ST. CONN.				
0+25	6+63.5	1,508	113	1,315
WEIRICH BLVD.				
4+85	6+00	261	0	171
THIRD ST. (At Charles Ave.)				
10+25	11+00	209	9	201
CHERRY ROAD				
2+92.2	6+08.6	248	247	732
TOTAL CODE U-1010(5) 5% CITY		33,084 C.Y.	122,997 C.Y.	62,548 S.Y.

CODE U-1010(5) 1.58% CITY

601+00	607+14	979	228	1,723
TOTAL CODE U-1010(5) 1.58% CITY		979 C.Y.	228 C.Y.	1,723 S.Y.

CODE U-1010(5) 100% CITY

THIRD ST. (At Third St. Conn.)				
23+30	24+54	195	10	157
TOTAL CODE U-1010(5) 100% CITY		195 C.Y.	10 C.Y.	157 S.Y.

CODE UG-1010(5) 5% CITY

563+58	568+16	25,009	18	3,184
Add Seeding for Work Agreement Areas				334
TOTAL CODE UG-1010(5) 5% CITY		25,009 C.Y.	18 C.Y.	3,518 S.Y.

ITEM E-4 BORROW CALCULATIONS

	EMBANKMENT + 22%	EXCAVATION
	CODE U-1010(5) 5% CITY	
ROADWAY	150,911 C.Y.	(Suitable Mat'l.) 31,084 C.Y.
SIPPO CREEK CHANNEL (See Sheet No. 97)		1,700 C.Y.
CODE U-1010(5) 1.58% CITY	278 C.Y.	979 C.Y.
CODE U-1010(5) 100% CITY	12 C.Y.	195 C.Y.
CODE UG-1010(5) 5% CITY	22 C.Y.	25,009 C.Y.
TOTAL PROJECT	151,223 C.Y.	58,967 C.Y.

TOTAL EMBANKMENT + 22%	151,223 C.Y.
TOTAL EXCAVATION	58,967 C.Y.
TOTAL BORROW	92,256 C.Y.

B-219 WATERPROOFED AGGREGATE BASE COURSE AND I-18 STABILIZED CRUSHED AGGREGATE SHOULDERS

STATION	TO STATION	LENGTH	B-219 WIDTH	I-18 WIDTH	I-18 DEPTH	SIDE	B-219 SQ. FT.	I-18 CU. FT.
			CODE U-1010(5) 5% CITY					
539+75	551+45	1170.00	8.0	8.25	0.417	Lt.	9,360.00	4,025.09
540+67	551+53	1086.00	8.0	8.25	0.417	Rt.	8,688.00	3,736.11
552+73	563+58	1085.00	8.0	8.25	0.417	Lt.	8,680.00	3,732.67
552+83	563+58	1075.00	8.0	8.25	0.417	Rt.	8,600.00	3,698.27
566+16	573+75	559.00	8.0	8.25	0.417	Lt.	4,472.00	1,923.10
568+16	575+54	738.00	8.0	8.25	0.417	Rt.	5,904.00	2,538.90
588+75	599+55	1080.00	8.0	8.25	0.417	Lt.	8,640.00	3,715.47
588+75	599+54	1079.00	8.0	8.25	0.417	Rt.	8,632.00	3,712.03

TOTAL CODE U-1010(5) 5% CITY ITEM B-219 62,976 S.F. x 0.25 ÷ 27 = 583.11 C.Y. USE 584 CU. YDS.
TOTAL CODE U-1010(5) 5% CITY ITEM I-18 27,081.64 C.F. ÷ 27 = 1,003.02 C.Y. USE 1004 CU. YDS.

CODE UG-1010(5) 5% CITY

563+58	568+16	458.00	8.0	8.25	0.417	Lt.	3,664.00	1,575.63
563+58	568+16	458.00	8.0	8.25	0.417	Rt.	3,664.00	1,575.63

TOTAL CODE UG-1010(5) 5% CITY ITEM B-219
7328 S.F (−) 495 S.F. (7' Shoulders) = 6833 S.F. x 0.25 ÷ 27 = 63.27 C.Y. USE 64 CU. YDS.
TOTAL CODE UG-1010(5) 5% CITY ITEM I-18
3151.26 C.F. (−) 206.42 C.F. (7' Shoulders) = 2944.84 C.F. ÷ 27 = 109.07 C.Y. USE 110 CU. YDS.

T-31 BITUMINOUS SURFACE TREATMENT - BITUMINOUS MATERIAL

(Rate of Application - 0.25 Gal. per Square Yard)

CODE U-1010(5) 5% CITY

62,976 S.F. ÷ 9 = 6,997.33 S.Y. x 0.25 = 1,749.33 Gals.
TOTAL CODE U-1010(5) 5% CITY BITUMINOUS MATERIAL USE 1750 GALS.

CODE UG-1010(5) 5% CITY

6,833 S.F. ÷ 9 = 759.22 S.Y. x 0.25 = 189.81 Gals.
TOTAL CODE UG-1010(5) 5% CITY BITUMINOUS MATERIAL USE 190 GALS.

T-31 BITUMINOUS SURFACE TREATMENT NO. 6 AGGREGATE

(Rate of Application - 0.008 Cu. Yds. per Square Yard)

CODE U-1010(5) 5% CITY

6,997.33 S.Y. x 0.008 = 55.98 Cu. Yds.
TOTAL CODE U-1010(5) 5% CITY No. 6 AGGREGATE USE 56 CU. YDS.

CODE UG-1010(5) 5% CITY

759.22 S.Y. x 0.008 = 6.07 Cu. Yds.
TOTAL CODE UG-1010(5) 5% CITY No. 6 AGGREGATE USE 7 CU. YDS.

ITEM E-1 COMPACTED SUBGRADE

CODE U-1010(5) 5% CITY

Under Item T-71	45,110 Sq. Yds.
Under Item B-219	6,998 Sq. Yds.
TOTAL CODE U-1010(5) 5% CITY	52,108 Sq. Yds.

CODE U-1010(5) 1.58% CITY

Under Item T-71	2,673 Sq. Yds.
TOTAL CODE U-1010(5) 1.58% CITY	2,673 Sq. Yds.

CODE U-1010(5) 100% CITY

Under Item T-71	428 Sq. Yds.
TOTAL CODE U-1010(5) 100% CITY	428 Sq. Yds.

CODE UG-1010(5) 5% CITY

Under Item T-71	2,596 Sq. Yds.
Under Item B-219	760 Sq. Yds.
TOTAL CODE UG-1010(5) 5% CITY	3,356 Sq. Yds.

ITEM I-8 STANDARD MONUMENT ASSEMBLY

STATION	LOCATION	NO.
	CODE U-1010(5) 5% CITY	
E.S. 543+90.15	℄	1
P.T. 550+89.02	℄	1
P.O.T. 552+13.71	℄	1
P.C. 554+39.28	℄	1
E.S. 562+12.50	℄	1
P.T. 569+85.71	℄	1
P.O.T. 578+62.48	℄	1
T.S. 580+45.05	℄	1
S.C. 583+45.05	℄	1
E.S. 596+22.60	℄	1
TOTAL CODE U-1010(5) 5% CITY		10

ITEM SPECIAL - FINE AGGREGATE (As Per Plan)

CODE U-1010(5) 5% CITY

MAIN LINE	(See Engr's. Comp.)	CU. YDS.
Sta. 547+50	to Sta. 551+50	954.74
Sta. 581+50	to Sta. 594+75	1,759.26
Sta. 596+43	to Sta. 599+40	367.33
TOTAL CODE U-1010(5) 5% CITY		3,081.33

USE 3,082 CU. YDS.

ITEM E-11 WATER

CODE U-1010(5) 5% CITY

ROADWAY EMBANKMENT + 22%	150,911 C.Y.	
150,911 C.Y. x 5.00 ÷ 1000 =		754.56 M. GALS.
SUBBASE	9,368 C.Y.	
STAB. CR. AGGR. SHOULDERS	1,004 C.Y.	
	10,372 C.Y.	
10,372 C.Y x 8.00 ÷ 1000 =		82.98
TOTAL CODE U-1010(5) 5% CITY		837.54 M. GALS.

USE 838 M. GALS.

CODE U-1010(5) 1.58% CITY

EMBANKMENT + 22%	278 C.Y.	
278 C.Y. x 5.00 ÷ 1000 =		1.39 M. GALS.
SUBBASE	571 C.Y.	
571 C.Y. x 8.00 ÷ 1000 =		4.57
TOTAL CODE U-1010(5) 1.58% CITY		5.96 M. GALS.

USE 6 M. GALS.

CODE U-1010(5) 100% CITY

EMBANKMENT + 22%	12 C.Y.	
12 C.Y. x 5.00 ÷ 1000 =		0.06 M. GALS.
SUBBASE	76 C.Y.	
76 C.Y. x 8.00 ÷ 1000 =		0.61
TOTAL CODE U-1010(5) 100% CITY		0.66 M. GALS.

USE 1 M. GALS.

CODE UG-1010(5) 5% CITY

EMBANKMENT + 22%	22 C.Y.	
22 C.Y. x 5.00 ÷ 1000 =		0.11 M. GALS.
SUBBASE	552 C.Y.	
STAB. CR. AGGR. SHOULDERS	110 C.Y.	
	662 C.Y.	
662 C.Y. x 8.00 ÷ 1000 =		5.30
TOTAL CODE UG-1010(5) 5% CITY		5.41 M. GALS.

USE 6 M. GALS.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA. - 21 - 10.23

TABULATION - PIPE UNDERDRAIN

CODE U-1010(5) 5% CITY

STATION TO STATION		SIDE	F.L. ELEV.	F.L. ELEV.	I-4 LIN. FEET		I-5 EACH					OUTLET STATION & REMARKS
					6" UDRAIN SHALLOW	6" UDRAIN OUTLET	6"-30° BEND	6"-60° Y	6"-45° BEND	6" TEE	6"-90° BEND	
539 + 90 M.L.	541 + 07 M.L.	Rt.	930.90	930.24	117'	16'				1		541 + 07 Rt. M.L.
2 + 18 Edwin Ave. Conn.	2 + 45 Edwin Ave. Conn.	Rt.	926.00	925.80	27'	20'				1		2 + 45 Rt. Edwin Ave Conn.
2 + 50 Edwin Ave. Conn.	4 + 98 Edwin Ave Conn.	Lt.	925.82	929.25	248'	18'					1	2 + 50 Lt. Edwin Ave Conn.
2 + 45 Edwin Ave. Conn.	5 + 00 Edwin Ave Conn.	Rt.	925.80	929.28	256'							2 + 45 Rt. Edwin Ave Conn.
5 + 00 Edwin Ave. Conn.	540 + 60 M.L.	Rt.	929.28	930.00	96'	20'					1	5 + 00 Rt. Edwin Ave. Conn.
541 + 07 M.L.	544 + 00 M.L.	Rt.	930.24	932.48	293'							541 + 07 Rt. M.L.
544 + 00 M.L.	547 + 00 M.L.	Rt.	932.48	935.21	300'	18'					1	544 + 00 Rt. M.L.
542 + 50 M.L.	546 + 75 M.L.	Lt.	931.76	935.62	427'							542 + 50 Lt. M.L. Median
546 + 75 M.L.	549 + 00 M.L.	Lt	935.62	937.67	226'							546 + 75 Lt M.L. Median
547 + 00 M.L.	550 + 00 M.L.	Rt.	935.21	937.69	300'	18'					1	547 + 00 Rt. M.L.
550 + 00 M.L.	553 + 00 M.L.	Rt.	937.69	940.91	300'	8'					1	550 + 00 Rt. M.L.
551 + 00 M.L.	551 + 17 M.L.	Lt.	934.00	939.97		23'			1			551 + 00 Lt. M.L. Toe Ditch
551 + 17 M.L.	551 + 70 M.L.	Lt.	939.97	940.25	54'			1				
551 + 70 M.L.	11+18 Walnut Road	Lt.	940.25	940.29	34'							
551 + 70 M.L.	555 + 95 M.L.	Lt.	940.25	942.86	425'							
551 + 00 M.L.	11+58.30 Walnut Road	Lt.	934.00	940.20	102'							
11+58.30 Walnut Road	11+58.30 Walnut Road	Lt. & Rt.	940.20	940.25	40'		1				1	
11+58.30 Walnut Road	11+07 Walnut Road	Rt.	940.25	940.62	76'							
11+18 Walnut Road	11+58.30 Walnut Road	Lt.	940.29	940.21	40'					1		
551 + 53 M.L.	9+02 Walnut Road	Rt. & Lt	939.48	933.90	136'							9+02 Lt. Walnut Road
552 + 73 M.L.	8+24 Walnut Road	Rt	940.50	930.60	214'							8+24 Rt. Walnut Road
8+00 Walnut Road	8+24 Walnut Road	Rt.	930.93	930.60	24'							8+24 Rt. Walnut Road
9+02 Walnut Road	8+24 Walnut Road	Lt.	933.90	930.60	78'							8+24 Lt. Walnut Road
8+00 Walnut Road	8+24 Walnut Road	Lt.	930.99	930.60	24'							8+24 Lt. Walnut Road
553 + 00 M.L.	555 + 95 M.L.	Rt.	940.91	943.00	295'	18'					1	553 + 00 Rt. M.L.
555 + 95 M.L.	559 + 00 M.L.	Lt.	942.86	940.00	305'	68'					1	559 + 00 Rt. M.L.
555 + 95 M.L.	559 + 00 M.L.	Rt.	943.00	939.32	305'	18'				1		559 + 00 Rt. M.L.
559 + 00 M.L.	561 + 00 M.L.	Rt.	940.00	934.71	200'	68'	1					561 + 65 Rt. M.L.
559 + 00 M.L.	561 + 00 M.L.	Lt.	940.00	934.71	200'	58'	1					561 + 55 Lt. M.L.
561 + 80 M.L.	562 + 25 M.L.	Rt.	932.06	925.75	45'					1		562 + 25 Rt. M.L.
562 + 25 M.L.	562 + 50 M.L.	Rt.	929.75	929.87	25'	14'						562 + 25 Rt. M.L.
561 + 75 M.L.	564 + 00 M.L.	Lt.	932.23	926.00	225'	14'				1		564 + 00 Lt. M.L.
569 + 00 M.L.	572 + 26 M.L.	Rt.	930.85	934.74	326'	18'					1	569 + 00 Rt. M.L.
569 + 00 M.L.	572 + 26 M.L.	Lt.	930.85	934.74	326'	20					1	569 + 00 Lt. M.L.
572 + 26 M.L.	574 + 10 M.L.	Rt.	934.74	933.46	184'	18'					1	574 + 10 Rt. M.L.
572 + 26 M.L.	574 + 05 M.L.	Lt.	934.74	933.53	179'	30'					1	574 + 05 Lt. M.L.
574 + 46 M.L.	576 + 50 M.L.	Lt.	932.91	928.52	204'							576 + 50 Lt. M.L.
574 + 50 M.L.	575 + 54 M.L.	Rt	932.84	930.69	104'	12'					1	
575 + 54 M.L.	577 + 30 M.L.	Rt.	930.54	927.25	176'						1	577 + 30 Rt. M.L.
576 + 75 M.L.	578 + 25 M.L.	Lt.	928.30	926.75	150'							578 + 25 Lt. M.L.
578 + 25 M.L.	579 + 95 M.L.	Lt.	926.75	925.54	170'							579 + 95 Lt. M.L.
577 + 30 M.L.	9+18 Charles Avenue	Rt. & Lt.	927.25	925.00	110'							9 + 18 Lt. Charles Avenue
9 + 18 Charles Avenue	8+18 Charles Avenue	Lt.	925.00	926.19	100'							9 + 18 Lt. Charles Avenue
8 + 18 Charles Avenue	7+95 Charles Avenue	Lt.	926.19	926.57	23'							8 + 18 Lt. Charles Avenue
7 + 95 Charles Avenue	8+65 Charles Avenue	Rt.	926.68	925.69	70'							8 + 65 Rt. Charles Avenue
8 + 65 Charles Avenue	10+50 Third Street	Rt.	925.69	926.03	34'							8 + 65 Rt. Charles Avenue
10+50 Third Street	11+00 Third Street	Rt.	926.03	927.45	50'							10+50 Rt. Third Street
11+00 Third Street	10+40 Third Street	Lt.	927.29	925.20	63'	24'					1	10+25 Lt. Third Street
9+44 Charles Avenue	578 + 98 M.L.	Rt.	925.10	926.21	74'							9 + 44 Rt. Charles Avenue
517 + 30 M.L.	580 + 20 M.L.	Rt	927.25	925.37	290'							580 + 20 Rt. M.L.
579 + 95 M.L.	580 + 15 M.L.	Lt	924.40	925.40	20'							579 + 95 Lt. M.L.
580 + 20 M.L.	580 + 35 M.L.	Rt.	925.54	924.20	15'	4'						580 + 35 Rt. M.L.
580 + 35 M.L.	581 + 25 M.L.	Rt.	924.20	924.81	90'					1		580 + 35 Rt. M.L.
581 + 55 M.L.	582 + 90 M.L.	Rt.	924.82	925.57	135'	16'	1					581 + 40 Rt. M.L.
582 + 90 M.L.	584 + 75 M.L.	Rt.	925.57	929.14	186'							582 + 90 Rt. M.L.
584 + 75 M.L.	586 + 00 M.L.	Rt.	929.14	931.18	125'							584 + 75 Rt. M.L.
586 + 00 M.L.	588 + 60 M.L.	Rt.	931.18	933.04	260'							586 + 00 Rt. M.L.
588 + 60 M.L.	593 + 00 M.L.	Rt.	933.04	935.59	440'							588 + 60 Rt. M.L.
594 + 87 M.L.	597 + 40 M.L.	Rt.	937.44	938.57	257'							593 + 00 Rt. M.L.
593 + 05 M.L.	597 + 40 M.L.	Rt.	935.62	937.20	435'	20'					1	593 + 05 Rt. M.L.
597 + 40 M.L.	599 + 50 M.L.	Rt.	937.20	935.72	210'	8'					1	
599 + 50 M.L	600 + 50 M.L.	Rt.	935.42	933.24	100'						1	600 + 50 Rt. M.L.

CODE U-1010(5) 5% CITY - *Continued*

STATION TO STATION		SIDE	F.L. ELEV.	F.L. ELEV.	I-4 LIN. FEET		I-5 - EACH					OUTLET STATIONS & REMARKS
					6" UDRAIN SHALLOW	6" UDRAIN OUTLET	6"-30° BEND	6"-60° Y	6"-45° BEND	6" TEE	6"-90° BEND	
4+41 Cherry Road	2+95 Cherry Road	Lt.	933.24	928.57	154'							2 + 95 Lt. Cherry Road
2+95 Cherry Road	602 + 60 M.L.	Rt.	928.57	934.25	178'							2 + 95 Rt. Cherry Road
5+94 Cherry Road	601 + 62 M.L.	Rt. & Lt.	940.68	936.26	144'							602 + 62 Lt. M.L.
6+15 Cherry Road	599 + 64 M.L.	Lt.	941.60	938.02	88'	46'					1	599 + 82 ℄ M.L.
23+32 Third Street	23+48 Third Street	Lt.	931.28	930.76	15'	32'		1				23+32 Rt. Third Street
24+52 Third Street	23+48 Third Street	Lt.	931.81	930.76	105'							23+32 Rt. Third Street
23+32 Third Street	5+68 Weirich Boulevard	Rt.	931.28	925.79	290'	24'					1	5 + 68 Rt. Weirich Boulevard
5+68 Weirich Boulevard	6+00 Weirich Boulevard	Rt.	925.79	926.06	32'							
24+52 Third Street	2+82 Third St. Conn.	Rt. & Lt.	931.78	925.64	272'	34'		1				2 + 97 Rt Third St. Conn.
2+82 Third St. Conn.	4+17 Third St. Conn.	Lt.	925.64	926.69	135'							
3+00 Third St. Conn.	4+17 Third St. Conn.	Lt. & Rt	925.70	926.69	117'	3'		1				2+97 Rt. Third St. Conn.
5+71 Weirich Boulevard	6+00 Weirich Boulevard	Lt.	925.81	926.07	29							5+71 Lt. Weirich Boulevard
4+17 Third St. Conn.	6+30 Third St. Conn.	Rt.	926.69	924.30	213'	3'				1		6+30 Rt. Third St. Conn.
4+17 Third St. Conn.	6+30 Third Street	Lt	926.69	924.30	213'	3'				1		6+30 Lt. Third St. Conn.
6+30 Third St. Conn.	4+62 First Street	Rt	924.30	925.68	44'							6+30 Rt. Third St. Conn.
6+30 Third St. Conn.	5+40 First Street	Lt.	924.30	924.72	44'							6+30 Lt. Third St. Conn.
5+68 Weirich Boulevard	2+95 Third St. Conn.	Lt	925.44	925.66	22'	4'		1				5+71 Lt. Weirich Boulevard
581 + 40 M.L.	581 + 50 M.L.	℄	925.00	925.70		▲40'					*1	581+40 Rt. M.L. - Fine Aggregate Blanket Area
581 + 50 M.L. ✓	582 + 40 M.L. ✓	Lt.	925.70	926.70	*90'						*1	581+40 ℄ M.L. - Fine Aggregate Blanket Area
581 + 50 M.L. ✓	581 + 50 M.L. ✓	Lt.	926.50	925.70	*40'						*1	581+50 ℄ M.L. - Fine Aggregate Blanket Area
582 + 00 M.L.	582 + 00 M.L.	Lt.	926.90	926.10	*40'							582+00 ℄ M.L. - Fine Aggregate Blanket Area
582 + 40 M.L.	582 + 40 M.L. ✓	Lt.	927.40	926.70	*35'							582+40 ℄ M.L. - Fine Aggregate Blanket Area
547 + 50 M.L. ✓	551 + 50 M.L. ✓	℄	925.10	926.70	*400'							546+50 Rt. M.L. - Fine Aggregate Blanket Area
CODE U-1010(5) 5% CITY - TOTALS →					13,043	768	4	5	1	12	20	

* Using Sec. M-6.4(f)(c) material
▲ Using Sec. M-6.4(f)(c) material, without perforations

CODE U-1010(5) 1.58% CITY

602 + 60 M.L.	605 + 00 M.L.	Rt.	934.25	936.36	240'							602 + 60 Rt. M.L.
605 + 00 M.L.	606 + 50 M.L.	Rt.	936.36	935.95	150'	12'					1	606 + 50 Rt. M.L.
605 + 25 M.L.	606 + 35 M.L.	Rt.	938.11	937.43	110'							606 + 35 Rt. M.L.
601 + 62 M.L.	602 + 53 M.L.	Lt.	936.26	937.26	91'							602 + 62 Lt. M.L.
CODE U-1010(5) 1.58% CITY - TOTALS →					591'	12'					1	

CODE UG-1010(5) 5% CITY

564 + 00 M.L.	564 + 35 M.L.	Lt.	926.00	926.30	35'							564 + 00 Lt. M.L.
564 + 45 M.L.	565 + 40 M.L.	Lt.	926.19	925.72	95'	12'			1			565 + 50 Lt. M.L.
565 + 55 M.L.	569 + 00 M.L.	Lt.	925.72	930.85	345'	10'		1				565 + 50 Lt. M.L.
566 + 10 M.L.	567 + 00 M.L.	Rt.	925.93	925.66	90'	24'				1		567 + 00 Rt. M.L.
567 + 00 M.L.	569 + 00 M.L.	Rt.	925.66	930.85	200'							567 + 00 Rt. M.L.
CODE UG-1010(5) 5% CITY - TOTALS →					765'	46'		1	1	1		

TABULATION - PIPE UNDERDRAIN FOR SPECIAL FINE AGGREGATE BLANKET

CODE U-1010(5) 5% CITY

STATION TO STATION		SIDE	F.L. ELEV.	F.L. ELEV.	I-4 LIN. FEET		I-5 - EACH			OUTLET STATIONS & REMARKS
					8" UDRAIN	8" UDRAIN Outlet	8"-45° BEND	8" TEE	8"-90° BEND	
582 + 40 M.L. ✓	586 + 25 M.L. ✓	℄	926.10	931.49	385'					582 + 40 ℄ M.L.
546 + 50 M.L. ✓	547 + 50 M.L. ✓	Rt.	924.93	924.66		124'	1			546 + 50 Rt M.L.
596 + 43 M.L. ✓	599 + 40 M.L. ✓	℄	931.00	937.95	298'	38'			1	596 + 43 Lt. M.L. F.L. 930.18
	TOTALS →				*683	≠ 162	1		1	
					12" UDRAIN	12" UDRAIN Outlet	12"-45° BEND	12" TEE	12"-90° BEND	
588 + 75 M.L. ✓	594 + 75 M.L. ✓	℄	931.58	934.10	600					586 + 00 Rt. M.L.
	TOTALS				*600					
					15" UDRAIN	15" UDRAIN Outlet	15"-45° BEND	15" TEE	15"-90° BEND	
586 + 00 M.L. ✓	586 + 25 M.L. ✓	Rt.	930.45	930.58		42	1			586 + 00 Rt M.L.
586 + 25 M.L. ✓	588 + 75 M.L. ✓	℄	930.58	931.33	250					586 + 00 Rt M.L.
CODE U-1010(5) 5% CITY - TOTALS →					*250	≠ 42	1			

* Using Sec. M-6.4(f) material
≠ Using Sec. M-6.4(c) material

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA. - 21 - 10.23

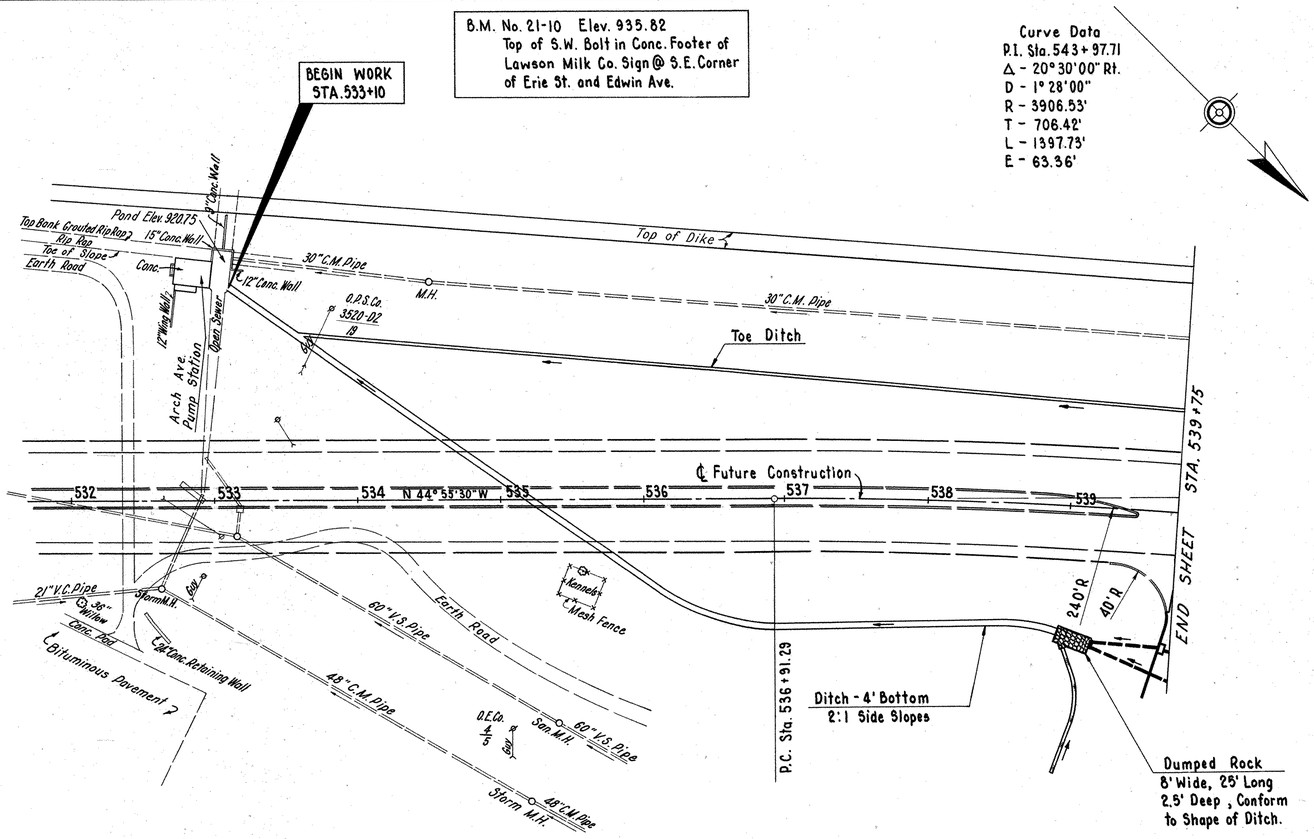
16

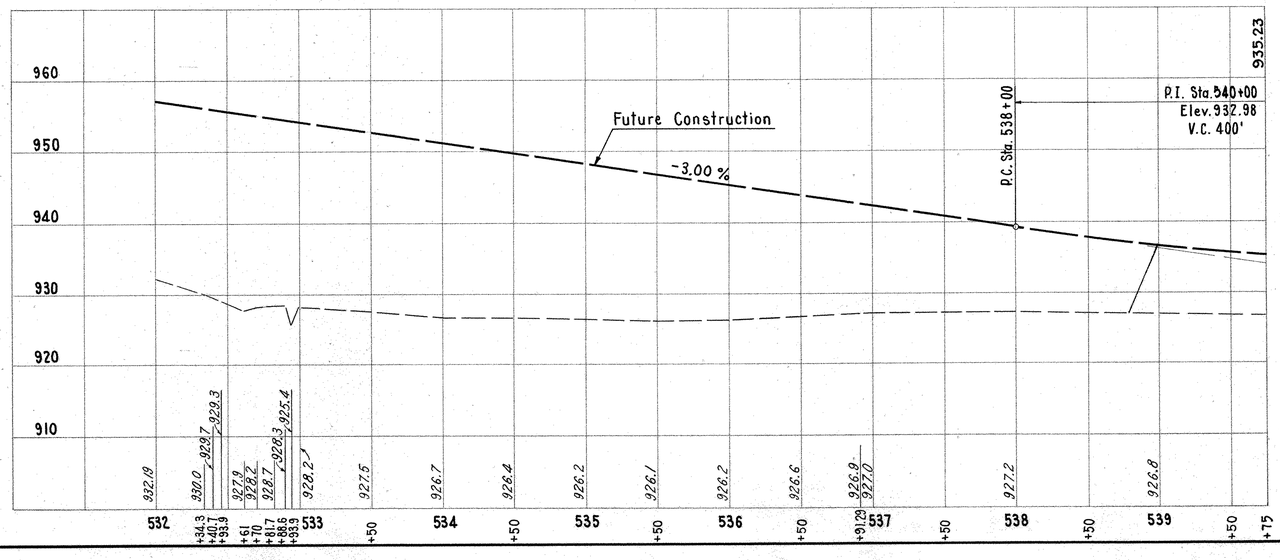
B.M. No. 21-10 Elev. 935.82
Top of S.W. Bolt in Conc. Footer of Lawson Milk Co. Sign @ S.E. Corner of Erie St. and Edwin Ave.

BEGIN WORK STA. 533+10

Curve Data
P.I. Sta. 543+97.71
Δ - 20°30'00" Rt.
D - 1°28'00"
R - 3906.53'
T - 706.42'
L - 1397.73'
E - 63.36'

For Proposed Typical Section of Adjoining Pavement to the South See Typical Section Sheet No. 3





Scale: Hor. 1" = 50'
Vert. 1" = 10'

LINE & PROFILE SHEET STA. 532+00 TO STA. 539+75

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA - 21 - 10.23

17

B.M. No. 21-10 Elev. 935.82
Top of S.W. Bolt in Conc. Footer of Lawson Milk Co. Sign @ S.E. Corner of Erie St. and Edwin Ave.

U-UG-1010 (5)

BEGIN SHEET STA. 539+75

BEGIN PROJECT STA. 539+75

Future Construction

Dumped Rock 6.5' Wide - 1.5' Long 2'6" Deep, Conform to Shape of Ditch

Dumped Rock 6.5' Wide - 1.5' Long 2'6" Deep, Conform to Shape of Ditch

M.H. Meter Station Conc. Bldg.

R/W Line

Toe Ditch

Top of Dike

Toe Drain

P.O.C. STA. 540+18.94 = EDWIN AVE STA. 6+04.98

Hub Set P.I. Sta. 543+97.71
372.97'
P.O.C. Sta. 540+18.94 = Sta. 6+04.98 Edwin Ave.
℄ Edwin Ave.
℄ Erie St.
Sta. 8+00 Edwin Ave.
P.T. Sta. 550+98.02
Δ = 20°30'00"
D = 1°28'00"
R = 3906.53'
159°30'00"
114°23'32"
69°27'05"

REFERENCE POINT
P.O.C. STA. 540 + 18.94

Existing 48" San. Sewer To Be Abandoned, as per plan See Sheet No. 9

48" Seg. Blk. San. Sewer

N 44° 55' 30" W

N 24° 25' 30" W

End Temporary Guard Rail

Existing 54" San. Sewer To Be Abandoned To This M.H.

16" Birch

Ditch 4' Bottom 2:1 Side Slopes

Bob Wire Fence

Temporary Guard Rail

EDWIN AVE CONNECTION

S 69°28'02" W

Tangent To Curve

10' R

99' R

40' R

NOTE: Federal Marker U-UG 1010 (5) Will Be Furnished And Erected On The Right By The State of Ohio Prior To Acceptance Of This Project.

54" Two ring brick San. sewer

CURVE DATA
P.I. Sta. 543+97.71
Δ - 20° 30' 00" Rt.
D - 1° 28' 00"
R - 3906.53'
T - 706.42
L - 1397.73'
Ex - 63.36'

END SHEET STA. 545+00

	935.23	935.94	934.71	934.54	934.42	934.38	934.39	934.47	934.60	934.80	935.26	935.71	936.17	936.62	937.08	937.53
940																
935																
930																
925																
920																
915		926.4				926.4				926.3		926.3		926.7		926.8
	+75	540			541					542		543		544		545

V.C. = 400'
P.I. Sta. 540 + 00
Elev. 932.98
P.T. Sta. 542 + 00

-3.000 %
+0.910 %

Begin 6"I-4 Pipe Rt. F.L. 930.90
End 6"I-4 Pipe Rt. F.L. 930.24
Begin 6"I-4 Pipe Rt. F.L. 930.24
Outlet 6"I-4 Pipe Rt. F.L. 930.00
6"I-4 Pipe Rt.
Begin 6"I-4 Pipe Lt. F.L. 931.76
6"I-4 Pipe Lt.
F.L. 934.03
End 6"I-4 Pipe Rt. F.L. 932.48
Begin 6"I-4 Pipe Rt. F.L. 932.48
F.L. 933.39
Outlet 6"I-4 Pipe Rt.

Existing 54" Sanitary Sewer

CODE U-1010(5) 5% CITY

ITEM I-15 GUARD RAIL

REF. NO.	Station to Station	Side	Std. Design	Temporary Guard Rail
1-6R	5+02 Edwin - 543+82 WL	Lt.		487.5
2-6R	540+19 Rt. 9+50 Walnut Lt.	Rt&Lt	1775.0	
3-6R	543+82 - 551+54	Lt.	1775.0	
			10550.0	487.5

CODE U-1010(5) 5% CITY

STORM SEWERS

REF. NO. From	REF. NO. To	STATION From	STATION To	Side	I-2 (LIN. FEET) 12"Class B Storm Sewer Under Pavement or Approaches	I-2 (LIN. FEET) Special M-6.8(b) 48" Pipe for Sanitary Sewer	I-8 EACH Standard No.2 Manhole	I-8 EACH Standard No.2-10 No.3 Median Inlet	I-8 EACH Standard Catch Basin	I-10 Dumped Rock Cu. Yd.	S-1 Concrete for Structures Class E 5-27.10C.4 End Wall	E-12 Abandoning Existing Seg. Block Sanitary Sewer 48" 54"
411 5	412 5	541+07	542+30	Rt&Lt	62'				1	9	0.23	
409 5	410 5	542+30	542+06	Rt.	84'	390'			1	9	0.23	
701 5	702 5	542+06	543+20	Rt&Lt.			1					158
		542+06	543+20	Lt.								187
		543+20	545+00					1	1	18	0.46	345
		TOTAL			126'	390'	1		1			

For Intersection Detail of Edwin Ave. Connection See Sheet No. 82.

For Profiles of Storm Sewers See Sheet No. 85

For Profile of Sanitary Sewer See Sheet No. 93

Scale: Hor. 1"=20' Vert. 1"=5'

LINE & PROFILE SHEET STA. 539+75 TO STA. 545+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

18

STA. - 21 - 10.23

B.M. No. 21-10 Elev. 935.82
Top of S.W. Bolt in Conc. Footer of Lawson Milk Co. Sign, S.E. Corner of Erie St. & Edwin Ave.

Abandon Catch Basin Sta 0+23 - 11' Lt.

Sta. 0+00 Edwin Ave. Conn. = & Sta. 28+43.85 Erie St. South

BEGIN WORK Sta. 0 + 15

Plug

Adjust Catch Basin to Grade BOERNER & CARLTON Glass & Paint Stores

Adjust Inlet to Grade

Toe Ditch

Dumped Rock 8.5' Wide 25' Long 2.5' Deep Conform to Shape of Ditch

Ditch 4' Bottom 2:1 Side Slopes Sodded

Nail Set — ℄ Edwin Ave. Conn. — 89°52'05" — ℄ Erie St. 1156.18' — 95°06'50" — ℄ Walnut Rd. — P.K. Nail — 260.51' — Nail Set — ℄ First St. — 86°46'00"

P.O.C. Sta. 540 + 18.94 = Sta. 6 + 04.98 Edwin Ave. Conn.

REFERENCE POINT
Sta. 0+00 Edwin Ave. Conn.

CODE U-1010(5) 5% CITY

STORM SEWERS

I-16 Inlet Abandoned	I-8 Adjust Inlet to Grade	REF. NO. From	REF. NO. To	STATION From	STATION To	SIDE	I-2 LIN. FT. 12" Class B Storm Sewer Under Pavement or Approaches	I-2 LIN. FT. 12" Class B Storm Sewer	I-8 EACH Standard No. 3 Catch Basin	I-8 EACH Standard No. 3-A Catch Basin	I-8 EACH Manhole Reconstructed to Grade Using Salvaged Casting As Per Plan	S-27 LIN. FT. 36" Roadway Culvert M 6.6 (b) or M 6.8 (b)	S-1 CU. YD. Concrete for Structures Class E 9-27 P.C. 4 End Wall	E-2 Excavation for Structures Cu. Yd.	I-10 Dumped Rock Cu. Yd.
1	1	423 S	422 S	0 + 15	0 + 80	Rt.	64			1					
		422 S	421 S	0 + 80	0 + 80	Rt. & Lt.	26			1					
		418 S	419 S	2 + 45	2 + 45	Rt. & Lt.	26		1						
		419 S	420 S	2 + 45	2 + 45	Lt.		18	1				0.23	1	
		424 S	—	3 + 68	—	Rt.					1				
		416 S	417 S	4 + 80	4 + 80	Lt. & Rt.						116	1.18	73	20
		413 S	414 S	5 + 00	5 + 00	Lt. & Rt.	26			1					
		414 S	415 S	5 + 00	4 + 84	Lt.		46		1			0.23	1	
1	1				TOTALS		142	64	2	4	1	116	1.64	75	20

DRIVE - CODE U-1010(5) 5% CITY

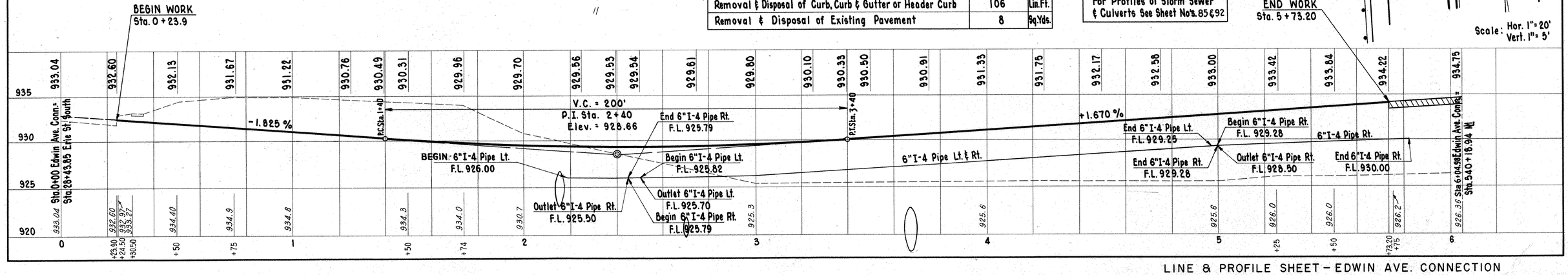
Station	Side	ITEM E-1 Roadway Exc. C.Y.	ITEM E-1 Roadway Emb. C.Y.		ITEM T-70-7" S.Y.
0+30	Lt.	1	0		4

CODE U-1010(5) 5% CITY

ITEM E-8

Removal & Disposal of Existing Sidewalk	622	Sq.Ft.
Removal & Disposal of Curb, Curb & Gutter or Header Curb	106	Lin.Ft.
Removal & Disposal of Existing Pavement	8	Sq.Yds.

For Intersection Detail of Edwin Ave. See Sheet No. 82
For Profiles of Storm Sewer & Culverts See Sheet No's. 85 & 92



Scale: Hor. 1" = 20'
Vert. 1" = 5'

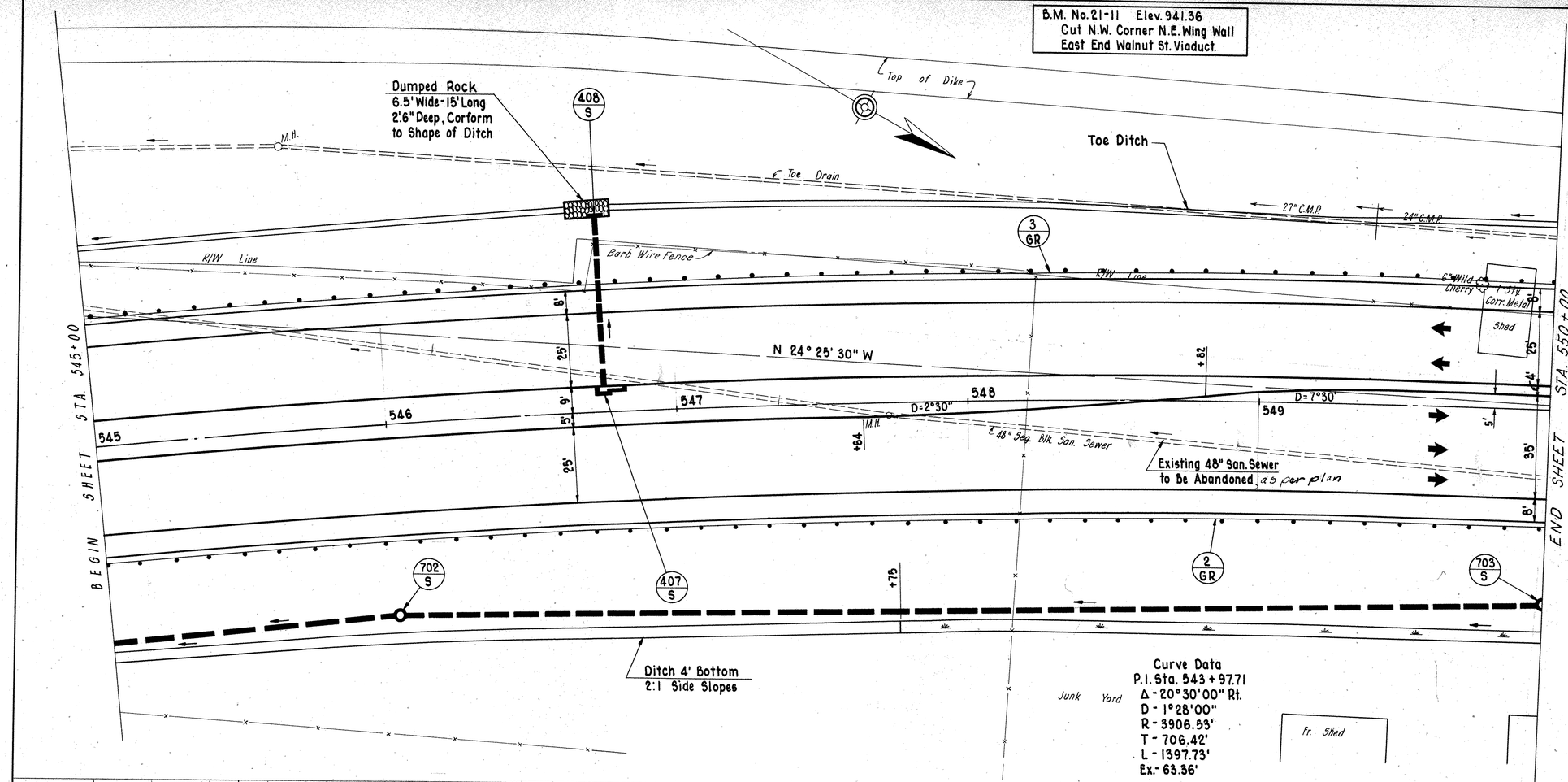
LINE & PROFILE SHEET - EDWIN AVE. CONNECTION

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

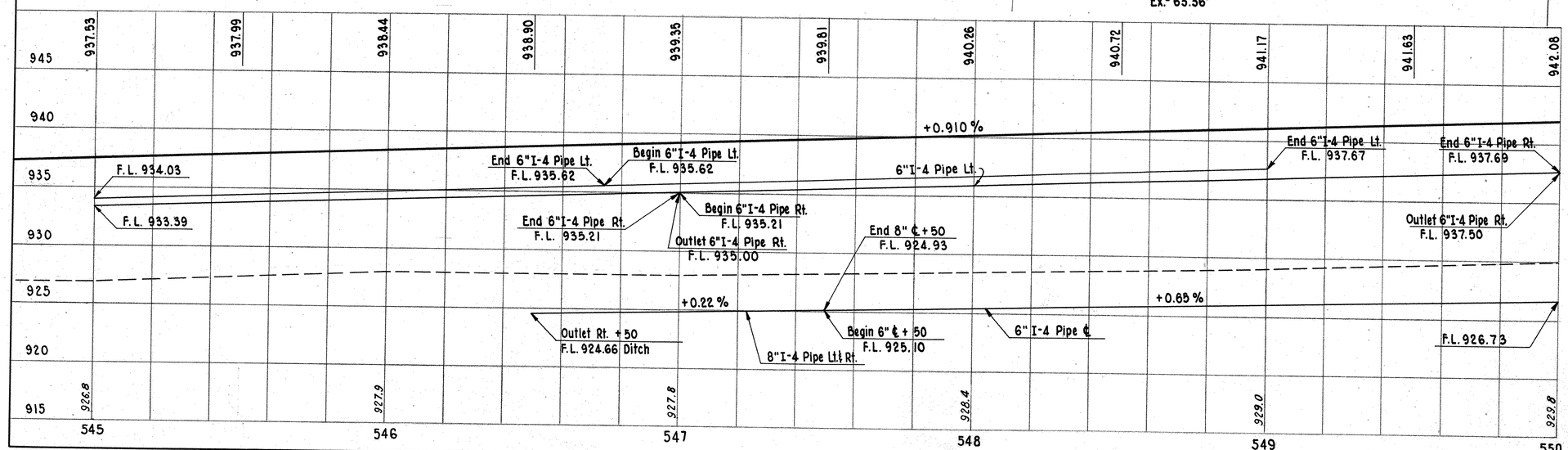
19

STA - 21 - 10.23

B.M. No. 21-11 Elev. 941.36
Cut N.W. Corner N.E. Wing Wall
East End Walnut St. Viaduct.



Curve Data
P.I. Sta. 543 + 97.71
Δ - 20°30'00" Rt.
D - 1°28'00"
R - 3906.53'
T - 706.42'
L - 1397.73'
Ex. - 63.36'



CODE U-1010(5) 5% CITY

STORM SEWERS

REF. NO. From	REF. NO. To	STATION From	STATION To	SIDE	I-8 EACH Standard Manhole NO. 2	I-10 Standard Median Inlet NO. 2-10	I-10 Dumped Rock Cu. Yds.	S-1 CU. YD. Concrete for Structures Class E S-27 P.C.4 End Wall	E-12 Abandoning Existing 48" Seg. Block Sanitary Sewer Lin. Ft.
702S	703S	546+00	550+00	Rt.	2	1	9	0.23	507
407S	408S	546+75	546+75	Lt.					567
		545+00	550+00	Rt&Lt.		1	9	0.23	
				TOTALS	2	2	18	0.46	1074

REF. NO. From	REF. NO. To	STATION From	STATION To	SIDE	E-2 Excavation for Structure CU. YD.	I-2(LIN. FEET) 12" Class B Storm Sewer under Pavt or Approaches	I-2(LIN. FEET) Special M-6.6(b) 48" Pipe for Sanitary Sewer
702S	703S	546+00	550+00	Rt.			396'
407S	408S	546+75	546+75	Lt.	1	60'	
		545+00	550+00	Rt&Lt.			
				TOTALS	1	60'	396'

For Profile of Storm Sewer
See Sheet No. 85

For Profile of Sanitary Sewer
See Sheet No. 93

Scale: Hor. 1"=20'
Vert. 1"= 5'

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

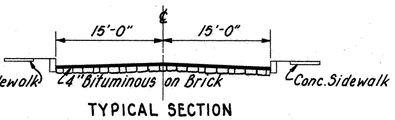
STA - 21 - 10.23

20

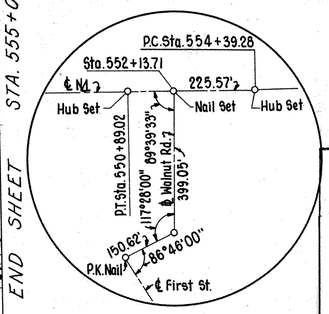
Curve Data
P.I. Sta. 543 + 97.71
Δ - 20° 30' 00" Rt.
D - 1° 28' 00"
R - 3906.53'
T - 706.42'
L - 1397.73'
Ex. - 63.36'

B.M. 21-11 Elev. 941.36
Cut N.W. Corner N.E. Wing Wall
East End Walnut Rd. Viaduct.

Curve Data
P.I. Sta. 562 + 13.52
Δ - 7° 13' 00" Lt.
D - 0° 28' 00"
R - 12,277.70'
T - 774.24'
L - 1546.43'
Ex. - 24.39'



TYPICAL SECTION
EXISTING WALNUT ROAD



REFERENCE POINT
P.O.T. Sta. 552 + 13.17

BEGIN SHEET STA. 550+00

END SHEET STA. 555+00

End Work
Sta. 11 + 58.3

Top of Dike

Toe Ditch

24" C.M. Pipe

18" C.M. Pipe

M.H.

10' R.

50' R.

45' R.

8' Conc. Sidewalk

6" Conc. Curb

8" V.C. Pipe

12" V.C. Pipe

24" R.C. Pipe

℄ 6" H.P. Gas Line

℄ 6" Water Line

S 65° 54' 57" W

℄ B. & O.R.R. Siding

Track No. 27 C

Timber Retaining Curb

Track To Be Abandoned By Others

P.C. Sta. 554 + 39.28

N 24° 25' 30" W

D - 6° 15' 00"

P.C.

+62

+60

550

551

552

553

554

N.P.R.R.

O.P.S.Co. "2520A3 21

Bulkhead

2" H.P. Gas Line

48" Seg. Blk. Pipe San. Sewer

12" Alley

Timber Wall

to be Abandoned, as per plan
See note, Sheet 9

Cone

Tile Block Garage

Existing 48" San. Sewer
To Be Abandoned in place

Sta. 552 + 13.71 Main Line =
Sta. 10 + 49.67 Walnut Road

Wood Fence

Gate

Truck Scales

1-Sty. Conc. Block Office & Warehouse

P.T. Sta. 550 + 89.02

Bituminous

Parking Lot (Earth)

Ditch 4' Bottom
2:1 Side Slopes
Sodded

Dumped Rock
8.5' Wide, 25' Long
Conform to Shape
of Ditch.

1'-2" Sumacs

Conc. Pad

R/W

WALNUT ROAD

15' ℄ 15'

8" V.C. Pipe San. Sewer

N.P.R.R.

Conc. Sidewalk

6" Conc. Curb

Metal Scrap Dock

Fuel Oil Tank & Hand Pump

Transformers

Conc. Ramp

4" V.C. Pipe

4" Water Pipe

℄ O.P.S.Co. "2520A2 41

Brick Shed

1-Sty. Brick Brick Shop

703 S

402 S

406 S

401 S

703a S

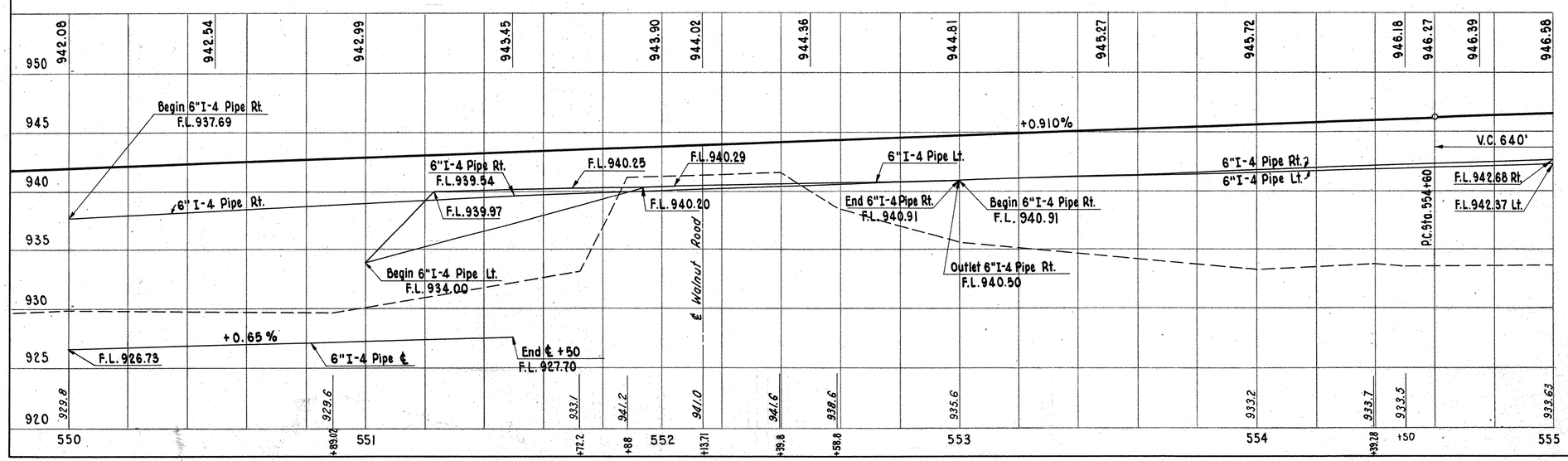
704 S

2 GR

3 GR

4 GR

5 GR



CODE U-1010(5) 5% CITY
ITEM 1-15 GUARD RAIL

Ref. No.	Station to Station	Side	Standard Design	Temporary Guard Rail
4 - GR	9+50 Walnut: 560+60	Rt.		862.5
5 - GR	552+74 to 561+00	Lt.		825.0
	TOTAL			1,687.5

CODE U-1010(5) 5% CITY
STORM SEWERS

REF. NO. From	REF. NO. To	STATION From	STATION To	Side	E-2 Excavation for Structures CU. YD.	I-2 (LIN. FEET) 15" Class B Storm Sewer	I-2 (LIN. FEET) Special 48" M-6.6 (c) Pipe for San. Sewers	I-8 EACH Standard Manhole No. 2	I-10 Dumped Rock CU. YD.	S-1 CU. YD. Concrete for Structures Class E S-27 P.C. 4 ENDWALL	S-27 LIN. FT. Roadway Culvert 24" M-6.6 (b) or M-6.8 (b)	E-12 SPECIAL Abandoning Existing 48" Seg. Block San. Sewer	SPECIAL Bulkhead Each
										0.26	150	2.16	1
										0.82			
										1.08	150	2.16	1
703 S	703a S	550+00	552+14	Rt.			212	1					
703a S	704 S	552+14	564+00	Rt.			188	1					
		Walnut Rd. 9+49		Lt.		92			20				
405 S	406 S	551+30	552+80	Rt.	132								
402 S	401 S	550+00	555+00	Rt.									
					133	92	400	2	20	1.08	150	2.16	1
					TOTALS								

For Intersection Detail of Walnut Rd. Connection. See Sheet No. 82

For Profiles of Storm Sewers See Sheet No. 85

For Profile of Sanitary Sewer See Sheet No. 93

Scale: Hor. 1" = 20'
Vert. 1" = 5'

LINE & PROFILE SHEET STA. 550+00 TO STA. 555+00

B.M. No. 21-11 Elev. 941.36
Cut N.W. Corner N.E. Wing Wall
East End Walnut St. Viaduct

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

21

STA. - 21 - 10.23

BEGIN WORK Sta. 8+00

END WORK Sta. 0+70

END WORK Sta. 11+58.3

Meet Existing Grade

WALNUT ROAD

Bituminous Pav't.

Sta. 8+64 Walnut Road = Sta. 0+00 Nickel Plate Drive

Sta. 552+13.71 Nt. = Sta. 10+49.67 Walnut Rd.

MASSILLON RIVET & MFG. CO.

2-Sty. - Frame Warehouse

MASSILLON CLEVELAND AKRON SIGN CO.

3-Sty. - Brick

1-Sty. Brick Freight Sta. NICKEL PLATE R.R.

Tile Block Garage

Concrete Pad

Existg. 48" San. Sewer to be Abandoned

8"V.C. Pipe San. Sewer

6" Water Line

6" H.P. Gas Line

2" H.P. Gas Line

12" V.C. Pipe

8" V.C. Pipe

6" V.C. Pipe

Bulkhead

Street Light

Existg. Bridge

Toe Ditch

Top of Dike

Timber Ret. Curb

Track No. 40

Track No. 27

Track No. 27E

Drive (Gravel)

Drive (Surfaced)

Conc. Sidewalk

Guard Fence

R.R. Warning Sign

R.R. Crossing Sign

Water Line

W. Meter & Valve Box

1" to 2" Sumacs

8'x12' Sign Board

Plug

M.H.

C.V.

O.P.S.Co.

O.B.T.Co.

N.P.R.R.

2520A-3 18

2520A-3 19

2520A-3 20

2520A-3 21

S 65°54'57" W

N 24°25'30" W

89°39'33"

552

553

45' R.

50' R.

25' R.

10' R.

5'

15'

33'

20'

12'

+40

Sta. 552+13.71 Nt. = Sta. 10+49.67 Walnut Rd.

CODE U-1010(5) 5% CITY

ITEM E-8

Removal & Disposal of Existing Sidewalk	1488	Sq.Ft.
Removal & Disposal of Curb, Curb & Gutter or Header Curb	353	Lin.Ft.
Removal & Disposal of Existing Pavement	107	Sq.Yds

CODE U-1010(5) 5% CITY

STORM SEWERS

REF. NO. From	REF. NO. To	STATION From	STATION To	SIDE	I-2 LIN.FT. 15" Class B Storm Sewer Under Pav't. or Approaches	I-8 LIN.FT. Standard No. 3 Catch Basin	I-8 LIN.FT. Standard Inlet No. 2-A-14	
403 S	404 S	8+24	8+24	Lt.&Rt.	26	2		
404 S	405 S	8+24	9+02	Lt.	74		1	
			TOTALS		100	2	1	

CODE U-1010(5) 5% CITY

DRIVE

STATION	SIDE	ITEM E-1 Roadway Exc. C.Y.	ITEM E-1 Roadway Emb. C.Y.		ITEM B-19 6" C.Y.	ITEM T-707" S.Y.
8+64	Lt.	14	0		14	0
8+90	Rt.	0	20		12	7
TOTALS		14	20		26	7

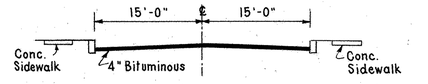
CODE U-1010(5)

100% CITY

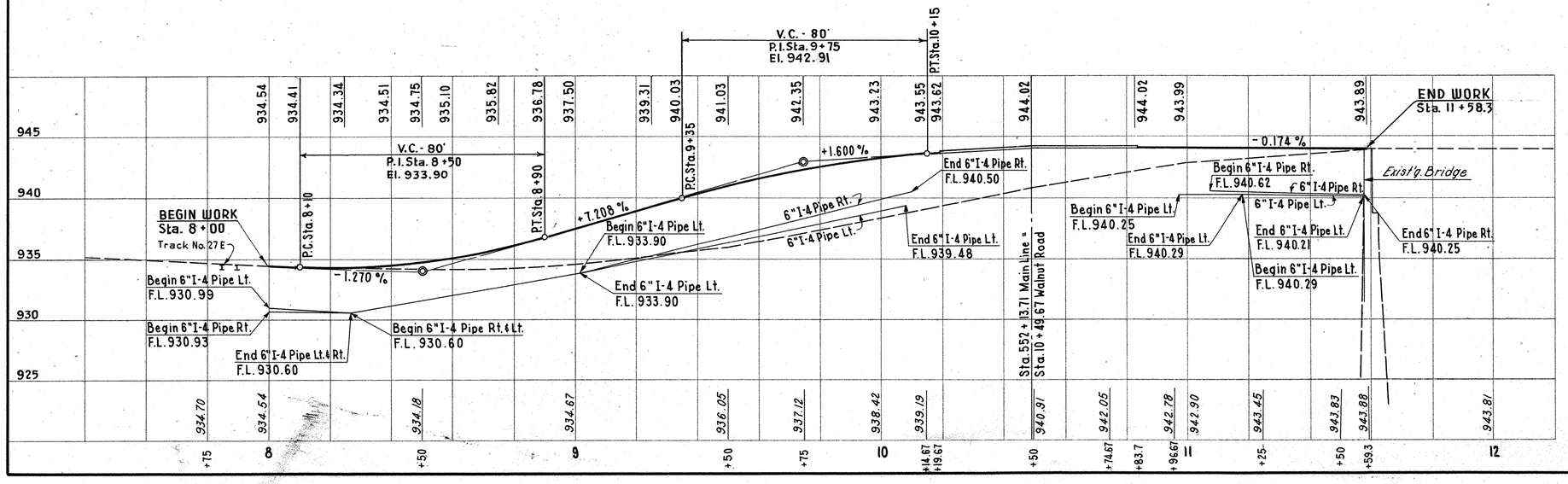
I-8

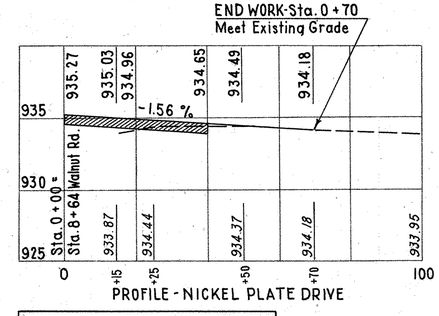
Manhole Adjusted To Grade

403a	8+49 Walnut Rd.	1



TYPICAL SECTION
EXISTING WALNUT ROAD





PROFILE - NICKEL PLATE DRIVE

For Intersection Detail of Walnut Road Connection See Sheet No. 82

For Profiles of Storm Sewer & Culvert See Sheets No. 85 & 92

For Profile of Sanitary Sewer See Sheet No. 93

Scale: Hor. 1" = 20'
Vert. 1" = 5'

LINE & PROFILE SHEET - WALNUT ROAD

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

22

STA - 20 - 10.23

B.M. No. 21-11 Elev. 941.36
Cut N.W. Corner N.E. Wing Wall
East End Walnut St. Viaduct

CURVE DATA
P.I. Sta. 562 + 13.52
Δ - 7° 13' 00" Lt.
D - 0° 28' 00"
R - 12,277.70'
T - 774.24'
Ex - 24.39'
L - 1546.43'

BEGIN SHEET STA. 555+00

END SHEET STA. 560+00

Top of Dike

5 GR

18" C.M. Pipe

Track No. 27 C

B & O. R.R. Siding

Track To Be Abandoned By Others

Track No. 27 C

N.Y.P.R.R. Siding

+04

+42

555 D = 6°15' 556 D = 5°00' 557 558 559 560

8' 25' 9' 25' 8'

N 24° 25' 30" W

48" Seg. Block Pipe San Sewer

12' Alley

M.H.

Bulkhead

4 GR

Existing 48" San. Sewer
To Be Abandoned in place

48" R.C.C. Pipe Sanitary Sewer

O.P.CO.

Bulkhead

M.H.

Toe Ditch

(Abandoned) Conc. Blk. House

Wood Scale Platform

O.R.C. #2520 A 2 43

O.P.CO.

1-Sty. Brick Brick Shop

W & L.E. R.R.

Track No. 27 D

Derailer

Track To Be Abandoned By Others

705 S

B & O. R.R.

Track No. 42

Track No. 34

Tracks To Be Abandoned By Others

Track No. 29 E

CODE U-1010(5) 5% CITY
STORM SEWER

REF. NO.	STATION		Side	I-8 EACH	I-12 LIN. FT.	SPECIAL	I-16
				Standard Manhole No. 2	Special 48" M-6.6(b) Pipe For Sanitary Sewer	48" Bulkhead Each	Manhole Abandoned
From	To						
704 S	705 S	From	Rt.	1	452'	3	1
		To	Rt.				
		From	Lt.			3	1
		To	Lt.	1	452'		
			TOTAL				

| | | | | | |

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

23

STA - 21 - 10.23

B.M. No. 21-12 Elev. 949.60
Cut Conc. Wing Wall East End P.R.R. Bridge Over Tuscarawas River 6' South of South Bridge Rail. West Corner of Angle Point in Wing Wall of North Bridge of Two Bridges.

Curve Data
P.I. Sta. 562+13.52
Δ = 7°13'00" Lt.
D = 0°28'00"
T = 774.24'
L = 1546.43'
R = 12,277.70'
Ex = 24.39'

PROPOSED STRUCTURE BRIDGE NO. STA-21-1069
U.S.R. 21 UNDER W. & L.E. R.R.
Type: Thru-girder with wrought iron plate deck and reinforced concrete substructure.
Spans: 82'-9" & 82'-0" c/c Brgs.
39.88' & 39.49' Clear. f/f substructure
Width: 1 Track 19'-9½" c/c girders plus 3'-0" Sidewalk (So. Side)
Clearance: 15.10' Min. Vertical
Loading: Coopers E-72
Skew: 58° 14' 43" Rt. Forward
Alignment: R.R. Tangent and 16°00' Curve Rt. U.S.R. 21 on 0°28' Curve Lt.
Superelevation: None
Design Criteria: A.R.E.A. Specifications

PROPOSED MINOR STRUCTURE
Type: Reinf. Conc. Saddle For Protection of Pressure Conduit
Alignment: Parallel to Existing Conduit (on 8° curve)

EXISTING WETMORE CREEK STRUCTURE
Reinforced Concrete Pressure Conduit
Span 14' ±
Height 7'-9"
(To Remain in Place)

CODE UG-1010(5) 5% CITY

STORM SEWERS

REF. NO. From	REF. NO. To	STATION From	STATION To	SIDE	E-2 Excavation For Structures Cu. Yd.	I-2 (LIN. FT.) Class B Storm Sewer Under Pavt. Approaches 12"	I-2 (LIN. FT.) Class B Storm Sewer Under Pavt. Approaches 15"	I-2 (LIN. FT.) Class B Storm Sewer Under Pavt. Approaches 18"	I-8 EACH Standard Catch Basin 2-2A(2-2B)	I-14 (LIN. FT.) Standard Type I Paved Gutter Modified As Per Plan	I-14 (LIN. FT.) Standard Type 2 Paved Gutter	S-1 CU. YD. Concrete For Structures Class E S-27 P.C. 4 End Wall
100 S	105 S	562+25	564+45	Rt.		222			1	10		0.23
102 S	105 S	564+08	564+45	Rt.	1	52						
105 S	106 S	564+45	566+50	Rt.			208		1		10	
101 S	103 S	564+00	565+30	Lt.		136					370	
—	—	562+50	566+20	Rt.							125	
—	104 S	564+25	565+50	Lt.			136	208	2	1	20	495
			TOTAL		1	274	136	208	2	1	20	495

Bridge No. STA. 21-1069
U.S.R. 21 under W. & L.E. R.R.
Sta. 564+09.11 See Sheet Nos. 119-129

For Profile of Storm Sewers See Sheet No. 86

Scale: Hor. 1"= 20'
Vert. 1"= 5'

For Alterations Wetmore Creek Pressure Conduit See Sheet No. 95

Track No. 29 Curve Data
P.I. Sta. 14+27
Δ = 13°47'00" Rt.
D = 16°00'00"
T = 43.42'
L = 86.22'
R = 359.26'

LINE & PROFILE SHEET STA. 560+00 TO STA. 565+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

24

STA - 21 - 10.23

B.M. No. 21-12 Elev. 949.60
Cut Conc. Wing Wall East End P.R.R. Bridge Over Tusarawas River 6' South of South Bridge Rail. West Corner of Angle Point in Wing Wall of North Bridge of Two Bridges.

For Profile of Storm Sewers See Sheet No. 86

For Profile of Sanitary Sewer See Sheet No. 94

ITEM 1-15 GUARD RAIL

REF. NO.	STATION TO STATION	SIDE	STANDARD DESIGN		
6 GR	566+12 576+14	Rt.	1012.5	CODE U-1010(5)	
CODE U-1010(5) 5% CITY TOTAL			1012.5	5% CITY	
7 GR	567+49 568+07	Rt.	62.5	CODE UG-1010(5)	
CODE UG-1010(5) 5% CITY TOTAL			62.5	5% CITY	

STORM SEWERS

REF. NO.	STATION From	STATION To	Side	E-2 Excavation For Side Structures Cu. Yd.	I-2 LIN. FT. Class B Storm Sewer Under Pavement or Approaches 12"	I-2 LIN. FT. Class B Storm Sewer Under Pavement or Approaches 18"	I-2 LIN. FT. Special M-6.6(b) Pipe For San. Sewer 48"	I-8 EACH Standard Manholes No. 1	I-8 EACH Standard Manholes No. 2	I-8 EACH Std. C.B. No. 2-2A	S-4 Reinf. Steel Lbs.	I-14 LIN. FT. Standard Paved Gutter Type 2 Modified	S-1 CU. YD. Concrete For Structures Class E S-27 P.C. 4 End Wall	S-1 CU. YD. Concrete For Structures Class E Special End Wall 1.16	SPEC. D.I. Head	SPEC. Manhole Abandoned	
103 S	106 S	565+30	566+50	Rt.												2	2
104 S	103 S	565+50	565+30	Lt+Rt.													
104 S	—	565+50	567+50	Lt.													
107 S	108 S	567+50	567+75	Lt+Rt.													
	106 S	566+20	566+50														
CODE UG-1010(5) 5% CITY TOTAL					1	152	130	1	2	34		30	200	0.23	1.16	4	4
801 S	802 S	567+69.5	572+30	Rt.		464		1									
		567+69.5	570+00						1								
CODE U-1010(5) 5% CITY TOTAL						464		1								4	4

PROPOSED STRUCTURE BRIDGE NO. STA.-21-1073
U.S.R. 21 UNDER PA. R.R. Sta. 565 + 91.16
Type: 2-Span Continuous Welded deck girder with wrought iron plate deck and reinf. concrete substructure
Spans: 66'-0½" & 66'-5¼" c/c Brgs.
40.51' & 40.77' Clear. Between Faces of Substructure
Width: 2 Tracks @ 14'-0" c/c (On Curve)
32'-6" c/c Fascia girders; 37'-1" % Parapets
Clearance: 15.02' Min. Vertical
Loading: Coopers E-72 Steam Impact
Skew: 48°16'02" Rt. Fwd.
Alignment: P.R.R. on 3°30'± Curve Rt. } Bridge designed to fit present rail location
U.S.R. 21 on 0°28' Curve Lt. }
Superelevation: 6" (Each Track)
Design Criteria: AREA Specifications

Bridge No. STA.-21-1073
U.S.R. 21 Under Penna. R.R.
Sta. 565 + 91.16
See Sheet Nos. 130-143

Scale: Hor. 1" = 20'
Vert. 1" = 5'

LINE & PROFILE SHEET STA. 565+00 TO STA. 570+00

B.M. 21-13 Elev. 938.23
Cut Top S.W. Corner Pier Footer of Third Pier West of East Abutment of Tremont Ave. Viaduct Tuscarawas River

FED. RD. DIVISION	STATE	PROJECT	
2.	OHIO	U-UG 1010(5)	

25

STA - 21 - 10.23

STA. 570+00

BEGIN SHEET

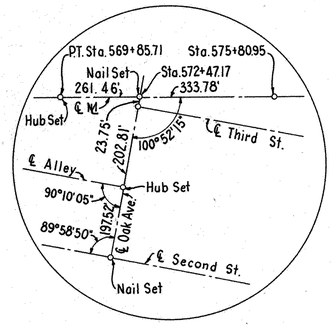
STA. 575+00

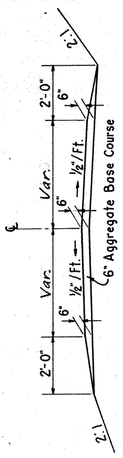
END SHEET

Top of Dike
12" C.M. Pipe
Track To Be Abandoned By Others
P.R.R. Industrial Track
Toe Ditch
Road (Earth)
Existing San. Sewer to be Abandoned in place
48" Seg. Blk. Pipe Sanitary Sewer
15" R.C.C. Pipe
Ditch 2
Ditch
Conc. & Brick Pump House
12" C.I. Pipe
M.H.
Bulkhead
Inlet
Sippo Creek
Paved Gutter Std. Type I (Modified)
Ditch 4' Bottom 2:1 Side Slope
E-1 Removal
Existg. San. Sewer to be Aband. in place
Drive (Proposed)
Bulkhead 48" Seg. Block Pipe Sanitary Sewer
15" R.C. Pipe 2
Channel
Lowering Ruins
28'R
52'R
12" Stone Wall (Ruins)
Cont'd. on Sheet No. 97
N 31° 38' 30" W
570 571 572 573 574
+75
8' 25' 9' 5' 25' 8'
O.P.S. Co. # 252 LCA 13
O.P.S. Co. # 252 LCA 12
O.P.S. Co.
34" Poplar
42" Willow
6" Apple
10" Apple
6" Plum
Sumacs
14"
Shed
Shrubs
2-Sty. Fr. Dwg.
#235
#233
#229
2-Sty. Fr. Dwg.
Wood Pad
Chicken Coop
Conc.
Sidewalk
Gas Line
Water Line
Conc. Side Walk
ALLEY (Earth)
MASSILLON COAL & BUILDERS SUPPLY CO.
1-Sty. Tile Bldg.
W.V.
F.H.
Guy
Sel. per Tr. 48 (Included in Item 206)
Backfill
Poles
Wires
Curb
Gutter
Pavement
Sidewalk
Slope
Ditch
Fill
Cut
Top of Slope
Toe of Slope
Sippo Creek Pressure Conduit
Begin 6" I-4 Pipe Lt. F.L. 932.91
End 6" I-4 Pipe Lt. F.L. 933.53
End 6" I-4 Pipe Rt. F.L. 933.46
6" I-4 Pipe Lt. & Rt. F.L. 931.91
Outlet 6" I-4 Pipe Lt. F.L. 933.45
Outlet 6" I-4 Pipe Rt. F.L. 933.00
Begin 6" I-4 Pipe Rt. F.L. 932.84
End 6" I-4 Pipe Lt. & Rt. F.L. 934.74
Begin 6" I-4 Pipe Lt. & Rt. F.L. 934.74
6" I-4 Pipe Lt. & Rt.
6" I-4 Pipe Lt. & Rt. F.L. 932.83
+2.071%
-2.439%
V.C. 600'
P.I. Sta. 572+50
Elev. 942.00
936.73 937.13 937.47 937.78 938.04 938.26 938.43 938.54 938.61 938.64 938.62 938.55 938.43 938.27 938.06 937.80 937.40 937.14 936.74 936.30 935.81
930.9 931.7 931.0 930.6 931.0 930.0 930.4 931.7 931.1 930.9 930.8 930.2 931.1 932.1 932.6 931.8 928.4 927.2 927.0 926.7 925.3 925.4 924.7 924.8 924.8 924.9 924.3 923.0 924.0 933.4 933.4 936.2 933.8 935.0
945 940 935 930 925 920 915
510 +50 571 +50 572 +32 +34 +37 +42 +47.5 +53 +58 +62 +67 573 +44 +50 +68 574 +86 +90 +94 +99 +08.5 +10.7 +12.8 +14.5 +17.0 +21 +31 +33.5 +36 +48 +50 +52 575

CODE U-1010(5) 5% CITY DRIVE			
STATION TO STATION	SIDE	ITEM E-1 ROADWAY	ITEM B-19 6"
		EXC. C.Y.	EMB. C.Y.
574+70 - 575+38	Rt. 98	0	90

REFERENCE POINT
P.O.T. Sta. 572+47.17





CODE U-1010(5) 5% CITY ITEM I-15 GUARD RAIL					
Ref. No.	Station to Station	Side	Std. Design	Temporary Guard Rail	
8-GR	570+32 to 570+48	Rt.	12.5		
9-GR	572+05 to 572+52	Rt.	50.0		
10-GR	574+63 to 577+00	Median	487.5		
TOTAL			550.0		

CODE U-1010(5) 5% CITY STORM SEWERS								
				I-2 LIN. FT.		I-8 EACH	SPECIAL	I-16
REF. NO.	STATION		SIDE	12" Class B Storm Sewer Sec. M-6.4 (c)	Special M-6.6 (b) Pipe For San. Sewer 48"	8" Pipe for San. Sewer M-6.8 (b)	48" Bulkhead	Abandoned Manholes
From To	From	To						
802S	803S	572+30	573+64	Rt.				
804S	803S	574+26	574+26	Rt.	135	84	4	1
109S	110S	573+92	574+06	Lt&Rt.				
		570+00	575+47	Lt&Rt.				
803a		572+41		Rt.				
803b		574+21		Rt.				
TOTAL				*	135	84	4	1

CODE U-1010(5) 5% CITY ITEM E-8	
Removal & Disposal of Existing Sidewalk	520 S.F.

Scale: Hor. 1" = 20'
Vert. 1" = 5'

For Details of Alteration Sippo Creek Conduit & Pump House See Sheets No. 97 to 105

For Profile of Sanitary Sewer See Sheet No. 94

* Included in Lump Sum bid for "Alterations to Sippo Creek Conduit and Pumping Station"

LINE & PROFILE SHEET STA. 570+00 TO STA. 575+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

26

STA - 21 - 10.23

B.M. No. 21-14 Elev. 936.51
Top S.W. Bolt In Steel Light Standard 46' South On Line Of West Edge Of Service Sta. Bldg. (Red Head Oil Co.) 85' Rt. Sta. 580+85

EXISTING STRUCTURE BRIDGE NO 21-1092
USR 21 UNDER EXISTING TREMONT AVE.
STA. 575 + 80.95

Type: Continuous Steel beams with concrete Filled I-Beam-Lok deck and Reinforced concrete substructure
Spans: 50'-55'-55'-50', 83'-95'-83', 62'-45'-10 13/16", 61'-1 3/16"-58' c/c Brgs.
Roadway: 40'-0" f/f curbs + two 6'-6" Sidewalks
Loading: H-20-33
Skew: 6°24'08" Rt. Fwd. Piers 2 to 7
9°08'46" Rt. Fwd. Piers 8 to 10
Alignment: Tangent

BEGIN SHEET STA. 575+00

END SHEET STA. 580+00

Sta. 578+62.48 Main Line = Sta. 10+40.31 Charles Ave

Sta. 575+80.95 M = Sta. 8+87.21

N 31°38'30" W

Δ 19°03'45"

Δ 100°45'00"

Δ 79°17'45"

Δ 75°00'00"

Δ 90°00'00"

Δ 90°00'00"

Δ 90

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

27

B.M. No. 21-14 Elev. 936.51
Top S.W. Bolt In Steel Light Standard 46' South On Line Of West Edge Of Service Sta. Bldg. (Red Head Oil Co.) 85' Rt. Sta. 580+85

STA.-21-10.23

TYPICAL SECTION
EXISTING CHARLES AVENUE
&
EXISTING THIRD STREET

19'-0" 19'-0"
Conc. Sidewalk, Stone Curb, Bituminous Surface, Stone Curb, Conc. Sidewalk

Sta. 5+00 Charles Ave. = Sta. 20+48.52 Second St.

Sta. 8+99.39 Charles Ave. = Sta. 10+00 Third St.

BEGIN WORK Sta. 7+95

END WORK Sta. 11+00

Sta. 10+40.37 Charles Ave. = Sta. 578+62.48 ℳ

CHARLES AVE. S.W. (Bituminous)

2nd STREET (Bituminous)

3rd STREET (Abandoned) 48' Sec. Blk.

Gravel Alley

N 20° 45' 20" W

S 69° 17' 45" W

N 20° 39' 07" W

N 31° 38' 30" W

90° 03' 05"

89° 56' 52"

79° 03' 45"

Existg. I.P. 90°03'05" — 399.39' — Sta. 578+62.48 — 180°00'00" — 182.57' — Hub Set — T.S. Sta. 580+45.05

Second St. ℄ S.W. — Charles Ave. ℄ — Nail Set — Sta. 575+80.96 — Third St. ℄

REFERENCE POINT
P.O.T. Sta. 578+62.48

CODE U-1010(5) 5% CITY		
ITEM E-8		
Removal & Disposal of Existing Sidewalk	675	Sq. Ft.
Removal & Disposal of Curb, Curb & Gutter or Header Curb	267	Lin. Ft.
Removal & Disposal of Existing Pavement	—	Sq. Yds.

CODE U-1010(5) 5% CITY — STORM SEWERS									
REF. NO. From	REF. NO. To	STATION From	STATION To	SIDE	I-2 (LIN. FT.) Class B Storm Sewer Under Pavement or Approaches 15"	I-2 (LIN. FT.) Class B Storm Sewer Under Pavement or Approaches 18"	I-8 EACH Standard Inlets (Modified) 2-A-12	I-8 EACH Standard Inlets (Modified) 2-A-18	I-16 Catch Basins Abandoned	E-12 Pipe Removal Over 15"
209S	210S	8+18 Charles Ave.	8+65 Charles Ave.	Lt. & Rt.		60		1		
210S	208S	8+65 Charles Ave.	10+25 Third St.	Rt. & Lt.		44	1			
211S	208S	10+50 Third St.	10+25 Third St.	Rt. & Lt.	40			1		
207a		9+24 Charles Ave.		Lt.					1	140
207b		9+20 Charles Ave.		Rt.					1	120
TOTALS					40	104	1	2	2	260

CODE U-1010(5) 100% CITY — I-8 Manhole Adjusted To Grade		
206a	9+00 Charles Ave.	1
206b	9+10 Charles Ave.	1
TOTAL		2

PROFILE - THIRD STREET RT.

PROFILE - CHARLES AVENUE

Existg. ℄ Grade

BEGIN WORK Meet Existg. Grade Sta. 7+95

V.C. 100'
P.I. Sta. 9+16.64
Elev. 928.93

-1.300% -1.420% +2.910% +1.332%

Begin 6"I-4 Pipe Rt. F.L. 925.69
Begin 6"I-4 Pipe Rt. F.L. 926.03
Begin 6"I-4 Pipe Lt. F.L. 925.20
Begin 6"I-4 Pipe Rt. F.L. 926.68
Begin 6"I-4 Pipe Lt. F.L. 926.57
Begin 6"I-4 Pipe Lt. F.L. 926.19
Begin 6"I-4 Pipe Rt. F.L. 925.69
Begin 6"I-4 Pipe Lt. F.L. 925.00
Begin 6"I-4 Pipe Rt. F.L. 925.10
End 6"I-4 Pipe Rt. F.L. 927.45
End 6"I-4 Pipe Lt. F.L. 927.29
End 6"I-4 Pipe Lt. F.L. 926.19
End 6"I-4 Pipe Rt. F.L. 926.03
End 6"I-4 Pipe Lt. F.L. 927.25
End 6"I-4 Pipe Rt. F.L. 926.18
Outlet 6"I-4 Pipe Lt. F.L. 925.00

P.I. Sta. 10+20 No Curve

For Intersection Detail of Charles Ave. Connection See Sheet No. 84
For Profiles of Storm Sewer See Sheet No. 87

Scale: Hor. 1"=20'
Vert. 1"=5'

LINE & PROFILE SHEET CHARLES AVE. - STA. 7+95 TO STA. 10+40.37
LINE & PROFILE SHEET THIRD ST. AT CHARLES AVE. - STA. 10+00 TO STA. 11+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

28

STA - 21 - 10.23

B.M. No. 21-14 Elev. 936.51
Top S.W. Bolt In Steel Light Standard 46' South on Line of West Edge of Service Station Bldg. (Red Head Oil Co.) 85' Rt. Sta. 580+85

Curve Lt Edge
Δ - 5°36'09" Rt.
D - 1°15'00"
T - 224.28'
L - 448.20'
R - 4583.66'

For Details of Combination Barrier Curb & Gutter See Sheets No. 110 to 113

CODE U-1010(5) 5% CITY DRIVES		
Station to Station	Side	B-19 6" C.Y.
583+50 - 585+25	Rt.	72

Drive Rt. Sta. 585+00 — 10'-0" — 10'-0"
Drive Rt. 584+00 — 2'-0" — 6'-0" — 6'-0" — 2'-0"
6" 6" 6"
2:1 2:1
6" Aggregate Base Course
DRIVES RT.
Sta. 583+50 to Sta. 585+25

Spiral Curve Data
P.I. Sta. 597+73.67
Δ - 60°40'16" Rt.
D - 2°07'30"
L.S. - 300.00'
R - 2696.27
θs - 3°11'15"
P - 1.39'
Xc - 299.91'
Yc - 5.57'
K - 149.99'
L.T. - 200.03'
S.T. - 100.03'
Lc - 2555.11'
Ts - 1728.62
Es - 429.34
Lc - 2555.11

CODE U-1010(5) 5% CITY ITEM I-12 COMBINATION BARRIER CURB & GUTTER
Sta. 580+50 - 585+00 Lt. 450 L.F.

CODE U-1010(5) 5% CITY ITEM I-15 GUARD RAIL						
Ref. No.	Station to Station			Std. Design		Temporary Guard Rail
12-GR	581+20	583+50	Rt.	231.5		
13-GR	584+44	588+69	Rt.	425.0		
	Total			662.5		

P.C. Lt. Edge = 34.00 Lt. of Sta 580+133

Sta. 580+50 Lt. Begin Combination Barrier Curb & Gutter

15" C.M. Pipe

M.H.

18" C.M. Pipe

Std. Paved Gutter Type 2

Top of Dike

Track to be Abandoned By Others

18" V.C. Pipe Storm Sewer

P.C.

300' R

100°48'25"

P.R.R. Track

P.T. Lt. Edge = 26.50 Lt. P.O.C. Sta. 584+58.70

Sta. 585+00 Lt End. Combination Barrier Curb & Gutter

N 31°38'30" W

BEGIN SHEET STA. 580+00

END SHEET STA. 585+00

T.S. Sta. 580+45.05

S.C. Sta. 583+45.05

Retaining Wall

Drive

Conc.

5 Doorway Catch Basin

1-Sty. Brick Garage

Earth

Bituminous

Privet Hedge

Gravel

Gasoline Tank Valves

Wood Fence

6" Conc. Ret. Wall

Conc. Gas Island & Air Hose

Conc. Gas Islands

Tile Block Service Station

Tr. Garage

2½-Sty. Shingle Dwg.

O.P.S.Co. #252IC4-2 18

8" Conc. Block Retaining Wall

LINCOLN WAY
U.S. Route 30

For Retaining Wall See Sheet No. 109

For Profiles of Storm Sewers See Sheet No. 88

EXISTING STRUCTURE BRIDGE NO. STA. 21-1105
U.S.R. 21 UNDER EXISTING LINCOLN WAY STA. 582+55.10
TYPE: Continuous Steel Beam And Girder Bridge With Concrete Deck And Substructure
SPANS: Girder Unit - 80'-100'-100'-80' c to c Brgs
Beam Unit - 68'-10"-58'-5½"-68'-6"-68'-6"-55'-0" c to c Brgs.
ROADWAY: 52'-0" Plus Two 6'-0" Sidewalk
LOADING: 5-20-40
SKEW: 6°45" Rt. Fwd. Piers 1-5
5°22" Rt. Fwd. Piers 6-8
SURFACE COURSE: 2½" Bituminous
For Structure No. Sta. 21-1105, See Sheet No. 145

For Structure No. 21-1105 See Sheet No. 154

Lincoln Way Viaduct

V.C. 280'
P.I. Sta. 582+00
Elev. 928.15

Vert. Clear. Min. 15.01'

P.C. Sta. 580+60

P.T. Sta. 583+40

P.C. Sta. 584+75

V.C. 250'

-0.713 %

-0.80 %

+2.000 %

+1.40 %

End G"I-4 Pipe Lt. F.L. 925.40

G"I-4 Pipe Rt. F.L. 925.51

G"I-4 Pipe Lt. F.L. 924.65

End G"I-4 Pipe Rt. F.L. 925.37

Begin G"I-4 Pipe Rt. F.L. 925.37

End G"I-4 Pipe F.L. 924.36

Begin G"I-4 Pipe F.L. 924.36

Outlet G"I-4 Pipe Rt. F.L. 924.20

End G"I-4 Pipe Rt. F.L. 924.81

G"I-4 Pipe

Outlet Rt. +40 F.L. 925.0 Manhole

Outlet G"I-4 Pipe Rt. F.L. 924.70

G"I-4 Pipe 2.0%

Begin Lateral +50 Lt. F.L. 926.5

Outlet Lateral +50 ℄ F.L. 925.1

40'-G"I-4 Pipe 2.0% Slope

Begin G"I-4 Pipe Rt. F.L. 924.82

Begin Lateral +00 Lt. F.L. 926.9

Outlet Lateral +00 ℄ F.L. 926.1

40'-G"I-4 Pipe 2.0% Slope

G"I-4 Pipe ℄

End ℄

Begin Lateral +40 Lt. F.L. 927.4

Outlet Lateral +40 ℄ F.L. 926.7

35'-G"I-4 Pipe 2.0% Slope

End G"I-4 Pipe Rt. F.L. 925.57

Begin G"I-4 Pipe Rt. F.L. 925.57

Outlet ℄ +40 F.L. 926.10 Manhole

G"I-4 Pipe Rt.

8"I-4 Pipe ℄

End G"I-4 Pipe Rt. F.L. 929.14

G"I-4 Pipe Rt. F.L. 929.62

Begin G"I-4 Pipe Rt F.L. 929.14

F.L. 929.74

REF. NO. From	REF. NO. To	STATION From	STATION To	Side	I-2 LIN. FT. Class B Storm Sewer Under Pavement or Approaches 12" 18" 36"	I-2 LIN. FT. Class B Storm Sewer 8" 12" 36"	I-8 EACH Standard Manhole No.1	I-8 EACH Standard Catch Basin No.3 2-2A	I-8 EACH Standard Inlet Modified 2-4A-6	I-8 EACH Standard Median Inlet 2-8 2-10	I-14 LIN FT. Standard Paved Gutter Type 2	I-5 EACH Pipe Special for Class B Storm Sewer 36" Wye	I-5 EACH Pipe Special for Class B Storm Sewer 8" Tee	I-5 EACH Pipe Special for Class B Storm Sewer 8"-90° Bend	I-16 Catch Basin Abandoned	I-16 Man Hole Abandoned	E-12 Pipe Removal 15 and Under	E-12 Pipe Removal Over 15"
214 S	213 S	580+15	579+95	Lt.		16		1										
213 S	216 S	579+95	580+35	Lt & Rt.	80		1								1	1	62	218
215 S	216 S	580+20	580+35	Rt.														
216 S	211 S	580+35	581+40	Rt.		12			1								96	218
218 S	211 S	581+25	581+40	Rt.														
219 S	211 S	581+00	581+40	Lt & Rt.	78	12		1						1				
211 S	220 S	581+40	582+40	Rt.		104		1										
221 S	220 S	582+25	582+40	Lt.	12													
220 S	220 S	582+40	583+16	Rt.		16			1									
220 S	220 S	582+32	582+72	Rt.		36												
220 S	220 S	582+72	582+90	Rt.		18												
220 S	220 S	582+90	583+16	Rt.	30				1									
220 S	222 S	583+16	583+92	Rt.	78					1								
222 S	223 S	583+92	583+75	Rt.	28													
223 S	224 S	583+92	584+15	Rt.			1											
224 S	225 S	584+15	585+01	Lt & Rt.	66			1			485							
220 S	220 S	582+53	-	Rt.														
220 S	-	582+58	-	Lt														
TOTALS					214	80	264	54	40	178	4	2	2	1	1	1	485	2

CODE U-1010(5) 5% CITY
STORM SEWERS

Scale: Hor. 1" = 20'
Vert. 1" = 5'

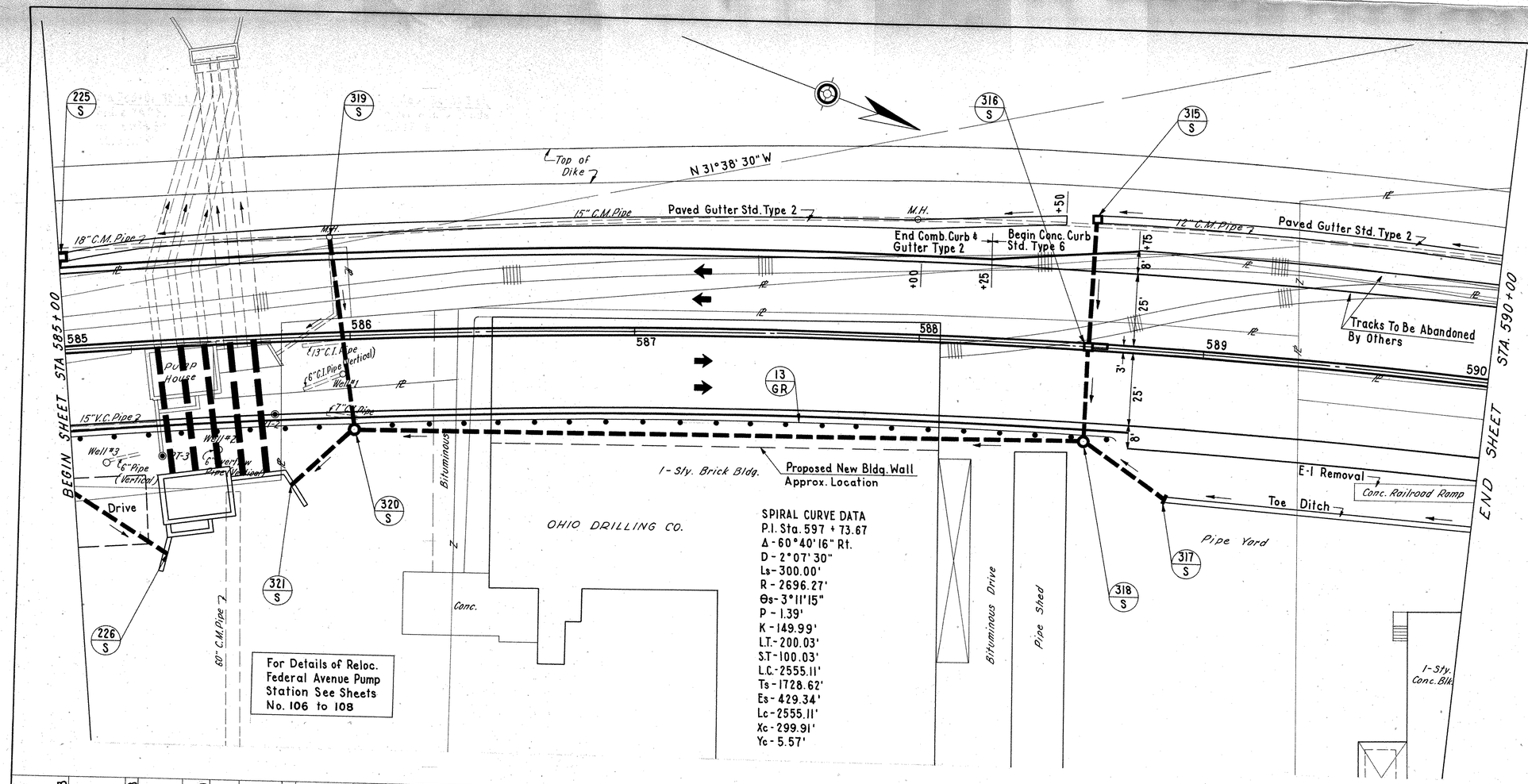
LINE & PROFILE SHEET STA. 580+00 TO STA. 585+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

29

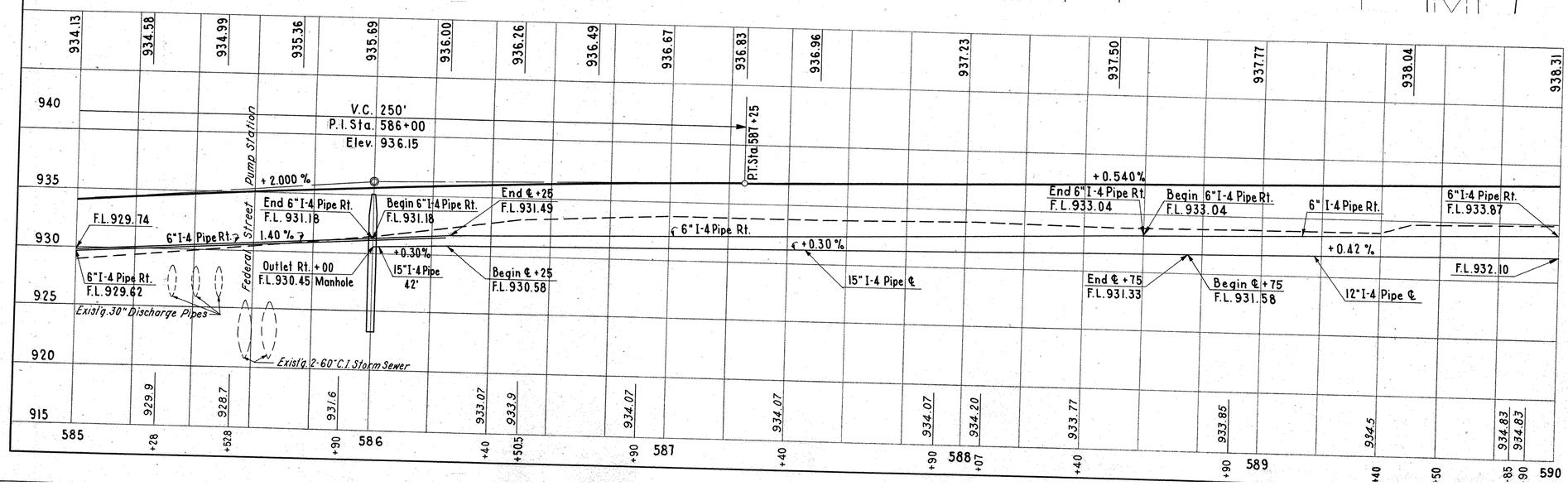
STA - 21 - 10.23

B.M. 21-15 Elev. 935.64
Top Flange Bolt on Street Side of Fire Hydrant 8' East of S.E. Corner Ohio Drilling Co. Bldg. (Front) on 3rd. St. N.W. East Bolt of Two Bolts.



For Details of Reloc. Federal Avenue Pump Station See Sheets No. 106 to 108

SPIRAL CURVE DATA
P.I. Sta. 597 + 73.67
Δ - 60°40'16" Rt.
D - 2°07'30"
Ls - 300.00'
R - 2696.27'
Θs - 3°11'15"
P - 1.39'
K - 149.99'
L.T. - 200.03'
S.T. - 100.03'
L.C. - 2555.11'
Ts - 1728.62'
Es - 429.34'
Lc - 2555.11'
Xc - 299.91'
Yc - 5.57'



CODE U-1010(5) 5% CITY

STORM SEWERS

REF. NO. From	REF. NO. To	STATION From	STATION To	Side	I-2 (LIN.FT.) Class B Storm Sewer Under Pav't. or Approaches 12"	Class B Storm Sewer Under Pav't. or Approaches 24"	Class A Storm Sewer 12"	Class B Storm Sewer 18"	Class B Storm Sewer 24"	Class B Storm Sewer 36"	Storm Sewer M-6.6(B) M-6.8(B) 24"	I-8 (EACH) Standard Manhole No. 1	Adjust Manhole To Grade	Standard Catch Basin 2-2A	Standard Median Inlet 2-8	S-1 (CU.YD.) Concrete for Structures Class E S-27 P.C.4 End Wall	E-2 (CU.YD.) Excavation For Structures	I-14 (LIN.FT.) Standard Paved Gutter Type 2
224 S	226 S	584+75	585+31	Rt.														
319 S	320 S	585+94	586+00	Lt.&Rt.		64										0.23	1	350
321 S	320 S	585+76	586+00	Rt.								1	1		1			
320 S	318 S	586+00	588+60	Rt.							28	1	1					780
315 S	316 S	588+60	588+60	Lt.	40		254							1		0.23	1	1130
316 S	318 S	588+60	588+60	Rt.	30									1				
318 S	317 S	588+60	588+90	Rt.			34											
225 S	—	585+01	588+50	Lt.														
315 S	—	588+60	596+40	Lt.														
TOTALS					70	64	34	254	—	70	28	2	1	1	1	0.23	1	1130

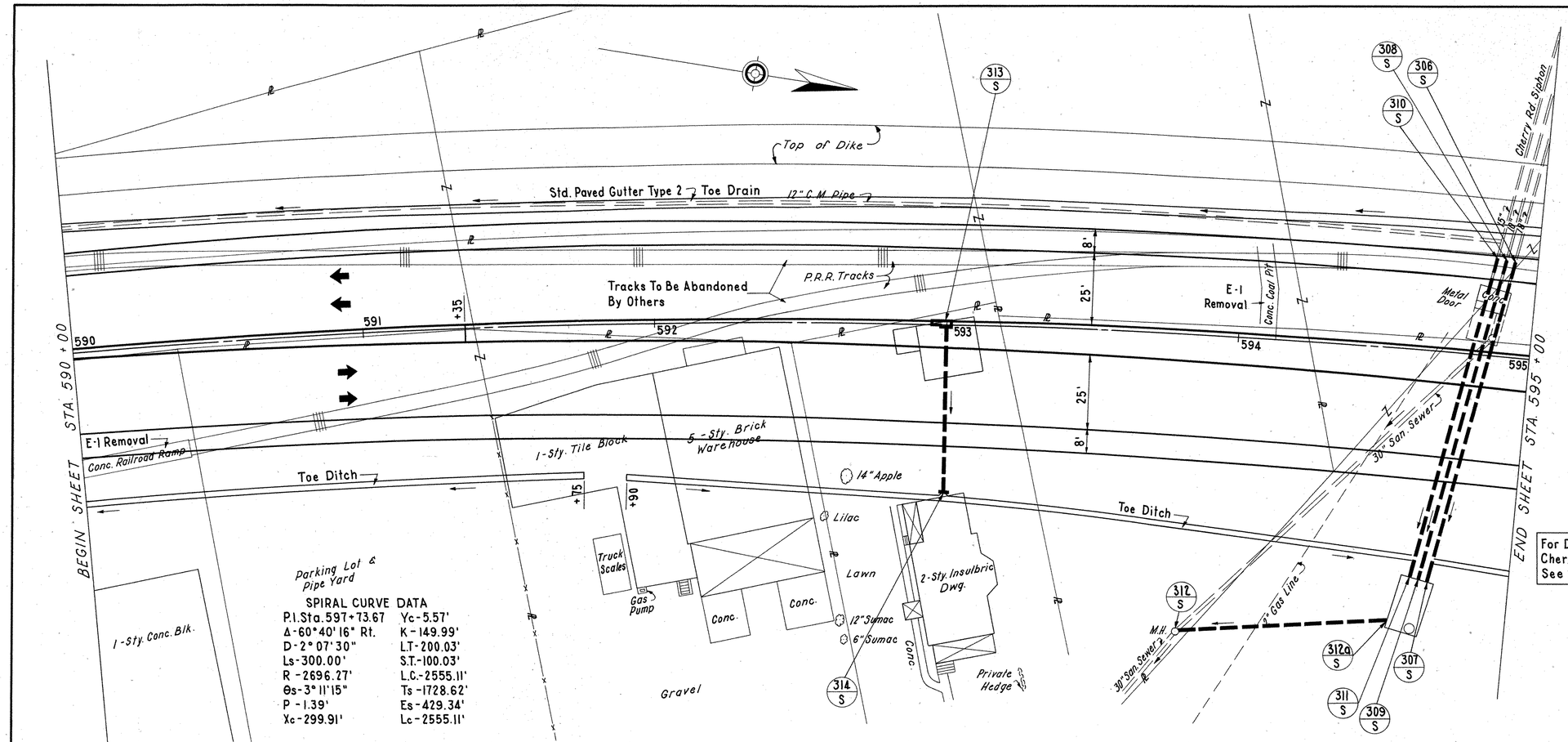
For Profiles of Storm Sewers See Sheet No. 89

Scale: Hor. 1"=20'
Vert. 1"=5'

FED.RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA. 21 - 10. 23

30

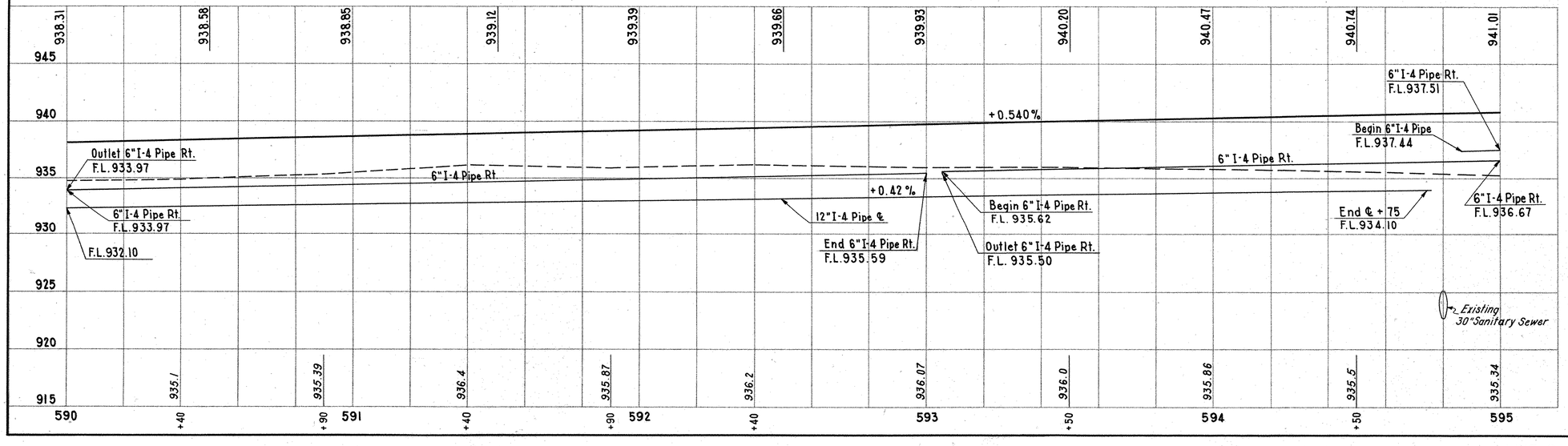


B.M. No. 21-15 Elev. 935.64
Top Flange Bolt on Street Side of Fire Hydrant 8' East of S.E. Corner Ohio Drilling Co. Bldg. (Front) on Third St. N.W. East Bolt of Two Bolts.

For Details of Reloc. Cherry Rd. Siphon See Sheets No. 116 to 118

SPIRAL CURVE DATA

P.I. Sta. 597+73.67	Yc-5.57'
Δ-60°40'16" Rt.	K-149.99'
D-2°07'30"	LT-200.03'
Ls-300.00'	S.T.-100.03'
R-2696.27'	L.C.-2555.11'
Θs-3°11'15"	Ts-1728.62'
P-1.39'	Es-429.34'
Xc-299.91'	Lc-2555.11'



For Storm Sewer Profile See Sheet No. 89

Scale: Hor. 1" = 20'
Vert. 1" = 5'

CODE U-1010(5) 5% CITY

STORM SEWERS							
REF. NO. From	REF. NO. To	STATION From	STATION To	Side	E-2 (CU. YD.) Excavation For Structures	I-2 (LIN. FT.) 12" Class B Storm Sewer Under Pavement or Approaches	I-8 EACH Standard Median Inlet 2-8	S-1 (CU. YD.) Concrete For Structures Class E S-27 P.C.4 End Wall
313 S	314 S	593 + 00	593 + 00	Rt.	1	56	1	0.23
TOTAL					1	56	1	0.23

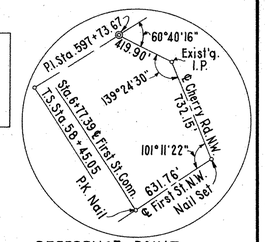
LINE & PROFILE SHEET STA. 590 + 00 TO STA. 595 + 00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

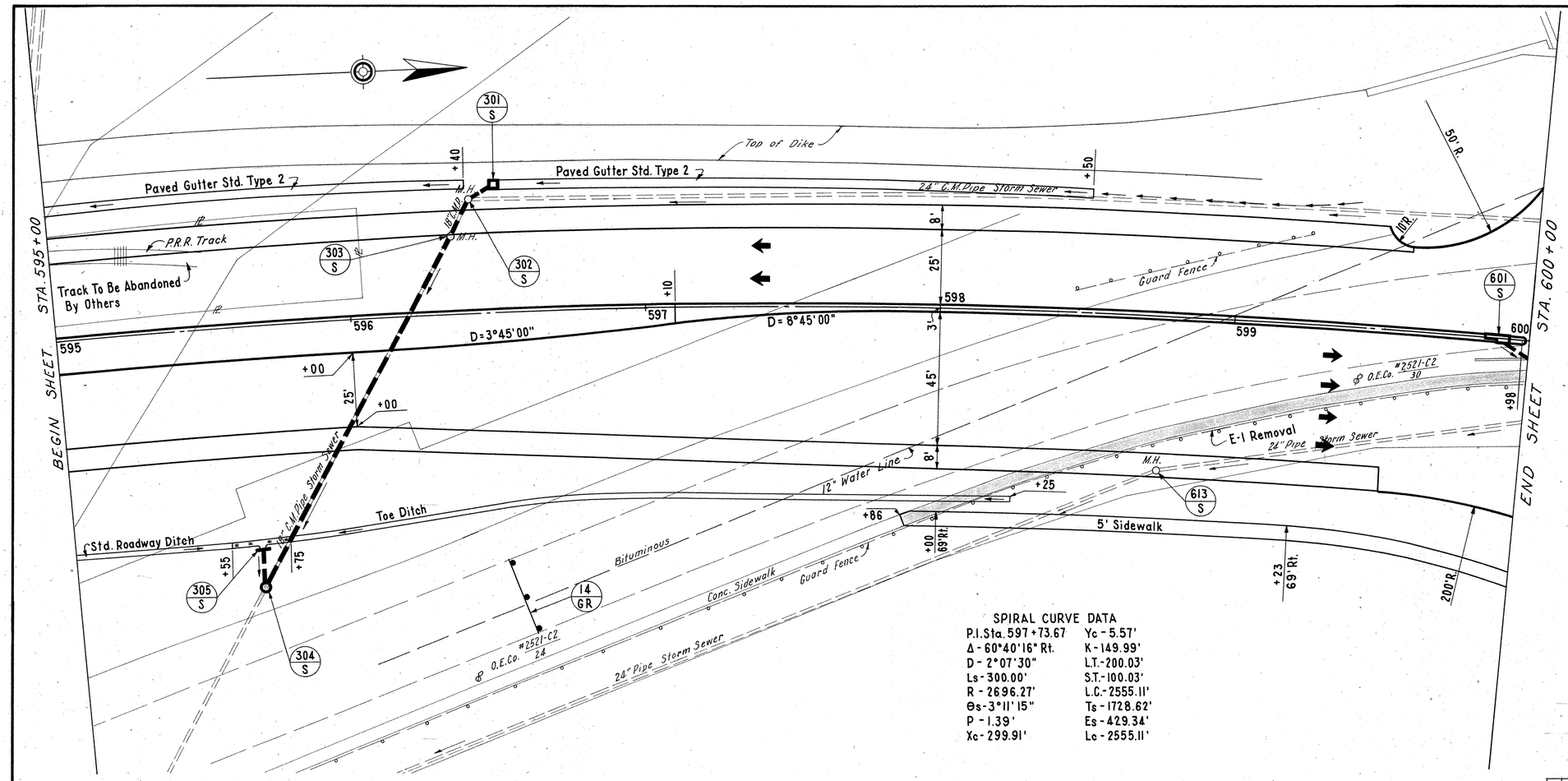
31

STA - 21 - 10.23

B.M. 21-3 Elev. 946.59
Cut S.E. Corner S.E. Wingwall East and Viaduct Cherry Rd. N.W., 100' Lt. Sta. 599 + 50-10'S. of S. Bridge Rail East End at Tuscarawas River.

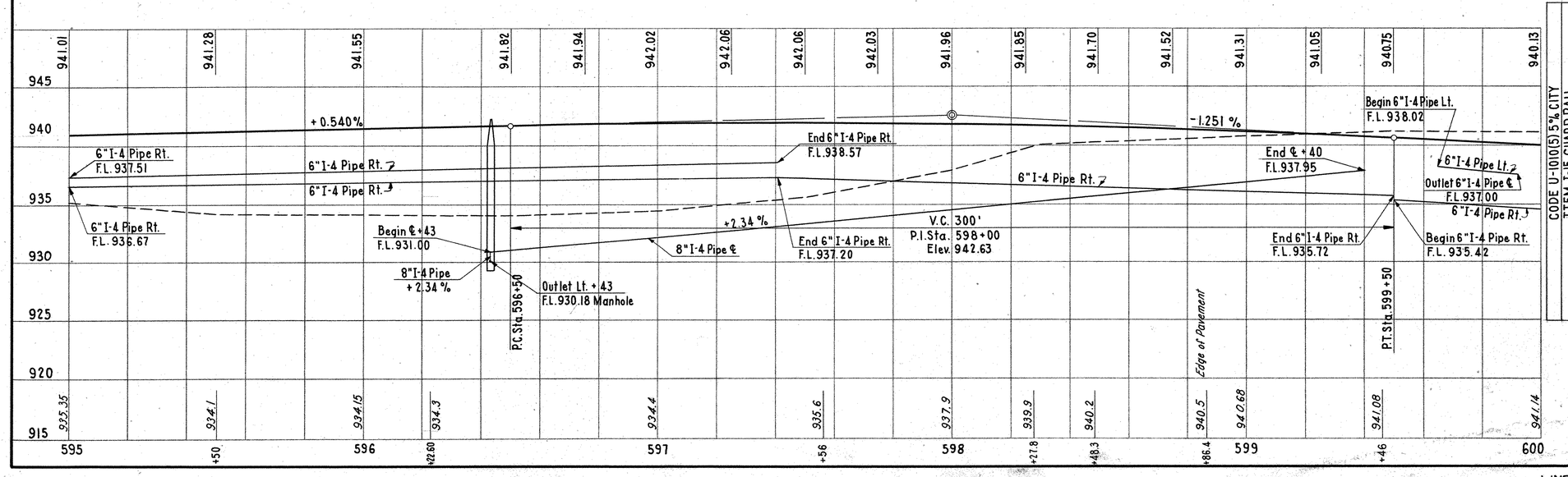


REFERENCE POINT
P.I. Sta. 597+73.67



SPIRAL CURVE DATA

P.I. Sta. 597+73.67	Yc - 5.57'
Δ - 60°40'16" Rt.	K - 149.99'
D - 2°07'30"	L.T. - 200.03'
Ls - 300.00'	S.T. - 100.03'
R - 2696.27'	L.C. - 2555.11'
Θs - 3°11'15"	Ts - 1728.62'
P - 1.39'	Es - 429.34'
Xc - 299.91'	Lc - 2555.11'



CODE U-1010(5) 5% CITY
ITEM E-8

Ref. No.	Station To Station	Side	Removal & Disposal of Existing Sidewalk Sq. Ft.	Removal & Disposal of Curb, Curb & Gutter or Header Curb Lin. Ft.	Removal & Disposal of Existing Pavement Sq. Yds.
14 GR	597+00	Rt.	844	18	—
	TOTAL		844	18	—

CODE U-1010(5) 5% CITY
ITEM I-15 GUARD RAIL

Ref. No.	Station To Station	Side	Standard Design	Temporary Guard Rail
14 GR	597+00	Rt.	25	
	TOTAL		25	

CODE U-1010(5) 5% CITY
STORM SEWERS

REF. NO. From	REF. NO. To	STATION From	STATION To	Side	E-2 (CU.YD.) Excavation For Structures	I-2 (LIN. FT.) 18" Class B Storm Sewer Under Pavement or Approaches M-6.01 or M-6.02	I-2 (LIN. FT.) Class B Storm Sewer 12"	I-2 (LIN. FT.) Class A Storm Sewer 15"	I-8 (EACH) Standard Catch Basin 2-2A	I-8 (EACH) Manhole Reconstructed To Grade Using Salvage Casting As Per Plan	I-8 (EACH) Standard Manhole No. 1	I-14 (LIN. FT.) Standard Paved Gutter Type 2	S-1 (CU.YD.) I-16 (EACH) Concrete Structures Class E S-27 P.C. 4 End Wall	I-16 (EACH) Manhole Abandoned
301 S	302 S	596+50	596+43	Lt.		144	6							
302 S	304 S	596+43	595+65	Lt & Rt.					1				0.23	1
304 S	305 S	595+65	595+65	Rt.	1			12			1			
303 S	—	596+36	—	Lt.						1		200		
301 S	—	596+50	596+50											
613 S	—	598+75	—											
TOTALS					1	144	6	12	1	1	1	200	0.23	1

For Profile of Storm Sewer See Sheet No. 89

Scale: Hor. 1" = 20'
Vert. 1" = 5'

LINE & PROFILE SHEET STA. 595+00 TO STA. 600+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG1010(5)	

STA - 21 - 10.23

32

B.M. No. 21-3 Elev. 946.59
Cut S.E. Corner S.E. Wingwall East end viaduct
Cherry Rd. N.W, 100' Lt. Sta. 599+50-10'S of
S. Bridge Rail East end @ Tuscarawas River

END WORK
Sta. 6+08.60

BEGIN SHEET STA. 600+00

END SHEET STA. 605+00

Sta. 600+15.39 NM
Sta. 4+95.54 Cherry Rd.

N 29°01'46"E

TYPICAL SECTION
EXISTING CHERRY ROAD

19'-0" | 19'-0"
Conc. Sidewalk | Stone Curb | Bituminous on Brick | Stone Curb | Conc. Sidewalk

U. S. Route 21

BEGIN WORK
Sta. 2+92.20

CHERRY RD. N.W. 2

HORACE MANN School

Eva Barth

SPIRAL CURVE DATA
P.I. Sta. 597+73.67
Δ = 60° 40' 16" Rt.
D = 2° 07' 30"
L.S. = 300.00'
R = 2696.27'
θs = 3° 11' 15"
P = 1.39'
K = 149.99'
LT. = 200.03'
S.T. = 100.03'
Ts = 1128.62'
Es = 429.34'
Lc = 2555.11'
Xc = 299.91'
Yc = 5.57'

DRIVE	CODE U-1010 (5) 5% City	
Cherry Rd. Station	Side	Item T-10 T" S.Y.
3+30	Lt.	11

ITEM E-8	CODE U-1010 (5) 5% City	1.58% City	
Removal & Disposal of Existing Sidewalk	1031	-	Sq. Ft.
Removal & Disposal of Curb, Curb & Gutter or Header Curb	68	-	Lin. Ft.
Removal & Disposal of Existing Pavement	1898	1318	Sq. Yds

U-1010 (5)

STORM SEWER

REF. No.	STATION From	STATION To	SIDE	12 LIN. FT. 12" Class B Storm Sewer Under Pavement or Approaches	I-8 EACH Manhole Reconstructed to Grade Using Salvaged Casting As Per Plan	Manhole Adjusted to Grade	Standard Manhole No. 2	Standard Median Inlet No. 2-6	Standard Inlet (Modified) No. 2-6 (2A-6 (2A-VDH-H	I-16 Inlets Abandoned	E-12 Pipe Removal 15" and Under	5% City	1.58% City	5% City
601 S	602 S	599+92	600+30	Rt.	40	1			1					
603 S	604 S	600+50	600+50	Rt.	26			1						
604 S	605 S	600+50	4+00 Cherry Rd.	Rt.	92		1							
608 S	601 S	601+62	601+90	Lt. & Rt.	46				1					
607 S	606 S	601+90	602+60	Rt.	72									
608 S	611 S	601+62	601+78	Lt.										
611 S	612 S	601+78	602+21	Rt.										
604a		4+83	Cherry Rd.	℄		1								
605a		3+44	Cherry Rd.	℄		1								
CODE U-1010 (5) 5% City TOTAL					158	1	2	1	1	1	34			89
CODE U-1010 (5) 1.58% City TOTAL					118	-	1	-	1	1	55			

For Intersection Detail of Cherry Rd. Connection. See Sheet No 84

For Profiles of Storm Sewers See Sheet No 91

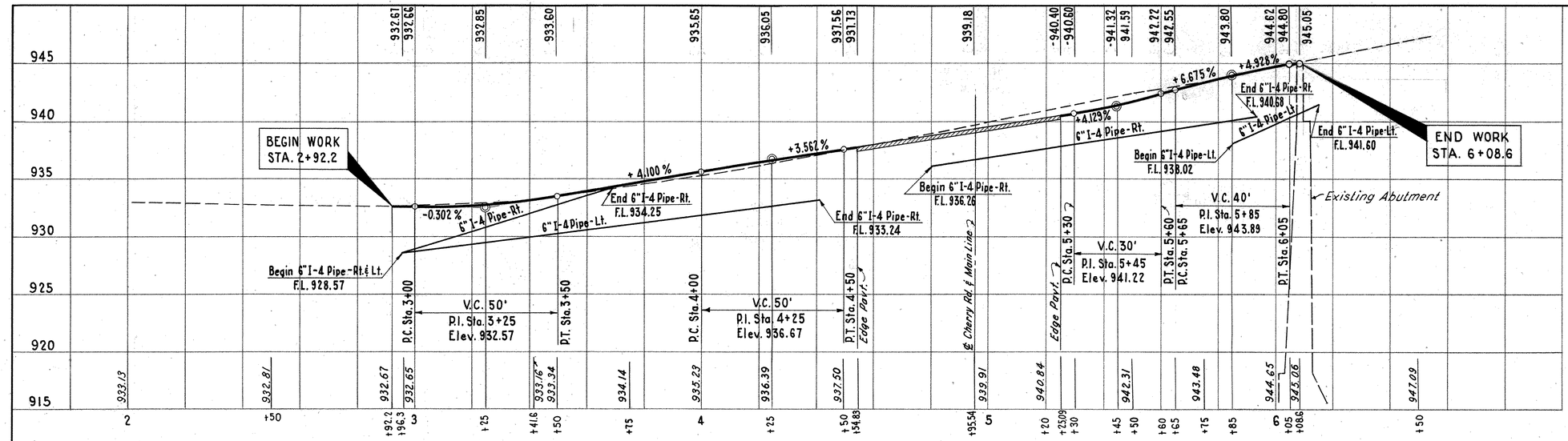
For Profiles of Mainline and Cherry Rd. See Sheet No. 33

Scale: 1"=20'

LINE SHEET STA. 600+00 TO STA. 605+00

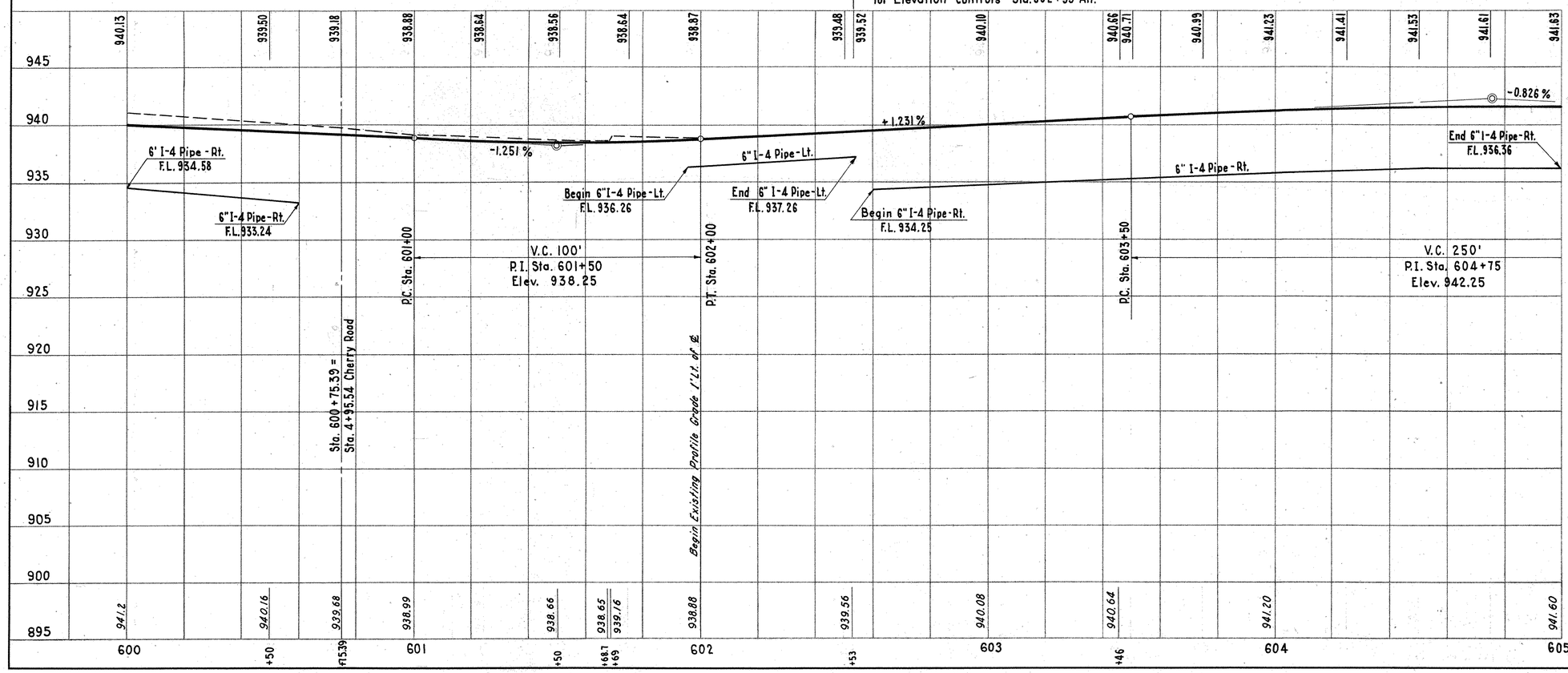
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG 1010 (5)	

STA - 21 - 10.23



PROFILE CHERRY ROAD

See Superelevation Tables for Elevation Controls Sta. 602+53 Ah.



For Plan Views of Main Line & Cherry Rd. See Sheet No. 32

Scale: Hor. 1" = 20'
Vert. 1" = 5'

PROFILE SHEET - CHERRY ROAD AND ℳ - STA. 600+00 TO STA. 605+00

NOTE: Federal Marker U-UG1010(5) Will be Furnished and Erected On the Left by The State of Ohio Prior to Acceptance of This Project.

STORM SEWERS					CODE U-1010(5)	1.58 % CITY			
Ref. No.		STATION			E-2 (Cu.Yd.)	I-2 (Lin.Ft.)	I-8 (Each)	S-1 (Cu.Yd.)	I-10 (Cu.Yd.)
From	To	From	To	Side	Excavation For Structures	12"Class B Storm Sewers Under Pavement or Approaches	Inlet Adjusted To Grade	Concrete for Structures Class E S-27 P.C. 4 End Wall	Dumped Rock
609 S	610 S	606+93	606+35	Rt.	1	6	1	0.23	9
TOTAL					1	6	1	0.23	9

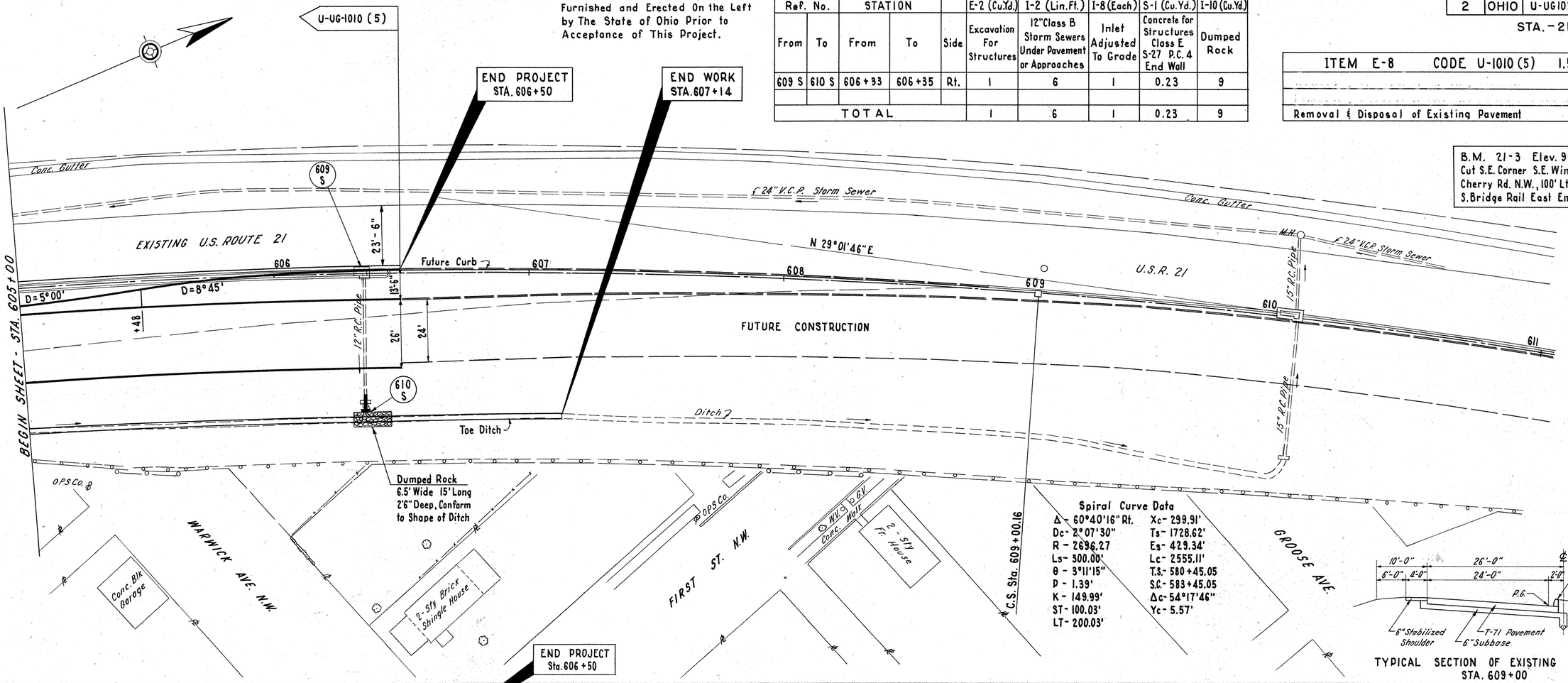
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG1010(5)	

34

STA. - 21 - 10.23

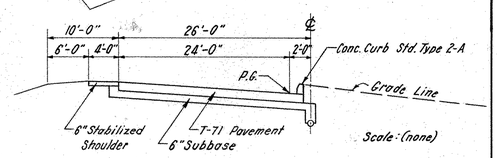
ITEM E-8	CODE U-1010(5)	1.58 % CITY	
Removal & Disposal of Existing Pavement		67	Sq.Yds.

B.M. 21-3 Elev. 946.59
Cut S.E. Corner S.E. Wingwall East and Viaduct Cherry Rd. N.W., 100' Lt. Sta. 599+50 - 10' S of S. Bridge Rail East End @ Tuscarawas River

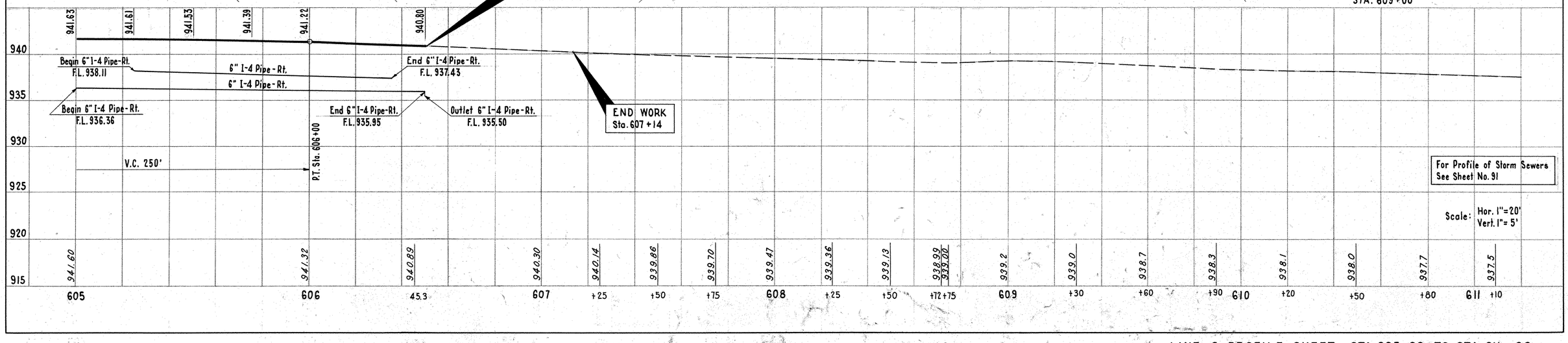


Spiral Curve Data

Δ - 60°40'16" Rt.	Xc - 299.91'
Dc - 2°07'30"	Ts - 1728.62'
R - 2696.27	Es - 429.34'
Ls - 300.00'	Lc - 2555.11'
θ - 3°11'15"	T.S. - 580+45.05
P - 1.39'	S.C. - 583+45.05
K - 149.99'	Δc - 54°17'46"
ST - 100.03'	Yc - 5.57'
LT - 200.03'	



TYPICAL SECTION OF EXISTING PAVEMENT STA. 609+00



For Profile of Storm Sewers See Sheet No. 91

Scale: Hor. 1"=20' Vert. 1"= 5'

LINE & PROFILE SHEET - STA. 605+00 TO STA. 611+00

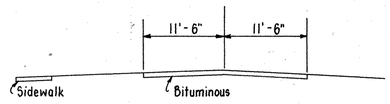
FED. RD DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

35

STA. -21-10.23

B.M. No. 21-3 Elev. 946.59
Cut S.E. Corner S.E. Wingwall East and Viaduct Cherry Rd. N.W., 100' Lt. Sta. 599+50 10' S. of S. Bridge Rail East End Tuscarawas River.

TYPICAL SECTION
EXISTING THIRD STREET

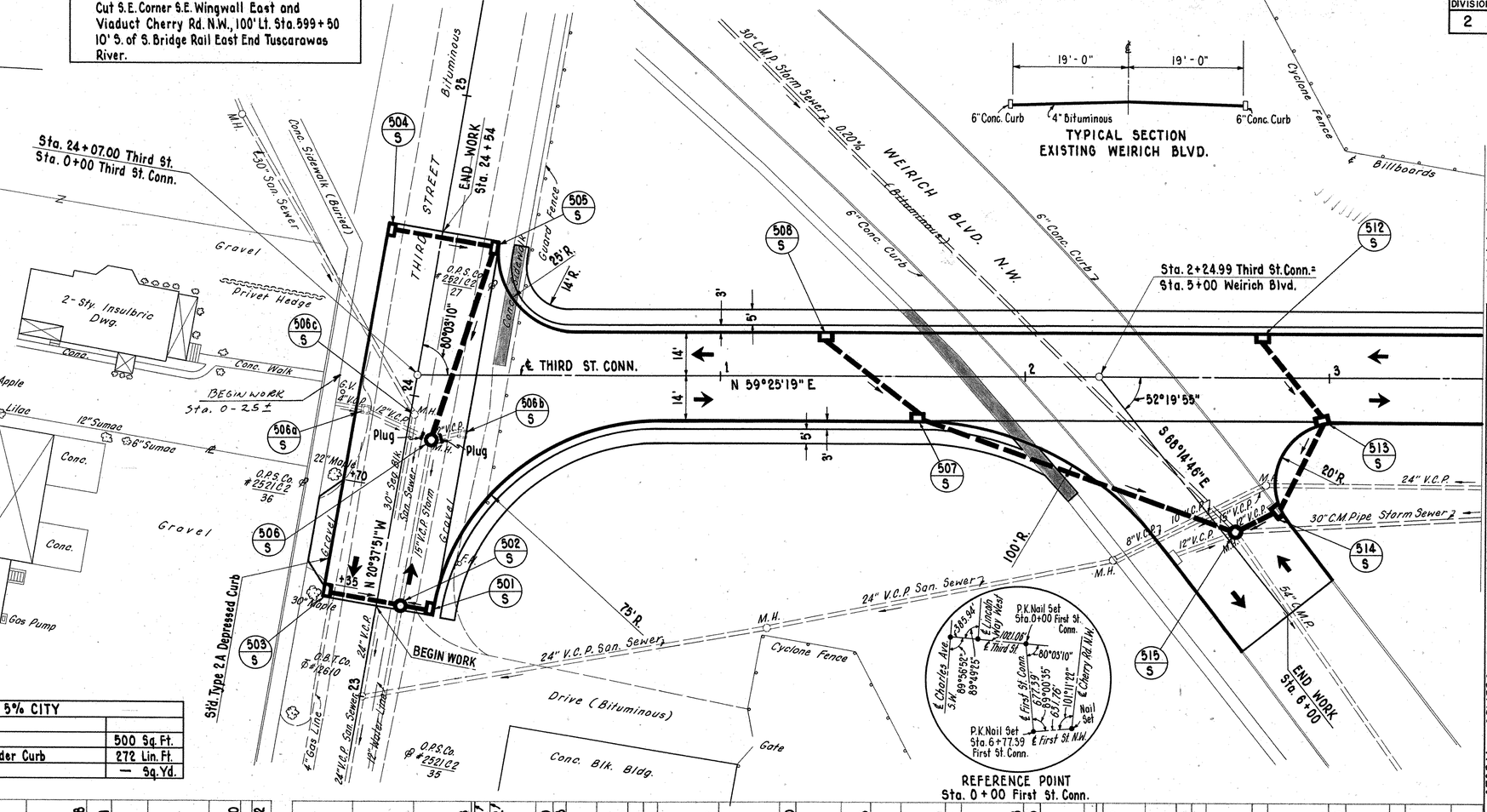


TYPICAL SECTION
EXISTING WEIRICH BLVD.

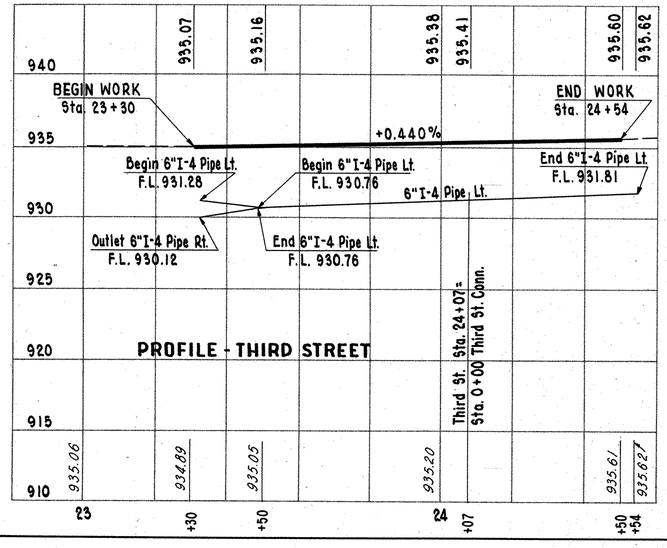
CODE U-1010(5) 100% CITY				
DRIVE				
STATION	SIDE	ITEM E-1 Roadway Exc.	ITEM E-1 Roadway Emb.	ITEM B-19 6" C.Y.
23+50	Lt.	3	0	3

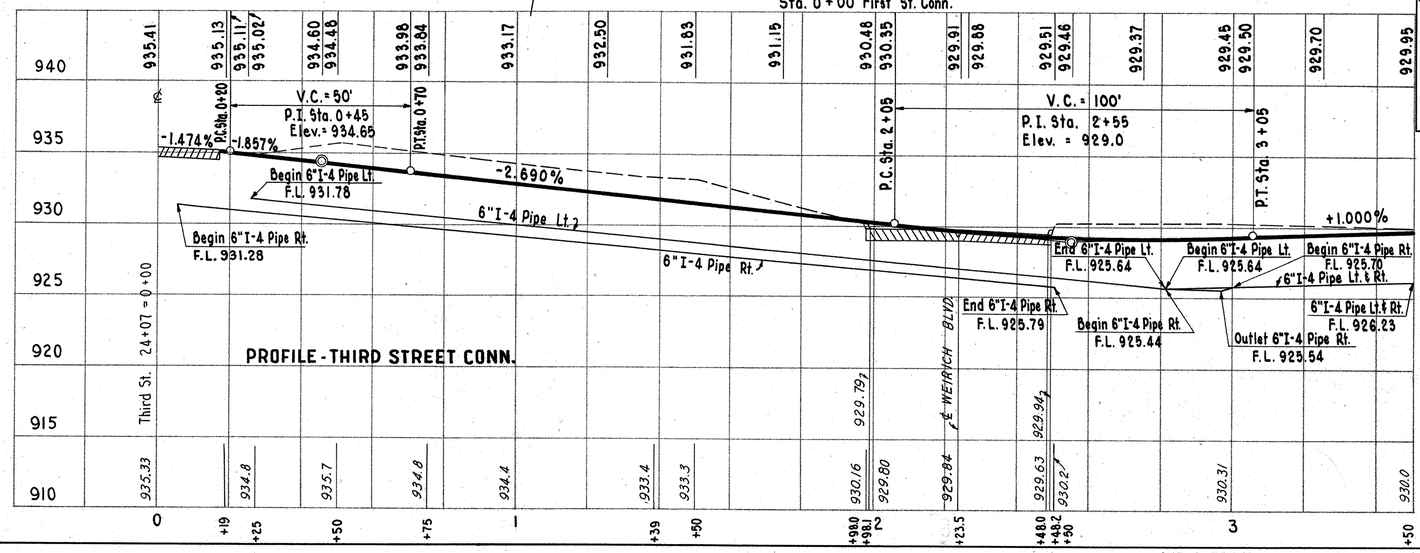
CODE U-1010(5) 100% CITY
ITEM I-8
Manhole Adjusted To Grade
506c 23+94 Third St. 1

CODE U-1010(5) 5% CITY	
ITEM E-8	
Removal & Disposal of Existing Sidewalk	500 Sq. Ft.
Removal & Disposal of Curb, Curb & Gutter or Header Curb	272 Lin. Ft.
Removal & Disposal of Existing Pavement	— Sq. Yd.



REFERENCE POINT
Sta. 0+00 First St. Conn.





STORM SEWERS STATION From	To	REF. NO. From	To	CODE U-1010(5) 5% CITY I-8 (EACH) Catch Basin I-16	Standard Catch Basin No. 3	Standard Manhole No. 1	Manhole Adjusted To Grade	CODE U-1010(5) 5% CITY E-12 (LIN. FT.) 12" Class B Storm Sewer Under Pav't. or Approaches	Pipe Removal 15" & Under	Side	To	From
		506a S	506 S	—	—	—	—	32'	20'	Rt.	23+88	23+93
		506b S	506 S	—	—	—	—	64'	8'	Rt.	23+88	23+90
		504 S	505 S	—	—	—	—	22'		Lt. & Rt.	24+92	24+52
		505 S	506 S	—	—	—	—	8'		Rt.	24+92	24+52
		503 S	502 S	—	—	—	—	32'		Lt. & Rt.	25+88	23+92
		501 S	502 S	—	—	—	—	34'		Rt.	25+88	23+92
		512 S	513 S	—	—	—	—	14'		Lt. & Rt.	2+97 Third St. Conn.	23+32
		513 S	514 S	—	—	—	—	38'		Lt. & Rt.	5+71 Weirich Blvd.	2+97 Third St. Conn.
		514 S	515 S	—	—	—	—	106'		Lt. & Rt.	5+68 Weirich Blvd.	5+71 Weirich Blvd.
		508 S	507 S	—	—	—	—	352'		Lt.	1+64 Third St. Conn.	1+35 Third St. Conn.
		507 S	515 S	—	—	—	—	28'		Lt. & Rt.	5+68 Weirich Blvd.	1+64 Third St. Conn.
				1	2	1	2	4	5		TOTALS	

For Intersection Detail of Third St. Connection
See Sheet No. 83
For Profile Weirich Blvd.
See Sheet No. 83
For Profiles of Storm Sewer
See Sheet No. 90

Scale: Hor. 1" = 20'
Vert. 1" = 5'

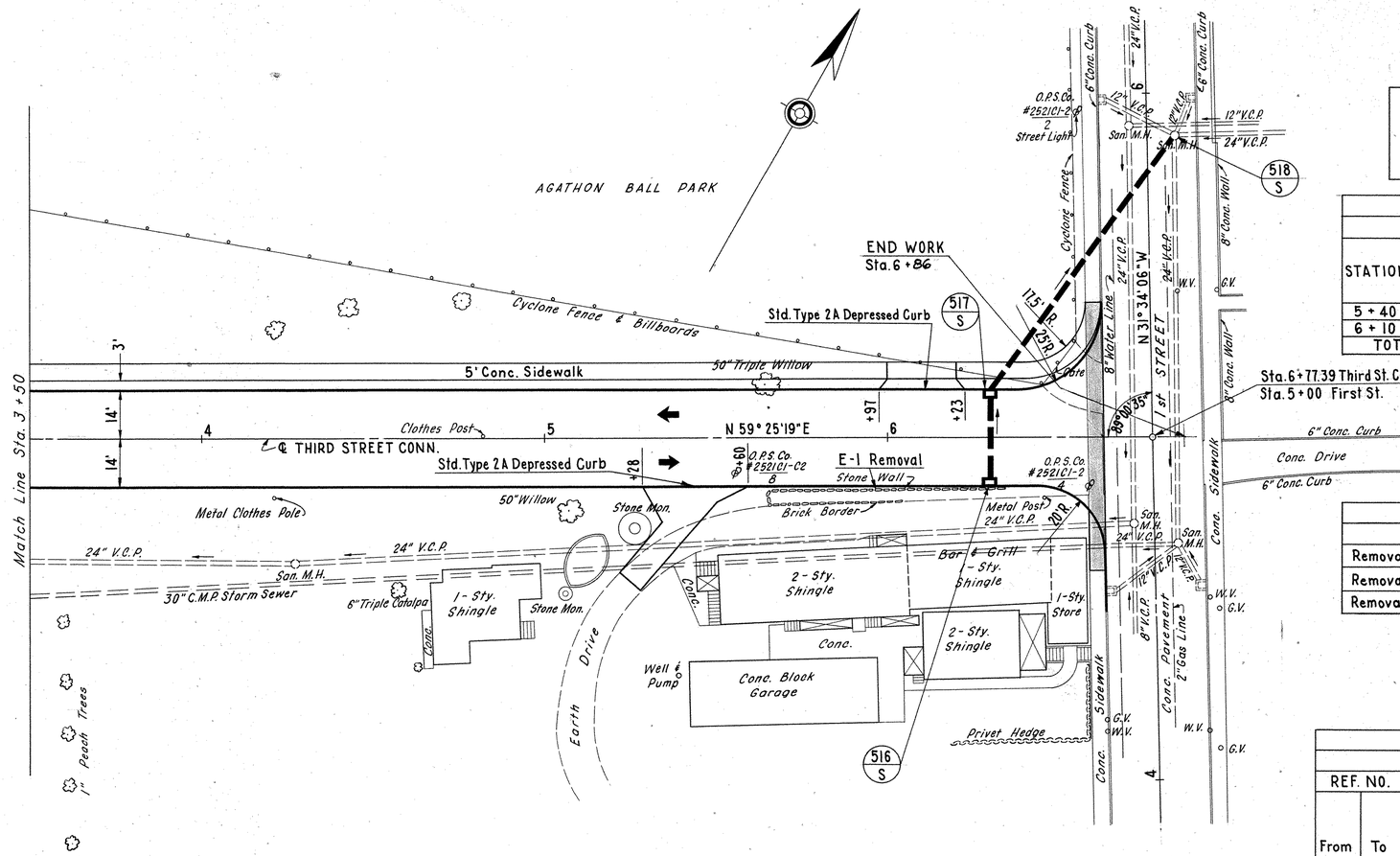
LINE & PROFILE SHEET - THIRD ST. CONN. - STA. 0+00 TO STA. 3+50

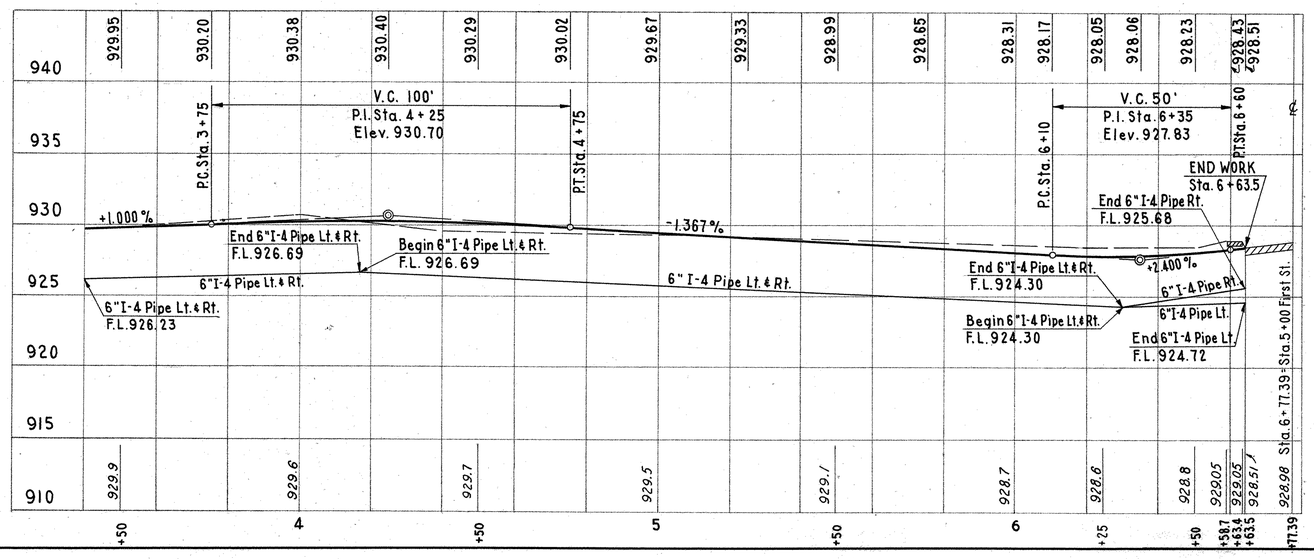
FED. RD DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

36

STA -21-10.23

B.M. No. 21-3 Elev. 946.59
Cut S.E. Corner S.E. Wing Wall
East end Viaduct Cherry Rd. N.W.
100' Lt. Sta. 599+50 10' S. of S. Bridge
Rail East End at Tuscarawas River.





CODE U-1010(5) 5% CITY						
DRIVE						
STATION	SIDE	ITEM E-1 Roadway		ITEM B-19 6"	ITEM T-70	
		Exc.	Emb.	C.Y.	S.Y.	
5+40	Rt.	7	0	7		
6+10	Lt.	1	0	0	19	
TOTALS		8	0	7	19	

CODE U-1010(5) 5% CITY		
ITEM E-8		
Removal & Disposal of Existing Sidewalk	390	Sq. Ft.
Removal & Disposal of Curb, Curb & Gutter or Header Curb	78	Lin. Ft.
Removal & Disposal of Existing Pavement	—	Sq. Yds.

CODE U-1010(5) 5% CITY						
STORM SEWERS						
REF. NO.		STATION			I-2 (LIN. FT.)	I-8 (EACH)
From	To	From	To	Side	12" Class B Storm Sewer Under Pavement or Approaches	Standard Catch Basin No. 3
516 S	517 S	6+30 Third St. Conn.	6+30	Lt. & Rt.	26	1
517 S	518 S	6+30	5+87.5 First St.	Lt. & Rt.	88	1
TOTALS					114	2

For Intersection Detail of Third St. Conn.
See Sheet No. 83

For Profiles of Storm Sewer
See Sheet No. 90

Scale: Hor. 1" = 20'
Vert. 1" = 5'

LINE & PROFILE SHEET THIRD ST. CONN. STA. 3+50 TO STA. 6+77.39

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

37

STA.- 21 - 10.23

℄ Survey Line

539+00
925
W 70'Rt.
F.L. 921.61

538+00
925
W 70'Rt.
F.L. 921.48

537+00
925
W 70'Rt.
F.L. 921.35

536+91.29
925
W 70'Rt.
F.L. 921.34

936.47
539+00
926.8

938.98
538+00
927.2

941.98
537+00
927.0

942.24
536+91.29
926.9

R/W
105'

F.L. 923.8

RW
110'

Sta. 538+78

W 80'Lt.

538+00
925

F.L. 923.3

RW
119'

W 80'Lt.

537+00
925

F.L. 922.8

RW
119'

W 80'Lt.

536+91.29
925

F.L. 922.76

Future

RW

Sta. 538+78
Begin Embankment
Area 0

Sta. 533+65

Begin Seeding
Sta. 533+10

Begin Ditch Lt.
Sta. 533+10

Scale 1" = 5'

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		86	1065		
192					75 434
291					
46		98	0		
399					289 0
46		102	0		
					393 0
511					
		110	0		
46					36 0
45					
		114	0		
46					1378 0
415		114	0		
					116 0
46		0			

10 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS- STA 536+91.29 TO STA 539+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	U-UG-1010(5)

58

STA.- 21 - 10.23

SEEDING

END WIDTH	SQ. YDS.
96	1089
100	1350
143	1144
63	175
63	158
192	1458

	END AREAS		VOLUME	
	CUT	FILL	CUT	FILL
	48	894		
			156	3119
	36	790		
			148	2852
	44	750		
			111	2870
	16	800		
			189	3454
	86	1065		

℄

543+00 925 — M 70'Rt. — R/W — F.L. 923.40

R/W — M 80'Lt. — 542+00 925 — F.L. 925.8

Existg. San. Sewer

935.71 543+00 926.3

M 70'Rt. — R/W — 542+00 925 — F.L. 923.04

M — F.L. 925.3

934.80 542+00 926.3

R/W — M 80'Lt. — 541+00 925

M 70'Rt. — 541+00 925 — F.L. 922.68 — R/W

M — F.L. 924.8

934.38 541+00 926.4

R/W — M 80'Lt. — 540+00 925

M — F.L. 924.3

Sta. 539+75 Ahead Back Sta. 539+00

934.94 540+00 926.4

Match Line Edwin Ave Sta. 5+50

Scale 1"=5'

Sta. 539+00

80 70 60 50 40 30 20 10 — 10 20 30 40

CROSS SECTIONS - STA. 540+00 TO STA. 543+00

SEEDING	
SHO WIDTH	SQ. YDS.

PROJ. NO. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.- 21 - 10.23

39

SHO AREA		VOLUME	
CUT	FILL	CUT	FILL

℄

547+00
925
M 70'Rt.
R W
F.L. 924.84

110
R W
F.L. 928.25
1222

939.35
547+00
927.8
Existg. San. Sewer

M
24 1196

546+00
925
M 70'Rt.
R W
F.L. 924.48

104 4211

110
R W
F.L. 927.3

938.44
546+00
927.9
Existg. San Sewer

M
32 1078

545+00
925
M 70'Rt.
R W
M
F.L. 924.12

1217
111 3941

109
R W
F.L. 926.8

M
28 1050

937.53
545+00
926.8
Existg. San. Sewer

1211

544+00
925
M 70'Rt.
R W
F.L. 923.76

144 3685

109
R W
F.L. 926.3

M
50 940

936.62
544+00
926.7
Existg. 48" Seg. Blk. San. Sewer

1139
182 3396

96
Sta. 543+00

Sta. 543+00
48 894

70 60 50 40 30 20 10 10 20 30 40

Scale = 1" = 5'

CROSS SECTIONS STA 544+00 TO STA 547+00

SEEDING	
END WIDTH	SQ YDS
99	969
97	1078
97	1139
108	1211

FED. AID DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	40

STA.- 21 - 10.23

ENG. AREA		VOLUME	
EXP.	REC.	CUT	FILL
		64	1318
		227	4141
		14	1194
		274	4493
		14	1232
		337	4637
		108	1272
		244	4570

R/W

F.L. 933.93

942.89
550+89.02
929.6

550+89.02
925
70'Rt.

F.L. 927.25

shed

Existg. San. Sewer

550+00
925
70'Rt.

F.L. 926.61

R/W

F.L. 933.4

942.08
550+00
929.8

Existg. San. Sewer

549+00
925
70'Rt.

F.L. 925.91

R/W

F.L. 932.8

941.17
549+00
929.0

Existg. San. Sewer

548+00
925
70'Rt.

F.L. 925.20

R/W

F.L. 930.53

940.26
548+00
928.4

Existg. 48" Seg. Blk. San. Sewer

Sta. 547+00

70 60 50 40 30

Scale 1"=5'

Sta. 547+75 Rt.
Begin L-10 Sodding
Width 9.5

SEEDING

END AREA		VOLUME	
CUT	FILL	CUT	FILL

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

41

STA.- 21 - 10.23

Sta. 552+60 ± Existing Toe Drain Begins

RW 92.5'

Back Area

Match Line Walnut Rd.

944.44
552+58.8
938.6

Back Area

Match Line Walnut Rd.

Ahead 0 1106
Back 0 672

54

Begin Seeding
Sta. 552+58.8

1 303

Match Line Walnut Rd.

Existg. San Sewer

Match Line Walnut Rd.

944.26
552+39.8
941.6

2 190

4 311

Match Line Walnut Rd.

Existg. San. Sewer

Match Line Walnut Rd.

943.79
551+88
941.2

2 134

1 327

RW 96

RW 90'

Area Ahead Match Line Walnut Rd. Sta. 11+00

Area Ahead Match Line Walnut Rd. Sta. 10+00

Existg. San Sewer

72

End Seeding
Sta. 551+72.2

190

Sta. 551+70 ± Existing Toe Drain Ends

943.65
551+72.2
933.1

Ahead 0 982
Back 0 1370

Sta. 551+06 Rt.
End L-10 Sodding
Width 9.5

Scale 1"= 5'

99 4141

Existg. 18" Pipe

Existg. 48" Seg Blk. San. Sewer

99

Sta. 550+89.02

Sta. 550+89.02 64 1318

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS- STA. 551+72.2 TO STA. 552+58.8

FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.- 21 - 10.23

42

SEEDING

END WIDTH	SQ. YDS.
93	648
99	434
100	1111
100	352
54	

RW 87'

Top of Dike

RW 89'

Top of Dike

RW 90'

Top of Dike

RW 92'

Top of Dike

℄

946.58
555+00
933.63

946.08
554+39.28
933.7

945.72
554+00
933.2

944.81
553+00
935.6

70'Rt.
555+00
930
F.L. 929.7

RW

70'Rt.
554+39.28
930
F.L. 929.4

Existg. San. Sewer

70'Rt.
554+00
930
F.L. 929.2

Existg. San. Sewer

70'Rt.
553+00
930
F.L. 928.7

Existg. 48" Seg. Blk. San Sewer

END AREA		VOLUME	
CUT	FILL	CUT	FILL
30	1524		
90	3337	100	
50	1444		
77	2066	100	
56	1396		
207	4811		
56	1202		
43	1761		
0	1106		

Sta. 552+58.8

60 50 40 30 20 10

Scale 1"= 5'

10 20 30 40

Sta. 552+58.8 Ahead

CROSS SECTIONS- STA. 553+00 TO STA. 555+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	U-UG-1010(5)

43

STA.- 21 - 10.23

SEEDING	
END WIDTH	SQ. YDS.
97	1122
105	1172
106	1106
93	

END AREA		VOLUME	
CUT	FILL	CUT	FILL
25	1190		
5	1454	56	4896
43	5478		
18	1504	89	5608
30	1524		

70 60 50 40 30 20 10 0 10 20 30 40

Sta. 555+00

℄

RW

T T

945.56
558+00
934.99

M
70'Rt.
558+00
930
F.L. 931.2

RW

T

945.56
558+00
934.99

M
70'Rt.
557+00
930
F.L. 930.7

RW

Existg. San. Sewer

End Toe Drain
Sta. 556+50 Lt.

RW
84'

946.55
557+00
934.12

M
70'Rt.
556+00
930
F.L. 930.2

RW

Existg. San. Sewer

946.89
556+00
933.52

Existg. 48" R.C.C. San. Sewer

Scale: 1" = 5'

CROSS SECTIONS STA. 556+00 TO STA. 558+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

44

STA.- 21 - 10.23

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
69					
	761	R W	R W		
		F.L.932.86	F.L.932.98		
		935.30			
		562+00			
		939.92			
			484	0	
					1052 111
68					
	922	R W	R W		
		F.L.936.06	F.L.936.29		
		938.61			
		561+00			
		939.58			
			84	60	
					156 1104
98		R W	M R W		
			70'Rt.		
			560+00		
			930		
		F.L.939.26			
	1072				
		941.58			
		560+00			
		937.4			
			M		
			70'Rt. R W		
			559+00		
			930		
			0	536	
					80 2322
					Existing 48" R.C.C. San. Sewer
95		R W	M		
	1067				
		943.90			
		559+00			
		936.24			
			43	718	
			F.L.931.7		126 3533
97		Sta. 558+00			
					25 1190

Scale: 1"=5'

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS STA.559+00 TO STA.562+00

FED. AID DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

45

STA.- 21 - 10.23

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
20		1106	0		
	391			2897	7
		652	4		
	261			989	11
		620	10		
53				1285	30
	342				
53		576	18		
	678			1963	33
		484	0		
69					

Sta. 564+25 Lt.
Begin Paved Gutter
Std. Type - 2

929.76
564+89
935.0

930.62
564+00
930.1

932.48
563+00
931.4

Sta. 562+50 Rt.
Begin Paved Gutter
Std Type - 2

Sta. 563+58

Sta. 562+00

Abut.

F.L. 928.49

F.L. 928.53

F.L. 928.30

F.L. 929.23

F.L. 929.66

F.L. 931.11

RW 89.5

R W

70 60 50 40 30 20 10 ℄ 10 20 30 40

Scale: 1"=5'

CROSS SECTIONS STA. 563+00 TO STA. 564+89

FED. AID DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

46

STA.- 21 - 10.23

SEEDING

CHO WIDTH	SQ. YDS.
69	
794	
74	
432	
18	
56	
20	

Sta. 567+50 Lt.
End Paved Gutter
Std. Type-2

M
10' Rt.
567+00
925

R/W

℄

Abut.

F.L. 929.46

930.78
567+00
946.34

F.L. 924.65

Abut.

F.L. 928.43

929.77
566+00
950.4

M
10' Rt.
566+00
940

Sta. 566+50 Rt.
End Paved Gutter
Std. Type 2

F.L. 927.97

Abut.

F.L. 928.35

929.66
565+15.5
945.3

Abut.

F.L. 928.40

Sta. 564+89

Scale: 1"=5'

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
M	1760	0		
			8011	0
M	2566	0		
			6131	0
			1352	0
			1206	0
Sta. 564+89	1106	0		

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS STA. 565+15.5 TO STA. 567+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

47

STA.- 21 - 10.23

SEEDING

END WIDTH	SQ. YDS.
117	1083
115	70
115	370
111	810
69	

RW 87'

F.L. 930.77

934.75
569+00
933.13

Sta. 568+16

RW 86'

Existg. San. Sewer

F.L. 930.10

932.89
568+10.5
933.5

RW 85'

F.L. 929.88

932.28
567+81
942.4

Sta. 567+00

70 60 50 40 30 20 10 ℄ 10 20 30 40

RW

NL 70'Rt. 569+00 930

NL 522 32

F.L. 924.38

RW

NL 70'Rt. 568+10.5 930

Sta. 568+16 875 2

NL 898 0

F.L. 924.50

RW

NL 70'Rt. 567+81 930

NL 1204 0

F.L. 924.54

Existg. 48" Brick San. Sewer

Scale: 1" = 5'

Sta. 567+00 1760 0

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	522	32		
			2173	53
	875	2		
			181	0
	898	0		
			1148	0
	1204	0		
			4446	0
	1760	0		

CROSS SECTIONS STA. 567+81 TO STA. 569+00

FED. RW DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

48

STA.- 21 - 10.23

SEEDING

END WIDTH	SQ. YDS.
121	
133	
119	
132	
119	
186	
115	
110	
117	

RW 86'

F.L. 933.00

RW 86.5'

F.L. 932.25

RW 87.5'

F.L. 931.51

RW 87.5'

F.L. 931.40

RW 87.5'

Sta. 569+00

938.61
572+00
931.0

Existg San. Sewer

938.04
571+00
930.99

Existg. San. Sewer

936.73
570+00
931.0

Existg. San. Sewer

936.47
569+85.71
931.1

Existg. 48" Seg. Block San. Sewer

572+00
930
70' Rt.

571+00
930
70' Rt.

570+00
930
70' Rt.

569+85.71
930
70' Rt.

F.L. 923.97

F.L. 924.11

F.L. 924.24

F.L. 924.26

Scale: 1" = 5'

END AREA		VOLUME	
CUT	FILL	CUT	FILL
136	658		
		548	2308
160	588		
		793	1889
268	432		
		140	215
260	382		
		1241	657
Sta. 569+00		522	32

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - STA. 569+85.71 TO STA. 572+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	U-UG-1010(5)

49

STA.- 21 - 10.23

SECTIONS

END WIDTH	SQ YDS.
123	1333
117	1356
127	1378
121	

℄

M

R W

Drive

575+00
935
10' Rt.

RW
85'

F.L. 931.50

935.81
575+00
935.06

M

Drive

RW
85.5'

Pump House
Floor

F.L. 932.45

Existing Pressure Conduit

RW
89'

Existg. San. Sewer

937.49
574+00
925.2

RW
86'

F.L. 933.40

M

R W

938.43
573+00
932.06

10' Rt.

573+00
925

Existg. Seg. Blk. San. Sewer

F.L. 923.84

Scale: 1" = 5'

Sta. 572+00

Sta. 572+00

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
36	48		
		70	1752
2	898		
		370	2656
198	536		
		619	2211
		136	658

70 60 50 40 30 20 10 ℄ 10 20 30 40

CROSS SECTIONS - STA. 573+00 TO STA. 575+00

SEEDING	
END WIDTH	SQ YDS.
52	
	522
42	
	739
	91
	989
	87
	1167
123	

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	U-UG-1010(5)

50

STA.- 21 - 10.23

END AREA		VOLUME	
CUT	FILL	CUT	FILL
	232 6		
			874 30
	240 10		
			1356 33
	492 8		
			1535 37
	336 12		
			689 111
	36 48		

R/W

F.L. 927.50

2-Sty Shingle
1st. FL. Elev. 933.52

Match Line
Charles Ave.

930.29
579 +00
932.15

R/W

F.L. 928.50

Match Line
Charles Ave.
Sta. 9+75

931.00
578 +00
931.65

Sta. 9+37-Lt. Charles Ave.
End L-10 Sodding
4.5' Width

R/W

F.L. 929.50

F.L. 934.00

70' Rt.

R/W

931.87
577 +00
936.28

Sta. 577+40-Rt.
Begin L-10 Sodding
4.5' Width

Pier

R/W

F.L. 930.50

F.L. 935.00

70' Rt.

R/W

933.53
576 +00
934.4

Sta. 575+00

70 60 50 40 30 20 10 10

Scale: 1"=5'

Sta. 575+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

51

STA.- 21 - 10.23

SEEDING

END WIDTH	SQ. YDS.
41	280
43	317
52	185
43	528
52	

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
400	40	851	51
336	6	671	18
238	10	332	13
274	10	937	30
232	6		

R/W

F.L. 931.22

928.91
581+55.05
929.6

R/W

F.L. 929.84

928.96
580+95.05
933.0

Sta. 580+50 Lt.
Begin *Comb. Barrier* Curb & Gutter

R/W

F.L. 928.46

929.33
580+35.05
932.8

Sta. 580+15 Lt.
Begin Paved Gutter
Std. Type 2

R/W

Garage
Fl. Elev. 933.8

929.58
580+00
932.87

Sta. 579+00

Scale: 1"= 5'

Sta. 579+00

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - STA. 580+00 TO STA. 581+55.05

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

52

STA. - 21 - 10.23

SEEDING

END WIDTH	SQ. YDS.
9	48
9	43
13	23
10	66
9	278
41	

R/W

F.L. 935.90

End Retaining Wall - Sta. 584+43

Drive

932.51
584+18
928.4

F.L. 935.62

1st Fl. Elev. 936.65

Basement Elev. 923.84

931.55
583+10
927.5

F.L. 935.20

Begin Retaining Wall - Sta. 583+50

1st Fl. Elev. 936.65

PROGRESSIVE CHEVROLET GARAGE

Basement Elev. 923.84

930.85
583+35.05
926.94

F.L. 934.90

930.52
583+17.30
927.0

F.L. 933.52

929.60
582+55.05
925.9

Sta. 581+55.05

Scale: 1" = 5'

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
60	100		
		75	174
24	96		
28	94		
20	50		
		18	29
34	38		
		72	83
28	34		
		792	137
400	40		

Sta. 581+55.05

50 40 30 20 10 10 20 30 40 50 60

CROSS SECTIONS - STA. 582+55.05 TO STA. 584+18

SEEDING	
END WIDTH	SQ. YDS.
22	122
22	200
50	611
60	276
9	

FED. AID DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

53

STA.- 21 - 10.23

END AREA		VOLUME	
CUT	FILL	CUT	FILL
22	132		
		39	252
20	140		
20	457		
2	354		
11	985		
4	178		
		85	371
60	100		

R/W

F.L. 936.72

Ohio Drilling Co.

R/W

Proposed Bldg. Wall
Approx. Location

936.60
586+90
934.1

R/W

F.L. 936.21

R/W

936.16
586+40
933.07

R/W

F.L. 935.71

Existing Pumping Station

L/A

3 Existing 30" Steel Pipes

R/W

Sta. 585+00 Lt.
End Comb. Barrier Curb & Gutter

935.56
585+90
931.6

2-60" Cast Iron Pipes

R/W

Seeding Limit

F.L. 936.12

L/A

933.94
584+90
929.0

Scale: 1" = 5'

Sta. 584+18

Sta. 584+18

50 40 30 20 10 | 10 20 30 40 50 60

CROSS SECTIONS - STA. 584+90 TO STA. 586+90

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

54

STA.- 21 - 10.23

SEEDING

END WIDTH	SQ. YDS.
40	194
30	153
25	139
25	131
22	

℄

R|W

F.L. 937.43

Sta. 588+60
Begin Paved Gutter
Std. Type

937.72
588+90
933.85

R|W

F.L. 932.10

48 218

R|W

F.L. 937.17

Sta. 588+50-Lt
End Paved Gutter
Std Type 2

937.45
588+40
933.77

Pipe Shed

R|W

28 190

R|W

F.L. 937.02

Ohio Drilling Co.

1st Fl. Elev. 934.07

937.18
587+90

R|W

Proposed Bldg. Wall
Approx. Location

20 146

44 311

44 276

R|W

F.L. 936.87

Ohio Drilling Co.

R|W

Proposed Bldg. Wall
Approx. Location

1st Fl. Elev. 934.07

936.91
584+40

28 152

46 263

Sta. 586+90

Sta. 586+90

22 132

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		70	378

Scale: 1" = 5'

50 40 30 20 10 ℄ 10 20 30 40 50 60

CROSS SECTIONS - STA. 587+40 TO STA. 588+90

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

55

STA - 21 - 1023

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS	CUT	FILL	CUT	FILL
36					
	203			18	126
37				35	250
	211			20	144
39				59	280
	219			44	158
40				67	296
	222			28	162
40				70	352
				48	218

R/W — F.L. 938.63 — F.L. 934.70 — R/W

938.80
590+90
935.39

R/W — F.L. 938.33 — F.L. 934.20 — R/W

938.53
590+40
935.1

R/W — F.L. 938.03 — F.L. 933.10 — R/W

1st fl Elev. 940.31

R.C. Bottling Plant

938.26
589+90
934.83

R/W — F.L. 937.73 — F.L. 933.20 — R/W

937.99
589+40
934.5

Sta. 588+90 — Sta. 588+90

Scale: 1" = 5'

50 40 30 20 10 0 10 20 30 40 50 60

CROSS SECTIONS – STA. 589+40 TO STA. 590+90

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA - 21 - 1023

56

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
53	333			26	244
47	250			16	188
43	228			8	154
39	208			12	122
36				18	126

		47	480
		22	317
		19	256
		28	230

R/W

F.L. 939.78

Garage

1st. Fl. Elev. 938.68

F.L. 934.90

Basement Elev. 930.93

939.93
593+00
936.07

R/W

F.L. 939.53

Warehouse

R/W

F.L. 935.32

939.61
592+40
936.2

R/W

F.L. 939.23

1st Fl. Elev. 940.38

R/W

F.L. 935.67

939.34
591+90
935.87

R/W

F.L. 938.93

R/W

F.L. 935.20

939.07
591+40
936.4

Sta. 590+90

Scale: 1" = 5'

Sta. 590+90

50 40 30 20 10 0 10 20 30 40 50 60

CROSS SECTIONS - STA. 591+40 TO STA. 593+00

FED. AID DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

57

STA - 21 - 1023

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
59					

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

58

STA - 21 - 1023

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS	CUT	FILL	CUT	FILL
62					
		12	574		
344				24	1041
62					
		14	550		
342				19	939
61					
		6	464		
333				32	778
59		28	376		

Sta. 596+40 Lt
End Paved Gutter
Std Type 2

R|W
F.L. 940.88

941.55
596+00
934.15

R|W
F.L. 934.20

Sta. 595+75-Rt.
End L-10 Sodding
Width 8.5'

R|W
F.L. 940.10

Sta. 595+55-Rt.
Begin L-10 Sodding
Width 8.5'

R|W
F.L. 933.15

941.28
595+50
934.1

R|W
F.L. 940.52

EXISTING PUMP STATION

R|W
F.L. 933.50

941.01
595+00
935.34

Existing 3-Pipe Siphon - 10", 15", 18" VP

Existing 30" Pipe

Scale: 1"=5'

Sta. 594+50

Sta. 594+50

50 40 30 20 10 0 10 20 30 40 50 60

CROSS SECTIONS - STA. 595+00 TO STA. 596+00

FED. AID DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA - 21 - 1023

59

SEEDING

RAD WIDTH	SQ YDS.
77	
	417
62	
	539
35	
	472
50	
	622
62	

RAD AREA

CUT	FILL
88	350
120	282
48	224
18	466
12	574

VOLUME

CUT	FILL
208	632
311	937
122	1278
56	1926

R|W

℄

940.10
599+54
941.23

941.31
599+00
940.68

941.96
598+00
937.9

942.02
597+00
934.4

M 75'Rt.
599+54
930

M 75'Rt.
599+00
930

M 73'Rt.
598+00
930

Sta. 598+50 Lt.
End Paved Gutter
Std Type 2
F.L. 941.05

Sta. 596+50 Lt.
Begin Paved Gutter
Std. Type 2
F.L. 940.80
F.L. 941.05

F.L. 938.20

F.L. 937.50

RW 80'

Scale : 1"=5'

Sta. 596+00

70 60 50 40 30 20 10 ℄ 10 20 30 40

Sta. 596+00

CROSS SECTIONS - STA. 597+00 TO STA. 599+54

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA - 21 - 1023

60

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
24					
144		36	0		
				72	11
28					
186		42	12		
				143	287
39					
383		112	298		
				300	724
99					
450		212	484		
				256	710
77		88	350		

Existing R/W

E-8 Removal

Match Line Cherry Rd. Sta. 4+25

R/W

938.56
601+50
938.7

938.88
601+00
939.0

NW 75'Rt.
600+50
930

Match Line Cherry Rd. Sta. 5+50

RW 97'

939.50
600+50
940.2

NW 75'Rt.
600+00
930

Match Line Cherry Rd. Sta. 6+00

940.13
600+00
941.1

Scale 1"=5'

Sta. 599+54

70 60 50 40 30 20 10 10 20 30 40

Sta. 599+54

FED. RD. DIV. NO.	STATE	PROJECT	
2	ORE.	U-UG-1010(5)	

STA. 21-10.23

61

SEEDING

END WIDTH	SQ. YDS.
6	41
10	44
7	127
36	167
24	

Existing R | W

E-8 Removal

R | W

School

940.66
603+46
941.1

Existing R | W

Seeding Limit

R | W

E-8 Removal

School

940.10
603+00
940.6

Existing R | W

E-8 Removal Back

E-8 Removal Bk. & Ah.

R | W

939.52
602+53
940.1

Existing R | W

RW 95'

E-8 Removal

938.87
602+00
939.4

Scale: 1"=5'

Sta. 601+50

Sta. 601+50

70 60 50 40 30 20 10 ℄ 10 20 30 40

CROSS SECTIONS - STA. 602+00 TO STA. 603+46

FINE AREA		TO-SOIL	
CUT	FILL	CUT	FILL
38	2		
		73	2
48	0		
		68	2
Ahead 30	2		
Back 48	2		
		124	2
78	0		
		106	0
36	0		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

62

STA. 21-10.23

SEEDING END WIDTH	SEEDING SQ. YDS.
19	30
19	356
45	433
33	300
21	81
6	

End Seeding
Sta. 607+14

607 +00
940.3

End Earthwork
Sta. 607+14

Seeding Limit

F.L. 932.90

R | W

E-8 Removal

941.22
606 +00
941.9

Sta. 606+50

Seeding Limit

F.L. 933.40

R | W

E-8 Removal

941.63
605 +00
942.2

F.L. 933.90

R | W

E-8 Removal Back

941.23
604 +00
941.7

Seeding Limit

R | W

Sta. 603+46

Scale: 1"=5'

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	2	0		
			1	0
	2	0		
			4	0
Sta. 606+50 Ahead	2	0		
Back	44	16		
			81	30
	44	16		
			193	56
	60	14		
			189	89
Ahead	42	34		
Back	30	34		
			68	36
Sta. 603+46	38	2		

70 60 50 40 30 20 10 ℄ 10 20 30 40

CROSS SECTIONS - STA. 604+00 TO STA. 607+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA: 21-10.23

G3

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
86		226	0		
	242				201 0
88					
	225	208	0		
					186 0
74		194	0		
	107				177 0
		172	0		
0					

℄

R | W — Building

931 .22
1+ 00
934 .8

R | W — First Floor Elevation — Building

931 .67
0+ 75
934 .9

R | W — Building

932 .13
0+ 50
934 .4

932 .60
0+23.9
932 .60

Begin Seeding
Sta. 0+23.9

Begin Earthwork
Sta. 0+23.9 (Full Area)

Scale: 1"=5'

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - EDWIN AVENUE - STA. 0+23.9 TO STA. 1+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA: 21-10.23

G4

SEEDING		END AREA		VOLUME	
END WIDTH	30 YDS.	CUT	FILL	CUT	FILL
105					
	1089	18	212		
				193	393
91					
		86	0		
	259				
				152	0
88					
		230	0		
	235				
				212	0
88					
		246	0		
	483			437	0
86		226	0		

R W

Existing 54" Brick San. Sewer

F.L. 924.82

929.80
3+00
925.3

F.L. 923.65

Sta. 3+00-Rt.
Begin L-10 Sodding
Width 11.0'

929.70
2+00
930.7

929.26
1+74
934.0

Shed

930.31
1+50
934.3

Scale: 1"=5'

Sta. 1+00

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - EDWIN AVENUE - STA. 1+50 TO STA. 3+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	U-U6-1010(5)

STA. 21-10.23

G5

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		934.25 / 5+75 / 926.2			
134		0	546		
	381	933.84 / 5+50 / 926.0		0	467
140		0	462		
	399	933.42 / 5+25 / 926.0		0	423
147		0	452		
	1478	933.00 / 5+00 / 925.6		85	1433
119		46	322		
	1244	931.33 / 4+00 / 925.6		119	989
105		18	212		

End Seeding
Sta. 5+50

Seeding Limit

End Earthwork
Sta. 5+50 (Full Area)

Seeding Limit
106'

Seeding Limit

Seeding Limit
112'

Seeding Limit

Seeding Limit
122'

Sta. 5+00-Rt.
End L-10 Sodding
Width 11.0'

R W

F.L. 923.09

R W

F.L. 922.95

Existing 54" Brick San. Sewer

Scale: 1"=5'

Sta. 3+00

Sta. 3+00

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - EDWIN AVENUE - STA. 4+00 TO STA. 5+75

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.-21-10.23

66

SEEDING END WIDTH	SEEDING SQ. YDS.
72	
	214
5	
	42
10	

END AREA SQ. FT.	END AREA SQ. FT.	VOLUMES CU. YDS.	VOLUMES CU. YDS.
2	178		
		37	174
38	10		
		72	10
40	1		

R | W

937 .50
9+ 00
934 .67

R | W

Existing R | W

Factory

934 .75
8+ 50
934 .18

Existing R | W

Existing R | W

Begin Seeding
Sta. 8+00

8+ 00
934 .54

Begin Earthwork
Sta. 8+00 (Full Area)

1+ 75
934 .70

Scale: 1"=5'

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS (WALNUT ROAD)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.-21-10.23

67

SEEDING

CHD WIDTH	SQ. YDS.
13	
122	
75	
236	
95	
464	
72	

END AREA

CUT	FILL
0	456
0	409
0	428
0	363
0	356
0	494
L	178

VOLUME

CUT	FILL

℄

10+14.67
939.19

943.23
10+00
938.42

942.35
9+75
937.12

941.03
9+50
936.05

End Seeding
Sta. 10+00

Match Line - Main Line Sta. 551+72.2

Area

End Earthwork
Sta. 10+00 (Full Area)

Area

Match Line - Main Line Sta. 552+58.8

Seeding Limit

Seeding Limit

R/W
79'

R/W

Scale: 1"=5'

Sta. 9+00

Sta. 9+00

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS WALNUT ROAD

FED. AID DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

68

STA: 21-10.23

SEEDING	
END WIDTH	SQ. YDS.
10	
18	
28	
88	
35	
54	
4	

End Seeding
Sta. 11+58.3

Existing R | W

Existing R | W

End Earthwork
Sta. 11+58.3 (Full Area)

11+ 58.3
943 .88

R | W

R | W

943 .91
11+ 50
943 .83

Match Line - Main Line

Match Line - Main Line

943 .94
11+ 25
943 .45

Match Line - Main Line Sta. 551+72.2

Match Line - Main Line Sta. 552+58.8

943.99
11+ 00
942 .90

Begin Seeding
Sta. 11+00

Begin Earthwork
Sta. 11+00 (Full Area)

Scale: 1"=5'

END AREA CUT	END AREA FILL	VOLUMES CUT	VOLUMES FILL
38	0		
		12	0
38	0		
		36	60
40	130		
		32	135
30	162		

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS-WALNUT ROAD-STA.11+00 TO STA.11+58.3

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

69

STA: 21-10.23

SEEDING	
END WIDTH	SQ. YDS.
25	
	89
7	
	4
7	

END AREA		VOLUME	
CUT	FILL	CUT	FILL
72	0		
		111	0
48	0		
		9	0
48			

R | W

Existing R | W

℄

929.88
8+50
929.87

R | W

Seeding Limit

Existing R | W

930.59
8+00
930.58

Existing R | W

Seeding Limit

Existing R | W

Begin Seeding Sta. 7+95

7+95
930.65

Begin Earthwork Sta. 7+95

Existing R | W

Existing R | W

7+50
931.28

Scale: 1"=5'

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - CHARLES STREET - STA. 7+50 TO STA. 8+50

SEEDING	
END WIDTH	SQ YDS
61	
110	
18	
133	
30	
153	
25	

REG. NO. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

70

STA.-21-10.23

END AREA		VOLUME	
CUT	FILL	CUT	FILL
170	14		
		131	8
112	4		
		157	6
58	2		
		120	2
72	0		

℄

℄ 75' Lt.

9+75
930

End Seeding
Sta. 9+75

930.04
10+00
930.12

First Floor Elevation

RW
81'

End Earthwork
Sta. 9+75 (Full Area)

RW
82'

929.71
9+75
929.72

Match Line 3rd St.

Seeding Limit

First Floor Elevation

929.41
9+50
929.07

Match Line-3rd St. Sta. 10+25

R W

929.32
9+00
929.14

Scale: 1"=5'

Sta. 8+50

Sta. 8+50

10 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS-CHARLES STREET-STA.9+00 TO STA.10+00

FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA: 21-10.23

71

SEEDING		END AREA		VOLUME	
CHO WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
17		86	0		
	49			80	0
18		86	0		
	97			88	0
52		104	0		
	96			93	0
17		96	0		

Seeding Limit
R | W
933.17
1+00
933.4

Seeding Limit
R | W
933.84
0+75
934.8

Seeding Limit
R | W
934.48
0+50
935.7

R | W
935.02
0+25
934.8

Begin Seeding
Sta. 0+25

Begin Earthwork
Sta. 0+25

Scale: 1"=5'

10 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS-THIRD STREET CONN.-STA.0+25 TO STA.1+00

FED. RD. DIV.NO.	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.- 21-10.23

72

SEEDING

END WIDTH	SQ. YDS.
18	
	78
10	
	58
11	
	78
17	
	94
15	

Seeding Limit

R W

℄

R W

929.45
3+00
930.3

Match Line Weirich Blvd.

Seeding Limit

R W

929.51
2+50
930.2

Match Line Weirich Blvd.

Seeding Limit

R W

930.48
2+00
929.80

Seeding Limit

R W

931.83
1+50
933.3

Sta. 1+00

Sta. 1+00

Scale: 1"=5'

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
82	0		
		157	0
88	0		
		119	7
40	8		
		128	7
98	0		
		170	0
86	0		

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS-THIRD STREET CONN.-STA.1+50 TO STA.3+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA: 2.1 - 10.23

13

SEEDING		AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
22		38	10		
	111			61	15
18		28	6		
	114			43	26
23		18	22		
	114			52	26
18		38	6		
	100			111	6
18		82	0		

Seeding Limit — R W — ℄ — R W

929.67
5+00
929.5

Seeding Limit — R W — R W

930.29
4+50
929.7

Seeding Limit — R W — R W

930.38
4+00
929.6

Seeding Limit — R W — R W

929.95
3+50
929.9

Sta. 3+00

Scale: 1"=5'

Sta. 3+00

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS-THIRD STREET CONN.-STA.3+50 TO STA. 5+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

14

STA: 21-10.23

SEEDING LEND WIDTH	SEEDING CU. YDS.
0	
	11
15	
	51
22	
	58
20	
	114
21	
	119
22	

End Seeding
Sta. 6+63.5

Seeding Limit

928.51
6+63.5
928.54

Seeding Limit

First Floor Elev.?

End Earthwork
Sta. 6+63.5

928.23
6+ 50
928.8

Seeding Limit

R W

R W

Bldg.

928.05
6+ 25
928.6

Seeding Limit

R W

R W

First Floor Elev.?

928.31
6+ 00
928.7

Seeding Limit

R W

R W

First Floor Elev.?

928.99
5+ 50
929.1

Scale: 1"=5'

Sta. 5+00

Sta. 5+00

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
126	0		
		57	0
100	0		
		84	0
82	0		
		72	2
74	4		
		113	9
48	6		
		80	15
38	10		

70 60 50 40 30 20 10 ℄ 10 20 30 40

CROSS SECTIONS - THIRD STREET CONN. - STA. 5+50 TO STA. 6+63.5

FED. RD DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA: 21+10.23

75

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
14		50	3		
	60			86	6
6		36	3		
	97			109	4
19		48	0		

End Seeding
Sta. 24+54

Existing R/W

Existing R/W

End Earthwork
Sta. 24+54

935.62
24+54
935.62

Existing R/W

Match Line Third St. Conn.

935.38
24+00
935.22

Existing R/W

Existing R/W

Begin Seeding
Sta. 23+30

935.07
23+30
934.89

Begin Earthwork
Sta. 23+30

Scale: 1"=5'

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS-THIRD STREET-STA.23+30 TO STA.24+54

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA. 21-10.23

76

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
24			58	0		
	47				80	0
10			114	0		
	22				81	0
6			62	0		
	24				42	0
11			28	0		
	9				8	0
0			0	0		

Existing R/W

929.68
5+75
929.94

Match Line Third St. Conn.

Existing R/W

929.23
5+50
929.91

Match Line Third St. Conn.

Existing R/W

929.31
5+25
929.86

Match Line Third St. Conn.

Seeding Limit

929.88
5+00
929.92

Begin Seeding
Sta. 4+85

Begin Earthwork Rt.
Sta. 4+85

Scale: 1"=5'

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - WEIRICH BLVD. - STA. 5+00 TO STA. 5+75

SEEDING	
END WIDTH	SQ. YDS.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

77

STA: 21-10.23

END AREA		FIGURE	
CUT	FILL	CUT	FILL

8+00
930.73

7+50
930.58

7+00
930.39

6+50
930.10

End Seeding
Sta. 6+00

Existing
R/W

End Earthwork
Sta. 6+00

Existing
R/W

929.93
6+00
629.93

Scale: 1"=5'

Sta. 5+75

Sta. 5+75

| | | |

FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

78

STA: 21-10.23

SEEDING END WIDTH	SEEDING SD FDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		54	0		
18					
				50	0
74					
		54	0		
35					
				60	0
74					
		76	0		
18					
				99	9
53					
		138	20		
20					

℄

Existing R W

First Floor Elev.

End Seeding Sta. 11+00

931.39
11+00
931.52

End Earthwork Sta. 11+00

Seeding Limit

930.66
10+75
930.77

First Floor Elev.

929.93
10+50
929.99

Match Line Charles Ave. Sta. 9+75

Begin Seeding Sta. 10+25

Seeding Limit

Proposed Sidewalk

Begin Earthwork Sta. 10+25

10+25
929.03

Scale: 1"=5'

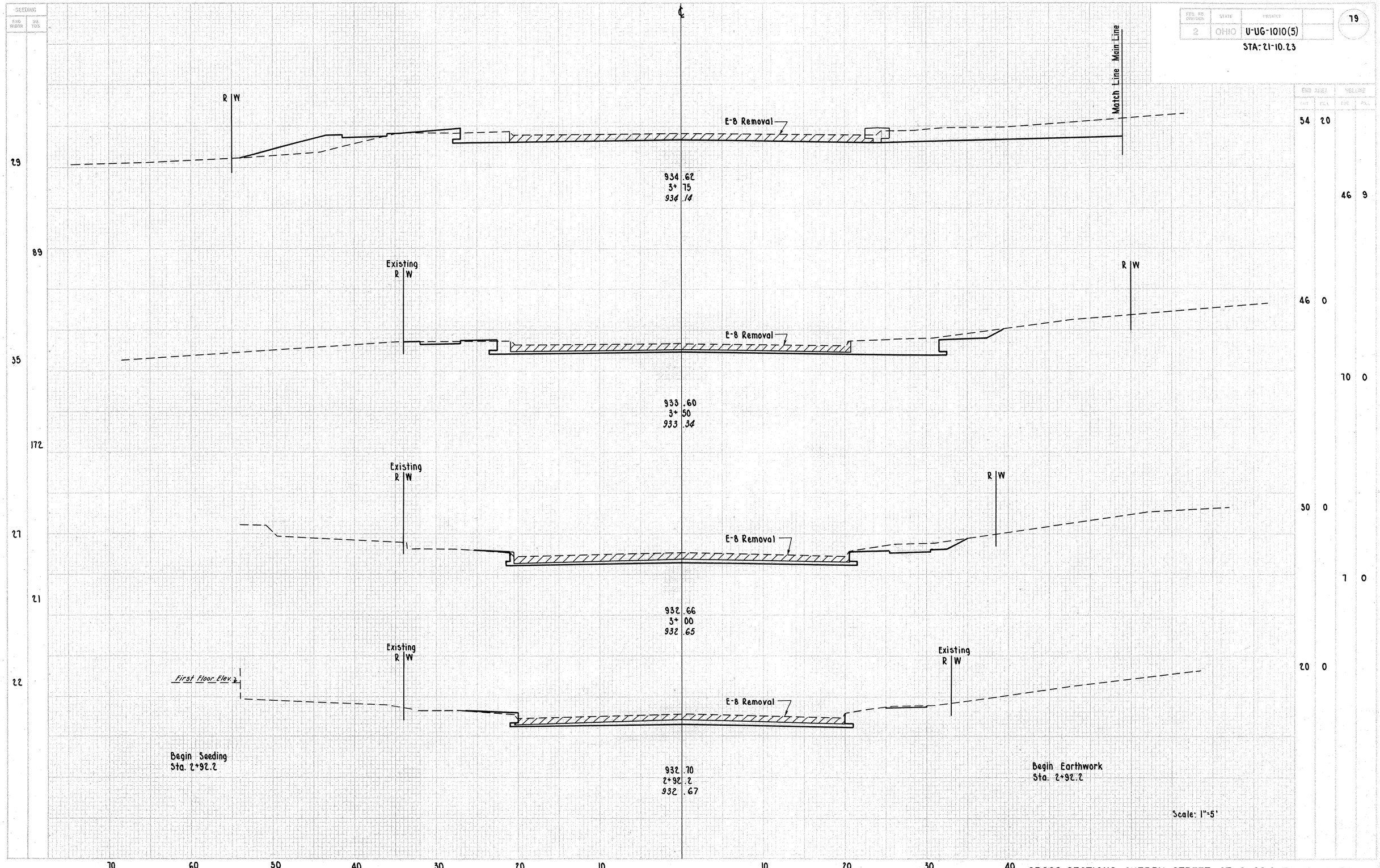
70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - THIRD STREET - STA. 10+25 TO STA. 11+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

79

STA: 21-10.23



SEEDING

END WIDTH	SQ. YDS.
	29
	89
	35
	172
	27
	21
	22

END AREA

CUT	FILL
54	20
46	0
30	0
20	0

VOLUME

CUT	FILL
46	9
70	0
7	0

GROSS SECTIONS-CHERRY STREET-STA.2+92.2 TO STA.3+75

SEEDING	
END WIDTH	SQ YDS.

FED. RD DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA: 21-10.23

80

END AREA		VOLUME	
CUT	FILL	CUT	FILL

939 .36
5+ 00
939 .91

937.56
4+ 50
937.50

936 .65
4+ 25
936 .39

935 .65
4+ 00
935 .23

M 75'Lt.

RW
122'

4+25
92.5

End Seeding
Sta. 4+25

End Earthwork
Sta. 4+25

Match Line: Main Line Sta. 601+50

E-8 Removal

M

94

235

RW
88'

75

144

29

E-8 Removal

Match Line Main Line

Sta. 3+75

70 60 50 40 30 20 10

Scale: 1"=5'

12 292

16 182

22 102

35 56

54 20

Sta. 3+75

PROJ. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA: 21-10.23

81

SEEDING	
END WIDTH	RD. YDS.
0	
	3
7	
	24
10	
	44
22	

End Seeding
Sta. 6+08.60

Match Line W. Sta. 600+00

℄

E-B Removal

944 .62
6+ 00
944 .65

End Earthwork
Sta. 6+08.60 (Use Area 6+00)

END AREA		VOLUME	
CUT	FILL	CU.	FILL
32	0		
		10	0
32	0		
		30	0
32	0		
		34	0
		42	0

Match Line

R | W

E-B Removal

943 .20
5+ 75
943 .48

Match Line Main Line Sta. 600+50

R | W

Begin Seeding
Sta. 5+50

E-B Removal

941 .59
5+ 50
942 .31

Begin Earthwork
Sta. 5+50

940 .40
5+ 25
941 .10

Scale: 1"=5'

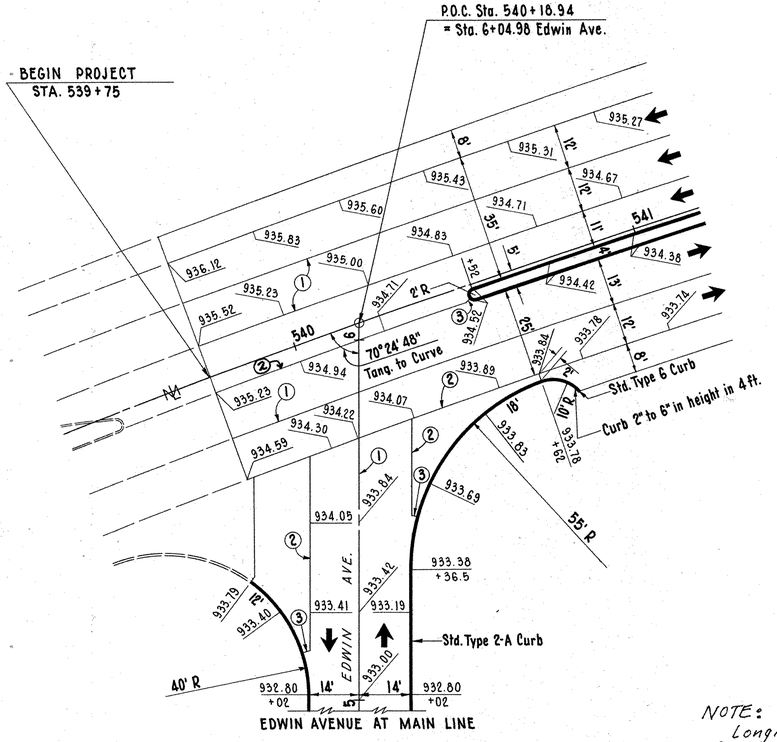
70 60 50 40 30 20 10 10 20 30 40

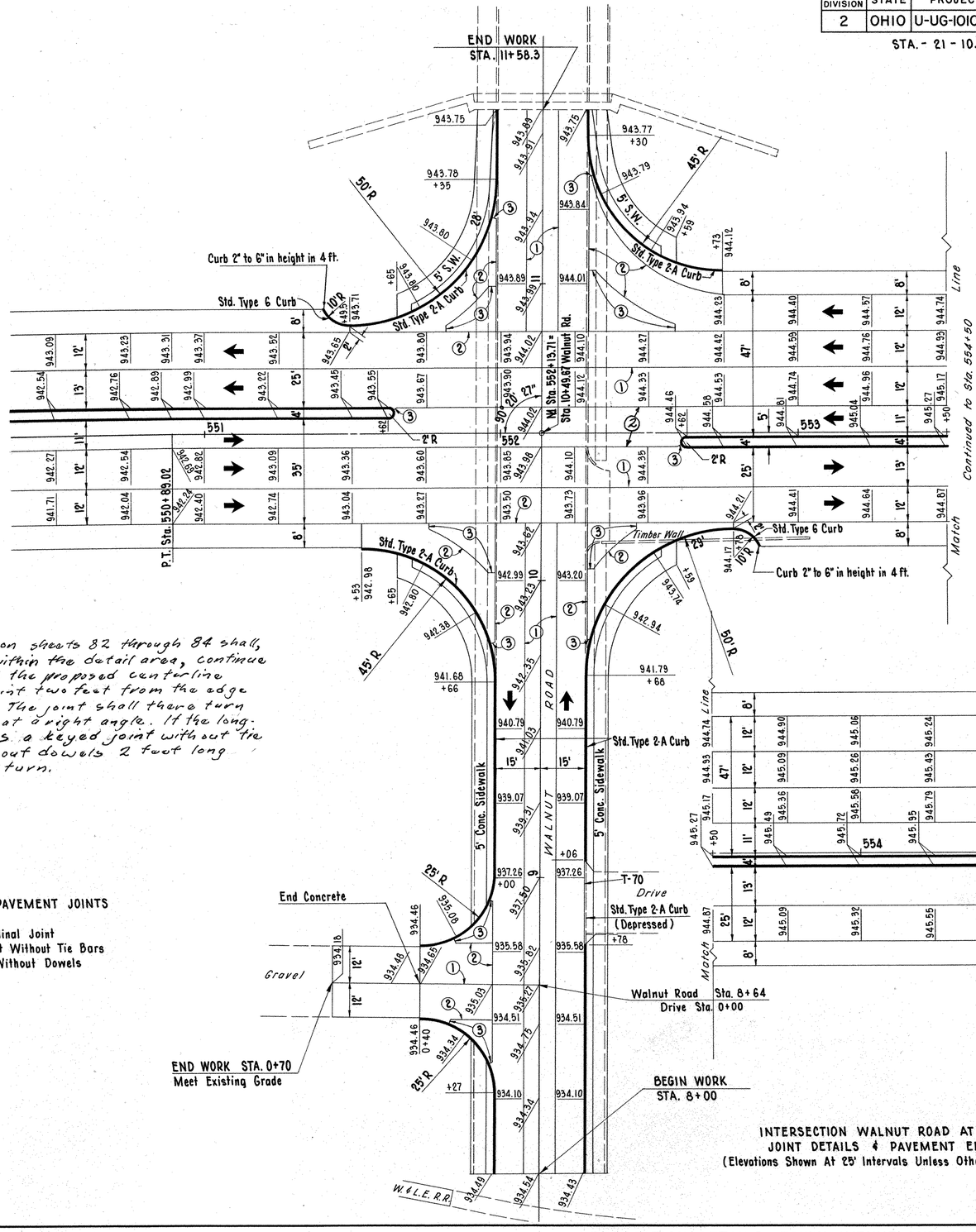
CROSS SECTIONS - CHERRY STREET - STA. 5+25 TO STA. 6+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

82

STA. - 21 - 10.23



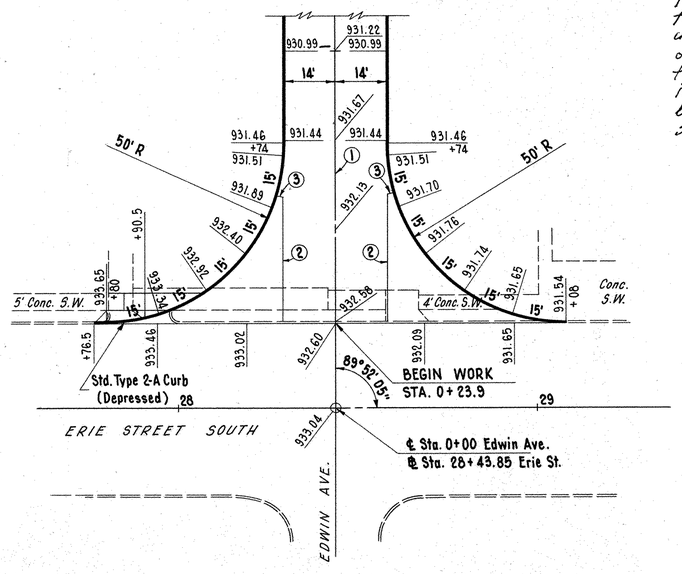


INTERSECTION WALNUT ROAD AT MAIN LINE
JOINT DETAILS & PAVEMENT ELEVATIONS
(Elevations Shown At 25' Intervals Unless Otherwise Indicated)

NOTE:
Longitudinal joints shown on sheets 82 through 84 shall, if termination is not shown within the detail area, continue forward and back parallel to the proposed centerline until the joint reaches a point two feet from the edge of the proposed pavement. The joint shall there turn to meet the pavement edge at a right angle. If the longitudinal joint is indicated as a keyed joint without tie bars, an expansion joint without dowels 2 feet long shall be provided at the turn.

LEGEND - FOR PAVEMENT JOINTS

(1) Standard Longitudinal Joint
(2) Standard Key Joint Without Tie Bars
(3) Expansion Joint Without Dowels



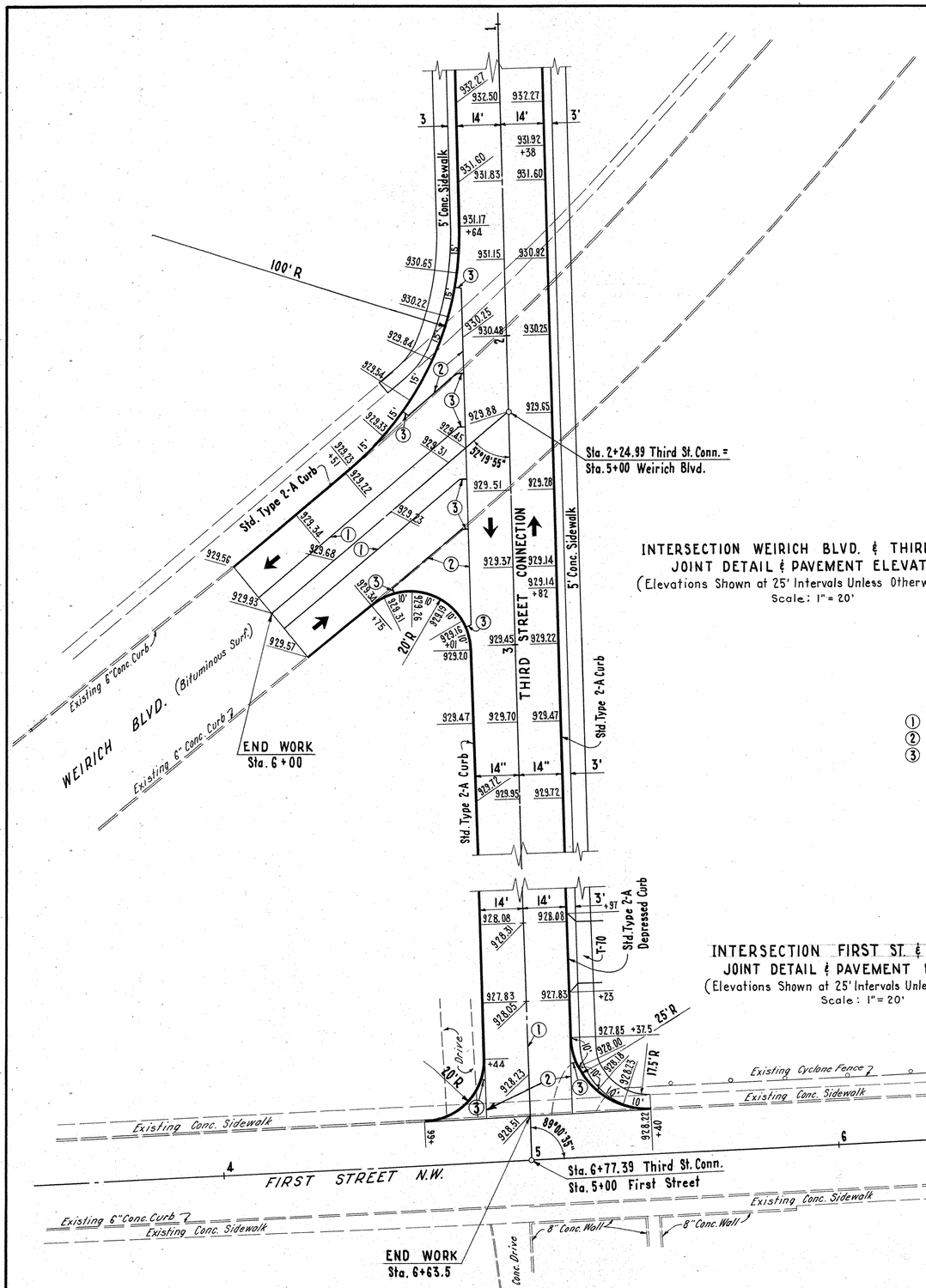
INTERSECTION EDWIN AVENUE AT ERIE STREET
JOINT DETAILS & PAVEMENT ELEVATIONS
(Elevations Shown At 25' Intervals Unless Otherwise Indicated)

INTERSECTION DETAILS - EDWIN AVENUE AND WALNUT ROAD

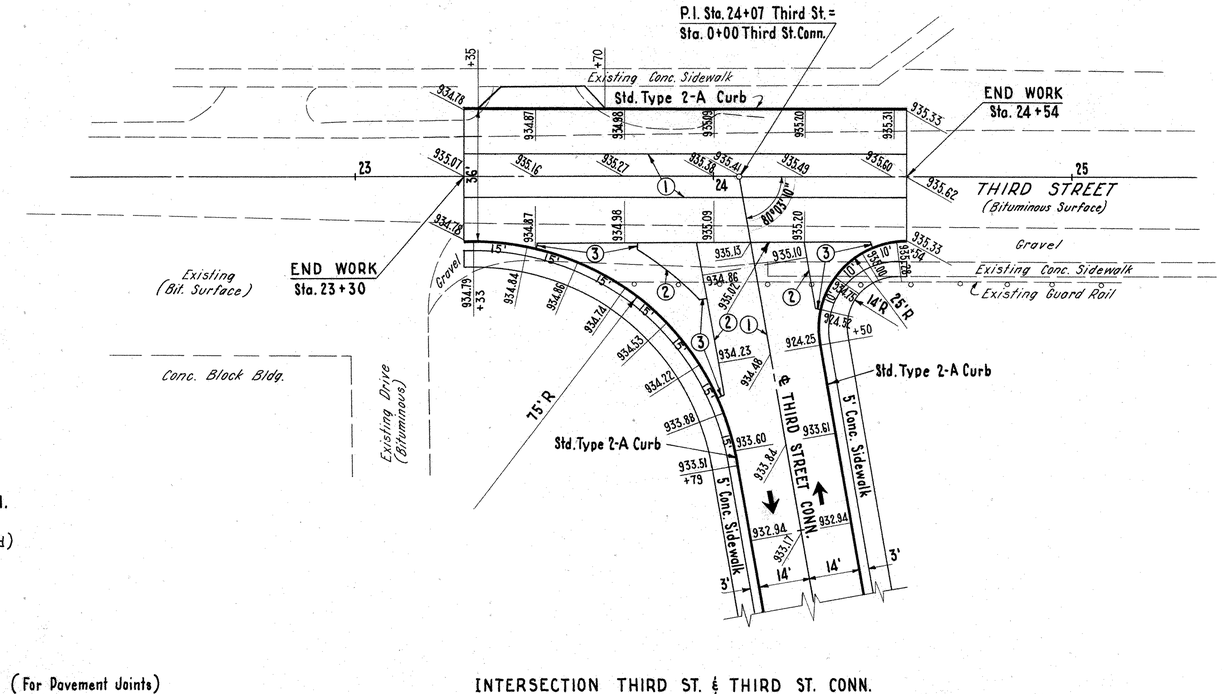
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

83

STA. 21-10.23



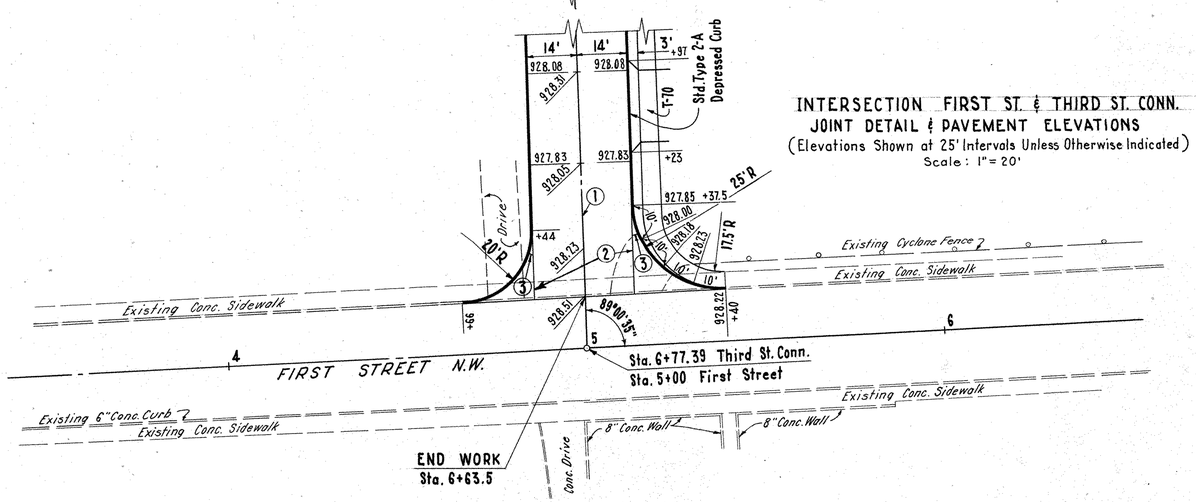
INTERSECTION WEIRICH BLVD. & THIRD ST. CONN.
JOINT DETAIL & PAVEMENT ELEVATIONS
(Elevations Shown at 25' Intervals Unless Otherwise Indicated)
Scale: 1" = 20'



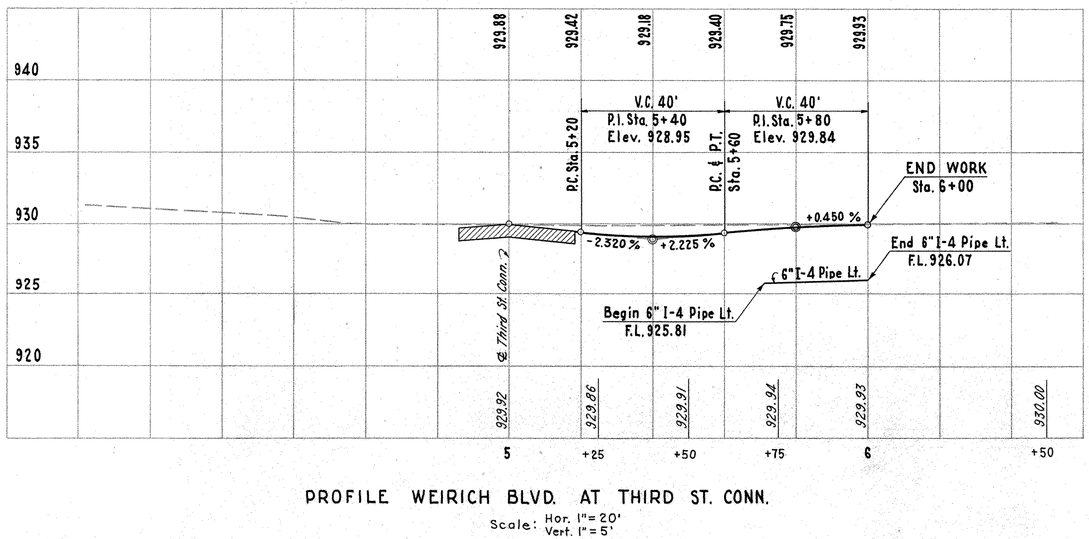
INTERSECTION THIRD ST. & THIRD ST. CONN.
JOINT DETAILS & PAVEMENT ELEVATIONS
Elevations Shown at 25' Intervals Unless Otherwise Indicated
Scale: 1" = 20'

LEGEND (For Pavement Joints)

① STANDARD LONGITUDINAL JOINT
② STANDARD KEY JOINT WITHOUT TIE BARS
③ EXPANSION JOINT WITHOUT DOWELS



INTERSECTION FIRST ST. & THIRD ST. CONN.
JOINT DETAIL & PAVEMENT ELEVATIONS
(Elevations Shown at 25' Intervals Unless Otherwise Indicated)
Scale: 1" = 20'



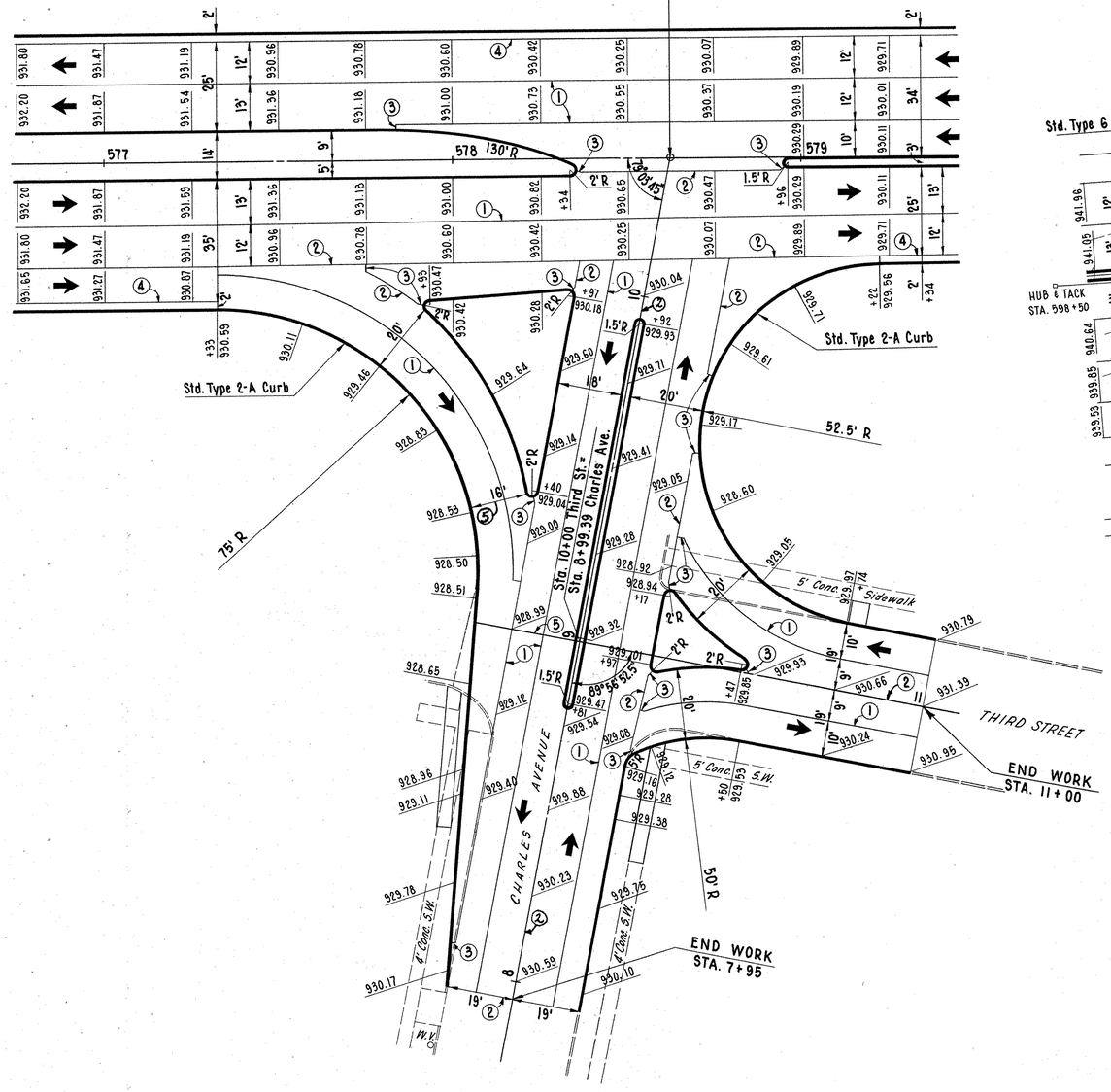
PROFILE WEIRICH BLVD. AT THIRD ST. CONN.
Scale: Hor. 1" = 20'
Vert. 1" = 5'

INTERSECTION DETAILS AND PROFILE – THIRD ST. CONN.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

84

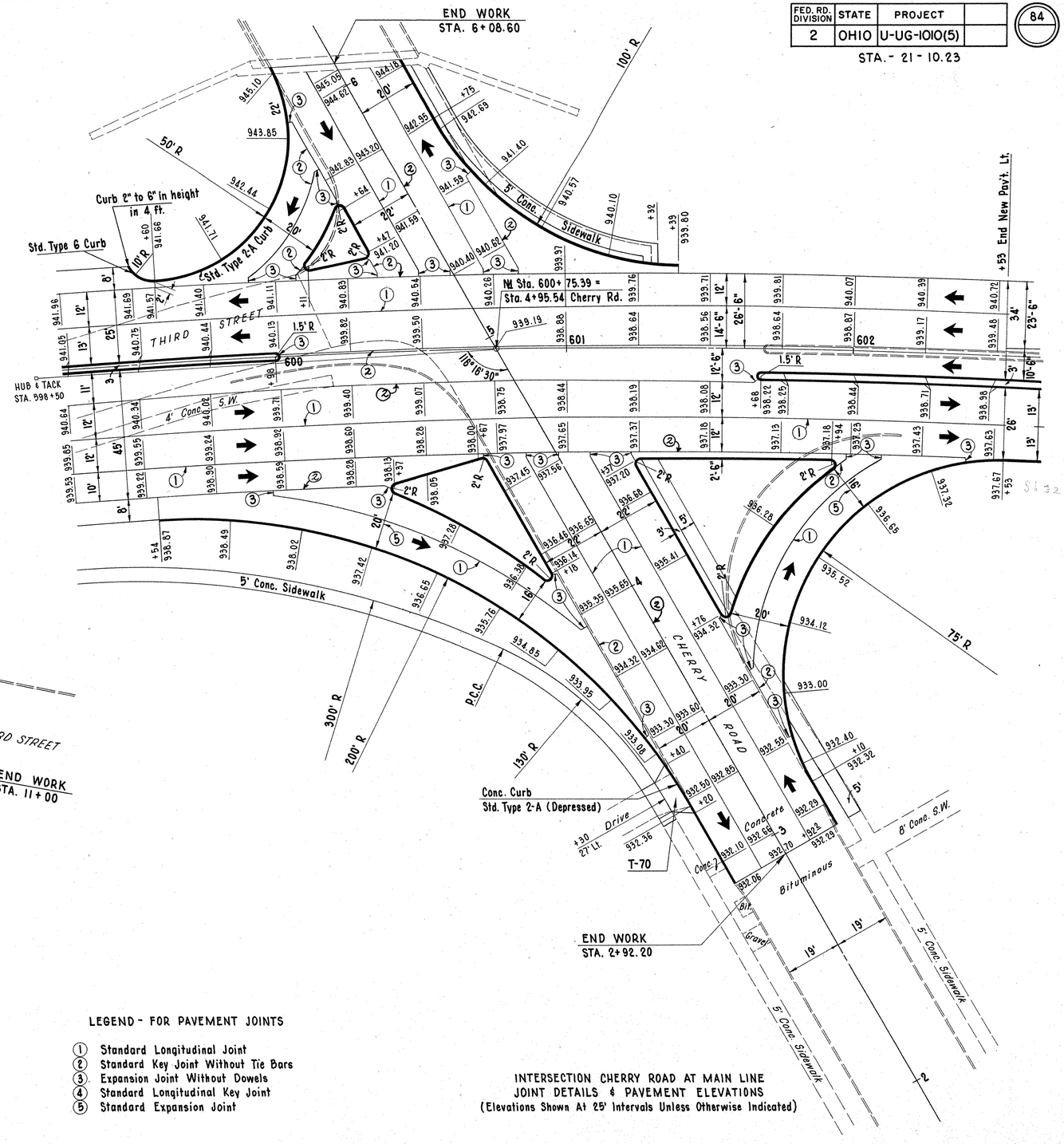
STA. - 21 - 10.23



INTERSECTION CHARLES AVE. AT MAIN LINE & THIRD STREET
JOINT DETAILS & PAVEMENT ELEVATIONS
(Elevations Shown At 25' Intervals Unless Otherwise Indicated)

LEGEND - FOR PAVEMENT JOINTS

(1) Standard Longitudinal Joint
(2) Standard Key Joint Without Tie Bars
(3) Expansion Joint Without Dowels
(4) Standard Longitudinal Key Joint
(5) Standard Expansion Joint



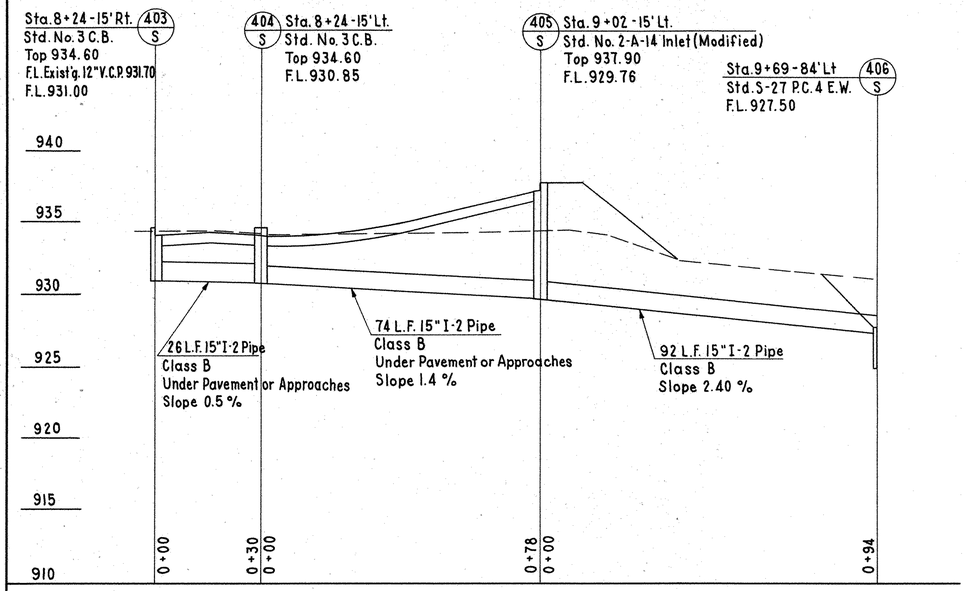
INTERSECTION CHERRY ROAD AT MAIN LINE
JOINT DETAILS & PAVEMENT ELEVATIONS
(Elevations Shown At 25' Intervals Unless Otherwise Indicated)

INTERSECTION DETAILS - CHARLES AVE., THIRD ST. AND CHERRY ROAD

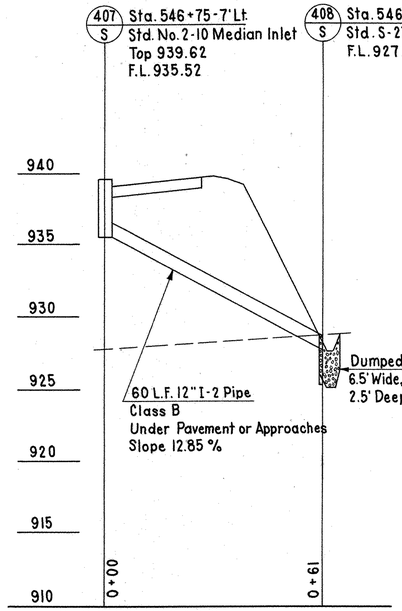
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

85

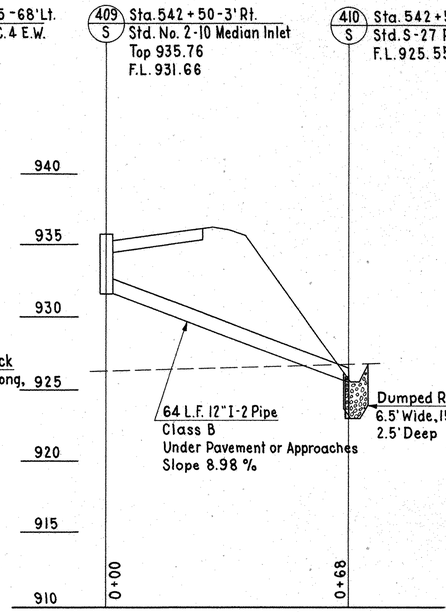
STA. - 21 - 10.23



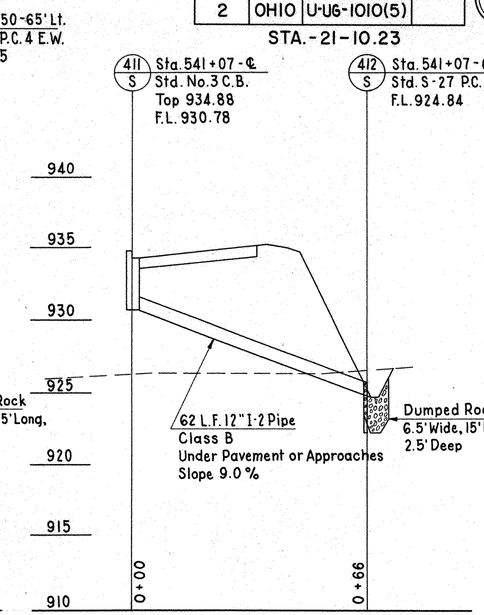
Scale: Hor. 1" = 20'
Vert. 1" = 5'



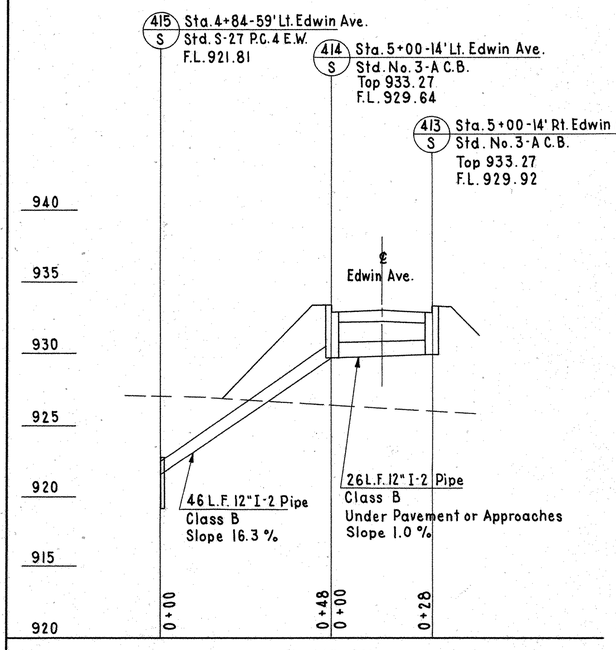
Scale: Hor. 1" = 20'
Vert. 1" = 5'



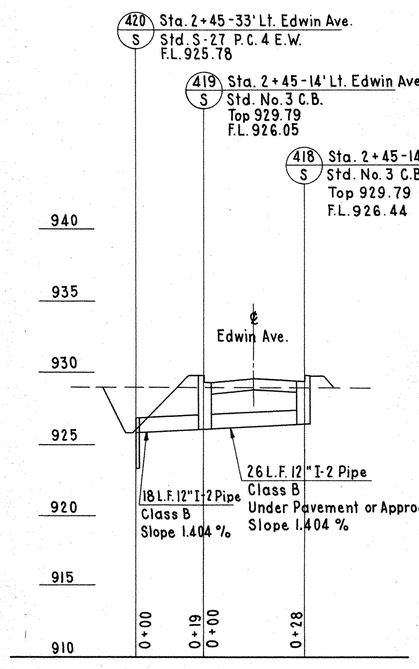
Scale: Hor. 1" = 20'
Vert. 1" = 5'



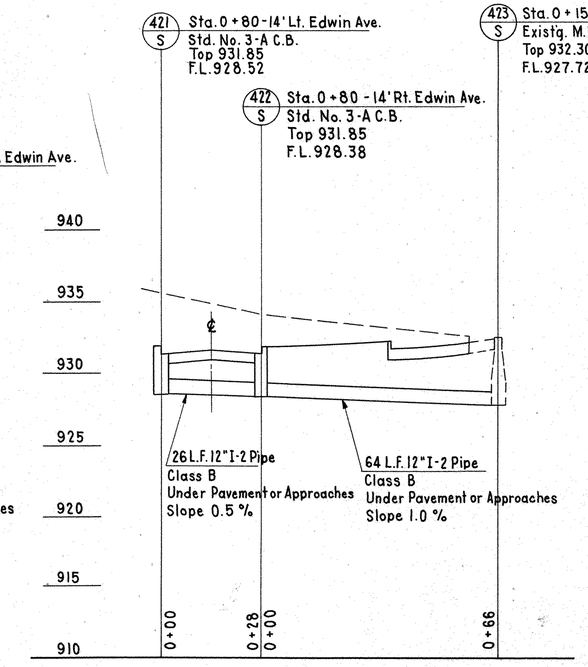
Scale: Hor. 1" = 20'
Vert. 1" = 5'



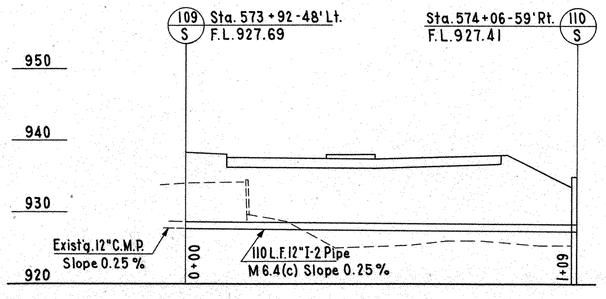
Scale: Hor. 1" = 20'
Vert. 1" = 5'



Scale: Hor. 1" = 20'
Vert. 1" = 5'



Scale: Hor. 1" = 20'
Vert. 1" = 5'



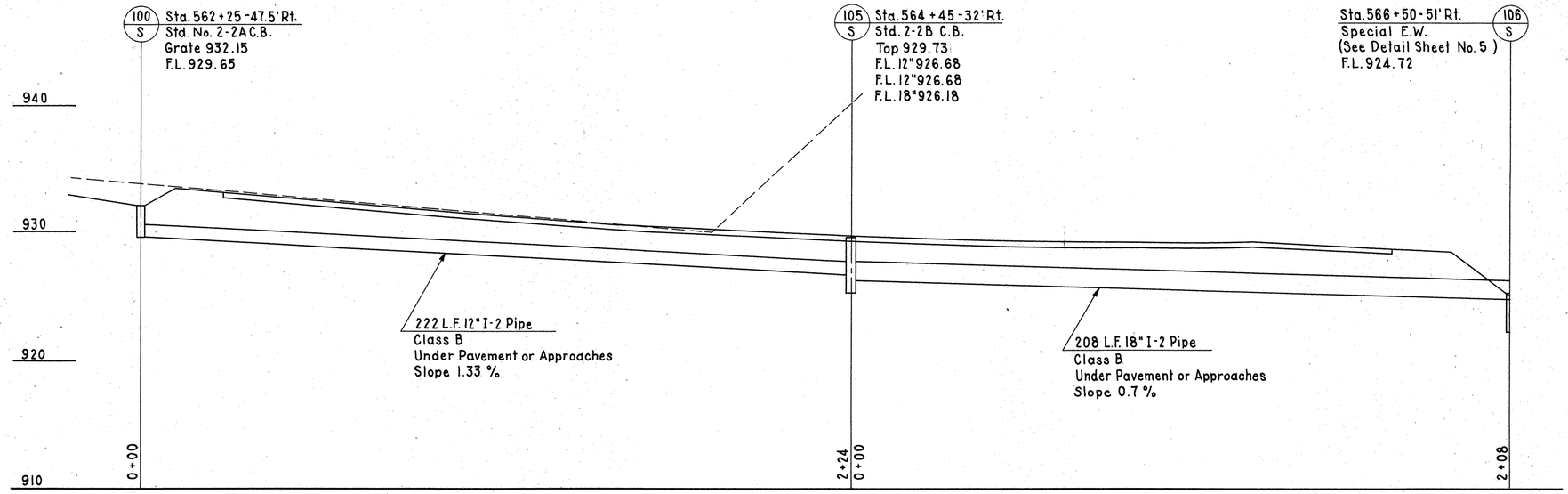
Scale: Hor. 1" = 20'
Vert. 1" = 10'

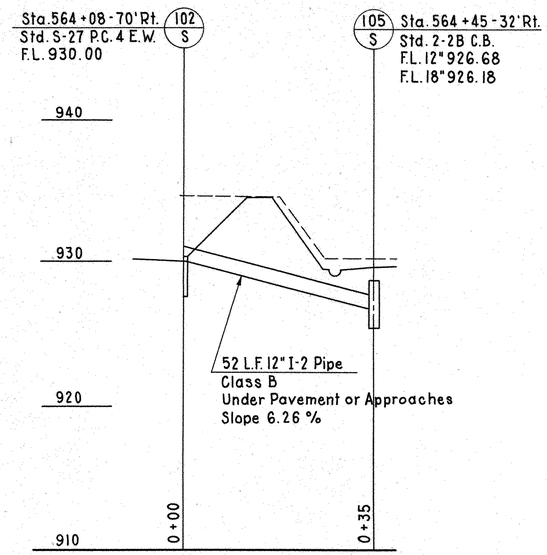
STORM SEWER PROFILES

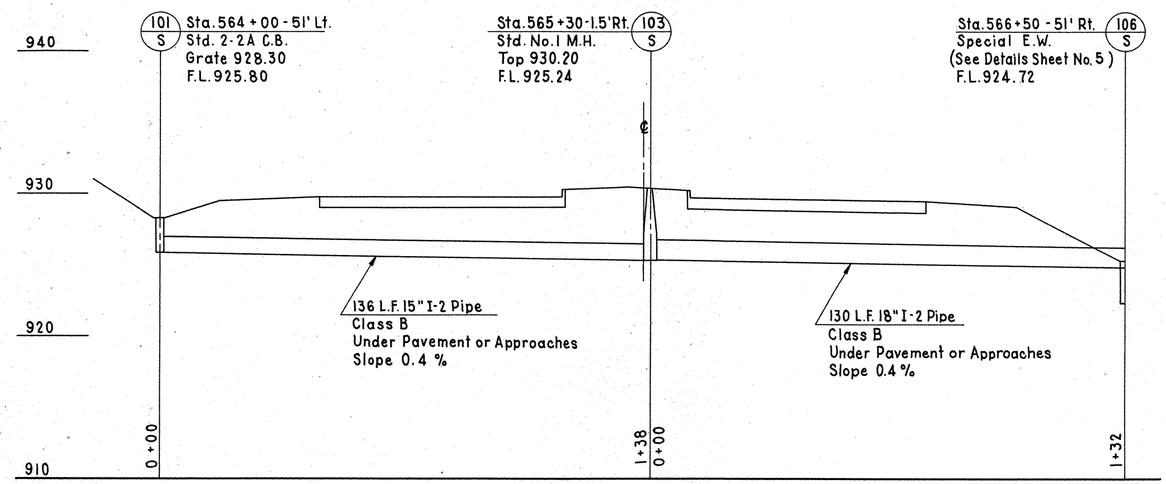
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

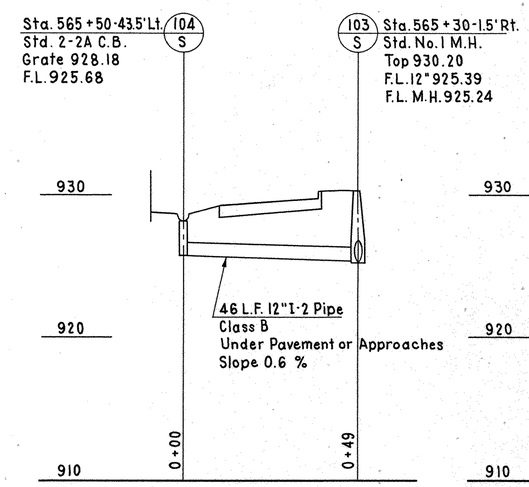
86

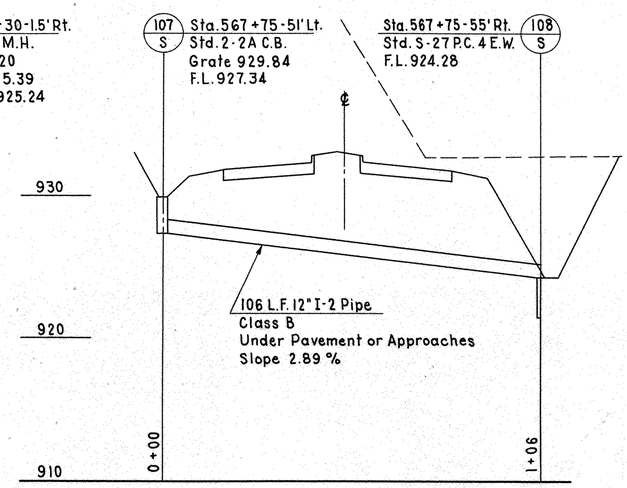
STA.-21-10.23











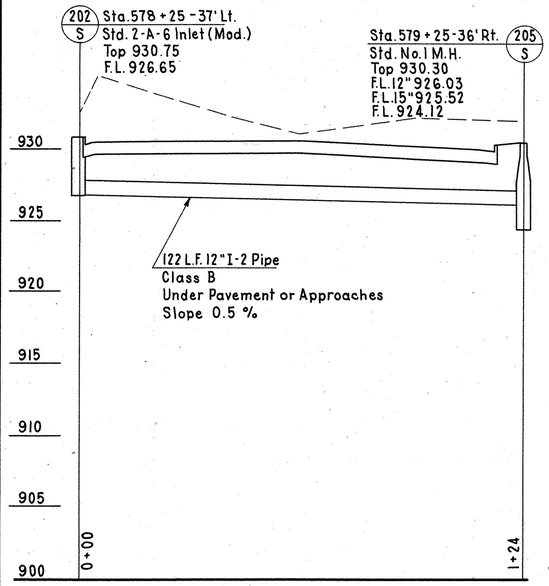
Scale: Hor. 1" = 20'
Vert. 1" = 5'

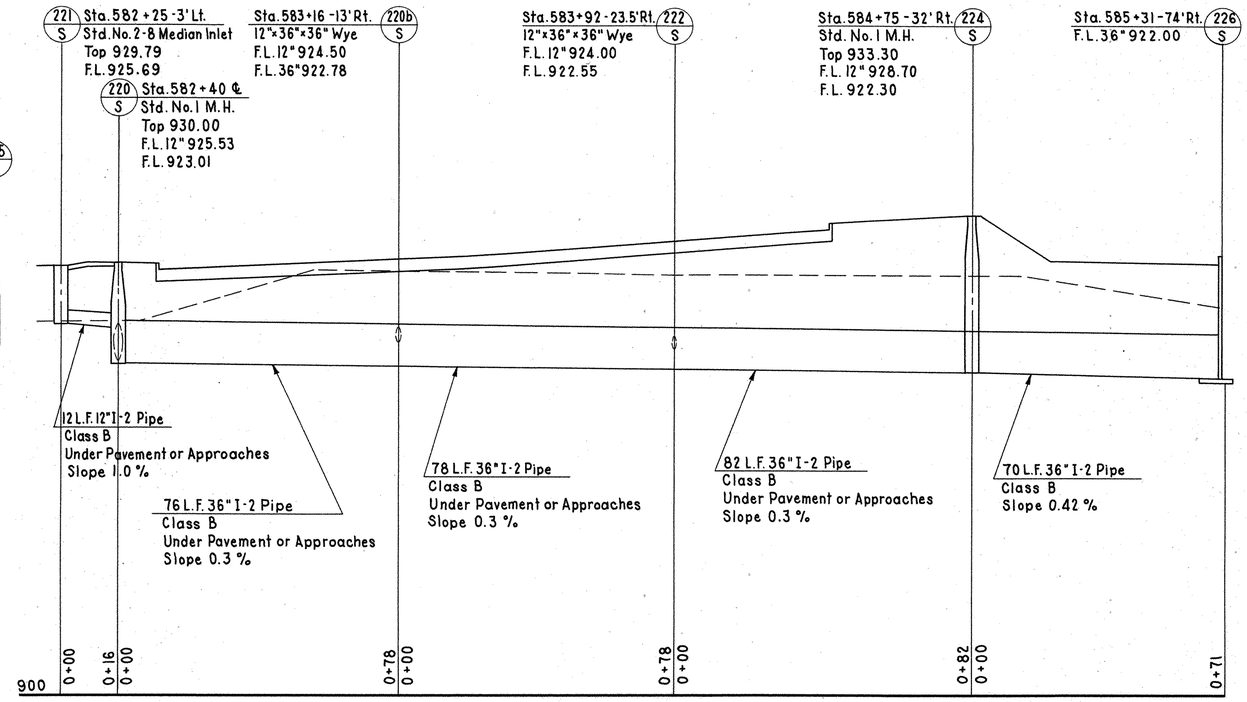
STORM SEWER PROFILES

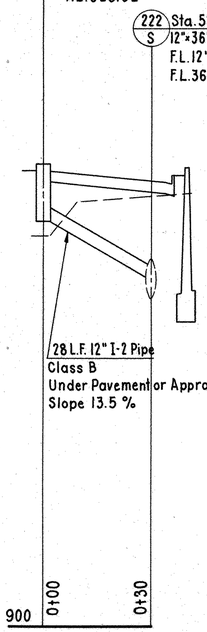
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

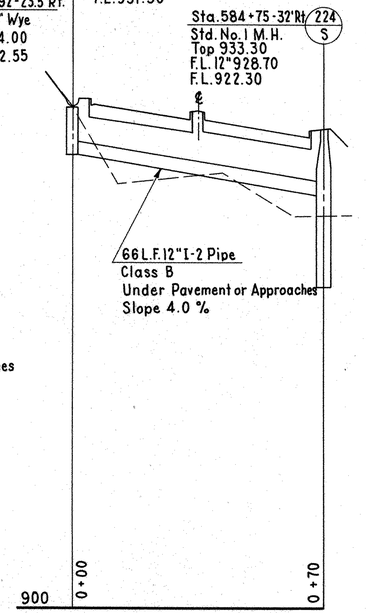
87

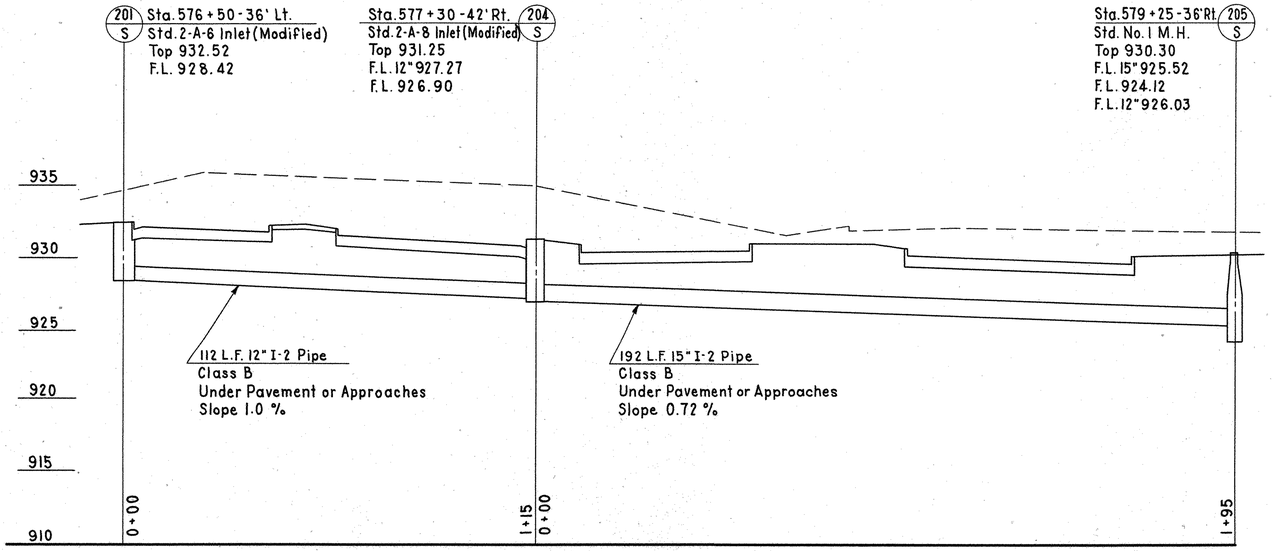
STA. - 21 - 10.23

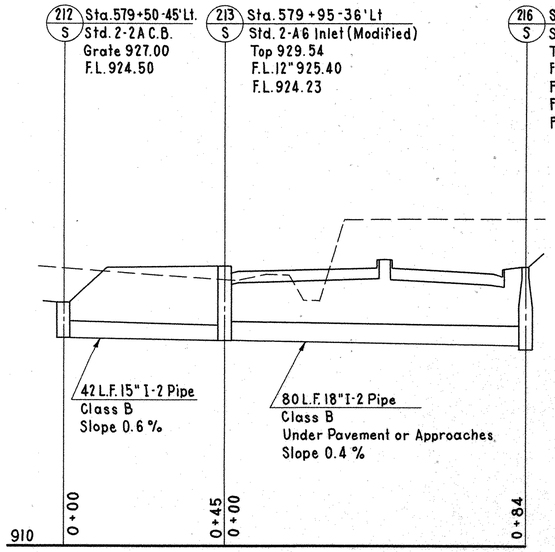


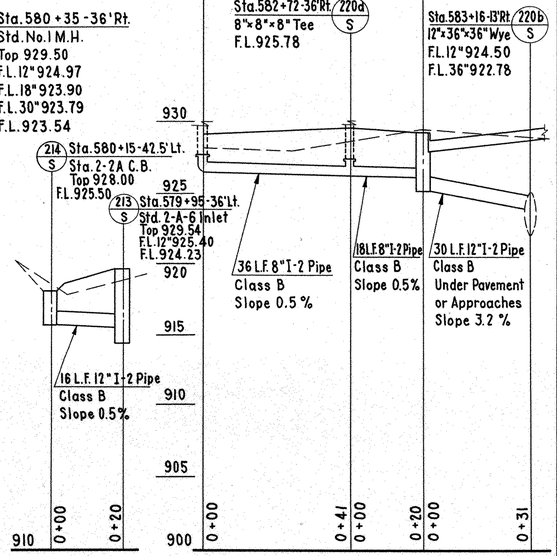










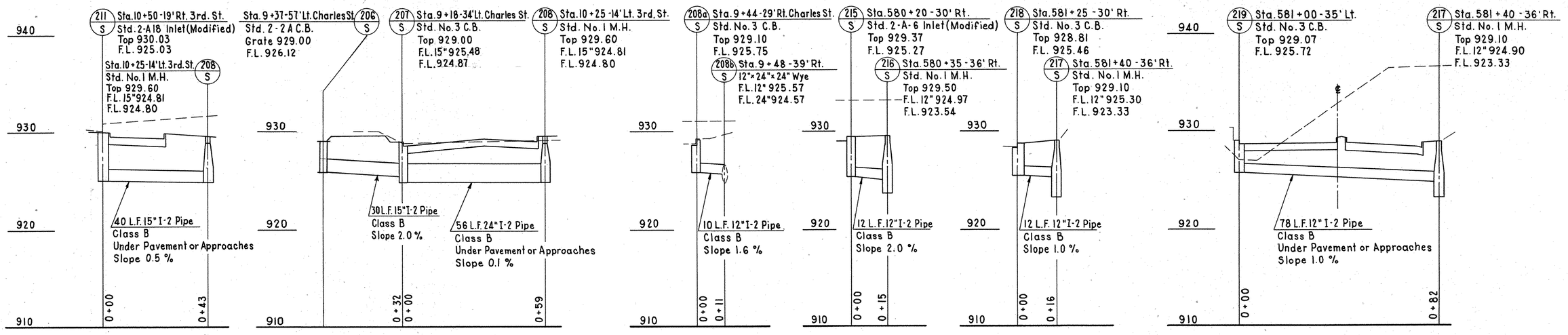


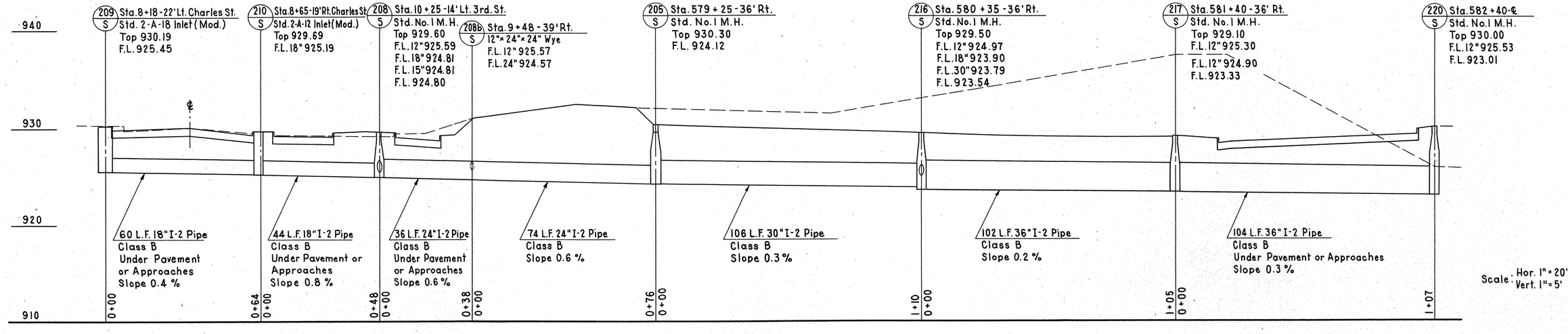
Scale: Hor. 1" - 20'
Vert. 1" - 5'

STORM SEWER PROFILES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.-21-10.23

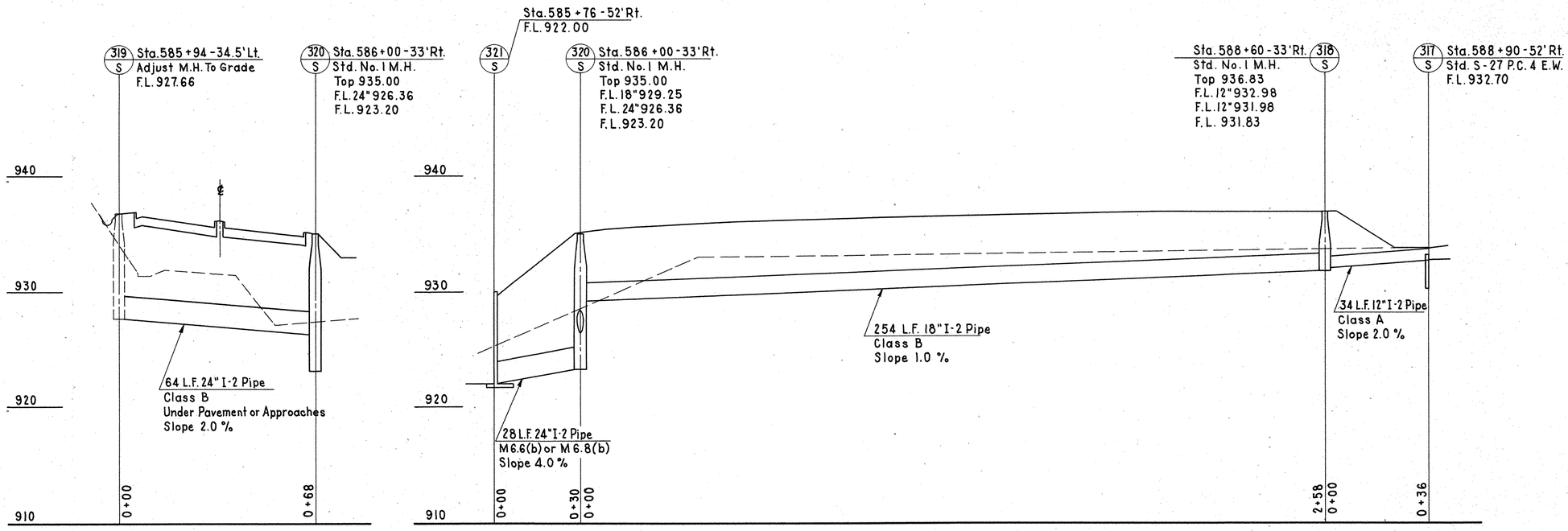


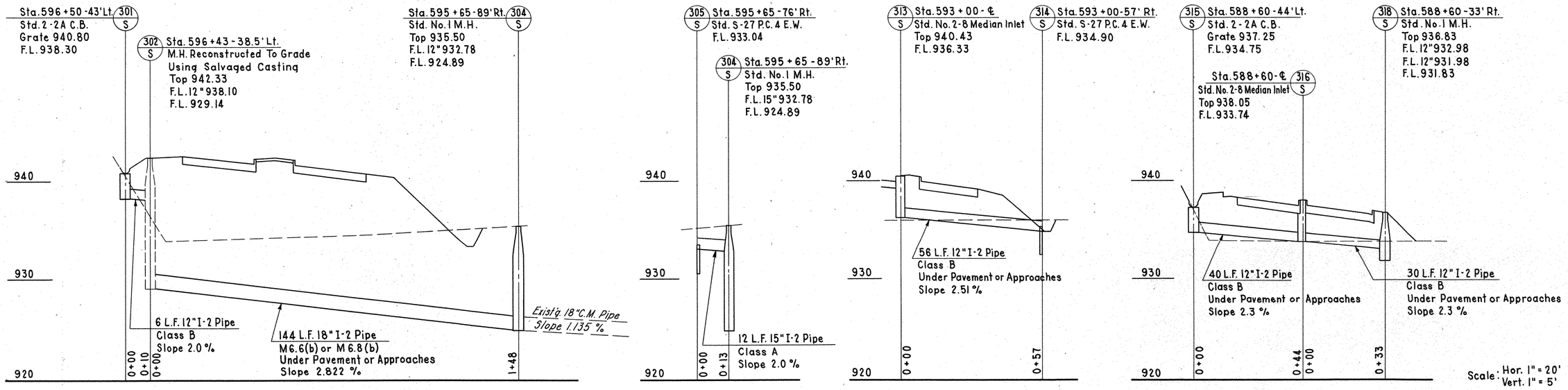


STORM SEWER PROFILES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.-21-10.23



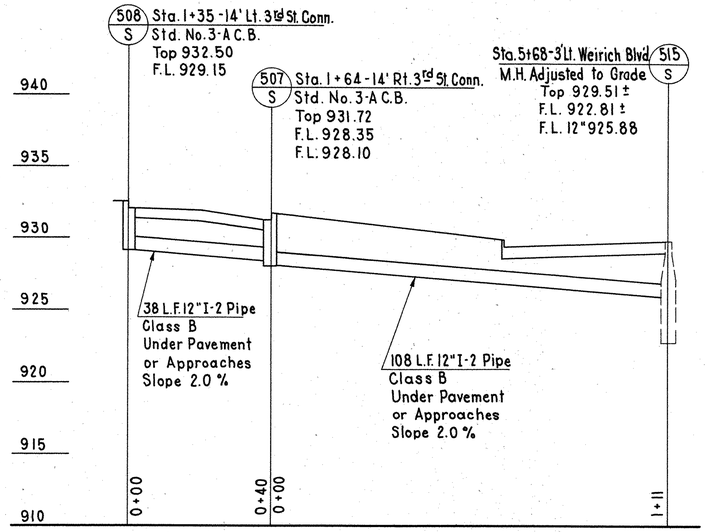


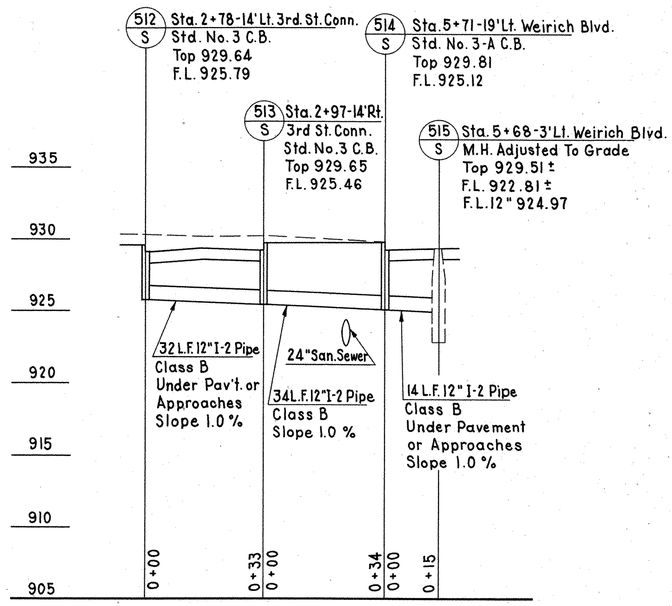
STORM SEWER PROFILES

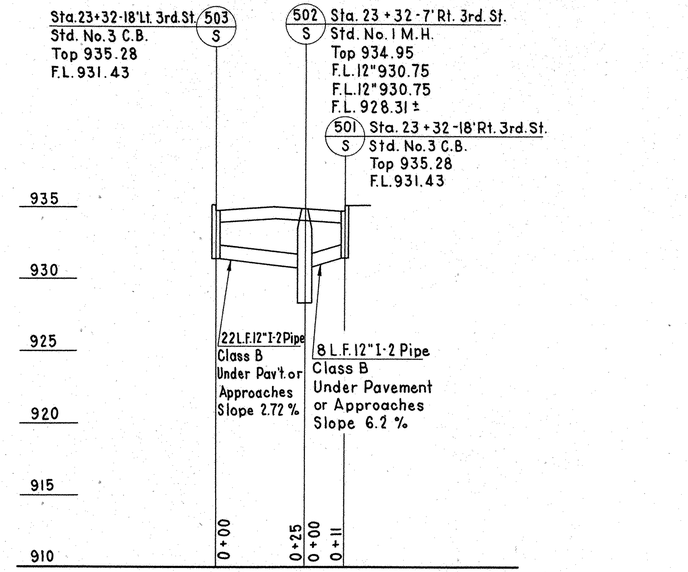
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

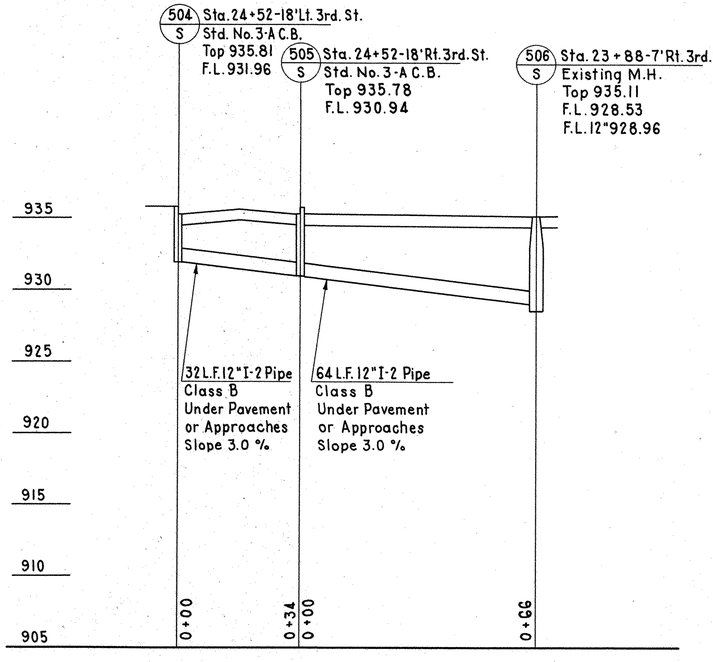
90

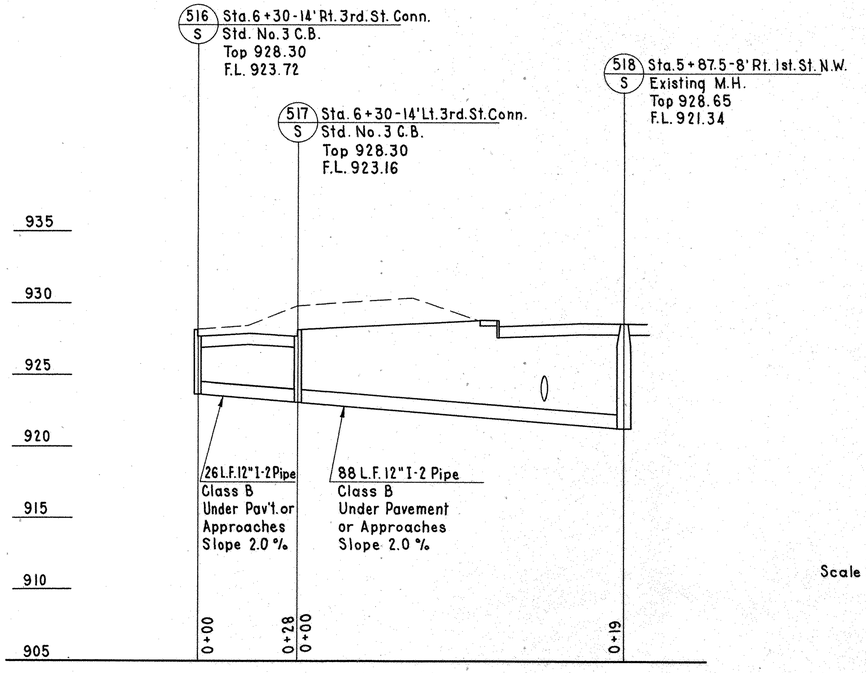
STA.-21-10.23











Scale : Hor. 1" = 20'
Vert. 1" = 5'

STORM SEWER PROFILES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-U6-1010(5)	

91

STA.-21-10.23

601 S Sta. 600 + 92 - ℄
Std. No. 2-6 Median Inlet
Top 940.63
F.L. 936.53

602 S Sta. 600 + 30 - 20' Rt.
M.H. Reconstructed To Grade
Top 939.21
F.L. 12" 935.18
Exist'g. Top 936.90
Exist'g. F.L. 921.81

40 L.F. 12" I-2 Pipe
Class B
Under Pavement
or Approaches
Slope 3.2 %

603 S Sta. 600 + 50 - 76' Rt.
Std. No. 2-A-10 Inlet (Modified)
Top 937.24
F.L. 933.14

604 S Sta. 600 + 50 - 49' Rt.
Std. No. 2 M.H.
Top 938.78
F.L. 12" 932.85
F.L. 12" 930.87
F.L. 923.00 ±

Sta. 4 + 00 - 22' Rt. 605 S
Std. No. 2-A-14 Inlet (Modified)
Top 935.91
F.L. 931.81

26 L.F. 12" I-2 Pipe
Class B
Under Pav't.
or Approaches
Slope 1.0 %

Exist'g. 18" V.C.P.
3.6 % ±

92 L.F. 12" I-2 Pipe
Class B
Under Pavement
or Approaches
Slope 1.0 %

608 S Sta. 601 + 62 - 31' Lt.
M.H. Adjusted To Grade
F.L. 12" 932.94

607 S Sta. 601 + 90 - 9' Rt.
Std. No. 2-8 Median Inlet
Top 938.24
F.L. 933.44

46 L.F. 12" I-2 Pipe
Class B
Under Pavement
or Approaches
Slope 1.0 %

72 L.F. 12" I-2 Pipe
Class B
Under Pavement
or Approaches
Slope 1.0 %

606 S Sta. 602 + 60 - 37' Rt.
Std. No. 2-A-6 Inlet (Modified)
Top 938.30
F.L. 934.20

609 S Sta. 606 + 35 - ℄
Adjust Exist'g. Inlet
Top 941.43
F.L. 12" 935.33

610 S Sta. 606 + 35 - 54' Rt.
Std. S-27 P.C. 4 E.W.
F.L. 934.16

Existing 12" R.C.P.
2.173 %

Dumped Rock
6.5' Wide, 15' Long,
2.6' Deep

6 L.F. 12" I-2 Pipe
Class B
Under Pavement
or Approaches
Slope 2.173 %

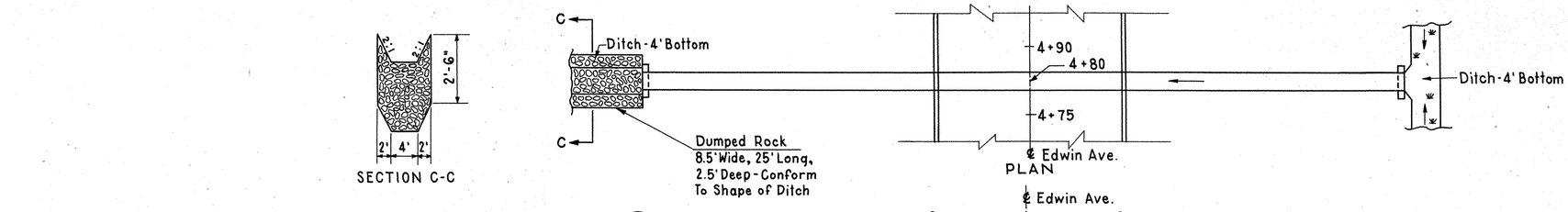
Scale: Hor. 1" = 20'
Vert. 1" = 5'

STORM SEWER PROFILES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

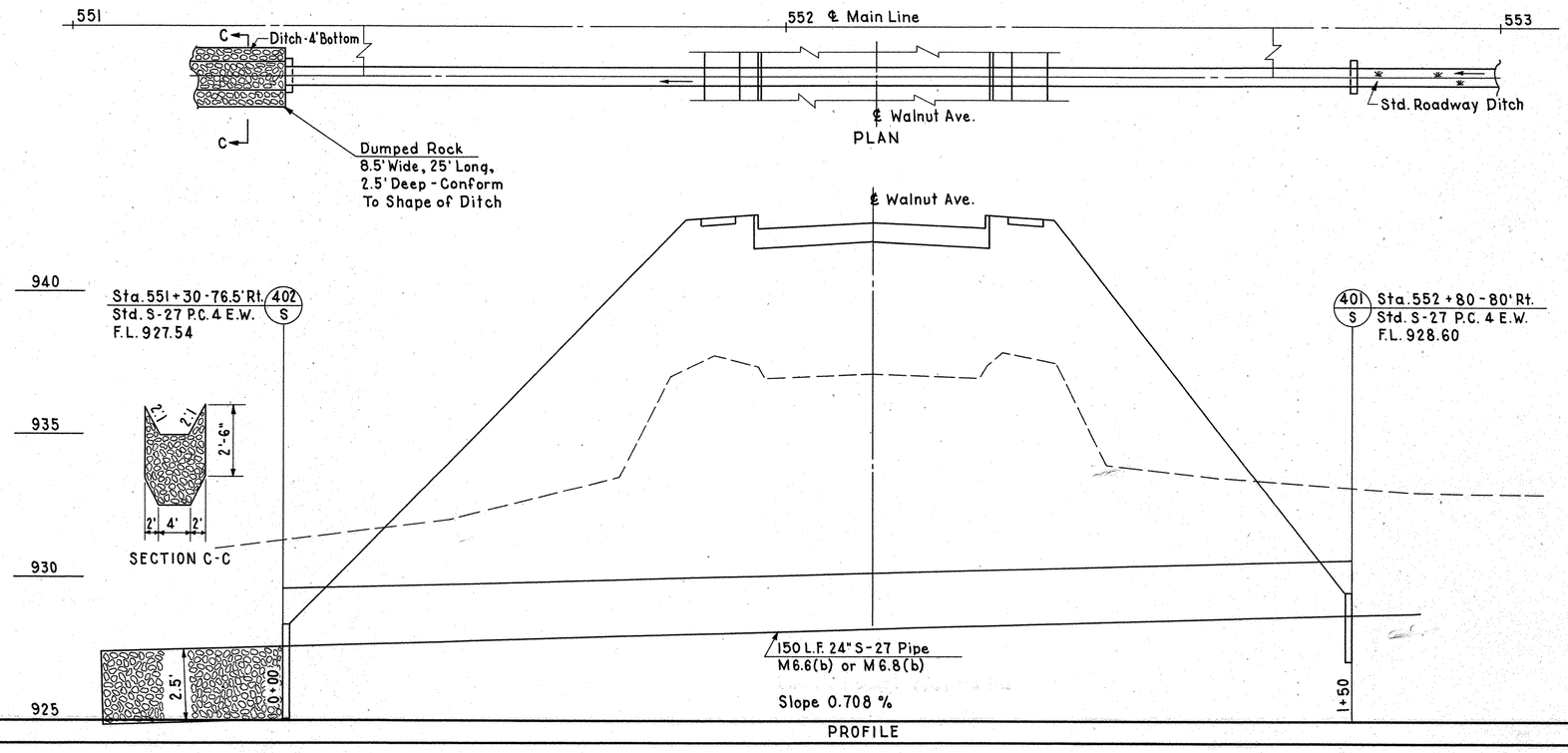
92

STA.-21-10.23



Area = 22.84 Ac.
Q_{25} = 40.0 C.f.s.

Scale: Hor. 1" = 10'
Vert. 1" = 2.5'



Area = 4.81 Ac.
Q_{25} = 10.0 C.f.s.

Scale: Hor. 1" = 10'
Vert. 1" = 2.5'

CULVERT DETAILS EDWIN AVE. STA.4+80 & STA.551+30 TO STA.552+8

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.-21-10.23

93

701 S Sta. 542+06 - 60' Rt.
Std. No. 2 M.H.
Top 928.0
F.L. 918.60 (To Meet Exist'g. F.L.)

702 S Sta. 546+00 - 65.5' Rt.
Std. No. 2 M.H.
Top 928.0
F.L. 918.68

930
925
915

Proposed Grade Over Pipe

Exist'g. 54" San. Sewer

0+00

390 L.F. 48" I-2 Pipe Special
M 6.6 (b)
Slope 0.021 %

3+90
0+00

396 L.F. 48" I-2 Pipe Special
M 6.6 (b)
Slope 0.021 %

Match Line Sta. 2+00

703a S Sta. 552+14 - 66' Rt.
Std. No. 2 M.H.
Top 942.35
F.L. 918.81

703 S Sta. 550+00 - 66.5' Rt.
Std. No. 2 M.H.
Top 929.6
F.L. 918.77

704 S Sta. 554+00 - 66' Rt.
Std. No. 2 M.H.
Top 934.2
F.L. 918.85

WALNUT ROAD

Proposed Grade Over Pipe

925
920
915

Match Line Sta. 2+00

Match Line Sta. 0+50

212 L.F. 48" I-2 Pipe Special
M 6.6 (c)
Slope 0.021 %

188 L.F. 48" I-2 Pipe Special
M 6.6 (c)
Slope 0.021 %

3+96
0+00

4+00
0+00

705 S Sta. 558+47.5 - 61.5' Rt.
Std. No. 2 M.H.
Top 935.5
F.L. 918.95 ± (Meet Exist'g. F.L.)

Proposed Grade Over Pipe

930
925
920
915

Match Line Sta. 0+50

Exist'g. 48" R.C. Pipe San. Sewer

452 L.F. 48" I-2 Pipe Special
M 6.6 (b)
Slope 0.021 %

4+52

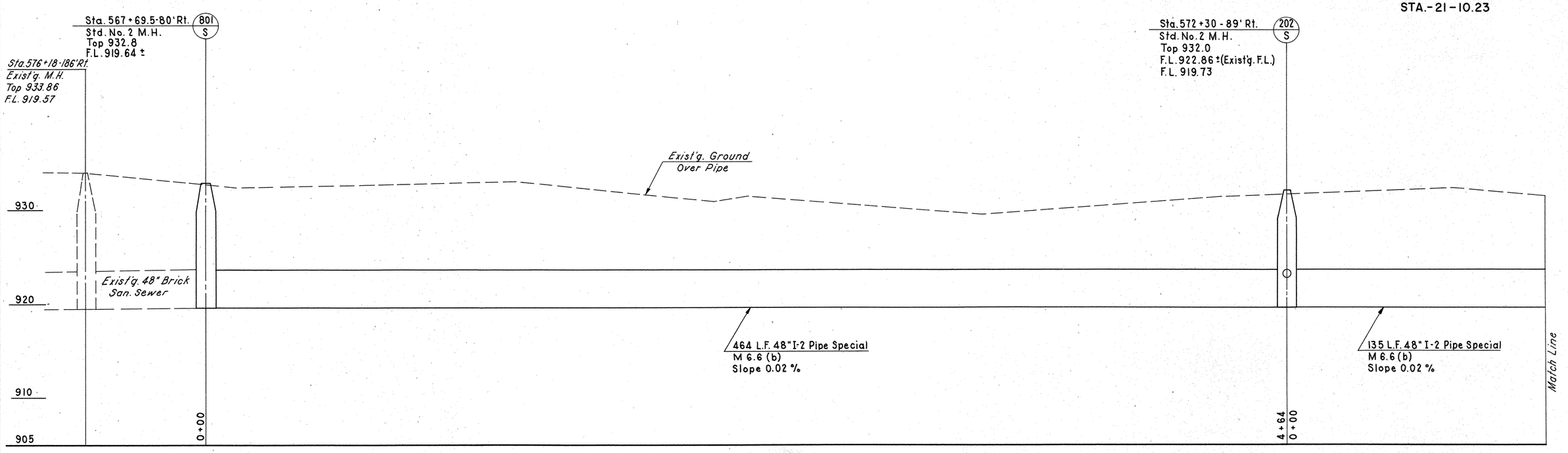
Scale: Hor. 1" = 20'
Vert. 1" = 5'

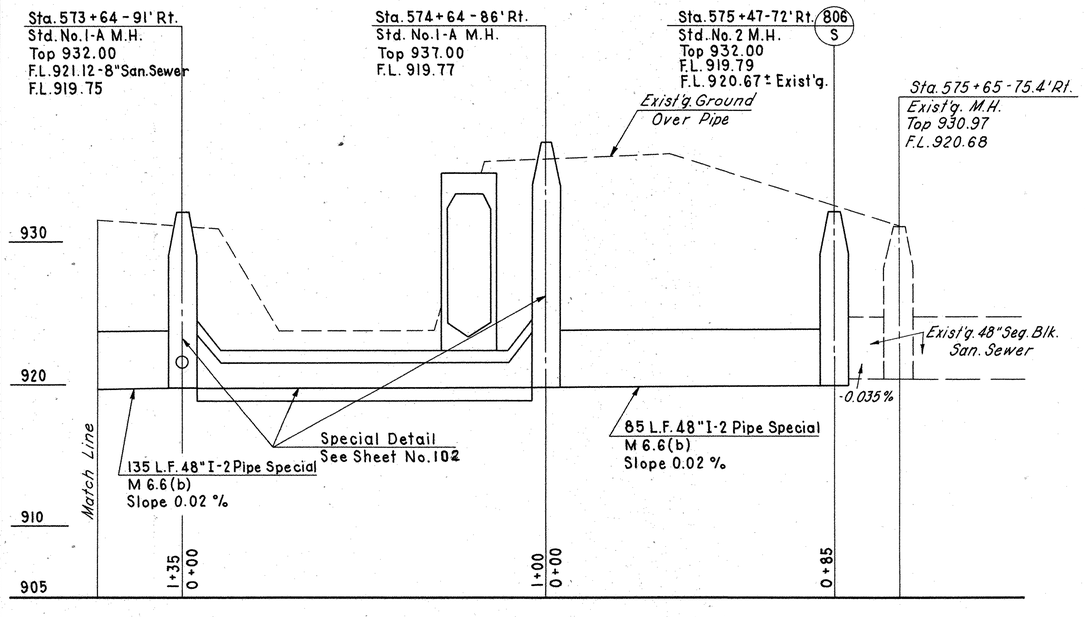
SANITARY SEWER PROFILE

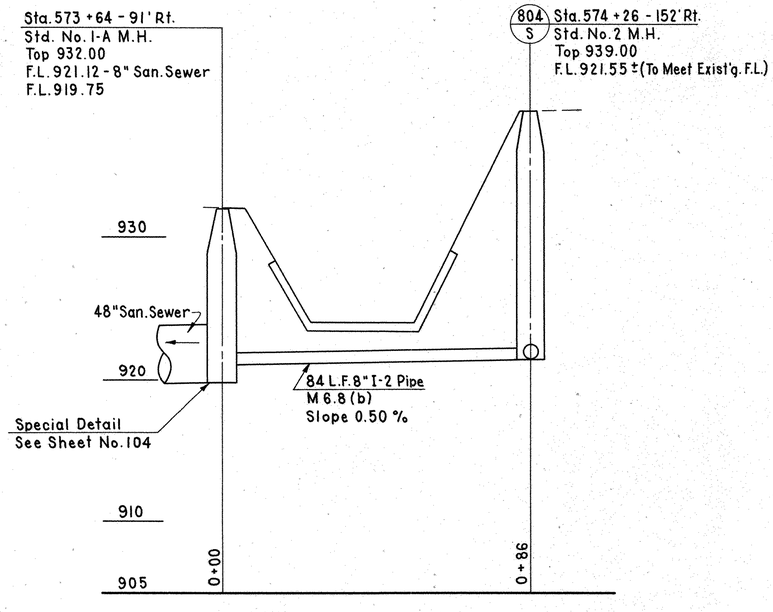
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

94

STA.-21-10.23







Scale: Hor. 1" = 20'
Vert. 1" = 5'

SANITARY SEWER PROFILE

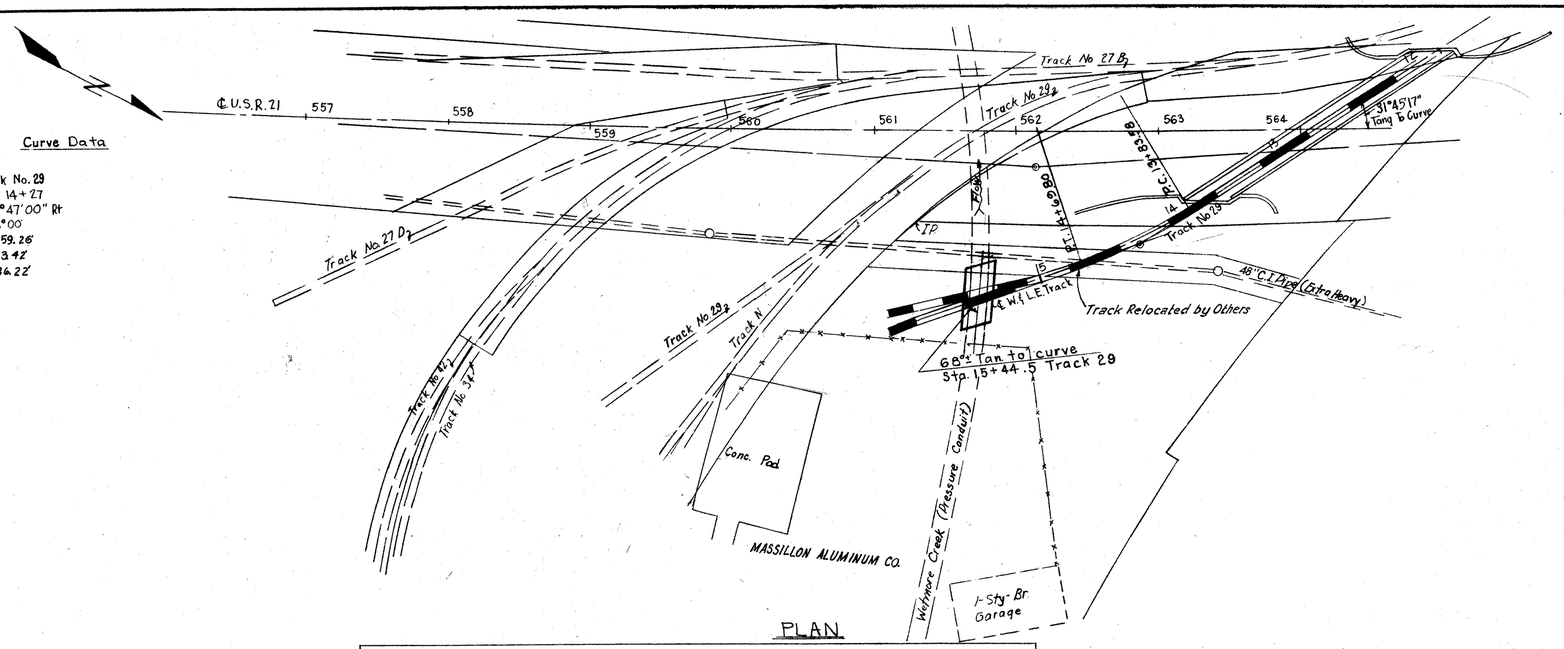
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

95

STA-21-10.23

Curve Data

Track No. 29
P.I. Sta 14+27
Δ = 13°47'00" Rt
D = 16°00'
R = 359.26'
T = 43.42'
L = 86.22'



PLAN

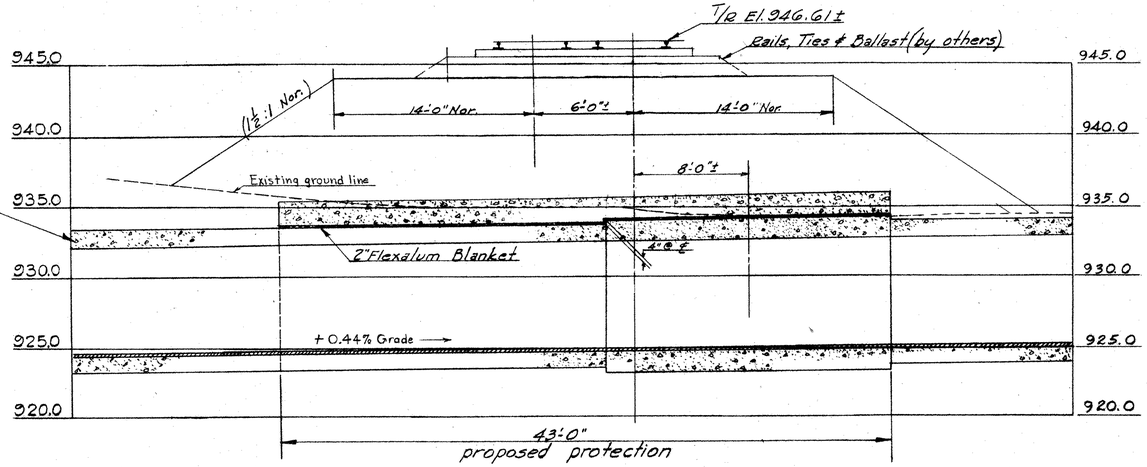
ESTIMATED QUANTITIES

Item	Totals	Unit	Description
E-2		L.S.	Cofferdams, Cribs & Sheeting
E-2	280.	C.Y.	Unclassified excavation
S-1	134.	C.Y.	Class "C" concrete
S-4	18347.	lbs.	Reinforcing steel
S-9	1540.	Sq.ft.	2" Preformed expansion filler (Flexalum)

EXISTING STRUCTURE

14'-0" Span x 7'-9" Height Reinforced Concrete Pressure Conduit

(To remain in place)



Proposed protection to be located to fit final railroad alignment.

LONGITUDINAL SECTION THRU CONDUIT
LOOKING NORTH

NOTES:-

- Design Specification: This structure conforms to the requirements of Design Specifications for Highway Structures of the State of Ohio, Dept. of Highways. dated 9-1-57, revised 2-21-58.
- Modifications to the above specification:-
  (a) Material specification shall govern except specification for Flexalum or approved equal as follows:-

  (b) Design procedures, allowable stresses and distribution of live load pertaining to railroads are to follow A.R.E.A. specifications (1959)

- Foundation bearing pressure: Footings are designed for a maximun bearing pressure of 2.75 tons per sq. ft.
- All concrete to be Class "C."

PROPOSED·MINOR·STRUCTURE

Type: Reinforced Concrete Saddle protection for Pressure Conduit.
Span: 14'-10" normal x 43.0' Long
Skew: 22°± Rt. Fwd.
Loading: Coopers E-72
Alignment: Parallel to existing Conduit (on 8° curve)

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SITE PLAN
W&LE R.R. OVER WETMORE CREEK PRESSURE CONDUIT · MASSILLON, OHIO.

STARK COUNTY U.S.R. 21 Rt. of Sta 561+74

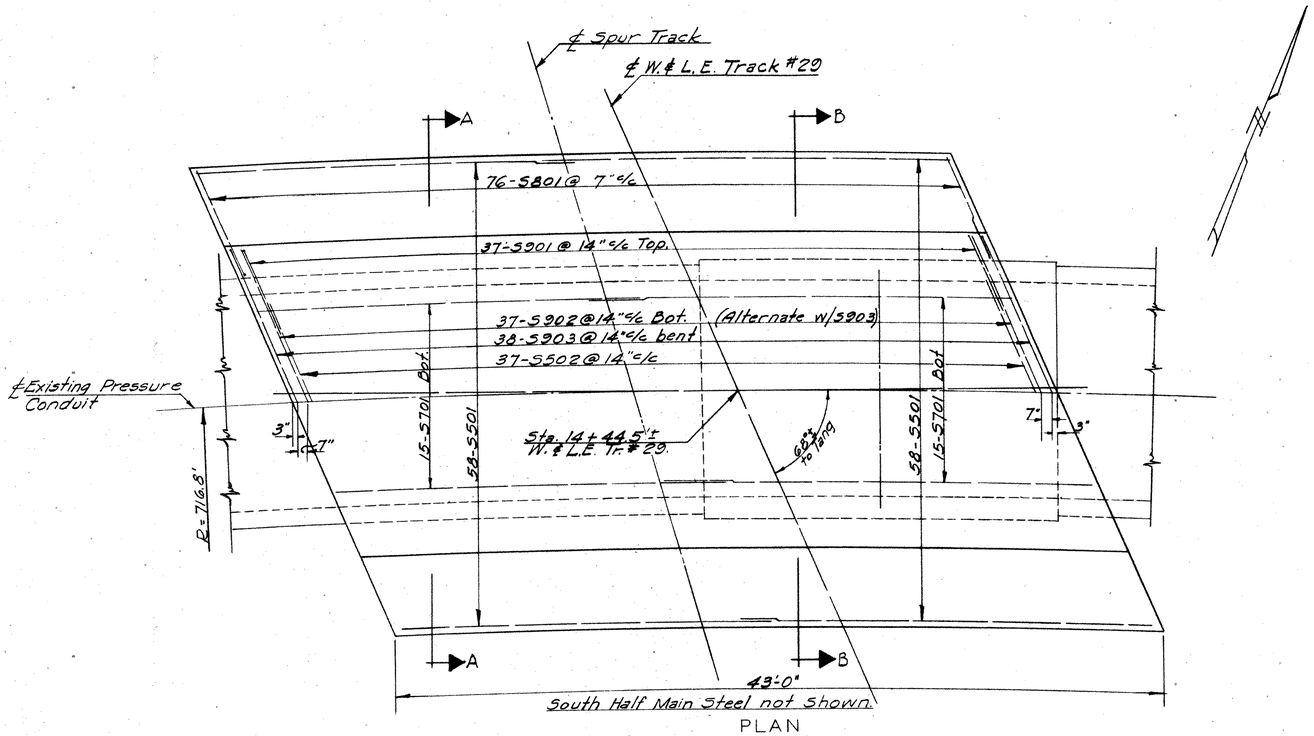
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
HGW	HGW		J.D.Y		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-57091

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

96

STA-21-10.23

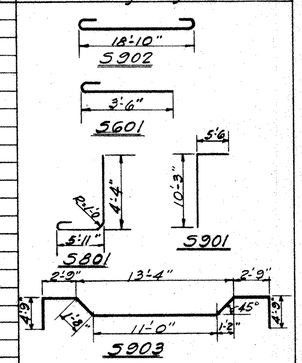


PLAN

REINFORCING·STEEL·LIST.

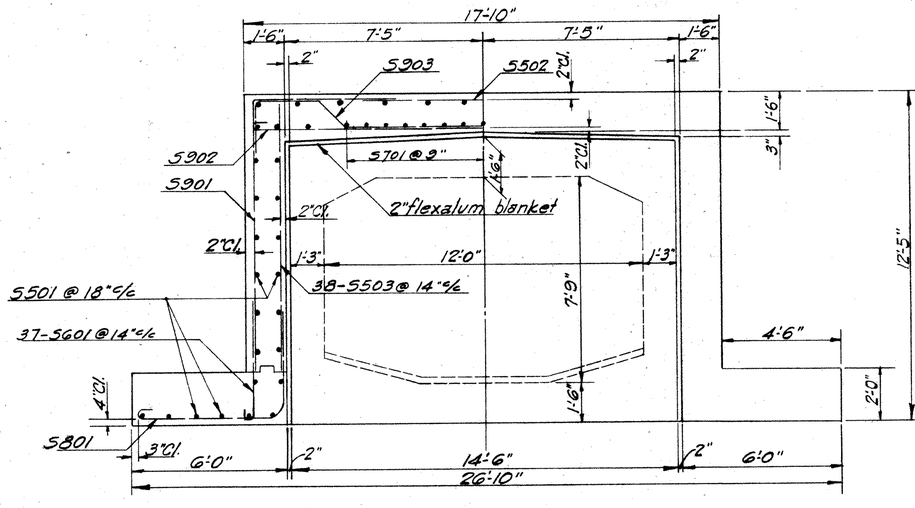
Mark	No.	Length	Weight	Shape
5501	116	22'-4"	2702.	S
5502	37	9'-9"	905.	S
5503	76	10'-0"	793.	S
5601	74	4'-2"	463.	B
5701	30	22'-6	1380.	S
5801	76	11'-8"	2367.	B
5901	74	15'-9"	3963.	B
5902	37	21'-4"	2684.	B
5903	38	29'-4"	3690.	B
	Replacement	Bars		
RE500	1	5'-7		S
RE600	2	4'-2"		B
RE700	1	6'-2"		S
RE800	2	4'-4		S
RE900	1	6'-10"		S

Bending Diagrams

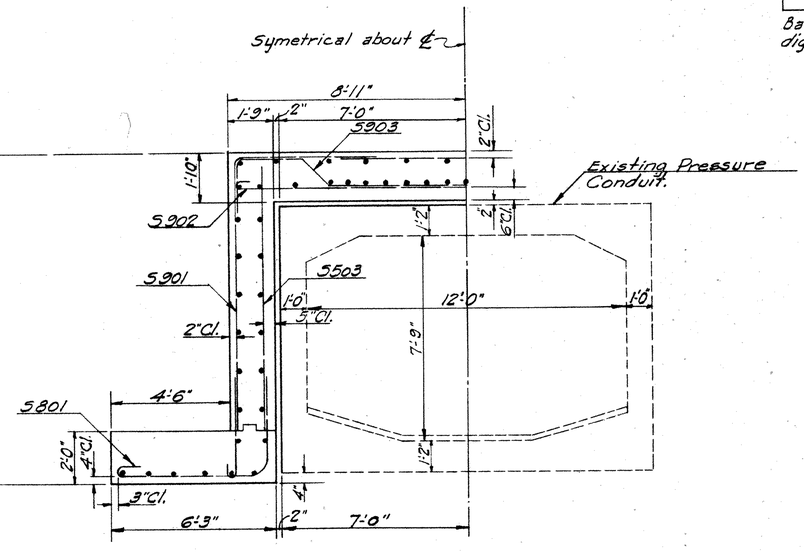


Replacement bars are not required if reinforcing steel is fabricated from stock previously tested and approved by the Ohio Highway Testing Laboratory

Bar size is indicated in the bar mark. The first digit where three digits are used, indicates the bar size number.



SECTION-B B



SECTION A A

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

CONCRETE SADDLE PROTECTION

W.℄ L.E. RR over WETMORE CREEK
PRESSURE CONDUIT ~ MASSILLON, OHIO.
STARK COUNTY U.S.R. 21
Rt. of Sta. 561+74 ±

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
DWP	TGP		SJF		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-35316

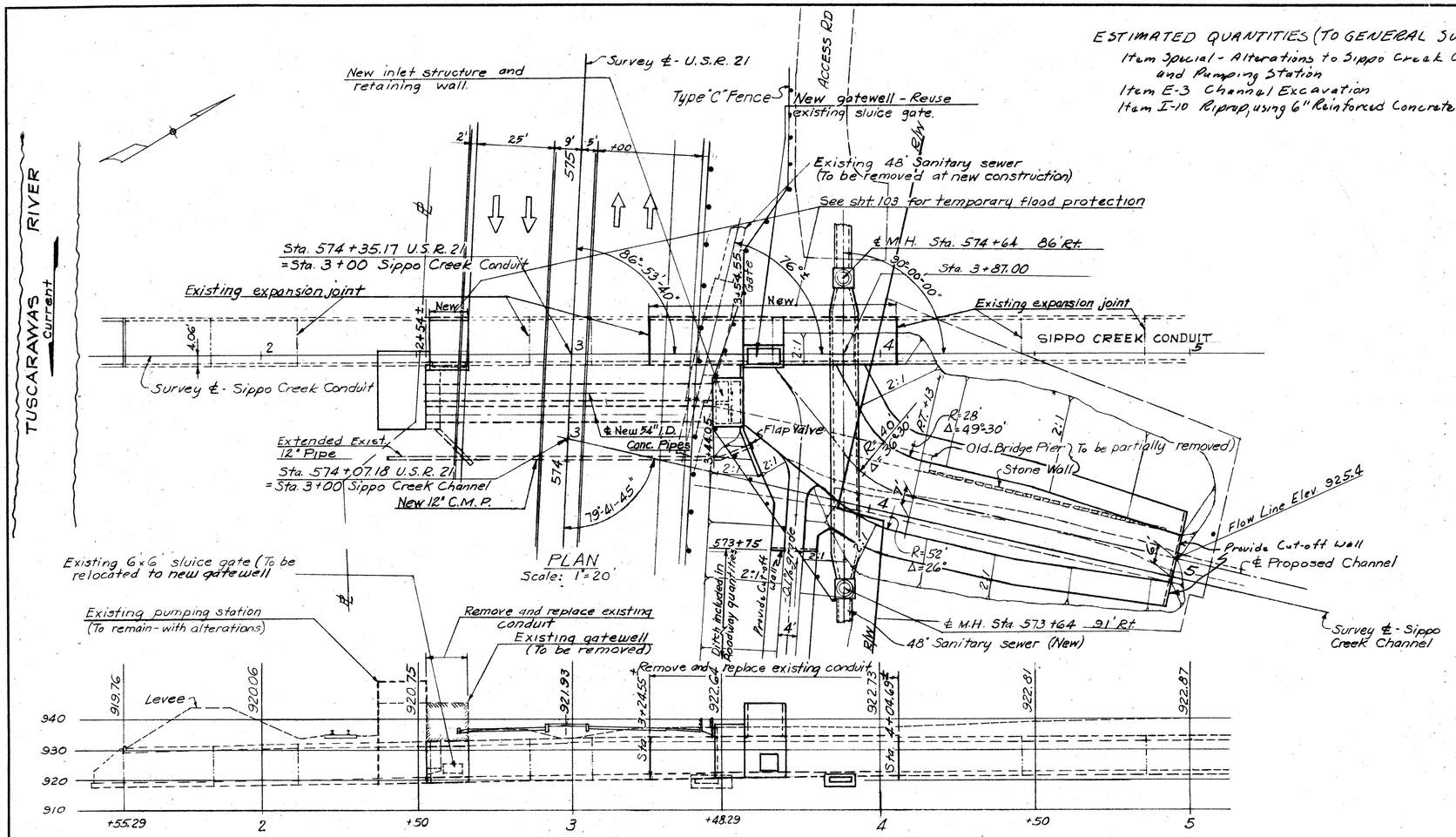
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

97

STA-21-10.23

ESTIMATED QUANTITIES (TO GENERAL SUMMARY)

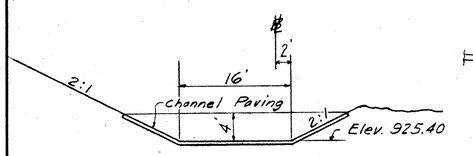
Item Special - Alterations to Sippo Creek Conduit and Pumping Station	Lump Sum
Item E-3 Channel Excavation	1700 Cu. Yds.
Item I-10 Riprap, using 6" Reinforced Concrete Slab	829 Sq. Yds.



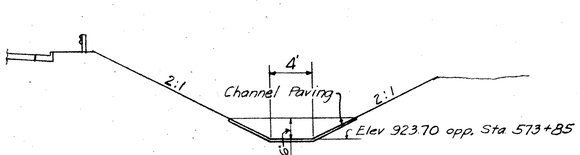
PLAN
Scale: 1"=20'

PROFILE ALONG CONDUIT BASELINE

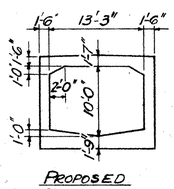
Elevations shown are invert for existing and proposed flow line.



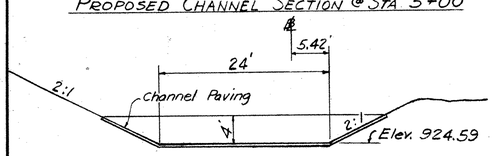
PROPOSED CHANNEL SECTION @ STA 5+00



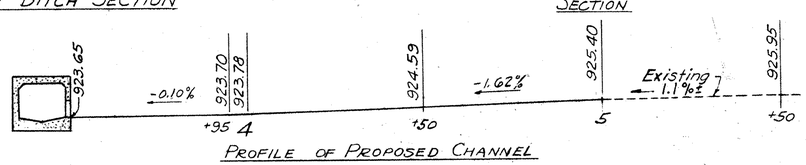
TYPICAL ROADWAY DITCH SECTION



PROPOSED SECTION



PROPOSED CHANNEL SECTION @ STA. 4+50



PROFILE OF PROPOSED CHANNEL

PROPOSED WORK.

1. The contractor shall secure written approval of his proposed construction procedure and sequence from the Corp of Engineers, U.S. Army, Huntington, W. Va. prior to beginning work on this item.
2. Remove section of existing pressure conduit and build new 48" sanitary sewer transition section between manholes. Divert sewer flow from existing to new section.
3. Remove section of existing pressure conduit and build new gatewell section and new conduit section, installing existing 6'x6' sluice gate.
4. Remove existing gatewell conduit section and build new pressure conduit. Remove trash screen and inlet facilities at pump house.
5. Lay new 54" pipes, repairing pump house wall as required. Build new inlet structure and retaining wall. Extend existing 12" pipe and reinstall flap valve.
6. Install existing 5'x3' sluice gates with manual controls, and trash screen at new inlet structure.
7. Install new ladder in existing discharge well.
8. Make backfill around pump house, 54" pipes and inlet structure.
9. Excavate channel; place roadway embankment; pave new creek channel and roadway drainage ditch.
10. Seed area bared by channel excavation in conjunction with seeding of roadway embankment slopes.
11. Make alterations to electric service as per Plans.
12. Maintain conduit flow and provide flood protection during construction.

GENERAL NOTES

1. Copper water stop to be installed in all conduit monolith joints.
2. Partial removal of old bridge pier and stone wall included with E-3 for payment.
3. See Sheets No. 104 & 105 for Pumping Station Electric Service Alterations.
4. See Sheet No. 103 for suggested details of Flood Protection during construction, also see General Note Sheet No. 10 and Special Drainage Structure notes on Sheet 118-A.

Construction and materials shall be governed by the provisions of Construction and Material Specifications, State of Ohio, Dept. of Highways, dated January 1, 1959 or as approved by the Corps of Engineers, U.S. Army.

Foundation Bearing Pressure: Footings are designed for a maximum bearing pressure of 3k per sq. ft.

- For Location see Roadway Plan Sheet No. 25

ESTIMATED-MAJOR-QUANTITIES

Item	Total	Unit	Description
E-2	L.S.	lump sum	Cofferdams, cribs and sheeting
E-2	900	cu. yds.	Unclassified excavation
S-1	325	cu. yds.	Class "C" concrete, pressure conduit & gatewell
S-1	59	cu. yds.	Class "C" concrete, sewer transition section
S-1	78	cu. yds.	Class "C" concrete, inlet structure & retaining wall
S-1	1	cu. yds.	Class "C" concrete, pump house alterations
S-4	62,598	lbs.	Reinforcing steel
S-7	L.S.	lump sum	Structural steel (gratings)
S-9	389	sq. ft.	½" Preformed expansion joint filler, Sec. M-10.02
S-9	135	lin. ft.	Folded copper strip (18" wide x 16 oz.)
S-14	50	lin. ft.	Railing - steel pipe
S-22	223	cu. yds.	Removal of portions of existing conduit and pumping station
S-25	L.S.	lump sum	Pumping station electric service alterations.
S-29	5	cu. yds.	Porous backfill
I-2	182	lin. ft.	54" Reinforced concrete pipe (M-6.6c)
I-2	110	lin. ft.	12" Bit. Coated Corrugated metal pipe (M-6.4c) including special
Special	L.S.	lump sum	Reset existing sluice gates and trash screen.
Special	L.S.	lump sum	Alterations to manual controls for sluice gates
I-8	2	each	Manhole standard No. 1A without drop pipes
Special	L.S.	lump sum	*Construct, maintain and remove temporary flood protection

*For Details see sheet no. 103.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

RELOCATION OF U.S. ROUTE 21

STARK COUNTY STA. 574+35.17

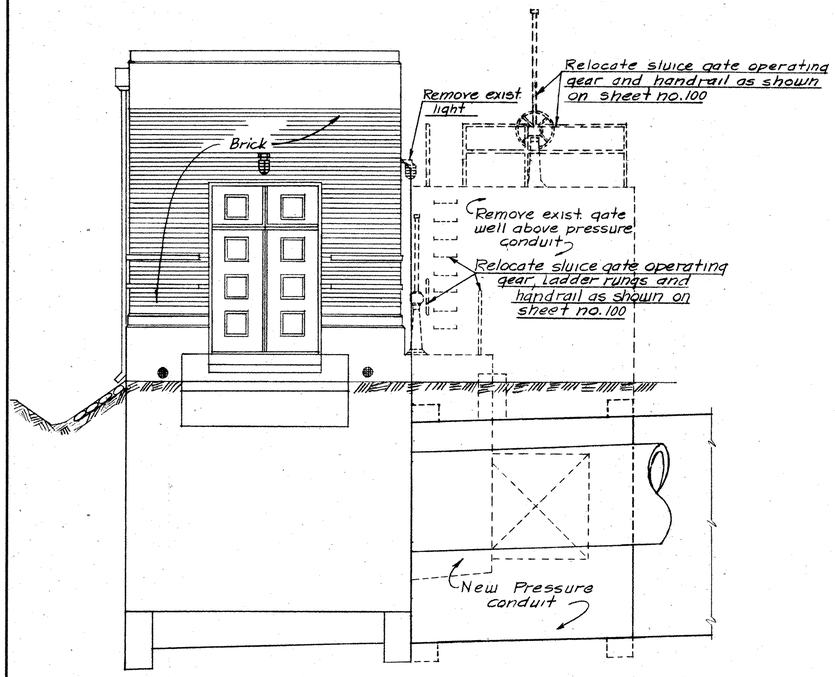
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
D.W.P. J.D.Y.	DWB.		CFF		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-57081

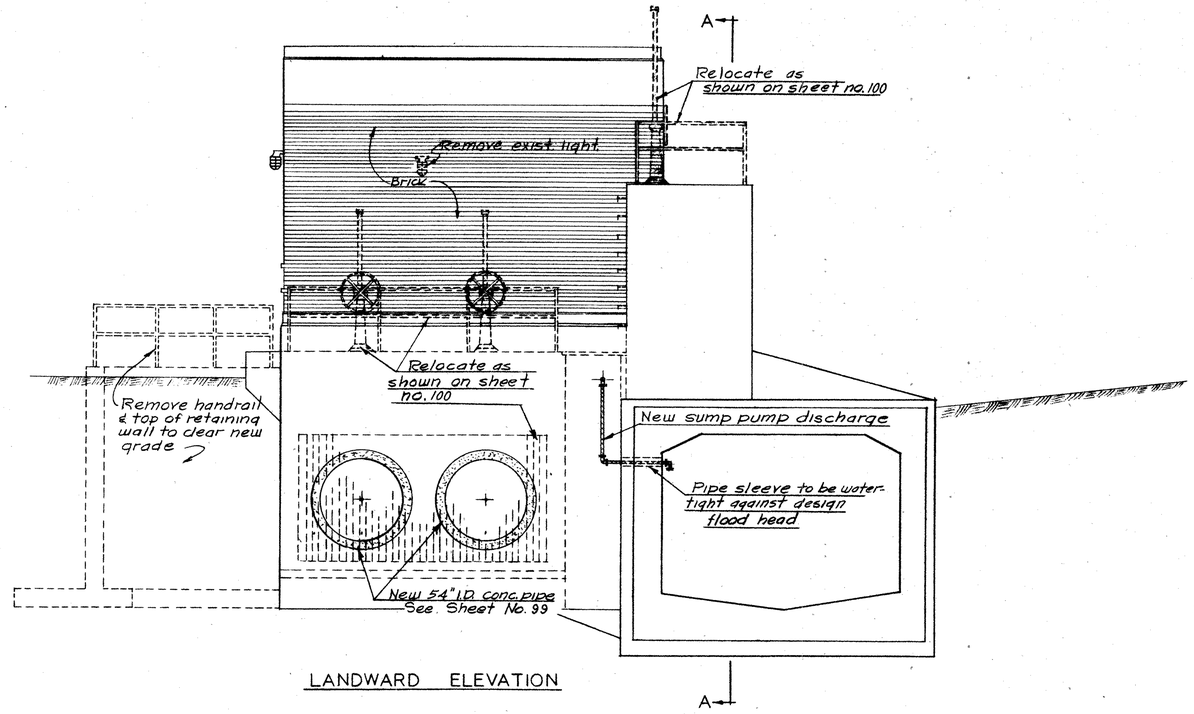
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

98

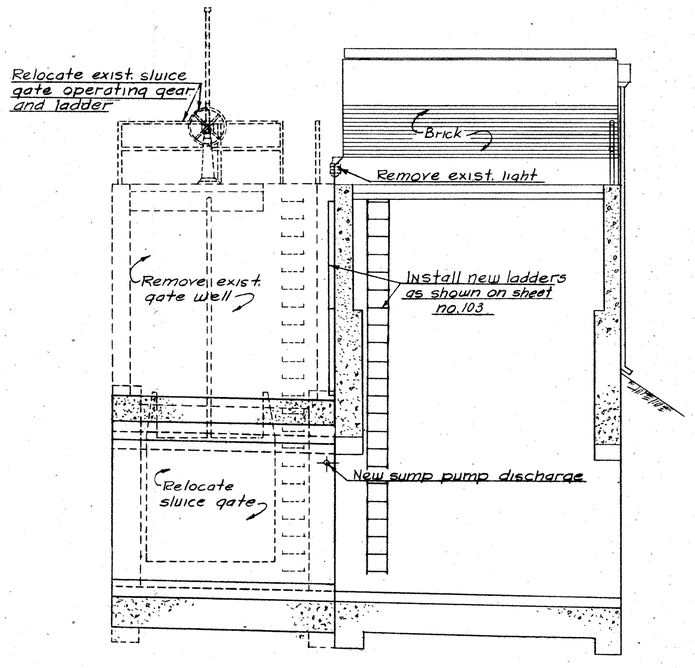
STA. -21-10.23



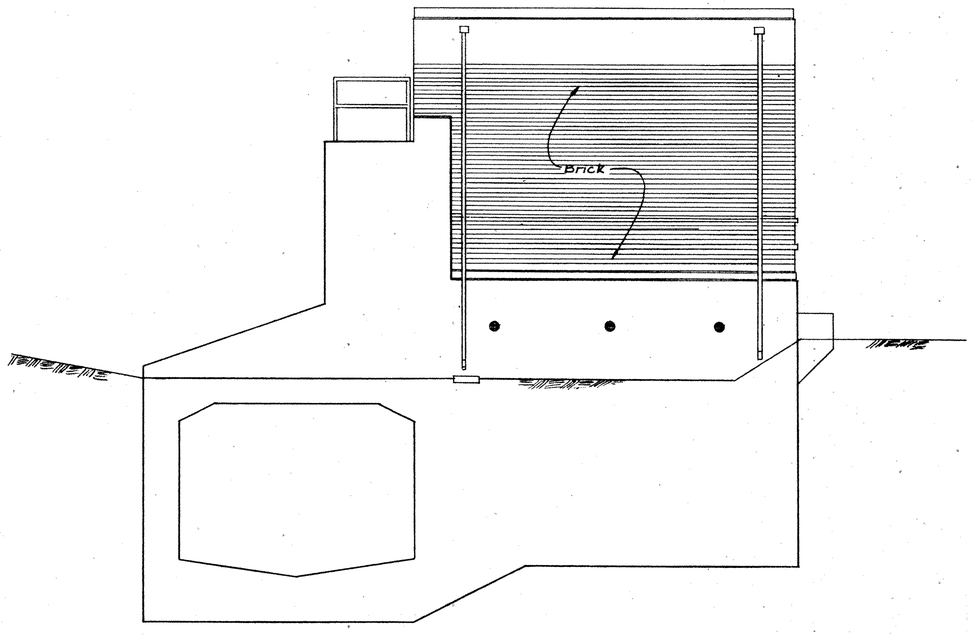
DOWNSTREAM ELEVATION



LANDWARD ELEVATION



SECTION A-A



RIVERWARD ELEVATION

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

ELEVATIONS

STARK COUNTY STA 574+35.17

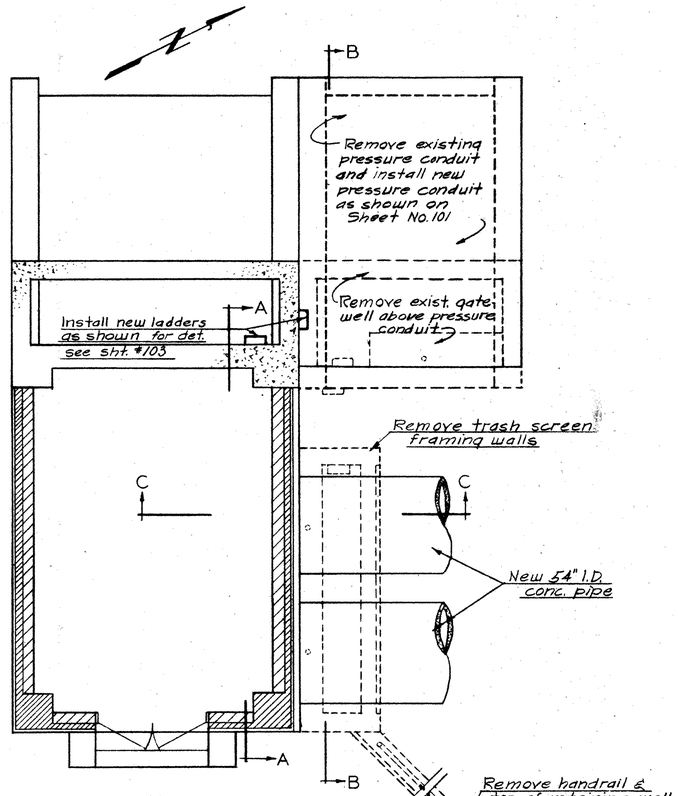
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
J.D.Y.	J.D.Y.		C.F.F.		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-27081

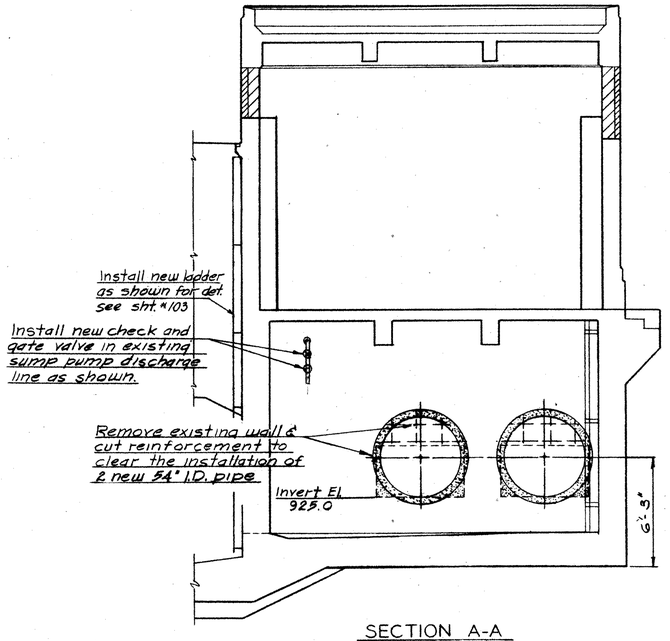
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

99

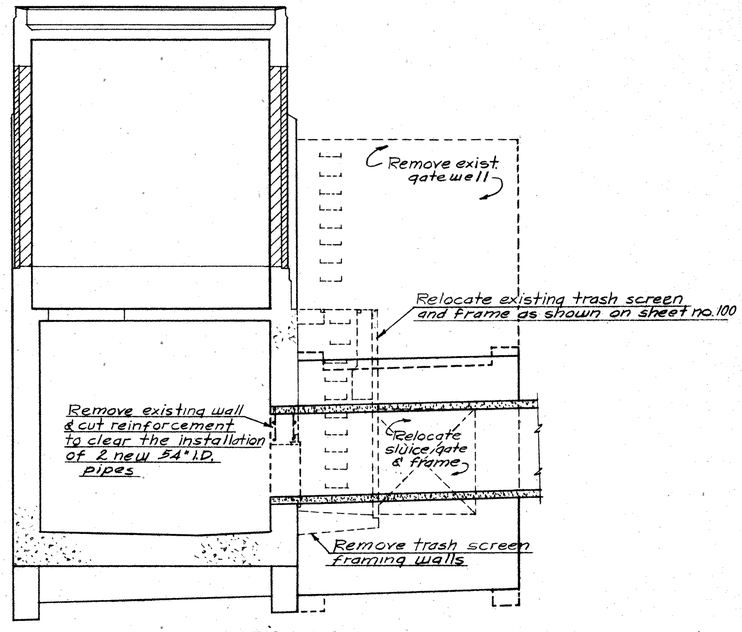
STA.-21-10.23



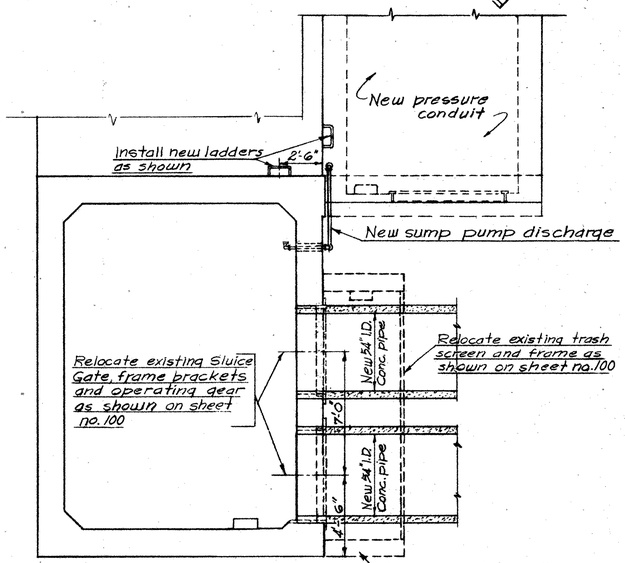
MOTOR FLOOR PLAN



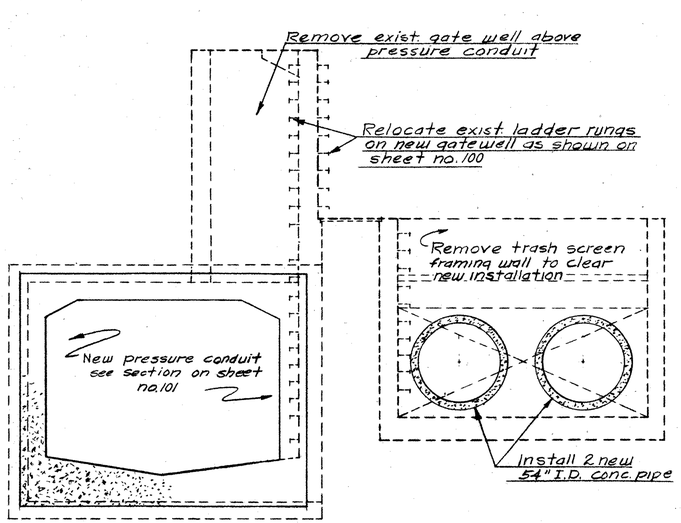
SECTION A-A



SECTION C-C

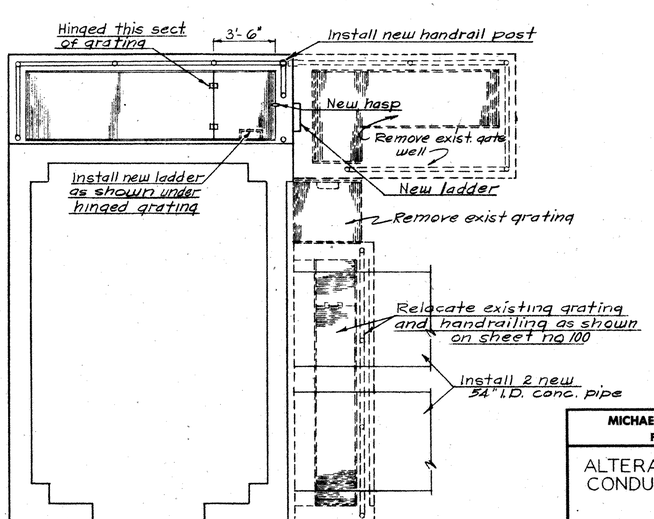


SUMP FLOOR PLAN



SECTION B-B

LEGEND.
O.F. = Outside Face
I.F. = Inside Face



MOTOR FLOOR PLAN

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

PLAN & SECTIONS

STARK COUNTY STA 574+35.17

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
J.D.Y.	J.D.Y.		CFF		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-27091

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

100

STA.-21-10.23

Existing Culvert — New Culvert — Sta 3+24.55 ± — Sta 3+54.55 ± — Sta 3+67.05 — New Sanitary sewer see sht. #102 — New Culvert — Existing Culvert — Sta 4+04.69 ±

12'-6"

½" Expansion Jt See Detail Sht. #103

½" Expansion Jt See Detail Sht. #103

New pressure conduit For section see sht. #101

New Gatewell

Relocated ladder rungs

Notch edges to install relocated grating & frame

Relocated handrailing and alter as required

Relocated Floorstand, stem, stem guide & sluice gate & frame and replace all damaged parts

Relocated Trash Screen, frame & fittings

Relocated handrailing, Alter as required

Relocated Floorstand, Sluice gate & frame, Alter as required.

Relocated grating & frame. Notch edge as required

Relocated flap valve

Install new grating & notch edges

New 54" I.D. Pipe

New 54" I.D. Pipe

PLAN

New 12" concrete pipe toe drain extension

Lengthen or replace existing stem as required

Finished grade El. 936.23

El 937.27

60"x 36" Opening

El 925.17

El 925.17

12-A607 @18" = 16'-0" T
12-A513 @18" = 16'-0" B

SECTION B-B

El 945.00

El 929.65

El 923.65

El 920.65

New pressure conduit similar to section shown on sheet no 101

SECTION A-A

New pressure conduit. For Sections See Sht. #101

Relocated Ladder

Warp bottom of transformation chamber to fit contour of new 54" I.D. Pipe

7-A501 @18" E.F.

SECTION C-C

El 937.27

Lengthen or replace existing stem as required

Trash Screen Headwall

El 930.85

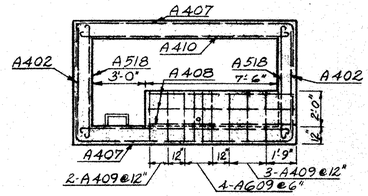
72"x 72" opening

El 925.10

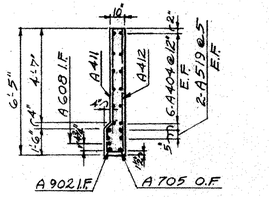
7-A514 @18" T
7-A517 @18" B

NOTE:
Reinforcement to be 2" clear.

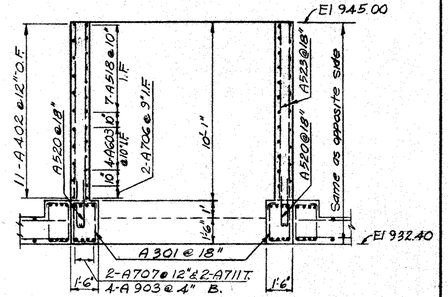
LEGEND
O.F. = Outside Face
I.F. = Inside Face



PLAN OF GATEWELL—TOP



TRASH SCREEN HEADWALL



SECTION D-D

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

DETAILS

STARK COUNTY STA. 574+35.17

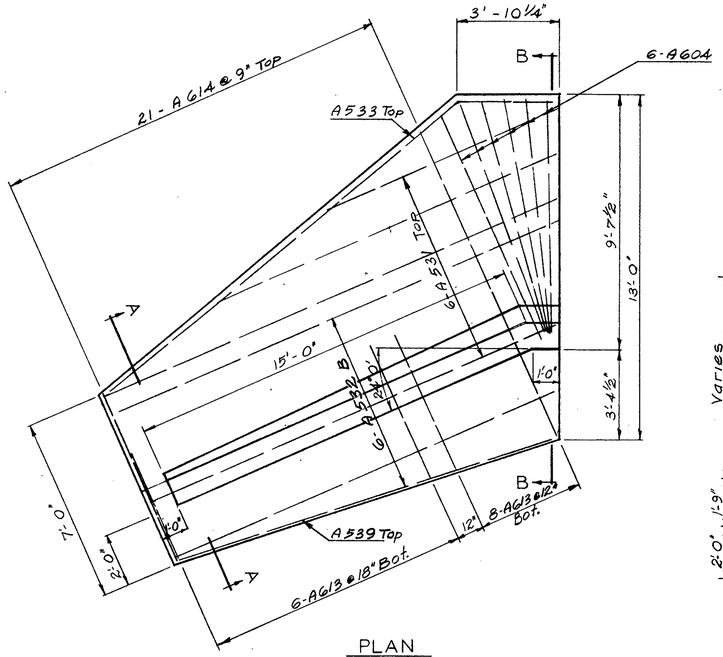
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
J.D.Y.	J.D.Y.		C.F.F.		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-57081

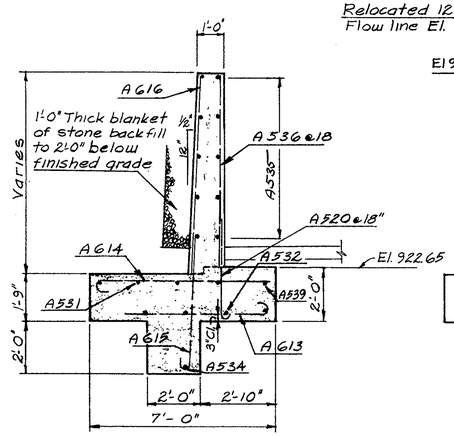
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

101

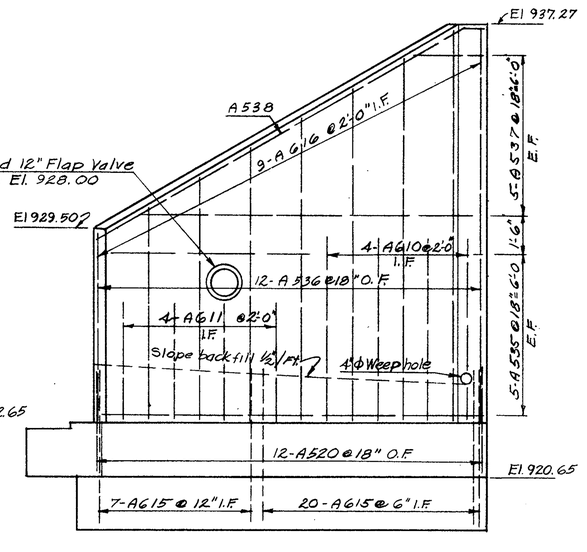
STA.-21-10.23



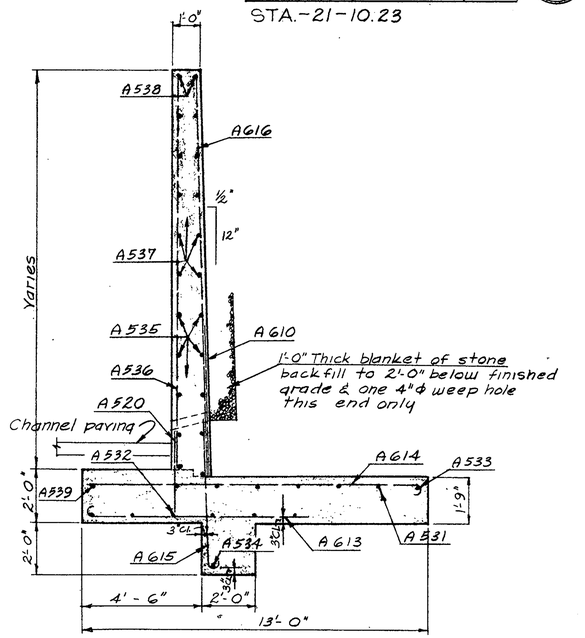
PLAN



SECTION A-A

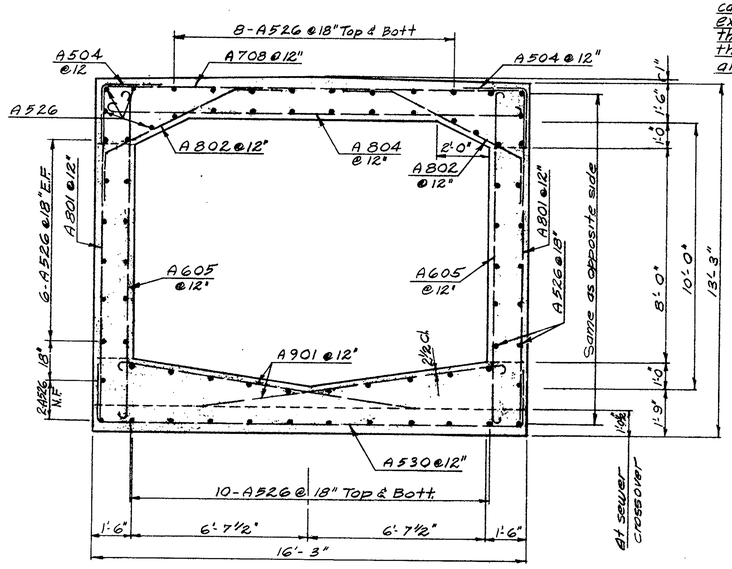


ELEVATION



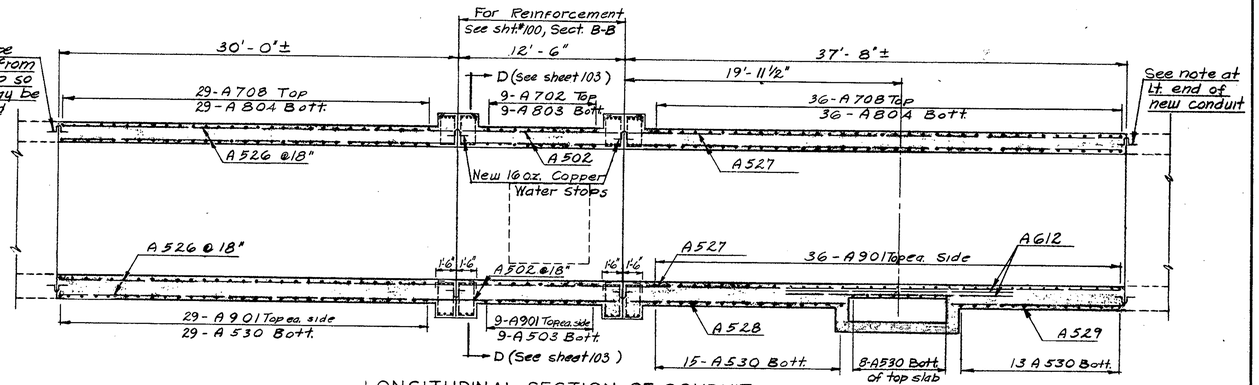
1'-0" Thick blanket of stone backfill to 2'-0" below finished grade & one 4"ϕ weep hole this end only

SECTION B-B



TYPICAL CONDUIT SECTION

Concrete should be carefully removed from existing waterstop so that water stop may be thoroughly cleaned and reused.



LONGITUDINAL SECTION OF CONDUIT

NOTE:
Reinforcement to be 2" Cl. except as noted.

LEGEND
O.F. = Outside Face
I.F. = Inside Face
E.F. = Each Face

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

DETAILS

STARK COUNTY STA 574+35.17

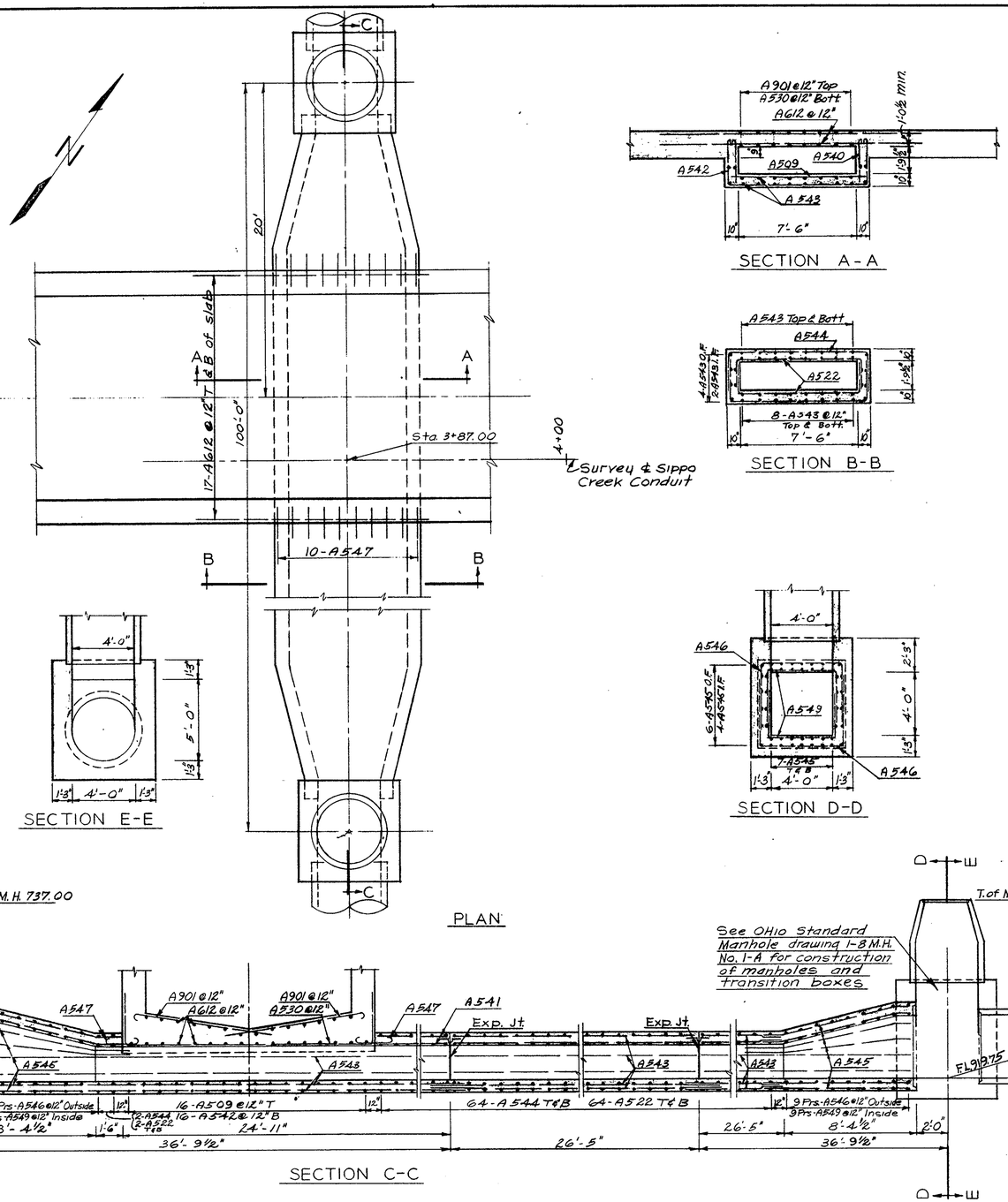
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
J.D.Y.	J.D.Y.		CFF		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-27081

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

102

STA-21-10.23



LEGEND
O.F. = Outside Face
I.F. = Inside Face
E.F. = Each Face

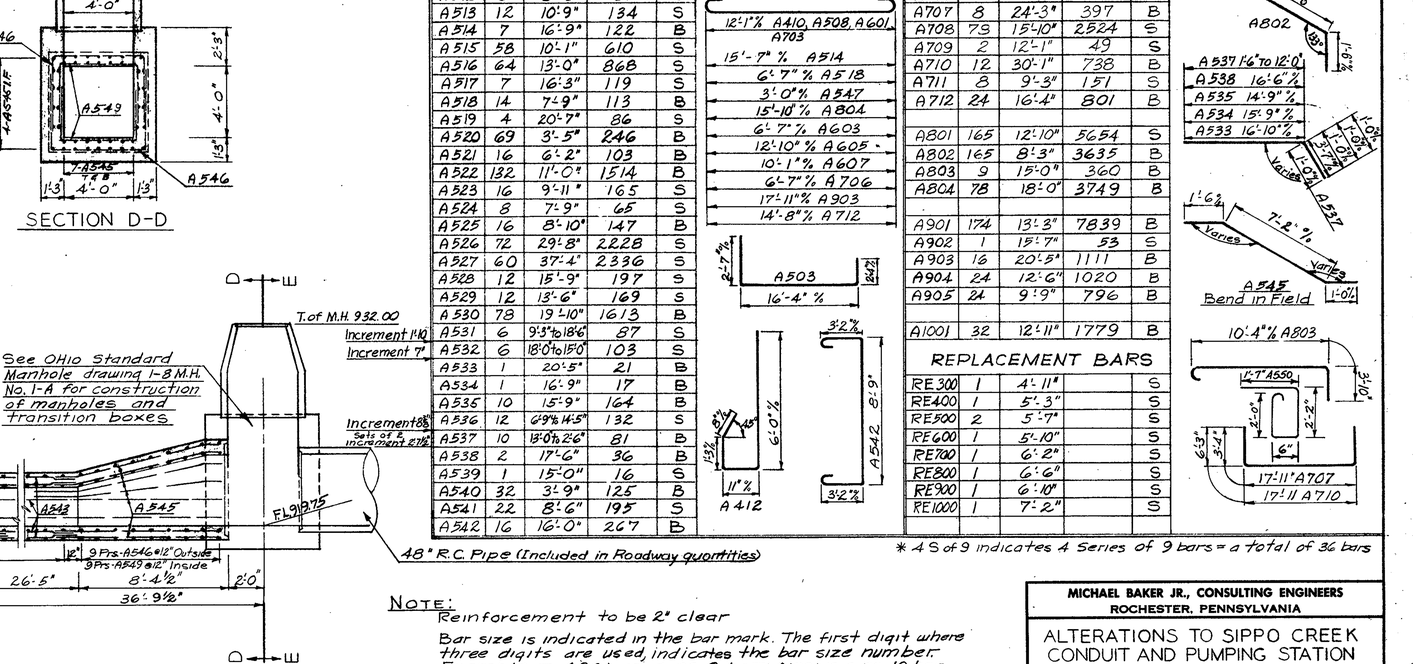
See notes for bar size code.

REINFORCING STEEL LIST

Mark	No	Length	Weight	Shp	Bending Diagram
A301	36	7'-0	95	B	A548 A301
A302	72	5'-4"	142	B	A302
A402	22	6'-7"	97	S	A402 A505 A602 A701
A403	8	18'-5"	98	B	
A404	12	19'-7"	157	S	
A405	13	15'-7"	135	S	
A406	28	5'-7"	104	S	
A407	10	14'-5"	96	B	
A408	5	8'-1"	27	S	
A409	5	8'-10"	30	B	
A410	11	13'-1"	96	B	
A411	14	6'-0"	56	S	
A412	14	8'-7"	80	B	
A550	10	6'-6"	68	B	
A501	28	10'-10"	316	S	
A502	124	12'-3"	1584	S	
A503	9	21'-0"	197	B	A403 A520 A544 A522
A504	165	5'-11"	1018	B	
A505	8	15'-4"	128	B	
A506	17	15'-7"	276	S	
A507	4	7'-0"	29	S	
A508	35	13'-3"	484	B	
A509	16	8'-9"	146	S	
A510	6	9'-0"	56	S	
A511	6	9'-7"	60	B	
A512	8	8'-0"	67	S	
A513	12	10'-9"	134	S	
A514	7	16'-9"	122	B	
A515	58	10'-1"	610	S	
A516	64	13'-0"	868	S	
A517	7	16'-3"	119	S	
A518	14	7'-9"	113	B	
A519	4	20'-7"	86	S	
A520	69	3'-5"	246	B	
A521	16	6'-2"	103	B	
A522	132	11'-0"	1514	B	
A523	16	9'-11"	165	S	
A524	8	7'-9"	65	S	
A525	16	8'-10"	147	B	
A526	72	29'-8"	2228	S	
A527	60	37'-4"	2336	S	
A528	12	15'-9"	197	S	
A529	12	13'-6"	169	S	
A530	78	19'-10"	1613	B	
A531	6	9'-3" to 18'-6"	87	S	
A532	6	18'-0" to 15'-0"	103	S	
A533	1	20'-5"	21	B	
A534	1	16'-9"	17	B	
A535	10	15'-9"	164	B	
A536	12	6'-9" to 14'-5"	132	S	
A537	10	13'-0" to 26'-6"	81	B	
A538	2	17'-6"	36	B	
A539	1	15'-0"	16	S	
A540	32	3'-9"	125	B	
A541	22	8'-6"	195	S	
A542	16	16'-0"	267	B	

Mark	No	Length	Weight	Shp	Bending Diagram
A543	110	26'-1"	2992	S	
A544	132	13'-10"	1904	B	Bend in Field
A545	96	9'-8"	968	B	
*A546	4 S of 9	13'-7" to 12'-5"	485	B	
A547	20	4'-2"	87	B	
A548	80	7'-4"	612	B	
*A549	4 S of 9	10'-11" to 9'-9"	388	B	
A601	7	13'-5"	142	B	
A602	5	15'-5"	116	B	
A603	8	7'-11"	95	B	
A604	6	9'-5"	85	B	
A605	165	14'-2"	3511	B	
A606	2	15'-7"	47	S	
A607	12	11'-9	206	B	
A608	1	15'-7"	23	S	
A609	4	8'-11"	54	B	
A610	4	7'-0"	42	S	
A611	4	4'-6"	27	S	
A612	34	17'-0"	868	S	
A613	14	5'-2" to 9'-0"	149	B	
A614	21	6'-8" to 12'-6"	302	B	
A615	27	6'-4"	257	B	
A616	9	6'-9" to 14'-5"	143	S	
A701	3	16'-1"	99	B	
A702	9	11'-2"	205	B	
A703	7	13'-9"	197	B	
A704	12	6'-4"	155	B	
A705	1	20'-7"	42	S	
A706	4	8'-3"	67	B	
A707	8	24'-3"	397	B	
A708	73	15'-10"	2524	S	
A709	2	12'-1"	49	S	
A710	12	30'-1"	738	B	
A711	8	9'-3"	151	S	
A712	24	16'-4"	801	B	
A801	165	12'-10"	5654	S	
A802	165	8'-3"	3635	B	
A803	9	15'-0"	360	B	
A804	78	18'-0"	3749	B	
A901	174	13'-3"	7839	B	
A902	1	15'-7"	53	S	
A903	16	20'-5"	1111	B	
A904	24	12'-6"	1020	B	
A905	24	9'-9"	796	B	
A1001	32	12'-11"	1779	B	

REPLACEMENT BARS				
RE300	1	4'-11"		S
RE400	1	5'-3"		S
RE500	2	5'-7"		S
RE600	1	5'-10"		S
RE700	1	6'-2"		S
RE800	1	6'-6"		S
RE900	1	6'-10"		S
RE1000	1	7'-2"		S



* 4 S of 9 indicates 4 Series of 9 bars = a total of 36 bars

NOTE:
Reinforcement to be 2" clear

Bar size is indicated in the bar mark. The first digit where three digits are used, indicates the bar size number. Example = A901 is a no. 9 bar; A1001 is a no. 10 bar

Replacement Bars: If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. S-4.02 need not be furnished and replacement bars will not be required.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

SEWER SECTION & STEEL LIST

STARK COUNTY STA. 574+35.17

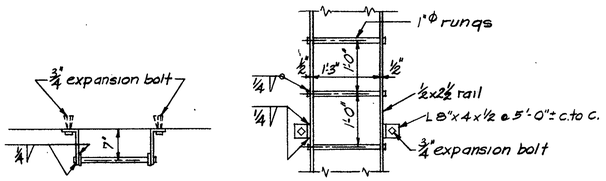
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
J.D.Y.	J.D.Y.		CFF		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-27091

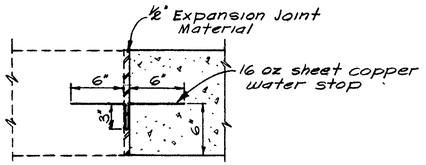
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

103

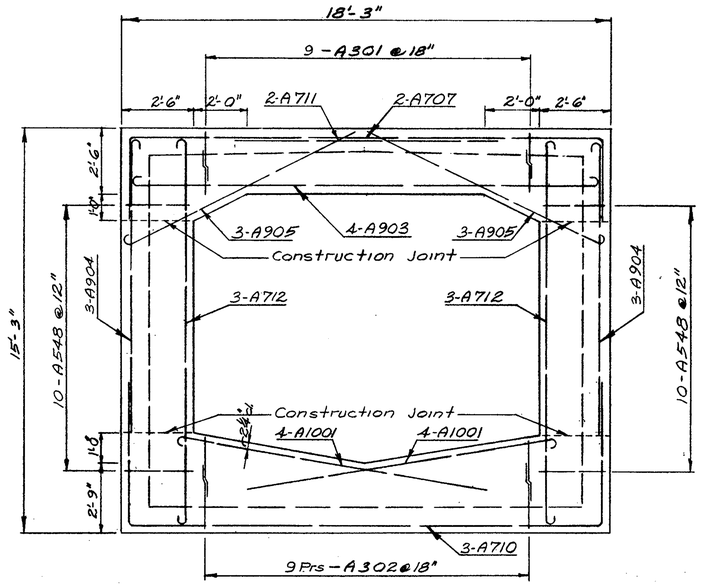
STA.- 21-10.23



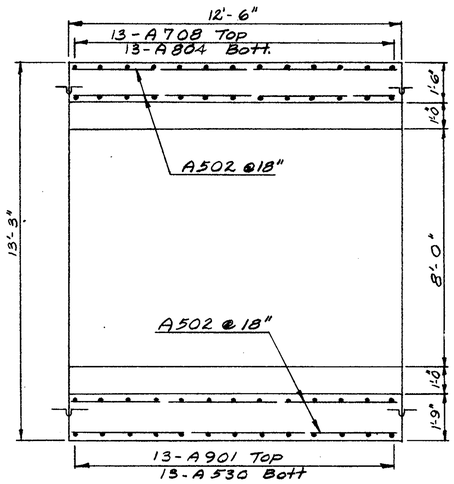
LADDER DETAILS
FOR OLD WORK



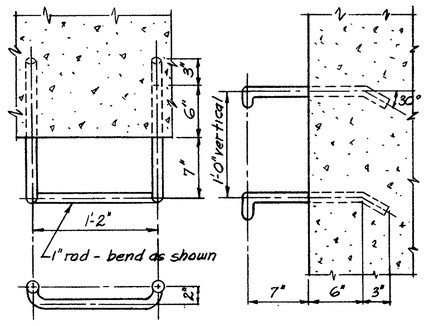
TYPICAL EXPANSION JOINT



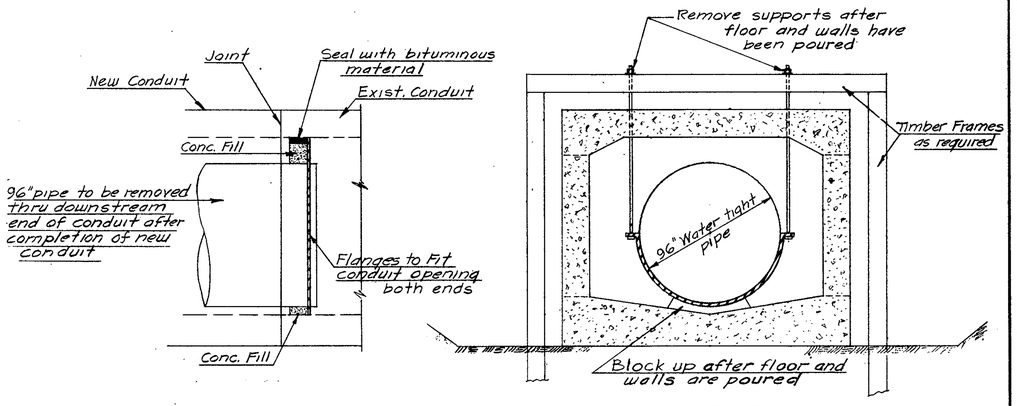
SECTION D-D OF FRAME



SECTION OF NEW PRESSURE CONDUIT
NEXT TO PUMP HOUSE



LADDER RUNG
FOR NEW WORK



SUGGESTED TEMPORARY FLOOD PROTECTION

Note:
Temporary flood protection may be accomplished by an alternate method subject to approval of the Director of Highways, the Bureau of Public Roads and the U.S. Army Corps of Engineers.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

MISCELLANEOUS DETAILS

STARK COUNTY STA 574+35.17

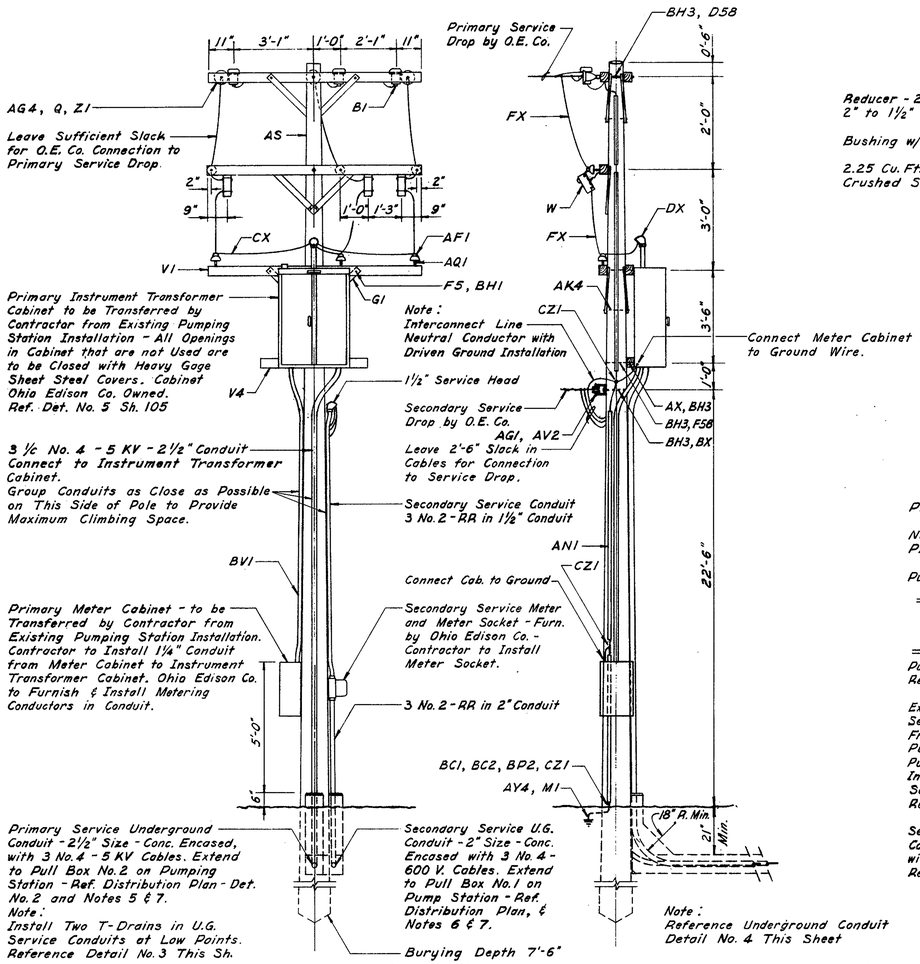
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
J.D.Y.	J.D.Y.		CFF		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-57061

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

104

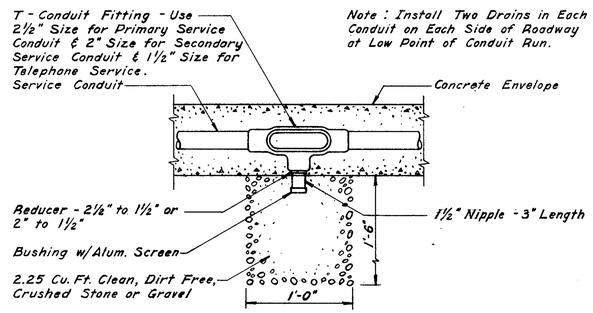
STA. - 21 - 10.23



SERVICE METERING & TERMINAL POLE DETAIL NO. 1

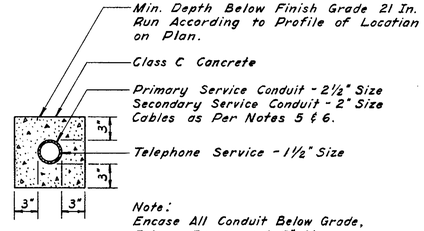
No Scale

Symbol	Quantity	Item & Description
AF1	6	Pin Type Insulator - O.B. 12847 or Equivalent
AG1	1	Secondary Rack Spool Insulator - 3" Dia. Size
AG4	3	6" Strain Dist. Insulator - O.B. 32433 or Equiv. (Furn. & Inst. by O.E. Co.)
AK4	10	½" x 4" Fetter Drive Lag Screw
AN1	3	Wood Moulding - 1" x 8' with ½" Groove (Treated)
AQ1	6	⅝" Steel Dist. Pin
AS	1	40' Pole CL 3 (Fully Treated) per ASA Specs. Pine or Cedar
AV2	1	1 Spool Secondary Rack
AY4	2	⅝" x 8'-0" Copperweld Sectional Ground Rod
B1	3	3 KV Arrester - Valve Type per O.E. Specs.
BC1	15	1 1/16" x 3" Copperweld Staple
BC2	4	5/16" x 1½" Copperweld Staple
BH1	10	1" Round Washer
BH3	27	2¼" Square Washer
BP2	40 L.F.	Wire - #2, #3 or #4 Bare or Weatherproof Copper
BX	1	⅝" x 9" Machine Bolt
DX	1	Service Hd. & Conduit Extension (Exist. Equip. from Pumping Station)
FX	As Req'd.	Wire #4, Weatherproof Copper (Medium Hard Drawn)



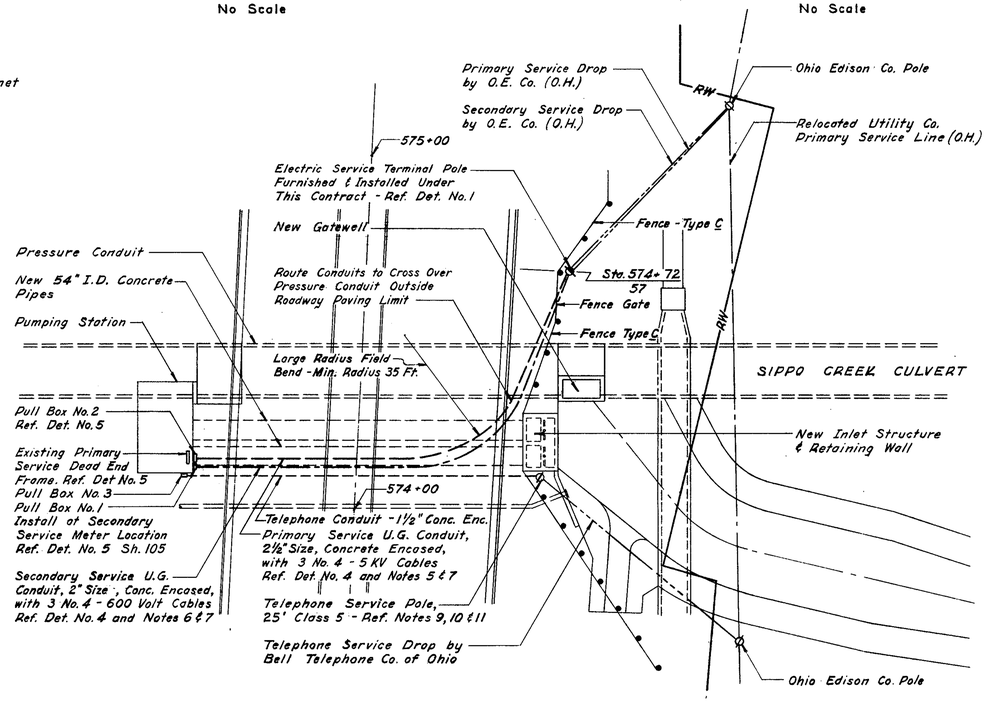
TYPICAL CONDUIT DRAIN DETAIL NO. 3

No Scale



SERVICE CONDUIT ENCASEMENT DETAIL NO. 4

No Scale



ELECTRIC SERVICE DISTRIBUTION PLAN - DETAIL NO. 2

Scale: 1" = 20'

Symbol	Quantity	Item & Description
BV1	As Req'd.	Conduit - 1¼" Galv. Rigid - From Instrument Transformer Cabinet to Meter Cabinet. (Furn. & Installed by Contractor, O.E. to Furn. & Inst. Wiring)
CZ1	3	Line Connector - #6 Solid to #2 Stranded Copper
D58	6	⅝" x 18" Double Arming Bolt
F5	10	⅜" x 5½" Machine Bolt
F58	1	⅝" x 12" Machine Bolt
G1	10	30" Wood Crossarm Brace with Clips (Treated)
M1	1	⅝" Bronze Ground Rod Clamp
Q	3	Strain Clamp (Furn. by O.E. Co. & Installed by O.E. Co.)
V1	10	3¼" x 4¼" x 8' - 6 Pin Dist. Wood Crossarm (Treated)
V4	1	3¼" x 4¼" x 4' - Outrigger Crossarm (Treated)
W	3	Cutout 5 KV - 100 Amp. - Porcelain Enclosed Type.
Z1	3	⅝" Nut, 1½" Eye (Furn. & Installed by O.E. Co.)
	2	Hangers - For Primary Instrument Transformer Cabinet (Furn. by O.E. Co.)
AX	4	½" x 5" Machine Bolt (For Fastening Cabinet to Crossarm)
CX	As Req'd.	Cable - 1/c No. 8 - 5000 Volt, Okonite Co. Cat. No. 10502

Note: Work This Sheet in Conjunction with the Notes & Details on Sheet No. 105

NOTES

1. Contractor to Review Metering Installation Details with O.E. Co. Meter Section Before Construction and shall Comply with Rules and Regulations of O.E. Co. for This Installation.
2. All Materials to be Furnished and Installed by Contractor Unless Otherwise Noted.
3. All Hardware shall be Hot Dipped Galvanized.
4. Primary Instrument Transformer Cabinet to be Transferred from Pumping Station to Terminal Pole.
5. Primary Service Cables shall be Single Conductor, A.W.G. No. 4, Unshielded, Concentric Stranded, Rated 5000 Volts with 110/64 th Inch Rubber Insulation and 3/64 th Inch Polychloroprene Sheath Equivalent to Okonite Company Okolite-Okoprene Cat. No. OK 10507.
6. Secondary Service Cables shall be Single Conductor, A.W.G. No. 4, Concentric Stranded, Rated 600 Volts with 4/64 th Inch Rubber Insulation and 3/64 th Inch Polychloroprene Sheath Equivalent to Okonite Co. Okolite-Okoprene Cat. No. OK 10050.
7. Terminate Cables in Accordance to Manufacturer's Recommendations. Substitution of Cable Type Listed in Notes 5 & 6 shall not be Permitted Unless Approved in Writing by the Engineer.
8. Installation shall Conform to Rules and Regulations of the National Electrical Code and the National Electrical Safety Code.
9. Telephone Service shall be Installed in Accordance to Rules & Regulations of Bell Telephone Co. of Ohio.
10. Install No. 12 Gage Galv. Drag Wire in Tele. Conduit.
11. Telephone Service Pole shall be Buried 6 Ft. Extend Conduit on Pole 18' Above Finish Grade and Terminate with Service Head.
12. All Material shall be New, First Grade and Approved by Underwriters Laboratories.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

SERVICE PLAN & DETAILS

STARK COUNTY STA. 574+35.17

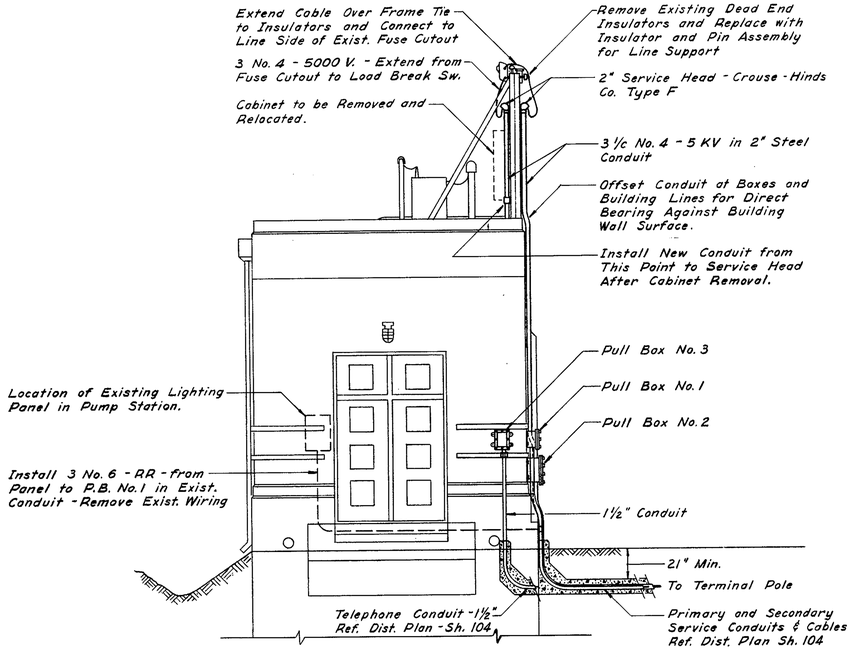
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
		RLB	EEE	RLB	

BEAVER VALLEY ENGINEERING SUPPLIES CO.

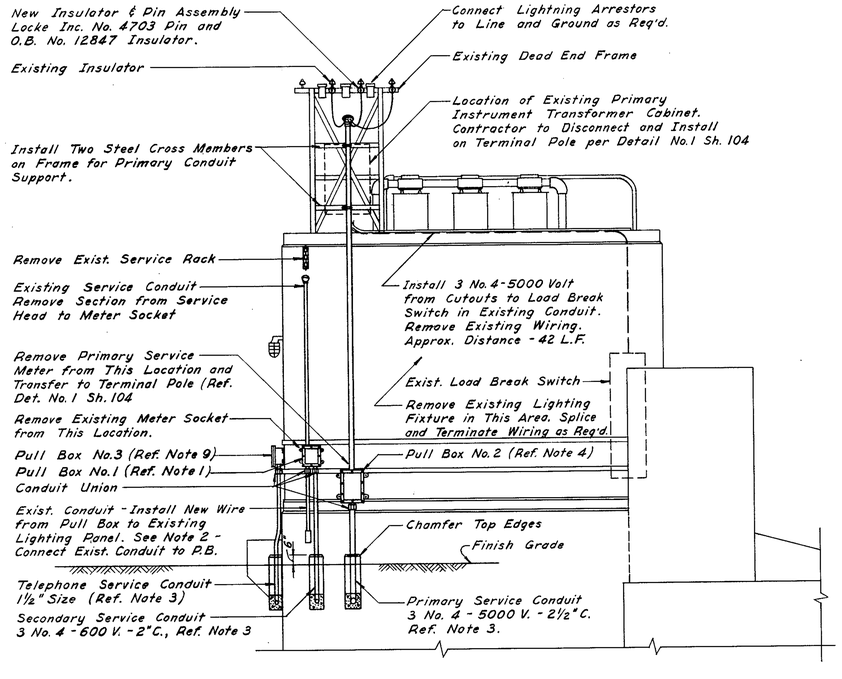
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

105

STA. - 21 - 10.23



DOWNSTREAM ELEVATION



LANDWARD ELEVATION

PUMPING STATION ELECTRIC SERVICE ALTERATIONS DETAIL NO. 5

Scale : ¼" = 1'-0"

Note : Work This Sheet in Conjunction with the Notes and Details on Sheet No. 104

NOTES

1. Pull Box No. 1 to be Cast Type with Screw Cover and Mounting Lugs. Inside Dim. 10"x8"x6", Equal to Spring City Electricol Co. No. HF 100806. Mount Box at Existing Meter Location and Connect Existing Service Conduit and Underground Service Conduit to Box.
2. Wire from P.B No. 1 to Lighting Panel Shall Consist of 3 No. 6 - RR Wires. Remove Exist. Wire. Splice New Wire to U.G. Service Cables in P.B. and Connect to Panel. Approx. Distance from P.B. No. 1 to Ltng. Panel - 23 L.F.
3. Route Service Conduits to Terminal Pole in Accordance to Plan on Sheet 104.
4. Pull Box No. 2 to be Cast Type with Screw Cover and Mounting Lugs. Inside Dim. 18"x12"x8", Equal to Spring City Electrical Co. No. HF 181208. Mount Box at Approx. Locotion of Primary Meter and Connect Underground Service Conduit and Riser to Dead End Frame.
5. Mount Boxes with ½" ϕ Cadmium Plated Machine Bolts and Expansion Anchors.
6. Support Conduits on Pump House with One Hole Pipe Straps at 8 Ft. Intervals.
7. Conduits shall be Screwed into Boxes. Red Lead All Conduit Joints.
8. Remove Primary Service Metering Conduit and Wire from Instrument Cabinet to Primary Service Meter.
9. Pull Box No. 3 shall be Equivalent to Pull Box No. 1 (Ref. Note 1). Mount Box at Existing Telephone Service Entrance Point. Remove Discontinued Existing Equipment.
10. Repair and Patch Building to Match Existing Installation at All New Openings and Where Existing Equipment is Removed.
11. All Conduit shall be Rigid Steel, Galvanized or Sheradized, Threaded Type. Mandrel and Clean Conduits Before Installation of Cable.
12. Contractor shall Obtain All Permits and Licences Required for This Work.
13. All Work shall be Subject to Requirements and Approval of Corps of Engineers, U.S. Army Office of the District Engineer, Huntington, West Virginia. The Above Office shall be Advised of Commencement of Work and Periods of Service Interruption shall be Subject to Approval from This Office. Requests and Approval for Service Interruption shall be Made in Writing.
14. Ground All Conduit and Boxes in Accordance to the National Electrical Code Requirements.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION
SERVICE DETAILS

STARK COUNTY STA. 574+35.17

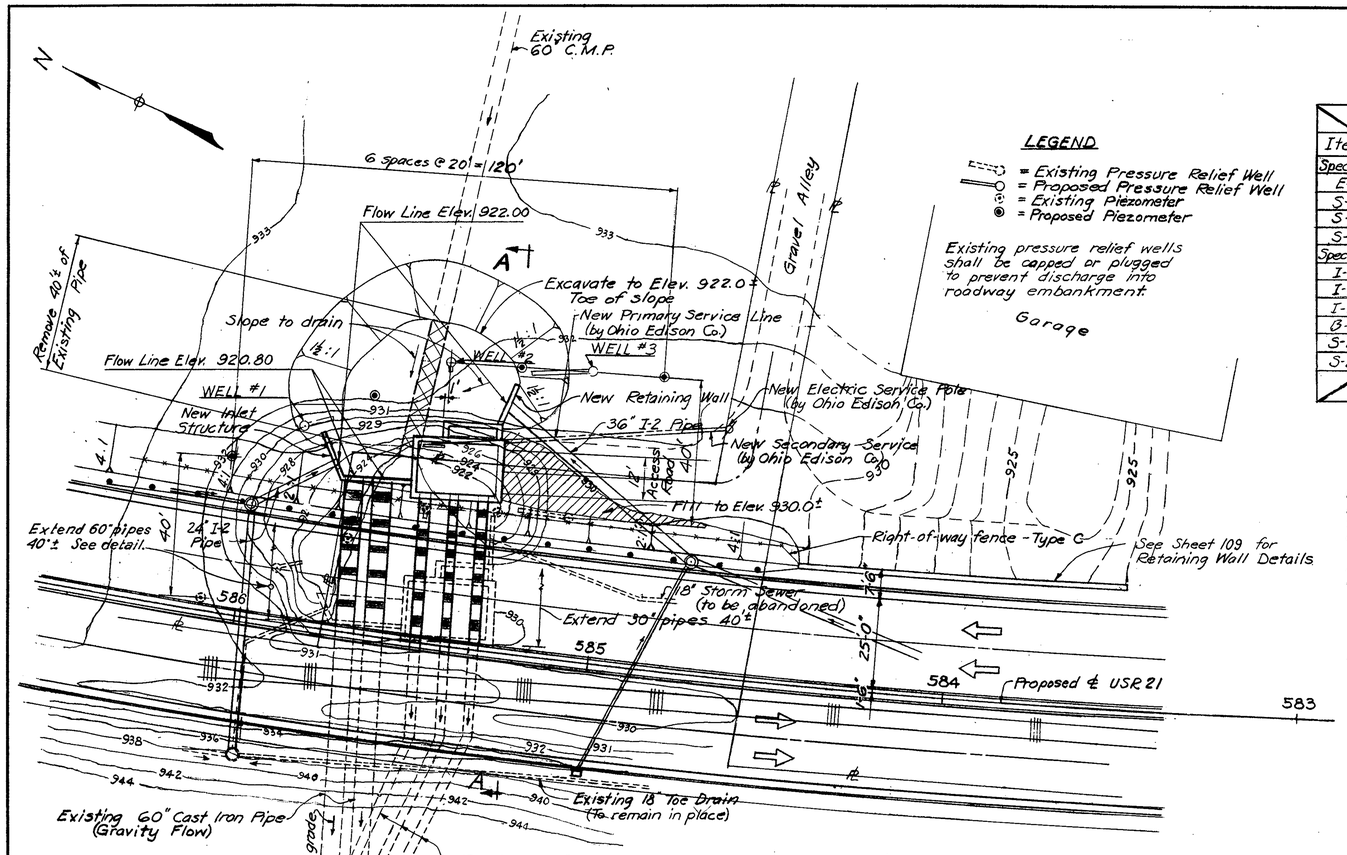
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
		RLB	EEE	RLB	

BEAVER VALLEY ENGINEERING SUPPLIES CO.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010 (5)	

106

STA-21-10.23



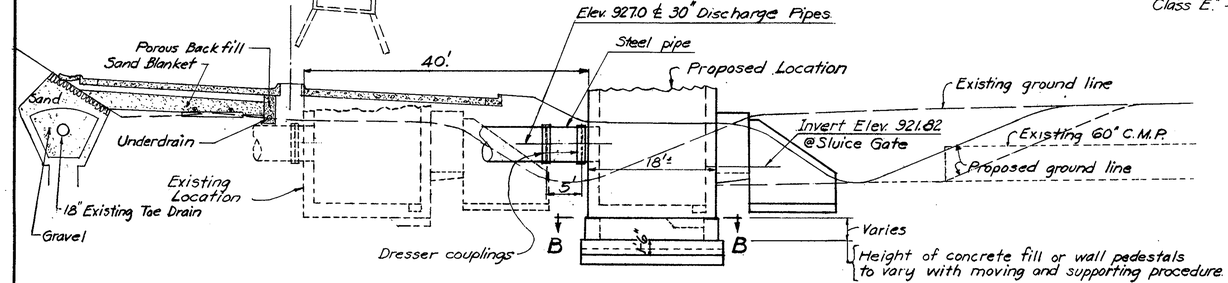
PLAN
Scale 1"=20'

LEGEND

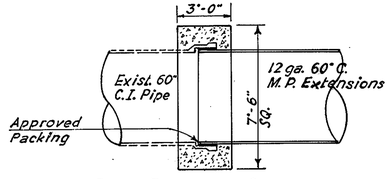
= Existing Pressure Relief Well
= Proposed Pressure Relief Well
= Existing Piezometer
= Proposed Piezometer

Existing pressure relief wells shall be capped or plugged to prevent discharge into roadway embankment.

Garage



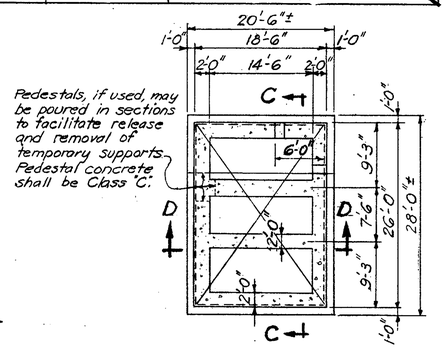
SECTION A-A
Scale 1"=10'



PIPE EXTENSION COLLAR DETAIL

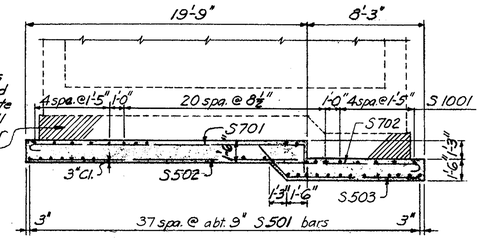
ESTIMATED MAJOR QUANTITIES

Item	Total	Unit	Description
Special	Lump Sum	lump	Temporary flood protection
E-2	667	cu. yds	Unclassified excavation
S-1	35	cu. yds.	Class "C" concrete
S-1	35	cu. yds.	Class "E" concrete, foundation slab
S-4	10451	lbs.	Reinforcing steel
Special	Lump Sum	lump	Support, raise and move exist. bldg.
I-2	82	lin. ft.	12 Ga 30" C.M. Pipe, Sec. m-6.4(d)
I-2	120	lin. ft.	30" steel pipe, Sec. M-6.9
I-13	24	lin. ft.	Concrete steps
B-19	12	cu. yds.	Aggregate Base Course
S-24	Lump Sum	lump	Removal of existing retaining walls & inlet structure
S-25	Lump Sum	lump	Electrical grounds



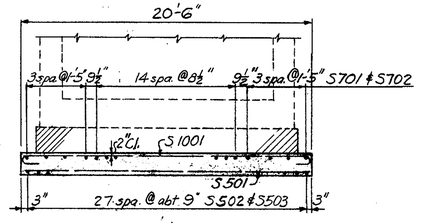
Pedestals, if used, may be poured in sections to facilitate release and removal of temporary supports. Pedestal concrete shall be Class "C".

PLAN SECTION B-B
SHOWING SUGGESTED PEDESTALS
Scale 1"=10'



If desired, temporary supports may remain under building and be encased in solid concrete fill. Concrete for solid fill may be either Class "C" or Class "E."

SECTION C-C
Scale 1"=5'



SECTION D-D
Scale 1"=5'

Concrete for foundation slab shall be Class "E".

PROPOSED WORK

Contractor shall secure written approval of his proposed moving methods, procedures and rein. conc. foundation slab and pedestals from the Corp of Engineers, U.S. Army, Huntington, W.Va. prior to beginning work on this item. Remove existing retaining wall, inlet structure and 60" corrugated metal pipe as required for new construction.

Excavate for and pour reinforced concrete foundation slab at new location. Move building to a position directly over this slab. Support, shim and plumb building at desired elevation. Pour wall pedestals or solid concrete fill on new foundation. Remove temporary supports.

Extend existing pipes to building and connect them. Build new inlet structure and retaining wall, extending and connecting pipes as per Plans. Install new electrical grounds. In conjunction with highway earthwork, place backfill around structures. Build access road and steps to entrance.

Align and level pumps and test operation of controls. Install new pressure relief wells and piezometers.

The Contractor must assume full responsibility for the moving procedure and the condition of the building after moving.

PLANS of existing construction are on file in both the Division and Central Offices of the Ohio Department of Highways and in the District Office of the Corps of Engineers, U.S. Army at Huntington, W.Va. The Corps of Engineers reserves the right to inspect all work performed under the special item "Relocation of Federal Avenue Pump Station, as per Plan."

For special drainage structure notes, see Sheet 118-A

ELECTRICAL GROUNDS: Contractor shall disconnect existing external ground system at the pump station, install new equivalent grounding system for the pump station at the proposed location and connect as required to station grounding bus. Work shall be subject to approval of the Corps of Engineers, U.S. Army, and requirements of the National Electric Code.

FLOOD PROTECTION: See General Note Sheet No. 10

ESTIMATED QUANTITIES (TO GENERAL SUMMARY)

Item Special - Relocation of Federal Avenue Pump Station — Lump Sum

Item Special - Pressure Relief Wells — 135 Lin. Ft.

Item Special - Piezometer Tubes — 100 Lin. Ft.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

FEDERAL AVENUE PUMP STATION RELOCATION
Tuscarawas River Local Protection Project - Massillon, Ohio
STARK COUNTY U.S.R. 21
Sta. 585+40

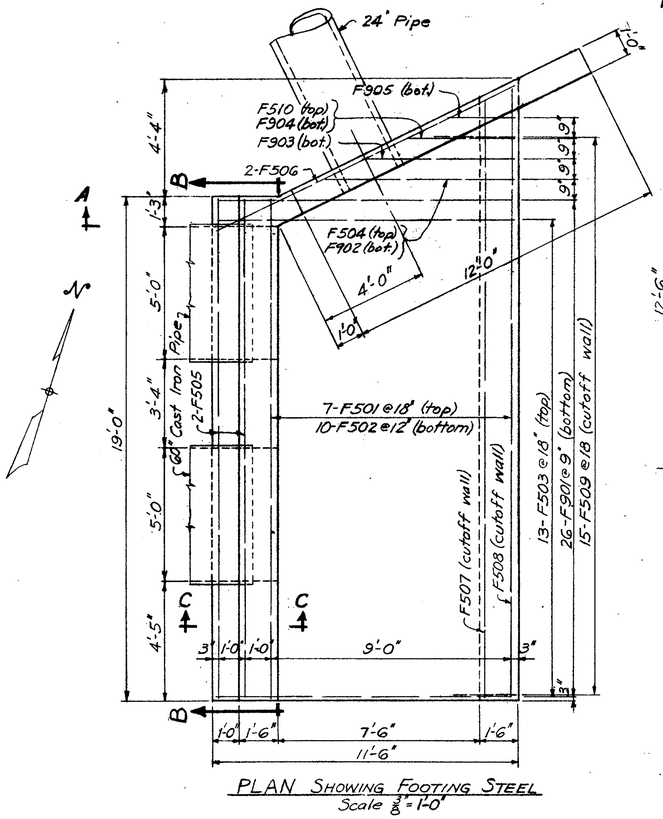
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
DWP	DWP		L.G.H. S.U.H.		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-27091

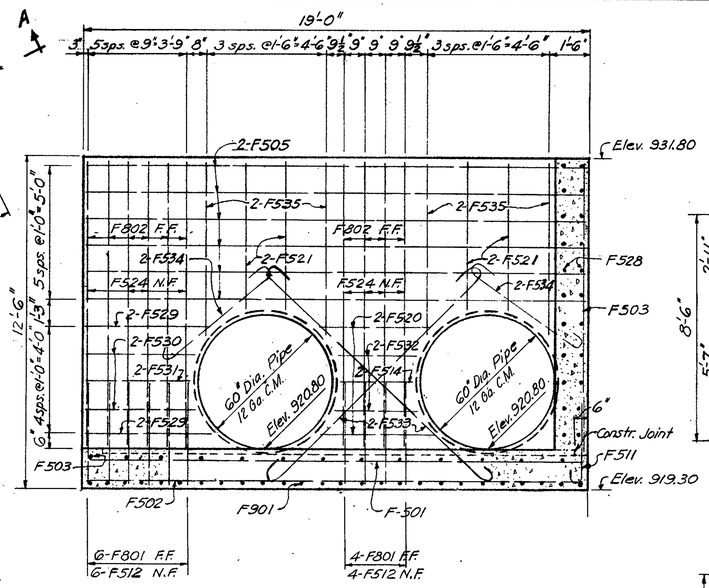
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

107

STA - 21-10.23

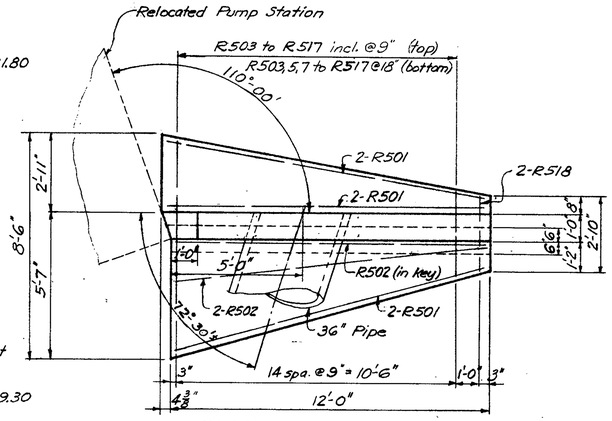


PLAN Showing Footing Steel
Scale $\frac{3}{8}$" = 1'-0"

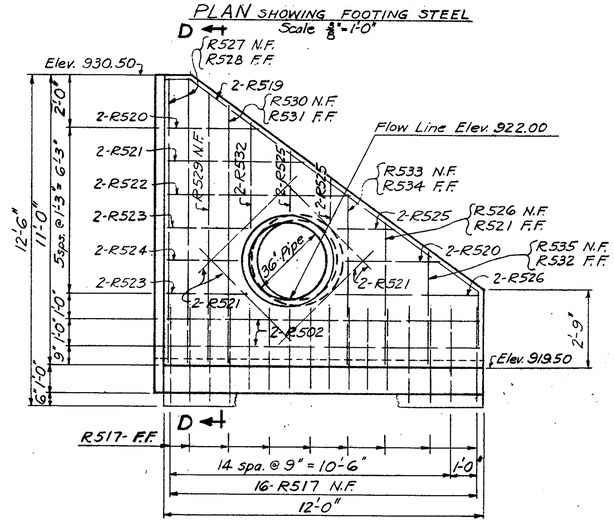


SECTION B-B
Scale $\frac{3}{8}$" = 1'-0"

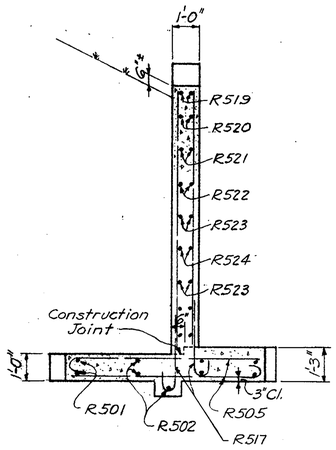
INLET STRUCTURE



PLAN SHOWING FOOTING STEEL
Scale $\frac{3}{8}$" = 1'-0"

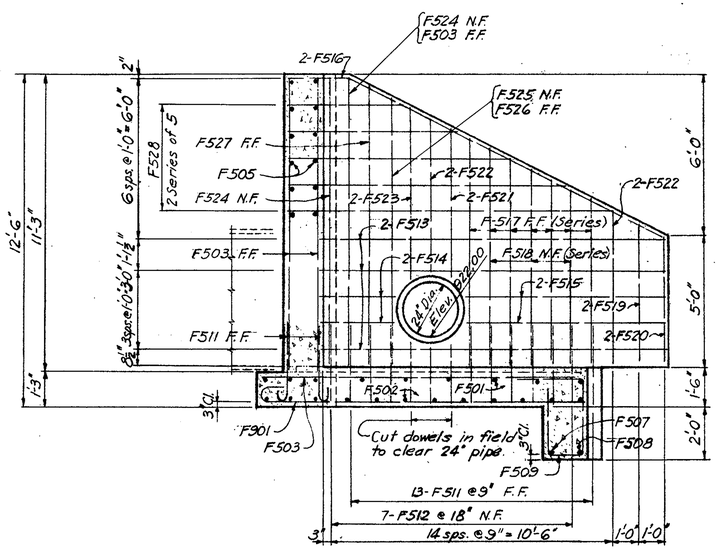


ELEVATION
Scale $\frac{3}{8}$" = 1'-0"

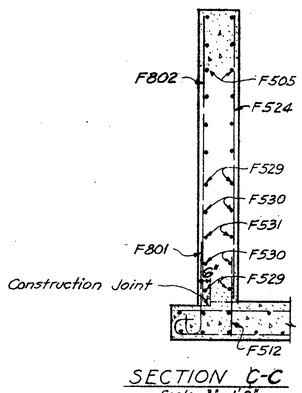


SECTION D-D
Scale $\frac{3}{8}$" = 1'-0"

RETAINING WALL



SECTION A-A
Scale $\frac{3}{8}$" = 1'-0"



SECTION C-C
Scale $\frac{3}{8}$" = 1'-0"

NOTES

Concrete for inlet structure and retaining wall shall be Class 'C'. Reinforcing steel shall have 2" minimum cover unless noted. See Sheet 108 for Reinforcing Steel List.

LEGEND: N.F. = Near Face
F.F. = Far Face

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

DETAILS OF INLET STRUCTURE AND RETAINING WALL
FEDERAL AVE. PUMP STATION RELOCATION

STARK COUNTY U.S.R. 21
Sta. 585+40

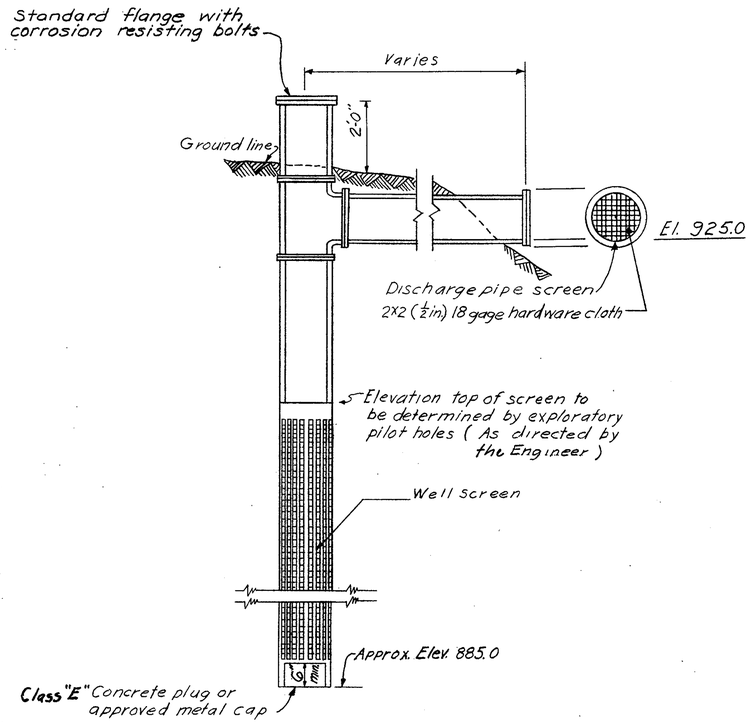
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
H.G.W. S.J.F.	D.W.P.		J.D.Y. S.J.F.		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-27091

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

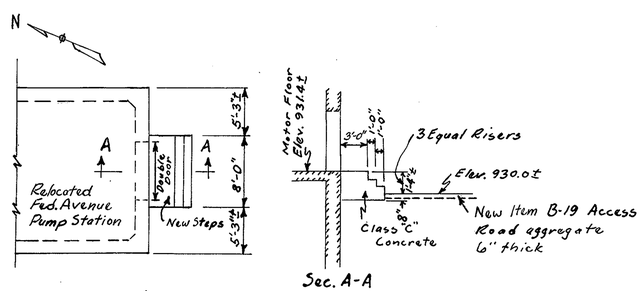
108

STA-21-10.23

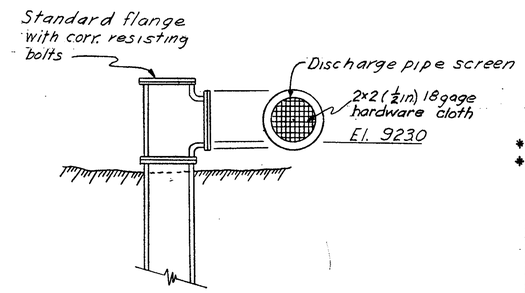


TYPICAL CROSS SECTION
THRU WELLS 1 & 3

NOT TO SCALE

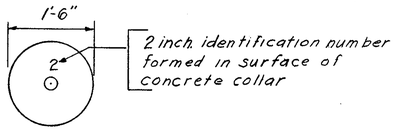


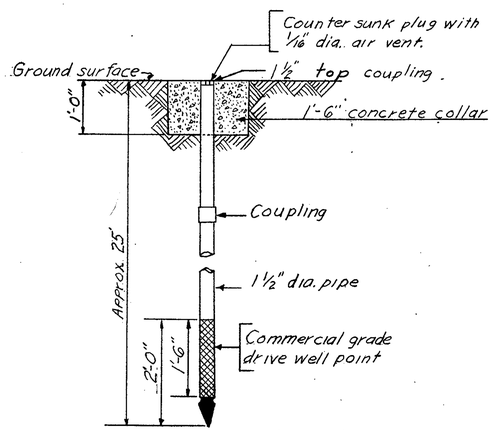
NEW STEP DETAILS
(as per Item I-13)



TYPICAL CROSS SECTION
THRU WELL 2

NOT TO SCALE



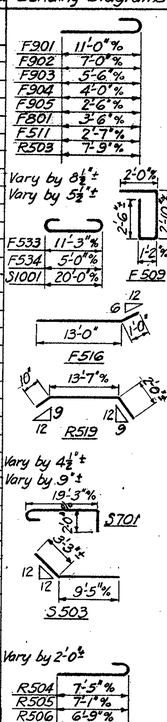


PIEZOMETER TUBE DETAILS

SCALE 3/4" = 1'-0"

REINFORCING STEEL LIST

Mark	No.	Length	Weight	Shp.
INLET STRUCTURE				
F901	26	12'-3"	1083	B
F902	1	8'-3"	28	B
F903	1	6'-9"	23	B
F904	1	5'-3"	18	B
F905	1	3'-9"	13	B
F801	10	4'-7"	122	B
F802	10	11'-0"	294	S
* F501	1Sof7	18'-6" to 22'-9"	151	S
* F502	1Sof10	18'-6" to 22'-9"	215	S
F503	16	11'-0"	184	S
F504	1	7'-0"	7	S
F505	16	18'-8"	312	S
F506	2	12'-3"	26	S
F507	1	22'-3"	23	S
F508	1	22'-9"	24	S
F509	15	8'-0"	125	B
F510	1	4'-0"	4	S
F511	15	3'-2"	50	B
F512	17	3'-4"	58	S
F513	6	13'-0"	81	S
F514	6	2'-6"	16	S
F515	4	7'-6"	31	S
F516	2	14'-0"	29	B
* F517	1Sof7	8'-8" to 6'-5"	55	S
* F518	1Sof3	8'-1" to 6'-7"	23	S
F519	2	5'-2"	11	S
F520	6	4'-6"	28	S
F521	10	5'-6"	57	S
F522	4	5'-9"	24	S
F523	2	6'-4"	13	S
F524	10	10'-9"	112	S
F525	1	10'-0"	10	S
F526	1	10'-3"	11	S
F527	1	10'-6"	11	S
* F528	2Sof5	4'-0" to 12'-0"	83	S
F529	4	4'-9"	20	S
F530	4	4'-1"	17	S
F531	2	3'-11"	8	S
F532	4	2'-9"	11	S
F533	4	12'-5"	52	B
F534	4	6'-2"	26	B
F535	8	6'-7"	55	S
RETAINING WALL				
R501	6	12'-0"	75	S
R502	7	11'-6"	84	S
R503	2	8'-4"	17	B
R504	1	8'-0"	8	B
R505	2	7'-8"	16	B
R506	1	7'-4"	8	B
R507	2	7'-0"	15	B



Vary by 2'-0½"

R504	7'-5" %
R505	7'-1" %
R506	6'-9" %
R507	6'-5" %
R508	6'-1" %
R509	5'-9" %
R510	5'-5" %
R511	5'-0" %
R512	4'-8" %
R513	4'-4" %
R514	4'-0" %
R515	3'-8" %
R516	3'-4" %
R517	3'-0" %
R518	2'-6" %
RE1000	7'-8" %
RE700	6'-6" %
S702	10'-0" %

Mark	No.	Length	Weight	Shp.
R508	1	6'-8"	7	B
R509	2	6'-4"	13	B
R510	1	6'-0"	6	B
R511	2	5'-7"	12	B
R512	1	5'-3"	5	B
R513	2	4'-11"	10	B
R514	1	4'-7"	5	B
R515	2	4'-3"	9	B
R516	1	3'-11"	4	B
R517	27	3'-7"	101	B
R518	2	3'-1"	6	B
R519	2	16'-4"	34	B
R520	4	3'-3"	14	S
R521	11	5'-0"	57	S
R522	2	6'-9"	14	S
R523	4	3'-0"	13	S
R524	2	2'-6"	5	S
R525	6	2'-3"	14	S
R526	3	5'-3"	16	S
R527	2	10'-9"	22	S
R528	2	10'-6"	22	S
R529	1	10'-3"	11	S
R530	1	9'-9"	10	S
R531	1	9'-6"	10	S
R532	3	4'-0"	13	S
R533	1	6'-6"	7	S
R534	1	6'-3"	7	S
R535	1	4'-3"	4	S
FOUNDATION SLAB				
S1001	31	22'-10"	3046	B
S701	23	21'-10"	1026	B
S702	23	10'-10"	509	B
S501	38	20'-0"	793	S
S502	28	16'-9"	489	S
S503	28	12'-8"	370	B
REPLACEMENT STEEL				
RE1000	1	9'-1"	—	B
RE900	1	6'-10"	—	S
RE800	1	6'-6"	—	S
RE700	1	7'-4"	—	B
RE500	1	5'-7"	—	S

BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four digits are used indicate the bar size number. For example, S1001 is a No. 10 size bar and F802 is a No. 8 size bar.

REPLACEMENT BARS: If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Section S-4.02 need not be furnished and replacement bars will not be required.

* Note:
1S of 7 etc. indicates 1 series of 7 bars which vary in length by 8½" ±

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

MISCELLANEOUS DETAILS
REINFORCING STEEL LIST
FEDERAL AVE. PUMP STATION RELOCATION

STARK COUNTY U.S.R. 21
Sta. 585+40

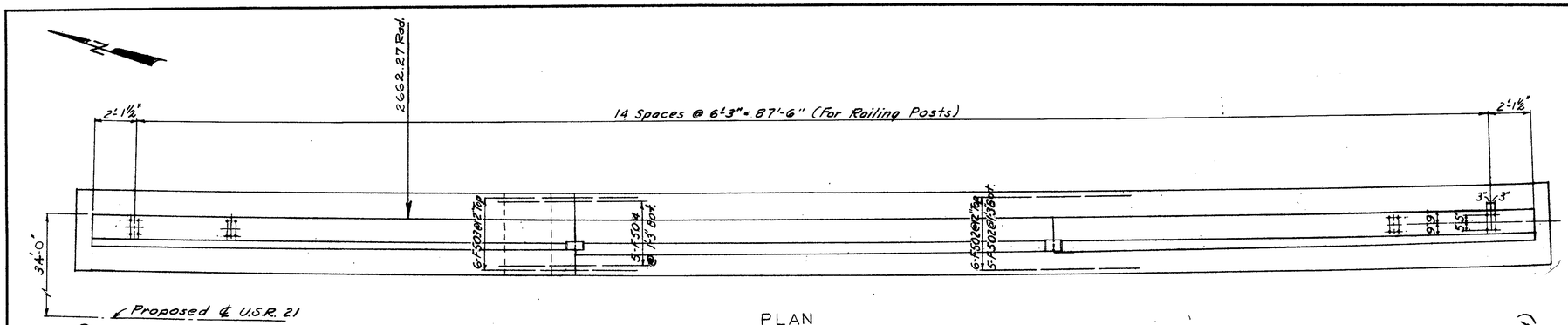
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
D.W.B. S.W.F.	D.W.B D.W.P		D.W.B. S.W.F.		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-57061

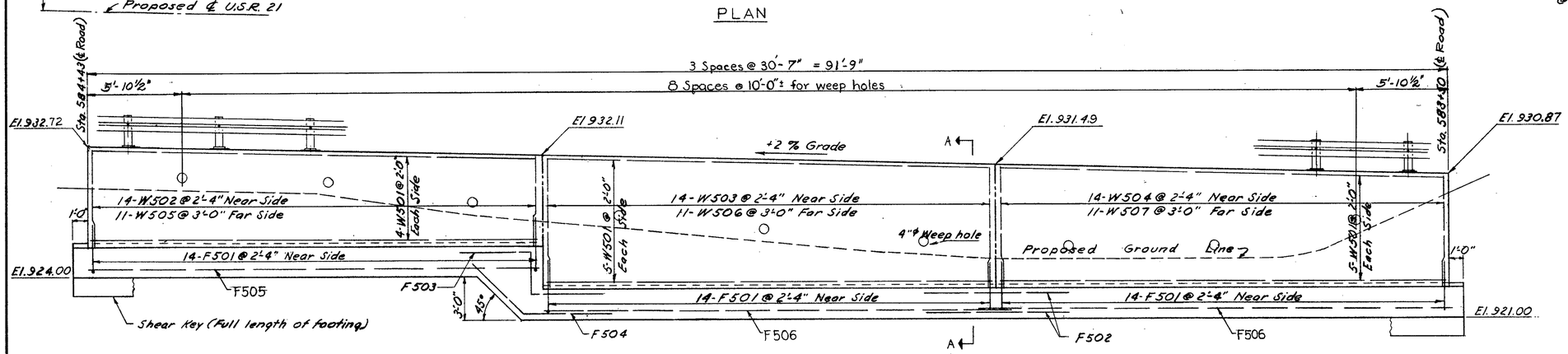
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

109

STA-21-10.23



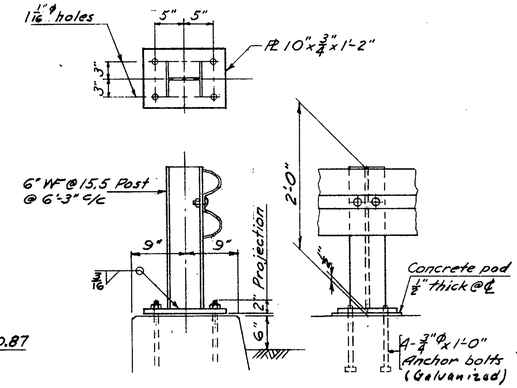
PLAN



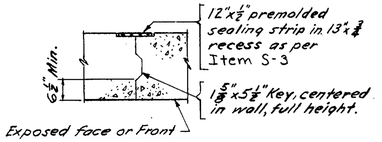
ELEVATION

SPIRAL CURVE DATA

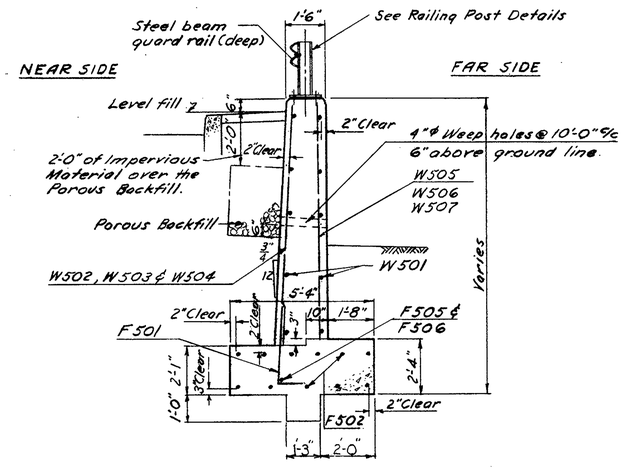
PI Sta. 597+37.67	Xc = 299.51
Δ = 60°-40'-16" Rt.	Yc = 5.57
D = 2°-07'-30"	K = 149.99
LS = 300.00'	Lt = 200.03
R = 2696.27'	S.T. = 100.03
θs = 3°-11'-15"	Lc = 2555.11
P = 1.39'	Ts = 1728.62
	Es = 429.34



RAILING POST DETAILS



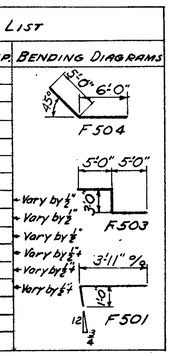
CONTRACTION JOINT



SECTION A-A

REINFORCING STEEL LIST

MARK	No.	LENGTH	WEIGHT	SHP.	BENDING DIAGRAMS
F501	42	4'-11"	215	B	
F502	11	10'-0"	115	S	
F503	6	13'-0"	81	B	
F504	5	11'-0"	57	B	
F505	1	30'-5"	32	S	
F506	2	32'-7"	68	S	
W501	28	30'-3"	883	S	
W502	14	5'-10" to 6'-5"	89	S	
W503	14	8'-2" to 8'-9"	123	S	
W504	14	7'-7" to 8'-2"	115	S	
W505	11	5'-7 to 6'-2"	67	S	
W506	11	7'-11" to 8'-6"	94	S	
W507	11	7'-4" to 7'-11"	88	S	
		REPLACEMENT BAR			
RE500	1	5'-7"			



Replacement Bars: If reinforcing bars are fabricated from stock which has previously been tested by the Ohio Highway Testing Laboratory, test samples as provided in Sec. S-402 need not be furnished and replacement bars will not be required.

GENERAL SUMMARY - RETAINING WALL

ESTIMATED QUANTITIES U 1010(5) SOUTH OF CHERRY RD.

Item	Total	Unit	Description
E-2	L. S.	lump sum	Cofferdams, cribs and sheeting
E-2	160	cu. yd.	Excavation for Structures
S-1	91	cu. yd	Class "E" concrete for structures
S-3	18	lin. ft.	Waterproofing, premolded sealing strip
S-4	2027	lbs	Reinforcing steel
S-29	144	cu. yd.	Porous backfill
S-14	87.5	lin. ft.	Railing, Type I-15.13 w/galv. posts, as per plan

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.

FOUNDATION BEARING PRESSURE: Footings are designed for a maximum bearing pressure of 1.4 tons per sq. ft.

POROUS BACKFILL: 2 ft. thick, as shown on Section A-A shall extend full length of retaining wall.

SHEAR KEY on footing shall be placed in a carefully made trench against undisturbed earth.

CONCRETE shall be class "E."

Ref. Highway Plan - Sht # 28

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

RETAINING WALL
Rt. of Sta. 583+50 to Sta. 584+43
STARK COUNTY U.S.R. 21

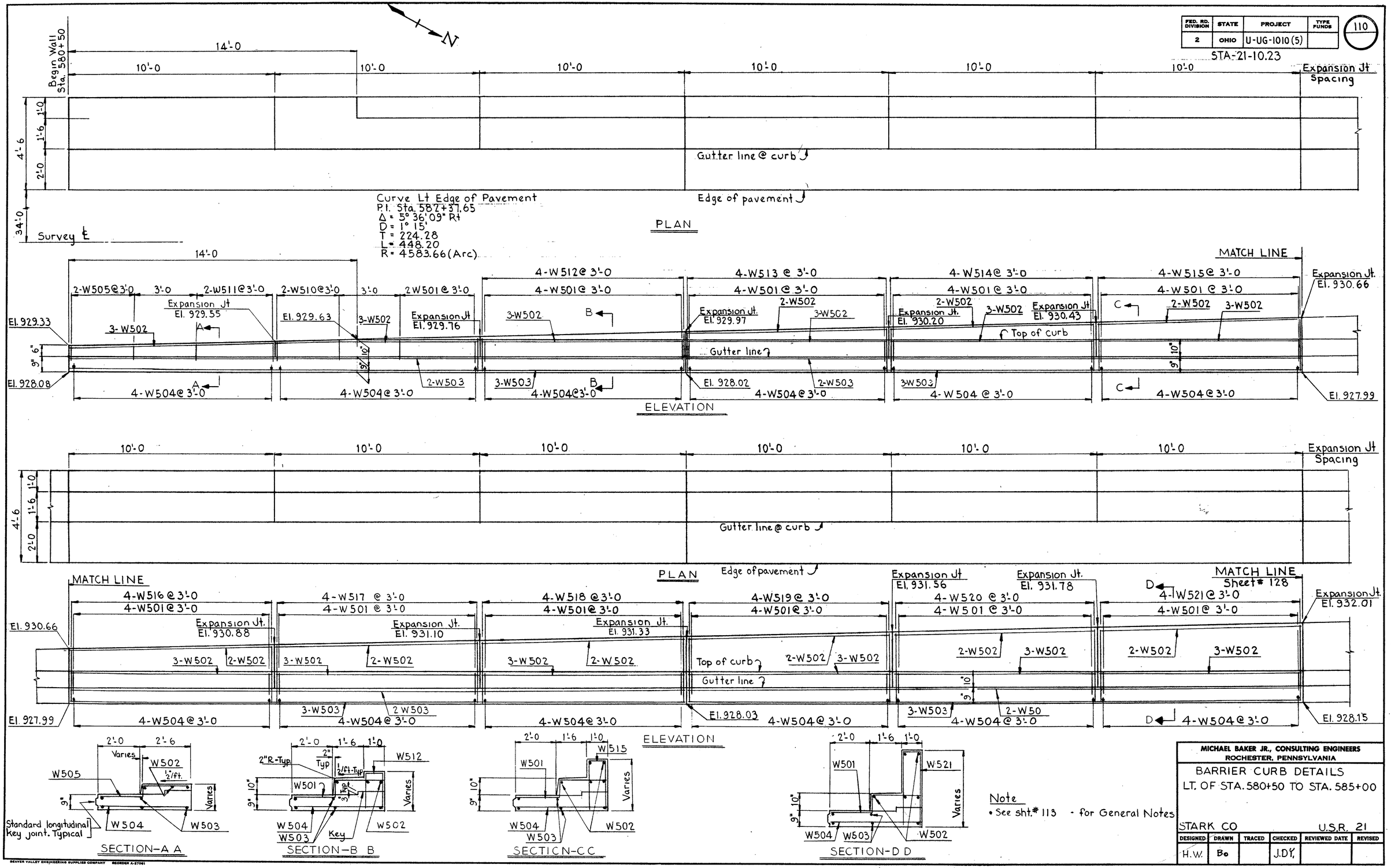
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
	O.W.		HGW		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-57081

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

110

STA-21-10.23



Note

- See sht.# 113 - for General Notes

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

BARRIER CURB DETAILS
LT. OF STA. 580+50 TO STA. 585+00

STARK CO U.S.R. 21

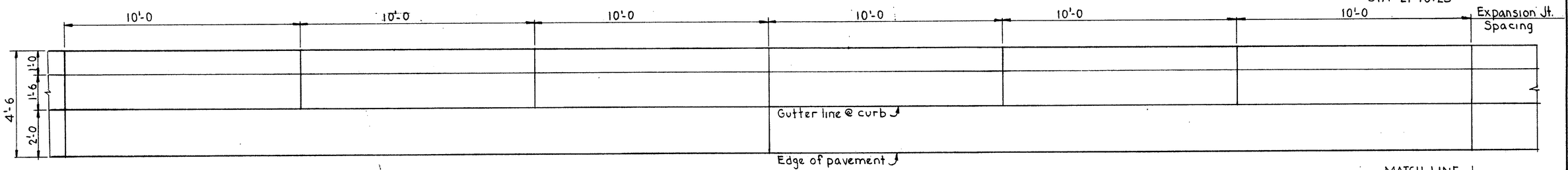
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
H.W.	Bo		J.D.Y.		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-57091

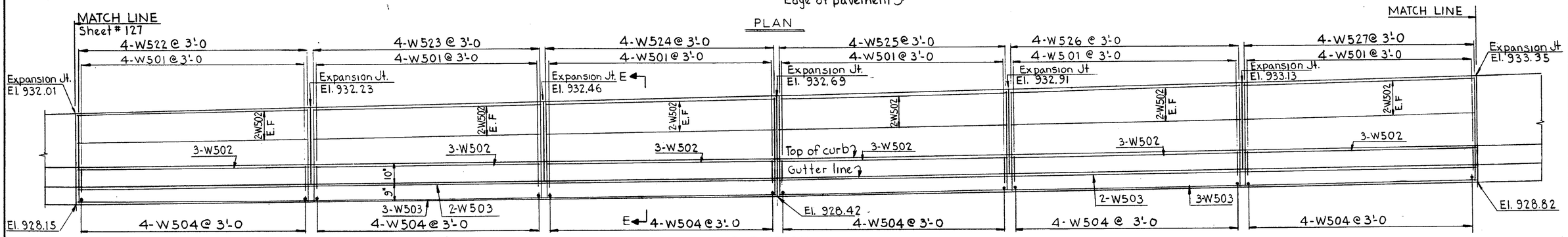
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

111

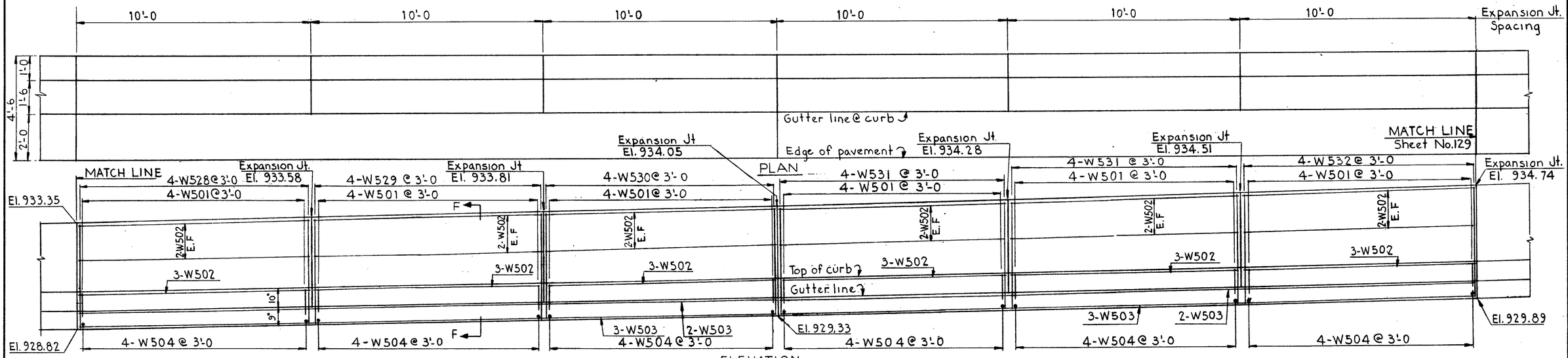
STA-21-10.23



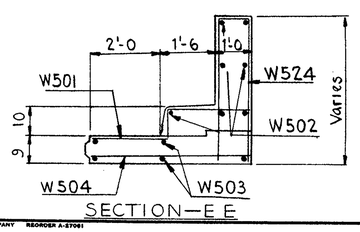
PLAN



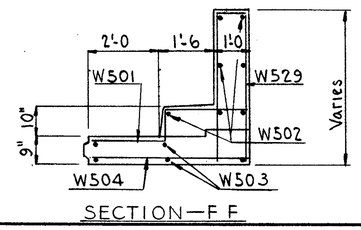
ELEVATION



ELEVATION



SECTION—E E



SECTION—F F

Note
See sht # 113 - for General Notes

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

BARRIER. CURB DETAILS
LT. OF STA. 580+50 TO STA. 585+00

STARK CO. U.S.R. 21

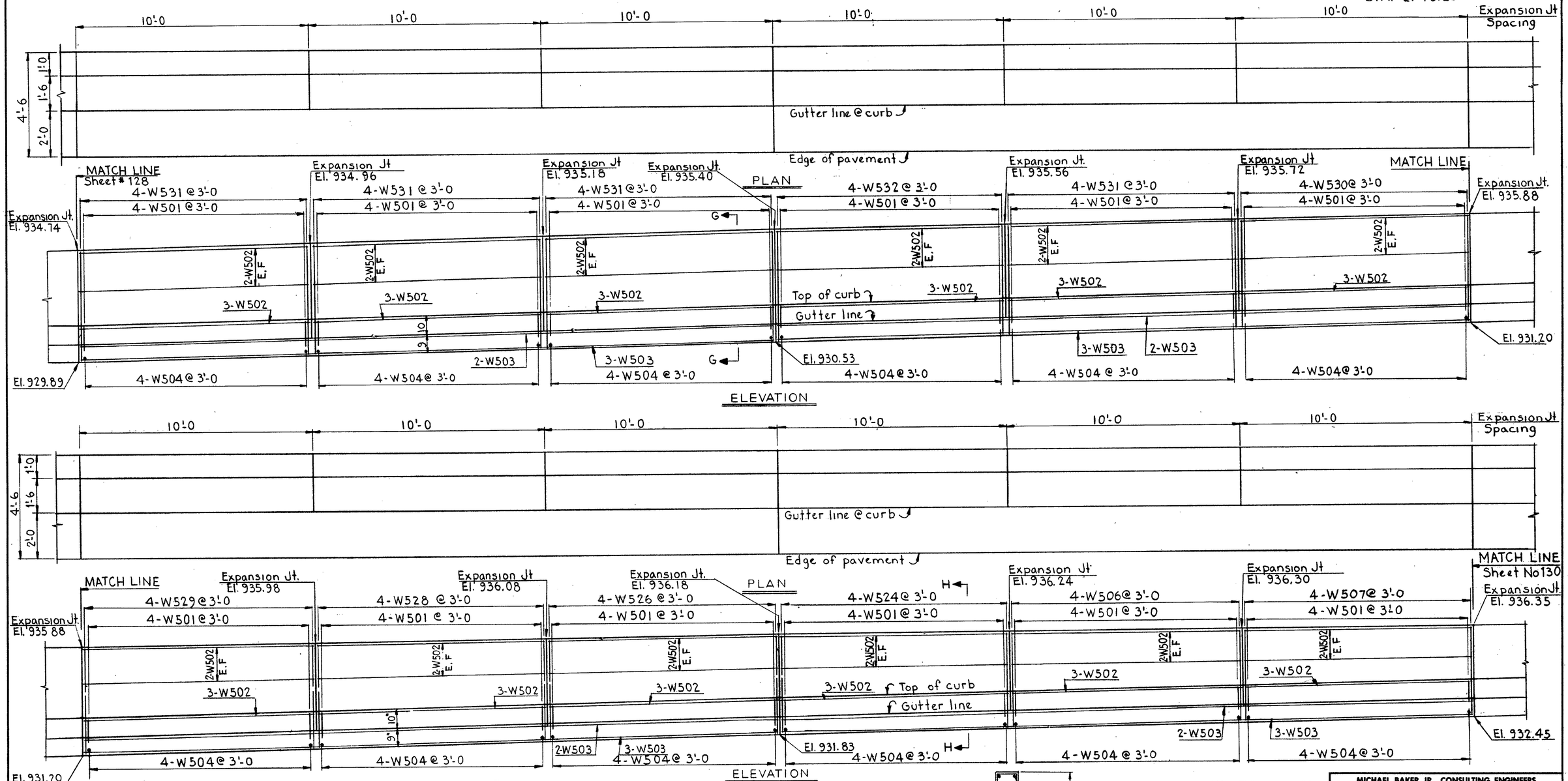
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
H.W	Bo.		J.D.K		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-87081

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

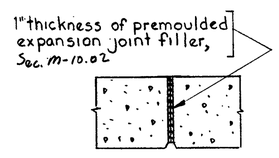
112

STA.- 21-10.23



★ ESTIMATED QUANTITIES

Item	Total	Units	Description
S-1	127	Cu Yds	Class "C" Concrete
S-4	7289	Lbs	Reinforcing Steel

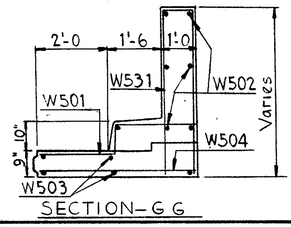


EXPANSION JOINT

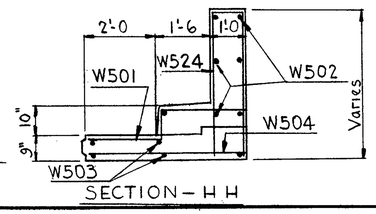
Note

See sht. # 113 for General Notes

★ Basis of Payment:
This item shall be paid for at the contract unit price per linear foot bid for item I-12 Reinf. Comb. barrier curb and gutter, as per plan, which price and payment shall constitute full compensation for all materials and work necessary to complete this item. Length measured at back face of wall.



SECTION – G G



SECTION – H H

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

BARRIER CURB DETAILS
LT. OF STA. 580+50 TO STA. 585+00

STARK CO U.S.R. 21

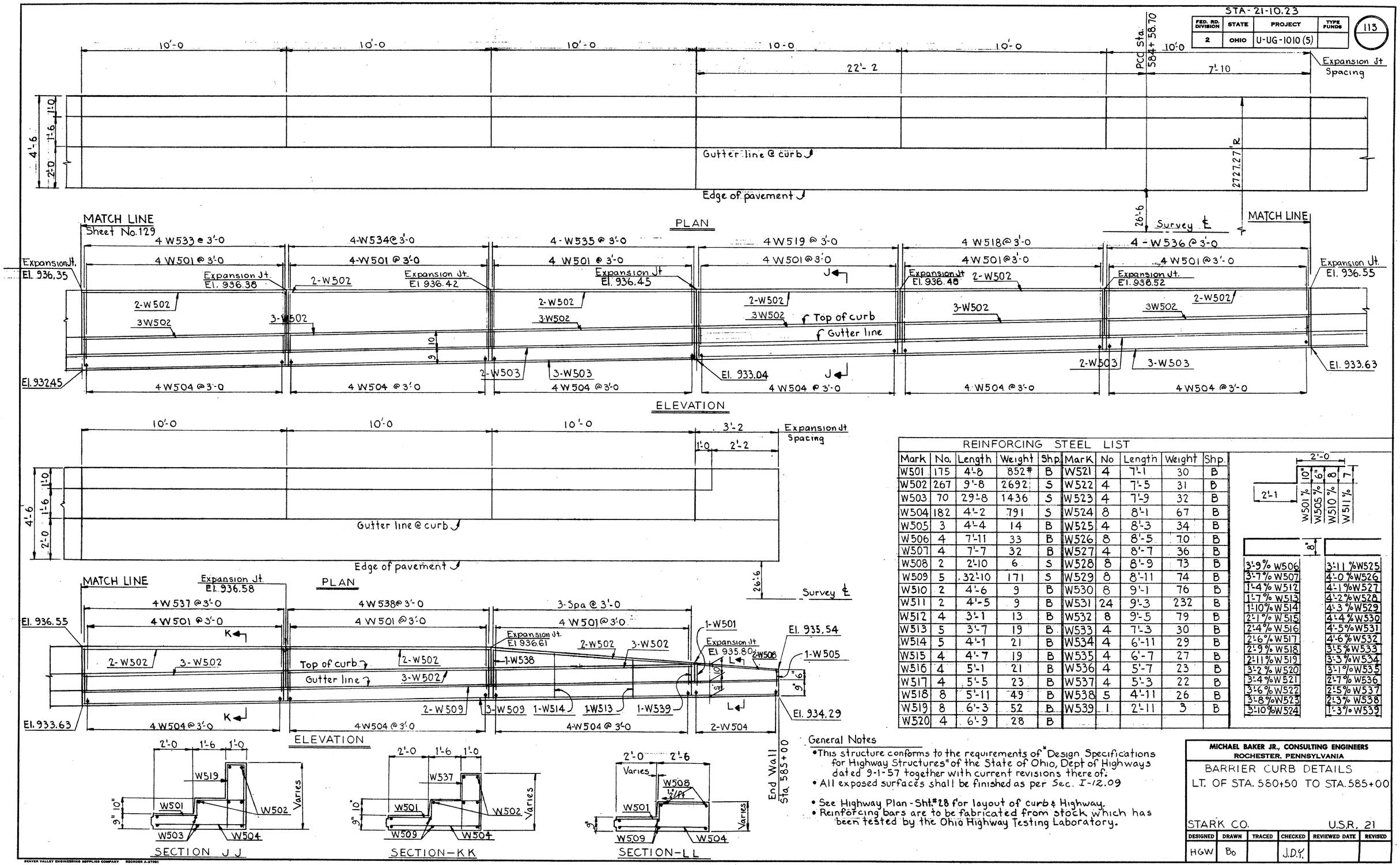
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
H.W	Bo		J.D.Y.		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-87091

STA - 21-10.23

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010 (5)	

113



REINFORCING STEEL LIST

Mark	No.	Length	Weight	Shp.	Mark	No	Length	Weight	Shp.
W501	175	4'-8	852#	B	W521	4	7'-1	30	B
W502	267	9'-8	2692	S	W522	4	7'-5	31	B
W503	70	29'-8	1436	S	W523	4	7'-9	32	B
W504	182	4'-2	791	S	W524	8	8'-1	67	B
W505	3	4'-4	14	B	W525	4	8'-3	34	B
W506	4	7'-11	33	B	W526	8	8'-5	70	B
W507	4	7'-7	32	B	W527	4	8'-7	36	B
W508	2	2'-10	6	S	W528	8	8'-9	73	B
W509	5	32'-10	171	S	W529	8	8'-11	74	B
W510	2	4'-6	9	B	W530	8	9'-1	76	B
W511	2	4'-5	9	B	W531	24	9'-3	232	B
W512	4	3'-1	13	B	W532	8	9'-5	79	B
W513	5	3'-7	19	B	W533	4	7'-3	30	B
W514	5	4'-1	21	B	W534	4	6'-11	29	B
W515	4	4'-7	19	B	W535	4	6'-7	27	B
W516	4	5'-1	21	B	W536	4	5'-7	23	B
W517	4	5'-5	23	B	W537	4	5'-3	22	B
W518	8	5'-11	49	B	W538	5	4'-11	26	B
W519	8	6'-3	52	B	W539	1	2'-11	3	B
W520	4	6'-9	28	B					

General Notes

- This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Dept of Highways dated 9-1-57 together with current revisions there of.
- All exposed surfaces shall be finished as per Sec. I-12.09
- See Highway Plan - Sht. #28 for layout of curb & Highway.
- Reinforcing bars are to be fabricated from stock which has been tested by the Ohio Highway Testing Laboratory.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

BARRIER CURB DETAILS
LT. OF STA. 580+50 TO STA. 585+00

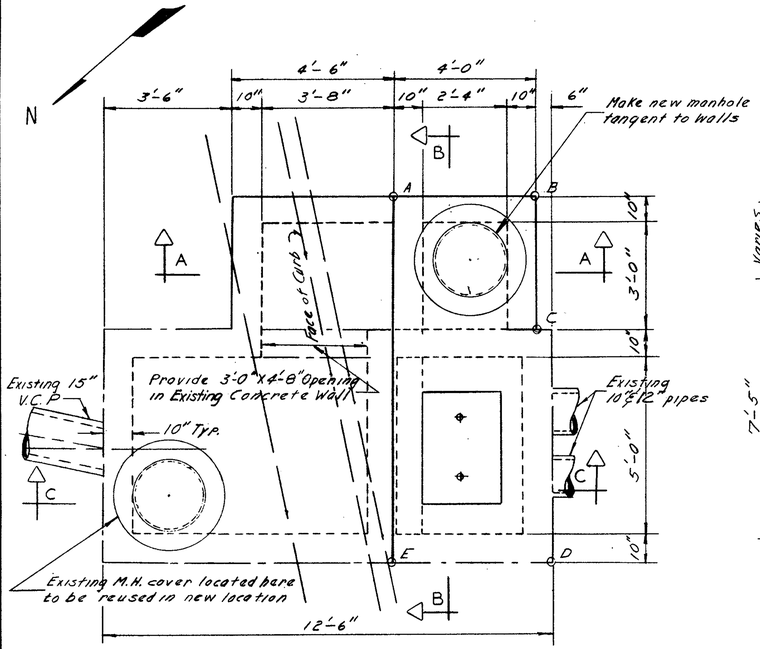
STARK CO. U.S.R. 21

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
HGW	BO		J.D.Y.		

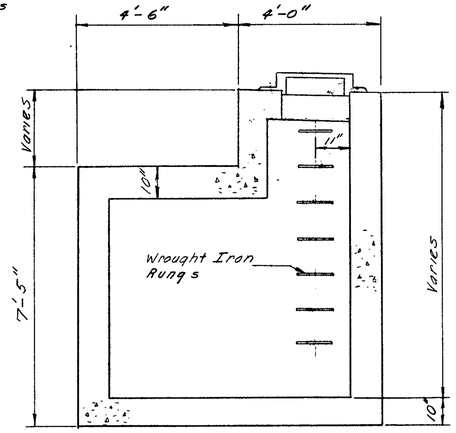
BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-87081

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

114

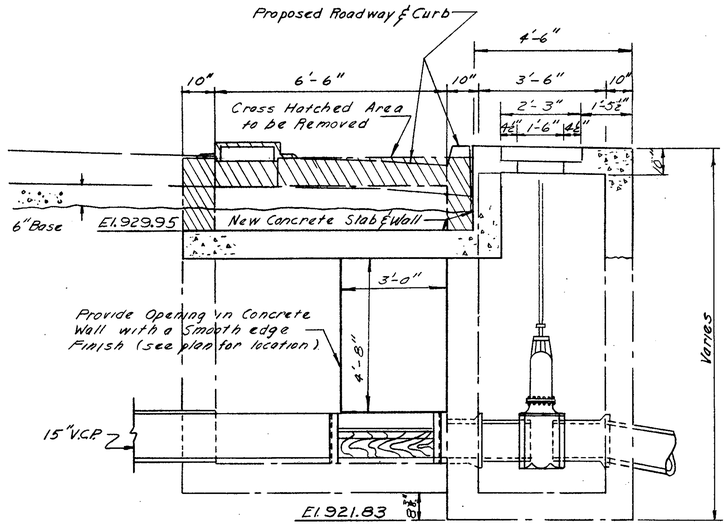


PLAN

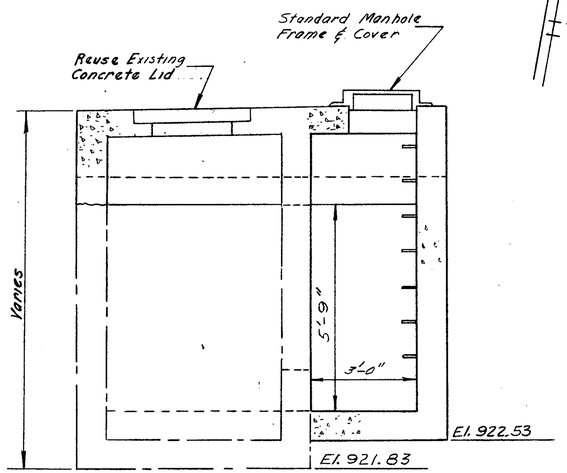


SECTION A-A

Top of slab elevations	
A	932.15
B	931.97
C	931.91
D	931.87
E	932.08

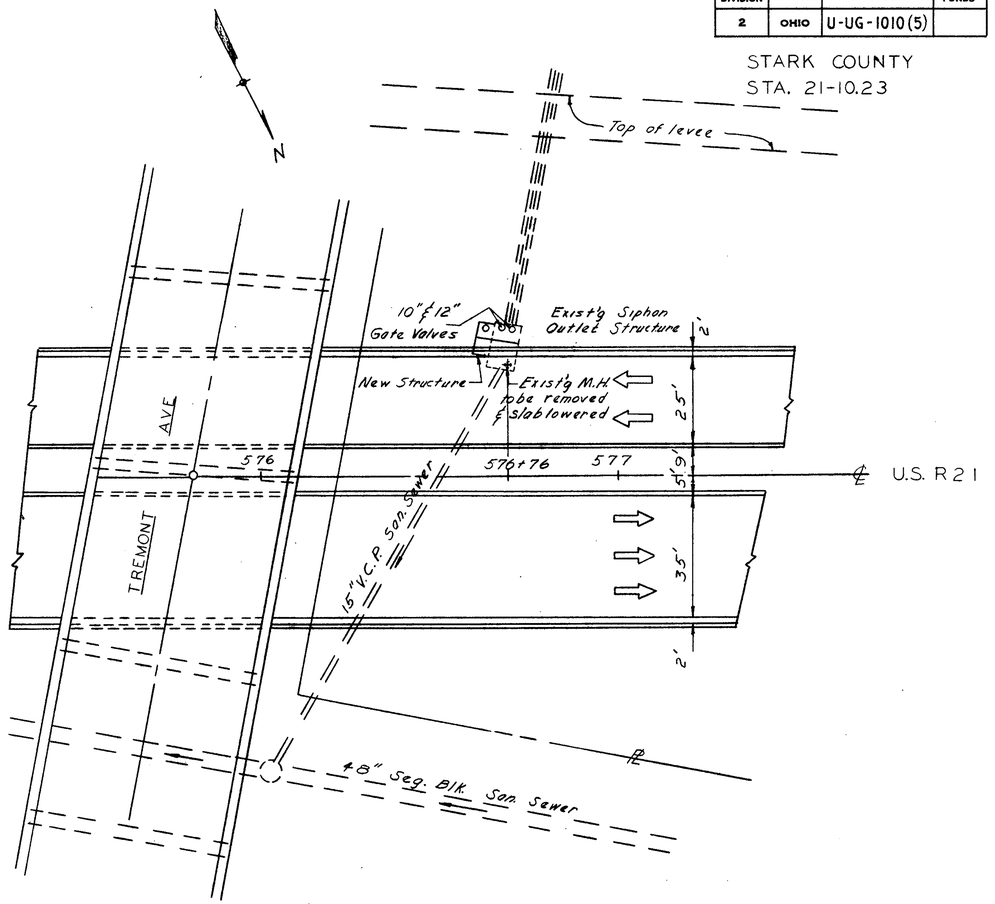


SECTION C-C



SECTION B-B

STARK COUNTY
STA. 21-10.23



LOCATION PLAN

- Ref. Highway Plan - Sht # 26

For special drainage structure notes, see Sheet 118-A.

For details and estimated quantities see sht. # 115

Existing 15" V.C.P., 10"℄12" pipe vaves & lower portion of existing structure is to remain in place.

Sheet 1 of 2

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO TREMONT AVE. SIPHON OUTLET STRUCTURE

RELOCATION OF U.S. ROUTE 21
STARK COUNTY Sta. 576+76

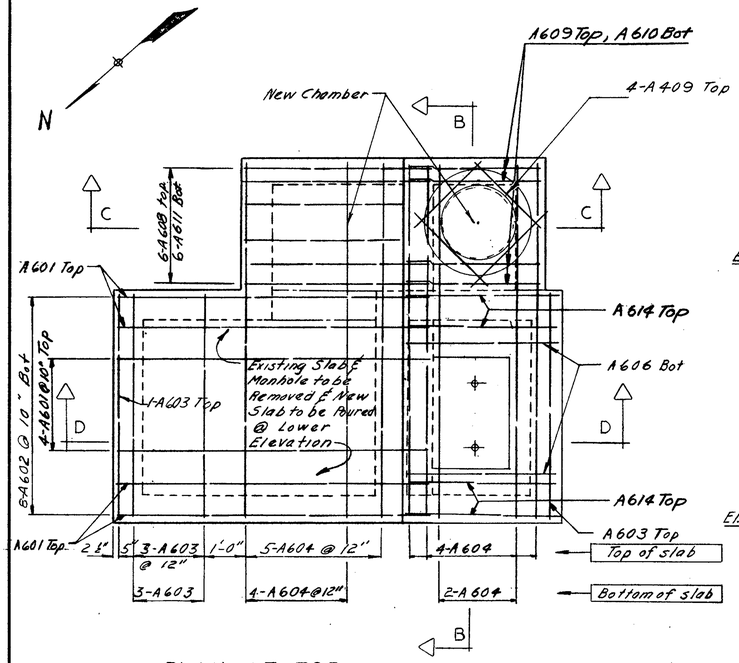
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
S.J.F.	S.J.F.		W.P.K. D.W.P.		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-27061

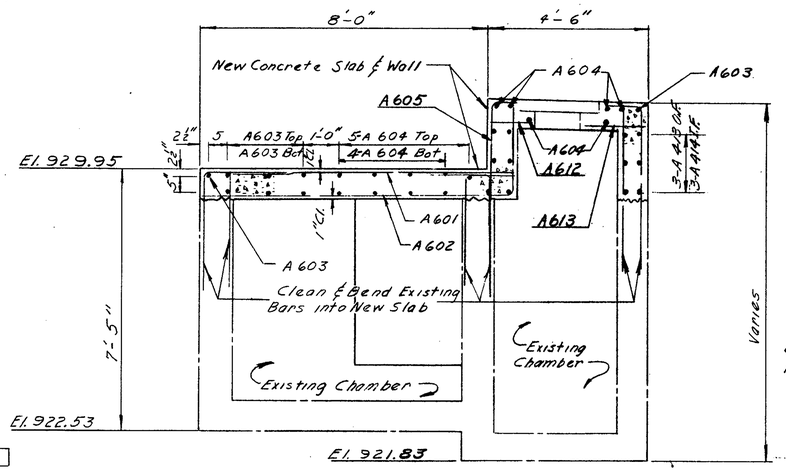
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

115

STARK COUNTY
STA. 21-10.23



PLAN AT TOP



SECTION D-D

ESTIMATED MAJOR QUANTITIES

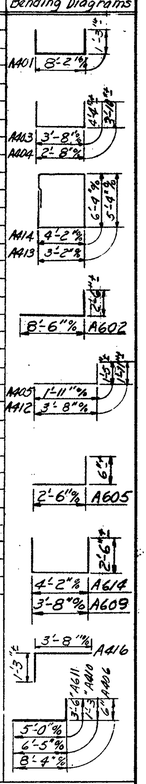
Item	Total	Unit	Description
E-2	32	cu. yd.	Unclassified excavation
S-1	10	cu. yd.	Class "C" concrete
S-4	1455	lbs.	Reinforcing steel
S-22	6	cu. yd.	Removal of portions of exist. Structure

ESTIMATED QUANTITIES (TO GENERAL SUMMARY)
Item Special - "Alterations to Tremont Avenue Siphon Outlet Structure" Lump Sum

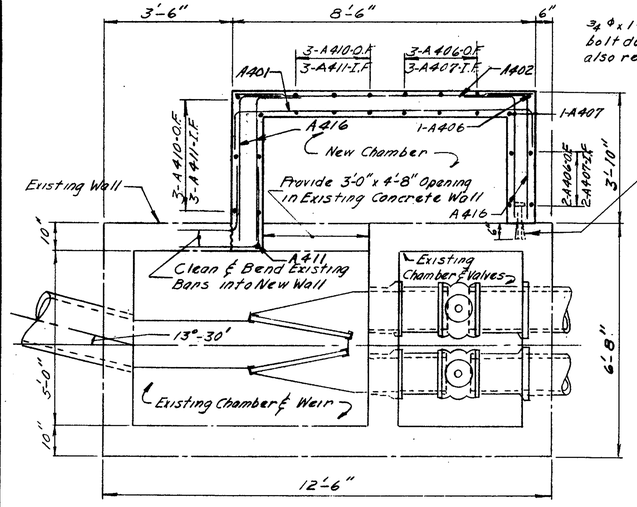
REINFORCING STEEL LIST

Mark	No.	Length	Weight	Shape	Bending Diagrams
A401	8	10'-6"	56	B	
A402	8	8'-2"	44	S	
A403	3	12'-2"	24	B	
A404	3	10'-2"	20	B	
A405	12	3'-3"	26	B	
A406	6	8'-9"	35	B	
A407	6	8'-4"	33	S	
A408	6	3'-8"	15	S	
A409	4	2'-3"	6	S	
A410	6	7'-7"	30	B	
A411	7	6'-5"	30	S	
A412	6	5'-6"	22	B	
A413	3	17'-10"	36	B	
A414	3	21'-10"	44	B	
A415	12	1'-11"	15	S	
A416	32	4'-10"	103	B	
A601	8	8'-6"	102	S	
A602	8	10'-11"	131	B	
A603	8	6'-4"	76	S	
A604	15	10'-2"	229	S	
A605	6	2'-10"	26	B	
A606	2	4'-2"	13	S	
A607	6	8'-2"	74	S	
A608	6	5'-0"	45	S	
A609	4	8'-5"	51	B	
A610	4	3'-8"	22	S	
A611	6	7'-4"	66	B	
A612	4	1'-0"	6	S	
A613	8	1'-9"	21	S	
A614	4	8'-11"	54	B	
Replacement Bars					
RE400	1	5'-3"		S	
RE600	1	5'-10"		S	

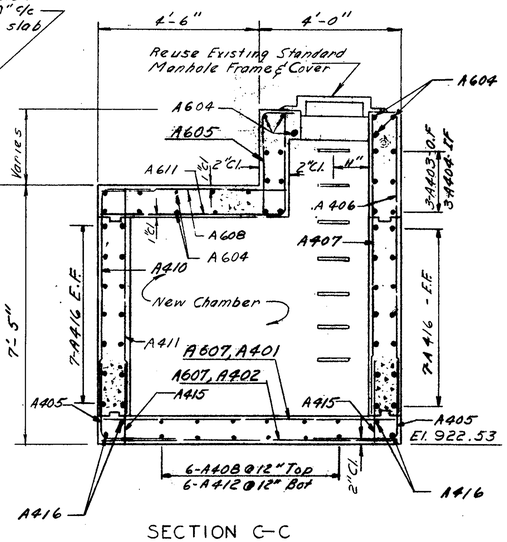
*Bar size is indicated in the bar mark. The first digit indicates the bar size number.
*Replacement Bars: If reinforcing bars are fabricated from stock which has previously been tested by the Ohio Highway Testing Laboratory, test samples as provided in Sec. S-4.02 need not be furnished and replacement bars will not be required.



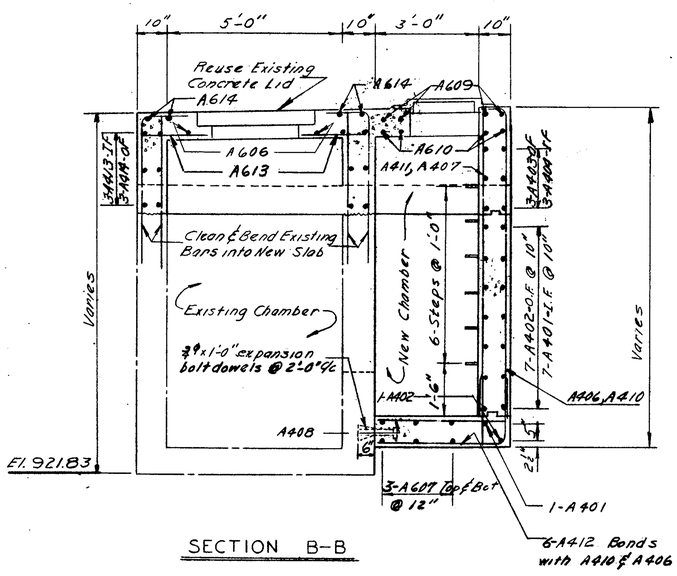
- See Ohio Std. Drawing I-8 Manhole No 1 dated 5-1-52 for details of steps & manhole frame & cover
- For Location Plan see sh. # 114
- Cover for reinforcing to be 1½" unless noted
- Concrete to be class "C"
- Legend - I.F. = inside face
  O.F. = outside face
  E.F. = each face



PLAN AT ELEVATION 927.00



SECTION C-C



SECTION B-B

- Sheet 2 of 2

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO TREMONT AVE.
SIPHON OUTLET STRUCTURE
RELOCATION OF US. ROUTE 21
STARK COUNTY Sta. 576+76

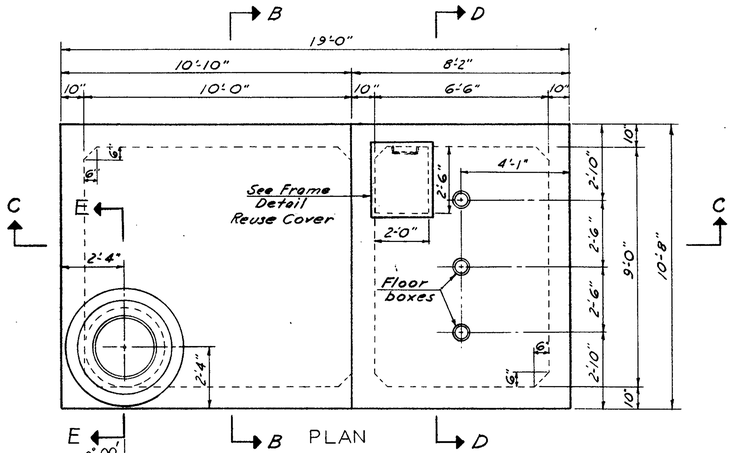
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
S.J.F.	S.J.F.		D.W.P. W.R.K.		

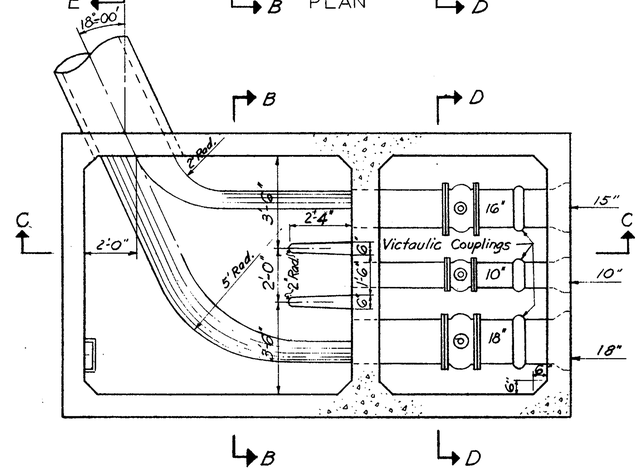
BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-27001

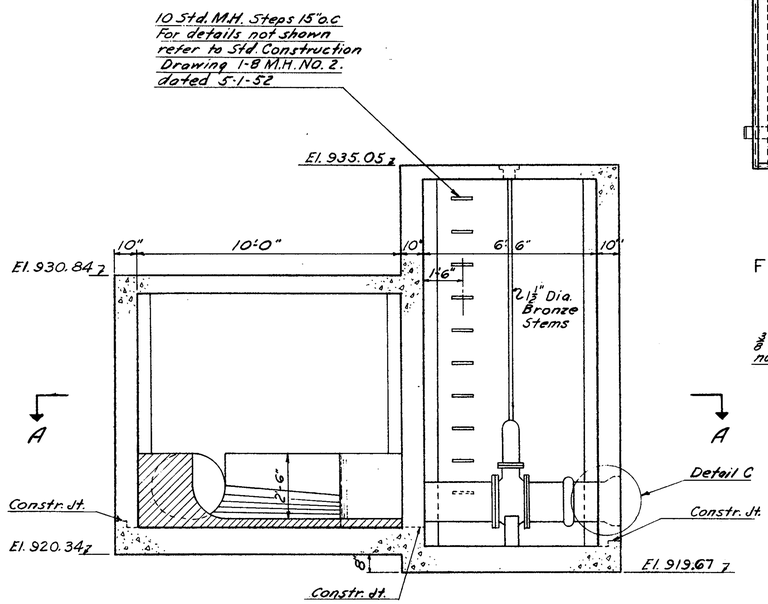
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

116

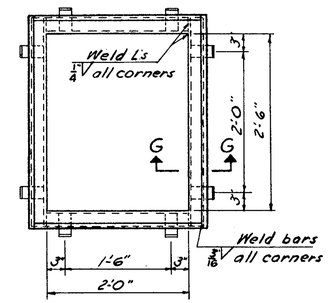
STA. - 21 - 10.23



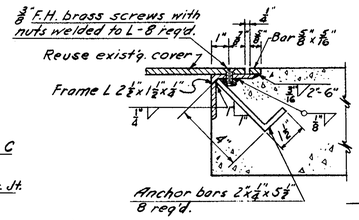




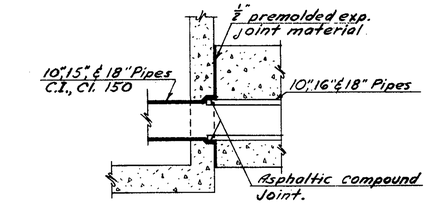
SECTION C-C



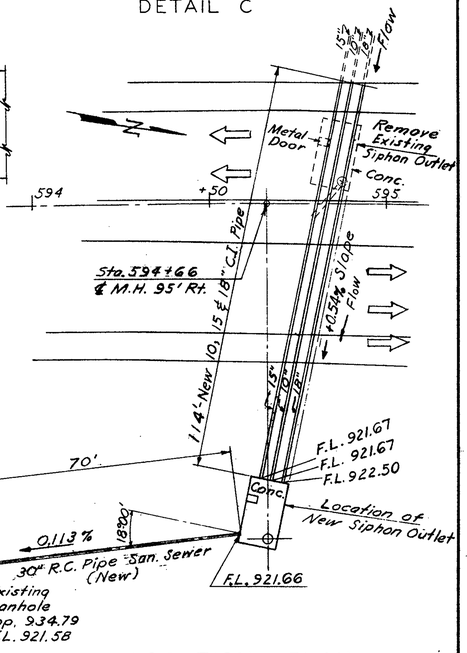
FRAME DETAIL
Scale 1"=1'-0"



SECTION G-G



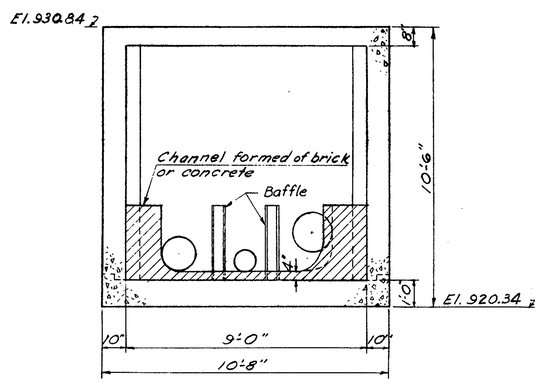
DETAIL C



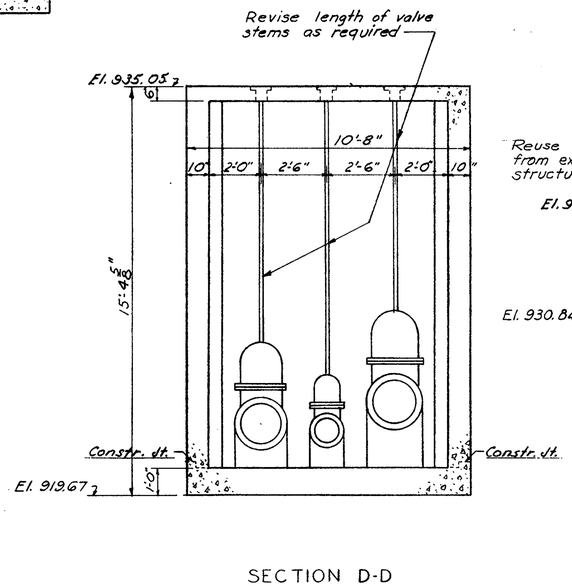
LOCATION PLAN

LIST OF MAJOR QUANTITIES

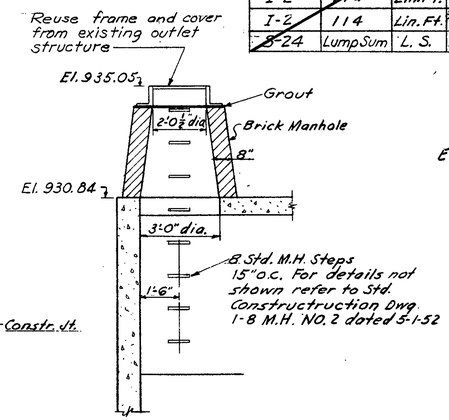
ITEM	TOTAL	UNIT	DESCRIPTION
E-2	147	Cu. Yds.	Unclassified excavation
E-2	1400	Sq. Ft.	Cofferdams, cribs and sheeting
S-1	39	Cu Yds	Concrete for structures, Class "C"
S-4	6,109	Lbs	Reinforcing steel
Special	Lump Sum	Lump Sum	Remove, recondition, & install existing valves and couplings
I-8	One	Each	Brick manhole as per plan
I-2	70	Lin. Ft.	30" Conc. san. sewer pipe, Su. M-66(c)
I-2	114	Lin. Ft.	* 10" C.I. pipe - Mech. Joint, Class 150
I-2	114	Lin. Ft.	* 15" C.I. pipe - Mech Joint, Class 150
I-2	114	Lin. Ft.	* 18" C.I. pipe - Mech Joint, Class 150
S-24	Lump Sum	L. S.	Removal of existing outlet structure



SECTION B-B



SECTION D-D



SECTION E-E

ESTIMATED QUANTITIES (TO GENERAL SUMMARY)

Item Special - Cherry Road Siphon Outlet Structure — Lump Sum

- Ref. Highway Plan - Sht # 30
- Cherry Road Siphon - Profiles - sht. 118

Gate valves and couplings shall be removed from existing siphon outlet structure, cleaned, repaired if necessary and reused.

Sheet 1 of 2

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

CHERRY ROAD SIPHON
OUTLET STRUCTURE
RT. OF STATION 594+66

STARK COUNTY — USR 21

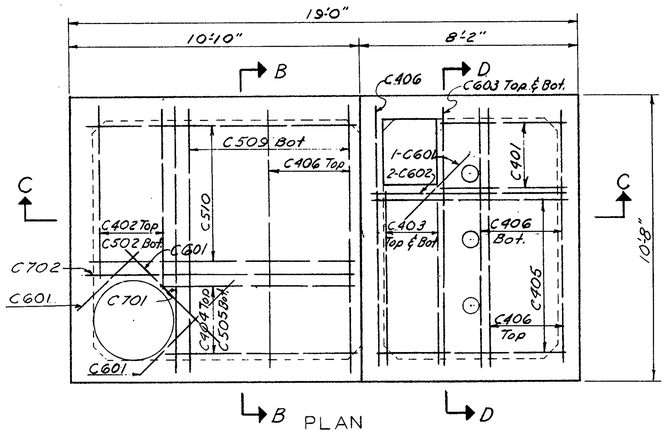
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
C.C.D.	O.W.		D.W.P. S.J.F.		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-27081

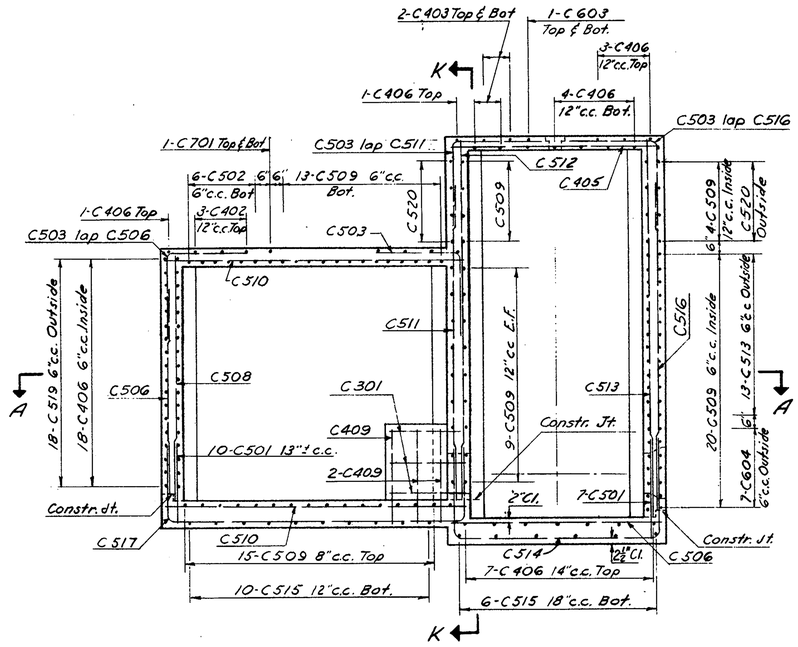
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

117

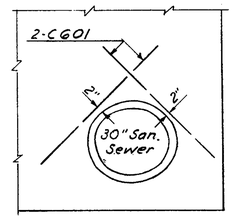
STA. - 21 - 10.23



PLAN



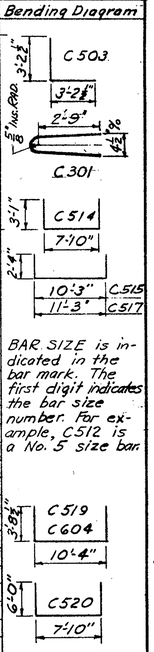
SECTION C-C



ELEVATION H-H

REINFORCING STEEL LIST

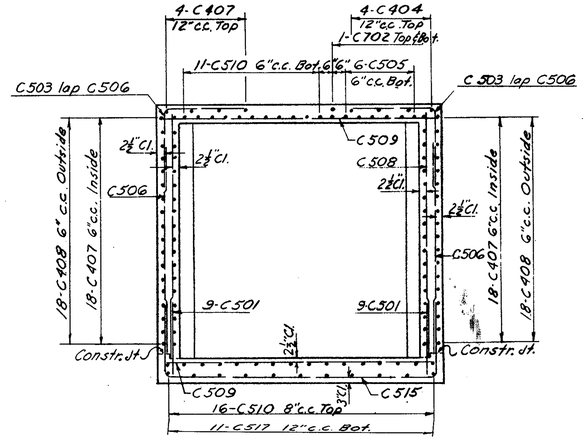
Mark	No.	Length	Weight	Shape	Bending Diagram
C401	8	4'-9"	25#	Str.	
C402	3	6'-3"	13	Str.	
C403	4	6'-9"	18	Str.	
C404	4	7'-3"	19	Str.	
C405	19	7'-9"	99	Str.	
C406	38	10'-3"	260	Str.	
C407	40	11'-3"	300	Str.	
C408	36	14'-9"	355	Str.	
C501	43	2'-9"	123	Str.	
C502	6	6'-3"	39	Str.	
C503	48	6'-3"	313	Bent	
C504	4	6'-3"	26	Str.	
C505	6	7'-3"	45	Str.	
C506	46	7'-9"	372	Str.	
C507	29	8'-6"	257	Str.	
C508	28	9'-3"	270	Str.	
C509	74	10'-3"	791	Str.	
C510	27	11'-3"	317	Str.	
C511	6	12'-0"	75	Str.	
C512	14	13'-4"	195	Str.	
C513	16	14'-0"	234	Str.	
C514	13	13'-3"	181	Bent	
C515	16	14'-8"	245	Bent	
C516	15	12'-5"	194	Str.	
C517	11	15'-8"	180	Bent	
C519	31	17'-6"	566	Bent	
C520	8	19'-7"	164	Bent	
C601	8	6'-0"	72	Str.	
C602	2	7'-9"	23	Str.	
C603	2	10'-3"	31	Str.	
C604	7	17'-5"	183	Bent	
C701	2	10'-3"	42	Str.	
C702	2	11'-3"	46	Str.	
C301	6	5'-8"	13	Bent	
C409	10	3'-6"	23	Str.	
	TOTAL WEIGHT		6109#		



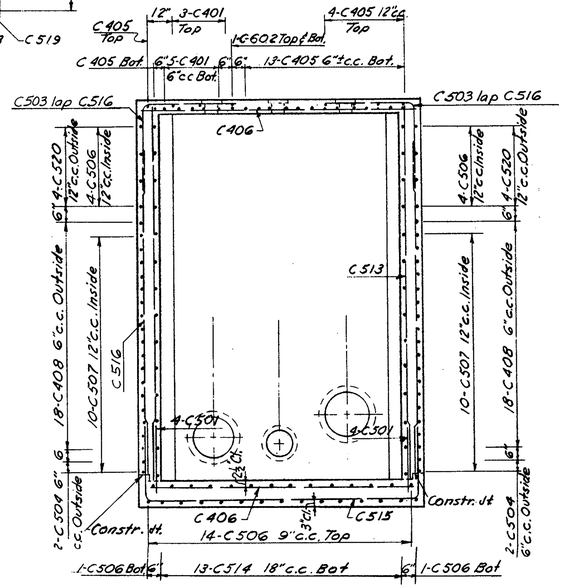
BAR SIZE is indicated in the bar mark. The first digit indicates the bar size number. For example, C512 is a No. 5 size bar.

Replacement Bars				
Mark	No.	Length	Weight	Shape
RE400		5'-3"		Str.
RE500		5'-6"		Str.
RE600		5'-10"		Str.
RE700		6'-2"		Str.

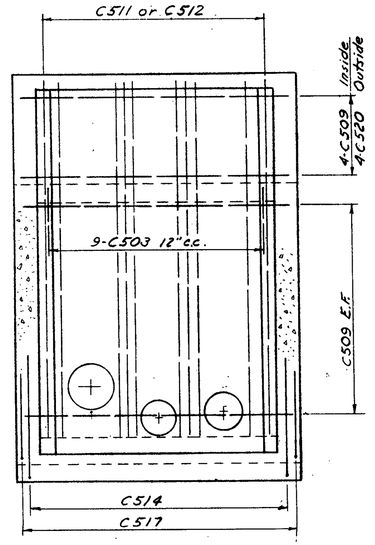
Replacement Bars: If reinforcing bars are fabricated from stock which has previously been tested by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 5-4.02 need not be furnished and replacement bars will not be required.



SECTION B-B



SECTION D-D



SECTION K-K

NOTES:
All Concrete shall be class "C" (f'_c = 4000 psi)
All reinforcing steel to have 1½ cover unless otherwise shown.
Reinforcing bars may be rotated, bent or cut in the field to clear pipes. Cut pieces shall be used to frame around pipes.
Min laps 30 bar diameters.
For special drainage structure notes, see Sheet 118-A.

Sheet 2 of 2

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

CHERRY ROAD SIPHON
OUTLET STRUCTURE
RT. OF STATION 594+66

STARK COUNTY — USR 21

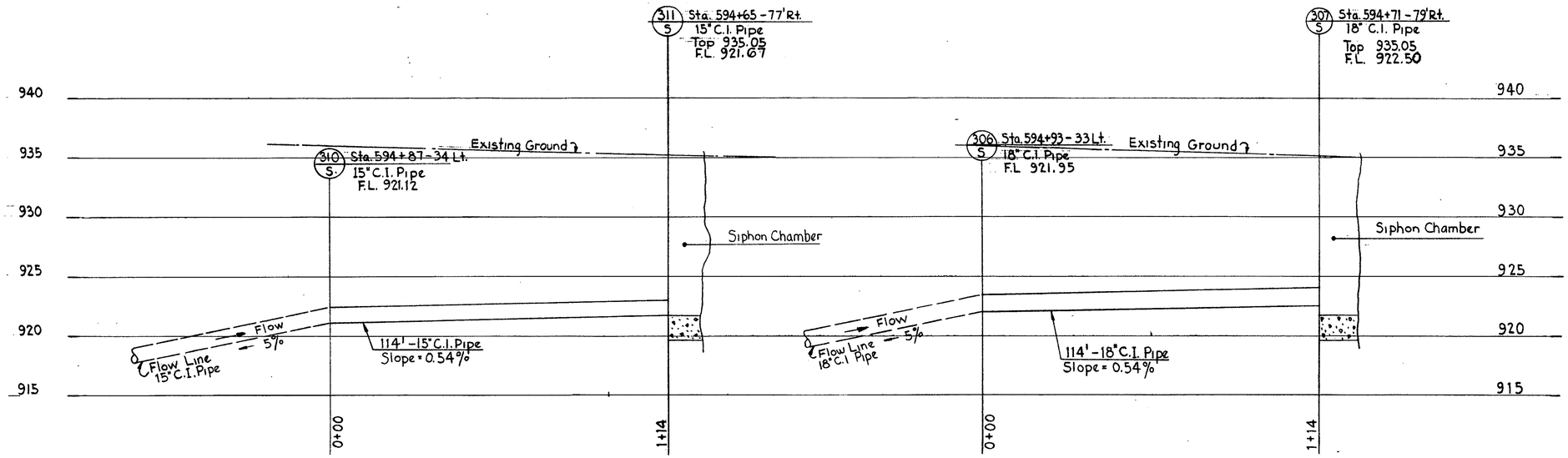
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
C.C.D.	.O.M.		D.W.P. S.J.F.		

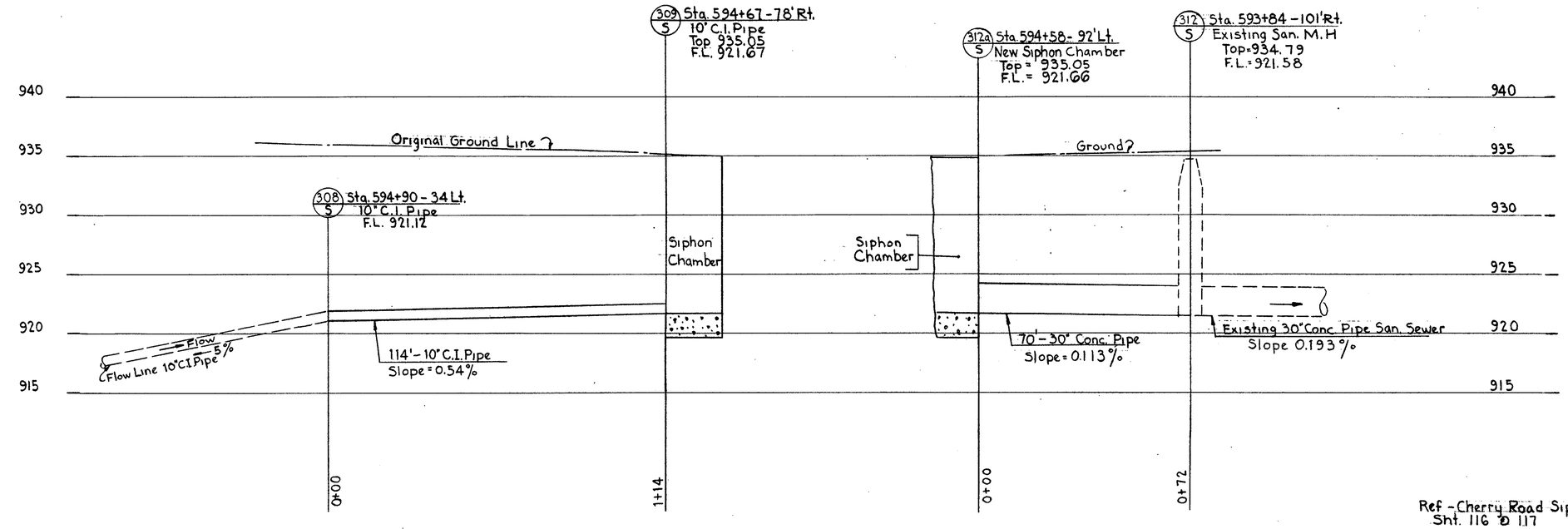
BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-57091

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

118

STA-21-10.23





Ref - Cherry Road Siphon Struct.
Sht. 116 & 117

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

CHERRY ROAD SIPHON PROFILE

STARK CO. U.S.R. 21

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
	Bo		DWP		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-67061

GENERAL NOTES - SPECIAL DRAINAGE STRUCTURES AND SANITARY SEWERS

GENERAL PROVISIONS FOR SPECIAL DRAINAGE STRUCTURES

All work in connection with the removal, relocation, alteration, rebuilding or extension of existing special drainage structures on this project shall, unless otherwise specified, conform to the following specifications :

1. Excavation, backfill, pumping, dewatering and provision of necessary cofferdams, cribs and sheeting shall conform to the requirements of Item E-2.
2. Preparation and placement of Portland cement concrete, and concrete classes indicated shall be governed by and conform to the provisions of Item S-1.
3. Material requirements and placement of reinforcing steel shall conform to the provisions of Item S-4.
4. Removal of portions of existing structures remaining in place shall be governed by the provisions of Item S-22.
5. Excavation for, placement of, and backfill for proposed pipes, shall be in accordance with Item I-2 specifications for Storm Sewers Under Pavement or Approaches. Basic material for each run of pipe shall be as indicated on the plans.
6. Construction of, and materials for, proposed manholes shall meet the requirements of Item I-8.
7. Electrical work, unless otherwise indicated, shall conform to the requirements of Item S-25.
8. Materials for, and installation of, expansion joint filler and copper water stops shall be governed by the provisions of Item S-9.
9. Materials for, and placement of, porous backfill shall conform to the requirements of Item S-29.
10. Any component item not specifically indicated to be removed and which is damaged or destroyed by the Contractor's operations shall be replaced by him at no expense to the State. Any mechanical item removed by the Contractor during construction and which is to be reinstalled may be replaced in kind by the owner at the owners expense. Installation of items so replaced shall be in accordance with these specifications.

STORM SEWERS (SANITARY)

8" and 48" Storm sewers (Sanitary) shall be constructed as described on Sheet No. 9 and, in addition, shall meet the following requirements :

1. TEST FOR WATER TIGHTNESS

The maximum allowable infiltration into the completed sewer shall be 1000 gallons per day, per inch of diameter, per mile of pipe. Infiltration in excess of the specified rate shall be considered sufficient cause for the rejection of the work.

Infiltration tests shall be made on sections of completed sewer as directed by the Engineer. The first test shall be made immediately after the first section of sewer pipe is laid between adjacent manholes to demonstrate that infiltration requirements are met before proceeding with additional pipe laying. The minimum section to be tested shall be approximately 500 feet, or between manholes, the maximum approximately 1200 feet. The time at which the test shall be run and the detailed methods proposed by the Contractor shall be approved by the Engineer. The length of each test shall be not less than 30 minutes nor more than 60 minutes. If workmanship demonstrates, and one or more tests show that the standard of water tightness specified herein is being obtained, the Engineer may waive as much of the remaining testing as may be indicated.

The Contractor shall furnish all labor, materials and equipment necessary to conduct the infiltration tests, including water, pumps, hose, etc. This work shall be considered to be a part of Item I-2. Payment for testing shall be included in the contract unit price bid for Items I-2, 48" Storm Sewer (Sanitary), Sec. M-6.6 (b) or Sec. M-6.6 (c) as per plan or Item I-2, 8" Storm Sewer (Sanitary), Sec. M-6.8 (b) as per plan.

ALTERATIONS TO SIPPO CREEK CONDUIT & PUMPING STATION

All work indicated on Sheets No. 97 through 105, unless separately itemized, shall be performed in accordance with the general provisions indicated above, with the following additions :

1. New steel grating shall be Kerrigan, Reliance, or approved equal, with 1¼" x 3/16" Bearing bars @ 1 3/16" c/c - as per Item S-7.

2. Existing trash screen frame may be cleaned, repaired if necessary, and reused. If new trash screen frame is furnished, it shall be of the same section as existing frame and its construction shall be governed by the provisions of Item S-7, using copper bearing steel.

3. Existing cast iron sluice gate frames are considered to be very difficult to remove in usable condition and therefore new frames may be obtained either from the sluice gate manufacturer, Morse Brothers Machinery Company, if available, or cast locally. In the latter event, the frames will have to be removed carefully and completely for pattern purposes. Material for casting shall have a minimum tensile strength of 30,000 psi and shall conform to Sec. M-7.8. Manufacturers designation for 6'x6' sluice gate is Perkul Model 45; for 3'x5' sluice gate is also Perkul Model 45.

4. New railing, where required, shall be made of 1½" ϕ standard weight welded or seamless steel pipe, galvanized after fabrication, as per Item S-14. Joints shall be flush welded type.

5. Field painting of new and reused steel shall be in accordance with Item S-8.

6. Replacement or extension parts for sluice gate operating mechanism shall be of same section and material as existing.

7. Materials for and placement of ladders shall conform to the requirements of Item I-8.

8. It is anticipated that the existing flap valve on 12" pipe discharging thru retaining wall will be reusable at the new location. If its condition should prove unsatisfactory for reuse, a new valve shall be furnished and installed. New valve, if furnished, shall be Neenah Series 5050 or Armco Model 10-C valve or approved equal.

9. Reinforced concrete sewer section between manholes as shown on Sheet No. 102 shall be tested for water tightness as indicated on this sheet for 48" sanitary sewer.

10. Basis of Payment - The lump sum price bid for "Item Special - Alterations to Sippo Creek Conduit and Pumping Station" shall constitute full compensation for altering the conduit and pumping station as detailed, for removing portions of the existing pressure conduit, including gatewell, trash screens, and inlet facilities, for building new sewer transition section, manholes, conduit, gatewell, inlet structure and retaining wall, installing new 12" and 54" pipe and ladders, resetting sluice gates and trash screens, altering manual gate controls, for excavation, backfill, concrete, reinforcing steel, structural steel, joint materials, porous backfill and railing, for alterations to pump station electrical service, for maintaining conduit and sewer flow, for construction, maintenance and removal of flood protection, for testing as specified, and for all labor, equipment, tools and incidentals necessary to complete this item.

RELOCATION OF FEDERAL AVENUE PUMP STATION

All work indicated on Sheets No. 106 through 108, unless separately itemized, shall be performed in accordance with the general provisions indicated above, with the following additions :

1. Packing for 60" corrugated metal pipe extensions shall be in accordance with Sec. M-10.08, Bituminous Joint Sealer.

2. TESTING OF PUMP STATION OPERATION : Before beginning construction, Contractor shall test operation of existing electrical and mechanical equipment at its present location. After moving building, aligning, reconnecting and leveling, similar tests shall be made. Contractor shall be responsible for making any adjustments necessary to produce comparable test results at the new location. Final testing will be observed by and shall meet with the approval of the Corps of Engineers, U.S. Army.

3. Construction and testing of, and materials for, pressure relief wells and piezometer tubes shall conform to notes in the Proposal. Testing of pressure relief wells will be under the joint supervision of the State of Ohio and the Corps of Engineers.

4. Basis of Payment - The lump sum price bid for "Item Special - Relocation of Federal Avenue Pump Station" shall constitute full compensation for excavation and backfill, removal of existing inlet structure and retaining wall, reinforced concrete foundation slab and pedestals or solid fill to support existing building at new location, new reinforced concrete inlet structure, the moving of existing building to new location, extension of 30" steel pipes Sec. M-6.9 from old to new location, the extension of 60" cast iron pipe with 12 Ga. 60" C.M.P. Sec. M-6.4 (d), the capping of existing pressure relief wells, new electrical grounds, testing of pump station operation, flood protection during construction, and for all materials, labor, equipment, tools and incidentals necessary to complete this item.

ALTERATIONS TO TREMONT AVENUE SIPHON OUTLET STRUCTURE

All work indicated on Sheets No. 114 and 115, unless separately itemized, shall be performed in accordance with the general provisions indicated above.

The lump sum price bid for "Item Special - Alterations to Tremont Avenue Siphon Outlet Structure" shall constitute full compensation for removing portions of the existing structure and rebuilding as detailed, for excavation and backfill, for furnishing and placing reinforcing steel and concrete, and for all labor, equipment, tools, and incidentals necessary to complete this item.

CHERRY ROAD SIPHON OUTLET STRUCTURE

All work indicated on Sheets No. 116 through 118, unless separately itemized, shall be performed in accordance with the general provisions indicated above, with the following additions :

1. TEST FOR WATER TIGHTNESS

The maximum allowable infiltration into the completed pipes shall be 1000 gallons per day, per inch of pipe diameter, per mile of pipe. Infiltration in excess of the specified rate shall be considered sufficient cause for the rejection of the work. Contractor shall test completed pipes as indicated for 48" sanitary sewer as directed by the Engineer.

2. Cast iron pipe shall be mechanical joint, Class 150, centrifugally cast in metal moulds in accordance to American Standard Specifications A 21.6 - 1953, or as amended. Cast iron pipe fittings and special castings shall conform to Standard Specifications for Cast Iron Pipe and Fittings, of the American Water Works Association and Federal Specification WW-P-421a where applicable.

The mechanical joint shall be of the stuffing box type. Each joint shall consist of :

(a) a bell cast integrally with the pipe or fitting and provided with an exterior flange having cored or drilled bolt holes and interior annular recesses for the sealing gasket and the spigot of the pipe or fitting.
(b) a pipe of fitting spigot.
(c) a sealing gasket.
(d) a separate cast iron follower gland having cored or drilled bolt holes.
(e) cast iron tee-head bolts and hexagon nuts.

The mechanical joint shall meet all applicable requirements of A.S.A. A 21.6 - 1953, or as amended, "Specifications for Cast Iron Pipe Centrifugally Cast in Metal Molds for Water or Other Liquids," and shall have the same pressure rating as the pipe or fitting of which it is a part.

3. Material for 30" concrete sanitary sewer pipe shall conform to Sec. M-6.6 (c).

4. The existing siphon outlet chamber shall be completely removed in accordance with Item S-24.

5. Basis of Payment - The lump sum price bid for "Item Special - Cherry Road Siphon Outlet Structure" shall constitute full compensation for furnishing, hauling and placing, ready for operation, the siphon outlet chamber, as detailed, cast iron siphon pipe and pipe specials, removal, repair and reinstallation of existing gate valves, stems, and guides, the 30" Sec. M-6.6 (c) discharge pipe, concrete, reinforcing steel, castings, joint materials, brick masonry, structural steel, excavation and backfill, for the testing specified, for making all connections, for removal of the existing chamber, and for all labor, equipment, tools and incidentals necessary to complete this item.

All component parts not specifically mentioned hereon or called for on the details, but which are required for a first class installation or satisfactory operation of the altered or relocated drainage structures shall also be furnished and placed and shall be considered as paid for as a part of the payment for each special "lump sum" item.

CAPPING OF EXISTING PRESSURE RELIEF WELLS AT FEDERAL AVENUE PUMP STATION

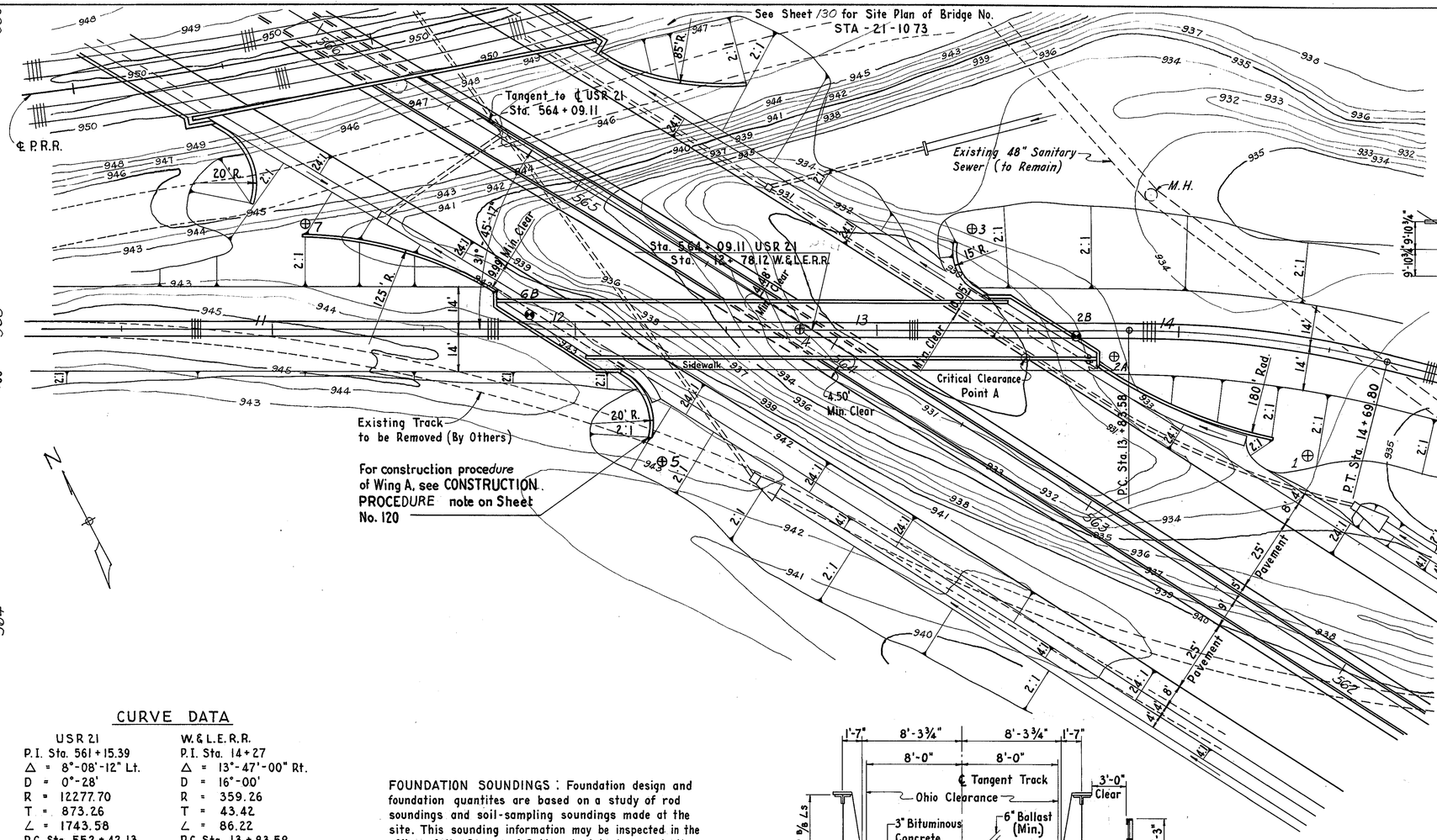
The existing discharge tee, discharge pipe, and portions of casing and flange cover above the tee shall be carefully removed and disposed of. The casing shall be cut off at least two feet below the proposed finished grade outside proposed pavement areas or at least two feet below the proposed subgrade elevation inside proposed pavement areas, and capped with Class "E" concrete or an approved prefabricated cap.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

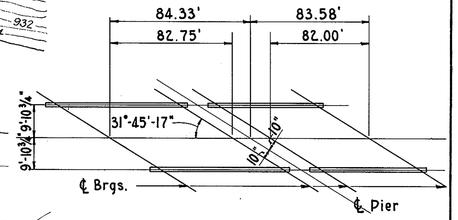
119

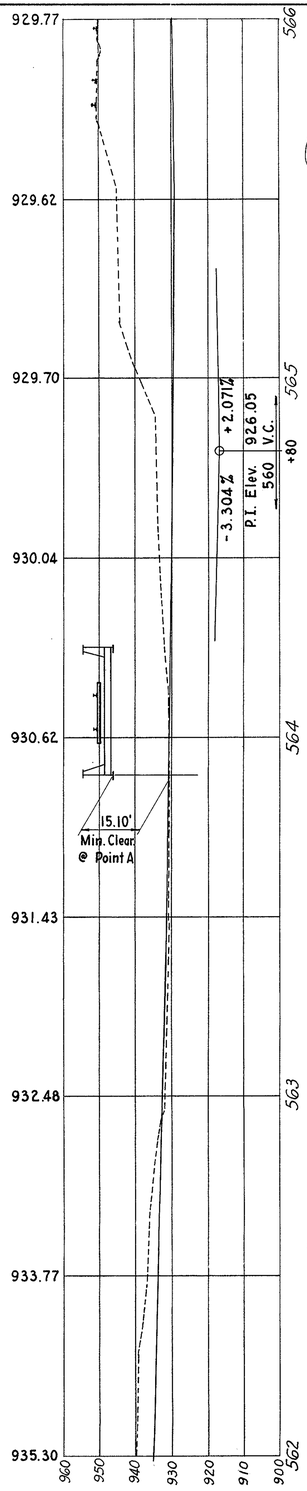
STA.-21-10.23

See Sheet 130 for Site Plan of Bridge No. STA-21-10 73



ALIGNMENT PLAN



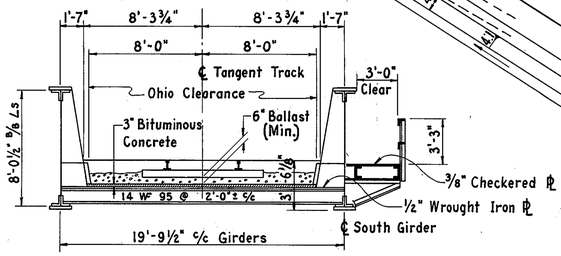


CURVE DATA

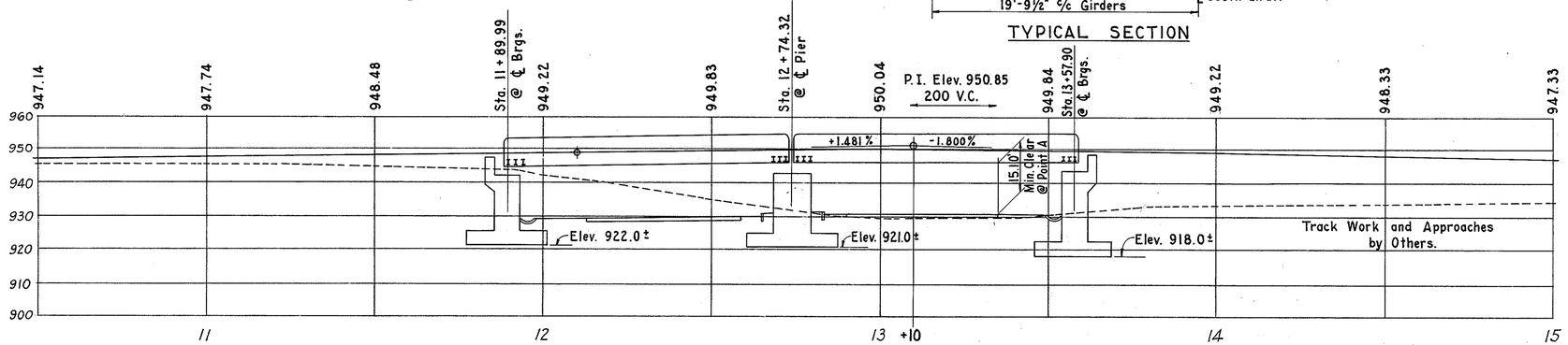
USR 21	W. & L. E. R. R.
P.I. Sta. 561+15.39	P.I. Sta. 14+27
Δ = 8°-08'-12" Lt.	Δ = 13°-47'-00" Rt.
D = 0°-28'	D = 16°-00'
R = 12277.70	R = 359.26
T = 873.26	T = 43.42
∠ = 1743.58	∠ = 86.22
P.C. Sta. 552+42.13	P.C. Sta. 13+83.58
P.T. Sta. 569+85.71	P.T. Sta. 14+69.80

FOUNDATION SOUNDINGS : Foundation design and foundation quantites 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 assumes no responsibility for the accuracy thereof.

LEGEND ⊕ - Rod Sounding
⊖ - Core Boring



TYPICAL SECTION



PROPOSED STRUCTURE

TYPE : Thru-girder with wrought iron plate deck & reinforced concrete substructure.
SPANS : 82'-9" & 82'-0" c/c Brgs.
39.88' & 39.49' Clear f/f. Substructure
WIDTH : 1 Track 19'-9½" c/c Girders plus 3'-0" Sidewalk (S. Side)
LOADING : Coopers E-72

SKEW : 58°-14'-43" Rt. Forward

ALIGNMENT : RR Tangent and 16°-00' Curve Rt.
USR 21 on 0°-28' Curve Lt.
SUPERELEVATION : None

DESIGN CRITERIA : A.R.E.A. Specifications

CLEARANCE : 15.10' Minimum - Vertical

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SITE PLAN
BRIDGE NO. STA.-21-1069
U.S.R. 21 UNDER W. & L.E. RR.

STARK COUNTY

SCALE : 1" = 20' STA. 564+09.11

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
MBJ	DWP	DWP	DWP	WRK	

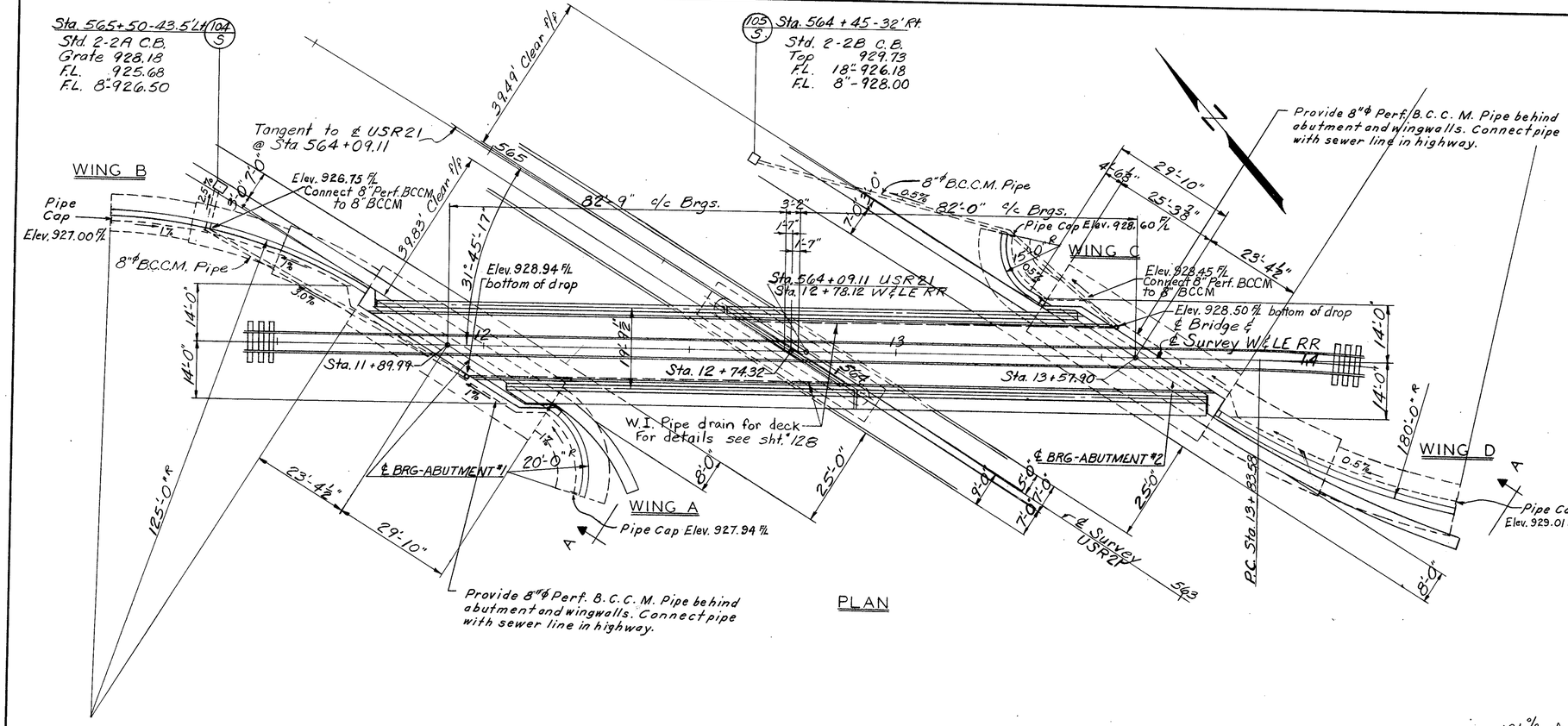
BEAVER VALLEY ENGINEERING SUPPLIES CO.

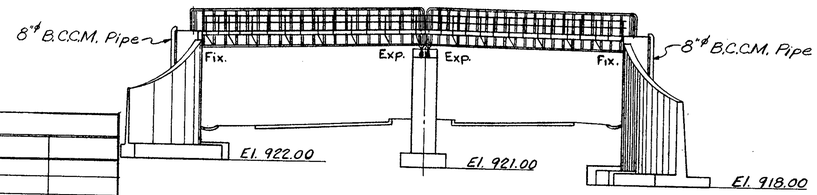
7163

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

120

STA-21-10.23





ELEVATION AA

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Super	Abuts	Wings	Piers		
E-2	Lump Sum	L. S.	Cofferdams Cribs & Sheeting		Lump Sum	Lump Sum	Lump Sum		
E-2	2,640	C.Y.	Unclassified Excavation		1,100	1340	200		
S-1	39	C.Y.	Class "C" Concrete, Superstructure	39					
S-1	579	C.Y.	Class "E" Concrete, Abut. & Pier above footings		410		169		
S-1	266	C.Y.	Class "E" Concrete, Wingwalls above footings			266			
S-1	490	C.Y.	Class "E" Concrete, Footings		233	206	51		
S-3	143	L.F.	Waterproofing, premolded sealing strip		90	53			
S-3	3	Sq Yd	Type B Waterproofing		3				
S-4	76,490	Lbs	Reinforcing Steel	2,722	34,772	32,587	6,409		
S-107	566,600	Lbs	Structural Steel, Including Castings & W.I. plate	566,600					
S-8	566,600	Lbs	Field painting of structural steel, as per plan	566,600					
S-9	218	Sq.Ft.	1" Preformed expansion joint Filler		218				
S-9	97	Lin.Ft.	Folded Copper strip 24 oz - 12" wide		97				
S-9	380	Lin.Ft.	Waterstop - 8" wide 24 oz copper flashing		150	230			
S-29	264	C.Y.	Porous Backfill		128	105			
S-29	200	Lin.Ft.	8" Bituminous coated corrugated metal pipe		200				
S-29	180	Lin.Ft.	6" Half round wrought iron pipe deck drain	180					
T-35	18	Cu.Yd.	Asphaltic concrete surface course (Type C) (85-100)	18					
S-29	282	Lin.Ft.	8" Perf. Bituminous coated corrugated metal pipe		282				

GENERAL NOTES

- CONSTRUCTION AND MATERIAL SPECIFICATIONS: State of Ohio, Department of Highways Construction and Material Specifications 1-1-59 and Supplemental Specifications No. S-103, revised 2-16-55 and No. S-107, revised 2-16-55.
- 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 and revised 2-21-58, and the A.R.E.A. Specifications amended to 3-11-59 for Cooper's E-72 Live Load.
- FOUNDATION BEARING PRESSURE: Footings are designed for a maximum bearing pressure of 3½ tons per sq. ft.
- WELDING of structural steel and wrought iron shall be Class "A" and shall comply with Sec. S-7.22 of the C.&S. Spec's. Welds shown as field welds may, at the option of the Contractor, be made in the shop.
- CONCRETE: Superstructure concrete shall be Class "C." Pier, Wing and Abutment concrete shall be Class "E."
- SURFACE FINISH OF CONCRETE: Form liners or plywood shall be used on all exposed surfaces of abutments, wings, and piers. These surfaces are to be grout cleaned according to Sec. S-1.22. The rubbing of concrete surfaces will not be permitted. Porous backfill shall be 2ft thick, extend up to the railroad ballast, and to the surface of the earth shoulders, and outward to the ends of the wingwalls and surface of the embankment slopes. The porous backfill shall extend down to the flow line of the 8" dia. drainpipe back of abutment and wingwalls.
- CHAMFER: Exposed Concrete edges to have 1" × 1" chamfer.
- SHEETING & BRACING: Before construction is started, eight sets of prints showing details of the sheeting and bracing to be used for excavation adjacent to the railroad tracks shall be submitted to the Director for approval by the Department of Highways and by the Railroad Company.

+1.481% & -1.800%

VPI Sta. 13+10
Elev. 950.85
200' V.C.
.820' M.O.

CURVE DATA

RAILROAD NOTE:
Track relocation, ballast, & ties or any work incidental there-to, is not included in this contract. The contractor is requested only to coordinate his work where possible with the track work done by others.

CONSTRUCTION PROCEDURE:
Wing "A", from expansion Jt. at abutment to end of wall, to be constructed after railroad over bridge is opened to traffic. Any additional sheeting, cribbing, or cofferdams required will be included in Item E-2 Cofferdams, Cribs & Sheeting.

UTILITY LINE (S)
All labor and expense involved in relocating (installing) the affected utility lines shall be borne by the owner(s). The Contractor and Owner(s) are requested to cooperate by arranging their work in such a manner that inconvenience to either will be held to a minimum.
RAILROAD AERIAL LINES shall be relocated by the railroad. The Contractor shall use all precautions necessary to see that lines are not disturbed during the construction stage and shall cooperate with the railroad in the relocation of these lines. The cost of the relocation shall be included in the railroad force account work.

FORCE ACCOUNT WORK
by the
New York, Chicago, & St. Louis Railroad
1. Engineering and Inspection
2. Communications and Signal Work
3. Track Work

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

GENERAL PLAN AND ELEVATION
& ESTIMATED QUANTITIES
BRIDGE NO. STA-21-1069
USR21 UNDER W&LE RR
STARK CO. STA. 564+09.11

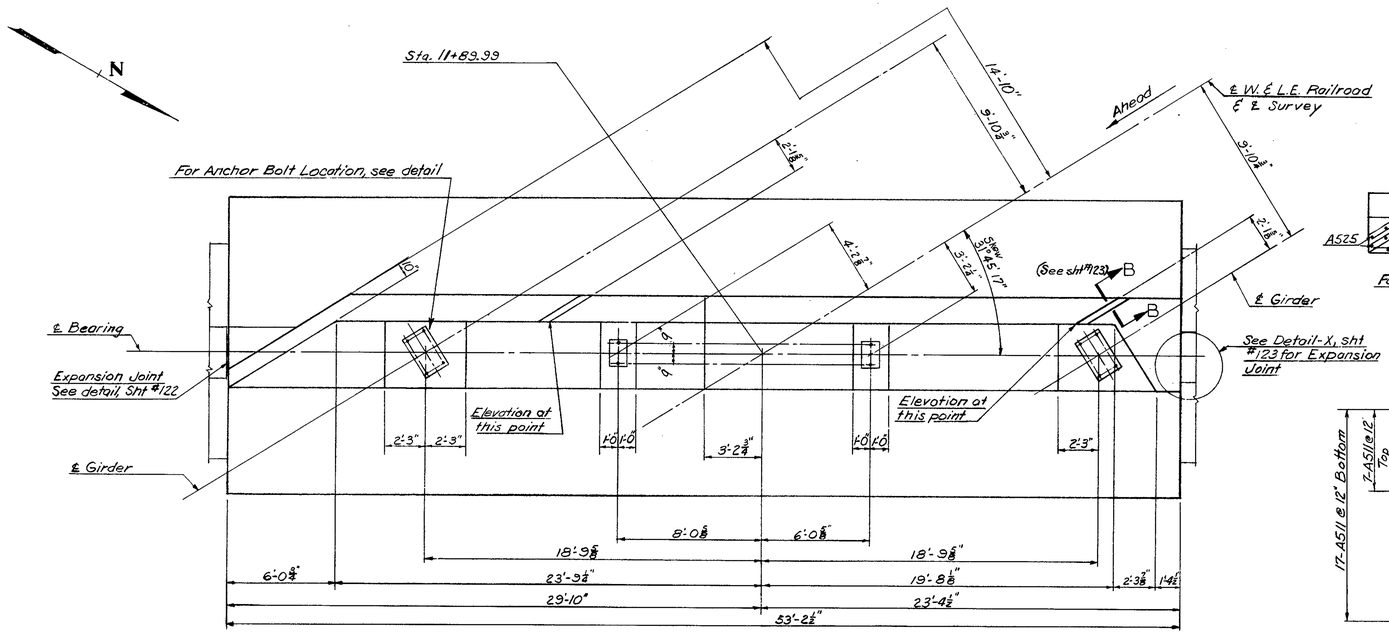
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
CFF	RLM		CFF		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-57576

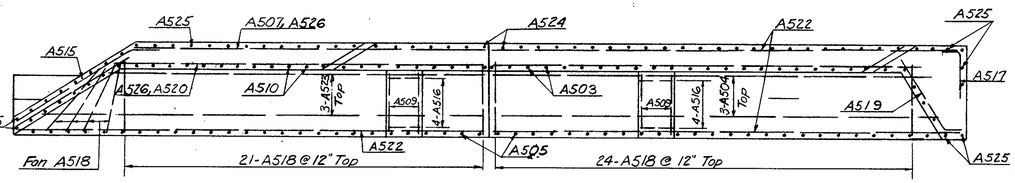
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010 (5)	

121

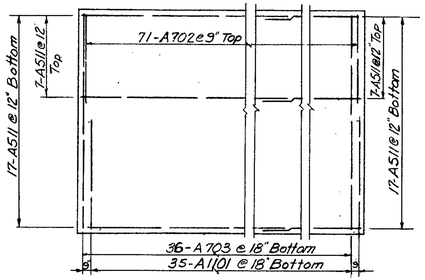
STA-21-10.23



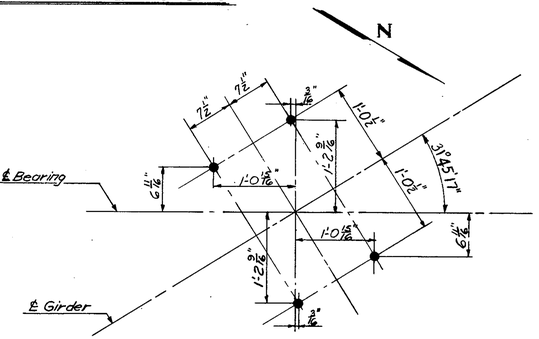
PLAN



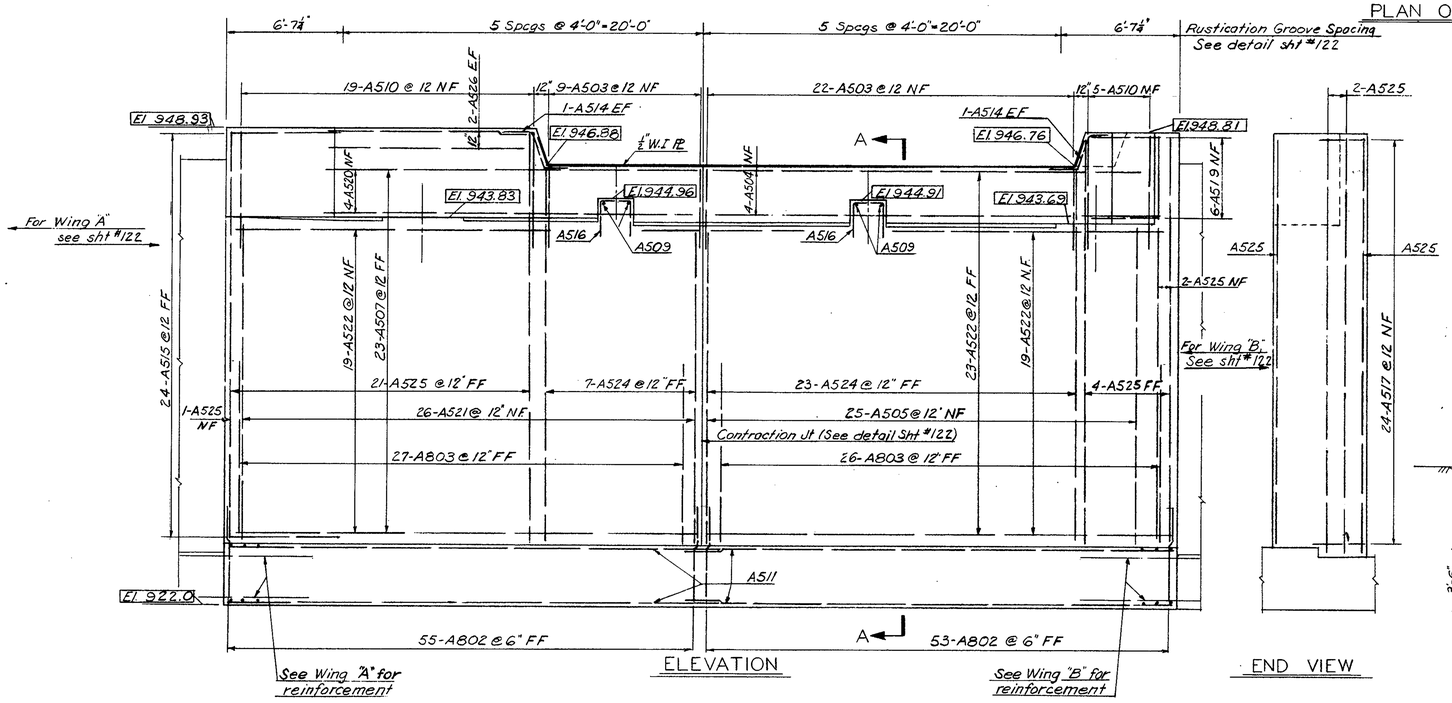
PLAN OF STEM REINFORCING



PLAN OF FOOTING REINFORCING

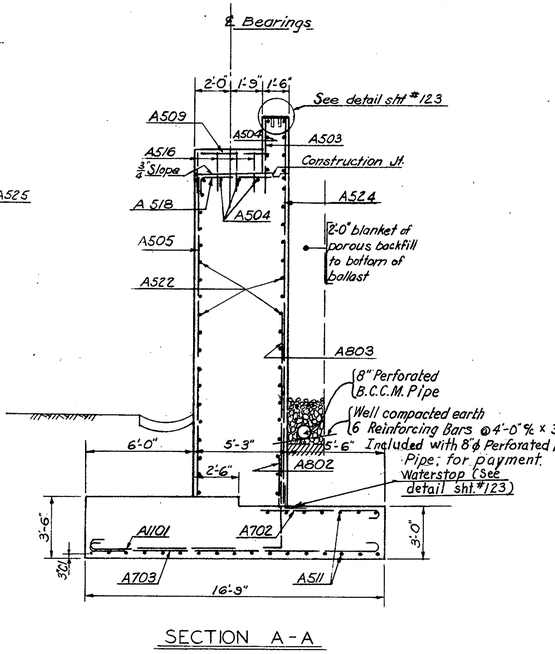


ANCHOR BOLT LOCATION PLAN FOR GIRDERS



ELEVATION

END VIEW



SECTION A-A

NOTE:
- Clearance of reinforcing steel shall be 2" from face of concrete, unless otherwise noted.
- Special care shall be taken in placing reinforcing steel in the bearing seat so that it will not interfere with the drilling of anchor bolt holes.

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ABUTMENT NO. 1 DETAILS
BRIDGE NO STA-21-1069
USR 21 UNDER W. & L.E. R.R.

STARK COUNTY STA 564+09.11

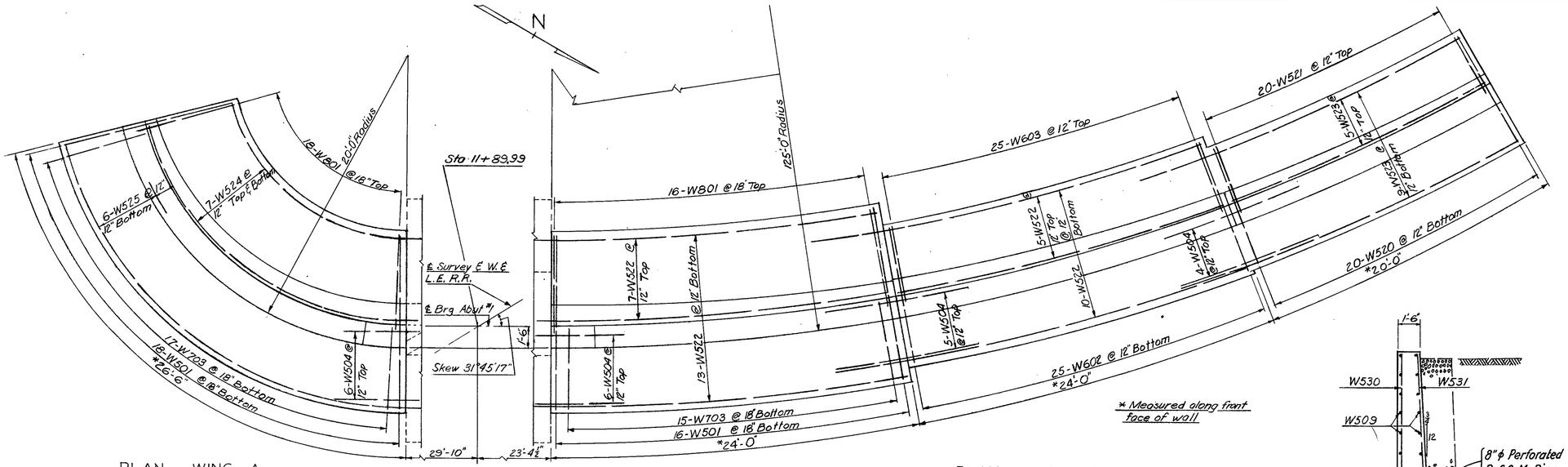
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
DWB	CFF		KAE		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-55316

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010 (5)	

122

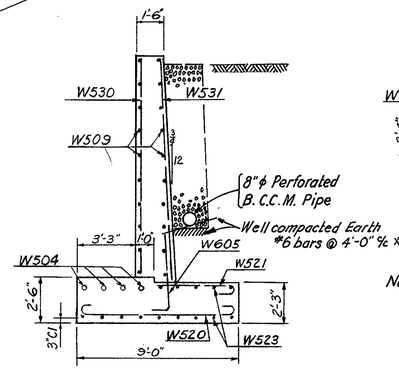
STA-21-1023



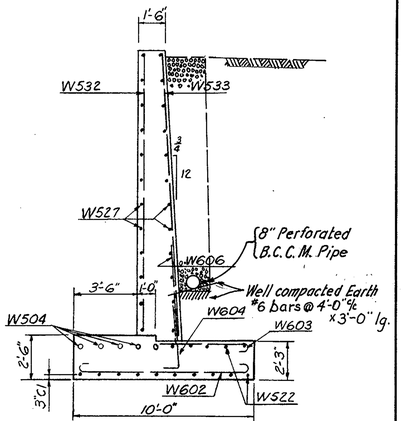
PLAN – WING A

PLAN – WING B

* Measured along front face of wall

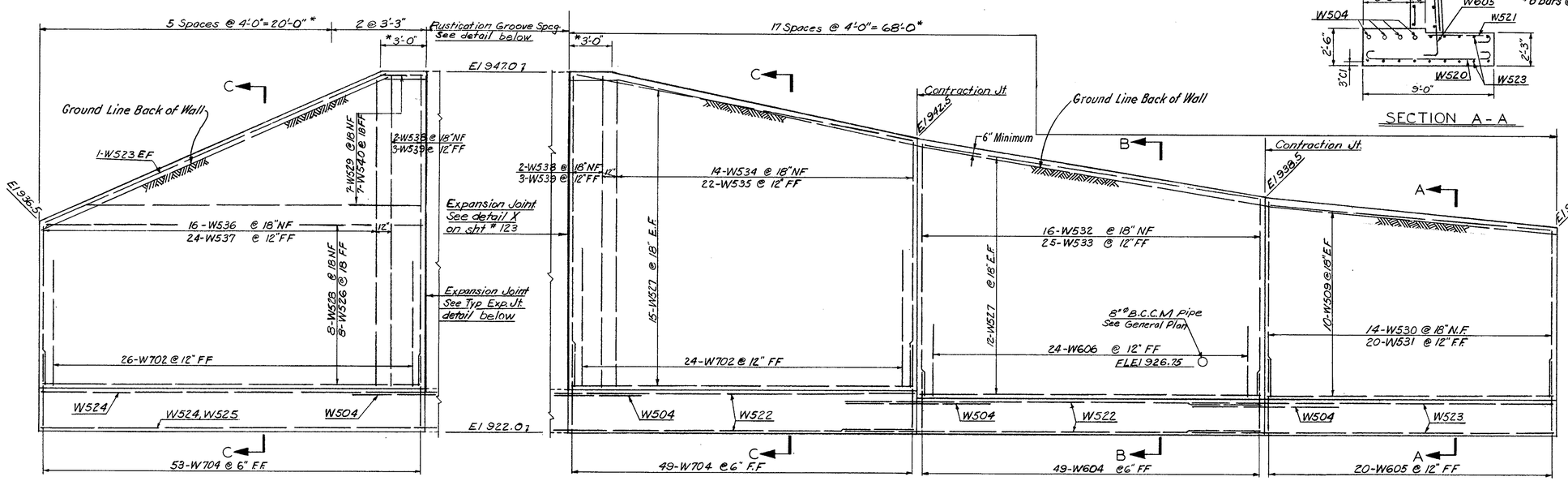


SECTION A-A



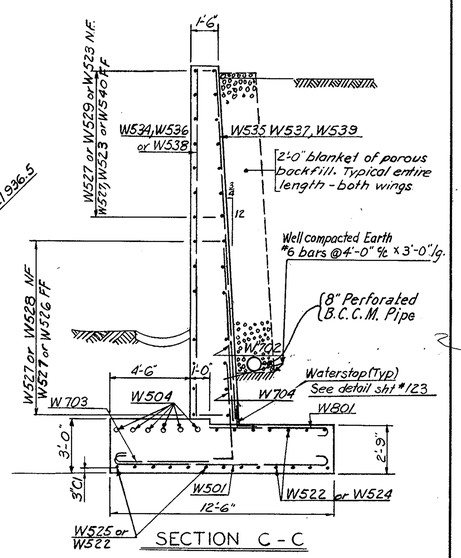
SECTION B-B

Note: *6 bars to be included with 8"ϕ perforated BCCM pipe for payment.

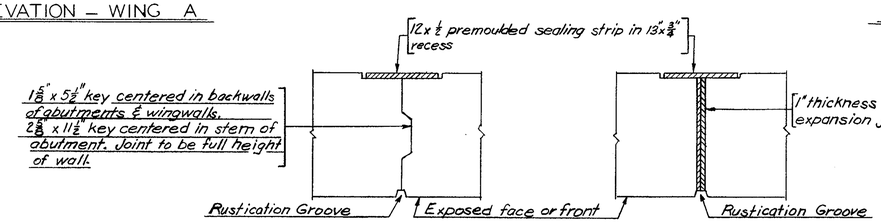


ELEVATION – WING A

ELEVATION – WING B

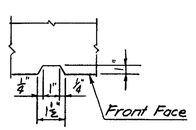


SECTION C-C



TYP CONTRACTION JOINT

TYP EXPANSION JOINT



RUSTICATION GROOVE DETAIL

NOTE
- Clearance of reinforcing steel shall be 2" from face of concrete unless otherwise shown.

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

WINGWALL DETAILS
ABUTMENT NO. 1
BRIDGE NO. STA-21-1069
USR 21 UNDER W. & L.E. RR.
STARK COUNTY STA. 564+09.11

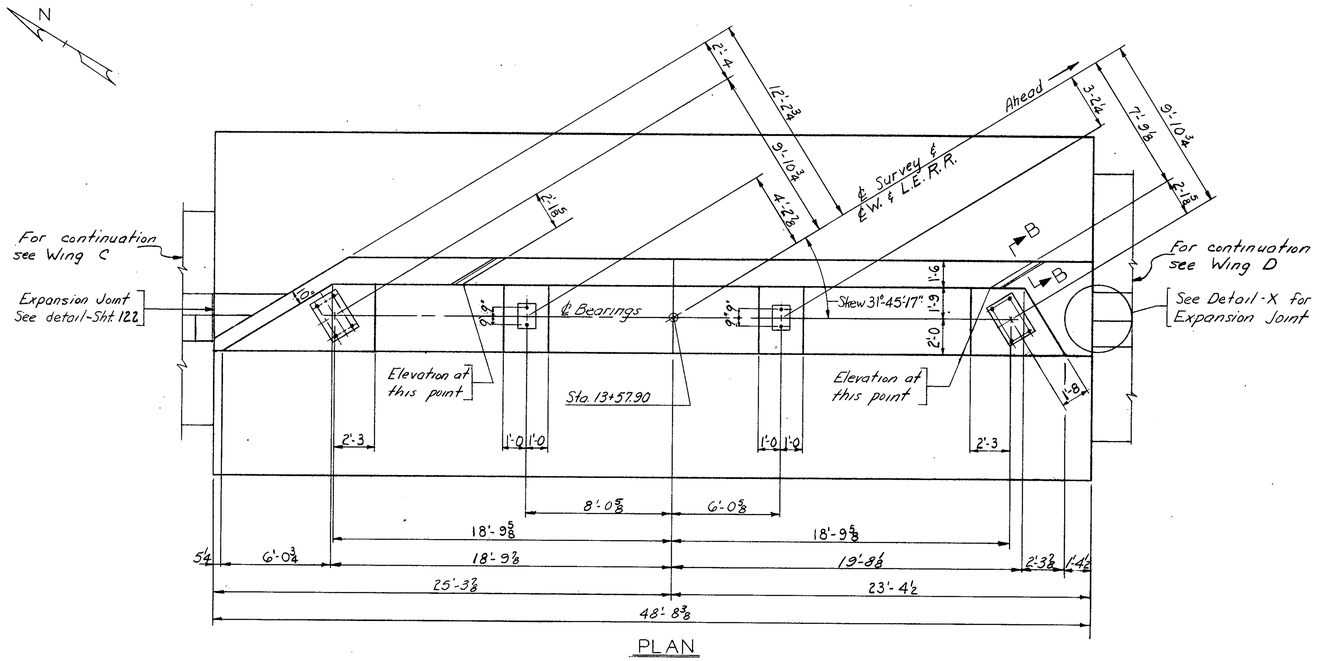
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
DWB	CFF		KAE		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-99316

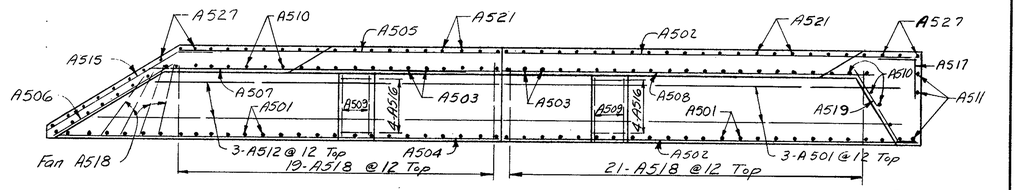
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	UUG-1010 (5)	

STA-21-10.23

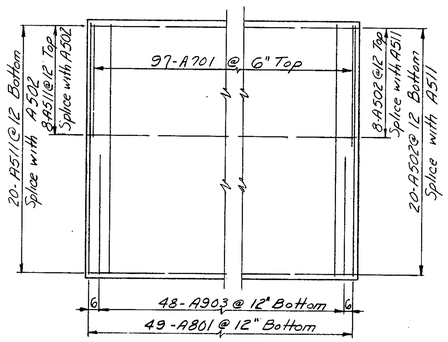
123



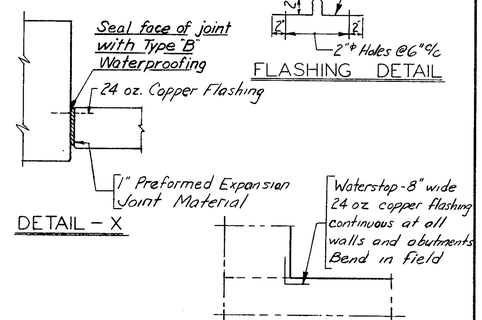
PLAN



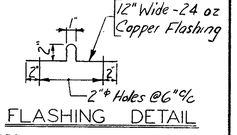
PLAN OF STEM REINFORCING



PLAN OF FOOTING REINFORCING

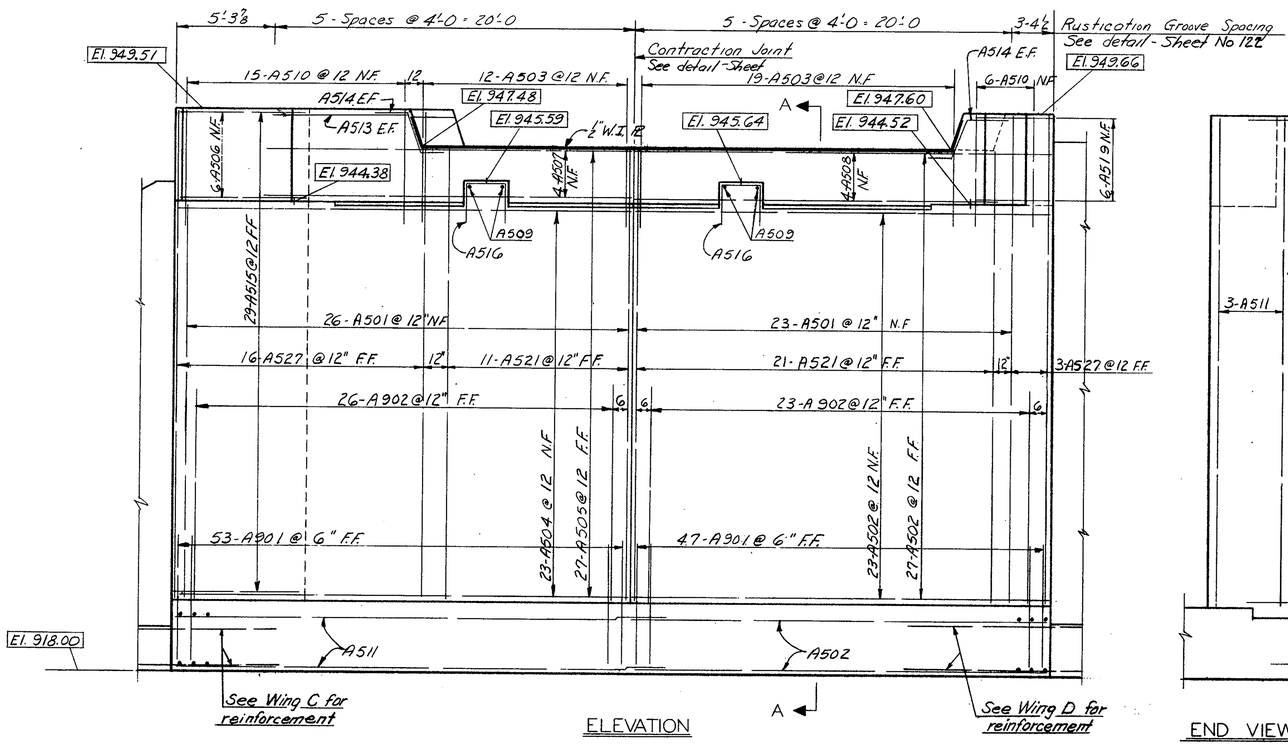


DETAIL – X

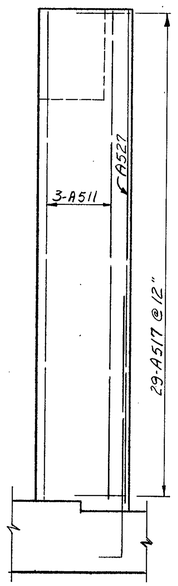


FLASHING DETAIL

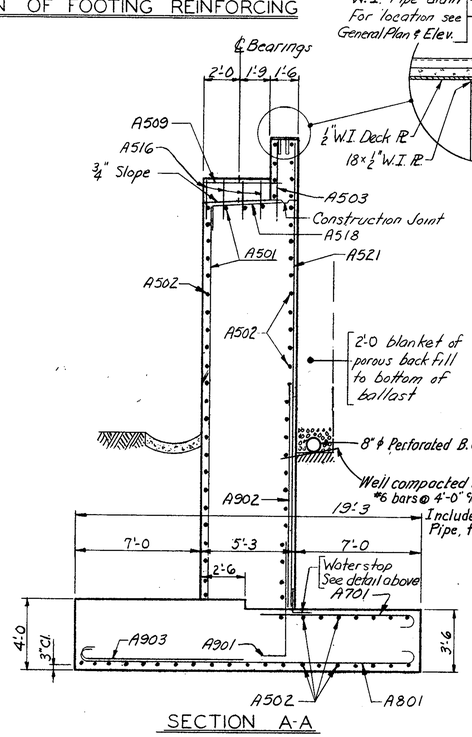
WATERSTOP DETAIL



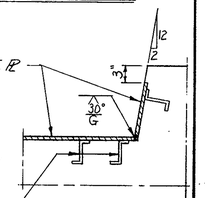
ELEVATION



END VIEW



SECTION A-A



SECTION B-B

NOTE

- Clearance of reinforcing steel shall be 2" from face of concrete unless otherwise shown.
- Special care shall be taken in placing reinforcing steel in the bearing seat so that it will not interfere with the drilling of anchor bolt holes.
- For anchor bolt layout - see Sheet No. 121

NF : Near Face
FF : Far Face
EF : Each Face

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ABUTMENT NO. 2 DETAILS
BRIDGE NO. STA-21-1069
USR 21 UNDER W. & L.E.R.R.
STARK COUNTY STA. 564+09.11

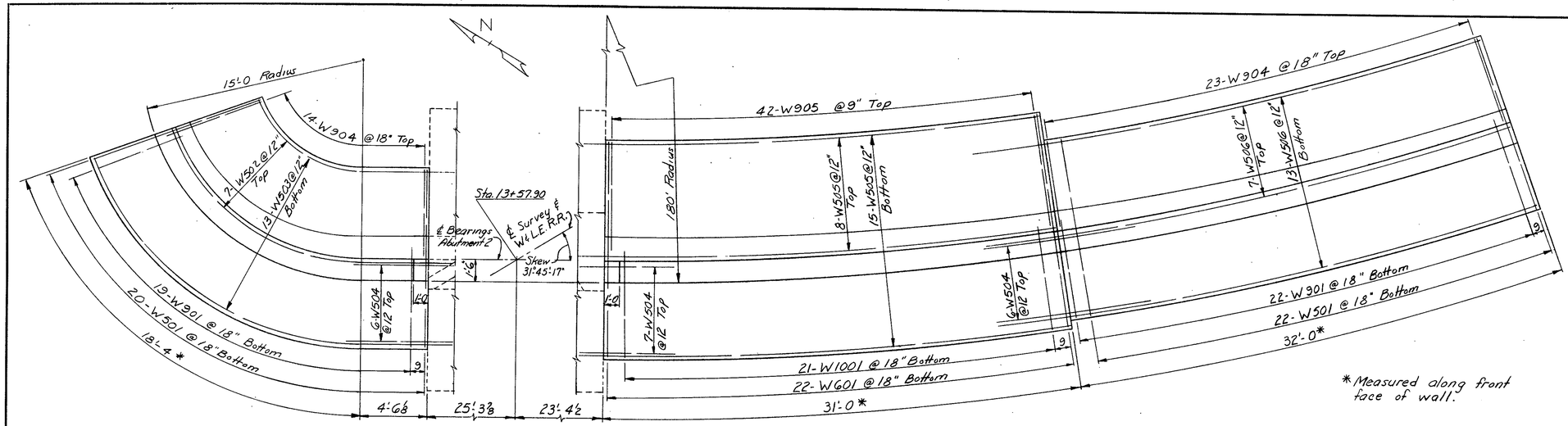
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
DWB	KAE		RLM		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-99318

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010 (5)	

124

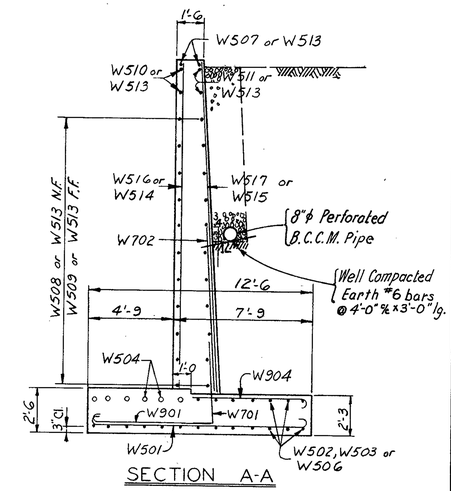
STA. - 21-10.23



PLAN - WING C

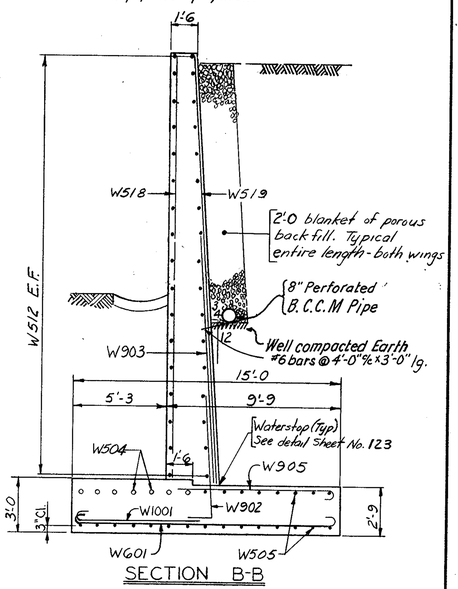
PLAN - WING D

* Measured along front face of wall.

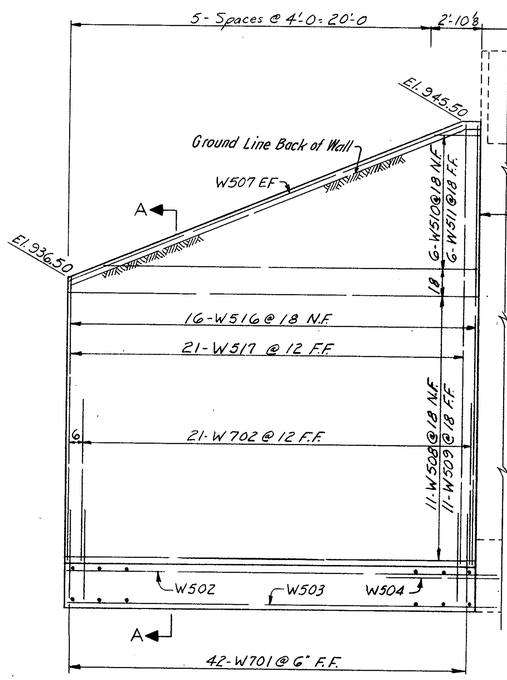


SECTION A-A

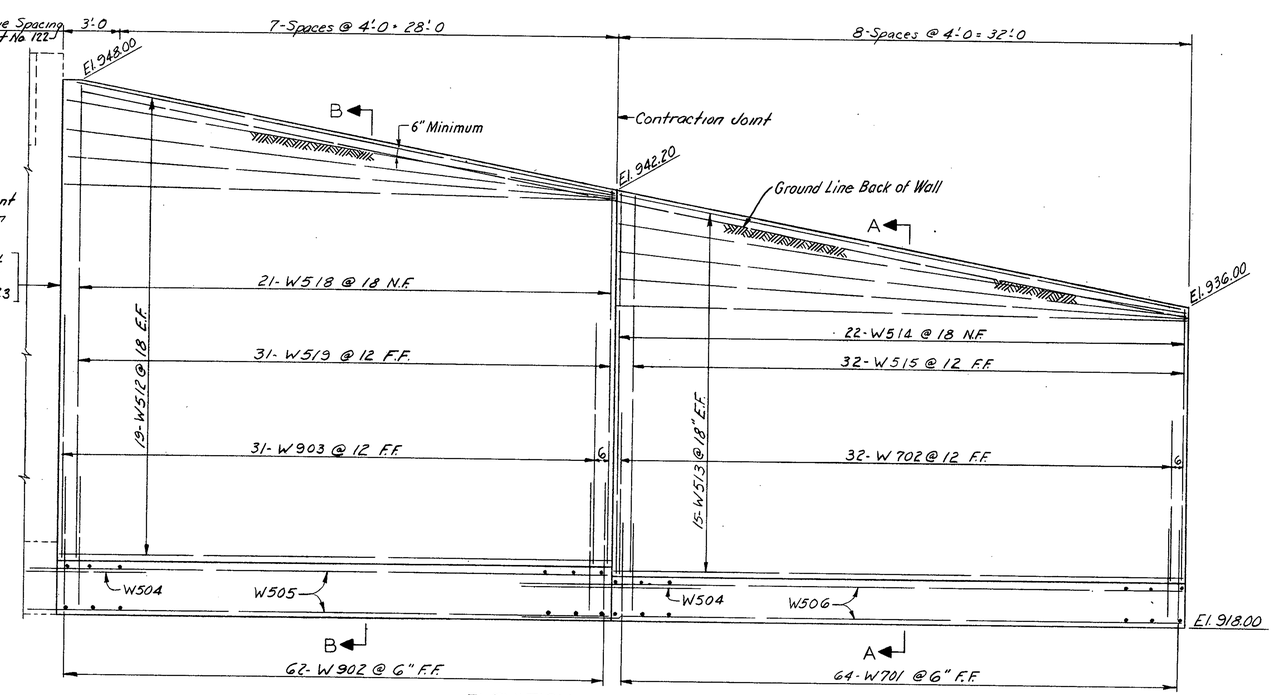
Note: #6 bars to be included with 8"ϕ perforated BCCM pipe for payment



SECTION B-B



ELEVATION — WING C



ELEVATION — WING D

NOTE
- Clearance of reinforcing steel shall be 2" from face of concrete unless otherwise shown.

NF = Near Face
FF = For Face
EF = Each Face

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

WINGWALL DETAILS
ABUTMENT NO. 2
BRIDGE NO. STA.-21-1069
USR 21 UNDER W & LE. RR
STARK COUNTY STA. 564+09.11

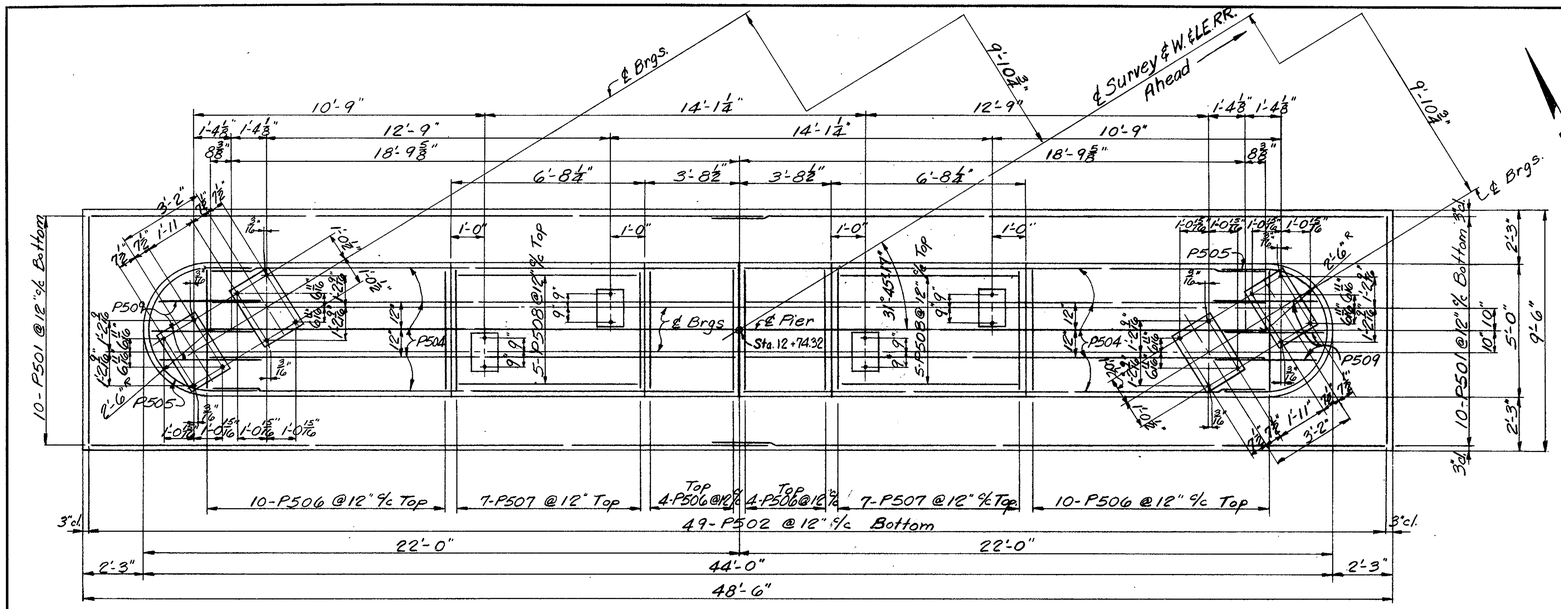
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
DWB	KAE		CFF		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-55316

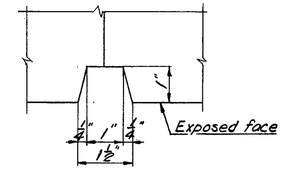
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG1010 (5)	

125

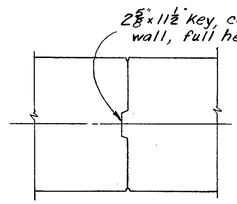
STA 21 - 10.23



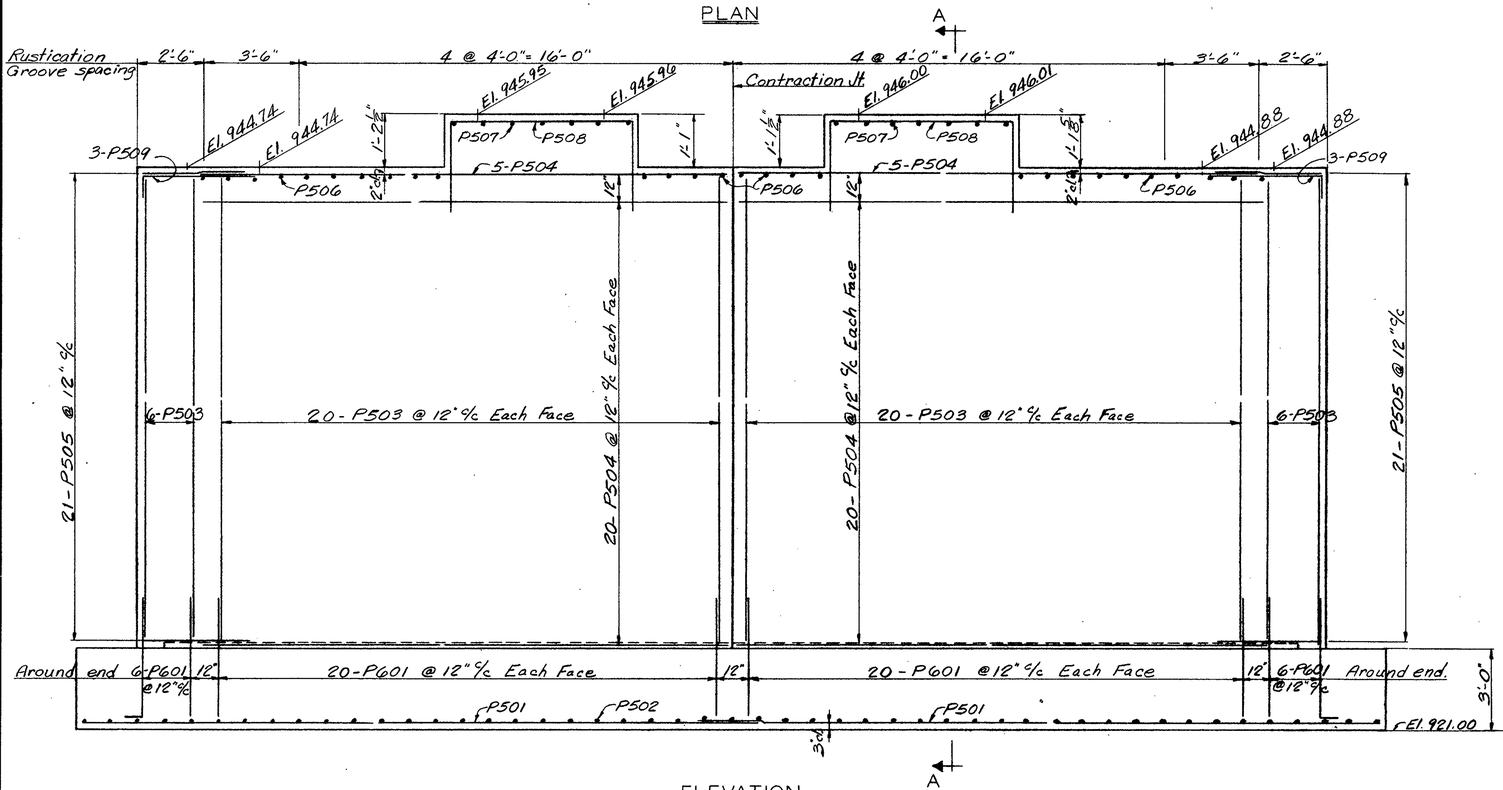
PLAN



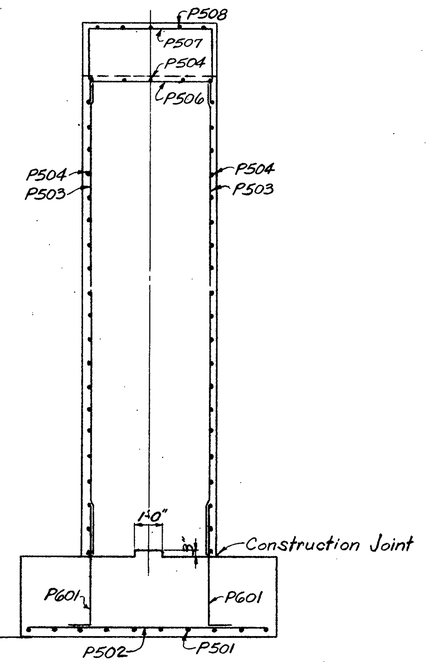
RUSTICATION GROOVE DETAIL



CONTRACTION JOINT DETAIL



ELEVATION



SECTION AA

Note:
- Special care shall be taken in placing reinforcing steel in the bearing seat so that it will not interfere with the drilling of anchor bolt holes.
- See sheet 129 for anchor bolts.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

PIER DETAILS
BRIDGE NO. STA. 21-1069
USR 21 UNDER W & LE RR

STARK CO. STA. 564+09.11

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
CFF	RLM		DWB		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-39316

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010 (5)	

126

STA. 21-10.23

REINFORCING STEEL LIST

ABUTMENTS

MARK	NUMBER ABUT. 1	NUMBER ABUT. 2	NUMBER TOTAL	LENGTH	WEIGHT	SHP
A501		52	52	22'-2	1202	S
A502		78	78	23'-0	1871	S
A503	31	31	62	4'-2	269	S
A504	7	23	30	25'-0	782	S
A505	51	27	78	17'-11	1458	S
A506		6	6	8'-0	50	S
A507	23	4	27	19'-4	544	S
A508		4	4	20'-3	84	S
A509	4	4	8	4'-9	40	S
A510	24	21	45	6'-2	289	S
A511	48	31	79	27'-4	2252	S
A512		3	3	20'-0 to 23'-4 Vary ea. 1'-8	68	S
A513		2	2	7'-6	16	S
A514	4	4	8	4'-0	33	B
A515	24	29	53	9'-4	516	B
A516	8	8	16	5'-11	99	B
A517	24	29	53	3'-10	212	B
A518	49	44	93	5'-0	485	B
A519	6	6	12	5'-9	72	B
A520	4		4	20'-9	87	S
A521		32	32	25'-10	862	S
A522	61		61	26'-3	1670	S
A523	3		3	21'-6 to 25'-0 Vary ea. 1'-9	73	S
A524	30		30	21'-7	675	S
A525	30		30	23'-8	741	S
A526	4		4	12'-0	50	S
A527		19	19	27'-10	552	S
A701		97	97	9'-4	1850	B
A702	71		71	7'-8	1113	B
A703	36		36	18'-1	1331	B
A801		49	49	21'-1	2758	B
A802	108		108	6'-9"	1946	B
A803	53		53	10'-9	1521	S
A901		100	100	3'-6	3230	B
A902		49	49	14'-11	2485	S
A903		48	48	10'-3	1673	B
A1101	35		35	9'-9	1813	B

WINGWALLS

MARK	NUMBER ABUT. 1	NUMBER ABUT. 2	NUMBER TOTAL	LENGTH	WEIGHT	SHP
W501	34	42	76	13'-4	1057	B
W502		7	7	18'-0 to 25'-7 Vary ea. 1'-3⅜"	159	S*
W503		13	13	18'-0 to 33'-3 Vary ea. 1'-3¼"	347	S*
W504	21	19	40	10'-0	417	S
W505		23	23	36'-6"	876	S*
W506		20	20	37'-6	782	S*
W507		2	2	23'-0	48	S*
W508		11	11	22'-4	256	S*
W509	20	11	31	19'-4	625	S*
W510		6	6	2'-6 to 20'-8 Vary ea. 3'-7⅝"	72	S*
W511		6	6	2'-6 to 18'-0 Vary ea. 3'-1¼"	64	S*
W512		38	38	30'-8	1215	S*
W513		30	30	31'-8	991	S*

WINGWALLS

MARK	NUMBER ABUT. 1	NUMBER ABUT. 2	NUMBER TOTAL	LENGTH	WEIGHT	SHP
W514		22	22	15'-4 to 21'-6 Vary ea. 3½"	423	S
W515		32	32	15'-7 to 21'-8 Vary ea. 2⅜"	622	S
W516		16	16	15'-10 to 24'-10 Vary ea. 7¼"	339	S
W517		21	21	16'-1 to 25'-1 Vary ea. 5⅜"	451	S
W518		21	21	21'-0 to 26'-10 Vary ea. 3½"	524	S
W519		31	31	21'-3 to 27'-1 Vary ea. 2⅜"	781	S
W520	20		20	9'-10	205	B
W521	20		20	5'-1	106	B
W522	35		35	29'-0	1059	S*
W523	16		16	25'-0	417	S*
W524	2 Groups of 7		14	21'-0 to 29'-0 Vary eq group 1'-4"	365	S*
W525	6		6	31'-6 to 37'-6 Vary ea. 1'-2⅜"	216	S*
W526	8		8	22'-8	189	S*
W527	54		54	23'-3	1309	S*
W528	8		8	25'-11	216	S*
W529	7		7	3'-3 to 23'-9 Vary ea. 3'-5"	99	S*
W530	14		14	11'-10 to 13'-9 Vary ea. 1¾"	187	S
W531	20		20	12'-1 to 14'-0 Vary ea. 1¼"	272	S
W532	16		16	13'-9 to 17'-9 Vary ea. 3¼"	264	S
W533	25		25	14'-0 to 18'-0 Vary ea. 2"	417	S
W534	14		14	17'-5 to 21'-9 Vary ea. 4"	286	S
W535	22		22	17'-8 to 22'-0 Vary ea. 2½"	455	S
W536	16		16	11'-5 to 21'-5 Vary ea. 8"	274	S
W537	24		24	11'-8 to 21'-8 Vary ea. 5¼"	417	S
W538	4		4	21'-10	91	S
W539	6		6	22'-1	138	S
W540	7		7	2'-9 to 21'-3 Vary ea. 3'-1"	88	S*
W601		22	22	16'-0	529	B
W602	25		25	11'-0	413	B
W603	25		25	5'-9	216	B
W604	49		49	4'-6	331	B
W605	20		20	4'-11	148	B
W606	24		24	5'-3	189	S
W701		106	106	6'-1	1318	B
W702	50	53	103	9'-6	2000	S
W703	32		32	6'-8	436	B
W704	102		102	6'-9	1407	B
W801	34		34	8'-4	756	B
W901		41	41	7'-8	1069	B
W902		62	62	8'-6	1792	B
W903		31	31	15'-6	1634	S
W904		37	37	8'-3	1038	B
W905		42	42	9'-11	1416	B
W1001		21	21	8'-7	776	B

PIER

MARK	NUMBER	LENGTH	WEIGHT	SHP
P501	20	24'-10	518	S
P502	49	9'-0	460	S
P503	92	20'-7	1975	S
P504	90	19'-4	1815	S
P505	42	10'-5	456	B
P506	28	5'-7	163	B
P507	14	10'-1	147	B
P508	10	11'-10	123	B
P509	6	4'-4	27	B
PG01	92	5'-3	725	B

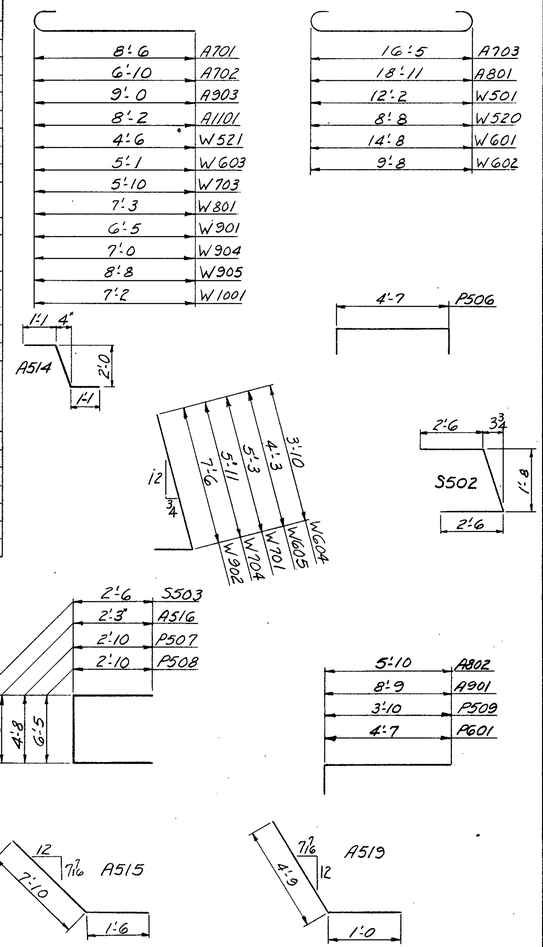
SUPERSTRUCTURE

S501	84	30'-0	2628	S
S502	6	6'-6	41	B
S503	6	6'-5	40	B
S504	6	0'-9"	5	S
S505	4	2'-0	8	S

REPLACEMENT BARS

RE501	3	5'-7		S
RE601	1	5'-3		S
RE701	1	6'-2		S
RE801	1	6'-6		S
RE901	1	6'-10		S
RE1001	1	7'-2		S
RE1101	1	7'-7		S

BENDING DIAGRAMS



All dimensions are out to out.

* Bars marked thus are to be bent in the field.

BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four digits are used, indicate the bar size number. For example, A701 is a No. 7 size bar and A1101 is a No. 11 size bar.

REPLACEMENT BARS: If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Section S.402 need not be furnished and replacement bars will not be required.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

REINFORCING STEEL LIST

BRIDGE NO. STA-21-1069
USR 21 UNDER W & LE RR
STARK COUNTY STA. 564+09.11

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
KAE	KAE		C.F.F.		

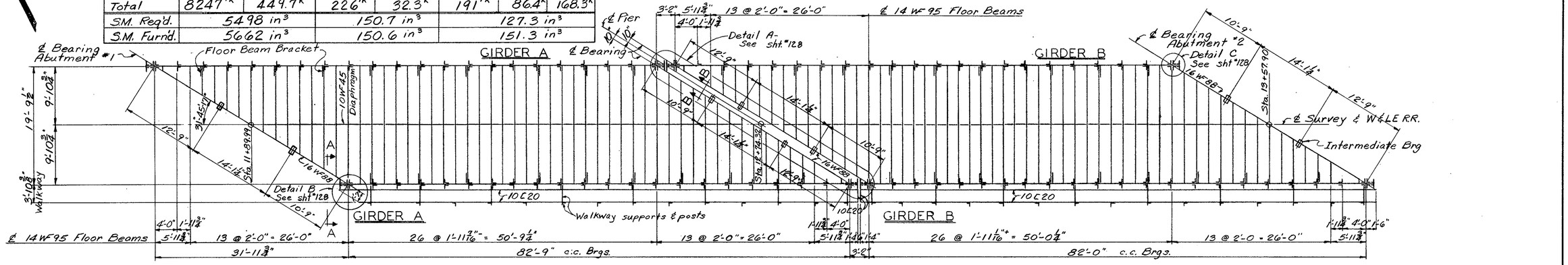
BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-37670

	Girder		Floor Beam		End Beam		
	Max. Mom.	Max. React.	Max. Mom.	Max. React.	Max. Mom.	Max. React. End	Max. React. Int.
Dead Load	2604'K	130.5K	21'K	4.7K	31'K	11.0K	26.8K
Live Load	3728'K	210.8K	120'K	16.2K	89'K	41.9K	78.6K
Impact	1726'K	97.6K	71'K	9.6K	53'K	25.1K	47.2K
Rolling	189'K	10.8K	14'K	1.8K	18'K	8.4K	15.7K
Total	8247'K	449.7K	226'K	32.3K	191'K	86.4K	168.3K
S.M. Req'd.	5498 in³		150.7 in³		127.3 in³		
S.M. Furn'd.	5662 in³		150.6 in³		151.3 in³		

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG1010(5)	

127

STA21-10.23



FRAMING PLAN

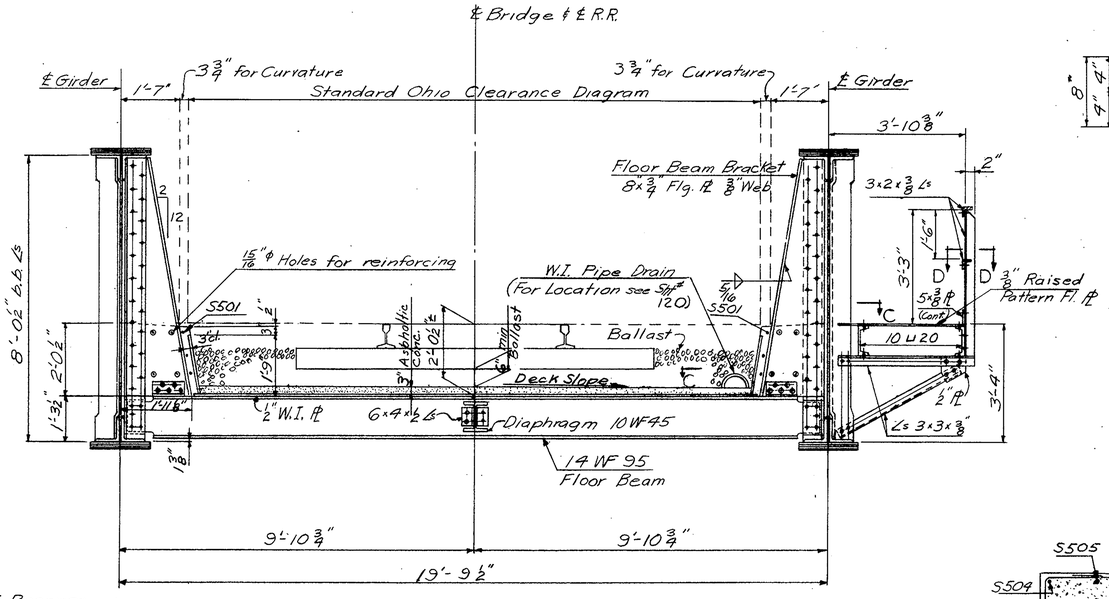
| | | |

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG 1010 (5)	

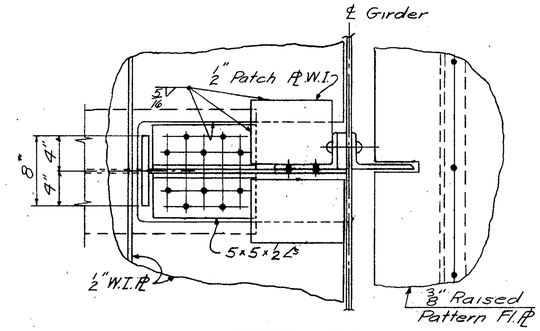
128

STA. 21-1023

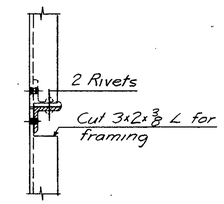
Note:
Ballast, ties, rails and other track requirements by others.



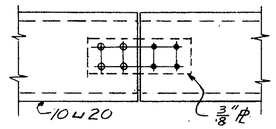
TYPICAL SECTION



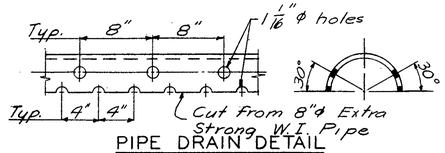
SECTION C-C



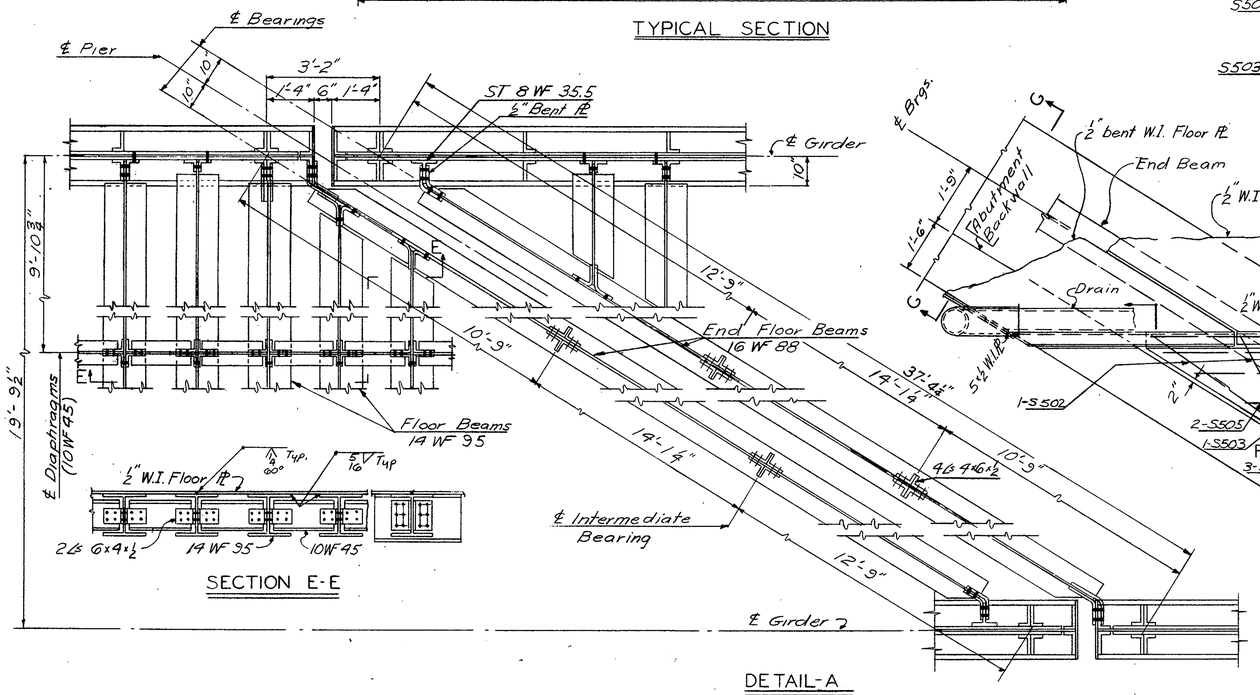
SECTION D-D



CHANNEL SPLICE

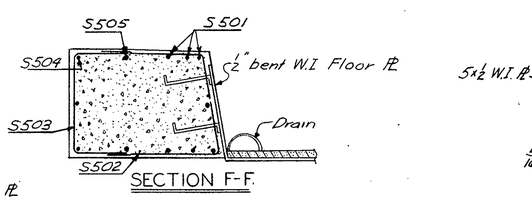


PIPE DRAIN DETAIL

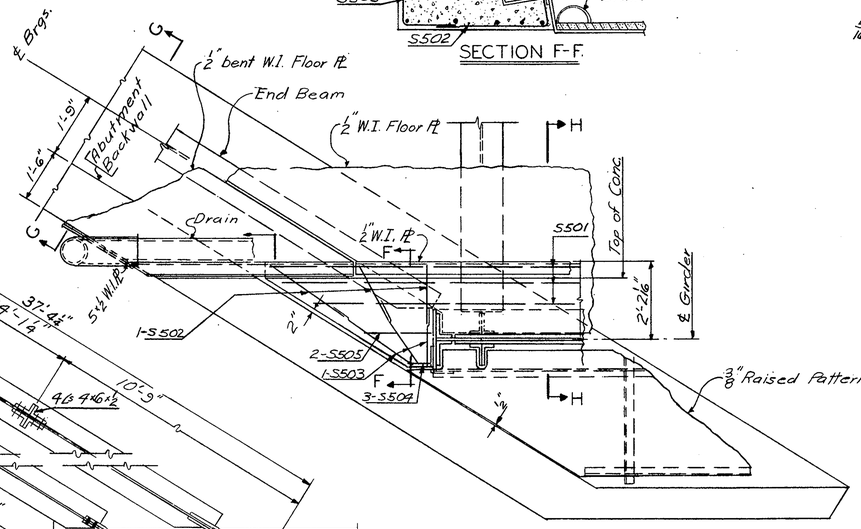


SECTION E-E

DETAIL-A

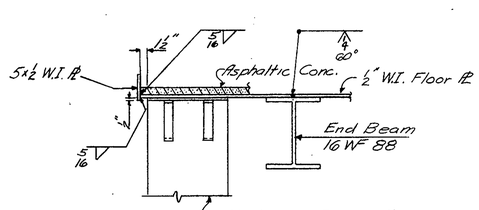


SECTION F-F

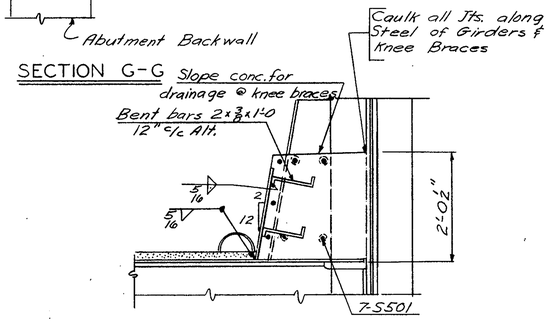


DETAIL B & DETAIL C

Detail B as shown
Detail C as shown, except walkway omitted.



SECTION G-G



SECTION H-H

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SUPERSTRUCTURE DETAILS
BRIDGE NO. STA. 21-1069
USR 21 UNDER W.&L.E.R.R.

STARK COUNTY STA. 564+09.11

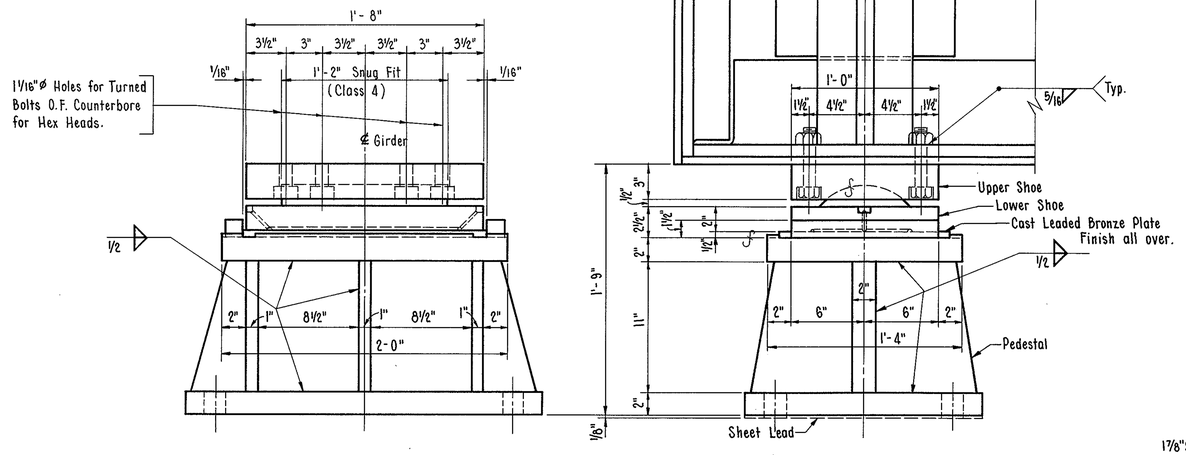
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
CFF	DWB		CFF		

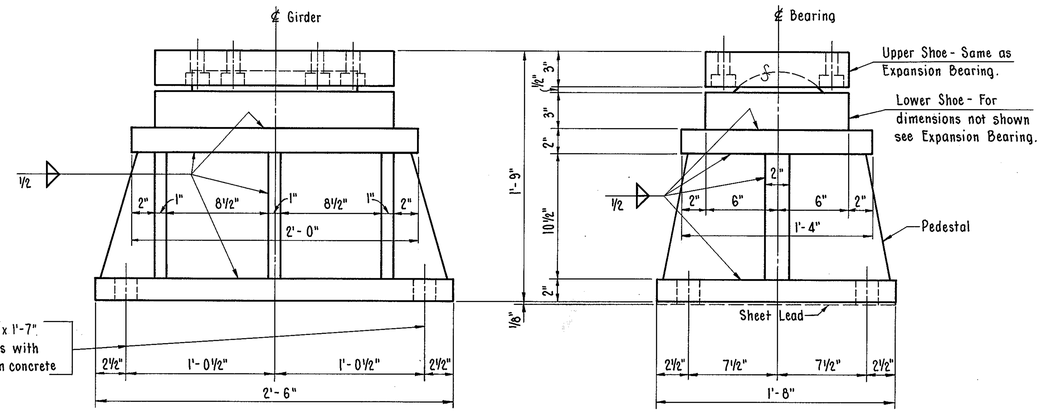
BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-35516

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

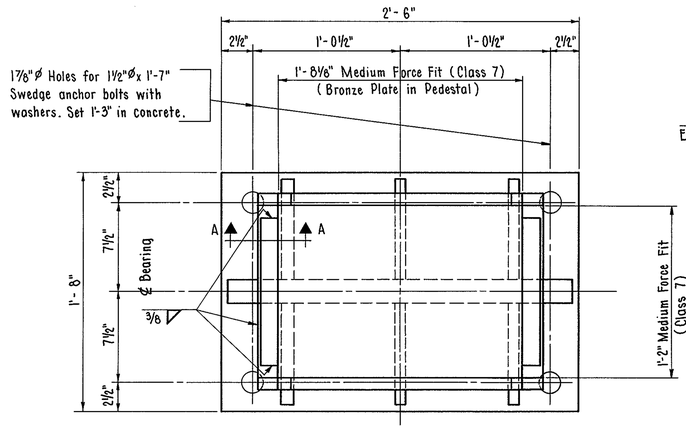
129

STA 21-10.23

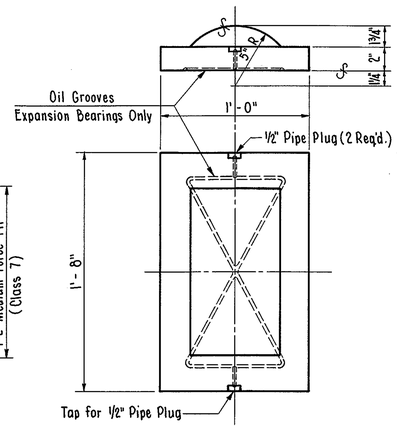




FIXED BEARING
4 REQ'D

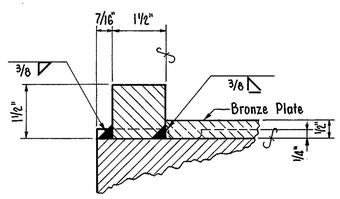


PLAN OF PEDESTAL

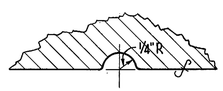


PLAN OF LOWER SHOE

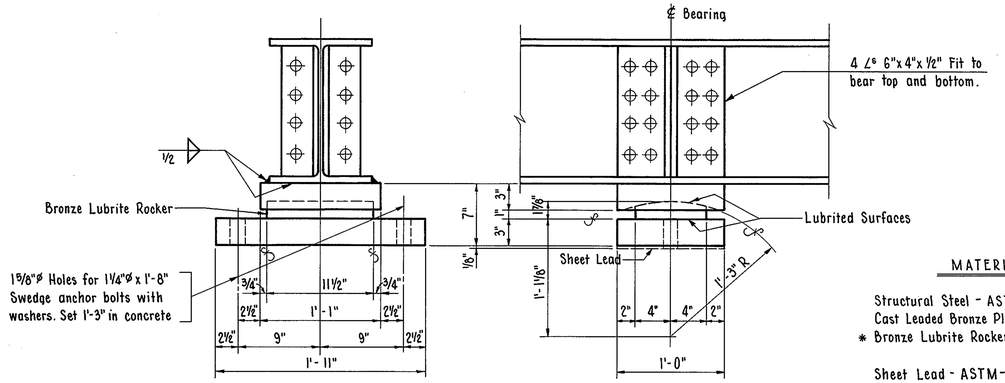
EXPANSION BEARING
4 REQ'D



SECTION AA



DETAIL OF OIL GROOVE



INTERMEDIATE BEARING
8 REQ'D

MATERIAL

Structural Steel - ASTM-A7
Cast Leaded Bronze Plate - ASTM-B144-Alloy 3A
* Bronze Lubrite Rocker - Cast Bridge Bearing Bronze-ASTM-B22 - Alloy E
Sheet Lead - ASTM-B29

*Lubrite or equal

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SUPERSTRUCTURE DETAILS
BRIDGE NO. STA 21-1069
USR 21 UNDER W. & L.E. R.R.

STARK CO. STA. 564+09.11

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
RLM	RLM	C.k.C.	J.D.Y.		

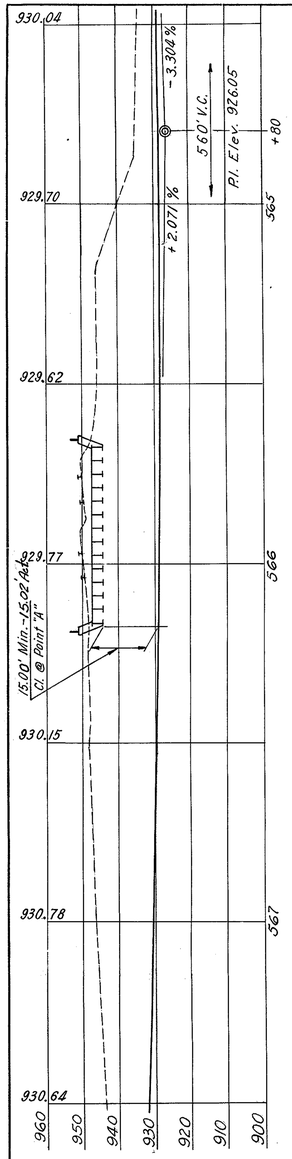
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

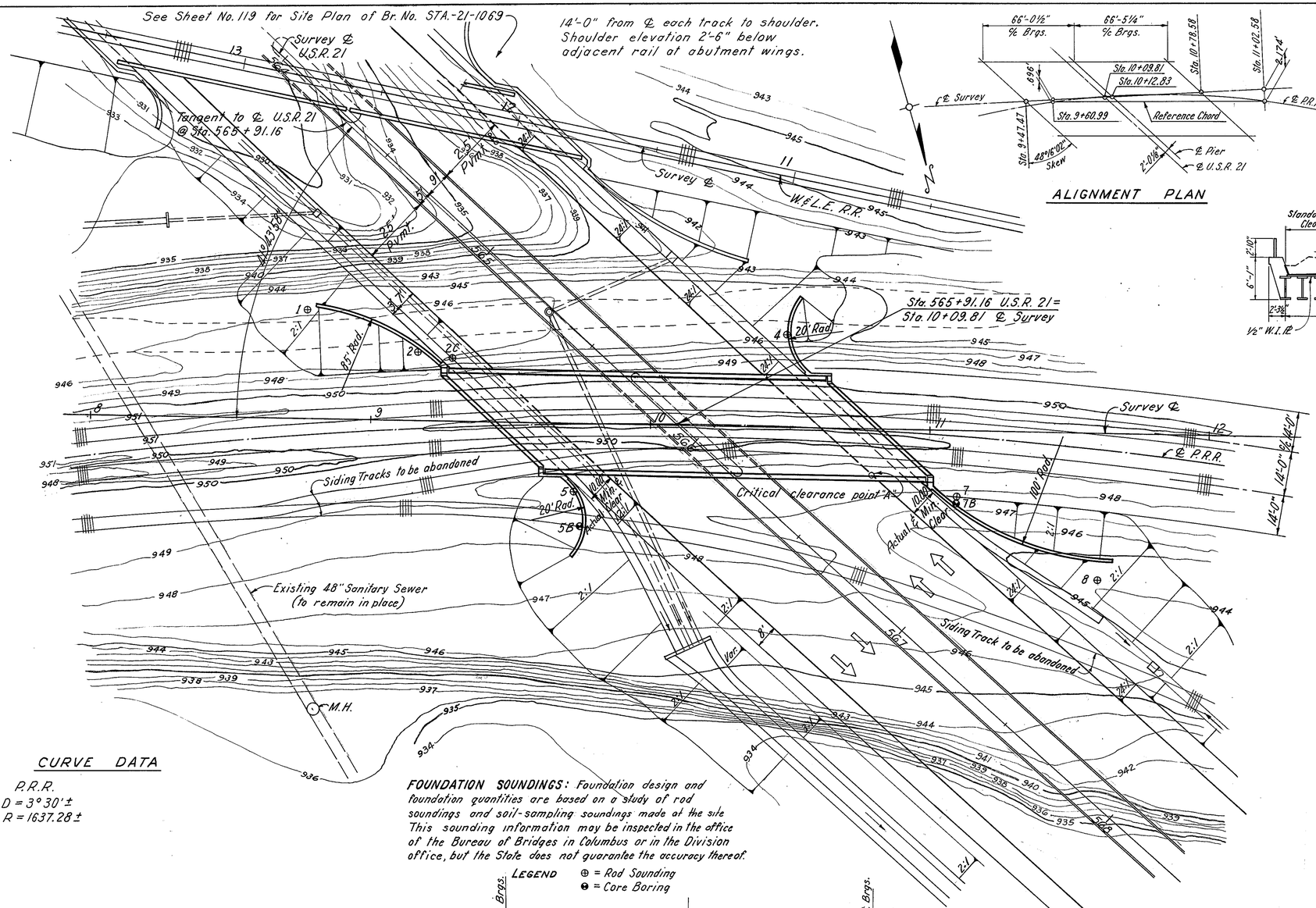
130

STA - 21 - 10.23

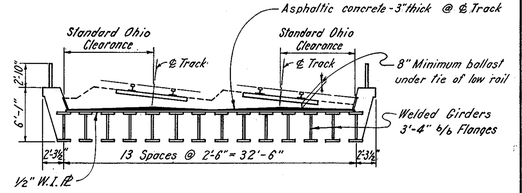
See Sheet No. 119 for Site Plan of Br. No. STA.-21-1069

14'-0" from ℄ each track to shoulder. Shoulder elevation 2'-6" below adjacent rail at abutment wings.





ALIGNMENT PLAN



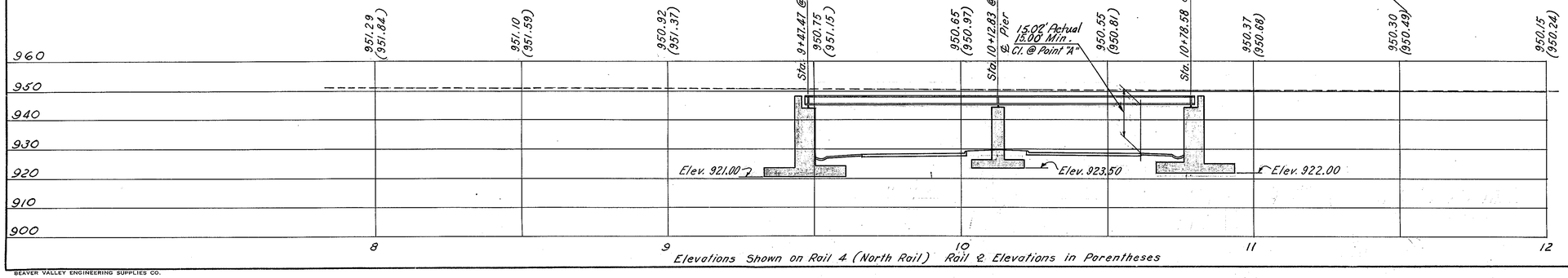
TYPICAL SECTION

CURVE DATA

P.R.R.
D = 3° 30' ±
R = 1637.28 ±

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.

LEGEND ⊕ = Rod Sounding ● = Core Boring



Elevations Shown on Rail 4 (North Rail) Rail 2 Elevations in Parentheses

PROPOSED STRUCTURE

TYPE: 2-Span Continuous Welded deck-girder with wrought iron plate deck and reinforced concrete substructure
SPANS: 66'-0½" & 66'-5¼" % Brgs. 40.51' & 40.77' Clear between faces of substructure.
WIDTH: 2 tracks @ 14'-0" % (on curve) 32'-6" % Fascia girders 37'-1" % Parapets
CLEARANCE: 15.02' Min. vertical
LOADING: Coopers E-72 - Steam Impact
SKEW: 48°16'02" Rt. Fwd.
ALIGNMENT: Bridge designed to fit present rail location (P.R.R. on 3° 30' ± Curve Rt. U.S.R. 21 on 0° 28' Curve Lt.
SUPERELEVATION: 6" (each track)
DESIGN CRITERIA: AREA Specifications

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SITE PLAN
BRIDGE NO. STA-21-1073
USR 21 UNDER PA.R.R.

STARK COUNTY
Scale: 1" = 20' STA. 565+91.16

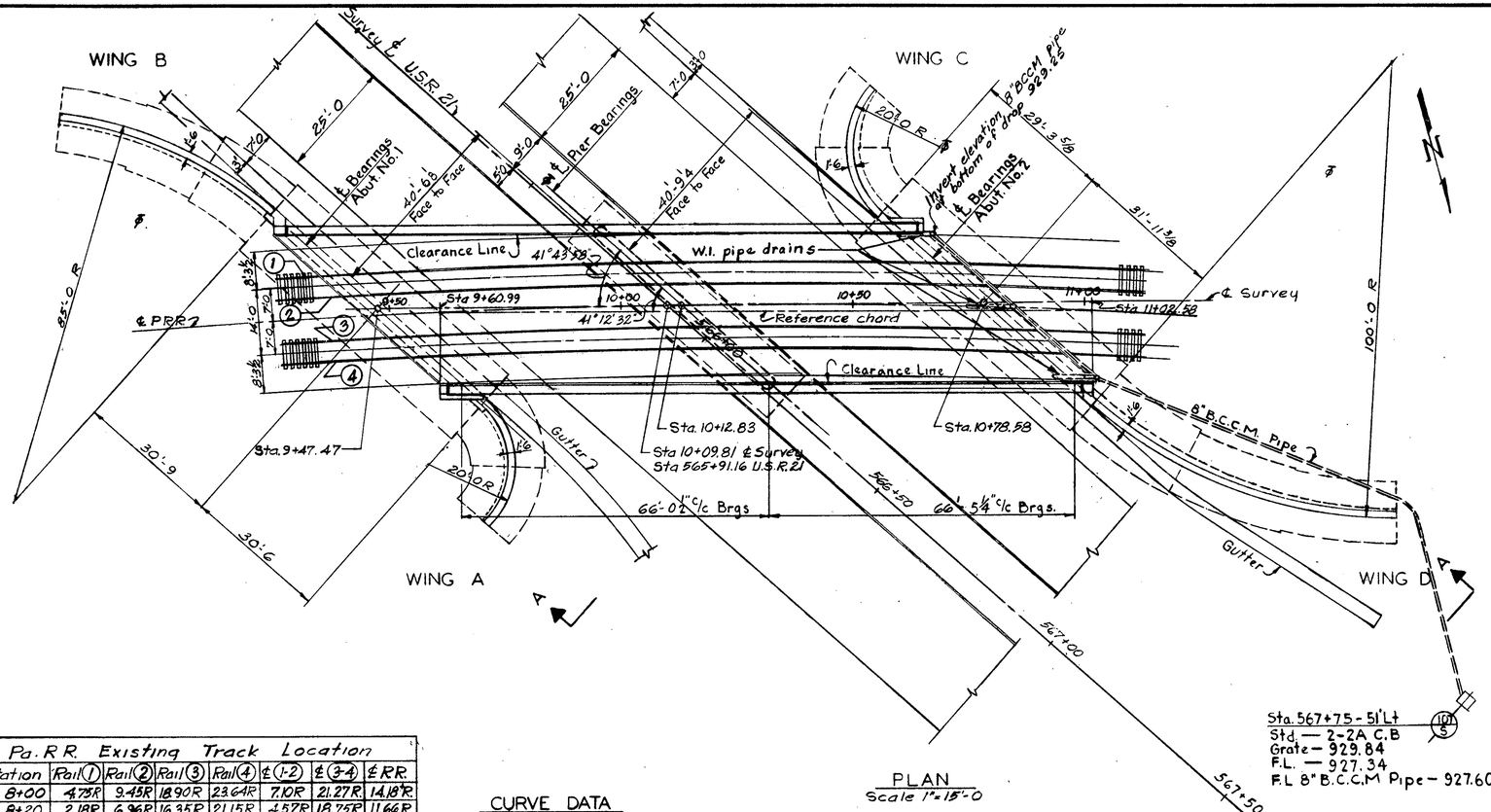
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
MBJ	COW	DWP RLM	DWP KAE	WRK RLM	

BEAVER VALLEY ENGINEERING SUPPLIES CO.

FED. NO. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

131

STA.-21-10.23



PLAN
Scale 1"=15'-0

GENERAL NOTES

CONSTRUCTION AND MATERIAL SPECIFICATIONS for this structure shall be the State of Ohio, Dept. of Highway Construction and Material Specifications dated 1-1-59 and Supplemental Specifications No. S-101 dated 12-2-59 and No S-107 revised 2-16-55 and S-307 dated 8-23-60

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Dept. of Highways, dated 9-1-57 and revised 2-21-58, and the A.R.E.A. Specifications amended 3-11-59.

FOUNDATION BEARING PRESSURE: Footings are designed for a maximum bearing pressure of 3 1/2 tons per sq/ft..

WELDING of structural steel and wrought iron shall be Class "A": Welds shown as field welds may, at the option of the Contractor, be made in the shop.

CONCRETE: Superstructure concrete shall be Class "C". Pier, wings and abutments shall be Class "E" concrete.

SURFACE FINISH OF CONCRETE: Pier, wings and abutment walls shall receive a rubbed surface finish. All other exposed surfaces shall be governed by the provisions of Item S-1.

CHAMFER: Exposed edges shall be chamfered 1"x1"

SHEETING AND BRACING: Before construction is started, eight sets of prints showing details of the sheeting and bracing to be used for excavation adjacent to the railroad tracks shall be submitted to the Director for approval by the Dept. Of Highways and by the Railroad Company.

RAILROAD NOTE: Track relocation, ballast and ties or any work incidental thereto is not included in this contract. The Contractor is requested to coordinate his work where possible with the track-work done by others.

TEMPORARY SPANS FOR THE PENNSYLVANIA RAILROAD: This item consists of the construction of cofferdams, sheet piling between cofferdams, and temporary spans to support two main tracks as shown on the plans, their maintenance and subsequent removal. The Contractor shall furnish all materials, labor, equipment and incidentals except as otherwise specified herein. The Railroad Company shall furnish and install the rails and other track metal. The Railroad Company will furnish and install temporary cross overs between the two main tracks at locations beyond each end of the bridge site to facilitate single track operation. The Contractor shall arrange his working schedule in such a manner that the temporary spans will be built with a reasonable minimum of interference with the railroad traffic. The contractor shall, prior to starting work, prearrange and agree with the Regional Engineer of the Pennsylvania Railroad on the methods and procedures for maintaining and protecting railroad traffic and operations and the time schedules for carrying out the necessary steps in such procedure. The Contractor shall, prior to performing work which will affect the railroad's operation, submit to the State, signed copies of such agreement with the Railroad. Timber shall be in accordance with A.R.E.A Specifications for f 1800 structural grade timber, except that only structural grade ties and blocking need be used. Structural steel shall be in accordance with Item S-107 and of the dimensions, weight and fabrication shown on the plans Used structural steel of proper dimensions will be permitted if the material which the Contractor proposes to furnish is approved by the Area Engineer, Pennsylvania Railroad Company and the Director. The minimum size and weight of such steel shall not be less than that shown on the plans.

After completion of the temporary spans, the Contractor shall maintain them at the direction of the Railroad Company. The Railroad Company shall remove the rails and fastenings and the Contractor shall dismantle and remove the temporary spans, cofferdams and sheet piling as indicated in the "Construction Procedure." The salvaged materials will become the property of the Contractor and shall be removed from the site by him. This item shall be paid for at the contract lump sum price bid for "Temporary Spans for Pennsylvania Railroad" which lump sum price shall constitute full compensation for the temporary spans, cofferdams, and sheet piling required to support the two main tracks as shown on the plans; for the furnishing of materials as herein specified; for the erection, maintenance and removal of the temporary spans including all necessary excavation and backfill beyond the limits for items E-1 and E-2, and for all labor, equipment, tools and incidentals necessary to complete this item.

ROLL-IN BENTS, APPURTENANCES, INCLUDING ROLL-IN OPERATION: This item consists of the construction by the Contractor of roll-in bents and jacking supports for the purpose of supporting the superstructure parts while they are being constructed off to the side of their permanent position (Superstructure to be erected in halves split longitudinally and rolled in from the respective sides of their final position.) The Contractor shall furnish all materials, labor, equipment and incidentals necessary to construct the bents and supports as shown on Sht. 143 of the plans. This item also includes the work to be done by the Contractor in performing the roll-in and jack down of the superstructure to its permanent position on the abutments and pier. The method and equipment that is to be used by the Contractor in this operation shall meet the approval of the Area Engineer, Pennsylvania Railroad Company and the Director. The Railroad Company will place ties, rails and ballast on the deck before the roll-in operation is performed and will make the connections to the rails on approaches after the superstructure is in its permanent position. All roll-in work as set forth in this item shall be done at the time prescribed and within the time limit set by the Railroad Company and without interference to railroad traffic on the adjacent track. The Contractor may submit an alternate or modified plan for roll in bents to the Area Engineer, Pennsylvania Railroad Company and the Director for approval. All salvaged roll-in bents will become the property of the Contractor and shall be removed from the site by him. This item shall be paid for at the contract lump sum price bid for "Roll-In Bents and Appurtenances including Roll-In Operation". As an emergency measure, duplicate winches and jacks shall be required during roll-in.

REINFORCING STEEL: All reinforcing steel shall be deformed bars and shall meet the requirements of section M-7.1, intermediate grade billet steel.

RAILROAD AERIAL LINES shall be relocated by the railroad. The Contractor shall use all precautions necessary to see that the lines are not disturbed during construction stages and shall cooperate with the railroad in the relocation of these lines. The cost of the relocation shall be included in the railroad force account work.

Pa. R.R. Existing Track Location

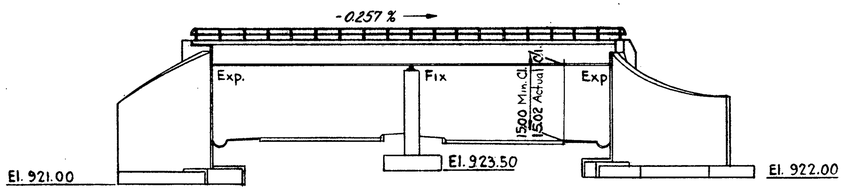
Station	Rail ①	Rail ②	Rail ③	Rail ④	℄ (1-2)	℄ (3-4)	℄ R.R.
8+00	4.78R	9.45R	18.90R	23.64R	7.10R	21.27R	14.18R
8+20	2.18R	6.96R	16.35R	21.15R	4.57R	18.75R	11.66R
8+40	0.07L	4.63R	14.05R	18.81R	2.28R	16.43R	9.36R
8+60	2.11L	2.63R	11.98R	16.72R	0.26R	14.35R	7.30R
8+80	3.88L	0.83R	10.19R	14.92R	1.52L	12.56R	5.52R
9+00	5.44L	0.73L	8.64R	13.35R	3.08L	11.00R	3.96R
9+20	6.70L	2.02L	7.34R	12.05R	4.36L	9.70R	2.67R
9+30	7.27L	2.57L	6.78R	11.49R	4.92L	9.14R	2.11R
9+40	7.77L	3.06L	6.29R	11.02R	5.42L	8.66R	1.62R
9+50	8.18L	3.48L	5.88R	10.58R	5.83L	8.23R	1.20R
9+60	8.58L	3.90L	5.53R	10.22R	6.24L	7.88R	0.82R
9+70	8.86L	4.16L	5.25R	9.94R	6.51L	7.60R	0.54R
9+80	9.17L	4.48L	4.97R	9.65R	6.80L	7.31R	0.26R
9+90	9.33L	4.61L	4.80R	9.48R	6.97L	7.14R	0.08R
10+00	9.48L	4.79L	4.64R	9.36R	7.14L	7.00R	0.07L
10+09.81	9.57L	4.85L	4.64R	9.28R	7.21L	6.96R	0.12L
10+20	9.60L	4.85L	4.59R	9.29R	7.22L	6.94R	0.14L
10+30	9.51L	4.80L	4.66R	9.33R	7.16L	7.00R	0.08L
10+40	9.39L	4.69L	4.78R	9.47R	7.04L	7.12R	0.04R
10+50	9.24L	4.53L	4.93R	9.64R	6.88L	7.28R	0.20R
10+60	9.03L	4.30L	5.18R	9.90R	6.66L	7.54R	0.44R
10+70	8.70L	4.02L	5.27R	10.16R	6.36L	7.72R	0.68R
10+80	8.43L	3.70L	5.80R	10.46R	6.06L	8.13R	1.03R
10+90	7.98L	3.30L	6.21R	10.91R	5.64L	8.56R	1.46R
11+00	7.61L	2.89L	6.61R	11.31R	5.25L	8.96R	1.86R
11+20	6.53L	1.83L	7.75R	12.47R	4.18L	10.11R	2.96R
11+40	5.18L	0.45L	9.09R	13.80R	2.82L	11.44R	4.32R
11+60	3.63L	1.10R	10.63R	15.40R	1.26L	13.02R	5.88R
11+80	1.80L	2.94R	12.48R	17.17R	0.57R	14.82R	7.70R
12+00	0.40R	5.10R	14.53R	19.25R	2.75R	16.89R	9.82R

NOTE: Offsets measured to gauge line of rails @ 90° to base line. Field Book No 4 1-25-60

CURVE DATA

P.R.R.		U.S.R. 21
D = 3° 30' ±	P.I Sta =	561+15.39
R = 1637.28 ±	Δ =	8° 08' 12" Lt.
	D =	0° 28'
	R =	12277.70'
	T =	873.26
	L =	1743.58

℄ = P.RR Telegraph



ELEVATION — A A
Scale 1"=15'-0

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

GENERAL PLAN & ELEVATION
BRIDGE NO STA 21-1073
USR 21 UNDER P.R.R.

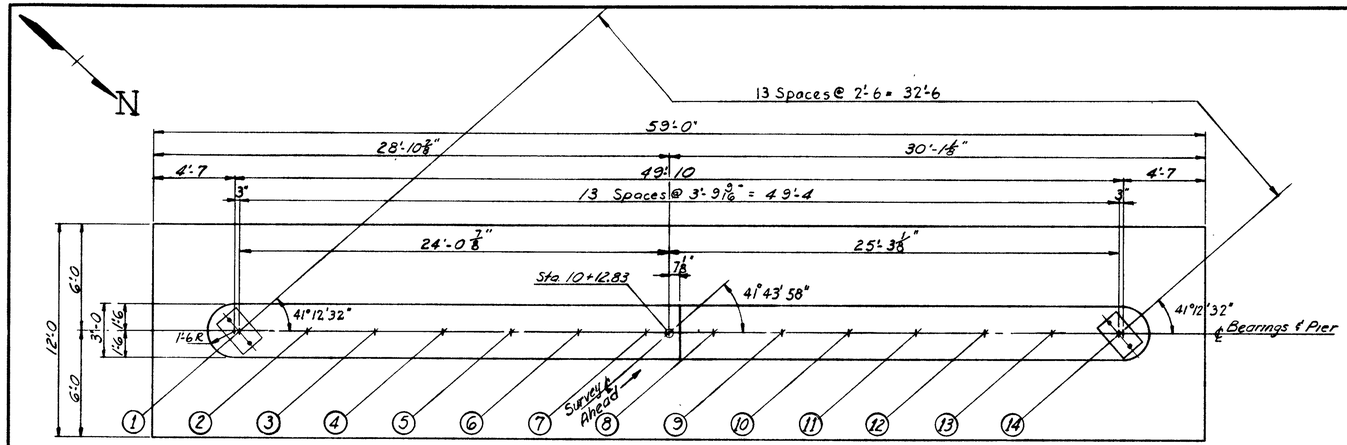
STARK CO. STA. 565+91.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
R.L.M	J.Y. -bo-		KAE		

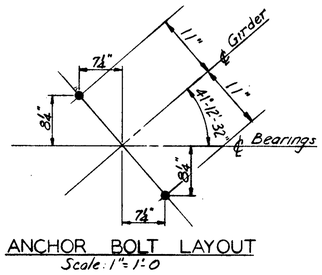
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

132

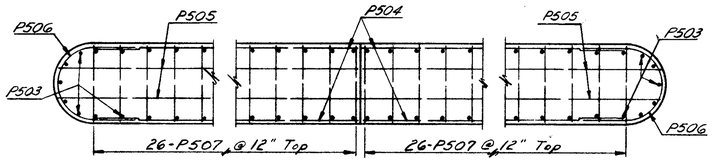
STA-21-10.23



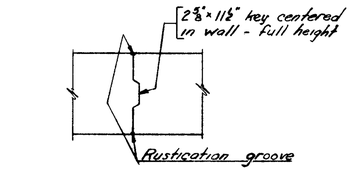
PLAN
Scale 1/4"=1'-0



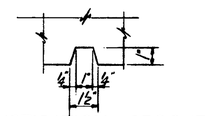
ANCHOR BOLT LAYOUT
Scale: 1"=1'-0



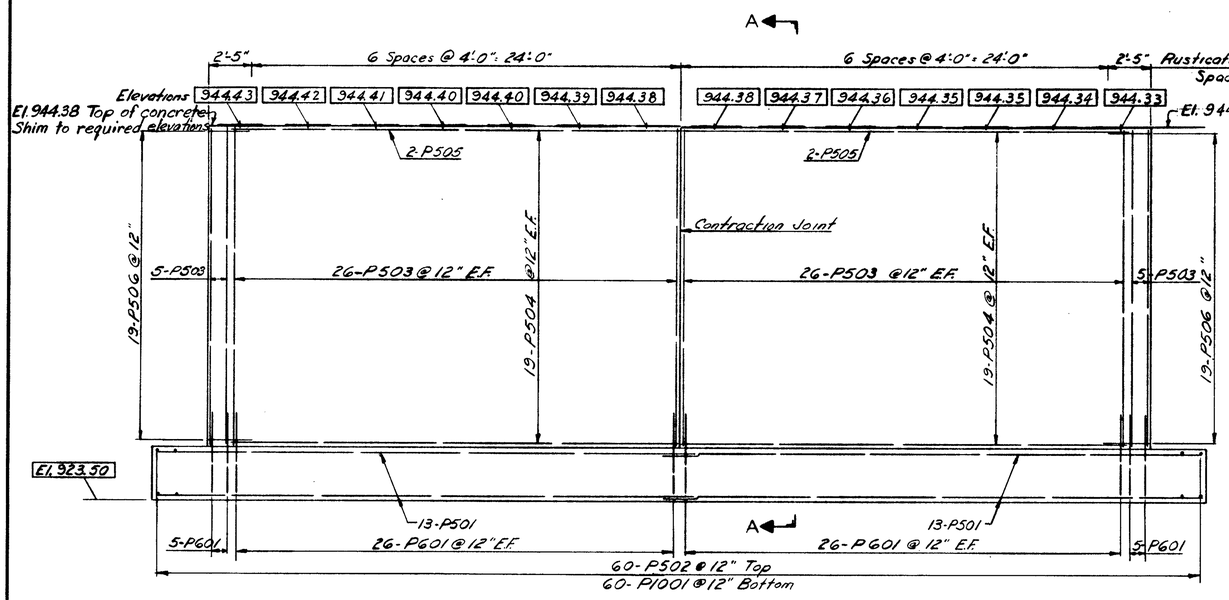
PLAN OF REINFORCEMENT
Scale 3/8"=1'-0



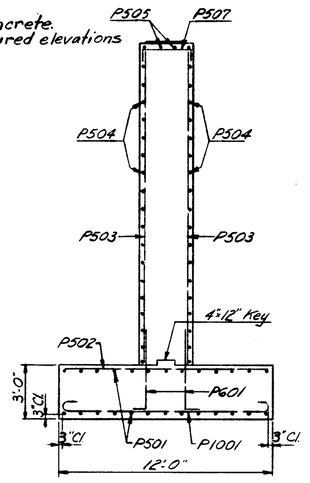
CONTRACTION JOINT DETAIL
Scale 3/8"=1'-0"



RUSTICATION GROOVE DETAIL
Scale 3"=1'-0"



ELEVATION
Scale 1/4"=1'-0



SECTION A-A
Scale 1/4"=1'-0

NOTE
- Clearance of reinforcing steel shall be 2" from the face of the concrete unless otherwise shown.
- All Anchor Bolts are to be preset.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

PIER DETAILS
BRIDGE NO. STA 21-1073
USR 21 UNDER PRR

STARK. COUNTY STA. 565+91.16

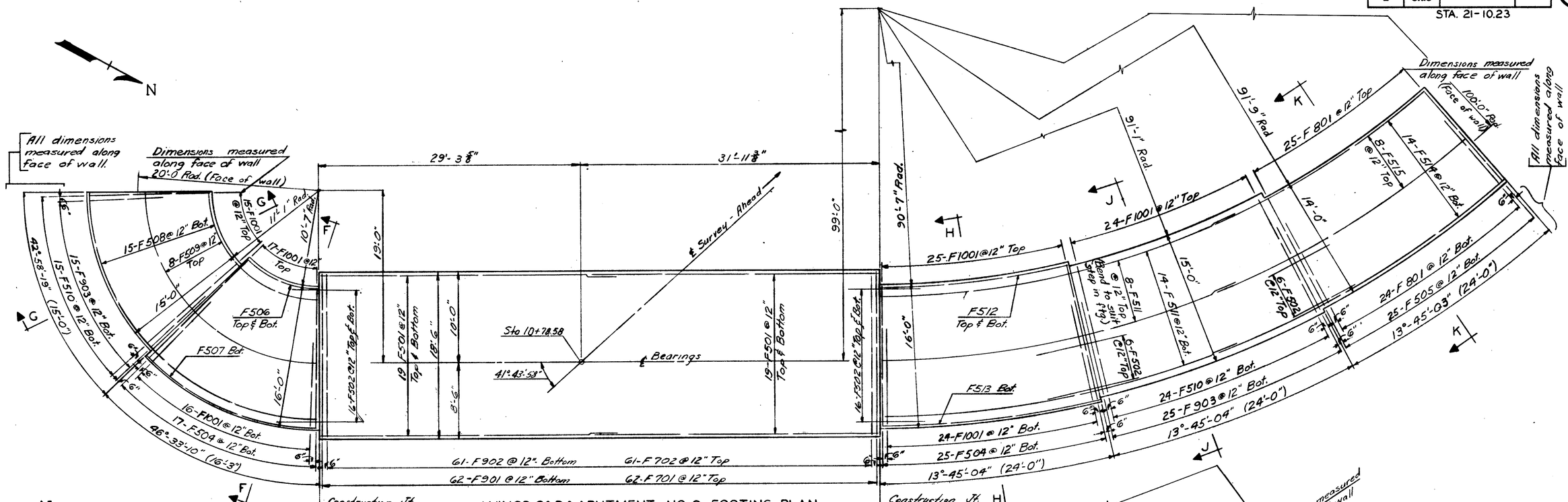
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
KAE	KAE		RLM		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-37979

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

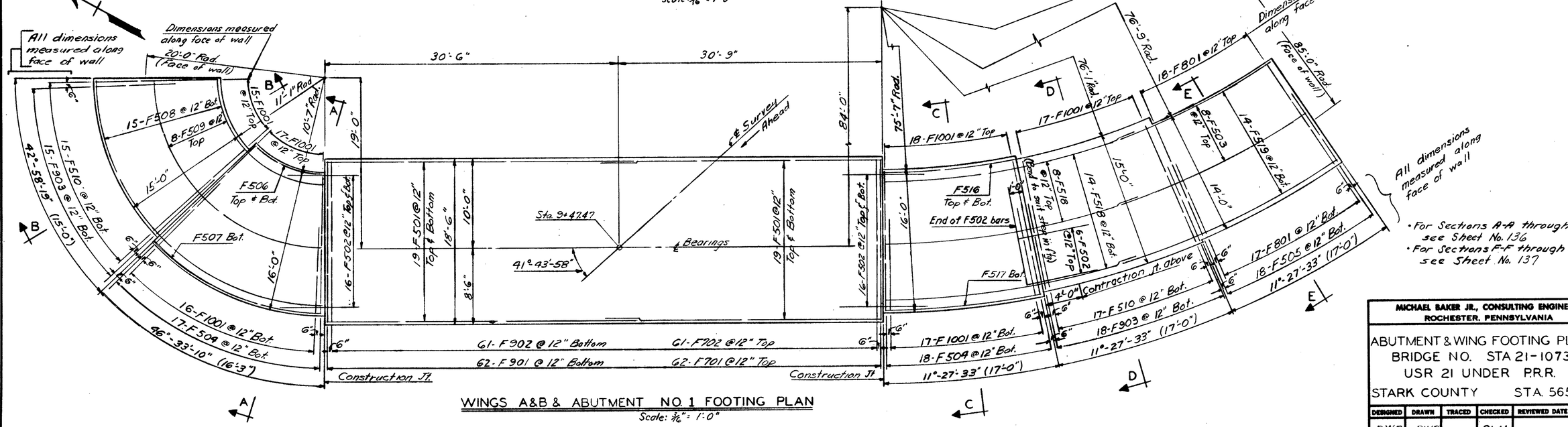
133

STA. 21-10.23



WINGS C&D & ABUTMENT NO. 2 FOOTING PLAN

Scale: 1/6" = 1'-0"



WINGS A&B & ABUTMENT NO. 1 FOOTING PLAN

Scale: 1/6" = 1'-0"

- For Sections A-A through E-E see Sheet No. 136
- For Sections F-F through K-K see Sheet No. 137

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ABUTMENT & WING FOOTING PLANS
BRIDGE NO. STA 21-1073
USR 21 UNDER PRR.
STARK COUNTY STA. 565+91.16

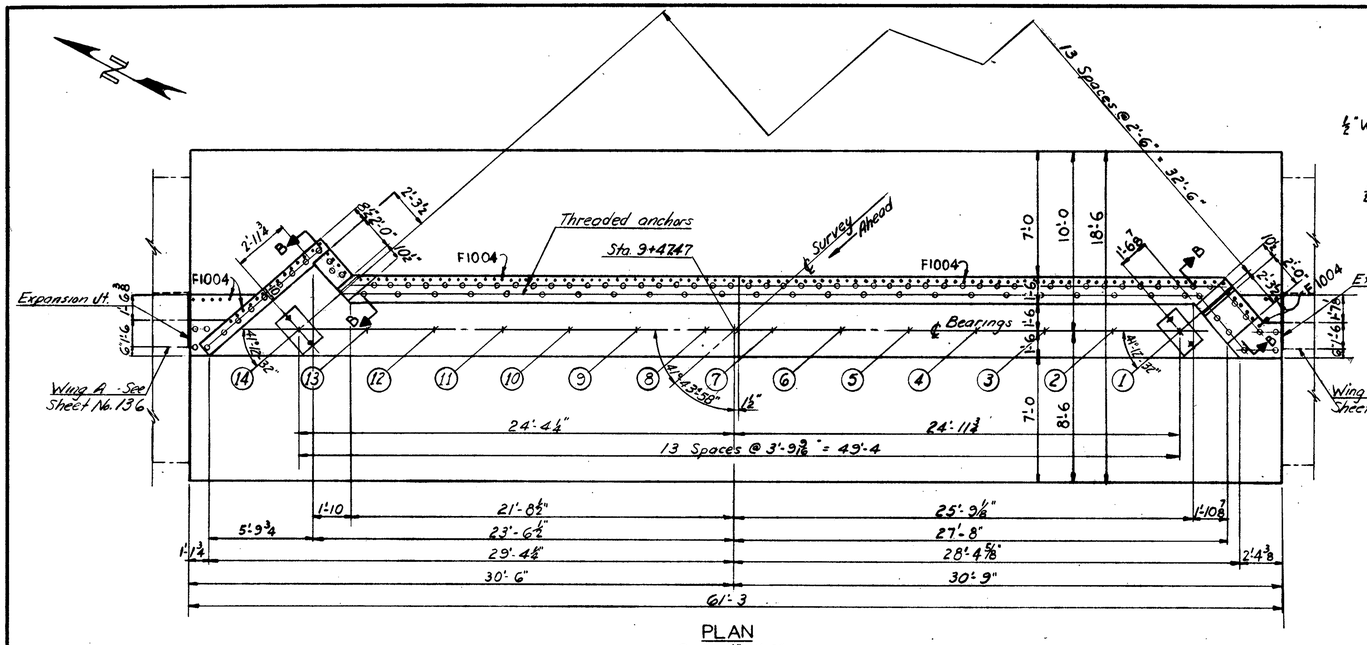
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
DWB	DWB		RLM		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-9916

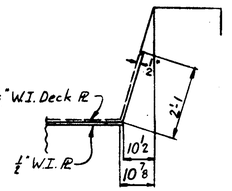
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

134

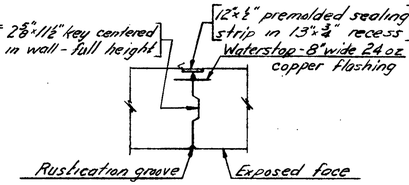
STA 21-10.23



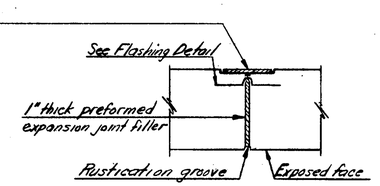
PLAN
Scale: 4" = 1'-0"



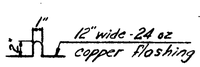
SECTION - B B
Scale ½" = 1'-0"



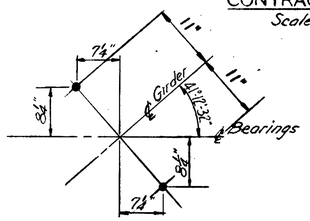
CONTRACTION JOINT
Scale: ½" = 1'-0"



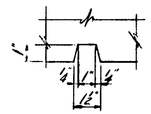
EXPANSION JOINT
Scale: ¾" = 1'-0"



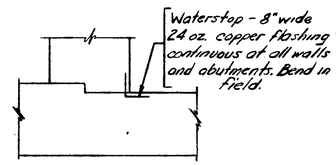
FLASHING DETAIL
Not to scale



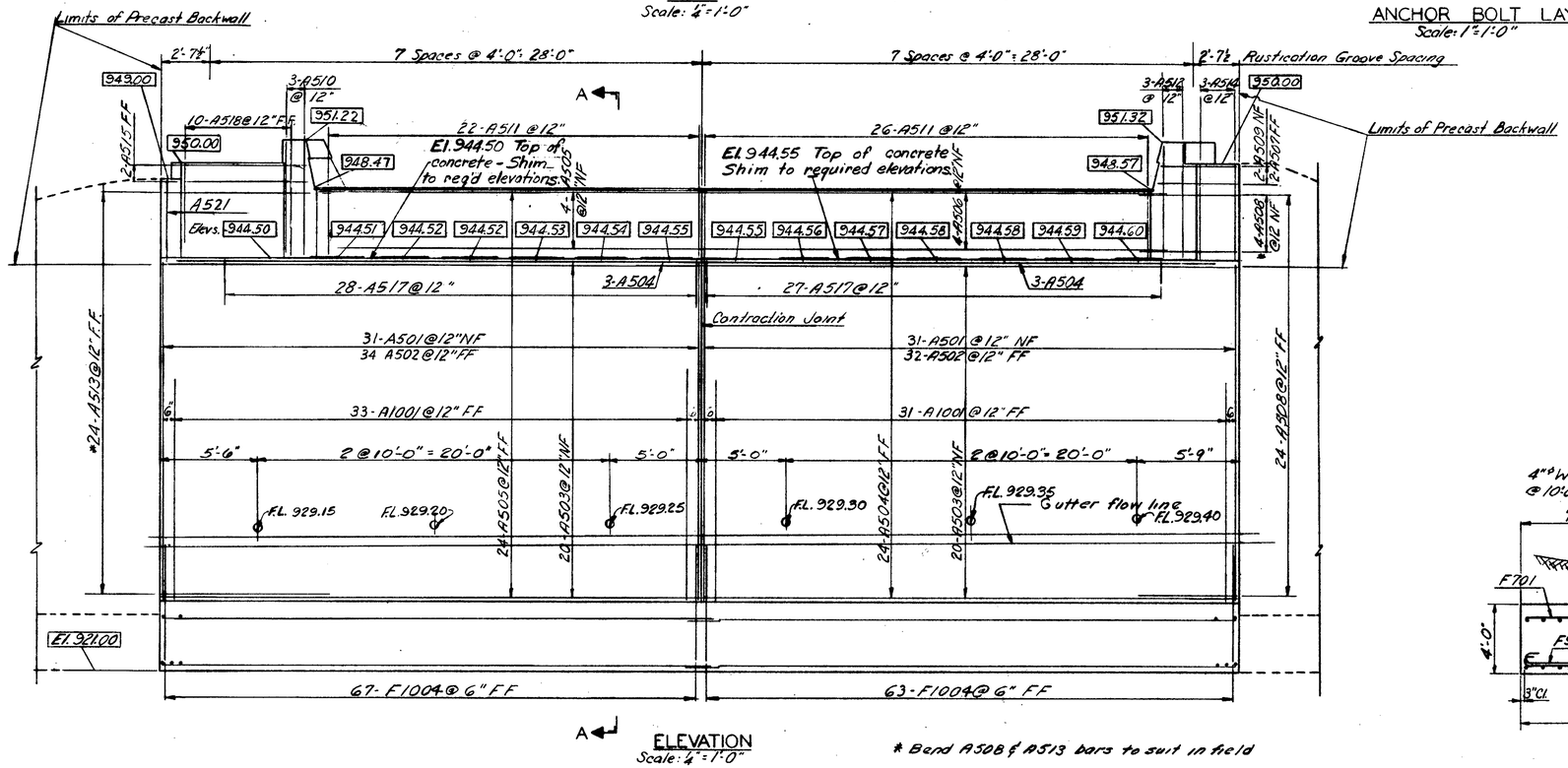
ANCHOR BOLT LAYOUT
Scale: 1" = 1'-0"



RUSTICATION GROOVE DETAIL
Scale: 3" = 1'-0"

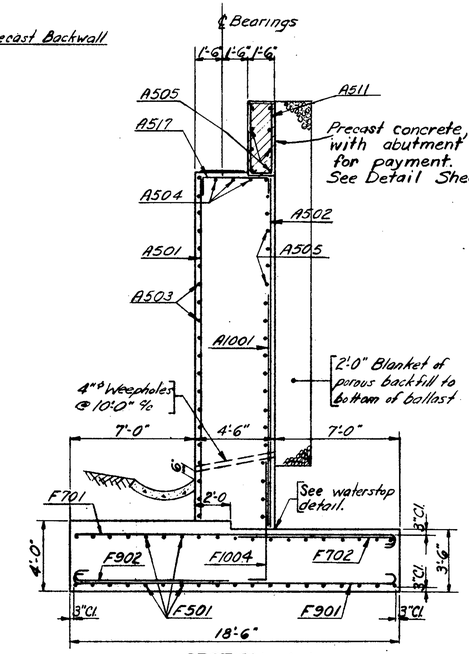


WATERSTOP DETAIL
Not to scale



ELEVATION
Scale: 4" = 1'-0"

* Bend A508 & A513 bars to suit in field



SECTION A-A
Scale: 4" = 1'-0"

NOTE

- All Anchor Bolts and Threaded Anchors are to be preset.

Clearance of reinforcing steel shall be 2" from the face of the concrete unless otherwise shown.

- For Footing Plan see Sheet No. 133
  NF = Near Face
  FF = For Face
- Material - Wrought Iron Plate ASTM-A42
  High Strength Steel ASTM-A325

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ABUTMENT NO. 1 DETAILS
BRIDGE NO. STA 21-1073
USR 21 UNDER PRR

STARK COUNTY STA 565+91.16

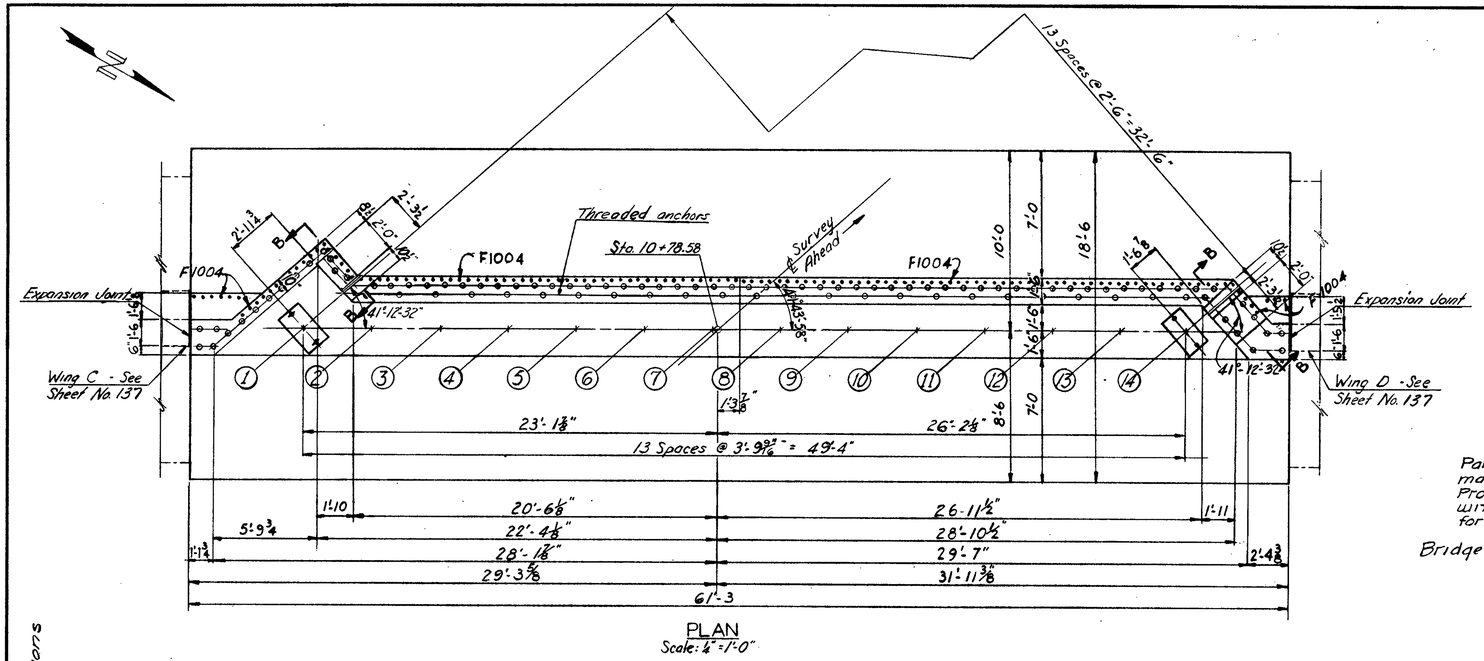
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
KAE	KAE		RLM	.	

BEAVER VALLEY BLUEPRINT SUPPLIES COMPANY BEAVER 2-9976

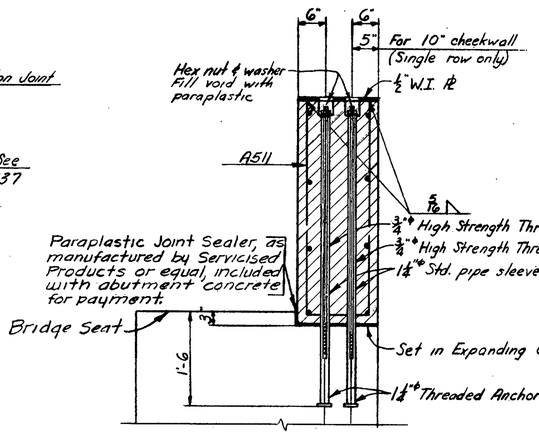
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

135

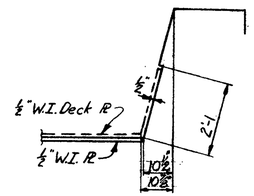
STA 21-10.23



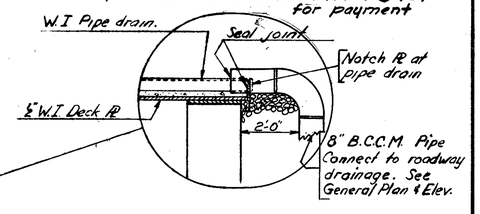
PLAN
Scale: ¼" = 1'-0"

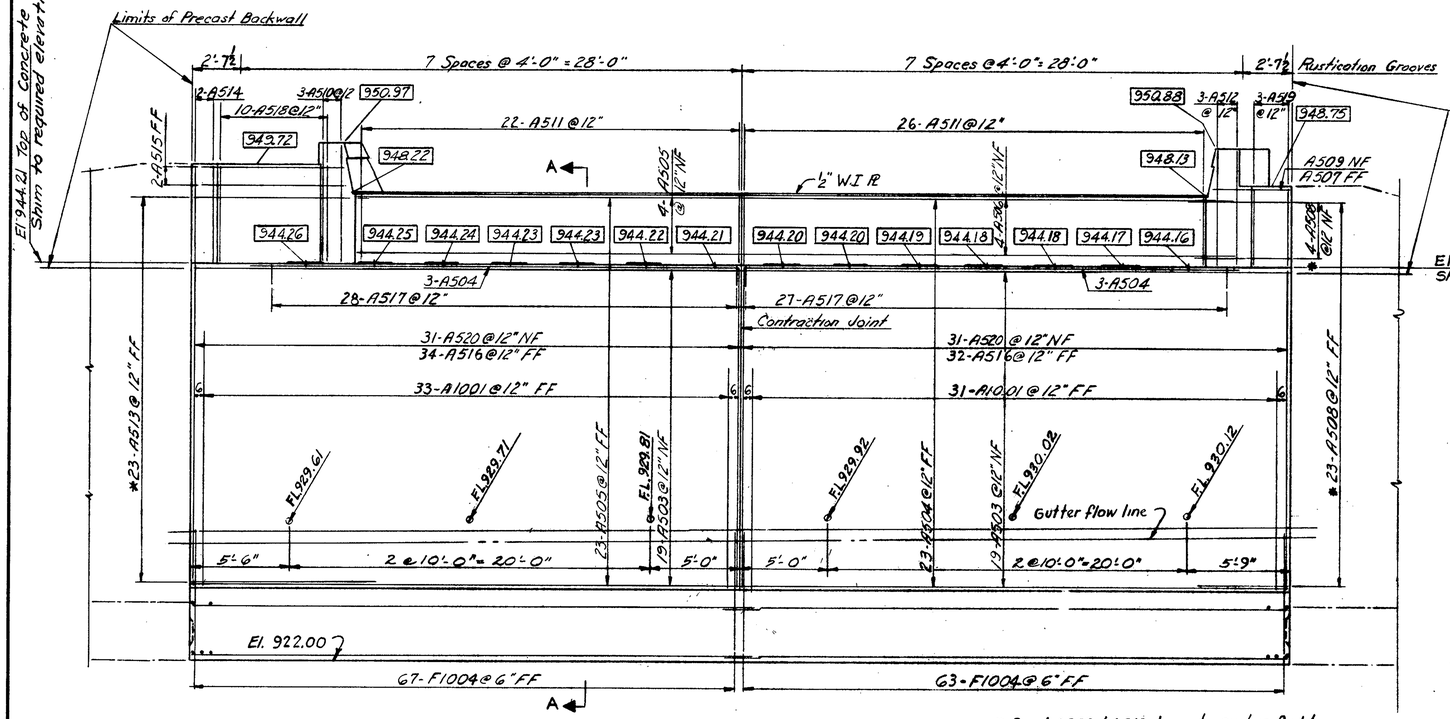


PRECAST BACKWALL DETAIL
Scale: ¾" = 1'-0



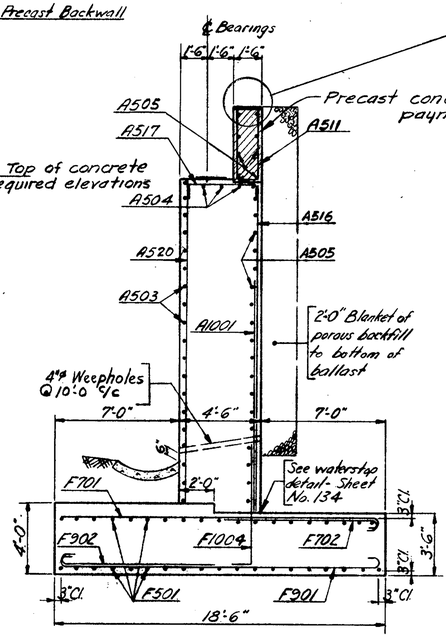
SECTION B-B
Scale ½" = 1'-0





ELEVATION
Scale: ¼" = 1'-0"

* Bend A508 & A513 bars to suit in field



SECTION A-A
Scale: ¼" = 1'-0"

NOTE

- All Anchor Bolts and Threaded Anchors are to be preset.
- Clearance of reinforcing steel shall be 2" from the face of the concrete unless otherwise shown.
- For expansion and contraction joint detail and for rustication groove detail, see Sheet No. 134
- For Anchor Bolt layout see Sheet No. 134
- For Footing Plan see Sheet No. 133

N.F. = Near Face
F.F. = For Face

- Material - Wrought Iron Plate ASTM-A42
High Strength Steel ASTM-A325

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ABUTMENT NO. 2 DETAILS
BRIDGE NO. STA 21-1073
USR 21 UNDER PRR

STARK COUNTY STA 565+91.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
KAE	KAE		RLM		

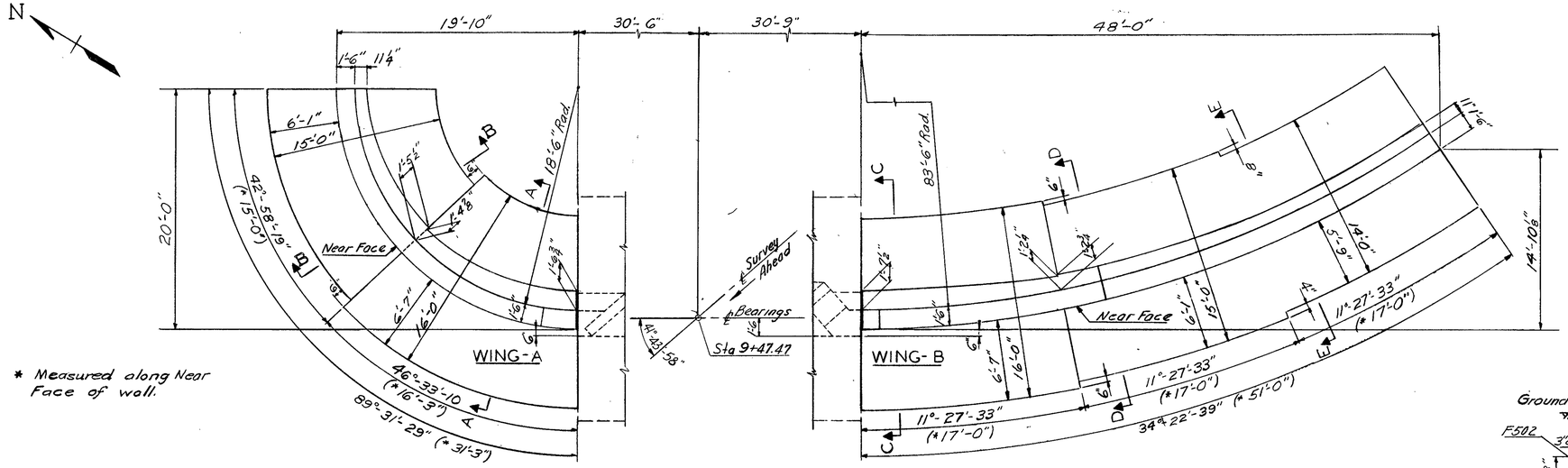
Top of Concrete Shim to required elevations

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-97979

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

136

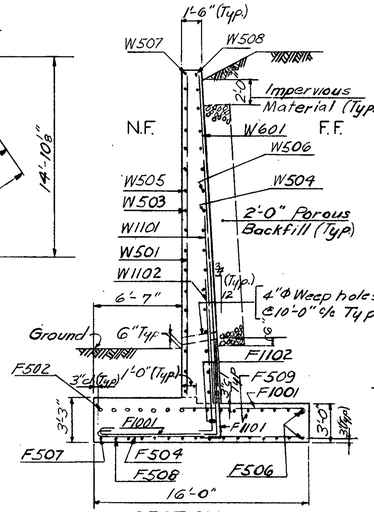
STA. 21-10.23



* Measured along Near Face of wall.

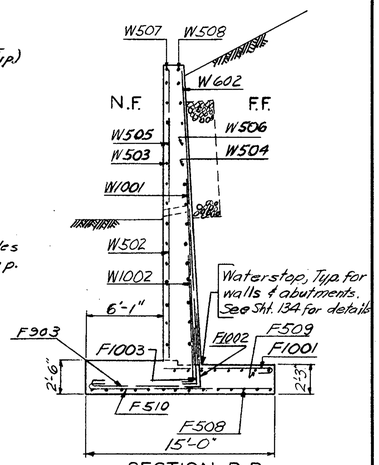
PLAN OF WING A & B

Scale: 3/16" = 1'-0"



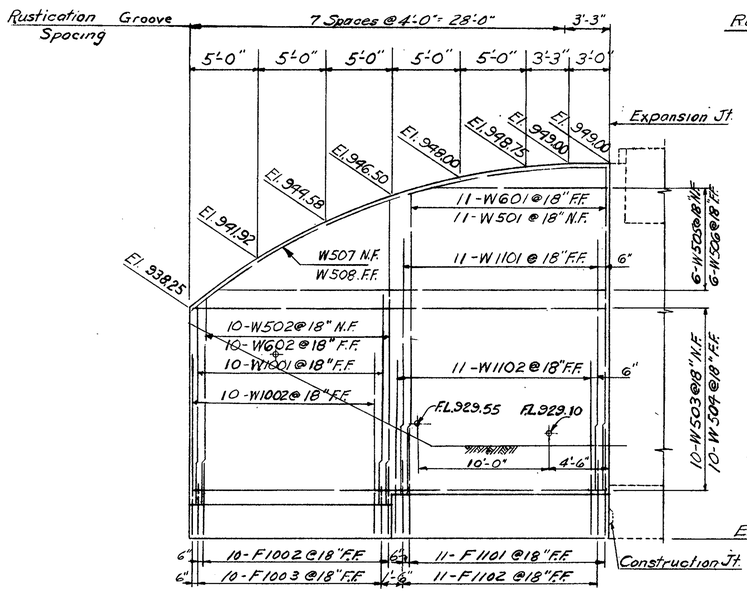
SECTION A-A

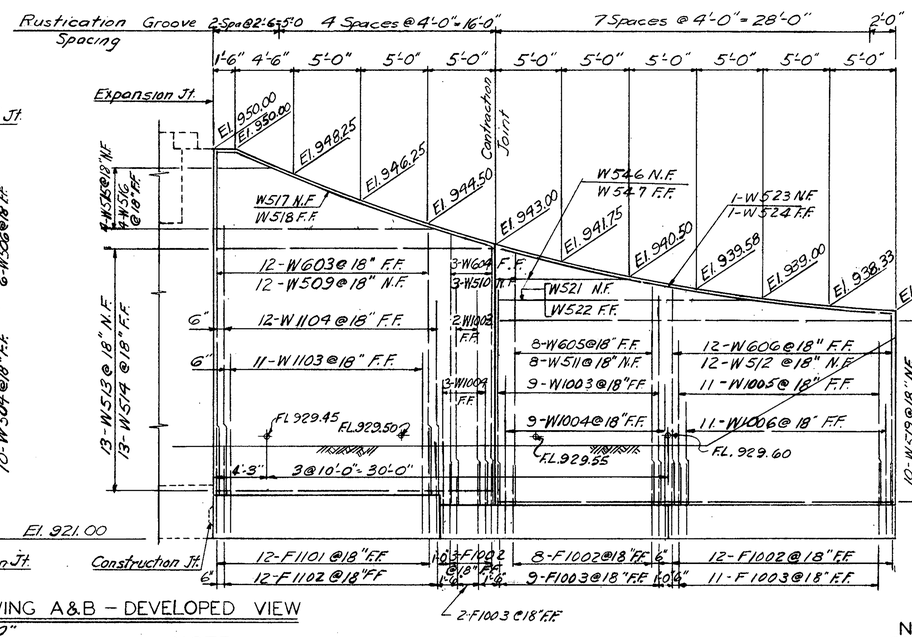
Scale: 3/16" = 1'-0"



SECTION B-B

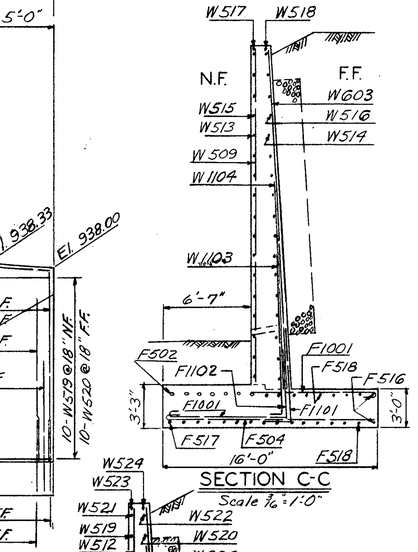
Scale: 3/16" = 1'-0"





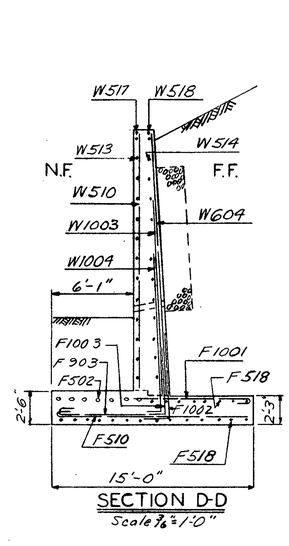
ELEVATION OF WING A&B – DEVELOPED VIEW

Scale: 3/16" = 1'-0"



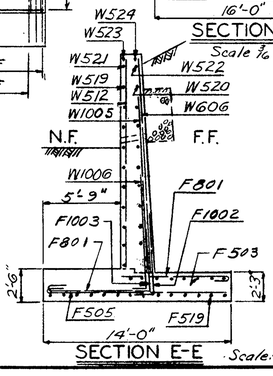
SECTION C-C

Scale 3/16" = 1'-0"



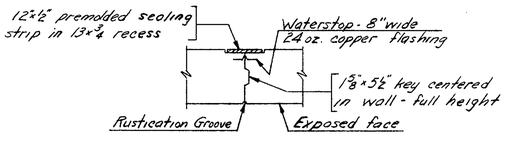
SECTION D-D

Scale 3/16" = 1'-0"



SECTION E-E

Scale: 3/16" = 1'-0"



CONTRACTION JOINT

Scale: ½" = 1'-0"

NOTE

- Clearance of Reinforcing Steel from face of concrete shall be 2" unless otherwise noted.
- For Footing Plan see Sheet No. 133
- N.F. = Near Face
- F.F. = For Face
- E.F. = Each Face
- For Expansion Joint, Rustication Groove, and Flashing Detail see Sheet No. 134.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

WING A&B DETAILS
ABUTMENT NO. 1
BRIDGE NO. STA 21-1073
USR 21 UNDER P.R.R.
STARK COUNTY STA. 565+91.16

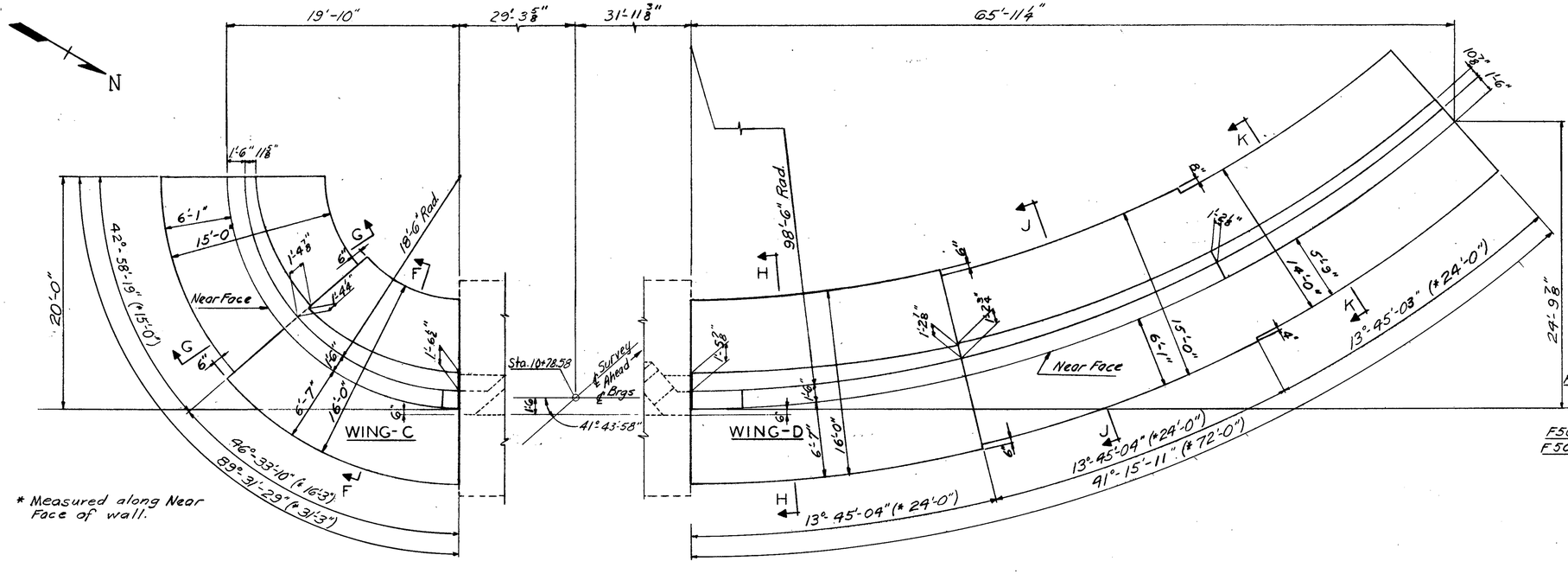
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
DWB	DWB		RLM		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-38318

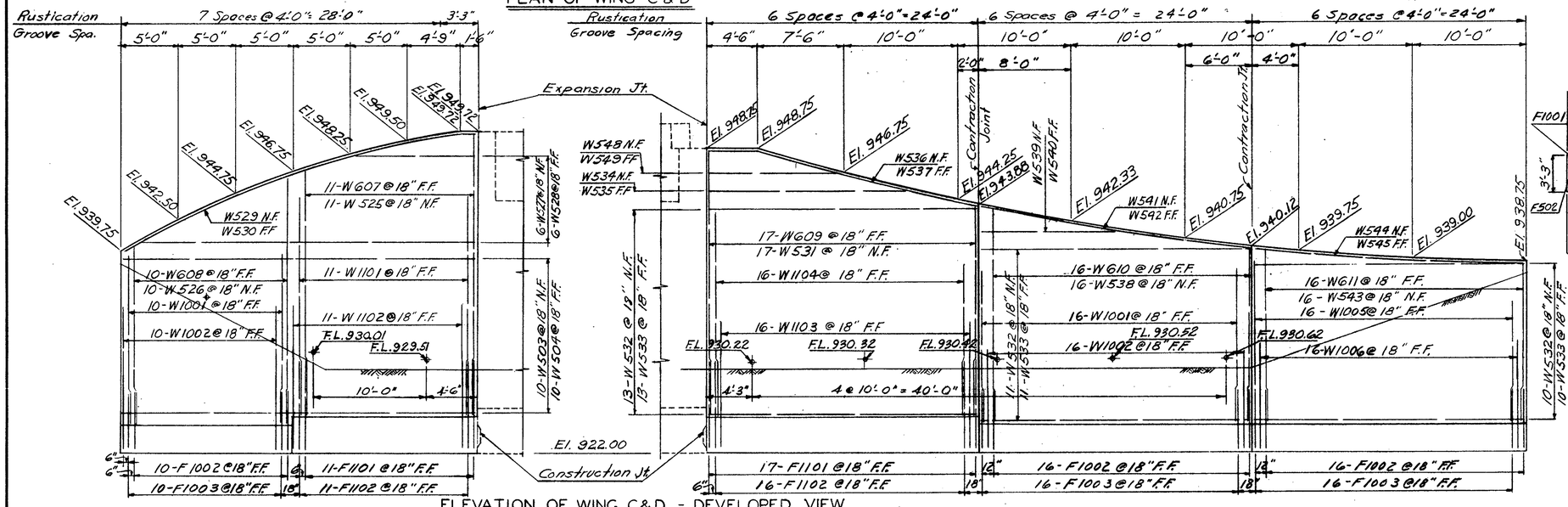
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

137

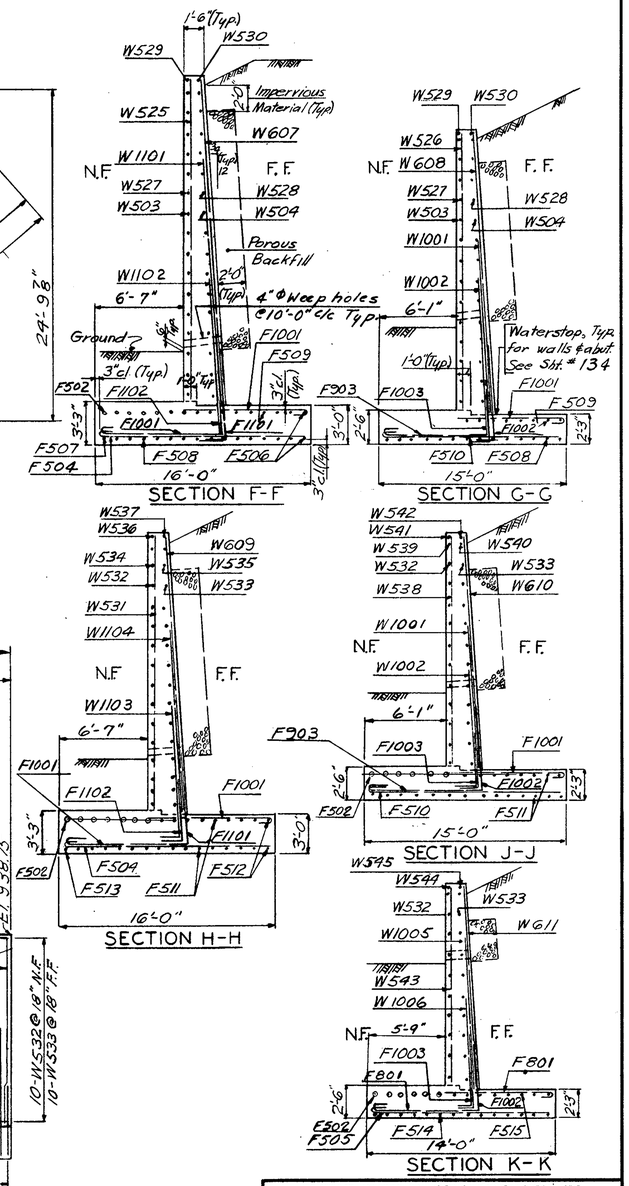
STA. 21-10.23



PLAN OF WING C & D



ELEVATION OF WING C&D - DEVELOPED VIEW



NOTE

- Clearance of Reinforcing Steel from face of concrete shall be 2" unless otherwise noted.
- For Footing Plan see Sheet No. 133
- For Expansion Jt., Rustication Groove, and Flashing Detail see Sheet No. 134

LEGEND

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

Scale: 3/16" = 1'-0

- For Contraction Jt. Detail see Sheet No. 136

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

WING C&D DETAILS
ABUTMENT NO. 2
BRIDGE NO. STA 21-1073
USR 21 UNDER P.R.R.

STARK COUNTY STA. 565+91.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
DWB	DWB		RLM		

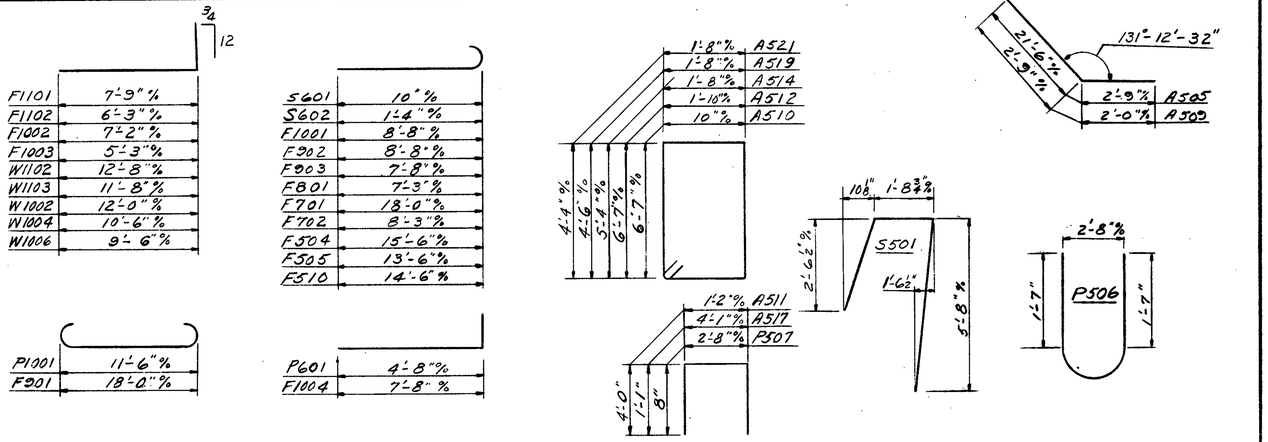
BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-99316

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

138

STA 21-10.23

BENDING DIAGRAM



ESTIMATED QUANTITIES

Item	Total	Unit	Description	Superstructure	Pier	Abuts.	Wings	General		
E-2	3936	C.Y.	Unclassified excavation		236	1784	1916			
S-1	96	C.Y.	Class "C" concrete - Superstructure	96						
S-1	805	C.Y.	Class "E" concrete - Walls		103	424	278			
S-1	664	C.Y.	Class "E" concrete - Footings		79	314	271			
S-3	201	Lin. Ft.	Waterproofing, premolded sealing strip			144	57			
S-4	131,331	Lbs.	Reinforcing steel	4224	11,626	56,871	58,610			
S-107	1,022,695	Lbs.	Structural steel, including W.I. Plate	1,022,695						
S-8	1,022,695	Lbs.	Field painting of structural steel	1,022,695						
S-9	227	S.F.	1" Preformed expansion joint filler			227				
S-9	100	Lin. Ft.	Folded copper strip 24 oz. - 12" wide			100				
S-9	411	Lin. Ft.	Waterstop - 8" wide - 24 oz copper strip			170	241			
Special	Lump Sum	L.S.	Temporary spans for Pennsylvania Railroad					Lump Sum		
Special	Lump Sum	L.S.	Roll-in bents and appurtenances including roll-in operation					Lump Sum		
S-14	270	Lin. Ft.	Railing (Steel pipe posts with rect. tubing rails)	270						
S-29	175	Lin. Ft.	8" Bituminous-coated corrugated metal pipe, including specials			175				
S-29	426	Lin. Ft.	8" Half round wrought iron pipe deck drain, including specials	426						
S-29	324	C.Y.	Porous backfill			177	147			
T-35	34	C.Y.	Asphaltic concrete surface course - Type A or C (85-100) as per plan	34						

REINFORCING STEEL LIST

Mark	Abut. No. 1	Abut. No. 2	Wing A&B	Wing C&D	Total	Length	Weight	Shp.	Remarks
F1101			23	28	51	8'-11"	2416	B	
F1102			23	27	50	7'-5"	1970	B	
F1001			100	121	221	10'-1"	9589	B	
F1002			33	42	75	8'-3"	2662	B	
F1003			32	42	74	6'-4"	2017	B	
F1004	130	130			260	8'-3"	9789	B	
F901	62	62			124	20'-6"	8643	B	
F902	61	61			122	9'-11"	4113	B	
F903			33	40	73	8'-11"	2213	B	
F801			35	49	84	8'-4"	1869	B	
F701	62	62			124	18'-10"	4773	B	
F702	61	61			122	9'-1"	2265	B	
F501	76	76			152	31'-4"	4967	S	
F502	64	64	6	12	146	10'-0"	1523	S	
F503			1 of 8		8	20'-0" to 24'-5"	185	S	Vary ea. by 7½"
F504			35	42	77	16'-1"	1292	B	
F505			18	25	43	14'-1"	632	B	
F506			2	2	4	8'-3"	34	S	
F507			1	1	2	20'-10"	43	S	
F508			1 of 15	1 of 15	30	17'-7" to 40'-3"	305	S	Vary ea. by 1'-7½"
F509			1 of 8	1 of 8	16	17'-7" to 29'-0"	389	S	Vary ea. by 1'-7½"
F510			32	39	71	15'-1"	1117	B	
F511				22	22	38'-9"	889	S	
F512				2	2	21'-3"	44	S	
F513				1	1	25'-0"	26	S	
F514				1 of 14	14	28'-10" to 38'-7"	492	S	Vary ea. by 9"
F515				1 of 8	8	28'-10" to 34'-4"	262	S	Vary ea. by 9"
F516			2		2	14'-8"	31	S	
F517			1		1	17'-9"	19	S	
F518			22		22	27'-6"	631	S	
F519			1 of 14		14	20'-0" to 28'-1"	351	S	Vary ea. by 7½"
A1001	64	64			128	13'-2"	7252	S	
A501	62				62	19'-4"	1250	S	
A502	66				66	19'-7"	1348	S	

Mark	Abut. No. 1	Abut. No. 2	Wing A&B	Wing C&D	Total	Length	Weight	Shp.	Remarks
A503	40	38			78	30'-3"	2461	S	
A504	30	29			59	27'-2"	1672	S	
A505	28	27			55	24'-3"	1331	B	
A506	4	4			8	26'-0"	217	S	
A507	2	1			3	3'-9"	12	S	
A508	28	27			55	6'-6"	373	S	
A509	2	1			3	4'-9"	15	B	
A510	3	3			6	15'-4"	96	B	
A511	48	48			96	8'-11"	893	B	
A512	3	3			6	17'-4"	108	B	
A513	24	23			47	10'-6"	515	S	
A514	3	2			5	14'-6"	76	B	
A515	2	2			4	8'-6"	35	S	
A516		66			66	18'-3"	1256	S	
A517	55	55			110	6'-0"	688	B	
A518	10	10			20	5'-4"	111	S	
A519		3			3	12'-10"	40	B	
A520		62			62	18'-0"	1164	S	
A521	1				1	12'-6"	13	B	
W1101			11	11	22	19'-4"	2260	S	
W1102			11	11	22	13'-10"	1617	B	
W1103			11	16	27	12'-10"	1841	B	
W1104			12	16	28	18'-4"	2727	S	
W1001			10	26	36	15'-0"	2324	S	
W1002			10	26	36	13'-1"	2027	B	
W1003			11	11	22	16'-3"	769	S	
W1004			12		12	11'-7"	598	B	
W1005			11	16	27	14'-0"	1627	S	
W1006			11	16	27	10'-7"	1230	B	
W601			1 of 11		11	22'-9" to 24'-9"	392	S	Vary ea. by 2½"
W602			1 of 10		10	15'-6" to 23'-0"	289	S	Vary ea. by 10"
W603			1 of 12		12	20'-3" to 25'-9"	415	S	Vary ea. by 6"
W604			1 of 3		3	19'-6" to 20'-6"	90	S	Vary ea. by 6"
W605			1 of 8		8	16'-3" to 19'-3"	213	S	Vary ea. by 5"
W606			1 of 12		12	14'-6" to 16'-6"	279	S	Vary ea. by 2"
W607				1 of 11	11	22'-0" to 24'-6"	384	S	Vary ea. by 3"
W608				1 of 10	10	15'-11" to 22'-1"	285	S	Vary ea. by 8½"
W609				1 of 17	17	18'-8" to 23'-6"	538	S	Vary ea. by 5"
W610				1 of 16	16	15'-8" to 19'-0"	417	S	Vary ea. by 2½"
W611				1 of 16	16	14'-3" to 15'-6"	357	S	Vary ea. by 1"
W501			1 of 11		11	22'-6" to 24'-6"	270	S	Vary ea. by 2½"

Mark	Wing A&B	Wing C&D	Total	Length	Weight	Shp	Remarks
W502	1 of 10		10	15'-3" to 22'-3"	198	S	Vary ea. by 10"
W503	10	10	20	30'-4"	633	S	
W504	1 of 10	1 of 10	20	27'-1" to 27'-10"	573	S	Vary ea. by 1"
W505	1 of 6		6	13'-0" to 24'-0"	131	S	Vary ea. by 3'-2½"
W506	1 of 6		6	12'-3" to 27'-6"	124	S	Vary ea. by 3'-1"
W507	1		1	34'-6"	36	S	
W508	1		1	33'-0"	34	S	
W509	1 of 12		12	20'-0" to 25'-6"	285	S	Vary ea. by 6"
W510	1 of 3		3	19'-3" to 20'-3"	62	S	Vary ea. by 6"
W511	1 of 8		8	16'-3" to 19'-0"	147	S	Vary ea. by 5"
W512	1 of 12		12	14'-3" to 16'-3"	191	S	Vary ea. by 2"
W513	13		13	20'-7"	279	S	
W514	13		13	20'-3"	275	S	
W515	1 of 4		4	4'-0" to 16'-0"	42	S	Vary ea. by 4'-0"
W516	1 of 4		4	3'-8" to 15'-8"	40	S	Vary ea. by 4'-0"
W517	1		1	21'-2"	22	S	
W518	1		1	20'-10"	22	S	
W519	10		10	29'-7"	309	S	
W520	10		10	29'-3"	305	S	
W521	1		1	18'-6"	19	S	
W522	1		1	18'-2"	19	S	
W523	1		1	30'-0"	31	S	
W524	1		1	29'-8"	31	S	
W525		1 of 11	11	21'-9" to 24'-3"	264	S	Vary ea. by 3"
W526		1 of 10	10	15'-9" to 21'-11"	196	S	Vary ea. by 2½"
W524		1 of 6	6	11'-3" to 29'-1"	126	S	Vary ea. by 3'-7"
W528		1 of 6	6	9'-9" to 27'-7"	117	S	Vary ea. by 3'-7"
W529	1	1		34'-0"	35	S	
W530	1	1		32'-6"	34	S	
W531		1 of 17	17	18'-5" to 23'-3"	369	S	Vary ea. by 3½"
W532	34	34		23'-7"	836	S	
W533	34	34		23'-4"	827	S	
W534	1	1		17'-6"	18	S	
W535	1	1		17'-3"	18	S	
W536	1	1		24'-4"	25	S	
W537	1	1		24'-1"	25	S	
W538	1 of 16	16		15'-3" to 18'-3"	285	S	Vary ea. by 2½"
W539	1	1		12'-0"	13	S	
W540	1	1		11'-9"	12	S	
W541	1	1		23'-9"	25	S	
W542	1	1		23'-6"	25	S	
W543	1 of 16	16		14'-0" to 15'-3"	244	S	Vary ea. by 1"
W544	1	1		23'-8"	25	S	
W545	1	1		23'-5"	24	S	
W546	1	1		9'-9"	10	S	
W547	1	1		9'-5"	10	S	
W548	1	1		11'-6"	12	S	
W549	1	1		11'-3"	12	S	

SUPERSTRUCTURE

Mark	No.	Length	Weight	Shp
S601	272	1'-6"	613	B
S602	134	2'-0"	403	B
S501	138	10'-0"	1935	B
S502	48	35'-4"	1769	S

PIER

Mark	No.	Length	Weight	Shp
P1001	60	14'-4"	3700	B
P601	114	5'-4"	913	B
P501	52	30'-1"	1632	S
P502	60	11'-6"	720	S
P503	114	17'-8"	2101	S
P504	76	24'-9"	1962	S
P505	4	24'-0"	108	S
P506	38	7'-3"	287	B
P507	52	3'-9"	203	B

REPLACEMENT BARS

RE1100	1	7'-7"		S
RE1000	3	7'-3"		S
RE900	1	6'-10"		S
RE800	1	6'-6"		S
RE700	1	6'-3"		S
RE600	1	5'-11"		S
RE500	3	5'-7"		S

Item T-35: The mix design of the asphaltic concrete as set up by the Laboratory shall have 0.75% more asphalt cement than the mix as normally designed for pavement use, using the proposed source of aggregate.

Bar Size:
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, W501 is a number 5 size bar and W1101 is a number 11 size bar.

Replacement Bars:
If replacement bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Section S-4.02 need not be furnished and replacement bars will not be required.

∫ = Series

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

REINFORCING STEEL LIST AND QUANTITIES
BRIDGE NO. STA 21-1073
USR 21 UNDER PRR
STARK COUNTY STA 565+91.16

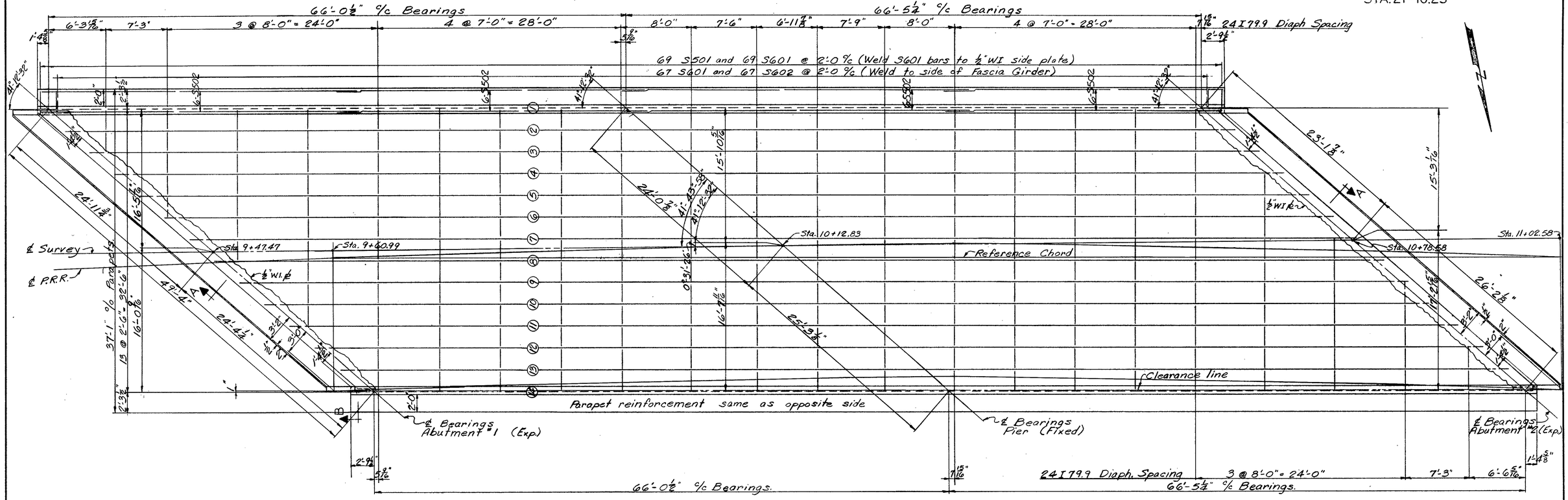
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
RLM MAE	S.J.F.		RLM		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-97670

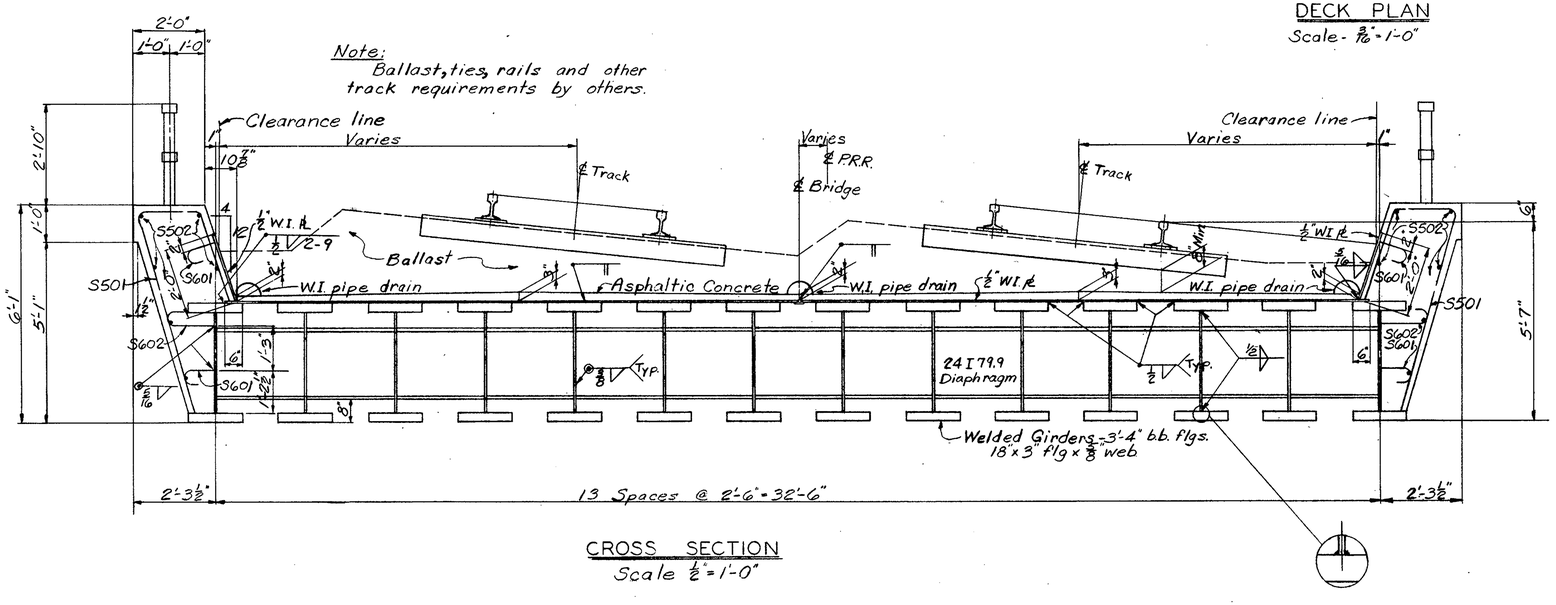
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

139

STA. 21-10.23



DECK PLAN
Scale- 1/16"-1'-0"



CROSS SECTION
Scale ½"=1'-0"

Notes:

Material- Structural Welding Steel ASTM-A373 unless noted.
Wrought Iron Plate ASTM-A42.
Welded Wrought Iron Pipe ASTM-A72.
All plan dimensions are horizontal.
No camber required.
For Sections A and B see Sheet No. 140

LOADS	INTERIOR GIRDER				FASCIA GIRDER			
	Maximum Positive Moment	Maximum Negative Moment	Maximum Abutment Reaction	Maximum Pier Reaction	Maximum Positive Moment	Maximum Negative Moment	Maximum Abutment Reaction	Maximum Pier Reaction
DEAD	356 ft-k	651 ft-k	29.1 k	97.0 k	705 ft-k	1268 ft-k	56.2 k	187.6 k
LIVE	839 ft-k	1061 ft-k	67.3 k	152.5 k				
IMPACT	512 ft-k	648 ft-k	41.0 k	93.0 k				
CENT. FORCE	168 ft-k	212 ft-k	13.5 k	30.5 k				
TOTAL	1875 ft-k	2572 ft-k	150.9 k	373.0 k	705 ft-k	1268 ft-k	56.2 k	187.6 k
SM.(Req'd-Stress)	1718. inches³							
SM.(Furnished)	* 1952. inches³							

* Size of girder selected to meet deflection specifications. AREA 15-4-4(5)

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SUPERSTRUCTURE DETAILS
BRIDGE NO. STA 21-1073
USR 21 UNDER P.R.R.

STARK CO. STA. 565+91.16

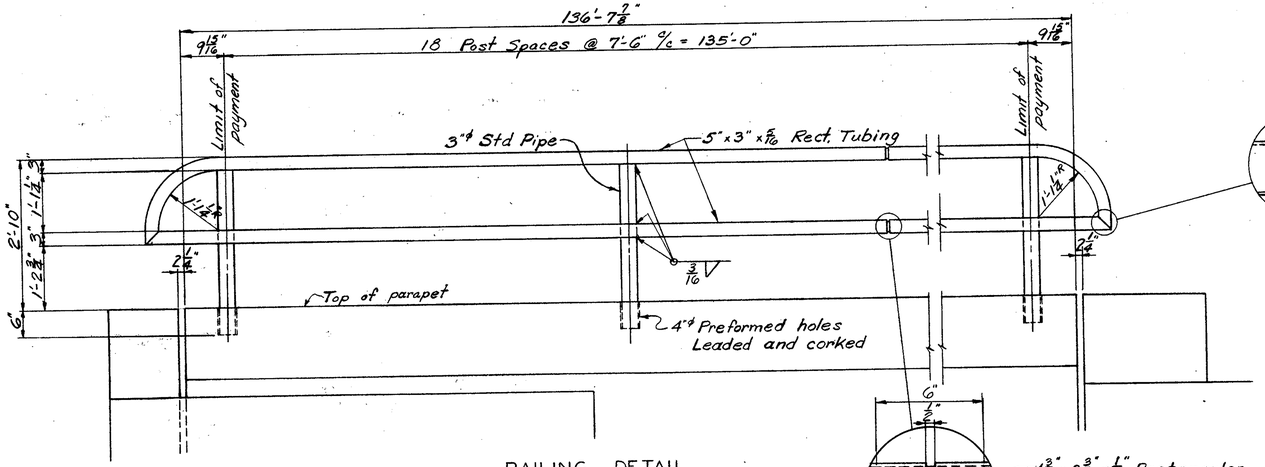
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
KAE RLM	RLM		KAE		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-57676

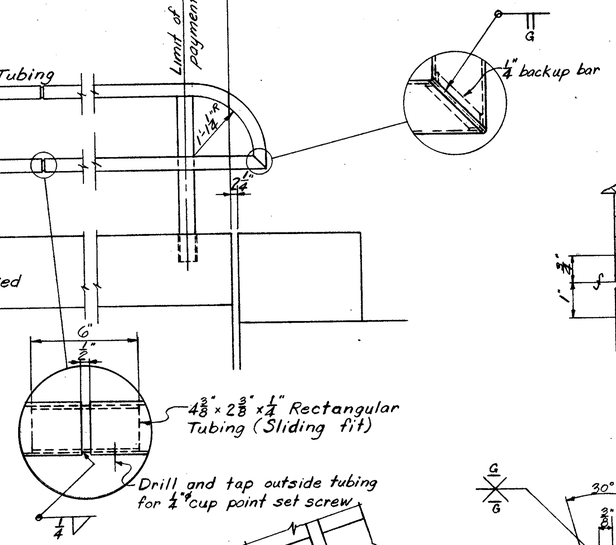
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

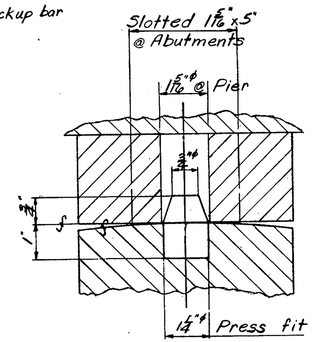
140

STA. 21-10.23

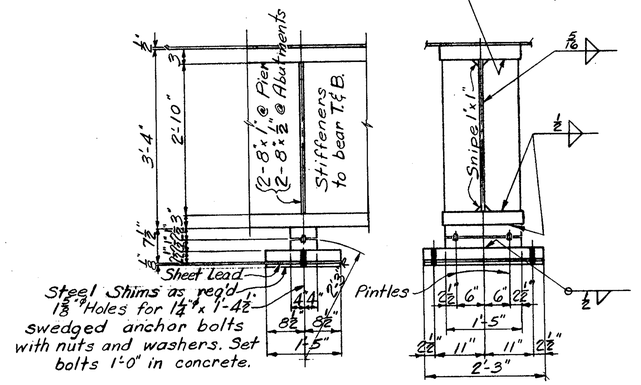


RAILING DETAIL
Scale 3/4" = 1'-0"

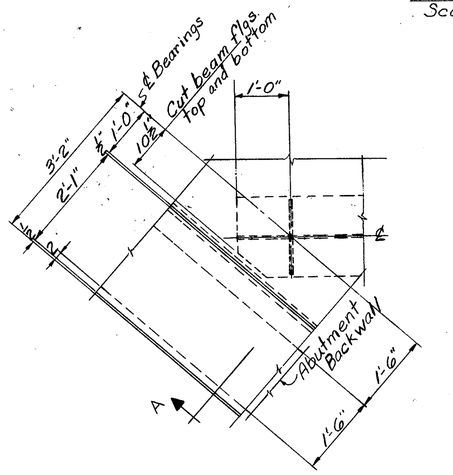


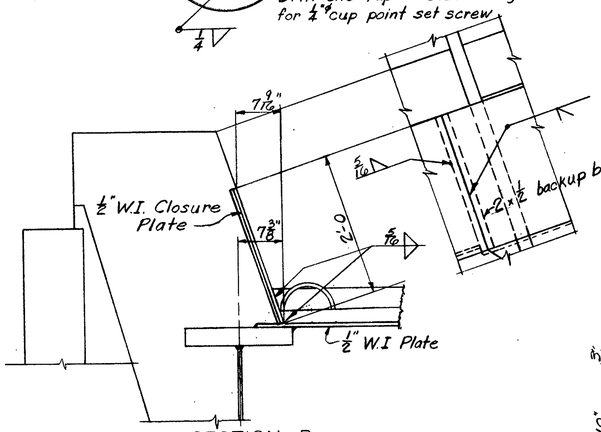


PINTLE DETAIL
Scale - 6" = 1'-0"

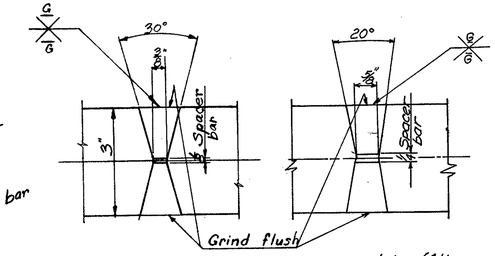


BEARING DETAIL
Scale 3/4" = 1'-0"

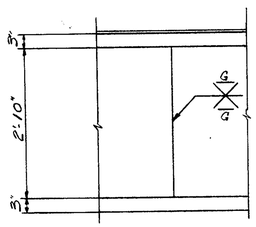




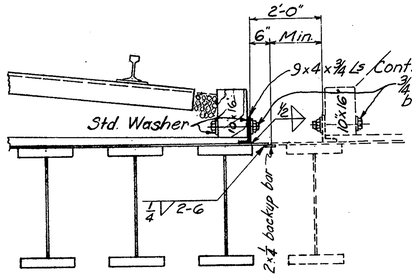
SECTION B
TYPICAL ALL CORNERS
Scale 1" = 1'-0"



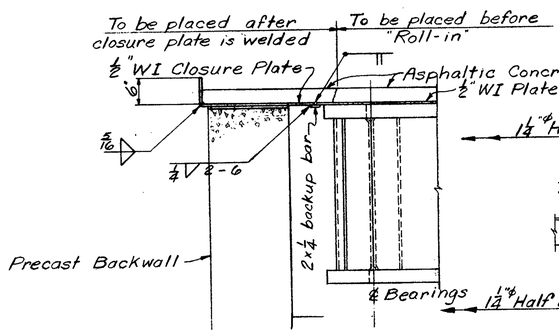
Manual Shielded Metal-Arc Submerged-Arc (Alternate)
FLANGE SPLICE
Scale - 6" = 1'-0"



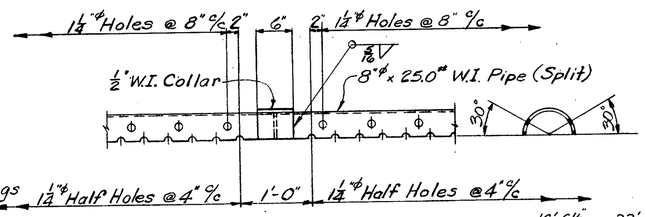
WEB SPLICE
Scale 3/4" = 1'-0"



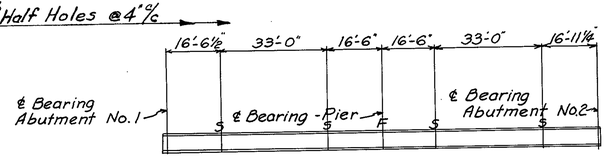
TEMPORARY BALLAST DAM DETAILS
Scale 1/2" = 1'-0"
To remove dam, burn off upstanding leg of angle.



SECTION A
Scale 3/4" = 1'-0"



W.I. PIPE DRAIN
Scale 1" = 1'-0"



GIRDER SPLICES

GIRDER SPLICE NOTES

All splices are to be optional.
See "RADIOGRAPH WELDING INSPECTION" requirements on sheet 131.0

S = Shop Splice
F = Field Splice

NOTES

Splices in the wrought iron deck plate shall be arranged so that no transverse welding to the beams is within the tension flange area.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SUPERSTUCTURE DETAILS
BRIDGE NO STA 21-1073
USR 21 UNDER P. RR.

STARK CO. STA. 565+91.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
KAE RLM	RLM		KAE		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-97976

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

141

STA-21-10.23

CONSTRUCTION PROCEDURE

To avoid delays and expedite construction, the Contractor may modify or revise any of the construction steps to suit unforeseen conditions that may arise in the field. However, any changes in the procedure must first be approved by the Area Engineer of the Pennsylvania Railroad and the Director.

TOTAL ESTIMATED QUANTITIES	
TOTAL	DESCRIPTION
338097 lbs	Structural Steel
84762 lin ft	Piling
2125 Sq ft	Sheet Piling
1925 lbs	Hardware
9.9 M.B.M.	Timber

NOTE:
The State of Ohio does not assume responsibility for any variations in estimated quantities listed in this table. The Contractor shall be paid his lump sum bid price for "Temporary Spans for Pennsylvania Railroad" regardless of any variations in quantities.

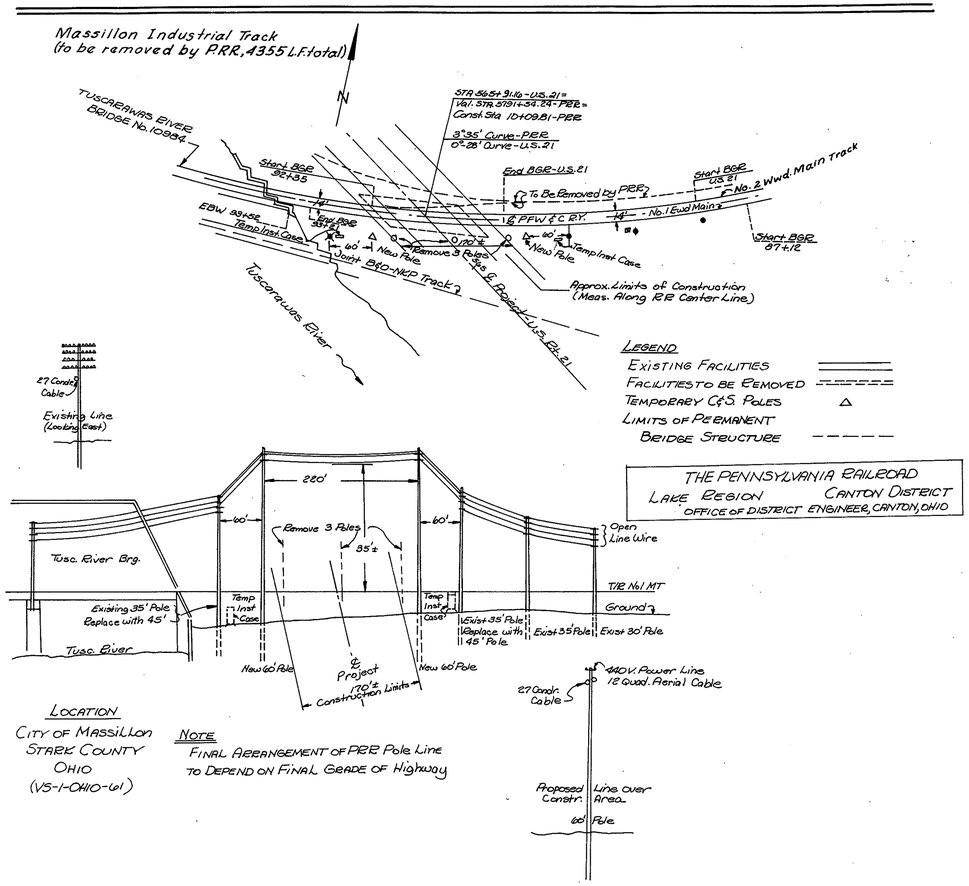
CONSTRUCTION STEPS:

1. Drive piling as required for the construction of cofferdams for the temporary spans for one track doing only such work on a daily basis as may be accomplished within the hours approved by Railroad. This includes replacing track, and otherwise making it ready for railroad traffic.
2. Repeat Step 1 for the other track.
3. Drive sheet piling and anchor piling between cofferdams as shown on plan.
4. Excavate inside cofferdams down to about 2'0" below top of piling for south side track using temporary shoring, if required, to hold fill under north side track. Erect the necessary bracing and prepare pile tops for temporary spans. Erect temporary spans for south side track. Note "Working Time" condition in Step 1.
5. Repeat Step 4 for north side temporary spans.
6. Continue excavation inside cofferdams alternating from one track to the other as required to produce efficient and steady progress. Erect bracing steel as shown on plans when excavated depths have been reached.
7. Pour footings and block as shown. Remove bracing as shown on plans and pour stems up to bearing elevations. Note: All anchors to be preset.
8. Erect jacking supports, roll-in bents, roller assemblies and closure span supports.
9. Erect superstructure halves on their respective bent positions. Pour concrete parapets on superstructure.
10. Place asphaltic concrete and deck drains on deck.
11. Lay new ballast, ties and track on superstructure while supported on roll-in bents.
12. Excavate for and place 1¼" ø tie rods and bracing between anchor piling and sheet piling.

ROLL-IN

13. (a) Remove south side track, ties and ballast. Remove south side temporary spans.
(b) Excavate between cofferdams to 6'-9" below low rail elevation. Burn off tops of cofferdam piling that interfere with roll-in. Place masonry bearing plates.
(c) Roll superstructure-half into place and jack down to final position on bearings.
(d) Erect closure spans, precast backwalls and closure plates. Lay closure ballast, ties and rails.
(e) Roll-in operations 13(a) through 13(d) shall be started and completed within the time limits approved by Railroad.

(f) Remove sheet piling, anchor piling and rods from between cofferdams and repeat Steps 13(a) through 13(e) for north side track.
(g) Weld superstructure halves together and complete construction along center line as shown on plans.
14. Construct wings as shown on plan, removing piling where necessary.
15. Backfill behind abutments and wings. Thoroughly compact fill and then remove closure spans for one track only. Complete construction as shown on plans. Salvage piling and other materials. Note "Working Time" condition in Step 1.
16. Repeat Step 15 for the other track.



LOCATION
CITY OF MASSILLON
STARK COUNTY
OHIO
(VS-1-OHIO-61)

NOTE
FINAL ARRANGEMENT OF PRR POLE LINE TO DEPEND ON FINAL GRADE OF HIGHWAY

THE PENNSYLVANIA RAILROAD
LAKE REGION CANTON DISTRICT
OFFICE OF DISTRICT ENGINEER, CANTON, OHIO

RAILROAD FORCE ACCOUNT PLAN

MATERIAL BILL FOR TEMPORARY STRUCTURE

No. of Pieces	SIZE	LENGTH	REMARKS
	STRUCTURAL STEEL		
10	8 WF 35	13'-11¼	Top struts for pier cofferdam
20	8 WF 35	20'-5¼	Top struts for abut. cofferdams
10	8 WF 40	11'-11⅞	Bottom struts for pier cofferdam
20	8 WF 40	18'-5⅞	Bottom struts for abut. cofferdams
—	12 WF 58	540 Lin. ft.	Wale
—	12 C 25.0	1620 Lin. ft.	Wale
8	27 WF 102	25'-0	Pier temporary spans
8	36 WF 182	33'-0	Abut. #1 temporary spans
8	36 WF 182	36'-0	Abut. #2 temporary spans
16	36 WF 150	14'-6	Closure spans
12	36 WF 150	5'-3	End diaphragms for closure spans
48	18 I 54.7	3'-5¼	Diaphragms for abut. temporary spans
16	18 I 54.7	3'-5½	Diaphragms for pier temporary spans
24	18 I 54.7	3'-5⅞	Diaphragms for closure spans
4	L 9"×4"×½"	25'-0	Pier
4	L 9"×4"×½"	33'-0	Abut #1
4	L 9"×4"×½"	36'-0	Abut #2
8	L 9"×4"×½"	14'-6	Closure spans
—	PL 60"×¾"	550 Lin. ft.	Deck PL on temp. and closure spans
—	PL 22"×½"	282 Lin. ft.	
—	C 12 C 10.5	158 Lin. ft.	
	PILING		
125	DP-2	12'-9	2125 Sq. ft. Sheet piling
8	14 WF 127	20'-0	160 Lin. ft. Anchor piles
84	14 WF 127	47'-0	3948 Lin. ft.
84	14 WF 127	52'-0	4368 Lin. ft.
	HARDWARE		
196	¾" ø	1'-0	Bolts complete with washers & nut
192	1¼" ø	3½"	H.S. Bolts complete with washers & nut
32	1" ø	6"	Lag screws
80	¾" ø	1'-6	Drift pins
8	1¼" ø	15'-6	Tie rods complete with washers & nuts
2	1¼" ø	12'-6	Tie rods complete with washers & nuts
2	1¼" ø	6'-6	Tie rods complete with washers & nuts
	TIMBER		
	4" Thick	4'-0	35,000 bd. ft. Between piles
	4" Thick	3'-0	23,400 bd. ft. Between piles
	4" Thick		2,462 bd. ft. Behind temporary spans
	10×12	196 Lin. Ft.	1,960 bd. ft. Ballast retainers
	10×18	196 Lin. Ft.	2,940 bd. ft. Ballast retainers
	8×16	164 Lin. Ft.	1,749 bd. ft. Closure span supports
245	8×8	21'-0	27,440 bd. ft. Closure span columns
30	8×8	6'-0	960 bd. ft. Struts
	8×8	170 Lin. Ft.	907 bd. ft. Wales
			1,642 bd. ft. Sheeting
			500 bd. ft. Blocking
	2" Thick		550 bd. ft. Safety walk

FORCE ACCOUNT WORK
by the
Pennsylvania Railroad

1. Engineering and Inspection
2. Communications and Signal Work
3. Track Work, Temporary
4. Track Work, Permanent

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

TEMPORARY STRUCTURE DETAILS
BRIDGE NO. STA 21I073
USR 21 UNDER PRR;
RAILROAD FORCE ACCOUNT WORK
STARK COUNTY STA 565+91.16

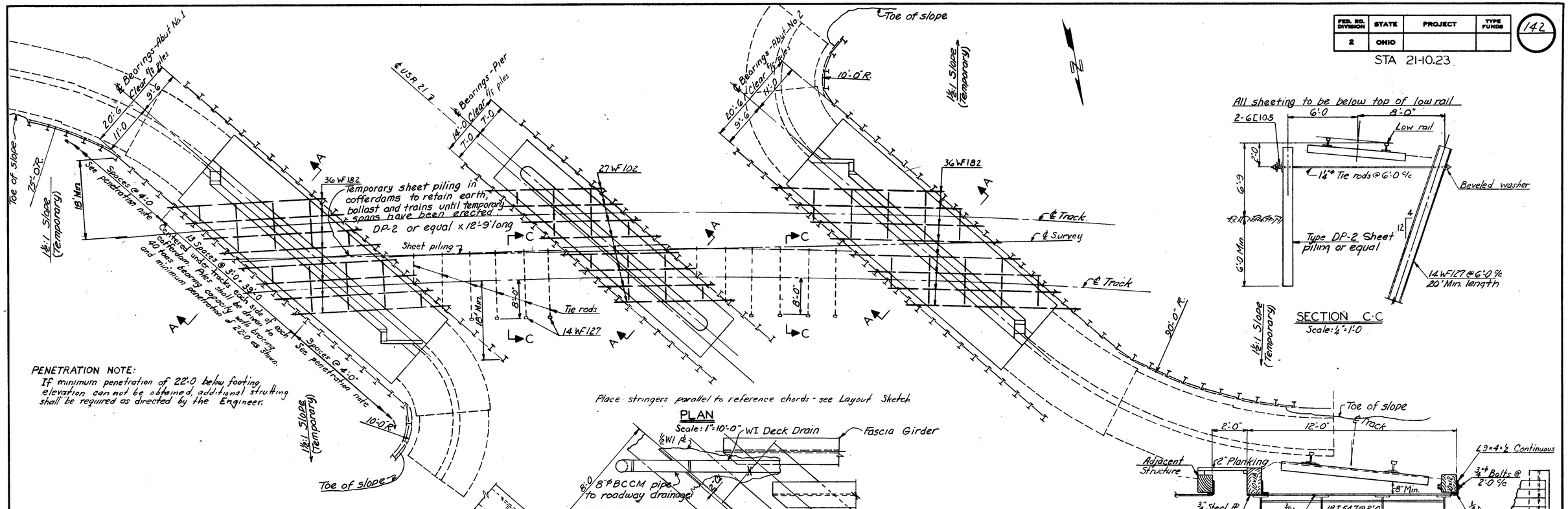
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
RLM KAE	KAE		RLM		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-97070

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

142

STA 21-10.23



SECTION C-C
Scale: ½" = 1'-0

TYPICAL CROSS-SECTION OF TEMPORARY & CLOSURE SPANS
Scale: ⅜" = 1'-0

PLAN OF CLOSURE SPAN
Scale: ⅜" = 1'-0
Drainage shown for Abutment No.2

SECTION A-A
Scale: ⅜" = 1'-0

LAYOUT SKETCH

VIEW B-B
Scale: ⅜" = 1'-0

NOTE:
• For Construction Procedure and Material Bill see Sheet No. 141.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

TEMPORARY STRUCTURE DETAILS
BRIDGE NO. STA 21-1073
USR 21 UNDER PRR

STARK COUNTY STA. 565+91.16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
LGH SJF	KAE		L.G.H.		

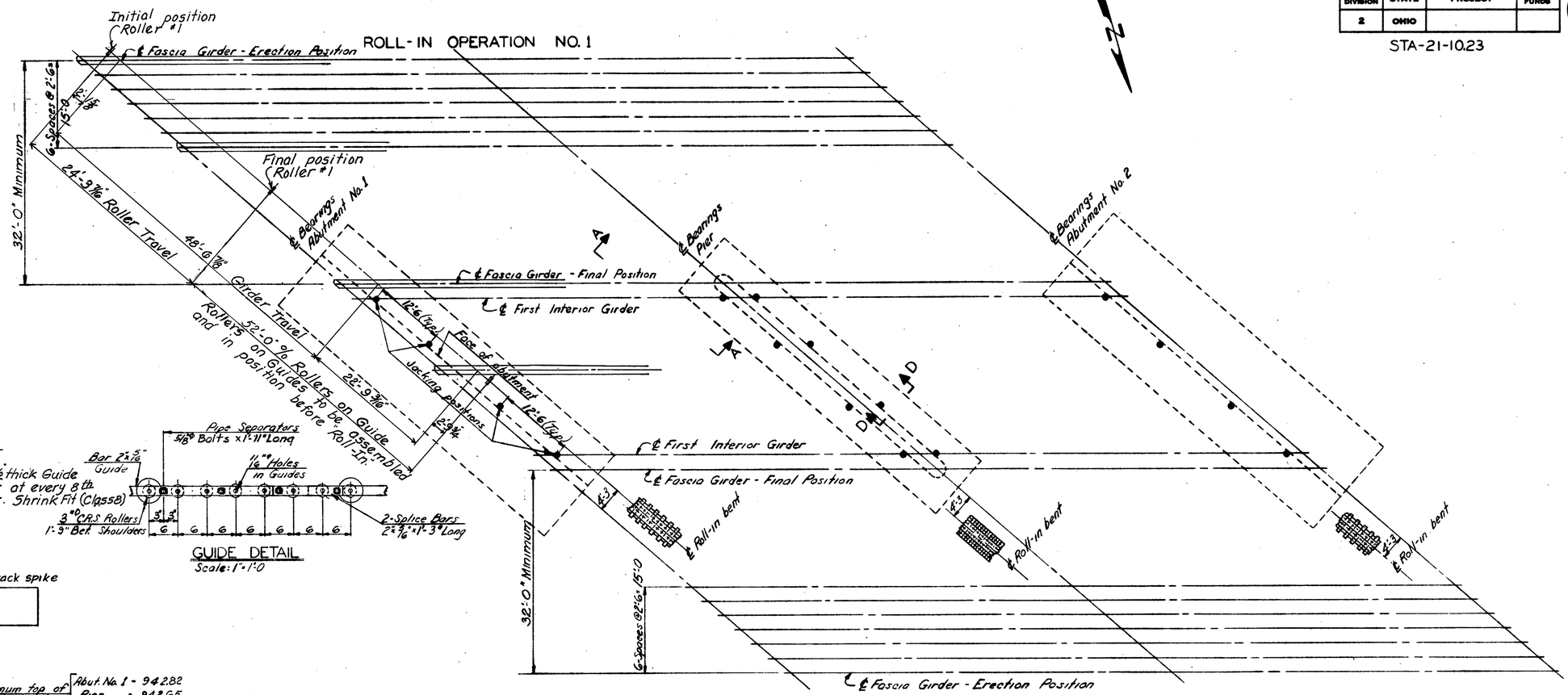
BEAVER VALLEY BLUEPRINT & SUPPLIES COMPANY ROCHESTER, PA 15074

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

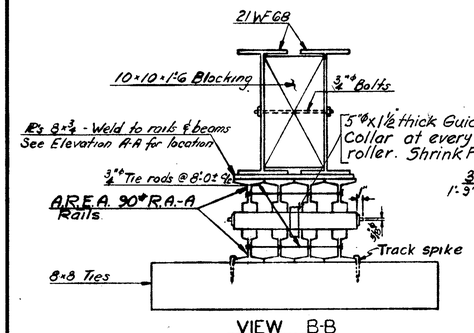
143

STA-21-10.23

ROLL-IN OPERATION NO. 1

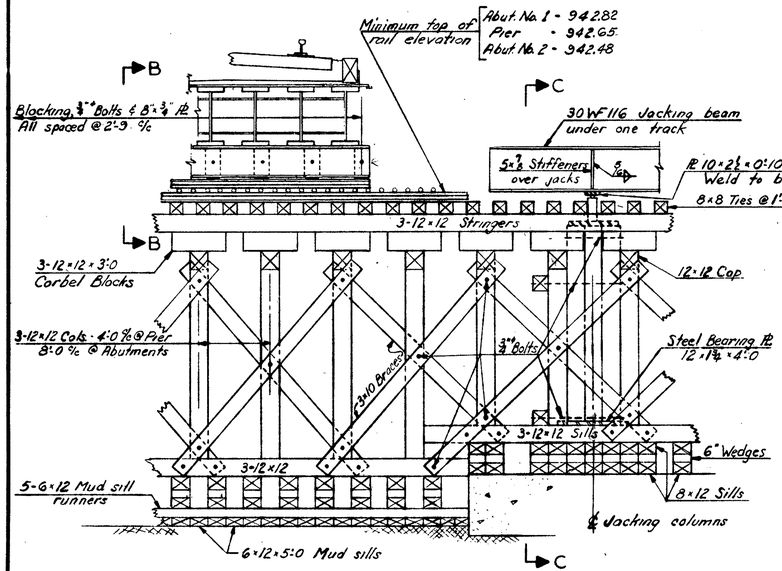


ROLL-IN OPERATION NO. 2

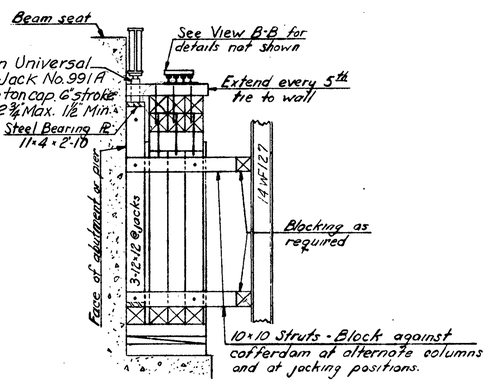


VIEW B-B
Scale: 1"=1'-0

GUIDE DETAIL
Scale: 1"=1'-0

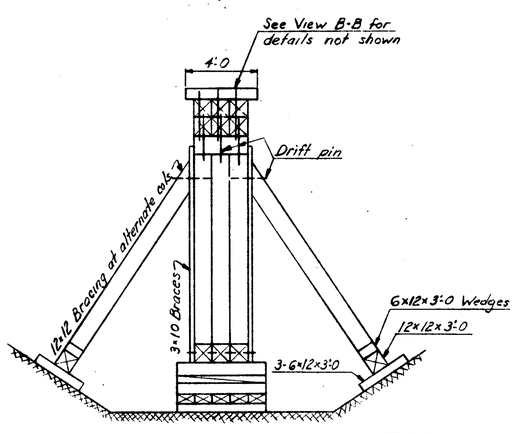


ROLL-IN BENT ELEVATION A-A AT PIER
ABUTMENTS SIMILAR
Scale: 1/4"=1'-0



SECTION C-C & D-D
Scale 1/4"=1'-0
Roll-in bent omitted at Section D-D

PLAN
Scale: 1"=10'-0



ROLL-IN BENT OUTSIDE COFFERDAM
Scale: 1/4"=1'-0

NOTE:

- For construction procedure, see Sheet No. 141
- Timber to have minimum stress values of: 350 psi - compression perpendicular to grain, 1010 psi - compression parallel to grain.
- Structural steel shall be in accordance with Item S-107 and of the dimensions, weight and fabrication shown on the plans. Used structural steel of proper dimensions will be permitted if the material which the contractor proposes to furnish is approved by the Area Engineer, Pennsylvania Railroad Company and the Director. The minimum size and weight of such steel shall not be less than that shown on the plans.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ROLL-IN BENT & JACKING DETAILS
BRIDGE NO. STA 21-1073
USR 21 UNDER PRR

STARK COUNTY STA. 565+91.16

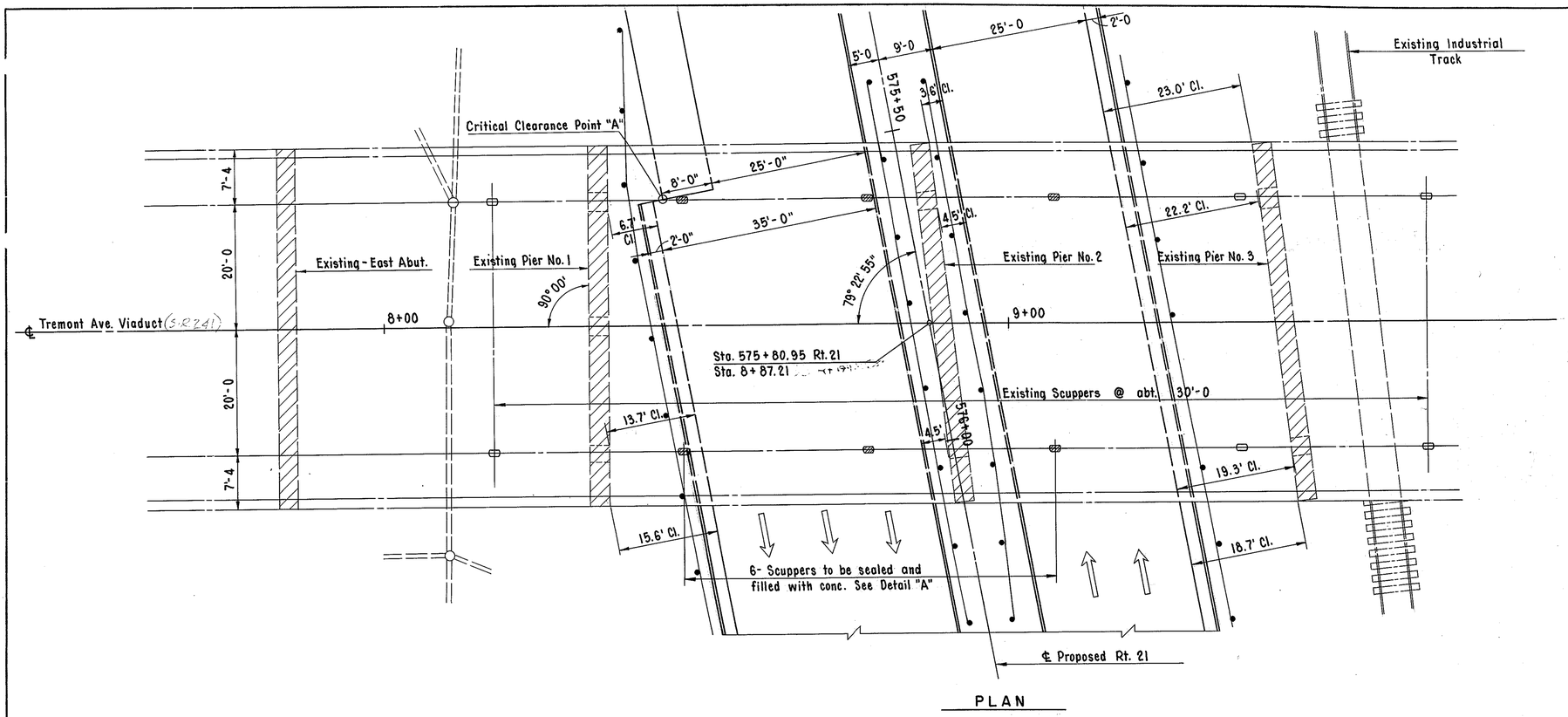
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
KAE RLM	KAE		L.G.H.		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-27970

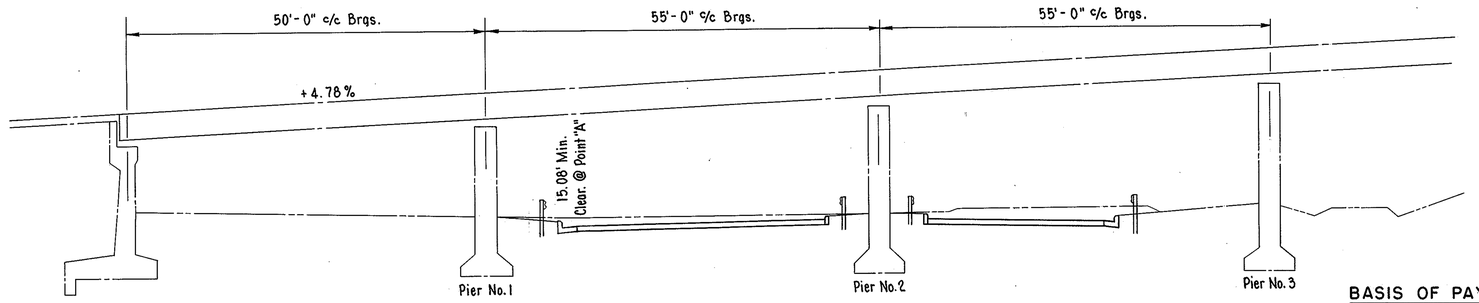
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

144

STA - 21 - 10.23



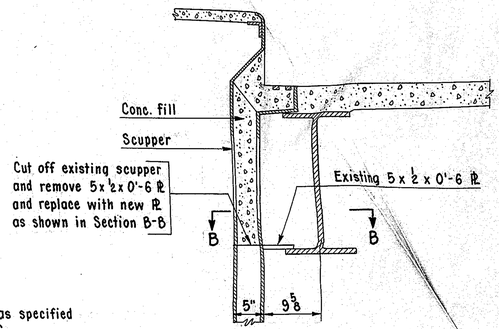
PLAN



ELEVATION

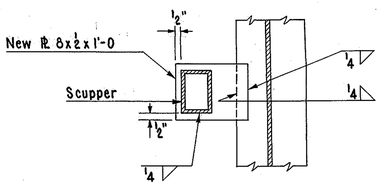
EXISTING STRUCTURE

TYPE : Continuous steel beams with concrete filled I-Beam-Lok deck and reinforced concrete substructure
SPANS : 50'-55'-55'-50'; 83'-95'-83'; 62'-45'-10 13/16"; 67'-1 3/16" - 58' c/c Brgs.
ROADWAY : 40'-0" f/f curbs + two 6'-6" sidewalks
LOADING : H-20-33
SKEW : 6°-24'-08" Rt. Fwd. Piers 2 to 7
9°-08'-46" Rt. Fwd. Piers 8 to 10
ALIGNMENT : Tangent



DETAIL - A

NOTE : Concrete shall be as specified in Section S-2.06



SECTION B-B

BASIS OF PAYMENT

Alteration to existing scuppers on Tremont Avenue Bridge shall be paid for at the lump sum bid - Item Special - which lump sum price and payment shall constitute full compensation for cutting off existing scuppers, sealing scuppers and filling scuppers with concrete and for all labor, tools, equipment, material and incidentals necessary to complete this item.

QUANTITIES

Item Special - Alterations to existing Tremont Avenue Bridge - Lump Sum

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SITE PLAN

ALTERATIONS TO EXISTING BRIDGE NO. STA. 21-1092 U.S.R. 21 UNDER EXISTING TREMONT AVENUE STA. 575+80.95

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
		D.W.B.	Bo	KAE	

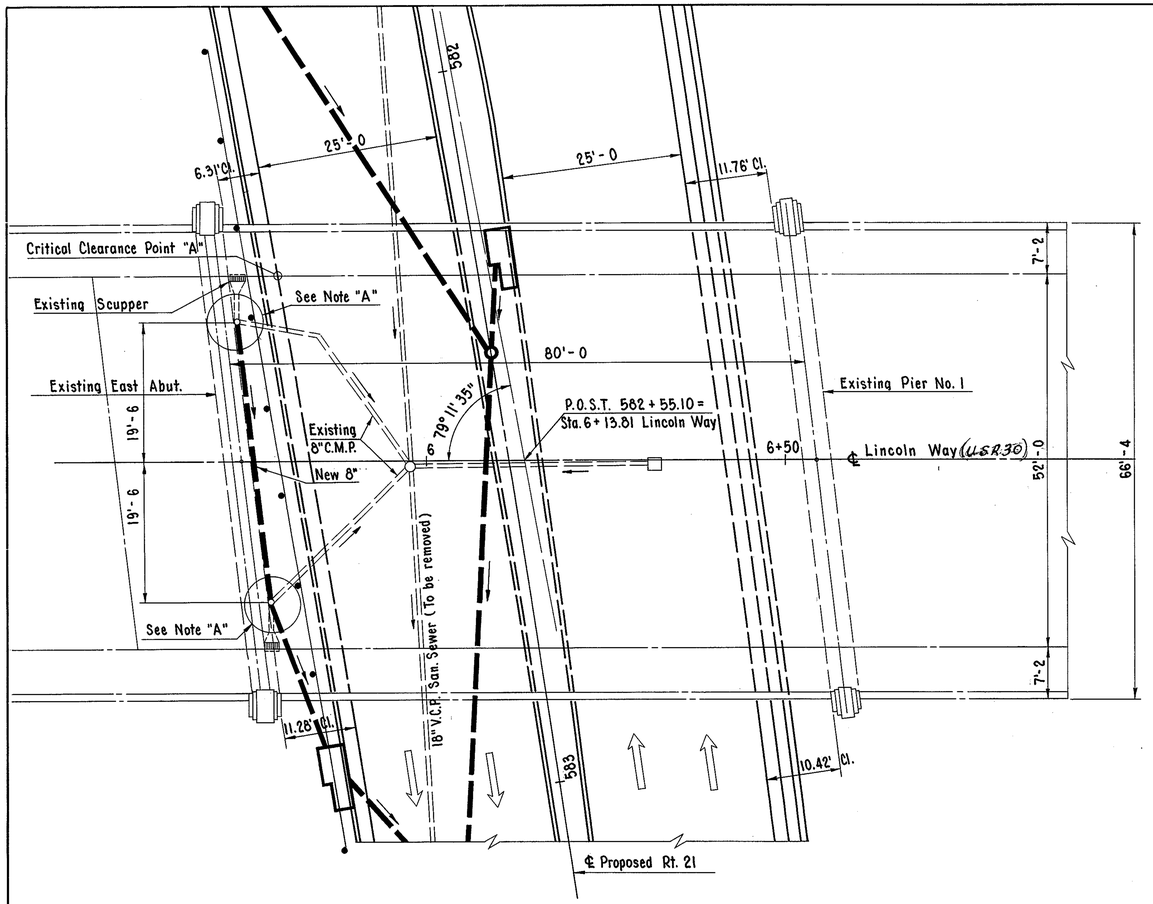
BEAVER VALLEY ENGINEERING SUPPLIES CO.

7/65

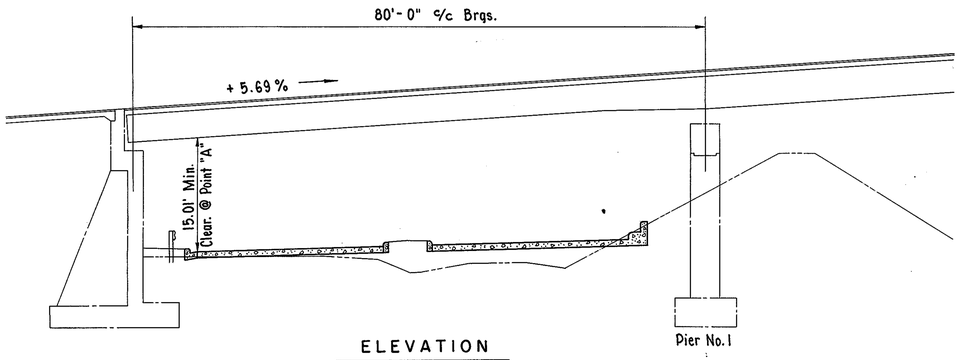
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

145

STA - 21 - 10.23



PLAN



ELEVATION

NOTE "A"

Disconnect down drain from existing 8" C.M.P. and connect to new 8" Class "B", I-2.

NOTE :

For Quantities see Sheet No. 28
(Included in Roadway Quantities)

EXISTING STRUCTURE

TYPE : Continuous steel beam and girder bridge with concrete deck and substructure
SPANS : Girder unit - 80'-100'-100'-80' ℄c Brgs.
Beam unit - 68'-10"-58'-5½"-68'-6"-68'-6"-55'-0" ℄c Brgs.
ROADWAY : 52'-0" plus two 6'-0" sidewalks
LOADING : S-20-40
SKEW : 6°-45' Rt. Fwd. Piers 1-5
5°-22' Rt. Fwd. Piers 6-8
SURFACE COURSE : 2½" Bituminous

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SITE PLAN
ALTERATIONS TO EXISTING BRIDGE NO. STA. - 21-1105 U.S.R. 21 UNDER EXISTING LINCOLN WAY
STA. 582+55.10

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
		D.W.B	Bo	K.A.E.	

BEAVER VALLEY ENGINEERING SUPPLIES CO.

7/160

GENERAL SUMMARY (BUILDING REMOVAL)

ITEM	U-1010(5) QUANTITY	UNIT	PARCEL NO.	DESCRIPTION	UG-1010(5) QUANTITY
S-24	Lump	Lump	109 LA	Removal of 2½ Story Frame Dwelling, 2 Story Frame Stable	
S-24	Lump	Lump	110 LA	Removal of 2½ Story Frame Dwelling, Frame Garage, Frame Shed	
S-24	Lump	Lump	113 LA	Removal of Tile Block Garage	
S-24	Lump	Lump	113 C-LA	Removal of 1 Story Corrugated Metal Shed	
S-24		Lump	115 LA	Removal of 1 Story Brick Office & Warehouse	Lump
S-24	Lump	Lump	115 A-LA	Removal of Four 20,000 Gal. Storage Tanks & Concrete Block Pump House	
S-24	Lump	Lump	116 LA	Removal of 1½ Story Frame Dwelling	
S-24	Lump	Lump	117 LA	Removal of 2 Story Frame Dwelling	
S-24	Lump	Lump	118 LA	Removal of 2½ Story Frame (Shingle) Dwelling	
S-24	Lump	Lump	119 LA	Removal of Frame Shed	
S-24	Lump	Lump	124 LA	Removal of 2 Story Frame (Shingle) Dwelling	
S-24	Lump	Lump	125 LA	Removal of 2 Story Frame (Shingle) Dwelling	
S-24	Lump	Lump	132 LA	Removal of 1 Story Brick Industrial Bldg. & Office, 1 Story Pipe Shed	

21-STA-10.23

LOCATION PLAT
STA-21-10.23 U-UG-1010(5)
STARK COUNTY
CITY OF MASSILLON
LIMITED ACCESS HIGHWAY
DIRECTORS JOURNAL VOL. PAGE

SCALE: 1" = 200'

NOTE: Spiralled Curves indicated on this Plan are Developed as outlined in "Transition Curves for Highways" by Joseph Barnett. Published in 1940 by U. S. Government Printing Office.

NOTE: True Bearings Established From Observation on Polaris.

STATE OF OHIO — MICHAEL BAKER JR. S3424 REGISTERED SURVEYOR

I HEREBY CERTIFY THIS PLAT TO BE CORRECT.
SIGNED BY Michael Baker Jr.
MICHAEL BAKER JR.- REG. LAND SURVEYOR. S3424
RECEIVED FOR RECORD July 27 1960
RECORDED VOL. 34 PAGE 64 OF THE STARK COUNTY RECORDS
Kenneth E. Motts RECORDER

CERTIFICATE OF APPROVAL
APPROVED _____
DATE _____ DIVISION DEPUTY DIRECTOR
APPROVED _____
DATE _____ CITY ENGINEER
CITY OF MASSILLON

SPIRAL CURVE DATA
P.I. Sta. 597+73.67
Δ - 60° 40' 16" Rt.
D - 2° 07' 30"
L.S. - 300.00'
R - 2696.27'
θs - 3° 11' 15"
p - 1.39'
Xc - 299.91'
Yc - 5.57'
K - 149.99'
L.T. - 200.03'
S.T. - 100.03'
Lc - 2555.11'
Ts - 1728.62'
Es - 429.34'

CURVE DATA
P.I. Sta. 543+97.71
Δ - 20° 30' 00" Rt.
D - 1° 28' 00"
R - 3906.53'
T - 706.42'
L - 1397.73'
Ex - 63.36'

P.I. Sta. 562+13.52
Δ - 7° 13' 00" Lt.
D - 0° 28' 00"
R - 12277.70'
T - 774.24'
L - 1546.43'
Ex - 24.39'

BEGIN PROJECT Sta. 539+75
END PROJECT Sta. 606+50
SUSPEND U-1010(5)
BEGIN UG-1010(5) Sta. 563+58
END UG-1010(5) Sta. 568+16
RESUME U-1010(5)
Match Line Sta. 536+00
Match Line Sta. 536+00
TUSCARAWAS RIVER
TOP OF DIKE
ARCH AVE. PUMP STATION
SIPPO CREEK PUMP STATION
SIPPO EAST CREEK
FEDERAL AVE. PUMP STATION
60" STORM SEWER
W. & L. E. Ry.
B & O W. & L. E. Ry.
W. & L. E. RY. FREIGHT TERMINAL
PENN. R.R.
INDUSTRIAL TRACK 1
P.C. Sta. 536+91.29
P.C. Sta. 554+33.28
P.T. Sta. 550+89.02
P.T. Sta. 569+85.71
P.I. Sta. 562+13.52
P.I. Sta. 597+73.67
T.S. Sta. 580+45.05
S.C. Sta. 583+45.05
E.S. Sta. 596+22.60
Ex. Sta. 543+90.15
Ex. Sta. 562+12.50
Sta. 552+13.71
Sta. 572.47.17
Sta. 575+80.95
Sta. 578+62.40
P.O.S.T. Sta. 582+55.10
Sta. 6+04.98
Sta. 11+58.3
Sta. 8+00.00
Sta. 10+40.37
Sta. 7+95.00
Sta. 6+08.60
Sta. 0+00
Sta. 2+92.20
Sta. 6+77.39
Sta. 6+04.98
Sta. 0+00
Sta. 0+00
Sta. 6+77.39
P.O.C. Sta. 540+18.94
Edwin Ave. Connection
Edwin Ave. Connection Sta. 6+04.98
Edwin Ave. Connection Sta. 0+00
Third St. Connection
Third St. Connection Sta. 0+00
Third St. Connection Sta. 6+77.39
HORACE MANN SCHOOL
Approx. ¼ Sec. Line
Approx. ½ Sec. Line
S.E. ¼ of Sec. 7
N.E. ¼ of Sec. 7
S.W. ¼ of Sec. 8
N.E. ¼ of Sec. 18
N.W. ¼ of Sec. 17
S.E. ¼ of Sec. 18
S.W. ¼ of Sec. 7
N.W. ¼ of Sec. 17
S.W. ¼ of Sec. 8
Pt. Sta. 569+85.71 S.E. ¼ of Sec. 18 S.W. ¼ of Sec. 7
DWIGHT AVE.
EDWIN AVE.
VERNA CT.
MAPLE AVE.
CURLEY CT.
DAWSON
ERIE STREET
SOUTH MASSILLON
WALNUT RD.
FIRST ST.
SECOND ST.
METHODE CREEK PRESSURE CONDUIT
DELT R.R.
OAK AVE.
S.W. 5TH AVE.
S.W. 3RD AVE.
S.W. 2ND AVE.
S.W. 1ST AVE.
FREMONT AVE. S.W.
CHARLES AVE. S.W.
LINCOLN WAY WEST
WEIRICH BLVD. N.W.
THIRD STREET N.W.
FIRST ST. N.W.
FEDERAL AVE. N.W.
NORTH AVE. N.W.
THORNE AVE. N.W.
CHERRY RD. N.W.
U. S. 21
S.R. 241
U.S. 30
N 24° 25' 30" W
N 44° 55' 30" W
N 31° 38' 30" W
N 29° 01' 46" E
706.42'
774.24'
774.24'
1728.62'
1557.06'
1156.15'
604.93'
620.00'
399.05'
382.92'
280.51'
224.41'
225.57'
372.92'
261.46'
333.78'
281.53'
182.57'
385.94'
1021.06'
677.39'
732.15'
631.76'
445.02'
329.80'
273.70'
444.61'
487.21'
399.39'
197.52'
202.81'
604.11'
190.56'
235.74'
215.81'
190.89'
429.34'
419.90'
315.11'
291.49'
105.98'
100°52'15"
100°51'05"
79°03'45"
89°52'50"
89°56'52"
89°49'25"
89°55'54"
90°10'05"
89°56'10"
89°58'50"
89°43'55"
90°03'05"
89°25'28"
89°39'33"
89°52'05"
95°06'50"
86°46'00"
171°28'00"
90°05'55"
70°24'48" Tang to Curve
11°23'32"
15°30'00"
83°35'30"
85°15'00"
260°48'25"
260°00'00"
59°39'52"
139°24'30"
109°21'25"
80°03'10"
89°00'35"
101°11'22"
N 28°01'46" E
Hub Set
Nail Set
P.K. Nail
Tack
Tack Set
Top of Dike
Existg. Iron Pin
Existg. Iron Pin
Existg. Iron Pin
Existg. Iron Pin
Existg. Iron Pin
Existg. Iron Pin
Existg. Iron Pin
Existg. Iron Pin
Four Punch Marks in Rim of Manhole
P.K. Nail Set
Nail Set
Nail Set
Nail Set
Hub Set
Hub Set
Hub

SUMMARY OF ADDITIONAL R/W REQUIRED

TOTAL NO. OF OWNERS — 31

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

157

STA-21-10.23
LIMITED ACCESS

2/23

U-1010 (5)

PARCEL NO.	OWNER	AREA ACRES	EXIST. BLDG.	SHEET NOS.	REMARKS
100 LA	U.S.A.	0.002		5	P.T. OL No. 297
100A LA	U.S.A.	0.036		5	P.T. OL No. 137 Parcel 97, Tr. A
100B LA	U.S.A.	0.601		5,6,7	P.T. OL No. 137 & No. 136 Parcel 199H & 200G
100C LA	U.S.A.	0.019		7	P.T. OL No. 137 Parcel 95
100N LA	U.S.A.	0.4411		8 & 9	P.T. OL 30 Parcel P-199-F
100G LA	U.S.A.	0.329		7 & 8	P.T. OL 36 P.T. Parcel 1996
100H LA	U.S.A.	0.012		7	OL 29 Parcel 200-F
100J LA	U.S.A.	0.102		10	P.T. Paved 88
100 X	U.S.A.	0.061		3	
100T LA	U.S.A.	0.051		10	P.T Parcel 151, Tr. 10 (P.T. Oak Ave.)
100W LA	U.S.A.	0.138		8	Parcel 200F, OL 29
101 LA	Massillon Conservancy District	0.845	Yes	10 & 11	Lot 1056 P.T. 1057 1058, 1059, 1069, 11143
101	Massillon Conservancy District	0.076		10 & 11	P.T. Lot 11143
101A LA	Massillon Conservancy District	0.159		11	P.T. Lot No's. 169, 174 & 175
101B LA	Massillon Conservancy District	0.059		11 & 12	P.T. Lot 163
101C LA	Massillon Conservancy District	0.300		14 & 15	P.T. Lot 1
101 X	Massillon Conservancy District	0.222		10	Lots 1068, 1069, 1070, 1071 & 1072
102 TS	W. & L.E. R.R.			7	Parcel 97, Tr. C Adjust Grade Of Drive
105 LA	City of Massillon	0.165		4	OL 383
126	City of Massillon			16	
126A LA	City of Massillon			16	
109 LA	W. A. Welling	0.219	Yes	4	Lot No. 9945
110 LA	Irene Peters	0.151	Yes	4	Lot No. 9944
113 LA	Massillon Paper Company	8.195	Yes	3,4,5,6 & 7	P.T. OL 297, 138, 137, 136
114 LA	Massillon Spring & Rivet Corp.	0.470		7	P.T. OL 35 Parcel 90A
114 TS	Massillon Spring & Rivet Corp.			7	P.T. O.L. 35 Adjust Grade Of Drive
115 LA	Chester K. Campbell dba Campbell Oil Company	0.155	Yes	9	P.T. Lot No. 9368
115A LA	Campbell Oil Company	0.304	Yes	9 & 10	Lot No's. 2134, 2135 & 2136
115 WA	Chester K. Campbell dba Campbell Oil Company			9	Lot No. 9368
116 LA	Minnie B. Snyder	0.103	Yes	10	Lot No. 2128
117 LA	Joseph W. Oats	0.069	Yes	10	Lot No. 2127
118 LA	Earle S. Jamison	0.102	Yes	10	Lot No. 2126
119 LA	Ollie L. Neal	0.016	Yes	10	Lot No. 2125
123 LA	J.S. Sanders	0.564		11	Lot No's. 1051, 1052 & 1053 P.T. Lot No. 1054, 11142
123	J.S. Sanders	0.019		11	P.T. Lot 295
124 LA	AUDREY J. SNOWDEN & GEROTHA MCGOWAN	0.042	Yes	11	Lot No. 173
125 LA	Donald E. Richardson	0.057	Yes	11	Lot No. 172
129 TS	Ralph L. Phillips			11	P.T. Lot No. 189 Replace Sidewalk
130 LA	The Red Head Oil Company	0.075		11 & 12	Lot No's. 162 & 163
131 WA	Progressive Chevrolet Co.			12	P.T. Lots 400 & 401
132 LA	Ohio Drilling Company	0.559	Yes	12 & 13	
132	Ohio Drilling Company	0.076		12	
132 X	Ohio Drilling Company	0.101		12	
133 LA	Anthony Fulmer	0.154	Yes	13	OL 14
133 WA	Anthony Fulmer		Yes	13	OL 14
133A LA	Anthony Fulmer	0.181		14	P.T. Lot 9248
134 LA	Catherine Kolek	0.119	Yes	13 & 14	Lot No. 9249
135 LA	Massillon School District	0.070		15	P.T. Lot No. 3598
136 LA	Lewis E. & Ann G. Lemmon	0.120		13	P.T. OL. 13
137	E. Smally			16	P.T. OL. 11
150 LA	U.S.A.	0.074		11	P.T. Charles St. P.T. Lot No's. 170, 174 & 175
150A LA	U.S.A.	0.015		11	P-151, Tr. 7
150B LA	U.S.A.	0.208		11 & 12	P.T. P-80, P-79 P-151 Tr. 7
150C LA	U.S.A.	0.284		12 & 13	P.T. Lot No. 398
150D LA	U.S.A.	0.033	YES PUMP STA.	12	P-76 P.T. Lot No's. 398 & 399
150D WA	U.S.A.			12	P.T. Lot No's. 399, 400 & 401
150D	U.S.A.	0.159		12	P.T. Lot No's. 399, 400 & 401 & P-76A
150E LA	U.S.A.	0.017		12	P-76A, P.T. Lot 400
150G LA	U.S.A.	0.082		13	P-71
150H LA	U.S.A.	0.062		13	P-65
150J LA	U.S.A.	0.060		14	P-63, P.T. Lot 9248
150K LA	U.S.A.	0.027		14	P.T. OL 15
150L LA	U.S.A.	0.150		14	P-151, Tr. 5
150M LA	U.S.A.	0.028		14	P-151, Tr. 5
150P LA	U.S.A.	0.141		14	P.T. P-61 B, Tr. A
150 L	U.S.A.	0.040		14	P.T. P-151, Tr. 5
150 P	U.S.A.	0.002		14	P.T. P-61 B, Tr. B
107	E.K.C.O Foundation Inc.	0.643		20	P.T. OL 31, P-92, Tr. B
150R LA	U.S.A.	0.019		15	P.T. P-57-P-58-P-59
150T LA	U.S.A.	0.545		14 & 15	P.T. P-61, Tr. A
150U LA	City Of Massillon	0.009		14	P.T. P-61 B, Tr. B
151	H.G. Jorden	None		15	
152 LA	EVA M. Barth	None		15	Access Rights Taken Only
114	Massillon Spring & Rivet Corp.	0.013		7	P.T. O.L. 35
119 WA	Ollie L. Neal		Yes	10	Lot No. 2125

UG-1010 (5)

PARCEL NO.	OWNER	AREA ACRES	EXIST. BLDG.	SHEET NOS.	REMARKS
100K LA	U.S.A.	0.0125		9	P.T. O.L. 30 Parcel P-199-F
100M LA	U.S.A.	0.0667		8 & 9	P.T. O.L. 30 Parcel P-199-F
100P LA	U.S.A.	0.009		9	P.T. O.L. 30 Parcel P-199-F
102B LA	W. & L.E. R.R.	0.546		8 & 9	O.L. 36 Parcel 200U, Tr. B
102C LA	W. & L.E. R.R.	0.292		8 & 9	P.T. OL 36 P.T. Parcel 1996
103 LA	B. & O. R.R.	1.6311		7 & 8	P.T. OL 36 & 0.59 & 0.3, P.T. Parcel 1996 & 0.60
104A LA	Penna. R.R.	0.859		9 & 10	P.T. OL 30 & 38
104B LA	Penna. R.R.	0.011		9	P.T. OL 30
104C LA	Penna. R.R.	0.659	Yes	9-14	P.T. Parcel 8, P.T. Parcel 88 P.T. Lot No's. 1058, 1059, 1060, 1063 & 1064 (P.T. Oak Ave.)
104D LA	Penna. R.R.	0.510		9-14	P.A. 9, P.T. Lot No. 1054 P.T. Charles Ave. P.T. Lot No's. 164, 165, 169, 174 & 175
104E LA	Penna. R.R.	0.782	YES PUMP STA.	9-14	P.A. 10
104F LA	Penna. R.R.	0.036		9-14	P.A. 11
106 LA	B. & O. R.R. & W. & L.E. R.R.	0.451		8 & 9	P.T. OL 29 & 32 Parcel 200U, Tr. A & Tr. D P.T. OL 36 P.T. Parcel 1996
104G LA	Penna. R.R.	0.100		12 & 13	P.T. Parcel 199C

Sheet Completed
Date 1-27-60

Revised
Date 2-11-60
Parcels 101C LA, 101C, 101D LA, 123 LA & 123 A
3-23-60
Added R.R. Parcels
6-15-60
Changed Acreage
Parcel 100 P LA
7-15-60
Add Parcel 104 B LA, 104G LA
Change Parcel 100 PLA, 104 A LA, 101 H LA, 150 PLA, 150 S LA, 150 T LA

REVISED PCL. 124-LA NAME CHANGE 2-16-60
Added Pc1s. 151-RA & 152-LA DATE 9-2-60
Revised Pc1s 100K-LA, 100M-LA & 100 P-LA Added Pc1. 100 N-LA DATE 8-19-60
DELETED, PC1S. 100-R-LA, 100-S, 100-U, 113-S, 132-WA & 150-E-LA REVISED PC1S. 102-TS, 114-TS, 123-LA, 123, 129-TS, 150-U-LA ADDED PC1. 100-X DATE 8-1-60
REVISED PCL. 101-LA, 101, 101-A-LA/101-B-LA 101-E, 109-LA, 113-LA, 115-NW, 116-LA 117-LA, 118-LA, 119-LA, 101-C-LA, 123-LA, 125-LA 123-LA, 123, 126-LA, 150-B-LA, 102-TS DELETED PCL. 100-D-LA, 101-E-LA, 101-F-LA (20) 101-C, 112, 101-G-LA, 101-H-LA, 101-J-LA, 101-J-X, 123-A 113-B-LA, 113-C-LA, 128-LA, 150-S-LA, 101-K-LA, DATE

Deleted Pc1.-134-WA 8-14-62
Deleted Pc1.-131-LA 8-8-62

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.- 21 - 10.23
LIMITED ACCESS

158

3/23

R/W

Outlet Structure
Discharge Well
Twin Box Conduit
4'-0" Conc.
BEGIN ACQUISITION Sta. 533+64 103' Lt.
533+20 159.5'
12" Toe Drain
Inlet Structure
12" Conc.
Elev. 920.75
Conc. Pump House
ARCH ST. PUMP STATION
Conc.
48" Pressure Conduit
12" Wingwall
532+87 146'
100 X
30" C.M.P. Toe Drain
M.H.
533+73 122'
Ø O.P.S. Co. #3520 D1 18
533+98.5 120'
534+25 133.5'
R/W Line 2
535+52 131.5'
535+51 121.5'
30" C.M.P. Toe Drain
R/W Line 2
Top of Dike
P-97 Tr. A
O.L. 138
U.S.A.
113 LA
THE MASSILLON PAPER COMPANY
T.B.A. 8.195 Ac.
P.R.O. 0.035 Ac.
533+62.5 93'
R/W Line 1
Ø O.P.S. Co. #2520 D-2 19
Guy
Future Construction ?
533+53.5
24" R.C.P.
48" Conc. Stone Retaining Wall
533
534
535
N 44° 55' 30" W
N 44° 50' 57" W (U.S.)
536
537
538
Conc. Box Meter Station
24" V.C.P.
San. M.H.
60" V.S.P.
Guy
Ø O.E. Co. #2520 D-1 63
North Road
18" C.M.P.
60" V.S.P.
Ø O.P.S. Co. #2520 D-1 4
Guy
21" V.C.P.
U.S.A.
48" C.M.P.
24" Conc. Retain Wall
BEGIN ACQUISITION Sta. 533+48.5 61' Rt.
CITY OF MASSILLON
534+42 117'
R/W Line 1
24" Elm
Mesh Fence Kennels
P.C. Sta. 536+91.29
CURVE DATA
P.I. Sta. 543+97.71
Δ - 20° 30' 00" Rt.
D - 1° 28' 00"
R - 3906.53'
T - 706.42'
L - 1397.73'
Ex - 65.36'
538+97 110'
Limit of Construction ?
R/W Line 1
538+00 106'
END SHEET STA. 539+00

Sheet Completed Date 1-27-60	Revised Date 3-23-60 DATE 8-1-60 REVISED 113 to 113A ICC X 3-1-60 J.D.R.

STA. 532+45 TO STA. 539+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

159

4/23

R/W

STA. - 21 - 10.23

LIMITED ACCESS

Sheet Completed
Date 1-27-60
Revised
Date 3-23-60
DATE 8-1-60
REVISED 109-LA, 113-LA
Revised Fence Line South Of Pcl. 109-LA 9-2-60

BEGIN LIMITED ACCESS
Sta. 0+40 56.5' Lt.

Sta. 0+00 Edwin Ave. Conn. = ℄ Sta. 28+43.85 Erie St. South

ERIE ST. SOUTH
Bituminous Pvt.
Conc. Sidewalk
Existg. 6" Water Line
20" V.C.P.
12" V.C.P.
Conc. S.W.
Stone Sidewalk
Conc.
EDWIN AVE.
12" V.C.P.
M.H.
112" V.C.P.
89° 52' 05"
Existg. 4" Gas Line
24" V.C.P.
Existg. 6" Water Line
OPSCo #1504
S 20° 39' 53" E
24" V.C.P.
Conc. Sidewalk
Conc.
Existg. 6" Gas Line
6" W.L.
W.V.
M.H.
15" V.C.P.
Storm Sewer
24" V.C.P.
Brick S.W.
Conc.
OPSCo 2520A3 14
30" Maple
Brick Drive
Conc.
2½-Sty. Dwg.
#831
Gravel Drive
Frame Garage
Lot No. 9942
2" Spruce
Brick Drive
30" Maple
CITY OF MASSILLON
48" C.M.P.
M.H.
24" V.C.P.
24" V.C.P.
M.H.
48" C.M.P.
M.H.
60" V.S.P.
Earth Road
THE MASSILLON PAPER COMPANY
538+97
110'
4+61
74.5'
538+99
110'
4+61.5
72.5'
Future Construction
Limit of Construction
40' R
N 69° 28' 02" E
5
Tang. to Curve
70° 24' 48"
540
6
4+88
74.5'
540+51
131'
4+87
76.5'
540+53
137'
Earth Road
55' R
P.O.C. Sta. 540+18.94 =
Sta. 6+04.98 Edwin Ave. Conn.
M.H.
GEORGE & ANNA BICKIS
R/W Line
Lot No. 9946
1+80
57'
2+40
61'
Limit of Construction
Fence, Type C
R/W Line
54" Brick
54" C.M.P.
M.H.
24" V.C.P.
Gravel Drive
2½-Sty. Sh. Dwg.
#903
Cistern
0.219 Ac.
109 LA
2-Sty. Stable
Stone Walk
W. A. WELLING
Lot No. 9945
Fence, Type C
Stub
OPSCo 2520A3 22
Rose Bush
18" Catalpa
Frame Garage
2½-Sty. Sh. Dwg.
#839
Cistern
Stone
IRENE PETERS
Lot No. 9944
0.151 Ac.
110 LA
105 LA
14'
2+40
48" C.M.P. Storm Sewer
O.L. 383
Limit of Construction
3 EDWIN AVE. CONN.
4
113 LA
THE MASSILLON PAPER COMPANY
T.B.A. 8.195 Ac.
P.R.O. 0.035 Ac.
2+40
62.5'
Fence, Type C
R/W Line
THE MASSILLON PAPER COMPANY
BOERNER & CARLTON
Glass & Paint Store
1-Sty. Brick
#835
BEGIN LIMITED ACCESS
Sta. 0+40 58.5' Rt.
18" V.C.P.
WILLARD H.
1+80
58.5'
Lot No. 9943
Conc. Blk. Garage
BOERNER
Conc.
2½-Sty. Sh. Dwg.
#831
Brick S.W.
Conc.
Brick Drive
Conc.
2½-Sty. Dwg.
Gravel Drive
Frame Garage
Lot No. 9942
2" Spruce
Brick Drive
30" Maple
CITY OF MASSILLON
48" C.M.P.
M.H.
24" V.C.P.
24" V.C.P.
M.H.
M.H.
Earth Road
55' R
P.O.C. Sta. 540+18.94 =
Sta. 6+04.98 Edwin Ave. Conn.
M.H.

EDWIN AVE. CONN.- STA. 0+00 TO STA. 6+04.98-RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

160

5
23
R/W

STA. - 21 - 10.23
LIMITED ACCESS

BEGIN SHEET STA. 539+00

END SHEET STA. 545+00

Top of Dike

539+35
103'

540+05
100.5'

541+02.5
96'

542+04.5
89'

543+01.5
82'

543+44
81.5'

543+97.5
74'

544+99
82'

545+00
83'

R/W Line

M.H.
Meter Station
Conc. Bldg.

U. S. A.

PT O.L. 297

P 97 TRACT A

100 LA

100A LA

100B LA

544+94.5
65'

48" Seg. Blk. San. Sewer

543+41.5
78'

Limit of Construction

THE MASSILLON PAPER COMPANY

113 LA
T.B.A. 8.195 Ac.
P.R.O. 0.035 Ac.

N 44° 55' 30" W

N 24° 25' 30" W

544+83
22'

10" Locust

O.L. 137

542+83.5
10'

16" Birch

Junk Yard

544+67.5
36'

540
700 Ft. 48" Tang. to Curve

Future Construction

EDWIN AVE. CONN.
N 69° 28' 02" E

P.O.C. Sta. 540+18.94 =
Sta. 6+04.98 Edwin Ave. Conn.

542+00
56'

54" Brick San. Sewer

Fence, Type C

Proposed M.H.

Proposed San. Sewer

542+00
83'

545+00
84'

55' R

40' R

4+88
74.5'

540+51
131'

4+87
76.5'

540+53
137'

Earth Road

W. & L.E. R.R.

Track No. 27 E

CURVE DATA
P.I. Sta. 543+97.71
Δ - 20° 30' 00" Rt.
D - 1° 28' 00"
R - 3906.53'
T - 706.42'
L - 1397.73'
Ex - 63.36'

Sheet Completed
Date 1-27-60
Revised
Date 3-23-60
DATE 8-1-60
REVISED 113-LA

STA. 539+00 TO STA. 545+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.- 21-10.23

LIMITED ACCESS

161

6/23

R/W

O.L. 140

O.L. 137 U.S.A. P 95

Top of Dike

O.L. 137 P 95 U.S.A.

550+50 80' 100C LA

R/W Line

547+00 82'

548+00 80.5'

P 199 H U.S.A.

M.H.

27" C.M. Pipe

U.S.A. Limit of Construction

27" C.M. Pipe

24" C.M. Pipe

R/W Line

546+71.5 60'

100B LA

545+81.5 56'

546+69.5 45'

O.L. 136

Barb Wire Fence

6" Wild Cherry

1-Sty. Corr. Metal Shed

100B LA

℄ 200 G U.S.A.

Corr. Metal Fence

THE MASSILLON PAPER COMPANY

113 LA

T.B.A. 8.195 Ac.
R.R.O. 0.035 Ac.

O.L. 136

N 24° 25' 30" W

550

549

548

547

546

48" Seg. Blk. San. Sewer

48" Seg. Blk. San. Sewer

M.H.

113 LA

BEGIN SHEET STA. 545+00

END SHEET STA. 551+00

Corr. Metal Fence

549+00 64.5'

550+00 64'

107'

105'

113 LA

Tile Blk. Garage

548+00 65.5'

Fence, Type C

Proposed San. Sewer

546+00 63'

Junk Yard

THE MASSILLON PAPER COMPANY

Limit of Construction

R/W Line

550+00 88'

Truck Scales

Gate

R/W Line

P.T. Sta. 550+99.02

O.L. 138

548+00 87'

Junk Yard

1-Sty. Conc. Block

Frame Shed

1-Sty. Conc. Block

Earth

546+00 86.5'

R/W Line

OPSCo. ℄ #2520A3 35

Corr. Metal Fence

OPSCo. ℄ #2520A3 34

OPSCo. ℄ #2520A3 17

Cinder Drive

Twin 12" Sumac

12" Sumac

O.L. 138

W. & L.E. R.R. (NICKEL PLATE R.R.)

Crushed Slag Drive

CURVE DATA
P.I. Sta. 543+97.71
Δ - 20° 30' 00" Rt.
D - 1° 28' 00"
R - 3906.53'
T - 706.42'
L - 1397.73'
Ex - 63.36'

P 97
Tr. C

Sheet Completed
Date 1-27-60

Revised
Date 3-23-60
DATE 8-2-60
REVISED 113-LA

Frame Ramp

Frame Loading Platform

1-Sty. Brick

Track No. 27 E

STA. 545+00 TO STA. 551+00 — RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.- 21 - 10.23

LIMITED ACCESS

162

7/23 R/W

END LIMITED ACCESS Sta. 551+89 110' Lt.

BEGIN LIMITED ACCESS Sta. 552+40 110' Lt.

BEGIN SHEET STA. 551+00

END SHEET STA. 557+00

Conc.

N.P.R.R. (No Number) 552+38.5 93'

100H LA

553+00 91'

P 200 F O.L. 29

U. S. A.

Top of Dike

551+50 81'

100C LA

R/W Line

552+39 72'

R.R. Crossing Sign

24" R.C.P.

Limit of Construction

551+88.5 77'

U. S. A.

100B LA

24" C.M.P. M.H.

18" C.M.P.

PT 199 G O.L. 36

U.S.A.

Limit of Construction

100G LA

PT 199 G O.L. 36

BO - 60

BO - 3

B. & O.

103 LA

18" C.M.P. Toe Drain

PT 199 G O.L. 36

B. & O. R.R. Siding

Timber Retaining Curb

Cone. Sidewalk

6" Water Line

Cone. Sidewalk

BO - 59

PT 199 G - O.L. 36

8" V.C.P.

P. C. Sta. 554+39.28

B. & O.

PT 199 G O.L. 36

551+87.5 27.5'

P 97

12" V.C.P.

S 65° 54' 57" W

103 LA

P 199 G

552 553 N 24° 25' 30" W 554 555 556

W.P.R.R. (No Number)

THE MASSILLON PAPER COMPANY

551+88.5

113 LA

T.B.A. 8.195 Ac.

P.R.O. 0.035 Ac.

Street Light

OPSCo #252DA3 21 M.H.

Conc.

2" H.P. Gas Line

48" Seg. Blk. San. Sewer

48" Seg. Blk.

Existg. 2" H.P. Gas Line

M.H.

Timber Wall

12' Alley

ORD. #1223 DEDICATION

556+44 38'

48" R.C.C. P.X.

556+42.5 58.5'

556+43.5 50.4

O.L. 35

W. & L.E.

102C LA

Tile Blk. Garage

551+82 64.5'

552+38 39'

552+56 39.5'

114 LA

T.B.A. 0.470 Ac.

P.R.O. 0.021 Ac.

THE MASSILLON PAPER COMPANY

Fence, Type C

Existg. 8" V.C. Pipe San. Sewer

Existg. R/W

Fence, Type C

MASSILLON SPRING & RIVET CORPORATION

551+32.5 90'

113 LA

Limit of Construction

Bituminous

Cone. Pad

Construction

Existg. R/W

P 97 TR. B

O.L. 138

6" Conc. Curb

WALNUT ROAD (Bituminous)

6" Conc. Curb

6" H.P. Gas Line

Conc. Sidewalk

P.T. O.L. 36

Existg. R/W

Proposed Sanitary Sewer

554+00 63'

552+50.5 64'

552+52 95'

552+66.5 95'

554+39 96'

556+40.5 87.5

Conc. Blk. Scale House (Abandoned)

Limit of Construction

R/W Line

P 90 A O.L. 35

R/W Line

Metal Scrap Dock

N.P.R.R. (No Number)

552+66.5 138'

552+83 138.5'

Fuel Oil Tank & Hand Pump

OPSCo #2520A2 41

Brick Shed

4" Metal Pipe

OPSCo (No Number)

Wood Scale Platform

OPSCo #2520A2 43

Derailer

Track No. 27 D

P 200 J TR. B O.L. 32 W. & L.E. R.R.

END LIMITED ACCESS Sta. 551+52 158' Rt.

551+09 158'

1" Water Line

Water Line

1"-2" Sumac

12" V.C.P.

P 97 TR. B

O.L. 138

BEGIN LIMITED ACCESS Sta. 552+38-95' Rt.

OPSCo #2520A3 19

F.H.

G.V.

P 90A TR. B

Existg. R/W

OPSCo #2520A3 20

552+38 165'

Brick

114 TS

TS

Transformers

OPSCo #2520A2 60

Conc. Ramp

8" V.C.P.

14" Sumac

M.H.

8" x 18" Frame Sign

Metal Valve Box Water Meter

P 153 TR. 3

U. S. A.

551+88 158'

Gravel

12" V.C.P.

552+48 165'

552+83 169'

552+38 168.5'

Crushed Slag Drive

8" Sumac

ODTCo (No Number) 3- Sty. Brick

14" Sumac

12" Sumac

MASSILLON SPRING & RIVET CORPORATION

1- Sty. Brick

1- Sty. Corr. Metal

Bituminous

Warehouse 2- Sty. Brick

P 97 TR. C TS

102 TS

551+09 208'

551+87.5 208'

1- Sty. Brick

Guard Posts

Conc. Sidewalk

Conc. S.W.

5" Stone Curb

R.R. Crossing Sign

Wood R.R. Warning Sign

OPSCo #2520A3 18

N.P.R.R. #9572

12" V.C.P.

Conc. S.W.

Track No. 27 E

Track No. 17

Track No. 37

W. & L.E. R.R.

CURVE DATA
P.I. Sta. 562+13.52
Δ - 7° 13' 00" Lt.
D - 0° 28' 00"
R - 12,277.70'
T - 774.24'
L - 1546.43'
Ex - 24.39'

Sheet Completed
Date 1-27-60
Revised
Date 3-23-60
DATE 8-2-60
REVISED 113-LA, 114-LA
DELETED 100-E-LA, 100-E

STA. 551+00 TO STA. 557+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010 (5)	

163

8/23 R/W

STA.- 21 - 10.23

LIMITED ACCESS

BEGIN SHEET STA. 557+00

END SHEET STA. 563+00

558+00 74.5'

O.L. 29

R/W Line

U.S.A.

P.T. 199-G - O.L. 36

100 G LA

80-60 80-3

103 LA

559+13 51.5'

559+95 62.5'

Top of Dike

Limit of Construction

100W LA

560+50 77'

561+00 67'

P 200-F O.L. 29

R/W Line

P 200-J Tr. A O.L. 29

106 LA

562+89 41.5'

P 200-J Tr. A O.L. 32

B. & O. R.R.

Track No. 27C

Track No. 27B

560+72.5 60.5'

80-58

B. & O.

P 199 - G

558

558+89 00'

559

559+94 18.5'

P.T. 199-G - O.L. 36

560+73.5 32'

561+74 31.5'

P 200-J Tr. B O.L. 32

Track No. 29

562

562+93.5 12'

N 24° 25' 30" W

N 31° 38' 30" W

559+97.5 5'

561+29 60'

P.T. 199-G

-O.L. 36

O.P.S.Co. (No Number)

Track No. 27D

558+49 58.5'

102C LA

B. & O. R.R. & W. & L.E. R.R. Joint

W. & L.E. R.R.

560+66 73'

102D LA

100N LA

0.4536 Ac.

U.S.A. O.L. 30

P 199-F

0.0667 Ac.

100M LA

Proposed San Sewer

48" R.C.C. PX

557+61 64'

558+76.5 70'

P.T. 199-G - O.L. 36

Fence, Type C

M.H.

Limit of Construction

NOTE: See Sheet No 18

R/W Line

EKCO FOUNDATION INC.

R/W Line

P 200-J Tr. B O.L. 32

559+07.5 72'

102B LA

559+85 77'

560+41 80.5'

48" R.C.C. PX

Existing Pipeline Easement

562+25.54 63.82'

P-92 Tr. B

558+97.5 81.5'

O.L. 31

561+30.77 61.84'

Existing Pipeline Easement

558+64 82.5'

TRACT D - P 200-J

Track No. 30

P 200-J Tr. B O.L. 32

EKCO FOUNDATION INC.

107

O.L. 32 W. & L.E. R.R.

Track No. 29

559+56.79 182.74'

Track No. 42

Track No. 34

TRACT E - P 200-J

O.L. 31

560+19.58 188.41'

Track No. 31

CURVE DATA
P.I. Sta. 562+13.52
Δ - 7° 13' 00" Lt.
D - 0° 28' 00"
R - 12,277.70'
T - 774.24'
L - 1546.43'
Ex - 24.39'

Sheet Completed
Date 1-27-60
Revised
Date 3-23-60
Revised 100M-LA, Added 100N-LA 9-2-60

STA. 557+00 TO STA. 563+00 — RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010 (5)	

164

9 / 23 R/W

STA.- 21- 10.23

LIMITED ACCESS

Suspend U-1010 (5) | Begin UG-1010 (5) | End UG-1010 (5) | Resume U-1010 (5)

Sta. 563+58 | Sta. 568+16

563+49 86.5'

564+29 82'

565+93.04 70.43'

565+83.71 69.91'

565+83.87 65.22'

566+06.85 45.34'

566+06.85 44.84'

566+75.42 44.16'

566+75.42 45.10'

567+41.90 69.30'

567+60.89 84.94'

568+39.11 29.04'

568+30.5 17.5'

565+27.20 45.30'

567+61.5 2'

565+14.82 40.13'

565+14.82 39.63'

564+67.14 55.37'

565+40.18 39.41'

565+40.18 39.91'

564+63.27 58.71'

565+98.27 59.21'

566+08.51 94.07'

564+23.51 60.59'

563+89.64 61.84'

566+06 104'

567+00 89'

567+47 86.5'

567+68 76.5'

568+22 86.5'

568+12 86.5'

566+88 146'

567+34 154'

NOTE: See Sheet No. 18

NOTE: See Sheet No. 18

NOTE: See Sheet No. 18

NOTE: See Sheet No. 18

30" Wing Wall

30" Wing Wall

Top of Dike

Top of Dike

Track No. 27B

U. S. A.

U. S. A.

U. S. A.

O.L. 29

O.L. 30

O.L. 38

PENNSYLVANIA RAILROAD (2 Tracks)

P.R.R. Telegraph Pole

P.R.R. Telegraph Pole

P.R.R. Telegraph Pole

P.R.R. Telegraph Pole

P.R.R. Telegraph Pole

B & O. R.R.

PENNA. R. R.

PENNA. R. R.

R/W Line

Limit of Construction

P-200-J TRACT A P.T. O.L. 30

P 200-J TRACT A P.T. O.L. 30

P-199-F P.T. O.L. 30

P 199 F P.T. O.L. 30

P-92 TRACT A P.T. O.L. 31

P-199 E TRACT B P.T. South Ave.

P-199 E TRACT A

106 LA

104 B LA

100 P LA 0.0094 Ac.

100 K LA 0.0125 Ac.

100 N LA 0.4536 Ac.

100 M LA 0.0667 Ac.

104 C LA

104 A

115 LA 0.155 Ac.

115 A LA 0.304 Ac.

115 WA

107

PA-8

CHESTER K. CAMPBELL dba CAMPBELL OIL COMPANY

CAMPBELL OIL COMPANY

EKCO FOUNDATION INC.

Fence, Type C

Existing R/W

Existing Pipe Easement

Proposed 48" Sanitary Sewer

48" Brick San. Sewer

48" C.I.P. Extra Heavy

48" R.C.C.P.

12" C.M.P.

52" B.W.

30" Elm

Lot No. 9368

Lot No. 9373

Lot No. 9369

Lot No. 2136

Lot No. 2135

Lot No. 2134

Gravel Alley

Alley (Cinder)

Cinder Drive

SOUTH AVENUE

Cyclone Fence

Bituminous

Earth

Gravel

(Gravel)

(Bituminous)

1- Sty. Brick

1- Sty. Cone. Blk. Shed

1- Sty. Tile Block

Cone. Blk. Pump House

4- 20,000 Gal. Storage Tanks

Cone. Pad

Corr. Metal Shed

Water Meter

Gas Pump Tank Tops

Gasoline Tank Tops

Breather Pipe

Tank Top

Gas Sign

Gas Island

O.P.S. Co. #2520 Bl 45

Oil Tank Cap

Snow Fence

8" Sumac

4" Sumac

M.H.

G.V.

8" V.C.P.

6" Conc. Curb

Depressed Curb

Bit.

Conc.

Conc. Ramp

Conc. S.W.

W.V.

N 31° 38' 30" W

CURVE DATA
P.I. Sta. 562+13.52
Δ- 7° 13' 00" Lt.
D- 0° 28' 00
R- 12,277.70'
T- 774.24'
L- 1546.43'
Ex- 24.39'

R= 1286.43

BEGIN SHEET STA. 563+00

END SHEET STA. 569+00

Sheet Completed Date	1-27-60
Revised Date	3-23-60
Date	6-15-60
Revised Parcels 100 P LA & 138	
Date	7-13-60
Remove Parcel 104 B LA	
DATE	7-28-60

REVISED PARCEL 115-LA
Revised Pcls 100 P LA, 100 K LA, 100 M LA & 104 A LA, Added 100 N LA & 115 WA Lines 9-2-60

STA. 563+00 TO STA. 569+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

165

10 / 23

R/W

STA. - 21 - 10.23

LIMITED ACCESS

CURVE DATA
P.I. Sta. 562+13.52
Δ- 7° 13' 00" Lt.
D - 0° 28' 00"
R - 12,277.70'
T - 774.24'
L - 1546.43'
Ex - 24.39'

BEGIN SHEET STA. 569+00

END SHEET STA. 575+00

P-199 E TRACT A

U. S. A.

Top of Dike

12" C.M. Pipe

100R LA

570+02 87'

R/W Line

P-90

100S LA

P-89

P-151 TRACT 10

Lot No. 1060

M.H.

15" C.M. Pipe

104C LA

PENNA. R. R.

Limit of Construction

PA-8

104A

569+38 68'

Lot No. 1064

572+24 56.5'

573+90.5 71.5'

574+10 49'

Lot No. 1059

Conc. & Brick pump House

P-88C

100T LA

572+92 63'

P-88

100J LA

574+25.5 49.5'

101 LA 0.845 Ac.

48" Brick San. Sewer

P.T. Sta. 569+85.71

48" Seg. Block San. Sewer

572+19 28'

15" R.C. Pipe

572+89 45'

Lot No. 1057

574+27 18.5'

MASSILLON CONSERVANCY DISTRICT

STOPPO CREEK

569+26.5

570

571

Earth Drive

572

573

N 31° 38' 30" W

574

Ditch

P-88C

569+86.5 11'

569+68 8'

CAMPBELL OIL COMPANY

Conc. Walk

140" Stump

570+45.5 22.5'

570+63.5 25.5

P-87

Lot No. 1056

574+30 46'

Fence Gate Type C

Fence Type C

42" Willow

574+71 54'

48" Seg. Blk. Pipe San. Sewer

574+14 47'

574+57 54'

574+91 67'

30" Stump

1½ - Sty. Fr. Dwg.

0.103 Ac.

116 LA

570+59.5 46'

JOSEPH W. OATS

0.069 Ac.

117 LA

Lot No. 2127

0.102 Ac.

EARLE S. JAMISON

34" Poplar

OPSCo. #2521C4 15

W.V.

Joint

2- Sty. Fr. #235

Lot No. 2136

0.304 Ac.

115A LA

570+54 77'

118 LA

8" Apple

10" Apple

570+64 92'

6" Plum

Stone Walk

Lot No. 2126

MINNIE B. SNYDER

Proposed 48" Sanitary Sewer

Cyclone Fence

Wood Fence

Barricade

Stone

2½ Sty. Shingle

233

Fence Type C

Barricade

Limit of Construction

MASSILLON CONSERVANCY DISTRICT

573+89 87.5'

573+60 87.5'

OPSCo. #2521C4 12

OPSCo. #2521C4 13

OPSCo. #2521C4 14

8" Water Line

F.H.

2" Gas Line

G.V.

8" V.C.P.

15" V.C.P.

6" Poplar

4" Elm

Lot No. 11143

Channel

101 LA 0.845 Ac.

101 LA 0.076 Ac.

OPSCo. (No Number)

574+91 69'

RW

RW

574+57.5 100.5'

569+53 88.5'

R/W Line

569+71 89'

570+32.5 51'

570+51 91.5'

Lot No. 2128

Lot No. 2135

Gravel

Drive (Earth)

1- Sty. Tile Block

MINNIE B. SNYDER

Alley (Cinder)

Lot No. 2134

Cyclone Fence

12" Sumac

8" Sumac

Board Fence

(Brick)

(Concrete)

3- Sty. Brick

Alley (Cinder)

WA

119 WA

570+62 100'

Lot No. 2125

570+49 98'

OLLIE L. NEAL

Conc.

119 LA 0.016 Ac.

571+46 95'

R/W Line

1- Sty. Fr. #229

2- Sty. Fr.

Wood pad

Chicken Coop

Conc.

2- Sty. Fr. #227

4" Elm

10" Conc.

Existing R/W

Row of Fence Posts

10" Apple

6" Apple

6" Peach

Wire Mesh Fence

Frame Garage

2- Sty. Shingle #223

Stone

Frame Garage

24" Maple

14" Sumac

Frame Shed

(Cinder)

Brick

OAK AVENUE (Earth)

Earth

Conc. Sidewalk

Existing R/W

Conc. Stairwell

571+95 96.5'

571+93.5 104'

572+61.5 99'

R/W Line

573+55 102'

573+86 103'

Lot No. 1069

MASSILLON CONSERVANCY DISTRICT

Lot No. 1070

26" Willow

573+54.5 134'

P-87A

574+42.5 144'

22" Elm

101 X 0.222 Ac.

Lot No. 1071

573+54.5 200'

574+34 182'

P-87B

Lot No. 1068

14" Locust

1½ - Sty. Brick Church A.M.E.Z. CHURCH

573+66.5 202'

14" Sumac

574+16.5 217'

573+65.5 207'

Lot No. 1067

Gas Meter

Post Pg.

Lot No. 1072

Mesh Fence

P-87C

Sheet Completed
Date 1-27-60

Revised
Date 2-11-60
Parcel 101 C LA
Parcel 101 C
DATE 7-27-60
REVISED PARCELS 101, 101-X, 101-LA, 116-LA, 117-LA, 118-LA, 119-LA DELETED 101-J-LA, 101-C, 101-J-X, 101-P-LA, 101-B-LA, 101-C-LA, TOM

STA. 569+00 TO STA. 575+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

166

11
23
R/W

STA.- 21- 10.23
LIMITED ACCESS

SPIRAL CURVE DATA

P.I. Sta. 597+73.67
Δ - 60° 40' 16" Rt.
D - 2° 07' 30"
L.S. - 300.00'
R - 2696.27'
θs - 3° 11' 15"
P - 1.39'
Xc - 299.91'
Yc - 5.57'
K - 149.99'
L.T. - 200.03'
S.T. - 100.03'
Lc - 2555.11'
Ts - 1728.62'
Es - 429.34'

BEGIN SHEET STA. 575+00

END SHEET STA. 581+00

MASSILLON CONSERVANCY DISTRICT

U.S.A.

575+56 84.5'

152 TRACT 5

15" C.M.P.

R/W Line

576+24.5 80'

MASSILLON CONSERVANCY DISTRICT

Limit of Construction

578+39 61.5'

R/W Line

U.S.A.

Top of Dike

578+42 75.5'

PA-8

PENNA. R.R.

104C LA

Western Union

Lot No. 1058

576+30 47'

Lot No. 1054

104D LA

PA-9

PENNA. R.R.

Western Union

M.H.

575+49 48'

MASSILLON CONSERVANCY DISTRICT

Lot No. 1054

Lot No. 1057

576

577

N 31° 38' 30" W

578

578+31.5 21.5'

578+95

OPSCo # 252104-2 29

2"x6" Wood Pole

578+27.5

0.845 Ac.

101 LA

TD-14 TRACT B

Earth Road

12" Water Line

(Supported On Bridge)

15" V.C.P.

123 LA

0.564 Ac.

Lot No. 1056

Lot No. 1053

Lot No. 1052

J. S. SANDERS

Wire Fence

Parking Lot (Gravel)

48" V.C.P.

Lot No. 1051

Limit of Construction

Fence, Type C

575+28.5 68'

576+08 70'

576+62 11.5

577+81 95'

577+97 95.5'

Single Strand Wire Fence on Channel Iron Posts

Wood Curb

578+09 100'

Catch Basin

OPSCo # 252104-2 30

OPSCo # 252104-2 32

48" Seg. Blk.

THIRD STREET (Abandoned)

END LIMITED ACCESS STA. 577+81 143.5' Rt.

24" V.C.P.

Blocked Off

18" V.C.P.

577+99 147.5

Parking Sign

3'x5' Metal Sign

OPSCo (No Number)

Lot No. 11142

Used Car Lot

Wire Fence

Parking Lot

J. S. SANDERS

Lot No. 295

123

0.019 Ac.

RW

577+82.5 236'

34" Maple

Bit.

24" V.C.P.

Conc. Sidewalk

26" Maple

MASSILLON CONSERVANCY DISTRICT

101 LA

Lot No. 11143

0.076 Ac.

OPSCo (No Number)

575+20 112.5'

TREMONT AVE.

Western Union Conduit

Western Union M.H.

578+97.5 12'

PA-9

18" V.C.P.

40" Poplar

36" Aspen

578+89 33.5'

579+91

579+87.5 46.5'

0.159 Ac.

101A LA

MASSILLON CONSERVANCY DISTRICT

580+41.5 7'

150A LA

40'

Lot No. 164

104D LA

U.S.A.

580

579

P-151

TRACT-7

580+39 6.5'

580+39 5.5'

U.S.A. 0.208 Ac.

150B LA

MASSILLON CONSERVANCY DISTRICT 0.059 Ac.

101B LA

580+59 8'

580+45.05

580+54 31'

Lot No. 163

130 LA

580+50 Limit of Construction 53'

Fence, Type C

Lot No. 162

THE RED HEAD OIL COMPANY 0.075 Ac.

580+30 51'

580+50 55'

Lot No. 161

(Earth)

Privet

Lot No. 160

OPSCo #252104-2

(Bituminous)

Gasoline Tank Valves

18 Wood Fence

Conc. Gas Island & Air Hose

Frame Garage

Gravel

6" Conc. Ret. Wall

Privet

Gasoline Tank Valve

THE RED HEAD OIL CO. (Bituminous)

Lot No. 159

Existing R/W

Conc.

Depressed Curb

36" V.C.P.

THIRD STREET

DIAMOND COURT (Earth)

Lot No. 169

580+30.5 49'

579+87.5 48'

Lot No. 174

Lot No. 175

579+32.5 53'

15" Sumac

18" Walnut

12" Apple

Fr. Garage

Bit.

R/W Line

124 LA

0.042 Ac.

2-Sty. Shingle

AUDREY J. SNOWDEN & GEROTHA McGOWAN

578+83 63'

Privet Hedge

Brick

W.V.

579+34 55'

579+86.5 52.5'

580+28 60.5'

Lot No. 173

Wire Mesh Fence

6" Willow

Lilac

Lot No. 172

Conc.

0.057 Ac.

DONALD E. RICHARDSON

2-Sty. Shingle

#67-71

Limit of Construction

Earth

Conc. Walk

579+22.5 12.5'

125 LA

14" Sumac

579+30.5 72'

ARCHIE & LILLY CAMERON

2-Sty. Shingle

#57

#51

2-Sty. Shingle

2½-Sty. Shingle

DIAMOND COURT

Conc. Sidewalk

Catch Basin

W.V.

18" Maple

6" Stone Curb

Stone Flower Box

Top Metal Cover

S.V.

6.V.

6" Willow

Conc.

Bushes

OBTCo # 2031

36" V.C.P.

N 20°39'07" W

(Bituminous over Brick)

BEGIN LIMITED ACCESS STA. 579+22 122' Rt.

M.H.

578+61.5 176.5

OPSCo #252104-2 28

Street Light

26" Elm

OPSCo #252104-2 27

W.V.

G.V.

Conc.

Limit of Construction

OPSCo #252104-2 20

OPSCo #252104-2 19

H-Frame

6" Stone Curb

Street Marker

Earth

Conc. Sidewalk

Existg. R/W

Hedge

T.S.

Maple

2" Sumac

6" Sumac

Street Light

129 T.S.

579+25.5 187.5'

Lilac

#56

#52

2½-Sty. Shingle

578+57 196.5

1-Sty. Brick Shingle

2-Sty. Brick Shingle

RALPH L. PHILLIPS #66

Lot No. 189

Wire Mesh Fence

Lot No. 186

Lot No. 188

Brick

Conc.

32" Locust

12" Cherry

CHARLES AVE. (Bituminous)

S 69°17'45" W

Sheet Completed Date 1-27-60

Revised Date 2-11-60
Parcels 101 C LA
101 C
Parcels 101 D LA
123 LA & 123 A
DATE 7-27-60
REVISED PARCELS 130-LA, 101-B-LA, 150-B-LA, 101, 101-LA 101-A-LA, DELETED 101-B-LA 101-C-LA, 101-C, 123-A, 101-F-LA
Revised Limited Access & Area Parcel 123-2 123 LA & 124-LA
REVISED PCL. 124-LA-NAME 1-9-61

STA. 575+00 TO STA. 581+00 — RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

167

12
23
R/W

STA.- 21- 10.23

LIMITED ACCESS

SPIRAL CURVE DATA

P.I. Sta. 597+73.67
Δ - 60° 40' 16" Rt.
D - 2° 07' 30"
L.S. - 300.00'
R - 2696.27'
θs - 3° 11' 15"
P - 1.39'
Xc - 299.91'
Yc - 5.57'
K - 149.99'
L.T. - 200.03'
S.T. - 100.03'
Lc - 2555.11'
Ts - 1728.62'
Es - 429.34'

BEGIN SHEET STA. 581+00

END SHEET STA. 587+00

LINCOLN WAY

THIRD STREET

FEDERAL AVE. S.W. (Bit.)

Sheet Completed
Date 1-27-60

Revised
Date 3-23-60
Date 7-13-60
Add Parcel
104 G LA
DATE 7-25-60
REVISED PARCELS
130-LA, 101-B-LA, 150-B-LA,
101-F-LA, 101-G-LA, 132-LA
DELETED 101-F-LA, 101-G-LA
Deleted 132 WA 8-16-60
Revised LA Line From
Sta. 586+80 to 587+00
8-5-61

STA. 581+00 TO STA. 587+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010 (5)	

168

13
23

R/W

STA.- 21- 10.23

LIMITED ACCESS

SPIRAL CURVE DATA

P.I. Sta. 597+73.67
Δ - 60° 40' 16" Rt.
D - 2° 07' 30"
L.S. - 300.00'
R - 2696.27'
θs - 3° 11' 15"
p - 1.39'
Xe - 299.91'
Ye - 5.57'
K - 149.99'
L.T. - 200.03'
S.T. - 100.03'
Le - 2555.11'
Ts - 1728.62'
Es - 429.34'

N 31° 38' 30" W

BEGIN SHEET STA. 587+00

END SHEET STA. 593+00

587+00 40'
588+00 45'
588+86.5 32'
589+00 50'
589+30.5 32'
590+00 48'
591+00 47'
591+30.5 46'
591+33 30'
592+00 46'
592+19
592+47 7'
592+60 71'
592+67.5 103'

U.S.A.
R/W Line ℄
15" C.M.P.
M.H.
12" C.M.P.
104 G LA
150C LA
Top of Dike
P-71 U.S.A.
150G LA
P-65
Limit of Construction
104 E LA
PA-10
PENNA R.R.
588
589
590
591
592
589+33 8'
589+33
589+33.5 2.5'
589+34.5 13'
588+75 9.5'
587+98 8'
THE OHIO DRILLING COMPANY
132 LA
0.559 Ac.
590+37 12.5'
590+36 1.5'
591+38 0.5'
O.L. 13
136 LA 0.120 Ac.
150H LA
U.S.A.
12" C.M.P.
104E LA
Guard Rail
R/W Line
O.L. 12
THE OHIO DRILLING COMPANY
588+08.5 36.5'
1- Sty. Brick
Conc. Wall Track Support
Earth
8.5'
Conc.
133 LA 0.154 Ac.
1- Sty. Tile Block
5- Sty. Brick
134 LA 0.119 Ac. CATHERINE KOLEK
Conc. Blk. Garage
14" Apple
Lilac
2- Sty. Insulbrick
12" Sumac
6" Sumac
CATHERINE KOLEK
Lot No. 9249
588+91 61'
589+38.5 62.5'
590+43.5 64'
591+47.5 61'
591+59.5 123'
Fence, Type C ℄
Limit of Construction ℄
132 LA 0.559 Ac.
LEWIS E. & ANN G. LEMMON
O.L. 12
1- Sty. Conc. Blk.
THE OHIO DRILLING COMPANY
WA
Truck Scales
Gas Pump
133 WA
Conc.
O.L. 14
ANTHONY FULMER
Gravel
Brick
Conc. Blk. Garage
Lilac
Lawn
Conc. Walk
Drive (Gravel)
Parking Lot & Pipe Yard
Pipe Shed
Bituminous Drive
Bituminous
3- Sty. Brick
Cyclone Fence
P.C. Iron Pin
Conc. Sidewalk
Existg. R/W
Gravel
Parking Sign
#2521C1-3 5
#2521C1-3 2
#2521C1-3 19
#2521C1-3 18
#2521C1-3 1
#2521C2 36
#2521C2 35
OPSCo
OBTCo #12610
26" Maple
34" Maple
30" Maple
22" Maple
F.H.
G.V.
W.V.
12" V.C.P.
15" V.C.P.
24" V.C.P.
10" V.C.P.
Depressed Curb
Bituminous Sidewalk
(Bituminous)
THIRD STREET
30" Seg. Blk. San. Sewer
Drive (Bituminous)
Guard Rail
MASSILLON CONS. DIST.

Sheet Completed
Date 1- 27- 60

Revised
Date 3-23-60
Date 7-13-60
Add Parcel
104 G LA
DATE 7-25-60
REVISED PARCELS
132-LA 136-LA, 134-LA
Deleted 132 WA 8-16-60
Revised L&B Line From Sta. 587+00 To 588+91 9-2-61
DELETED PCL.: 134-WA
ADDED INSERT 8-14-62
DELETED INSERT REVISED R/W LINE PCL.: 136-LA 10-25-62

STA. 587+00 TO STA. 593+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010 (5)	

169

14/23 R/W

STA. - 21- 10.23

LIMITED ACCESS

SPIRAL CURVE DATA

P.I. Sta. 597+73.67
Δ - 60° 40' 16" Rt.
D - 2° 07' 30"
L.S. - 300.00'
R - 2696.27'
θs - 3° 11" 15"
P - 1.39'
Xc - 299.91'
Yc - 5.57'
K - 149.99'
L.T. - 200.03'
S.T. - 100.03'
Lc - 2555.11'
Ts - 1728.62'
Es - 429.34'

BEGIN SHEET STA. 593+00

END SHEET STA. 599+00

P-63 · P-62 · U.S.A. · P-151 TRACT-5 · P-61B TRACT-A · P-61 TRACT-A · P-61 TRACT-B · P-61B TRACT-B · P-153 TRACT-4 · P-72

Abandoned Third Street

Approx. Old Channel ℄

Cherry Road Siphon 15" 18" 10"

R/W Line · Limit of Construction · 12" C.M.P. · Top of Dike

593+08 47' · 150J LA · 594+12.5 48' · 594+16 34' · 595+06 49' · 596+04.5 49' · 597+00 48'

150H LA · 594+95.5 35' · 150M LA · 595+85 36.5' · 596+13.5 36.5'

104E LA · 593+17 8' · 593+11.5 33' · 593+18.5 · 594+23.5 4' · 594+73 5' · PA-10

PENNA. R.R. O.L. 15 · Metal Trap Door · Conc.

Conc. Pit Coal · Conc. Blk. Garage 0.119 Ac.

594 · 594+24.5 · 595 · 596 · 597

593+18 3.5' · 595+51 6' · 596+14 7' · 150T LA

M.H. · 18" C.M.P. · Storm Sewer 24" C.M.P. · Limit of Construction · R/W Line

134 LA · 133A LA 0.181 Ac. · 150K LA · 150L LA · 150P LA

30" Seg. Blk. San. Sewer

597+80 6' · 598 · 597+62 1' · Guard Rail

ANTHONY FULMER Lot No. 9248

593+11.5 68 · 594+36 43' · 594+08 77.5' · 594+66.5 78.5' · 594+89 79' · 595+59 63.5' · 596+21 44' · 596+24 53'

Limit of Construction · Fence, Type C · Existg. 2" Gas Line

150 P · 150U LA · 150 L

T.B.A. 0.300 Ac. P.R.O. 0.678 Ac. · 101-C LA

MASSILLON CONSERVANCY DISTRICT · Existg. 12" Water Line

2-Sty. Insulbric #315 · Yard · Cool R/W Line

593+37.5 75.5 · 593+78 112.5' · 594+83 87.5' · 595+07.5 80' · 595+45.5 81' · 596+20 81' · 597+76.5 75' · 597+91.5 67'

M.H. · R/W · 30" Seg. Blk. San. Sewer · Conc. S.W. (Buried) · Gravel Driveway · Lawn · Conc. Walk · Lot No. 9249

CATHERINE KOLEK

Barricade · Existg. 12" Water Line · OECo #2521-C2 30 · Conc. Sidewalk · Guard Rail · 24" V.C.P. · Fence, Type C · Existg. R/W

THIRD STREET (Bituminous) · OECo #2521-C2 29 · Conc. Sidewalk · Guard Rail · 24" V.C.P.

598+02 93.5' · 598+71 69' · 101C LA · R/W Line

CITY OF MASSILLON

Sta. 24+07.00 Third St. = Sta. 0+00 Third St. Conn.

24 · M.H. · 30" Seg. Blk. San. Sewer · 80° 03' 10" · 15" V.C.P. · 12" V.C.P. · OPSCo #2521 C2 27

Conc. Sidewalk · Gravel · Guard Rail · Street Marker · U.S.A.

THIRD ST. · E. SMALLY · MASSILLON CONSERVANCY DISTRICT · CITY OF MASSILLON

54" C.M.P. · WEIRICH BLVD. N-W (Bituminous) · 6" Conc. Curb · OPSCo #2521 C2 52

MASSILLON CONSERVANCY DISTRICT

Cyclone Fence & Billboards · Ball Park

Sheet Completed Date 1-27-60

Revised
Date 3-23-60
Date 7-13-60
Change Parcels 101 H LA, 150 T LA, 150 S LA, 150 P LA
DATE 8-3-60
REVISED 101-C LA, 134-LA 133-A-LA DELETED 101-H-LA, 105-S-LA DELETED PCL.-134-WA
8-14-62
REVISED R/W LINE PCL. 134, LR 10-2662

STA. 593+00 TO STA. 599+00 — RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA. - 21 - 10.23
LIMITED ACCESS

170
15
23
R/W

END LIMITED ACCESS
STA. 599 + 89
97' Lt.

BEGIN LIMITED ACCESS
STA. 600 + 54
97' Lt.

Sta. 600 + 75.39 ℄ =
Sta. 4 + 95.54 Cherry Rd.

END ACQUISITION
STA. 601 + 30
50' Lt.

599 + 96.5
80'

600 + 54
91'

600 + 70
65.5'

U.S.A.
P-61, TRACT A
599 + 48.5
47.5'

Top of Dike

R/W Line 7

Limit of Construction

U.S.A.

Street Marker

150 R LA

150 T LA

Existing R/W 7

Existing Guard Rail

Existing 6" Water Line

M.H.

Conc. Gutter

12" R.C. Pipe

24" V.C. Pipe

24" C.M. Pipe Storm Sewer

W.V.

600 + 32.5
8'

601 + 00
50'

Existing 12" Water Line

BEGIN SHEET STA. 599 + 00

END SHEET STA. 605 + 00

(Bituminous) ℄ 600

599 + 29
6'

MASSILLON CONSERVANCY DISTRICT

Conc. Sidewalk

599 + 51
47.5'

T.B.A. 0.300 Ac.
P.R.O. 0.678 Ac.
24" Pipe Storm Sewer

101 C LA

Guard Fence

Traffic Signal

School Zone Sign

8" V.C. Pipe Sanitary Sewer

18" V.C. Pipe Storm Sewer

Steel Light Pole

600 + 30.5
33.5'

599 + 50
66'

Fence, Type C 2

600 + 00
75.5'

600 + 50
88'

MASSILLON CONSERVANCY DISTRICT

101 C LA

T.B.A. 0.300 Ac.
P.R.O. 0.678 Ac.

Limit of Construction

R/W Line

601 + 03.5
116'

6" Beveled Curve

Traffic Light (10' Steel Pole)

601 + 58
86.5'

Existing 4" Gas Line

O.P.S.Co. #2621 #1

S 69° 37' 16" W

W.V.

Concrete Port.

6" Conc. Curb 7

Street Light

Steel Pole

12" V.C.P.

602

U.S. Route 21

603

604

12" R.C. Pipe

602 + 37
40'

603 + 46
40'

603 + 67.5
43'

R/W Line & Fence, Type C

Existing R/W 7

602 + 36.5
44.5'

Cyclone Fence

Limit of Construction
Fence, Type C 2

135 LA

Bit. Court

HORACE MANN SCHOOL

END ACQUISITION
STA. 603 + 62
43.5' Rt.

601 + 90.5
107'

601 + 87
108'

R/W Line 2

8" Conc. Walk

602 + 15
157'

BEGIN LIMITED ACCESS
STA. 602 + 0.5
162' Rt.

MASSILLON CITY SCHOOL DISTRICT

30" Maple

Lot No. 3598

Lot No. 3597

SPIRAL CURVE DATA

P.I. Sta. 597+73.67	Ye - 5.57'
Δ - 60° 40' 16" Rt.	K - 149.99'
D - 2° 07' 30"	L.T. - 200.03'
L.S. - 300.00'	S.T. - 100.03'
R - 2696.27'	Lc - 2555.11'
θs - 3° 11' 15"	Ts - 1728.62'
P - 1.39'	Es - 429.34'
Xc - 299.91'	

600 + 98
132.5'

12" Elm

601 + 16
159'

Gravel

O.P.S.Co. #2621 #2

601 + 25.5
153.5'

22" Willow

Earth Drive

Lot No. 2

601 + 33.5
146.5'

Conc.

2½-Sty. Shingle Dwg.

Brick

Lot No. 3

MASSILLON CONSERVANCY DISTRICT

14" Twin Mulberry

12" Mulberry

151

H.G. JORDEN

Cyclone Fence ?

EVA M. BARTH

152 LA

END LIMITED ACCESS
STA. 601 + 51
193' Rt.

Tile Blk. Gar.

Light Pole

Conc. Walk

2½-Sty. Shingle Dwg.

Earth Drive

Fr. Gar.

Lot No. 4

Lot No. 5

Brick Drive

Conc. S.W.

Existing R/W 7

Bituminous Port.

CHERRY ROAD N.W. 2

Existing 8" Water Line

6" Conc. Curb 7

Existing R/W

Conc. S.W.

O.P.S.Co. #2621 #3

O.P.S.Co. #47

Steel Pole

Conc.

Br.

Earth

Sheet Completed
Date 1-27-60
Revised
Date 3-23-60
Date 7-13-60
Change Parcels 150 T LA, 101 H LA
DATE 8-3-60 REVISED 101-C-LA DELETED 101-H-LA
9-14-60 Added Pcls 151-LA & 152-LA Deleted Pcl.-151-LA 8-8-62

Scale : 1" = 20'

STA. 599+00 TO STA. 605+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-U6-1010(5)	

STA.- 21-10.23

171

16
23
R/W

THIRD STREET (Bituminous)

Conc. Sidewalk

Guard Fence

O.P.S.Co. #2521-G2 27

Existing R/W Line

CITY OF MASSILLON

0+58 28'

0+48 45.5'

0+73 25'

RW

54" C.M.P. Storm Sewer

Existing R/W Line

6" Conc. Curb

WEIRICH BLVD. (Bituminous) N.W.

Sta. 2+24.99 Third St. Conn. = Sta. 5+00 Weirich Blvd.

AGATHON BALL PARK

Cyclone Fence & Billboards

END WORK Sta. 6+63.5

48" Triple Willow

Gate

O.P.S.Co. #2521C1-2 2

Street Light

6" Conc. Curb

Cyclone Fence

Conc. Sidewalk

Cast Iron 8" Water Line

1st STREET (Conc.)

℄ THIRD STREET CONNECTION

N 59° 25' 19" E

Clothes Post

0+48 29.5'

0+78.5 17' 1

0+28 27'

137

0+79.5 25'

0+94 25'

126

RW

RW

E. SMALLY

CITY OF MASSILLON

O.L. 11

0+22 59

Gravel

M.H.

F.H.

24" V.C.P. San. Sewer

M.H.

24" V.C.P.

Cyclone Fence

Drive (Bituminous)

Gate

Conc. Blk. Bldg.

2521 C1-2 O.P.S.Co. Street Light Dead End

S 68° 14' 46" E 552.19'55"

M.H.

8" V.C.P.

10" V.C.P.

15" V.C.P.

12" V.C.P.

M.H.

12" V.C.P.

M.H.

Existing R/W Line

54" C.M.P.

END WORK Sta. 6+00

Existing R/W Line

1" Peach Trees

Clothes Post

O.P.S.Co. #2521C1-2

Stone Wall

Brick Border

Metal Post

Cast Iron 8" Water Line

Metal Clothes Pole

48" Willow

Stone Mon.

24" V.C.P.

San. M.H.

24" V.C.P.

30" C.M. Pipe Storm Sewer (Approx. Location)

6" Triple Catalpa

Conc.

1-Sty. Shingle

Stone Mon.

Conc.

2-Sty. Shingle

Bar & Grill 1-Sty. Shingle

1-Sty. Store

Conc.

2-Sty. Shingle

Earth Drive

Well & Pump

Conc. Blk. Garage

Privet Hedge

Conc. Sidewalk

G.V.

W.V.

The City Will Acquire Right-of-Way For First Street Connection Between First Street And Third Street. There Will Be No Federal Participation In The Right-of-Way For This Portion of Project.

Sheet Completed Date 1-27-60

Revised Date 3-23-60

Scale : 1" = 20'

THIRD STREET CONN. STA. 0+00 to STA. 6+63.5 RIGHT OF WAY PLAN

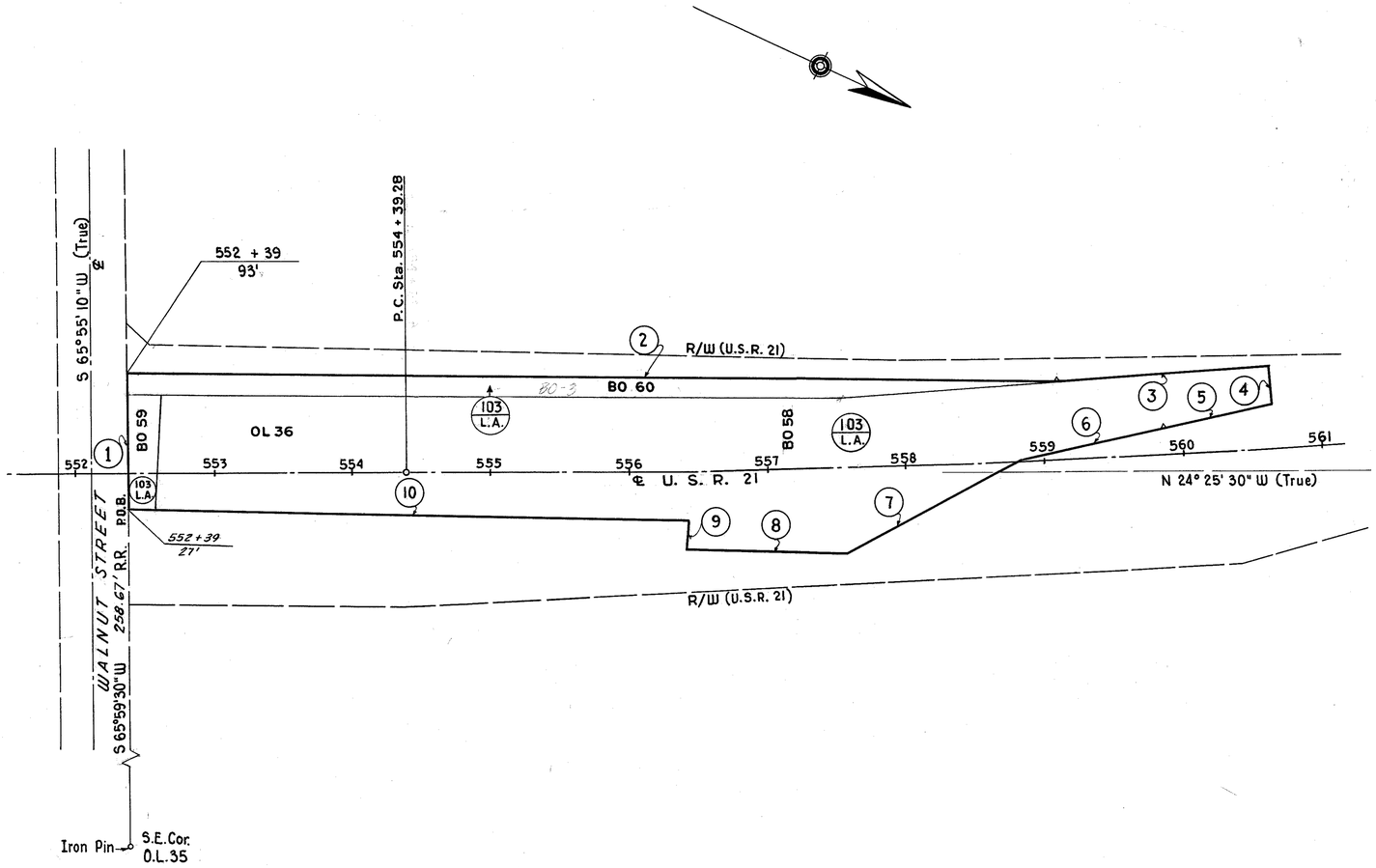
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG-1010(5)	

172

STA.-21-10.23

LIMITED ACCESS

17/23 R/W



BOUNDARY LINES		
LINE	BEARING	DISTANCE
	103 LA B.&O.R.R.	
1	S 65°59'30" W	97.69
2	N 23° 27' 41" W	670.53
3	N 30° 08' 54" W	159.73
4	N 59° 51' 06" E	28.92
5	S 36° 37' 36" E	80.95
6	S 36° 37' 36" E	105.99
7	S 52° 22' 03" E	143.04
8	S 23° 00' 30" E	118.00
9	S 69° 11' 00" W	20.03
10	S 23° 00' 30" E	407.30

AREA

T.B.A. 1.6311 Acres
P.R.O 0.0411 Acres

Above Bearings Based on Assumed North which is 0° 04' 20" Left of True North

Information Taken From
B. & O. R. R. CO., Wheeling Division
STATION MAP V122-4 / S 29

Refer to R/W Plans - Sheets 7 & 8
Refer to Design Plans - Sheets 20 & 23

Revised 8-3-60

Scale: 1" = 50'

Property to be Acquired from the B.& O. R.R. Co.

B & O R.R. RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG - 1010 (5)	

173

18/23

R/W

STA. - 21 - 10.23

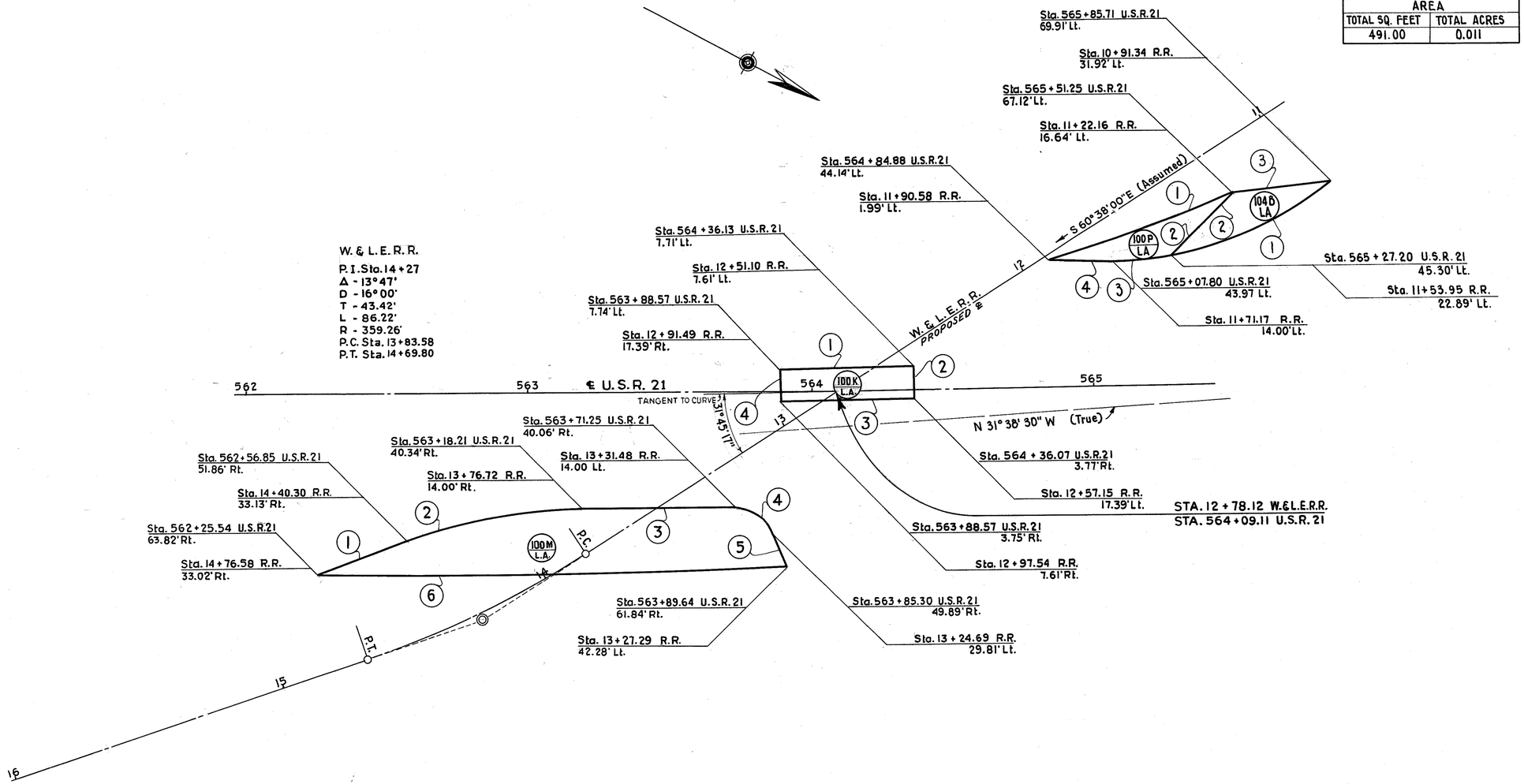
LIMITED ACCESS

BOUNDARY LINES		
104-B LA To Be Acquired From P.R.R.		
COURSE	BEARING	DISTANCE
1 ARC	R= 125.00'	Rt. 63.46
CHORD	S 52°25' 32" E	63.26
2 ARC	R= 1713.21	Rt. 32.40
CHORD	N 71°45'49" W	32.40
3 ARC	R= 2897.93	Lt. 34.42
CHORD	N 34° 15' 31" W	34.41
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
491.00	0.011	

BOUNDARY LINES		
100 P LA		
COURSE	BEARING	DISTANCE
1 ARC	R=598.69'	70.00
CHORD	N 48°32' 55" W	69.96
2 ARC	R= 1713.21'	32.40
CHORD	S 71°45'49" W	32.40
3 ARC	R= 125.00'	19.40
CHORD	S 33°19'34" E	19.38
4	S 28°52'43" E	22.82
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
409.00	0.009	

BOUNDARY LINES		
100 K LA		
COURSE	BEARING	DISTANCE
1	N 28°52'43" W	47.50
2	N 61°07'17" E	11.50
3	S 28°52'43" E	47.50
4	S 61°07'17" W	11.50
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
546.25	0.0125	

BOUNDARY LINES		
100 M LA		
COURSE	BEARING	DISTANCE
1	N 48°55' 55" W	33.64
2 ARC	R=180.00'	63.00
CHORD	N 38°54'19" W	62.68
3	N 28°52'43" W	53.20
4 ARC	R= 15.00'	18.33
CHORD	N 06°07' 50" E	17.21
5	N 41°08' 17" E	12.73
6 ARC	R=3,017.93	164.98
CHORD	S 29°05'22" E	164.97
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
2,907.36	0.0667	



Above Bearings Based on Assumed North which is 0°04'20" Left of True North

Refer to R/W Plans - Sheets 8 & 9
Refer to Design Plans - Sheet 12

Scale 1" = 20'

Property to be Acquired from the U. S. A. for the W. & L. E. R. R. Co.

REVISED 104-B 7-28-60

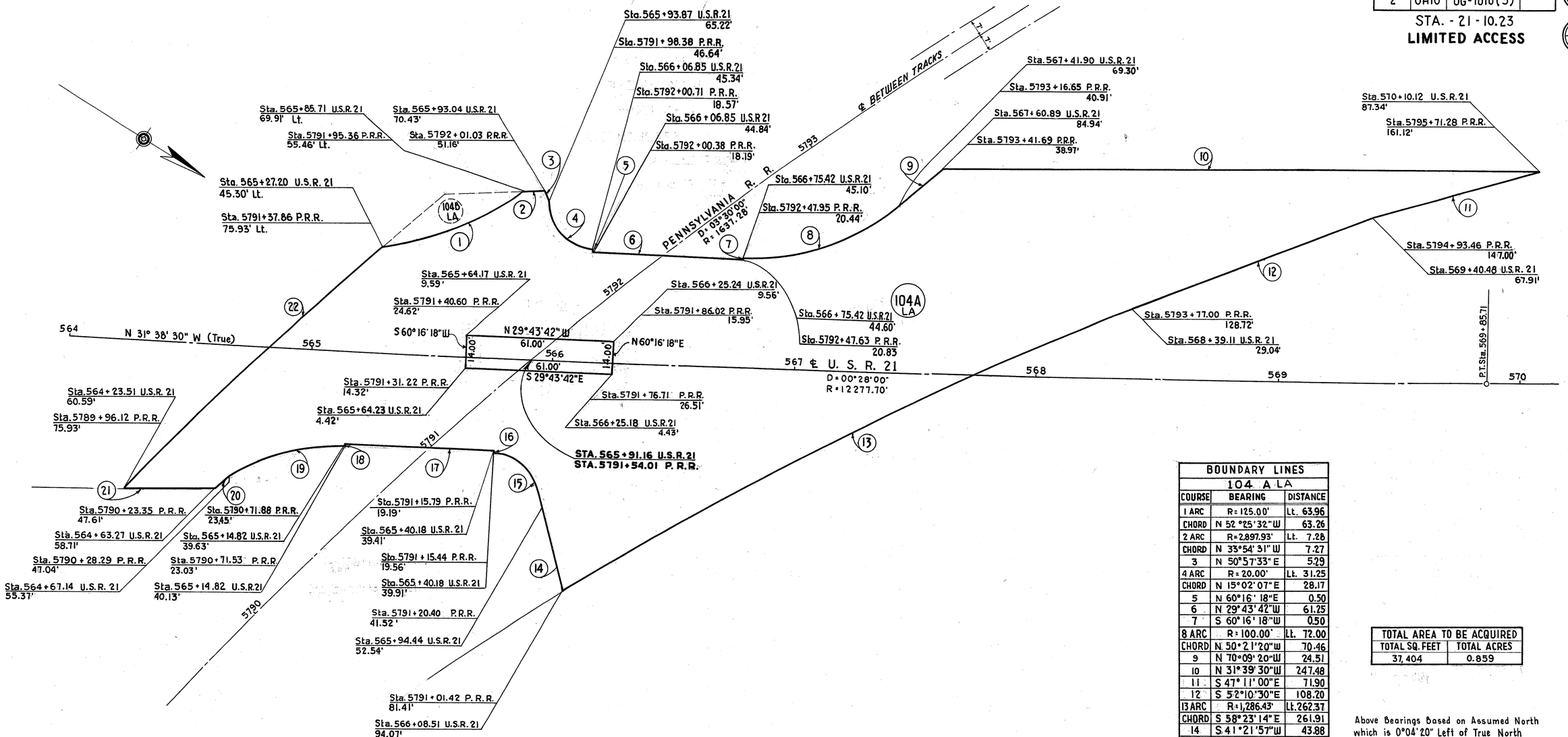
W & L. E. R. R. RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG-1010(5)	

174

19
23
R/W

STA. - 21 - 10.23
LIMITED ACCESS



BOUNDARY LINES		
104 A LA		
COURSE	BEARING	DISTANCE
1 ARC	R=125.00'	Lt. 63.96
CHORD	N 52°25'32"W	63.26
2 ARC	R=2,897.93'	Lt. 7.28
CHORD	N 33°54'31"W	7.27
3	N 50°57'33"E	5.29
4 ARC	R=20.00'	Lt. 31.25
CHORD	N 15°02'07"E	28.17
5	N 60°16'18"E	0.50
6	N 29°43'42"W	61.25
7	S 60°16'18"W	0.50
8 ARC	R=100.00'	Lt. 72.00
CHORD	N. 50°21'20"W	70.46
9	N 70°09'20"W	24.51
10	N 31°39'30"W	247.48
11	S 47°11'00"E	71.90
12	S 5°10'30"E	108.20
13 ARC	R=1,286.43'	Lt. 262.37
CHORD	S 58°23'14"E	261.91
14	S 41°21'57"W	43.88
15 ARC	R=20.00'	Lt. 23.90
CHORD	S 04°30'06"W	22.50
16	S 60°16'18"W	0.50
17	S 29°43'42"E	61.25
18	N 60°16'18"E	0.50
19 ARC	R=85.00'	Lt 51.00
CHORD	S 46°55'02"E	50.24
20	S 69°53'58"E	5.12
21 ARC	R=3,017.93'	Rt. 40.02
CHORD	S 31°43'18"E	40.01
22 ARC	R=1,713.21	Rt. 148.29
CHORD	N 74°47'07"W	148.24
AREA		
TOTAL SQ. FEET		TOTAL ACRES
38,258		0.878

TOTAL AREA TO BE ACQUIRED	
TOTAL SQ. FEET	TOTAL ACRES
37,404	0.859

Above Bearings Based on Assumed North which is 0°04'20" Left of True North

Information Taken From
PGH. FT. W. & CHI. R.R.
R/W & TRACK MAP V.1. OHIO 61.1

Refer to R/W Plans - Sheets 9 & 10
Refer to Design Plans - Sheets 23 & 24

Scale: 1" = 20'

Property to be Acquired from the P. R. R. Co.

P.R.R. RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG-1010 (5)	

175

STA. -21-10.23

LIMITED ACCESS

20/23

R/W

558 559 560 U. S. 561 R. 21 562 563 564

Sta. 561+30.77 U.S.R. 21
61.84' Rt

Sta. 15+65.95 R.R.
65.95' Rt.

ARC 281.50' → N 28°23'13"W CHORD 281.39'
R 3017.93'

→ S 60°38'00"E

13

OL 31

R 612.27'

ARC 169.78' → N 75°42'50"W CHORD 169.23'

15

℄ Proposed Track No. 29

16

→ S 46°51'00"E

(107)

Limit of Construction

→ S 50°43'04"E - 200.00'

Sta. 13+08.85 R.R.
52.84' Lt.

Sta. 564+10.77 U.S.R. 21
61.09' Rt.

Sta. 559+56.79 U.S.R. 21
182.74' Rt.

Sta. 17+72.15 R.R.
11.32' Rt.

Sta. 560+19.58 U.S.R. 21
188.41' Rt

Sta. 17+14.16 R.R.
15.74' Lt.

17

→ N 21°49'50"W - 64.00'

→ S 43°42'58"E - 101.00'

Sta. 14+98.59 R.R.
36.66' Lt.

Sta. 562+27.14 U.S.R. 21
136.85' Rt.

18

℄ Proposed Track No. 29

19

Proposed Track No. 30

→ S 52°40'18"E - 94.00'

Sta. 15+99.44 R.R.
31.14 Lt.

Sta. 561+31.19 U.S.R. 21
164.54' Rt.

→ S 68°27'10"W - 111.80'

→ S 61°10'29"E - 56.00'

Sta. 16+92.95 R.R.
40.67' Lt.

Sta. 560+47.50 U.S.R. 21
204.71' Rt.

Sta. 559+46.90 U.S.R. 21
293.27' Rt.

Sta. 18+19.59 R.R.
89.03' Lt.

→ S 72°20'11"E - 80.18'

Sta. 17+47.21 R.R.
54.53' Lt.

Sta. 560+01.90 U.S.R. 21
236.08' Rt.

11.00'

Building

N 22°05'41"W - 10.00'

TRACK NO. 29
P.I. Sta. 14+27
Δ - 13°47' Rt.
D - 16°00'
T - 43.42'
L - 86.22'
R - 359.26'
P.C. Sta. 13+85.58
P.T. Sta. 14+69.80

AREA
28,023 Sq. Feet
0.643 Acres

Refer to R/W Plans - Sheets 8 & 9
Refer to Design Plans - Sheets 22 & 23

Scale: 1" = 20'

Property to be Acquired for the W. & L.E. R.R. Co.
from the Ekco Foundation, Inc.

W & L.E. R.R. RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG-1010(5)	

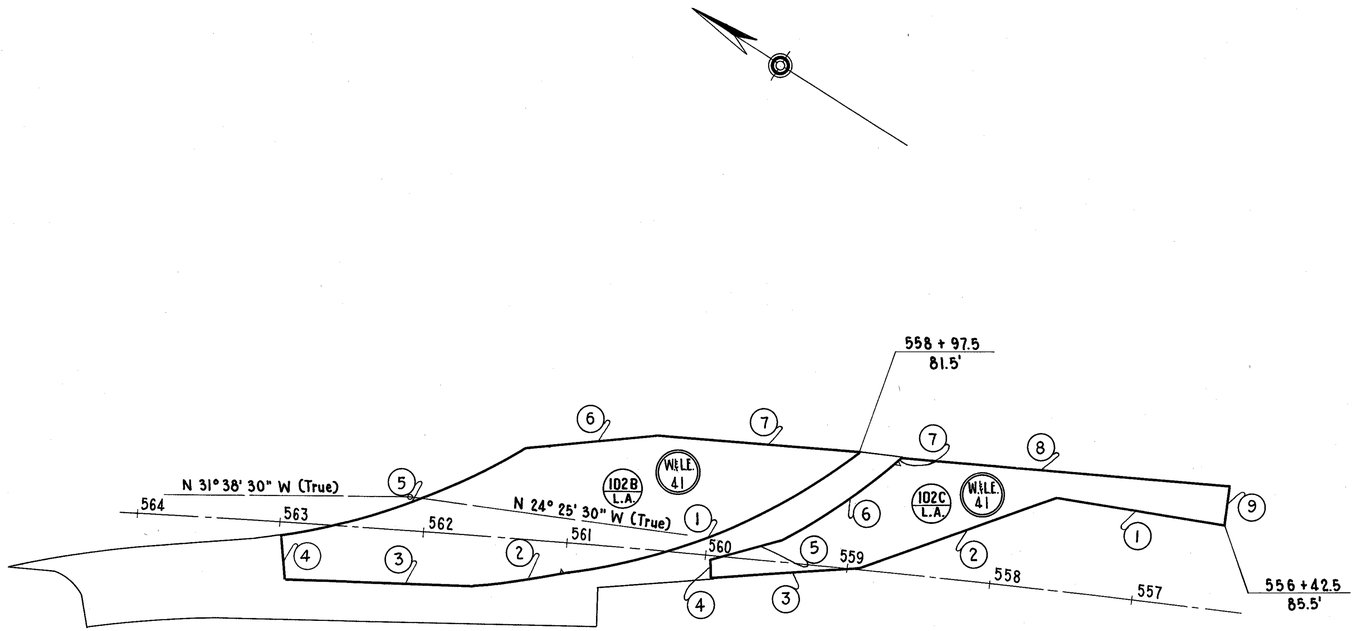
176

STA. - 21 - 10.23

LIMITED ACCESS

21/23

R/W



BOUNDARY LINES 102 B L A		
COURSE	BEARING	DISTANCE
1 ARC	R = 400.28'	231.31
CHORD	N 53°52'50" W	228.10
2 ARC	R = 608.30'	63.55
CHORD	N 34°18'28" W	63.53
3	N 32°55'17" W	125.47
4	N 50°12'07" E	29.56
5 ARC	R = 453.34'	181.04
CHORD	S 51°52'21" E	179.83
6	S 38°58'22" E	92.01
7	S 27°14'26" E	144.66
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
23,797.87	0.5463	

BOUNDARY LINES 102 C L A		
COURSE	BEARING	DISTANCE
1	N 23°00'30" W	118.00
2	N 52°22'03" W	143.04
3	N 36°37'36" W	105.99
4	N 48°39'06" E	13.75
5	S 49°19'04" E	50.24
6 ARC	R = 420.28'	104.37
CHORD	S 65°56'37" E	104.11
7	S 75°04'32" E	1.45
8	S 27°14'26" E	229.61
9	S 69°11'00" W	29.26
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
12,742.59	0.2925	

Above Bearings Based on Assumed North which is 0° 04' 20" Left of True North

Information Taken From
R/W & TRACK MAP
Wheeling & Lake Erie R.R. CO.
STATION MAP V-8B / ST-17

Refer to R/W Plans - Sheets 8 & 9
Refer to Design Plans - Sheets 22 & 23

Scale: 1" = 50'

Property to be Acquired from the W. & L. E. R R. Co.

W & L. E. R.R. RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG - 1010(5)	

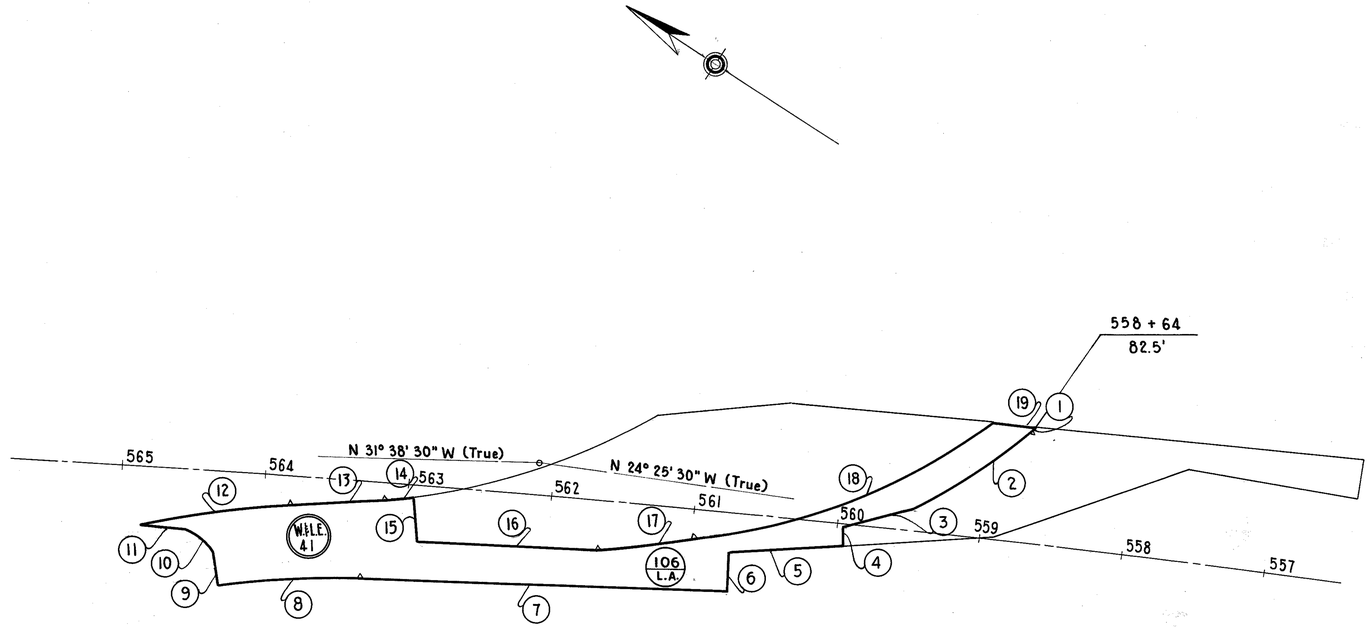
177

22/23

R/W

STA. - 21 - 10.23

LIMITED ACCESS



BOUNDARY LINES		
106 LA		
COURSE	BEARING	DISTANCE
1	N 75°04'32"W	1.45
2 ARC	R=420.28'	104.37
CHORD	N 65°56'37"W	104.11
3	N 49°19'04"W	50.24
4	S 48°39'06"W	13.75
5	N 36°37'36"W	80.95
6	S 59°51'06"W	28.92
7	N 30°08'54"W	259.40
8 ARC	R=548.69'	97.23
CHORD	N 35°39'46"W	97.09
9	N 47°02'17"E	23.14
10 ARC	R=20.00'	26.50
CHORD	N 09°04'50"E	24.60
11	N 28°52'43"W	30.38
12 ARC	R=598.69'	105.05
CHORD	S 40°22'04"E	104.93
13	S 35°54'21"E	63.84
14 ARC	R=453.34'	23.81
CHORD	S 38°48'36"E	23.81
15	S 50°12'07"W	29.56
16	S 32°55'17"E	125.47
17 ARC	R=608.30'	63.55
CHORD	S 34°18'28"E	63.53
18 ARC	R=400.28'	231.31
CHORD	S 53°52'50"E	228.10
19	S 27°14'26"E	28.54
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
19,652.14	0.4512	

Above Bearings Based on Assumed North which is 0°04'20" Left of True North

Information Taken From
B. & O. R.R. CO., Wheeling Division
STATION MAP V122-4 / S29

Refer to R/W Plans - Sheets 8 & 9
Refer to Design Plans - Sheets 22 & 23

Scale: 1" = 50"

Property to be Acquired from the B. & O. & W. & L. E. R.R. Co's. Joint

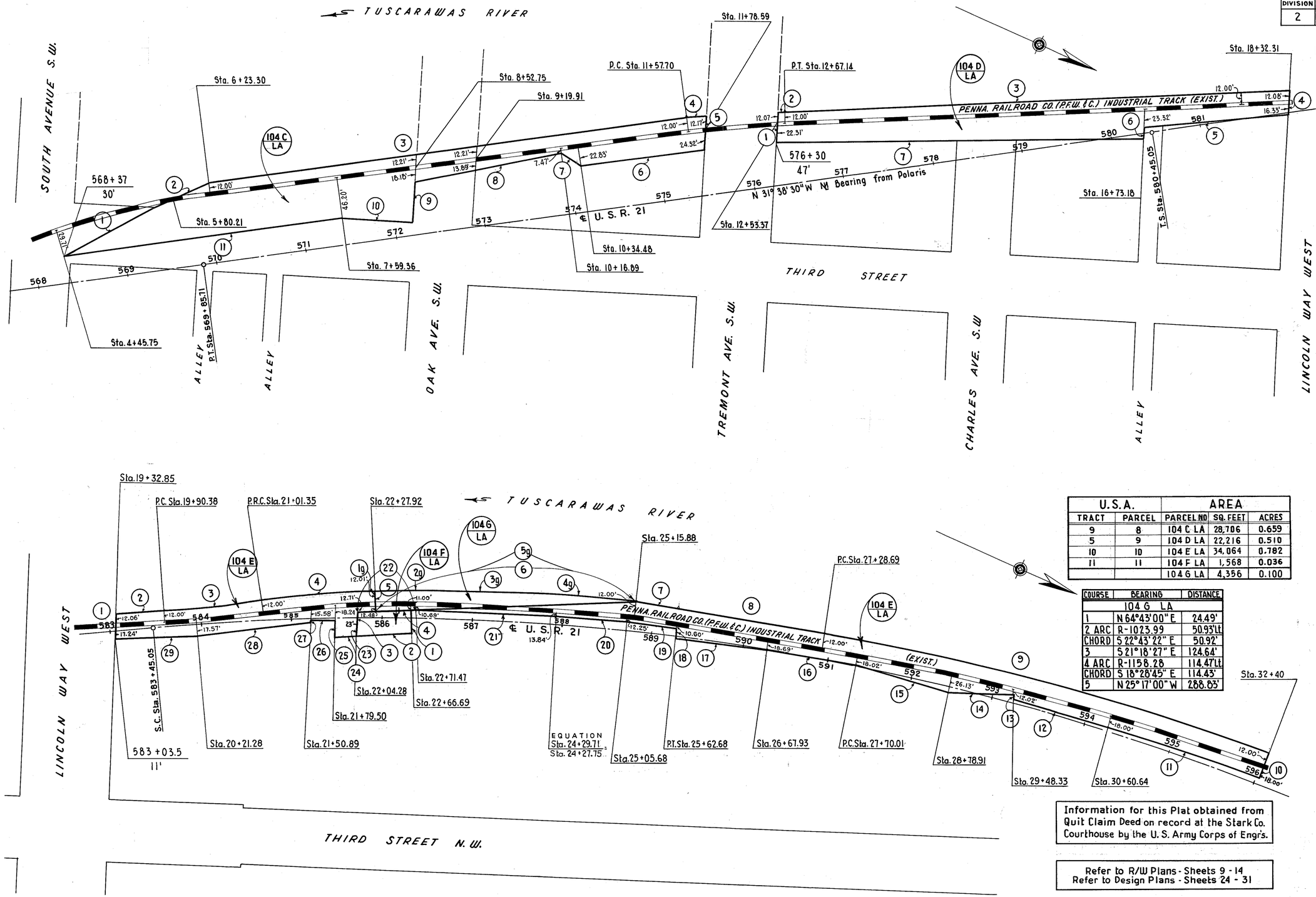
B. & O. & W. & L. E. R.R. RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG-1010(5)	

178

23/23 R/W

STA.-21-10.23
LIMITED ACCESS



BOUNDARY LINES		
COURSE	BEARING	DISTANCE
104 C LA		
1	N 52° 10' 30" W	108.20
2	N 47° 11' 00" W	71.90
3	N 31° 14' 37" W	534.40
4 ARC	R-1285.57'	Rt. 23.12
CHORD	N 30° 44' 49" W	23.12
5	N 69° 19' 30" E	36.49
6	S 30° 44' 00" E	139.66
7	S 09° 52' 00" W	23.35
8	S 34° 47' 30" E	167.82
9	N 69° 24' 30" E	44.50
10	S 20° 37' 00" E	83.53
11	S 31° 17' 00" E	305.95
104 D LA		
1	S 69° 19' 30" W	34.38
2 ARC	R-1285.57	Rt. 6.59
CHORD	N 26° 24' 34" W	6.59
3	N 26° 19' 07" W	566.39
4	N 69° 25' 30" E	28.41
5	S 28° 48' 30" E	159.58
6	N 69° 25' 30" E	13.50
7	S 24° 19' 00" E	412.58
104 E LA		
1	S 69° 25' 30" W	29.30
2	N 26° 19' 07" W	56.33
3 ARC	R-1261.57	Lt. 109.95
CHORD	N 28° 48' 47" W	109.91
4 ARC	R-1023.99	Rt. 127.89
CHORD	N 21° 44' 17" W	127.80
5	N 64° 43' 00" E	24.49
6	N 25° 17' 00" W	288.83
7 ARC	R-1158.28'	Rt. 47.25
CHORD	N 14° 28' 28" W	47.25
8	N 13° 18' 27" W	166.06
9 ARC	R-2697.89'	Rt. 513.63
CHORD	N 07° 51' 13" W	512.84
10	N 81° 36' 02" E	30.00
11 ARC	R-2667.89	Lt. 178.17
CHORD	S 04° 18' 51" E	178.13
12	S 06° 52' 00" E	107.89
13	S 69° 07' 00" W	5.40
14	S 20° 43' 00" E	72.90
15	S 06° 58' 00" E	108.30
16	S 13° 30' 30" E	101.82
17	S 15° 29' 00" E	102.22
18	S 69° 47' 00" W	12.19
19	S 16° 26' 30" E	58.11
20	S 19° 17' 00" E	77.06
21	S 20° 03' 30" E	155.96
22	S 25° 17' 00" E	67.54
23	N 69° 23' 00" E	25.00
24	S 25° 17' 00" E	23.50
25	S 67° 27' 30" W	19.00
26	S 22° 32' 30" E	28.50
27	N 67° 27' 30" E	2.75
28	S 29° 20' 30" E	121.93
29	S 26° 17' 30" E	90.59
104 F LA		
1	N 69° 23' 00" E	25.00
2	S 25° 17' 00" E	62.54
3	S 69° 23' 00" W	25.00
4	N 25° 17' 08" W	62.54

U.S.A.		AREA		
TRACT	PARCEL	PARCEL NO	SQ. FEET	ACRES
9	8	104 C LA	28,706	0.659
5	9	104 D LA	22,216	0.510
10	10	104 E LA	34,064	0.782
11	11	104 F LA	1,568	0.036
		104 G LA	4,356	0.100

COURSE	BEARING	DISTANCE
104 G LA		
1	N 64°43'00" E	24.49'
2 ARC	R-1023.99	50.93'Lt.
CHORD	S 22°43'22" E	50.92'
3	S 21°18'27" E	124.64'
4 ARC	R-1158.28	114.47'Lt.
CHORD	S 18°26'45" E	114.43'
5	N 25°17'00" W	288.83'

Information for this Plat obtained from Quit Claim Deed on record at the Stark Co. Courthouse by the U. S. Army Corps of Engr's.

Refer to R/W Plans - Sheets 9 - 14
Refer to Design Plans - Sheets 24 - 31

Above Bearings Based on Quit Claim Deed on Record at the Stark County Courthouse by the U. S. Army Corps of Engineers.

Scale: 1" = 50'

Property to be Acquired from the Pennsylvania R.R. Co.

P.R.R. RIGHT OF WAY PLAN

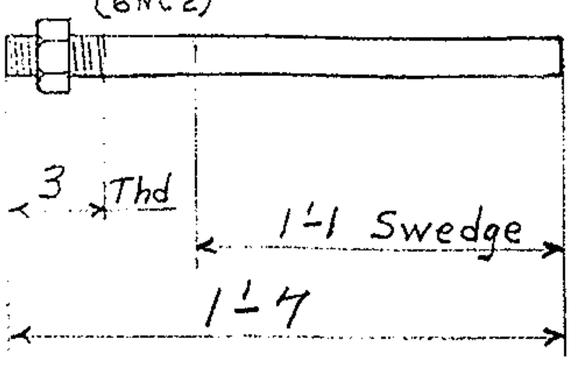
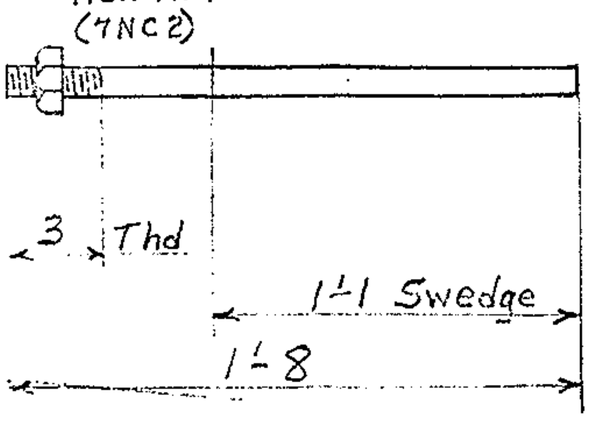
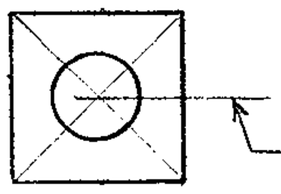
FORM D-58

SKETCH, SHOP AND SHIPPING BILL

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION

SKETCH	Item No.	NO. PCS.	MARK	MATERIAL: SHAPE	MATERIAL: LENGTH FT.	MATERIAL: LENGTH INS.	CALCULATED WEIGHT FOR ONE MEMBER	ORDERED: NO. PCS.	ORDERED: LENGTH FT.	ORDERED: LENGTH INS.	ORDERED: ITEM	SHIPMENTS
Hex Nut (6NC2) 	1											
	2											
	3											
	4											
	5	30										
	6											
	7	32	A1	Rods 1½"φ	1	7					S	
	8	32		Hex Nuts 1½" Tap							S	
	9											
	10											
	11											
	12											
Hex Nut (7NC2) 	13											
	14											
	15											
	16											
	17	20										
	18	16	A2	Rods 1¼"φ	1	8					S	
	19	16		Hex Nuts 1¼" Tap							S	
	20											
	21											
	22											
	23											
	24											
1 9/16"φ Hole 	25											
	26											
	27	W										
	28	32	W1	Wash 3½ 3/8		3½					S	
	29											
	30											
	31											
	32	30										
	33	16	W2	Wash 3"φ x 3/8" thk. x 1 5/16"φ hole							S	
	34											
	35											
	36											
	37											
	38											
	39											
	40											
	41											
	42											
	43											

Advance Shipment

32	35	36	40	50	61	65	71	90	91	92	4	20	80
F	MAR	MAC	M	W	B	C	80	SP-J	SP-B	SP-F	SR	NM	MS

ADVANCE BILL PAGES 105 & M103

HOCKER 265

ANCHOR BOLTS

PAINT WASHERS ONLY

DRAWINGS	NAME	DATE
MADE BY	LTB	5-31-61
CHKD. BY	PAP	6-8-61

REVISIONS

DRAWINGS: ROANOKE

FABRICATION: AMBRIDGE

IN CHARGE OF: SLUSHER

ORDER No. V6336

SHEET No. C1

NAME OF STRUCTURE: BRIDGE No STA 21-1067

Ohio State Hwy. Dept.

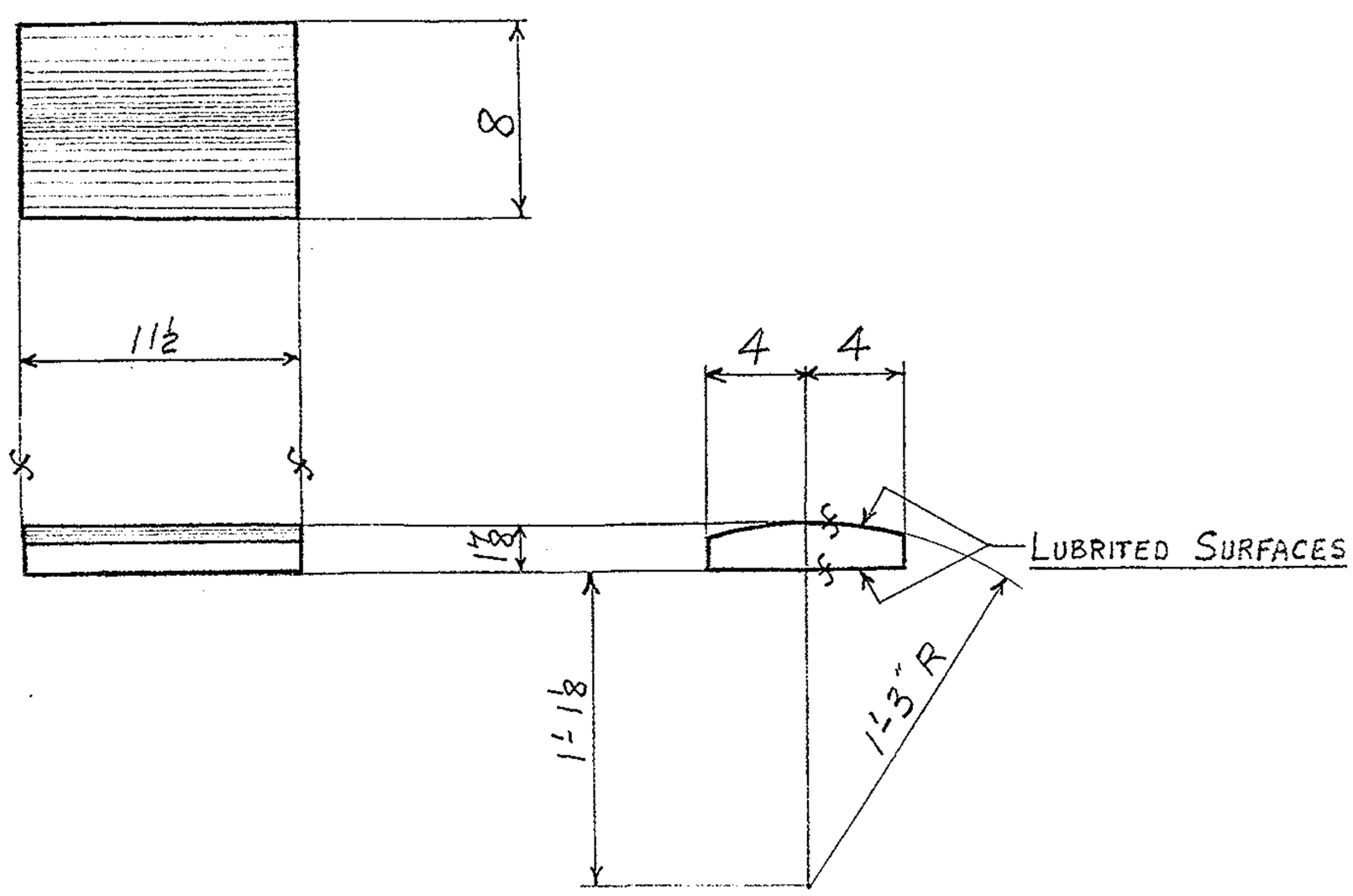
C-12A

SKETCH, SHOP AND SHIPPING BILL

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION



CAST BRONZE LUBRITE ROCKER BRI

ASTM-B22-52-Alloy E

LUBRITE OR EQUAL

LINE NO.	MEMBER NO. PCS.	MEMBER NAME	MEMBER MARK	MATERIAL [redacted]	MATERIAL SHAPE	MATERIAL LENGTH FT.	MATERIAL LENGTH INS.	MATERIAL + INS.	REMARKS	CALCULATED WEIGHT FOR ONE MEMBER	ORDERED NO. PCS.	ORDERED	ORDERED LENGTH FT.	ORDERED LENGTH INS.	ORDERED ITEM	SHIPMENTS
1																
2	8	BRONZE LUB. ROCKER	BRI	PL	8" × 1⅜	-	11½"				REQN	71-A-1174				
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																

MAY BE SHIPPED DIRECT

HOCKER 265

ADVANCE BILL PAGE-M103

| | | | | | | | | | | | | | | | |

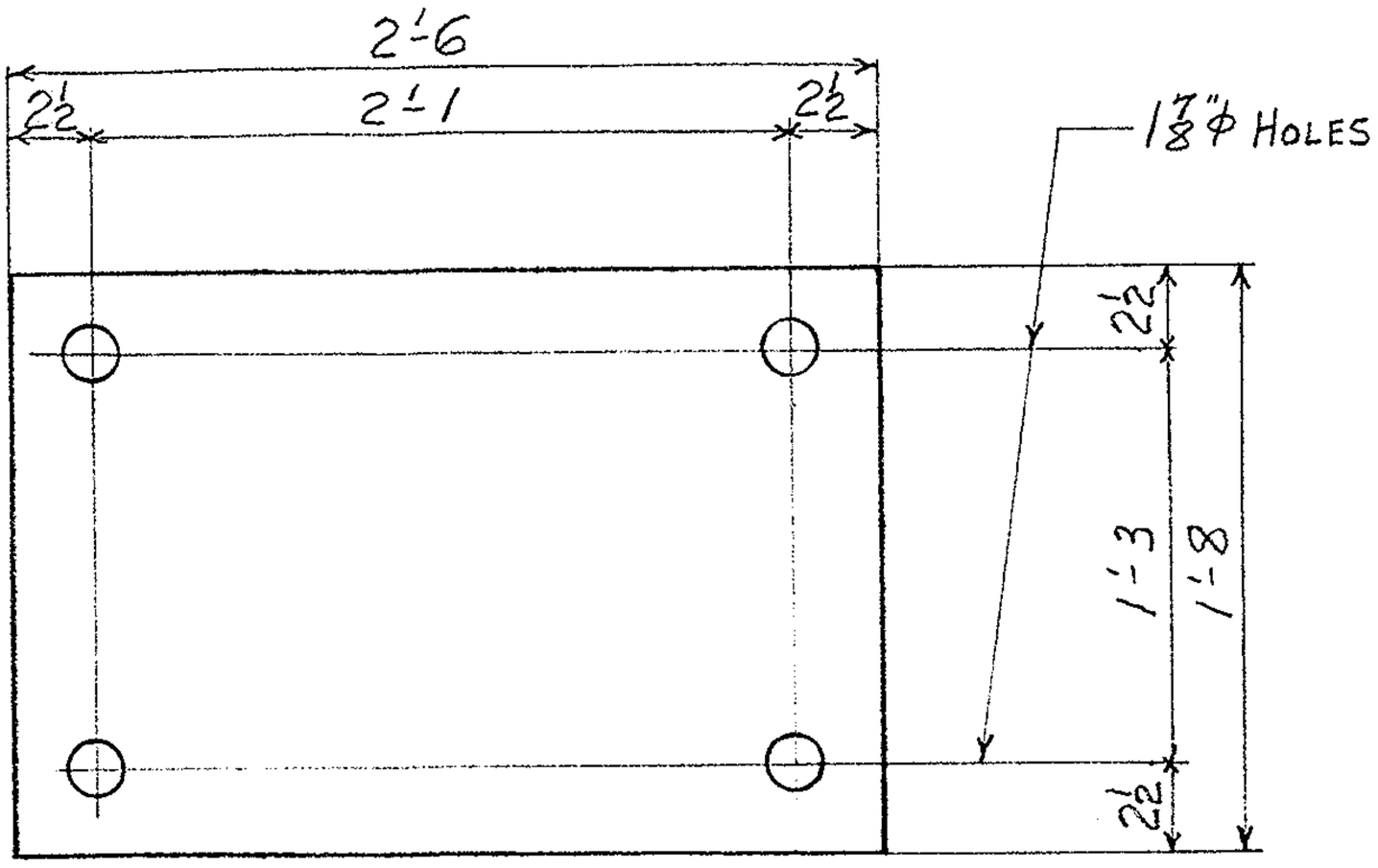
D42A

SKETCH, SHOP AND SHIPPING BILL

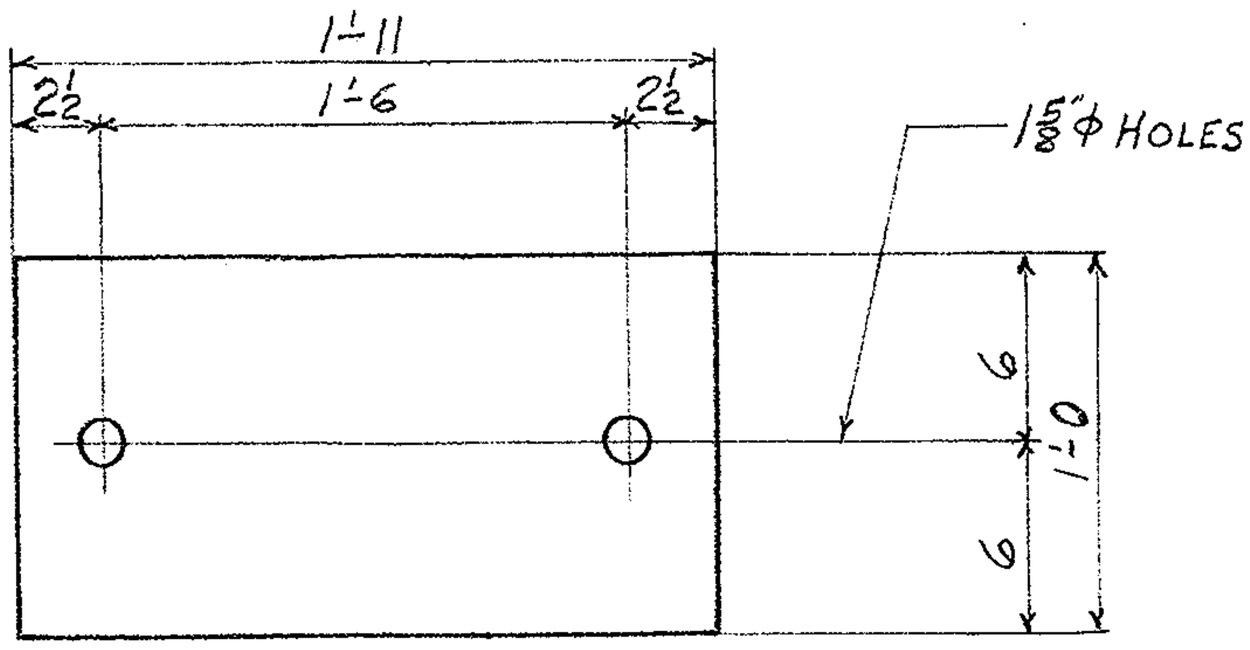
AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION



1/8" SHEET LEAD - SL1



1/8" SHEET LEAD SL2

SPECIFICATION :-

SHEET LEAD - ASTM - B29-55 - COMMON DESILVERIZED LEAD

LINE NO.	MEMBER NO. PCS.	MEMBER NAME	MEMBER MARK	MATERIAL	SHAPE	LENGTH FT.	LENGTH INS.	+ INS.	REMARKS	CALCULATED WEIGHT FOR ONE MEMBER	ORDERED NO. PCS.	ORDERED LENGTH FT.	ORDERED LENGTH INS.	ORDERED ITEM	SHIPMENT
1															
2	8	SHEET LEAD	SL1	SHEETS	20 × ⅛	2	6				REQN. 71-A-1173				
3															
4															
5															
6															
7	8	SHEET LEAD	SL2	SHEETS	12 × ⅛	1	11								
8															
9															
10	1	SHEET LEAD		SHEET	4 × ⅛	0	4		PLAIN FOR TESTING PURPOSES						
11															
12															
13															
14															
15															
16															
17															
18															

6X

MAY BE SHIPPED DIRECT

HOCKER 265

ADVANCE BILL PAGE - M103

SHEET LEAD

DRAWINGS	NAME	DATE
MADE BY	LTB	5-31-61
CHKD. BY	PAP	6-8-61

REVISIONS: F 12-12-1 X; E; D; C; B

DRAWINGS ROANOKE

FABRICATION AMBRIDGE

IN CHARGE OF SLUSHER ORDER No. V6336

SHEET No C102

NAME OF STRUCTURE

BRIDGE No STA 21-1069

Ohio State Hwy. Dept.

D-68

SKETCH SHEET

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION

1-2

STATE OF OHIO

DEPARTMENT OF HIGHWAYS

AMERICAN BRIDGE DIVISION

1961

NAME PLATE - 2 REQUIRED

PATTERN No. AC426(ALT)

WEIGHT 10 #

REQ. NO 1-86682

ALL LETTERS & FIGURES RAISED, FLAT FACED GOTHIC.

MATERIAL - CAST IRON

HOLES 1" ϕ CORED

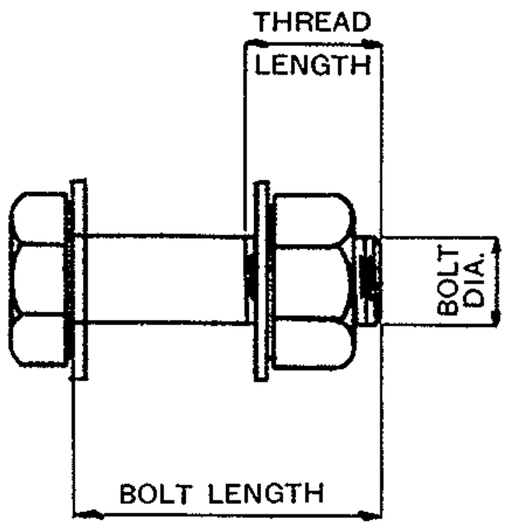
SCALE ½ SIZE

HOCKEN-265

| | | |

D607 Rev. 4/61
HIGH STRENGTH BOLTS

AMERICAN BRIDGE
DIVISION
UNITED STATES (USS) STEEL CORPORATION



HIGH STRENGTH STRUCTURAL BOLTS

Bolts, Nuts and Washers shall conform to ASTM Specification A325.

Vendor is to furnish American Bridge Division 3 copies of test report showing compliance with the requirements of ASTM Specification A325.

BOLT DIMENSIONS AND MARKING

Bolt dimensions shall conform to ASA standard B18.2 for Heavy Semifinished Hexagon Head Bolts, except the height of the head shall be that for Regular Semifinished Hexagon Head Bolts, and length of thread shall be as shown in table.

Bolts are identified by three radial lines 120° apart on the head.

NUT DIMENSIONS AND MARKING

Nut dimensions shall conform to ASA standard B18.2 for Heavy Semifinished Hexagon Nuts.

Nuts are identified by three circumferential marks 120° apart on one face of the nut, or by the number "2".

WASHER DIMENSIONS

Washer shall be flat and smooth and their nominal dimensions shall not be less than those shown in table, with tolerances conforming to ASA standard B27.2, Type A.

Modified dimensions of Clipped Washers are shown below:

A = 7/8 × Dia. of Bolt.



SHIP DIRECT

Line No.	Actual Number Req'd.	No. Shipped	Bolts Dia.	Bolts Length	Washers O.D.	Washers Thickness	Washers Hole	Total Calculated Weight	Ordered On Requisition
1	72	80	7/8	4 3/4					
2	32	38		4 1/4					
3	40	46		4					
4	4	6		3 3/4					
5	508	533		3 1/2					
6	1216	1276		3					
7	364	380		2 3/4					71-A-1459
8	1220	1281		2 1/2					
9									
10									
11									
12									
13	4	6	3/4	2 1/2					
14	40	46		2 1/4					
15									
16									
17									
18									
19									
20									
21	6912	7280			2	.165	15/16		71-A-1460
22	84	98			1 3/4	.148	13/16		7A7-500-492
23									
24									
25									
26									
27									
28									
29	* NUTS TO BE ORDERED SEPARATELY								
30	SUMMARY OF HEAVY SEMI-FINISHED HEX. NUTS								
31			HEX. NUTS FOR 1 DIA. BOLTS						
32	3456	3640	HEX. NUTS FOR 7/8 DIA. BOLTS						71-A-1459
33	44	52	HEX. NUTS FOR 3/4 DIA. BOLTS						
34			HEX. NUTS FOR DIA. BOLTS						

HOCKER 265

Bolt Dia.	Thread Length	Washers Nominal Dimensions	Washers Max. Thickness	Washers Min. Thickness
1/2	1	1 3/8φ x .109 x 9/16φ Hole	.132	.086
5/8	1 1/4	1 1/2φ x .134 x 11/16φ Hole	.160	.108
3/4	1 3/8	1 3/4φ x .148 x 13/16φ Hole	.177	.122
7/8	1 1/2	2φ x .165 x 15/16φ Hole	.192	.136
1	1 3/4	2 1/4φ x .165 x 1 1/16φ Hole	.192	.136
1 1/8	2	2 1/2φ x .165 x 1 1/4φ Hole	.192	.136
1 1/4	2	2 3/4φ x .165 x 1 3/8φ Hole	.192	.136
1 3/8	2 1/4	3φ x .180 x 1 1/2φ Hole	.213	.153
1 1/2	2 1/4	3 1/4φ x .180 x 1 5/8φ Hole	.213	.153

32	35	36	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM	NS

ASTM A-325 HEAVY SEMIFINISHED HEXAGON STRUCTURAL BOLTS

DRAWINGS	NAME	DATE
MADE BY	H.B.	9-8-61
CHKD. BY	DHF	9-12-61

REVISIONS: F E D C B A

DRAWINGS: ROANOKE
FABRICATION: AMBRIDGE
IN CHARGE OF: SLUSHER
ORDER No.: V-6336
SHEET N: C104

NAME OF STRUCTURE

Proj. No. 2

Bridge No. Sta. 21-1069 Over USR21 Under W&LE RR, Massillon, Stark Co., Ohio ~ Ohio State Hwy Dept.

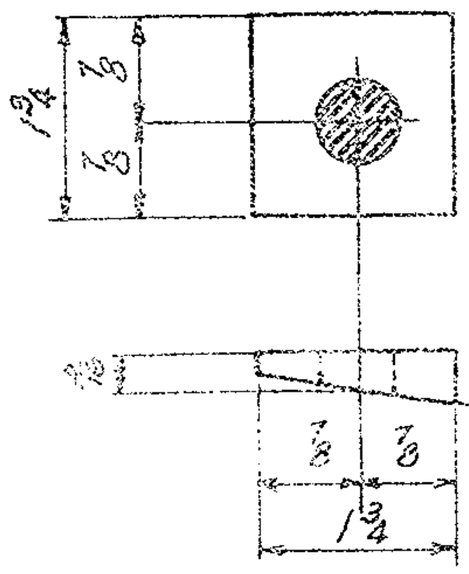
SKETCH, SHOP AND SHIPPING BILL.

AMERICAN BRIDGE

DIVISION

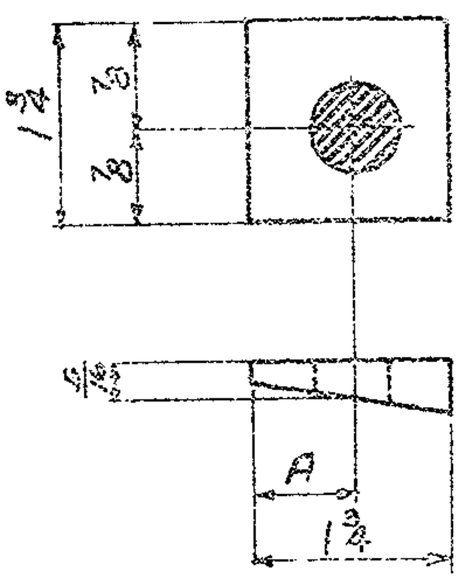
UNITED STATES STEEL CORPORATION

SKETCH	LINE	ACTUAL No. REQ'D	No. SHIPPED	MATERIAL TYPE	MATERIAL SIZE OF HOLE	CALCULATED WEIGHT FOR ONE NUMBER	ORDER NO. PCS	ORDER	ORDER
	1								
	2	4	6	STANDARD	13/16			1117-500-412	
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
	11								
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								
	21								
	22								
	23			OFFSET					
	24								
	25								
	26								
	27								
	28								
	29								
	30								
	31								
	32								
	33								
	34								
	35								
	36								
	37								
	38								
	39								
	40								
	41								
	42								
	43								



STANDARD BEVELED WASHERS FOR A325 HIGH STRENGTH STRUCTURAL BOLTS

5/8, 3/4, 7/8, OR 1" DIA.



OFFSET BEVELED WASHERS FOR A325 HIGH STRENGTH STRUCTURAL BOLTS

5/8, 3/4 OR 7/8" DIA.

A = 7/8 × Dia. of Bolt

Washers to conform to ASTM Specification A325.

Washers shall be smooth and flat on each surface within tolerance of 0.010"

SHIP DIRECT

NOTE TO VENDOR:

Vendor to furnish American Bridge Div.: 5 copies of Test Reports for Washers showing conformance with ASTM Specs. A325

HOCKER 265

BEVELED WASHERS FOR A325 HIGH STRENGTH STRUCTURAL BOLTS NO PAINT OR OIL

DRAWINGS	NAME	DATE
MADE BY	HB	
CNKD. BY	DHF	

REVISIONS

DRAWINGS Roanoke

FABRICATION Amoskeag

NAME OF STRUCTURE

FORM 3-B8

SKETCH, SHOP AND SHIPPING BILL

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION

SKETCH	ON SHEET	NO. PCS.	MARK	MATERIAL SHAPE	MATERIAL LENGTH FT.	MATERIAL LENGTH INS.	CALCULATED WEIGHT FOR ONE MARK	ORDER NO. PCS.	ORDER
	1								
	2								
X	3	350	LBS.	7/32" E6024 WELD ROD					71-Y-0400
	4								
	5	300	LBS.	5/32" E6010 WELD ROD					
	6								
	7	1080	LBS.	7/32" LINCOLN WELD WIRE # L60					
	8								
	9	1100	LBS.	LINCOLN # 780 FLUX					
	10								
	11								
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								
	21								
	22								
	23								
	24								
	25								
	26								
	27								
	28								
	29								
	30								
	31								
	32								
	33								
	34								
	35								
SHIP DIRECT	36								
	37								
	38								
	39								
	40								
	41								
	42								
	43								
	44								
	45								
	46						K2-15		

HOCKER 265

FIELD WELDING RODS

PAINT —

CONTACT SURFACES —

	RIVETS	BOLTS
	X	X

DRAWINGS	NAME	DATE
MADE BY	H.B.	9-12-61
CNKD. BY		

REVISIONS: E | D | C | B | X 2/3/62 A

DRAWINGS: ROANOKE

FABRICATION: AMBRIDGE

IN CHARGE: SLUSHER

ORDER NO.: V-6336 : 10

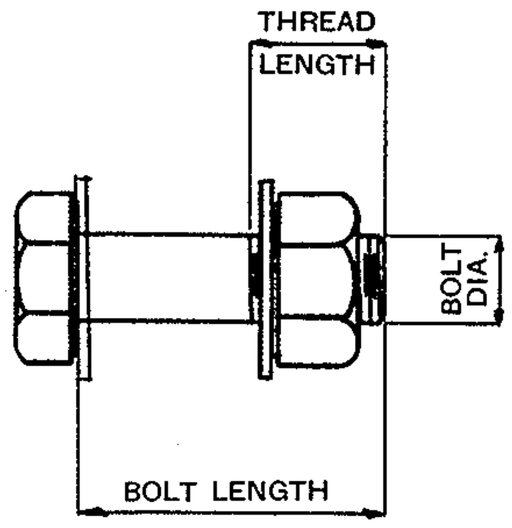
NAME OF STRUCTURE

BRIDGE No. STA. 21-1069 OVER USR 21 UNDER W & LE RR, MASSILLON, STARK Co., OHIO. OHIO STATE HWY. DEPT. PROJ. No. 260

D607 Rev. 4/61
HIGH STRENGTH BOLTS

AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

DAY



Line No.	Actual Number Req'd.	No. Shipped	Bolts * Dia.	Bolts * Length	Washers O.D.	Washers Thickness	Washers Hole	Total Calculated Weight	Ordered On Requisition
1									
2		165	7/8	4 3/4				155	
3		330	7/8	3 3/4				310	
4									
5									
6									
7									
8									
9		990			2	.165	15/16		
10									
11									
12									
13									
14									
15									All Bolts, Washers and
16									Nuts this sheet Purchased
17									by Const. Dept under
18									Purchase Ord. 71-Y-0515
19									
20									
21									DO NOT DUPLICATE
22									
23									
24									
25									
26									
27									
28									
29	* NUTS TO BE ORDERED SEPARATELY								
30	SUMMARY OF HEAVY SEMI-FINISHED HEX. NUTS								
31			HEX. NUTS FOR 1 DIA. BOLTS						
32		495	HEX. NUTS FOR 7/8 DIA. BOLTS						
33			HEX. NUTS FOR 3/4 DIA. BOLTS						
34			HEX. NUTS FOR DIA. BOLTS						

SH TOTAL 465

HIGH STRENGTH STRUCTURAL BOLTS

Bolts, Nuts and Washers shall conform to ASTM Specification A325.

Vendor is to furnish American Bridge Division 3 copies of test report showing compliance with the requirements of ASTM Specification A325.

BOLT DIMENSIONS AND MARKING

Bolt dimensions shall conform to ASA standard B18.2 for Heavy Semifinished Hexagon Head Bolts, except the height of the head shall be that for Regular Semifinished Hexagon Head Bolts, and length of thread shall be as shown in table.

Bolts are identified by three radial lines 120° apart on the head.

NUT DIMENSIONS AND MARKING

Nut dimensions shall conform to ASA standard B18.2 for Heavy Semifinished Hexagon Nuts.

Nuts are identified by three circumferential marks 120° apart on one face of the nut, or by the number "2".

WASHER DIMENSIONS

Washer shall be flat and smooth and their nominal dimensions shall not be less than those shown in table, with tolerances conforming to ASA standard B27.2, Type A.

Modified dimensions of Clipped Washers are shown below:

A = 7/8 × Dia. of Bolt.



Bolt Dia.	Thread Length	Washers Nominal Dimensions	Washers Max. Thickness	Washers Min. Thickness
1/2	1	1 3/8φ x .109 x 9/16φ Hole	.132	.086
5/8	1 1/4	1 1/2φ x .134 x 11/16φ Hole	.160	.108
3/4	1 3/8	1 3/4φ x .148 x 13/16φ Hole	.177	.122
7/8	1 1/2	2φ x .165 x 15/16φ Hole	.192	.136
1	1 3/4	2 1/4φ x .165 x 1 1/16φ Hole	.192	.136
1 1/8	2	2 1/2φ x .165 x 1 1/4φ Hole	.192	.136
1 1/4	2	2 3/4φ x .165 x 1 3/8φ Hole	.192	.136
1 3/8	2 1/4	3φ x .180 x 1 1/2φ Hole	.213	.153
1 1/2	2 1/4	3 1/4φ x .180 x 1 5/8φ Hole	.213	.153

HOCKER 265

32	35	36	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM	NS

ASTM A-325 HEAVY SEMIFINISHED HEXAGON STRUCTURAL BOLTS
Bott. Flg. L to Floor Beams,

DRAWINGS	NAME	DATE
MADE BY	S	7/27
CHKD. BY	✓	✓

REVISIONS: F E D C B A

DRAWINGS: Rke.
FABRICATION: Amb.

IN CHARGE OF: Slusher
ORDER No.: V-6336

SHEET No. C107

NAME OF STRUCTURE
Bridge No. Sta. 21-1069 Ohio State Hwy. Dept.

RIVETS

Dia.

grip / DIV.

SKETCH SHEET

AMERICAN BRIDGE

DIVISION

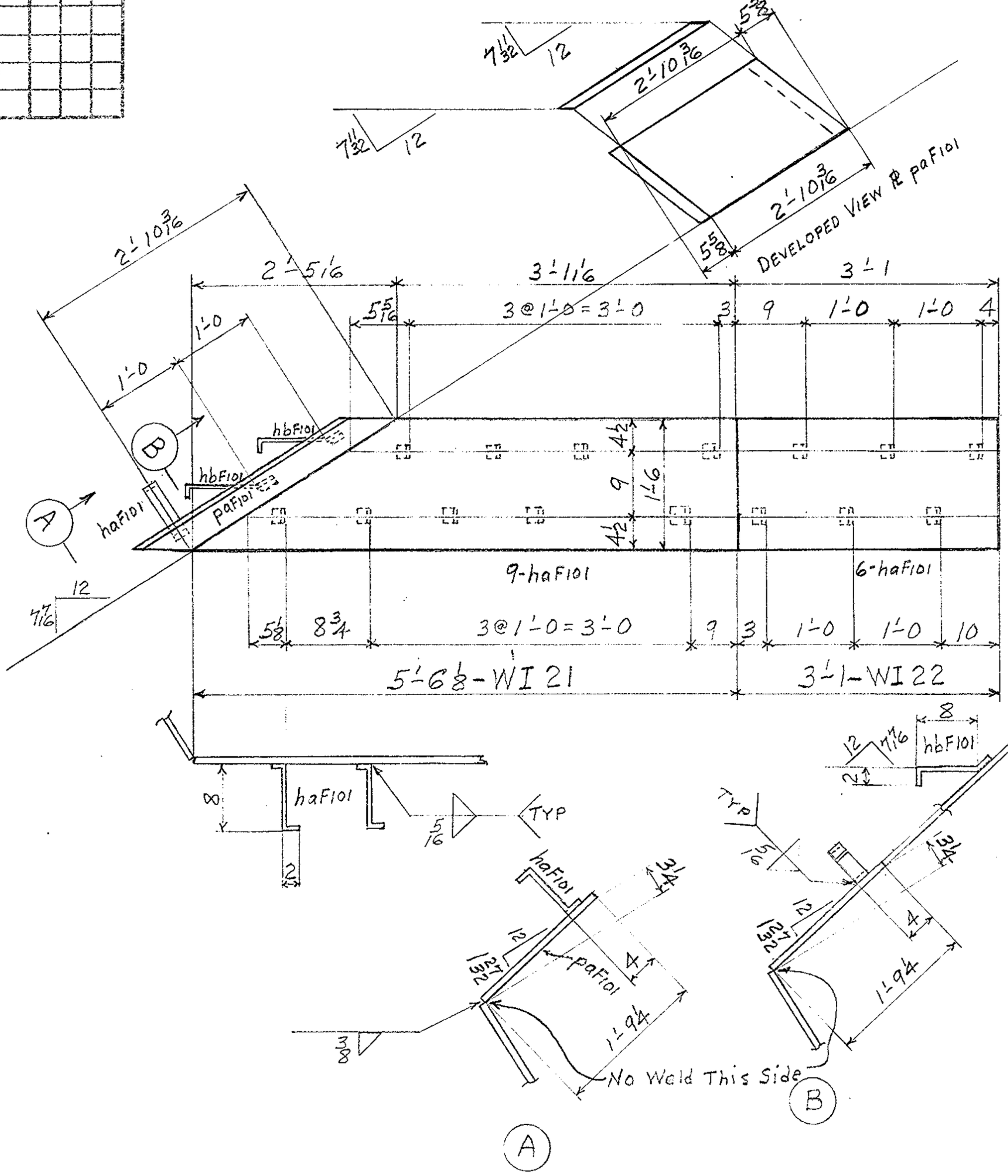
UNITED STATES STEEL CORPORATION

BOLTS

Hd. Nut

Dia.

grip / DIV.



K		
	F	32
	MAR	35
	MAC	36
	M	40
	W	50
	B	61
	⊕	65
	BO	71
	SP-J	90
	SP-B	91
	SP-F	92
	SR	
	MN	20
	IRS	60

Welding ~~Gross Wt. of Electrodes — Pounds~~

Advance Bill Page— 104-M104

NO. PCS.	MATERIAL SHAPE				LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP PIECE	ORDERED	ITEM
1	WI	℄	18	1/2	5	6 1/8	WI21		19 x 1/2 29-0	a35
1	WI	℄	21 1/4	1/2	3	4 3/4	paF101		21 1/2 x 1/2 12-10	A36
10	Bar	2	3/8		1	0	haF101 (Bent)			S
2	Bar	2	3/8		1	0	hbF101 (Bent)			S

NO. PCS.	MATERIAL SHAPE				LENGTH FT.	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
1	WI	℄	18	1/2	3	1	WI22		19 x 1/2 29-0	a35
6	Bar						haF101			S

Advance Shipment

HOCKER 265

| | | | | | |

RIVETS

Dia.

Grip Dia.

AGPO

SKETCH SHEET

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION

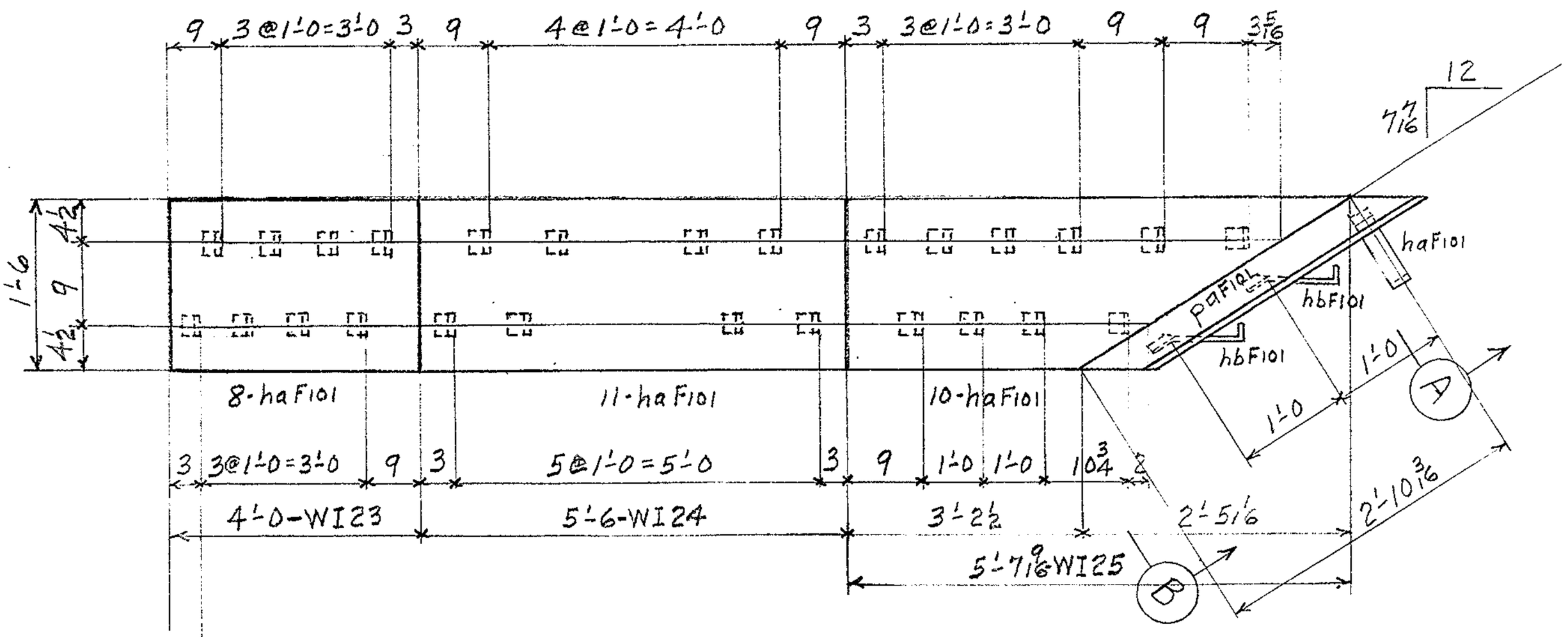
BOLTS

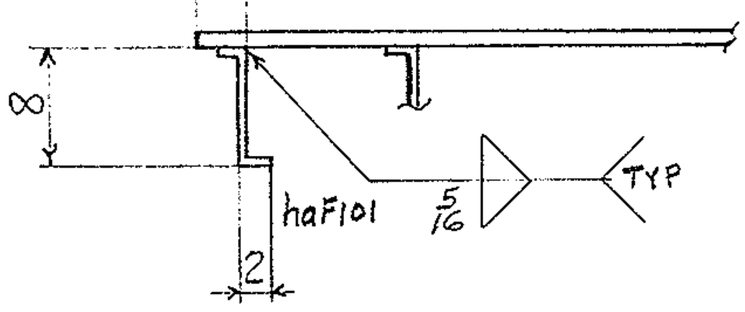
Hd. Nut

Dia.

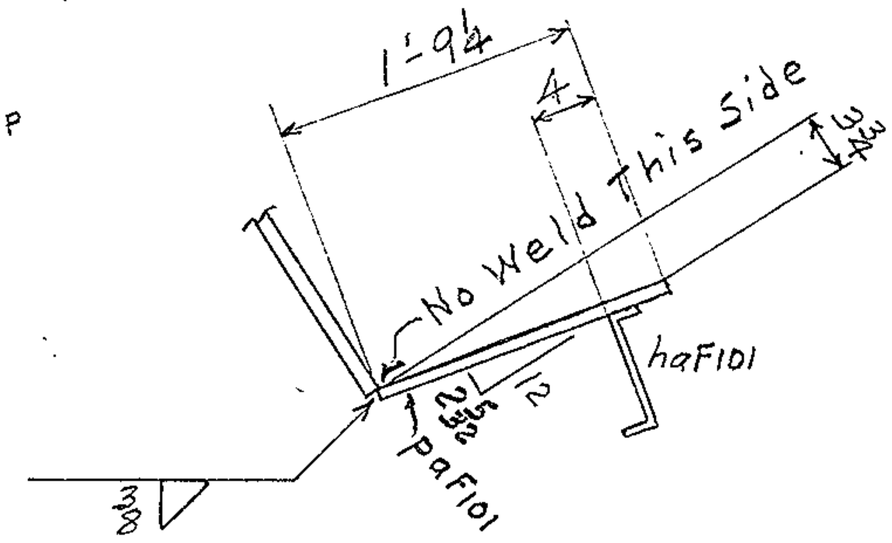
Grip Dia.

32	35	36	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	BD	SP-J	SP-B	SP-F	SR	MN	HS
12													

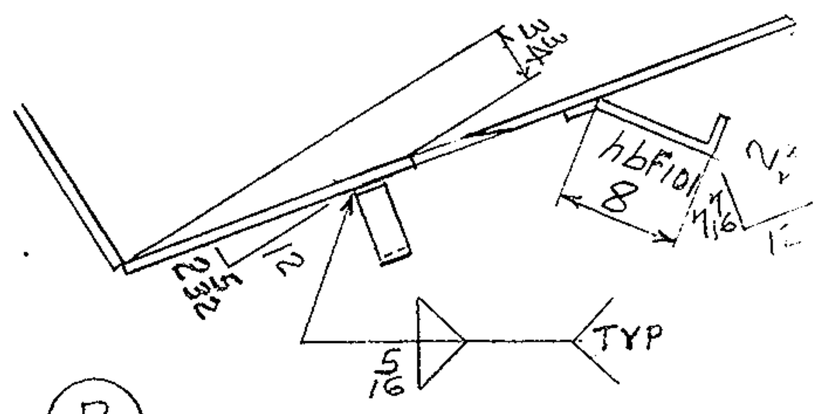




2 in 12
from Horz. Line.



A



B

Welding [redacted]

Advance Bill Page— 104-M104

NO. POS.	MATERIAL SHAPE	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
5	WI PL 18 1/2	4	0	WI23		19×1/2 29-8	A25
40	Bar 2 3/8	1	0	haF101 (Bent)			S
2	WI PL 18 1/2	5	6	WI24		19×1/2 29-8	A35
22	Bar			haF101			S

NO. POS.	MATERIAL SHAPE	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITY
1	WI PL 18 1/2	5	7 9/16	WI25		19×1/2 29-8	A35
1	WI PL 21/4 1/2	3	4 3/4	paF101		PL 1/2×2 12.10	A36
11	Bar			haF101			S
2	Bar 2 3/8	1	0	hbF101 (Bent)			S

Advance Shipment

HOCKER 265

WI PL @ Abut #1

PAINT No

CONTACT SURFACES No

DRAWINGS	NAME	DATE
MADE BY	LTB	6-27-61
CHKD. BY	JHKW	7-7-61

REVISIONS

DRAWINGS: ROANOKE

FABRICATION: AMBRIDGE

IN CHARGE OF: SLUSHER

ORDER No. V6336

SHEET No. F102

NAME OF STRUCTURE

BRIDGE No STA 21-1069

Ohio State Hwy Dept - Proj 260

RIVETS

Dia.

GRIP / DIV.

BOLTS

Hd. ____ Nut ____

Dia.

GRIP / DIV.

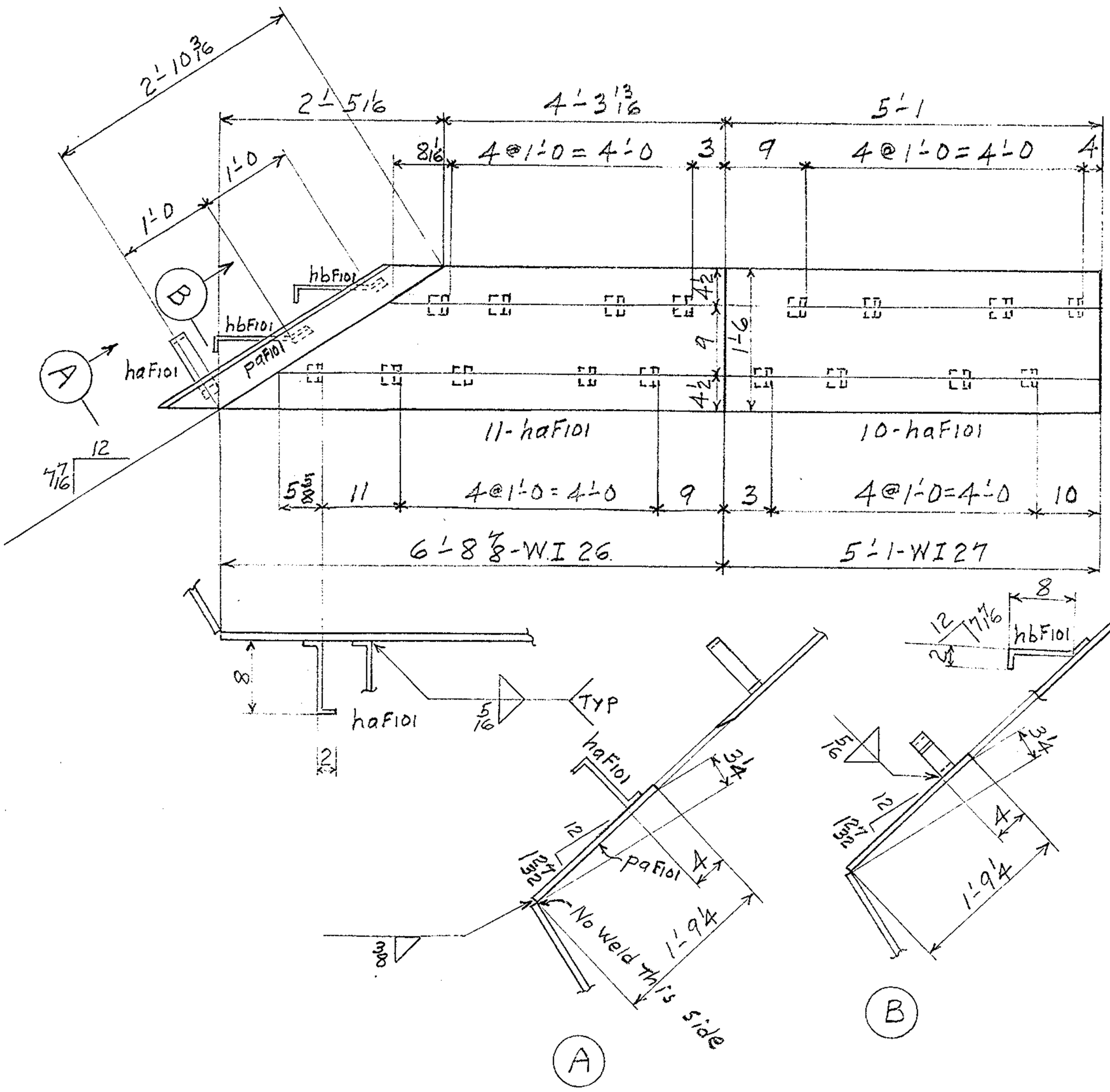
Acrd

SKETCH SHEET

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION



	F	32
	MAR	35
	MAC	36
	M	40
	W	50
	B	61
	C	65
	BD	71
	SP-J	90
	SP-B	91
	SP-	92
	SR	
	MH	20
	SIS	80

Welding [redacted]

Advance Bill Page— 104-M104

NO. PCS.	MATERIAL SHAPE	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
				X			
1	WI PL 18 1/2	6	8 7/8	WI26		19 x 2 29-8	A35
1	WI PL 21/4 1/2	3	4 3/4	paF101		2 1/2 x 2 12-10	A36
11	Bar 2 3/8	1	0	haF101 (Bent)			S
2	Bar 2 3/8	1	0	hbF101 (Bent)			S.

NO. PCS.	MATERIAL SHAPE	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
1	WI PL 18 1/2	5	1	WI27		19 x 2 29-8	A35
10	Bar			haF101			S

Advance Shipment

HOCKER 265.

| | | | |

RIVETS

Dia.

GRIP / DIV.

ASTM
SKETCH SHEET

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION

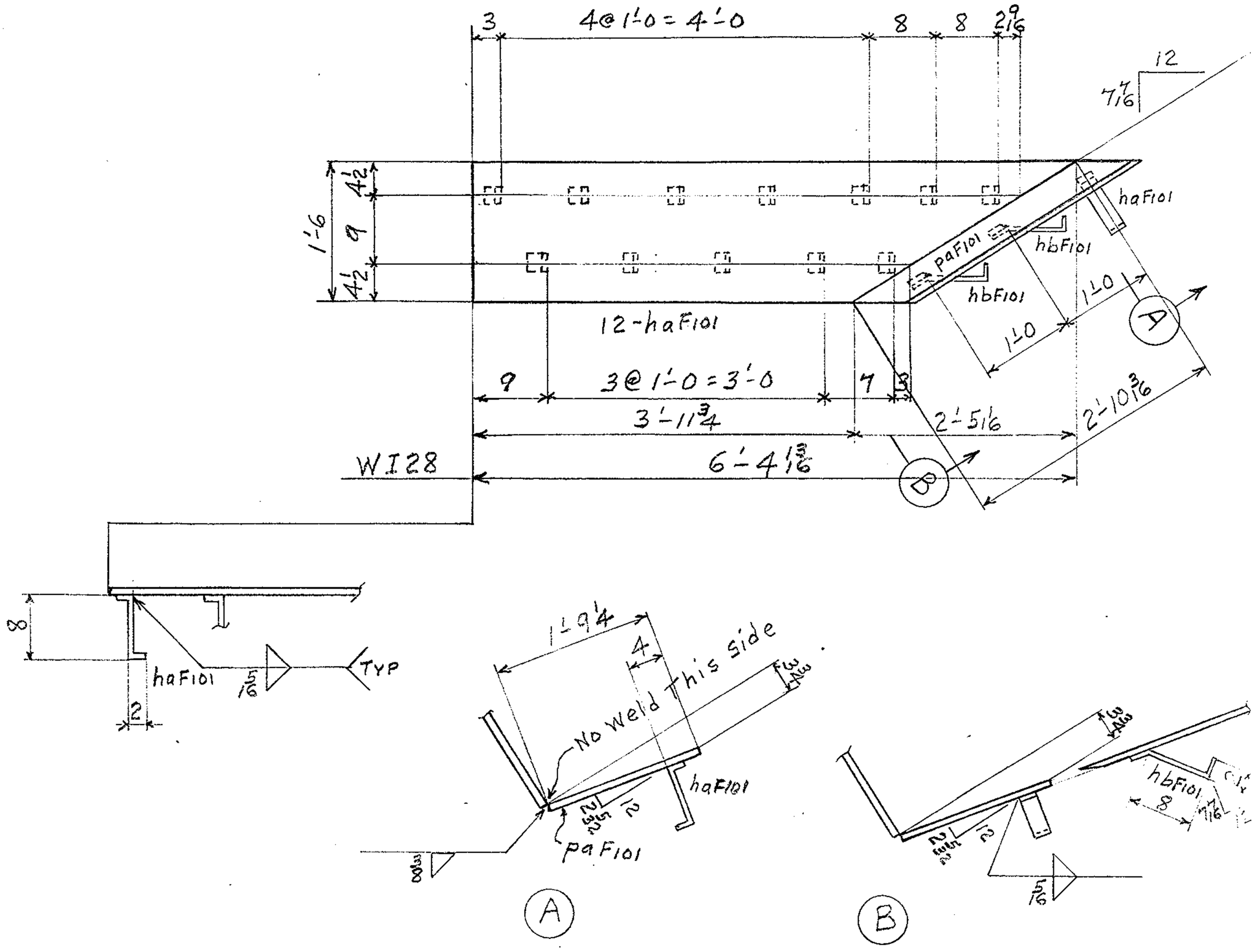
BOLTS

Hd. Nut

Dia.

GRIP / DIV.

32	35	36	40	50	61	65	71	90	91	92		28	
F	MAR	MAC	M	W	B	C	80	SP-J	SP-B	SP-F	SR	MM	
NP													



Welding [redacted]

Advance Bill Page— 104-M104

NO. POS.	MATERIAL SHAPE				LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
							X			
1	WI	PL	18	1/2	6	4 13/16	WI 28		19 x 1/2 29-8	A35
1	WI	PL	21 1/4	1/2	3	4 3/4	paF101		21 1/2 x 1/2 12-10	A36
12	Bar	2	3/8		1	0	haF101			S
2	Bar	2	3/8		1	0	hbF101			S

Advance Shipment

HOCKER 265

NO. POS.	MATERIAL SHAPE	LENGTH FT.	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM

WI PL @ Abut #2

PAINT No

CONTACT SURFACES No

DRAWINGS	NAME	DATE
MADE BY	LTB	6-29-61
CHKD. BY	JHKW	7-7-61

REVISIONS: 6-11-61 X

DRAWINGS: ROANOKE

FABRICATION: AMBRIDGE

IN CHARGE OF: SLUSHER

ORDER No. V6336

SHEET No. F104

NAME OF STRUCTURE

BRIDGE NO STA 21-1069

Ohio State Hwy Dept - Proj 260

RIVETS

Dia.

Grip / Div.

ASCO
SKETCH SHEET

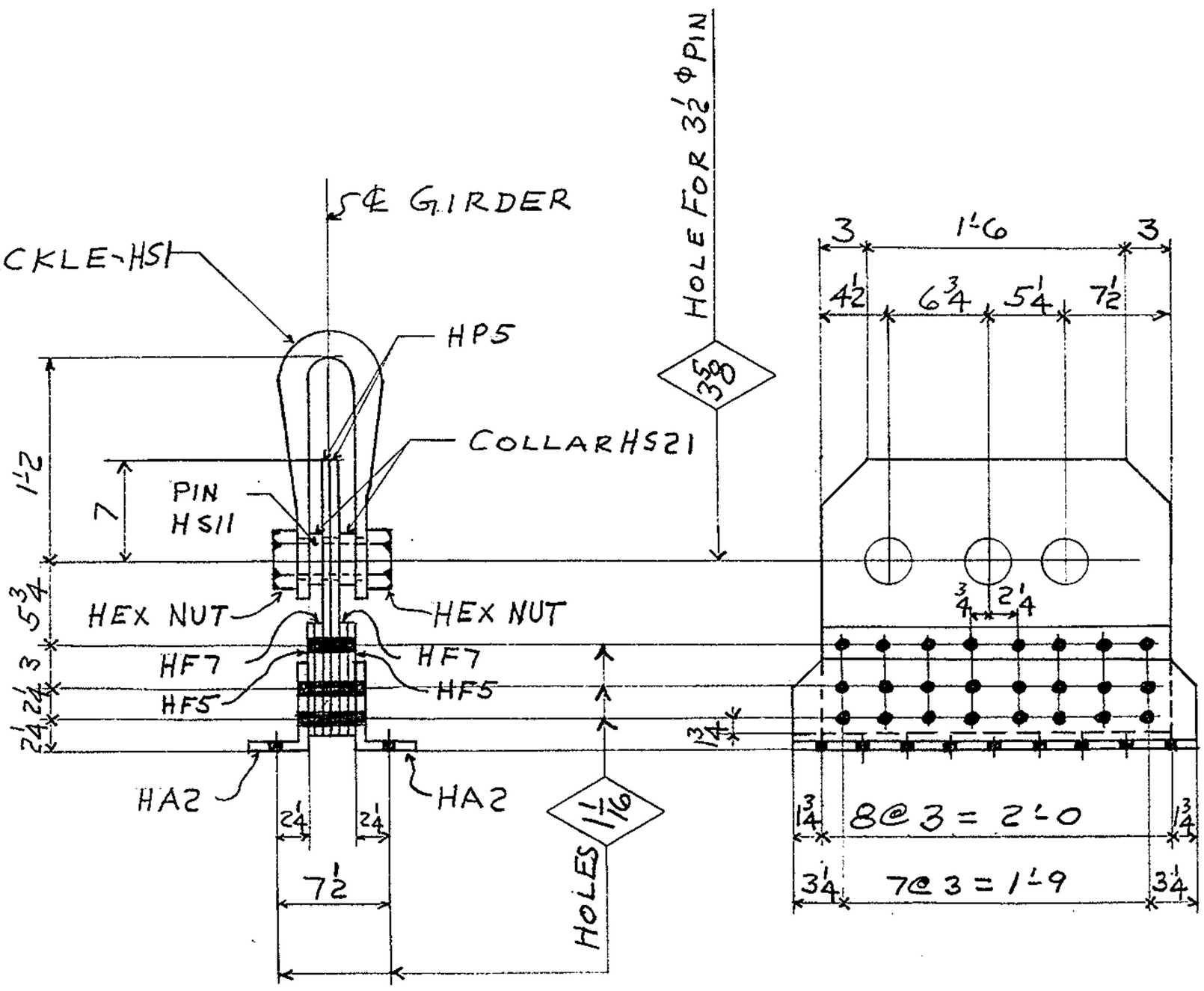
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

BOLTS

Hd. ____ Nut ____

Dia.

Grip / Div.



32 TON ERECTION HITCH

2- REQUIRED

NOTE:
ALL MATERIAL TO BE FURNISHED BY ERECTION DEPT.

~~Welding Groups Wt. of Electrodes _____ Pounds~~

Advance Bill Page—

NO. PCS.	MATERIAL SHAPE	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP PIECE	ORDERED	ITEM	NO. PCS.	MATERIAL SHAPE	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITE
4	Ls			HA2											
2	SHACKLES			HS1											
4	PL			HP5											
4	GAS PIPE COLLARS			HS21											
2	PINS			HS11											
4	Fills			HF5											
4	Fills			HF7											
4	Hex Nuts 3" Tap														

HOCKER 265

ERECTION HITCH	RIVETS	HOLES	DRAWINGS	NAME	DATE	REVISIONS	DRAWINGS	IN CHARGE OF	SHEET No.
PAINT NO	X	As Noted	MADE BY	R.T.	7-28-61		Roanoke	Slusher	F105
CONTACT SURFACES NO			CHKD. BY	J.K.W.	7-28-61		FABRICATION Ambridge	ORDER No. V-6336	

NAME OF STRUCTURE
BRIDGE Nº STA. 21-1069 OVER USR 21 UNDER W & L E RR MASSILLON, STARK Co., OHIO
OHIO STATE HWY DEPT. PROJ. Nº 260

RIVETS

Dia.

GRIP / DIV.

Aetd
SKETCH SHEET

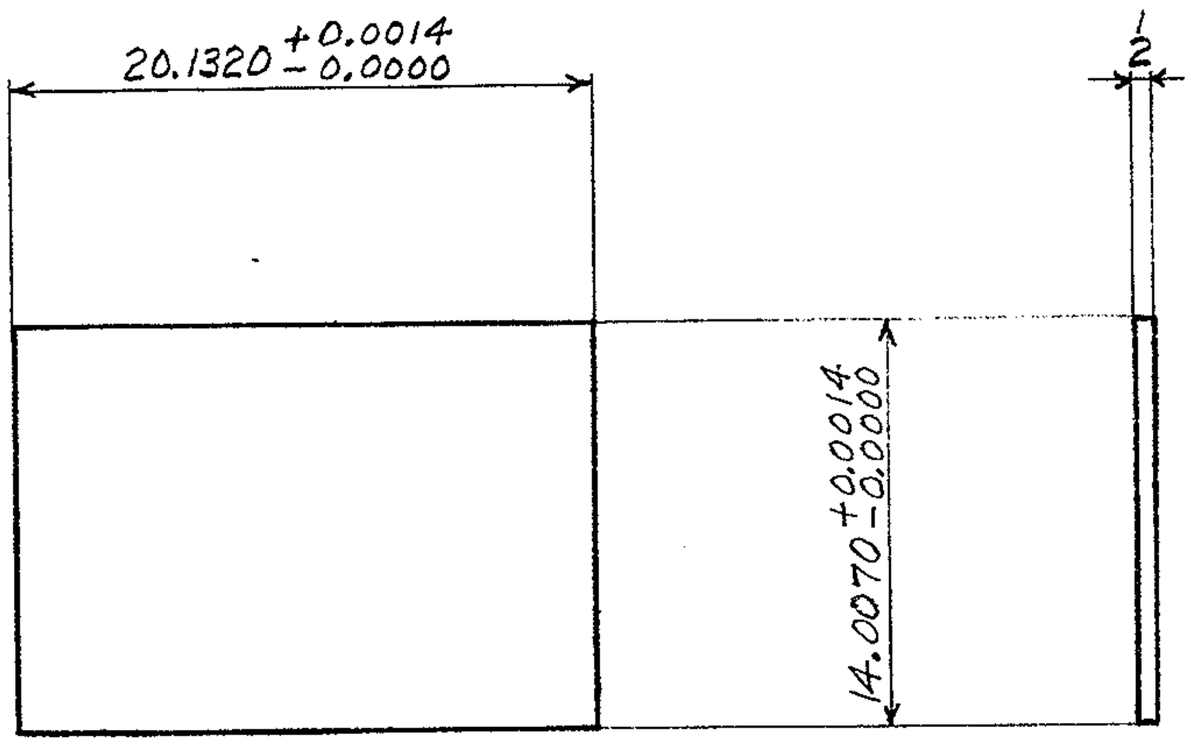
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

BOLTS

Hd. Nut

Dia.

GRIP / DIV.



CAST LEADED BRONZE PLATE pl

ASTM-B144-52-Alloy 3A

FINISH ALL OVER

Assemble WITH EFI Sh. 101

[redacted]

Advance Bill Page— M103

NO. PCS.	MATERIAL SHAPE	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM	NO. PCS.	MATERIAL SHAPE	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED
4	PL 14 × 1/2	1	8⅛	pl		REQN. 1-75847								
	Cast Leaded Bronze													

HOCKER 265

			DRAWINGS	NAME	DATE
Cast Leaded Bronze PL			MADE BY	LTB	5-31-61
[redacted]			CHKD. BY	PAP	6-8-61
[redacted]					

REVISIONS: E D C B A

DRAWINGS: ROANOKE
FABRICATION: AMBRIDGE

IN CHARGE OF: SLUSHER
ORDER No. V6336

SHEET No. P101

NAME OF STRUCTURE

BRIDGE No STA 21-1069

Ohio State Hwy. Dept.

FORM D-561

TURNED BOLTS

AMERICAN BRIDGE

DIVISION

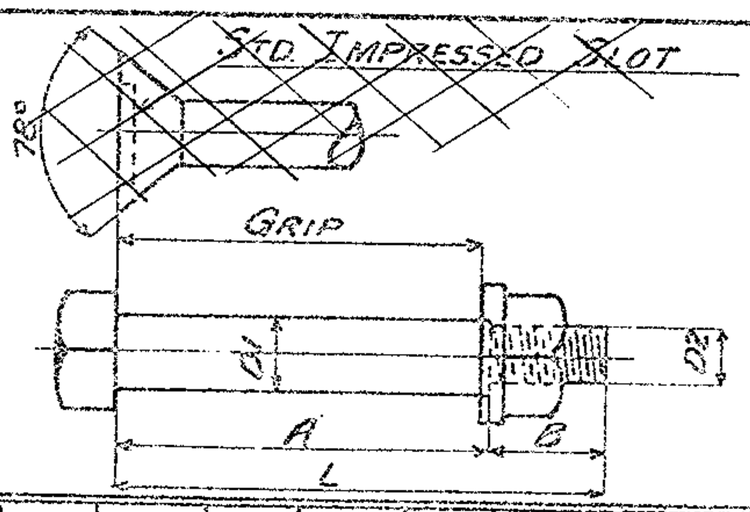
UNITED STATES STEEL COMPANY

SPECIFY UNDER DI

LDF = LIGHT DRIVE FIT

DF = DRIVE FIT

OF = { ORDINARY FIT (HOLE DIAMETER MINUS 1/32") }



STANDARD WASHERS	PLATE	LOCK	BEVEL
TYPE	X	V	P
DIMENSION "A"	GRIP + 1/16 OR 1/8	GRIP - 1/16 OR 1/8	

FOR AMBRIDGE FABRICATION FOR ORDINARY FIT TURNED BOLTS REDUCE DIMENSION "A" 1/

NO. REQD.	TYPE OF HEAD	SIZE OF REAMED HOLE	D1	D2	A	B	L	GRIP	TYPE OF NUT	NO. OF NUTS EACH BOLT	TYPE WASHER	NO. AND SIZE OF WASHER EACH BOLT	LOCATION	SHEET NO. MACH. CONT.	SHEET NO. STRUCT. CONT.	CALCULATED WEIGHT TOTAL	SHIPMENT
64	Hex	1 1/16	OF	1"	3 1/2	1 1/2	5	3 5/8	Hex	1	—	NONE	Shoes to Gdr.-MARK XI	101	S		

32	35	36	49	50	61	65	71	90	91	92		24	93
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM	PS
							✓						

HOCKER 265

ADVANCE BILL PAGE - M103

TURNED BOLTS FOR SHOES

DRAWINGS	NAME	DATE
MADE BY	LTB	5-31-61
CHKD. BY	PAP	6-8-61

REVISIONS: E W D O M X

DRAWINGS: ROANOKE

FABRICATION: AMBRIDGE

IN CHARGE OF: SLUSHER

ORDER No. V6336

SHEET No. P102

om

NAME OF STRUCTURE

BRIDGE NO STA 21-1069

Ohio State Hwy. Dept.

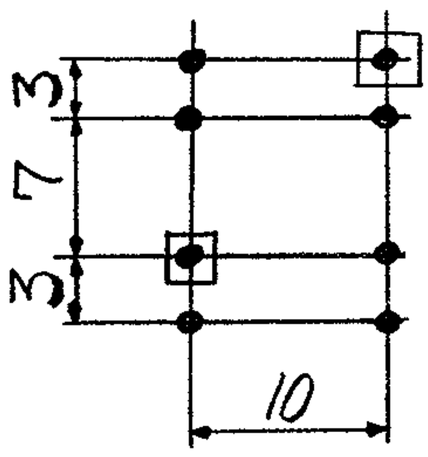
A-V-866

SKETCH SHEET

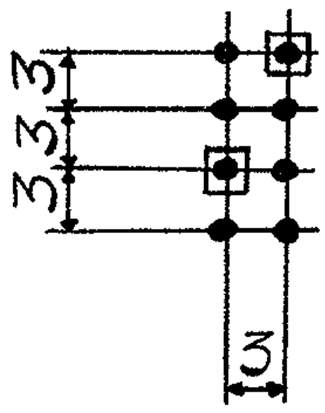
AMERICAN BRIDGE

DIVISION

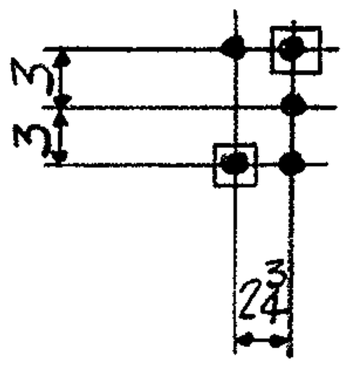
UNITED STATES STEEL CORPORATION



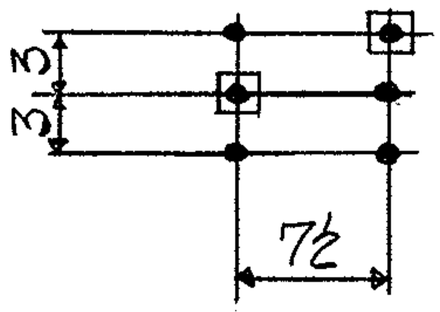
15/16" ϕ HOLES RT1



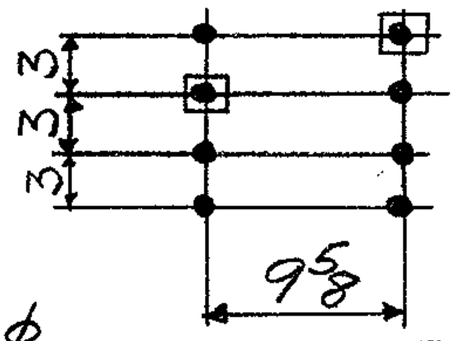
15/16" ϕ HOLES RT2



15/16" ϕ HOLES RT3



15/16" ϕ HOLES RT4



15/16" ϕ HOLES RT5

NOTE TO SHOP: SPACING ON THIS SHEET IS NOT TO BE USED FOR MAKING TEMPLETS. REFER TO DETAIL DRAWINGS FOR SPACING OF HOLES FOR ALL TEMPLETS.

REAMING TEMPLET INDEX

RT No.	Total Times Used		Sheet Numbers — Number Of Times Used On Each Sheet Shown Thus → (4)
			Div. #1 / Div. #2
RT1	4	4	102(2) 103(2) 104(2) 105(2)
RT2	164	164	102(41) 103(41) 104(41) 105(41) 106(8) 107(12) 108(6) 109(6) 110(8) 111(48) 112(36) 113(16) 114(6) 119(6) 120(12)
RT3	4	4	102(1) 103(1) 104(1) 105(1) 110(2) 113(2)
RT4	48	48	106(48) 107(12) 108(6) 109(6) 114(6) 119(6) 120(12)
RT5	4	4	106(4) 110(2) 113(2)

NOTE TO SHOP

IN PLACING SYMMETRICAL REAMING TEMPLETS ON STEEL, IT IS MOST IMPORTANT THAT THE TEMPLET BE APPLIED TO MATCHING CONNECTIONS IN THE SAME POSITION AND NOT TURNED UPSIDE DOWN OR FACED IN THE OPPOSITE DIRECTION.

IN ORDER TO INSURE THAT THE SHOP WILL PLACE THE TEMPLET PROPERLY, A SMALL SQUARE WILL BE PLACED AROUND TWO HOLES UNSYMMETRICALLY LOCATED, AS SHOWN ABOVE, AND ON THE DETAIL DRAWINGS.

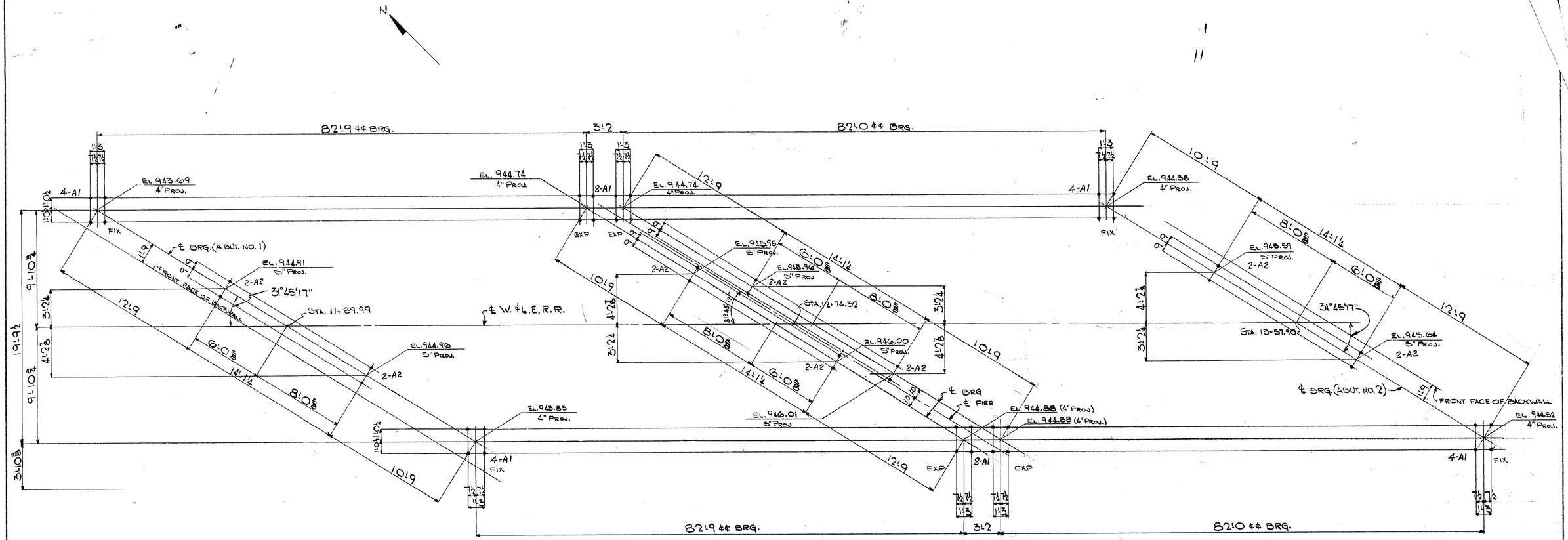
THE SHOP MUST PAINT THESE SQUARES ON BOTH FACES OF THE METAL TEMPLET AND THEN APPLY THE RT TO THE MEMBER TO EXACTLY DUPLICATE THE PATTERN SHOWN ON THE DETAIL DRAWING.

THE SHOP WILL REAM FROM EITHER THE FRONT FACE OR THE BACK FACE OF THE METAL TEMPLET AS NECESSARY TO DUPLICATE THE PATTERN ON THE DRAWING.

HOCKER 265

REAMING TEMPLETS	RIVETS	HOLES	DRAWINGS	NAME	DATE							REVISIONS	DRAWINGS	IN CHARGE OF	SHEET No.
PAINT —	X	X	MADE BY	H.B.	9-6-61								ROANOKE	SLUSHER	RT1
CONTACT SURFACES —			CHKD. BY	DHF	9-12-61								FABRICATION	ORDER No.	
						F	E	D	C	B	A		AMBRIDGE	V-6336	

NAME OF STRUCTURE



Anchor Bolt Setting Plan

Anchor bolts furnished by American Bridge and set by others in strict accordance with this plan.

Bridge No. Sta. 21-1069
Over USR 21 under W&LE RR
Massillon, Stark Co., Ohio
Ohio State Hwy Dept Proj. No. 260

HOCKER 265

D-53X—REV. 3-59 PENCIL-CLOTH

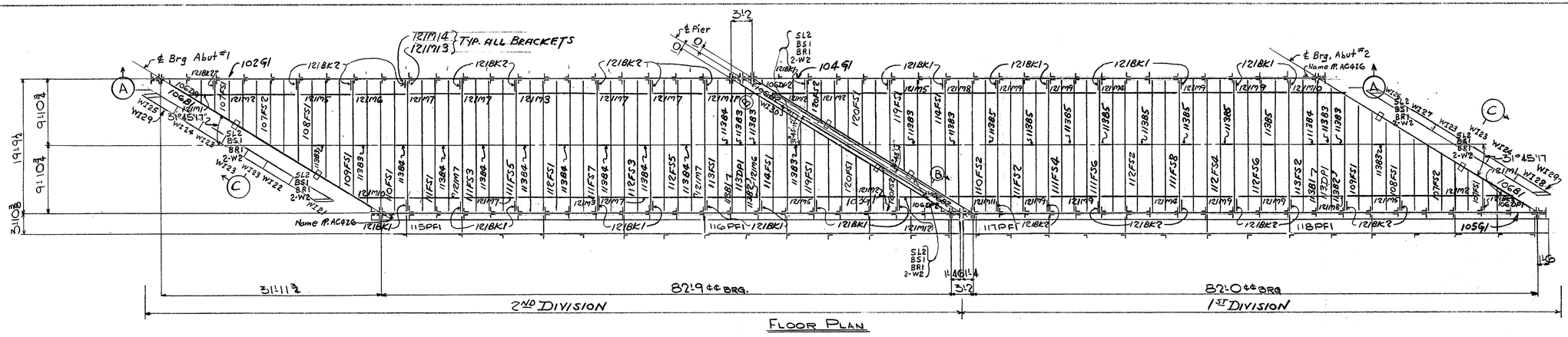
AMERICAN BRIDGE DIVISION
UNITED STATES STEEL CORPORATION

32	35	36	40	50	51	65	71	90	91	92		20	80					
F	MAR	M.C	M	W	B	C	BO	SP-F	SP-B	SP-F	SR	MM	NS					

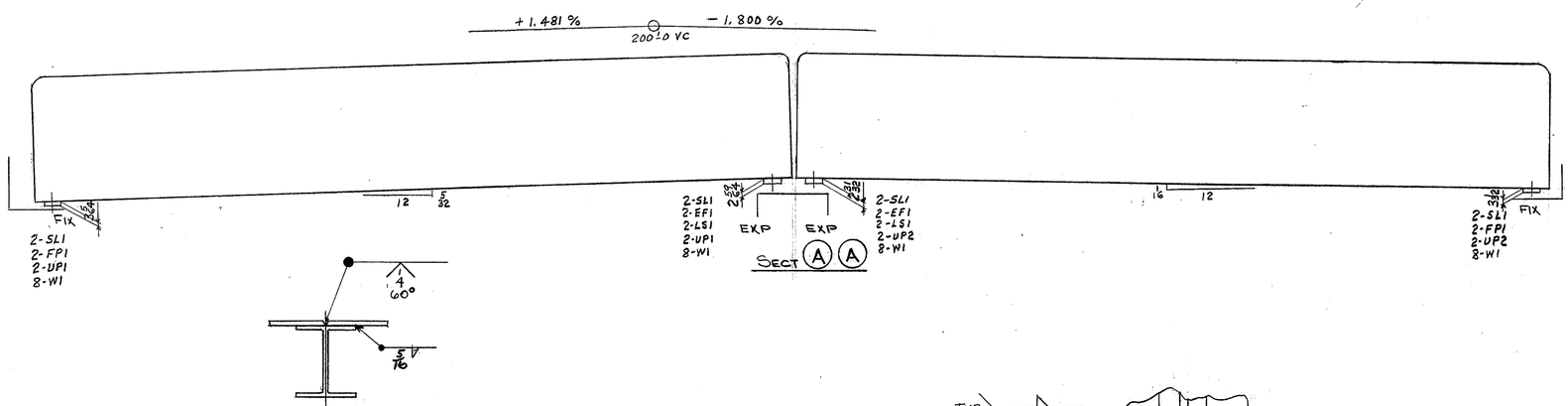
F	
E	
D	
C	
B	
A	
REVISIONS	

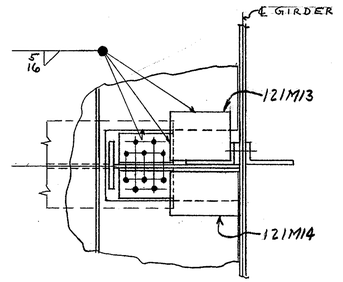
DRAWINGS MADE AT Roanoke PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Slusher
DRAW. MADE BY S.A. DATE
DRAW. CHECKED BY PAP DATE 5-12-61
ORDER No. V6336 SHEET No. E1

POST 123-B WHITEK



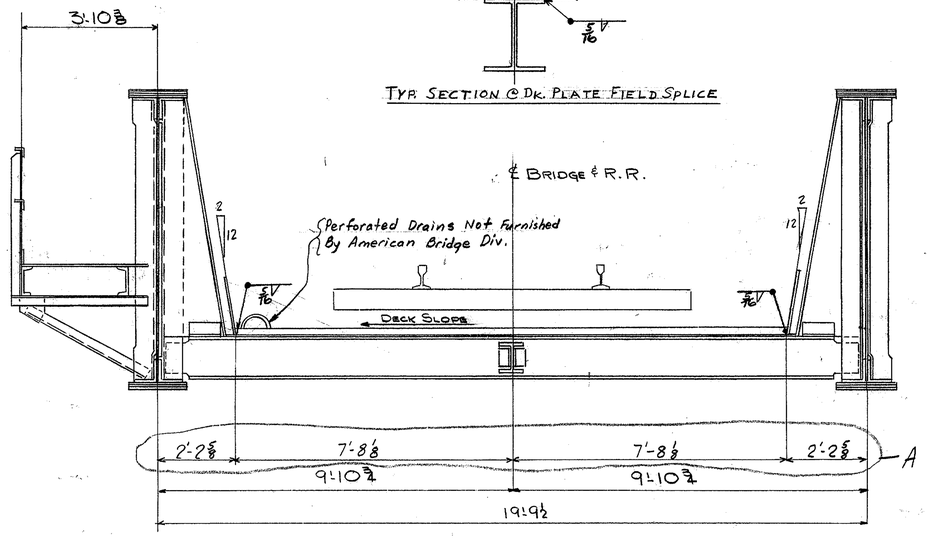
FLOOR PLAN



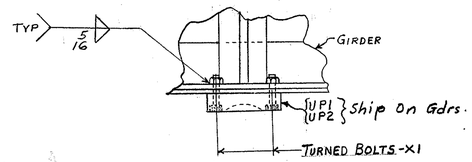


TYPICAL SECTION AT BRACKETS

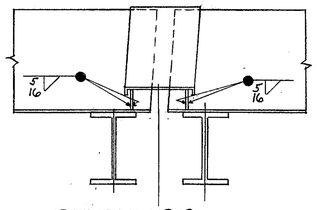
TYP. SECTION @ Dk. PLATE FIELD SPLICE



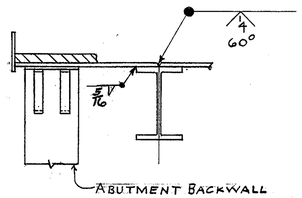
TYPICAL SECTION THRU ROADWAY



DETAIL AT BEARINGS



SECTION @ B



SECTION @ C

BRIDGE NO. STA. 21-1069
OVER USR 21 UNDER W&LE RR
MASSILLON, STARK CO., OHIO
OHIO STATE HWY DEPT PROJ NO 260

32	35	36	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	BD	SP-J	SP-B	SP-F	SR	MR	NS

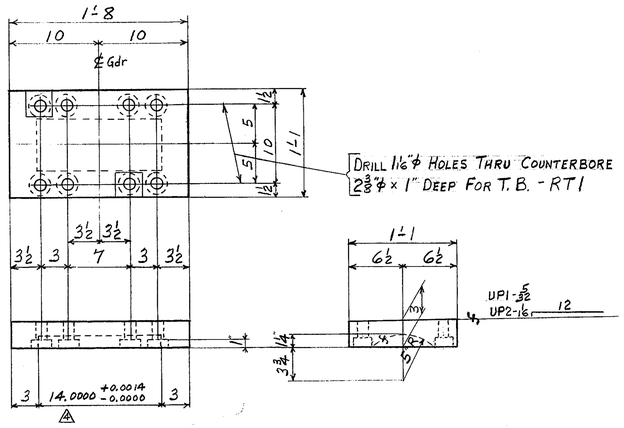
D-65X—REV. 3-59 PENCIL/CLOTH
AMERICAN BRIDGE DIVISION
UNITED STATES STEEL CORPORATION

HOCKER 265

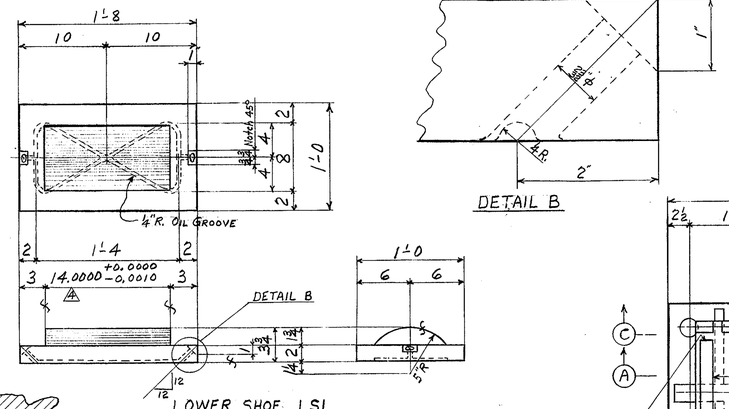
F	
E	
D	
C	
B	
A	1-31-62 M 2-242
REVISIONS	

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY S.A. DATE 5/61
DRAW. CHECKED BY PAP DATE 5/11/61
ORDER NO. V6356
SHEET NO. E 101

POST 123-D WHITE X



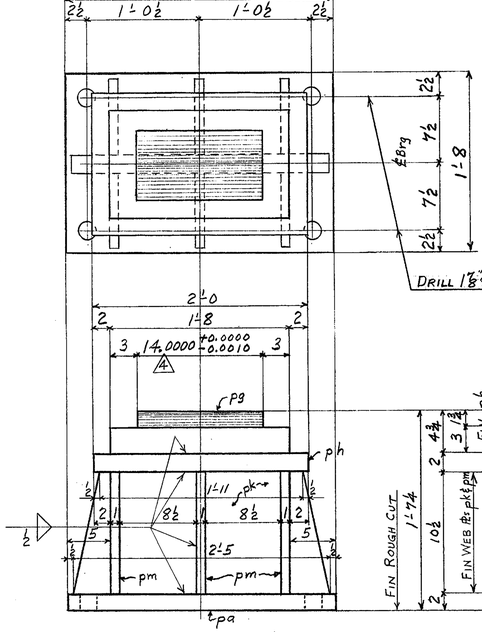
UPPER SHOE UP1-Ship Assembled On 10251-10361 Drill 33/32"ϕ Hole Thru - 1/2" PT
UPPER SHOE UP2-Ship Assembled On 10461-10561 For 1/2" Socket Hd. Pipe Plug



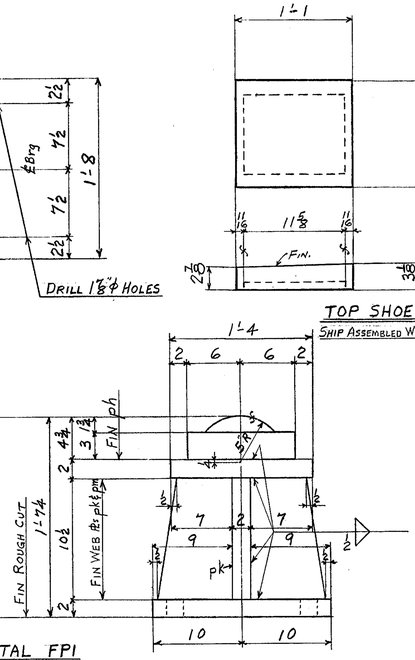
LOWER SHOE LSI

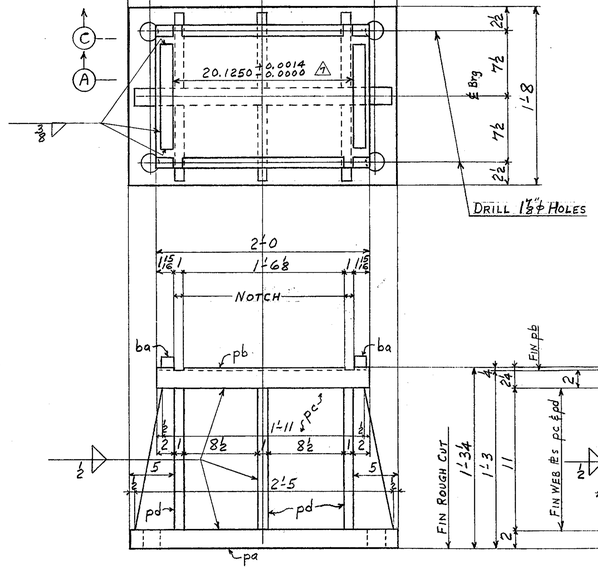
DETAIL OF OIL GROOVE

DETAIL B

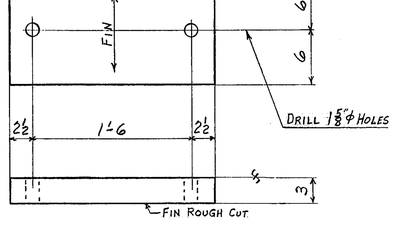


FIXED PEDESTAL FPI

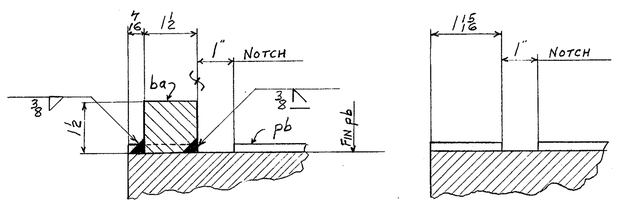




EXPANSION PEDESTAL EFI

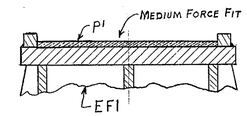


BOTTOM SHOE BSI



SEC @ (A)

SEC @ (C)



ASSEMBLY OF Pl TO EFI
(Pl DETAILED SH. P101)

1st D.V.	2nd D.V.	LINE	Total No. of Pieces on this Order	No. of Pcs. on Sheet	MATERIAL SHAPE	LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
		1										
	4	2	4	4	UPPER SHOES UP1 - Ship Assembled On 10251-10351							
4		3	4	4	UPPER SHOES UP2 - Ship Assembled On 10451-10565							
		4	4	4	Pl 13 (35/64 x 25 3/8 / 25/64 x 25 3/8)	1	8	UP1	Bev Fin 1 Side 13x3 3/8		S	
		5	4	4	Pl 13 (33/64 x 23 1/2 / 23/64 x 23 1/2)	1	8	UP2	Bev Fin 1 Side		S	
		6										
		7										
		8										
		9										
2	2	10	4		LOWER SHOES LSI							
		11	4	4	Pl 12 3 3/4	1	8		Fin 2 Sides 12x4 1/2		S	
		12	8	8	1/2" Socket Hd Pipe Plugs				Mfg. Std.		1-48008	
		13										
		14										
		15										
		16										
2	2	17	4		EXPANSION PEDESTAL EFI							
		18	4	4	Pl 20 2	2	6	pa	Fin 1 Side 20x2 1/8 6 1/2		66	
		19	4	4	Pl 16 24	2	0	pb			S	
		20	4	4	Pl 11 2	2	5	pc	Fin 2 Edges 11 1/2 x 19 5/8		57	
		21	24	24	Pl 8 1/2 1		11	pd	F2E		S	
		22	8	8	Bar 1 1/2 1 1/2	1	0	ba	Fin 1 Side 1 5/8 x 1 1/2		S	
		23	4	4	Bronze Pl 14 1/2	1	8 3/8	pl	Detailed Sh P101			X
		24										
		25										
		26										
		27										
2	2	28	4		FIXED PEDESTAL FPI							
		29	4	4	Pl			pa	Fin 1 Side			
		30	4	4	Pl 12 4 3/4	1	8	pa	Fin 1 Side 12x5		S	
		31	4	4	Pl 16 2	2	0	ph	Fin 1 Side Plane 28" Thk		S	
		32	4	4	Pl 10 1/2 2	2	5	pk	Fin 2 Edges 11 1/2 x 19 5/8		57	
		33	24	24	Pl 8 1/2 1		10 1/2	pm	F2E		S	
		34										
		35										
		36										
		37										
		38										
		39			SHIP ASSEMBLED WITH 10681 Sh 106							
4	4	40	8	8	Pl 12 (33/64 x 23 1/2 / 29/64 x 23 1/2)	1	1	paa	Bev. Fin. 1 Side 12x3 3/8		S	
		41										
		42										
		43										
		44										
4	4	45	8		BOTTOM SHOES BSI							
		46	8	8	Pl 12 3	1	11		Fin 2 Sides Plane 32" Thk		S	
		47										
		48										
		49										
		50										
		51										
		52										
		53										
		54										
		55										
		56										
		57										
		58										
		59										
		60										
		61										
		62	NOTE:-									
		63	All material this sheet ASTM-A7 except as noted									
		64										

SHOES

HOLES:- As Noted

PAINT NOTE:-
Coat Fin Surfaces With White Lead And Tallow
PAINT: Yes UN
SHOP CONTACT SURFACES: No

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

	32	35	38	40	50	61	65	71	80	81	92		20	60
F	MAR	MAC	M	W	B	C	BD	SP-J	SP-B	SP-F	SR	MM	NS	
N		✓	✓											

WELDING Adv. Bill 105-M102-M103

BRIDGE NO STA 21-1069
OVER USR 21 UNDER W&LE RR
MASSILLON, STARK CO., OHIO
OHIO STATE HWY DEPT. PROJ NO 260

D-DIX—PENCIL CLOTH
AMERICAN BRIDGE DIVISION UNITED STATES STEEL CORPORATION

HOCKER.265

REVISIONS	
F	
E	
D	
C	
B	
A	

DRAWINGS MADE AT Roanoke PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Slusher
DRAW. MADE BY LTB DATE 5-26-61
DRAW. CHECKED BY PAD DATE 6-8-61
ORDER NO. V6336 SHEET NO. 101

PR 4092-1059

A. B. SMITH CO., PGH., PA.

Cov PL 20×⅝×58'-10¼

on Cov PL 1⅞ ⅜ on Cov PL

18'-1½ to ℄ Brg.

Cov PL 20×½×51'-0

23'-1½

Cov PL 20×½×41'-0

28'-7½

Cov PL 20×½×29'-0

Typ BG

Bend Line

85'-5 0.to 0.

82'-9 c.c. Brgs.

℄ Brg to Line Ⓧ 36'-1 5/16

REAM

2-L⁵ 8×8×1×85'-1¾

STENCIL FS

on web PL

on Bk of L

on Bk of PL

Bend Line

cut 0.s. leg of 8"x8"x1" L

cut Flush 8×8×1"L

FUP 1 8×1

B.E.

2-L⁵ 8×8×1×85'-3¾

Cov PL 20×⅝×62'-1¾

"REAM"

Note break in gage

Drill 11/16 to RT 1

spacing not given Same As Top Flange

8-0½ L.L.

Cov PL 20×⅝×11'-1⅛

2-L⁵ 8×8×1×85'-1¾

Cov PL 20×½×51'-0

Cov PL 20×½×41'-0

Cov PL 20×½×27'-0

"REAM" - all web holes

No paint NS full length of girder

BRIDGE Nº STA. 21.10.69
OVER USR 21 UNDER W&LERR
MASSILLON STARK CO. OHIO
OHIO STATE HWY. DEPT. PROJ Nº 260

D-63X—REV. 3-59 PENCILCLOTH

AMERICAN BRIDGE DIVISION

HOCKER 265 UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT	Roanoke PLANT
WORK FABRICATED AT	Ambridge PLANT
IN CHARGE OF	Slusher
DRAW. MADE BY	ABD Jr. DATE
DRAW. CHECKED BY	JKW DATE 6-26-61
ORDER No.	V6336
SHEET No.	102AC

REVISIONS	
A	3-6-62

32	35	36	40	50	61	65	71	80	91	92		20	80
F	MAR	MAC	M	W	B	C	BD	SP-J	SP-B	SP-F	SR	MM	NS
			✓										

POST 123-B WHITEX

X

Y

Open hole top Flg. only

Open holes Top Flg. (Rivets Bott. Flg.

Step note break in stagger

58'-10½ 44 Splice on Cov PL

1-Cov PL 20×⅝ × 19'-10¼

19'-10½ 44 Splice on Cov PL

pf102

9@3½ = 2'-7½ | 4@3 6@3⅜ = 1'-6¾ | 8@3 = 2'-0 | 4@3 | 9@3½ = 2'-7½ | 4@3 | 11@3 = 2'-9 | 4@3 6@3⅜ = 1'-6¾ | 5@2½ 4@2⅜ 6@2½ = 1'-3 | 4@3 5@3 = 1'-3 | 4@4 7@2⅞ = 1'-8⅜ | 3@3 4@2½ 4@2⅜ 3@3 | 7@3 = 1'-9 | 4@2¾ = 11 | 4@3 5@3 = 1'-3 | 5@3½ = 1'-6¾ | 3@3

34'-8⅜ Line X to Line Y

85'-5 O. to O.

82'-9 c.c. Brgs.

3'-10⅞ | 3'-10⅞ | 3'-10⅞ | 3'-10⅞ | 3'-5⅜ | 3'-10⅞ | 3'-10⅞ | 3'-10⅞

pf102

Web PL 28×½ × 32'-10¼

Sf102E } NS fg102 } Sb102E (FS)

Sd102E } NS fg102 } Sb102E (FS)

Gb102E dc102

pf102

1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞ | 1'-11⅞

8'-0½ b.b. L's

11'6 = 5.46

3 4½ 3½

3 3 4½ 3 3

"BEAM" all web holes

No point NS full length of girder

2-1½

1-3½

BOTTOM SPACING SAME AS TOP FLANGE

BRIDGE Nº STA. 21-1069
OVER USR 21 UNDER W&L E.R.R.
MASSILLON, STARK CO. OHIO
OHIO STATE HWY DEPT. PROJ Nº260

D-65X—REV. 3-59 PENCILCLOTH

AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT Roanoke PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Slusher
DRAW. MADE BY ABD Jr. DATE
DRAW. CHECKED BY JHW DATE 6-26-61

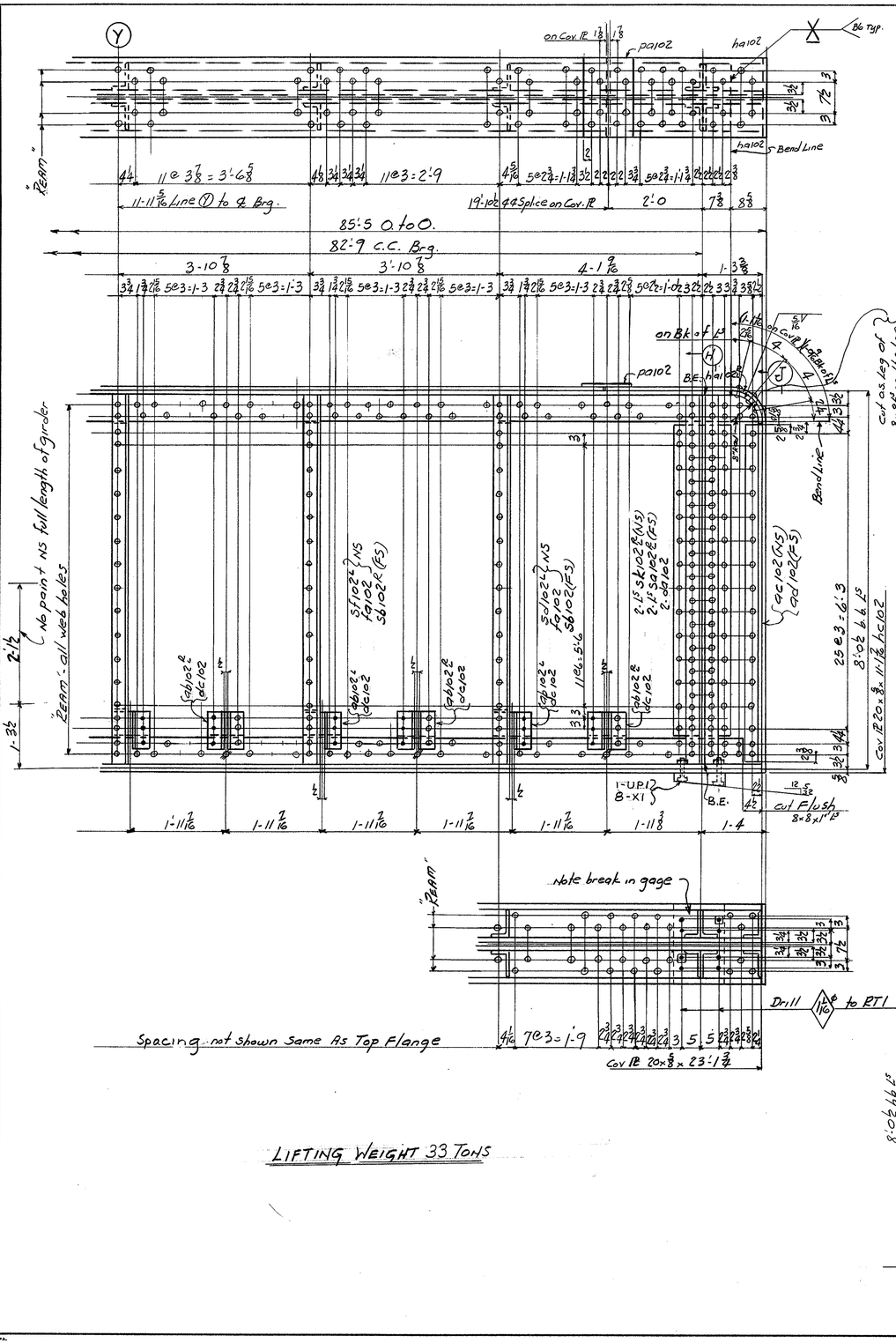
F	
E	
D	
C	
B	
A 2-6-62	0A
REVISIONS	

ORDER No. V6336

SHEET No. 102 BC

32	35	36	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM	NS

POST 123-D WHITEX


Y
X
on Cov. PL 1⅛
pa102
ha102
B6 Typ.
Bend Line
"Ream"
11 @ 3 7/8 = 3'-6 5/8
11 @ 3 = 2'-9
5 @ 2¾ - 1-1¾ 2 @ 2½ 2 @ 2⅜
5 @ 2¾ - 1-1¾ 2 @ 2½ 2 @ 2⅜
11-11 5/16 Line Ⓨ to ℄ Brg.
19'-10½ ℄ Splice on Cov. PL
2'-0
7⅞
8⅝
85'-5 O to O.
82'-9 c.c. Brg.
3-10 7/8
3'-10 7/8
4-1 7/16
1-3⅜
5 @ 3 = 1'-3
5 @ 2¾ 2 @ 2⅝ 2 @ 2 15/16
on Bk of L
Cut as Key of 8"x8" on this line
Bend Line
pa102
BE
ha102
Ⓗ
Ⓙ
"Beam" - all web holes
No paint ns full length of girder
sf102 ns
fa102
sb102 e (FS)
sa102 ns
fa102
sb102 e (FS)
2 - L sk102 e (NS)
2 - L sa102 e (FS)
2 - dd102
ga102 e
dc102
ga102 e
dc102
ga102 e
dc

Cov PL 20×⅝×58'-10¼

on Cov PL 18 7/8 3/8 on Cov PL

18'-1½ to ℄ Brg.

Cov PL 20×½×51'-0

23'-1½

Cov PL 20×½×41'-0

28'-7½

Cov PL 20×½×29'-0

Typ BG

Bend Line

5@2¼=1'-1¾ 6@3=1'-6 4½ 10@3=2'-6 4@3½=1'-2 12@4=4'-0 12@4=4'-0 5@4¼=1'-9¼ 6@3⅜=1'-6¾ 6@3=1'-6 4@3⅜=1'-3 10@3=2'-6 4@3½=1'-2 11@3=2'-9 8@3½=2'-4

2'-0 58'-10½ ℄ Spl. on Cov PL

℄ Brg to Line Ⓧ 36'-1 5/16

REAM

85'-5 0. to 0.

82'-9 c.c. Brgs.

4'-2½ 4'-0 4'-0 4'-0 4'-0 4'-0 4'-0 4'-0 3'-10 13/16

2-L⁵ 8×8×1×85'-1¾

Ⓐ Ⓑ Ⓔ Ⓗ Ⓕ Ⓖ Ⓙ

STENCIL FS

10341

Cov PL 20×⅝×58'-10½

Cov PL 20×½×51'-0

Cov PL 20×½×41'-0

Cov PL 20×½×29'-0

1-UP1 8-X1

B.E.

cut Flash 8×8×1"

2-L⁵ 8×8×1×85'-3¾

1'-4 1'-3⅜ 2'-11⅛ 1'-9¼ 2'-0 2'-0 2'-0 2'-0 2'-0 2'-0 2'-0 2'-0 2'-0 2'-0 2'-0 1'-11⅞ 1'-11 7/16

"REAM"

Note break in gage

Drill 11/16 ⌀ to RT1

5 5 3 7@3=1'-9 5@3½=1'-5¼ Spacing not given Same As Top Flange

Cov PL 20×⅝×62'-1¾

20@4=6'-8

18@4⅜=6'-1¼

4@4⅜=1'-5¼

Web PL 96×½×33'-2¾

on sg103ᵍ & ab103ᵏ

R.T.P.

STENCIL FS

Ream N.S. full length of girder

No Paint N.S. - all web holes

BRIDGE Nº STA. 21-1069
OVER USR 21 UNDER W&LE R.R.
MASSILLON, STARK CO., OHIO
OHIO STATE HWY DEPT. PROJ. Nº 260

D-43X—REV. 3-59 PENCILCLOTH

AMERICAN BRIDGE DIVISION
UNITED STATES STEEL CORPORATION

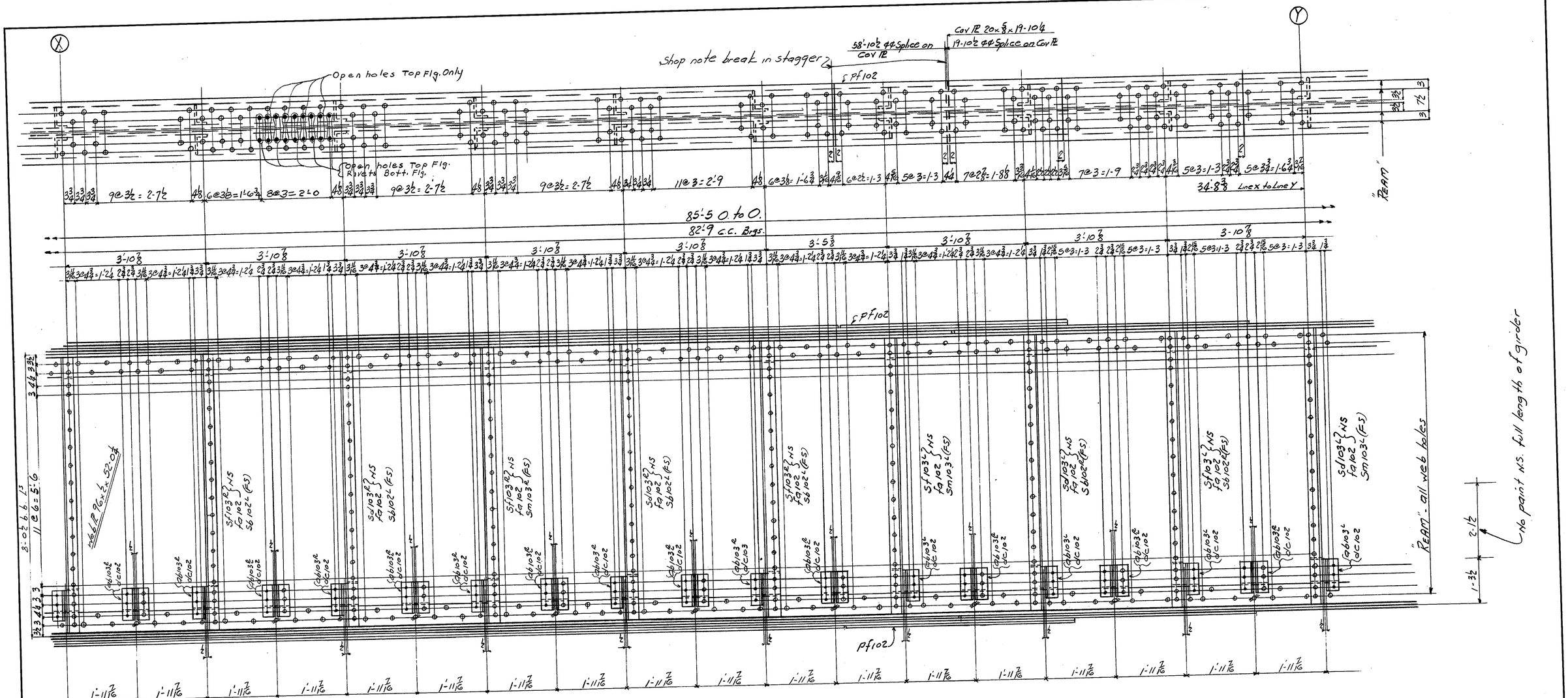
HOCKER 265

DRAWINGS MADE AT	Roanoke PLANT
WORK FABRICATED AT	Ambridge PLANT
IN CHARGE OF	Slusher
DRAW. MADE BY	ABD Jr. DATE
DRAW. CHECKED BY	JKW DATE 6-26-61
ORDER No.	V6336
SHEET No.	103AC

REVISIONS																		
F																		
E																		
D																		
C																		
B	2-6-62	L																
A	12-28-61	①																

32	35	38	40	50	61	65	71	99	91	92		20	80
F	MAR	MAC	M	W	B	C	BO	SP-P	SP-B	SP-F	SR	MM	NS

POST 123-B WHITEX



BOTTOM SPACING SAME AS TOP FLANGE

BRIDGE Nº STA. 21-1069
OVER USR 21 UNDER W&LE R.R.
MASSILLON, STARK CO, OHIO
OHIO STATE HWY DEPT. PROJ Nº 260

D-433K—REV. 3-59 PENCILCLOTH
AMERICAN BRIDGE DIVISION
UNITED STATES STEEL CORPORATION
HOCKER 265

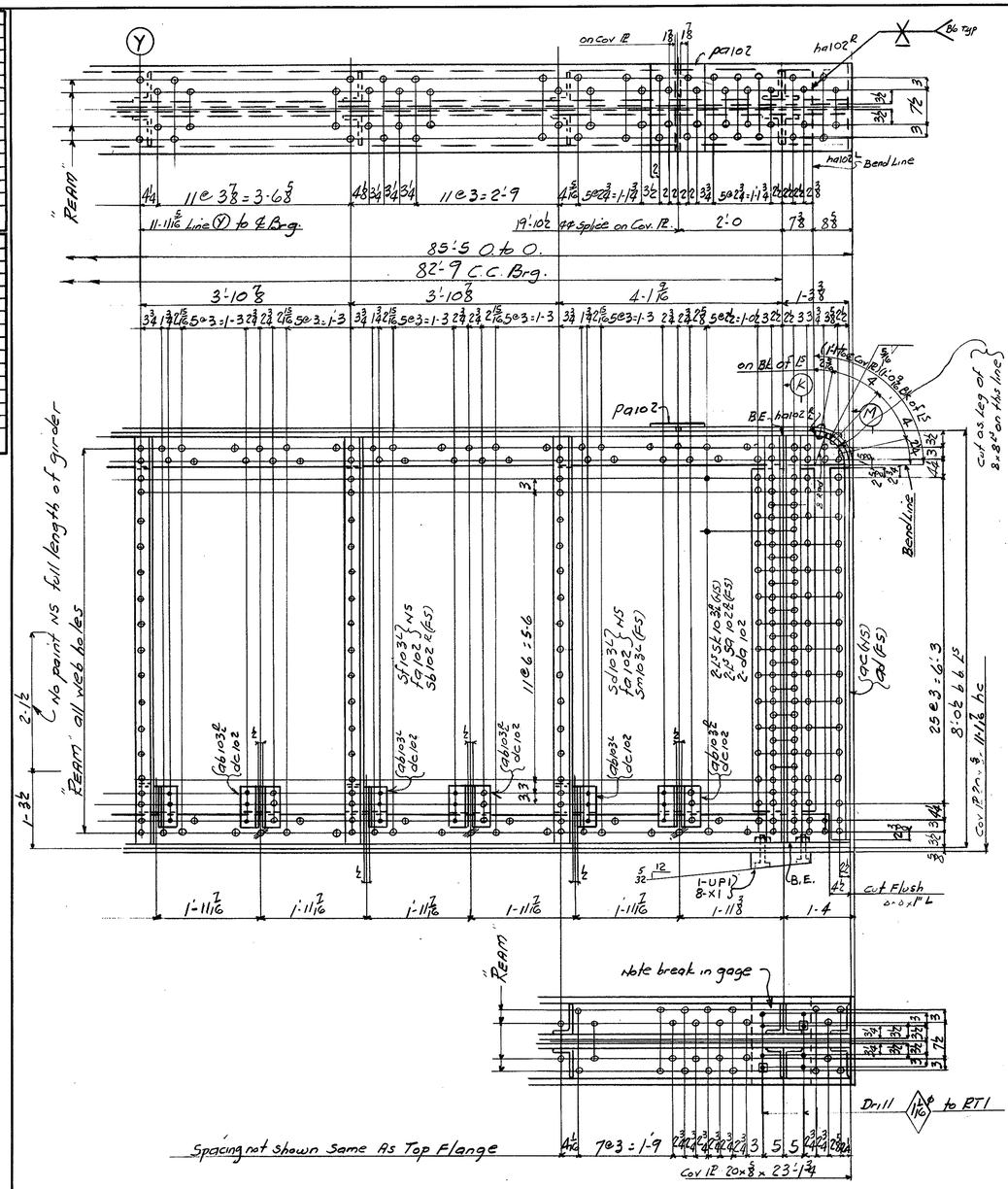
DRAWINGS MADE AT Roanoke PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Slusher
DRAW. MADE BY ABD Jr DATE
DRAW. CHECKED BY JHW DATE 6-26-61

REVISIONS	
F	
E	
D	
C	
B	
A	

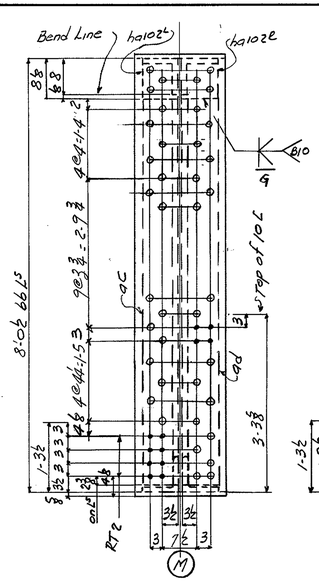
ORDER No. V6336
SHEET No. 103.BC

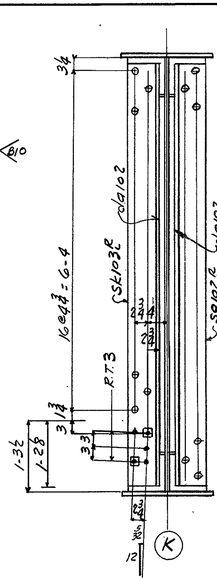
32	35	38	48	58	61	65	71	98	91	92		28	88
F	MAR	MAC	M	W	B	C	90	SP-F	SP-B	SP-F	SR	MM	NS

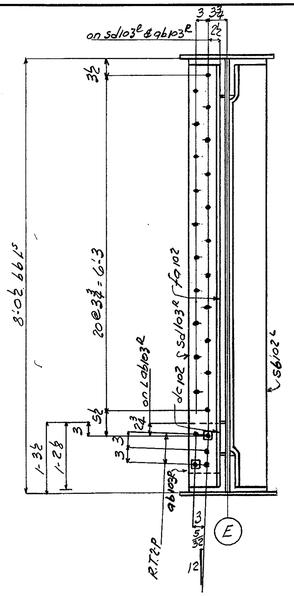
POST 123-B WHITEX

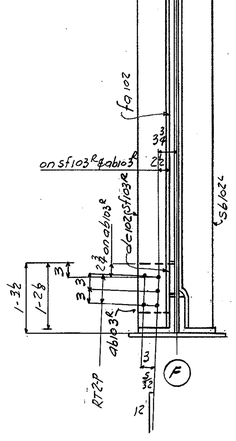


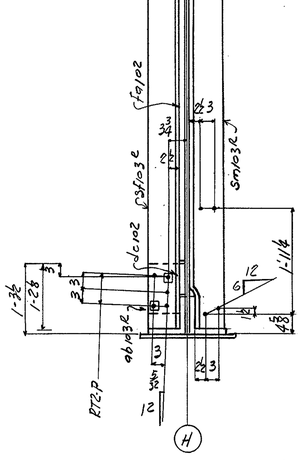
LIFTING WEIGHT 33 TONS

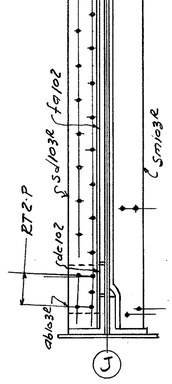












LINE	Total No. of Pces on the Same Order	No. of Pces on Sheet	MATERIAL SHAPE	LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP. PIECE
1		ONE GIRDER				103G1	STENCIL			
2		2	L5 8 8	1	85 1 3/4			86-9	43	
3		2	L5 8 8	1	85 3 1/4			87-6	44	
4		1	web PL 9/16	33	2 3/4			33-3 3/4	67	
5		1	web PL 9/16	52	0 4			52-1 4	68	
6		1	Cov PL 20 5/8	11	1 7/16	bb102	Bent			
7		1	Cov PL 20 5/8	11	1 7/16	bc	Bent		5	
8		1	Cov PL 20 5/8	58	10 1/4			58-1 4	49	
9		1	Cov PL 20 5/8	62	1 3/4			62-2 3/4	51	
10		1	Cov PL 20 5/8	19	10 1/4			19-1 4	55	
11		1	Cov PL 20 5/8	23	1 3/4			23-2 3/4	53	
12		2	Cov PL 20 1/2	51	0			51-0	60	
13		2	Cov PL 20 1/2	41	0			41-0	59	
14		2	Cov PL 20 1/2	29	0				5	
15		2	L5 8 4	1	7 3 1/2	aa102				
16		4	L5 7 4	3/4	7 10 1/2	sa102	F2E			
17	3R 3L	2	L5 7 4	3/4	7 10 1/2	Sm103	F2E	40/45	2	
18	3R 3L	2	L5 7 4	3/4	7 10 1/2	Sb103	F2E	40/45	2	
19	4R 4L	13	L5 7 4	1/2	7 10 1/2	Sb103	3/4 crimped	40/45	1	
20	8R 8L	7	L5 7 4	1/2	7 10 1/2	Sm103	3/4 crimped	40/45	1	
21		1	L 7 4	1/2	7 10 1/2	Sh102				
22	12R 12L	9	L5 7 4	1/2	7 10 1/2	sd103	2-6 2-3	40/45	1	
23	12R 12L	9	L5 7 4	1/2	7 10 1/2	Sf103	2-6 2-3	40/45	1	
24		1	L 8 4	1	7 3 1/2	ac		40/45	45	
25		1	L 8 4	1	7 3 1/2	ad		40/45	45	
26	2	1	8 TCB 359	1	1 6	ma103			5	
27	66R 52L	59	L5 7 4	1/2	0 10 1/4	ab103	2-3 2-6	40/45	1	
28		4	PL 14	1	6 8 1/4	da102				
29		18	Brs 4	1	6 1	Fa102				
30										
31		40	Brs 7 1/2	1	0 8 1/2	dc102				
32		2	PL 20 1/2	38	6 8 1/4	dd102				
33		1	Br 4	1	6 8 1/4	fb102				
34		4	Brs 6	38	2 8 1/2	pd102				
35		4	PL 8	1	0 11 5/8	ha102	& bent			
36		2	PL 12 1/2	1	8	pa102				
37		2	PL 20 5/8	6	5 5/16	pf102				
38	2	1	L 7 4 1/2	7	10 1/2	Sq103		40/45	1	
39		1	Br 4	1	6 1	fd102				
40										
41		2	Upper Shoes			UP1	Detailed on Sh. 101			
42		16	Turn Bolts			X1	Detailed on Sh. 101			
43										
44										
45										
46										
47										
48										
49										
50										
51										
52										
53										
54										
55										
56										
57										
58										
59										
60										
61										
62										
63										
64										

2nd Division

NOTES.

All holes marked "Ream" to be punched 4" small and reamed to size assembled. Holes in material over 3/4" thick to be subdrilled

All holes marked R.T. to be sub-punched 4" small and reamed to size to a metal templet.

No Paint within 5" of all open holes, holes shall be free from burrs.

B.E. denotes Bearing End.

NO CAMBER REQUIRED

1/8 5/16 Rivets Holes

PAINT: Yes U.N
SHOP CONTACT SURFACES: No

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS.

22	35	36	40	58	61	65	71	90	91	92		29	88
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-S	SP-F	SR	MM	85
			1										

BRIDGE No STA. 21-1069
OVER USR 21 UNDER W&L.E.R.R.
MASSILLON, STARK CO OHIO
OHIO STATE HWY DEPT. PROJ. No 260

DRY—PENCIL CLOTH
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

HOCKER 265

DRAWINGS MADE AT Roanoke PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Slusher
DRAW. MADE BY AGD Jr DATE
DRAW. CHECKED BY JHW DATE 6-26-61
ORDER No. V6336
SHEET No. 103C om

REVISIONS	
F	
E	
D	
C	
B	
A	

A. O. SMITH CO., PEN., PA.

Adv. BIII

PR 4093—1259

Cov PL 20×⅝×58'-5¾

Cov PL 20×½×51-0

Cov PL 20×½×41-0

Cov PL 20×½×29-0

17-9 to ℄ Brg

22-9

28'-3

Typ BG

Bend Line

84'-8 O. to O.

82-0 C.C. Brgs.

58'-6 ℄ ℄ Splice on Cov PL

℄ Brg to Line Ⓧ 36'-0 15/16

Ramp

2-L⁵ 8×8×1×84'-4¾

STENCIL F.S.

104G1

Cov PL 20×⅝×61'-9¼

Note break in gage

Drill 11/16 ø to PL1

Spacing not given Same As Top Flange

8'-0 6⅝ L⁵

Cut Flush 8×8×1 L⁵

2-L⁵ 8×8×1×84'-6¾

BRIDGE Nº STA. 21-1069
OVER USR 21 UNDER W&LERR
MASSILLON, STARK Co OHIO
OHIO STATE HWY DEPT PROJ Nº 260

D-43X—REV. 3-59 PENCILCLOTH

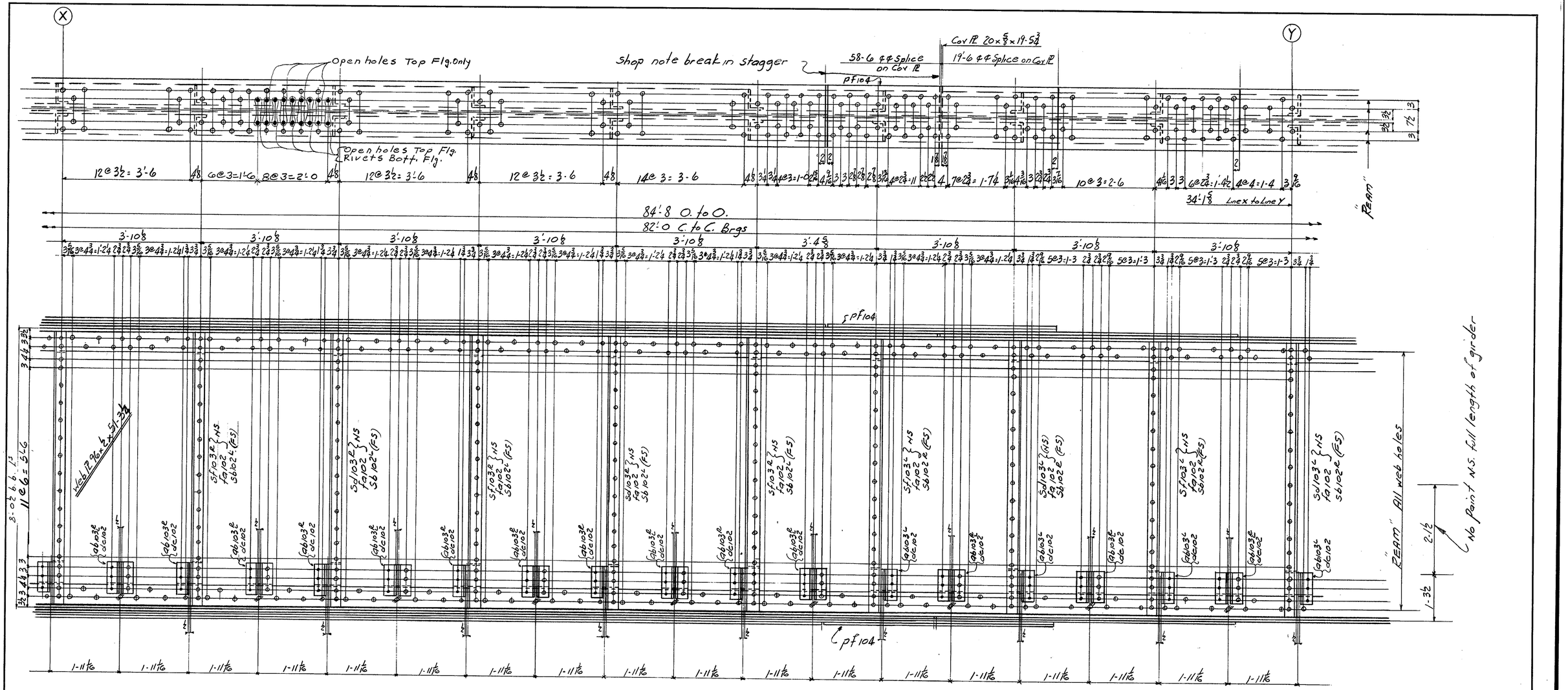
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

HOCKER 265

F	DRAWINGS MADE AT	KOAHOLE PLANT
E	WORK FABRICATED AT	AMBRIDGE PLANT
D	IN CHARGE OF	Slusher
C	DRAW. MADE BY	RAH Jr. DATE
B	DRAW. CHECKED BY	JHW DATE 6-26-61
A 2-6-62	ORDER No.	V6336
REVISIONS	SHEET No.	104 AC

32	35	38	49	58	61	65	71	88	91	92			20	88
F	MAR	MAC	M	W	B	C	BO	SP-B	SP-B	SP-F	SR		MM	NS

POST 123-B WHITEX



BRIDGE Nº STA. 21-1069
OVER USR 21 UNDER W&LERR
MASSILLON, STARK CO. OHIO
OHIO STATE HWY DEPT PROJ Nº 260

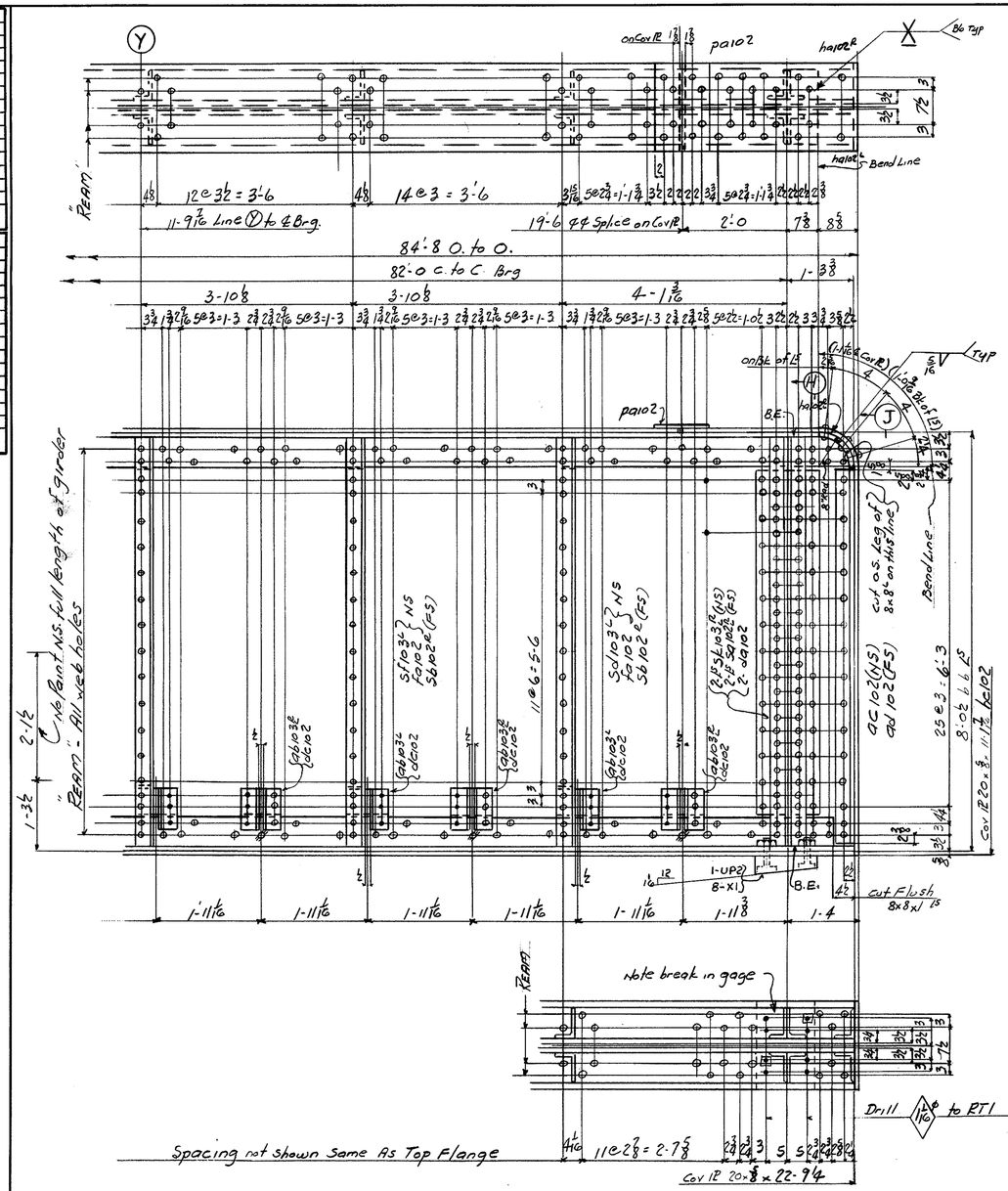
32	35	38	48	58	61	65	71	88	91	92		28	88
F	MAR	MAC	M	/W	B	C	BO	SP-F	SP-B	SP-F	SR	MM	NS
			/										

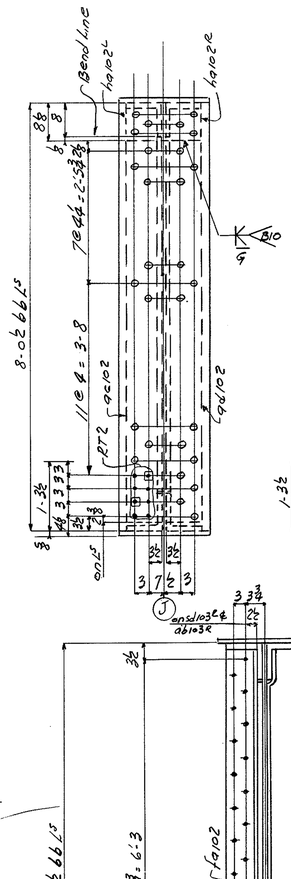
D-63X—REV. 3-59 PENCILCLOTH
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

HOCKER 265

DRAWINGS MADE AT	ROANOKE PLANT
WORK FABRICATED AT	AMBRIDGE PLANT
IN CHARGE OF	SLUSHER
DRAW. MADE BY	ABD JR DATE
DRAW. CHECKED BY	JHW DATE 6-26-61
ORDER No.	V6336
SHEET No.	104 BC
REVISIONS	F, E, D, C, B, A

POST 123-B WHITEX





LIFTING WEIGHT 32 TONS

LINE	Total No. of Pieces in the Order	No. of Pcs. on Sheet	MATERIAL SHAPE				LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
1			One Girder						104G1	STENCIL			
2		2	L	8	8	1	84	4¾			84-7½	41	
3		2	L	8	8	1	84	6¾			85-4½	42	
4		1	Web PL	96	½		51	3¾			51-4½	63	
5		1	Web PL	96	½		33	2¾			33-3¾	62	
6		1	Cov PL	20	5/8		11	1 7/16	hb102	Bent			
7		1	Cov PL	20	5/8		11	1 7/16	hc102	Bent			
8		1	Cov PL	20	5/8		58	5¾			58-6¾	48	
9		1	Cov PL	20	5/8		61	9¼			61-10¼	50	
10		1	Cov PL	20	5/8		19	5¾			19-6¾	54	
11		1	Cov PL	20	5/8		22	9¼			22-10¼	52	
12		2	Cov PLs	20	½		51	0			51-0	60	
13		2	Cov PL	20	½		41	0			41-0	59	
14		2	Cov PL	20	½		29	0				5	
15		2	L	8	4	1	7	3½	aa102				
16		6	L	7	4	¾	7	10½	sa102	FZE			
17		20	L	7	4	½	7	10½	sb102	-7 -13 crimped			
18		9	L	7	4	½	7	10½	sb102	-8 -8			
19		9	L	7	4	½	7	10½	sf103	-8 -13			
20		1	L	7	4	½	7	10½	sg103				
21		1	L	7	4	½	7	10½	sh102				
22		2	L	7	4	¾	7	10½	sk103	(FZE)			
23		1	L	8	4	1	7	3½	ac102				
24		1	L	8	4	1	7	3½	ad102				
25		1	8 TCB	39	5		1	1¼	ma103				
26		59	L	7	4	½	0	10¼	ab103	-33 -36			
27		4	PLs	14	1		6	8¼	da102				
28		18	Brs	4	1		6	1	fa102				
29		40	Brs	7⅜	1		0	8½	db102				
30		2	PLs	20	⅜		6	8¼	dd102				
31		1	Br	4	1		6	8¼	fb102				
32		4	Brs	6	⅜		2	8½	pd102				
33		4	PLs	8	1		0	11⅝	ha102	L (bent)			
34		7	PLs	12	½		1	8	pa102				
35	4	2	PLs	20	⅝		6	5⅞	pf102				5
36		1	Br	4	1		6	1	fd102				
37													
38		2	Upper Shoes						UP2	Detailed on Sh. 101			
39		16	Turn Bolts						X1	Detailed on Sh. PL102			
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53										1st Division			
54													
55													
56													
57													
58													
59													
60													
61													
62													
63													
64													

Notes
All holes marked "Beam" to be punched 4" small and reamed to size assembled.
Holes in material over ⅞" thick to be subdrilled
All holes marked R.T. to be sub-punched ¼" small and reamed to size to a metal templet.
No Paint within 5" of all open holes holes shall be free from burrs.
B.E. denotes Bearing End.
No CAMBER REQUIRED

7/8 ⌀ Rivets
15/16 ⌀ Holes

PAINT: YES ON
SHOP CONTACT SURFACES: No.

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS.

32	35	36	40	50	61	65	71	80	91	92		20	80
F	MAB	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MN	MS

BRIDGE OVER STA. 21-1069
OVER USR21 UNDER W&LE R R
MASSILLON STARK Co OHIO
OHIO STATE HWY DEPT PROJ No 260

D-BW—PENCIL CLOTH
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

HOCKER 265

DRAWINGS MADE AT	Roanoke PLANT
WORK FABRICATED AT	Ambridge PLANT
IN CHARGE OF	Slusher
DRAW. MADE BY	ABH Jr. DATE
DRAW. CHECKED BY	JAH DATE 6-26-61
ORDER No.	V6336
SHEET No.	104C

REVISIONS

A. & B. SMITH CO., PBH., PA.

PR 4992—1219

Adv. Bill

Cov PL 20 × ⅜ × 58'-5¾

17'-9 to ℄ Brg

Cov PL 20 × ½ × 51-0

22'-9

Cov PL 20 × ½ × 41-0

28'-3

Cov PL 20 × ½ × 29'-0

Typ BG

on Cov PL

PA102

HA102

Bend Line

58'-6 77 Splice on Cov PL

℄ Brg to Line Ⓧ 36-0 15/16

"REAM"

84'-8 0. to 0

82-0 C.C. Brgs

4-2½

4 @ 4'-0

3'-10 7/16

2-L⁵ 8 × 8 × 1 × 84'-4¾

on Web PL

on BK of L⁵

Bend Line

2-PA102

10561

2-L⁵ 8 × 8 × 1 × 84'-6¾

Cut Flush 8 × ⅜ - 1'-1½

B.E.

Cov PL 20 × ⅝ × 61'-9¼

Cov PL 20 × ½ × 51-0

Cov PL 20 × ½ × 41-0

Cov PL 20 × ½ × 29-0

STENCIL FS

2-PA102

"REAM" - all web holes

2-1/2

1'-3½

No paint N.S. full length of girder

note break in gage

Drill ⅞ to RT1

Spacing not given Same As Top Flange

A

Bend Line

20 @ 4-6-8

HB102

GA102

GA102

B10

B

C

D

Cov PL 20 × ⅜ × 11'-7⅛ HB102

8'-0½ b.l.s

256 @ 3-6'-3

2-L⁵ PA102

2-L⁵ SB102 (NS)

2-L⁵ SM103 (FS)

2-GA102

1-MA102

1-DE102

11 @ 6'-5-6

SB102 SF102 FA102 SM103 (FS)

DC102 DE102

Cov PL 20 × ½ × 96 × ½ × 33'-2¾

Cov PL 20 × ⅝ × 61'-9¼

18 @ 4'-6 = 6'-1½

14 @ 4'-3 = 5'-1½

SN102

DA102

GA102

HB102

RT2-P

PA102

on SG102 & AB102

SG102

FB102

DE102

SB102

1-UP2 8-X1

Cut Flush 8 × ⅜ - 1'-1½

2-L⁵ 8 × 8 × 1 × 84'-6¾

1'-4 | 1'-3⅜ | 2'-11⅛ | 1'-9¼ | 2'-0 | 2'-0 | 2'-0 | 2'-0 | 2'-0 | 2'-0 | 2'-0 | 2'-0 | 2'-0 | 2'-0 | 1'-11⅜ | 1'-11 15/16

BRIDGE No STA. 21-1069
OVER USR 21 UNDER W&LERR
MASSILLON STARK CO. OHIO
OHIO STATE HWY DEPT. PROJ No 260

D-63X—REV. 3-59 PENCILCLOTH

AMERICAN BRIDGE DIVISION
UNITED STATES STEEL CORPORATION

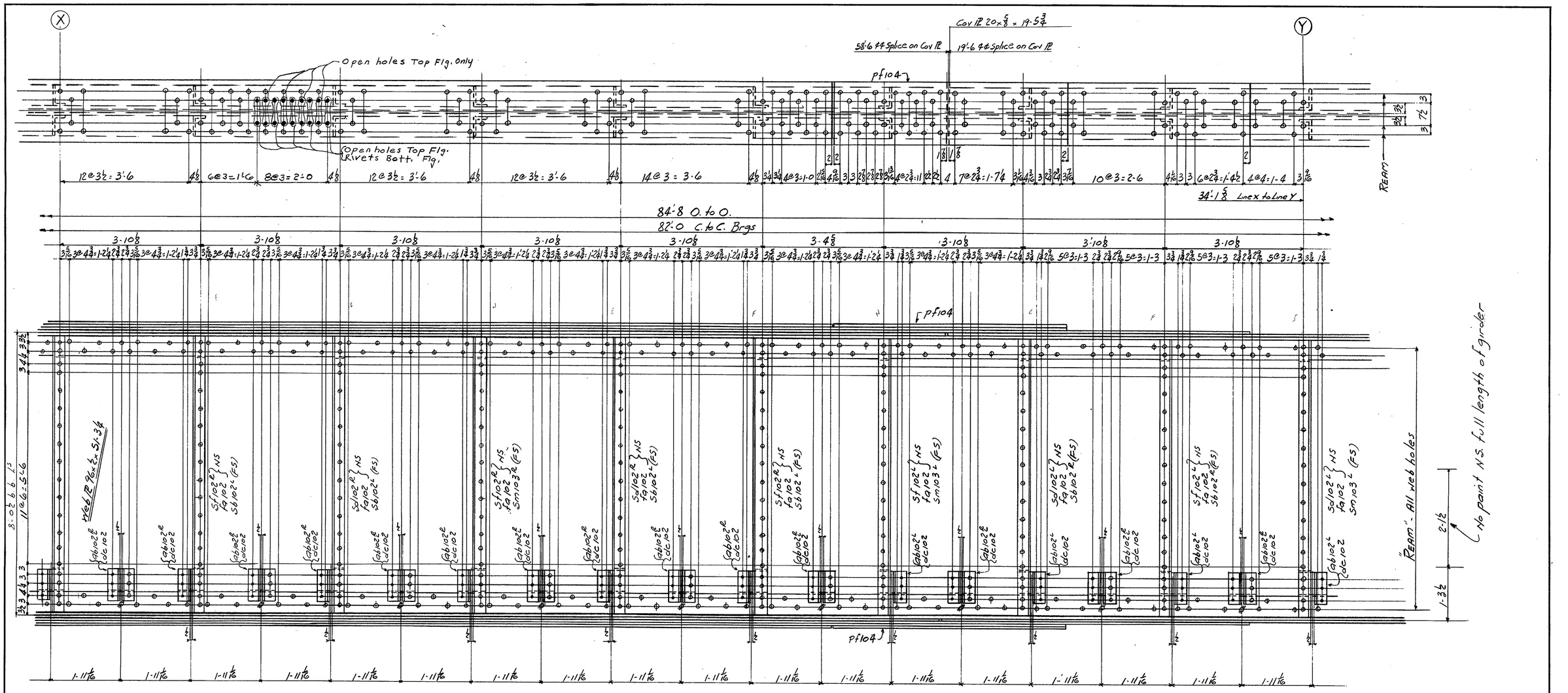
HOCKER 265

DRAWINGS MADE AT	Roanoke PLANT
WORK FABRICATED AT	Ambridge PLANT
IN CHARGE OF	Slusher
DRAW. MADE BY	ABD Jr. DATE
DRAW. CHECKED BY	JHW DATE 6-26-61
ORDER No.	V6336
SHEET No.	105AC

REVISIONS		
B	2-6-62	12
A	12-29-61	9

32	35	38	40	50	61	65	71	80	91	92		20	80
F	MAR	MAC	M	/	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM	NS

POST 123-B WHITEK



BOTTOM SPACING SAME AS TOP FLANGE

BRIDGE Nº STA. 21-1069
OVER USR 21 UNDER W&LERR
MASSILLON STARK CO OHIO
OHIO STATE HWY DEPT. PROJ Nº 260

D-43X—REV. 3-59 PENCILCLOTH
AMERICAN BRIDGE DIVISION
UNITED STATES STEEL CORPORATION

HOCKER 265

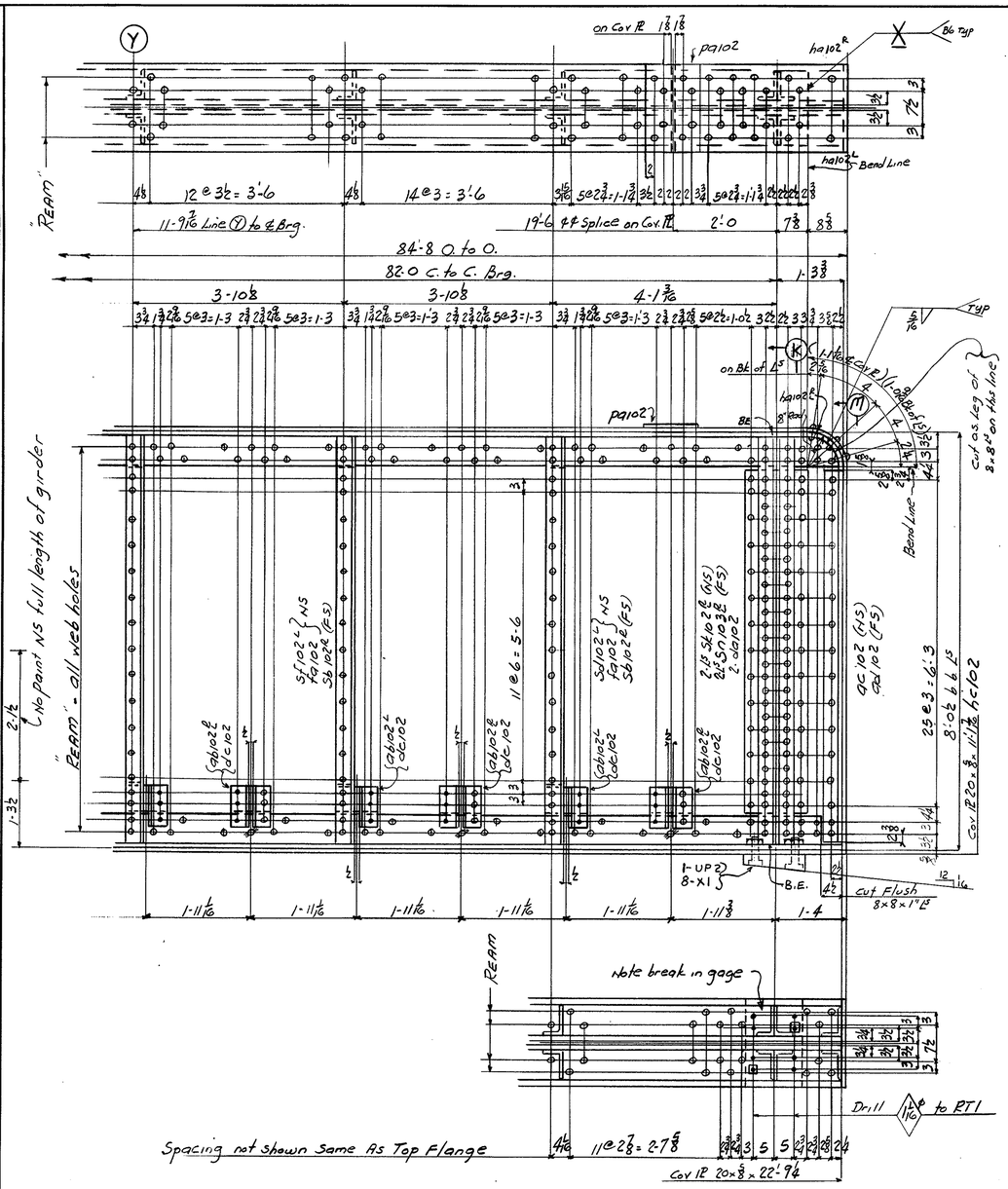
DRAWINGS MADE AT Roanoke PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Slusher
DRAW. MADE BY ABD Jr DATE
DRAW. CHECKED BY JWKui DATE 6-26-61

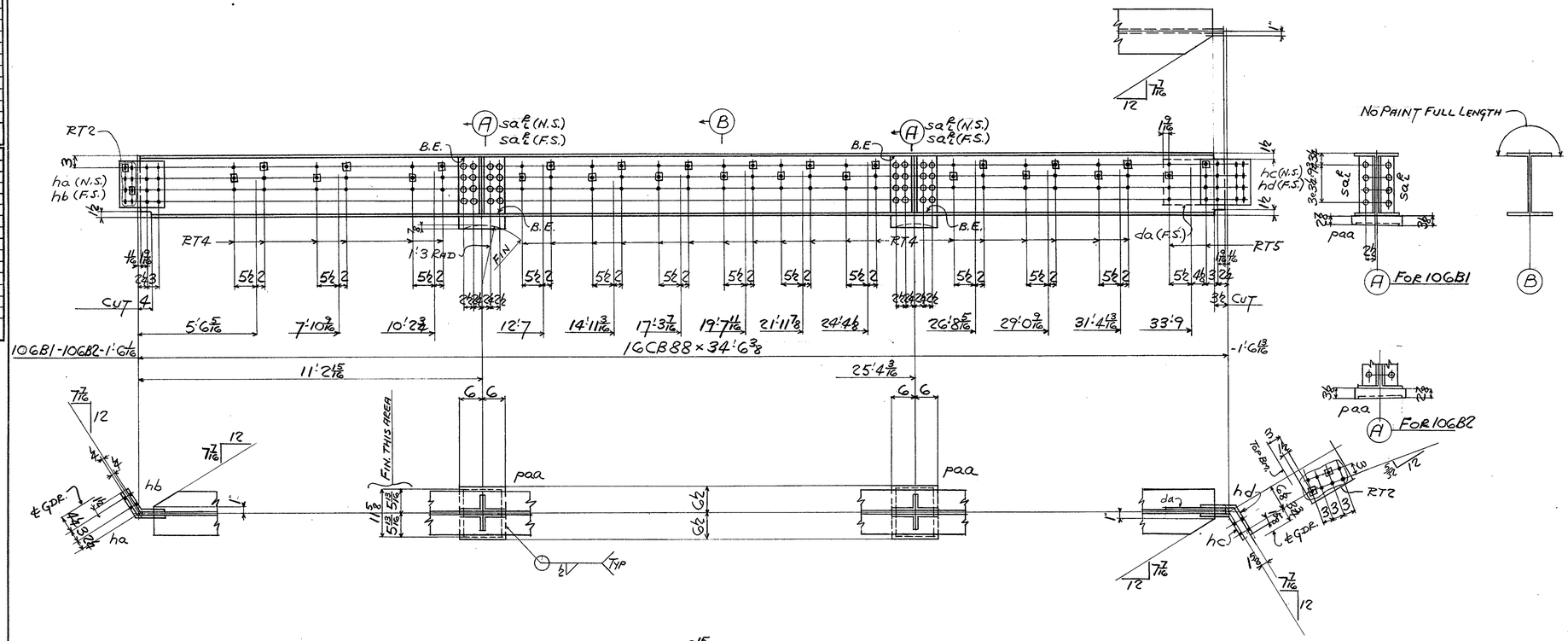
REVISIONS
F
E
D
C
B
A

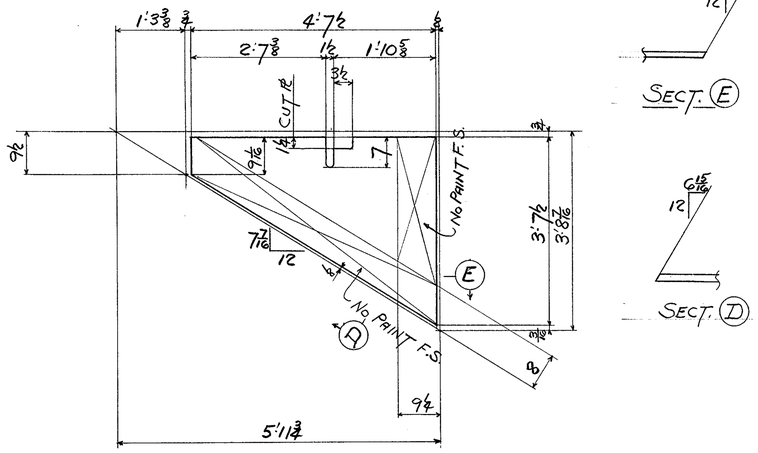
ORDER No. V6336
SHEET No. 105BC

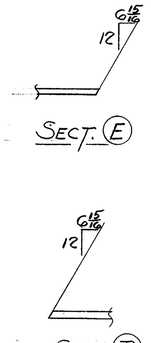
32	35	38	48	58	61	65	71	89	91	92		28	88
F	MAR	MAC	M	W	B	C	BO	SP-S	SP-B	SP-F	SR	MM	NS
			/										

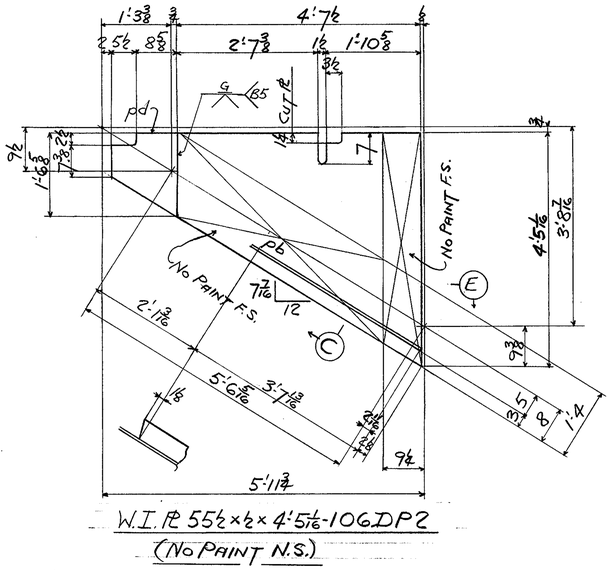
POST 123-B WHITEX

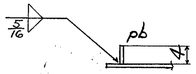

Y
on Cov PL 1 7/8 1/8
pa102
ha102R
Bg Typ
ha102L
Bend Line
"REAM"
4@ 12 @ 3 1/2 = 3'-6
4@ 14 @ 3 = 3'-6
11'-9 7/16 Line Ⓨ to ℄ Brg.
19'-6 ℄℄ Splice on Cov PL
2'-0
7 7/8
8 5/8
84'-8 O. to O.
82'-0 C. to C. Brg.
1'-3 3/8
3-10 3/8
3-10 3/8
4-1 7/16
Typ
on Bk of L5
1-11 7/16 Cov PL
1-2 9/16 Cov PL
ha102R
8" Rad
pa102
Bend Line
cut as leg of 8x8x1 on this line
Ⓜ
Ⓚ
Ⓔ
Ⓕ
Ⓗ
Ⓙ
"REAM" - all web holes
No paint N.S. full length of girder
sf102L sg102 sb102R (F.S.)
sb102L sg102 (N.S.)
sb102R (F.S.)
2 L5 sb102R (N.S.)
2 L5 sn103R (F.S.)
2 dq102
dc102 (N.S.)
dc102 (F.S.)
11@ 6 = 5-6
25@ 3 = 6'-3
8'-0 2 9/16 L5
Cov PL 20 x 5/8 x 11'-11 7/16
1 UP2
8 X1
B.E.
cut Flush 8x8x1" PL
1-11 7/16
1-11 7/16
1-11 7/16
1-11 7/16
1-11 7/16
1-11 3/8
1-4
"REAM"
Note break in gage
Drill 1 1/16 ⌀ to RT1
Spacing not shown Same As Top Flange
11@ 2 7/8 = 2'-7 5/8
Cov PL 20 x 5/8 x 22'-9 1/4
Bend Line
ha102L
ha102R
8 5/8
8 1/8
7@ 11'-2 5/8
11@ 4'-3 1/8
8'-0 1/2 L5
dq102
dc102
RT2
on L5
Ⓜ
on Sf102R & ab102R
sf102R
sn103R
dq102
14@ 4 3/8 = 5'-1 1/4
RT3
1'-11 1/8
8'-0 1/2 L5
on Sf102R & ab102R
sf102R
sb102R
20@ 3 1/8 = 6'-3
on Ladder
dc102
RT2-P
Ⓔ
on Sf102R & ab102R
fa102
sn103R
ab102R
RT2
Ⓕ
fa102
sf102R
dc102
ab102R
sn103R
Ⓗ
fa102
sd102R
dc102
ab102R
sn103R
Ⓙ
1-3 1/2
1-2 6
1-2 8
1-3 1/4
1-11 4
12
6
3 3/4
3 1/2
2 3/4
3 3/4
3 1/2
2 3/4
3 3/4
3 1/2
2 3/4











REAMING NOTE:
ALL HOLES MARKED R.T. TO BE SUB-PUNCHED 4" SMALL AND REAMED TO SIZE TO A METAL TEMPLET

PAINT NOTE FOR H. T. BOLTS
All holes on this drawing, ~~unless noted "All or otherwise"~~ are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

RIVETS 7/8
HOLES 15/16

PAINT: Yes - U.N.
SHOP CONTACT SURFACES: No

LINE	Total No. of Pieces as the Order	No. of Pcs. on Sheet	SHAPE	LENGTH Feet	LENGTH Inches	ASSEM-BLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
1										
2			2-BEAMS				10GB1			
3			2-BEAMS				10GB2			
4		4	16 CB 88	34	5				26	
5		32	L 6 4 1/2	1	2 1/2	sa℄	F.2.E		S	
6		4	℄ 12 1/2	1	2 1/4	ha	BENT		S	
7		4	℄ 12 1/2	1	1	hb	BENT		S	
8		4	℄ 12 1/2	1	2	hc	BENT		S	
9		4	℄ 12 1/2	1	4 1/4	hd	BENT		S	
10		4	FILLS 12 1/2	1	3 3/8	da			S	
11		8	℄ 12 3/8	1	1	paa	DETAILED ON SHEET 101		X	
12		16	S8 7/8						S	
13										
14										
15										
16										
17										
18	2	2	WI ℄ 55 1/2 1/2	3	7 1/2		106DP1	57 1/2 x 12-0	1-75849 A14	
19										
20										
21										
22										
23										
24			2 DECK PLATES				106DP2			
26	2	2	WI ℄ 55 1/2 1/2	4	5 1/16			57 1/2 x 12-0 REQ 20-0	1-75849 A14 1-75849 A20	
26	2	2	WI Bars 4 1/2	3	8 7/16	pb				
27	2	2	WI ℄ 14 1/8 1/2	1	6 3/16	pd		22 x 3-0	1-75849 A17	
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
51										
52										
53										
54										
55										
56										
57										
58										
59										
60										
61										
62										
63										
64										

BEAMS & DECK PLATES

BRIDGE Nº STA. 21-1069
OVER U.S.R. 21 UNDER W.&L.E.R.R.
MASSILLON, STARK Co. OHIO
OHIO STATE HWY. DEPT. PROJ Nº 260

D-SEC—PENCIL CLOTH
AMERICAN BRIDGE
DIVISION OF UNITED STATES STEEL CORPORATION

HOCKER 265

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY CMS DATE 6/8/61
DRAW. CHECKED BY JKW DATE 6-28-61
ORDER NO. V-6336
SHEET NO. 106

REVISIONS	
F	
E	
D	
C	
B	
A	

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

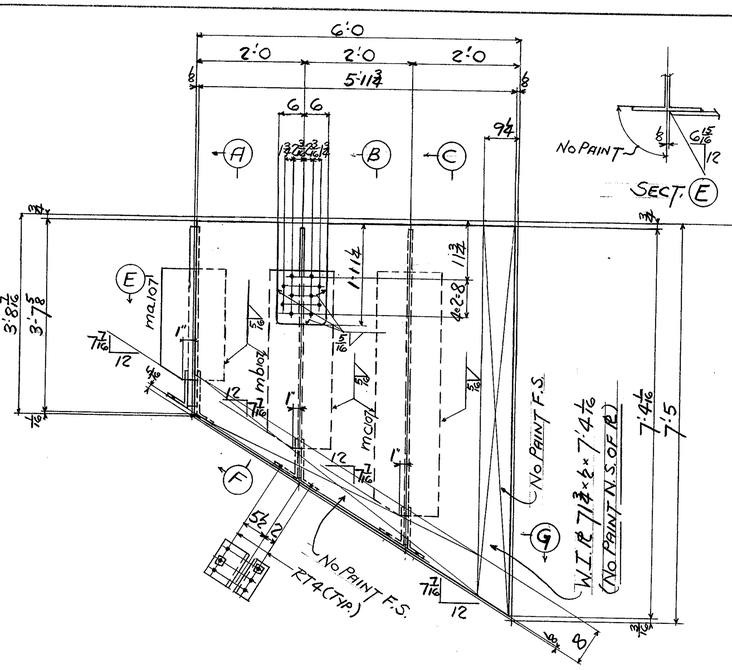
32	35	36	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	S	C	BD	SP-J	SP-B	SP-F	SR	MM	BS
				✓		✓							

WELDING

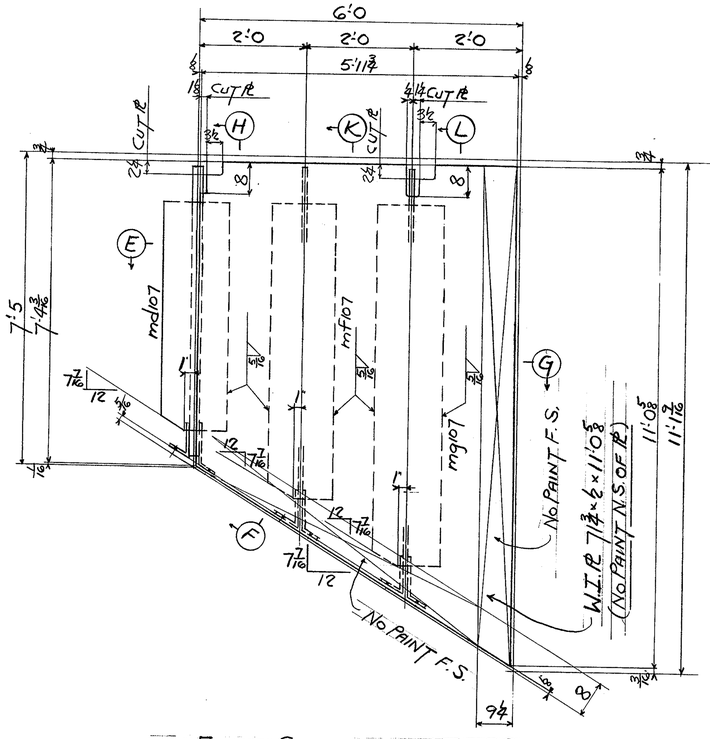
Adv. Bill M101, M102, 102-103

A. & B. SMITH CO., PGH., PA.

PR 4092—8259



FLOOR SECTION - 107FS1



FLOOR SECTION - 107FS2

REAMING NOTE:
ALL HOLES MARKED R.T. TO BE SUB-PUNCHED ¾" SMALL AND REAMED TO SIZE TO A METAL TEMPLET

PAINT NOTE FOR H. T. BOLTS

All holes on this drawing, ~~unless noted "A" or otherwise~~, are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

RIVETS — 7/8
HOLES — 15/16

PAINT: YES. U.N.
SHOP CONTACT SURFACES: No

1ST DIV	2ND DIV	LINE	Total No. of Pcs. on this Order	No. of Pcs. on Sheet	MATERIAL SHAPE	LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
		1										
		2										
1	1	3			2-FLOOR SECTIONS 107FS1							
		4	2	WI	PL 7/16 × 1/2	7	4 7/16			72 SQ FT × 11-3	75849 #8	
		5	4	2	14 CB 95	3	5	ma107		32-7½	27	
		6	4	2	14 CB 95	4	7⅜	mb107		32-7½	27	
		7	4	2	14 CB 95	5	10¾	mc107		52-5½	28	
		8	48	6	PL 9 × 1/2	1	0 5/8	ha107	BENT		5	
		9	48	6	PL 9 × 1/2	1	1 3/8	hb107	BENT		5	
		10										
		11										
		12										
		13										
		14										
1	1	15			2-FLOOR SECTIONS 107FS2							
		16	2	WI	PL 7/16 × 1/2	11	0 5/8			76 SQ FT × 18-8	75849 #3	
		17	4	2	14 CB 95	7	1½	md107		52-5½	28	
		18	4	2	14 CB 95	8	4¼	mf107		33-7½	29	
		19	4	2	14 CB 95	9	7¼	mg107		52-0	33	
		20		6				ha107				
		21		6				hb107				
		22										
		23										
		24										
		25										
		26										
		27										
		28										
		29										
		30										
		31										
		32										
		33										
		34										
		35										
		36										
		37										
		38										
		39										
		40										
		41										
		42										
		43										
		44										
		45										
		46										
		47										
		48										
		49										
		50										
		51										
		52										
		53										
		54										
		55										
		56										
		57										
		58										
		59										
		60										
		61										
		62										
		63										
		64										

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

32	35	38	40	50	61	65	71	80	91	92		20	80
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM	MS
						✓							

FLOOR SECTIONS

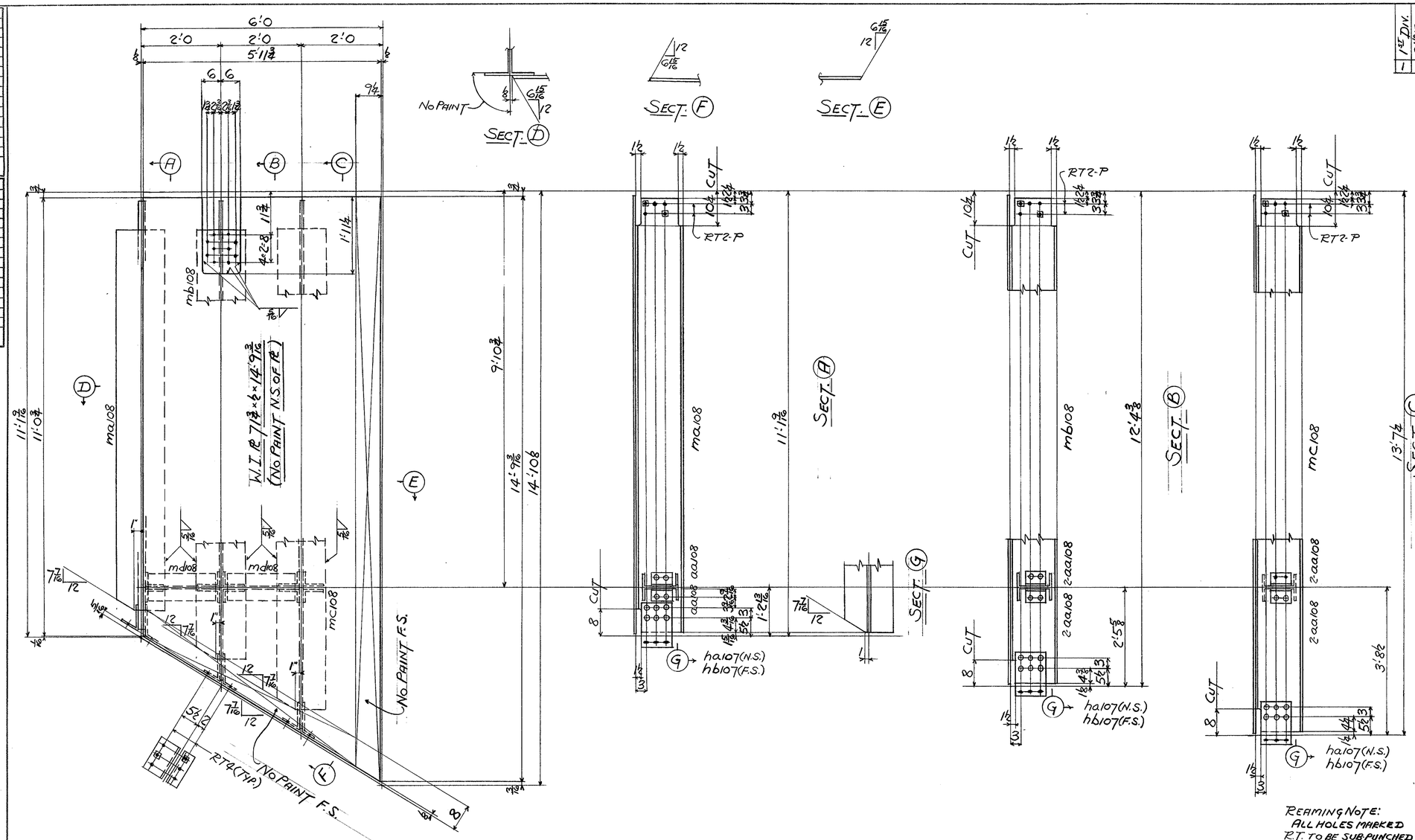
BRIDGE Nº STA. 21-1069
OVER U.S.R. 21 UNDER W. & L.E.R.R.
MASSILLON, STARK CO. OHIO
OHIO STATE HWY. DEPT. PROJ. Nº 260

D-SIX—PENCIL CLOTH
HOCKER 265
AMERICAN BRIDGE
DIVISION UNITED STATES STEEL CORPORATION

REVISIONS	
F	
E	
D	
C	
B	
A	

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY CMS DATE 6/6/61
DRAW. CHECKED BY [illegible] DATE 6-28-61
ORDER No. V-6336
SHEET No. 107

A. & P. SMITH CO., PGH., PA.



FLOOR SECTION - 108FS1

REAMING NOTE:
ALL HOLES MARKED R.T. TO BE SUBPUNCHED ¼ SMALL AND REAMED TO SIZE TO A METAL TEMPLET

PAINT NOTE FOR H. T. BOLTS
All holes on this drawing, ~~unless noted "A" or otherwise~~, are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

RIVETS — 7/8
HOLES — 15/16

PAINT: YES: U.N.
SHOP CONTACT SURFACES: No

1ST DIV.	2ND DIV.	LINE	Total No. of Pieces on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE						LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
		1															
		2															
1	1	3			2-FLOOR SECTIONS								108FS1				
		4		2	WI℄	7⅛	½	14	9⅞						72PL ½ × 1'-10½	75BM A6	
		5	4	2		14	CB	95	10	10			ma108		43-6½	30	
		6	4	2		14	CB	95	12	1			mb108		48-6½	31	
		7	4	2		14	CB	95	13	3⅜			mc108		1PL 52-9 3PL 40-1	33 32	
		8	18	4		10	CB	45	1	10⅝			md108		44-9½	24	
		9		6	℄		9	½	1	0¾			ha107	BENT			
		10		6	℄		9	½	1	1⅜			hb107	BENT			
		11	320	20	L	6	4	½		6			aa108			51	
		12		4	SB	⅞										5	
		13															
		14															
		15															
		16															
		17															
		18															
		19															
		20															
		21															
		22															
		23															
		24															
		25															
		26															
		27															
		28															
		29															
		30															
		31															
		32															
		33															
		34															
		35															
		36															
		37															
		38															
		39															
		40															
		41															
		42															
		43															
		44															
		45															
		46															
		47															
		48															
		49															
		50															
		51															
		52															
		53															
		54															
		55															
		56															
		57															
		58															
		59															
		60															
		61															
		62															
		63															
		64															

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

32	35	36	40	50	61	65	71	80	81	92		20	80
F	MAR	MAC	M	W	B	C	✓80	SP-J	SP-B	SP-F	SR	MM	NS

WELDING

Adv. Bill M102-103

FLOOR SECTIONS
BRIDGE Nº STA. 21-1069
OVER U.S.R. 21 UNDER W&L.E.R.R.
MASSILLON, STARK CO. OHIO
OHIO STATE HWY. DEPT. PROJ. Nº 260

D-BK—PENCIL CLOTH
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

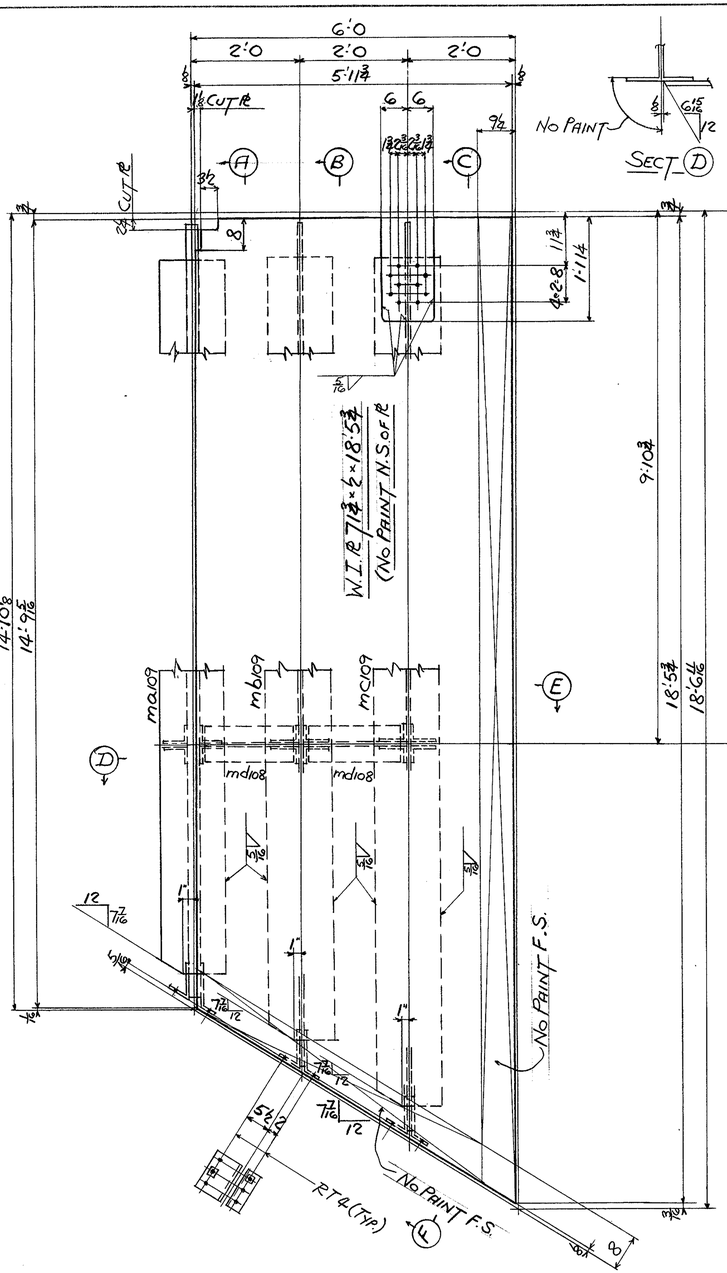
HOCKER 265

F	
E	
D	
C	
B	
A	
REVISIONS	

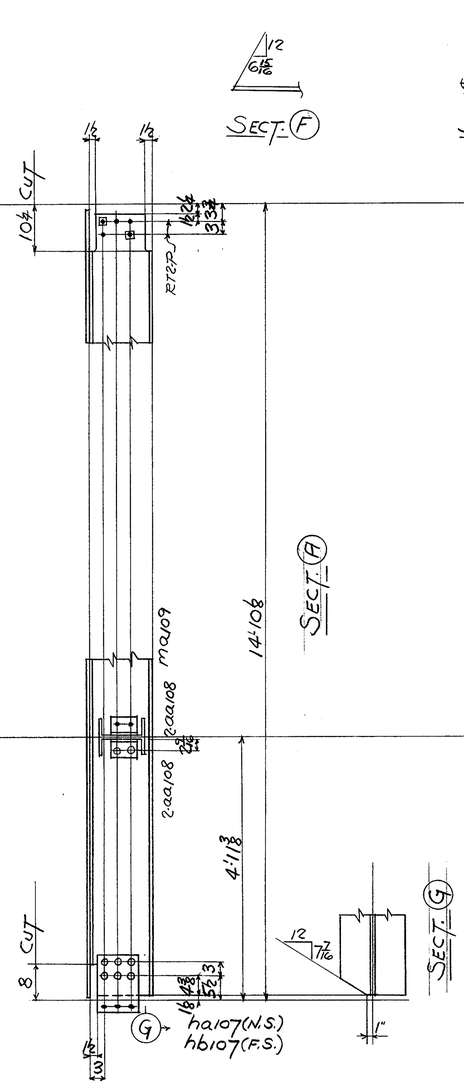
DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY CMS DATE 6/7/61
DRAW. CHECKED BY JHW DATE 6-28-61
ORDER No. V-6336
SHEET No. 108

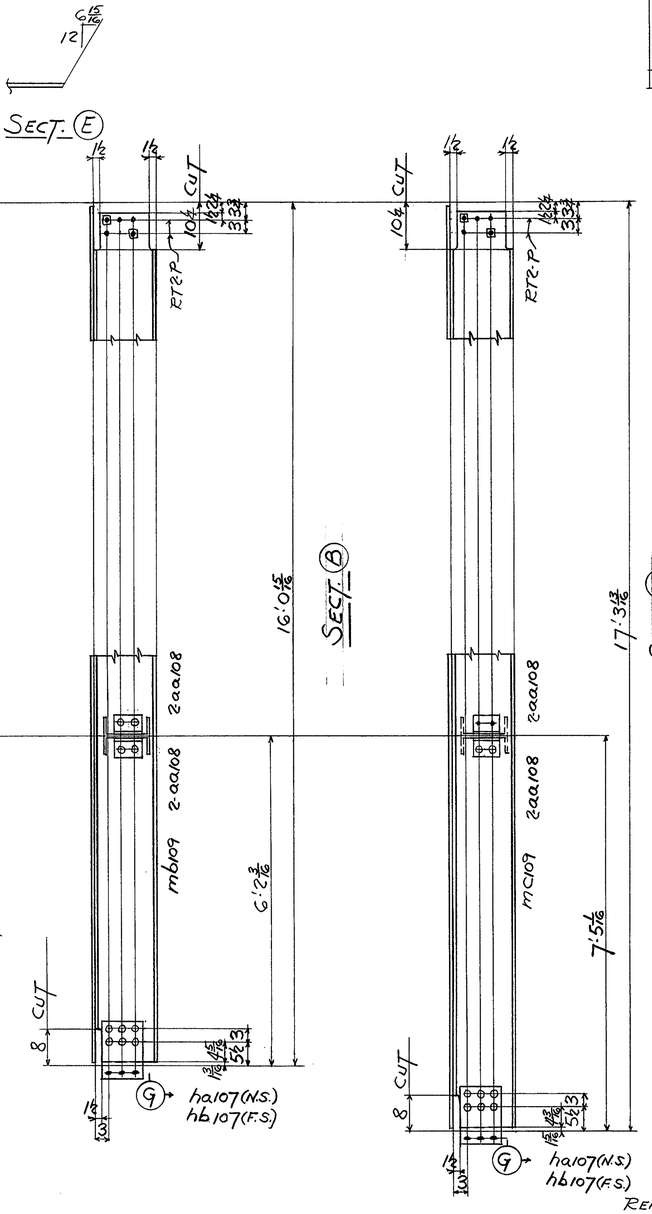
A. & B. SMITH CO., PGH., PA.

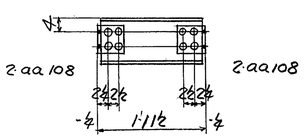
PR 4092—1299



FLOOR SECTION - 109FS1







DETAIL OF md108

PAINT NOTE FOR H. T. BOLTS

All holes on this drawing, ~~unless noted "N" or otherwise~~, are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

REAMING NOTE:
ALL HOLES MARKED R.T. TO BE SUB PUNCHED ¾" SMALL AND REAMED TO SIZE TO A METAL TEMPLET.

RIVETS — 7/8
HOLES — 15/16

PAINT: YES. U.N.
SHOP CONTACT SURFACES: NO

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS.
E101

	32	35	38	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	80	SP-J	SP-B	SP-F	SR		MM	MS

1ST DIV.	2ND DIV.
1	1

LINE	Total No. of Pieces as in the Order	No. of Pcs. on Sheet	MATERIAL SHAPE	LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
1										
2										
3			2-FLOOR SECTIONS - 109FS1							
4		2	WI R 7⅛ × ½	18	5¾			723 @ 18'-7 1-	75 @ 19.4	
5	4	2	14 C 8 95	14	6¾	ma109		2= 43-9⅛ 1= 43'-6	34 37	
6	4	2	14 C 8 95	15	9⅛	mb109		2= 47'-6 1= 47'-6⅛	37 37	
7	4	2	14 C 8 95	17	0½	mc109		1= 47'-6 2= 51'-6⅛	37 36	
8		4	10 C 8 45	1	10⅛	md108				
9		6	R	9	½	1	0⅜	ha107	BENT	
10		6	R	9	½	1	1⅜	hb107	BENT	
11		24	L 6 4 ½			6	aa108			
12		8	SB 7⅛							5
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
51										
52										
53										
54										
55										
56										
57										
58										
59										
60										
61										
62										
63										
64										

FLOOR SECTIONS
BRIDGE No. STA. 21-1069
OVER U.S.R. 21 UNDER W. & L.E.R.R.
MASSILLON, STARK CO. OHIO
OHIO STATE HWY. DEPT. PROJ. No. 260

D-8X—PENCIL CLOTH
AMERICAN BRIDGE DIVISION UNITED STATES STEEL CORPORATION
HOCKER 265

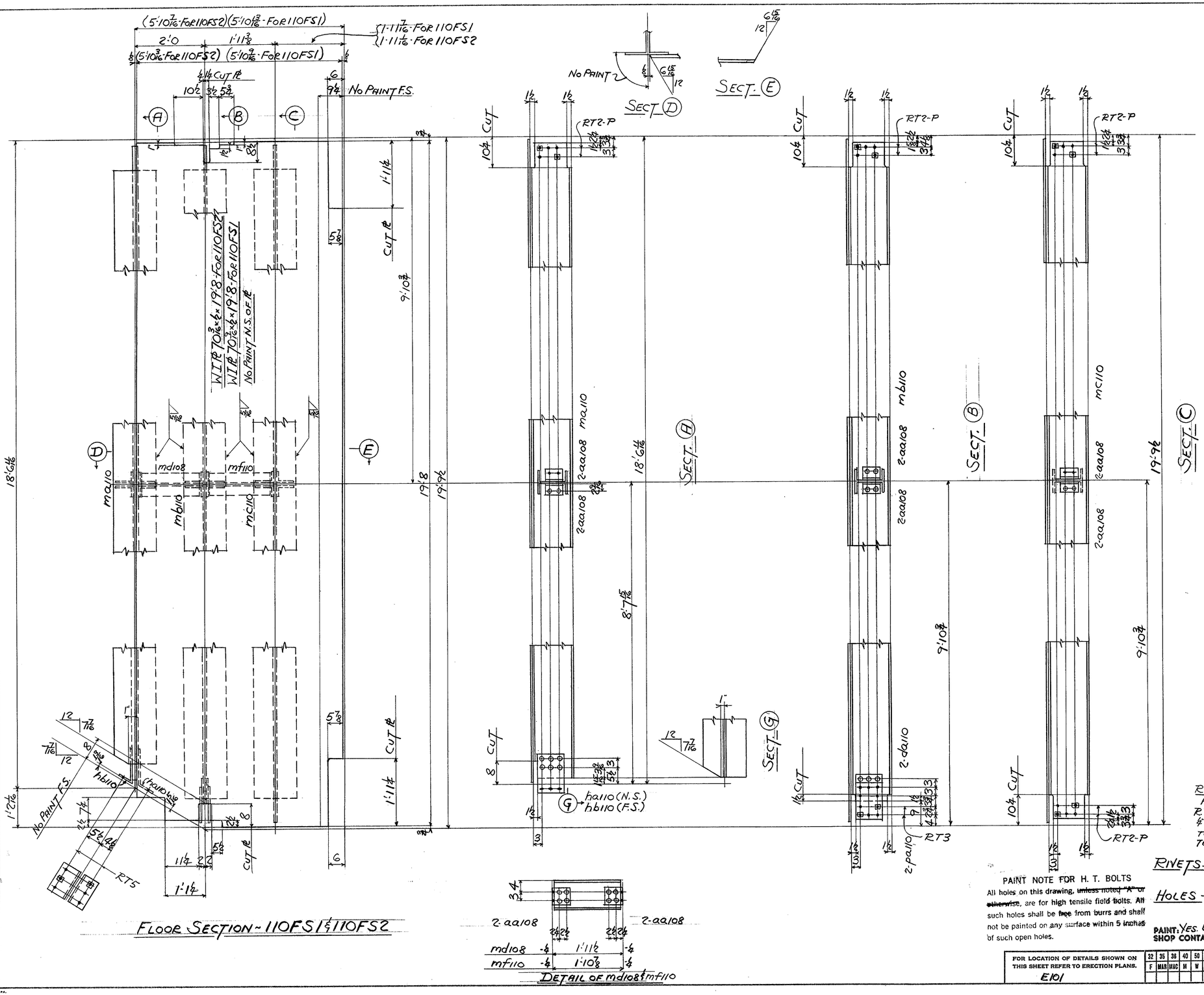
REVISIONS	
F	
E	
D	
C	
B	
A	

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY CMS DATE 6/19/61
DRAW. CHECKED BY JWKJ DATE 6-28-61
ORDER No. V-G336
SHEET No. 109 OF

PR 4092—1259

WELDING Adv. Bill M101 & 103

A. & B. SMITH CO., PGH., PA.



FLOOR SECTION - 110FS1 & 110FS2

1st DIV.	2nd DIV.	LINE	Total No. of Pcs. on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE	MATERIAL LENGTH Feet	MATERIAL LENGTH Inches	ASSEM-BLING MARK	REMARKS	ORDERED	ORDERED ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
		1										
		2										
1		3			ONE-FLOOR SECTION			110FS1				
		4	1	1	WIℝ 70 3/16 × 1/2	19	8			7/8"ø 1 9-9 1/2	1-75849 A9	
		5	2	1	14 CB 95	18	2 1/2	ma110		36-7 1/2	38	
		6	2	1	14 CB 95	18	10	mb110		37-9 1/2	39	
		7	38	1	14 CB 95	19	5	mc110		38-10 1/2	40	
		8		1	10 CB 45	1	10 1/2	md108				
		9	2	1	10 CB 45	1	10	mf110		7-6 1/2	25	
		10		12	L 6 4 1/2		6	aa108				
		11	4	1	PL 9 1/2	1	0	ha110	BENT		5	
		12	4	1	PL 9 1/2		11 3/4	hb110	BENT		5	
		13	8	2	PL 9 1/2	1	0 1/2	pa110			5	
		14	8	2	FILL 9 1/2		9	da110			5	
		15		6	SB 7/8						5	
		16										
		17										
		18										
		19										
		20										
1		21			ONE-FLOOR SECTION			110FS2				
		22		1	WIℝ 70 3/16 × 1/2	19	8			7/8"ø 1 9-9 1/2	1-75849 A10	
		23		1				ma110				
		24		1				mb110				
		25		1				mc110				
		26		1				md108				
		27		1				mf110				
		28		12				aa108				
		29		1				ha110	BENT			
		30		1				hb110	BENT			
		31		2				pa110				
		32		2				da110				
		33		6	SB 7/8						5	
		34										
		35										
		36										
		37										
		38										
		39										
		40										
		41										
		42										
		43										
		44										
		46										
		46										
		47										
		48										
		49										
		50										
		51										
		52										
		53										
		54										
		55										
		56										
		57										
		58										
		59										
		60										
		61										
		62										
		63										
		64										

REAMING NOTE:
ALL HOLES MARKED R.T. TO BE SUB-PUNCHED & SMALL AND REAMED TO SIZE TO A METAL TEMPLET.

PAINT NOTE FOR H. T. BOLTS
All holes on this drawing, ~~unless noted "A" or otherwise~~, are for high tensile field bolts. All such holes shall be ~~free~~ from burrs and shall not be painted on any surface within 5 inches of such open holes.

RIVETS — 7/8
HOLES — 15/16

PAINT: YES. U.N
SHOP CONTACT SURFACES: No

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS.
E101

32	35	36	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	80	SP-J	SP-B	SP-F	SR	MM	BS
							✓						

WELDING

FLOOR SECTIONS
BRIDGE Nº STA. 21-1069
OVER U.S.R. 21 UNDER W&L.E.R.R.
MASSILLON, STARK CO. OHIO
OHIO STATE HWY. DEPT. PROJ. Nº 260

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY SMS DATE 6/20/61
DRAW. CHECKED BY NEW DATE 6-28-61

AMERICAN BRIDGE DIVISION UNITED STATES STEEL CORPORATION

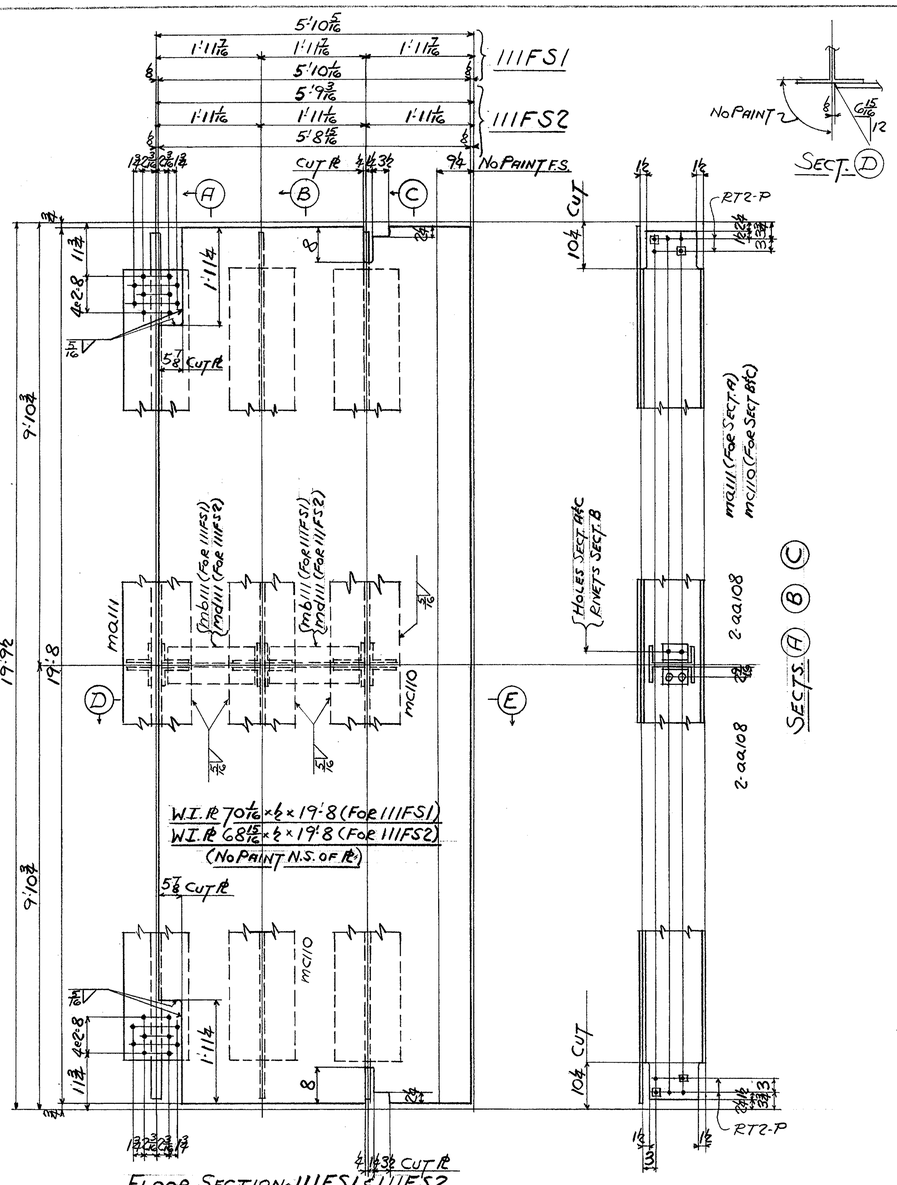
HOCKER 265

REVISIONS	ORDER No.	SHEET No.
F	V-6336	110
E		
D		
C		
B		
A		

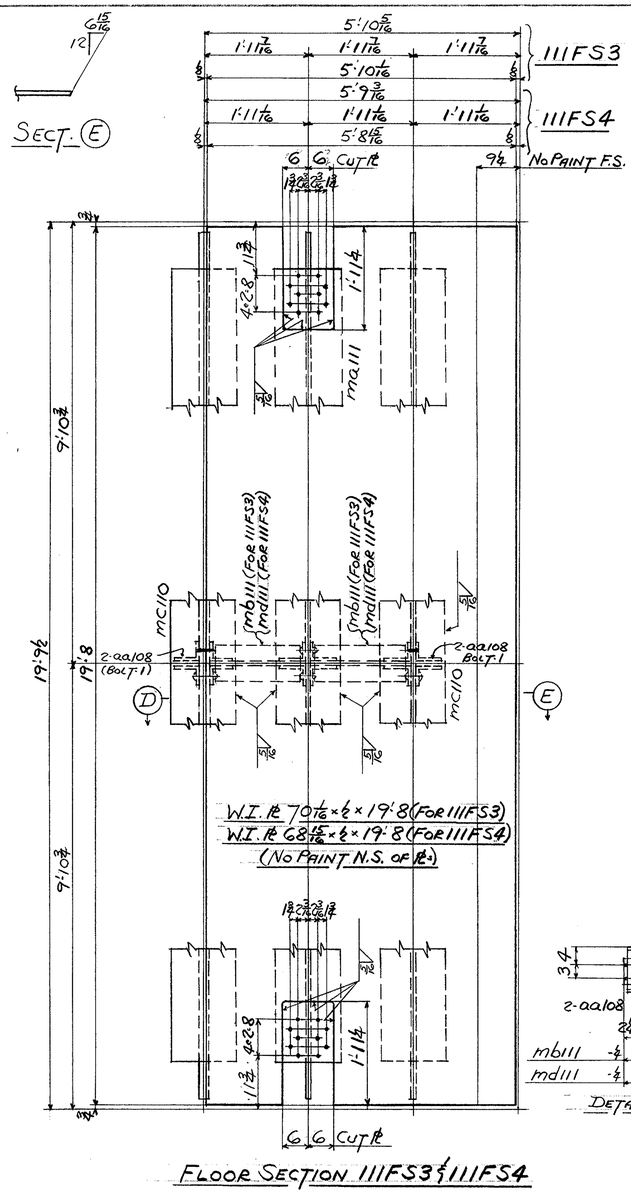
Adv. Bill M101-103

PR 4902—1959

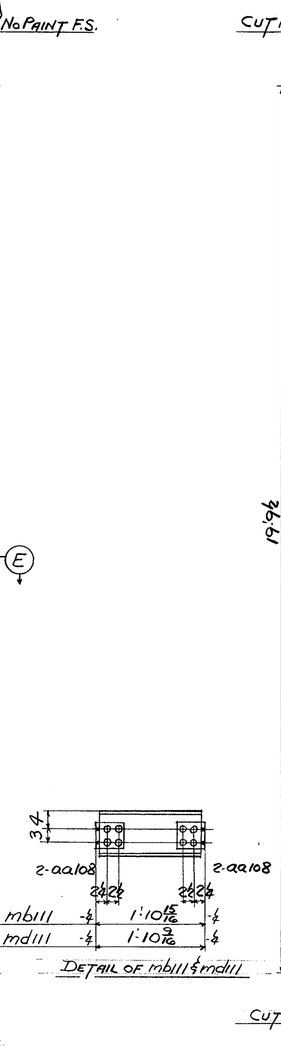
A. B. SMITH CO., PGH., PA.

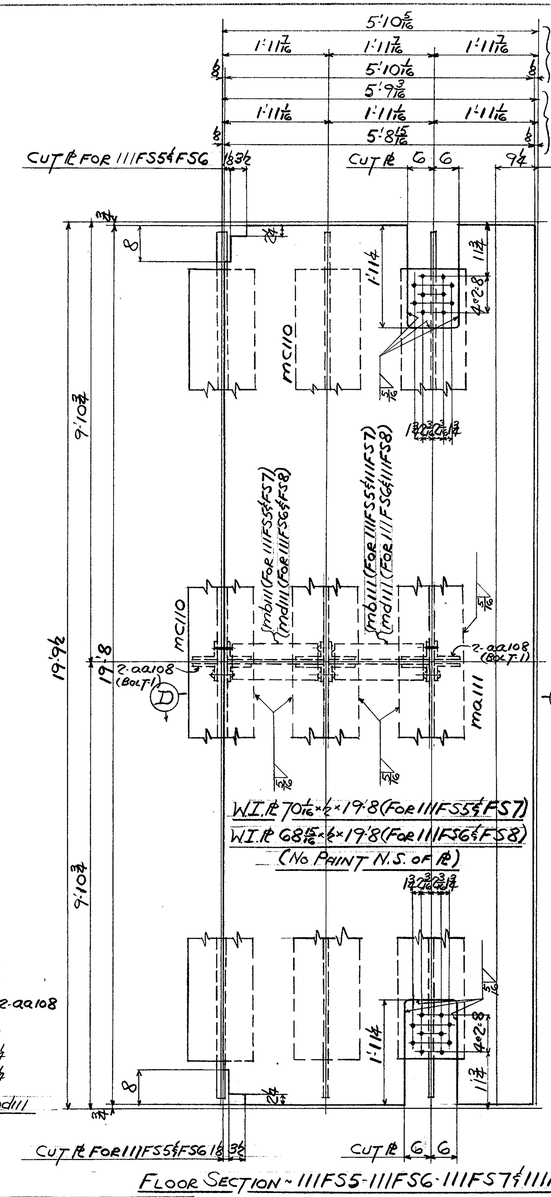


FLOOR SECTION - 111FS1 & 111FS2



FLOOR SECTION 111FS3 & 111FS4





FLOOR SECTION - 111FS5 - 111FS6 - 111FS7 & 111FS8

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE	LENGTH: Feet	LENGTH: Inches	ASSEM-BLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
1										
2			ONE-FLOOR SECTION -			111FS1 - 2ND DIV				
3			ONE-FLOOR SECTION -			111FS2 1ST DIV				
4	1	WI R 70 1/16 × 1/2	19	8		FOR FS1		7/16 1'-19-9/16	75849 A11	
5	1	WI R 68 15/16 × 1/2	19	8		FOR FS2		7/16 1'-19-9/16	75849 A13	
6	12	2	14 CB 95	19	5	ma111			38-10 1/2	60
7	4	14 CB 95	19	5	mc110					
8	16	2	10 CB 45	1	10	mb111	FOR FS1		48-8 1/2	23
9	16	2	10 CB 45	1	9 1/2	md111	FOR FS2		43-11 1/2	22
10		24 L 6 4 1/2			6	aa108				
11		8 SB 7/8								5
12										
13										
14										
15										

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE	LENGTH: Feet	LENGTH: Inches	ASSEM-BLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
16										
17			ONE-FLOOR SECTION -			111FS3	2ND DIV			
18			ONE-FLOOR SECTION -			111FS4	1ST DIV.			
19	1	WI R 70 1/16 × 1/2	19	8		FOR FS3		7/16 1'-19-9/16	75849 A11	
20	1	WI R 68 15/16 × 1/2	19	8		FOR FS4		7/16 1'-19-9/16	75849 A13	
21	2					ma111				
22	4					mc110				
23	2					mb111	FOR FS3			
24	2					md111	FOR FS4			
25	24					aa108				
26	8	SB 7/8								5
27										
28										
29										
30										

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE	LENGTH: Feet	LENGTH: Inches	ASSEM-BLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
31										
32			ONE-FLOOR SECTION -			111FS5	2ND DIV			
33			ONE-FLOOR SECTION -			111FS6	1ST DIV.			
34			ONE-FLOOR SECTION -			111FS7	2ND DIV.			
35			ONE-FLOOR SECTION -			111FS8	1ST DIV.			
36	2	WI R 70 1/16 × 1/2	19	8		FOR FS5 & FS7		7/16 1'-19-9/16	75849 A11	
37	2	WI R 68 15/16 × 1/2	19	8		FOR FS6 & FS8		7/16 1'-19-9/16	75849 A13	
38	4					ma111				
39	8					mc110				
40	4					mb111	FOR FS5 & FS7			
41	4					md111	FOR FS6 & FS8			
42	48					aa108				
43	16	SB 7/8								5
44										
45										

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE	LENGTH: Feet	LENGTH: Inches	ASSEM-BLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
46										
47										
48										
49										
50										
51								7/16 1'-19-9/16	75849 A11	
52								7/16 1'-19-9/16	75849 A13	
53										
54										
55										
56										
57										
58										S
59										
60										

PAINT NOTE FOR H. T. BOLTS

All holes on this drawing, ~~otherwise~~ are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

REAMING NOTE: ALL HOLES MARKED R.T. TO BE SUB-PUNCHED 1/4" SMALL AND REAMED TO SIZE TO A METAL TEMPLET

RIVETS 7/8

HOLES 15/16

PAINT YES - U.N.
SHOP CONTACT SURFACES No

WELDING

FLOOR SECTIONS

BRIDGE No STA. 21-1069

OVER U.S.R. 21 UNDER W&L.E.R.R.

MASSILLON, STARK CO. OHIO

OHIO STATE HWY. DEPT: PROJ. No 266

D-82X-3M-PENCILTEX

AMERICAN BRIDGE DIVISION UNITED STATES STEEL CORPORATION

HOCKER 265

DRAWINGS MADE AT ROANOKE PLA

WORK FABRICATED AT AMBRIDGE PLA

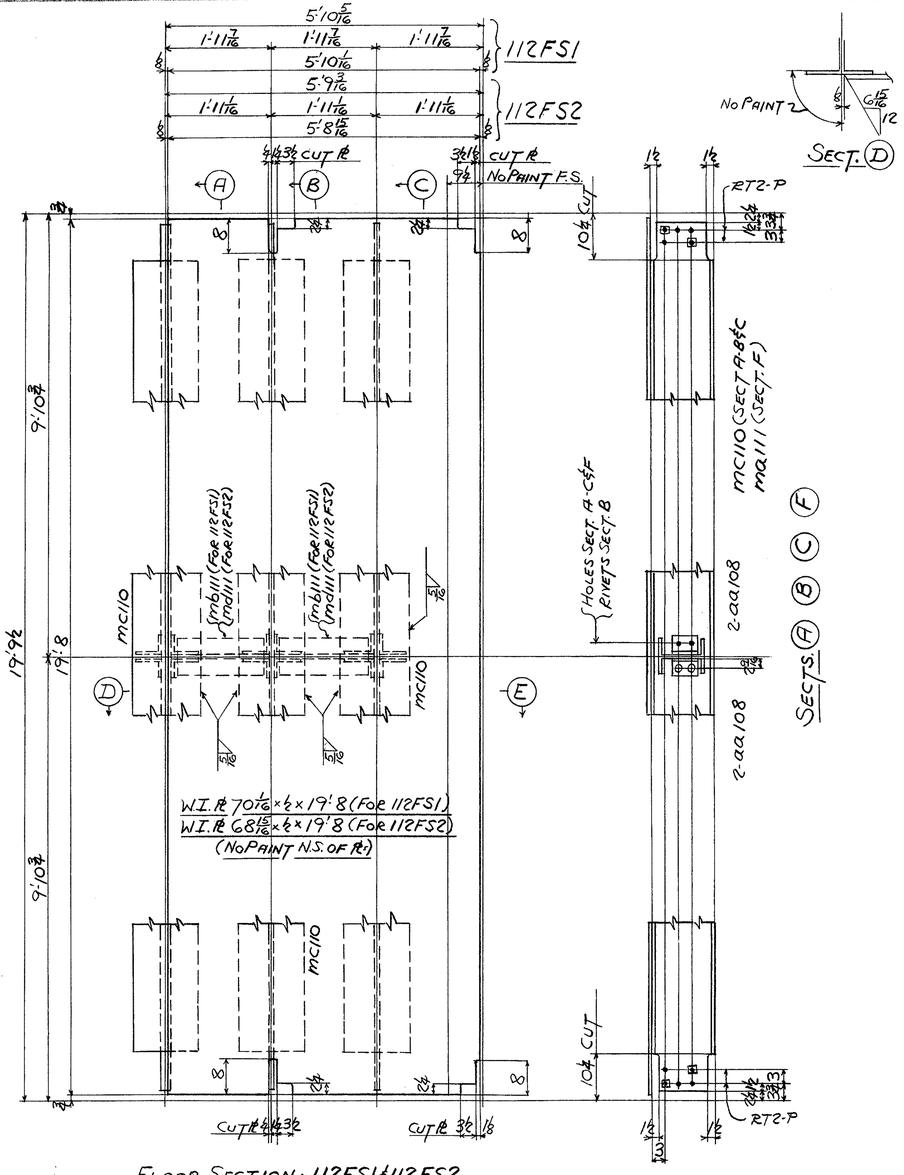
IN CHARGE OF SLUSHER

DRAW. MADE BY CMS DATE 6/29/

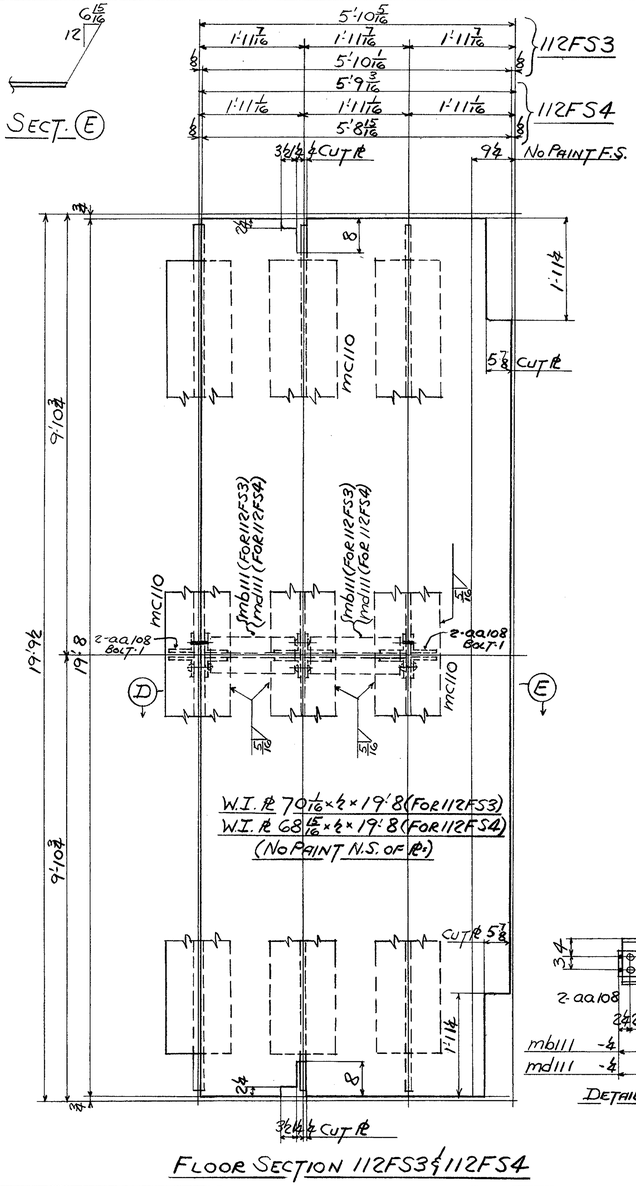
DRAW. CHECKED BY JHW DATE 6-28-

	REVISIONS	ORDER No.	SHEET No.
F		V-6336	111
E			
D			
C			
B			
X			

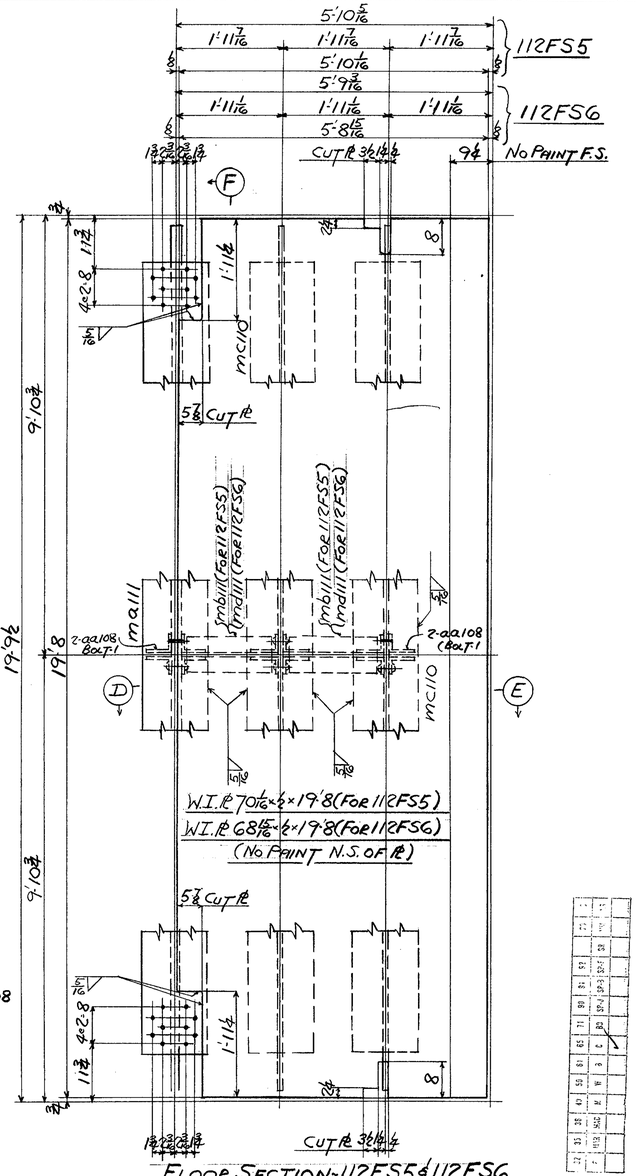
Adv. Bill M101-103



FLOOR SECTION ~ 112FS1 & 112FS2



FLOOR SECTION 112FS3 & 112FS4



FLOOR SECTION ~ 112FS5 & 112FS6

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE	LENGTH: Feet	LENGTH: Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
1										
2			ONE-FLOOR SECTION ~			112FS1	2ND DIV			
3			ONE-FLOOR SECTION ~			112FS2	1ST DIV.			
4	1	WI ℄ 70 1/16 × ½		19	8		FOR FS1	71# 19-9½	75849 A11	
5	1	WI ℄ 68 15/16 × ½		19	8		FOR FS2	70# 19-9½	75849 A13	
6	6	14	C8 95	19	5	MC110				
7	2	10	C8 45	1	10	mb111	FOR FS1			
8	2	10	C8 45	1	9½	md111	FOR FS2			
9	24	L G 4 × ½			6	aa108				
10	8	SB 7/8"							5	
11										
12										
13										
14										
15										

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE	LENGTH: Feet	LENGTH: Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
16										
17			ONE-FLOOR SECTION ~			112FS3	2ND DIV.			
18			ONE-FLOOR SECTION ~			112FS4	1ST DIV.			
19	1	WI ℄ 70 1/16 × ½		19	8		FOR FS3	71# 19-9½	75849 A11	
20	1	WI ℄ 68 15/16 × ½		19	8		FOR FS4	70# 19-9½	75849 A13	
21	6					MC110				
22	2					mb111	FOR FS3			
23	2					md111	FOR FS4			
24	24					aa108				
25	8	SB 7/8"							5	
26										
27										
28										
29										
30										

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE	LENGTH: Feet	LENGTH: Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
31										
32			ONE-FLOOR SECTION ~			112FS5	2ND DIV.			
33			ONE-FLOOR SECTION ~			112FS6	1ST DIV.			
34	1	WI ℄ 70 1/16 × ½		19	8		FOR FS5	71# 19-9½	75849 A11	
35	1	WI ℄ 68 15/16 × ½		19	8		FOR FS6	70# 19-9½	75849 A13	
36	2	14	C8 95	19	5	ma111				
37	4					MC110				
38	2					mb111	FOR FS5			
39	2					md111	FOR FS6			
40	24					aa108				
41	8	SB 7/8"							5	
42										
43										
44										
45										
46										
47										
48										
49										
50										
51										
52										
53										
54										
55										
56										
57										
58										
59										
60										

PAINT NOTE FOR H. T. BOLTS

All holes on this drawing, ~~unless noted NAT or CADMIUM~~, are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

REAMING NOTE: ALL HOLES MARKED 2T TO BE SUB-PUNCHED ½" SMALL AND REAMED TO SIZE TO A METAL TEMPLET

RIVETS 7/8 HOLES 15/16

PAINT YES. U.N. SHOP CONTACT SURFACES No

WELDING

Adv. Bill M101-103

FLOOR SECTIONS

BRIDGE No STA. 21-1069

OVER U.S.R. 21 UNDER W&L.E.R.R.

MASSILLON, STARK CO. OHIO

OHIO STATE HWY. DEPT. PROJ. No 26

D-82X-3M-PENCILTEX

AMERICAN BRIDGE DIVISION UNITED STATES STEEL CORPORATION

HOCKER 265

DRAWINGS MADE AT ROANOKE PL.

WORK FABRICATED AT AMBRIDGE PL.

IN CHARGE OF SLUSHER

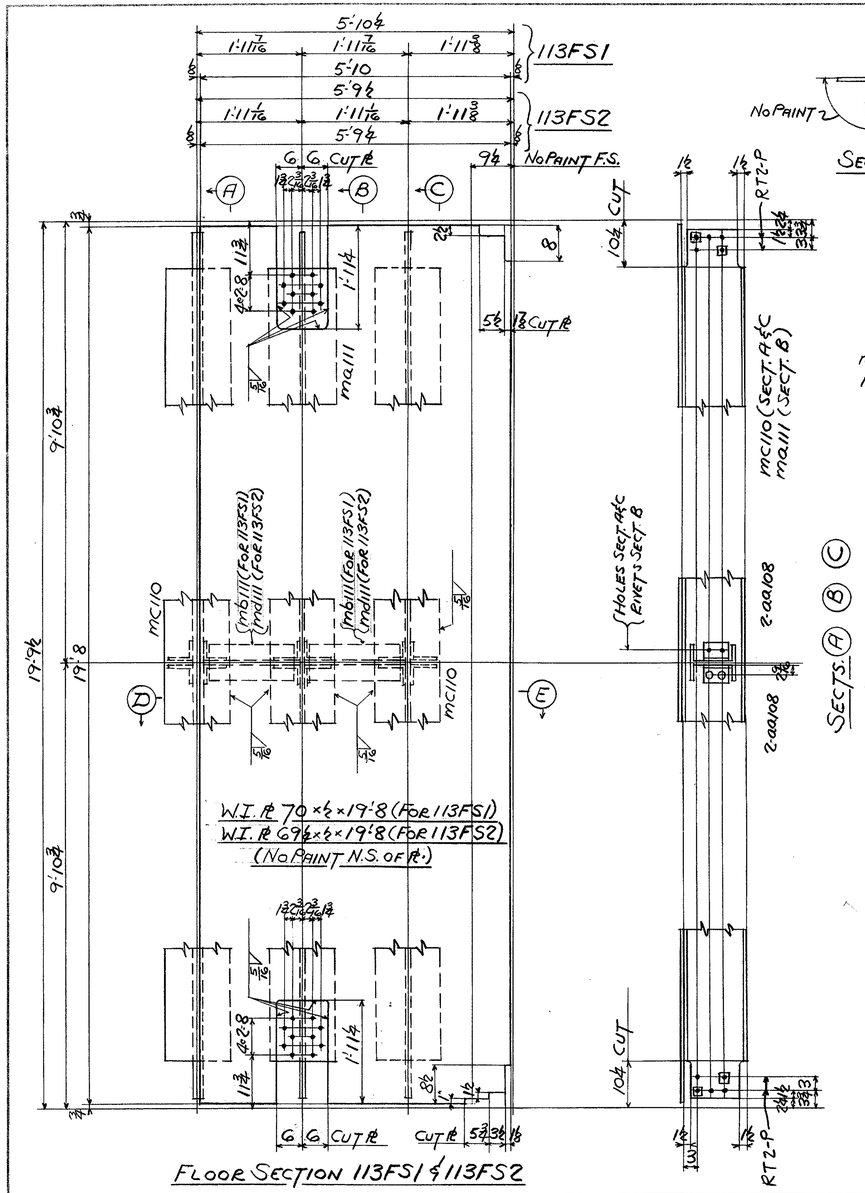
DRAW. MADE BY CMS DATE 6/2

DRAW. CHECKED BY JHH DATE 6-2

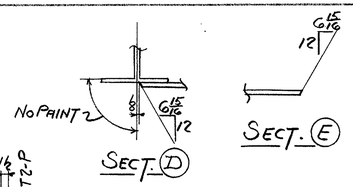
F	
E	
D	
C	
B	
X	
REVISIONS	

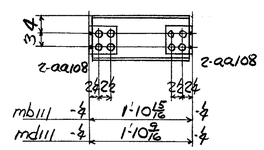
ORDER No. V-6336

SHEET No. 112



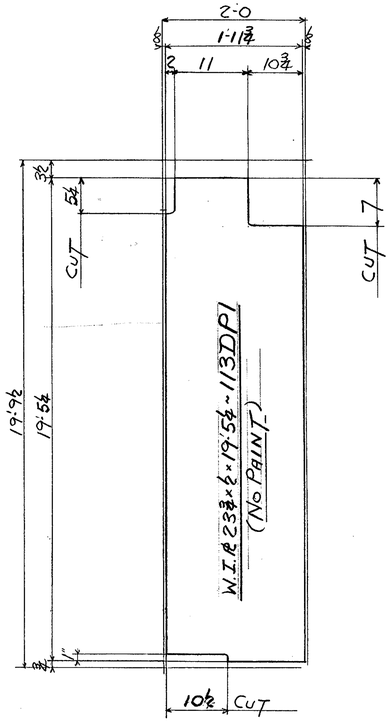
FLOOR SECTION 113FS1 & 113FS2

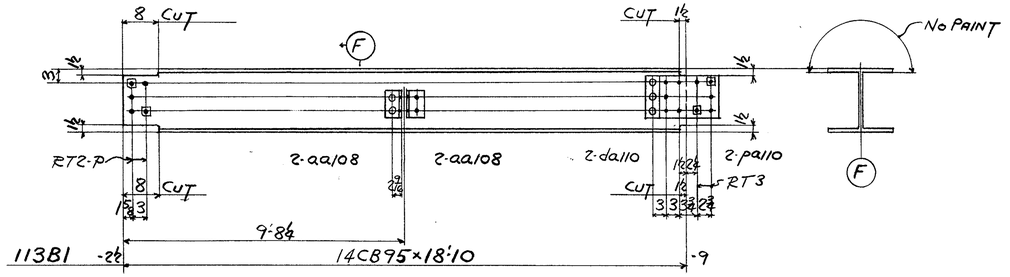


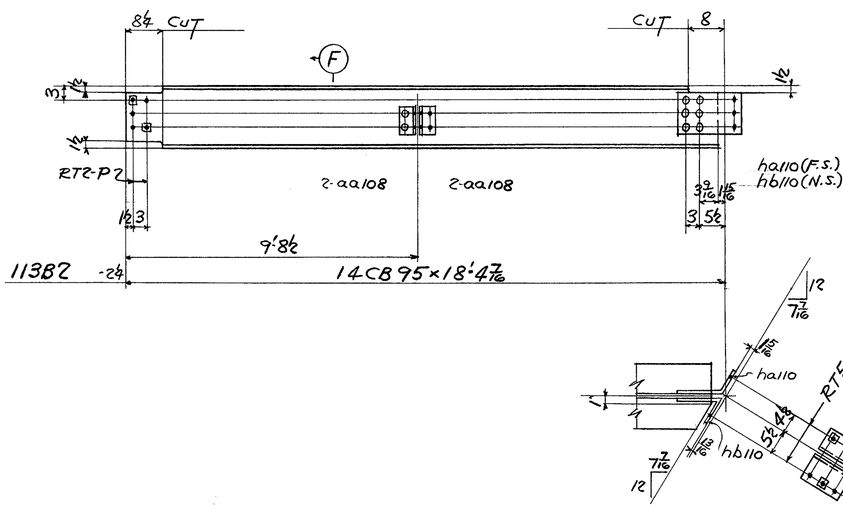


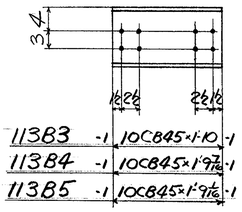
DETAIL OF mb111 & md111

SECTS. (A) (B) (C)









REAMING NOTE:
ALL HOLES MARKED R.T. TO BE SUB PUNCHED ¼" SMALL AND REAMED TO SIZE TO A METAL TEMPLET.

PAINT NOTE FOR H. T. BOLTS

All holes on this drawing, ~~unless noted "F" or otherwise~~, are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

32	35	38	40	50	61	65	71	90	91	92		29	8C
F	WAB	MAC	M	W	B	C	AB	SP-J	SP-B	SP-F	SB		
						✓							

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE	LENGTH: Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED: ITEM
1									
2			ONE FLOOR SECTION				113FS1 2ND DIV		
3			ONE FLOOR SECTION				113FS2 1ST DIV		
4	1	WI PL 70 ½	19	8			FOR FS1	7/8 × 1'-7584.9 = 19-9½ A11	
5	1	WI PL 69½ ½	19	8			FOR FS2	7/8 × 1'-7584.9 = 19-9½ A12	
6	4	14 CB 95	19	5		MC110			
7	2	14 CB 95	19	5		MA111			
8	2	10 CB 45 1	10			MB111	FOR FS1		
9	2	10 CB 45 1	9½			MD111	FOR FS2		
10	24	L G 4 ½	6			aa108			
11	8	SB 7/8 #							5
12									
13									
14									
15									

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE	LENGTH: Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED: ITEM
16									
17			2-BEAMS				1138 1 1		
18	2		14 CB 95	18	10				37-9½ 39
19	4	PL	9 ½	1	0½	pa110			
20	4	FILL	9 ½		9	da110			
21	8					aa108			
22	8	SB 7/8							5
23									
24									
25			2-BEAMS				1138 2 1		
26	2		14 CB 95	18	2½				36-7½ 38
27	2	PL	9 ½	1	0	ha110	BENT		
28	2	PL	9 ½		11¾	hb110	BENT		
29	8					aa108			
30	4	SB 7/8							5

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE	LENGTH: Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED: ITEM
31									
32		10	10 CB 45 1	10			1138 3 5		48-8½ 23
33		10	10 CB 45 1	9 7/16			1138 4 9		2ℓ 44-9½ 24 2ℓ 7-6½ 25
34		8	10 CB 45 1	9 7/16			1138 5 8		63-11½ 22
35									
36									
37									
38		2	WI PL 23¾ ½	19	5½		113DP1 1 1	7584.9 = 19-9½ A16	2ℓ 48-8½ 23
39									
40									
41									
42									
43									
44									
45									

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE	LENGTH: Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED: ITEM
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									
57									
58									
59									
60									

RIVETS — 7/8
HOLES — 15/16

PAINT YES - UN.
SHOP CONTACT SURFACES No

FLOOR SECTION, BEAMS & DECK ℄
BRIDGE Nº STA. 21·1069
OVER U.S.R. 21 UNDER W&L.E. R.R.
MASSILLON, STARK CO. OHIO
OHIO STATE HWY. DEPT. PROJ. Nº 260

D-82X—3M—PENCILTEX

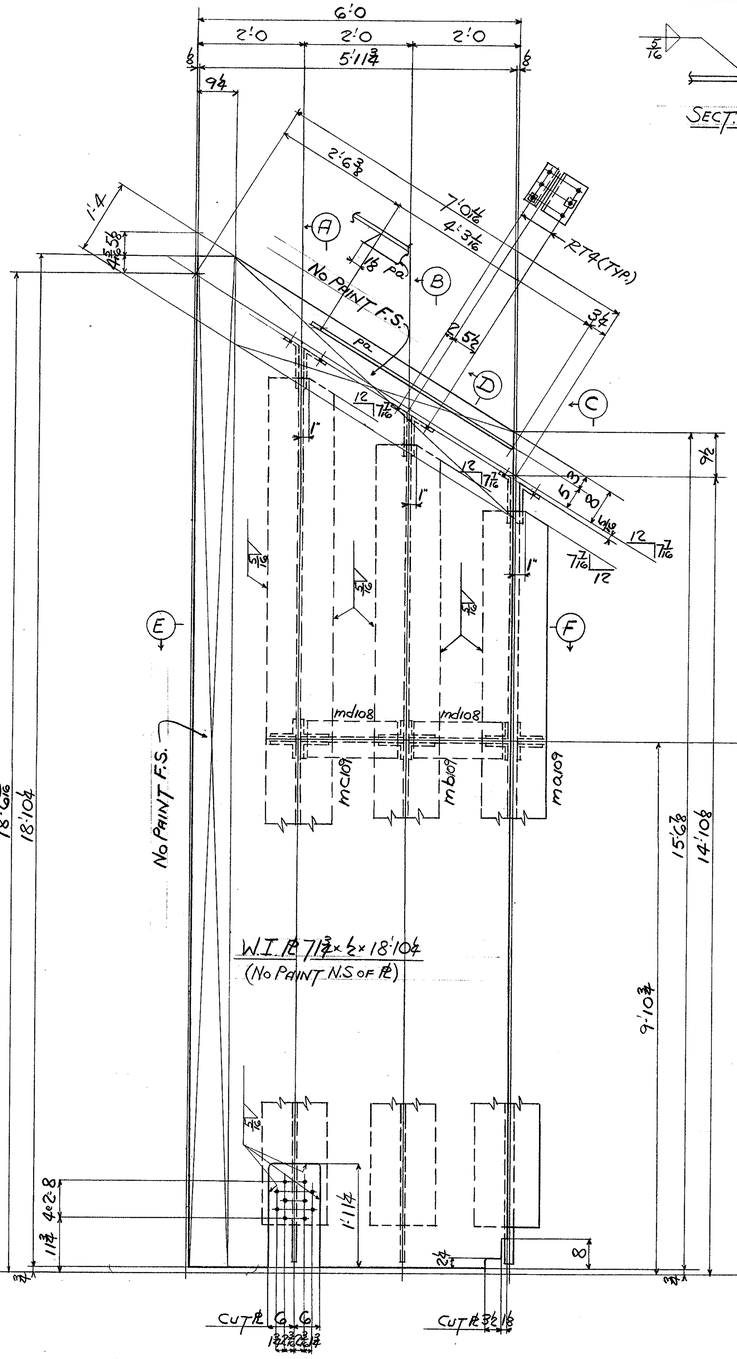
AMERICAN BRIDGE
DIVISION OF UNITED STATES STEEL CORPORATION

HOCKER 265

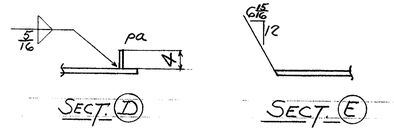
DRAWINGS MADE AT	ROANOKE PLAN
WORK FABRICATED AT	AMBRIDGE PLAN
IN CHARGE OF	SLUSHER
DRAW. MADE BY	CMS DATE 6/26/61
DRAW. CHECKED BY	JHW DATE 6-28-61
ORDER NO.	Y-6336
SHEET NO.	113

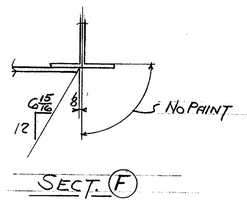
F	
E	
D	
C	
B	
X	
REVISIONS	

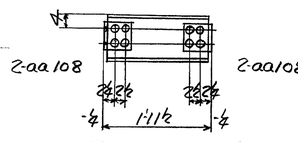
WELDING Adv. Bill M101-103

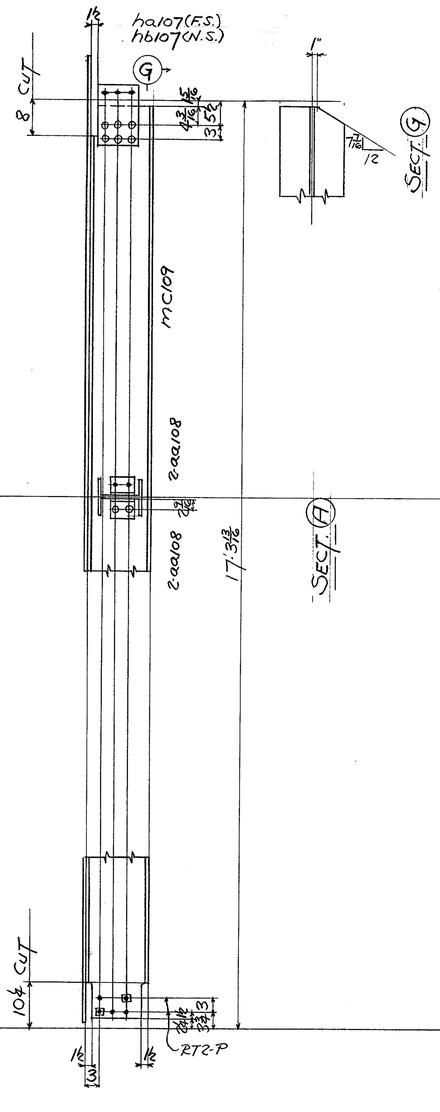


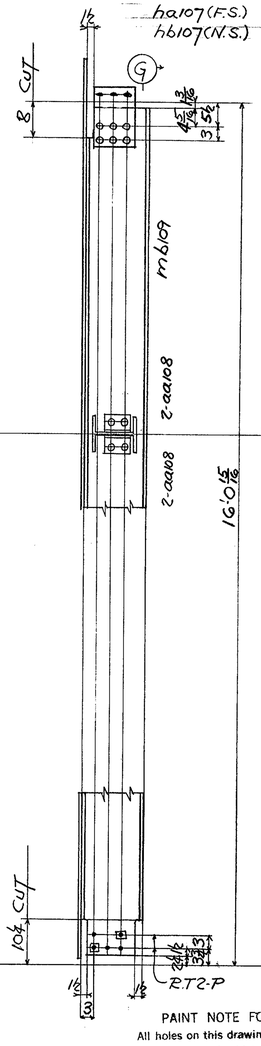
FLOOR SECTION - 114FS1

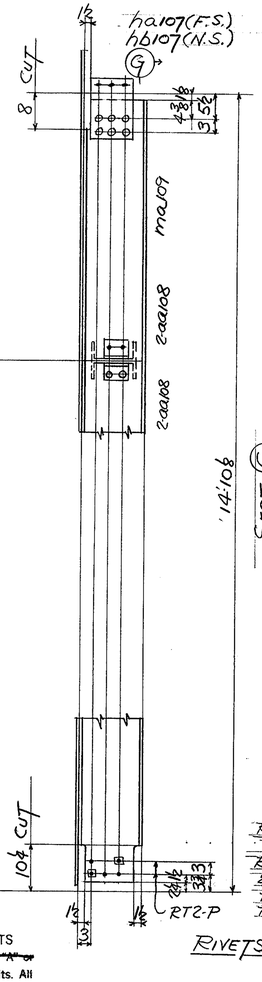












PAINT NOTE FOR H. T. BOLTS

All holes on this drawing, ~~unless noted "A" or otherwise~~, are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

REAMING NOTE:
ALL HOLES MARKED R.T. TO BE SUB-PUNCHED & SMALL AND REAMED TO SIZE TO A METAL TEMPLET.

RIVETS — 7/8 — 15/16 — HOLES

PAINT: YES. U.N.
SHOP CONTACT SURFACES: No

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS.
E101

22	35	36	40	50	61	65	71	90	91	92		20	89
F	MAR	MAG	M	W	B	C	60	SP-J	SP-B	SP-F	SR	MM	NS
							✓						

1ST DIV.	2ND DIV.	LINE	Total No. of Pieces as the Order	No. of Pcs. on Sheet	MATERIAL SHAPE	LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
		1										
		2										
1	1	3			2-FLOOR SECTIONS 114FS1							
		4	2		WI PL 7 1/2 x 1/2	18	10 1/4			72366 19-6	1-75849 A2	
		5	2		14 C 8 95	14	6 1/2	ma109				
		6	2		14 C 8 95	15	9 1/2	mb109				
		7	2		14 C 8 95	17	0 1/4	mc109				
		8	4		10 C 8 45	1	10 1/2	md108				
		9	6	PL	9 1/2	1	0 3/8	ha107	BENT			
		10	6	PL	9 1/2	1	1 3/8	hb107	BENT			
		11	24	L	6 4 1/2		6	aa108				
		12	2	WI BARS	4 1/2	4	4 7/16	pa		REQ'D 20-0	1-75849 A30	5
		13	8	SB	1/8							
		14										
		15										
		16										
		17										
		18										
		19										
		20										
		21										
		22										
		23										
		24										
		25										
		26										
		27										
		28										
		29										
		30										
		31										
		32										
		33										
		34										
		35										
		36										
		37										
		38										
		39										
		40										
		41										
		42										
		43										
		44										
		45										
		46										
		47										
		48										
		49										
		50										
		51										
		52										
		53										
		54										
		55										
		56										
		57										
		58										
		59										
		60										
		61										
		62										
		63										
		64										

FLOOR SECTIONS
BRIDGE No STA. 21+1069
OVER U.S.R. 21 UNDER W&L.E.R.R.
MASSILLON, STARK Co. OHIO
OHIO STATE HWY. DEPT. PROJ. No 260

DRBU—PENCIL CLOTH
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

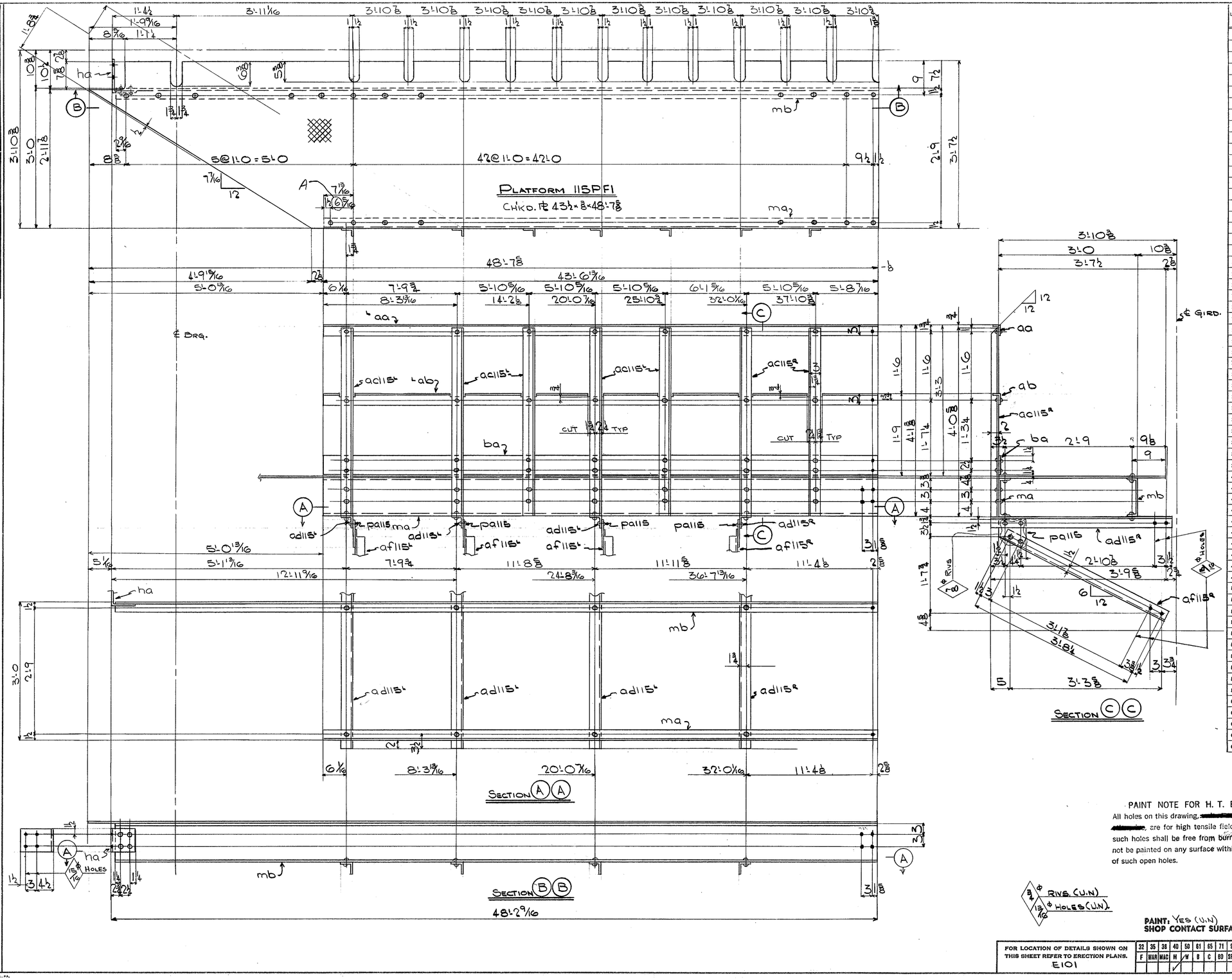
HOCKER 265

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY CMS DATE 6-27-61
DRAW. CHECKED BY JWH DATE 7-3-61
ORDER No. V-6336
SHEET No. 114

REVISIONS	
A	
B	
C	
D	
E	
F	

WELDING — Min. Fillet M101-M102-103

A.B. SMITH CO., PERTH AMBOY, N.J.



LINE	Total No. of Pieces on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE	LENGTH Feet	LENGTH Inches	ASSM. BLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
3			ONE PLATFORM			115PF1				
4	1	1	CHKD PL 43½ × ⅜	48	7⅞		S300	44 X 49-0	71	
5	1	1	10 C 20	48	1½	mb		48-4	9	
6	1	1	10 C 20	43	6⅜	ma		43-9	7	
7	1	1	L 3 2 ⅜	43	6⅜	aa		44-0	13	
8	1	1	L 3 2 ⅜	43	6⅜	ab		44-0	13	
9	15R 12L	7	L 3 2 ⅜	4	0⅞	ac115ᴿ ᴸ		40/45	11	
10	8R 8L	4	L 3 3 ⅜	3	11⅞	ad115ᴿ ᴸ		40/45	10	
11	8R 8L	4	L 3 3 ⅜	3	11½	af115ᴿ ᴸ		40/45	10	
12	16	4	PL ⅜	7½	½		pal15		S	
13		1	PL ⅜	6	½	1	2½	ha	BENT		S	
14		1	BR ⅜	5	⅜	43	6⅜	ba	Splice 2-24/27	A33	

2ND DIVISION

BRIDGE NO. STA. 21-1069
OVER USR 21 UNDER W&LE R.R.
MASSILLON, STARK CO. OHIO
OHIO STATE HWY. DEPT. PROJ. NO. 260

PAINT NOTE FOR H. T. BOLTS

All holes on this drawing, [redacted], are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

Φ RIVS. (U.N)
Φ HOLES (U.N.)

PAINT: YES (U.N)
SHOP CONTACT SURFACES: NO

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

32	35	38	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	80	SP-1	SP-B	SP-F	SR	MM	NS
				✓									

HOCKER 265

AMERICAN BRIDGE DIVISION UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY S.A. DATE 6/61
DRAW. CHECKED BY JWG DATE 7-3-61

REVISIONS		ORDER No.	SHEET No.
A 12-22-61	OA	V63336	115

Adv. Bill 103-104

PIR 4092—1259

PLATFORM 116PF1
CH'KD. PL 43½ × ⅜ × 37'-4 1/16

37@11.0=37'-0

SECT. (A)(A)

SECT. (B)(B)

SECT. (C)(C)

SECT. (D)

PAINT NOTE FOR H. T. BOLTS
All holes on this drawing, ■■■■■ are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

PAINT: YES (U.N)
SHOP CONTACT SURFACES: NO

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

32	35	38	40	50	61	65	71	90	91	92		20	60
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM	MS

LINE	Total No. of Pcs. as the Order	MATERIAL No. of Pcs. on Sheet	SHAPE	LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
1										
2										
3			ONE PLATFORM				116PF1			
4		1	CH'KD PL 43½ ⅜	37	4 1/16		S 300	44 x 37-6	69	
5		1	10 C 20	37	3 1/16	ma		37-4	FIVE	
6		1	10 C 20	37	3 1/16	mb		37-4	FIVE	
7		1	L 3 2 ⅜	37	3 1/16	aa		37-6	12	
8		1	L 3 2 ⅜	37	3 1/16	ab		37-6	12	
9		6	L 3 2 ⅜	4	0⅜	ac115R	5			
10	2	1	L 3 2 ⅜	4	0⅜	ag116		40/45	11	
11		2	L 3 3 ⅜	3	11⅜	ad115R				
12		3	L 3 3 ⅜	3	11⅜	af115R				
13	2R 1L	1	L 3 3 ⅜	3	11 1/16	ah116R		40/45	10	
14	(2)	1	L 3½ 3 ⅜		7⅛	ak116			5	
15	2	1	L 3 2 ⅜		5⅜	an116		40/45	11	
16	2	1	L 3 2 ⅜		5	am116		40/45	11	
17		4	PL ¾	7⅛	½			8¼	pa115	
18		1	BR	5	⅜	37 3/16	ba	(SPLICE 1-9 4/17 1-14 1/16)	A33 B34	
19	4	2	BR	5½	⅜	1 0	bb116		5	
20	2	1	L 3 3 ⅜	3	11⅜	ap116		40/45	10	
21	2	1	L 3 2 ⅜		5	av116		40/45	11	
22	2R 1L	1	L 3 3 ⅜	3	9⅜	aw116R		40/45	10	
23	2	1	10 C 20	2	10⅛	mc116		6-0 2	4	
24	(4)	2	L 6 6 ⅜		5⅞	ay116			5	
25	2	1	L 4 3 ⅜		6	at116			5	
26		4	PL ¾						5	
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
51										
52										
53										
54										
55										
56										
57										
58										
59										
60										
61										
62			2ND DIVISION							
63										
64										

WALKWAY

BRIDGE NO. STA. 21-1069
OVER USR 21 UNDER W&LE R.R.
MASSILLON, STARK CO., OHIO
OHIO STATE HWY. DEPT. PROJ. NO. 260

HOCKER 265

AMERICAN BRIDGE DIVISION UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY S.A. DATE 6/61
DRAW. CHECKED BY JMED DATE 7-3-61
ORDER NO. V6336
SHEET NO. 116

REVISIONS
A 12-26-61 (2) M

Adv. Bill 103-104

PIR 4892—1059

PLATFORM 117PF1

CHKR PL 43½ × 8 × 48'-2 11/16 (BENT)

SECT. (D)

SECT. (C)(C)

SECT. (B)(B)

SECT. (A)(A)

PAINT NOTE FOR H. T. BOLTS

All holes on this drawing, [illegible], are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

13/16 ⌀ HOLES (UN) 1¼ RIVS.

PAINT: YES (UN)
SHOP CONTACT SURFACES: NO

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

32	35	38	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	BD	SP-J	SP-S	SP-F	SR	MM	HS

LINE	Item No. of Piece as on Shop Order	No. of Pcs. on Sheet	MATERIAL SHAPE				LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED		CALCULATED WEIGHT FOR ONE SHIP PIECE
												ITEM	
1													
2													
3			ONE PLATFORM							117PF1			
4	1	CHKR PL	43½	8			48	2 11/16		(BENT) S300	44x48-10	70	
5	1	10	C	20			47	5 9/16	ma		47-7	8	
6	1	10	C	20			47	5 9/16	mb		47-7	8	
7	1	L	3	2	3/8		47	5 9/16	aa		47-7	14	
8	1	L	3	2	3/8		47	5 9/16	ab		47-7	14	
9	8	L	3	2	3/8		4	0 3/8	ac115	9°-6½			
10	3	L	3	3	3/8		3	11 3/8	ad115	9°-6½			
11	3	L	3	3	3/8		3	11 ¼	af115	9°-6½			
12	1	L	3	3	3/8		3	8 9/16	ah116				
13	4	PL			7/16	½		8¼	pa115				
14	1	BR			5	3/8	47	5 9/16	ba	Splice 2 = 24'-2.7			A33
15	1	L	3	3	3/8		3	9 3/8	aw116				
16	1	10	C	20			2	10 ¼	mc116				
17	2	L	6	6	3/8			5½	ay116				
18										(A)			
19													
20													
21													
22													
23													
24													
26													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													
56													
57													
58													
59													
60										1ST DIVISION			
61													
62													
63													
64													

WALKWAY

BRIDGE NO. STA. 21-1069
OVER USR 21 UNDER W & LE R.R.
MASSILLON, STARK CO., OHIO
OHIO STATE HWY. DEPT. PROJ. NO. 260

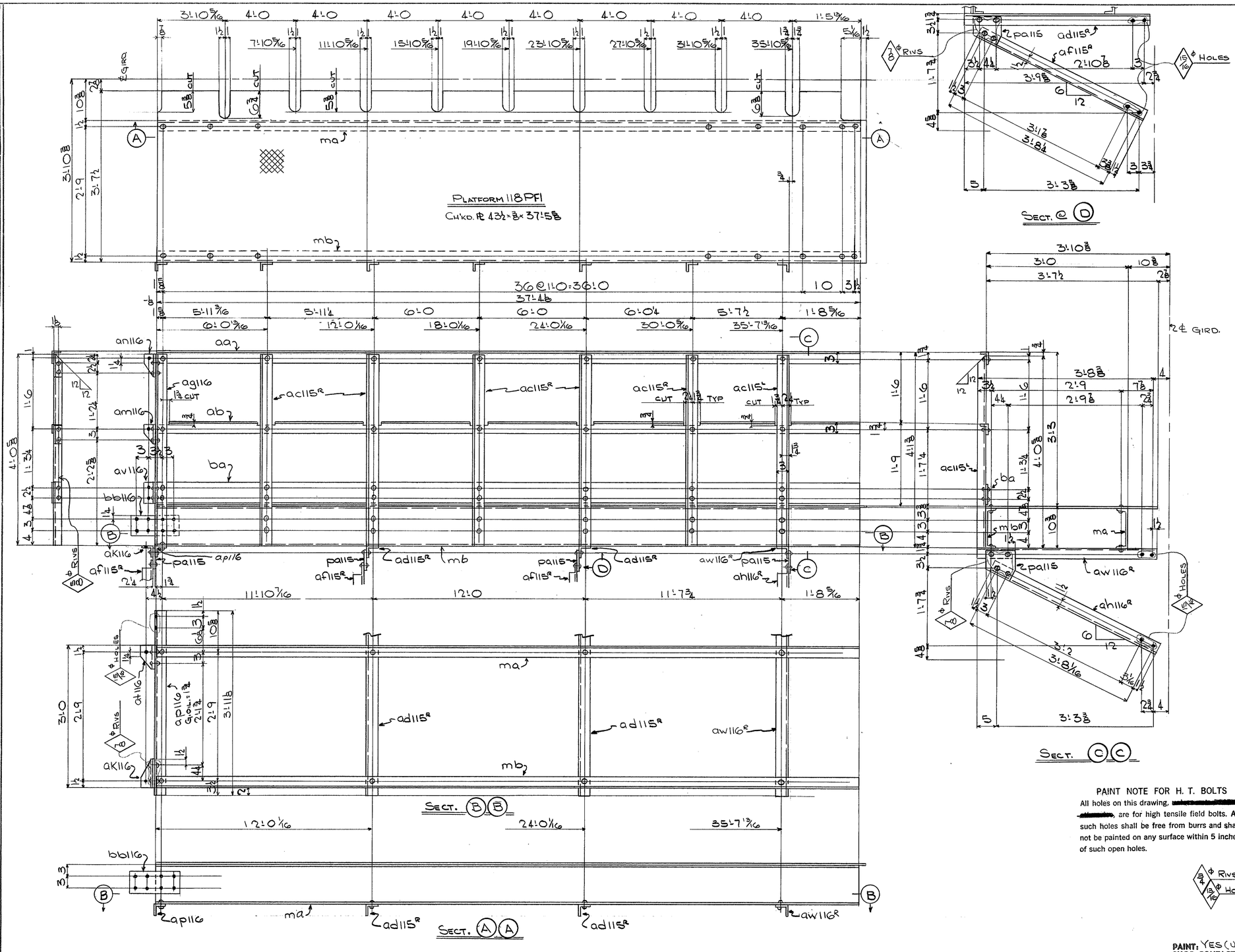
HOCKER 265

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY S.A. DATE 6/61
DRAW. CHECKED BY JWW DATE 7-3-61

REVISIONS	ORDER NO.	SHEET NO.
A 12-26-61 (2)	V6336	117

Adv. Bill 103-104

PR 4092-1259



LINE	Total No. of Pieces as the Order	MATERIAL: No. of Pos. on Sheet	SHAPE				LENGTH: Feet	LENGTH: Inches	ASSEMBLING MARK	REMARKS	ORDERED		CALCULATED WEIGHT FOR ONE SHIP PIECE
												ITEM	
1													
2			ONE PLATFORM							118PF1			
3		1	CH'KD PL	43½	⅜		37	5⅝		S800	44x37-6	69	
4		1	10	C	20		37	4⅝	ma		37-6	6	
5		1	10	C	20		37	4⅝	mb		37-6	6	
6		1	L	3	2	⅜	37	4⅝	aa		37-6	12	
7		1	L	3	2	⅜	37	4⅝	ab		37-6	12	
8		6	L	3	2	⅜	4	0⅝	ac115R				
9		1	L	3	2	⅜	4	0⅝	ag116				
10		2	L	3	3	⅜	3	11⅝	ad115R				
11		1	L	3	3	⅜	3	11⅝	ap116				
12		3	L	3	3	⅜	3	11¼	af115R				
13		1	L	3	3	⅜	3	11⅛	ah116R				
14		1	L	3½	3	⅜		7¼	ak116				
15		1	L	3	2	⅜		5⅜	an116				
16		1	L	3	2	⅜		5	am116				
17		1	L	3	2	⅜		5	av116				
18		4	PL		7¼	½		8¼	pa115				
19		1	BR		5	⅜	37	4⅝	ba				
20		2	BR		5½	⅜	1	0	bb116				
21		1	L	4	3	⅜		6	at116				
22		1	L	3	3	⅜	3	9⅜	aw116R				
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													
56													
57													
58													
59													
60													
61			1ST DIVISION										
62													
63													
64													

PAINT NOTE FOR H. T. BOLTS

All holes on this drawing, [redacted], are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

℄ RIVS. (UN)
℄ HOLES (UN)

PAINT: YES (UN)
SHOP CONTACT SURFACES: No

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

	32	35	36	40	50	61	65	71	90	91	92		20	80
	F	MAS	MAC	M	W	B	C	BD	SP-J	SP-B	SP-F	SR	MM	HS
					1									

REVISIONS	
F	
E	
D	
C	
B	
A	

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY S.A. DATE 6/61
DRAW. CHECKED BY JKW DATE 7-3-61
ORDER NO. V6336
SHEET NO. 118

D-STK—PENCIL CLOTH
AMERICAN BRIDGE DIVISION
UNITED STATES STEEL CORPORATION

WALKWAY

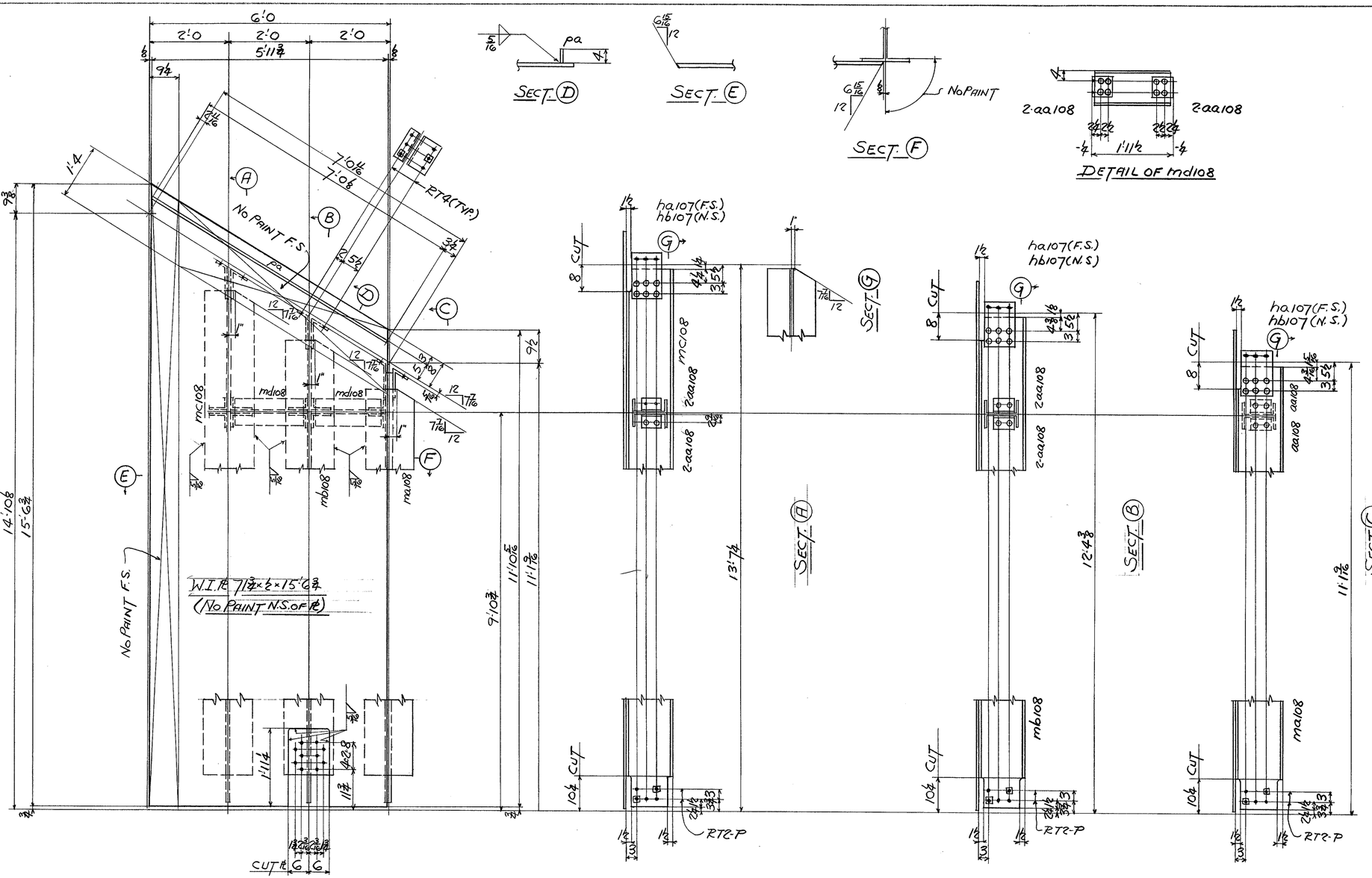
BRIDGE NO. STA. 21-1069
OVER USR 21 UNDER W&LE R.R.
MASSILLON, STARK CO. OHIO
OHIO STATE HWY. DEPT. PROJ. NO. 260

HOCKER 265

Adv. Bill 103-104

A. B. SMITH CO., PGH., PA.

PR 4992—1359



1ST DIV	2ND DIV	LINE	Total No. of Pieces as in the Order	No. of Pcs. on Sheet	MATERIAL SHAPE	LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
		1										
		2										
1	1	3		2	FLOOR SECTIONS				119FS1			
		4	2	WI R	7 1/4 x 1/2	15	6 3/4			2 REQ 1- 124x 15-9	75849 A5	
		5	2		14 CB	95	10	ma108				
		6	2		14 CB	95	12	mb108				
		7	2		14 CB	95	13	mc108				
		8	4		10 CB	45	1	md108				
		9	6	R	9 x 1/2	1	0 3/4	ha107	BENT			
		10	6	R	9 x 1/2	1	1 3/8	hb107	BENT			
		11	20	L	6 x 1/2		6	aa108				
		12	2	W.I. PLATES	4 x 1/2	7	0 4	pa		REQ 1- 20-0	75848 A20 S	
		13	4	SB	7/8"							
		14										
		15										
		16										
		17										
		18										
		19										
		20										
		21										
		22										
		23										
		24										
		25										
		26										
		26										
		27										
		28										
		29										
		30										
		31										
		32										
		33										
		34										
		35										
		36										
		37										
		38										
		39										
		40										
		41										
		42										
		43										
		44										
		45										
		46										
		47										
		48										
		49										
		50										
		51										
		52										
		53										
		54										
		55										
		56										
		57										
		58										
		59										
		60										
		61										
		62										
		63										
		64										

PAINT NOTE FOR H. T. BOLTS

All holes on this drawing, ~~unless noted "All or otherwise,"~~ are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

REAMING NOTE:
ALL HOLES MARKED R.T TO BE SUB-PUNCHED & SMALL AND REAMED TO SIZE TO A METAL TEMPLET.

RIVETS 7/8
HOLES 15/16

PAINT: YES U.N.
SHOP CONTACT SURFACES: NO

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

32	35	38	40	50	61	65	71	80	81	92		20	80
F	MAR	MAC		M	W	B	C	SP-J	SP-B	SP-F	SR	MM	NS

FLOOR SECTION
BRIDGE No STA. 21-1069
OVER U.S.R. 21 UNDER W&L E.R.R.
MASSILLON, STARK CO. OHIO
OHIO STATE HWY. DEPT. PROJ. No 260

HOCKER 26 — 5-DIX-PENCIL CLOTH

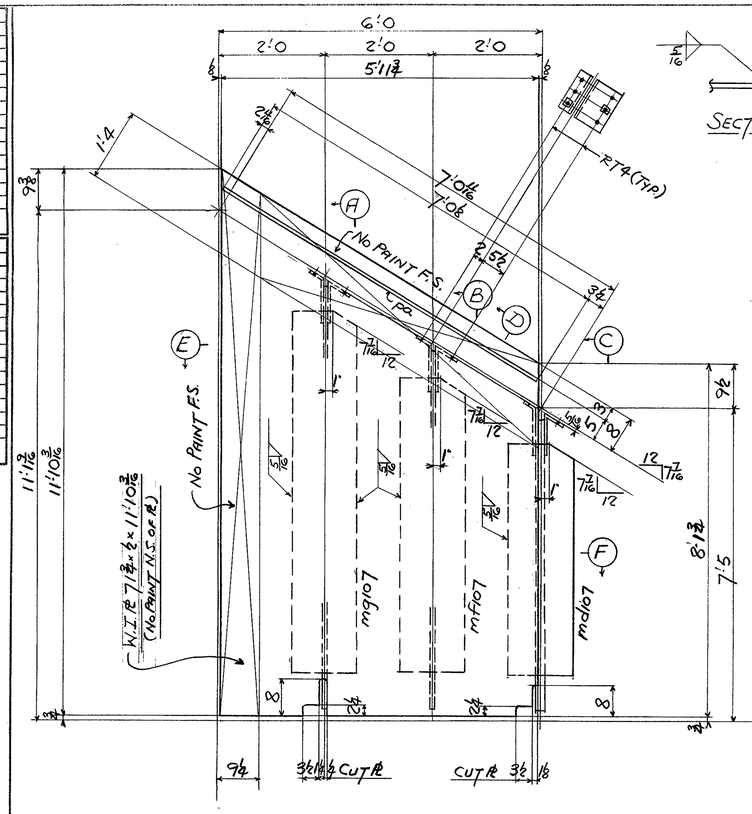
AMERICAN BRIDGE DIVISION UNITED STATES STEEL CORPORATION

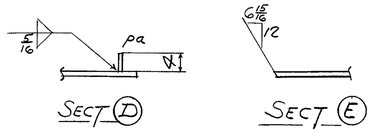
F	
E	
D	
C	
B	
A	
REVISIONS	

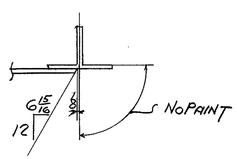
DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY CMS DATE 6/28/61
DRAW. CHECKED BY JWW DATE 7-3-61
ORDER No. V.6336
SHEET No. 119 OM

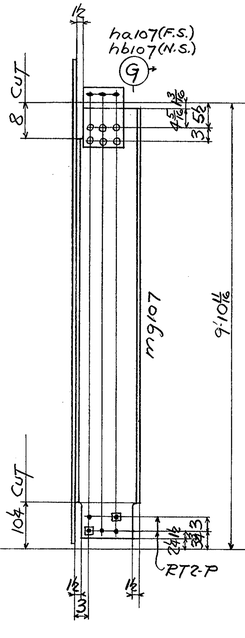
WELDING Adv. Bill M101-M102-103

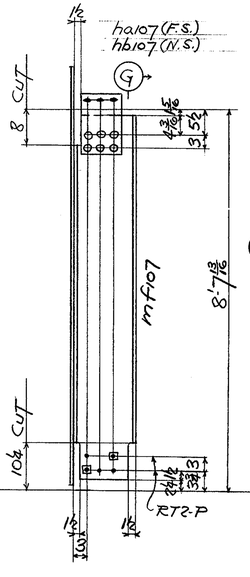
A. & B. SMITH CO., POR., PA. — FM 4092-1359

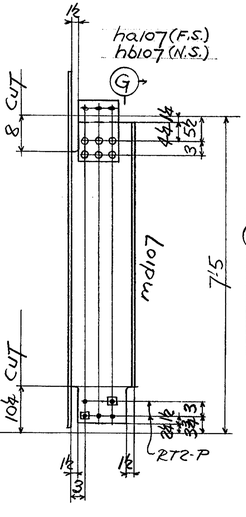




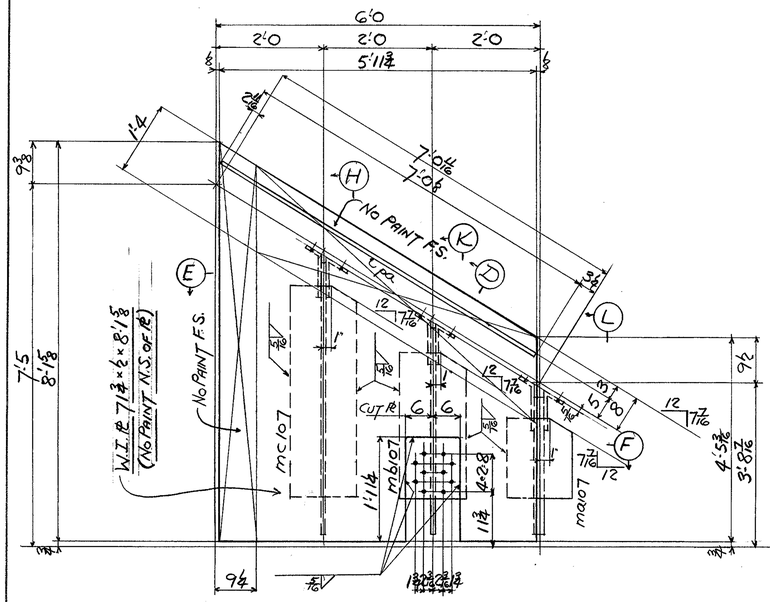


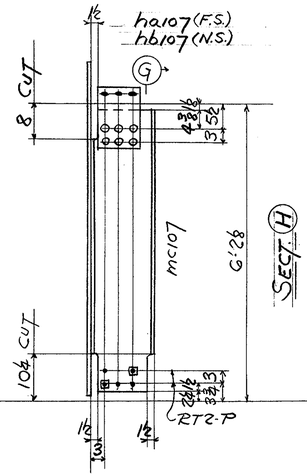


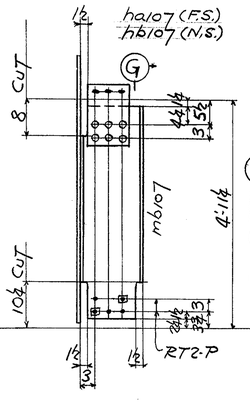


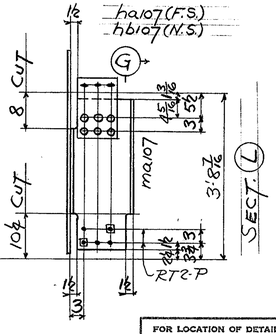


FLOOR SECTION - 120FS1









FLOOR SECTION - 120FS2

REAMING NOTE: ALL HOLES MARKED R.T. TO BE SUB-PUNCHED ¼ SMALL AND REAMED TO SIZE TO A METAL TEMPLET.

PAINT NOTE FOR H. T. BOLTS

All holes on this drawing, ~~unless noted "A" or otherwise,~~ are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

RIVETS — ⅞

HOLES — 15/16

PAINT: YES. U.N.
SHOP CONTACT SURFACES: No

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101	32	35	38	40	50	61	65	71	90	91	92		20	80
	F	MAR	MAC	M	W	B	C	80	SP-J	SP-B	SP-F	SA	MM	MS

REVISIONS						
A	9-7-61					

ORDER No. V-6336 — SHEET No. 120

LINE	Total No. of Pieces on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE				LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
1													
2													
3			2-FLOOR SECTIONS							120FS1			
4		2	WI	BE	7⅛	2	11	10⅛		☐	3 7/8 x 20-3	1 75849 A1	
5		2		L4	C8	95	7	1½	md107				
6		2		L4	C8	95	8	4½	mf107				
7		2		L4	C8	95	9	7½	mg107				
8		6	PL		9	½	1	0⅜	ha107	BENT			
9		6	PL		9	½	1	3⅜	hb107	BENT			
10	4	2	WI	BEND	4	½	7	0⅛	pa		REGI 20-0	75849 A30	
11													
12													
13													
14													
15			2-FLOOR SECTIONS							120FS2			
16		2	WI	PL	7⅛	½	8	1⅝		☑	3 7/8 x 12-10	1 75849 A17	
17		2		L4	C8	95	3	5	ma107				
18		2		L4	C8	95	4	7⅜	mb107				
19		2		L4	C8	95	5	10⅜	mc107				
20		6							ha107				
21		6							hb107				
22		2							pa				

FLOOR SECTION
BRIDGE No. STA. 21-1069
OVER U.S.R. 21 UNDER W&L.E.R.R.
MASSILLON, STARK Co. OHIO
OHIO STATE HWY. DEPT. PROJ. No. 260

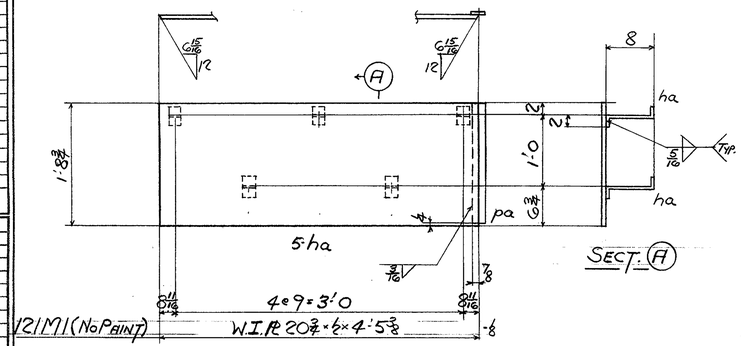
D-EU—PENCIL CLOTH
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

HOCKER 265

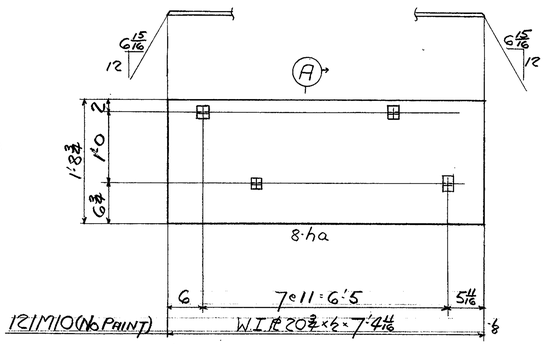
DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY CMS DATE 6/29/61
DRAW. CHECKED BY JHW DATE 7-3-61

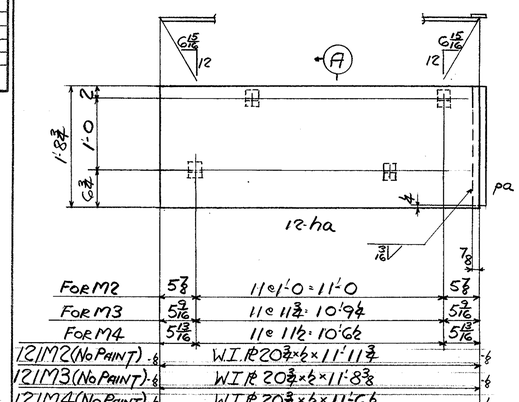
WELDING Adv. Bill M101-102-103

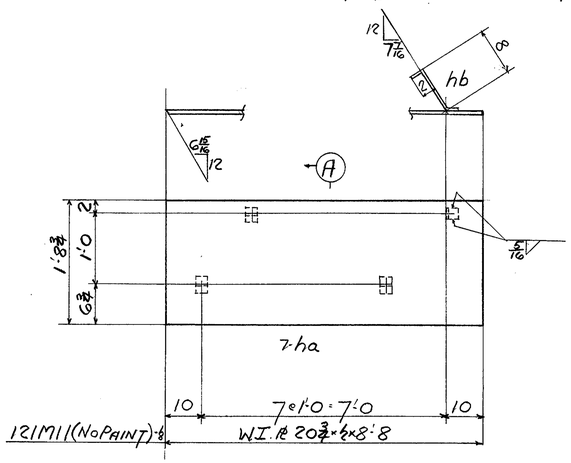
A. & B. SMITH CO., PHILA., PA.

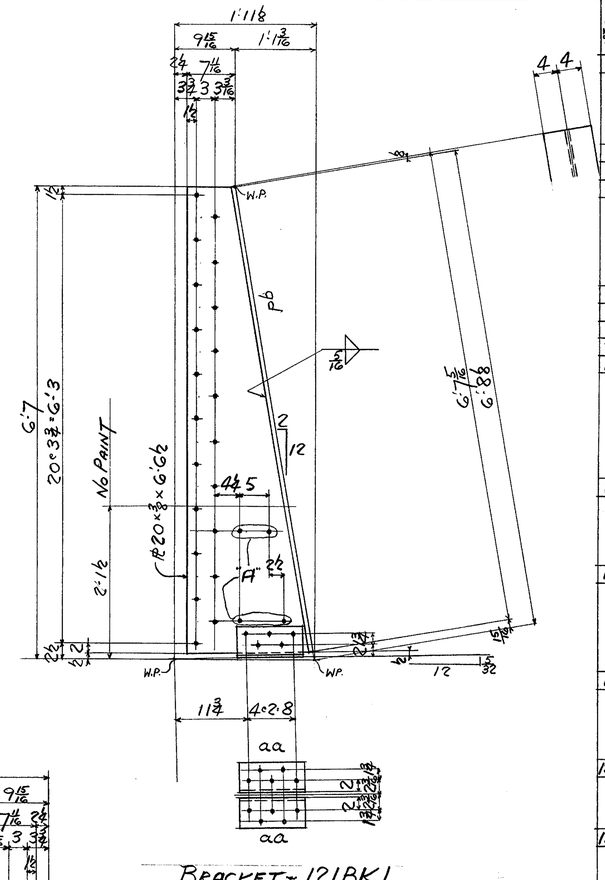


SECT. (A)

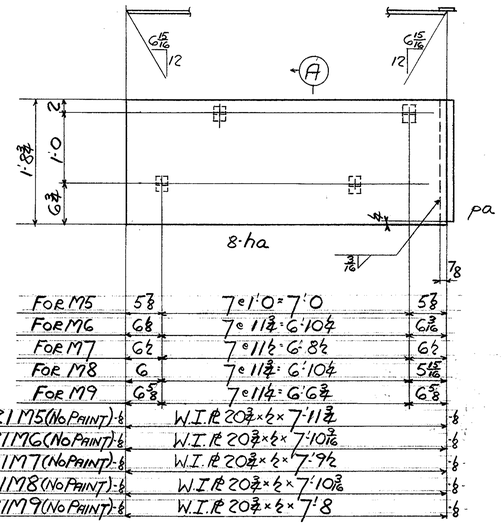


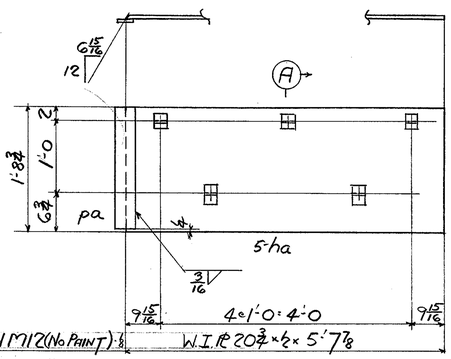


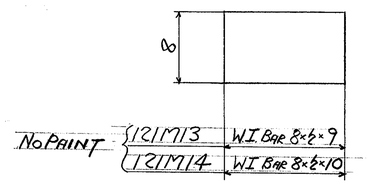


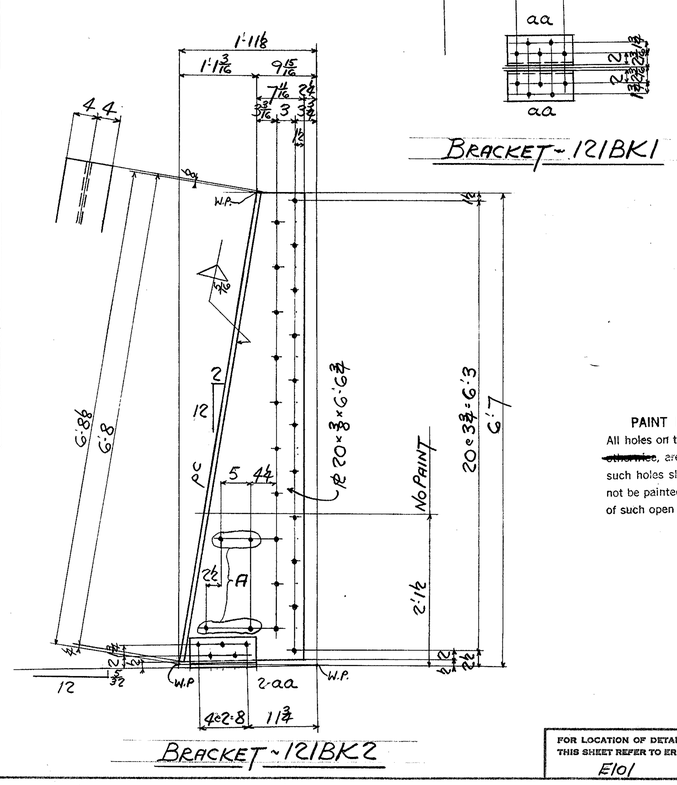


BRACKET - 121BK1









BRACKET - 121BK2

PAINT NOTE FOR H. T. BOLTS
All holes on this drawing, unless noted "A" ~~otherwise~~, are for high tensile field bolts. All such holes shall be free from burrs and shall not be painted on any surface within 5 inches of such open holes.

RIVETS — NONE
HOLES — 15/16

PAINT: YES · U.N.
SHOP CONTACT SURFACES: NO

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS.	32 F	35 MAR	38 MAC	40 M	50 W	61 B	65 C	71 BO	80 SP-J	91 SP-B	92 SP-F	20 SR	20 MM	80 HS
E101					✓									

1ST DIV.	2ND DIV.	LINE	Item No. of Piece on the Order	No. of Pcs. on Sheet	SHAPE	LENGTH Feet	LENGTH Inches	ASSEM. BLING MARK	REMARKS	ORDERED ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
		1									
1	1	2		2	WI. IR 20¾ ½	4	5⅜		121M1	REQ'I- 2½×4'-7 75849 A25	
		3	3⅜	10	BARS 2 ⅜	1	0	ha	BENT	S	
		4	3⅛	2	BARS 2 ½	1	8½	pa		S	
		5									
		6									
2	2	7		4	WI IR 20¾ ½	11	11⅜		121M2	REQ'I- 2½×12'-1 75849 A18	
	2	8		2	WI IR 20¾ ½	11	8⅜		121M3	REQ'I- 2½×12'-0 75849 A19	
2		9		2	WI IR 20¾ ½	11	6⅛		121M4	REQ'I- 2½×12'-0 75849 A19	
		10		96				ha			
		11		8				pa			
		12									
		13									
		14									
2	2	15		4	WI IR 20¾ ½	11	3⅜		121M5	REQ'I- 2½×8'-1 75849 A21	
	2	16		2	WI IR 20¾ ½	10	9⅞		121M6	REQ'I- 2½×8'-0 75849 A22	
	8	17		8	WI IR 20¾ ½	7	9½		121M7	REQ'I- 2½×8'-0 75849 A22	
2		18		2	WI IR 20¾ ½	10	3⅝		121M8	REQ'I- 2½×8'-0 75849 A22	
8		19		8	WI IR 20¾ ½	7	8		121M9	REQ'I- 2½×8'-0 75849 A22	
		20		192				ha			
		21		24				pa			
		22									
		23									
		24									
		25									
1	1	26		2	WI IR 20¾ ½	7	4½		121M10	REQ'I- 2½×7'-9 75849 A23	
		27		16				ha			
		28									
		29									
		30									
1	1	31		2	WI IR 20¾ ½	8	8		121M11	REQ'I- 2½×8'-9 75849 A20	
		32		14				ha			
		33		2	BAR 2 ⅜	1	0	hb	BENT	S	
		34									
		35									
		36									
1	1	37		2	WI IR 20¾ ½	5	7⅞		121M12	REQ'I- 2½×5'-8 75849 A24	
		38		10				ha			
		39		2				pa			
		40									
		41									
18	18	42		36	WI BARS 8 ½		9		121M13	REQ'I- 20-0 75849 A28	
		43									
		44									
		45									
18	18	46		36	WI BARS 8 ½		10		121M14	REQ'I- 20-0 75849 A28	
		47									
		48									
		49									
9	9	60			18 BRACKETS				121BK1		
		61		18	IR 20 ⅜	6	6½			80×22-0 61	
		62		18	BARS 8 ¾	6	7⅛	pb		S	
		63	72	36	L 5 5 ½		11	aa		402 40/65 32" S	
		64		36	SB ⅞					S	
		65									
		66									
9	9	67			18 BRACKETS				121BK2		
		68		18	IR 20 ⅜	6	6½			80×22-0 61	
		69		18	BARS 8 ¾	6	8	pc		S	
		70		36				aa			
		71		36	SB ⅞					S	
		72									
		73									
		74									

BRACKETS & PLATES

BRIDGE Nº STA. 21-1069
OVER U.S.R. 21 UNDER W&L.E.R.R.
MASSILLON, STARK CO. OHIO
OHIO STATE HWY. DEPT. PROJ Nº 260

HOCKER 265

D&W—PENCIL CLOTH
AMERICAN BRIDGE DIVISION
UNITED STATES STEEL CORPORATION

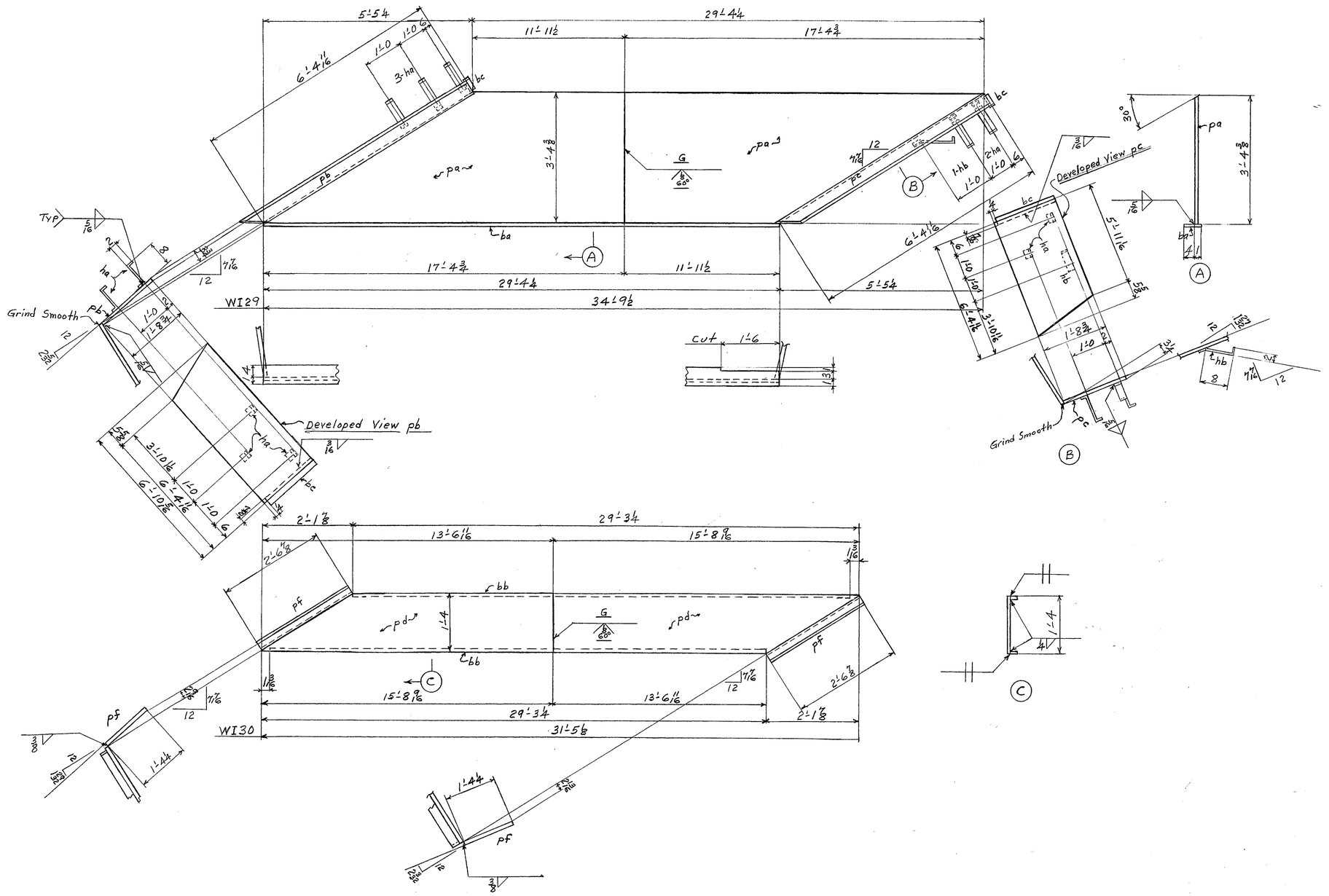
DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY CMS DATE 7/7/61
DRAW. CHECKED BY JWW DATE 7-7-61

REVISIONS	ORDER No.	SHEET No.
F	V-6336	121
E		
D		
C		
B		
A		

WELDING Adv. BIR M101-102

PR 4002—1259

A.M. BYERS CO., PGH., PA.



DECK PLATES

1st Div.	2nd Div.	LINE	Total No. of Pieces in the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE				LENGTH: Feet	LENGTH: Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
		1													
		2													
1	1	3		2	WROUGHT IRON PL - WI29										
		4		WI	PL	40½	½		17	4¹⁵/₁₆	pa		REQ'D 1-75849 41¼ x 20-0 A15		
		5		2	WI	PL	20⅜	½		6	10¹⁵/₁₆	pb		21 x 6-11 A26	
		6		2	WI	PL	20⅜	½		6	4¹⁵/₁₆	pc		REQ'D 1-75849 21 x 6-6 A26	
		7		2	WI	Bar	5	½		29	4¼	ba	Weld for length	REQ'D 1-75849 20-0 A29	
		8		10	Bar	2	⅜			1	0	ha			5
		9		2	Bar	2	⅜			1	0	hb			5
		10		4	Bar	2	¼			1	8½	bc			5
		11													
		12													
		13													
		14													
		15													
		16													
		17													
		18													
		19													
1		20			ONE WROUGHT IRON PL - WI30										
		21		2	WI	PL	16	½		15	8½	pd		REQ'D 1-75849 11x 20-0 A27	
		22		2	WI	PL	16¾	½		2	6⅞	pf		REQ'D 1-75849 22x 3-0 A17	
		23		2	WI	Bar	1⅛	½		29	2	bb	Weld for length	REQ'D 1-75849 20-0 A31	
		24													
		25													
		26													
		27													
		28													
		29													
		30													
		31													
		32													
		33													
		34													
		35													
		36													
		37													
		38													
		39													
		40													
		41													
		42													
		43													
		44													
		45													
		46													
		47													
		48													
		49													
		50													
		51													
		52													
		53													
		54													
		55													
		56													
		57													
		58													
		59													
		60													
		61													
		62													
		63													
		64													

BRIDGE NO STA 21-1069
OVER USR 21 UNDER W&LE RR
MASSILLON, STARK CO., OHIO
OHIO STATE HWY DEPT PROJ NO 260

HOCKER 265

DIRK-PENCIL CLOTH
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

REVISIONS	
F	
E	
D	
C	
B	
A	

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY LTB DATE 7-5-61
DRAW. CHECKED BY JHW DATE 7-25-61
ORDER NO. V6336
SHEET NO. 122

PAINT: NO
SHOP CONTACT SURFACES: NO

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

32	35	38	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	80	SP-J	SP-B	SP-F	SR	MM	HS

WELDING

Adv. Bill 104-M101-M102

PR-4992-1200

R. B. SMITH CO., PGH., PA.

FORM 0-33

SKETCH, SHOP AND SHIPPING S.

AMERICAN BRI...

DIVISION

UNITED STATES STEEL CORPORATION

SKETCH	LINE NO.	NO. PCS.	MARK	MATERIAL SHAPE	MATERIAL LENGTH FT.	MATERIAL LENGTH INS.	CALCULATED WEIGHT FOR ONE MEMBER	ORDERED NO. PCS.	ORDERED LENGTH
Hex Nut (TNC2) 1¼"Φ; 3" Thd.; 10" Swedge; 1'-5½"	1								
	2								
	3								
	4								
	5	B°							
	6	84	A3	Rods 1¼"Φ	1	5½			
	7	84		Hex Nuts 1¼" Tap					
	8								
	9								
	10								
	11								
	12								
1" (10 NC2) Thd for ¾" Bolt; Drill 21/32"Φ 8" Deep; 1¼"Φ; 1'-2 5/8"; 1'-3"; ¼; 3/8"	13								
	14								
	15								
	16								
	17								
	18	MAC/SP-F							
	19								
	20	192	A4	Rods ¾"Φ	1	4 5/8			
	21	192		Bars 3 3/8		11			
	22								
	23								
	24								
	25								
	26								
	27								
	28								
	29								
	30								
	31								
	32								
	33	Bo							
	34	84	W3	Washers 3"Φ x 3/8"-thk 15" Price					
	35								
	36								
	37								
	38								
	39								
	40								
	41								
	42								
	43								
	44								
	45								
	46								

Advance Shipment

32	35	36	40	50	61	65	71	90	91	92		28	80
F	MAR	MAC	M	W	B	C	BD	SP-J	SP-B	SP-F	SR	MN	NS
		№					✓			M5			

HOCKER 265

ADVANCE BILL PASSED 10 & UP

ANCHOR BOLTS

PAINT WASHERS ONLY

[redacted]

DRAWINGS	NAME	DATE
MADE BY	LTB	6-[illegible]
CHKD. BY	[illegible]	7-24-61

REVISIONS: A B C D E X

DRAWINGS [illegible]

FABRICATION A[illegible]

NAME OF STRUCTURE

BRIDGE No STA 21-1073 Ohio State Hwy [illegible]

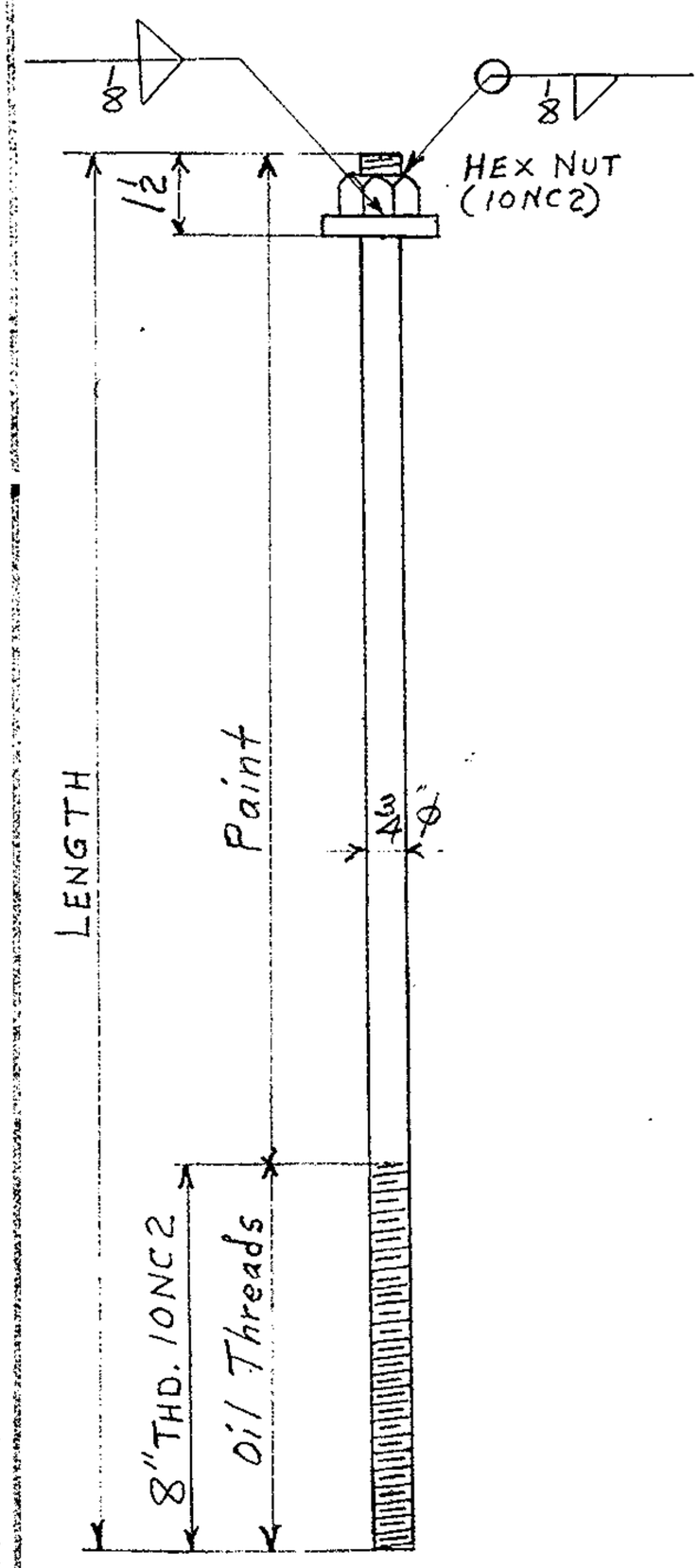
FORM D-64

SKETCH, SHOP AND SHIPPING BILL

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION



LINE NO.	NO. PCS.	MARK	MATERIAL SHAPE	LENGTH FT.	LENGTH IN.	CALCULATED WEIGHT FOR ONE PIECE	SHIPPED NO. PCS
1							
2							
3							
4	146	A5	Rods 3/4" ϕ	4	6 1/2		
5	146		Hex Nuts 3/4" Tap				
6	146		Wash 2" ϕ x 3/8 thk. x 13/16" ϕ Hole				
7							
8	11	A6	Rods 3/4" ϕ	7	4 1/2		
9	11		Hex Nuts 3/4" Tap				
10	11		Wash 2" ϕ x 3/8" thk x 13/16" ϕ Hole				
11							
12	4	A7	Rods 3/4" ϕ	6	0 1/2		
13	4		Hex Nuts 3/4" Tap				
14	4		Wash 2" ϕ x 3/8" thk. x 13/16" ϕ Hole				
15							
16	21	A8	Rods 3/4" ϕ	6	1 1/2		
17	21		Hex Nuts 3/4" Tap				
18	21		Wash 2" ϕ x 3/8" thk. x 13/16" ϕ Hole				
19							
20	3	A9	Rods 3/4" ϕ	5	1 1/2		
21	3		Hex Nuts 3/4" Tap				
22	3		Wash 2" ϕ x 3/8" thk. x 13/16" ϕ hole				
23							
24	4	A10	Rods 3/4" ϕ	5	2 1/2		
25	4		Hex Nuts 3/4" Tap				
26	4		Wash 2" ϕ x 3/8" thk. x 13/16" ϕ Hole				
27							
28	3	A11	Rods 3/4" ϕ	7	3 1/2		
29	3		Hex Nuts 3/4" Tap				
30	3		Wash 2" ϕ x 3/8" thk. x 13/16" ϕ Hole				
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							

Advance Shipment

MATERIAL

RODS & NUTS - ASTM-A325-58T
WASHERS - - - ASTM-A7-58T

32	35	36	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	80	SP-J	SP-B	SP-F	SR	MM	FS
							NP			✓			

BACKWALL ANCHORS

PAINT YES - U,N.

[redacted]

	NAME	DATE
DRAWING		
MADE BY	LTB	6-7-61
CHKD. BY	JHKW	7-25-61

REVISIONS

DRAWING: ROANOKE

FABRICATOR: AMBRIDGE

SHIPPED BY: [illegible]

HOCKER 265

ADVANCE BILL PAGE - M101 & M102

NAME OF STRUCTURE

BRIDGE NO STA 21-1073 Ohio State Hwy [illegible]

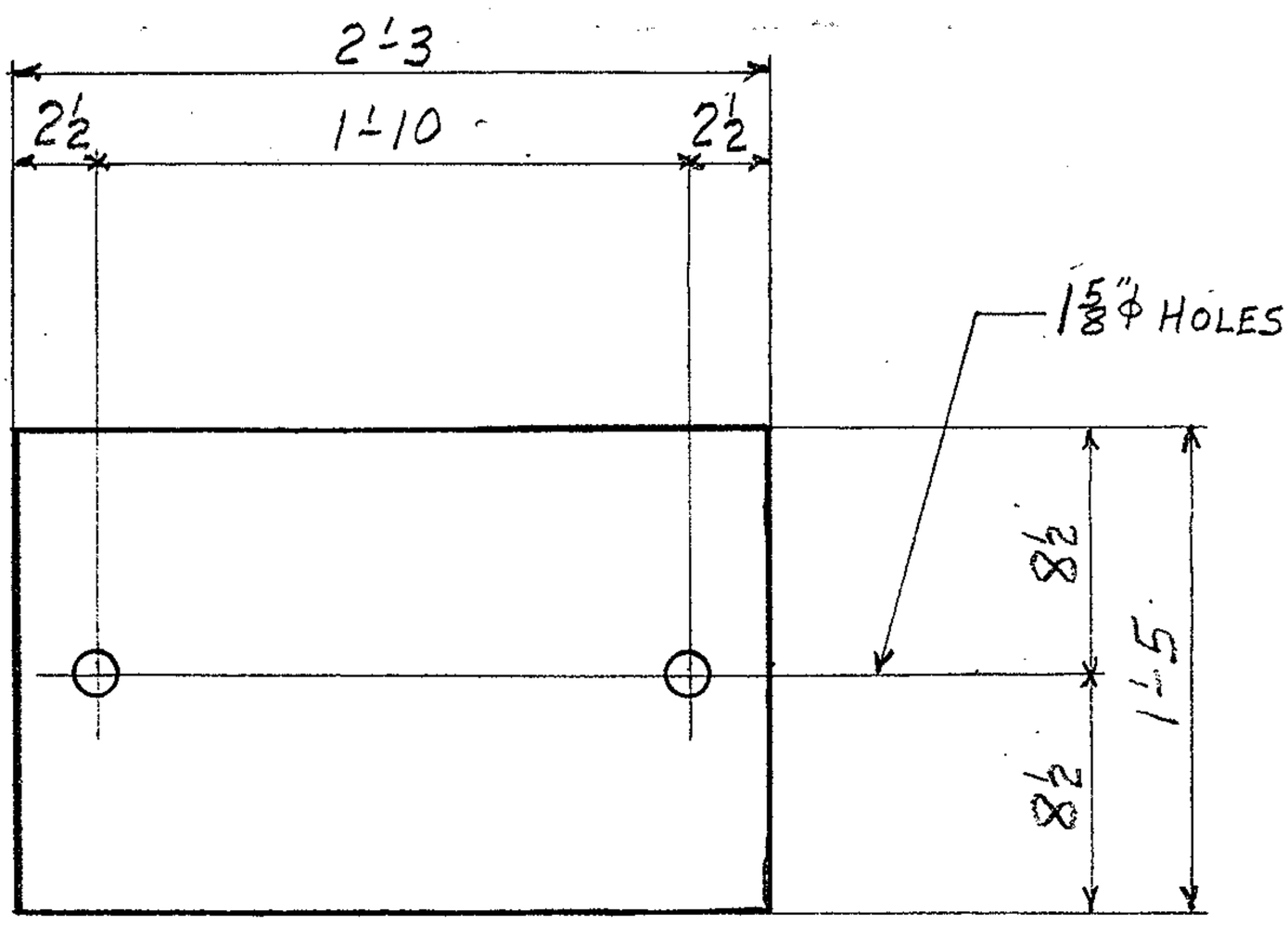
DEZA

SKETCH, SHOP AND SHIPPING BILL

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION



⅛" SHEET LEAD SL3

SPECIFICATION:-

SHEET LEAD- ASTM-B29-55- COMMON DESILVERIZED LEAD

32	35	36	40	50	61	65	71	90	91	92		20	60
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM	NS

LINE NO.	MEMBER NO. PCS.	MEMBER NAME	MEMBER MARK	MATERIAL [redacted]	MATERIAL SHAPE	MATERIAL LENGTH FT.	MATERIAL LENGTH INS.	MATERIAL + INS.	REMARKS	CALCULATED WEIGHT FOR ONE MEMBER	ORDERED NO. PCS.	ORDERED	ORDERED LENGTH FT.	ORDERED LENGTH INS.	ORDERED ITEM	SHIPMENTS
1																[redacted]
2																
3	42	SHEET LEAD	SL3	SHEETS	17 × ⅛	2	3					REQN.	71-A-1173			
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																

MAY BE SHIPPED DIRECT

HOCKER 265

ADVANCE BILL PAGE- M102

| | | | | | | | | | | | | | | | |

FORM P-15

SKETCH, SHOP AND SHIPPING BILL

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION

SKETCH	LINE NO.	NO. PCS.	MARK	MATERIAL SHAPE	MATERIAL LENGTH FT.	MATERIAL LENGTH INS.	CALCULATED WEIGHT FOR ONE PIECE	SHIPMENT NO. PCS.	SHIPMENT	SHIPMENT LENGTH
	1									
X	2									
	3	2750	LBS.	5/32" E6010 WELD ROD						
	4									
	5	250	LBS.	7/32" E6024 WELD ROD						
	6									
	7	100	LBS	3/16" E6010 WELD ROD						
	8									
	9	1260	LBS	7/32" LINCOLN WELD WIRE #L60						
	10									
	11	1300	LBS	LINCOLN #780 FLUX						
	12									
	13									
	14									
	15									
	16									
	17									
	18									
	19									
	20									
	21									
	22									
	23									
	24									
	25									
	26									
	27									
	28									
	29									
	30									
	31									
	32									
	33									
	34									
	35									
	36			SHIP DIRECT						
	37									
	38									
	39									
	40									
	41									
	42									
	43									
	44									
	45									
	46									

71-Y-0400

HOCKER 265

FIELD WELDING RODS

PAINT ——

CONTACT SURFACES ——

	RIVETS	HOLES
	X	X

DRAWINGS	NAME	DATE
MADE BY	H.B.	9-12-61
CHKD. BY		

REVISIONS: E | D | C | B | A | X

DRAWINGS: ROLLED

SHIPMENT: SLUSHED GRIP

FABRICATION: AMBRIDGE

V-6337

102

NAME OF STRUCTURE

BRIDGE NO. STA. 21-1073 OVER USR 21 UNDER PRR, MASSILLON, STARK CO., OHIO. OHIO STATE HWY.

RIVETS

Dia. | GRIP DIV.

BOLTS

Hd. Nut.

Dia. | GRIP DIV.

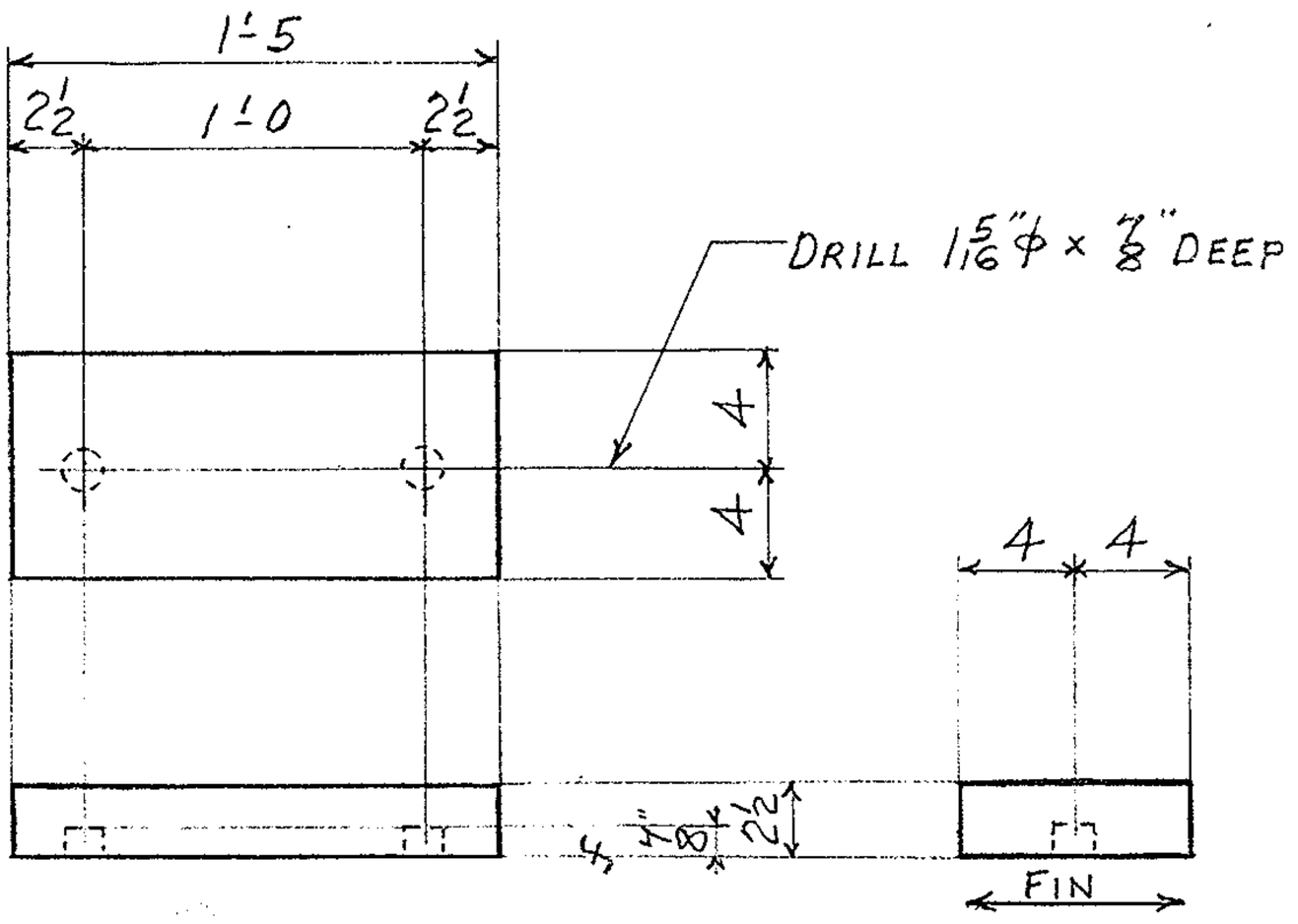
A&Nd

SKETCH SHEET

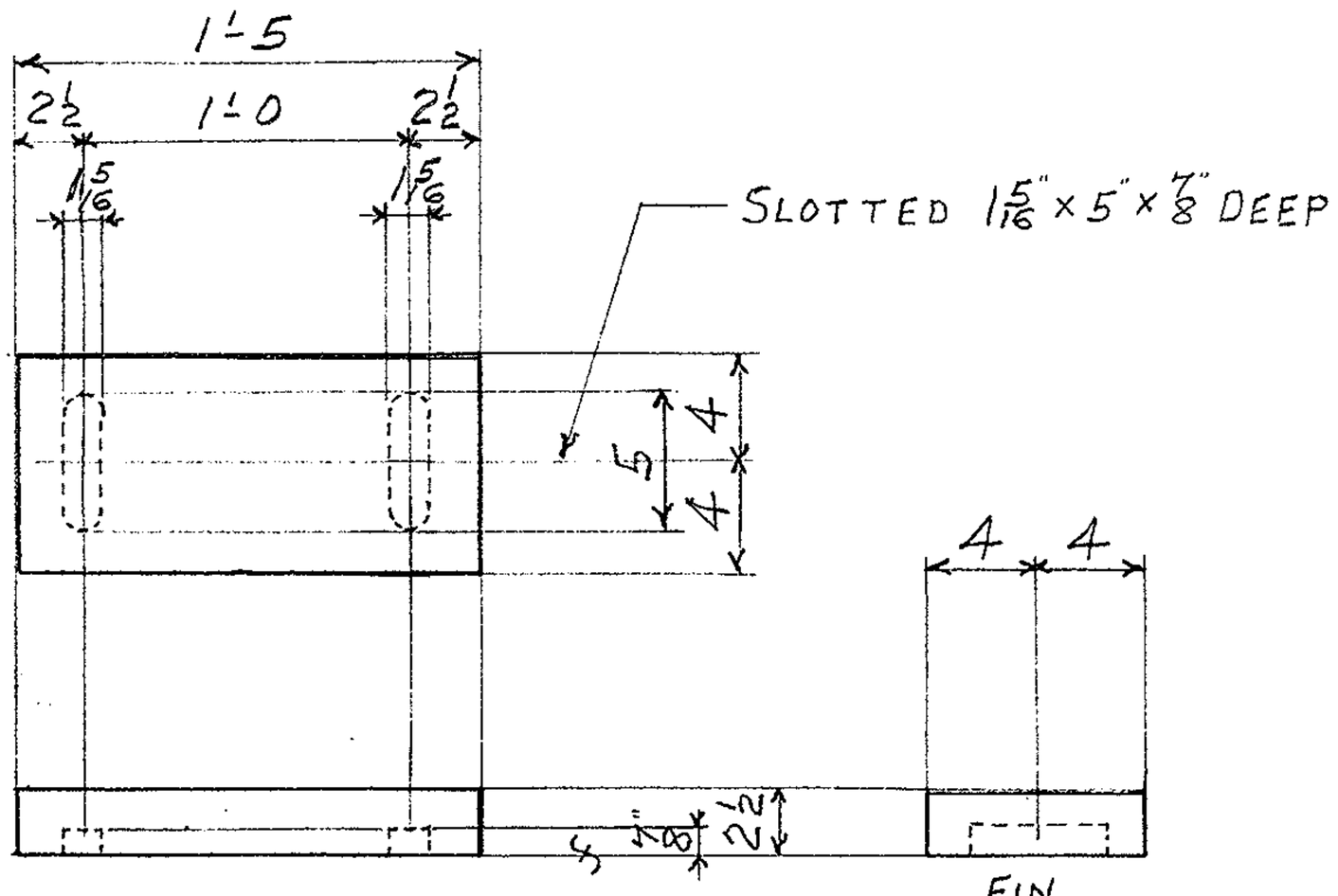
AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION



PL 8 × 2½ × 1'-5 pb (Fin 1 side)



PL 8 × 2½ × 1'-5 pc (Fin 1 side)

NO. POS.	MATERIAL SHAPE	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP PIECE	ORDERED	ITEM
F MAC							
14	PL 8 2½	1	5	pb (Fin 1 side)		8 × 2 5/8 21-7	1
F MAC							
28	PL 8 2½	1	5	pc (Fin 1 side)		8 × 2 5/8 21-7	1

NOTE:-
MATERIAL TO BE A.S.T.M.-A373

PAINT NOTE:-
COAT FINISHED SURFACES WITH WHITE LEAD AND TALLOW

Advance Bill Page— 101

HOCKER 265

| | | | | | | |

RIVETS — Dia. — GRIP DIV.

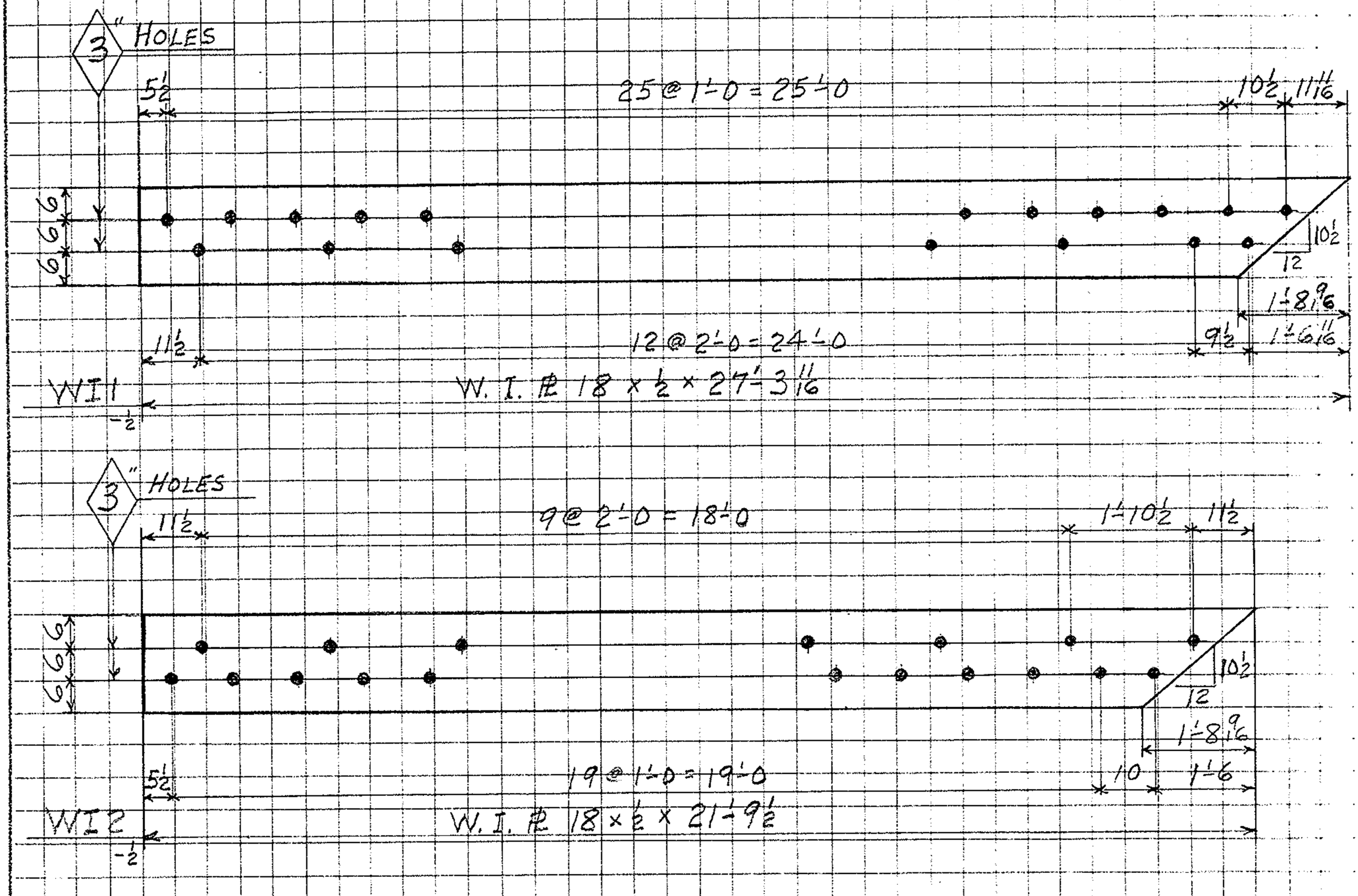
SKETCH SHEET

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION

BOLTS — Hd. ____ Nut — Dia. — GRIP DIV.



MATERIAL:-
WROUGHT IRON - ASTM-A42-55

32	35	36	40	50	61	65	71	80	91	92		20	
F	MAR	MAC	M	W	D	C	DO	SP-J	SP-B	SP-F	SR	MM	

Advance Bill M 101

NO. PCS.	MATERIAL SHAPE				LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP PIECE	ORDERED	ITEM
2	W.I. PL	18	½		27	3 11/16	WI 1		19 ½. 27-5¾	a18
2	W.I. PL	18	½		21	9½	WI 2		19¼ x ½ 21-11¾	a19

NO. PCS.	MATERIAL SHAPE	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM

Advance Shipment

HOCKER 265

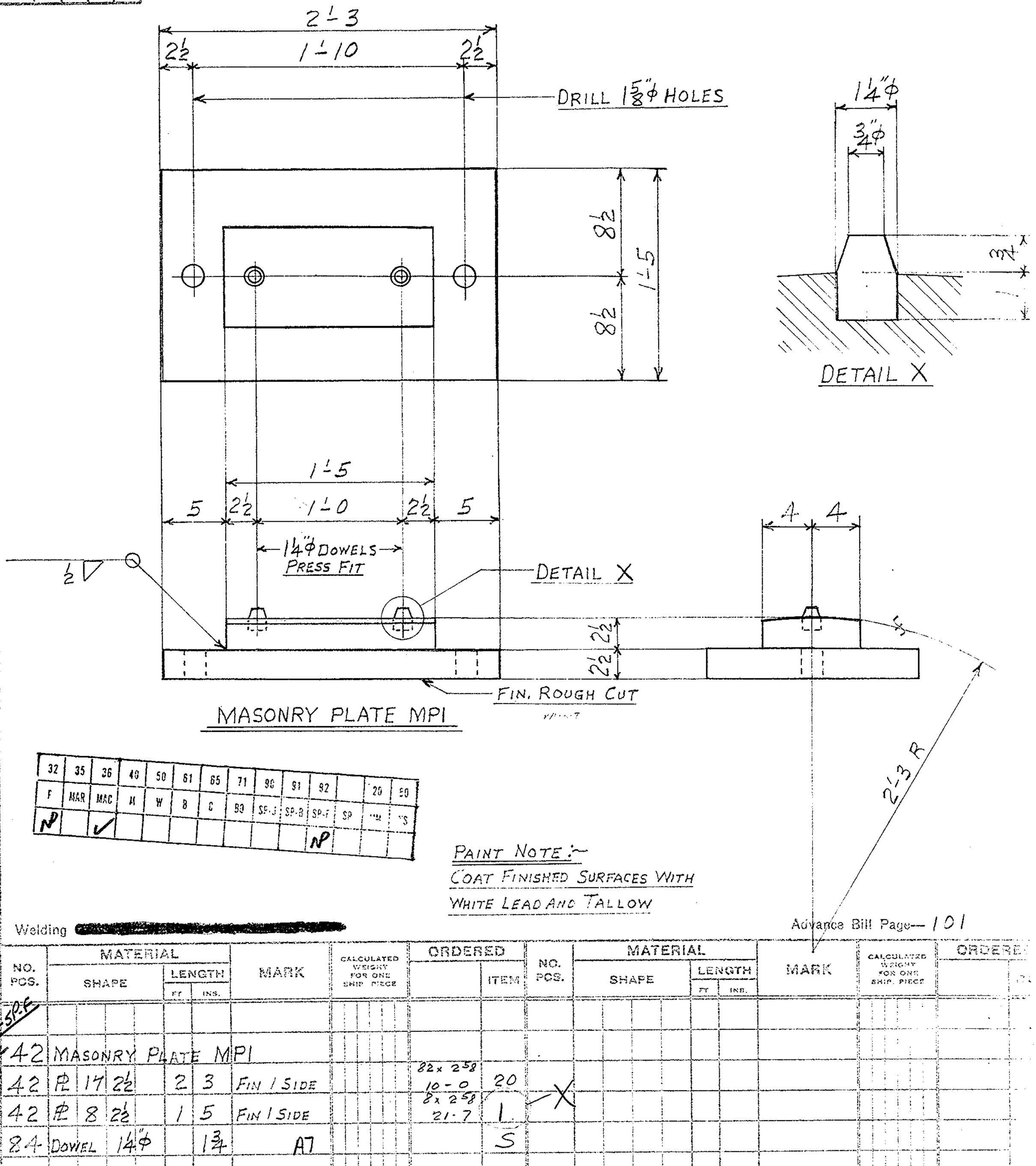
| | | | | | | | | | | | | |

RIVETS				
Dia.				
GRIP / DIV.				

ABTG
SKETCH SHEET

AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

BOLTS				
Hd.	Nut			
Dia.				
GRIP / DIV.				



MASONRY PLATE MPI

32	35	36	40	50	61	65	71	90	91	92		29	90
F	MAR	MAC	M	W	B	C	B3	SP-J	SP-B	SP-F	SP	"M"	"S"
NP		✓								NP			

PAINT NOTE:-
COAT FINISHED SURFACES WITH
WHITE LEAD AND TALLOW

Welding [redacted]

Advance Bill Page— 101

NO. PCS.	MATERIAL SHAPE	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM	NO. PCS.	MATERIAL SHAPE	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED
F-SP-F MAC														
42	MASONRY PLATE MPI													
42	PL 17 2½	2	3	FIN 1 SIDE		82 x 258 10-0	20							
42	PL 8 2½	1	5	FIN 1 SIDE		8 x 258 21-7	1	X						
84	DOWEL 1¼"Φ		1¾	A7			S							
	NOTE:-													
	MATERIAL TO BE A.S.T.M. A373 U.N.													

HOCKER 265

MASONRY PLATES			DRAWINGS	NAME	DATE						10-9-61 OC	REVISIONS	DRAWINGS	IN CHARGE OF	
PAINT YES-SEE PAINT NOTE			MADE BY	LTB	6-6-61								ROANOKE	SLUSHER ORDER No.	SHEET No.
[redacted]			CHKD. BY	JHW	7-25-61								FABRICATION AMBRIDGE	V6337	F101

NAME OF STRUCTURE
BRIDGE No STA 21-1073 Ohio State Hwy Dept Proj. No 26

RIVETS | Dia. | Grip Div.

Navy

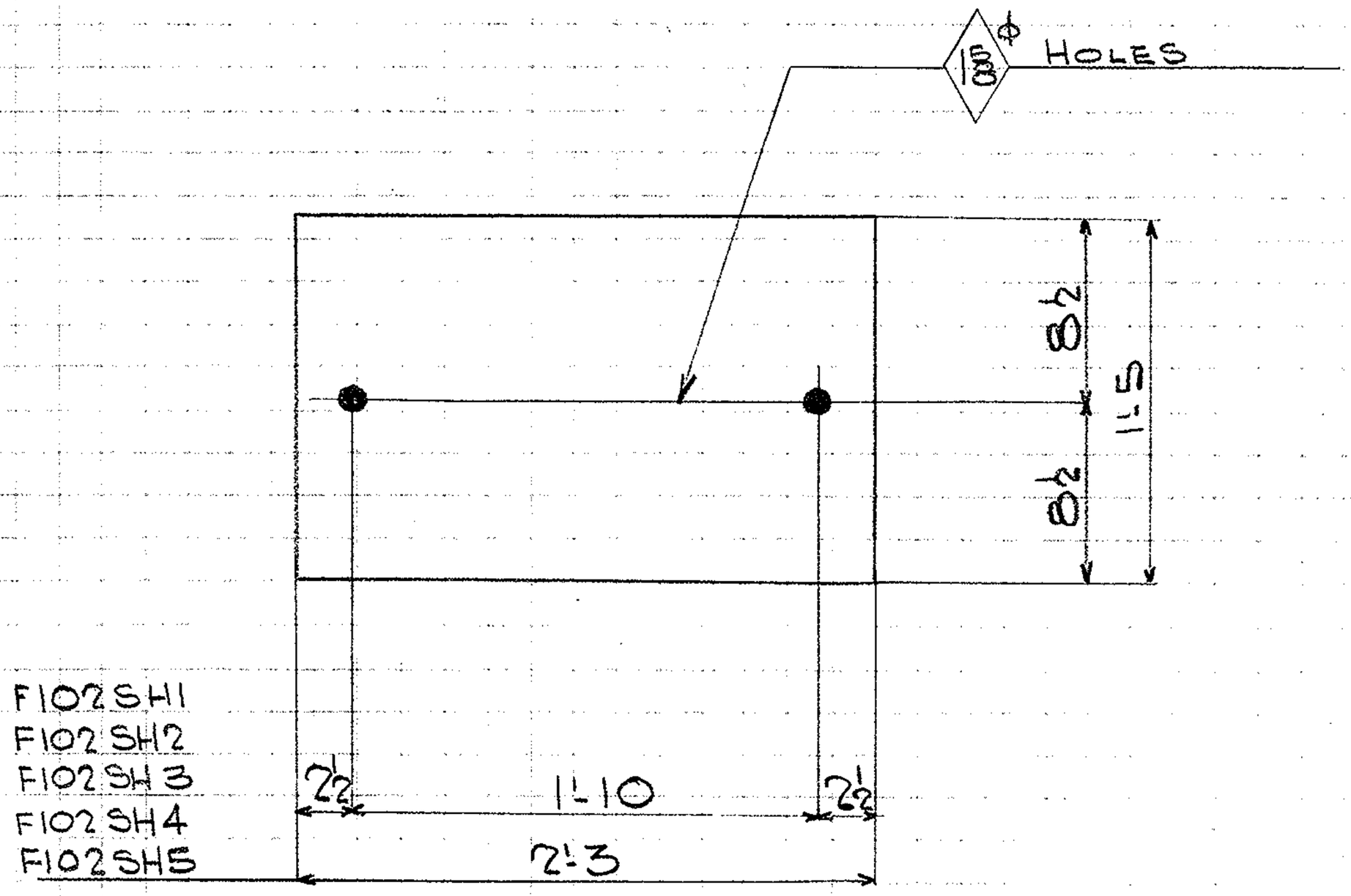
SKETCH SHEET

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION

BOLTS | Hd. | Nut | Dia. | Grip Div.



F102SH1
F102SH2
F102SH3
F102SH4
F102SH5

PLATES MUST BE FLAT

32	35	36	40	50	61	65	71	90	91	92		99	0
F	[illegible]	[illegible]	M	W	B	T	S	[illegible]	[illegible]	[illegible]	SB	[illegible]	9
				✓									

Welding Gross Wt. of Electrodes=_____Pounds

Advance Bill Page— 101

NO. POS.	MATERIAL SHAPE	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP PIECE	ORDERED	ITEM	MAT POS	MATERIAL [illegible]	LENGTH FT	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
									DIV. No.1 / DIV. No.2						
6	PL ½ x 17	2	3	F102SH1			S		3 3						
11	PL ¼ x 17	2	3	F102SH2			S		6 5						
7	PL ⅜ x 17	2	3	F102SH3			S		3 4						
6	PL ½ x 17	2	3	F102SH4			S		3 3						
6	PL ⅝ x 17	2	3	F102SH5			S		3 3						

HOCKER 265

	RIVETS	HOLES	DRAWINGS	NAME	DATE	REVISIONS	DRAWINGS	IN CHARGE OF	
SHIMS		Noted	MADE BY	SA	3/62		ROANOKE FABRICATION	SLUSHER ORDER No.	SHEET No.
PAINT YES	—	—	CHKD. BY	J	4				
CONTACT SURFACES						REVISED X	AMBRIDGE	V6337	F102

NAME OF STRUCTURE

OHIO STATE HWY. DEPT

BRIDGE No. STA. 21-1073 OVER U.S.R.21 UNDER PA. R.R., MASSILLON, STARK CO. OHIO, PROJ. No. 260 C

RIVETS — Dia. — Grip Dir.

BOLTS — Hd. — Nut — Dia. — Grip Dir.

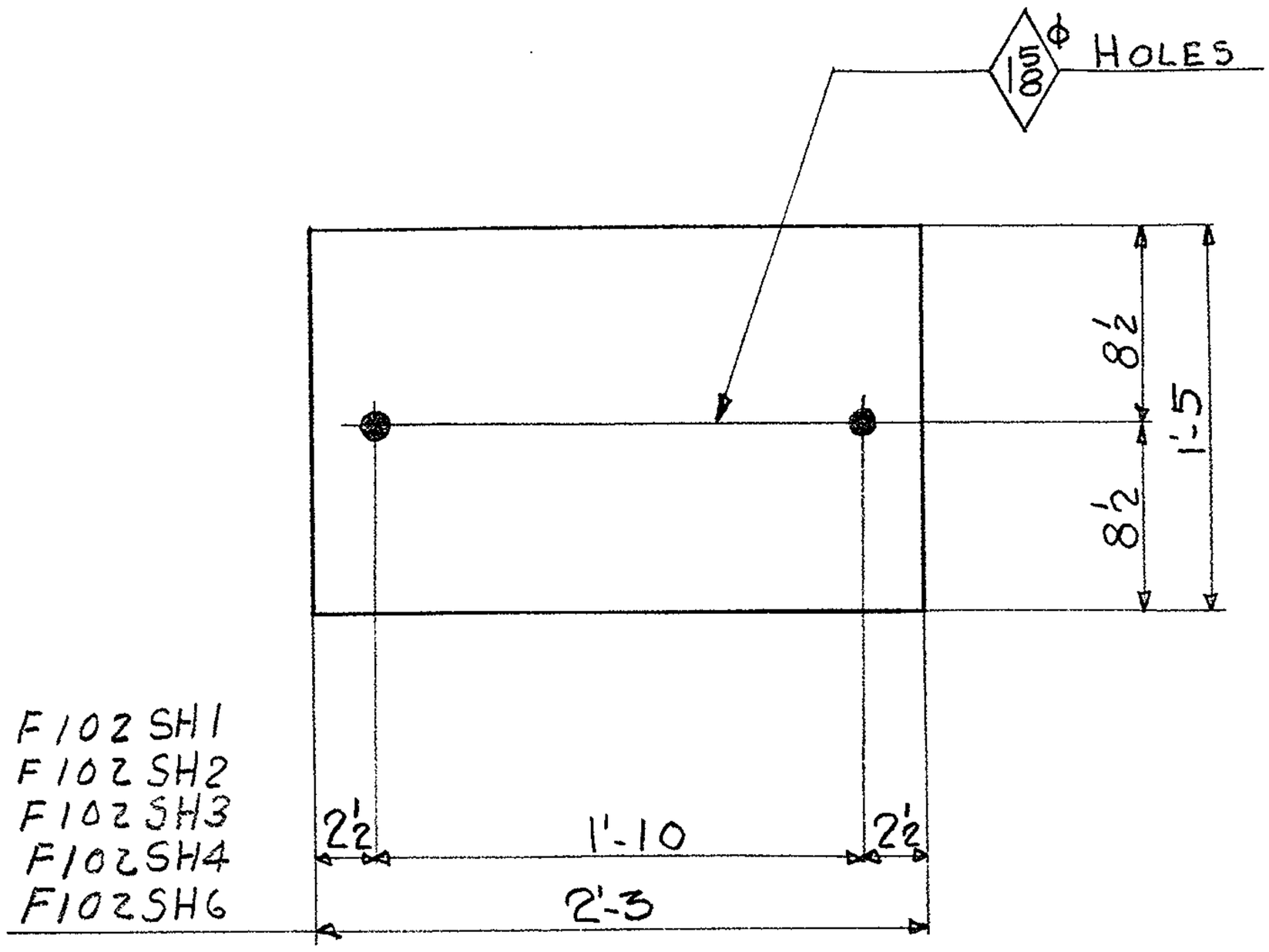
075A (REV. 3-61)

SKETCH SHEET

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION



F102 SH1
F102 SH2
F102 SH3
F102SH4
F102SH6

PLATES MUST BE FLAT

32	35	36	40	50	61	65	71	90	91	92		20
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM
				✓								

Advance Bill

LINE	NO. PCS.	MATERIAL SHAPE	LENGTH FT.	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP PIECE	ORDERED	ITEM
1								
2	7	PL	17	1/8	2	3	F102SH1		S
3	6	PL	17	1/4	2	3	F102SH2		S
4	2	PL	17	3/8	2	3	F102SH3		S
5	1	PL	17	1/2	2	3	F102SH4		S
6	6	PL	17	1/16	2	3	F102SH6		S
7								
8								
9								

LINE	NO. PCS.	MATERIAL SHAPE	LENGTH FT.	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP PIECE	ORDERED
10							
11							
12							
13							
14							
15							
16							
17							
18							

SHIMS

PAINT YES

CONTACT SURFACES

	RIVETS	HOLES
	—	NOTED
	—	—

DRAWINGS	NAME	DATE
MADE BY	JRM	8-30-62
CHK'D BY	JK	8-30-62

REVISIONS

DRAWINGS AMB #2

FABRICATION AMB

IN CHARGE OF HOCKER 265

ORDER No. V6337

SHEET No F102A

NAME OF STRUCTURE

OHIO STATE HWY. DEPT

BRIDGE No. STA. 21-1073 OVER U.S.R. 21 UNDER PA. R.R., MASSILLON, STARK CO. OHIO, PROJ No 260

RIVETS — Dia. — Grip — Div.

D79½A REV. 2-61

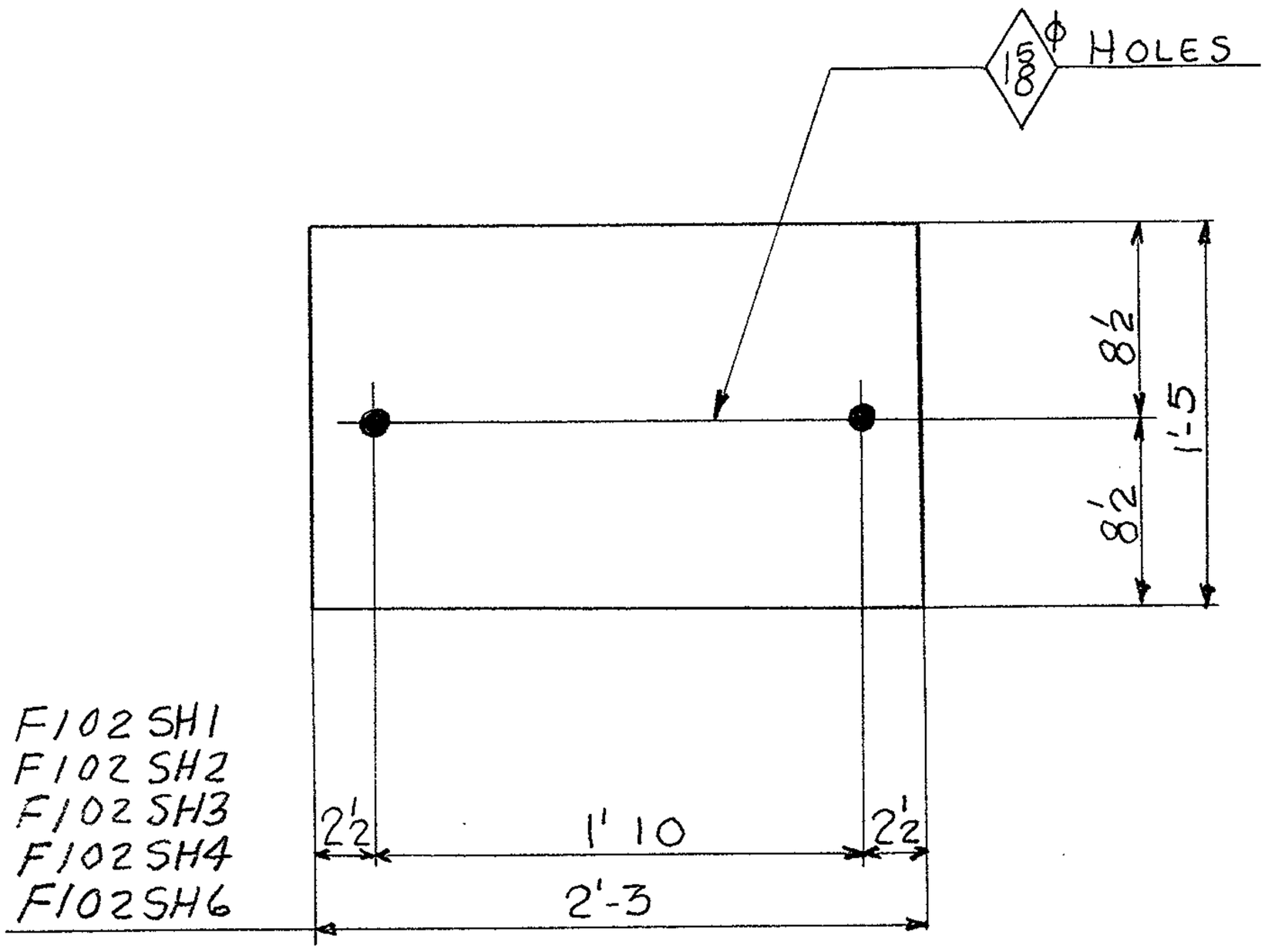
SKETCH SHEET

AMERICAN BRIDGE

DIVISION

UNITED STATES STEEL CORPORATION

BOLTS — Hd. — Nut — Dia. — Grip — Div.



F102SH1
F102SH2
F102SH3
F102SH4
F102SH6

PLATES MUST BE FLAT

32	35	36	40	50	61	65	71	90	91	92		20	
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM	
				✓									

Advance Bill

LINE	NO. PCS.	MATERIAL SHAPE	LENGTH FT.	LENGTH INS.	MARK	CALCULATED WEIGHT FOR ONE SHIP PIECE	ORDERED	ITEM
1								
2	7	PL	17	⅛	2 3	F102SH1		S
3	6	PL	17	¼	2 3	F102SH2		S
4	2	PL	17	⅜	2 3	F102SH3		S
5	1	PL	17	½	2 3	F102SH4		S
6	6	PL	17	⅙	2 3	F102SH6		S
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								

SHIMS

PAINT YES

CONTACT SURFACES

	RIVETS	HOLES
	—	NOTED
	—	—

DRAWINGS	NAME	DATE
MADE BY	JRM	9-20-62
CHK'D BY	JK	9-20-62

REVISIONS: L E D C B A

DRAWINGS: AMB #2

FABRICATION: AMB

IN CHARGE OF: HOCKER 265

ORDER No.: V6337

SHEET No: F 103A

NAME OF STRUCTURE

BRIDGE No. STA. 21-1073 OVER U.S.R. 21 UNDER PA. R.R, MASSILLON, STARK CO, OHIO

OHIO STATE HWY. DEPT

PROJ No 260

℄ BRNG. ABUT. #1 EXP.

℄ BRNG. @ PIER FIX

℄ BRNG. ABUT. #2 EXP.

B

B

12 @ 2'-0 = 24'-0
25 @ 1'-0 = 25'-0

℄ CONTRACTION JOINT

9 @ 2'-0 = 18'-0
19 @ 1'-0 = 19'-0

19 @ 1'-0 = 19'-0
9 @ 2'-0 = 18'-0

℄ CONTRACTION JOINT

25 @ 1'-0 = 25'-0
12 @ 2'-0 = 24'-0

13 SPCS. @ 2'-6" = 32'-6

13 SPCS. @ ABT. 3'-9⅞" = 49'-4

13 SPCS. @ ABT. 3'-9⅞" = 49'-4

STA. 9+47.47

STA. 10+12.83

STA. 10+78.68

41°12'32"

41°12'32"

66'-0½ ℄ ℄ BRNG.

66'-5¼ ℄ ℄ BRNG.

F102SH1
F102SH2
F102SH3
F102SH4
F102SH5

944.61 944.60 944.59 944.59 944.58 944.57 944.56 944.56 944.55 944.54 944.53 944.53 944.52 944.51*

944.44 944.43 944.42 944.41 944.41 944.40 944.39 944.39 944.38 944.37 944.36 944.36 944.35 944.34

944.27 944.26 944.25 944.24 944.24 944.23 944.22 944.22 944.21 944.20 944.19 944.19 944.18 944.17

4-A4 4-A7 4-A4 4-A6 12-A4 12-A8 3-A4 3-A6 73-A4 73-A5 28-A3 28-W3 3-A4 3-A11 9-A4 9-A8 3-A4 3-A9 4-A4 4-A6 4-A4 4-A10

WI1 WI2

℄ BRNG.

2'-0

6 6 6

WI1
WI2

5/16

PRE-CAST BACKWALL
REINFORCING RODS AND PIPE SLEEVES BY OTHERS
BRIDGE SEAT

A4

A

ENLARGED SECT. Ⓐ

ELEV. TO BOTT. OF SHOE ℞ SHOWN THUS 944.51 IN PLAN

BOTT. OF SHOE

℄ TOP OF FIN CONCRETE

LEAD ℞

TYP. BRG. DETAIL

B

NOTE

ANCHOR BOLTS A3 TO HAVE 5½" PROJECTION ABOVE CONCRETE BRIDGE SEAT.
ANCHOR BOLTS FURNISHED BY AMERICAN BRIDGE AND SET BY OTHERS IN STRICT ACCORDANCE WITH THIS PLAN.

BRIDGE NO. STA.-21-1073
OVER U.S.R.21 UNDER PA.R.R.
MASSILLON, STARK CO., OHIO
OHIO STATE HWY. DEPT. PROJ. #260

HOCKER 265

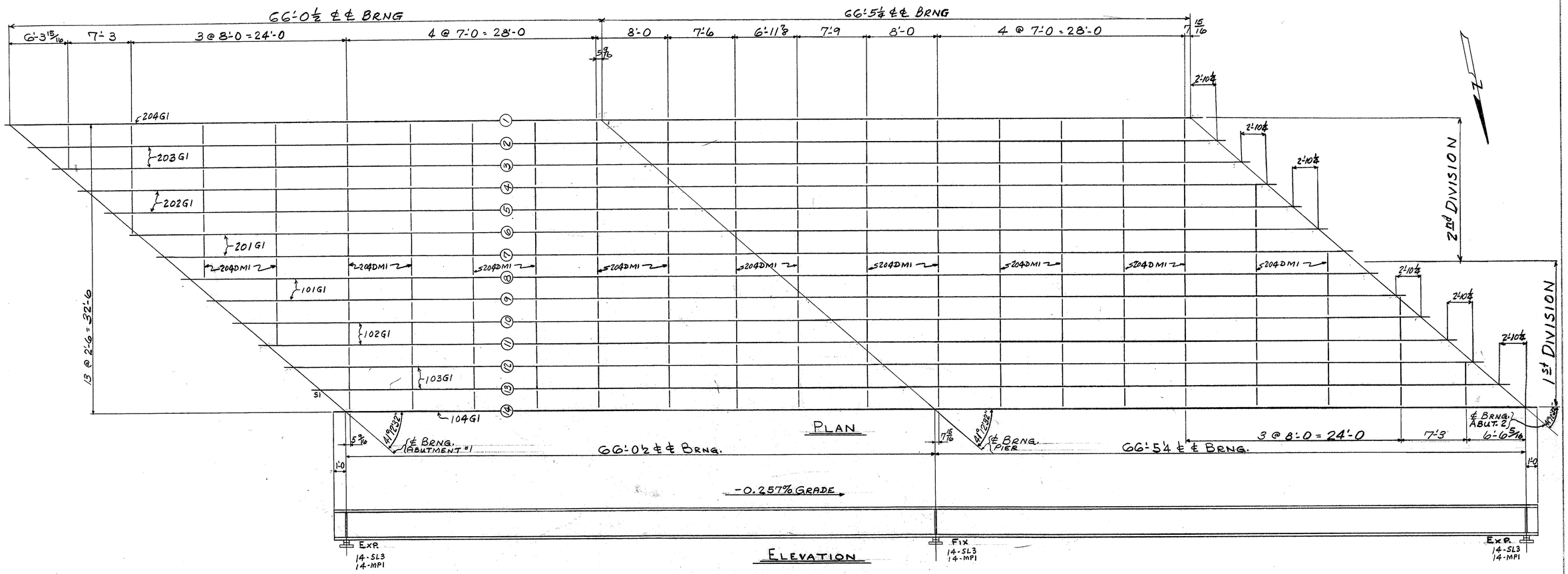
AMERICAN BRIDGE DIVISION
UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT	ROANOKE PLANT
WORK FABRICATED AT	AMBRIDGE PLANT
IN CHARGE OF	SLUSHER
DRAW. MADE BY	H.B. DATE 6-6-61
DRAW. CHECKED BY	JWKW DATE 7-25-61
ORDER NO.	V-6337
SHEET NO.	E1

REVISIONS
B 3-20-62 ℄ ℞
A 11-17-61 S

32	35	35	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	BD	SP-J	SP-B	SP-F	SR	MM	NS

POST 123-P WHITEX



BRIDGE No. STA.-21-1073
OVER U.S.R. 21 UNDER PA. R.R.
MASSILLON, STARK CO., OHIO
OHIO STATE HWY. DEPT. PROJ. #260

G-63X—REV. 3-59 PENCIL-CLOTH

HOCKER 265

AMERICAN BRIDGE DIVISION
UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY H.B. DATE 6-8-61
DRAW. CHECKED BY JKW DATE 7-26-61

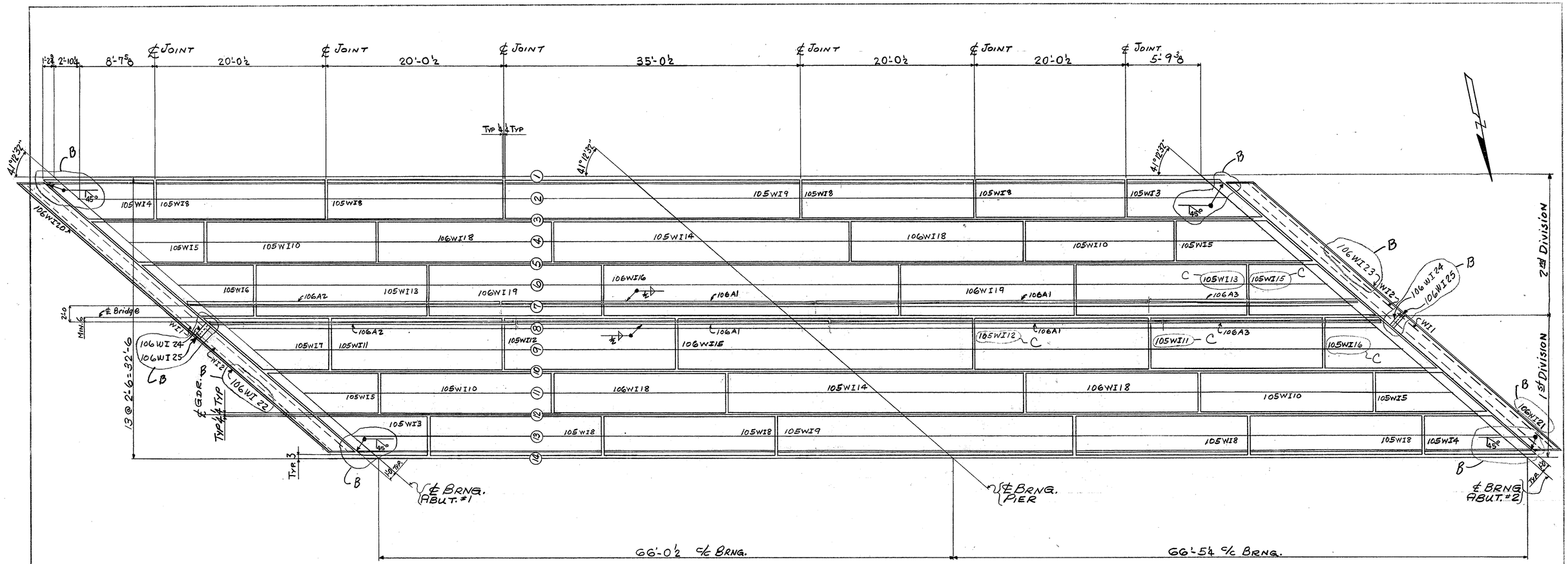
F	
E	
D	
C	
B	
A	
REVISIONS	

ORDER No. V-6337

SHEET No. E101

32	35	36	40	50	51	65	71	80	91	92		20	80
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM	NS

POST 123-B WHITEX



DECK PLAN

NOTE TO FIELD:
USE BACK UP BARS 105B51 AS REQUIRED FOR W.I PLATES.

BRIDGE No. STA.-21-10.73
OVER U.S.R. 21 UNDER PA. R.R.
MASSILLON, STARK Co., OHIO
OHIO STATE HWY. DEPT.-PROJ.# 260

HOCKER 265

D-63X—REV. 3-59 PENCIL CLOTH
AMERICAN BRIDGE DIVISION
UNITED STATES STEEL CORPORATION

32	35	36	40	50	61	65	71	90	91	92		26	80
F	MAR	MAC	M	W	B	C	BD	SP-J	SP-B	SP-F	SR	MM	NS

F		DRAWINGS MADE AT ROANOKE PLANT
E		WORK FABRICATED AT AMBRIDGE PLANT
D		IN CHARGE OF SLUSHER
C	2-9-62 (E)	DRAW. MADE BY H.B. DATE 6-12-61
B	1-31-62 (D)	DRAW. CHECKED BY JHW DATE 7-28-61
A	1-22-62 (K)	ORDER No. V-6337 SHEET No. E102
REVISIONS		

POST 123-D WHITEX

FLG PL 18×3×17'-6½ (TOP & BOTT.)

FLG. PL 18×3×33'-0 (TOP & BOTT.)

FLG. PL 18×3×33'-0 (TOP & BOTT.)

10½ / 12

CUT TOP & BOTT. FLANGES 10½

2'-6 | 5½ | 2'-5 3/8 | 1 1/16 | FIN. MA101

BB TOP & BOTT.

BA101

MA101

FLG PL 18×3×17'-6½ (TOP & BOTT)

FLG. PL 18×3×33'-0 (TOP & BOTT.)

FLG. PL 18×3×33'-0 (TOP & BOTT.)

134'-5¾ OUT TO OUT OF GIRDER

132'-5¾ ℄℄ END BRG'S.

66'-0½ ℄℄ BRG'S.

74'-2

66'-5¼ ℄℄ BRG'S.

60'-3¾

1'-0

A

B

B.E.

2-SA101

WEB PL 34 5/8 × 74'-2

2-SB101

BG

BB

9 | 9 | 1

SA101

3'-4 | 2'-10 | 2'-4 | 3

TYP. 1½

TYP. 5/16

pc

8½ | 8½ | 9 | 9

2'-10¼ | 6'-8⅞ | 8'-0 | 4 @ 7'-0 = 28'-0 | 8'-0 | 7'-6 | 6'-11⅞ | 2'-0½ | 9¾ | 7'-6½ | 4¾ | 8'-2½

9'-7⅛ | 11⅞ | 8'-0 | 5'-1 | 7'-1½ | 2'-5½ | 2'-10¼

4 | 4 | 6

pb

No Paint F. S.

STENCIL F.S.

No weld top flg.

SB101

TYP.

45°

8

SECTION C

SECTION B-B

74'-2

66'-0½ ℄℄ BRG'S.

66'-5¼ ℄℄ BRG'S.

60'-3¾

132'-5¾ ℄℄ END BRG'S.

134'-5¾ OUT TO OUT OF GIRDER

BRIDGE NO. STA. 21-1073 OVER USR 21 UNDER P.R.R., MASSILLON, STARK CO., OHIO

OHIO STATE HWY. DEPT. PROJ. No 260

101G1 (NO CAMBER REQUIRED)

LIFTING WT. APPROX. 65 TONS

HOCKER 265

D-65X—REV. 2-59 PENCILCLOTH

AMERICAN BRIDGE DIVISION

UNITED STATES STEEL CORPORATION

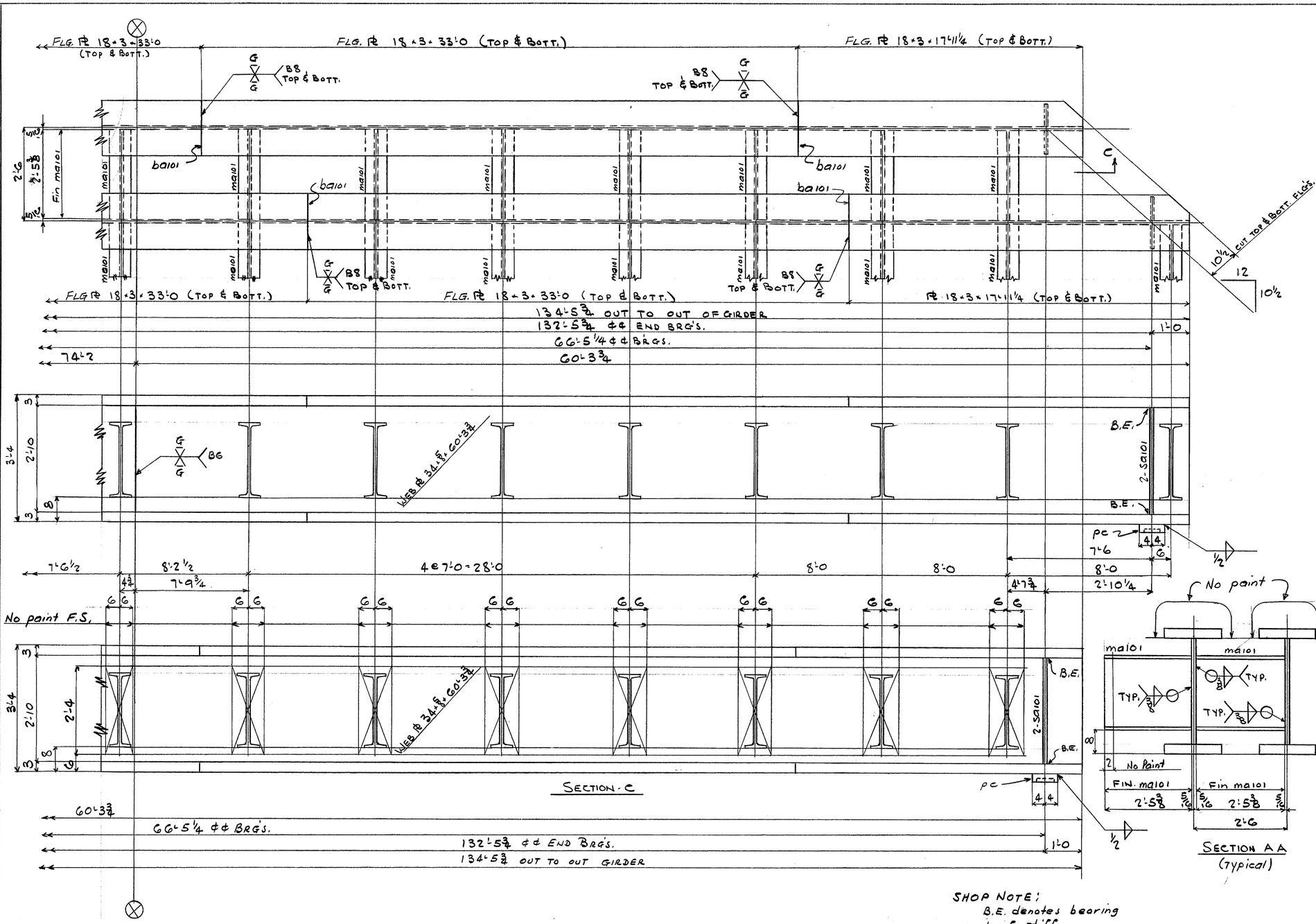
DRAWINGS MADE AT	ROANOKE PLANT
WORK FABRICATED AT	AMBRIDGE PLANT
IN CHARGE OF	SLUSHER
DRAW. MADE BY	KBB DATE 6-8-61
DRAW. CHECKED BY	DATE 7-26-61
ORDER No.	VG337
SHEET No.	101A6

REVISIONS: F, E, D, C, B, A

32	35	36	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MA	NS

WELDING

POST 123-D WHITECK



LINE	Sheet No. of Piece on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE	LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
1										
2										
3										
4			ONE GIRDER SECTION			101G1	STENCIL			
5		2	WEB PL	34 5/8	74 2			1/2 × 74-4	13	
6		2	WEB PL	34 5/8	60 3 3/4			3/8 × 60-5 3/4	12	
7		4	FLG. PL	18 3	17 6 1/2			17-8 1/2	18	
8		4	FLG. PL	18 3	17 11 1/16			18-1 1/4	19	
9		12	FLG. PL	18 3	32 11 5/8			33-2	17	
10	106	35	24 I	79 9	2 5 3/8	ma101	F2E	45-9	A21	
11	28	8	PL	8 1/2	2 10	sa101	F2E	44 3/4 × 12-10 1/4	3/4 × 35 A10 S1	
12	14	4	PL	8 1	2 10	sb101	F2E			5
13		4	PL			pc	Detail P101			
14		2	PL			pb				
15	52	16	B1	3/8	1 6	ba101	A7	1'-6	A23	
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34			NOTE:-							
35										
36			MATERIAL TO BE A.S.T.M. - A373 U.N.							
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
51										
52										
53										
54										
55										
56										
57										
58										
59										
60										
61										
62										
63										
64										

GIRDER SECTION

BRIDGE No. STA. 21-1073
OVER USR 21 UNDER P. R.R.
MASSILLON, STARK Co., OHIO
OHIO STATE HWY. DEPT. Proj. No. 260

HOCKER 265

D-81K—PENCIL CLOTH
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

SHOP NOTE:
B.E. denotes bearing end of stiffeners, Radiographic inspection of butt welds is required in accordance with Ohio State Hwy. Dept. Supplemental Specification No. S-307.

PAINT: yes (U.N.)
SHOP CONTACT SURFACES: No

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101	32	35	38	40	50	51	65	71	90	91	92		20	80
	F	MAR	MAC	M	W	B	C	BD	SP-J	SP-B	SP-F	SR	MM	NS
	N°			V										

WELDING

Adv. Bill 101

REVISIONS	
F	
E	
D	
C	
B	
A	

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY KEB DATE 6-12-61
DRAW. CHECKED BY [illegible] DATE 7-26-61
ORDER No. VG337
SHEET No. 1018

A. B. SMITH CO., PGH., PA.

PR 4992—1259

FLG. PL 18×3×17'-6½ (TOP & BOTT.)

FLG. PL 18×3×33'-0 (TOP & BOTT.)

FLG. PL 18×3×33'-0 (TOP & BOTT.)

10½ / 12

10½

cut top & bott. flanges

5/16

2'-6

2'-5⅜

Fin. main

5/16

bain

G G BB Top & Bott.

main

bain

G G BB Top & Bott.

main

bain

G G BB Top & Bott.

main

bain

G G BB Top & Bott.

C

FLG. PL 18×3×17'-6½ (TOP & BOTT.)

FLG. PL 18×3×33'-0 (TOP & BOTT.)

FLG. PL 18×3×33'-0 (TOP & BOTT.)

134'-5¾ out to out of Girder

132'-5¾ ℄℄ end brgs.

66'-0½ ℄℄ brgs.

74'-2

66'-5¼ ℄℄ brgs.

60'-3¾

1'-0

A

B

9 9 1 3 2'-10 3'-4 8 2 pc 8½ 8½ 9 9

Typ. 1½

5/16 Typ

Sain

Sain

B.E.

2-Sain

Web PL 34×⅜×74'-2

½

B.E.

pc

4 4

½

2'-10¼ 1'-0⅜ 8'-0 4@7'-0 = 28'-0 8'-0 7'-6 6'-11⅞

3'-10⅝

A

B.E.

2-Sbin

B.E.

BG G G

pb

4 4 B ½

6'-6¼ 1'-2¾ 5'-10¾

7'-9 8'-0

3'-8 4'-1 5'-0½ 2'-10¼

9 9 1 3 2'-10 3'-4 2'-4 8 2 pc 8½ 8½ 9 9

No paint F.S.

6 6

Sain

Sain

B.E.

2-Sain

Web PL 34×⅜×74'-2

B.E.

pc

4 4 ½

½

B

B.E.

2-Sbin

B.E.

BG G G

pb

4 4 B ½

SECTION C

74'-2

66'-0½ ℄℄ Brg's.

66'-5¼ ℄℄ brgs.

60'-3¾

1'-0

132'-5¾ ℄℄ end brg's.

134'-5¾ out to out Girder

No Weld top flg.

1 TYP

Sbin

Sbin

TYP

½

5/16 TYP

pb

8½ 8½

SECTION B-B

102G1 (NO CAMBER REQUIRED)

LIFTING WT. APPROX. 65 TONS

BRIDGE NO. STA. 21-1073
OVER U.S.R. 21 UNDER P.R.R.
MASSILLON, STARK CO., OHIO
OHIO STATE HWY. DEPT. PROJ. NO. 260

HOCKER 265

D-63X—REV. 3-59 PENCILCLOTH

AMERICAN BRIDGE DIVISION
UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY KEB DATE 6-13-61
DRAW. CHECKED BY JHW DATE 7-26-61
ORDER NO. V6337
SHEET NO. 102AB

REVISIONS	
F	
E	
D	
C	
B	
A	

32	35	38	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	80	SP-J	SP-B	SP-F	SR	MM	NS

WELDING

POST 123-B WHITEX

FLG. PL. 18 × 3 × 33'-0 (Top & Bott.)

FLG. PL. 18 × 3 × 33'-0 (Top & Bott.)

FLG. PL. 18 × 3 × 17'-11 1/4 (Top & Bott.)

ba101

B8 Top & Bott.

ma101

2'-6

2'-5 3/8

Fin. ma101

5/16

FLG. PL. 18 × 3 × 33'-0 (Top & Bott.)

FLG. PL. 18 × 3 × 33'-0 (Top & Bott.)

FLG. PL. 18 × 3 × 17'-11 1/4 (Top & Bott.)

134'-5 3/4 out to out of girders

132'-5 3/4 ℄℄ end brgs.

66'-5 1/4 ℄℄ brgs.

60'-3 3/4

74'-2

1'-0

C

cut top & bott. flanges

10 1/2

12

10 1/2

3'-4

2'-10

3

8

Web PL 34 × 5/8 × 60'-3 3/4

BG

B.E.

2 - Sa101

pc

4 4

1/2

8'-0

2'-1 1/4

4 @ 7'-0 = 28'-0

3 @ 8'-0 = 24'-0

2'-4 1/4

5'-2 1/2

2'-10 1/4

No Paint F.S.

2'-4

6 6

No paint

TYP.

Fin ma101

2'-5 3/8

2'-6

SECTION-C

SECTION A-A (Typical)

60'-3 3/4

66'-5 1/4 ℄℄ brgs.

132'-5 3/4 ℄℄ end brgs.

134'-5 3/4 out to out of girders

1'-0

SHOP NOTE:
B.E. denotes bearing end of stiffeners.
Radiographic inspection of butt welds is required in accordance with Ohio State Hwy. Dept. Supplemental Specification No. S-307.

LINE	Total No. of Pieces as this Order	No. of Pcs. on Sheet	MATERIAL SHAPE	LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
4			ONE Girder Section			102G1			
6	2		Web PL 34 5/8	74	2				
7	2		Web PL 34 5/8	60	3 3/4			36 1/2 × .74-4	13
8	4		FLG PL 18	3	17	G PL		36 1/2 × 60-5 3/4	12
9	4		FLG PL 18	3	17 11/16			17-8 1/2	18
10	12		FLG PL 18	3	32	11 3/8		18-1 4	19
11	35	24	I 79.9	2	5 3/8	ma101	F2E	33-2	17
12	16		Brs	3/8	1	6	ba101	A7	
13	8		PL	8	1/2	2 10	sa101	F2E	
14	4		PL	8	1	2 10	sb101	F2E	
15	4		PL				pc	det. on P101	
16	2		PL				pb		
26			NOTE:-						
28			MATERIAL TO BE A.S.T.M. A373 U.N.						

GIRDER SECTION

BRIDGE NO. STA. 21-1073
OVER USR 21 UNDER P.R.R.
MASSILLON, STARK CO., OHIO
OHIO STATE HWY. DEPT. PROJ. NO. 260

HOCKER 265

DIEK—PENCIL CLOTH
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY KEB DATE 6-14-61
DRAW. CHECKED BY JHW DATE 7-26-61
ORDER NO. V6337
SHEET NO. 1028

REVISIONS
F
E
D
C
B
A

PAINT: YES (U.N.)
SHOP CONTACT SURFACES: No

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

32	35	36	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	BD	SP-J	SP-B	SP-F	SR	MM	NS
	NP		✓										

WELDING

Adv. Bill 101

PR 4092—1259

A. B. DICK CO., PEN., PA.

FLG. PL 18×3×17'-6½ (Top & Bott.)

FLG. PL 18×3×33'-0 (Top & Bott.)

FLG. PL 18×3×33'-0 (Top & Bott.)

10½ / 12

10½

Cut top & bottom flanges

5/16

2'-6

2'-5 3/8

Fin. ma101

5/16

BB Top & Bott.

ba101

ma101

BB Top & Bott.

ba101

BB Top & Bott.

BB Top & Bott.

FLG. PL 18×3×17'-6½ (Top & Bott.)

FLG. PL 18×3×33'-0 (Top & Bott.)

FLG. PL 18×3×33'-0 (Top & Bott.)

134'-5¾ out to out of Girder

132'-5¾ ℄ ℄ End Brng's.

1'-0

66'-0½ ℄ ℄ Brng's.

74'-2

66'-5¼ ℄ ℄ Brng's.

60'-3¾

A

B

9 9

1

3

3'-4

2'-10

8

sa101

typ. 3/8

typ. sa101

typ. 1/2

pc

8½ 8½

9 9

B.E.

2-sa101

Web PL 34 5/8 × 74'-2

B.E.

pc

4 4

½

2'-10¼

3'-3 13/16

6'-2 1/16

4@7'-0 = 28'-0

8'-0

7'-6

6'-11⅞

7'-9

B.E.

2-sb101

B.E.

BG

pb

4 4 B

½ 3/16 3/16

4'-5 13/16

8'-0

3'-7 5/16

4@7'-0 = 28'-0

1'-7 9/16

7'-1½

2'-10¼

6'-4 7/16

9/16

No Paint F.S.

6 6

sa101

sa101

3'-4

2'-10

2'-4

3

3

6

10

2-sa101

B.E.

Web PL 34 5/8 × 74'-2

B.E.

pc

pc

4 4

½

B.E.

2-sb101

B.E.

BG

pb

4 4 B

½

SECTION C

74'-2

66'-0½ ℄ ℄ Brng's.

1'-0

66'-5¼ ℄ ℄ Brng's.

60'-3¾

132'-5¾ ℄ ℄ end brng's.

134'-5¾ out to out of girder

No Weld Top Flg.

Typ.

sb101

typ. 3/8

typ. 1/2

pb

8½ 8½

SECTION B-B

103G1 (NO CAMBER REQUIRED)

Lifting Wgt. Approx. 65 Tons

BRIDGE NO. STA. 21-1073

OVER U.S.R. 21 UNDER P.R.R.

MASSILLON, STARK CO., OHIO

OHIO STATE HWY. DEPT. PROJ. # 260.

D-63X—REV. 5-57 PENCIL CLOTH

HOCKER 265

AMERICAN BRIDGE DIVISION

UNITED STATES STEEL CORPORATION

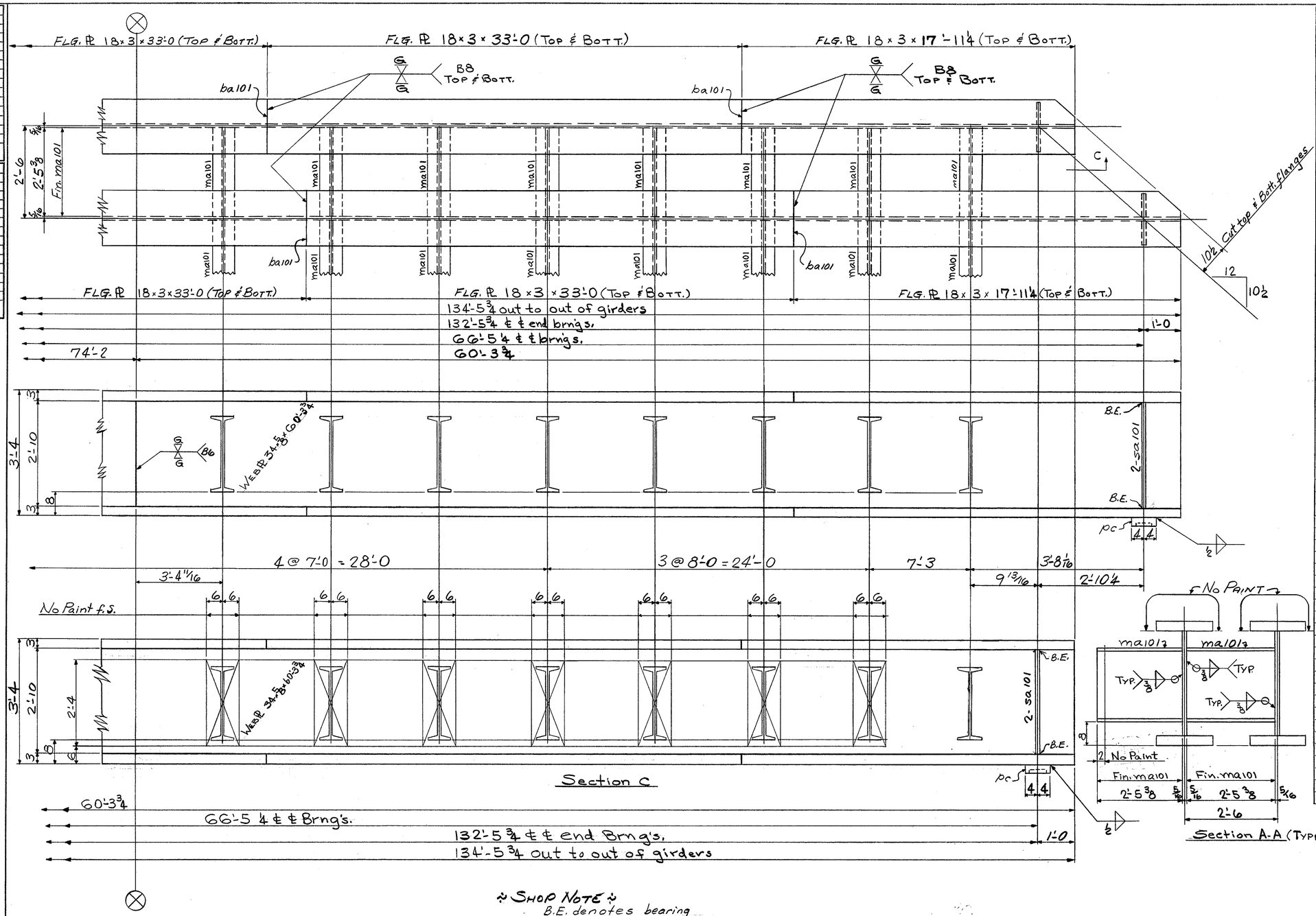
DRAWINGS MADE AT	ROANOKE PLANT
WORK FABRICATED AT	AMBRIDGE PLANT
IN CHARGE OF	SLUSHER
DRAW. MADE BY	H.B. DATE 6-15-61
DRAW. CHECKED BY	DATE 7-26-61
ORDER No.	V-6337
SHEET No.	103AB

REVISIONS

32	35	36	40	50	61	65	71	99	91	92		20	80					
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM	NS					

WELDING

POST 123-B WHITEX



LINE	Sequence No. of Piece as the Piece Appears on Order	No. of Pcs. on Sheet	MATERIAL SHAPE			LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
1												
2												
3												
4			ONE GIRDER SECTION 103G1									
5												
6		2	WEB PL	34	5/8	74	2			36½ x 74-4	13	
7		2	WEB PL	34	5/8	60	3¾			36½ x 60-5¾	12	
8		4	FLG PL	18	3	17	6 5/16			17-8½	18	
9		4	FLG PL	18	3	17	11⅞			18-1¼	19	
10		12	FLG PL	18	3	32	11⅞			33-2	17	
11		36	24 I	79.9		2	5⅜	ma101	F.2.E.			
12												
13		8	PL	8	½	2	10	sa101	F.2.E.			
14		4	PL	8	1	2	10	sb101	F.2.E.			
15		4	PL					pc	Det. Dn P101			
16		2	PL					pb				
17		16	BR	⅜	⅛	1	6	ba101	A7			
18												
19												
20												
21												
22												
23												
24												
25												
26			NOTE:-									
27												
28			MATERIAL TO BE A.S.T.M. A373 U.N.									
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												
61												
62												
63												
64												

GIRDER SECTION

BRIDGE NO. STA. 21-1073
OVER USR 21 UNDER P.R.R.
MASSILLON, STARK Co., OHIO
OHIO STATE HWY. DEPT. PROJ. #260

HOCKER 265

AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY H.B. DATE 6-20-61
DRAW. CHECKED BY [illegible] DATE 7-26-61

REVISIONS	ORDER NO.	SHEET NO.
F	V-6337	103B
E		
D		
C		
B		
A		

÷ SHOP NOTE ÷

B.E. denotes bearing end of stiffener.

Radiographic inspection of butt welds is required in accordance with Ohio State Hwy. Dept. Supplemental Specifications No. S-307.

PAINT: YES (U.N.)
SHOP CONTACT SURFACES: No

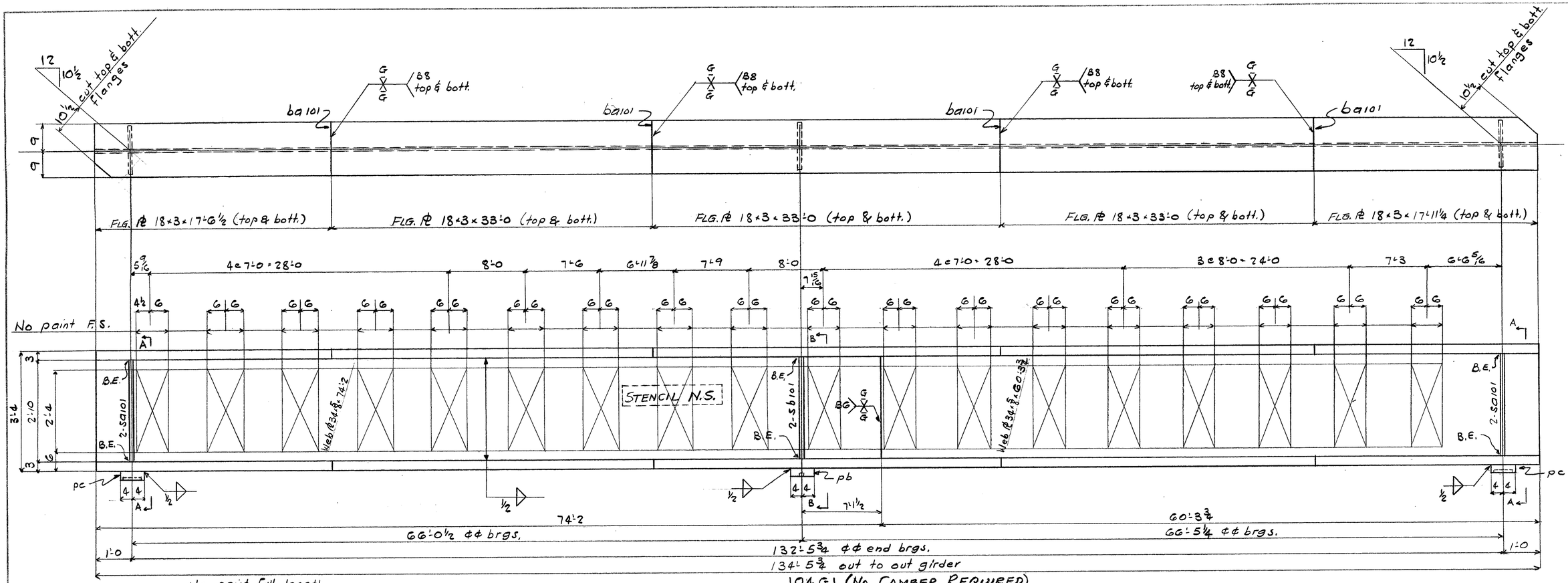
FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

32	35	36	40	59	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	80	SP-J	SP-B	SP-F	SB	MM	NS
	16		✓										

Welding

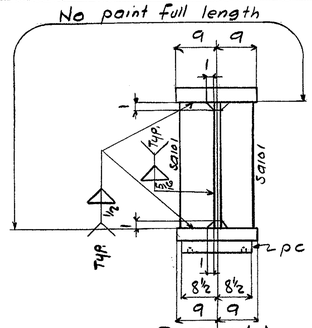
Adv. BM

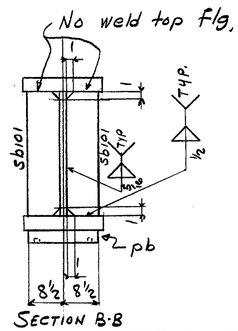
PR 1092—1259



104G1 (No Camber Required)

Lifting wt. approx. 30 tons





Shop Note:
B.E. denotes bearing end of stiffeners.
Radiographic inspection of butt welds is required in accordance with Ohio State Hwy. Dept. Supplemental Specification No. S-307.

32	35	36	45	50	51	65	21	91	81	82		28	53
F	HPS	345	W	W	3	C	85	50-2	50-2	50-2	50		
	NP	✓											

GIRDER

Bridge No. STA. 21-1073
over USR 21 under P.R.R.
Massillon, Stark Co., Ohio
Ohio State Hwy. Dept. Proj. No. 2

HOCKER 265

AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

Drawings made at	Roanoke
Work fabricated at	Ambridge
In charge of	Slusher
Draw. made by	KEB Date 6-23
Draw. checked by	JKW Date 7-26
Order No.	VG337
Sheet No.	104

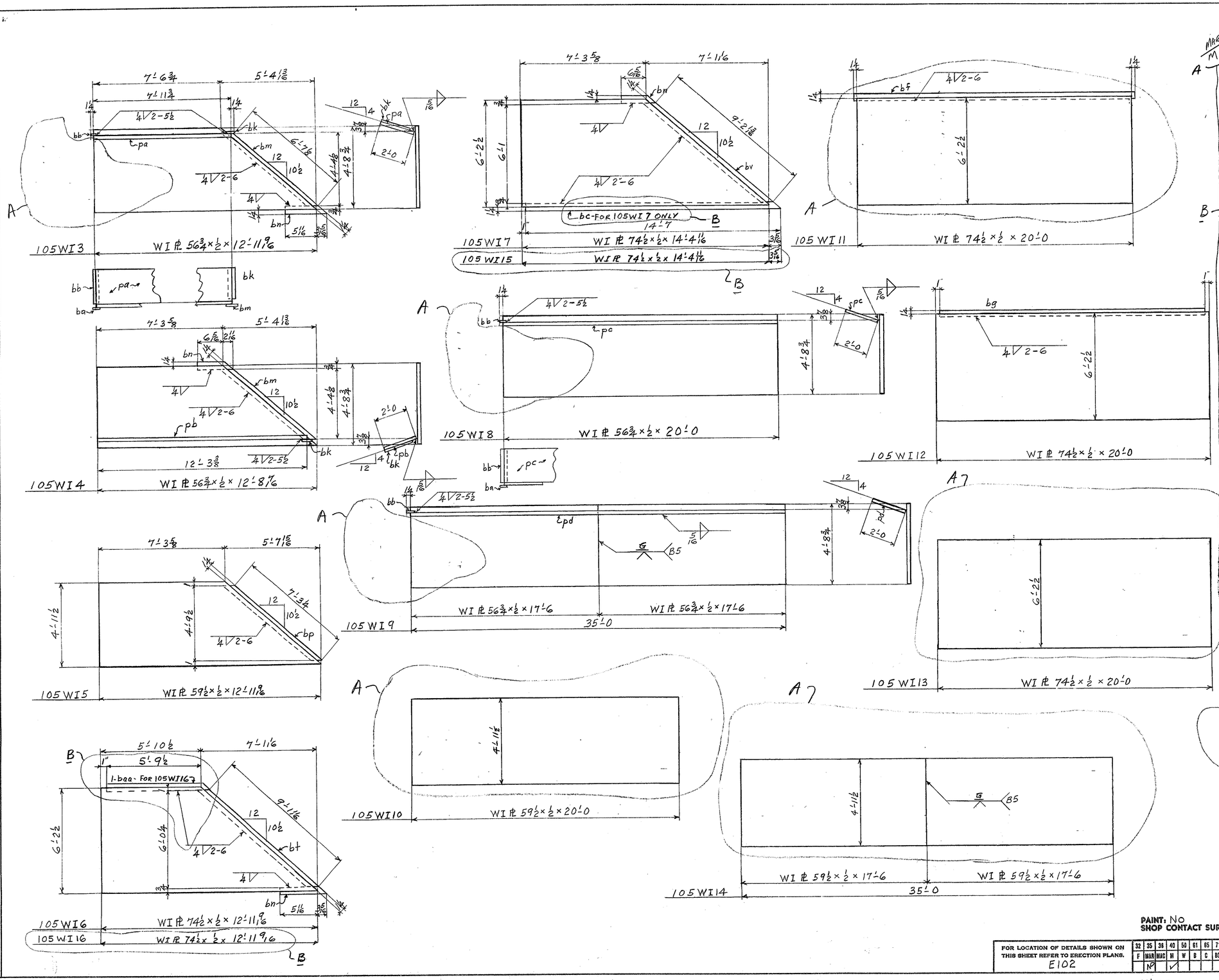
REVISIONS: F, E, D, C, B, X

Paint yes (U.N.)
Shop contact surfaces No

Welding Air. Bill 101

Line	Total No. of Pieces on the Order	Material: No. of Pcs. on Sheet	Material: Shape	Material: Length Feet	Material: Length Inches	Assembling Mark	Remarks	Calculated Weight for One Ship. Piece	Ordered	Item
1										
2	One Girder					104g1	STENCIL			
3										
4	1		Web PL 34 × ⅝	74	2				34×74-4	13
5	1		Web PL 34 × ⅝	60	3¾				34×60-3¾	18
6	2		FLG PL 18 × 3	17	6⅝				17-8⅝	14
7	2		FLG PL 18 × 3	17	11¼				18-1¼	15
8	6		FLG PL 18 × 3	32	11⅝				33-2	17
9	4		PL ⅜ × 8½	2	10	sa101	F2E			
10	2		PL ⅜ × 8	2	10	sb101	F2E			
11	2		PL			pc	det. on P101			
12	1		PL			pb				
13	4		B/S ⅜ × ⅛	1	6	ba101	A7			
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
51										
52										
53										
54										
55										
56										
57										
58										
59										
60										

NOTE:-
MATERIAL TO BE A.S.T.M. A 373 O.N.



LINE	Total No. of Pieces in This Order	No. of Pcs. per Sheet	MATERIAL SHAPE				LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS			ORDERED	ITEM	CALC WT FOR SHIP
1		2	WI	PL	56¾	½	12	11⅞	105WI3	1	1		57¾ x 20-5½	A7	
2		2	WI	PL	24	½	7	11¾	pa				24½ 8-1	A16	
3															
4	12	2	Bar	2	4		1	11⅝	bb				20-0	A32	
5	4	2	Bar	2	½		1	11⅜	bk					S	
6	4	2	Bar	2	4		6	9⅞	bm					S	
7	8	2	Bar	2	4			9	bn					S	
8		B													
9		2	WI	PL	56¾	½	12	8⅞	105WI4	1	1		57¾ x 20-5½	A7	
10		2	WI	PL	24	½	12	3⅜	pb				25 x 12-4¼	A15	
11		2	Bar						bm						
12		2	Bar						bn						
13		2	Bar						bk						
14		4	WI	R	59½	½	12	11⅝	105WI5	2	2	C	60½ x 20-5½	A4	
15		4	Br		2	4	7	5½	bp					S	
16		1	WI	PL	74½	½	12	11⅝	105WI6		1		75½ x 20-5½	A1	
17		1	Br						bm						
18	2	1	Br		2	4	9	4	bt					S	
19		1	WI	PL	74½	½	14	4⅛	105WI7	1			75½ x 20-5½	A1	
20		1	Bar	2	4		14	7	bc				20-0	A32	
21		1	Bar						bn						
22	2	1	Bar	2	4		9	5⅛	bv				20-0	A32	
23		8	WI	PL	56¾	½	20	0	105WI8	4	4		57¾ x 20-1	A8	
24	A	8	WI	PL	24	½	20	0	pc				25 x 20-1	A13	
25															
26		8	Bar						bb						
27															
28															
29		2	WROUGHT IRON PL = 105WI9							1	1				
30		4	WI	PL	56¾	½	17	5⅞					57¾ x 17-7	A9	
31		2	WI	PL	24	½	35	0	pd				25 x 35-1	A12	
32	A														
33		2	Bar						bb						
34															
35															
36		4	WI	PL	59½	½	20	0	105WI10	2	2		60½ x 20-1	A5	
37	A														
38															
39												B			
40		2	WI	PL	74½	½	20	0	105WI11	2			75½ x 20-1	A2	
41	A														
42															
43		2	Bar	2	4		20	2½	bf					S	
44															
45												B			
46		2	WI	PL	74½	½	20	0	105WI12	2			75½ x 20-1	A2	
47		2	Bar	2	4		19	10	bg					S	
48		1	WI	PL	74½	½	14	4⅛	105WI15		1		75½ x 20-5½	A1	
49		1	Br						bn						
50		1	Br						bv						
51		2	WI	PL	74½	½	20	0	105WI13		2		75½ x 20-1	A2	
52															
53	A														
54		4	BACKING BARS						105BB1	2	2				
55		4	FLT.	2	4	21	6						A373	S	
56	A														
57		2	WROUGHT IRON PL = 105WI14							1	1				
58		4	WI	PL	59½	½	17	5⅞					60½ 17-7	A6	
59															
60	A														
61		1	WI	R	74½	½	12	11⅝	105WI16	1			75½ x 20-5½	A1	
62		1	BAR	2	4		6	0½	baa					S	
63		1	BAR						bt						
64		1	BAR						bn						

1ST DIV.
2ND DIV.

WROUGHT IRON PLATES

BRIDGE NO STA 21-1073
OVER USR 21 UNDER PA RR
MASSILLON, STARK CO., OHIO
OHIO STATE HWY DEPT PROJ NO 260

HOCKER 265

D-BIX—PENCIL CLOTH
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER

F			
E			
D			
C	2-14-62	LTB	6-15-61
B	2-9-62	LTB	7-28-61
A	1-22-62	JKW	
REVISIONS		DRAW. MADE BY	DATE
		DRAW. CHECKED BY	DATE

ORDER No. V6337
SHEET No. 105

PAINT: No
SHOP CONTACT SURFACES: No

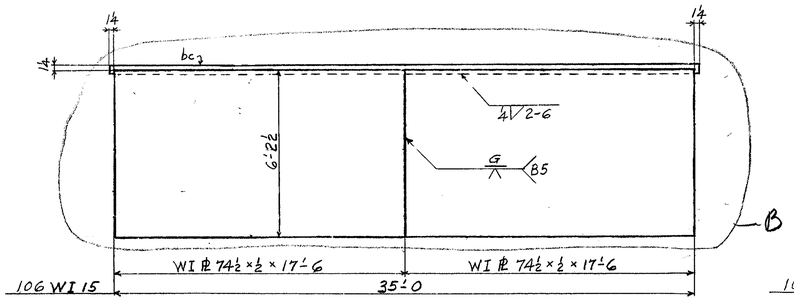
FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E102

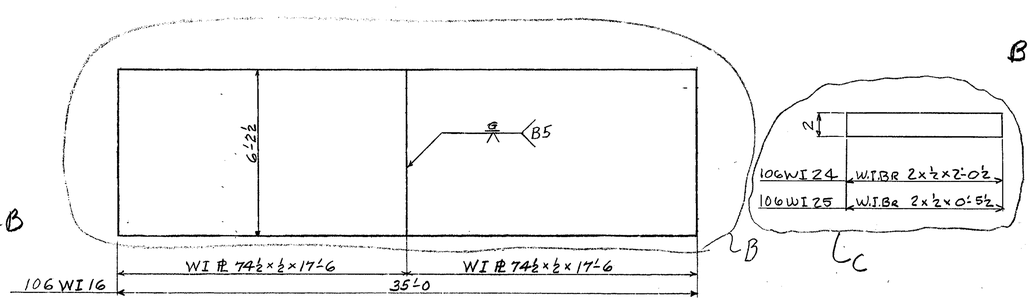
32 F	35 MAR	36 MAC	40 M	50 W	61 B	65 C	71 BO	80 SP-J	91 SP-B	92 SP-F	20 SR	80 MM	RS
	NP		✓										

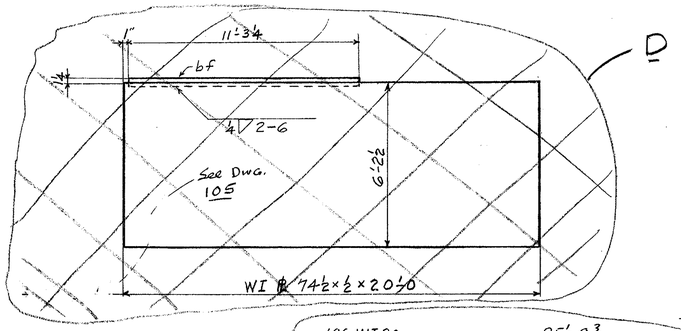
WELDING

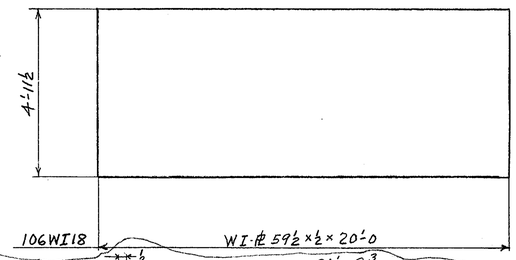
Adv. Bill M101-101

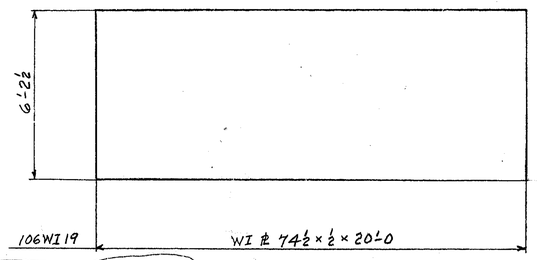
A. & B. SMITH CO., PGH., PA.

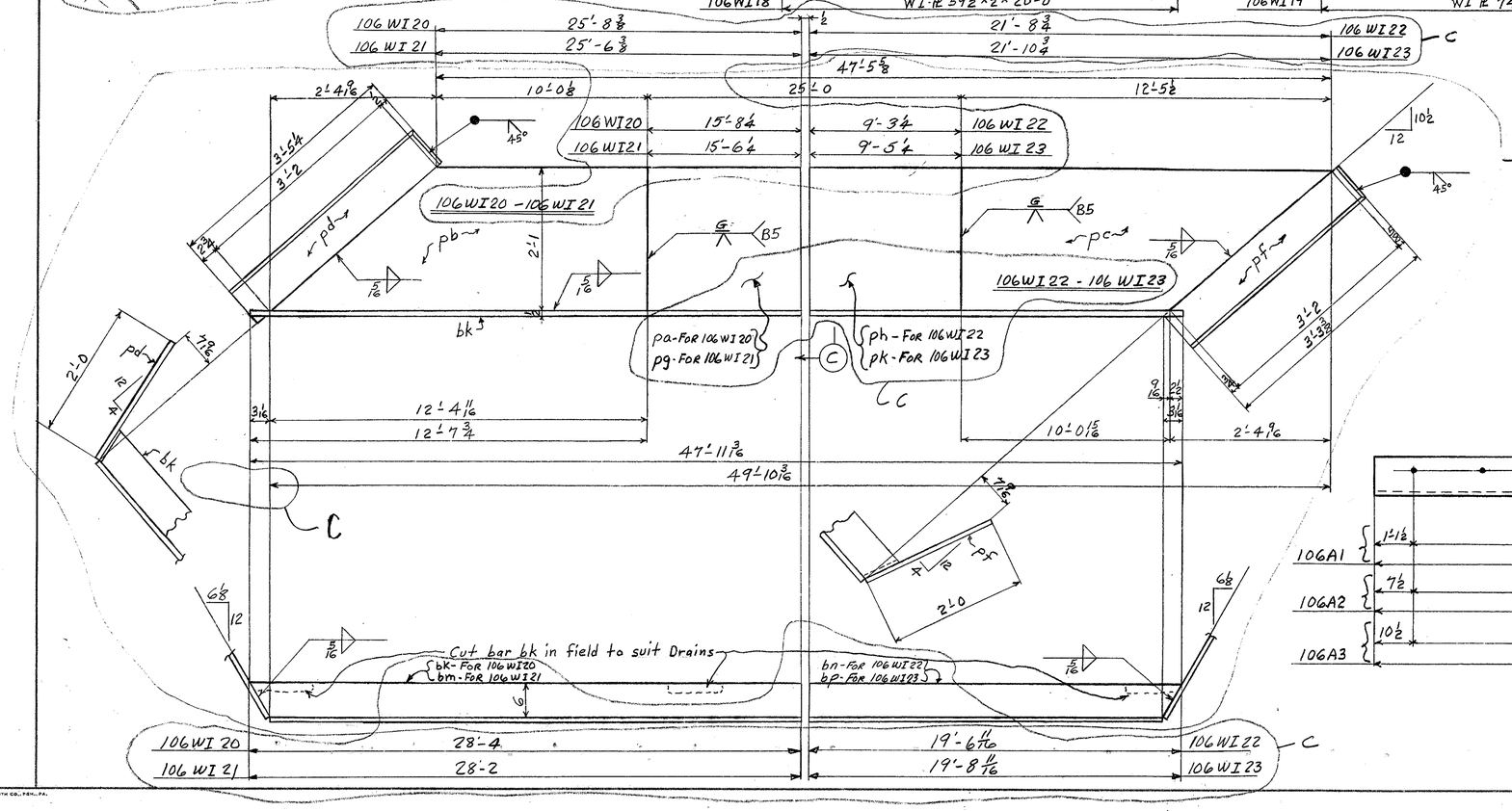


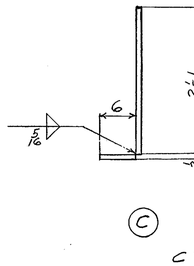


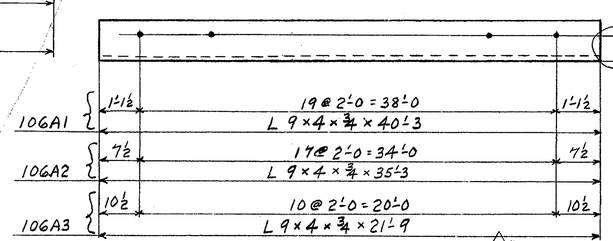












WROUGT IRON PLATES

DIVISION 1	DIVISION 2	LINE	First No. of Pieces as the Order	MATERIAL No. of Pcs. on Sheet	MATERIAL SHAPE	MATERIAL LENGTH Feet	MATERIAL LENGTH Inches	ASSEM-BLING MARK	REMARKS	ORDERED	ORDERED ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
		1		ONE WROUGHT IRON ℔ 106 WI 15								
		2		2	WI ℔ 74½ ½	17	5 1/16			75½ × 17-7	A3	
	X	3										
	X	4										
		6		1	Bar 2 4	35	2½	bc	Weld for length		S	
		7										
		8										
	1	9		ONE WROUGHT IRON ℔ 106 WI 16								
		10		2	WI ℔ 74½ ½	17	5 1/16			75½ × 17-7	A3	
		11										
		12										
		13										
		14										
		15										
		16										
		17										
		18										
		19										
		20										
2	2	21		4	WI ℔ 59½ ½	20	0	106 WI 18		60½ × 20-1	A5	
		22										
		23										
	2	24		2	WI ℔ 74½ ½	20	0	106 WI 19		75½ × 20-1	A2	
		25										
	1	26		1	WROUGHT IRON ℔ - 106 WI 20							
		27		1	WI ℔ 25 ½	15	8 3/16	pa		264 × 25-1	A10	
		28	2	1	WI ℔ 25 ½	12	4 3/8	pb		264 × 22-8½	A11	
		29										
		30	2	1	WI ℔ 24 ½	3	5¼	pd		25 × 14-6	A14	
		31										
		32		1	WI ℔ 6 ½	28	4	bk	WELD FOR LENGTH	16-2	A20	
		33										
		34										
		35		1	WROUGHT IRON ℔ - 106 WI 21							
		36		1	WI ℔ 25 ½	15	6 3/16	pg		264 × 25-1	A10	
		37		1	WI ℔			pb				
		38		1	WI ℔			pd				
		39		1	WI ℔ 6 ½	28	2	bm	WELD FOR LENGTH	16-2	A20	
2	2	40		4	L 9 4 ¾	40	3	106A1		40-3	A28	
		41										
	2	42		2	WI BR 2 ½	2	0½	106 WI 24			S	
		43										
1	1	44		2	L 9 4 ¾	35	3	106A2		35-3	A29	
		46										
	2	46		2	WI BR 2 ½	0	5½	106 WI 25			S	
		47										
1	1	48		2	L 9 4 ¾	21	9	106A3		25-3	A30	
		49										
		50		1	WROUGHT IRON ℔ - 106 WI 22							
	2	51		1	WI ℔ 25 ½	12	5 1/16	pc		264 × 22-8½	A11	
		52		1	WI ℔ 25 ½	9	3¼	ph		264 × 25-1	A10	
	2	53		1	WI ℔ 24 ½	3	3⅜	pf		25 × 14-6	A14	
		54		1	WI ℔ 6 ½	19	6 11/16	bn	WELD FOR LENGTH	16-2	A20	
		55										
		56		1	WROUGHT IRON ℔ - 106 WI 23							
		57		1	WI ℔			pc				
		58		1	WI ℔ 25 ½	9	5¼	pk		264 × 25-1	A10	
		59		1	WI ℔ 6 ½	19	8 11/16	bp	WELD FOR LENGTH	16-2	A20	
		60		1	WI ℔			pf				
		61										
		62										
		63										
		64										

BRIDGE NO STA 21-1073
OVER USR 21 UNDER PA RR
MASSILLON, STARK CO., OHIO
OHIO STATE HWY DEPT PROJ NO 260

HOCKER 265

D-BX—PENCIL CLOTH
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

F	
E	
D	2-9-62 (4) C-273
C	1-31-62 (3)
B	1-22-62 (2)
A	12-14-61 (1)
REVISIONS	

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY LTB DATE 6-21-61
DRAW. CHECKED BY JWH DATE 7-28-61
ORDER NO. V6337
SHEET NO. 106

PAINT: No
SHOP CONTACT SURFACES: No

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E102

32	35	36	40	50	61	65	71	90	91	92		20	80				
F	MAR	MAC	M	W	B	C	80	SP-J	SP-B	SP-F		SR	MM	MS			
	NP		✓														

WELDING

Adv. Dgr M101-101

A.B.&.PITTS CO., PGH., PA.

PIT 4092—1259

FLG. PL 18×3×17'-6½ (TOP & BOTT.)

FLG. PL 18×3×33'-0 (TOP & BOTT.)

FLG. PL 18×3×33'-0 (TOP & BOTT.)

Cut Top & Bott. Flanges

Fin. ma101

ba101

B8 Top & Bott.

FLG. PL 18×3×17'-6½ (TOP & BOTT.)

FLG. PL 18×3×33'-0 (TOP & BOTT.)

134'-5¾ Out to Out of Girder

132'-5¾ ℄ ℄ End Brngs.

66'-0½ ℄ ℄ Brng.

74'-2

FLG. PL 18×3×33'-0 (TOP & BOTT.)

66'-5¼ ℄ ℄ BRNGS.

60'-3¾

No Paint (N.S.)

TYP.

sa101

2-sa101

B.E.

Web PL 34⅝×74'-2

STENCIL N.S.

2-sb101

pc

pb

2'-10¼ 4'-5⅜ 8'-0 8'-0 4 @ 7'-0 28'-0 8'-0 7'-6

7'-3⅝

6'-8⅞ 9⅛ 6'-4⅜ 2'-10¼

2'-1⅛ 4'-10¾ 2'-2¾ 6'-11⅞ 7'-9

7½

B6

No Weld Top Flg.

sb101

Section B-B

Section C

74'-2

66'-0½ ℄ ℄ Bearings

132'-5¾ ℄ ℄ End Brngs.

134'-5¾ Out To Out Of Girder

66'-5¼ ℄ ℄ Bearings

60'-3¾

201G1 (No Camber Required)

Lifting Wgt. Approx. 65 Tons

Bridge No. STA. 21-1073
Over U.S.R. 21 Under P.R.R.
Massillon, Stark Co., Ohio
Ohio State Hwy. Dept. Proj. 260

HOCKER 265

D-63X—REV. 3-59 PENCIL/CLOTH

AMERICAN BRIDGE DIVISION
UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY H.B. DATE 6-21-61
DRAW. CHECKED BY JHW DATE 7-26-61

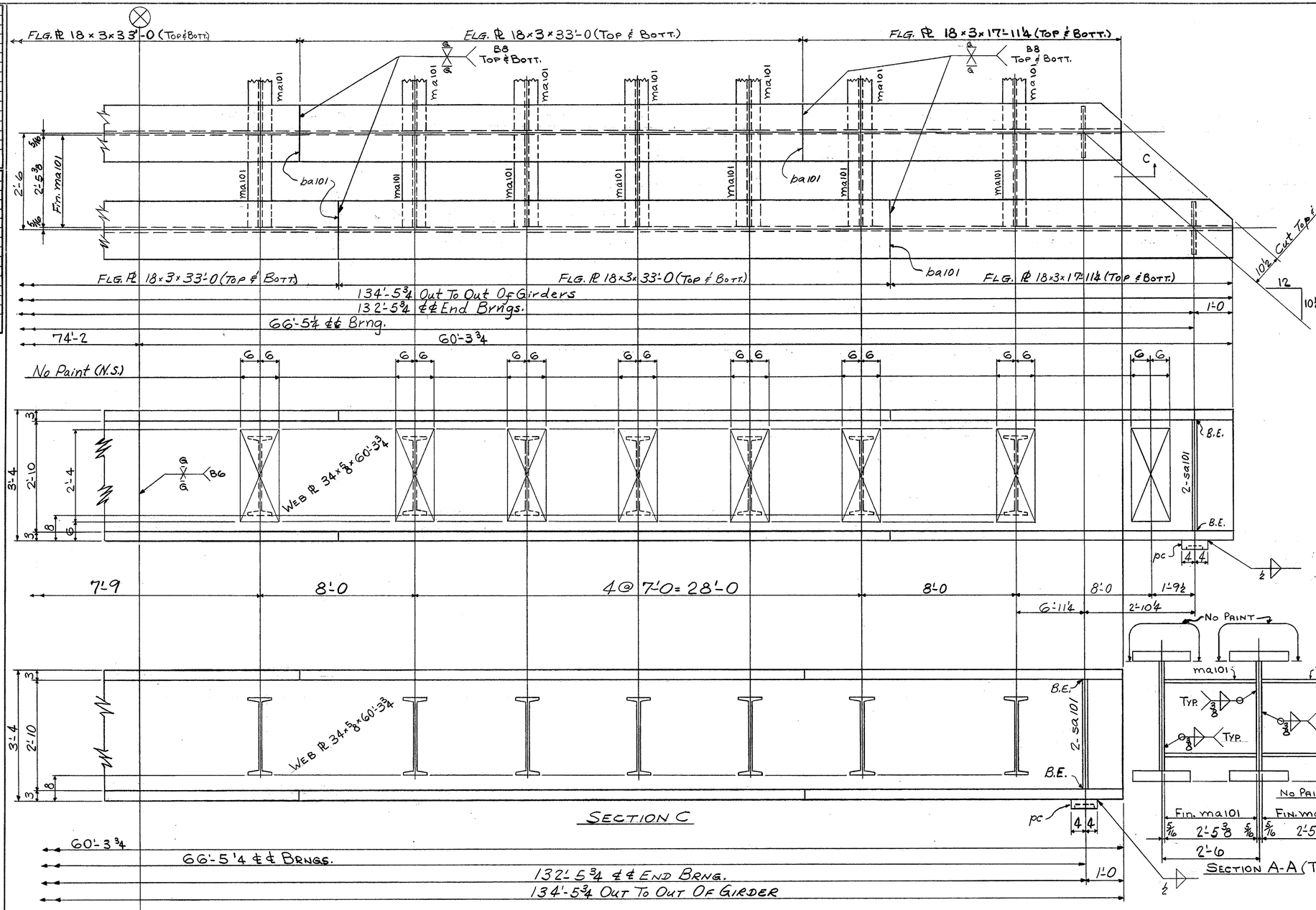
ORDER No. V.6337 SHEET No. 201AB

REVISIONS
F
E
D
C
B
A

32	35	36	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM	NS

Welding

POST 123-B WHITEX



LINE	Item No. of Piece on the Order	No. of Pcs. on Sheet	SHAPE			LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP. PIECE
5			ONE GIRDER SECTION					201G1	STENCIL			
6		2	WEB PL	34	⅝	74	2			36'-2 × 74-4	13	
7		2	WEB PL	34	⅝	60	3¾			36'-2 × 60-5¾	12	
8		4	FLG. PL	18	3	17	6⅝			17-8½	18	
9		4	FLG. PL	18	3	17	11⅝			18-1¼	19	
10		12	FLG. PL	18	3	32	11⅝			33-2	17	
11	106	35	24 I	79.9		2	5⅜	ma101	F.2.E.	45-9	A31	
12												
13	28	8	PL		8	½	2	10	sa101	F.2.E.	44¾ × 12 × 104	3 V6035 10G1
14	44	4	PL		8	1	2	10	sb101	F.2.E.		S
15		4	PL						pc	Det. On P101		
16		2	PL						pb			
17	56	16	BRS	⅜	8	1	6		ba101	A7	16-0	1138
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30			NOTE :-									
31												
32			MATERIAL TO BE A.S.T.M. A373 U.N.									
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												
61												
62												
63												
64												

GIRDER SECTION

BRIDGE NO. STA. 21-1073
OVER U.S.R. 21 UNDER P.R.R.
MASSILLON, STARK CO., OHIO
OHIO STATE HWY. DEPT., PROJ. #260

HOCKER 265

D-BIX—PENCIL CLOTH
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

REVISIONS	
F	
E	
D	
C	
B	
A	

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY H.B. DATE 6-26-61
DRAW. CHECKED BY JKW DATE 7-26-61
ORDER NO. V-6337. SHEET NO. 201B

PAINT: YES (U.N.)
SHOP CONTACT SURFACES: NO

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

32	35	38	40	50	51	65	71	80	91	92		20	80
F	MAR	MAC	M	W	B	C	DD	SP-J	SP-B	SP-F	SR	MM	RS
	N												

WELDING

SHOP NOTE
B.E. DENOTES BEARING END OF STIFFENERS.
Radiographic inspection of butt welds is required in accordance with Ohio State Hwy. Dept. Supplemental Specifications No. S-307.

Adv. Bill

A. B. SMITH CO., PGH., PA.
PR 4093—1259

FLG. PL 18×3×17'-6½ (TOP ≠ BOTT.)

FLG. PL 18×3×33'-0 (TOP ≠ BOTT.)

FLG. PL 18×3×33'-0 (TOP ≠ BOTT.)

10½ / 12

10½

CUT TOP ≠ BOTTOM FLANGES

2'-6

2'-5⅜

FLG. MA101

MA101

BA101

B8 TOP ≠ BOTT. (TOP ≠ BOTT.)

B8 TOP ≠ BOTT.

FLG. PL 18×3×17'-6½

FLG. PL 18×3×33'-0 (TOP ≠ BOTT.)

FLG. PL 18×3×33'-0 (TOP ≠ BOTT.)

134'-5¾ OUT TO OUT OF GIRDER

132'-5¾ ℄ ℄ END BRNGS.

66'-5¼ ℄ ℄ BRNG.

60'-3¾

1'-0

66'-0½ ℄ ℄ BRNG.

74'-2

NO PAINT (N.S.)

9 9

TYP. 5/16

SA101

3'-4

2'-10

2'-4

8

3

TYP. ½

PC

8½ 8½

9 9

2-SA101

WELD PL 34×⅝×714'-2

B.E.

PC 4 4 ½

1'-0 2'-10¼ 2'-1⅞ 3@8'-0=24'-0 4@7'-0=28'-0 8'-0

5'-0⅛

A B

2-SB101

PB 4 4 ⅝ 3'-10⅝ 3'-7⅜ 3'-6⅛

1'-0⅜ 7'-6 6'-5⅝ ⅞ 6'-11⅞

2'-10¼

B6

SECTION C

74'-2

66'-0½ ℄ ℄ BEARINGS

66'-5¼ ℄ ℄ BEARINGS

60'-3¾

132'-5¾ ℄ ℄ END BRNGS.

134'-5¾ OUT TO OUT OF GIRDER

202 G1 (NO CAMBER REQUIRED)

LIFTING WGT. APPROX. 65 TONS

NO WELD TOP FLG.

SB101

SB6101

TYP.

⅝

8½ 8½

SECT. B-B

BRIDGE NO. STA. 21-10.73
OVER U.S.R. 21 UNDER P.R.R.
MASSILLON, STARK CO., OHIO
OHIO STATE HWY. DEPT., PROJ. 260

HOCKER 265

D-63X—REV. 3-59 PENCILCLOTH

AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY H.B. DATE 6-23-61
DRAW. CHECKED BY JKW DATE 7-27-61

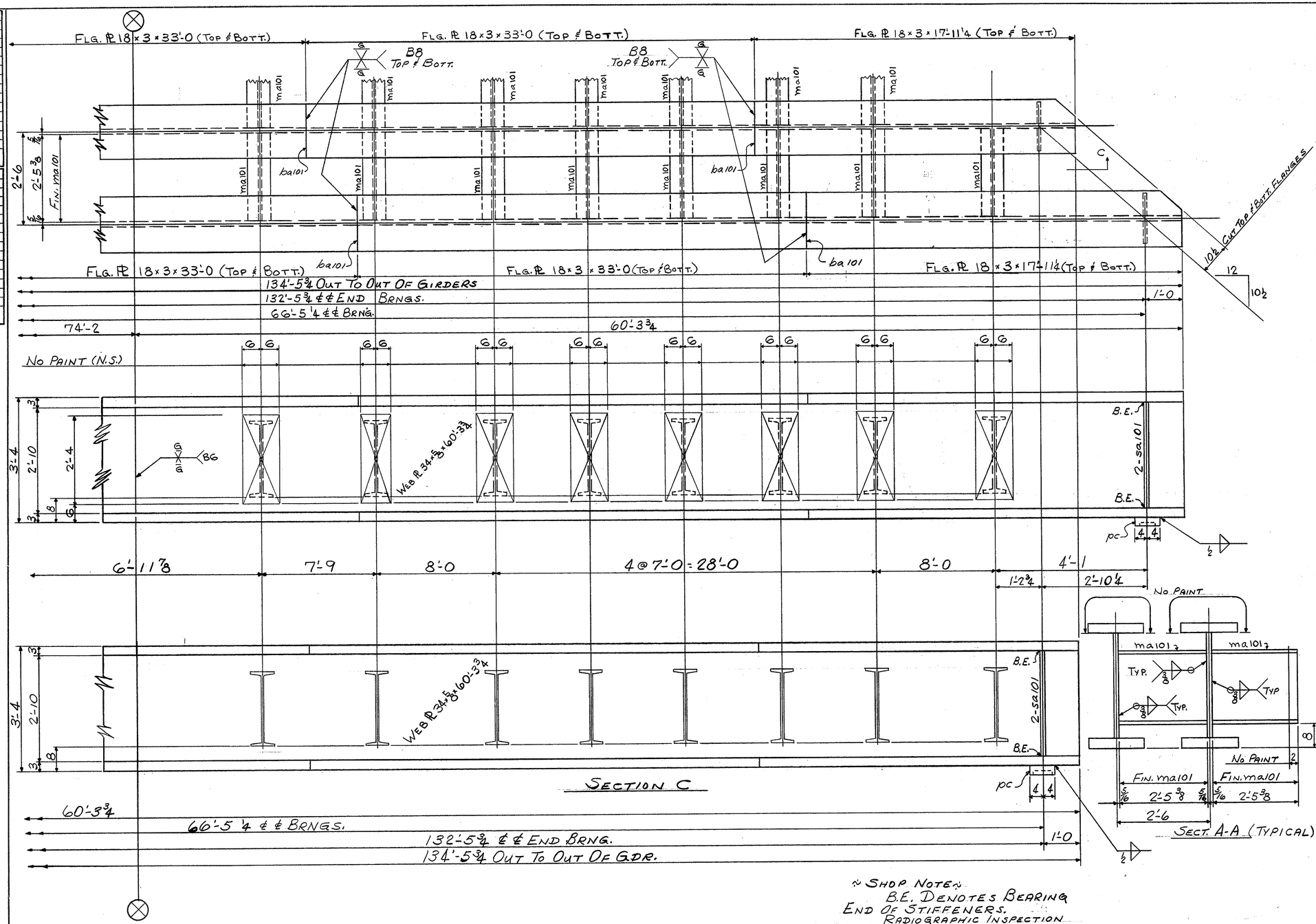
ORDER No. V-6337 SHEET No. 202AB

F	
E	
D	
C	
B	
A	
REVISIONS	

WELDING

32	35	36	40	50	61	65	71	90	91	92		20	80						
F	MAR	MAC	M	W	B	C	BQ	SP-J	SP-B	SP-F	SR	MM	NS						

POST 123-B WHITEX



LINE	Total No. of Pieces on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE				LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP. PIECE
1													
2													
3													
4			ONE GIRDER SECTION							202G1 A			
5													
6		2	WEB PL	34	5/8	74	2				36'-74-4	13	
7		2	WEB PL	34	5/8	60	3 3/4				36'-60-5/8	12	
8		4	FLG. PL	18	3	17	6 5/16				17-8 1/2	18	
9		4	FLG. PL	18	3	17	11 5/16				18-1 1/4	19	
10		12	FLG. PL	18	3	32	11 3/8				33-2	17	
11		35	24 I	79.9		2	5 3/8		ma101	F.2.E.			
12													
13		8	PL		8	1/2	2	10	sa101	F.2.E.			
14		4	PL		8	1	2	10	sb101	F.2.E.			
15		4	PL						pc	DET. ON PL101			
16		2	PL						pbj				
17	1	16	BR		3/8	1/8	1	6	ba101	A7			
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28			NOTE:-										
29													
30			MATERIAL TO BE A.S.T.M. A373 U.N.										
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													
56													
57													
58													
59													
60													
61													
62													
63													
64													

GIRDER SECTION

BRIDGE No. STA. 21-1073
OVER U.S.R. 21 UNDER P.R.R.
MASSILLON, STARK Co., OHIO
OHIO STATE HWY. DEPT., PROJ. #260

HOCKER 265

DRAW—PENCIL CLOTH
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

F	
E	
D	
C	
B	
A	10-30-61 ①
REVISIONS	

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY H.B DATE 6-26-61
DRAW. CHECKED BY DHW DATE 7-27-61
ORDER No. V-6337
SHEET No. 202B

PAINT: YES (U.N.)
SHOP CONTACT SURFACES: NO

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS. E101

32	35	36	40	50	61	65	71	90	91	92		20	80
F	MAR	MIC	M	W	B	C	80	SP-J	SP-B	SP-F	SR	MM	RS
	10		✓										

~ SHOP NOTE ~
B.E. DENOTES BEARING END OF STIFFENERS.
RADIOGRAPHIC INSPECTION OF BUTT WELDS IS REQUIRED IN ACCORDANCE WITH OHIO STATE HWY. DEPT. SUPPLEMENTAL SPECIFICATIONS No. S-307.

WELDING Adv. Bill

FR 4892—1259

FLG. PL 18 × 3 × 17'-6½ (TOP & BOTT.)

FLG. PL 18 × 3 × 33'-0 (TOP & BOTT.)

FLG. PL 18 × 3 × 33'-0 (TOP & BOTT.)

10½ / 12

CUT TOP & BOTTOM FLANGES 10½

2'-6 · 2'-5⅜ · 5/16 · FIN. MA101

ma101 · ba101

B8 TOP & BOTT.

FLG. PL 18 × 3 × 17'-6½ (TOP & BOTT.)

FLG. PL 18 × 3 × 33'-0 (TOP & BOTT.)

FLG. PL 18 × 3 × 33'-0 (TOP & BOTT.)

134'-5¾ OUT TO OUT OF GIRDER

132'-5¾ ℄℄ END BRNGS.

66'-5¼ ℄℄ BRNG.

1'-0

66'-0½ ℄℄ BRNG.

74'-2

60'-3¾

NO PAINT (N.S.)

9 · 9 · 8½ · 8½

3'-4 · 2'-10 · 2'-4 · 3 · 8 · 6

TYP. ½ · 5/16 · SA101

B.E. · 2-SA101 · WEB PL 34 × 5/16 × 74'-2

B.E. · 2-SB101

pc · pb · 4 · 4 · 8

1'-0 · 2'-10¼ · 7/16 · 7'-3 · 3@8'-0=24'-0 · 4@7'-0=28'-0

3'-5 1/16

6'-2 1/16 · 1'-9 15/16 · 5'-3 9/16

8'-0 · 7'-6

3'-3 13/16 · 4'-8 3/16 · 2'-5 5/16 · 2'-10¼

2'-10¼

A · B · A1 · B1

B6

SECTION C

NO WELD TOP FLG.

SB101 · TYP. · 5/16

SECTION B-B

74'-2

66'-0½ ℄℄ BRNG.

132'-5¾ ℄℄ END BRNG.

134'-5¾ ℄℄ END BRNG.

60'-3¾

66'-5¼ ℄℄ BRNG.

203 G1 (NO CAMBER REQUIRED)

LIFTING WGT. APPROX. 65 TONS

BRIDGE NO. STA. 21-107.3

OVER U.S.R. 21 UNDER P.R.R.

MASSILLON, STARK CO., OHIO

OHIO STATE HWY. DEPT., PROJ. "260

D-63X—REV. 3-59 PENCILCLOTH

HOCKER 265 AMERICAN BRIDGE DIVISION

UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT ROANOKE PLANT

WORK FABRICATED AT AMBRIDGE PLANT

IN CHARGE OF SLUSHER

DRAW. MADE BY H.B. DATE 6-27-61

DRAW. CHECKED BY JKH DATE 7-27-61

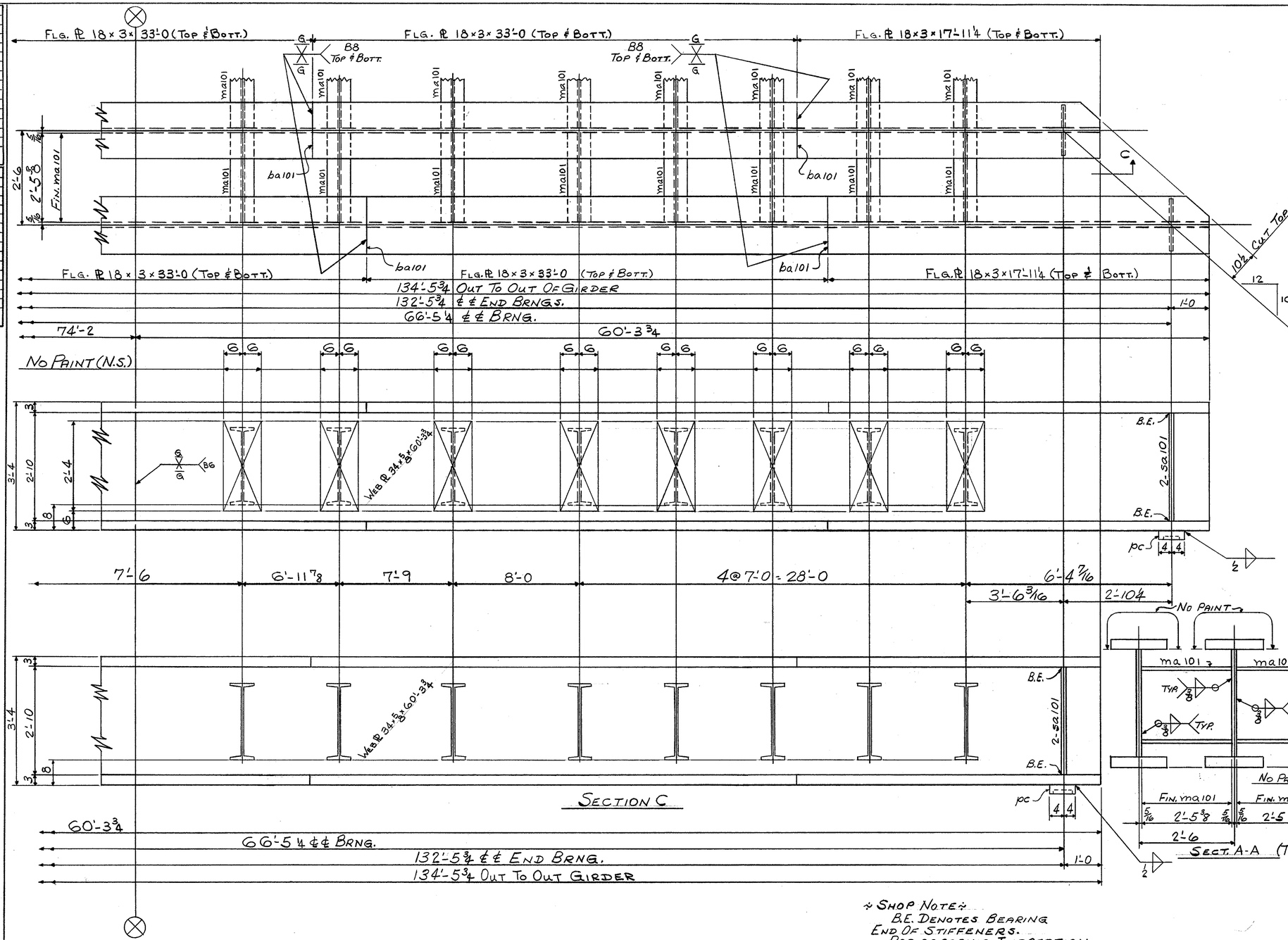
ORDER NO. V-6337 | SHEET NO. 203AB

REVISIONS	
F	
E	
D	
C	
B	
A	

32	35	36	40	50	61	65	71	90	91	92		20	80
F	MAR	MAC	M	W	B	C	BO	SP-J	SP-B	SP-F	SR	MM	NS

WELDING

POST 123-B WHITEX



LINE	Total No. of Pieces on this Order	MATERIAL No. of Pcs. on Sheet	SHAPE	LENGTH Feet	LENGTH Inches	ASSEM-BLING MARK	REMARKS	ORDERED	ITEM	CALCULATED WEIGHT FOR ONE SHIP PIECE
4			ONE GIRDER SECTION 106G1							
6	2	2	WEB PL 34 5/8	74	2			36½×74·4	13	
7	2	2	WEB PL 34 5/8	60	3¾			36½×60·5¾	12	
8	4	4	FLG PL 18 3	17	6⅝			17·8½	18	
9	4	4	FLG PL 18 3	17	11 1/16			18·1¼	19	
10	12	12	FLG PL 18 3	32	11 5/8			33·2	17	
11	36	24	I 79	9	2	5⅜	ma101 F.2.E.			
12										
13	8	8	PL ½	2	10		sa101 F.2.E.			
14	4	4	PL 8	1	2	10	sb101 F.2.E.			
15	4	4	PL				pc DET. ON P101			
16	2	2	PL				pb			
17	16	16	BR 3/8	1	8	6	ba101 A7			
18										
29			NOTE:-							
31			MATERIAL TO BE A.S.T.M. A373 UN.							

GIRDER SECTION

BRIDGE No. STA. 21-107.3
OVER U.S.R. 21 UNDER P.R.R.
MASSILLON, STARK Co., OHIO
OHIO STATE HWY. DEPT., PROJ. #260

HOCKER 265

* SHOP NOTE *
B.E. DENOTES BEARING END OF STIFFENERS.
RADIOGRAPHIC INSPECTION OF BUTT WELDS IS REQUIRED IN ACCORDANCE WITH OHIO STATE HIGHWAY DEPT. SUPPLEMENTAL SPECIFICATIONS No. S-307.

PAINT: YES (U.N.)
SHOP CONTACT SURFACES: No

FOR LOCATION OF DETAILS SHOWN ON THIS SHEET REFER TO ERECTION PLANS.	32	35	38	40	50	61	65	71	80	81	92		20	80
E101	F	MAB	MAC	M	W	B	C	80	SP-J	SP-B	SP-F	SR	MM	MS
		NP		✓										

WELDING

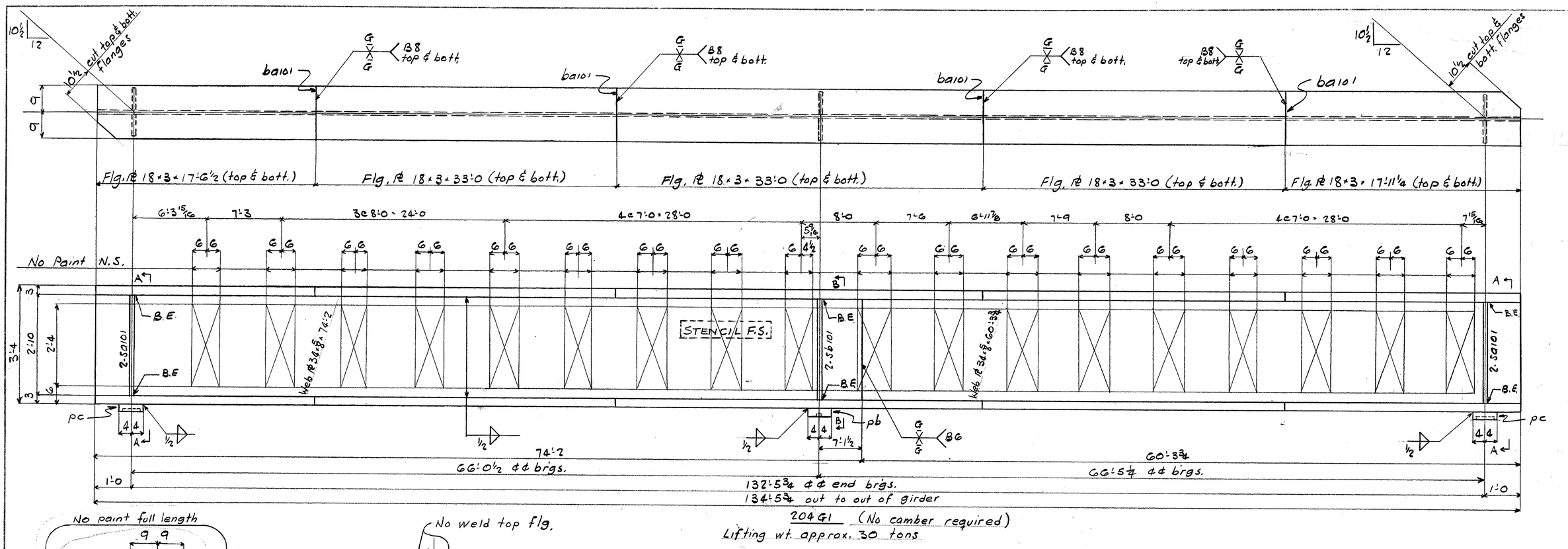
REVISIONS	
F	
E	
D	
C	
B	
A	

DRAWINGS MADE AT ROANOKE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF SLUSHER
DRAW. MADE BY H.B. DATE 6-28-61
DRAW. CHECKED BY JHW DATE 7-27-61
ORDER No. V-6337
SHEET No. 203B

AMERICAN BRIDGE DIVISION UNITED STATES STEEL CORPORATION

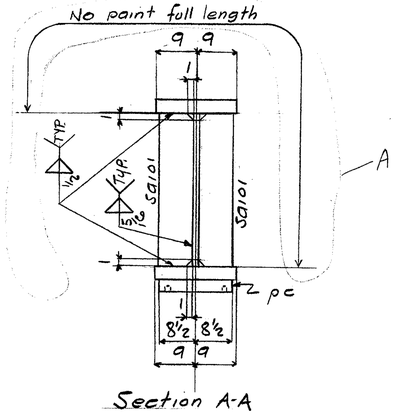
Adv. Bill

PR 4892-1359

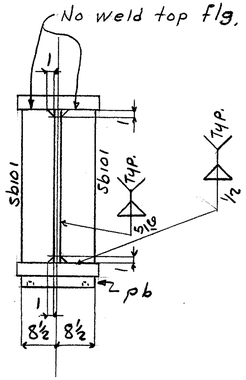


204 G1 (No camber required)

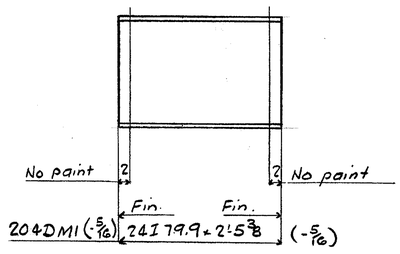
Lifting wt. approx. 30 tons



Section A-A



Section B-B



Shop Note:
B.E. denotes bearing end of stiffeners.
Radiographic inspection of butt welds is required in accordance with Ohio State Hwy. Dept. supplemental specification No. S-307.

32	33	35	41	53	61	65	71	91	101	102	201	203
F	M59	M202	M	M	S	S	M3	M3	M3	M3	M3	M3
NP	✓	✓										

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE	LENGTH: Feet	LENGTH: Inches	ASSEM-BLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
1										
2			One Girder			204G1	STENCIL			
3										
4	1		Web PL 34 5/8	74	2				34½ x .744	18
5	1		Web PL 34 5/8	60	3¾				34½ x 10.54	12
6	2		Flg. PL 18 3	17	6 5/16				1" 17'-8"	14
7	2		Flg. PL 18 3	17	11¼				1" 17'-8"	15
8	6		Flg. PL 18 3	32	11⅝				1" 18'-1"	17
9	4		PL ⅝	2	10	5a101	F2E		38.2	17
10	2		PL ⅝	2	10	5b101	F2E			
11	2		PL ⅝			pc	detail Plate			
12	1		PL ⅝			pb				
13	8		Bars ⅜ ⅝	1	6	ba101	A7			
14										
15										
16										
17										
18			18 24 I 79.9	2	5⅜	204DM1	F2E		45-9 A31	
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39			NOTE:-							
40										
41			MATERIAL TO BE A.S.T.M. A 373 U.N.							
42										
43										
44										
45										
46										
47										
48										
49										
50										
51										
52										
53										
54										
55										
56										
57										
58										
59										
60										

GIRDER

BRIDGE NO. STA. 21-1073
OVER USR 21 UNDER P.R.R.
MASSILLON, STARK CO., OHIO
OHIO STATE HWY. DEPT. PROJ. No. 260

HOCKER 265

D-82X—3M—PENCILTEX
AMERICAN BRIDGE
DIVISION
UNITED STATES STEEL CORPORATION

DRAWINGS MADE AT Roanoke PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Slusher
DRAW. MADE BY KEB DATE 6-26-62
DRAW. CHECKED BY MEO DATE 7-27-62

F	
E	
D	
C	
B	
X	3-7-62
REVISIONS	

ORDER NO. VG337
SHEET NO. 204

PAINT Yes (U.N.)
SHOP CONTACT SURFACES No

Welding

Adv. Bill 101

21-STA.-10.23

LOCATION PLAT
STA-21-10.23 U-UG-1010(5)
STARK COUNTY
CITY OF MASSILLON
LIMITED ACCESS HIGHWAY
DIRECTORS JOURNAL VOL. PAGE

SCALE: 1" = 200'

NOTE: Spiralled Curves indicated on this Plan are Developed as outlined in "Transition Curves for Highways" by Joseph Barnett. Published in 1940 by U.S. Government Printing Office.

NOTE: True Bearings Established From Observation on Polaris.

STATE OF OHIO — MICHAEL BAKER JR. — S3424 — REGISTERED SURVEYOR

I HEREBY CERTIFY THIS PLAT TO BE CORRECT.
SIGNED BY Michael Baker Jr.
MICHAEL BAKER JR.- REG. LAND SURVEYOR. S3424
RECEIVED FOR RECORD July 27 1960
RECORDED VOL. 34 PAGE 64 OF THE STARK COUNTY RECORDS
Kenneth E. Watts 1569
RECORDER

CERTIFICATE OF APPROVAL
APPROVED _____
DATE _____ DIVISION DEPUTY DIRECTOR
APPROVED _____
DATE _____ CITY ENGINEER CITY OF MASSILLON

SPIRAL CURVE DATA
P.I. Sta. 597+73.67
Δ - 60°40'16" Rt.
D - 2°07'30"
L.S.-300.00'
R - 2696.27'
θs - 3°11'15"
p - 1.39'
Xc - 299.91'
Yc - 5.57'
K - 149.99'
L.T.- 200.03'
S.T. - 100.03'
Lc - 2555.11'
Ts - 1728.62'
Es - 429.34'

CURVE DATA
P.I. Sta. 543+97.71
Δ - 20°30'00" Rt.
D - 1°28'00"
R - 3906.53'
T - 706.42'
L - 1397.73'
Ex- 63.36'

P.I. Sta. 562+13.52
Δ - 7°13'00" Lt.
D - 0°28'00"
R - 12277.70'
T - 774.24'
L - 1546.43'
Ex- 24.39'

BEGIN PROJECT Sta. 539+75
END PROJECT Sta. 606+50
SUSPEND U-1010(5)
BEGIN UG-1010(5) Sta. 563+58
END UG-1010(5) Sta. 568+16
RESUME U-1010(5)
P.T. Sta. 569+85
N.E. ¼ of Sec. 18
S.E. ¼ of Sec. 7
TUSCARAWAS RIVER
TOP OF DIKE
Match Line Sta. 536+00
ARCH AVE. PUMP STATION
P.C. Sta. 554+39.28
SIPPO CREEK PUMP STATION
Sta. 10+40.37
PENN. R.R.
INDUSTRIAL TRACK 1
FEDERAL AVE. PUMP STATION
60" STORM SEWER
N 31°38'30" W
N 29°01'46" E
Sta. 6+08.60
Sta. 6+04.96
Sta. 11+58.3
N 24° 25' 30" W
B & O. W.L.E.RY.
N 44° 55' 30" W
W. & L. E. RY. FREIGHT TERMINAL
Sta. 8+00.00
W. & L. E. Ry.
P.C. Sta. 536+91.29
℄ Edwin Ave Connection
Match Line Sta. 536+00
Sta. 0+00
P.T. Sta. 550+89.02
WALNUT RD.
BELT R.R.
WETMORE CREEK PRESSURE CONDUIT
PENN. R.R.
N.E. ¼ of Sec. 18
N.W. ¼ of Sec. 17
S.E. ¼ of Sec. 7
S.W. ¼ of Sec. 8
SIPPO EAST CREEK
Sta. 7+95.00
THIRD STREET N.W.
SECOND ST. S.W.
OAK AVE.
MASSILLON
SOUTH AVE.
WEST WAY
T.S. Sta. 580+45.05
S.C. Sta. 583+45.05
WEIRICH BLVD. N.W.
Sta. 0+00
Sta. 2+92.20
Approx. ¼ Sec. Line
℄ Third St. Connection
HORACE MANN SCHOOL
Sta. 6+77.39
FIRST ST. N.W.
ERIE STREET
DWIGHT AVE.
EDWIN AVE.
VERNA CT.
MAPLE AVE.
CURLEY CT.
DAWSON
FIRST ST. S.W.
TREMONT AVE.
CHARLES AVE.
LINCOLN AVE. N.W.
FEDERAL AVE. N.W.
NORTH AVE. N.W.
THORNE AVE. N.W.
CHERRY RD. N.W.
S.R. 241
U.S. 30
U. S. 21
Approx. ¼ Sec. Line
S.E. ¼ of Sec. 7
S.W. ¼ of Sec. 8
N.E. ¼ of Sec. 7
S.E. ¼ of Sec. 7
N.E. ¼ of Sec. 7
1728.62'

Ex Sta. 543+90.15
P.I. Sta. 543+97.71
Hub Set
N P.O.C. Sta. 540+18.94
N 44°39'30" W 372.92'
159°30'00"
Edwin Ave. Connection Sta. 6+04.98
14°23'32"
70°24'46" Tang to Curve
604.93'
620.00'
Edwin Ave. Connection
Edwin Ave. Connection Sta. 0+00
89°52'05"
Exist'g. Iron Pin
1156.15'
℄ Erie Street
℄ Channel
Sta. 552+13.71
89°25'28"
224.41'
P.T. Sta. 550+89.02
N 24°25'30"W 831.11'
706.42'
225.57'
P.C. Sta. 554+39.28
774.24'
Nail Set
89°39'35"
399.05'
171°28'00"
Exist'g. Iron Pin
P.K. Nail
Road
86°46'00"
1557.06'
℄ First Street
95°06'50"
N. Walnut 280.51'
Exist'g. Iron Pin
Ex. Sta. 562+12.50
P.I. Sta. 562+13.52
N 31°38'30" W
P.T. Sta. 569+85.71
X Cut in Paving Intersection
Sta. 572+47.17
261.46'
23.75'
333.78'
100°52'15"
Sta. 575+80.95
℄ Channel
83°35'30"
239.74'
Nail Set
261.53'
79°03'45"
100°51'05"
Sta. 578+62.48
℄ Channel
85°15'00"
190.89'
P.O.S.T. Sta. 582+55.10
182.57'
260°48'25"
Tack Set
Tack
S.C. Sta. 583+45.05
Hub Set
℄ Lincoln Way West
89°49'25"
215.81'
180°00'00"
40.38'
89°56'52"
385.94'
Exist'g. Iron Pin
T.S. Sta. 580+45.05
1021.06'
℄ Third Street
Third St. Connection Sta. 0+00
P.K. Nail
Hub Set
444.01'
℄ Alley
89°55'54"
90°10'05"
198.58'
89°56'10"
445.02'
89°58'50"
197.52'
℄ Oak Ave.
202.81'
Exist'g. Iron Pin
℄ Tremont Ave. S.W.
S.R. 241
487.21'
℄ Charles Ave. S.W.
399.39'
89°43'55"
329.80'
℄ Second Street S.W.
90°03'05"
273.70'
Exist'g. Iron Pin
℄ South Ave.
382.92'
Nail Set
Exist'g. Iron Pin
90°05'55"
Four Punch Marks in Rim of Manhole
℄ Third St. Connection
677.39'
P.K. Nail Set
Third St. Connection Sta. 6+77.39
89°00'35"
631.76'
℄ First St. N.W.
101°11'22"
Nail Set
℄ Cherry Rd. N.W.
732.15'
109°21'25"
291.49'
80°03'10"
105.85'
E.S. Sta. 596+22.60
Exist'g. Iron Pin
Hub Set
Top of Dike
139°24'30"
Hub Set
P.I. Sta. 597+73.67
89°39'32"
N 29°01'46" E
419.90'
375.11'
449.34'
Exist'g. Iron Pin
1728.62'

◉ Monument Assembly will be set during Construction on ℄ Stations shown above.

R# 126

LOCATION PLAT

2

SUMMARY OF ADDITIONAL R/W REQUIRED

TOTAL NO. OF OWNERS — 31

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

157

STA-21-10.23
LIMITED ACCESS

2/23

U-1010 (5)

PARCEL NO.	OWNER	AREA ACRES	EXIST. BLDG.	SHEET NOS.	REMARKS
100 LA	U.S.A.	0.002		5	P.T. OL No. 297
100A LA	U.S.A.	0.036		5	P.T. OL No. 137 Parcel 97, Tr. A
100B LA	U.S.A.	0.601		5,6,7	P.T. OL No. 137 & No. 136 Parcel 199H & 200G
100C LA	U.S.A.	0.019		7	P.T. OL No. 137 Parcel 95
100N LA	U.S.A.	0.4411		8 & 9	P.T. OL 30 Parcel P-199-F
100G LA	U.S.A.	0.329		7 & 8	P.T. OL 36 P.T. Parcel 1996
100H LA	U.S.A.	0.012		7	OL 29 Parcel 200-F
100J LA	U.S.A.	0.102		10	P.T. Paved 88
100 X	U.S.A.	0.061		3	
100T LA	U.S.A.	0.051		10	P.T Parcel 151, Tr. 10 (P.T. Oak Ave.)
100W LA	U.S.A.	0.138		8	Parcel 200F, OL 29
101 LA	Massillon Conservancy District	0.845	Yes	10 & 11	Lot 1056 P.T. 1057 1058, 1059, 1069, 11143
101	Massillon Conservancy District	0.076		10 & 11	P.T. Lot 11143
101A LA	Massillon Conservancy District	0.159		11	P.T. Lot No's. 169, 174 & 175
101B LA	Massillon Conservancy District	0.059		11 & 12	P.T. Lot 163
101C LA	Massillon Conservancy District	0.300		14 & 15	P.T. Lot 1
101 X	Massillon Conservancy District	0.222		10	Lots 1068, 1069, 1070, 1071 & 1072
102 TS	W. & L.E. R.R.			7	Parcel 97, Tr. C Adjust Grade Of Drive
105 LA	City of Massillon	0.165		4	OL 383
126	City of Massillon			16	
126A LA	City of Massillon			16	
109 LA	W. A. Welling	0.219	Yes	4	Lot No. 9945
110 LA	Irene Peters	0.151	Yes	4	Lot No. 9944
113 LA	Massillon Paper Company	8.195	Yes	3,4,5,6 & 7	P.T. OL 297, 138, 137, 136
114 LA	Massillon Spring & Rivet Corp.	0.470		7	P.T. OL 35 Parcel 90A
114 TS	Massillon Spring & Rivet Corp.			7	P.T. O.L. 35 Adjust Grade Of Drive
115 LA	Chester K. Campbell dba Campbell Oil Company	0.155	Yes	9	P.T. Lot No. 9368
115A LA	Campbell Oil Company	0.304	Yes	9 & 10	Lot No's. 2134, 2135 & 2136
115 WA	Chester K. Campbell dba Campbell Oil Company			9	Lot No. 9368
116 LA	Minnie B. Snyder	0.103	Yes	10	Lot No. 2128
117 LA	Joseph W. Oats	0.069	Yes	10	Lot No. 2127
118 LA	Earle S. Jamison	0.102	Yes	10	Lot No. 2126
119 LA	Ollie L. Neal	0.016	Yes	10	Lot No. 2125
123 LA	J.S. Sanders	0.564		11	Lot No's. 1051, 1052 & 1053 P.T. Lot No. 1054, 11142
123	J.S. Sanders	0.019		11	P.T. Lot 295
124 LA	AUDREY J. SNOWDEN & GEROTHA MCGOWAN	0.042	Yes	11	Lot No. 173
125 LA	Donald E. Richardson	0.057	Yes	11	Lot No. 172
129 TS	Ralph L. Phillips			11	P.T. Lot No. 189 Replace Sidewalk
130 LA	The Red Head Oil Company	0.075		11 & 12	Lot No's. 162 & 163
131 WA	Progressive Chevrolet Co.			12	P.T. Lots 400 & 401
132 LA	Ohio Drilling Company	0.559	Yes	12 & 13	
132	Ohio Drilling Company	0.076		12	
132 X	Ohio Drilling Company	0.101		12	
133 LA	Anthony Fulmer	0.154	Yes	13	OL 14
133 WA	Anthony Fulmer		Yes	13	OL 14
133A LA	Anthony Fulmer	0.181		14	P.T. Lot 9248
134 LA	Catherine Kolek	0.119	Yes	13 & 14	Lot No. 9249
135 LA	Massillon School District	0.070		15	P.T. Lot No. 3598
136 LA	Lewis E. & Ann G. Lemmon	0.120		13	P.T. OL. 13
137	E. Smally			16	P.T. OL. 11
150 LA	U.S.A.	0.074		11	P.T. Charles St. P.T. Lot No's. 170, 174 & 175
150A LA	U.S.A.	0.015		11	P-151, Tr. 7
150B LA	U.S.A.	0.208		11 & 12	P.T. P-80, P-79 P-151 Tr. 7
150C LA	U.S.A.	0.284		12 & 13	P.T. Lot No. 398
150D LA	U.S.A.	0.033	YES PUMP STA.	12	P-76 P.T. Lot No's. 398 & 399
150D WA	U.S.A.			12	P.T. Lot No's. 399, 400 & 401
150D	U.S.A.	0.159		12	P.T. Lot No's. 399, 400 & 401 & P-76A
150E LA	U.S.A.	0.017		12	P-76A, P.T. Lot 400
150G LA	U.S.A.	0.082		13	P-71
150H LA	U.S.A.	0.062		13	P-65
150J LA	U.S.A.	0.060		14	P-63, P.T. Lot 9248
150K LA	U.S.A.	0.027		14	P.T. OL 15
150L LA	U.S.A.	0.150		14	P-151, Tr. 5
150M LA	U.S.A.	0.028		14	P-151, Tr. 5
150P LA	U.S.A.	0.141		14	P.T. P-61 B, Tr. A
150 L	U.S.A.	0.040		14	P.T. P-151, Tr. 5
150 P	U.S.A.	0.002		14	P.T. P-61 B, Tr. B
107	E.K.C.O Foundation Inc.	0.643		20	P.T. OL 31, P-92, Tr. B
150R LA	U.S.A.	0.019		15	P.T. P-57-P-58-P-59
150T LA	U.S.A.	0.545		14 & 15	P.T. P-61, Tr. A
150U LA	City Of Massillon	0.009		14	P.T. P-61 B, Tr. B
151	H.G. Jorden	None		15	
152 LA	EVA M. Barth	None		15	Access Rights Taken Only
114	Massillon Spring & Rivet Corp.	0.013		7	P.T. O.L. 35
119 WA	Ollie L. Neal		Yes	10	Lot No. 2125

UG-1010 (5)

PARCEL NO.	OWNER	AREA ACRES	EXIST. BLDG.	SHEET NOS.	REMARKS
100K LA	U.S.A.	0.0125		9	P.T. O.L. 30 Parcel P-199-F
100M LA	U.S.A.	0.0667		8 & 9	P.T. O.L. 30 Parcel P-199-F
100P LA	U.S.A.	0.009		9	P.T. O.L. 30 Parcel P-199-F
102B LA	W. & L.E. R.R.	0.546		8 & 9	O.L. 36 Parcel 200U, Tr. B
102C LA	W. & L.E. R.R.	0.292		8 & 9	P.T. OL 36 P.T. Parcel 1996
103 LA	B. & O. R.R.	1.6311		7 & 8	P.T. OL 36 & 0.59 & 0.3, P.T. Parcel 1996 & 0.60
104A LA	Penna. R.R.	0.859		9 & 10	P.T. OL 30 & 38
104B LA	Penna. R.R.	0.011		9	P.T. OL 30
104C LA	Penna. R.R.	0.659	Yes	9-14	P.T. Parcel 8, P.T. Parcel 88 P.T. Lot No's. 1058, 1059, 1060, 1063 & 1064 (P.T. Oak Ave.)
104D LA	Penna. R.R.	0.510		9-14	P.A. 9, P.T. Lot No. 1054 P.T. Charles Ave. P.T. Lot No's. 164, 165, 169, 174 & 175
104E LA	Penna. R.R.	0.782	YES PUMP STA.	9-14	P.A. 10
104F LA	Penna. R.R.	0.036		9-14	P.A. 11
106 LA	B. & O. R.R. & W. & L.E. R.R.	0.451		8 & 9	P.T. OL 29 & 32 Parcel 200U, Tr. A & Tr. D P.T. OL 36 P.T. Parcel 1996
104G LA	Penna. R.R.	0.100		12 & 13	P.T. Parcel 199C

Sheet Completed
Date 1-27-60

Revised
Date 2-11-60
Parcels 101C LA, 101C, 101D LA, 123 LA & 123 A
3-23-60
Added R.R. Parcels
6-15-60
Changed Acreage
Parcel 100 P LA
7-15-60
Add Parcel 104 B LA, 104G LA
Change Parcel 100 PLA, 104 A LA, 101 H LA, 150 PLA, 150 S LA, 150 T LA

REVISED PCL. 124-LA NAME CHANGE 2-16-60
Added Pc1s. 151-RA & 152-LA DATE 9-2-60
Revised Pc1s 100K-LA, 100M-LA & 100 P-LA Added Pc1. 100 N-LA DATE 8-19-60
DELETED, PC1S. 100-R-LA, 100-S, 100-U, 113-S, 132-WA & 150-E-LA REVISED PC1S. 102-TS, 114-TS, 123-LA, 123, 129-TS, 150-U-LA ADDED PC1. 100-X DATE 8-1-60
REVISED PCL. 101-LA, 101, 101-A-LA/101-B-LA 101-E, 109-LA, 113-LA, 115-NW, 116-LA 117-LA, 118-LA, 119-LA, 101-C-LA, 123-LA, 125-LA 123-LA, 123, 126-LA, 150-B-LA, 102-TS DELETED PCL. 100-D-LA, 101-E-LA, 101-F-LA (20) 101-C, 112, 101-G-LA, 101-H-LA, 101-J-LA, 101-J-X, 123-A 113-B-LA, 113-C-LA, 128-LA, 150-S-LA, 101-K-LA, DATE

Deleted Pc1.-134-WA 8-14-62
Deleted Pc1.-131-LA 8-8-62

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.- 21 - 10.23
LIMITED ACCESS

158

3/23

R/W

Outlet Structure
Discharge Well
Twin Box Conduit
4'-0" Conc.
BEGIN ACQUISITION Sta. 533+64 103' Lt.
533+20 159.5'
12" Toe Drain
Inlet Structure
12" Conc.
Elev. 920.75
Conc. Pump House
ARCH ST. PUMP STATION
Conc.
48" Pressure Conduit
12" Wingwall
532+87 146'
100 X
30" C.M.P. Toe Drain
M.H.
533+73 122'
Ø O.P.S. Co. #3520 D1 18
533+98.5 120'
534+25 133.5'
R/W Line 2
535+52 131.5'
535+51 121.5'
30" C.M.P. Toe Drain
R/W Line 2
Top of Dike
P-97 Tr. A
O.L. 138
U.S.A.
113 LA
THE MASSILLON PAPER COMPANY
T.B.A. 8.195 Ac.
P.R.O. 0.035 Ac.
533+62.5 93'
R/W Line 1
Ø O.P.S. Co. #2520 D-2 19
Guy
Future Construction ?
533+53.5
24" R.C.P.
48" Conc. Stone Retaining Wall
533
534
535
N 44° 55' 30" W
N 44° 50' 57" W (U.S.)
536
537
538
Conc. Box Meter Station
24" V.C.P.
San. M.H.
60" V.S.P.
Guy
Ø O.E. Co. #2520 D-1 63
North Road
18" C.M.P.
60" V.S.P.
Ø O.P.S. Co. #2520 D-1 4
Guy
21" V.C.P.
U.S.A.
48" C.M.P.
24" Conc. Retain Wall
BEGIN ACQUISITION Sta. 533+48.5 61' Rt.
CITY OF MASSILLON
534+42 117'
R/W Line 1
24" Elm
Mesh Fence Kennels
P.C. Sta. 536+91.29
CURVE DATA
P.I. Sta. 543+97.71
Δ - 20° 30' 00" Rt.
D - 1° 28' 00"
R - 3906.53'
T - 706.42'
L - 1397.73'
Ex - 65.36'
538+97 110'
Limit of Construction ?
R/W Line 1
538+00 106'
END SHEET STA. 539+00

Sheet Completed Date 1-27-60	Revised Date 3-23-60 DATE 8-1-60 REVISED 113 to 113A ICC X 3-1-60 J.D.R.

STA. 532+45 TO STA. 539+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

159

4/23

R/W

STA. - 21 - 10.23

LIMITED ACCESS

Sheet Completed
Date 1-27-60
Revised
Date 3-23-60
DATE 8-1-60
REVISED 109-LA, 113-LA
Revised Fence Line South Of Pcl. 109-LA 9-2-60

BEGIN LIMITED ACCESS
Sta. 0+40 56.5' Lt.

Sta. 0+00 Edwin Ave. Conn. = ℄ Sta. 28+43.85 Erie St. South

ERIE ST. SOUTH
Bituminous Pvt.
Conc. Sidewalk
Existg. 6" Water Line
20" V.C.P.
12" V.C.P.
Conc. S.W.
Stone Sidewalk
Conc.
EDWIN AVE.
12" V.C.P.
M.H.
112" V.C.P.
89° 52' 05"
Existg. 4" Gas Line
24" V.C.P.
Existg. 6" Water Line
OPSCo #1504
S 20° 39' 53" E
24" V.C.P.
Conc. Sidewalk
Conc.
Existg. 6" Gas Line
6" W.L.
W.V.
M.H.
15" V.C.P.
Storm Sewer
24" V.C.P.
Brick S.W.
Conc.
OPSCo 2520A3 14
30" Maple
Brick Drive
Conc.
2½-Sty. Dwg.
#831
Gravel Drive
Frame Garage
Lot No. 9942
2" Spruce
Brick Drive
30" Maple
CITY OF MASSILLON
48" C.M.P.
M.H.
24" V.C.P.
24" V.C.P.
M.H.
48" C.M.P.
M.H.
60" V.S.P.
Earth Road
THE MASSILLON PAPER COMPANY
538+97
110'
4+61
74.5'
538+99
110'
4+61.5
72.5'
Future Construction
Limit of Construction
40' R
N 69° 28' 02" E
5
Tang. to Curve
70° 24' 48"
540
6
4+88
74.5'
540+51
131'
4+87
76.5'
540+53
137'
Earth Road
55' R
P.O.C. Sta. 540+18.94 =
Sta. 6+04.98 Edwin Ave. Conn.
M.H.
GEORGE & ANNA BICKIS
R/W Line
Lot No. 9946
1+80
57'
2+40
61'
Limit of Construction
Fence, Type C
R/W Line
54" Brick
54" C.M.P.
M.H.
24" V.C.P.
Gravel Drive
2½-Sty. Sh. Dwg.
#903
Cistern
0.219 Ac.
109 LA
2-Sty. Stable
Stone Walk
W. A. WELLING
Lot No. 9945
Fence, Type C
Stub
OPSCo 2520A3 22
Rose Bush
18" Catalpa
Frame Garage
2½-Sty. Sh. Dwg.
#839
Cistern
Stone
IRENE PETERS
Lot No. 9944
0.151 Ac.
110 LA
105 LA
14'
2+40
48" C.M.P. Storm Sewer
O.L. 383
Limit of Construction
3 EDWIN AVE. CONN.
4
113 LA
THE MASSILLON PAPER COMPANY
T.B.A. 8.195 Ac.
P.R.O. 0.035 Ac.
2+40
62.5'
Fence, Type C
R/W Line
THE MASSILLON PAPER COMPANY
BOERNER & CARLTON
Glass & Paint Store
1-Sty. Brick
#835
BEGIN LIMITED ACCESS
Sta. 0+40 58.5' Rt.
18" V.C.P.
WILLARD H.
1+80
58.5'
Lot No. 9943
Conc. Blk. Garage
BOERNER
Conc.
2½-Sty. Sh. Dwg.
#831
Brick S.W.
Conc.
Brick Drive
Conc.
2½-Sty. Dwg.
Gravel Drive
Frame Garage
Lot No. 9942
2" Spruce
Brick Drive
30" Maple
CITY OF MASSILLON
48" C.M.P.
M.H.
24" V.C.P.
24" V.C.P.
M.H.
M.H.
Earth Road
55' R
P.O.C. Sta. 540+18.94 =
Sta. 6+04.98 Edwin Ave. Conn.
M.H.

EDWIN AVE. CONN.- STA. 0+00 TO STA. 6+04.98-RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

160

5
23
R/W

STA. - 21 - 10.23
LIMITED ACCESS

BEGIN SHEET STA. 539+00

END SHEET STA. 545+00

Top of Dike

539+35
103'

540+05
100.5'

541+02.5
96'

542+04.5
89'

543+01.5
82'

543+44
81.5'

543+97.5
74'

544+99
82'

545+00
83'

R/W Line

M.H.
Meter Station
Conc. Bldg.

U. S. A.

PT O.L. 297

P 97 TRACT A

100 LA

100A LA

100B LA

544+94.5
65'

48" Seg. Blk. San. Sewer

543+41.5
78'

Limit of Construction

THE MASSILLON PAPER COMPANY

113 LA
T.B.A. 8.195 Ac.
P.R.O. 0.035 Ac.

N 44° 55' 30" W

N 24° 25' 30" W

544+83
22'

10" Locust

O.L. 137

542+83.5
10'

16" Birch

Junk Yard

544+67.5
36'

540
700 Ft. 48" Tang. to Curve

Future Construction

EDWIN AVE. CONN.
N 69° 28' 02" E

P.O.C. Sta. 540+18.94 =
Sta. 6+04.98 Edwin Ave. Conn.

542+00
56'

54" Brick San. Sewer

Fence, Type C

Proposed M.H.

Proposed San. Sewer

542+00
83'

545+00
84'

55' R

40' R

4+88
74.5'

540+51
131'

4+87
76.5'

540+53
137'

Earth Road

W. & L.E. R.R.

Track No. 27 E

CURVE DATA
P.I. Sta. 543+97.71
Δ - 20° 30' 00" Rt.
D - 1° 28' 00"
R - 3906.53'
T - 706.42'
L - 1397.73'
Ex - 63.36'

Sheet Completed
Date 1-27-60
Revised
Date 3-23-60
DATE 8-1-60
REVISED 113-LA

STA. 539+00 TO STA. 545+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.- 21-10.23

LIMITED ACCESS

161

6/23

R/W

O.L. 140

O.L. 137 U.S.A. P 95

Top of Dike

O.L. 137 P 95 U.S.A.

550+50 80' 100C LA

R/W Line

547+00 82'

548+00 80.5'

P 199 H U.S.A.

M.H.

27" C.M. Pipe

U.S.A. Limit of Construction

27" C.M. Pipe

24" C.M. Pipe

R/W Line

546+71.5 60'

100B LA

545+81.5 56'

546+69.5 45'

O.L. 136

Barb Wire Fence

6" Wild Cherry

1-Sty. Corr. Metal Shed

100B LA

℄ 200 G U.S.A.

Corr. Metal Fence

THE MASSILLON PAPER COMPANY

113 LA

T.B.A. 8.195 Ac.
R.R.O. 0.035 Ac.

O.L. 136

N 24° 25' 30" W

550

549

548

547

546

48" Seg. Blk. San. Sewer

48" Seg. Blk. San. Sewer

M.H.

113 LA

BEGIN SHEET STA. 545+00

END SHEET STA. 551+00

Corr. Metal Fence

549+00 64.5'

550+00 64'

107'

105'

113 LA

Tile Blk. Garage

548+00 65.5'

Fence, Type C

Proposed San. Sewer

546+00 63'

Junk Yard

THE MASSILLON PAPER COMPANY

Limit of Construction

R/W Line

550+00 88'

Truck Scales

Gate

R/W Line

P.T. Sta. 550+99.02

O.L. 138

548+00 87'

Junk Yard

1-Sty. Conc. Block

Frame Shed

1-Sty. Conc. Block

Earth

546+00 86.5'

R/W Line

OPSCo. ℄ #2520A3 35

Corr. Metal Fence

OPSCo. ℄ #2520A3 34

OPSCo. ℄ #2520A3 17

Cinder Drive

Twin 12" Sumac

12" Sumac

O.L. 138

W. & L.E. R.R. (NICKEL PLATE R.R.)

Crushed Slag Drive

CURVE DATA
P.I. Sta. 543+97.71
Δ - 20° 30' 00" Rt.
D - 1° 28' 00"
R - 3906.53'
T - 706.42'
L - 1397.73'
Ex - 63.36'

P 97
Tr. C

Sheet Completed
Date 1-27-60

Revised
Date 3-23-60
DATE 8-2-60
REVISED 113-LA

Frame Ramp

Frame Loading Platform

1-Sty. Brick

Track No. 27 E

STA. 545+00 TO STA. 551+00 — RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.- 21 - 10.23

LIMITED ACCESS

162

7/23 R/W

END LIMITED ACCESS Sta. 551+89 110' Lt.

BEGIN LIMITED ACCESS Sta. 552+40 110' Lt.

BEGIN SHEET STA. 551+00

END SHEET STA. 557+00

Conc.

N.P.R.R. (No Number) 552+38.5 93'

100H LA

553+00 91'

P 200 F O.L. 29

U. S. A.

Top of Dike

551+50 81'

100C LA

R/W Line

552+39 72'

R.R. Crossing Sign

24" R.C.P.

Limit of Construction

551+88.5 77'

U. S. A.

100B LA

24" C.M.P. M.H.

18" C.M.P.

PT 199 G O.L. 36

U.S.A.

Limit of Construction

100G LA

PT 199 G O.L. 36

BO - 60

BO - 3

B. & O.

103 LA

18" C.M.P. Toe Drain

PT 199 G O.L. 36

B. & O. R.R. Siding

Timber Retaining Curb

Cone. Sidewalk

6" Water Line

Cone. Sidewalk

BO - 59

PT 199 G - O.L. 36

8" V.C.P.

P. C. Sta. 554+39.28

B. & O.

PT 199 G O.L. 36

551+87.5 27.5'

P 97

12" V.C.P.

S 65° 54' 57" W

103 LA

P 199 G

552 553 N 24° 25' 30" W 554 555 556

W.P.R.R. (No Number)

THE MASSILLON PAPER COMPANY

551+88.5

113 LA

T.B.A. 8.195 Ac.

P.R.O. 0.035 Ac.

Street Light

OPSCo #252DA3 21 M.H.

Conc.

2" H.P. Gas Line

48" Seg. Blk. San. Sewer

48" Seg. Blk.

Existg. 2" H.P. Gas Line

M.H.

Timber Wall

12' Alley

ORD. #1223 DEDICATION

556+44 38'

48" R.C.C. P.X.

556+42.5 58.5'

556+43.5 50.4

O.L. 35

W. & L.E.

102C LA

Tile Blk. Garage

551+82 64.5'

552+38 39'

552+56 39.5'

114 LA

T.B.A. 0.470 Ac.

P.R.O. 0.021 Ac.

THE MASSILLON PAPER COMPANY

Fence, Type C

Existg. 8" V.C. Pipe San. Sewer

Existg. R/W

Fence, Type C

MASSILLON SPRING & RIVET CORPORATION

551+32.5 90'

113 LA

Limit of Construction

Bituminous

Cone. Pad

Construction

Existg. R/W

P 97 TR. B

O.L. 138

6" Conc. Curb

WALNUT ROAD (Bituminous)

6" Conc. Curb

6" H.P. Gas Line

Conc. Sidewalk

P.T. O.L. 36

Existg. R/W

Proposed Sanitary Sewer

554+00 63'

552+50.5 64'

552+52 95'

552+66.5 95'

554+39 96'

556+40.5 87.5

Conc. Blk. Scale House (Abandoned)

Limit of Construction

R/W Line

P 90 A O.L. 35

R/W Line

Metal Scrap Dock

N.P.R.R. (No Number)

552+66.5 138'

552+83 138.5'

Fuel Oil Tank & Hand Pump

OPSCo #2520A2 41

Brick Shed

4" Metal Pipe

OPSCo (No Number)

Wood Scale Platform

OPSCo #2520A2 43

Derailer

Track No. 27 D

P 200 J TR. B O.L. 32 W. & L.E. R.R.

END LIMITED ACCESS Sta. 551+52 158' Rt.

551+09 158'

1" Water Line

Water Line

1"-2" Sumac

12" V.C.P.

P 97 TR. B

O.L. 138

BEGIN LIMITED ACCESS Sta. 552+38-95' Rt.

OPSCo #2520A3 19

F.H.

G.V.

P 90A TR. B

Existg. R/W

OPSCo #2520A3 20

552+38 165'

Brick

114 TS

TS

Transformers

OPSCo #2520A2 60

Conc. Ramp

8" V.C.P.

14" Sumac

M.H.

8" x 18" Frame Sign

Metal Valve Box Water Meter

P 153 TR. 3

U. S. A.

551+88 158'

Gravel

12" V.C.P.

552+48 165'

552+83 169'

552+38 168.5'

Crushed Slag Drive

8" Sumac

ODTCo (No Number) 3- Sty. Brick

14" Sumac

12" Sumac

MASSILLON SPRING & RIVET CORPORATION

1- Sty. Brick

1- Sty. Corr. Metal

Bituminous

Warehouse 2- Sty. Brick

P 97 TR. C TS

102 TS

551+09 208'

551+87.5 208'

1- Sty. Brick

Guard Posts

Conc. Sidewalk

Conc. S.W.

5" Stone Curb

R.R. Crossing Sign

Wood R.R. Warning Sign

OPSCo #2520A3 18

N.P.R.R. #9572

12" V.C.P.

Conc. S.W.

Track No. 27 E

Track No. 17

Track No. 37

W. & L.E. R.R.

CURVE DATA
P.I. Sta. 562+13.52
Δ - 7° 13' 00" Lt.
D - 0° 28' 00"
R - 12,277.70'
T - 774.24'
L - 1546.43'
Ex - 24.39'

Sheet Completed
Date 1-27-60
Revised
Date 3-23-60
DATE 8-2-60
REVISED 113-LA, 114-LA
DELETED 100-E-LA, 100-E

STA. 551+00 TO STA. 557+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010 (5)	

163

8/23 R/W

STA.- 21 - 10.23

LIMITED ACCESS

BEGIN SHEET STA. 557+00

END SHEET STA. 563+00

558+00 74.5'

O.L. 29

R/W Line

U.S.A.

P.T. 199-G - O.L. 36

100 G LA

80-60 80-3

103 LA

559+13 51.5'

559+95 62.5'

Top of Dike

Limit of Construction

100W LA

560+50 77'

561+00 67'

P 200-F O.L. 29

R/W Line

P 200-J Tr. A O.L. 29

106 LA

562+89 41.5'

P 200-J Tr. A O.L. 32

B. & O. R.R.

Track No. 27C

Track No. 27B

560+72.5 60.5'

80-58

B. & O.

P 199 - G

558

558+89 00'

559

559+94 18.5'

P.T. 199-G - O.L. 36

560+73.5 32'

561+74 31.5'

P 200-J Tr. B O.L. 32

Track No. 29

562

562+93.5 12'

N 24° 25' 30" W

N 31° 38' 30" W

559+97.5 5'

561+29 60'

P.T. 199-G

-O.L. 36

O.P.S.Co. (No Number)

Track No. 27D

558+49 58.5'

102C LA

B. & O. R.R. & W. & L.E. R.R. Joint

W. & L.E. R.R.

560+66 73'

102D LA

100N LA

0.4536 Ac.

U.S.A. O.L. 30

P 199-F

0.0667 Ac.

100M LA

Proposed San Sewer

48" R.C.C. PX

557+61 64'

558+76.5 70'

P.T. 199-G - O.L. 36

Fence, Type C

M.H.

Limit of Construction

NOTE: See Sheet No 18

R/W Line

EKCO FOUNDATION INC.

R/W Line

P 200-J Tr. B O.L. 32

559+07.5 72'

102B LA

559+85 77'

560+41 80.5'

48" R.C.C. PX

Existing Pipeline Easement

562+25.54 63.82'

P-92 Tr. B

558+97.5 81.5'

O.L. 31

561+30.77 61.84'

Existing Pipeline Easement

558+64 82.5'

TRACT D - P 200-J

Track No. 30

P 200-J Tr. B O.L. 32

EKCO FOUNDATION INC.

107

O.L. 32 W. & L.E. R.R.

Track No. 29

559+56.79 182.74'

Track No. 42

Track No. 34

TRACT E - P 200-J

O.L. 31

560+19.58 188.41'

Track No. 31

CURVE DATA
P.I. Sta. 562+13.52
Δ - 7° 13' 00" Lt.
D - 0° 28' 00"
R - 12,277.70'
T - 774.24'
L - 1546.43'
Ex - 24.39'

Sheet Completed
Date 1-27-60
Revised
Date 3-23-60
Revised 100M-LA, Added 100N-LA 9-2-60

STA. 557+00 TO STA. 563+00 — RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010 (5)	

164

9 / 23 R/W

STA.- 21- 10.23

LIMITED ACCESS

Suspend U-1010 (5) | Begin UG-1010 (5) | End UG-1010 (5) | Resume U-1010 (5)

Sta. 563+58 | Sta. 568+16

563+49 86.5'

564+29 82'

565+93.04 70.43'

565+83.71 69.91'

565+83.87 65.22'

566+06.85 45.34'

566+06.85 44.84'

566+75.42 44.16'

566+75.42 45.10'

567+41.90 69.30'

567+60.89 84.94'

568+39.11 29.04'

568+30.5 17.5'

565+27.20 45.30'

567+61.5 2'

565+14.82 40.13'

565+14.82 39.63'

564+67.14 55.37'

565+40.18 39.41'

565+40.18 39.91'

564+63.27 58.71'

565+98.27 59.21'

566+08.51 94.07'

564+23.51 60.59'

563+89.64 61.84'

566+06 104'

567+00 89'

567+47 86.5'

567+68 76.5'

568+22 86.5'

568+12 86.5'

566+88 146'

567+34 154'

NOTE: See Sheet No. 18

NOTE: See Sheet No. 18

NOTE: See Sheet No. 18

NOTE: See Sheet No. 18

30" Wing Wall

30" Wing Wall

Top of Dike

Top of Dike

Track No. 27B

U. S. A.

U. S. A.

U. S. A.

O.L. 29

O.L. 30

O.L. 38

PENNSYLVANIA RAILROAD (2 Tracks)

P.R.R. Telegraph Pole

P.R.R. Telegraph Pole

P.R.R. Telegraph Pole

P.R.R. Telegraph Pole

P.R.R. Telegraph Pole

B & O. R.R.

PENNA. R. R.

PENNA. R. R.

R/W Line

Limit of Construction

P-200-J TRACT A P.T. O.L. 30

P 200-J TRACT A P.T. O.L. 30

P-199-F P.T. O.L. 30

P 199 F P.T. O.L. 30

P-92 TRACT A P.T. O.L. 31

P-199 E TRACT B P.T. South Ave.

P-199 E TRACT A

106 LA

104 B LA

100 P LA 0.0094 Ac.

100 K LA 0.0125 Ac.

100 N LA 0.4536 Ac.

100 M LA 0.0667 Ac.

104 C LA

104 A

115 LA 0.155 Ac.

115 A LA 0.304 Ac.

115 WA

107

PA-8

CHESTER K. CAMPBELL dba CAMPBELL OIL COMPANY

CAMPBELL OIL COMPANY

EKCO FOUNDATION INC.

Fence, Type C

Existing R/W

Existing Pipe Easement

Proposed 48" Sanitary Sewer

48" Brick San. Sewer

48" C.I.P. Extra Heavy

48" R.C.C.P.

12" C.M.P.

52" B.W.

30" Elm

Lot No. 9368

Lot No. 9373

Lot No. 9369

Lot No. 2136

Lot No. 2135

Lot No. 2134

Gravel Alley

Alley (Cinder)

Cinder Drive

SOUTH AVENUE

Cyclone Fence

Bituminous

Earth

Gravel

(Gravel)

(Bituminous)

1- Sty. Brick

1- Sty. Cone. Blk. Shed

1- Sty. Tile Block

Cone. Blk. Pump House

4- 20,000 Gal. Storage Tanks

Cone. Pad

Corr. Metal Shed

Water Meter

Gas Pump Tank Tops

Gasoline Tank Tops

Breather Pipe

Tank Top

Gas Sign

Gas Island

O.P.S. Co. #2520 Bl 45

Oil Tank Cap

Snow Fence

8" Sumac

4" Sumac

M.H.

G.V.

8" V.C.P.

6" Conc. Curb

Depressed Curb

Bit.

Conc.

Conc. Ramp

Conc. S.W.

W.V.

N 31° 38' 30" W

CURVE DATA
P.I. Sta. 562+13.52
Δ- 7° 13' 00" Lt.
D- 0° 28' 00
R- 12,277.70'
T- 774.24'
L- 1546.43'
Ex- 24.39'

R= 1286.43

BEGIN SHEET STA. 563+00

END SHEET STA. 569+00

Sheet Completed Date	1-27-60
Revised Date	3-23-60
Date	6-15-60
Revised Parcels 100 P LA & 138	
Date	7-13-60
Remove Parcel 104 B LA	
DATE	7-28-60

REVISED PARCEL 115-LA
Revised Pcls 100 P LA, 100 K LA, 100 M LA & 104 A LA, Added 100 N LA & 115 WA Lines 9-2-60

STA. 563+00 TO STA. 569+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

165

10 / 23

R/W

STA. - 21 - 10.23

LIMITED ACCESS

CURVE DATA
P.I. Sta. 562+13.52
Δ- 7° 13' 00" Lt.
D - 0° 28' 00"
R - 12,277.70'
T - 774.24'
L - 1546.43'
Ex - 24.39'

BEGIN SHEET STA. 569+00

END SHEET STA. 575+00

P-199 E TRACT A

U. S. A.

Top of Dike

12" C.M. Pipe

100R LA

570+02 87'

R/W Line

P-90

100S LA

P-89

P-151 TRACT 10

Lot No. 1060

M.H.

15" C.M. Pipe

104C LA

PENNA. R. R.

Limit of Construction

PA-8

104A

569+38 68'

Lot No. 1064

572+24 56.5'

573+90.5 71.5'

574+10 49'

Lot No. 1059

Conc. & Brick pump House

P-88C

100T LA

572+92 63'

P-88

100J LA

574+25.5 49.5'

101 LA 0.845 Ac.

48" Brick San. Sewer

P.T. Sta. 569+85.71

48" Seg. Block San. Sewer

572+19 28'

15" R.C. Pipe

572+89 45'

Lot No. 1057

574+27 18.5'

MASSILLON CONSERVANCY DISTRICT

STOPPO CREEK

569+26.5

570

571

Earth Drive

572

573

N 31° 38' 30" W

574

Ditch

P-88C

569+86.5 11'

569+68 8'

CAMPBELL OIL COMPANY

Conc. Walk

140" Stump

570+45.5 22.5'

570+63.5 25.5

P-87

Lot No. 1056

574+30 46'

Fence Gate Type C

Fence Type C

42" Willow

574+71 54'

48" Seg. Blk. Pipe San. Sewer

574+14 47'

574+57 54'

574+91 67'

30" Stump

1½ - Sty. Fr. Dwg.

0.103 Ac.

116 LA

570+59.5 46'

JOSEPH W. OATS

0.069 Ac.

117 LA

Lot No. 2127

0.102 Ac.

EARLE S. JAMISON

34" Poplar

OPSCo. #2521C4 15

W.V.

Joint

2- Sty. Fr. #235

Lot No. 2136

0.304 Ac.

115A LA

570+54 77'

118 LA

8" Apple

10" Apple

570+64 92'

6" Plum

Stone Walk

Lot No. 2126

MINNIE B. SNYDER

Proposed 48" Sanitary Sewer

Cyclone Fence

Wood Fence

Barricade

Stone

2½ Sty. Shingle

233

Fence Type C

Barricade

Limit of Construction

MASSILLON CONSERVANCY DISTRICT

573+89 87.5'

573+60 87.5'

OPSCo. #2521C4 12

OPSCo. #2521C4 13

OPSCo. #2521C4 14

8" Water Line

F.H.

2" Gas Line

G.V.

8" V.C.P.

15" V.C.P.

6" Poplar

4" Elm

Lot No. 11143

Channel

101 LA 0.845 Ac.

101 LA 0.076 Ac.

OPSCo. (No Number)

574+91 69'

RW

RW

574+57.5 100.5'

569+53 88.5'

R/W Line

569+71 89'

570+32.5 51'

570+51 91.5'

Lot No. 2128

Lot No. 2135

Gravel

Drive (Earth)

1- Sty. Tile Block

MINNIE B. SNYDER

Alley (Cinder)

Lot No. 2134

Cyclone Fence

12" Sumac

8" Sumac

Board Fence

(Brick)

(Concrete)

3- Sty. Brick

Alley (Cinder)

WA

119 WA

570+62 100'

Lot No. 2125

570+49 98'

OLLIE L. NEAL

Conc.

119 LA 0.016 Ac.

571+46 95'

R/W Line

1- Sty. Fr. #229

2- Sty. Fr.

Wood pad

Chicken Coop

Conc.

2- Sty. Fr. #227

4" Elm

10" Conc.

Existing R/W

Row of Fence Posts

10" Apple

6" Apple

6" Peach

Wire Mesh Fence

Frame Garage

2- Sty. Shingle #223

Stone

Frame Garage

24" Maple

14" Sumac

Frame Shed

(Cinder)

Brick

OAK AVENUE (Earth)

Earth

Conc. Sidewalk

Existing R/W

Conc. Stairwell

571+95 96.5'

571+93.5 104'

572+61.5 99'

R/W Line

573+55 102'

573+86 103'

Lot No. 1069

MASSILLON CONSERVANCY DISTRICT

Lot No. 1070

26" Willow

573+54.5 134'

P-87A

574+42.5 144'

22" Elm

101 X 0.222 Ac.

Lot No. 1071

573+54.5 200'

574+34 182'

P-87B

Lot No. 1068

14" Locust

1½ - Sty. Brick Church A.M.E.Z. CHURCH

573+66.5 202'

14" Sumac

574+16.5 217'

573+65.5 207'

Lot No. 1067

Gas Meter

Post Pg.

Lot No. 1072

Mesh Fence

P-87C

Sheet Completed
Date 1-27-60

Revised
Date 2-11-60
Parcel 101 C LA
Parcel 101 C
DATE 7-27-60
REVISED PARCELS 101, 101-X, 101-LA, 116-LA, 117-LA, 118-LA, 119-LA DELETED 101-J-LA, 101-C, 101-J-X, 101-P-LA, 101-B-LA, 101-C-LA, TOM

STA. 569+00 TO STA. 575+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

166

11
23
R/W

STA.- 21- 10.23
LIMITED ACCESS

SPIRAL CURVE DATA

P.I. Sta. 597+73.67
Δ - 60° 40' 16" Rt.
D - 2° 07' 30"
L.S. - 300.00'
R - 2696.27'
θs - 3° 11' 15"
P - 1.39'
Xc - 299.91'
Yc - 5.57'
K - 149.99'
L.T. - 200.03'
S.T. - 100.03'
Lc - 2555.11'
Ts - 1728.62'
Es - 429.34'

BEGIN SHEET STA. 575+00

END SHEET STA. 581+00

MASSILLON CONSERVANCY DISTRICT

U.S.A.

575+56 84.5'

152 TRACT 5

15" C.M.P.

R/W Line

576+24.5 80'

MASSILLON CONSERVANCY DISTRICT

Limit of Construction

578+39 61.5'

R/W Line

U.S.A.

Top of Dike

578+42 75.5'

PA-8

PENNA. R.R.

104C LA

Western Union

Lot No. 1058

576+30 47'

Lot No. 1054

104D LA

PA-9

PENNA. R.R.

Western Union

M.H.

575+49 48'

MASSILLON CONSERVANCY DISTRICT

Lot No. 1054

Lot No. 1057

576

577

N 31° 38' 30" W

578

578+31.5 21.5'

578+95

OPSCo # 252104-2 29

2"x6" Wood Pole

578+27.5

0.845 Ac.

101 LA

TD-14 TRACT B

Earth Road

12" Water Line

(Supported On Bridge)

15" V.C.P.

123 LA

0.564 Ac.

Lot No. 1056

Lot No. 1053

Lot No. 1052

J. S. SANDERS

Wire Fence

Parking Lot (Gravel)

48" V.C.P.

Lot No. 1051

Limit of Construction

Fence, Type C

575+28.5 68'

576+08 70'

576+62 11.5

577+81 95'

577+97 95.5'

Single Strand Wire Fence on Channel Iron Posts

Wood Curb

578+09 100'

Catch Basin

OPSCo # 252104-2 30

OPSCo # 252104-2 32

48" Seg. Blk.

THIRD STREET (Abandoned)

END LIMITED ACCESS STA. 577+81 143.5' Rt.

24" V.C.P.

Blocked Off

18" V.C.P.

577+99 147.5

Parking Sign

3'x5' Metal Sign

OPSCo (No Number)

Lot No. 11142

Used Car Lot

Wire Fence

Parking Lot

J. S. SANDERS

Lot No. 295

123

0.019 Ac.

RW

577+82.5 236'

34" Maple

Bit.

24" V.C.P.

Conc. Sidewalk

26" Maple

MASSILLON CONSERVANCY DISTRICT

101 LA

Lot No. 11143

0.076 Ac.

OPSCo (No Number)

575+20 112.5'

TREMONT AVE.

Western Union Conduit

Western Union M.H.

578+97.5 12'

PA-9

18" V.C.P.

40" Poplar

36" Aspen

578+89 33.5'

579+91

579+87.5 46.5'

0.159 Ac.

101A LA

MASSILLON CONSERVANCY DISTRICT

580+41.5 7'

150A LA

40'

Lot No. 164

104D LA

U.S.A.

580

579

P-151

TRACT-7

580+39 6.5'

580+39 5.5'

U.S.A. 0.208 Ac.

150B LA

MASSILLON CONSERVANCY DISTRICT 0.059 Ac.

101B LA

580+59 8'

580+45.05

580+54 31'

Lot No. 163

130 LA

580+50 Limit of Construction 53'

Fence, Type C

Lot No. 162

THE RED HEAD OIL COMPANY 0.075 Ac.

580+30 51'

580+50 55'

Lot No. 161

(Earth)

Privet

Lot No. 160

OPSCo #252104-2

(Bituminous)

Gasoline Tank Valves

18 Wood Fence

Conc. Gas Island & Air Hose

Frame Garage

Gravel

6" Conc. Ret. Wall

Privet

Gasoline Tank Valve

THE RED HEAD OIL CO. (Bituminous)

Lot No. 159

Existing R/W

Conc.

Depressed Curb

36" V.C.P.

THIRD STREET

DIAMOND COURT (Earth)

Lot No. 169

580+30.5 49'

579+87.5 48'

Lot No. 174

Lot No. 175

579+32.5 53'

15" Sumac

18" Walnut

12" Apple

Fr. Garage

Bit.

R/W Line

124 LA

0.042 Ac.

2-Sty. Shingle

AUDREY J. SNOWDEN & GEROTHA McGOWAN

578+83 63'

Privet Hedge

Brick

W.V.

579+34 55'

579+86.5 52.5'

580+28 60.5'

Lot No. 173

Wire Mesh Fence

6" Willow

Lilac

Lot No. 172

Conc.

0.057 Ac.

DONALD E. RICHARDSON

2-Sty. Shingle

#67-71

Limit of Construction

Earth

Conc. Walk

579+22.5 12.5'

125 LA

14" Sumac

579+30.5 72'

ARCHIE & LILLY CAMERON

2-Sty. Shingle

#57

#51

2-Sty. Shingle

2½-Sty. Shingle

DIAMOND COURT

Conc. Sidewalk

Catch Basin

W.V.

18" Maple

6" Stone Curb

Stone Flower Box

Top Metal Cover

S.V.

6.V.

6" Willow

Conc.

Bushes

OBTCo # 2031

36" V.C.P.

N 20°39'07" W

(Bituminous over Brick)

BEGIN LIMITED ACCESS STA. 579+22 122' Rt.

M.H.

578+61.5 176.5

OPSCo #252104-2 28

Street Light

26" Elm

OPSCo #252104-2 27

W.V.

G.V.

Conc.

Limit of Construction

OPSCo #252104-2 20

OPSCo #252104-2 19

H-Frame

6" Stone Curb

Street Marker

Earth

Conc. Sidewalk

Existg. R/W

Hedge

T.S.

Maple

2" Sumac

6" Sumac

Street Light

129 T.S.

579+25.5 187.5'

Lilac

#56

#52

2½-Sty. Shingle

578+57 196.5

1-Sty. Brick Shingle

2-Sty. Brick Shingle

RALPH L. PHILLIPS #66

Lot No. 189

Wire Mesh Fence

Lot No. 186

Lot No. 188

Brick

Conc.

32" Locust

12" Cherry

CHARLES AVE. (Bituminous)

S 69°17'45" W

Sheet Completed Date 1-27-60

Revised Date 2-11-60
Parcels 101 C LA
101 C
Parcels 101 D LA
123 LA & 123 A
DATE 7-27-60
REVISED PARCELS 130-LA, 101-B-LA, 150-B-LA, 101, 101-LA 101-A-LA, DELETED 101-B-LA 101-C-LA, 101-C, 123-A, 101-F-LA
Revised Limited Access & Area Parcel 123-2 123 LA & 124-LA
REVISED PCL. 124-LA-NAME 1-9-61

STA. 575+00 TO STA. 581+00 — RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

167

12
23
R/W

STA.- 21- 10.23

LIMITED ACCESS

SPIRAL CURVE DATA

P.I. Sta. 597+73.67
Δ - 60° 40' 16" Rt.
D - 2° 07' 30"
L.S. - 300.00'
R - 2696.27'
θs - 3° 11' 15"
P - 1.39'
Xc - 299.91'
Yc - 5.57'
K - 149.99'
L.T. - 200.03'
S.T. - 100.03'
Lc - 2555.11'
Ts - 1728.62'
Es - 429.34'

BEGIN SHEET STA. 581+00

END SHEET STA. 587+00

LINCOLN WAY

THIRD STREET

FEDERAL AVE. S.W. (Bit.)

Sheet Completed
Date 1-27-60

Revised
Date 3-23-60
Date 7-13-60
Add Parcel
104 G LA
DATE 7-25-60
REVISED PARCELS
130-LA, 101-B-LA, 150-B-LA,
101-F-LA, 101-G-LA, 132-LA
DELETED 101-F-LA, 101-G-LA
Deleted 132 WA 8-16-60
Revised LA Line From
Sta. 586+80 to 587+00
8-5-61

STA. 581+00 TO STA. 587+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010 (5)	

168

13
23

R/W

STA.- 21- 10.23

LIMITED ACCESS

SPIRAL CURVE DATA

P.I. Sta. 597+73.67
Δ - 60° 40' 16" Rt.
D - 2° 07' 30"
L.S. - 300.00'
R - 2696.27'
θs - 3° 11' 15"
p - 1.39'
Xe - 299.91'
Ye - 5.57'
K - 149.99'
L.T. - 200.03'
S.T. - 100.03'
Le - 2555.11'
Ts - 1728.62'
Es - 429.34'

N 31° 38' 30" W

BEGIN SHEET STA. 587+00

END SHEET STA. 593+00

587+00 40'
588+00 45'
588+86.5 32'
589+00 50'
589+30.5 32'
590+00 48'
591+00 47'
591+30.5 46'
591+33 30'
592+00 46'
592+19
592+47 7'
592+60 71'
592+67.5 103'

U.S.A.
R/W Line ℄
15" C.M.P.
M.H.
12" C.M.P.
104 G LA
150C LA
Top of Dike
P-71 U.S.A.
150G LA
P-65
Limit of Construction
104 E LA
PA-10
PENNA R.R.
588
589
590
591
592
589+33 8'
589+33
589+33.5 2.5'
589+34.5 13'
588+75 9.5'
587+98 8'
THE OHIO DRILLING COMPANY
132 LA
0.559 Ac.
590+37 12.5'
590+36 1.5'
591+38 0.5'
O.L. 13
136 LA 0.120 Ac.
150H LA
U.S.A.
12" C.M.P.
104E LA
Guard Rail
R/W Line
O.L. 12
THE OHIO DRILLING COMPANY
588+08.5 36.5'
1- Sty. Brick
Conc. Wall Track Support
Earth
8.5'
Conc.
133 LA 0.154 Ac.
1- Sty. Tile Block
5- Sty. Brick
134 LA 0.119 Ac. CATHERINE KOLEK
Conc. Blk. Garage
14" Apple
Lilac
2- Sty. Insulbrick
12" Sumac
6" Sumac
CATHERINE KOLEK
Lot No. 9249
588+91 61'
589+38.5 62.5'
590+43.5 64'
591+47.5 61'
591+59.5 123'
Fence, Type C ℄
Limit of Construction ℄
132 LA 0.559 Ac.
LEWIS E. & ANN G. LEMMON
O.L. 12
1- Sty. Conc. Blk.
THE OHIO DRILLING COMPANY
WA
Truck Scales
Gas Pump
133 WA
Conc.
O.L. 14
ANTHONY FULMER
Gravel
Brick
Conc. Blk. Garage
Lilac
Lawn
Conc. Walk
Drive (Gravel)
Parking Lot & Pipe Yard
Pipe Shed
Bituminous Drive
Bituminous
3- Sty. Brick
Cyclone Fence
P.C. Iron Pin
Conc. Sidewalk
Existg. R/W
Gravel
Parking Sign
#2521C1-3 5
#2521C1-3 2
#2521C1-3 19
#2521C1-3 18
#2521C1-3 1
#2521C2 36
#2521C2 35
OPSCo
OBTCo #12610
26" Maple
34" Maple
30" Maple
22" Maple
F.H.
G.V.
W.V.
12" V.C.P.
15" V.C.P.
24" V.C.P.
10" V.C.P.
Depressed Curb
Bituminous Sidewalk
(Bituminous)
THIRD STREET
30" Seg. Blk. San. Sewer
Drive (Bituminous)
Guard Rail
MASSILLON CONS. DIST.

Sheet Completed
Date 1- 27- 60

Revised
Date 3-23-60
Date 7-13-60
Add Parcel
104 G LA
DATE 7-25-60
REVISED PARCELS
132-LA 136-LA, 134-LA
Deleted 132 WA 8-16-60
Revised L&B Line From Sta. 587+00 To 588+91 9-2-61
DELETED PCL.: 134-WA
ADDED INSERT 8-14-62
DELETED INSERT REVISED R/W LINE PCL.: 136-LA 10-25-62

STA. 587+00 TO STA. 593+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010 (5)	

169

14/23 R/W

STA. - 21- 10.23

LIMITED ACCESS

SPIRAL CURVE DATA

P.I. Sta. 597+73.67
Δ - 60° 40' 16" Rt.
D - 2° 07' 30"
L.S. - 300.00'
R - 2696.27'
θs - 3° 11" 15"
P - 1.39'
Xc - 299.91'
Yc - 5.57'
K - 149.99'
L.T. - 200.03'
S.T. - 100.03'
Lc - 2555.11'
Ts - 1728.62'
Es - 429.34'

BEGIN SHEET STA. 593+00

END SHEET STA. 599+00

P-63 · P-62 · U.S.A. · P-151 TRACT-5 · P-61B TRACT-A · P-61 TRACT-A · P-61 TRACT-B · P-61B TRACT-B · P-153 TRACT-4 · P-72

Abandoned Third Street

Approx. Old Channel ℄

Cherry Road Siphon 15" 18" 10"

R/W Line · Limit of Construction · 12" C.M.P. · Top of Dike

593+08 47' · 150J LA · 594+12.5 48' · 594+16 34' · 595+06 49' · 596+04.5 49' · 597+00 48'

150H LA · 594+95.5 35' · 150M LA · 595+85 36.5' · 596+13.5 36.5'

104E LA · 593+17 8' · 593+11.5 33' · 593+18.5 · 594+23.5 4' · 594+73 5' · PA-10

PENNA. R.R. O.L. 15 · Metal Trap Door · Conc.

Conc. Pit Coal · Conc. Blk. Garage 0.119 Ac.

594 · 594+24.5 · 595 · 596 · 597

593+18 3.5' · 595+51 6' · 596+14 7' · 150T LA

M.H. · 18" C.M.P. · Storm Sewer 24" C.M.P. · Limit of Construction · R/W Line

134 LA · 133A LA 0.181 Ac. · 150K LA · 150L LA · 150P LA

30" Seg. Blk. San. Sewer

597+80 6' · 598 · 597+62 1' · Guard Rail

ANTHONY FULMER Lot No. 9248

593+11.5 68 · 594+36 43' · 594+08 77.5' · 594+66.5 78.5' · 594+89 79' · 595+59 63.5' · 596+21 44' · 596+24 53'

Limit of Construction · Fence, Type C · Existg. 2" Gas Line

150 P · 150U LA · 150 L

T.B.A. 0.300 Ac. P.R.O. 0.678 Ac. · 101-C LA

MASSILLON CONSERVANCY DISTRICT · Existg. 12" Water Line

2-Sty. Insulbric #315 · Yard · Cool R/W Line

593+37.5 75.5 · 593+78 112.5' · 594+83 87.5' · 595+07.5 80' · 595+45.5 81' · 596+20 81' · 597+76.5 75' · 597+91.5 67'

M.H. · R/W · 30" Seg. Blk. San. Sewer · Conc. S.W. (Buried) · Gravel Driveway · Lawn · Conc. Walk · Lot No. 9249

CATHERINE KOLEK

Barricade · Existg. 12" Water Line · OECo #2521-C2 30 · Conc. Sidewalk · Guard Rail · 24" V.C.P. · Fence, Type C · Existg. R/W

THIRD STREET (Bituminous) · OECo #2521-C2 29 · Conc. Sidewalk · Guard Rail · 24" V.C.P.

598+02 93.5' · 598+71 69' · 101C LA · R/W Line

CITY OF MASSILLON

Sta. 24+07.00 Third St. = Sta. 0+00 Third St. Conn.

24 · M.H. · 30" Seg. Blk. San. Sewer · 80° 03' 10" · 15" V.C.P. · 12" V.C.P. · OPSCo #2521 C2 27

Conc. Sidewalk · Gravel · Guard Rail · Street Marker · U.S.A.

THIRD ST. · E. SMALLY · MASSILLON CONSERVANCY DISTRICT · CITY OF MASSILLON

54" C.M.P. · WEIRICH BLVD. N-W (Bituminous) · 6" Conc. Curb · OPSCo #2521 C2 52

MASSILLON CONSERVANCY DISTRICT

Cyclone Fence & Billboards · Ball Park

Sheet Completed Date 1-27-60

Revised
Date 3-23-60
Date 7-13-60
Change Parcels 101 H LA, 150 T LA, 150 S LA, 150 P LA
DATE 8-3-60
REVISED 101-C LA, 134-LA 133-A-LA DELETED 101-H-LA, 105-S-LA DELETED PCL.-134-WA
8-14-62
REVISED R/W LINE PCL. 134, LR 10-2662

STA. 593+00 TO STA. 599+00 — RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA. - 21 - 10.23
LIMITED ACCESS

170
15
23
R/W

END LIMITED ACCESS
STA. 599 + 89
97' Lt.

BEGIN LIMITED ACCESS
STA. 600 + 54
97' Lt.

Sta. 600 + 75.39 ℄ =
Sta. 4 + 95.54 Cherry Rd.

END ACQUISITION
STA. 601 + 30
50' Lt.

599 + 96.5
80'

600 + 54
91'

600 + 70
65.5'

U.S.A.
P-61, TRACT A
599 + 48.5
47.5'

Top of Dike

R/W Line 7

Limit of Construction

U.S.A.

Street Marker

150 R LA

150 T LA

Existing R/W 7

Existing Guard Rail

Existing 6" Water Line

M.H.

Conc. Gutter

12" R.C. Pipe

24" V.C. Pipe

24" C.M. Pipe Storm Sewer

W.V.

600 + 32.5
8'

601 + 00
50'

Existing 12" Water Line

BEGIN SHEET STA. 599 + 00

END SHEET STA. 605 + 00

(Bituminous) ℄ 600

599 + 29
6'

MASSILLON CONSERVANCY DISTRICT

Conc. Sidewalk

599 + 51
47.5'

T.B.A. 0.300 Ac.
P.R.O. 0.678 Ac.
24" Pipe Storm Sewer

101 C LA

Guard Fence

Traffic Signal

School Zone Sign

8" V.C. Pipe Sanitary Sewer

18" V.C. Pipe Storm Sewer

Steel Light Pole

600 + 30.5
33.5'

599 + 50
66'

Fence, Type C 2

600 + 00
75.5'

600 + 50
88'

MASSILLON CONSERVANCY DISTRICT

101 C LA

T.B.A. 0.300 Ac.
P.R.O. 0.678 Ac.

Limit of Construction

R/W Line

601 + 03.5
116'

6" Beveled Curve

Traffic Light (10' Steel Pole)

601 + 58
86.5'

Existing 4" Gas Line

O.P.S.Co. #2621 #1

S 69° 37' 16" W

W.V.

Concrete Port.

6" Conc. Curb 7

Street Light

Steel Pole

12" V.C.P.

602

U.S. Route 21

603

604

12" R.C. Pipe

602 + 37
40'

603 + 46
40'

603 + 67.5
43'

R/W Line & Fence, Type C

Existing R/W 7

602 + 36.5
44.5'

Cyclone Fence

Limit of Construction
Fence, Type C 2

135 LA

Bit. Court

HORACE MANN SCHOOL

END ACQUISITION
STA. 603 + 62
43.5' Rt.

601 + 90.5
107'

601 + 87
108'

R/W Line 2

8" Conc. Walk

602 + 15
157'

BEGIN LIMITED ACCESS
STA. 602 + 0.5
162' Rt.

MASSILLON CITY SCHOOL DISTRICT

30" Maple

Lot No. 3598

Lot No. 3597

SPIRAL CURVE DATA

P.I. Sta. 597+73.67	Ye - 5.57'
Δ - 60° 40' 16" Rt.	K - 149.99'
D - 2° 07' 30"	L.T. - 200.03'
L.S. - 300.00'	S.T. - 100.03'
R - 2696.27'	Lc - 2555.11'
θs - 3° 11' 15"	Ts - 1728.62'
P - 1.39'	Es - 429.34'
Xc - 299.91'	

600 + 98
132.5'

12" Elm

601 + 16
159'

Gravel

O.P.S.Co. #2621 #2

601 + 25.5
153.5'

22" Willow

Earth Drive

Lot No. 2

601 + 33.5
146.5'

Conc.

2½-Sty. Shingle Dwg.

Brick

Lot No. 3

MASSILLON CONSERVANCY DISTRICT

14" Twin Mulberry

12" Mulberry

151

H.G. JORDEN

Cyclone Fence ?

EVA M. BARTH

152 LA

END LIMITED ACCESS
STA. 601 + 51
193' Rt.

Tile Blk. Gar.

Light Pole

Conc. Walk

2½-Sty. Shingle Dwg.

Earth Drive

Fr. Gar.

Lot No. 4

Lot No. 5

Brick Drive

Conc. S.W.

Existing R/W 7

Bituminous Port.

CHERRY ROAD N.W. 2

Existing 8" Water Line

6" Conc. Curb 7

Existing R/W

Conc. S.W.

O.P.S.Co. #2621 #3

O.P.S.Co. #47

Steel Pole

Conc.

Br.

Earth

Sheet Completed
Date 1-27-60
Revised
Date 3-23-60
Date 7-13-60
Change Parcels 150 T LA, 101 H LA
DATE 8-3-60 REVISED 101-C-LA DELETED 101-H-LA
9-14-60 Added Pcls 151-LA & 152-LA Deleted Pcl.-151-LA 8-8-62

Scale : 1" = 20'

STA. 599+00 TO STA. 605+00 - RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-U6-1010(5)	

STA.- 21-10.23

171

16
23
R/W

THIRD STREET (Bituminous)

Conc. Sidewalk

Guard Fence

O.P.S.Co. #2521-G2 27

Existing R/W Line

CITY OF MASSILLON

0+58 28'

0+48 45.5'

0+73 25'

RW

54" C.M.P. Storm Sewer

Existing R/W Line

6" Conc. Curb

WEIRICH BLVD. (Bituminous) N.W.

Sta. 2+24.99 Third St. Conn. = Sta. 5+00 Weirich Blvd.

AGATHON BALL PARK

Cyclone Fence & Billboards

END WORK Sta. 6+63.5

48" Triple Willow

Gate

O.P.S.Co. #2521C1-2 2

Street Light

6" Conc. Curb

Cyclone Fence

Conc. Sidewalk

Cast Iron 8" Water Line

1st STREET (Conc.)

℄ THIRD STREET CONNECTION

N 59° 25' 19" E

Clothes Post

0+48 29.5'

0+78.5 17' 1

0+28 27'

137

0+79.5 25'

0+94 25'

126

RW

RW

E. SMALLY

CITY OF MASSILLON

O.L. 11

0+22 59

Gravel

M.H.

F.H.

24" V.C.P. San. Sewer

M.H.

24" V.C.P.

Cyclone Fence

Drive (Bituminous)

Gate

Conc. Blk. Bldg.

2521 C1-2 O.P.S.Co. Street Light Dead End

S 68° 14' 46" E 552.19'55"

M.H.

8" V.C.P.

10" V.C.P.

15" V.C.P.

12" V.C.P.

M.H.

12" V.C.P.

M.H.

Existing R/W Line

54" C.M.P.

END WORK Sta. 6+00

Existing R/W Line

1" Peach Trees

Clothes Post

O.P.S.Co. #2521C1-2

Stone Wall

Brick Border

Metal Post

Cast Iron 8" Water Line

Metal Clothes Pole

48" Willow

Stone Mon.

24" V.C.P.

San. M.H.

24" V.C.P.

30" C.M. Pipe Storm Sewer (Approx. Location)

6" Triple Catalpa

Conc.

1-Sty. Shingle

Stone Mon.

Conc.

2-Sty. Shingle

Bar & Grill 1-Sty. Shingle

1-Sty. Store

Conc.

2-Sty. Shingle

Earth Drive

Well & Pump

Conc. Blk. Garage

Privet Hedge

Conc. Sidewalk

G.V.

W.V.

The City Will Acquire Right-of-Way For First Street Connection Between First Street And Third Street. There Will Be No Federal Participation In The Right-of-Way For This Portion of Project.

Sheet Completed Date 1-27-60

Revised Date 3-23-60

Scale : 1" = 20'

THIRD STREET CONN. STA. 0+00 to STA. 6+63.5 RIGHT OF WAY PLAN

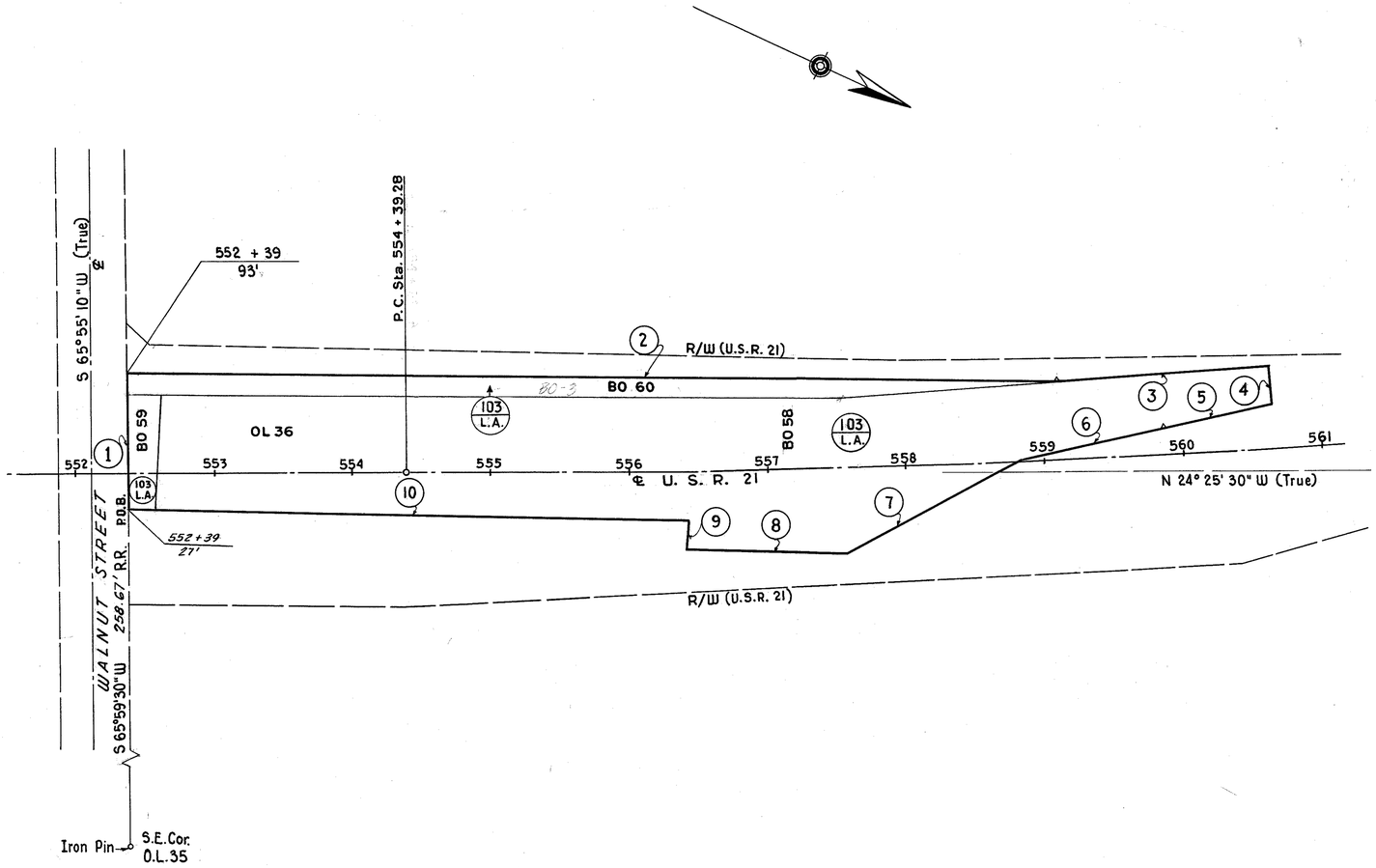
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG-1010(5)	

172

STA.-21-10.23

LIMITED ACCESS

17/23 R/W



BOUNDARY LINES		
LINE	BEARING	DISTANCE
	103 LA B.&O.R.R.	
1	S 65°59'30" W	97.69
2	N 23° 27' 41" W	670.53
3	N 30° 08' 54" W	159.73
4	N 59° 51' 06" E	28.92
5	S 36° 37' 36" E	80.95
6	S 36° 37' 36" E	105.99
7	S 52° 22' 03" E	143.04
8	S 23° 00' 30" E	118.00
9	S 69° 11' 00" W	20.03
10	S 23° 00' 30" E	407.30

AREA

T.B.A. 1.6311 Acres
P.R.O 0.0411 Acres

Above Bearings Based on Assumed North which is 0° 04' 20" Left of True North

Information Taken From
B. & O. R. R. CO., Wheeling Division
STATION MAP V122-4 / S 29

Refer to R/W Plans - Sheets 7 & 8
Refer to Design Plans - Sheets 20 & 23

Revised 8-3-60

Scale: 1" = 50'

Property to be Acquired from the B.& O. R.R. Co.

B & O R.R. RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG - 1010 (5)	

173

18/23

R/W

STA. - 21 - 10.23

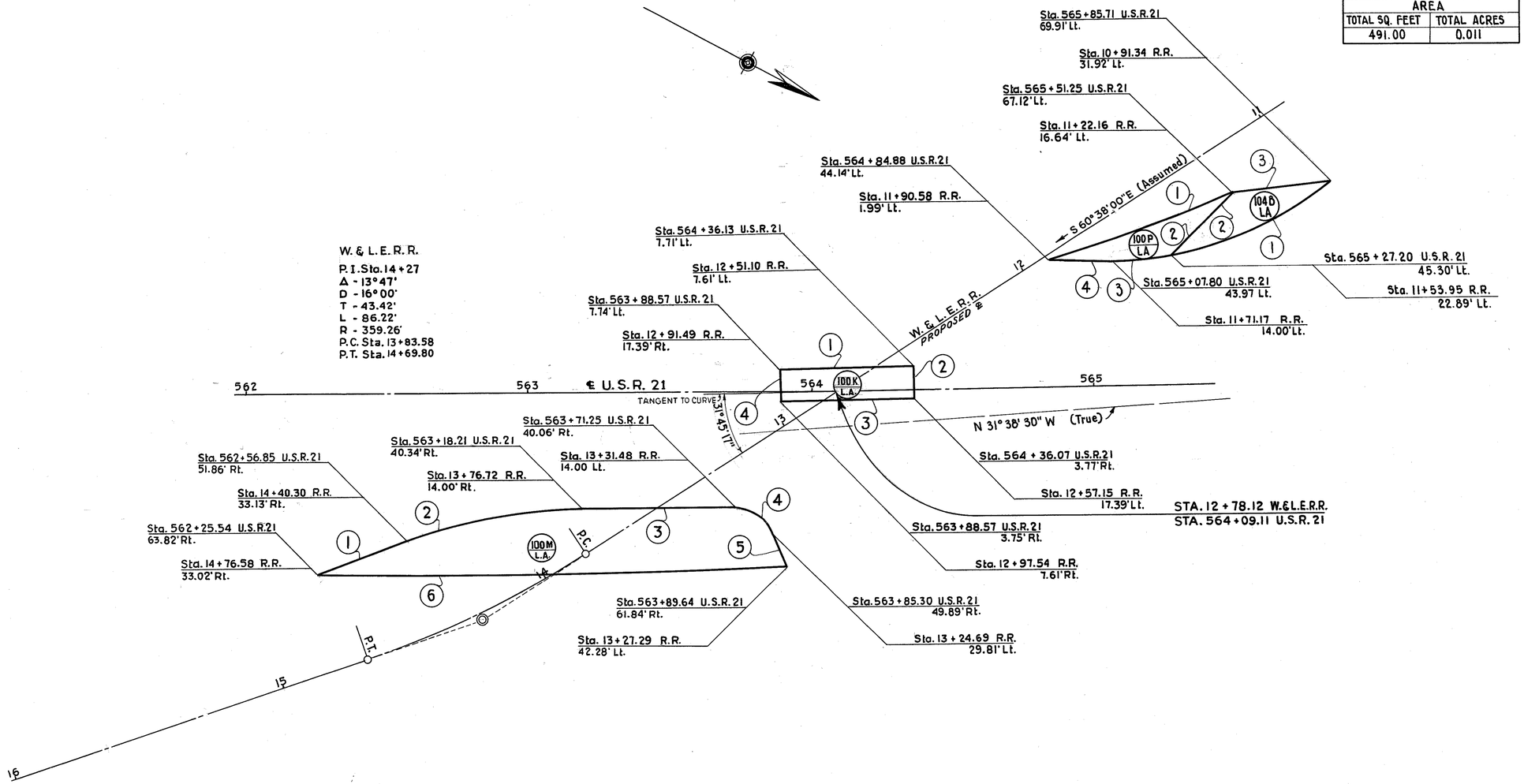
LIMITED ACCESS

BOUNDARY LINES		
104-B LA To Be Acquired From P.R.R.		
COURSE	BEARING	DISTANCE
1 ARC	R= 125.00'	Rt. 63.46
CHORD	S 52°25' 32" E	63.26
2 ARC	R= 1713.21	Rt. 32.40
CHORD	N 71°45'49" W	32.40
3 ARC	R= 2897.93	Lt. 34.42
CHORD	N 34° 15' 31" W	34.41
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
491.00	0.011	

BOUNDARY LINES		
100 P LA		
COURSE	BEARING	DISTANCE
1 ARC	R=598.69'	70.00
CHORD	N 48°32' 55" W	69.96
2 ARC	R= 1713.21'	32.40
CHORD	S 71°45'49" W	32.40
3 ARC	R= 125.00'	19.40
CHORD	S 33°19'34" E	19.38
4	S 28°52'43" E	22.82
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
409.00	0.009	

BOUNDARY LINES		
100 K LA		
COURSE	BEARING	DISTANCE
1	N 28°52'43" W	47.50
2	N 61°07'17" E	11.50
3	S 28°52'43" E	47.50
4	S 61°07'17" W	11.50
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
546.25	0.0125	

BOUNDARY LINES		
100 M LA		
COURSE	BEARING	DISTANCE
1	N 48°55' 55" W	33.64
2 ARC	R=180.00'	63.00
CHORD	N 38°54'19" W	62.68
3	N 28°52'43" W	53.20
4 ARC	R= 15.00'	18.33
CHORD	N 06°07' 50" E	17.21
5	N 41°08' 17" E	12.73
6 ARC	R=3,017.93	164.98
CHORD	S 29°05'22" E	164.97
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
2,907.36	0.0667	



Above Bearings Based on Assumed North which is 0°04'20" Left of True North

Refer to R/W Plans - Sheets 8 & 9
Refer to Design Plans - Sheet 12

Scale 1" = 20'

Property to be Acquired from the U. S. A. for the W. & L. E. R. R. Co.

REVISED 104-B 7-28-60

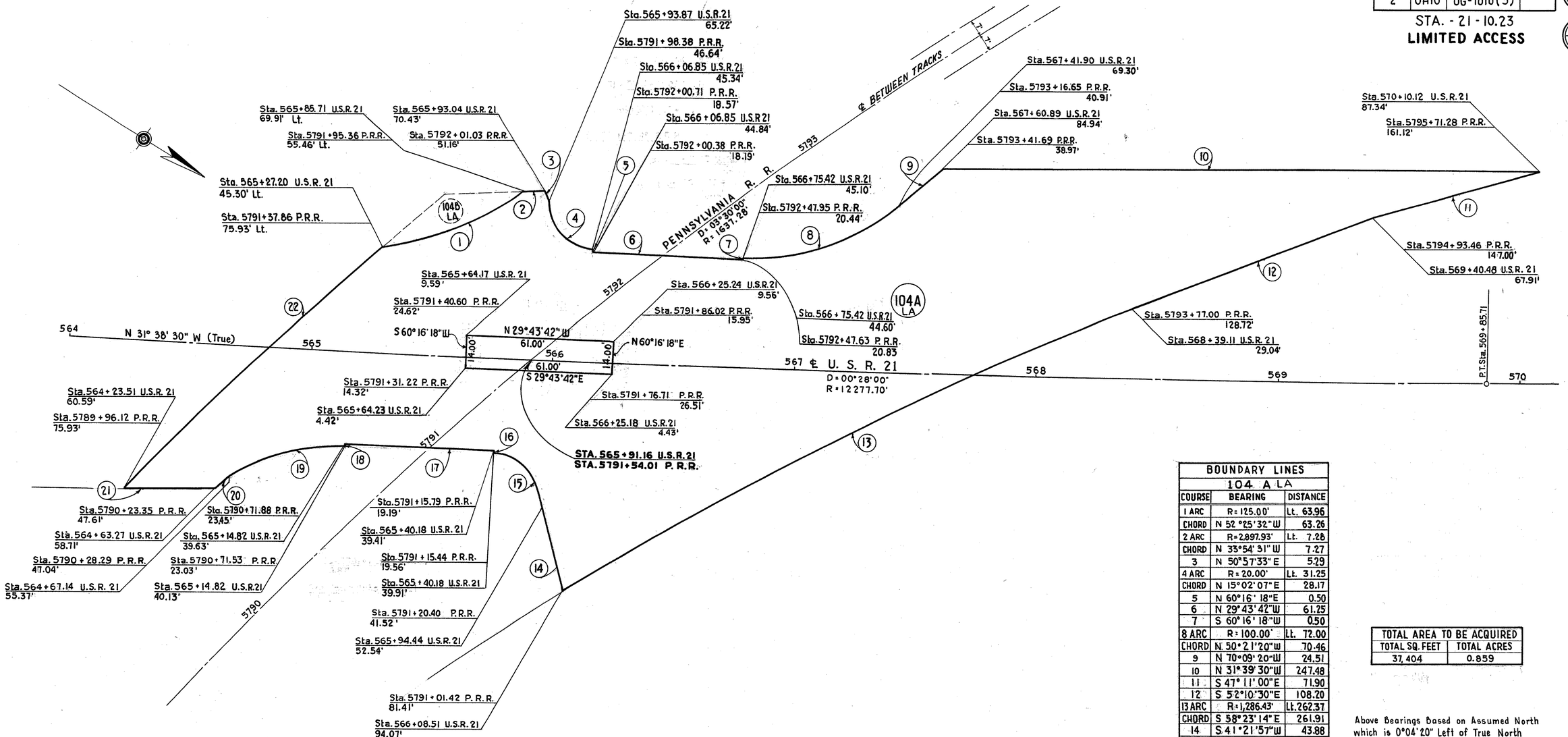
W & L. E. R. R. RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG-1010(5)	

174

19
23
R/W

STA. - 21 - 10.23
LIMITED ACCESS



BOUNDARY LINES		
104 A LA		
COURSE	BEARING	DISTANCE
1 ARC	R=125.00'	Lt. 63.96
CHORD	N 52°25'32"W	63.26
2 ARC	R=2,897.93'	Lt. 7.28
CHORD	N 33°54'31"W	7.27
3	N 50°57'33"E	5.29
4 ARC	R=20.00'	Lt. 31.25
CHORD	N 15°02'07"E	28.17
5	N 60°16'18"E	0.50
6	N 29°43'42"W	61.25
7	S 60°16'18"W	0.50
8 ARC	R=100.00'	Lt. 72.00
CHORD	N. 50°21'20"W	70.46
9	N 70°09'20"W	24.51
10	N 31°39'30"W	247.48
11	S 47°11'00"E	71.90
12	S 5°10'30"E	108.20
13 ARC	R=1,286.43'	Lt. 262.37
CHORD	S 58°23'14"E	261.91
14	S 41°21'57"W	43.88
15 ARC	R=20.00'	Lt. 23.90
CHORD	S 04°30'06"W	22.50
16	S 60°16'18"W	0.50
17	S 29°43'42"E	61.25
18	N 60°16'18"E	0.50
19 ARC	R=85.00'	Lt 51.00
CHORD	S 46°55'02"E	50.24
20	S 69°53'58"E	5.12
21 ARC	R=3,017.93'	Rt. 40.02
CHORD	S 31°43'18"E	40.01
22 ARC	R=1,713.21	Rt. 148.29
CHORD	N 74°47'07"W	148.24
AREA		
TOTAL SQ. FEET		TOTAL ACRES
38,258		0.878

TOTAL AREA TO BE ACQUIRED	
TOTAL SQ. FEET	TOTAL ACRES
37,404	0.859

Above Bearings Based on Assumed North which is 0°04'20" Left of True North

Information Taken From
PGH. FT. W. & CHI. R.R.
R/W & TRACK MAP V.1. OHIO 61.1

Refer to R/W Plans - Sheets 9 & 10
Refer to Design Plans - Sheets 23 & 24

Scale: 1" = 20'

Property to be Acquired from the P. R. R. Co.

P.R.R. RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG-1010 (5)	

175

STA. -21-10.23

LIMITED ACCESS

20/23

R/W

558 559 560 U. S. 561 R. 21 562 563 564

Sta. 561+30.77 U.S.R. 21
61.84' Rt

Sta. 15+65.95 R.R.
65.95' Rt.

ARC 281.50' → N 28°23'13"W CHORD 281.39'
R 3017.93'

→ S 60°38'00"E

13

OL 31

R 612.27'

ARC 169.78' → N 75°42'50"W CHORD 169.23'

15

℄ Proposed Track No. 29

16

→ S 46°51'00"E

(107)

Limit of Construction

→ S 50°43'04"E - 200.00'

Sta. 13+08.85 R.R.
52.84' Lt.

Sta. 564+10.77 U.S.R. 21
61.09' Rt.

Sta. 559+56.79 U.S.R. 21
182.74' Rt.

Sta. 17+72.15 R.R.
11.32' Rt.

Sta. 560+19.58 U.S.R. 21
188.41' Rt

Sta. 17+14.16 R.R.
15.74' Lt.

17

→ N 21°49'50"W - 64.00'

→ S 43°42'58"E - 101.00'

Sta. 14+98.59 R.R.
36.66' Lt.

Sta. 562+27.14 U.S.R. 21
136.85' Rt.

18

℄ Proposed Track No. 29

19

Proposed Track No. 30

→ S 52°40'18"E - 94.00'

Sta. 15+99.44 R.R.
31.14 Lt.

Sta. 561+31.19 U.S.R. 21
164.54' Rt.

→ S 68°27'10"W - 111.80'

→ S 61°10'29"E - 56.00'

Sta. 16+92.95 R.R.
40.67' Lt.

Sta. 560+47.50 U.S.R. 21
204.71' Rt.

Sta. 559+46.90 U.S.R. 21
293.27' Rt.

Sta. 18+19.59 R.R.
89.03' Lt.

→ S 72°20'11"E - 80.18'

Sta. 17+47.21 R.R.
54.53' Lt.

Sta. 560+01.90 U.S.R. 21
236.08' Rt.

11.00'

Building

N 22°05'41"W - 10.00'

TRACK NO. 29
P.I. Sta. 14+27
Δ - 13°47' Rt.
D - 16°00'
T - 43.42'
L - 86.22'
R - 359.26'
P.C. Sta. 13+85.58
P.T. Sta. 14+69.80

AREA
28,023 Sq. Feet
0.643 Acres

Refer to R/W Plans - Sheets 8 & 9
Refer to Design Plans - Sheets 22 & 23

Scale: 1" = 20'

Property to be Acquired for the W. & L.E. R.R. Co.
from the Ekco Foundation, Inc.

W & L.E. R.R. RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG-1010(5)	

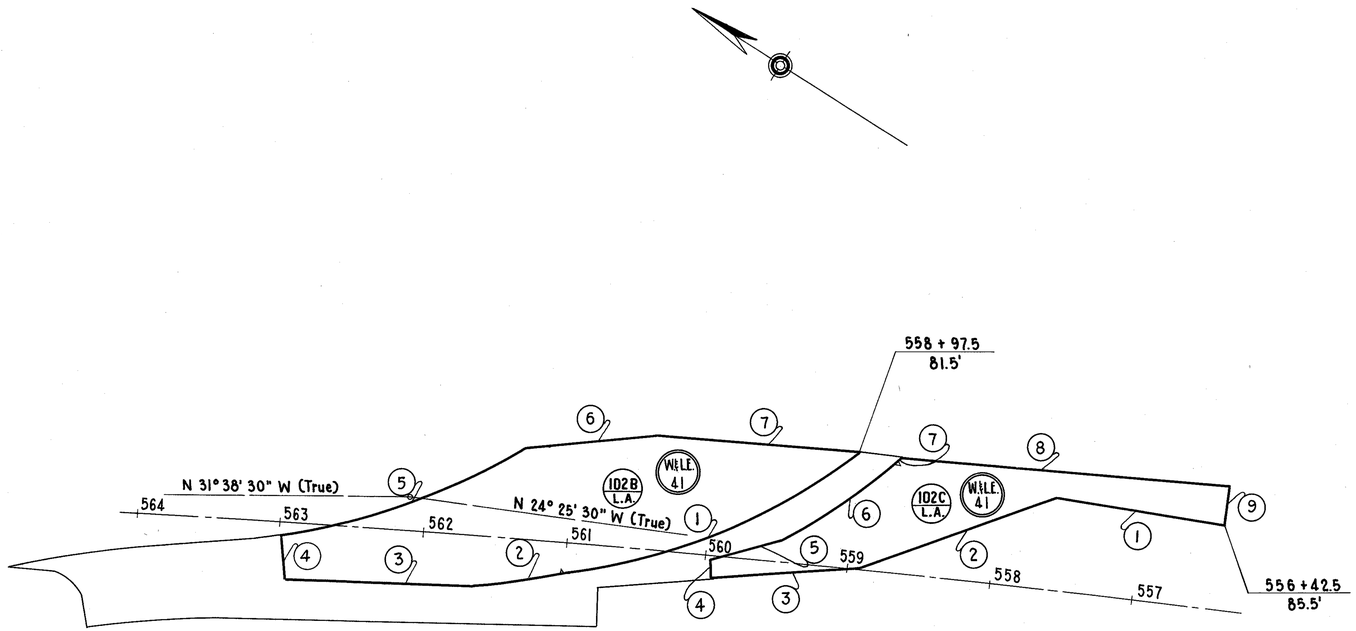
176

STA. - 21 - 10.23

LIMITED ACCESS

21/23

R/W



BOUNDARY LINES 102 B L A		
COURSE	BEARING	DISTANCE
1 ARC	R = 400.28'	231.31
CHORD	N 53°52'50" W	228.10
2 ARC	R = 608.30'	63.55
CHORD	N 34°18'28" W	63.53
3	N 32°55'17" W	125.47
4	N 50°12'07" E	29.56
5 ARC	R = 453.34'	181.04
CHORD	S 51°52'21" E	179.83
6	S 38°58'22" E	92.01
7	S 27°14'26" E	144.66
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
23,797.87	0.5463	

BOUNDARY LINES 102 C L A		
COURSE	BEARING	DISTANCE
1	N 23°00'30" W	118.00
2	N 52°22'03" W	143.04
3	N 36°37'36" W	105.99
4	N 48°39'06" E	13.75
5	S 49°19'04" E	50.24
6 ARC	R = 420.28'	104.37
CHORD	S 65°56'37" E	104.11
7	S 75°04'32" E	1.45
8	S 27°14'26" E	229.61
9	S 69°11'00" W	29.26
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
12,742.59	0.2925	

Above Bearings Based on Assumed North which is 0° 04' 20" Left of True North

Information Taken From
R/W & TRACK MAP
Wheeling & Lake Erie R.R. CO.
STATION MAP V-8B / ST-17

Refer to R/W Plans - Sheets 8 & 9
Refer to Design Plans - Sheets 22 & 23

Scale: 1" = 50'

Property to be Acquired from the W. & L. E. R R. Co.

W & L. E. R.R. RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG - 1010(5)	

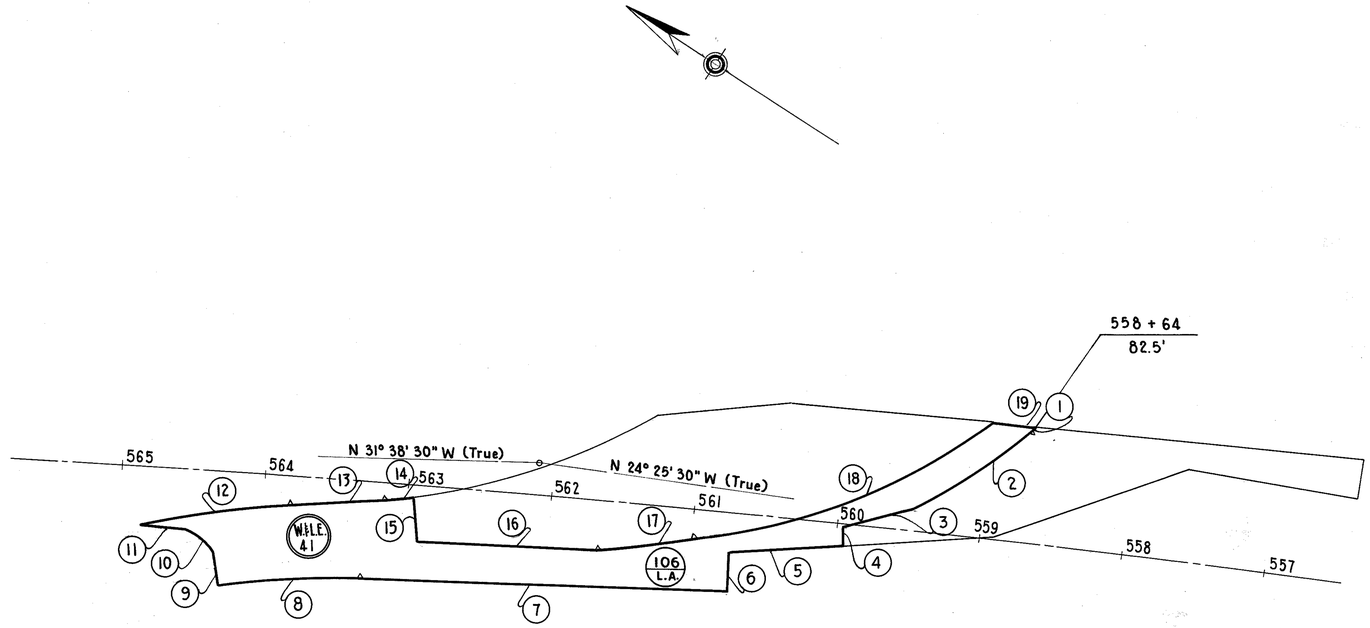
177

22/23

R/W

STA. - 21 - 10.23

LIMITED ACCESS



BOUNDARY LINES		
106 LA		
COURSE	BEARING	DISTANCE
1	N 75°04'32"W	1.45
2 ARC	R=420.28'	104.37
CHORD	N 65°56'37"W	104.11
3	N 49°19'04"W	50.24
4	S 48°39'06"W	13.75
5	N 36°37'36"W	80.95
6	S 59°51'06"W	28.92
7	N 30°08'54"W	259.40
8 ARC	R=548.69'	97.23
CHORD	N 35°39'46"W	97.09
9	N 47°02'17"E	23.14
10 ARC	R=20.00'	26.50
CHORD	N 09°04'50"E	24.60
11	N 28°52'43"W	30.38
12 ARC	R=598.69'	105.05
CHORD	S 40°22'04"E	104.93
13	S 35°54'21"E	63.84
14 ARC	R=453.34'	23.81
CHORD	S 38°48'36"E	23.81
15	S 50°12'07"W	29.56
16	S 32°55'17"E	125.47
17 ARC	R=608.30'	63.55
CHORD	S 34°18'28"E	63.53
18 ARC	R=400.28'	231.31
CHORD	S 53°52'50"E	228.10
19	S 27°14'26"E	28.54
AREA		
TOTAL SQ. FEET	TOTAL ACRES	
19,652.14	0.4512	

Above Bearings Based on Assumed North which is 0°04'20" Left of True North

Information Taken From
B. & O. R.R. CO., Wheeling Division
STATION MAP V122-4 / S29

Refer to R/W Plans - Sheets 8 & 9
Refer to Design Plans - Sheets 22 & 23

Scale: 1" = 50"

Property to be Acquired from the B. & O. & W. & L. E. R.R. Co's. Joint

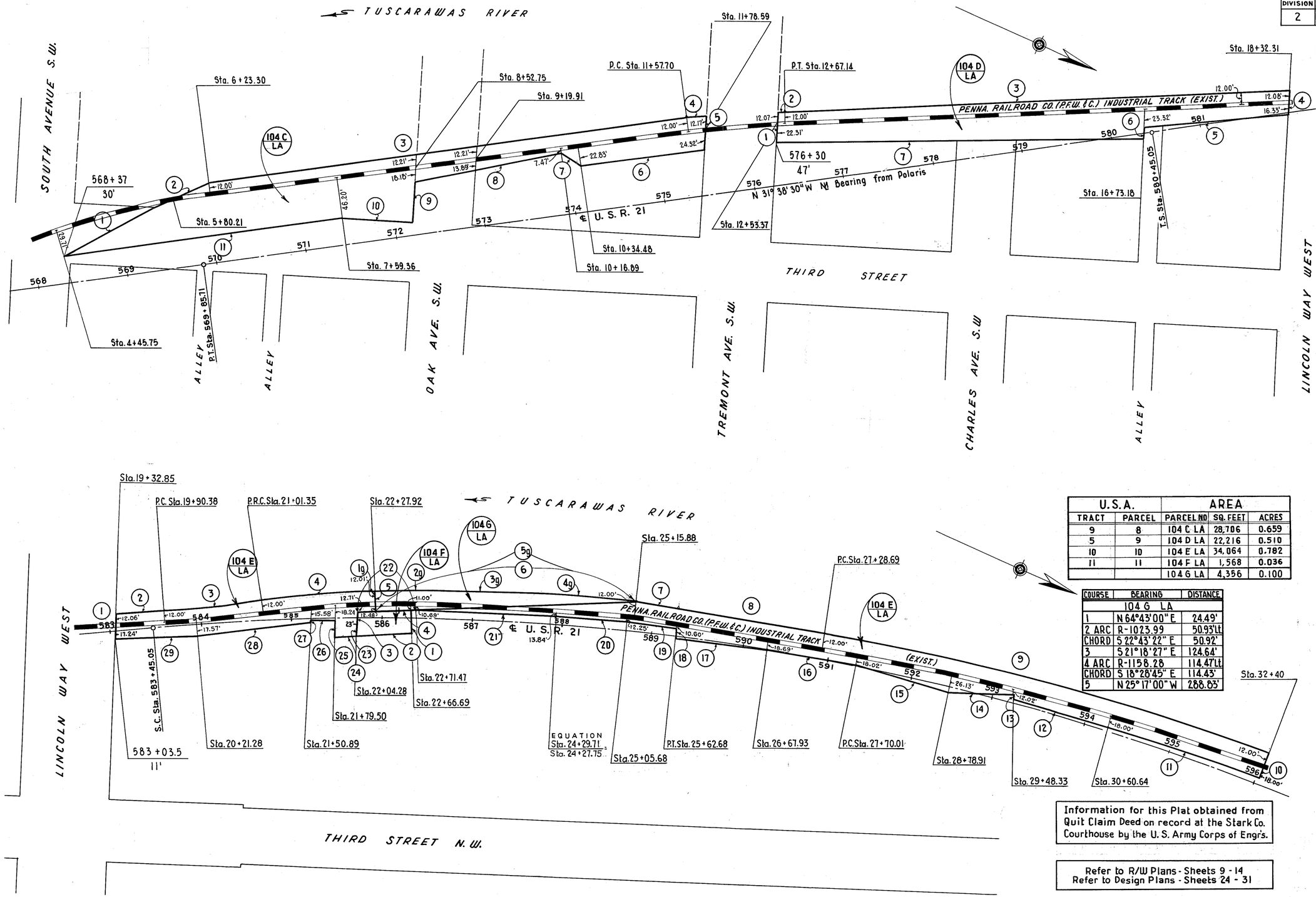
B. & O. & W. & L. E. R.R. RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	UG-1010(5)	

178

23/23 R/W

STA.-21-10.23
LIMITED ACCESS



BOUNDARY LINES		
COURSE	BEARING	DISTANCE
104 C LA		
1	N 52° 10' 30" W	108.20
2	N 47° 11' 00" W	71.90
3	N 31° 14' 37" W	534.40
4 ARC	R-1285.57'	Rt. 23.12
CHORD	N 30° 44' 49" W	23.12
5	N 69° 19' 30" E	36.49
6	S 30° 44' 00" E	139.66
7	S 09° 52' 00" W	23.35
8	S 34° 47' 30" E	167.82
9	N 69° 24' 30" E	44.50
10	S 20° 37' 00" E	83.53
11	S 31° 17' 00" E	305.95
104 D LA		
1	S 69° 19' 30" W	34.38
2 ARC	R-1285.57	Rt. 6.59
CHORD	N 26° 24' 34" W	6.59
3	N 26° 19' 07" W	566.39
4	N 69° 25' 30" E	28.41
5	S 28° 48' 30" E	159.58
6	N 69° 25' 30" E	13.50
7	S 24° 19' 00" E	412.58
104 E LA		
1	S 69° 25' 30" W	29.30
2	N 26° 19' 07" W	56.33
3 ARC	R-1261.57	Lt. 109.95
CHORD	N 28° 48' 47" W	109.91
4 ARC	R-1023.99	Rt. 127.89
CHORD	N 21° 44' 17" W	127.80
5	N 64° 43' 00" E	24.49
6	N 25° 17' 00" W	288.83
7 ARC	R-1158.28'	Rt. 47.25
CHORD	N 14° 28' 28" W	47.25
8	N 13° 18' 27" W	166.06
9 ARC	R-2697.89'	Rt. 513.63
CHORD	N 07° 51' 13" W	512.84
10	N 81° 36' 02" E	30.00
11 ARC	R-2667.89	Lt. 178.17
CHORD	S 04° 18' 51" E	178.13
12	S 06° 52' 00" E	107.89
13	S 69° 07' 00" W	5.40
14	S 20° 43' 00" E	72.90
15	S 06° 58' 00" E	108.30
16	S 13° 30' 30" E	101.82
17	S 15° 29' 00" E	102.22
18	S 69° 47' 00" W	12.19
19	S 16° 26' 30" E	58.11
20	S 19° 17' 00" E	77.06
21	S 20° 03' 30" E	155.96
22	S 25° 17' 00" E	67.54
23	N 69° 23' 00" E	25.00
24	S 25° 17' 00" E	23.50
25	S 67° 27' 30" W	19.00
26	S 22° 32' 30" E	28.50
27	N 67° 27' 30" E	2.75
28	S 29° 20' 30" E	121.93
29	S 26° 17' 30" E	90.59
104 F LA		
1	N 69° 23' 00" E	25.00
2	S 25° 17' 00" E	62.54
3	S 69° 23' 00" W	25.00
4	N 25° 17' 08" W	62.54

U.S.A.		AREA		
TRACT	PARCEL	PARCEL NO	SQ. FEET	ACRES
9	8	104 C LA	28,706	0.659
5	9	104 D LA	22,216	0.510
10	10	104 E LA	34,064	0.782
11	11	104 F LA	1,568	0.036
		104 G LA	4,356	0.100

COURSE	BEARING	DISTANCE
104 G LA		
1	N 64°43'00" E	24.49'
2 ARC	R-1023.99	50.93'Lt.
CHORD	S 22°43'22" E	50.92'
3	S 21°18'27" E	124.64'
4 ARC	R-1158.28	114.47'Lt.
CHORD	S 18°26'45" E	114.43'
5	N 25°17'00" W	288.83'

Information for this Plat obtained from Quit Claim Deed on record at the Stark Co. Courthouse by the U. S. Army Corps of Engr's.

Refer to R/W Plans - Sheets 9 - 14
Refer to Design Plans - Sheets 24 - 31

Above Bearings Based on Quit Claim Deed on Record at the Stark County Courthouse by the U. S. Army Corps of Engineers.

Scale: 1" = 50'

Property to be Acquired from the Pennsylvania R.R. Co.

P.R.R. RIGHT OF WAY PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG1010(5)	

STA. - 21 - 10.23

17/18

R/W

Track No. 29
P.I. Sta. 19 + 64.94
Δ = 20°38'20" Rt.
D = 10°00'
R = 573.69'
T = 104.46'
L = 206.39'

Track No. 34
P.I. Sta. 3 + 14.61
Δ = 56°20'30" Lt.
D = 22°00'
R = 262.04'
T = 140.33'
L = 256.10'

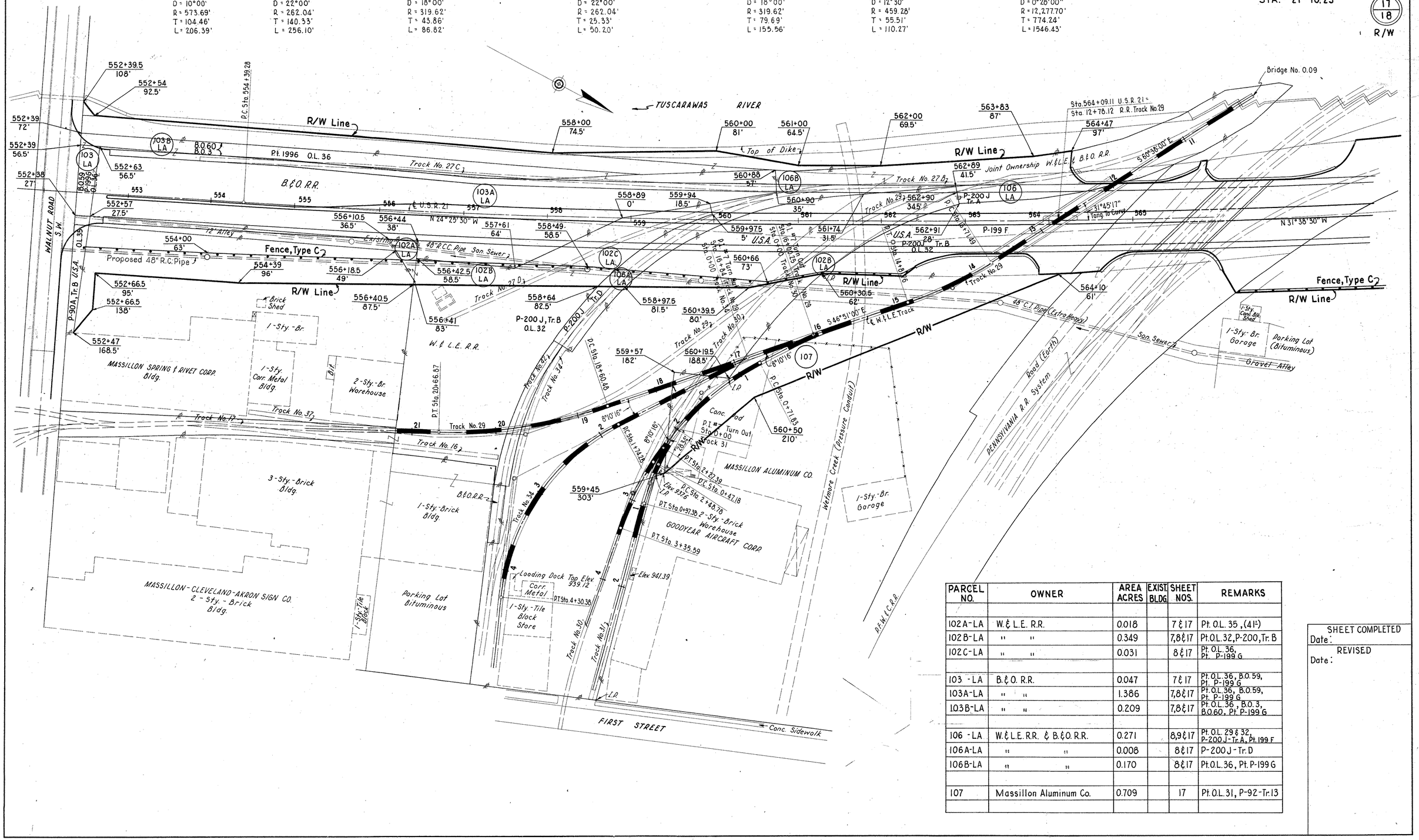
Track No. 30
P.I. Sta. 2 + 92.64
Δ = 15°37'36" Lt.
D = 18°00'
R = 319.62'
T = 43.86'
L = 86.82'

Track No. 31
P.I. Sta. 0 + 72.51
Δ = 11°02'40" Lt.
D = 22°00'
R = 262.04'
T = 25.33'
L = 50.20'

Track No. 30
P.I. Sta. 1 + 51.52
Δ = 28°00'00" Lt.
D = 18°00'
R = 319.62'
T = 79.69'
L = 155.56'

Track No. 29
P.I. Sta. 14 + 27
Δ = 13°47'00" Rt.
D = 12°30'
R = 459.28'
T = 55.51'
L = 110.27'

U.S.R. 21
P.I. Sta. 562 + 13.52
Δ = 7°15'00" Lt.
D = 0°26'00"
R = 12,277.70'
T = 774.24'
L = 1546.43'



PARCEL NO.	OWNER	AREA ACRES	EXIST BLDG.	SHEET NOS.	REMARKS
102A-LA	W.&L.E. R.R.	0.018		7&17	Pt. O.L. 35, (41±)
102B-LA	" "	0.349		7,8&17	Pt. O.L. 32, P-200, Tr. B
102C-LA	" "	0.031		8&17	Pt. O.L. 36, Pt. P-199 G
103 -LA	B.&O. R.R.	0.047		7&17	Pt. O.L. 36, B.O. 59, Pt. P-199 G
103A-LA	" "	1.386		7,8&17	Pt. O.L. 36, B.O. 59, Pt. P-199 G
103B-LA	" "	0.209		7,8&17	Pt. O.L. 36, B.O. 3, B.O. 60, Pt. P-199 G
106 -LA	W.&L.E. R.R. & B.&O. R.R.	0.271		8,9&17	Pt. O.L. 29 & 32, P-200 J-Tr. A, Pt. 199 F
106A-LA	" "	0.008		8&17	P-200 J-Tr. D
106B-LA	" "	0.170		8&17	Pt. O.L. 36, Pt. P-199 G
107	Massillon Aluminum Co.	0.709		17	Pt. O.L. 31, P-92-Tr. 13

SHEET COMPLETED
Date:

REVISED
Date:

DIV. 4 R/W RECORD SECTION
AUG 29 1962
RECD. FRWD.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG1010(5)	

STA. - 21 - 10.23

17/18

R/W

Track No. 29
P.I. Sta. 19 + 64.94
Δ = 20°38'20" Rt.
D = 10°00'
R = 573.69'
T = 104.46'
L = 206.39'

Track No. 34
P.I. Sta. 3 + 14.61
Δ = 56°20'30" Lt.
D = 22°00'
R = 262.04'
T = 140.33'
L = 256.10'

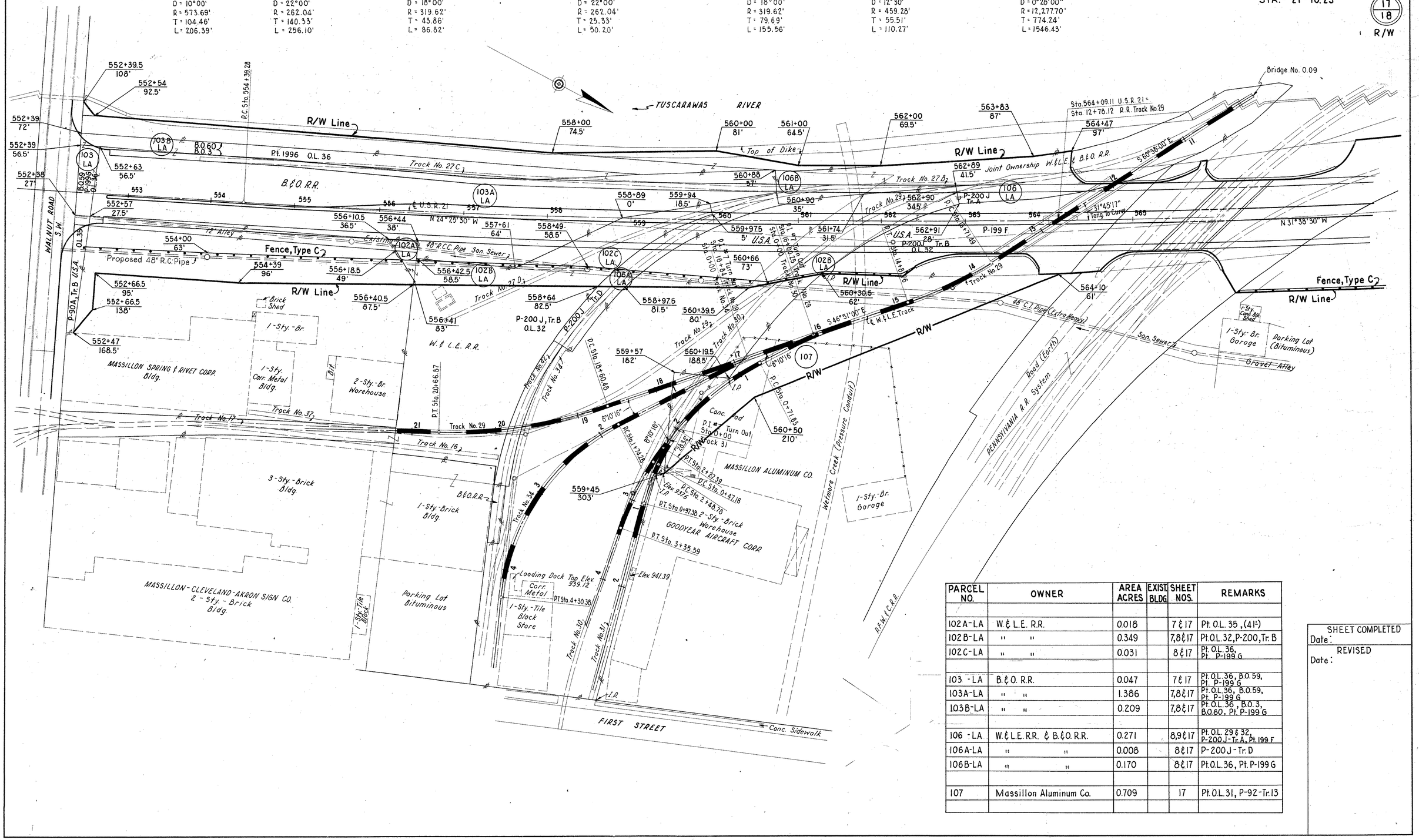
Track No. 30
P.I. Sta. 2 + 92.64
Δ = 15°37'36" Lt.
D = 18°00'
R = 319.62'
T = 43.86'
L = 86.82'

Track No. 31
P.I. Sta. 0 + 72.51
Δ = 11°02'40" Lt.
D = 22°00'
R = 262.04'
T = 25.33'
L = 50.20'

Track No. 30
P.I. Sta. 1 + 51.52
Δ = 28°00'00" Lt.
D = 18°00'
R = 319.62'
T = 79.69'
L = 155.56'

Track No. 29
P.I. Sta. 14 + 27
Δ = 13°47'00" Rt.
D = 12°30'
R = 459.28'
T = 55.51'
L = 110.27'

U.S.R. 21
P.I. Sta. 562 + 13.52
Δ = 7°15'00" Lt.
D = 0°26'00"
R = 12,277.70'
T = 774.24'
L = 1546.43'



PARCEL NO.	OWNER	AREA ACRES	EXIST BLDG.	SHEET NOS.	REMARKS
102A-LA	W.&L.E. R.R.	0.018		7&17	Pt. O.L. 35, (41±)
102B-LA	" "	0.349		7,8&17	Pt. O.L. 32, P-200, Tr. B
102C-LA	" "	0.031		8&17	Pt. O.L. 36, Pt. P-199 G
103 -LA	B.&O. R.R.	0.047		7&17	Pt. O.L. 36, B.O. 59, Pt. P-199 G
103A-LA	" "	1.386		7,8&17	Pt. O.L. 36, B.O. 59, Pt. P-199 G
103B-LA	" "	0.209		7,8&17	Pt. O.L. 36, B.O. 3, B.O. 60, Pt. P-199 G
106 -LA	W.&L.E. R.R. & B.&O. R.R.	0.271		8,9&17	Pt. O.L. 29 & 32, P-200 J-Tr. A, Pt. 199 F
106A-LA	" "	0.008		8&17	P-200 J-Tr. D
106B-LA	" "	0.170		8&17	Pt. O.L. 36, Pt. P-199 G
107	Massillon Aluminum Co.	0.709		17	Pt. O.L. 31, P-92-Tr. 13

SHEET COMPLETED
Date:

REVISED
Date:

DIV. 4 R/W RECORD SECTION
AUG 29 1962
RECD. FRWD.

FED. HWY. DIVISION	STATE	PROJECT	
2	OHIO	U-UG 1010 (5)	

1
6

SOIL PROFILE
STARK COUNTY STA. 21-10.23
MASSILLON, OHIO

NOTE: THE INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS SECURED FOR THE USE OF THE STATE OF OHIO AND IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING THE CONSTRUCTION OF THE PROJECT.

LEGEND FOR PROJECT — AVERAGE RESULTS OF TESTS — 43 SAMPLES TESTED

DESCRIPTION	H.R.B. CLASS	OHIO CLASS	% AGG	% C SAND	% F SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
GRAVEL AND/OR STONE FRAGMENTS	A-1a(0)	A-1a	79	8	5	7	1	NP	NP	14	1
GRAVEL AND/OR STONE FRAGMENTS WITH SAND	A-1b(0)	A-1a	39	21	19	13	8	NP	NP	13	7
FINE SAND	—	—	—	—	—	—	—	—	—	—	—
COARSE AND FINE SAND	—	A-3a	14	20	40	18	8	NP	NP	13	4
GRAVEL AND/OR STONE FRAGMENTS WITH SAND & SILT	A-2-4(0)	A-2-4	32	16	22	20	10	17	4	12	10
GRAVEL AND/OR STONE FRAGMENTS WITH SAND	A-2-5(0)	A-2-5	29	26	19	20	6	46	4	17	2
SANDY SILT	A-4(6)	A-4a	21	11	23	28	17	26	6	20	17
SILT	A-4(8)	A-4b	1	4	24	50	21	26	6	36	1
ELASTIC SILT & CLAY WITH OR WITHOUT ORGANIC MATERIAL	—	—	—	—	—	—	—	—	—	—	—
SILT AND CLAY	A-6(9)	A-6a	5	6	10	44	35	31	13	25	1
SILTY CLAY	—	—	—	—	—	—	—	—	—	—	—
ELASTIC CLAY	—	—	—	—	—	—	—	—	—	—	—
CLAY	—	—	—	—	—	—	—	—	—	—	—
TOP SOIL	(VISUAL CLASSIFICATION)										
BERM MATERIAL	(VISUAL CLASSIFICATION)										
CINDERS WITH OR WITHOUT SOIL	(VISUAL CLASSIFICATION)										
ROCK-SOIL MIXTURE	(VISUAL CLASSIFICATION)										
PEAT OR ORGANIC MATERIAL	(VISUAL CLASSIFICATION)										

SOD & TOP SOIL = X' = APPROX. DEPTH

BERM MATERIAL

AUGER BORING PLOTTED TO VERTICAL SCALE ONLY

AUGER BORING - PLAN VIEW

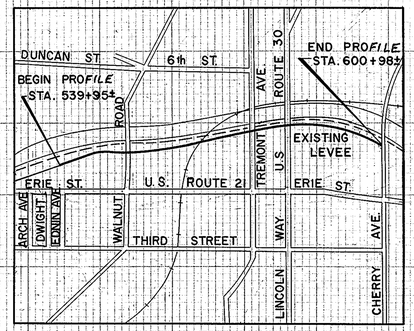
CORE BORING - PLAN VIEW

NUMBER OF BLOWS FOR "STANDARD PENETRATION" TEST.
X = NUMBER OF BLOWS FOR THE FIRST 6 INCHES.
Y = NUMBER OF BLOWS FOR THE SECOND 6 INCHES.

● WATER CONTENT EQUAL TO OR GREATER THAN LIQUID LIMIT.

W-FREE WATER

NOTE: FIGURES BESIDE BORINGS INDICATE WATER CONTENT IN PER CENT.



LOCATION MAP

SUMMARY OF SOIL TEST DATA

NOTE: N.P. SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC

STATION & OFFSET		DEPTH FROM - TO	% AGG	% CS	% FS	% SILT	% CLAY	L.L.	P.I.	% W.C.	SHTL. CLASS
536+50	℄	0-5	28	21	21	19	11	23	7	14	A-2-4
		5-10	29	13	33	17	8	NP	NP	8	A-2-4
		10-16	22	23	26	22	7	NP	NP	8	A-2-4
539+50	℄	0-5	14	12	37	21	16	24	6	18	A-4a
		5-10	9	10	58	17	6	NP	NP	16	A-3a
545+00	40'LT.	0-5	11	11	15	37	26	41	10	24	A-4a
		5-10	10	7	19	41	23	27	4	31	A-4a
548+00	40'LT.	4.5-12	17	12	33	24	14	25	7	10	A-4a
551+25	20'RT.	0-10	30	24	16	24	6	42	4	17	A-2-5
		10-12	32	16	20	23	9	24	5	12	A-2-4
556+00	℄	4.5-12	30	14	19	25	12	29	2	24	A-4a
559+00	℄	0-10	79	8	5	7	1	NP	NP	14	A-1-a
560+00	℄	4-10	51	21	11	10	7	NP	NP	18	A-1-b
561+50	℄	14-20	44	16	17	16	7	NP	NP	6	A-1-b
562+00	℄	9-25	32	15	32	15	6	NP	NP	14	A-2-4
564+00	℄	4.5-10	37	22	23	11	7	NP	NP	10	A-1-b
565+00	℄	0-4	29	10	21	25	15	28	8	19	A-4a
		4-14.5	30	8	20	27	15	26	8	26	A-4a
		14.5-18	42	15	19	14	10	23	5	12	A-1-b
565+50	℄	7-20	28	28	23	16	5	50	4	17	A-2-5
		20-30	33	15	17	25	10	22	3	15	A-2-4

STATION & OFFSET		DEPTH FROM - TO	% AGG	% CS	% FS	% SILT	% CLAY	L.L.	P.I.	% W.C.	SHTL. CLASS
566+50	℄	0-18	47	23	16	11	3	NP	NP	16	A-1-b
567+50	℄	0-16	23	30	28	9	10	NP	NP	9	A-1-b
		16-20	15	24	33	20	8	NP	NP	16	A-3a
		20-25	13	28	36	13	10	18	2	9	A-3a
568+25	℄	0-10	36	16	16	18	14	31	10	18	A-2-4
572+00	℄	0-10	35	15	19	21	10	21	3	11	A-2-4
574+00	15'LT.	4.5-9.5	37	11	15	24	13	30	9	21	A-4a
576+00	℄	5-12	29	17	20	23	11	25	7	7	A-2-4
578+00	℄	0-4.5	27	18	17	27	11	20	4	8	A-4a
		4.5-11	5	6	10	44	35	31	13	25	A-6a
		11-15	10	8	28	31	23	20	5	19	A-4a
580+00	℄	0-10	29	8	27	24	12	23	4	19	A-4a
582+00	℄	0-4.5	19	16	24	26	15	22	6	14	A-4a
		4.5-10	18	10	35	23	14	20	5	20	A-4a
584+00	℄	0-5	16	10	23	35	16	34	10	30	A-4a
		5-9.5		4	24	50	21	26	6	36	A-4b
		9.5-15	36	12	18	23	11	24	5	16	A-2-4
588+00	10'LT.	0-4.5	20	17	34	22	7	NP	NP	13	A-3a
		4.5-10	9	11	16	41	23	28	7	24	A-4a
592+00	℄	0-5	34	19	19	19	9	NP	NP	21	A-1-b
596+00	℄	0-4.5	25	11	21	28	15	24	5	14	A-4a
		4.5-10	25	13	21	24	17	24	7	17	A-4a

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG1010(5)	

2
6

SOIL PROFILE
STARK COUNTY STA. 21-10.23
MASSILLON, OHIO

536 537 538 539 540 541 542 543 544 545 546 547 548 549 550

P.C. Sta. 536+91.29

40'L

40'L

18" Birch

6" Wild Cherry

1-Sty. Corr. Metal Shed

-3.0%

+0.910%

970 960 950 940 930 920 910 900

40'L

14 LOOSE AND DENSE
8
7

18 MEDIUM STIFF
16 LOOSE

16 SOFT
20
19 MEDIUM DENSE

40'Lt.

24 LOOSE
W
SOFT
31

31 LOOSE
10 MEDIUM DENSE
W
20

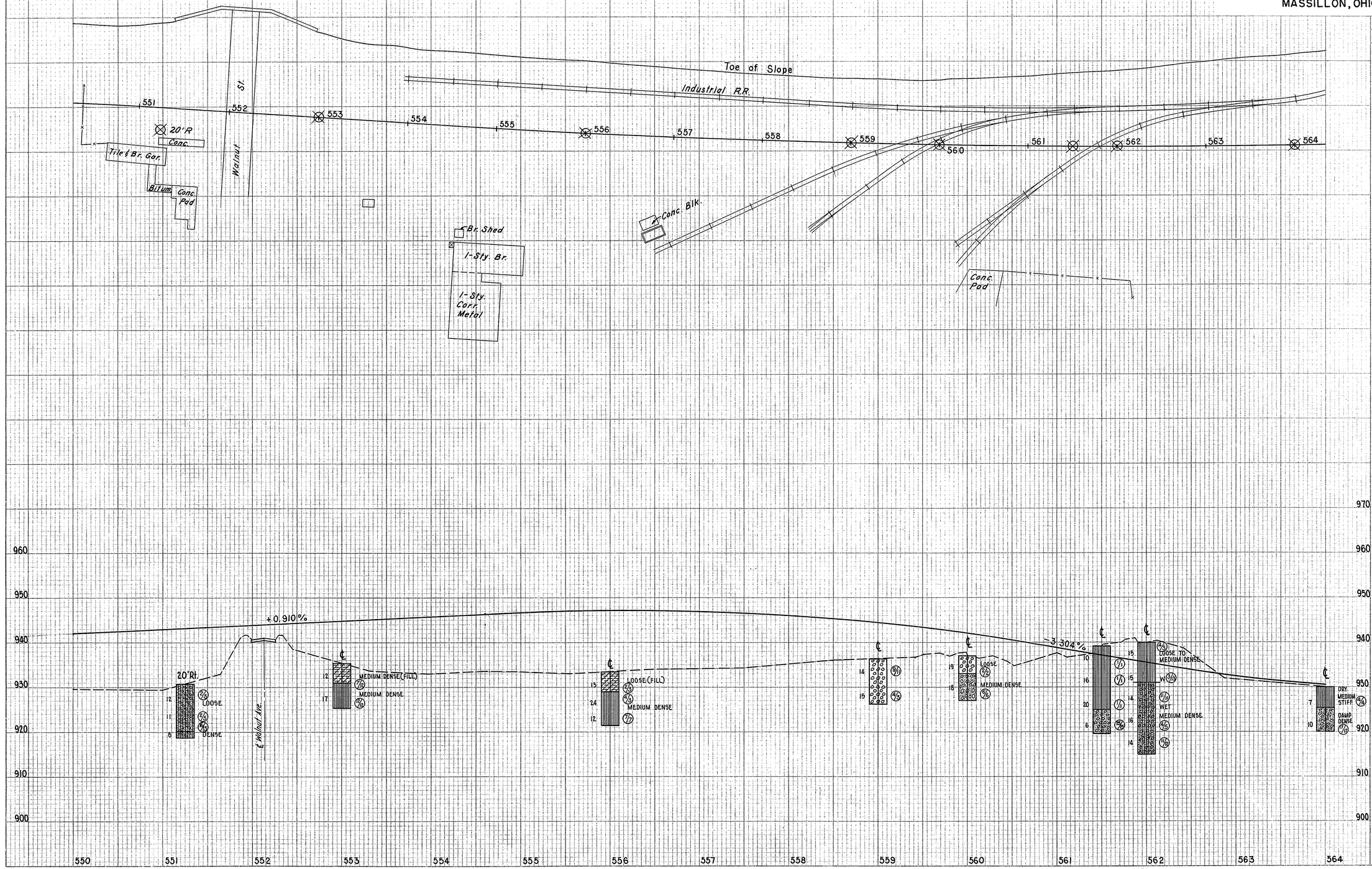
537 538 539 540 541 542 543 544 545 546 547 548 549 550

SOIL PROFILE

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG1010(5)	

3/6

SOIL PROFILE
STARK COUNTY STA. 21-10.23
MASSILLON, OHIO

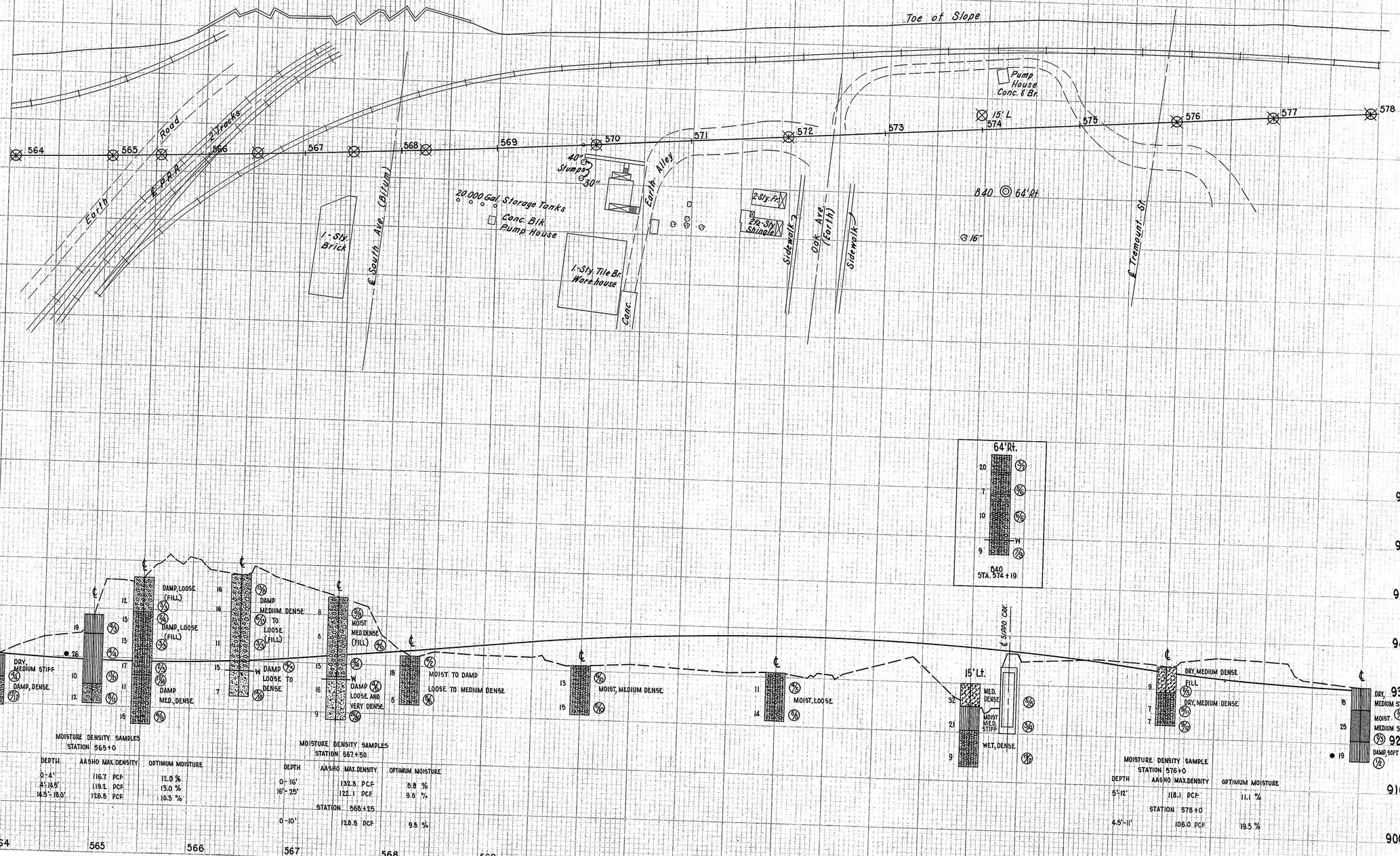


SOIL PROFILE

FED. AID PROJECT	STATE	PROJECT	
2	OHIO	U-UG 1010 (5)	

4
6

SOIL PROFILE
STARK COUNTY STA. 21-10.23
MASSILLON, OHIO



MOISTURE DENSITY SAMPLES
STATION 565+0

DEPTH	AASHO MAX. DENSITY	OPTIMUM MOISTURE
0'-4'	116.7 PCF	12.0 %
4'-14.5'	119.2 PCF	13.0 %
14.5'-18.0'	126.8 PCF	10.3 %

MOISTURE DENSITY SAMPLES
STATION 567+50

DEPTH	AASHO MAX. DENSITY	OPTIMUM MOISTURE
0'-16'	132.8 PCF	8.8 %
16'-25'	122.1 PCF	9.6 %

STATION 568+25

0'-10'	128.8 PCF	9.8 %

MOISTURE DENSITY SAMPLE
STATION 576+0

DEPTH	AASHO MAX. DENSITY	OPTIMUM MOISTURE
5'-12'	118.1 PCF	11.1 %

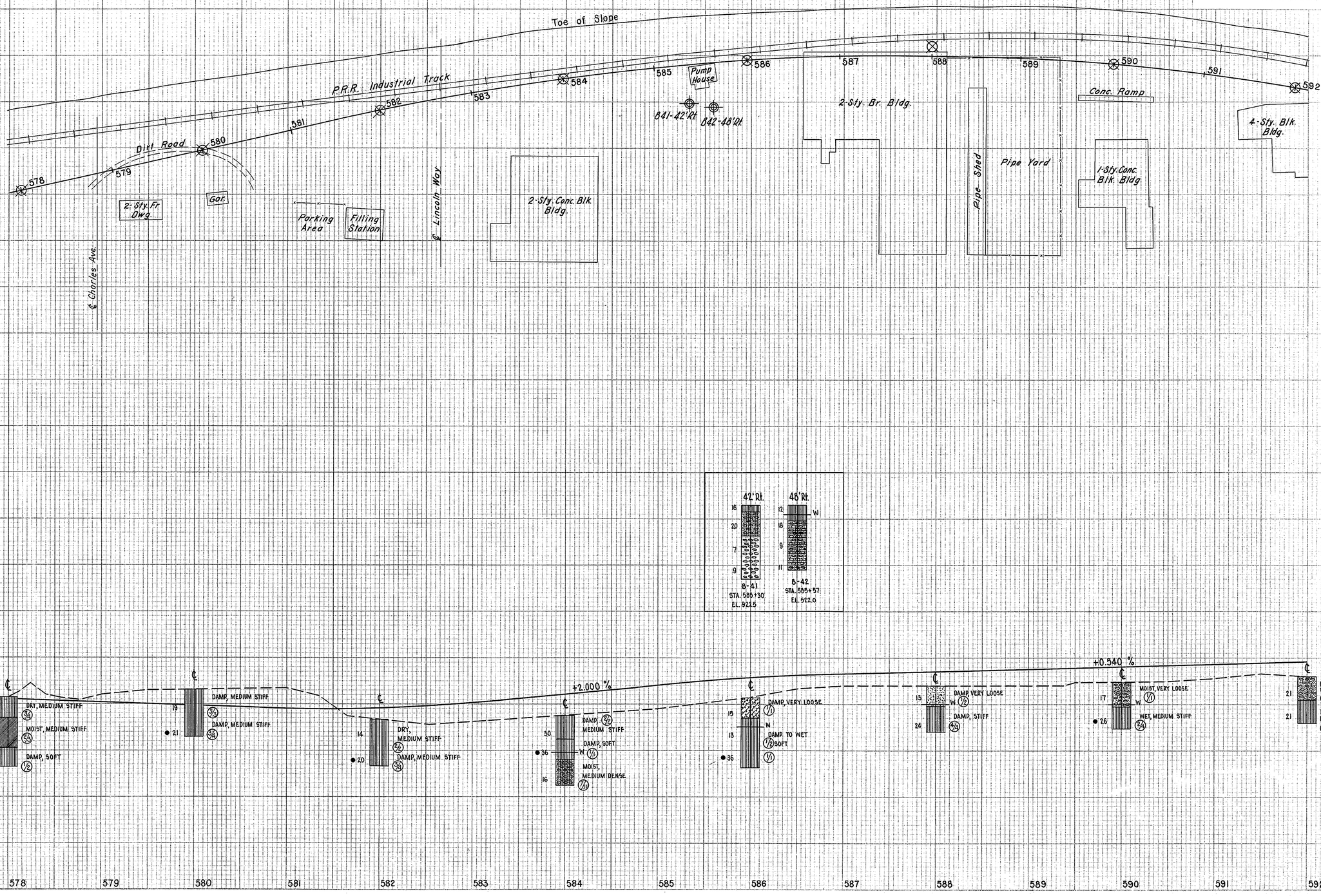
STATION 578+0

4.5'-11'	106.0 PCF	19.3 %

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO	U-UG1010(5)	

5
6

SOIL PROFILE
STARK COUNTY STA. 21-10.23
MASSILLON, OHIO



SOIL PROFILE

U-UG 1010(5)

SOIL PROFILE
STARK COUNTY STA. 21-10.23
MASSILLON, OHIO

